

—Readme—

Ecotoxicology Data Package: Contaminants in Migratory Waterfowl in the Northeast United States

Cornell Wildlife Health Lab,
Animal Health Diagnostic Center,
College of Veterinary Medicine,
Cornell University
Ithaca, New York, USA

Project Contacts

David Dayan, 0009-0002-3662-9145, dbd63@cornell.edu

Brenda J. Hanley, 0000-0002-0380-6267, bjh262@cornell.edu

Krysten L. Schuler, 0000-0002-0515-3589, ks833@cornell.edu (permanent)

Name of the Project at Cornell University

Waterfowl Contaminant Study

<https://cwhl.vet.cornell.edu/project/waterfowl-contaminant-study>

Location of the Project at Cornell University

Wildlife Health Lab

Animal Health Diagnostic Center

College of Veterinary Medicine

240 Farrier Road

Ithaca, New York, USA 14850

(607) 253-3900

<https://cwhl.vet.cornell.edu/>

Species Described

Mallard (*Anas platyrhynchos*)

American black duck (*Anas rubripes*)

Canada goose (*Branta canadensis*)

American green-winged teal (*Anas carolinensis*)

Wood duck (*Aix sponsa*)

Collection Dates of Samples

October 3, 2021, to February 15, 2022

Study Area

Northeast United States, including the states of New York, New Jersey, Connecticut, and Pennsylvania. United States Environmental Protection Agency Level III Ecoregions: 58, 59, 60, combined 61 & 62, 64, 67, combined 69 & 70, 83, combined 63 & 84 (USEPA 2024).

Overview

This data package constitutes the ecotoxicology evidence used to assess contaminant loads in the breast muscle tissues of hunter-harvested migratory waterfowl collected in the Northeast Atlantic Flyway during the 2021-2022 hunting season. This package contains three folders: (1) Waterfowl Sample (Field) Collection Metadata Folder, (2) Analytical Chemistry Data Folder, and (3) Final Contaminant Data Folder. Content in the Waterfowl Sample (Field) Collection Metadata Folder was produced while obtaining samples of wild waterfowl from hunters across the study area. Content in the Analytical Chemistry Data Folder was originally compiled, curated, and provided by contracted analytical facilities to the Wildlife Health Laboratory at Cornell University (CWHL), after which CWHL did minimal data cleaning (converted formats, removed redundant columns). Specifically, analytical chemistry data on mercury (Hg) originated from raw data provided by the New York State Department of Environmental Conservation Analytical Services Unit at the Hale Creek Field Station (Gloversville, New York); polychlorinated dibenzo-p-dioxins and furans (PCDD/Fs) originated from raw data provided by Pace Analytical (Minneapolis, Minnesota); and polychlorinated biphenyls (PCBs), E1 and E2 organochlorine pesticides (OCPs), and per- and polyfluoroalkyl substances (PFAS) originated from raw data provided by SGS AXYS (Sidney, British Columbia). Content in the Final Contaminant Data Folder was processed according to our specific project decisions regarding concentrations (see below and annotations in code for details) for publication in Dayan et al. (*in preparation*). **Note for reuse:** Throughout these data, we renamed tissue sample IDs '11-1' to '11-1A' and '11-2' to '11-2A' to ensure csv auto-formatting did not inappropriately convert IDs to dates.

Field Sample Collection

Methods for sample collection are described in detail in Dayan et al. (*in preparation*). In brief, state wildlife agency staff obtained whole waterfowl carcasses or tissue samples from hunters across the study region. The target tissue sample was breast muscle tissue with associated skin and subcutaneous fat. Upon collection, state wildlife agency staff assigned each bird a unique sample ID, waterfowl age class, species, and harvest location (when possible), recorded metadata on sample collection forms, chain-of-custody forms, online data forms, and/or hard copy tags, then shipped carcasses or tissues to CWHL.

Tissue Preparation

Preparation of all samples in this data set prior to shipping to analytical chemistry laboratories included the homogenization of waterfowl breast muscle tissues with associated skin and subcutaneous fat and without feathers. Full details for tissue processing are available in Dayan et al. (*in preparation*).

Contaminant Analyses

Analytical methods used to produce the raw contaminant data are described in detail in Dayan et al. (*in preparation*). In brief, Pace Analytical determined PCDD/F presence/absence and concentrations in tissue samples following USEPA Method 1613B (USEPA 1994). SGS AXYS analyzed tissue samples for PCBs and OCPs following internal SGS protocol MLA-007. [*Note: Protocol MLA-007 is not publicly available*]

but may be obtained by contacting SGS AXYS]. SGS AXYS analysis for PCBs and low polarity OCPs was conducted through gas chromatography/low resolution mass spectrometry and analysis for polar OCPs was conducted through gas chromatography/electron capture detection. SGS AXYS analyzed tissues for PFAS following internal protocol MLA-110, based on USEPA Draft Method 1633 (USEPA 2021). Hale Creek Field Station analyzed tissue samples for total mercury following a modified version of USEPA Method 7473 (USEPA 1998), which included thermal decomposition, amalgamation, and atomic absorption spectrophotometry using a Milestone Tri-Cell Direct Mercury Analyzer, DMA-80.

Waterfowl Sample Collection Metadata Folder

This folder includes:

- *Waterfowl Contaminant Study Sample Collection Metadata 2021-2022*

Metadata, including unique identifier, species, sex, age, harvest location, were obtained from sample collection forms, chain-of-custody forms, online data forms, and/or hard copy tags. Metadata from these diverse sources were populated into a single Microsoft Excel (MC 2024) spreadsheet (.xlsx) and subsequently converted to comma separated value (.csv) format for preservation and data processing in R Studio (RStudio 2024). Variables ending in ‘_test’ were populated from information obtained from the analytical facilities. Variable names, descriptions, and formats for these data are in Appendix 1.

Note 1. If ecoregion was not reported on the sample collection form by hunters or state biologists, coauthors at CWHL inferred and imputed ecoregion using the most precise known geographical information, in the following order of preference: latitude and longitude, address, and town. Professionals at CWHL inferred ecoregion by uploading the ecoregion shape file to Google Earth Pro and viewing the location of the most precise known geographical information. If, after this investigation, the missing ecoregion remained ambiguous, professionals at the CWHL assigned Unknown to ecoregion.

Note 2. If sample group was not reported on the sample collection form by hunters or state biologists, coauthors at CWHL inferred and imputed sample group using the most precise known geographical information, in the following order of preference: latitude and longitude, address, and town. Sample group was inferred by uploading the sample group shape file to Google Earth Pro and viewing the location of the most precise known geographical information. If, after this investigation, the missing sample group remained ambiguous, coauthors at CWHL gave the sample group a value of ‘Unknown.’

Note 3. If county was not reported on the sample collection form by hunters or state biologists, and we could not reliably infer county from other geographical characteristics, then coauthors at CWHL gave county a value of ‘Unknown.’

Note 4. If town was not reported on the sample collection form by hunters or state biologists, and we could not reliably infer town from other geographical characteristics, then coauthors at CWHL gave town a value of ‘Unknown.’

Note 5. If address was not reported on the sample collection form by hunters or state biologists, and we could not reliably infer address from other geographical characteristics, then coauthors at CWHL gave address a value of ‘Unknown.’

Note 6. If latitude and longitude were not reported on the sample collection form by hunters or state biologists, coauthors at CWHL inferred and imputed latitude and longitude using the most precise known geographical information, in the following order of preference: address and town. Latitude and longitude were inferred by viewing the location of the most precise known geographical information on Google

Earth Pro and taking the coordinates of the location. Even when reported by state biologists, we considered all measurements of latitude and longitude to be inexact estimations.

Note 7. If reported ecoregions or sample groups were found to be demonstrably incorrect using other evidence [i.e., when viewing harvest locations on Google Earth Pro], coauthors at CWHL modified the field to reflect the correct ecoregion or sample group.

Note 8. We did not make original field data sources available herein (i.e., sample collection forms, chain-of-custody forms, online data forms, and/or hard copy tags) because they contained personally identifiable information of the hunter.

R code used to process the Waterfowl Sample Collection Metadata is available on the GitHub repository for this project (*daviddayan720/CWHL_Waterfowl_Contaminants*). Please refer to annotations in the code itself or to the methods in Dayan et al. (*in preparation*) for processing details.

IMPORTANT: When downloading the Waterfowl Sample Collection Metadata, we advise that the data be kept in comma separated value format. Conversion from comma separated value to Microsoft Excel spreadsheet format may alter sample ID values (i.e., sample ID 11-1 may automatically be converted to November 1 by the Excel software).

