

Interlaboratory Comparison on Dioxins in Food 2008



Ninth Round of an International Study

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Norwegian Institute of Public Health

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Summary

In 2008, the ninth round of the Interlaboratory Comparison on Dioxins in Food was conducted on the determination of the 2,3,7,8-chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) as well as dioxin-like non-ortho and mono-ortho chlorinated biphenyls (PCBs) in three different food items. In addition laboratories could voluntarily determine and report six Indicator PCBs, polybrominated diphenyl ethers (PBDEs) and hexabromocyclododecane (HBCD). The objectives of this interlaboratory comparison study were a) to offer a quality assurance instrument for the participating laboratories, b) to assess the between laboratory reproducibility and c) to assess the readiness of expert laboratories world-wide to determine levels of chlorinated and brominated persistent organic pollutants in regular foodstuffs.

The 2008 study was performed on sample homogenates of cream, eel and deer meat. In addition, six standard solutions were provided containing known concentrations of a) PCDDs/PCDFs, b) non-ortho PCBs, c) mono-ortho PCBs, d) PBDEs, e) Indicator PCBs and f) α -HBCD. The testing materials were sent to 107 laboratories in January 2008, and results were returned from 102 laboratories in 33 different countries by the deadline in April. Most laboratories analyzed all the three food items. A draft report was made available on the web in August and was discussed among the participants at the Waters Users' Meeting during the DIOXIN2008 Symposium in Birmingham, UK.

This report presents the reported results for: all seventeen 2,3,7,8-substituted PCDDs/PCDFs, the non-ortho substituted PCBs #77, 81, 126 and 169 and the eight mono-ortho substituted PCBs #105, 114, 118, 123, 156, 157, 167, 189 in the three food items on a fresh weight and lipid weight basis. In addition, the results for eight PBDE congeners BDE #28, 47, 99, 100, 153, 154, 183 and 209, six Indicator PCBs #28, 52, 101, 138, 153 and 180, and total HBCD as well as the α -, β - and γ -isomers were reported from those laboratories that voluntarily determined their concentrations. Non-detected congeners were assigned a concentration corresponding to the reported detection limit except for PBDEs, Indicator PCBs and HBCD where non-detects were removed from the data set. The consensus concentration (assigned value) for each analyte in the three food samples was determined as follows: The median of all reported concentrations for each analyte was calculated. All values above two times the median were removed from the calculation. The consensus median and consensus

mean plus standard deviation (SD) were calculated from the remaining data. Toxic equivalents (TEQs) were calculated from the consensus values of individual congeners using the toxic equivalency factors derived by WHO in 1998 and 2006. Z-scores for PCDD/PCDF TEQs were calculated for each laboratory using $\pm 20\%$ of the consensus TEQs as a value for target standard deviation (σ). Further, Z-scores were calculated for the non-ortho PCB TEQ, the mono-ortho PCB TEQ, the total TEQ, the sum of six Indicator PCBs, the sum of eight PBDEs, total HBCD, and the three isomers of HBCD and for each single congener in all three matrices.

The consensus values for the standard solutions were calculated as mentioned above except that values outside $\pm 50\%$ of the median of all values were removed prior to the final calculation of the consensus median and mean. The consensus values for the lipid content were calculated by first excluding results deviating more than two SD from the mean of all values and then re-calculating the median, mean and SD.

For the determination of total TEQs, Z-scores within ± 1 were obtained by 46-62% of the laboratories. The majority of the laboratories (61-77%) reported results for total TEQ with a trueness of $\pm 40\%$ for all food samples (Z-score ± 2). The relative standard deviation (RSD) calculated for the total TEQ after removal of outliers is quite low (12-18%). It is therefore concluded that the performance of laboratories world-wide in determining dioxin-like compounds is generally good for the food samples included in this study.

Between 58-64 laboratories reported results for the six Indicator PCBs, 34-40 laboratories reported concentrations for the seven tetra- to hepta-BDEs and 26-28 laboratories reported concentrations for BDE-209. The concentrations of the sum of seven PBDEs ranged from 22 pg/g fresh weight in deer meat to 24 172 pg/g fresh weight in eel. The RSD for PBDE concentrations on fresh weight basis was on average 57, 23 and 56% for cream, eel and deer meat respectively. The consensus concentrations for BDE-209 were 50, 18 and 84 pg/g fresh weight in cream, eel and deer meat respectively. The corresponding RSD on fresh weight basis was 62, 85 and 63%. The consensus concentrations calculated for HBCD are just indicative values as few laboratories reported these congeners. The sum of concentrations for six Indicator PCBs ranged from 0.22 ng/g fresh weight in deer meat to 650 ng/g fresh weight in eel. The average RSDs were 57, 35 and 34% for cream, eel and deer meat respectively.

Introduction

In order to ensure consumer protection and reduce human exposure to dioxins and dioxin-like PCBs through food consumption, many countries request frequent monitoring of the presence of these toxic pollutants in food and feed. There is therefore a large demand for chemical laboratories that are able to determine these contaminants at low levels in food and feed. It is usually required by the authorities that laboratories performing such measurements are accredited according to ISO standards and prove their competence by successful participation in interlaboratory studies.

This study is the ninth round of a world-wide interlaboratory comparison study on dioxin-like compounds in food organized by the Department of Analytical Chemistry, Division of Environmental Medicine, Norwegian Institute of Public Health, Oslo, Norway.

The exercise took place from January 2008, when the samples were shipped to the laboratories for analysis, to the beginning of April 2008, when the last reports on the results were received. A draft report was made available to the participants on the web ([http://](http://www.fhi.no)

www.fhi.no) in August and was discussed during the Waters Users' Meeting at the DIOXIN2008 Symposium in Birmingham, England.

The main objective of this exercise was to assess the between laboratory reproducibility of dioxin-like compounds analyses in frequently consumed foods and provide a QA/QC instrument for each participating laboratory to contribute to its proficiency. Participants were also asked to voluntarily determine the concentrations of eight PBDEs, six Indicator PCBs and HBCD in the food samples in order to assess the readiness of laboratories to analyze these persistent organic pollutants.

All of the participants from previous rounds of this series of "Interlaboratory Comparisons on Dioxins in Food" were invited to participate. In addition, several other laboratories announced their participation. There was no limit to the total number of participating laboratories. The 102 laboratories that submitted results, and thereby contributed to the study results, are presented in Table 1.

Table 1. Participants that reported results in the ninth round of Interlaboratory Comparison on Dioxins in Food 2008

<p>Agenzia Regionale Protezione Ambiente del Piemonte Torino, Italy</p>	<p>Chemisches und Veterinäruntersuchungsamt (CVUA) Freiburg, Germany</p>
<p>AgriParadigma s.r.l Ravenna, Italy</p>	<p>Consorzio Interuniversitario Nazionale la Chimica per l'Ambiente Marghera, Italy</p>
<p>ALcontrol AB Linköping, Sweden</p>	<p>Danish Veterinary and Food Administration Ringsted, Denmark</p>
<p>ALS Czech Republic, s.r.o. Pardubice, Czech Republic</p>	<p>Department of Environmental and Occupational Health Tainan, Taiwan, ROC</p>
<p>ALS Laboratory Group Edmonton, Alberta, Canada</p>	<p>Department of Instrumental Analysis and Environmental Chemistry Madrid, Spain</p>
<p>Analytical Perspectives Wilmington, North Carolina, USA</p>	<p>Dioxin Analysis Unit Sydney, Australia</p>
<p>AsureQuality Limited Wellington, New Zealand</p>	<p>Eco-Research Bolzano, Italy</p>
<p>Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit Oberschleissheim, Germany</p>	<p>Environmental Analysis Laboratory Taoyuan County, Taiwan, ROC</p>
<p>Bayerisches Landesamt für Umwelt Augsburg, Germany</p>	<p>eurofins ergo Forschungsgesellschaft mbH Hamburg, Germany</p>
<p>Calgary Laboratory Calgary, Canada</p>	<p>FDA, Arkansas Regional Lab, Dioxin Group Jefferson, Arkansas, USA</p>
<p>CARSO Lyon, France</p>	<p>Federaal Laboratorium voor de Voedselveiligheid Tervuren, Belgium</p>
<p>Central Laboratory of Residue Analysis of Pesticides and Heavy Metals in Food Giza, Egypt</p>	<p>Federal Environment Agency, Laboratory for Water Analysis Berlin, Germany</p>
<p>Central Agricultural Office (CAO), Food and Feed Safety Directorate (FFSD) Budapest, Hungary</p>	<p>Federal Research Centre for Nutrition and Food (BfEL) Kulmbach, Germany</p>
<p>Central Science Laboratory York, UK</p>	<p>Food and Consumer Products safety Authority Zutphen, The Netherlands</p>
<p>Centro Nacional Alimentación Madrid, Spain</p>	<p>FOOD GmbH Analytik Jena, Germany</p>
<p>Chelab s.r.l. Resana, Italy</p>	<p>Food Research Division Ottawa, Canada</p>
<p>Chemisches Landes- und Staatliches Veterinäruntersuchungsamt Münster Münster, Germany</p>	<p>GfA mbH Hamburg, Germany</p>
<p>Government Laboratory, The Hong Kong SAR Hong Kong, China</p>	<p>Landesuntersuchungsamt Speyer, Germany</p>

Hazard Substance Analysis Team
Busan, Republic of Korea

Hong Kong Baptist University/Dioxin Analysis Laboratory
Kowloon, Hong Kong

Hong Kong Government Laboratory
Hong Kong, Hong Kong

Institut für chemische und mikrobiologische Analytik UEG GmbH
Wetzlar, Germany

Institut Pasteur de Lille
Lille, France

Institut Quimic de Sarria - Environmental Laboratory
Barcelona, Spain

Institute of Aquaculture, University of Stirling
Stirling, Scotland, UK

Institute of Public Health
Ostrava, Czech Republic

Instituto Nacional De Engenharia, Tecnologia E Inovação
Lisboa, Portugal

Istituto Zooprofilattico Sperimentale Dell'Abruzzo E Del Molise "G. Caporale"
Teramo, Italy

Japan Food Research Laboratories
Tokyo, Japan

Korea Food And Administration
Seoul, Republic Of Korea

LABERCA
Nantes, France

Laboratori de Dioxines, Dept. de Ecotecnologies, IIQAB-CSIC
Barcelona, Spain

Laboratory of Vendee
La Roche sur yon, France

Landesamt für Umweltschutz Sachsen-Anhalt
Halle, Germany

NILU
Kjeller, Norway

Norwegian Institute of Public Health
Oslo, Norway

Landwirtschaftliche Untersuchungs- und Forschungsanstalt Speyer
Speyer, Germany

Lufa Rostock
Rostock, Germany

Marchwood Scientific Services
Southampton, UK

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Münster, Germany

Maxxam Analytics, Inc.
Burlington, Ontario, Canada

MicroPolluants Technologie
Thionville, France

Ministry of Agriculture
Giza, EGYPT

Ankara Provincial Control Laboratory
Ankara, Turkey

Nab Labs Oy
Espoo, Finland

National Food Institute,
Søborg, Denmark

National institute of nutrition and food safety
Beijing, China

National Public Health Institute
Kuopio, Finland

National Tsing Hua University/ GMLab Department of Chemistry
Hsinchu, Taiwan

NCSR "Demokritos"
Athens, Greece

Niedersächsisches Landesamt für Verbraucherschutz und Lebensmittelsicherheit
Oldenburg, Germany

NIFES
Bergen, Norway

SunDream Environmental Technology Corp
Taichung City, Taiwan, ROC

Super Micro Mass Research and Technology Center, Cheng-Shiu University
Koahsiung, Taiwan, ROC

<p>Oekometric GmbH Bayreuth, Germany</p>	<p>Swedish National Food Administration Uppsala, Sweden</p>
<p>Pacific Rim Laboratories Inc. Surrey, British Columbia, CANADA</p>	<p>Swiss Federal Institute for Materials Testing and Research (Empa) Dübendorf, Switzerland</p>
<p>Qlip N.V. Leusden, The Netherlands</p>	<p>Test America West Sacramento West Sacramento, California, USA</p>
<p>R&C LAB S.r.l. Altavilla Vicentina, Vicenza, Italy</p>	<p>TLR international laboratories Rotterdam, The Netherlands</p>
<p>Research and Productivity Council (RPC) Fredericton, Canada</p>	<p>Toxicological Chemistry Unit Rome, ITALY</p>
<p>RIKILT Wageningen, The Netherlands</p>	<p>TÜV SÜD Industrie Service GmbH Donzdorf, Germany</p>
<p>Safety and Environmental Assurance Centre Beds, UK</p>	<p>U. S. Environmental Protection Agency, Environmental Chemistry Laboratory Stennis Space Center, USA</p>
<p>Scientific Analysis Laboratories Manchester, UK</p>	<p>Umeå University Umeå, Sweden</p>
<p>Scientific Institute of Public Health Brussels, Belgium</p>	<p>Umweltbundesamt GmbH Wien, Austria</p>
<p>Servizos de Apoio á Investigación Coruña, Spain</p>	<p>University of Liege/CART Liege, Belgium</p>
<p>SGS Belgium NV Antwerpen, Belgium</p>	<p>USDA ARS Biosciences Research Laboratory Fargo, USA</p>
<p>SGS Institut Fresenius Bayreuth, Germany</p>	<p>VITO Mol, Belgium</p>
<p>Slovak Medical University Bratislava, Slovak Republic</p>	<p>Wellington Laboratories Inc Guelph, Ontario, Canada</p>
<p>State Laboratory County Kildare, Ireland</p>	<p>WESSLING Laboratorien GmbH Altenberge, Germany</p>
<p>State veterinary and food Institute Kosice, Slovakia</p>	<p>Zavod za zdravstveno varstvo / Institut za varstvo okolja Maribor, Slovenia</p>

Design and practical implementation

Study design and reporting of results

As in the previous rounds of this interlaboratory comparison studies, the test material chosen represented naturally contaminated food samples. The analytes to be determined by each participating laboratory were all seventeen 2,3,7,8-substituted PCDDs/PCDFs, the four non-ortho substituted PCBs #77, 81, 126 and 169 and the eight mono-ortho substituted PCBs #105, 114, 118, 123, 156, 157, 167 and 189. In addition, laboratories were asked to determine on a voluntary basis eight PBDEs #28, 47, 99, 100, 153, 154, 183 and 209, six Indicator PCB congeners PCB #28, 52, 101, 138, 153 and 180, total HBCD and its three isomers (α -, β -, γ -HBCD). The six PCB congeners belong together with the mono-ortho PCB #118 to the selection of PCBs commonly referred to as ICES-7.

The analysis should be performed using the laboratories own methods for sample preparation and instrumental analysis, their own standards and quantification procedures, and their own method for lipid determination.

It was recommended that laboratories determine as many as possible of the 2,3,7,8-substituted PCDDs/PCDFs, dioxin-like PCBs, PBDEs, Indicator PCBs and HBCD. The report was to include the determined lipid percent for the test samples. Also the actual sample and lipid amount (g) for each determination should be reported. For each sample, laboratories were to report the found concentration on fresh weight basis for each congener which was detected (e.g. $S/N \geq 3$) as well as the level of determination (LOD, e.g., $S/N = 3$). Non-detected congeners (e.g. $S/N < 3$) were to be marked "ND" in the comments column of the Report form.

In addition, six standard solutions containing known concentrations of a) seventeen 2,3,7,8-substituted PCDDs/PCDFs, b) four non-ortho PCBs, c) eight mono-ortho PCBs, d) eight PBDEs, e) six Indicator PCBs and f) α -HBCD were to be analyzed using the laboratory's own quantification standards and methods. The results were reported on separate forms.

The test materials consisted of cream, eel and deer meat. The laboratories could choose to analyze one, two or all three food samples.

Each participating laboratory was given a specific code by the co-coordinators. In the present report, the participants are presented in the tables and figures by

their laboratory codes. Participants had access to their own code only and laboratory codes were not revealed to third parties.

On receipt by the co-coordinators, the raw data from the laboratories were entered into a database. The draft final report was generated and made available to all participants on the web in August 2008. The draft of the final report was discussed at the Waters users' meeting at DIOXIN2008 in August in Birmingham, England.

Collection, preparation, and distribution of samples

Samples shipped to the participants comprised one to three of the following:

- Cream: Obtained from local store in Norway (50 g)
- From Norway (125 g)
- Eel: Contaminated eel from The Netherlands (50 g)

The test materials consisted of three natural products not fortified with standards. The cream was purchased from a local store in Oslo. The contaminated eel were provided by Dr. Rainer Malisch, CVUA, Freiburg, Germany. Deer meat was obtained from hunters in Western Norway.

Homogenization of the eel and deer meat was performed by repeatedly grinding portions of the food item in a grinder and homogenizing these portions in a mixer. The homogeneity of these materials was tested using an approach developed at NIPH. The rationale for and description of the test method is given in appendix E. Cream from 1 liter containers obtained from a local store in Norway was mixed and was heated to 40°C and subsequently subdivided. Sub-samples of at least 50g of cream (C), 125g of deer meat (D) and 50g of eel (E) were placed into carefully cleaned screw-cap glass bottles. All samples were stored at -20 °C until shipment. The frozen samples were shipped to the participating laboratories marked as test material C, D and E.

Statistical analysis

Based on experiences from previous rounds, we have chosen the following approach for the calcula-

tion of the consensus concentrations for each of the congeners:

For PCDDs/PCDFs and dioxin-like PCBs congener-by-congener medians were calculated from the food sample data of all reporting laboratories using the detection limit as concentration for non-detected congeners (upperbound concentration). For PBDEs, Indicator PCBs and HBCD, non-detected congeners were removed from the data set prior to consensus calculation. Outliers were defined as those values above two times the median of all values and were removed from the data set. The consensus values were defined as the median of the remaining data for each congener. In addition, the consensus mean and SD were calculated from this data set for each congener. Those congener data which had been removed prior to consensus calculation are marked in the tables presenting the individual results.

For the standard solutions, outliers were defined as those values outside $\pm 50\%$ of the median of all reported values. Consensus median, mean and SD were calculated from the remaining data. The consensus of the lipid content was calculated as the mean after removal of values outside $\pm 2SD$.

TEQs were calculated from the consensus values for PCDDs/PCDFs, non-ortho PCBs, and mono-ortho PCBs, using the toxic equivalency factors derived by WHO in 1998 and 2006. As the detection limit was used for the concentration of non-detects, these TEQs represent upper bound concentrations.

Z-scores for PCDD/PCDF TEQ as well as for the non-ortho PCB TEQ, the mono-ortho PCB TEQ, the total TEQ, the sum of six Indicator PCBs, the sum of eight PBDEs, total HBCD and for each congener were calculated for each laboratory according to the following equation:

$$z = (x - X)/\sigma$$

Where x = reported value; X = consensus value (assigned value); σ = target value for standard deviation. A σ of 20% of the consensus was used, i.e. Z-scores between +1 and -1 reflect a deviation of $\pm 20\%$ from the consensus value.

The final report and certificate

The draft of the final report was prepared by the co-coordinators and published on the web in August 2008. The draft was discussed at the Waters Users' Meeting at the DIOXIN2008 Symposium in August in Birmingham, England.

A certificate, stating the participant's code, will be sent to each participant contributing to the results together with the printed report in autumn 2008. Fur-

ther copies of the report may then be ordered from the co-coordinators for a fee covering printing and mailing costs.

Co-ordination

The study was initiated and carried out by the Department of Analytical Chemistry, Division of Environmental Medicine, Norwegian Institute of Public Health, Oslo, Norway. Members of the co-ordination committee were:

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Georg Becher, PhD, Department Director and Professor
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Results

The results are presented in the following chapters. A participating laboratory will be able to compare its performance congener by congener with the other laboratories. Since variations in performances are based on several factors, it is recommended that each laboratory carefully evaluates the factors that, favorably or unfavorably, have contributed to its performance. A general reader of the report, who has no access to the laboratory codes, will be able to get a picture of the analytical performance of laboratories world-wide for determining dioxins, dioxin-like PCBs, Indicator PCBs, PBDEs and HBCD in regular foods.

Presentation in the report

One-hundred and two laboratories from 33 different countries have submitted results. In appendix C the consensus statistics are given on fresh and lipid weight basis for concentrations and TEQ values of individual congeners, a summary of TEQ values for each food item, and the Z-score plots based on a target deviation of $\pm 20\%$. Further, the results of the lipid determinations are presented. Finally, individual results reported by the laboratories for each congener are given for cream, eel and deer meat in appendix 2, 3 and 4.

Summarising comments on results

PCDDs/PCDFs

Analyte solution

Concentrations for PCDDs/PCDFs were reported by 91-92 laboratories. The average RSD for the 17 congeners was 8.8% ranging from 6.7% for 1,2,3,7,8 PeCDD to 11% for 1,2,3,7,8,9 HxCDD. The calculation of Z-scores for the TEQs (target 13.7 pg TEQ/ μ l) of the PCDD/PCDF standard solution showed that 95% of the labs were within the range of $\pm 20\%$ of the consensus value. This demonstrates the high quality of the calibration solutions used by the laboratories.

Cream

For the cream sample, PCDD/PCDF results from 80 laboratories were received. The consensus TEQ was 0,059 pg/g fresh weight and 0,15 pg/g lipid weight. The

average RSD was 47% ranging from 28-73%. Z-scores within ± 1 were obtained by 37% of the laboratories and 57% of the laboratories had Z-scores within ± 2 . Almost 80% percent of the PCDD/PCDF TEQ is made up by the four congeners 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 2,3,4,7,8-PeCDF and 1,2,3,6,7,8-HxCDD.

Eel

PCDD/PCDF concentrations in the eel sample were reported by 90 laboratories. The consensus TEQ was 3.6 pg/g fresh weight and 23 pg/g lipid weight. The average RSD was 33% ranging from 22-56%. Z-scores were within ± 1 for 73% of the laboratories and within ± 2 for 87% of the laboratories. Over 90% percent of the PCDD/PCDF TEQ is made up by the three congeners 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD and 2,3,4,7,8-PeCDF.

Deer meat

For the deer meat sample 78-79 laboratories determined PCDD/PCDF concentrations. The consensus TEQ was 0.034 pg/g fresh weight and 0.27 pg/g lipid weight. The average RSD was 47% ranging from 28-72%. Z-scores for PCDD/PCDF TEQ within ± 1 were obtained by 36% of the laboratories and 56% had Z-scores within ± 2 .

Dioxin-like PCBs

Analyte solution

The 12 dioxin-like PCBs in the analyte solution were analyzed and reported by 85 to 89 laboratories. The RSDs for the different congeners were 8.0-9.8% with an average of 9.0%.

Cream

Dioxin-like PCB concentrations were reported from 76 to 79 laboratories. The concentrations of the 12 congeners varied between 0.06 pg/g fresh weight (CB-81) and 89 pg/g fresh weight (CB-118). The dioxin-like PCBs contribute 58% to the total TEQ in the sample with CB-126 as the main contributor. The average RSD for concentrations of individual dioxin-like PCB congeners on fresh weight basis was 38% ranging from 28% for CB-105 to 58% for CB-77.

Eel

The number of laboratories measured and reported dioxin-like PCB concentrations in eel were between

82 and 86. The concentrations ranged from 0.66 pg/g fresh weight for CB-81 to 65 ng/g fresh weight for CB-118. The dioxin-like PCBs contribute to about 85% of the total TEQ in the sample with CB-126 as the main contributor. The average RSD for concentrations of individual dioxin-like PCB congeners on fresh weight basis was 30% ranging from 22% for CB-105, -156 and -189 to 51% for CB-81.

Deer meat

Dioxin-like PCBs were reported by 74 to 76 laboratories. Levels were ranging from 0.043 pg/g fresh weight for CB-169 to 31 pg/g fresh weight for CB-118. The average RSD was 36%. The contribution of the dioxin-like PCBs to the total TEQ was about 55%.

Total TEQ

In Figure 1, the contribution of the three groups of dioxin-like compounds is depicted. For all three sample types, dioxin-like PCBs contributed to 50% or more of the total TEQs, demonstrating the importance of PCBs for the determination of the total 2,3,7,8-TCDD related toxic potency of food samples.

The RSD for total TEQ on fresh weight basis calculated from the RSD of individual congeners was 18% for cream, 12% for eel and 18% for deer meat.

Indicator PCBs

Analyte solution

Sixtyfive laboratories reported Indicator PCBs in the analyte solution. The average RSD was 9.9% ranging from 8.9-11%.

Cream

For the cream sample Indicator PCB results were received from 59 laboratories. The concentrations were varying between 10 pg/g fresh weight and 179 pg/g fresh weight. The RSDs were ranging from 37-84% with an average of 57%. The consensus median for the sum of Indicator PCBs was 408 pg/g fresh weight.

Eel

Within the deadline, 63-64 laboratories reported results of Indicator PCBs in the eel sample. The concentrations ranged from 4.0 ng/g fresh weight to 307 ng/g fresh weight with a consensus median for the sum of Indicator PCBs of 650 ng/g fresh weight. The average RSD was 35% ranging from 31-40%.

Deer meat

Results were obtained from 58-59 laboratories. The concentrations of Indicator PCBs in the deer meat

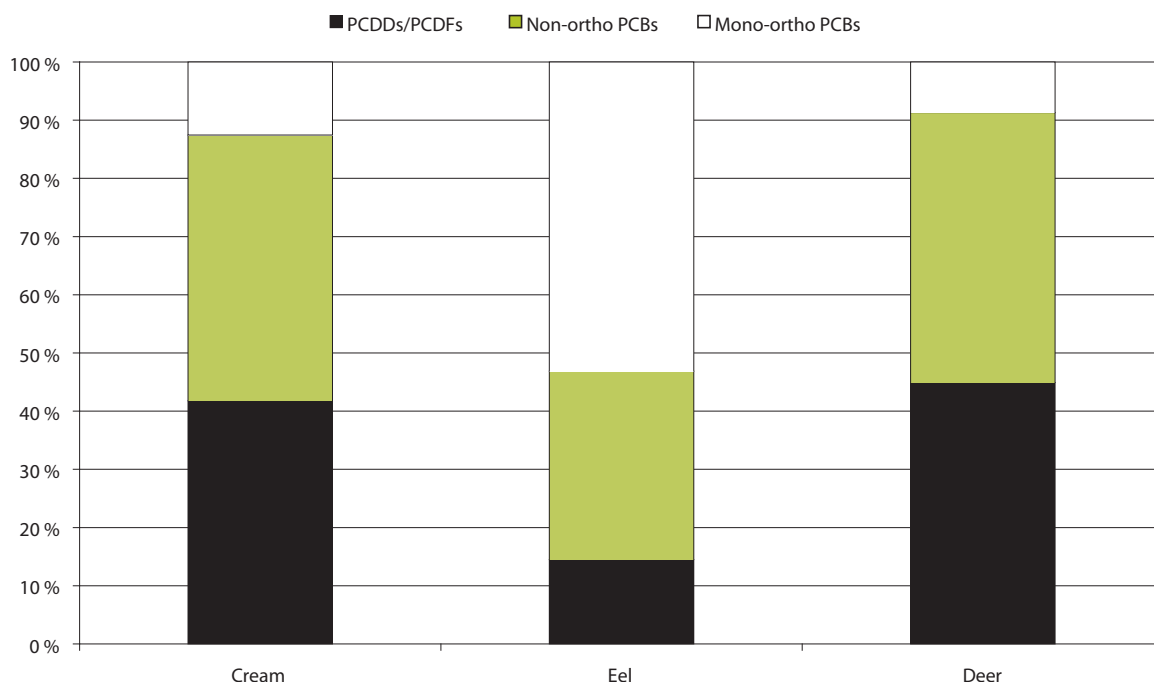


Figure 1. The contribution of PCDDs/PCDFs, non-ortho PCBs and mono-ortho PCBs to the total TEQ calculated using the WHO1998 TEFs, in the three food samples.

sample were ranging from 24 pg/g fresh weight to 75 pg/g fresh weight and the consensus median for the sum was 224 pg/g fresh weight. The average RSD was 34% ranging from 26-45% for CB-180 and CB-52, respectively.

PBDEs

Analyte solution

The PBDE standard solution was analyzed by 36 to 37 laboratories (BDE-28 to BDE-183) and 27 laboratories reported values for BDE-209. The RSDs were between 8.0-12% for all congeners except BDE-209 where the RSD was 13%.

Cream

PBDE concentrations were reported by 34 to 35 laboratories, except for BDE-209 for which 27 results were received. The consensus concentrations were in the range 0.42 pg/g fresh weight for BDE-28 and 20 pg/g fresh weight for BDE-47. The concentration for BDE-209 was 50 pg/g fresh weight. The sum of tri- to heptaBDEs was 40 pg/g fresh weight. The range of RSDs on fresh weight was 33-92% with an average of 57%, excluding BDE-209 for which the RSD was 62%.

Eel

Within the deadline 39-40 laboratories had reported results for tri- to hepta BDEs and 28 laboratories reported results for BDE-209. The concentrations varied between 33 pg/g fresh weight and 14 ng/g fresh weight. The concentration for BDE-209 was 18 pg/g fresh weight. The sum of tri- to heptaBDEs was 24 ng/g fresh weight. The RSD calculated from the concentrations on fresh weight ranged from 20-30% with an average of 23% for the tri- to heptaBDEs. The RSD calculated from the concentrations on fresh weight for BDE-209 was 85%.

Deer meat

Between 35 and 36 laboratories reported results for tri- to hepta BDEs and 26 reported results for BDE-209. The concentrations varied between 0.69 pg/g fresh weight and 9.4 pg/g fresh weight. The concentration for BDE-209 was 84 pg/g fresh weight. The sum of tri to hepta-BDEs was 22 pg/g fresh weight. The RSDs for the individual congeners were ranging from 48 to 63% with an average of 56%, excluding BDE-209 for which the RSD was 63%.

HBCD

In this round of the interlaboratory study HBCD and the isomers α -, β - and γ -HBCD could voluntarily be de-

termined and reported for the second time. A total of 8 laboratories reported α -HBCD in the standard solution and between 6-8 laboratories reported the isomers. Since a few numbers of laboratories reported HBCD these values are regarded as indicative.

Lipid content

The mean and RSDs (in parentheses) for the lipid contents of the food samples were calculated to be 39,0% (8,73%) for cream, 15,3% (9,36%) for eel and 12,6% (16,8%) for deer meat.

Acknowledgements

The laboratories are acknowledged for their participation in this interlaboratory comparison and their interest in its overall objectives, thereby making it clear that they value good analytical performance. All the individual analysts are acknowledged for their contributions to the results.

We are grateful to Cambridge Isotope Laboratories, Inc. for providing the standard solutions for this interlaboratory study. We thank Dr. Rainer Malisch, CVUA, Freiburg, Germany for providing us the contaminated eel and Ove Herland, Fønnes, Norway for providing the deer meat.

Appendix A:

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Appendix A: Affiliations and addresses of participants

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Appendix B:

Study announcement and
instructions for participants

Announcement for Interlaboratory Comparison on Dioxins in Food 2008

Introduction

We hereby announce the ninth round of interlaboratory comparison on the determination of dioxins, PCBs, PBDEs and HBCD in food. We will also in this round include 1, 2, 5, 6, 9, 10-Hexabromocyclododecane (HBCD); the third most widely used brominated flame retardant in the world. The study is open for academic, regulatory as well as commercial laboratories world-wide. The organizer of this study is the Department of Analytical Chemistry at the Norwegian Institute of Public Health in Oslo, Norway. The study is scheduled to take place from January to April 2008. A draft report will be available prior to the evaluation meeting which will take place at the Dioxin 2008 Symposium in August, Birmingham, England. The final report will be prepared and sent to participants by November 2008 together with a certificate for participation.

Objectives

The objectives of this exercise are to assess the interlaboratory consistency in results from analyses of dioxins, PCBs, PBDEs and HBCD in regular foods known to contribute to the intake in the general population and to assess the world-wide readiness and capacity in analysing dioxins and other halogenated persistent pollutants in food. The study also serves as a quality assurance instrument for the participating laboratories.

Participants

We encourage all laboratories world-wide working in this field to participate and assess their analytical performance. Participants are requested to completely fill out the Registration Form and mark for the desired sample types and what analytes they intend to determine.

Analytical requirements

In this interlaboratory comparison, all the seventeen 2, 3, 7, 8-substituted PCDDs and PCDFs, the four non-ortho PCBs, CB-77, 81, 126 and 169 as well as the eight mono-ortho PCBs, CB-105, 114, 118, 123, 156, 157, 167, and 189 will be assessed. In addition, you are invited to determine six marker PCBs, eight PBDEs and HBCD. The concentration of the following congeners can be reported: CB-28, 52, 101, 138, 153 and 180 and BDE-28, 47, 99, 100, 153, 154, 183 and 209. The concentration of α -HBCD, β -HBCD and γ -HBCD as well as the total of these isomers will also be assessed. The test materials consist of three fresh food homogenates. You can choose to analyse one, two or all three of the food items. We encourage you to determine as many analytes as possible. You are further requested to determine and report the lipid content of the foods.

We also include standard solutions of all analytes that should be analysed as solutions of known concentration, which may be used to check your own calibration solutions.

Test material

The test materials consist of three unfortified natural food product homogenates, Eel (E) ~50 g, Deer meat (D) ~125 g, and Cream (C) ~50 g. They will be distributed by DHL to the participating laboratories labelled as test material **E, D, and C**.

Please note:

In order to avoid delay at customs, please inform us if there are import restrictions for any of these samples in your country.

Instructions for analysis and reporting

Further detailed instructions and reporting forms will be sent out simultaneously with the dispatch of the samples in January.

In short, laboratories should:

- use their own standard operation procedures for clean-up and instrumental determination
- use their own reference standards for identification and quantification
- report a single concentration for each analyte in each food matrix analysed on fresh weight basis
- report limits of detection for all measured analytes in each food item
- report the lipid content

Time schedule

Announcement	December 2007
Return of registration form	December 14, 2007
Shipment of test material	January 14, 2008
Confirmation of receipt of test material by participant	Within 7 days
Reporting of test results ^{a)}	April 18, 2008
Publication of draft report on web-site	July/August 2008
Evaluation meeting at Dioxin 2008 in Birmingham, England	August 2008
Final report sent to all participants	November 2008

- a) Please be sure that your results are reported on time as there will be **no extension of the deadline.**

Participation fee

To all laboratories that have received the test materials, a corresponding invoice will be sent. The participation fee for any combination of the analytes in one food item is 1000 Euro, for two food items 1200 Euro, and for the complete set of all three food items the fee is 1400 Euro.

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Interlaboratory Comparison on Dioxins in Food 2008

Instructions for participants

January 2008

1. Introduction

This is the ninth round of the interlaboratory comparison exercise on the determination of dioxins, PCBs, PBDEs and HBCD in food organised by the Department of Analytical Chemistry, Norwegian Institute of Public Health, Oslo, Norway. The objective of this exercise is to assess the interlaboratory comparability of the results from analyses of all dioxins and dioxin-like PCBs included in the WHO₉₈-TEF scheme in regular foods. Participants may also determine and report concentrations of six marker PCBs, eight polybrominated diphenylethers (PBDEs) and hexabromocyclododecane (HBCD). The exercise serves as a quality assurance instrument for the participating laboratories. A further objective is to assess the world-wide readiness and capacity for the determination of dioxin-like compounds, marker PCBs, PBDEs and HBCD in food. Instructions for the analysis and submission of results are given below.

Please read these instructions carefully before starting the experimental work.

The participating laboratories will collaboratively assess the interlaboratory comparability in the analytical performance for determination of:

- dioxins and furans: all seventeen 2,3,7,8-substituted PCDDs and PCDFs
- non-ortho PCBs: CB-77, 81, 126 and 169
- mono-ortho PCBs: CB-105, 114, 118, 123, 156, 157, 167 and 189.
- marker PCBs: CB-28, 52, 101, 138, 153 and 180
- PBDEs: BDE-28, 47, 99, 100, 153, 154, 183 and 209
- HBCD α -HBCD, β -HBCD, γ -HBCD and total HBCD

in deer meat (D), eel (E), and cream (C). The mentioned analytes should also be determined in the respective six standard solutions.

Also in this round of the Interlaboratory comparison study, the concentration of α -HBCD, β -HBCD and γ -HBCD as well as the total of these isomers will be assessed. Both results from GC-MS and LC-MS or LC-MS/MS are welcome.

2. Participants

A list of participants is attached. 104 laboratories have announced their participation in the study.

3. Design of the study

3.1 Test materials

Samples

One standard solution of each:

- EDF-5008-50 with PCDDs/PCDFs at concentrations 2:5:10 pg/μl for tetra:penta-hexa-hepta:octa chlorinated dibenzo-p-dioxins/-dibenzo furans respectively
- EC-4986/1000 with non-ortho PCBs at concentration 10 pg/μl
- EC-4987/100 with mono-ortho PCBs at concentration 100 pg/μl
- EC-5179/50 with marker PCBs at concentration 100 pg/μl
- EO-5103/100 with PBDEs at concentration 25 pg/μl, except BDE-209 at 100 pg/μl
- ULM-4834-S/100 with α-HBCD at a concentration 500 pg/μl

One sample of each

- ca. 125 g deer meat, lipid content about ~ 10%
- ca. 50 g eel, lipid content about ~ 10%
- ca. 50 g cream, lipid content about ~ 40%

Fortification

The samples are prepared from regular market foods. There is no fortification or spiking of the PCDD, PCDF, PCB, PBDE or HBCD analytes in the food samples.

Shipment

The samples are fresh frozen food homogenates. They are distributed by DHL and should reach the receiving laboratory in good condition within a few days. The airwaybill numbers will be made available for the participants to trace the shipment at <http://www.dhl.com>.

3.2 Coding

Coding of laboratories

Upon arrival of the samples in the participant's laboratory, the Microsoft excel file named "Participant confirmation", shall be filled in and **immediately** returned to the co-ordinators by e-mail or telefax. The code of the laboratory will then be given by the co-ordinators. The laboratory codes will not be revealed to the other participants or to third parties.

Coding of samples

Deer meat samples	D
Eel samples	E
Cream samples	C

The above sample coding is marked on the sample bottles.

3.3 Analytical procedure

Methods to be used

Laboratories shall use

- their own methods for sample preparation and instrumental analysis
- their own internal- and quantification standards
- their own lipid determination procedure

Standard solutions

The standard solutions should be analysed using the laboratory's own quantification standards and methods and the results shall be reported.

General

Beware of the high risk of background contamination and positive blank values when analysing food samples with levels of dioxins, PCBs, PBDEs and HBCD in the low ppt range.

The eel sample is expected to contain high levels of dioxins.

Use sample size according to expected levels of dioxins for the determinations in order to achieve a detection level that leaves as few as possible analytes as non-detected. The sample amount dispatched is not meant for replicate analyses.

The samples might become inhomogeneous during freezing and transport. Re-homogenise all received material of each food item before any portion is taken out for analysis.

4. Reporting

4.1 Results to be reported

Laboratories are recommended to report as many as possible of the congeners mentioned in chapter 1.

The reports must include the determined lipid percent for all three matrixes. Also, the actual sample amount (g) for each determination must be reported.

The analytical report must include concentrations for all the congeners in all the samples on fresh weight basis, see Report forms B, C, D for PCDD/PCDF and dioxin-like PCBs and Report form 2, 3, 4 for marker PCBs, PBDEs and HBCD.

Laboratories must report one concentration on fresh weight basis for each congener which is detected ($S/N \geq 3$), as well as the limit of determination (LOD, $S/N = 3$) for each sample. Non-detected congeners ($S/N < 3$) must be marked ND in the Comments column of the Report form. **Please note that the LOD will be used as concentration of non-detected congeners.**

4.2 Checklist

Please use the attached checklist before returning the Report forms with your results.

4.3 Submitting results

Three Microsoft Excel files are provided to each participant comprising:

Participants confirmation

- confirmation of receiving test materials

Report form dioxins and dioxinlike PCBs

- analytical data, Report forms A, B, C and D

Report form marker PCBs, PBDEs and HBCD

- analytical data, Report forms 1, 2, 3 and 4

Participants are requested to submit their reports electronically to avoid possible transcription errors.

Please, do not alter rows or columns in the original Report forms!

The electronic report shall be sent to dioxin@fhi.no within the deadline.

If necessary, a hard copy of the Report forms can be provided. Please contact one of the co-ordinators. If a hard copy report is used, it shall either be faxed to: + 47 22 04 26 86 or mailed to:

Norwegian Institute of Public Health
att. Veronica Horpestad Liane
P.O. Box 4403 Nydalen
N-0403 Oslo, Norway

Deadline

The reports must be in our hands no later than April 18, 2008 to enable us to prepare the draft report for the Dioxin 2008 Symposium in Birmingham, England. There will be no extension of this deadline. A confirmation for receiving your results will be sent to you by e-mail within a week.

5. Statistical evaluations

Prior to the final report, a draft version will be prepared based on the data reported by April 18. The co-ordinators will calculate mean, median and between-laboratory standard deviations for each congener. Outliers will be removed, and consensus values will be calculated. In case of extreme deviation from normal distribution, appropriate procedures will be used to get a best available estimate of the true value. For the dioxin-like compounds, TEQ values will be calculated for each laboratory and a consensus TEQ value based on the consensus of the congeners. Z-scores will be calculated for laboratories' results for PCDD/PCDF TEQs and PCB TEQs.

Statistical results based on the reported data as well as other important information from the evaluation of the data, will be discussed during a consultation meeting in August at the Dioxin 2008 Symposium in Birmingham, England.

6. Final report

The final report will be prepared by the co-ordinators. All participants will be presented by their laboratory code. A draft will be published on the internet in July/August. The results will be discussed during the Dioxin 2008 Symposium in Birmingham, England. The final report will be printed by November 2008 and thereafter distributed to the participating laboratories. The report will also be partly available in an electronic version on <http://www.fhi.no>. Certificates of participation in the study will be given to all laboratories submitting results.

7. Fee

To all laboratories that have received the materials, an invoice will be sent. The participation fee for any combination of the 29 dioxin-like congeners, six marker PCBs, 8 PBDEs and HBCD is

- EURO 1000 for one food item
- EURO 1200 for two food items
- EURO 1400 for the complete set of all three food items.

Up to six standard solutions will be distributed free of charge to all participants, dependent on which analytes the participating laboratories intend to determine.

Invoices will be sent out after we have received the Participant confirmation from the participants.

8. Time schedule

Announcement	December 2007
Return of registration form	December 14, 2007
Shipment of test material	January 14, 2008
Confirmation of receipt of test material by participant	Within 7 days
Reporting of test results	April 18, 2008
Publication of draft report on web-site	July/August 2008
Evaluation meeting at Dioxin 2008 in Brimingham, England	August, 2008
Final report sent to all participants	November 2008

- a) Please be sure that your results are reported in time as there will be **no extension of the deadline.**

9. Co-ordinators of the study

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Interlaboratory Comparison on Dioxins in Food 2008

Checklist

In order to avoid possible misunderstandings and errors when reporting your results, we here give a list of possible pitfalls. Please, check this list and your Report forms before reporting your results.

- Are the results for each congener filled out in the correct order? Be especially aware of 2,3,4,6,7,8- and 1,2,3,7,8,9-HxCDF, and PCB 81.
- Are all congener results reported in pg/ μ l for standards and pg/g for samples?
- Are both concentration and LOD reported for each congener?
- Are sample amount and measured lipid content filled in?
- Are not detected congeners marked with ND in the Comments column?

Appendix C:

Summary results

Consensus of congener concentrations

Consensus of TEQ values

Consensus statistics

Laboratories' reported TEQs

Lipid determination

Laboratories' Z-scores

Z-score plots

Consensus of congener concentrations

	Cream		Eel		Deer meat	
	pg TE/g fw.	pg TE/g lw.	pg TE/g fw.	pg TE/g lw.	pg TE/g fw.	pg TE/g lw.
2,3,7,8-TCDD	0,011	0,028	2,0	13	0,0049	0,039
1,2,3,7,8-PeCDD	0,015	0,038	0,44	2,9	0,0098	0,077
1,2,3,4,7,8-HxCDD	0,013	0,032	0,13	0,86	0,0053	0,042
1,2,3,6,7,8-HxCDD	0,024	0,062	0,62	4,1	0,0069	0,054
1,2,3,7,8,9-HxCDD	0,017	0,044	0,11	0,73	0,0051	0,040
1,2,3,4,6,7,8-HpCDD	0,040	0,10	0,36	2,3	0,028	0,22
1,2,3,4,6,7,8,9-OCDD	0,087	0,22	0,58	3,8	0,12	0,90
2,3,7,8-TCDF	0,013	0,033	0,12	0,78	0,012	0,094
1,2,3,7,8-PeCDF	0,011	0,029	0,049	0,32	0,0056	0,044
2,3,4,7,8-PeCDF	0,036	0,092	1,7	11	0,026	0,21
1,2,3,4,7,8-HxCDF	0,020	0,051	1,2	7,5	0,0080	0,063
1,2,3,6,7,8-HxCDF	0,018	0,047	0,44	2,9	0,0064	0,050
2,3,4,6,7,8-HxCDF	0,018	0,046	0,36	2,4	0,0064	0,050
1,2,3,7,8,9-HxCDF	0,010	0,026	0,020	0,13	0,0050	0,039
1,2,3,4,6,7,8-HpCDF	0,021	0,054	0,44	2,9	0,015	0,12
1,2,3,4,7,8,9-HpCDF	0,012	0,029	0,048	0,31	0,0074	0,058
1,2,3,4,6,7,8,9-OCDF	0,038	0,096	0,19	1,2	0,025	0,20
PCB 77	0,65	1,7	11	71	0,59	4,7
PCB 126	0,63	1,6	78	507	0,35	2,7
PCB 169	0,12	0,30	21	138	0,043	0,34
PCB 81	0,060	0,15	0,66	4,3	0,076	0,59
PCB 105	19	49	10250	66559	9,2	72
PCB 114	1,9	4,9	524	3403	0,65	5,1
PCB 118	89	227	64554	419180	31	242
PCB 123	1,2	3,0	633	4110	0,35	2,7
PCB 156	9,3	24	8791	57082	3,6	29
PCB 157	1,9	4,8	1565	10162	0,74	5,8
PCB 167	5,2	13	6924	44960	1,9	15
PCB 189	0,82	2,1	1260	8182	0,40	3,1

Consensus of congener concentrations

	Cream		Eel		Deer	
	pg/g fw.	pg/g lw.	pg/g fw.	pg/g lw.	pg/g fw.	pg/g lw.
CB 28	10	25	4005	26026	28	216
CB 52	14	35	45140	293307	25	197
CB 101	17	43	68922	447835	27	214
CB 138	135	345	140000	909682	45	352
CB 153	179	457	307494	1998011	75	585
CB 180	53	135	84501	549065	24	186
BDE 28	0,42	1,1	269	1747	0,69	5,4
BDE 47	20	50	13709	89077	9,4	73
BDE 99	13	34	491	3190	5,8	45
BDE 100	3,0	7,7	7531	48936	1,0	8,2
BDE 153	2,3	5,7	1041	6761	2,5	19
BDE 154	1,5	3,8	1098	7137	0,64	5,0
BDE 183	0,36	0,92	33	215	1,8	14
BDE 209	50	128	18	119	84	654
α-HBCD	4,3	11	15371	99874	12	97
β-HBCD	NA	NA	396	2574	4,3	33
γ-HBCD	1,3	3,2	969	6296	10	81
Tot HBCD	5,6	14	18550	120533	22	172
Sum PCB	408	1040	650062	4223926	224	1749
Sum BDE without 209	40	103	24172	157063	22	171
Sum BDE	90	231	24190	157183	106	825

fw. - fresh weight

lw. - lipid weight

Consensus of TEQs

TEF₁₉₉₈

	Cream		Eel		Deer	
	pg TE/g fw.	pg TE/g lw.	pg TE/g fw.	pg TE/g lw.	pg TE/g fw.	pg TE/g lw.
2,3,7,8-TCDD	0,011	0,028	2,0	13	0,0049	0,038
1,2,3,7,8-PeCDD	0,015	0,038	0,44	2,9	0,010	0,077
1,2,3,4,7,8-HxCDD	0,0013	0,0032	0,013	0,086	0,00053	0,0042
1,2,3,6,7,8-HxCDD	0,0024	0,0062	0,062	0,41	0,00069	0,0054
1,2,3,7,8,9-HxCDD	0,0017	0,0044	0,011	0,073	0,00051	0,0040
1,2,3,4,6,7,8-HpCDD	0,00040	0,0010	0,0036	0,023	0,00028	0,0022
1,2,3,4,6,7,8,9-OCDD	0,0000087	0,000022	0,000058	0,00038	0,000012	0,000090
2,3,7,8-TCDF	0,0013	0,0033	0,012	0,078	0,0012	0,0093
1,2,3,7,8-PeCDF	0,00057	0,0015	0,0025	0,016	0,00028	0,0022
2,3,4,7,8-PeCDF	0,018	0,046	0,85	5,5	0,013	0,10
1,2,3,4,7,8-HxCDF	0,0020	0,0051	0,12	0,75	0,00080	0,0063
1,2,3,6,7,8-HxCDF	0,0018	0,0047	0,044	0,29	0,00064	0,0050
2,3,4,6,7,8-HxCDF	0,0018	0,0046	0,036	0,24	0,00064	0,0050
1,2,3,7,8,9-HxCDF	0,0010	0,0026	0,0020	0,013	0,00050	0,0039
1,2,3,4,6,7,8-HpCDF	0,00021	0,00054	0,0044	0,029	0,00015	0,0012
1,2,3,4,7,8,9-HpCDF	0,00012	0,00029	0,00048	0,0031	0,000074	0,00058
1,2,3,4,6,7,8,9-OCDF	0,0000038	0,0000096	0,000019	0,00012	0,0000025	0,000020
PCB 77	0,000065	0,00017	0,0011	0,0071	0,000059	0,00046
PCB 126	0,063	0,16	7,8	51	0,035	0,27
PCB 169	0,0012	0,0030	0,21	1,4	0,00043	0,0034
PCB 81	0,0000060	0,000015	0,000066	0,00043	0,0000076	0,000059
PCB 105	0,0019	0,0049	1,0	6,7	0,00092	0,0072
PCB 114	0,00096	0,0024	0,26	1,7	0,00032	0,0025
PCB 118	0,0089	0,023	6,5	42	0,0031	0,024
PCB 123	0,00012	0,00030	0,063	0,41	0,000035	0,00027
PCB 156	0,0047	0,012	4,4	29	0,0018	0,014
PCB 157	0,00094	0,0024	0,78	5,1	0,00037	0,0029
PCB 167	0,000052	0,00013	0,069	0,45	0,000019	0,00015
PCB 189	0,000082	0,00021	0,13	0,82	0,000040	0,00031
PCDDs/PCDFs	0,059	0,15	3,6	23	0,034	0,27
Non-ortho PCBs	0,064	0,16	8,0	52	0,035	0,28
Mono-ortho PCBs	0,018	0,045	13	86	0,0066	0,052
Total TEQ	0,14	0,36	25	161	0,076	0,59

fw. - fresh weight

lw- - lipid weight

Consensus of TEQs

TEF₂₀₀₆

	Cream		Eel		Deer	
	pg TE/g fw.	pg TE/g lw.	pg TE/g fw.	pg TE/g lw.	pg TE/g fw.	pg TE/g lw.
2,3,7,8-TCDD	0,011	0,028	2,0	13	0,0049	0,038
1,2,3,7,8-PeCDD	0,015	0,038	0,44	2,9	0,0098	0,077
1,2,3,4,7,8-HxCDD	0,0013	0,0032	0,013	0,086	0,00053	0,0042
1,2,3,6,7,8-HxCDD	0,0024	0,0062	0,062	0,41	0,00069	0,0054
1,2,3,7,8,9-HxCDD	0,0017	0,0044	0,011	0,073	0,00051	0,0040
1,2,3,4,6,7,8-HpCDD	0,00040	0,0010	0,0036	0,023	0,00028	0,0022
1,2,3,4,6,7,8,9-OCDD	0,000026	0,000066	0,00017	0,0011	0,000035	0,00027
2,3,7,8-TCDF	0,0013	0,0033	0,012	0,078	0,0012	0,0093
1,2,3,7,8-PeCDF	0,00034	0,00088	0,0015	0,0096	0,00017	0,0013
2,3,4,7,8-PeCDF	0,011	0,028	0,51	3,3	0,0079	0,062
1,2,3,4,7,8-HxCDF	0,0020	0,0051	0,12	0,75	0,00080	0,0063
1,2,3,6,7,8-HxCDF	0,0018	0,0047	0,044	0,29	0,00064	0,0050
2,3,4,6,7,8-HxCDF	0,0018	0,0046	0,036	0,24	0,00064	0,0050
1,2,3,7,8,9-HxCDF	0,0010	0,0026	0,0020	0,013	0,00050	0,0039
1,2,3,4,6,7,8-HpCDF	0,00021	0,00054	0,0044	0,029	0,00015	0,0012
1,2,3,4,7,8,9-HpCDF	0,00012	0,00029	0,00048	0,0031	0,000074	0,00058
1,2,3,4,6,7,8,9-OCDF	0,000011	0,000029	0,000057	0,00037	0,0000076	0,000059
PCB 77	0,000065	0,00017	0,0011	0,0071	0,000059	0,00046
PCB 126	0,063	0,16	7,8	51	0,035	0,27
PCB 169	0,0035	0,0090	0,64	4,2	0,0013	0,010
PCB 81	0,000018	0,000046	0,00020	0,0013	0,000023	0,00018
PCB 105	0,00057	0,0015	0,31	2,0	0,00028	0,0022
PCB 114	0,000058	0,00015	0,016	0,10	0,000019	0,00015
PCB 118	0,0027	0,0068	1,9	13	0,00092	0,0072
PCB 123	0,000036	0,000091	0,019	0,12	0,000011	0,000082
PCB 156	0,00028	0,00071	0,26	1,7	0,00011	0,00085
PCB 157	0,000057	0,00014	0,047	0,31	0,000022	0,00017
PCB 167	0,00016	0,00040	0,21	1,3	0,000056	0,00044
PCB 189	0,000025	0,000063	0,038	0,25	0,000012	0,000094
PCDDs/PCDFs	0,051	0,13	3,3	21	0,029	0,23
Non-ortho PCBs	0,066	0,17	8,5	55	0,036	0,28
Mono-ortho PCBs	0,0039	0,0098	2,8	18	0,0014	0,011
Total TEQ	0,12	0,31	15	95	0,066	0,52

fw. - fresh weight

lw- - lipid weight

Consensus statistics

Analyte solution

	Target value pg/µl	Consensus median, pg/µl	Median all values pg/µl	Consensus mean, pg/µl	Standard deviation, pg/µl	Relative standard deviation, %	No. of values reported	No. of values removed
2,3,7,8-TCDD	2,0	2,0	2,0	2,0	0,20	10	91	2
1,2,3,7,8-PeCDD	5,0	4,9	4,9	4,9	0,42	8,7	91	1
1,2,3,4,7,8-HxCDD	5,0	4,9	4,9	4,9	0,43	8,6	92	2
1,2,3,6,7,8-HxCDD	5,0	4,8	4,8	4,8	0,37	7,7	92	2
1,2,3,7,8,9-HxCDD	5,0	5,1	5,1	5,1	0,55	11	92	1
1,2,3,4,6,7,8-HpCDD	5,0	5,0	5,0	4,9	0,46	9,4	92	2
1,2,3,4,6,7,8,9-OCDD	10	9,9	10	10	0,78	7,8	92	4
2,3,7,8-TCDF	2,0	1,9	1,9	2,0	0,20	10	92	2
1,2,3,7,8-PeCDF	5,0	5,0	5,0	5,0	0,34	6,7	92	2
2,3,4,7,8-PeCDF	5,0	4,9	4,8	4,9	0,38	7,8	92	3
1,2,3,4,7,8-HxCDF	5,0	4,9	5,0	4,9	0,47	9,6	92	1
1,2,3,6,7,8-HxCDF	5,0	5,0	5,0	5,0	0,40	7,9	92	3
2,3,4,6,7,8-HxCDF	5,0	5,0	5,0	4,9	0,49	10	92	1
1,2,3,7,8,9-HxCDF	5,0	5,0	5,0	4,9	0,43	8,8	92	1
1,2,3,4,6,7,8-HpCDF	5,0	4,9	4,9	4,9	0,43	8,8	92	2
1,2,3,4,7,8,9-HpCDF	5,0	5,0	5,0	5,0	0,46	9,1	92	1
1,2,3,4,6,7,8,9-OCDF	10	9,8	9,8	9,9	0,83	8,4	92	2
PCB 77	10	10	10	10	0,95	9,4	89	3
PCB 126	10	10	10	10	0,84	8,3	89	2
PCB 169	10	10	10	10	0,87	8,6	89	2
PCB 81	10	10	10	10	0,83	8,0	88	2
PCB 105	100	103	103	103	8,8	8,5	86	2
PCB 114	100	103	103	104	9,7	9,3	86	2
PCB 118	100	101	101	102	9,4	9,2	86	2
PCB 123	100	103	103	104	10	9,8	86	2
PCB 156	100	104	104	104	8,9	8,6	86	3
PCB 157	100	104	103	105	10	9,5	85	2
PCB 167	100	103	103	104	10	9,7	86	2
PCB 189	100	103	103	103	9,5	9,2	86	2

Consensus statistics

Cream, fresh weight

	Consensus median, pg/g	Median all values pg/g	Consensus mean, pg/g	Standard deviation, pg/g	Relative standard deviation, %	No. of values reported	No. of values removed	No. of reported non-detects
2,3,7,8-TCDD	0,011	0,015	0,013	0,0069	55	80	16	51
1,2,3,7,8-PeCDD	0,015	0,019	0,017	0,0071	42	80	18	35
1,2,3,4,7,8-HxCDD	0,013	0,019	0,015	0,0091	59	80	20	47
1,2,3,6,7,8-HxCDD	0,024	0,027	0,027	0,012	44	80	11	28
1,2,3,7,8,9-HxCDD	0,017	0,020	0,018	0,010	56	80	16	44
1,2,3,4,6,7,8-HpCDD	0,040	0,049	0,040	0,018	46	80	24	19
1,2,3,4,6,7,8,9-OCDD	0,087	0,15	0,11	0,079	72	80	26	21
2,3,7,8-TCDF	0,013	0,019	0,015	0,0090	60	80	21	33
1,2,3,7,8-PeCDF	0,011	0,015	0,012	0,0062	52	80	21	47
2,3,4,7,8-PeCDF	0,036	0,038	0,037	0,015	40	80	11	12
1,2,3,4,7,8-HxCDF	0,020	0,024	0,022	0,0084	38	80	22	21
1,2,3,6,7,8-HxCDF	0,018	0,021	0,019	0,0074	39	80	22	20
2,3,4,6,7,8-HxCDF	0,018	0,021	0,019	0,0076	41	80	22	31
1,2,3,7,8,9-HxCDF	0,010	0,020	0,015	0,011	73	80	17	52
1,2,3,4,6,7,8-HpCDF	0,021	0,030	0,024	0,012	51	80	25	24
1,2,3,4,7,8,9-HpCDF	0,012	0,020	0,015	0,0099	66	80	25	47
1,2,3,4,6,7,8,9-OCDF	0,038	0,057	0,042	0,026	62	80	28	29
PCB 77	0,65	0,80	0,69	0,40	58	79	24	10
PCB 126	0,63	0,64	0,62	0,21	34	79	8	5
PCB 169	0,12	0,14	0,12	0,056	46	78	18	15
PCB 81	0,060	0,087	0,064	0,031	49	76	27	26
PCB 105	19	20	19	5,3	28	77	10	3
PCB 114	1,9	2,0	1,9	0,62	33	76	12	13
PCB 118	89	90	88	26	30	77	10	2
PCB 123	1,2	1,3	1,2	0,51	41	76	18	18
PCB 156	9,3	10	9,4	3,1	33	77	11	6
PCB 157	1,9	2,0	2,0	0,66	33	77	12	12
PCB 167	5,2	5,4	5,3	1,9	36	77	10	8
PCB 189	0,82	1,0	0,88	0,32	37	77	19	16

Consensus statistics

Eel, fresh weight

	Consensus median, pg/g	Median all values pg/g	Consensus mean, pg/g	Standard deviation, pg/g	Relative standard deviation, %	No. of values reported	No. of values removed	No. of reported non-detects
2,3,7,8-TCDD	2,0	2,0	1,9	0,44	23	90	1	1
1,2,3,7,8-PeCDD	0,44	0,44	0,42	0,13	30	90	5	5
1,2,3,4,7,8-HxCDD	0,13	0,14	0,13	0,042	32	90	9	8
1,2,3,6,7,8-HxCDD	0,62	0,63	0,61	0,21	34	90	3	3
1,2,3,7,8,9-HxCDD	0,11	0,12	0,11	0,033	30	89	14	11
1,2,3,4,6,7,8-HpCDD	0,36	0,36	0,38	0,11	30	90	9	3
1,2,3,4,6,7,8,9-OCDD	0,58	0,61	0,62	0,24	39	90	18	4
2,3,7,8-TCDF	0,12	0,13	0,13	0,050	40	90	12	7
1,2,3,7,8-PeCDF	0,049	0,051	0,049	0,018	38	90	21	16
2,3,4,7,8-PeCDF	1,7	1,7	1,7	0,45	27	90	5	3
1,2,3,4,7,8-HxCDF	1,2	1,2	1,1	0,28	25	90	6	3
1,2,3,6,7,8-HxCDF	0,44	0,45	0,44	0,14	32	90	6	5
2,3,4,6,7,8-HxCDF	0,36	0,37	0,36	0,11	32	90	6	5
1,2,3,7,8,9-HxCDF	0,020	0,027	0,023	0,013	56	90	24	46
1,2,3,4,6,7,8-HpCDF	0,44	0,45	0,45	0,13	28	90	7	2
1,2,3,4,7,8,9-HpCDF	0,048	0,051	0,052	0,021	40	90	15	23
1,2,3,4,6,7,8,9-OCDF	0,19	0,20	0,20	0,086	44	90	16	8
PCB 77	11	12	12	4,6	39	86	17	2
PCB 126	78	79	78	22	29	86	5	1
PCB 169	21	21	21	5,5	26	85	6	1
PCB 81	0,66	0,98	0,76	0,38	51	82	31	15
PCB 105	10250	10250	10010	2206	22	83	0	0
PCB 114	524	530	539	162	30	82	7	1
PCB 118	64554	64917	62140	17292	28	83	1	0
PCB 123	633	707	624	294	47	83	24	6
PCB 156	8791	8791	8621	1909	22	83	0	0
PCB 157	1565	1568	1495	343	23	83	1	0
PCB 167	6924	6924	6687	1763	26	83	0	0
PCB 189	1260	1260	1234	268	22	83	0	0

Consensus statistics

Deer, fresh weight

	Consensus median, pg/g	Median all values pg/g	Consensus mean, pg/g	Standard deviation, pg/g	Relative standard deviation, %	No. of values reported	No. of values removed	No. of reported non-detects
2,3,7,8-TCDD	0,0049	0,0070	0,0061	0,0035	58	78	20	40
1,2,3,7,8-PeCDD	0,0098	0,010	0,011	0,0043	41	78	16	28
1,2,3,4,7,8-HxCDD	0,0053	0,0080	0,0067	0,0038	57	78	20	44
1,2,3,6,7,8-HxCDD	0,0069	0,0084	0,0075	0,0038	50	79	23	33
1,2,3,7,8,9-HxCDD	0,0051	0,0080	0,0065	0,0042	66	78	20	51
1,2,3,4,6,7,8-HpCDD	0,028	0,031	0,030	0,014	46	79	20	15
1,2,3,4,6,7,8,9-OCDD	0,12	0,15	0,13	0,058	45	78	22	6
2,3,7,8-TCDF	0,012	0,014	0,013	0,0066	51	79	19	17
1,2,3,7,8-PeCDF	0,0056	0,0078	0,0064	0,0036	57	78	19	34
2,3,4,7,8-PeCDF	0,026	0,028	0,029	0,012	40	79	9	11
1,2,3,4,7,8-HxCDF	0,0080	0,011	0,0096	0,0051	53	79	18	22
1,2,3,6,7,8-HxCDF	0,0064	0,0089	0,0068	0,0034	50	78	23	27
2,3,4,6,7,8-HxCDF	0,0064	0,010	0,0078	0,0048	62	79	22	34
1,2,3,7,8,9-HxCDF	0,0050	0,0080	0,0059	0,0043	72	79	20	55
1,2,3,4,6,7,8-HpCDF	0,015	0,022	0,018	0,0095	52	79	23	11
1,2,3,4,7,8,9-HpCDF	0,0074	0,010	0,0080	0,0057	70	78	20	45
1,2,3,4,6,7,8,9-OCDF	0,025	0,040	0,032	0,018	57	79	23	19
PCB 77	0,59	0,70	0,66	0,28	42	76	22	5
PCB 126	0,35	0,37	0,35	0,10	30	76	8	5
PCB 169	0,043	0,048	0,045	0,019	42	74	17	16
PCB 81	0,076	0,083	0,078	0,030	38	74	18	14
PCB 105	9,2	9,6	9,9	2,9	29	74	8	1
PCB 114	0,65	0,7	0,70	0,22	31	74	14	9
PCB 118	31	32	34	10	31	74	10	0
PCB 123	0,35	0,6	0,48	0,29	61	74	21	17
PCB 156	3,6	3,8	4,0	1,3	32	74	11	4
PCB 157	0,74	0,8	0,78	0,22	28	74	14	8
PCB 167	1,9	2,0	2,0	0,70	34	74	11	5
PCB 189	0,40	0,49	0,46	0,16	35	74	14	12

Consensus statistics

Analyte solution

	Target value pg/µl	Median, pg/µl all values	Median, pg/µl outliers removed	Mean, pg/µl all values	Mean, pg/µl outliers removed
CB 28	100	105	105	114	106
CB 52	100	103	103	109	104
CB 101	100	103	102	108	103
CB 138	100	106	105	111	107
CB 153	100	105	104	108	103
CB 180	100	105	105	111	105
BDE 28	25	25	25	26	25
BDE 47	25	25	25	25	25
BDE 99	25	24	24	25	25
BDE 100	25	26	26	26	26
BDE 153	25	26	26	26	26
BDE 154	25	26	26	26	26
BDE 183	25	25	25	25	25
BDE 209	100	91	91	94	94
α-HBCD *	500	490	490	510	510

	Relative standard deviation, % all values	Relative standard deviation, % outliers removed	Number of reported values	Number of reported outliers
CB 28	38	11	65	3
CB 52	25	9	65	3
CB 101	23	9	65	3
CB 138	23	11	65	3
CB 153	23	10	65	3
CB 180	25	9	65	3
BDE 28	16	10	36	2
BDE 47	9	9	37	0
BDE 99	11	11	37	0
BDE 100	12	12	37	0
BDE 153	10	10	37	0
BDE 154	8	8	37	0
BDE 183	12	12	37	0
BDE 209	13	13	27	0
α-HBCD *	16	16	8	0

* : Indicative value due to few reported values

Consensus statistics Cream, fresh weight

	Median, pg/g all values	Median, pg/g outliers removed	Median, pg/g outliers and NDs removed	Mean, pg/g all values	Mean, pg/g outliers removed	Mean, pg/g outliers and NDs removed
CB 28	20	10	10	218	12	12
CB 52	24	15	14	246	16	15
CB 101	26	17	17	134	18	18
CB 138	140	135	135	324	133	134
CB 153	183	179	179	530	182	184
CB 180	54	53	53	135	56	57
BDE 28	1,3	0,55	0,42	5,9	0,91	0,80
BDE 47	23	20	20	51	23	23
BDE 99	15	13	13	32	14	14
BDE 100	4,3	3,0	3,0	14	3,5	3,3
BDE 153	2,7	2,1	2,3	9,1	2,4	2,5
BDE 154	2,3	1,8	1,5	9,1	2,1	1,9
BDE 183	2,7	0,97	0,36	11	1,5	0,79
BDE 209	60	45	50	901	41	43
α -HBCD *	22	12	NA	50	13	NA
β -HBCD *	18	10	NA	34	10	NA
γ -HBCD *	20	11	NA	48	11	NA
Tot HBCD *	150	39	NA	424	82	NA

	Relative standard deviation, % all values	Relative standard deviation, % outliers removed	Relative standard deviation, % outliers and NDs removed	Number of reported values	Number of outliers	Number of reported NDs
CB 28	496	85	84	59	22	6
CB 52	405	74	74	59	22	7
CB 101	279	71	71	59	21	6
CB 138	254	42	39	59	8	2
CB 153	301	42	39	59	8	2
CB 180	331	40	37	59	6	2
BDE 28	291	81	92	34	10	15
BDE 47	132	49	49	35	9	3
BDE 99	195	37	33	35	7	4
BDE 100	203	46	39	35	10	7
BDE 153	196	39	39	35	12	11
BDE 154	231	54	59	35	9	12
BDE 183	207	103	88	35	12	15
BDE 209	464	62	62	27	7	10
α -HBCD *	130	88	NA	6	2	4
β -HBCD *	110	91	NA	6	2	5
γ -HBCD *	133	99	NA	6	2	4
Tot HBCD *	142	123	NA	9	3	5

NDs: Non-detects

* : Indicative value due to few reported values

Consensus statistics

Eel, fresh weight

	Median, pg/g all values	Median, pg/g outliers removed	Median, pg/g outliers and NDs removed	Mean, pg/g all values	Mean, pg/g outliers removed	Mean, pg/g outliers and NDs removed
CB 28	4030	4005	4005	4176	3982	3982
CB 52	45140	45140	45140	41717	41717	41717
CB 101	68922	68922	68922	68221	68221	68221
CB 138	140000	140000	140000	143006	143006	143006
CB 153	307494	307494	307494	282950	282950	282950
CB 180	84501	84501	84501	79582	79582	79582
BDE 28	270	270	269	280	280	274
BDE 47	13804	13709	13709	14907	13820	13820
BDE 99	491	491	491	480	480	480
BDE 100	7531	7531	7531	7813	7813	7813
BDE 153	1045	1041	1041	1051	1007	1007
BDE 154	1098	1098	1098	1092	1092	1092
BDE 183	33	33	33	53	32	33
BDE 209	37	24	18	207	27	27
α -HBCD *	15371	15371	15371	13407	13407	13407
β -HBCD *	394	394	396	329	329	358
γ -HBCD *	994	969	969	1159	941	941
Tot HBCD *	18550	18550	18550	16502	16502	16502
	Relative standard deviation, % all values	Relative standard deviation, % outliers removed	Relative standard deviation, % outliers and NDs removed	Number of reported values	Number of outliers	Number of reported NDs
CB 28	43	37	37	64	2	0
CB 52	31	31	31	64	0	0
CB 101	32	32	32	64	0	0
CB 138	40	40	40	63	0	0
CB 153	38	38	38	63	0	0
CB 180	34	34	34	64	0	0
BDE 28	31	31	30	39	0	1
BDE 47	50	21	21	40	1	0
BDE 99	20	20	20	40	0	0
BDE 100	26	26	26	40	0	0
BDE 153	33	21	21	40	1	0
BDE 154	21	21	21	40	0	0
BDE 183	155	26	25	40	4	5
BDE 209	240	72	85	28	8	14
α -HBCD *	41	41	41	8	0	0
β -HBCD *	44	44	34	8	0	2
γ -HBCD *	62	43	43	8	1	0
Tot HBCD *	37	37	37	14	0	0

NDs: Non-detects

* : Indicative value due to few reported values

Consensus statistics Deer meat, fresh weight

	Median, pg/g all values	Median, pg/g outliers removed	Median, pg/g outliers and NDs removed	Mean, pg/g all values	Mean, pg/g outliers removed	Mean, pg/g outliers and NDs removed
CB 28	32	28	28	220	30	30
CB 52	31	26	25	1225	28	28
CB 101	33	26	27	1764	29	29
CB 138	50	45	45	3651	47	47
CB 153	84	75	75	8298	75	75
CB 180	27	24	24	2047	25	25
BDE 28	1,0	0,69	0,69	3,4	0,80	0,78
BDE 47	14	9,4	9,4	42	13	12
BDE 99	7,4	6,4	5,8	18	6,4	6,2
BDE 100	2,1	1,1	1,0	5,5	1,5	1,5
BDE 153	3,4	2,5	2,5	7,4	2,8	2,9
BDE 154	1,5	0,69	0,64	4,7	0,97	0,85
BDE 183	2,9	2,3	1,8	12	2,3	2,1
BDE 209	89	83	84	450	83	84
α -HBCD *	20	20	12	40	17	12
β -HBCD *	20	20	4	225	15	4
γ -HBCD *	20	20	10	283	18	10
Tot HBCD *	39	23	22	119	24	24
	Relative standard deviation, % all values	Relative standard deviation, % outliers removed	Relative standard deviation, % outliers and NDs removed	Number of reported values	Number of outliers	Number of reported NDs
CB 28	516	40	39	59	12	2
CB 52	687	45	45	58	14	2
CB 101	725	35	35	59	14	1
CB 138	745	31	31	59	14	0
CB 153	752	30	30	59	14	0
CB 180	751	30	26	59	12	2
BDE 28	197	56	48	35	9	10
BDE 47	361	55	54	36	7	3
BDE 99	262	54	56	36	6	3
BDE 100	199	62	62	36	12	8
BDE 153	129	50	52	35	9	8
BDE 154	179	68	57	36	12	11
BDE 183	273	63	63	36	10	12
BDE 209	314	59	63	26	5	5
α -HBCD *	106	51	62	7	2	3
β -HBCD *	237	69	69	7	2	4
γ -HBCD *	233	50	94	7	2	4
Tot HBCD *	163	52	56	12	5	3

NDs: Non-detects

* : Indicative value due to few reported values

Laboratories' reported TEQs, sum indicator PCB and sum BDE without BDE 209

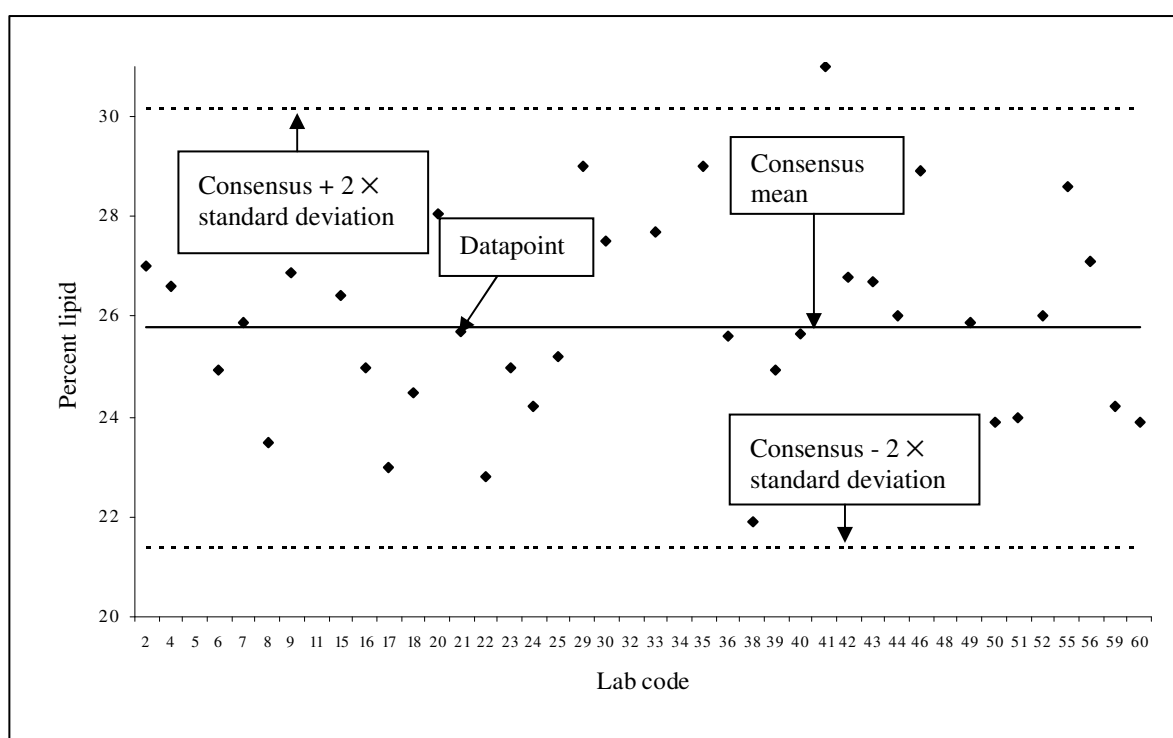
TEF ₁₉₉₈	Median pg/g	Mean pg/g	SD pg/g	RSD %	Min pg/g	Max pg/g	Reporting laboratories
Cream fresh weight							
PCDD/PCDF TEQ	0,070	0,25	0,84	338	0,019	7,0	81
Non-ortho PCB TEQ	0,066	0,095	0,13	139	0,0096	1,1	79
Mono-ortho PCB TEQ	0,018	0,034	0,061	181	0,0012	0,40	77
Total TEQ	0,16	0,37	0,86	232	0,030	7,2	84
Sum indicator PCB	462	1587	4634	292	0,43	28708	59
Sum BDE without BDE 209	62	132	192	146	11	822	35
Eel fresh weight							
PCDD/PCDF TEQ	3,7	4,0	1,9	47	0,41	14	91
Non-ortho PCB TEQ	8,1	9,1	5,4	59	0,11	47	86
Mono-ortho PCB TEQ	14	14	7,1	51	2,9	68	83
Total TEQ	26	25	11	43	0,81	78	92
Sum indicator PCB	649095	612997	200292	33	1495	950527	64
Sum BDE without BDE 209	24182	25669	9308	36	5305	74620	40
Deer meat fresh weight							
PCDD/PCDF TEQ	0,044	0,085	0,14	163	0,022	0,95	80
Non-ortho PCB TEQ	0,037	0,046	0,040	86	0,0068	0,29	76
Mono-ortho PCB TEQ	0,0072	0,013	0,017	138	0,0036	0,12	74
Total TEQ	0,091	0,14	0,15	105	0,051	1,0	82
Sum indicator PCB	260	17184	127206	740	71	977678	59
Sum BDE without BDE 209	36	92	227	246	6,1	1371	36

Presentation of results for lipid determination

Removal of outliers and calculation of consensus were done by the following procedure:

1. The mean was calculated from all the reported data.
2. Values outside a range of $\pm 2 \times$ the standard deviation of this mean, were defined as outliers and removed from the data set.
3. Mean, standard deviation and median were re-calculated from the remaining data. This mean was called consensus.

The diagram shows the reported data with consensus and consensus \pm the new standard deviation $\times 2$.



Z-Scores of lipid content

Z-scores of lipid content were calculated for each laboratory according to the following equation:

$$z = (x - X)/\sigma$$

Where x = reported value; X = assigned value (consensus); σ = target value for standard deviation. A σ of 20% of the consensus was used, i.e. z-scores between +1 and -1 reflect a deviation of $\pm 20\%$ from the consensus value.

Lipid determination for Deer meat

Lab code	% lipid	Notes	Lab code	% lipid	Notes	Lab code	% lipid	Notes
1	12,1		63	13,0				
2	12,8		64	14,6				
4	12,7		65	12,7				
5	12,9		66	13,1				
6	17,6	outlier	69	12,7				
7	13,7		70	12,8				
9	12,9		71	16,1				
10	8,4		72	14,7				
11	13,0		73	13,7				
12	12,8		74	12,5				
13	14,0		77	12,4				
15	12,5		78	13,6				
17	8,2	outlier	79	13,2				
18	11,9		81	12,8				
19	12,3		83	13,5				
22	9,0		87	11,6				
25	10,4		88	12,4				
26	15,5		93	15,7				
27	13,2		94	11,1				
28	12,5		95	12,3				
29	8,1	outlier	97	12,4				
30	8,0	outlier	99	13,4				
31	14,2		100	11,5				
32	12,3		102	14,9				
34	12,5		103	14,0				
35	12,7		104	13,1				
36	12,0		105	13,7				
37	13,1		106	13,3				
39	12,7		107	20,9	outlier			
40	12,3		109	8,6				
42	12,2		113	13,0				
43	12,6		115	11,7				
45	12,6		116	11,3				
46	10,6		119	13,1				
48	11,7		120	13,6				
49	13,2							
50	14,7							
51	13,5							
52	11,0							
53	13,1							
54	12,8							
56	4,3	outlier						
57	11,2							
59	10,8							
61	12,6							
62	12,8							

Mean	Standard deviation	Relative standard deviation	Median
12,7	1,38	10,9	12,8

Lipid determination for Eel

Lab code	% lipid	Notes	Lab code	% lipid	Notes	Lab code	% lipid	Notes
1	14,7		62	15,4				
2	14,9		63	17,4				
4	15,2		64	16,9				
6	2,0	outlier	66	16,8				
7	12,5		69	14,7				
9	16,0		70	15,7				
10	14,1		71	19,6				
11	15,5		72	21,0	outlier			
12	15,4		73	14,5				
13	15,5		74	14,3				
15	14,8		76	15,0				
17	15,5		77	15,4				
18	16,4		78	17,3				
19	16,1		79	15,0				
22	6,4	outlier	81	15,3				
25	15,6		82	15,9				
26	15,0		83	15,2				
27	15,9		85	16,0				
28	11,0		87	12,1				
29	8,1	outlier	88	15,9				
30	14,4		90	15,5				
31	13,8		93	16,1				
32	12,8		94	14,8				
34	16,2		95	15,5				
35	15,3		97	14,4				
36	13,9		98	15,0				
37	16,9		99	13,4				
39	15,5		100	15,2				
40	15,6		102	16,8				
42	15,1		103	16,4				
43	17,9		104	15,9				
45	15,3		105	15,7				
46	13,3		106	16,0				
47	15,9		107	24,9	outlier			
48	15,7		109	13,8				
49	18,2		111	14,1				
50	16,4		112	15,4				
51	16,0		113	16,0				
52	15,7		114	15,3				
53	15,4		115	15,0				
54	15,9		116	15,2				
56	5,8	outlier	119	15,5				
57	10,5		120	16,5				
59	18,0							
60	13,3							
61	12,7							

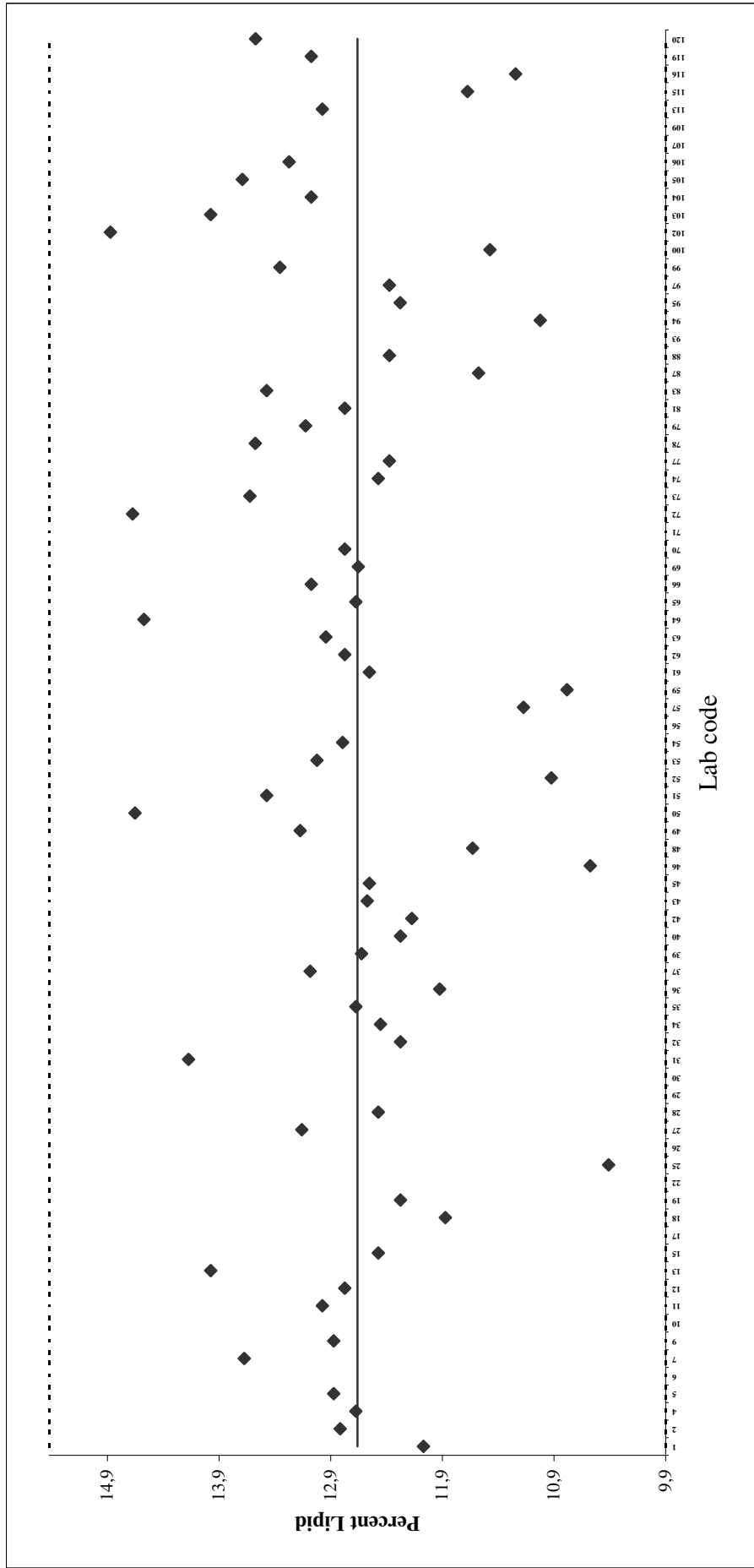
Mean	Standard deviation	Relative standard deviation	Median
15,3	1,46	9,6	15,4

Lipid determination for Cream

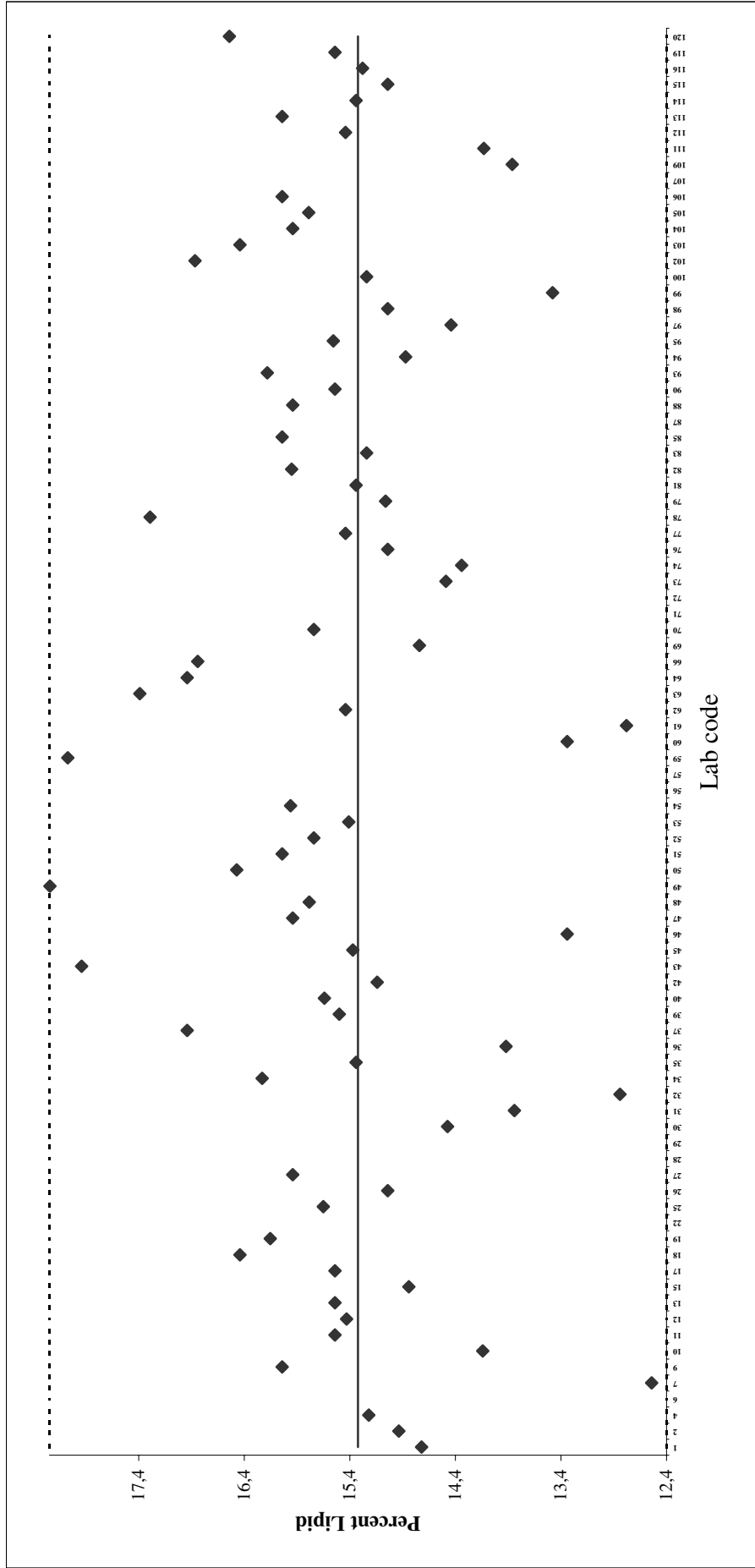
Lab code	% lipid	Notes	Lab code	% lipid	Notes	Lab code	% lipid	Notes
1	26,9		63	45,4				
2	39,0		64	38,6				
3	42,9		66	41,3				
4	40,3		68	16,9	outlier			
6	4,5	outlier	69	38,7				
7	44,0		70	38,6				
9	42,4		72	59,9	outlier			
10	37,7		73	39,2				
11	39,6		74	39,2				
12	39,6		76	40,4				
13	40,2		77	3,3	outlier			
15	39,2		78	45,6				
17	45,5		79	36,2				
19	42,4		81	37,6				
20	32,3		82	39,5				
22	34,2		83	37,1				
25	41,1		85	42,0				
26	38,5		87	39,2				
27	33,1		88	39,5				
29	38,0		94	37,9				
30	39,1		95	38,6				
32	39,6		97	38,7				
34	33,7		98	40,6				
35	36,9		100	39,2				
36	39,8		102	37,3				
37	40,1		103	39,9				
38	38,6		104	38,8				
39	41,9		105	36,9				
40	33,0		106	40,4				
42	39,4		107	33,7				
43	40,4		109	37,3				
45	45,3		113	31,0				
47	41,8		115	36,8				
48	38,5		116	39,1				
49	33,9		118	40,2				
50	38,4		119	41,5				
51	40,0		120	41,2				
52	41,2							
53	39,7							
54	38,8							
56	9,2	outlier						
57	38,6							
59	42,4							
60	38,5							
61	38,9							
62	39,3							

Mean	Standard deviation	Relative standard deviation	Median
38,9	3,22	8,3	39,2

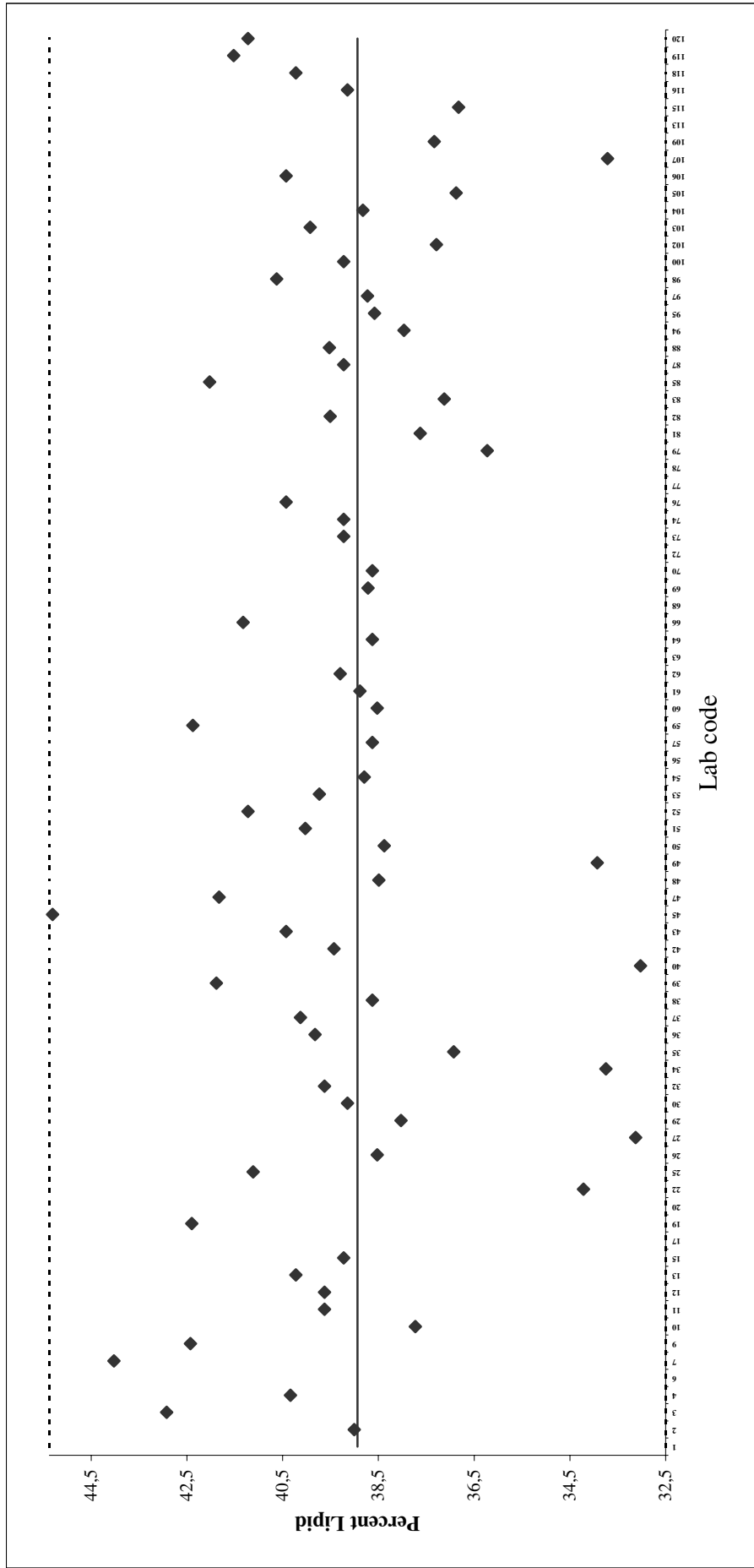
Lipid determination; Deer meat



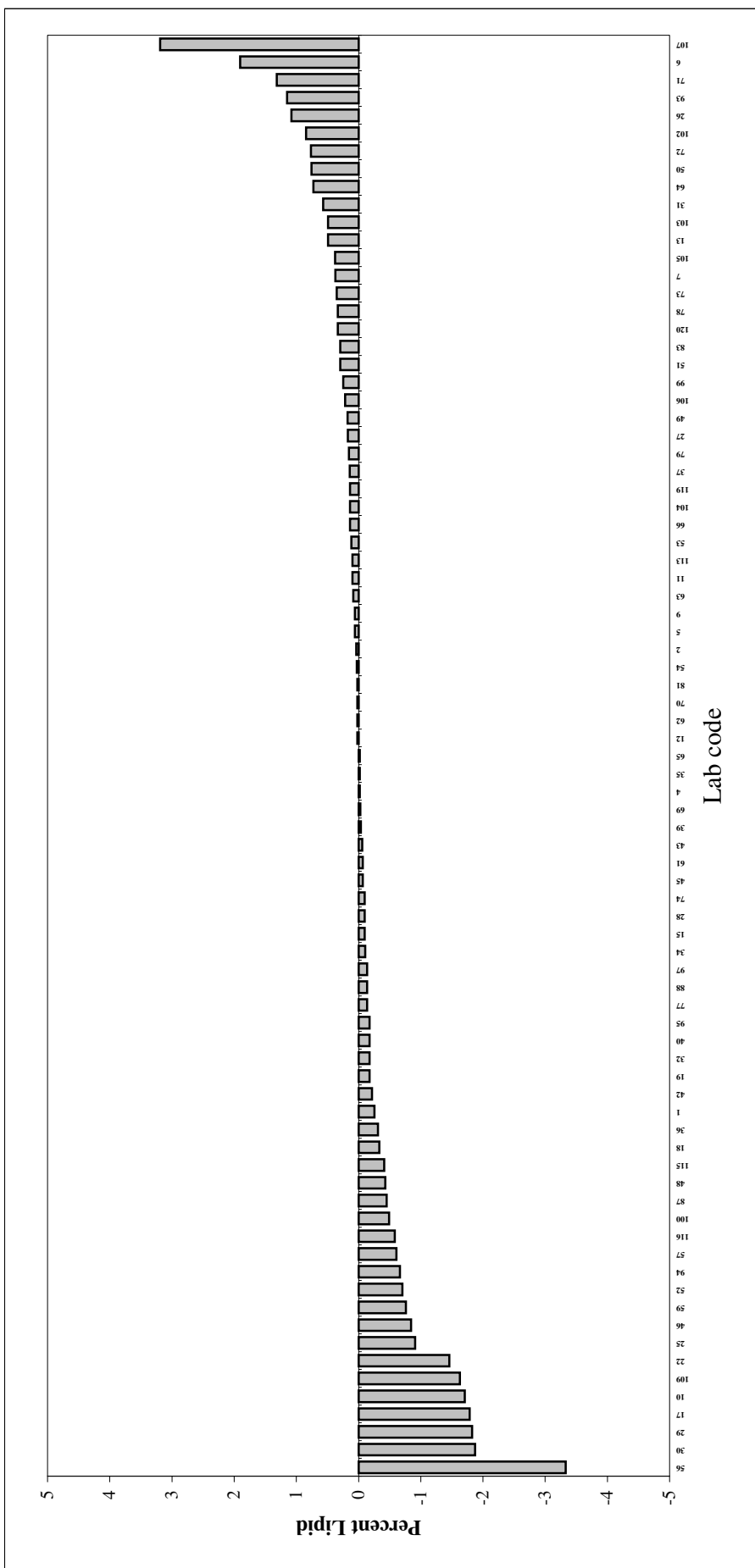
Lipid determination; Eel



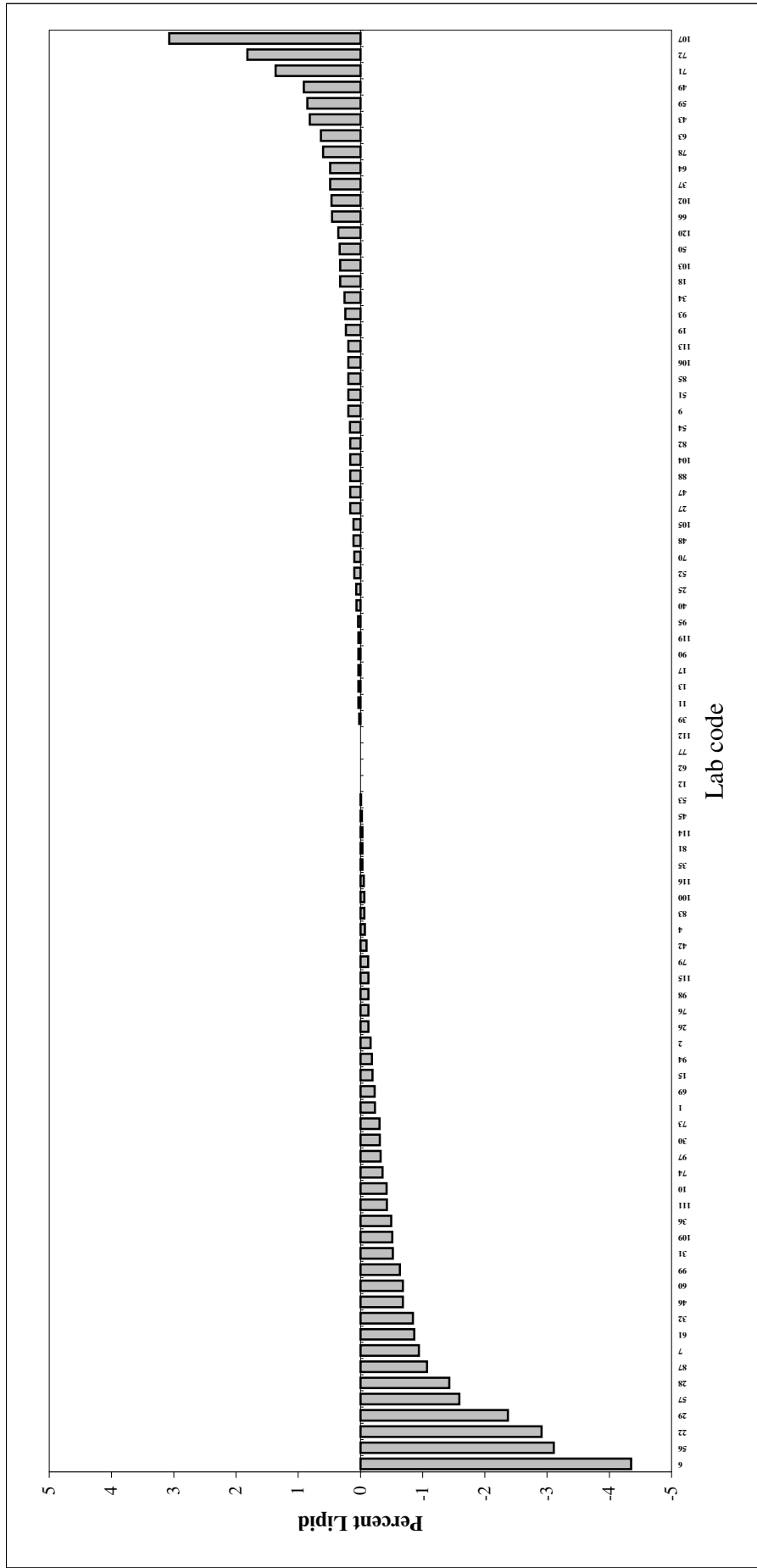
Lipid determination; Cream



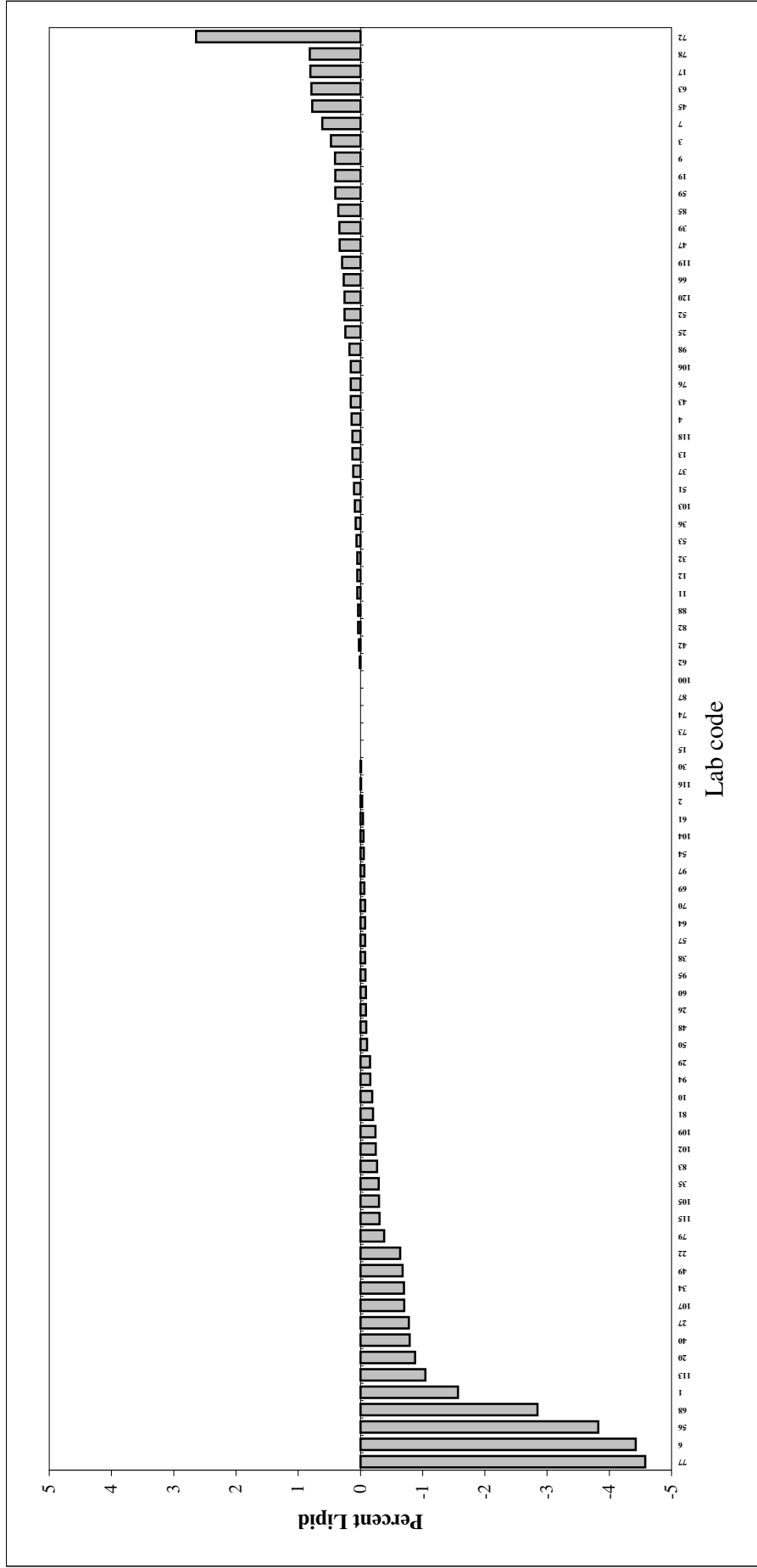
Z-score lipid determination; Deer meat



Z-score lipid determination; Eel



Z-score lipid determination; Cream



Laboratories Z-scores: Analyte solution

Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
2	-0,10	-0,12	-0,033	0,81	-0,43	-1,1
3	0,25	0,24	0,42	0,35	0,35	
4	-0,31	-0,42	0,88	0,34	0,22	
5	-0,38	-0,42	0,17	-0,11	-0,16	
6	-0,47*	-0,041				
7	-0,063	-0,14	0,83	0,032	0,14	0,69
9	-0,18	-0,21	0,15	0,091		
10	0,19	0,22	-0,29	0,58	0,58	
11	0,15	0,17	-0,018	-0,52		
12	-0,077	-0,069	-0,23	0,20	-0,012	
13	-1,1	-1,3	0,45	-0,16	-0,24	0,13
15	0,16	0,19	-0,11	-0,098	0,099	
17	-0,22	-0,24	-0,027	0,0061	-0,072	
18	0,22	0,27	-0,54	0,78	6,9	
19	-0,10	-0,11	-0,050	0,27		
20	-0,32	-0,33	-0,17	0,015		
22	0,0068	-0,029	0,47	-0,16	-0,35	0,53
24					-0,23	-0,40
25	-0,17	-0,16	-0,37	-0,18	0,48	
26	-0,013	-0,016	-0,022	0,29	-0,14	
27	0,023	0,0013	0,26	0,19	0,18	
28	-0,53*	-0,11				
29	1,3	1,4	-0,77	0,20	4,0	
30	-0,29	-0,37	0,39	0,83	0,46	1,0
31	0,85	0,93	-0,0044	-0,076		
32	-0,37	-0,39	-0,14	-0,073	0,40	-0,40
34	0,11*	0,19	0,044*			0,99
35	-0,14	-0,15	-0,19	0,32		
36	-0,39	-0,056	-3,9	-3,5		
37	0,0074	0,019	-0,12	-0,077	-0,38	-0,012
38	-0,091	-0,093	-0,13	0,27		
39	-0,054	-0,090	0,38	-0,023		
40	-2,2	-2,4	-0,16	-0,80	6,7	0,097
41	-0,28*	-0,28	0,50			
42	-0,42	-0,52	0,67	0,23		
43	0,011	-0,0066	0,21	0,13	-0,30	0,068
45	-0,10	-0,087	-0,34	0,35	0,19	-0,22
46	0,50	0,55	0,10	-0,66	-0,88	
47	-0,069	-0,111	0,38	0,34		
48	-4,6*		-0,21	0,46	-0,19	
49	-0,30	-0,31	-0,27	-0,013	-0,056	-0,075
50	-0,11	-0,16	0,46	0,33	0,016	-0,082
51	-0,35	-0,36	-0,34	0,27	-0,14	
52	-0,28	-0,33	0,19	0,56	-0,096	0,56
53	0,079	0,066	0,21	0,23	-0,71	-0,091
54	-0,16	-0,22	0,46	0,40	0,32	-0,27
56	-3,1*	-3,4*	-0,99	1,9	0,96	
57	0,049	0,086	-0,40	0,021		
59	-0,028	-0,026	-0,052	-0,0071		
60	-0,18	-0,20	-0,00059	0,28	-0,32	-0,074

Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
61	-0,18	-0,22	0,27	0,041	-0,21	0,18
62	0,18	0,20	-0,095	0,091	0,11	
63	0,028	0,079	-0,60	0,0067	-0,066	
64	-0,048	-0,071	0,22	0,038	-0,31	
65	0,22	0,16	0,88	0,78		
66	-0,28	-0,33	0,20	0,52	0,48	
69	14	16	0,027	0,090	-0,23	0,25
70	-4,6*		-0,052	0,16	-0,093	-0,071
71	0,14	0,16	-0,0028	-0,011	-0,094	-0,026
72	-0,028	-0,036	0,0047	0,38	-0,081	
73	0,30	0,31	0,23	0,29	-0,36	-0,39
74	0,39	0,42	-0,024	0,89	0,015	0,71
75	-0,23	-0,28	0,31	0,33	0,34	
76	-0,52	-0,48	-0,88	-1,3	-1,3	
77	-0,045	-0,049	-0,0117	0,028	0,22	-0,037
78	-0,51	-0,25	-3,3	-3,6		
79	0,18	0,16	0,33	0,56	0,079	-0,43
81	-0,034	-0,027	-0,12	0,041	-0,18	
82	0,39	0,37	0,53	1,3	0,18	0,44
83	-0,097*	-0,019	-0,21			
85	-0,60	-0,55	-1,2	-0,79	-0,26	
87	-0,11	-0,14	0,14	0,19	0,44	
88	0,045	0,037	0,056	0,50		
90	-0,18	-0,19	-0,064	0,15	0,32	-0,31
93	-0,24	-0,25	-0,27	0,065	-0,30	0,87
94	0,057	0,051	0,13	0,063	0,011	
95	-0,152	-0,21	0,42	0,65	0,26	0,039
97	-0,096	-0,13	0,23	0,58	0,090	-0,26
98	-0,36	-0,37	-0,22	-0,049		
100	-0,16	-0,17	-0,19	0,43	0,28	0,47
101					-0,053	
102	-0,39*	0,046				
103	-0,061	-0,081	0,19	-0,099	-0,18	-0,12
104	0,097	0,03	0,90	0,19	0,98	0,20
105	-0,11	-0,12	0,0056	0,17		
106	0,44	0,37	1,2	0,81	1,1	
107	0,010	0,014	-0,031	-0,018		
109	-0,63*	-0,21				
111	-0,38*	0,058				
112	-0,17	-0,19	0,055	0,13		
113	-0,55	-0,56	-0,55	-0,16	-0,20	-1,1*
114	-0,016	-0,018	-0,0093	0,078		
115	-0,15*	-0,15	-0,22	0,64*	0,083	
116	-0,19	-0,23	0,23	0,54	0,79	
119	-0,065	-0,074	0,038	-0,016		-0,0010
120	-0,021	-0,017	-0,14	0,29		0,27

* These values are based on determination of a limited number of congeners

Laboratories Z-scores: Cream

Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
1	13*	1,9	-2,1*	108	347	75
2	0,099	0,37	-0,29	0,61	0,31	82
3	5,9	14	0,24	0,34	0,0081	
4	-0,64	-1,6	0,18	-0,33	-1,9	
6	45*	116				
7	1,7	2,6	0,33	3,4	5,0	23
9	-0,28	-0,52	-0,15	0,048		
10	-1,3	-0,98	-1,8	-0,54	-0,47	
11	4,7	8,6	1,9	1,4		
12	0,86	-1,7	1,3	7,6	19	
13	5,7	1,8	11	0,096	3,3	9,3
15	0,38	0,52	0,29	0,28	3,9	
17	1,1	0,33	2,1	-0,18	0,85	
19	-0,60	1,3	-2,4	-0,45		
20	0,068	1,4	-1,2	0,22		
22	0,59	0,97	0,35	0,13	-1,3	2,3
25	17	24	15	0,36	-4,1	
26	5,9	7,7	4,5	5,4	24	
27	4,4	10	0,12	0,29	1,3	
29	-1,2*		-0,033*	7,0	12	
30	-0,79	-1,4	-0,75	1,1	0,81	-1,2
32	0,31	0,27	0,38	0,19	2,1	0,034
34	0,087*	2,8	-1,1*			-1,4
35	-0,20	0,90	-1,1	-0,65		
36	3,6	2,3	-1,5	27		
37	2,0	4,1	0,51	0,62	1,1	4,7
38	3,7	7,9	1,2	-1,1		
39	4,0	3,7	4,2	4,1		
40	0,56	-0,64	1,7	0,40	2,4	5,9
42	-0,43	-1,7	0,58	0,28		
43	-0,49	-0,50	-0,55	-0,22	-1,0	-0,72
45	1,1	3,6	-3,8	11	27	8,6
47	-0,14	0,32	-0,55	-0,17		
48	0,73	3,7	-2,3	2,0	5,2	
49	-0,15	0,25	-0,51	-0,14	8,0	5,6
50	0,15	0,39	-0,034	0,017	-0,13	1,3
51	-0,42	-1,4	0,31	-0,0054	-0,20	
52	0,017	0,55	-1,0	2,0	1,1	21
53	0,57	0,56	0,34	1,4	5,3	2,6
54	0,44	1,7	-0,94	1,2	-0,46	11
56	20	52	-3,0	-2,3	-2,9	
57	2,7	-1,8	2,7	18		
58	21*	26*				
59	2,6	4,6	1,5	0,16		
60	-1,2	-2,1	-0,64	-0,14	-0,83	2,6
61	4,9	12	0,017	0,29	0,19	97
62	0,27	0,079	0,50	0,033	3,2	
63	20	8,7	13	87	120	
64	-0,77	-0,79	-0,82	-0,50	-0,10	
66	0,70	0,67	-0,036	3,5	7,5	

Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
67						-0,39
68	31*	47	6,6*	62*		
69	-1,0	-1,8	-0,63	0,21	0,20	-1,1
70	11*		29	0,45	-0,71	19
72	0,91	5,2	-2,4	-1,5	0,26	
73	0,43	-0,0087	0,91	0,14	0,45	-0,34
74	3,7	6,6	1,9	0,44	0,66	0,10
76	2,9	1,1	5,6	-0,93	-0,40	
77	-3,9	-3,4	-4,2	-4,7	-4,7	-3,6
78	109	236	23	-0,0027	-0,24	
79	-0,12	-0,66	0,41	-0,24	-5,0	
81	3,5	9,4	-0,66	-0,89		
82	5,5	9,4	4,7	-4,7	-5,0	-1,7
83	-0,30*	-0,60	1,3			
85	6,2	14	1,4	-1,1	-0,67	
87	-0,16	-0,33	-0,12	0,25	2,3	
88	0,85	0,39	-0,12	5,9	4,0	
94	-0,97	-1,4	-0,85	0,14	-0,39	
95	-0,62	-0,88	-0,53	-0,11	-0,42	2,1
97	0,26	0,51	0,059	0,10	2,5	7,8
98	-0,12	-0,28	0,012	-0,036		7,4
100	251	592	7,5	2,9	4,7	4,1
101					13	
102	2,3*	13				
103	-0,064	-0,81	0,57	0,099	-0,17	-1,3
104	0,50	-0,99	0,082	7,0	4,3	14
105	8,1	21	-0,94	-0,49		
106	1,3	2,9	0,25	0,11	-0,39	
107	-1,7	-0,30	-2,8	-2,7		
109	-1,3*	3,9				
113	4,9	9,3	2,0	1,3	1,0	3,1
115	52	35	81	6,0	0,48	
116	-0,28	0,71	-1,1	-0,8	250	
118	13*					
119	-1,6	-2,0	-1,4	-0,91		-0,46
120	1,5	1,2	2,2	-0,19		-0,54

* These values are based on determination of a limited number of congeners

Laboratories Z-scores: Eel

Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
1	-2,5*	-3,8	-4,5*	-0,90	0,036	-1,5
2	0,21	0,34	0,018	0,29	0,030	-0,87
4	0,23	0,25	0,71	-0,065	-0,19	
6	-4,2*	0,25				
7	-1,3	-1,5	-0,72	-1,6	-1,5	0,77
9	1,1	0,86	1,2	1,1		
10	0,058	0,16	-0,13	0,14	0,71	
11	0,89	0,98	0,58	1,1		
12	-0,25	0,36	0,44	-0,84	-2,8	
13	0,88	-0,24	0,81	1,2	0,57	-0,27
15	-0,31	0,10	-0,0038	-0,61	0,44	
17	-1,1	0,99	-1,9	-1,1	-2,9	
18	-0,64	9,9	-2,3	-2,5	-2,5	
19	1,2	-0,16	0,60	1,9		
22	2,7*	5,5	5,6	0,22*	-0,048	-0,85
24					1,0	0,19
25	0,20	-1,3	0,53	0,40	-3,1	
26	2,8	-0,39	6,4	1,6	-5,0	
27	0,35	0,0024	-0,33	0,86	1,8	
28	-4,3*	-0,15				
29	0,34*	2,8*	-0,075*	-0,094	1,4	
30	-1,2	-0,49	-0,057	-2,0	-2,0	-0,18
31	-0,27	1,0	0,043	-0,82		
32	-0,54	-0,30	-0,85	-0,41	-0,48	0,21
34	-2,5*	0,66	0,040*			0,83
35	-0,19	-0,25	0,61	-0,66		
36	-2,6	-1,2	-4,4	-1,9		
37	0,67	0,10	-0,50	1,5	0,34	-0,31
39	0,32	-1,2	0,00045	0,91		
40	2,0	-0,68	6,3	0,12	1,4	0,21
41	0,76	1,2	0,33	0,92	1,2	
42	0,39	-0,51	0,13	0,79		
43	0,67	-0,11	1,8	0,22	-0,67	-0,17
45	0,66	0,59	-0,016	1,1	0,50	0,83
46	-1,7	-0,26	-2,2	-1,8	-1,6	
47	0,78	-0,045	2,2	0,16		
48	0,96	0,42	1,5	0,82	-0,18	
49	1,1	-0,14	2,7	0,49	-0,17	0,70
50	-0,19	0,0066	0,88	-0,89	-0,75	0,28
51	-0,15	-0,31	-0,049	-0,17	-0,95	
52	0,34	1,3	-0,63	0,67	-1,1	1,1
53	2,5	14	0,34	0,62	0,88	0,28
54	0,42	-0,000066	-0,082	0,84	0,57	0,17
56	5,3	-0,31	2,0	8,8	-4,5	
57	-4,0	-4,4	-4,9	-3,4		
58	-1,7*	4,7*				
59	-1,1	4,0	-1,8	-2,1		
60	0,28	-0,19	0,034	0,55	0,33	0,0037
61	-0,83	-0,82	-1,0	-0,73	0,013	-0,66
62	-0,25	0,24	0,041	-0,56	0,086	

Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
63	-0,40	0,10	-1,0	-0,16	2,2	
64	1,0	0,70	2,4	0,24	0,58	
66	0,39	0,17	0,063	0,65	1,6	
67						-0,28
69	0,25	0,093	1,2	-0,25	-0,72	0,28
70	-0,59*		0,14	0,17	-0,054	0,00041
71	0,42	-0,56	-0,76	1,4	0,57	-0,0019
72	0,52	1,7	0,27	0,37	0,29	
73	-0,087	-0,019	0,32	-0,36	-0,25	-0,26
74	0,83	0,91	1,2	0,62	0,47	2,9
75	0,85	0,15	2,1	0,26	-0,87	
76	-0,092	0,80	-0,52	-0,072	-0,51	
77	-2,2	-0,043	-0,21	-3,9	-3,9	-3,9
78	7,6	1,5	24	-1,0	-0,65	
79	-0,17	-0,035	-0,17	-0,20	-0,17	-0,19
81	-1,4	-0,87	-0,41	-2,2		
82	0,53	0,36	0,41	0,65	1,3	0,84
83	-2,7*	-0,21	-0,13			
85	-0,81	1,1	-1,9	-0,68	-0,48	
87	1,1	0,67	2,7	0,26	1,3	
88	1,7	1,7	1,3	2,0	2,3	
90	11	-0,20	-0,52	21		10
93	-1,1	-1,9	-1,2	-0,82	1,4	-0,63
94	0,22	0,32	-0,13	0,40	0,37	
95	0,53	0,012	1,4	0,17	-0,028	-0,52
97	0,45	-0,0083	1,2	0,092	0,30	-0,085
98	-0,057	-0,43	0,18	-0,096		-0,15
99	0,21	-0,54	1,3	-0,23		
100	0,12	2,4	-0,060	-0,38	-1,2	-0,23
101					-0,42	
102	-4,8*	-3,9				
103	-0,031	0,096	-0,43	0,18	0,60	-0,66
104	-0,11	-0,13	0,079	-0,23	0,99	0,35
105	-0,20	-0,029	-0,55	-0,029		
106	0,54	0,54	0,92	0,31	0,19	
107	0,83	1,8	1,7	0,010		
109	-4,3*	-0,15				
111	-2,9*	-0,77	-0,45*			
112	2,9	13	1,1	1,1		
113	4,0	0,96	11	0,63	-3,4*	0,66*
114	-0,13	0,11	-0,33	-0,065		
115	-3,6*	4,3				
116	0,34	0,030	0,51	0,32	-0,93	
119	-0,069	0,091	-0,17	-0,051		1,8
120	0,56	0,26	0,81	0,50		1,2

* These values are based on determination of a limited number of congeners

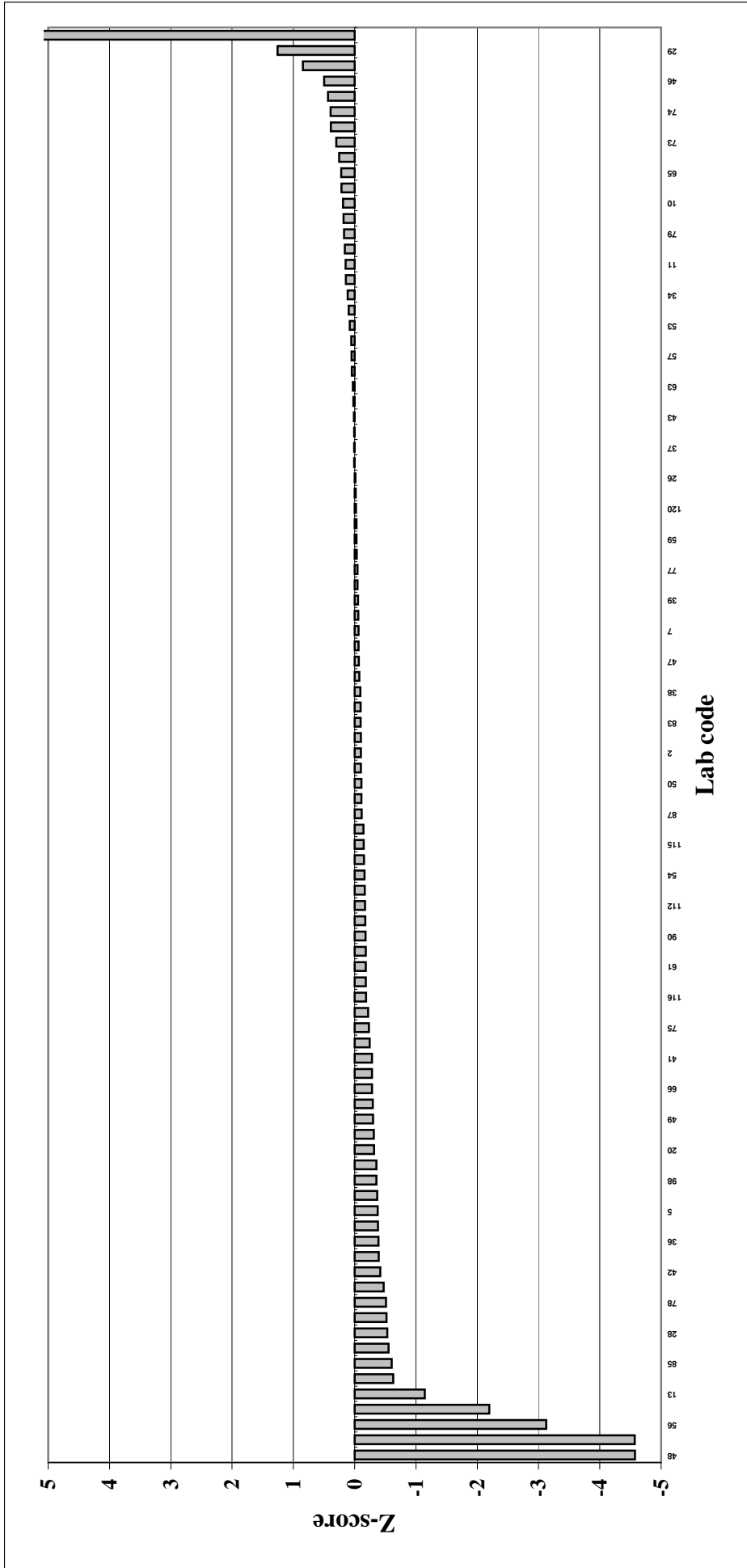
Laboratories Z-scores: Deer meat

Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
1	1,0*	1,1	-4,0*	28	102	2,1
2	-0,58	-0,95	-0,27	-0,34	-1,4	35
4	-0,044	-0,89	0,28	2,6	0,64	
5	2,0	4,1	0,33	-0,058	-2,2	
6	13*	35				
7	1,2	-0,29	2,4	2,0	7,0	11
9	-0,37	-0,55	-0,21	-0,32		
10	-0,31	0,33	-0,81	-0,93	-1,0	
11	5,1	8,1	2,5	3,3		
12	0,54	-1,2	2,1	1,4	1,0	
13	3,2	-0,18	6,7	2,2	1,3	8,2
15	0,23	-0,19	0,49	1,0	2,2	
17	-0,27	1,6	-2,0	-0,68	-0,35	
18	1,9	4,8	-0,31	-0,86	-1,5	
19	6,1	15	-1,7	-0,39		
22	6,2	6,0	6,3	5,8	-0,52	9,0
24					1,6	7,8
25	9,5	24	-3,4	1,8	20	
26	14	12	15	21	21827	
27	-0,32	-0,61	-0,23	0,71	0,66	
28	7,7*	23				
29	3,1*	5,1*	1,4*	1,6	2,5	
30	-1,2	-1,2	-1,3	-0,76	-0,5	-3,6
31	0,98	4,3	-1,8	-1,3		
32	1,6	3,3	0,21	0,52	0,68	-0,49
34	0,51*	1,5	0,56*			1,4
35	-0,28	-0,60	-0,11	0,42		
36	4,8	1,3	-1,4	55		
37	-0,71	-0,085	-1,4	-0,47	-0,57	-0,21
39	0,25	1,2	-0,50	-0,79		
40	1,2	1,7	1,0	-0,42	3,4	2,5*
42	-0,43	-0,89	-0,038	-0,21		
43	-0,070	-0,70	0,50	0,12	-0,51	-0,51
45	7,4	8,4	7,8	-0,070	-0,53	-0,39
46	-0,53	0,31	-1,2	-1,6	-0,89	
48	0,41	2,4	-2,3	4,7	7,8	
49	1,8	3,8	0,091	0,45	29	15
50	0,46	0,53	0,47	0,057	-1,5	35
51	12	2,8	6,7	86	130	
52	1,8	4,6	-0,89	1,5	0,67	3,9
53	1,3	1,3	0,65	5,5	25	8,4
54	1,6	3,4	-0,26	2,2	-0,12	5,5
56	21	21	26	-1,0	-3,4	
57	-0,92	0,55	-2,1	-2,3		
58	19*	26*				
59	-0,28	0,13	-0,60	-0,69		
61	1,8	4,1	-0,13	0,050	-0,34	40
62	0,16	0,079	0,046	1,2	1,4	
63	0,77	1,9	-1,2	5,4	4,3	
64	-0,61	-0,91	-0,34	-0,46	0,80	

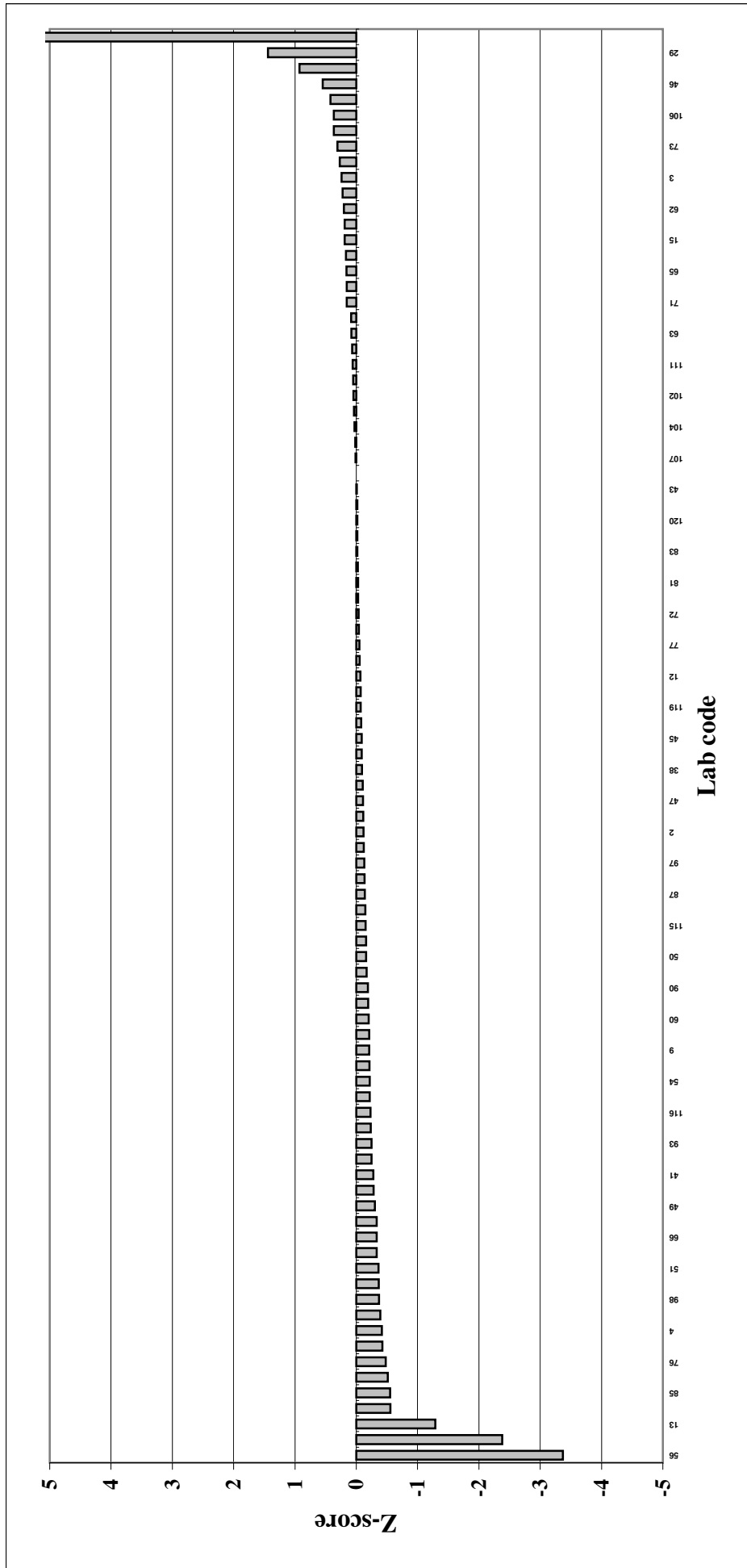
Lab Code	Total TEQ	PCDD/PCDF TEQ	non-orto PCB TEQ	mono-orto PCB TEQ	Sum Indicator PCB	Sum PBDE without 209
65	-0,050	-0,53	0,34	0,39		
66	-0,16	-0,66	0,026	1,5	1,5	
67						-0,36
69	-0,58	-1,0	-0,27	-0,083	-2,1	-1,9
70	1,1*		7,2	-0,044	-0,90	3,9
71	2,1	5,2	-0,57	0,81	-0,17	309
72	8,2	12	1,2	26	-0,40	
73	-0,0074	-1,0	0,89	0,50	0,76	-0,56
74	2,9	4,5	1,6	1,6	1,0	-1,0
77	0,049	-1,7	0,59	6,4	6,2	11
78	62	134	3,2	-1,4	-2,0	
79	0,35	0,37	0,42	-0,099	0,23	2,3
81	8,0	20	-1,7	-1,5		
83	-0,48*	-0,81	0,69*			
87	-0,23	-0,35	-0,17	0,083	1,5	
88	0,46	-0,27	0,49	4,1	12	
93	16	-1,5	36	1,7	30	12
94	-0,65	-0,54	-1,1	1,1	0,65	
95	-0,40	-1,3	0,36	0,029	3,8	-0,78
97	3,2	2,0	2,3	14	31	53
99	4,6	7,4	1,7	5,5		
100	50	108	2,6	0,83	1,0	0,35
101					10	
102	6,8*	21				
103	-0,40	-0,56	-0,29	-0,11	-0,076	-2,3
104	1,6	0,69	0,31	13	10	11
105	0,50	1,8	-0,62	-0,23		
106	0,72	0,72	0,88	-0,11	-0,62	
107	6,6	3,7	4,3	34		
109	-1,7*	2,5				
113	5,2	7,5	3,1	3,9	3,1*	4,8
115	19*	48				
116	-0,72*		2,7	3,0	86	
119	-0,53	-0,57	-0,45	-0,78		-0,99
120	3,0	4,9	1,8	-0,018		-1,6

* These values are based on determination of a limited number of congeners

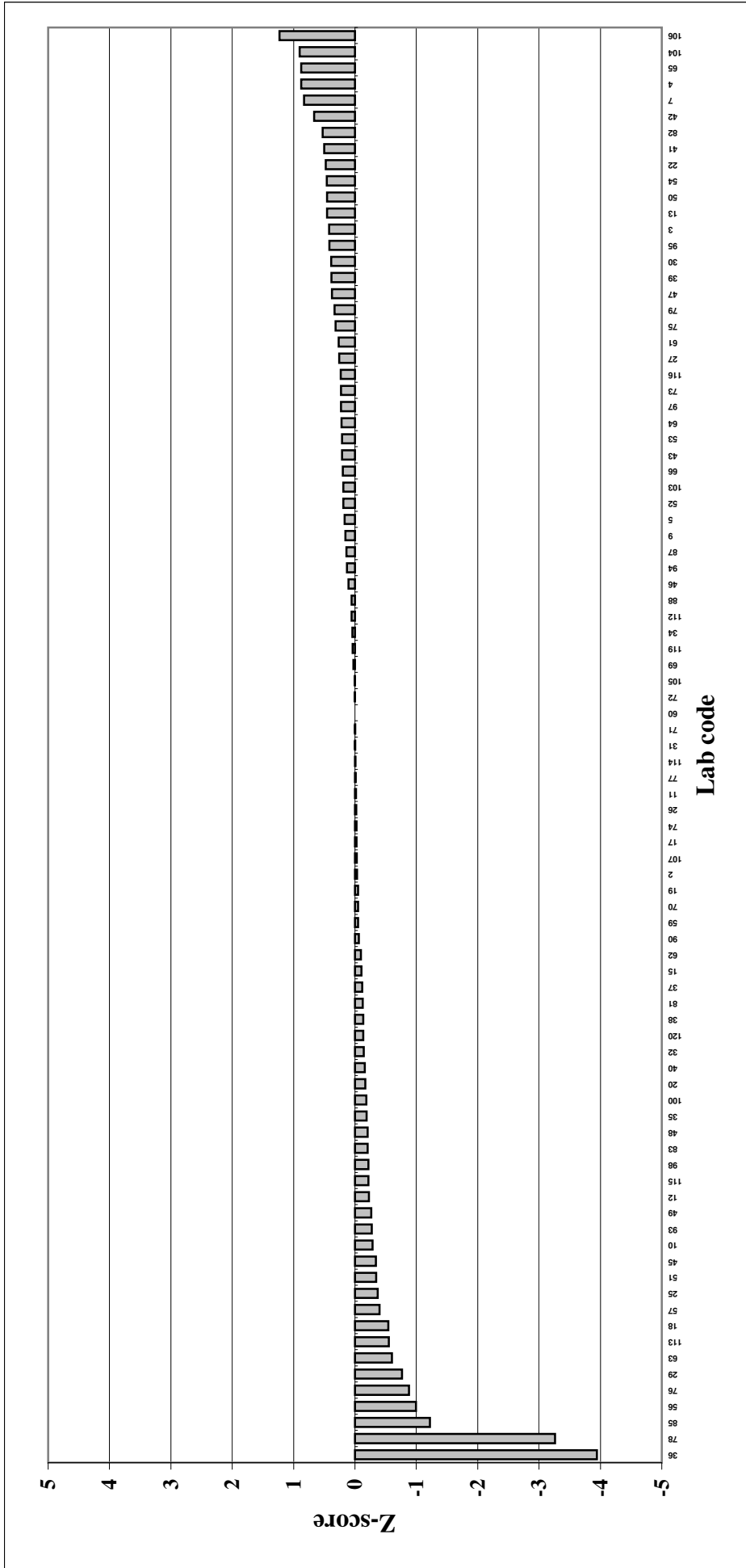
Z-score analyte solution; total TEQ



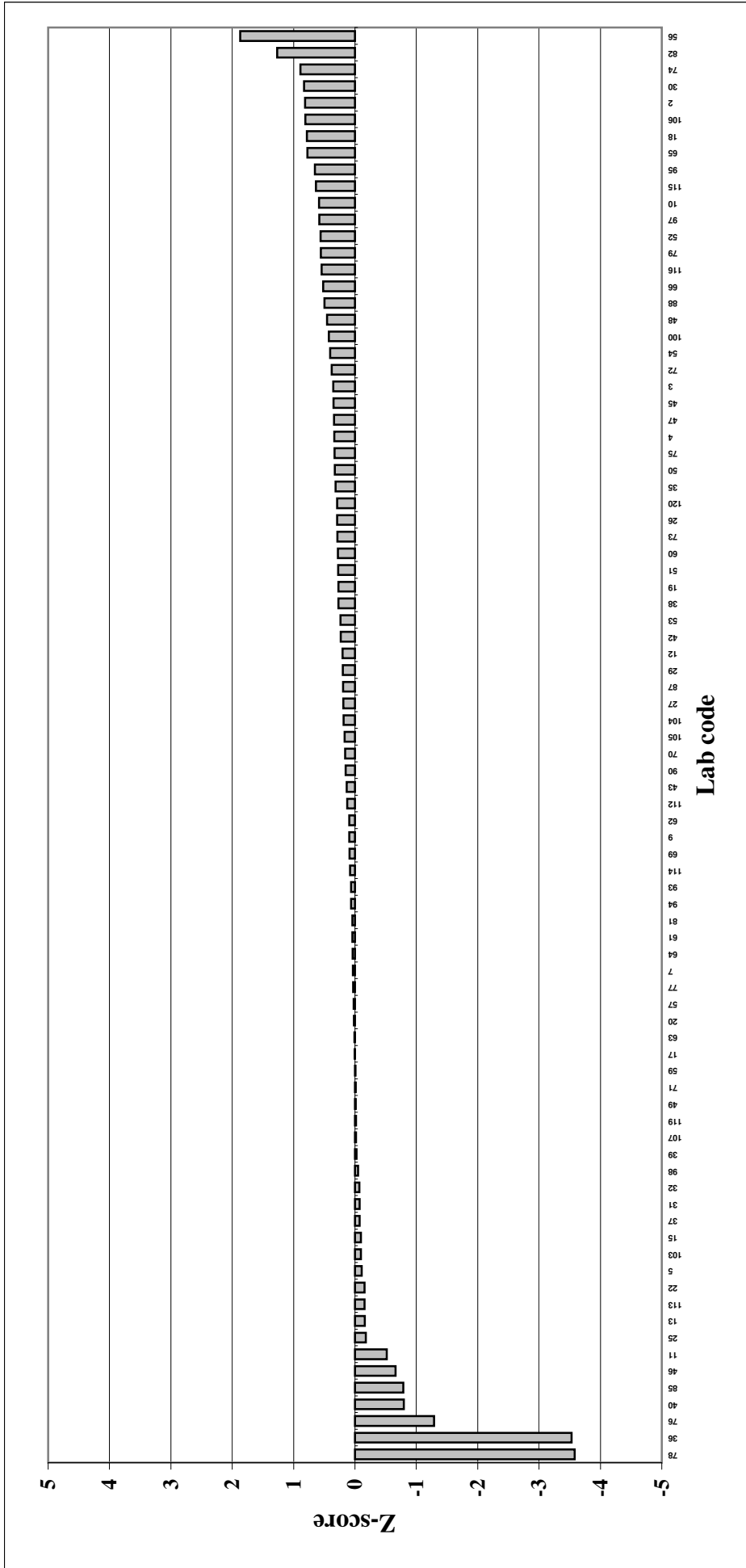
Z-score analyte solution; PCDD/PCDF TEQ



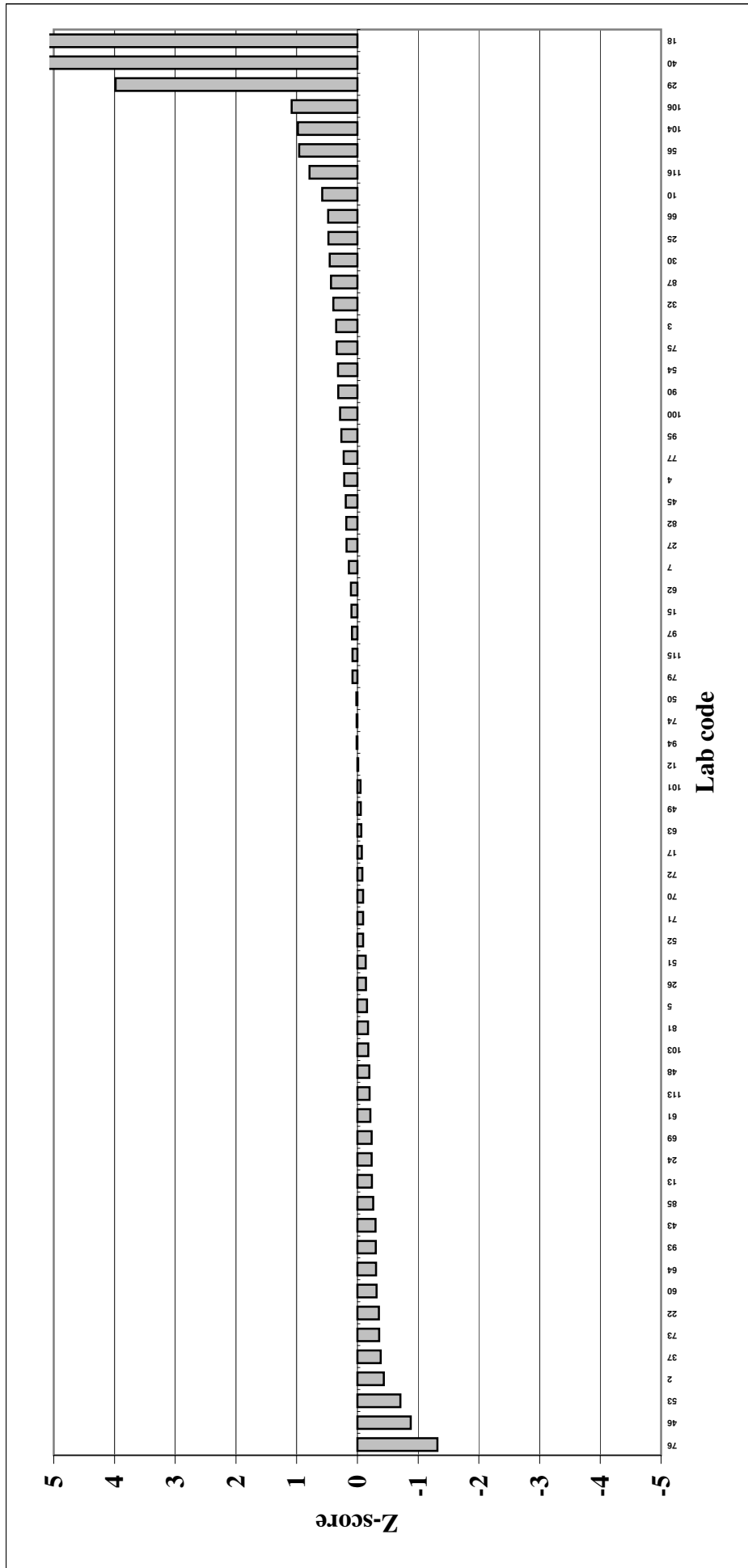
Z-score analyte solution; non-ortho PCB TEQ



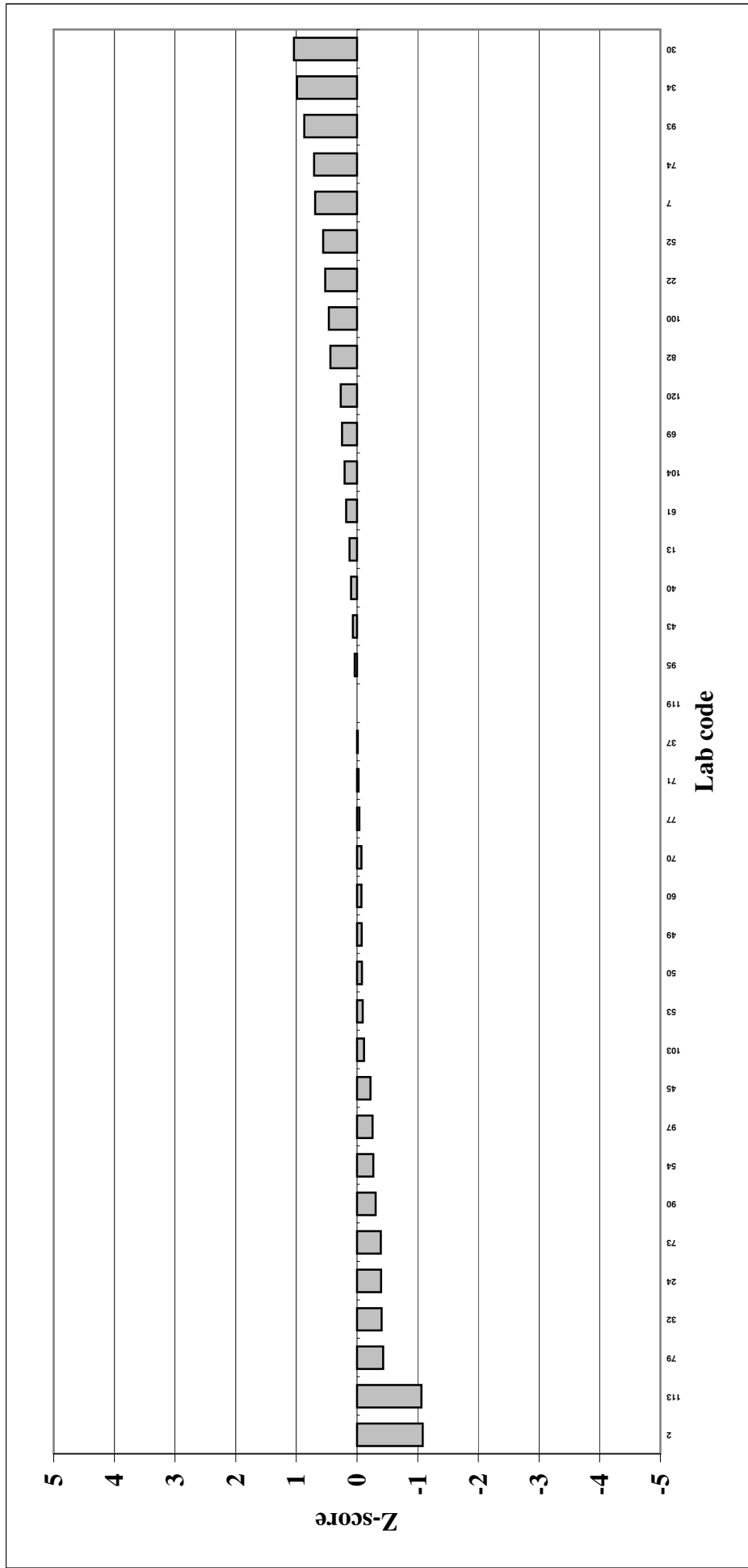
Z-score analyte solution; mono-ortho PCB TEQ



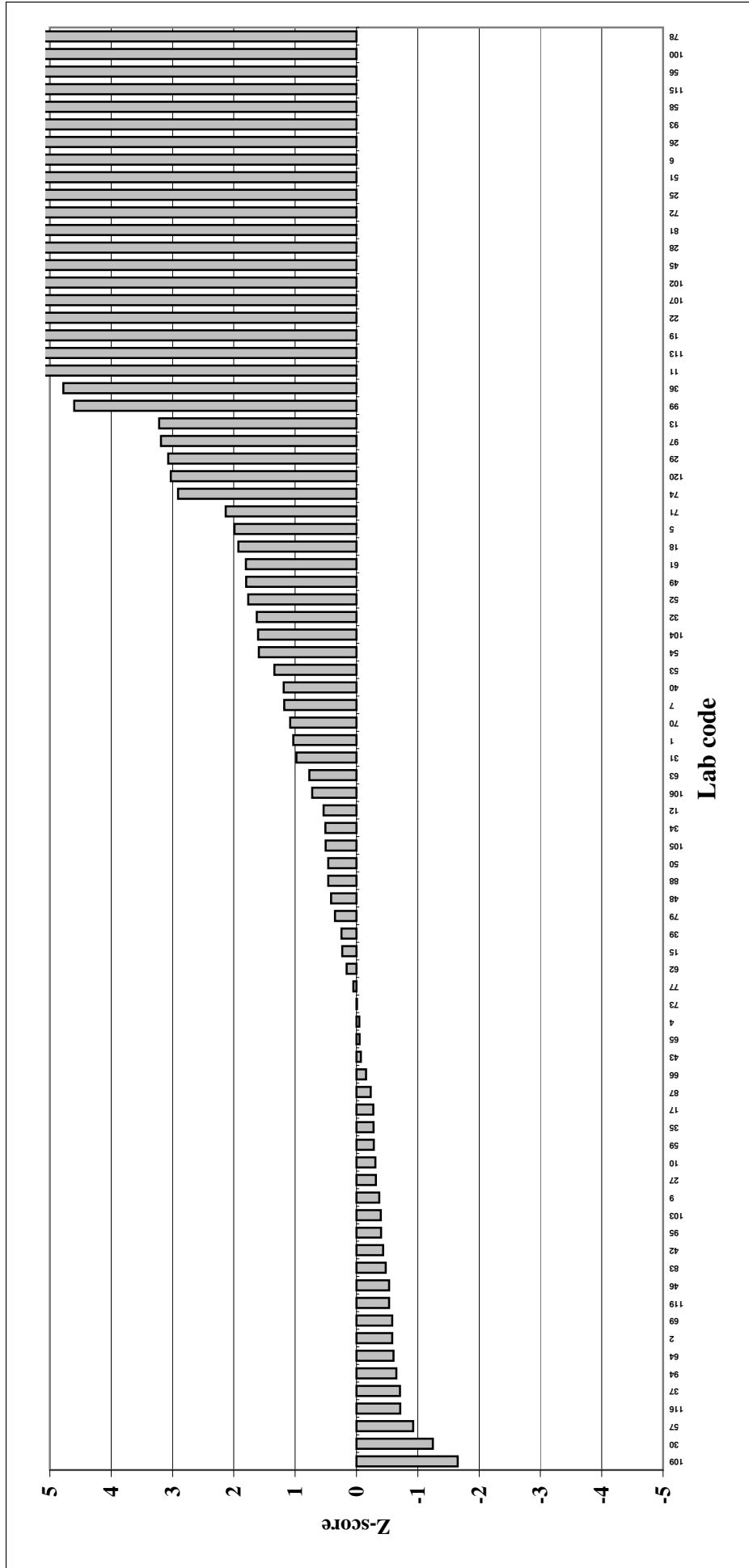
Z-score analyte solution; sum indicator PCB



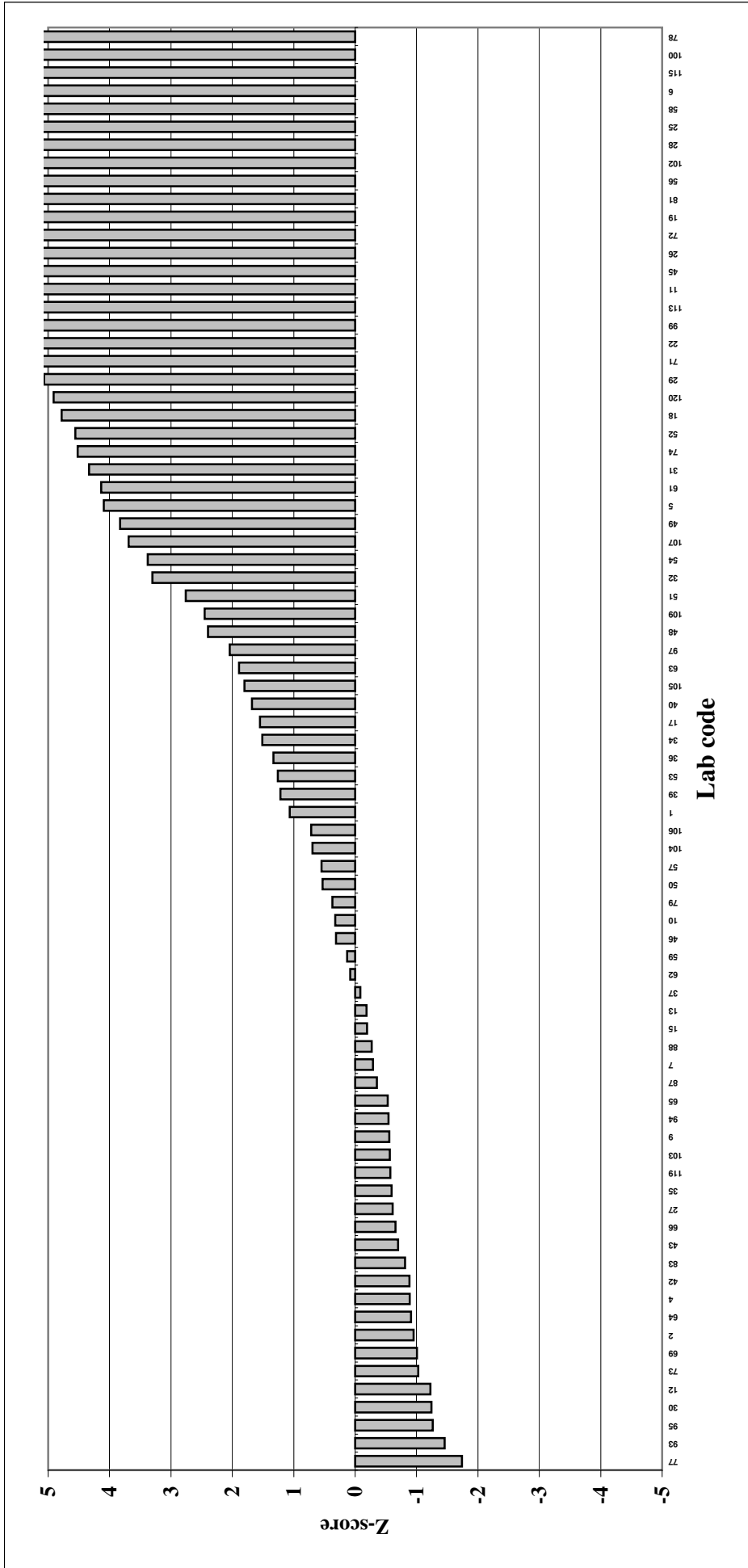
Z-score analyte solution; sum PBDE without BDE-209



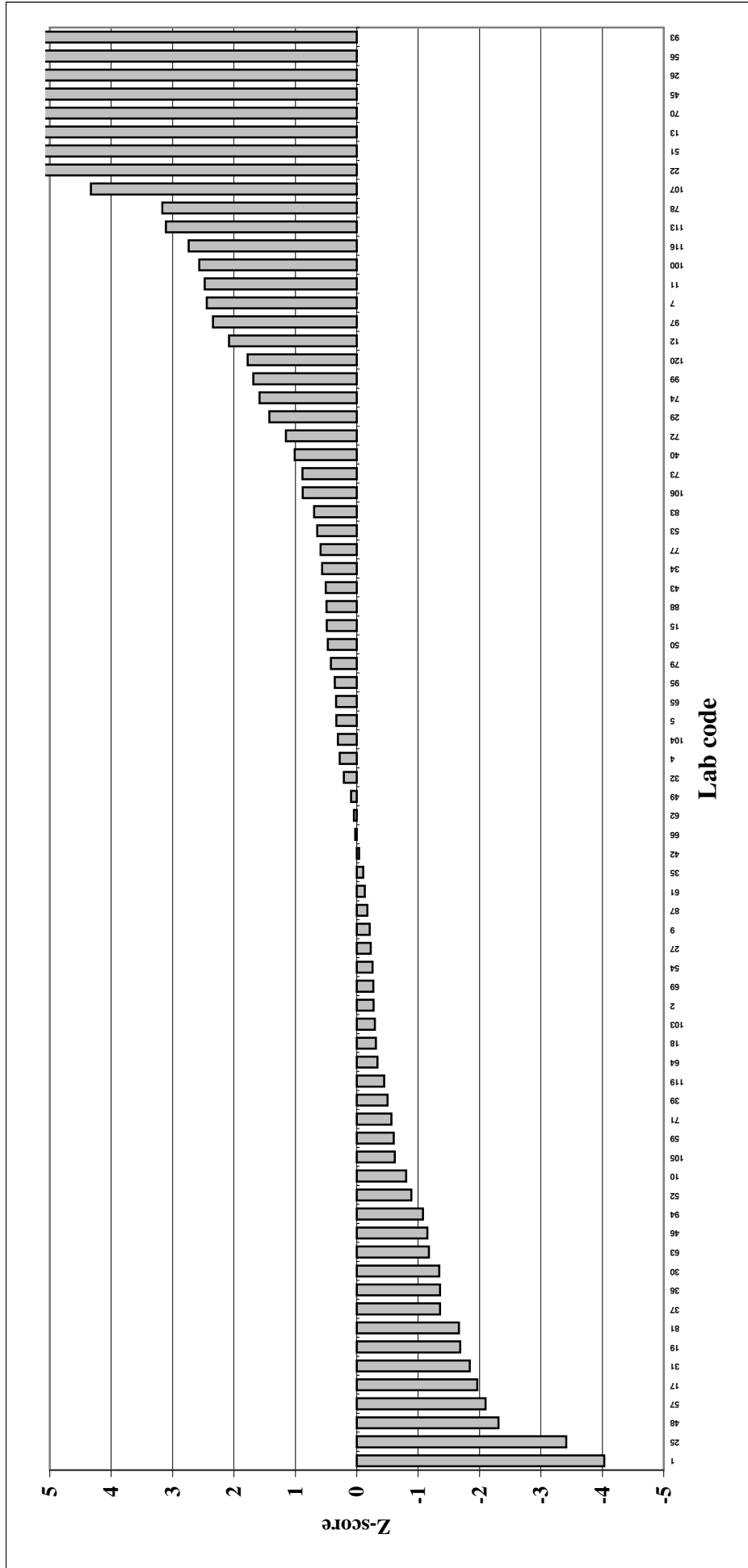
Z-score Deer meat; total TEQ



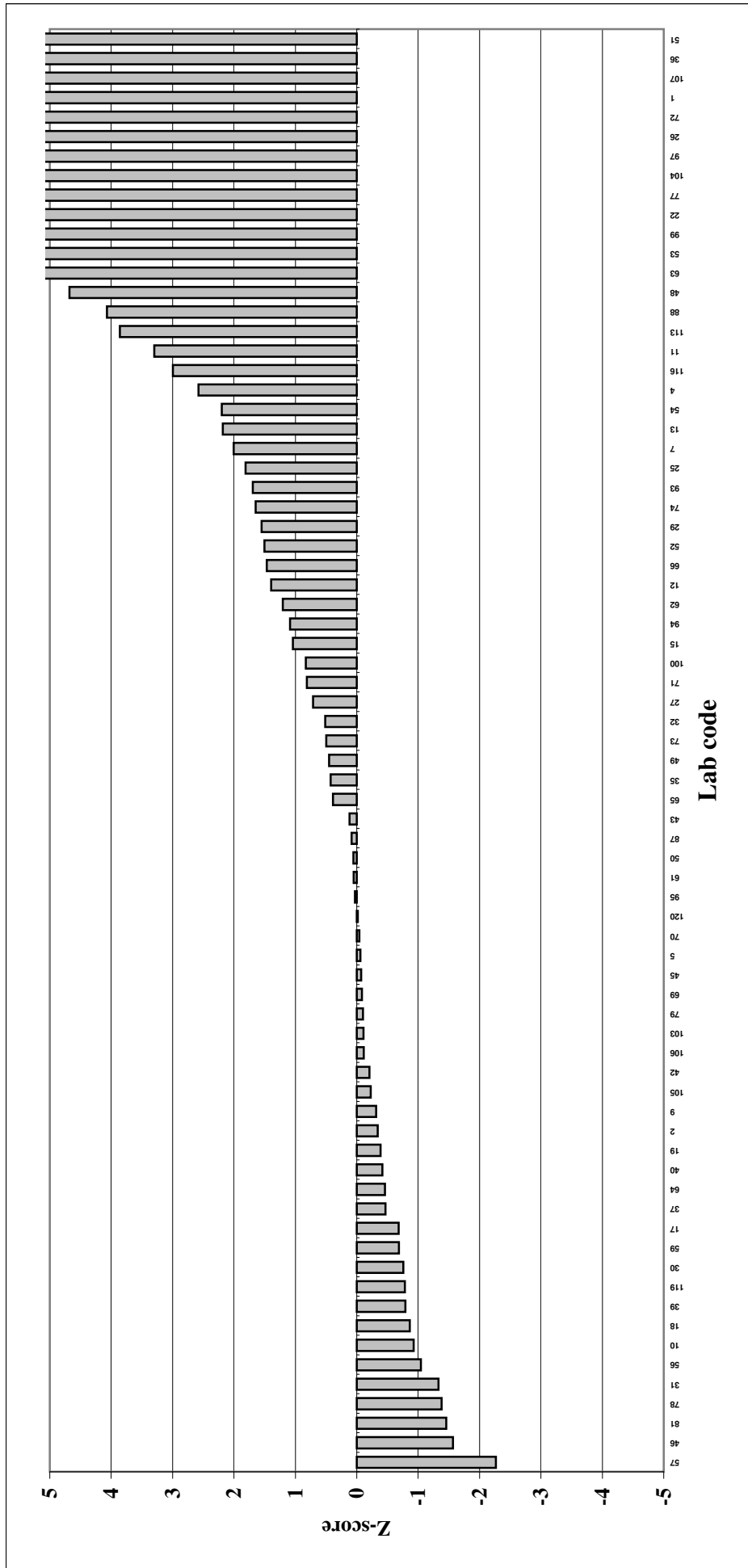
Z-score Deer meat; PCDD/PCDF TEQ



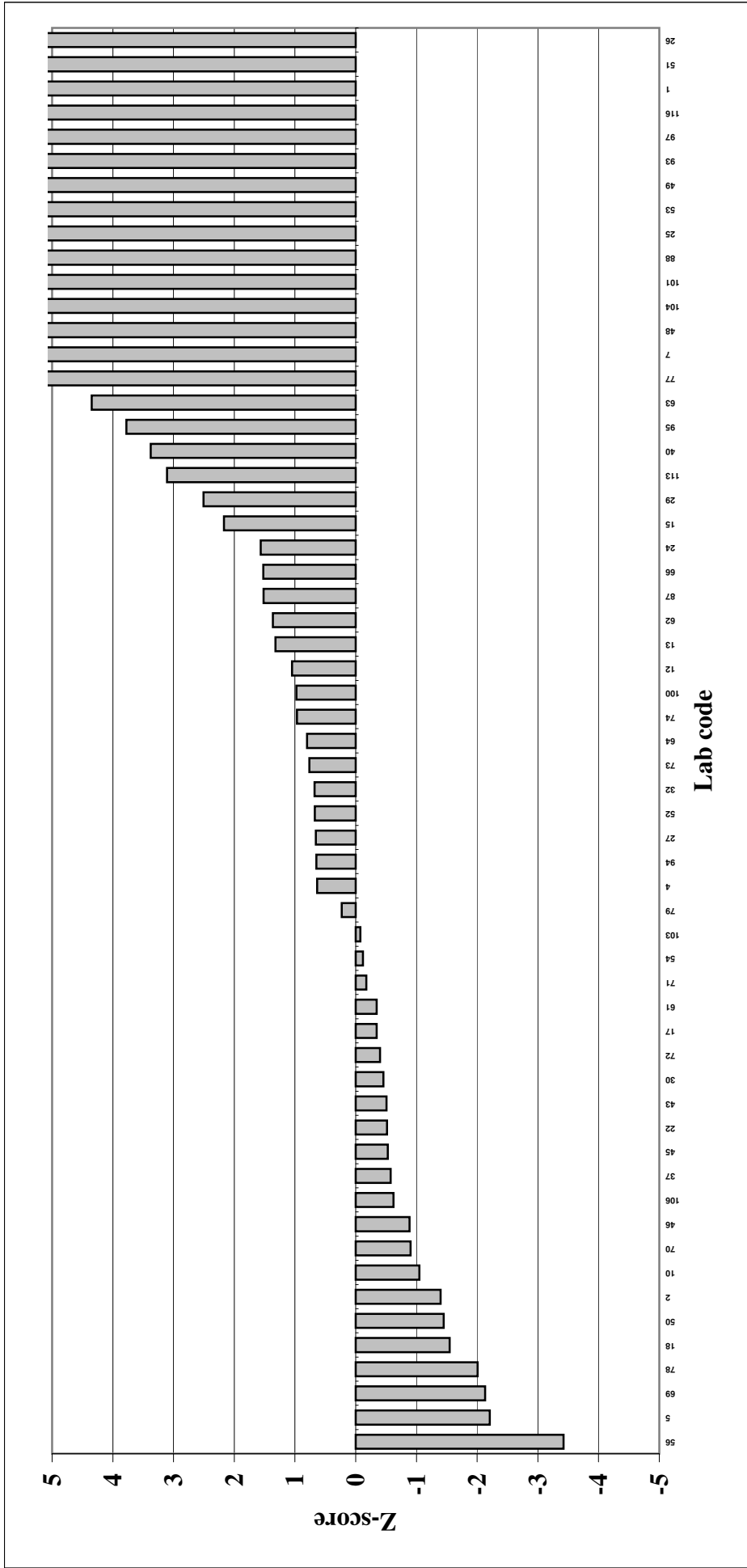
Z-score Deer meat; non-ortho PCB TEQ



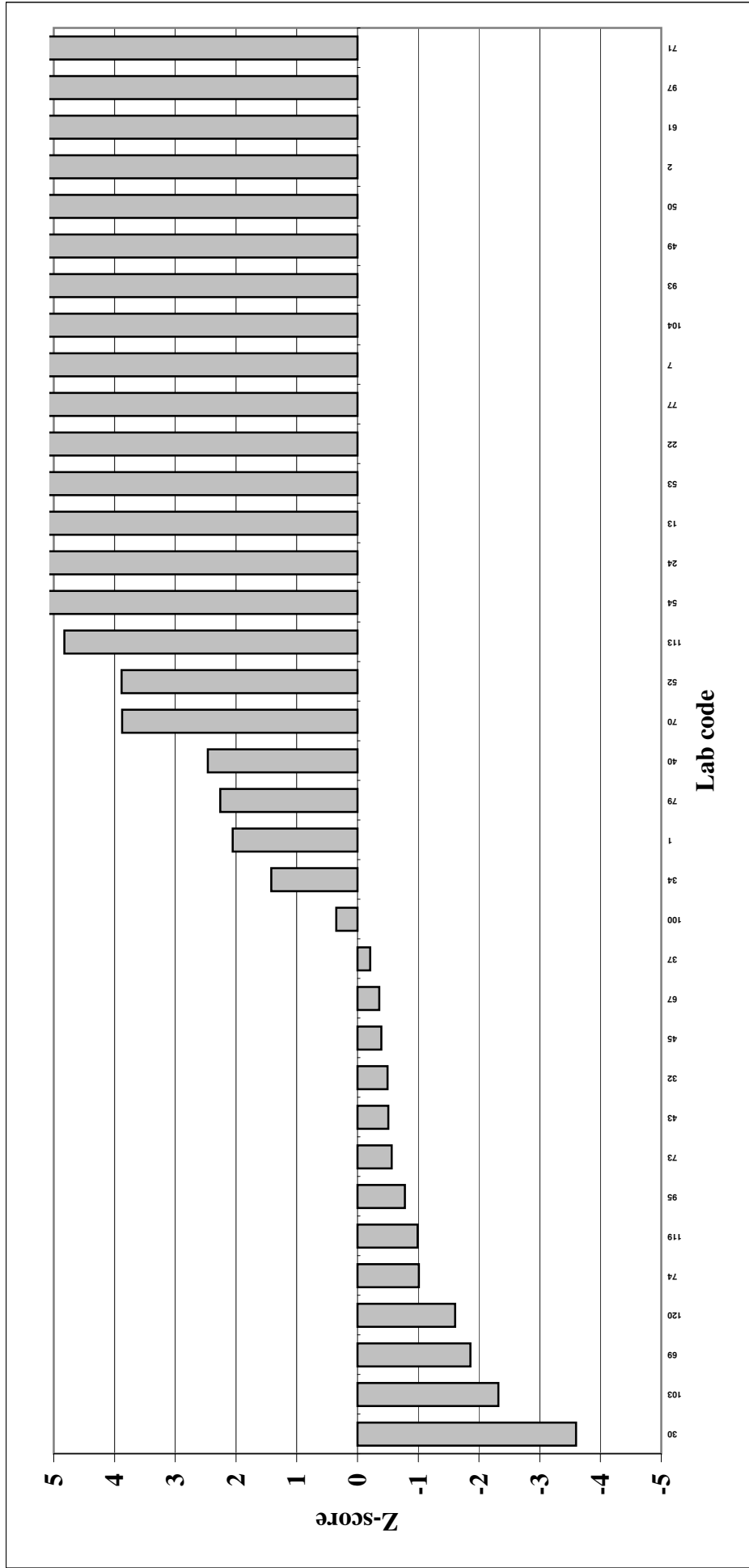
Z-score Deer meat; mono-ortho PCB TEQ



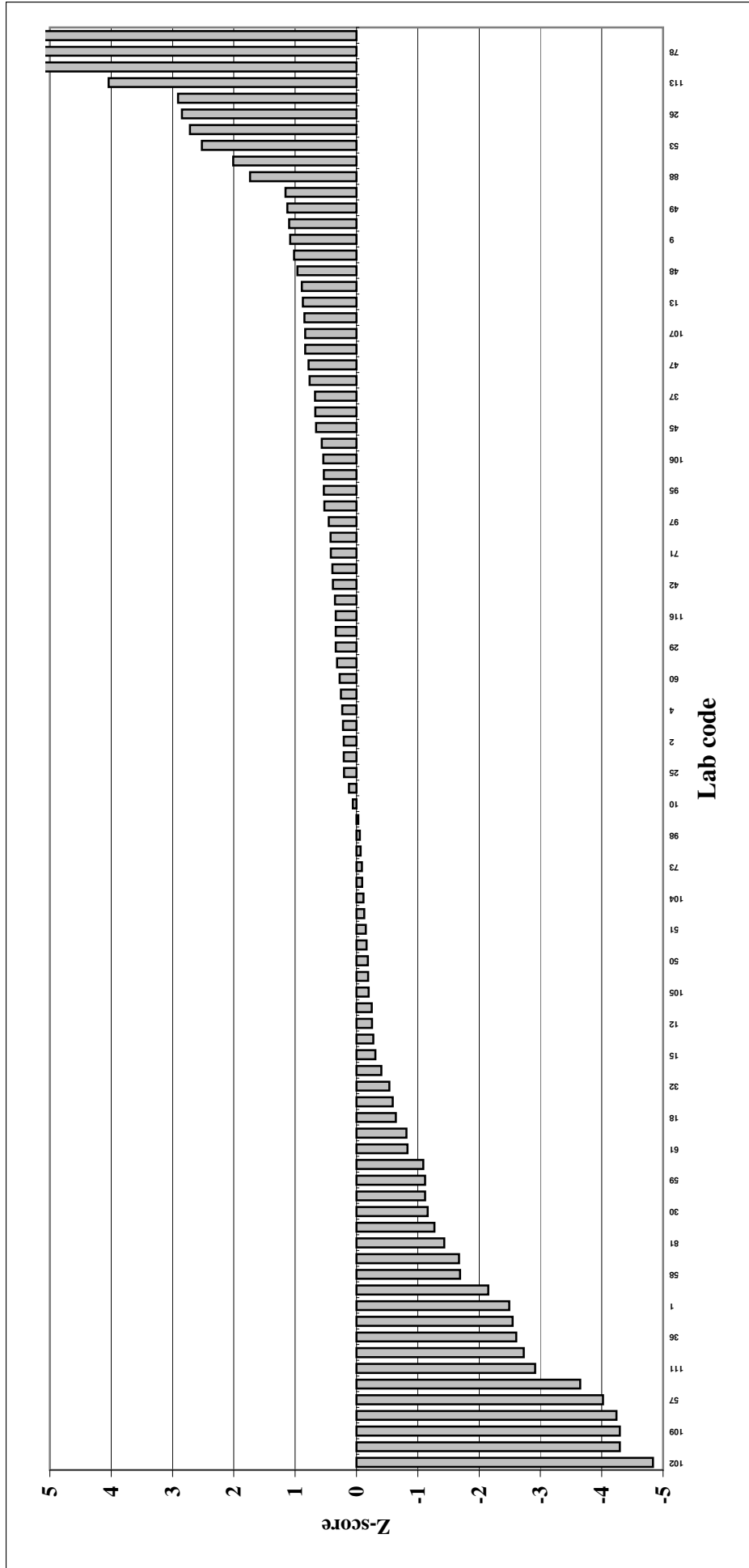
Z-score Deer meat; sum indicator PCB



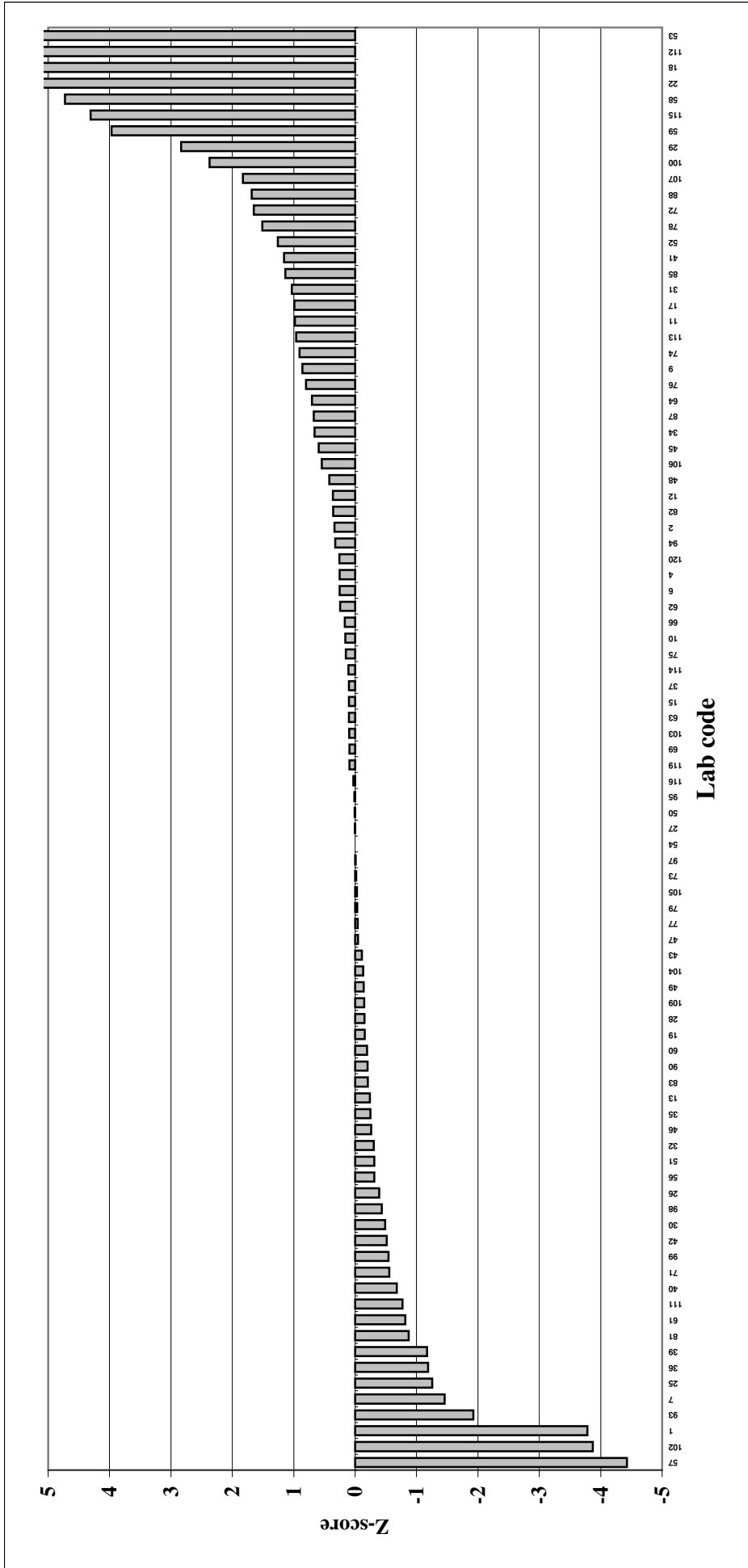
Z-score Deer meat; sum PBDE without BDE-209



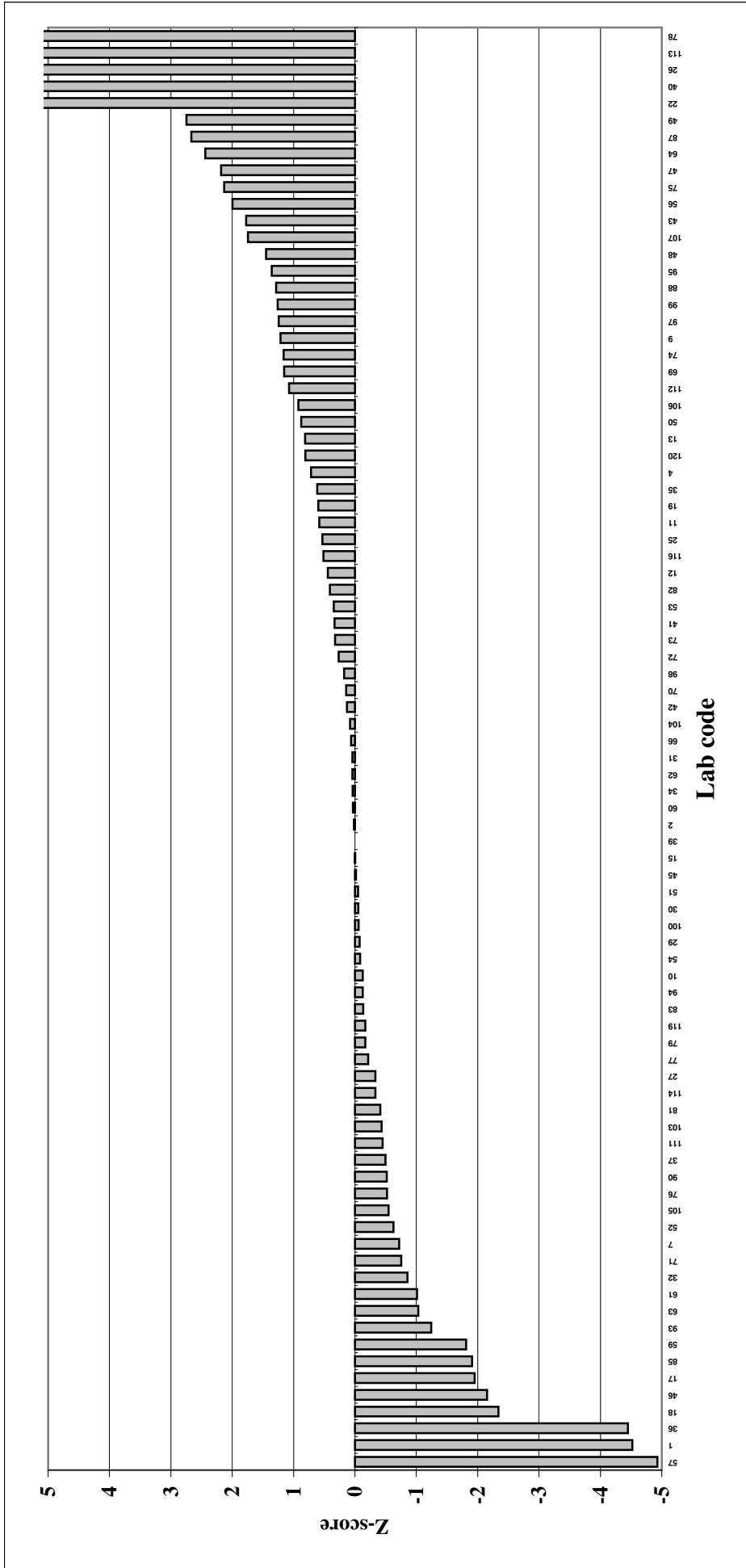
Z-score Eel; total TEQ



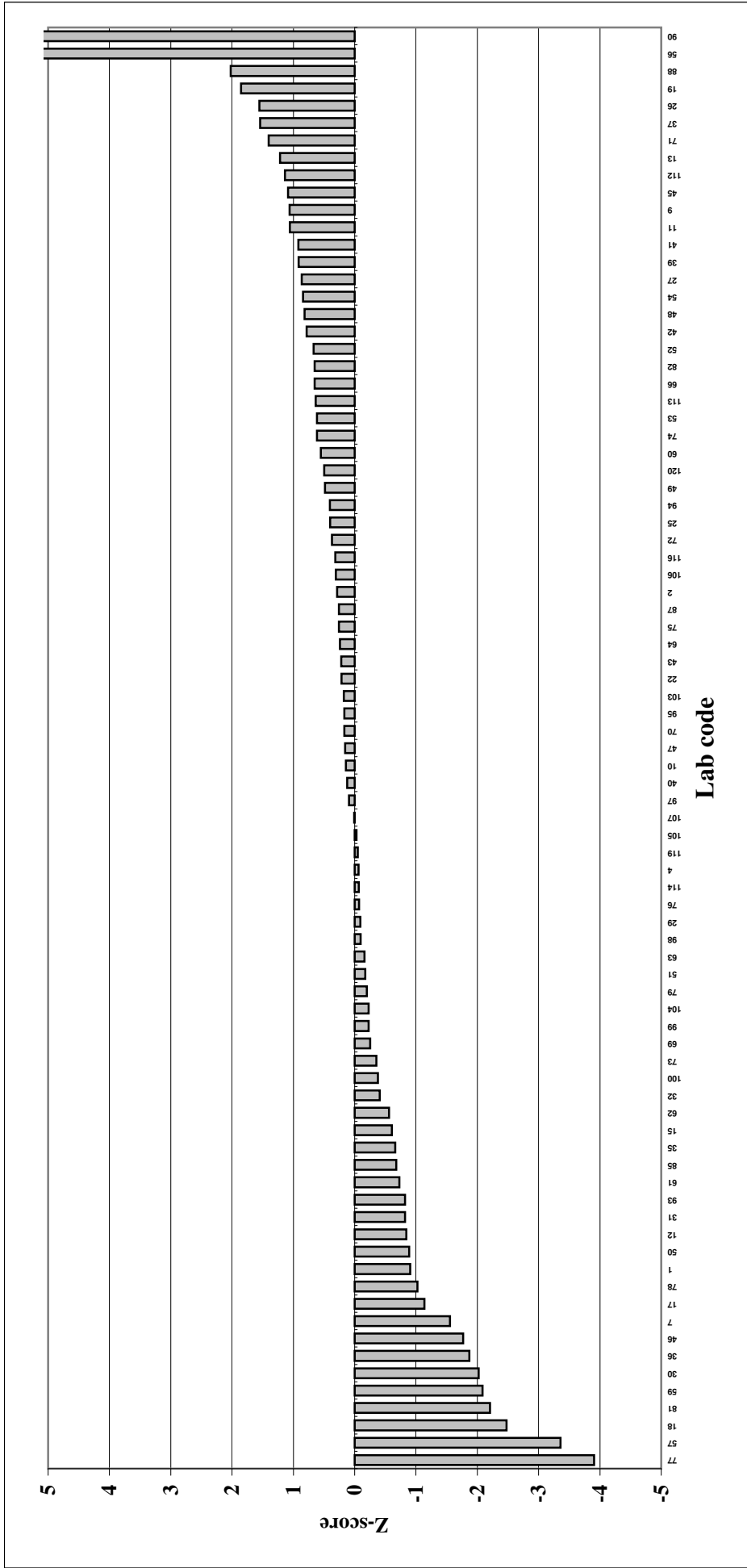
Z-score Eel; PCDD/PCDF TEQ



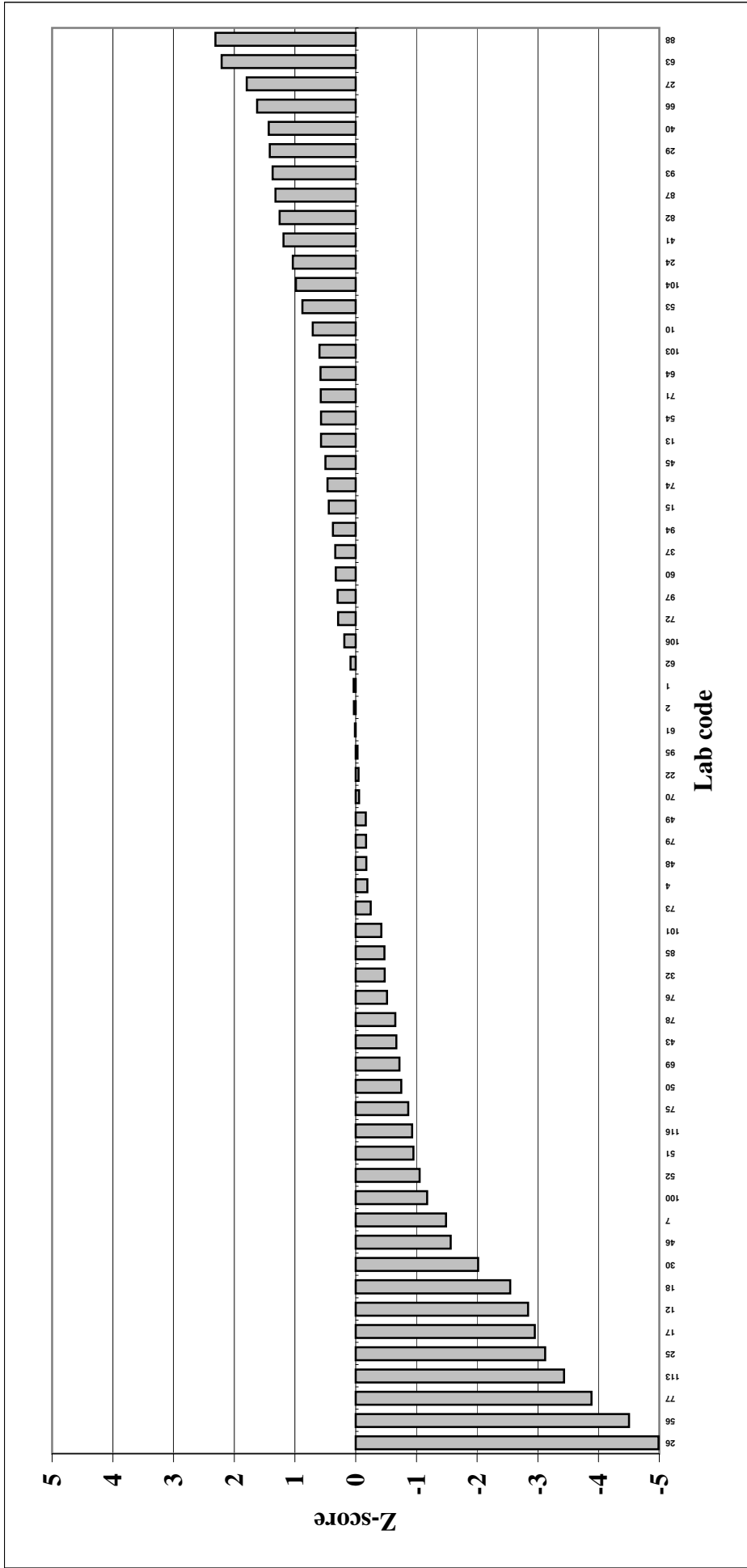
Z-score Eel; non-ortho PCB TEQ



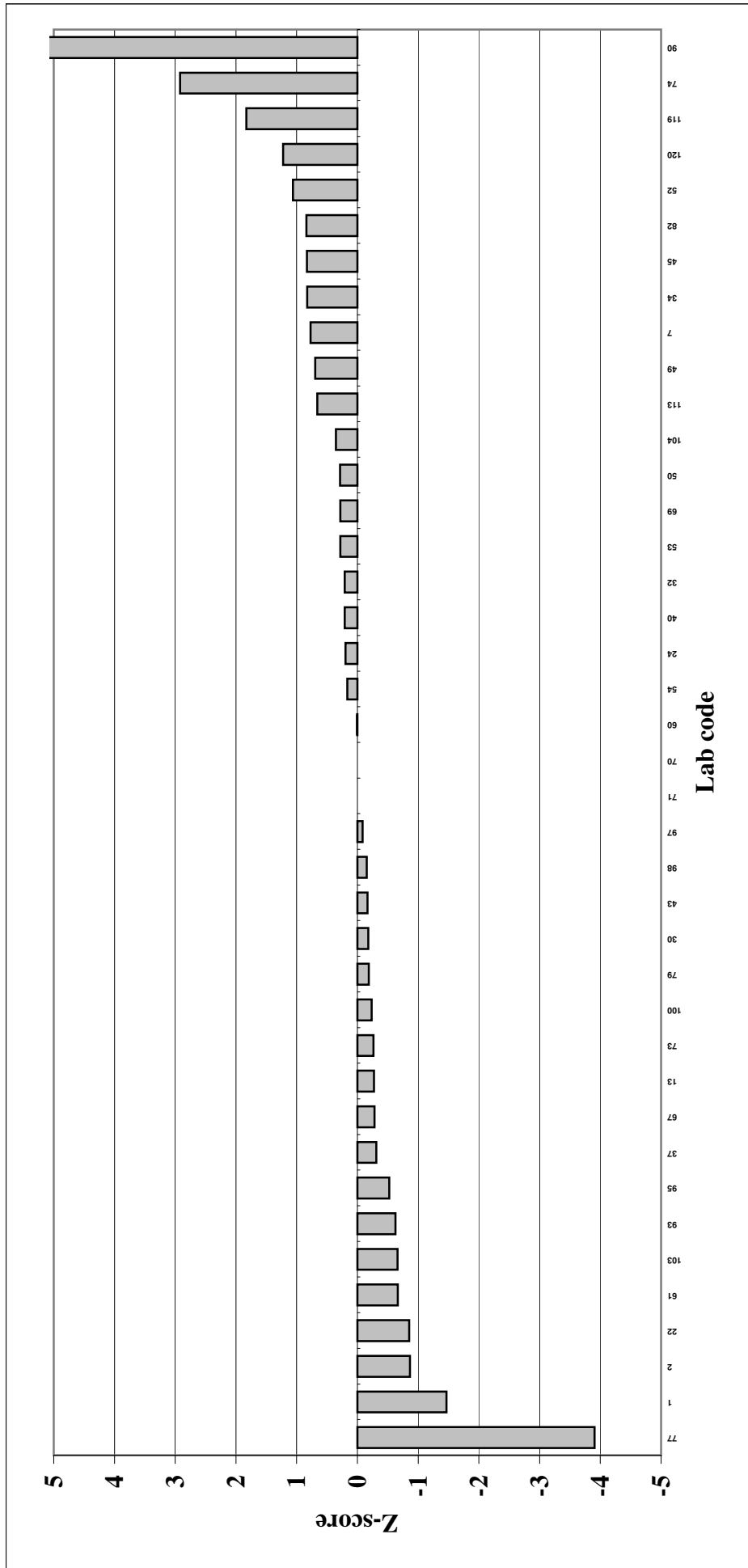
Z-score Eel; mono-ortho PCB TEQ



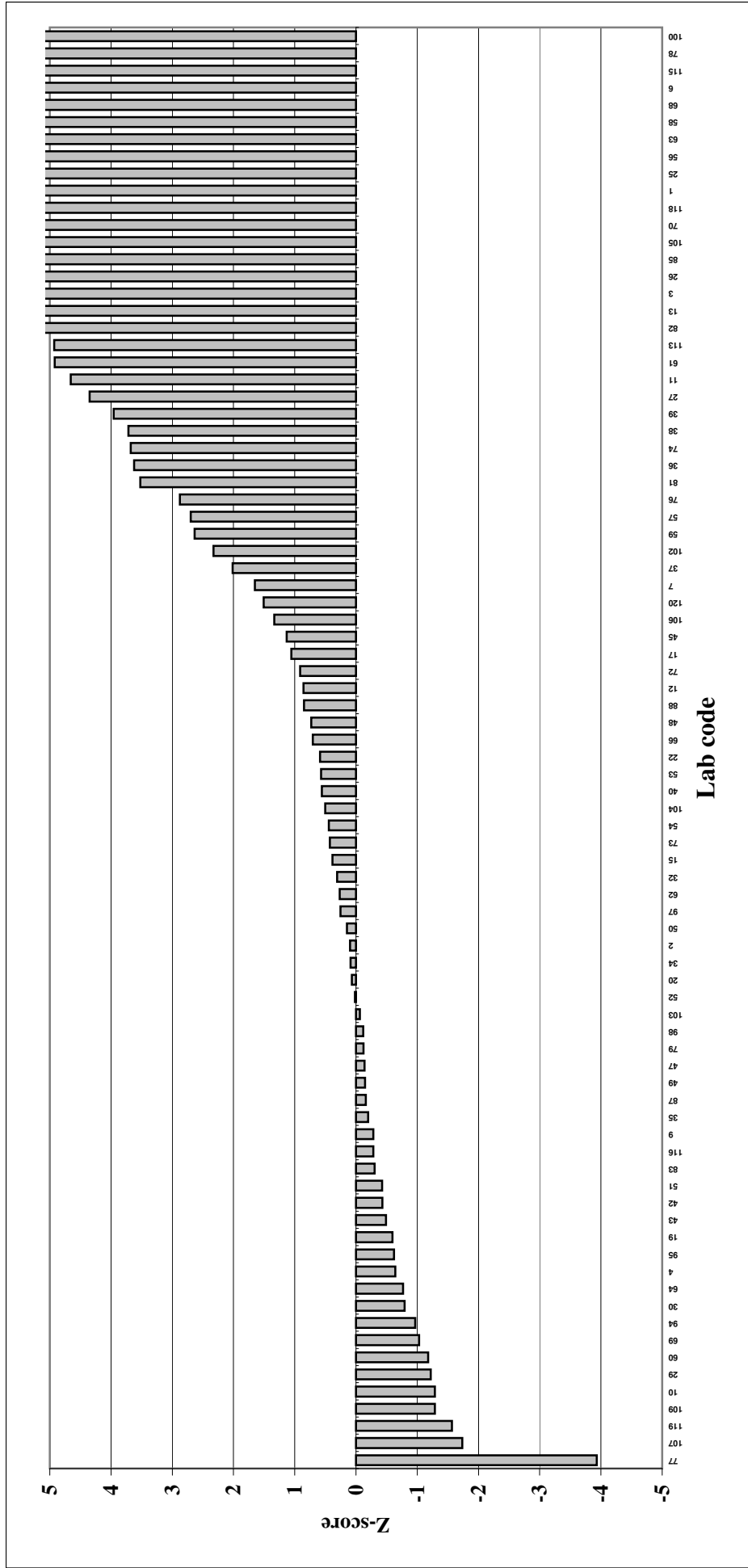
Z-score Eel; sum indicator PCB



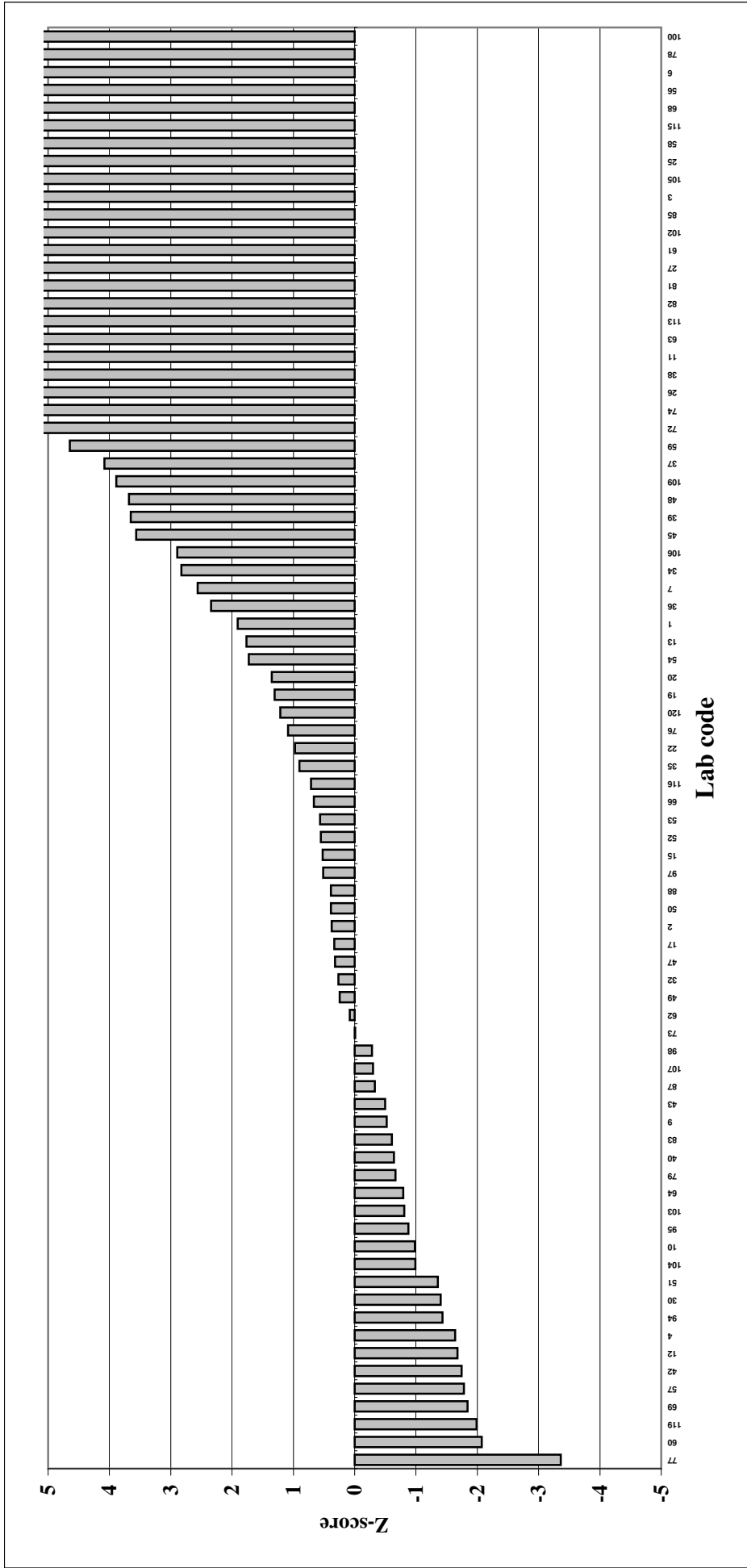
Z-score Eel; sum PBDE without BDE-209



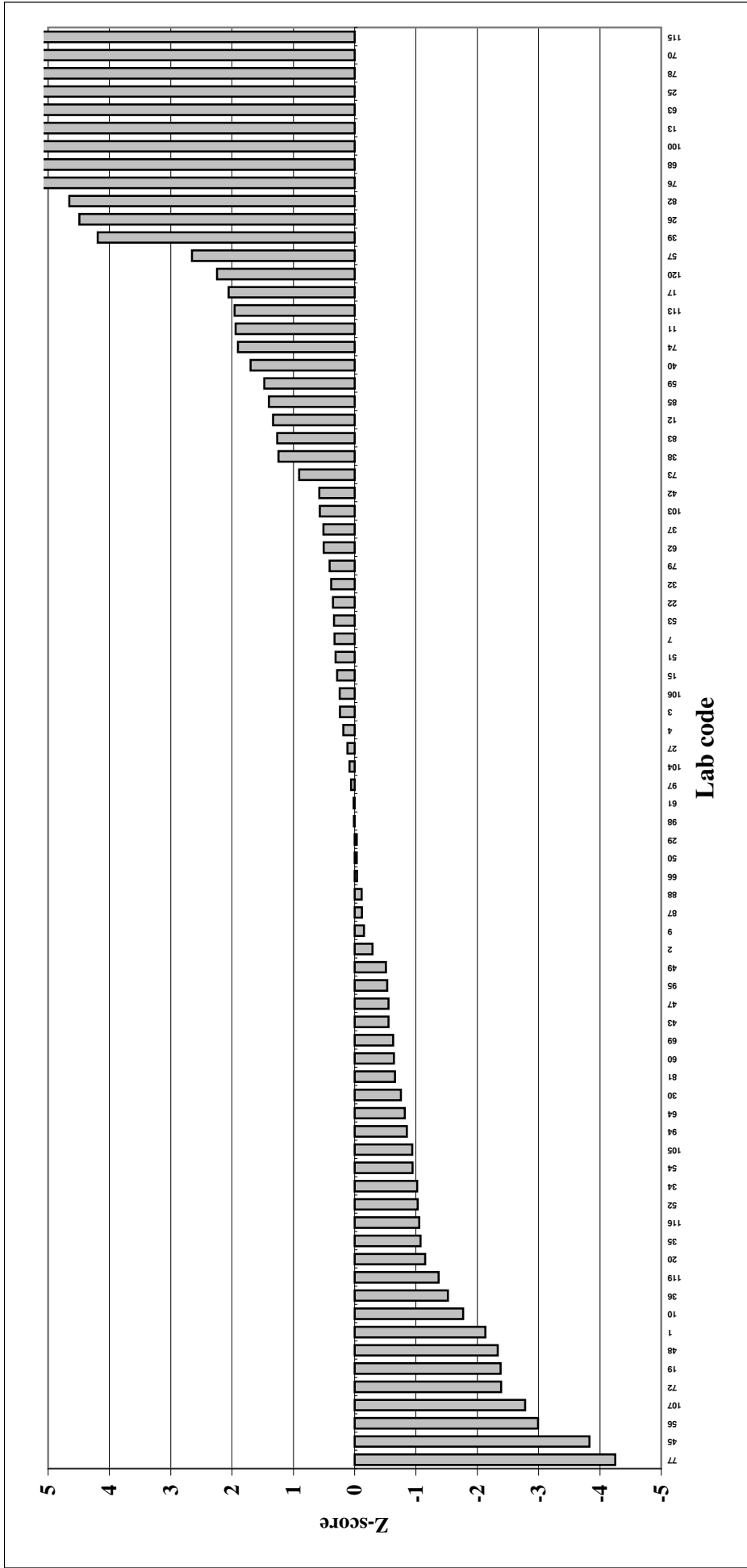
Z-score Cream; total TEQ



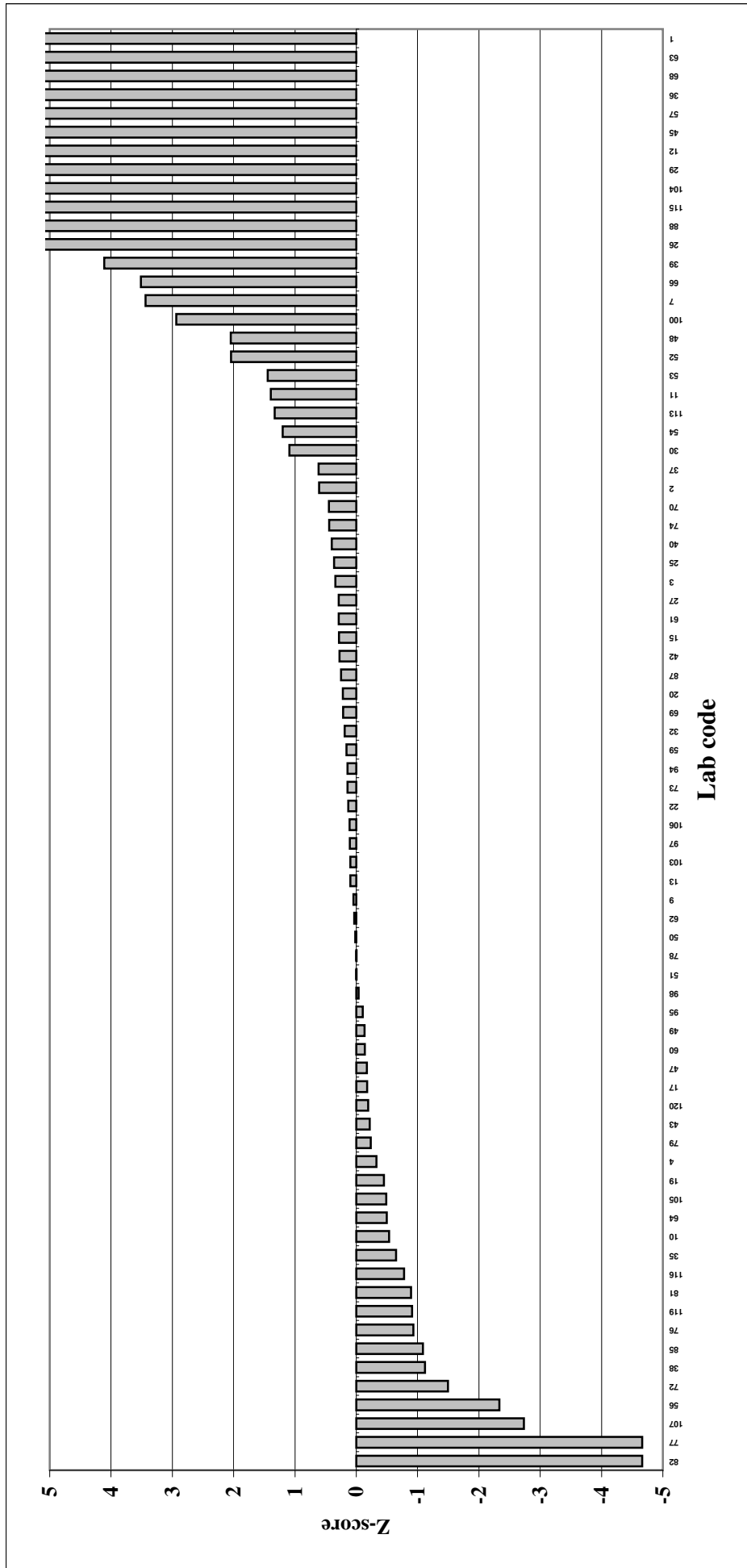
Z-score Cream; PCDD/PCDF TEQ



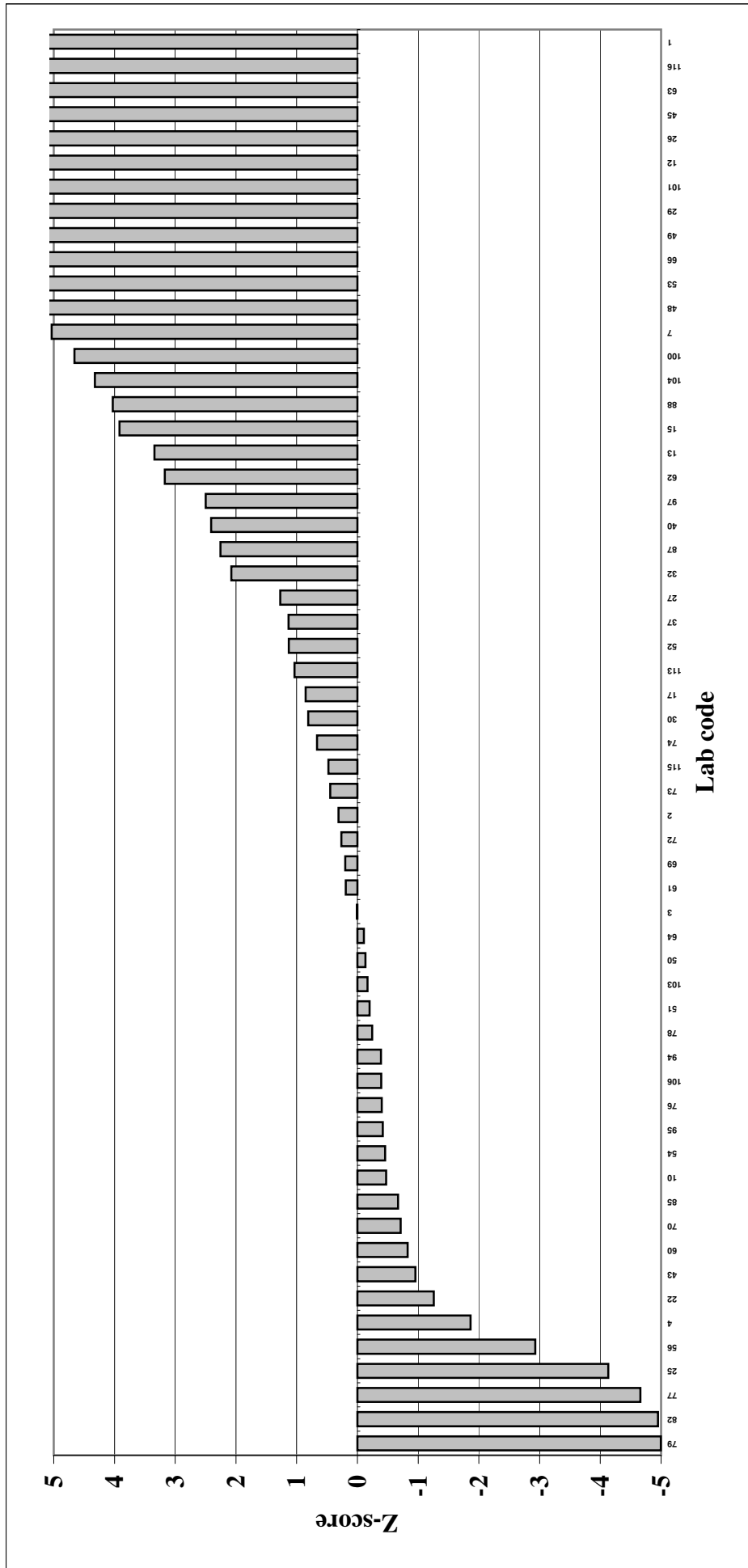
Z-score Cream; non-ortho PCB TEQ



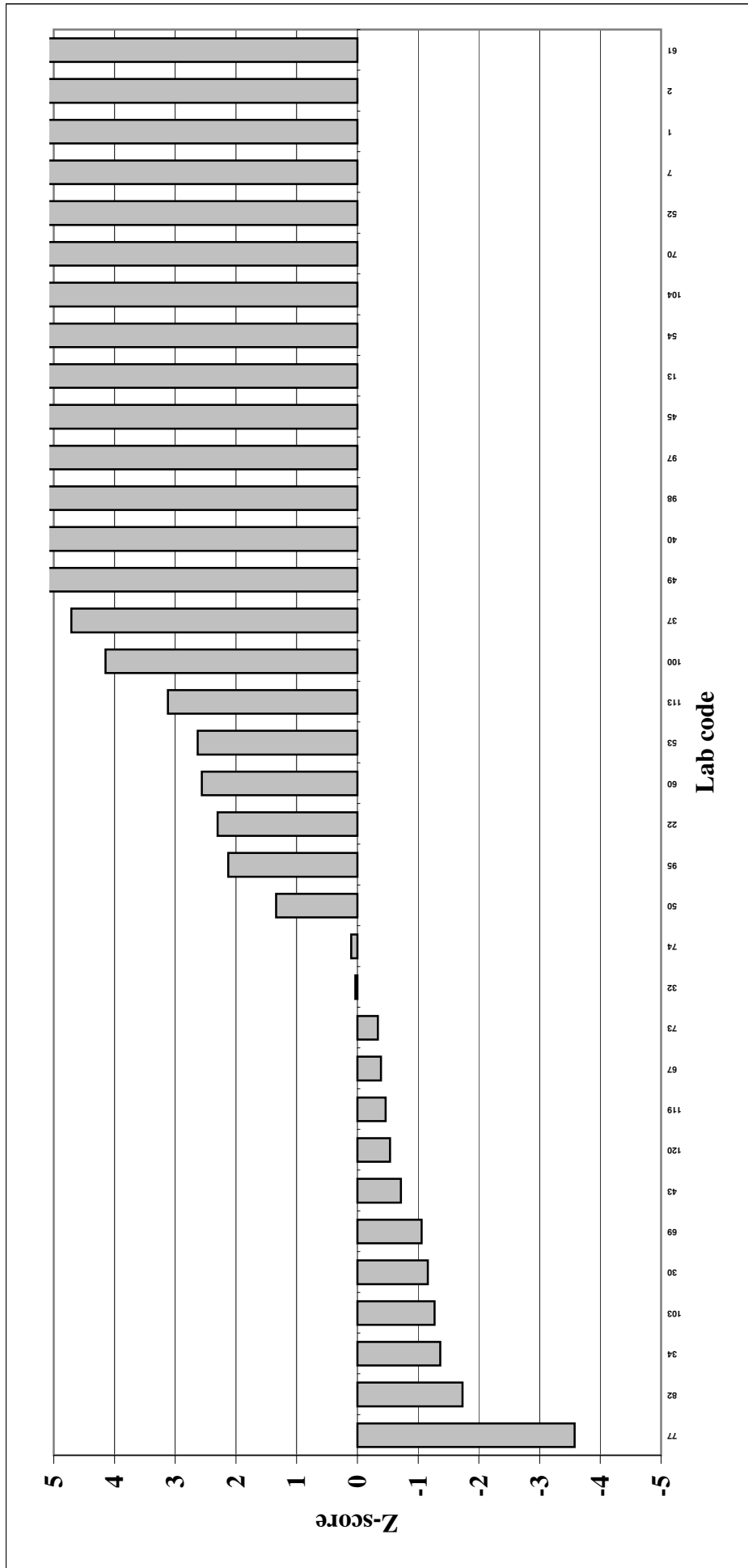
Z-score Cream; mono-ortho PCB TEQ



Z-score Cream; sum indicator PCB



Z-score Cream; sum PBDE without BDE-209



Appendix D:

WHO TEFs for human risk assessment

WHO TEFs for human risk assessment based on the conclusions of the World Health Organisation Meeting in Stockholm, Sweden, 15-18 June 1997 and International Programme on Chemical Safety expert meeting in Geneva, June 2005 (M. van den Berg et al., Environ Health Perspect 1998;106:775-792; M. van den Berg et al., Toxicological sciences 93(2), 223-241 (2006))

Congener	TEF values (1998)	TEF values (2006)	Congener	TEF values (1998)	TEF values (2006)
"Dioxins"			"Dioxin-like" PCBs		
Polychlorinated dibenzo-p-dioxins (PCDDs)			Non-ortho PCBs		
2,3,7,8-TCDD	1	1	PCB 77	0.0001	0.0001
1,2,3,7,8-PeCDD	1	1	PCB 81	0.0001	0.0003
1,2,3,4,7,8-HxCDD	0.1	0.1	PCB 126	0.1	0.1
1,2,3,6,7,8-HxCDD	0.1	0.1	PCB 169	0.01	0.03
1,2,3,7,8,9-HxCDD	0.1	0.1			
1,2,3,4,6,7,8-HpCDD	0.01	0.01			
OCDD	0.0001	0.0003			
Polychlorinated dibenzofurans (PCDFs)			Mono-ortho PCBs		
2,3,7,8-TCDF	0.1	0.1	PCB 105	0.0001	0.00003
1,2,3,7,8-PeCDF	0.05	0.03	PCB 114	0.0005	0.00003
2,3,4,7,8-PeCDF	0.5	0.3	PCB 118	0.0001	0.00003
1,2,3,4,7,8-HxCDF	0.1	0.1	PCB 123	0.0001	0.00003
1,2,3,6,7,8-HxCDF	0.1	0.1	PCB 156	0.0005	0.00003
1,2,3,7,8,9-HxCDF	0.1	0.1	PCB 157	0.0005	0.00003
2,3,4,6,7,8-HxCDF	0.1	0.1	PCB 167	0.00001	0.00003
1,2,3,4,6,7,8-HpCDF	0.01	0.01	PCB 189	0.0001	0.00003
1,2,3,4,7,8,9-HpCDF	0.01	0.01			
OCDF	0.0001	0.0003			

Abbreviations used: "T" = tetra; "Pe" = penta; "Hx" = hexa; "Hp" = hepta; "O" = octa; "CDD" = chlorodibenzo-p-dioxin; "CDF" = chlorodibenzofuran; "CB" = chlorobiphenyl.

Appendix E:

Homogeneity testing

Homogeneity testing of test materials for “Interlaboratory Comparison on Dioxins in Food” organised by the Norwegian Institute of Public Health

Introduction

The International Harmonized Protocol for the Proficiency Testing of Analytical Chemistry Laboratories (Pure Appl Chem 2006;78:145-96) states that “The bulk material prepared for the proficiency test must be sufficient homogeneous and stable, in respect of each analyte, to ensure that all laboratories receive distribution units that do not differ to any consequential degree in mean analyte concentration. The scheme provider must clearly state the procedure used to establish the homogeneity of the test material”.

The protocol requires that the variation in composition among the distributed units is negligible in relation to variation introduced by the measurements conducted by the participants of the proficiency test (PT). The estimated variation between the samples (s_{sam}) should be less than 30% of the target standard deviation (σ_p), i.e., $s_{\text{sam}} < 0.3 \sigma_p$.

Further the protocol states that homogeneity testing is required to reassure the participants in proficiency testing schemes that the distributed units of the test material are sufficiently similar. The test specified calls for the selection of ten or more units at random after the putative homogenized material has been split and packaged into discrete samples for distribution. The material from each sample is then analyzed in duplicate, under randomized repeatability conditions (that is, all in one run) using a method with sufficient analytical precision. The value of σ_{sam} is then estimated from the mean squares after one-way analysis of variance (ANOVA).

Much depends on the quality of the analytical results of the homogeneity testing. If the analytical precision (σ_{an}) of the homogeneity test is not small, important sampling variation may be obscured by analytical variation. We may get a non-significant result when testing for heterogeneity, not because it is not present, but the test has no power to detect it. It is recommended that the analytical (repeatability) precision of the method used in the homogeneity test should satisfy $\sigma_{\text{an}} < 0.5 \sigma_p$

Consequences for the Interlaboratory Comparison on Dioxins in Food

Below follows the consequences for the Interlaboratory Comparison on Dioxin in Food;

1.

The protocol recommends duplicate analysis of at least 10 distribution units. Due to limited amount of test material in each distribution unit and the requirement for sufficiently low analytical standard deviation, the test analysis has to be restricted to PCB, e.g., 6 indicator PCB or CB-153. It is, however, questionable whether analysis of indicator PCB also reflects the distribution of dioxins and other contaminants in the sample, as the test material is often prepared by mixing specifically contaminated material with background contaminated material in order to achieve a sufficient contamination level. Therefore, the distribution of PCBs in the sample might not be relevant for the distribution of dioxins in the sample. The analytical precision of the method used in the homogeneity test should be less than half of the target standard deviation, i.e., $\sigma_{\text{an}} < 0.5 \sigma_p$. For determination of dioxins, the target standard deviation may be approximated by the requirement for trueness (Commission Regulation (EC) No 1883/2006) of $\pm 20\%$ for total TEQ, i.e., the analytical precision should be less than 10%. This is unrealistic to achieve for the determination of dioxins.

2.

The homogeneity testing using, e.g., the determination of indicator PCBs, requires the analysis of at least 60 samples prior to shipment of the distribution units to the participants. This causes problems for the time schedule of the sample preparation and involves high costs.

3.

The laboratory conducting the homogeneity test on PT analytes would have access to the test material and knowledge of contamination levels prior to the start of the PT and would therefore not be qualified for participation in the PT.

Conclusion

A valid testing of homogeneity of the test materials of the Interlaboratory Comparison (ILC) on Dioxins in Food with respect to the distribution of dioxins and dioxin-like PCBs is not guaranteed using indicator PCBs. It is doubtful that the analytical precision is small enough to detect a lack in sufficient homogeneity. Given the need for annually testing three different matrices for homogeneity, alternative, rapid and low cost homogeneity tests using surrogate should be applied.

Present approach for homogeneity testing for the ILC on Dioxins in Food

The Harmonized Protocol states under Chapter Testing for sufficient homogeneity: “Tests for sufficient homogeneity are in practice never wholly satisfactory... However, given that sufficient homogeneity is a reasonable prior assumption (because proficiency testing scheme providers do their best to ensure it), and that the cost [and time-consumption] of testing for it is often high, it is sensible to make the main emphasis the avoidance of “Type 1 errors” (that is, false rejection of a satisfactory material).

Having this in mind and the facts that it is impossible to determine all analytes for homogeneity testing of food test material and that a single indicator analyte not necessarily reflects the distribution of the other analytes, we have developed an approach that ensures that the test material is thoroughly blended and evenly distributed among the individual test bottles. The homogeneity testing of solid samples is based on the principle of measuring electrolytic conductivity after addition of sodium chloride to a small portion of the coarsely blended test material. A demonstration of homogeneous distribution of the added salt in the sub samples would indicate our ability to evenly blend the food matrix, i.e., with this approach we ensure the efficiency of our blending procedure. This is especially of importance when blending highly contaminated food matrices with background contaminated food matrices.

When testing homogeneity of the food samples, sodium chloride was added to about 10% of the test material in such an amount that the conductivity was about doubled compared to the natural conductivity. This sub-sample was added to the total sample. For example, to 1 kg of homogenised chicken meat, 150 g NaCl were added resulting in an addition of 1% NaCl to the final test material of 15 kg. Conductivity measurements are performed as follows: boiling water is added to 10.0g of the test material, and the resulting dispersion is ultrasonicated. After centrifugation, the extract is filtered through folded paper filters and allowed to cool to room temperature. The electrolytic conductivity of the water extract is measured using a conductivity meter.

Homogeneity of the test material was demonstrated by comparing the conductivity in water extracts of 10 samples from the same bottle (variation within bottles), and in extracts from 10 different bottles (variation between bottles).

Example

As an example, the relative standard deviation (RSD) of 10 conductivity measurements within a sample bottle containing chicken meat homogenate was 2%. The RSD for the measurement of samples from 10 different, randomly selected bottles was 3%. The contribution of the inhomogeneity to the total variation, calculated from $RSD^2_{\text{inhomogeneity}} = RSD^2_{\text{between}} - RSD^2_{\text{within}}$ ¹ was 2.2% and hence small and acceptable. The total uncertainty for the determination of PCDD/Fs is usually considerably larger, so the measured contribution of inhomogeneity to the total uncertainty can be neglected

¹G. Becher, L.S. Haug, C. Thomsen, World-wide comparison on the quality of analytical determinations of PCDDs/PCDFs and dioxin-like PCBs in food, *Talanta* 63 (2004) 1115-1122.

Appendix 1:

Presentation of results
for analyte solution

Appendix 1: Presentation of results: Analyte solution

Statistic calculations for PCDDs, PCDFs, dioxin-like PCBs, indicator PCBs, PBDEs and α -HBCD

The analyte solution contained

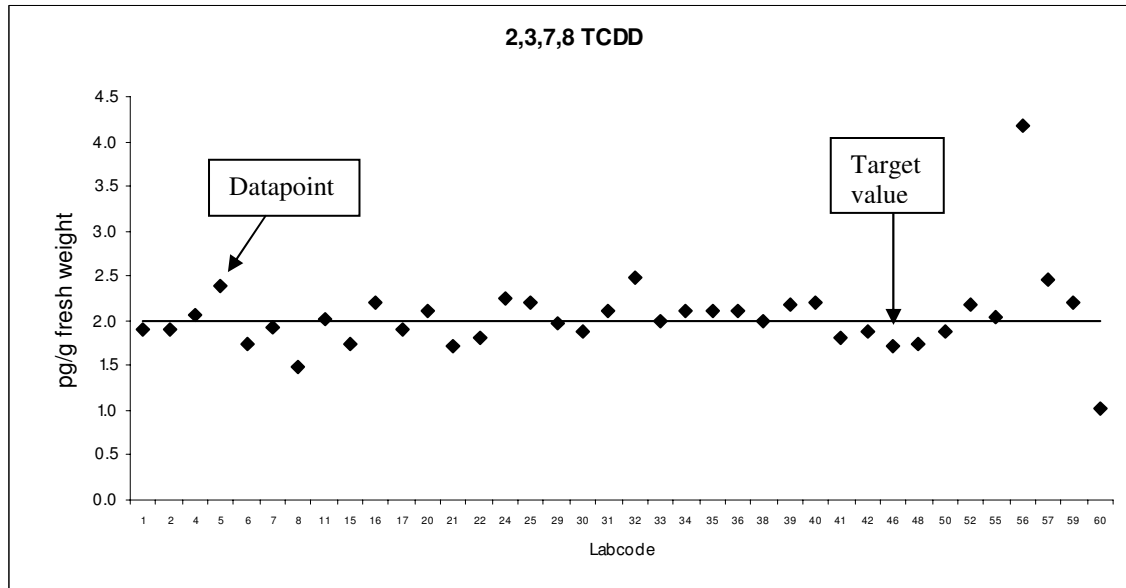
- PCDDs/PCDFs at concentrations of 2:5:10 pg/ μ l for tetra:penta-hexa-hepta:octa chlorinated dibenzodioxins/furans respectively.
- Non-ortho PCBs at concentration of 10 pg/ μ l.
- Mono-ortho PCBs and indicator PCBs at concentration of 100 pg/ μ l.
- PBDE at a concentration of 25 pg/ μ l, except BDE-209 at 100 pg/ μ l.
- α -HBCD at a concentration of 500 pg/ μ l.

These concentrations are called the congeners' target value.

For each congener, the outliers were removed and the consensus calculated according to the following procedure:

1. The median was calculated from all the reported data.
2. Values outside a range of 50 % to 150 % of this median, were defined as outliers and removed from the data set.
3. Median, mean and standard deviation were re-calculated from the remaining data. This median and mean were called consensus median and mean.

The diagram shows the target value and the reported data. Values outside a range of 50 % to 150 % of “median of all values”, were defined as outliers and are not shown in the plot.



Z-Scores of individual congeners

Z-scores of each congener were calculated for each laboratory according to the following equation:

$$z = (x - X)/\sigma$$

Where x = reported value; X = assigned value (consensus); σ = target value for standard deviation. A σ of 20% of the consensus was used, i.e. z-scores between +1 and -1 reflect a deviation of $\pm 20\%$ from the consensus value.

