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Tennessee Valley Authority

ARCADIS Technical Memorandum

Baseline Fish Reanalysis

May 2012

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Baseline Fish Reanalysis

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Acronyms and Abbreviations

CRM	Clinch River mile
ERM	Emory River mile
MDL	method detection limit
NFG	National Functional Guidelines
ORNL	Oak Ridge National Laboratory
RL	Reporting Limit
TDEC	Tennessee Department of Environment and Conservation
TVA	Tennessee Valley Authority
TWRA	Tennessee Wildlife Resources Agency

1. Introduction and Background

Fish sampling began in January 2009, immediately following the December 22, 2008 ash spill at the Tennessee Valley Authority (TVA) Kingston Fossil Plant. 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 and into 2010 and 2011.

Baseline post-spill sampling of fish from locations on the Emory and Clinch Rivers was conducted in January and February 2009, with a supplemental sampling event in the Emory River reference reach in April 2009. The objective was to document fish health and concentrations of metals in fish tissue. TVA, Tennessee Department of Environment and Conservation (TDEC), Tennessee Wildlife Resources Agency (TWRA) and Oak Ridge National Laboratory (ORNL) collaborated in collecting a total of 53 fish consisting of largemouth bass, channel catfish, blue catfish and spotted bass.

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 in September 2009 so that all subsequent fish sample analyses have been reported to the project method detection limit (MDL). The best commercially available technology and U.S. Environmental Protection Agency-approved methodologies 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. This ARCADIS Technical Memorandum provides a comparative evaluation of the initial analyses and the 2011 re-analyses of the baseline fish tissue.

2. Sampling and Methods

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 in January and February 2009, with a supplemental sampling event at ERM 8.0 in April 2009 (Figure 1). Four species of fish were collected: blue catfish, channel catfish, largemouth bass and spotted bass. Each fish sample was filleted (halved). One fillet was homogenized and shipped to Pace Analytical Services, Inc. (Pace) for analysis. The other fillet was frozen and archived by TWRA.

Aliquots of homogenized samples were initially analyzed by Pace for lipid content, moisture content and metals, the latter by SW846 6020 in April, 2009. Aliquots of the retained homogenate from the initial fillets were reanalyzed for metals and moisture content in April 2011. Only 36 out of 53 of the initial fillets had sufficient retained homogenate volume for re-analysis. The archived fillets were submitted to Pace, homogenized and, in April, 2011, analyzed for metals and moisture content. Consequently, for each analyte there are three results for 36 of the 53 baseline fish samples and two results for 17 of the 53 baseline fish samples. A summary of sample identification numbers, collection dates, species and locations are provided in Table 1.

A comparison of the wet weight results reported for the original and reanalyzed samples was conducted to determine if the results agree and, if not, to describe the nature of the disagreement or “bias” between results. Agreement among the data sets was evaluated visually in bivariate agreement and difference plots for each analyte. Only samples in which both results were detected are included on these plots. The agreement plots show each sample plotted with respect to its original result value (x-axis) vs. its reanalyzed result (y-axis). The y=x line (line of agreement) is overlain on each scatter plot. Where the results agree, the points should fall roughly along the agreement line. If there is a constant bias among results the points will lie along a line that is parallel but offset above or below the agreement line. Difference plots show the difference between the two results (y-axis) plotted against the average of the two results (x-axis). On these plots, results in agreement will fall roughly along the y=0 line (difference=0). Constant bias would be indicated if the points tend to fall above or below the y=0 line. Difference plots also illustrate the nature of the error among the results and whether it is constant across concentrations or tends to increase. Where error is increasing with average concentration, a log transformation may be warranted before evaluating the magnitude of the bias. Agreement was evaluated statistically using paired t-tests on detected results only.

A comparison of the dry weight results was conducted for 20 samples that had non-rejected moisture content results for the originally analyzed samples (Table 1) and the corresponding reanalyzed fillet results. It should be noted that all moisture results for the reanalyzed homogenates and fillets were rejected, due to sample holding time exceedances (the samples were reanalyzed greater than two years after collection), but were used in this evaluation as representative of moisture content at the time of re-analysis. Agreement among the results for these 20 samples was evaluated visually in bivariate agreement plots and statistically with paired t-tests.

A qualitative comparison was performed for metals that had an insufficient number of detected pairs for a statistical comparison. Bivariate plots (original vs. reanalyzed fillet) were prepared that included all data pairs by detection status.

Finally, a comparison of the initial and reanalyzed baseline fish data was performed by Environmental Standards, Inc. in accordance with the *National Functional Guidelines* (NFG) *for Inorganic Data Review* (US EPA, October 2004) criteria for duplicate sample analysis.

3. Results

3.1 Descriptive Statistics

The 53 fish samples were reanalyzed in order to report concentrations at lower detection limits. Table 2 compares the reporting limits of the original analysis and the reanalysis. As expected, the reporting limits of the reanalysis are lower and therefore the frequency of detection has increased in cases where it was less than 100% in the original analysis. There are a few exceptions to this pattern. For chromium, nickel and zinc the reporting limits were roughly the same in the original and reanalysis. For potassium they were higher in the reanalysis. In addition, the detection frequency for chromium decreased in the reanalysis.

Table 3 provides summary statistics for wet weight metals results by sample replicate (i.e. original, reanalyzed fillet, reanalyzed homogenate). The reporting limits were substituted for all non-detects. As expected the lower reporting limits in the reanalyzed samples affect the calculated mean concentrations and this influence increases as the frequency of detection decreases. Estimated mean wet weight concentrations of metals with low detection frequency (aluminum, antimony, beryllium, boron, cadmium, cobalt, iron, lead, molybdenum, silver, thallium and vanadium) decrease dramatically among reanalyzed results due to the lower reporting limits being substituted for the non-detect results. Exceptions to this pattern are chromium and nickel for which reporting limits were roughly the same among original and reanalyzed results. The opposite pattern is noted in estimated mean concentrations of metals that were fully detected (or nearly so) in both the original and reanalysis. These metals (calcium, magnesium, mercury, potassium, selenium, sodium, strontium and zinc) have increased mean wet weight concentrations for reanalyzed results. Results were variable for metals with intermediate frequencies of detection, especially those that had low frequencies of detection in the original results but fairly high levels of detection in the reanalyzed results (arsenic, barium, copper, manganese). For arsenic, barium and manganese, mean wet weight concentrations are roughly similar in original and reanalyzed results. For copper, the mean wet weight concentration of the reanalyzed fillets is roughly double that of the original analysis however this disparity may be due to the presence of outliers in the data set (see section 3.4). The differences among the results are further investigated in the next section. Appendix A provides additional summary statistics by species and location (Tables A-1 and A-2) along with a side by side comparison of each sample result by replicate (Table A-3).

3.2 Wet Weight Agreement

Agreement among sample results was evaluated visually in bivariate agreement plots and difference plots (Appendices B through J). An example of these plots is shown in Figure 2 for selenium. In the agreement plot (top), each point represents the concentration reported for the original analysis (x-axis) and the fillet reanalysis (y-axis) for a particular sample. In this example all points fall above the 1:1 line of agreement indicating that the reanalyzed result is consistently higher than the original result. In addition it appears that the variance of the error between results is increasing with concentration (i.e. points are at greater distance from agreement line with increasing concentration). The difference plot (bottom) shows the difference between the two results (original – reanalyzed) as a function of concentration. All points fall below the agreement line (difference=0) again confirming that the reanalyzed result is consistently higher than the original result. The difference plot also gives an indication that the difference between the results is increasing with concentration. No patterns with respect to species are noted.

When the original wet weight result for selenium is compared to the reanalyzed homogenate result (see selenium plots in Appendices C and F) a similar pattern is found. Most points fall above the agreement line indicating that the reanalyzed results are greater than the original result. In addition, the variance of difference between the results tends to increase with increasing concentration.

When the reanalyzed fillet result is compared to the reanalyzed homogenate result much better agreement is noted. In the agreement plot (Figure 3, top), points tend to straddle the agreement line. In the difference plot (Figure 3, bottom), again, points tend to straddle the agreement line; however, there is some indication of lack of agreement since more points fall above the agreement line indicating that the fillet samples tend to have a higher concentration then the retained homogenate samples. In addition there is an indication of increasing variance with concentration, similar to what was seen in Figure 2.

In short, for selenium, the reanalyzed wet weight results (archived fillets and retained homogenates) tend to be slightly higher than original wet weight results; however, much better agreement is noted when the reanalyzed results are compared with each other. Furthermore, the variance of the difference between results tends to increase with concentration. This is not uncommon in environmental data where a log transformation is often needed to achieve normal or nearly normal concentrations. A similar pattern to that of selenium was found for six other metals as well (arsenic,

magnesium, mercury, potassium, sodium and zinc). In the bivariate plots for these metals comparing the original results to the reanalyzed results (both fillet and homogenate), the reanalyzed concentrations tend to be slightly higher (see plots in Appendices B, C) whereas when the reanalyzed results are compared to each other, much better agreement is noted (Appendix D). In addition for these and other metals, the difference plots (Appendices E, F and G) tend to show an increasing variance in the differences with concentration. Due to this changing variance, lack of agreement was further evaluated in both the raw and log transformed scale. Bivariate plots in the log scale for original vs. reanalyzed fillet results are presented in Appendix H.

Agreement was evaluated statistically using paired t-tests on both raw and log-transformed data that was detected in both results (Table 4). The patterns noted in the plots described above are confirmed to be statistically significant. Reanalyzed wet weight results, both fillet and homogenate, are statistically significantly greater than the original wet weight results for arsenic, magnesium, mercury, potassium, selenium, sodium and zinc. Better agreement is noted among the reanalyzed results, although some small but statistically significant differences are noted for arsenic, barium, potassium, selenium and sodium.

A comparison of the mean concentrations of all 53 samples as calculated from the replicate analyses is shown in Table 5. Means are calculated with reporting limits substituted for non-detects. For most of the metals that were shown to have statistically significantly greater reanalyzed results (magnesium, mercury, potassium, selenium, sodium and zinc), mean concentrations are 6% to 32% greater (mean = 17%) in the reanalyzed fillets. (Note: Means for reanalyzed homogenate samples are not strictly comparable to original means due to the fact that the original means include all 53 samples whereas the reanalyzed homogenate means include only 36 of the 53 samples.) Arsenic is the exception, for while the detected concentrations tend to be greater in the reanalyzed samples, substitution of the lower reporting limits has the opposite effect, therefore the means are roughly comparable in reanalyzed vs. original results.

Because the reanalyses were conducted more than two years after sample collection, it might be hypothesized that moisture content is causing the enhanced differences in wet weight concentrations for metals. Specifically, concentrations reported on a wet weight basis would be higher in the reanalyzed samples if those samples lost moisture during the holding period. Therefore a comparison of moisture content measured in the original and reanalyzed fillet samples is shown in Figure 4. Thirty-three of the 53 original moisture content values were flagged as rejected by data validators, therefore,

only 20 results are included on this plot. The figure shows that, in fact, moisture content in the original samples tended to be slightly higher than in the reanalyzed fillet samples and this is confirmed in the t-test result for moisture (Table 6). On average, the moisture content is 0.7% (95% C.I.: 0.013%-1.4%) greater in the original samples. This would tend to bias the wet weight concentrations of the reanalyzed result higher. In order to investigate the influence of moisture content, the 20 samples were evaluated for agreement in dry weight as well.

3.3 Dry Weight Agreement

Agreement between the 20 original and reanalyzed fillet dry weight results was evaluated similarly as described for wet weight (see agreement plots, Appendices I and J). In the case of selenium (Figure 5), a similar pattern was found as for wet weight. Specifically, reanalyzed dry weight results tend to be greater than original dry weight results. Further this pattern is similarly noted in the same metals as noted for wet weight (arsenic, magnesium, mercury, potassium, selenium, sodium and zinc). T-tests (Table 6) confirm that for all these metals the reanalyzed results are greater than original results. Therefore, it can be concluded that the bias seen in wet weight results cannot be solely attributed to differences in the moisture contents. However, when reanalyzed dry weight results are compared with each other, much better agreement is noted.

A comparison of the mean dry weight concentrations of all 53 samples as calculated from the replicate analyses is shown in Table 7. Means are calculated with reporting limits substituted for non-detects. A similar pattern is noted as for wet weight results in Table 5. For most of the metals that were shown to have statistically significantly greater reanalyzed results (magnesium, mercury, potassium, selenium and zinc), mean concentrations are 7% to 23% greater (mean = 13%) in the reanalyzed fillets. Arsenic is the exception, for while the detected concentrations tend to be greater in the reanalyzed samples, substitution of the lower reporting limits has the opposite effect, therefore the means are roughly comparable in reanalyzed vs. original results. Unlike what was found for wet weight, however, the sodium means for the original and reanalyzed fillets are roughly same.

3.4 Agreement among Other Metals

Calcium and strontium tend to have similar patterns of agreement and were highly variable. No statistically significant differences were noted among any of the results for these two constituents. Barium, copper and manganese also tended to have similar

patterns of agreement. Specifically, low concentrations (near detection) were in agreement while, at the same time, some highly variable concentrations appear to be outliers on the agreement plots. An examination of all the bivariate plots was conducted and points appearing as outliers with respect to the agreement line compared with other points were noted and are listed in Table 8.

Agreement for all other metals (aluminum, antimony, boron, cadmium, cobalt, iron, lead, molybdenum, nickel, silver, thallium, and vanadium) can only be evaluated in a qualitative way since there are few samples for which these metals were detected in both the original analysis and the reanalysis or were detected in either. Appendix K contains bivariate agreement plots of all results (detected (in both), not detected, or detected in one or the other) for all metals. These plots show good agreement for most metals in that the detected concentrations in reanalyzed samples (but not detected in the original samples) tended to have concentrations less than the previous reporting limits. (The exception is chromium as many of the samples with detected original results were not detected in the reanalyzed results; however, all of these results were near detection limits). The lower detection limits achieved in the reanalysis for these trace metals will allow a more direct comparison of subsequent fish sampling events to baseline and facilitate the detection of potential bioaccumulation of these trace metals should it occur.

3.5 Differences among Locations

In order to determine if sample location had an effect on sample agreement, bivariate agreement plots were created for detected original vs. detected reanalyzed fillet results (wet weight) by sample location (Appendix L). An example plot is shown in Figure 6 for selenium. As shown, there is no apparent effect of sample location on agreement. All points are above the agreement line and there is no pattern of greater bias among samples from specific locations. No pattern with respect to location is observed for any of the analytes (Appendix L).

3.6 Comparison of Sample Results Using National Functional Guidelines Criterion for Laboratory Duplicates

Environmental Standards, Inc. (Environmental Standards) performed a comparison of the initial and reanalyzed baseline fish data in accordance with the *National Functional Guidelines* (NFG) *for Inorganic Data Review* (US EPA, October 2004) criterion for duplicate sample analysis. According to the NFG, the objective of duplicate sample analyses is to demonstrate acceptable method precision by the laboratory at the time

of analysis. Typically, the laboratory duplicate criterion is applied to laboratory duplicate analyses prepared and analyzed by the laboratory in the same batch from separate aliquots of a single sample. It should be noted that the baseline fish sample reanalyses were performed by the same laboratory; however, the samples were analyzed more than 2 years apart and the analyses were performed on different sample aliquots from those initially submitted to the laboratory. Additionally, it should be noted that, in the case of the original homogenates and reanalyzed filets, the samples were homogenized by different entities. The use of standard NFG criterion of <20% relative percent difference (RPD), when both results were greater than 5× the reporting limit (RL) or difference less than the RL, when at least one result was less than the RL, is, therefore, considered conservative. All data were compared on a wet-weight basis.

Results from the initial analysis and reanalysis were compared per analyte per sample. Based on the comparison performed, the majority of analytes in the original and reanalysis were within the laboratory duplicate criterion. Table 9 presents the number and percentage of results that were within the criterion for all reported analytes. It should be noted that several analytes were considered acceptable to the limited extent that positive results were not observed in the initial analysis or reanalysis (*i.e.,* aluminum, antimony, beryllium, boron, cadmium, cobalt, lead, molybdenum, silver, thallium, and vanadium).

The comparisons for arsenic, selenium, magnesium, and potassium revealed that the results were within the NFG laboratory duplicate acceptance criterion even though the reanalysis results were generally higher than the initial results. A high percentage of the results for calcium were outside of the acceptance criterion; however, roughly half of the reanalyzed results were higher than the original results and half were lower than the initial analysis results. For copper, the majority of the results were within the acceptance criterion and roughly half of the reanalysis were higher and half were lower than the initial analysis results.

In general, the results for most analytes were within the acceptance criterion. For some analytes (selenium, arsenic, magnesium, potassium, mercury, and zinc), the results of the reanalysis were generally higher than the initial analysis results; for other analytes (calcium, copper, sodium, and strontium), roughly half of the reanalysis results were higher and half were lower than the original results.

4. Conclusions

Detected concentrations of certain metals (arsenic, magnesium, mercury, potassium, selenium, sodium and zinc) were statistically significantly greater in reanalyzed samples (fillet and homogenate) vs. original samples for wet weight results although the differences were small in relation to the mean concentrations of the two results. Similarly, detected concentrations of these same metals, with the exception of sodium, were also statistically significantly greater for dry weight results. (Reanalyzed dry weight sodium concentrations were greater than original results; however, the difference was not statistically significant.) Moisture content is lower in the reanalyzed samples, but this did not explain the increase in the detected concentrations of these metals (arsenic, magnesium, mercury, potassium, selenium, and zinc), given that higher concentrations in reanalyzed samples were found on both a wet and dry weight basis. The effect of this apparent bias in results resulted, in most cases, in an increase in mean concentrations for these metals in reanalyzed results as compared to original results on both a wet weight (magnesium, mercury, potassium, selenium, sodium and zinc) and dry weight (magnesium, mercury, potassium, selenium, and zinc) basis. (Arsenic is an exception since substitution of lower reporting limits for non-detects countered the influence on the means of higher detected values.) The increase in mean ranged from 6% to 32% for wet weight comparisons and from 7% to 23% for dry weight comparisons. Although small increases in reanalyzed results were noted, a comparison of original and reanalyzed samples demonstrated results to be within the conservative NFG duplicate criteria. The percentage of comparisons in agreement for original vs. reanalyzed fillet results was 98% for arsenic, 96% for magnesium, 72% for mercury, 96% for potassium, 100% for selenium, 91% for sodium and 72% for zinc.

Estimated mean wet weight concentrations of metals with low detection frequency (aluminum, antimony, beryllium, boron, cadmium, cobalt, iron, lead, molybdenum, silver, thallium and vanadium) decrease dramatically among reanalyzed results due to the lower reporting limits being substituted for the non-detect results. (Exceptions to this pattern are chromium and nickel for which reporting limits were roughly the same among original and reanalyzed results.) The lower mean values among reanalyzed results are more realistic than those calculated with the substitution of higher detection limits for non-detected values. Therefore, the use of the reanalyzed baseline fish data set, rather than the original, will make temporal comparisons more realistic and will facilitate the detection of potential bioaccumulation of these trace metals in fish should it occur in subsequent sampling events.

Results among reanalyzed samples (fillet vs. homogenate) were generally in agreement on both a wet and dry weight basis although some small but statistically significant differences were noted.

Neither sample species nor sample location appears to have an effect on agreement. The patterns of sample agreement for locations downstream of the site (ERM 0.5 and CRM 1.5) were generally similar to the patterns for upstream reference locations (ERM 8.0 and CRM 9.5). This is consistent with the premise that the baseline fish were collected before measureable bioaccumulation could occur.

5. References

US Environmental Protection Agency (USEPA). 2004. National Functional Guidelines for Inorganic Review. EPA 540-R-04-004, OSWER 9240.1-45. Washington, DC.

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Table 1. Baseline Fish Collection and Analysis Summary: Tennessee Valley Authority (TVA) Kingston Ash Recovery Project

EQUIS Field Sample Id	Sample Date	Location	Species	Percent Moisture	Total Length	Total Weight
N00004256-001A	2/25/2009	ERM8.0	Channel Catfish	Rejected	39.6 cm	499.0 g
N00004256-001F	1/26/2009	ERM8.0	Channel Catfish	Rejected	39.6 cm	499.0 g
N00004256-001G	1/26/2009	ERM8.0	Channel Catfish	Rejected	39.6 cm	499.0 g
N00004256-002A	1/26/2009	ERM8.0	Channel Catfish	Rejected	43.2 cm	811.9 g
N00004256-002F	1/26/2009	ERM8.0	Channel Catfish	Rejected	43.2 cm	811.9 g
N00004256-002G	1/26/2009	ERM8.0	Channel Catfish	Rejected	43.2 cm	811.9 g
N00004256-003A	1/26/2009	ERM8.0	Channel Catfish	Rejected	46.5 cm	1147.6 g
N00004256-003F	2/25/2009	ERM8.0	Channel Catfish	Rejected	46.5 cm	1147.6 g
N00004256-003G	2/25/2009	ERM8.0	Channel Catfish	Rejected	46.5 cm	1147.6 g
N00004256-004A	2/25/2009	ERM8.0	Largemouth Bass	Rejected	30.7 cm	303.9 g
N00004256-004F	2/25/2009	ERM8.0	Largemouth Bass	Rejected	30.7 cm	303.9 g
N00004256-004G	2/25/2009	ERM8.0	Largemouth Bass	Rejected	30.7 cm	303.9 g
N00004258-001A	1/9/2009	ERM0.5	Largemouth Bass	Rejected	37.6 cm	784.7 g
N00004258-001F	1/9/2009	ERM0.5	Largemouth Bass	Rejected	37.6 cm	784.7 g
N00004258-002A	1/9/2009	ERM0.5	Largemouth Bass	77.1	33.3 cm	499.0 g
N00004258-002F	1/9/2009	ERM0.5	Largemouth Bass	Rejected	33.3 cm	499.0 g
N00004258-003A	1/9/2009	ERM0.5	Largemouth Bass	Rejected	30.7 cm	390.1 g
N00004258-003F	1/9/2009	ERM0.5	Largemouth Bass	Rejected	30.7 cm	390.1 g
N00004258-004A	1/12/2009	ERM0.5	Largemouth Bass	Rejected	29.2 cm	313.0 g
N00004258-004F	1/12/2009	ERM0.5	Largemouth Bass	Rejected	29.2 cm	313.0 g
N00004258-005A	2/12/2009	ERM0.5	Largemouth Bass	Rejected	35.6 cm	576.1 g
N00004258-005F	1/12/2009	ERM0.5	Largemouth Bass	Rejected	35.6 cm	576.1 g
N00004258-006A	2/12/2009	ERM0.5	Largemouth Bass	Rejected	30.2 cm	331.1 g
N00004258-006F	2/12/2009	ERM0.5	Largemouth Bass	Rejected	30.2 cm	331.1 g
N00004258-007A	2/12/2009	ERM0.5	Largemouth Bass	Rejected	28.7 cm	272.2 g
N00004258-007F	2/12/2009	ERM0.5	Largemouth Bass	Rejected	28.7 cm	272.2 g
N00004258-008A	2/12/2009	ERM0.5	Largemouth Bass	Rejected	37.1 cm	680.4 g
N00004258-008F	2/12/2009	ERM0.5	Largemouth Bass	Rejected	37.1 cm	680.4 g
N00004258-009A	1/9/2009	ERM0.5	Channel Catfish	Rejected	45.7 cm	1052.3 g
N00004258-009F	1/9/2009	ERM0.5	Channel Catfish	Rejected	45.7 cm	1052.3 g
N00004258-010A	1/9/2009	ERM0.5	Channel Catfish	Rejected	40.6 cm	644.1 g
N00004258-010F	1/9/2009	ERM0.5	Channel Catfish	Rejected	40.6 cm	644.1 g
N00004258-011A	1/9/2009	ERM0.5	Channel Catfish	Rejected	35.8 cm	426.4 g
N00004258-011F	1/9/2009	ERM0.5	Channel Catfish	Rejected	35.8 cm	426.4 g
N00004258-012A	1/12/2009	ERM0.5	Channel Catfish	81.7	48.5 cm	1047.8 g
N00004258-012F	1/12/2009	ERM0.5	Channel Catfish	Rejected	48.5 cm	1047.8 g
N00004258-013A	1/9/2009	ERM0.5	Blue Catfish	Rejected	41.9 cm	743.9 g
N00004258-013F	1/9/2009	ERM0.5	Blue Catfish	Rejected	41.9 cm	743.9 g
N00004258-014A	1/9/2009	ERM0.5	Blue Catfish	Rejected	38.1 cm	544.3 g
N00004258-014F	1/9/2009	ERM0.5	Blue Catfish	Rejected	38.1 cm	544.3 g
N00004258-015A	1/9/2009	ERM0.5	Blue Catfish	Rejected	51.3 cm	1324.5 g
N00004258-015F	1/9/2009	ERM0.5	Blue Catfish	Rejected	51.3 cm	1324.5 g
N00004258-016A	1/9/2009	ERM0.5	Blue Catfish	Rejected	50.8 cm	1442.4 g
N00004258-016F	1/9/2009	ERM0.5	Blue Catfish	Rejected	50.8 cm	1442.4 g
N00004258-017A	1/9/2009	ERM0.5	Blue Catfish	70.9	41.1 cm	644.1 g
N00004258-017F	1/9/2009	ERM0.5	Blue Catfish	Rejected	41.1 cm	644.1 g
N00004259-001A	1/9/2009	CRM9.5	Largemouth Bass	77	31.8 cm	435.4 g
N00004259-001F	1/9/2009	CRM9.5	Largemouth Bass	Rejected	31.8 cm	435.4 g
N00004259-001G	1/9/2009	CRM9.5	Largemouth Bass	Rejected	31.8 cm	435.4 g
N00004259-002A	1/9/2009	CRM9.5	Largemouth Bass	Rejected	29.5 cm	326.6 g
N00004259-002F	1/9/2009	CRM9.5	Largemouth Bass	Rejected	29.5 cm	326.6 g
N00004259-002G	1/9/2009	CRM9.5	Largemouth Bass	Rejected	29.5 cm	326.6 g
N00004259-003A	1/9/2009	CRM9.5	Largemouth Bass	77.3	35.3 cm	589.7 g
N00004259-003F	1/9/2009	CRM9.5	Largemouth Bass	Rejected	35.3 cm	589.7 g
N00004259-003G	1/9/2009	CRM9.5	Largemouth Bass	Rejected	35.3 cm	589.7 g
N00004259-004A	1/9/2009	CRM9.5	Largemouth Bass	77.7	31.8 cm	408.2 g
N00004259-004F	1/9/2009	CRM9.5	Largemouth Bass	Rejected	31.8 cm	408.2 g
N00004259-004G	1/9/2009	CRM9.5	Largemouth Bass	Rejected	31.8 cm	408.2 g
N00004259-005A	1/12/2009	CRM9.5	Largemouth Bass	Rejected	35.6 cm	576.1 g
N00004259-005F	1/12/2009	CRM9.5	Largemouth Bass	Rejected	35.6 cm	576.1 g
N00004259-005G	1/12/2009	CRM9.5	Largemouth Bass	Rejected	35.6 cm	576.1 g
N00004259-006A	1/9/2009	CRM9.5	Channel Catfish	Rejected	39.1 cm	544.3 g

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Table 1. Baseline Fish Collection and Analysis Summary: Tennessee Valley Authority (TVA) Kingston Ash Recovery Project

EQUIS Field Sample Id	Sample Date	Location	Species	Percent Moisture	Total Length	Total Weight
N00004259-006F	1/9/2009	CRM9.5	Channel Catfish	Rejected	39.1 cm	544.3 g
N00004259-006G	1/9/2009	CRM9.5	Channel Catfish	Rejected	39.1 cm	544.3 g
N00004259-007A	1/9/2009	CRM9.5	Channel Catfish	Rejected	41.7 cm	630.5 g
N00004259-007F	1/9/2009	CRM9.5	Channel Catfish	Rejected	41.7 cm	630.5 g
N00004259-007G	1/9/2009	CRM9.5	Channel Catfish	Rejected	41.7 cm	630.5 g
N00004259-008A	1/12/2009	CRM9.5	Channel Catfish	Rejected	32.8 cm	186.0 g
N00004259-008F	1/12/2009	CRM9.5	Channel Catfish	Rejected	32.8 cm	186.0 g
N00004259-008G	1/12/2009	CRM9.5	Channel Catfish	Rejected	32.8 cm	186.0 g
N00004259-009A	1/12/2009	CRM9.5	Channel Catfish	Rejected	48.5 cm	1043.3 g
N00004259-009F	1/12/2009	CRM9.5	Channel Catfish	Rejected	48.5 cm	1043.3 g
N00004259-009G	1/12/2009	CRM9.5	Channel Catfish	Rejected	48.5 cm	1043.3 g
N00004259-010A	1/9/2009	CRM9.5	Blue Catfish	Rejected	47.5 cm	979.8 g
N00004259-010F	1/9/2009	CRM9.5	Blue Catfish	Rejected	47.5 cm	979.8 g
N00004259-010G	1/9/2009	CRM9.5	Blue Catfish	Rejected	47.5 cm	979.8 g
N00004259-011A	1/9/2009	CRM9.5	Blue Catfish	81.1	47.8 cm	979.8 g
N00004259-011F	1/9/2009	CRM9.5	Blue Catfish	Rejected	47.8 cm	979.8 g
N00004259-011G	1/9/2009	CRM9.5	Blue Catfish	Rejected	47.8 cm	979.8 g
N00004259-012A	1/9/2009	CRM9.5	Blue Catfish	82.3	46.5 cm	771.1 g
N00004259-012F	1/9/2009	CRM9.5	Blue Catfish	Rejected	46.5 cm	771.1 g
N00004259-012G	1/9/2009	CRM9.5	Blue Catfish	Rejected	46.5 cm	771.1 g
N00004259-013A	1/9/2009	CRM9.5	Blue Catfish	80.5	39.4 cm	544.3 g
N00004259-013F	1/9/2009	CRM9.5	Blue Catfish	Rejected	39.4 cm	544.3 g
N00004259-013G	1/9/2009	CRM9.5	Blue Catfish	Rejected	39.4 cm	544.3 g
N00004259-014A	1/9/2009	CRM9.5	Blue Catfish	Rejected	39.6 cm	462.7 g
N00004259-014F	1/9/2009	CRM9.5	Blue Catfish	Rejected	39.6 cm	462.7 g
N00004259-014G	1/9/2009	CRM9.5	Blue Catfish	Rejected	39.6 cm	462.7 g
N00004260-001A	1/9/2009	CRM1.5	Largemouth Bass	77.4	36.1 cm	612.3 g
N00004260-001F	1/9/2009	CRM1.5	Largemouth Bass	Rejected	36.1 cm	612.3 g
N00004260-001G	1/9/2009	CRM1.5	Largemouth Bass	Rejected	36.1 cm	612.3 g
N00004260-002A	1/12/2009	CRM1.5	Largemouth Bass	Rejected	33.3 cm	616.9 g
N00004260-002F	1/9/2009	CRM1.5	Largemouth Bass	Rejected	33.3 cm	616.9 g
N00004260-002G	1/9/2009	CRM1.5	Largemouth Bass	Rejected	33.3 cm	616.9 g
N00004260-003A	1/9/2009	CRM1.5	Largemouth Bass	76.9	32.5 cm	480.8 g
N00004260-003F	1/9/2009	CRM1.5	Largemouth Bass	Rejected	32.5 cm	480.8 g
N00004260-003G	1/9/2009	CRM1.5	Largemouth Bass	Rejected	32.5 cm	480.8 g
N00004260-004A	1/12/2009	CRM1.5	Largemouth Bass	76.5	31.8 cm	458.1 g
N00004260-004F	1/12/2009	CRM1.5	Largemouth Bass	Rejected	31.8 cm	458.1 g
N00004260-004G	1/12/2009	CRM1.5	Largemouth Bass	Rejected	31.8 cm	458.1 g
N00004260-005A	1/12/2009	CRM1.5	Spotted Bass	71.7	42.2 cm	1088.6 g
N00004260-005F	1/12/2009	CRM1.5	Spotted Bass	Rejected	42.2 cm	1088.6 g
N00004260-005G	1/12/2009	CRM1.5	Spotted Bass	Rejected	42.2 cm	1088.6 g
N00004260-006A	1/9/2009	CRM1.5	Channel Catfish	72.2	37.3 cm	616.9 g
N00004260-006F	1/12/2009	CRM1.5	Channel Catfish	Rejected	37.3 cm	616.9 g
N00004260-006G	1/12/2009	CRM1.5	Channel Catfish	Rejected	37.3 cm	616.9 g
N00004260-007A	1/9/2009	CRM1.5	Channel Catfish	Rejected	44.7 cm	988.8 g
N00004260-007F	1/9/2009	CRM1.5	Channel Catfish	Rejected	44.7 cm	988.8 g
N00004260-007G	1/9/2009	CRM1.5	Channel Catfish	Rejected	44.7 cm	988.8 g
N00004260-008A	1/12/2009	CRM1.5	Channel Catfish	80.1	37.3 cm	435.4 g
N00004260-008F	1/12/2009	CRM1.5	Channel Catfish	Rejected	37.3 cm	435.4 g
N00004260-008G	1/12/2009	CRM1.5	Channel Catfish	Rejected	37.3 cm	435.4 g
N00004260-009A	1/12/2009	CRM1.5	Channel Catfish	Rejected	36.6 cm	362.9 g
N00004260-009F	1/12/2009	CRM1.5	Channel Catfish	Rejected	36.6 cm	362.9 g
N00004260-009G	1/12/2009	CRM1.5	Channel Catfish	Rejected	36.6 cm	362.9 g
N00004260-010A	1/12/2009	CRM1.5	Channel Catfish	Rejected	40.4 cm	499.0 g
N00004260-010F	1/12/2009	CRM1.5	Channel Catfish	Rejected	40.4 cm	499.0 g
N00004260-010G	1/12/2009	CRM1.5	Channel Catfish	Rejected	40.4 cm	499.0 g
N00004447-001A	4/1/2009	ERM8.0	Largemouth Bass	Rejected	44.0 cm	1279.0 g
N00004447-001F	4/1/2009	ERM8.0	Largemouth Bass	Rejected	44.0 cm	1279.0 g
N00004447-001G	4/1/2009	ERM8.0	Largemouth Bass	Rejected	44.0 cm	1279.0 g
N00004447-002A	4/1/2009	ERM8.0	Largemouth Bass	Rejected	30.5 cm	317.3 g
N00004447-002F	4/1/2009	ERM8.0	Largemouth Bass	Rejected	30.5 cm	317.3 g
N00004447-002G	4/1/2009	ERM8.0	Largemouth Bass	Rejected	30.5 cm	317.3 g

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Table 1. Baseline Fish Collection and Analysis Summary: Tennessee Valley Authority (TVA) Kingston Ash Recovery Project

EQUIS Field Sample Id	Sample Date	Location	Species	Percent Moisture	Total Length	Total Weight
N00004447-003A	4/1/2009	ERM8.0	Largemouth Bass	Rejected	38.0 cm	701.0 g
N00004447-003F	4/1/2009	ERM8.0	Largemouth Bass	Rejected	38.0 cm	701.0 g
N00004447-003G	4/1/2009	ERM8.0	Largemouth Bass	Rejected	38.0 cm	701.0 g
N00004447-004A	4/1/2009	ERM8.0	Largemouth Bass	79.2	36.7 cm	707.0 g
N00004447-004F	4/1/2009	ERM8.0	Largemouth Bass	Rejected	36.7 cm	707.0 g
N00004447-004G	4/1/2009	ERM8.0	Largemouth Bass	Rejected	36.7 cm	707.0 g
N00004447-005A	4/1/2009	ERM8.0	Largemouth Bass	79.4	45.7 cm	1478.0 g
N00004447-005F	4/1/2009	ERM8.0	Largemouth Bass	Rejected	45.7 cm	1478.0 g
N00004447-005G	4/1/2009	ERM8.0	Largemouth Bass	Rejected	45.7 cm	1478.0 g
N00004447-006A	4/1/2009	ERM8.0	Channel Catfish	80.2	40.0 cm	539.0 g
N00004447-006F	4/1/2009	ERM8.0	Channel Catfish	Rejected	40.0 cm	539.0 g
N00004447-006G	4/1/2009	ERM8.0	Channel Catfish	Rejected	40.0 cm	539.0 g
N00004447-007A	4/1/2009	ERM8.0	Channel Catfish	80.1	42.4 cm	643.7 g
N00004447-007F	4/1/2009	ERM8.0	Channel Catfish	Rejected	42.4 cm	643.7 g
N00004447-007G	4/1/2009	ERM8.0	Channel Catfish	Rejected	42.4 cm	643.7 g
N00004447-008A	4/1/2009	ERM8.0	Channel Catfish	80.2	51.0 cm	1157.0 g
N00004447-008F	4/1/2009	ERM8.0	Channel Catfish	Rejected	51.0 cm	1157.0 g
N00004447-008G	4/1/2009	ERM8.0	Channel Catfish	Rejected	51.0 cm	1157.0 g

Notes: Last letter of Sample ID indicates sample analysis replicate. A = Original Analysis. F = Reanalyzed Fillets. G = Reanalyzed Homogenate Samples.

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Table 2. Analytical Reporting Limits and Frequency of Detection in Baseline Fish Samples

Analyte	Sample Replicate	N	Analytical Reporting Limits			Percent Detection
			Mean	Maximum	Minimum	
Aluminum	A	53	24.9	25.3	24.7	0%
Aluminum	F	53	3.9	4.2	3.6	30%
Aluminum	G	36	4.1	11.7	3.6	8%
Antimony	A	53	0.100	0.101	0.098	0%
Antimony	F	53	0.014	0.015	0.013	0%
Antimony	G	36	0.015	0.042	0.013	6%
Arsenic	A	53	0.100	0.122	0.098	36%
Arsenic	F	53	0.027	0.029	0.025	74%
Arsenic	G	36	0.029	0.082	0.025	61%
Barium	A	53	0.100	0.101	0.098	26%
Barium	F	53	0.045	0.048	0.041	68%
Barium	G	36	0.047	0.130	0.041	81%
Beryllium	A	53	0.100	0.101	0.098	0%
Beryllium	F	53	0.029	0.031	0.026	0%
Beryllium	G	36	0.030	0.086	0.026	0%
Boron	A	53	1.99	2.03	1.97	0%
Boron	F	53	0.402	0.430	0.370	0%
Boron	G	36	0.424	1.200	0.370	0%
Cadmium	A	53	0.100	0.101	0.098	0%
Cadmium	F	53	0.009	0.049	0.007	6%
Cadmium	G	36	0.008	0.022	0.007	17%
Calcium	A	53	100	101	99	85%
Calcium	F	53	47	50	43	100%
Calcium	G	36	49	141	43	100%
Chromium	A	53	0.10	0.10	0.10	60%
Chromium	F	53	0.12	0.13	0.11	6%
Chromium	G	36	0.13	0.37	0.11	33%
Cobalt	A	53	0.10	0.10	0.10	0%
Cobalt	F	53	0.01	0.02	0.01	13%
Cobalt	G	36	0.01	0.04	0.01	50%
Copper	A	53	0.50	0.51	0.49	21%
Copper	F	53	0.14	0.15	0.13	100%
Copper	G	36	0.15	0.42	0.13	100%
Iron	A	53	25	25	25	0%
Iron	F	53	12	13	11	2%
Iron	G	36	12	35	11	0%
Lead	A	53	0.10	0.10	0.10	4%
Lead	F	53	0.03	0.03	0.03	23%
Lead	G	36	0.03	0.08	0.03	11%
Magnesium	A	53	100	101	99	100%
Magnesium	F	53	47	50	43	100%
Magnesium	G	36	49	141	43	100%
Manganese	A	53	0.50	0.51	0.49	21%
Manganese	F	53	0.17	0.18	0.15	87%
Manganese	G	36	0.17	0.50	0.15	97%
Mercury	A	53	0.02	0.05	0.02	87%
Mercury	F	53	0.01	0.01	0.01	100%
Mercury	G	36	0.01	0.03	0.01	100%
Molybdenum	A	53	1.00	1.01	0.98	0%
Molybdenum	F	53	0.03	0.04	0.03	0%
Molybdenum	G	36	0.04	0.10	0.03	0%
Nickel	A	53	0.10	0.10	0.10	8%
Nickel	F	53	0.09	0.10	0.09	26%
Nickel	G	36	0.10	0.29	0.09	19%
Potassium	A	53	100	101	99	100%
Potassium	F	53	701	750	642	100%
Potassium	G	36	742	2120	644	100%
Selenium	A	53	0.20	0.21	0.19	85%
Selenium	F	53	0.07	0.07	0.06	100%
Selenium	G	36	0.07	0.20	0.06	100%

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Table 2. Analytical Reporting Limits and Frequency of Detection in Baseline Fish Samples

Analyte	Sample Replicate	N	Analytical Reporting Limits			Percent Detection
			Mean	Maximum	Minimum	
Silver	A	53	0.05	0.05	0.05	0%
Silver	F	53	0.00	0.01	0.00	0%
Silver	G	36	0.00	0.01	0.00	6%
Sodium	A	53	100	101	99	100%
Sodium	F	53	47	50	43	100%
Sodium	G	36	49	141	43	100%
Strontium	A	53	0.10	0.10	0.10	79%
Strontium	F	53	0.04	0.05	0.04	98%
Strontium	G	36	0.05	0.13	0.04	100%
Thallium	A	53	0.10	0.10	0.10	0%
Thallium	F	53	0.01	0.02	0.01	0%
Thallium	G	36	0.01	0.04	0.01	0%
Vanadium	A	53	0.20	0.21	0.19	0%
Vanadium	F	53	0.04	0.05	0.04	11%
Vanadium	G	36	0.05	0.13	0.04	17%
Zinc	A	53	1.99	2.03	1.97	100%
Zinc	F	53	2.11	2.30	1.90	100%
Zinc	G	36	2.23	6.40	1.90	100%

A = Original Analysis. F = Reanalyzed Fillets. G = Reanalyzed Homogenate.

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Table 3. Summary Statistics for Baseline Fish Samples by Sample Replicate

Analyte	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
										Maximum	Minimum	Maximum	Minimum
Aluminum	A	53	0	0%	24.9	0.1	0.0	25.3	24.7			25.3	24.7
Aluminum	F	53	16	30%	4.9	2.0	0.3	13.0	3.6	13.0	3.9	4.2	3.6
Aluminum	G	36	3	8%	5.1	3.7	0.6	18.7	3.6	18.7	10.8	11.7	3.6
Antimony	A	53	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Antimony	F	53	0	0%	0.014	0.001	0.000	0.015	0.013			0.015	0.013
Antimony	G	36	2	6%	0.015	0.005	0.001	0.042	0.013	0.021	0.017	0.042	0.013
Arsenic	A	53	19	36%	0.14	0.06	0.01	0.29	0.10	0.29	0.12	0.12	0.10
Arsenic	F	53	39	74%	0.13	0.12	0.02	0.36	0.03	0.36	0.03	0.03	0.03
Arsenic	G	36	22	61%	0.11	0.10	0.02	0.33	0.03	0.33	0.03	0.08	0.03
Barium	A	53	14	26%	0.12	0.09	0.01	0.70	0.10	0.70	0.11	0.10	0.10
Barium	F	53	36	68%	0.09	0.08	0.01	0.46	0.04	0.46	0.04	0.05	0.04
Barium	G	36	29	81%	0.13	0.19	0.03	1.20	0.04	1.20	0.05	0.05	0.04
Beryllium	A	53	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Beryllium	F	53	0	0%	0.029	0.001	0.000	0.031	0.026			0.031	0.026
Beryllium	G	36	0	0%	0.030	0.010	0.002	0.086	0.026			0.086	0.026
Boron	A	53	0	0%	1.994	0.011	0.001	2.026	1.975			2.026	1.975
Boron	F	53	0	0%	0.402	0.019	0.003	0.430	0.370			0.430	0.370
Boron	G	36	0	0%	0.424	0.134	0.022	1.200	0.370			1.200	0.370
Cadmium	A	53	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Cadmium	F	53	3	6%	0.009	0.007	0.001	0.049	0.007	0.018	0.009	0.049	0.007
Cadmium	G	36	6	17%	0.009	0.003	0.001	0.022	0.007	0.017	0.009	0.022	0.007
Calcium	A	53	45	85%	1147	1861	256	7426	99	7426	101	100	99
Calcium	F	53	53	100%	1351	1875	257	12200	67	12200	67		
Calcium	G	36	36	100%	1548	3291	548	19400	79	19400	79		
Chromium	A	53	32	60%	0.13	0.06	0.01	0.43	0.10	0.43	0.10	0.10	0.10
Chromium	F	53	3	6%	0.13	0.06	0.01	0.44	0.11	0.44	0.17	0.13	0.11
Chromium	G	36	12	33%	0.19	0.16	0.03	0.86	0.11	0.86	0.15	0.13	0.11
Cobalt	A	53	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Cobalt	F	53	7	13%	0.015	0.004	0.001	0.035	0.012	0.035	0.014	0.015	0.012
Cobalt	G	36	18	50%	0.019	0.012	0.002	0.077	0.013	0.077	0.015	0.015	0.013
Copper	A	53	11	21%	0.52	0.09	0.01	1.05	0.49	1.05	0.50	0.51	0.49
Copper	F	53	53	100%	0.91	1.37	0.19	6.80	0.20	6.80	0.20		
Copper	G	36	36	100%	0.44	0.21	0.04	1.40	0.22	1.40	0.22		
Iron	A	53	0	0%	24.9	0.1	0.0	25.3	24.7			25.3	24.7
Iron	F	53	1	2%	12.2	3.4	0.5	35.9	10.7	35.9	35.9	12.5	10.7
Iron	G	36	0	0%	12.4	4.0	0.7	35.3	10.7			35.3	10.7

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Table 3. Summary Statistics for Baseline Fish Samples by Sample Replicate

Analyte	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
										Maximum	Minimum	Maximum	Minimum
Lead	A	53	2	4%	0.10	0.01	0.00	0.16	0.10	0.16	0.14	0.10	0.10
Lead	F	53	12	23%	0.03	0.01	0.00	0.08	0.03	0.08	0.03	0.03	0.03
Lead	G	36	4	11%	0.04	0.04	0.01	0.24	0.03	0.24	0.03	0.08	0.03
Magnesium	A	53	53	100%	241	48	7	375	169	375	169		
Magnesium	F	53	53	100%	277	49	7	439	202	439	202		
Magnesium	G	36	36	100%	282	70	12	556	199	556	199		
Manganese	A	53	11	21%	0.65	0.72	0.10	5.66	0.49	5.66	0.54	0.51	0.49
Manganese	F	53	46	87%	0.63	0.92	0.13	5.80	0.15	5.80	0.16	0.18	0.15
Manganese	G	36	35	97%	0.79	1.97	0.33	12.10	0.15	12.10	0.18	0.15	0.15
Mercury	A	53	46	87%	0.07	0.05	0.01	0.22	0.02	0.22	0.02	0.05	0.02
Mercury	F	53	53	100%	0.09	0.07	0.01	0.36	0.02	0.36	0.02		
Mercury	G	36	36	100%	0.11	0.07	0.01	0.30	0.02	0.30	0.02		
Molybdenum	A	53	0	0%	1.00	0.01	0.00	1.01	0.98			1.01	0.98
Molybdenum	F	53	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	G	36	0	0%	0.04	0.01	0.00	0.10	0.03			0.10	0.03
Nickel	A	53	4	8%	0.11	0.06	0.01	0.55	0.10	0.55	0.12	0.10	0.10
Nickel	F	53	14	26%	0.11	0.05	0.01	0.30	0.09	0.30	0.09	0.10	0.09
Nickel	G	36	7	19%	0.13	0.09	0.01	0.55	0.09	0.55	0.12	0.10	0.09
Potassium	A	53	53	100%	3388	281	39	4042	2738	4042	2738		
Potassium	F	53	53	100%	3823	315	43	4280	3080	4280	3080		
Potassium	G	36	36	100%	4037	429	71	4880	3190	4880	3190		
Selenium	A	53	45	85%	0.38	0.16	0.02	0.74	0.19	0.74	0.21	0.21	0.19
Selenium	F	53	53	100%	0.45	0.18	0.02	0.88	0.20	0.88	0.20		
Selenium	G	36	36	100%	0.39	0.15	0.02	0.69	0.18	0.69	0.18		
Silver	A	53	0	0%	0.050	0.001	0.000	0.051	0.049			0.051	0.049
Silver	F	53	0	0%	0.003	0.001	0.000	0.007	0.003			0.007	0.003
Silver	G	36	2	6%	0.004	0.005	0.001	0.030	0.003	0.030	0.004	0.009	0.003
Sodium	A	53	53	100%	415	73	10	614	285	614	285		
Sodium	F	53	53	100%	440	87	12	660	291	660	291		
Sodium	G	36	36	100%	467	96	16	721	305	721	305		
Strontium	A	53	42	79%	0.94	1.46	0.20	5.72	0.10	5.72	0.10	0.10	0.10
Strontium	F	53	52	98%	1.04	1.34	0.18	8.30	0.04	8.30	0.05	0.04	0.04
Strontium	G	36	36	100%	1.20	2.44	0.41	14.30	0.05	14.30	0.05		
Thallium	A	53	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Thallium	F	53	0	0%	0.014	0.001	0.000	0.018	0.012			0.018	0.012
Thallium	G	36	0	0%	0.014	0.004	0.001	0.040	0.012			0.040	0.012

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Table 3. Summary Statistics for Baseline Fish Samples by Sample Replicate

Analyte	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
										Maximum	Minimum	Maximum	Minimum
Vanadium	A	53	0	0%	0.20	0.00	0.00	0.21	0.19			0.21	0.19
Vanadium	F	53	6	11%	0.05	0.01	0.00	0.14	0.04	0.14	0.05	0.05	0.04
Vanadium	G	36	6	17%	0.05	0.02	0.00	0.15	0.04	0.15	0.05	0.13	0.04
Zinc	A	53	53	100%	7.8	2.3	0.3	13.5	4.2	13.5	4.2		
Zinc	F	53	53	100%	9.3	2.9	0.4	17.3	5.1	17.3	5.1		
Zinc	G	36	36	100%	9.5	2.7	0.4	19.0	5.6	19.0	5.6		

Notes: Full analytical reporting limit substituted for non-detects. A = Original Analysis. F = Reanalyzed Fillets. G = Reanalyzed Homogenate.

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Table 4. Paired t-Test Results Comparing Detected Values Among Replicates: Wet Weight

	Difference (Original - Reanal. Fillet)			Difference (Original - Reanal. Homogenate)			Difference (Reanal. Fillet - Reanal. Homogenate)		
	N	Mean	p-value	N	Mean	p-value	N	Mean	p-value
Arsenic	19	-0.065	<.0001	11	-0.034	0.009	21	0.02	0.005
Barium	12	0.052	0.295	10	-0.002	0.923	22	-0.07	0.217
Cadmium	0			0			1	0.01	.
Calcium	45	33	0.912	29	-460	0.510	36	-103	0.875
Chromium	1	-0.213	.	10	-0.16	0.041	0		
Cobalt	0			0			5	0.00	0.629
Copper	11	-0.846	0.222	7	-0.062	0.373	36	0.15	0.160
Magnesium	53	-37	<.0001	36	-39	0.000	36	-4.8	0.671
Manganese	11	0.423	0.345	7	-1.53	0.385	31	-0.22	0.591
Mercury	46	-0.025	<.0001	31	-0.030	<.0001	36	-0.001	0.623
Nickel	1	0.113	.	2	-0.097	0.298	1	-0.26	.
Potassium	53	-435	<.0001	36	-577	<.0001	36	-158	0.006
Selenium	45	-0.072	<.0001	28	-0.053	<.0001	36	0.012	0.075
Sodium	53	-25	0.003	36	-49	<.0001	36	-24	0.070
Strontium	42	0.132	0.579	26	-0.252	0.664	35	-0.09	0.845
Zinc	53	-1.486	<.0001	36	-2.052	<.0001	36	-0.22	0.647

	Difference (Original - Reanal. Fillet) Log-transformed			Difference (Original - Reanal. Homogenate) Log-transformed			Difference (Reanal. Fillet - Reanal. Homogenate) Log-transformed		
	N	Mean	p-value	N	Mean	p-value	N	Mean	p-value
Arsenic	19	-0.27	<.0001	11	-0.16	0.008	21	0.06	0.042
Barium	12	0.44	0.054	10	0.08	0.581	22	-0.39	0.041
Calcium	45	-0.35	0.095	29	-0.15	0.470	36	0.09	0.700
Chromium	1	-0.86	.	10	-0.52	0.017	0	.	.
Cobalt	0	.	.	0	.	.	5	-0.15	0.558
Copper	11	-0.24	0.489	7	-0.04	0.671	36	0.09	0.439
Magnesium	53	-0.15	<.0001	36	-0.14	<.0001	36	-0.01	0.826
Manganese	11	0.51	0.086	7	-0.21	0.644	31	-0.15	0.379
Mercury	46	-0.28	<.0001	31	-0.28	<.0001	36	-0.01	0.833
Nickel	1	0.81	.	2	-0.44	0.149	1	-1.35	.
Potassium	53	-0.12	<.0001	36	-0.15	<.0001	36	-0.04	0.008
Selenium	45	-0.17	<.0001	28	-0.13	<.0001	36	0.05	0.008
Sodium	53	-0.05	0.002	36	-0.11	<.0001	36	-0.05	0.040
Strontium	42	-0.06	0.768	26	-0.01	0.958	35	0.02	0.944
Zinc	53	-0.17	<.0001	36	-0.25	<.0001	36	-0.04	0.401

Shading indicates Mean difference is significantly different from 0 (• =0.05).

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Table 5. Comparison of Mean Concentrations for Baseline Fish Calculated from Original and Reanalyzed Results

Analyte	Mean Concentration (mg/kg wet weight)			% Increase (Decrease) in Mean from Original		% Detection of Original	% Detection of Reanalyzed Fillet
	Original (N=53)	Reanalyzed Fillet (N=53)	Reananlyzed Homogenate (N=36)	Reanalyzed Fillet	Reananlyzed Homogenate		
% Moisture	78.90	77.82	78.06	-1.4%	-1.1%		
Aluminum	24.94	4.85	5.12	-81%	-79%	0%	30%
Antimony	0.10	0.01	0.02	-86%	-85%	0%	0%
Arsenic	0.14	0.13	0.11	-7.3%	-21%	36%	74%
Barium	0.12	0.09	0.13	-23%	7%	26%	68%
Beryllium	0.10	0.03	0.03	-71%	-70%	0%	0%
Boron	1.99	0.40	0.42	-80%	-79%	0%	0%
Cadmium	0.10	0.01	0.01	-91%	-91%	0%	6%
Calcium	1147.15	1350.84	1547.97	18%	35%	85%	100%
Chromium	0.13	0.13	0.19	3.3%	46%	60%	6%
Cobalt	0.10	0.01	0.02	-85%	-81%	0%	13%
Copper	0.52	0.91	0.44	74%	-16%	21%	100%
Iron	24.94	12.15	12.36	-51%	-50%	0%	2%
Lead	0.10	0.03	0.04	-70%	-66%	4%	23%
Magnesium	240.56	277.45	281.50	15%	17%	100%	100%
Manganese	0.65	0.63	0.79	-2.6%	21%	21%	87%
Mercury	0.07	0.09	0.11	32%	54%	87%	100%
Molybdenum	1.00	0.03	0.04	-97%	-96%	0%	0%
Nickel	0.11	0.11	0.13	0.047%	13%	8%	26%
Potassium	3388.04	3823.21	4037.22	13%	19%	100%	100%
Selenium	0.38	0.45	0.39	17%	1.2%	85%	100%
Silver	0.05	0.00	0.00	-94%	-92%	0%	0%
Sodium	414.61	439.79	466.69	6.1%	13%	100%	100%
Strontium	0.94	1.04	1.20	11%	28%	79%	98%
Thallium	0.10	0.01	0.01	-86%	-86%	0%	0%
Vanadium	0.20	0.05	0.05	-76%	-73%	0%	11%
Zinc	7.81	9.30	9.52	19%	22%	100%	100%

*Reporting Limit Substituted for Non-Detects. Shading indicates increase.

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Table 6. Paired t-Test Results Comparing Detected Values of Twenty Original and Reanalyzed Fillet Results: Dry Weight

Paired t-Test Results Comparing Detected Values Among Replicates (Dry Weight Results)

		Difference (Original - Reanal. Fillet)			p-value Raw Data	p-value Log-transformed data
	N	Mean	95% LCL	95% UCL		
% Moisture	20	0.715	0.013	1.417	0.046	NA
Arsenic	8	-0.266	-0.363	-0.169	0.000	0.001
Barium	5	0.329	0.100	0.558	0.016	0.009
Calcium	16	1330	-3913	6573	0.597	0.420
Copper	1	0.388	.	.	.	.
Magnesium	20	-80	-151	-9	0.029	0.011
Manganese	3	1.38	-4.82	7.58	0.439	0.420
Mercury	15	-0.084	-0.107	-0.060	<.0001	<.0001
Potassium	20	-1404	-1990	-819	<.0001	0.0002
Selenium	16	-0.225	-0.334	-0.115	0.001	0.0001
Sodium	20	-69	-157	19	0.115	0.076
Strontium	14	2.16	-2.25	6.57	0.309	0.996
Zinc	20	-7.35	-10.69	-4.02	0.0002	<.0001

Note: Only the 20 samples with non-rejected moisture results in original samples were included in the analysis. Shading indicates mean difference is significantly different from 0 (• =0.05). p-Values are presented for both raw and log transformed results. No detected paired results were available for aluminum, antimony, cadmium. chromium, cobalt, lead, nickel, silver, thallium, or vanadium.

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Table 7. Comparison of Mean Concentrations for Baseline Fish Calculated from Original and Reanalyzed Fillet Results: Dry Weight

Analyte	Mean Concentration (mg/kg dry weight)			% Increase (Decrease) in Mean from Original		% Detection of Original	% Detection of Reanalyzed Fillet
	Original (N=53)	Reanalyzed Fillet (N=53)	Reananlyzed Homogenate (N=36)	Reanalyzed Fillet	Reananlyzed Homogenate		
% Moisture	78.90	77.82	78.06	-1.4%	-1.1%		
Aluminum	120.35	22.00	23.49	-82%	-80%	0%	30%
Antimony	0.48	0.06	0.07	-88%	-85%	0%	0%
Arsenic	0.66	0.56	0.49	-15.2%	-26%	36%	74%
Barium	0.59	0.42	0.60	-29%	2%	26%	68%
Beryllium	0.48	0.13	0.14	-73%	-71%	0%	0%
Boron	9.62	1.83	1.94	-81%	-80%	0%	0%
Cadmium	0.48	0.04	0.04	-92%	-92%	0%	6%
Calcium	5270.92	5940.10	7210.38	13%	37%	85%	100%
Chromium	0.63	0.61	0.86	-3.2%	37%	60%	6%
Cobalt	0.48	0.07	0.09	-85%	-81%	0%	13%
Copper	2.52	4.07	2.00	62%	-21%	21%	100%
Iron	120.35	55.33	56.50	-54%	-53%	0%	2%
Lead	0.49	0.14	0.16	-71%	-67%	4%	23%
Magnesium	1145.77	1253.88	1297.37	9%	13%	100%	100%
Manganese	3.20	2.91	3.67	-9.1%	15%	21%	87%
Mercury	0.35	0.43	0.51	23%	46%	87%	100%
Molybdenum	4.82	0.15	0.17	-97%	-96%	0%	0%
Nickel	0.55	0.51	0.57	-7.273%	4%	8%	26%
Potassium	16283.02	17371.25	18674.64	7%	15%	100%	100%
Selenium	1.81	2.02	1.76	12%	-2.8%	85%	100%
Silver	0.24	0.01	0.02	-96%	-92%	0%	0%
Sodium	1992.08	1991.25	2165.36	-0.04%	9%	100%	100%
Strontium	4.30	4.59	5.58	7%	30%	79%	98%
Thallium	0.48	0.06	0.06	-88%	-88%	0%	0%
Vanadium	0.96	0.21	0.24	-78%	-75%	0%	11%
Zinc	37.33	41.86	43.82	12%	17%	100%	100%

*Reporting Limit Substituted for Non-Detects. Shading indicates increase.

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Table 8. Sample Results Exhibiting Significant Lack of Agreement Based on Visual Examination of Bivariate Plots

Sample Information				Concentration Wet Weight (mg/kg)			Detected (1=Yes)		
Location	Species	Analyte	Sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Channel Catfish	Copper	N00004256-002	0.51	1.3	0.4	0	1	1
ERM8.0	Largemouth Bass	Zinc	N00004256-004	13.51	15.4	19	1	1	1
ERM0.5	Largemouth Bass	Calcium	N00004258-001	6304	774	.	1	1	.
ERM0.5	Largemouth Bass	Copper	N00004258-002	0.5	4.7	.	0	1	.
ERM0.5	Largemouth Bass	Copper	N00004258-007	0.5	6.8	.	1	1	.
ERM0.5	Channel Catfish	Copper	N00004258-012	0.49	4.5	.	0	1	.
ERM0.5	Blue Catfish	Manganese	N00004258-013	0.63	3	.	1	1	.
ERM0.5	Blue Catfish	Barium	N00004258-015	0.7	0.29	.	1	1	.
ERM0.5	Blue Catfish	Manganese	N00004258-015	5.66	1.9	.	1	1	.
ERM0.5	Blue Catfish	Copper	N00004258-016	0.62	4.2	.	1	1	.
CRM9.5	Largemouth Bass	Calcium	N00004259-004	7426	1870	2990	1	1	1
CRM9.5	Largemouth Bass	Copper	N00004259-004	0.49	2.1	0.37	0	1	1
CRM9.5	Channel Catfish	Barium	N00004259-006	0.1	0.05	1.2	0	1	1
CRM9.5	Channel Catfish	Calcium	N00004259-006	1189	413	19400	1	1	1
CRM9.5	Channel Catfish	Lead	N00004259-006	0.1	0.03	0.24	0	0	1
CRM9.5	Channel Catfish	Magnesium	N00004259-006	227.3	236	556	1	1	1
CRM9.5	Channel Catfish	Manganese	N00004259-006	0.83	0.38	12.1	1	1	1
CRM9.5	Channel Catfish	Sodium	N00004259-006	406.2	442	721	1	1	1
CRM9.5	Channel Catfish	Strontium	N00004259-006	1	0.36	14.3	1	1	1
CRM9.5	Channel Catfish	Barium	N00004259-009	0.16	0.46	0.25	1	1	1
CRM9.5	Channel Catfish	Calcium	N00004259-009	99.8	12200	789	0	1	1
CRM9.5	Channel Catfish	Magnesium	N00004259-009	223.7	439	275	1	1	1
CRM9.5	Channel Catfish	Manganese	N00004259-009	0.51	5.8	1.6	0	1	1
CRM9.5	Channel Catfish	Sodium	N00004259-009	388.2	660	454	1	1	1
CRM9.5	Channel Catfish	Strontium	N00004259-009	0.1	8.3	0.7	0	1	1
CRM9.5	Channel Catfish	Zinc	N00004259-009	5.89	17.3	9.2	1	1	1
CRM9.5	Blue Catfish	Copper	N00004259-014	0.49	2.5	0.51	0	1	1

Notes: Orange shading indicates apparent outlier based on visual examination of bivariate agreement plots.

Table 9. Number and Percentage of Original to Reanalyzed Results That Are Within Laboratory Duplicate Criteria

Analyte	Original vs. Reanalyzed Fillets		Original vs. Reanalyzed Homogenates	
	Number of Results Within Criteria/Number of Samples	Percentage Within Criteria	Number of Results Within Criteria/Number of Samples	Percentage Within Criteria
Aluminum	53/53	100%	36/36	100%
Antimony	53/53	100%	36/36	100%
Arsenic	52/53	98%	36/36	100%
Barium	47/53	89%	34/36	94%
Beryllium	53/53	100%	36/36	100%
Boron	53/53	100%	36/36	100%
Cadmium	53/53	100%	36/36	100%
Calcium	13/53	25%	11/36	31%
Chromium	49/53	92%	30/36	83%
Cobalt	53/53	100%	36/36	100%
Copper	42/53	79%	36/36	100%
Iron	53/53	100%	36/36	100%
Lead	51/53	96%	34/36	94%
Magnesium	51/53	96%	36/36	100%
Manganese	43/53	81%	33/36	92%
Mercury	38/53	72%	17/36	47%
Molybdenum	53/53	100%	36/36	100%
Nickel	47/53	89%	31/36	86%
Potassium	51/53	96%	30/36	83%
Selenium	53/53	100%	36/36	100%
Silver	53/53	100%	36/36	100%
Sodium	48/53	91%	33/36	92%
Strontium	11/53	21%	13/36	36%
Thallium	53/53	100%	36/36	100%
Vanadium	53/53	100%	36/36	100%
Zinc	38/53	72%	20/36	56%

Note: Table shows number and percentage of comparisons that are in compliance with duplicate criteria. Compliance is defined as follows: 1) where concentrations in both are above 5 times the reporting limit a duplicate concentration must be within 20% of original concentration or 2) when only one sample is below the reporting limit, the difference between the original and duplicate must be less than the reporting limit. Comparisons were made on a wet weight basis.

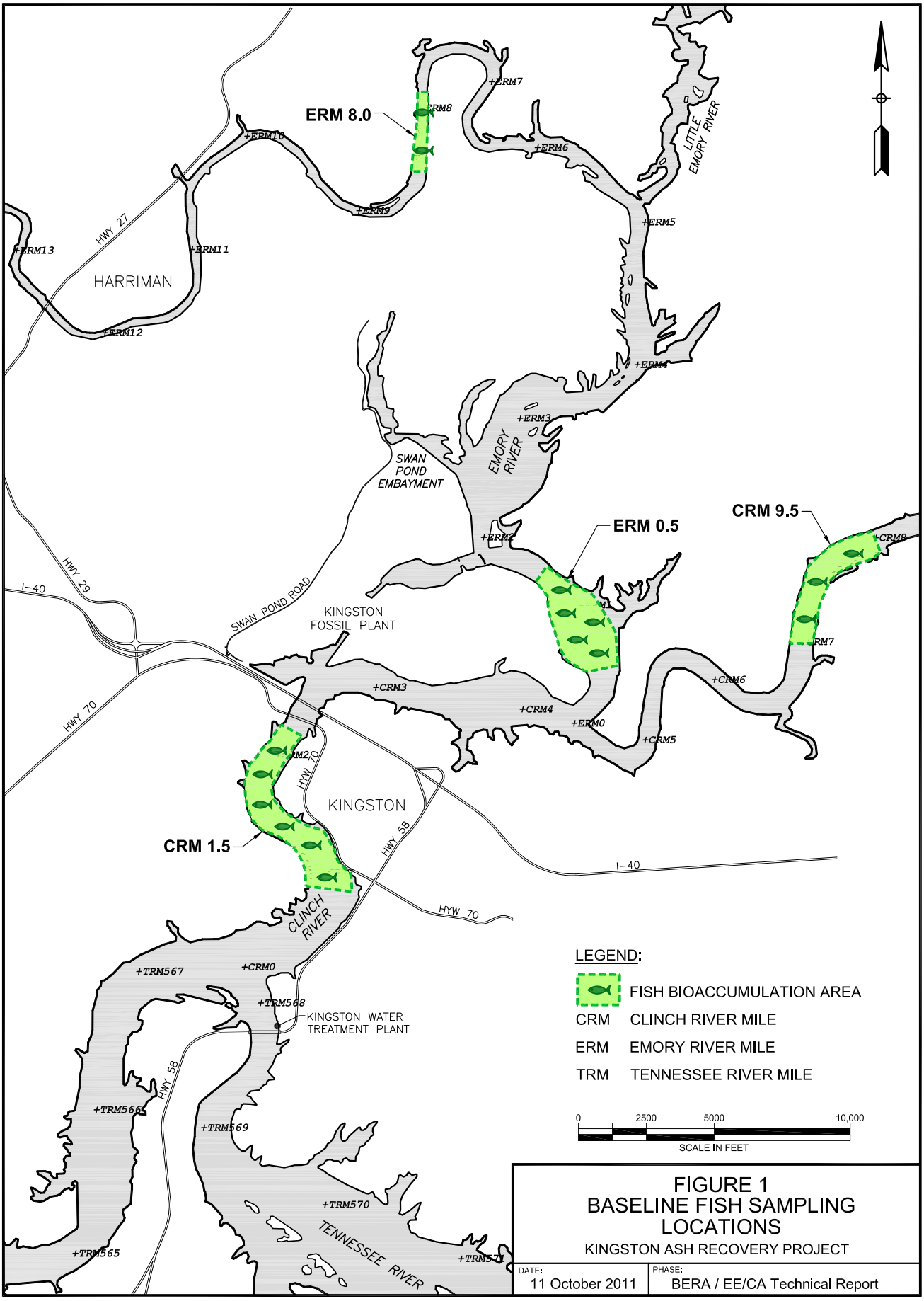
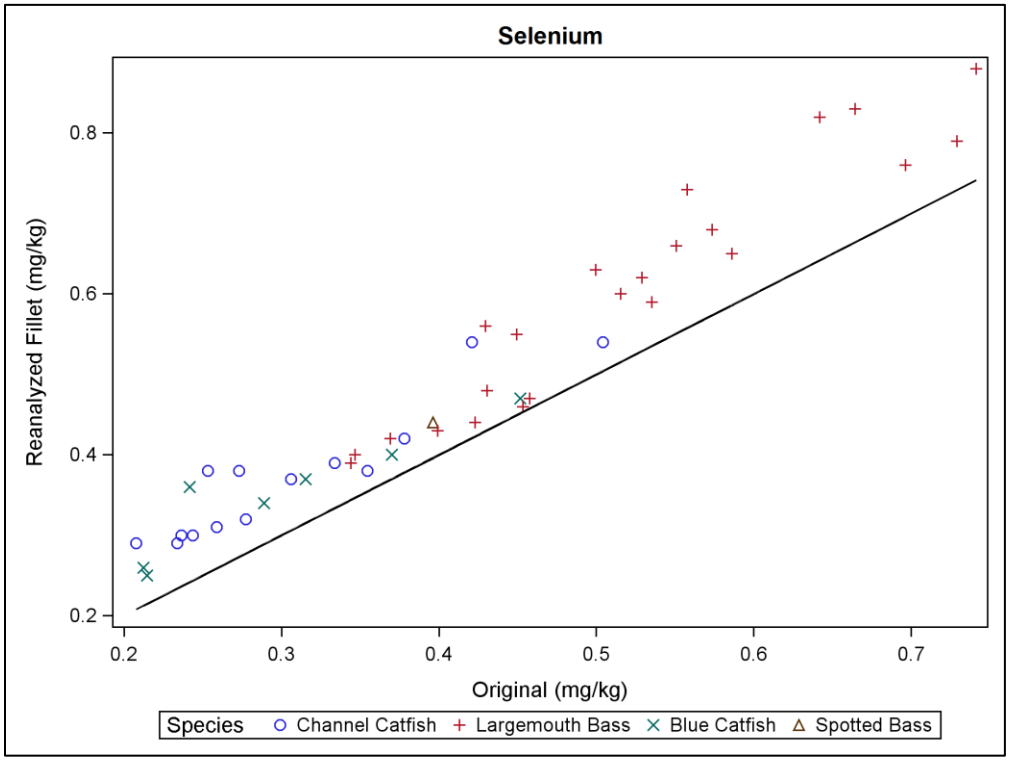


FIGURE 1
BASELINE FISH SAMPLING LOCATIONS
KINGSTON ASH RECOVERY PROJECT

DATE: 11 October 2011
PHASE: BERA / EE/CA Technical Report

I:\0002 ENGINEERING\Civil\Report Graphics\199_Baseline Fish Sampling Locations.dwg Oct 12,2011 -bperatro

Figure 2. Agreement and Difference Plots Comparing Original and Reanalyzed Fillet Wet Weight Results for Selenium (mg/kg wet weight)



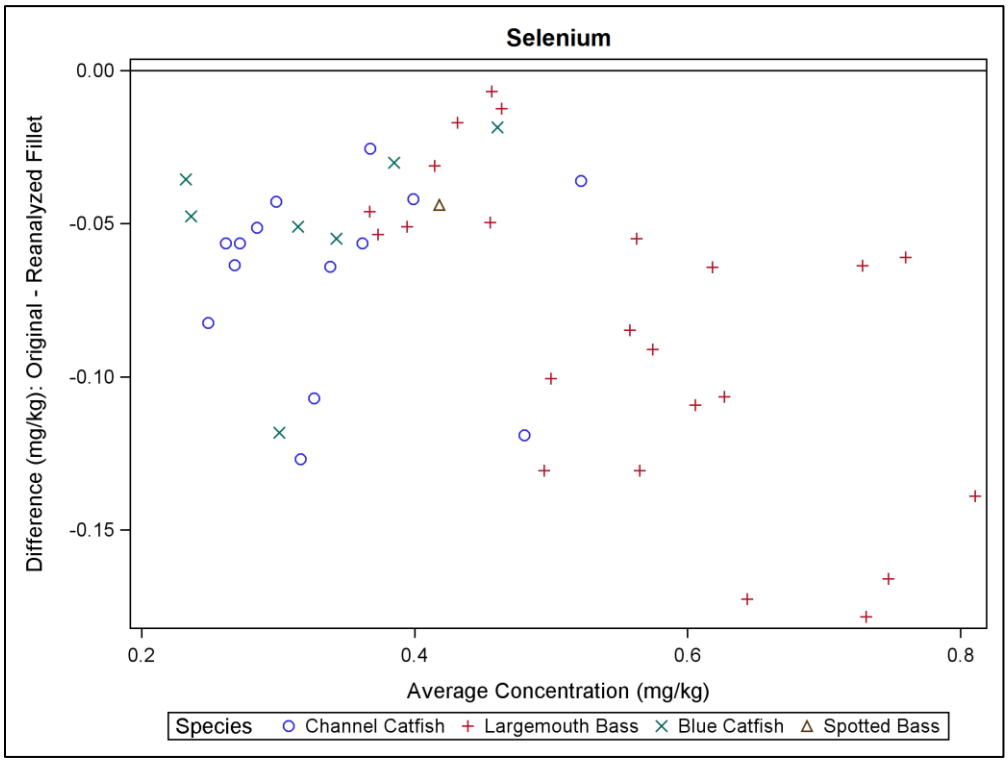
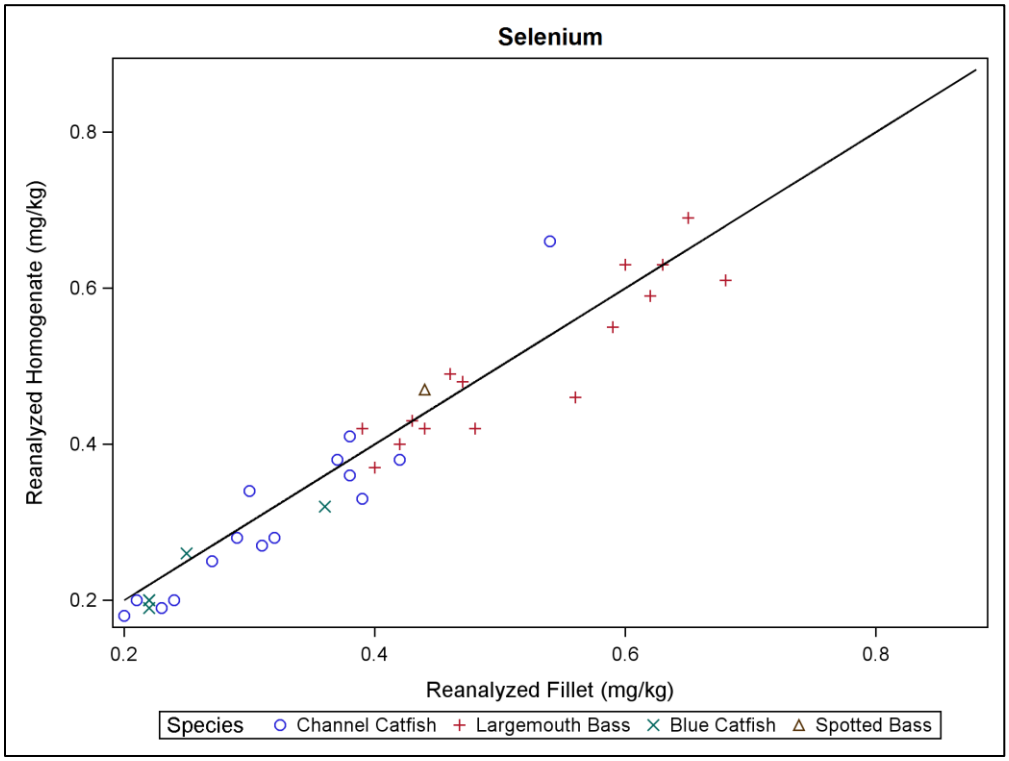


Figure 3. Agreement and Difference Plots Comparing Reanalyzed Fillet and Renanalyzed Homogenate Wet Weight Results for Selenium (mg/kg wet weight)



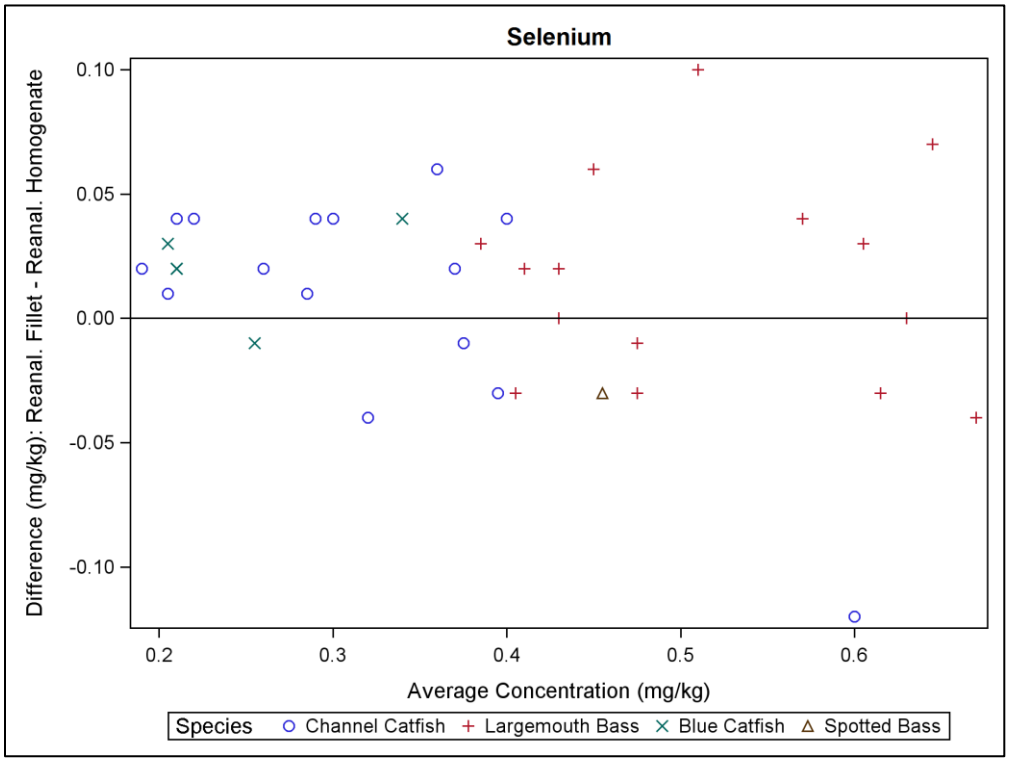


Figure 4. Agreement Plot Comparing Moisture Content in Twenty Original and Reanalyzed Fillet Samples

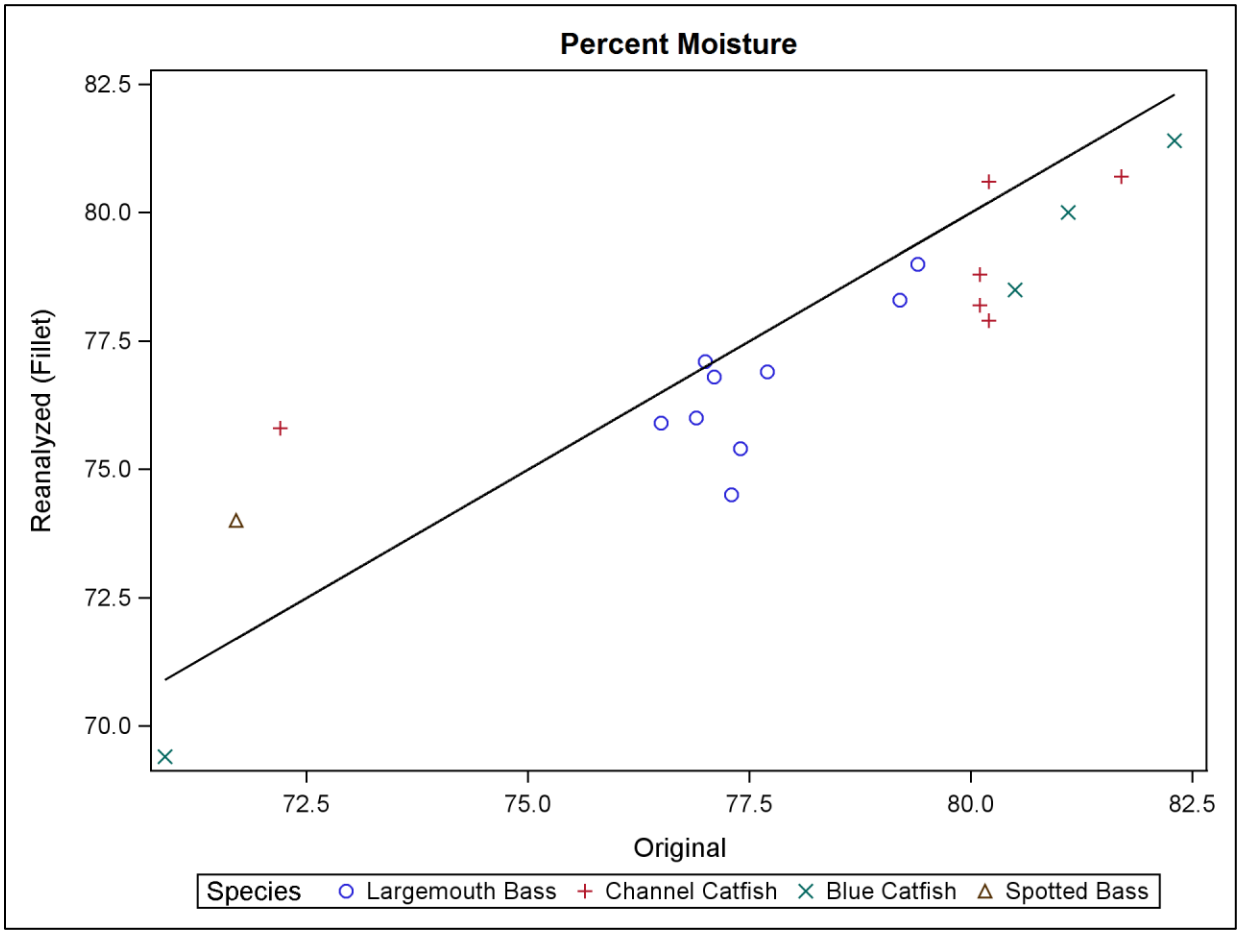
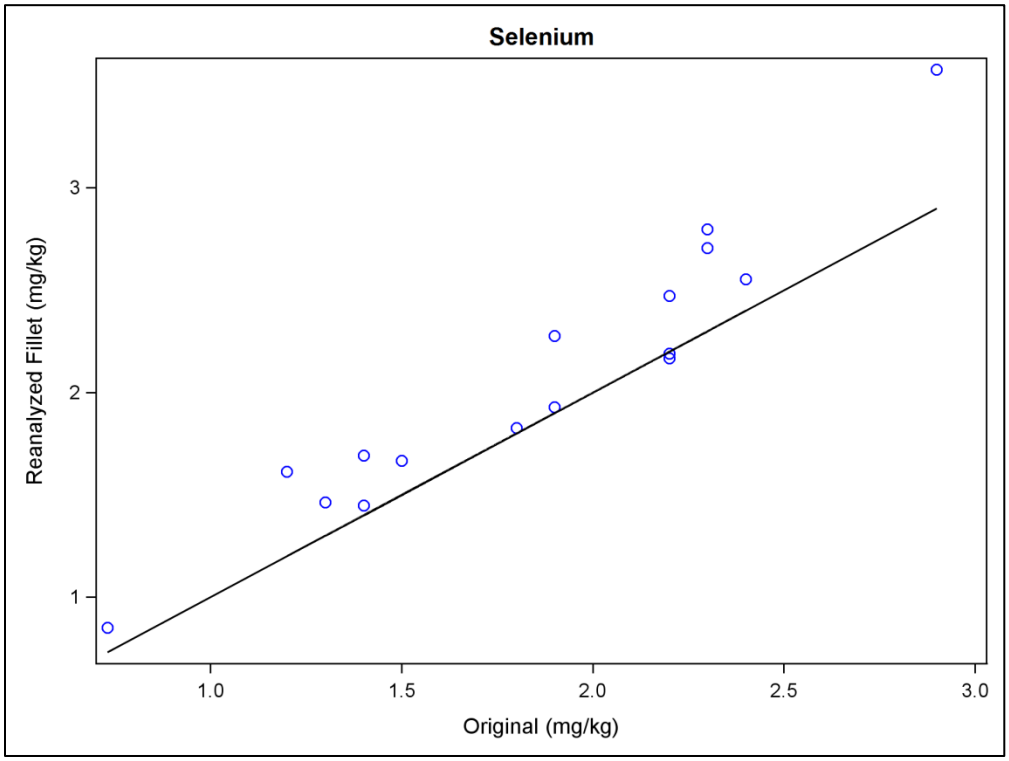


Figure 5. Agreement Plot Comparing Twenty Original and Reanalyzed Fillet Dry Weight Results for Selenium (mg/kg dry weight) in Arithmetic and Log Scale



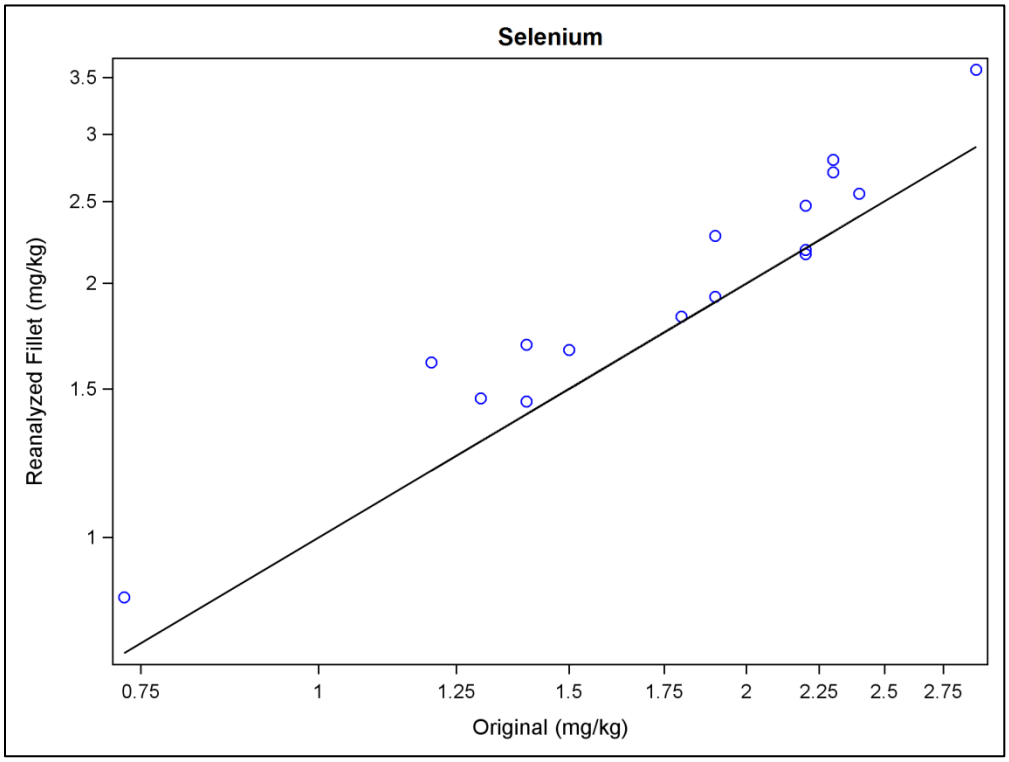
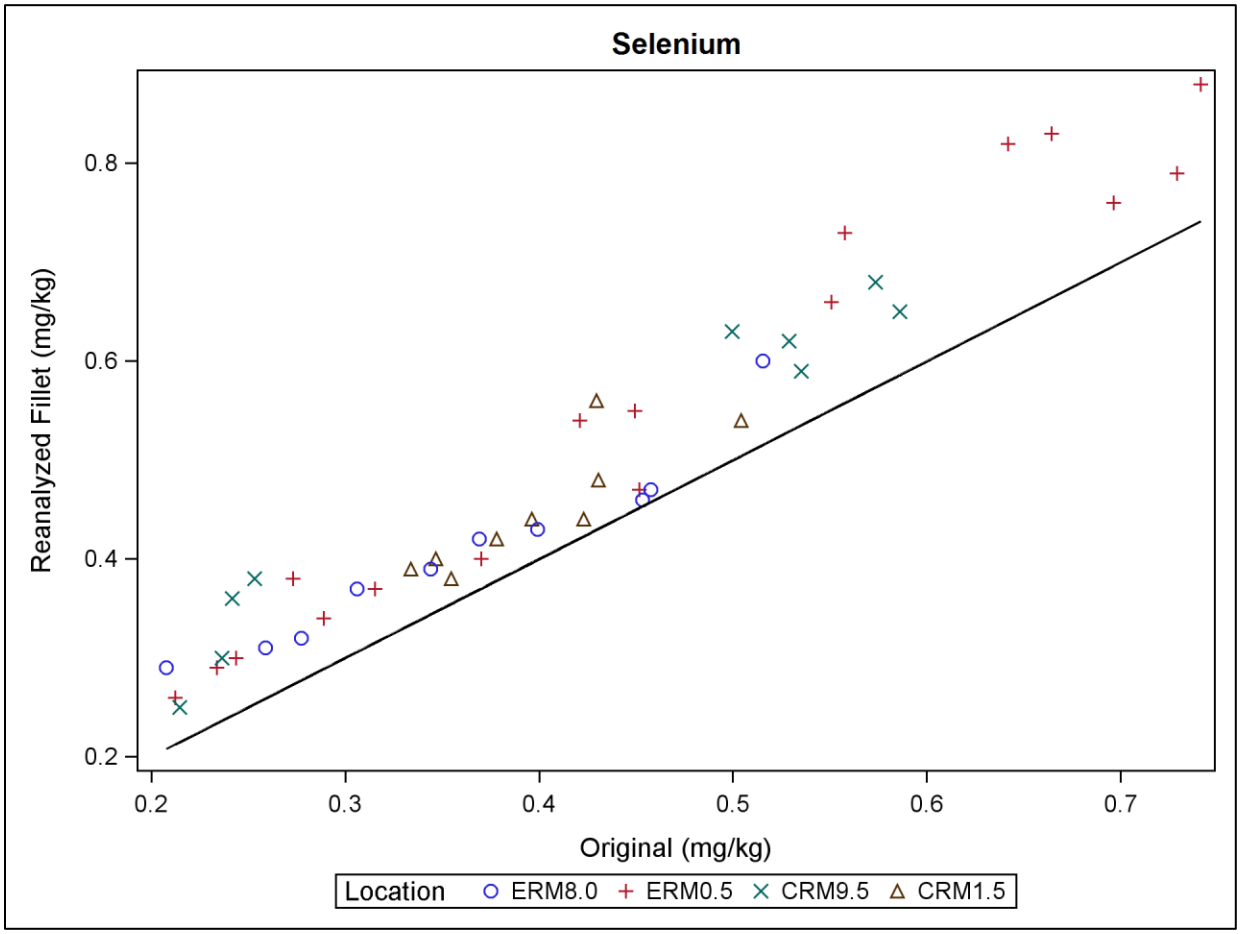


Figure 6. Bivariate Agreement Plot Comparing Original and Reanalyzed Fillet Wet Weight Results for Selenium (mg/kg wet weight) by Location



Appendix **A**

Data and Summary Statistics

ARCADIS

Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Aluminum	Blue Catfish	A	10	0	0%	24.94	0.09	0.03	25.08	24.77			25.08	24.77
Aluminum	Blue Catfish	F	10	4	40%	5.12	1.77	0.56	7.90	3.60	7.90	5.20	4.10	3.60
Aluminum	Blue Catfish	G	5	0	0%	3.92	0.19	0.09	4.10	3.60			4.10	3.60
Aluminum	Channel Catfish	A	19	0	0%	24.96	0.10	0.02	25.16	24.82			25.16	24.82
Aluminum	Channel Catfish	F	19	7	37%	5.17	2.49	0.57	13.00	3.70	13.00	3.90	4.20	3.70
Aluminum	Channel Catfish	G	15	2	13%	5.87	4.22	1.09	18.00	3.60	18.00	10.80	11.70	3.60
Aluminum	Largemouth Bass	A	23	0	0%	24.93	0.15	0.03	25.32	24.72			25.32	24.72
Aluminum	Largemouth Bass	F	23	4	17%	4.46	1.67	0.35	9.50	3.60	9.50	4.10	4.10	3.60
Aluminum	Largemouth Bass	G	15	1	7%	4.82	3.84	0.99	18.70	3.60	18.70	18.70	4.10	3.60
Aluminum	Spotted Bass	A	1	0	0%	24.90			24.90	24.90			24.90	24.90
Aluminum	Spotted Bass	F	1	1	100%	5.20			5.20	5.20	5.20	5.20		
Aluminum	Spotted Bass	G	1	0	0%	4.20			4.20	4.20			4.20	4.20
Antimony	Blue Catfish	A	10	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Antimony	Blue Catfish	F	10	0	0%	0.014	0.001	0.000	0.015	0.013			0.015	0.013
Antimony	Blue Catfish	G	5	0	0%	0.014	0.001	0.000	0.015	0.013			0.015	0.013
Antimony	Channel Catfish	A	19	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Antimony	Channel Catfish	F	19	0	0%	0.014	0.001	0.000	0.015	0.013			0.015	0.013
Antimony	Channel Catfish	G	15	1	7%	0.016	0.007	0.002	0.042	0.013	0.017	0.017	0.042	0.013
Antimony	Largemouth Bass	A	23	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Antimony	Largemouth Bass	F	23	0	0%	0.014	0.001	0.000	0.015	0.013			0.015	0.013
Antimony	Largemouth Bass	G	15	1	7%	0.014	0.002	0.001	0.021	0.013	0.021	0.021	0.015	0.013
Antimony	Spotted Bass	A	1	0	0%	0.099			0.099	0.099			0.099	0.099
Antimony	Spotted Bass	F	1	0	0%	0.015			0.015	0.015			0.015	0.015
Antimony	Spotted Bass	G	1	0	0%	0.015			0.015	0.015			0.015	0.015
Arsenic	Blue Catfish	A	10	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Arsenic	Blue Catfish	F	10	7	70%	0.047	0.028	0.009	0.110	0.027	0.110	0.029	0.029	0.027
Arsenic	Blue Catfish	G	5	2	40%	0.034	0.010	0.004	0.051	0.028	0.051	0.036	0.029	0.028
Arsenic	Channel Catfish	A	19	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Arsenic	Channel Catfish	F	19	8	42%	0.033	0.010	0.002	0.061	0.026	0.061	0.028	0.028	0.026
Arsenic	Channel Catfish	G	15	4	27%	0.034	0.015	0.004	0.082	0.025	0.053	0.028	0.082	0.025
Arsenic	Largemouth Bass	A	23	18	78%	0.184	0.060	0.013	0.287	0.099	0.287	0.118	0.122	0.099
Arsenic	Largemouth Bass	F	23	23	100%	0.236	0.087	0.018	0.360	0.032	0.360	0.032		
Arsenic	Largemouth Bass	G	15	15	100%	0.201	0.085	0.022	0.330	0.039	0.330	0.039		
Arsenic	Spotted Bass	A	1	1	100%	0.243			0.243	0.243	0.243	0.243		
Arsenic	Spotted Bass	F	1	1	100%	0.310			0.310	0.310	0.310	0.310		
Arsenic	Spotted Bass	G	1	1	100%	0.270			0.270	0.270	0.270	0.270		
Barium	Blue Catfish	A	10	4	40%	0.163	0.190	0.060	0.703	0.099	0.703	0.106	0.100	0.099
Barium	Blue Catfish	F	10	8	80%	0.145	0.084	0.027	0.290	0.041	0.290	0.061	0.047	0.041
Barium	Blue Catfish	G	5	4	80%	0.073	0.035	0.016	0.130	0.046	0.130	0.046	0.047	0.047

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Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Barium	Channel Catfish	A	19	3	16%	0.107	0.019	0.004	0.163	0.099	0.163	0.119	0.101	0.099
Barium	Channel Catfish	F	19	13	68%	0.090	0.100	0.023	0.460	0.042	0.460	0.043	0.047	0.042
Barium	Channel Catfish	G	15	13	87%	0.179	0.289	0.075	1.200	0.041	1.200	0.047	0.042	0.041
Barium	Largemouth Bass	A	23	6	26%	0.113	0.028	0.006	0.212	0.098	0.212	0.120	0.101	0.098
Barium	Largemouth Bass	F	23	14	61%	0.073	0.035	0.007	0.140	0.041	0.140	0.044	0.047	0.041
Barium	Largemouth Bass	G	15	11	73%	0.091	0.045	0.012	0.180	0.041	0.180	0.063	0.043	0.041
Barium	Spotted Bass	A	1	1	100%	0.204			0.204	0.204	0.204	0.204		
Barium	Spotted Bass	F	1	1	100%	0.130			0.130	0.130	0.130	0.130		
Barium	Spotted Bass	G	1	1	100%	0.290			0.290	0.290	0.290	0.290		
Beryllium	Blue Catfish	A	10	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Beryllium	Blue Catfish	F	10	0	0%	0.029	0.001	0.000	0.031	0.026			0.031	0.026
Beryllium	Blue Catfish	G	5	0	0%	0.029	0.001	0.001	0.030	0.027			0.030	0.027
Beryllium	Channel Catfish	A	19	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Beryllium	Channel Catfish	F	19	0	0%	0.029	0.001	0.000	0.031	0.027			0.031	0.027
Beryllium	Channel Catfish	G	15	0	0%	0.033	0.015	0.004	0.086	0.026			0.086	0.026
Beryllium	Largemouth Bass	A	23	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Beryllium	Largemouth Bass	F	23	0	0%	0.028	0.001	0.000	0.030	0.026			0.030	0.026
Beryllium	Largemouth Bass	G	15	0	0%	0.028	0.001	0.000	0.030	0.026			0.030	0.026
Beryllium	Spotted Bass	A	1	0	0%	0.099			0.099	0.099			0.099	0.099
Beryllium	Spotted Bass	F	1	0	0%	0.030			0.030	0.030			0.030	0.030
Beryllium	Spotted Bass	G	1	0	0%	0.031			0.031	0.031			0.031	0.031
Boron	Blue Catfish	A	10	0	0%	1.994	0.009	0.003	2.008	1.982			2.008	1.982
Boron	Blue Catfish	F	10	0	0%	0.404	0.019	0.006	0.430	0.370			0.430	0.370
Boron	Blue Catfish	G	5	0	0%	0.408	0.016	0.007	0.420	0.380			0.420	0.380
Boron	Channel Catfish	A	19	0	0%	1.995	0.008	0.002	2.009	1.980			2.009	1.980
Boron	Channel Catfish	F	19	0	0%	0.405	0.017	0.004	0.430	0.380			0.430	0.380
Boron	Channel Catfish	G	15	0	0%	0.459	0.206	0.053	1.200	0.370			1.200	0.370
Boron	Largemouth Bass	A	23	0	0%	1.995	0.013	0.003	2.026	1.975			2.026	1.975
Boron	Largemouth Bass	F	23	0	0%	0.398	0.020	0.004	0.430	0.370			0.430	0.370
Boron	Largemouth Bass	G	15	0	0%	0.395	0.020	0.005	0.430	0.370			0.430	0.370
Boron	Spotted Bass	A	1	0	0%	1.981			1.981	1.981			1.981	1.981
Boron	Spotted Bass	F	1	0	0%	0.420			0.420	0.420			0.420	0.420
Boron	Spotted Bass	G	1	0	0%	0.430			0.430	0.430			0.430	0.430
Cadmium	Blue Catfish	A	10	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Cadmium	Blue Catfish	F	10	0	0%	0.016	0.015	0.005	0.049	0.007			0.049	0.007
Cadmium	Blue Catfish	G	5	1	20%	0.009	0.003	0.001	0.013	0.007	0.013	0.013	0.008	0.007
Cadmium	Channel Catfish	A	19	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Cadmium	Channel Catfish	F	19	3	16%	0.008	0.002	0.001	0.018	0.007	0.018	0.009	0.008	0.007
Cadmium	Channel Catfish	G	15	3	20%	0.009	0.004	0.001	0.022	0.007	0.014	0.012	0.022	0.007

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Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Cadmium	Largemouth Bass	A	23	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Cadmium	Largemouth Bass	F	23	0	0%	0.007	0.000	0.000	0.008	0.007			0.008	0.007
Cadmium	Largemouth Bass	G	15	2	13%	0.008	0.003	0.001	0.017	0.007	0.017	0.009	0.008	0.007
Cadmium	Spotted Bass	A	1	0	0%	0.099			0.099	0.099			0.099	0.099
Cadmium	Spotted Bass	F	1	0	0%	0.008			0.008	0.008			0.008	0.008
Cadmium	Spotted Bass	G	1	0	0%	0.008			0.008	0.008			0.008	0.008
Calcium	Blue Catfish	A	10	9	90%	1028	1904	602	6327	99	6327	101	99	99
Calcium	Blue Catfish	F	10	10	100%	1404	1156	366	3300	108	3300	108		
Calcium	Blue Catfish	G	5	5	100%	653	599	268	1480	149	1480	149		
Calcium	Channel Catfish	A	19	14	74%	277	293	67	1189	99	1189	102	100	99
Calcium	Channel Catfish	F	19	19	100%	1131	2745	630	12200	67	12200	67		
Calcium	Channel Catfish	G	15	15	100%	1645	4948	1278	19400	79	19400	79		
Calcium	Largemouth Bass	A	23	21	91%	1677	2071	432	7426	99	7426	101	99	99
Calcium	Largemouth Bass	F	23	23	100%	1456	1212	253	3710	106	3710	106		
Calcium	Largemouth Bass	G	15	15	100%	1698	1459	377	4660	110	4660	110		
Calcium	Spotted Bass	A	1	1	100%	6679			6679	6679	6679	6679		
Calcium	Spotted Bass	F	1	1	100%	2580			2580	2580	2580	2580		
Calcium	Spotted Bass	G	1	1	100%	2320			2320	2320	2320	2320		
Chromium	Blue Catfish	A	10	3	30%	0.109	0.020	0.006	0.157	0.099	0.157	0.100	0.100	0.099
Chromium	Blue Catfish	F	10	3	30%	0.184	0.119	0.038	0.440	0.110	0.440	0.170	0.130	0.110
Chromium	Blue Catfish	G	5	1	20%	0.140	0.028	0.013	0.190	0.120	0.190	0.190	0.130	0.120
Chromium	Channel Catfish	A	19	12	63%	0.134	0.074	0.017	0.425	0.099	0.425	0.104	0.101	0.099
Chromium	Channel Catfish	F	19	0	0%	0.124	0.005	0.001	0.130	0.120			0.130	0.120
Chromium	Channel Catfish	G	15	6	40%	0.229	0.229	0.059	0.860	0.110	0.860	0.150	0.130	0.110
Chromium	Largemouth Bass	A	23	16	70%	0.138	0.059	0.012	0.315	0.099	0.315	0.103	0.101	0.099
Chromium	Largemouth Bass	F	23	0	0%	0.123	0.007	0.001	0.130	0.110			0.130	0.110
Chromium	Largemouth Bass	G	15	5	33%	0.174	0.096	0.025	0.440	0.110	0.440	0.160	0.130	0.110
Chromium	Spotted Bass	A	1	1	100%	0.102			0.102	0.102	0.102	0.102		
Chromium	Spotted Bass	F	1	0	0%	0.130			0.130	0.130			0.130	0.130
Chromium	Spotted Bass	G	1	0	0%	0.130			0.130	0.130			0.130	0.130
Cobalt	Blue Catfish	A	10	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Cobalt	Blue Catfish	F	10	4	40%	0.018	0.008	0.002	0.035	0.013	0.035	0.018	0.014	0.013
Cobalt	Blue Catfish	G	5	3	60%	0.017	0.004	0.002	0.022	0.014	0.022	0.016	0.014	0.014
Cobalt	Channel Catfish	A	19	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Cobalt	Channel Catfish	F	19	3	16%	0.014	0.002	0.000	0.018	0.013	0.018	0.014	0.015	0.013
Cobalt	Channel Catfish	G	15	10	67%	0.024	0.017	0.004	0.077	0.013	0.077	0.015	0.015	0.013
Cobalt	Largemouth Bass	A	23	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Cobalt	Largemouth Bass	F	23	0	0%	0.013	0.001	0.000	0.015	0.012			0.015	0.012
Cobalt	Largemouth Bass	G	15	5	33%	0.016	0.005	0.001	0.030	0.013	0.030	0.016	0.014	0.013

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Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Cobalt	Spotted Bass	A	1	0	0%	0.099			0.099	0.099			0.099	0.099
Cobalt	Spotted Bass	F	1	0	0%	0.014			0.014	0.014			0.014	0.014
Cobalt	Spotted Bass	G	1	0	0%	0.015			0.015	0.015			0.015	0.015
Copper	Blue Catfish	A	10	1	10%	0.51	0.04	0.01	0.62	0.49	0.62	0.62	0.51	0.49
Copper	Blue Catfish	F	10	10	100%	1.17	1.44	0.46	4.20	0.25	4.20	0.25		
Copper	Blue Catfish	G	5	5	100%	0.38	0.07	0.03	0.51	0.32	0.51	0.32		
Copper	Channel Catfish	A	19	6	32%	0.54	0.13	0.03	1.05	0.49	1.05	0.50	0.51	0.49
Copper	Channel Catfish	F	19	19	100%	0.83	1.06	0.24	4.50	0.25	4.50	0.25		
Copper	Channel Catfish	G	15	15	100%	0.49	0.27	0.07	1.40	0.22	1.40	0.22		
Copper	Largemouth Bass	A	23	4	17%	0.52	0.06	0.01	0.76	0.49	0.76	0.50	0.51	0.49
Copper	Largemouth Bass	F	23	23	100%	0.89	1.61	0.34	6.80	0.20	6.80	0.20		
Copper	Largemouth Bass	G	15	15	100%	0.41	0.18	0.05	1.00	0.24	1.00	0.24		
Copper	Spotted Bass	A	1	0	0%	0.51			0.51	0.51			0.51	0.51
Copper	Spotted Bass	F	1	1	100%	0.40			0.40	0.40	0.40	0.40		
Copper	Spotted Bass	G	1	1	100%	0.45			0.45	0.45	0.45	0.45		
Iron	Blue Catfish	A	10	0	0%	24.94	0.09	0.03	25.08	24.77			25.08	24.77
Iron	Blue Catfish	F	10	0	0%	11.75	0.52	0.16	12.50	10.80			12.50	10.80
Iron	Blue Catfish	G	5	0	0%	11.86	0.50	0.22	12.30	11.00			12.30	11.00
Iron	Channel Catfish	A	19	0	0%	24.96	0.10	0.02	25.16	24.82			25.16	24.82
Iron	Channel Catfish	F	19	1	5%	13.08	5.54	1.27	35.90	11.00	35.90	35.90	12.50	11.00
Iron	Channel Catfish	G	15	0	0%	13.38	6.09	1.57	35.30	10.80			35.30	10.80
Iron	Largemouth Bass	A	23	0	0%	24.93	0.15	0.03	25.32	24.72			25.32	24.72
Iron	Largemouth Bass	F	23	0	0%	11.56	0.58	0.12	12.50	10.70			12.50	10.70
Iron	Largemouth Bass	G	15	0	0%	11.49	0.53	0.14	12.40	10.70			12.40	10.70
Iron	Spotted Bass	A	1	0	0%	24.90			24.90	24.90			24.90	24.90
Iron	Spotted Bass	F	1	0	0%	12.20			12.20	12.20			12.20	12.20
Iron	Spotted Bass	G	1	0	0%	12.50			12.50	12.50			12.50	12.50
Lead	Blue Catfish	A	10	1	10%	0.10	0.01	0.00	0.14	0.10	0.14	0.14	0.10	0.10
Lead	Blue Catfish	F	10	6	60%	0.04	0.02	0.01	0.08	0.03	0.08	0.03	0.03	0.03
Lead	Blue Catfish	G	5	1	20%	0.03	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Lead	Channel Catfish	A	19	1	5%	0.10	0.01	0.00	0.16	0.10	0.16	0.16	0.10	0.10
Lead	Channel Catfish	F	19	5	26%	0.03	0.01	0.00	0.07	0.03	0.07	0.03	0.03	0.03
Lead	Channel Catfish	G	15	3	20%	0.05	0.06	0.01	0.24	0.03	0.24	0.03	0.08	0.03
Lead	Largemouth Bass	A	23	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	Largemouth Bass	F	23	1	4%	0.03	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Lead	Largemouth Bass	G	15	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Lead	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Lead	Spotted Bass	F	1	0	0%	0.03			0.03	0.03			0.03	0.03
Lead	Spotted Bass	G	1	0	0%	0.03			0.03	0.03			0.03	0.03