Analytical Chemistry Data Folder

This folder includes:

- *Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022*
- *Waterfowl Muscle Tissue E1 Organochlorine Pesticide Data from SGS AXYS 2021-2022*
- *Waterfowl Muscle Tissue E2 Organochlorine Pesticide Data from SGS AXYS 2021-2022*
- *Waterfowl Muscle Tissue Per- and Polyfluoroalkyl Substance Data from SGS AXYS 2021-2022*
- *Waterfowl Muscle Tissue Polychlorinated Biphenyl Data from SGS AXYS 2021-2022*
- *Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-2022*

R code used to process the Analytical Chemistry Data is available on the GitHub repository for this project (*daviddayan720/CWHL_Waterfowl_Contaminants*). Please refer to Dayan et al. (*in preparation*) as well as annotations in the code itself for details on processing.

IMPORTANT: When downloading the Analytical Chemistry Data, we advise that the data be kept in comma separated value format. Conversion from comma separated value to Microsoft Excel spreadsheet format may alter sample ID values (i.e., sample ID 11-1 may automatically be converted to November 1 by the Excel software).

The details of each file in this folder appears below.

Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022

Coauthors at CWHL populated the dioxin and furan data from hard-copy records produced by Pace Analytical using first a Microsoft Excel (MC 2024) spreadsheet (.xlsx) and subsequently a comma separated value (.csv) format for preservation and data processing in R Studio (Rstudio 2024). The original hard-copy analytical records are available upon reasonable request to CWHL. Variable names, descriptions, and formats for these data are in Appendix 2. These data contain a data structure that is conventional in toxicology labs, where a single sample is characterized by multiple rows of tests in the spreadsheet. The data are then later converted into a statistical matrix (where one row indicates a single sample) in the Final Contaminant Data Folder.

Note 1. Identification (ID) values with ‘DUP’ indicate analyses of a laboratory duplicate.

Note 2. Pace Analytical included estimated maximum possible concentrations (EMPCs) as positives when calculating 2,3,7,8-tetrachlorodibenzodioxin toxic equivalency (TEQ) values and used the World Health Organization (WHO) 2005 toxic equivalency factors.

Note 3. Homolog results may be reported as not detected (ND) even if a toxic congener in that homolog family was detected but was reported as an EMPC.

Note 4. Percent moisture was not reported for DUP or samples with insufficient sample mass.

Note 5. Analytical records may have more than one result qualifier (i.e., IJ or PJ). Result qualifier values IJ, PJ, I, and P indicate that a reported concentration is an EMPC.

Note 6. Estimated detection limits were not reported to for TEQ, Moisture Percent, and Lipid Percent.

Waterfowl Muscle Tissue E1 Organochlorine Pesticide Data from SGS AXYS 2021-2022

SGS AXYS provided data on E1 organochlorine pesticides (OCPs) in five comma separated value (.csv) files representing five batches of analytical chemistry data. [E1 refers to the low polarity OCPs analyzed after Florisil fractionation of the tissue extract]. As these .csv files all had the same column names and structure, coauthors at CWHL used the function *rbind* in R (R 2024) to combine these .csv files into a single .csv named *Waterfowl Muscle Tissue E1 Organochlorine Pesticide Data from SGS AXYS 2021-2022*. The original analytical records are available upon reasonable request to CWHL. Variable names, descriptions, and formats for these data are in Appendix 3. These data contain a data structure that is conventional in toxicology labs, where a single sample is characterized by multiple rows of tests in the spreadsheet. The data are then later converted into a statistical matrix (where one row indicates a single sample) in the Final Contaminant Data Folder.

Waterfowl Muscle Tissue E2 Organochlorine Pesticide Data from SGS AXYS 2021-2022

SGS AXYS provided data on E2 organochlorine pesticides (OCPs) in five comma separated value (.csv) files representing five batches of analytical chemistry data. [E2 refers to the high polarity OCPs analyzed after Florisil fractionation of the tissue extract.] As these .csv files all had the same column names and structure, coauthors at CWHL used the function *rbind* in R (R 2024) to combine these .csv files into a single .csv, which we named *Waterfowl Muscle Tissue E2 Organochlorine Pesticide Data from SGS AXYS 2021-2022*. The original analytical records are available upon reasonable request to CWHL. Variable names, descriptions, and formats for these data are in Appendix 3. These data contain a data structure that is conventional in toxicology labs, where a single sample is characterized by multiple rows of tests in the spreadsheet. The data are then later converted into a statistical matrix (where one row indicates a single sample) in the Final Contaminant Data Folder.

Waterfowl Muscle Tissue Per- and Polyfluoroalkyl Substance Data from SGS AXYS 2021-2022

SGS AXYS provided data on per- and polyfluoroalkyl substances (PFAS) in six comma separated value (.csv) files representing six batches of analytical chemistry data. As these .csv files all had the same column names and structure, coauthors at CWHL used the function *rbind* in R (R 2024) to combine these .csv files into a single .csv file, which we named *Waterfowl Muscle Tissue Per- and Polyfluoroalkyl Substance Data from SGS AXYS 2021-2022*. The original analytical records are available upon reasonable

request to CWHL. Variable names, descriptions, and formats for these data are in Appendix 3. These data contain a data structure that is conventional in toxicology labs, where a single sample is characterized by multiple rows of tests in the spreadsheet. The data are then later converted into a statistical matrix (where one row indicates a single sample) in the Final Contaminant Data Folder.

Waterfowl Muscle Tissue Polychlorinated Biphenyl Data from SGS AXYS 2021-2022

SGS AXYS provided data on polychlorinated biphenyls (PCBs) in five comma separated value (.csv) files representing five batches of analytical chemistry data. As these .csv files all had the same column names and structure, coauthors at CWHL used the function *rbind* function in R (R 2024) to combine these .csv files into a single csv named *Waterfowl Muscle Tissue Polychlorinated Biphenyl Data from SGS AXYS 2021-2022*. The original analytical records are available upon reasonable request to CWHL. Variable names, descriptions, and formats for data are in Appendix 3. These data contain a data structure that is conventional in toxicology labs, where a single sample is characterized by multiple rows of tests in the spreadsheet. The data are then later converted into a statistical matrix (where one row indicates a single sample) in the Final Contaminant Data Folder.

Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-2022

The Hale Creek Field Station provided data on total mercury. These data included completely blank columns for waterfowl age, sample preparation method, waterfowl length, percent moisture, and percent lipid. The data further included completely blank columns applicable only to composite samples (maximum, minimum, and standard deviation waterfowl length; maximum, minimum, and standard deviation waterfowl weight). In the production of this dataset, coauthors at CWHL removed blank columns as well as columns applicable to composite samples [this study did not include composite samples]. Coauthors at CWHL subsequently converted the Microsoft Excel (MC 2024) spreadsheet (.xlsx) provided by Hale Creek to comma separated value (.csv) format for preservation and data processing in R Studio (Rstudio 2024), resulting in the file named *Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-22*. Variable names, descriptions, and formats for these data are in Appendix 4.

Note 1. In some cases, metadata in the file provided by Hale Creek Field Station did not match original metadata. In such cases, the CWHL considered the original metadata to be the correct data.

Note 2. Hale Creek Field Station used some TAGNOs (sample identifiers) that were associated with, but not identical to, the ID (sample identifier) used in the original metadata. In some cases, the IDs differed only by punctuation. In some cases, differences were more involved. For example, coauthors at the CWHL used code to match TAGNO and original metadata ID values:

- a. TAGNO 'B921078_1' corresponds to ID '1'
- b. TAGNO 'B921077_2' corresponds to ID '2'
- c. TAGNO 'B921074_6' corresponds to ID '6'
- d. TAGNO 'B921076_7' corresponds to ID '7'
- e. TAGNO 'B921079_8' corresponds to ID '8'

Note 3. Hale Creek Field Station reported the species (SPP) of TAGNO 999-1 as ABDU. However, original metadata indicated that this sample was ABDU/MALL hybrid. Subsequently, CWHL classified this sample as an ABDU in the Final Contaminant Data.

Note 4. Hale Creek Field Station included waterfowl sex for a small subset of samples, if they had that information through communications with CWHL.

Note 5. Hale Creek Field Station included waterfowl weight for a small subset of samples, if they had that information through communications with CWHL.

Note 6. The statistically derived method detection limit (MDL) was 0.004 µg/g Hg on a wet weight basis. A negative concentration indicates the concentration was below the MDL. The number following the negative sign is the MDL.