Analyte solution

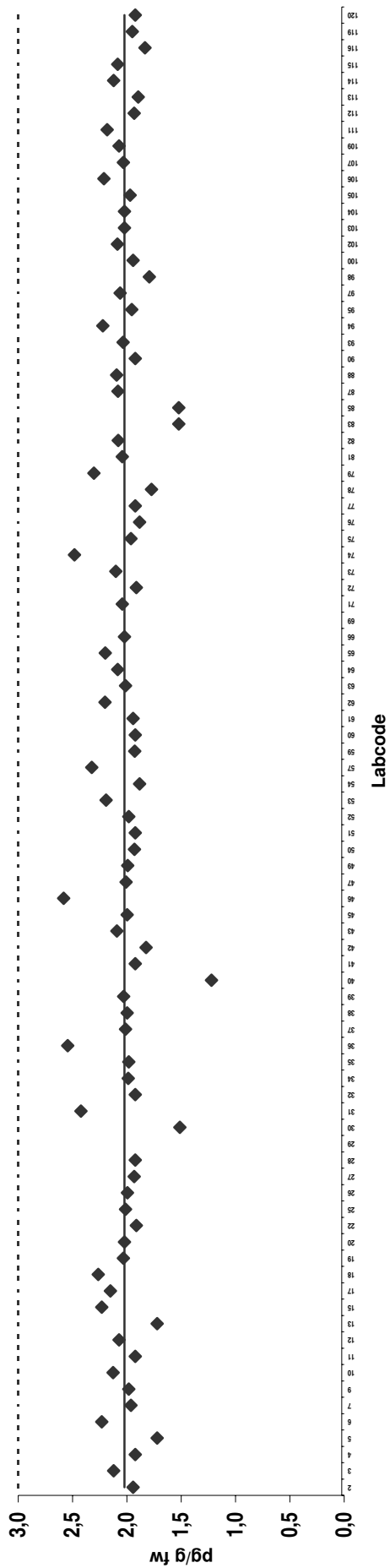
Congener: 2,3,7,8 TCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	1,9		59	1,9		120	1,9	
3	2,1		60	1,9				
4	1,9		61	1,9				
5	1,7		62	2,2				
6	2,2		63	2,0				
7	1,9		64	2,1				
9	2,0		65	2,2				
10	2,1		66	2,0				
11	1,9		69	8,4	Outlier			
12	2,0		71	2,0				
13	1,7		72	1,9				
15	2,2		73	2,1				
17	2,1		74	2,5				
18	2,2		75	1,9				
19	2,0		76	1,9				
20	2,0		77	1,9				
22	1,9		78	1,8				
25	2,0		79	2,3				
26	2,0		81	2,0				
27	1,9		82	2,1				
28	1,9		83	1,5				
29	3,5	Outlier	85	1,5				
30	1,5		87	2,1				
31	2,4		88	2,1				
32	1,9		90	1,9				
34	2,0		93	2,0				
35	2,0		94	2,2				
36	2,5		95	1,9				
37	2,0		97	2,0				
38	2,0		98	1,8				
39	2,0		100	1,9				
40	1,2		102	2,1				
41	1,9		103	2,0				
42	1,8		104	2,0				
43	2,1		105	1,9				
45	2,0		106	2,2				
46	2,6		107	2,0				
47	2,0		109	2,1				
49	2,0		111	2,2				
50	1,9		112	1,9				
51	1,9		113	1,9				
52	2,0		114	2,1				
53	2,2		115	2,1				
54	1,9		116	1,8				
57	2,3		119	1,9				

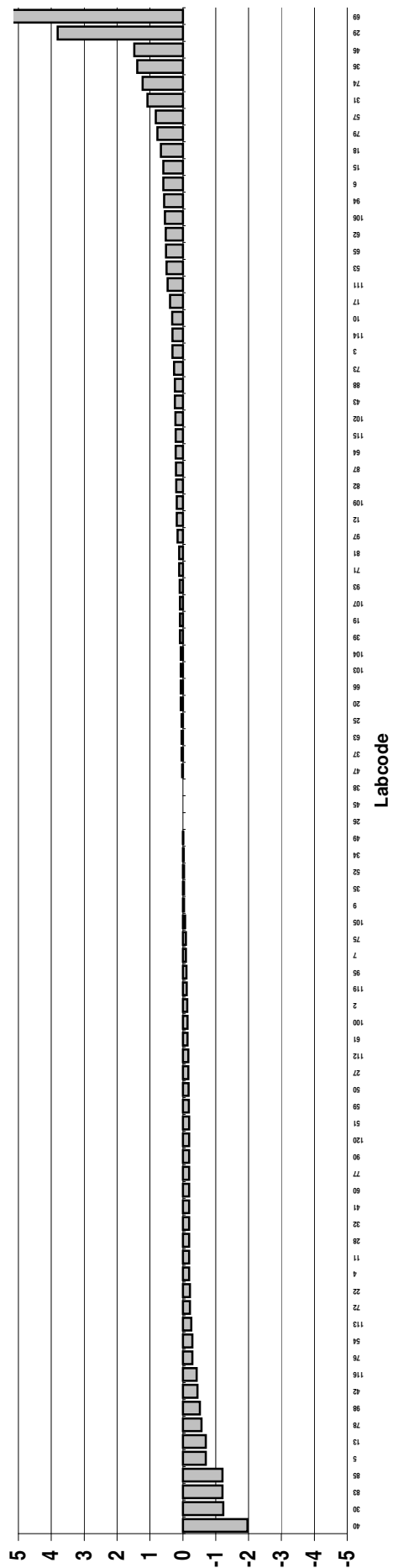
Consensus statistics

Consensus median, pg/g	2,0
Median all values pg/g	2,0
Consensus mean, pg/g	2,0
Standard deviation, pg/g	0,20
Relative standard deviation, %	10
No. of values reported	91
No. of values removed	2
No. of reported non-detects	0

2,3,7,8 TCDD



Z-score: 2,3,7,8 TCDD



Analyte solution

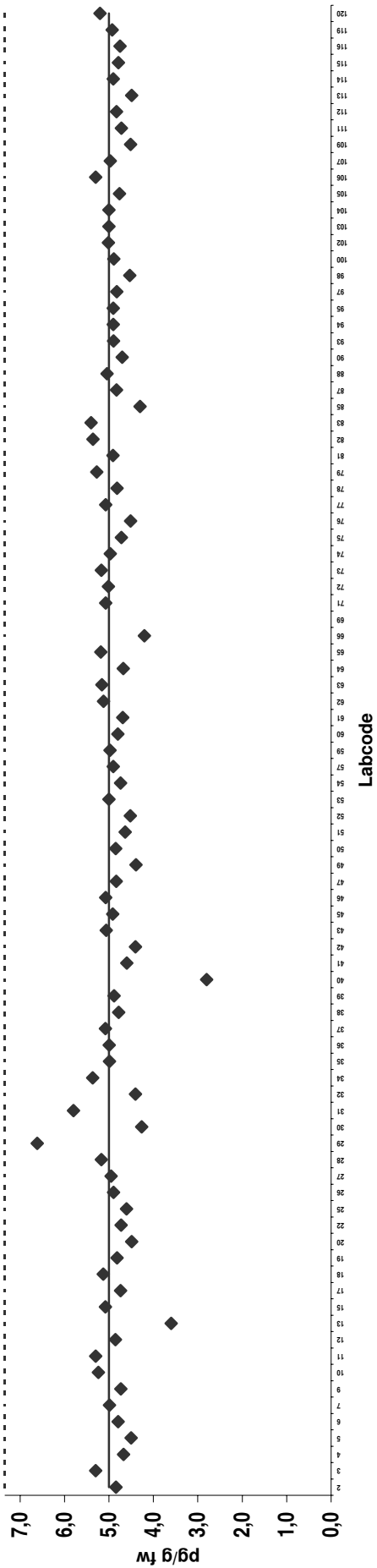
Congener: 1,2,3,7,8 PeCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	4,8		59	5,0		120	4,8	
3	5,3		60	4,8				
4	4,7		61	4,7				
5	4,5		62	5,1				
6	4,8		63	5,2				
7	5,0		64	4,7				
9	4,7		65	5,2				
10	5,2		66	4,2				
11	5,3		69	2,1				
12	4,9		71	5,1	Outlier			
13	3,6		72	5,0				
15	5,1		73	5,2				
17	4,7		74	5,0				
18	5,1		75	4,7				
19	4,8		76	4,5				
20	4,5		77	5,1				
22	4,7		78	4,8				
25	4,6		79	5,3				
26	4,9		81	4,9				
27	5,0		82	5,4				
28	5,2		83	5,4				
29	6,6		85	4,3				
30	4,3		87	4,8				
31	5,8		88	5,0				
32	4,4		90	4,7				
34	5,4		93	4,9				
35	5,0		94	4,9				
36	5,0		95	4,9				
37	5,1		97	4,8				
38	4,8		98	4,5				
39	4,9		100	4,9				
40	2,8		102	5,0				
41	4,6		103	5,0				
42	4,4		104	5,0				
43	5,1		105	4,8				
45	4,9		106	5,3				
46	5,1		107	5,0				
47	4,8		109	4,5				
49	4,4		111	4,7				
50	4,8		112	4,8				
51	4,6		113	4,5				
52	4,5		114	4,9				
53	5,0		115	4,8				
54	4,7		116	4,7				
57	4,9		119	4,9				

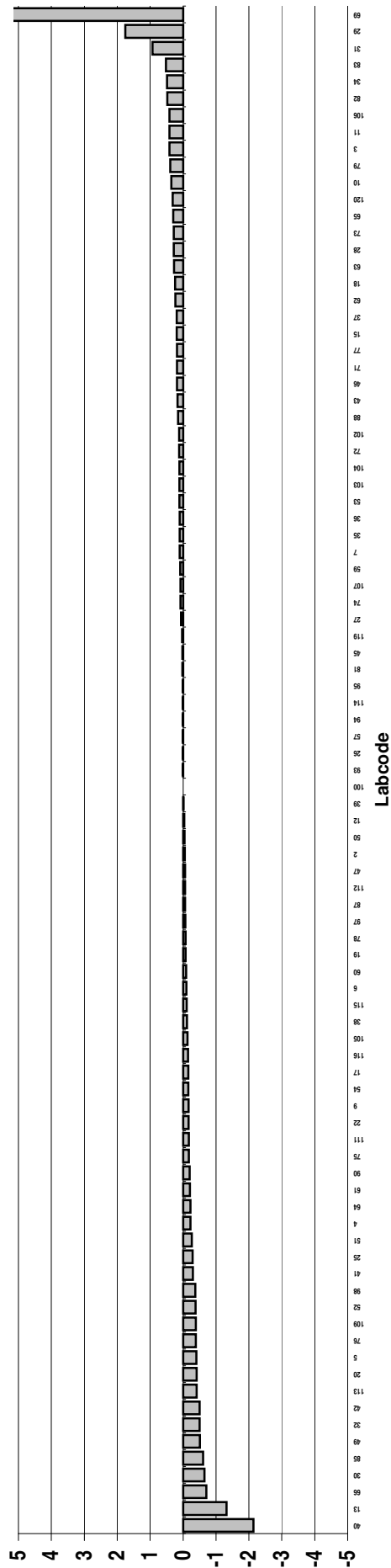
Consensus statistics

Consensus median, pg/g	4,9
Median all values pg/g	4,9
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,42
Relative standard deviation, %	8,7
No. of values reported	91
No. of values removed	1
No. of reported non-detects	0

1,2,3,7,8 PeCDD



Z-score: 1,2,3,7,8 PeCDD



Analyte solution

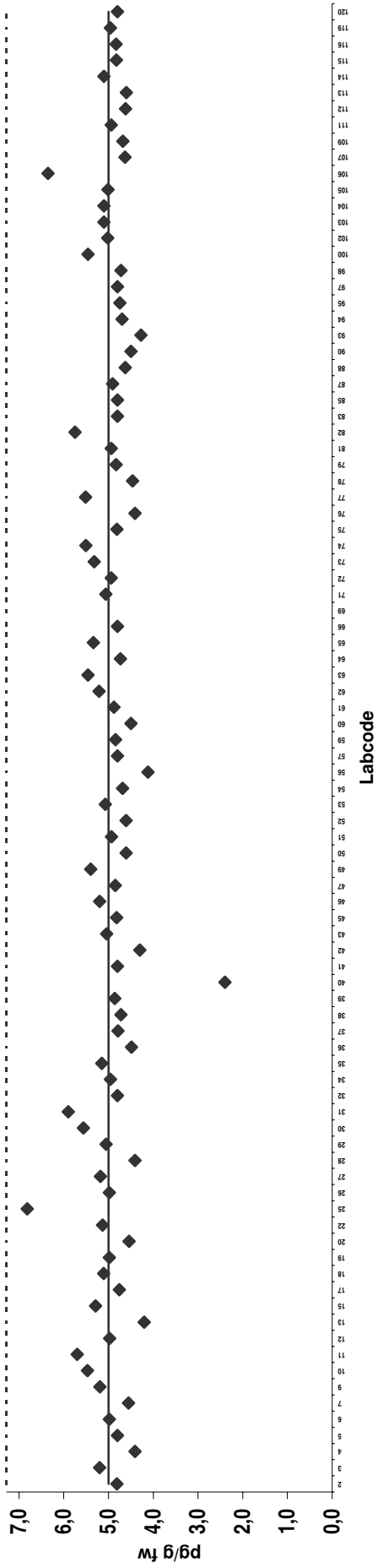
Congener: 1,2,3,4,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	4,8		57	4,8		119	4,8	
3	5,2		59	4,8		120	5,2	
4	4,4		60	4,5				
5	4,8		61	4,9				
6	5,0		62	5,2				
7	4,6		63	5,5				
9	5,2		64	4,7				
10	5,5		65	5,3				
11	5,7		66	4,8				
12	5,0		69	20	Outlier			
13	4,2		71	5,1				
15	5,3		72	4,9				
17	4,8		73	5,3				
18	5,1		74	5,5				
19	5,0		75	4,8				
20	4,5		76	4,4				
22	5,1		77	5,5				
25	6,8		78	4,5				
26	5,0		79	4,8				
27	5,2		81	4,9				
28	4,4		82	5,8				
29	5,1		83	4,8				
30	5,6		85	4,8				
31	5,9		87	4,9				
32	4,8		88	4,6				
34	5,0		90	4,5				
35	5,2		93	4,3				
36	4,5		94	4,7				
37	4,8		95	4,7				
38	4,7		97	4,8				
39	4,9		98	4,7				
40	2,4		100	5,5				
41	4,8		102	5,0				
42	4,3		103	5,1				
43	5,0		104	5,1				
45	4,8		105	5,0				
46	5,2		106	6,4				
47	4,9		107	4,6				
49	5,4		109	4,7				
50	4,6		111	4,9				
51	4,9		112	4,6				
52	4,6		113	4,6				
53	5,1		114	5,1				
54	4,7		115	4,8				
56	4,1		116	4,8				

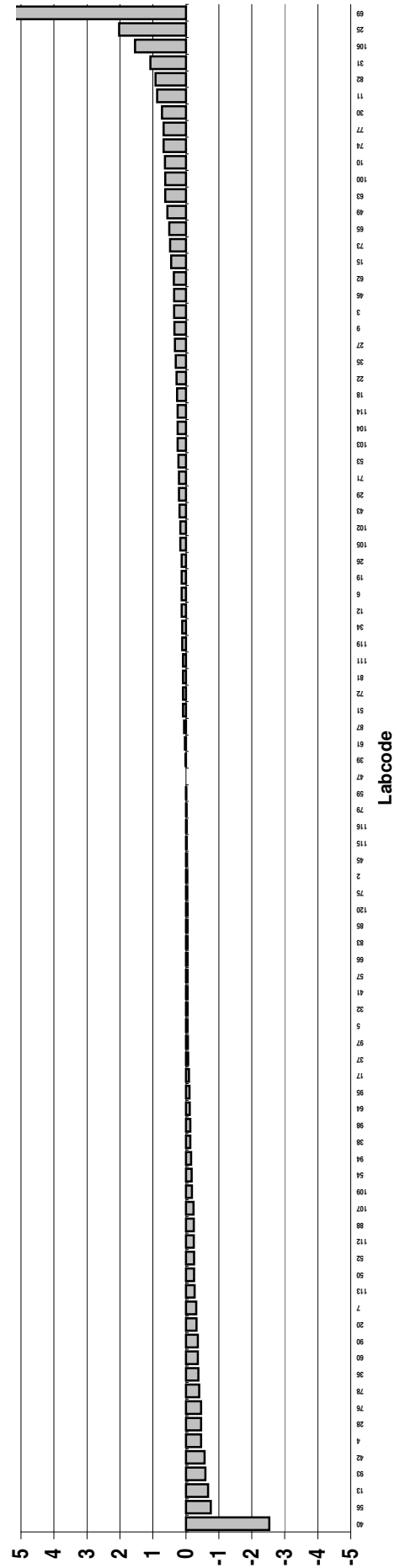
Consensus statistics

Consensus median, pg/g	4,9
Median all values pg/g	4,9
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,43
Relative standard deviation, %	8,6
No. of values reported	92
No. of values removed	2
No. of reported non-detects	0

1,2,3,4,7,8 HxCDD



Z-score: 1,2,3,4,7,8 HxCDD



Analyte solution

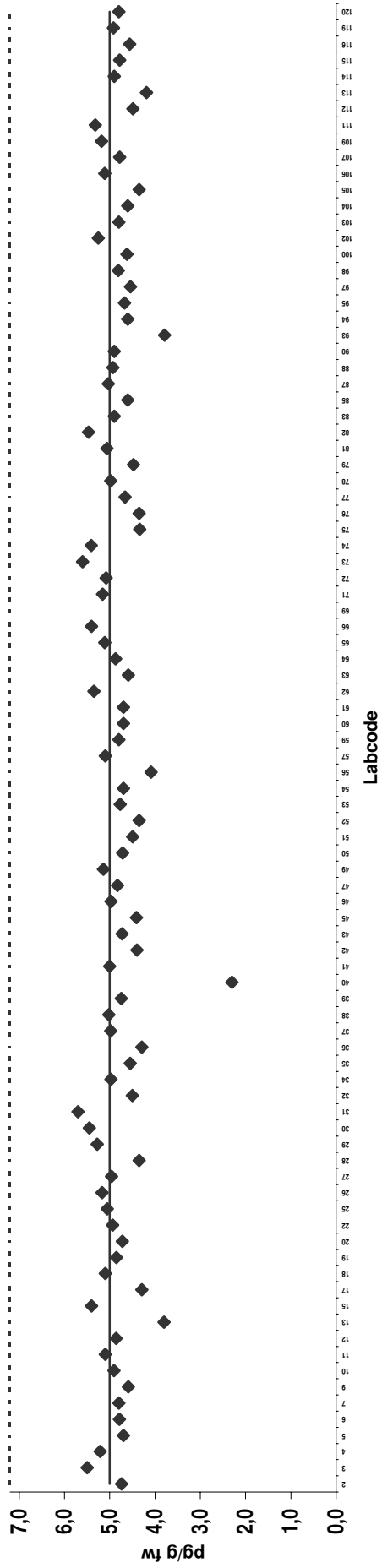
Congener: 1,2,3,6,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	4,7		57	5,1		119	4,7	
3	5,5		59	4,8		120	5,5	
4	5,2		60	4,7				
5	4,7		61	4,7				
6	4,8		62	5,4				
7	4,8		63	4,6				
9	4,6		64	4,9				
10	4,9		65	5,1				
11	5,1		66	5,4				
12	4,9		69	20	Outlier			
13	3,8		71	5,2				
15	5,4		72	5,1				
17	4,3		73	5,6				
18	5,1		74	5,4				
19	4,9		75	4,3				
20	4,7		76	4,4				
22	4,9		77	4,7				
25	5,1		78	5,0				
26	5,2		79	4,5				
27	5,0		81	5,1				
28	4,4		82	5,5				
29	5,3		83	4,9				
30	5,5		85	4,6				
31	5,7		87	5,0				
32	4,5		88	4,9				
34	5,0		90	4,9				
35	4,6		93	3,8				
36	4,3		94	4,6				
37	5,0		95	4,7				
38	5,0		97	4,5				
39	4,7		98	4,8				
40	2,3		100	4,6				
41	5,0		102	5,3				
42	4,4		103	4,8				
43	4,7		104	4,6				
45	4,4		105	4,3				
46	5,0		106	5,1				
47	4,8		107	4,8				
49	5,1		109	5,2				
50	4,7		111	5,3				
51	4,5		112	4,5				
52	4,4		113	4,2				
53	4,8		114	4,9				
54	4,7		115	4,8				
56	4,1		116	4,6				

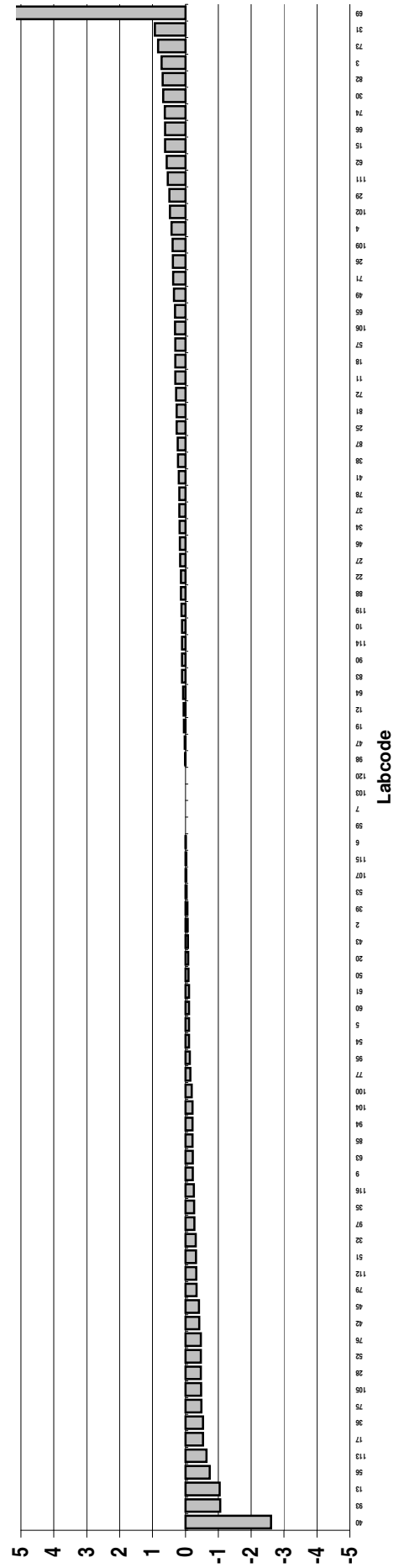
Consensus statistics

Consensus median, pg/g	4,8
Median all values pg/g	4,8
Consensus mean, pg/g	4,8
Standard deviation, pg/g	0,37
Relative standard deviation, %	7,7
No. of values reported	92
No. of values removed	2
No. of reported non-detects	0

1,2,3,6,7,8 HxCDD



Z-score: 1,2,3,6,7,8 HxCDD



Analyte solution

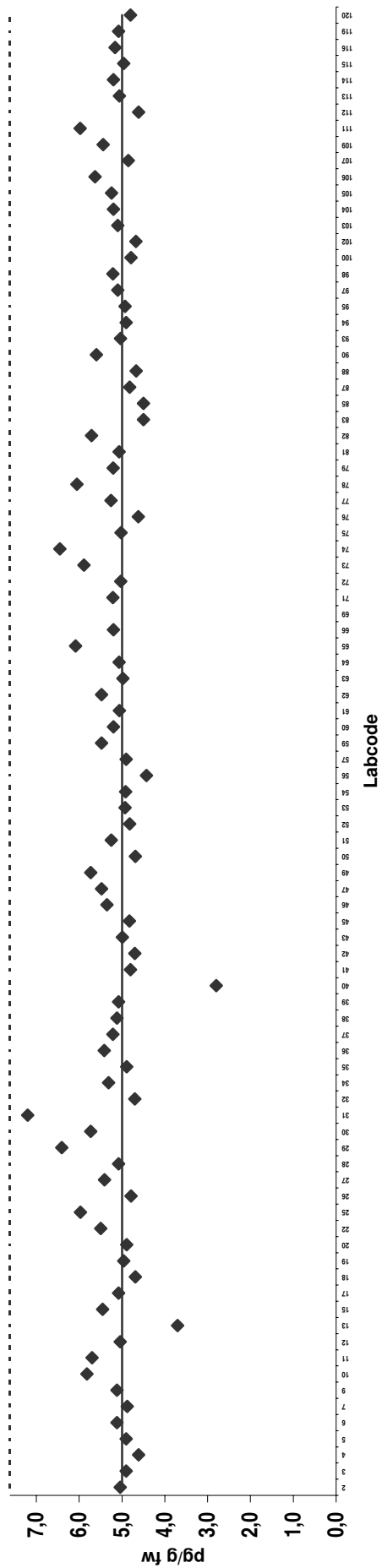
Congener: 1,2,3,7,8,9 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	5,0		57	4,9		119	5,0	
3	4,9		59	5,5		120	4,9	
4	4,6		60	5,2				
5	4,9		61	5,1				
6	5,1		62	5,5				
7	4,9		63	5,0				
9	5,1		64	5,1				
10	5,8		65	6,1				
11	5,7		66	5,2				
12	5,0		69	2,2				
13	3,7		71	5,2				
15	5,5		72	5,0				
17	5,1		73	5,9				
18	4,7		74	6,5				
19	5,0		75	5,0				
20	4,9		76	4,6				
22	5,5		77	5,3				
25	6,0		78	6,1				
26	4,8		79	5,2				
27	5,4		81	5,1				
28	5,1		82	5,7				
29	6,4		83	4,5				
30	5,7		85	4,5				
31	7,2		87	4,8				
32	4,7		88	4,7				
34	5,3		90	5,6				
35	4,9		93	5,0				
36	5,4		94	4,9				
37	5,2		95	4,9				
38	5,1		97	5,1				
39	5,1		98	5,2				
40	2,8		100	4,8				
41	4,8		102	4,7				
42	4,7		103	5,1				
43	5,0		104	5,2				
45	4,8		105	5,2				
46	5,4		106	5,6				
47	5,5		107	4,9				
49	5,7		109	5,4				
50	4,7		111	6,0				
51	5,2		112	4,6				
52	4,8		113	5,1				
53	4,9		114	5,2				
54	4,9		115	5,0				
56	4,4		116	5,2				
					Outlier			

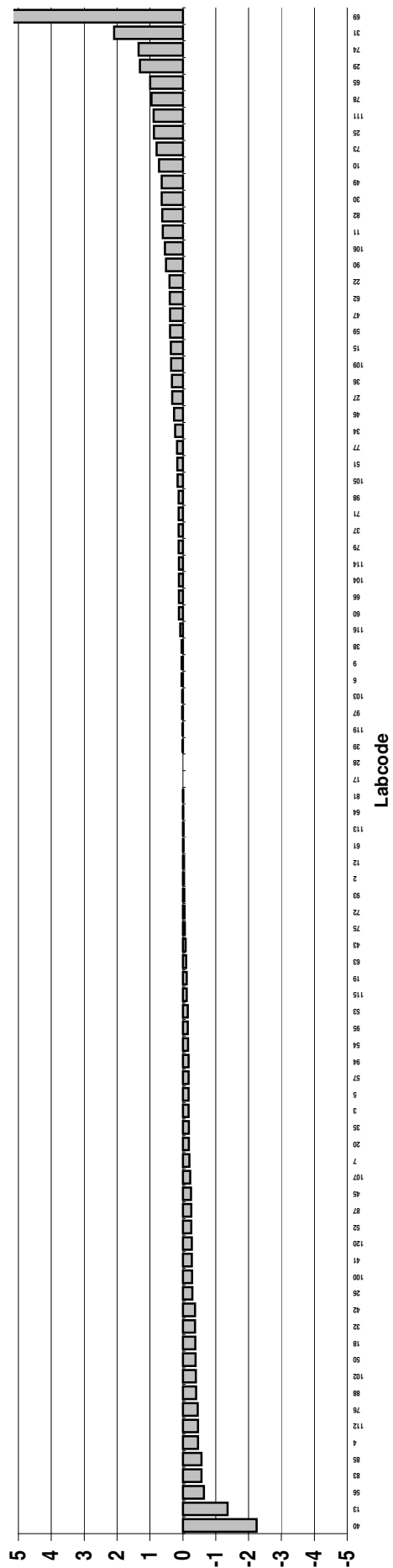
Consensus statistics

Consensus median, pg/g	5,1
Median all values pg/g	5,1
Consensus mean, pg/g	5,1
Standard deviation, pg/g	0,55
Relative standard deviation, %	11
No. of values reported	92
No. of values removed	1
No. of reported non-detects	0

1,2,3,7,8,9 HxCDD



Z-score: 1,2,3,7,8,9 HxCDD



Analyte solution

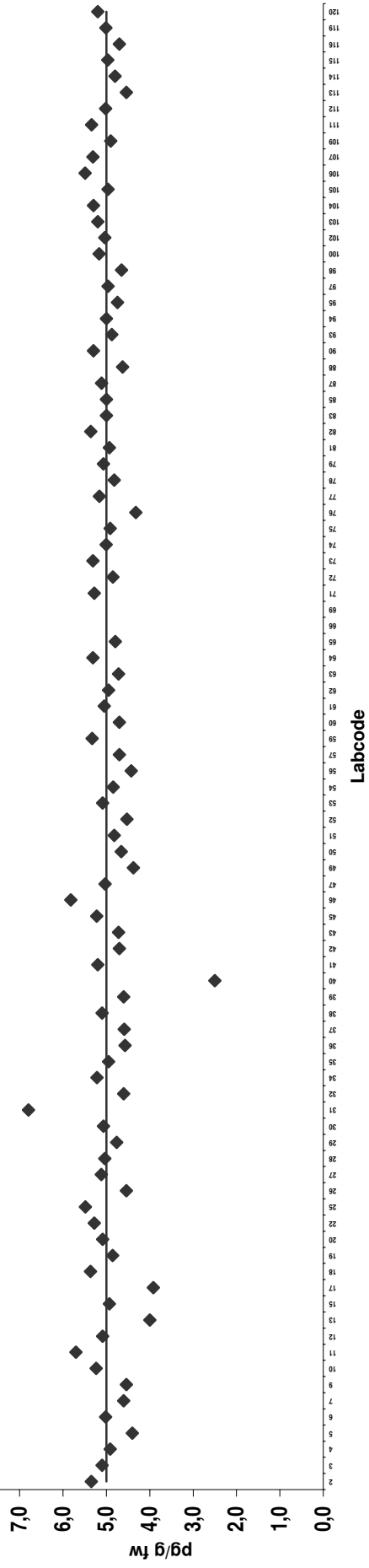
Congener: 1,2,3,4,6,7,8 HpCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	5,4		57	4,7		119	5,4	
3	5,1		59	5,3		120	5,1	
4	4,9		60	4,7				
5	4,4		61	5,1				
6	5,0		62	5,0				
7	4,6		63	4,7				
9	4,5		64	5,3				
10	5,2		65	4,8				
11	5,7		66	9,2	Outlier			
12	5,1		69	2,0	Outlier			
13	4,0		71	5,3				
15	4,9		72	4,9				
17	3,9		73	5,3				
18	5,4		74	5,0				
19	4,9		75	4,9				
20	5,1		76	4,3				
22	5,3		77	5,2				
25	5,5		78	4,8				
26	4,5		79	5,1				
27	5,1		81	4,9				
28	5,0		82	5,4				
29	4,8		83	5,0				
30	5,1		85	5,0				
31	6,8		87	5,1				
32	4,6		88	4,6				
34	5,2		90	5,3				
35	5,0		93	4,9				
36	4,6		94	5,0				
37	4,6		95	4,7				
38	5,1		97	5,0				
39	4,6		98	4,7				
40	2,5		100	5,2				
41	5,2		102	5,0				
42	4,7		103	5,2				
43	4,7		104	5,3				
45	5,2		105	5,0				
46	5,8		106	5,5				
47	5,0		107	5,3				
49	4,4		109	4,9				
50	4,7		111	5,3				
51	4,8		112	5,0				
52	4,5		113	4,5				
53	5,1		114	4,8				
54	4,8		115	5,0				
56	4,4		116	4,7				

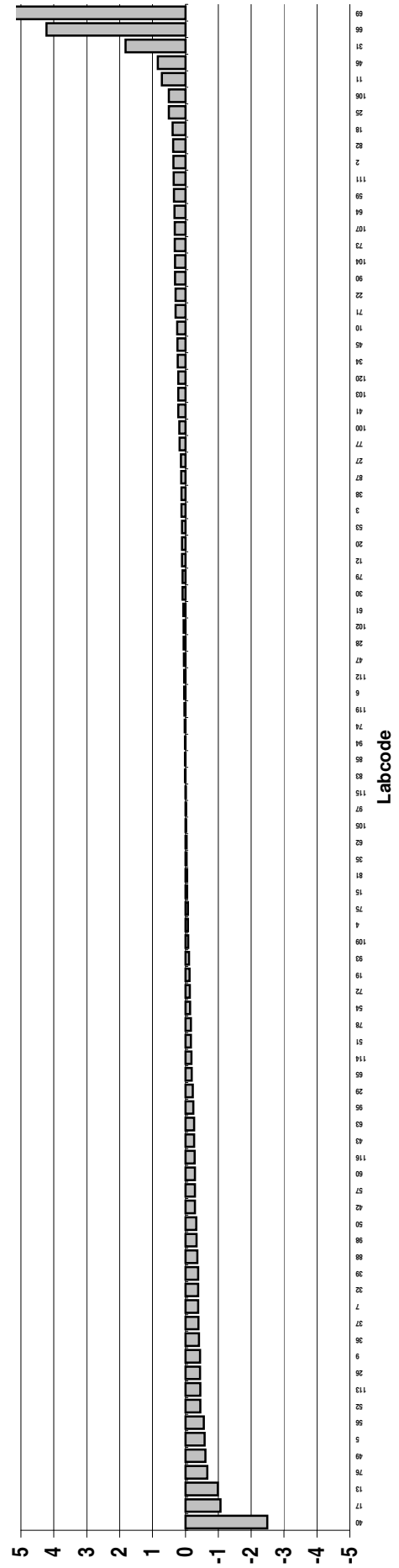
Consensus statistics

Consensus median, pg/g	5,0
Median all values pg/g	5,0
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,46
Relative standard deviation, %	9,4
No. of values reported	92
No. of values removed	2
No. of reported non-detects	0

1,2,3,4,6,7,8 HpCDD



Z-score: 1,2,3,4,6,7,8 HpCDD



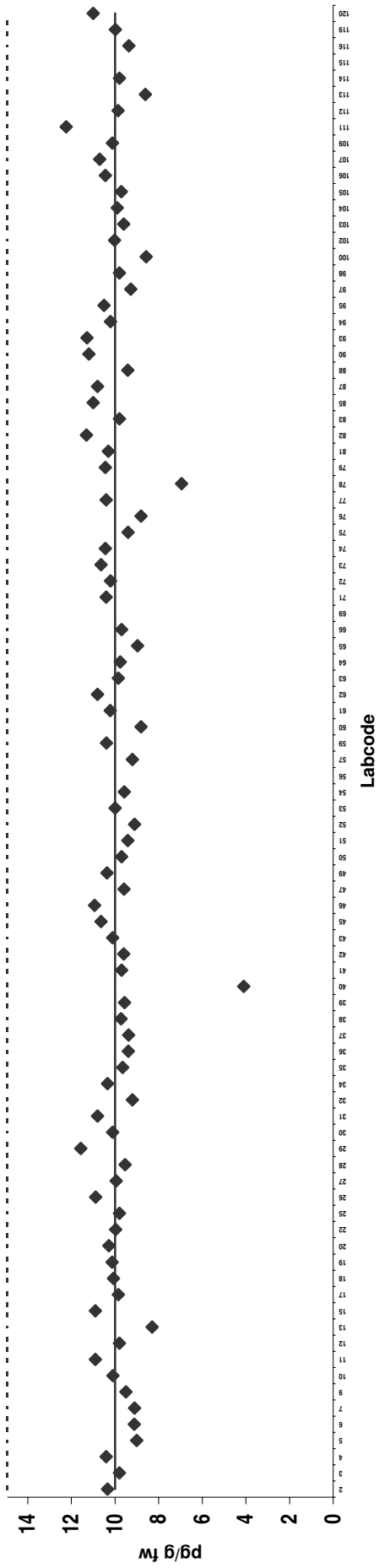
Analyte solution Congener: OCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	10		57	9,2		119	10	
3	9,8		59	10		120	9,8	
4	10		60	8,8				
5	9,0		61	10				
6	9,1		62	11				
7	9,1		63	9,9				
9	9,5		64	9,8				
10	10		65	9,0				
11	11		66	9,7				
12	9,8		69	4,3	Outlier			
13	8,3		71	10				
15	11		72	10				
17	9,8		73	11				
18	10		74	10				
19	10		75	9,4				
20	10		76	8,8				
22	10		77	10				
25	9,8		78	7,0				
26	11		79	10				
27	10		81	10				
28	9,5		82	11				
29	12		83	9,8				
30	10		85	11				
31	11		87	11				
32	9,2		88	9,4				
34	10		90	11				
35	9,7		93	11				
36	9,4		94	10				
37	9,4		95	11				
38	9,7		97	9,3				
39	9,6		98	9,8				
40	4,1		100	8,6				
41	9,7		102	10				
42	9,6		103	9,6				
43	10		104	9,9				
45	11		105	9,7				
46	11		106	10				
47	9,6		107	11				
49	10		109	10				
50	9,7		111	12				
51	9,4		112	9,9				
52	9,1		113	8,6				
53	10		114	9,8				
54	9,6		115	21	Outlier			
56	48	Outlier	116	9,4				

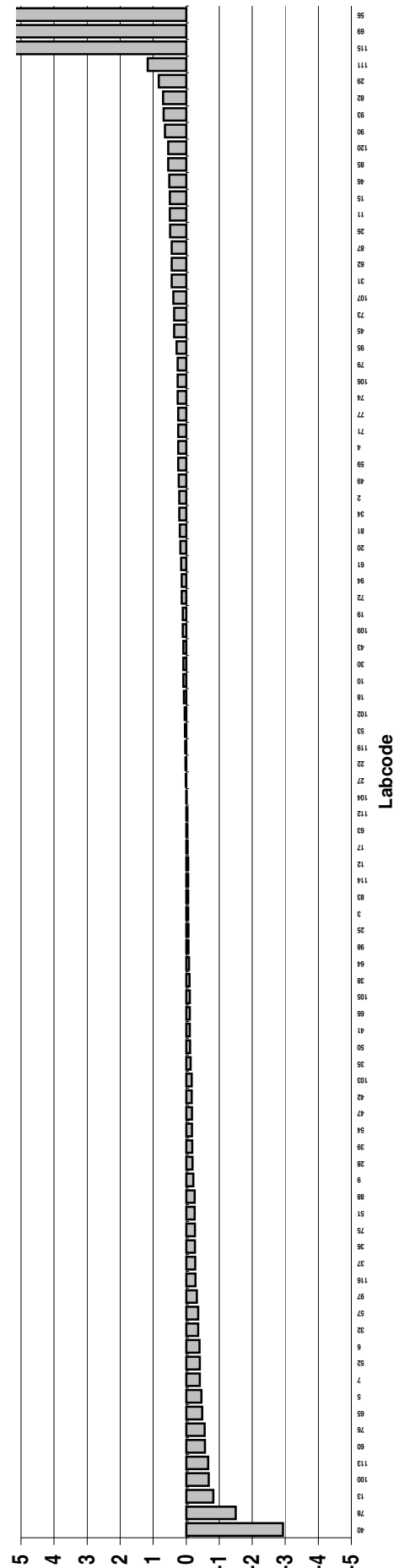
Consensus statistics

Consensus median, pg/g	9,9
Median all values pg/g	10
Consensus mean, pg/g	10
Standard deviation, pg/g	0,78
Relative standard deviation, %	7,8
No. of values reported	92
No. of values removed	4
No. of reported non-detects	0

OCDD



Z-score: OCDD



Analyte solution

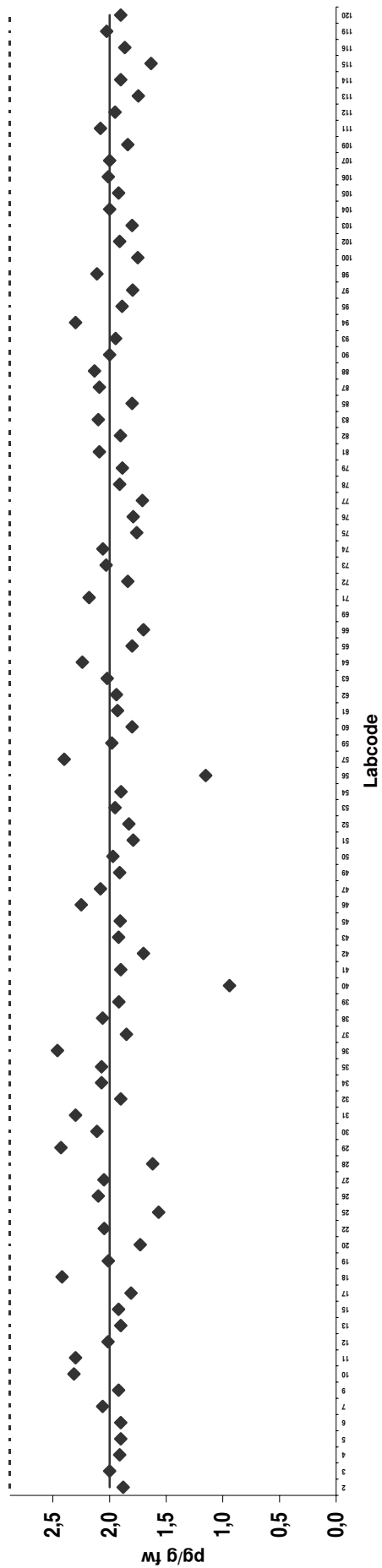
Congener: 2,3,7,8 TCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	1,9		57	2,4		119	1,9	
3	2,0		59	2,0		120	2,0	
4	1,9		60	1,8				
5	1,9		61	1,9				
6	1,9		62	1,9				
7	2,1		63	2,0				
9	1,9		64	2,2				
10	2,3		65	1,8				
11	2,3		66	1,7				
12	2,0		69	8,2				
13	1,9		71	2,2				
15	1,9		72	1,8				
17	1,8		73	2,0				
18	2,4		74	2,1				
19	2,0		75	1,8				
20	1,7		76	1,8				
22	2,0		77	1,7				
25	1,6		78	1,9				
26	2,1		79	1,9				
27	2,1		81	2,1				
28	1,6		82	1,9				
29	2,4		83	2,1				
30	2,1		85	1,8				
31	2,3		87	2,1				
32	1,9		88	2,1				
34	2,1		90	2,0				
35	2,1		93	1,9				
36	2,5		94	2,3				
37	1,9		95	1,9				
38	2,1		97	1,8				
39	1,9		98	2,1				
40	0,94		100	1,8				
41	1,9		102	1,9				
42	1,7		103	1,8				
43	1,9		104	2,0				
45	1,9		105	1,9				
46	2,3		106	2,0				
47	2,1		107	2,0				
49	1,9		109	1,8				
50	2,0		111	2,1				
51	1,8		112	2,0				
52	1,8		113	1,7				
53	2,0		114	1,9				
54	1,9		115	1,6				
56	1,2		116	1,9				

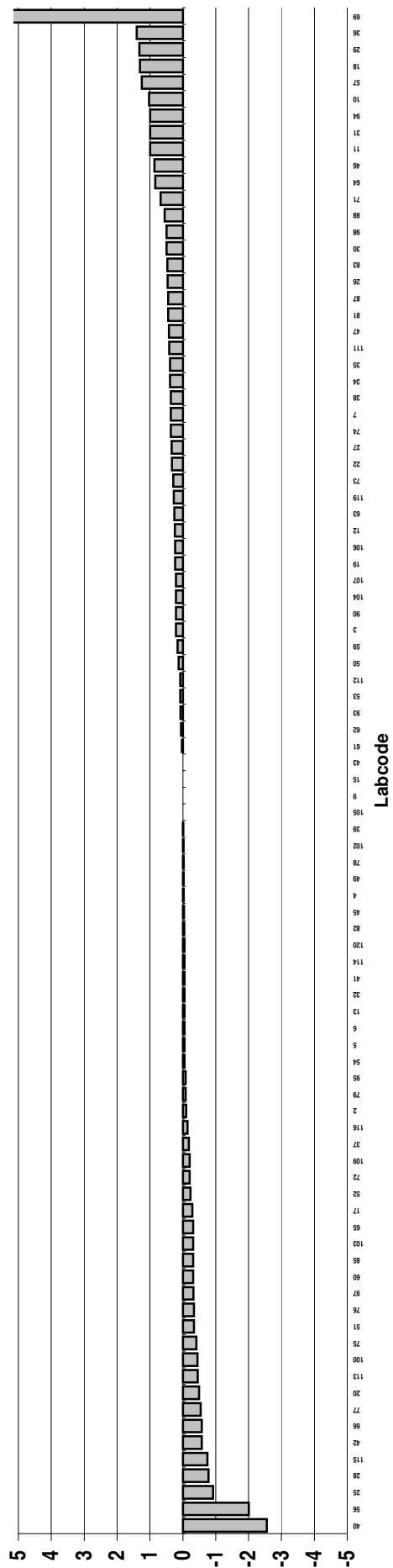
Consensus statistics

Consensus median, pg/g	1,9
Median all values pg/g	1,9
Consensus mean, pg/g	2,0
Standard deviation, pg/g	0,20
Relative standard deviation, %	10
No. of values reported	92
No. of values removed	2
No. of reported non-detects	0

2,3,7,8 TCDF



Z-score: 2,3,7,8 TCDF



Analyte solution

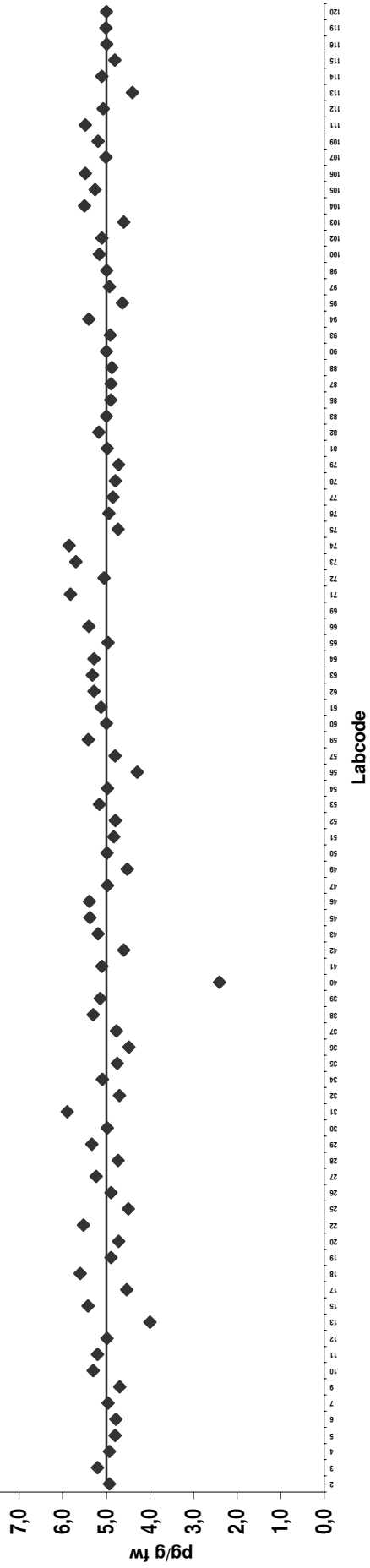
Congener: 1,2,3,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	4,9		57	4,8		119	4,9	
3	5,2		59	5,4		120	5,2	
4	4,9		60	5,0				
5	4,8		61	5,1				
6	4,8		62	5,3				
7	5,0		63	5,3				
9	4,7		64	5,3				
10	5,3		65	5,0				
11	5,2		66	5,4				
12	5,0		69	2,2				
13	4,0		71	5,8	Outlier			
15	5,4		72	5,1				
17	4,5		73	5,7				
18	5,6		74	5,9				
19	4,9		75	4,7				
20	4,7		76	4,9				
22	5,5		77	4,9				
25	4,5		78	4,8				
26	4,9		79	4,7				
27	5,2		81	5,0				
28	4,7		82	5,2				
29	5,3		83	5,0				
30	5,0		85	4,9				
31	5,9		87	4,9				
32	4,7		88	4,9				
34	5,1		90	5,0				
35	4,8		93	4,9				
36	4,5		94	5,4				
37	4,8		95	4,6				
38	5,3		97	4,9				
39	5,1		98	5,0				
40	2,4		100	5,2				
41	5,1		102	5,1	Outlier			
42	4,6		103	4,6				
43	5,2		104	5,5				
45	5,4		105	5,3				
46	5,4		106	5,5				
47	5,0		107	5,0				
49	4,5		109	5,2				
50	5,0		111	5,5				
51	4,8		112	5,1				
52	4,8		113	4,4				
53	5,2		114	5,1				
54	5,0		115	4,8				
56	4,3		116	5,0				

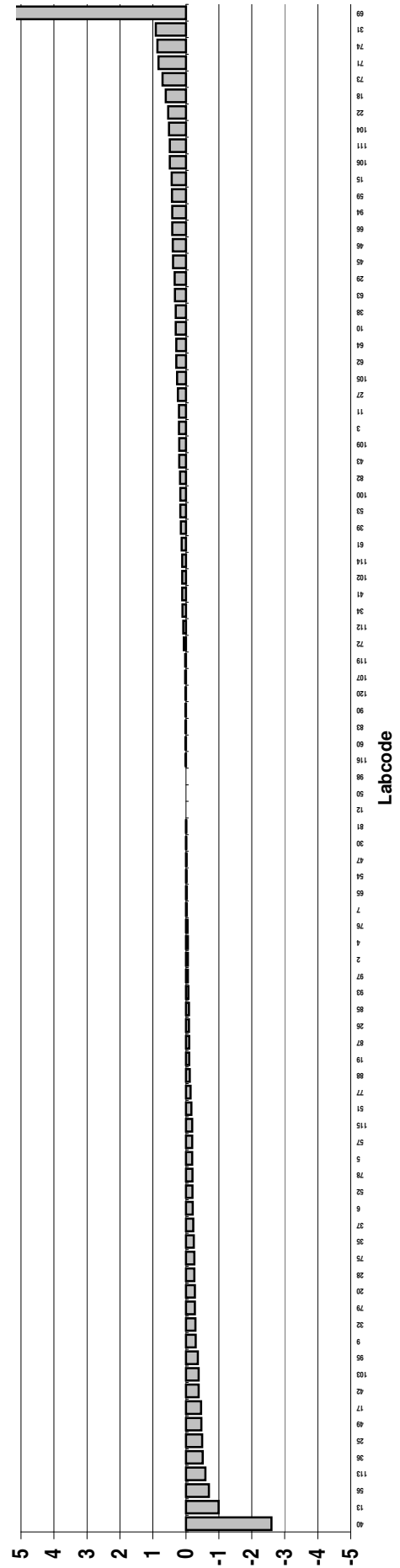
Consensus statistics

Consensus median, pg/g	5,0
Median all values pg/g	5,0
Consensus mean, pg/g	5,0
Standard deviation, pg/g	0,34
Relative standard deviation, %	6,7
No. of values reported	92
No. of values removed	2
No. of reported non-detects	0

1,2,3,7,8 PeCDF



Z-score: 1,2,3,7,8 PeCDF



Analyte solution

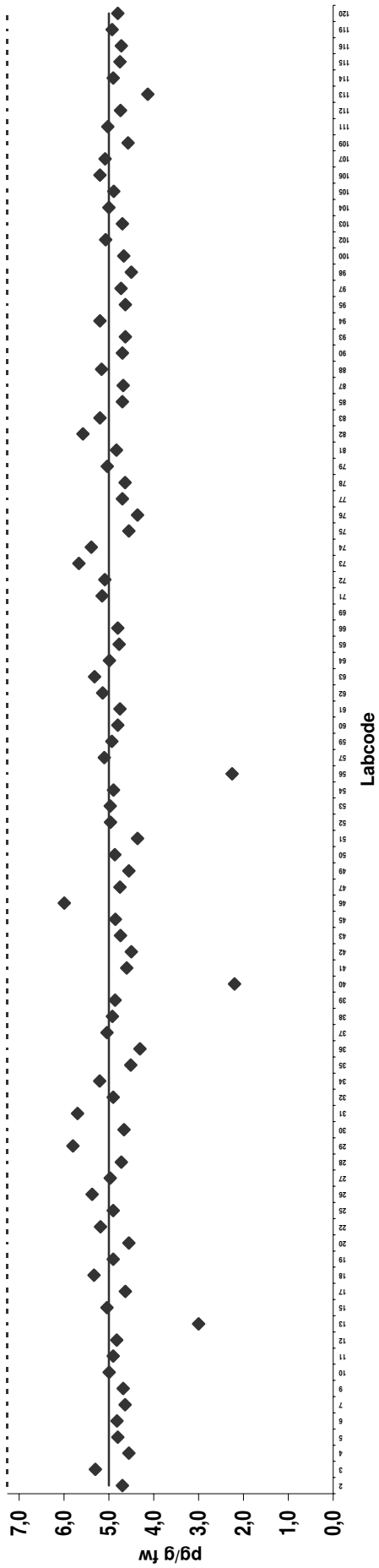
Congener: 2,3,4,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	4,7		57	5,1		119	4,7	
3	5,3		59	4,9		120	5,3	
4	4,6		60	4,8				
5	4,8		61	4,8				
6	4,8		62	5,1				
7	4,6		63	5,3				
9	4,7		64	5,0				
10	5,0		65	4,8				
11	4,9		66	4,8				
12	4,8		69	20	Outlier			
13	3,0		71	5,2				
15	5,0		72	5,1				
17	4,6		73	5,7				
18	5,3		74	5,4				
19	4,9		75	4,6				
20	4,6		76	4,4				
22	5,2		77	4,7				
25	4,9		78	4,6				
26	5,4		79	5,0				
27	5,0		81	4,8				
28	4,7		82	5,6				
29	5,8		83	5,2				
30	4,7		85	4,7				
31	5,7		87	4,7				
32	4,9		88	5,2				
34	5,2		90	4,7				
35	4,5		93	4,6				
36	4,3		94	5,2				
37	5,0		95	4,6				
38	4,9		97	4,7				
39	4,9		98	4,5				
40	2,2		100	4,7				
41	4,6		102	5,1				
42	4,5		103	4,7				
43	4,7		104	5,0				
45	4,9		105	4,9				
46	6,0		106	5,2				
47	4,8		107	5,1				
49	4,6		109	4,6				
50	4,9		111	5,0				
51	4,4		112	4,7				
52	5,0		113	4,1				
53	5,0		114	4,9				
54	4,9		115	4,8				
56	2,3		116	4,7				

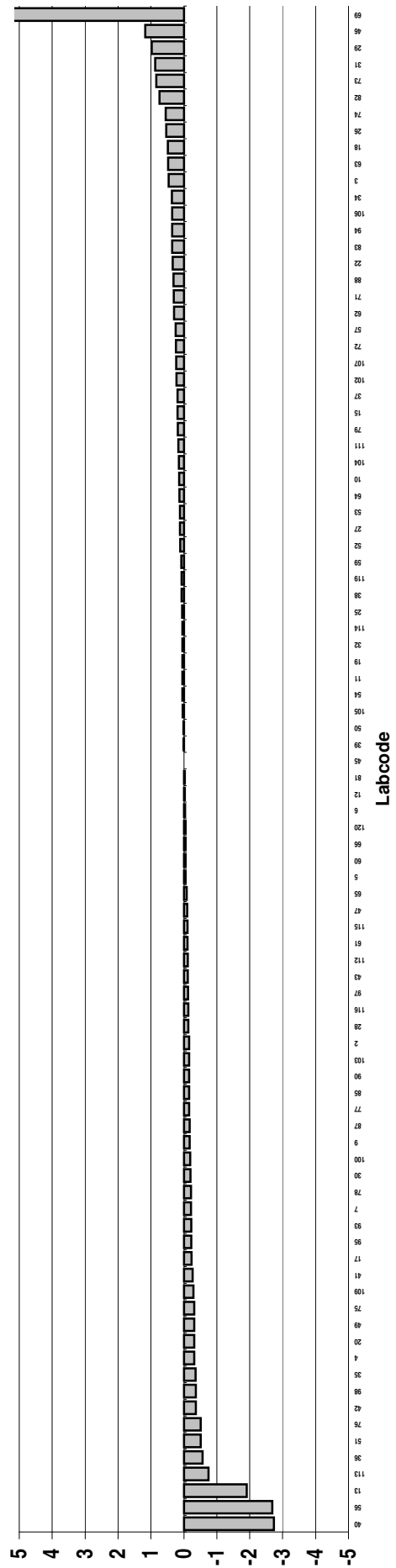
Consensus statistics

Consensus median, pg/g	4,9
Median all values pg/g	4,8
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,38
Relative standard deviation, %	7,8
No. of values reported	92
No. of values removed	3
No. of reported non-detects	0

2,3,4,7,8 PeCDF



Z-score: 2,3,4,7,8 PeCDF



Analyte solution

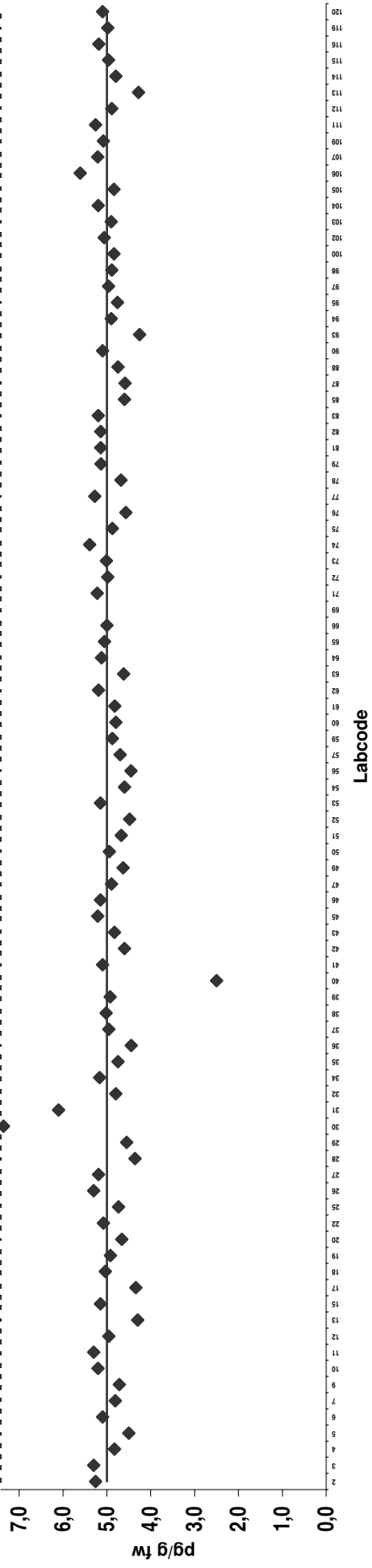
Congener: 1,2,3,4,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	5,3		57	4,7		119	5,3	
3	5,3		59	4,9		120	5,3	
4	4,8		60	4,8				
5	4,5		61	4,8				
6	5,1		62	5,2				
7	4,8		63	4,6				
9	4,7		64	5,1				
10	5,2		65	5,1				
11	5,3		66	5,0				
12	5,0		69	2,1				
13	4,3		71	5,2	Outlier			
15	5,2		72	5,0				
17	4,3		73	5,0				
18	5,0		74	5,4				
19	4,9		75	4,9				
20	4,7		76	4,6				
22	5,1		77	5,3				
25	4,7		78	4,7				
26	5,3		79	5,1				
27	5,2		81	5,1				
28	4,4		82	5,1				
29	4,6		83	5,2				
30	7,4		85	4,6				
31	6,1		87	4,6				
32	4,8		88	4,7				
34	5,2		90	5,1				
35	4,8		93	4,3				
36	4,4		94	4,9				
37	5,0		95	4,8				
38	5,0		97	5,0				
39	4,9		98	4,9				
40	2,5		100	4,8				
41	5,1		102	5,1				
42	4,6		103	4,9				
43	4,8		104	5,2				
45	5,2		105	4,8				
46	5,2		106	5,6				
47	4,9		107	5,2				
49	4,6		109	5,1				
50	4,9		111	5,3				
51	4,7		112	4,9				
52	4,5		113	4,3				
53	5,2		114	4,8				
54	4,6		115	5,0				
56	4,5		116	5,2				

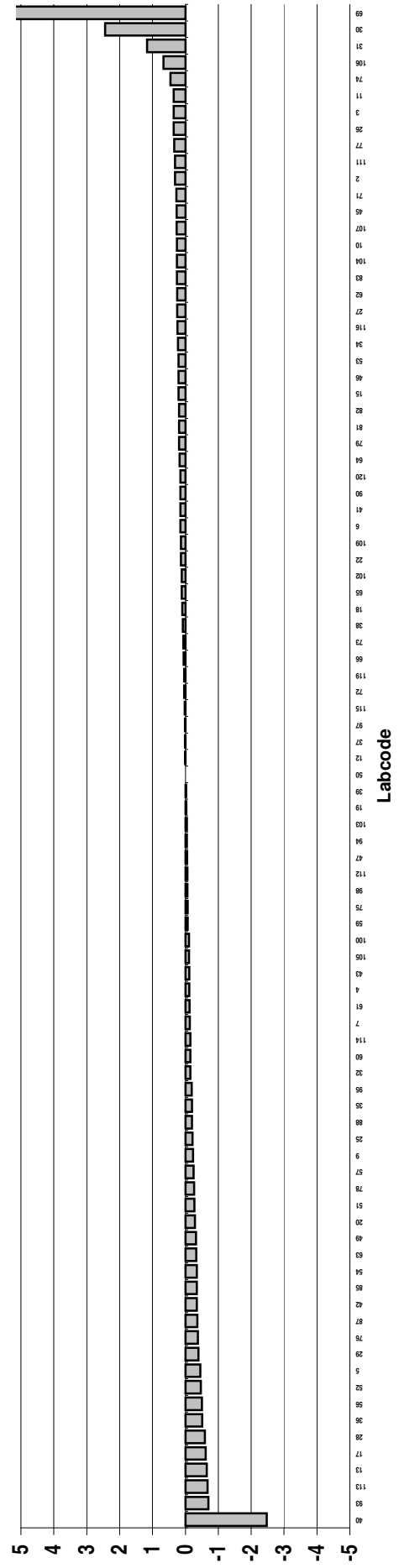
Consensus statistics

Consensus median, pg/g	4,9
Median all values pg/g	5,0
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,47
Relative standard deviation, %	9,6
No. of values reported	92
No. of values removed	1
No. of reported non-detects	0

1,2,3,4,7,8 HxCDF



Z-score: 1,2,3,4,7,8 HxCDF



Analyte solution

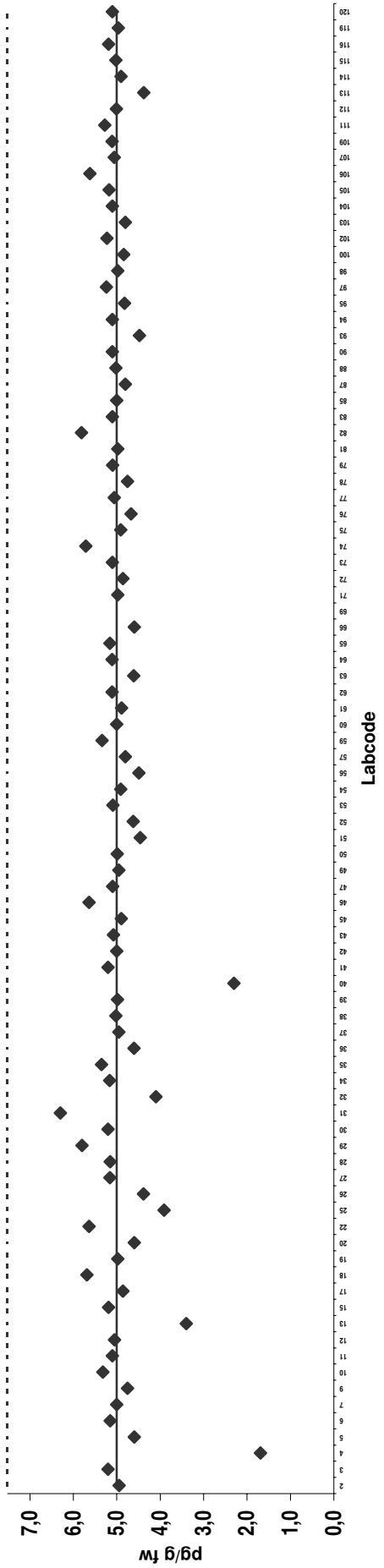
Congener: 1,2,3,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	4,9		57	4,8		119	4,9	
3	5,2		59	5,3		120	5,2	
4	1,7	Outlier	60	5,0				
5	4,6		61	4,9				
6	5,2		62	5,1				
7	5,0		63	4,6				
9	4,8		64	5,1				
10	5,3		65	5,2				
11	5,1		66	4,6				
12	5,1		69	2,2				
13	3,4		71	5,0	Outlier			
15	5,2		72	4,9				
17	4,9		73	5,1				
18	5,7		74	5,7				
19	5,0		75	4,9				
20	4,6		76	4,7				
22	5,6		77	5,1				
25	3,9		78	4,8				
26	4,4		79	5,1				
27	5,2		81	5,0				
28	5,2		82	5,8				
29	5,8		83	5,1				
30	5,2		85	5,0				
31	6,3		87	4,8				
32	4,1		88	5,0				
34	5,2		90	5,1				
35	5,4		93	4,5				
36	4,6		94	5,1				
37	5,0		95	4,8				
38	5,0		97	5,2				
39	5,0		98	5,0				
40	2,3		100	4,8				
41	5,2		102	5,2				
42	5,0		103	4,8				
43	5,1		104	5,1				
45	4,9		105	5,2				
46	5,6		106	5,6				
47	5,1		107	5,1				
49	5,0		109	5,1				
50	5,0		111	5,3				
51	4,5		112	5,0				
52	4,6		113	4,4				
53	5,1		114	4,9				
54	4,9		115	5,0				
56	4,5		116	5,2				

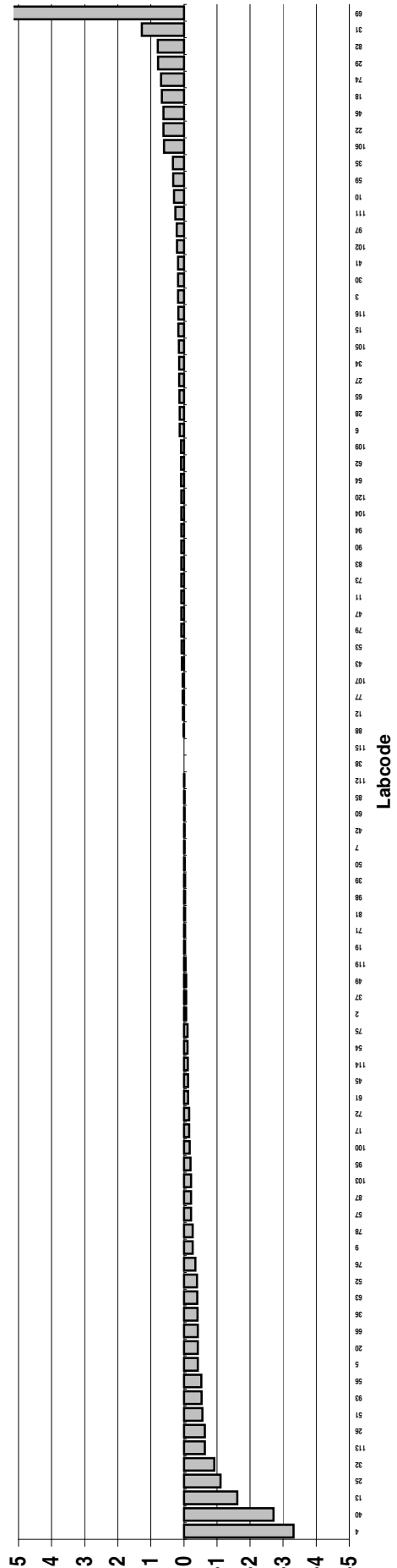
Consensus statistics

Consensus median, pg/g	5,0
Median all values pg/g	5,0
Consensus mean, pg/g	5,0
Standard deviation, pg/g	0,40
Relative standard deviation, %	7,9
No. of values reported	92
No. of values removed	3
No. of reported non-detects	0

1,2,3,6,7,8 HxCDF



Z-score: 1,2,3,6,7,8 HxCDF



Analyte solution

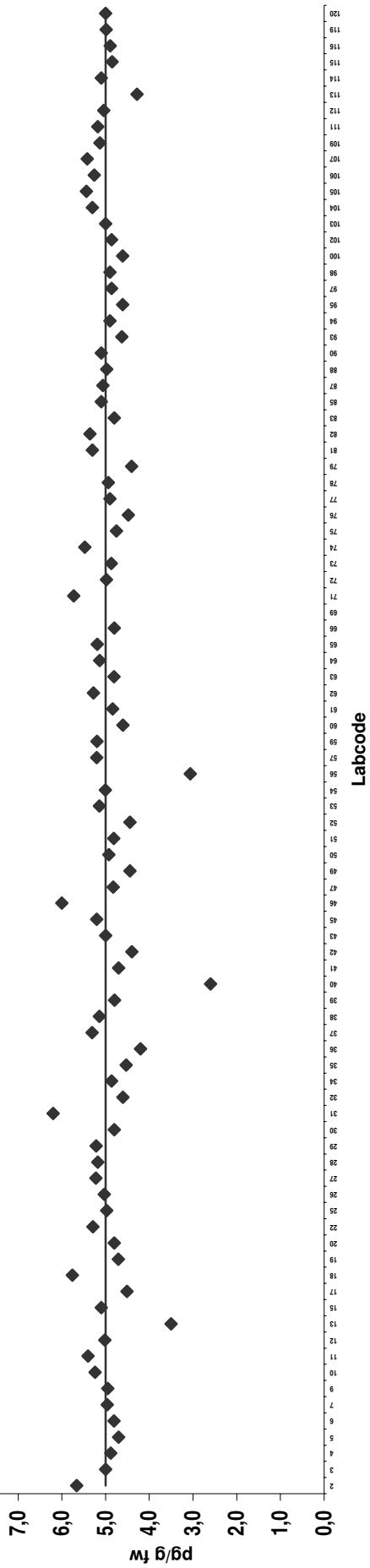
Congener: 2,3,4,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	5,7		57	5,2		119	5,7	
3	5,0		59	5,2		120	5,0	
4	4,9		60	4,6				
5	4,7		61	4,8				
6	4,8		62	5,3				
7	5,0		63	4,8				
9	5,0		64	5,1				
10	5,2		65	5,2				
11	5,4		66	4,8				
12	5,0		69	2,1				
13	3,5		71	5,7	Outlier			
15	5,1		72	5,0				
17	4,5		73	4,9				
18	5,8		74	5,5				
19	4,7		75	4,8				
20	4,8		76	4,5				
22	5,3		77	4,9				
25	5,0		78	4,9				
26	5,0		79	4,4				
27	5,2		81	5,3				
28	5,2		82	5,4				
29	5,2		83	4,8				
30	4,8		85	5,1				
31	6,2		87	5,1				
32	4,6		88	5,0				
34	4,9		90	5,1				
35	4,5		93	4,6				
36	4,2		94	4,9				
37	5,3		95	4,6				
38	5,1		97	4,9				
39	4,8		98	4,9				
40	2,6		100	4,6				
41	4,7		102	4,9				
42	4,4		103	5,0				
43	5,0		104	5,3				
45	5,2		105	5,4				
46	6,0		106	5,3				
47	4,8		107	5,4				
49	4,4		109	5,1				
50	4,9		111	5,2				
51	4,8		112	5,0				
52	4,4		113	4,3				
53	5,1		114	5,1				
54	5,0		115	4,8				
56	3,1		116	4,9				

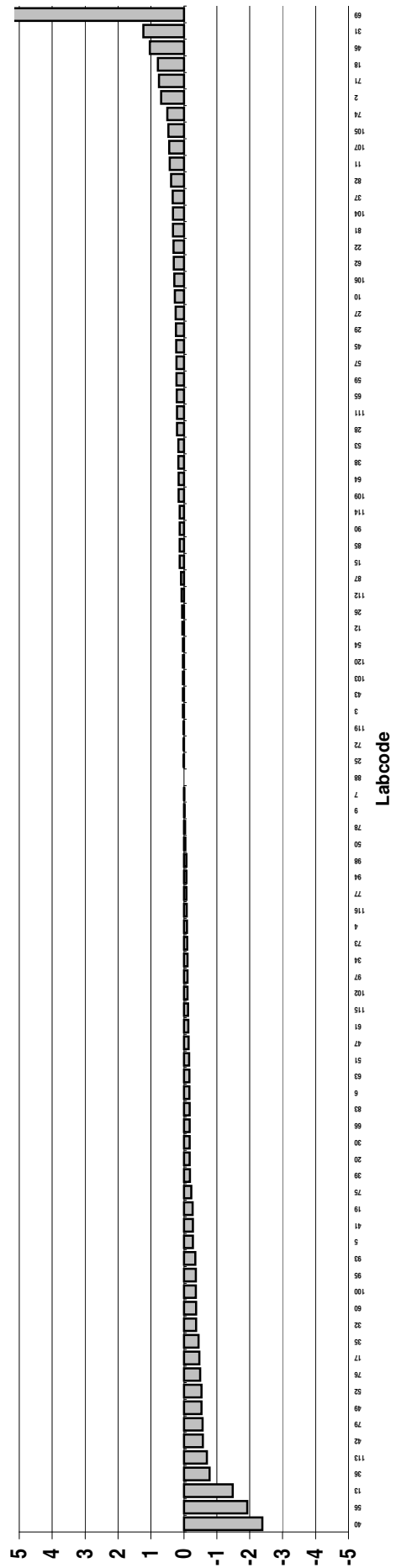
Consensus statistics

Consensus median, pg/g	5,0
Median all values pg/g	5,0
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,49
Relative standard deviation, %	10
No. of values reported	92
No. of values removed	1
No. of reported non-detects	0

2,3,4,6,7,8 HxCDF



Z-score: 2,3,4,6,7,8 HxCDF



Analyte solution

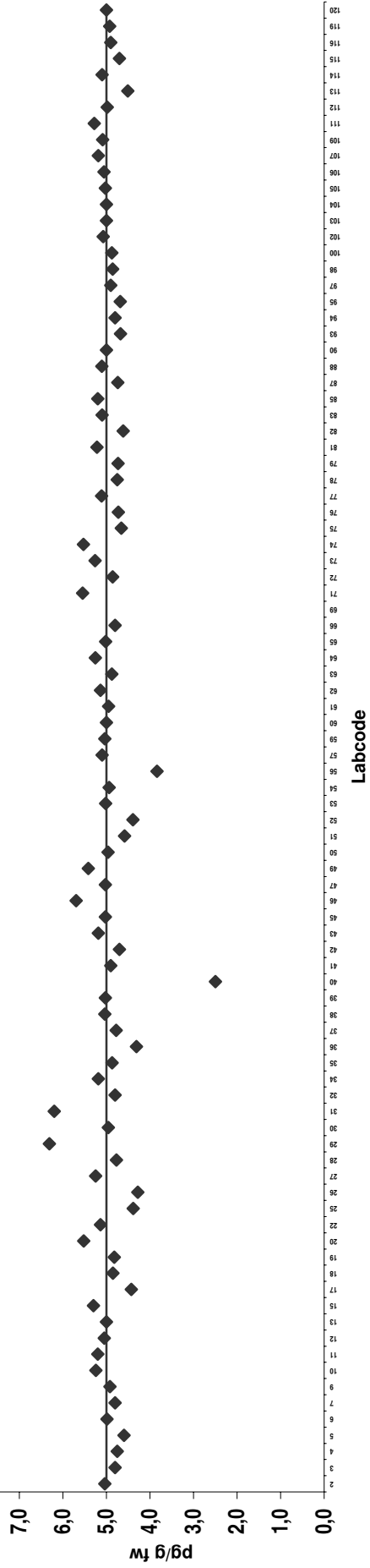
Congener: 1,2,3,7,8,9 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	5,0		57	5,1		119	5,0	
3	4,8		59	5,0		120	4,8	
4	4,8		60	5,0				
5	4,6		61	5,0				
6	5,0		62	5,1				
7	4,8		63	4,9				
9	4,9		64	5,3				
10	5,2		65	5,0				
11	5,2		66	4,8				
12	5,1		69	2,1				
13	5,0		71	5,6				
15	5,3		72	4,9				
17	4,4		73	5,3				
18	4,9		74	5,5				
19	4,8		75	4,7				
20	5,5		76	4,7				
22	5,1		77	5,1				
25	4,4		78	4,8				
26	4,3		79	4,7				
27	5,3		81	5,2				
28	4,8		82	4,6				
29	6,3		83	5,1				
30	5,0		85	5,2				
31	6,2		87	4,7				
32	4,8		88	5,1				
34	5,2		90	5,0				
35	4,9		93	4,7				
36	4,3		94	4,8				
37	4,8		95	4,7				
38	5,0		97	4,9				
39	5,0		98	4,9				
40	2,5		100	4,9				
41	4,9		102	5,1				
42	4,7		103	5,0				
43	5,2		104	5,0				
45	5,0		105	5,0				
46	5,7		106	5,1				
47	5,0		107	5,2				
49	5,4		109	5,1				
50	5,0		111	5,3				
51	4,6		112	5,0				
52	4,4		113	4,5				
53	5,0		114	5,1				
54	4,9		115	4,7				
56	3,8		116	4,9				

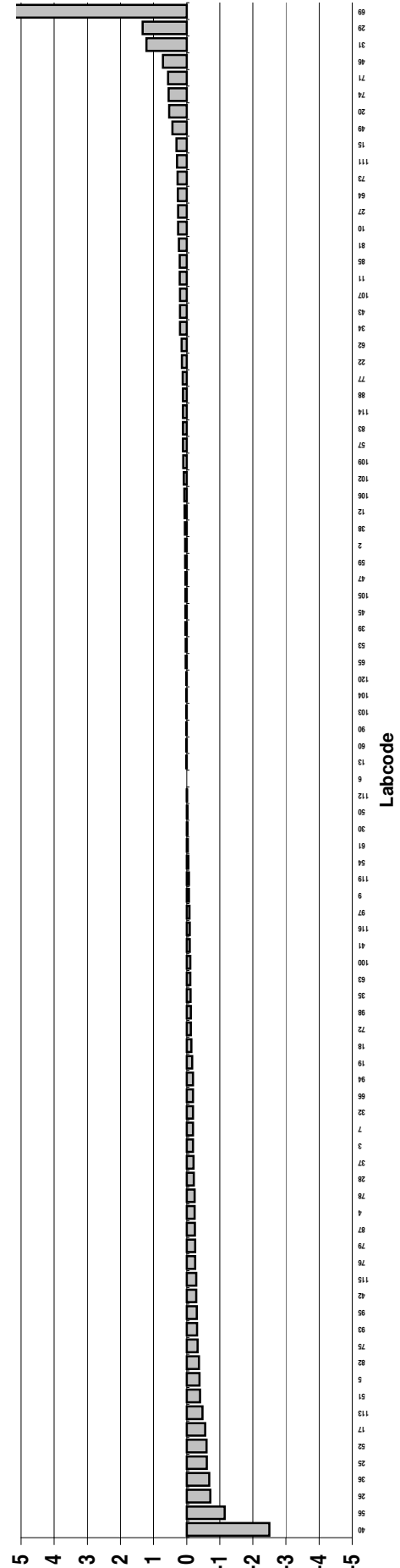
Consensus statistics

Consensus median, pg/g	5,0
Median all values pg/g	5,0
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,43
Relative standard deviation, %	8,8
No. of values reported	92
No. of values removed	1
No. of reported non-detects	0

1,2,3,7,8,9 HxCDF



Z-score: 1,2,3,7,8,9 HxCDF



Analyte solution

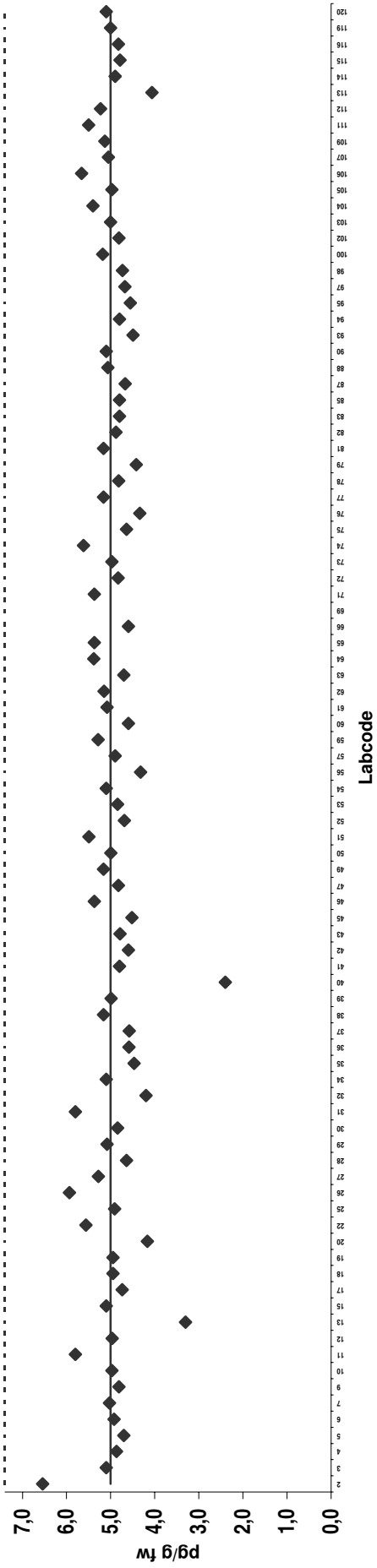
Congener: 1,2,3,4,6,7,8 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	6,5		57	4,9		119	6,5	
3	5,1		59	5,3		120	5,1	
4	4,9		60	4,6				
5	4,7		61	5,1				
6	4,9		62	5,2				
7	5,0		63	4,7				
9	4,8		64	5,4				
10	5,0		65	5,4				
11	5,8		66	4,6				
12	5,0		69	2,1				
13	3,3		71	5,4	Outlier			
15	5,1		72	4,8				
17	4,7		73	5,0				
18	5,0		74	5,6				
19	5,0		75	4,6				
20	4,2		76	4,3				
22	5,6		77	5,2				
25	4,9		78	4,8				
26	5,9		79	4,4				
27	5,3		81	5,2				
28	4,6		82	4,9				
29	5,1		83	4,8				
30	4,8		85	4,8				
31	5,8		87	4,7				
32	4,2		88	5,1				
34	5,1		90	5,1				
35	4,5		93	4,5				
36	4,6		94	4,8				
37	4,6		95	4,6				
38	5,2		97	4,7				
39	5,0		98	4,7				
40	2,4		100	5,2				
41	4,8		102	4,8				
42	4,6		103	5,0				
43	4,8		104	5,4				
45	4,5		105	5,0				
46	5,4		106	5,7				
47	4,8		107	5,1				
49	5,2		109	5,1				
50	5,0		111	5,5				
51	5,5		112	5,2				
52	4,7		113	4,1				
53	4,8		114	4,9				
54	5,1		115	4,8				
56	4,3		116	4,8				

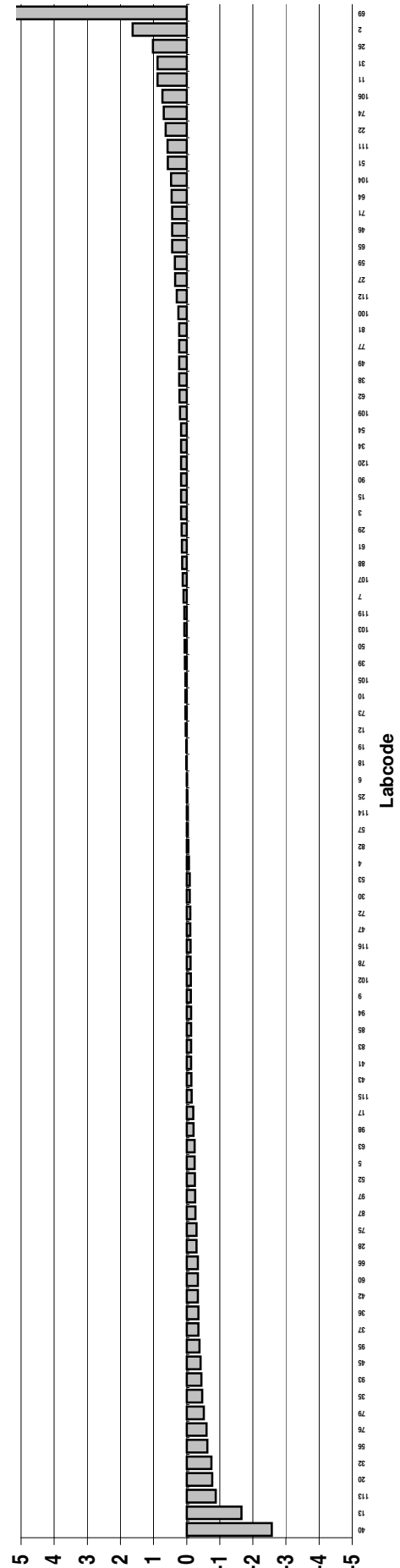
Consensus statistics

Consensus median, pg/g	4,9
Median all values pg/g	4,9
Consensus mean, pg/g	4,9
Standard deviation, pg/g	0,43
Relative standard deviation, %	8,8
No. of values reported	92
No. of values removed	2
No. of reported non-detects	0

1,2,3,4,6,7,8 HpCDF



Z-score: 1,2,3,4,6,7,8 HpCDF



Analyte solution

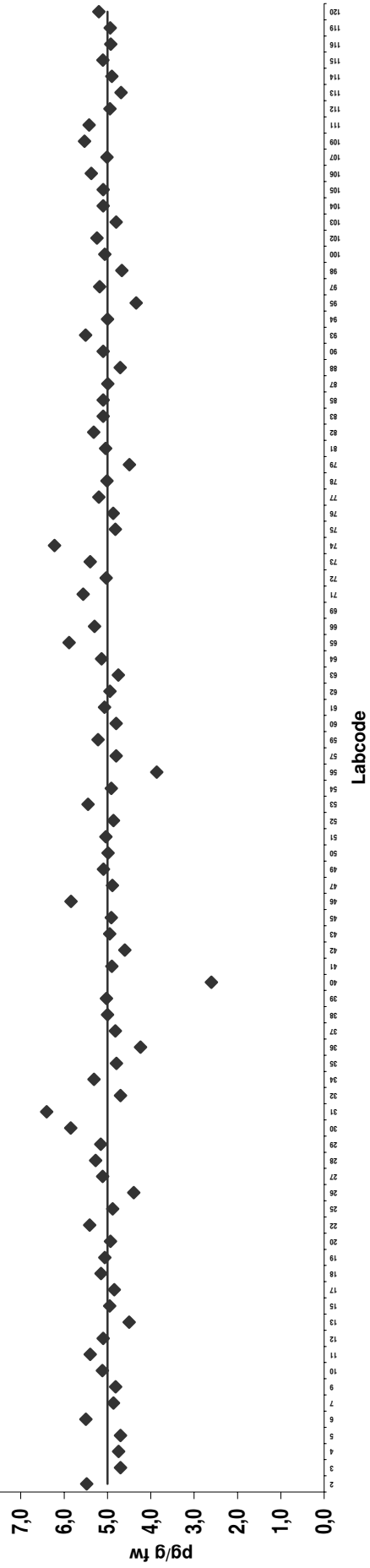
Congener: 1,2,3,4,7,8,9 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	5,5		57	4,8		119	5,5	
3	4,7		59	5,2		120	4,7	
4	4,7		60	4,8				
5	4,7		61	5,1				
6	5,5		62	4,9				
7	4,9		63	4,8				
9	4,8		64	5,1				
10	5,1		65	5,9				
11	5,4		66	5,3				
12	5,1		69	2,3				
13	4,5		71	5,6				
15	5,0		72	5,0				
17	4,8		73	5,4				
18	5,2		74	6,2				
19	5,1		75	4,8				
20	4,9		76	4,9				
22	5,4		77	5,2				
25	4,9		78	5,0				
26	4,4		79	4,5				
27	5,1		81	5,0				
28	5,3		82	5,3				
29	5,2		83	5,1				
30	5,9		85	5,1				
31	6,4		87	5,0				
32	4,7		88	4,7				
34	5,3		90	5,1				
35	4,8		93	5,5				
36	4,2		94	5,0				
37	4,8		95	4,3				
38	5,0		97	5,2				
39	5,0		98	4,7				
40	2,6		100	5,1				
41	4,9		102	5,2				
42	4,6		103	4,8				
43	5,0		104	5,1				
45	4,9		105	5,1				
46	5,8		106	5,4				
47	4,9		107	5,0				
49	5,1		109	5,5				
50	5,0		111	5,4				
51	5,0		112	4,9				
52	4,9		113	4,7				
53	5,5		114	4,9				
54	4,9		115	5,1				
56	3,9		116	4,9				

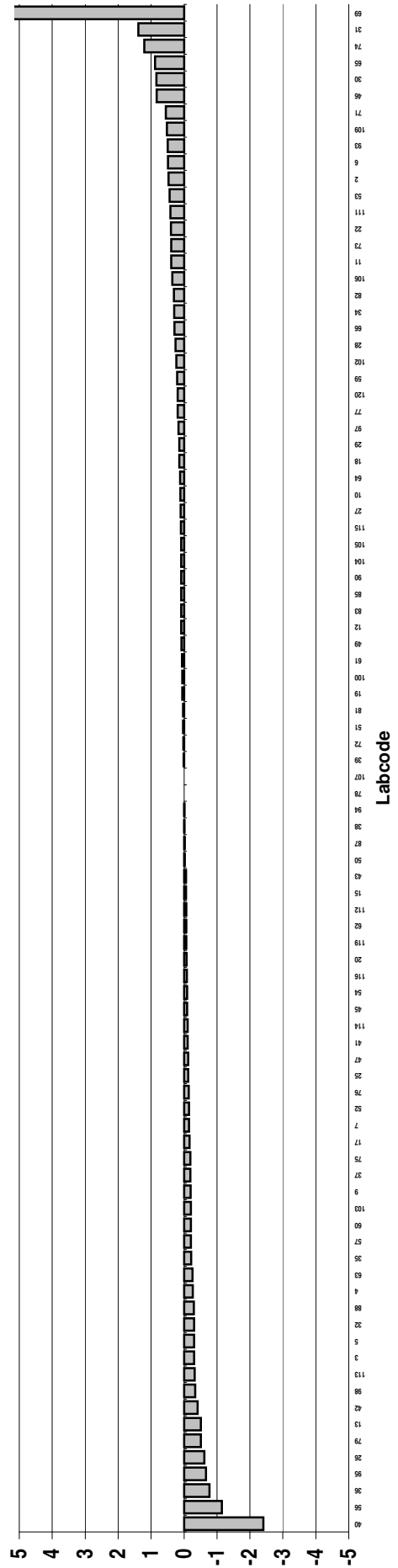
Consensus statistics

Consensus median, pg/g	5,0
Median all values pg/g	5,0
Consensus mean, pg/g	5,0
Standard deviation, pg/g	0,46
Relative standard deviation, %	9,1
No. of values reported	92
No. of values removed	1
No. of reported non-detects	0

1,2,3,4,7,8,9 HpCDF



Z-score: 1,2,3,4,7,8,9 HpCDF



Analyte solution

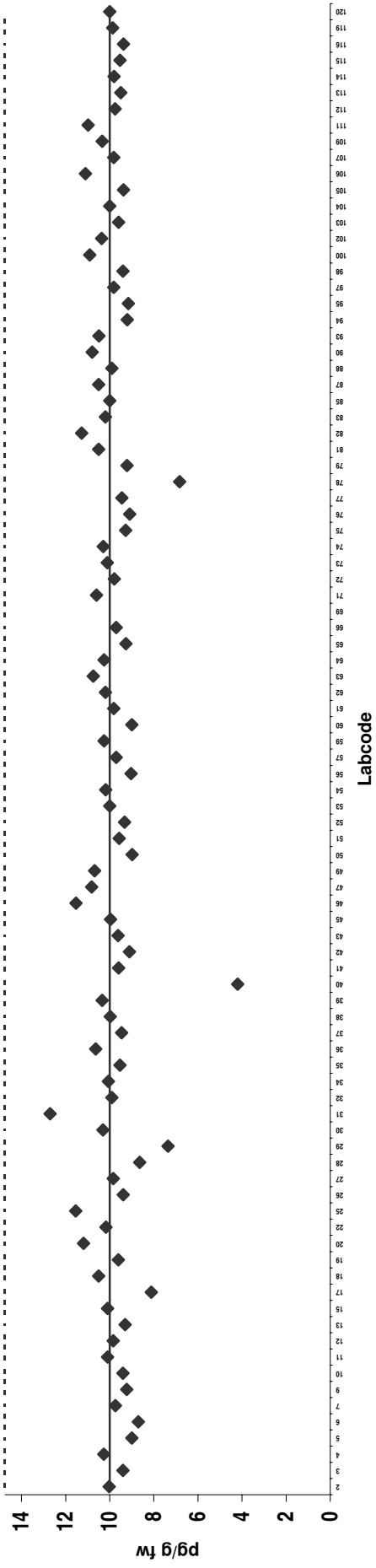
Congener: OCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	10		57	9,7		119	10	
3	9,4		59	10		120	9,4	
4	10		60	9,0				
5	9,0		61	9,8				
6	8,7		62	10				
7	9,7		63	11				
9	9,2		64	10				
10	9,4		65	9,3				
11	10		66	9,7				
12	9,8		69	40	Outlier			
13	9,3		71	11				
15	10		72	9,8				
17	8,1		73	10				
18	11		74	10				
19	9,6		75	9,3				
20	11		76	9,1				
22	10		77	9,5				
25	12		78	6,8				
26	9,4		79	9,2				
27	9,8		81	11				
28	8,6		82	11				
29	7,4		83	10				
30	10		85	10				
31	13		87	11				
32	9,9		88	9,9				
34	10		90	11				
35	9,5		93	10				
36	11		94	9,2				
37	9,5		95	9,2				
38	10		97	9,8				
39	10		98	9,4				
40	4,2		100	11				
41	9,6		102	10				
42	9,1		103	9,6				
43	9,6		104	10				
45	10		105	9,4				
46	12		106	11				
47	11		107	9,8				
49	11		109	10				
50	9,0		111	11				
51	9,6		112	9,8				
52	9,3		113	9,5				
53	10		114	9,8				
54	10		115	9,5				
56	9,0		116	9,4				

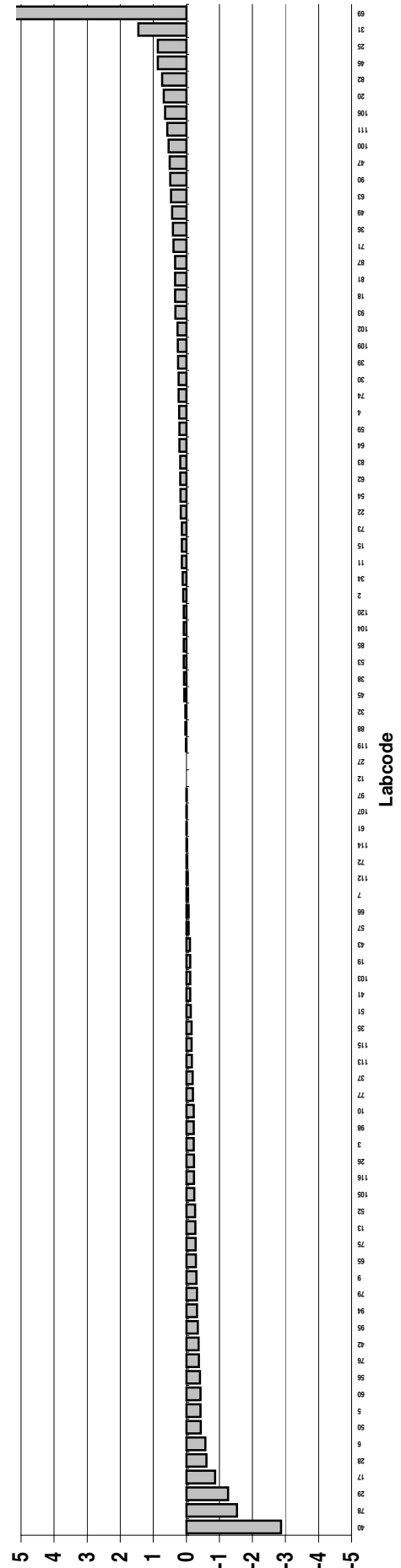
Consensus statistics

Consensus median, pg/g	9,8
Median all values pg/g	9,8
Consensus mean, pg/g	9,9
Standard deviation, pg/g	0,83
Relative standard deviation, %	8,4
No. of values reported	92
No. of values removed	2
No. of reported non-detects	0

OCDF



Z-score: OCDF



Analyte solution

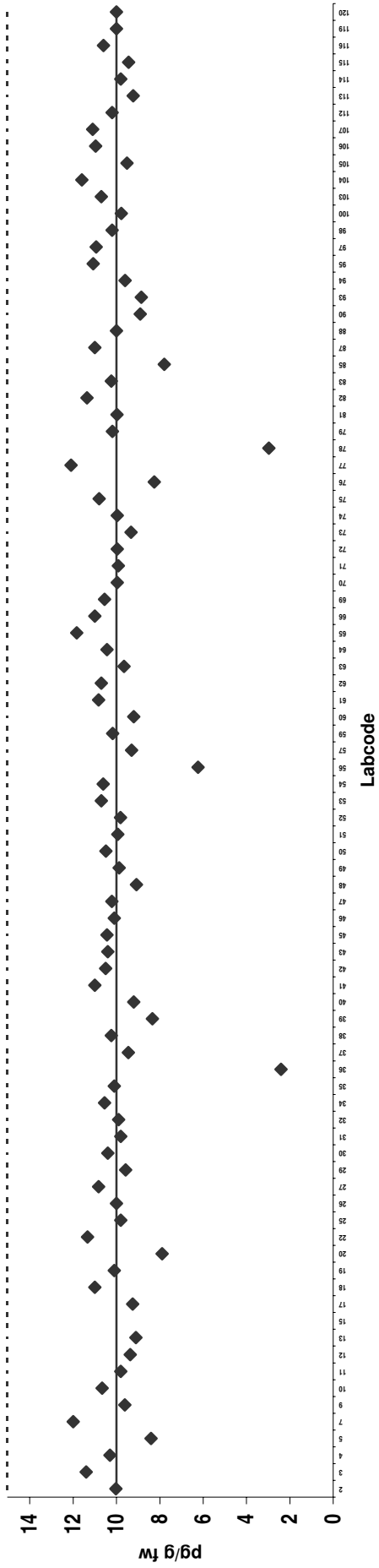
Congener: PCB 77

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	10		59	10	
3	11		60	9,2	
4	10		61	11	
5	8,4		62	11	
7	12		63	10	
9	9,6		64	10	
10	11		65	12	
11	9,8		66	11	
12	9,4		69	11	
13	9,1		70	10	
15	10,5		71	9,9	
17	9,3		72	10	
18	11		73	9,3	
19	10		74	10	
20	7,9		75	11	
22	11		76	8,3	
25	9,8		77	12	
26	10		78	3,0	
27	11		79	10	Outlier
29	9,6		81	10	
30	10		82	11	
31	9,8		83	10	
32	9,9		85	7,8	
34	11		87	11	
35	10		88	10	
36	2,4		90	8,9	
37	9,5		93	8,9	
38	10		94	9,6	
39	8,3		95	11	
40	9,2		97	11	
41	11		98	10	
42	11		100	9,8	
43	10		103	11	
45	10		104	12	
46	10		105	9,5	
47	10		106	11	
48	9,1		107	11	
49	9,9		112	10	
50	10		113	9,2	
51	9,9		114	9,8	
52	9,8		115	9,4	
53	11		116	11	
54	11		119	10	
56	6,2		120	10	
57	9,3				

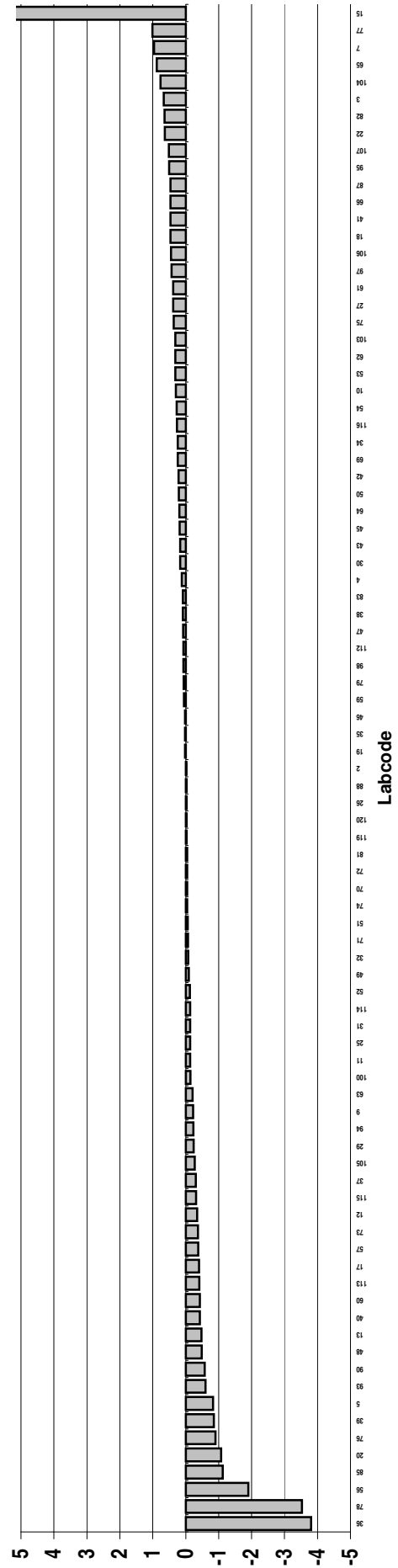
Consensus statistics

Consensus median, pg/g	10
Median all values pg/g	10
Consensus mean, pg/g	10
Standard deviation, pg/g	0,95
Relative standard deviation, %	9,4
No. of values reported	89
No. of values removed	3
No. of reported non-detects	0

PCB 77



Z-score: PCB 77



Analyte solution

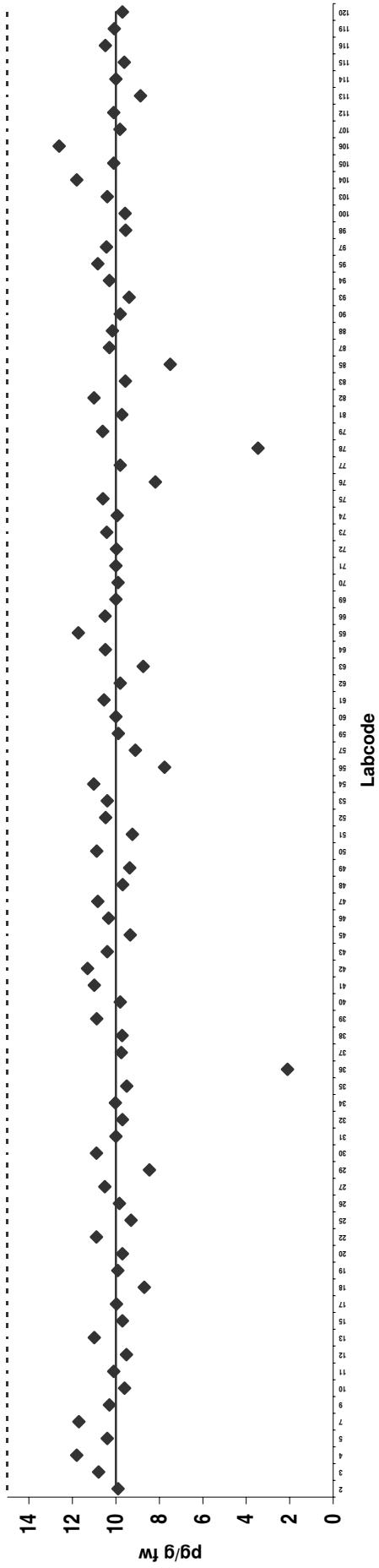
Congener: PCB 126

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	9,9		59	9,9	
3	11		60	10	
4	12		61	11	
5	10		62	9,8	
7	12		63	8,7	
9	10		64	10	
10	9,6		65	12	
11	10		66	11	
12	9,5		69	10	
13	11		70	9,9	
15	9,7		71	10	
17	10		72	10	
18	8,7		73	10	
19	9,9		74	9,9	
20	9,7		75	11	
22	11		76	8,2	
25	9,3		77	9,8	
26	9,8		78	3,5	
27	11		79	11	Outlier
29	8,5		81	9,7	
30	11		82	11	
31	10		83	9,6	
32	9,7		85	7,5	
34	10		87	10	
35	9,5		88	10	
36	2,1		90	9,8	
37	9,8		93	9,4	
38	9,7		94	10	
39	11		95	11	
40	9,8		97	10	
41	11		98	9,6	
42	11		100	9,6	
43	10		103	10	
45	9,3		104	12	
46	10		105	10	
47	11		106	13	
48	9,7		107	9,8	
49	9,4		112	10	
50	11		113	8,9	
51	9,2		114	10	
52	10		115	9,6	
53	10		116	10	
54	11		119	10	
56	7,8		120	9,7	
57	9,1				

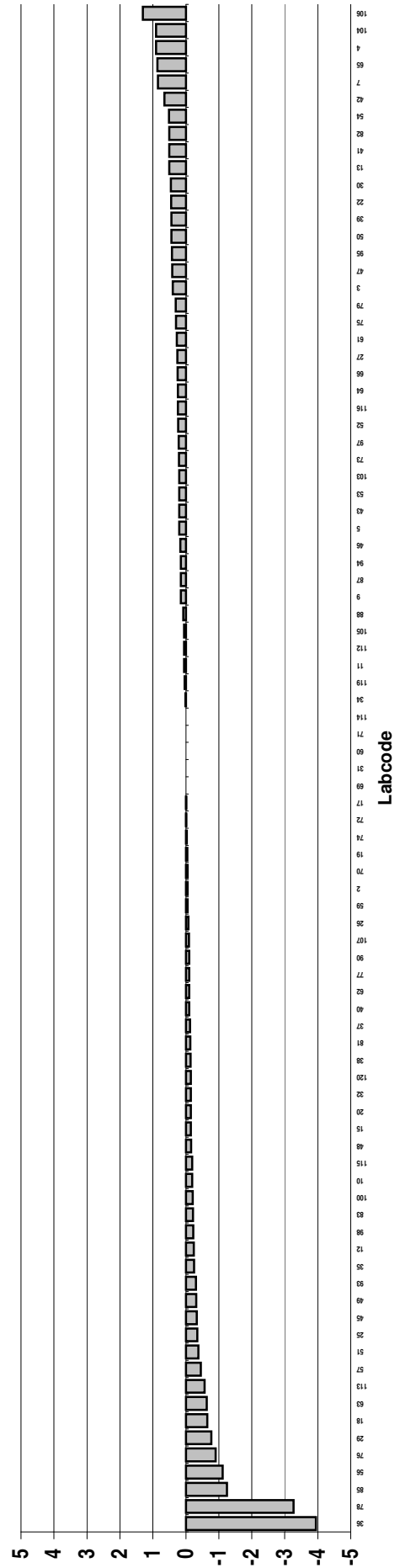
Consensus statistics

Consensus median, pg/g	10
Median all values pg/g	10
Consensus mean, pg/g	10
Standard deviation, pg/g	0,84
Relative standard deviation, %	8,3
No. of values reported	89
No. of values removed	2
No. of reported non-detects	0

PCB 126



Z-score: PCB 126



Analyte solution

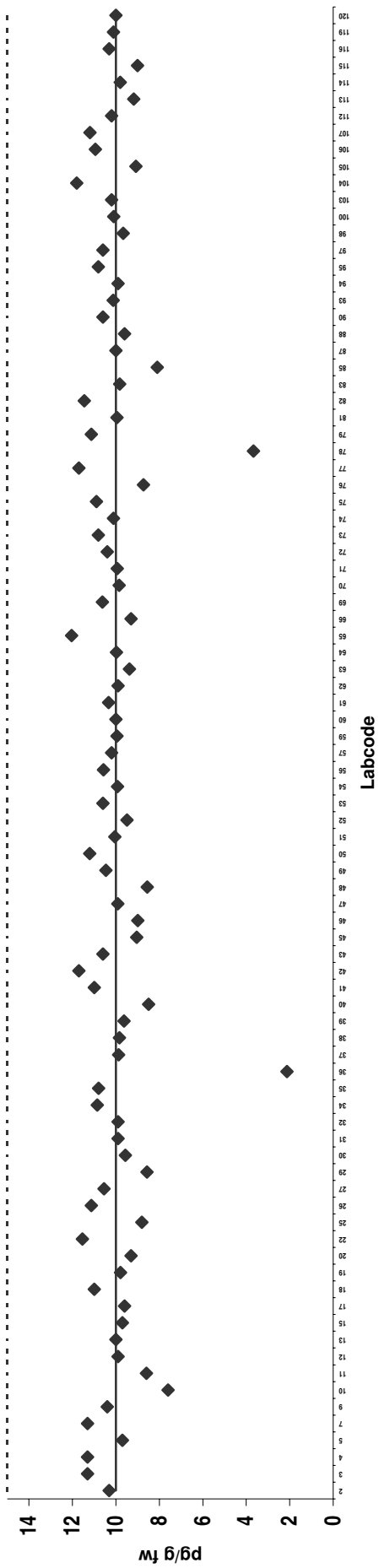
Congener: PCB 169

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	10		59	9,9	
3	11		60	10	
4	11		61	10	
5	9,7		62	9,9	
7	11		63	9,4	
9	10		64	10	
10	7,6		65	12	
11	8,6		66	9,3	
12	9,9		69	11	
13	10		70	9,9	
15	9,7		71	9,9	
17	9,6		72	10	
18	11		73	11	
19	9,8		74	10	
20	9,3		75	11	
22	12		76	8,7	
25	8,8		77	12	
26	11		78	3,7	Outlier
27	11		79	11	
29	8,6		81	10	
30	9,6		82	11	
31	9,9		83	9,8	
32	9,9		85	8,1	
34	11		87	10	
35	11		88	9,6	
36	2,1	Outlier	90	11	
37	9,9		93	10	
38	9,8		94	9,9	
39	9,6		95	11	
40	8,5		97	11	
41	11		98	9,7	
42	12		100	10	
43	11		103	10	
45	9,0		104	12	
46	9,0		105	9,1	
47	9,9		106	11	
48	8,6		107	11	
49	10		112	10	
50	11		113	9,2	
51	10		114	9,8	
52	9,5		115	9,0	
53	11		116	10	
54	9,9		119	10	
56	11		120	10	
57	10				

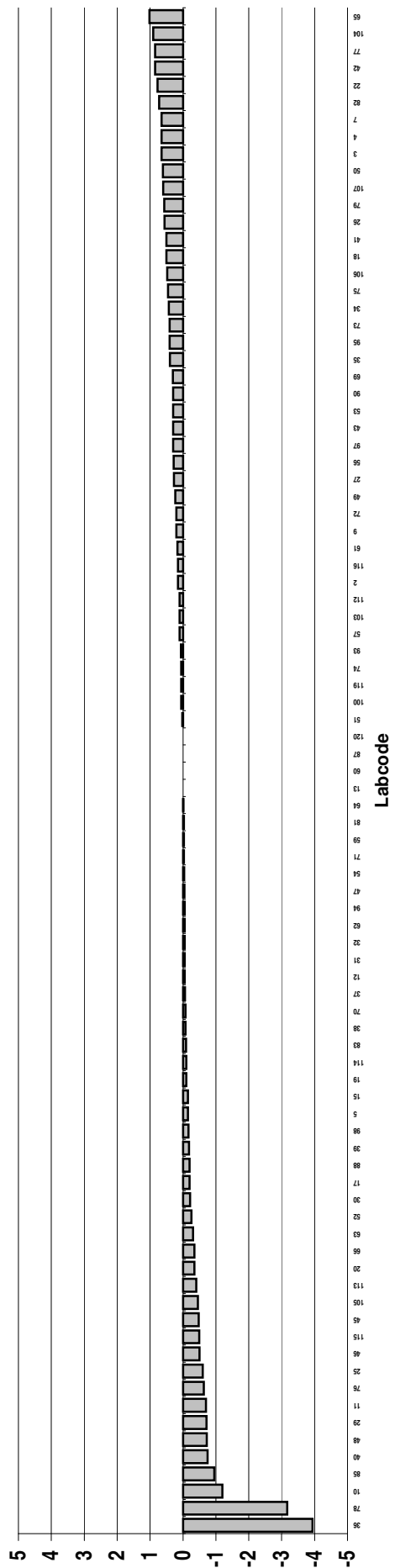
Consensus statistics

Consensus median, pg/g	10
Median all values pg/g	10
Consensus mean, pg/g	10
Standard deviation, pg/g	0,87
Relative standard deviation, %	8,6
No. of values reported	89
No. of values removed	2
No. of reported non-detects	0

PCB 169



Z-score: PCB 169



Analyte solution

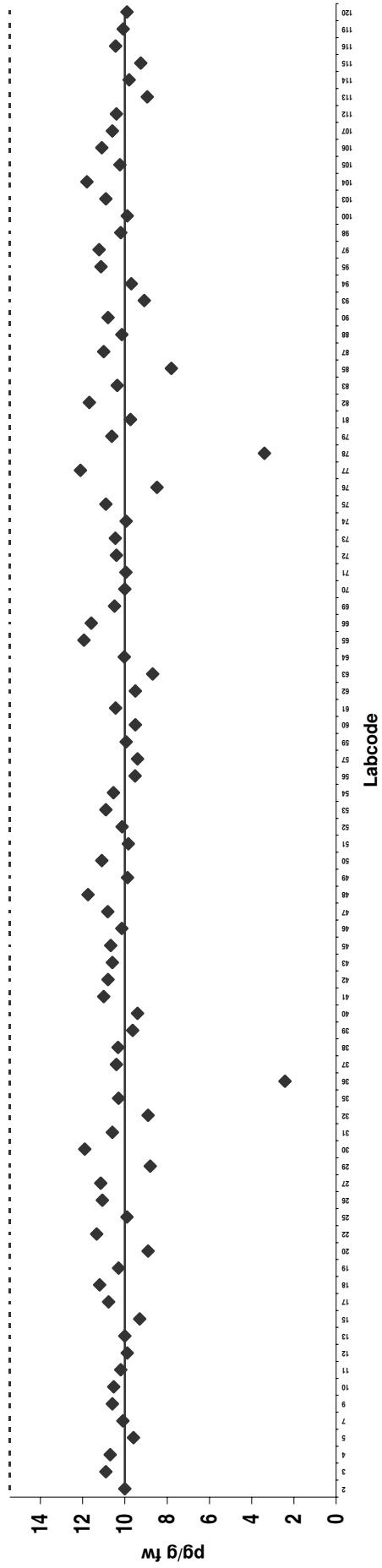
Congener: PCB 81

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	10		60	9,5	
3	11		61	10	
4	11		62	9,5	
5	9,6		63	8,7	
7	10		64	10	
9	11		65	12	
10	11		66	12	
11	10		69	10	
12	9,9		70	10	
13	10		71	10	
15	9,3		72	10	
17	11		73	10	
18	11		74	9,9	
19	10		75	11	
20	8,9		76	8,5	
22	11		77	12	
25	9,9		78	3,4	Outlier
26	11		79	11	
27	11		81	9,7	
29	8,8		82	12	
30	12		83	10	
31	11		85	7,8	
32	8,9		87	11	
35	10		88	10	
36	2,4	Outlier	90	11	
37	10		93	9,1	
38	10		94	9,7	
39	9,6		95	11	
40	9,4		97	11	
41	11		98	10	
42	11		100	9,9	
43	11		103	11	
45	11		104	12	
46	10		105	10	
47	11		106	11	
48	12		107	11	
49	9,9		112	10	
50	11		113	8,9	
51	9,8		114	9,8	
52	10		115	9,2	
53	11		116	10	
54	11		119	10	
56	9,5		120	9,9	
57	9,4				
59	9,9				

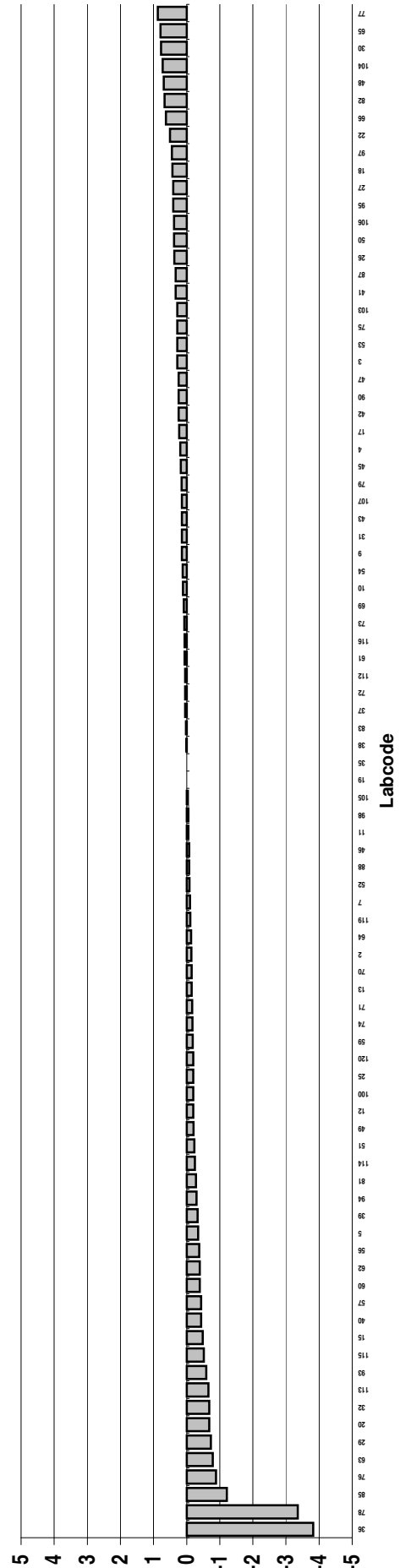
Consensus statistics

Consensus median, pg/g	10
Median all values pg/g	10
Consensus mean, pg/g	10
Standard deviation, pg/g	0,83
Relative standard deviation, %	8,0
No. of values reported	88
No. of values removed	2
No. of reported non-detects	0