ARCADIS

Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Magnesium	Blue Catfish	A	10	10	100%	215	22	7	276	201	276	201		
Magnesium	Blue Catfish	F	10	10	100%	249	25	8	287	221	287	221		
Magnesium	Blue Catfish	G	5	5	100%	226	13	6	237	203	237	203		
Magnesium	Channel Catfish	A	19	19	100%	202	24	5	248	169	248	169		
Magnesium	Channel Catfish	F	19	19	100%	247	52	12	439	202	439	202		
Magnesium	Channel Catfish	G	15	15	100%	257	87	23	556	199	556	199		
Magnesium	Largemouth Bass	A	23	23	100%	279	37	8	375	222	375	222		
Magnesium	Largemouth Bass	F	23	23	100%	314	27	6	362	265	362	265		
Magnesium	Largemouth Bass	G	15	15	100%	323	27	7	362	284	362	284		
Magnesium	Spotted Bass	A	1	1	100%	331			331	331	331	331		
Magnesium	Spotted Bass	F	1	1	100%	299			299	299	299	299		
Magnesium	Spotted Bass	G	1	1	100%	306			306	306	306	306		
Manganese	Blue Catfish	A	10	4	40%	1.08	1.61	0.51	5.66	0.49	5.66	0.63	0.51	0.49
Manganese	Blue Catfish	F	10	10	100%	1.25	0.88	0.28	3.00	0.16	3.00	0.16		
Manganese	Blue Catfish	G	5	5	100%	0.55	0.32	0.14	0.98	0.27	0.98	0.27		
Manganese	Channel Catfish	A	19	4	21%	0.53	0.08	0.02	0.83	0.49	0.83	0.54	0.51	0.49
Manganese	Channel Catfish	F	19	19	100%	0.74	1.28	0.29	5.80	0.16	5.80	0.16		
Manganese	Channel Catfish	G	15	15	100%	1.31	3.01	0.78	12.10	0.18	12.10	0.18		
Manganese	Largemouth Bass	A	23	3	13%	0.57	0.19	0.04	1.16	0.49	1.16	0.90	0.51	0.49
Manganese	Largemouth Bass	F	23	16	70%	0.29	0.18	0.04	0.87	0.15	0.87	0.18	0.18	0.15
Manganese	Largemouth Bass	G	15	14	93%	0.38	0.26	0.07	1.20	0.15	1.20	0.18	0.15	0.15
Manganese	Spotted Bass	A	1	0	0%	0.51			0.51	0.51			0.51	0.51
Manganese	Spotted Bass	F	1	1	100%	0.29			0.29	0.29	0.29	0.29		
Manganese	Spotted Bass	G	1	1	100%	0.21			0.21	0.21	0.21	0.21		
Mercury	Blue Catfish	A	10	9	90%	0.08	0.04	0.01	0.18	0.04	0.18	0.05	0.04	0.04
Mercury	Blue Catfish	F	10	10	100%	0.10	0.05	0.02	0.23	0.05	0.23	0.05		
Mercury	Blue Catfish	G	5	5	100%	0.13	0.07	0.03	0.23	0.07	0.23	0.07		
Mercury	Channel Catfish	A	19	19	100%	0.07	0.06	0.01	0.22	0.03	0.22	0.03		
Mercury	Channel Catfish	F	19	19	100%	0.10	0.09	0.02	0.36	0.03	0.36	0.03		
Mercury	Channel Catfish	G	15	15	100%	0.11	0.09	0.02	0.30	0.04	0.30	0.04		
Mercury	Largemouth Bass	A	23	17	74%	0.06	0.04	0.01	0.18	0.02	0.18	0.02	0.05	0.02
Mercury	Largemouth Bass	F	23	23	100%	0.08	0.05	0.01	0.21	0.02	0.21	0.02		
Mercury	Largemouth Bass	G	15	15	100%	0.10	0.06	0.02	0.21	0.02	0.21	0.02		
Mercury	Spotted Bass	A	1	1	100%	0.07			0.07	0.07	0.07	0.07		
Mercury	Spotted Bass	F	1	1	100%	0.09			0.09	0.09	0.09	0.09		
Mercury	Spotted Bass	G	1	1	100%	0.09			0.09	0.09	0.09	0.09		
Molybdenum	Blue Catfish	A	10	0	0%	1.00	0.01	0.00	1.01	0.99			1.01	0.99
Molybdenum	Blue Catfish	F	10	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	Blue Catfish	G	5	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03

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Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Molybdenum	Channel Catfish	A	19	0	0%	1.00	0.01	0.00	1.01	0.99			1.01	0.99
Molybdenum	Channel Catfish	F	19	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	Channel Catfish	G	15	0	0%	0.04	0.02	0.00	0.10	0.03			0.10	0.03
Molybdenum	Largemouth Bass	A	23	0	0%	1.00	0.01	0.00	1.01	0.98			1.01	0.98
Molybdenum	Largemouth Bass	F	23	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	Largemouth Bass	G	15	0	0%	0.04	0.01	0.00	0.09	0.03			0.09	0.03
Molybdenum	Spotted Bass	A	1	0	0%	0.99			0.99	0.99			0.99	0.99
Molybdenum	Spotted Bass	F	1	0	0%	0.04			0.04	0.04			0.04	0.04
Molybdenum	Spotted Bass	G	1	0	0%	0.04			0.04	0.04			0.04	0.04
Nickel	Blue Catfish	A	10	1	10%	0.14	0.14	0.04	0.55	0.10	0.55	0.55	0.10	0.10
Nickel	Blue Catfish	F	10	4	40%	0.14	0.07	0.02	0.26	0.09	0.26	0.10	0.10	0.09
Nickel	Blue Catfish	G	5	0	0%	0.10	0.00	0.00	0.10	0.09			0.10	0.09
Nickel	Channel Catfish	A	19	1	5%	0.11	0.02	0.01	0.20	0.10	0.20	0.20	0.10	0.10
Nickel	Channel Catfish	F	19	6	32%	0.12	0.05	0.01	0.30	0.09	0.30	0.09	0.10	0.09
Nickel	Channel Catfish	G	15	3	20%	0.15	0.13	0.03	0.55	0.09	0.55	0.14	0.10	0.09
Nickel	Largemouth Bass	A	23	2	9%	0.10	0.01	0.00	0.13	0.10	0.13	0.12	0.10	0.10
Nickel	Largemouth Bass	F	23	3	13%	0.10	0.02	0.00	0.17	0.09	0.17	0.09	0.10	0.09
Nickel	Largemouth Bass	G	15	4	27%	0.12	0.04	0.01	0.21	0.09	0.21	0.12	0.10	0.09
Nickel	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Nickel	Spotted Bass	F	1	1	100%	0.12			0.12	0.12	0.12	0.12		
Nickel	Spotted Bass	G	1	0	0%	0.10			0.10	0.10			0.10	0.10
Potassium	Blue Catfish	A	10	10	100%	3195	306	97	3588	2738	3588	2738		
Potassium	Blue Catfish	F	10	10	100%	3597	325	103	4040	3090	4040	3090		
Potassium	Blue Catfish	G	5	5	100%	3904	152	68	4090	3760	4090	3760		
Potassium	Channel Catfish	A	19	19	100%	3351	311	71	4042	2766	4042	2766		
Potassium	Channel Catfish	F	19	19	100%	3699	326	75	4280	3080	4280	3080		
Potassium	Channel Catfish	G	15	15	100%	3935	517	133	4880	3190	4880	3190		
Potassium	Largemouth Bass	A	23	23	100%	3508	187	39	3780	3033	3780	3033		
Potassium	Largemouth Bass	F	23	23	100%	4021	162	34	4260	3730	4260	3730		
Potassium	Largemouth Bass	G	15	15	100%	4191	377	97	4830	3520	4830	3520		
Potassium	Spotted Bass	A	1	1	100%	3255			3255	3255	3255	3255		
Potassium	Spotted Bass	F	1	1	100%	3890			3890	3890	3890	3890		
Potassium	Spotted Bass	G	1	1	100%	3930			3930	3930	3930	3930		
Selenium	Blue Catfish	A	10	7	70%	0.27	0.09	0.03	0.45	0.19	0.45	0.21	0.21	0.19
Selenium	Blue Catfish	F	10	10	100%	0.31	0.09	0.03	0.47	0.22	0.47	0.22		
Selenium	Blue Catfish	G	5	5	100%	0.23	0.06	0.02	0.32	0.19	0.32	0.19		
Selenium	Channel Catfish	A	19	14	74%	0.28	0.09	0.02	0.50	0.19	0.50	0.21	0.20	0.19
Selenium	Channel Catfish	F	19	19	100%	0.33	0.10	0.02	0.54	0.20	0.54	0.20		
Selenium	Channel Catfish	G	15	15	100%	0.31	0.12	0.03	0.66	0.18	0.66	0.18		

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Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Selenium	Largemouth Bass	A	23	23	100%	0.52	0.12	0.02	0.74	0.34	0.74	0.34		
Selenium	Largemouth Bass	F	23	23	100%	0.60	0.15	0.03	0.88	0.39	0.88	0.39		
Selenium	Largemouth Bass	G	15	15	100%	0.51	0.10	0.03	0.69	0.37	0.69	0.37		
Selenium	Spotted Bass	A	1	1	100%	0.40			0.40	0.40	0.40	0.40		
Selenium	Spotted Bass	F	1	1	100%	0.44			0.44	0.44	0.44	0.44		
Selenium	Spotted Bass	G	1	1	100%	0.47			0.47	0.47	0.47	0.47		
Silver	Blue Catfish	A	10	0	0%	0.050	0.001	0.000	0.051	0.049			0.051	0.049
Silver	Blue Catfish	F	10	0	0%	0.003	0.001	0.000	0.007	0.003			0.007	0.003
Silver	Blue Catfish	G	5	0	0%	0.003	0.000	0.000	0.003	0.003			0.003	0.003
Silver	Channel Catfish	A	19	0	0%	0.050	0.001	0.000	0.051	0.049			0.051	0.049
Silver	Channel Catfish	F	19	0	0%	0.003	0.000	0.000	0.003	0.003			0.003	0.003
Silver	Channel Catfish	G	15	1	7%	0.005	0.007	0.002	0.030	0.003	0.030	0.030	0.009	0.003
Silver	Largemouth Bass	A	23	0	0%	0.050	0.001	0.000	0.051	0.049			0.051	0.049
Silver	Largemouth Bass	F	23	0	0%	0.003	0.000	0.000	0.003	0.003			0.003	0.003
Silver	Largemouth Bass	G	15	1	7%	0.003	0.000	0.000	0.004	0.003	0.004	0.004	0.003	0.003
Silver	Spotted Bass	A	1	0	0%	0.051			0.051	0.051			0.051	0.051
Silver	Spotted Bass	F	1	0	0%	0.003			0.003	0.003			0.003	0.003
Silver	Spotted Bass	G	1	0	0%	0.003			0.003	0.003			0.003	0.003
Sodium	Blue Catfish	A	10	10	100%	419	40	13	473	359	473	359		
Sodium	Blue Catfish	F	10	10	100%	448	60	19	545	349	545	349		
Sodium	Blue Catfish	G	5	5	100%	475	31	14	515	433	515	433		
Sodium	Channel Catfish	A	19	19	100%	377	63	14	505	285	505	285		
Sodium	Channel Catfish	F	19	19	100%	406	91	21	660	297	660	297		
Sodium	Channel Catfish	G	15	15	100%	427	111	29	721	305	721	305		
Sodium	Largemouth Bass	A	23	23	100%	437	76	16	614	297	614	297		
Sodium	Largemouth Bass	F	23	23	100%	459	88	18	605	291	605	291		
Sodium	Largemouth Bass	G	15	15	100%	495	82	21	622	362	622	362		
Sodium	Spotted Bass	A	1	1	100%	577			577	577	577	577		
Sodium	Spotted Bass	F	1	1	100%	552			552	552	552	552		
Sodium	Spotted Bass	G	1	1	100%	607			607	607	607	607		
Strontium	Blue Catfish	A	10	9	90%	0.84	1.51	0.48	5.03	0.10	5.03	0.10	0.10	0.10
Strontium	Blue Catfish	F	10	10	100%	1.04	0.74	0.23	2.20	0.10	2.20	0.10		
Strontium	Blue Catfish	G	5	5	100%	0.51	0.48	0.21	1.20	0.12	1.20	0.12		
Strontium	Channel Catfish	A	19	14	74%	0.26	0.25	0.06	1.00	0.10	1.00	0.12	0.10	0.10
Strontium	Channel Catfish	F	19	19	100%	0.85	1.88	0.43	8.30	0.06	8.30	0.06		
Strontium	Channel Catfish	G	15	15	100%	1.22	3.63	0.94	14.30	0.07	14.30	0.07		
Strontium	Largemouth Bass	A	23	18	78%	1.34	1.56	0.33	5.55	0.10	5.55	0.12	0.10	0.10
Strontium	Largemouth Bass	F	23	22	96%	1.15	1.01	0.21	3.10	0.04	3.10	0.05	0.04	0.04
Strontium	Largemouth Bass	G	15	15	100%	1.37	1.20	0.31	3.70	0.05	3.70	0.05		

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Table A-1. Summary Statistics for Baseline Fish Samples by Sample Replicate and Species

Analyte	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
											Maximum	Minimum	Maximum	Minimum
Strontium	Spotted Bass	A	1	1	100%	5.72			5.72	5.72	5.72	5.72		
Strontium	Spotted Bass	F	1	1	100%	2.30			2.30	2.30	2.30	2.30		
Strontium	Spotted Bass	G	1	1	100%	1.80			1.80	1.80	1.80	1.80		
Thallium	Blue Catfish	A	10	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Thallium	Blue Catfish	F	10	0	0%	0.013	0.001	0.000	0.014	0.012			0.014	0.012
Thallium	Blue Catfish	G	5	0	0%	0.014	0.000	0.000	0.014	0.013			0.014	0.013
Thallium	Channel Catfish	A	19	0	0%	0.100	0.001	0.000	0.101	0.099			0.101	0.099
Thallium	Channel Catfish	F	19	0	0%	0.013	0.001	0.000	0.014	0.013			0.014	0.013
Thallium	Channel Catfish	G	15	0	0%	0.015	0.007	0.002	0.040	0.012			0.040	0.012
Thallium	Largemouth Bass	A	23	0	0%	0.100	0.001	0.000	0.101	0.098			0.101	0.098
Thallium	Largemouth Bass	F	23	0	0%	0.014	0.001	0.000	0.018	0.012			0.018	0.012
Thallium	Largemouth Bass	G	15	0	0%	0.013	0.001	0.000	0.015	0.012			0.015	0.012
Thallium	Spotted Bass	A	1	0	0%	0.099			0.099	0.099			0.099	0.099
Thallium	Spotted Bass	F	1	0	0%	0.014			0.014	0.014			0.014	0.014
Thallium	Spotted Bass	G	1	0	0%	0.014			0.014	0.014			0.014	0.014
Vanadium	Blue Catfish	A	10	0	0%	0.200	0.005	0.001	0.208	0.195			0.208	0.195
Vanadium	Blue Catfish	F	10	3	30%	0.057	0.030	0.010	0.140	0.041	0.140	0.050	0.047	0.041
Vanadium	Blue Catfish	G	5	0	0%	0.045	0.002	0.001	0.046	0.042			0.046	0.042
Vanadium	Channel Catfish	A	19	0	0%	0.200	0.004	0.001	0.208	0.191			0.208	0.191
Vanadium	Channel Catfish	F	19	2	11%	0.046	0.004	0.001	0.061	0.042	0.061	0.050	0.047	0.042
Vanadium	Channel Catfish	G	15	4	27%	0.062	0.035	0.009	0.150	0.041	0.150	0.047	0.130	0.041
Vanadium	Largemouth Bass	A	23	0	0%	0.199	0.001	0.000	0.203	0.197			0.203	0.197
Vanadium	Largemouth Bass	F	23	1	4%	0.044	0.002	0.000	0.047	0.041	0.046	0.046	0.047	0.041
Vanadium	Largemouth Bass	G	15	2	13%	0.047	0.012	0.003	0.089	0.041	0.089	0.049	0.047	0.041
Vanadium	Spotted Bass	A	1	0	0%	0.198			0.198	0.198			0.198	0.198
Vanadium	Spotted Bass	F	1	0	0%	0.046			0.046	0.046			0.046	0.046
Vanadium	Spotted Bass	G	1	0	0%	0.047			0.047	0.047			0.047	0.047
Zinc	Blue Catfish	A	10	10	100%	7.7	2.2	0.7	12.2	5.2	12.2	5.2		
Zinc	Blue Catfish	F	10	10	100%	8.8	2.4	0.8	13.6	5.4	13.6	5.4		
Zinc	Blue Catfish	G	5	5	100%	8.9	1.7	0.8	11.4	7.0	11.4	7.0		
Zinc	Channel Catfish	A	19	19	100%	6.3	1.1	0.2	8.1	4.2	8.1	4.2		
Zinc	Channel Catfish	F	19	19	100%	7.5	2.7	0.6	17.3	5.1	17.3	5.1		
Zinc	Channel Catfish	G	15	15	100%	9.0	2.5	0.6	14.0	5.6	14.0	5.6		
Zinc	Largemouth Bass	A	23	23	100%	9.1	2.4	0.5	13.5	4.8	13.5	4.8		
Zinc	Largemouth Bass	F	23	23	100%	10.9	2.5	0.5	15.4	5.8	15.4	5.8		
Zinc	Largemouth Bass	G	15	15	100%	10.1	3.2	0.8	19.0	6.3	19.0	6.3		
Zinc	Spotted Bass	A	1	1	100%	8.1			8.1	8.1	8.1	8.1		
Zinc	Spotted Bass	F	1	1	100%	11.1			11.1	11.1	11.1	11.1		
Zinc	Spotted Bass	G	1	1	100%	11.3			11.3	11.3	11.3	11.3		

A = Original Analysis. F = Reanalyzed Fillets. G = Reanalyzed Homogenate.

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Aluminum	CRM1.5	Channel Catfish	A	5	0	0%	24.92	0.07	0.03	24.99	24.82			24.99	24.82
Aluminum	CRM1.5	Channel Catfish	F	5	1	20%	4.12	0.15	0.07	4.30	3.90	4.30	4.30	4.20	3.90
Aluminum	CRM1.5	Channel Catfish	G	5	0	0%	4.04	0.09	0.04	4.10	3.90			4.10	3.90
Aluminum	CRM1.5	Largemouth Bass	A	4	0	0%	24.99	0.08	0.04	25.09	24.91			25.09	24.91
Aluminum	CRM1.5	Largemouth Bass	F	4	0	0%	3.75	0.24	0.12	4.10	3.60			4.10	3.60
Aluminum	CRM1.5	Largemouth Bass	G	4	0	0%	3.80	0.22	0.11	4.10	3.60			4.10	3.60
Aluminum	CRM1.5	Spotted Bass	A	1	0	0%	24.90			24.90	24.90			24.90	24.90
Aluminum	CRM1.5	Spotted Bass	F	1	1	100%	5.20			5.20	5.20	5.20	5.20		
Aluminum	CRM1.5	Spotted Bass	G	1	0	0%	4.20			4.20	4.20			4.20	4.20
Aluminum	CRM9.5	Blue Catfish	A	5	0	0%	24.91	0.08	0.04	24.96	24.77			24.96	24.77
Aluminum	CRM9.5	Blue Catfish	F	5	0	0%	3.92	0.13	0.06	4.10	3.80			4.10	3.80
Aluminum	CRM9.5	Blue Catfish	G	5	0	0%	3.92	0.19	0.09	4.10	3.60			4.10	3.60
Aluminum	CRM9.5	Channel Catfish	A	4	0	0%	24.90	0.03	0.02	24.94	24.86			24.94	24.86
Aluminum	CRM9.5	Channel Catfish	F	4	2	50%	6.15	4.57	2.28	13.00	3.80	13.00	3.90	3.90	3.80
Aluminum	CRM9.5	Channel Catfish	G	4	2	50%	11.10	5.77	2.89	18.00	3.90	18.00	10.80	11.70	3.90
Aluminum	CRM9.5	Largemouth Bass	A	5	0	0%	24.87	0.17	0.08	25.17	24.74			25.17	24.74
Aluminum	CRM9.5	Largemouth Bass	F	5	0	0%	3.84	0.18	0.08	4.10	3.60			4.10	3.60
Aluminum	CRM9.5	Largemouth Bass	G	5	1	20%	6.82	6.64	2.97	18.70	3.80	18.70	18.70	4.00	3.80
Aluminum	ERM0.5	Blue Catfish	A	5	0	0%	24.96	0.09	0.04	25.08	24.82			25.08	24.82
Aluminum	ERM0.5	Blue Catfish	F	5	4	80%	6.32	1.86	0.83	7.90	3.60	7.90	5.20	3.60	3.60
Aluminum	ERM0.5	Channel Catfish	A	4	0	0%	24.95	0.11	0.05	25.11	24.88			25.11	24.88
Aluminum	ERM0.5	Channel Catfish	F	4	2	50%	5.10	1.51	0.75	7.00	3.70	7.00	5.60	4.10	3.70
Aluminum	ERM0.5	Largemouth Bass	A	8	0	0%	24.93	0.18	0.06	25.32	24.75			25.32	24.75
Aluminum	ERM0.5	Largemouth Bass	F	8	3	38%	5.60	2.54	0.90	9.50	3.60	9.50	7.60	4.00	3.60
Aluminum	ERM8.0	Channel Catfish	A	6	0	0%	25.04	0.11	0.05	25.16	24.88			25.16	24.88
Aluminum	ERM8.0	Channel Catfish	F	6	2	33%	5.45	2.54	1.04	9.70	3.70	9.70	7.50	4.10	3.70
Aluminum	ERM8.0	Channel Catfish	G	6	0	0%	3.92	0.23	0.09	4.20	3.60			4.20	3.60
Aluminum	ERM8.0	Largemouth Bass	A	6	0	0%	24.92	0.16	0.06	25.09	24.72			25.09	24.72
Aluminum	ERM8.0	Largemouth Bass	F	6	1	17%	3.92	0.19	0.08	4.10	3.60	4.10	4.10	4.10	3.60
Aluminum	ERM8.0	Largemouth Bass	G	6	0	0%	3.83	0.23	0.09	4.10	3.60			4.10	3.60
Antimony	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	CRM1.5	Channel Catfish	F	5	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	CRM1.5	Channel Catfish	G	5	1	20%	0.02	0.00	0.00	0.02	0.01	0.02	0.02	0.02	0.01
Antimony	CRM1.5	Largemouth Bass	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	CRM1.5	Largemouth Bass	F	4	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	CRM1.5	Largemouth Bass	G	4	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	CRM1.5	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Antimony	CRM1.5	Spotted Bass	F	1	0	0%	0.02			0.02	0.02			0.02	0.02
Antimony	CRM1.5	Spotted Bass	G	1	0	0%	0.02			0.02	0.02			0.02	0.02
Antimony	CRM9.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	CRM9.5	Blue Catfish	F	5	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	CRM9.5	Blue Catfish	G	5	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	CRM9.5	Channel Catfish	F	4	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	CRM9.5	Channel Catfish	G	4	0	0%	0.02	0.01	0.01	0.04	0.01			0.04	0.01
Antimony	CRM9.5	Largemouth Bass	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	CRM9.5	Largemouth Bass	F	5	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Antimony	CRM9.5	Largemouth Bass	G	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Antimony	ERM0.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	ERM0.5	Blue Catfish	F	5	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	ERM0.5	Channel Catfish	F	4	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	ERM0.5	Largemouth Bass	A	8	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	ERM0.5	Largemouth Bass	F	8	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	ERM8.0	Channel Catfish	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	ERM8.0	Channel Catfish	F	6	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	ERM8.0	Channel Catfish	G	6	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	ERM8.0	Largemouth Bass	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Antimony	ERM8.0	Largemouth Bass	F	6	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Antimony	ERM8.0	Largemouth Bass	G	6	1	17%	0.01	0.00	0.00	0.02	0.01	0.02	0.02	0.02	0.01
Arsenic	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Arsenic	CRM1.5	Channel Catfish	F	5	3	60%	0.04	0.01	0.00	0.05	0.03	0.05	0.03	0.03	0.03
Arsenic	CRM1.5	Channel Catfish	G	5	1	20%	0.03	0.01	0.00	0.05	0.03	0.05	0.05	0.03	0.03
Arsenic	CRM1.5	Largemouth Bass	A	4	4	100%	0.22	0.06	0.03	0.28	0.15	0.28	0.15		
Arsenic	CRM1.5	Largemouth Bass	F	4	4	100%	0.27	0.06	0.03	0.35	0.23	0.35	0.23		
Arsenic	CRM1.5	Largemouth Bass	G	4	4	100%	0.23	0.04	0.02	0.28	0.18	0.28	0.18		
Arsenic	CRM1.5	Spotted Bass	A	1	1	100%	0.24			0.24	0.24	0.24	0.24		
Arsenic	CRM1.5	Spotted Bass	F	1	1	100%	0.31			0.31	0.31	0.31	0.31		
Arsenic	CRM1.5	Spotted Bass	G	1	1	100%	0.27			0.27	0.27	0.27	0.27		
Arsenic	CRM9.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Arsenic	CRM9.5	Blue Catfish	F	5	2	40%	0.04	0.02	0.01	0.07	0.03	0.07	0.03	0.03	0.03
Arsenic	CRM9.5	Blue Catfish	G	5	2	40%	0.03	0.01	0.00	0.05	0.03	0.05	0.04	0.03	0.03
Arsenic	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Arsenic	CRM9.5	Channel Catfish	F	4	1	25%	0.04	0.02	0.01	0.06	0.03	0.06	0.06	0.03	0.03
Arsenic	CRM9.5	Channel Catfish	G	4	1	25%	0.04	0.03	0.01	0.08	0.03	0.03	0.03	0.08	0.03
Arsenic	CRM9.5	Largemouth Bass	A	5	4	80%	0.22	0.07	0.03	0.29	0.12	0.29	0.18	0.12	0.12
Arsenic	CRM9.5	Largemouth Bass	F	5	5	100%	0.29	0.09	0.04	0.36	0.16	0.36	0.16		
Arsenic	CRM9.5	Largemouth Bass	G	5	5	100%	0.26	0.08	0.04	0.33	0.15	0.33	0.15		
Arsenic	ERM0.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Arsenic	ERM0.5	Blue Catfish	F	5	5	100%	0.06	0.03	0.01	0.11	0.03	0.11	0.03		
Arsenic	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Arsenic	ERM0.5	Channel Catfish	F	4	1	25%	0.03	0.01	0.00	0.04	0.03	0.04	0.04	0.03	0.03
Arsenic	ERM0.5	Largemouth Bass	A	8	8	100%	0.20	0.03	0.01	0.23	0.16	0.23	0.16		
Arsenic	ERM0.5	Largemouth Bass	F	8	8	100%	0.27	0.04	0.01	0.33	0.21	0.33	0.21		
Arsenic	ERM8.0	Channel Catfish	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Arsenic	ERM8.0	Channel Catfish	F	6	3	50%	0.03	0.01	0.00	0.05	0.03	0.05	0.03	0.03	0.03
Arsenic	ERM8.0	Channel Catfish	G	6	2	33%	0.03	0.01	0.00	0.04	0.03	0.04	0.03	0.03	0.03
Arsenic	ERM8.0	Largemouth Bass	A	6	2	33%	0.11	0.02	0.01	0.15	0.10	0.15	0.12	0.10	0.10
Arsenic	ERM8.0	Largemouth Bass	F	6	6	100%	0.13	0.06	0.03	0.22	0.03	0.22	0.03		
Arsenic	ERM8.0	Largemouth Bass	G	6	6	100%	0.13	0.06	0.03	0.23	0.04	0.23	0.04		
Barium	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Barium	CRM1.5	Channel Catfish	F	5	5	100%	0.10	0.06	0.02	0.19	0.05	0.19	0.05		
Barium	CRM1.5	Channel Catfish	G	5	5	100%	0.12	0.04	0.02	0.16	0.07	0.16	0.07		
Barium	CRM1.5	Largemouth Bass	A	4	2	50%	0.12	0.03	0.01	0.16	0.10	0.16	0.12	0.10	0.10

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
												Maximum	Minimum	Maximum	Minimum
Barium	CRM1.5	Largemouth Bass	F	4	3	75%	0.08	0.04	0.02	0.14	0.04	0.14	0.04	0.05	0.05
Barium	CRM1.5	Largemouth Bass	G	4	4	100%	0.11	0.05	0.03	0.18	0.07	0.18	0.07		
Barium	CRM1.5	Spotted Bass	A	1	1	100%	0.20			0.20	0.20	0.20	0.20		
Barium	CRM1.5	Spotted Bass	F	1	1	100%	0.13			0.13	0.13	0.13	0.13		
Barium	CRM1.5	Spotted Bass	G	1	1	100%	0.29			0.29	0.29	0.29	0.29		
Barium	CRM9.5	Blue Catfish	A	5	2	40%	0.10	0.01	0.00	0.11	0.10	0.11	0.11	0.10	0.10
Barium	CRM9.5	Blue Catfish	F	5	4	80%	0.13	0.07	0.03	0.18	0.05	0.18	0.06	0.05	0.05
Barium	CRM9.5	Blue Catfish	G	5	4	80%	0.07	0.04	0.02	0.13	0.05	0.13	0.05	0.05	0.05
Barium	CRM9.5	Channel Catfish	A	4	2	50%	0.13	0.04	0.02	0.16	0.10	0.16	0.16	0.10	0.10
Barium	CRM9.5	Channel Catfish	F	4	3	75%	0.15	0.21	0.10	0.46	0.04	0.46	0.04	0.04	0.04
Barium	CRM9.5	Channel Catfish	G	4	4	100%	0.42	0.53	0.26	1.20	0.06	1.20	0.06		
Barium	CRM9.5	Largemouth Bass	A	5	2	40%	0.13	0.05	0.02	0.21	0.10	0.21	0.14	0.10	0.10
Barium	CRM9.5	Largemouth Bass	F	5	5	100%	0.10	0.03	0.01	0.14	0.07	0.14	0.07		
Barium	CRM9.5	Largemouth Bass	G	5	4	80%	0.10	0.04	0.02	0.14	0.04	0.14	0.08	0.04	0.04
Barium	ERM0.5	Blue Catfish	A	5	2	40%	0.22	0.27	0.12	0.70	0.10	0.70	0.11	0.10	0.10
Barium	ERM0.5	Blue Catfish	F	5	4	80%	0.16	0.10	0.05	0.29	0.04	0.29	0.08	0.04	0.04
Barium	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Barium	ERM0.5	Channel Catfish	F	4	3	75%	0.09	0.06	0.03	0.18	0.05	0.18	0.06	0.05	0.05
Barium	ERM0.5	Largemouth Bass	A	8	2	25%	0.11	0.02	0.01	0.16	0.10	0.16	0.12	0.10	0.10
Barium	ERM0.5	Largemouth Bass	F	8	5	63%	0.07	0.03	0.01	0.14	0.04	0.14	0.06	0.05	0.04
Barium	ERM8.0	Channel Catfish	A	6	1	17%	0.10	0.01	0.00	0.12	0.10	0.12	0.12	0.10	0.10
Barium	ERM8.0	Channel Catfish	F	6	2	33%	0.04	0.00	0.00	0.05	0.04	0.05	0.04	0.05	0.04
Barium	ERM8.0	Channel Catfish	G	6	4	67%	0.07	0.04	0.02	0.15	0.04	0.15	0.05	0.04	0.04
Barium	ERM8.0	Largemouth Bass	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Barium	ERM8.0	Largemouth Bass	F	6	1	17%	0.05	0.02	0.01	0.09	0.04	0.09	0.09	0.05	0.04
Barium	ERM8.0	Largemouth Bass	G	6	3	50%	0.07	0.04	0.02	0.15	0.04	0.15	0.06	0.04	0.04
Beryllium	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	CRM1.5	Channel Catfish	F	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM1.5	Channel Catfish	G	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM1.5	Largemouth Bass	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	CRM1.5	Largemouth Bass	F	4	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM1.5	Largemouth Bass	G	4	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM1.5	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Beryllium	CRM1.5	Spotted Bass	F	1	0	0%	0.03			0.03	0.03			0.03	0.03
Beryllium	CRM1.5	Spotted Bass	G	1	0	0%	0.03			0.03	0.03			0.03	0.03
Beryllium	CRM9.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	CRM9.5	Blue Catfish	F	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM9.5	Blue Catfish	G	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	CRM9.5	Channel Catfish	F	4	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM9.5	Channel Catfish	G	4	0	0%	0.04	0.03	0.01	0.09	0.03			0.09	0.03
Beryllium	CRM9.5	Largemouth Bass	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	CRM9.5	Largemouth Bass	F	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	CRM9.5	Largemouth Bass	G	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	ERM0.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	ERM0.5	Blue Catfish	F	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Beryllium	ERM0.5	Channel Catfish	F	4	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	ERM0.5	Largemouth Bass	A	8	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	ERM0.5	Largemouth Bass	F	8	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	ERM8.0	Channel Catfish	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	ERM8.0	Channel Catfish	F	6	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	ERM8.0	Channel Catfish	G	6	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	ERM8.0	Largemouth Bass	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Beryllium	ERM8.0	Largemouth Bass	F	6	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Beryllium	ERM8.0	Largemouth Bass	G	6	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Boron	CRM1.5	Channel Catfish	A	5	0	0%	1.99	0.01	0.00	2.00	1.99			2.00	1.99
Boron	CRM1.5	Channel Catfish	F	5	0	0%	0.42	0.01	0.01	0.43	0.40			0.43	0.40
Boron	CRM1.5	Channel Catfish	G	5	0	0%	0.42	0.01	0.00	0.42	0.40			0.42	0.40
Boron	CRM1.5	Largemouth Bass	A	4	0	0%	1.99	0.00	0.00	2.00	1.99			2.00	1.99
Boron	CRM1.5	Largemouth Bass	F	4	0	0%	0.39	0.03	0.01	0.43	0.37			0.43	0.37
Boron	CRM1.5	Largemouth Bass	G	4	0	0%	0.40	0.03	0.01	0.43	0.37			0.43	0.37
Boron	CRM1.5	Spotted Bass	A	1	0	0%	1.98			1.98	1.98			1.98	1.98
Boron	CRM1.5	Spotted Bass	F	1	0	0%	0.42			0.42	0.42			0.42	0.42
Boron	CRM1.5	Spotted Bass	G	1	0	0%	0.43			0.43	0.43			0.43	0.43
Boron	CRM9.5	Blue Catfish	A	5	0	0%	1.99	0.00	0.00	1.99	1.98			1.99	1.98
Boron	CRM9.5	Blue Catfish	F	5	0	0%	0.41	0.01	0.01	0.42	0.39			0.42	0.39
Boron	CRM9.5	Blue Catfish	G	5	0	0%	0.41	0.02	0.01	0.42	0.38			0.42	0.38
Boron	CRM9.5	Channel Catfish	A	4	0	0%	2.00	0.01	0.00	2.00	1.99			2.00	1.99
Boron	CRM9.5	Channel Catfish	F	4	0	0%	0.40	0.02	0.01	0.42	0.39			0.42	0.39
Boron	CRM9.5	Channel Catfish	G	4	0	0%	0.60	0.40	0.20	1.20	0.38			1.20	0.38
Boron	CRM9.5	Largemouth Bass	A	5	0	0%	1.99	0.02	0.01	2.02	1.97			2.02	1.97
Boron	CRM9.5	Largemouth Bass	F	5	0	0%	0.40	0.02	0.01	0.42	0.37			0.42	0.37
Boron	CRM9.5	Largemouth Bass	G	5	0	0%	0.39	0.01	0.00	0.41	0.39			0.41	0.39
Boron	ERM0.5	Blue Catfish	A	5	0	0%	2.00	0.01	0.00	2.01	1.99			2.01	1.99
Boron	ERM0.5	Blue Catfish	F	5	0	0%	0.40	0.02	0.01	0.43	0.37			0.43	0.37
Boron	ERM0.5	Channel Catfish	A	4	0	0%	1.99	0.01	0.00	2.00	1.98			2.00	1.98
Boron	ERM0.5	Channel Catfish	F	4	0	0%	0.40	0.02	0.01	0.42	0.39			0.42	0.39
Boron	ERM0.5	Largemouth Bass	A	8	0	0%	2.00	0.01	0.01	2.03	1.98			2.03	1.98
Boron	ERM0.5	Largemouth Bass	F	8	0	0%	0.40	0.02	0.01	0.42	0.37			0.42	0.37
Boron	ERM8.0	Channel Catfish	A	6	0	0%	2.00	0.01	0.00	2.01	1.98			2.01	1.98
Boron	ERM8.0	Channel Catfish	F	6	0	0%	0.40	0.02	0.01	0.43	0.38			0.43	0.38
Boron	ERM8.0	Channel Catfish	G	6	0	0%	0.40	0.02	0.01	0.43	0.37			0.43	0.37
Boron	ERM8.0	Largemouth Bass	A	6	0	0%	1.99	0.01	0.00	2.01	1.98			2.01	1.98
Boron	ERM8.0	Largemouth Bass	F	6	0	0%	0.41	0.02	0.01	0.43	0.38			0.43	0.38
Boron	ERM8.0	Largemouth Bass	G	6	0	0%	0.40	0.02	0.01	0.42	0.37			0.42	0.37
Cadmium	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	CRM1.5	Channel Catfish	F	5	1	20%	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Cadmium	CRM1.5	Channel Catfish	G	5	2	40%	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Cadmium	CRM1.5	Largemouth Bass	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	CRM1.5	Largemouth Bass	F	4	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cadmium	CRM1.5	Largemouth Bass	G	4	2	50%	0.01	0.00	0.00	0.02	0.01	0.02	0.01	0.01	0.01
Cadmium	CRM1.5	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Cadmium	CRM1.5	Spotted Bass	F	1	0	0%	0.01			0.01	0.01			0.01	0.01

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Cadmium	CRM1.5	Spotted Bass	G	1	0	0%	0.01			0.01	0.01			0.01	0.01
Cadmium	CRM9.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	CRM9.5	Blue Catfish	F	5	0	0%	0.02	0.02	0.01	0.05	0.01			0.05	0.01
Cadmium	CRM9.5	Blue Catfish	G	5	1	20%	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Cadmium	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	CRM9.5	Channel Catfish	F	4	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cadmium	CRM9.5	Channel Catfish	G	4	0	0%	0.01	0.01	0.00	0.02	0.01			0.02	0.01
Cadmium	CRM9.5	Largemouth Bass	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	CRM9.5	Largemouth Bass	F	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cadmium	CRM9.5	Largemouth Bass	G	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cadmium	ERM0.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	ERM0.5	Blue Catfish	F	5	0	0%	0.01	0.01	0.00	0.03	0.01			0.03	0.01
Cadmium	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	ERM0.5	Channel Catfish	F	4	1	25%	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Cadmium	ERM0.5	Largemouth Bass	A	8	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	ERM0.5	Largemouth Bass	F	8	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cadmium	ERM8.0	Channel Catfish	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	ERM8.0	Channel Catfish	F	6	1	17%	0.01	0.00	0.00	0.02	0.01	0.02	0.02	0.01	0.01
Cadmium	ERM8.0	Channel Catfish	G	6	1	17%	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Cadmium	ERM8.0	Largemouth Bass	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cadmium	ERM8.0	Largemouth Bass	F	6	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cadmium	ERM8.0	Largemouth Bass	G	6	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Calcium	CRM1.5	Channel Catfish	A	5	5	100%	336.60	262.17	117.25	778.10	156.80	778.10	156.80		
Calcium	CRM1.5	Channel Catfish	F	5	5	100%	983.40	758.79	339.34	1930.00	194.00	1930.00	194.00		
Calcium	CRM1.5	Channel Catfish	G	5	5	100%	690.40	976.25	436.59	2430.00	175.00	2430.00	175.00		
Calcium	CRM1.5	Largemouth Bass	A	4	4	100%	2693.50	1518.63	759.32	4531.00	1042.00	4531.00	1042.00		
Calcium	CRM1.5	Largemouth Bass	F	4	4	100%	1682.75	1383.20	691.60	3710.00	601.00	3710.00	601.00		
Calcium	CRM1.5	Largemouth Bass	G	4	4	100%	2712.50	1619.21	809.60	4660.00	1180.00	4660.00	1180.00		
Calcium	CRM1.5	Spotted Bass	A	1	1	100%	6679.00			6679.00	6679.00	6679.00	6679.00		
Calcium	CRM1.5	Spotted Bass	F	1	1	100%	2580.00			2580.00	2580.00	2580.00	2580.00		
Calcium	CRM1.5	Spotted Bass	G	1	1	100%	2320.00			2320.00	2320.00	2320.00	2320.00		
Calcium	CRM9.5	Blue Catfish	A	5	5	100%	597.74	520.99	232.99	1347.00	100.90	1347.00	100.90		
Calcium	CRM9.5	Blue Catfish	F	5	5	100%	1614.00	1250.29	559.15	3300.00	307.00	3300.00	307.00		
Calcium	CRM9.5	Blue Catfish	G	5	5	100%	653.00	598.79	267.79	1480.00	149.00	1480.00	149.00		
Calcium	CRM9.5	Channel Catfish	A	4	3	75%	573.80	469.88	234.94	1189.00	99.80	1189.00	346.30	99.80	99.80
Calcium	CRM9.5	Channel Catfish	F	4	4	100%	3267.25	5955.81	2977.91	12200.00	215.00	12200.00	215.00		
Calcium	CRM9.5	Channel Catfish	G	4	4	100%	5131.50	9516.90	4758.45	19400.00	125.00	19400.00	125.00		
Calcium	CRM9.5	Largemouth Bass	A	5	5	100%	2848.78	2919.84	1305.79	7426.00	355.90	7426.00	355.90		
Calcium	CRM9.5	Largemouth Bass	F	5	5	100%	2718.00	698.23	312.26	3590.00	1870.00	3590.00	1870.00		
Calcium	CRM9.5	Largemouth Bass	G	5	5	100%	2208.40	1320.67	590.62	3550.00	462.00	3550.00	462.00		
Calcium	ERM0.5	Blue Catfish	A	5	4	80%	1458.60	2724.23	1218.31	6327.00	99.29	6327.00	151.60	99.29	99.29
Calcium	ERM0.5	Blue Catfish	F	5	5	100%	1193.60	1154.70	516.40	3050.00	108.00	3050.00	108.00		
Calcium	ERM0.5	Channel Catfish	A	4	4	100%	169.55	42.97	21.49	219.20	115.80	219.20	115.80		
Calcium	ERM0.5	Channel Catfish	F	4	4	100%	763.00	669.56	334.78	1730.00	192.00	1730.00	192.00		
Calcium	ERM0.5	Largemouth Bass	A	8	8	100%	1415.61	2091.32	739.39	6304.00	134.60	6304.00	134.60		
Calcium	ERM0.5	Largemouth Bass	F	8	8	100%	1319.88	1068.77	377.87	2990.00	141.00	2990.00	141.00		
Calcium	ERM8.0	Channel Catfish	A	6	2	33%	102.38	5.08	2.08	112.50	99.30	112.50	102.40	100.47	99.30

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Calcium	ERM8.0	Channel Catfish	F	6	6	100%	75.22	6.16	2.52	83.60	67.30	83.60	67.30		
Calcium	ERM8.0	Channel Catfish	G	6	6	100%	116.82	59.05	24.11	232.00	78.80	232.00	78.80		
Calcium	ERM8.0	Largemouth Bass	A	6	4	67%	370.84	428.03	174.74	1066.00	99.09	1066.00	100.50	99.33	99.09
Calcium	ERM8.0	Largemouth Bass	F	6	6	100%	434.50	642.25	262.20	1730.00	106.00	1730.00	106.00		
Calcium	ERM8.0	Largemouth Bass	G	6	6	100%	595.17	672.28	274.46	1720.00	110.00	1720.00	110.00		
Chromium	CRM1.5	Channel Catfish	A	5	3	60%	0.11	0.01	0.00	0.13	0.10	0.13	0.10	0.10	0.10
Chromium	CRM1.5	Channel Catfish	F	5	0	0%	0.13	0.00	0.00	0.13	0.12			0.13	0.12
Chromium	CRM1.5	Channel Catfish	G	5	2	40%	0.15	0.03	0.01	0.19	0.13	0.19	0.15	0.13	0.13
Chromium	CRM1.5	Largemouth Bass	A	4	3	75%	0.18	0.06	0.03	0.25	0.10	0.25	0.18	0.10	0.10
Chromium	CRM1.5	Largemouth Bass	F	4	0	0%	0.12	0.01	0.00	0.13	0.11			0.13	0.11
Chromium	CRM1.5	Largemouth Bass	G	4	3	75%	0.23	0.09	0.04	0.33	0.12	0.33	0.21	0.12	0.12
Chromium	CRM1.5	Spotted Bass	A	1	1	100%	0.10			0.10	0.10	0.10	0.10		
Chromium	CRM1.5	Spotted Bass	F	1	0	0%	0.13			0.13	0.13			0.13	0.13
Chromium	CRM1.5	Spotted Bass	G	1	0	0%	0.13			0.13	0.13			0.13	0.13
Chromium	CRM9.5	Blue Catfish	A	5	1	20%	0.11	0.02	0.01	0.13	0.10	0.13	0.13	0.10	0.10
Chromium	CRM9.5	Blue Catfish	F	5	1	20%	0.19	0.14	0.06	0.44	0.12	0.44	0.44	0.13	0.12
Chromium	CRM9.5	Blue Catfish	G	5	1	20%	0.14	0.03	0.01	0.19	0.12	0.19	0.19	0.13	0.12
Chromium	CRM9.5	Channel Catfish	A	4	2	50%	0.13	0.04	0.02	0.17	0.10	0.17	0.16	0.10	0.10
Chromium	CRM9.5	Channel Catfish	F	4	0	0%	0.12	0.01	0.00	0.13	0.12			0.13	0.12
Chromium	CRM9.5	Channel Catfish	G	4	2	50%	0.34	0.35	0.18	0.86	0.12	0.86	0.27	0.12	0.12
Chromium	CRM9.5	Largemouth Bass	A	5	3	60%	0.11	0.02	0.01	0.14	0.10	0.14	0.11	0.10	0.10
Chromium	CRM9.5	Largemouth Bass	F	5	0	0%	0.12	0.01	0.00	0.13	0.11			0.13	0.11
Chromium	CRM9.5	Largemouth Bass	G	5	0	0%	0.12	0.00	0.00	0.13	0.12			0.13	0.12
Chromium	ERM0.5	Blue Catfish	A	5	2	40%	0.11	0.03	0.01	0.16	0.10	0.16	0.10	0.10	0.10
Chromium	ERM0.5	Blue Catfish	F	5	2	40%	0.18	0.11	0.05	0.37	0.11	0.37	0.17	0.13	0.11
Chromium	ERM0.5	Channel Catfish	A	4	3	75%	0.11	0.01	0.00	0.12	0.10	0.12	0.11	0.10	0.10
Chromium	ERM0.5	Channel Catfish	F	4	0	0%	0.12	0.01	0.00	0.13	0.12			0.13	0.12
Chromium	ERM0.5	Largemouth Bass	A	8	6	75%	0.13	0.05	0.02	0.24	0.10	0.24	0.10	0.10	0.10
Chromium	ERM0.5	Largemouth Bass	F	8	0	0%	0.12	0.01	0.00	0.13	0.11			0.13	0.11
Chromium	ERM8.0	Channel Catfish	A	6	4	67%	0.17	0.13	0.05	0.43	0.10	0.43	0.13	0.10	0.10
Chromium	ERM8.0	Channel Catfish	F	6	0	0%	0.12	0.00	0.00	0.13	0.12			0.13	0.12
Chromium	ERM8.0	Channel Catfish	G	6	2	33%	0.22	0.23	0.10	0.70	0.11	0.70	0.15	0.13	0.11
Chromium	ERM8.0	Largemouth Bass	A	6	4	67%	0.14	0.09	0.03	0.32	0.10	0.32	0.11	0.10	0.10
Chromium	ERM8.0	Largemouth Bass	F	6	0	0%	0.13	0.01	0.00	0.13	0.12			0.13	0.12
Chromium	ERM8.0	Largemouth Bass	G	6	2	33%	0.18	0.13	0.05	0.44	0.11	0.44	0.16	0.13	0.11
Cobalt	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	CRM1.5	Channel Catfish	F	5	1	20%	0.01	0.00	0.00	0.02	0.01	0.01	0.01	0.02	0.01
Cobalt	CRM1.5	Channel Catfish	G	5	4	80%	0.02	0.01	0.00	0.04	0.01	0.04	0.02	0.01	0.01
Cobalt	CRM1.5	Largemouth Bass	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	CRM1.5	Largemouth Bass	F	4	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Cobalt	CRM1.5	Largemouth Bass	G	4	3	75%	0.02	0.00	0.00	0.02	0.01	0.02	0.02	0.01	0.01
Cobalt	CRM1.5	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Cobalt	CRM1.5	Spotted Bass	F	1	0	0%	0.01			0.01	0.01			0.01	0.01
Cobalt	CRM1.5	Spotted Bass	G	1	0	0%	0.02			0.02	0.02			0.02	0.02
Cobalt	CRM9.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	CRM9.5	Blue Catfish	F	5	2	40%	0.02	0.01	0.00	0.04	0.01	0.04	0.02	0.01	0.01
Cobalt	CRM9.5	Blue Catfish	G	5	3	60%	0.02	0.00	0.00	0.02	0.01	0.02	0.02	0.01	0.01

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Cobalt	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	CRM9.5	Channel Catfish	F	4	1	25%	0.01	0.00	0.00	0.02	0.01	0.02	0.02	0.01	0.01
Cobalt	CRM9.5	Channel Catfish	G	4	3	75%	0.04	0.03	0.01	0.08	0.01	0.08	0.03	0.01	0.01
Cobalt	CRM9.5	Largemouth Bass	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	CRM9.5	Largemouth Bass	F	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cobalt	CRM9.5	Largemouth Bass	G	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cobalt	ERM0.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	ERM0.5	Blue Catfish	F	5	2	40%	0.02	0.01	0.00	0.03	0.01	0.03	0.02	0.01	0.01
Cobalt	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	ERM0.5	Channel Catfish	F	4	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cobalt	ERM0.5	Largemouth Bass	A	8	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	ERM0.5	Largemouth Bass	F	8	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cobalt	ERM8.0	Channel Catfish	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	ERM8.0	Channel Catfish	F	6	1	17%	0.01	0.00	0.00	0.02	0.01	0.02	0.02	0.02	0.01
Cobalt	ERM8.0	Channel Catfish	G	6	3	50%	0.02	0.01	0.00	0.04	0.01	0.04	0.02	0.02	0.01
Cobalt	ERM8.0	Largemouth Bass	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Cobalt	ERM8.0	Largemouth Bass	F	6	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Cobalt	ERM8.0	Largemouth Bass	G	6	2	33%	0.02	0.01	0.00	0.03	0.01	0.03	0.02	0.01	0.01
Copper	CRM1.5	Channel Catfish	A	5	3	60%	0.52	0.03	0.01	0.56	0.49	0.56	0.50	0.50	0.49
Copper	CRM1.5	Channel Catfish	F	5	5	100%	0.60	0.56	0.25	1.60	0.28	1.60	0.28		
Copper	CRM1.5	Channel Catfish	G	5	5	100%	0.47	0.10	0.04	0.57	0.32	0.57	0.32		
Copper	CRM1.5	Largemouth Bass	A	4	0	0%	0.50	0.01	0.00	0.51	0.49			0.51	0.49
Copper	CRM1.5	Largemouth Bass	F	4	4	100%	0.36	0.02	0.01	0.38	0.33	0.38	0.33		
Copper	CRM1.5	Largemouth Bass	G	4	4	100%	0.45	0.05	0.03	0.49	0.38	0.49	0.38		
Copper	CRM1.5	Spotted Bass	A	1	0	0%	0.51			0.51	0.51			0.51	0.51
Copper	CRM1.5	Spotted Bass	F	1	1	100%	0.40			0.40	0.40	0.40	0.40		
Copper	CRM1.5	Spotted Bass	G	1	1	100%	0.45			0.45	0.45	0.45	0.45		
Copper	CRM9.5	Blue Catfish	A	5	0	0%	0.50	0.01	0.00	0.51	0.49			0.51	0.49
Copper	CRM9.5	Blue Catfish	F	5	5	100%	0.77	0.97	0.43	2.50	0.31	2.50	0.31		
Copper	CRM9.5	Blue Catfish	G	5	5	100%	0.38	0.07	0.03	0.51	0.32	0.51	0.32		
Copper	CRM9.5	Channel Catfish	A	4	2	50%	0.65	0.27	0.13	1.05	0.49	1.05	0.56	0.51	0.49
Copper	CRM9.5	Channel Catfish	F	4	4	100%	0.97	1.03	0.51	2.50	0.34	2.50	0.34		
Copper	CRM9.5	Channel Catfish	G	4	4	100%	0.65	0.50	0.25	1.40	0.32	1.40	0.32		
Copper	CRM9.5	Largemouth Bass	A	5	0	0%	0.50	0.01	0.00	0.51	0.49			0.51	0.49
Copper	CRM9.5	Largemouth Bass	F	5	5	100%	0.68	0.79	0.35	2.10	0.29	2.10	0.29		
Copper	CRM9.5	Largemouth Bass	G	5	5	100%	0.37	0.02	0.01	0.39	0.34	0.39	0.34		
Copper	ERM0.5	Blue Catfish	A	5	1	20%	0.52	0.06	0.03	0.62	0.49	0.62	0.62	0.50	0.49
Copper	ERM0.5	Blue Catfish	F	5	5	100%	1.58	1.83	0.82	4.20	0.25	4.20	0.25		
Copper	ERM0.5	Channel Catfish	A	4	0	0%	0.50	0.01	0.00	0.50	0.49			0.50	0.49
Copper	ERM0.5	Channel Catfish	F	4	4	100%	1.35	2.10	1.05	4.50	0.28	4.50	0.28		
Copper	ERM0.5	Largemouth Bass	A	8	3	38%	0.52	0.06	0.02	0.65	0.49	0.65	0.50	0.50	0.49
Copper	ERM0.5	Largemouth Bass	F	8	8	100%	1.71	2.56	0.90	6.80	0.27	6.80	0.27		
Copper	ERM8.0	Channel Catfish	A	6	1	17%	0.51	0.03	0.01	0.57	0.50	0.57	0.57	0.51	0.50
Copper	ERM8.0	Channel Catfish	F	6	6	100%	0.58	0.39	0.16	1.30	0.25	1.30	0.25		
Copper	ERM8.0	Channel Catfish	G	6	6	100%	0.39	0.12	0.05	0.57	0.22	0.57	0.22		
Copper	ERM8.0	Largemouth Bass	A	6	1	17%	0.54	0.11	0.04	0.76	0.49	0.76	0.76	0.50	0.49
Copper	ERM8.0	Largemouth Bass	F	6	6	100%	0.31	0.12	0.05	0.53	0.20	0.53	0.20		

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Copper	ERM8.0	Largemouth Bass	G	6	6	100%	0.41	0.29	0.12	1.00	0.24	1.00	0.24		
Iron	CRM1.5	Channel Catfish	A	5	0	0%	24.92	0.07	0.03	24.99	24.82			24.99	24.82
Iron	CRM1.5	Channel Catfish	F	5	0	0%	12.22	0.36	0.16	12.50	11.70			12.50	11.70
Iron	CRM1.5	Channel Catfish	G	5	0	0%	12.14	0.26	0.12	12.30	11.70			12.30	11.70
Iron	CRM1.5	Largemouth Bass	A	4	0	0%	24.99	0.08	0.04	25.09	24.91			25.09	24.91
Iron	CRM1.5	Largemouth Bass	F	4	0	0%	11.35	0.78	0.39	12.50	10.80			12.50	10.80
Iron	CRM1.5	Largemouth Bass	G	4	0	0%	11.50	0.67	0.33	12.40	10.90			12.40	10.90
Iron	CRM1.5	Spotted Bass	A	1	0	0%	24.90			24.90	24.90			24.90	24.90
Iron	CRM1.5	Spotted Bass	F	1	0	0%	12.20			12.20	12.20			12.20	12.20
Iron	CRM1.5	Spotted Bass	G	1	0	0%	12.50			12.50	12.50			12.50	12.50
Iron	CRM9.5	Blue Catfish	A	5	0	0%	24.91	0.08	0.04	24.96	24.77			24.96	24.77
Iron	CRM9.5	Blue Catfish	F	5	0	0%	11.86	0.36	0.16	12.30	11.50			12.30	11.50
Iron	CRM9.5	Blue Catfish	G	5	0	0%	11.86	0.50	0.22	12.30	11.00			12.30	11.00
Iron	CRM9.5	Channel Catfish	A	4	0	0%	24.90	0.03	0.02	24.94	24.86			24.94	24.86
Iron	CRM9.5	Channel Catfish	F	4	0	0%	11.68	0.49	0.24	12.30	11.20			12.30	11.20
Iron	CRM9.5	Channel Catfish	G	4	0	0%	17.45	11.90	5.95	35.30	11.10			35.30	11.10
Iron	CRM9.5	Largemouth Bass	A	5	0	0%	24.87	0.17	0.08	25.17	24.74			25.17	24.74
Iron	CRM9.5	Largemouth Bass	F	5	0	0%	11.52	0.58	0.26	12.30	10.70			12.30	10.70
Iron	CRM9.5	Largemouth Bass	G	5	0	0%	11.46	0.31	0.14	12.00	11.20			12.00	11.20
Iron	ERM0.5	Blue Catfish	A	5	0	0%	24.96	0.09	0.04	25.08	24.82			25.08	24.82
Iron	ERM0.5	Blue Catfish	F	5	0	0%	11.64	0.67	0.30	12.50	10.80			12.50	10.80
Iron	ERM0.5	Channel Catfish	A	4	0	0%	24.95	0.11	0.05	25.11	24.88			25.11	24.88
Iron	ERM0.5	Channel Catfish	F	4	0	0%	11.70	0.39	0.20	12.20	11.30			12.20	11.30
Iron	ERM0.5	Largemouth Bass	A	8	0	0%	24.93	0.18	0.06	25.32	24.75			25.32	24.75
Iron	ERM0.5	Largemouth Bass	F	8	0	0%	11.49	0.53	0.19	12.30	10.80			12.30	10.80
Iron	ERM8.0	Channel Catfish	A	6	0	0%	25.04	0.11	0.05	25.16	24.88			25.16	24.88
Iron	ERM8.0	Channel Catfish	F	6	1	17%	15.67	9.92	4.05	35.90	11.00	35.90	35.90	12.40	11.00
Iron	ERM8.0	Channel Catfish	G	6	0	0%	11.70	0.67	0.27	12.50	10.80			12.50	10.80
Iron	ERM8.0	Largemouth Bass	A	6	0	0%	24.92	0.16	0.06	25.09	24.72			25.09	24.72
Iron	ERM8.0	Largemouth Bass	F	6	0	0%	11.83	0.58	0.24	12.40	10.90			12.40	10.90
Iron	ERM8.0	Largemouth Bass	G	6	0	0%	11.50	0.67	0.27	12.20	10.70			12.20	10.70
Lead	CRM1.5	Channel Catfish	A	5	1	20%	0.11	0.03	0.01	0.16	0.10	0.16	0.16	0.10	0.10
Lead	CRM1.5	Channel Catfish	F	5	1	20%	0.03	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Lead	CRM1.5	Channel Catfish	G	5	1	20%	0.03	0.01	0.00	0.04	0.03	0.04	0.04	0.03	0.03
Lead	CRM1.5	Largemouth Bass	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	CRM1.5	Largemouth Bass	F	4	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Lead	CRM1.5	Largemouth Bass	G	4	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Lead	CRM1.5	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Lead	CRM1.5	Spotted Bass	F	1	0	0%	0.03			0.03	0.03			0.03	0.03
Lead	CRM1.5	Spotted Bass	G	1	0	0%	0.03			0.03	0.03			0.03	0.03
Lead	CRM9.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	CRM9.5	Blue Catfish	F	5	3	60%	0.05	0.02	0.01	0.08	0.03	0.08	0.05	0.03	0.03
Lead	CRM9.5	Blue Catfish	G	5	1	20%	0.03	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Lead	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	CRM9.5	Channel Catfish	F	4	1	25%	0.04	0.02	0.01	0.07	0.03	0.07	0.07	0.03	0.03
Lead	CRM9.5	Channel Catfish	G	4	2	50%	0.09	0.10	0.05	0.24	0.03	0.24	0.03	0.08	0.03
Lead	CRM9.5	Largemouth Bass	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Lead	CRM9.5	Largemouth Bass	F	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Lead	CRM9.5	Largemouth Bass	G	5	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Lead	ERM0.5	Blue Catfish	A	5	1	20%	0.11	0.02	0.01	0.14	0.10	0.14	0.14	0.10	0.10
Lead	ERM0.5	Blue Catfish	F	5	3	60%	0.03	0.01	0.00	0.04	0.03	0.04	0.03	0.03	0.03
Lead	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	ERM0.5	Channel Catfish	F	4	2	50%	0.03	0.00	0.00	0.04	0.03	0.04	0.03	0.03	0.03
Lead	ERM0.5	Largemouth Bass	A	8	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	ERM0.5	Largemouth Bass	F	8	1	13%	0.03	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Lead	ERM8.0	Channel Catfish	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	ERM8.0	Channel Catfish	F	6	1	17%	0.03	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Lead	ERM8.0	Channel Catfish	G	6	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Lead	ERM8.0	Largemouth Bass	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Lead	ERM8.0	Largemouth Bass	F	6	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Lead	ERM8.0	Largemouth Bass	G	6	0	0%	0.03	0.00	0.00	0.03	0.03			0.03	0.03
Magnesium	CRM1.5	Channel Catfish	A	5	5	100%	216.46	28.85	12.90	247.80	181.30	247.80	181.30		
Magnesium	CRM1.5	Channel Catfish	F	5	5	100%	256.40	22.41	10.02	278.00	220.00	278.00	220.00		
Magnesium	CRM1.5	Channel Catfish	G	5	5	100%	247.40	25.84	11.56	278.00	221.00	278.00	221.00		
Magnesium	CRM1.5	Largemouth Bass	A	4	4	100%	299.33	20.95	10.48	323.90	281.80	323.90	281.80		
Magnesium	CRM1.5	Largemouth Bass	F	4	4	100%	314.00	34.19	17.09	362.00	282.00	362.00	282.00		
Magnesium	CRM1.5	Largemouth Bass	G	4	4	100%	336.00	29.44	14.72	362.00	300.00	362.00	300.00		
Magnesium	CRM1.5	Spotted Bass	A	1	1	100%	331.10			331.10	331.10	331.10	331.10		
Magnesium	CRM1.5	Spotted Bass	F	1	1	100%	299.00			299.00	299.00	299.00	299.00		
Magnesium	CRM1.5	Spotted Bass	G	1	1	100%	306.00			306.00	306.00	306.00	306.00		
Magnesium	CRM9.5	Blue Catfish	A	5	5	100%	210.88	6.00	2.68	217.40	201.80	217.40	201.80		
Magnesium	CRM9.5	Blue Catfish	F	5	5	100%	251.80	28.40	12.70	287.00	221.00	287.00	221.00		
Magnesium	CRM9.5	Blue Catfish	G	5	5	100%	225.60	13.48	6.03	237.00	203.00	237.00	203.00		
Magnesium	CRM9.5	Channel Catfish	A	4	4	100%	217.13	18.44	9.22	227.90	189.60	227.90	189.60		
Magnesium	CRM9.5	Channel Catfish	F	4	4	100%	279.25	107.26	53.63	439.00	208.00	439.00	208.00		
Magnesium	CRM9.5	Channel Catfish	G	4	4	100%	329.00	154.69	77.35	556.00	208.00	556.00	208.00		
Magnesium	CRM9.5	Largemouth Bass	A	5	5	100%	302.74	48.49	21.68	374.60	254.20	374.60	254.20		
Magnesium	CRM9.5	Largemouth Bass	F	5	5	100%	330.40	20.29	9.08	353.00	313.00	353.00	313.00		
Magnesium	CRM9.5	Largemouth Bass	G	5	5	100%	325.20	27.21	12.17	359.00	294.00	359.00	294.00		
Magnesium	ERM0.5	Blue Catfish	A	5	5	100%	219.72	31.43	14.06	275.70	201.40	275.70	201.40		
Magnesium	ERM0.5	Blue Catfish	F	5	5	100%	245.80	24.72	11.06	285.00	223.00	285.00	223.00		
Magnesium	ERM0.5	Channel Catfish	A	4	4	100%	184.70	15.06	7.53	205.30	169.10	205.30	169.10		
Magnesium	ERM0.5	Channel Catfish	F	4	4	100%	238.75	28.23	14.11	280.00	220.00	280.00	220.00		
Magnesium	ERM0.5	Largemouth Bass	A	8	8	100%	271.34	41.64	14.72	359.00	221.70	359.00	221.70		
Magnesium	ERM0.5	Largemouth Bass	F	8	8	100%	319.88	25.45	9.00	357.00	289.00	357.00	289.00		
Magnesium	ERM8.0	Channel Catfish	A	6	6	100%	192.15	16.79	6.85	213.00	171.70	213.00	171.70		
Magnesium	ERM8.0	Channel Catfish	F	6	6	100%	223.83	18.48	7.54	254.00	202.00	254.00	202.00		
Magnesium	ERM8.0	Channel Catfish	G	6	6	100%	216.83	18.80	7.67	246.00	199.00	246.00	199.00		
Magnesium	ERM8.0	Largemouth Bass	A	6	6	100%	256.87	5.74	2.34	266.20	251.30	266.20	251.30		
Magnesium	ERM8.0	Largemouth Bass	F	6	6	100%	292.33	19.19	7.83	318.00	265.00	318.00	265.00		
Magnesium	ERM8.0	Largemouth Bass	G	6	6	100%	312.67	26.61	10.86	353.00	284.00	353.00	284.00		
Manganese	CRM1.5	Channel Catfish	A	5	1	20%	0.51	0.03	0.01	0.56	0.49	0.56	0.56	0.50	0.49
Manganese	CRM1.5	Channel Catfish	F	5	5	100%	0.72	0.44	0.20	1.40	0.30	1.40	0.30		
Manganese	CRM1.5	Channel Catfish	G	5	5	100%	0.59	0.31	0.14	1.10	0.31	1.10	0.31		

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Manganese	CRM1.5	Largemouth Bass	A	4	1	25%	0.60	0.20	0.10	0.90	0.49	0.90	0.90	0.51	0.49
Manganese	CRM1.5	Largemouth Bass	F	4	4	100%	0.35	0.25	0.13	0.72	0.18	0.72	0.18		
Manganese	CRM1.5	Largemouth Bass	G	4	4	100%	0.60	0.41	0.20	1.20	0.31	1.20	0.31		
Manganese	CRM1.5	Spotted Bass	A	1	0	0%	0.51			0.51	0.51			0.51	0.51
Manganese	CRM1.5	Spotted Bass	F	1	1	100%	0.29			0.29	0.29	0.29	0.29		
Manganese	CRM1.5	Spotted Bass	G	1	1	100%	0.21			0.21	0.21	0.21	0.21		
Manganese	CRM9.5	Blue Catfish	A	5	2	40%	0.61	0.17	0.07	0.87	0.49	0.87	0.69	0.51	0.49
Manganese	CRM9.5	Blue Catfish	F	5	5	100%	1.03	0.61	0.27	1.70	0.31	1.70	0.31		
Manganese	CRM9.5	Blue Catfish	G	5	5	100%	0.55	0.32	0.14	0.98	0.27	0.98	0.27		
Manganese	CRM9.5	Channel Catfish	A	4	2	50%	0.59	0.16	0.08	0.83	0.49	0.83	0.54	0.51	0.49
Manganese	CRM9.5	Channel Catfish	F	4	4	100%	1.66	2.76	1.38	5.80	0.21	5.80	0.21		
Manganese	CRM9.5	Channel Catfish	G	4	4	100%	3.71	5.62	2.81	12.10	0.37	12.10	0.37		
Manganese	CRM9.5	Largemouth Bass	A	5	1	20%	0.61	0.24	0.11	1.05	0.50	1.05	1.05	0.51	0.50
Manganese	CRM9.5	Largemouth Bass	F	5	5	100%	0.32	0.04	0.02	0.36	0.25	0.36	0.25		
Manganese	CRM9.5	Largemouth Bass	G	5	5	100%	0.36	0.14	0.06	0.50	0.18	0.50	0.18		
Manganese	ERM0.5	Blue Catfish	A	5	2	40%	1.55	2.30	1.03	5.66	0.49	5.66	0.63	0.49	0.49
Manganese	ERM0.5	Blue Catfish	F	5	5	100%	1.47	1.12	0.50	3.00	0.16	3.00	0.16		
Manganese	ERM0.5	Channel Catfish	A	4	1	25%	0.54	0.08	0.04	0.66	0.49	0.66	0.66	0.50	0.49
Manganese	ERM0.5	Channel Catfish	F	4	4	100%	0.65	0.44	0.22	1.30	0.38	1.30	0.38		
Manganese	ERM0.5	Largemouth Bass	A	8	1	13%	0.58	0.23	0.08	1.16	0.49	1.16	1.16	0.51	0.49
Manganese	ERM0.5	Largemouth Bass	F	8	6	75%	0.32	0.23	0.08	0.87	0.15	0.87	0.21	0.17	0.15
Manganese	ERM8.0	Channel Catfish	A	6	0	0%	0.50	0.01	0.00	0.51	0.50			0.51	0.50
Manganese	ERM8.0	Channel Catfish	F	6	6	100%	0.20	0.05	0.02	0.27	0.16	0.27	0.16		
Manganese	ERM8.0	Channel Catfish	G	6	6	100%	0.31	0.16	0.07	0.63	0.18	0.63	0.18		
Manganese	ERM8.0	Largemouth Bass	A	6	0	0%	0.50	0.00	0.00	0.50	0.49			0.50	0.49
Manganese	ERM8.0	Largemouth Bass	F	6	1	17%	0.19	0.06	0.02	0.31	0.15	0.31	0.31	0.18	0.15
Manganese	ERM8.0	Largemouth Bass	G	6	5	83%	0.25	0.09	0.04	0.41	0.15	0.41	0.20	0.15	0.15
Mercury	CRM1.5	Channel Catfish	A	5	5	100%	0.07	0.08	0.04	0.21	0.03	0.21	0.03		
Mercury	CRM1.5	Channel Catfish	F	5	5	100%	0.11	0.14	0.06	0.36	0.03	0.36	0.03		
Mercury	CRM1.5	Channel Catfish	G	5	5	100%	0.10	0.11	0.05	0.30	0.04	0.30	0.04		
Mercury	CRM1.5	Largemouth Bass	A	4	0	0%	0.03	0.01	0.01	0.05	0.02			0.05	0.02
Mercury	CRM1.5	Largemouth Bass	F	4	4	100%	0.04	0.02	0.01	0.06	0.02	0.06	0.02		
Mercury	CRM1.5	Largemouth Bass	G	4	4	100%	0.03	0.01	0.01	0.05	0.02	0.05	0.02		
Mercury	CRM1.5	Spotted Bass	A	1	1	100%	0.07			0.07	0.07	0.07	0.07		
Mercury	CRM1.5	Spotted Bass	F	1	1	100%	0.09			0.09	0.09	0.09	0.09		
Mercury	CRM1.5	Spotted Bass	G	1	1	100%	0.09			0.09	0.09	0.09	0.09		
Mercury	CRM9.5	Blue Catfish	A	5	5	100%	0.10	0.05	0.02	0.18	0.07	0.18	0.07		
Mercury	CRM9.5	Blue Catfish	F	5	5	100%	0.13	0.06	0.03	0.23	0.08	0.23	0.08		
Mercury	CRM9.5	Blue Catfish	G	5	5	100%	0.13	0.07	0.03	0.23	0.07	0.23	0.07		
Mercury	CRM9.5	Channel Catfish	A	4	4	100%	0.07	0.03	0.01	0.11	0.05	0.11	0.05		
Mercury	CRM9.5	Channel Catfish	F	4	4	100%	0.09	0.05	0.02	0.16	0.06	0.16	0.06		
Mercury	CRM9.5	Channel Catfish	G	4	4	100%	0.10	0.06	0.03	0.18	0.05	0.18	0.05		
Mercury	CRM9.5	Largemouth Bass	A	5	4	80%	0.09	0.06	0.03	0.18	0.04	0.18	0.05	0.04	0.04
Mercury	CRM9.5	Largemouth Bass	F	5	5	100%	0.10	0.07	0.03	0.21	0.04	0.21	0.04		
Mercury	CRM9.5	Largemouth Bass	G	5	5	100%	0.10	0.07	0.03	0.21	0.04	0.21	0.04		
Mercury	ERM0.5	Blue Catfish	A	5	4	80%	0.06	0.02	0.01	0.09	0.04	0.09	0.05	0.04	0.04
Mercury	ERM0.5	Blue Catfish	F	5	5	100%	0.07	0.02	0.01	0.11	0.05	0.11	0.05		

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
												Maximum	Minimum	Maximum	Minimum
Mercury	ERM0.5	Channel Catfish	A	4	4	100%	0.04	0.01	0.00	0.05	0.03	0.05	0.03		
Mercury	ERM0.5	Channel Catfish	F	4	4	100%	0.07	0.03	0.01	0.11	0.06	0.11	0.06		
Mercury	ERM0.5	Largemouth Bass	A	8	7	88%	0.04	0.02	0.01	0.08	0.02	0.08	0.02	0.02	0.02
Mercury	ERM0.5	Largemouth Bass	F	8	8	100%	0.05	0.03	0.01	0.10	0.02	0.10	0.02		
Mercury	ERM8.0	Channel Catfish	A	6	6	100%	0.10	0.08	0.03	0.22	0.03	0.22	0.03		
Mercury	ERM8.0	Channel Catfish	F	6	6	100%	0.12	0.09	0.04	0.24	0.04	0.24	0.04		
Mercury	ERM8.0	Channel Catfish	G	6	6	100%	0.12	0.09	0.04	0.24	0.04	0.24	0.04		
Mercury	ERM8.0	Largemouth Bass	A	6	6	100%	0.10	0.02	0.01	0.13	0.08	0.13	0.08		
Mercury	ERM8.0	Largemouth Bass	F	6	6	100%	0.13	0.03	0.01	0.18	0.11	0.18	0.11		
Mercury	ERM8.0	Largemouth Bass	G	6	6	100%	0.15	0.03	0.01	0.21	0.11	0.21	0.11		
Molybdenum	CRM1.5	Channel Catfish	A	5	0	0%	1.00	0.00	0.00	1.01	1.00			1.01	1.00
Molybdenum	CRM1.5	Channel Catfish	F	5	0	0%	0.04	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM1.5	Channel Catfish	G	5	0	0%	0.04	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM1.5	Largemouth Bass	A	4	0	0%	0.99	0.01	0.00	1.00	0.99			1.00	0.99
Molybdenum	CRM1.5	Largemouth Bass	F	4	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM1.5	Largemouth Bass	G	4	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM1.5	Spotted Bass	A	1	0	0%	0.99			0.99	0.99			0.99	0.99
Molybdenum	CRM1.5	Spotted Bass	F	1	0	0%	0.04			0.04	0.04			0.04	0.04
Molybdenum	CRM1.5	Spotted Bass	G	1	0	0%	0.04			0.04	0.04			0.04	0.04
Molybdenum	CRM9.5	Blue Catfish	A	5	0	0%	0.99	0.01	0.00	1.00	0.99			1.00	0.99
Molybdenum	CRM9.5	Blue Catfish	F	5	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM9.5	Blue Catfish	G	5	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM9.5	Channel Catfish	A	4	0	0%	0.99	0.00	0.00	1.00	0.99			1.00	0.99
Molybdenum	CRM9.5	Channel Catfish	F	4	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM9.5	Channel Catfish	G	4	0	0%	0.05	0.03	0.02	0.10	0.03			0.10	0.03
Molybdenum	CRM9.5	Largemouth Bass	A	5	0	0%	1.00	0.01	0.00	1.00	0.99			1.00	0.99
Molybdenum	CRM9.5	Largemouth Bass	F	5	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	CRM9.5	Largemouth Bass	G	5	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	ERM0.5	Blue Catfish	A	5	0	0%	1.00	0.01	0.00	1.01	0.99			1.01	0.99
Molybdenum	ERM0.5	Blue Catfish	F	5	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	ERM0.5	Channel Catfish	A	4	0	0%	1.00	0.01	0.00	1.01	0.99			1.01	0.99
Molybdenum	ERM0.5	Channel Catfish	F	4	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	ERM0.5	Largemouth Bass	A	8	0	0%	1.00	0.01	0.00	1.01	0.98			1.01	0.98
Molybdenum	ERM0.5	Largemouth Bass	F	8	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	ERM8.0	Channel Catfish	A	6	0	0%	1.00	0.01	0.00	1.01	0.99			1.01	0.99
Molybdenum	ERM8.0	Channel Catfish	F	6	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	ERM8.0	Channel Catfish	G	6	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	ERM8.0	Largemouth Bass	A	6	0	0%	1.00	0.01	0.00	1.01	0.99			1.01	0.99
Molybdenum	ERM8.0	Largemouth Bass	F	6	0	0%	0.03	0.00	0.00	0.04	0.03			0.04	0.03
Molybdenum	ERM8.0	Largemouth Bass	G	6	0	0%	0.04	0.02	0.01	0.09	0.03			0.09	0.03
Nickel	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Nickel	CRM1.5	Channel Catfish	F	5	0	0%	0.09	0.01	0.00	0.10	0.09			0.10	0.09
Nickel	CRM1.5	Channel Catfish	G	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Nickel	CRM1.5	Largemouth Bass	A	4	1	25%	0.11	0.01	0.01	0.12	0.10	0.12	0.12	0.10	0.10
Nickel	CRM1.5	Largemouth Bass	F	4	0	0%	0.09	0.01	0.00	0.10	0.09			0.10	0.09
Nickel	CRM1.5	Largemouth Bass	G	4	3	75%	0.15	0.05	0.03	0.21	0.09	0.21	0.12	0.09	0.09
Nickel	CRM1.5	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Nickel	CRM1.5	Spotted Bass	F	1	1	100%	0.12			0.12	0.12	0.12	0.12		
Nickel	CRM1.5	Spotted Bass	G	1	0	0%	0.10			0.10	0.10			0.10	0.10
Nickel	CRM9.5	Blue Catfish	A	5	1	20%	0.19	0.20	0.09	0.55	0.10	0.55	0.55	0.10	0.10
Nickel	CRM9.5	Blue Catfish	F	5	2	40%	0.14	0.07	0.03	0.23	0.09	0.23	0.20	0.10	0.09
Nickel	CRM9.5	Blue Catfish	G	5	0	0%	0.10	0.00	0.00	0.10	0.09			0.10	0.09
Nickel	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Nickel	CRM9.5	Channel Catfish	F	4	2	50%	0.15	0.10	0.05	0.30	0.09	0.30	0.10	0.10	0.09
Nickel	CRM9.5	Channel Catfish	G	4	2	50%	0.22	0.22	0.11	0.55	0.09	0.55	0.14	0.10	0.09
Nickel	CRM9.5	Largemouth Bass	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Nickel	CRM9.5	Largemouth Bass	F	5	1	20%	0.11	0.03	0.02	0.17	0.09	0.17	0.17	0.10	0.09
Nickel	CRM9.5	Largemouth Bass	G	5	0	0%	0.09	0.00	0.00	0.10	0.09			0.10	0.09
Nickel	ERM0.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Nickel	ERM0.5	Blue Catfish	F	5	2	40%	0.13	0.07	0.03	0.26	0.09	0.26	0.10	0.10	0.09
Nickel	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Nickel	ERM0.5	Channel Catfish	F	4	1	25%	0.12	0.05	0.02	0.19	0.09	0.19	0.19	0.10	0.09
Nickel	ERM0.5	Largemouth Bass	A	8	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Nickel	ERM0.5	Largemouth Bass	F	8	1	13%	0.09	0.00	0.00	0.10	0.09	0.10	0.10	0.10	0.09
Nickel	ERM8.0	Channel Catfish	A	6	1	17%	0.12	0.04	0.02	0.20	0.10	0.20	0.20	0.10	0.10
Nickel	ERM8.0	Channel Catfish	F	6	3	50%	0.11	0.04	0.02	0.20	0.09	0.20	0.09	0.10	0.09
Nickel	ERM8.0	Channel Catfish	G	6	1	17%	0.14	0.10	0.04	0.35	0.09	0.35	0.35	0.10	0.09
Nickel	ERM8.0	Largemouth Bass	A	6	1	17%	0.11	0.01	0.01	0.13	0.10	0.13	0.13	0.10	0.10
Nickel	ERM8.0	Largemouth Bass	F	6	1	17%	0.09	0.00	0.00	0.10	0.09	0.09	0.09	0.10	0.09
Nickel	ERM8.0	Largemouth Bass	G	6	1	17%	0.11	0.05	0.02	0.21	0.09	0.21	0.21	0.10	0.09
Potassium	CRM1.5	Channel Catfish	A	5	5	100%	3403.00	226.14	101.14	3725.00	3150.00	3725.00	3150.00		
Potassium	CRM1.5	Channel Catfish	F	5	5	100%	3834.00	268.48	120.07	4280.00	3580.00	4280.00	3580.00		
Potassium	CRM1.5	Channel Catfish	G	5	5	100%	3858.00	445.16	199.08	4460.00	3370.00	4460.00	3370.00		
Potassium	CRM1.5	Largemouth Bass	A	4	4	100%	3449.50	239.65	119.83	3673.00	3219.00	3673.00	3219.00		
Potassium	CRM1.5	Largemouth Bass	F	4	4	100%	4027.50	182.83	91.41	4230.00	3800.00	4230.00	3800.00		
Potassium	CRM1.5	Largemouth Bass	G	4	4	100%	4205.00	338.48	169.24	4630.00	3890.00	4630.00	3890.00		
Potassium	CRM1.5	Spotted Bass	A	1	1	100%	3255.00			3255.00	3255.00	3255.00	3255.00		
Potassium	CRM1.5	Spotted Bass	F	1	1	100%	3890.00			3890.00	3890.00	3890.00	3890.00		
Potassium	CRM1.5	Spotted Bass	G	1	1	100%	3930.00			3930.00	3930.00	3930.00	3930.00		
Potassium	CRM9.5	Blue Catfish	A	5	5	100%	3468.40	105.25	47.07	3588.00	3328.00	3588.00	3328.00		
Potassium	CRM9.5	Blue Catfish	F	5	5	100%	3888.00	104.26	46.63	4040.00	3790.00	4040.00	3790.00		
Potassium	CRM9.5	Blue Catfish	G	5	5	100%	3904.00	152.09	68.01	4090.00	3760.00	4090.00	3760.00		
Potassium	CRM9.5	Channel Catfish	A	4	4	100%	3711.50	239.36	119.68	4042.00	3485.00	4042.00	3485.00		
Potassium	CRM9.5	Channel Catfish	F	4	4	100%	3940.00	181.29	90.65	4120.00	3760.00	4120.00	3760.00		
Potassium	CRM9.5	Channel Catfish	G	4	4	100%	4552.50	283.36	141.68	4880.00	4210.00	4880.00	4210.00		
Potassium	CRM9.5	Largemouth Bass	A	5	5	100%	3456.60	164.21	73.43	3613.00	3246.00	3613.00	3246.00		
Potassium	CRM9.5	Largemouth Bass	F	5	5	100%	3934.00	155.98	69.76	4140.00	3760.00	4140.00	3760.00		
Potassium	CRM9.5	Largemouth Bass	G	5	5	100%	3974.00	510.86	228.46	4830.00	3520.00	4830.00	3520.00		
Potassium	ERM0.5	Blue Catfish	A	5	5	100%	2921.20	111.65	49.93	3026.00	2738.00	3026.00	2738.00		
Potassium	ERM0.5	Blue Catfish	F	5	5	100%	3306.00	124.22	55.55	3410.00	3090.00	3410.00	3090.00		
Potassium	ERM0.5	Channel Catfish	A	4	4	100%	3151.50	289.52	144.76	3404.00	2766.00	3404.00	2766.00		
Potassium	ERM0.5	Channel Catfish	F	4	4	100%	3542.50	232.00	116.00	3770.00	3230.00	3770.00	3230.00		
Potassium	ERM0.5	Largemouth Bass	A	8	8	100%	3471.88	193.20	68.30	3641.00	3033.00	3641.00	3033.00		
Potassium	ERM0.5	Largemouth Bass	F	8	8	100%	4035.00	137.84	48.73	4190.00	3790.00	4190.00	3790.00		

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
												Maximum	Minimum	Maximum	Minimum
Potassium	ERM8.0	Channel Catfish	A	6	6	100%	3200.50	238.74	97.46	3460.00	2890.00	3460.00	2890.00		
Potassium	ERM8.0	Channel Catfish	F	6	6	100%	3531.67	392.45	160.22	4030.00	3080.00	4030.00	3080.00		
Potassium	ERM8.0	Channel Catfish	G	6	6	100%	3586.67	290.29	118.51	3880.00	3190.00	3880.00	3190.00		
Potassium	ERM8.0	Largemouth Bass	A	6	6	100%	3639.50	130.91	53.44	3780.00	3424.00	3780.00	3424.00		
Potassium	ERM8.0	Largemouth Bass	F	6	6	100%	4070.00	197.79	80.75	4260.00	3730.00	4260.00	3730.00		
Potassium	ERM8.0	Largemouth Bass	G	6	6	100%	4363.33	191.07	78.00	4590.00	4080.00	4590.00	4080.00		
Selenium	CRM1.5	Channel Catfish	A	5	4	80%	0.35	0.11	0.05	0.50	0.19	0.50	0.33	0.19	0.19
Selenium	CRM1.5	Channel Catfish	F	5	5	100%	0.39	0.11	0.05	0.54	0.24	0.54	0.24		
Selenium	CRM1.5	Channel Catfish	G	5	5	100%	0.40	0.17	0.08	0.66	0.20	0.66	0.20		
Selenium	CRM1.5	Largemouth Bass	A	4	4	100%	0.41	0.04	0.02	0.43	0.35	0.43	0.35		
Selenium	CRM1.5	Largemouth Bass	F	4	4	100%	0.47	0.07	0.03	0.56	0.40	0.56	0.40		
Selenium	CRM1.5	Largemouth Bass	G	4	4	100%	0.42	0.04	0.02	0.46	0.37	0.46	0.37		
Selenium	CRM1.5	Spotted Bass	A	1	1	100%	0.40			0.40	0.40	0.40	0.40		
Selenium	CRM1.5	Spotted Bass	F	1	1	100%	0.44			0.44	0.44	0.44	0.44		
Selenium	CRM1.5	Spotted Bass	G	1	1	100%	0.47			0.47	0.47	0.47	0.47		
Selenium	CRM9.5	Blue Catfish	A	5	2	40%	0.21	0.02	0.01	0.24	0.19	0.24	0.21	0.21	0.19
Selenium	CRM9.5	Blue Catfish	F	5	5	100%	0.25	0.06	0.03	0.36	0.22	0.36	0.22		
Selenium	CRM9.5	Blue Catfish	G	5	5	100%	0.23	0.06	0.02	0.32	0.19	0.32	0.19		
Selenium	CRM9.5	Channel Catfish	A	4	2	50%	0.22	0.03	0.01	0.25	0.20	0.25	0.24	0.20	0.20
Selenium	CRM9.5	Channel Catfish	F	4	4	100%	0.28	0.08	0.04	0.38	0.21	0.38	0.21		
Selenium	CRM9.5	Channel Catfish	G	4	4	100%	0.27	0.09	0.04	0.36	0.19	0.36	0.19		
Selenium	CRM9.5	Largemouth Bass	A	5	5	100%	0.54	0.04	0.02	0.59	0.50	0.59	0.50		
Selenium	CRM9.5	Largemouth Bass	F	5	5	100%	0.63	0.03	0.02	0.68	0.59	0.68	0.59		
Selenium	CRM9.5	Largemouth Bass	G	5	5	100%	0.61	0.05	0.02	0.69	0.55	0.69	0.55		
Selenium	ERM0.5	Blue Catfish	A	5	5	100%	0.33	0.09	0.04	0.45	0.21	0.45	0.21		
Selenium	ERM0.5	Blue Catfish	F	5	5	100%	0.37	0.08	0.03	0.47	0.26	0.47	0.26		
Selenium	ERM0.5	Channel Catfish	A	4	4	100%	0.29	0.09	0.04	0.42	0.23	0.42	0.23		
Selenium	ERM0.5	Channel Catfish	F	4	4	100%	0.38	0.12	0.06	0.54	0.29	0.54	0.29		
Selenium	ERM0.5	Largemouth Bass	A	8	8	100%	0.63	0.10	0.04	0.74	0.45	0.74	0.45		
Selenium	ERM0.5	Largemouth Bass	F	8	8	100%	0.75	0.11	0.04	0.88	0.55	0.88	0.55		
Selenium	ERM8.0	Channel Catfish	A	6	4	67%	0.24	0.05	0.02	0.31	0.20	0.31	0.21	0.20	0.20
Selenium	ERM8.0	Channel Catfish	F	6	6	100%	0.29	0.06	0.02	0.37	0.20	0.37	0.20		
Selenium	ERM8.0	Channel Catfish	G	6	6	100%	0.27	0.06	0.03	0.38	0.18	0.38	0.18		
Selenium	ERM8.0	Largemouth Bass	A	6	6	100%	0.42	0.06	0.03	0.52	0.34	0.52	0.34		
Selenium	ERM8.0	Largemouth Bass	F	6	6	100%	0.46	0.07	0.03	0.60	0.39	0.60	0.39		
Selenium	ERM8.0	Largemouth Bass	G	6	6	100%	0.48	0.08	0.03	0.63	0.40	0.63	0.40		
Silver	CRM1.5	Channel Catfish	A	5	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	CRM1.5	Channel Catfish	F	5	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	CRM1.5	Channel Catfish	G	5	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	CRM1.5	Largemouth Bass	A	4	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	CRM1.5	Largemouth Bass	F	4	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	CRM1.5	Largemouth Bass	G	4	1	25%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver	CRM1.5	Spotted Bass	A	1	0	0%	0.05			0.05	0.05			0.05	0.05
Silver	CRM1.5	Spotted Bass	F	1	0	0%	0.00			0.00	0.00			0.00	0.00
Silver	CRM1.5	Spotted Bass	G	1	0	0%	0.00			0.00	0.00			0.00	0.00
Silver	CRM9.5	Blue Catfish	A	5	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	CRM9.5	Blue Catfish	F	5	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Silver	CRM9.5	Blue Catfish	G	5	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	CRM9.5	Channel Catfish	A	4	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	CRM9.5	Channel Catfish	F	4	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	CRM9.5	Channel Catfish	G	4	0	0%	0.00	0.00	0.00	0.01	0.00			0.01	0.00
Silver	CRM9.5	Largemouth Bass	A	5	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	CRM9.5	Largemouth Bass	F	5	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	CRM9.5	Largemouth Bass	G	5	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	ERM0.5	Blue Catfish	A	5	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	ERM0.5	Blue Catfish	F	5	0	0%	0.00	0.00	0.00	0.01	0.00			0.01	0.00
Silver	ERM0.5	Channel Catfish	A	4	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	ERM0.5	Channel Catfish	F	4	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	ERM0.5	Largemouth Bass	A	8	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	ERM0.5	Largemouth Bass	F	8	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	ERM8.0	Channel Catfish	A	6	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	ERM8.0	Channel Catfish	F	6	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	ERM8.0	Channel Catfish	G	6	1	17%	0.01	0.01	0.00	0.03	0.00	0.03	0.03	0.00	0.00
Silver	ERM8.0	Largemouth Bass	A	6	0	0%	0.05	0.00	0.00	0.05	0.05			0.05	0.05
Silver	ERM8.0	Largemouth Bass	F	6	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Silver	ERM8.0	Largemouth Bass	G	6	0	0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00
Sodium	CRM1.5	Channel Catfish	A	5	5	100%	402.16	43.00	19.23	450.60	333.60	450.60	333.60		
Sodium	CRM1.5	Channel Catfish	F	5	5	100%	430.40	75.70	33.85	536.00	333.00	536.00	333.00		
Sodium	CRM1.5	Channel Catfish	G	5	5	100%	457.00	70.02	31.32	531.00	373.00	531.00	373.00		
Sodium	CRM1.5	Largemouth Bass	A	4	4	100%	465.70	48.22	24.11	506.40	411.30	506.40	411.30		
Sodium	CRM1.5	Largemouth Bass	F	4	4	100%	490.25	28.45	14.23	522.00	453.00	522.00	453.00		
Sodium	CRM1.5	Largemouth Bass	G	4	4	100%	536.50	56.87	28.43	597.00	476.00	597.00	476.00		
Sodium	CRM1.5	Spotted Bass	A	1	1	100%	577.30			577.30	577.30	577.30	577.30		
Sodium	CRM1.5	Spotted Bass	F	1	1	100%	552.00			552.00	552.00	552.00	552.00		
Sodium	CRM1.5	Spotted Bass	G	1	1	100%	607.00			607.00	607.00	607.00	607.00		
Sodium	CRM9.5	Blue Catfish	A	5	5	100%	447.86	17.43	7.79	472.60	425.90	472.60	425.90		
Sodium	CRM9.5	Blue Catfish	F	5	5	100%	491.60	40.80	18.25	545.00	448.00	545.00	448.00		
Sodium	CRM9.5	Blue Catfish	G	5	5	100%	475.40	31.28	13.99	515.00	433.00	515.00	433.00		
Sodium	CRM9.5	Channel Catfish	A	4	4	100%	414.83	63.30	31.65	505.30	359.60	505.30	359.60		
Sodium	CRM9.5	Channel Catfish	F	4	4	100%	483.00	122.88	61.44	660.00	376.00	660.00	376.00		
Sodium	CRM9.5	Channel Catfish	G	4	4	100%	520.75	142.49	71.24	721.00	393.00	721.00	393.00		
Sodium	CRM9.5	Largemouth Bass	A	5	5	100%	527.82	69.07	30.89	614.10	424.50	614.10	424.50		
Sodium	CRM9.5	Largemouth Bass	F	5	5	100%	543.00	25.93	11.60	587.00	519.00	587.00	519.00		
Sodium	CRM9.5	Largemouth Bass	G	5	5	100%	541.00	71.76	32.09	622.00	453.00	622.00	453.00		
Sodium	ERM0.5	Blue Catfish	A	5	5	100%	390.50	35.74	15.98	447.70	358.50	447.70	358.50		
Sodium	ERM0.5	Blue Catfish	F	5	5	100%	404.60	40.86	18.27	463.00	349.00	463.00	349.00		
Sodium	ERM0.5	Channel Catfish	A	4	4	100%	406.08	54.31	27.15	453.80	329.40	453.80	329.40		
Sodium	ERM0.5	Channel Catfish	F	4	4	100%	418.25	73.15	36.57	492.00	344.00	492.00	344.00		
Sodium	ERM0.5	Largemouth Bass	A	8	8	100%	421.23	43.58	15.41	476.30	360.80	476.30	360.80		
Sodium	ERM0.5	Largemouth Bass	F	8	8	100%	458.63	91.18	32.24	605.00	366.00	605.00	366.00		
Sodium	ERM8.0	Channel Catfish	A	6	6	100%	310.93	30.83	12.59	366.80	285.10	366.80	285.10		
Sodium	ERM8.0	Channel Catfish	F	6	6	100%	327.67	19.73	8.06	353.00	297.00	353.00	297.00		
Sodium	ERM8.0	Channel Catfish	G	6	6	100%	338.50	27.51	11.23	387.00	305.00	387.00	305.00		
Sodium	ERM8.0	Largemouth Bass	A	6	6	100%	362.22	39.98	16.32	399.00	297.30	399.00	297.30		

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
												Maximum	Minimum	Maximum	Minimum
Sodium	ERM8.0	Largemouth Bass	F	6	6	100%	368.00	59.21	24.17	455.00	291.00	455.00	291.00		
Sodium	ERM8.0	Largemouth Bass	G	6	6	100%	427.83	60.88	24.86	507.00	362.00	507.00	362.00		
Strontium	CRM1.5	Channel Catfish	A	5	4	80%	0.30	0.27	0.12	0.76	0.10	0.76	0.16	0.10	0.10
Strontium	CRM1.5	Channel Catfish	F	5	5	100%	0.77	0.63	0.28	1.50	0.14	1.50	0.14		
Strontium	CRM1.5	Channel Catfish	G	5	5	100%	0.41	0.45	0.20	1.20	0.14	1.20	0.14		
Strontium	CRM1.5	Largemouth Bass	A	4	4	100%	2.34	1.38	0.69	3.90	0.79	3.90	0.79		
Strontium	CRM1.5	Largemouth Bass	F	4	4	100%	1.36	1.13	0.57	3.00	0.45	3.00	0.45		
Strontium	CRM1.5	Largemouth Bass	G	4	4	100%	2.21	1.35	0.68	3.70	0.94	3.70	0.94		
Strontium	CRM1.5	Spotted Bass	A	1	1	100%	5.72			5.72	5.72	5.72	5.72		
Strontium	CRM1.5	Spotted Bass	F	1	1	100%	2.30			2.30	2.30	2.30	2.30		
Strontium	CRM1.5	Spotted Bass	G	1	1	100%	1.80			1.80	1.80	1.80	1.80		
Strontium	CRM9.5	Blue Catfish	A	5	4	80%	0.49	0.42	0.19	1.10	0.10	1.10	0.11	0.10	0.10
Strontium	CRM9.5	Blue Catfish	F	5	5	100%	1.24	0.86	0.38	2.20	0.23	2.20	0.23		
Strontium	CRM9.5	Blue Catfish	G	5	5	100%	0.51	0.48	0.21	1.20	0.12	1.20	0.12		
Strontium	CRM9.5	Channel Catfish	A	4	3	75%	0.48	0.39	0.19	1.00	0.10	1.00	0.29	0.10	0.10
Strontium	CRM9.5	Channel Catfish	F	4	4	100%	2.25	4.04	2.02	8.30	0.14	8.30	0.14		
Strontium	CRM9.5	Channel Catfish	G	4	4	100%	3.83	6.98	3.49	14.30	0.14	14.30	0.14		
Strontium	CRM9.5	Largemouth Bass	A	5	5	100%	2.23	2.22	0.99	5.55	0.28	5.55	0.28		
Strontium	CRM9.5	Largemouth Bass	F	5	5	100%	2.14	0.68	0.31	3.10	1.30	3.10	1.30		
Strontium	CRM9.5	Largemouth Bass	G	5	5	100%	1.73	1.08	0.48	2.90	0.31	2.90	0.31		
Strontium	ERM0.5	Blue Catfish	A	5	5	100%	1.18	2.15	0.96	5.03	0.10	5.03	0.10		
Strontium	ERM0.5	Blue Catfish	F	5	5	100%	0.85	0.64	0.29	1.70	0.10	1.70	0.10		
Strontium	ERM0.5	Channel Catfish	A	4	4	100%	0.20	0.06	0.03	0.26	0.12	0.26	0.12		
Strontium	ERM0.5	Channel Catfish	F	4	4	100%	0.71	0.68	0.34	1.70	0.13	1.70	0.13		
Strontium	ERM0.5	Largemouth Bass	A	8	7	88%	1.02	1.36	0.48	4.06	0.10	4.06	0.12	0.10	0.10
Strontium	ERM0.5	Largemouth Bass	F	8	8	100%	1.06	0.93	0.33	2.60	0.07	2.60	0.07		
Strontium	ERM8.0	Channel Catfish	A	6	3	50%	0.12	0.03	0.01	0.16	0.10	0.16	0.14	0.10	0.10
Strontium	ERM8.0	Channel Catfish	F	6	6	100%	0.07	0.01	0.00	0.09	0.06	0.09	0.06		
Strontium	ERM8.0	Channel Catfish	G	6	6	100%	0.16	0.12	0.05	0.38	0.07	0.38	0.07		
Strontium	ERM8.0	Largemouth Bass	A	6	2	33%	0.34	0.40	0.16	1.03	0.10	1.03	0.62	0.10	0.10
Strontium	ERM8.0	Largemouth Bass	F	6	5	83%	0.31	0.54	0.22	1.40	0.04	1.40	0.05	0.04	0.04
Strontium	ERM8.0	Largemouth Bass	G	6	6	100%	0.50	0.62	0.25	1.60	0.05	1.60	0.05		
Thallium	CRM1.5	Channel Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	CRM1.5	Channel Catfish	F	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	CRM1.5	Channel Catfish	G	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	CRM1.5	Largemouth Bass	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	CRM1.5	Largemouth Bass	F	4	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	CRM1.5	Largemouth Bass	G	4	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Thallium	CRM1.5	Spotted Bass	A	1	0	0%	0.10			0.10	0.10			0.10	0.10
Thallium	CRM1.5	Spotted Bass	F	1	0	0%	0.01			0.01	0.01			0.01	0.01
Thallium	CRM1.5	Spotted Bass	G	1	0	0%	0.01			0.01	0.01			0.01	0.01
Thallium	CRM9.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	CRM9.5	Blue Catfish	F	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	CRM9.5	Blue Catfish	G	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	CRM9.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	CRM9.5	Channel Catfish	F	4	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	CRM9.5	Channel Catfish	G	4	0	0%	0.02	0.01	0.01	0.04	0.01			0.04	0.01

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only Maximum	Detects Only Minimum	Non-Detects Only Maximum	Non-Detects Only Minimum
Thallium	CRM9.5	Largemouth Bass	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	CRM9.5	Largemouth Bass	F	5	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Thallium	CRM9.5	Largemouth Bass	G	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	ERM0.5	Blue Catfish	A	5	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	ERM0.5	Blue Catfish	F	5	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	ERM0.5	Channel Catfish	A	4	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	ERM0.5	Channel Catfish	F	4	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	ERM0.5	Largemouth Bass	A	8	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	ERM0.5	Largemouth Bass	F	8	0	0%	0.01	0.00	0.00	0.02	0.01			0.02	0.01
Thallium	ERM8.0	Channel Catfish	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	ERM8.0	Channel Catfish	F	6	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	ERM8.0	Channel Catfish	G	6	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	ERM8.0	Largemouth Bass	A	6	0	0%	0.10	0.00	0.00	0.10	0.10			0.10	0.10
Thallium	ERM8.0	Largemouth Bass	F	6	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Thallium	ERM8.0	Largemouth Bass	G	6	0	0%	0.01	0.00	0.00	0.01	0.01			0.01	0.01
Vanadium	CRM1.5	Channel Catfish	A	5	0	0%	0.20	0.00	0.00	0.20	0.19			0.20	0.19
Vanadium	CRM1.5	Channel Catfish	F	5	1	20%	0.05	0.00	0.00	0.05	0.04	0.05	0.05	0.05	0.04
Vanadium	CRM1.5	Channel Catfish	G	5	2	40%	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05
Vanadium	CRM1.5	Largemouth Bass	A	4	0	0%	0.20	0.00	0.00	0.20	0.20			0.20	0.20
Vanadium	CRM1.5	Largemouth Bass	F	4	0	0%	0.04	0.00	0.00	0.05	0.04			0.05	0.04
Vanadium	CRM1.5	Largemouth Bass	G	4	1	25%	0.05	0.00	0.00	0.05	0.04	0.05	0.05	0.05	0.04
Vanadium	CRM1.5	Spotted Bass	A	1	0	0%	0.20			0.20	0.20			0.20	0.20
Vanadium	CRM1.5	Spotted Bass	F	1	0	0%	0.05			0.05	0.05			0.05	0.05
Vanadium	CRM1.5	Spotted Bass	G	1	0	0%	0.05			0.05	0.05			0.05	0.05
Vanadium	CRM9.5	Blue Catfish	A	5	0	0%	0.20	0.01	0.00	0.21	0.19			0.21	0.19
Vanadium	CRM9.5	Blue Catfish	F	5	1	20%	0.05	0.01	0.00	0.07	0.04	0.07	0.07	0.05	0.04
Vanadium	CRM9.5	Blue Catfish	G	5	0	0%	0.05	0.00	0.00	0.05	0.04			0.05	0.04
Vanadium	CRM9.5	Channel Catfish	A	4	0	0%	0.20	0.00	0.00	0.20	0.20			0.20	0.20
Vanadium	CRM9.5	Channel Catfish	F	4	1	25%	0.05	0.01	0.00	0.06	0.04	0.06	0.06	0.05	0.04
Vanadium	CRM9.5	Channel Catfish	G	4	1	25%	0.09	0.06	0.03	0.15	0.04	0.15	0.15	0.13	0.04
Vanadium	CRM9.5	Largemouth Bass	A	5	0	0%	0.20	0.00	0.00	0.20	0.20			0.20	0.20
Vanadium	CRM9.5	Largemouth Bass	F	5	0	0%	0.04	0.00	0.00	0.05	0.04			0.05	0.04
Vanadium	CRM9.5	Largemouth Bass	G	5	0	0%	0.04	0.00	0.00	0.05	0.04			0.05	0.04
Vanadium	ERM0.5	Blue Catfish	A	5	0	0%	0.20	0.00	0.00	0.20	0.20			0.20	0.20
Vanadium	ERM0.5	Blue Catfish	F	5	2	40%	0.06	0.04	0.02	0.14	0.04	0.14	0.05	0.05	0.04
Vanadium	ERM0.5	Channel Catfish	A	4	0	0%	0.20	0.01	0.00	0.20	0.19			0.20	0.19
Vanadium	ERM0.5	Channel Catfish	F	4	0	0%	0.04	0.00	0.00	0.05	0.04			0.05	0.04
Vanadium	ERM0.5	Largemouth Bass	A	8	0	0%	0.20	0.00	0.00	0.20	0.20			0.20	0.20
Vanadium	ERM0.5	Largemouth Bass	F	8	0	0%	0.04	0.00	0.00	0.05	0.04			0.05	0.04
Vanadium	ERM8.0	Channel Catfish	A	6	0	0%	0.20	0.00	0.00	0.21	0.20			0.21	0.20
Vanadium	ERM8.0	Channel Catfish	F	6	0	0%	0.04	0.00	0.00	0.05	0.04			0.05	0.04
Vanadium	ERM8.0	Channel Catfish	G	6	1	17%	0.05	0.02	0.01	0.10	0.04	0.10	0.10	0.05	0.04
Vanadium	ERM8.0	Largemouth Bass	A	6	0	0%	0.20	0.00	0.00	0.20	0.20			0.20	0.20
Vanadium	ERM8.0	Largemouth Bass	F	6	1	17%	0.05	0.00	0.00	0.05	0.04	0.05	0.05	0.05	0.04
Vanadium	ERM8.0	Largemouth Bass	G	6	1	17%	0.05	0.02	0.01	0.09	0.04	0.09	0.09	0.05	0.04
Zinc	CRM1.5	Channel Catfish	A	5	5	100%	6.52	0.85	0.38	7.34	5.40	7.34	5.40		
Zinc	CRM1.5	Channel Catfish	F	5	5	100%	8.20	1.20	0.54	10.20	7.20	10.20	7.20		

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Table A-2. Summary Statistics for Baseline Fish Samples by Sample Replicate, Species and Location

Analyte	Location	Species	Replicate	N	N (Detected)	% Detected	Mean	St. dev.	Std.err.	Maximum	Minimum	Detects Only		Non-Detects Only	
												Maximum	Minimum	Maximum	Minimum
Zinc	CRM1.5	Channel Catfish	G	5	5	100%	9.38	1.86	0.83	12.50	8.00	12.50	8.00		
Zinc	CRM1.5	Largemouth Bass	A	4	4	100%	8.64	1.13	0.56	9.82	7.22	9.82	7.22		
Zinc	CRM1.5	Largemouth Bass	F	4	4	100%	10.75	1.87	0.93	13.30	9.00	13.30	9.00		
Zinc	CRM1.5	Largemouth Bass	G	4	4	100%	10.05	1.54	0.77	11.70	8.30	11.70	8.30		
Zinc	CRM1.5	Spotted Bass	A	1	1	100%	8.07			8.07	8.07	8.07	8.07		
Zinc	CRM1.5	Spotted Bass	F	1	1	100%	11.10			11.10	11.10	11.10	11.10		
Zinc	CRM1.5	Spotted Bass	G	1	1	100%	11.30			11.30	11.30	11.30	11.30		
Zinc	CRM9.5	Blue Catfish	A	5	5	100%	7.34	1.27	0.57	9.24	5.88	9.24	5.88		
Zinc	CRM9.5	Blue Catfish	F	5	5	100%	9.94	2.59	1.16	13.60	7.30	13.60	7.30		
Zinc	CRM9.5	Blue Catfish	G	5	5	100%	8.92	1.75	0.78	11.40	7.00	11.40	7.00		
Zinc	CRM9.5	Channel Catfish	A	4	4	100%	5.90	0.49	0.25	6.34	5.22	6.34	5.22		
Zinc	CRM9.5	Channel Catfish	F	4	4	100%	9.03	5.53	2.76	17.30	6.00	17.30	6.00		
Zinc	CRM9.5	Channel Catfish	G	4	4	100%	10.13	2.60	1.30	14.00	8.40	14.00	8.40		
Zinc	CRM9.5	Largemouth Bass	A	5	5	100%	9.71	2.02	0.90	12.60	7.40	12.60	7.40		
Zinc	CRM9.5	Largemouth Bass	F	5	5	100%	12.42	1.40	0.63	14.10	11.10	14.10	11.10		
Zinc	CRM9.5	Largemouth Bass	G	5	5	100%	10.48	2.34	1.05	13.40	7.20	13.40	7.20		
Zinc	ERM0.5	Blue Catfish	A	5	5	100%	7.98	3.03	1.35	12.23	5.18	12.23	5.18		
Zinc	ERM0.5	Blue Catfish	F	5	5	100%	7.68	1.87	0.84	10.40	5.40	10.40	5.40		
Zinc	ERM0.5	Channel Catfish	A	4	4	100%	6.71	1.08	0.54	8.14	5.53	8.14	5.53		
Zinc	ERM0.5	Channel Catfish	F	4	4	100%	7.05	1.22	0.61	8.60	5.70	8.60	5.70		
Zinc	ERM0.5	Largemouth Bass	A	8	8	100%	9.81	2.13	0.75	13.49	6.94	13.49	6.94		
Zinc	ERM0.5	Largemouth Bass	F	8	8	100%	11.44	2.01	0.71	13.90	8.60	13.90	8.60		
Zinc	ERM8.0	Channel Catfish	A	6	6	100%	6.08	1.48	0.60	8.01	4.18	8.01	4.18		
Zinc	ERM8.0	Channel Catfish	F	6	6	100%	6.20	1.10	0.45	8.30	5.10	8.30	5.10		
Zinc	ERM8.0	Channel Catfish	G	6	6	100%	8.02	2.78	1.13	13.10	5.60	13.10	5.60		
Zinc	ERM8.0	Largemouth Bass	A	6	6	100%	8.06	3.58	1.46	13.51	4.84	13.51	4.84		
Zinc	ERM8.0	Largemouth Bass	F	6	6	100%	9.10	3.39	1.38	15.40	5.80	15.40	5.80		
Zinc	ERM8.0	Largemouth Bass	G	6	6	100%	9.80	4.72	1.93	19.00	6.30	19.00	6.30		