Final Contaminant Data Folder

This folder includes:

- *Waterfowl Contaminant Study Final Processed Data 2021-2022*

Coauthors at the CWHL produced the Final Contaminant Data by processing the files in the Analytical Chemistry Data Folder and then combining that information with information from files in the Waterfowl Sample Collection Metadata Folder.

In brief, we corrected erroneously listed sample ID information from the Analytical Chemistry Data to match the Waterfowl Sample Collection Metadata, converted all contaminant concentrations to units of ng/g, blank corrected data from SGS AXYS by subtracting detectable concentrations found in the batch procedural blanks from concentrations in samples in the corresponding batch, and converted all values listed as not detectable (i.e., below the detection limit of the analytical method) to zero (0) ng/g. We did not alter data between limits of detection and quantification or alter data that were reported as detectable concentrations but had associated laboratory qualifiers. Additionally, we removed duplicate analyses of samples and only considered the first analytical run. Variable names, descriptions, and formats for data are in Appendix 5.

The R code used to produce the Final Contaminant Data is available on the GitHub repository for this project ([daviddayan720/CWHL_Waterfowl_Contaminants](#)). Please refer to Dayan et al. (*in preparation*) as well as to annotations in the code itself for specific details on processing.

IMPORTANT: When downloading the Final Contaminant Data, we advise that the data be kept in comma separated value format. Conversion from comma separated value to Microsoft Excel spreadsheet format may alter sample ID values (i.e., sample ID 11-1 may automatically be converted to November 1 by the Excel software).

Permits

Waterfowl carcasses, tissues, and associated metadata were collected by state wildlife agencies under USFWS permit MB707860-0 (New York State Department of Environmental Conservation), USFWS permit MB77373B-0 (Connecticut Department of Energy and Environmental Protection), USFWS permit MB717235 (Pennsylvania Game Commission), and MBPER0047186 (New Jersey Division of Fish and Wildlife). The CWHL received and processed carcasses and tissues under the New York State Department of Environmental Conservation's permit.

Funding

This study was supported by funding from the 2022 Multistate Conservation Grant Program Traditional Multistate Conservation Program, Wildlife Restoration (T-MSCGP) # F22AP00575-00, administered jointly by the Association of Fish and Wildlife Agencies and the U.S. Fish and Wildlife Service, for a project entitled, 'Contaminant Loads in Waterfowl of the Northeast Atlantic Flyway: New Threats and Outdated Advisories'. The views expressed do not necessarily reflect

the views of the Association of Fish and Wildlife Agencies, U.S. Fish and Wildlife Service, New York State Department of Environmental Conservation, Pennsylvania Game Commission, Connecticut Department of Energy and Environmental Protection, or New Jersey Department of Environmental Protection, their officers, directors, affiliates, agents, nor staff.

License of the Data

All data in this packet are shared under a Creative Commons Attribution 4.0 International license (CC BY 4.0, <https://creativecommons.org/licenses/by/4.0/>); the data are openly available to share and adapt, but appropriate credit to the original data creators is required upon reuse.

Suggested Citation for Re-Use of this Data

Dayan, D. B., B. J. Hanley, & K. Schuler. 2024. *Ecotoxicology Data Package: Contaminants in Migratory Waterfowl in the Northeast United States* [Dataset]. Cornell University Library eCommons Repository. [DOI](#).

Related Publications

Dayan, D. B., B. J. Hanley, J. Stiller, W. Richter, I. Gregg, N. R. Huck, M. T. Huang, T. Nichols, H. M. Spielthoff, J. C. Becker, L. A. Murphy, & K. L. Schuler. Environmental contaminants in migratory waterfowl in the Northeast Atlantic Flyway. *In preparation*.

Literature Cited

- American Chemical Society [ACS]. 2024. CAS Registry. <https://www.cas.org/cas-data/cas-registry>.
- Microsoft Corporation [MC]. 2018. *Microsoft Excel*. Retrieved from <https://office.microsoft.com/excel>.
- Rstudio 2024. Rstudio: Integrated Development Environment for R. Posit Software, PBC, Boston, MA URL. <http://www.posit.co/>.
- US Environmental Protection Administration [USEPA]. 1998. "Method 7473 (SW-846): Mercury in Solids and Solutions by Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry," Revision 0.
- US Environmental Protection Administration [USEPA]. 1994. Method 1613: Tetrathrough Octa-Chlorinated Dioxins and Furans by Isotope Dilution Hrgc/Hrms. U.S. Environmental Protection Agency.
- US Environmental Protection Administration [USEPA]. 2021. Draft Method 1633. Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in aqueous, solid, biosolids, and tissue samples by LC-MS/MS. https://www.epa.gov/system/files/documents/2021-09/method_1633_draft_aug-2021.pdf. Accessed 28 March 2024.
- US Environmental Protection Administration [USEPA]. 2024. Level III and IV Ecoregions of the Continental United States. <https://www.epa.gov/eco-research/level-iii-and-iv-ecoregions-continental-united-states>. Accessed 28 March 2024.

Appendix 1. Variable names, descriptions, and formats used in *Waterfowl Contaminant Study Sample Collection Metadata 2021-2022*.

Information Presented as:

Variable Name: description.

- Format/Accepted Values: Explicit Interpretation

ID: Unique sample record identifier assigned at time of waterfowl harvest.

- **(Character string):** Unique identifier of the bird assigned by the biologist at the time of harvest.
Note: If lab-specific IDs did not exactly match these IDs for the same bird, then members of the CWHL matched the records among the labs during downstream processing and ultimately used this ID as the overall ID for that bird.

Hg_test: Binary identifier indicating whether sample was evaluated for total mercury.

- **Y:** Yes, sample was evaluated for total mercury.
- **N:** No, sample was not evaluated for total mercury.

Dioxin_test: Binary identifier indicating whether sample was evaluated for dioxins and furans.

- **Y:** Yes, sample was evaluated for dioxins and furans.
- **N:** No, sample was not evaluated for dioxins and furans.

PCBOCP_test: Binary identifier indicating if sample was evaluated for polychlorinated biphenyls and organochlorine pesticides.

- **Y:** Yes, sample was evaluated for polychlorinated biphenyls and organochlorine pesticides.
- **N:** No, sample was not evaluated for polychlorinated biphenyls and organochlorine pesticides.

PFAS_test: Binary identifier indicating if sample was evaluated for per- and polyfluoroalkyl substances.

- **Y:** Yes, sample was evaluated for per- and polyfluoroalkyl substances.
- **N:** No, sample was not evaluated for per- and polyfluoroalkyl substances.

Species: Waterfowl species code reported by state agency biologists.

- **ABDU:** The bird was an American black duck.
- **AGWT:** The bird was an American green-winged teal.
- **CAGO:** The bird was a Canada goose.
- **MALL:** The bird was a mallard.
- **WODU:** The bird was a wood duck.
- **ABDU/MALL:** The bird was an American black duck / mallard hybrid.

Sex: Waterfowl sex reported by agency biologists based on external characteristics (i.e., coloration, size).

- **M:** The bird was male.
- **F:** The bird was female.
- **Unknown:** The sex of the bird was not reported at the time of harvest and could not be determined *post hoc*.

State: US state in which waterfowl was harvested.

- **NY:** The bird was killed in New York.
- **NJ:** The bird was killed in New Jersey.
- **PA:** The bird was killed in Pennsylvania.
- **CT:** The bird was killed in Connecticut.

Ecoregion: United States Environmental Protection Agency (USEPA) Level III Ecoregion in which waterfowl was harvested (see *Notes 1 and 7 in the Waterfowl Sample Collection Metadata Folder Section*).

- **58:** The bird was killed in Ecoregion 58.
- **59:** The bird was killed in Ecoregion 59.
- **60:** The bird was killed in Ecoregion 60.
- **61/62:** The bird was killed in an area encapsulating both Ecoregions 61 and 62.
- **63/84:** The bird was killed in an area encapsulating both Ecoregions 63 and 84.
- **64:** The bird was killed in Ecoregion 64.
- **67:** The bird was killed in Ecoregion 67.
- **69/70:** The bird was killed in an area encapsulating both Ecoregions 69 and 70.
- **83:** The bird was killed in Ecoregion 83.
- **Unknown:** Ecoregion from which the bird originated was not reported and could not be determined *post hoc*.

sample_group: Randomized sampling scheme group in which waterfowl were harvested (see *Notes 2 and 7 in the Waterfowl Sample Collection Metadata Folder Section*). *Note: Statisticians pre-installed a randomized spatial grid of sample groups overlaying the study region to ensure that the region was adequately sampled. By taking as close to equal number of birds from each geographically random sample group, we aimed to ensure that our overall data was representative of the region of interest [and did not constitute only birds harvested in the most convenient areas]. However, actual outcomes of the number of birds in each sample group was imbalanced among sample groups [see Dayan et al. in preparation for exact details.]*

- **1:** Based on location of harvest, the bird belonged to randomized sample group 1.
- **2:** Based on location of harvest, the bird belonged to randomized sample group 2.
- **3:** Based on location of harvest, the bird belonged to randomized sample group 3.
- **Unknown:** Sample group was not reported and could not be determined *post hoc*.