PCB 81



Z-score: PCB 81



Analyte solution

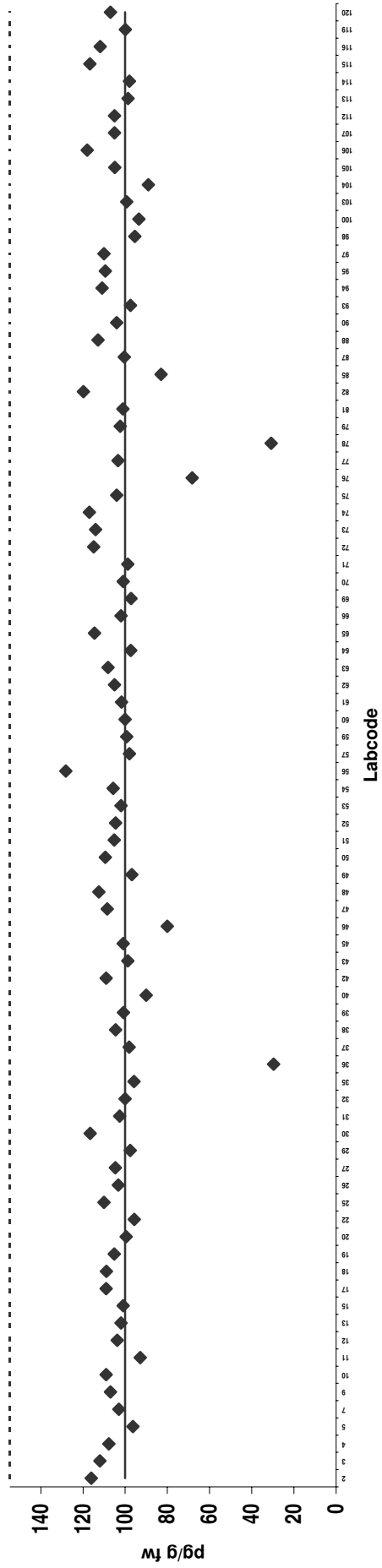
Congener: PCB 105

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	116		61	102	
3	112		62	105	
4	108		63	108	
5	96		64	97	
7	103		65	115	
9	107		66	102	
10	109		69	97	
11	93		70	101	
12	104		71	99	
13	102		72	115	
15	101		73	114	
17	109		74	117	
18	109		75	104	
19	105		76	68	
20	100		77	103	
22	96		78	31	Outlier
25	110		79	102	
26	103		81	101	
27	105		82	120	
29	98		85	83	
30	117		87	100	
31	103		88	113	
32	100		90	104	
35	96		93	97	
36	30	Outlier	94	111	
37	98		95	109	
38	105		97	110	
39	101		98	96	
40	90		100	94	
42	109		103	99	
43	99		104	89	
45	101		105	105	
46	80		106	118	
47	109		107	105	
48	112		112	105	
49	97		113	99	
50	109		114	98	
51	105		115	117	
52	105		116	112	
53	102		119	100	
54	106		120	107	
56	128				
57	98				
59	99				
60	100				

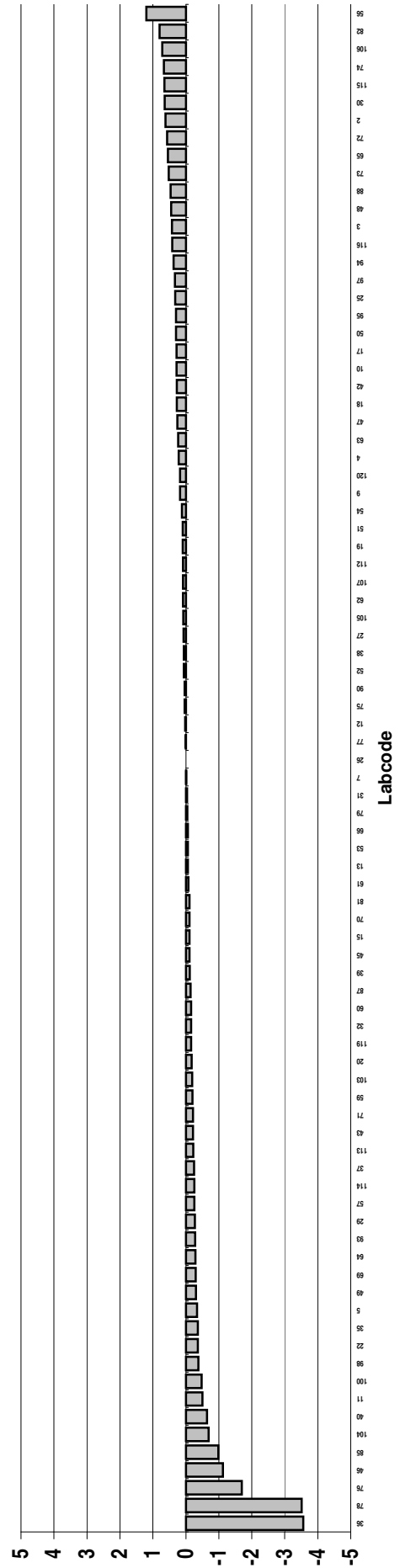
Consensus statistics

Consensus median, pg/g	103
Median all values pg/g	103
Consensus mean, pg/g	103
Standard deviation, pg/g	8,8
Relative standard deviation, %	8,5
No. of values reported	86
No. of values removed	2
No. of reported non-detects	0

PCB 105



Z-score: PCB 105



Analyte solution

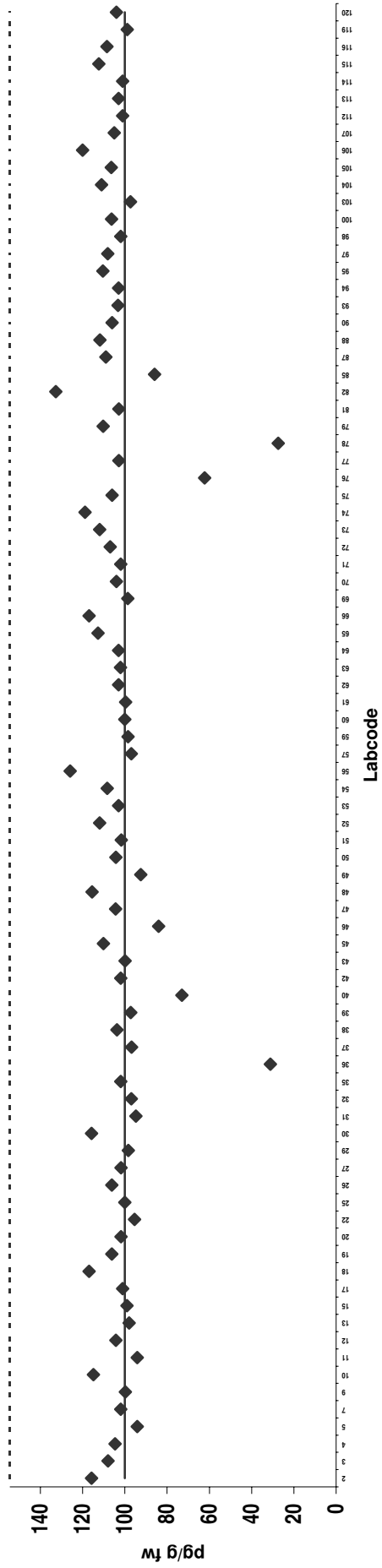
Congener: PCB 114

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	116		61	100	
3	108		62	103	
4	105		63	102	
5	94		64	103	
7	102		65	113	
9	100		66	117	
10	115		69	99	
11	94		70	104	
12	104		71	102	
13	98		72	107	
15	99		73	112	
17	101		74	119	
18	117		75	106	
19	106		76	62	
20	102		77	103	
22	95		78	27	Outlier
25	100		79	110	
26	106		81	103	
27	102		82	133	
29	98		85	86	
30	116		87	109	
31	95		88	112	
32	97		90	106	
35	102		93	103	
36	31	Outlier	94	103	
37	97		95	110	
38	104		97	108	
39	97		98	102	
40	73		100	106	
42	102		103	97	
43	100		104	111	
45	110		105	106	
46	84		106	120	
47	104		107	105	
48	115		112	101	
49	93		113	103	
50	104		114	101	
51	102		115	112	
52	112		116	109	
53	103		119	99	
54	108		120	104	
56	126				
57	97				
59	98				
60	100				

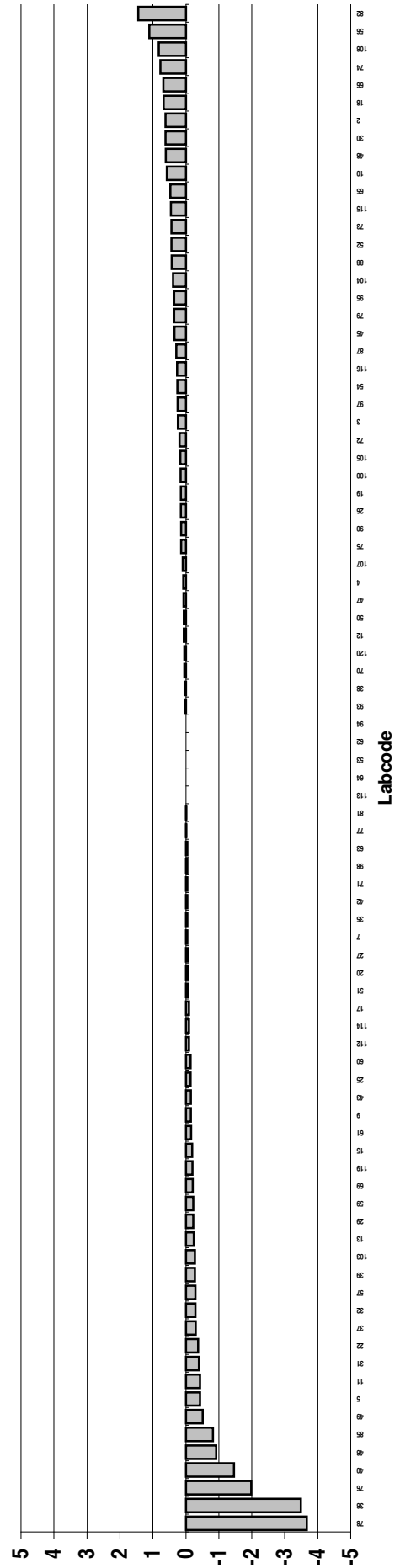
Consensus statistics

Consensus median, pg/g	103
Median all values pg/g	103
Consensus mean, pg/g	104
Standard deviation, pg/g	9,7
Relative standard deviation, %	9,3
No. of values reported	86
No. of values removed	2
No. of reported non-detects	0

PCB 114



Z-score: PCB 114



Analyte solution

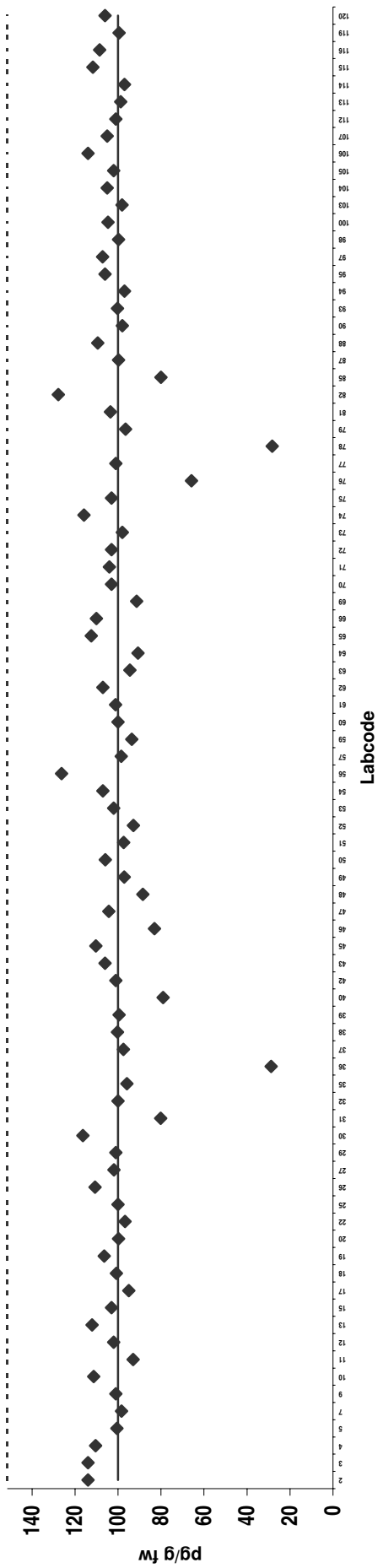
Congener: PCB 118

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	114		61	101	
3	114		62	107	
4	110		63	94	
5	101		64	91	
7	98		65	112	
9	101		66	110	
10	111		69	91	
11	93		70	103	
12	102		71	104	
13	112		72	103	
15	103		73	98	
17	95		74	116	
18	101		75	103	
19	106		76	66	
20	100		77	101	
22	97		78	28	Outlier
25	100		79	96	
26	111		81	104	
27	102		82	128	
29	101		85	80	
30	116		87	100	
31	80		88	109	
32	100		90	98	
35	96		93	100	
36	29	Outlier	94	97	
37	98		95	106	
38	100		97	107	
39	99		98	100	
40	79		100	105	
42	101		103	98	
43	106		104	105	
45	110		105	102	
46	83		106	114	
47	104		107	105	
48	88		112	101	
49	97		113	99	
50	106		114	97	
51	97		115	112	
52	93		116	109	
53	102		119	100	
54	107		120	106	
56	126				
57	99				
59	94				
60	100				

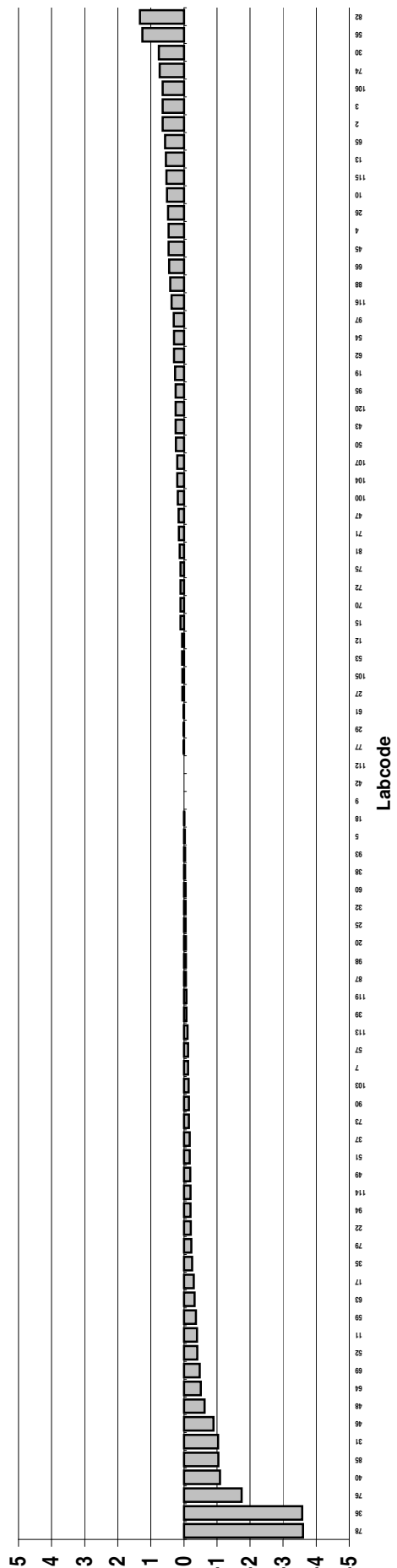
Consensus statistics

Consensus median, pg/g	101
Median all values pg/g	101
Consensus mean, pg/g	102
Standard deviation, pg/g	9,4
Relative standard deviation, %	9,2
No. of values reported	86
No. of values removed	2
No. of reported non-detects	0

PCB 118



Z-score: PCB 118



Analyte solution

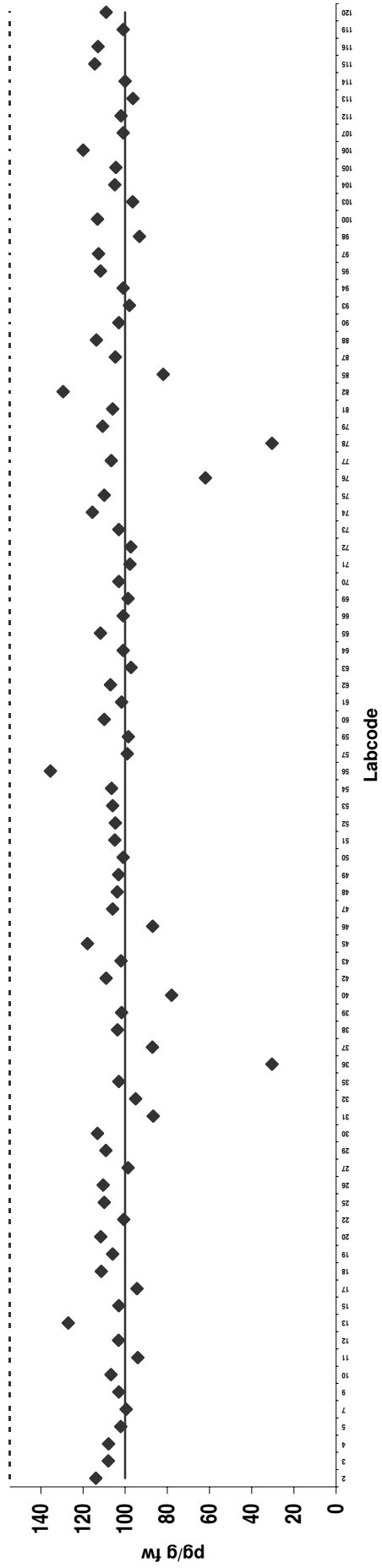
Congener: PCB 123

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	114		61	102	
3	108		62	107	
4	108		63	97	
5	102		64	101	
7	100		65	112	
9	103		66	101	
10	107		69	99	
11	94		70	103	
12	103		71	98	
13	127		72	97	
15	103		73	103	
17	94		74	116	
18	111		75	110	
19	106		76	62	
20	112		77	107	
22	101		78	30	Outlier
25	110		79	111	
26	110		81	106	
27	99		82	129	
29	109		85	82	
30	113		87	105	
31	87		88	114	
32	95		90	103	
35	103		93	98	
36	30	Outlier	94	101	
37	87		95	112	
38	104		97	113	
39	102		98	93	
40	78		100	113	
42	109		103	97	
43	102		104	105	
45	118		105	104	
46	87		106	120	
47	106		107	101	
48	104		112	102	
49	103		113	96	
50	101		114	100	
51	105		115	114	
52	105		116	113	
53	106		119	101	
54	106		120	109	
56	136				
57	99				
59	98				
60	110				

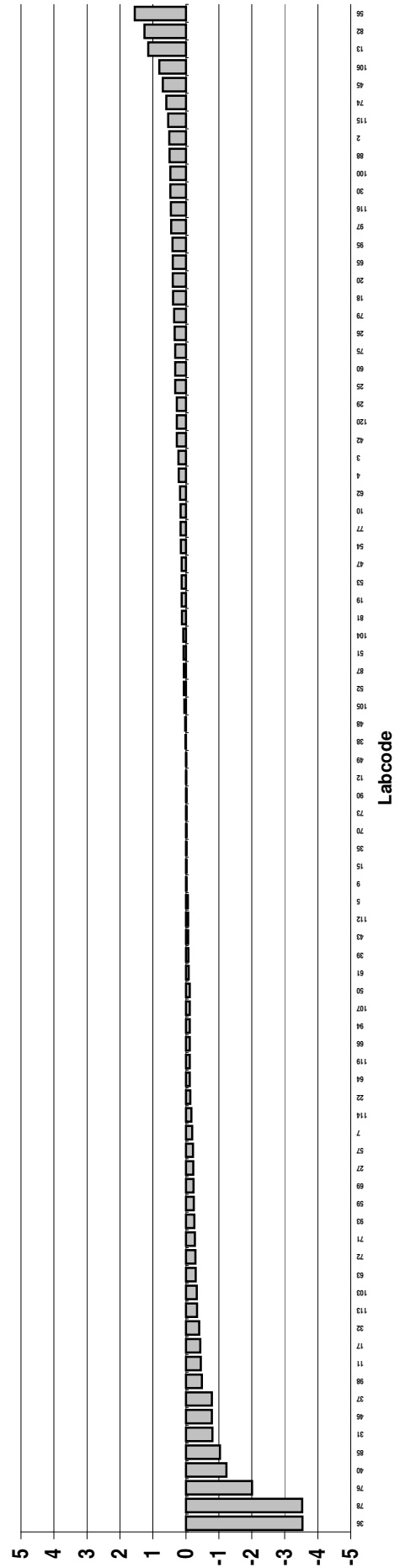
Consensus statistics

Consensus median, pg/g	103
Median all values pg/g	103
Consensus mean, pg/g	104
Standard deviation, pg/g	10
Relative standard deviation, %	10
No. of values reported	86
No. of values removed	2
No. of reported non-detects	0

PCB 123



Z-score: PCB 123



Analyte solution

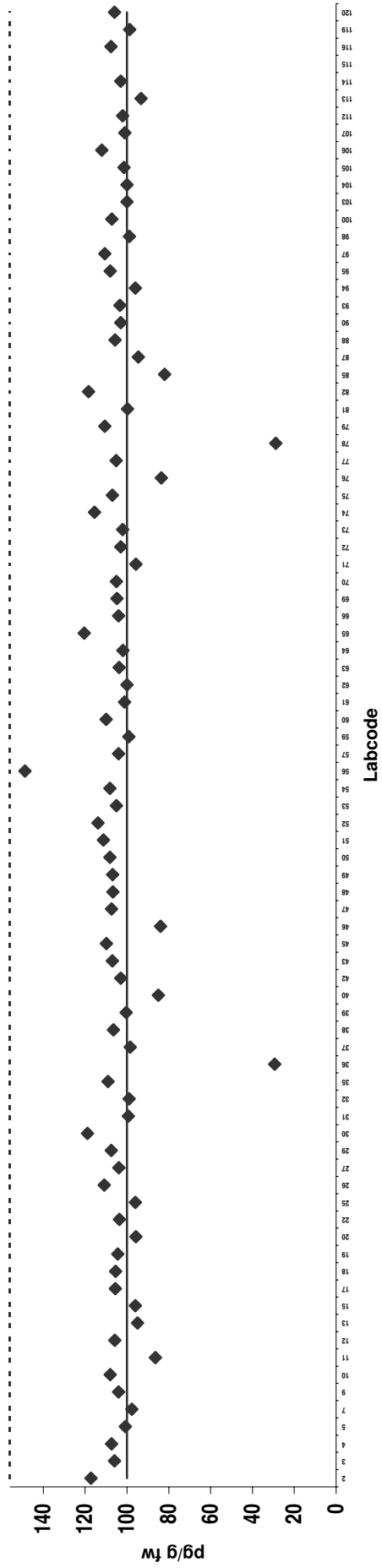
Congener: PCB 156

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	117		61	101	
3	106		62	100	
4	107		63	104	
5	101		64	102	
7	98		65	120	
9	104		66	104	
10	108		69	105	
11	86		70	105	
12	106		71	96	
13	95		72	103	
15	96		73	102	
17	106		74	116	
18	105		75	107	
19	104		76	84	
20	96		77	105	
22	104		78	29	Outlier
25	96		79	111	
26	111		81	100	
27	104		82	118	
29	107		85	82	
30	119		87	95	
31	99		88	106	
32	99		90	103	
35	109		93	103	
36	29	Outlier	94	96	
37	98		95	108	
38	106		97	111	
39	100		98	99	
40	85		100	107	
42	103		103	100	
43	107		104	100	
45	110		105	101	
46	84		106	112	
47	107		107	101	
48	107		112	102	
49	107		113	93	
50	108		114	103	
51	111		115	226	
52	114		116	108	Outlier
53	105		119	99	
54	108		120	106	
56	149				
57	104				
59	99				
60	110				

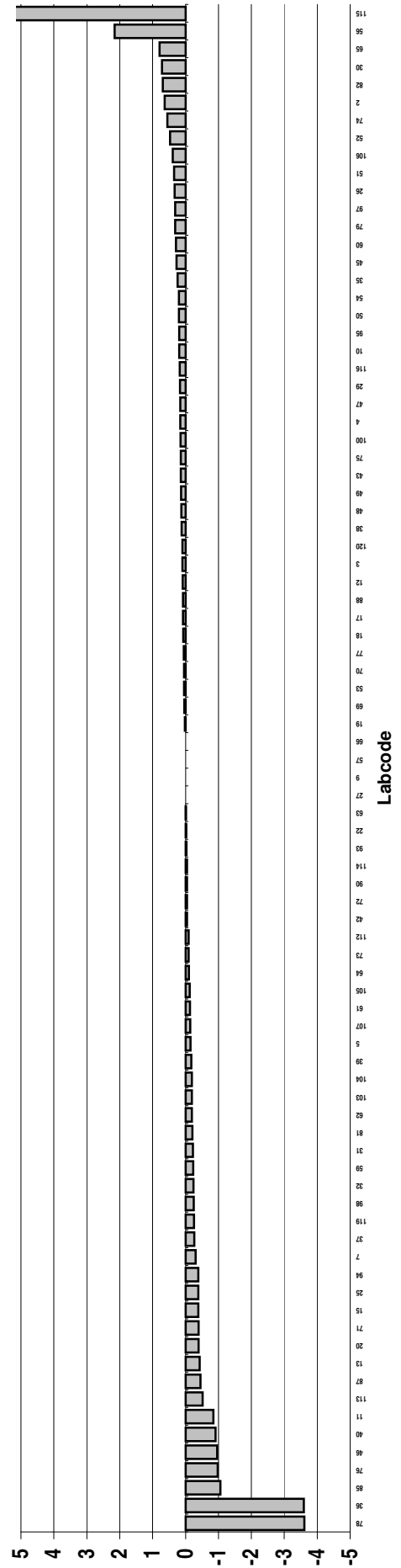
Consensus statistics

Consensus median, pg/g	104
Median all values pg/g	104
Consensus mean, pg/g	104
Standard deviation, pg/g	8,9
Relative standard deviation, %	8,6
No. of values reported	86
No. of values removed	3
No. of reported non-detects	0

PCB 156



Z-score: PCB 156



Analyte solution

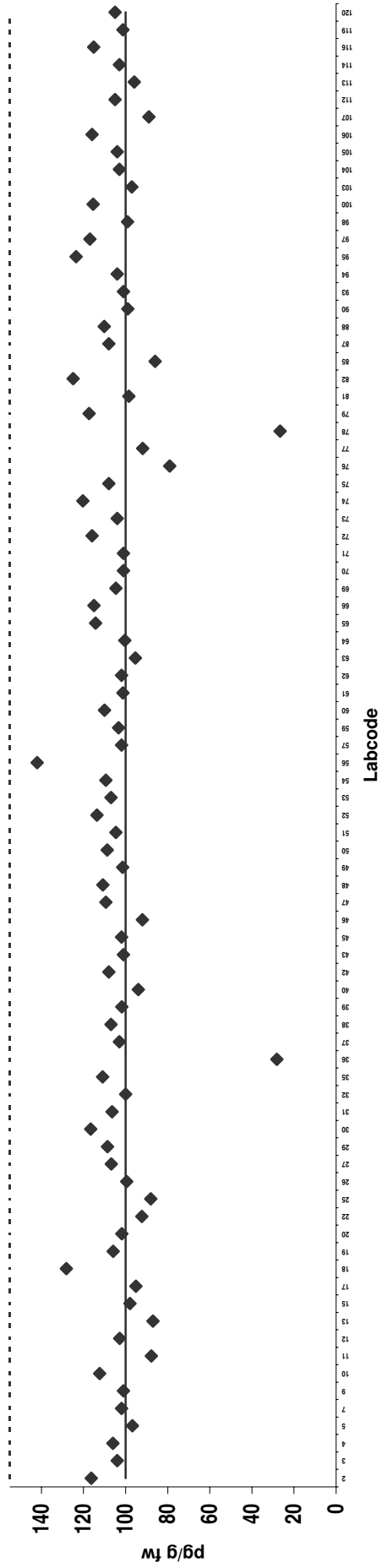
Congener: PCB 157

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	116		61	101	
3	104		62	102	
4	106		63	95	
5	97		64	100	
7	102		65	114	
9	101		66	115	
10	112		69	105	
11	88		70	101	
12	103		71	101	
13	87		72	116	
15	98		73	104	
17	95		74	120	
18	128		75	108	
19	106		76	79	
20	102		77	92	
22	92		78	27	Outlier
25	88		79	117	
26	99		81	99	
27	107		82	125	
29	109		85	86	
30	117		87	108	
31	107		88	110	
32	100		90	99	
35	111		93	101	
36	28	Outlier	94	104	
37	103		95	124	
38	107		97	117	
39	102		98	99	
40	94		100	116	
42	108		103	97	
43	101		104	103	
45	102		105	104	
46	92		106	116	
47	109		107	89	
48	111		112	105	
49	101		113	96	
50	109		114	103	
51	105		116	115	
52	114		119	101	
53	107		120	105	
54	109				
56	142				
57	102				
59	103				
60	110				

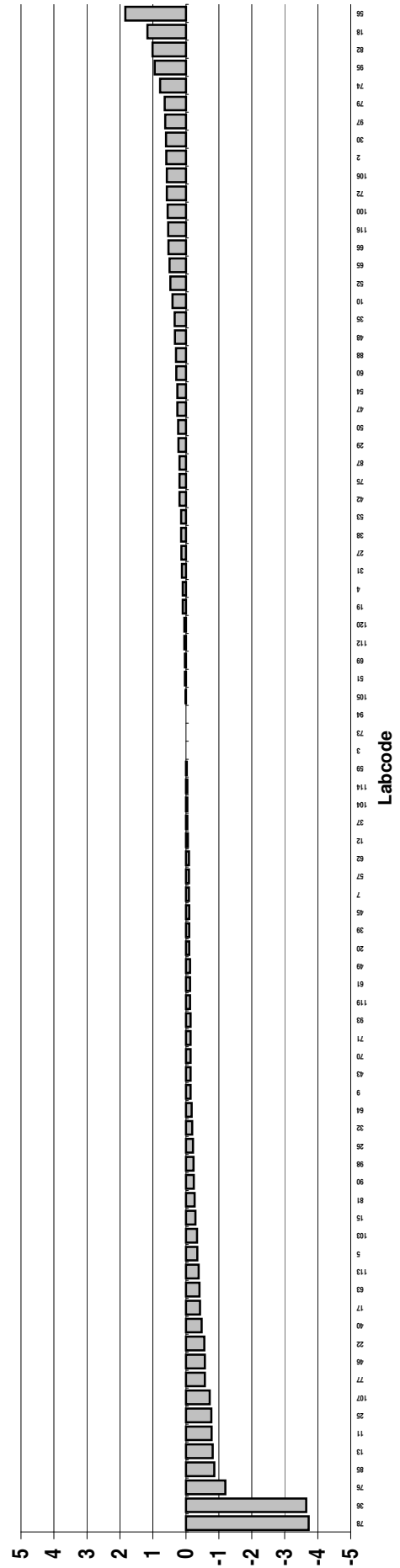
Consensus statistics

Consensus median, pg/g	104
Median all values pg/g	103
Consensus mean, pg/g	105
Standard deviation, pg/g	10
Relative standard deviation, %	9,5
No. of values reported	85
No. of values removed	2
No. of reported non-detects	0

PCB 157



Z-score: PCB 157



Analyte solution

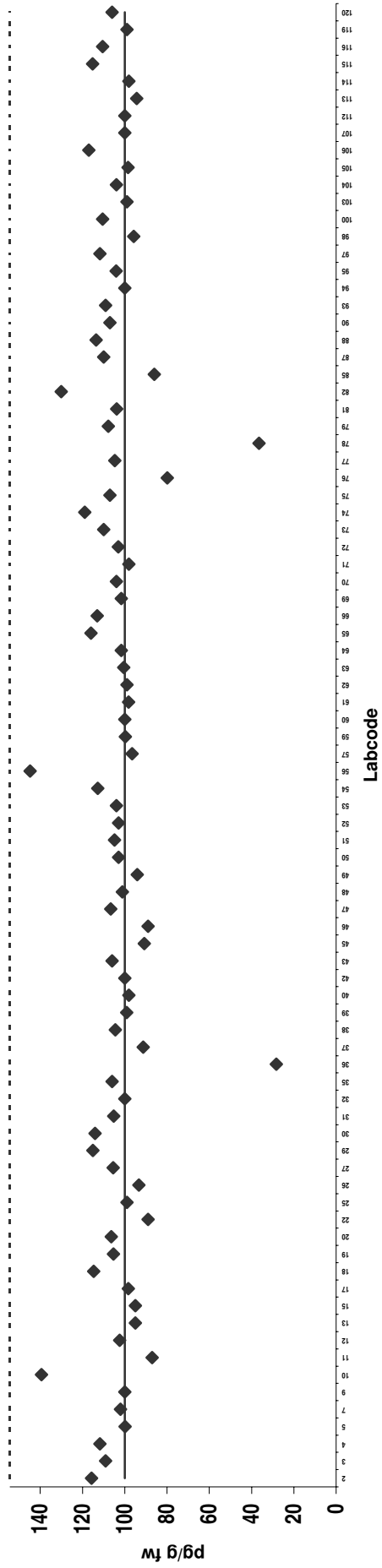
Congener: PCB 167

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	116		61	98	
3	109		62	99	
4	112		63	101	
5	100		64	102	
7	102		65	116	
9	100		66	113	
10	139		69	102	
11	87		70	104	
12	102		71	98	
13	95		72	103	
15	95		73	110	
17	98		74	119	
18	115		75	107	
19	105		76	80	
20	106		77	105	
22	89		78	37	Outlier
25	99		79	108	
26	93		81	104	
27	105		82	130	
29	115		85	86	
30	114		87	110	
31	105		88	113	
32	100		90	107	
35	106		93	109	
36	28		94	100	
37	91	Outlier	95	104	
38	104		97	112	
39	99		98	96	
40	98		100	111	
42	100		103	99	
43	106		104	104	
45	91		105	98	
46	89		106	117	
47	107		107	100	
48	101		112	100	
49	94		113	94	
50	103		114	98	
51	105		115	115	
52	103		116	110	
53	104		119	99	
54	113		120	106	
56	145				
57	97				
59	100				
60	100				

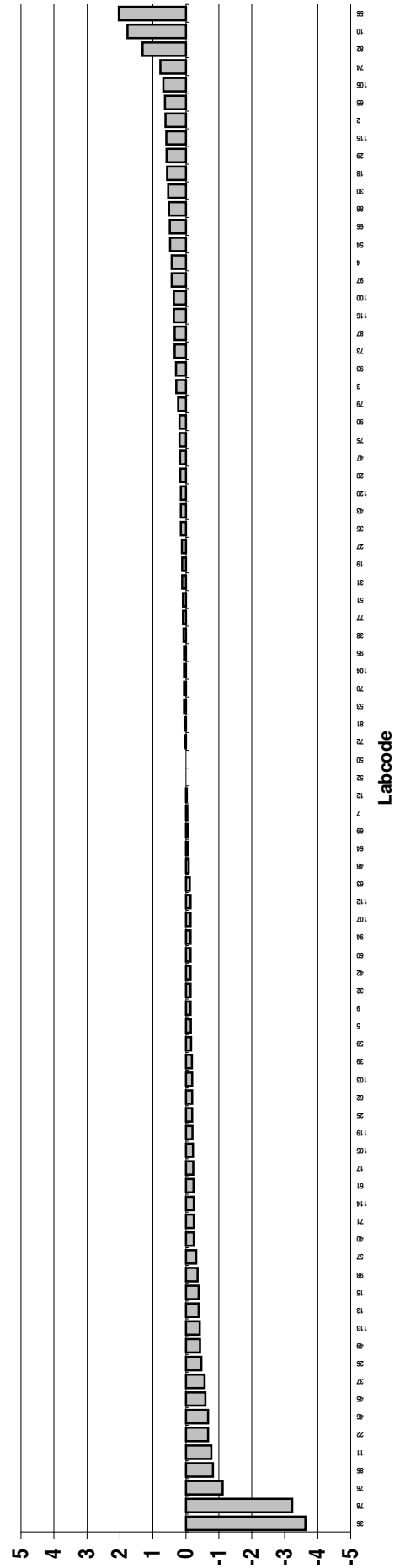
Consensus statistics

Consensus median, pg/g	103
Median all values pg/g	103
Consensus mean, pg/g	104
Standard deviation, pg/g	10
Relative standard deviation, %	9,7
No. of values reported	86
No. of values removed	2
No. of reported non-detects	0

PCB 167



Z-score: PCB 167



Analyte solution

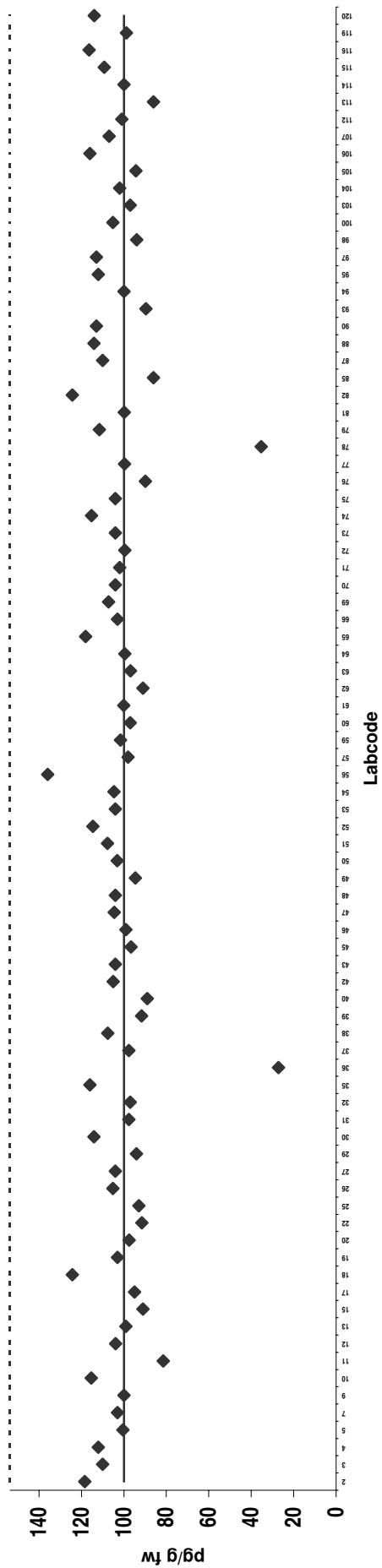
Congener: PCB 189

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	118		61	100	
3	110		62	91	
4	112		63	97	
5	101		64	100	
7	103		65	118	
9	100		66	103	
10	115		69	107	
11	82		70	104	
12	104		71	102	
13	99		72	100	
15	91		73	104	
17	95		74	115	
18	124		75	104	
19	103		76	90	
20	98		77	100	
22	92		78	35	Outlier
25	93		79	112	
26	105		81	100	
27	104		82	124	
29	94		85	86	
30	114		87	110	
31	98		88	114	
32	97		90	113	
35	116		93	90	
36	27	Outlier	94	100	
37	98		95	112	
38	108		97	113	
39	92		98	94	
40	89		100	105	
42	105		103	97	
43	104		104	102	
45	97		105	94	
46	99		106	116	
47	104		107	107	
48	104		112	101	
49	95		113	86	
50	103		114	100	
51	108		115	109	
52	115		116	116	
53	104		119	99	
54	105		120	114	
56	136				
57	98				
59	102				
60	97				

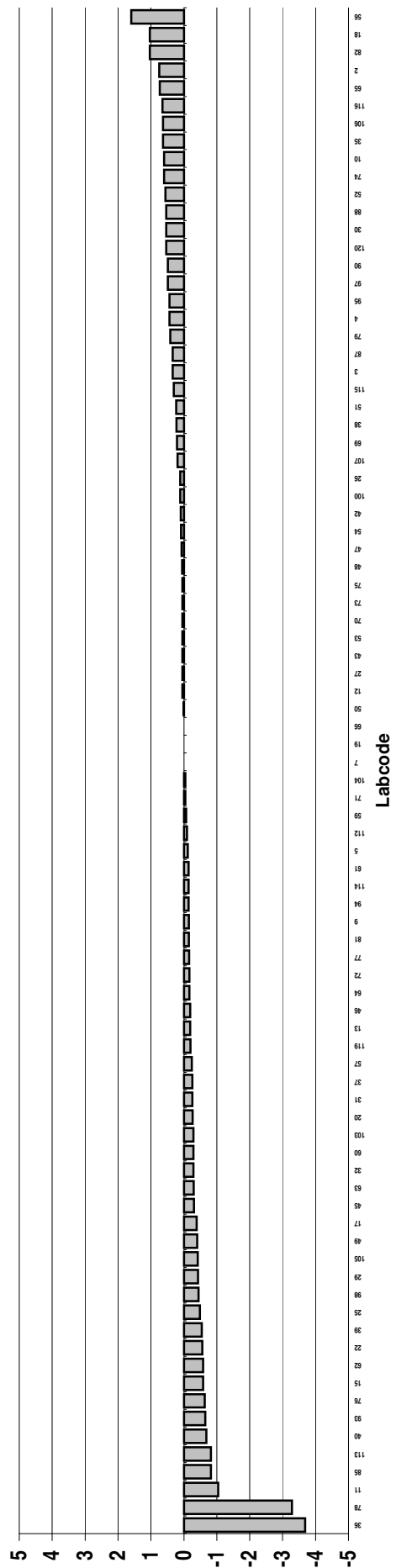
Consensus statistics

Consensus median, pg/g	103
Median all values pg/g	103
Consensus mean, pg/g	103
Standard deviation, pg/g	9,5
Relative standard deviation, %	9,2
No. of values reported	86
No. of values removed	2
No. of reported non-detects	0

PCB 189



Z-score: PCB 189



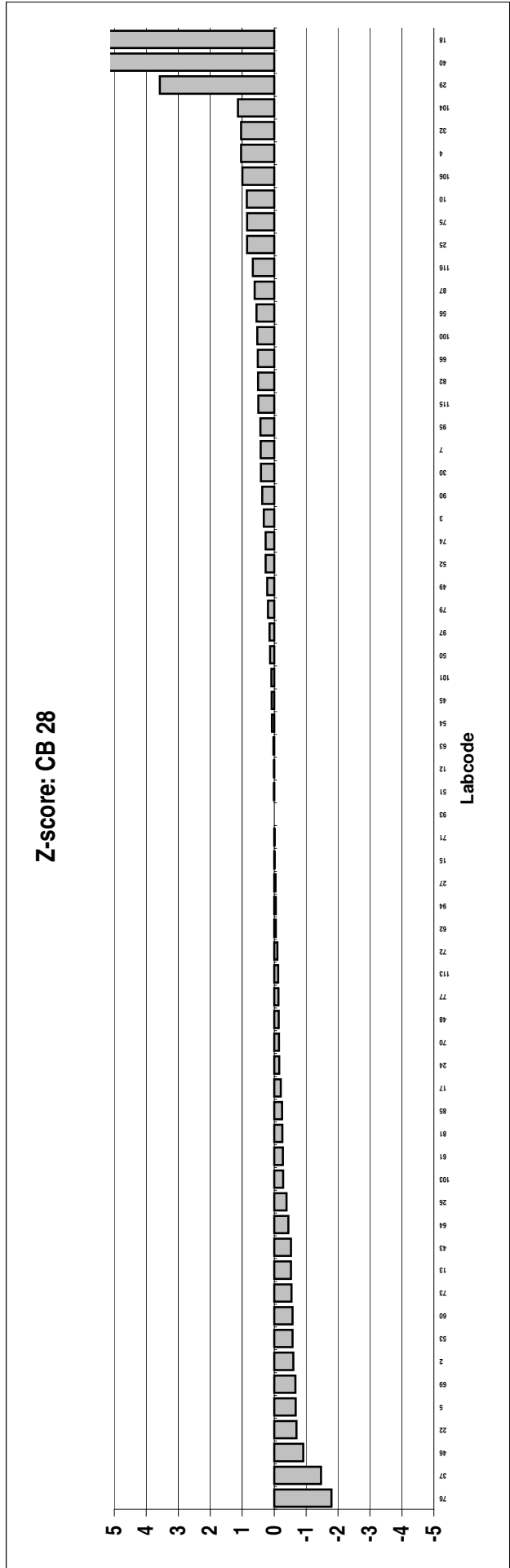
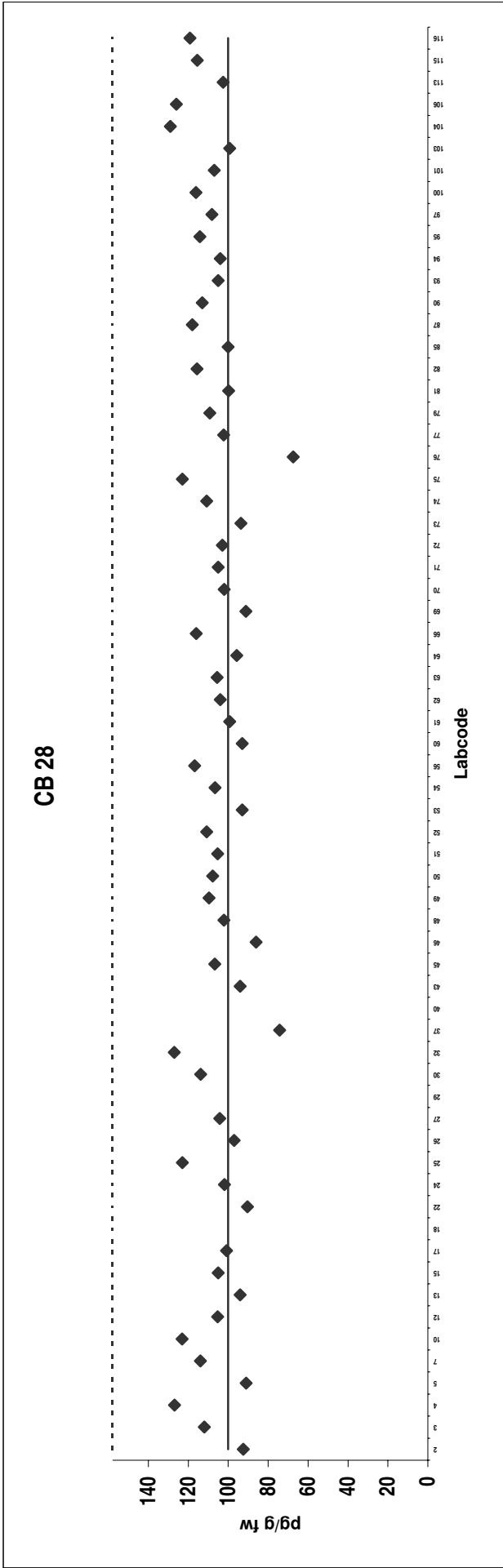
Analyte solution

Congener: CB 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	92		76	67	
3	112		77	102	
4	127		79	109	
5	91		81	100	
7	114		82	116	
10	123		85	100	
12	105		87	118	
13	94		90	113	
15	105		93	105	
17	101		94	104	
18	354	Outlier	95	114	
22	90		97	108	
24	102		100	116	
25	123		101	107	
26	97		103	99	
27	104		104	129	
29	180	Outlier	106	126	
30	114		113	102	
32	127		115	116	
37	74		116	119	
40	320	Outlier			
43	94				
45	107				
46	86				
48	102				
49	110				
50	108				
51	105				
52	111				
53	93				
54	107				
56	117				
60	93				
61	99				
62	104				
63	106				
64	96				
66	116				
69	91				
70	102				
71	105				
72	103				
73	94				
74	111				
75	123				

Consensus statistics

Consensus median, pg/g	105
Median all values pg/g	105
Consensus mean, pg/g	106
Standard deviation, pg/g	12
Relative standard deviation, %	11
No. of values reported	65
No. of values removed	3
No. of reported non-detects	0



Analyte solution

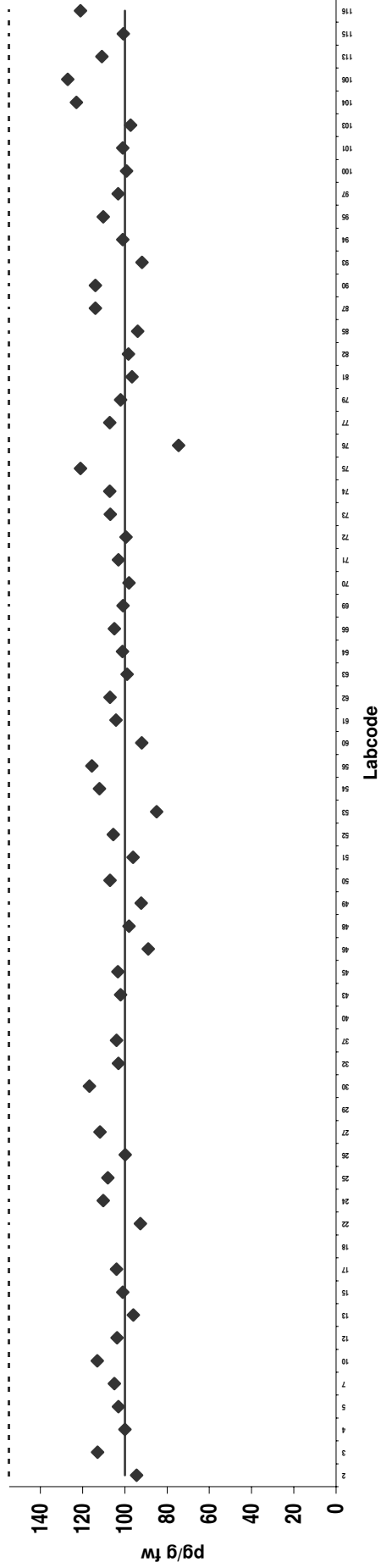
Congener: CB 52

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	94		76	75	
3	113		77	107	
4	100		79	102	
5	103		81	97	
7	105		82	98	
10	113		85	94	
12	104		87	114	
13	96		90	114	
15	101		93	92	
17	104		94	101	
18	245	Outlier	95	110	
22	93		97	103	
24	110		100	99	
25	108		101	101	
26	100		103	97	
27	112		104	123	
29	201	Outlier	106	127	
30	117		113	111	
32	103		115	101	
37	104		116	121	
40	230	Outlier			
43	102				
45	103				
46	89				
48	98				
49	92				
50	107				
51	96				
52	106				
53	85				
54	112				
56	116				
60	92				
61	104				
62	107				
63	99				
64	101				
66	105				
69	101				
70	98				
71	103				
72	99				
73	107				
74	107				
75	121				

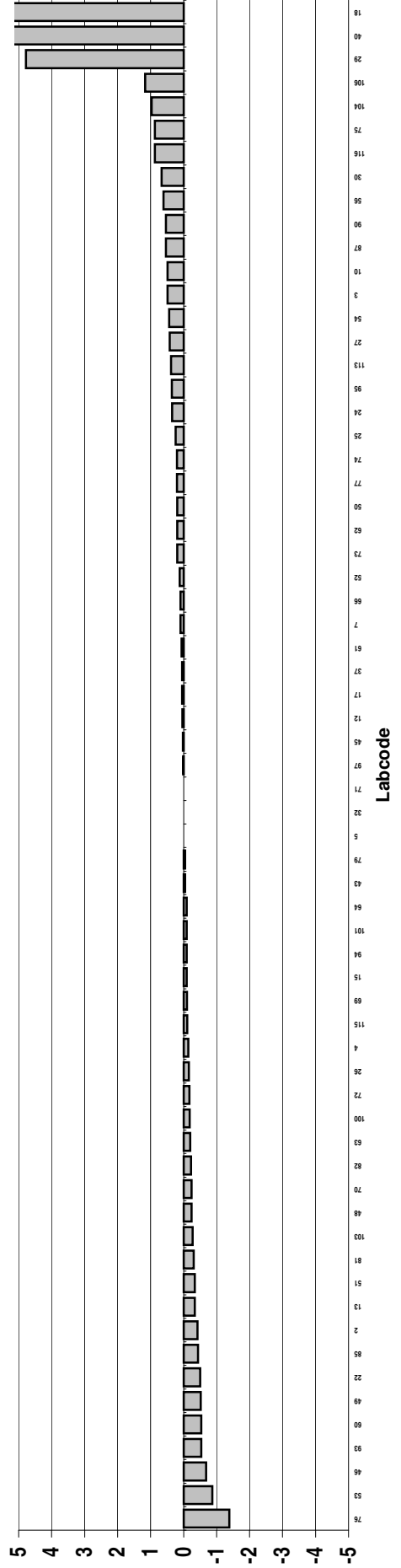
Consensus statistics

Consensus median, pg/g	103
Median all values pg/g	103
Consensus mean, pg/g	104
Standard deviation, pg/g	9,2
Relative standard deviation, %	9
No. of values reported	65
No. of values removed	3
No. of reported non-detects	0

CB 52



Z-score: CB 52



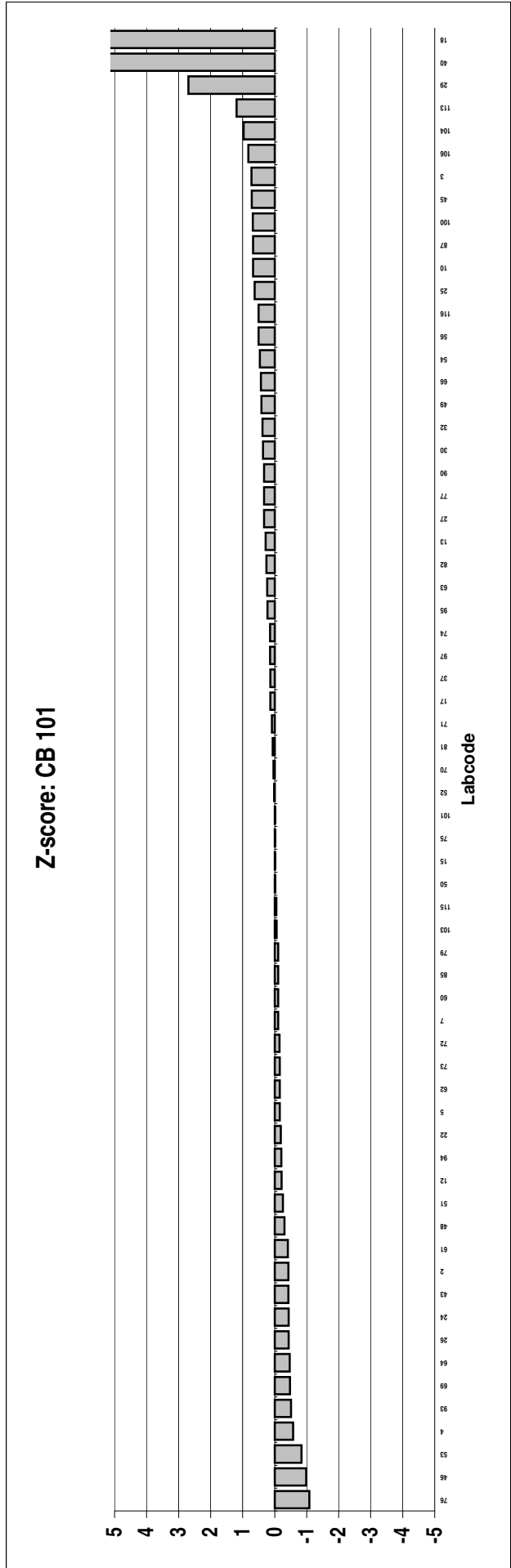
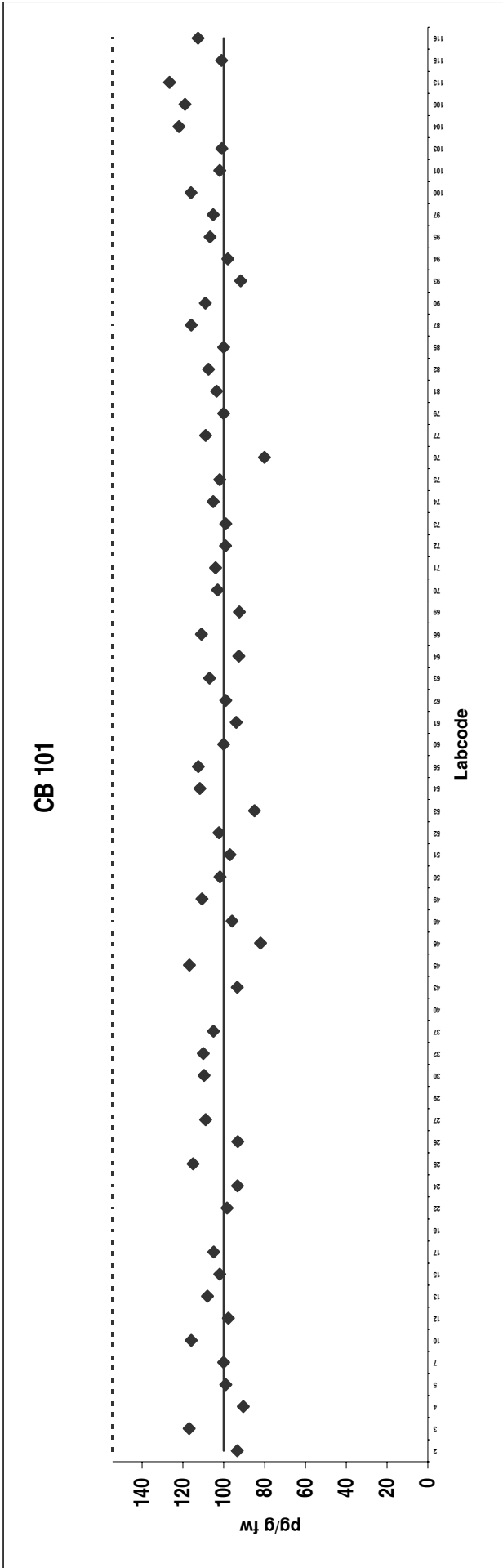
Analyte solution

Congener: CB 101

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	93		76	80	
3	117		77	109	
4	90		79	100	
5	99		81	104	
7	100		82	108	
10	116		85	100	
12	98		87	116	
13	108		90	109	
15	102		93	92	
17	105		94	98	
18	231	Outlier	95	107	
22	98		97	105	
24	93		100	116	
25	115		101	102	
26	93		103	101	
27	109		104	122	
29	157		106	119	
30	110	Outlier	113	127	
32	110		115	101	
37	105		116	113	
40	230	Outlier			
43	93				
45	117				
46	82				
48	96				
49	111				
50	102				
51	97				
52	102				
53	85				
54	112				
56	113				
60	100				
61	94				
62	99				
63	107				
64	93				
66	111				
69	92				
70	103				
71	104				
72	99				
73	99				
74	105				
75	102				

Consensus statistics

Consensus median, pg/g	102
Median all values pg/g	103
Consensus mean, pg/g	103
Standard deviation, pg/g	9,4
Relative standard deviation, %	9
No. of values reported	65
No. of values removed	3
No. of reported non-detects	0



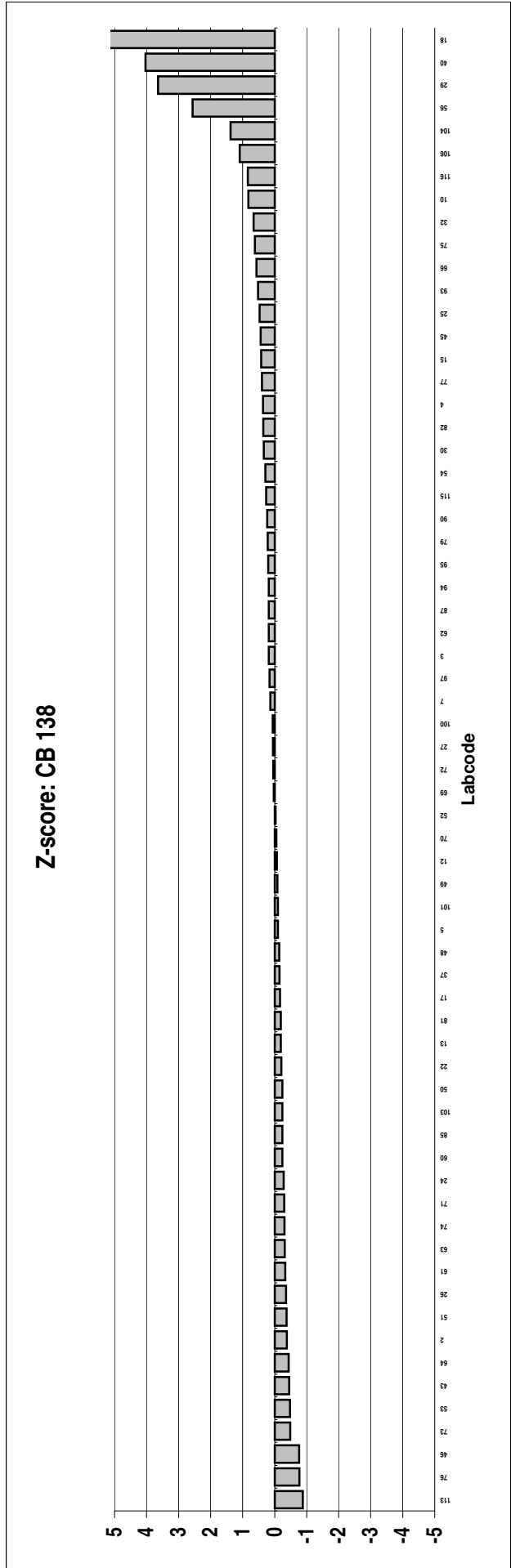
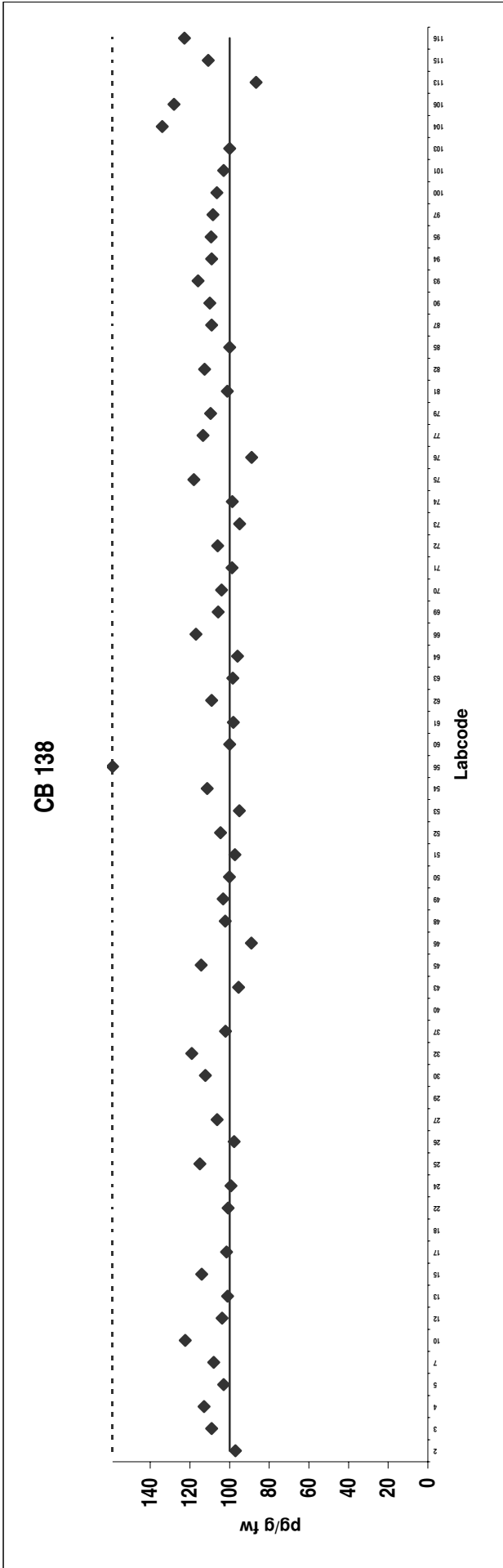
Analyte solution

Congener: CB 138

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	97		76	89	
3	109		77	113	
4	113		79	110	
5	103		81	101	
7	108		82	113	
10	122		85	100	
12	104		87	109	
13	101		90	110	
15	114		93	116	
17	102		94	109	
18	256	Outlier	95	109	
22	101		97	108	
24	99		100	106	
25	115		101	103	
26	98		103	100	
27	106		104	134	
29	182	Outlier	106	128	
30	112		113	87	
32	119		115	111	
37	102		116	123	
40	190	Outlier			
43	96				
45	114				
46	89				
48	102				
49	103				
50	100				
51	97				
52	105				
53	95				
54	111				
56	159				
60	100				
61	98				
62	109				
63	98				
64	96				
66	117				
69	106				
70	104				
71	99				
72	106				
73	95				
74	99				
75	118				

Consensus statistics

Consensus median, pg/g	105
Median all values pg/g	106
Consensus mean, pg/g	107
Standard deviation, pg/g	11
Relative standard deviation, %	11
No. of values reported	65
No. of values removed	3
No. of reported non-detects	0



Analyte solution

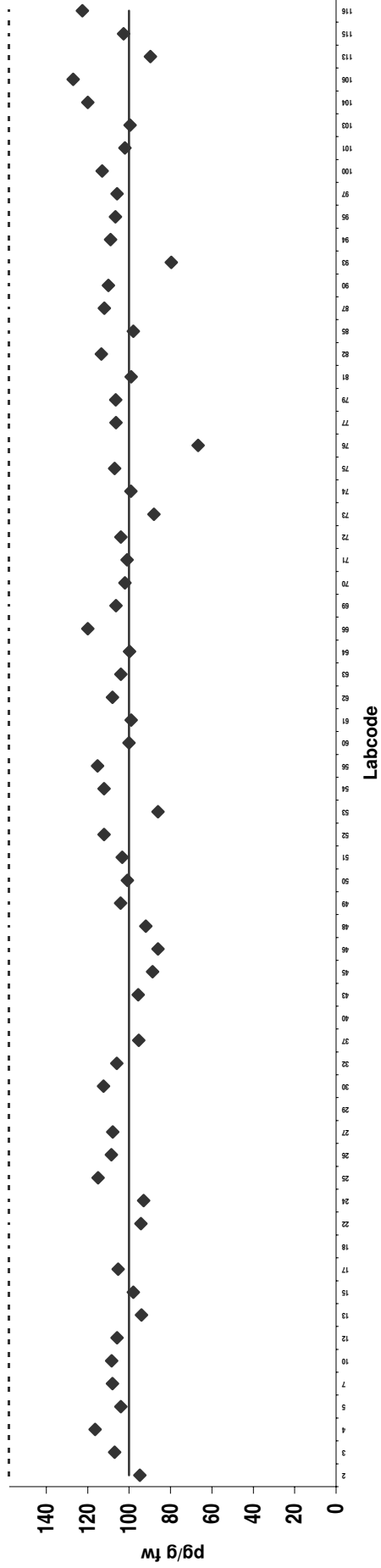
Congener: CB 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	95		76	67	
3	107		77	106	
4	116		79	106	
5	104		81	99	
7	108		82	113	
10	108		85	98	
12	106		87	112	
13	94		90	110	
15	98		93	80	
17	105		94	109	
18	166		95	107	
22	94		97	106	
24	93		100	113	
25	115		101	102	
26	109		103	100	
27	108		104	120	
29	197		106	127	
30	112		113	90	
32	106		115	103	
37	95		116	123	
40	250	Outlier			
43	96				
45	89				
46	86				
48	92				
49	104				
50	101				
51	103				
52	112				
53	86				
54	112				
56	115				
60	100				
61	99				
62	108				
63	104				
64	100				
66	120				
69	106				
70	102				
71	101				
72	104				
73	88				
74	99				
75	107				

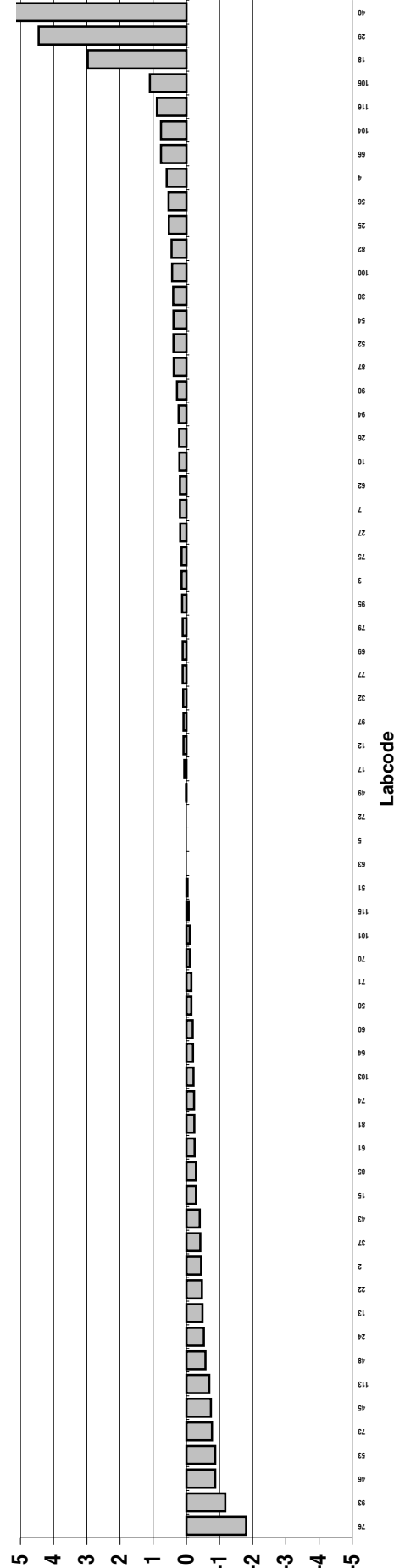
Consensus statistics

Consensus median, pg/g	104
Median all values pg/g	105
Consensus mean, pg/g	103
Standard deviation, pg/g	10
Relative standard deviation, %	10
No. of values reported	65
No. of values removed	3
No. of reported non-detects	0

CB 153



Z-score: CB 153



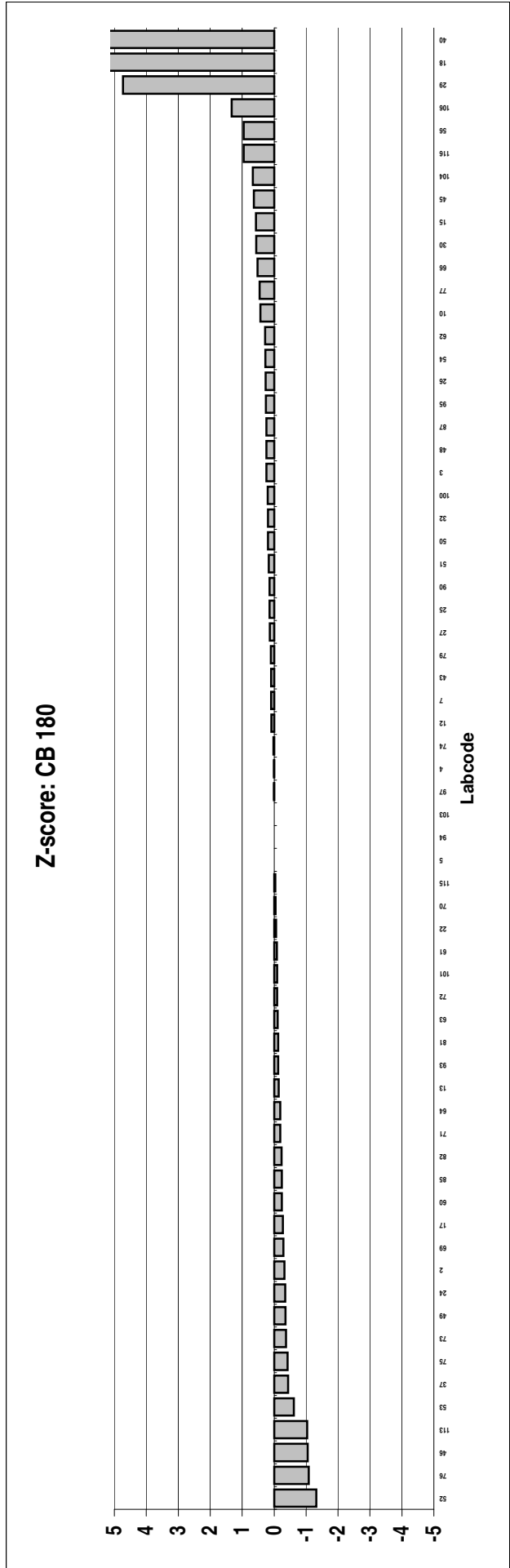
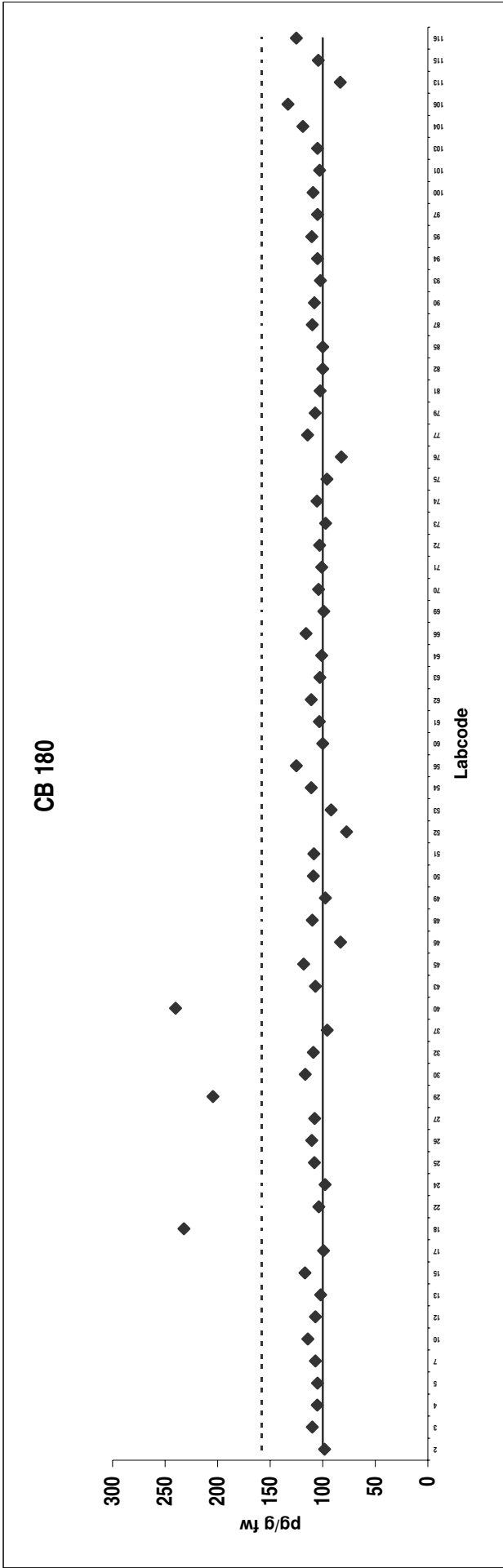
Analyte solution

Congener: CB 180

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	98		76	82	
3	110		77	115	
4	105		79	107	
5	105		81	102	
7	107		82	100	
10	114		85	100	
12	107		87	110	
13	102		90	108	
15	117		93	102	
17	99		94	105	
18	232	Outlier	95	110	
22	104		97	105	
24	98		100	109	
25	108		101	103	
26	111		103	105	
27	108		104	119	
29	204	Outlier	106	133	
30	117		113	83	
32	109		115	104	
37	96		116	125	
40	240	Outlier			
43	107				
45	118				
46	83				
48	110				
49	98				
50	109				
51	109				
52	77				
53	92				
54	111				
56	125				
60	100				
61	103				
62	111				
63	103				
64	101				
66	116				
69	99				
70	104				
71	101				
72	103				
73	97				
74	105				
75	96				

Consensus statistics

Consensus median, pg/g	105
Median all values pg/g	105
Consensus mean, pg/g	105
Standard deviation, pg/g	9,8
Relative standard deviation, %	9,3
No. of values reported	65
No. of values removed	3
No. of reported non-detects	0



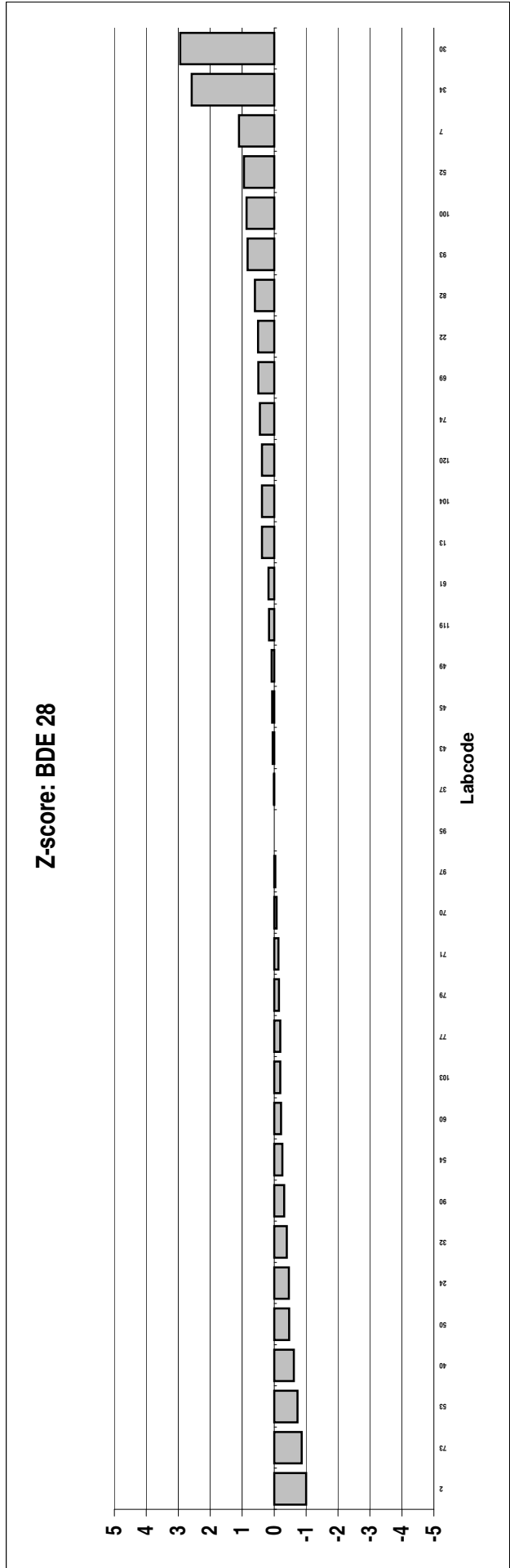
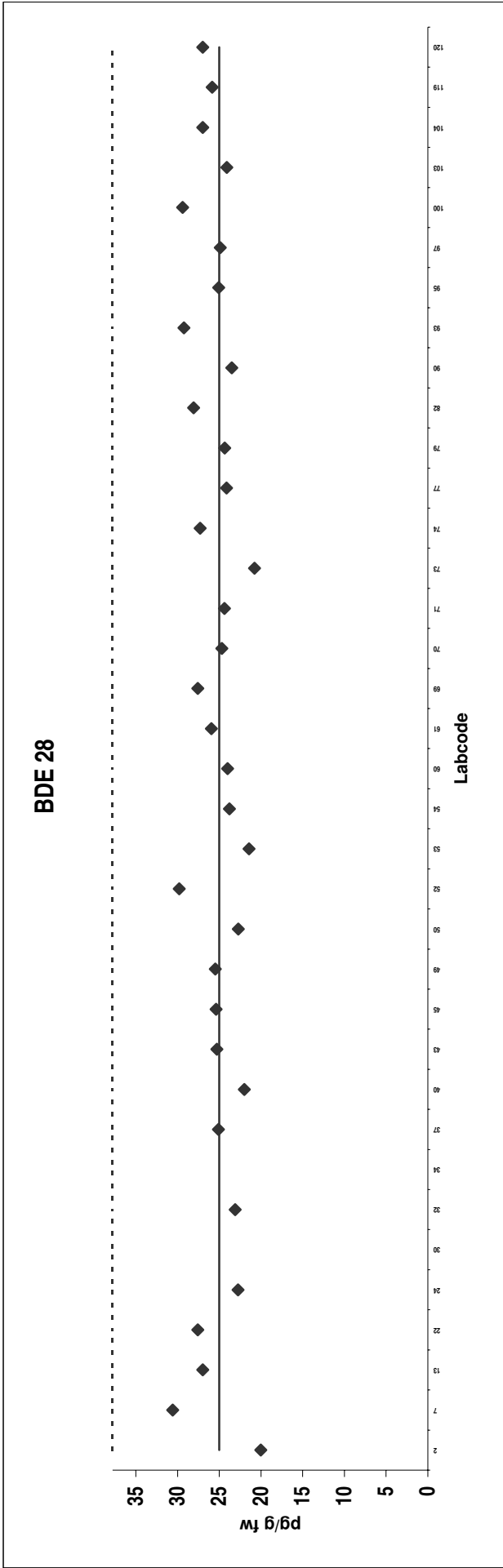
Analyte solution

Congener: BDE 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	20				
7	31				
13	27				
22	28				
24	23				
30	40	Outlier			
32	23				
34	38				
37	25	Outlier			
40	22				
43	25				
45	25				
49	25				
50	23				
52	30				
53	21				
54	24				
60	24				
61	26				
69	28				
70	25				
71	24				
73	21				
74	27				
77	24				
79	24				
82	28				
90	24				
93	29				
95	25				
97	25				
100	29				
103	24				
104	27				
119	26				
120	27				

Consensus statistics

Consensus median, pg/g	25
Median all values pg/g	25
Consensus mean, pg/g	25
Standard deviation, pg/g	2,6
Relative standard deviation, %	10
No. of values reported	36
No. of values removed	2
No. of reported non-detects	0



Analyte solution

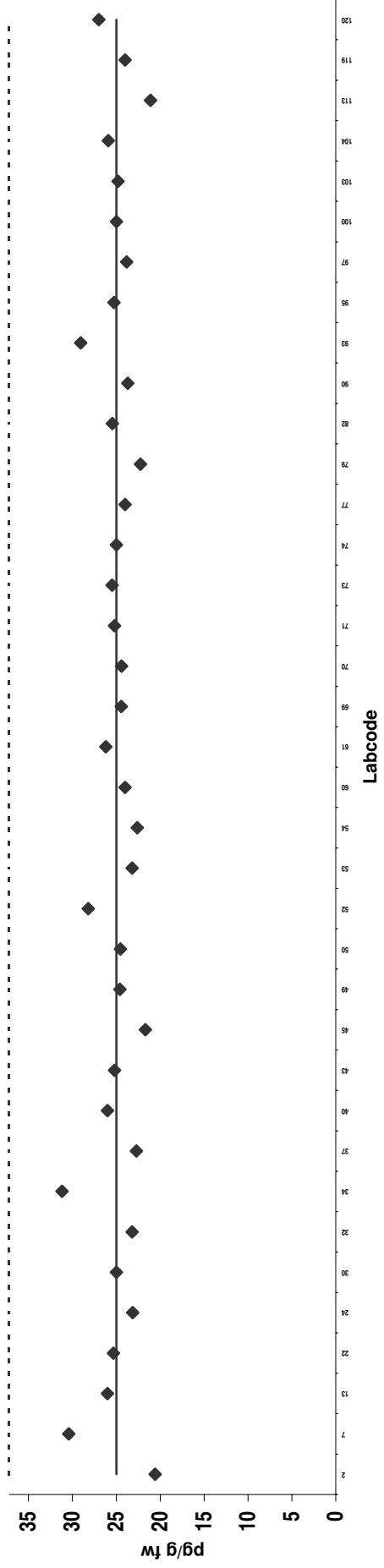
Congener: BDE 47

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	21				
7	30				
13	26				
22	25				
24	23				
30	25				
32	23				
34	31				
37	23				
40	26				
43	25				
45	22				
49	25				
50	25				
52	28				
53	23				
54	23				
60	24				
61	26				
69	24				
70	24				
71	25				
73	25				
74	25				
77	24				
79	22				
82	25				
90	24				
93	29				
95	25				
97	24				
100	25				
103	25				
104	26				
113	21				
119	24				
120	27				

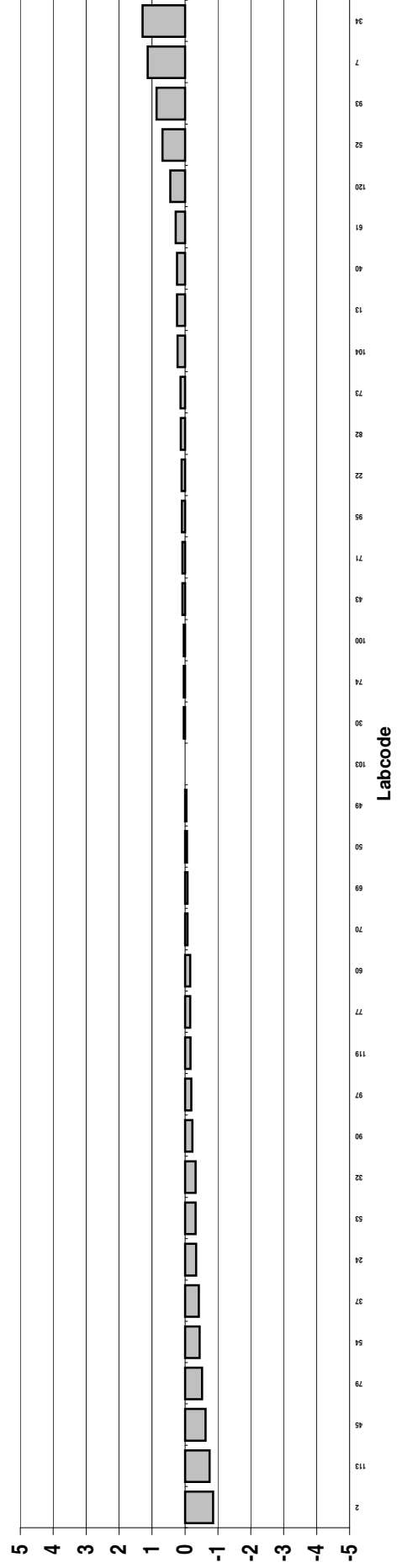
Consensus statistics

Consensus median, pg/g	25
Median all values pg/g	25
Consensus mean, pg/g	25
Standard deviation, pg/g	2,3
Relative standard deviation, %	9,1
No. of values reported	37
No. of values removed	0
No. of reported non-detects	0

BDE 47



Z-score: BDE 47



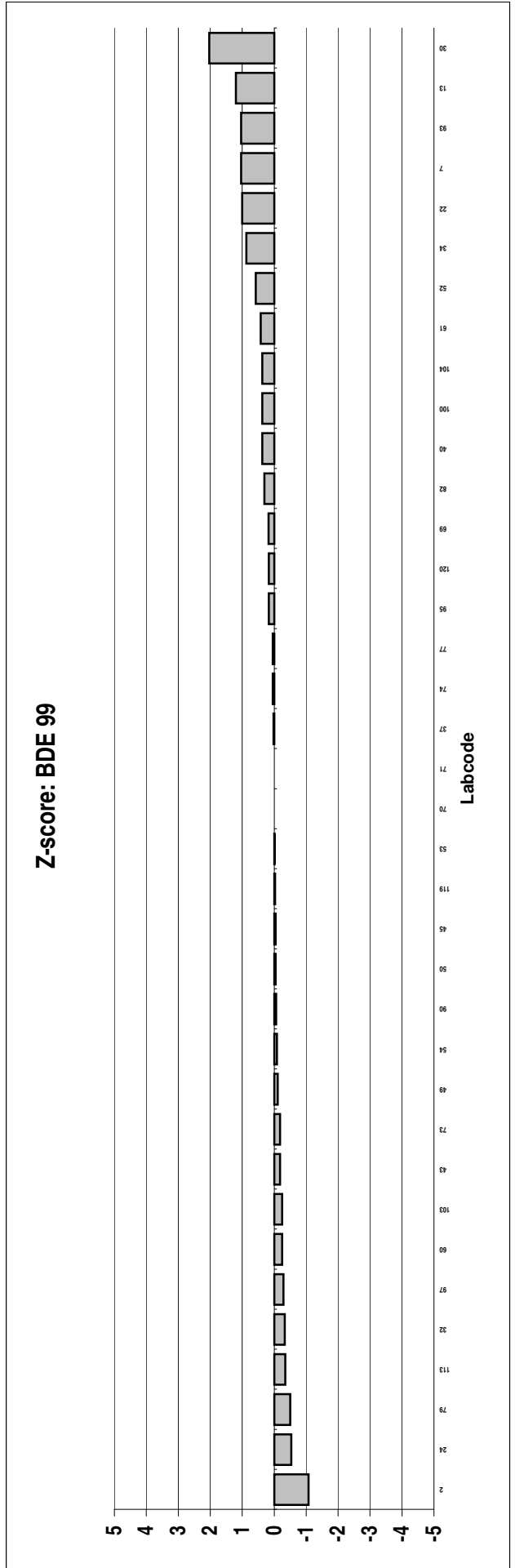
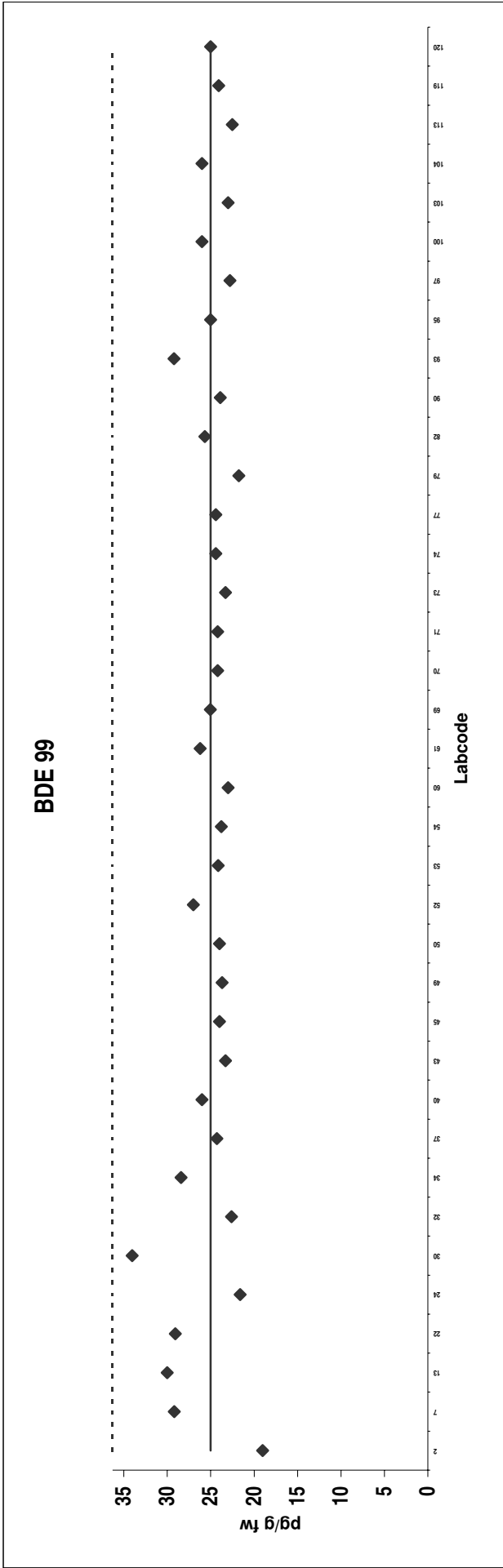
Analyte solution

Congener: BDE 99

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	19				
7	29				
13	30				
22	29				
24	22				
30	34				
32	23				
34	28				
37	24				
40	26				
43	23				
45	24				
49	24				
50	24				
52	27				
53	24				
54	24				
60	23				
61	26				
69	25				
70	24				
71	24				
73	23				
74	24				
77	24				
79	22				
82	26				
90	24				
93	29				
95	25				
97	23				
100	26				
103	23				
104	26				
113	23				
119	24				
120	25				

Consensus statistics

Consensus median, pg/g	24
Median all values pg/g	24
Consensus mean, pg/g	25
Standard deviation, pg/g	2,8
Relative standard deviation, %	11
No. of values reported	37
No. of values removed	0
No. of reported non-detects	0



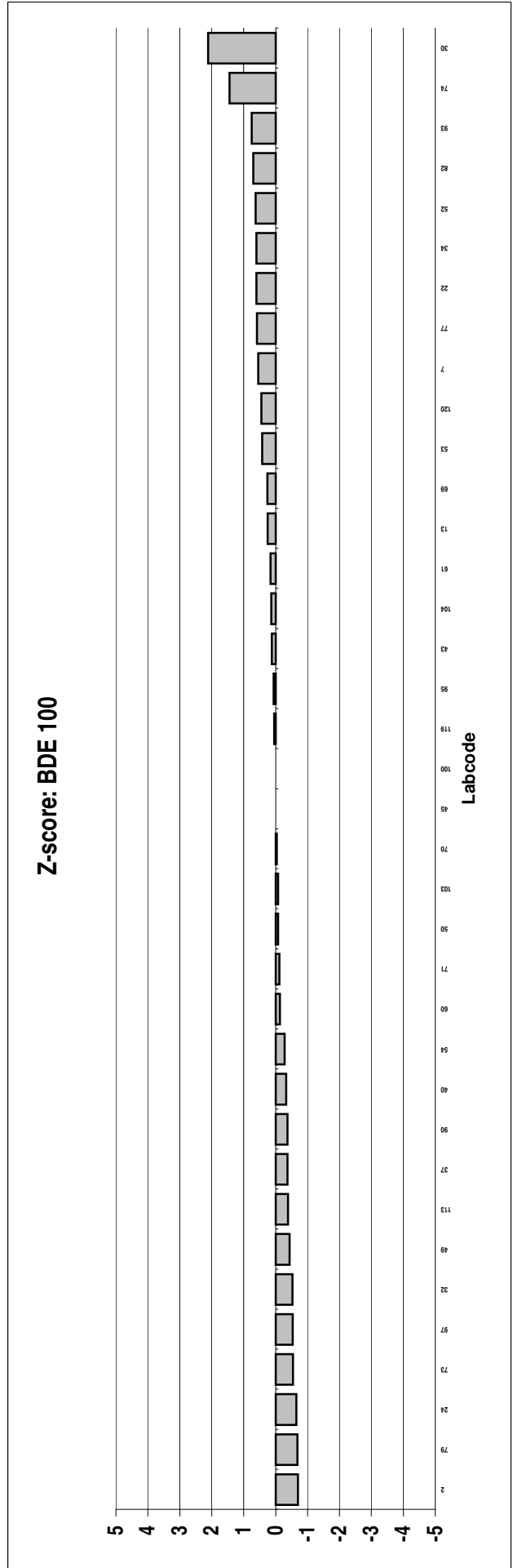
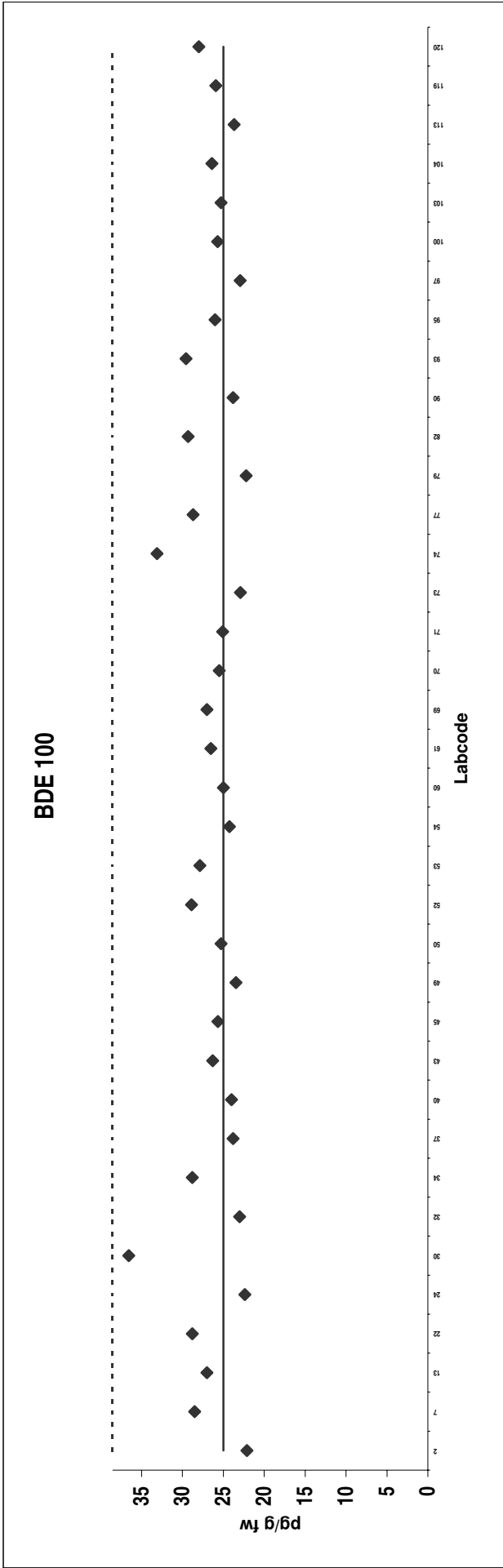
Analyte solution

Congener: BDE 100

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	22				
7	29				
13	27				
22	29				
24	22				
30	37				
32	23				
34	29				
37	24				
40	24				
43	26				
45	26				
49	23				
50	25				
52	29				
53	28				
54	24				
60	25				
61	27				
69	27				
70	26				
71	25				
73	23				
74	33				
77	29				
79	22				
82	29				
90	24				
93	30				
95	26				
97	23				
100	26				
103	25				
104	26				
113	24				
119	26				
120	28				

Consensus statistics

Consensus median, pg/g	26
Median all values pg/g	26
Consensus mean, pg/g	26
Standard deviation, pg/g	3,0
Relative standard deviation, %	12
No. of values reported	37
No. of values removed	0
No. of reported non-detects	0



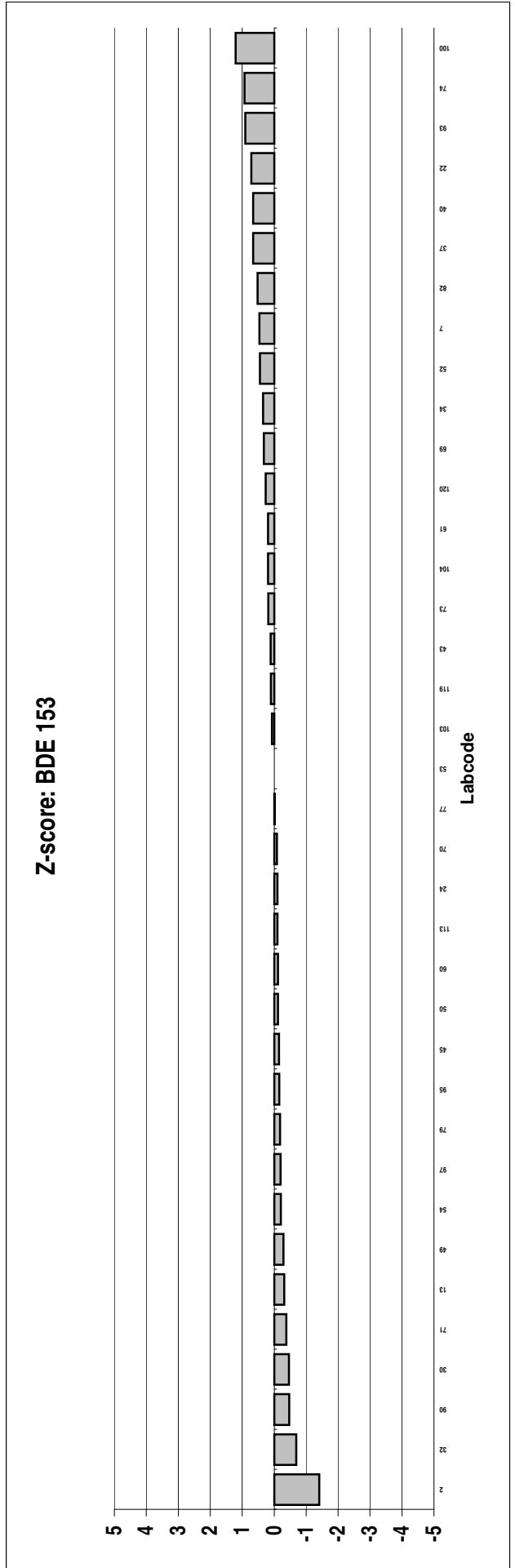
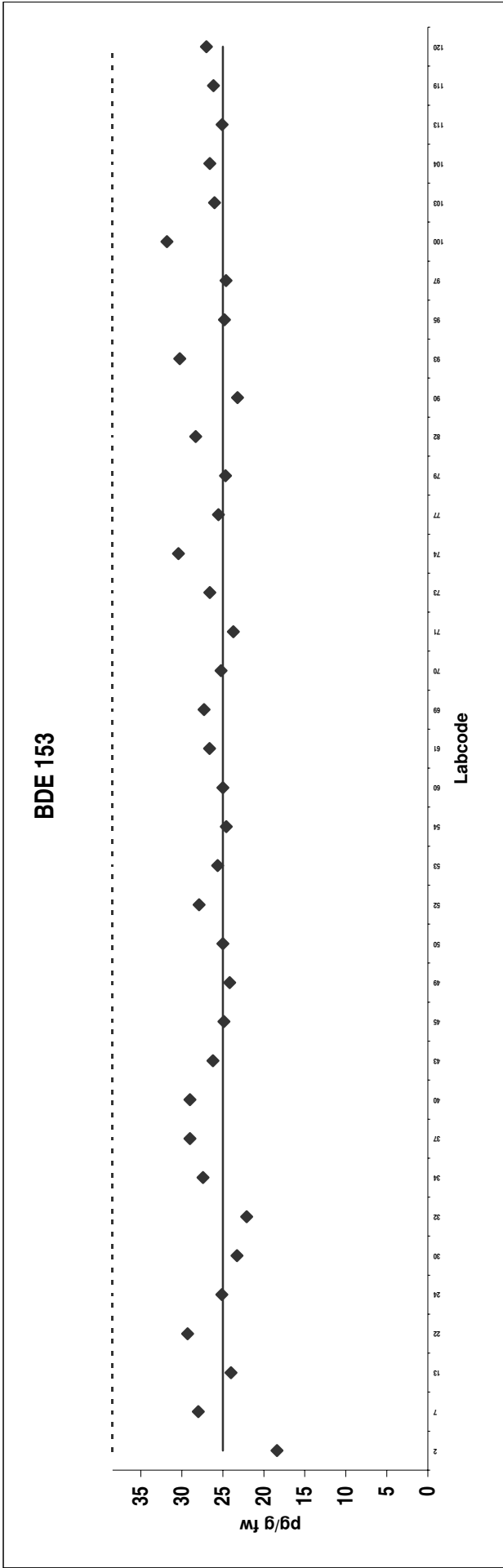
Analyte solution

Congener: BDE 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	18				
7	28				
13	24				
22	29				
24	25				
30	23				
32	22				
34	27				
37	29				
40	29				
43	26				
45	25				
49	24				
50	25				
52	28				
53	26				
54	25				
60	25				
61	27				
69	27				
70	25				
71	24				
73	27				
74	30				
77	26				
79	25				
82	28				
90	23				
93	30				
95	25				
97	25				
100	32				
103	26				
104	27				
113	25				
119	26				
120	27				

Consensus statistics

Consensus median, pg/g	26
Median all values pg/g	26
Consensus mean, pg/g	26
Standard deviation, pg/g	2,5
Relative standard deviation, %	10
No. of values reported	37
No. of values removed	0
No. of reported non-detects	0



Analyte solution

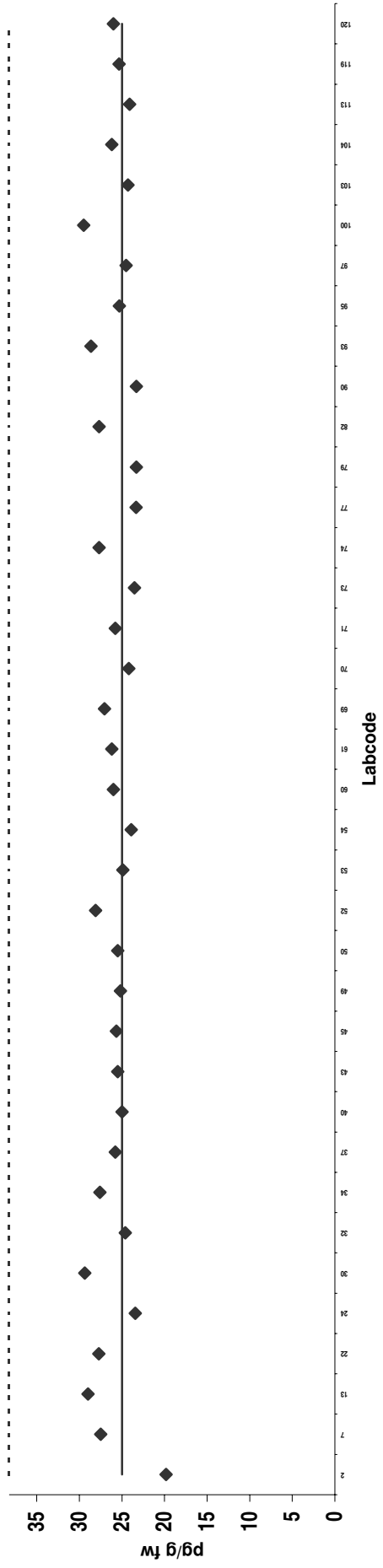
Congener: BDE 154

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	20				
7	28				
13	29				
22	28				
24	23				
30	29				
32	25				
34	28				
37	26				
40	25				
43	26				
45	26				
49	25				
50	25				
52	28				
53	25				
54	24				
60	26				
61	26				
69	27				
70	24				
71	26				
73	24				
74	28				
77	23				
79	23				
82	28				
90	23				
93	29				
95	25				
97	25				
100	30				
103	24				
104	26				
113	24				
119	25				
120	26				

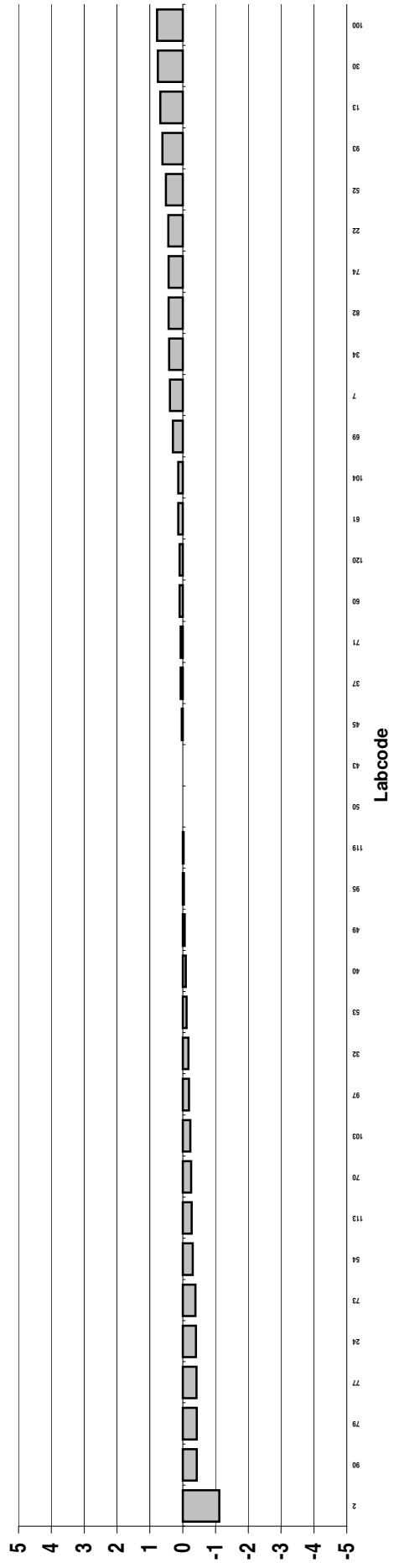
Consensus statistics

Consensus median, pg/g	26
Median all values pg/g	26
Consensus mean, pg/g	26
Standard deviation, pg/g	2.0
Relative standard deviation, %	8.0
No. of values reported	37
No. of values removed	0
No. of reported non-detects	0

BDE 154



Z-score: BDE 154



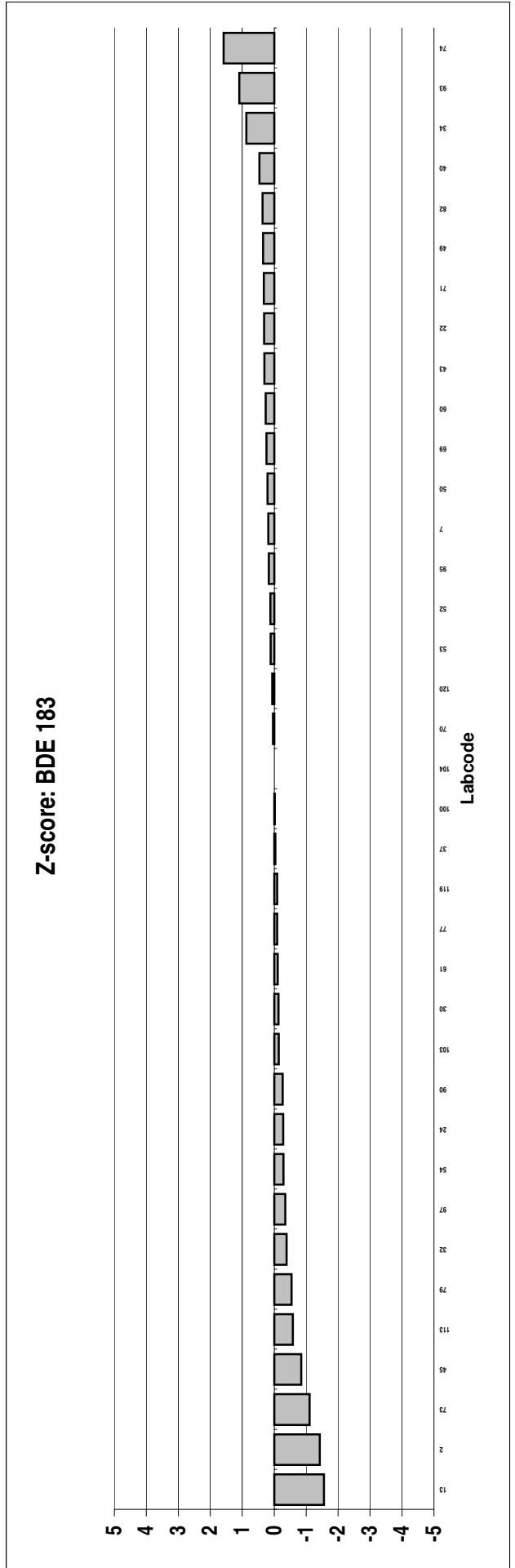
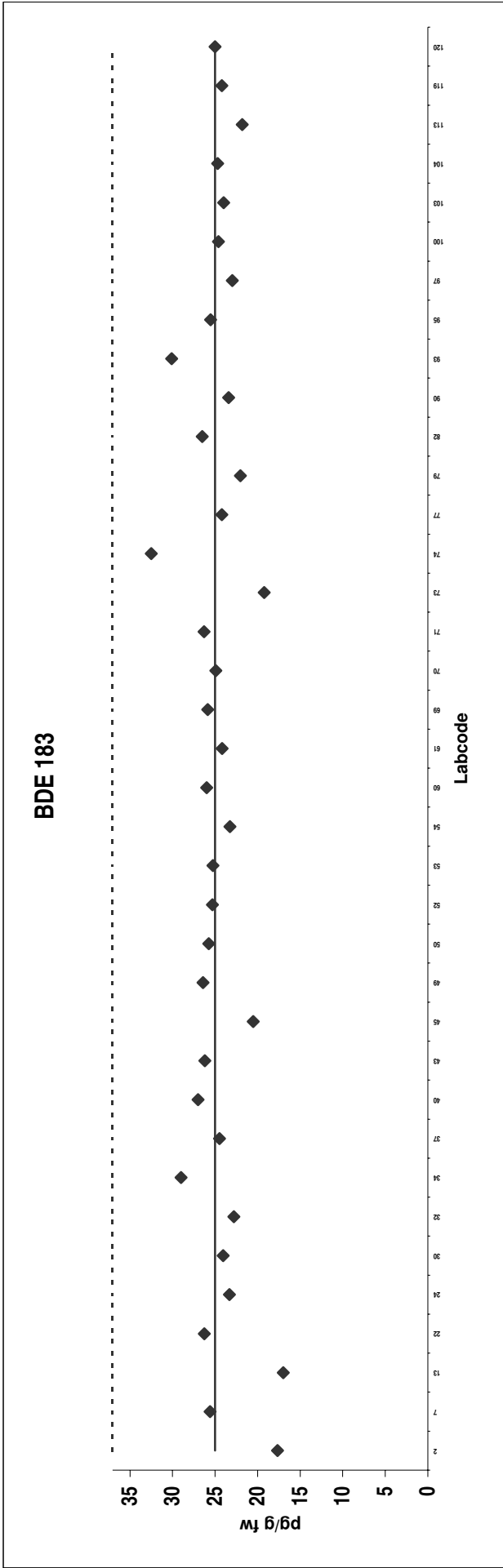
Analyte solution

Congener: BDE 183

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	18				
7	26				
13	17				
22	26				
24	23				
30	24				
32	23				
34	29				
37	25				
40	27				
43	26				
45	21				
49	26				
50	26				
52	25				
53	25				
54	23				
60	26				
61	24				
69	26				
70	25				
71	26				
73	19				
74	33				
77	24				
79	22				
82	27				
90	23				
93	30				
95	26				
97	23				
100	25				
103	24				
104	25				
113	22				
119	24				
120	25				

Consensus statistics

Consensus median, pg/g	25
Median all values pg/g	25
Consensus mean, pg/g	25
Standard deviation, pg/g	3,0
Relative standard deviation, %	12
No. of values reported	37
No. of values removed	0
No. of reported non-detects	0



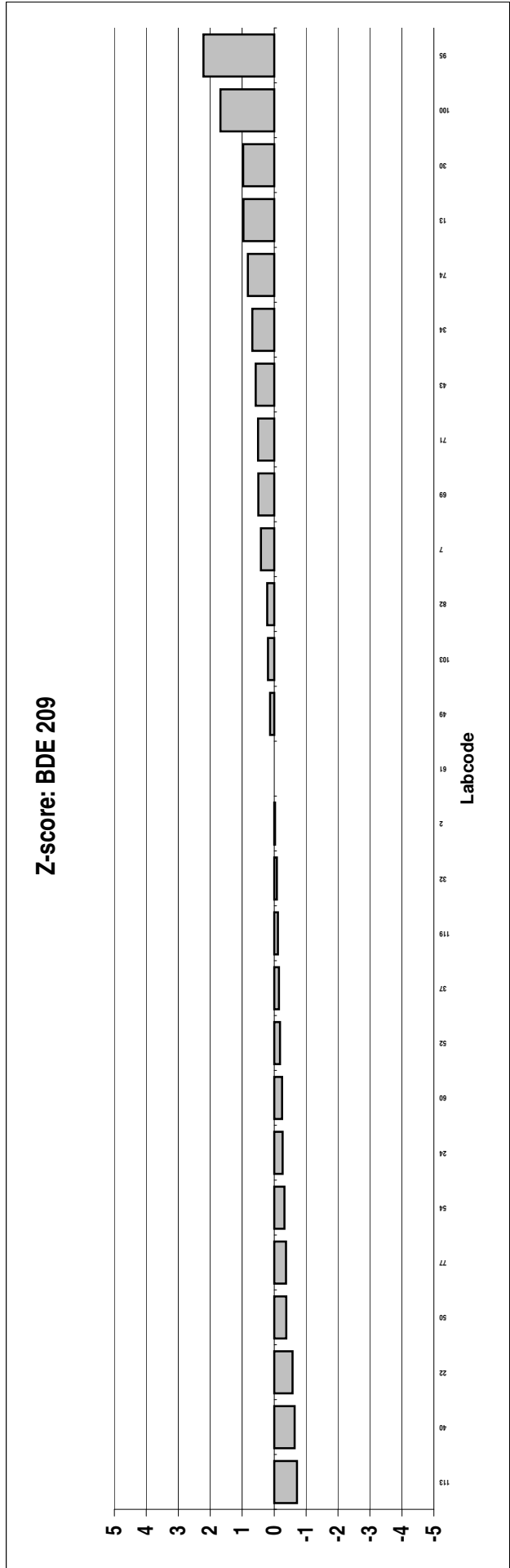
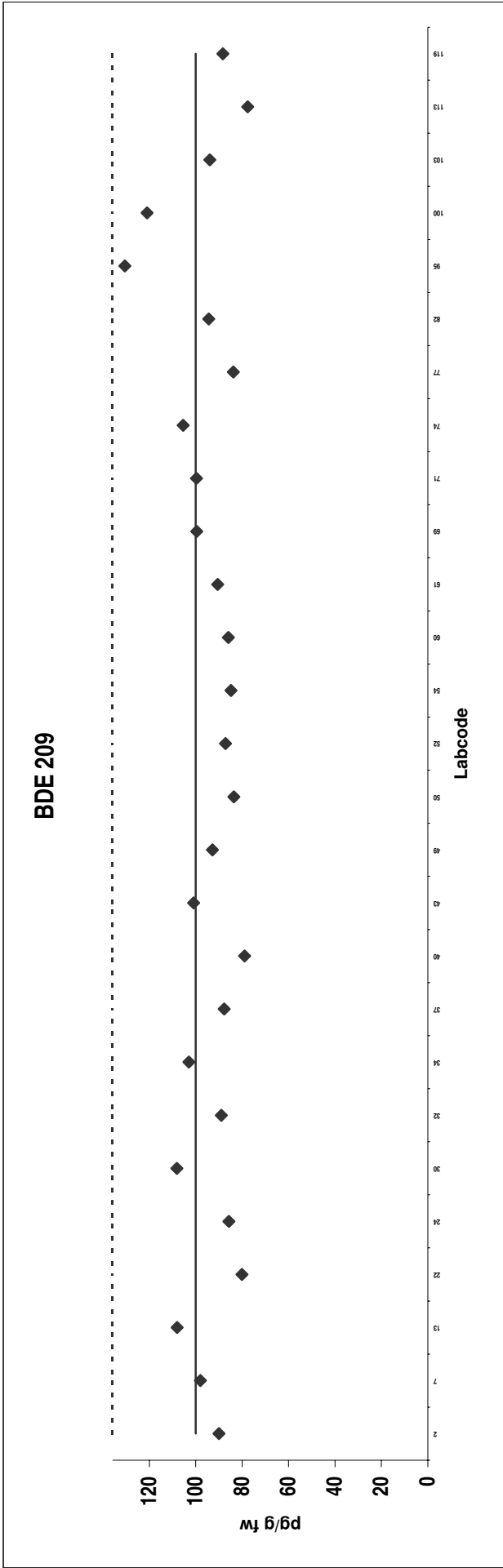
Analyte solution

Congener: BDE 209

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	90				
7	98				
13	108				
22	80				
24	86				
30	108				
32	89				
34	103				
37	88				
40	79				
43	101				
49	93				
50	84				
52	87				
54	85				
60	86				
61	91				
69	100				
71	100				
74	106				
77	84				
82	94				
95	131				
100	121				
103	94				
113	78				
119	88				

Consensus statistics

Consensus median, pg/g	91
Median all values pg/g	91
Consensus mean, pg/g	94
Standard deviation, pg/g	13
Relative standard deviation, %	13
No. of values reported	27
No. of values removed	0
No. of reported non-detects	0



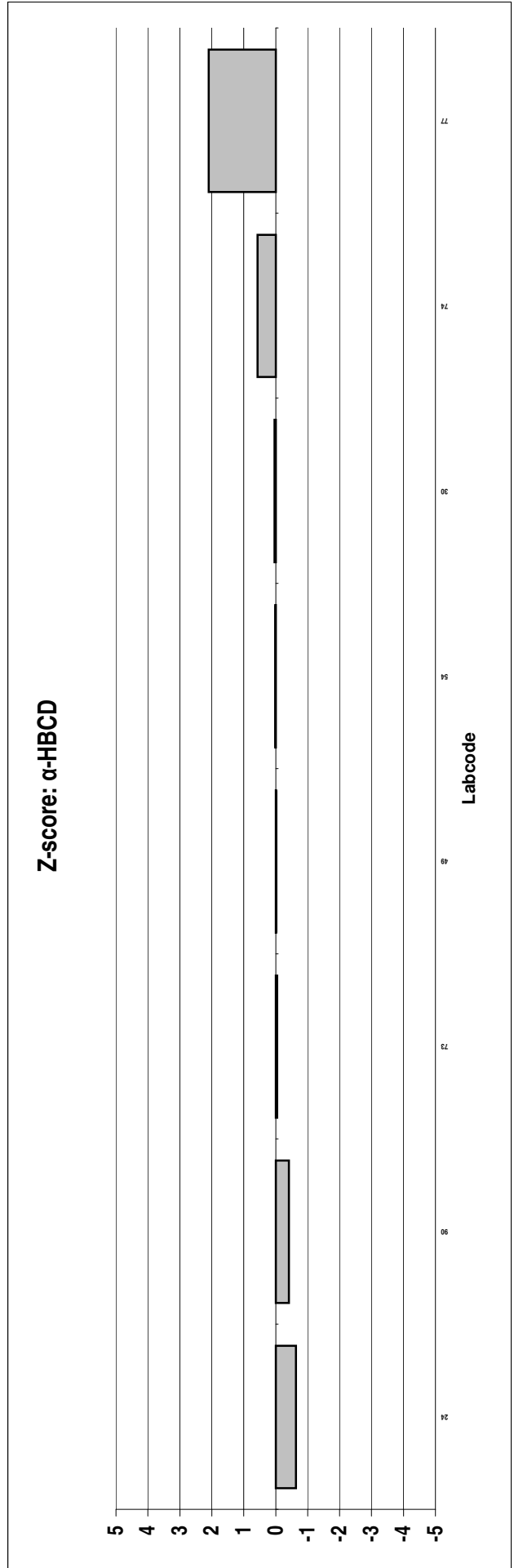
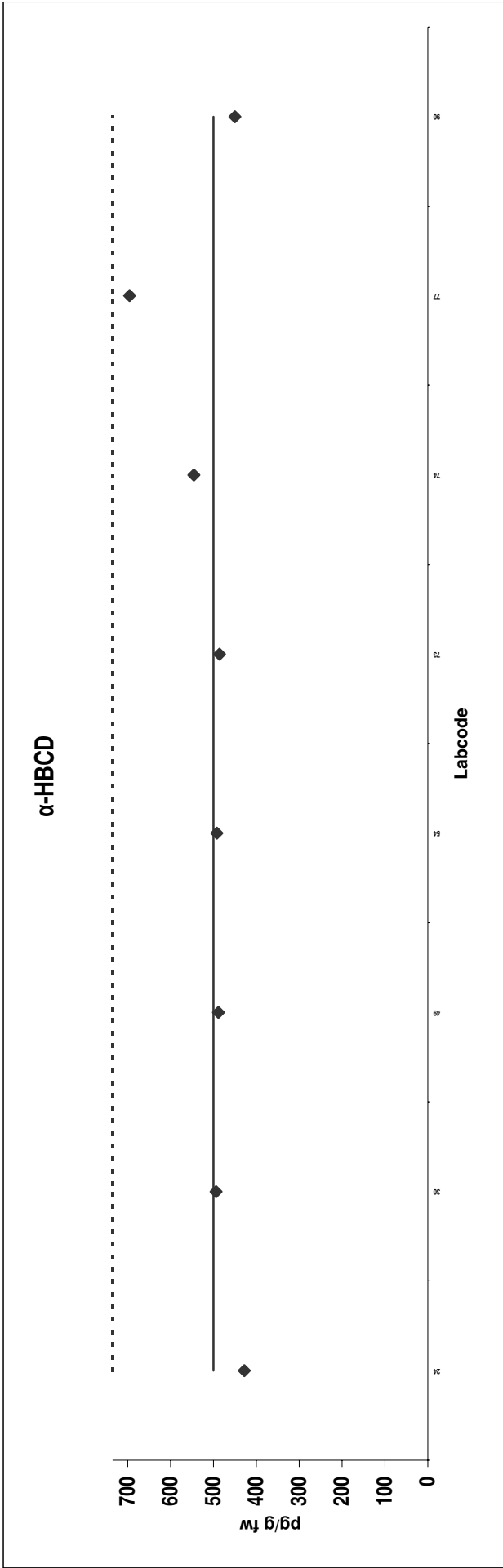
Analyte solution

Congener: α -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
24	428				
30	494				
49	489				
54	492				
73	486				
74	546				
77	696				
90	450				

Consensus statistics

Consensus median, pg/g	490
Median all values pg/g	490
Consensus mean, pg/g	510
Standard deviation, pg/g	83
Relative standard deviation, %	16
No. of values reported	8
No. of values removed	0
No. of reported non-detects	0



Appendix 2:

Presentation of results
for cream

Appendix 2: Presentation of results: Cream

Statistic calculations for PCDDs, PCDFs and dioxin-like PCBs

For each congener, the outliers were removed and the consensus calculated according to the following procedure:

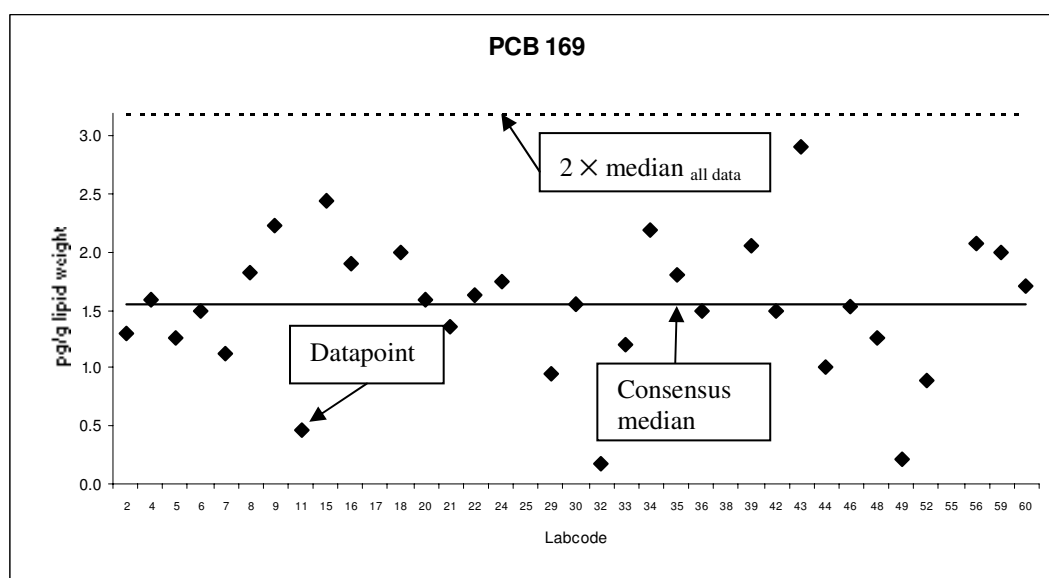
1. The median was calculated from all the reported data, using the detection limit as concentration for non-detected congeners.
2. Values exceeding $2 \times$ this median, were defined as outliers and removed from the data set.
3. Median, mean and standard deviation were re-calculated from the remaining data. This second median was called consensus.