A = Original Analysis. F = Reanalyzed Fillets. G = Reanalyzed Homogenate.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Channel Catfish	% Lipids	N00004256-001	1.5	.	.	1	.	.	0	.	.
ERM8.0	Channel Catfish	% Lipids	N00004256-002	2.5	.	.	1	.	.	0	.	.
ERM8.0	Channel Catfish	% Lipids	N00004256-003	4	.	.	1	.	.	0	.	.
ERM8.0	Largemouth	% Lipids	N00004256-004	0.36	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-001	1.9	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-002	3.5	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-003	2.3	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-004	2.8	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-005	2.4	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-006	1.1	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-007	1.7	.	.	1	.	.	0	.	.
ERM0.5	Largemouth	% Lipids	N00004258-008	0.47	.	.	1	.	.	0	.	.
ERM0.5	Channel Catfish	% Lipids	N00004258-009	1.2	.	.	1	.	.	0	.	.
ERM0.5	Channel Catfish	% Lipids	N00004258-010	0.51	.	.	1	.	.	0	.	.
ERM0.5	Channel Catfish	% Lipids	N00004258-011	2	.	.	1	.	.	0	.	.
ERM0.5	Channel Catfish	% Lipids	N00004258-012	0.79	.	.	1	.	.	0	.	.
ERM0.5	Blue Catfish	% Lipids	N00004258-013	0.98	.	.	1	.	.	0	.	.
ERM0.5	Blue Catfish	% Lipids	N00004258-014	3.3	.	.	1	.	.	0	.	.
ERM0.5	Blue Catfish	% Lipids	N00004258-015	2.8	.	.	1	.	.	0	.	.
ERM0.5	Blue Catfish	% Lipids	N00004258-016	2.2	.	.	1	.	.	0	.	.
ERM0.5	Blue Catfish	% Lipids	N00004258-017	10.1	.	.	1	.	.	0	.	.
CRM9.5	Largemouth	% Lipids	N00004259-001	1.6	.	.	1	.	.	0	.	.
CRM9.5	Largemouth	% Lipids	N00004259-002	1.2	.	.	1	.	.	0	.	.
CRM9.5	Largemouth	% Lipids	N00004259-003	2.4	.	.	1	.	.	0	.	.
CRM9.5	Largemouth	% Lipids	N00004259-004	1.3	.	.	1	.	.	0	.	.
CRM9.5	Largemouth	% Lipids	N00004259-005	2.2	.	.	1	.	.	0	.	.
CRM9.5	Channel Catfish	% Lipids	N00004259-006	2.6	.	.	1	.	.	0	.	.
CRM9.5	Channel Catfish	% Lipids	N00004259-007	3.7	.	.	1	.	.	0	.	.
CRM9.5	Channel Catfish	% Lipids	N00004259-008	4.5	.	.	1	.	.	0	.	.
CRM9.5	Channel Catfish	% Lipids	N00004259-009	3.4	.	.	1	.	.	0	.	.
CRM9.5	Blue Catfish	% Lipids	N00004259-010	1	.	.	1	.	.	0	.	.
CRM9.5	Blue Catfish	% Lipids	N00004259-011	0.2	.	.	1	.	.	0	.	.
CRM9.5	Blue Catfish	% Lipids	N00004259-012	0.43	.	.	1	.	.	0	.	.
CRM9.5	Blue Catfish	% Lipids	N00004259-013	0.94	.	.	1	.	.	0	.	.
CRM9.5	Blue Catfish	% Lipids	N00004259-014	0.62	.	.	1	.	.	0	.	.
CRM1.5	Largemouth	% Lipids	N00004260-001	1.2	.	.	1	.	.	0	.	.
CRM1.5	Largemouth	% Lipids	N00004260-002	1.2	.	.	1	.	.	0	.	.
CRM1.5	Largemouth	% Lipids	N00004260-003	2.4	.	.	1	.	.	0	.	.
CRM1.5	Largemouth	% Lipids	N00004260-004	1.8	.	.	1	.	.	0	.	.
CRM1.5	Spotted Bass	% Lipids	N00004260-005	4.3	.	.	1	.	.	0	.	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Channel Catfish	% Lipids	N00004260-006	5.1	.	.	1	.	.	0	.	.
CRM1.5	Channel Catfish	% Lipids	N00004260-007	1.9	.	.	1	.	.	0	.	.
CRM1.5	Channel Catfish	% Lipids	N00004260-008	1.4	.	.	1	.	.	0	.	.
CRM1.5	Channel Catfish	% Lipids	N00004260-009	2.7	.	.	1	.	.	0	.	.
CRM1.5	Channel Catfish	% Lipids	N00004260-010	2.4	.	.	1	.	.	0	.	.
ERM8.0	Largemouth	% Lipids	N00004447-001	1.2	.	.	1	.	.	0	.	.
ERM8.0	Largemouth	% Lipids	N00004447-002	0.86	.	.	1	.	.	0	.	.
ERM8.0	Largemouth	% Lipids	N00004447-003	0.92	.	.	1	.	.	0	.	.
ERM8.0	Largemouth	% Lipids	N00004447-004	0.72	.	.	1	.	.	0	.	.
ERM8.0	Largemouth	% Lipids	N00004447-005	1	.	.	1	.	.	0	.	.
ERM8.0	Channel Catfish	% Lipids	N00004447-006	3.9	.	.	1	.	.	0	.	.
ERM8.0	Channel Catfish	% Lipids	N00004447-007	3	.	.	1	.	.	0	.	.
ERM8.0	Channel Catfish	% Lipids	N00004447-008	2.7	.	.	1	.	.	0	.	.
ERM8.0	Channel Catfish	% Moisture	N00004256-001	82.7	79.4	79.1	1	1	1	0	0	0
ERM8.0	Channel Catfish	% Moisture	N00004256-002	83	78.5	78.4	1	1	1	0	0	0
ERM8.0	Channel Catfish	% Moisture	N00004256-003	75.2	76.1	77.5	1	1	1	0	0	0
ERM8.0	Largemouth	% Moisture	N00004256-004	77.6	77	72.5	1	1	1	0	0	0
ERM0.5	Largemouth	% Moisture	N00004258-001	79.6	77.6	.	1	1	.	0	0	.
ERM0.5	Largemouth	% Moisture	N00004258-002	77.1	76.8	.	1	1	.	0	0	.
ERM0.5	Largemouth	% Moisture	N00004258-003	75.7	76.6	.	1	1	.	0	0	.
ERM0.5	Largemouth	% Moisture	N00004258-004	78.2	77.8	.	1	1	.	0	0	.
ERM0.5	Largemouth	% Moisture	N00004258-005	77.7	76.3	.	1	1	.	0	0	.
ERM0.5	Largemouth	% Moisture	N00004258-006	78.9	77.8	.	1	1	.	0	0	.
ERM0.5	Largemouth	% Moisture	N00004258-007	79.3	77.5	.	1	1	.	0	0	.
ERM0.5	Largemouth	% Moisture	N00004258-008	78.6	79.6	.	1	1	.	0	0	.
ERM0.5	Channel Catfish	% Moisture	N00004258-009	81.8	79.3	.	1	1	.	0	0	.
ERM0.5	Channel Catfish	% Moisture	N00004258-010	82.6	79.9	.	1	1	.	0	0	.
ERM0.5	Channel Catfish	% Moisture	N00004258-011	85.4	81.8	.	1	1	.	0	0	.
ERM0.5	Channel Catfish	% Moisture	N00004258-012	81.7	80.7	.	1	1	.	0	0	.
ERM0.5	Blue Catfish	% Moisture	N00004258-013	83	81.6	.	1	1	.	0	0	.
ERM0.5	Blue Catfish	% Moisture	N00004258-014	80.3	77.6	.	1	1	.	0	0	.
ERM0.5	Blue Catfish	% Moisture	N00004258-015	81.5	79.3	.	1	1	.	0	0	.
ERM0.5	Blue Catfish	% Moisture	N00004258-016	78.5	76.9	.	1	1	.	0	0	.
ERM0.5	Blue Catfish	% Moisture	N00004258-017	70.9	69.4	.	1	1	.	0	0	.
CRM9.5	Largemouth	% Moisture	N00004259-001	77	77.1	76.9	1	1	1	0	0	0
CRM9.5	Largemouth	% Moisture	N00004259-002	78.3	77.5	80.1	1	1	1	0	0	0
CRM9.5	Largemouth	% Moisture	N00004259-003	77.3	74.5	76.1	1	1	1	0	0	0
CRM9.5	Largemouth	% Moisture	N00004259-004	77.7	76.9	76.8	1	1	1	0	0	0
CRM9.5	Largemouth	% Moisture	N00004259-005	76.1	75.9	78.4	1	1	1	0	0	0
CRM9.5	Channel Catfish	% Moisture	N00004259-006	73.1	76.7	79.5	1	1	1	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Channel Catfish	% Moisture	N00004259-007	77.8	75.4	78.4	1	1	1	0	0	0
CRM9.5	Channel Catfish	% Moisture	N00004259-008	78.5	79.4	78.3	1	1	1	0	0	0
CRM9.5	Channel Catfish	% Moisture	N00004259-009	78.9	76	70.6	1	1	1	0	0	0
CRM9.5	Blue Catfish	% Moisture	N00004259-010	81.4	79.7	81.9	1	1	1	0	0	0
CRM9.5	Blue Catfish	% Moisture	N00004259-011	81.1	80	84.9	1	1	1	0	0	0
CRM9.5	Blue Catfish	% Moisture	N00004259-012	82.3	81.4	78.5	1	1	1	0	0	0
CRM9.5	Blue Catfish	% Moisture	N00004259-013	80.5	78.5	80.1	1	1	1	0	0	0
CRM9.5	Blue Catfish	% Moisture	N00004259-014	80.5	80.5	83.1	1	1	1	0	0	0
CRM1.5	Largemouth	% Moisture	N00004260-001	77.4	75.4	79.7	1	1	1	0	0	0
CRM1.5	Largemouth	% Moisture	N00004260-002	79.5	76.8	78.8	1	1	1	0	0	0
CRM1.5	Largemouth	% Moisture	N00004260-003	76.9	76	75.2	1	1	1	0	0	0
CRM1.5	Largemouth	% Moisture	N00004260-004	76.5	75.9	77.3	1	1	1	0	0	0
CRM1.5	Spotted Bass	% Moisture	N00004260-005	71.7	74	74.6	1	1	1	0	0	0
CRM1.5	Channel Catfish	% Moisture	N00004260-006	72.2	75.8	76.1	1	1	1	0	0	0
CRM1.5	Channel Catfish	% Moisture	N00004260-007	82.4	78.1	78.9	1	1	1	0	0	0
CRM1.5	Channel Catfish	% Moisture	N00004260-008	80.1	78.2	81	1	1	1	0	0	0
CRM1.5	Channel Catfish	% Moisture	N00004260-009	79	76.8	70	1	1	1	0	0	0
CRM1.5	Channel Catfish	% Moisture	N00004260-010	80.3	77.9	74.7	1	1	1	0	0	0
ERM8.0	Largemouth	% Moisture	N00004447-001	79	79.6	80.3	1	1	1	0	0	0
ERM8.0	Largemouth	% Moisture	N00004447-002	79.5	79.5	79	1	1	1	0	0	0
ERM8.0	Largemouth	% Moisture	N00004447-003	78.5	78.8	77.1	1	1	1	0	0	0
ERM8.0	Largemouth	% Moisture	N00004447-004	79.2	78.3	78.1	1	1	1	0	0	0
ERM8.0	Largemouth	% Moisture	N00004447-005	79.4	79	80.1	1	1	1	0	0	0
ERM8.0	Channel Catfish	% Moisture	N00004447-006	80.2	77.9	78.7	1	1	1	0	0	0
ERM8.0	Channel Catfish	% Moisture	N00004447-007	80.1	78.8	80.7	1	1	1	0	0	0
ERM8.0	Channel Catfish	% Moisture	N00004447-008	80.2	80.6	78.7	1	1	1	0	0	0
ERM8.0	Channel Catfish	Aluminum	N00004256-001	25.09	4.1	4.2	0	0	0	0	0	0
ERM8.0	Channel Catfish	Aluminum	N00004256-002	25.16	9.7	3.9	0	1	0	0	1	0
ERM8.0	Channel Catfish	Aluminum	N00004256-003	25.05	7.5	4.1	0	1	0	0	1	0
ERM8.0	Largemouth	Aluminum	N00004256-004	25.09	3.8	4	0	0	0	0	0	0
ERM0.5	Largemouth	Aluminum	N00004258-001	24.89	3.7	.	0	0	.	0	0	.
ERM0.5	Largemouth	Aluminum	N00004258-002	24.96	8.7	.	0	1	.	0	1	.
ERM0.5	Largemouth	Aluminum	N00004258-003	25.03	3.8	.	0	0	.	0	0	.
ERM0.5	Largemouth	Aluminum	N00004258-004	24.85	9.5	.	0	1	.	0	1	.
ERM0.5	Largemouth	Aluminum	N00004258-005	24.75	7.6	.	0	1	.	0	1	.
ERM0.5	Largemouth	Aluminum	N00004258-006	25.32	3.6	.	0	0	.	0	0	.
ERM0.5	Largemouth	Aluminum	N00004258-007	24.84	4	.	0	0	.	0	0	.
ERM0.5	Largemouth	Aluminum	N00004258-008	24.82	3.9	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Aluminum	N00004258-009	24.93	5.6	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Aluminum	N00004258-010	24.88	7	.	0	1	.	0	1	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Channel Catfish	Aluminum	N00004258-011	25.11	4.1	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Aluminum	N00004258-012	24.89	3.7	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Aluminum	N00004258-013	24.99	7.2	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Aluminum	N00004258-014	24.82	3.6	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Aluminum	N00004258-015	24.98	7.7	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Aluminum	N00004258-016	24.94	7.9	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Aluminum	N00004258-017	25.08	5.2	.	0	1	.	0	1	.
CRM9.5	Largemouth	Aluminum	N00004259-001	24.84	3.8	3.8	0	0	0	0	0	0
CRM9.5	Largemouth	Aluminum	N00004259-002	25.17	4.1	3.8	0	0	0	0	0	0
CRM9.5	Largemouth	Aluminum	N00004259-003	24.74	3.9	3.8	0	0	0	0	0	0
CRM9.5	Largemouth	Aluminum	N00004259-004	24.75	3.8	4	0	0	0	0	0	0
CRM9.5	Largemouth	Aluminum	N00004259-005	24.86	3.6	18.7	0	0	1	0	0	1
CRM9.5	Channel Catfish	Aluminum	N00004259-006	24.88	3.9	10.8	0	0	1	0	0	1
CRM9.5	Channel Catfish	Aluminum	N00004259-007	24.86	3.8	3.9	0	0	0	0	0	0
CRM9.5	Channel Catfish	Aluminum	N00004259-008	24.94	3.9	18	0	1	1	0	1	1
CRM9.5	Channel Catfish	Aluminum	N00004259-009	24.9	13	11.7	0	1	0	0	1	0
CRM9.5	Blue Catfish	Aluminum	N00004259-010	24.92	4.1	3.9	0	0	0	0	0	0
CRM9.5	Blue Catfish	Aluminum	N00004259-011	24.95	3.8	4.1	0	0	0	0	0	0
CRM9.5	Blue Catfish	Aluminum	N00004259-012	24.96	3.8	4	0	0	0	0	0	0
CRM9.5	Blue Catfish	Aluminum	N00004259-013	24.96	4	3.6	0	0	0	0	0	0
CRM9.5	Blue Catfish	Aluminum	N00004259-014	24.77	3.9	4	0	0	0	0	0	0
CRM1.5	Largemouth	Aluminum	N00004260-001	25.09	3.6	3.6	0	0	0	0	0	0
CRM1.5	Largemouth	Aluminum	N00004260-002	25.01	3.7	3.8	0	0	0	0	0	0
CRM1.5	Largemouth	Aluminum	N00004260-003	24.95	3.6	4.1	0	0	0	0	0	0
CRM1.5	Largemouth	Aluminum	N00004260-004	24.91	4.1	3.7	0	0	0	0	0	0
CRM1.5	Spotted Bass	Aluminum	N00004260-005	24.9	5.2	4.2	0	1	0	0	1	0
CRM1.5	Channel Catfish	Aluminum	N00004260-006	24.94	4.1	4.1	0	0	0	0	0	0
CRM1.5	Channel Catfish	Aluminum	N00004260-007	24.99	4.2	4	0	0	0	0	0	0
CRM1.5	Channel Catfish	Aluminum	N00004260-008	24.88	4.1	4.1	0	0	0	0	0	0
CRM1.5	Channel Catfish	Aluminum	N00004260-009	24.99	3.9	3.9	0	0	0	0	0	0
CRM1.5	Channel Catfish	Aluminum	N00004260-010	24.82	4.3	4.1	0	1	0	0	1	0
ERM8.0	Largemouth	Aluminum	N00004447-001	24.99	4.1	3.7	0	1	0	0	1	0
ERM8.0	Largemouth	Aluminum	N00004447-002	25.01	3.9	4.1	0	0	0	0	0	0
ERM8.0	Largemouth	Aluminum	N00004447-003	24.73	3.6	4	0	0	0	0	0	0
ERM8.0	Largemouth	Aluminum	N00004447-004	24.96	4	3.6	0	0	0	0	0	0
ERM8.0	Largemouth	Aluminum	N00004447-005	24.72	4.1	3.6	0	0	0	0	0	0
ERM8.0	Channel Catfish	Aluminum	N00004447-006	25.15	3.8	3.7	0	0	0	0	0	0
ERM8.0	Channel Catfish	Aluminum	N00004447-007	24.88	3.9	3.6	0	0	0	0	0	0
ERM8.0	Channel Catfish	Aluminum	N00004447-008	24.95	3.7	4	0	0	0	0	0	0
ERM8.0	Channel Catfish	Antimony	N00004256-001	0.1	0.02	0.02	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Channel Catfish	Antimony	N00004256-002	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Antimony	N00004256-003	0.1	0.01	0.02	0	0	0	0	0	0
ERM8.0	Largemouth	Antimony	N00004256-004	0.1	0.01	0.01	0	0	0	0	0	0
ERM0.5	Largemouth	Antimony	N00004258-001	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Antimony	N00004258-002	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Antimony	N00004258-003	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Antimony	N00004258-004	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Antimony	N00004258-005	0.1	0.02	.	0	0	.	0	0	.
ERM0.5	Largemouth	Antimony	N00004258-006	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Antimony	N00004258-007	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Antimony	N00004258-008	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Antimony	N00004258-009	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Antimony	N00004258-010	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Antimony	N00004258-011	0.1	0.02	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Antimony	N00004258-012	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Antimony	N00004258-013	0.1	0.02	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Antimony	N00004258-014	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Antimony	N00004258-015	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Antimony	N00004258-016	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Antimony	N00004258-017	0.1	0.02	.	0	0	.	0	0	.
CRM9.5	Largemouth	Antimony	N00004259-001	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Antimony	N00004259-002	0.1	0.02	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Antimony	N00004259-003	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Antimony	N00004259-004	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Antimony	N00004259-005	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Antimony	N00004259-006	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Antimony	N00004259-007	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Antimony	N00004259-008	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Antimony	N00004259-009	0.1	0.02	0.04	0	0	0	0	0	0
CRM9.5	Blue Catfish	Antimony	N00004259-010	0.1	0.02	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Antimony	N00004259-011	0.1	0.01	0.02	0	0	0	0	0	0
CRM9.5	Blue Catfish	Antimony	N00004259-012	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Antimony	N00004259-013	0.1	0.02	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Antimony	N00004259-014	0.1	0.01	0.02	0	0	0	0	0	0
CRM1.5	Largemouth	Antimony	N00004260-001	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Antimony	N00004260-002	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Antimony	N00004260-003	0.1	0.01	0.02	0	0	0	0	0	0
CRM1.5	Largemouth	Antimony	N00004260-004	0.1	0.02	0.01	0	0	0	0	0	0
CRM1.5	Spotted Bass	Antimony	N00004260-005	0.1	0.02	0.02	0	0	0	0	0	0
CRM1.5	Channel Catfish	Antimony	N00004260-006	0.1	0.02	0.02	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Channel Catfish	Antimony	N00004260-007	0.1	0.02	0.02	0	0	0	0	0	0
CRM1.5	Channel Catfish	Antimony	N00004260-008	0.1	0.02	0.02	0	0	1	0	0	1
CRM1.5	Channel Catfish	Antimony	N00004260-009	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Antimony	N00004260-010	0.1	0.01	0.02	0	0	0	0	0	0
ERM8.0	Largemouth	Antimony	N00004447-001	0.1	0.02	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Antimony	N00004447-002	0.1	0.01	0.02	0	0	1	0	0	1
ERM8.0	Largemouth	Antimony	N00004447-003	0.1	0.01	0.02	0	0	0	0	0	0
ERM8.0	Largemouth	Antimony	N00004447-004	0.1	0.02	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Antimony	N00004447-005	0.1	0.02	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Antimony	N00004447-006	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Antimony	N00004447-007	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Antimony	N00004447-008	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Arsenic	N00004256-001	0.1	0.05	0.04	0	1	1	0	1	1
ERM8.0	Channel Catfish	Arsenic	N00004256-002	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Arsenic	N00004256-003	0.1	0.03	0.03	0	1	1	0	1	1
ERM8.0	Largemouth	Arsenic	N00004256-004	0.15	0.22	0.23	1	1	1	0	1	1
ERM0.5	Largemouth	Arsenic	N00004258-001	0.2	0.23	.	1	1	.	0	1	.
ERM0.5	Largemouth	Arsenic	N00004258-002	0.22	0.31	.	1	1	.	0	1	.
ERM0.5	Largemouth	Arsenic	N00004258-003	0.19	0.26	.	1	1	.	0	1	.
ERM0.5	Largemouth	Arsenic	N00004258-004	0.2	0.25	.	1	1	.	0	1	.
ERM0.5	Largemouth	Arsenic	N00004258-005	0.18	0.33	.	1	1	.	0	1	.
ERM0.5	Largemouth	Arsenic	N00004258-006	0.23	0.27	.	1	1	.	0	1	.
ERM0.5	Largemouth	Arsenic	N00004258-007	0.23	0.28	.	1	1	.	0	1	.
ERM0.5	Largemouth	Arsenic	N00004258-008	0.16	0.21	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Arsenic	N00004258-009	0.1	0.04	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Arsenic	N00004258-010	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Arsenic	N00004258-011	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Arsenic	N00004258-012	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Arsenic	N00004258-013	0.1	0.04	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Arsenic	N00004258-014	0.1	0.03	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Arsenic	N00004258-015	0.1	0.04	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Arsenic	N00004258-016	0.1	0.11	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Arsenic	N00004258-017	0.1	0.07	.	0	1	.	0	1	.
CRM9.5	Largemouth	Arsenic	N00004259-001	0.18	0.24	0.21	1	1	1	0	1	1
CRM9.5	Largemouth	Arsenic	N00004259-002	0.12	0.16	0.15	0	1	1	0	1	1
CRM9.5	Largemouth	Arsenic	N00004259-003	0.27	0.36	0.33	1	1	1	0	1	1
CRM9.5	Largemouth	Arsenic	N00004259-004	0.22	0.32	0.32	1	1	1	0	1	1
CRM9.5	Largemouth	Arsenic	N00004259-005	0.29	0.36	0.3	1	1	1	0	1	1
CRM9.5	Channel Catfish	Arsenic	N00004259-006	0.1	0.03	0.03	0	0	1	0	0	1
CRM9.5	Channel Catfish	Arsenic	N00004259-007	0.1	0.03	0.03	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Channel Catfish	Arsenic	N00004259-008	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Arsenic	N00004259-009	0.1	0.06	0.08	0	1	0	0	1	0
CRM9.5	Blue Catfish	Arsenic	N00004259-010	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Arsenic	N00004259-011	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Arsenic	N00004259-012	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Arsenic	N00004259-013	0.1	0.07	0.05	0	1	1	0	1	1
CRM9.5	Blue Catfish	Arsenic	N00004259-014	0.1	0.03	0.04	0	1	1	0	1	1
CRM1.5	Largemouth	Arsenic	N00004260-001	0.15	0.23	0.18	1	1	1	0	1	1
CRM1.5	Largemouth	Arsenic	N00004260-002	0.21	0.23	0.21	1	1	1	0	1	1
CRM1.5	Largemouth	Arsenic	N00004260-003	0.25	0.27	0.24	1	1	1	0	1	1
CRM1.5	Largemouth	Arsenic	N00004260-004	0.28	0.35	0.28	1	1	1	0	1	1
CRM1.5	Spotted Bass	Arsenic	N00004260-005	0.24	0.31	0.27	1	1	1	0	1	1
CRM1.5	Channel Catfish	Arsenic	N00004260-006	0.1	0.05	0.05	0	1	1	0	1	1
CRM1.5	Channel Catfish	Arsenic	N00004260-007	0.1	0.04	0.03	0	1	0	0	1	0
CRM1.5	Channel Catfish	Arsenic	N00004260-008	0.1	0.03	0.03	0	1	0	0	1	0
CRM1.5	Channel Catfish	Arsenic	N00004260-009	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Arsenic	N00004260-010	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Arsenic	N00004447-001	0.1	0.11	0.11	0	1	1	0	1	1
ERM8.0	Largemouth	Arsenic	N00004447-002	0.1	0.03	0.04	0	1	1	0	1	1
ERM8.0	Largemouth	Arsenic	N00004447-003	0.12	0.16	0.17	1	1	1	0	1	1
ERM8.0	Largemouth	Arsenic	N00004447-004	0.1	0.14	0.13	0	1	1	0	1	1
ERM8.0	Largemouth	Arsenic	N00004447-005	0.1	0.11	0.11	0	1	1	0	1	1
ERM8.0	Channel Catfish	Arsenic	N00004447-006	0.1	0.03	0.03	0	1	0	0	1	0
ERM8.0	Channel Catfish	Arsenic	N00004447-007	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Arsenic	N00004447-008	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Barium	N00004256-001	0.12	0.05	0.15	1	1	1	0	1	1
ERM8.0	Channel Catfish	Barium	N00004256-002	0.1	0.04	0.05	0	0	1	0	0	1
ERM8.0	Channel Catfish	Barium	N00004256-003	0.1	0.04	0.05	0	0	1	0	0	1
ERM8.0	Largemouth	Barium	N00004256-004	0.1	0.09	0.15	0	1	1	0	1	1
ERM0.5	Largemouth	Barium	N00004258-001	0.16	0.04	.	1	0	.	0	0	.
ERM0.5	Largemouth	Barium	N00004258-002	0.1	0.14	.	0	1	.	0	1	.
ERM0.5	Largemouth	Barium	N00004258-003	0.1	0.1	.	0	1	.	0	1	.
ERM0.5	Largemouth	Barium	N00004258-004	0.12	0.06	.	1	1	.	0	1	.
ERM0.5	Largemouth	Barium	N00004258-005	0.1	0.06	.	0	1	.	0	1	.
ERM0.5	Largemouth	Barium	N00004258-006	0.1	0.04	.	0	0	.	0	0	.
ERM0.5	Largemouth	Barium	N00004258-007	0.1	0.06	.	0	1	.	0	1	.
ERM0.5	Largemouth	Barium	N00004258-008	0.1	0.05	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Barium	N00004258-009	0.1	0.06	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Barium	N00004258-010	0.1	0.18	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Barium	N00004258-011	0.1	0.05	.	0	0	.	0	0	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Channel Catfish	Barium	N00004258-012	0.1	0.07	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Barium	N00004258-013	0.1	0.18	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Barium	N00004258-014	0.1	0.04	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Barium	N00004258-015	0.7	0.29	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Barium	N00004258-016	0.11	0.23	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Barium	N00004258-017	0.1	0.08	.	0	1	.	0	1	.
CRM9.5	Largemouth	Barium	N00004259-001	0.14	0.08	0.13	1	1	1	0	1	1
CRM9.5	Largemouth	Barium	N00004259-002	0.1	0.13	0.14	0	1	1	0	1	1
CRM9.5	Largemouth	Barium	N00004259-003	0.1	0.14	0.08	0	1	1	0	1	1
CRM9.5	Largemouth	Barium	N00004259-004	0.21	0.07	0.1	1	1	1	0	1	1
CRM9.5	Largemouth	Barium	N00004259-005	0.1	0.09	0.04	0	1	0	0	1	0
CRM9.5	Channel Catfish	Barium	N00004259-006	0.1	0.05	1.2	0	1	1	0	1	1
CRM9.5	Channel Catfish	Barium	N00004259-007	0.1	0.04	0.06	0	0	1	0	0	1
CRM9.5	Channel Catfish	Barium	N00004259-008	0.16	0.04	0.16	1	1	1	0	1	1
CRM9.5	Channel Catfish	Barium	N00004259-009	0.16	0.46	0.25	1	1	1	0	1	1
CRM9.5	Blue Catfish	Barium	N00004259-010	0.11	0.05	0.05	1	0	1	0	0	1
CRM9.5	Blue Catfish	Barium	N00004259-011	0.1	0.17	0.05	0	1	0	0	1	0
CRM9.5	Blue Catfish	Barium	N00004259-012	0.11	0.06	0.08	1	1	1	0	1	1
CRM9.5	Blue Catfish	Barium	N00004259-013	0.1	0.18	0.13	0	1	1	0	1	1
CRM9.5	Blue Catfish	Barium	N00004259-014	0.1	0.17	0.06	0	1	1	0	1	1
CRM1.5	Largemouth	Barium	N00004260-001	0.12	0.08	0.12	1	1	1	0	1	1
CRM1.5	Largemouth	Barium	N00004260-002	0.16	0.14	0.18	1	1	1	0	1	1
CRM1.5	Largemouth	Barium	N00004260-003	0.1	0.04	0.07	0	1	1	0	1	1
CRM1.5	Largemouth	Barium	N00004260-004	0.1	0.05	0.07	0	0	1	0	0	1
CRM1.5	Spotted Bass	Barium	N00004260-005	0.2	0.13	0.29	1	1	1	0	1	1
CRM1.5	Channel Catfish	Barium	N00004260-006	0.1	0.05	0.07	0	1	1	0	1	1
CRM1.5	Channel Catfish	Barium	N00004260-007	0.1	0.1	0.15	0	1	1	0	1	1
CRM1.5	Channel Catfish	Barium	N00004260-008	0.1	0.09	0.16	0	1	1	0	1	1
CRM1.5	Channel Catfish	Barium	N00004260-009	0.1	0.06	0.1	0	1	1	0	1	1
CRM1.5	Channel Catfish	Barium	N00004260-010	0.1	0.19	0.13	0	1	1	0	1	1
ERM8.0	Largemouth	Barium	N00004447-001	0.1	0.05	0.04	0	0	0	0	0	0
ERM8.0	Largemouth	Barium	N00004447-002	0.1	0.05	0.1	0	0	1	0	0	1
ERM8.0	Largemouth	Barium	N00004447-003	0.1	0.04	0.06	0	0	1	0	0	1
ERM8.0	Largemouth	Barium	N00004447-004	0.1	0.05	0.04	0	0	0	0	0	0
ERM8.0	Largemouth	Barium	N00004447-005	0.1	0.05	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Barium	N00004447-006	0.1	0.04	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Barium	N00004447-007	0.1	0.05	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Barium	N00004447-008	0.1	0.04	0.07	0	1	1	0	1	1
ERM8.0	Channel Catfish	Beryllium	N00004256-001	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Beryllium	N00004256-002	0.1	0.03	0.03	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Channel Catfish	Beryllium	N00004256-003	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Beryllium	N00004256-004	0.1	0.03	0.03	0	0	0	0	0	0
ERM0.5	Largemouth	Beryllium	N00004258-001	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Beryllium	N00004258-002	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Beryllium	N00004258-003	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Beryllium	N00004258-004	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Beryllium	N00004258-005	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Beryllium	N00004258-006	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Beryllium	N00004258-007	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Beryllium	N00004258-008	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Beryllium	N00004258-009	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Beryllium	N00004258-010	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Beryllium	N00004258-011	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Beryllium	N00004258-012	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Beryllium	N00004258-013	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Beryllium	N00004258-014	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Beryllium	N00004258-015	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Beryllium	N00004258-016	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Beryllium	N00004258-017	0.1	0.03	.	0	0	.	0	0	.
CRM9.5	Largemouth	Beryllium	N00004259-001	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Beryllium	N00004259-002	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Beryllium	N00004259-003	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Beryllium	N00004259-004	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Beryllium	N00004259-005	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Beryllium	N00004259-006	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Beryllium	N00004259-007	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Beryllium	N00004259-008	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Beryllium	N00004259-009	0.1	0.03	0.09	0	0	0	0	0	0
CRM9.5	Blue Catfish	Beryllium	N00004259-010	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Beryllium	N00004259-011	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Beryllium	N00004259-012	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Beryllium	N00004259-013	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Beryllium	N00004259-014	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Beryllium	N00004260-001	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Beryllium	N00004260-002	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Beryllium	N00004260-003	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Beryllium	N00004260-004	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Spotted Bass	Beryllium	N00004260-005	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Beryllium	N00004260-006	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Beryllium	N00004260-007	0.1	0.03	0.03	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Channel Catfish	Beryllium	N00004260-008	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Beryllium	N00004260-009	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Beryllium	N00004260-010	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Beryllium	N00004447-001	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Beryllium	N00004447-002	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Beryllium	N00004447-003	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Beryllium	N00004447-004	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Beryllium	N00004447-005	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Beryllium	N00004447-006	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Beryllium	N00004447-007	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Beryllium	N00004447-008	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Boron	N00004256-001	2.01	0.43	0.43	0	0	0	0	0	0
ERM8.0	Channel Catfish	Boron	N00004256-002	2.01	0.38	0.4	0	0	0	0	0	0
ERM8.0	Channel Catfish	Boron	N00004256-003	2.01	0.4	0.42	0	0	0	0	0	0
ERM8.0	Largemouth	Boron	N00004256-004	1.99	0.39	0.41	0	0	0	0	0	0
ERM0.5	Largemouth	Boron	N00004258-001	2	0.38	.	0	0	.	0	0	.
ERM0.5	Largemouth	Boron	N00004258-002	1.99	0.4	.	0	0	.	0	0	.
ERM0.5	Largemouth	Boron	N00004258-003	2.02	0.39	.	0	0	.	0	0	.
ERM0.5	Largemouth	Boron	N00004258-004	2.01	0.38	.	0	0	.	0	0	.
ERM0.5	Largemouth	Boron	N00004258-005	1.98	0.42	.	0	0	.	0	0	.
ERM0.5	Largemouth	Boron	N00004258-006	2.03	0.37	.	0	0	.	0	0	.
ERM0.5	Largemouth	Boron	N00004258-007	1.99	0.41	.	0	0	.	0	0	.
ERM0.5	Largemouth	Boron	N00004258-008	1.99	0.41	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Boron	N00004258-009	1.98	0.39	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Boron	N00004258-010	1.98	0.41	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Boron	N00004258-011	2	0.42	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Boron	N00004258-012	1.99	0.39	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Boron	N00004258-013	2.01	0.42	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Boron	N00004258-014	1.99	0.37	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Boron	N00004258-015	2	0.39	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Boron	N00004258-016	2	0.39	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Boron	N00004258-017	2.01	0.43	.	0	0	.	0	0	.
CRM9.5	Largemouth	Boron	N00004259-001	2	0.39	0.39	0	0	0	0	0	0
CRM9.5	Largemouth	Boron	N00004259-002	2.02	0.42	0.39	0	0	0	0	0	0
CRM9.5	Largemouth	Boron	N00004259-003	1.97	0.4	0.39	0	0	0	0	0	0
CRM9.5	Largemouth	Boron	N00004259-004	1.98	0.4	0.41	0	0	0	0	0	0
CRM9.5	Largemouth	Boron	N00004259-005	1.98	0.37	0.39	0	0	0	0	0	0
CRM9.5	Channel Catfish	Boron	N00004259-006	1.99	0.41	0.38	0	0	0	0	0	0
CRM9.5	Channel Catfish	Boron	N00004259-007	2	0.39	0.41	0	0	0	0	0	0
CRM9.5	Channel Catfish	Boron	N00004259-008	2	0.39	0.4	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Channel Catfish	Boron	N00004259-009	2	0.42	1.2	0	0	0	0	0	0
CRM9.5	Blue Catfish	Boron	N00004259-010	1.99	0.42	0.41	0	0	0	0	0	0
CRM9.5	Blue Catfish	Boron	N00004259-011	1.98	0.4	0.42	0	0	0	0	0	0
CRM9.5	Blue Catfish	Boron	N00004259-012	1.98	0.39	0.41	0	0	0	0	0	0
CRM9.5	Blue Catfish	Boron	N00004259-013	1.99	0.42	0.38	0	0	0	0	0	0
CRM9.5	Blue Catfish	Boron	N00004259-014	1.99	0.41	0.42	0	0	0	0	0	0
CRM1.5	Largemouth	Boron	N00004260-001	1.99	0.38	0.37	0	0	0	0	0	0
CRM1.5	Largemouth	Boron	N00004260-002	1.99	0.38	0.4	0	0	0	0	0	0
CRM1.5	Largemouth	Boron	N00004260-003	1.99	0.37	0.43	0	0	0	0	0	0
CRM1.5	Largemouth	Boron	N00004260-004	2	0.43	0.38	0	0	0	0	0	0
CRM1.5	Spotted Bass	Boron	N00004260-005	1.98	0.42	0.43	0	0	0	0	0	0
CRM1.5	Channel Catfish	Boron	N00004260-006	2	0.43	0.42	0	0	0	0	0	0
CRM1.5	Channel Catfish	Boron	N00004260-007	1.99	0.43	0.42	0	0	0	0	0	0
CRM1.5	Channel Catfish	Boron	N00004260-008	1.99	0.43	0.42	0	0	0	0	0	0
CRM1.5	Channel Catfish	Boron	N00004260-009	2	0.4	0.4	0	0	0	0	0	0
CRM1.5	Channel Catfish	Boron	N00004260-010	1.99	0.41	0.42	0	0	0	0	0	0
ERM8.0	Largemouth	Boron	N00004447-001	2	0.43	0.38	0	0	0	0	0	0
ERM8.0	Largemouth	Boron	N00004447-002	2.01	0.41	0.42	0	0	0	0	0	0
ERM8.0	Largemouth	Boron	N00004447-003	1.98	0.38	0.42	0	0	0	0	0	0
ERM8.0	Largemouth	Boron	N00004447-004	2	0.42	0.37	0	0	0	0	0	0
ERM8.0	Largemouth	Boron	N00004447-005	1.98	0.42	0.37	0	0	0	0	0	0
ERM8.0	Channel Catfish	Boron	N00004447-006	2	0.39	0.38	0	0	0	0	0	0
ERM8.0	Channel Catfish	Boron	N00004447-007	1.99	0.4	0.37	0	0	0	0	0	0
ERM8.0	Channel Catfish	Boron	N00004447-008	1.98	0.38	0.41	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cadmium	N00004256-001	0.1	0.02	0.01	0	1	1	0	1	1
ERM8.0	Channel Catfish	Cadmium	N00004256-002	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cadmium	N00004256-003	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cadmium	N00004256-004	0.1	0.01	0.01	0	0	0	0	0	0
ERM0.5	Largemouth	Cadmium	N00004258-001	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cadmium	N00004258-002	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cadmium	N00004258-003	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cadmium	N00004258-004	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cadmium	N00004258-005	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cadmium	N00004258-006	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cadmium	N00004258-007	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cadmium	N00004258-008	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cadmium	N00004258-009	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cadmium	N00004258-010	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cadmium	N00004258-011	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cadmium	N00004258-012	0.1	0.01	.	0	1	.	0	1	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Blue Catfish	Cadmium	N00004258-013	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Cadmium	N00004258-014	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Cadmium	N00004258-015	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Cadmium	N00004258-016	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Cadmium	N00004258-017	0.1	0.03	.	0	0	.	0	0	.
CRM9.5	Largemouth	Cadmium	N00004259-001	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cadmium	N00004259-002	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cadmium	N00004259-003	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cadmium	N00004259-004	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cadmium	N00004259-005	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Cadmium	N00004259-006	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Cadmium	N00004259-007	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Cadmium	N00004259-008	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Cadmium	N00004259-009	0.1	0.01	0.02	0	0	0	0	0	0
CRM9.5	Blue Catfish	Cadmium	N00004259-010	0.1	0.05	0.01	0	0	1	0	0	1
CRM9.5	Blue Catfish	Cadmium	N00004259-011	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Cadmium	N00004259-012	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Cadmium	N00004259-013	0.1	0.03	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Cadmium	N00004259-014	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Cadmium	N00004260-001	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Cadmium	N00004260-002	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Cadmium	N00004260-003	0.1	0.01	0.02	0	0	1	0	0	1
CRM1.5	Largemouth	Cadmium	N00004260-004	0.1	0.01	0.01	0	0	1	0	0	1
CRM1.5	Spotted Bass	Cadmium	N00004260-005	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Cadmium	N00004260-006	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Cadmium	N00004260-007	0.1	0.01	0.01	0	0	1	0	0	1
CRM1.5	Channel Catfish	Cadmium	N00004260-008	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Cadmium	N00004260-009	0.1	0.01	0.01	0	1	0	0	1	0
CRM1.5	Channel Catfish	Cadmium	N00004260-010	0.1	0.01	0.01	0	0	1	0	0	1
ERM8.0	Largemouth	Cadmium	N00004447-001	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cadmium	N00004447-002	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cadmium	N00004447-003	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cadmium	N00004447-004	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cadmium	N00004447-005	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cadmium	N00004447-006	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cadmium	N00004447-007	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cadmium	N00004447-008	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Calcium	N00004256-001	112.5	83.6	232	1	1	1	0	1	1
ERM8.0	Channel Catfish	Calcium	N00004256-002	100.47	68.6	127	0	1	1	0	1	1
ERM8.0	Channel Catfish	Calcium	N00004256-003	102.4	77.1	94.4	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Largemouth	Calcium	N00004256-004	1066	1730	1720	1	1	1	0	1	1
ERM0.5	Largemouth	Calcium	N00004258-001	6304	774	.	1	1	.	0	1	.
ERM0.5	Largemouth	Calcium	N00004258-002	460.3	2990	.	1	1	.	0	1	.
ERM0.5	Largemouth	Calcium	N00004258-003	1402	2770	.	1	1	.	0	1	.
ERM0.5	Largemouth	Calcium	N00004258-004	2095	1110	.	1	1	.	0	1	.
ERM0.5	Largemouth	Calcium	N00004258-005	162.3	1550	.	1	1	.	0	1	.
ERM0.5	Largemouth	Calcium	N00004258-006	411.5	141	.	1	1	.	0	1	.
ERM0.5	Largemouth	Calcium	N00004258-007	134.6	1010	.	1	1	.	0	1	.
ERM0.5	Largemouth	Calcium	N00004258-008	355.2	214	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Calcium	N00004258-009	162.2	617	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Calcium	N00004258-010	219.2	1730	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Calcium	N00004258-011	181	192	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Calcium	N00004258-012	115.8	513	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Calcium	N00004258-013	401.2	653	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Calcium	N00004258-014	99.29	108	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Calcium	N00004258-015	6327	1520	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Calcium	N00004258-016	313.9	3050	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Calcium	N00004258-017	151.6	637	.	1	1	.	1	1	.
CRM9.5	Largemouth	Calcium	N00004259-001	4025	2190	2870	1	1	1	1	1	1
CRM9.5	Largemouth	Calcium	N00004259-002	355.9	3590	3550	1	1	1	1	1	1
CRM9.5	Largemouth	Calcium	N00004259-003	874	2790	1170	1	1	1	1	1	1
CRM9.5	Largemouth	Calcium	N00004259-004	7426	1870	2990	1	1	1	1	1	1
CRM9.5	Largemouth	Calcium	N00004259-005	1563	3150	462	1	1	1	1	1	1
CRM9.5	Channel Catfish	Calcium	N00004259-006	1189	413	19400	1	1	1	1	1	1
CRM9.5	Channel Catfish	Calcium	N00004259-007	346.3	241	212	1	1	1	1	1	1
CRM9.5	Channel Catfish	Calcium	N00004259-008	660.1	215	125	1	1	1	1	1	1
CRM9.5	Channel Catfish	Calcium	N00004259-009	99.8	12200	789	0	1	1	0	1	1
CRM9.5	Blue Catfish	Calcium	N00004259-010	857.5	307	267	1	1	1	1	1	1
CRM9.5	Blue Catfish	Calcium	N00004259-011	100.9	3300	149	1	1	1	1	1	1
CRM9.5	Blue Catfish	Calcium	N00004259-012	1347	603	1100	1	1	1	1	1	1
CRM9.5	Blue Catfish	Calcium	N00004259-013	540.2	1440	1480	1	1	1	1	1	1
CRM9.5	Blue Catfish	Calcium	N00004259-014	143.1	2420	269	1	1	1	1	1	1
CRM1.5	Largemouth	Calcium	N00004260-001	3232	1290	3410	1	1	1	1	1	1
CRM1.5	Largemouth	Calcium	N00004260-002	4531	3710	4660	1	1	1	1	1	1
CRM1.5	Largemouth	Calcium	N00004260-003	1042	1130	1600	1	1	1	1	1	1
CRM1.5	Largemouth	Calcium	N00004260-004	1969	601	1180	1	1	1	1	1	1
CRM1.5	Spotted Bass	Calcium	N00004260-005	6679	2580	2320	1	1	1	1	1	1
CRM1.5	Channel Catfish	Calcium	N00004260-006	378.1	194	179	1	1	1	1	1	1
CRM1.5	Channel Catfish	Calcium	N00004260-007	156.8	563	2430	1	1	1	1	1	1
CRM1.5	Channel Catfish	Calcium	N00004260-008	778.1	1650	383	1	1	1	1	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Channel Catfish	Calcium	N00004260-009	185	580	175	1	1	1	1	1	1
CRM1.5	Channel Catfish	Calcium	N00004260-010	185	1930	285	1	1	1	1	1	1
ERM8.0	Largemouth	Calcium	N00004447-001	109.8	138	202	1	1	1	1	1	1
ERM8.0	Largemouth	Calcium	N00004447-002	750.3	136	1130	1	1	1	1	1	1
ERM8.0	Largemouth	Calcium	N00004447-003	99.33	106	286	0	1	1	0	1	1
ERM8.0	Largemouth	Calcium	N00004447-004	100.5	126	110	1	1	1	1	1	1
ERM8.0	Largemouth	Calcium	N00004447-005	99.09	371	123	0	1	1	0	1	1
ERM8.0	Channel Catfish	Calcium	N00004447-006	100.19	77.9	78.8	0	1	1	0	1	1
ERM8.0	Channel Catfish	Calcium	N00004447-007	99.3	76.8	86.6	0	1	1	0	1	1
ERM8.0	Channel Catfish	Calcium	N00004447-008	99.4	67.3	82.1	0	1	1	0	1	1
ERM8.0	Channel Catfish	Chromium	N00004256-001	0.15	0.13	0.15	1	0	1	1	0	1
ERM8.0	Channel Catfish	Chromium	N00004256-002	0.43	0.12	0.7	1	0	1	1	0	1
ERM8.0	Channel Catfish	Chromium	N00004256-003	0.13	0.12	0.13	1	0	0	1	0	0
ERM8.0	Largemouth	Chromium	N00004256-004	0.13	0.12	0.16	1	0	1	1	0	1
ERM0.5	Largemouth	Chromium	N00004258-001	0.24	0.12	.	1	0	.	1	0	.
ERM0.5	Largemouth	Chromium	N00004258-002	0.16	0.12	.	1	0	.	1	0	.
ERM0.5	Largemouth	Chromium	N00004258-003	0.1	0.12	.	0	0	.	1	0	.
ERM0.5	Largemouth	Chromium	N00004258-004	0.12	0.12	.	1	0	.	1	0	.
ERM0.5	Largemouth	Chromium	N00004258-005	0.1	0.13	.	1	0	.	1	0	.
ERM0.5	Largemouth	Chromium	N00004258-006	0.1	0.11	.	0	0	.	1	0	.
ERM0.5	Largemouth	Chromium	N00004258-007	0.1	0.13	.	1	0	.	1	0	.
ERM0.5	Largemouth	Chromium	N00004258-008	0.12	0.13	.	1	0	.	1	0	.
ERM0.5	Channel Catfish	Chromium	N00004258-009	0.11	0.12	.	1	0	.	1	0	.
ERM0.5	Channel Catfish	Chromium	N00004258-010	0.11	0.12	.	1	0	.	1	0	.
ERM0.5	Channel Catfish	Chromium	N00004258-011	0.12	0.13	.	1	0	.	1	0	.
ERM0.5	Channel Catfish	Chromium	N00004258-012	0.1	0.12	.	0	0	.	1	0	.
ERM0.5	Blue Catfish	Chromium	N00004258-013	0.1	0.13	.	1	0	.	1	0	.
ERM0.5	Blue Catfish	Chromium	N00004258-014	0.1	0.11	.	0	0	.	1	0	.
ERM0.5	Blue Catfish	Chromium	N00004258-015	0.1	0.12	.	0	0	.	1	0	.
ERM0.5	Blue Catfish	Chromium	N00004258-016	0.16	0.37	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Chromium	N00004258-017	0.1	0.17	.	0	1	.	1	1	.
CRM9.5	Largemouth	Chromium	N00004259-001	0.1	0.12	0.12	0	0	0	1	0	0
CRM9.5	Largemouth	Chromium	N00004259-002	0.11	0.13	0.12	1	0	0	1	0	0
CRM9.5	Largemouth	Chromium	N00004259-003	0.14	0.12	0.12	1	0	0	1	0	0
CRM9.5	Largemouth	Chromium	N00004259-004	0.1	0.12	0.13	0	0	0	1	0	0
CRM9.5	Largemouth	Chromium	N00004259-005	0.11	0.11	0.12	1	0	0	1	0	0
CRM9.5	Channel Catfish	Chromium	N00004259-006	0.1	0.12	0.12	0	0	0	1	0	0
CRM9.5	Channel Catfish	Chromium	N00004259-007	0.1	0.12	0.12	0	0	0	1	0	0
CRM9.5	Channel Catfish	Chromium	N00004259-008	0.17	0.12	0.27	1	0	1	1	0	1
CRM9.5	Channel Catfish	Chromium	N00004259-009	0.16	0.13	0.86	1	0	1	1	0	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Blue Catfish	Chromium	N00004259-010	0.1	0.13	0.19	0	0	1	1	0	1
CRM9.5	Blue Catfish	Chromium	N00004259-011	0.1	0.12	0.13	0	0	0	1	0	0
CRM9.5	Blue Catfish	Chromium	N00004259-012	0.1	0.12	0.13	0	0	0	1	0	0
CRM9.5	Blue Catfish	Chromium	N00004259-013	0.1	0.44	0.12	0	1	0	1	1	0
CRM9.5	Blue Catfish	Chromium	N00004259-014	0.13	0.13	0.13	1	0	0	1	0	0
CRM1.5	Largemouth	Chromium	N00004260-001	0.25	0.12	0.33	1	0	1	1	0	1
CRM1.5	Largemouth	Chromium	N00004260-002	0.18	0.12	0.25	1	0	1	1	0	1
CRM1.5	Largemouth	Chromium	N00004260-003	0.19	0.11	0.21	1	0	1	1	0	1
CRM1.5	Largemouth	Chromium	N00004260-004	0.1	0.13	0.12	0	0	0	1	0	0
CRM1.5	Spotted Bass	Chromium	N00004260-005	0.1	0.13	0.13	1	0	0	1	0	0
CRM1.5	Channel Catfish	Chromium	N00004260-006	0.13	0.13	0.15	1	0	1	1	0	1
CRM1.5	Channel Catfish	Chromium	N00004260-007	0.11	0.13	0.13	1	0	0	1	0	0
CRM1.5	Channel Catfish	Chromium	N00004260-008	0.1	0.13	0.13	0	0	0	1	0	0
CRM1.5	Channel Catfish	Chromium	N00004260-009	0.1	0.12	0.19	0	0	1	1	0	1
CRM1.5	Channel Catfish	Chromium	N00004260-010	0.1	0.13	0.13	1	0	0	1	0	0
ERM8.0	Largemouth	Chromium	N00004447-001	0.32	0.13	0.12	1	0	0	1	0	0
ERM8.0	Largemouth	Chromium	N00004447-002	0.1	0.13	0.13	0	0	0	1	0	0
ERM8.0	Largemouth	Chromium	N00004447-003	0.1	0.12	0.13	0	0	0	1	0	0
ERM8.0	Largemouth	Chromium	N00004447-004	0.11	0.13	0.44	1	0	1	1	0	1
ERM8.0	Largemouth	Chromium	N00004447-005	0.11	0.13	0.11	1	0	0	1	0	0
ERM8.0	Channel Catfish	Chromium	N00004447-006	0.1	0.12	0.12	0	0	0	1	0	0
ERM8.0	Channel Catfish	Chromium	N00004447-007	0.13	0.12	0.11	1	0	0	1	0	0
ERM8.0	Channel Catfish	Chromium	N00004447-008	0.1	0.12	0.13	0	0	0	1	0	0
ERM8.0	Channel Catfish	Cobalt	N00004256-001	0.1	0.02	0.02	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cobalt	N00004256-002	0.1	0.01	0.02	0	0	1	0	0	1
ERM8.0	Channel Catfish	Cobalt	N00004256-003	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cobalt	N00004256-004	0.1	0.01	0.01	0	0	0	0	0	0
ERM0.5	Largemouth	Cobalt	N00004258-001	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cobalt	N00004258-002	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cobalt	N00004258-003	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cobalt	N00004258-004	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cobalt	N00004258-005	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cobalt	N00004258-006	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cobalt	N00004258-007	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Cobalt	N00004258-008	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cobalt	N00004258-009	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cobalt	N00004258-010	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cobalt	N00004258-011	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Cobalt	N00004258-012	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Cobalt	N00004258-013	0.1	0.01	.	0	0	.	0	0	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Blue Catfish	Cobalt	N00004258-014	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Cobalt	N00004258-015	0.1	0.02	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Cobalt	N00004258-016	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Cobalt	N00004258-017	0.1	0.03	.	0	1	.	0	1	.
CRM9.5	Largemouth	Cobalt	N00004259-001	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cobalt	N00004259-002	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cobalt	N00004259-003	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cobalt	N00004259-004	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Cobalt	N00004259-005	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Cobalt	N00004259-006	0.1	0.02	0.03	0	1	1	0	1	1
CRM9.5	Channel Catfish	Cobalt	N00004259-007	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Cobalt	N00004259-008	0.1	0.01	0.03	0	0	1	0	0	1
CRM9.5	Channel Catfish	Cobalt	N00004259-009	0.1	0.01	0.08	0	0	1	0	0	1
CRM9.5	Blue Catfish	Cobalt	N00004259-010	0.1	0.02	0.02	0	1	1	0	1	1
CRM9.5	Blue Catfish	Cobalt	N00004259-011	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Cobalt	N00004259-012	0.1	0.01	0.02	0	0	1	0	0	1
CRM9.5	Blue Catfish	Cobalt	N00004259-013	0.1	0.04	0.02	0	1	1	0	1	1
CRM9.5	Blue Catfish	Cobalt	N00004259-014	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Cobalt	N00004260-001	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Cobalt	N00004260-002	0.1	0.01	0.02	0	0	1	0	0	1
CRM1.5	Largemouth	Cobalt	N00004260-003	0.1	0.01	0.02	0	0	1	0	0	1
CRM1.5	Largemouth	Cobalt	N00004260-004	0.1	0.02	0.02	0	0	1	0	0	1
CRM1.5	Spotted Bass	Cobalt	N00004260-005	0.1	0.01	0.02	0	0	0	0	0	0
CRM1.5	Channel Catfish	Cobalt	N00004260-006	0.1	0.02	0.02	0	0	1	0	0	1
CRM1.5	Channel Catfish	Cobalt	N00004260-007	0.1	0.02	0.02	0	0	1	0	0	1
CRM1.5	Channel Catfish	Cobalt	N00004260-008	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Cobalt	N00004260-009	0.1	0.01	0.04	0	1	1	0	1	1
CRM1.5	Channel Catfish	Cobalt	N00004260-010	0.1	0.01	0.02	0	0	1	0	0	1
ERM8.0	Largemouth	Cobalt	N00004447-001	0.1	0.01	0.02	0	0	1	0	0	1
ERM8.0	Largemouth	Cobalt	N00004447-002	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cobalt	N00004447-003	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Cobalt	N00004447-004	0.1	0.01	0.03	0	0	1	0	0	1
ERM8.0	Largemouth	Cobalt	N00004447-005	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cobalt	N00004447-006	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Cobalt	N00004447-007	0.1	0.02	0.02	0	1	1	0	1	1
ERM8.0	Channel Catfish	Cobalt	N00004447-008	0.1	0.01	0.04	0	0	1	0	0	1
ERM8.0	Channel Catfish	Copper	N00004256-001	0.57	0.57	0.57	1	1	1	0	1	1
ERM8.0	Channel Catfish	Copper	N00004256-002	0.51	1.3	0.4	0	1	1	0	1	1
ERM8.0	Channel Catfish	Copper	N00004256-003	0.5	0.42	0.47	0	1	1	0	1	1
ERM8.0	Largemouth	Copper	N00004256-004	0.76	0.53	1	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Largemouth	Copper	N00004258-001	0.49	0.27	.	0	1	.	0	1	.
ERM0.5	Largemouth	Copper	N00004258-002	0.5	4.7	.	0	1	.	0	1	.
ERM0.5	Largemouth	Copper	N00004258-003	0.51	0.41	.	1	1	.	0	1	.
ERM0.5	Largemouth	Copper	N00004258-004	0.5	0.4	.	0	1	.	0	1	.
ERM0.5	Largemouth	Copper	N00004258-005	0.49	0.42	.	0	1	.	0	1	.
ERM0.5	Largemouth	Copper	N00004258-006	0.65	0.38	.	1	1	.	0	1	.
ERM0.5	Largemouth	Copper	N00004258-007	0.5	6.8	.	1	1	.	0	1	.
ERM0.5	Largemouth	Copper	N00004258-008	0.49	0.29	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Copper	N00004258-009	0.49	0.3	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Copper	N00004258-010	0.5	0.28	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Copper	N00004258-011	0.5	0.33	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Copper	N00004258-012	0.49	4.5	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Copper	N00004258-013	0.49	0.25	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Copper	N00004258-014	0.49	0.27	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Copper	N00004258-015	0.5	0.36	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Copper	N00004258-016	0.62	4.2	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Copper	N00004258-017	0.49	2.8	.	0	1	.	0	1	.
CRM9.5	Largemouth	Copper	N00004259-001	0.51	0.29	0.34	0	1	1	0	1	1
CRM9.5	Largemouth	Copper	N00004259-002	0.5	0.32	0.39	0	1	1	0	1	1
CRM9.5	Largemouth	Copper	N00004259-003	0.5	0.37	0.38	0	1	1	0	1	1
CRM9.5	Largemouth	Copper	N00004259-004	0.49	2.1	0.37	0	1	1	0	1	1
CRM9.5	Largemouth	Copper	N00004259-005	0.5	0.33	0.39	0	1	1	0	1	1
CRM9.5	Channel Catfish	Copper	N00004259-006	0.56	0.34	0.41	1	1	1	0	1	1
CRM9.5	Channel Catfish	Copper	N00004259-007	0.49	2.5	0.32	0	1	1	0	1	1
CRM9.5	Channel Catfish	Copper	N00004259-008	1.05	0.54	1.4	1	1	1	0	1	1
CRM9.5	Channel Catfish	Copper	N00004259-009	0.51	0.49	0.47	0	1	1	0	1	1
CRM9.5	Blue Catfish	Copper	N00004259-010	0.5	0.31	0.37	0	1	1	0	1	1
CRM9.5	Blue Catfish	Copper	N00004259-011	0.49	0.38	0.36	0	1	1	0	1	1
CRM9.5	Blue Catfish	Copper	N00004259-012	0.5	0.32	0.32	0	1	1	0	1	1
CRM9.5	Blue Catfish	Copper	N00004259-013	0.51	0.34	0.35	0	1	1	0	1	1
CRM9.5	Blue Catfish	Copper	N00004259-014	0.49	2.5	0.51	0	1	1	0	1	1
CRM1.5	Largemouth	Copper	N00004260-001	0.5	0.37	0.49	0	1	1	0	1	1
CRM1.5	Largemouth	Copper	N00004260-002	0.49	0.35	0.38	0	1	1	0	1	1
CRM1.5	Largemouth	Copper	N00004260-003	0.51	0.38	0.45	0	1	1	0	1	1
CRM1.5	Largemouth	Copper	N00004260-004	0.49	0.33	0.49	0	1	1	0	1	1
CRM1.5	Spotted Bass	Copper	N00004260-005	0.51	0.4	0.45	0	1	1	0	1	1
CRM1.5	Channel Catfish	Copper	N00004260-006	0.56	0.39	0.57	1	1	1	0	1	1
CRM1.5	Channel Catfish	Copper	N00004260-007	0.49	0.36	0.45	0	1	1	0	1	1
CRM1.5	Channel Catfish	Copper	N00004260-008	0.5	0.28	0.32	0	1	1	0	1	1
CRM1.5	Channel Catfish	Copper	N00004260-009	0.5	0.37	0.54	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Channel Catfish	Copper	N00004260-010	0.53	1.6	0.49	1	1	1	0	1	1
ERM8.0	Largemouth	Copper	N00004447-001	0.5	0.27	0.24	0	1	1	0	1	1
ERM8.0	Largemouth	Copper	N00004447-002	0.49	0.2	0.34	0	1	1	0	1	1
ERM8.0	Largemouth	Copper	N00004447-003	0.49	0.28	0.3	0	1	1	0	1	1
ERM8.0	Largemouth	Copper	N00004447-004	0.5	0.35	0.3	0	1	1	0	1	1
ERM8.0	Largemouth	Copper	N00004447-005	0.49	0.23	0.28	0	1	1	0	1	1
ERM8.0	Channel Catfish	Copper	N00004447-006	0.5	0.64	0.34	0	1	1	0	1	1
ERM8.0	Channel Catfish	Copper	N00004447-007	0.5	0.25	0.32	0	1	1	0	1	1
ERM8.0	Channel Catfish	Copper	N00004447-008	0.5	0.27	0.22	0	1	1	0	1	1
ERM8.0	Channel Catfish	Iron	N00004256-001	25.09	12.4	12.5	0	0	0	0	0	0
ERM8.0	Channel Catfish	Iron	N00004256-002	25.16	35.9	11.6	0	1	0	0	1	0
ERM8.0	Channel Catfish	Iron	N00004256-003	25.05	11.6	12.3	0	0	0	0	0	0
ERM8.0	Largemouth	Iron	N00004256-004	25.09	11.4	12	0	0	0	0	0	0
ERM0.5	Largemouth	Iron	N00004258-001	24.89	11.1	.	0	0	.	0	0	.
ERM0.5	Largemouth	Iron	N00004258-002	24.96	11.6	.	0	0	.	0	0	.
ERM0.5	Largemouth	Iron	N00004258-003	25.03	11.4	.	0	0	.	0	0	.
ERM0.5	Largemouth	Iron	N00004258-004	24.85	10.9	.	0	0	.	0	0	.
ERM0.5	Largemouth	Iron	N00004258-005	24.75	12.3	.	0	0	.	0	0	.
ERM0.5	Largemouth	Iron	N00004258-006	25.32	10.8	.	0	0	.	0	0	.
ERM0.5	Largemouth	Iron	N00004258-007	24.84	11.9	.	0	0	.	0	0	.
ERM0.5	Largemouth	Iron	N00004258-008	24.82	11.9	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Iron	N00004258-009	24.93	11.5	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Iron	N00004258-010	24.88	11.8	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Iron	N00004258-011	25.11	12.2	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Iron	N00004258-012	24.89	11.3	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Iron	N00004258-013	24.99	12.1	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Iron	N00004258-014	24.82	10.8	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Iron	N00004258-015	24.98	11.4	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Iron	N00004258-016	24.94	11.4	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Iron	N00004258-017	25.08	12.5	.	0	0	.	0	0	.
CRM9.5	Largemouth	Iron	N00004259-001	24.84	11.4	11.3	0	0	0	0	0	0
CRM9.5	Largemouth	Iron	N00004259-002	25.17	12.3	11.4	0	0	0	0	0	0
CRM9.5	Largemouth	Iron	N00004259-003	24.74	11.7	11.4	0	0	0	0	0	0
CRM9.5	Largemouth	Iron	N00004259-004	24.75	11.5	12	0	0	0	0	0	0
CRM9.5	Largemouth	Iron	N00004259-005	24.86	10.7	11.2	0	0	0	0	0	0
CRM9.5	Channel Catfish	Iron	N00004259-006	24.88	11.8	11.1	0	0	0	0	0	0
CRM9.5	Channel Catfish	Iron	N00004259-007	24.86	11.4	11.8	0	0	0	0	0	0
CRM9.5	Channel Catfish	Iron	N00004259-008	24.94	11.2	11.6	0	0	0	0	0	0
CRM9.5	Channel Catfish	Iron	N00004259-009	24.9	12.3	35.3	0	0	0	0	0	0
CRM9.5	Blue Catfish	Iron	N00004259-010	24.92	12.3	11.9	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Blue Catfish	Iron	N00004259-011	24.95	11.5	12.3	0	0	0	0	0	0
CRM9.5	Blue Catfish	Iron	N00004259-012	24.96	11.5	12	0	0	0	0	0	0
CRM9.5	Blue Catfish	Iron	N00004259-013	24.96	12.1	11	0	0	0	0	0	0
CRM9.5	Blue Catfish	Iron	N00004259-014	24.77	11.9	12.1	0	0	0	0	0	0
CRM1.5	Largemouth	Iron	N00004260-001	25.09	11	10.9	0	0	0	0	0	0
CRM1.5	Largemouth	Iron	N00004260-002	25.01	11.1	11.6	0	0	0	0	0	0
CRM1.5	Largemouth	Iron	N00004260-003	24.95	10.8	12.4	0	0	0	0	0	0
CRM1.5	Largemouth	Iron	N00004260-004	24.91	12.5	11.1	0	0	0	0	0	0
CRM1.5	Spotted Bass	Iron	N00004260-005	24.9	12.2	12.5	0	0	0	0	0	0
CRM1.5	Channel Catfish	Iron	N00004260-006	24.94	12.5	12.3	0	0	0	0	0	0
CRM1.5	Channel Catfish	Iron	N00004260-007	24.99	12.5	12.1	0	0	0	0	0	0
CRM1.5	Channel Catfish	Iron	N00004260-008	24.88	12.4	12.3	0	0	0	0	0	0
CRM1.5	Channel Catfish	Iron	N00004260-009	24.99	11.7	11.7	0	0	0	0	0	0
CRM1.5	Channel Catfish	Iron	N00004260-010	24.82	12	12.3	0	0	0	0	0	0
ERM8.0	Largemouth	Iron	N00004447-001	24.99	12.4	11.1	0	0	0	0	0	0
ERM8.0	Largemouth	Iron	N00004447-002	25.01	11.9	12.2	0	0	0	0	0	0
ERM8.0	Largemouth	Iron	N00004447-003	24.73	10.9	12.1	0	0	0	0	0	0
ERM8.0	Largemouth	Iron	N00004447-004	24.96	12.1	10.9	0	0	0	0	0	0
ERM8.0	Largemouth	Iron	N00004447-005	24.72	12.3	10.7	0	0	0	0	0	0
ERM8.0	Channel Catfish	Iron	N00004447-006	25.15	11.4	11.1	0	0	0	0	0	0
ERM8.0	Channel Catfish	Iron	N00004447-007	24.88	11.7	10.8	0	0	0	0	0	0
ERM8.0	Channel Catfish	Iron	N00004447-008	24.95	11	11.9	0	0	0	0	0	0
ERM8.0	Channel Catfish	Lead	N00004256-001	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Lead	N00004256-002	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Lead	N00004256-003	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Lead	N00004256-004	0.1	0.03	0.03	0	0	0	0	0	0
ERM0.5	Largemouth	Lead	N00004258-001	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Lead	N00004258-002	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Lead	N00004258-003	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Lead	N00004258-004	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Lead	N00004258-005	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Lead	N00004258-006	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Lead	N00004258-007	0.1	0.03	.	0	1	.	0	1	.
ERM0.5	Largemouth	Lead	N00004258-008	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Lead	N00004258-009	0.1	0.03	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Lead	N00004258-010	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Lead	N00004258-011	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Lead	N00004258-012	0.1	0.04	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Lead	N00004258-013	0.1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Lead	N00004258-014	0.1	0.03	.	0	0	.	0	0	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Blue Catfish	Lead	N00004258-015	0.14	0.04	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Lead	N00004258-016	0.1	0.04	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Lead	N00004258-017	0.1	0.03	.	0	1	.	0	1	.
CRM9.5	Largemouth	Lead	N00004259-001	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Lead	N00004259-002	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Lead	N00004259-003	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Lead	N00004259-004	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Lead	N00004259-005	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Lead	N00004259-006	0.1	0.03	0.24	0	0	1	0	0	1
CRM9.5	Channel Catfish	Lead	N00004259-007	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Lead	N00004259-008	0.1	0.03	0.03	0	0	1	0	0	1
CRM9.5	Channel Catfish	Lead	N00004259-009	0.1	0.07	0.08	0	1	0	0	1	0
CRM9.5	Blue Catfish	Lead	N00004259-010	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Lead	N00004259-011	0.1	0.06	0.03	0	1	0	0	1	0
CRM9.5	Blue Catfish	Lead	N00004259-012	0.1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Lead	N00004259-013	0.1	0.05	0.03	0	1	1	0	1	1
CRM9.5	Blue Catfish	Lead	N00004259-014	0.1	0.08	0.03	0	1	0	0	1	0
CRM1.5	Largemouth	Lead	N00004260-001	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Lead	N00004260-002	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Lead	N00004260-003	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Lead	N00004260-004	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Spotted Bass	Lead	N00004260-005	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Lead	N00004260-006	0.16	0.03	0.03	1	0	0	0	0	0
CRM1.5	Channel Catfish	Lead	N00004260-007	0.1	0.03	0.04	0	0	1	0	0	1
CRM1.5	Channel Catfish	Lead	N00004260-008	0.1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Lead	N00004260-009	0.1	0.03	0.03	0	1	0	0	1	0
CRM1.5	Channel Catfish	Lead	N00004260-010	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Lead	N00004447-001	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Lead	N00004447-002	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Lead	N00004447-003	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Lead	N00004447-004	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Lead	N00004447-005	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Lead	N00004447-006	0.1	0.03	0.03	0	1	0	0	1	0
ERM8.0	Channel Catfish	Lead	N00004447-007	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Lead	N00004447-008	0.1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Magnesium	N00004256-001	183.4	202	214	1	1	1	0	1	1
ERM8.0	Channel Catfish	Magnesium	N00004256-002	171.7	207	201	1	1	1	0	1	1
ERM8.0	Channel Catfish	Magnesium	N00004256-003	213	254	246	1	1	1	0	1	1
ERM8.0	Largemouth Bass	Magnesium	N00004256-004	257.6	309	334	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Largemouth Bass	Magnesium	N00004258-001	359	320	.	1	1	.	0	1	.
ERM0.5	Largemouth Bass	Magnesium	N00004258-002	256.5	356	.	1	1	.	0	1	.
ERM0.5	Largemouth Bass	Magnesium	N00004258-003	257.6	357	.	1	1	.	0	1	.
ERM0.5	Largemouth Bass	Magnesium	N00004258-004	300.8	320	.	1	1	.	0	1	.
ERM0.5	Largemouth Bass	Magnesium	N00004258-005	221.7	315	.	1	1	.	0	1	.
ERM0.5	Largemouth Bass	Magnesium	N00004258-006	270.1	289	.	1	1	.	0	1	.
ERM0.5	Largemouth Bass	Magnesium	N00004258-007	252.5	310	.	1	1	.	0	1	.
ERM0.5	Largemouth Bass	Magnesium	N00004258-008	252.5	292	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Magnesium	N00004258-009	169.1	221	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Magnesium	N00004258-010	205.3	280	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Magnesium	N00004258-011	182.5	234	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Magnesium	N00004258-012	181.9	220	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Magnesium	N00004258-013	209.1	251	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Magnesium	N00004258-014	204.9	223	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Magnesium	N00004258-015	275.7	227	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Magnesium	N00004258-016	207.5	285	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Magnesium	N00004258-017	201.4	243	.	1	1	.	0	1	.
CRM9.5	Largemouth Bass	Magnesium	N00004259-001	326.6	313	319	1	1	1	0	1	1
CRM9.5	Largemouth Bass	Magnesium	N00004259-002	269.1	352	347	1	1	1	0	1	1
CRM9.5	Largemouth Bass	Magnesium	N00004259-003	254.2	315	294	1	1	1	0	1	1
CRM9.5	Largemouth Bass	Magnesium	N00004259-004	374.6	319	359	1	1	1	0	1	1
CRM9.5	Largemouth Bass	Magnesium	N00004259-005	289.2	353	307	1	1	1	0	1	1
CRM9.5	Channel Catfish	Magnesium	N00004259-006	227.3	236	556	1	1	1	0	1	1
CRM9.5	Channel Catfish	Magnesium	N00004259-007	189.6	208	208	1	1	1	0	1	1
CRM9.5	Channel Catfish	Magnesium	N00004259-008	227.9	234	277	1	1	1	0	1	1
CRM9.5	Channel Catfish	Magnesium	N00004259-009	223.7	439	275	1	1	1	0	1	1
CRM9.5	Blue Catfish	Magnesium	N00004259-010	212	226	224	1	1	1	0	1	1
CRM9.5	Blue Catfish	Magnesium	N00004259-011	217.4	287	203	1	1	1	0	1	1
CRM9.5	Blue Catfish	Magnesium	N00004259-012	201.8	221	233	1	1	1	0	1	1
CRM9.5	Blue Catfish	Magnesium	N00004259-013	214.5	254	237	1	1	1	0	1	1
CRM9.5	Blue Catfish	Magnesium	N00004259-014	208.7	271	231	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Largemouth Bass	Magnesium	N00004260-001	309.6	311	362	1	1	1	0	1	1
CRM1.5	Largemouth Bass	Magnesium	N00004260-002	323.9	362	358	1	1	1	0	1	1
CRM1.5	Largemouth Bass	Magnesium	N00004260-003	281.8	301	300	1	1	1	0	1	1
CRM1.5	Largemouth Bass	Magnesium	N00004260-004	282	282	324	1	1	1	0	1	1
CRM1.5	Spotted Bass	Magnesium	N00004260-005	331.1	299	306	1	1	1	0	1	1
CRM1.5	Channel Catfish	Magnesium	N00004260-006	243.3	278	278	1	1	1	0	1	1
CRM1.5	Channel Catfish	Magnesium	N00004260-007	181.3	220	236	1	1	1	0	1	1
CRM1.5	Channel Catfish	Magnesium	N00004260-008	212.9	261	221	1	1	1	0	1	1
CRM1.5	Channel Catfish	Magnesium	N00004260-009	247.8	253	272	1	1	1	0	1	1
CRM1.5	Channel Catfish	Magnesium	N00004260-010	197	270	230	1	1	1	0	1	1
ERM8.0	Largemouth Bass	Magnesium	N00004447-001	252	265	297	1	1	1	0	1	1
ERM8.0	Largemouth Bass	Magnesium	N00004447-002	260.4	318	353	1	1	1	0	1	1
ERM8.0	Largemouth Bass	Magnesium	N00004447-003	253.7	292	315	1	1	1	0	1	1
ERM8.0	Largemouth Bass	Magnesium	N00004447-004	266.2	290	284	1	1	1	0	1	1
ERM8.0	Largemouth Bass	Magnesium	N00004447-005	251.3	280	293	1	1	1	0	1	1
ERM8.0	Channel Catfish	Magnesium	N00004447-006	195.2	224	208	1	1	1	0	1	1
ERM8.0	Channel Catfish	Magnesium	N00004447-007	179.7	229	199	1	1	1	0	1	1
ERM8.0	Channel Catfish	Magnesium	N00004447-008	209.9	227	233	1	1	1	0	1	1
ERM8.0	Channel Catfish	Manganese	N00004256-001	0.5	0.18	0.63	0	1	1	0	1	1
ERM8.0	Channel Catfish	Manganese	N00004256-002	0.51	0.25	0.23	0	1	1	0	1	1
ERM8.0	Channel Catfish	Manganese	N00004256-003	0.5	0.18	0.29	0	1	1	0	1	1
ERM8.0	Largemouth	Manganese	N00004256-004	0.49	0.31	0.41	0	1	1	0	1	1
ERM0.5	Largemouth	Manganese	N00004258-001	1.16	0.21	.	1	1	.	0	1	.
ERM0.5	Largemouth	Manganese	N00004258-002	0.5	0.87	.	0	1	.	0	1	.
ERM0.5	Largemouth	Manganese	N00004258-003	0.51	0.39	.	0	1	.	0	1	.
ERM0.5	Largemouth	Manganese	N00004258-004	0.5	0.28	.	0	1	.	0	1	.
ERM0.5	Largemouth	Manganese	N00004258-005	0.49	0.22	.	0	1	.	0	1	.
ERM0.5	Largemouth	Manganese	N00004258-006	0.51	0.15	.	0	0	.	0	0	.
ERM0.5	Largemouth	Manganese	N00004258-007	0.5	0.26	.	0	1	.	0	1	.
ERM0.5	Largemouth	Manganese	N00004258-008	0.49	0.17	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Manganese	N00004258-009	0.49	0.48	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Manganese	N00004258-010	0.5	1.3	.	0	1	.	0	1	.
ERM0.5	Channel Catfish	Manganese	N00004258-011	0.66	0.38	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Manganese	N00004258-012	0.49	0.44	.	0	1	.	0	1	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Blue Catfish	Manganese	N00004258-013	0.63	3	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Manganese	N00004258-014	0.49	0.16	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Manganese	N00004258-015	5.66	1.9	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Manganese	N00004258-016	0.49	1.7	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Manganese	N00004258-017	0.49	0.6	.	0	1	.	0	1	.
CRM9.5	Largemouth	Manganese	N00004259-001	0.51	0.25	0.43	0	1	1	0	1	1
CRM9.5	Largemouth	Manganese	N00004259-002	0.5	0.32	0.44	0	1	1	0	1	1
CRM9.5	Largemouth	Manganese	N00004259-003	0.5	0.31	0.23	0	1	1	0	1	1
CRM9.5	Largemouth	Manganese	N00004259-004	1.05	0.35	0.5	1	1	1	0	1	1
CRM9.5	Largemouth	Manganese	N00004259-005	0.5	0.36	0.18	0	1	1	0	1	1
CRM9.5	Channel Catfish	Manganese	N00004259-006	0.83	0.38	12.1	1	1	1	0	1	1
CRM9.5	Channel Catfish	Manganese	N00004259-007	0.49	0.21	0.37	0	1	1	0	1	1
CRM9.5	Channel Catfish	Manganese	N00004259-008	0.54	0.25	0.77	1	1	1	0	1	1
CRM9.5	Channel Catfish	Manganese	N00004259-009	0.51	5.8	1.6	0	1	1	0	1	1
CRM9.5	Blue Catfish	Manganese	N00004259-010	0.69	0.31	0.38	1	1	1	0	1	1
CRM9.5	Blue Catfish	Manganese	N00004259-011	0.49	1.7	0.27	0	1	1	0	1	1
CRM9.5	Blue Catfish	Manganese	N00004259-012	0.87	0.46	0.78	1	1	1	0	1	1
CRM9.5	Blue Catfish	Manganese	N00004259-013	0.51	1.3	0.98	0	1	1	0	1	1
CRM9.5	Blue Catfish	Manganese	N00004259-014	0.49	1.4	0.32	0	1	1	0	1	1
CRM1.5	Largemouth	Manganese	N00004260-001	0.5	0.27	0.53	0	1	1	0	1	1
CRM1.5	Largemouth	Manganese	N00004260-002	0.9	0.72	1.2	1	1	1	0	1	1
CRM1.5	Largemouth	Manganese	N00004260-003	0.51	0.18	0.31	0	1	1	0	1	1
CRM1.5	Largemouth	Manganese	N00004260-004	0.49	0.22	0.37	0	1	1	0	1	1
CRM1.5	Spotted Bass	Manganese	N00004260-005	0.51	0.29	0.21	0	1	1	0	1	1
CRM1.5	Channel Catfish	Manganese	N00004260-006	0.5	0.3	0.31	0	1	1	0	1	1
CRM1.5	Channel Catfish	Manganese	N00004260-007	0.49	0.45	1.1	0	1	1	0	1	1
CRM1.5	Channel Catfish	Manganese	N00004260-008	0.56	0.93	0.38	1	1	1	0	1	1
CRM1.5	Channel Catfish	Manganese	N00004260-009	0.5	0.54	0.54	0	1	1	0	1	1
CRM1.5	Channel Catfish	Manganese	N00004260-010	0.49	1.4	0.64	0	1	1	0	1	1
ERM8.0	Largemouth	Manganese	N00004447-001	0.5	0.18	0.25	0	0	1	0	0	1
ERM8.0	Largemouth	Manganese	N00004447-002	0.49	0.17	0.23	0	0	1	0	0	1
ERM8.0	Largemouth	Manganese	N00004447-003	0.49	0.15	0.2	0	0	1	0	0	1
ERM8.0	Largemouth	Manganese	N00004447-004	0.5	0.17	0.24	0	0	1	0	0	1
ERM8.0	Largemouth	Manganese	N00004447-005	0.49	0.17	0.15	0	0	0	0	0	0
ERM8.0	Channel Catfish	Manganese	N00004447-006	0.5	0.16	0.18	0	1	1	0	1	1
ERM8.0	Channel Catfish	Manganese	N00004447-007	0.5	0.27	0.26	0	1	1	0	1	1
ERM8.0	Channel Catfish	Manganese	N00004447-008	0.5	0.18	0.25	0	1	1	0	1	1
ERM8.0	Channel Catfish	Mercury	N00004256-001	0.07	0.09	0.1	1	1	1	1	1	1
ERM8.0	Channel Catfish	Mercury	N00004256-002	0.06	0.08	0.09	1	1	1	1	1	1
ERM8.0	Channel Catfish	Mercury	N00004256-003	0.18	0.24	0.23	1	1	1	1	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Largemouth	Mercury	N00004256-004	0.08	0.11	0.14	1	1	1	1	1	1
ERM0.5	Largemouth	Mercury	N00004258-001	0.08	0.1	.	1	1	.	1	1	.
ERM0.5	Largemouth	Mercury	N00004258-002	0.04	0.05	.	1	1	.	1	1	.
ERM0.5	Largemouth	Mercury	N00004258-003	0.02	0.02	.	0	1	.	1	1	.
ERM0.5	Largemouth	Mercury	N00004258-004	0.02	0.03	.	1	1	.	1	1	.
ERM0.5	Largemouth	Mercury	N00004258-005	0.03	0.04	.	1	1	.	1	1	.
ERM0.5	Largemouth	Mercury	N00004258-006	0.03	0.04	.	1	1	.	1	1	.
ERM0.5	Largemouth	Mercury	N00004258-007	0.03	0.04	.	1	1	.	1	1	.
ERM0.5	Largemouth	Mercury	N00004258-008	0.08	0.09	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Mercury	N00004258-009	0.04	0.06	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Mercury	N00004258-010	0.05	0.07	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Mercury	N00004258-011	0.05	0.11	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Mercury	N00004258-012	0.03	0.06	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Mercury	N00004258-013	0.05	0.06	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Mercury	N00004258-014	0.06	0.06	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Mercury	N00004258-015	0.06	0.08	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Mercury	N00004258-016	0.09	0.11	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Mercury	N00004258-017	0.04	0.05	.	0	1	.	0	1	.
CRM9.5	Largemouth	Mercury	N00004259-001	0.08	0.1	0.12	1	1	1	0	1	1
CRM9.5	Largemouth	Mercury	N00004259-002	0.18	0.21	0.21	1	1	1	0	1	1
CRM9.5	Largemouth	Mercury	N00004259-003	0.05	0.06	0.05	1	1	1	0	1	1
CRM9.5	Largemouth	Mercury	N00004259-004	0.04	0.04	0.04	0	1	1	0	1	1
CRM9.5	Largemouth	Mercury	N00004259-005	0.09	0.11	0.1	1	1	1	0	1	1
CRM9.5	Channel Catfish	Mercury	N00004259-006	0.06	0.07	0.07	1	1	1	0	1	1
CRM9.5	Channel Catfish	Mercury	N00004259-007	0.05	0.06	0.05	1	1	1	0	1	1
CRM9.5	Channel Catfish	Mercury	N00004259-008	0.06	0.08	0.1	1	1	1	0	1	1
CRM9.5	Channel Catfish	Mercury	N00004259-009	0.11	0.16	0.18	1	1	1	0	1	1
CRM9.5	Blue Catfish	Mercury	N00004259-010	0.09	0.14	0.15	1	1	1	0	1	1
CRM9.5	Blue Catfish	Mercury	N00004259-011	0.18	0.23	0.23	1	1	1	0	1	1
CRM9.5	Blue Catfish	Mercury	N00004259-012	0.08	0.1	0.1	1	1	1	0	1	1
CRM9.5	Blue Catfish	Mercury	N00004259-013	0.07	0.08	0.07	1	1	1	0	1	1
CRM9.5	Blue Catfish	Mercury	N00004259-014	0.08	0.1	0.08	1	1	1	0	1	1
CRM1.5	Largemouth	Mercury	N00004260-001	0.04	0.06	0.04	0	1	1	0	1	1
CRM1.5	Largemouth	Mercury	N00004260-002	0.05	0.06	0.05	0	1	1	0	1	1
CRM1.5	Largemouth	Mercury	N00004260-003	0.02	0.02	0.03	0	1	1	0	1	1
CRM1.5	Largemouth	Mercury	N00004260-004	0.02	0.02	0.02	0	1	1	0	1	1
CRM1.5	Spotted Bass	Mercury	N00004260-005	0.07	0.09	0.09	1	1	1	0	1	1
CRM1.5	Channel Catfish	Mercury	N00004260-006	0.03	0.05	0.05	1	1	1	1	1	1
CRM1.5	Channel Catfish	Mercury	N00004260-007	0.21	0.36	0.3	1	1	1	1	1	1
CRM1.5	Channel Catfish	Mercury	N00004260-008	0.04	0.05	0.04	1	1	1	1	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Channel Catfish	Mercury	N00004260-009	0.04	0.05	0.06	1	1	1	1	1	1
CRM1.5	Channel Catfish	Mercury	N00004260-010	0.03	0.03	0.04	1	1	1	1	1	1
ERM8.0	Largemouth	Mercury	N00004447-001	0.11	0.12	0.13	1	1	1	1	1	1
ERM8.0	Largemouth	Mercury	N00004447-002	0.09	0.13	0.17	1	1	1	1	1	1
ERM8.0	Largemouth	Mercury	N00004447-003	0.13	0.18	0.21	1	1	1	1	1	1
ERM8.0	Largemouth	Mercury	N00004447-004	0.08	0.11	0.11	1	1	1	1	1	1
ERM8.0	Largemouth	Mercury	N00004447-005	0.12	0.14	0.15	1	1	1	1	1	1
ERM8.0	Channel Catfish	Mercury	N00004447-006	0.04	0.05	0.05	1	1	1	1	1	1
ERM8.0	Channel Catfish	Mercury	N00004447-007	0.03	0.04	0.04	1	1	1	1	1	1
ERM8.0	Channel Catfish	Mercury	N00004447-008	0.22	0.24	0.24	1	1	1	1	1	1
ERM8.0	Channel Catfish	Molybdenum	N00004256-001	1	0.04	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Molybdenum	N00004256-002	1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Molybdenum	N00004256-003	0.99	0.03	0.04	0	0	0	0	0	0
ERM8.0	Largemouth	Molybdenum	N00004256-004	1.01	0.03	0.09	0	0	0	0	0	0
ERM0.5	Largemouth	Molybdenum	N00004258-001	1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Molybdenum	N00004258-002	0.98	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Molybdenum	N00004258-003	1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Molybdenum	N00004258-004	1	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Molybdenum	N00004258-005	1	0.04	.	0	0	.	0	0	.
ERM0.5	Largemouth	Molybdenum	N00004258-006	1.01	0.03	.	0	0	.	0	0	.
ERM0.5	Largemouth	Molybdenum	N00004258-007	0.99	0.04	.	0	0	.	0	0	.
ERM0.5	Largemouth	Molybdenum	N00004258-008	0.98	0.04	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Molybdenum	N00004258-009	1	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Molybdenum	N00004258-010	0.99	0.03	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Molybdenum	N00004258-011	1.01	0.04	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Molybdenum	N00004258-012	1.01	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Molybdenum	N00004258-013	1	0.04	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Molybdenum	N00004258-014	0.99	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Molybdenum	N00004258-015	1	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Molybdenum	N00004258-016	1.01	0.03	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Molybdenum	N00004258-017	0.99	0.04	.	0	0	.	0	0	.
CRM9.5	Largemouth	Molybdenum	N00004259-001	0.99	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Molybdenum	N00004259-002	1	0.04	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Molybdenum	N00004259-003	1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Largemouth	Molybdenum	N00004259-004	1	0.03	0.04	0	0	0	0	0	0
CRM9.5	Largemouth	Molybdenum	N00004259-005	1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Molybdenum	N00004259-006	1	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Molybdenum	N00004259-007	1	0.03	0.04	0	0	0	0	0	0
CRM9.5	Channel Catfish	Molybdenum	N00004259-008	0.99	0.03	0.03	0	0	0	0	0	0
CRM9.5	Channel Catfish	Molybdenum	N00004259-009	0.99	0.04	0.1	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Blue Catfish	Molybdenum	N00004259-010	0.99	0.04	0.04	0	0	0	0	0	0
CRM9.5	Blue Catfish	Molybdenum	N00004259-011	1	0.03	0.04	0	0	0	0	0	0
CRM9.5	Blue Catfish	Molybdenum	N00004259-012	0.99	0.03	0.04	0	0	0	0	0	0
CRM9.5	Blue Catfish	Molybdenum	N00004259-013	0.99	0.04	0.03	0	0	0	0	0	0
CRM9.5	Blue Catfish	Molybdenum	N00004259-014	0.99	0.04	0.04	0	0	0	0	0	0
CRM1.5	Largemouth	Molybdenum	N00004260-001	0.99	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Molybdenum	N00004260-002	1	0.03	0.03	0	0	0	0	0	0
CRM1.5	Largemouth	Molybdenum	N00004260-003	0.99	0.03	0.04	0	0	0	0	0	0
CRM1.5	Largemouth	Molybdenum	N00004260-004	0.99	0.04	0.03	0	0	0	0	0	0
CRM1.5	Spotted Bass	Molybdenum	N00004260-005	0.99	0.04	0.04	0	0	0	0	0	0
CRM1.5	Channel Catfish	Molybdenum	N00004260-006	1	0.04	0.04	0	0	0	0	0	0
CRM1.5	Channel Catfish	Molybdenum	N00004260-007	1	0.04	0.04	0	0	0	0	0	0
CRM1.5	Channel Catfish	Molybdenum	N00004260-008	1	0.04	0.04	0	0	0	0	0	0
CRM1.5	Channel Catfish	Molybdenum	N00004260-009	1.01	0.03	0.03	0	0	0	0	0	0
CRM1.5	Channel Catfish	Molybdenum	N00004260-010	1	0.04	0.04	0	0	0	0	0	0
ERM8.0	Largemouth	Molybdenum	N00004447-001	1.01	0.04	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Molybdenum	N00004447-002	1	0.04	0.04	0	0	0	0	0	0
ERM8.0	Largemouth	Molybdenum	N00004447-003	0.99	0.03	0.04	0	0	0	0	0	0
ERM8.0	Largemouth	Molybdenum	N00004447-004	1	0.04	0.03	0	0	0	0	0	0
ERM8.0	Largemouth	Molybdenum	N00004447-005	0.99	0.04	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Molybdenum	N00004447-006	1.01	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Molybdenum	N00004447-007	1	0.03	0.03	0	0	0	0	0	0
ERM8.0	Channel Catfish	Molybdenum	N00004447-008	0.99	0.03	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Nickel	N00004256-001	0.1	0.1	0.1	0	0	0	1	0	0
ERM8.0	Channel Catfish	Nickel	N00004256-002	0.2	0.09	0.35	1	1	1	1	1	1
ERM8.0	Channel Catfish	Nickel	N00004256-003	0.1	0.09	0.1	0	0	0	1	0	0
ERM8.0	Largemouth	Nickel	N00004256-004	0.1	0.09	0.1	0	0	0	1	0	0
ERM0.5	Largemouth	Nickel	N00004258-001	0.1	0.09	.	0	0	.	1	0	.
ERM0.5	Largemouth	Nickel	N00004258-002	0.1	0.1	.	0	1	.	1	1	.
ERM0.5	Largemouth	Nickel	N00004258-003	0.1	0.09	.	0	0	.	1	0	.
ERM0.5	Largemouth	Nickel	N00004258-004	0.1	0.09	.	0	0	.	1	0	.
ERM0.5	Largemouth	Nickel	N00004258-005	0.1	0.1	.	0	0	.	1	0	.
ERM0.5	Largemouth	Nickel	N00004258-006	0.1	0.09	.	0	0	.	1	0	.
ERM0.5	Largemouth	Nickel	N00004258-007	0.1	0.1	.	0	0	.	1	0	.
ERM0.5	Largemouth	Nickel	N00004258-008	0.1	0.1	.	0	0	.	1	0	.
ERM0.5	Channel Catfish	Nickel	N00004258-009	0.1	0.09	.	0	0	.	1	0	.
ERM0.5	Channel Catfish	Nickel	N00004258-010	0.1	0.1	.	0	0	.	1	0	.
ERM0.5	Channel Catfish	Nickel	N00004258-011	0.1	0.1	.	0	0	.	1	0	.
ERM0.5	Channel Catfish	Nickel	N00004258-012	0.1	0.19	.	0	1	.	1	1	.
ERM0.5	Blue Catfish	Nickel	N00004258-013	0.1	0.1	.	0	0	.	1	0	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Blue Catfish	Nickel	N00004258-014	0.1	0.09	.	0	0	.	1	0	.
ERM0.5	Blue Catfish	Nickel	N00004258-015	0.1	0.09	.	0	0	.	1	0	.
ERM0.5	Blue Catfish	Nickel	N00004258-016	0.1	0.26	.	0	1	.	1	1	.
ERM0.5	Blue Catfish	Nickel	N00004258-017	0.1	0.1	.	0	1	.	0	1	.
CRM9.5	Largemouth	Nickel	N00004259-001	0.1	0.09	0.09	0	0	0	0	0	0
CRM9.5	Largemouth	Nickel	N00004259-002	0.1	0.1	0.09	0	0	0	0	0	0
CRM9.5	Largemouth	Nickel	N00004259-003	0.1	0.1	0.09	0	0	0	0	0	0
CRM9.5	Largemouth	Nickel	N00004259-004	0.1	0.17	0.1	0	1	0	0	1	0
CRM9.5	Largemouth	Nickel	N00004259-005	0.1	0.09	0.09	0	0	0	0	0	0
CRM9.5	Channel Catfish	Nickel	N00004259-006	0.1	0.1	0.09	0	1	0	0	1	0
CRM9.5	Channel Catfish	Nickel	N00004259-007	0.1	0.3	0.1	0	1	0	0	1	0
CRM9.5	Channel Catfish	Nickel	N00004259-008	0.1	0.09	0.14	0	0	1	0	0	1
CRM9.5	Channel Catfish	Nickel	N00004259-009	0.1	0.1	0.55	0	0	1	0	0	1
CRM9.5	Blue Catfish	Nickel	N00004259-010	0.1	0.2	0.1	0	1	0	0	1	0
CRM9.5	Blue Catfish	Nickel	N00004259-011	0.1	0.09	0.1	0	0	0	0	0	0
CRM9.5	Blue Catfish	Nickel	N00004259-012	0.55	0.09	0.1	1	0	0	0	0	0
CRM9.5	Blue Catfish	Nickel	N00004259-013	0.1	0.23	0.09	0	1	0	0	1	0
CRM9.5	Blue Catfish	Nickel	N00004259-014	0.1	0.1	0.1	0	0	0	0	0	0
CRM1.5	Largemouth	Nickel	N00004260-001	0.12	0.09	0.17	1	0	1	0	0	1
CRM1.5	Largemouth	Nickel	N00004260-002	0.1	0.09	0.21	0	0	1	0	0	1
CRM1.5	Largemouth	Nickel	N00004260-003	0.1	0.09	0.12	0	0	1	0	0	1
CRM1.5	Largemouth	Nickel	N00004260-004	0.1	0.1	0.09	0	0	0	0	0	0
CRM1.5	Spotted Bass	Nickel	N00004260-005	0.1	0.12	0.1	0	1	0	0	1	0
CRM1.5	Channel Catfish	Nickel	N00004260-006	0.1	0.1	0.1	0	0	0	0	0	0
CRM1.5	Channel Catfish	Nickel	N00004260-007	0.1	0.09	0.1	0	0	0	0	0	0
CRM1.5	Channel Catfish	Nickel	N00004260-008	0.1	0.1	0.1	0	0	0	0	0	0
CRM1.5	Channel Catfish	Nickel	N00004260-009	0.1	0.09	0.1	0	0	0	0	0	0
CRM1.5	Channel Catfish	Nickel	N00004260-010	0.1	0.09	0.1	0	0	0	0	0	0
ERM8.0	Largemouth	Nickel	N00004447-001	0.13	0.09	0.09	1	0	0	0	0	0
ERM8.0	Largemouth	Nickel	N00004447-002	0.1	0.09	0.1	0	1	0	0	1	0
ERM8.0	Largemouth	Nickel	N00004447-003	0.1	0.09	0.1	0	0	0	0	0	0
ERM8.0	Largemouth	Nickel	N00004447-004	0.1	0.09	0.21	0	0	1	0	0	1
ERM8.0	Largemouth	Nickel	N00004447-005	0.1	0.1	0.09	0	0	0	0	0	0
ERM8.0	Channel Catfish	Nickel	N00004447-006	0.1	0.2	0.09	0	1	0	0	1	0
ERM8.0	Channel Catfish	Nickel	N00004447-007	0.1	0.09	0.09	0	0	0	0	0	0
ERM8.0	Channel Catfish	Nickel	N00004447-008	0.1	0.11	0.1	0	1	0	0	1	0
ERM8.0	Channel Catfish	Potassium	N00004256-001	3460	3410	3880	1	1	1	0	1	1
ERM8.0	Channel Catfish	Potassium	N00004256-002	2890	3080	3190	1	1	1	0	1	1
ERM8.0	Channel Catfish	Potassium	N00004256-003	3373	4030	3790	1	1	1	0	1	1
ERM8.0	Largemouth	Potassium	N00004256-004	3584	4000	4380	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Largemouth	Potassium	N00004258-001	3448	4030	.	1	1	.	0	1	.
ERM0.5	Largemouth	Potassium	N00004258-002	3481	3910	.	1	1	.	0	1	.
ERM0.5	Largemouth	Potassium	N00004258-003	3451	4190	.	1	1	.	0	1	.
ERM0.5	Largemouth	Potassium	N00004258-004	3641	4180	.	1	1	.	0	1	.
ERM0.5	Largemouth	Potassium	N00004258-005	3033	3790	.	1	1	.	0	1	.
ERM0.5	Largemouth	Potassium	N00004258-006	3503	4000	.	1	1	.	0	1	.
ERM0.5	Largemouth	Potassium	N00004258-007	3623	4040	.	1	1	.	0	1	.
ERM0.5	Largemouth	Potassium	N00004258-008	3595	4140	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Potassium	N00004258-009	2766	3230	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Potassium	N00004258-010	3341	3770	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Potassium	N00004258-011	3095	3650	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Potassium	N00004258-012	3404	3520	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Potassium	N00004258-013	2924	3410	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Potassium	N00004258-014	2994	3350	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Potassium	N00004258-015	2738	3090	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Potassium	N00004258-016	2924	3340	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Potassium	N00004258-017	3026	3340	.	1	1	.	0	1	.
CRM9.5	Largemouth	Potassium	N00004259-001	3519	3930	3520	1	1	1	0	1	1
CRM9.5	Largemouth	Potassium	N00004259-002	3320	3760	3680	1	1	1	0	1	1
CRM9.5	Largemouth	Potassium	N00004259-003	3246	3810	3840	1	1	1	0	1	1
CRM9.5	Largemouth	Potassium	N00004259-004	3613	4140	4830	1	1	1	0	1	1
CRM9.5	Largemouth	Potassium	N00004259-005	3585	4030	4000	1	1	1	0	1	1
CRM9.5	Channel Catfish	Potassium	N00004259-006	3605	4070	4470	1	1	1	0	1	1
CRM9.5	Channel Catfish	Potassium	N00004259-007	3485	3760	4210	1	1	1	0	1	1
CRM9.5	Channel Catfish	Potassium	N00004259-008	4042	4120	4650	1	1	1	0	1	1
CRM9.5	Channel Catfish	Potassium	N00004259-009	3714	3810	4880	1	1	1	0	1	1
CRM9.5	Blue Catfish	Potassium	N00004259-010	3460	3800	3880	1	1	1	0	1	1
CRM9.5	Blue Catfish	Potassium	N00004259-011	3553	4040	3760	1	1	1	0	1	1
CRM9.5	Blue Catfish	Potassium	N00004259-012	3328	3870	4030	1	1	1	0	1	1
CRM9.5	Blue Catfish	Potassium	N00004259-013	3413	3790	3760	1	1	1	0	1	1
CRM9.5	Blue Catfish	Potassium	N00004259-014	3588	3940	4090	1	1	1	0	1	1
CRM1.5	Largemouth	Potassium	N00004260-001	3639	4230	4630	1	1	1	0	1	1
CRM1.5	Largemouth	Potassium	N00004260-002	3219	3980	3980	1	1	1	0	1	1
CRM1.5	Largemouth	Potassium	N00004260-003	3673	4100	3890	1	1	1	0	1	1
CRM1.5	Largemouth	Potassium	N00004260-004	3267	3800	4320	1	1	1	0	1	1
CRM1.5	Spotted Bass	Potassium	N00004260-005	3255	3890	3930	1	1	1	0	1	1
CRM1.5	Channel Catfish	Potassium	N00004260-006	3725	4280	4460	1	1	1	0	1	1
CRM1.5	Channel Catfish	Potassium	N00004260-007	3150	3580	3370	1	1	1	0	1	1
CRM1.5	Channel Catfish	Potassium	N00004260-008	3423	3680	3690	1	1	1	0	1	1
CRM1.5	Channel Catfish	Potassium	N00004260-009	3486	3800	4170	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM1.5	Channel Catfish	Potassium	N00004260-010	3231	3830	3600	1	1	1	0	1	1
ERM8.0	Largemouth	Potassium	N00004447-001	3780	4260	4550	1	1	1	0	1	1
ERM8.0	Largemouth	Potassium	N00004447-002	3424	3730	4080	1	1	1	0	1	1
ERM8.0	Largemouth	Potassium	N00004447-003	3763	4200	4340	1	1	1	0	1	1
ERM8.0	Largemouth	Potassium	N00004447-004	3619	4210	4240	1	1	1	0	1	1
ERM8.0	Largemouth	Potassium	N00004447-005	3667	4020	4590	1	1	1	0	1	1
ERM8.0	Channel Catfish	Potassium	N00004447-006	2950	3110	3430	1	1	1	0	1	1
ERM8.0	Channel Catfish	Potassium	N00004447-007	3164	3750	3380	1	1	1	0	1	1
ERM8.0	Channel Catfish	Potassium	N00004447-008	3366	3810	3850	1	1	1	0	1	1
ERM8.0	Channel Catfish	Selenium	N00004256-001	0.21	0.29	0.28	1	1	1	0	1	1
ERM8.0	Channel Catfish	Selenium	N00004256-002	0.31	0.37	0.38	1	1	1	0	1	1
ERM8.0	Channel Catfish	Selenium	N00004256-003	0.2	0.27	0.25	0	1	1	0	1	1
ERM8.0	Largemouth	Selenium	N00004256-004	0.52	0.6	0.63	1	1	1	0	1	1
ERM0.5	Largemouth	Selenium	N00004258-001	0.55	0.66	.	1	1	.	0	1	.
ERM0.5	Largemouth	Selenium	N00004258-002	0.66	0.83	.	1	1	.	0	1	.
ERM0.5	Largemouth	Selenium	N00004258-003	0.73	0.79	.	1	1	.	0	1	.
ERM0.5	Largemouth	Selenium	N00004258-004	0.74	0.88	.	1	1	.	0	1	.
ERM0.5	Largemouth	Selenium	N00004258-005	0.56	0.73	.	1	1	.	0	1	.
ERM0.5	Largemouth	Selenium	N00004258-006	0.7	0.76	.	1	1	.	0	1	.
ERM0.5	Largemouth	Selenium	N00004258-007	0.64	0.82	.	1	1	.	0	1	.
ERM0.5	Largemouth	Selenium	N00004258-008	0.45	0.55	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Selenium	N00004258-009	0.27	0.38	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Selenium	N00004258-010	0.24	0.3	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Selenium	N00004258-011	0.23	0.29	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Selenium	N00004258-012	0.42	0.54	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Selenium	N00004258-013	0.29	0.34	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Selenium	N00004258-014	0.32	0.37	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Selenium	N00004258-015	0.37	0.4	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Selenium	N00004258-016	0.45	0.47	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Selenium	N00004258-017	0.21	0.26	.	1	1	.	1	1	.
CRM9.5	Largemouth	Selenium	N00004259-001	0.53	0.62	0.59	1	1	1	1	1	1
CRM9.5	Largemouth	Selenium	N00004259-002	0.59	0.65	0.69	1	1	1	1	1	1
CRM9.5	Largemouth	Selenium	N00004259-003	0.5	0.63	0.63	1	1	1	1	1	1
CRM9.5	Largemouth	Selenium	N00004259-004	0.54	0.59	0.55	1	1	1	1	1	1
CRM9.5	Largemouth	Selenium	N00004259-005	0.57	0.68	0.61	1	1	1	1	1	1
CRM9.5	Channel Catfish	Selenium	N00004259-006	0.2	0.21	0.2	0	1	1	0	1	1
CRM9.5	Channel Catfish	Selenium	N00004259-007	0.2	0.23	0.19	0	1	1	0	1	1
CRM9.5	Channel Catfish	Selenium	N00004259-008	0.24	0.3	0.34	1	1	1	1	1	1
CRM9.5	Channel Catfish	Selenium	N00004259-009	0.25	0.38	0.36	1	1	1	1	1	1
CRM9.5	Blue Catfish	Selenium	N00004259-010	0.24	0.36	0.32	1	1	1	1	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Blue Catfish	Selenium	N00004259-011	0.21	0.22	0.2	0	1	1	0	1	1
CRM9.5	Blue Catfish	Selenium	N00004259-012	0.19	0.22	0.2	0	1	1	0	1	1
CRM9.5	Blue Catfish	Selenium	N00004259-013	0.2	0.22	0.19	0	1	1	0	1	1
CRM9.5	Blue Catfish	Selenium	N00004259-014	0.21	0.25	0.26	1	1	1	1	1	1
CRM1.5	Largemouth	Selenium	N00004260-001	0.43	0.56	0.46	1	1	1	1	1	1
CRM1.5	Largemouth	Selenium	N00004260-002	0.43	0.48	0.42	1	1	1	1	1	1
CRM1.5	Largemouth	Selenium	N00004260-003	0.35	0.4	0.37	1	1	1	1	1	1
CRM1.5	Largemouth	Selenium	N00004260-004	0.42	0.44	0.42	1	1	1	1	1	1
CRM1.5	Spotted Bass	Selenium	N00004260-005	0.4	0.44	0.47	1	1	1	1	1	1
CRM1.5	Channel Catfish	Selenium	N00004260-006	0.33	0.39	0.33	1	1	1	0	1	1
CRM1.5	Channel Catfish	Selenium	N00004260-007	0.19	0.24	0.2	0	1	1	0	1	1
CRM1.5	Channel Catfish	Selenium	N00004260-008	0.38	0.42	0.38	1	1	1	0	1	1
CRM1.5	Channel Catfish	Selenium	N00004260-009	0.5	0.54	0.66	1	1	1	0	1	1
CRM1.5	Channel Catfish	Selenium	N00004260-010	0.35	0.38	0.41	1	1	1	0	1	1
ERM8.0	Largemouth	Selenium	N00004447-001	0.4	0.43	0.43	1	1	1	0	1	1
ERM8.0	Largemouth	Selenium	N00004447-002	0.37	0.42	0.4	1	1	1	0	1	1
ERM8.0	Largemouth	Selenium	N00004447-003	0.34	0.39	0.42	1	1	1	0	1	1
ERM8.0	Largemouth	Selenium	N00004447-004	0.46	0.47	0.48	1	1	1	0	1	1
ERM8.0	Largemouth	Selenium	N00004447-005	0.45	0.46	0.49	1	1	1	0	1	1
ERM8.0	Channel Catfish	Selenium	N00004447-006	0.28	0.32	0.28	1	1	1	0	1	1
ERM8.0	Channel Catfish	Selenium	N00004447-007	0.26	0.31	0.27	1	1	1	0	1	1
ERM8.0	Channel Catfish	Selenium	N00004447-008	0.2	0.2	0.18	0	1	1	0	1	1
ERM8.0	Channel Catfish	Silver	N00004256-001	0.05	0	0.03	0	0	1	0	0	1
ERM8.0	Channel Catfish	Silver	N00004256-002	0.05	0	0	0	0	0	0	0	0
ERM8.0	Channel Catfish	Silver	N00004256-003	0.05	0	0	0	0	0	0	0	0
ERM8.0	Largemouth	Silver	N00004256-004	0.05	0	0	0	0	0	0	0	0
ERM0.5	Largemouth	Silver	N00004258-001	0.05	0	.	0	0	.	0	0	.
ERM0.5	Largemouth	Silver	N00004258-002	0.05	0	.	0	0	.	0	0	.
ERM0.5	Largemouth	Silver	N00004258-003	0.05	0	.	0	0	.	0	0	.
ERM0.5	Largemouth	Silver	N00004258-004	0.05	0	.	0	0	.	0	0	.
ERM0.5	Largemouth	Silver	N00004258-005	0.05	0	.	0	0	.	0	0	.
ERM0.5	Largemouth	Silver	N00004258-006	0.05	0	.	0	0	.	0	0	.
ERM0.5	Largemouth	Silver	N00004258-007	0.05	0	.	0	0	.	0	0	.
ERM0.5	Largemouth	Silver	N00004258-008	0.05	0	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Silver	N00004258-009	0.05	0	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Silver	N00004258-010	0.05	0	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Silver	N00004258-011	0.05	0	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Silver	N00004258-012	0.05	0	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Silver	N00004258-013	0.05	0	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Silver	N00004258-014	0.05	0	.	0	0	.	0	0	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Blue Catfish	Silver	N00004258-015	0.05	0	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Silver	N00004258-016	0.05	0	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Silver	N00004258-017	0.05	0.01	.	0	0	.	0	0	.
CRM9.5	Largemouth	Silver	N00004259-001	0.05	0	0	0	0	0	0	0	0
CRM9.5	Largemouth	Silver	N00004259-002	0.05	0	0	0	0	0	0	0	0
CRM9.5	Largemouth	Silver	N00004259-003	0.05	0	0	0	0	0	0	0	0
CRM9.5	Largemouth	Silver	N00004259-004	0.05	0	0	0	0	0	0	0	0
CRM9.5	Largemouth	Silver	N00004259-005	0.05	0	0	0	0	0	0	0	0
CRM9.5	Channel Catfish	Silver	N00004259-006	0.05	0	0	0	0	0	0	0	0
CRM9.5	Channel Catfish	Silver	N00004259-007	0.05	0	0	0	0	0	0	0	0
CRM9.5	Channel Catfish	Silver	N00004259-008	0.05	0	0	0	0	0	0	0	0
CRM9.5	Channel Catfish	Silver	N00004259-009	0.05	0	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Silver	N00004259-010	0.05	0	0	0	0	0	0	0	0
CRM9.5	Blue Catfish	Silver	N00004259-011	0.05	0	0	0	0	0	0	0	0
CRM9.5	Blue Catfish	Silver	N00004259-012	0.05	0	0	0	0	0	0	0	0
CRM9.5	Blue Catfish	Silver	N00004259-013	0.05	0	0	0	0	0	0	0	0
CRM9.5	Blue Catfish	Silver	N00004259-014	0.05	0	0	0	0	0	0	0	0
CRM1.5	Largemouth	Silver	N00004260-001	0.05	0	0	0	0	0	0	0	0
CRM1.5	Largemouth	Silver	N00004260-002	0.05	0	0	0	0	0	0	0	0
CRM1.5	Largemouth	Silver	N00004260-003	0.05	0	0	0	0	1	0	0	1
CRM1.5	Largemouth	Silver	N00004260-004	0.05	0	0	0	0	0	0	0	0
CRM1.5	Spotted Bass	Silver	N00004260-005	0.05	0	0	0	0	0	0	0	0
CRM1.5	Channel Catfish	Silver	N00004260-006	0.05	0	0	0	0	0	0	0	0
CRM1.5	Channel Catfish	Silver	N00004260-007	0.05	0	0	0	0	0	0	0	0
CRM1.5	Channel Catfish	Silver	N00004260-008	0.05	0	0	0	0	0	0	0	0
CRM1.5	Channel Catfish	Silver	N00004260-009	0.05	0	0	0	0	0	0	0	0
CRM1.5	Channel Catfish	Silver	N00004260-010	0.05	0	0	0	0	0	0	0	0
ERM8.0	Largemouth	Silver	N00004447-001	0.05	0	0	0	0	0	0	0	0
ERM8.0	Largemouth	Silver	N00004447-002	0.05	0	0	0	0	0	0	0	0
ERM8.0	Largemouth	Silver	N00004447-003	0.05	0	0	0	0	0	0	0	0
ERM8.0	Largemouth	Silver	N00004447-004	0.05	0	0	0	0	0	0	0	0
ERM8.0	Largemouth	Silver	N00004447-005	0.05	0	0	0	0	0	0	0	0
ERM8.0	Channel Catfish	Silver	N00004447-006	0.05	0	0	0	0	0	0	0	0
ERM8.0	Channel Catfish	Silver	N00004447-007	0.05	0	0	0	0	0	0	0	0
ERM8.0	Channel Catfish	Silver	N00004447-008	0.05	0	0	0	0	0	0	0	0
ERM8.0	Channel Catfish	Sodium	N00004256-001	366.8	353	387	1	1	1	0	1	1
ERM8.0	Channel Catfish	Sodium	N00004256-002	307.7	342	325	1	1	1	0	1	1
ERM8.0	Channel Catfish	Sodium	N00004256-003	322.4	297	347	1	1	1	0	1	1
ERM8.0	Largemouth	Sodium	N00004256-004	394.2	331	452	1	1	1	0	1	1
ERM0.5	Largemouth	Sodium	N00004258-001	469.2	394	.	1	1	.	0	1	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Largemouth	Sodium	N00004258-002	476.3	605	.	1	1	.	0	1	.
ERM0.5	Largemouth	Sodium	N00004258-003	454.4	576	.	1	1	.	0	1	.
ERM0.5	Largemouth	Sodium	N00004258-004	438.2	484	.	1	1	.	0	1	.
ERM0.5	Largemouth	Sodium	N00004258-005	385.8	465	.	1	1	.	0	1	.
ERM0.5	Largemouth	Sodium	N00004258-006	360.8	389	.	1	1	.	0	1	.
ERM0.5	Largemouth	Sodium	N00004258-007	389.2	390	.	1	1	.	0	1	.
ERM0.5	Largemouth	Sodium	N00004258-008	395.9	366	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Sodium	N00004258-009	329.4	368	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Sodium	N00004258-010	408.9	469	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Sodium	N00004258-011	432.2	344	.	1	1	.	0	1	.
ERM0.5	Channel Catfish	Sodium	N00004258-012	453.8	492	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Sodium	N00004258-013	362.1	349	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Sodium	N00004258-014	358.5	401	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Sodium	N00004258-015	447.7	463	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Sodium	N00004258-016	391.3	414	.	1	1	.	0	1	.
ERM0.5	Blue Catfish	Sodium	N00004258-017	392.9	396	.	1	1	.	0	1	.
CRM9.5	Largemouth	Sodium	N00004259-001	531.3	519	512	1	1	1	0	1	1
CRM9.5	Largemouth	Sodium	N00004259-002	614.1	587	622	1	1	1	0	1	1
CRM9.5	Largemouth	Sodium	N00004259-003	424.5	531	453	1	1	1	0	1	1
CRM9.5	Largemouth	Sodium	N00004259-004	555.3	538	608	1	1	1	0	1	1
CRM9.5	Largemouth	Sodium	N00004259-005	513.9	540	510	1	1	1	0	1	1
CRM9.5	Channel Catfish	Sodium	N00004259-006	406.2	442	721	1	1	1	0	1	1
CRM9.5	Channel Catfish	Sodium	N00004259-007	359.6	376	393	1	1	1	0	1	1
CRM9.5	Channel Catfish	Sodium	N00004259-008	505.3	454	515	1	1	1	0	1	1
CRM9.5	Channel Catfish	Sodium	N00004259-009	388.2	660	454	1	1	1	0	1	1
CRM9.5	Blue Catfish	Sodium	N00004259-010	425.9	545	433	1	1	1	0	1	1
CRM9.5	Blue Catfish	Sodium	N00004259-011	455.5	523	490	1	1	1	0	1	1
CRM9.5	Blue Catfish	Sodium	N00004259-012	472.6	448	515	1	1	1	0	1	1
CRM9.5	Blue Catfish	Sodium	N00004259-013	444.6	465	481	1	1	1	0	1	1
CRM9.5	Blue Catfish	Sodium	N00004259-014	440.7	477	458	1	1	1	0	1	1
CRM1.5	Largemouth	Sodium	N00004260-001	506.2	522	597	1	1	1	0	1	1
CRM1.5	Largemouth	Sodium	N00004260-002	506.4	496	571	1	1	1	0	1	1
CRM1.5	Largemouth	Sodium	N00004260-003	438.9	453	476	1	1	1	0	1	1
CRM1.5	Largemouth	Sodium	N00004260-004	411.3	490	502	1	1	1	0	1	1
CRM1.5	Spotted Bass	Sodium	N00004260-005	577.3	552	607	1	1	1	0	1	1
CRM1.5	Channel Catfish	Sodium	N00004260-006	333.6	333	373	1	1	1	0	1	1
CRM1.5	Channel Catfish	Sodium	N00004260-007	450.6	536	531	1	1	1	0	1	1
CRM1.5	Channel Catfish	Sodium	N00004260-008	408	457	436	1	1	1	0	1	1
CRM1.5	Channel Catfish	Sodium	N00004260-009	399	391	528	1	1	1	0	1	1
CRM1.5	Channel Catfish	Sodium	N00004260-010	419.6	435	417	1	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Largemouth	Sodium	N00004447-001	399	417	483	1	1	1	0	1	1
ERM8.0	Largemouth	Sodium	N00004447-002	297.3	291	362	1	1	1	0	1	1
ERM8.0	Largemouth	Sodium	N00004447-003	344	354	384	1	1	1	0	1	1
ERM8.0	Largemouth	Sodium	N00004447-004	347.4	360	379	1	1	1	0	1	1
ERM8.0	Largemouth	Sodium	N00004447-005	391.4	455	507	1	1	1	0	1	1
ERM8.0	Channel Catfish	Sodium	N00004447-006	285.1	321	332	1	1	1	0	1	1
ERM8.0	Channel Catfish	Sodium	N00004447-007	298.5	319	305	1	1	1	0	1	1
ERM8.0	Channel Catfish	Sodium	N00004447-008	285.1	334	335	1	1	1	0	1	1
ERM8.0	Channel Catfish	Strontium	N00004256-001	0.14	0.09	0.38	1	1	1	1	1	1
ERM8.0	Channel Catfish	Strontium	N00004256-002	0.16	0.06	0.21	1	1	1	1	1	1
ERM8.0	Channel Catfish	Strontium	N00004256-003	0.14	0.07	0.13	1	1	1	1	1	1
ERM8.0	Largemouth	Strontium	N00004256-004	1.03	1.4	1.6	1	1	1	1	1	1
ERM0.5	Largemouth	Strontium	N00004258-001	4.06	0.45	.	1	1	.	1	1	.
ERM0.5	Largemouth	Strontium	N00004258-002	0.41	2.6	.	1	1	.	1	1	.
ERM0.5	Largemouth	Strontium	N00004258-003	1.19	2.2	.	1	1	.	1	1	.
ERM0.5	Largemouth	Strontium	N00004258-004	1.72	0.92	.	1	1	.	1	1	.
ERM0.5	Largemouth	Strontium	N00004258-005	0.12	1.3	.	1	1	.	1	1	.
ERM0.5	Largemouth	Strontium	N00004258-006	0.32	0.07	.	1	1	.	1	1	.
ERM0.5	Largemouth	Strontium	N00004258-007	0.1	0.83	.	0	1	.	1	1	.
ERM0.5	Largemouth	Strontium	N00004258-008	0.26	0.11	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Strontium	N00004258-009	0.24	0.48	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Strontium	N00004258-010	0.26	1.7	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Strontium	N00004258-011	0.16	0.13	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Strontium	N00004258-012	0.12	0.53	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Strontium	N00004258-013	0.32	0.51	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Strontium	N00004258-014	0.1	0.1	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Strontium	N00004258-015	5.03	1.3	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Strontium	N00004258-016	0.26	1.7	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Strontium	N00004258-017	0.2	0.65	.	1	1	.	0	1	.
CRM9.5	Largemouth	Strontium	N00004259-001	3.43	1.7	2.5	1	1	1	0	1	1
CRM9.5	Largemouth	Strontium	N00004259-002	0.28	3.1	2.9	1	1	1	0	1	1
CRM9.5	Largemouth	Strontium	N00004259-003	0.75	2.3	0.96	1	1	1	0	1	1
CRM9.5	Largemouth	Strontium	N00004259-004	5.55	1.3	2	1	1	1	0	1	1
CRM9.5	Largemouth	Strontium	N00004259-005	1.15	2.3	0.31	1	1	1	0	1	1
CRM9.5	Channel Catfish	Strontium	N00004259-006	1	0.36	14.3	1	1	1	0	1	1
CRM9.5	Channel Catfish	Strontium	N00004259-007	0.29	0.19	0.19	1	1	1	0	1	1
CRM9.5	Channel Catfish	Strontium	N00004259-008	0.54	0.14	0.14	1	1	1	0	1	1
CRM9.5	Channel Catfish	Strontium	N00004259-009	0.1	8.3	0.7	0	1	1	0	1	1
CRM9.5	Blue Catfish	Strontium	N00004259-010	0.67	0.23	0.2	1	1	1	0	1	1
CRM9.5	Blue Catfish	Strontium	N00004259-011	0.1	2.2	0.12	0	1	1	0	1	1