County: State county in which waterfowl was harvested (see *Note 3 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Character string):** The county where the bird was killed.
- **Unknown:** County where the bird was killed was not reported and could not be determined *post hoc*.

Town: Town in which waterfowl was harvested (see *Note 4 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Character string):** The town where the bird was killed.
- **Unknown:** Town where the bird was killed was not reported and could not be determined *post hoc*.

Address: Closest known address to where waterfowl was harvested (see *Note 5 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Character string):** The address where the bird was killed.
- **Unknown:** Address where the bird was killed was not reported and could not be determined *post hoc*.

Latitude: Latitude at which waterfowl was harvested (see *Note 6 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Number):** Latitude in decimal degrees where the bird was killed.

- **(Cell left blank):** Latitude where the bird was killed was not reported and could not be determined *post hoc*.

Longitude: Longitude at which waterfowl was harvested (see *Note 6 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Number):** Longitude in decimal degrees where the bird was killed.
- **(Cell left blank):** Longitude where the bird was killed was not reported and could not be determined *post hoc*.

Harvest_date: Date on which waterfowl was harvested.

- **MM/DD/YYYY:** Date that the bird was killed, where MM indicated the month of kill, DD indicates the day of kill, and YYYY indicated the calendar year of kill.
- **(Cell left blank):** The date that the bird was killed was not reported and could not be determined *post hoc*.

Age: Waterfowl age class reported by biologists based on external characteristics (i.e., coloration, size).

- **Adult:** The bird was an adult.
- **Juvenile:** The bird was a juvenile.
- **Unknown:** Age of the bird was not reported and could not be determined *post hoc*.

Weight_(g): Waterfowl carcass weight in grams reported by state biologists.

- **(Number):** Weight (in grams) of the bird.
- **Unknown:** Weight of the bird was not reported and could not be determined *post hoc*.

Culmen_(mm): Culmen length measured by state biologists using a dial caliper, reported in mm rounded to the nearest tenth. The measurement was taken from the intersection of the feathers and bill to the tip of the bill.

- **(Number):** Length of the culmen (in millimeters) of the bird.
- **Unknown:** Culmen length of the bird was not reported and could not be determined *post hoc*.

Tarsus_(mm): Partial tarsus length measured by state biologists using a dial caliper, reported in mm rounded to the nearest tenth. The measurement was taken from the proximal portion of bone.

- **(Number):** Length of the tarsus (in millimeters) of the bird.
- **Unknown:** Tarsus length of the bird was not reported and could not be determined *post hoc*.

Head_length_(mm): Total head length measured by state biologists using a dial caliper, reported in mm rounded to the nearest tenth.

- **(Number):** Length of the head (in millimeters) of the bird.
- **Unknown:** Head length of the bird was not reported and could not be determined *post hoc*.

Appendix 2. Variable names, descriptions, and formats used in *Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022*. These data contain a data structure that is conventional in toxicology labs, where a single sample is characterized by multiple rows of tests in the spreadsheet. Information Presented as:

Variable Name: description.

- Format/Accepted Values: Explicit Interpretation

ID: Unique sample record identifier (see *Note 1 in the Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022 section*).

- **(Character string):** The unique identifier either carried forward for the bird from the corresponding record in the *Waterfowl Contaminant Study Sample Collection Metadata 2021-2022*, or a new ID specific to Pace Analytical assigned by professionals at Pace Analytical. *Note: If the Pace Analytical ID did not exactly match the ID for the same bird in the Waterfowl Contaminant Study Sample Collection Metadata 2021-2022, then members of the CWHL matched the records during downstream processing and ultimately used the ID from the Waterfowl Contaminant Study Sample Collection Metadata 2021-2022, as the overall ID for that bird.*

Analyte: Percent lipid or percent moisture of the waterfowl sample analyzed at Pace Analytical. -OR- Name of polychlorinated dibenzo-*p*-dioxin or furan toxic congener or homolog family.

- **Moisture_Percent:** Percent moisture in the sample.
- **Lipid_Percent:** Percent lipid in the sample.
- **TCDF_2378:** 2,3,7,8-tetrachlorodibenzofuran.
- **TCDF_Total:** Total tetrachlorodibenzofuran.
- **TCDD_2378:** 2,3,7,8-tetrachlorodibenzodioxin.
- **TCDD_Total:** Total tetrachlorodibenzodioxin.
- **PeCDF_12378:** 1,2,3,7,8-pentachlorodibenzofuran.
- **PeCDF_23478:** 2,3,4,7,8-pentachlorodibenzofuran.
- **PeCDF_Total:** Total pentachlorodibenzofuran.
- **PeCDD_12378:** 1,2,3,7,8-pentachlorodibenzodioxin.
- **PeCDD_Total:** Total pentachlorodibenzodioxin.
- **HxCDF_123478:** 1,2,3,4,7,8-hexachlorodibenzofuran.
- **HxCDF_123678:** 1,2,3,6,7,8-hexachlorodibenzofuran.
- **HxCDF_234678:** 2,3,4,6,7,8-hexachlorodibenzofuran.
- **HxCDF_123789:** 1,2,3,7,8,9-hexachlorodibenzofuran.
- **HxCDF_Total:** Total hexachlorodibenzofuran.
- **HxCDD_123478:** 1,2,3,4,7,8-hexachlorodibenzodioxin.
- **HxCDD_123678:** 1,2,3,6,7,8-hexachlorodibenzodioxin.
- **HxCDD_123789:** 1,2,3,7,8,9-hexachlorodibenzodioxin.
- **HxCDD_Total:** Total hexachlorodibenzodioxin.
- **HpCDF_1234678:** 1,2,3,4,6,7,8-heptachlorodibenzofuran.
- **HpCDF_1234789:** 1,2,3,4,7,8,9-heptachlorodibenzofuran.
- **HpCDF_Total:** Total heptachlorodibenzofuran.
- **HpCDD_1234678:** 1,2,3,4,6,7,8-heptachlorodibenzodioxin.
- **HpCDD_Total:** Total heptachlorodibenzodioxin.
- **OCDF:** Octochlorodibenzofuran.
- **OCDD:** Octochlorodibenzodioxin.
- **TEQ:** 2,3,7,8-TCDD Toxic Equivalency (see *Note 2 in the Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022 section*).

Result: Concentration of analyte in ng/kg (see *Note 3 in the Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022 section*) -OR- Percent (for Percent_Lipid and Percent_Moisture) (see *Note 4 in the Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022 section*). *Note: Results correspond to the Analyte column.*

- **(Number):** Concentration in ng/kg.
- **ND:** Not detected.
- **(Cell left blank):** Not reported.

Result_Qualifier: Flag assigned by laboratory professionals to reported concentrations where analyses deviated from standard analytical methods. *Note: Compound flags also exist (see Note 5 in the Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022 section).* *Note: Result qualifiers correspond to the Result column.*

- **J:** Estimated value.
- **I:** Isotope ratio out of specification.
- **B:** Result is less than 10x higher than method blank level.
- **P:** PCDE interference.
- **(Cell left blank):** No laboratory flags assigned to the reported result.

EDL: Estimated detection limit based on signal-to-noise measurements (see *Note 6 in the Waterfowl Muscle Tissue Dioxin and Furan Data from Pace Analytical 2021-2022 section*).

- **(Number):** Concentration of analyte required to produce a signal with a peak height $\geq 2.5x$ the background signal level.
- **(Cell left blank):** Not reported.

Appendix 3. Variable names, type, and formats used for *Waterfowl Muscle Tissue Polychlorinated Biphenyl Data from SGS AXYS 2021-2022*, *Waterfowl Muscle Tissue E1 Organochlorine Pesticide Data from SGS AXYS 2021-2022*, *Waterfowl Muscle Tissue E2 Organochlorine Pesticide Data from SGS AXYS 2021-2022*, and *Waterfowl Muscle Tissue Per- and Polyfluoroalkyl Substance Data from SGS AXYS 2021-2022*. These data contain a data structure that is conventional in toxicology labs, where a single sample is characterized by multiple rows of tests in the spreadsheet.