Statistic calculations for indicator PCBs, PBDEs and HBCD

For each congener, the outliers were removed and the consensus calculated according to the following procedure:

1. The median was calculated from all the reported data, using the detection limit as concentration for non-detected congeners (NDs).
2. Values exceeding $2 \times$ this median, were defined as outliers and removed from the data set. The NDs were also removed.
3. Median, mean and standard deviation were re-calculated from the remaining data. This second median was called consensus.
4. For comparison, median, mean and standard deviation were also calculated without removing NDs.

The diagram shows the reported data up to approximately the limit for outliers ($2 \times$ the first median).



Z-Scores of individual congeners

Z-scores of each congener were calculated for each laboratory according to the following equation:

$$z = (x - X)/\sigma$$

where x = reported value; X = assigned value (consensus); σ = target value for standard deviation. A σ of 20% of the consensus was used, i.e. z-scores between +1 and -1 reflect a deviation of $\pm 20\%$ from the consensus value.

Cream

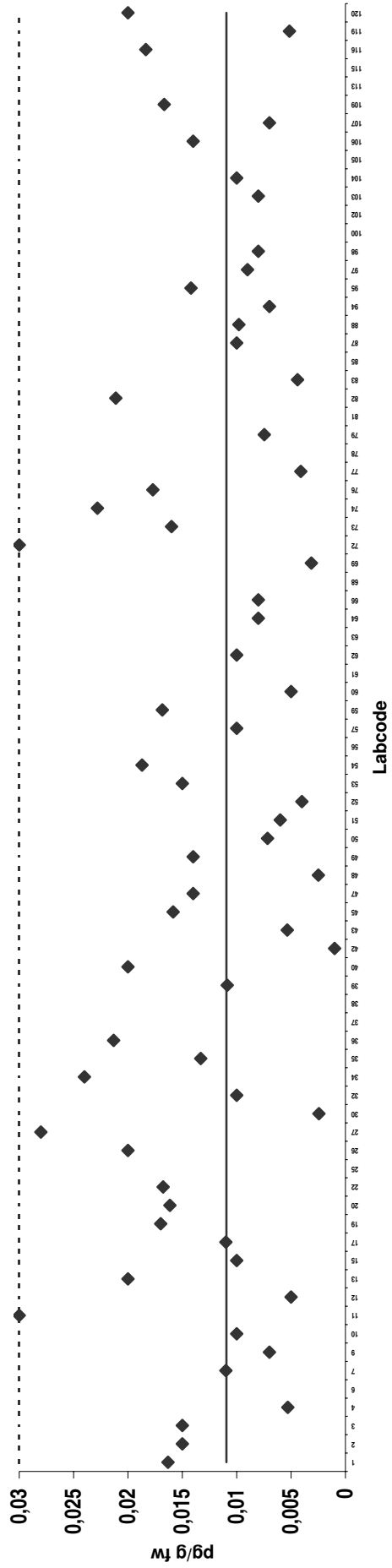
Congener: 2,3,7,8 TCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,016		63	0,045	Outlier,ND
2	0,015	ND	64	0,0080	ND
3	0,015		66	0,0080	ND
4	0,0053		68	0,077	Outlier
6	0,065	Outlier	69	0,0031	
7	0,011		72	0,030	
9	0,0070		73	0,016	
10	0,010	ND	74	0,023	ND
11	0,030	ND	76	0,018	ND
12	0,0050	ND	77	0,0041	ND
13	0,020	ND	78	0,44	Outlier,ND
15	0,010	ND	79	0,0075	
17	0,011		81	0,050	Outlier,ND
19	0,017	ND	82	0,021	ND
20	0,016	ND	83	0,0044	ND
22	0,017	ND	85	0,063	Outlier,ND
25	0,050	Outlier,ND	87	0,010	ND
26	0,020	ND	88	0,0098	
27	0,028	ND	94	0,0070	
30	0,0024		95	0,014	
32	0,010	ND	97	0,0090	ND
34	0,024	ND	98	0,0080	ND
35	0,013	ND	100	1,0	Outlier
36	0,021	ND	102	0,035	Outlier
37	0,044	Outlier	103	0,0080	ND
38	0,034	Outlier,ND	104	0,010	ND
39	0,011		105	0,066	Outlier,ND
40	0,020	ND	106	0,014	ND
42	0,0010	ND	107	0,0070	ND
43	0,0054		109	0,017	ND
45	0,016		113	0,042	Outlier,ND
47	0,014		115	0,11	Outlier,ND
48	0,0025	ND	116	0,018	
49	0,014		119	0,0052	
50	0,0072		120	0,020	ND
51	0,0060				
52	0,0040	ND			
53	0,015	ND			
54	0,019	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,017	ND			
60	0,0050	ND			
61	0,037	Outlier			
62	0,010	ND			

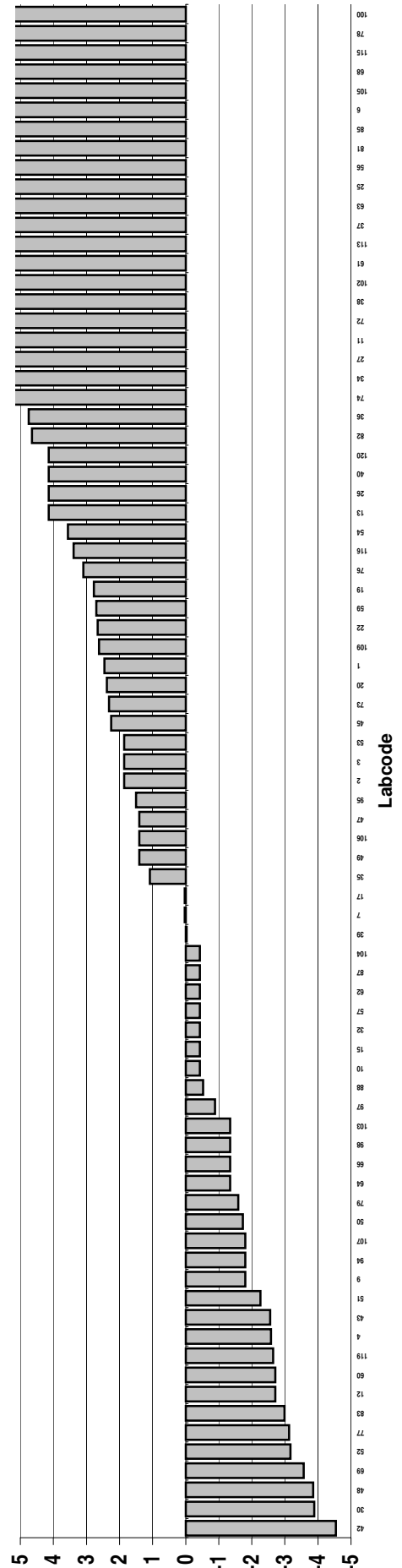
Consensus statistics

Consensus median, pg/g	0,011
Median all values pg/g	0,015
Consensus mean, pg/g	0,013
Standard deviation, pg/g	0,0069
Relative standard deviation, %	55
No. of values reported	80
No. of values removed	16
No. of reported non-detects	51

2,3,7,8 TCDD



Z-score: 2,3,7,8 TCDD



Cream

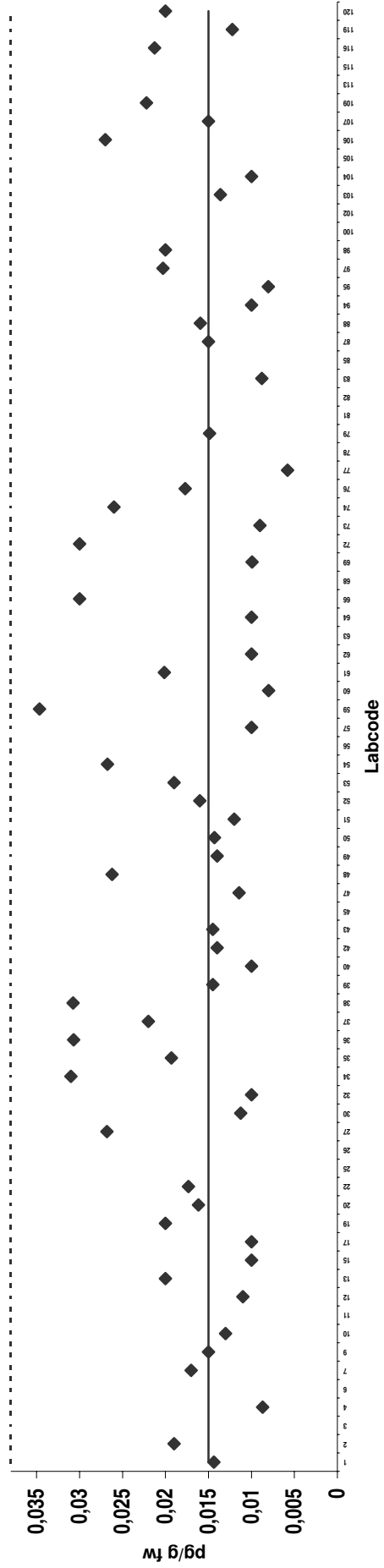
Congener: 1,2,3,7,8 PeCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,014	ND	63	0,045	Outlier,ND
2	0,019	ND	64	0,010	ND
3	0,045	Outlier	66	0,030	ND
4	0,0087		68	0,28	Outlier
6	0,59	Outlier	69	0,0099	
7	0,017		72	0,030	
9	0,015		73	0,0090	
10	0,013		74	0,026	
11	0,080	Outlier,ND	76	0,018	ND
12	0,011		77	0,0058	ND
13	0,020	ND	78	1,6	Outlier,ND
15	0,010	ND	79	0,015	
17	0,010		81	0,050	Outlier,ND
19	0,020		82	0,092	Outlier,ND
20	0,016	ND	83	0,0088	ND
22	0,017		85	0,040	Outlier,ND
25	0,050	Outlier,ND	87	0,015	ND
26	0,050	Outlier,ND	88	0,016	
27	0,027		94	0,010	
30	0,011		95	0,0080	
32	0,010	ND	97	0,020	ND
34	0,031		98	0,020	ND
35	0,019		100	1,6	Outlier
36	0,031	ND	102	0,077	Outlier
37	0,022	ND	103	0,014	
38	0,031	ND	104	0,010	
39	0,014		105	0,069	
40	0,010	ND	106	0,027	Outlier
42	0,014		107	0,015	
43	0,015		109	0,022	ND
45	0,041	Outlier	113	0,050	Outlier,ND
47	0,011		115	0,12	Outlier,ND
48	0,026		116	0,021	
49	0,014		119	0,012	
50	0,014		120	0,020	ND
51	0,012				
52	0,016				
53	0,019	ND			
54	0,027	ND			
56	0,22	Outlier			
57	0,010	ND			
59	0,035	ND			
60	0,0080				
61	0,020				
62	0,010	ND			

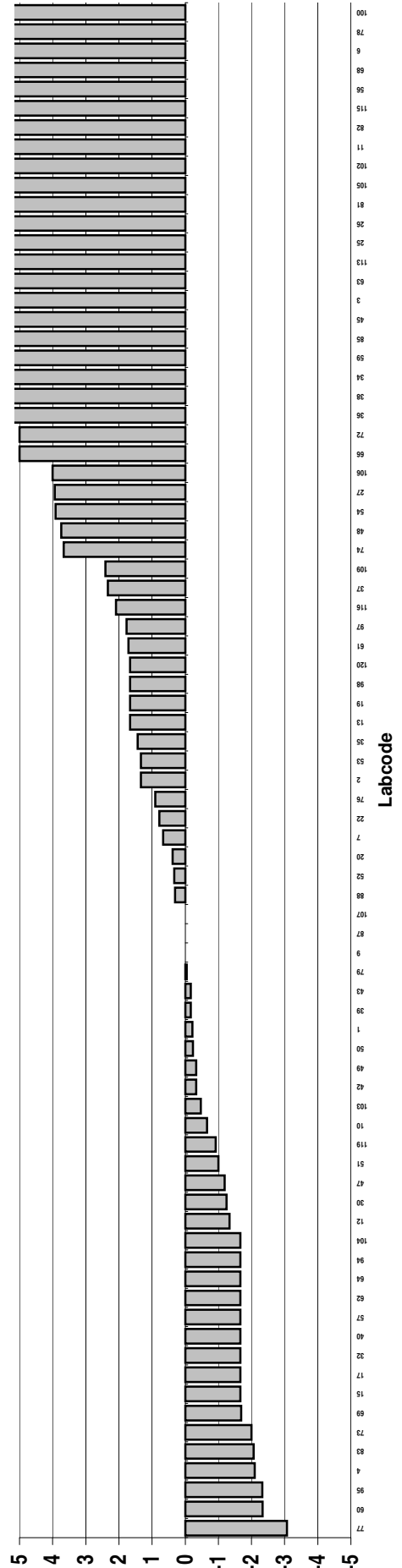
Consensus statistics

Consensus median, pg/g	0,015
Median all values pg/g	0,019
Consensus mean, pg/g	0,017
Standard deviation, pg/g	0,0071
Relative standard deviation, %	42
No. of values reported	80
No. of values removed	18
No. of reported non-detects	35

1,2,3,7,8 PeCDD



Z-score: 1,2,3,7,8 PeCDD



Cream

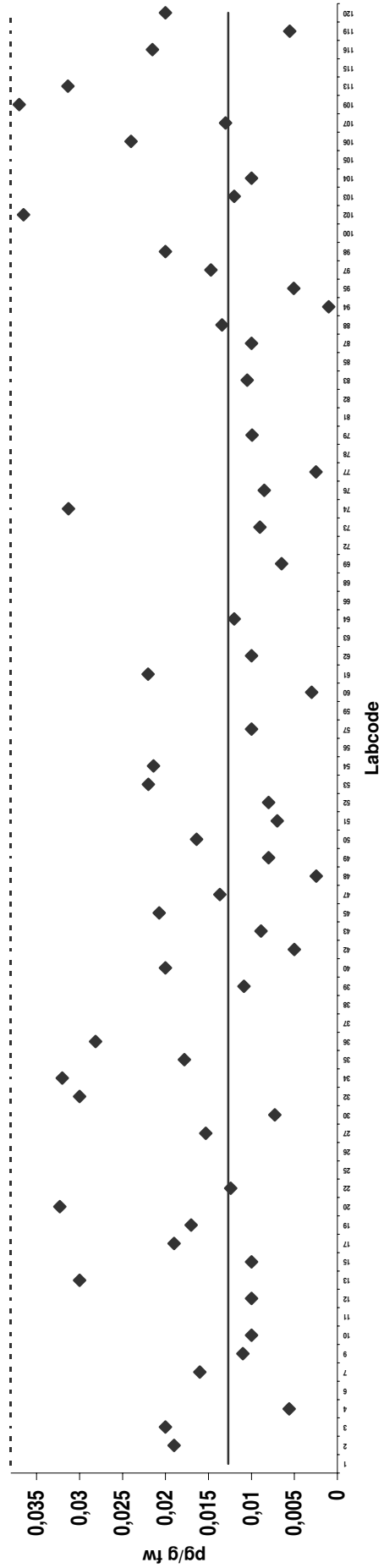
Congener: 1,2,3,4,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,079	Outlier	63	0,045	Outlier,ND
2	0,019	ND	64	0,012	ND
3	0,020		66	0,040	Outlier,ND
4	0,0056		68	0,14	Outlier
6	0,61	Outlier	69	0,0065	
7	0,016		72	0,050	Outlier
9	0,011		73	0,0090	
10	0,010	ND	74	0,031	ND
11	0,040	Outlier,ND	76	0,0085	
12	0,010	ND	77	0,0025	ND
13	0,030	ND	78	0,83	Outlier,ND
15	0,010	ND	79	0,0099	
17	0,019		81	0,050	Outlier,ND
19	0,017	ND	82	0,054	Outlier,ND
20	0,032	ND	83	0,011	ND
22	0,012		85	0,089	Outlier,ND
25	0,050	Outlier,ND	87	0,010	ND
26	0,050	Outlier,ND	88	0,013	
27	0,015		94	0,0010	ND
30	0,0073		95	0,0051	
32	0,030	ND	97	0,015	ND
34	0,032	ND	98	0,020	ND
35	0,018	ND	100	0,62	Outlier
36	0,028	ND	102	0,037	
37	0,039	Outlier,ND	103	0,012	ND
38	0,040	Outlier,ND	104	0,010	ND
39	0,011		105	0,065	Outlier
40	0,020	ND	106	0,024	
42	0,0050	ND	107	0,013	
43	0,0089		109	0,037	
45	0,021	ND	113	0,031	ND
47	0,014		115	0,11	Outlier,ND
48	0,0025		116	0,022	ND
49	0,0080		119	0,0055	
50	0,016	ND	120	0,020	ND
51	0,0070	ND			
52	0,0080				
53	0,022	ND			
54	0,021	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,038	Outlier			
60	0,0030	ND			
61	0,022				
62	0,010	ND			

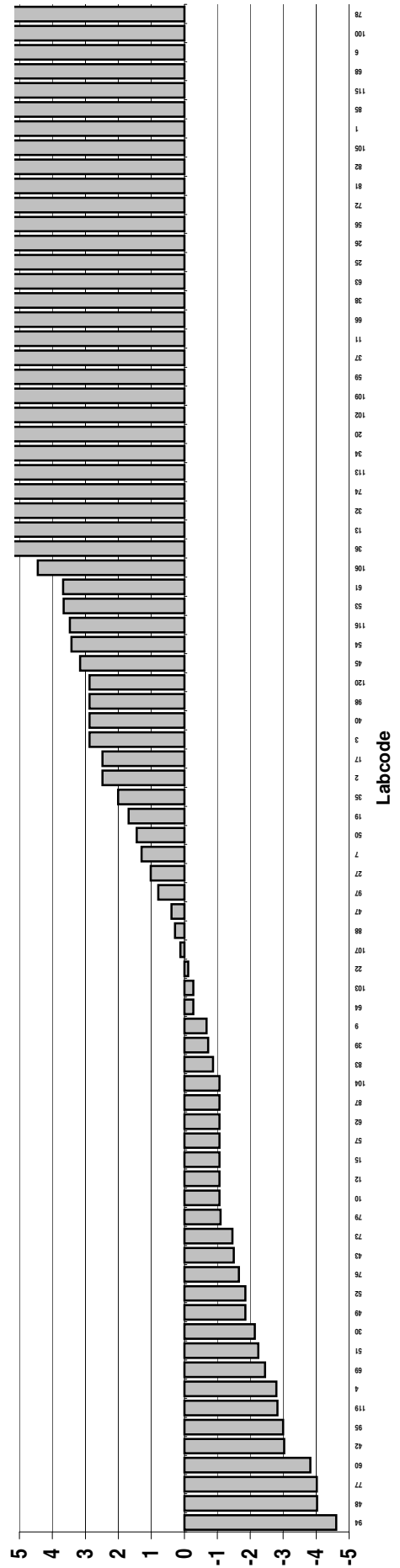
Consensus statistics

Consensus median, pg/g	0,013
Median all values pg/g	0,019
Consensus mean, pg/g	0,015
Standard deviation, pg/g	0,0091
Relative standard deviation, %	59
No. of values reported	80
No. of values removed	20
No. of reported non-detects	47

1,2,3,4,7,8 HxCDD



Z-score: 1,2,3,4,7,8 HxCDD



Cream

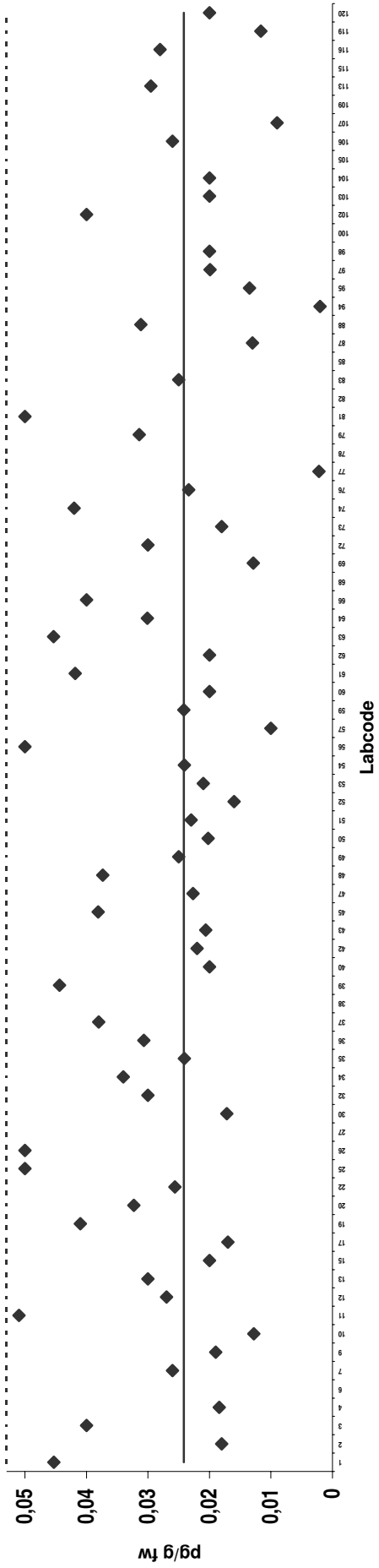
Congener: 1,2,3,6,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,045		63	0,045	ND
2	0,018	ND	64	0,030	ND
3	0,040		66	0,040	ND
4	0,018		68	0,16	Outlier
6	0,54	Outlier	69	0,013	
7	0,026		72	0,030	ND
9	0,019		73	0,018	
10	0,013		74	0,042	
11	0,051		76	0,023	
12	0,027		77	0,0022	ND
13	0,030		78	0,85	Outlier,ND
15	0,020	ND	79	0,031	
17	0,017		81	0,050	ND
19	0,041		82	0,054	Outlier,ND
20	0,032	ND	83	0,025	
22	0,026		85	0,060	Outlier,ND
25	0,050	ND	87	0,013	
26	0,050	ND	88	0,031	
27	0,17	Outlier	94	0,0020	ND
30	0,017		95	0,014	
32	0,030	ND	97	0,020	
34	0,034	ND	98	0,020	ND
35	0,024		100	1,3	Outlier
36	0,031	ND	102	0,040	
37	0,038	ND	103	0,020	
38	0,059	Outlier	104	0,020	
39	0,044		105	0,065	
40	0,020	ND	106	0,026	Outlier
42	0,022		107	0,0090	
43	0,021		109	0,074	Outlier
45	0,038		113	0,030	ND
47	0,023		115	0,12	Outlier
48	0,037		116	0,028	
49	0,025		119	0,012	
50	0,020		120	0,020	ND
51	0,023				
52	0,016				
53	0,021	ND			
54	0,024	ND			
56	0,050	ND			
57	0,010	ND			
59	0,024	ND			
60	0,020	ND			
61	0,042				
62	0,020				

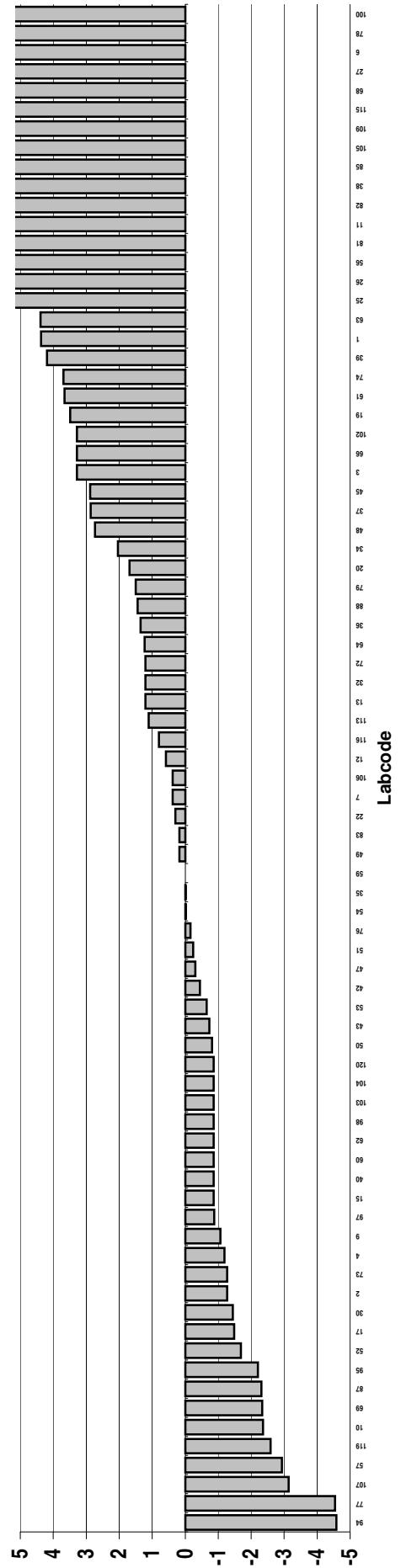
Consensus statistics

Consensus median, pg/g	0,024
Median all values pg/g	0,027
Consensus mean, pg/g	0,027
Standard deviation, pg/g	0,012
Relative standard deviation, %	44
No. of values reported	80
No. of values removed	11
No. of reported non-detects	28

1,2,3,6,7,8 HxCDD



Z-score: 1,2,3,6,7,8 HxCDD



Cream

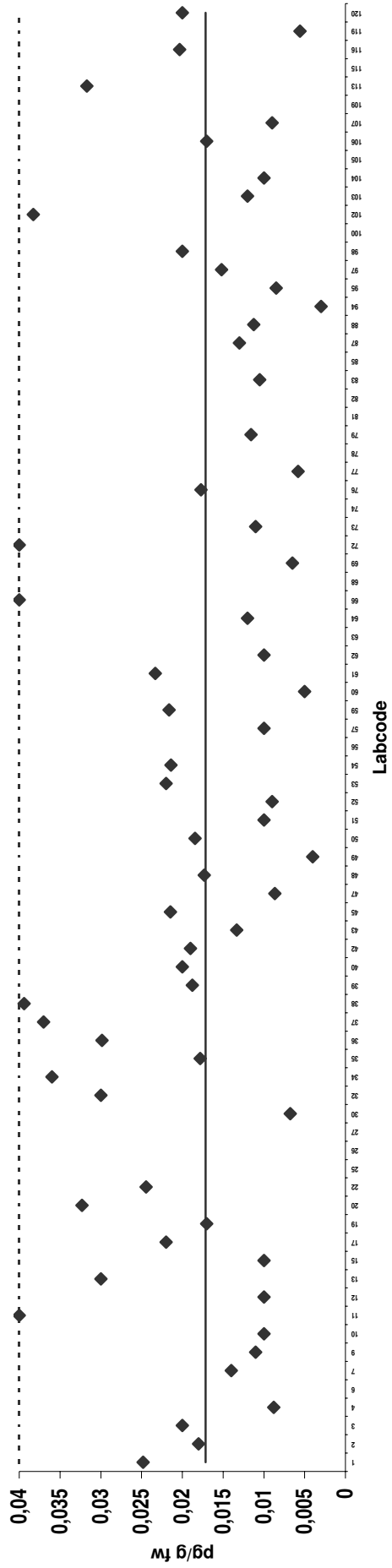
Congener: 1,2,3,7,8,9 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,025		63	0,045	Outlier,ND
2	0,018	ND	64	0,012	ND
3	0,020		66	0,040	ND
4	0,0088		68	0,10	Outlier
6	0,87	Outlier	69	0,0065	
7	0,014		72	0,040	ND
9	0,011		73	0,011	
10	0,010	ND	74	0,22	Outlier,ND
11	0,040	ND	76	0,018	ND
12	0,010	ND	77	0,0058	ND
13	0,030	ND	78	0,72	Outlier,ND
15	0,010		79	0,012	
17	0,022		81	0,050	Outlier,ND
19	0,017	ND	82	0,054	Outlier,ND
20	0,032	ND	83	0,011	ND
22	0,024		85	0,060	Outlier,ND
25	0,050	Outlier,ND	87	0,013	
26	0,050	Outlier,ND	88	0,011	
27	0,052	Outlier	94	0,0030	ND
30	0,0068		95	0,0085	
32	0,030	ND	97	0,015	ND
34	0,036	ND	98	0,020	ND
35	0,018	ND	100	0,89	Outlier
36	0,030	ND	102	0,038	
37	0,037	ND	103	0,012	ND
38	0,039		104	0,010	ND
39	0,019		105	0,12	Outlier
40	0,020	ND	106	0,017	ND
42	0,019		107	0,0090	
43	0,013		109	0,074	Outlier
45	0,021		113	0,032	ND
47	0,0086		115	0,11	Outlier,ND
48	0,017		116	0,020	ND
49	0,0040		119	0,0056	
50	0,018	ND	120	0,020	ND
51	0,010				
52	0,0090	ND			
53	0,022	ND			
54	0,021	ND			
56	0,22	Outlier			
57	0,010	ND			
59	0,022	ND			
60	0,0050	ND			
61	0,023				
62	0,010				

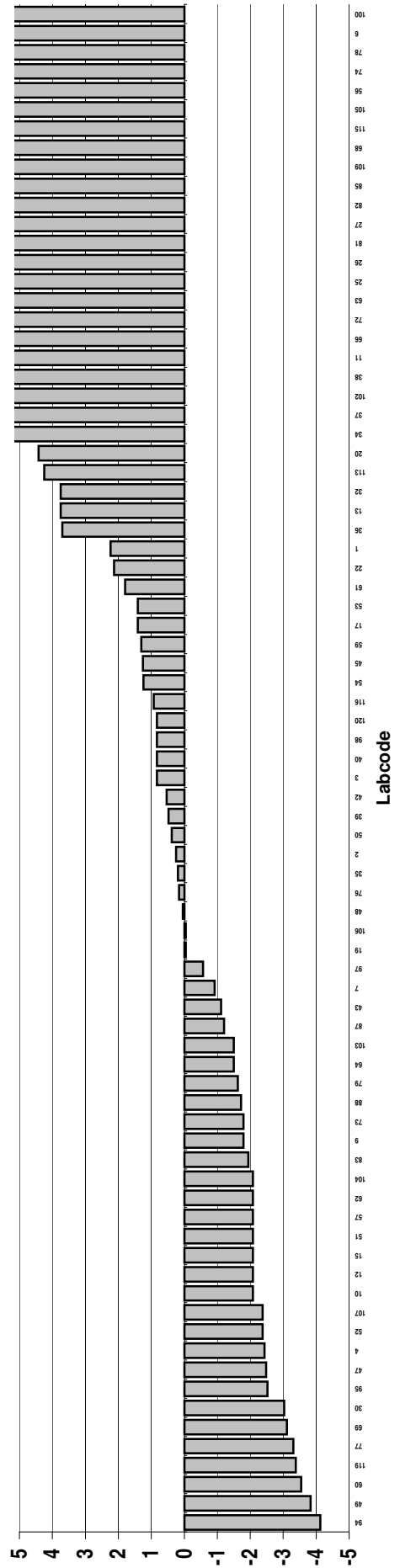
Consensus statistics

Consensus median, pg/g	0,017
Median all values pg/g	0,020
Consensus mean, pg/g	0,018
Standard deviation, pg/g	0,010
Relative standard deviation, %	56
No. of values reported	80
No. of values removed	16
No. of reported non-detects	44

1,2,3,7,8,9 HxCDD



Z-score: 1,2,3,7,8,9 HxCDD



Cream

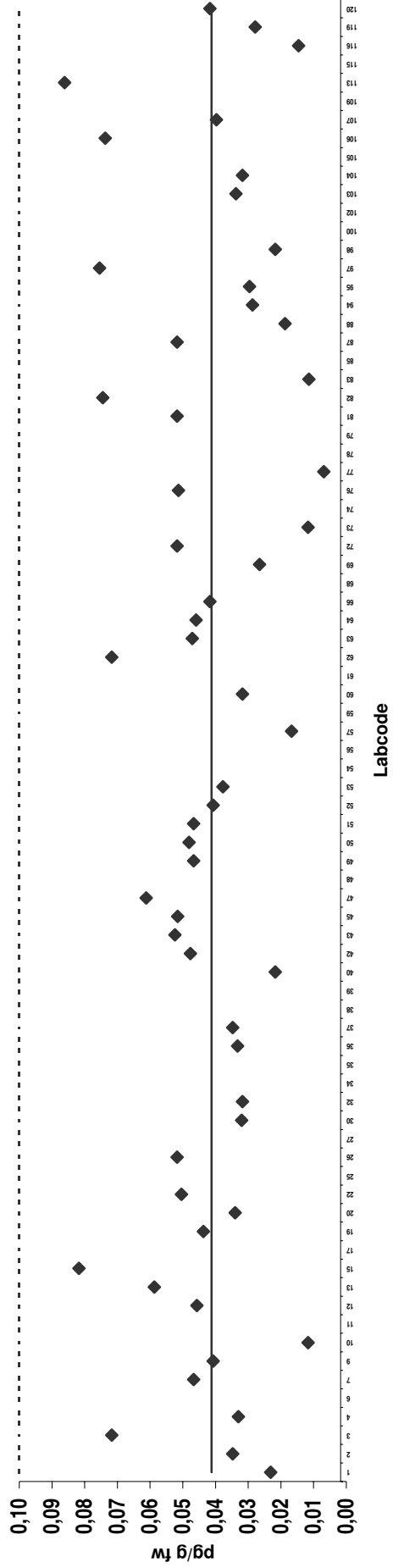
Congener: 1,2,3,4,6,7,8 HpCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,021		63	0,045	ND
2	0,033	ND	64	0,044	ND
3	0,070		66	0,040	ND
4	0,031		68	0,30	Outlier
6	2,5	Outlier	69	0,025	
7	0,045		72	0,050	
9	0,039		73	0,010	
10	0,010	ND	74	0,15	Outlier
11	0,11	Outlier	76	0,050	
12	0,044		77	0,0052	ND
13	0,057		78	0,97	Outlier,ND
15	0,080		79	0,13	Outlier
17	0,11	Outlier	81	0,050	
19	0,042	ND	82	0,073	ND
20	0,032	ND	83	0,0097	ND
22	0,049		85	0,21	Outlier
25	0,50	Outlier,ND	87	0,050	
26	0,050	ND	88	0,017	
27	6,3	Outlier	94	0,027	
30	0,030		95	0,028	
32	0,030	ND	97	0,074	
34	0,27	Outlier	98	0,020	Outlier
35	0,22	Outlier,ND	100	1,2	Outlier
36	0,032	ND	102	0,30	Outlier
37	0,033	ND	103	0,032	
38	0,57	Outlier	104	0,030	
39	0,18	Outlier	105	0,20	Outlier
40	0,020	ND	106	0,072	
42	0,046		107	0,038	
43	0,051		109	0,19	Outlier
45	0,050		113	0,084	
47	0,059		115	0,32	Outlier
48	0,27	Outlier	116	0,013	ND
49	0,045		119	0,026	
50	0,046		120	0,040	
51	0,045				
52	0,039				
53	0,036	ND			
54	0,11	Outlier			
56	0,21	Outlier			
57	0,015				
59	0,14	Outlier			
60	0,030				
61	0,16	Outlier			
62	0,070				

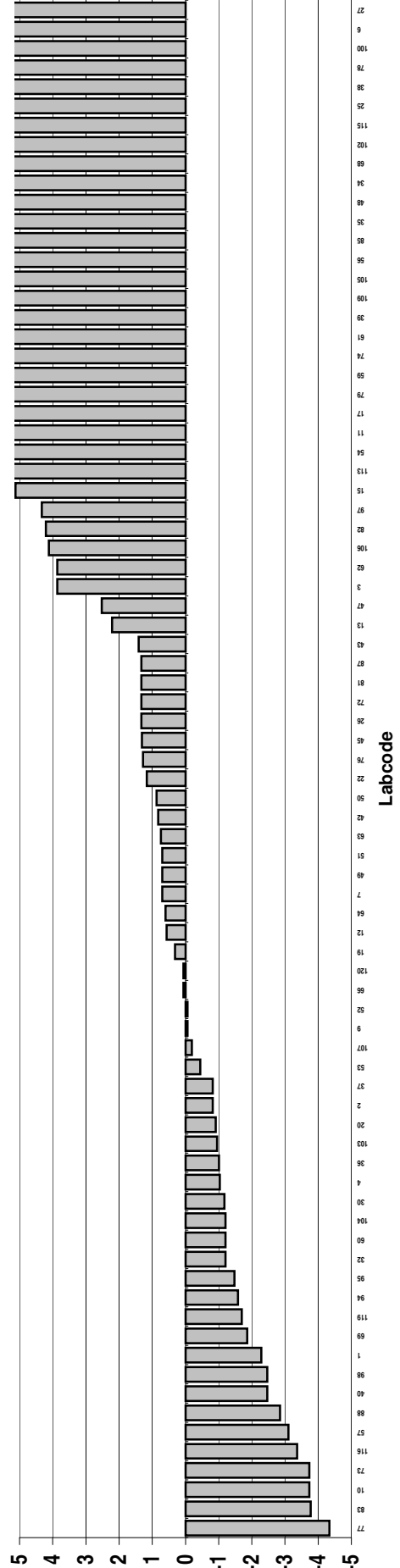
Consensus statistics

Consensus median, pg/g	0,040
Median all values pg/g	0,049
Consensus mean, pg/g	0,040
Standard deviation, pg/g	0,018
Relative standard deviation, %	46
No. of values reported	80
No. of values removed	24
No. of reported non-detects	19

1,2,3,4,6,7,8 HpCDD



Z-score: 1,2,3,4,6,7,8 HpCDD



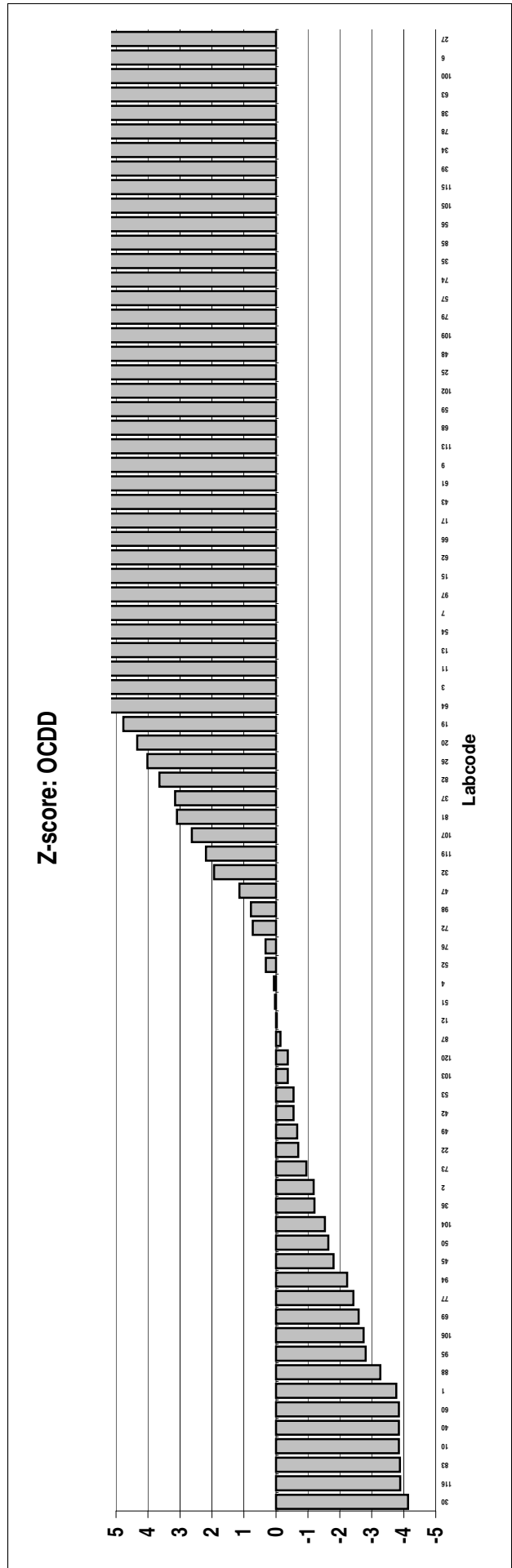
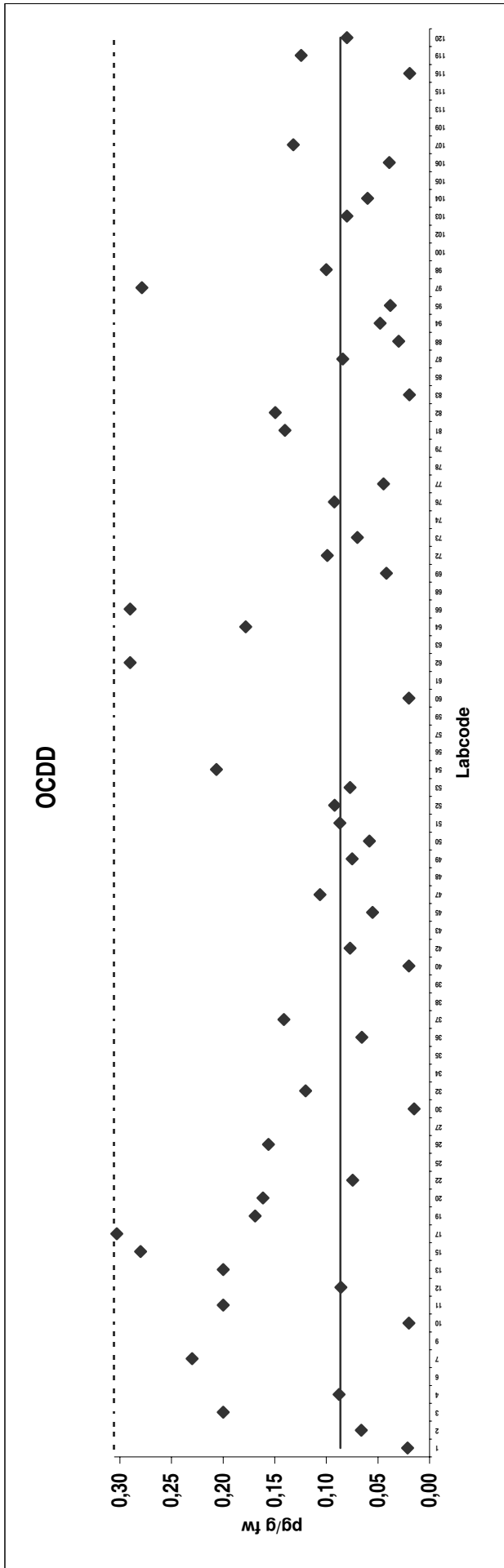
Cream

Congener: OCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,021	ND	63	5,2	Outlier
2	0,066	ND	64	0,18	
3	0,20		66	0,29	
4	0,088		68	0,36	Outlier
6	24	Outlier	69	0,042	
7	0,23		72	0,099	
9	0,34	Outlier	73	0,070	
10	0,020	ND	74	0,77	Outlier
11	0,20	ND	76	0,092	
12	0,086		77	0,045	
13	0,20	ND	78	2,0	Outlier,ND
15	0,28		79	0,68	Outlier
17	0,30		81	0,14	
19	0,17	ND	82	0,15	ND
20	0,16	ND	83	0,019	ND
22	0,074		85	0,94	Outlier
25	0,50	Outlier,ND	87	0,084	
26	0,16		88	0,030	
27	25	Outlier	94	0,048	
30	0,015		95	0,038	
32	0,12	ND	97	0,28	
34	1,8	Outlier	98	0,10	ND
35	0,89	Outlier,ND	100	7,5	Outlier
36	0,066	ND	102	0,46	Outlier
37	0,14	ND	103	0,080	
38	3,0	Outlier	104	0,060	
39	1,7	Outlier	105	1,6	Outlier
40	0,020	ND	106	0,039	
42	0,077		107	0,13	
43	0,32	Outlier	109	0,65	Outlier
45	0,055		113	0,36	Outlier
47	0,11		115	1,6	Outlier
48	0,53	Outlier	116	0,019	ND
49	0,075		119	0,12	
50	0,058		120	0,080	
51	0,087				
52	0,092				
53	0,077	ND			
54	0,21				
56	1,0	Outlier,ND			
57	0,70	Outlier			
59	0,36	Outlier			
60	0,020	ND			
61	0,32	Outlier			
62	0,29				

Consensus statistics

Consensus median, pg/g	0,087
Median all values pg/g	0,15
Consensus mean, pg/g	0,11
Standard deviation, pg/g	0,079
Relative standard deviation, %	72
No. of values reported	80
No. of values removed	26
No. of reported non-detects	21



Cream

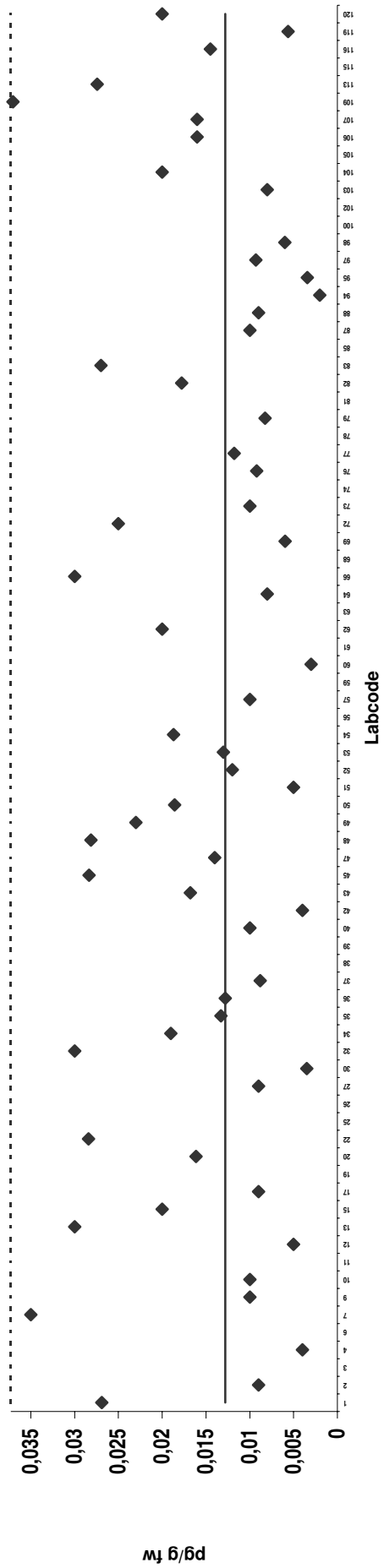
Congener: 2,3,7,8 TCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,027		63	0,045	Outlier,ND
2	0,0090	ND	64	0,0080	ND
3	0,11	Outlier	66	0,030	
4	0,0040		68	0,063	Outlier
6	0,068	Outlier	69	0,0060	
7	0,035		72	0,025	
9	0,010		73	0,010	
10	0,010	ND	74	0,055	Outlier
11	0,059	Outlier	76	0,0092	
12	0,0050	ND	77	0,012	
13	0,030	ND	78	0,34	Outlier,ND
15	0,020		79	0,0083	
17	0,0090		81	0,050	Outlier,ND
19	0,061	Outlier	82	0,018	ND
20	0,016	ND	83	0,027	
22	0,028		85	0,072	Outlier,ND
25	0,050	Outlier,ND	87	0,010	ND
26	0,072	Outlier	88	0,0090	
27	0,0090	ND	94	0,0020	ND
30	0,0035		95	0,0034	
32	0,030	ND	97	0,0093	ND
34	0,019	ND	98	0,0060	ND
35	0,013	ND	100	4,5	Outlier
36	0,013	ND	102	0,12	Outlier
37	0,0088	ND	103	0,0080	
38	0,045	Outlier,ND	104	0,020	ND
39	0,094	Outlier	105	0,053	Outlier,ND
40	0,010	ND	106	0,016	
42	0,0040	ND	107	0,016	
43	0,017		109	0,037	
45	0,028		113	0,027	ND
47	0,014		115	0,28	Outlier
48	0,028		116	0,014	
49	0,023		119	0,0056	
50	0,019		120	0,020	
51	0,0050	ND			
52	0,012				
53	0,013	ND			
54	0,019	ND			
56	0,45	Outlier			
57	0,010				
59	0,14	Outlier			
60	0,0030	ND			
61	0,063	Outlier			
62	0,020				

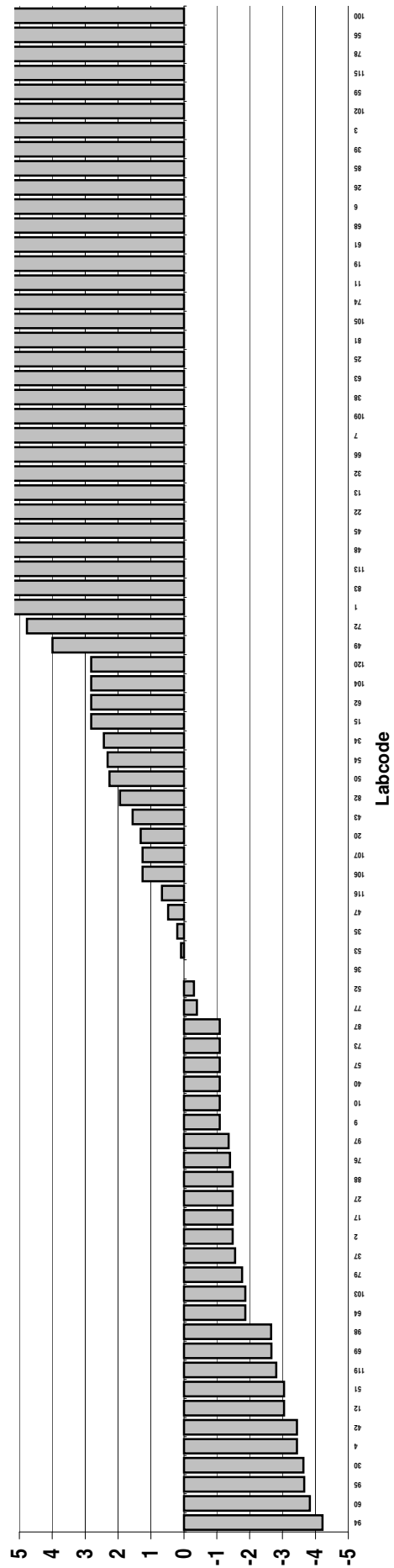
Consensus statistics

Consensus median, pg/g	0,013
Median all values pg/g	0,019
Consensus mean, pg/g	0,015
Standard deviation, pg/g	0,0090
Relative standard deviation, %	60
No. of values reported	80
No. of values removed	21
No. of reported non-detects	33

2,3,7,8 TCDF



Z-score: 2,3,7,8 TCDF



Cream

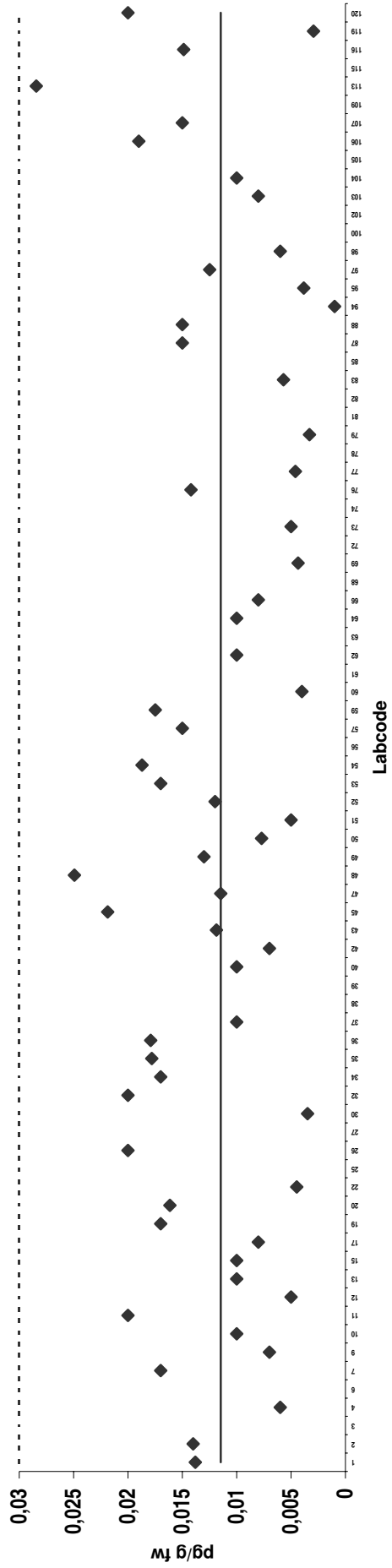
Congener: 1,2,3,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,014	ND	63	0,045	Outlier,ND
2	0,014	ND	64	0,010	ND
3	0,12	Outlier	66	0,0080	ND
4	0,0060		68	0,28	Outlier
6	0,48	Outlier	69	0,0043	
7	0,017		72	0,045	Outlier
9	0,0070		73	0,0050	
10	0,010	ND	74	0,15	Outlier,ND
11	0,020	ND	76	0,014	
12	0,0050	ND	77	0,0046	ND
13	0,010	ND	78	0,51	Outlier,ND
15	0,010	ND	79	0,0033	
17	0,0080	ND	81	0,050	Outlier,ND
19	0,017		82	0,032	Outlier,ND
20	0,016	ND	83	0,0057	ND
22	0,0045	ND	85	0,045	Outlier
25	0,056	Outlier	87	0,015	ND
26	0,020	ND	88	0,015	
27	0,033	Outlier,ND	94	0,0010	ND
30	0,0035	ND	95	0,0038	
32	0,020	ND	97	0,013	ND
34	0,017	ND	98	0,0060	ND
35	0,018	ND	100	1,8	Outlier
36	0,018	ND	102	0,062	Outlier
37	0,010	ND	103	0,0080	ND
38	0,037	Outlier,ND	104	0,010	ND
39	0,087	Outlier	105	0,095	Outlier
40	0,010	ND	106	0,019	
42	0,0070		107	0,015	
43	0,012		109	0,037	Outlier
45	0,022	ND	113	0,028	ND
47	0,011		115	0,12	Outlier,ND
48	0,025		116	0,015	ND
49	0,013		119	0,0029	
50	0,0077		120	0,020	ND
51	0,0050	ND			
52	0,012	ND			
53	0,017	ND			
54	0,019	ND			
56	0,13	Outlier			
57	0,015				
59	0,017	ND			
60	0,0040	ND			
61	0,10	Outlier			
62	0,010	ND			

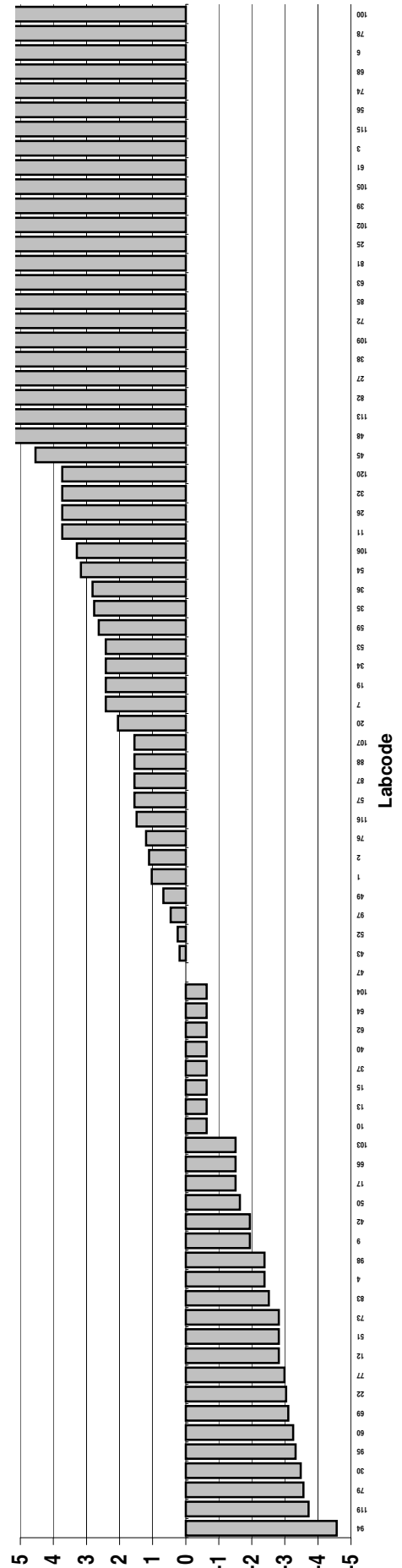
Consensus statistics

Consensus median, pg/g	0,011
Median all values pg/g	0,015
Consensus mean, pg/g	0,012
Standard deviation, pg/g	0,0062
Relative standard deviation, %	52
No. of values reported	80
No. of values removed	21
No. of reported non-detects	47

1,2,3,7,8 PeCDF



Z-score: 1,2,3,7,8 PeCDF



Cream

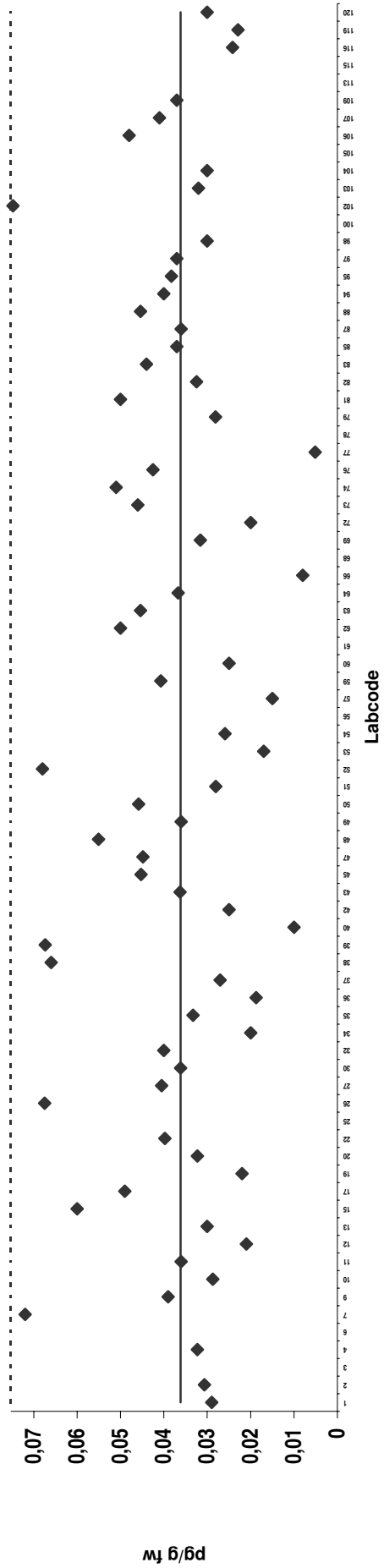
Congener: 2,3,4,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,029	ND	63	0,045	ND
2	0,031		64	0,037	ND
3	0,20	Outlier	66	0,0080	Outlier
4	0,032		68	0,21	
6	0,43	Outlier	69	0,032	
7	0,072		72	0,020	
9	0,039		73	0,046	
10	0,029		74	0,051	
11	0,036		76	0,043	
12	0,021		77	0,0051	ND
13	0,030		78	0,55	Outlier,ND
15	0,060		79	0,028	
17	0,049		81	0,050	ND
19	0,022		82	0,032	ND
20	0,032	ND	83	0,044	
22	0,040		85	0,037	
25	0,31	Outlier	87	0,036	
26	0,068		88	0,045	
27	0,041		94	0,040	
30	0,036		95	0,038	
32	0,040		97	0,037	
34	0,020		98	0,030	ND
35	0,033		100	6,2	Outlier
36	0,019	ND	102	0,075	
37	0,027		103	0,032	
38	0,066		104	0,030	
39	0,067		105	0,15	
40	0,010	ND	106	0,048	Outlier
42	0,025		107	0,041	
43	0,036		109	0,037	
45	0,045		113	0,091	Outlier
47	0,045		115	0,20	Outlier
48	0,055		116	0,024	
49	0,036		119	0,023	
50	0,046		120	0,030	
51	0,028				
52	0,068				
53	0,017	ND			
54	0,026				
56	0,33	Outlier			
57	0,015				
59	0,041				
60	0,025				
61	0,14	Outlier			
62	0,050				

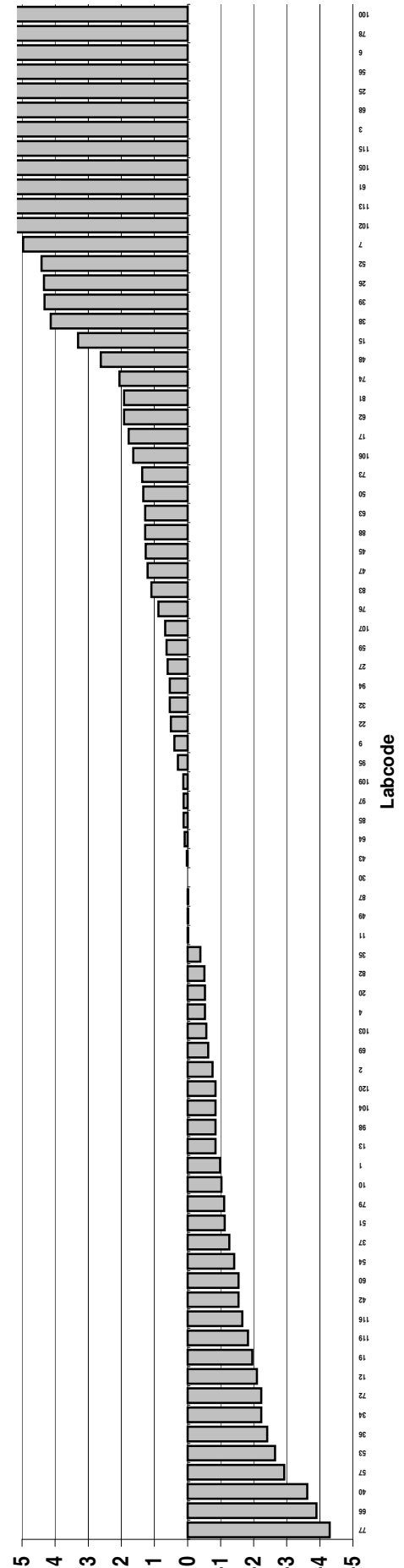
Consensus statistics

Consensus median, pg/g	0,036
Median all values pg/g	0,038
Consensus mean, pg/g	0,037
Standard deviation, pg/g	0,015
Relative standard deviation, %	40
No. of values reported	80
No. of values removed	11
No. of reported non-detects	12

2,3,4,7,8 PeCDF



Z-score: 2,3,4,7,8 PeCDF



Cream

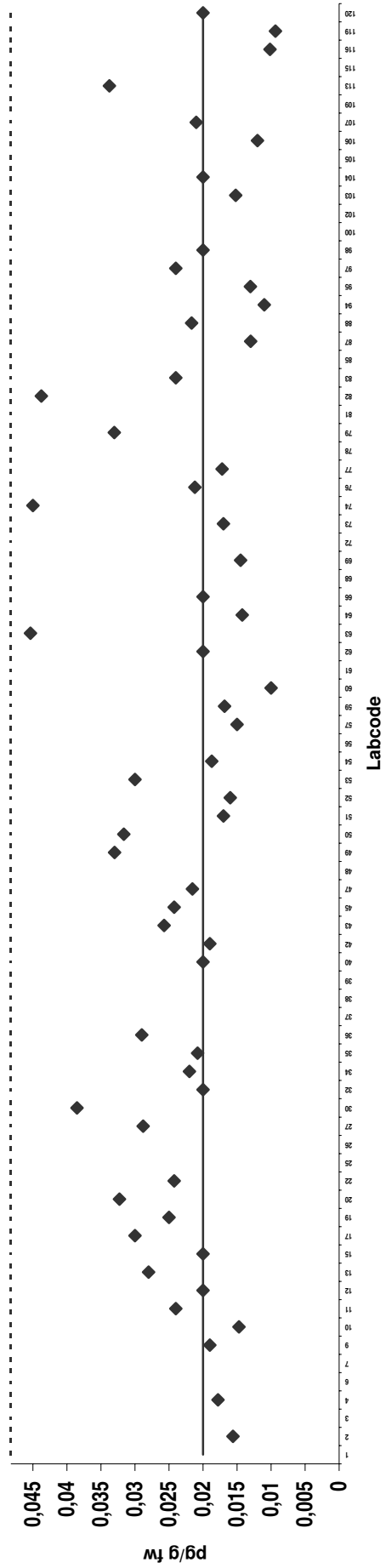
Congener: 1,2,3,4,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,069		63	0,045	ND
2	0,016	Outlier	64	0,014	ND
3	0,11	Outlier	66	0,020	Outlier
4	0,018		68	0,18	Outlier
6	0,55	Outlier	69	0,014	Outlier
7	0,059	Outlier	72	0,13	
9	0,019		73	0,017	
10	0,015		74	0,045	
11	0,024		76	0,021	
12	0,020		77	0,017	
13	0,028		78	0,63	Outlier,ND
15	0,020		79	0,033	
17	0,030		81	0,050	Outlier,ND
19	0,025	ND	82	0,044	ND
20	0,032	ND	83	0,024	
22	0,024		85	0,32	Outlier
25	0,050	Outlier,ND	87	0,013	
26	0,050	Outlier,ND	88	0,022	
27	0,029		94	0,011	
30	0,039		95	0,013	
32	0,020	ND	97	0,024	
34	0,022		98	0,020	ND
35	0,021		100	1,1	Outlier
36	0,029	ND	102	0,072	Outlier
37	0,051	Outlier	103	0,015	
38	0,064	Outlier	104	0,020	
39	0,056	Outlier	105	0,11	Outlier
40	0,020	ND	106	0,012	ND
42	0,019		107	0,021	
43	0,026		109	0,056	Outlier
45	0,024		113	0,034	ND
47	0,022		115	0,23	Outlier
48	0,088	Outlier	116	0,010	ND
49	0,033		119	0,0094	
50	0,032		120	0,020	ND
51	0,017				
52	0,016				
53	0,030	ND			
54	0,019	ND			
56	0,050	Outlier,ND			
57	0,015				
59	0,017	ND			
60	0,010				
61	0,14	Outlier			
62	0,020				

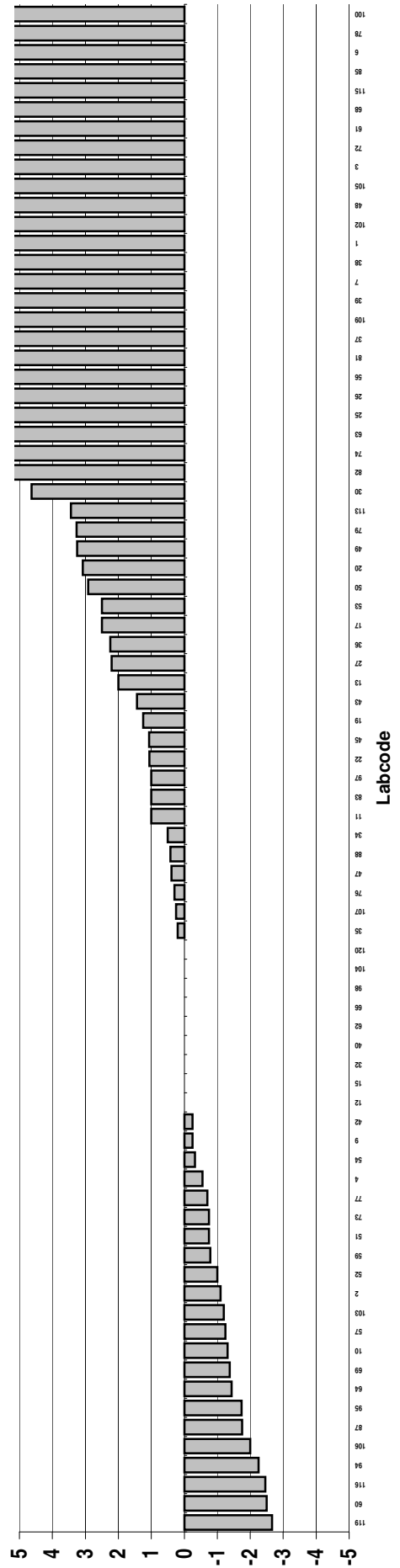
Consensus statistics

Consensus median, pg/g	0,020
Median all values pg/g	0,024
Consensus mean, pg/g	0,022
Standard deviation, pg/g	0,0084
Relative standard deviation, %	38
No. of values reported	80
No. of values removed	22
No. of reported non-detects	21

1,2,3,4,7,8 HxCDF



Z-score: 1,2,3,4,7,8 HxCDF



Cream

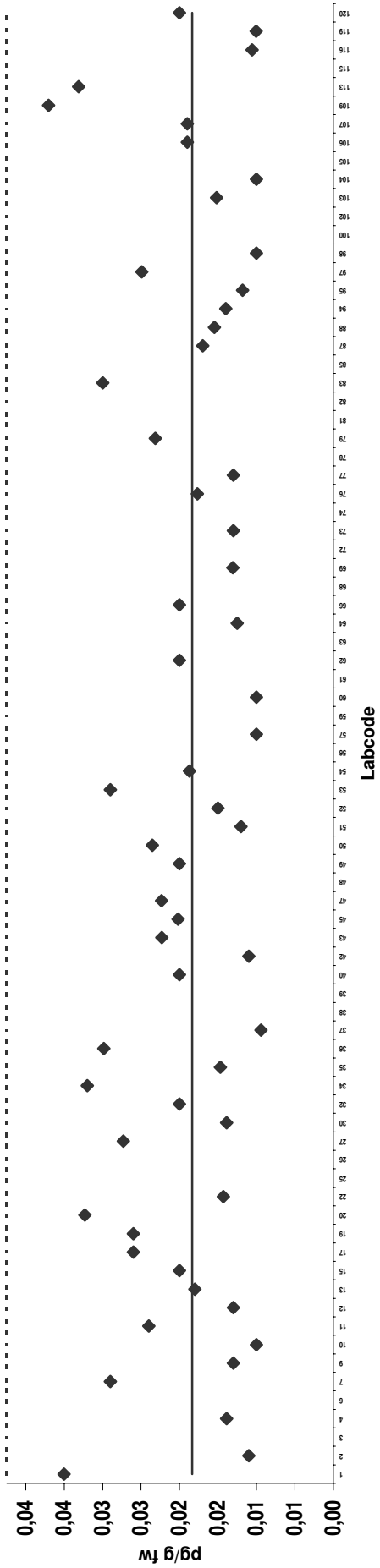
Congener: 1,2,3,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,035		63	0,045	Outlier,ND
2	0,011		64	0,013	
3	0,10	Outlier	66	0,020	ND
4	0,014		68	0,20	Outlier
6	0,46	Outlier	69	0,013	
7	0,029		72	0,060	Outlier
9	0,013		73	0,013	
10	0,010	ND	74	0,051	Outlier
11	0,024		76	0,018	ND
12	0,013		77	0,013	
13	0,018		78	0,57	Outlier,ND
15	0,020		79	0,023	
17	0,026		81	0,050	Outlier,ND
19	0,026		82	0,044	Outlier,ND
20	0,032	ND	83	0,030	
22	0,014		85	0,069	Outlier
25	0,13	Outlier	87	0,017	
26	0,050	Outlier,ND	88	0,015	
27	0,027		94	0,014	
30	0,014		95	0,012	
32	0,020	ND	97	0,025	
34	0,032		98	0,010	ND
35	0,015		100	1,5	Outlier
36	0,030	ND	102	0,077	Outlier
37	0,0094		103	0,015	Outlier
38	0,060	Outlier	104	0,010	
39	0,054	Outlier	105	0,081	Outlier
40	0,020	ND	106	0,019	
42	0,011		107	0,019	
43	0,022		109	0,037	
45	0,020		113	0,033	ND
47	0,022		115	0,13	Outlier,ND
48	0,066	Outlier	116	0,011	ND
49	0,020		119	0,010	
50	0,024		120	0,020	ND
51	0,012				
52	0,015				
53	0,029	ND			
54	0,019	ND			
56	0,050	Outlier,ND			
57	0,010				
59	0,11	Outlier			
60	0,010				
61	0,13	Outlier			
62	0,020				

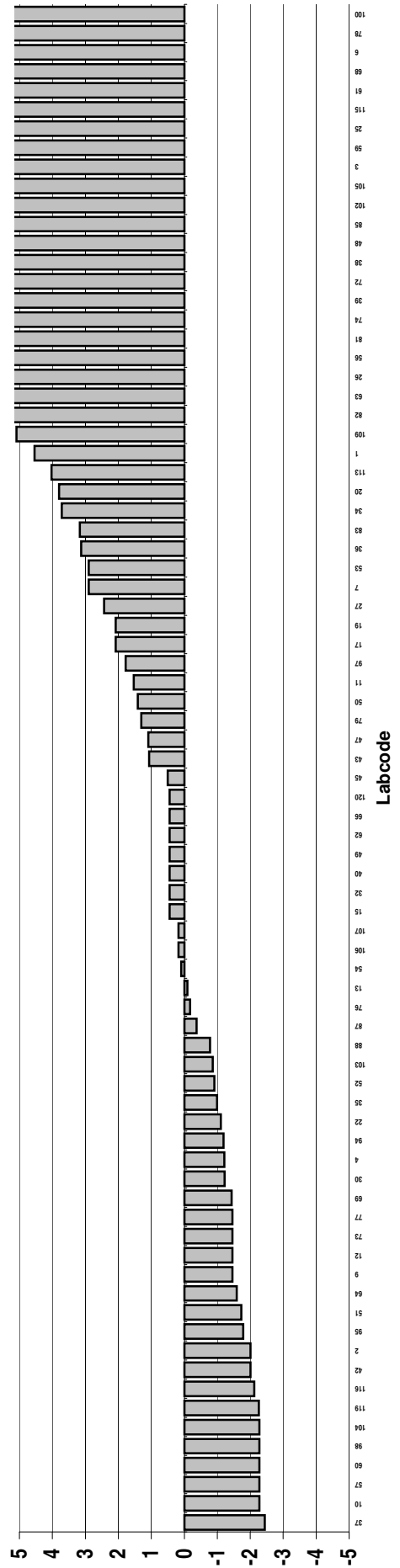
Consensus statistics

Consensus median, pg/g	0,018
Median all values pg/g	0,021
Consensus mean, pg/g	0,019
Standard deviation, pg/g	0,0074
Relative standard deviation, %	39
No. of values reported	80
No. of values removed	22
No. of reported non-detects	20

1,2,3,6,7,8 HxCDF



Z-score: 1,2,3,6,7,8 HxCDF



Cream

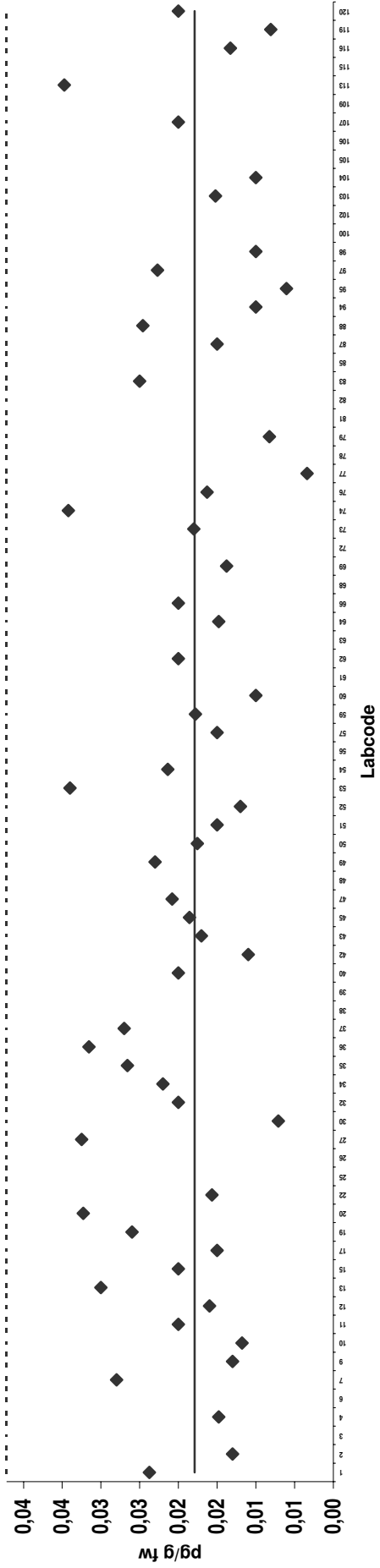
Congener: 2,3,4,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,024	ND	63	0,045	Outlier,ND
2	0,013	ND	64	0,015	
3	0,10	Outlier	66	0,020	ND
4	0,015		68	0,19	Outlier
6	0,81	Outlier	69	0,014	
7	0,028		72	0,050	Outlier
9	0,013		73	0,018	
10	0,012		74	0,034	ND
11	0,020	ND	76	0,016	
12	0,016		77	0,0034	ND
13	0,030	ND	78	0,52	Outlier,ND
15	0,020		79	0,0083	
17	0,015		81	0,050	Outlier,ND
19	0,026		82	0,044	Outlier,ND
20	0,032	ND	83	0,025	
22	0,016		85	0,068	Outlier,ND
25	0,050	Outlier,ND	87	0,015	ND
26	0,050	Outlier,ND	88	0,025	
27	0,033		94	0,010	
30	0,0071		95	0,0060	
32	0,020	ND	97	0,023	
34	0,022	ND	98	0,010	ND
35	0,027	ND	100	0,79	Outlier
36	0,032	ND	102	0,043	Outlier
37	0,027	ND	103	0,015	
38	0,071	Outlier	104	0,010	
39	0,065	Outlier	105	0,099	Outlier
40	0,020	ND	106	0,045	Outlier
42	0,011		107	0,020	
43	0,017		109	0,056	Outlier
45	0,019	ND	113	0,035	ND
47	0,021		115	0,12	Outlier,ND
48	0,13	Outlier	116	0,013	ND
49	0,023		119	0,0081	
50	0,018		120	0,020	ND
51	0,015				
52	0,012				
53	0,034	ND			
54	0,021	ND			
56	0,50	Outlier			
57	0,015				
59	0,018	ND			
60	0,010				
61	0,11	Outlier			
62	0,020				

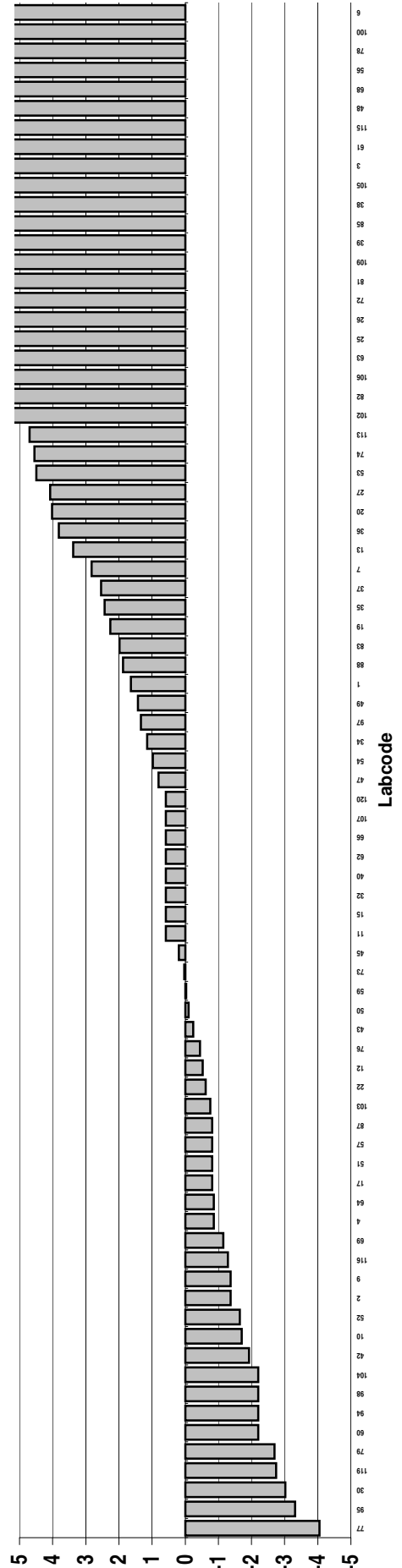
Consensus statistics

Consensus median, pg/g	0,018
Median all values pg/g	0,021
Consensus mean, pg/g	0,019
Standard deviation, pg/g	0,0076
Relative standard deviation, %	41
No. of values reported	80
No. of values removed	22
No. of reported non-detects	31

2,3,4,6,7,8 HxCDF



Z-score: 2,3,4,6,7,8 HxCDF



Cream

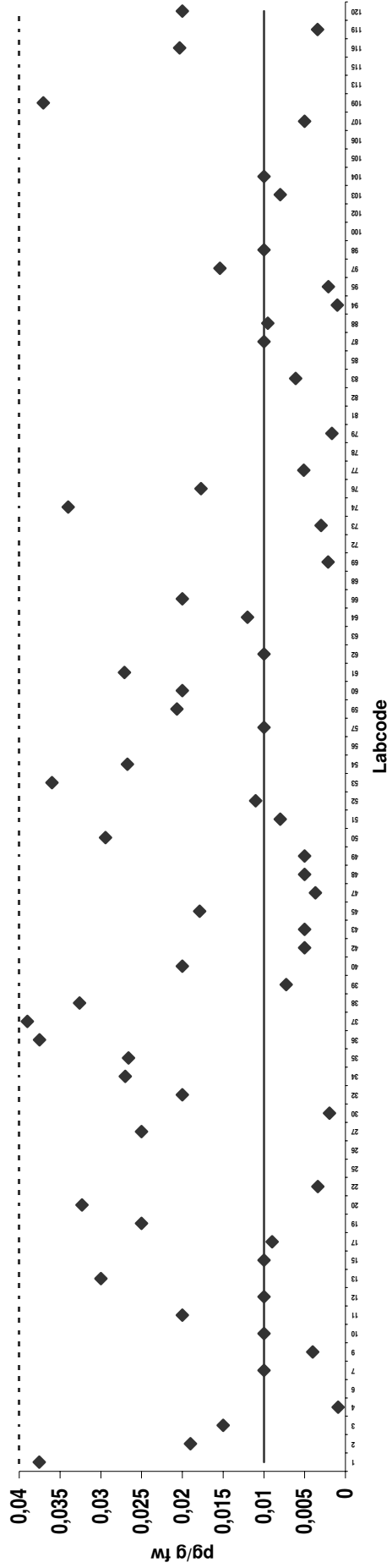
Congener: 1,2,3,7,8,9 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,038		63	0,045	Outlier,ND
2	0,019	ND	64	0,012	ND
3	0,015		66	0,020	ND
4	0,00090	ND	68	0,22	Outlier
6	0,80	Outlier	69	0,0021	
7	0,010		72	0,080	Outlier
9	0,0040		73	0,0030	
10	0,010	ND	74	0,034	
11	0,020	ND	76	0,018	ND
12	0,010	ND	77	0,0051	ND
13	0,030	ND	78	0,66	Outlier,ND
15	0,010	ND	79	0,0017	
17	0,0090		81	0,050	Outlier,ND
19	0,025	ND	82	0,044	Outlier,ND
20	0,032	ND	83	0,0061	ND
22	0,0034	ND	85	0,16	Outlier,ND
25	0,050	Outlier,ND	87	0,010	ND
26	0,050	Outlier,ND	88	0,0095	
27	0,025	ND	94	0,0010	ND
30	0,0019	ND	95	0,0021	ND
32	0,020	ND	97	0,015	ND
34	0,027	ND	98	0,010	ND
35	0,027	ND	100	1,2	Outlier
36	0,038	ND	102	0,065	Outlier
37	0,039	ND	103	0,0080	ND
38	0,033		104	0,010	ND
39	0,0072		105	0,20	Outlier
40	0,020	ND	106	0,095	Outlier
42	0,0050		107	0,0050	ND
43	0,0050	ND	109	0,037	
45	0,018	ND	113	0,048	Outlier,ND
47	0,0037		115	0,12	Outlier,ND
48	0,0050		116	0,020	ND
49	0,0050		119	0,0034	
50	0,029	ND	120	0,020	ND
51	0,0080	ND			
52	0,011	ND			
53	0,036	ND			
54	0,027	ND			
56	0,66	Outlier			
57	0,010	ND			
59	0,021	ND			
60	0,020	ND			
61	0,027	ND			
62	0,010	ND			

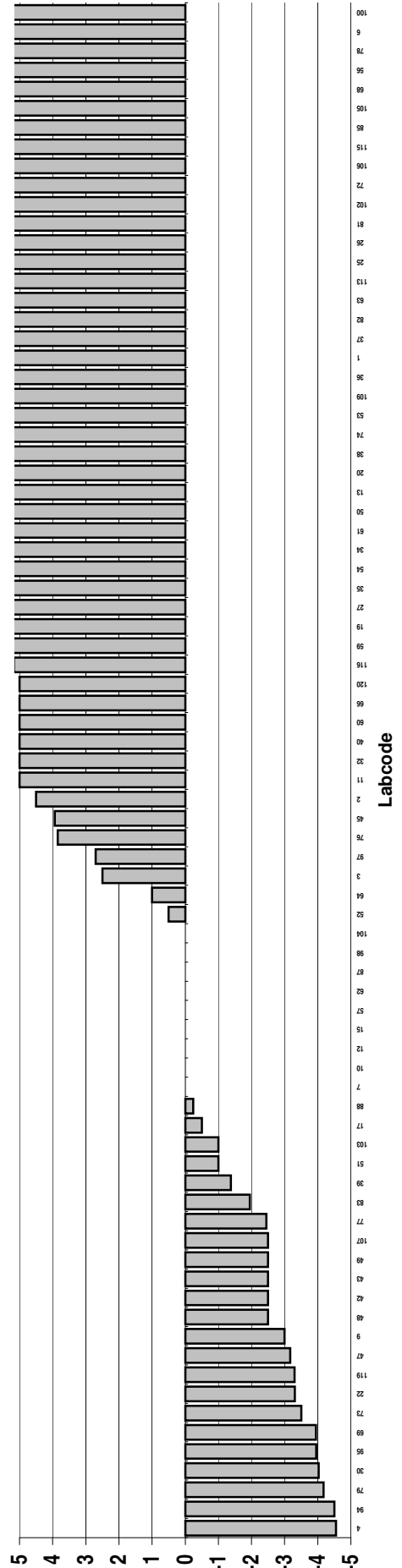
Consensus statistics

Consensus median, pg/g	0,010
Median all values pg/g	0,020
Consensus mean, pg/g	0,015
Standard deviation, pg/g	0,011
Relative standard deviation, %	73
No. of values reported	80
No. of values removed	17
No. of reported non-detects	52

1,2,3,7,8,9 HxCDF



Z-score: 1,2,3,7,8,9 HxCDF



Cream

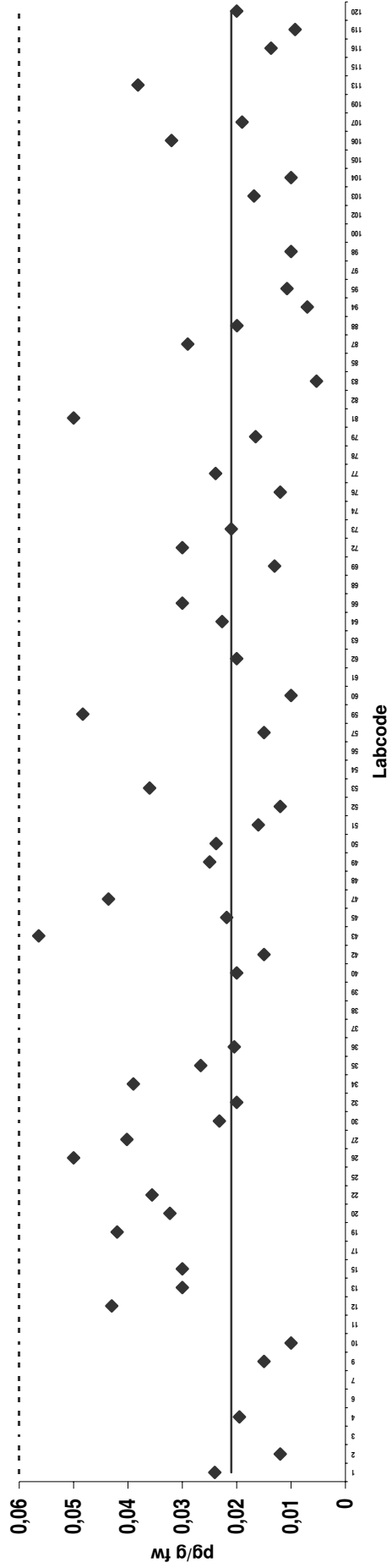
Congener: 1,2,3,4,6,7,8 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,024	ND	63	0,76	Outlier
2	0,012	ND	64	0,023	
3	0,15	Outlier	66	0,030	ND
4	0,020		68	0,17	Outlier
6	0,98	Outlier	69	0,013	
7	0,12	Outlier	72	0,030	
9	0,015		73	0,021	
10	0,010	ND	74	0,062	Outlier,ND
11	0,080	Outlier,ND	76	0,012	
12	0,043		77	0,024	
13	0,030	ND	78	0,50	Outlier,ND
15	0,030		79	0,017	
17	0,065	Outlier	81	0,050	ND
19	0,042	ND	82	0,060	Outlier,ND
20	0,032	ND	83	0,0053	ND
22	0,036		85	0,22	Outlier
25	2,2	Outlier	87	0,029	
26	0,050	ND	88	0,020	
27	0,040		94	0,0070	
30	0,023		95	0,011	
32	0,020	ND	97	0,061	Outlier
34	0,039		98	0,010	ND
35	0,027	ND	100	0,90	Outlier
36	0,020	ND	102	0,11	Outlier
37	0,076	Outlier	103	0,017	
38	0,37	Outlier	104	0,010	ND
39	0,083	Outlier	105	0,18	Outlier
40	0,020	ND	106	0,032	
42	0,015		107	0,019	
43	0,056		109	0,17	Outlier
45	0,022		113	0,038	
47	0,044		115	0,097	Outlier,ND
48	0,34	Outlier	116	0,014	ND
49	0,025		119	0,0092	
50	0,024		120	0,020	ND
51	0,016				
52	0,012				
53	0,036	ND			
54	0,11	Outlier			
56	0,98	Outlier			
57	0,015				
59	0,048				
60	0,010				
61	0,31	Outlier			
62	0,020				

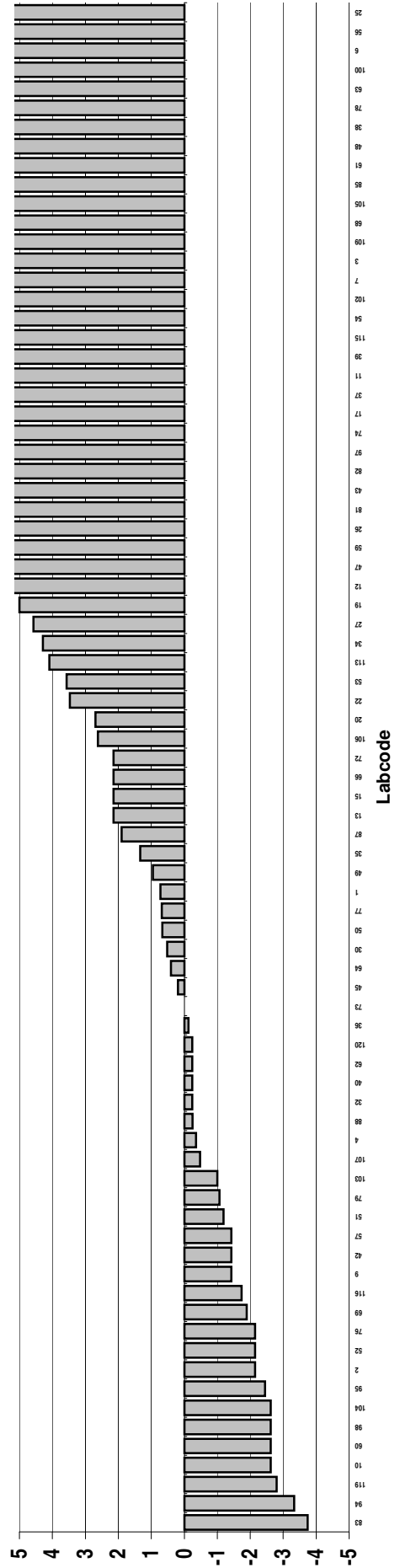
Consensus statistics

Consensus median, pg/g	0,021
Median all values pg/g	0,030
Consensus mean, pg/g	0,024
Standard deviation, pg/g	0,012
Relative standard deviation, %	51
No. of values reported	80
No. of values removed	25
No. of reported non-detects	24

1,2,3,4,6,7,8 HpCDF



Z-score: 1,2,3,4,6,7,8 HpCDF



Cream

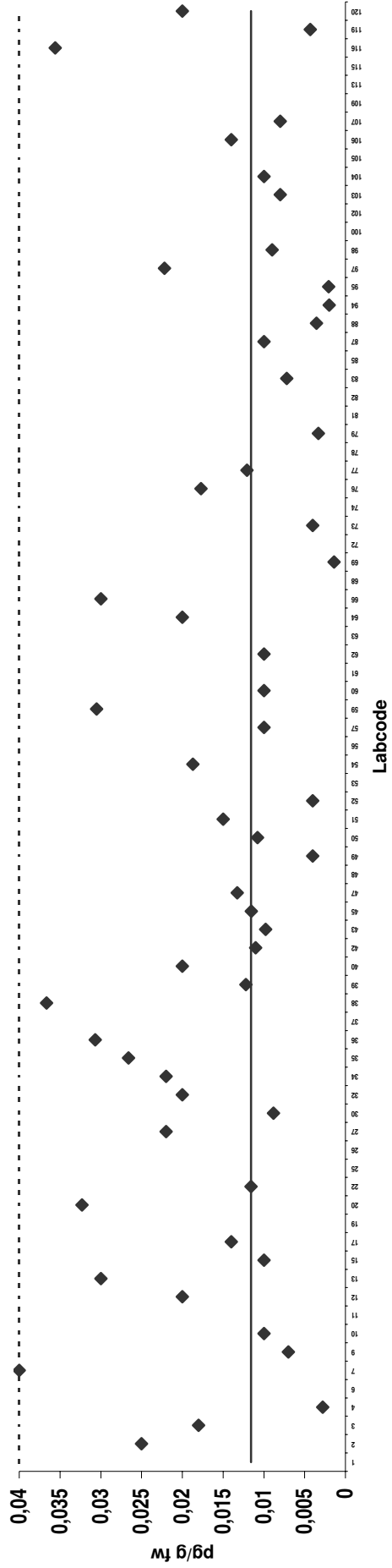
Congener: 1,2,3,4,7,8,9 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,057	Outlier	63	0,045	Outlier,ND
2	0,025	ND	64	0,020	ND
3	0,018		66	0,030	ND
4	0,0028		68	0,19	Outlier
6	1,3	Outlier	69	0,0014	
7	0,040		72	0,050	Outlier
9	0,0070		73	0,0040	
10	0,010	ND	74	0,085	Outlier,ND
11	0,080	Outlier,ND	76	0,018	ND
12	0,020		77	0,012	
13	0,030	ND	78	0,93	Outlier,ND
15	0,010	ND	79	0,0033	
17	0,014		81	0,050	Outlier,ND
19	0,042	Outlier,ND	82	0,060	Outlier,ND
20	0,032	ND	83	0,0072	ND
22	0,012		85	0,13	Outlier,ND
25	0,50	Outlier,ND	87	0,010	ND
26	0,10	Outlier,ND	88	0,0036	
27	0,022	ND	94	0,0020	ND
30	0,0088		95	0,0021	
32	0,020	ND	97	0,022	ND
34	0,022	ND	98	0,0090	ND
35	0,027	ND	100	0,59	Outlier
36	0,031	ND	102	0,072	Outlier
37	0,042	Outlier,ND	103	0,0080	ND
38	0,037		104	0,010	ND
39	0,012		105	0,19	Outlier
40	0,020	ND	106	0,014	ND
42	0,011		107	0,0080	
43	0,0098		109	0,056	Outlier
45	0,012	ND	113	0,050	Outlier,ND
47	0,013		115	0,11	Outlier,ND
48	0,044	Outlier	116	0,036	ND
49	0,0040		119	0,0043	
50	0,011	ND	120	0,020	ND
51	0,015	ND			
52	0,0040	ND			
53	0,044	Outlier,ND			
54	0,019	ND			
56	0,82	Outlier			
57	0,010	ND			
59	0,031	ND			
60	0,010	ND			
61	0,066	Outlier			
62	0,010	ND			

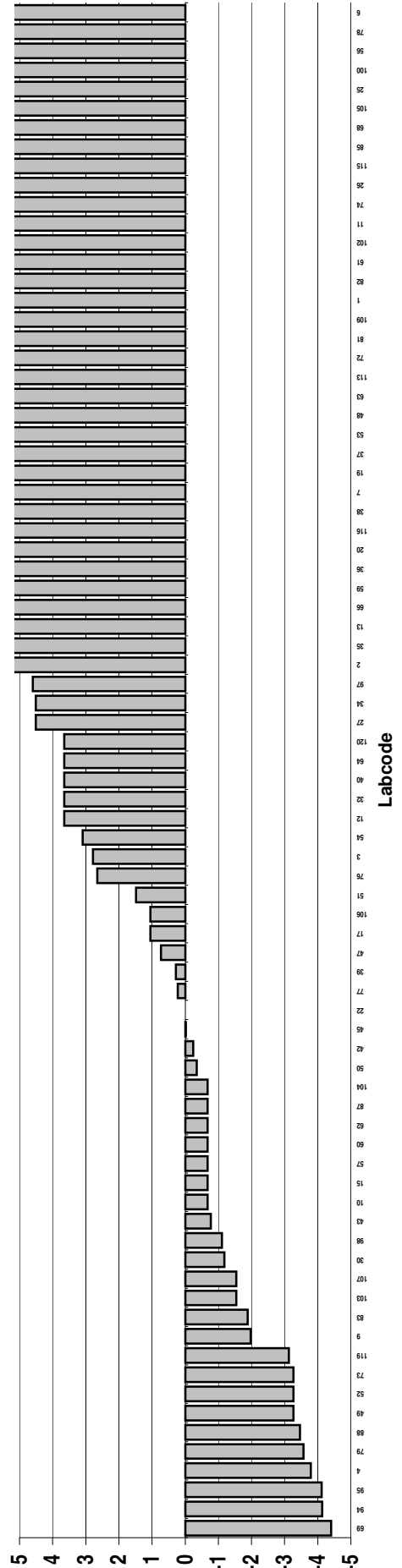
Consensus statistics

Consensus median, pg/g	0,012
Median all values pg/g	0,020
Consensus mean, pg/g	0,015
Standard deviation, pg/g	0,0099
Relative standard deviation, %	66
No. of values reported	80
No. of values removed	25
No. of reported non-detects	47

1,2,3,4,7,8,9 HpCDF



Z-score: 1,2,3,4,7,8,9 HpCDF



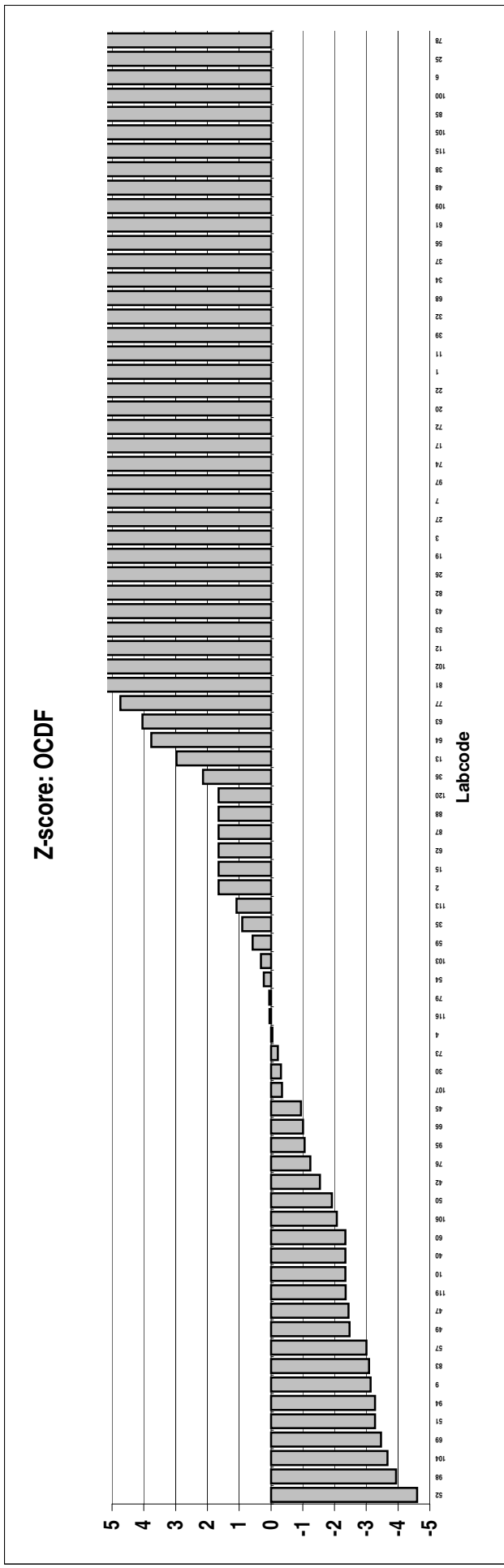
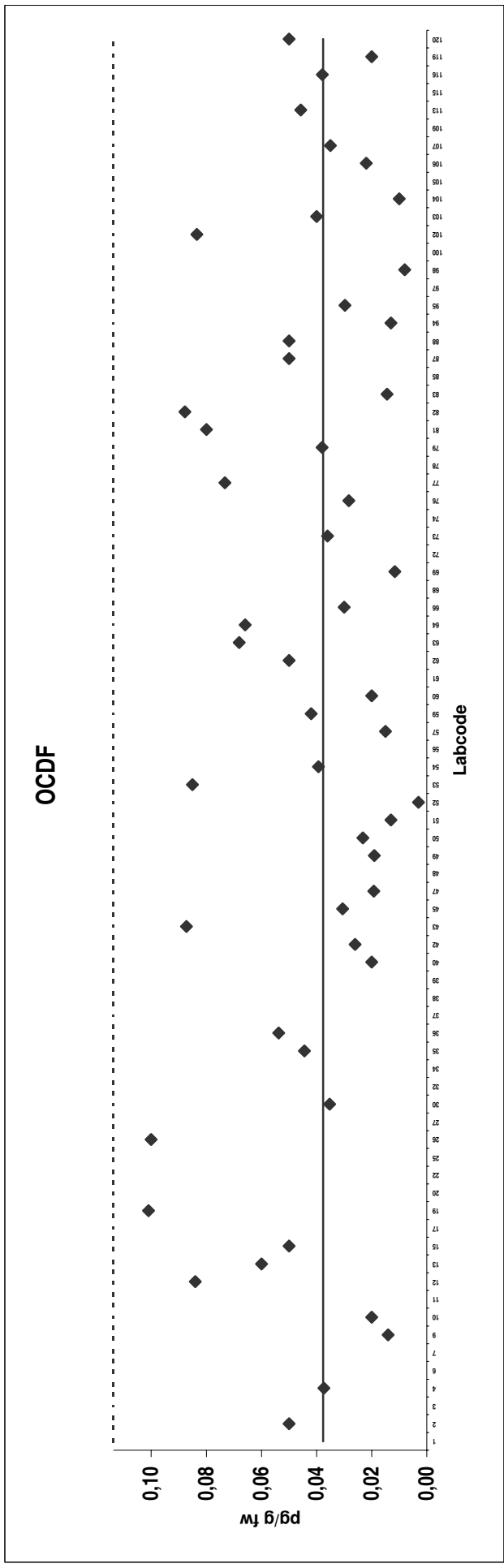
Cream