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Blue Catfish	Strontium	N00004259-012	1.1	0.45	0.82	1	1	1	0	1	1
CRM9.5	Blue Catfish	Strontium	N00004259-013	0.47	1.5	1.2	1	1	1	0	1	1
CRM9.5	Blue Catfish	Strontium	N00004259-014	0.11	1.8	0.21	1	1	1	0	1	1
CRM1.5	Largemouth	Strontium	N00004260-001	3.01	1.2	3	1	1	1	0	1	1
CRM1.5	Largemouth	Strontium	N00004260-002	3.9	3	3.7	1	1	1	0	1	1
CRM1.5	Largemouth	Strontium	N00004260-003	0.79	0.8	1.2	1	1	1	0	1	1
CRM1.5	Largemouth	Strontium	N00004260-004	1.67	0.45	0.94	1	1	1	0	1	1
CRM1.5	Spotted Bass	Strontium	N00004260-005	5.72	2.3	1.8	1	1	1	0	1	1
CRM1.5	Channel Catfish	Strontium	N00004260-006	0.31	0.14	0.14	1	1	1	0	1	1
CRM1.5	Channel Catfish	Strontium	N00004260-007	0.1	0.34	1.2	0	1	1	0	1	1
CRM1.5	Channel Catfish	Strontium	N00004260-008	0.76	1.4	0.35	1	1	1	0	1	1
CRM1.5	Channel Catfish	Strontium	N00004260-009	0.17	0.49	0.16	1	1	1	0	1	1
CRM1.5	Channel Catfish	Strontium	N00004260-010	0.16	1.5	0.22	1	1	1	0	1	1
ERM8.0	Largemouth	Strontium	N00004447-001	0.1	0.07	0.24	0	1	1	0	1	1
ERM8.0	Largemouth	Strontium	N00004447-002	0.62	0.06	0.87	1	1	1	0	1	1
ERM8.0	Largemouth	Strontium	N00004447-003	0.1	0.04	0.19	0	0	1	0	0	1
ERM8.0	Largemouth	Strontium	N00004447-004	0.1	0.05	0.05	0	1	1	0	1	1
ERM8.0	Largemouth	Strontium	N00004447-005	0.1	0.23	0.05	0	1	1	0	1	1
ERM8.0	Channel Catfish	Strontium	N00004447-006	0.1	0.07	0.07	0	1	1	0	1	1
ERM8.0	Channel Catfish	Strontium	N00004447-007	0.1	0.08	0.09	0	1	1	0	1	1
ERM8.0	Channel Catfish	Strontium	N00004447-008	0.1	0.06	0.09	0	1	1	0	1	1
ERM8.0	Channel Catfish	Thallium	N00004256-001	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Thallium	N00004256-002	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Thallium	N00004256-003	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Thallium	N00004256-004	0.1	0.01	0.01	0	0	0	0	0	0
ERM0.5	Largemouth	Thallium	N00004258-001	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Thallium	N00004258-002	0.1	0.02	.	0	0	.	0	0	.
ERM0.5	Largemouth	Thallium	N00004258-003	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Thallium	N00004258-004	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Thallium	N00004258-005	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Largemouth	Thallium	N00004258-006	0.1	0.02	.	0	0	.	0	0	.
ERM0.5	Largemouth	Thallium	N00004258-007	0.1	0.02	.	0	0	.	0	0	.
ERM0.5	Largemouth	Thallium	N00004258-008	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Thallium	N00004258-009	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Thallium	N00004258-010	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Thallium	N00004258-011	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Thallium	N00004258-012	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Thallium	N00004258-013	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Thallium	N00004258-014	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Thallium	N00004258-015	0.1	0.01	.	0	0	.	0	0	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Blue Catfish	Thallium	N00004258-016	0.1	0.01	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Thallium	N00004258-017	0.1	0.01	.	0	0	.	0	0	.
CRM9.5	Largemouth	Thallium	N00004259-001	0.1	0.02	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Thallium	N00004259-002	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Thallium	N00004259-003	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Thallium	N00004259-004	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Largemouth	Thallium	N00004259-005	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Thallium	N00004259-006	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Thallium	N00004259-007	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Thallium	N00004259-008	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Channel Catfish	Thallium	N00004259-009	0.1	0.01	0.04	0	0	0	0	0	0
CRM9.5	Blue Catfish	Thallium	N00004259-010	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Thallium	N00004259-011	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Thallium	N00004259-012	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Thallium	N00004259-013	0.1	0.01	0.01	0	0	0	0	0	0
CRM9.5	Blue Catfish	Thallium	N00004259-014	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Thallium	N00004260-001	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Thallium	N00004260-002	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Thallium	N00004260-003	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Largemouth	Thallium	N00004260-004	0.1	0.01	0.02	0	0	0	0	0	0
CRM1.5	Spotted Bass	Thallium	N00004260-005	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Thallium	N00004260-006	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Thallium	N00004260-007	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Thallium	N00004260-008	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Thallium	N00004260-009	0.1	0.01	0.01	0	0	0	0	0	0
CRM1.5	Channel Catfish	Thallium	N00004260-010	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Thallium	N00004447-001	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Thallium	N00004447-002	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Thallium	N00004447-003	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Thallium	N00004447-004	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Largemouth	Thallium	N00004447-005	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Thallium	N00004447-006	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Thallium	N00004447-007	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Thallium	N00004447-008	0.1	0.01	0.01	0	0	0	0	0	0
ERM8.0	Channel Catfish	Vanadium	N00004256-001	0.21	0.05	0.05	0	0	0	0	0	0
ERM8.0	Channel Catfish	Vanadium	N00004256-002	0.2	0.04	0.1	0	0	1	0	0	1
ERM8.0	Channel Catfish	Vanadium	N00004256-003	0.2	0.04	0.05	0	0	0	0	0	0
ERM8.0	Largemouth	Vanadium	N00004256-004	0.2	0.05	0.05	0	1	0	0	1	0
ERM0.5	Largemouth	Vanadium	N00004258-001	0.2	0.04	.	0	0	.	0	0	.
ERM0.5	Largemouth	Vanadium	N00004258-002	0.2	0.04	.	0	0	.	0	0	.

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM0.5	Largemouth	Vanadium	N00004258-003	0.2	0.04	.	0	0	.	0	0	.
ERM0.5	Largemouth	Vanadium	N00004258-004	0.2	0.04	.	0	0	.	0	0	.
ERM0.5	Largemouth	Vanadium	N00004258-005	0.2	0.05	.	0	0	.	0	0	.
ERM0.5	Largemouth	Vanadium	N00004258-006	0.2	0.04	.	0	0	.	0	0	.
ERM0.5	Largemouth	Vanadium	N00004258-007	0.2	0.05	.	0	0	.	0	0	.
ERM0.5	Largemouth	Vanadium	N00004258-008	0.2	0.05	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Vanadium	N00004258-009	0.2	0.04	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Vanadium	N00004258-010	0.19	0.05	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Vanadium	N00004258-011	0.2	0.05	.	0	0	.	0	0	.
ERM0.5	Channel Catfish	Vanadium	N00004258-012	0.2	0.04	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Vanadium	N00004258-013	0.2	0.05	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Vanadium	N00004258-014	0.2	0.04	.	0	0	.	0	0	.
ERM0.5	Blue Catfish	Vanadium	N00004258-015	0.2	0.05	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Vanadium	N00004258-016	0.2	0.14	.	0	1	.	0	1	.
ERM0.5	Blue Catfish	Vanadium	N00004258-017	0.2	0.05	.	0	0	.	1	0	.
CRM9.5	Largemouth	Vanadium	N00004259-001	0.2	0.04	0.04	0	0	0	1	0	0
CRM9.5	Largemouth	Vanadium	N00004259-002	0.2	0.05	0.04	0	0	0	1	0	0
CRM9.5	Largemouth	Vanadium	N00004259-003	0.2	0.05	0.04	0	0	0	1	0	0
CRM9.5	Largemouth	Vanadium	N00004259-004	0.2	0.04	0.05	0	0	0	1	0	0
CRM9.5	Largemouth	Vanadium	N00004259-005	0.2	0.04	0.04	0	0	0	1	0	0
CRM9.5	Channel Catfish	Vanadium	N00004259-006	0.2	0.05	0.15	0	0	1	1	0	1
CRM9.5	Channel Catfish	Vanadium	N00004259-007	0.2	0.04	0.05	0	0	0	1	0	0
CRM9.5	Channel Catfish	Vanadium	N00004259-008	0.2	0.04	0.04	0	0	0	1	0	0
CRM9.5	Channel Catfish	Vanadium	N00004259-009	0.2	0.06	0.13	0	1	0	1	1	0
CRM9.5	Blue Catfish	Vanadium	N00004259-010	0.2	0.05	0.05	0	0	0	1	0	0
CRM9.5	Blue Catfish	Vanadium	N00004259-011	0.21	0.04	0.05	0	0	0	1	0	0
CRM9.5	Blue Catfish	Vanadium	N00004259-012	0.19	0.04	0.05	0	0	0	1	0	0
CRM9.5	Blue Catfish	Vanadium	N00004259-013	0.2	0.07	0.04	0	1	0	1	1	0
CRM9.5	Blue Catfish	Vanadium	N00004259-014	0.2	0.05	0.05	0	0	0	1	0	0
CRM1.5	Largemouth	Vanadium	N00004260-001	0.2	0.04	0.05	0	0	1	1	0	1
CRM1.5	Largemouth	Vanadium	N00004260-002	0.2	0.04	0.04	0	0	0	1	0	0
CRM1.5	Largemouth	Vanadium	N00004260-003	0.2	0.04	0.05	0	0	0	1	0	0
CRM1.5	Largemouth	Vanadium	N00004260-004	0.2	0.05	0.04	0	0	0	1	0	0
CRM1.5	Spotted Bass	Vanadium	N00004260-005	0.2	0.05	0.05	0	0	0	1	0	0
CRM1.5	Channel Catfish	Vanadium	N00004260-006	0.2	0.05	0.05	0	0	0	0	0	0
CRM1.5	Channel Catfish	Vanadium	N00004260-007	0.19	0.05	0.05	0	0	1	0	0	1
CRM1.5	Channel Catfish	Vanadium	N00004260-008	0.2	0.05	0.05	0	1	0	0	1	0
CRM1.5	Channel Catfish	Vanadium	N00004260-009	0.2	0.04	0.05	0	0	1	0	0	1
CRM1.5	Channel Catfish	Vanadium	N00004260-010	0.2	0.05	0.05	0	0	0	0	0	0
ERM8.0	Largemouth	Vanadium	N00004447-001	0.2	0.05	0.04	0	0	0	0	0	0

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Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
ERM8.0	Largemouth	Vanadium	N00004447-002	0.2	0.05	0.05	0	0	0	0	0	0
ERM8.0	Largemouth	Vanadium	N00004447-003	0.2	0.04	0.05	0	0	0	0	0	0
ERM8.0	Largemouth	Vanadium	N00004447-004	0.2	0.05	0.09	0	0	1	0	0	1
ERM8.0	Largemouth	Vanadium	N00004447-005	0.2	0.05	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Vanadium	N00004447-006	0.2	0.04	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Vanadium	N00004447-007	0.2	0.05	0.04	0	0	0	0	0	0
ERM8.0	Channel Catfish	Vanadium	N00004447-008	0.2	0.04	0.05	0	0	0	0	0	0
ERM8.0	Channel Catfish	Zinc	N00004256-001	8.01	8.3	13.1	1	1	1	1	1	1
ERM8.0	Channel Catfish	Zinc	N00004256-002	6.43	6.2	8.6	1	1	1	1	1	1
ERM8.0	Channel Catfish	Zinc	N00004256-003	7.47	5.9	8.3	1	1	1	1	1	1
ERM8.0	Largemouth	Zinc	N00004256-004	13.51	15.4	19	1	1	1	1	1	1
ERM0.5	Largemouth	Zinc	N00004258-001	7.96	8.6	.	1	1	.	1	1	.
ERM0.5	Largemouth	Zinc	N00004258-002	9.44	12.4	.	1	1	.	1	1	.
ERM0.5	Largemouth	Zinc	N00004258-003	13.49	12.9	.	1	1	.	1	1	.
ERM0.5	Largemouth	Zinc	N00004258-004	9.77	9.9	.	1	1	.	1	1	.
ERM0.5	Largemouth	Zinc	N00004258-005	6.94	10.9	.	1	1	.	1	1	.
ERM0.5	Largemouth	Zinc	N00004258-006	10.89	13.5	.	1	1	.	1	1	.
ERM0.5	Largemouth	Zinc	N00004258-007	11.59	13.9	.	1	1	.	1	1	.
ERM0.5	Largemouth	Zinc	N00004258-008	8.41	9.4	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Zinc	N00004258-009	6.44	7.3	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Zinc	N00004258-010	5.53	6.6	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Zinc	N00004258-011	6.72	5.7	.	1	1	.	1	1	.
ERM0.5	Channel Catfish	Zinc	N00004258-012	8.14	8.6	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Zinc	N00004258-013	5.88	5.4	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Zinc	N00004258-014	5.18	6.7	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Zinc	N00004258-015	10.06	7.6	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Zinc	N00004258-016	12.23	10.4	.	1	1	.	1	1	.
ERM0.5	Blue Catfish	Zinc	N00004258-017	6.55	8.3	.	1	1	.	0	1	.
CRM9.5	Largemouth	Zinc	N00004259-001	8.76	11.1	10.2	1	1	1	0	1	1
CRM9.5	Largemouth	Zinc	N00004259-002	7.4	14.1	13.4	1	1	1	0	1	1
CRM9.5	Largemouth	Zinc	N00004259-003	8.99	12	11.9	1	1	1	0	1	1
CRM9.5	Largemouth	Zinc	N00004259-004	12.6	13.7	9.7	1	1	1	0	1	1
CRM9.5	Largemouth	Zinc	N00004259-005	10.8	11.2	7.2	1	1	1	0	1	1
CRM9.5	Channel Catfish	Zinc	N00004259-006	6.16	6	14	1	1	1	0	1	1
CRM9.5	Channel Catfish	Zinc	N00004259-007	5.22	6.1	8.9	1	1	1	0	1	1
CRM9.5	Channel Catfish	Zinc	N00004259-008	6.34	6.7	8.4	1	1	1	0	1	1
CRM9.5	Channel Catfish	Zinc	N00004259-009	5.89	17.3	9.2	1	1	1	0	1	1
CRM9.5	Blue Catfish	Zinc	N00004259-010	5.88	7.3	7	1	1	1	0	1	1
CRM9.5	Blue Catfish	Zinc	N00004259-011	7.79	13.6	11.4	1	1	1	0	1	1
CRM9.5	Blue Catfish	Zinc	N00004259-012	9.24	9.2	8.5	1	1	1	0	1	1

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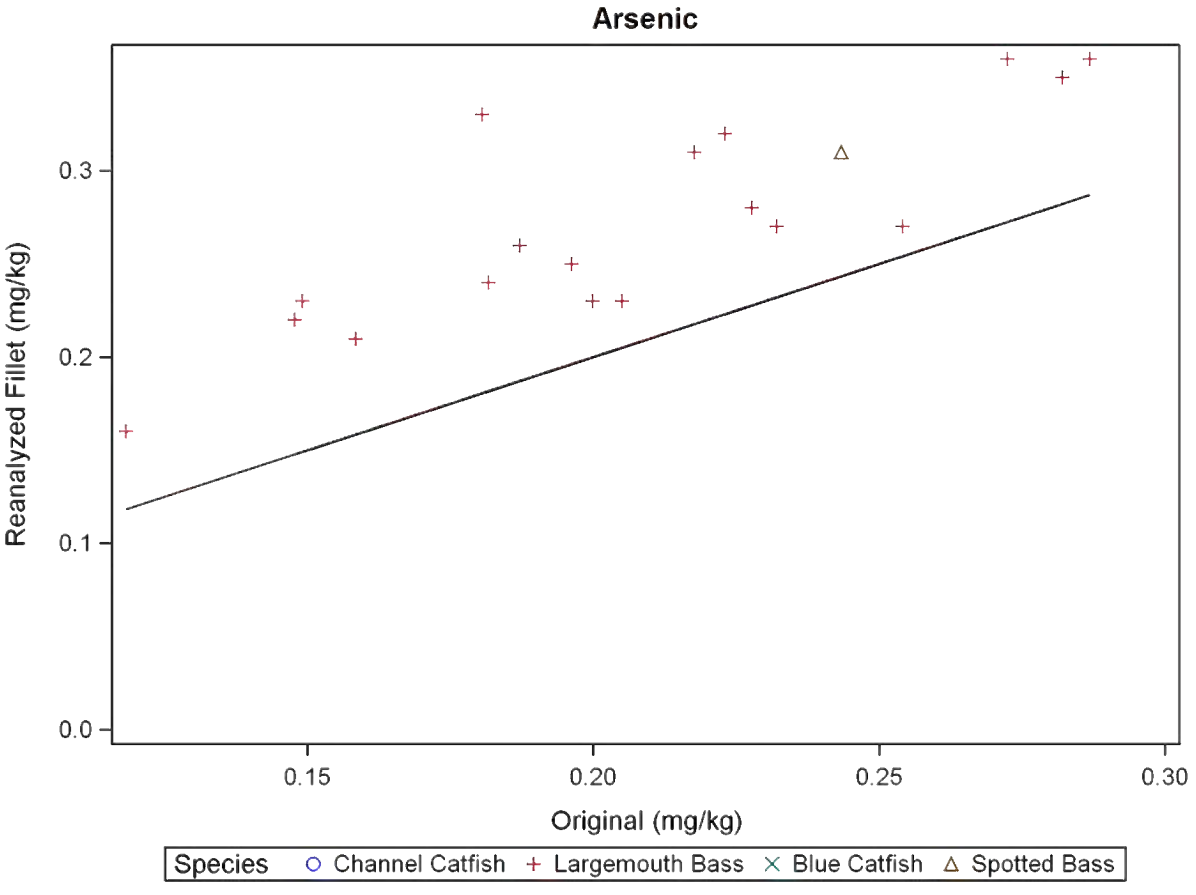
Table A-3. Concentrations of Metals by Sample Replicate in 53 Baseline Fish

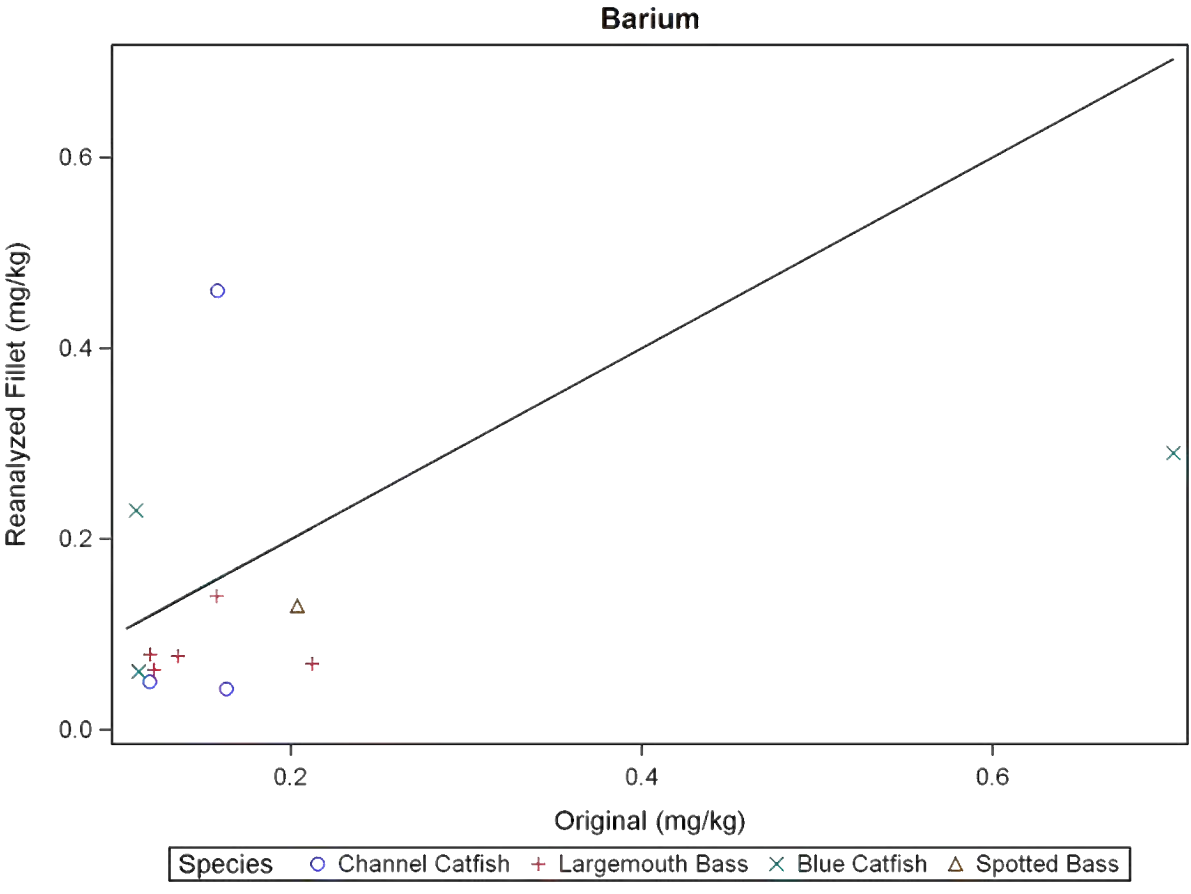
Sample Information				Concentration Wet Weight (mg/kg)			Detected(1=Yes)			Estimated(1=Yes)		
Location	Species	Analyte_Name	sample	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)	Original	Reanalyzed (Fillet)	Reanalyzed (Homogenate)
CRM9.5	Blue Catfish	Zinc	N00004259-013	7.14	11.5	7.8	1	1	1	0	1	1
CRM9.5	Blue Catfish	Zinc	N00004259-014	6.65	8.1	9.9	1	1	1	0	1	1
CRM1.5	Largemouth	Zinc	N00004260-001	9.2	13.3	9.3	1	1	1	0	1	1
CRM1.5	Largemouth	Zinc	N00004260-002	8.32	9.8	11.7	1	1	1	0	1	1
CRM1.5	Largemouth	Zinc	N00004260-003	9.82	10.9	10.9	1	1	1	0	1	1
CRM1.5	Largemouth	Zinc	N00004260-004	7.22	9	8.3	1	1	1	0	1	1
CRM1.5	Spotted Bass	Zinc	N00004260-005	8.07	11.1	11.3	1	1	1	0	1	1
CRM1.5	Channel Catfish	Zinc	N00004260-006	7.34	7.2	8.2	1	1	1	0	1	1
CRM1.5	Channel Catfish	Zinc	N00004260-007	5.93	8.3	8.5	1	1	1	0	1	1
CRM1.5	Channel Catfish	Zinc	N00004260-008	6.63	10.2	9.7	1	1	1	0	1	1
CRM1.5	Channel Catfish	Zinc	N00004260-009	5.4	7.4	12.5	1	1	1	0	1	1
CRM1.5	Channel Catfish	Zinc	N00004260-010	7.31	7.9	8	1	1	1	0	1	1
ERM8.0	Largemouth	Zinc	N00004447-001	5.46	8.1	7.2	1	1	1	0	1	1
ERM8.0	Largemouth	Zinc	N00004447-002	11.28	9.7	10.3	1	1	1	0	1	1
ERM8.0	Largemouth	Zinc	N00004447-003	5.48	6.8	7.3	1	1	1	0	1	1
ERM8.0	Largemouth	Zinc	N00004447-004	7.78	8.8	8.7	1	1	1	0	1	1
ERM8.0	Largemouth	Zinc	N00004447-005	4.84	5.8	6.3	1	1	1	0	1	1
ERM8.0	Channel Catfish	Zinc	N00004447-006	4.18	5.1	5.9	1	1	1	0	1	1
ERM8.0	Channel Catfish	Zinc	N00004447-007	5.35	5.6	5.6	1	1	1	0	1	1
ERM8.0	Channel Catfish	Zinc	N00004447-008	5.07	6.1	6.6	1	1	1	0	1	1

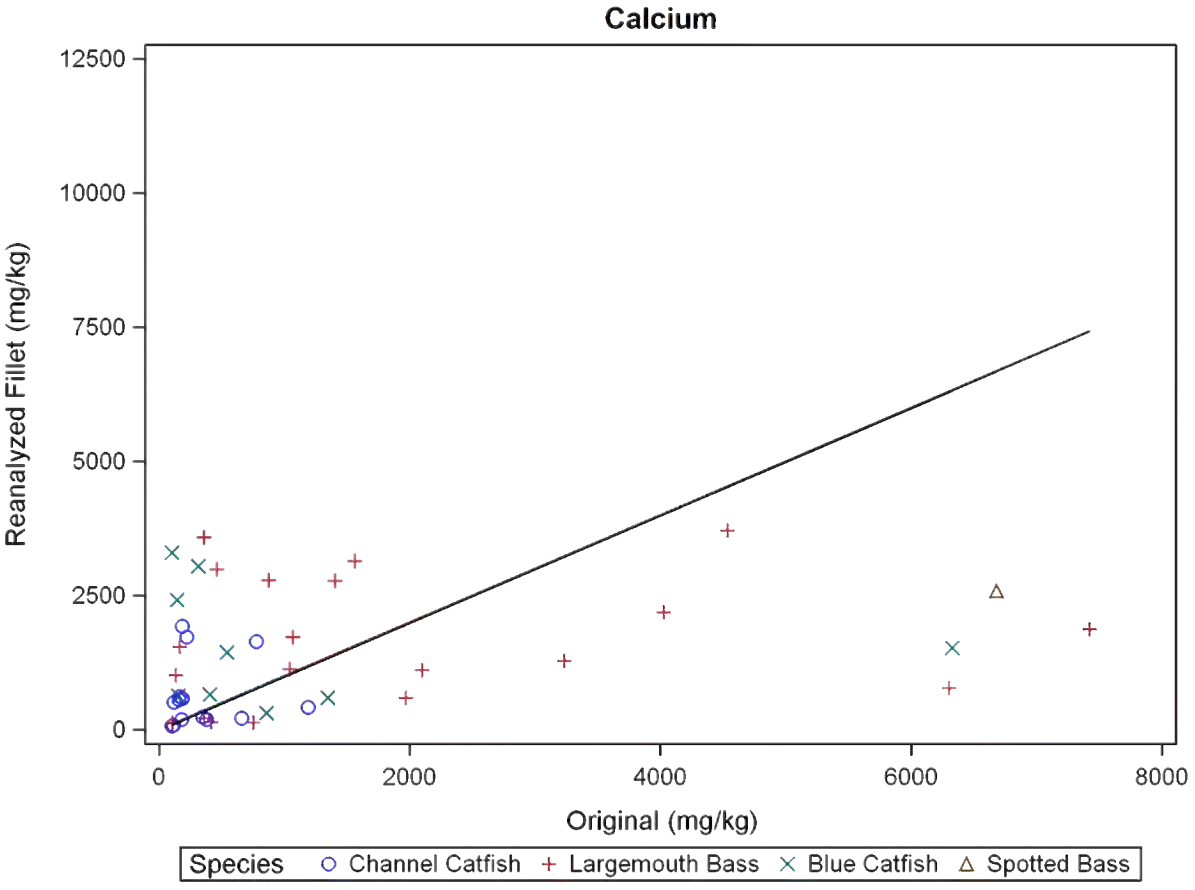
Indicates lack of agreement based on visual examination of agreement plots.

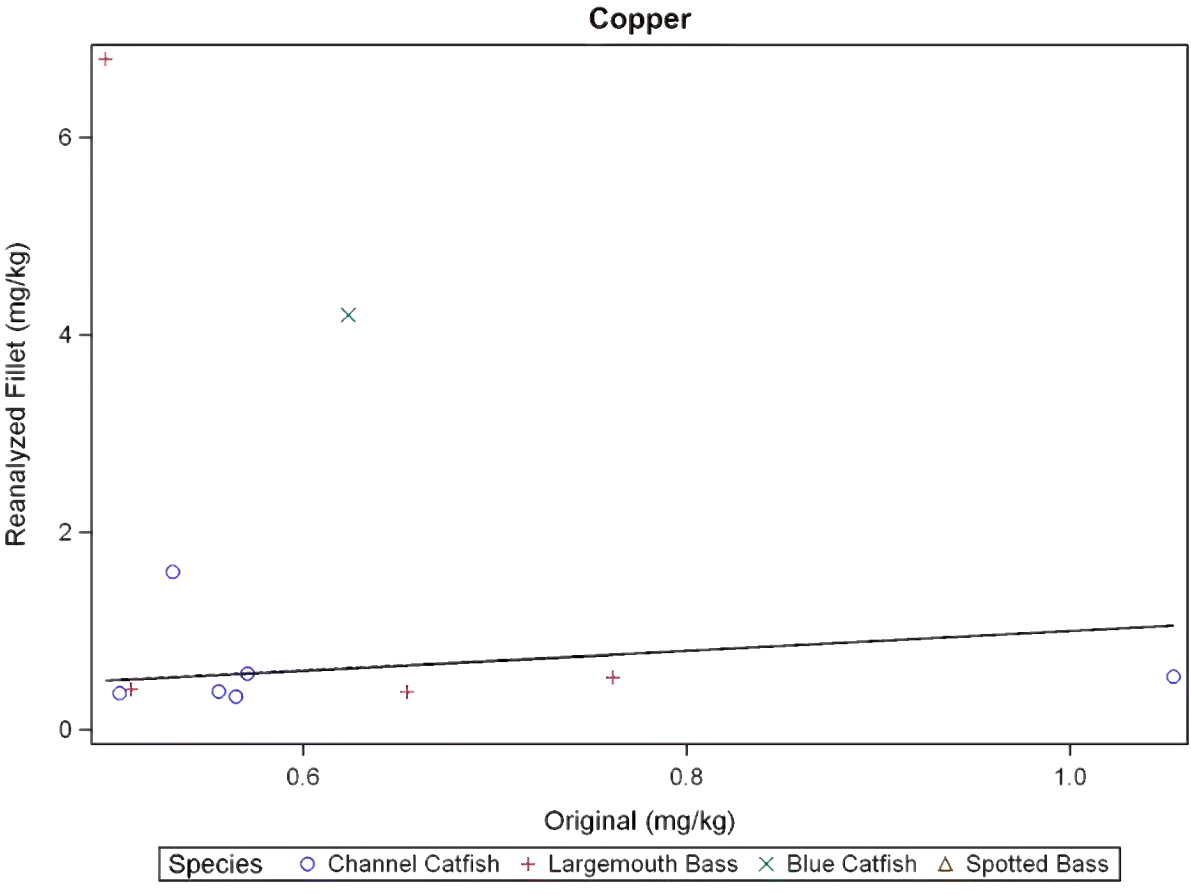
Appendix **B**

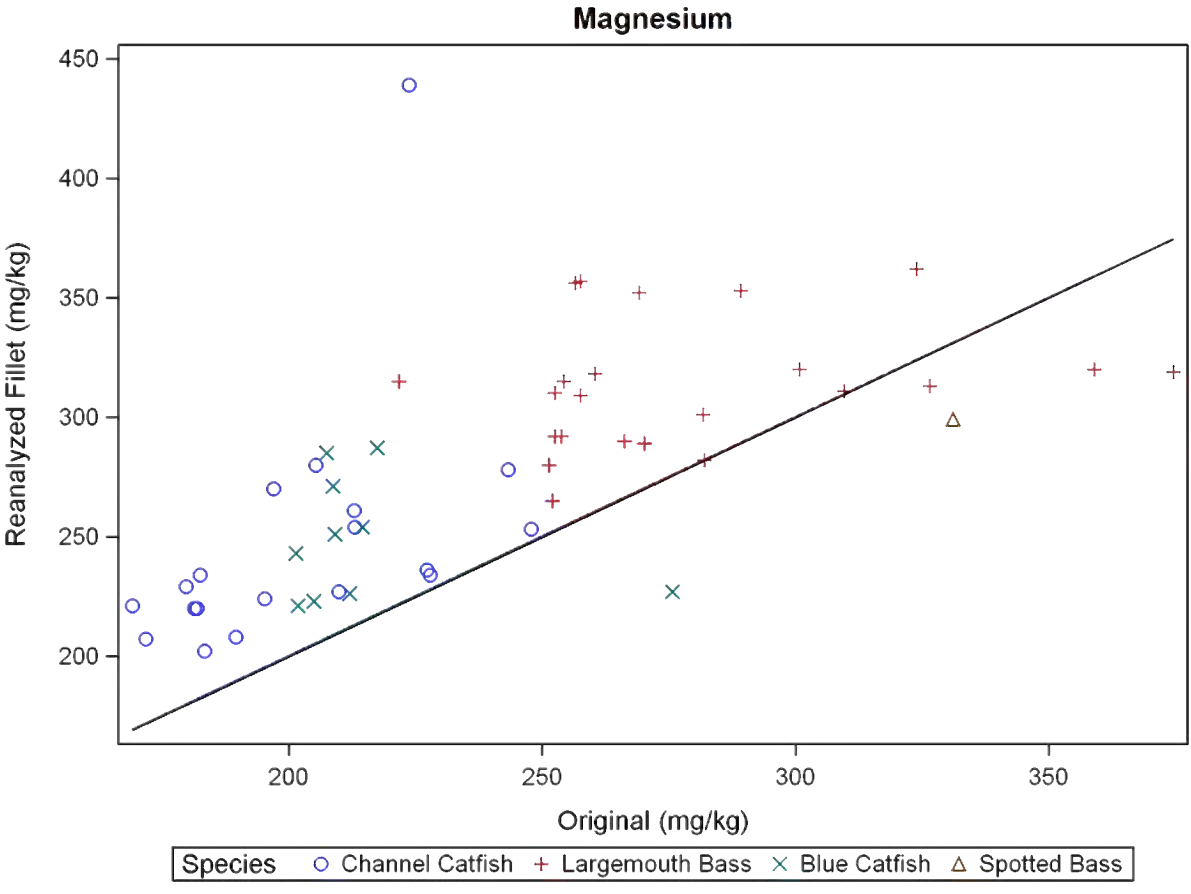
Bivariate Agreement Plots Comparing Original and Reanalyzed Fillet Detected Wet Weight Results for Metals

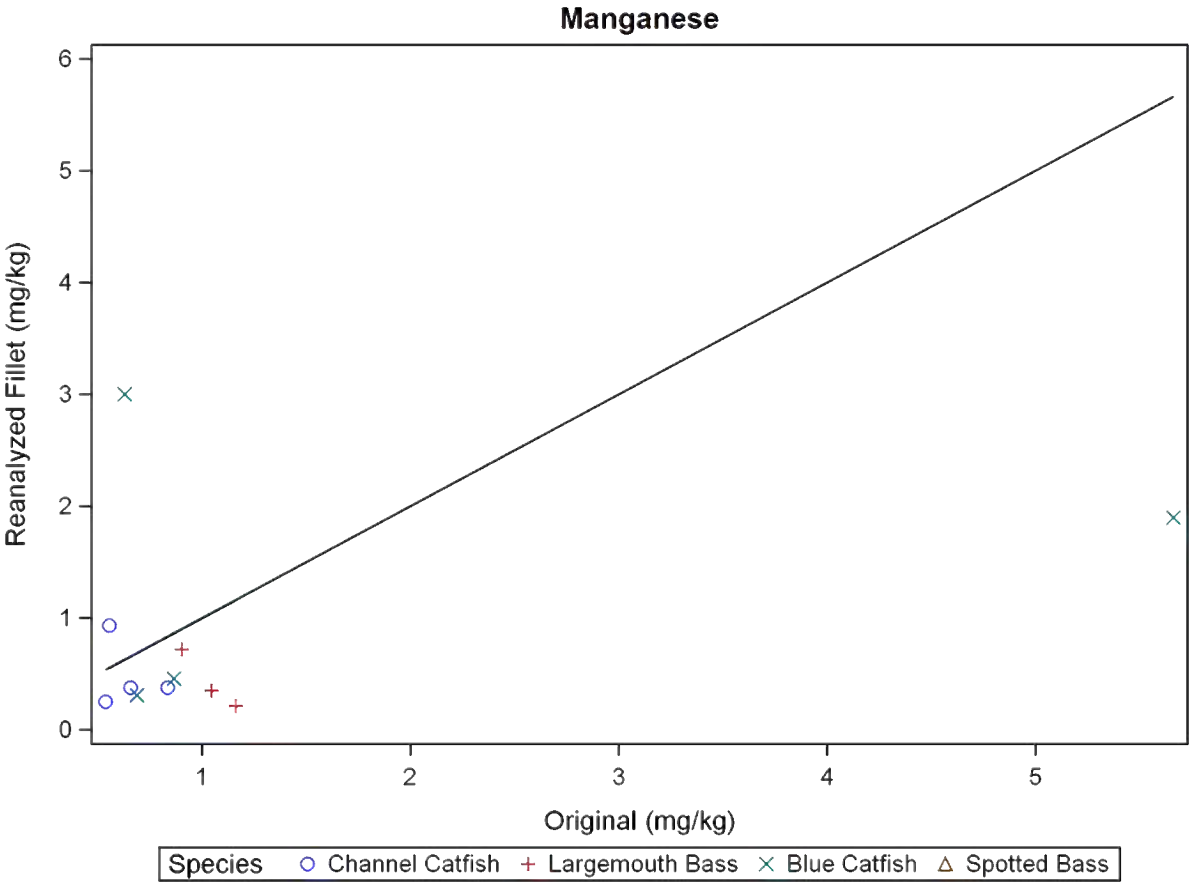

Arsenic
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
0.15
0.20
0.25
0.30
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

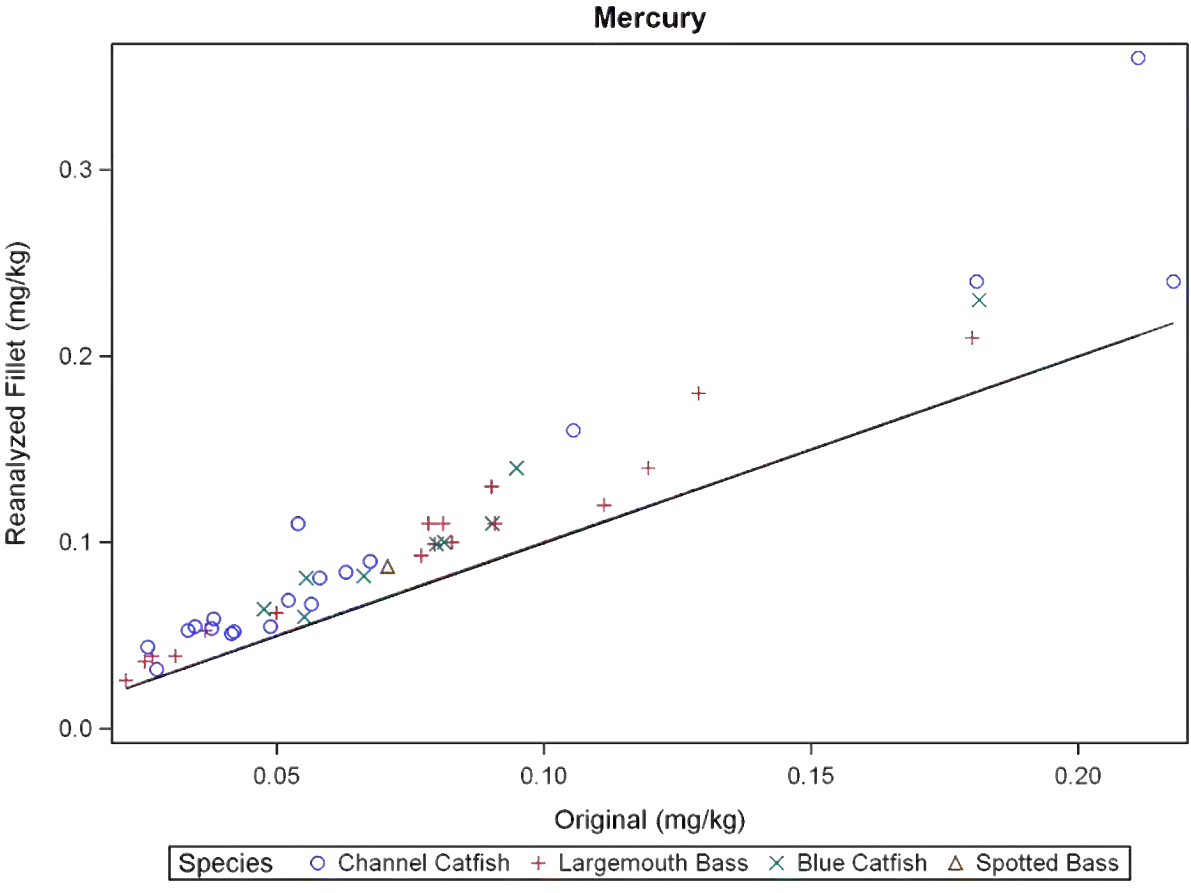

Barium
Reanalyzed Fillet (mg/kg)
0.0
0.2
0.4
0.6
0.2
0.4
0.6
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

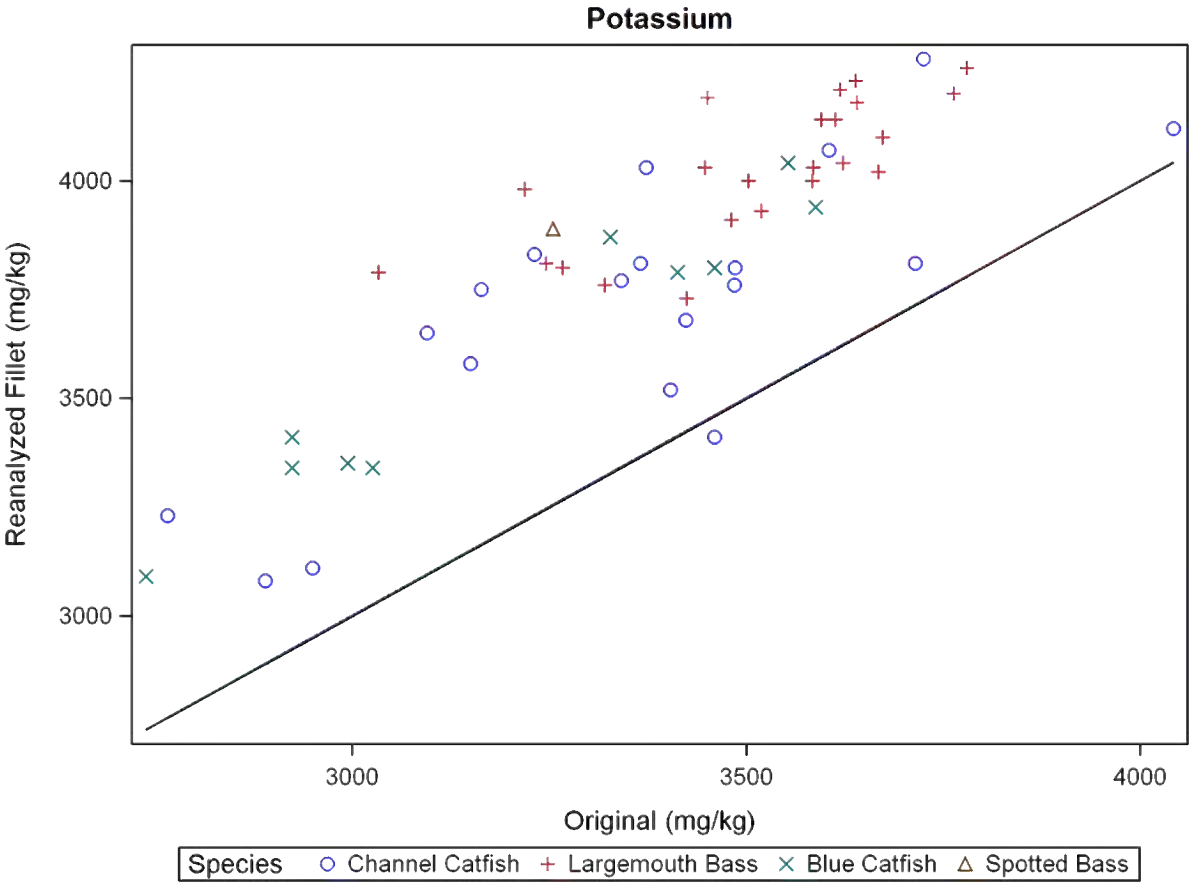

Calcium
Reanalyzed Fillet (mg/kg)
12500
10000
7500
5000
2500
0
0
2000
4000
6000
8000
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

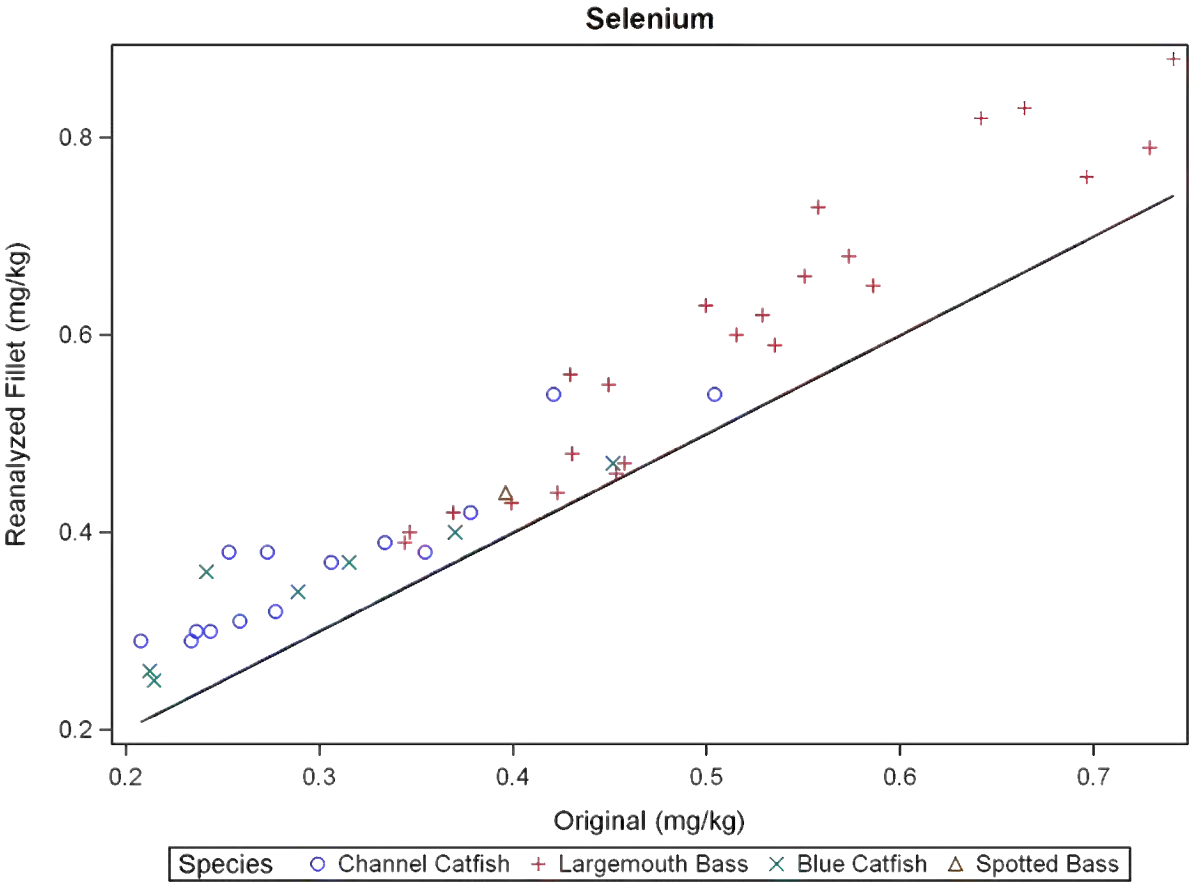

Copper
Reanalyzed Fillet (mg/kg)
0
2
4
6
0.6
0.8
1.0
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

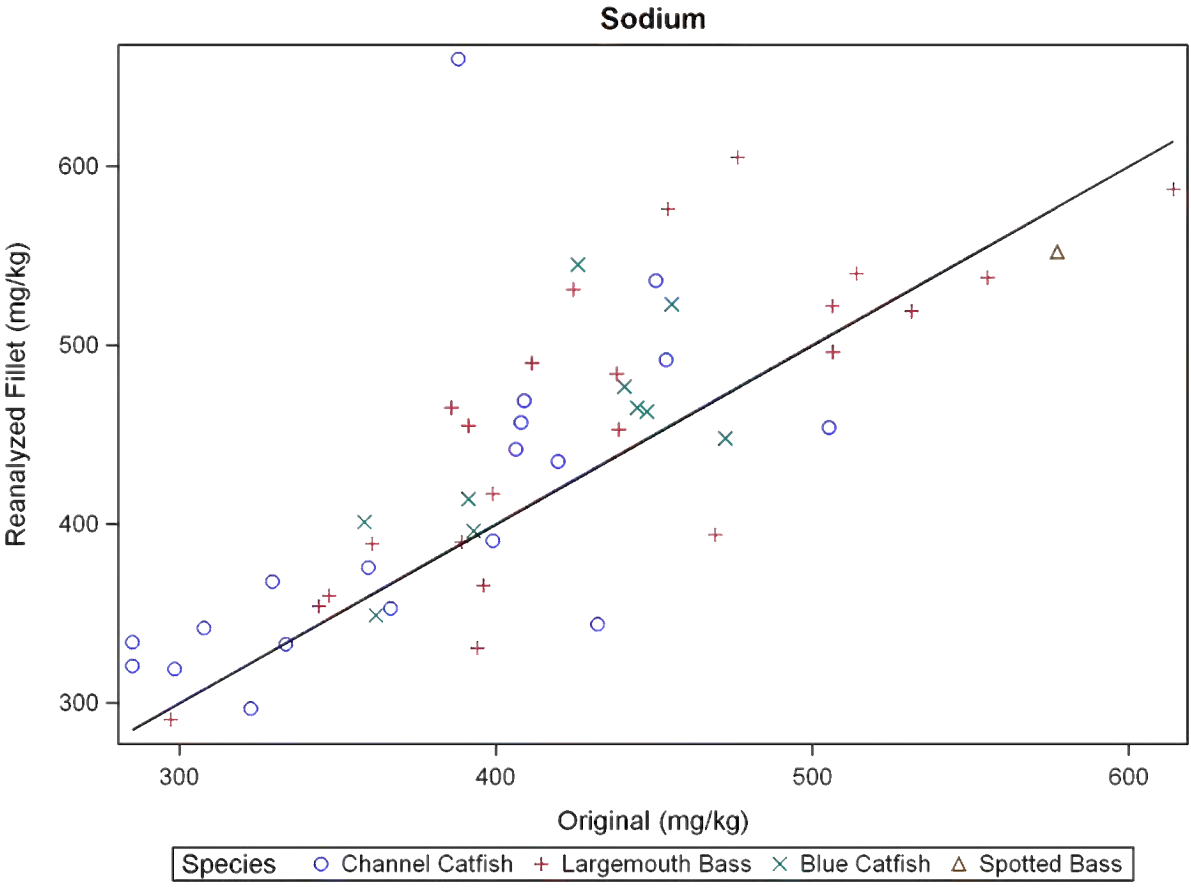

Magnesium
Reanalyzed Fillet (mg/kg)
450
400
350
300
250
200
200
250
300
350
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

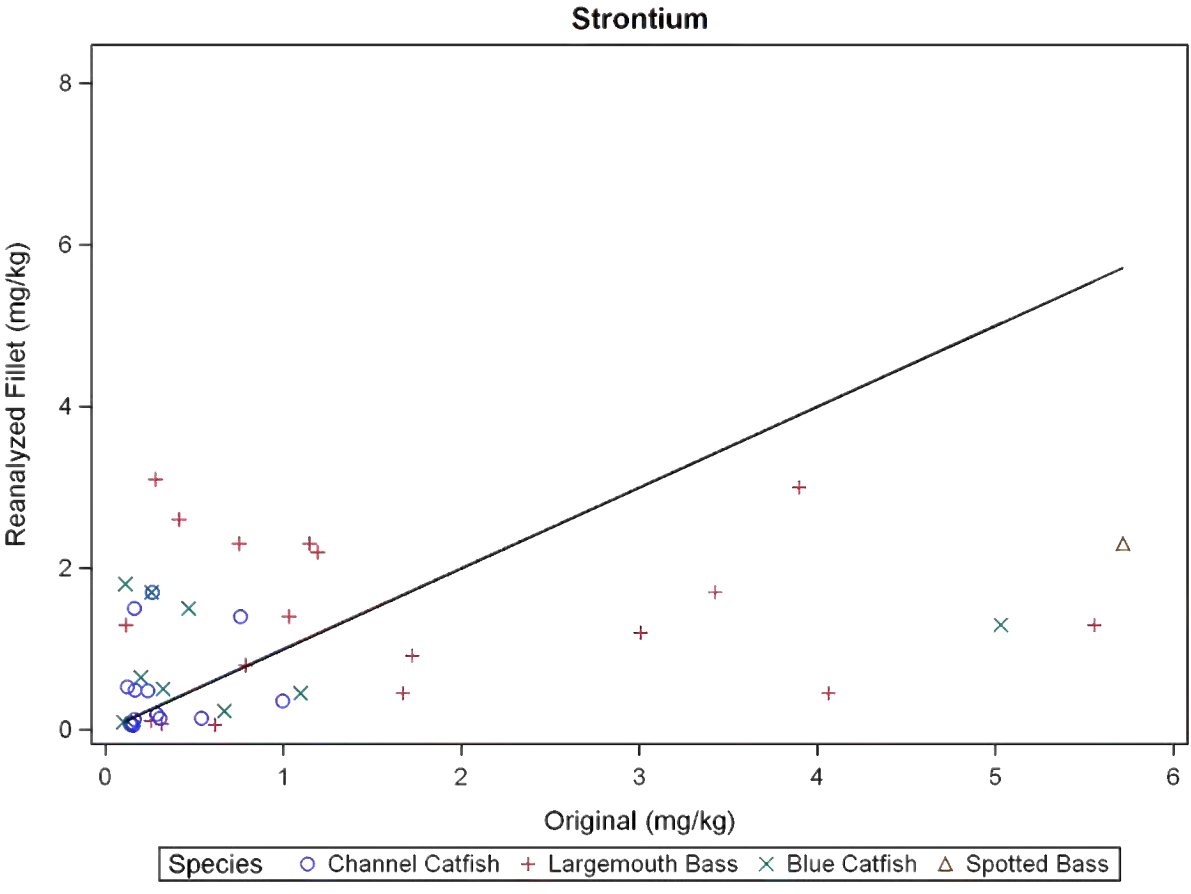

Manganese
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
0
1
2
3
4
5
6
1
2
3
4
5
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

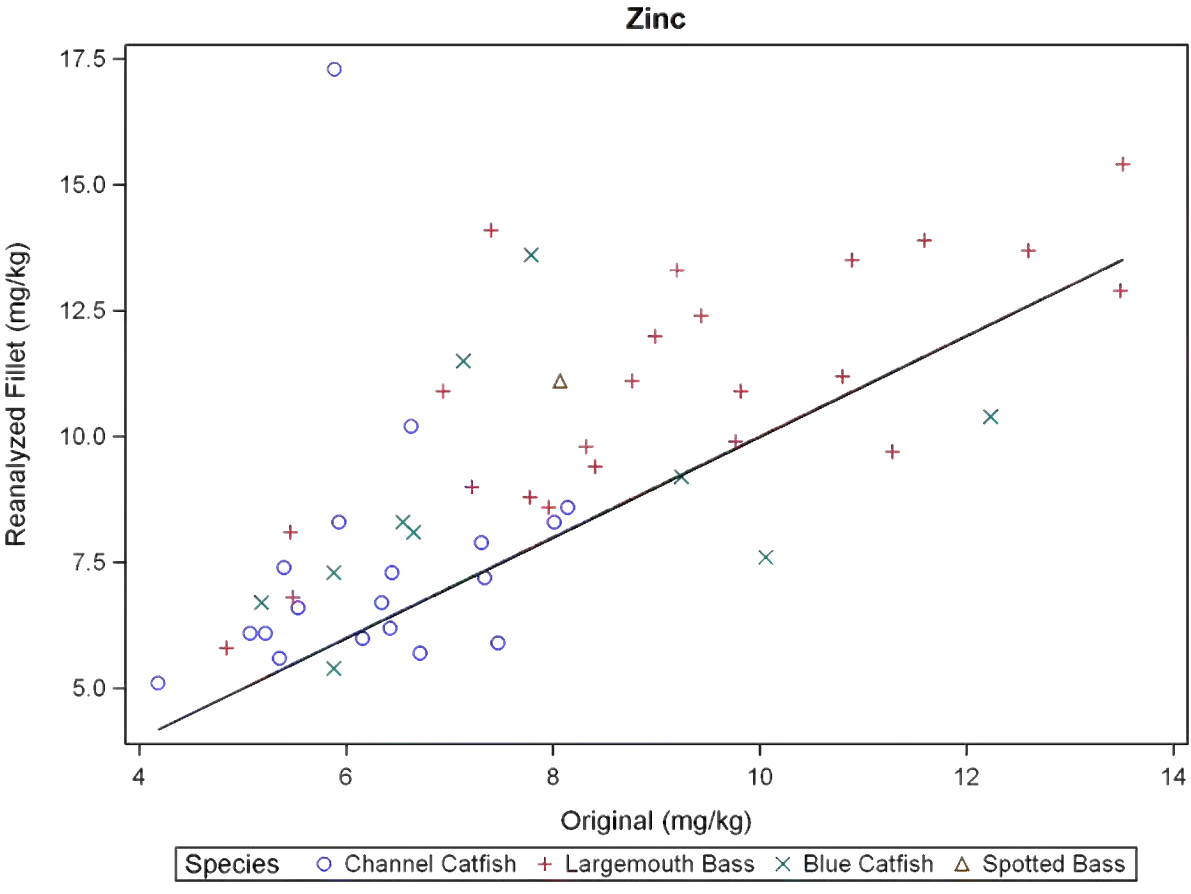

Mercury
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
0.05
0.10
0.15
0.20
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Potassium
Reanalyzed Fillet (mg/kg)
4000
3500
3000
3000
3500
4000
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Selenium
Reanalyzed Fillet (mg/kg)
0.2
0.4
0.6
0.8
0.2
0.3
0.4
0.5
0.6
0.7
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

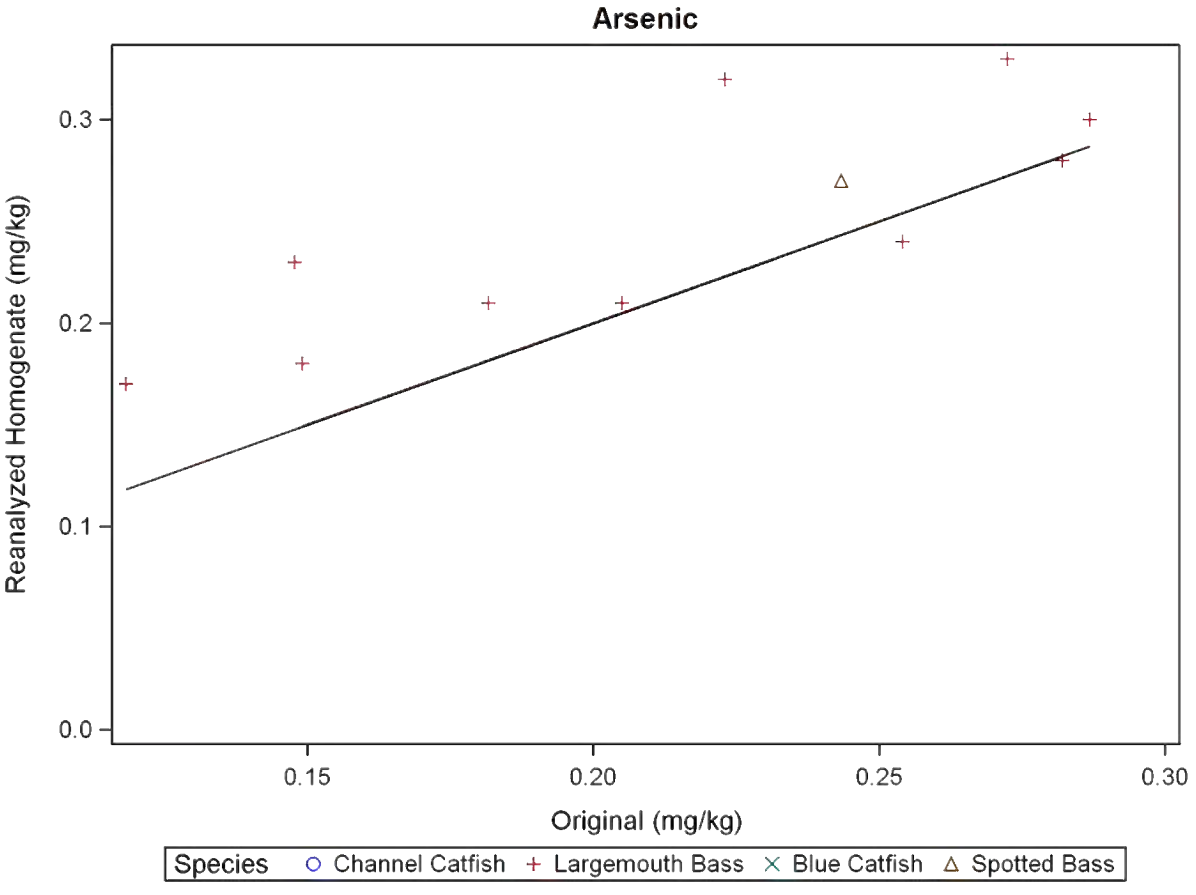

Sodium
Reanalyzed Fillet (mg/kg)
600
500
400
300
300
400
500
600
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

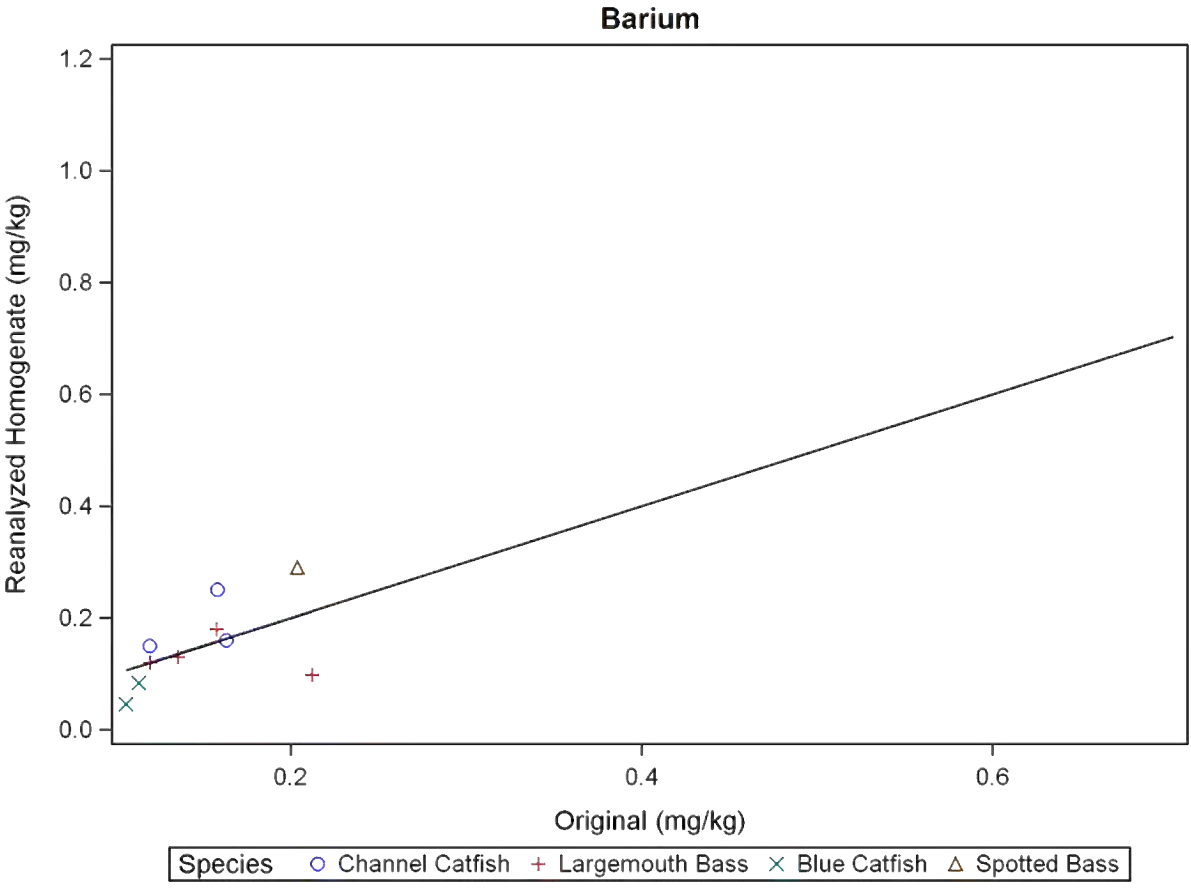

Strontium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
0
2
4
6
8
0
1
2
3
4
5
6
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

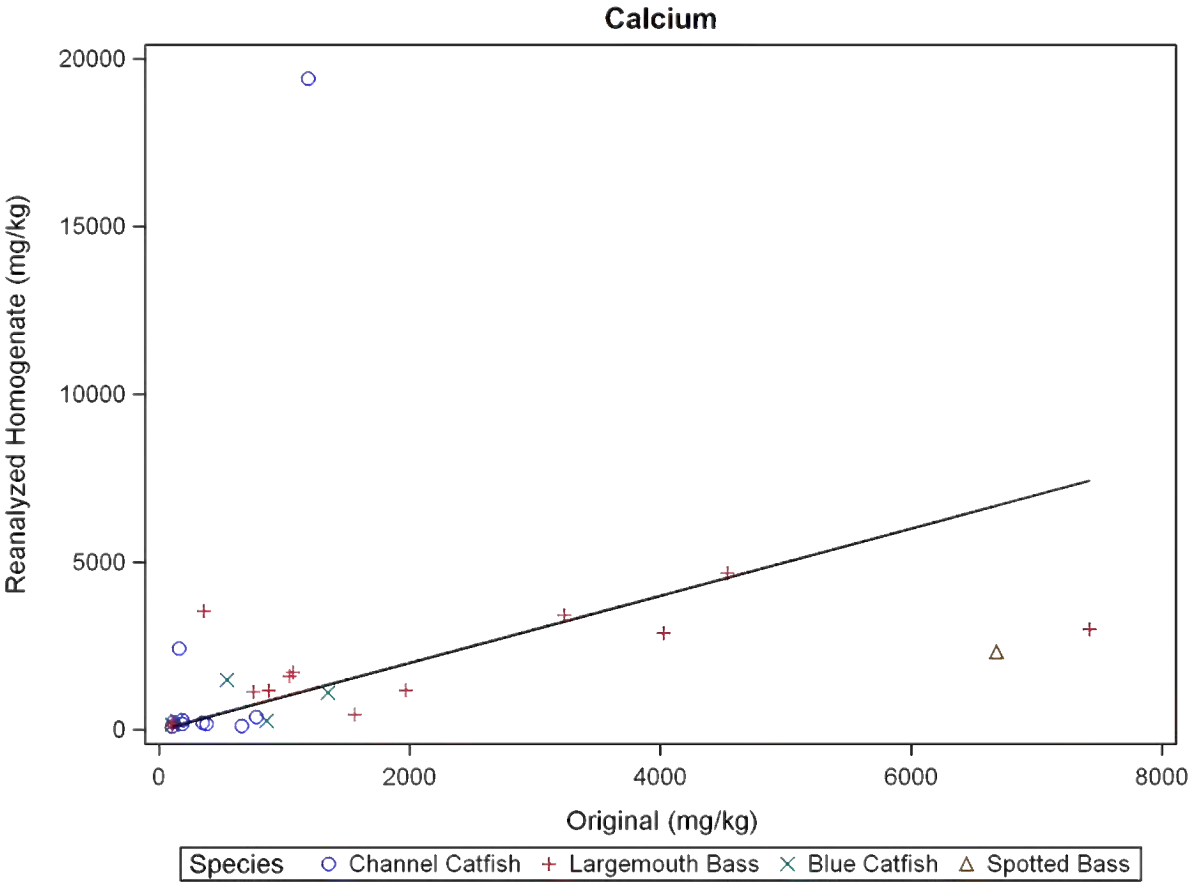

Zinc
Reanalyzed Fillet (mg/kg)
17.5
15.0
12.5
10.0
7.5
5.0
4
6
8
10
12
14
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

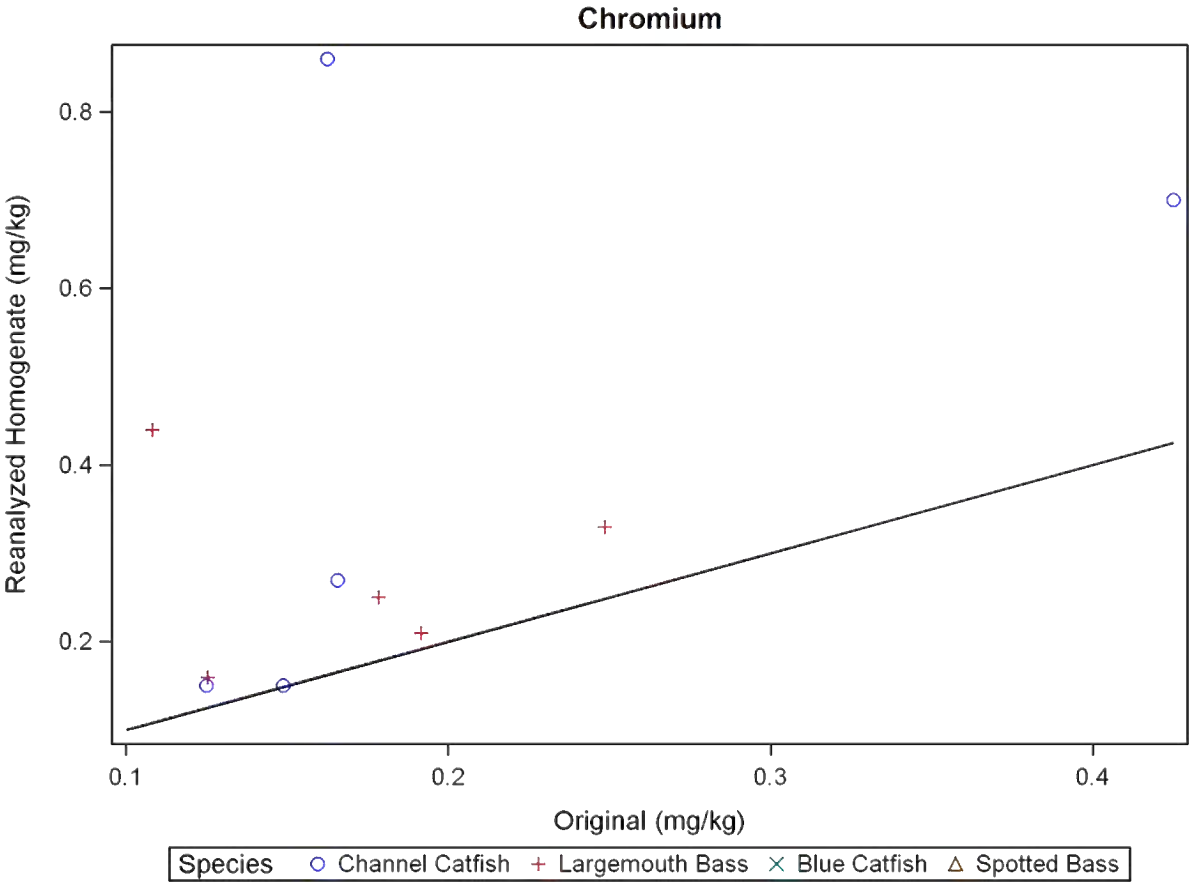
Appendix **C**

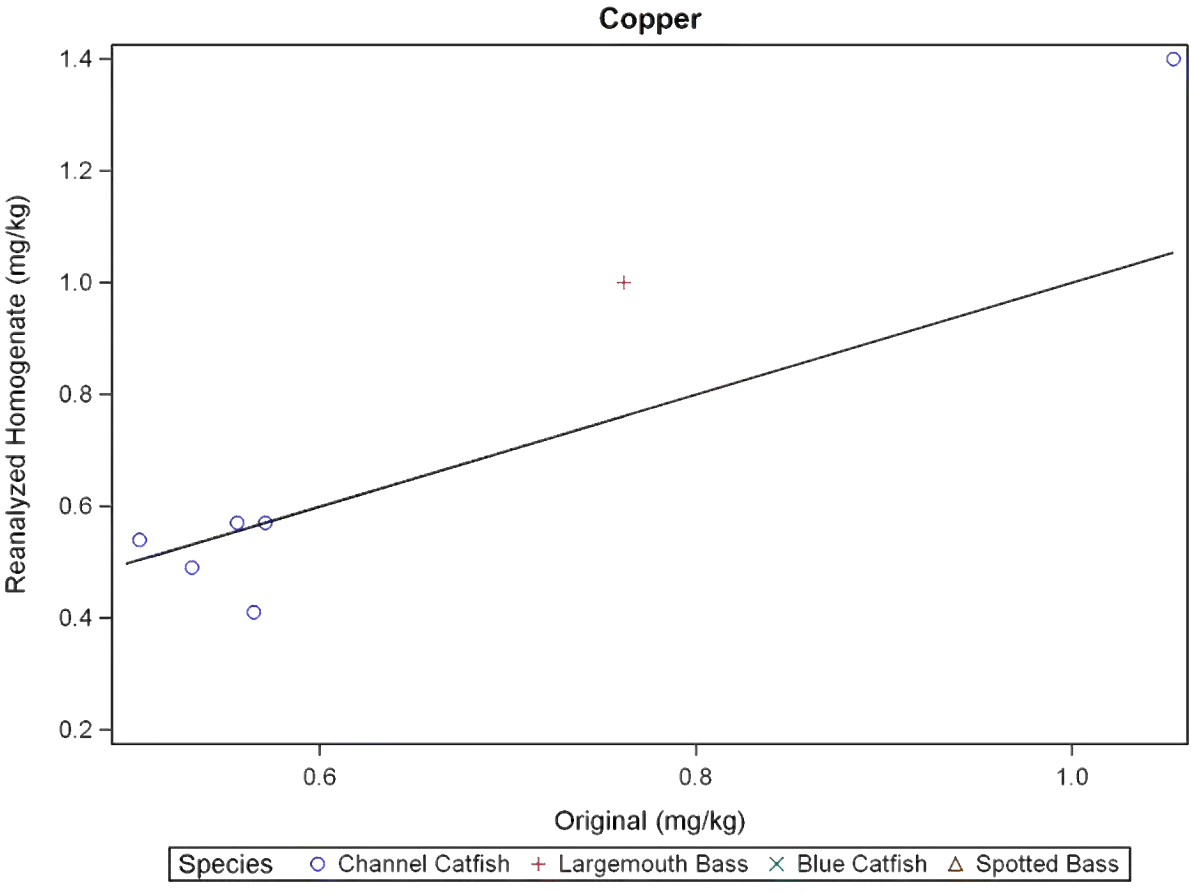
Bivariate Agreement Plots Comparing Original and Reanalyzed Homogenate Detected Wet Weight Results for Metals

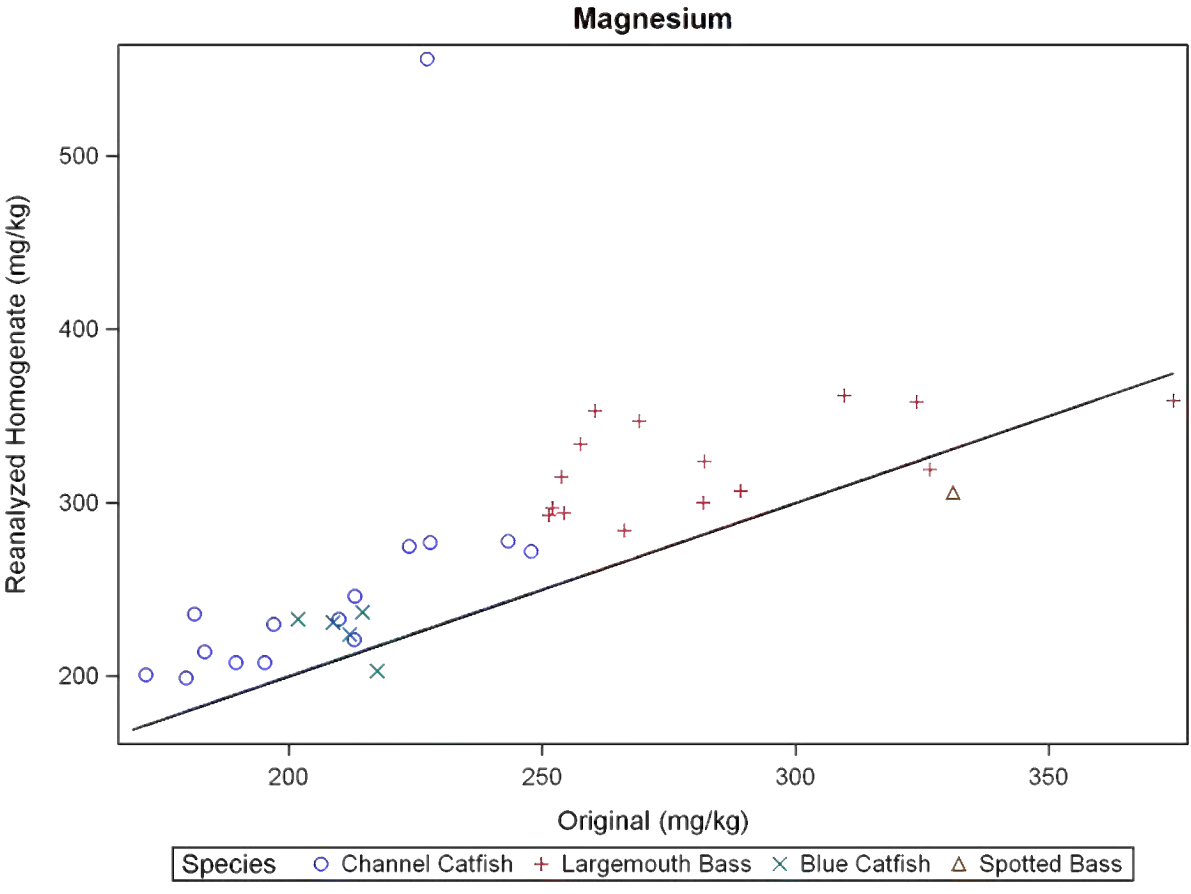

Arsenic
Reanalyzed Homogenate (mg/kg)
0.0
0.1
0.2
0.3
0.15
0.20
0.25
0.30
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

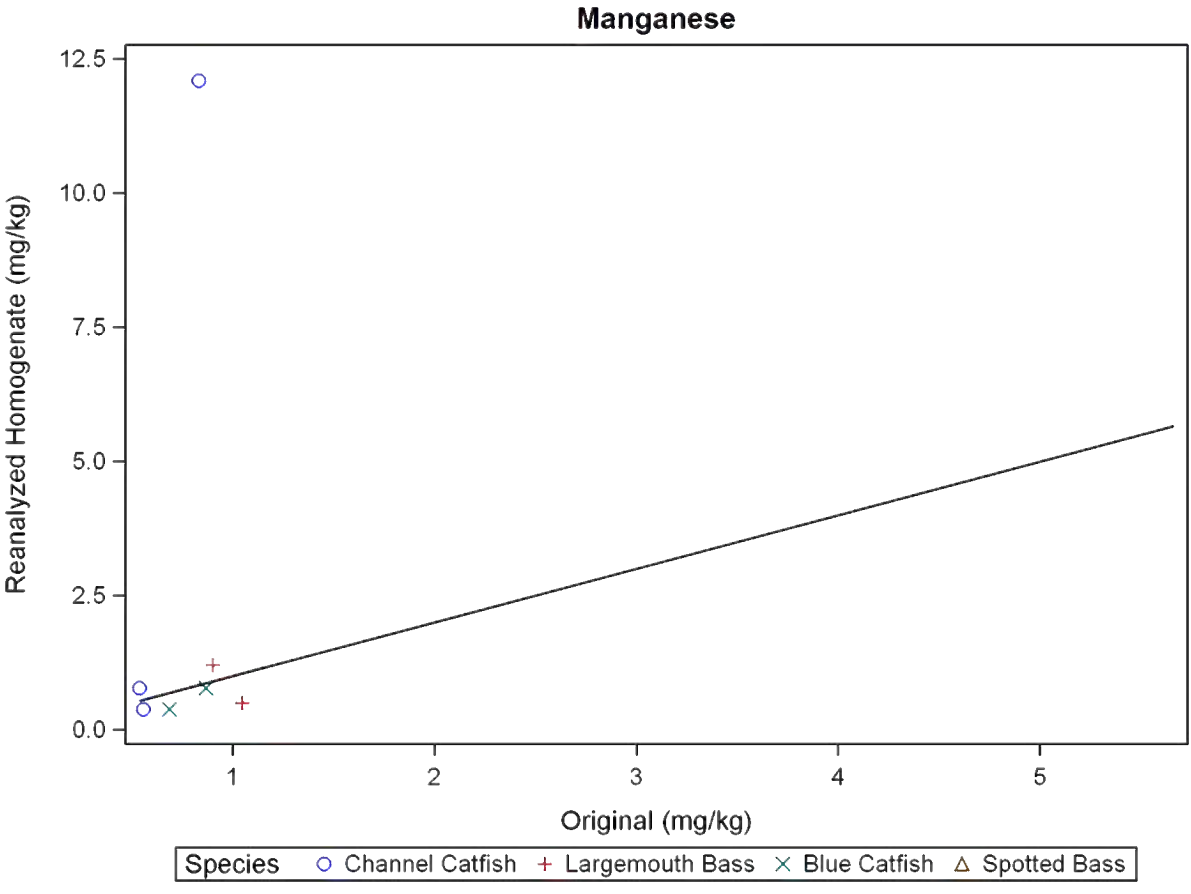

Barium
Reanalyzed Homogenate (mg/kg)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.4
0.6
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

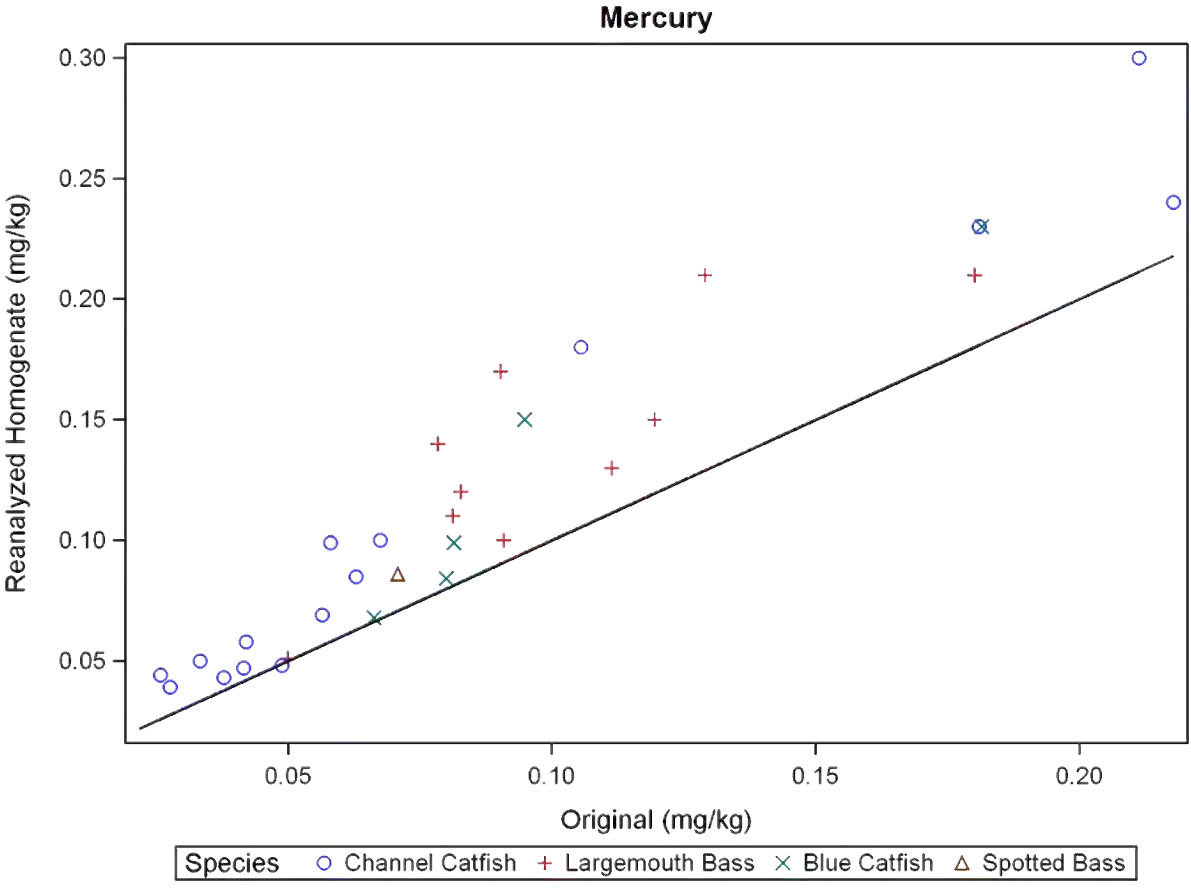

Calcium
Reanalyzed Homogenate (mg/kg)
20000
15000
10000
5000
0
0
2000
4000
6000
8000
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

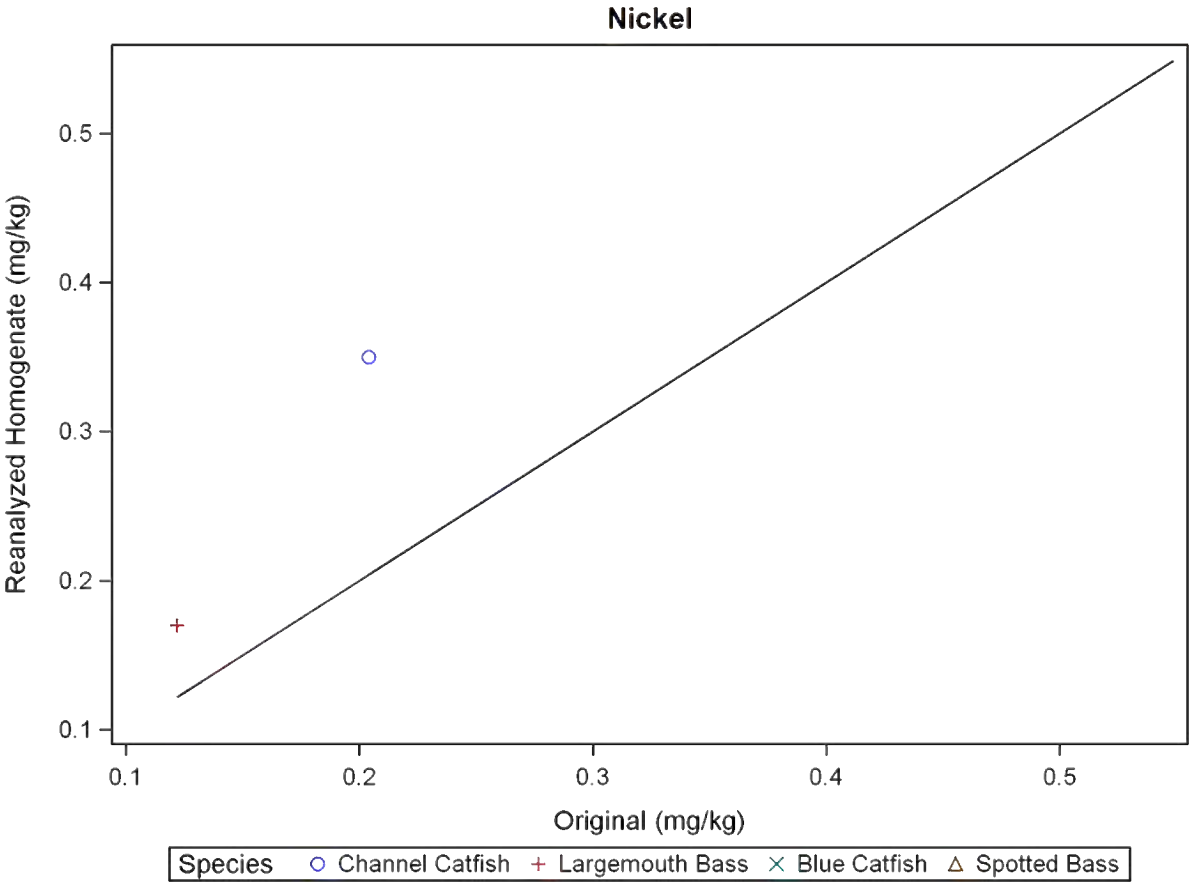

Chromium
Reanalyzed Homogenate (mg/kg)
0.8
0.6
0.4
0.2
0.1
0.2
0.3
0.4
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

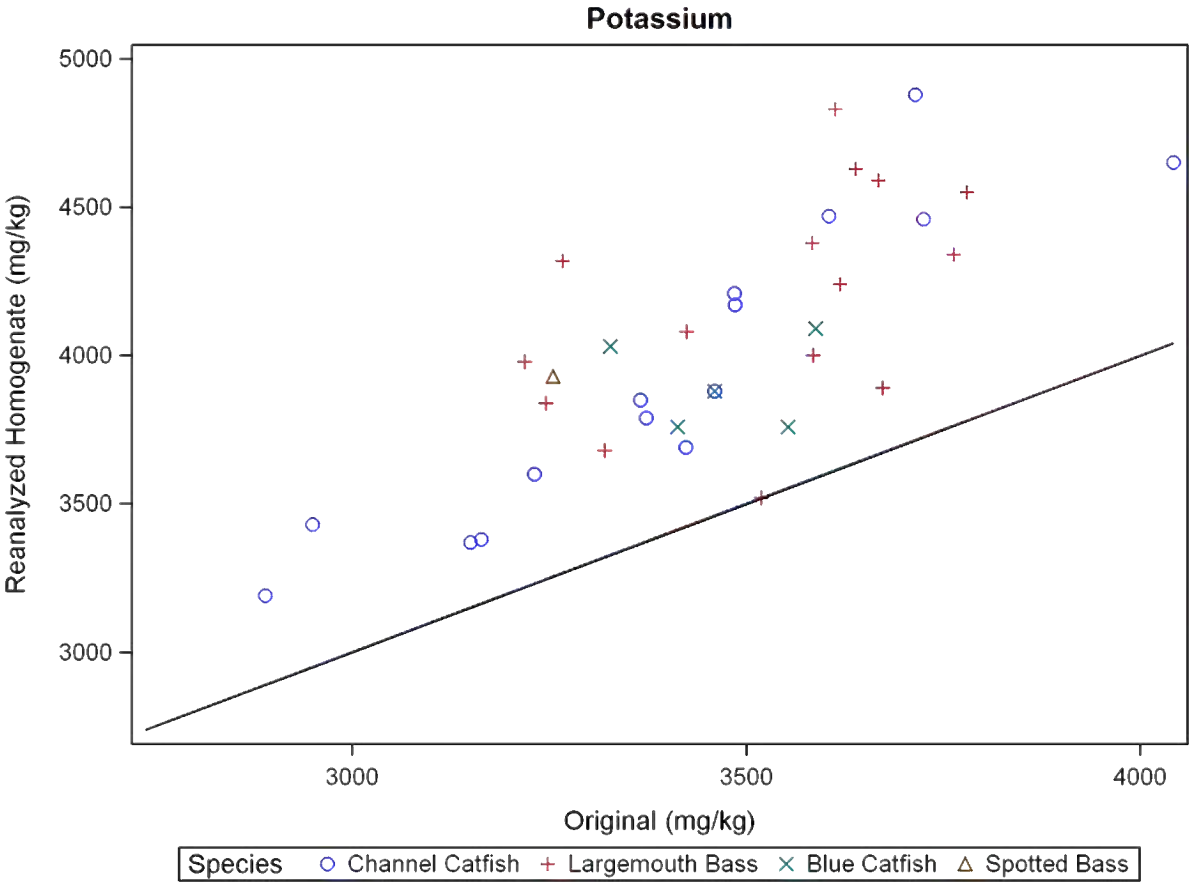

Copper
Reanalyzed Homogenate (mg/kg)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.6
0.8
1.0
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

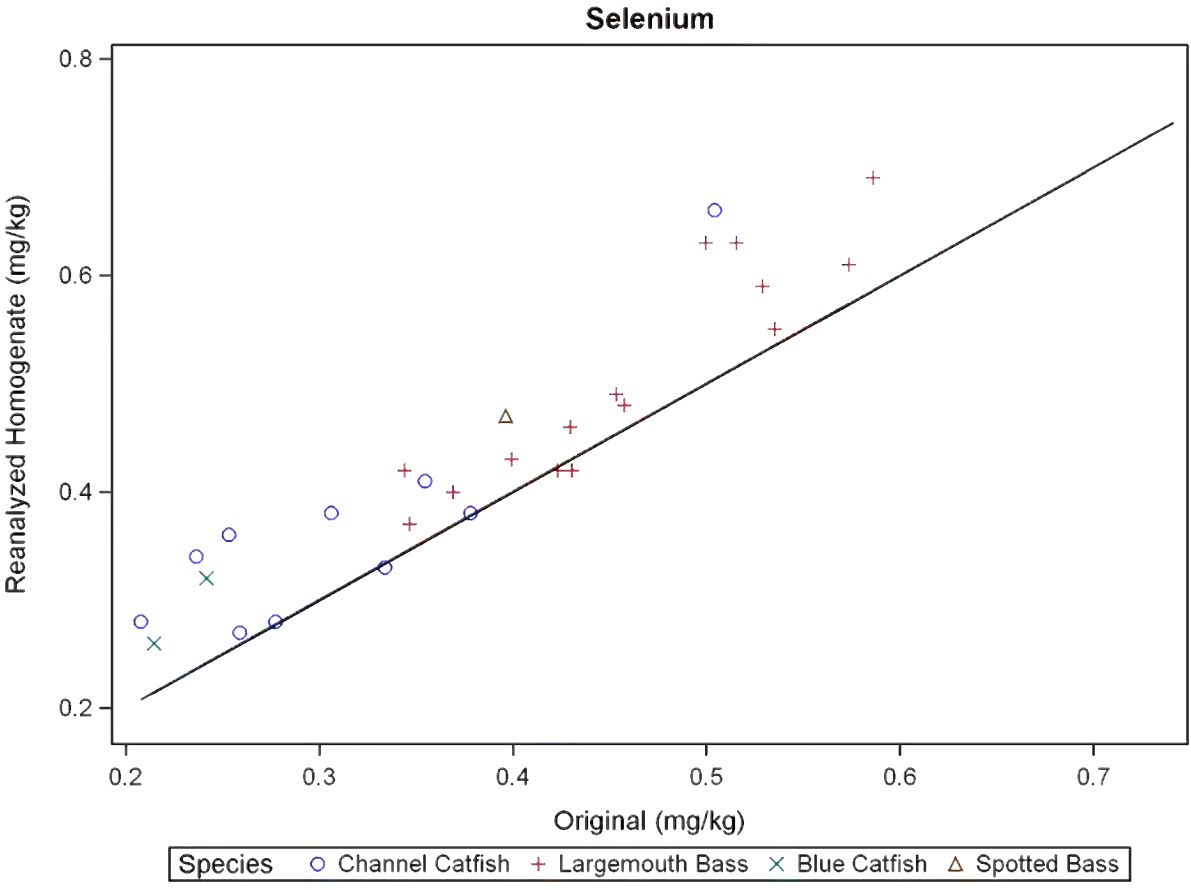

Magnesium
Reanalyzed Homogenate (mg/kg)
500
400
300
200
200
250
300
350
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