Information Presented as:

Variable Name: description.

- Format/Accepted Values: Explicit Interpretation.

TagNo: Sample specific record identifier.

- **NA:** Not reported.

LabNo: Sample-specific record identifier assigned by SGS AXYS.

- **(Character string):** A number internal to SGS AXYS.

SPP: Waterfowl species.

- **NA:** Not reported.

Sex: Waterfowl sex.

- **NA:** Not reported.

Weight: Sample weight.

- **NA:** Not reported.

Condition: Sample condition.

- **NA:** Not reported.

Analysis_Date: Date of chemical analysis at SGS AXYS.

- **YYYYMMDD:** Date of analysis, where YYYY represents calendar year, MM represents month, and DD represents day.

Analysis_Time: Time of chemical analysis on a 24-hour basis.

- **HHMM:** Hour of analysis, where HH represents hour (24-hour clock), and MM represents minute.

Sample_Type: Type of sample analyzed.

- **BLANK:** Method blank.
- **DUP:** Duplicate tissue sample.
- **Sample:** Study tissue sample.
- **SPM:** Spiked matrix.

Analyte: Name of chemical analyzed.

- **(Character string):** Conventional name of chemical. *Note: If the analyte is not found here, see Appendix 5 for full key of chemical names and their descriptions. Note: Total PCBs becomes TPCBs in Appendix 5.*
- **% Moisture:** Percentage moisture.
- **% Lipid:** Percentage lipid.

Result: Analytical result for chemical analyzed. *Note: Result corresponds to the Analyte column.*

- **(Number):** Quantity, reported in the unit of the corresponding result unit column.
- **NA:** No result reported.

Detect: Indicator of if the analyte was detected or not detected. *Note: Detect corresponds to the Analyte column.*

- **Y:** Analyte was detected.
- **N:** Analyte was not detected.

Result_Qualifier: Laboratory flag assigned to reported concentrations where analyses deviated from standard analytical methods. *Note: Analytical records may have more than one result qualifier. Note: Result qualifiers correspond to the Result column.*

Specifically for Waterfowl Muscle Tissue E1 Organochlorine Pesticide Data from SGS AXYS 2021-2022 data:

- **B:** Analyte detected in the method blank and concentration is not greater than 10 times the method blank level.
- **D:** Dilution data.
- **J:** Concentration is below the limit of quantification.
- **K:** A peak was detected that did not meet all criteria for positive identification of the target analyte; the reported value is the estimated maximum possible concentration.
- **NQ:** Data not quantified.
- **U:** Target analyte not detected.
- **N:** Analyte recovery in the ongoing precision and recovery laboratory-generated reference sample was not within method/contract control limit.
- **NA:** No laboratory flags assigned to the reported result.

Specifically for Waterfowl Muscle Tissue E2 Organochlorine Pesticide Data from SGS AXYS 2021-2022 data:

- **B:** Analyte detected in the method blank and concentration is not greater than 10 times the method blank level.
- **H:** Estimated value (always applied to endrin in tissue samples).
- **J:** Concentration is below the limit of quantification.
- **Q:** Applicable to dual column ECD data; the analyte was detected on both the DB5 column and the DB17 column, but the two concentrations differ by more than 40%.
- **U:** Target analyte not detected.
- **N:** Analyte recovery in the ongoing precision and recovery laboratory-generated reference sample was not within method/contract control limit.
- **NA:** No laboratory flags assigned to the reported result.

Specifically for Waterfowl Muscle Tissue Per- and Polyfluoroalkyl Substance Data from SGS AXYS 2021-2022 data:

- **B:** Target analyte detected in the laboratory procedural blank sample.
- **J:** Target analyte concentration estimated less than concentration at which test accuracy has been demonstrated (limit of quantification), but greater than the reporting limit.
- **H:** Target analyte concentration estimated.
- **K:** Identifies a target analyte that could not be confirmed by virtue of not satisfying all method required criteria; the reported value was reported as the maximum possible concentration.
- **N:** Percent recovery was above the upper method limits.
- **U:** Target analyte was not detected.

- **NQ:** Data were not quantifiable.
- **NA:** No laboratory flags assigned to the reported result.

Result_Unit: Unit of analytical result.

- **%:** Percent.
- **% recovery:** Percent recovery of analyte in the spiked matrix.
- **ng/g:** Concentration of the analyte expressed in nanograms of analyte per gram of tissue homogenate

LOQ: Limit of Quantification (ng/g).

- **(Number):** Concentration of the target analyte at which quantitative test accuracy has been demonstrated by SGS AXYS.
- **NA:** No LOQ reported.

Reporting_Limit: Analytical reporting limit (ng/g).

- **(Number):** Concentration of the target analyte equivalent to the sensitivity standard or the sample detection limit, whichever was greater, as determined by SGS AXYS.
- **NA:** No reporting limit reported.

SDG: Record identifier of the analytical batch to which a sample belonged.

- **(Character string):** Record identifier of the analytical batch.

Remarks: Notes by professionals at SGS AXYS.

- **NA:** Not reported.

CAS_Number: CAS registry number of the analyte (ACS 2024).

- **(Character string):** The CAS number for the analyte.
- **NA:** Not reported or no CAS registry number exists.

Location: Sample location.

- **NA:** Not reported.

Length: Length of analysis.

- **NA:** Not reported.

Sample_Date:

- **DD-MMM-YY:** Date, where DD corresponds to the day, MMM corresponds to the three-letter abbreviation for the month, and YY represents the last two digits of the calendar year.
- **N/A:** Not reported.

Sample ID: Unique sample record identifier.

- **(Character string):** The unique identifier either carried forward for the bird from the corresponding record in the *Waterfowl Contaminant Study Sample Collection Metadata 2021-2022*, or a new ID specific to SGS AXYS assigned by professionals at SGS AXYS. *Note: If the SGS AXYS ID did not exactly match the ID for the same bird in the Waterfowl Contaminant Study Sample Collection Metadata 2021-2022, then members of the CWHL matched the records during downstream processing and ultimately used the ID from the Waterfowl Contaminant Study Sample Collection Metadata 2021-2022, as the overall ID for that bird.*

Prep: Sample preparation method.

- **NA:** Not reported.

Appendix 4. Variable names, descriptions, and formats used in *Waterfowl Muscle Tissue Total Mercury Data Produced by Hale Creek Field Station 2021-2022*.

Information Presented as:

Variable Name: description.

- Format/Accepted Values: Explicit Interpretation.

LABNO: Unique sample record identifier assigned at Hale Creek Field Station.

- **(Character string):** The unique sample record identifier at Hale Creek.

TAGNO: Sample-specific record identifier assigned by Hale Creek. *See Note 2 in the Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-22 section.*

- **(Character string):** The unique identifier either carried forward for the bird from the corresponding record in the *Waterfowl Contaminant Study Sample Collection Metadata 2021-2022*, or a new ID specific to Hale Creek assigned by professionals at Hale Creek. *Note: If the TAGNO did not exactly match the ID for the same bird in the Waterfowl Contaminant Study Sample Collection Metadata 2021-2022, then members of the CWHL matched the records during downstream processing and ultimately used the ID from the Waterfowl Contaminant Study Sample Collection Metadata 2021-2022, as the overall ID for that bird.*

SPP: Waterfowl species code. *See Note 3 in the Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-22 section.*

- **ABDU:** The sample was from an American black duck.
- **AGWT:** The sample was from an American green-winged teal.
- **CAGO:** The sample was from a Canada goose.
- **MALL:** The sample was from a mallard.
- **WODU:** The sample was from a wood duck.

SDATE: Date when waterfowl was collected.

- **YYYYMMDD:** Date sample collected from field, where YYYY indicates year, MM indicates month, and DD indicates day.
- **(Cell left blank):** Date not reported.

LOCATION: Where waterfowl was collected.

- **(Character string):** Location of harvest, with town listed first, then a dash, then state, where NY indicates New York, NJ indicates New Jersey, PA indicates Pennsylvania, and CT indicates Connecticut.

SEX: Sex of sampled waterfowl. *See Note 4 in the Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-22 section.*

- **M:** The sample was from a male bird.
- **F:** The sample was from a female bird.
- **(Cell left blank):** Sex not reported.

WGTG: Waterfowl weight in g. *See Note 5 in the Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-22 section.*

- **(Number):** Weight of waterfowl carcass.
- **(Cell left blank):** Not reported.

PROGRAM: Program name assigned at Hale Creek.

- **Cornell WF-2021:** Project name.