Congener: OCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,18	Outlier	63	0,068	ND
2	0,050	ND	64	0,066	ND
3	0,12	Outlier	66	0,030	Outlier
4	0,037		68	0,24	Outlier
6	1,5	Outlier	69	0,012	Outlier
7	0,13	Outlier	72	0,15	Outlier
9	0,014		73	0,036	Outlier
10	0,020	ND	74	0,15	Outlier
11	0,20	Outlier,ND	76	0,028	
12	0,084		77	0,073	
13	0,060	ND	78	1,9	Outlier,ND
15	0,050	ND	79	0,038	
17	0,15	Outlier	81	0,080	ND
19	0,10		82	0,088	ND
20	0,16	Outlier,ND	83	0,014	ND
22	0,17	Outlier	85	0,71	Outlier
25	1,6	Outlier	87	0,050	ND
26	0,10	ND	88	0,050	
27	0,13	Outlier	94	0,013	
30	0,035		95	0,030	
32	0,23	Outlier,ND	97	0,14	Outlier
34	0,24	Outlier	98	0,0080	ND
35	0,044	ND	100	1,4	Outlier
36	0,054	ND	102	0,083	
37	0,25	Outlier	103	0,040	
38	0,42	Outlier	104	0,010	ND
39	0,21	Outlier	105	0,55	Outlier
40	0,020	ND	106	0,022	ND
42	0,026		107	0,035	
43	0,087		109	0,33	Outlier
45	0,031		113	0,046	ND
47	0,019		115	0,50	Outlier
48	0,36	Outlier	116	0,038	ND
49	0,019		119	0,020	
50	0,023		120	0,050	ND
51	0,013	ND			
52	0,0030	ND			
53	0,085	ND			
54	0,039				
56	0,25	Outlier			
57	0,015				
59	0,042	ND			
60	0,020	ND			
61	0,33	Outlier			
62	0,050	ND			

Consensus statistics

Consensus median, pg/g	0,038
Median all values pg/g	0,057
Consensus mean, pg/g	0,042
Standard deviation, pg/g	0,026
Relative standard deviation, %	62
No. of values reported	80
No. of values removed	28
No. of reported non-detects	29



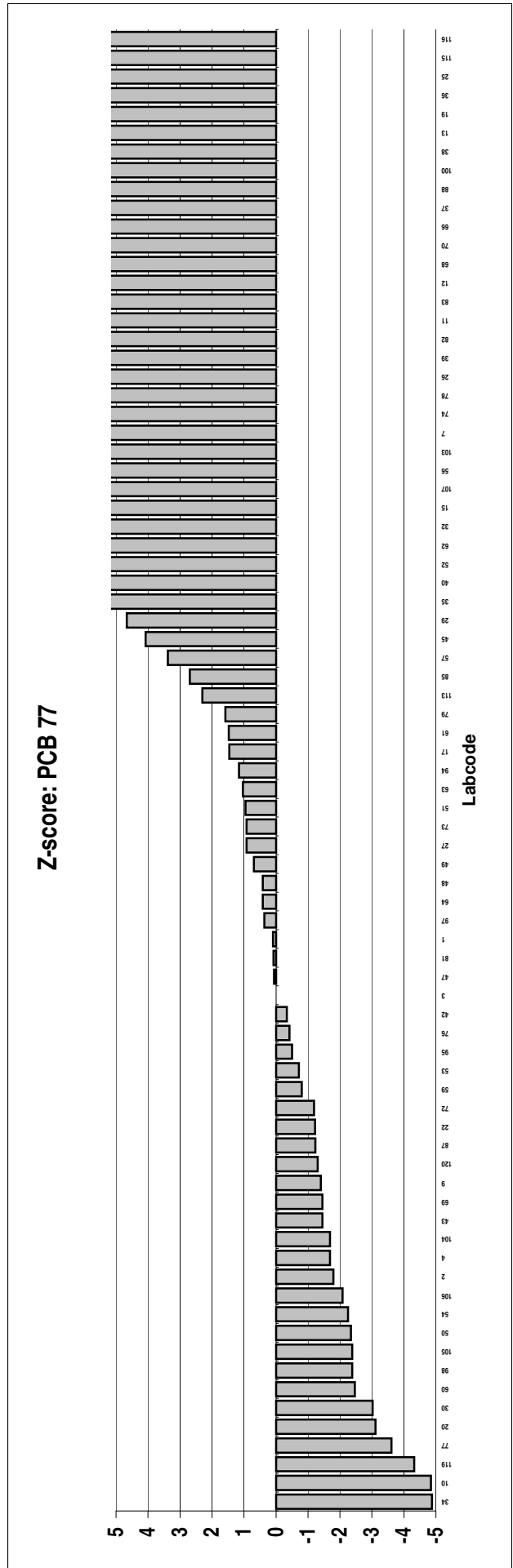
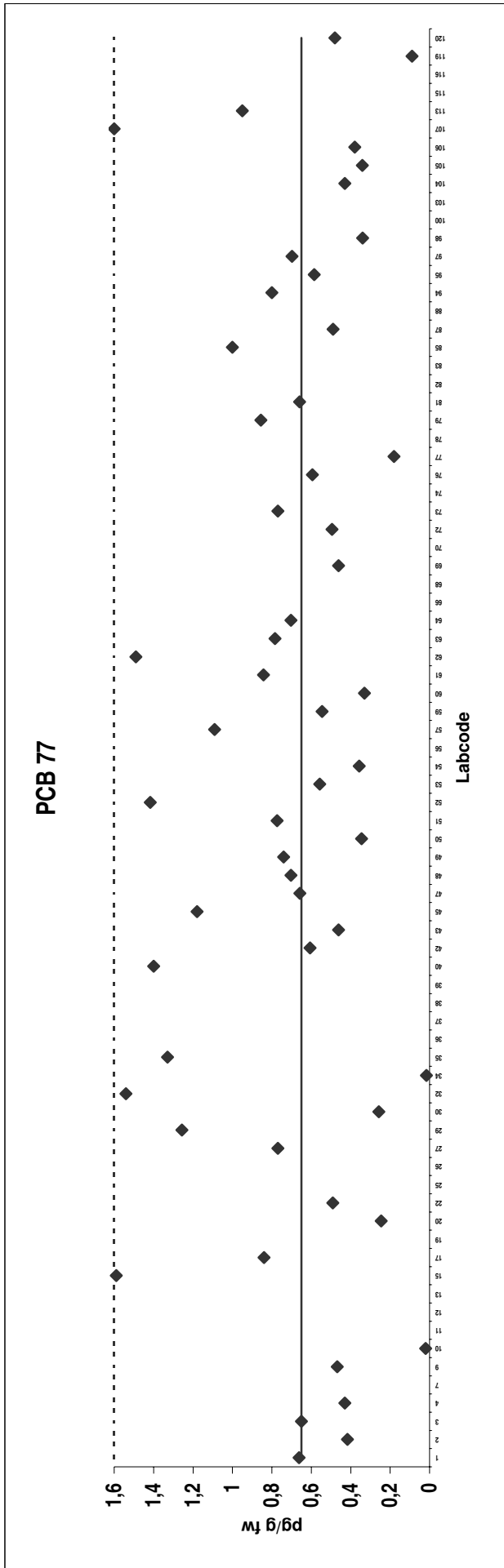
Cream

Congener: PCB 77

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,66		63	0,78	
2	0,42		64	0,70	Outlier
3	0,65		66	4,1	Outlier
4	0,43		68	3,5	
7	2,2	Outlier	69	0,46	
9	0,47		70	3,9	Outlier,ND
10	0,020	ND	72	0,50	
11	2,7	Outlier	73	0,77	
12	3,5	Outlier	74	2,2	Outlier
13	6,0	Outlier,ND	76	0,60	
15	1,6		77	0,18	
17	0,84	ND	78	2,2	Outlier,ND
19	6,9	Outlier	79	0,86	
20	0,25		81	0,66	
22	0,49		82	2,3	
25	9,4	Outlier	83	2,8	Outlier
26	2,2	Outlier	85	1,0	Outlier
27	0,77		87	0,49	
29	1,3		88	4,2	Outlier
30	0,26		94	0,80	
32	1,5	ND	95	0,58	
34	0,016	ND	97	0,70	
35	1,3	ND	98	0,34	
36	7,3	Outlier	100	4,8	Outlier
37	4,1	Outlier	103	1,9	Outlier
38	5,8	Outlier	104	0,43	
39	2,3	Outlier	105	0,34	
40	1,4		106	0,38	
42	0,61		107	1,6	
43	0,46		113	0,95	
45	1,2		115	10,0	
47	0,66		116	10,9	
48	0,70		119	0,089	
49	0,74		120	0,48	
50	0,35				
51	0,77				
52	1,4				
53	0,56				
54	0,36				
56	1,9				
57	1,1	Outlier			
59	0,55				
60	0,33				
61	0,84				
62	1,5				

Consensus statistics

Consensus median, pg/g	0,65
Median all values pg/g	0,80
Consensus mean, pg/g	0,69
Standard deviation, pg/g	0,40
Relative standard deviation, %	58
No. of values reported	79
No. of values removed	24
No. of reported non-detects	10



Cream

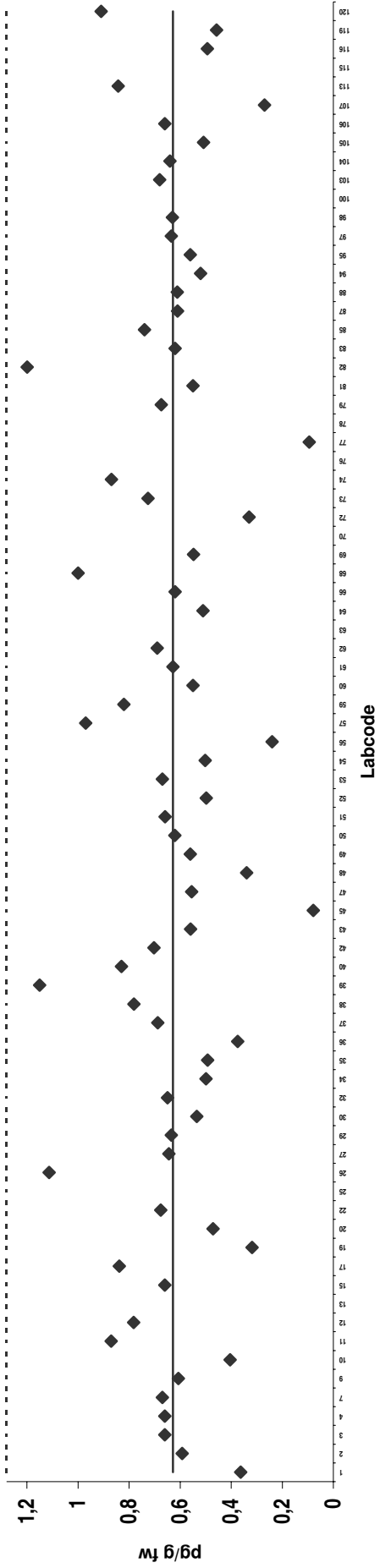
Congener: PCB 126

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,36		63	2,2	Outlier
2	0,59		64	0,51	
3	0,66		66	0,62	
4	0,66		68	1,0	
7	0,67		69	0,55	
9	0,61		70	3,9	Outlier,ND
10	0,40		72	0,33	
11	0,87		73	0,73	
12	0,78		74	0,87	
13	2,0		76	1,4	
15	0,66	Outlier,ND	77	0,094	
17	0,84		78	3,4	
19	0,32		79	0,67	
20	0,47		81	0,55	
22	0,68		82	1,2	
25	2,2		83	0,62	
26	1,1		85	0,74	
27	0,64		87	0,61	
29	0,63		88	0,61	
30	0,54		94	0,52	
32	0,65		95	0,56	
34	0,50		97	0,63	
35	0,49		98	0,63	
36	0,38		100	1,5	
37	0,69		103	0,68	
38	0,78		104	0,64	
39	1,2		105	0,51	
40	0,83		106	0,66	
42	0,70		107	0,27	
43	0,56		113	0,84	
45	0,078		115	10	
47	0,56		116	0,49	
48	0,34		119	0,46	
49	0,56		120	0,91	
50	0,62				
51	0,66				
52	0,50				
53	0,67				
54	0,50				
56	0,24				
57	0,97				
59	0,82				
60	0,55				
61	0,63				
62	0,69				

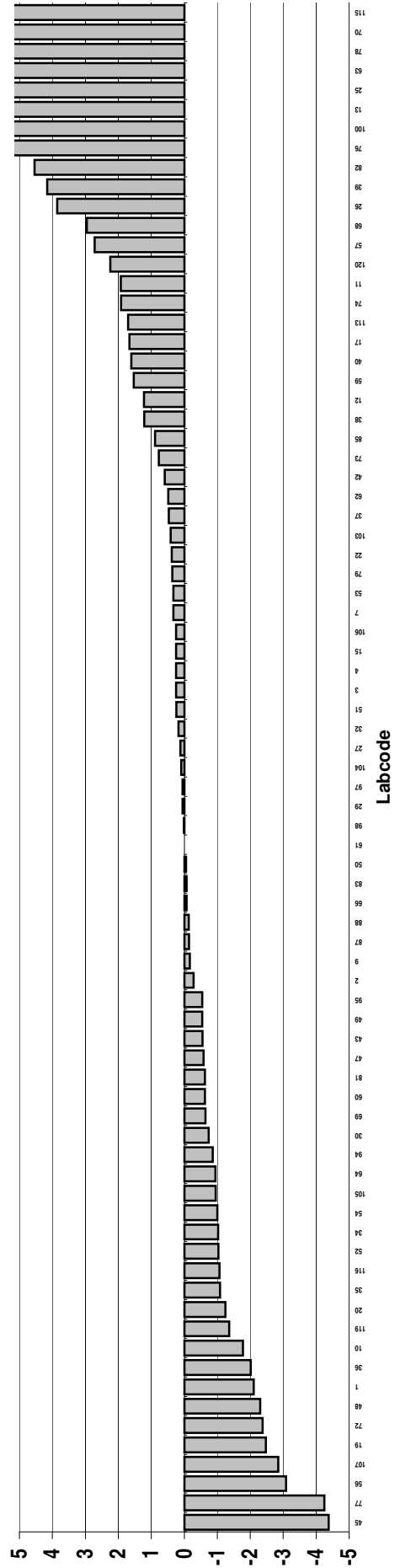
Consensus statistics

Consensus median, pg/g	0,63
Median all values pg/g	0,64
Consensus mean, pg/g	0,62
Standard deviation, pg/g	0,21
Relative standard deviation, %	34
No. of values reported	79
No. of values removed	8
No. of reported non-detects	5

PCB 126



Z-score: PCB 126



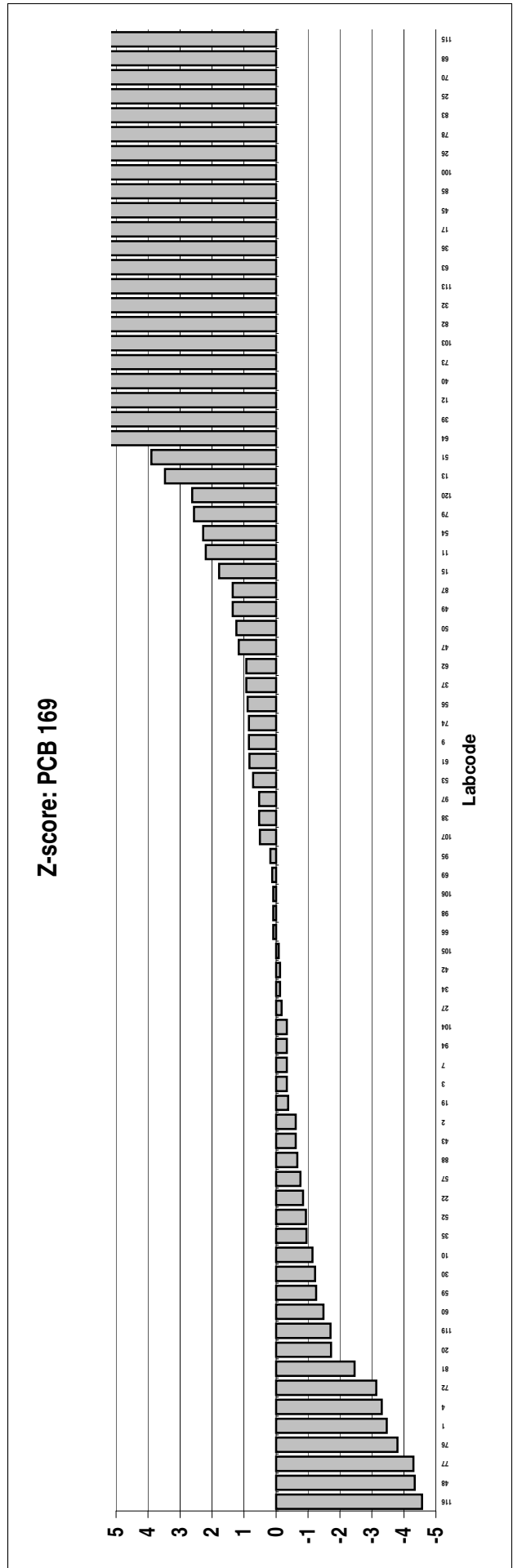
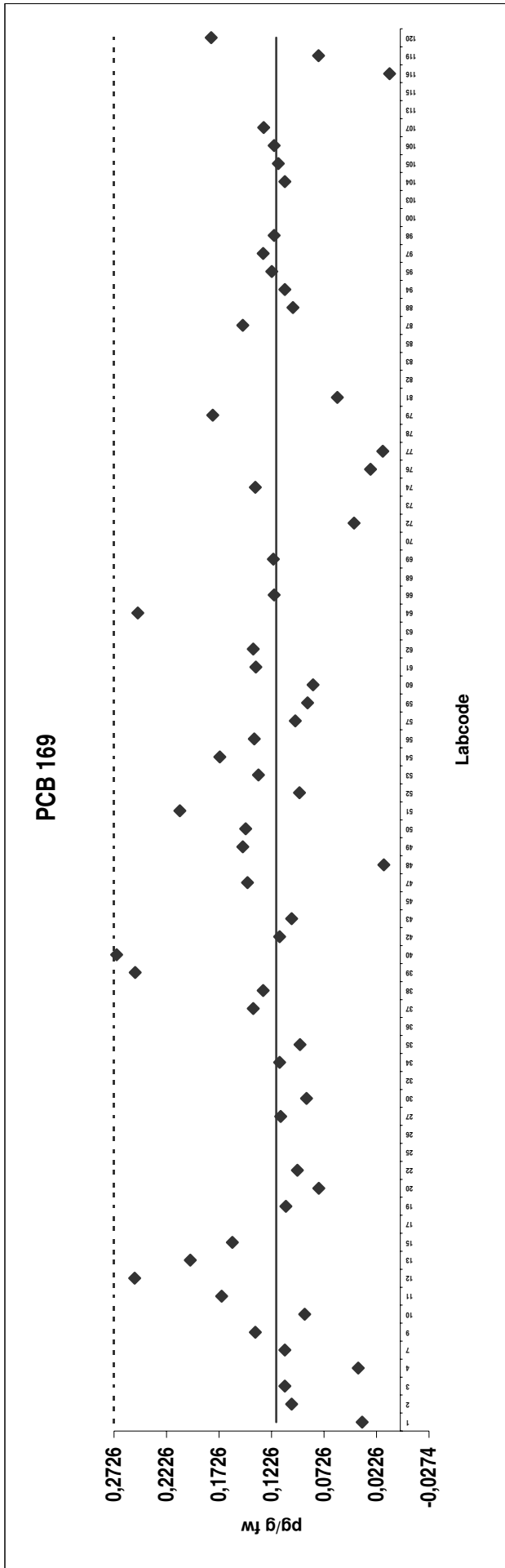
Cream

Congener: PCB 169

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,036		64	0,25	ND
2	0,10		66	0,12	
3	0,11		68	4,8	Outlier
4	0,040		69	0,12	
7	0,11		70	3,9	Outlier,ND
9	0,14		72	0,044	
10	0,091		73	0,30	Outlier
11	0,17		74	0,14	
12	0,25		76	0,028	
13	0,20		77	0,017	
15	0,16	ND	78	1,5	Outlier,ND
17	0,65		79	0,18	
19	0,11		81	0,060	
20	0,078		82	0,36	Outlier,ND
22	0,098		83	1,8	Outlier
25	3,6	Outlier	85	0,78	Outlier,ND
26	1,0	Outlier,ND	87	0,15	ND
27	0,11		88	0,10	
30	0,089		94	0,11	
32	0,38		95	0,12	
34	0,12		97	0,13	
35	0,096		98	0,12	
36	0,63		100	0,92	Outlier
37	0,14		103	0,32	Outlier
38	0,13		104	0,11	
39	0,25		105	0,12	
40	0,27		106	0,12	
42	0,12	ND	107	0,13	
43	0,10		113	0,48	Outlier,ND
45	0,71		115	10	Outlier,ND
47	0,15	Outlier	116	0,010	ND
48	0,016		119	0,078	
49	0,15		120	0,18	
50	0,15				
51	0,21				
52	0,096				
53	0,14				
54	0,17				
56	0,14				
57	0,10				
59	0,088	ND			
60	0,083				
61	0,14				
62	0,14				
63	0,54	Outlier			

Consensus statistics

Consensus median, pg/g	0,12
Median all values pg/g	0,14
Consensus mean, pg/g	0,12
Standard deviation, pg/g	0,056
Relative standard deviation, %	46
No. of values reported	78
No. of values removed	18
No. of reported non-detects	15



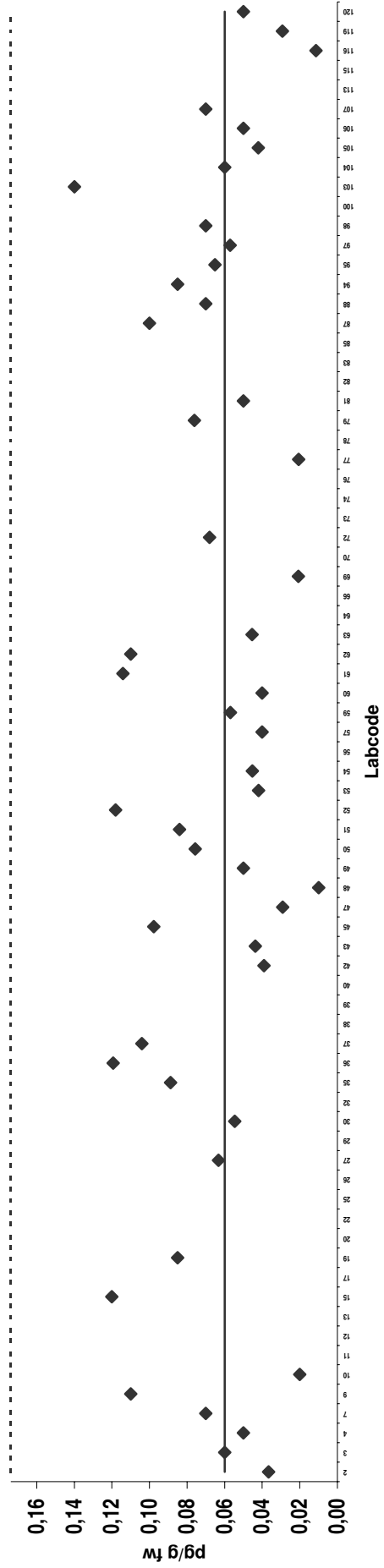
Cream Congener: PCB 81

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	0,037		66	0,21	Outlier
3	0,060		69	0,021	Outlier,ND
4	0,050		70	3,9	Outlier,ND
7	0,070		72	0,068	Outlier,ND
9	0,11		73	0,21	Outlier
10	0,020	ND	74	0,18	Outlier
11	0,25	Outlier	76	0,52	Outlier
12	0,85	Outlier	77	0,021	Outlier,ND
13	0,20	Outlier,ND	78	1,8	Outlier,ND
15	0,12		79	0,076	Outlier,ND
17	0,84	Outlier,ND	81	0,050	Outlier,ND
19	0,085	ND	82	0,39	Outlier
20	14	Outlier	83	0,36	Outlier,ND
22	0,39	Outlier	85	1,0	ND
25	1,0	Outlier,ND	87	0,10	ND
26	0,69	Outlier	88	0,070	ND
27	0,063		94	0,085	ND
29	0,82	Outlier	95	0,065	ND
30	0,055		97	0,057	ND
32	0,31	Outlier,ND	98	0,070	Outlier
35	0,089	ND	100	1,00	Outlier
36	0,12	ND	103	0,14	
37	0,10		104	0,060	
38	0,31	Outlier	105	0,042	
39	0,23	Outlier	106	0,050	
40	0,24	Outlier,ND	107	0,070	
42	0,039		113	0,56	Outlier,ND
43	0,044		115	10	Outlier,ND
45	0,098		116	0,011	ND
47	0,029		119	0,029	ND
48	0,010	ND	120	0,050	ND
49	0,050				
50	0,076				
51	0,084				
52	0,12				
53	0,042				
54	0,045				
56	2,0	Outlier,ND			
57	0,040				
59	0,057	ND			
60	0,040				
61	0,11				
62	0,11				
63	0,045	ND			
64	0,25	Outlier,ND			

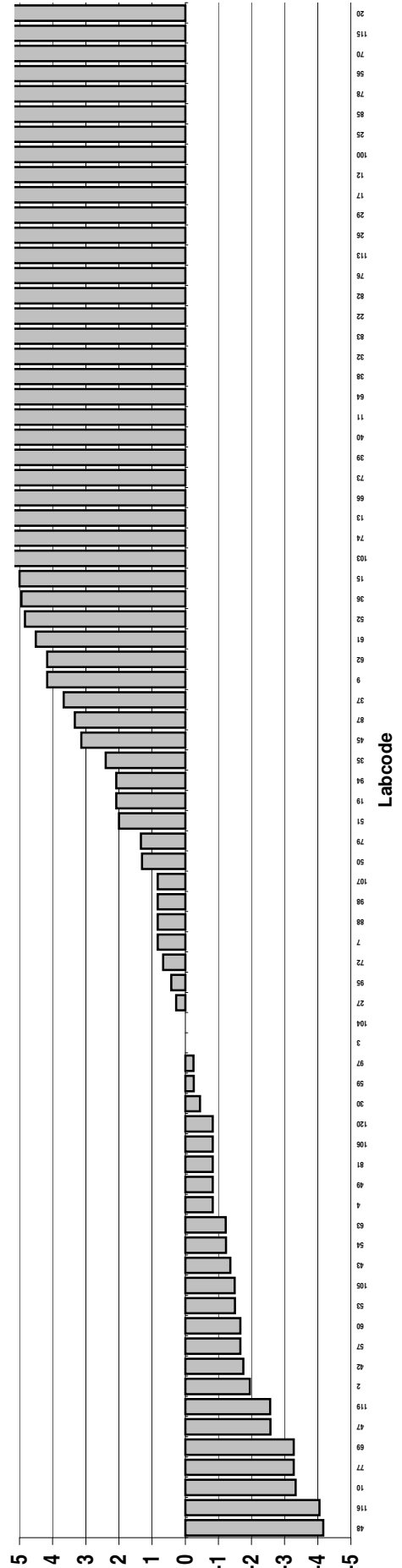
Consensus statistics

Consensus median, pg/g	0,060
Median all values pg/g	0,087
Consensus mean, pg/g	0,064
Standard deviation, pg/g	0,031
Relative standard deviation, %	49
No. of values reported	76
No. of values removed	27
No. of reported non-detects	26

PCB 81



Z-score: PCB 81



Cream

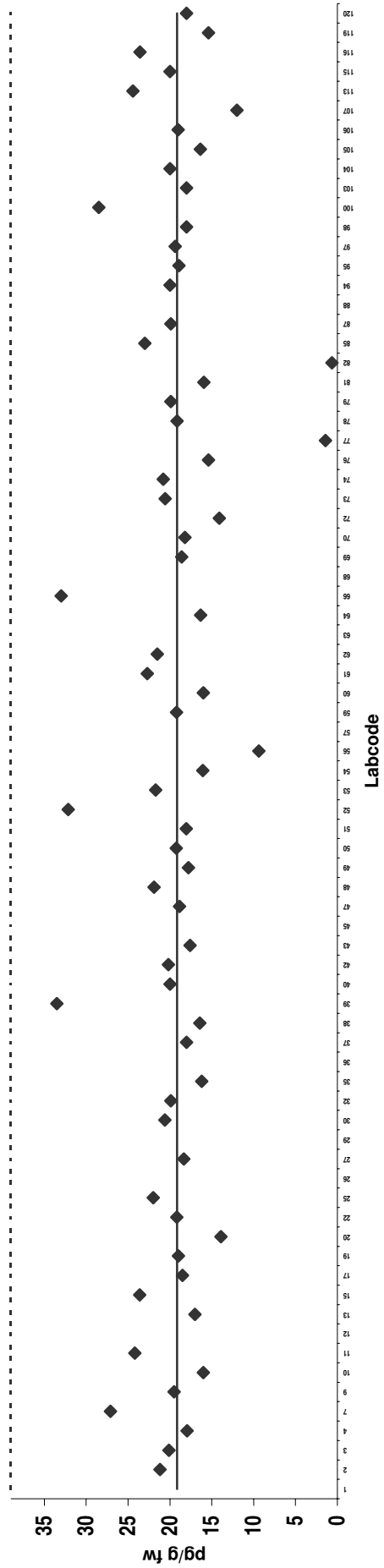
Congener: PCB 105

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	342		64	16	
2	21	Outlier	66	33	Outlier
3	20		68	64	
4	18		69	19	
7	27		70	18	
9	20		72	14	
10	16		73	21	
11	24		74	21	
12	46	Outlier	76	15	
13	17	ND	77	1,4	
15	24		78	19	
17	19		79	20	
19	19		81	16	
20	14		82	0,63	ND
22	19		85	23	
25	22		87	20	
26	40	Outlier	88	63	Outlier
27	18		94	20	
29	47	Outlier	95	19	
30	21		97	19	
32	20		98	18	
35	16		100	29	
36	167	Outlier	103	18	
37	18		104	20	
38	16		105	16	
39	33		106	19	
40	20		107	12	
42	20		113	24	
43	18		115	20	
45	57	Outlier	116	24	ND
47	19		119	15	
48	22		120	18	
49	18				
50	19				
51	18				
52	32				
53	22				
54	16				
56	9,4				
57	44	Outlier			
59	19				
60	16				
61	23				
62	22				
63	215	Outlier			

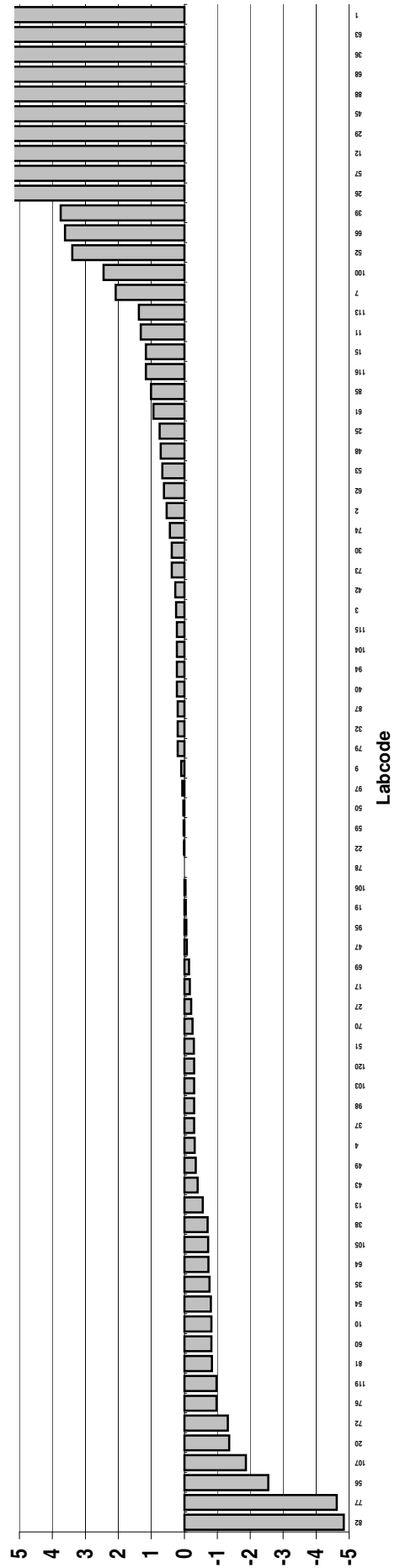
Consensus statistics

Consensus median, pg/g	19
Median all values pg/g	20
Consensus mean, pg/g	19
Standard deviation, pg/g	5,3
Relative standard deviation, %	28
No. of values reported	77
No. of values removed	10
No. of reported non-detects	3

PCB 105



Z-score: PCB 105



Cream

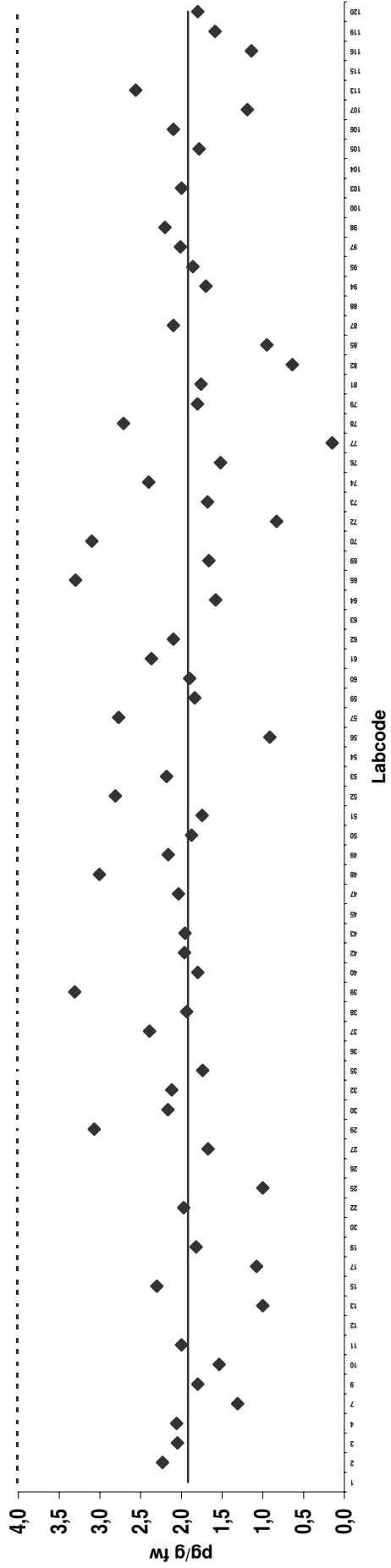
Congener: PCB 114

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	14		64	1,6	
2	2,2	Outlier	66	3,3	
3	2,1		69	1,7	
4	2,1		70	3,1	ND
7	1,3		72	0,83	
9	1,8		73	1,7	ND
10	1,5		74	2,4	
11	2,0		76	1,5	
12	6,9	Outlier	77	0,15	ND
13		ND	78	2,7	ND
15	2,3		79	1,8	
17	1,1		81	1,8	
19	1,8		82	0,64	ND
20	6,5		85	0,95	
22	2,0	Outlier,ND	87	2,1	
25		ND	88	7,3	Outlier
26	5,5	Outlier	94	1,7	
27	1,7		95	1,9	
29	3,1		97	2,0	
30	2,2		98	2,2	
32	2,1		100	7,4	Outlier,ND
35	1,7		103	2,0	
36	10	Outlier	104	10	Outlier,ND
37	2,4		105	1,8	
38	1,9	ND	106	2,1	
39	3,3		107	1,2	
40	1,8		113	2,6	
42	2,0		115	10	
43	2,0		116	1,1	
45	4,3	Outlier	119	1,6	
47	2,0		120	1,8	
48	3,0				
49	2,2				
50	1,9				
51	1,7				
52	2,8				
53	2,2				
54	5,7	Outlier,ND			
56	0,92				
57	2,8				
59	1,8				
60	1,9				
61	2,4				
62	2,1				
63	9,0	Outlier			

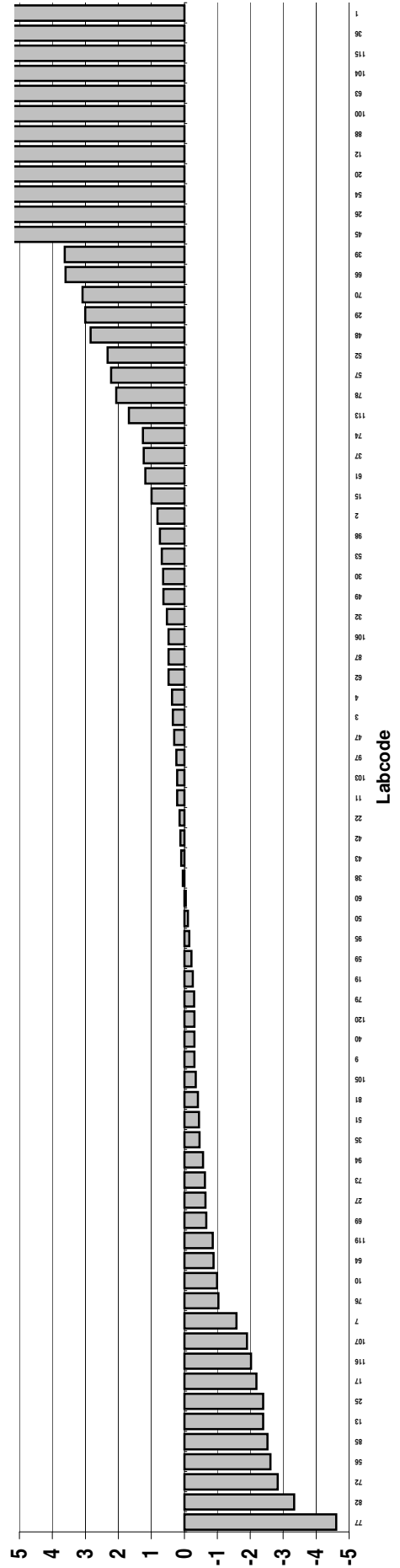
Consensus statistics

Consensus median, pg/g	1,9
Median all values pg/g	2,0
Consensus mean, pg/g	1,9
Standard deviation, pg/g	0,62
Relative standard deviation, %	33
No. of values reported	76
No. of values removed	12
No. of reported non-detects	13

PCB 114



Z-score: PCB 114



Cream

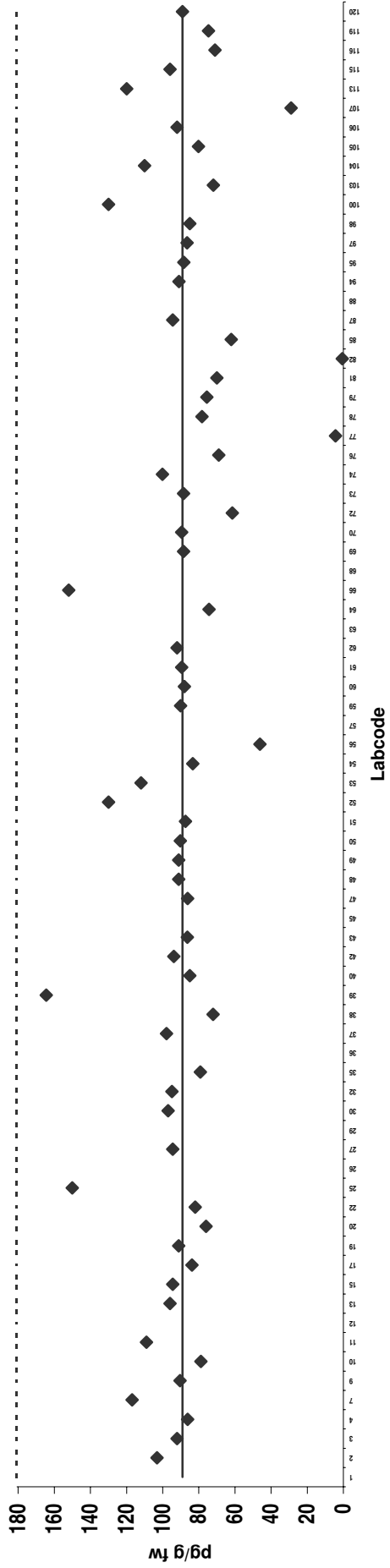
Congener: PCB 118

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	2112		64	74	
2	103	Outlier	66	152	Outlier
3	92		68	424	
4	86		69	88	
7	117		70	90	
9	90		72	61	
10	79		73	88	
11	109		74	100	
12	241	Outlier	76	69	
13	96	ND	77	4,4	
15	95		78	78	
17	84		79	76	
19	91		81	70	
20	76		82	0,60	ND
22	82		85	62	
25	150		87	95	
26	212	Outlier	88	195	Outlier
27	94		94	91	
29	219	Outlier	95	88	
30	97		97	86	
32	95		98	85	
35	79		100	130	
36	719	Outlier	103	72	
37	98		104	110	
38	72		105	80	
39	164		106	92	
40	85		107	29	
42	94		113	120	
43	86		115	96	
45	278	Outlier	116	71	
47	86		119	75	
48	91		120	89	
49	91				
50	90				
51	87				
52	130				
53	112				
54	83				
56	46				
57	357	Outlier			
59	90				
60	88				
61	89				
62	92				
63	1075	Outlier			

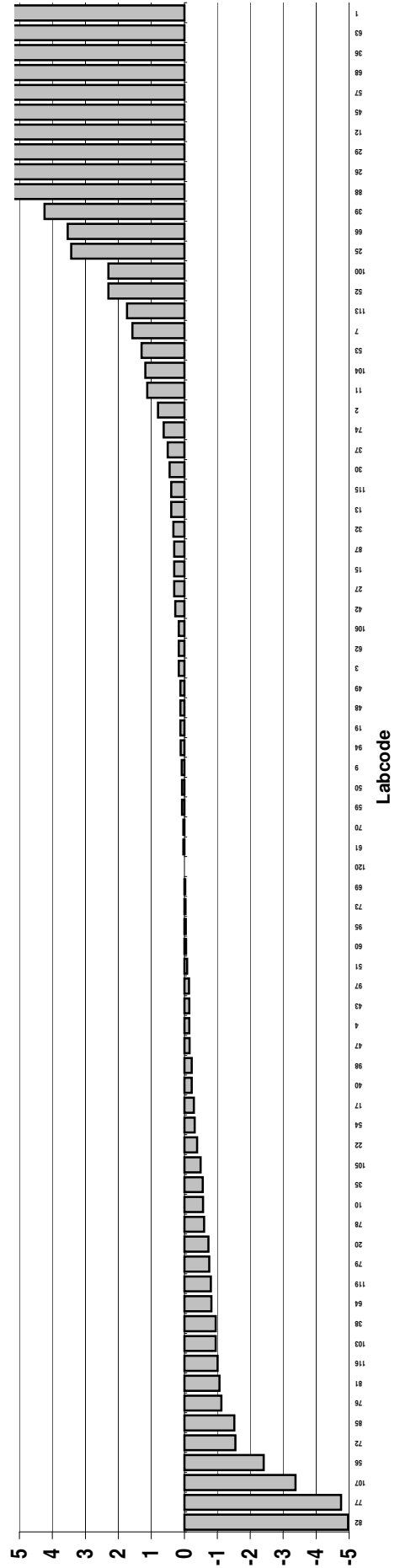
Consensus statistics

Consensus median, pg/g	89
Median all values pg/g	90
Consensus mean, pg/g	88
Standard deviation, pg/g	26
Relative standard deviation, %	30
No. of values reported	77
No. of values removed	10
No. of reported non-detects	2

PCB 118



Z-score: PCB 118



Cream

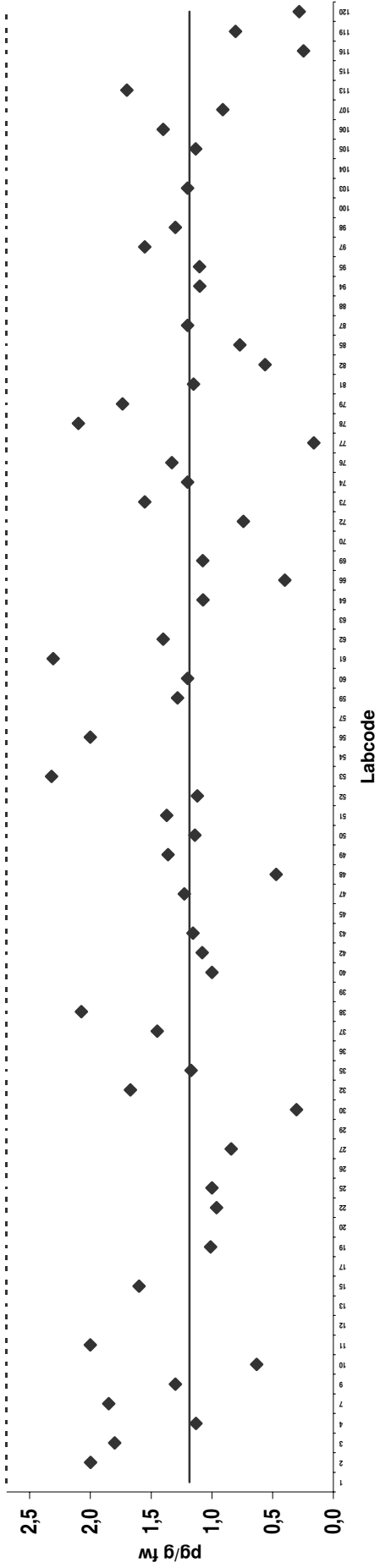
Congener: PCB 123

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	19		64	1,1	
2	2,0	Outlier	66	0,40	ND
3	1,8		69	1,1	
4	1,1		70	3,1	Outlier,ND
7	1,9		72	0,74	
9	1,3		73	1,6	ND
10	0,63		74	1,2	
11	2,0		76	1,3	
12	2,9	ND	77	0,16	ND
13	5,0	Outlier,ND	78	2,1	ND
15	1,6		79	1,7	
17	3,2	Outlier	81	1,2	
19	1,0		82	0,56	ND
20	6,5	Outlier,ND	85	0,77	ND
22	0,96		87	1,2	
25	1,0	ND	88	2,9	Outlier
26	2,9	Outlier	94	1,1	
27	0,84		95	1,1	
29	3,1	Outlier	97	1,6	
30	0,30	ND	98	1,3	
32	1,7		100	3,0	Outlier
35	1,2		103	1,2	
36	54	Outlier	104	10	Outlier,ND
37	1,5		105	1,1	
38	2,1	ND	106	1,4	
39	7,2	Outlier	107	0,91	
40	1,0		113	1,7	
42	1,1		115	10	Outlier,ND
43	1,2		116	0,25	ND
45	3,0	Outlier	119	0,81	
47	1,2		120	0,28	
48	0,47				
49	1,4				
50	1,1				
51	1,4				
52	1,1				
53	2,3				
54	5,6	Outlier,ND			
56	2,0	ND			
57	5,0	Outlier			
59	1,3				
60	1,2				
61	2,3				
62	1,4				
63	1065	Outlier			

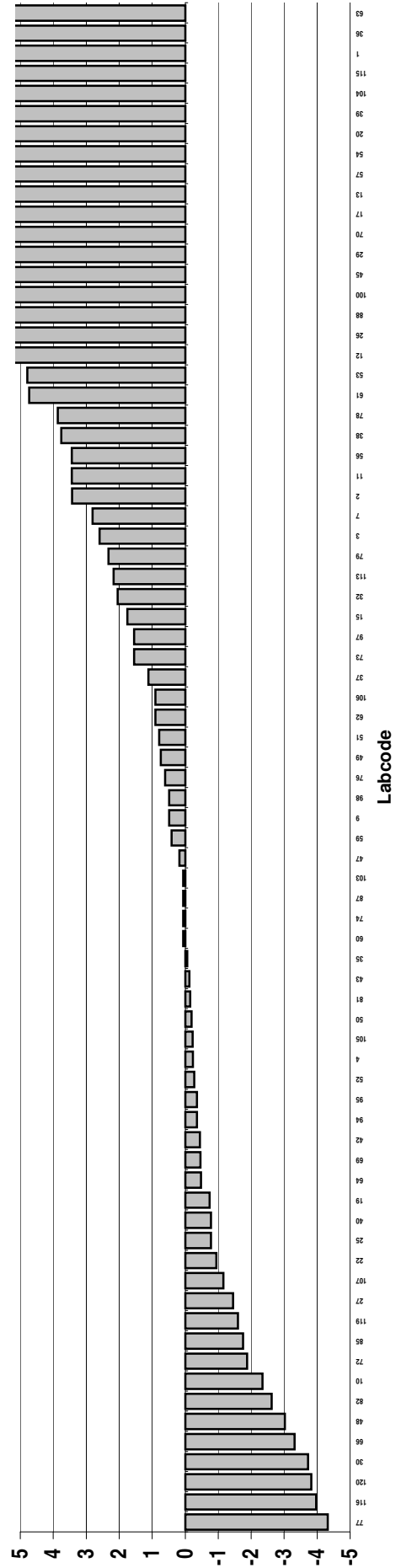
Consensus statistics

Consensus median, pg/g	1,2
Median all values pg/g	1,3
Consensus mean, pg/g	1,2
Standard deviation, pg/g	0,51
Relative standard deviation, %	41
No. of values reported	76
No. of values removed	18
No. of reported non-detects	18

PCB 123



Z-score: PCB 123



Cream

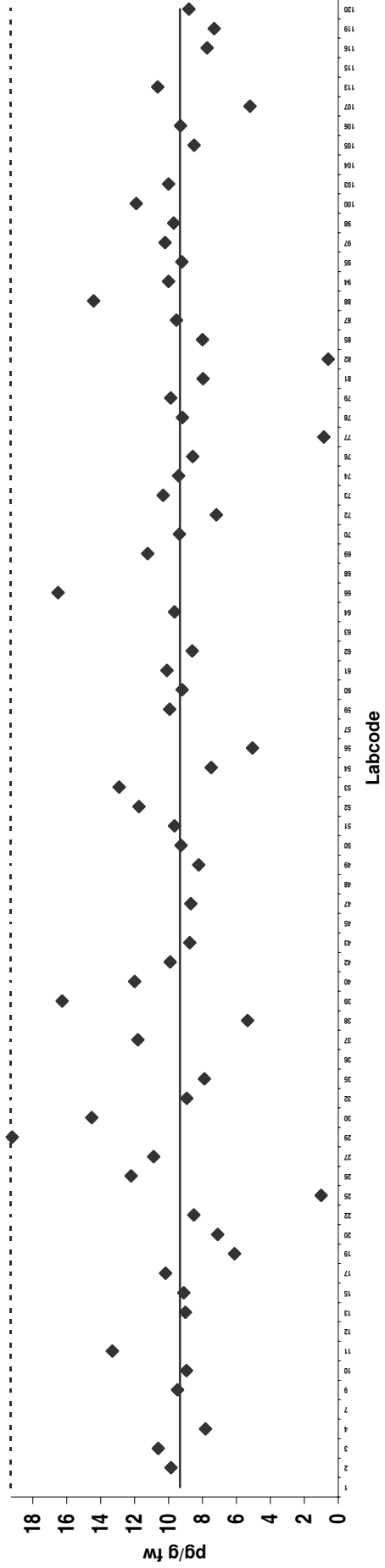
Congener: PCB 156

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	242		64	10	
2	10	Outlier	66	17	
3	11		68	184	Outlier
4	7,8		69	11	
7	25	Outlier	70	9,4	
9	9,5		72	7,2	
10	8,9		73	10	
11	13		74	9,4	
12	20	Outlier	76	8,6	
13	9,0	ND	77	0,85	
15	9,1		78	9,2	
17	10		79	10	
19	6,1		81	8,0	
20	7,1		82	0,59	ND
22	8,5		85	8,0	
25	1,0	ND	87	10	
26	12		88	14	
27	11		94	10	
29	19		95	9,2	
30	15		97	10	
32	8,9		98	10	
35	7,9		100	12	
36	21	Outlier	103	10	Outlier,ND
37	12		104	20	
38	5,3		105	8,5	
39	16		106	9,3	
40	12		107	5,2	
42	10		113	11	
43	8,7		115	20	Outlier,ND
45	34	Outlier	116	7,7	
47	8,7	Outlier	119	7,3	
48	21	Outlier	120	8,8	
49	8,2				
50	9,3				
51	10				
52	12				
53	13	ND			
54	7,5				
56	5,1	Outlier			
57	63				
59	10				
60	9,2				
61	10				
62	8,6				
63	147	Outlier			

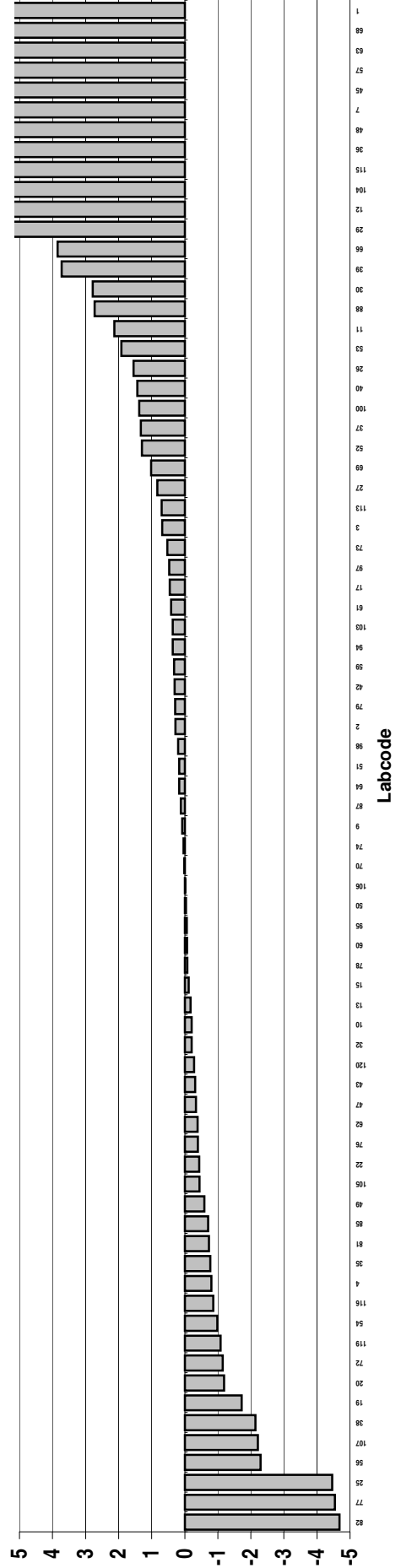
Consensus statistics

Consensus median, pg/g	9,3
Median all values pg/g	9,6
Consensus mean, pg/g	9,4
Standard deviation, pg/g	3,1
Relative standard deviation, %	33
No. of values reported	77
No. of values removed	11
No. of reported non-detects	6

PCB 156



Z-score: PCB 156



Cream

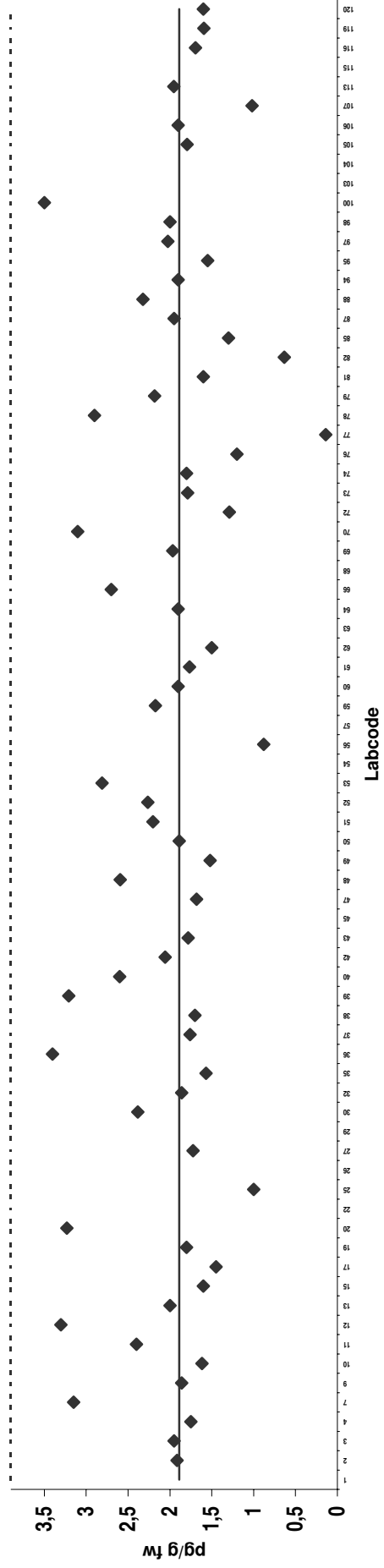
Congener: PCB 157

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	39		64	1,9	
2	1,9	Outlier	66	2,7	
3	2,0		68	185	Outlier
4	1,8		69	2,0	
7	3,2		70	3,1	ND
9	1,9		72	1,3	
10	1,6		73	1,8	
11	2,4		74	1,8	
12	3,3		76	1,2	
13	2,0		77	0,14	ND
15	1,6	ND	78	2,9	ND
17	1,5		79	2,2	
19	1,8		81	1,6	
20	3,2		82	0,63	ND
22	5,0		85	1,3	
25	1,0	Outlier	87	2,0	
26	3,9	Outlier	88	2,3	
27	1,7		94	1,9	
29	8,0	Outlier	95	1,5	
30	2,4		97	2,0	
32	1,9		98	2,0	
35	1,6		100	3,5	ND
36	3,4		103	4,8	Outlier
37	1,8		104	20	Outlier,ND
38	1,7	ND	105	1,8	
39	3,2		106	1,9	
40	2,6		107	1,0	
42	2,1		113	2,0	
43	1,8		115	20	Outlier,ND
45	5,8	Outlier	116	1,7	
47	1,7		119	1,6	
48	2,6		120	1,6	
49	1,5				
50	1,9				
51	2,2				
52	2,3				
53	2,8				
54	7,5	Outlier,ND			
56	0,88				
57	10	Outlier			
59	2,2				
60	1,9				
61	1,8				
62	1,5				
63	17	Outlier			

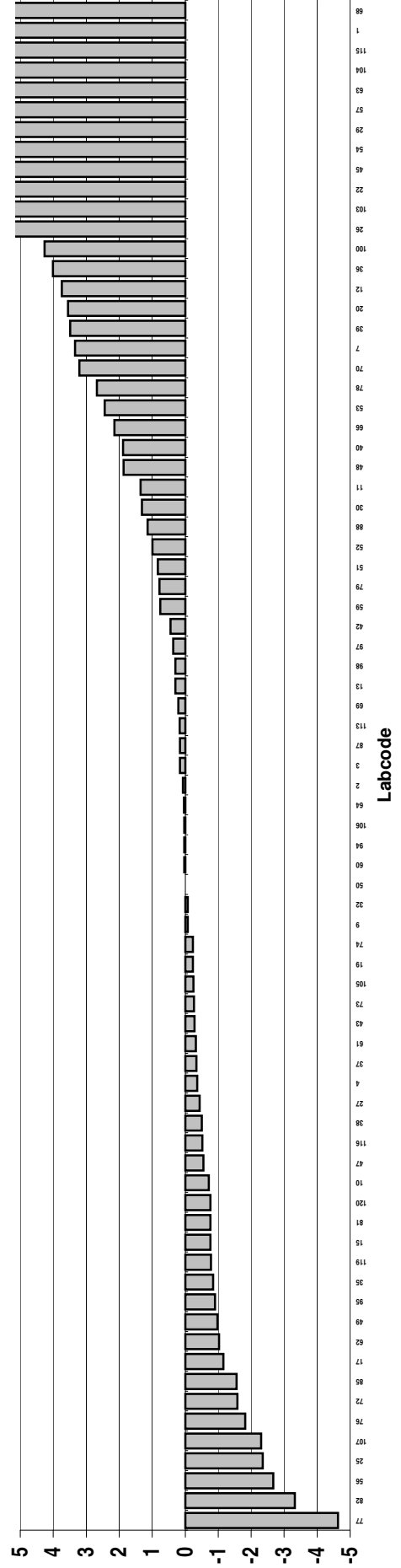
Consensus statistics

Consensus median, pg/g	1,9
Median all values pg/g	2,0
Consensus mean, pg/g	2,0
Standard deviation, pg/g	0,66
Relative standard deviation, %	33
No. of values reported	77
No. of values removed	12
No. of reported non-detects	12

PCB 157



Z-score: PCB 157



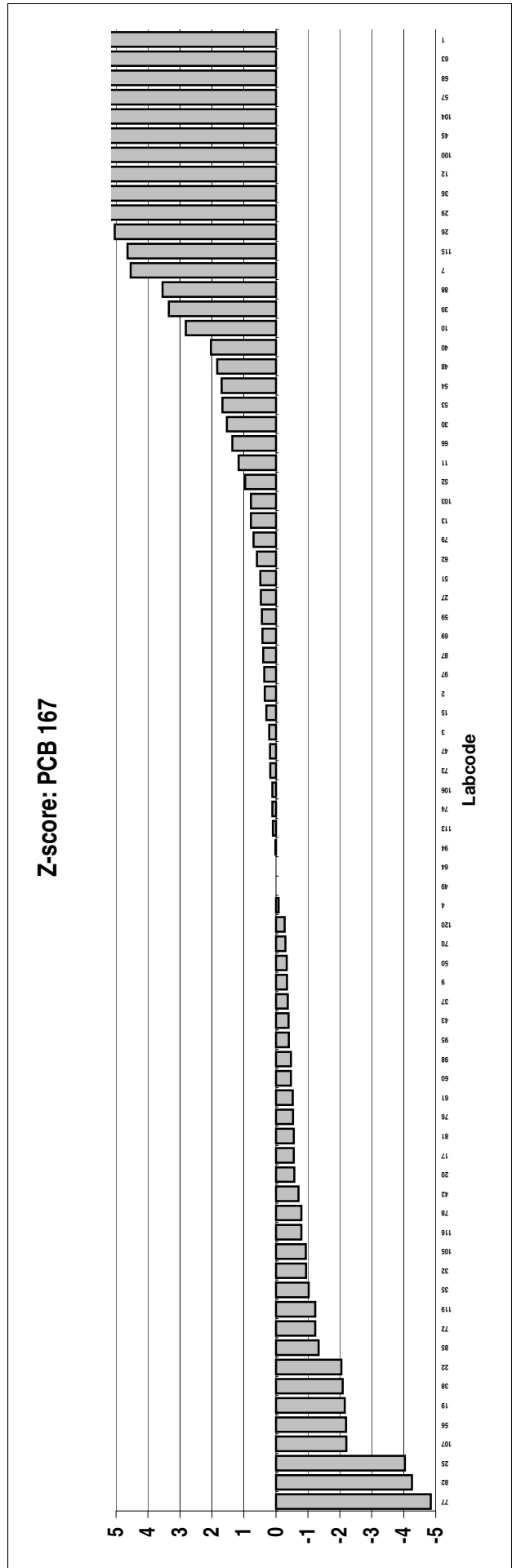
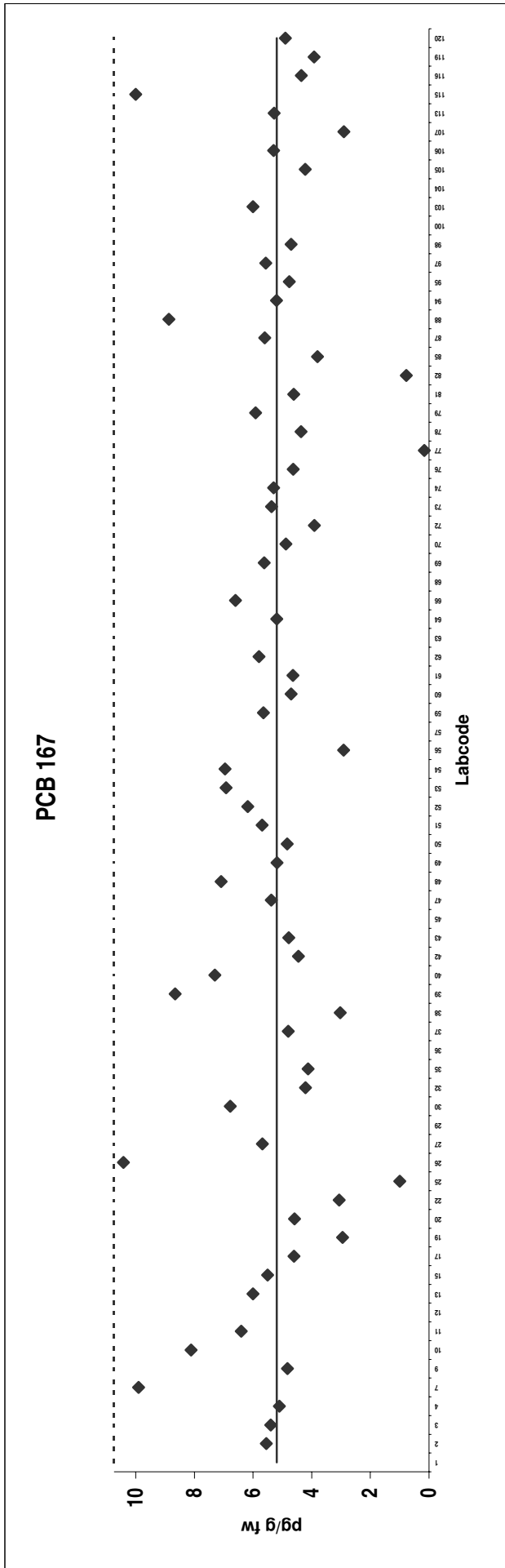
Cream

Congener: PCB 167

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	180		64	5,2	
2	5,5	Outlier	66	6,6	Outlier
3	5,4		68	87	
4	5,1		69	5,6	
7	10		70	4,9	
9	4,8		72	3,9	
10	8,1		73	5,4	
11	6,4		74	5,3	
12	14		76	4,6	
13	6,0	Outlier	77	0,16	ND
15	5,5	ND	78	4,4	
17	4,6		79	5,9	
19	3,0		81	4,6	
20	4,6		82	0,77	ND
22	3,1		85	3,8	
25	1,0	ND	87	5,6	
26	10		88	8,9	
27	5,7		94	5,2	
29	11	Outlier	95	4,8	
30	6,8		97	5,6	
32	4,2		98	4,7	
35	4,1		100	22	Outlier,ND
36	12		103	6,0	
37	4,8	Outlier	104	30	Outlier,ND
38	3,0		105	4,2	
39	8,7		106	5,3	
40	7,3		107	2,9	
42	4,5		113	5,3	
43	4,8		115	10	ND
45	24	Outlier	116	4,4	
47	5,4		119	3,9	
48	7,1		120	4,9	
49	5,2				
50	4,8				
51	5,7				
52	6,2				
53	6,9	ND			
54	7,0				
56	2,9	Outlier			
57	56				
59	5,6				
60	4,7				
61	4,6				
62	5,8				
63	96	Outlier			

Consensus statistics

Consensus median, pg/g	5,2
Median all values pg/g	5,4
Consensus mean, pg/g	5,3
Standard deviation, pg/g	1,9
Relative standard deviation, %	36
No. of values reported	77
No. of values removed	10
No. of reported non-detects	8



Cream

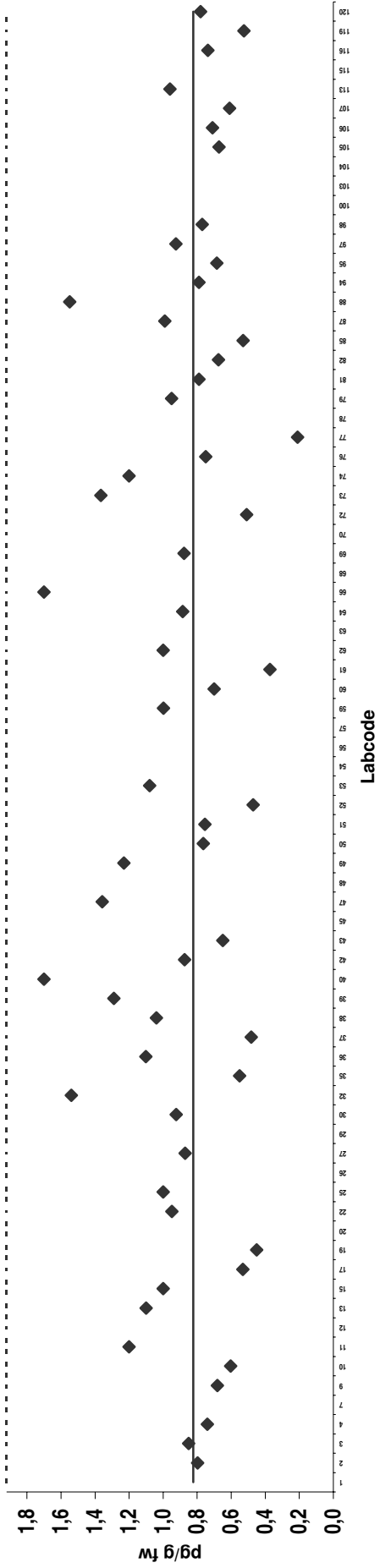
Congener: PCB 189

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	18		64	0,88	
2	0,80	Outlier	66	1,7	Outlier
3	0,85		68	26	
4	0,74		69	0,88	
7	2,9	Outlier	70	3,1	Outlier,ND
9	0,68		72	0,51	
10	0,60		73	1,4	
11	1,2		74	1,2	
12	2,0	Outlier	76	0,75	
13	1,1		77	0,21	ND
15	1,0	ND	78	2,3	Outlier,ND
17	0,53		79	0,95	
19	0,45		81	0,79	
20	3,2	Outlier,ND	82	0,68	
22	0,95		85	0,53	ND
25	1,0	ND	87	0,99	
26	3,3	Outlier	88	1,5	
27	0,87		94	0,79	
29	3,3	Outlier	95	0,68	
30	0,92		97	0,93	
32	1,5	ND	98	0,77	
35	0,55		100	2,1	Outlier,ND
36	1,1		103	4,0	Outlier
37	0,48		104	30	Outlier,ND
38	1,0	ND	105	0,67	
39	1,3		106	0,71	ND
40	1,7		107	0,61	
42	0,87		113	0,96	
43	0,65		115	10	
45	3,7	Outlier	116	0,74	Outlier,ND
47	1,4		119	0,53	
48	2,0	Outlier	120	0,78	
49	1,2				
50	0,76				
51	0,75				
52	0,47				
53	1,1				
54	9,4	Outlier,ND			
56	2,0	Outlier,ND			
57	9,3	Outlier			
59	1,0				
60	0,70				
61	0,37				
62	1,0	ND			
63	1,5	Outlier			

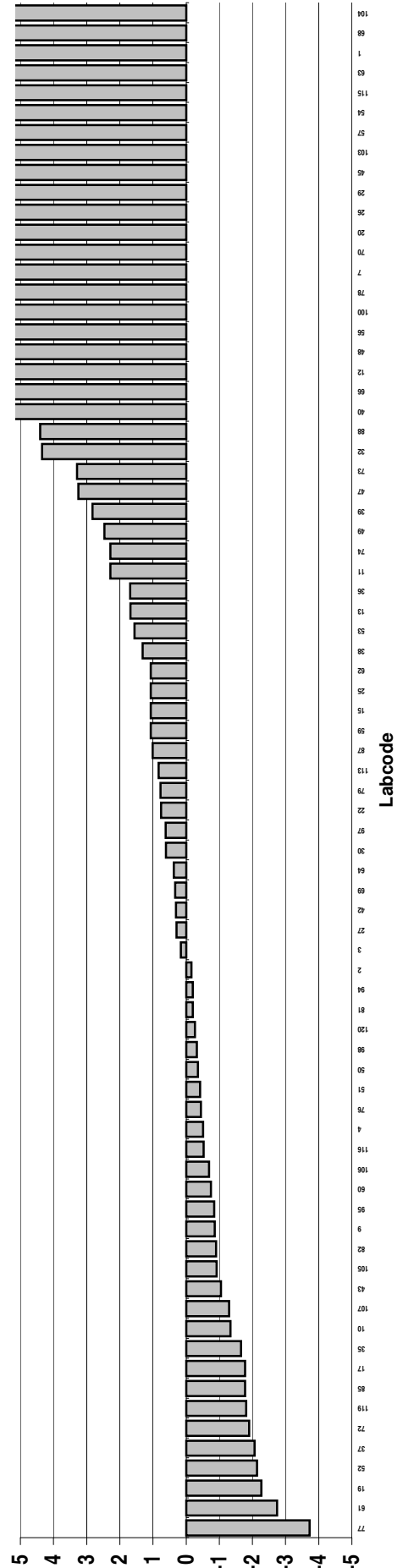
Consensus statistics

Consensus median, pg/g	0,82
Median all values pg/g	0,96
Consensus mean, pg/g	0,88
Standard deviation, pg/g	0,32
Relative standard deviation, %	37
No. of values reported	77
No. of values removed	19
No. of reported non-detects	16

PCB 189



Z-score: PCB 189



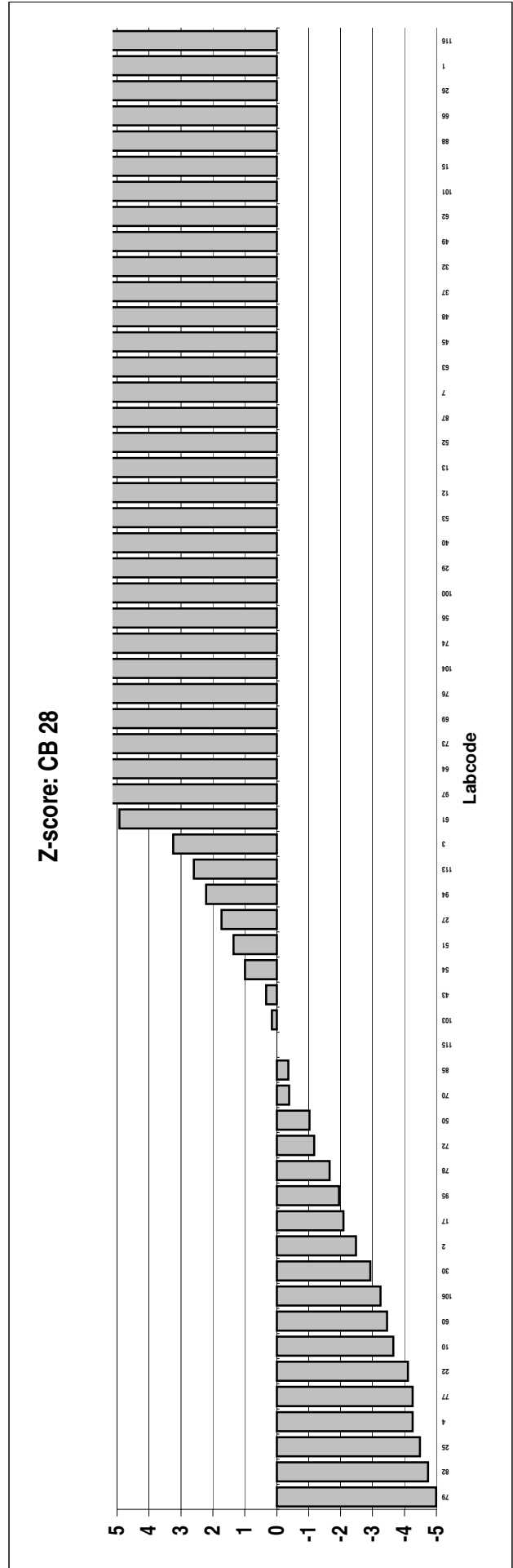
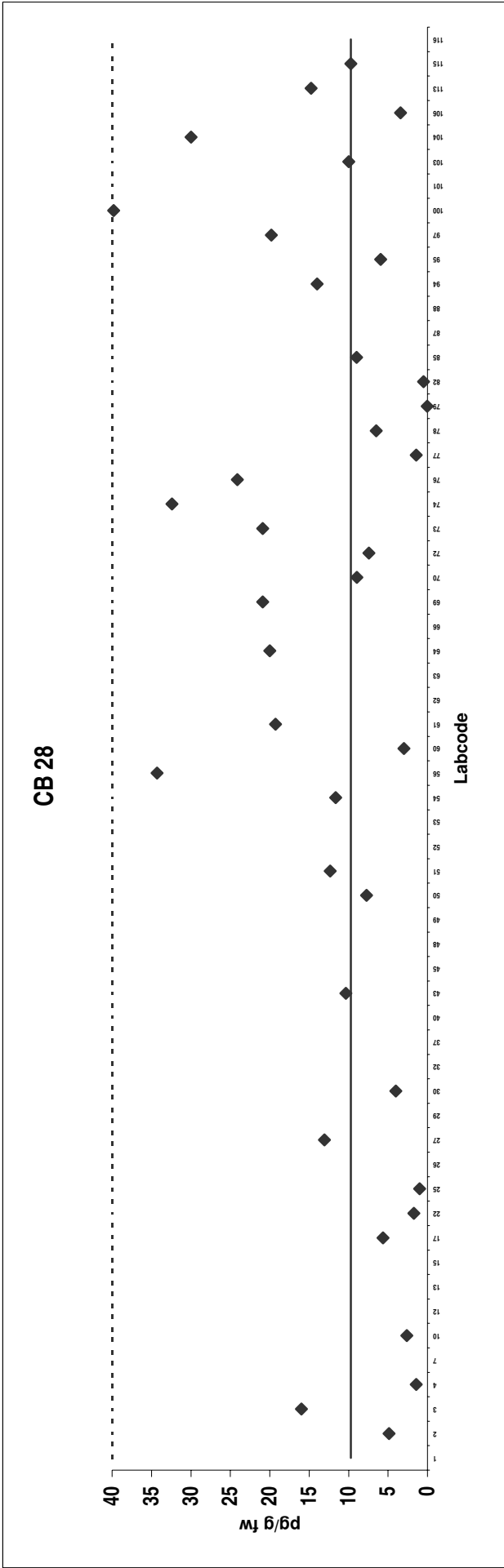
Cream

Congener: CB 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	2834	Outlier	85	9,0	Outlier
2	4,9		87	51	Outlier,ND
3	16		88	100	Outlier,ND
4	1,4		94	14	
7	62	Outlier	95	5,9	
10	2,6		97	20	
12	45	Outlier	100	40	
13	47	Outlier,ND	101	90	Outlier
15	96	Outlier	103	10	
17	5,6		104	30	
22	1,7		106	3,4	
25	1,0		113	15	
26	339	Outlier	115	10	
27	13	Outlier	116	7890	Outlier
29	41	Outlier			
30	4,0				
32	76	Outlier			
37	73	Outlier,ND			
40	44	Outlier			
43	10				
45	70	Outlier			
48	73	Outlier			
49	81	Outlier			
50	7,7				
51	12				
52	50	Outlier			
53	45	Outlier,ND			
54	12				
56	34				
60	3,0				
61	19				
62	86	Outlier			
63	70	Outlier			
64	20	ND			
66	132	Outlier			
69	21				
70	9,0				
72	7,4				
73	21				
74	32				
76	24				
77	1,4				
78	6,5				
79	0,021				
82	0,51	ND			

Consensus statistics

Consensus median, pg/g	9,7
Median all values pg/g	20
Consensus mean, pg/g	12
Standard deviation, pg/g	10
Relative standard deviation, %	85
No. of values reported	59
No. of values removed	22
No. of reported non-detects	6

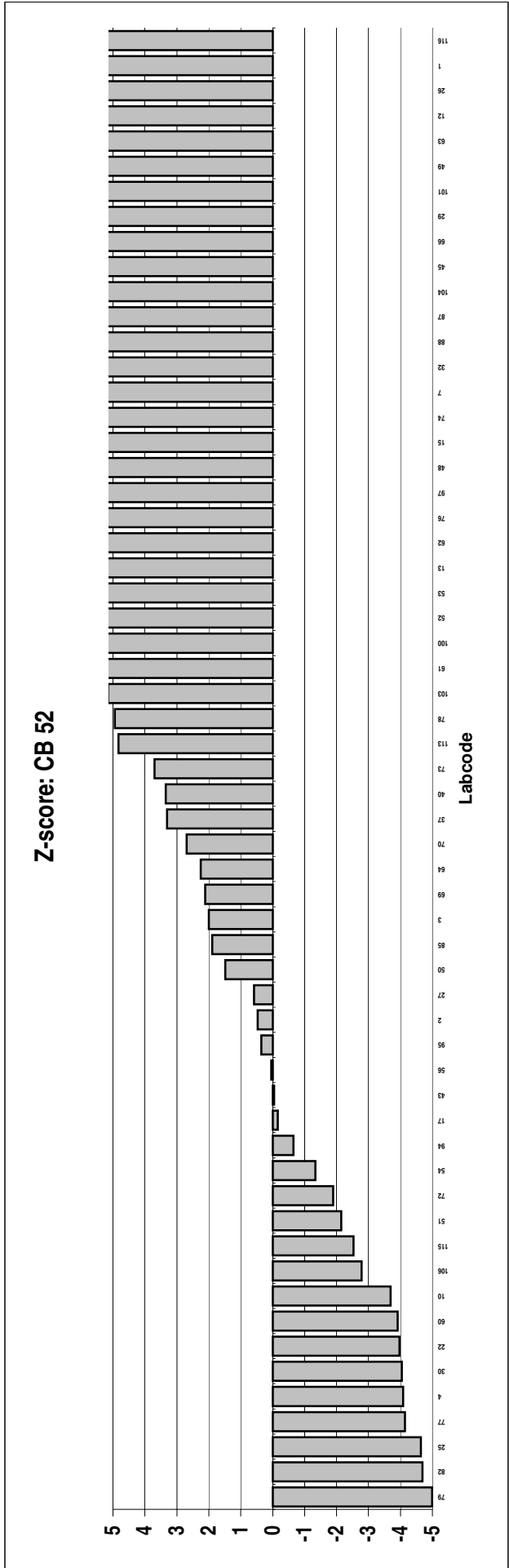
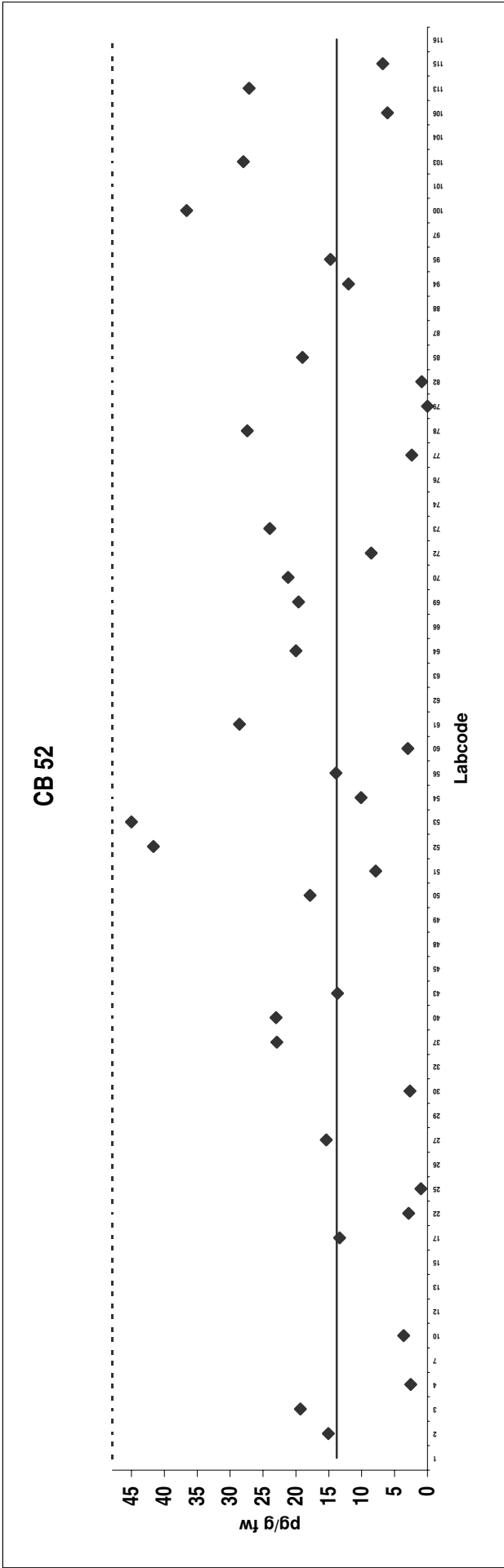


Cream
Congener: CB 52

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	4610	Outlier	85	19	Outlier
2	15		87	100	Outlier,ND
3	19		88	100	Outlier,ND
4	2,5		94	12	
7	69	Outlier	95	15	
10	3,6		97	51	Outlier
12	308	Outlier	100	37	
13	49	Outlier,ND	101	152	Outlier
15	55	Outlier	103	28	
17	13		104	110	Outlier
22	2,8		106	6,1	
25	1,0		113	27	
26	908	Outlier	115	6,8	
27	15		116	6230	Outlier
29	145	Outlier			
30	2,6				
32	78	Outlier			
37	23	ND			
40	23				
43	14				
45	126	Outlier			
48	51	Outlier			
49	238	Outlier			
50	18				
51	7,9				
52	42				
53	45	ND			
54	10				
56	14				
60	3,0				
61	29				
62	49	Outlier			
63	275	Outlier			
64	20	ND			
66	127	Outlier			
69	20				
70	21				
72	8,6				
73	24	ND			
74	67	Outlier			
76	50	Outlier			
77	2,4				
78	27				
79	0,018				
82	0,86	ND			

Consensus statistics

Consensus median, pg/g	14
Median all values pg/g	24
Consensus mean, pg/g	16
Standard deviation, pg/g	12
Relative standard deviation, %	74
No. of values reported	59
No. of values removed	22
No. of reported non-detects	7



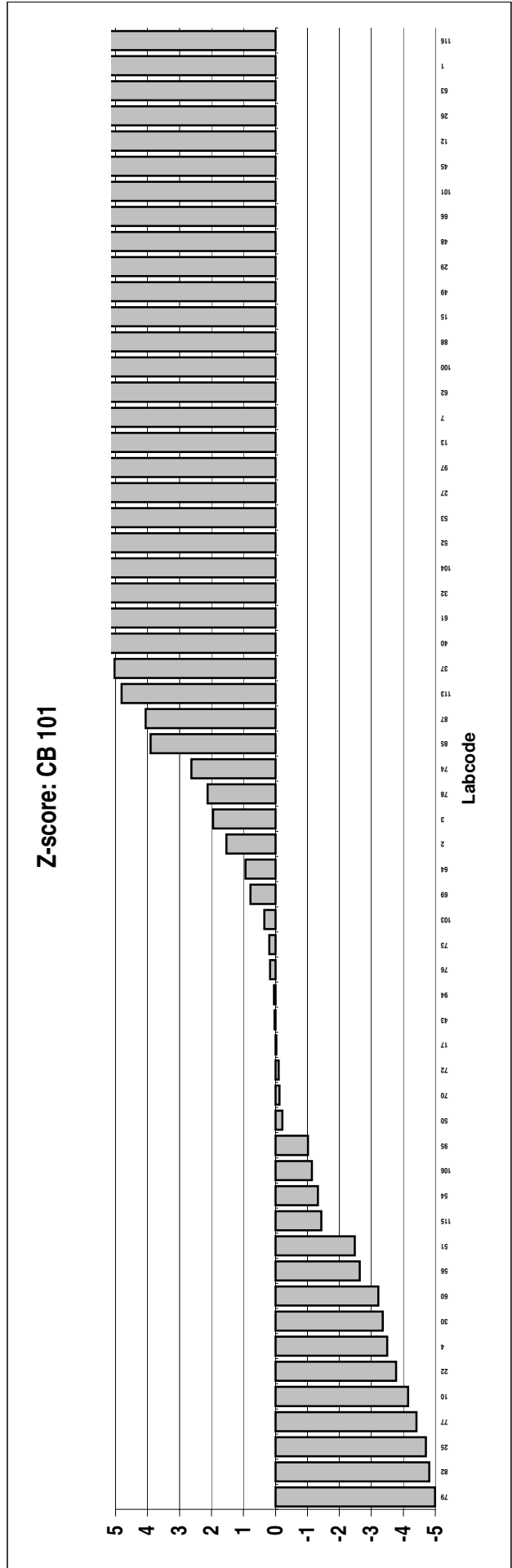
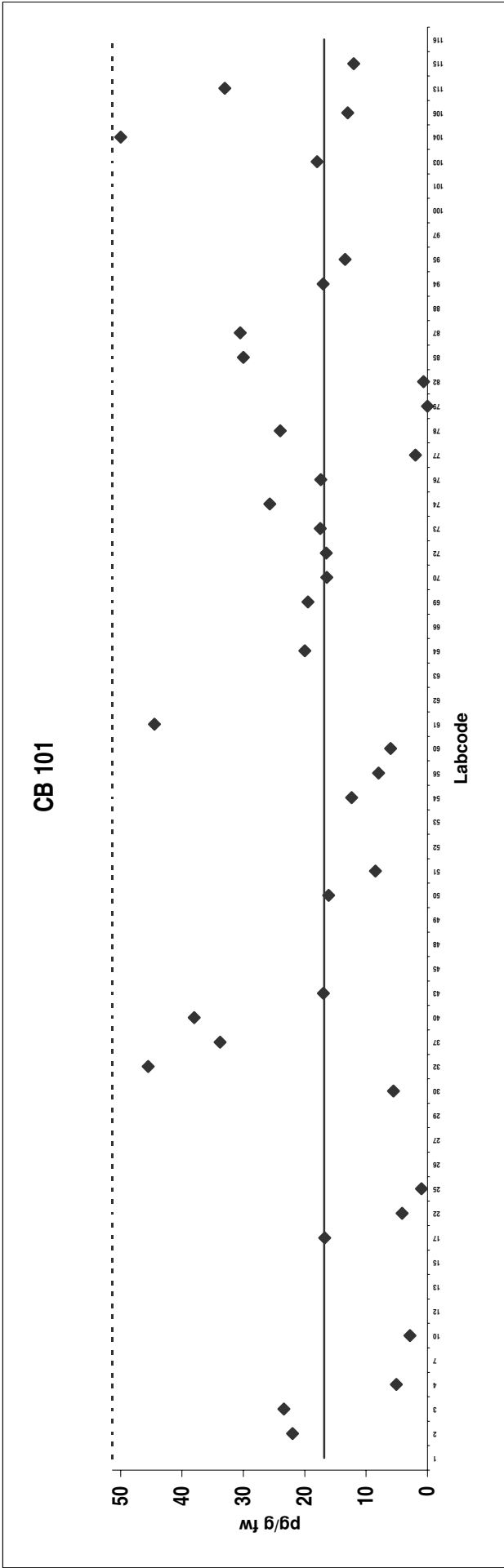
Cream

Congener: CB 101

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1326	Outlier	85	30	
2	22		87	31	Outlier,ND
3	23		88	100	
4	5,1		94	17	
7	88	Outlier	95	13	
10	2,9		97	64	Outlier
12	320	Outlier	100	96	Outlier
13	81	Outlier,ND	101	234	Outlier
15	101	Outlier	103	18	Outlier
17	17		104	50	
22	4,1		106	13	
25	1,0		113	33	
26	353	Outlier	115	12	ND
27	63	Outlier	116	2500	Outlier
29	154	Outlier			
30	5,5				
32	46				
37	34	ND			
40	38				
43	17				
45	272	Outlier			
48	161	Outlier			
49	133	Outlier			
50	16				
51	8,5				
52	56	Outlier			
53	62	Outlier			
54	12				
56	8,0				
60	6,0				
61	44				
62	94	Outlier			
63	763	Outlier			
64	20	ND			
66	173	Outlier			
69	19				
70	16				
72	17				
73	17				
74	26				
76	17				
77	2,0				
78	24				
79	0,019				
82	0,65	ND			

Consensus statistics

Consensus median, pg/g	17
Median all values pg/g	26
Consensus mean, pg/g	18
Standard deviation, pg/g	13
Relative standard deviation, %	71
No. of values reported	59
No. of values removed	21
No. of reported non-detects	6

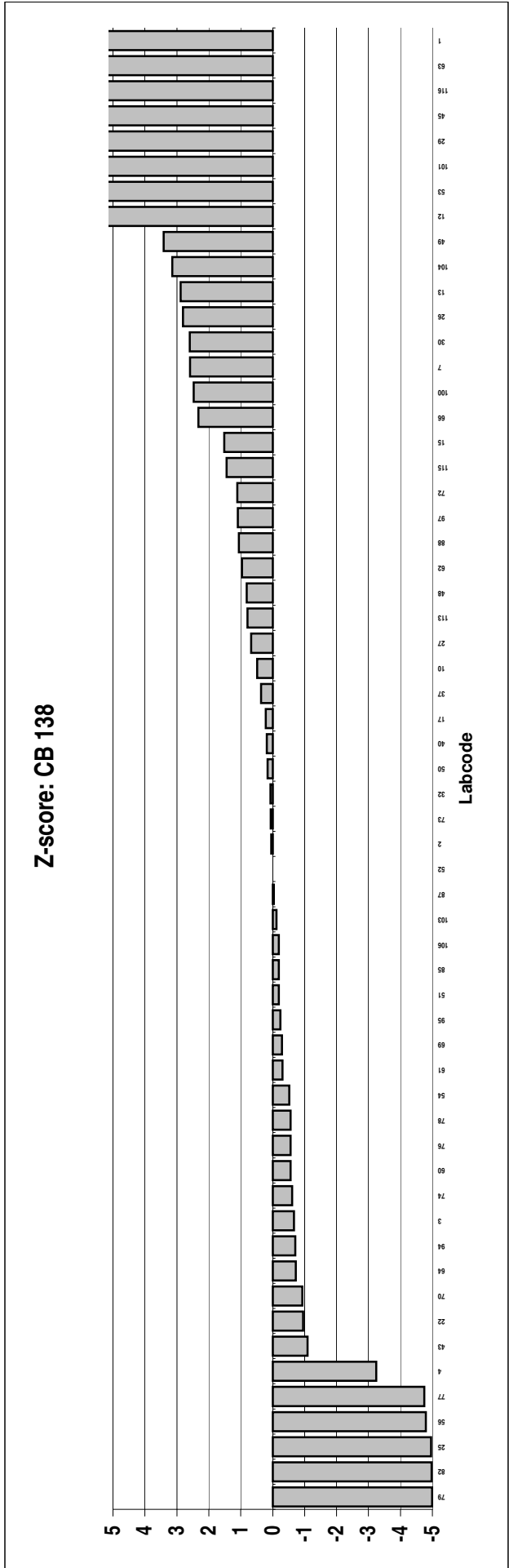
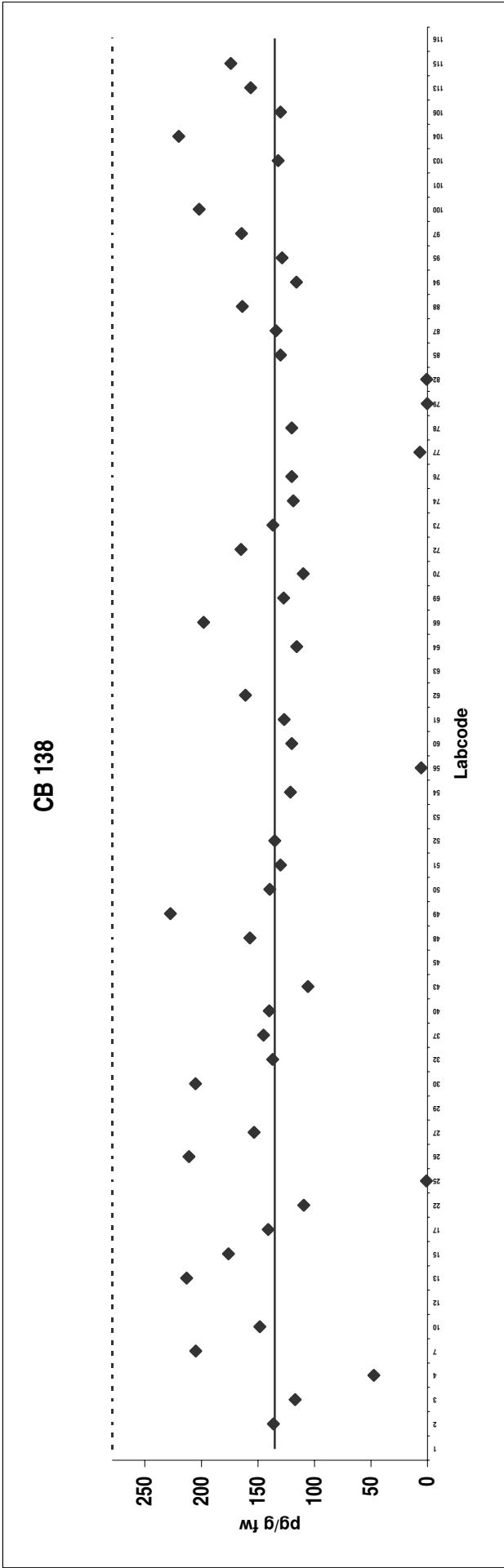


Cream
Congener: CB 138

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	5579	Outlier	85	130	
2	136		87	134	
3	117		88	164	
4	48		94	116	
7	205		95	129	
10	148		97	165	
12	287	Outlier	100	202	
13	213	ND	101	358	Outlier
15	176		103	132	
17	141		104	220	
22	109		106	130	
25	1,0		113	156	
26	211		115	174	
27	153		116	2060	Outlier
29	360	Outlier			
30	205				
32	137				
37	145				
40	140				
43	106				
45	514	Outlier			
48	157				
49	227				
50	140				
51	130				
52	135				
53	290	Outlier			
54	121				
56	5,5				
60	120				
61	127				
62	161				
63	2911	Outlier			
64	116				
66	198				
69	127				
70	110				
72	165				
73	137				
74	119				
76	120				
77	6,8				
78	120				
79	0,14				
82	0,76	ND			

Consensus statistics

Consensus median, pg/g	135
Median all values pg/g	140
Consensus mean, pg/g	133
Standard deviation, pg/g	55
Relative standard deviation, %	42
No. of values reported	59
No. of values removed	8
No. of reported non-detects	2



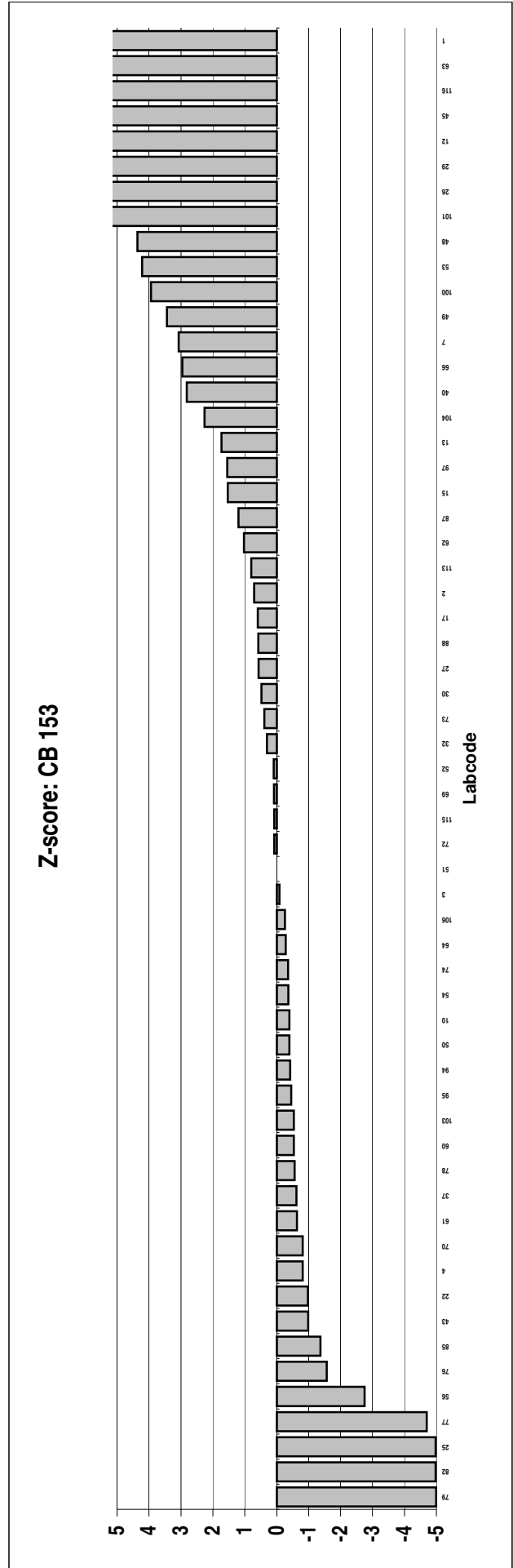
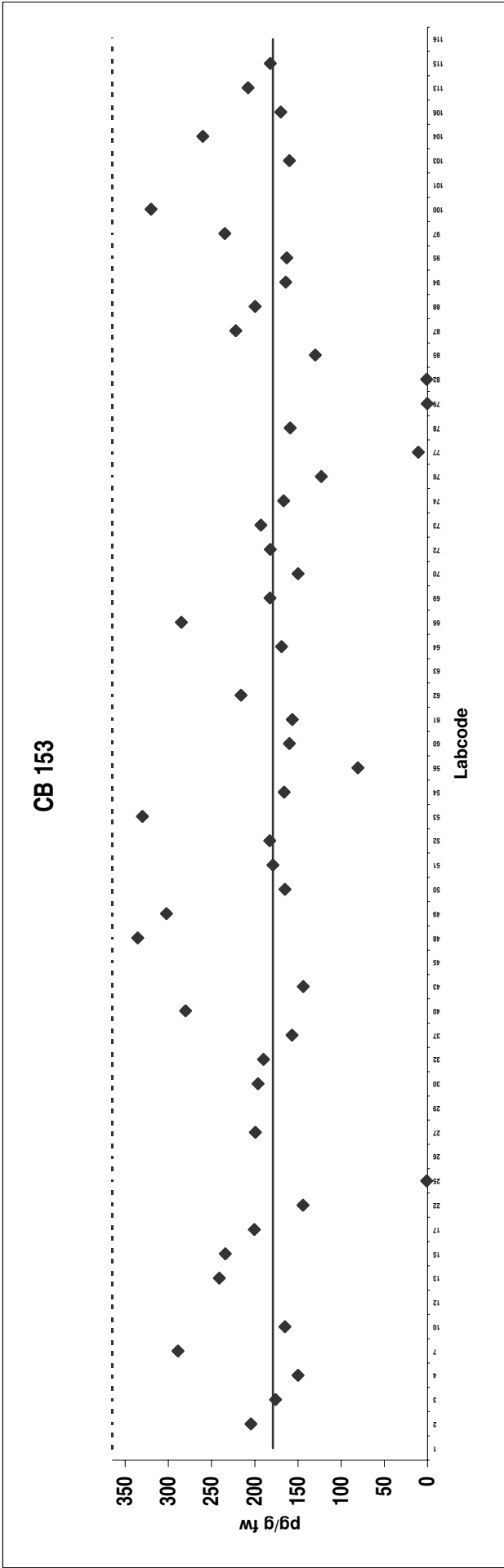
Cream

Congener: CB 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	10935	Outlier	85	130	
2	204		87	222	
3	176		88	200	
4	150		94	164	
7	289		95	163	
10	165		97	235	
12	794	Outlier	100	320	
13	241	ND	101	446	Outlier
15	234		103	160	
17	200		104	260	
22	144		106	170	
25	1,0		113	208	
26	455	Outlier	115	182	
27	199	Outlier	116	1400	Outlier
29	566				
30	196				
32	190				
37	157				
40	280				
43	144				
45	1284	Outlier			
48	335				
49	302				
50	165				
51	179				
52	183				
53	330				
54	166				
56	80				
60	160				
61	156				
62	216				
63	6129	Outlier			
64	169				
66	285				
69	182				
70	150				
72	182				
73	193				
74	166				
76	123				
77	11				
78	159				
79	0,18				
82	0,78	ND			

Consensus statistics

Consensus median, pg/g	179
Median all values pg/g	183
Consensus mean, pg/g	182
Standard deviation, pg/g	76
Relative standard deviation, %	42
No. of values reported	59
No. of values removed	8
No. of reported non-detects	2

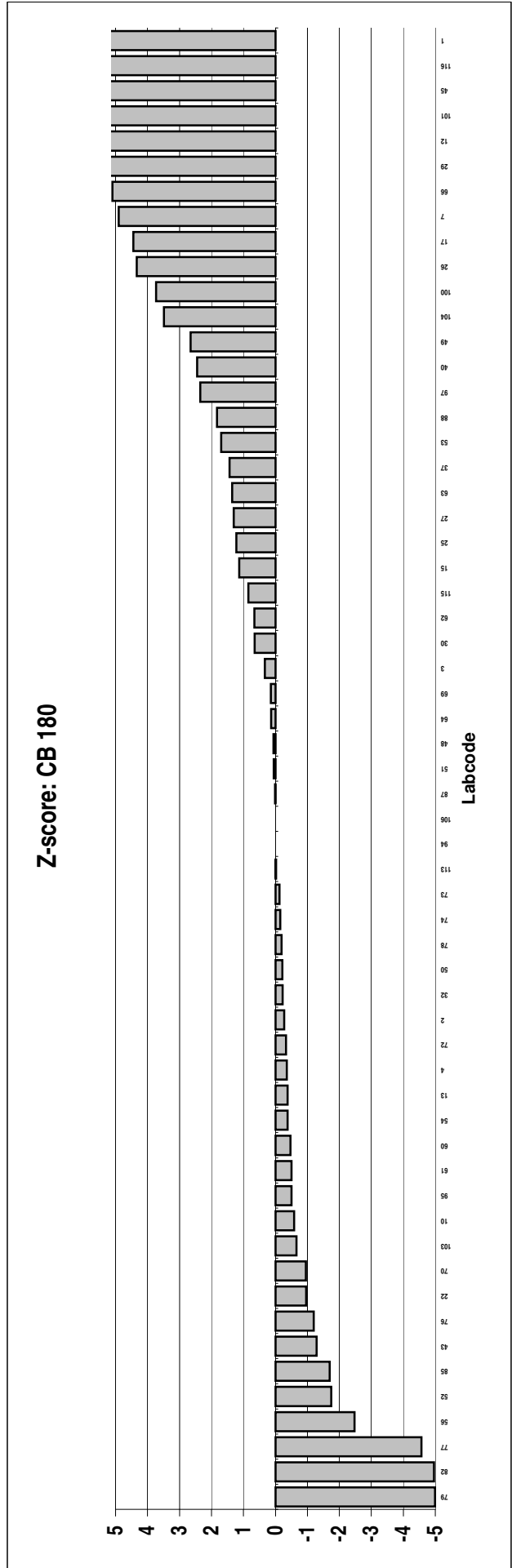
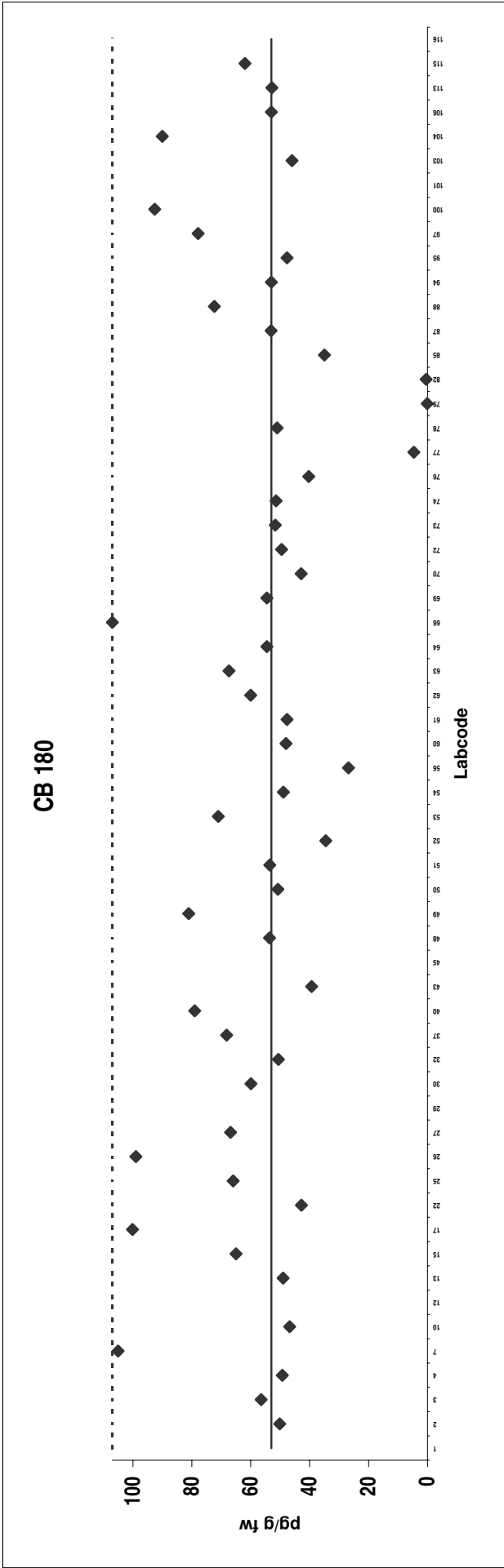


Cream
Congener: CB 180

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	3425	Outlier	85	35	
2	50		87	53	
3	57		88	72	
4	49		94	53	
7	105		95	48	
10	47		97	78	
12	164	Outlier	100	93	
13	49	ND	101	223	Outlier
15	65		103	46	
17	100		104	90	
22	43		106	53	
25	66		113	53	
26	99		115	62	
27	67		116	690	Outlier
29	157				
30	60				
32	51				
37	68				
40	79				
43	39				
45	304	Outlier			
48	54				
49	81				
50	51				
51	54				
52	34				
53	71				
54	49				
56	27				
60	48				
61	48				
62	60				
63	67				
64	54				
66	107				
69	55				
70	43				
72	50				
73	52				
74	51				
76	40				
77	4,6				
78	51				
79	0,055				
82	0,44	ND			

Consensus statistics

Consensus median, pg/g	53
Median all values pg/g	54
Consensus mean, pg/g	56
Standard deviation, pg/g	23
Relative standard deviation, %	40
No. of values reported	59
No. of values removed	6
No. of reported non-detects	2

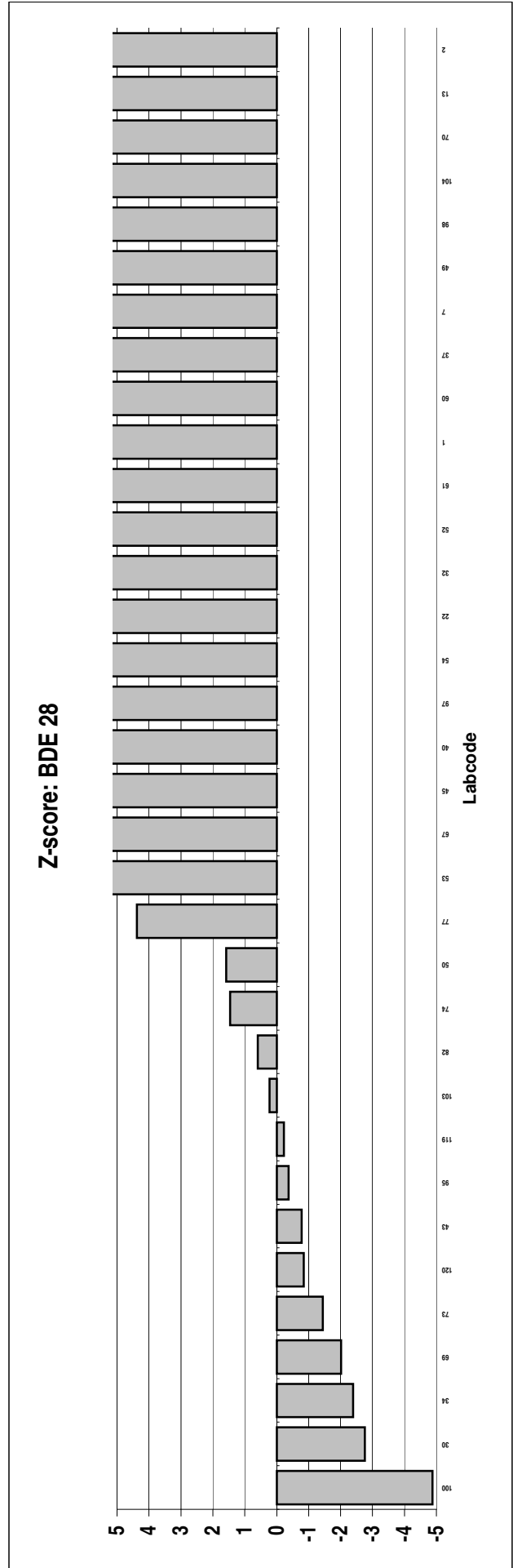
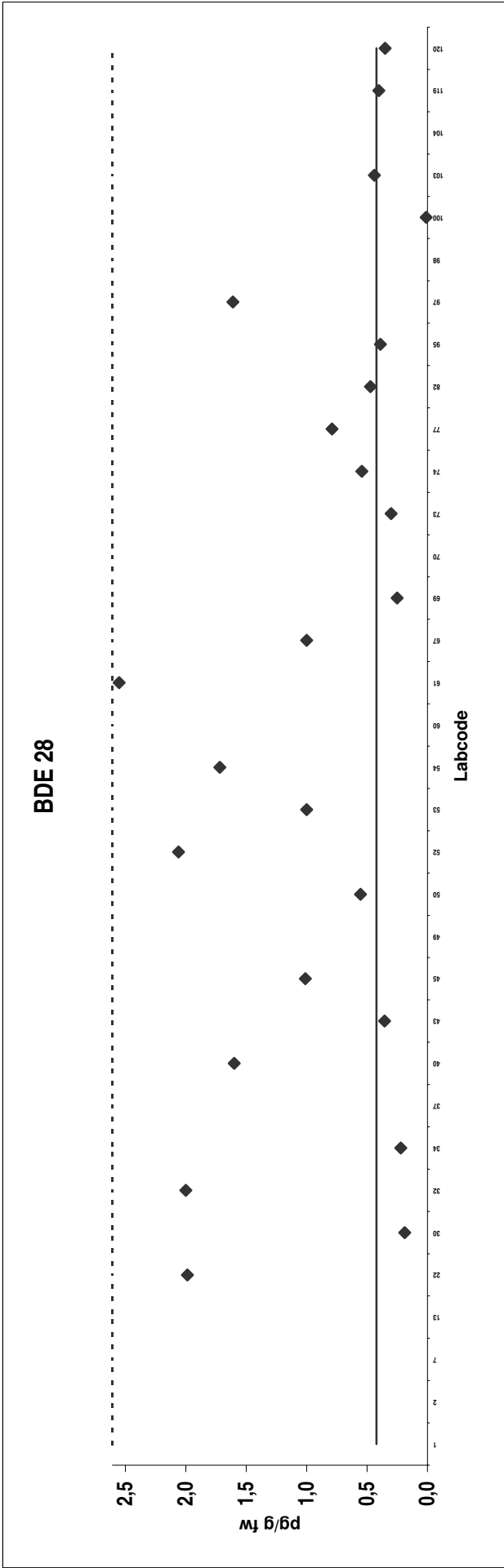