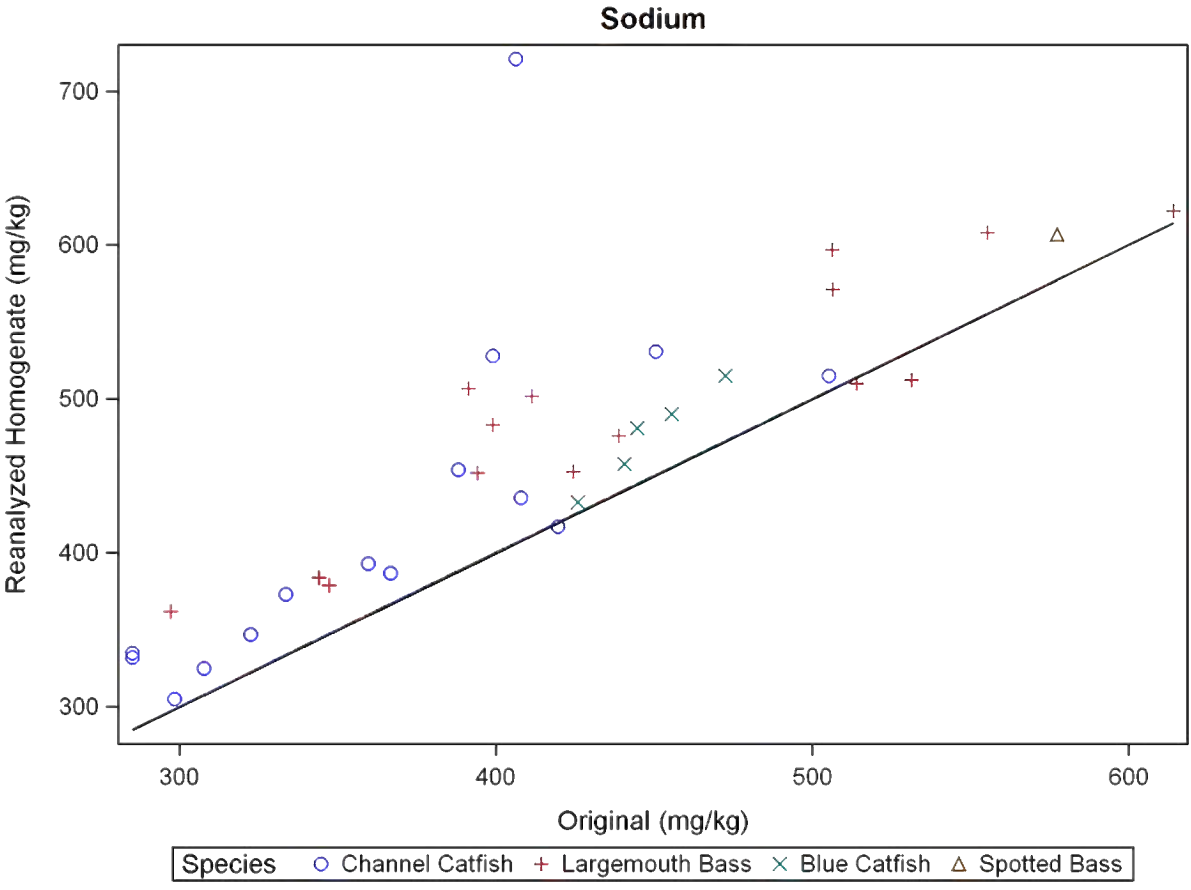

Manganese
Reanalyzed Homogenate (mg/kg)
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

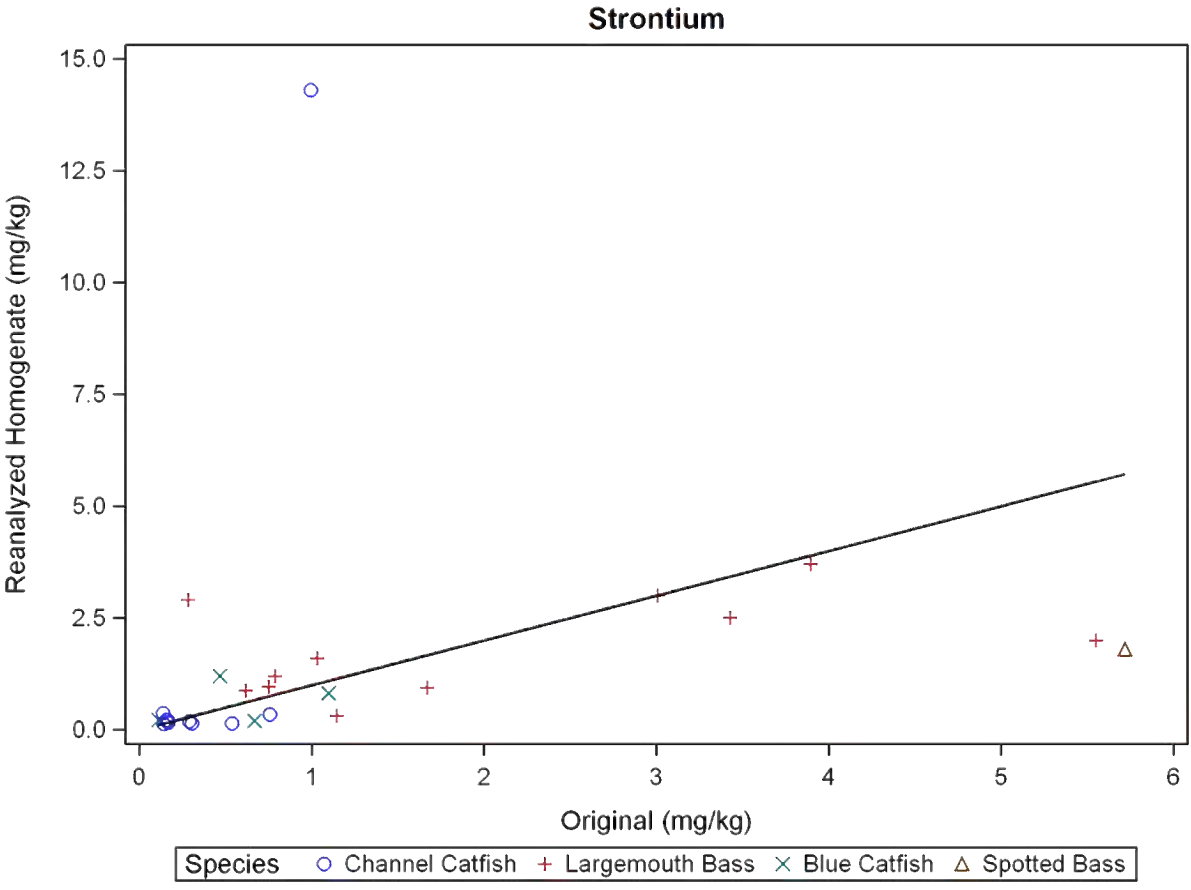

Mercury
Reanalyzed Homogenate (mg/kg)
0.30
0.25
0.20
0.15
0.10
0.05
0.05
0.10
0.15
0.20
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

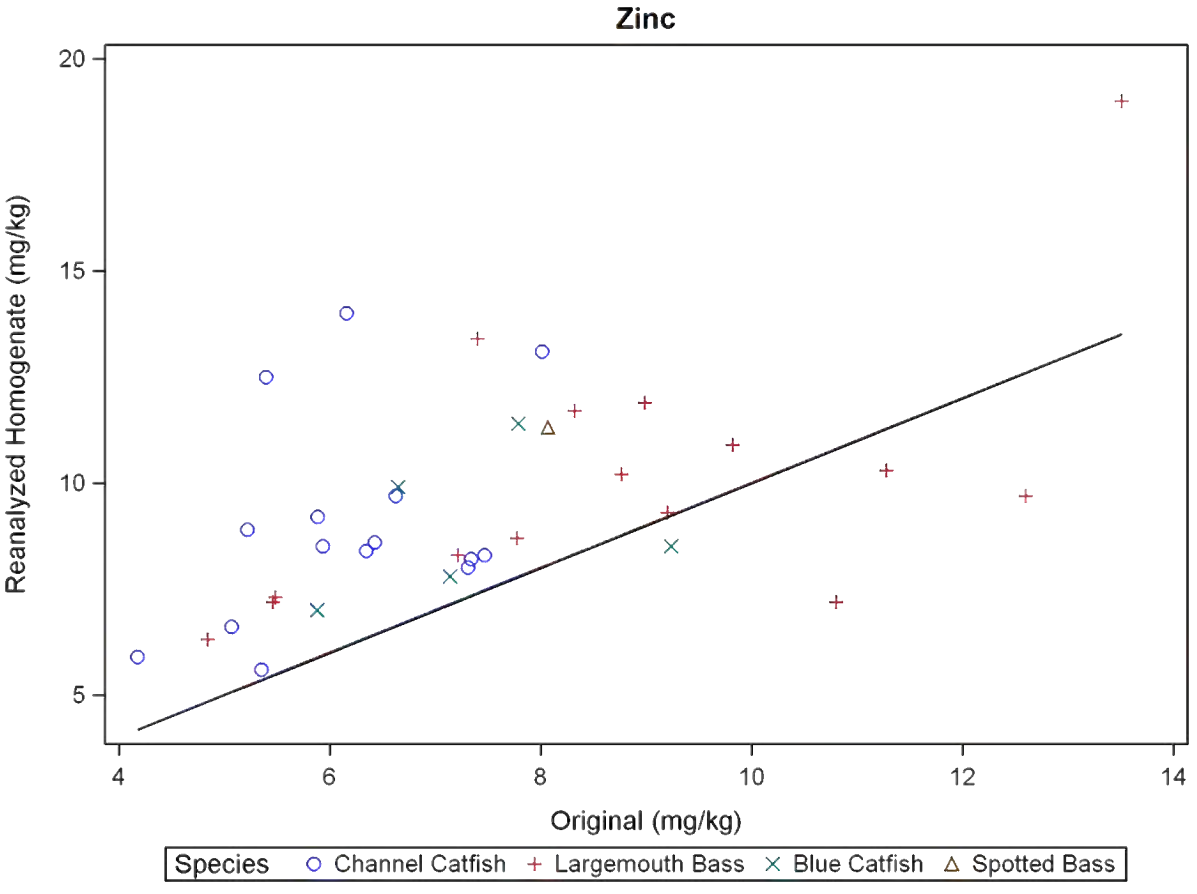

Nickel
Reanalyzed Homogenate (mg/kg)
0.1
0.2
0.3
0.4
0.5
Original (mg/kg)
0.1
0.2
0.3
0.4
0.5
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Potassium
Reanalyzed Homogenate (mg/kg)
5000
4500
4000
3500
3000
3000
3500
4000
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Selenium
Reanalyzed Homogenate (mg/kg)
0.8
0.6
0.4
0.2
0.2
0.3
0.4
0.5
0.6
0.7
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

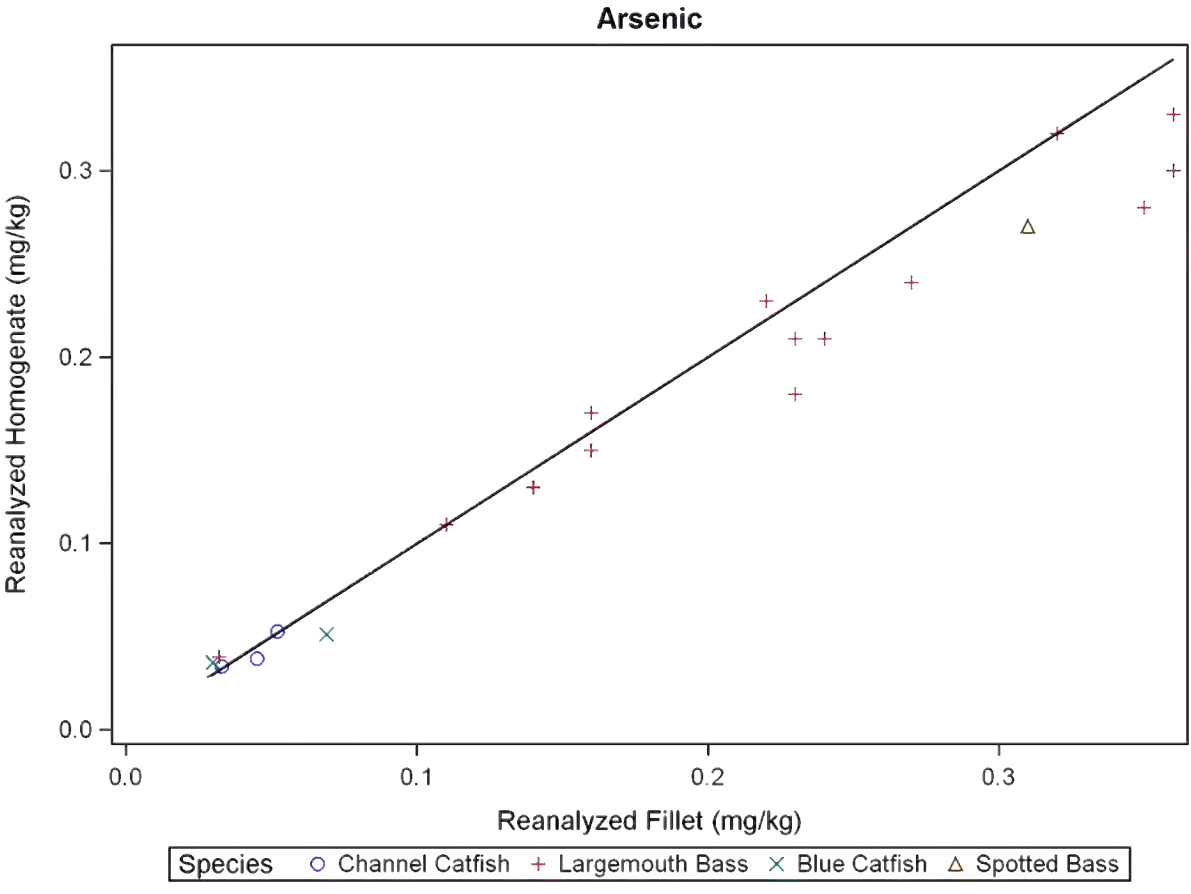

Sodium
Reanalyzed Homogenate (mg/kg)
700
600
500
400
300
300
400
500
600
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

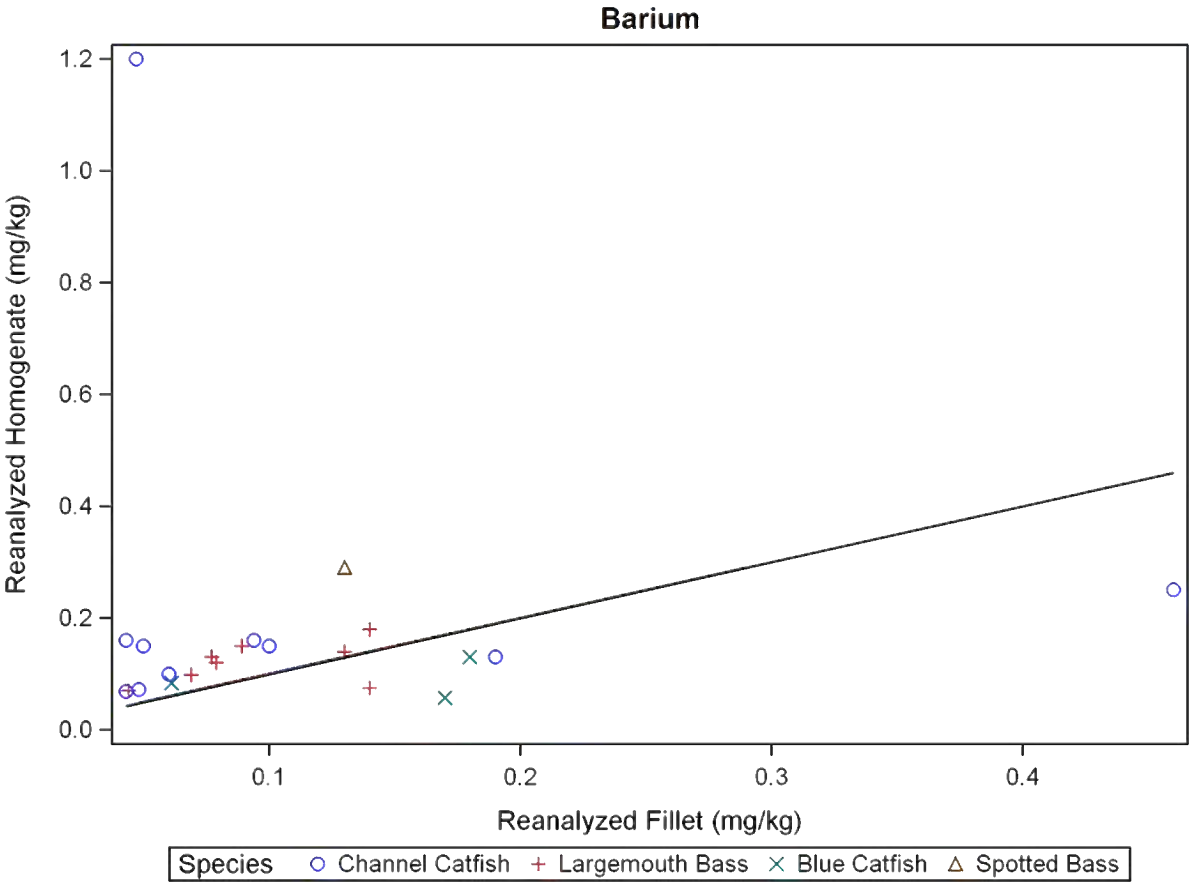

Strontium
Reanalyzed Homogenate (mg/kg)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
0
1
2
3
4
5
6
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

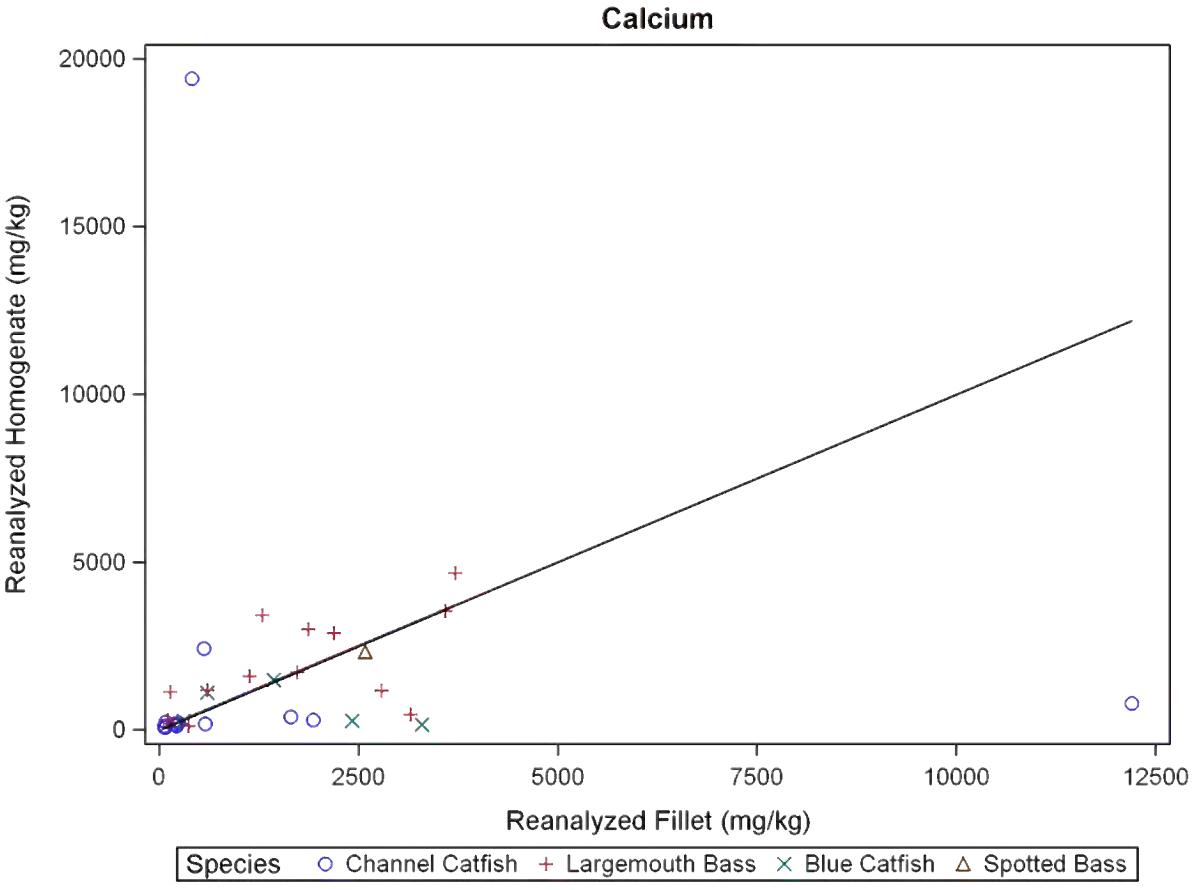

Zinc
Reanalyzed Homogenate (mg/kg)
20
15
10
5
4
6
8
10
12
14
Original (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

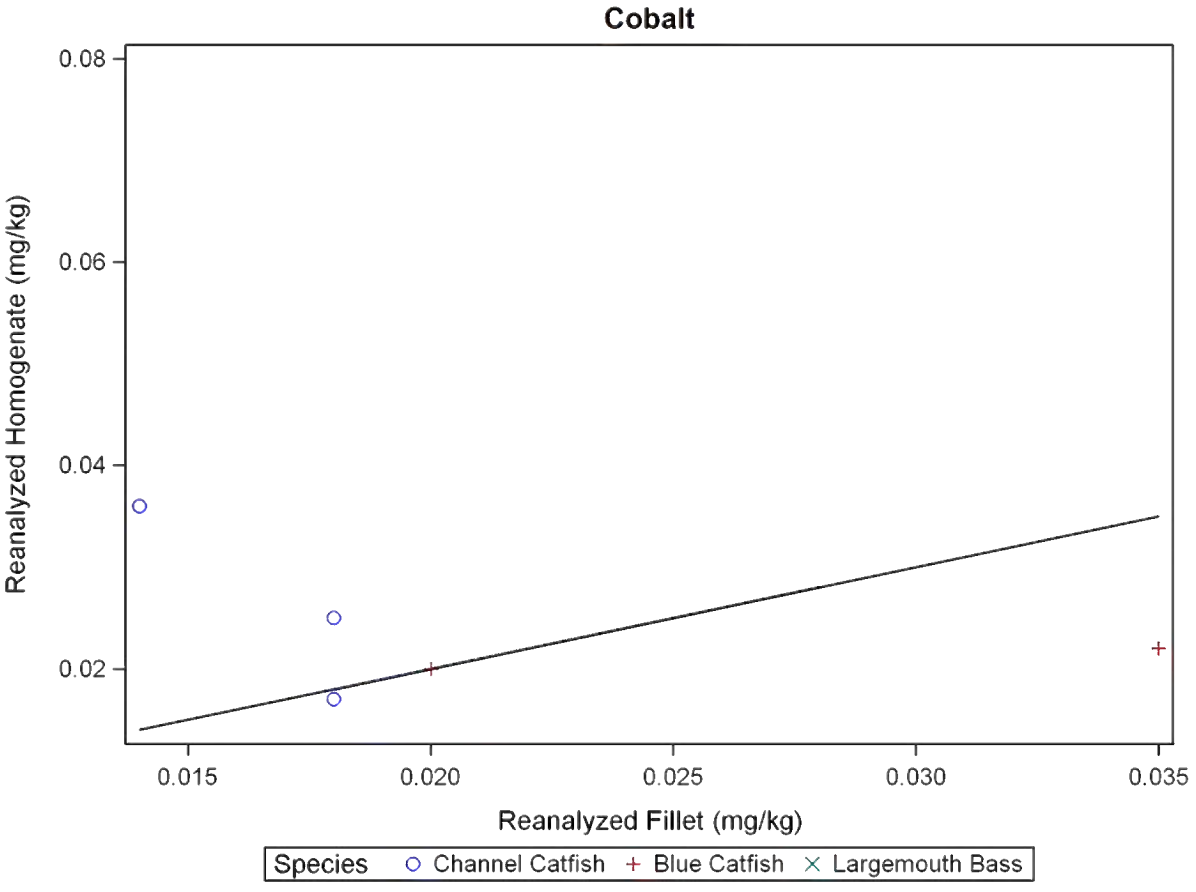
Appendix **D**

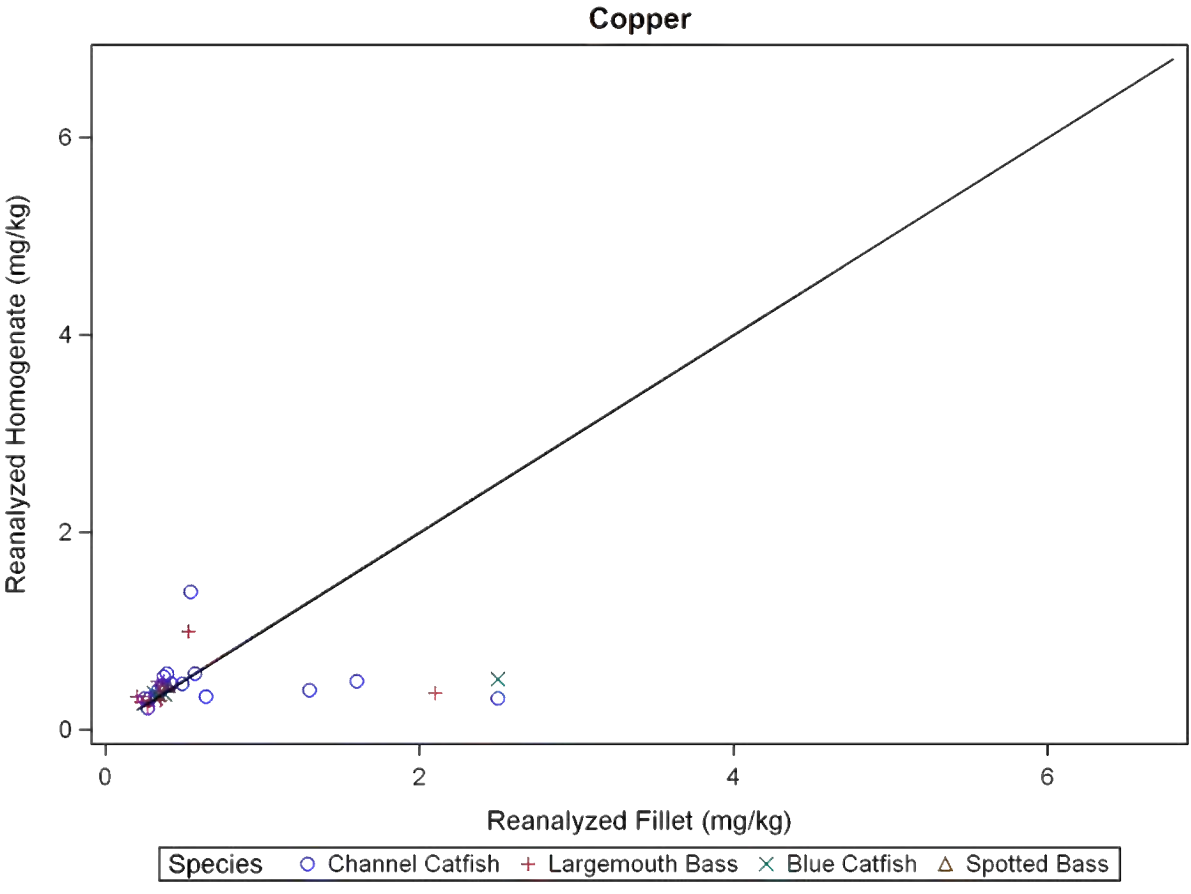
Bivariate Agreement Plots Comparing Reanalyzed Fillet and Reanalyzed Homogenate Detected Wet Weight Results for Metals

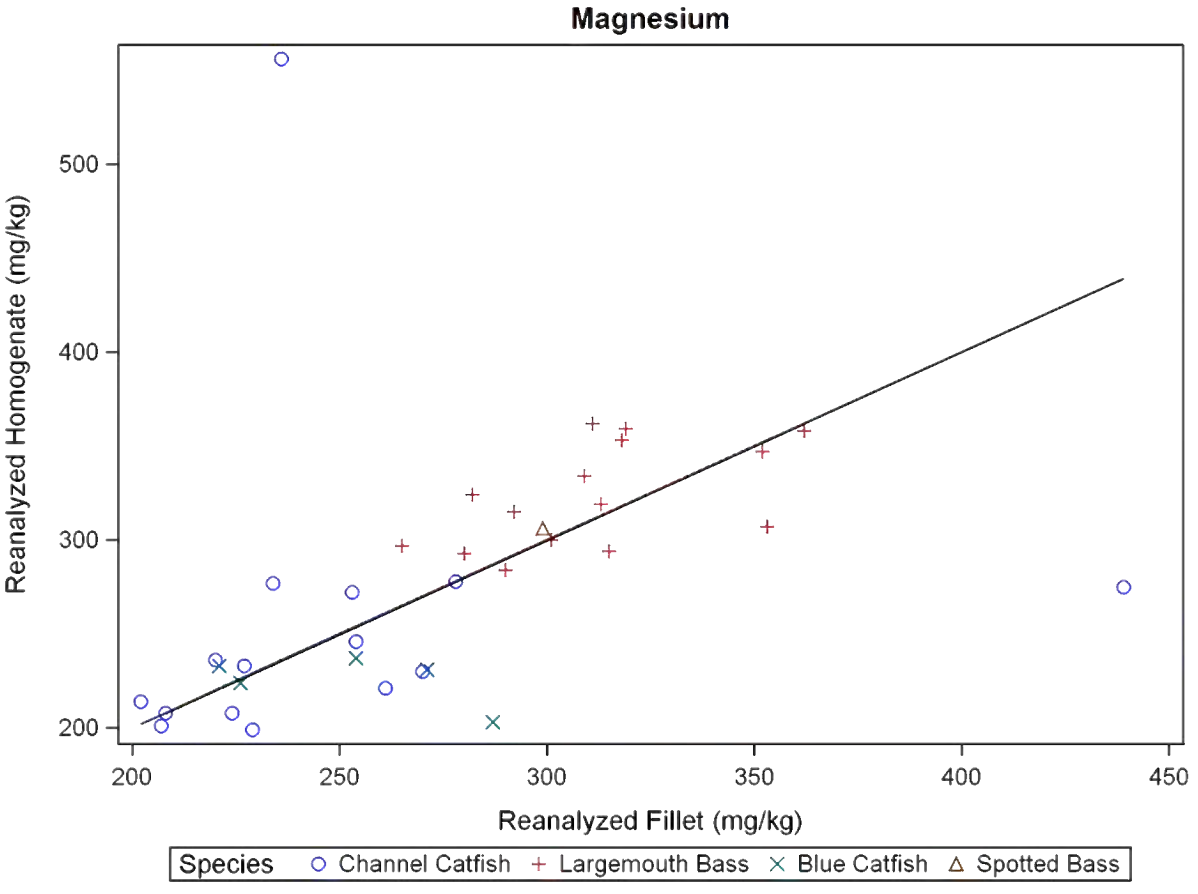

Arsenic
Reanalyzed Homogenate (mg/kg)
0.0
0.1
0.2
0.3
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

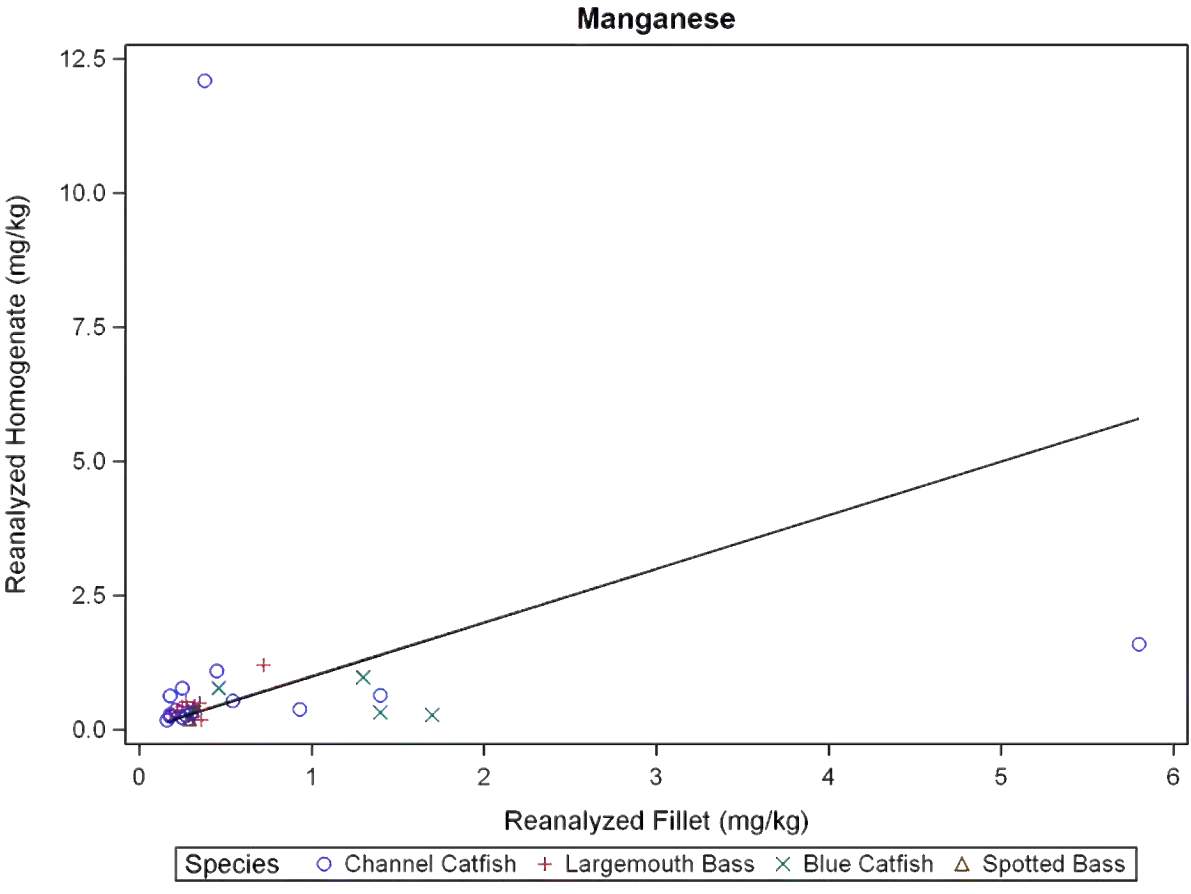

Barium
Reanalyzed Homogenate (mg/kg)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.1
0.2
0.3
0.4
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

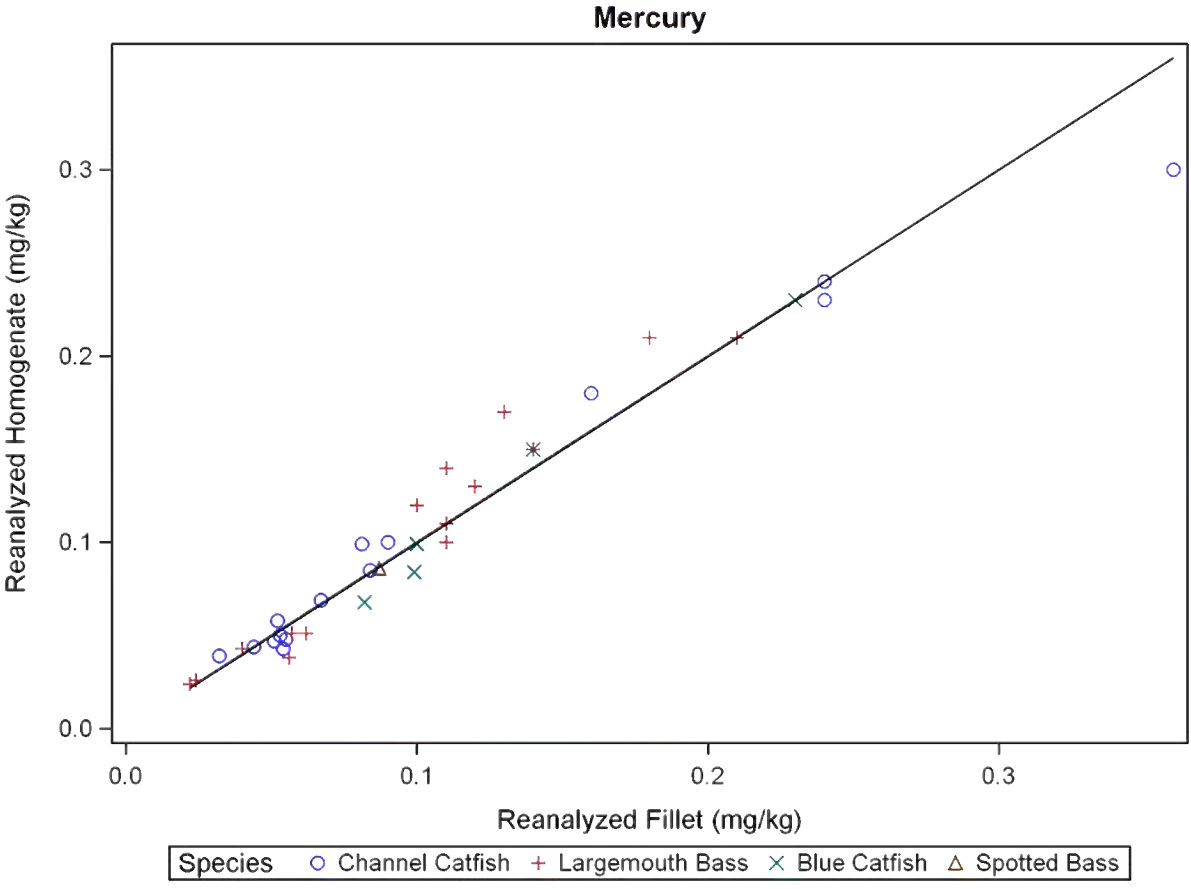

Calcium
Reanalyzed Homogenate (mg/kg)
20000
15000
10000
5000
0
0
2500
5000
7500
10000
12500
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

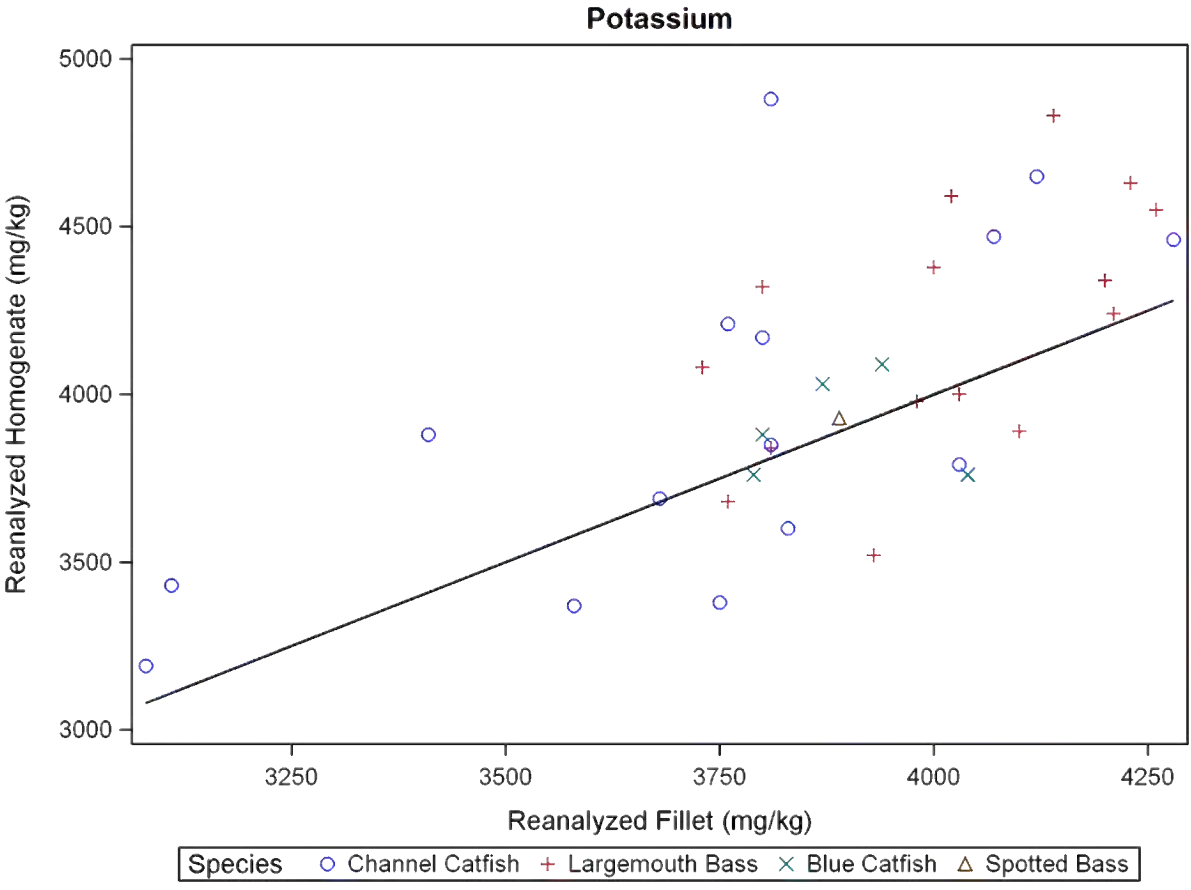

Cobalt
0.08
0.06
0.04
0.02
Reanalyzed Homogenate (mg/kg)
0.015
0.020
0.025
0.030
0.035
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Blue Catfish
Largemouth Bass

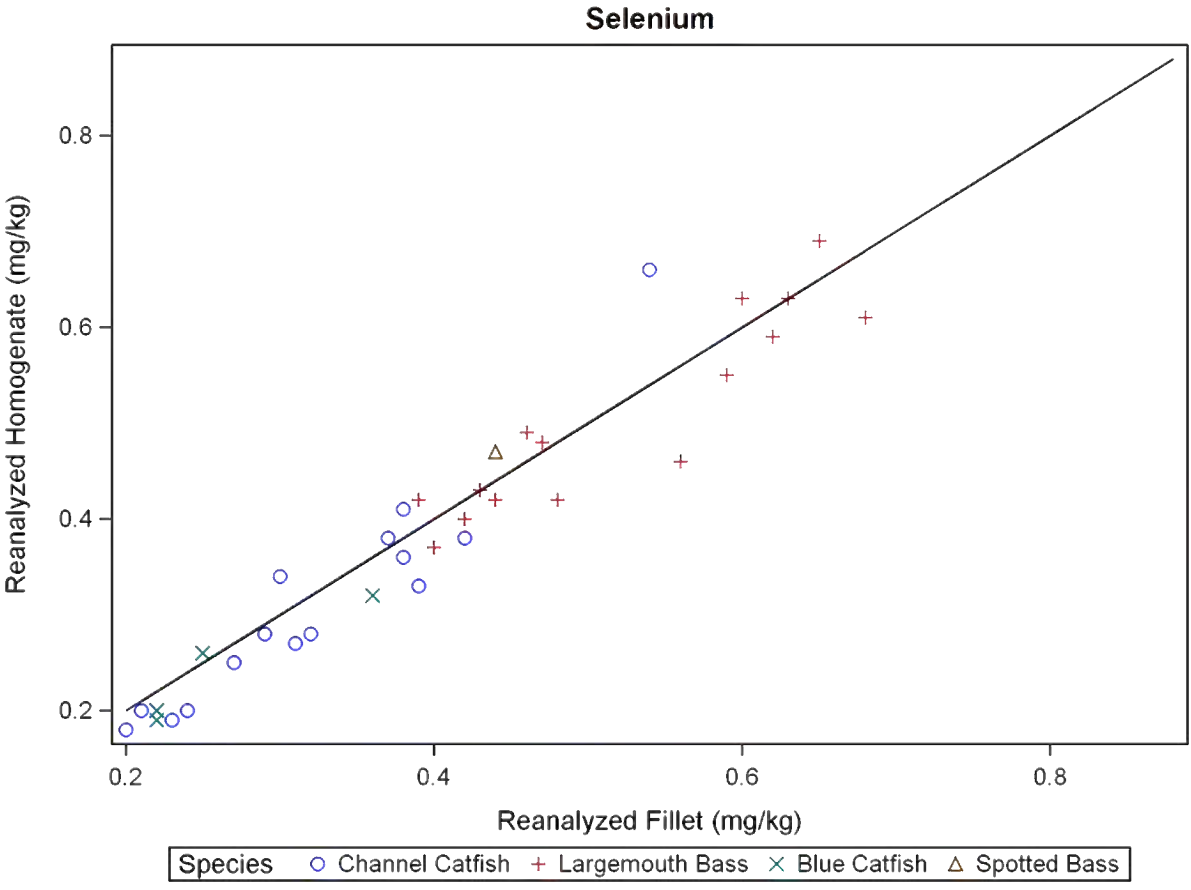

Copper
Reanalyzed Homogenate (mg/kg)
Reanalyzed Fillet (mg/kg)
0
2
4
6
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

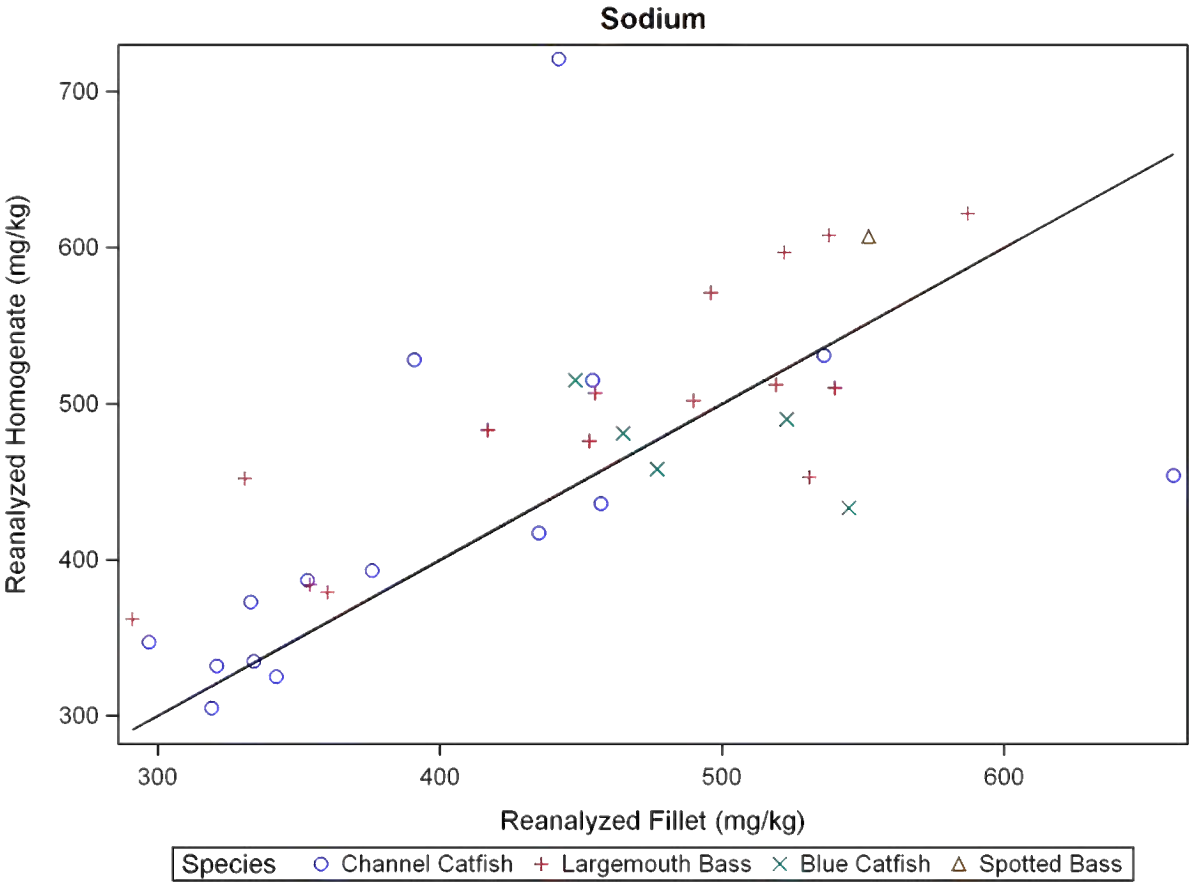

Magnesium
Reanalyzed Homogenate (mg/kg)
500
400
300
200
200
250
300
350
400
450
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

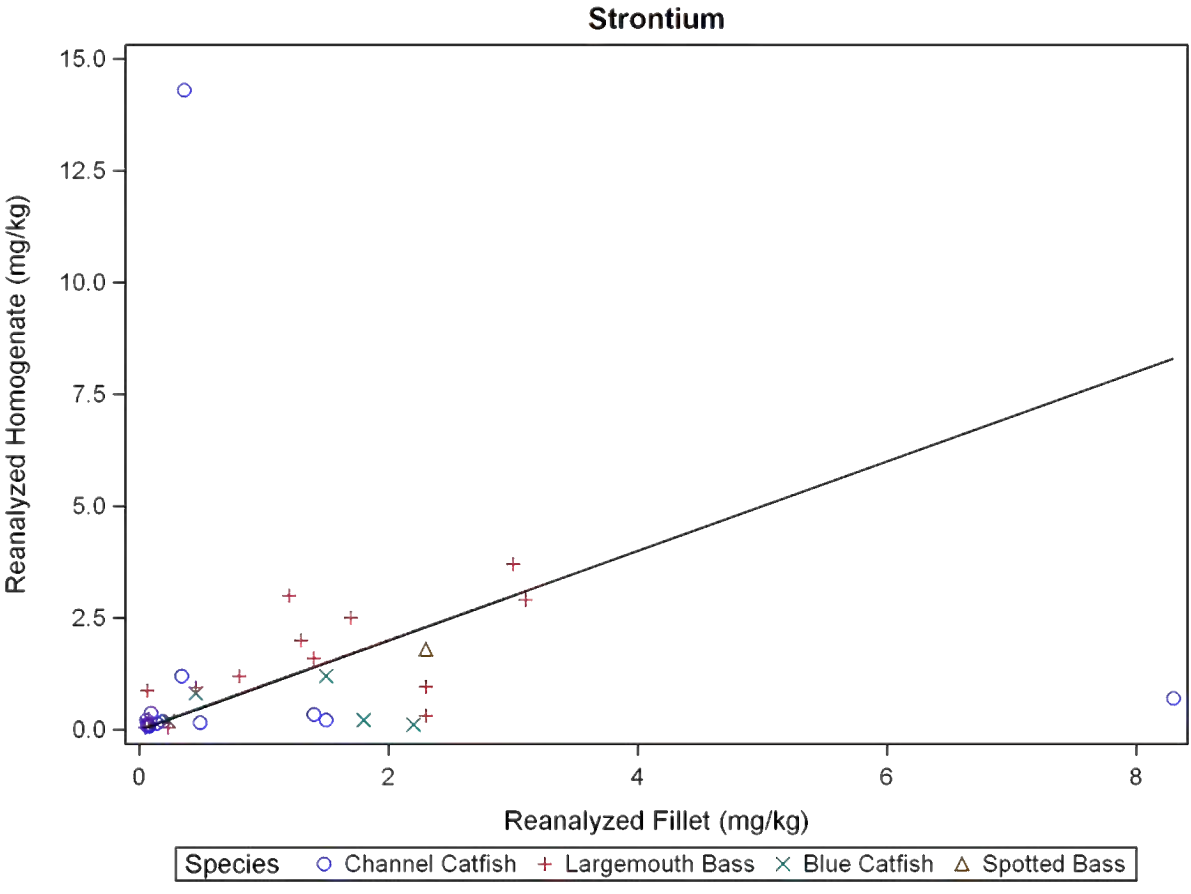

Manganese
Reanalyzed Homogenate (mg/kg)
12.5
10.0
7.5
5.0
2.5
0.0
0
1
2
3
4
5
6
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

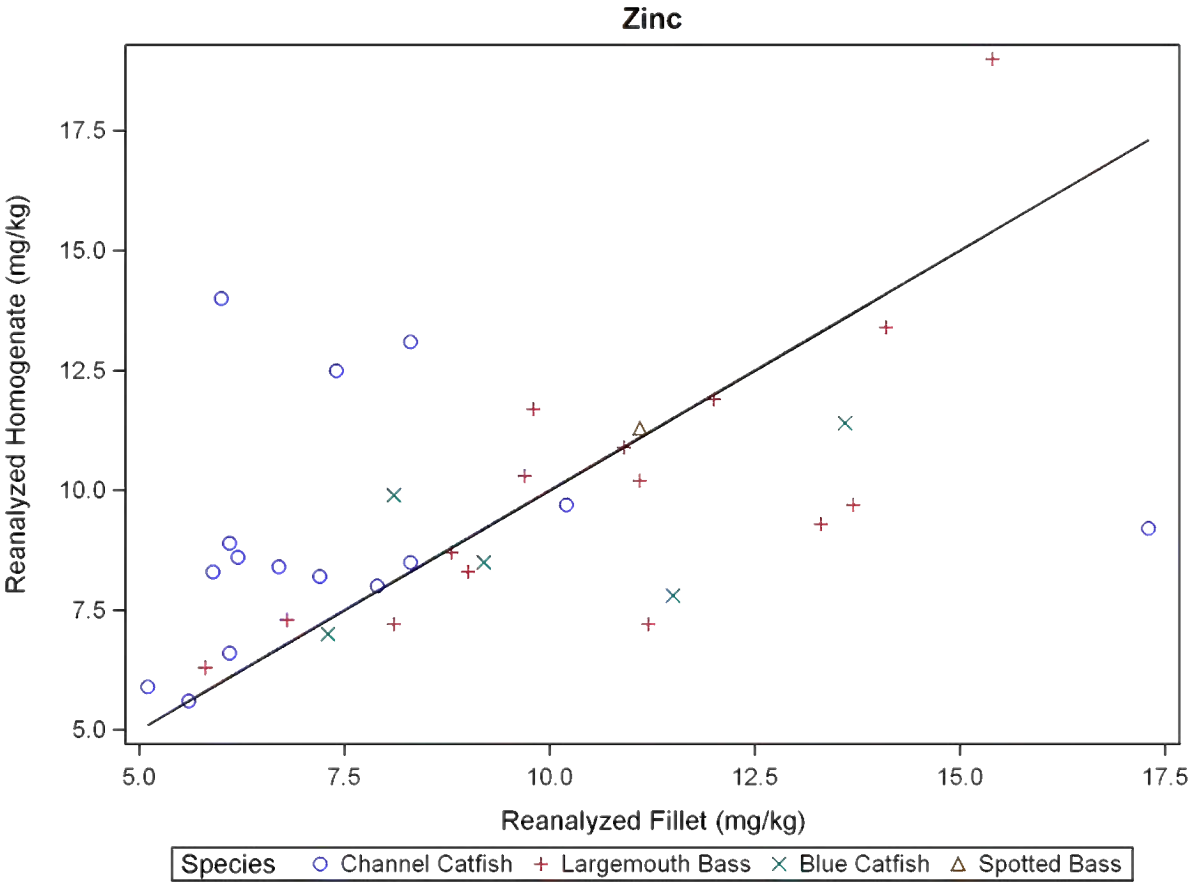

Mercury
Reanalyzed Homogenate (mg/kg)
0.0
0.1
0.2
0.3
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Potassium
Reanalyzed Homogenate (mg/kg)
5000
4500
4000
3500
3000
3250
3500
3750
4000
4250
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Selenium
Reanalyzed Homogenate (mg/kg)
0.2
0.4
0.6
0.8
Reanalyzed Fillet (mg/kg)
0.2
0.4
0.6
0.8
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

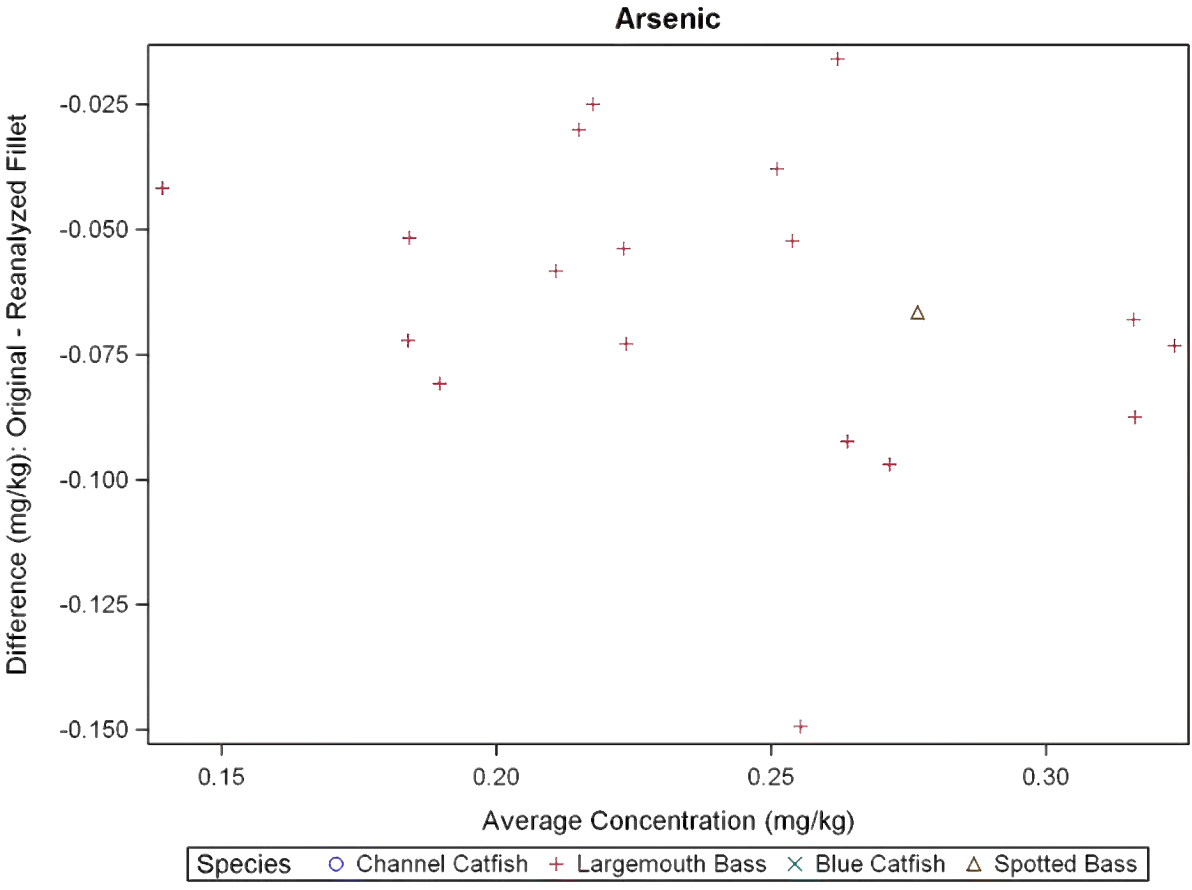

Sodium
Reanalyzed Homogenate (mg/kg)
700
600
500
400
300
300
400
500
600
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

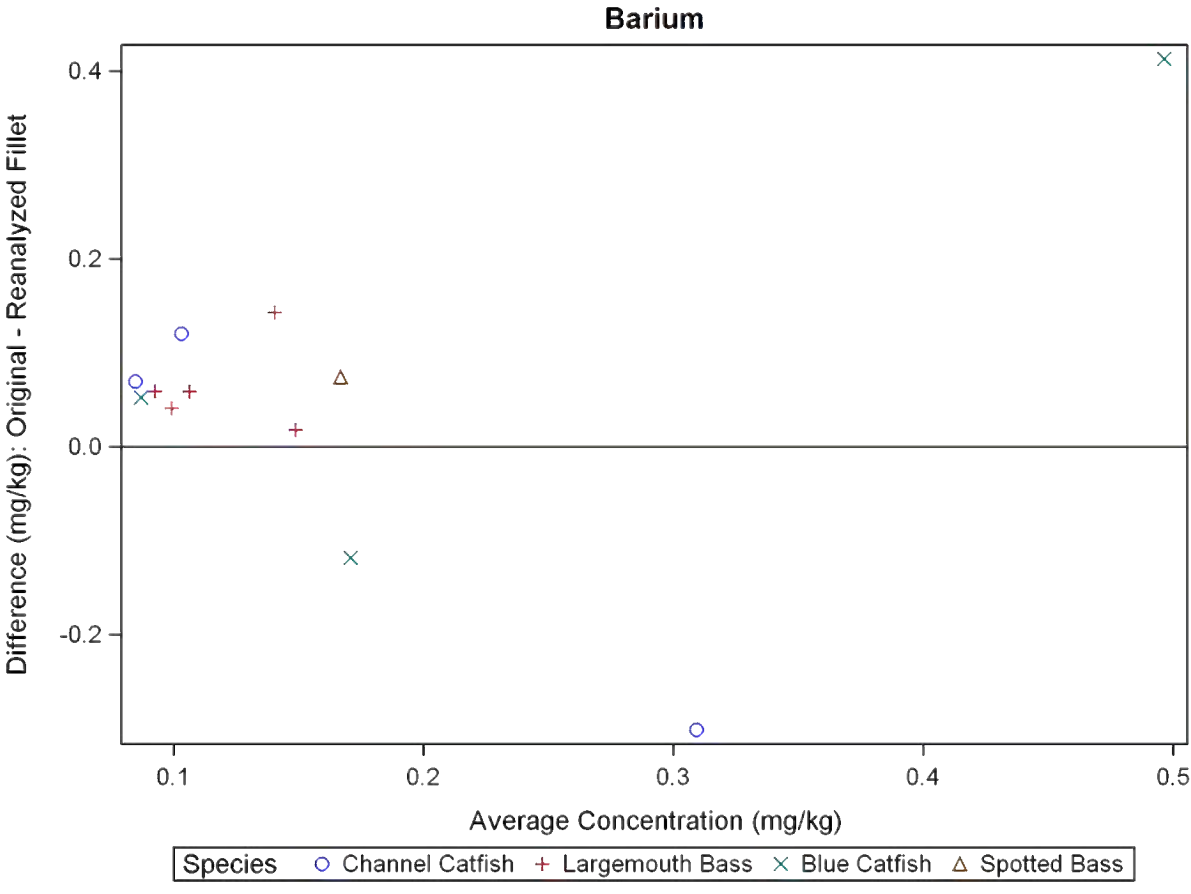

Strontium
Reanalyzed Homogenate (mg/kg)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
0
2
4
6
8
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

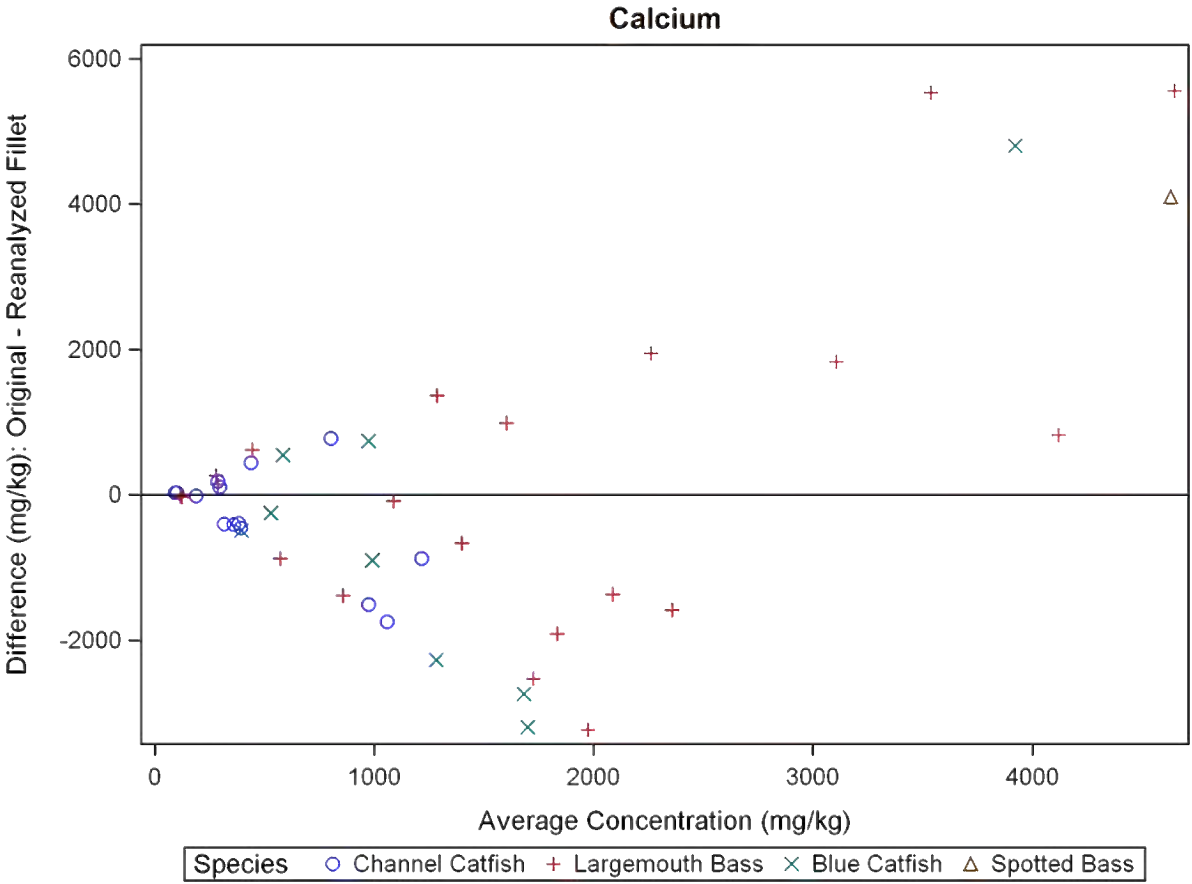

Zinc
Reanalyzed Homogenate (mg/kg)
17.5
15.0
12.5
10.0
7.5
5.0
5.0
7.5
10.0
12.5
15.0
17.5
Reanalyzed Fillet (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

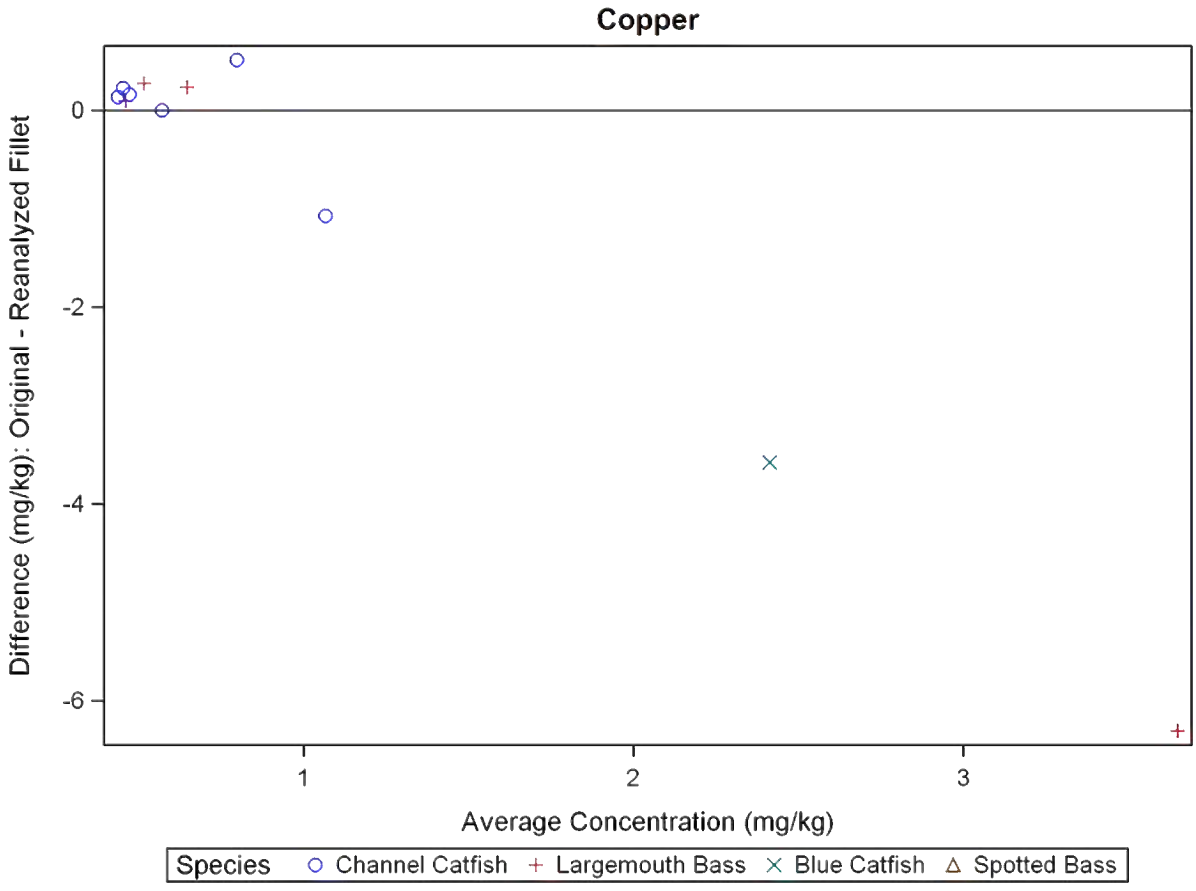
Appendix **E**

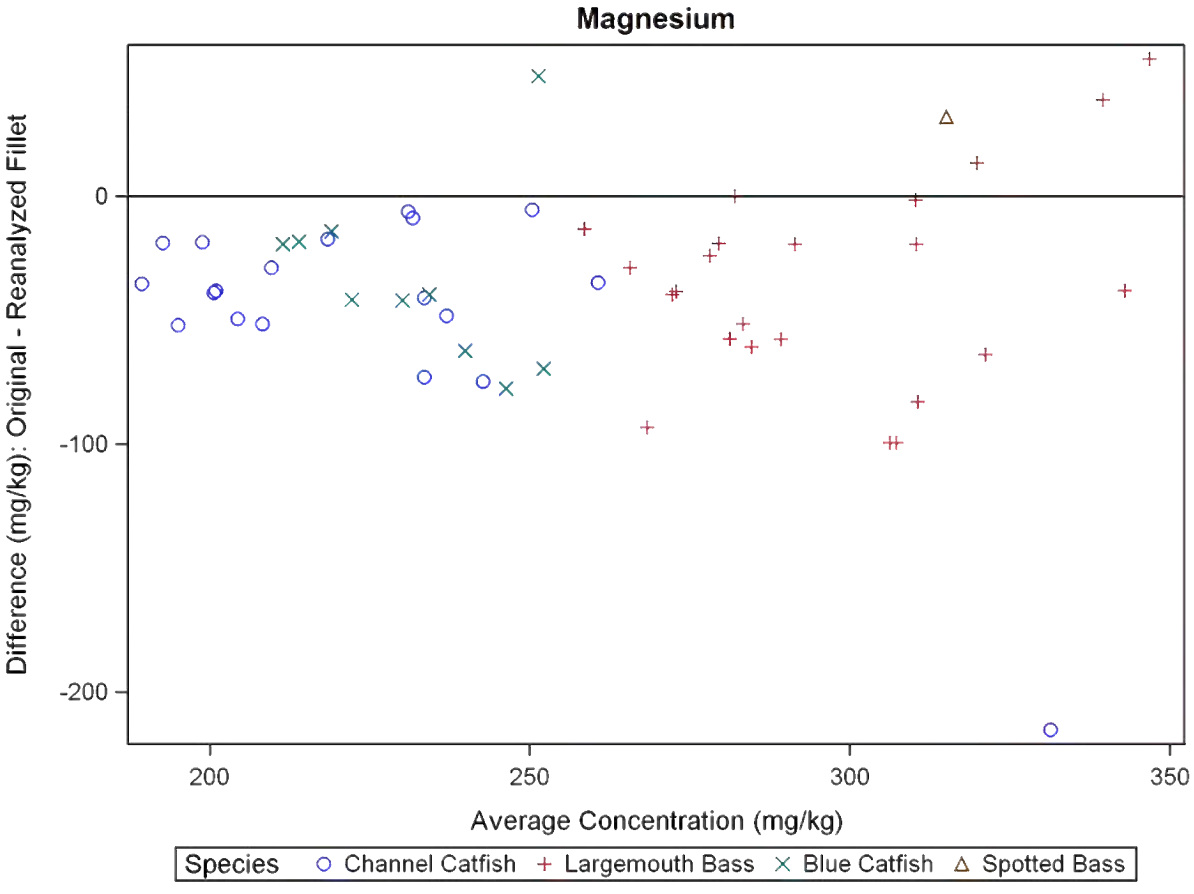
Difference Plots Comparing Original and Reanalyzed Fillet Detected Wet Weight Results for Metals

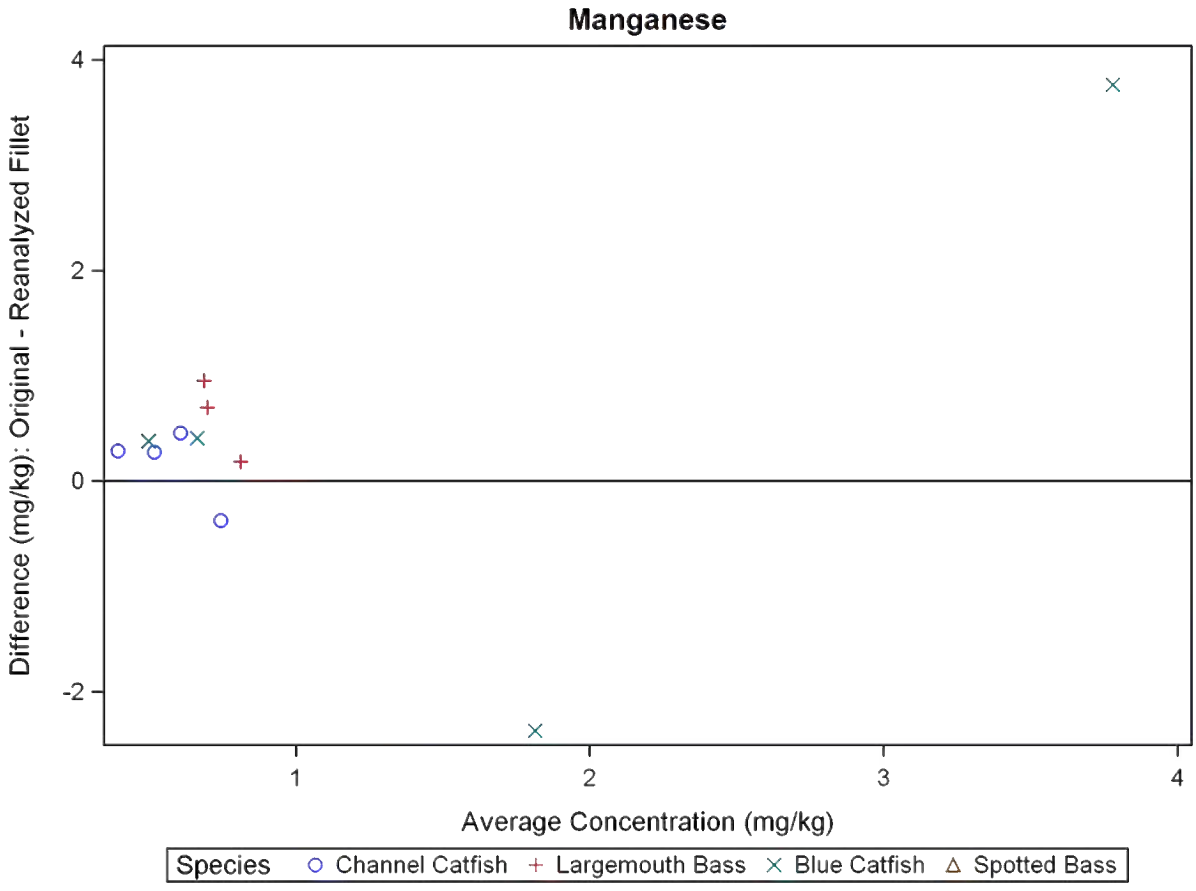

Arsenic
Difference (mg/kg): Original - Reanalyzed Fillet
-0.025
-0.050
-0.075
-0.100
-0.125
-0.150
0.15
0.20
0.25
0.30
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

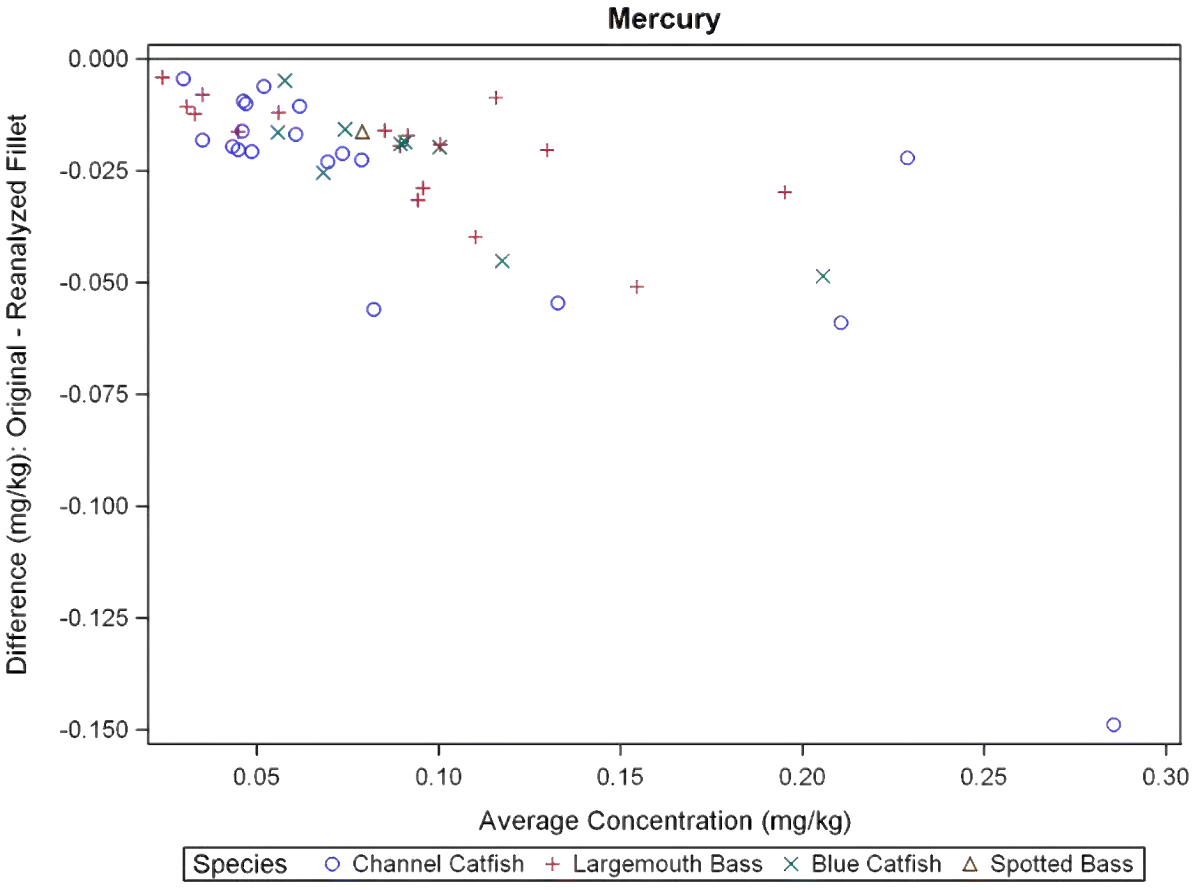

Barium
Difference (mg/kg): Original - Reanalyzed Fillet
0.4
0.2
0.0
-0.2
0.1
0.2
0.3
0.4
0.5
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

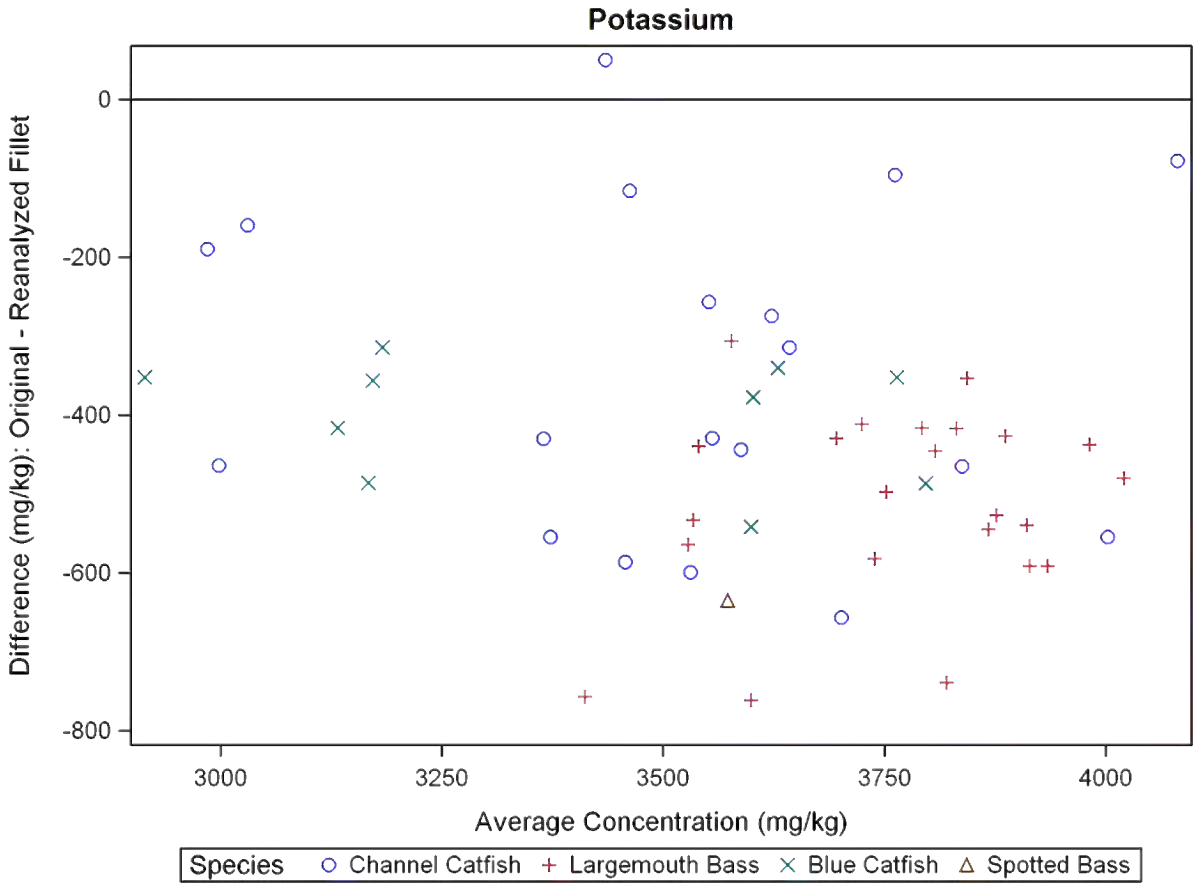

Calcium
Difference (mg/kg): Original - Reanalyzed Fillet
6000
4000
2000
0
-2000
0
1000
2000
3000
4000
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

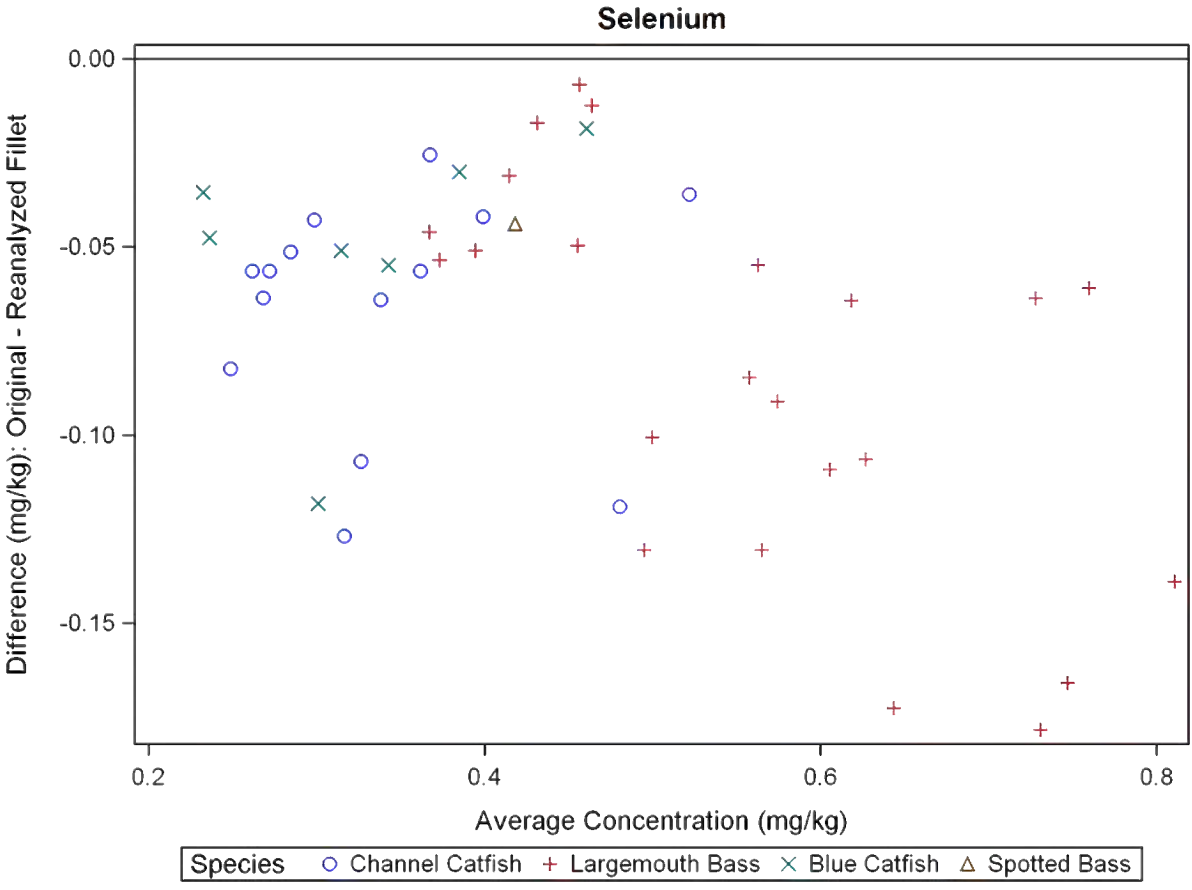

Copper
Difference (mg/kg): Original - Reanalyzed Fillet
0
-2
-4
-6
1
2
3
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

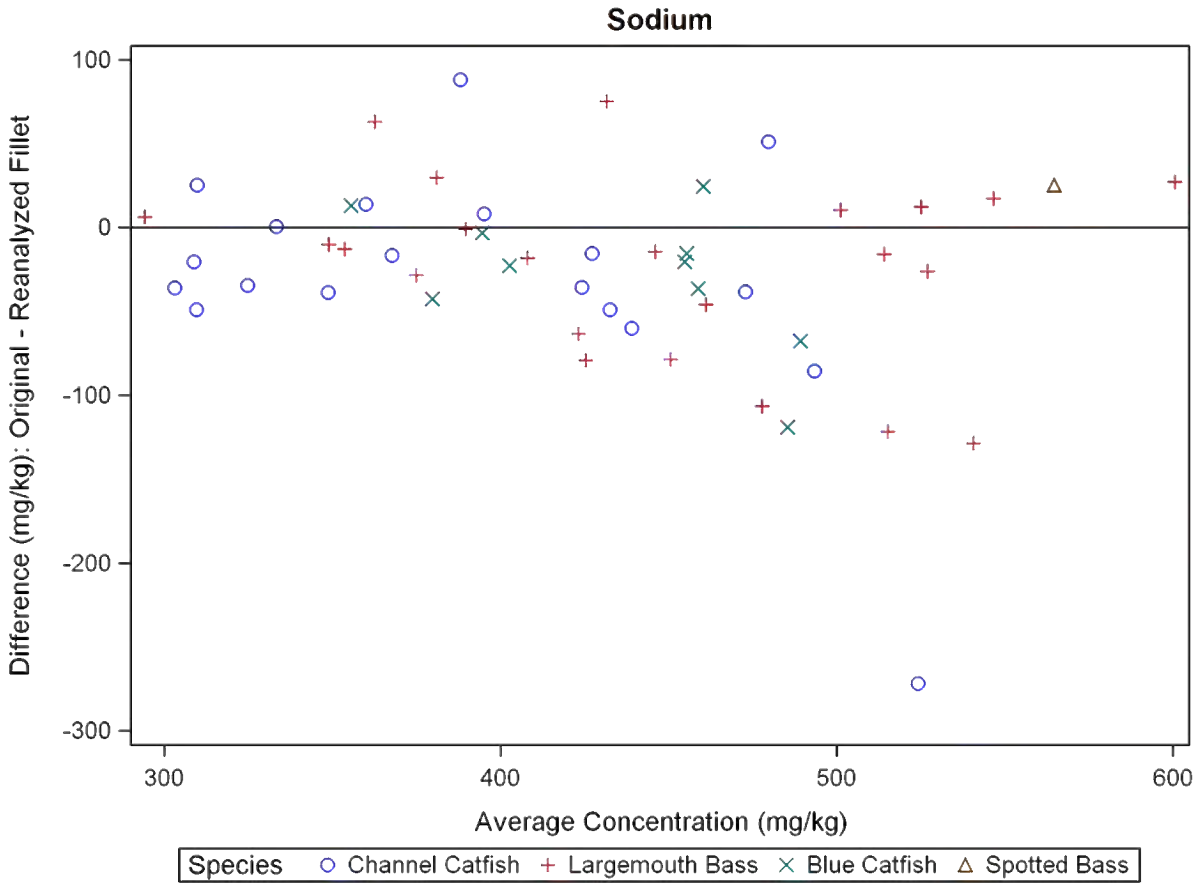

Magnesium
Difference (mg/kg): Original - Reanalyzed Fillet
0
-100
-200
200
250
300
350
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

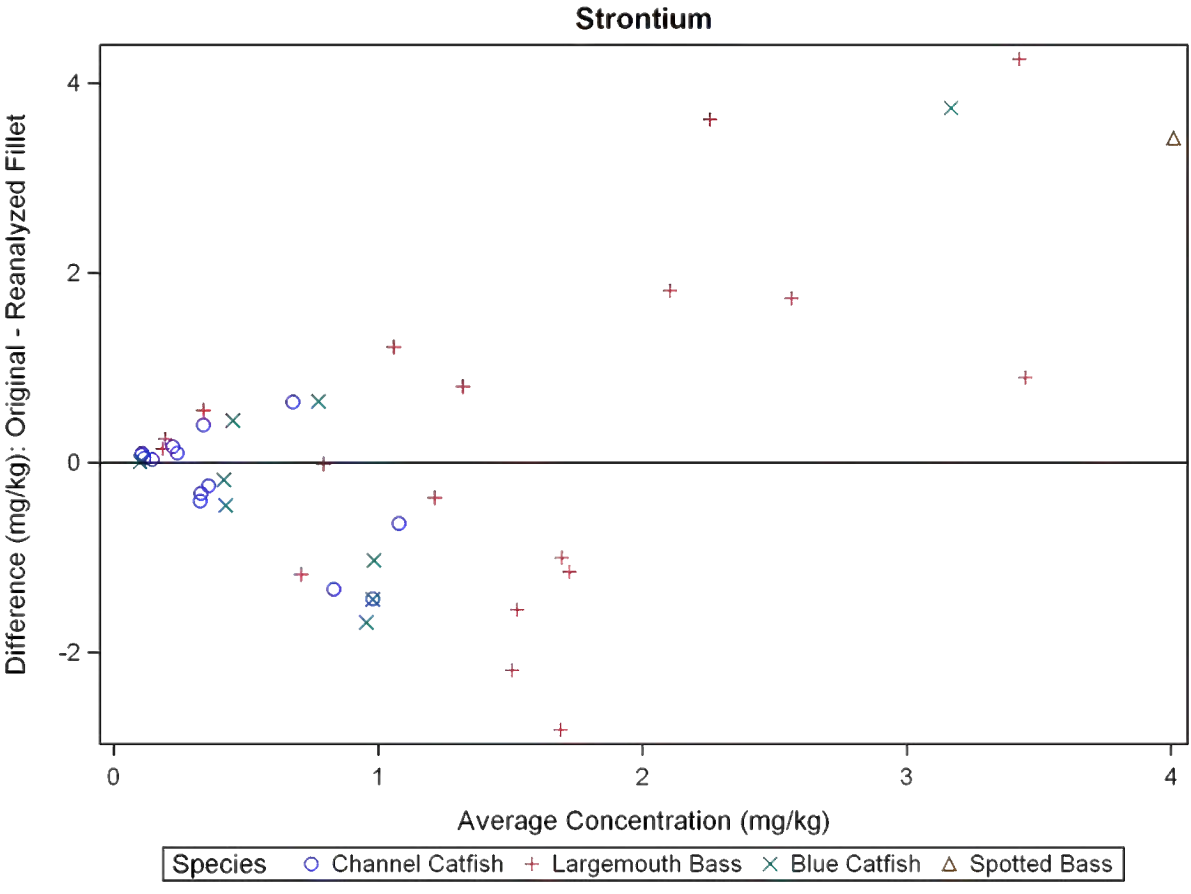

Manganese
Difference (mg/kg): Original - Reanalyzed Fillet
4
2
0
-2
1
2
3
4
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

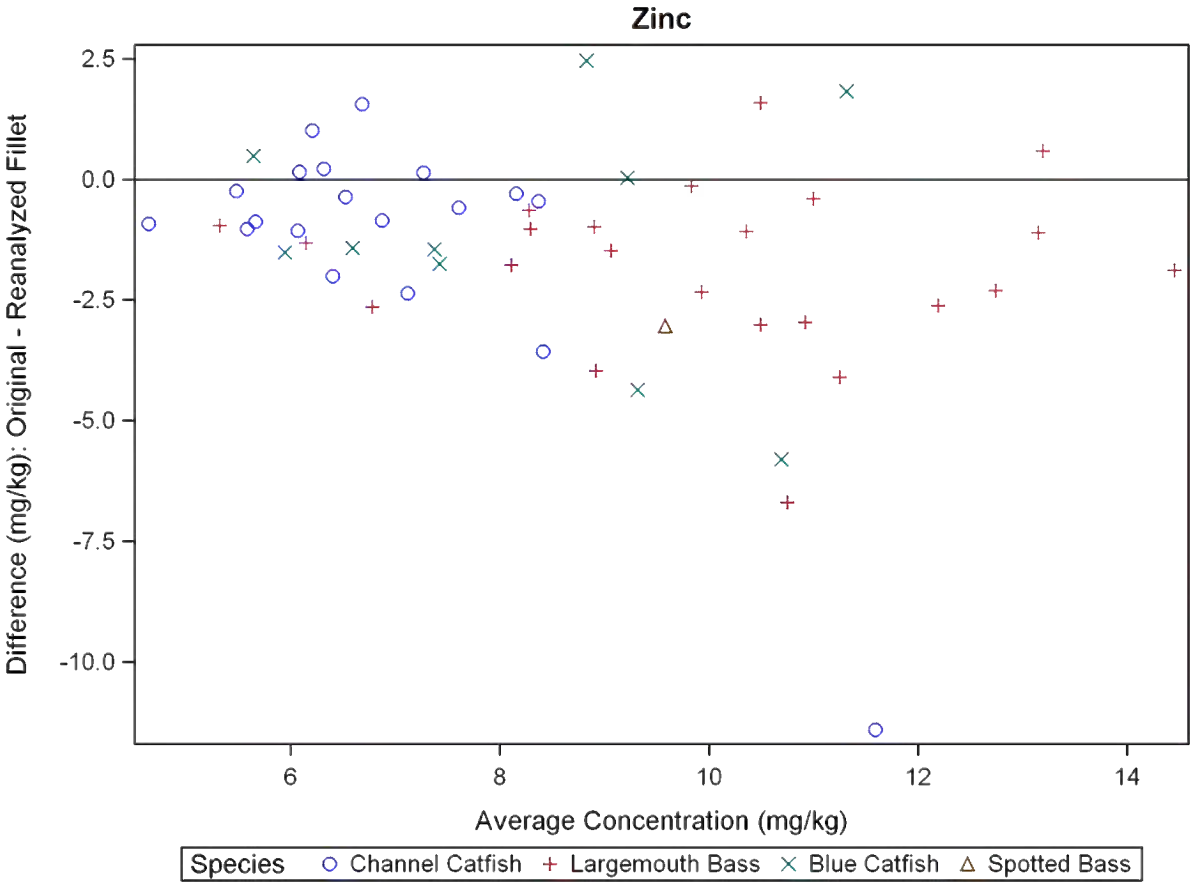

Mercury
Difference (mg/kg): Original - Reanalyzed Fillet
0.000
-0.025
-0.050
-0.075
-0.100
-0.125
-0.150
0.05
0.10
0.15
0.20
0.25
0.30
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Potassium
Difference (mg/kg): Original - Reanalyzed Fillet
0
-200
-400
-600
-800
3000
3250
3500
3750
4000
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Selenium
0.00
-0.05
-0.10
-0.15
Difference (mg/kg): Original - Reanalyzed Fillet
0.2
0.4
0.6
0.8
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

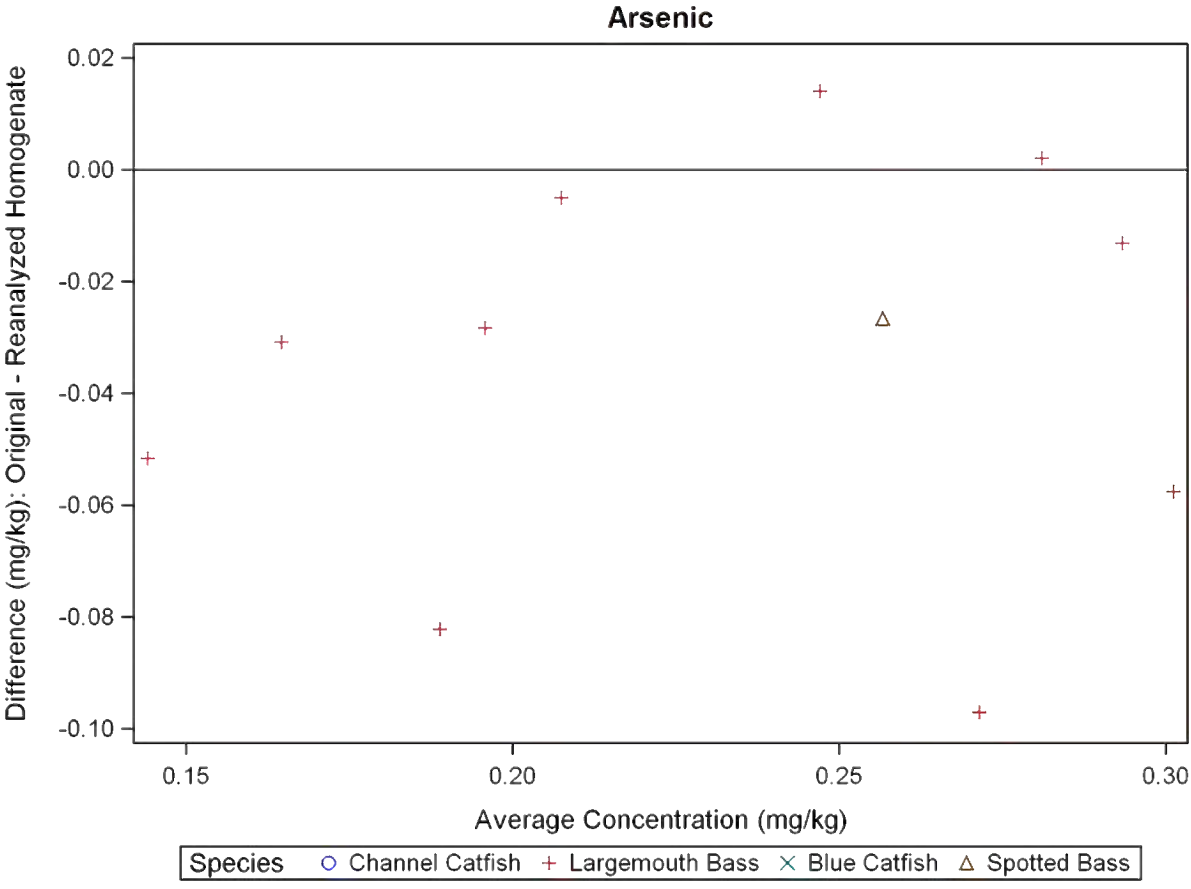

Sodium
Difference (mg/kg): Original - Reanalyzed Fillet
100
0
-100
-200
-300
300
400
500
600
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

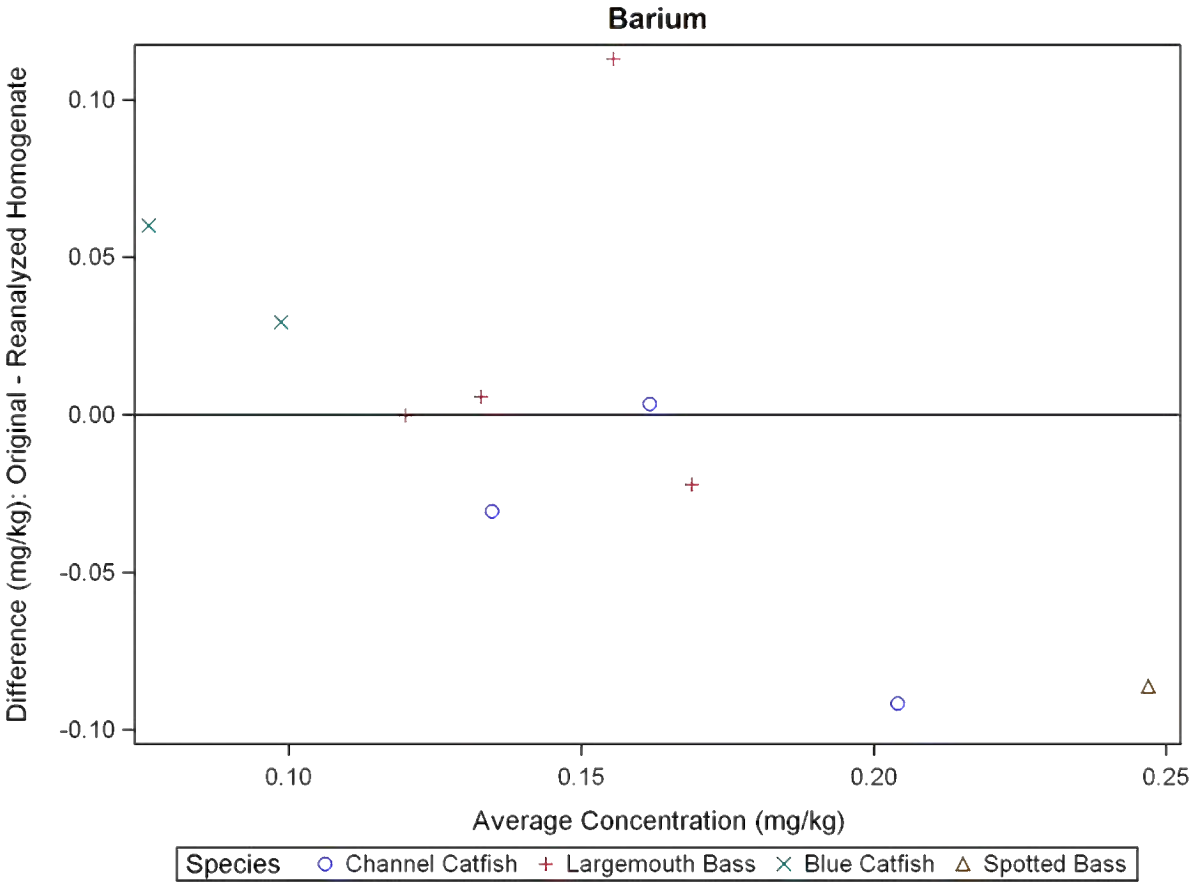

Strontium
Difference (mg/kg): Original - Reanalyzed Fillet
4
2
0
-2
0
1
2
3
4
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

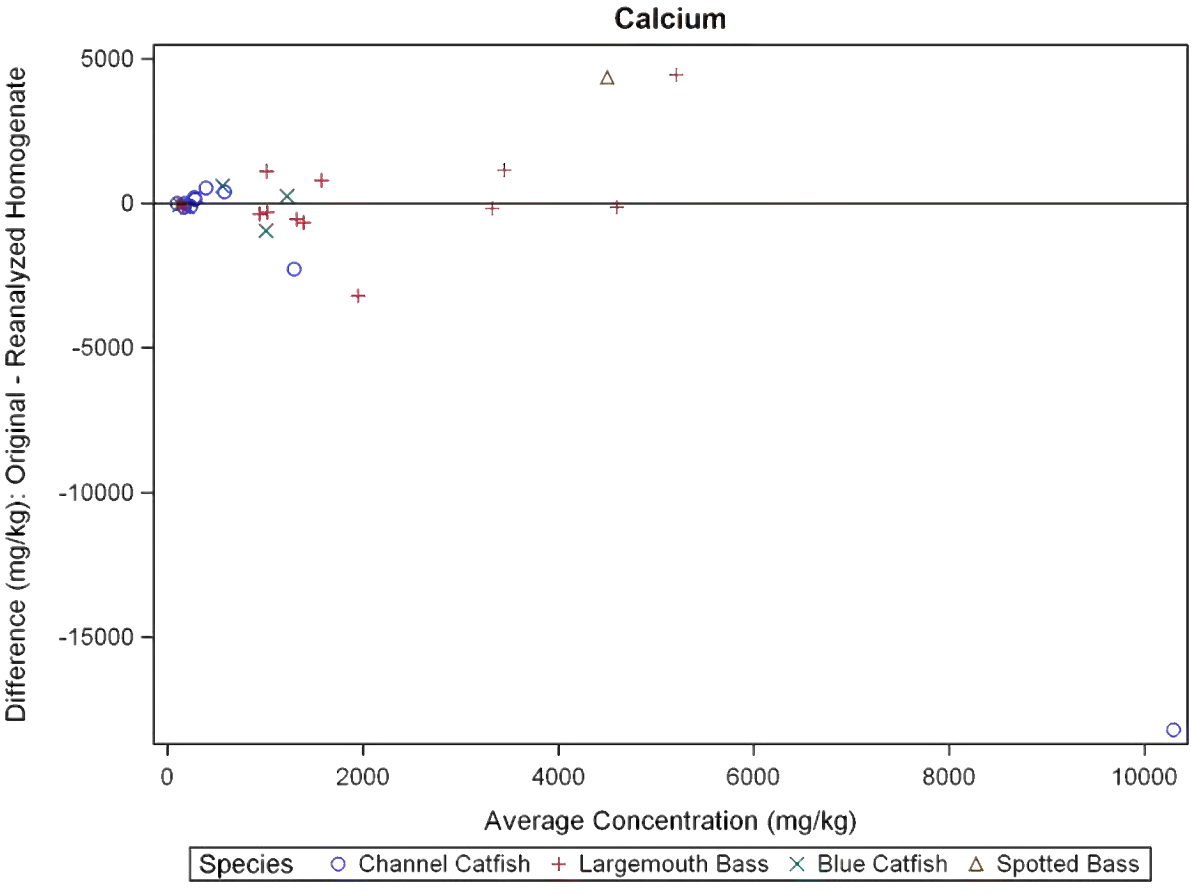

Zinc
Difference (mg/kg): Original - Reanalyzed Fillet
2.5
0.0
-2.5
-5.0
-7.5
-10.0
6
8
10
12
14
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