NOONLY: Number of individuals in a sample (if greater than 1, sample is composite).

- **1:** Each sample represents tissues from a single bird.

Hg: Concentration of total mercury in waterfowl tissue sample in $\mu\text{g/g}$ on a wet weight basis. *See Note 6 in the Waterfowl Muscle Tissue Total Mercury Data from Hale Creek Field Station 2021-22 section.*

- **(Number):** Concentration of total mercury.

Appendix 5. Variable names, type, and formats used for *Waterfowl Contaminant Study Final Processed Data 2021-2022*.

Information Presented as:

Variable Name: description.

- Format/Accepted Values: Explicit Interpretation.

ID: Unique sample record identifier assigned at time of waterfowl harvest.

- **(Character string):** Unique identifier of the bird assigned by the biologist at the time of harvest.
Note: If lab-specific IDs did not exactly match these IDs for the same bird, then members of the CWHL matched the records among the labs during downstream processing and ultimately used this ID as the overall ID for that bird.

Hg_test: Binary identifier indicating whether sample was evaluated for total mercury.

- **Y:** Yes, sample was evaluated for total mercury.
- **N:** No, sample was not evaluated for total mercury.

Dioxin_test: Binary identifier indicating whether sample was evaluated for dioxins and furans.

- **Y:** Yes, sample was evaluated for dioxins and furans.
- **N:** No, sample was not evaluated for dioxins and furans.

PCBOCP_test: Binary identifier indicating if sample was evaluated for polychlorinated biphenyls and organochlorine pesticides.

- **Y:** Yes, sample was evaluated for polychlorinated biphenyls and organochlorine pesticides.
- **N:** No, sample was not evaluated for polychlorinated biphenyls and organochlorine pesticides.

PFAS_test: Binary identifier indicating if sample was evaluated for per- and polyfluoroalkyl substances.

- **Y:** Yes, sample was evaluated for per- and polyfluoroalkyl substances.
- **N:** No, sample was not evaluated for per- and polyfluoroalkyl substances.

species: Waterfowl species code reported by state agency biologists.

- **ABDU:** The bird was an American black duck.
- **AGWT:** The bird was an American green-winged teal.
- **CAGO:** The bird was a Canada goose.
- **MALL:** The bird was a mallard.
- **WODU:** The bird was a wood duck.
- **ABDU/MALL:** The bird was an American black duck / mallard hybrid.

sex: Waterfowl sex reported by state agency biologists based on external characteristics (i.e., coloration, size).

- **M:** The bird was male.
- **F:** The bird was female.
- **Unknown:** The sex of the bird was not reported at the time of harvest and could not be determined post hoc.

state: US state in which waterfowl was harvested.

- **NY:** The bird was killed in New York.
- **NJ:** The bird was killed in New Jersey.
- **PA:** The bird was killed in Pennsylvania.
- **CT:** The bird was killed in Connecticut.

ecoregion: United States Environmental Protection Agency (USEPA) Level III Ecoregion in which waterfowl was harvested (see *Notes 1 and 7 in the Waterfowl Sample Collection Metadata Folder Section*).

- **58:** The bird was killed in Ecoregion 58.
- **59:** The bird was killed in Ecoregion 59.
- **60:** The bird was killed in Ecoregion 60.
- **61/62:** The bird was killed in an area encapsulating both Ecoregions 61 and 62.
- **63/84:** The bird was killed in an area encapsulating both Ecoregions 63 and 84.
- **64:** The bird was killed in Ecoregion 64.
- **67:** The bird was killed in Ecoregion 67.
- **69/70:** The bird was killed in an area encapsulating both Ecoregions 69 and 70.
- **83:** The bird was killed in Ecoregion 83.
- **Unknown:** Ecoregion from which the bird originated was not reported and could not be determined *post hoc*.

sample_group: Randomized sampling scheme group in which waterfowl were harvested (see *Notes 2 and 7 in the Waterfowl Sample Collection Metadata Folder Section*). *Note: Statisticians pre-installed a randomized spatial grid of sample groups overlaying the study region to ensure that the region was adequately sampled. By taking as close to equal number of birds from each geographically random sample group, we aimed to ensure that our overall data was representative of the region of interest [and did not constitute only birds harvested in the most convenient areas]. However, actual outcomes of the number of birds in each sample group was imbalanced among sample groups [see Dayan et al. in preparation for exact details.]*

- **1:** Based on location of harvest, the bird belonged to randomized sample group 1.
- **2:** Based on location of harvest, the bird belonged to randomized sample group 2.
- **3:** Based on location of harvest, the bird belonged to randomized sample group 3.
- **Unknown:** Sample group was not reported and could not be determined *post hoc*.

county: State county in which waterfowl was harvested (see *Note 3 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Character string):** The county where the bird was killed.
- **Unknown:** County where the bird was killed was not reported and could not be determined *post hoc*.

town: Town in which waterfowl was harvested (see *Note 4 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Character string):** The town where the bird was killed.
- **Unknown:** Town where the bird was killed was not reported and could not be determined *post hoc*.

address: Closest known address to where waterfowl was harvested (see *Note 5 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Character string):** The address where the bird was killed.
- **Unknown:** Address where the bird was killed was not reported and could not be determined *post hoc*.

Latitude: Latitude at which waterfowl was harvested (see *Note 6 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Number):** Latitude in decimal degrees where the bird was killed.
- **(Cell left blank):** Latitude where the bird was killed was not reported and could not be determined *post hoc*.

Longitude: Longitude at which waterfowl was harvested (see *Note 6 in the Waterfowl Sample Collection Metadata Folder Section*).

- **(Number):** Longitude in decimal degrees where the bird was killed.
- **(Cell left blank):** Longitude where the bird was killed was not reported and could not be determined *post hoc*.

Harvest_date: Date on which waterfowl was harvested.

- **MM/DD/YYYY:** Date that the bird was killed, where MM indicated the month of kill, DD indicates the day of kill, and YYYY indicated the calendar year of kill.
- **(Cell left blank):** The date that the bird was killed was not reported and could not be determined *post hoc*.

Age: Waterfowl age class reported by biologists based on external characteristics (i.e., coloration, size).

- **Adult:** The bird was an adult.
- **Juvenile:** The bird was a juvenile.
- **Unknown:** Age of the bird was not reported and could not be determined *post hoc*.

Weight_(g): Waterfowl carcass weight in grams reported by state biologists.

- **(Number):** Weight (in grams) of the bird.
- **Unknown:** Weight of the bird was not reported and could not be determined *post hoc*.

Culmen_(mm): Culmen length measured by state biologists using a dial caliper, reported in mm rounded to the nearest tenth. The measurement was taken from the intersection of the feathers and bill to the tip of the bill.

- **(Number):** Length of the culmen (in millimeters) of the bird.
- **Unknown:** Culmen length of the bird was not reported and could not be determined *post hoc*.

Tarsus_(mm): Partial tarsus length measured by state biologists using a dial caliper, reported in mm rounded to the nearest tenth. The measurement was taken from the proximal portion of bone.

- **(Number):** Length of the tarsus (in millimeters) of the bird.
- **Unknown:** Tarsus length of the bird was not reported and could not be determined *post hoc*.

Head_length_(mm): Total head length measured by state biologists using a dial caliper, reported in mm rounded to the nearest tenth.

- **(Number):** Length of the head (in millimeters) of the bird.
- **Unknown:** Head length of the bird was not reported and could not be determined *post hoc*.