Cream
Congener: BDE 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	3,3	Outlier			
2	100	Outlier,ND			
7	4,2	Outlier			
13	24	Outlier,ND			
22	2,0	ND			
30	0,19				
32	2,0	ND			
34	0,22				
37	4,0	Outlier,ND			
40	1,6				
43	0,36				
45	1,0				
49	8,8	Outlier			
50	0,55				
52	2,1				
53	1,0	ND			
54	1,7	ND			
60	4,0	Outlier,ND			
61	2,6				
67	1,0	ND			
69	0,25				
70	13	Outlier,ND			
73	0,30				
74	0,54				
77	0,79				
82	0,47	ND			
95	0,39	ND			
97	1,6				
98	9,0	Outlier,ND			
100	0,010	ND			
103	0,44				
104	10				
119	0,40	Outlier,ND			
120	0,35				

Consensus statistics

Consensus median, pg/g	0,42
Median all values pg/g	1,3
Consensus mean, pg/g	0,91
Standard deviation, pg/g	0,74
Relative standard deviation, %	81
No. of values reported	34
No. of values removed	10
No. of reported non-detects	15

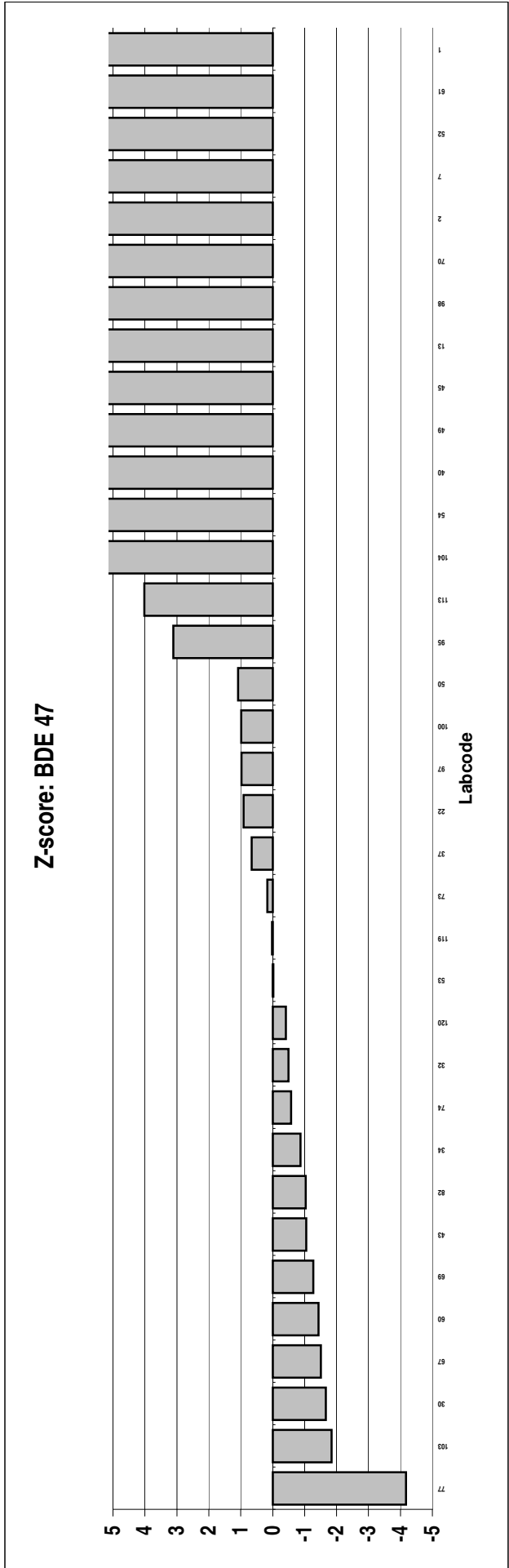
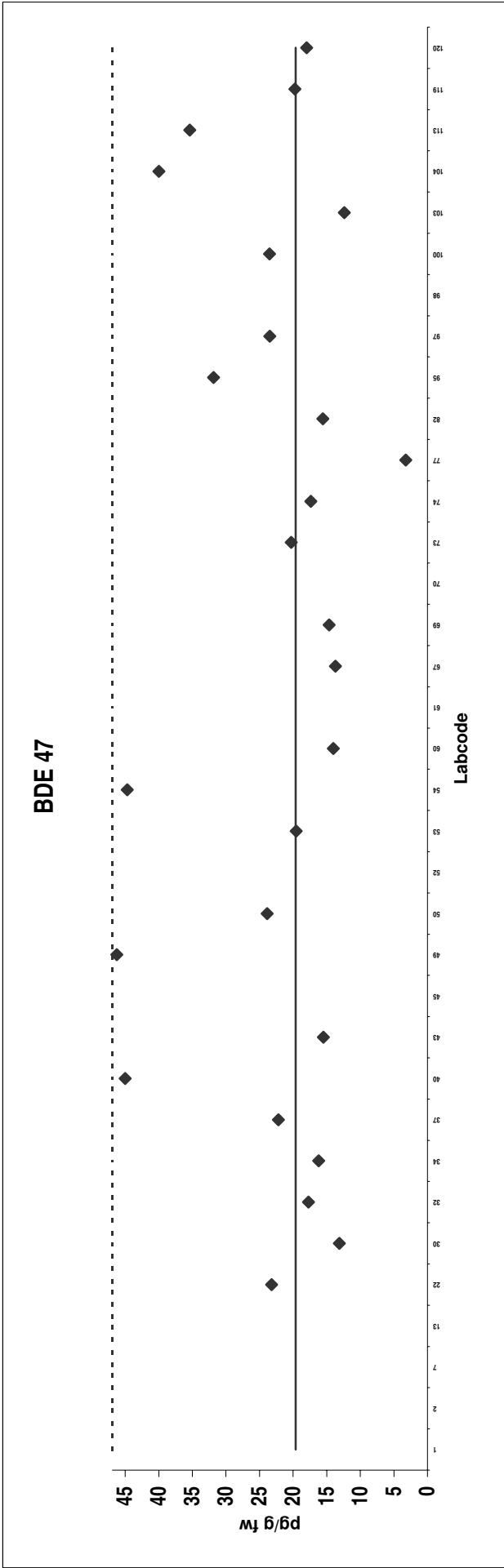


Cream
Congener: BDE 47

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	298	Outlier			
2	100	Outlier,ND			
7	102	Outlier			
13	59	Outlier,ND			
22	23				
30	13				
32	18				
34	16				
37	22				
40	45				
43	15				
45	57	Outlier			
49	46				
50	24				
52	149				
53	20	Outlier			
54	45				
60	14				
61	278	Outlier			
67	14				
69	15				
70	81	Outlier			
73	20				
74	17				
77	3,3				
82	16				
95	32				
97	23				
98	60	Outlier,ND			
100	24				
103	12				
104	40				
113	35				
119	20				
120	18				

Consensus statistics

Consensus median, pg/g	20
Median all values pg/g	23
Consensus mean, pg/g	23
Standard deviation, pg/g	11
Relative standard deviation, %	49
No. of values reported	35
No. of values removed	9
No. of reported non-detects	3

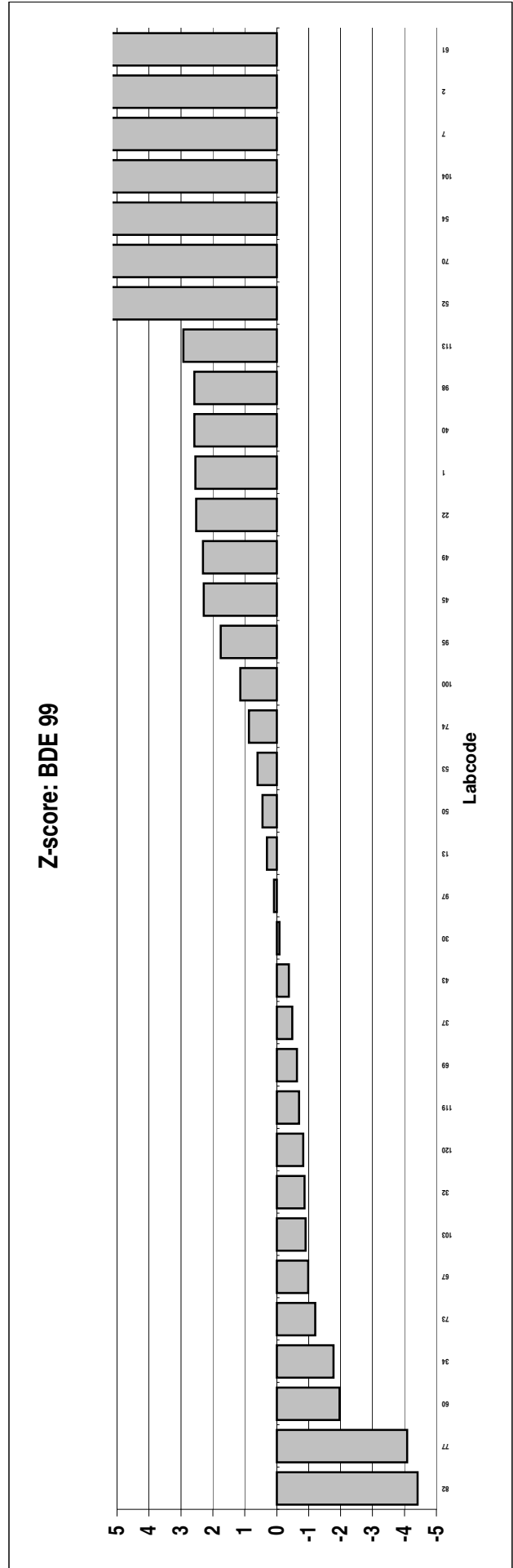
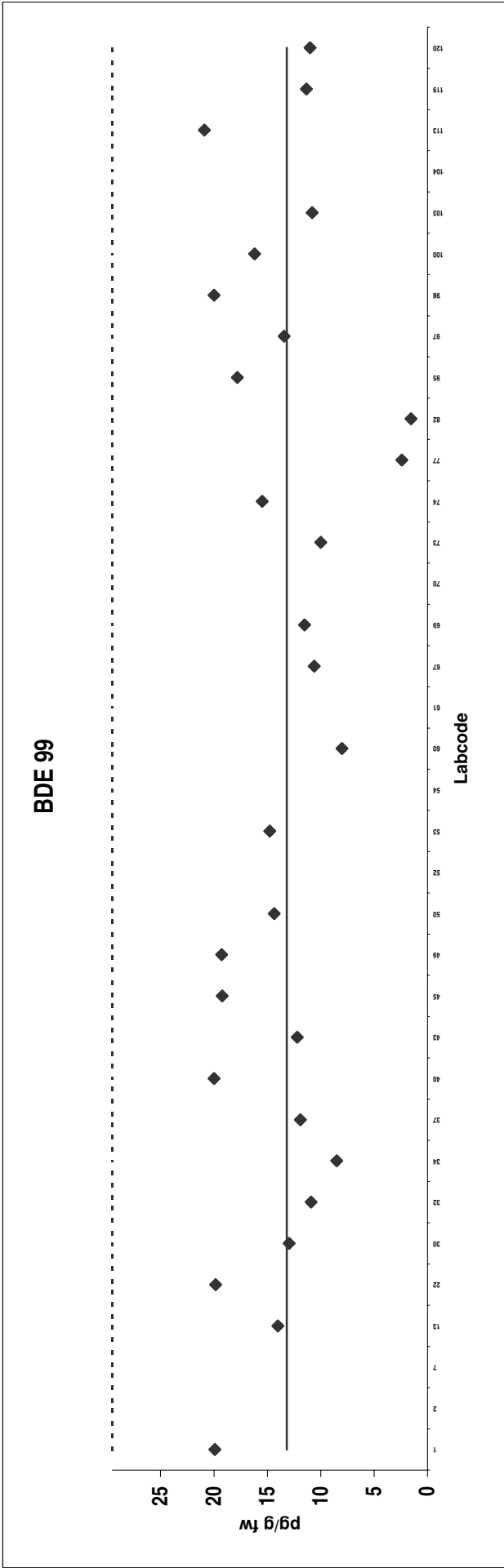


Cream
Congener: BDE 99

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	20				
2	100	Outlier,ND			
7	65	Outlier			
13	14				
22	20				
30	13				
32	11				
34	8,5				
37	12				
40	20				
43	12				
45	19				
49	19				
50	14				
52	41	Outlier			
53	15				
54	55	Outlier			
60	8,0				
61	371	Outlier			
67	11				
69	12				
70	52	Outlier			
73	10				
74	15				
77	2,4				
82	1,5	ND			
95	18				
97	13				
98	20	ND			
100	16				
103	11				
104	60	Outlier,ND			
113	21				
119	11				
120	11				

Consensus statistics

Consensus median, pg/g	13
Median all values pg/g	15
Consensus mean, pg/g	14
Standard deviation, pg/g	5,1
Relative standard deviation, %	37
No. of values reported	35
No. of values removed	7
No. of reported non-detects	4



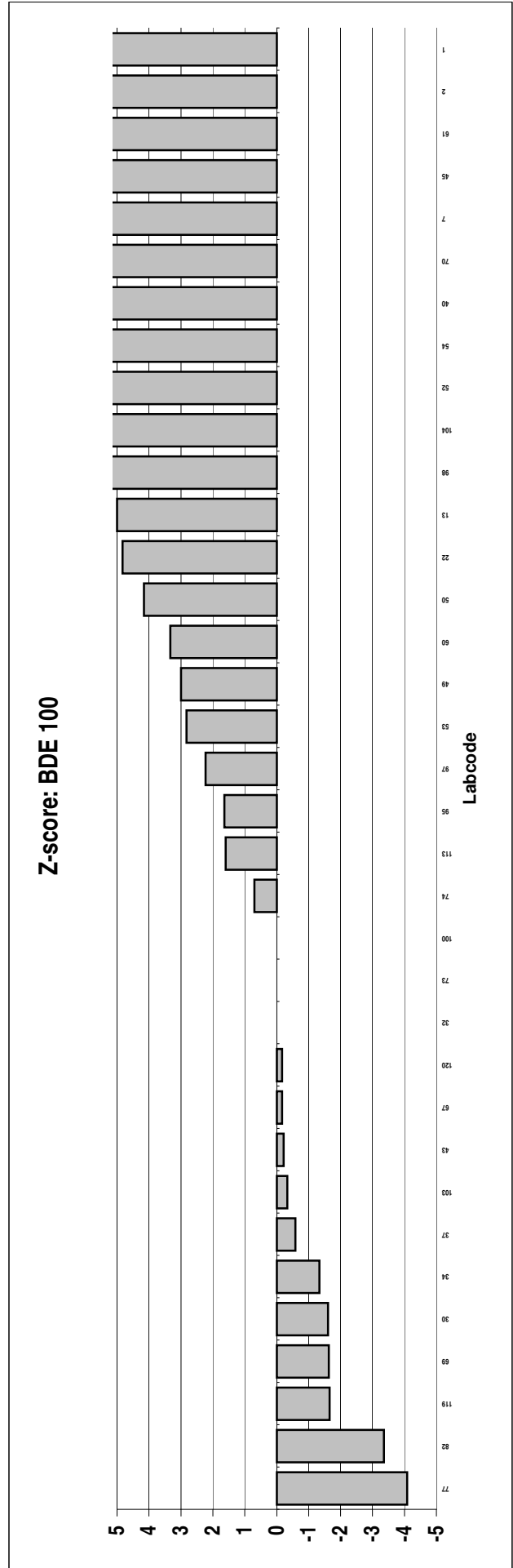
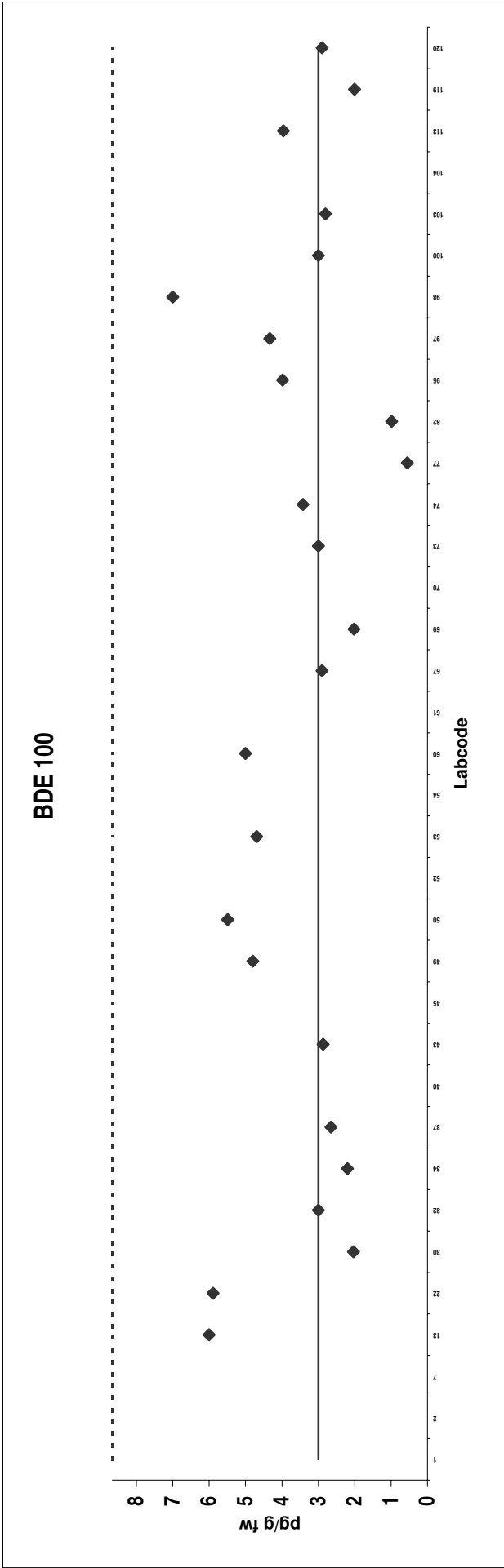
Cream

Congener: BDE 100

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	125	Outlier			
2	100	Outlier,ND			
7	15	Outlier			
13	6,0	ND			
22	5,9				
30	2,0				
32	3,0				
34	2,2				
37	2,7				
40	12	Outlier			
43	2,9				
45	22	Outlier			
49	4,8				
50	5,5				
52	10	Outlier			
53	4,7				
54	11	Outlier			
60	5,0	ND			
61	84	Outlier			
67	2,9				
69	2,0				
70	13	Outlier,ND			
73	3,0				
74	3,4				
77	0,55				
82	0,99	ND			
95	4,0				
97	4,3				
98	7,0	ND			
100	3,0				
103	2,8				
104	10	Outlier,ND			
113	4,0				
119	2,0				
120	2,9				

Consensus statistics

Consensus median, pg/g	3,0
Median all values pg/g	4,3
Consensus mean, pg/g	3,5
Standard deviation, pg/g	1,6
Relative standard deviation, %	46
No. of values reported	35
No. of values removed	10
No. of reported non-detects	7



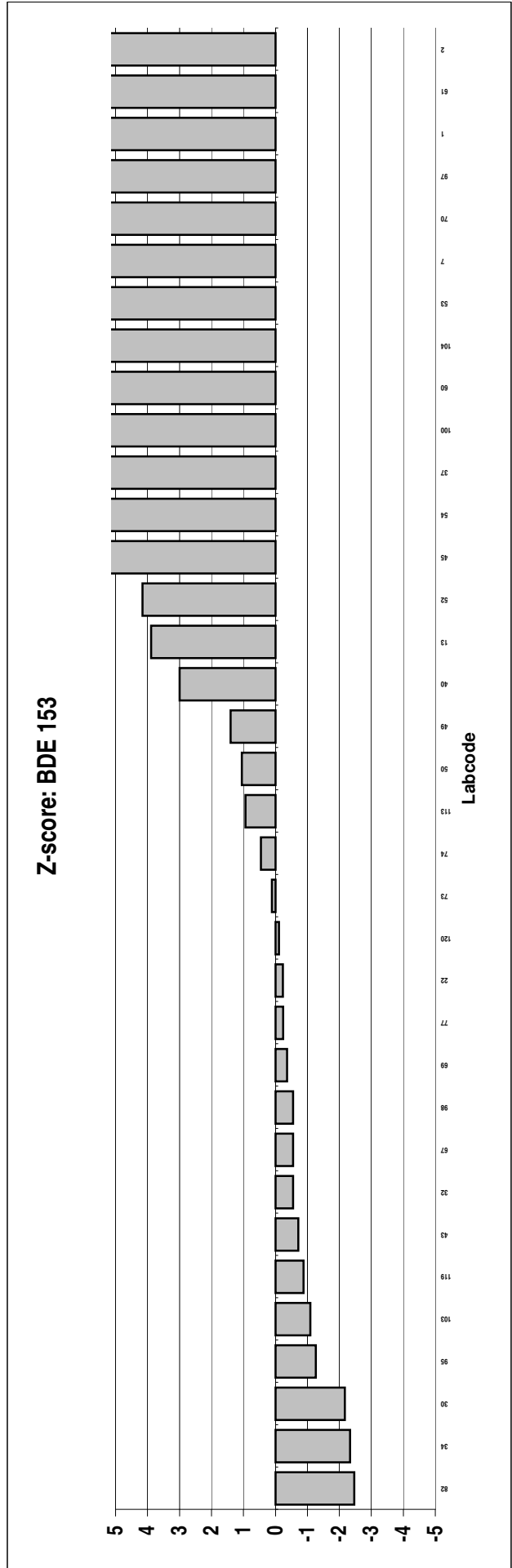
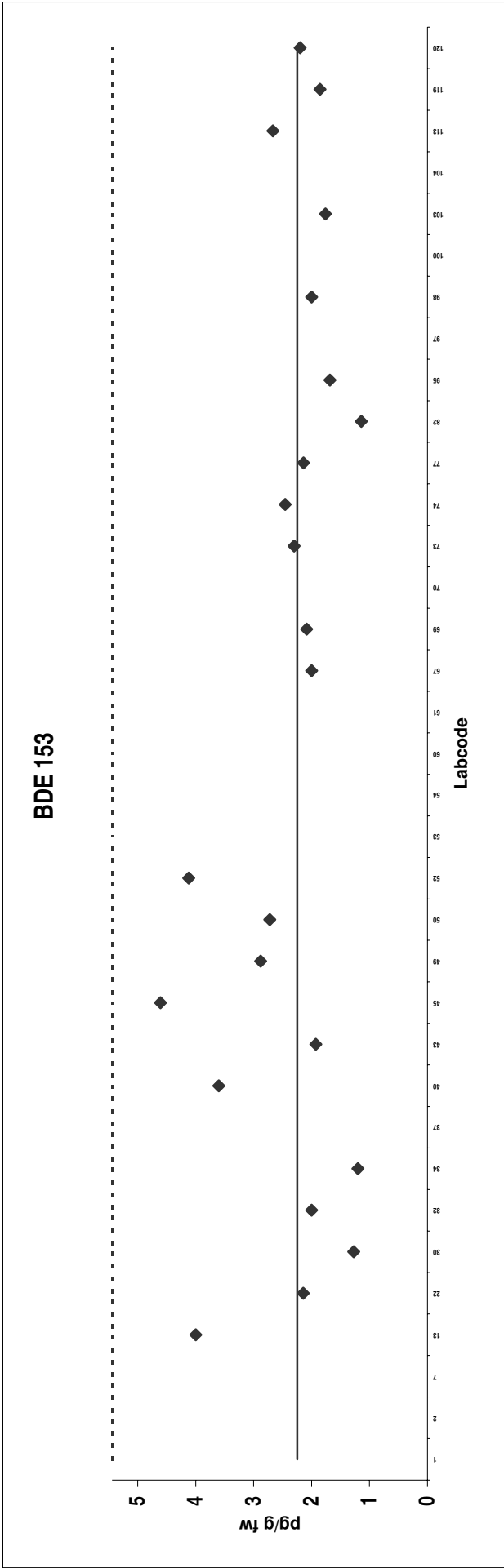
Cream

Congener: BDE 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	29	Outlier			
2	100	Outlier,ND			
7	13	Outlier			
13	4,0	ND			
22	2,1	ND			
30	1,3	ND			
32	2,0	ND			
34	1,2				
37	8,3	Outlier,ND			
40	3,6				
43	1,9				
45	4,6				
49	2,9				
50	2,7				
52	4,1				
53	10				
54	6,2	Outlier			
60	10	Outlier			
61	41	Outlier,ND			
67	2,0	Outlier			
69	2,1	ND			
70	13	Outlier,ND			
73	2,3				
74	2,5				
77	2,1				
82	1,1	ND			
95	1,7	ND			
97	13	Outlier			
98	2,0	ND			
100	8,9	Outlier			
103	1,8				
104	10				
113	2,7	Outlier			
119	1,9				
120	2,2				

Consensus statistics

Consensus median, pg/g	2,3
Median all values pg/g	2,7
Consensus mean, pg/g	2,4
Standard deviation, pg/g	0,92
Relative standard deviation, %	39
No. of values reported	35
No. of values removed	12
No. of reported non-detects	11



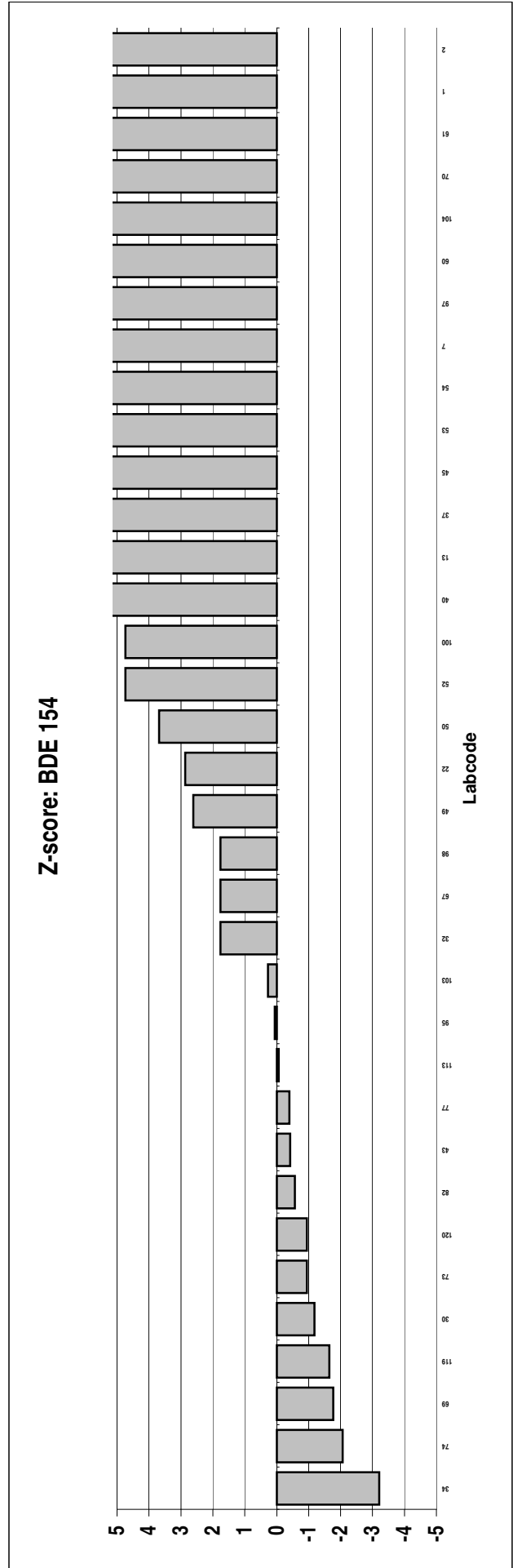
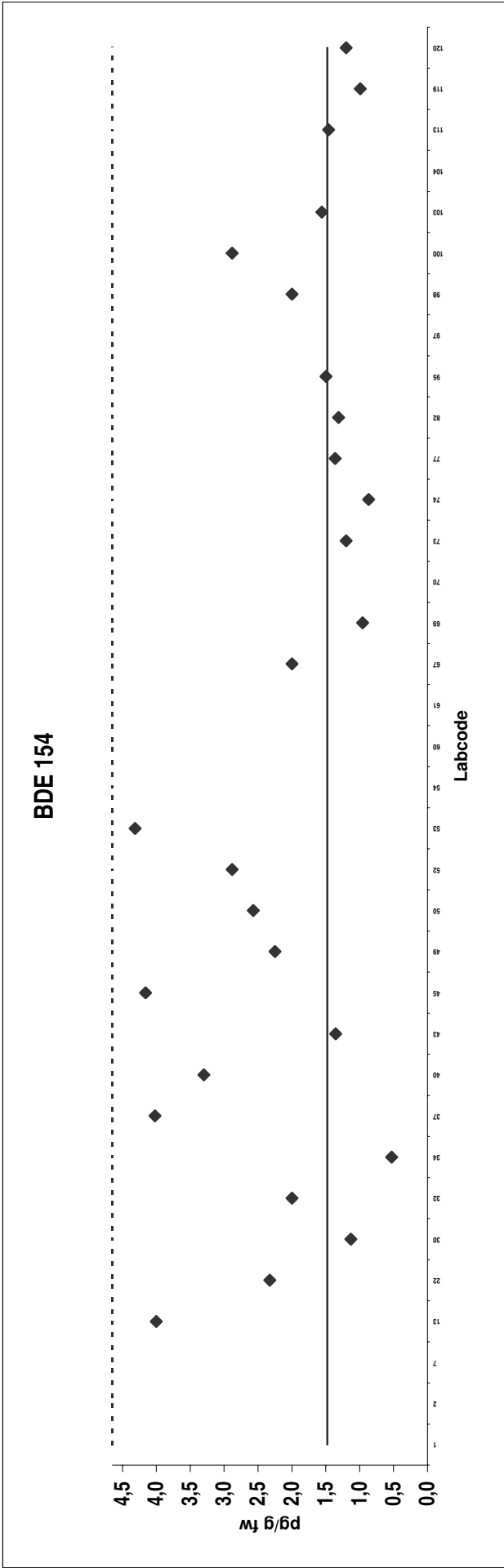
Cream

Congener: BDE 154

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	75	Outlier			
2	100	Outlier,ND			
7	5,5	Outlier			
13	4,0	ND			
22	2,3	ND			
30	1,1	ND			
32	2,0	ND			
34	0,53	ND			
37	4,0	ND			
40	3,3				
43	1,4				
45	4,2				
49	2,3				
50	2,6				
52	2,9				
53	4,3				
54	5,2	Outlier			
60	10	Outlier,ND			
61	39	Outlier			
67	2,0	ND			
69	0,96				
70	13	Outlier,ND			
73	1,2				
74	0,87				
77	1,4	ND			
82	1,3	ND			
95	1,5				
97	5,5	Outlier			
98	2,0	ND			
100	2,9				
103	1,6				
104	10	Outlier,ND			
113	1,5				
119	0,99				
120	1,2				

Consensus statistics

Consensus median, pg/g	1,5
Median all values pg/g	2,3
Consensus mean, pg/g	2,1
Standard deviation, pg/g	1,1
Relative standard deviation, %	54
No. of values reported	35
No. of values removed	9
No. of reported non-detects	12



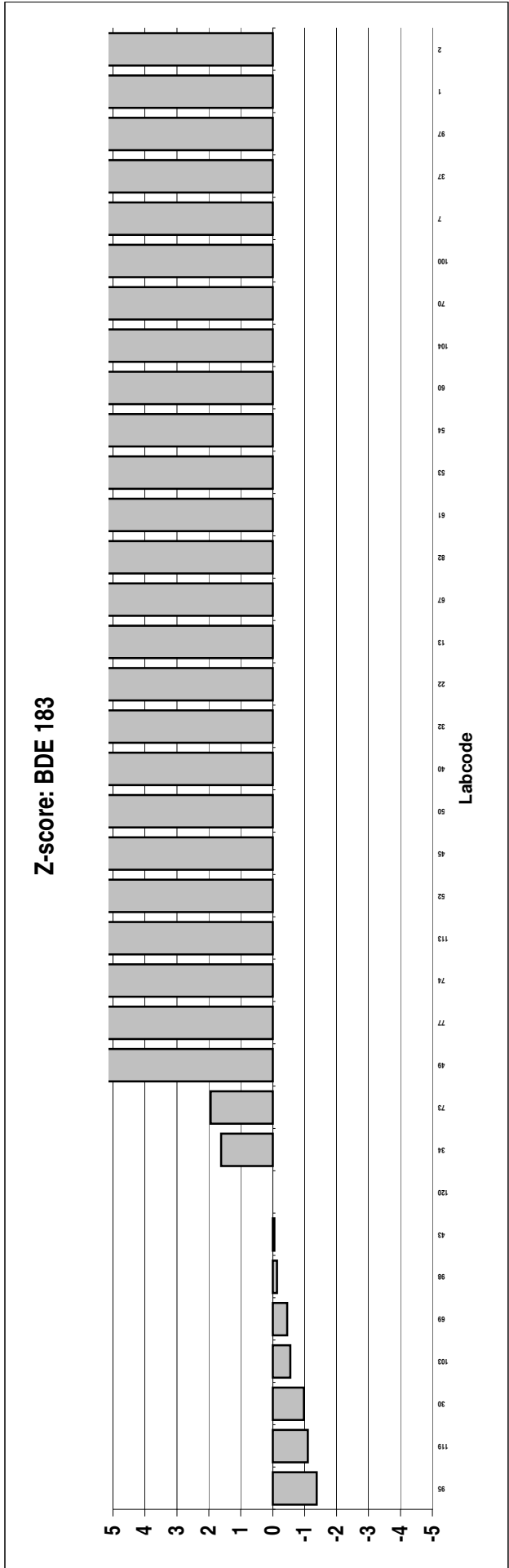
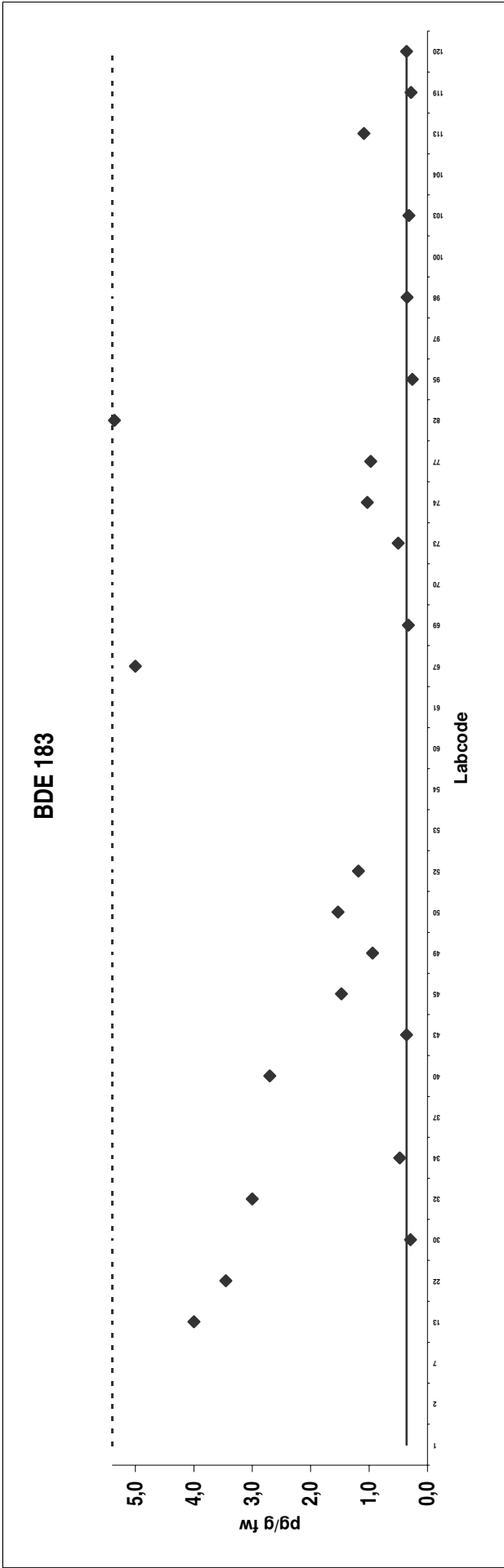
Cream

Congener: BDE 183

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	94	Outlier			
2	100	Outlier,ND			
7	21	Outlier			
13	4,0	ND			
22	3,5	ND			
30	0,29				
32	3,0	ND			
34	0,48	ND			
37	25	Outlier,ND			
40	2,7				
43	0,36				
45	1,5				
49	0,94				
50	1,5				
52	1,2				
53	7,0	Outlier,ND			
54	8,8	Outlier,ND			
60	10	Outlier,ND			
61	6,1	Outlier			
67	5,0	ND			
69	0,33				
70	13	Outlier,ND			
73	0,50				
74	1,0				
77	0,97				
82	5,4	ND			
95	0,26	ND			
97	41	Outlier			
98	0,35				
100	19	Outlier			
103	0,32				
104	10	Outlier,ND			
113	1,1	ND			
119	0,28				
120	0,36				

Consensus statistics

Consensus median, pg/g	0,36
Median all values pg/g	2,7
Consensus mean, pg/g	1,5
Standard deviation, pg/g	1,6
Relative standard deviation, %	103
No. of values reported	35
No. of values removed	12
No. of reported non-detects	15

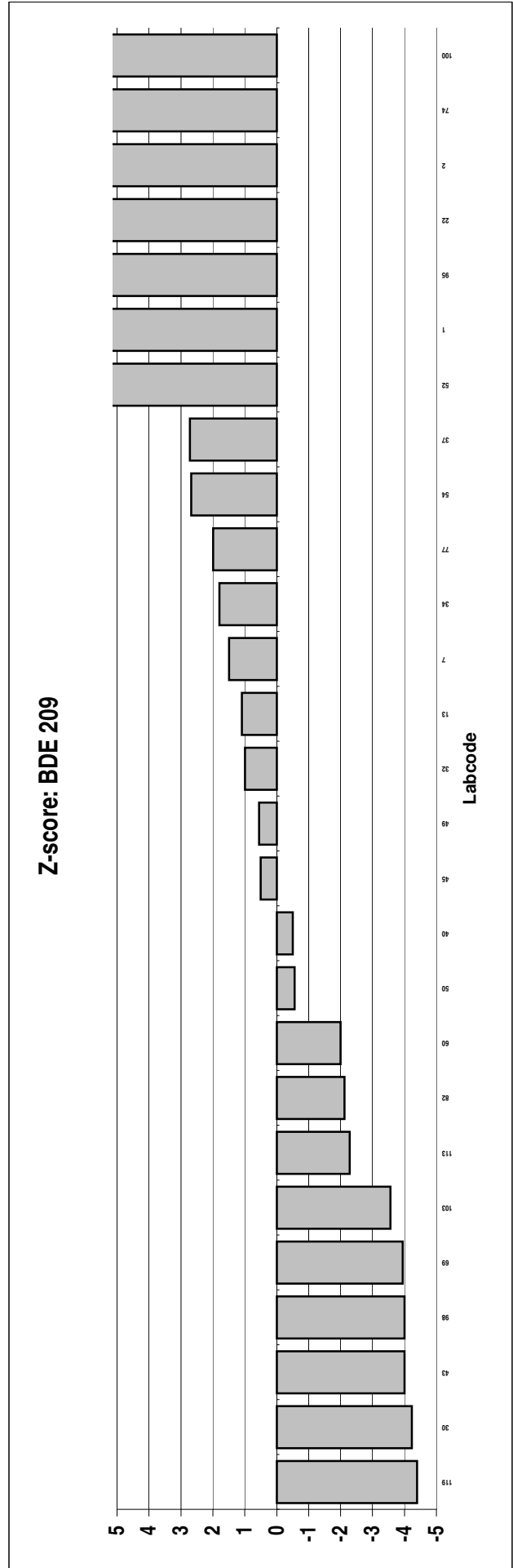
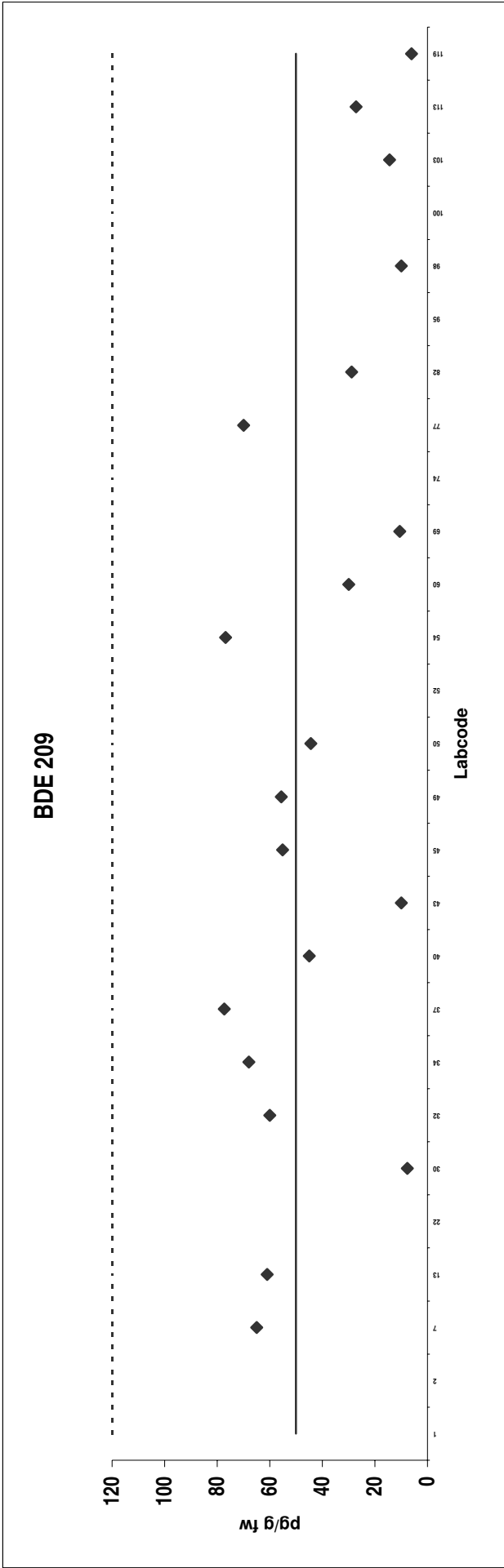


Cream
Congener: BDE 209

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	149	Outlier			
2	400	Outlier,ND			
7	65				
13	61	ND			
22	369	Outlier			
30	8				
32	60	ND			
34	68				
37	77	ND			
40	45				
43	10	ND			
45	55				
49	56				
50	44				
52	121				
54	77	Outlier			
60	30	ND			
69	11				
74	495	Outlier			
77	70				
82	29	ND			
95	168	Outlier,ND			
98	10	ND			
100	21800	Outlier			
103	14				
113	27				
119	6,0	ND			

Consensus statistics

Consensus median, pg/g	50
Median all values pg/g	60
Consensus mean, pg/g	41
Standard deviation, pg/g	25
Relative standard deviation, %	62
No. of values reported	27
No. of values removed	7
No. of reported non-detects	10

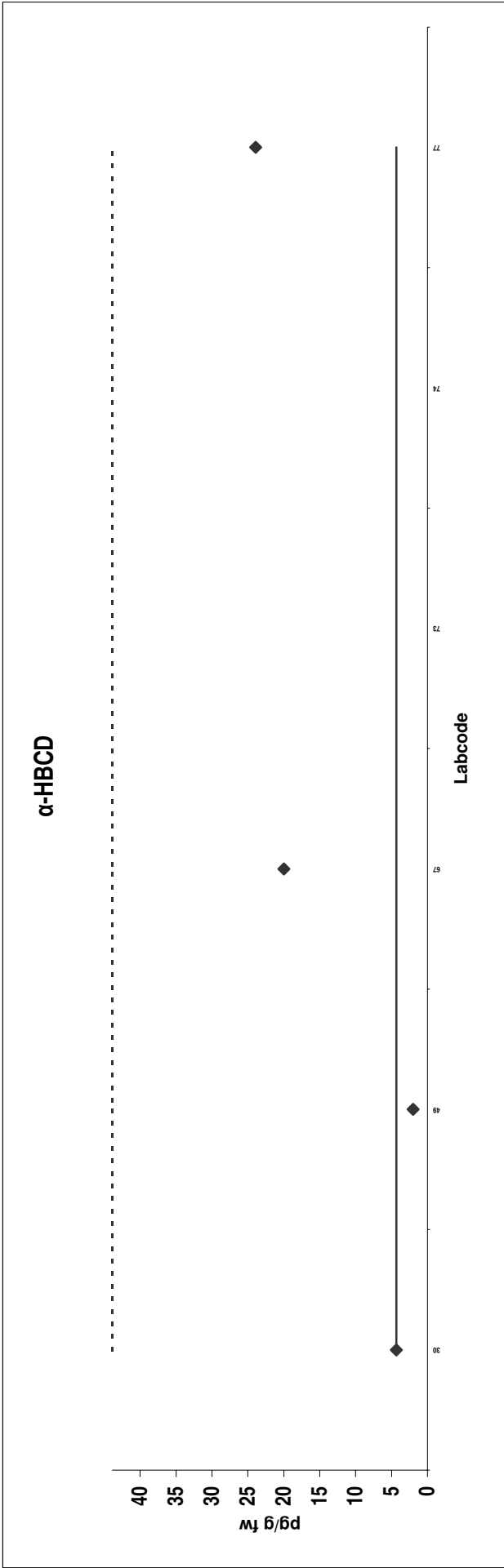


Cream

Congener: α -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
30	4,3				
49	2,0	ND			
67	20	ND			
73	78	Outlier,ND			
74	168	Outlier			
77	24	ND			

Consensus statistics	
Consensus median, pg/g	4,3
Median all values pg/g	22
Consensus mean, pg/g	13
Standard deviation, pg/g	11
Relative standard deviation, %	88
No. of values reported	6
No. of values removed	2
No. of reported non-detects	4



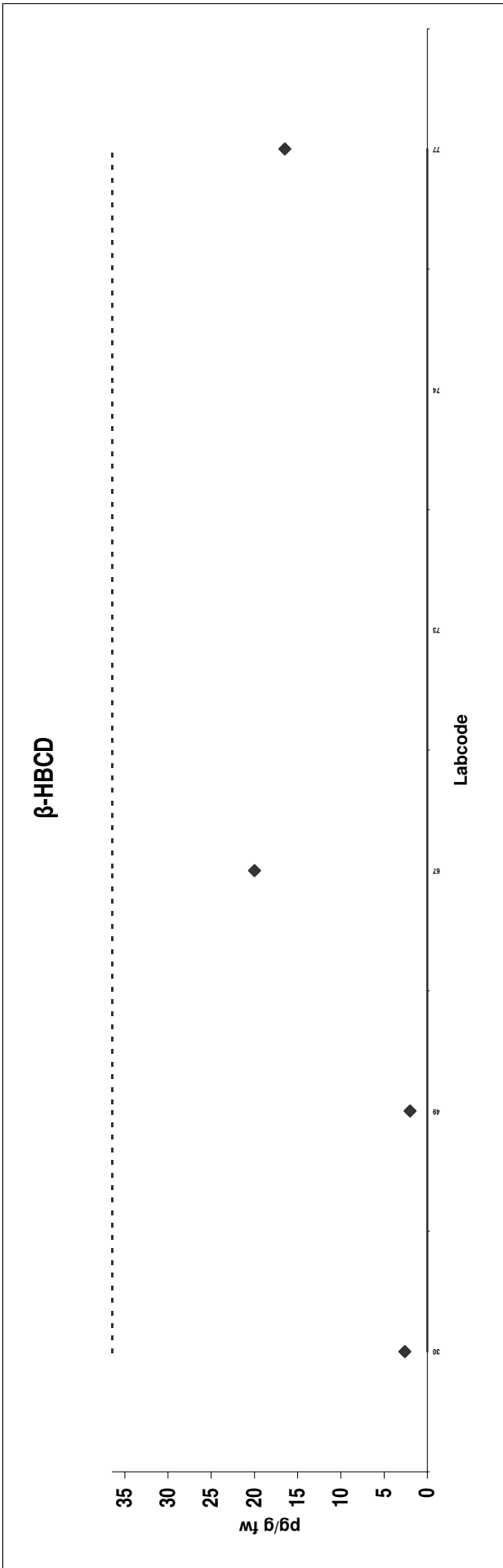
Cream

Congener: β -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
30	2,6	ND			
49	2,0	ND			
67	20,0	ND			
73	78	Outlier,ND			
74	82	Outlier			
77	16	ND			

Consensus statistics

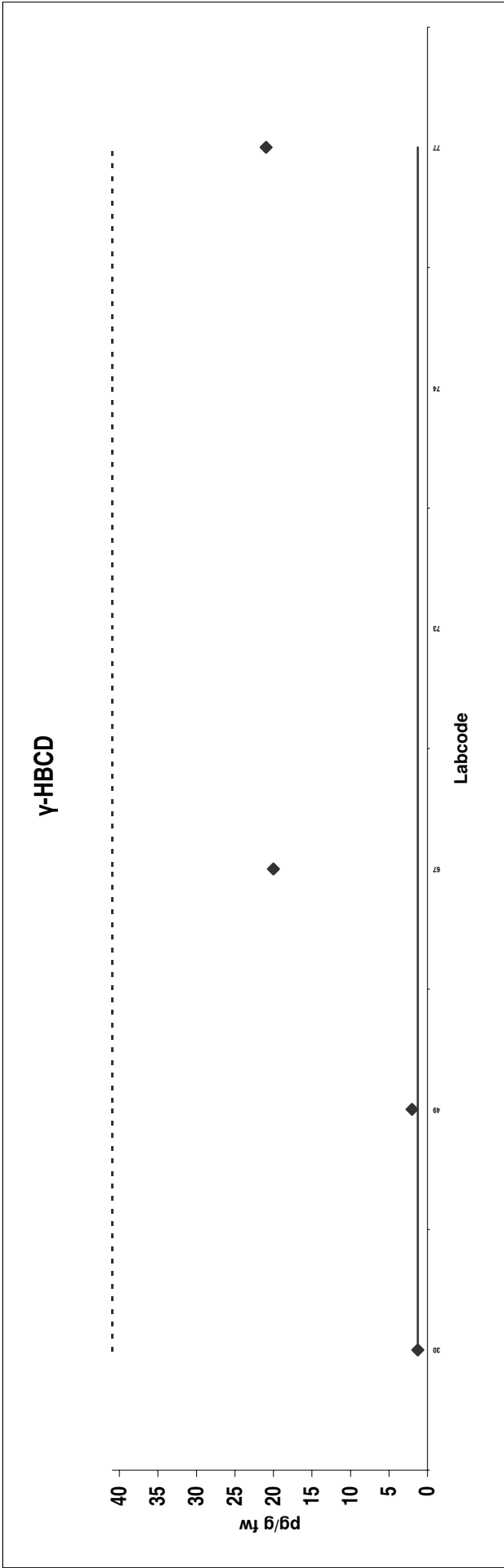
Consensus median, pg/g	NA
Median all values pg/g	18
Consensus mean, pg/g	10
Standard deviation, pg/g	9,3
Relative standard deviation, %	91
No. of values reported	6
No. of values removed	2
No. of reported non-detects	5



Cream
Congener: γ -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
30	1,3				
49	2,0	ND			
67	20	ND			
73	78	Outlier,ND			
74	164	Outlier			
77	21	ND			

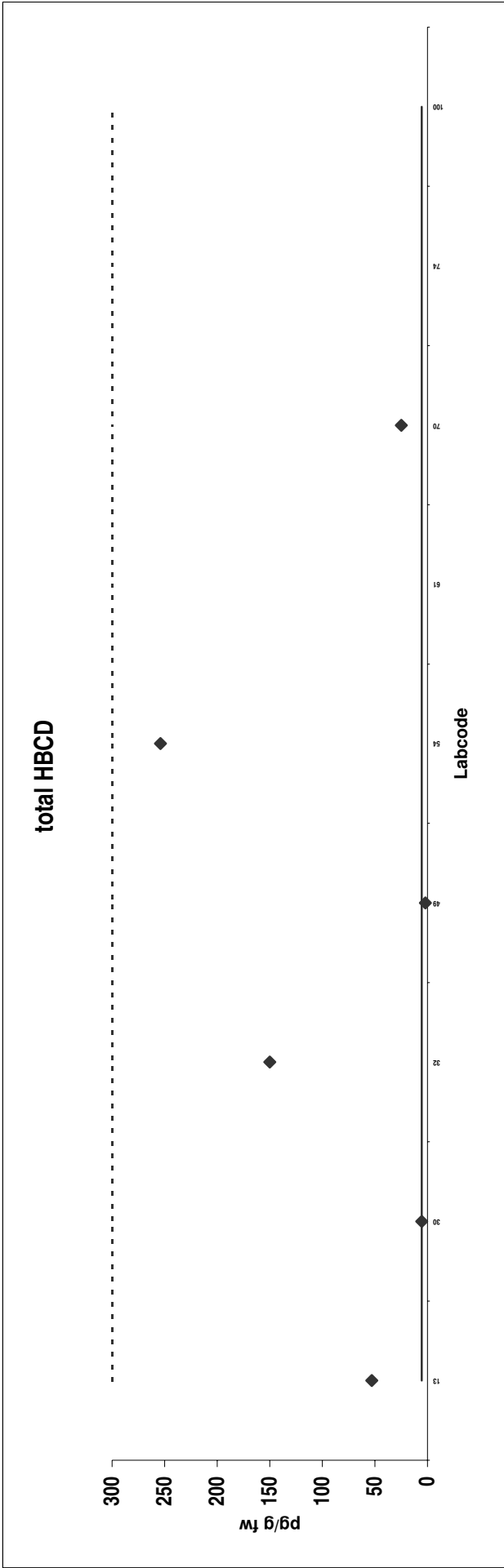
Consensus statistics	
Consensus median, pg/g	1,3
Median all values pg/g	20
Consensus mean, pg/g	11
Standard deviation, pg/g	11
Relative standard deviation, %	99
No. of values reported	6
No. of values removed	2
No. of reported non-detects	4



Cream
Congener: total HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
13	53	ND			
30	5,6				
32	150	ND			
49	2,0	ND			
54	254	ND			
61	1446	Outlier			
70	25	ND			
74	414	Outlier			
100	1470	Outlier			

Consensus statistics	
Consensus median, pg/g	5,6
Median all values pg/g	150
Consensus mean, pg/g	82
Standard deviation, pg/g	101
Relative standard deviation, %	123
No. of values reported	9
No. of values removed	3
No. of reported non-detects	5



Appendix 3:

Presentation of results
for eel

Appendix 3: Presentation of results: Eel

Statistic calculations for PCDDs, PCDFs and dioxin-like PCBs

For each congener, the outliers were removed and the consensus calculated according to the following procedure:

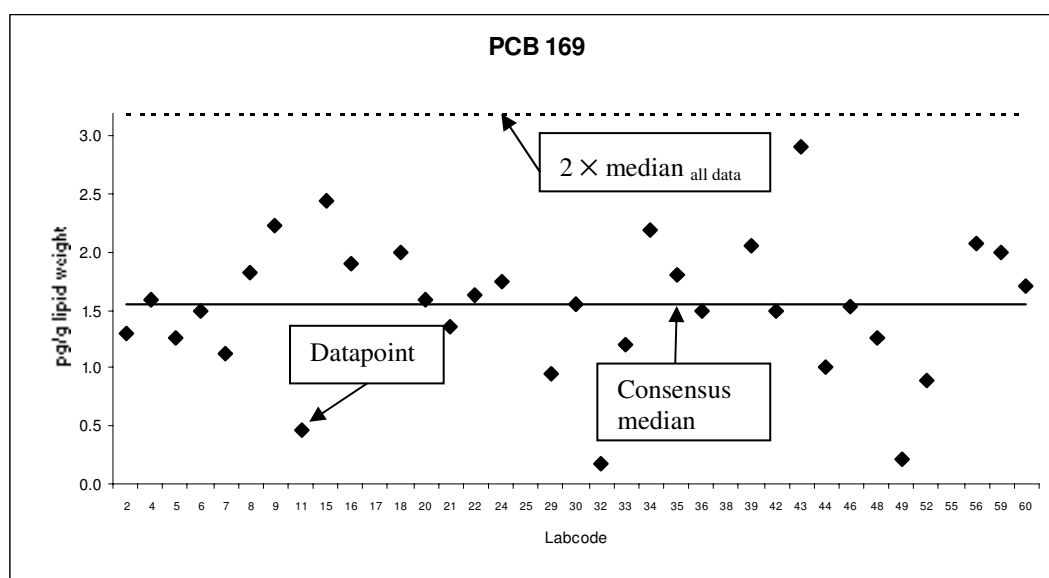
1. The median was calculated from all the reported data, using the detection limit as concentration for non-detected congeners.
2. Values exceeding $2 \times$ this median, were defined as outliers and removed from the data set.
3. Median, mean and standard deviation were re-calculated from the remaining data. This second median was called consensus.

Statistic calculations for indicator PCBs, PBDEs and HBCD

For each congener, the outliers were removed and the consensus calculated according to the following procedure:

1. The median was calculated from all the reported data, using the detection limit as concentration for non-detected congeners (NDs).
2. Values exceeding $2 \times$ this median, were defined as outliers and removed from the data set. The NDs were also removed.
3. Median, mean and standard deviation were re-calculated from the remaining data. This second median was called consensus.
4. For comparison, median, mean and standard deviation were also calculated without removing NDs.

The diagram shows the reported data up to approximately the limit for outliers ($2 \times$ the first median).



Z-Scores of individual congeners

Z-scores of each congener were calculated for each laboratory according to the following equation:

$$z = (x - X)/\sigma$$

where x = reported value; X = assigned value (consensus); σ = target value for standard deviation. A σ of 20% of the consensus was used, i.e. z-scores between +1 and -1 reflect a deviation of $\pm 20\%$ from the consensus value.

Eel
Congener: 2,3,7,8 TCDD

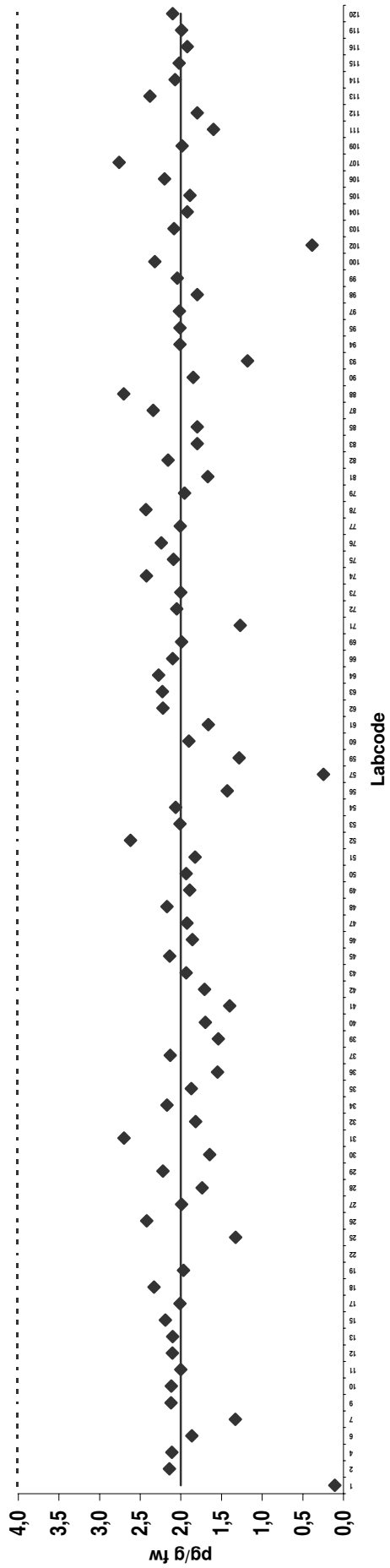
Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,11		60	1,9	
2	2,1		61	1,7	
4	2,1		62	2,2	
6	1,9		63	2,2	
7	1,3		64	2,3	
9	2,1		66	2,1	
10	2,1		69	2,0	
11	2,0		71	1,3	
12	2,1		72	2,1	
13	2,1		73	2,0	
15	2,2		74	2,4	
17	2,0		75	2,1	
18	2,3		76	2,2	
19	2,0		77	2,0	
22	4,2		78	2,4	
25	1,3		79	2,0	
26	2,4		81	1,7	
27	2,0		82	2,2	
28	1,7		83	1,8	
29	2,2		85	1,8	
30	1,6		87	2,3	
31	2,7		88	2,7	
32	1,8		90	1,9	
34	2,2		93	1,2	
35	1,9		94	2,0	
36	1,6		95	2,0	
37	2,1		97	2,0	
39	1,5		98	1,8	
40	1,7		99	2,0	
41	1,4		100	2,3	
42	1,7		102	0,39	
43	1,9		103	2,1	
45	2,1		104	1,9	
46	1,9		105	1,9	
47	1,9		106	2,2	
48	2,2		107	2,8	
49	1,9		109	2,0	
50	1,9		111	1,6	
51	1,8		112	1,8	
52	2,6		113	2,4	
53	2,0		114	2,1	
54	2,1		115	2,0	
56	1,4		116	1,9	
57	0,25		119	2,0	
59	1,3		120	2,1	

Outlier

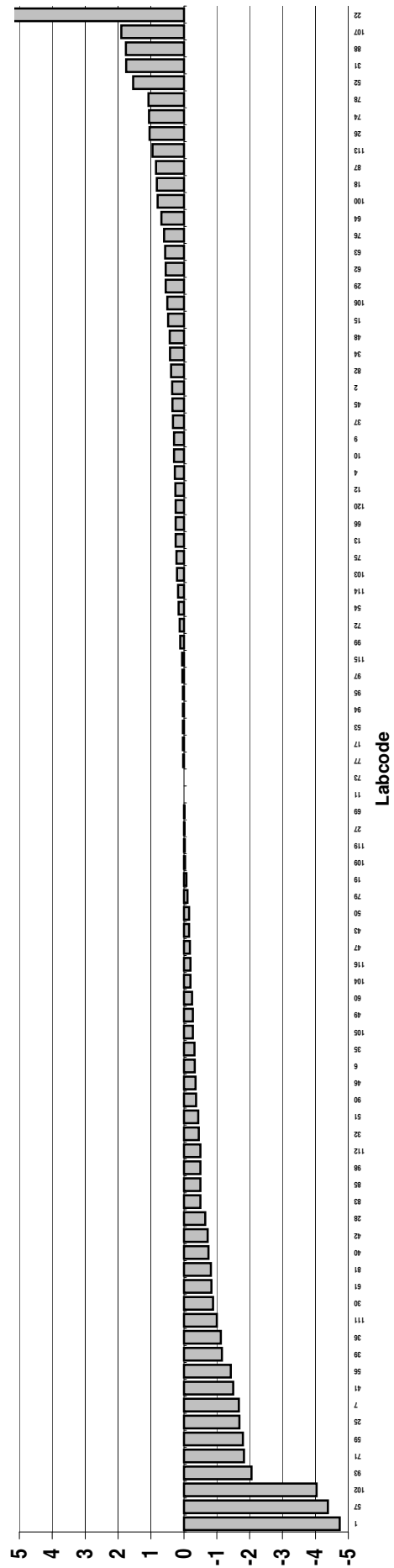
Consensus statistics

Consensus median, pg/g	2,0
Median all values pg/g	2,0
Consensus mean, pg/g	1,9
Standard deviation, pg/g	0,44
Relative standard deviation, %	23
No. of values reported	90
No. of values removed	1
No. of reported non-detects	1

2,3,7,8 TCDD



Z-score: 2,3,7,8 TCDD



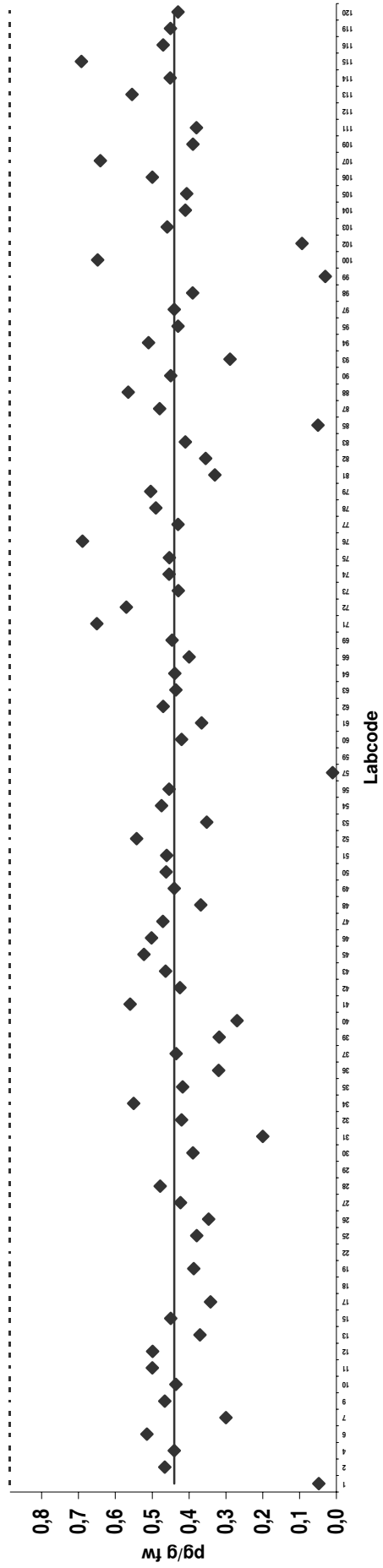
Eel
Congener: 1,2,3,7,8 PeCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,048		60	0,42	
2	0,47		61	0,37	
4	0,44		62	0,47	
6	0,51		63	0,44	
7	0,30		64	0,44	
9	0,47		66	0,40	
10	0,44		69	0,45	
11	0,50		71	0,65	
12	0,50		72	0,57	
13	0,37		73	0,43	
15	0,45		74	0,45	
17	0,34		75	0,45	
18	7,2	Outlier	76	0,69	
19	0,39		77	0,43	
22	0,90	Outlier	78	0,49	ND
25	0,38		79	0,50	
26	0,35		81	0,33	
27	0,42		82	0,35	
28	0,48		83	0,41	
29	1,6	Outlier	85	0,050	ND
30	0,39		87	0,48	
31	0,20		88	0,56	
32	0,42		90	0,45	
34	0,55		93	0,29	
35	0,42		94	0,51	
36	0,32		95	0,43	
37	0,43		97	0,44	
39	0,32		98	0,39	
40	0,27		99	0,030	ND
41	0,56		100	0,65	
42	0,43		102	0,093	
43	0,46		103	0,46	
45	0,52		104	0,41	
46	0,50		105	0,41	
47	0,47		106	0,50	
48	0,37		107	0,64	
49	0,44		109	0,39	
50	0,46		111	0,38	
51	0,46		112	5,0	Outlier,ND
52	0,54		113	0,55	
53	0,35		114	0,45	
54	0,47		115	0,69	
56	0,45		116	0,47	
57	0,010	ND	119	0,45	
59	2,1	Outlier	120	0,43	

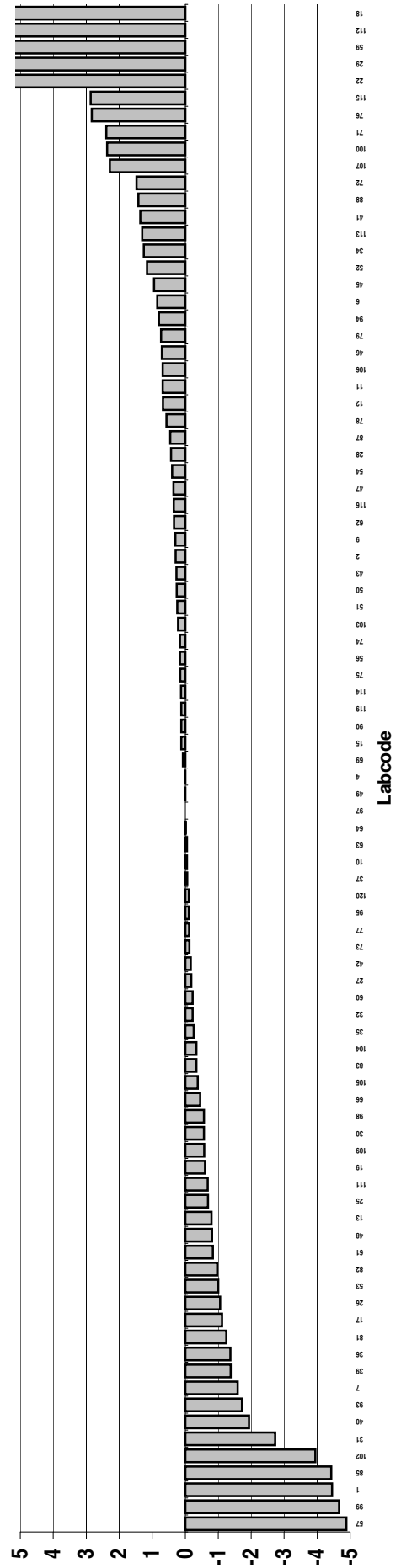
Consensus statistics

Consensus median, pg/g	0,44
Median all values pg/g	0,44
Consensus mean, pg/g	0,42
Standard deviation, pg/g	0,13
Relative standard deviation, %	30
No. of values reported	90
No. of values removed	5
No. of reported non-detects	5

1,2,3,7,8 PeCDD



Z-score: 1,2,3,7,8 PeCDD



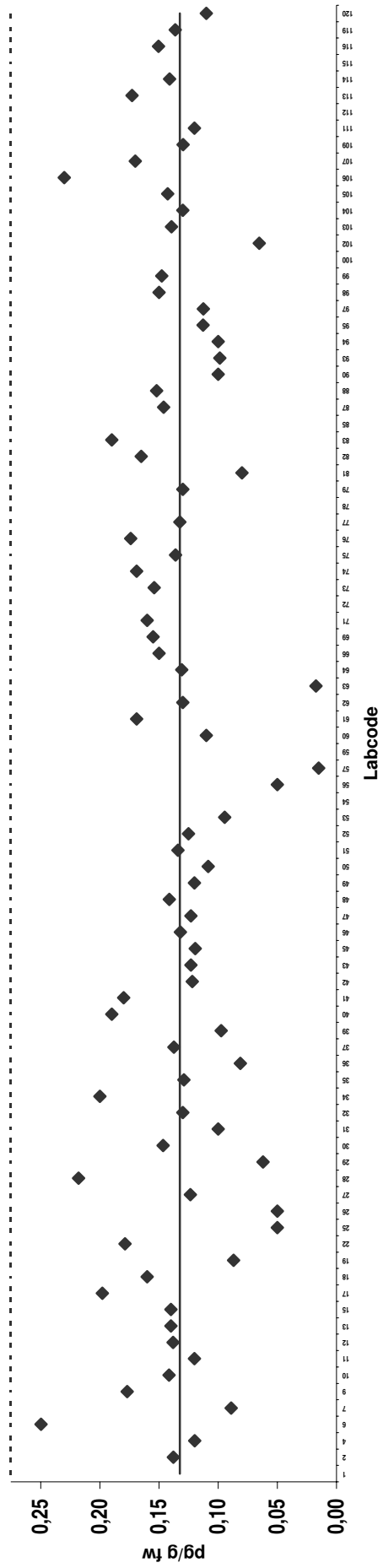
Eel
Congener: 1,2,3,4,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1,6		60	0,11	
2	0,14	Outlier	61	0,17	
4	0,12		62	0,13	
6	0,25		63	0,017	ND
7	0,089		64	0,13	
9	0,18		66	0,15	
10	0,14		69	0,16	
11	0,12		71	0,16	
12	0,14		72	1,2	Outlier
13	0,14		73	0,15	
15	0,14		74	0,17	
17	0,20		75	0,14	
18	0,16		76	0,17	
19	0,087		77	0,13	
22	0,18		78	0,89	Outlier,ND
25	0,050	ND	79	0,13	
26	0,050	ND	81	0,080	
27	0,12		82	0,17	
28	0,22		83	0,19	
29	0,062		85	0,33	
30	0,15		87	0,15	Outlier
31	0,10	ND	88	0,15	
32	0,13		90	0,10	
34	0,20		93	0,099	
35	0,13		94	0,10	
36	0,081		95	0,11	
37	0,14		97	0,11	
39	0,097		98	0,15	
40	0,19		99	0,15	
41	0,18		100	0,42	Outlier
42	0,12		102	0,065	
43	0,12		103	0,14	
45	0,12		104	0,13	
46	0,13		105	0,14	
47	0,12		106	0,23	
48	0,14		107	0,17	
49	0,12		109	0,13	
50	0,11		111	0,12	
51	0,13		112	5,0	Outlier,ND
52	0,13		113	0,17	
53	0,095		114	0,14	
54	0,63	Outlier	115	0,37	Outlier,ND
56	0,050	ND	116	0,15	
57	0,015		119	0,14	
59	2,0	Outlier	120	0,11	

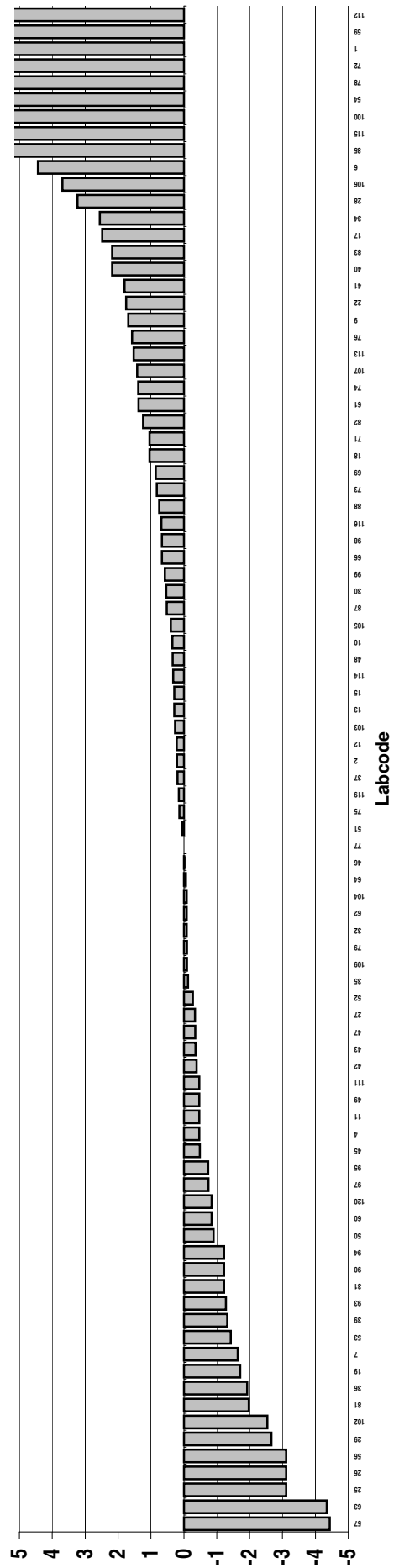
Consensus statistics

Consensus median, pg/g	0,13
Median all values pg/g	0,14
Consensus mean, pg/g	0,13
Standard deviation, pg/g	0,042
Relative standard deviation, %	32
No. of values reported	90
No. of values removed	9
No. of reported non-detects	8

1,2,3,4,7,8 HxCDD



Z-score: 1,2,3,4,7,8 HxCDD



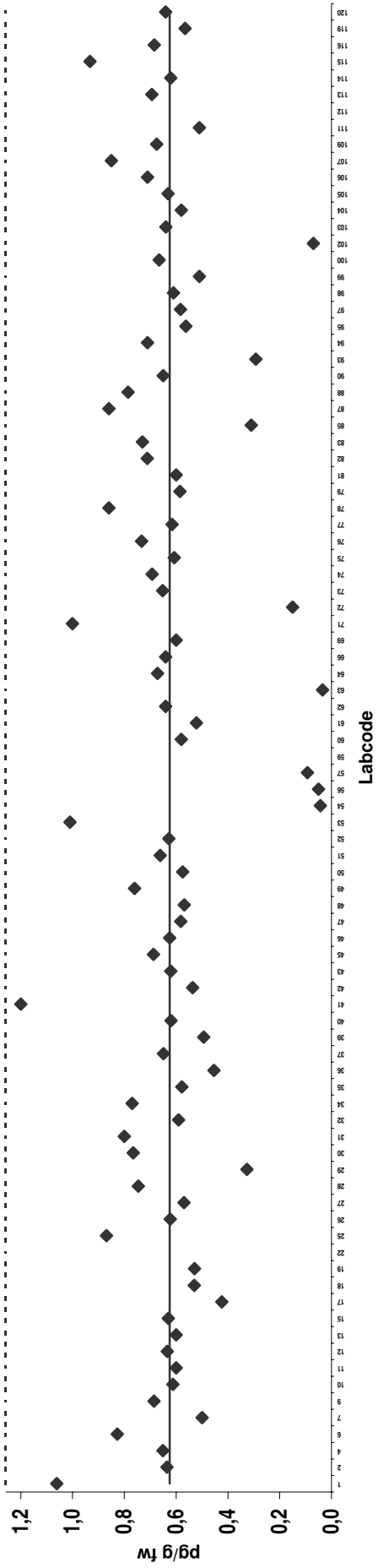
Eel
Congener: 1,2,3,6,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1,1		60	0,58	
2	0,64		61	0,52	
4	0,65		62	0,64	
6	0,83		63	0,035	
7	0,50		64	0,67	
9	0,69		66	0,64	
10	0,61		69	0,60	
11	0,60		71	1,0	
12	0,63		72	0,15	
13	0,60		73	0,65	
15	0,63		74	0,69	
17	0,42		75	0,61	
18	0,53		76	0,73	
19	0,53		77	0,62	
22	1,3		78	0,86	ND
25	0,87		79	0,59	
26	0,62		81	0,60	
27	0,57		82	0,71	
28	0,75		83	0,73	
29	0,33		85	0,31	
30	0,77		87	0,86	
31	0,80		88	0,79	
32	0,59		90	0,65	
34	0,77		93	0,29	
35	0,58		94	0,71	
36	0,45		95	0,56	
37	0,65		97	0,58	
39	0,49		98	0,61	
40	0,62		99	0,51	
41	1,2		100	0,67	
42	0,54		102	0,070	
43	0,62		103	0,64	
45	0,69		104	0,58	
46	0,62		105	0,63	
47	0,58		106	0,71	
48	0,57		107	0,85	
49	0,76		109	0,67	
50	0,57		111	0,51	
51	0,66		112	5,0	
52	0,63		113	0,69	
53	1,0		114	0,62	
54	0,043		115	0,93	
56	0,050		116	0,68	ND
57	0,093		119	0,57	
59	2,2	Outlier	120	0,64	Outlier,ND

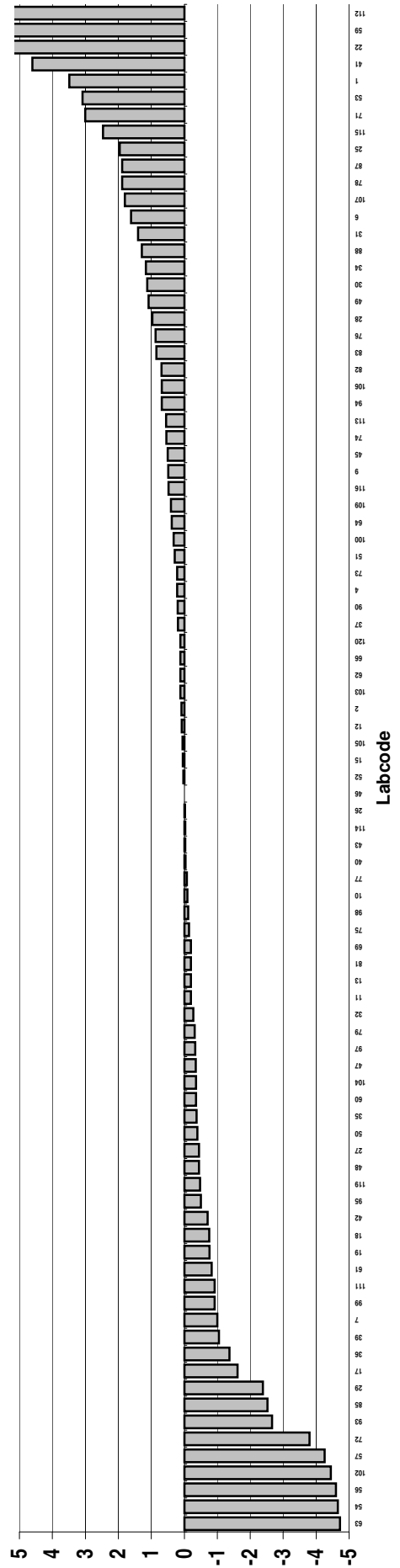
Consensus statistics

Consensus median, pg/g	0,62
Median all values pg/g	0,63
Consensus mean, pg/g	0,61
Standard deviation, pg/g	0,21
Relative standard deviation, %	34
No. of values reported	90
No. of values removed	3
No. of reported non-detects	3

1,2,3,6,7,8 HxCDD



Z-score: 1,2,3,6,7,8 HxCDD



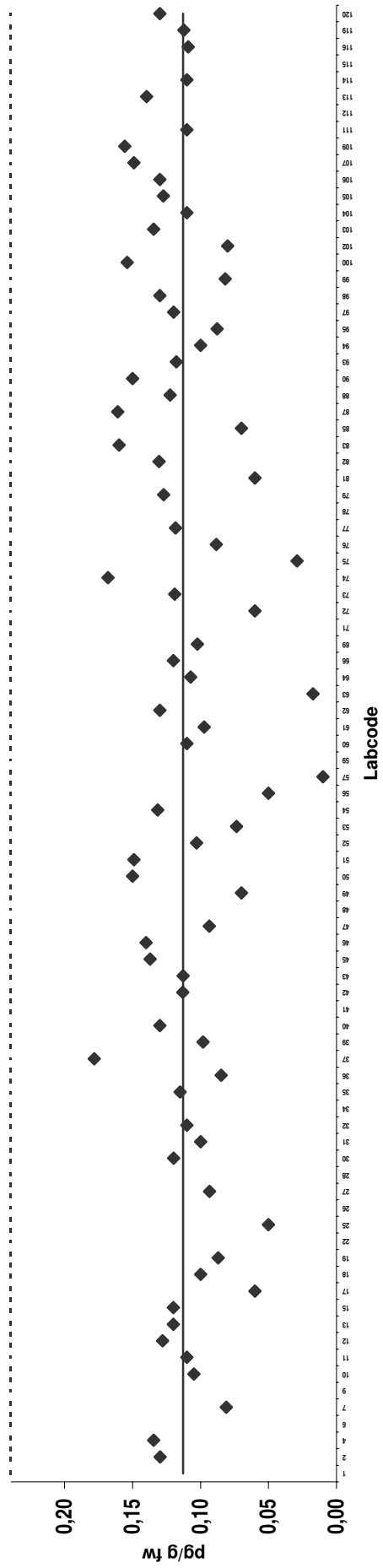
Eel
Congener: 1,2,3,7,8,9 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,37		61	0,097	
2	0,13	Outlier	62	0,13	
4	0,13		63	0,017	ND
6	0,45	Outlier	64	0,11	
7	0,081		66	0,12	
9	5,1	Outlier	69	0,10	
10	0,10		71	0,25	Outlier
11	0,11		72	0,060	ND
12	0,13		73	0,12	
13	0,12		74	0,17	
15	0,12		75	0,029	ND
17	0,060		76	0,089	ND
18	0,10	ND	77	0,12	
19	0,087		78	0,37	Outlier,ND
22	0,25	Outlier	79	0,13	
25	0,050		81	0,060	
26	0,42	Outlier	82	0,13	
27	0,093		83	0,16	
28	0,28	Outlier	85	0,070	
30	0,12		87	0,16	
31	0,10	ND	88	0,12	
32	0,11		90	0,15	
34	0,27	Outlier	93	0,12	
35	0,12		94	0,10	
36	0,085		95	0,088	
37	0,18		97	0,12	
39	0,098		98	0,13	
40	0,13		99	0,082	
41	0,24	Outlier	100	0,15	
42	0,11		102	0,080	
43	0,11		103	0,13	
45	0,14		104	0,11	
46	0,14		105	0,13	
47	0,094		106	0,13	
48	0,54	Outlier	107	0,15	
49	0,070		109	0,16	
50	0,15		111	0,11	
51	0,15		112	5,0	Outlier,ND
52	0,10		113	0,14	
53	0,074		114	0,11	
54	0,13		115	0,40	
56	0,050	ND	116	0,11	Outlier,ND
57	0,010	ND	119	0,11	
59	2,0	Outlier	120	0,13	
60	0,11				

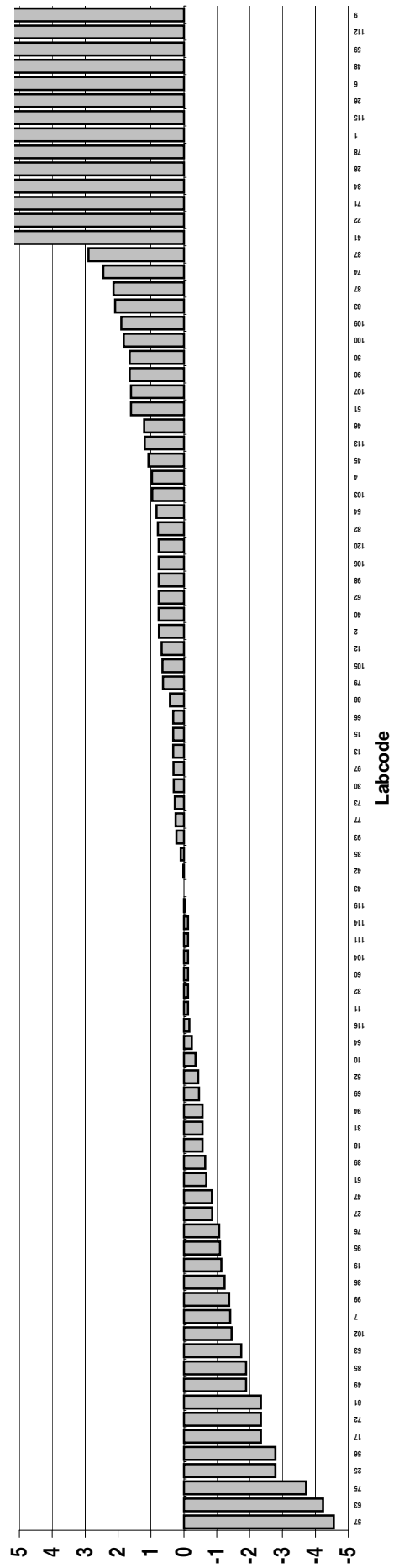
Consensus statistics

Consensus median, pg/g	0,11
Median all values pg/g	0,12
Consensus mean, pg/g	0,11
Standard deviation, pg/g	0,033
Relative standard deviation, %	30
No. of values reported	89
No. of values removed	14
No. of reported non-detects	11

1,2,3,7,8,9 HxCDD



Z-score: 1,2,3,7,8,9 HxCDD



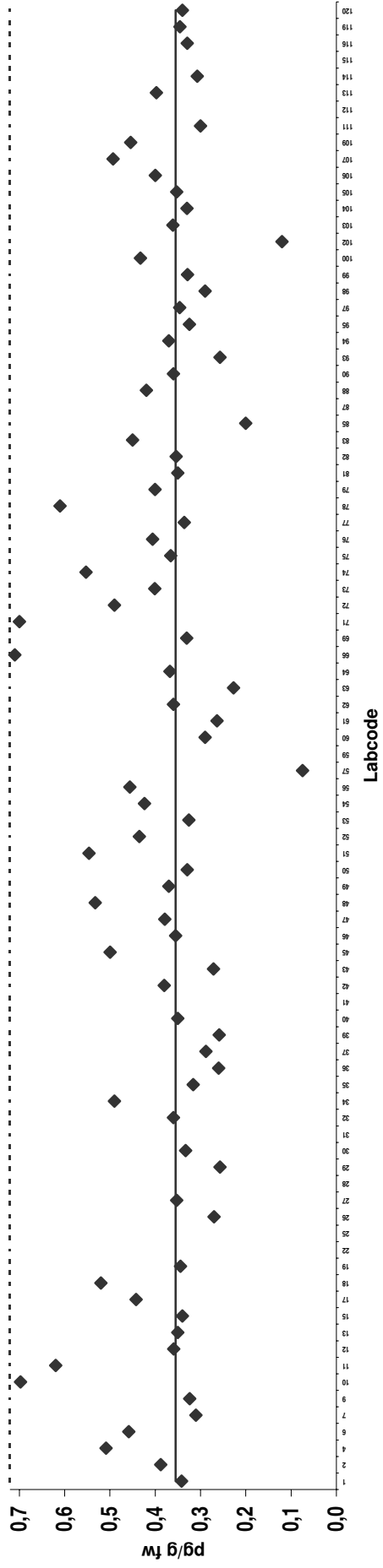
Eel
Congener: 1,2,3,4,6,7,8 HpCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,34		60	0,29	
2	0,39		61	0,26	
4	0,51		62	0,36	
6	0,46		63	0,23	
7	0,31		64	0,37	
9	0,32		66	0,71	
10	0,70		69	0,33	
11	0,62		71	0,70	
12	0,36		72	0,49	
13	0,35		73	0,40	
15	0,34		74	0,55	
17	0,44		75	0,37	
18	0,52		76	0,41	
19	0,34		77	0,34	
22	0,80		78	0,61	ND
25	0,86	Outlier	79	0,40	
26	0,27	Outlier	81	0,35	
27	0,35		82	0,35	
28	0,86	Outlier	83	0,45	
29	0,26		85	0,20	
30	0,33		87	0,76	Outlier
31	1,2		88	0,42	
32	0,36		90	0,36	
34	0,49		93	0,26	
35	0,32		94	0,37	
36	0,26		95	0,32	
37	0,29		97	0,35	
39	0,26		98	0,29	
40	0,35		99	0,33	
41	1,5		100	0,43	
42	0,38		102	0,12	
43	0,27		103	0,36	
45	0,50		104	0,33	
46	0,36		105	0,35	
47	0,38		106	0,40	
48	0,53		107	0,49	
49	0,37		109	0,45	
50	0,33		111	0,30	
51	0,55		112	5,0	Outlier,ND
52	0,44		113	0,40	
53	0,33		114	0,31	
54	0,42		115	2,3	Outlier,ND
56	0,46		116	0,33	
57	0,075		119	0,35	
59	2,1	Outlier	120	0,34	

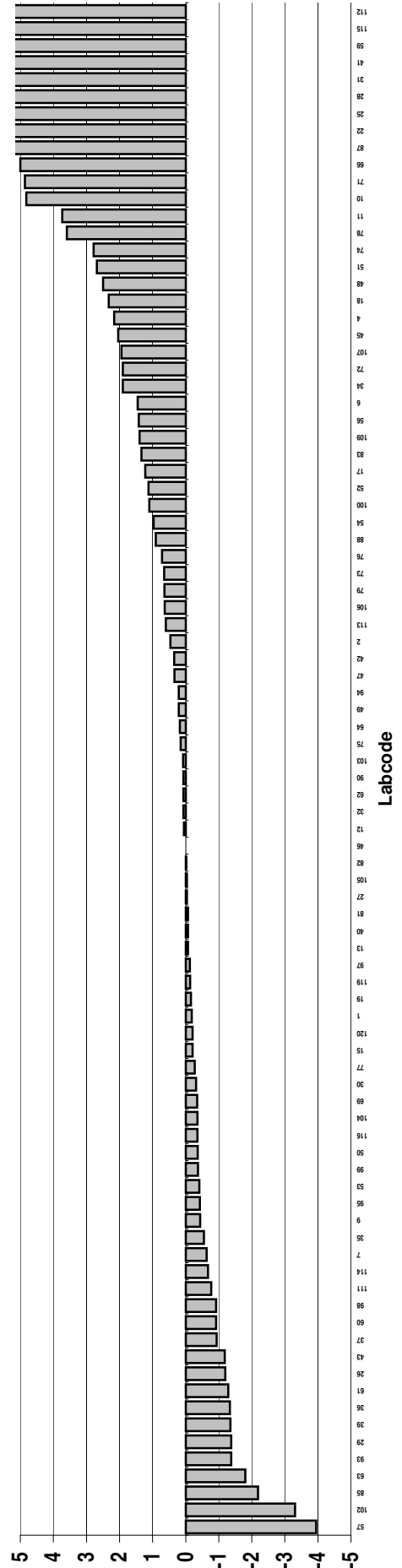
Consensus statistics

Consensus median, pg/g	0,36
Median all values pg/g	0,36
Consensus mean, pg/g	0,38
Standard deviation, pg/g	0,11
Relative standard deviation, %	30
No. of values reported	90
No. of values removed	9
No. of reported non-detects	3

1,2,3,4,6,7,8 HpCDD



Z-score: 1,2,3,4,6,7,8 HpCDD

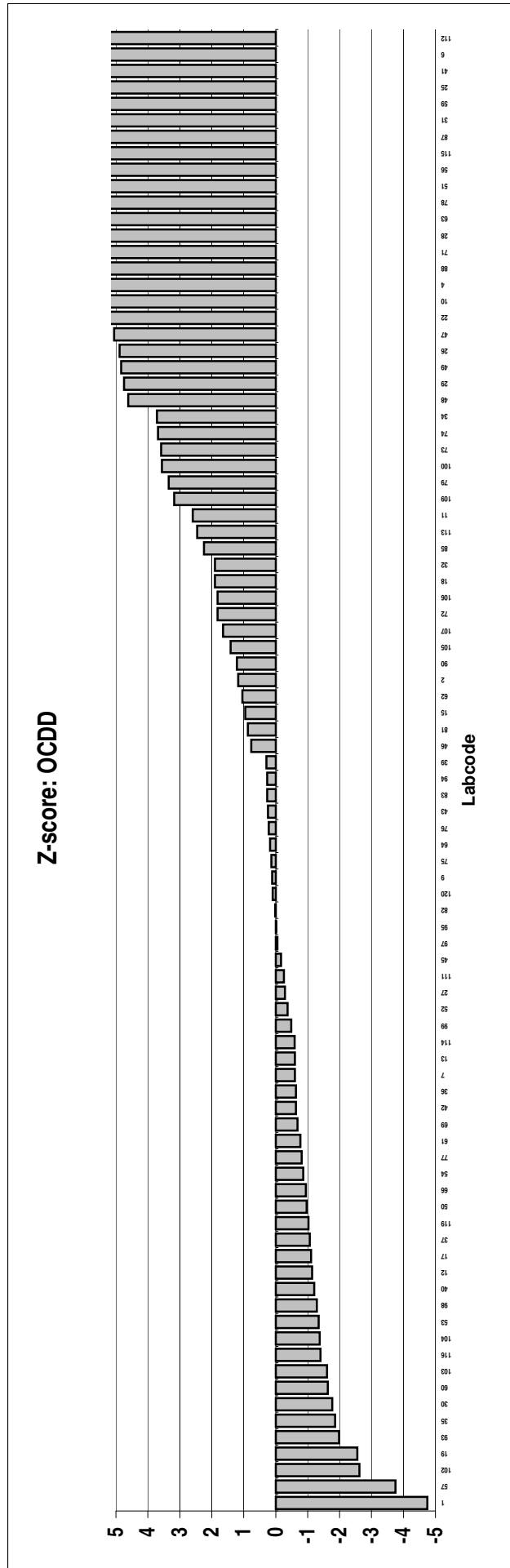
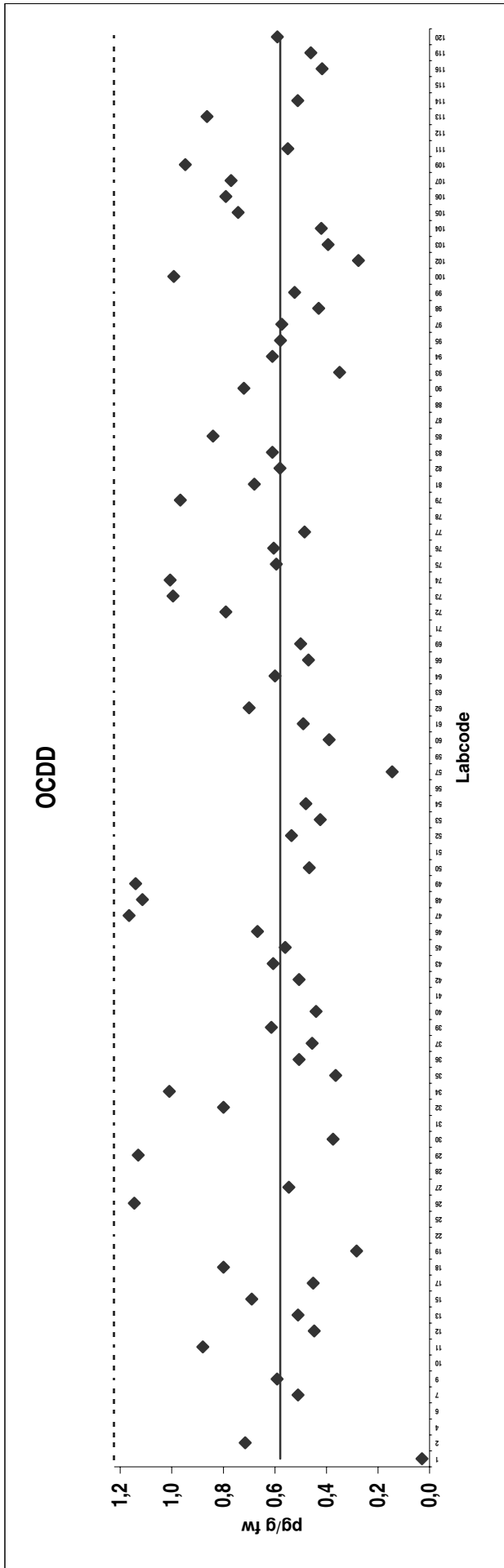


Eel
Congener: OCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,030	ND	60	0,39	
2	0,72		61	0,49	
4	1,3	Outlier	62	0,70	Outlier
6	8,8	Outlier	63	1,9	
7	0,51		64	0,60	
9	0,59		66	0,47	
10	1,3	Outlier	69	0,50	
11	0,88		71	1,4	Outlier
12	0,45		72	0,79	
13	0,51		73	1,00	
15	0,69		74	1,0	
17	0,45		75	0,60	
18	0,80		76	0,61	
19	0,28		77	0,48	
22	1,2	Outlier	78	2,0	Outlier,ND
25	4,7	Outlier	79	0,97	
26	1,1		81	0,68	
27	0,55		82	0,58	
28	1,7	Outlier	83	0,61	
29	1,1		85	0,84	
30	0,37		87	3,5	Outlier
31	3,7	Outlier	88	1,4	Outlier
32	0,80		90	0,72	
34	1,0		93	0,35	
35	0,36		94	0,61	
36	0,51		95	0,58	
37	0,46		97	0,57	
39	0,61		98	0,43	
40	0,44		99	0,52	
41	6,3	Outlier	100	0,99	
42	0,51		102	0,28	
43	0,61		103	0,39	
45	0,56		104	0,42	
46	0,67		105	0,74	
47	1,2		106	0,79	
48	1,1		107	0,77	
49	1,1		109	0,95	
50	0,47		111	0,55	
51	2,1	Outlier	112	10	ND
52	0,54		113	0,86	Outlier,ND
53	0,42		114	0,51	
54	0,48		115	2,3	
56	2,2	Outlier	116	0,42	Outlier
57	0,15		119	0,46	
59	4,1	Outlier	120	0,59	

Consensus statistics

Consensus median, pg/g	0,58
Median all values pg/g	0,61
Consensus mean, pg/g	0,62
Standard deviation, pg/g	0,24
Relative standard deviation, %	39
No. of values reported	90
No. of values removed	18
No. of reported non-detects	4

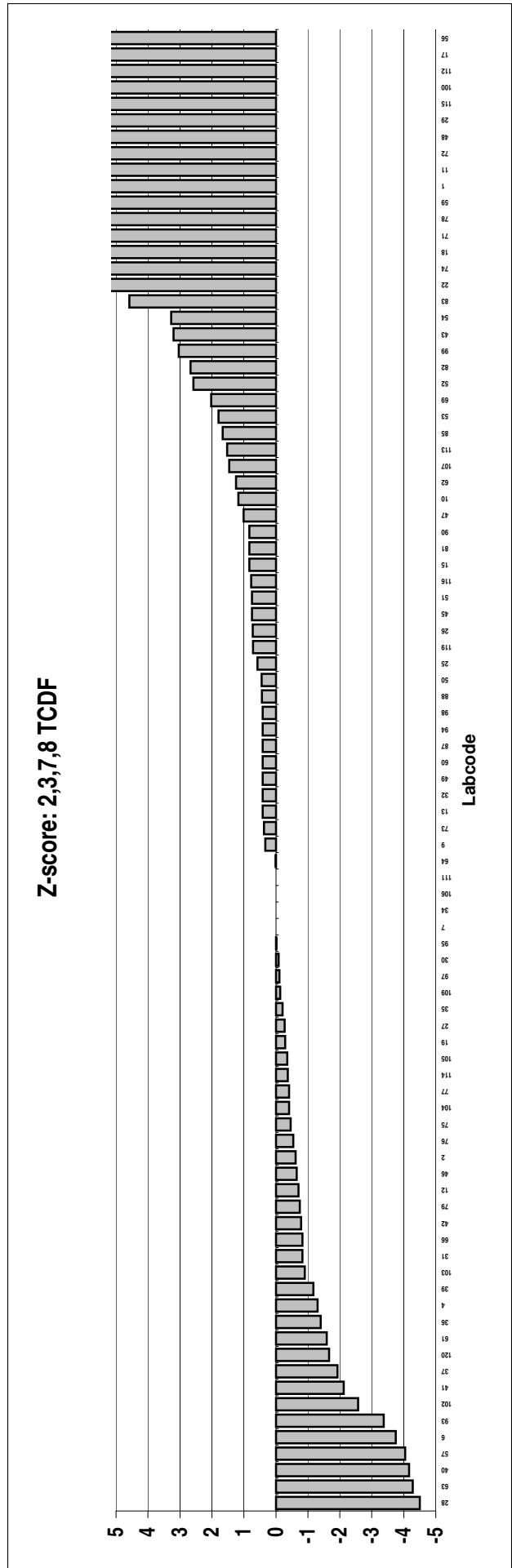
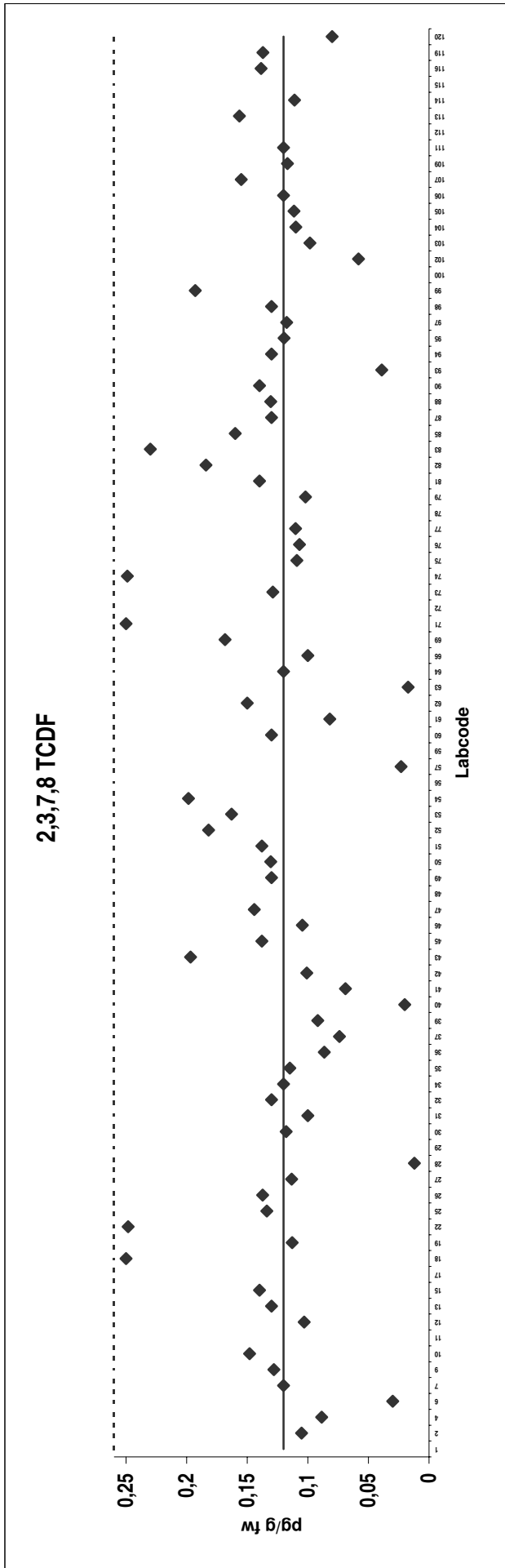


Eel
Congener: 2,3,7,8 TCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,39		60	0,13	
2	0,11	Outlier	61	0,082	
4	0,089		62	0,15	ND
6	0,030		63	0,017	
7	0,12		64	0,12	
9	0,13		66	0,10	
10	0,15		69	0,17	
11	0,54		71	0,25	
12	0,10	Outlier	72	0,63	Outlier
13	0,13		73	0,13	
15	0,14		74	0,25	
17	2,6	Outlier	75	0,11	
18	0,25	ND	76	0,11	
19	0,11		77	0,11	
22	0,25		78	0,36	Outlier,ND
25	0,13		79	0,10	
26	0,14		81	0,14	
27	0,11		82	0,18	
28	0,012	ND	83	0,23	
29	0,67	Outlier	85	0,16	
30	0,12		87	0,13	
31	0,10		88	0,13	
32	0,13		90	0,14	
34	0,12		93	0,039	
35	0,12		94	0,13	
36	0,086		95	0,12	
37	0,074		97	0,12	
39	0,092		98	0,13	
40	0,020	ND	99	0,19	
41	0,069		100	0,84	Outlier
42	0,10		102	0,058	
43	0,20		103	0,098	
45	0,14		104	0,11	
46	0,10		105	0,11	
47	0,14		106	0,12	
48	0,64		107	0,16	
49	0,13	Outlier	109	0,12	
50	0,13		111	0,12	
51	0,14		112	1,0	Outlier,ND
52	0,18		113	0,16	
53	0,16		114	0,11	
54	0,20		115	0,70	Outlier,ND
56	4,9	Outlier	116	0,14	
57	0,023		119	0,14	
59	0,38	Outlier	120	0,080	

Consensus statistics

Consensus median, pg/g	0,12
Median all values pg/g	0,13
Consensus mean, pg/g	0,13
Standard deviation, pg/g	0,050
Relative standard deviation, %	40
No. of values reported	90
No. of values removed	12
No. of reported non-detects	7



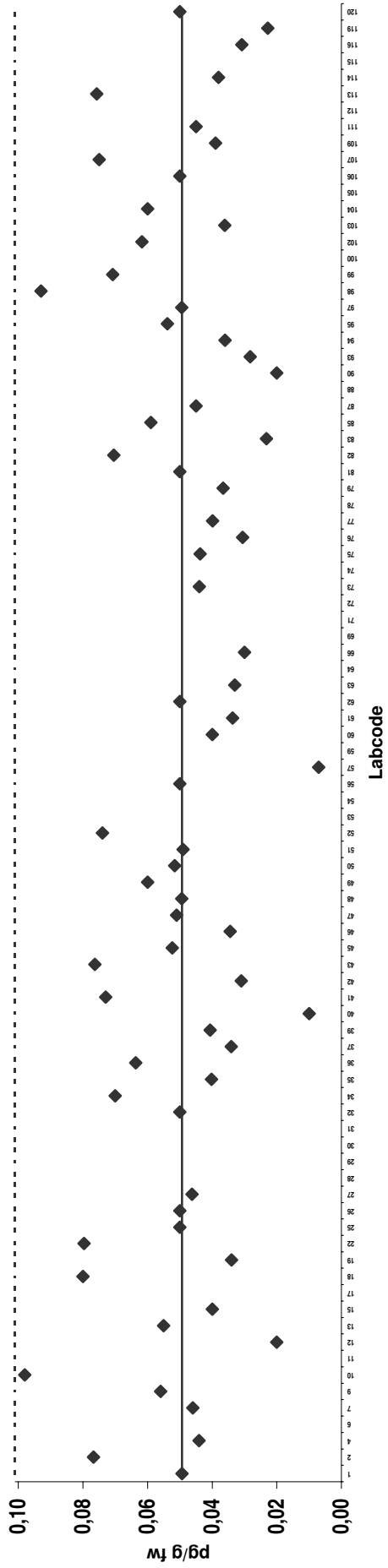
Eel
Congener: 1,2,3,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,049		60	0,040	
2	0,077		61	0,034	
4	0,044		62	0,050	
6	0,23	Outlier	63	0,033	
7	0,046		64	0,19	Outlier
9	0,056		66	0,030	
10	0,098	ND	69	0,18	Outlier
11	0,48	Outlier	71	0,14	Outlier
12	0,020		72	5,9	Outlier
13	0,055		73	0,044	
15	0,040		74	0,13	Outlier
17	5,2	Outlier	75	0,044	
18	0,080	ND	76	0,031	
19	0,034		77	0,040	
22	0,080		78	0,86	Outlier,ND
25	0,050	ND	79	0,037	
26	0,050	ND	81	0,050	ND
27	0,046		82	0,070	ND
28	0,17	Outlier	83	0,023	ND
29	2,6	Outlier	85	0,059	ND
30	0,28	Outlier	87	0,045	
31	3,6	Outlier	88	0,48	Outlier
32	0,050	ND	90	0,020	
34	0,070		93	0,028	
35	0,040		94	0,036	
36	0,064		95	0,054	
37	0,034		97	0,049	
39	0,041		98	0,093	
40	0,010	ND	99	0,071	
41	0,073		100	0,19	Outlier
42	0,031		102	0,062	
43	0,076		103	0,036	
45	0,052		104	0,060	
46	0,034		105	0,13	
47	0,051	ND	106	0,050	
48	0,049		107	0,075	
49	0,060		109	0,039	
50	0,052		111	0,045	
51	0,049		112	5,0	Outlier,ND
52	0,074		113	0,076	
53	0,24	Outlier,ND	114	0,038	
54	0,22	Outlier	115	14	Outlier,ND
56	0,050	ND	116	0,031	
57	0,0070		119	0,023	
59	1,9	Outlier	120	0,050	

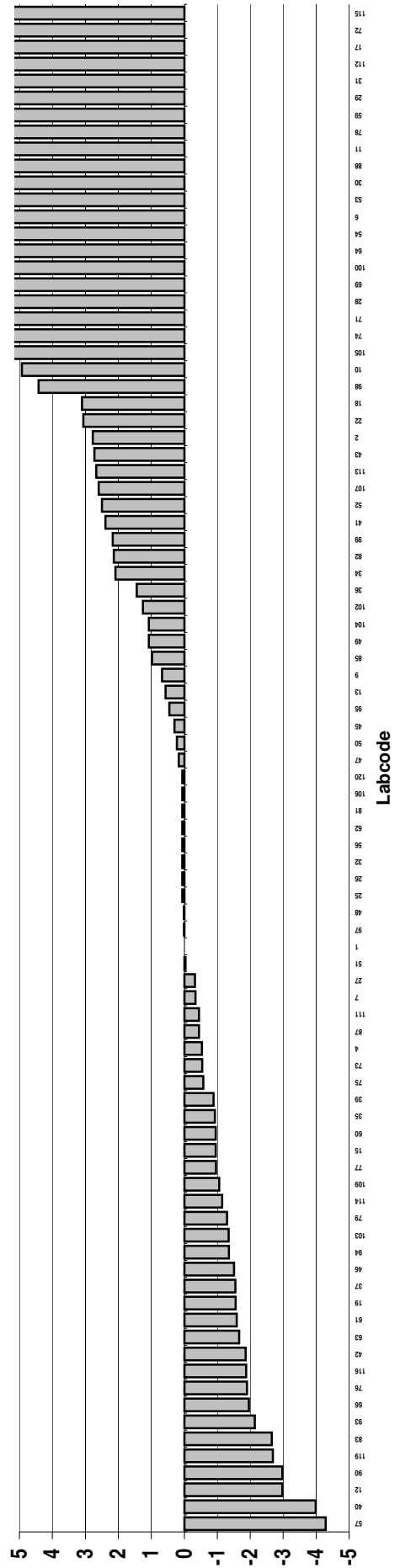
Consensus statistics

Consensus median, pg/g	0,049
Median all values pg/g	0,051
Consensus mean, pg/g	0,049
Standard deviation, pg/g	0,018
Relative standard deviation, %	38
No. of values reported	90
No. of values removed	21
No. of reported non-detects	16

1,2,3,7,8 PeCDF



Z-score: 1,2,3,7,8 PeCDF



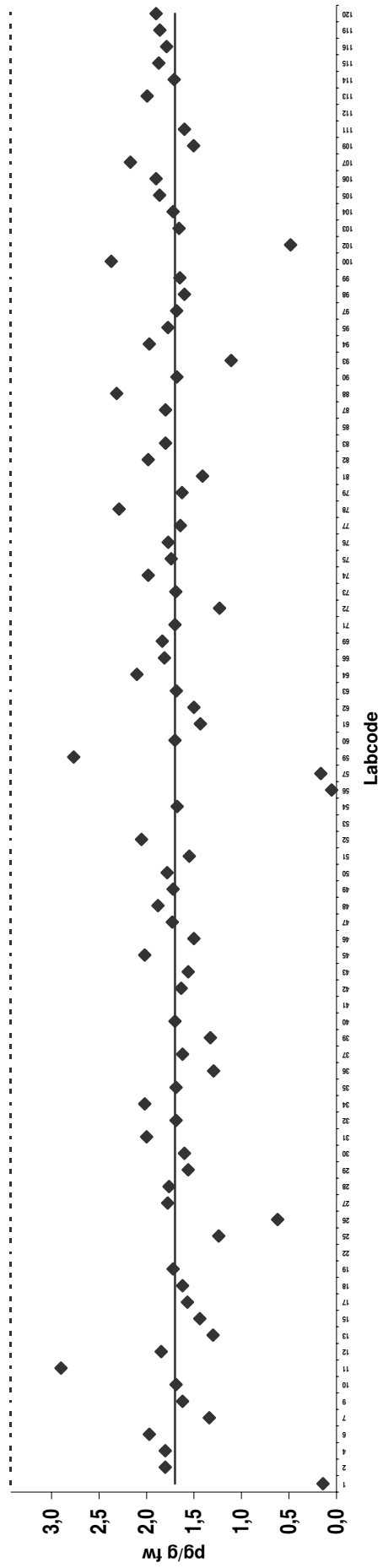
Eel
Congener: 2,3,4,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,14		60	1,7	
2	1,8		61	1,4	
4	1,8		62	1,5	
6	2,0		63	1,7	
7	1,3		64	2,1	
9	1,6		66	1,8	
10	1,7		69	1,8	
11	2,9		71	1,7	
12	1,8		72	1,2	
13	1,3		73	1,7	
15	1,4		74	2,0	
17	1,6		75	1,7	
18	1,6		76	1,8	
19	1,7		77	1,6	
22	3,7	Outlier	78	2,3	ND
25	1,2		79	1,6	
26	0,62		81	1,4	
27	1,8		82	2,0	
28	1,8		83	1,8	
29	1,6		85	3,9	Outlier
30	1,6		87	1,8	
31	2,0		88	2,3	
32	1,7		90	1,7	
34	2,0		93	1,1	
35	1,7		94	2,0	
36	1,3		95	1,8	
37	1,6		97	1,7	
39	1,3		98	1,6	
40	1,7		99	1,6	
41	3,9	Outlier	100	2,4	
42	1,6		102	0,48	
43	1,6		103	1,7	
45	2,0		104	1,7	
46	1,5		105	1,9	
47	1,7		106	1,9	
48	1,9		107	2,2	
49	1,7		109	1,5	
50	1,8		111	1,6	
51	1,6		112	5,0	Outlier,ND
52	2,1		113	2,0	
53	7,3	Outlier	114	1,7	
54	1,7		115	1,9	
56	0,050	ND	116	1,8	
57	0,17		119	1,9	
59	2,8		120	1,9	