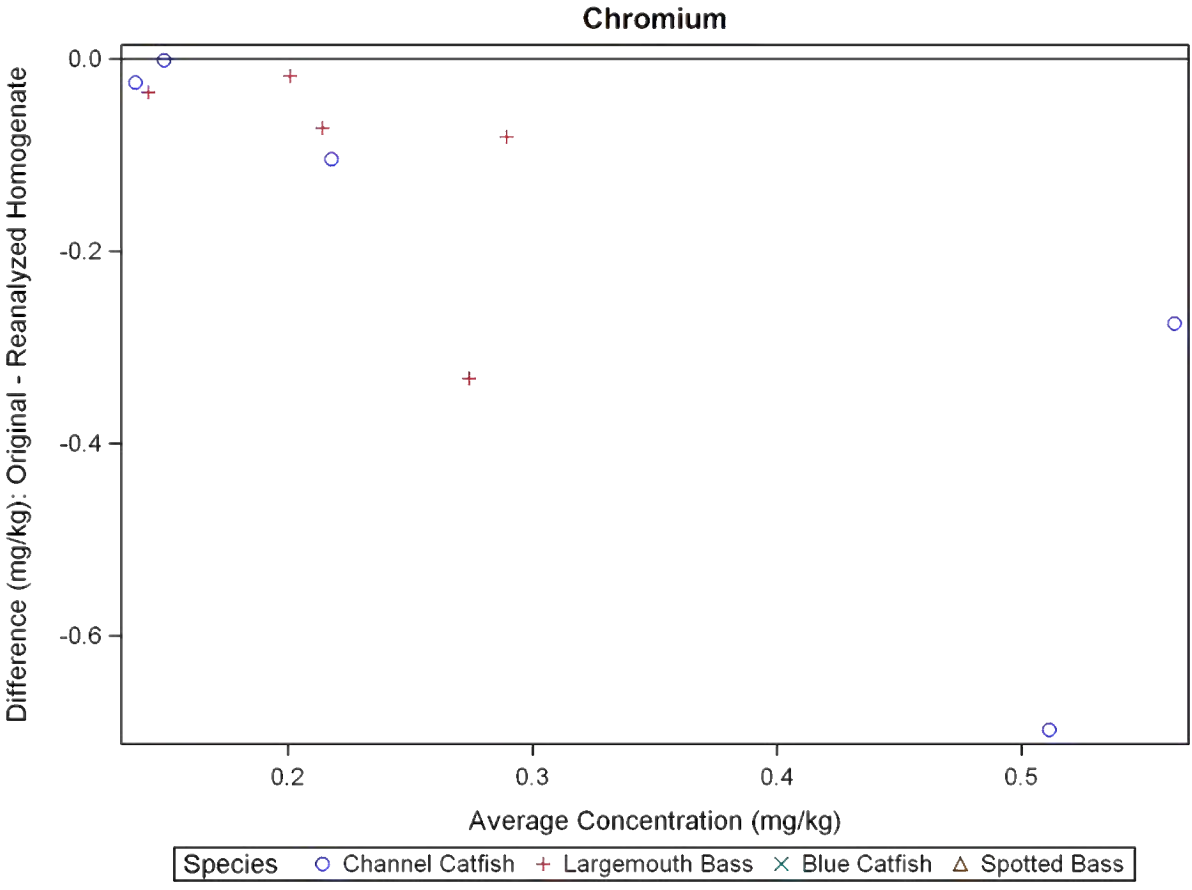
Appendix **F**

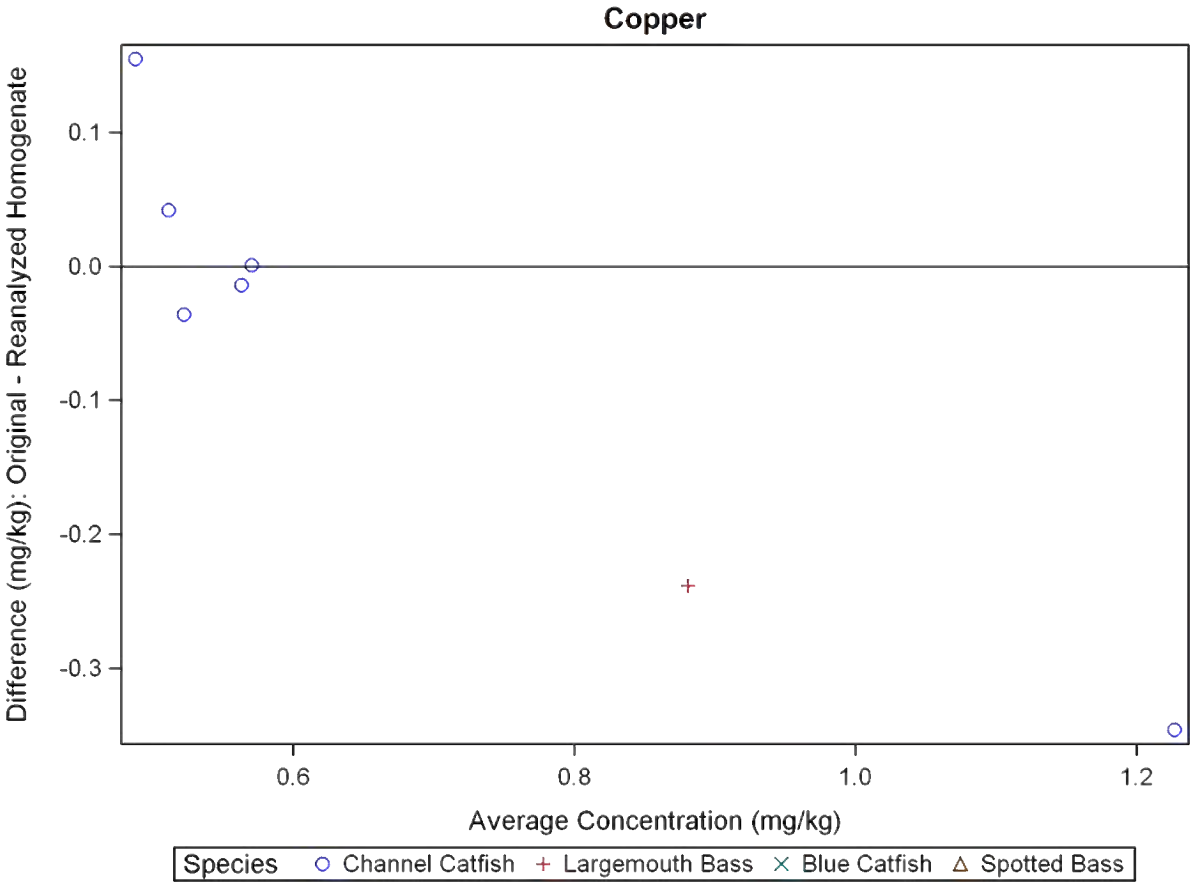
Difference Plots Comparing Original and Reanalyzed Homogenate Detected Wet Weight Results for Metals

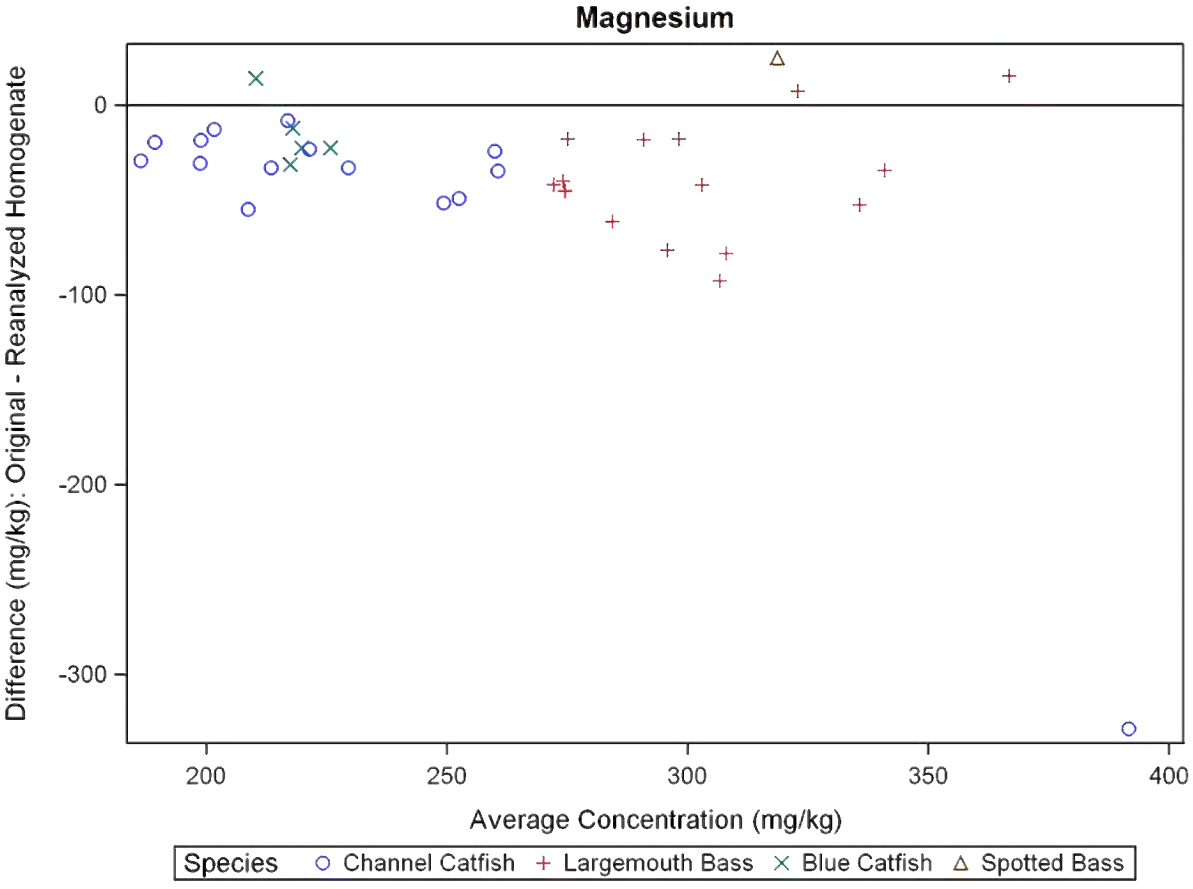

Arsenic
Difference (mg/kg): Original - Reanalyzed Homogenate
0.02
0.00
-0.02
-0.04
-0.06
-0.08
-0.10
0.15
0.20
0.25
0.30
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

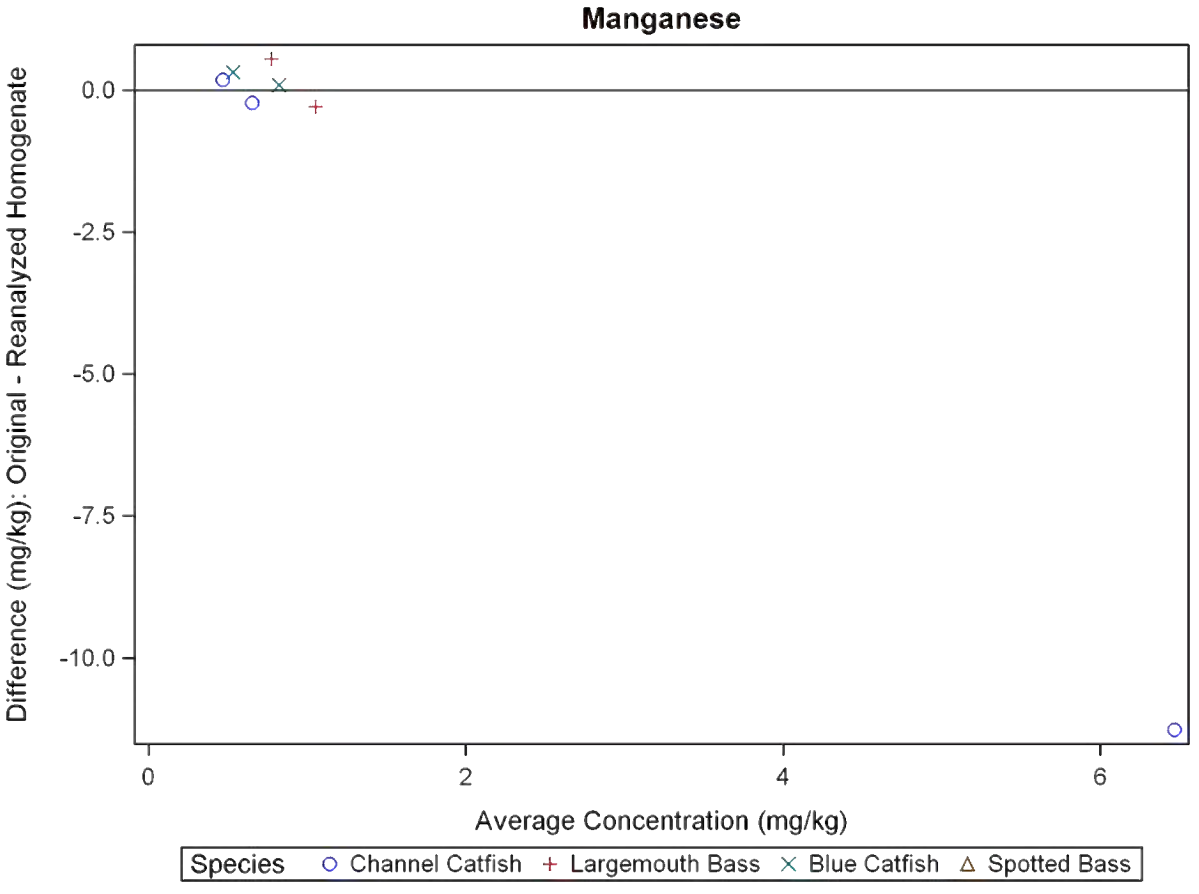

Barium
Difference (mg/kg): Original - Reanalyzed Homogenate
0.10
0.05
0.00
-0.05
-0.10
0.10
0.15
0.20
0.25
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

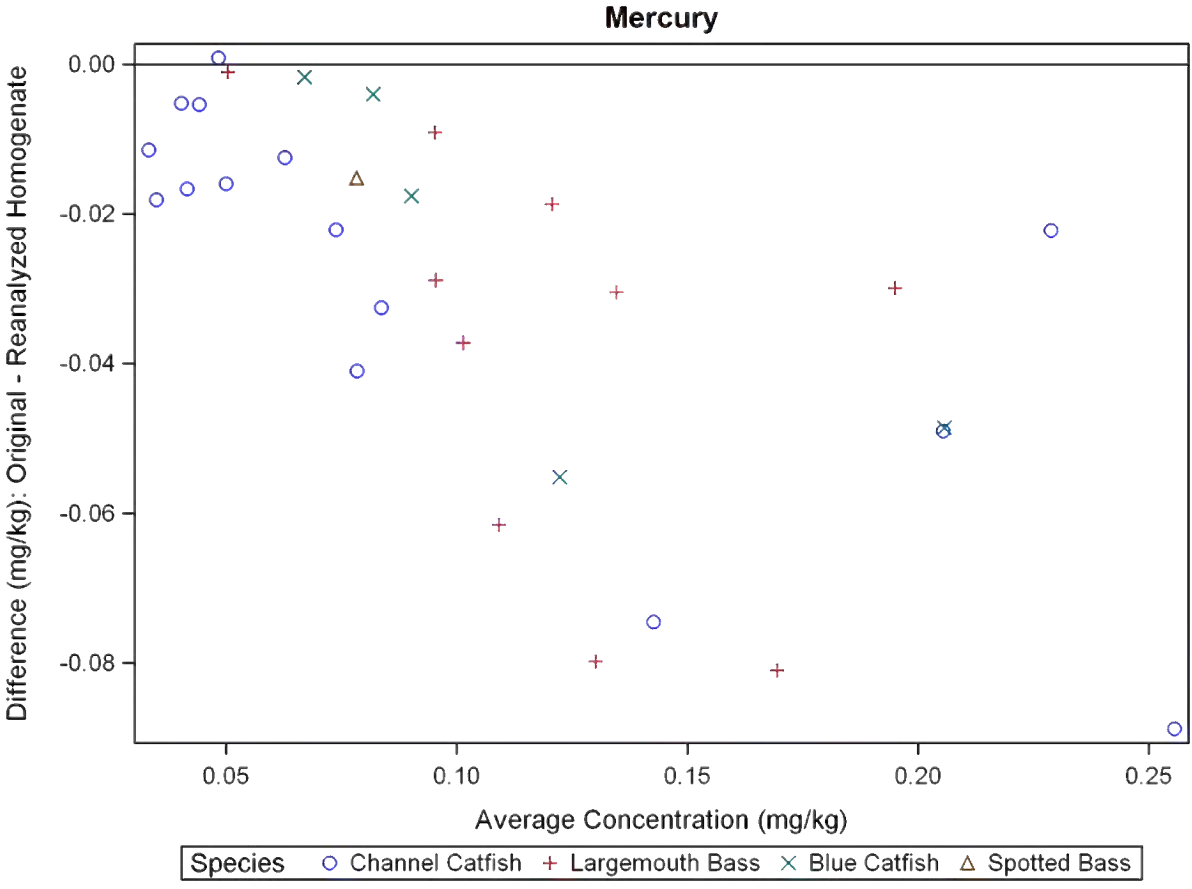

Calcium
Difference (mg/kg): Original - Reanalyzed Homogenate
5000
0
-5000
-10000
-15000
0
2000
4000
6000
8000
10000
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

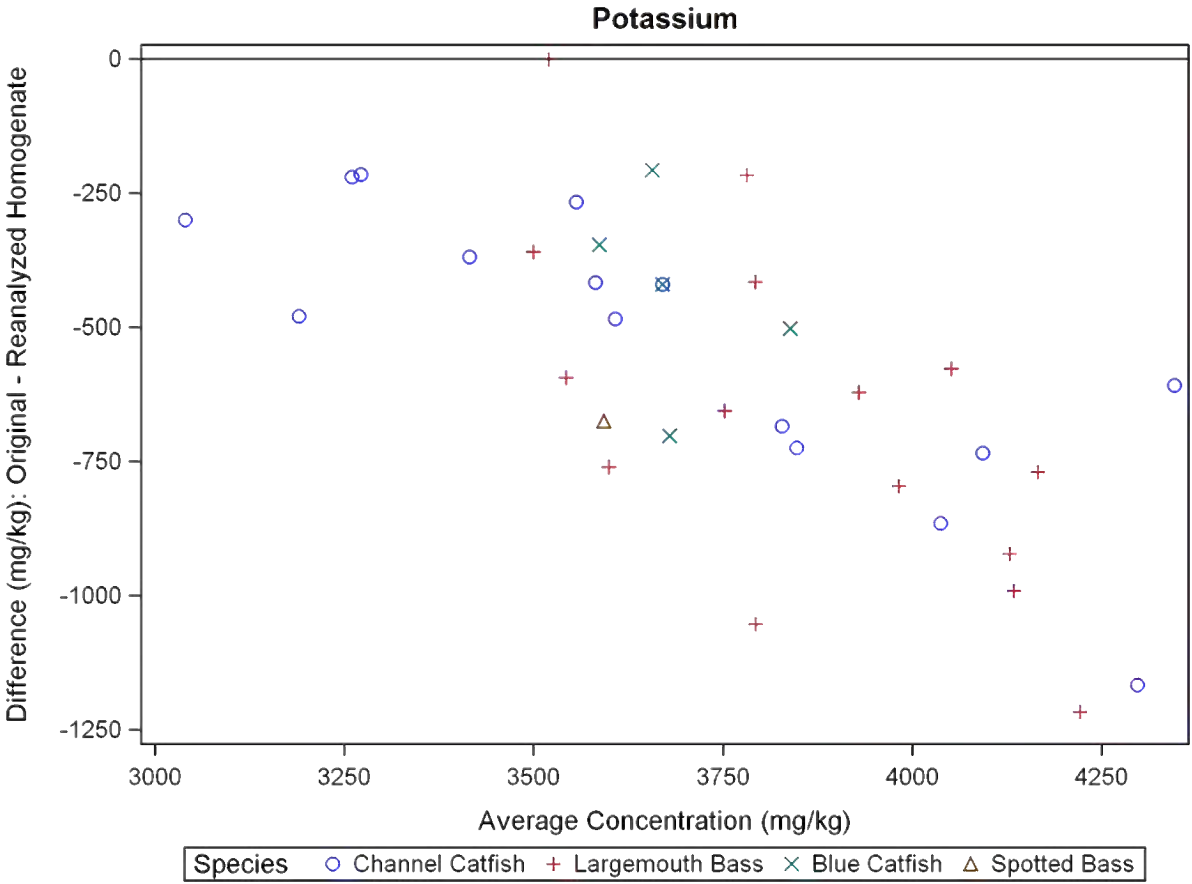

Chromium
Difference (mg/kg): Original - Reanalyzed Homogenate
0.0
-0.2
-0.4
-0.6
0.2
0.3
0.4
0.5
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

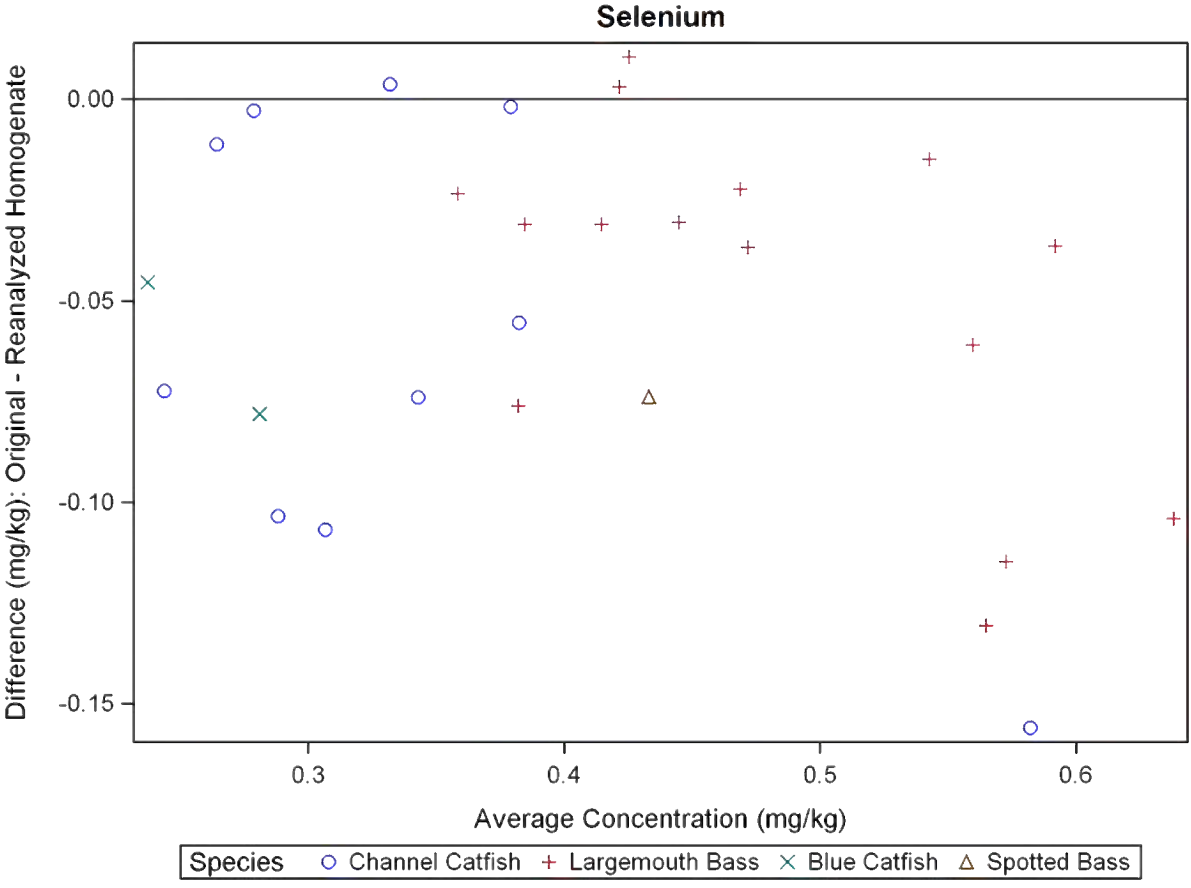

Copper
Difference (mg/kg): Original - Reanalyzed Homogenate
0.1
0.0
-0.1
-0.2
-0.3
0.6
0.8
1.0
1.2
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

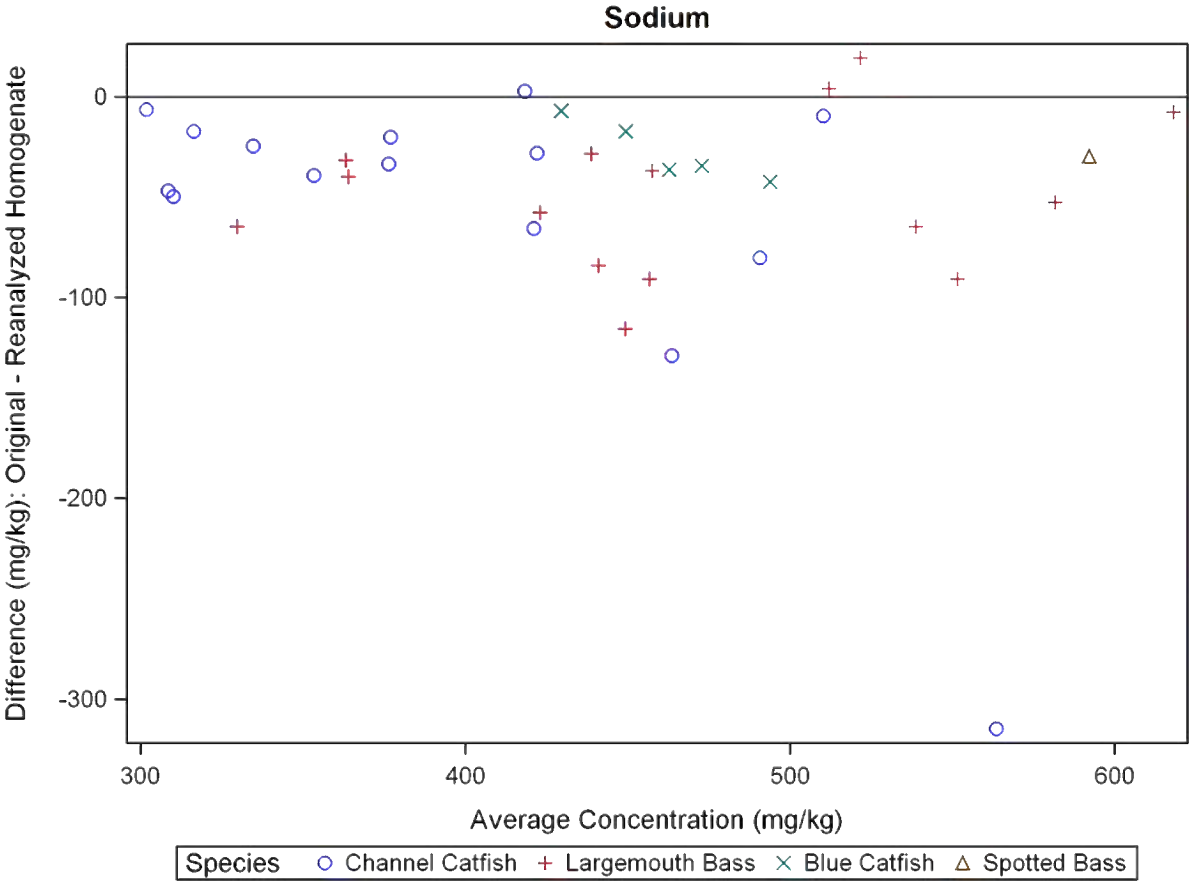

Magnesium
Difference (mg/kg): Original - Reanalyzed Homogenate
0
-100
-200
-300
200
250
300
350
400
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

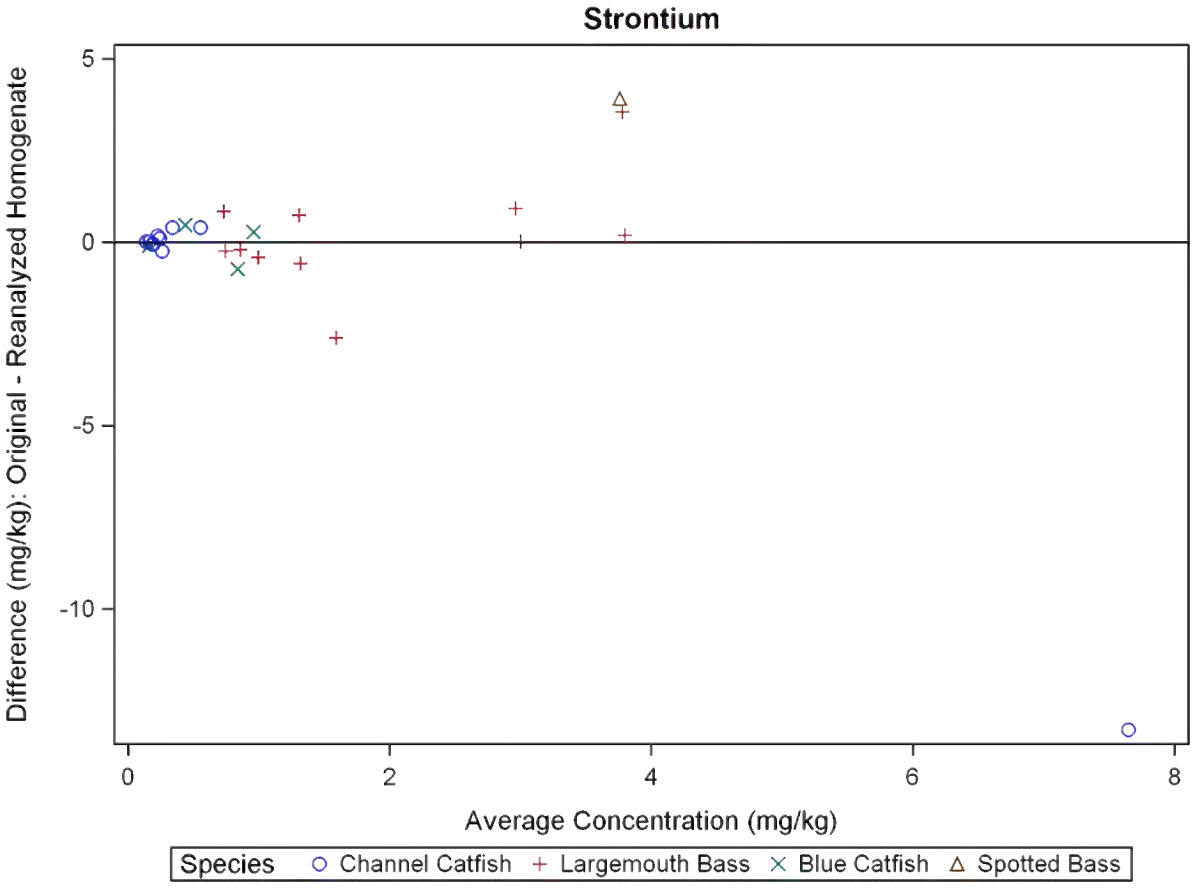

Manganese
Difference (mg/kg): Original - Reanalyzed Homogenate
0.0
-2.5
-5.0
-7.5
-10.0
0
2
4
6
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

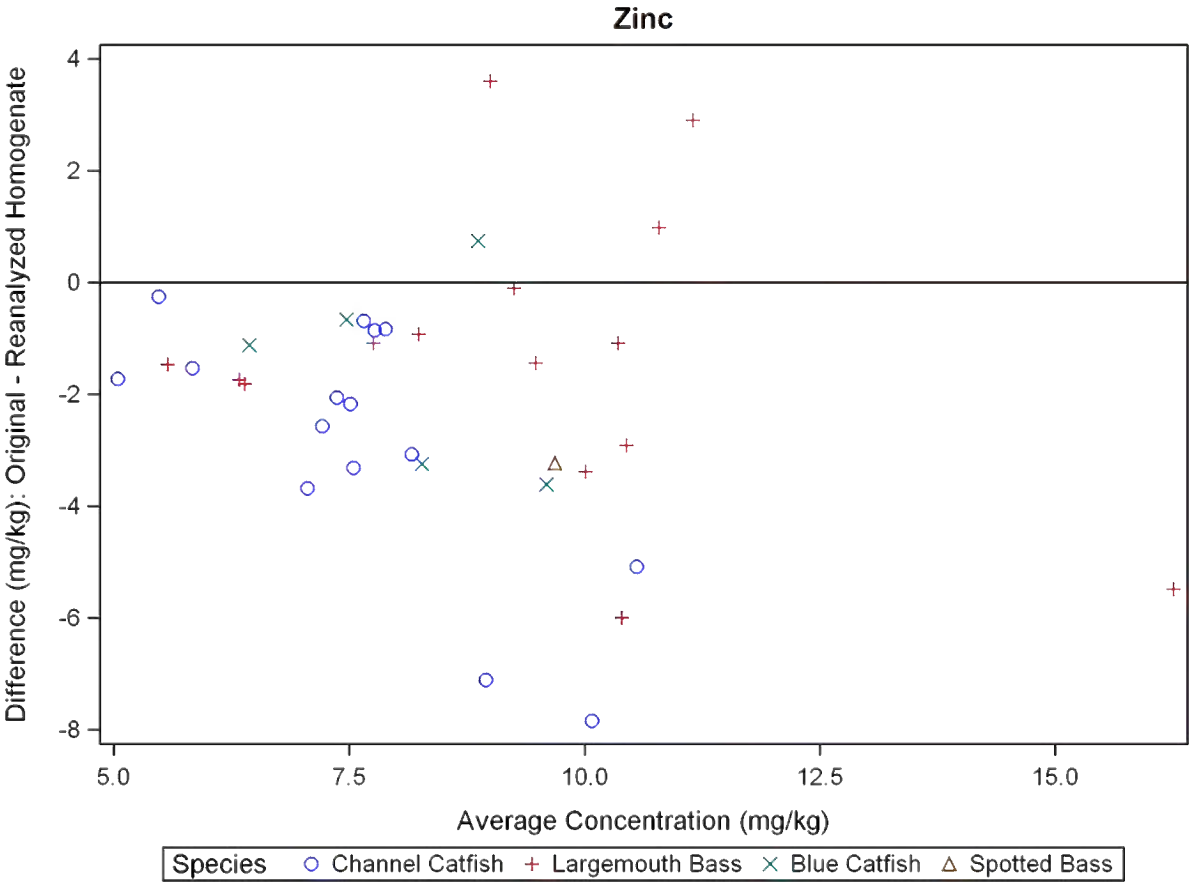

Mercury
Difference (mg/kg): Original - Reanalyzed Homogenate
0.00
-0.02
-0.04
-0.06
-0.08
0.05
0.10
0.15
0.20
0.25
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Potassium
Difference (mg/kg): Original - Reanalyzed Homogenate
0
-250
-500
-750
-1000
-1250
3000
3250
3500
3750
4000
4250
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Selenium
Difference (mg/kg): Original - Reanalyzed Homogenate
0.00
-0.05
-0.10
-0.15
0.3
0.4
0.5
0.6
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

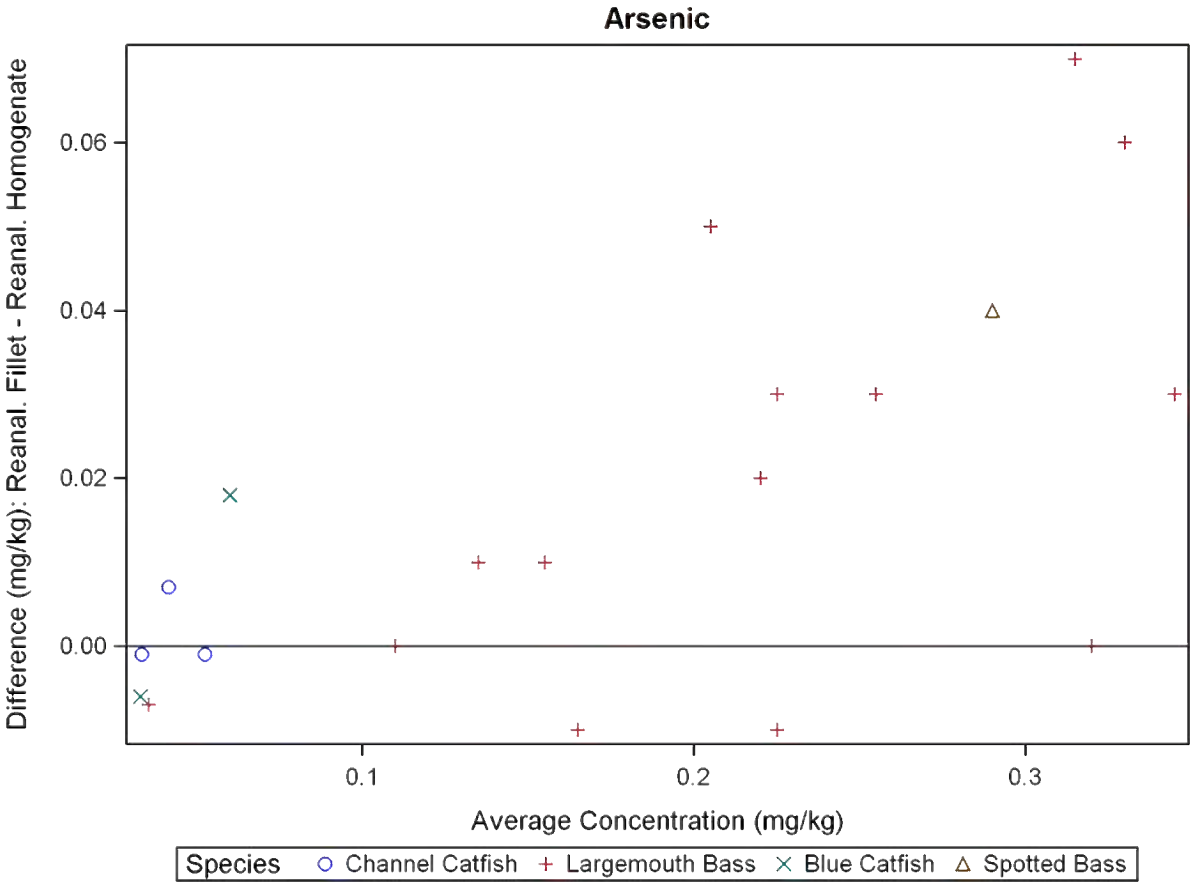

Sodium
Difference (mg/kg): Original - Reanalyzed Homogenate
0
-100
-200
-300
300
400
500
600
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

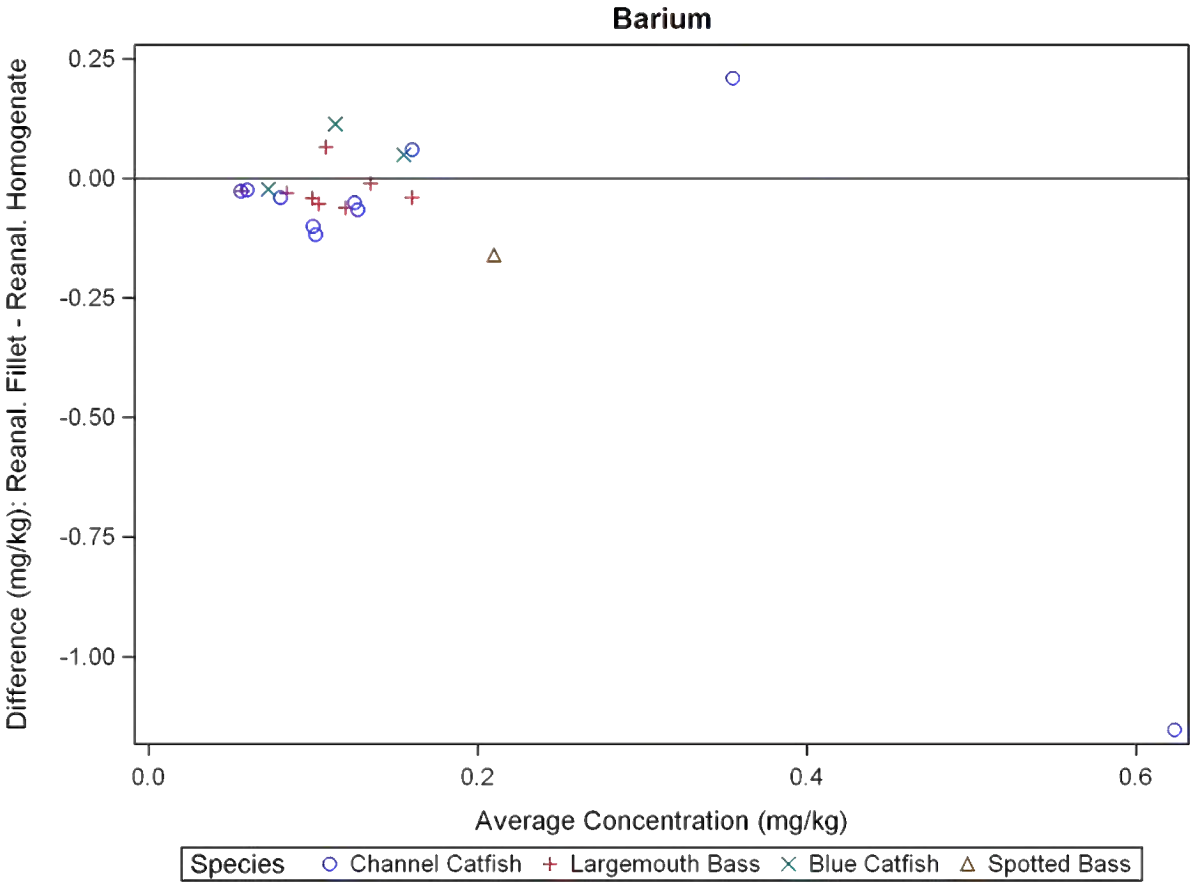

Strontium
Difference (mg/kg): Original - Reanalyzed Homogenate
5
0
-5
-10
0
2
4
6
8
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

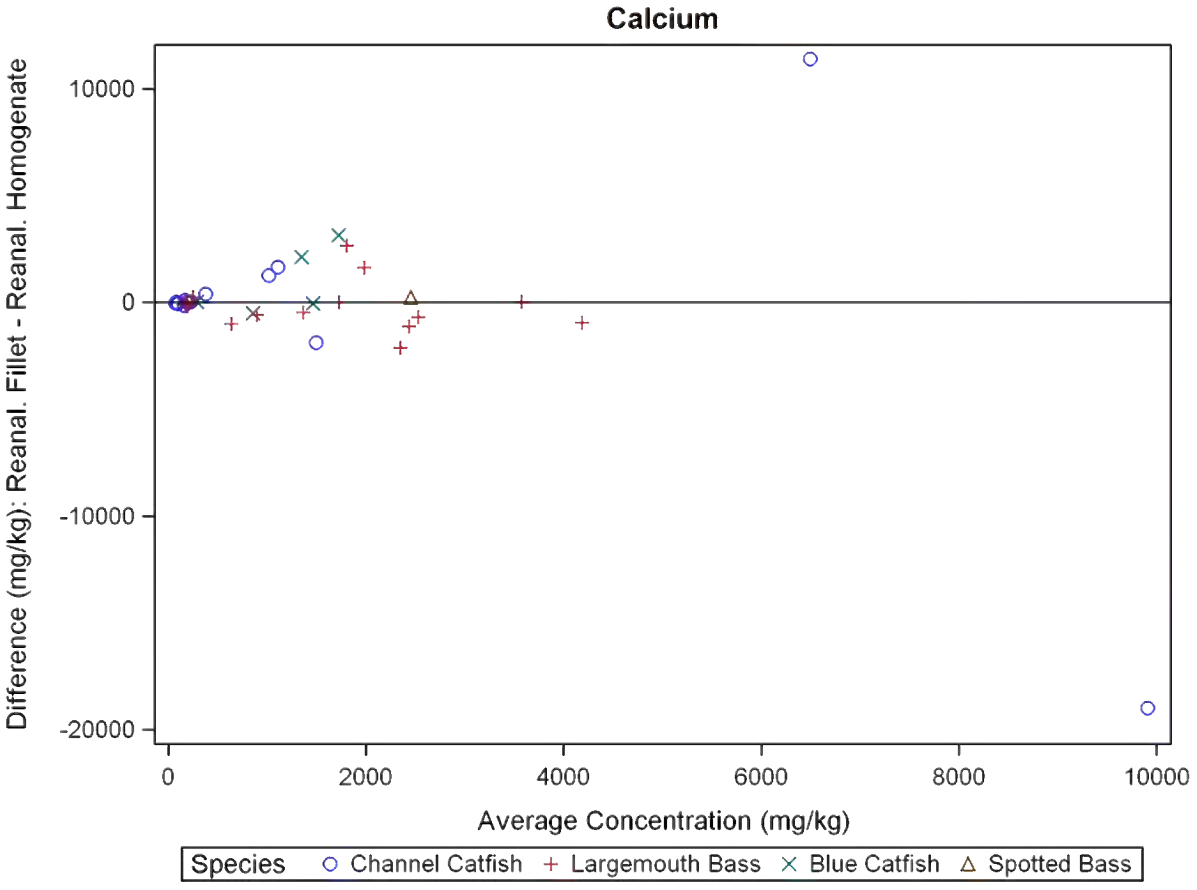

Zinc
Difference (mg/kg): Original - Reanalyzed Homogenate
4
2
0
-2
-4
-6
-8
5.0
7.5
10.0
12.5
15.0
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

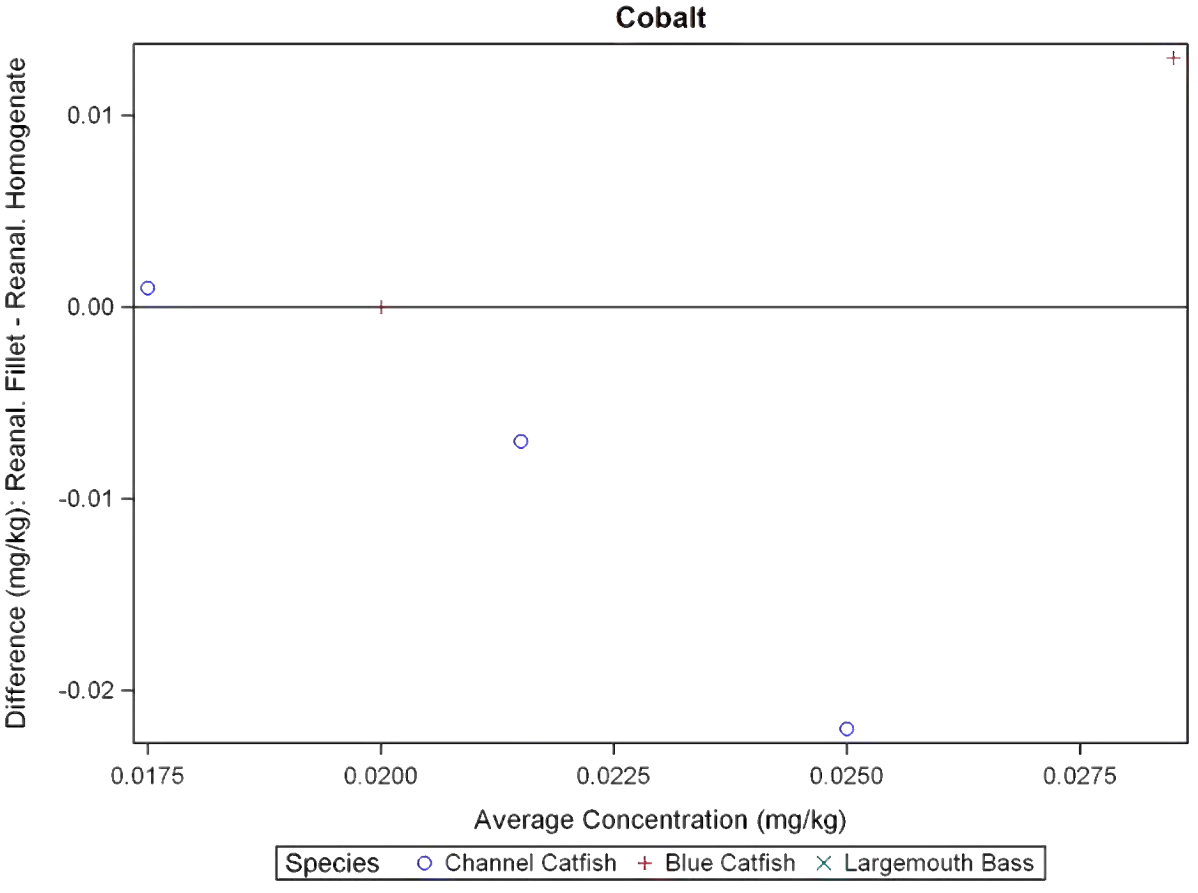
Appendix **G**

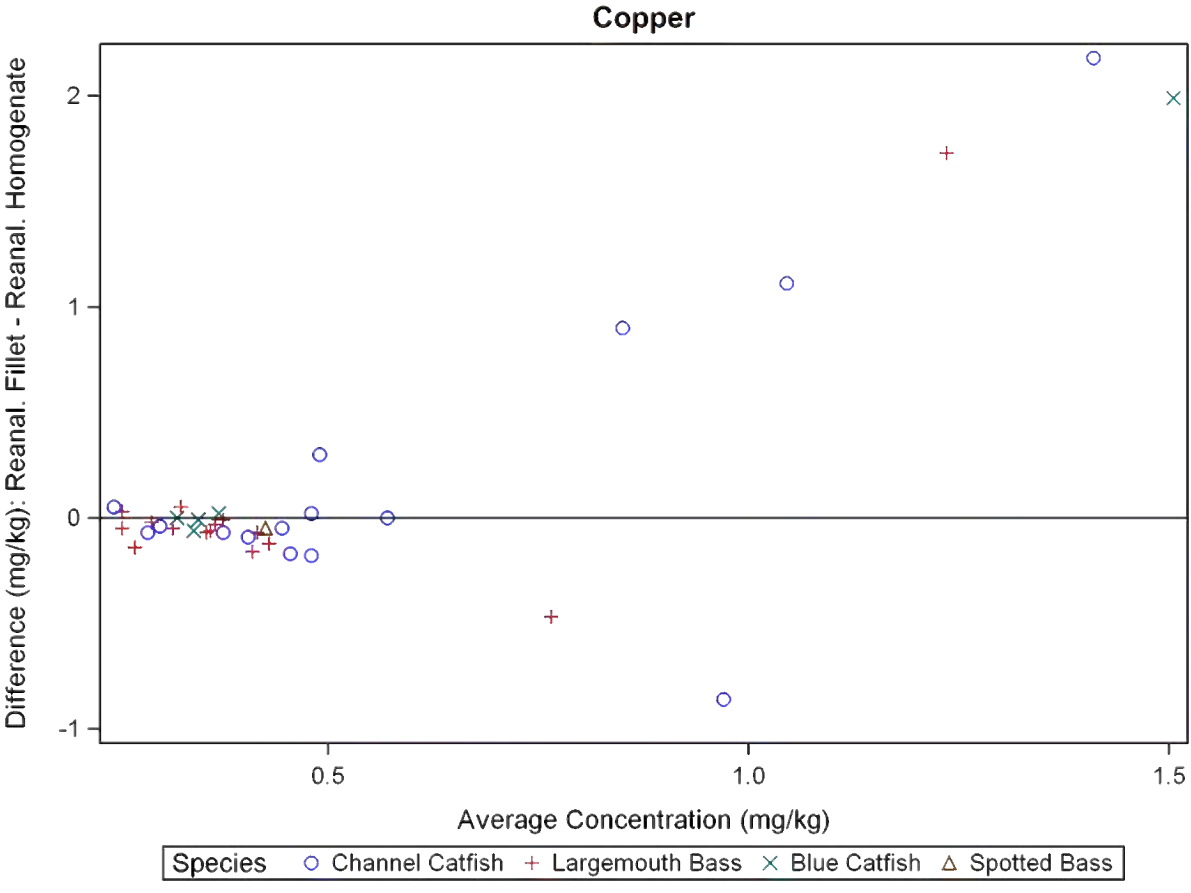
Difference Plots Comparing Reanalyzed Fillet and Reanalyzed Homogenate Detected Wet Weight Results for Metals

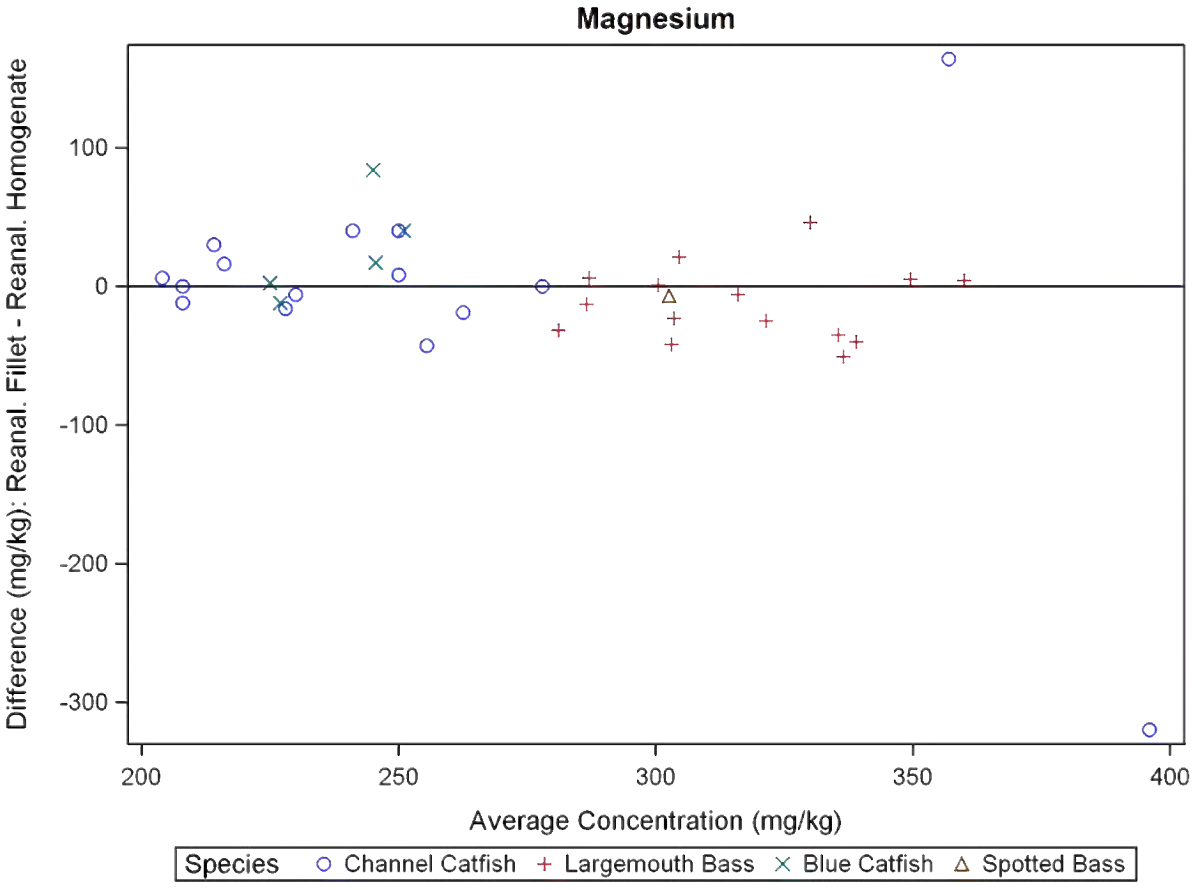

Arsenic
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
0.06
0.04
0.02
0.00
0.1
0.2
0.3
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

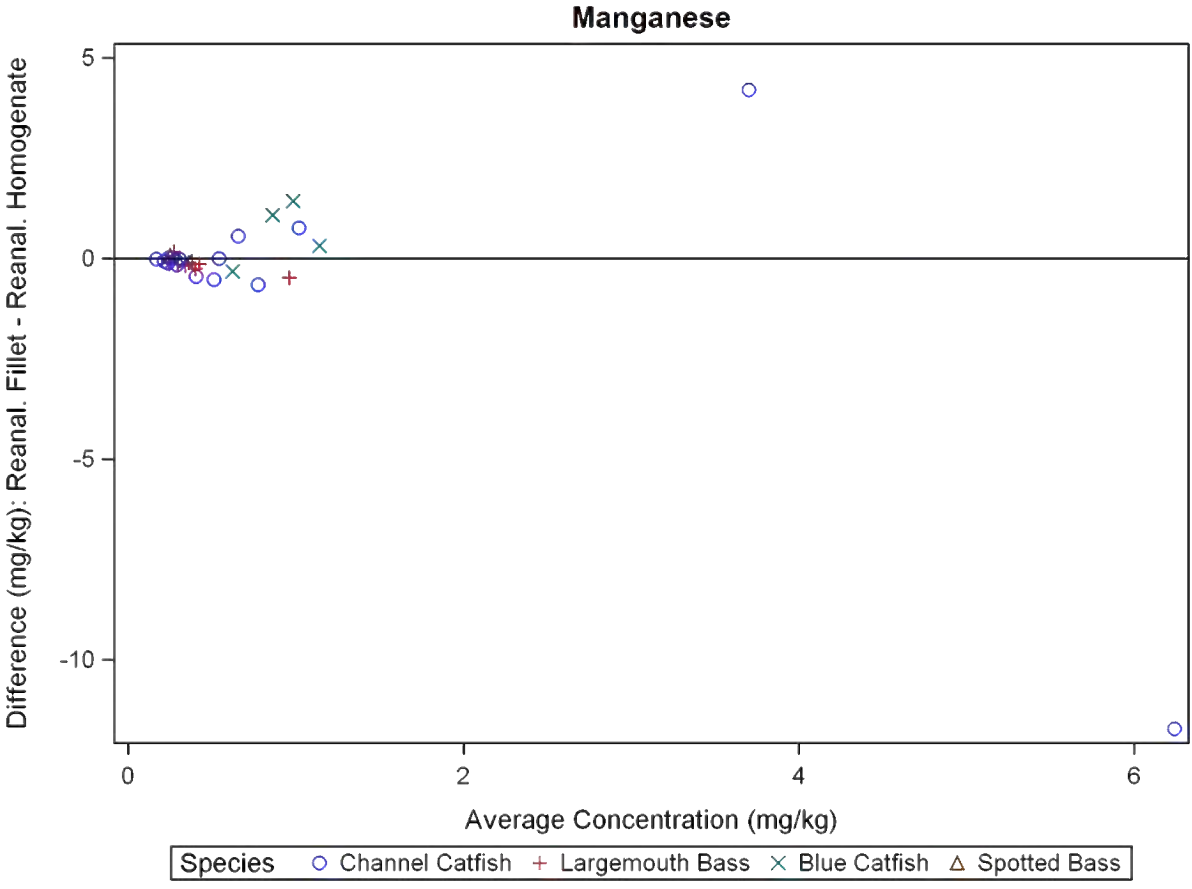

Barium
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
0.25
0.00
-0.25
-0.50
-0.75
-1.00
0.0
0.2
0.4
0.6
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

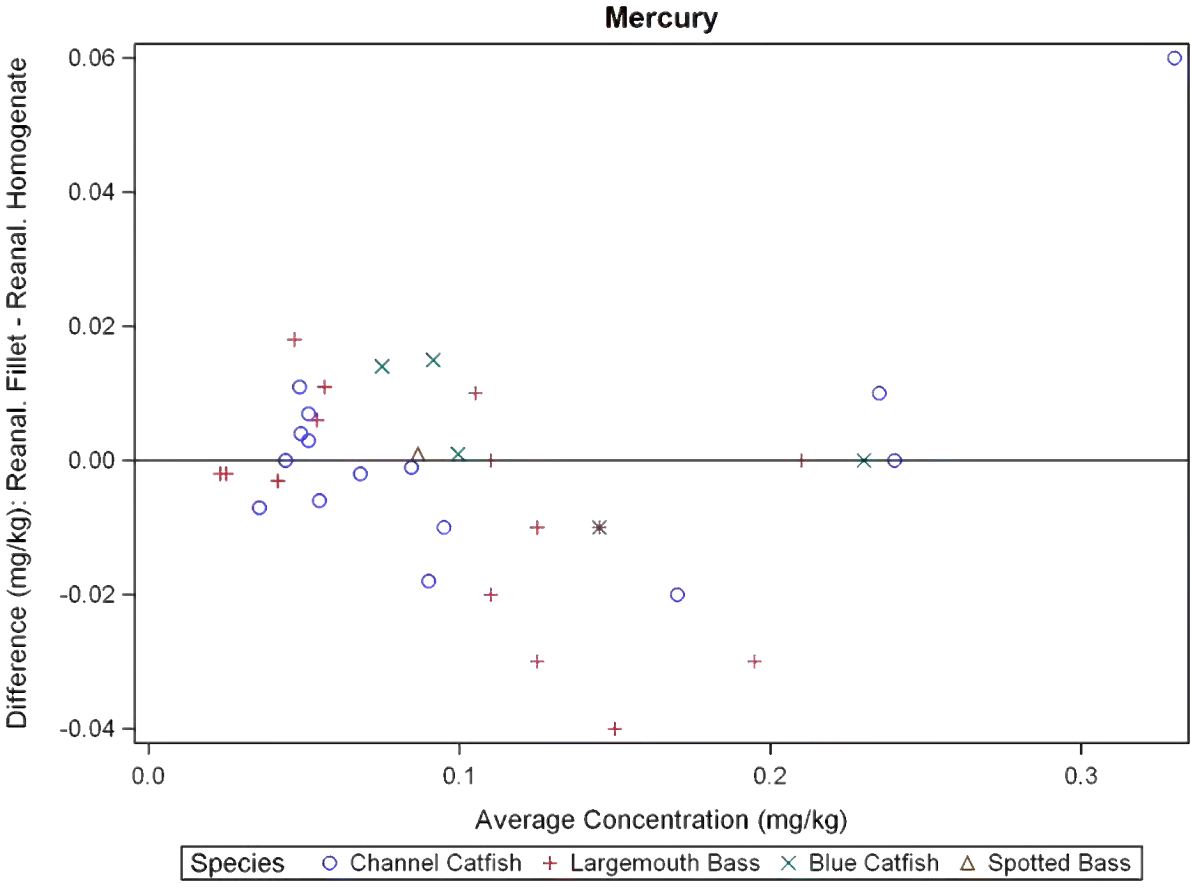

Calcium
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
10000
0
-10000
-20000
0
2000
4000
6000
8000
10000
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

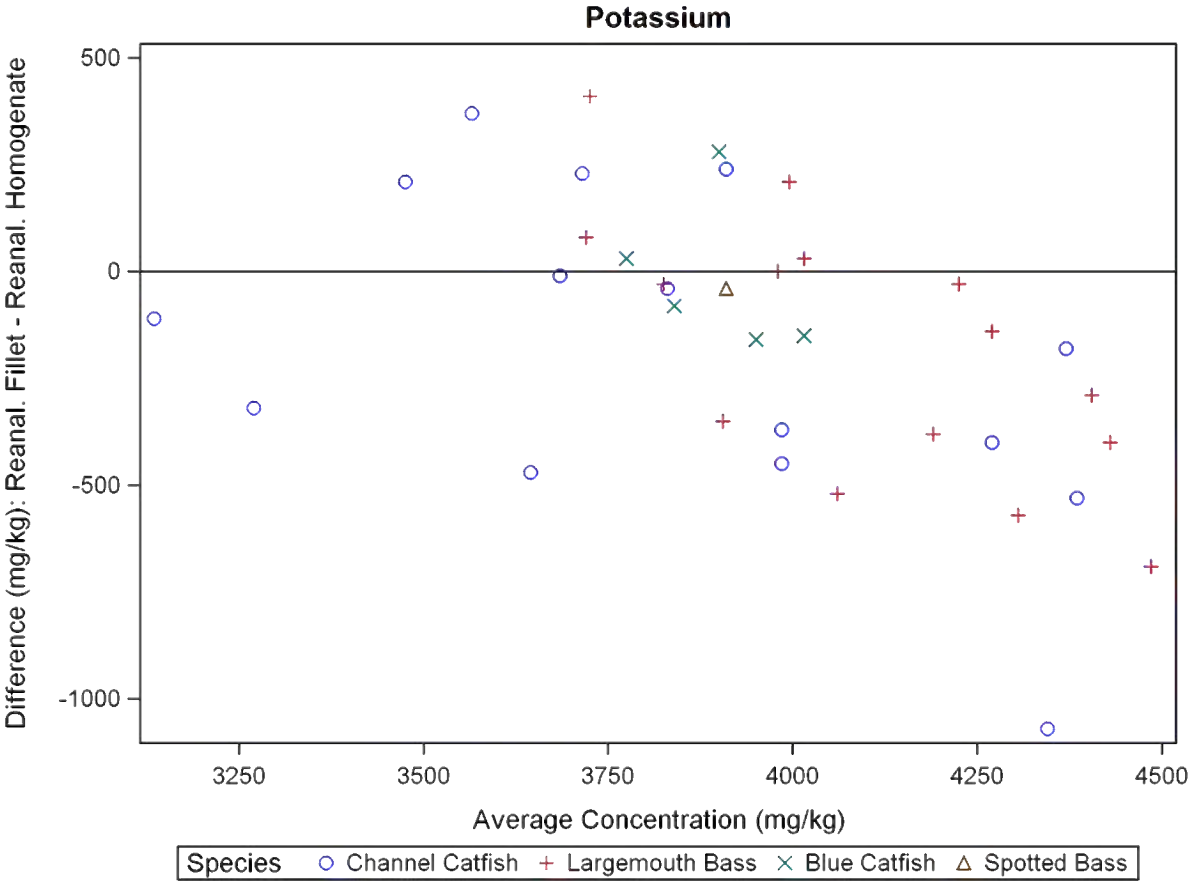

Cobalt
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
0.01
0.00
-0.01
-0.02
0.0175
0.0200
0.0225
0.0250
0.0275
Average Concentration (mg/kg)
Species
Channel Catfish
Blue Catfish
Largemouth Bass

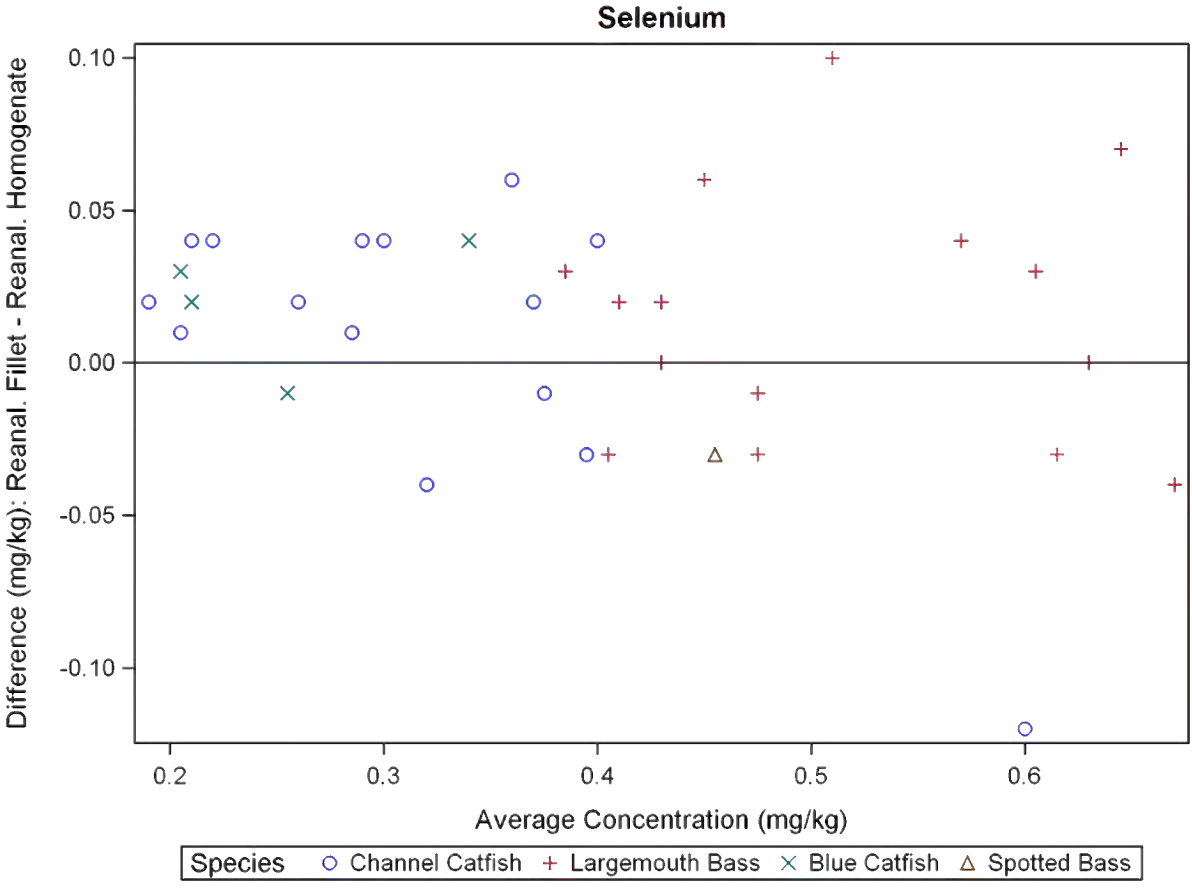

Copper
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
2
1
0
-1
0.5
1.0
1.5
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

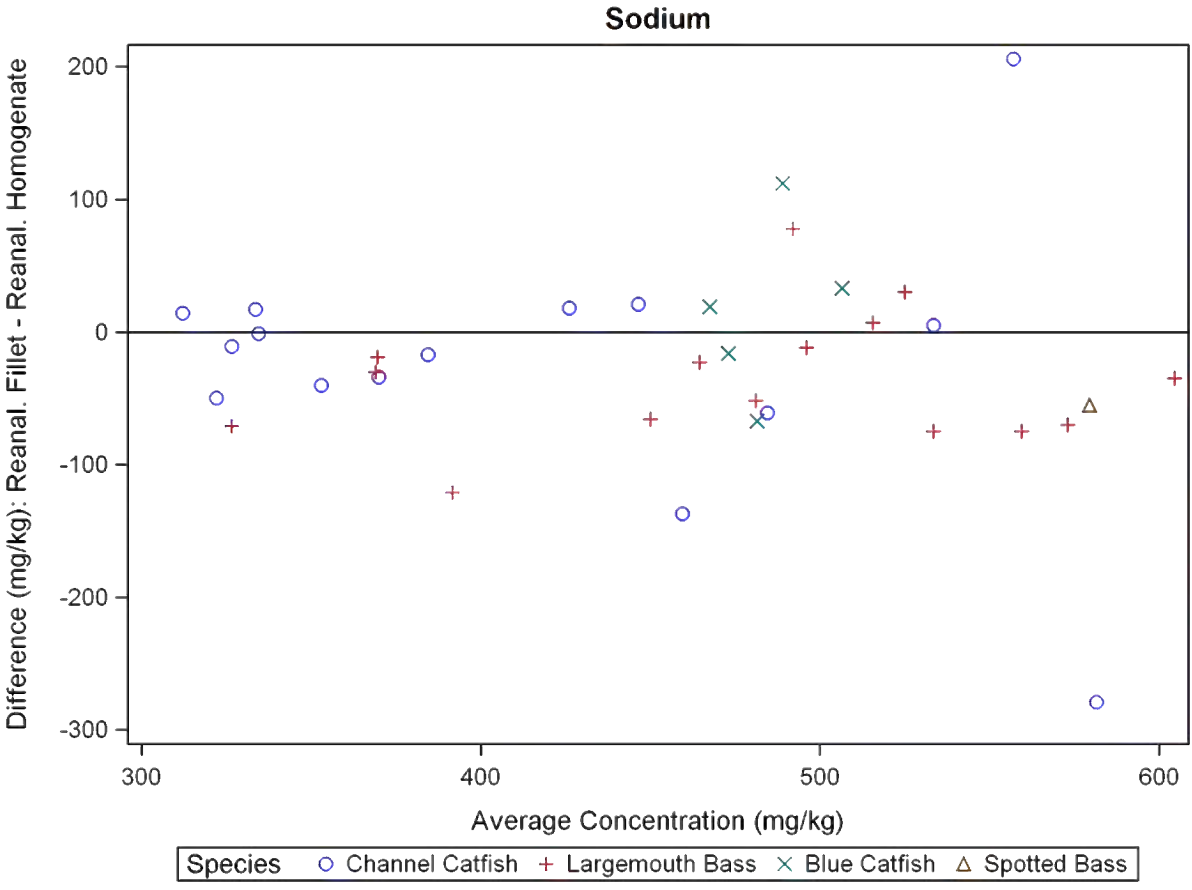

Magnesium
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
100
0
-100
-200
-300
200
250
300
350
400
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

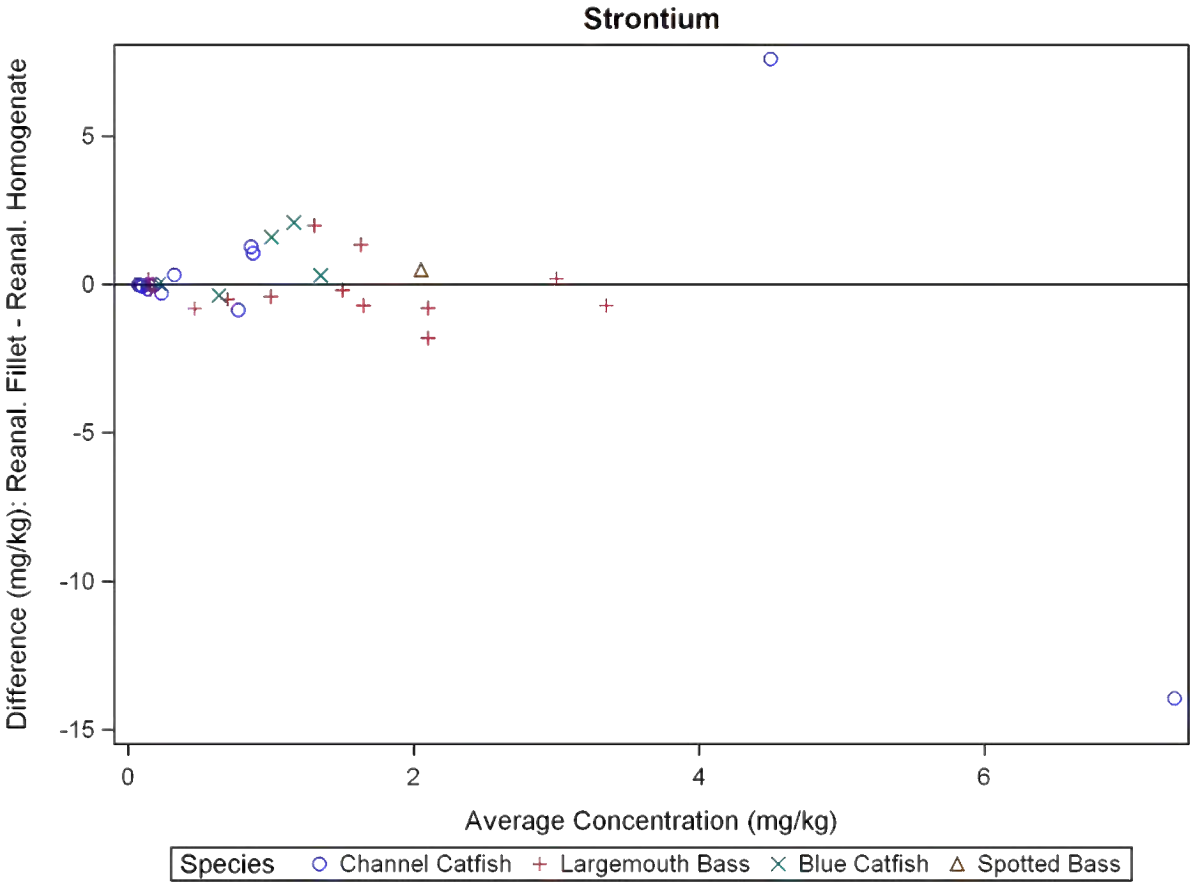

Manganese
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
5
0
-5
-10
0
2
4
6
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

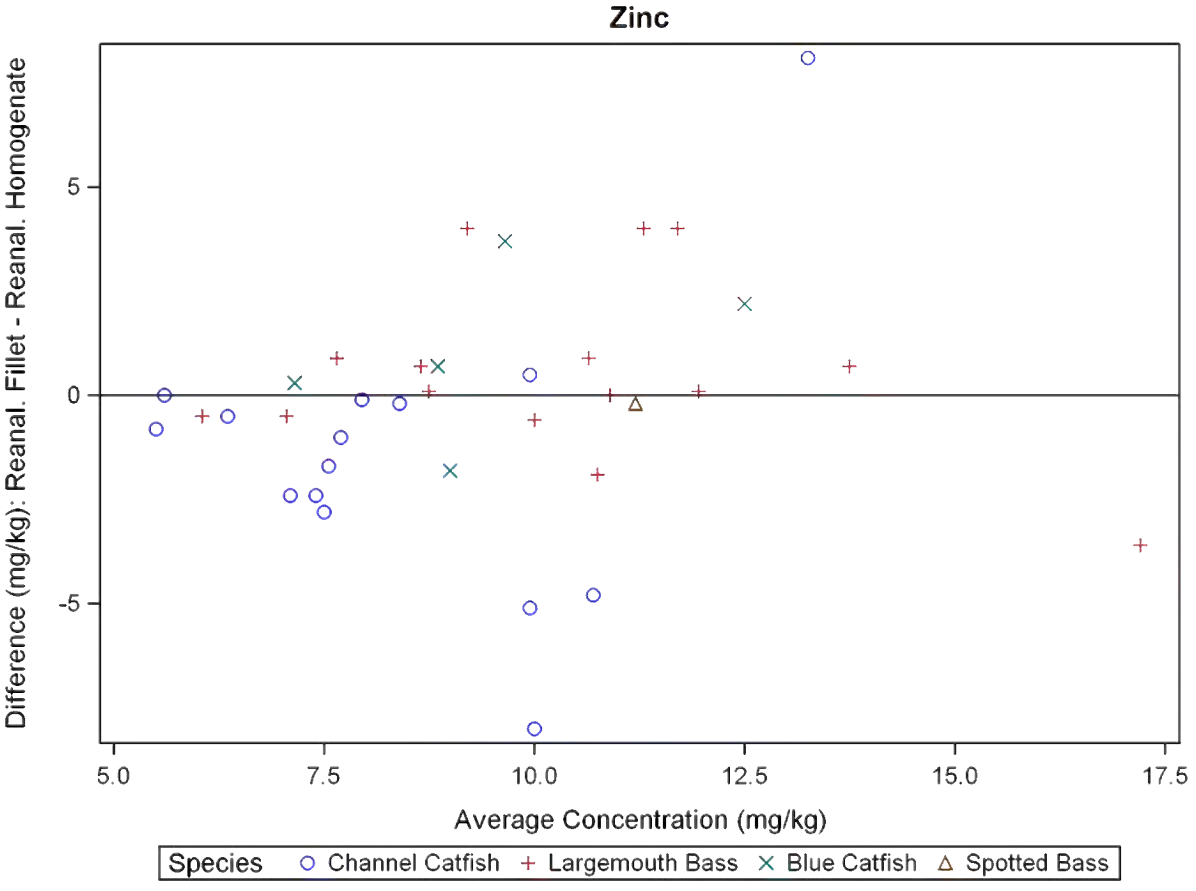

Mercury
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
0.06
0.04
0.02
0.00
-0.02
-0.04
0.0
0.1
0.2
0.3
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Potassium
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
500
0
-500
-1000
3250
3500
3750
4000
4250
4500
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass


Selenium
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
0.10
0.05
0.00
-0.05
-0.10
0.2
0.3
0.4
0.5
0.6
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

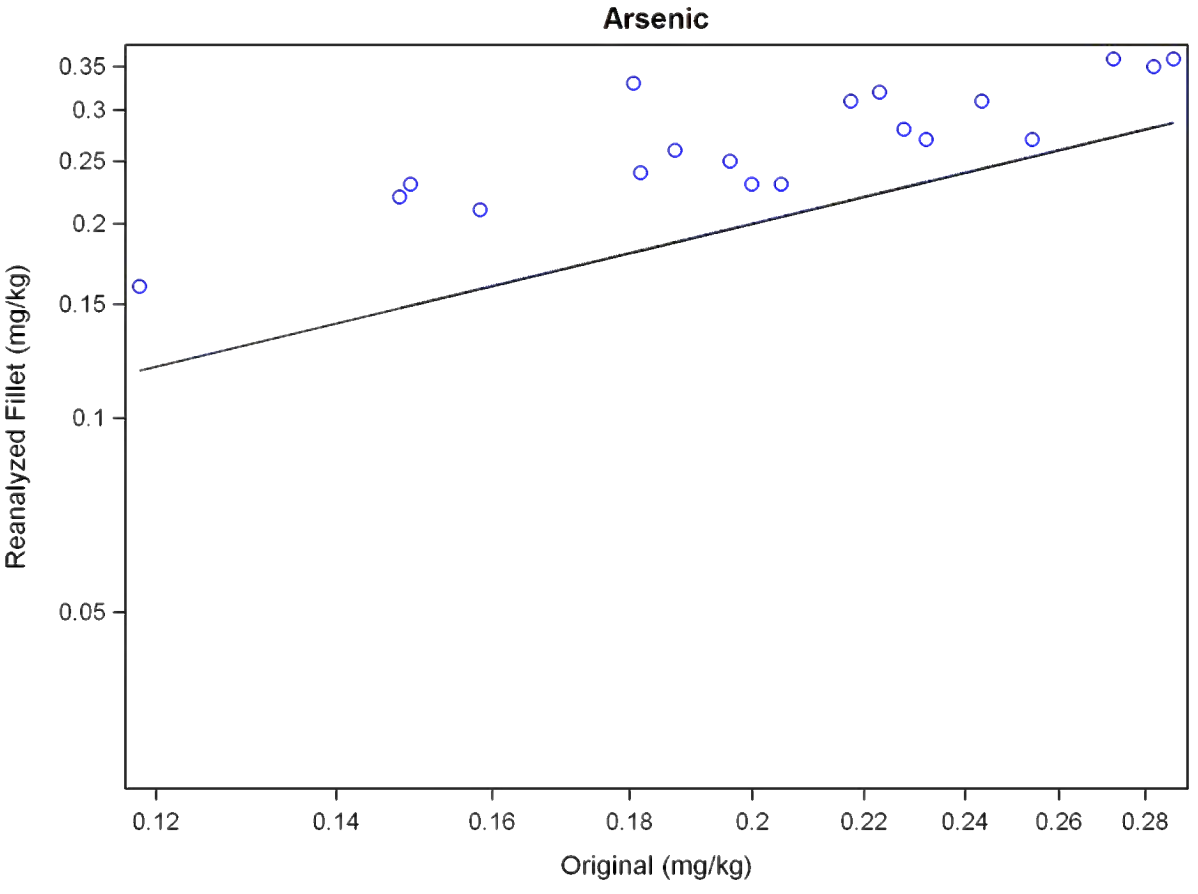

Sodium
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
200
100
0
-100
-200
-300
300
400
500
600
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

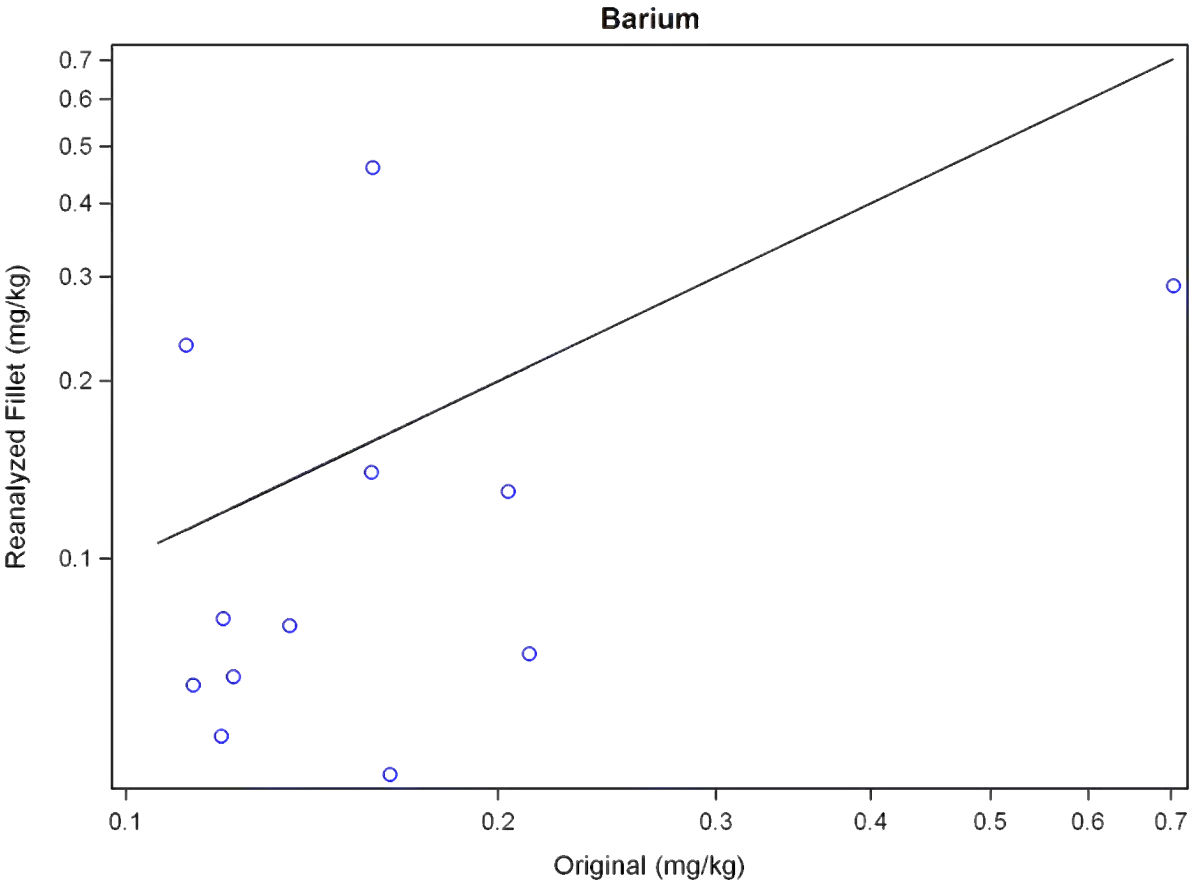

Strontium
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
5
0
-5
-10
-15
0
2
4
6
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

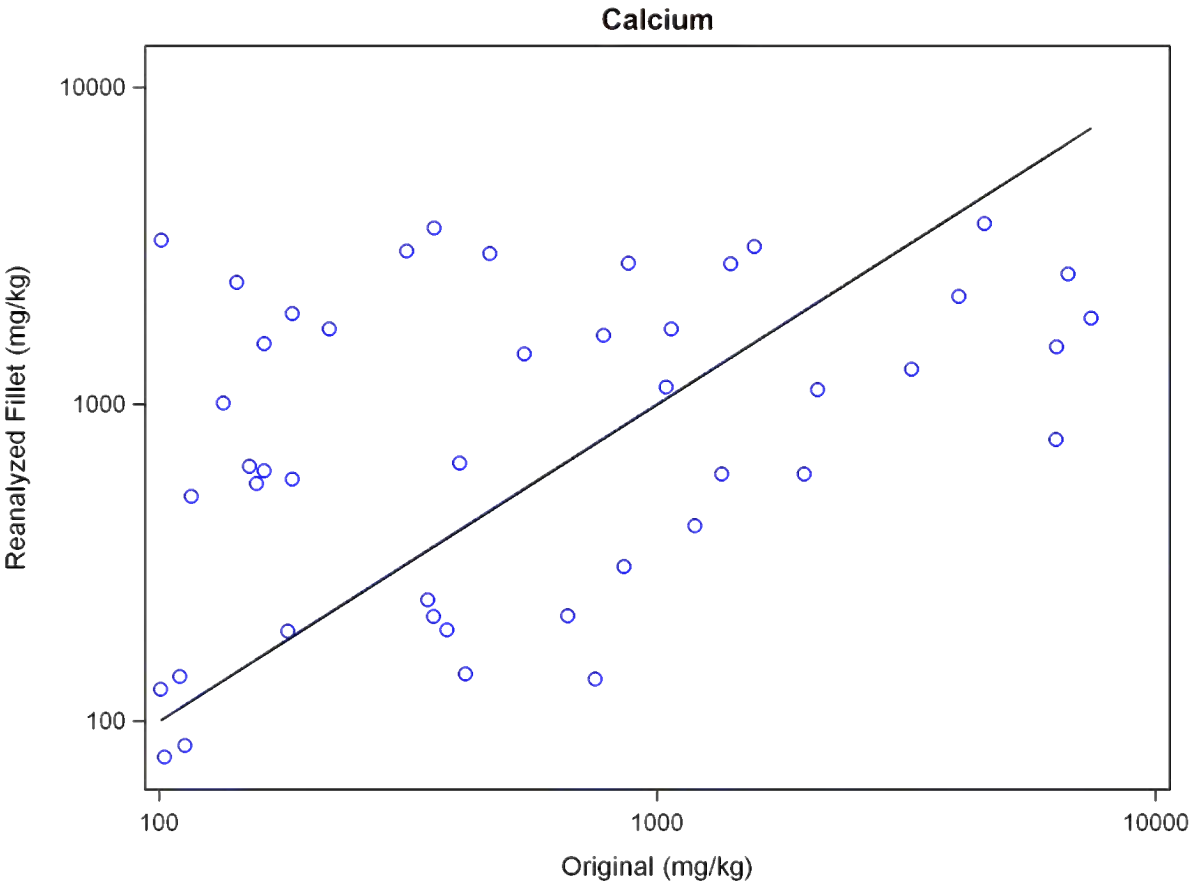

Zinc
Difference (mg/kg): Reanal. Fillet - Reanal. Homogenate
5
0
-5
5.0
7.5
10.0
12.5
15.0
17.5
Average Concentration (mg/kg)
Species
Channel Catfish
Largemouth Bass
Blue Catfish
Spotted Bass

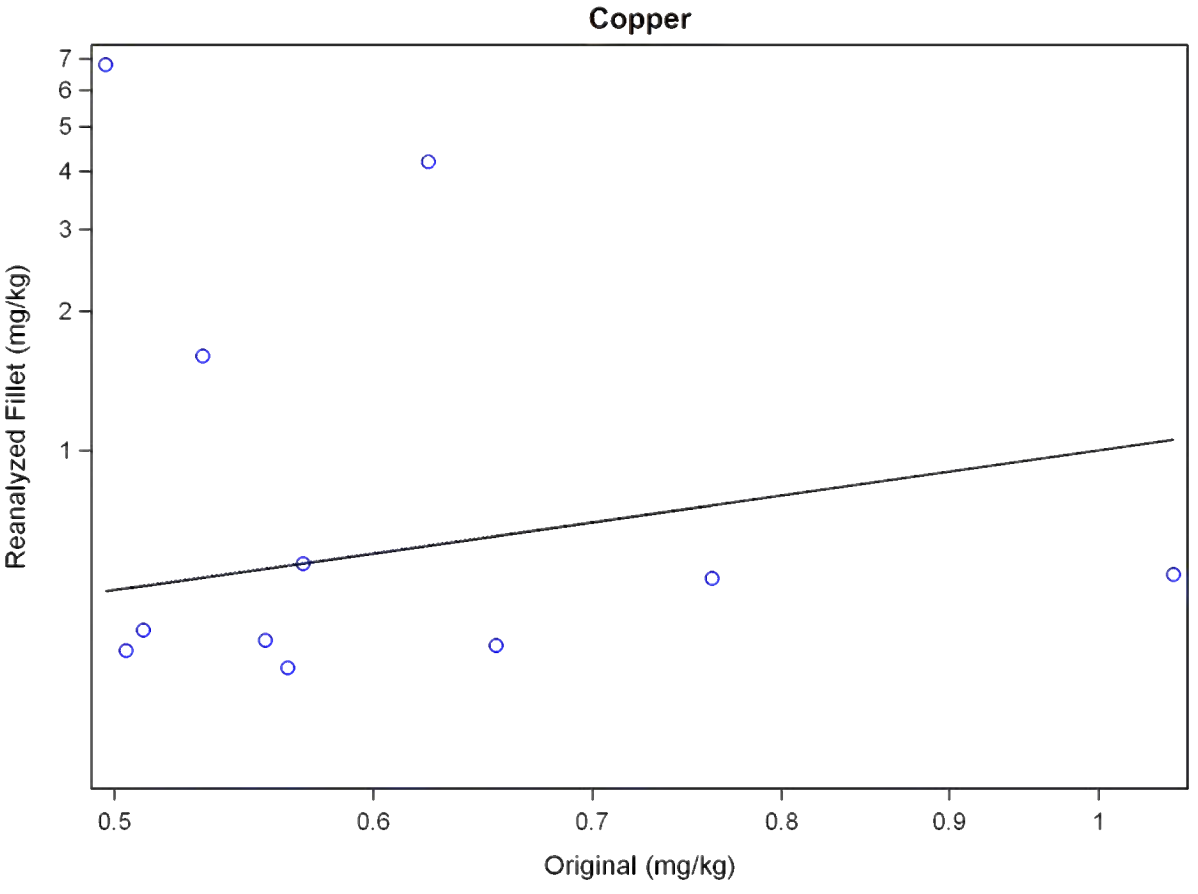
Appendix **H**

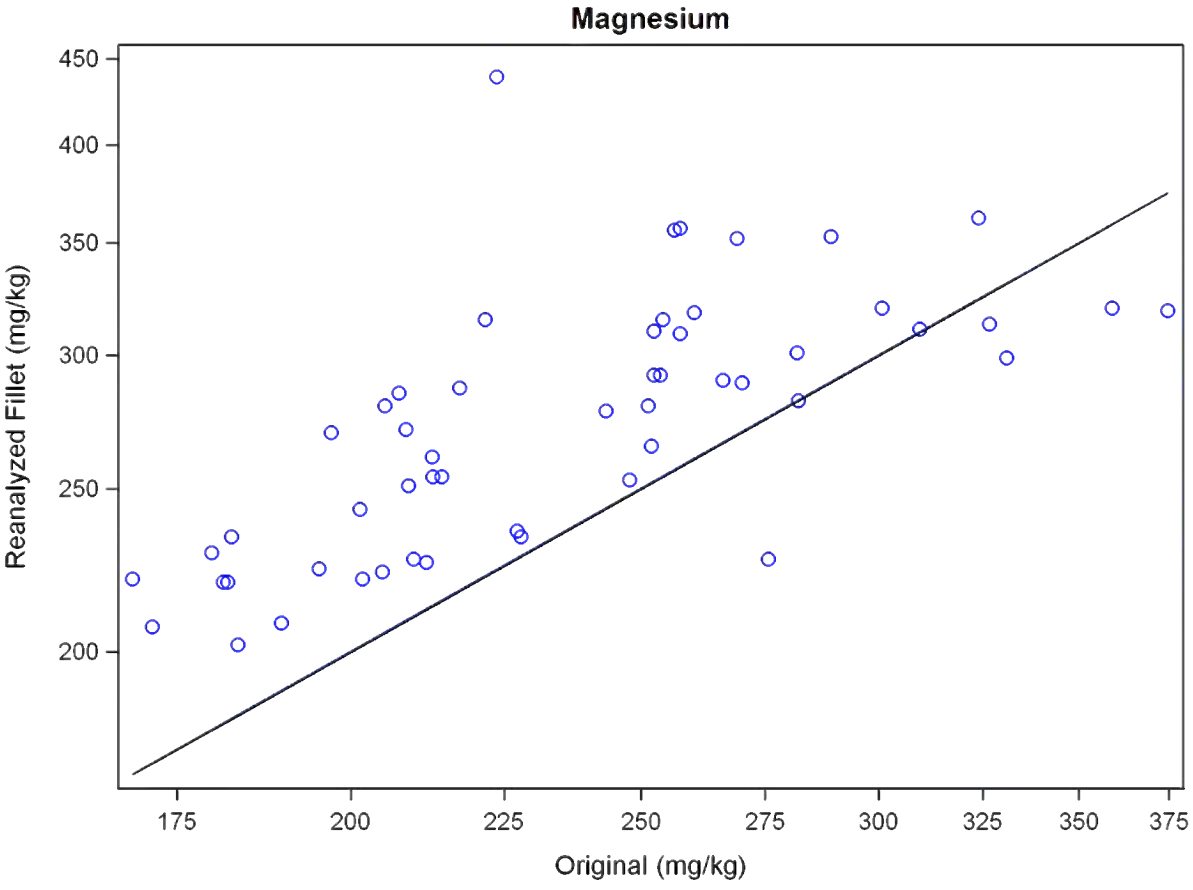
Bivariate Agreement Plots Comparing Original and Reanalyzed Fillet Detected Wet Weight Results for Metals: Log Scale

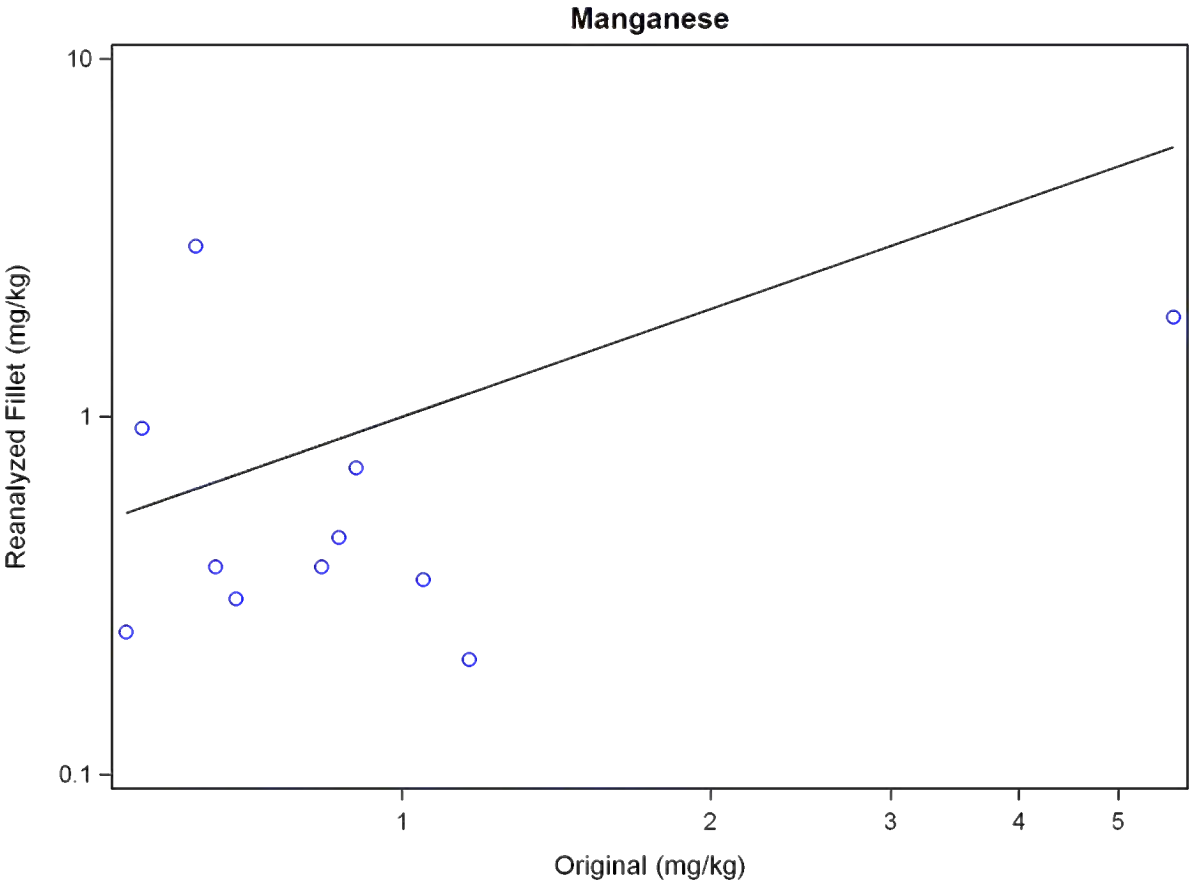

Arsenic
Reanalyzed Fillet (mg/kg)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0.12
0.14
0.16
0.18
0.2
0.22
0.24
0.26
0.28
Original (mg/kg)

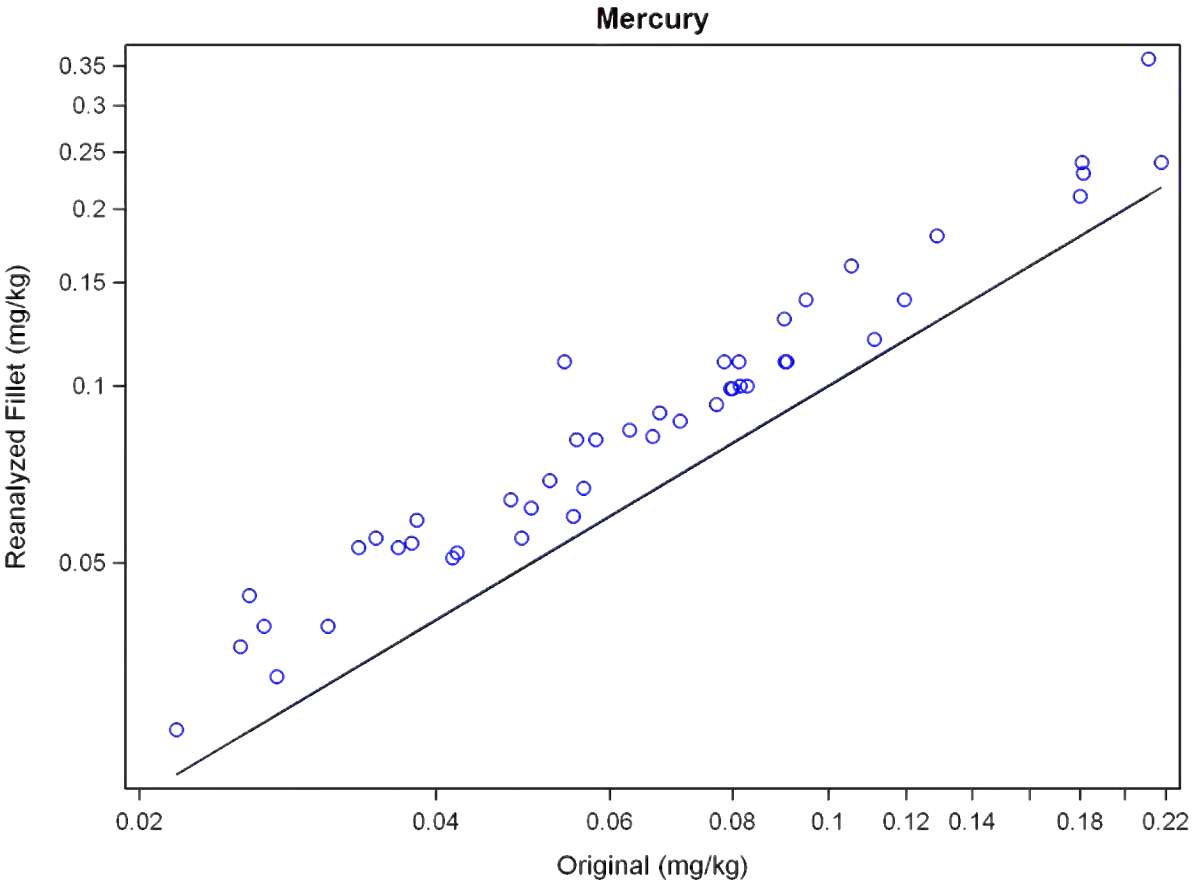

Barium
Reanalyzed Fillet (mg/kg)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Original (mg/kg)

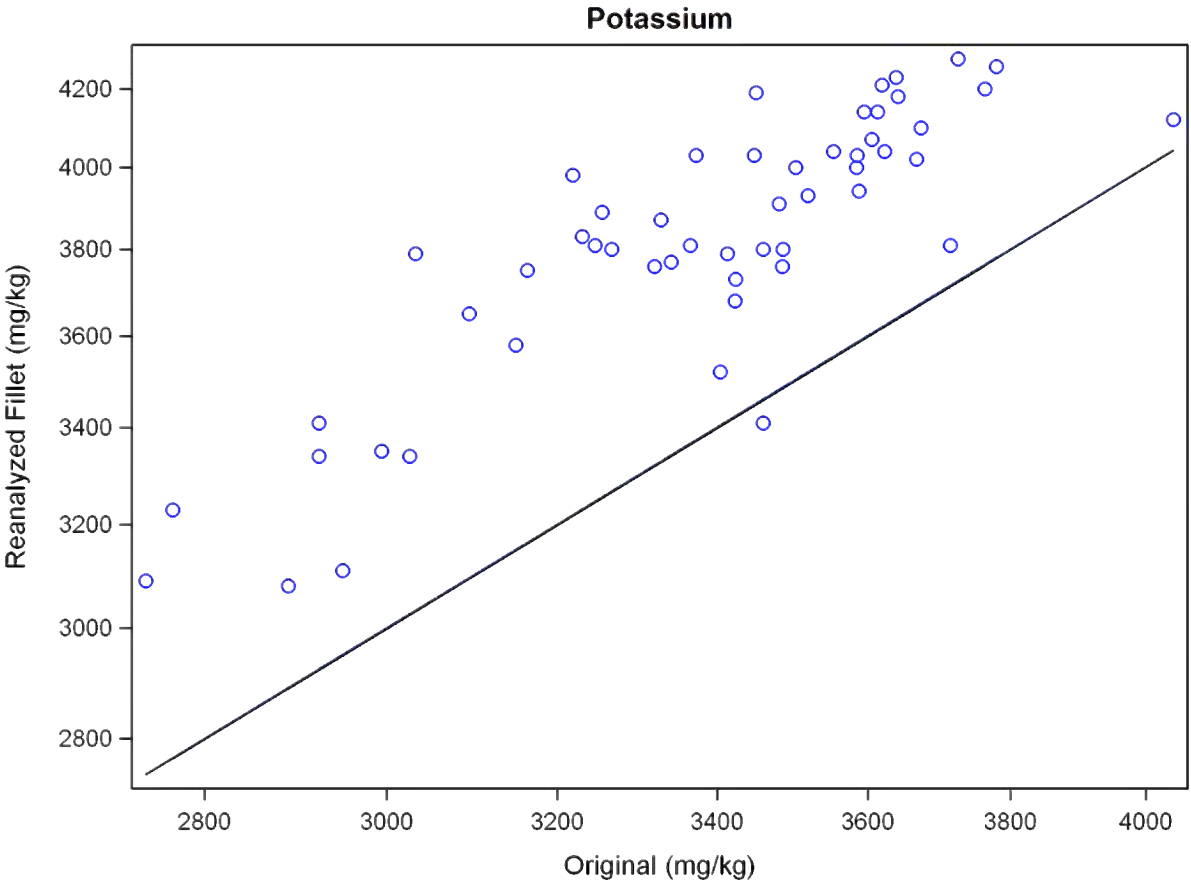

Calcium
10000
1000
100
Reanalyzed Fillet (mg/kg)
100
1000
10000
Original (mg/kg)

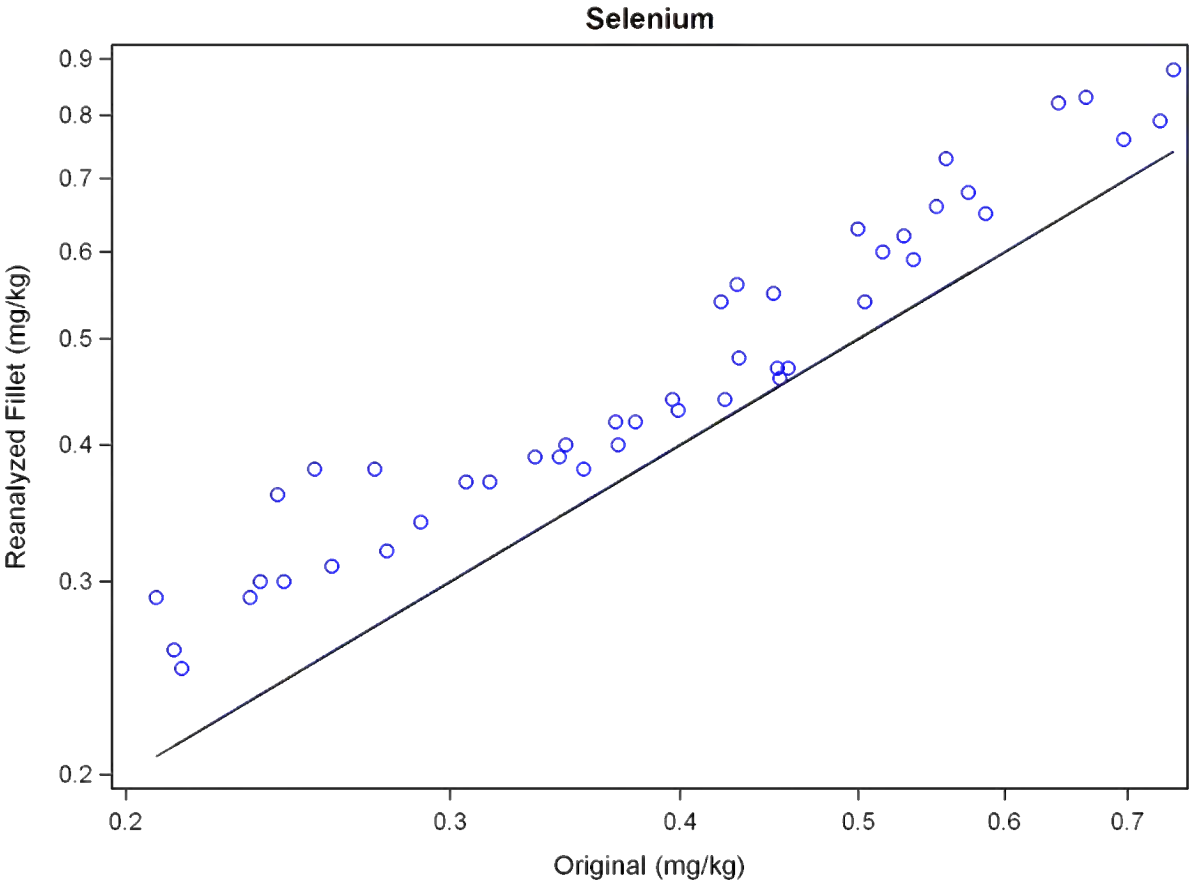

Copper
Reanalyzed Fillet (mg/kg)
7
6
5
4
3
2
1
0.5
0.6
0.7
0.8
0.9
1
Original (mg/kg)