Hg: Concentration of total mercury in waterfowl tissue sample in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

TEQ: 2,3,7,8-TCDD Toxic Equivalency in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

TCDF_2378: Concentration of 2,3,7,8-tetrachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

TCDF_Total: Concentration of Total tetrachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

TCDD_2378: Concentration of 2,3,7,8-tetrachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

TCDD_Total: Concentration of Total tetrachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PeCDF_12378: Concentration of 1,2,3,7,8-pentachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PeCDF_23478: Concentration of 2,3,4,7,8-pentachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PeCDF_Total: Concentration of Total pentachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PeCDD_12378: Concentration of 1,2,3,7,8-pentachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PeCDD_Total: Concentration of Total pentachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDF_123478: Concentration of 1,2,3,4,7,8-hexachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDF_123678: Concentration of 1,2,3,6,7,8-hexachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDF_234678: Concentration of 2,3,4,6,7,8-hexachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDF_123789: Concentration of 1,2,3,7,8,9-hexachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDF_Total: Concentration of Total hexachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDD_123478: Concentration of 1,2,3,4,7,8-hexachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDD_123678: Concentration of 1,2,3,6,7,8-hexachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDD_123789: Concentration of 1,2,3,7,8,9-hexachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HxCDD_Total: Concentration of Total hexachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HpCDF_1234678: Concentration of 1,2,3,4,6,7,8-heptachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HpCDF_1234789: Concentration of 1,2,3,4,7,8,9-heptachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HpCDF_Total: Concentration of Total heptachlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HpCDD_1234678: Concentration of 1,2,3,4,6,7,8-heptachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HpCDD_Total: Concentration of Total heptachlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

OCDF: Concentration of Octochlorodibenzofuran in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

OCDD: Concentration of Octochlorodibenzodioxin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

TPCBs: Concentration of Σ PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

10PCB209: Concentration of deca-chlorinated PCB 209 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

1PCB1: Concentration of mono-chlorinated PCB 1 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

1PCB2: Concentration of mono-chlorinated PCB 2 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

1PCB3: Concentration of mono-chlorinated PCB 3 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB11: Concentration of di-chlorinated PCB 11 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB12+13: Concentration of di-chlorinated PCBs 12 and 13 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB14: Concentration of di-chlorinated PCB 14 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB15: Concentration of di-chlorinated PCB 15 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB4+10: Concentration of di-chlorinated PCBs 4 and 10 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB5+8: Concentration of di-chlorinated PCBs 5 and 8 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB6: Concentration of di-chlorinated PCB 6 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2PCB7+9: Concentration of di-chlorinated PCBs 7 and 9 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

3PCB16+32: Concentration of tri-chlorinated PCBs 16 and 32 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB17: Concentration of tri-chlorinated PCB 17 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB18: Concentration of tri-chlorinated PCB 18 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB19: Concentration of tri-chlorinated PCB 19 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB20+21+33: Concentration of tri-chlorinated PCBs 20, 21, and 33 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB22: Concentration of tri-chlorinated PCB 22 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB23+34: Concentration of tri-chlorinated PCBs 23 and 34 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB24+27: Concentration of tri-chlorinated PCBs 24 and 27 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB25: Concentration of tri-chlorinated PCB 25 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

3PCB26: Concentration of tri-chlorinated PCB 26 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB28: Concentration of tri-chlorinated PCB 28 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB29: Concentration of tri-chlorinated PCB 29 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB30: Concentration of tri-chlorinated PCB 30 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB31: Concentration of tri-chlorinated PCB 31 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB35: Concentration of tri-chlorinated PCB 35 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB36: Concentration of tri-chlorinated PCB 36 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB37: Concentration of tri-chlorinated PCB 37 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB38: Concentration of tri-chlorinated PCB 38 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3PCB39: Concentration of tri-chlorinated PCB 39 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.

- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB40: Concentration of tetra-chlorinated PCB 40 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB41+64+68+71: Concentration of tetra-chlorinated PCBs 41, 64, 68, and 71 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB42+59: Concentration of tetra-chlorinated PCBs 42 and 59 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB43+49: Concentration of tetra-chlorinated PCBs 43 and 49 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB44: Concentration of tetra-chlorinated PCB 44 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB45: Concentration of tetra-chlorinated PCB 45 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB46: Concentration of tetra-chlorinated PCB 46 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB47+48+75: Concentration of tetra-chlorinated PCBs 47, 48, and 75 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB50: Concentration of tetra-chlorinated PCB 50 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

4PCB51: Concentration of tetra-chlorinated PCB 51 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB52+73: Concentration of tetra-chlorinated PCBs 52 and 73 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB53: Concentration of tetra-chlorinated PCB 53 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB54: Concentration of tetra-chlorinated PCB 54 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB55: Concentration of tetra-chlorinated PCB 55 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB56+60: Concentration of tetra-chlorinated PCBs 56 and 60 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB57: Concentration of tetra-chlorinated PCB 57 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB58: Concentration of tetra-chlorinated PCB 58 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB61+74: Concentration of tetra-chlorinated PCBs 61 and 74 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB62+65: Concentration of tetra-chlorinated PCBs 62 and 65 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB63: Concentration of tetra-chlorinated PCB 63 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB66+80: Concentration of tetra-chlorinated PCBs 66 and 80 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB67: Concentration of tetra-chlorinated PCB 67 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB69: Concentration of tetra-chlorinated PCB 69 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB70+76: Concentration of tetra-chlorinated PCBs 70 and 76 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB72: Concentration of tetra-chlorinated PCB 72 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB77: Concentration of tetra-chlorinated PCB 77 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB78: Concentration of tetra-chlorinated PCB 78 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB79: Concentration of tetra-chlorinated PCB 79 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4PCB81: Concentration of tetra-chlorinated PCB 81 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB100: Concentration of penta-chlorinated PCB 100 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB103: Concentration of penta-chlorinated PCB 103 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB104: Concentration of penta-chlorinated PCB 104 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB105+127: Concentration of penta-chlorinated PCBs 105 and 127 in ng/g on a wet weight basis.
This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB106+118: Concentration of penta-chlorinated PCBs 106 and 118 in ng/g on a wet weight basis.
This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB107+109: Concentration of penta-chlorinated PCBs 107 and 109 in ng/g on a wet weight basis.
This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB110: Concentration of penta-chlorinated PCB 110 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB111+117: Concentration of penta-chlorinated PCBs 111 and 117 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB112: Concentration of penta-chlorinated PCB 112 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB113: Concentration of penta-chlorinated PCB 113 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB114: Concentration of penta-chlorinated PCB 114 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB119: Concentration of penta-chlorinated PCB 119 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB122: Concentration of penta-chlorinated PCB 122 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB123: Concentration of penta-chlorinated PCB 123 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB124: Concentration of penta-chlorinated PCB 124 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB125: Concentration of penta-chlorinated PCB 125 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB126: Concentration of penta-chlorinated PCB 126 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

5PCB82: Concentration of penta-chlorinated PCB 82 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB83+108: Concentration of penta-chlorinated PCBs 83 and 108 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB84: Concentration of penta-chlorinated PCB 84 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB85+120: Concentration of penta-chlorinated PCBs 85 and 120 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB86+97: Concentration of penta-chlorinated PCBs 86 and 97 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB87+115+116: Concentration of penta-chlorinated PCBs 87, 115, and 116 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB88+121: Concentration of penta-chlorinated PCBs 88 and 121 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB89+90+101: Concentration of penta-chlorinated PCBs 89, 90, and 101 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB91: Concentration of penta-chlorinated PCB 91 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB92: Concentration of penta-chlorinated PCB 92 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB93+95: Concentration of penta-chlorinated PCBs 93 and 95 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB94: Concentration of penta-chlorinated PCB 94 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB96: Concentration of penta-chlorinated PCB 96 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB98+102: Concentration of penta-chlorinated PCBs 98 and 102 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5PCB99: Concentration of penta-chlorinated PCB 99 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB128: Concentration of hexa-chlorinated PCB 128 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB129: Concentration of hexa-chlorinated PCB 129 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB130: Concentration of hexa-chlorinated PCB 130 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

6PCB131+142: Concentration of hexa-chlorinated PCBs 131 and 142 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB132+168: Concentration of hexa-chlorinated PCBs 132 and 168 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB133: Concentration of hexa-chlorinated PCB 133 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB134+143: Concentration of hexa-chlorinated PCBs 134 and 143 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB135+144: Concentration of hexa-chlorinated PCBs 135 and 144 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB136: Concentration of hexa-chlorinated PCB 136 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB137: Concentration of hexa-chlorinated PCB 137 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB138+163+164: Concentration of hexa-chlorinated PCBs 138, 163, and 164 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB139+149: Concentration of hexa-chlorinated PCBs 139 and 149 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB140: Concentration of hexa-chlorinated PCB 140 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB141: Concentration of hexa-chlorinated PCB 141 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB145: Concentration of hexa-chlorinated PCB 145 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB146: Concentration of hexa-chlorinated PCB 46 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB147: Concentration of hexa-chlorinated PCB 147 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB148: Concentration of hexa-chlorinated PCB 148 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB150: Concentration of hexa-chlorinated PCB 150 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB151: Concentration of hexa-chlorinated PCB 151 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB152: Concentration of hexa-chlorinated PCB 152 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB153: Concentration of hexa-chlorinated PCB 153 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB154: Concentration of hexa-chlorinated PCB 154 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB155: Concentration of hexa-chlorinated PCB 155 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB156: Concentration of hexa-chlorinated PCB 156 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB157: Concentration of hexa-chlorinated PCB 157 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB158+160: Concentration of hexa-chlorinated PCBs 158 and 160 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB159: Concentration of hexa-chlorinated PCB 159 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB161: Concentration of hexa-chlorinated PCB 161 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB162: Concentration of hexa-chlorinated PCB 162 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB165: Concentration of hexa-chlorinated PCB 165 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

6PCB166: Concentration of hexa-chlorinated PCB 166 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB167: Concentration of hexa-chlorinated PCB 167 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6PCB169: Concentration of hexa-chlorinated PCB 169 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB170+190: Concentration of hepta-chlorinated PCBs 170 and 190 in ng/g on a wet weight basis.