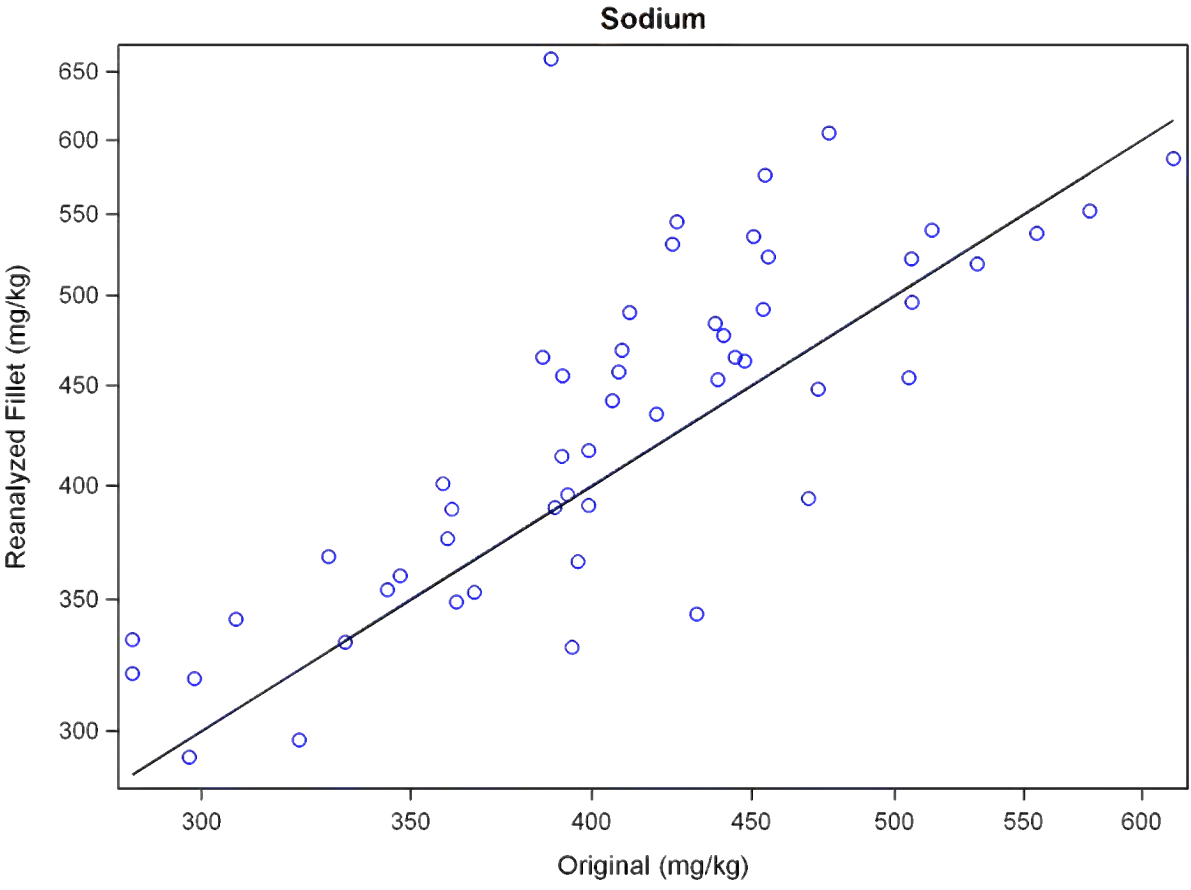

Magnesium
Reanalyzed Fillet (mg/kg)
450
400
350
300
250
200
175
200
225
250
275
300
325
350
375
Original (mg/kg)

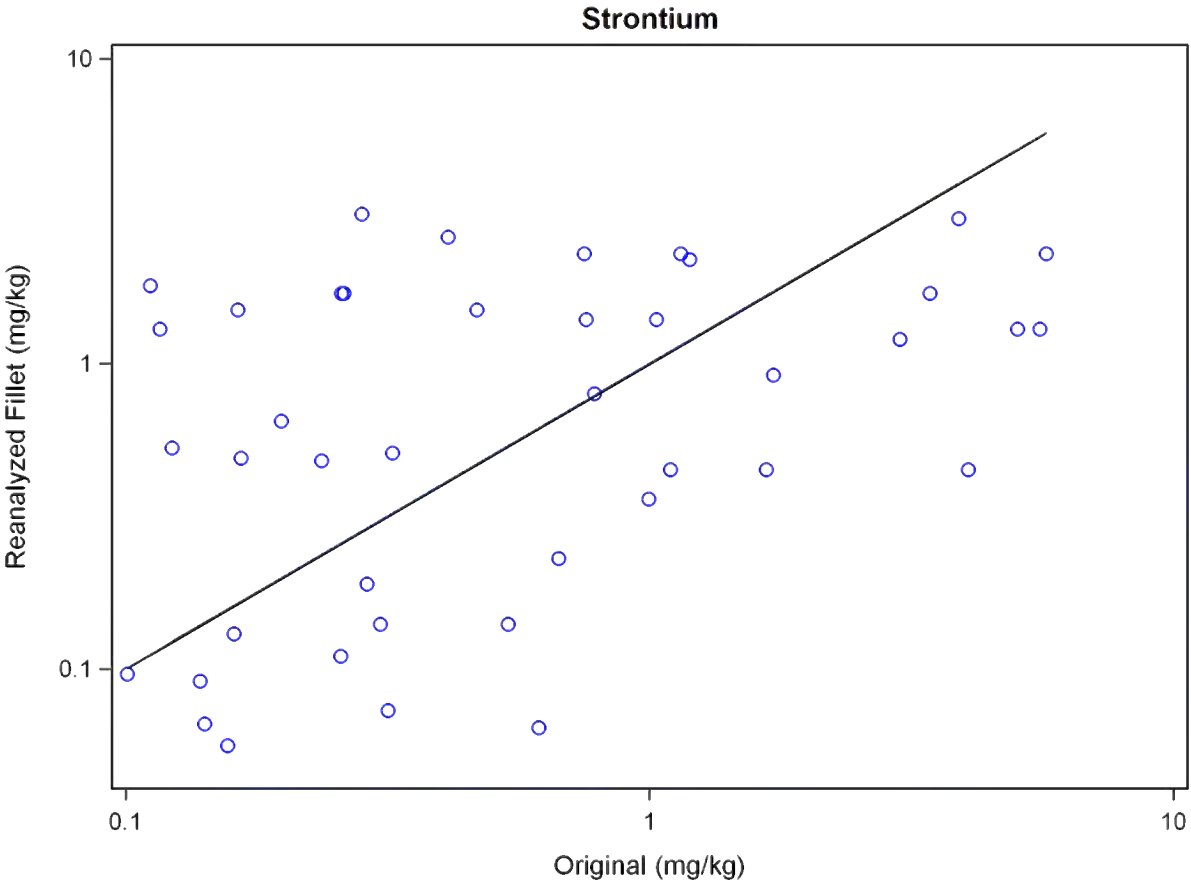

Manganese
10
1
0.1
Reanalyzed Fillet (mg/kg)
1
2
3
4
5
Original (mg/kg)

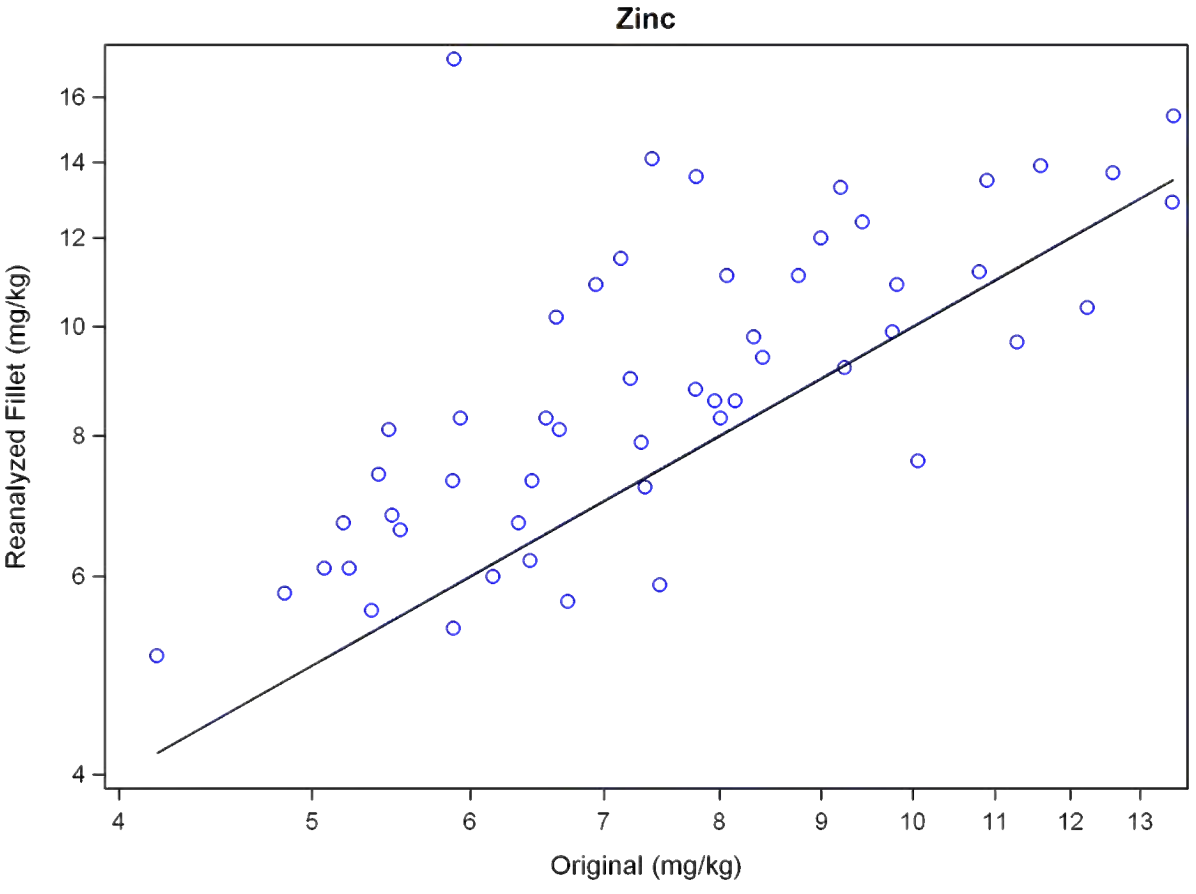

Mercury
Reanalyzed Fillet (mg/kg)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.18
0.22
Original (mg/kg)


Potassium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
2800
3000
3200
3400
3600
3800
4000
4200


Selenium
Reanalyzed Fillet (mg/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.2
0.3
0.4
0.5
0.6
0.7
Original (mg/kg)

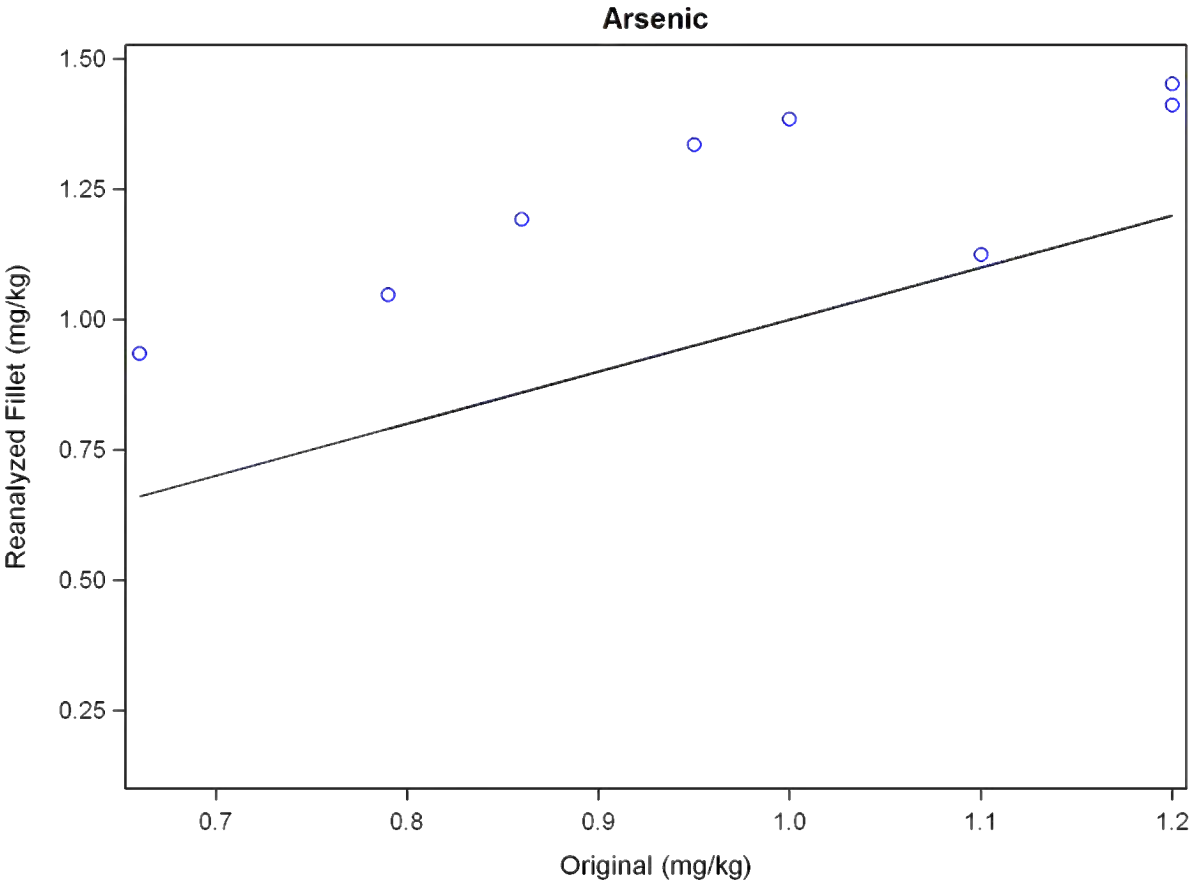

Sodium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
650
600
550
500
450
400
350
300
300
350
400
450
500
550
600

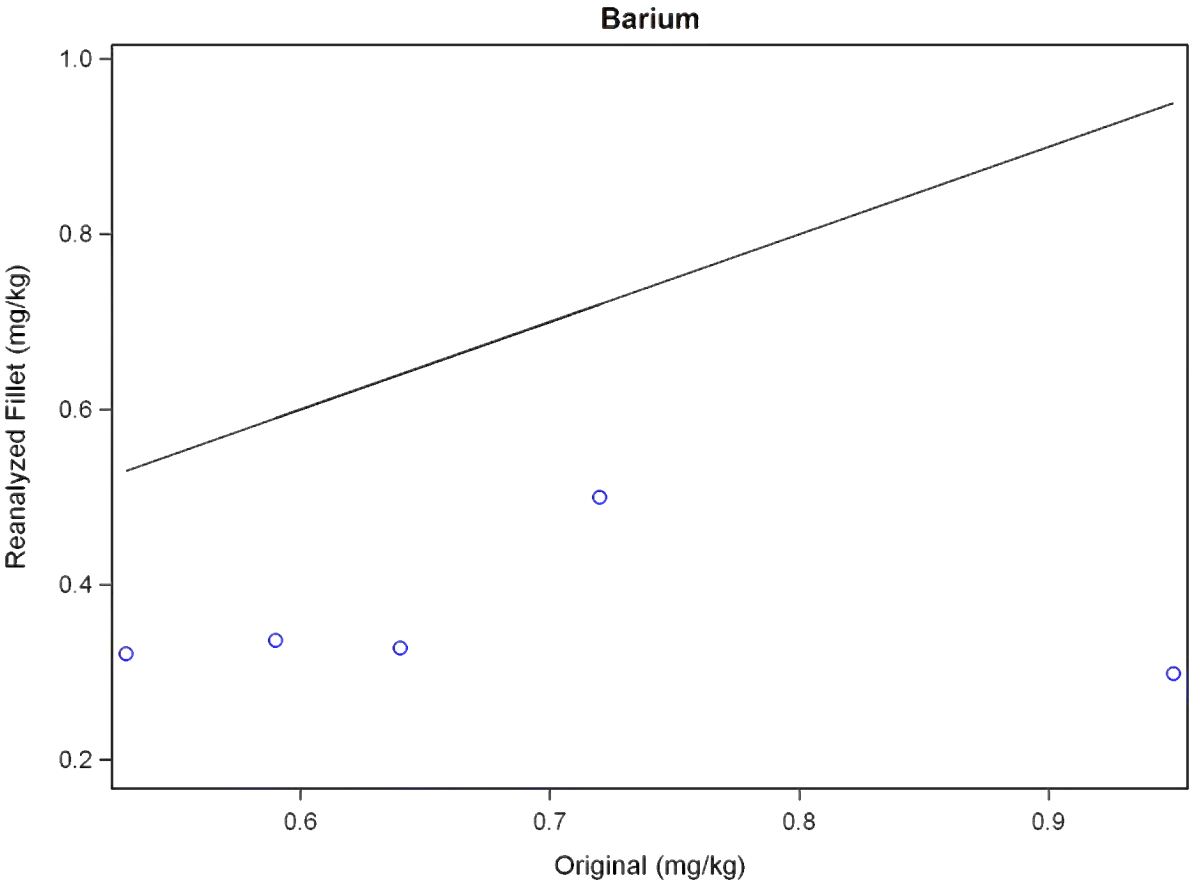

Strontium
10
1
0.1
Reanalyzed Fillet (mg/kg)
0.1
1
10
Original (mg/kg)

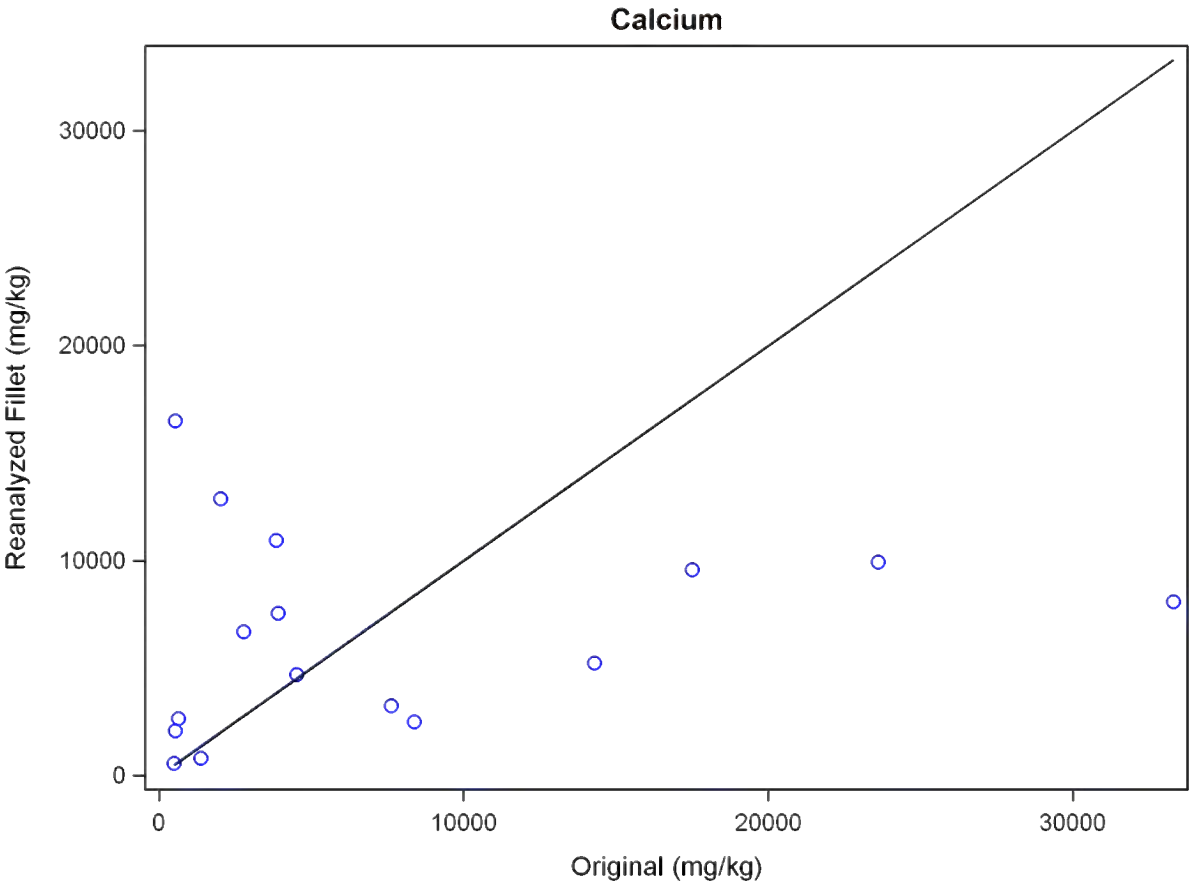

Zinc
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
4
6
8
10
12
14
16
4
5
6
7
8
9
10
11
12
13

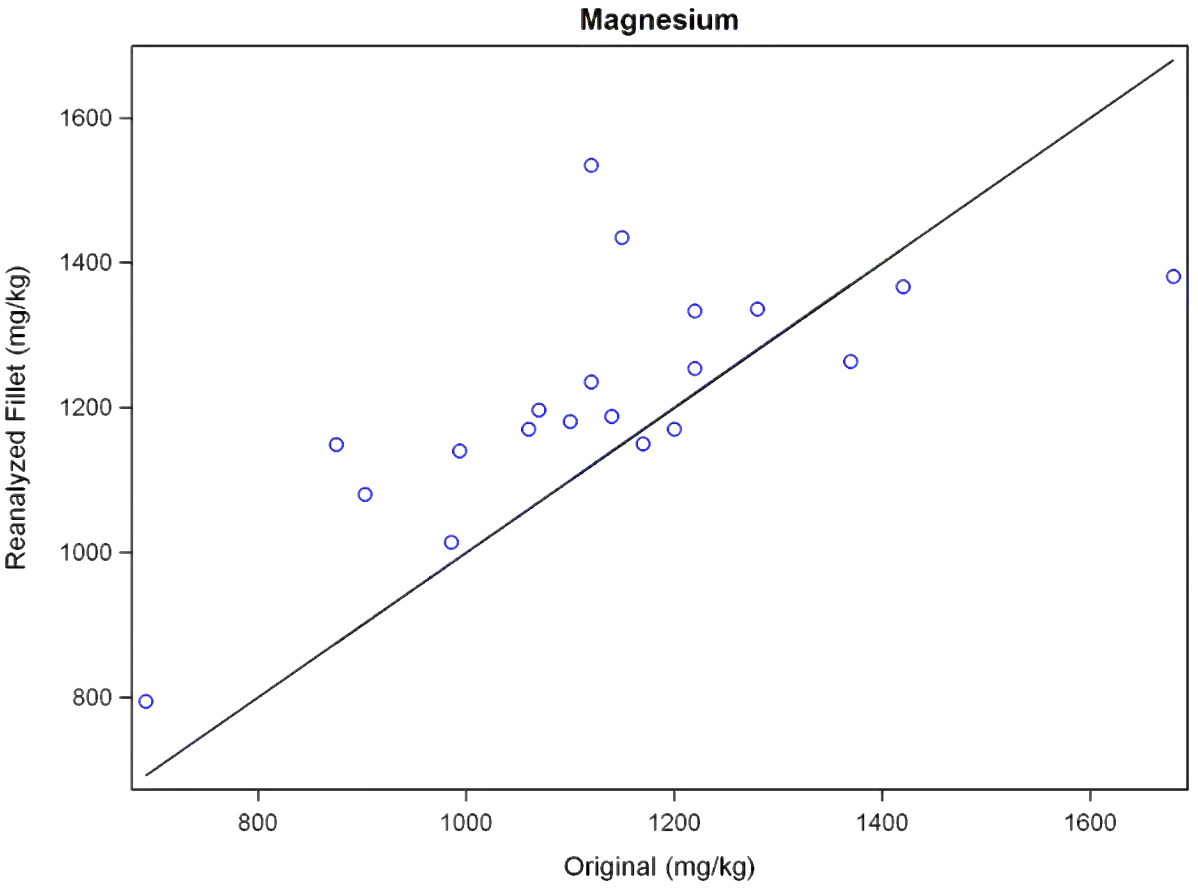
Appendix I

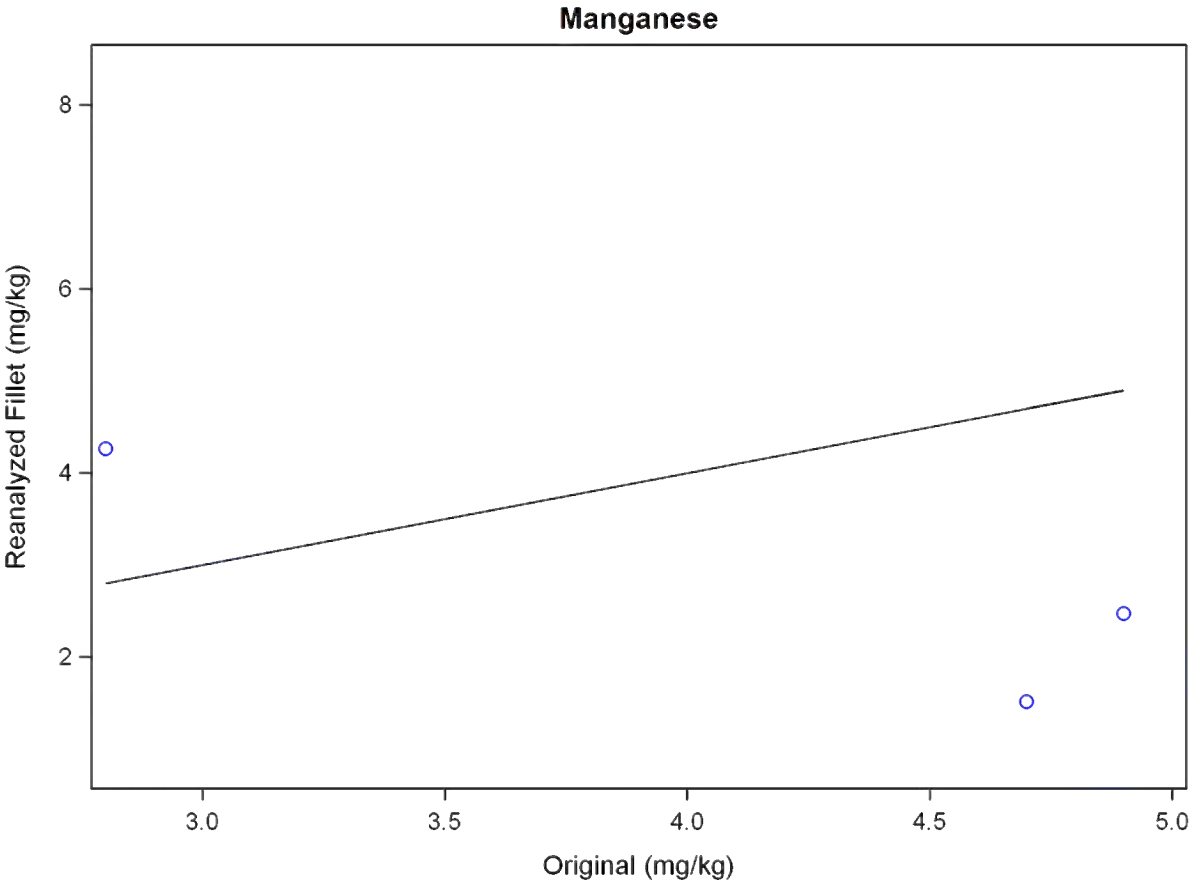
Bivariate Agreement Plots Comparing Twenty Original and Reanalyzed Fillet Detected Dry Weight Results for Metals

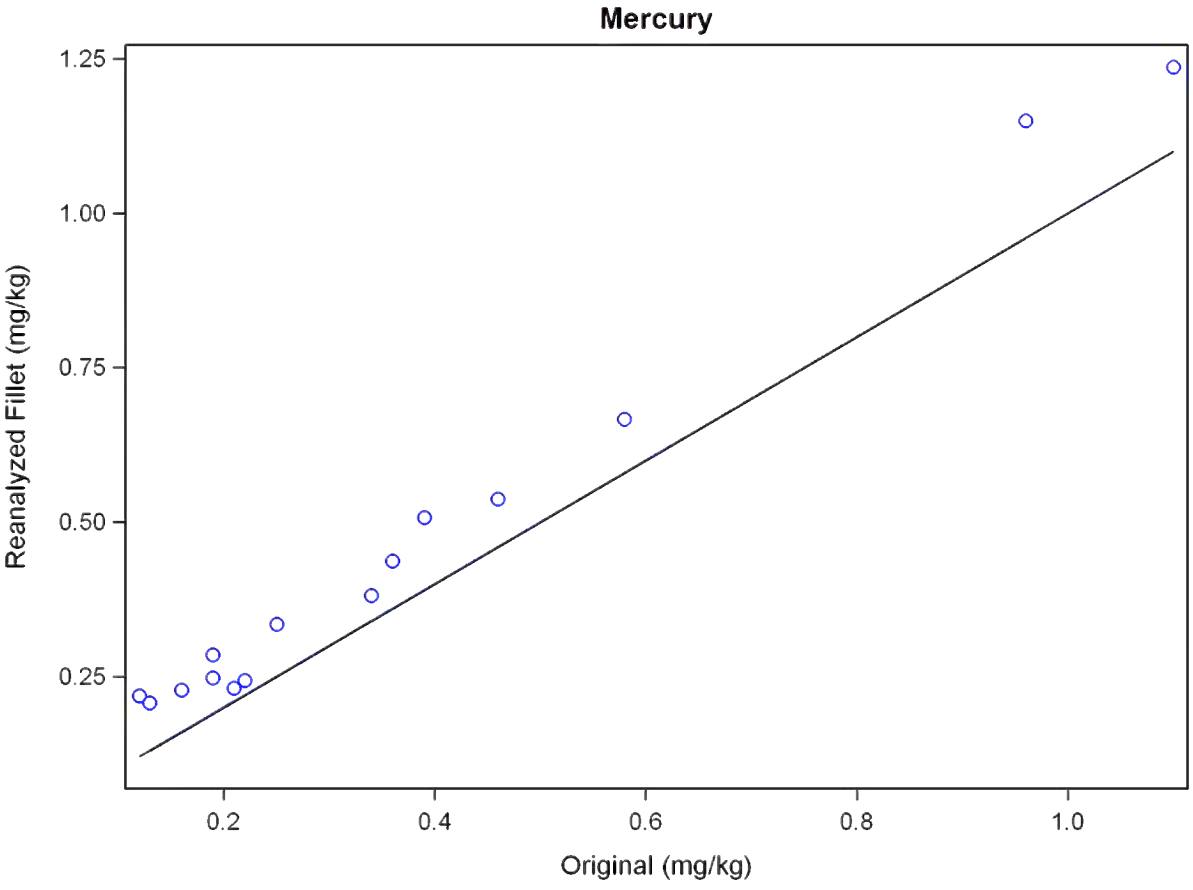

Arsenic
1.50
1.25
1.00
0.75
0.50
0.25
Reanalyzed Fillet (mg/kg)
0.7
0.8
0.9
1.0
1.1
1.2
Original (mg/kg)

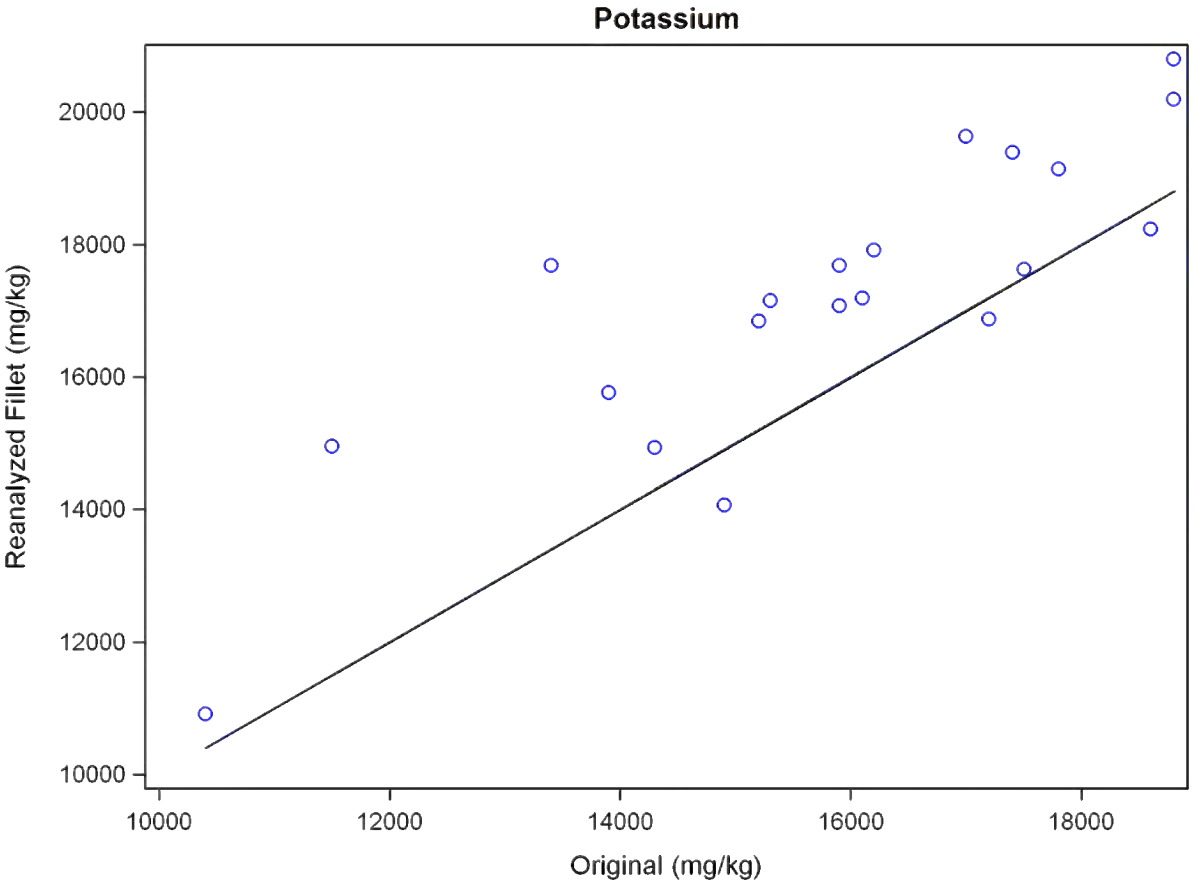

Barium
1.0
0.8
0.6
0.4
0.2
Reanalyzed Fillet (mg/kg)
0.6
0.7
0.8
0.9
Original (mg/kg)

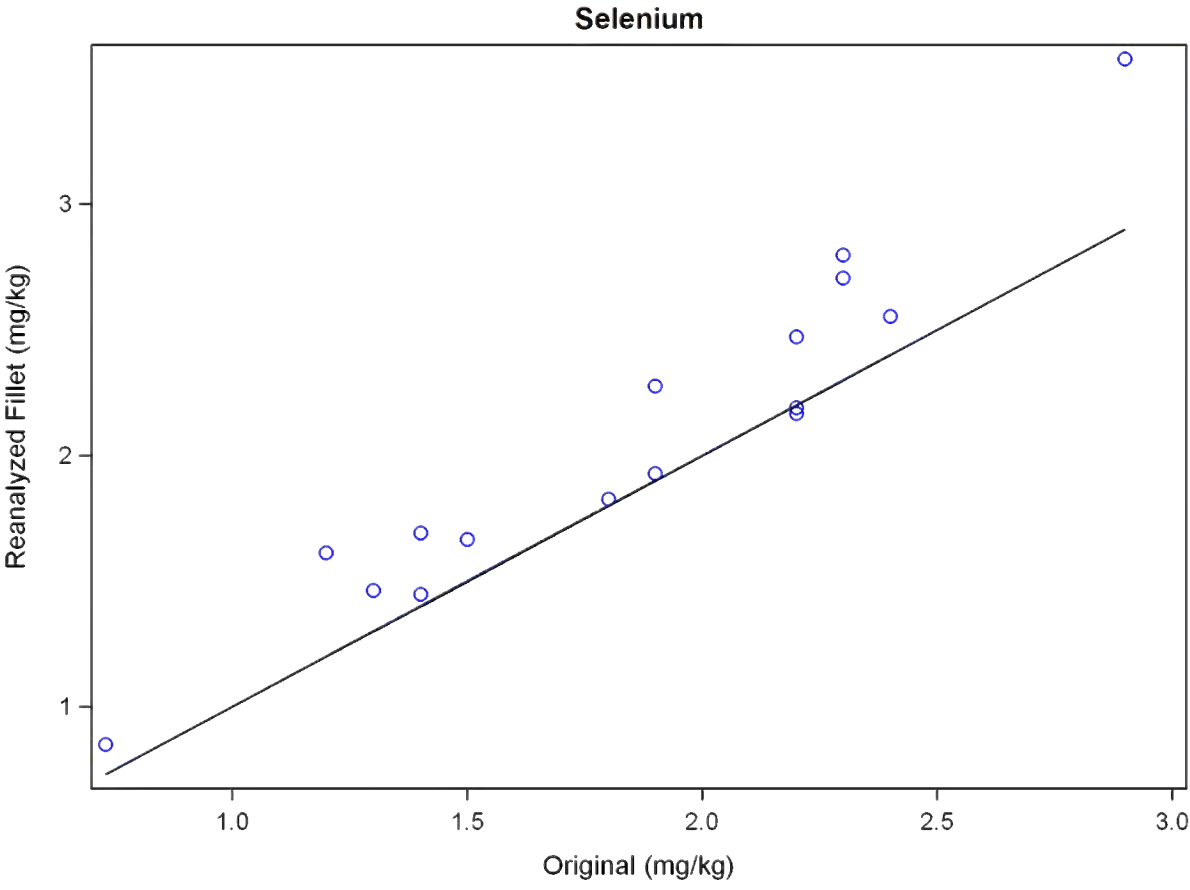

Calcium
Reanalyzed Fillet (mg/kg)
30000
20000
10000
0
0
10000
20000
30000
Original (mg/kg)

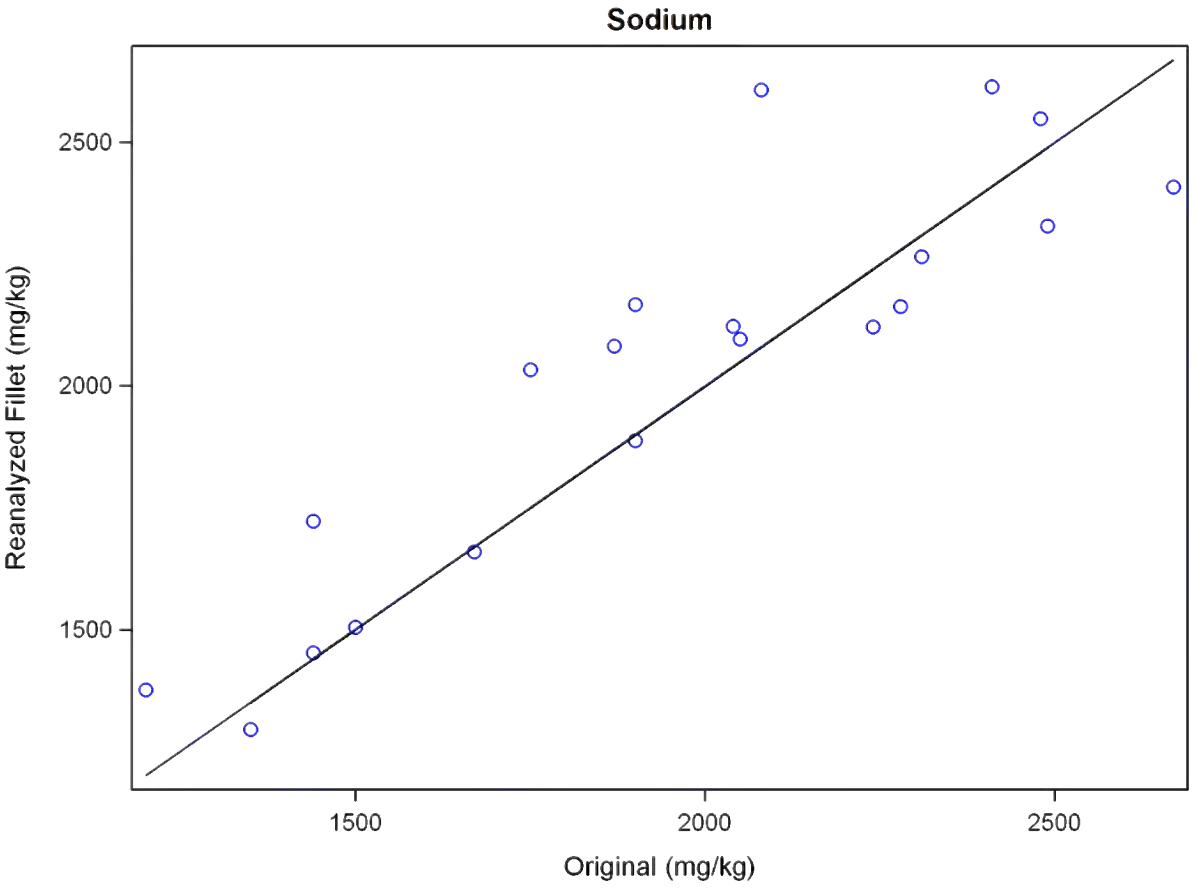

Magnesium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
800
1000
1200
1400
1600

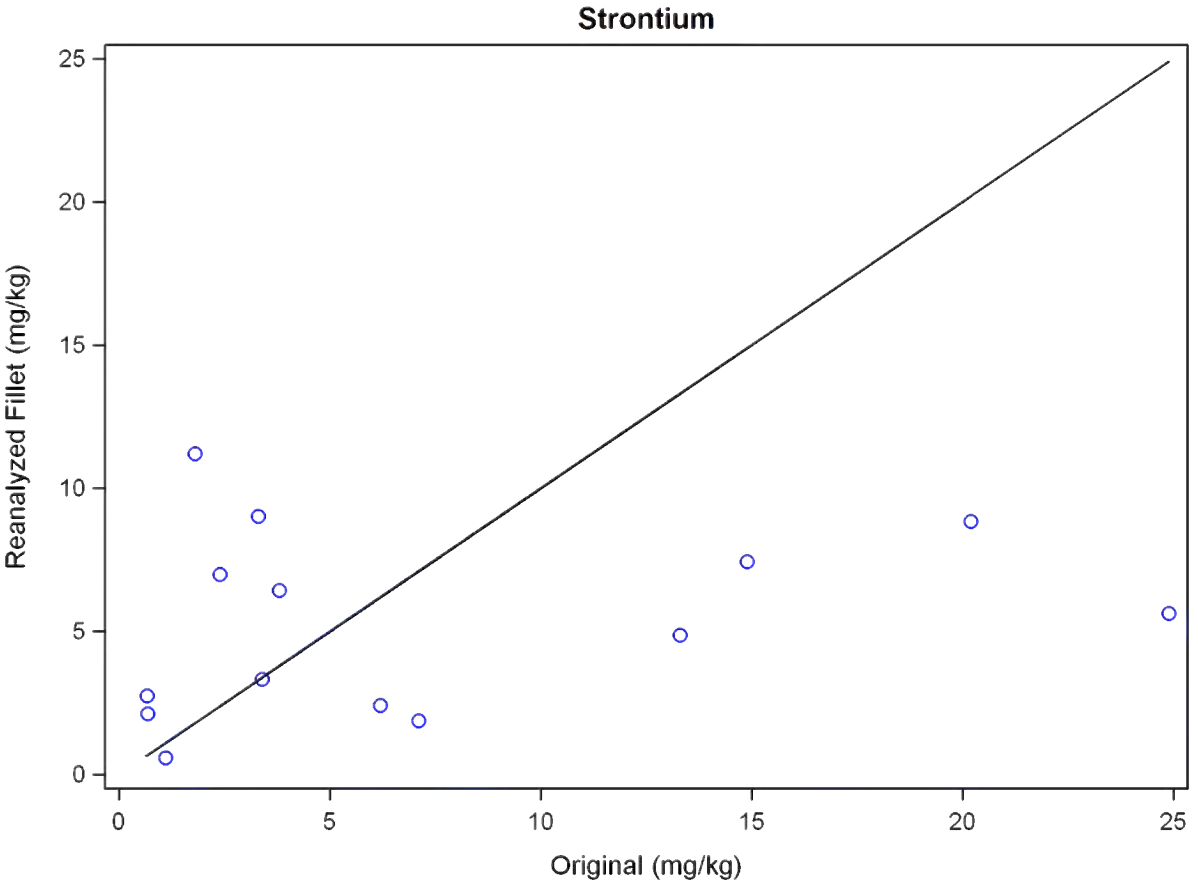

Manganese
Reanalyzed Fillet (mg/kg)
8
6
4
2
3.0
3.5
4.0
4.5
5.0
Original (mg/kg)

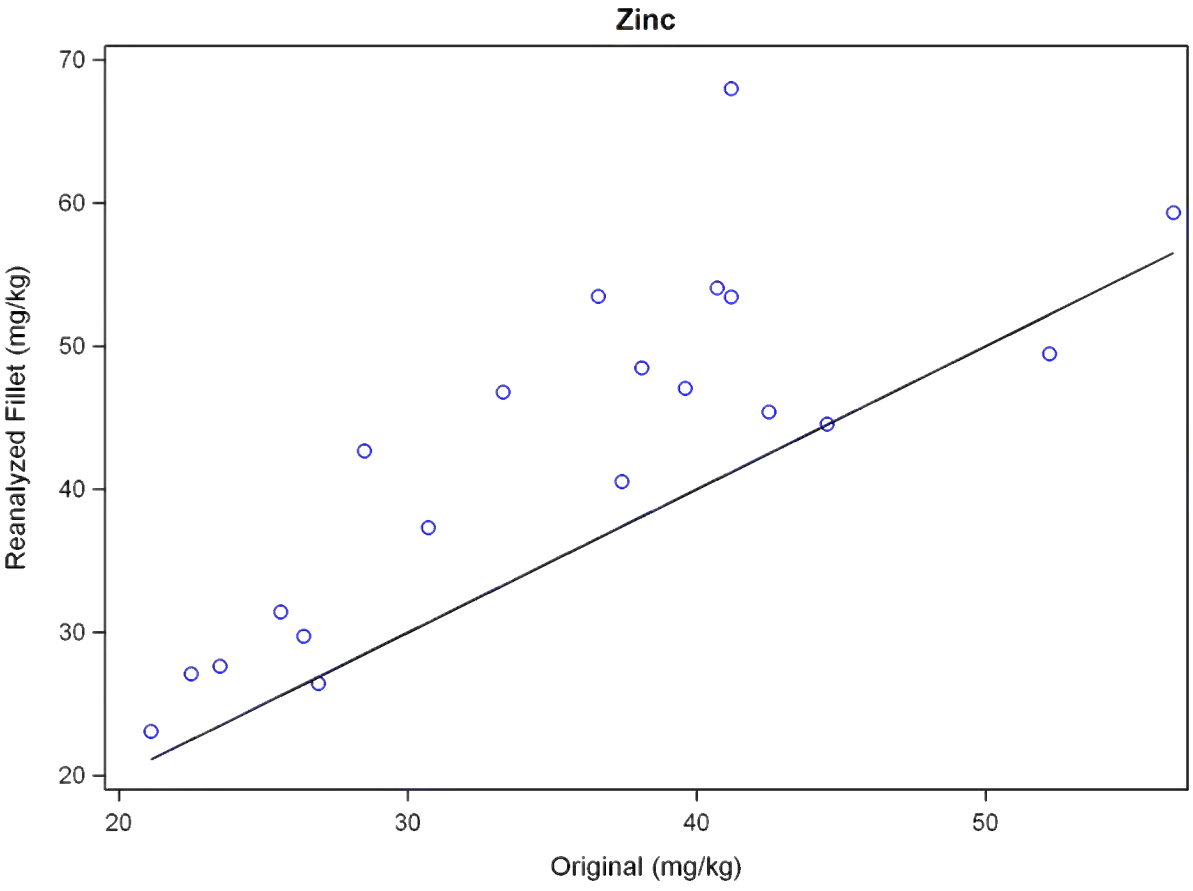

Mercury
Reanalyzed Fillet (mg/kg)
1.25
1.00
0.75
0.50
0.25
0.2
0.4
0.6
0.8
1.0
Original (mg/kg)


Potassium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
10000
12000
14000
16000
18000
20000
10000
12000
14000
16000
18000


Selenium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
1
2
3
1.0
1.5
2.0
2.5
3.0

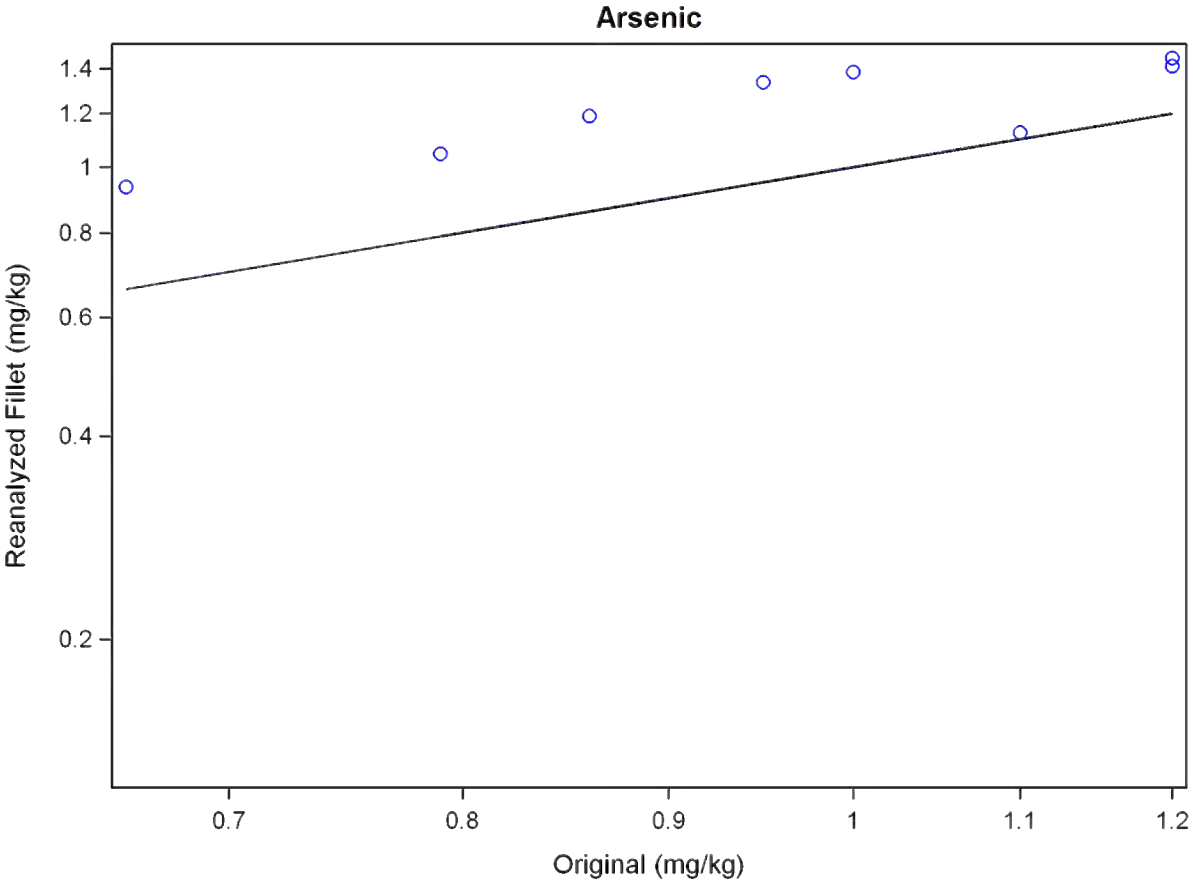

Sodium
Reanalyzed Fillet (mg/kg)
2500
2000
1500
1500
2000
2500
Original (mg/kg)

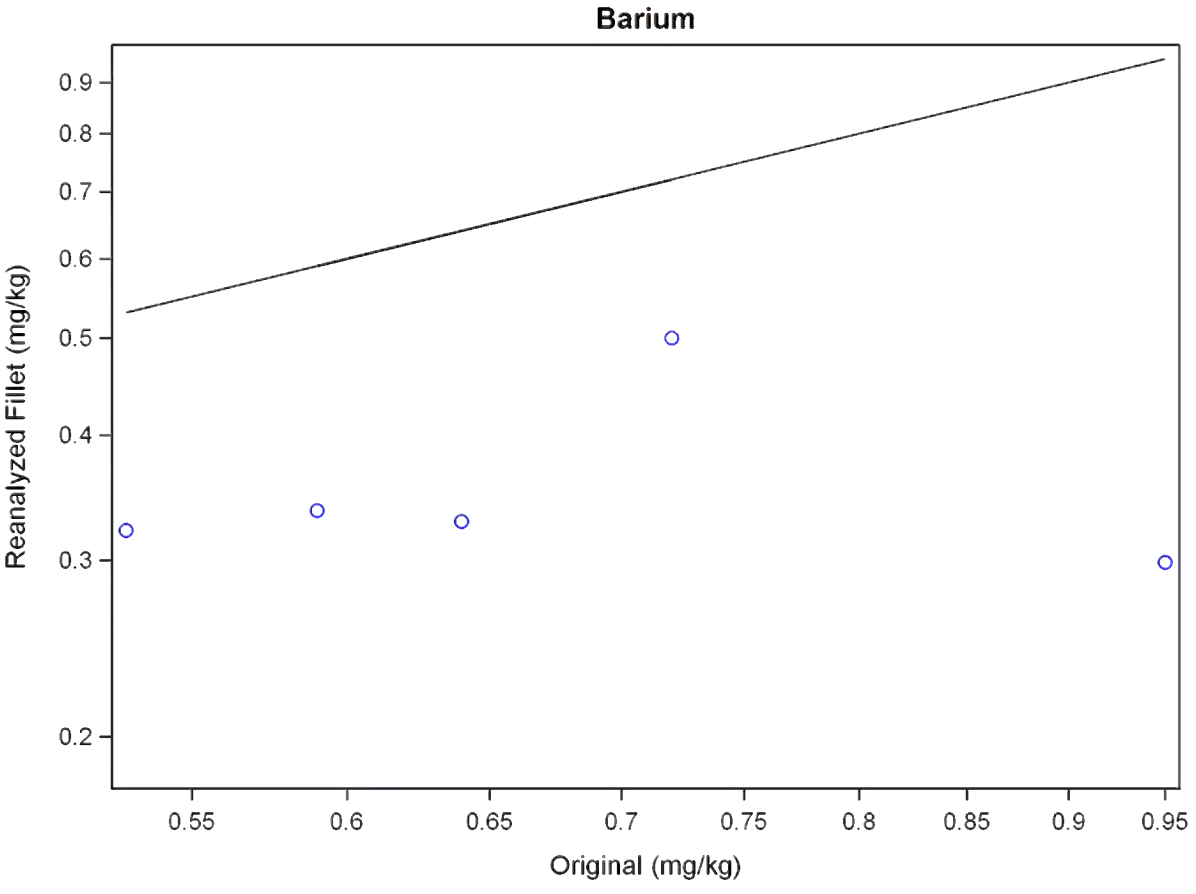

Strontium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
0
5
10
15
20
25

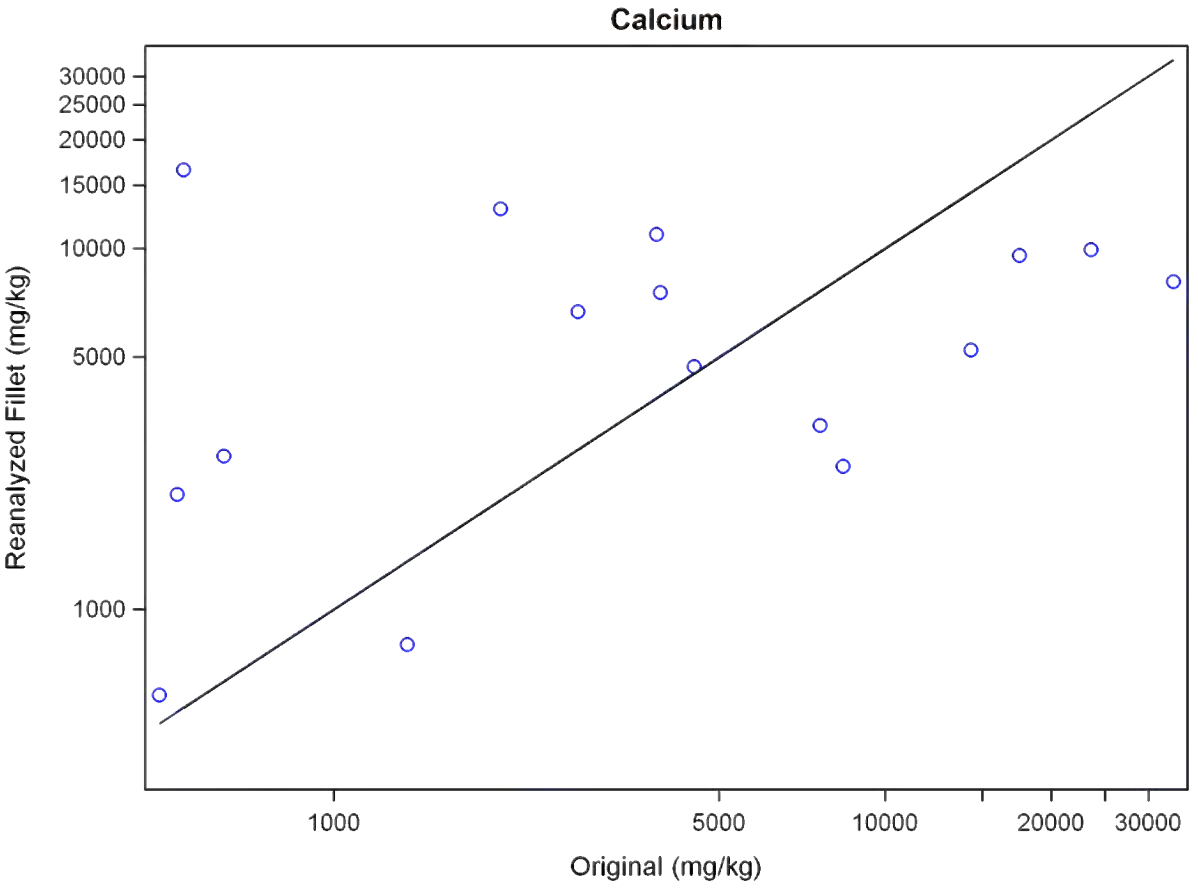

Zinc
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
70
60
50
40
30
20
20
30
40
50

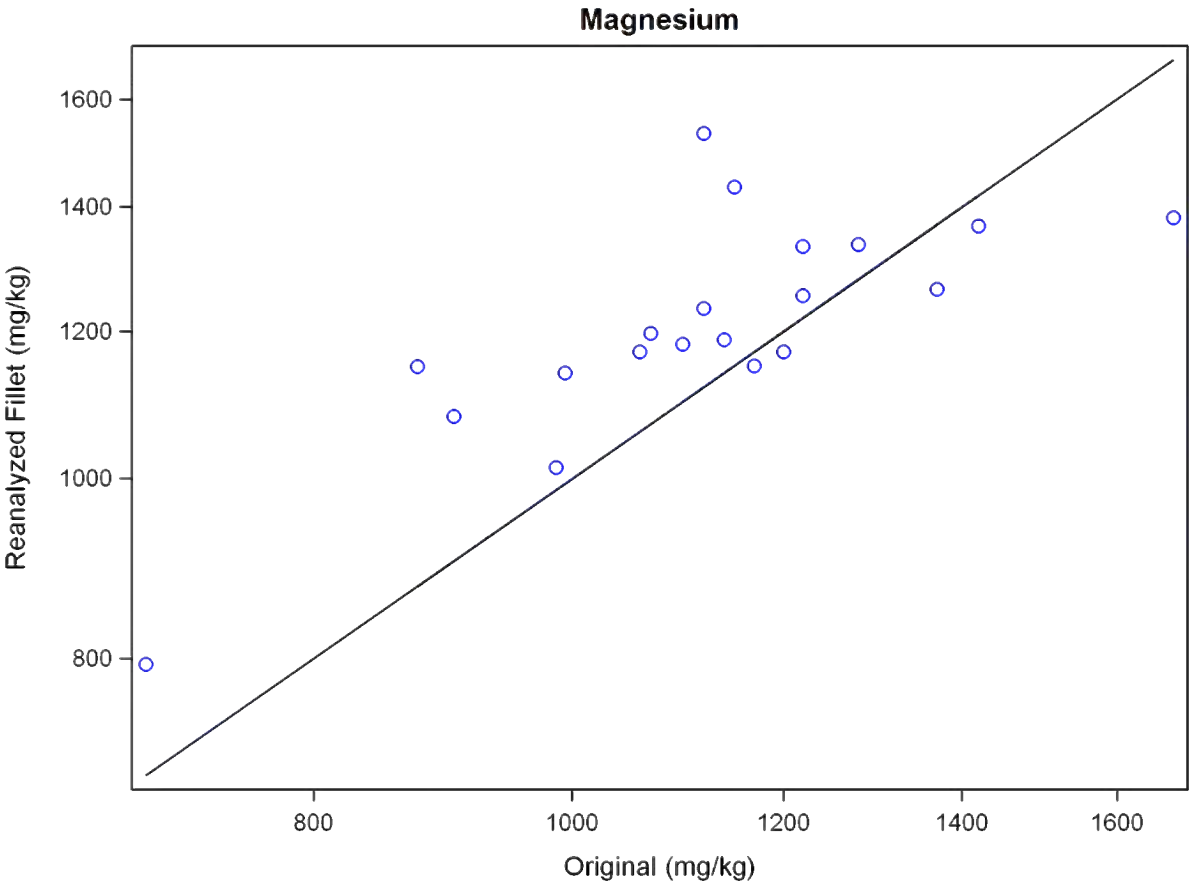
Appendix **J**

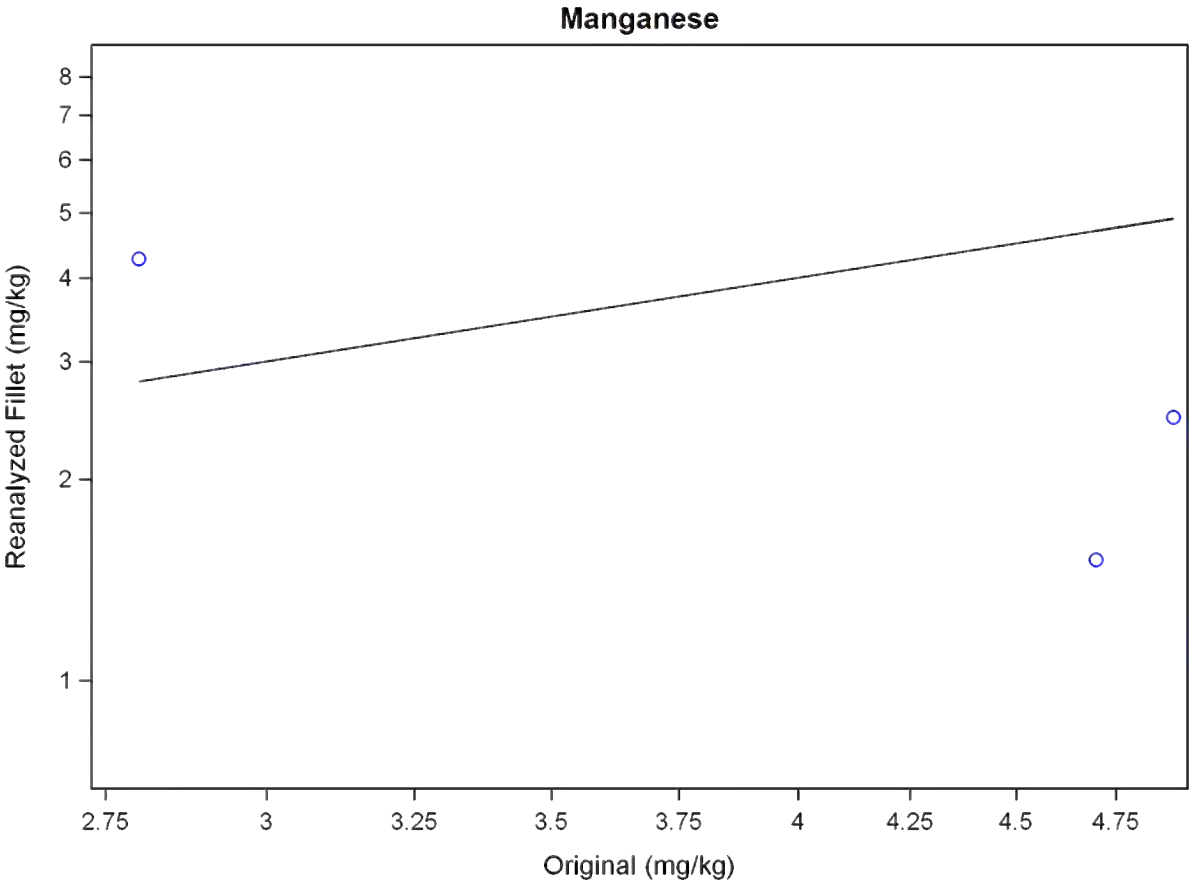
Bivariate Agreement Plots Comparing Twenty Original and Reanalyzed Fillet Detected Dry Weight Results for Metals: Log Scale

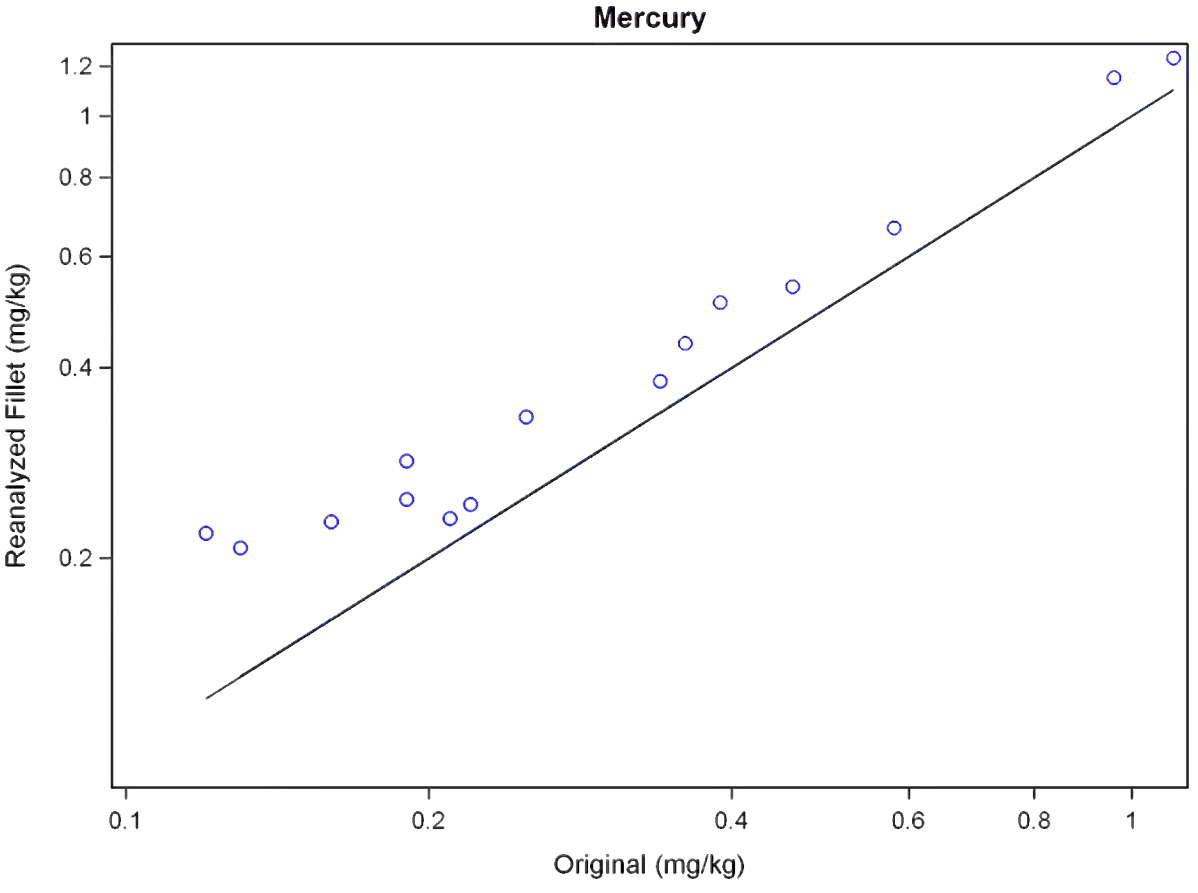

Arsenic
Reanalyzed Fillet (mg/kg)
1.4
1.2
1
0.8
0.6
0.4
0.2
0.7
0.8
0.9
1
1.1
1.2
Original (mg/kg)

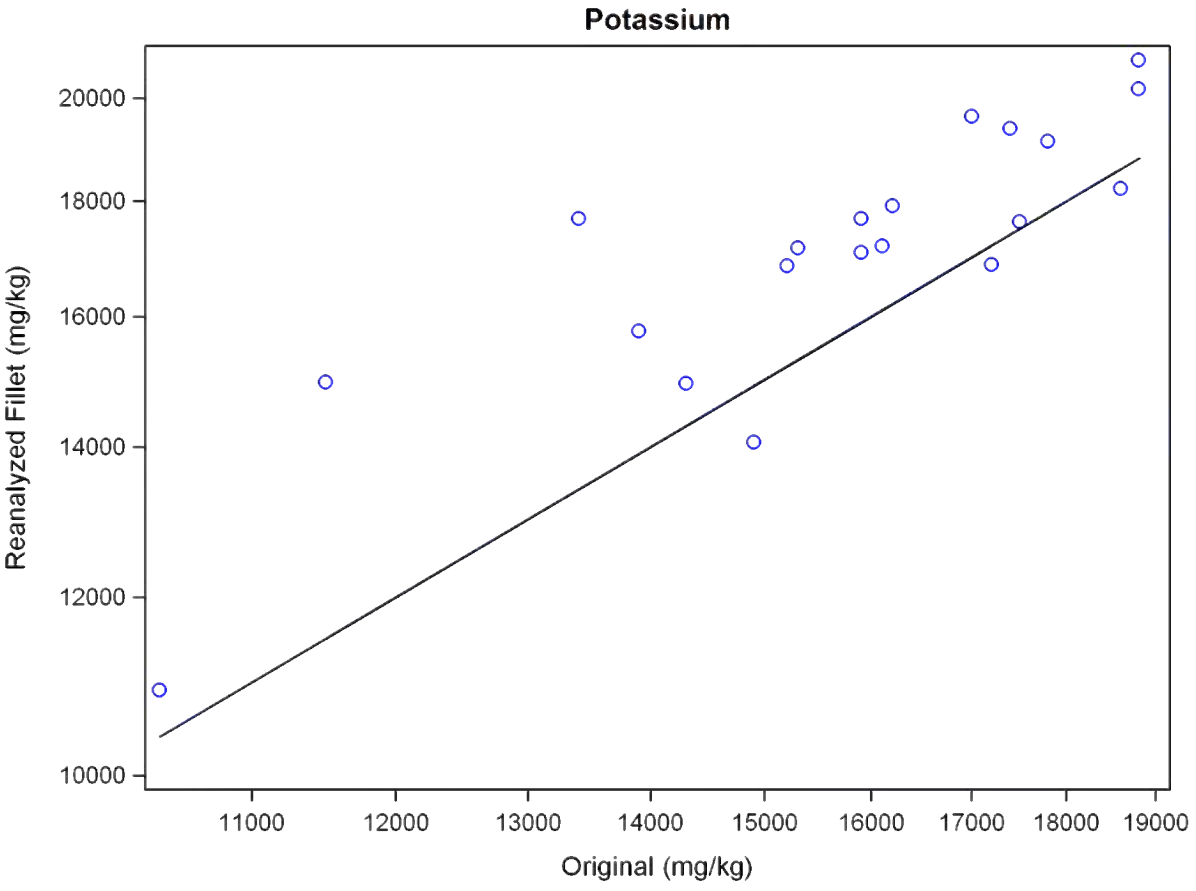

Barium
Reanalyzed Fillet (mg/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.55
0.6
0.65
0.7
0.75
0.8
0.85
0.9
0.95
Original (mg/kg)

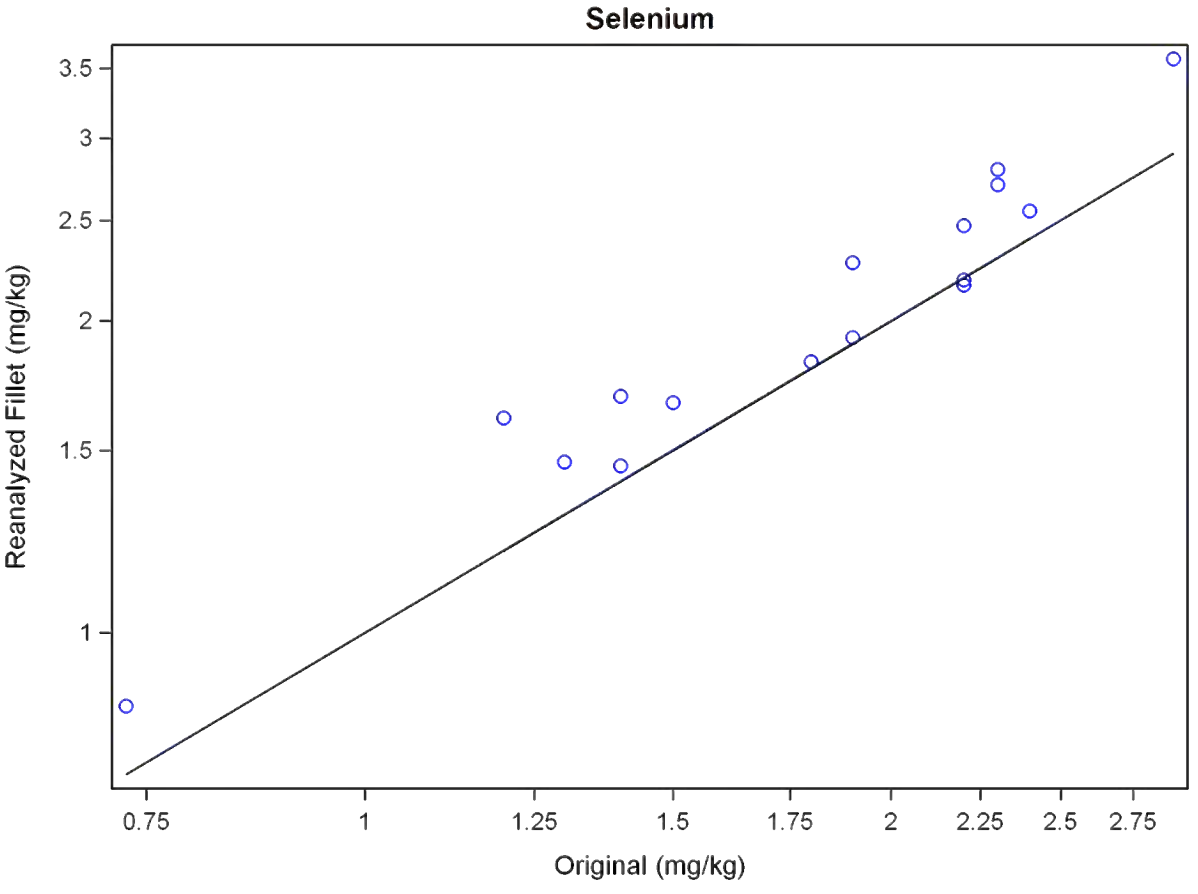

Calcium
30000
25000
20000
15000
10000
5000
1000
Reanalyzed Fillet (mg/kg)
1000
5000
10000
20000
30000
Original (mg/kg)

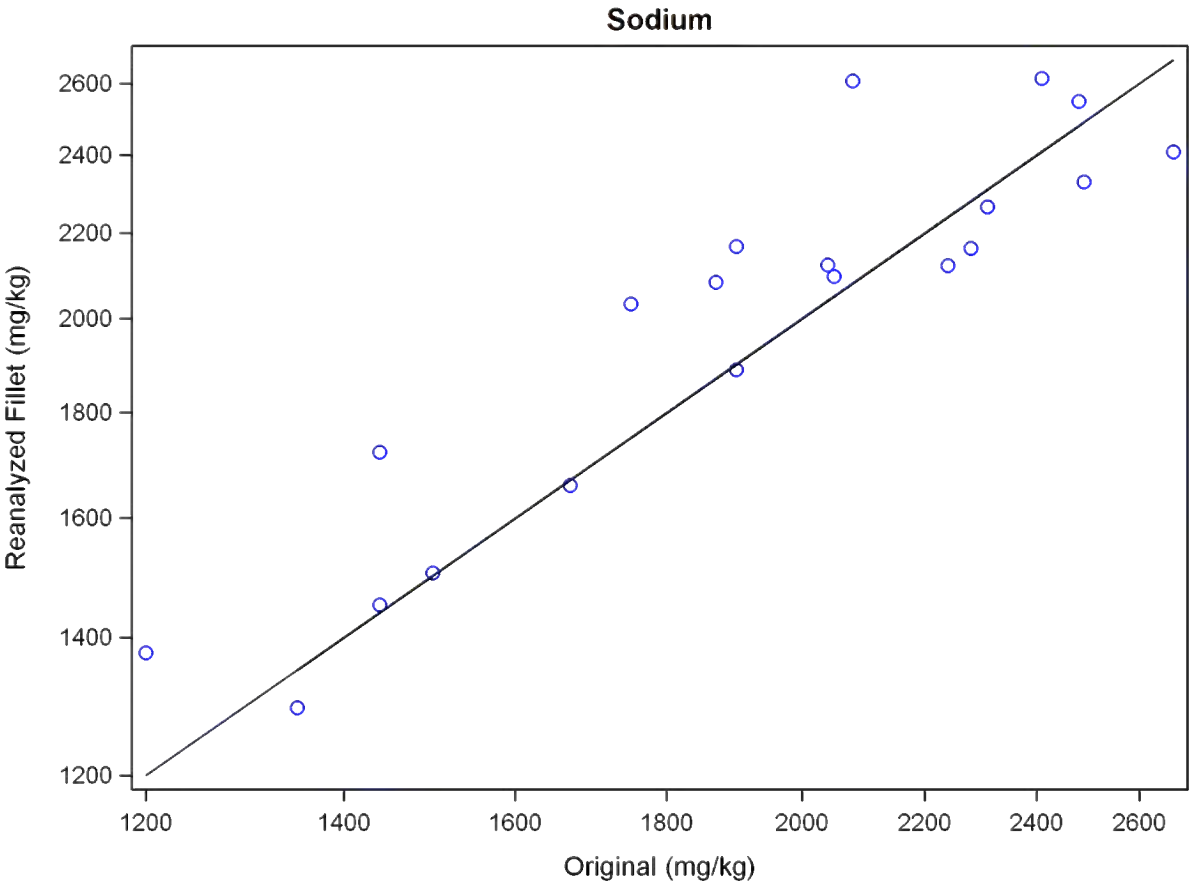

Magnesium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
800
1000
1200
1400
1600

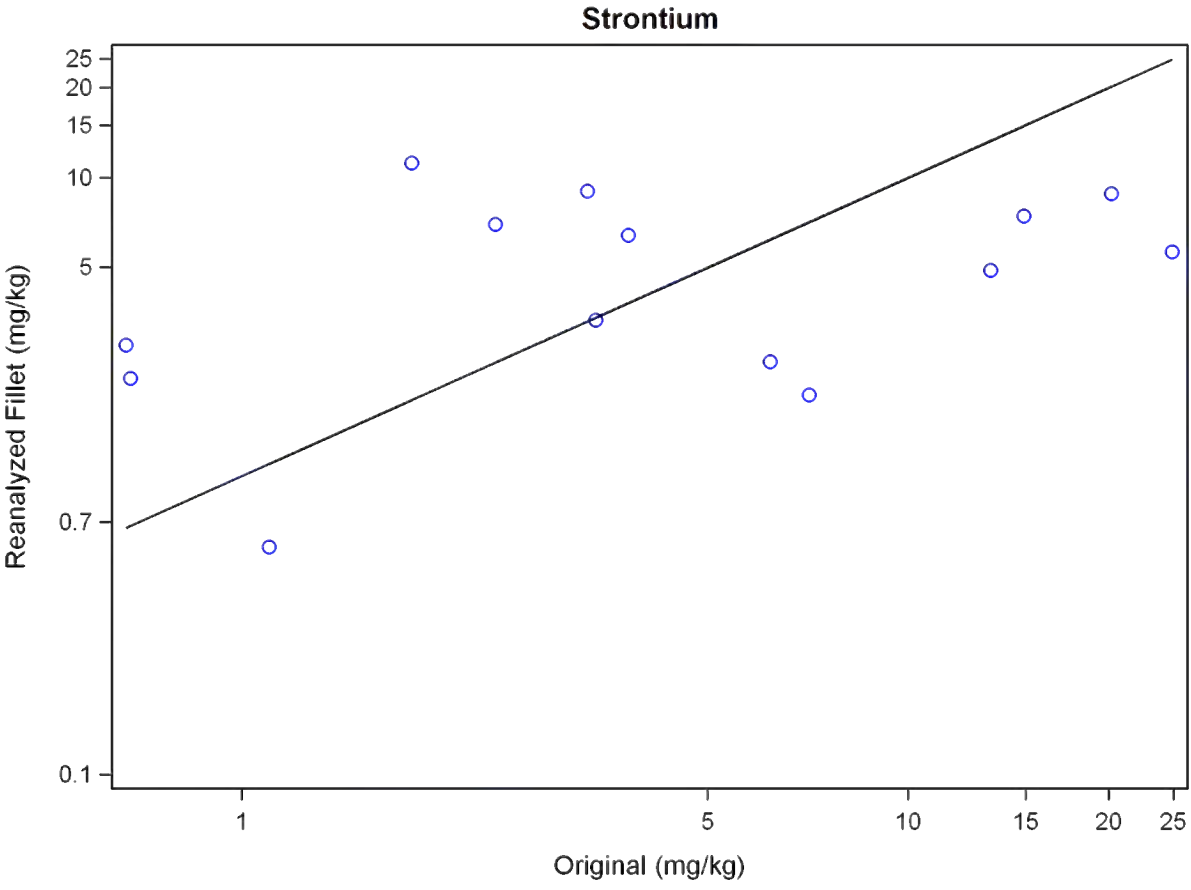

Manganese
Reanalyzed Fillet (mg/kg)
8
7
6
5
4
3
2
1
2.75
3
3.25
3.5
3.75
4
4.25
4.5
4.75
Original (mg/kg)

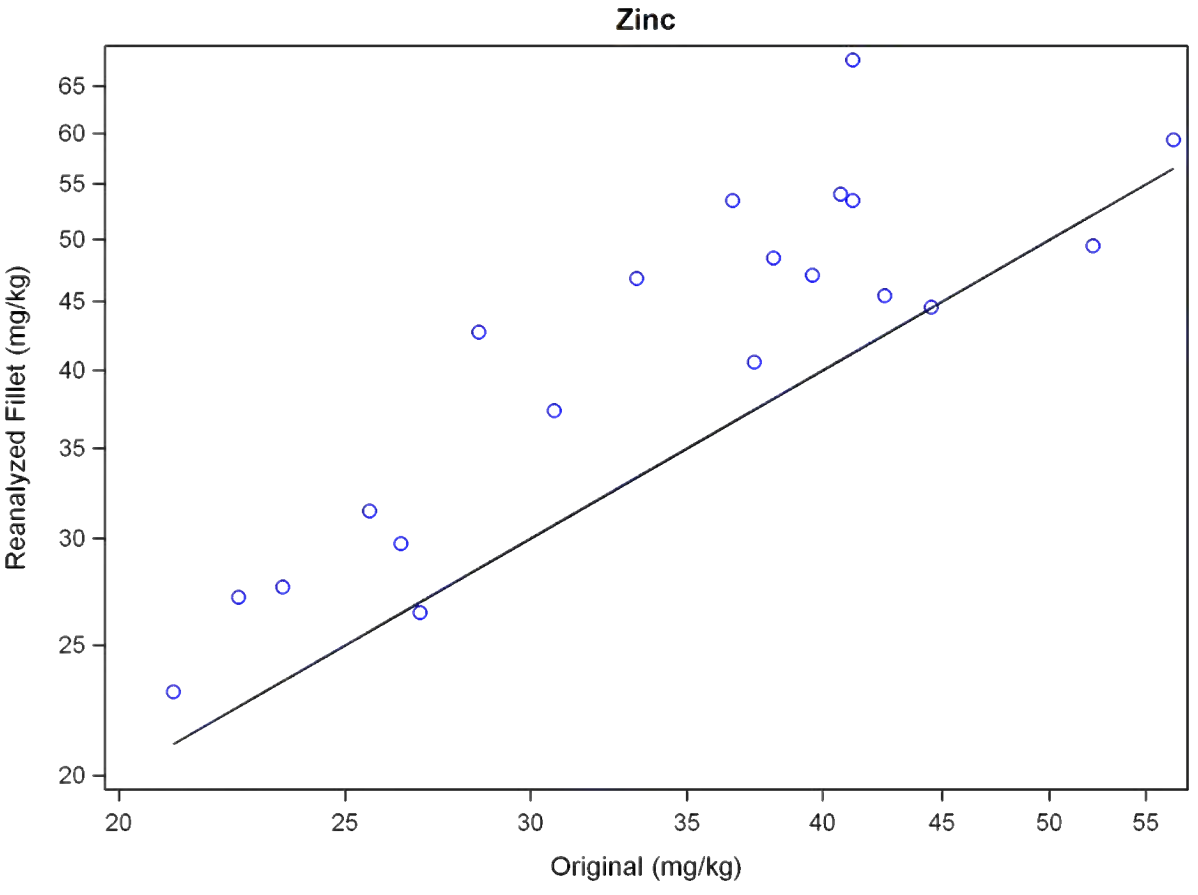

Mercury
Reanalyzed Fillet (mg/kg)
1.2
1
0.8
0.6
0.4
0.2
0.1
0.2
0.4
0.6
0.8
1
Original (mg/kg)


Potassium
Reanalyzed Fillet (mg/kg)
20000
18000
16000
14000
12000
10000
11000
12000
13000
14000
15000
16000
17000
18000
19000
Original (mg/kg)


Selenium
Reanalyzed Fillet (mg/kg)
3.5
3
2.5
2
1.5
1
0.75
1
1.25
1.5
1.75
2
2.25
2.5
2.75
Original (mg/kg)

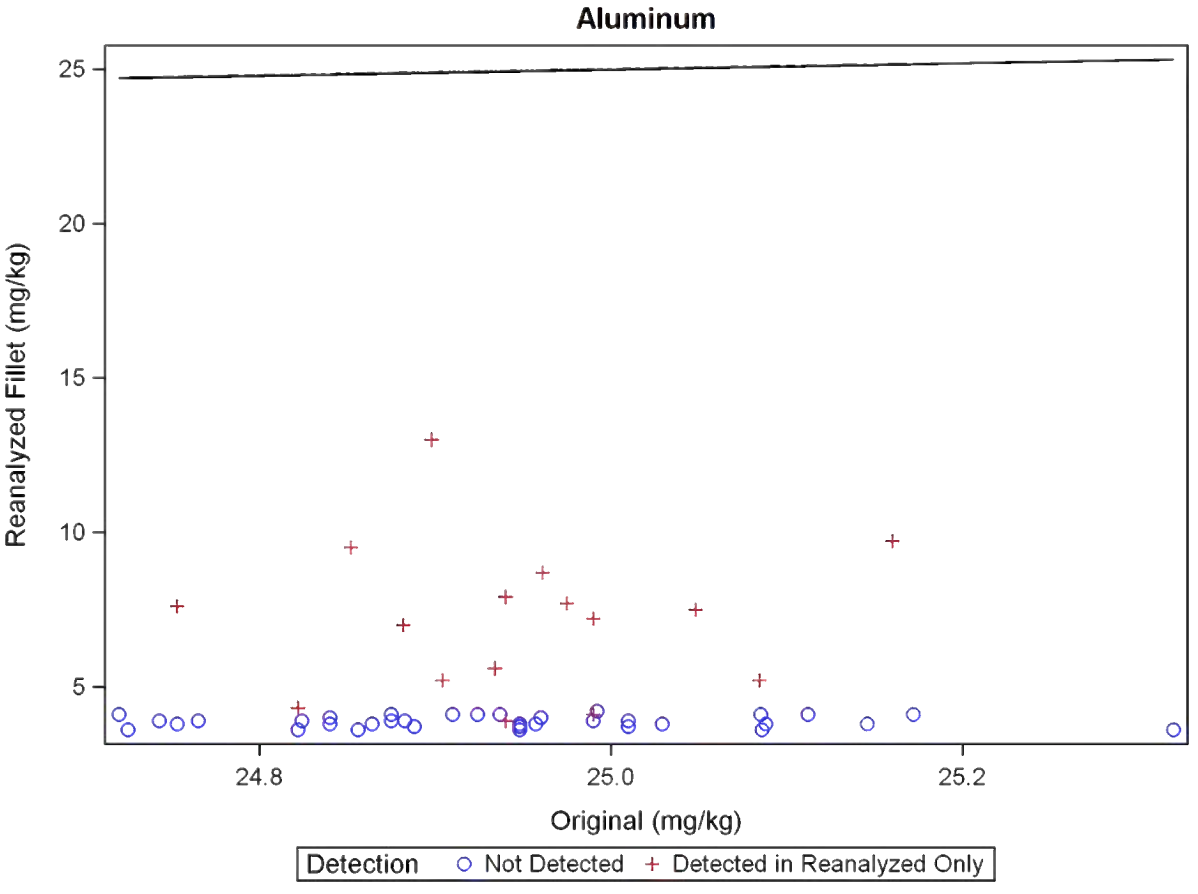

Sodium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
1200
1400
1600
1800
2000
2200
2400
2600

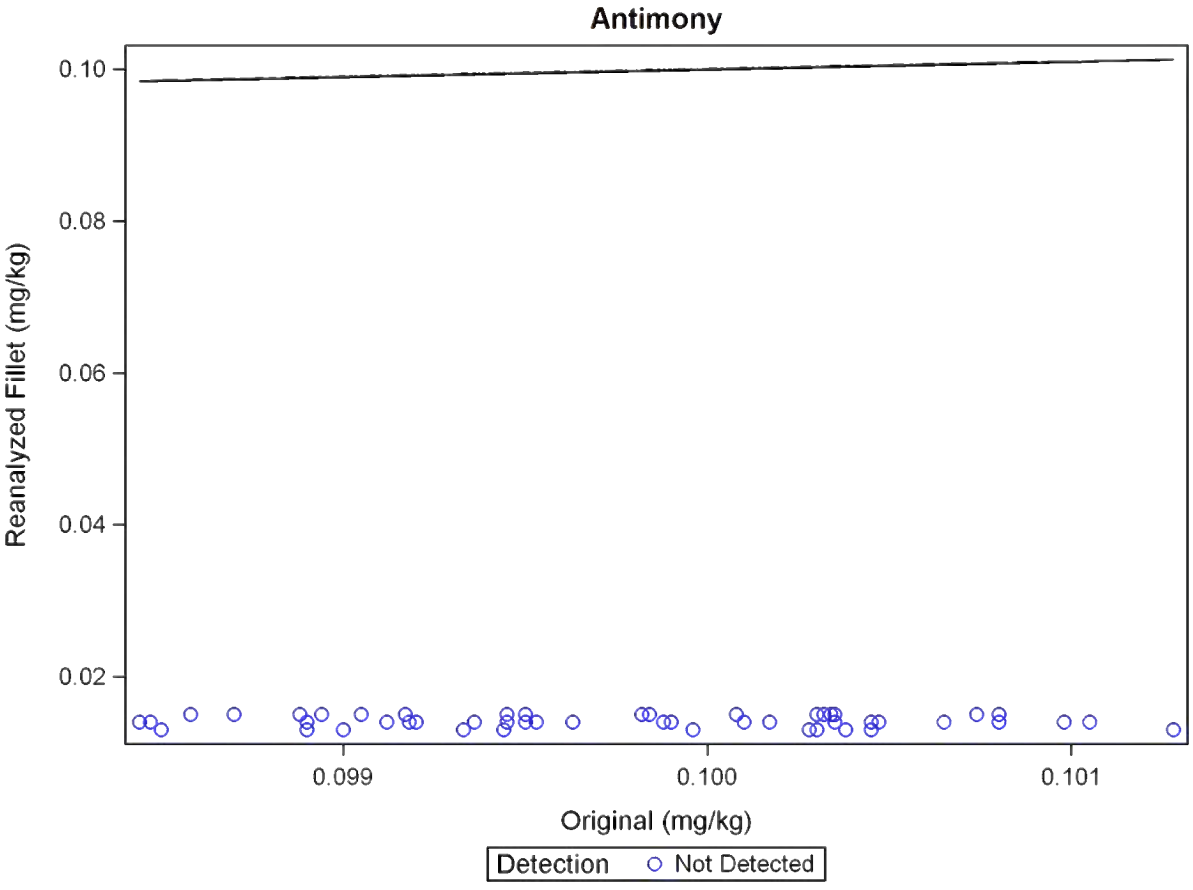

Strontium
Reanalyzed Fillet (mg/kg)
25
20
15
10
5
0.7
0.1
1
5
10
15
20
25
Original (mg/kg)

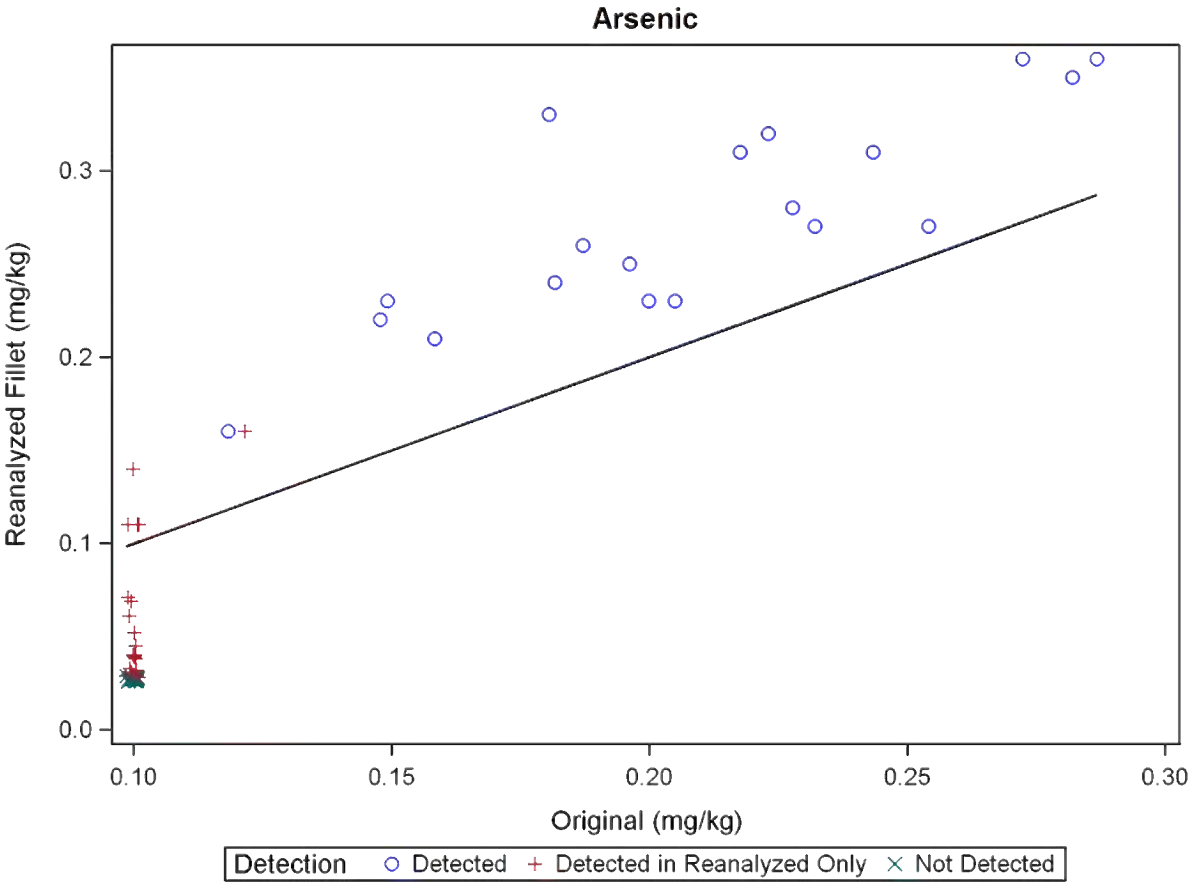

Zinc
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
20
25
30
35
40
45
50
55
60
65

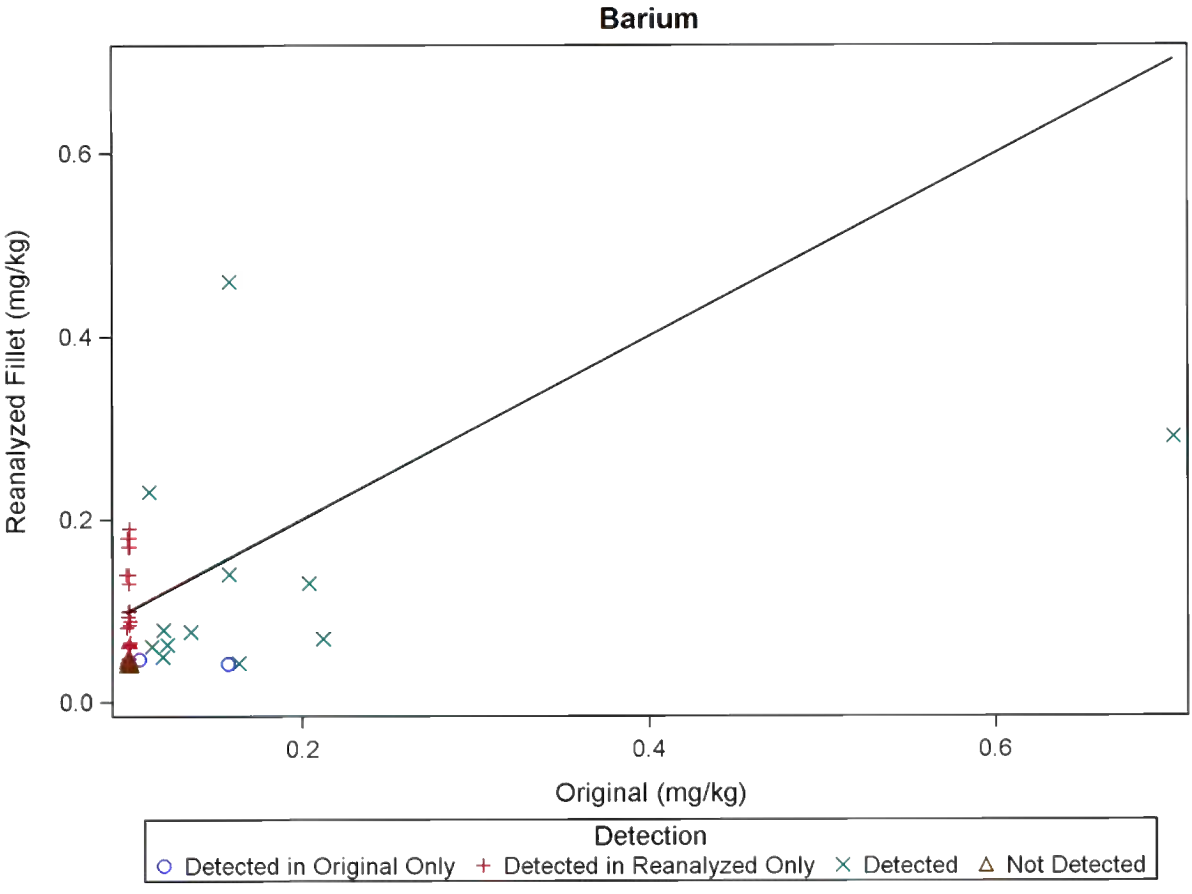
Appendix **K**

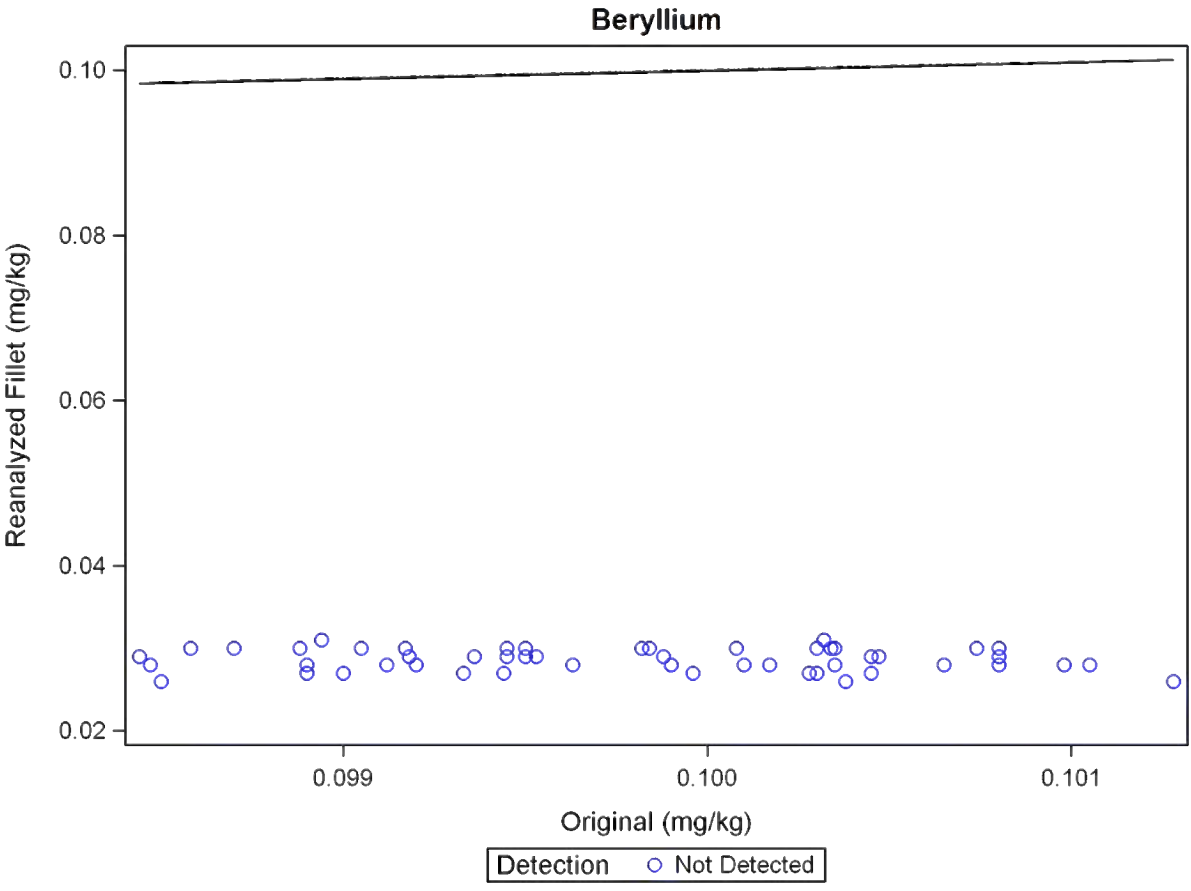
Bivariate Agreement Plots Comparing Original and Reanalyzed Fillet Detected Wet Weight Results for All Metals and All Samples (Detected and Non-detected)

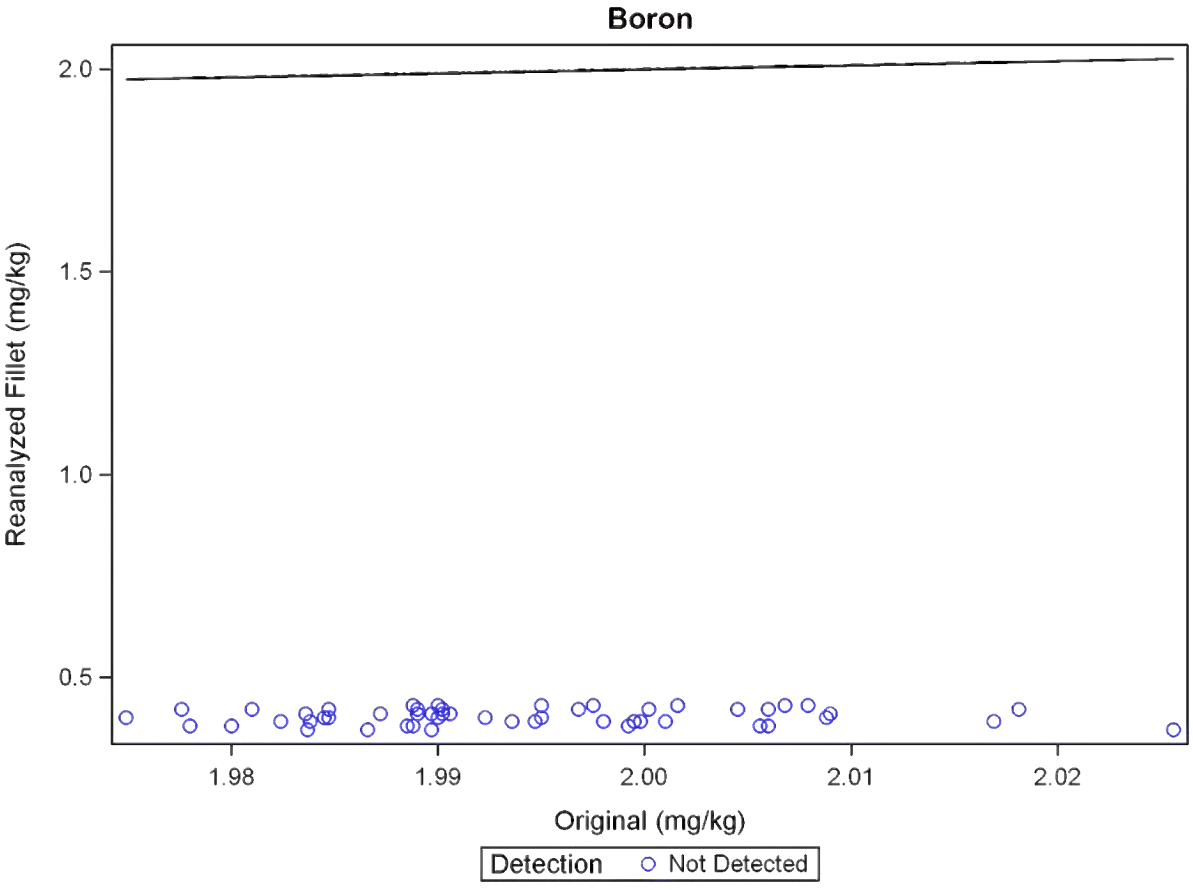

Aluminum
Reanalyzed Fillet (mg/kg)
25
20
15
10
5
24.8
25.0
25.2
Original (mg/kg)
Detection
Not Detected
Detected in Reanalyzed Only

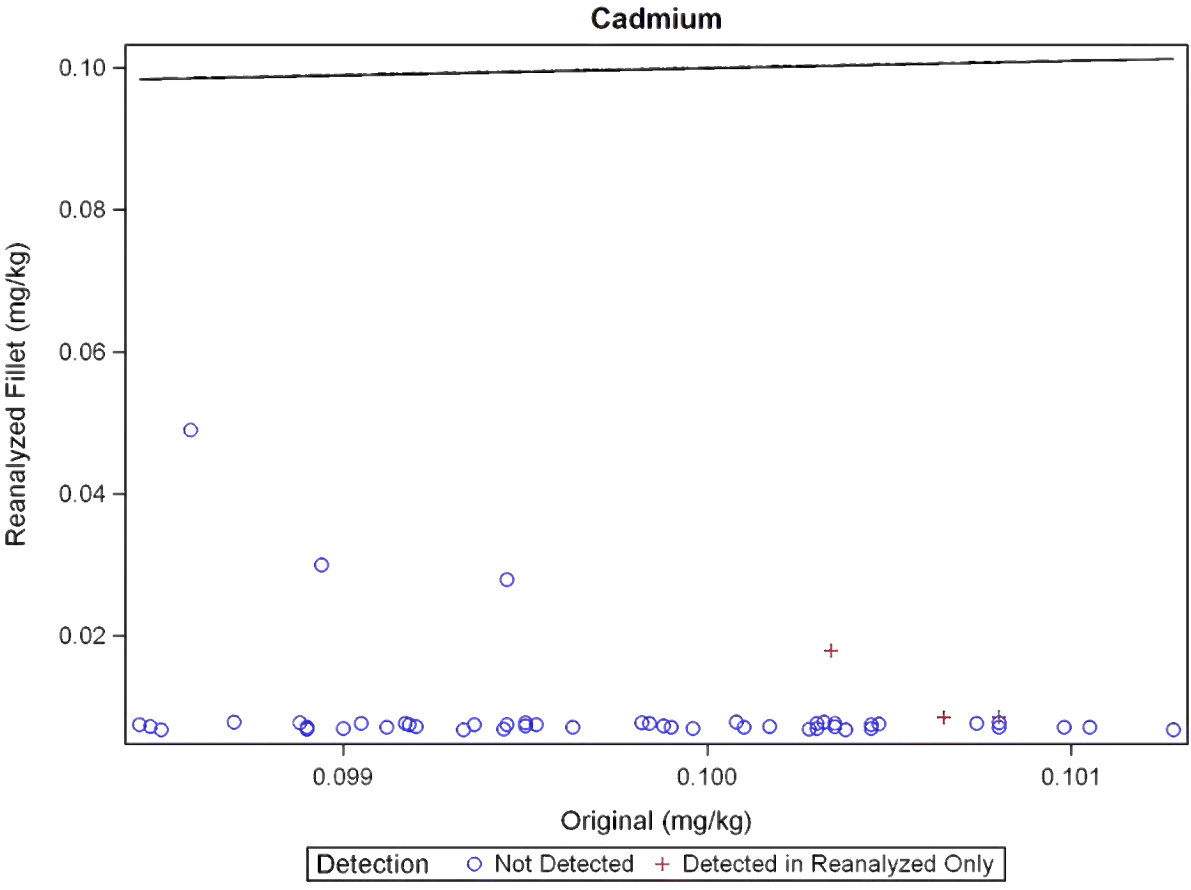

Antimony
0.10
0.08
0.06
0.04
0.02
Reanalyzed Fillet (mg/kg)
0.099
0.100
0.101
Original (mg/kg)
Detection
Not Detected