This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB171: Concentration of hepta-chlorinated PCB 171 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB172+192: Concentration of hepta-chlorinated PCBs 172 and 192 in ng/g on a wet weight basis.

This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB173: Concentration of hepta-chlorinated PCB 173 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB174+181: Concentration of hepta-chlorinated PCBs 174 and 181 in ng/g on a wet weight basis.

This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB175: Concentration of hepta-chlorinated PCB 175 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB176: Concentration of hepta-chlorinated PCB 176 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB177: Concentration of hepta-chlorinated PCB 177 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB178: Concentration of hepta-chlorinated PCB 178 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB179: Concentration of hepta-chlorinated PCB 179 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB180: Concentration of hepta-chlorinated PCB 180 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB182+187: Concentration of hepta-chlorinated PCBs 182 and 187 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB183: Concentration of hepta-chlorinated PCB 183 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB184: Concentration of hepta-chlorinated PCB 184 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB185: Concentration of hepta-chlorinated PCB 185 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB186: Concentration of hepta-chlorinated PCB 186 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.

- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB188: Concentration of hepta-chlorinated PCB 188 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB189: Concentration of hepta-chlorinated PCB 189 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB191: Concentration of hepta-chlorinated PCB 191 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

7PCB193: Concentration of hepta-chlorinated PCB 193 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB194: Concentration of octa-chlorinated PCB 194 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB195: Concentration of octa-chlorinated PCB 195 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB196+203: Concentration of octa-chlorinated PCBs 196 and 203 in ng/g on a wet weight basis. This represents a coeluting peak.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB197: Concentration of octa-chlorinated PCB 197 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB198: Concentration of octa-chlorinated PCB 198 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB199: Concentration of octa-chlorinated PCB 199 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB200: Concentration of octa-chlorinated PCB 200 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB201: Concentration of octa-chlorinated PCB 201 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB202: Concentration of octa-chlorinated PCB 202 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB204: Concentration of octa-chlorinated PCB 204 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8PCB205: Concentration of octa-chlorinated PCB 205 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

9PCB206: Concentration of nona-chlorinated PCB 206 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

9PCB207: Concentration of nona-chlorinated PCB 207 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

9PCB208: Concentration of nona-chlorinated PCB 208 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aroclor 1016: Concentration of PCBs as equivalents of Aroclor 1016 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aroclor 1221: Concentration of PCBs as equivalents of Aroclor 1221 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aroclor 1232: Concentration of PCBs as equivalents of Aroclor 1232 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aroclor 1242: Concentration of PCBs as equivalents of Aroclor 1242 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aroclor 1248: Concentration of PCBs as equivalents of Aroclor 1248 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aroclor 1254: Concentration of PCBs as equivalents of Aroclor 1254 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aroclor 1260: Concentration of PCBs as equivalents of Aroclor 1260 in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

DecaCB: Concentration of deca-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total DiCB: Concentration of di-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total HeptaCB: Concentration of hepta-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total HexaCB: Concentration of hexa-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

Total MonoCB: Concentration of mono-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total NonaCB: Concentration of nona-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total OctaCB: Concentration of octa-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total PentaCB: Concentration of penta-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total TetraCB: Concentration of tetra-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Total TriCB: Concentration of tri-chlorinated PCBs in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2,4'-DDD: Concentration of 2,4'-DDD in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2,4'-DDE: Concentration of 2,4'-DDE in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

2,4'-DDT: Concentration of 2,4'-DDT in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4,4'-DDD: Concentration of 4,4'-DDD in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.

- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4,4'-DDE: Concentration of 4,4'-DDE in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4,4'-DDT: Concentration of 4,4'-DDT in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Aldrin: Concentration of aldrin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Chlordane, alpha (cis): Concentration of α -chlordane in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Chlordane, gamma (trans): Concentration of γ -chlordane in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Chlordane, oxy-: Concentration of oxy-chlordane in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HCH, alpha: Concentration of α -hexachlorocyclohexane in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HCH, beta: Concentration of β -hexachlorocyclohexane in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HCH, gamma: Concentration of γ -hexachlorocyclohexane in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Heptachlor: Concentration of heptachlor in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Hexachlorobenzene: Concentration of hexachlorobenzene in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Mirex: Concentration of mirex in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Nonachlor, cis-: Concentration of cis-nonachlor in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Nonachlor, trans-: Concentration of trans-nonachlor in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Dieldrin: Concentration of dieldrin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Endosulphan Sulphate: Concentration of endosulphan sulphate in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Endrin: Concentration of endrin in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Endrin Aldehyde: Concentration of endrin aldehyde in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Endrin Ketone: Concentration of endrin ketone in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HCH, delta: Concentration of δ -hexachlorocyclohexane in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Heptachlor Epoxide: Concentration of heptachlor epoxide in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

Methoxychlor: Concentration of methoxychlor in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

alpha-Endosulphan: Concentration of α -endosulphan in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

beta-Endosulphan: Concentration of β -endosulphan in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

11Cl-PF3OUdS: Concentration of 2-(8-chloro-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-hexadecafluorooctoxy)-1,1,2,2-tetrafluoroethanesulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

3:3 FTCA: Concentration of 3:3 fluorotelomer carboxylic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

4:2 FTS: Concentration of 4:2 fluorotelomer sulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

5:3 FTCA: Concentration of 5:3 fluorotelomer carboxylic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

6:2 FTS: Concentration of 6:2 fluorotelomer sulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.

- **(Cell left blank):** Analyte was not evaluated.

7:3 FTCA: Concentration of 7:3 fluorotelomer carboxylic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

8:2 FTS: Concentration of 8:2 fluorotelomer sulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

9CI-PF3ONS: Concentration of 2-(6-chloro-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexoxy)-1,1,2,2-tetrafluoroethanesulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

ADONA: Concentration of 4,8-Dioxa-3H-perfluorononanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

EtFOSAA: Concentration of 2-(N-Ethyl-perfluorooctane sulfonamido) acetic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

HFPO-DA: Concentration of Hexafluoropropylene Oxide Dimer Acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

MeFOSAA: Concentration of 2-(N-Methyl-perfluorooctane sulfonamido) acetic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

N-EtFOSA: Concentration of N-ethyl perfluorooctane sulfonamide in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

N-EtFOSE: Concentration of N-ethyl perfluorooctane sulfonamidoethanol in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

N-MeFOSA: Concentration of N-methyl perfluorooctane sulfonamide in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

N-MeFOSE: Concentration of N-methyl perfluorooctane sulfonamidoethanol in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

NFDHA: Concentration of nonafluoro-3,6-dioxaheptanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFBA: Concentration of perfluorobutanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFBS: Concentration of perfluorobutane sulfonate in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFDA: Concentration of perfluorodecanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFDS: Concentration of perfluorodecane sulfonate in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFDoA: Concentration of perfluorododecanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFDoS: Concentration of perfluorododecane sulfonate in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFEESA: Concentration of perfluoro(2-ethoxyethane) sulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.

- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFHpA: Concentration of perfluoroheptanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFHpS: Concentration of perfluoroheptane sulfonate in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFHxA: Concentration of perfluorohexanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFHxS: Concentration of perfluorohexane sulfonate in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFMBA: Concentration of perfluoro(4-methoxybutanoic) acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFMPA: Concentration of perfluoro-3-methoxypropanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFNA: Concentration of perfluorononanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFNS: Concentration of perfluorononane sulfonate in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFOA: Concentration of perfluorooctanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFOS: Concentration of perfluorooctane sulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFOSA: Concentration of perfluorooctanesulfonamide in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFPeA: Concentration of perfluoropentanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFPeS: Concentration of perfluoropentane sulfonic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFTeDA: Concentration of perfluorotetradecanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFTrDA: Concentration of perfluorotridecanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.

PFUnA: Concentration of perfluoroundecanoic acid in ng/g on a wet weight basis.

- **(Number > 0):** Reported concentration in ng/g.
- **0:** Analyte was evaluated but not detected.
- **(Cell left blank):** Analyte was not evaluated.