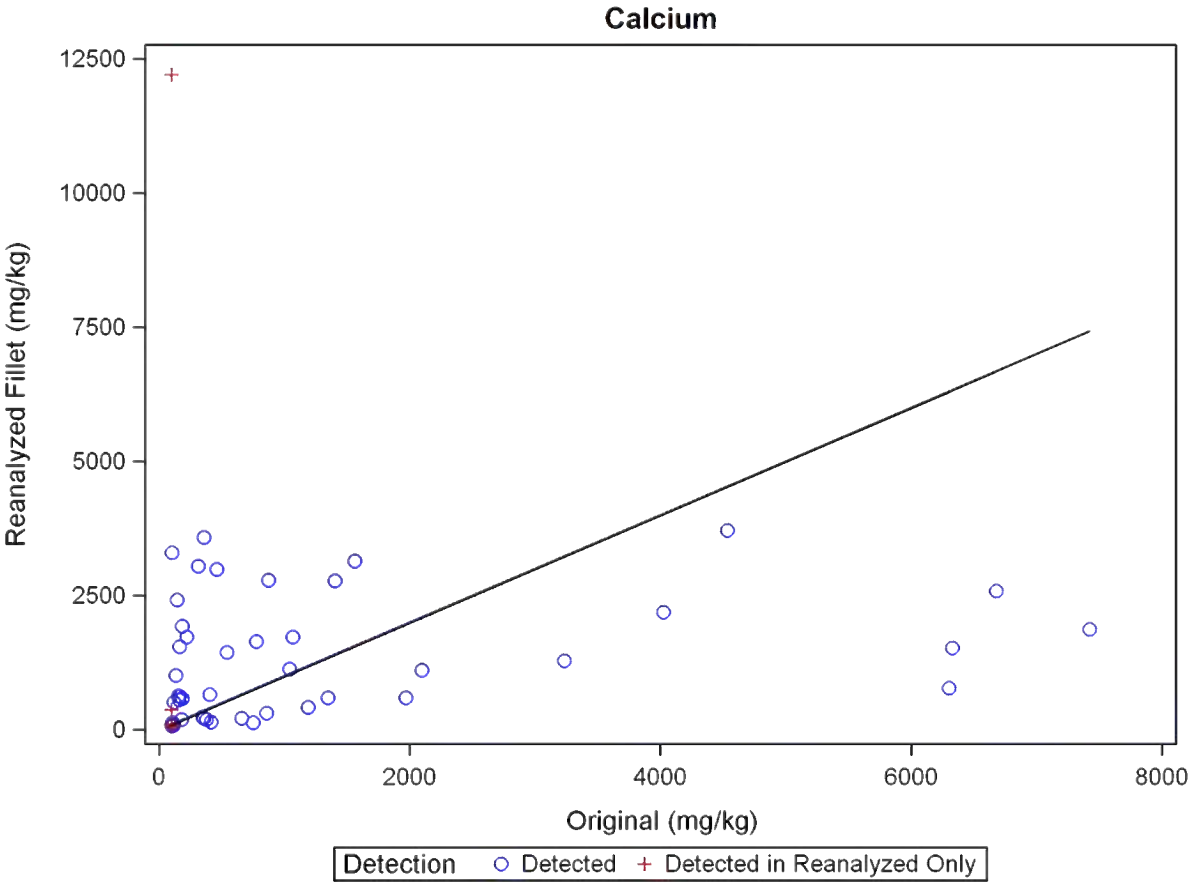

Arsenic
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
0.10
0.15
0.20
0.25
0.30
Original (mg/kg)
Detection
Detected
Detected in Reanalyzed Only
Not Detected

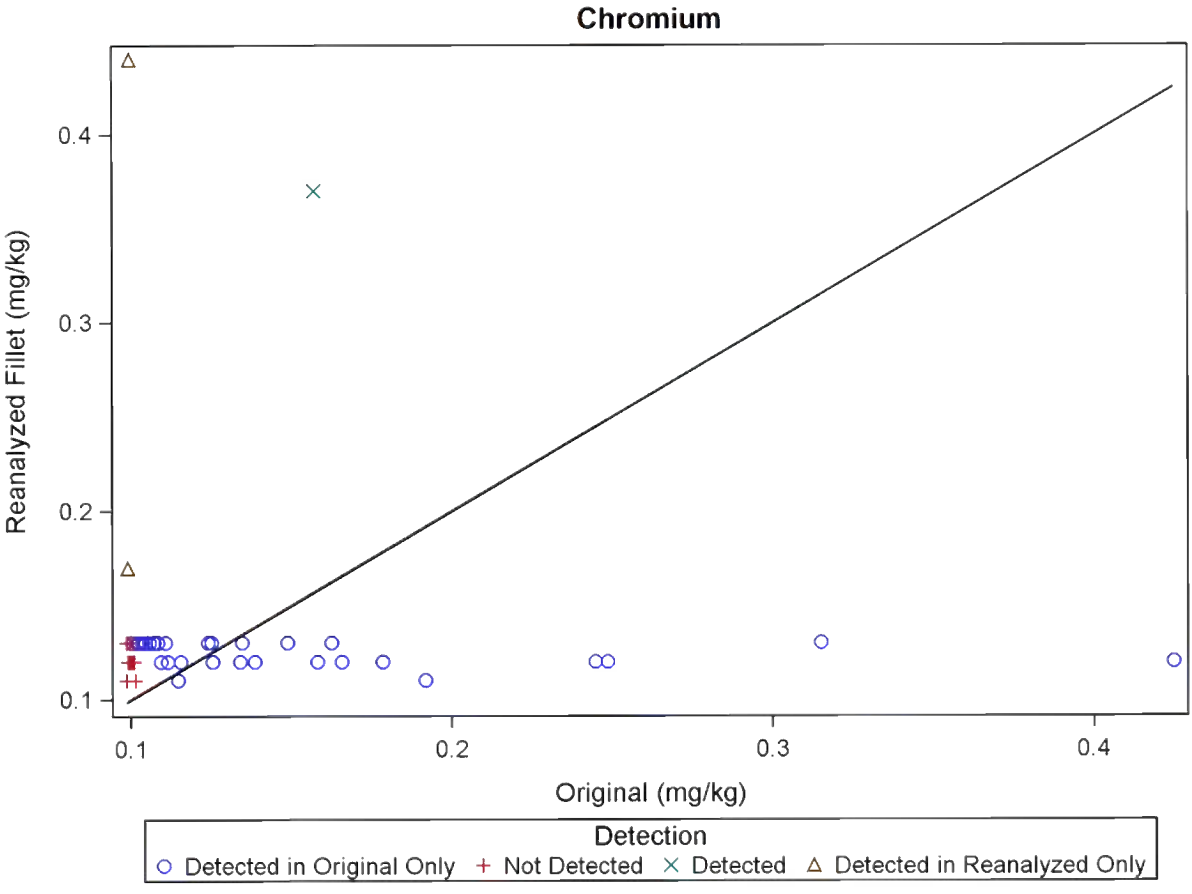

Barium
Reanalyzed Fillet (mg/kg)
0.0
0.2
0.4
0.6
0.2
0.4
0.6
Original (mg/kg)
Detection
Detected in Original Only
Detected in Reanalyzed Only
Detected
Not Detected

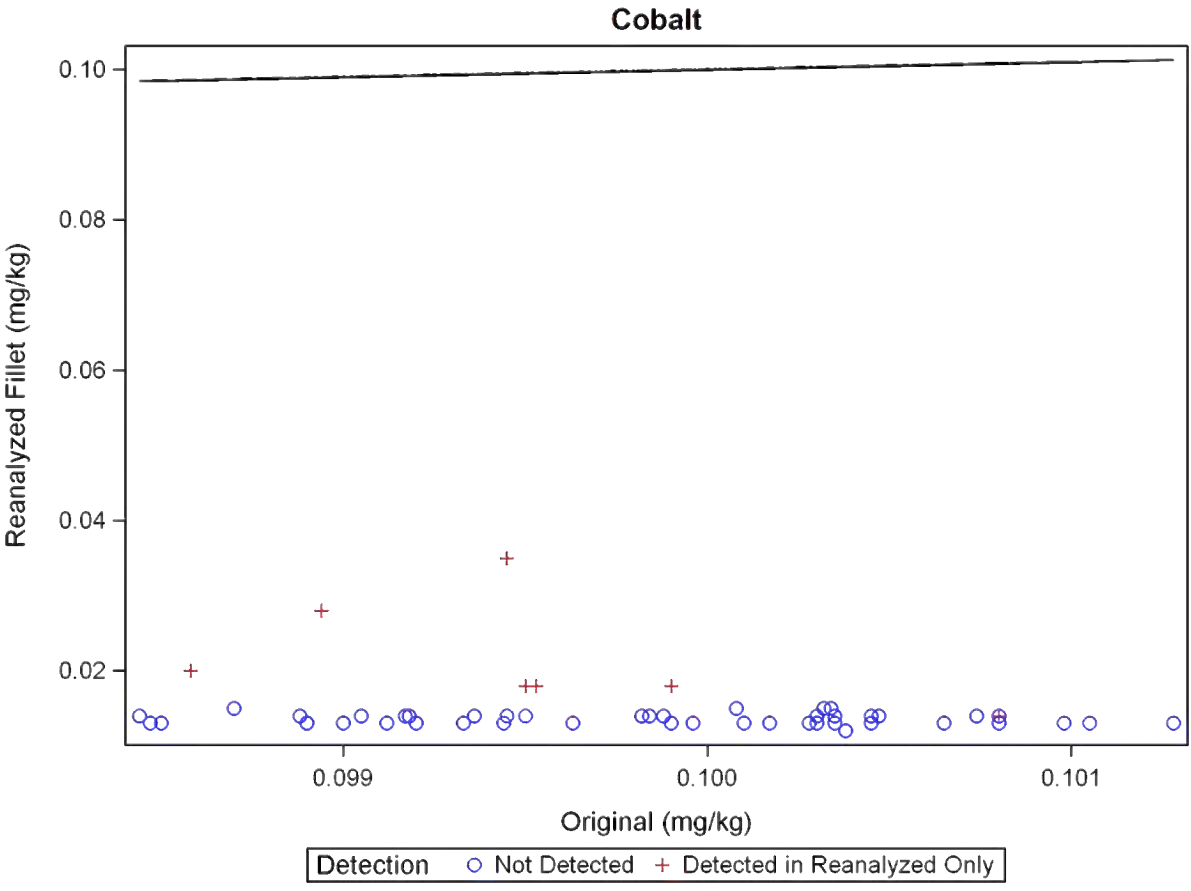

Beryllium
0.10
0.08
0.06
0.04
0.02
Reanalyzed Fillet (mg/kg)
0.099
0.100
0.101
Original (mg/kg)
Detection
Not Detected

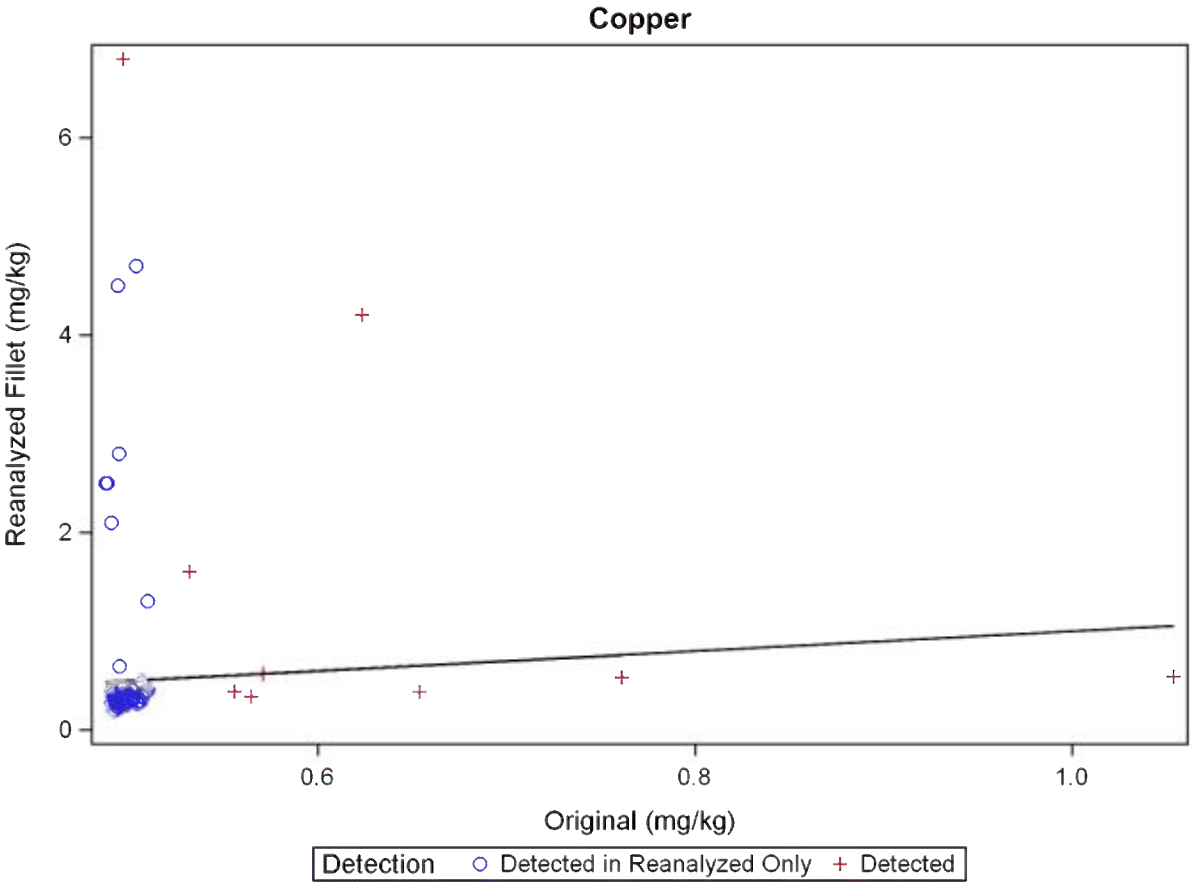

Boron
2.0
1.5
1.0
0.5
Reanalyzed Fillet (mg/kg)
1.98
1.99
2.00
2.01
2.02
Original (mg/kg)
Detection
Not Detected

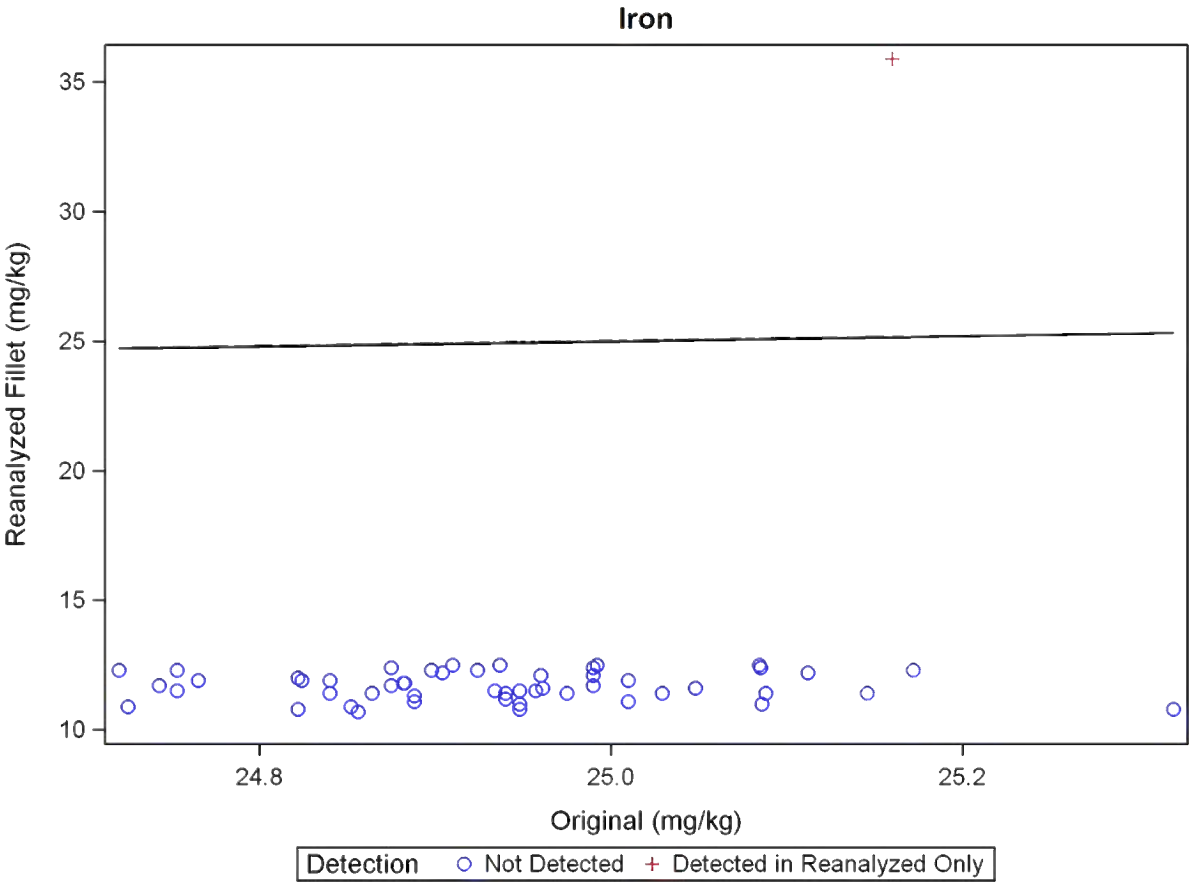

Cadmium
0.10
0.08
0.06
0.04
0.02
Reanalyzed Fillet (mg/kg)
0.099
0.100
0.101
Original (mg/kg)
Detection
Not Detected
Detected in Reanalyzed Only

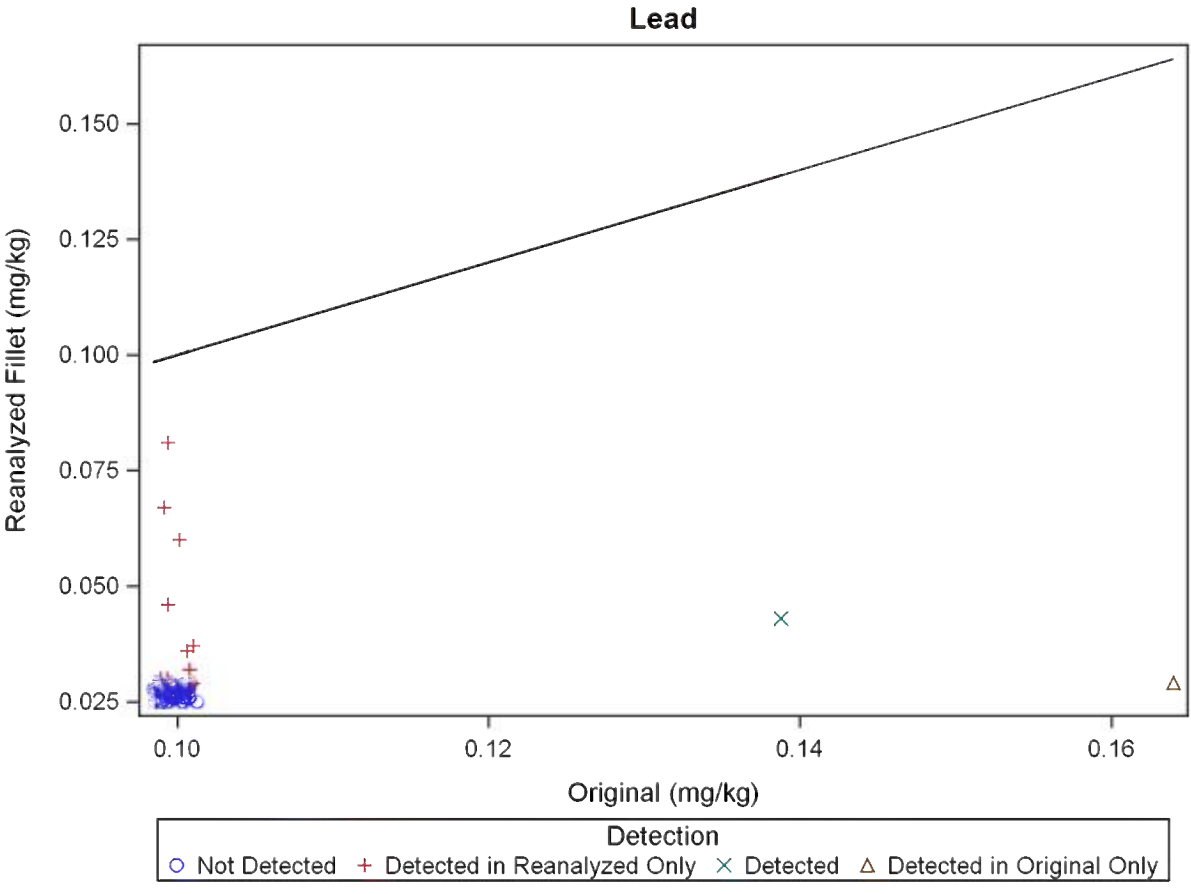

Calcium
Reanalyzed Fillet (mg/kg)
12500
10000
7500
5000
2500
0
0
2000
4000
6000
8000
Original (mg/kg)
Detection
Detected
Detected in Reanalyzed Only

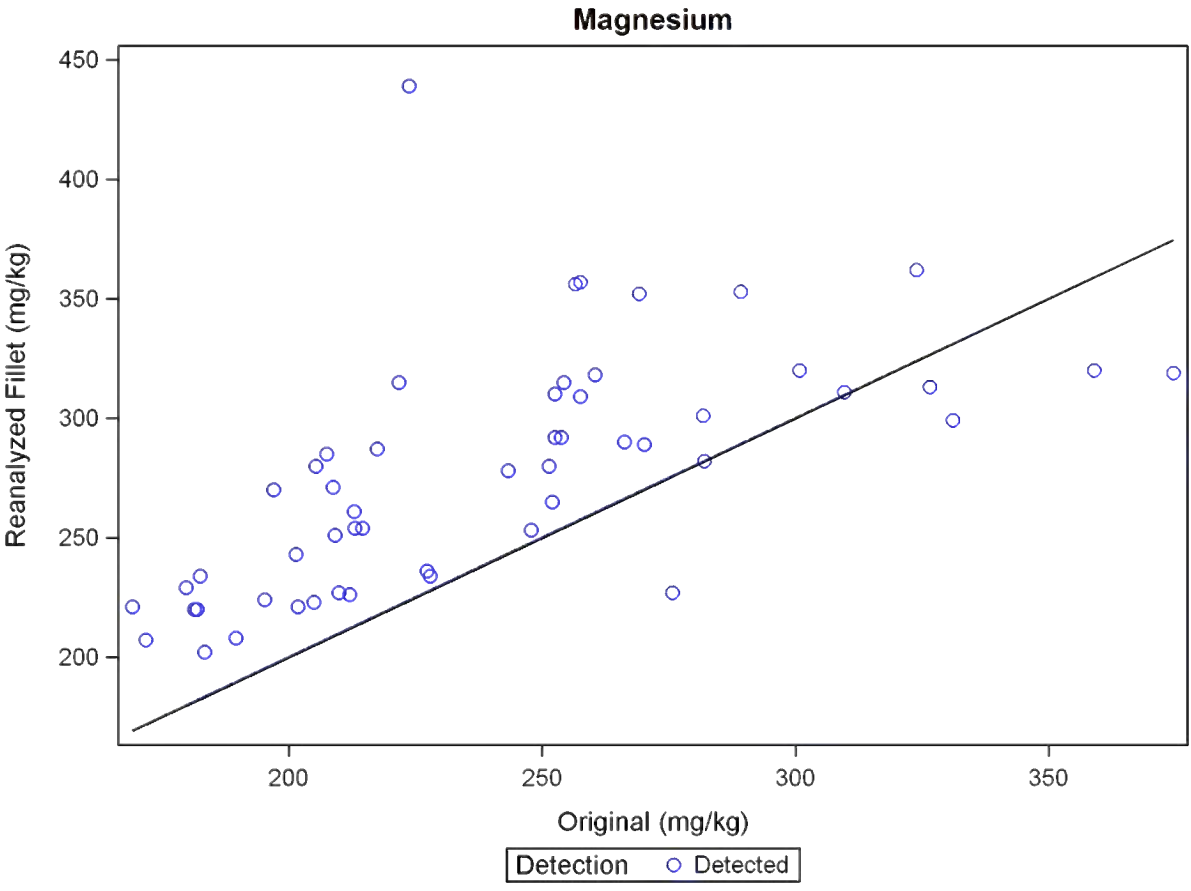

Chromium
Reanalyzed Fillet (mg/kg)
0.1
0.2
0.3
0.4
Original (mg/kg)
0.1
0.2
0.3
0.4
Detection
Detected in Original Only
Not Detected
Detected
Detected in Reanalyzed Only

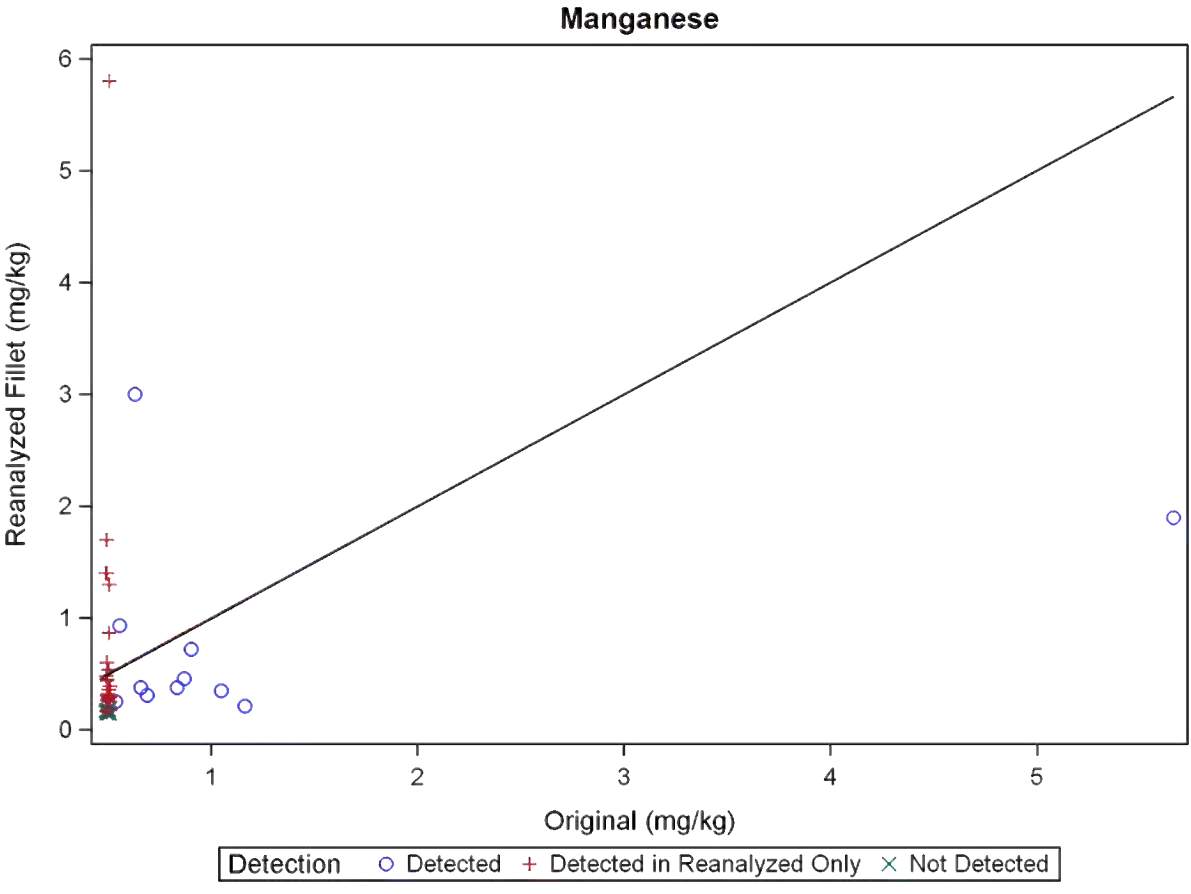

Cobalt
0.10
0.08
0.06
0.04
0.02
Reanalyzed Fillet (mg/kg)
0.099
0.100
0.101
Original (mg/kg)
Detection
Not Detected
Detected in Reanalyzed Only

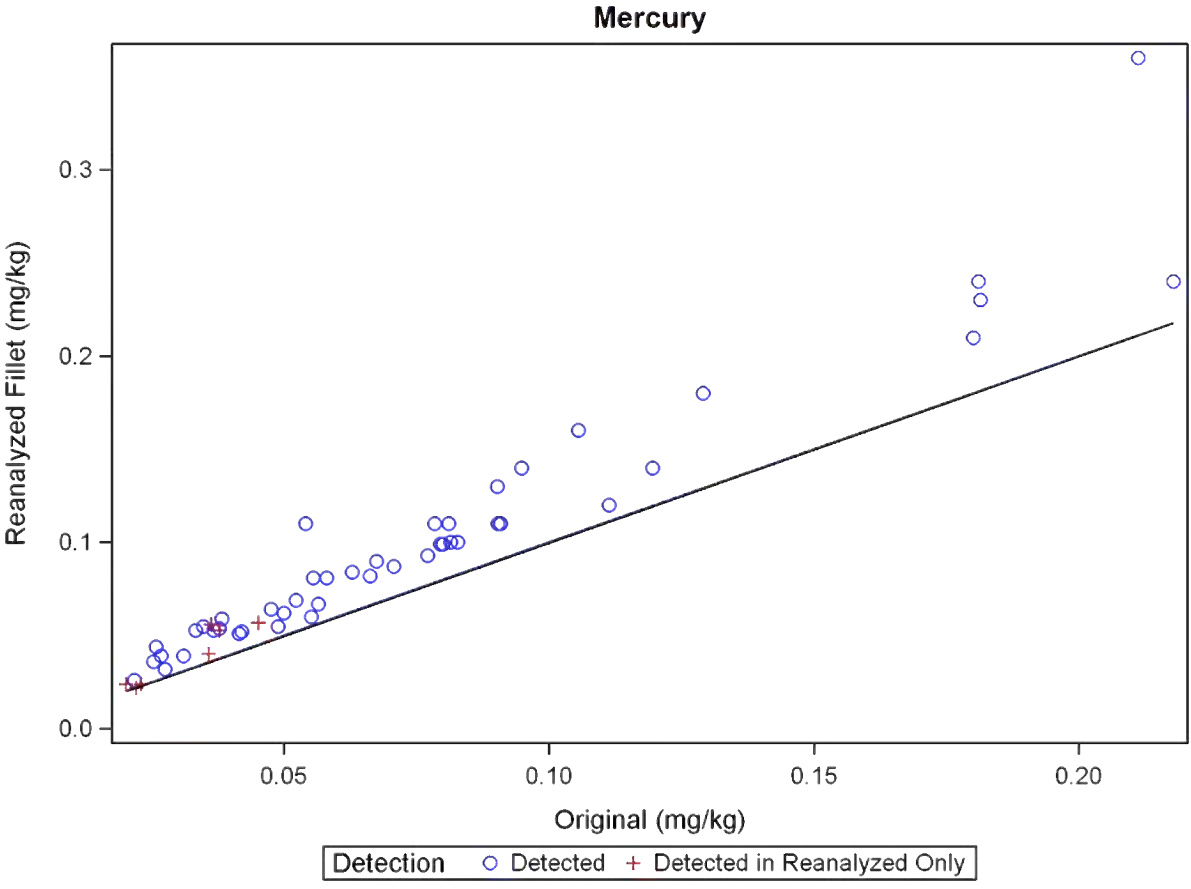

Copper
Reanalyzed Fillet (mg/kg)
0
2
4
6
0.6
0.8
1.0
Original (mg/kg)
Detection
Detected in Reanalyzed Only
Detected

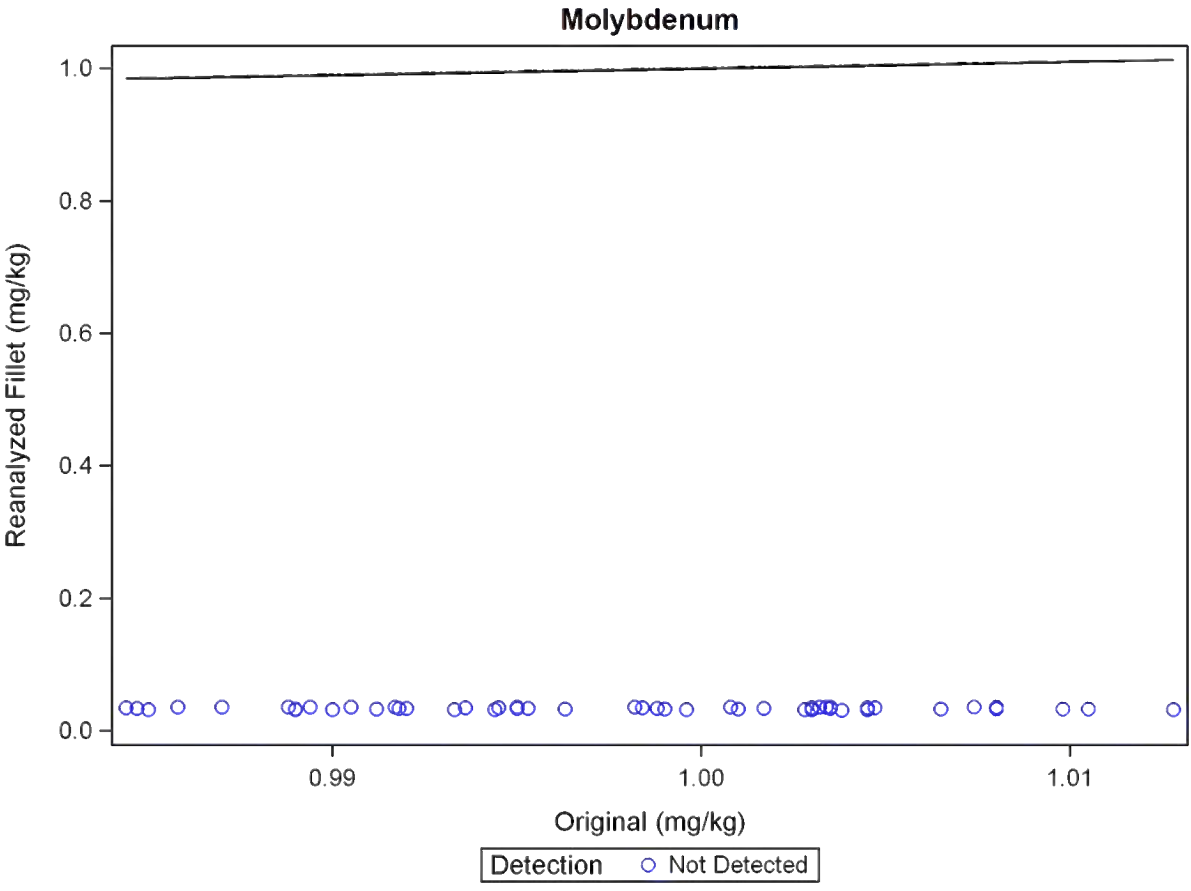

Iron
Reanalyzed Fillet (mg/kg)
35
30
25
20
15
10
24.8
25.0
25.2
Original (mg/kg)
Detection
Not Detected
Detected in Reanalyzed Only

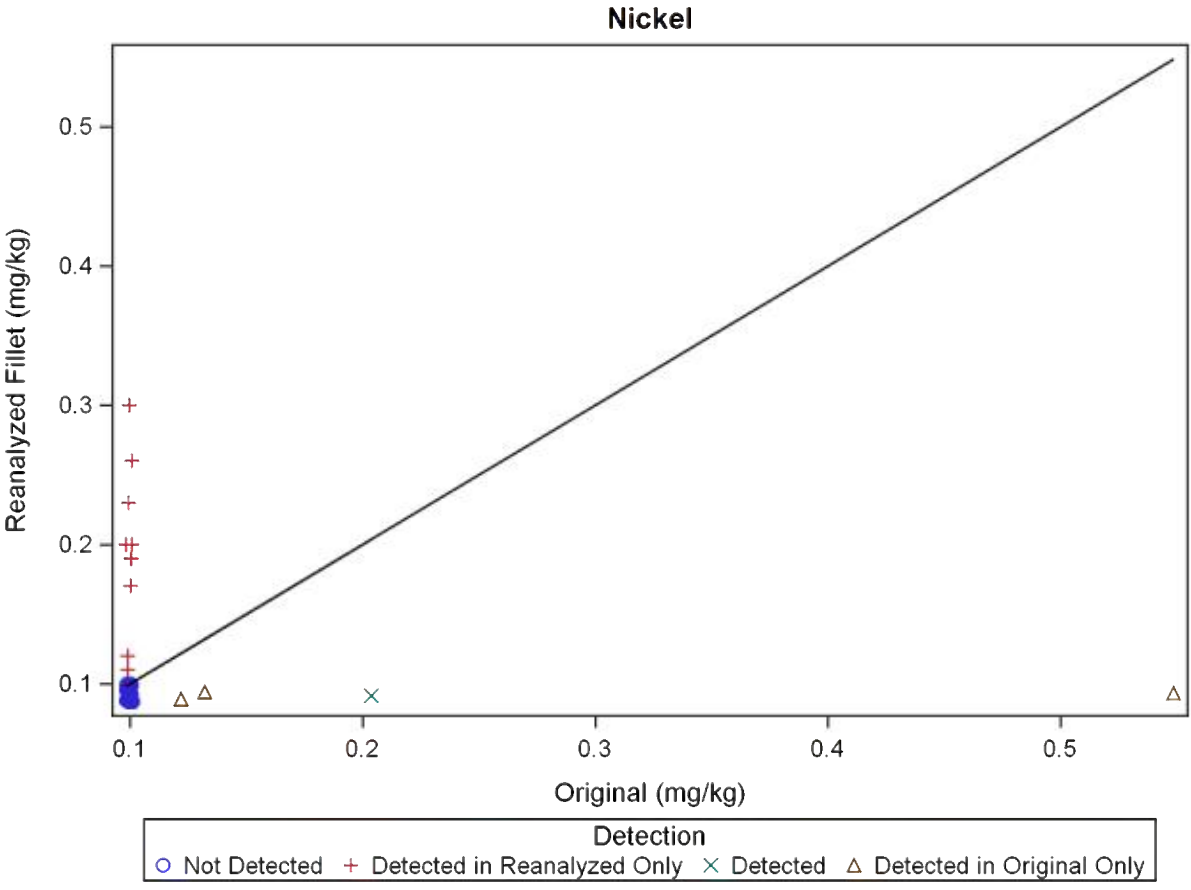

Lead
Reanalyzed Fillet (mg/kg)
0.150
0.125
0.100
0.075
0.050
0.025
0.10
0.12
0.14
0.16
Original (mg/kg)
Detection
Not Detected
Detected in Reanalyzed Only
Detected
Detected in Original Only

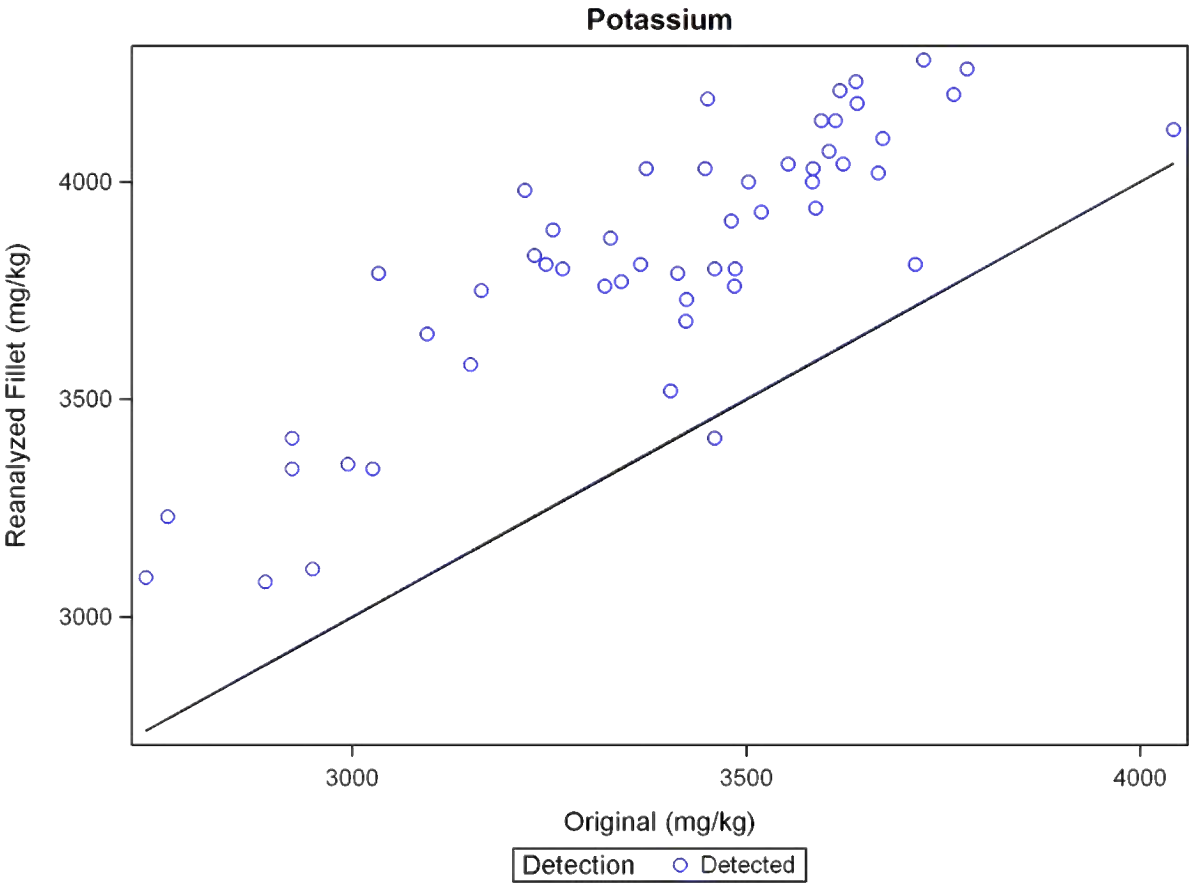

Magnesium
Reanalyzed Fillet (mg/kg)
450
400
350
300
250
200
200
250
300
350
Original (mg/kg)
Detection
Detected

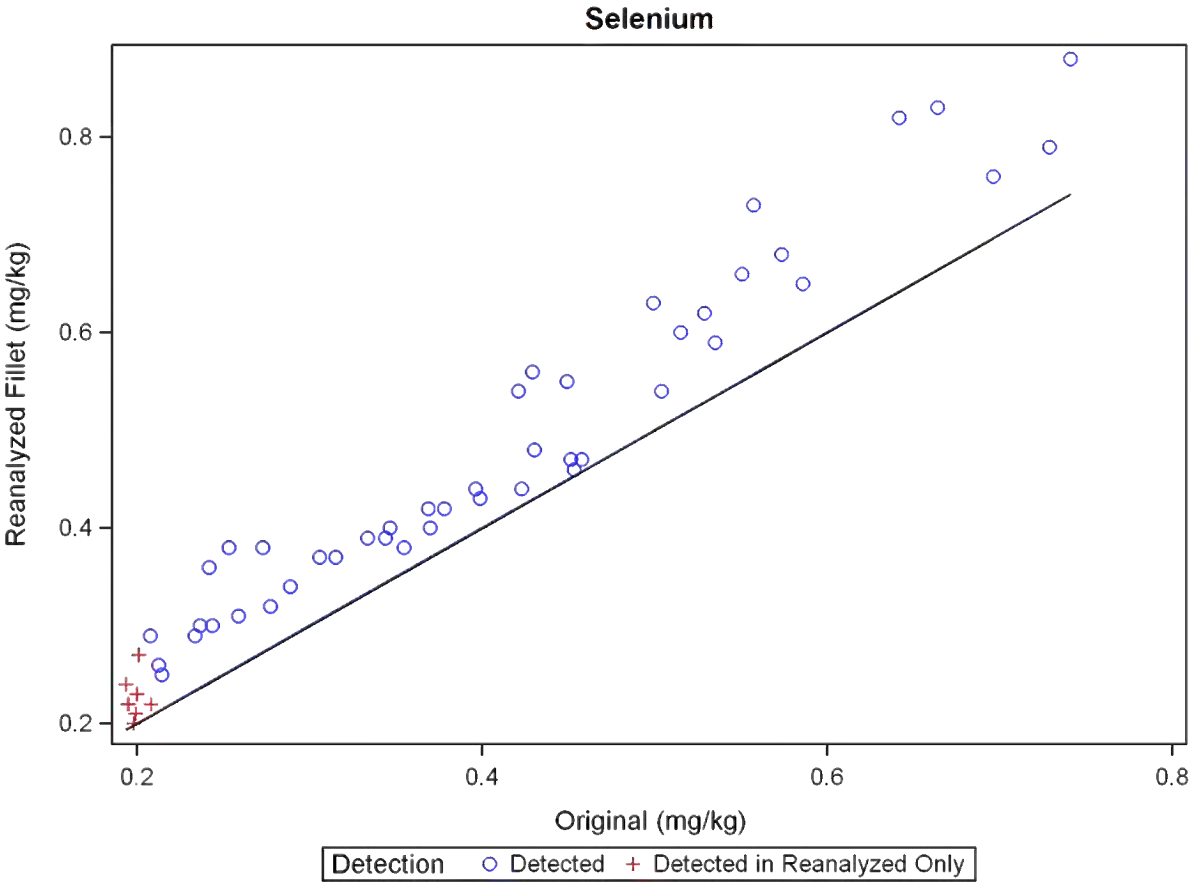

Manganese
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
0
1
2
3
4
5
6
1
2
3
4
5
Detection
Detected
Detected in Reanalyzed Only
Not Detected

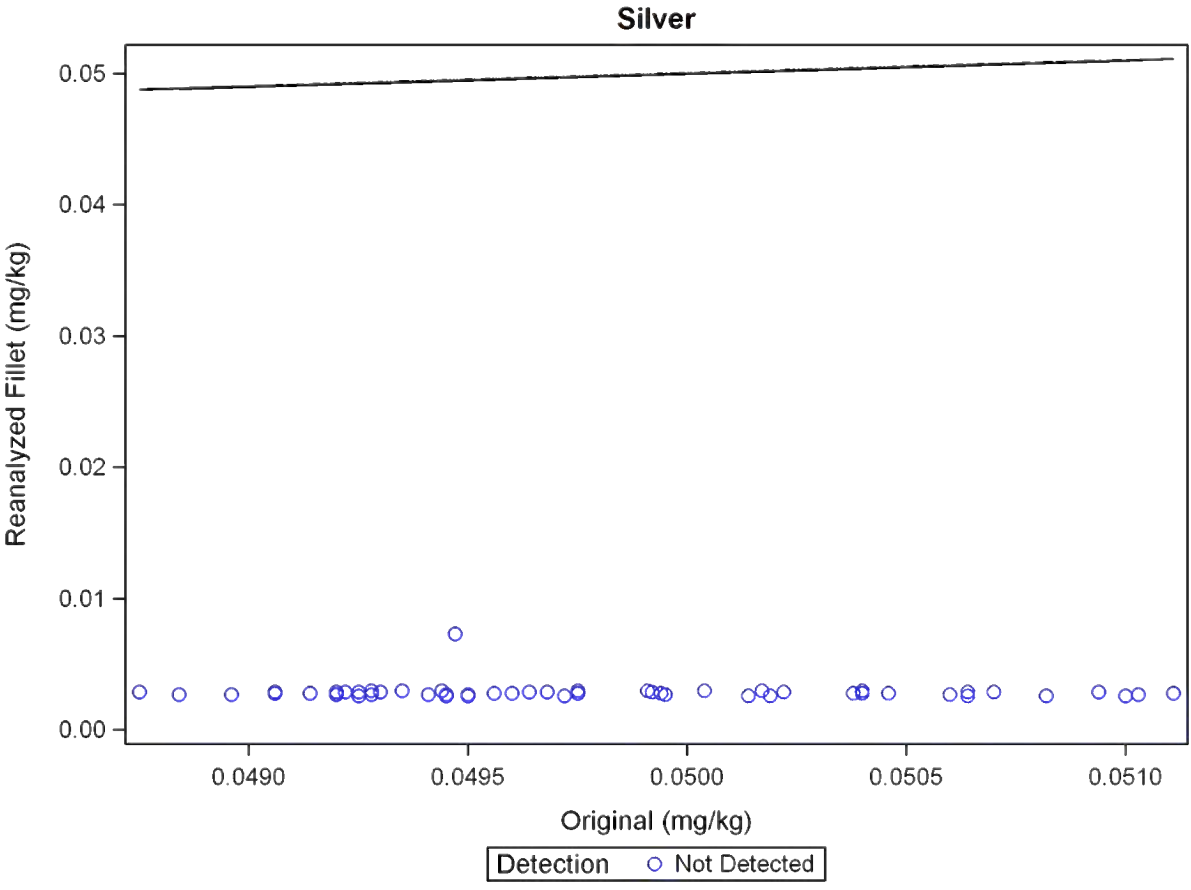

Mercury
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
0.05
0.10
0.15
0.20
Original (mg/kg)
Detection
Detected
Detected in Reanalyzed Only

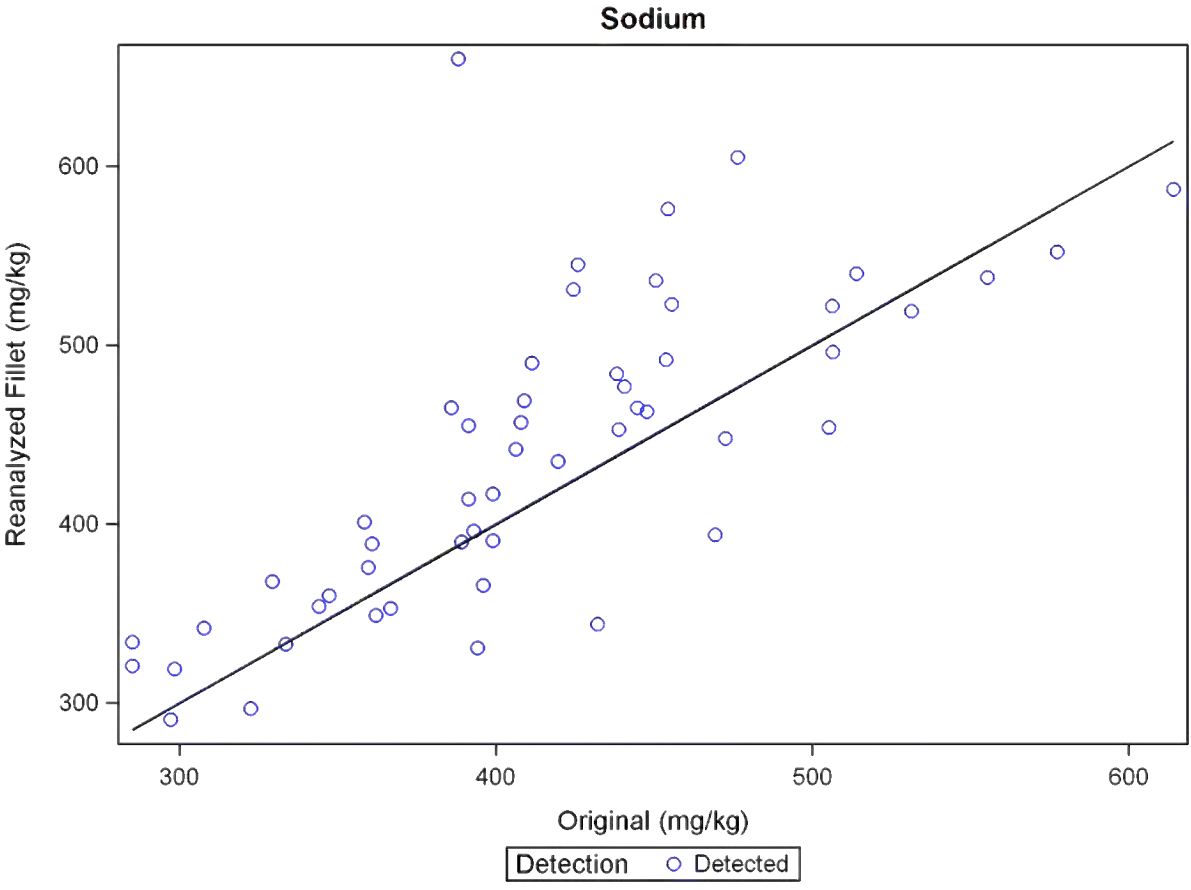

Molybdenum
Reanalyzed Fillet (mg/kg)
1.0
0.8
0.6
0.4
0.2
0.0
0.99
1.00
1.01
Original (mg/kg)
Detection
Not Detected

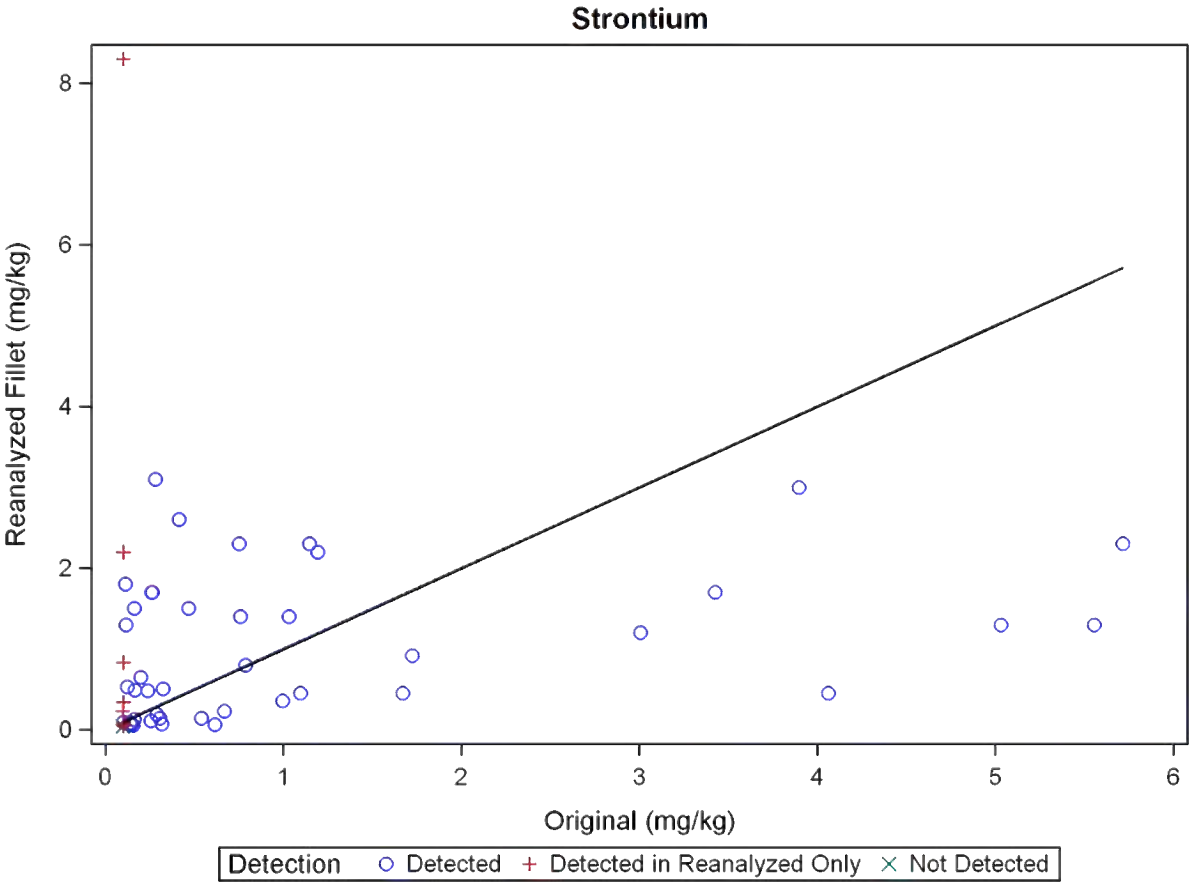

Nickel
Reanalyzed Fillet (mg/kg)
0.5
0.4
0.3
0.2
0.1
0.1
0.2
0.3
0.4
0.5
Original (mg/kg)
Detection
Not Detected
Detected in Reanalyzed Only
Detected
Detected in Original Only

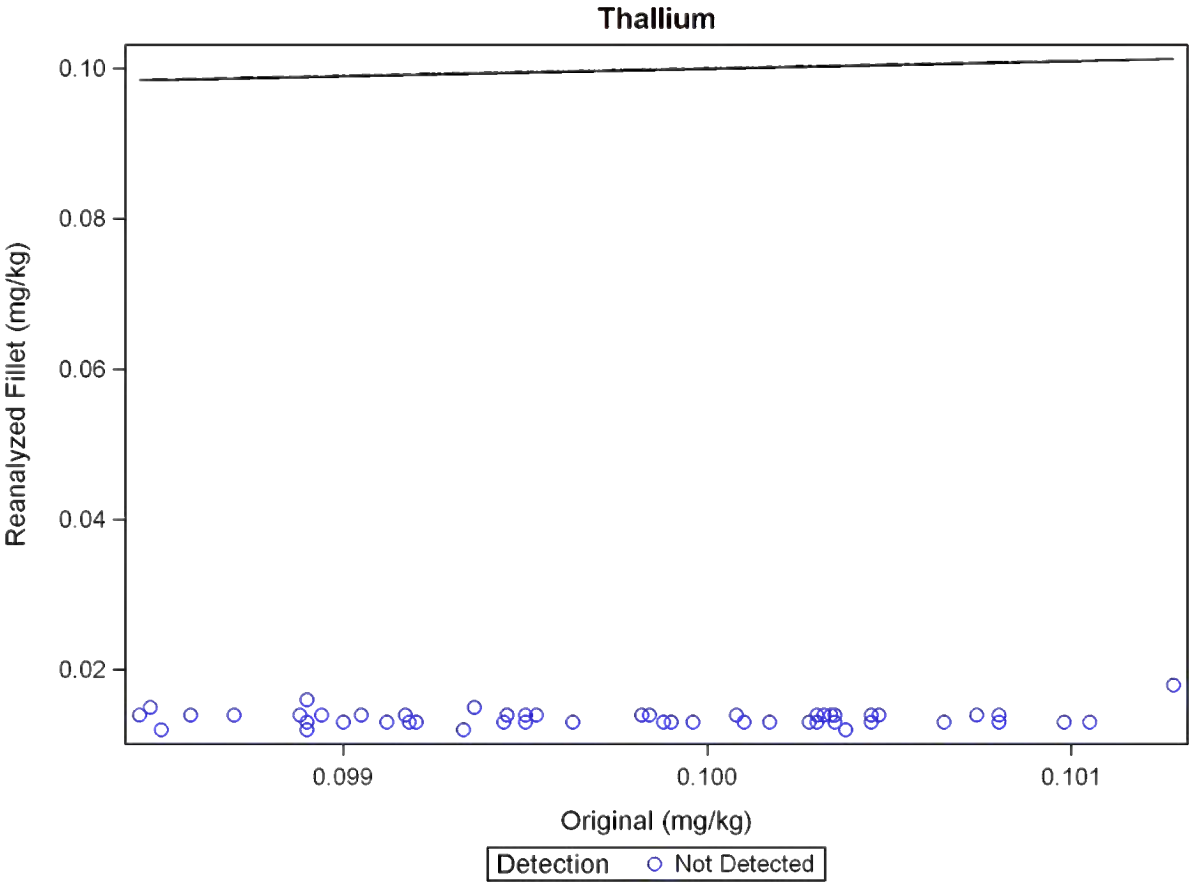

Potassium
Reanalyzed Fillet (mg/kg)
4000
3500
3000
3000
3500
4000
Original (mg/kg)
Detection
Detected

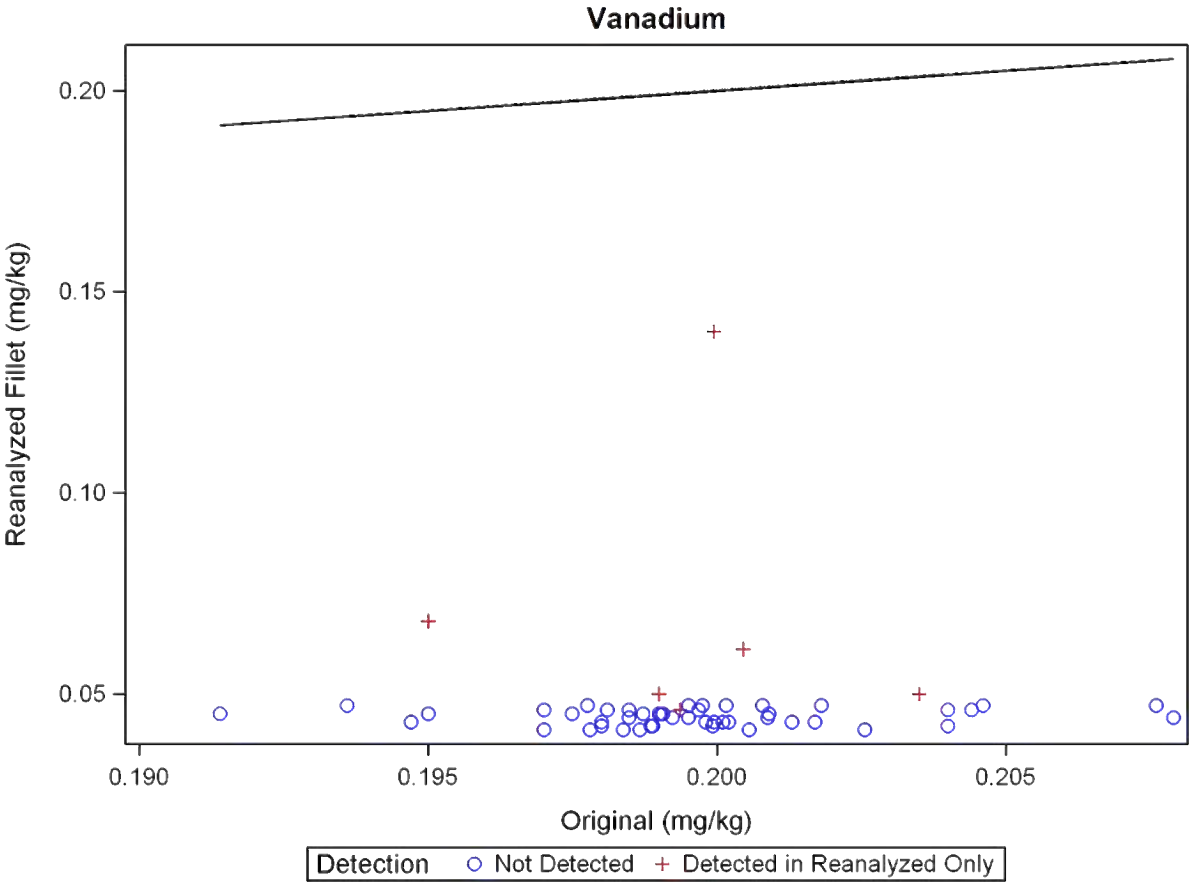

Selenium
Reanalyzed Fillet (mg/kg)
0.2
0.4
0.6
0.8
Original (mg/kg)
0.2
0.4
0.6
0.8
Detection
Detected
Detected in Reanalyzed Only

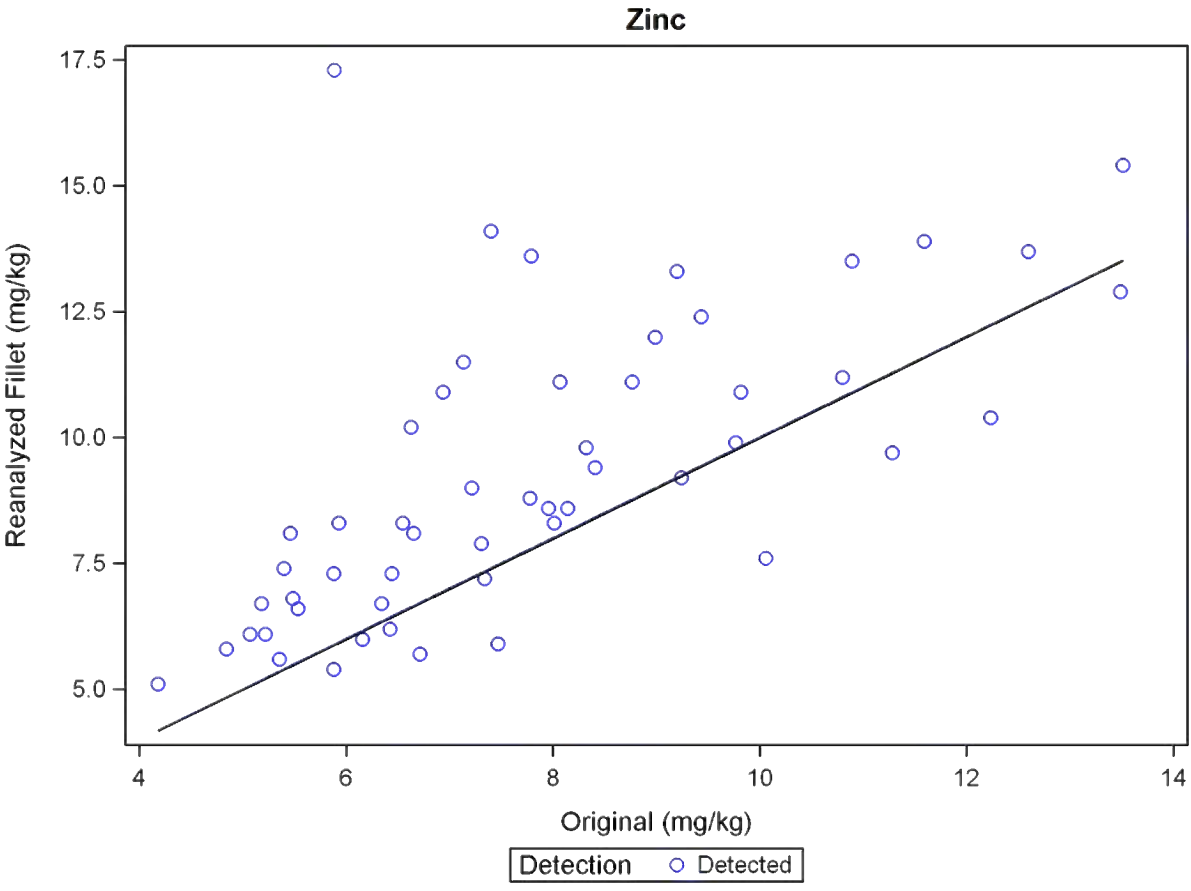

Silver
Reanalyzed Fillet (mg/kg)
0.05
0.04
0.03
0.02
0.01
0.00
0.0490
0.0495
0.0500
0.0505
0.0510
Original (mg/kg)
Detection
Not Detected


Sodium
Reanalyzed Fillet (mg/kg)
600
500
400
300
300
400
500
600
Original (mg/kg)
Detection
Detected


Strontium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
0
2
4
6
8
0
1
2
3
4
5
6
Detection
Detected
Detected in Reanalyzed Only
Not Detected

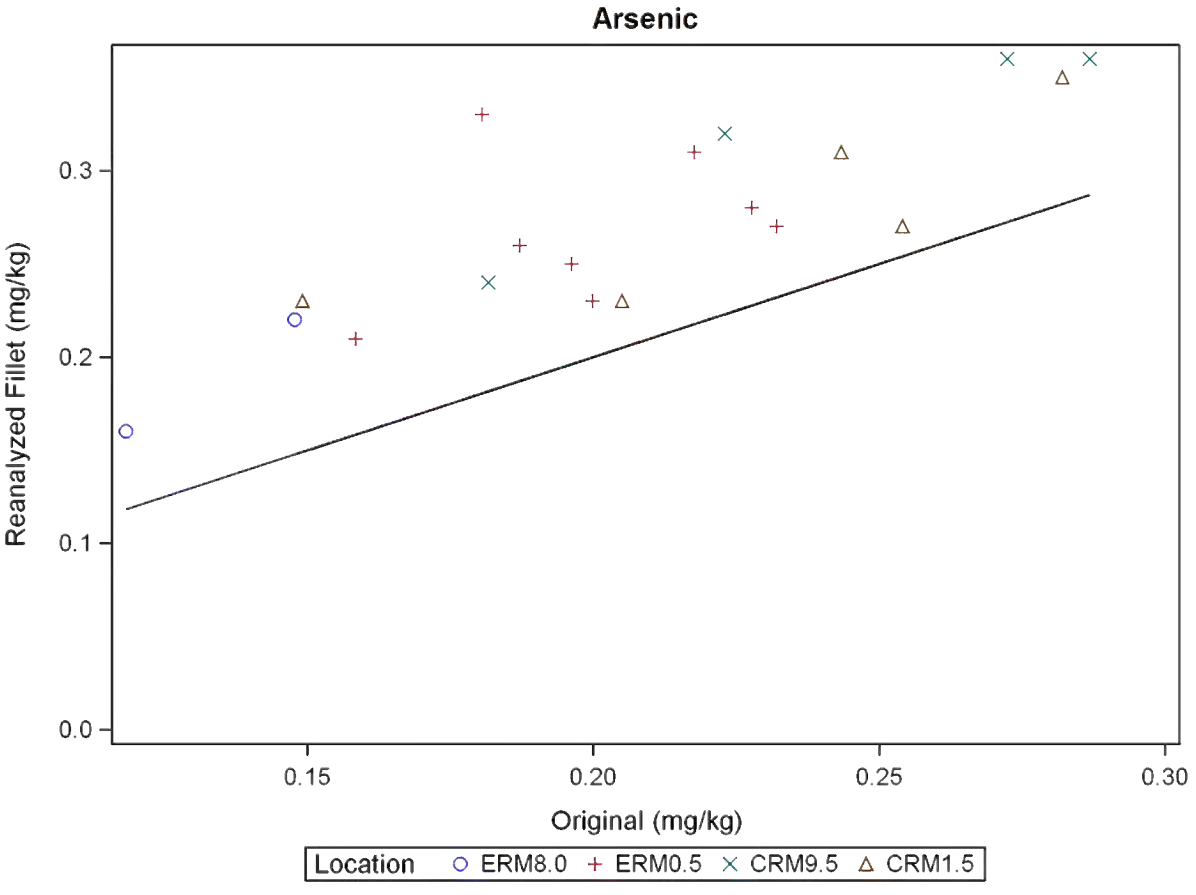

Thallium
0.10
0.08
0.06
0.04
0.02
Reanalyzed Fillet (mg/kg)
0.099
0.100
0.101
Original (mg/kg)
Detection
Not Detected

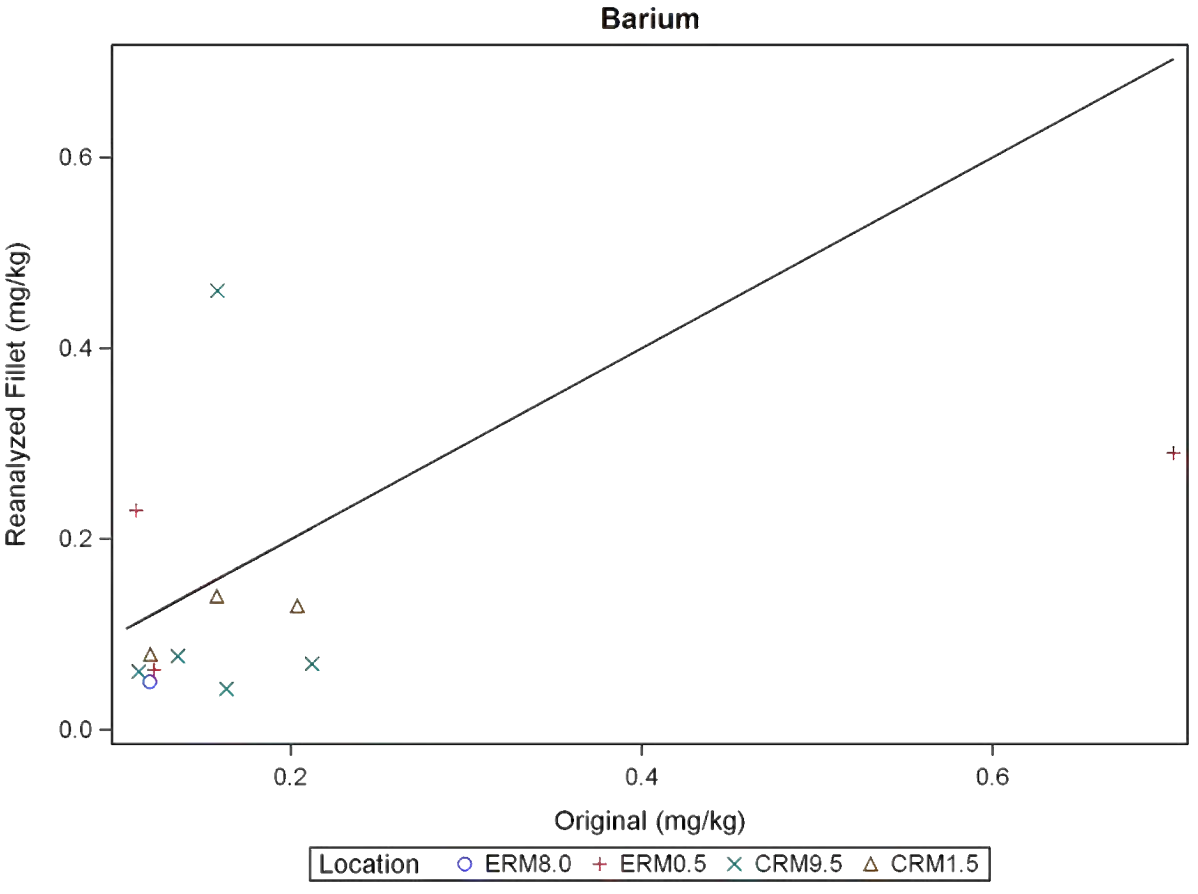

Vanadium
Reanalyzed Fillet (mg/kg)
0.20
0.15
0.10
0.05
0.190
0.195
0.200
0.205
Original (mg/kg)
Detection
Not Detected
Detected in Reanalyzed Only

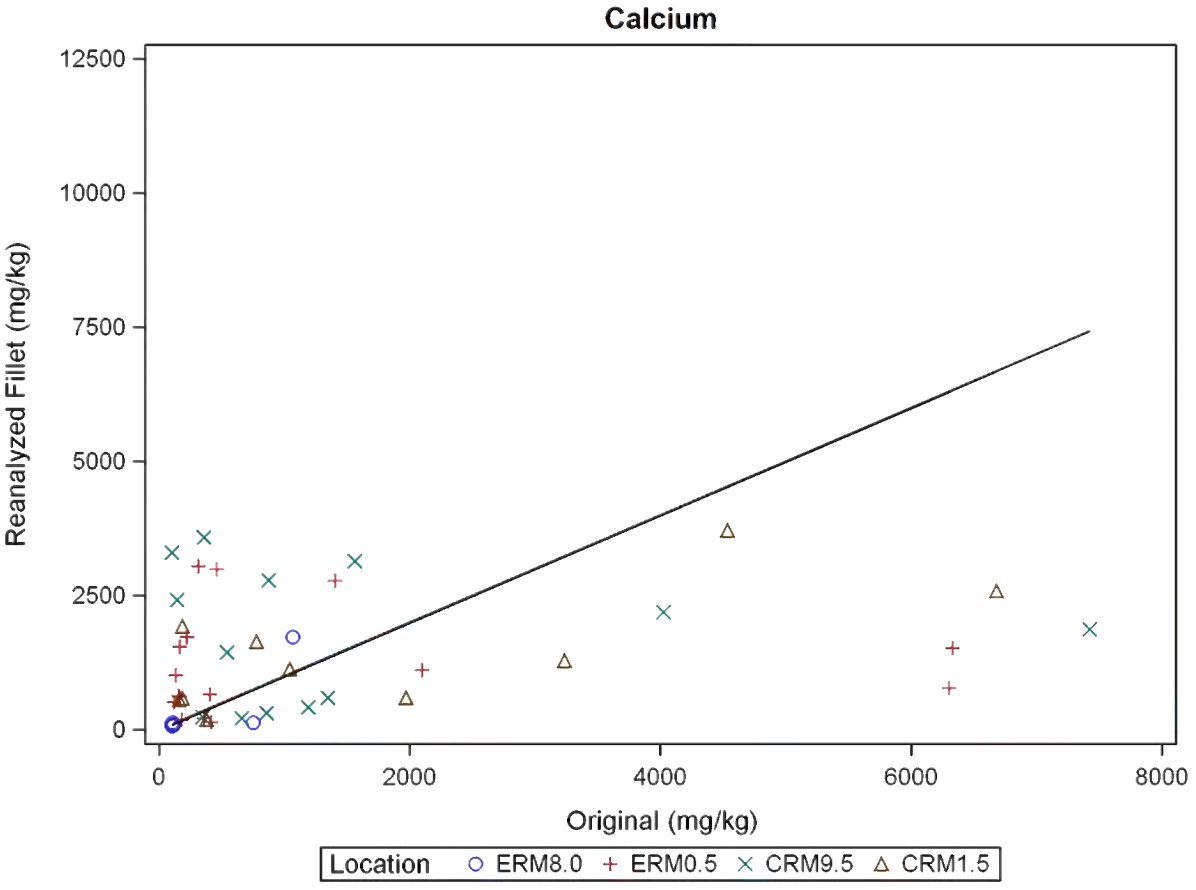

Zinc
Reanalyzed Fillet (mg/kg)
17.5
15.0
12.5
10.0
7.5
5.0
4
6
8
10
12
14
Original (mg/kg)
Detection
Detected

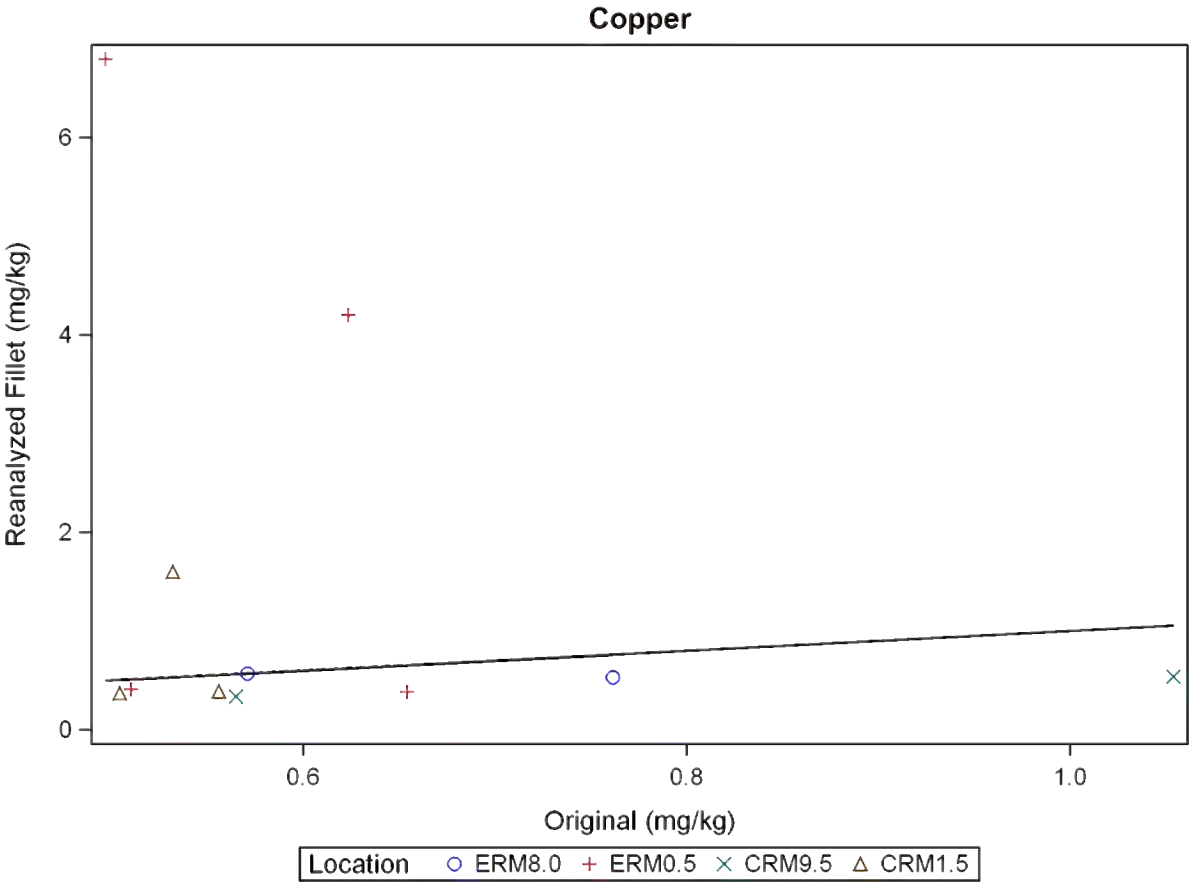
Appendix **L**

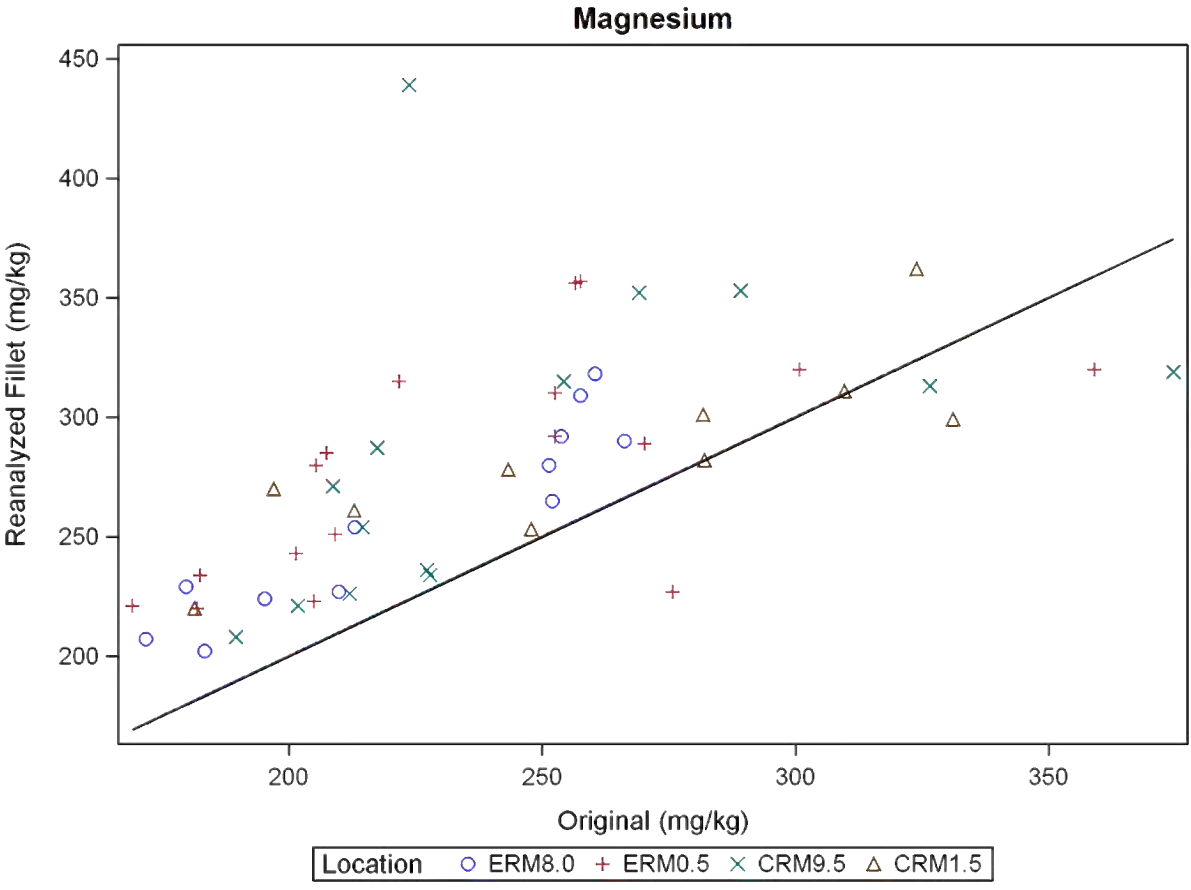
Bivariate Agreement Plots Comparing Original and Reanalyzed Fillet Detected Wet Weight Results for Metals by Location

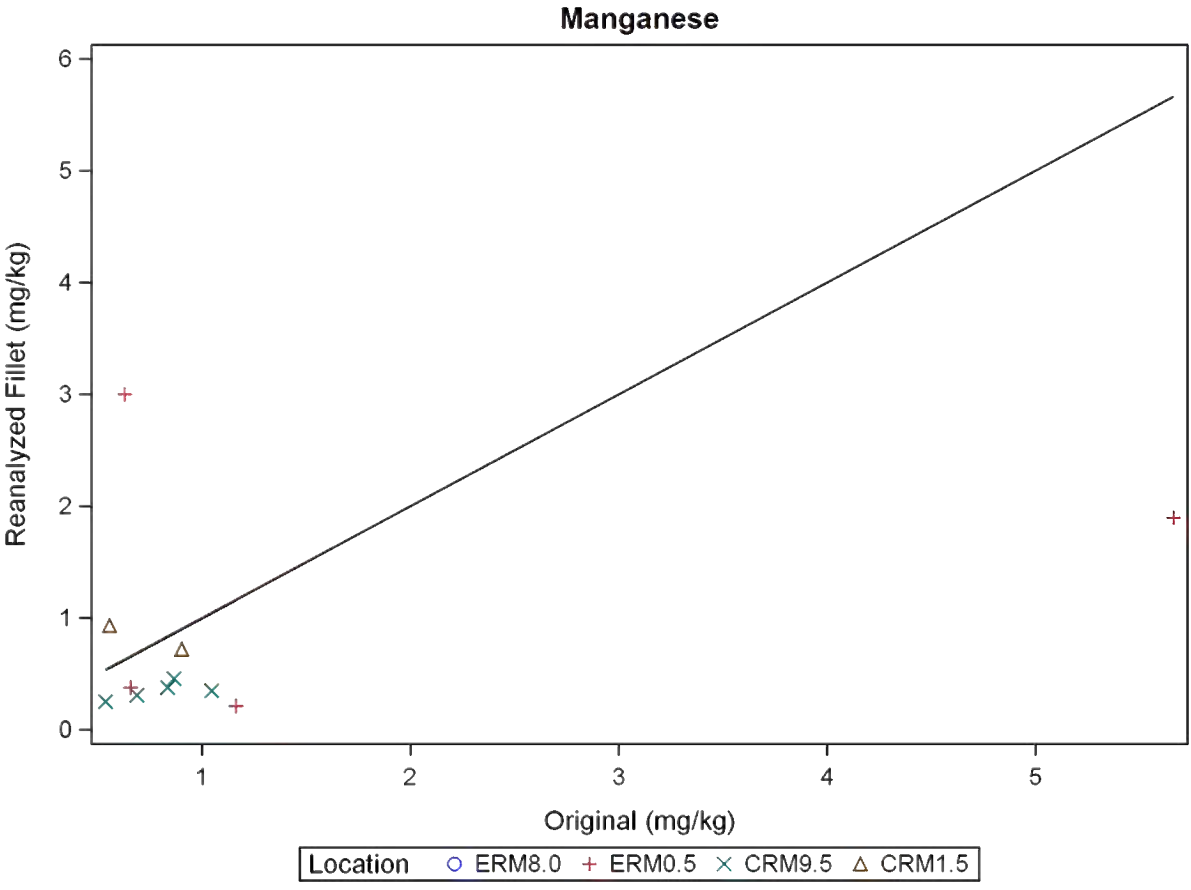

Arsenic
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
0.15
0.20
0.25
0.30
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5

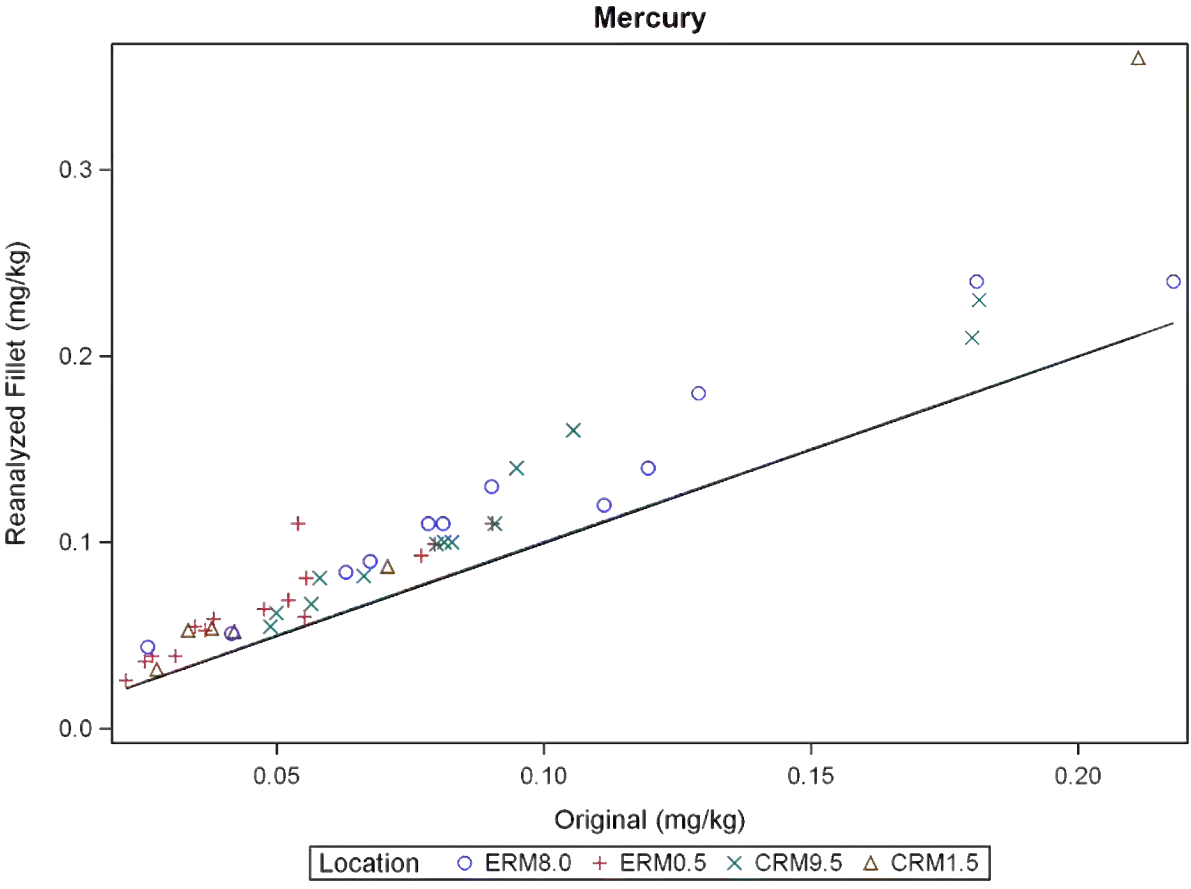

Barium
Reanalyzed Fillet (mg/kg)
0.0
0.2
0.4
0.6
0.2
0.4
0.6
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5

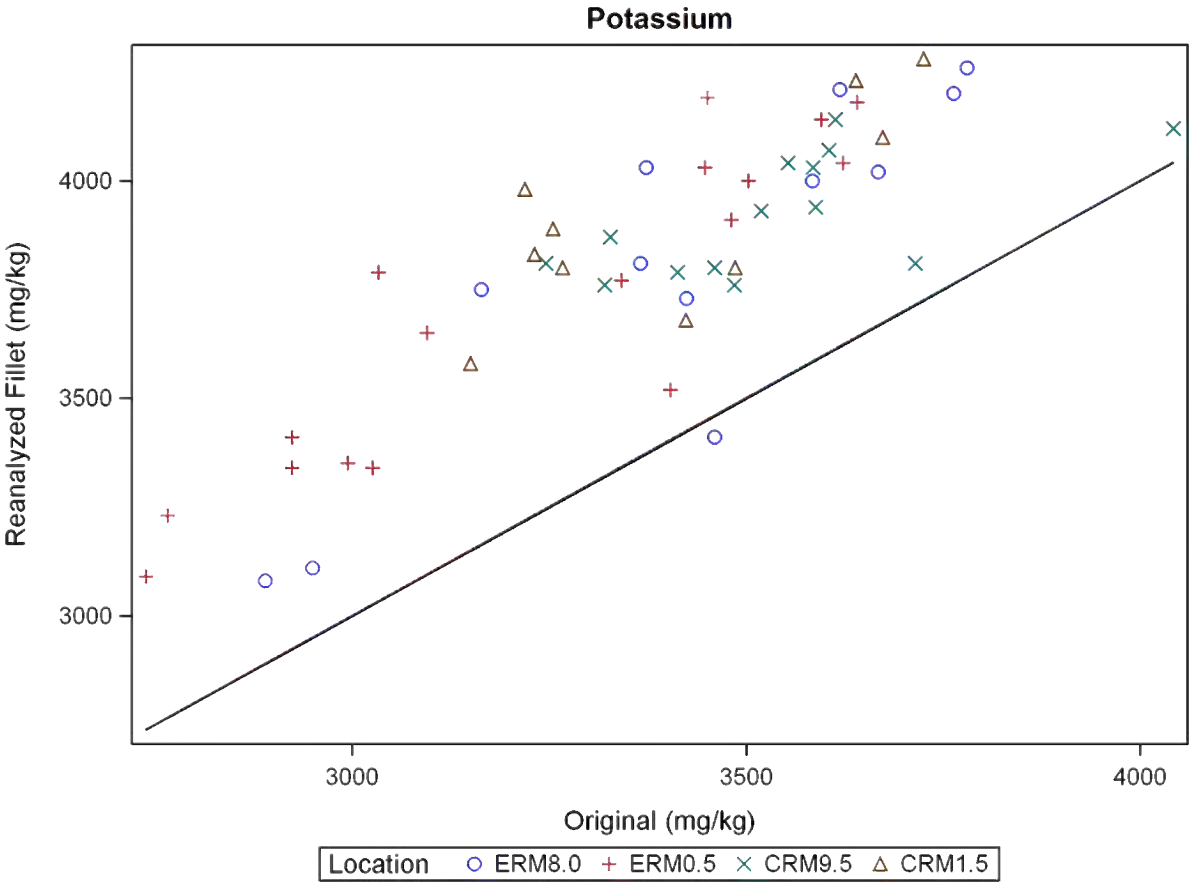

Calcium
Reanalyzed Fillet (mg/kg)
12500
10000
7500
5000
2500
0
0
2000
4000
6000
8000
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5

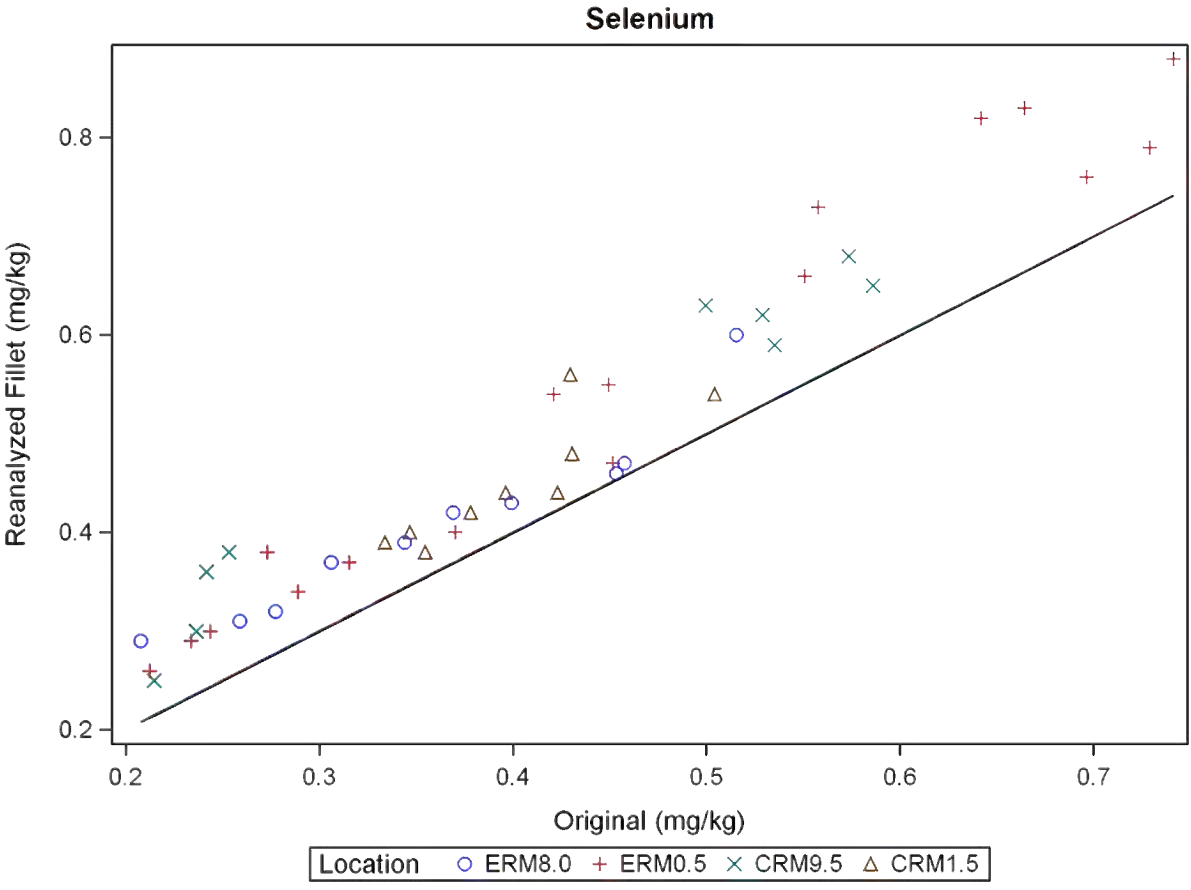

Copper
Reanalyzed Fillet (mg/kg)
0
2
4
6
0.6
0.8
1.0
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5

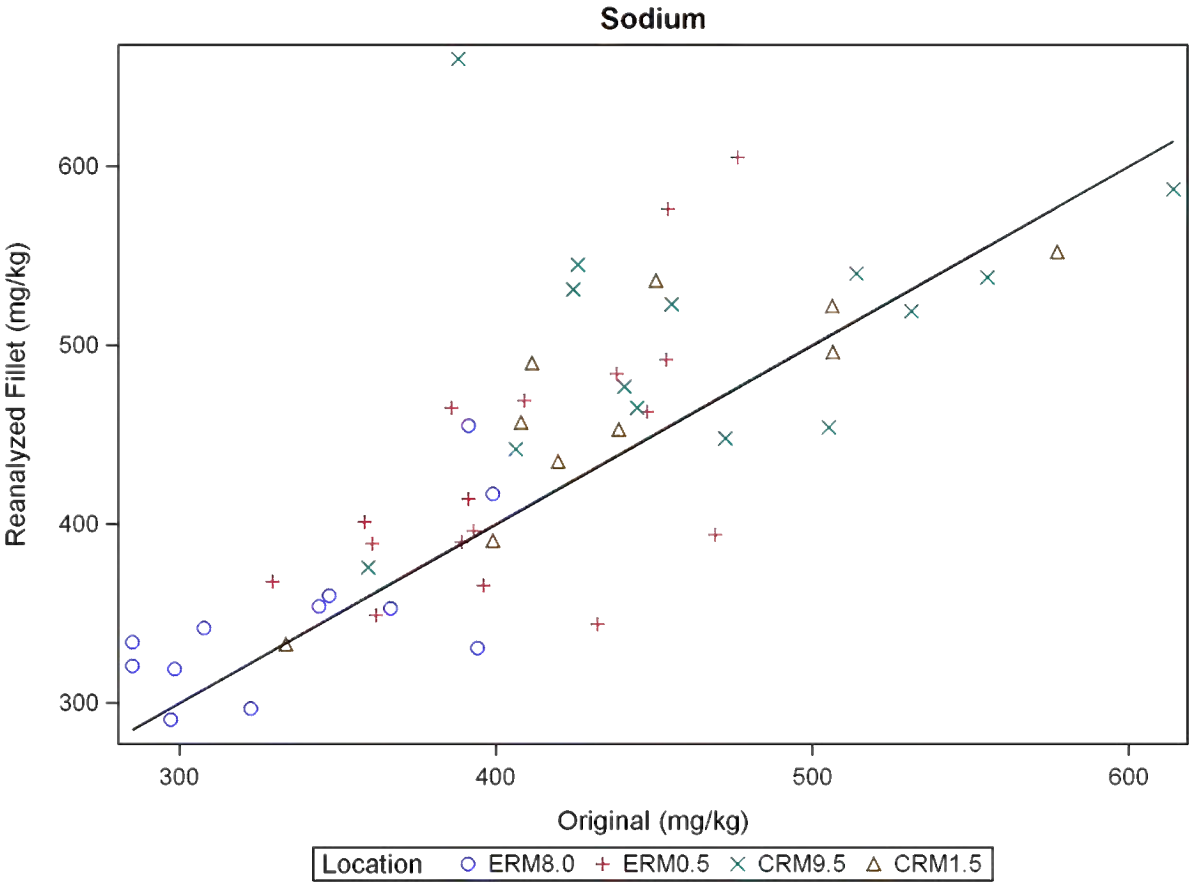

Magnesium
Reanalyzed Fillet (mg/kg)
450
400
350
300
250
200
200
250
300
350
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5

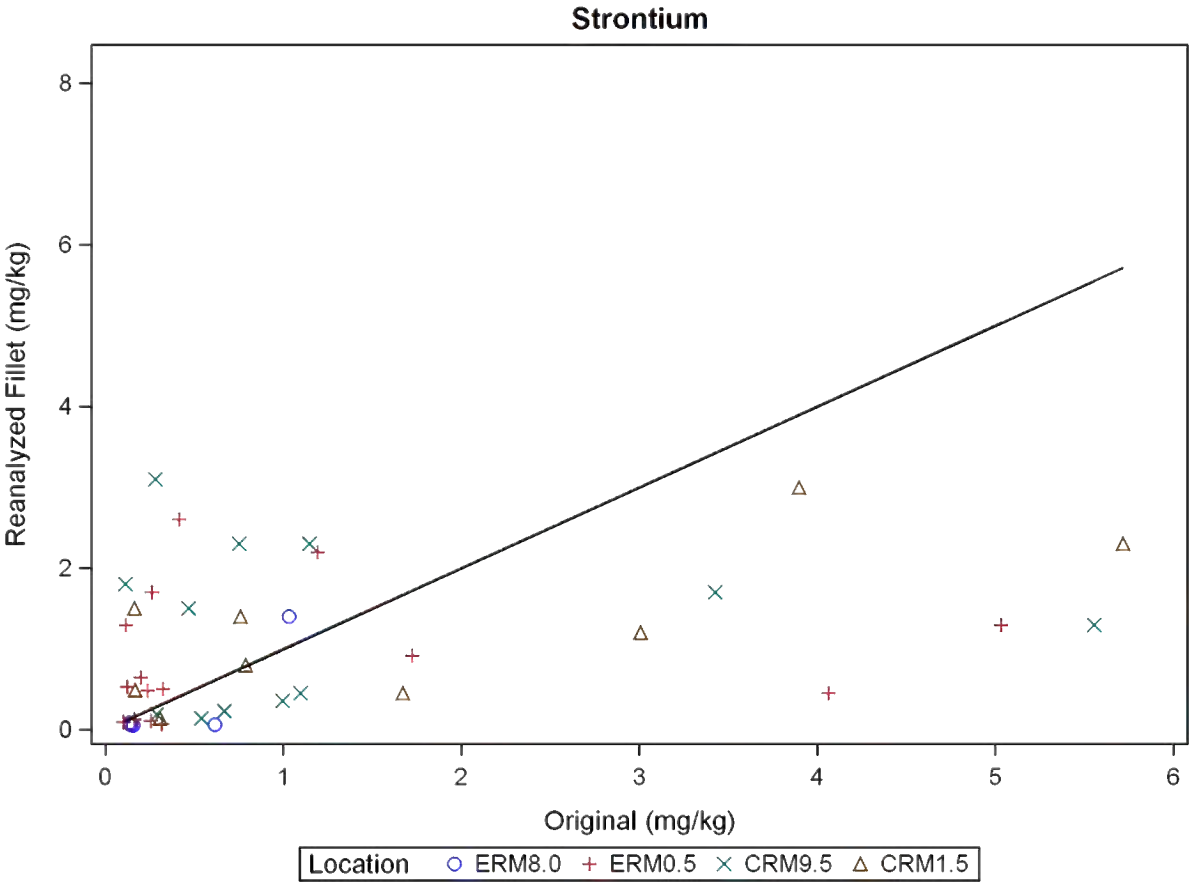

Manganese
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
0
1
2
3
4
5
6
1
2
3
4
5
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5

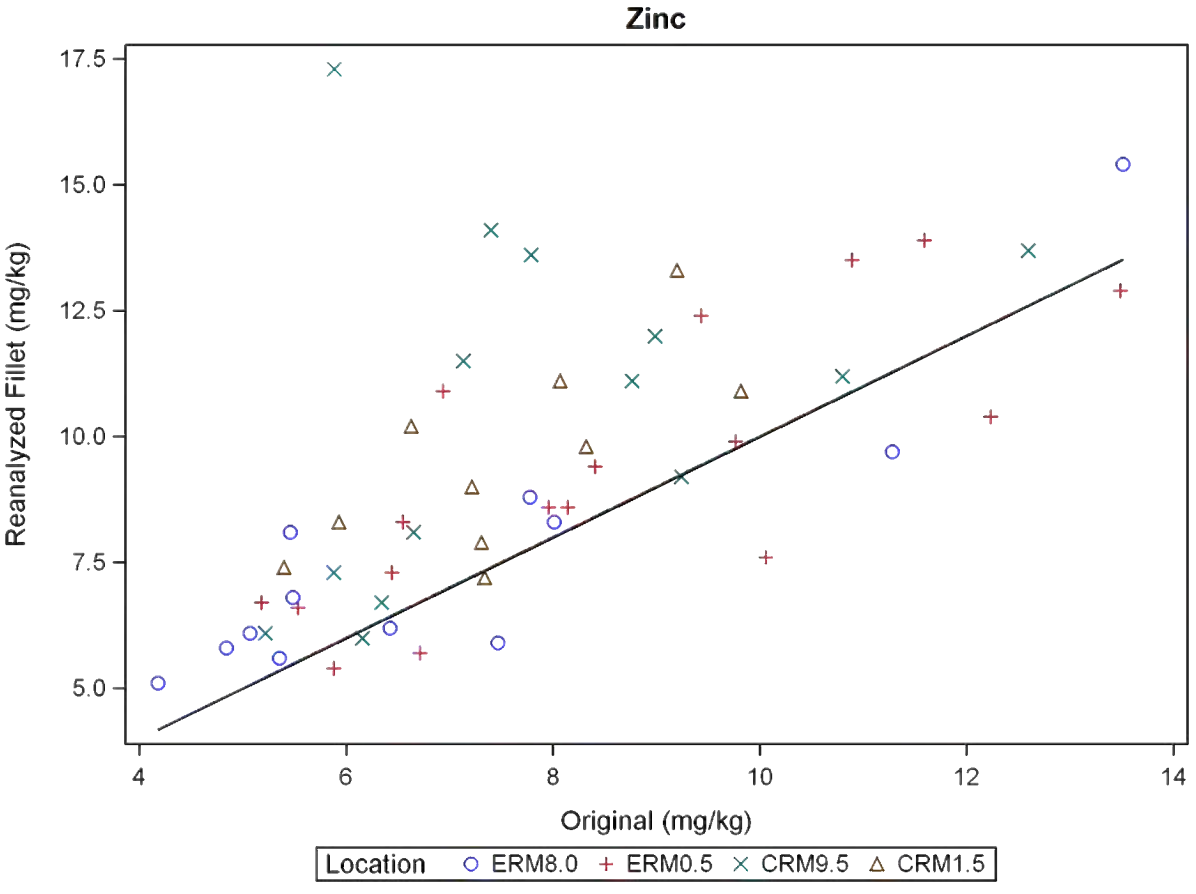

Mercury
Reanalyzed Fillet (mg/kg)
0.0
0.1
0.2
0.3
0.05
0.10
0.15
0.20
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5


Potassium
Reanalyzed Fillet (mg/kg)
4000
3500
3000
3000
3500
4000
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5


Selenium
Reanalyzed Fillet (mg/kg)
0.2
0.4
0.6
0.8
0.2
0.3
0.4
0.5
0.6
0.7
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5


Sodium
Reanalyzed Fillet (mg/kg)
600
500
400
300
300
400
500
600
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5


Strontium
Reanalyzed Fillet (mg/kg)
Original (mg/kg)
0
2
4
6
8
0
1
2
3
4
5
6
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5


Zinc
Reanalyzed Fillet (mg/kg)
17.5
15.0
12.5
10.0
7.5
5.0
4
6
8
10
12
14
Original (mg/kg)
Location
ERM8.0
ERM0.5
CRM9.5
CRM1.5