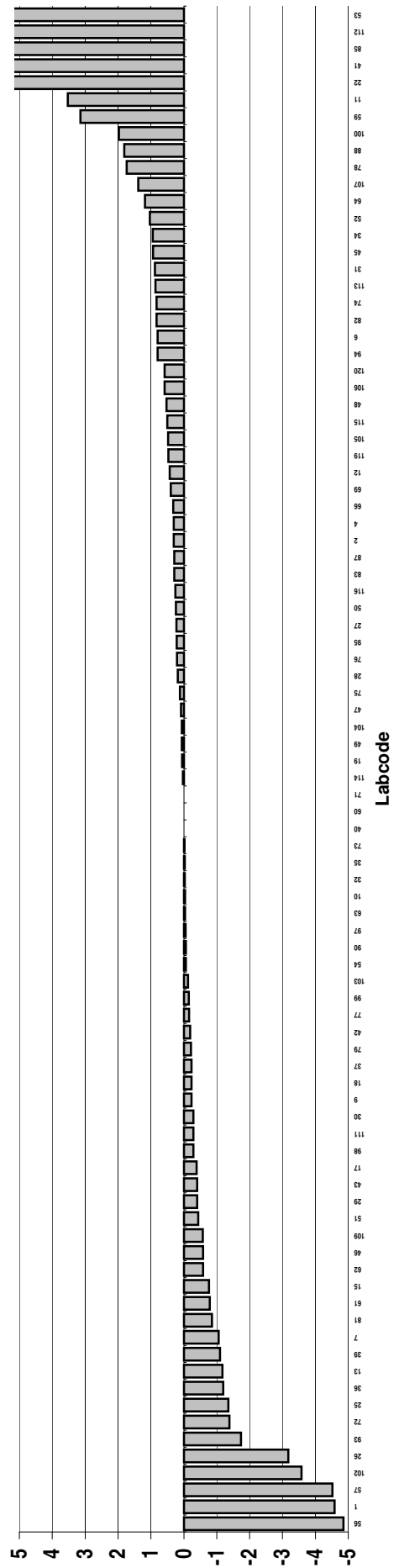
Consensus statistics

Consensus median, pg/g	1,7
Median all values pg/g	1,7
Consensus mean, pg/g	1,7
Standard deviation, pg/g	0,45
Relative standard deviation, %	27
No. of values reported	90
No. of values removed	5
No. of reported non-detects	3

2,3,4,7,8 PeCDF



Z-score: 2,3,4,7,8 PeCDF



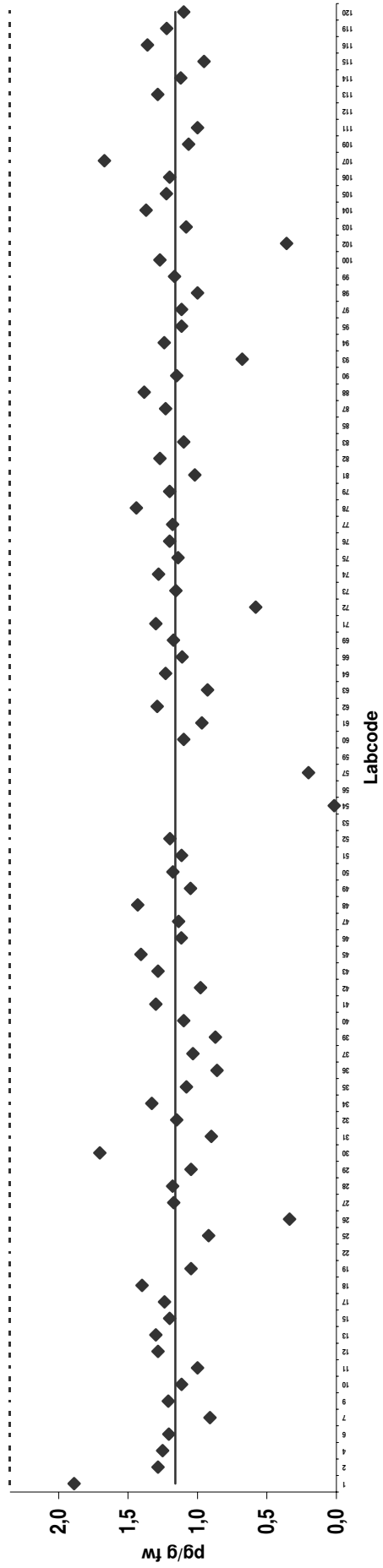
Eel
Congener: 1,2,3,4,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1,9		60	1,1	
2	1,3		61	0,97	
4	1,3		62	1,3	
6	1,2		63	0,93	
7	0,91		64	1,2	
9	1,2		66	1,1	
10	1,1		69	1,2	
11	1,0		71	1,3	
12	1,3		72	0,58	
13	1,3		73	1,2	
15	1,2		74	1,3	
17	1,2		75	1,1	
18	1,4		76	1,2	
19	1,0		77	1,2	
22	2,5		78	1,4	ND
25	0,92		79	1,2	
26	0,34		81	1,0	
27	1,2		82	1,3	
28	1,2		83	1,1	
29	1,0		85	3,8	
30	1,7		87	1,2	
31	0,90		88	1,4	
32	1,2		90	1,2	
34	1,3		93	0,68	
35	1,1		94	1,2	
36	0,86		95	1,1	
37	1,0		97	1,1	
39	0,87		98	1,0	
40	1,1		99	1,2	
41	1,3		100	1,3	
42	0,98		102	0,36	
43	1,3		103	1,1	
45	1,4		104	1,4	
46	1,1		105	1,2	
47	1,1		106	1,2	
48	1,4		107	1,7	
49	1,1		109	1,1	
50	1,2		111	1,0	
51	1,1		112	5,0	
52	1,2		113	1,3	
53	41		114	1,1	
54	0,016	Outlier	115	0,95	
56	9,2	ND	116	1,4	
57	0,20	Outlier	119	1,2	
59	2,5	Outlier	120	1,1	Outlier,ND

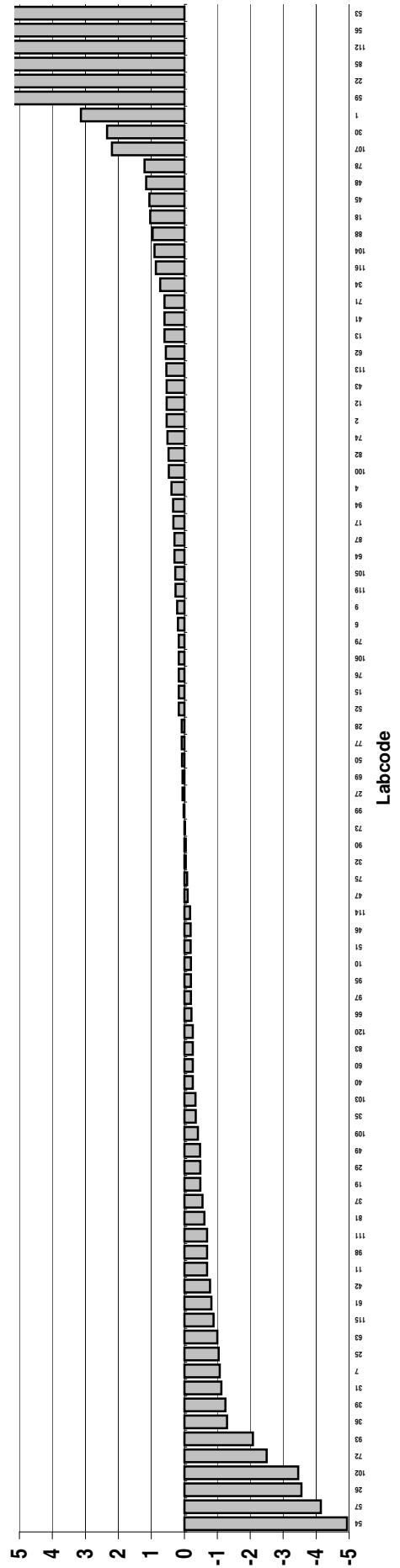
Consensus statistics

Consensus median, pg/g	1,2
Median all values pg/g	1,2
Consensus mean, pg/g	1,1
Standard deviation, pg/g	0,28
Relative standard deviation, %	25
No. of values reported	90
No. of values removed	6
No. of reported non-detects	3

1,2,3,4,7,8 HxCDF



Z-score: 1,2,3,4,7,8 HxCDF



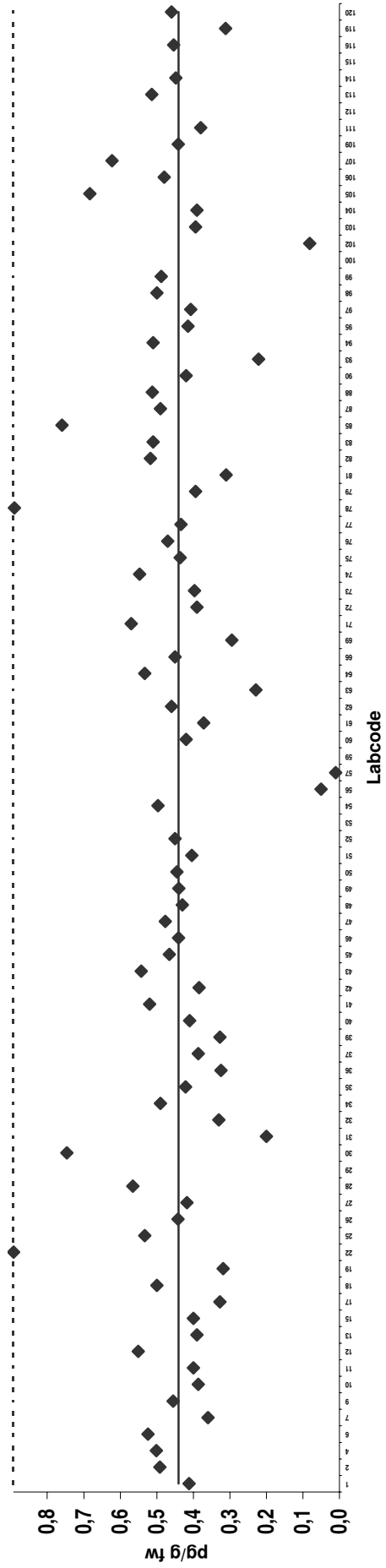
Eel
Congener: 1,2,3,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,41		60	0,42	
2	0,49		61	0,37	
4	0,50		62	0,46	
6	0,52		63	0,23	
7	0,36		64	0,53	
9	0,46		66	0,45	
10	0,39		69	0,29	
11	0,40		71	0,57	
12	0,55		72	0,39	
13	0,39		73	0,40	
15	0,40		74	0,55	
17	0,33		75	0,44	
18	0,50		76	0,47	
19	0,32		77	0,43	
22	0,89		78	0,89	ND
25	0,53		79	0,39	
26	0,44		81	0,31	
27	0,42		82	0,52	
28	0,57		83	0,51	
29	5,4	Outlier	85	0,76	
30	0,75		87	0,49	
31	0,20		88	0,51	
32	0,33		90	0,42	
34	0,49		93	0,22	
35	0,42		94	0,51	
36	0,32		95	0,41	
37	0,39		97	0,41	
39	0,33		98	0,50	
40	0,41		99	0,49	
41	0,52		100	7,4	Outlier
42	0,38		102	0,082	
43	0,54		103	0,39	
45	0,47		104	0,39	
46	0,44		105	0,68	
47	0,48		106	0,48	
48	0,43		107	0,62	
49	0,44		109	0,44	
50	0,44		111	0,38	
51	0,40		112	5,0	Outlier,ND
52	0,45		113	0,51	
53	31	Outlier	114	0,45	
54	0,50	ND	115	19	Outlier,ND
56	0,050	ND	116	0,45	
57	0,010	ND	119	0,31	
59	2,2	Outlier	120	0,46	

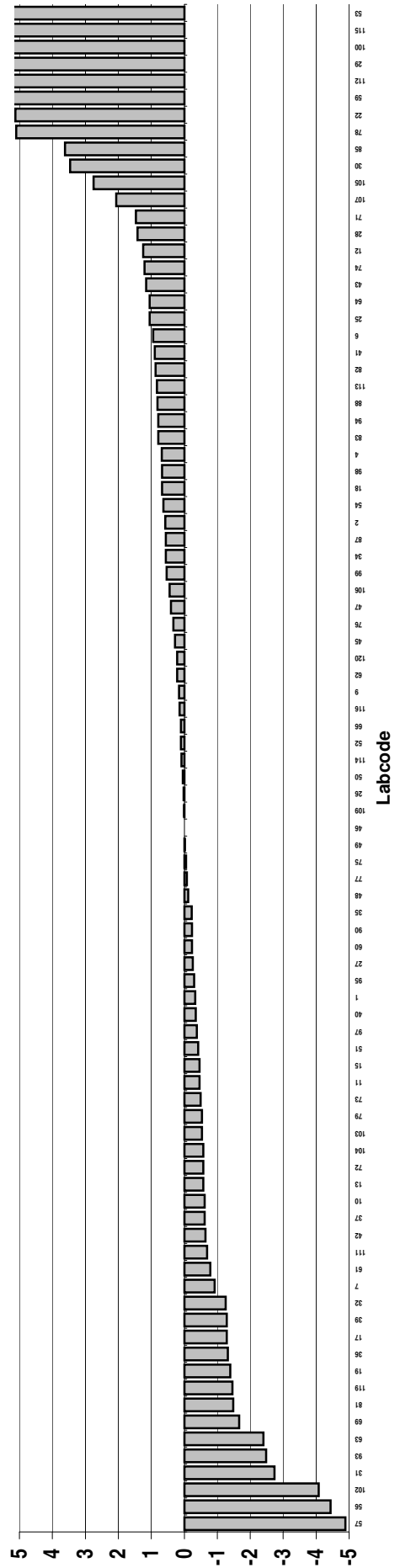
Consensus statistics

Consensus median, pg/g	0,44
Median all values pg/g	0,45
Consensus mean, pg/g	0,44
Standard deviation, pg/g	0,14
Relative standard deviation, %	32
No. of values reported	90
No. of values removed	6
No. of reported non-detects	5

1,2,3,6,7,8 HxCDF



Z-score: 1,2,3,6,7,8 HxCDF



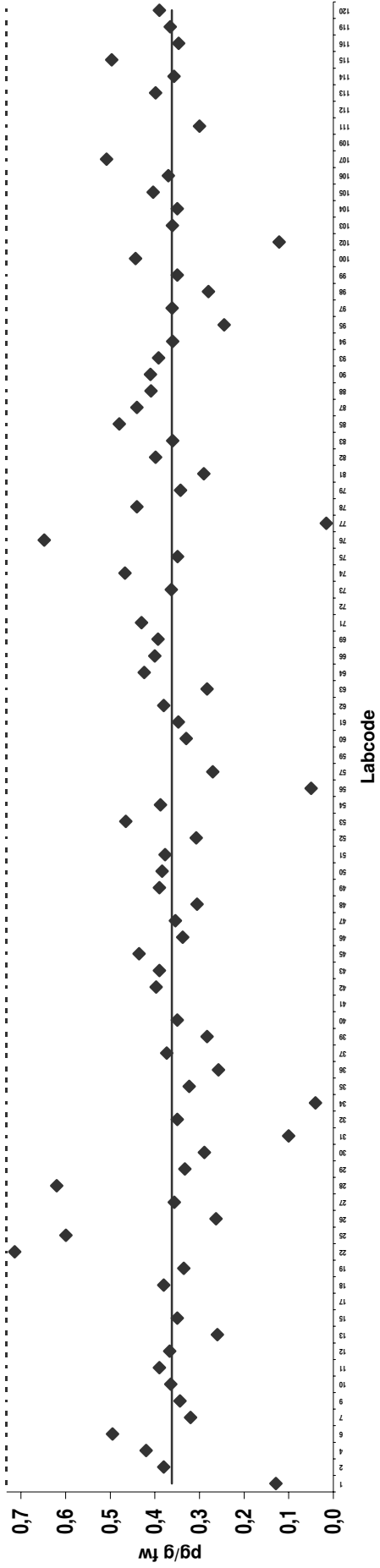
Eel
Congener: 2,3,4,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,13		60	0,33	
2	0,38		61	0,35	
4	0,42		62	0,38	
6	0,49		63	0,28	
7	0,32		64	0,42	
9	0,34		66	0,40	
10	0,36		69	0,39	
11	0,39		71	0,43	
12	0,37		72	3,5	Outlier
13	0,26		73	0,36	
15	0,35		74	0,47	
17	4,2	Outlier	75	0,35	
18	0,38		76	0,65	
19	0,34		77	0,016	
22	0,71		78	0,44	ND
25	0,60		79	0,34	
26	0,26		81	0,29	
27	0,36		82	0,40	
28	0,62		83	0,36	
29	0,33		85	0,48	
30	0,29		87	0,44	
31	0,10		88	0,41	
32	0,35		90	0,41	
34	0,040	ND	93	0,39	
35	0,32		94	0,36	
36	0,26		95	0,24	
37	0,37		97	0,36	
39	0,28		98	0,28	
40	0,35		99	0,35	
41	0,75		100	0,44	
42	0,40		102	0,12	
43	0,39		103	0,36	
45	0,44		104	0,35	
46	0,34		105	0,40	
47	0,35		106	0,37	
48	0,31		107	0,51	
49	0,39		109	0,91	Outlier
50	0,38		111	0,30	
51	0,38		112	5,0	Outlier,ND
52	0,31		113	0,40	
53	0,47		114	0,36	
54	0,39		115	0,50	ND
56	0,050	ND	116	0,35	
57	0,27		119	0,37	
59	2,0	Outlier	120	0,39	

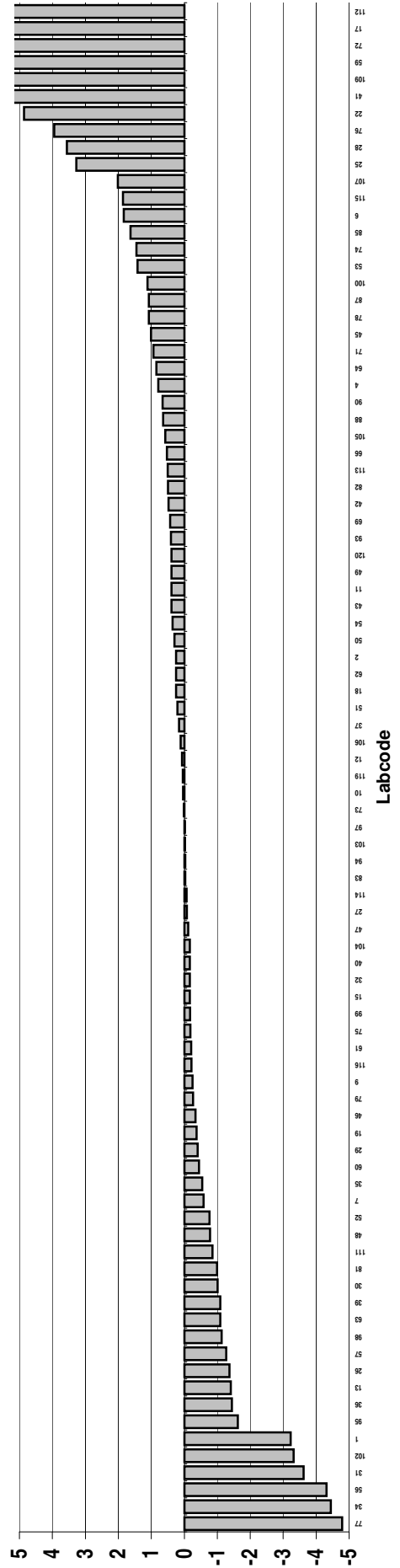
Consensus statistics

Consensus median, pg/g	0,36
Median all values pg/g	0,37
Consensus mean, pg/g	0,36
Standard deviation, pg/g	0,11
Relative standard deviation, %	32
No. of values reported	90
No. of values removed	6
No. of reported non-detects	5

2,3,4,6,7,8 HxCDF



Z-score: 2,3,4,6,7,8 HxCDF



Eel
Congener: 1,2,3,7,8,9 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,58		60	0,020	ND
2	0,012	Outlier	61	0,0095	
4	0,013	ND	62	0,040	ND
6	0,069	Outlier	63	0,017	ND
7	0,026		64	0,020	ND
9	0,013		66	0,040	ND
10	0,098	Outlier,ND	69	0,011	
11	0,030	ND	71	0,090	Outlier,ND
12	0,040	ND	72	5,9	Outlier
13	0,010	ND	73	0,018	
15	0,030		74	0,059	Outlier
17	0,027		75	0,025	ND
18	0,12	Outlier,ND	76	0,089	Outlier,ND
19	0,095	Outlier	77	0,35	Outlier
22	0,0072	ND	78	0,32	Outlier,ND
25	0,050	ND	79	0,013	
26	0,050	ND	81	0,050	ND
27	0,019	ND	82	0,027	ND
28	0,038	ND	83	0,020	ND
29	0,62	Outlier	85	0,17	Outlier,ND
30	0,011	ND	87	0,010	
31	0,10	Outlier,ND	88	0,015	
32	0,050	ND	90	0,030	ND
34	0,080	Outlier	93	0,0015	
35	0,013	ND	94	0,0080	ND
36	0,040	ND	95	0,015	
37	0,032	ND	97	0,022	ND
39	0,013	ND	98	0,030	ND
40	0,010	ND	99	0,025	
41	0,62	Outlier	100	0,18	Outlier
42	0,050		102	0,031	
43	0,015		103	0,020	
45	0,024	ND	104	0,010	
46	0,022	ND	105	0,024	
47	0,018	ND	106	0,041	
48	0,025	ND	107	0,011	
49	0,010		109	0,026	
50	0,056	Outlier,ND	111	0,011	
51	0,016		112	5,0	Outlier,ND
52	0,055	Outlier,ND	113	0,045	ND
53	0,52	Outlier,ND	114	0,0090	
54	0,039		115	0,25	Outlier,ND
56	0,15	Outlier	116	0,0088	ND
57	0,010	ND	119	0,014	
59	2,0	Outlier	120	0,020	ND

Consensus statistics

Consensus median, pg/g	0,020
Median all values pg/g	0,027
Consensus mean, pg/g	0,023
Standard deviation, pg/g	0,013
Relative standard deviation, %	56
No. of values reported	90
No. of values removed	24
No. of reported non-detects	46

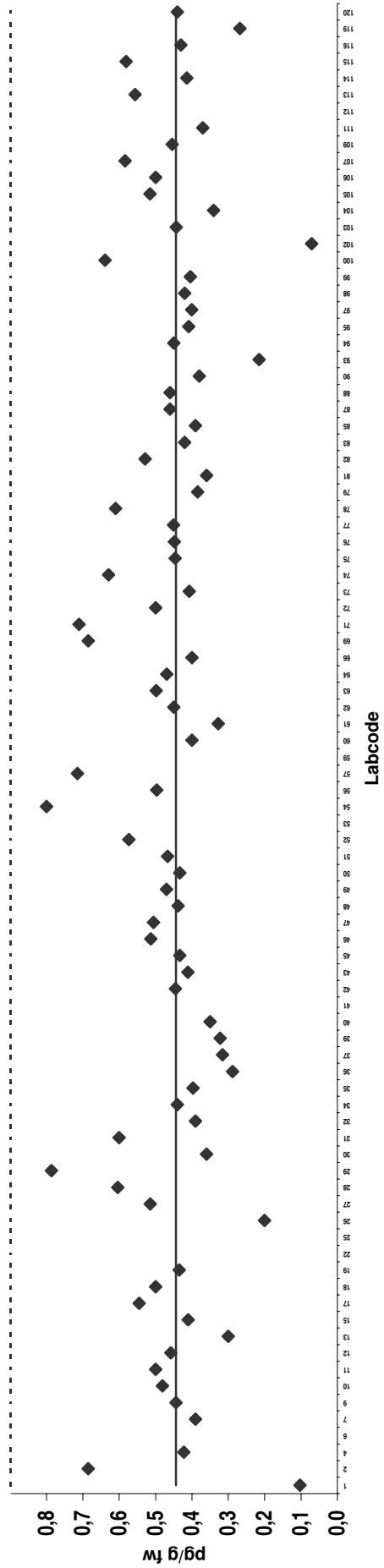
Eel
Congener: 1,2,3,4,6,7,8 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,10		60	0,40	
2	0,69		61	0,33	
4	0,42		62	0,45	
6	0,97	Outlier	63	0,50	
7	0,39		64	0,47	
9	0,44		66	0,40	
10	0,48		69	0,68	
11	0,50		71	0,71	
12	0,46		72	0,50	
13	0,30		73	0,41	
15	0,41		74	0,63	
17	0,55		75	0,45	
18	0,50		76	0,45	
19	0,44		77	0,45	
22	0,93	Outlier	78	0,61	ND
25	3,7	Outlier	79	0,38	
26	0,20		81	0,36	
27	0,51		82	0,53	
28	0,60		83	0,42	
29	0,79		85	0,39	
30	0,36		87	0,46	
31	0,60		88	0,46	
32	0,39		90	0,38	
34	0,44		93	0,21	
35	0,40		94	0,45	
36	0,29		95	0,41	
37	0,32		97	0,40	
39	0,32		98	0,42	
40	0,35		99	0,40	
41	1,3	Outlier	100	0,64	
42	0,45		102	0,070	
43	0,41		103	0,44	
45	0,43		104	0,34	
46	0,51		105	0,52	
47	0,51		106	0,50	
48	0,44		107	0,58	
49	0,47		109	0,45	
50	0,43		111	0,37	
51	0,47		112	5,0	Outlier,ND
52	0,57		113	0,56	
53	1,2	Outlier	114	0,41	
54	0,80		115	0,58	
56	0,50		116	0,43	
57	0,72		119	0,27	
59	2,2	Outlier	120	0,44	

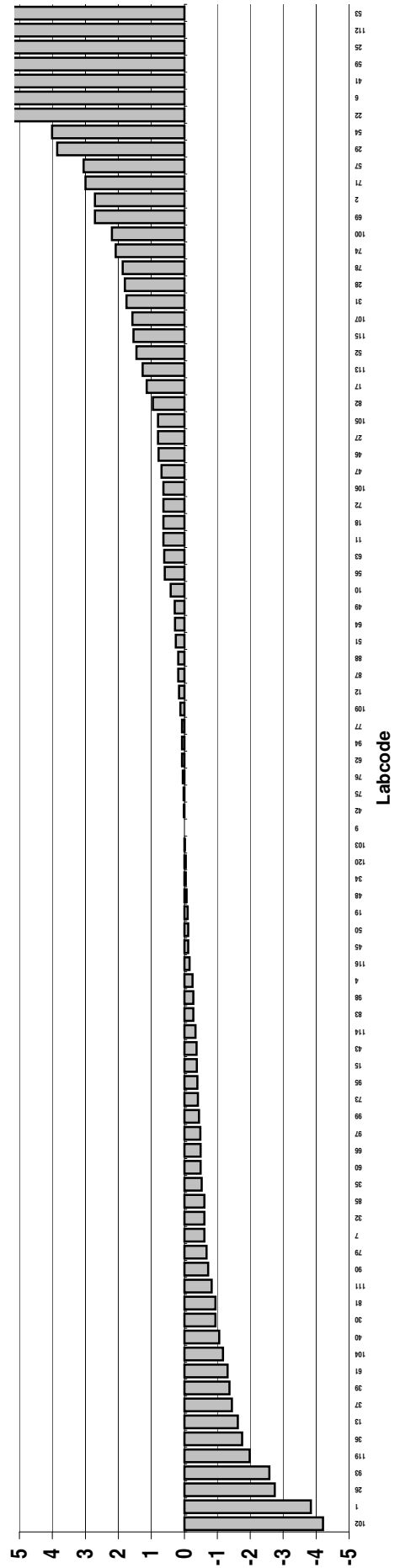
Consensus statistics

Consensus median, pg/g	0,44
Median all values pg/g	0,45
Consensus mean, pg/g	0,45
Standard deviation, pg/g	0,13
Relative standard deviation, %	28
No. of values reported	90
No. of values removed	7
No. of reported non-detects	2

1,2,3,4,6,7,8 HpCDF



Z-score: 1,2,3,4,6,7,8 HpCDF



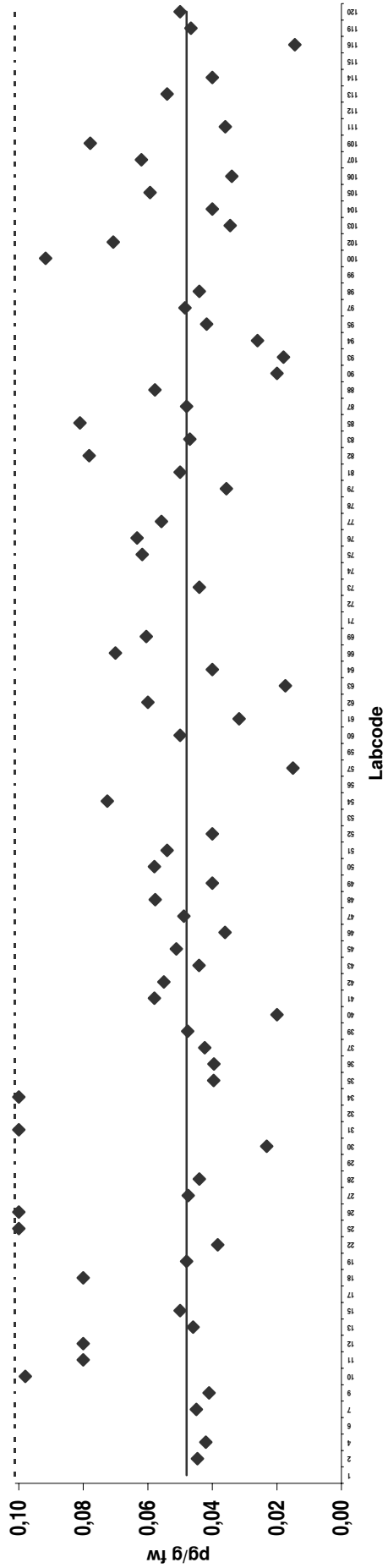
Eel
Congener: 1,2,3,4,7,8,9 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,33		60	0,050	
2	0,045	Outlier	61	0,032	
4	0,042		62	0,060	
6	0,19		63	0,017	ND
7	0,045	Outlier	64	0,040	ND
9	0,041		66	0,070	
10	0,098		69	0,060	
11	0,080	ND	71	0,13	Outlier,ND
12	0,080	ND	72	0,27	Outlier
13	0,046		73	0,044	
15	0,050		74	0,11	Outlier
17	0,16		75	0,062	
18	0,080	Outlier	76	0,063	
19	0,048	ND	77	0,056	
22	0,038		78	0,76	Outlier,ND
25	0,10	ND	79	0,036	
26	0,10	ND	81	0,050	ND
27	0,048		82	0,078	ND
28	0,044	ND	83	0,047	
29	0,12	Outlier	85	0,081	ND
30	0,023		87	0,048	
31	0,10	ND	88	0,058	
32	0,12	Outlier	90	0,020	
34	0,10		93	0,018	
35	0,040		94	0,026	
36	0,040		95	0,042	
37	0,042		97	0,049	
39	0,048		98	0,044	
40	0,020	ND	99	0,20	Outlier
41	0,058	ND	100	0,092	
42	0,055		102	0,071	
43	0,044		103	0,034	
45	0,051		104	0,040	
46	0,036		105	0,059	
47	0,049		106	0,034	
48	0,058		107	0,062	
49	0,040		109	0,078	
50	0,058		111	0,036	
51	0,054		112	5,0	Outlier,ND
52	0,040	ND	113	0,054	
53	38	Outlier	114	0,040	
54	0,073	ND	115	0,14	Outlier,ND
56	0,20	Outlier,ND	116	0,014	
57	0,015		119	0,047	
59	1,9	Outlier	120	0,050	

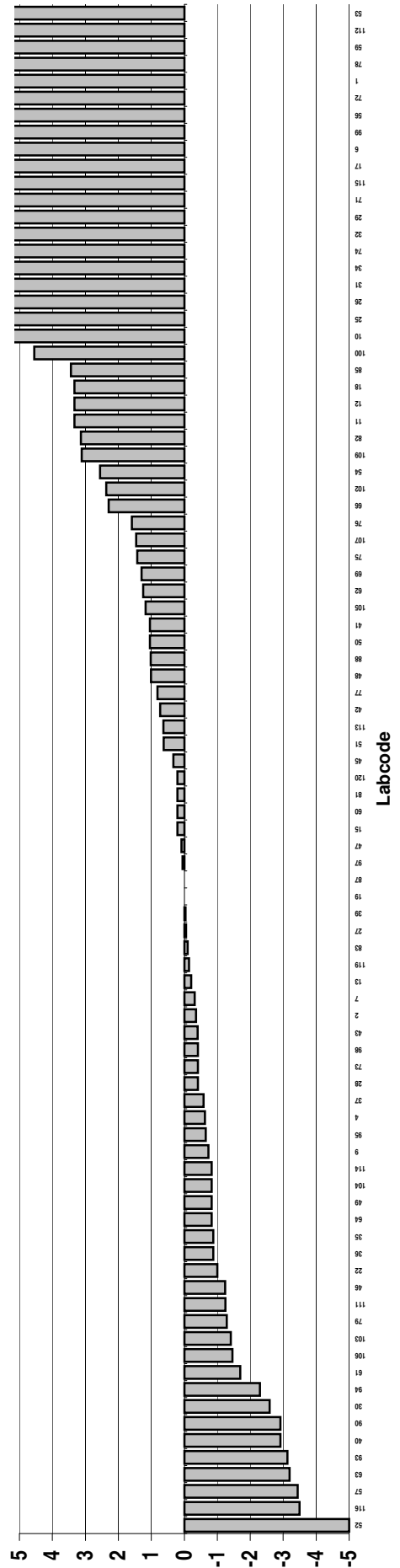
Consensus statistics

Consensus median, pg/g	0,048
Median all values pg/g	0,051
Consensus mean, pg/g	0,052
Standard deviation, pg/g	0,021
Relative standard deviation, %	40
No. of values reported	90
No. of values removed	15
No. of reported non-detects	23

1,2,3,4,7,8,9 HpCDF



Z-score: 1,2,3,4,7,8,9 HpCDF

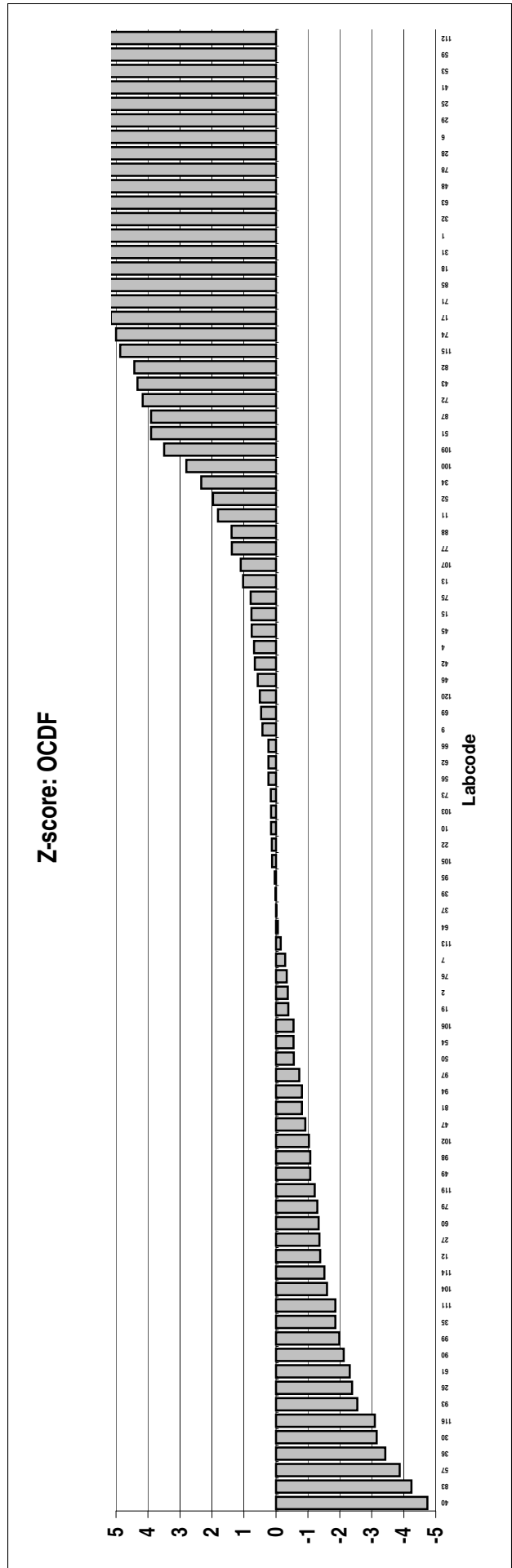
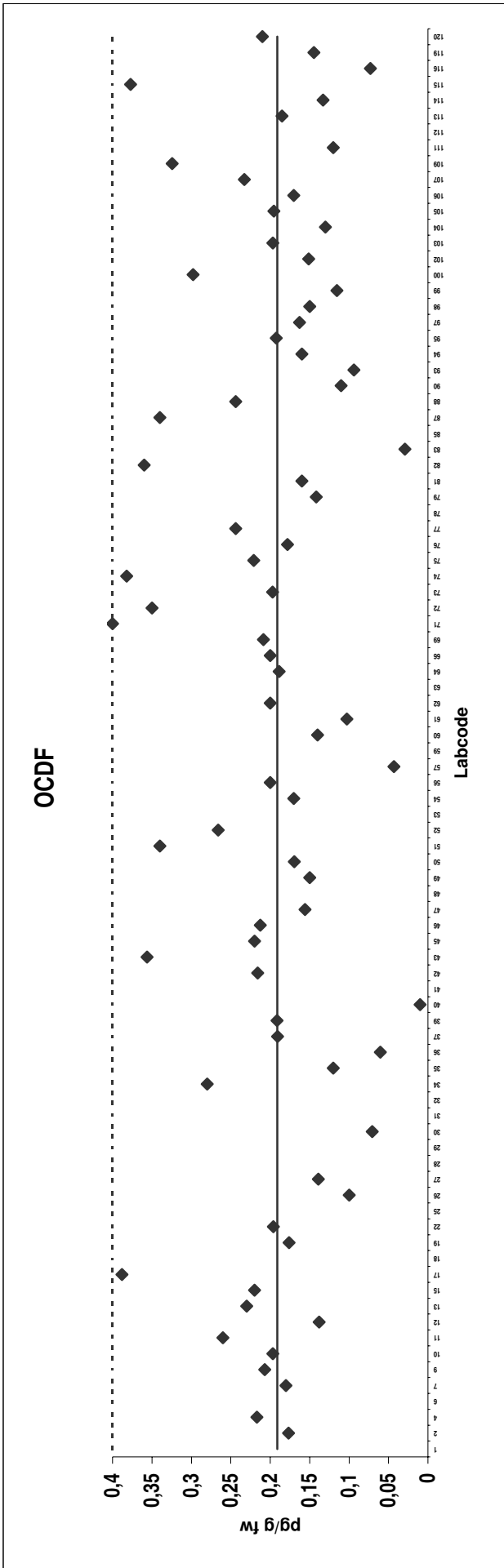


Eel
Congener: OCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,52		60	0,14	
2	0,18	Outlier	61	0,10	
4	0,22		62	0,20	
6	1,0	Outlier	63	0,62	Outlier
7	0,18		64	0,19	
9	0,21		66	0,20	
10	0,20		69	0,21	
11	0,26		71	0,40	
12	0,14		72	0,35	
13	0,23		73	0,20	
15	0,22		74	0,38	
17	0,39		75	0,22	
18	0,49	Outlier	76	0,18	
19	0,18		77	0,24	
22	0,20		78	0,86	Outlier,ND
25	1,6	Outlier	79	0,14	
26	0,10	ND	81	0,16	
27	0,14		82	0,36	ND
28	0,96	Outlier	83	0,029	ND
29	1,3	Outlier	85	0,45	Outlier
30	0,071		87	0,34	
31	0,50	Outlier	88	0,24	
32	0,61	Outlier	90	0,11	
34	0,28		93	0,094	
35	0,12		94	0,16	
36	0,060	ND	95	0,19	
37	0,19		97	0,16	
39	0,19		98	0,15	
40	0,010	ND	99	0,12	
41	2,6	Outlier	100	0,30	
42	0,22		102	0,15	
43	0,36		103	0,20	
45	0,22		104	0,13	
46	0,21		105	0,20	
47	0,16		106	0,17	
48	0,80	Outlier	107	0,23	
49	0,15		109	0,32	
50	0,17		111	0,12	
51	0,34		112	10	
52	0,27		113	0,19	
53	4,3	Outlier	114	0,13	
54	0,17		115	0,38	
56	0,20	ND	116	0,073	
57	0,043		119	0,14	
59	4,3	Outlier	120	0,21	

Consensus statistics

Consensus median, pg/g	0,19
Median all values pg/g	0,20
Consensus mean, pg/g	0,20
Standard deviation, pg/g	0,086
Relative standard deviation, %	44
No. of values reported	90
No. of values removed	16
No. of reported non-detects	8



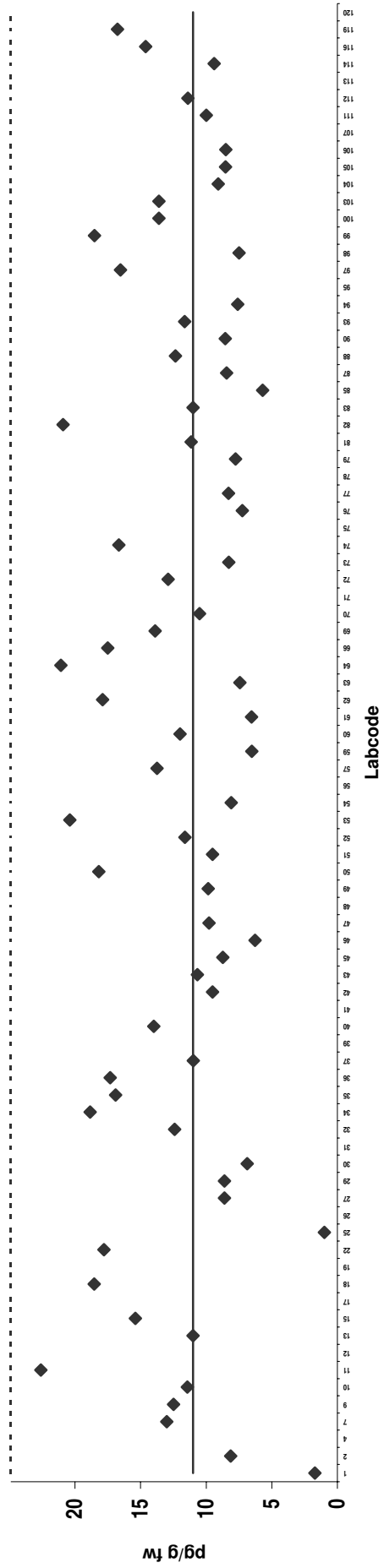
Eel
Congener: PCB 77

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1,7		62	18	
2	8,1		63	7,4	
4	29	Outlier	64	21	
7	13		66	18	
9	13		69	14	
10	11		70	11	
11	23		71	39	Outlier
12	64	Outlier	72	13	
13	11		73	8,3	
15	15		74	17	
17	90	Outlier	75	30	Outlier
18	19		76	7,3	
19	104	Outlier	77	8,3	
22	18		78	1743	Outlier,ND
25	1,0	ND	79	7,8	
26	58	Outlier	81	11	
27	8,6		82	21	
29	8,6		83	11	
30	6,9		85	5,7	
31	60	Outlier	87	8,5	
32	12		88	12	
34	19		90	8,5	
35	17		93	12	
36	17		94	7,6	
37	11		95	45	Outlier
39	56	Outlier	97	17	
40	14		98	7,5	
41	51	Outlier	99	19	
42	10		100	14	
43	11		103	14	
45	8,7		104	9,1	
46	6,3		105	8,5	
47	10		106	8,5	
48	765	Outlier	107	46	Outlier
49	10		111	10	
50	18		112	11	
51	10		113	450	Outlier
52	12		114	9,4	
53	20		116	15	
54	8,1		119	17	
56	4111	Outlier	120	120	Outlier
57	14				
59	6,5				
60	12				
61	6,5				

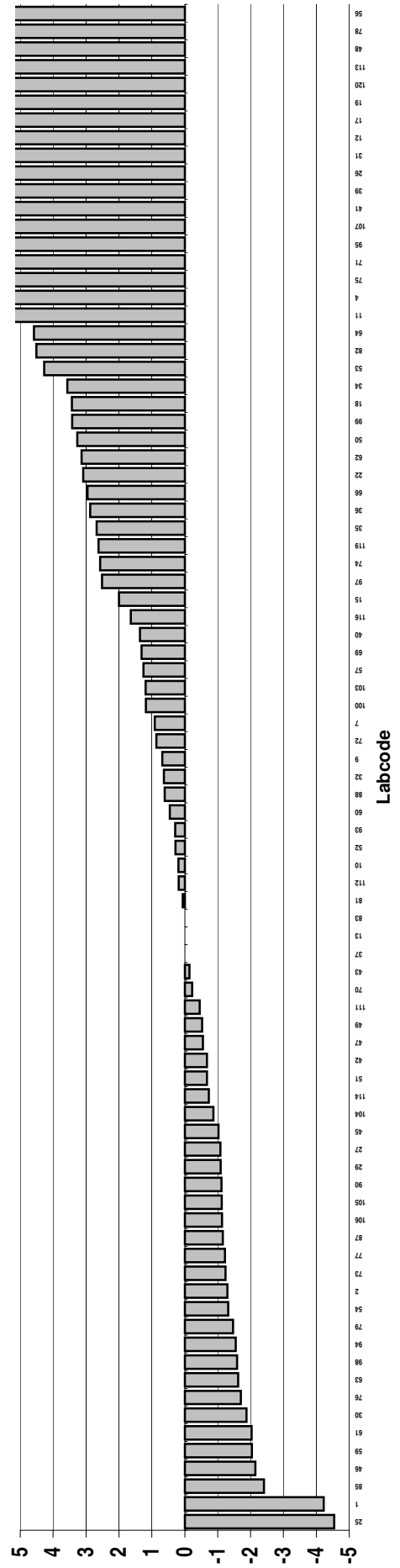
Consensus statistics

Consensus median, pg/g	11
Median all values pg/g	12
Consensus mean, pg/g	12
Standard deviation, pg/g	4,6
Relative standard deviation, %	39
No. of values reported	86
No. of values removed	17
No. of reported non-detects	2

PCB 77



Z-score: PCB 77



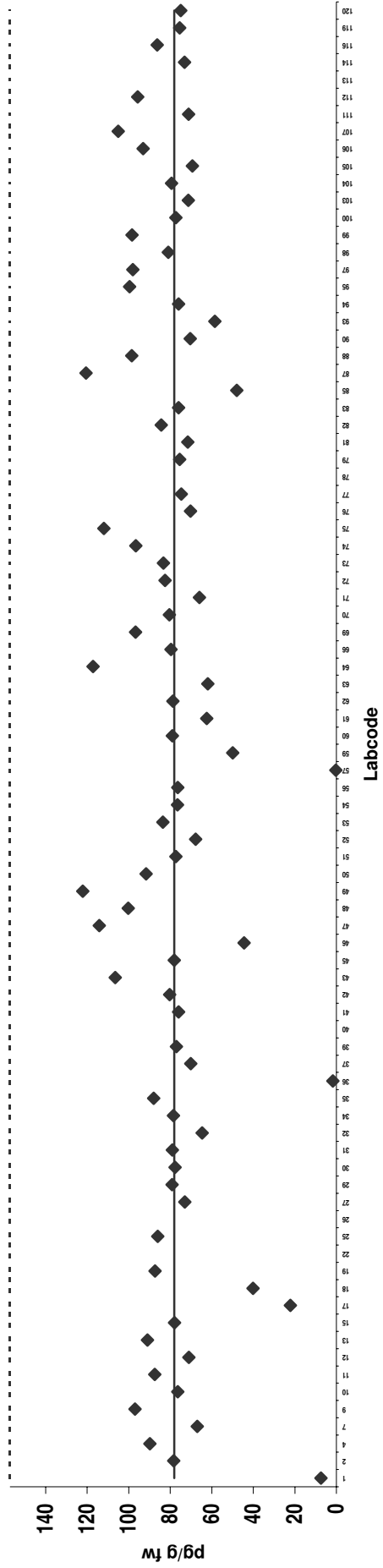
Eel
Congener: PCB 126

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	7.5		62	79	
2	78		63	62	
4	90		64	117	
7	67		66	80	
9	97		69	97	
10	76		70	80	
11	87		71	66	
12	71		72	83	
13	91		73	83	
15	78		74	97	
17	22		75	112	
18	40		76	70	
19	87		77	75	
22	166		78	470	Outlier
25	86	Outlier	79	75	
26	179	Outlier	81	72	
27	73		82	84	
29	79		83	76	
30	78		85	48	
31	79		87	121	
32	65		88	99	
34	78		90	70	
35	88		93	59	
36	1.6		94	76	
37	70		95	100	
39	77		97	98	
40	180	Outlier	98	81	
41	76		99	98	
42	80		100	77	
43	107		103	71	
45	78		104	79	
46	45		105	69	
47	114		106	93	
48	100		107	105	
49	122		111	71	
50	92		112	96	
51	77		113	254	
52	68		114	73	Outlier
53	84		116	86	
54	77		119	76	
56	76		120	75	
57	0.30	ND			
59	50				
60	79				
61	62				

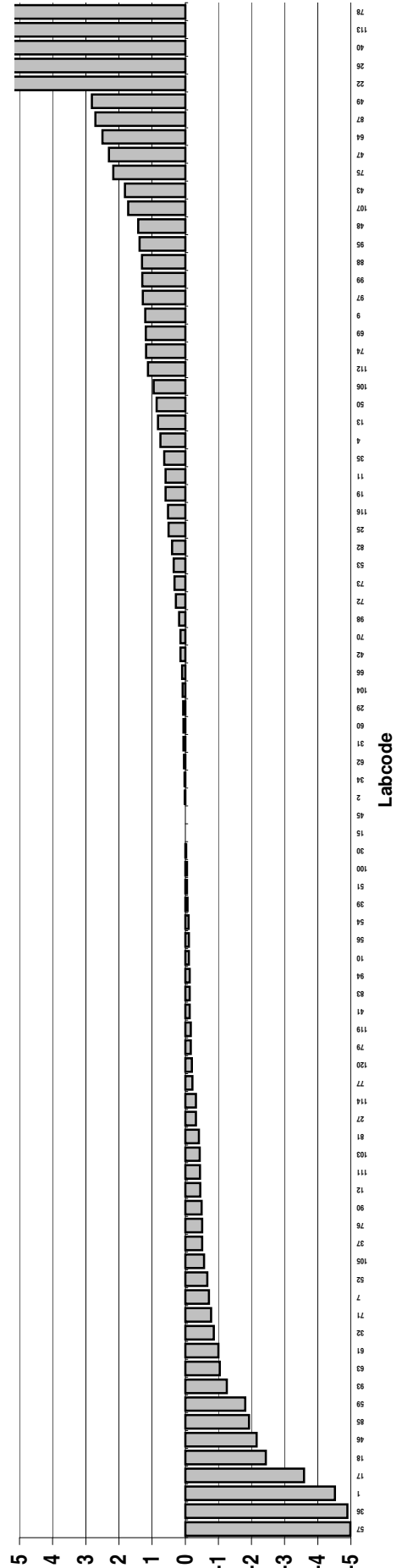
Consensus statistics

Consensus median, pg/g	78
Median all values pg/g	79
Consensus mean, pg/g	78
Standard deviation, pg/g	22
Relative standard deviation, %	29
No. of values reported	86
No. of values removed	5
No. of reported non-detects	1

PCB 126



Z-score: PCB 126



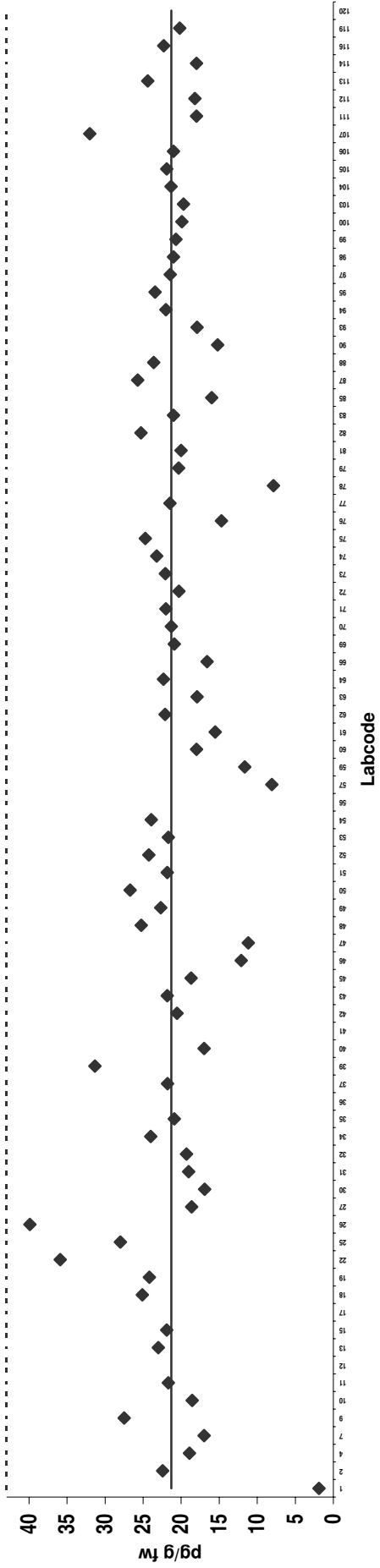
Eel
Congener: PCB 169

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1,9		63	18	
2	22		64	22	
4	19		66	17	
7	17		69	21	
9	28		70	21	
10	19		71	22	
11	22		72	20	
12	162	Outlier	73	22	
13	23		74	23	
15	22		75	25	
17	262	Outlier	76	15	
18	25		77	21	
19	24		78	7,9	ND
22	36		79	20	
25	28		81	20	
26	40		82	25	
27	19		83	21	
30	17		85	16	
31	19		87	26	
32	19		88	24	
34	24		90	15	
35	21		93	18	
36	72	Outlier	94	22	
37	22		95	23	
39	31		97	21	
40	17		98	21	
41	92	Outlier	99	21	
42	21		100	20	
43	22		103	20	
45	19		104	21	
46	12		105	22	
47	11		106	21	
48	25		107	32	
49	23		111	18	
50	27		112	18	
51	22		113	24	
52	24		114	18	
53	22		116	22	
54	24		119	20	
56	313	Outlier	120	180	
57	8,1				
59	12				
60	18				
61	16				
62	22				

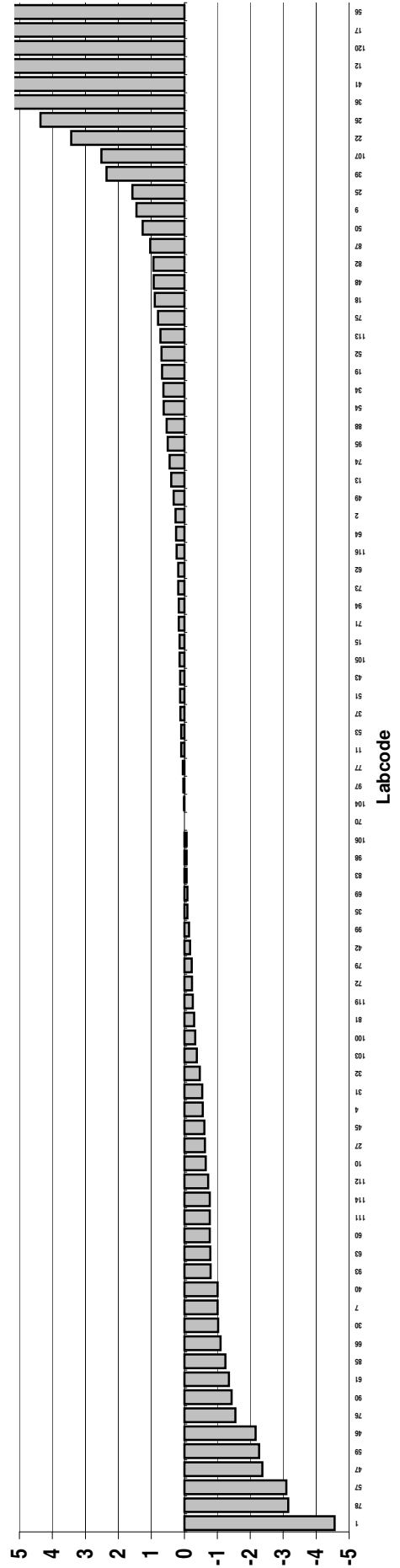
Consensus statistics

Consensus median, pg/g	21
Median all values pg/g	21
Consensus mean, pg/g	21
Standard deviation, pg/g	5,5
Relative standard deviation, %	26
No. of values reported	85
No. of values removed	6
No. of reported non-detects	1

PCB 169



Z-score: PCB 169

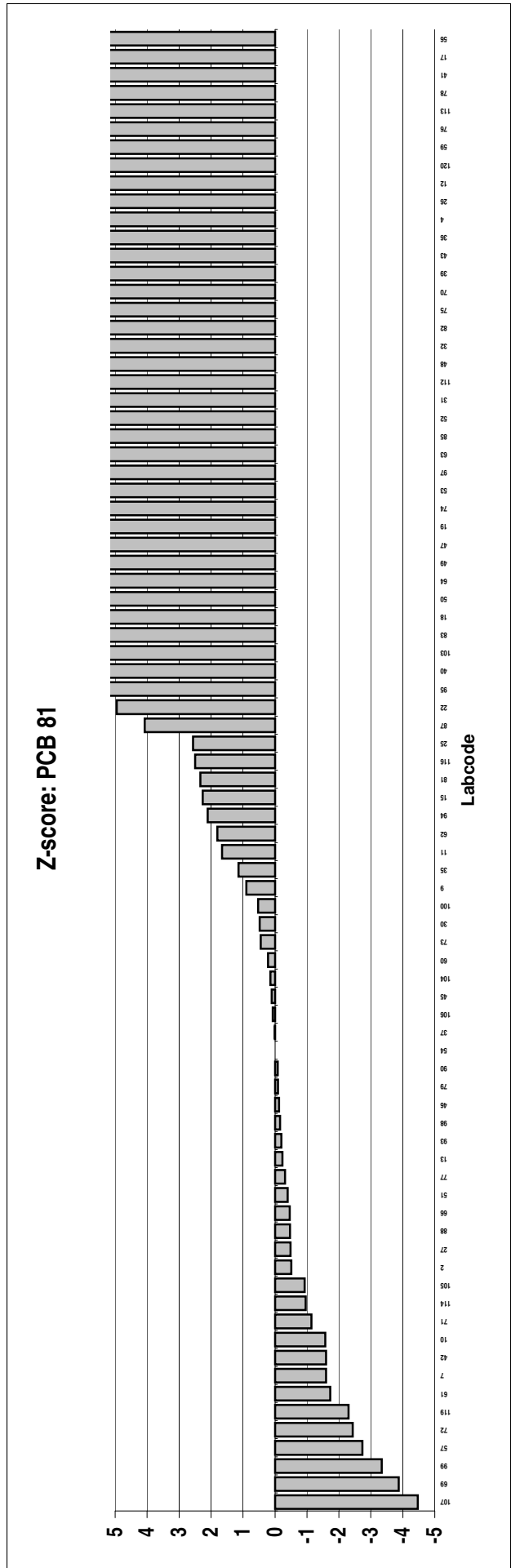
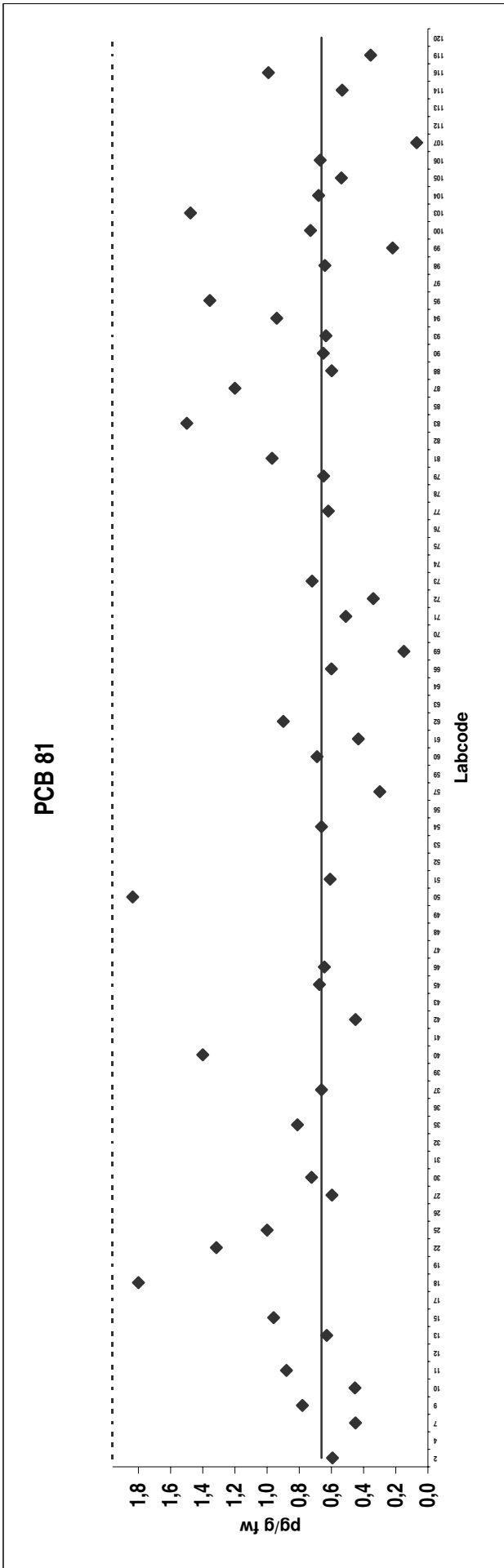


Eel
Congener: PCB 81

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	0,59		66	0,60	
4	26	Outlier	69	0,15	Outlier,ND
7	0,45		70	10	ND
9	0,78		71	0,51	
10	0,45		72	0,34	
11	0,88		73	0,72	
12	106	Outlier	74	2,7	Outlier
13	0,63		75	8,9	Outlier,ND
15	0,96		76	174	Outlier
17	512	Outlier	77	0,62	
18	1,8	ND	78	358	Outlier,ND
19	2,5	Outlier	79	0,65	
22	1,3		81	0,97	
25	1,0	ND	82	7,2	Outlier,ND
26	32	Outlier	83	1,5	ND
27	0,60		85	4,6	Outlier
30	0,72		87	1,2	
31	5,0	Outlier	88	0,60	
32	5,3	Outlier,ND	90	0,65	
35	0,81		93	0,63	
36	19	Outlier	94	0,94	
37	0,66		95	1,4	
39	11	Outlier,ND	97	3,2	Outlier
40	1,4	ND	98	0,64	
41	380	Outlier	99	0,22	
42	0,45		100	0,73	
43	11	Outlier	103	1,5	
45	0,67		104	0,68	
46	0,64		105	0,54	ND
47	2,0	Outlier	106	0,67	
48	5,1	Outlier	107	0,070	
49	2,0	Outlier	112	5,0	Outlier,ND
50	1,8		113	222	Outlier
51	0,61		114	0,53	
52	4,7	Outlier	116	0,99	
53	2,8	Outlier	119	0,36	
54	0,66		120	140	Outlier
56	527	Outlier			
57	0,30	ND			
59	153	Outlier			
60	0,69				
61	0,43				
62	0,90				
63	3,7	Outlier			
64	2,0	Outlier,ND			

Consensus statistics

Consensus median, pg/g	0,66
Median all values pg/g	0,98
Consensus mean, pg/g	0,76
Standard deviation, pg/g	0,38
Relative standard deviation, %	51
No. of values reported	82
No. of values removed	31
No. of reported non-detects	15

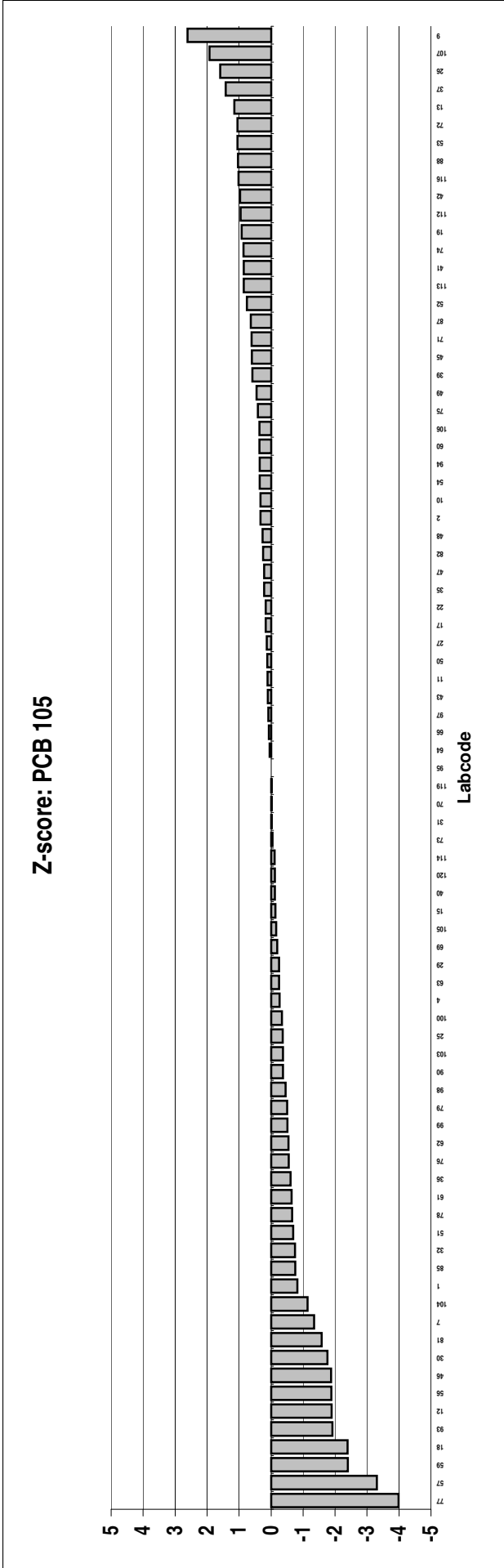
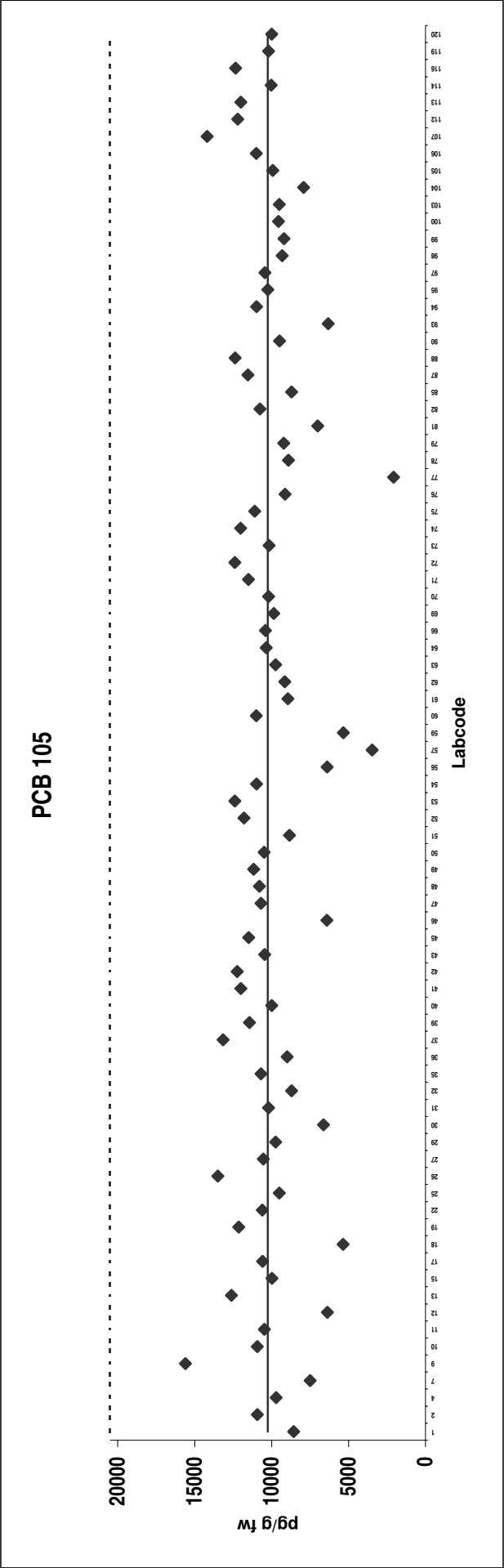


Eel
Congener: PCB 105

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	8565		63	9740	
2	10928		64	10345	
4	9708		66	10400	
7	7500		69	9857	
9	15600		70	10200	
10	10932		71	11500	
11	10473		72	12400	
12	6370		73	10166	
13	12605		74	12019	
15	9980		75	11100	
17	10590		76	9126	
18	5350		77	2072	
19	12141		78	8901	
22	10601		79	9219	
25	9500		81	7001	
26	13503		82	10759	
27	10534		85	8700	
29	9744		87	11550	
30	6630		88	12376	
31	10200		90	9489	
32	8710		93	6320	
35	10700		94	10976	
36	8994		95	10250	
37	13156		97	10429	
39	11448		98	9320	
40	10000		99	9203	
41	12000		100	9560	
42	12234		103	9496	
43	10461		104	7920	
45	11488		105	9923	
46	6410		106	11000	
47	10700		107	14200	
48	10792		112	12200	
49	11173		113	11996	
50	10490		114	10030	
51	8842		116	12345	
52	11799		119	10200	
53	12400		120	10000	
54	10974				
56	6393				
57	3475				
59	5333				
60	11000				
61	8938				
62	9140				

Consensus statistics

Consensus median, pg/g	10250
Median all values pg/g	10250
Consensus mean, pg/g	10010
Standard deviation, pg/g	2206
Relative standard deviation, %	22
No. of values reported	83
No. of values removed	0
No. of reported non-detects	0



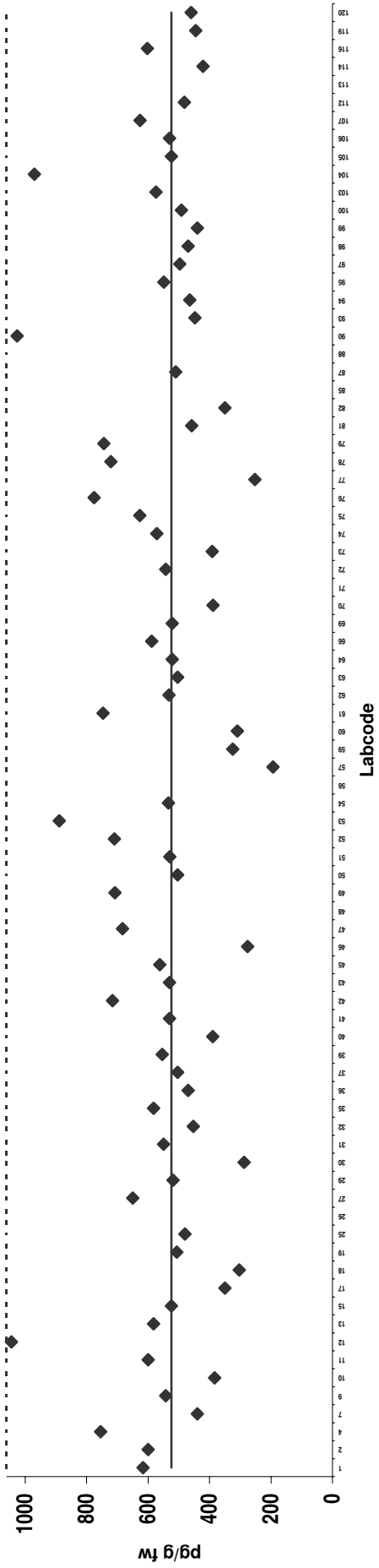
Eel
Congener: PCB 114

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	617		64	521	
2	600		66	588	
4	755		69	521	
7	440		70	389	
9	543		71	3230	Outlier
10	384		72	543	
11	600		73	391	
12	1045		74	572	
13	582		75	627	
15	524		76	776	
17	350		77	252	
18	304		78	721	
19	507		79	744	
25	480		81	458	
26	1652		82	350	ND
27	650		85	1700	Outlier
29	519		87	510	
30	288		88	3791	Outlier
31	550		90	1026	
32	453		93	447	
35	582		94	464	
36	470		95	549	
37	504		97	497	
39	554		98	470	
40	390		99	440	
41	530		100	492	
42	716		103	574	
43	531		104	970	
45	562		105	524	
46	276		106	530	
47	683		107	626	
48	2083		112	482	
49	708		113	1106	
50	504		114	421	
51	529		116	602	
52	710		119	445	
53	889		120	460	
54	534				
56	53769				
57	194				
59	325				
60	310				
61	747				
62	532				
63	504				

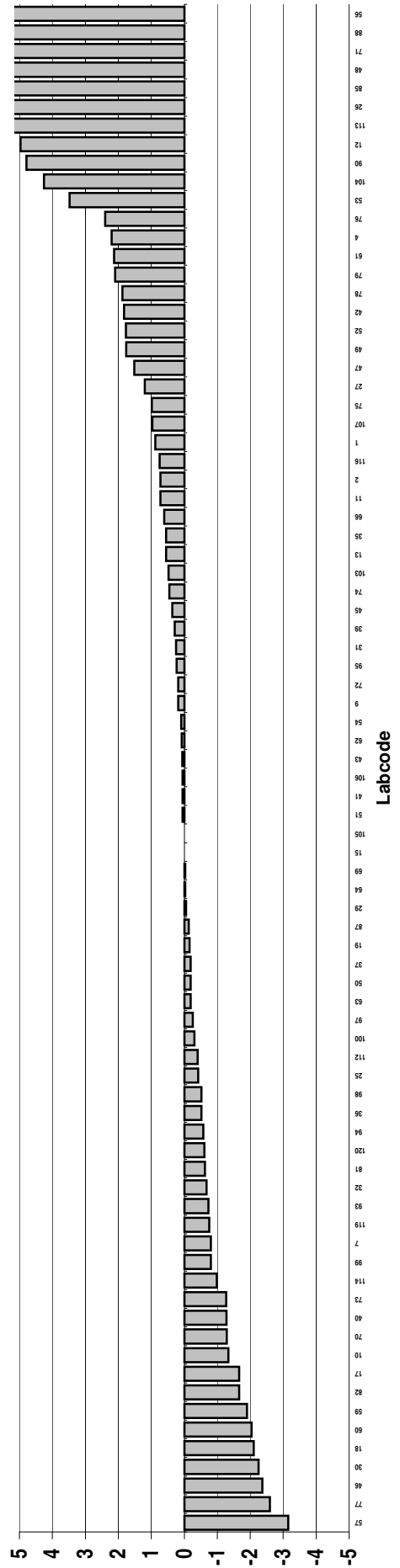
Consensus statistics

Consensus median, pg/g	524
Median all values pg/g	530
Consensus mean, pg/g	539
Standard deviation, pg/g	162
Relative standard deviation, %	30
No. of values reported	82
No. of values removed	7
No. of reported non-detects	1

PCB 114



Z-score: PCB 114



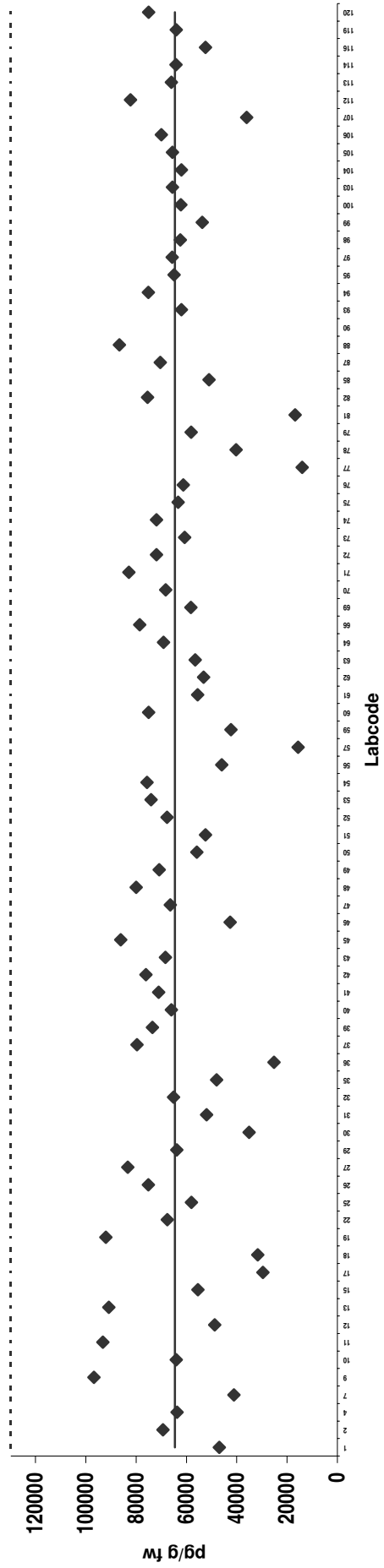
Eel
Congener: PCB 118

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	46931		63	56545	
2	69307		64	69095	
4	63771		66	78600	
7	41100		69	58205	
9	96800		70	68300	
10	64048		71	82900	
11	93185		72	71900	
12	48800		73	60715	
13	90866		74	71924	
15	55400		75	63300	
17	29580		76	61213	
18	31614		77	13991	
19	91996		78	40224	
22	67579		79	58176	
25	58000		81	16828	
26	75108		82	75423	
27	83301		85	51000	
29	63815		87	70431	
30	35100		88	86695	
31	52000		90	612230	Outlier
32	65100		93	61965	
35	48000		94	75173	
36	25218		95	64917	
37	79707		97	65699	
39	73550		98	62400	
40	66000		99	53752	
41	71000		100	62200	
42	76099		103	65600	
43	68415		104	61980	
45	86125		105	65611	
46	42600		106	70000	
47	66400		107	36100	
48	80038		112	82200	
49	70858		113	65944	
50	55918		114	64190	
51	52409		116	52401	
52	67719		119	64100	
53	74100		120	75000	
54	75653				
56	45982				
57	15565				
59	42319				
60	75000				
61	55537				
62	53200				

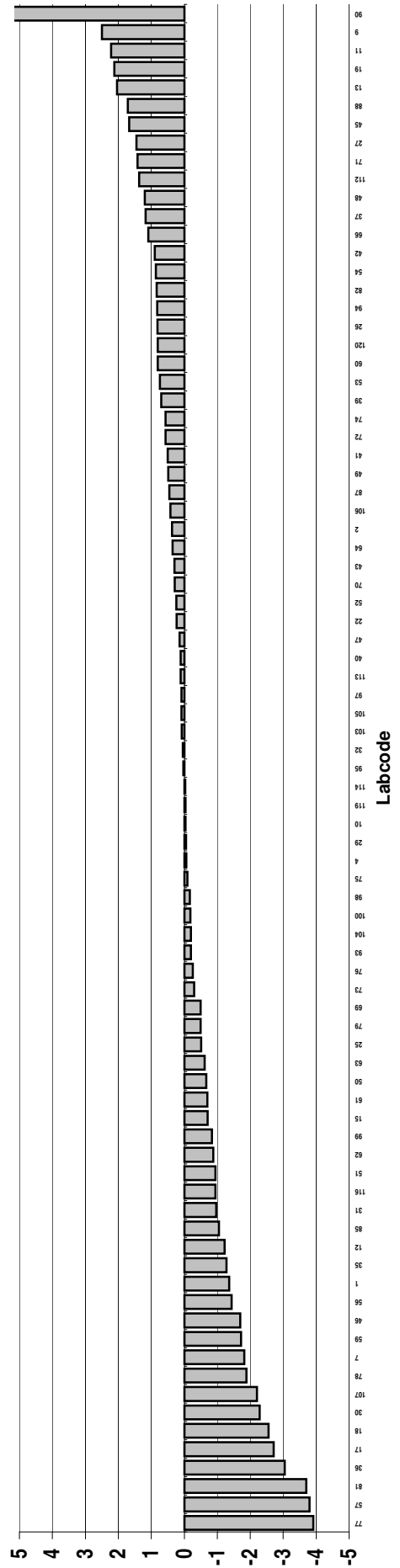
Consensus statistics

Consensus median, pg/g	64554
Median all values pg/g	64917
Consensus mean, pg/g	62140
Standard deviation, pg/g	17292
Relative standard deviation, %	28
No. of values reported	83
No. of values removed	1
No. of reported non-detects	0

PCB 118



Z-score: PCB 118

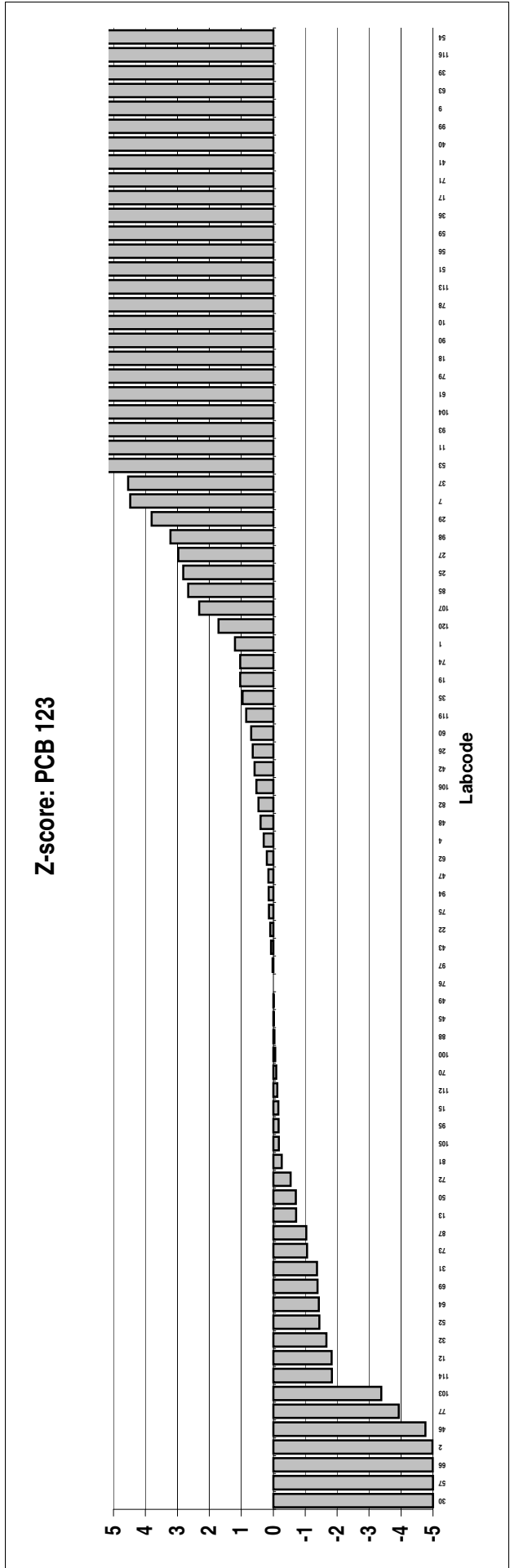
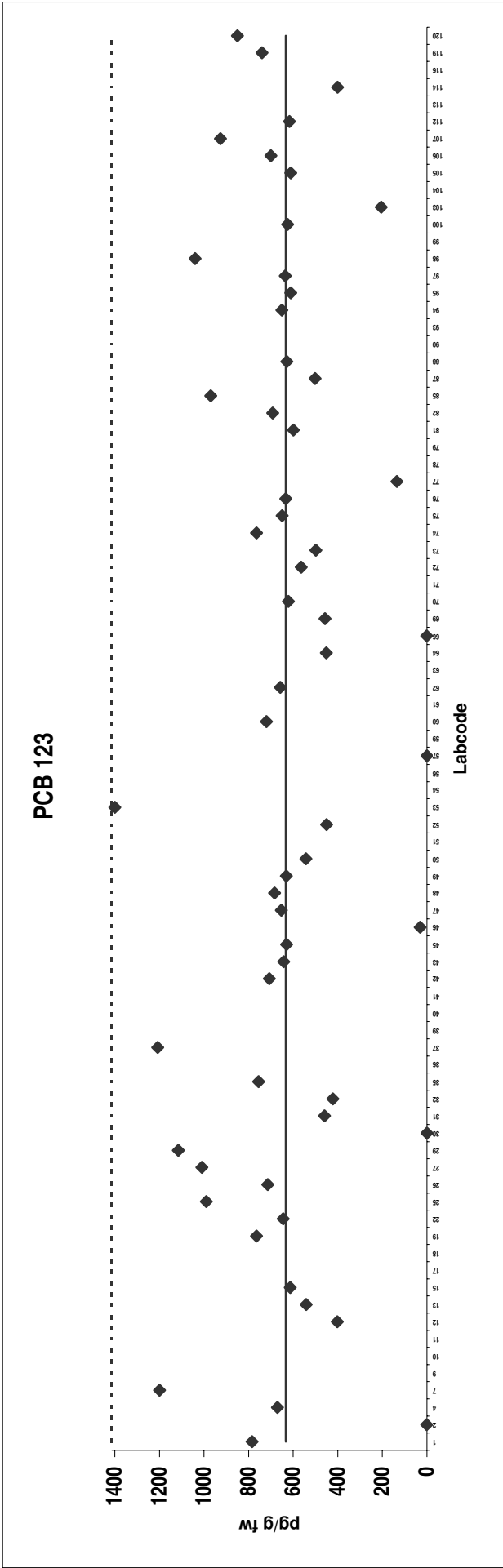


Eel
Congener: PCB 123

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	785		63	6619	Outlier
2	1,6	ND	64	452	
4	671		66	1,0	ND
7	1200		69	458	
9	6070	Outlier	70	621	
10	2751	Outlier	71	5150	Outlier
11	1462	Outlier	72	564	
12	402		73	499	
13	542		74	764	
15	613		75	650	
17	4526	Outlier	76	633	
18	2308	Outlier	77	135	
19	764		78	2900	Outlier,ND
22	645		79	2210	Outlier
25	990		81	600	
26	715		82	692	
27	1009		85	970	
29	1115		87	502	
30	0,18	ND	88	628	
31	460		90	2446	Outlier
32	422		93	1521	Outlier
35	755		94	651	
36	4085	Outlier	95	611	
37	1208		97	636	
39	8518	Outlier	98	1040	
40	5500	Outlier	99	5904	
41	5200	Outlier	100	625	Outlier
42	707		103	205	
43	642		104	1540	Outlier
45	630		105	610	
46	30	ND	106	700	
47	653		107	926	
48	684		112	617	
49	631		113	3245	
50	543		114	401	
51	3479	Outlier	116	9568	Outlier
52	450		119	740	
53	1400		120	850	
54	10019	Outlier			
56	3674	Outlier			
57	0,30	ND			
59	4058	Outlier			
60	720				
61	1995	Outlier			
62	658				

Consensus statistics

Consensus median, pg/g	633
Median all values pg/g	707
Consensus mean, pg/g	624
Standard deviation, pg/g	294
Relative standard deviation, %	47
No. of values reported	83
No. of values removed	24
No. of reported non-detects	6



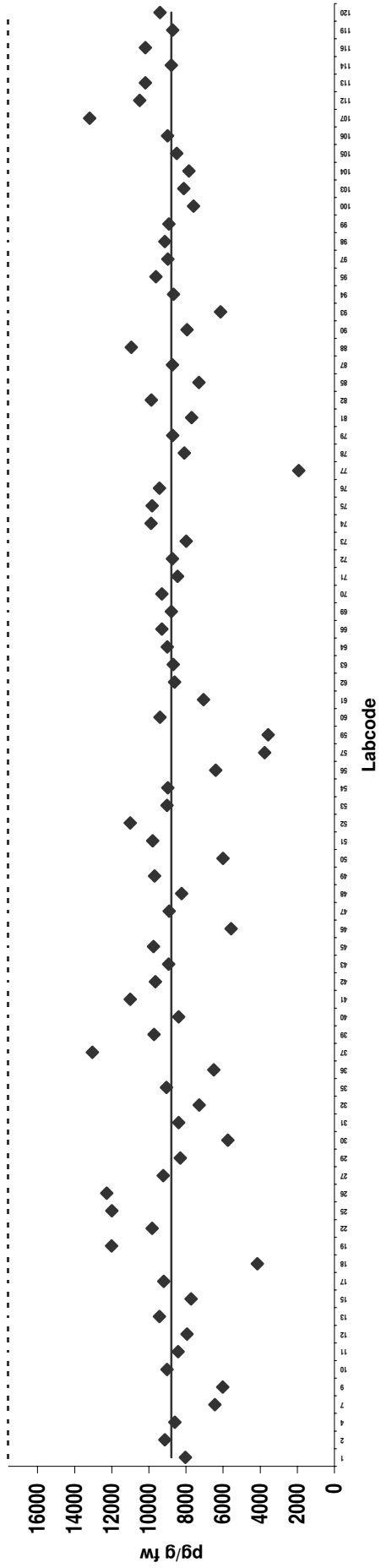
Eel
Congener: PCB 156

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	8027		63	8691	
2	9147		64	9013	
4	8596		66	9300	
7	6440		69	8791	
9	6020		70	9300	
10	9026		71	8460	
11	8428		72	8730	
12	7950		73	7993	
13	9433		74	9884	
15	7720		75	9820	
17	9199		76	9435	
18	4150		77	1922	
19	12013		78	8094	
22	9832		79	8711	
25	12000		81	7699	
26	12281		82	9864	
27	9229		85	7300	
29	8305		87	8730	
30	5750		88	10948	
31	8400		90	7951	
32	7285		93	6139	
35	9060		94	8670	
36	6499		95	9625	
37	13045		97	8981	
39	9723		98	9140	
40	8400		99	8922	
41	11000		100	7590	
42	9658		103	8118	
43	8940		104	7840	
45	9760		105	8503	
46	5570		106	9000	
47	8900		107	13200	
48	8242		112	10500	
49	9694		113	10197	
50	6007		114	8790	
51	9795		116	10185	
52	11013		119	8720	
53	9020		120	9400	
54	8985				
56	6403				
57	3768				
59	3578				
60	9400				
61	7055				
62	8610				

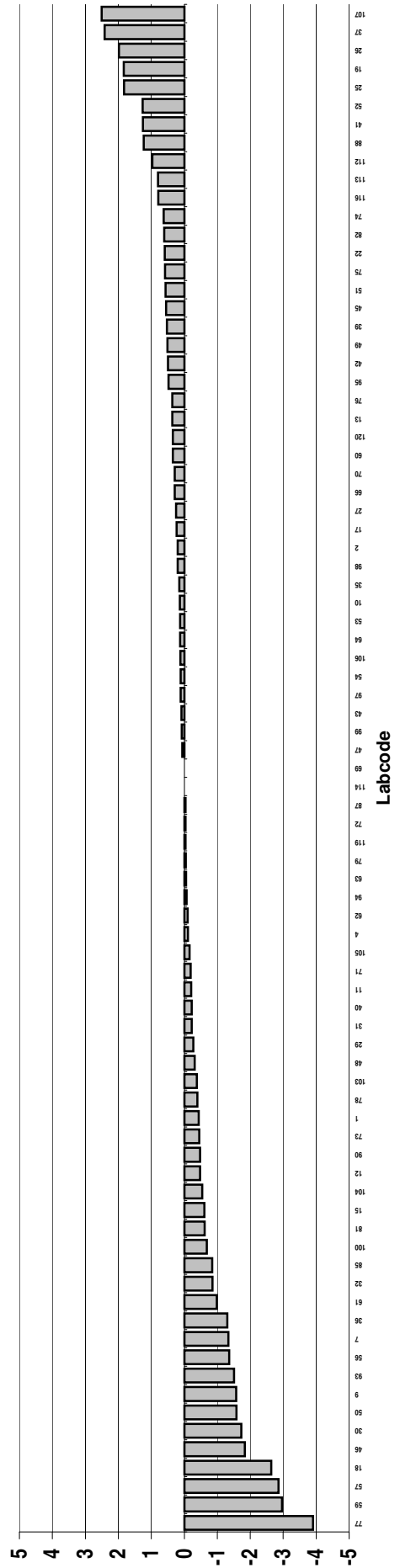
Consensus statistics

Consensus median, pg/g	8791
Median all values pg/g	8791
Consensus mean, pg/g	8621
Standard deviation, pg/g	1909
Relative standard deviation, %	22
No. of values reported	83
No. of values removed	0
No. of reported non-detects	0

PCB 156



Z-score: PCB 156



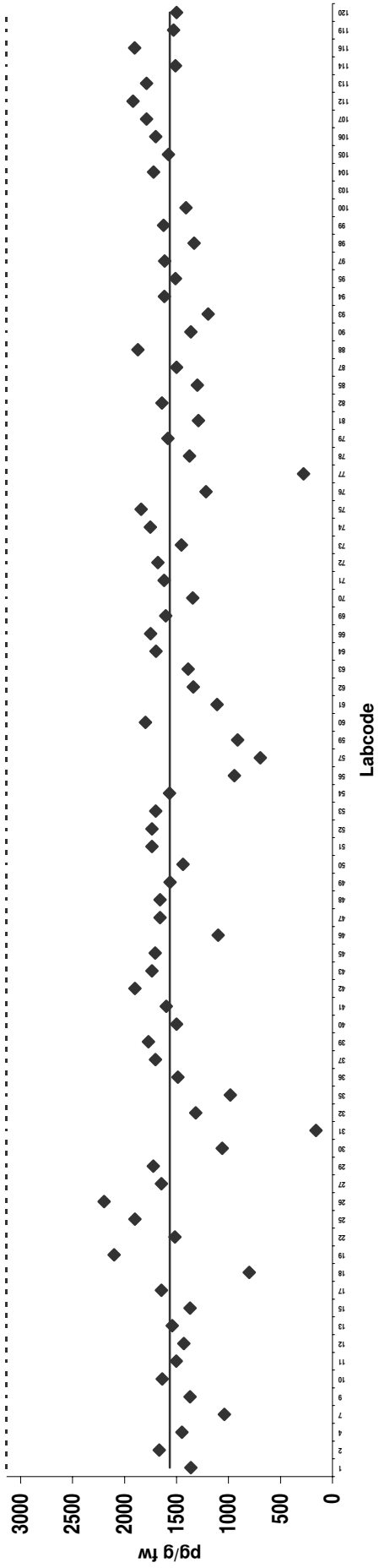
Eel
Congener: PCB 157

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1363		63	1390	
2	1666		64	1697	
4	1448		66	1750	
7	1040		69	1604	
9	1370		70	1345	
10	1639		71	1620	
11	1504		72	1680	
12	1430		73	1454	
13	1543		74	1752	
15	1370		75	1840	
17	1647		76	1218	
18	800		77	277	
19	2100		78	1376	
22	1516		79	1583	
25	1900		81	1288	
26	2197		82	1641	
27	1645		85	1300	
29	1725		87	1500	
30	1060		88	1871	
31	159		90	1363	
32	1315		93	1195	
35	983		94	1618	
36	1487		95	1511	
37	1702		97	1615	
39	1770		98	1330	
40	1500		99	1625	
41	1600		100	1410	
42	1900		103	3198	
43	1737		104	1720	
45	1705		105	1579	
46	1100		106	1700	
47	1660		107	1790	
48	1658		112	1920	
49	1562		113	1789	
50	1438		114	1510	
51	1738		116	1904	
52	1737		119	1530	
53	1700		120	1500	
54	1568				
56	944				
57	694				
59	914				
60	1800				
61	1109				
62	1340				Outlier

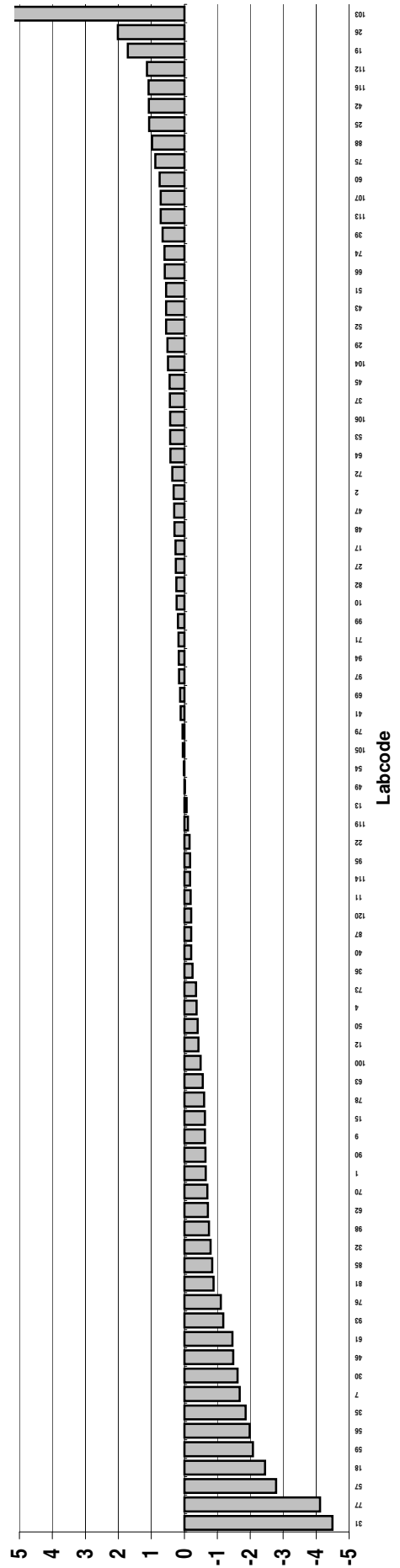
Consensus statistics

Consensus median, pg/g	1565
Median all values pg/g	1568
Consensus mean, pg/g	1495
Standard deviation, pg/g	343
Relative standard deviation, %	23
No. of values reported	83
No. of values removed	1
No. of reported non-detects	0

PCB 157



Z-score: PCB 157



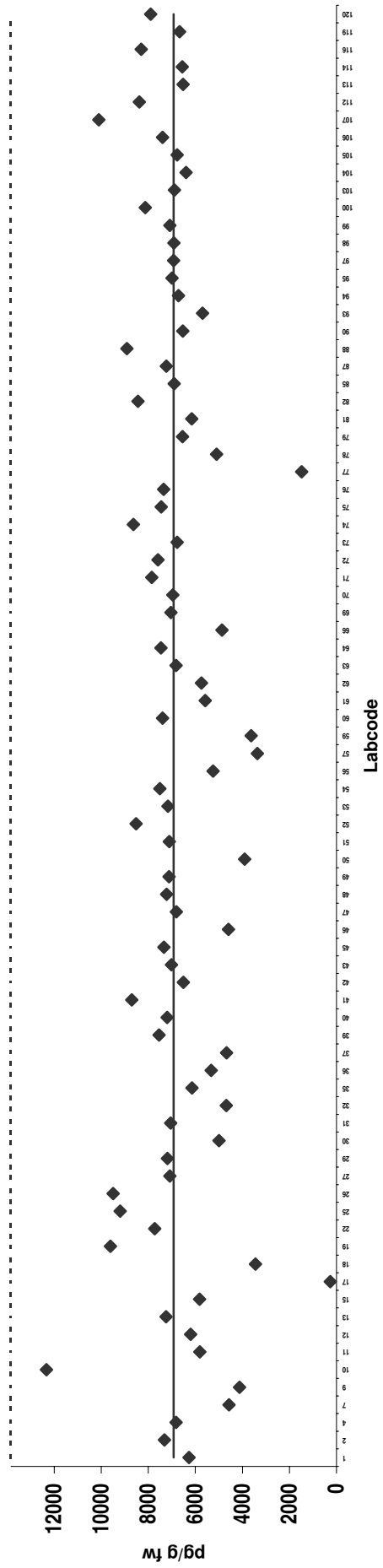
Eel
Congener: PCB 167

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	6268		63	6820	
2	7309		64	7468	
4	6818		66	4870	
7	4570		69	7040	
9	4120		70	6955	
10	12335		71	7850	
11	5813		72	7590	
12	6200		73	6772	
13	7251		74	8635	
15	5820		75	7450	
17	262		76	7343	
18	3446		77	1476	
19	9610		78	5096	
22	7727		79	6548	
25	9200		81	6155	
26	9492		82	8438	
27	7081		85	6900	
29	7183		87	7230	
30	4990		88	8914	
31	7050		90	6528	
32	4680		93	5692	
35	6140		94	6721	
36	5330		95	6998	
37	4673		97	6924	
39	7549		98	6910	
40	7200		99	7083	
41	8700		100	8130	
42	6511		103	6888	
43	7014		104	6390	
45	7339		105	6775	
46	4590		106	7400	
47	6810		107	10100	
48	7219		112	8380	
49	7122		113	6522	
50	3903		114	6560	
51	7113		116	8304	
52	8524		119	6670	
53	7160		120	7900	
54	7509				
56	5251				
57	3362				
59	3626				
60	7400				
61	5578				
62	5740				

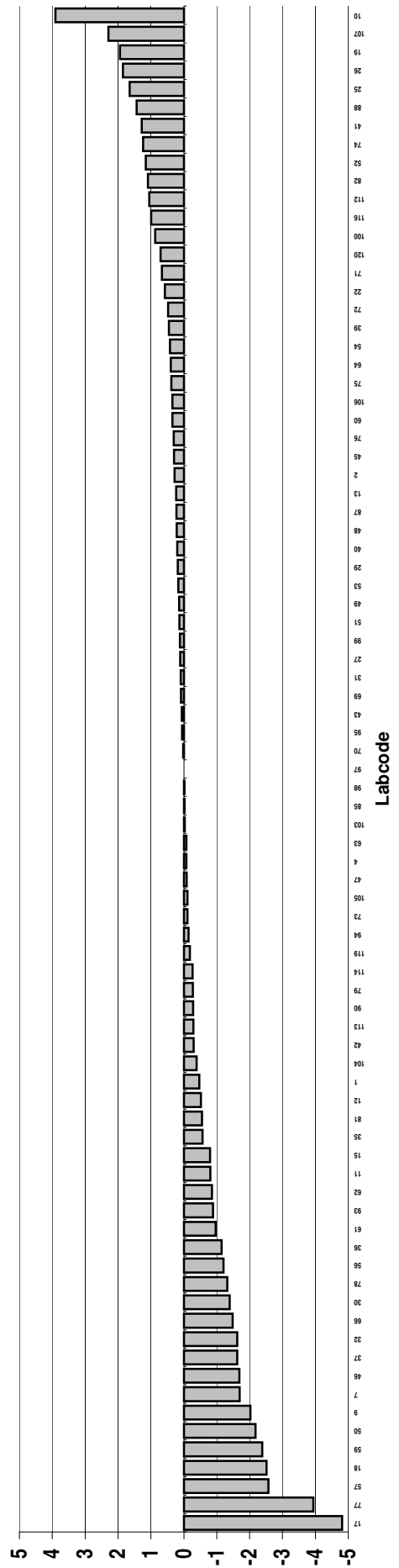
Consensus statistics

Consensus median, pg/g	6924
Median all values pg/g	6924
Consensus mean, pg/g	6687
Standard deviation, pg/g	1763
Relative standard deviation, %	26
No. of values reported	83
No. of values removed	0
No. of reported non-detects	0

PCB 167



Z-score: PCB 167



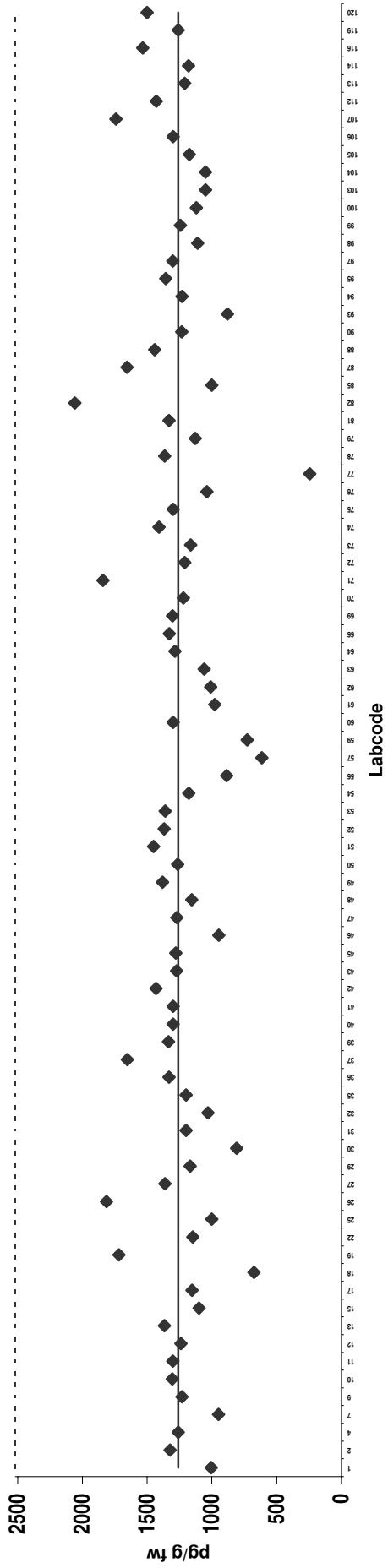
Eel
Congener: PCB 189

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1005		63	1059	
2	1322		64	1285	
4	1261		66	1330	
7	948		69	1304	
9	1230		70	1220	
10	1305		71	1840	
11	1302		72	1210	
12	1240		73	1164	
13	1366		74	1409	
15	1100		75	1300	
17	1153		76	1039	
18	674		77	245	
19	1717		78	1365	
22	1147		79	1127	
25	1000		81	1331	
26	1814		82	2059	
27	1363		85	1000	
29	1168		87	1655	
30	808		88	1443	
31	1200		90	1233	
32	1031		93	879	
35	1200		94	1230	
36	1331		95	1357	
37	1654		97	1301	
39	1336		98	1110	
40	1300		99	1243	
41	1300		100	1120	
42	1432		103	1050	
43	1273		104	1050	
45	1279		105	1174	
46	947		106	1300	
47	1270		107	1740	
48	1156		112	1430	
49	1380		113	1210	
50	1264		114	1180	
51	1450		116	1534	
52	1369		119	1260	
53	1360		120	1500	
54	1179				
56	887				
57	614				
59	727				
60	1300				
61	979				
62	1010				

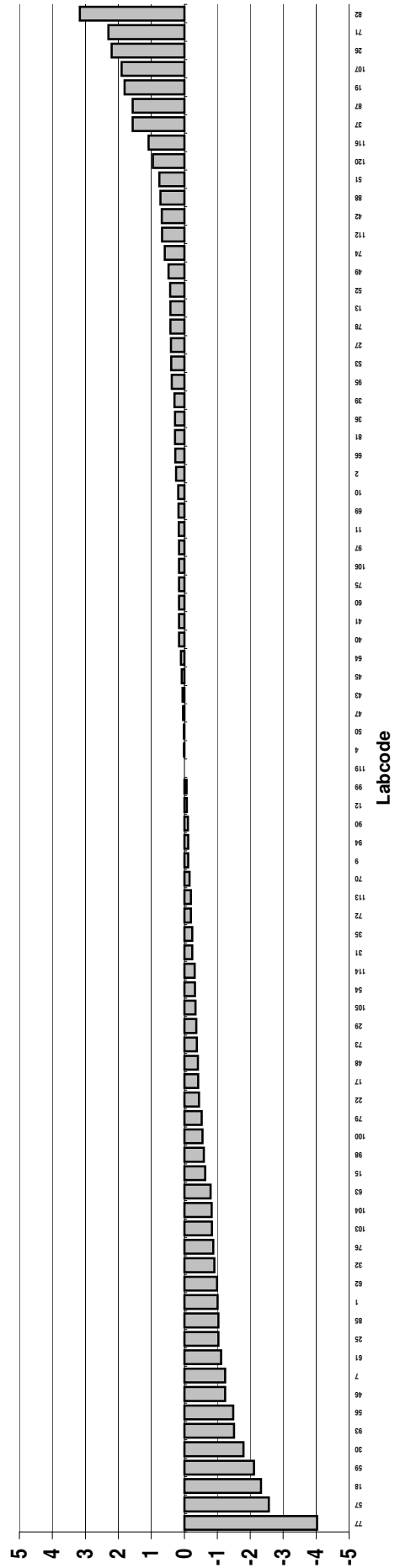
Consensus statistics

Consensus median, pg/g	1260
Median all values pg/g	1260
Consensus mean, pg/g	1234
Standard deviation, pg/g	268
Relative standard deviation, %	22
No. of values reported	83
No. of values removed	0
No. of reported non-detects	0

PCB 189



Z-score: PCB 189

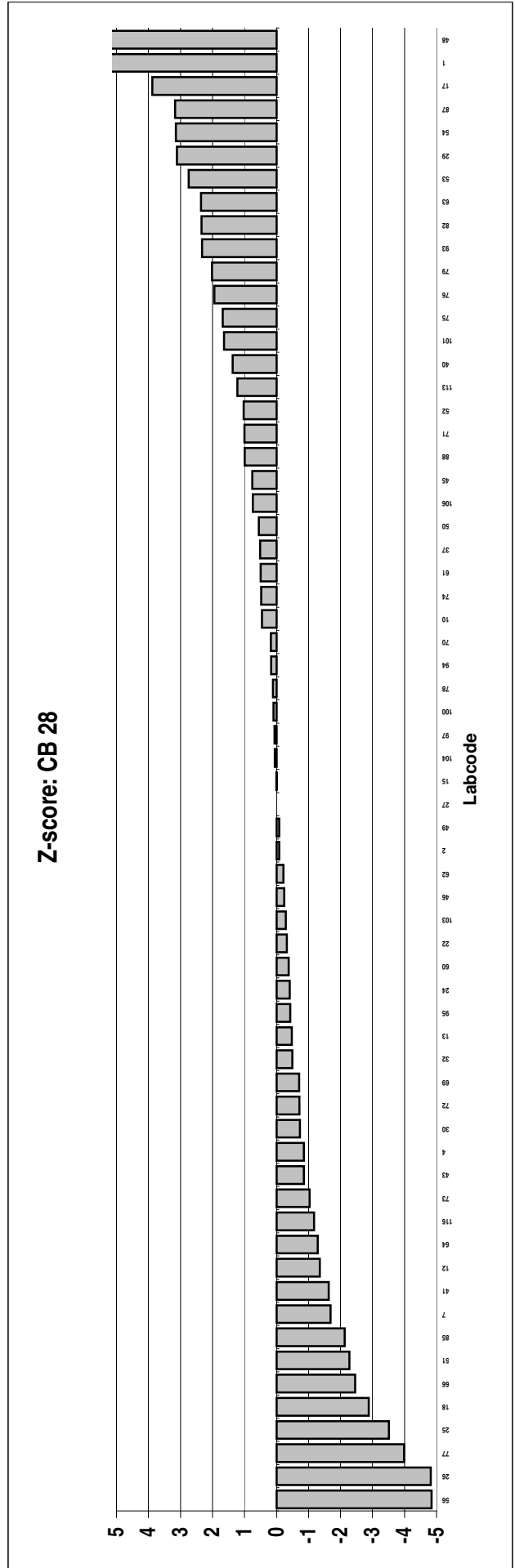
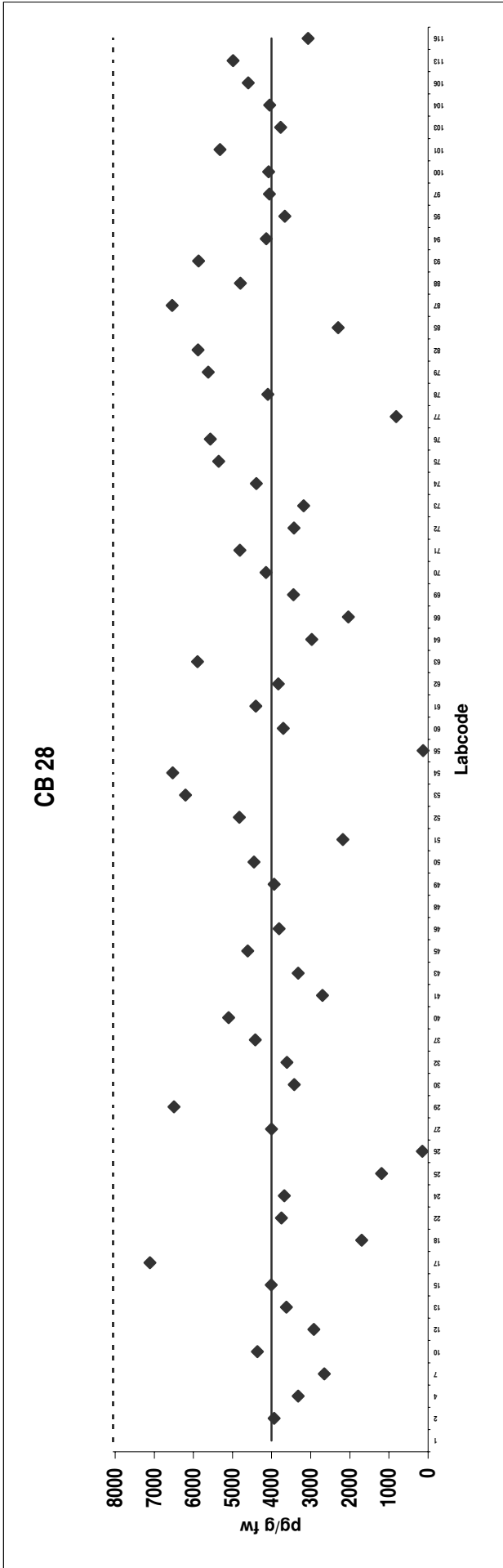


Eel
Congener: CB 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	9496	Outlier	76	5564	
2	3936		77	815	
4	3323		78	4095	
7	2650		79	5621	
10	4367		82	5879	
12	2920		85	2300	
13	3622		87	6541	
15	4010		88	4801	
17	7114		93	5867	
18	1696		94	4137	
22	3750		95	3664	
24	3673		97	4055	
25	1190		100	4080	
26	144		101	5320	
27	4001		103	3772	
29	6495		104	4050	
30	3420		106	4600	
32	3610		113	4985	
37	4414		116	3066	
40	5100				
41	2700				
43	3319				
45	4610				
46	3810				
48	10885	Outlier			
49	3936				
50	4448				
51	2178				
52	4826				
53	6200				
54	6527				
56	127				
60	3700				
61	4402				
62	3830				
63	5897				
64	2973				
66	2040				
69	3440				
70	4145				
71	4810				
72	3430				
73	3179				
74	4388				
75	5350				

Consensus statistics

Consensus median, pg/g	4005
Median all values pg/g	4030
Consensus mean, pg/g	3982
Standard deviation, pg/g	1470
Relative standard deviation, %	37
No. of values reported	64
No. of values removed	2
No. of reported non-detects	0



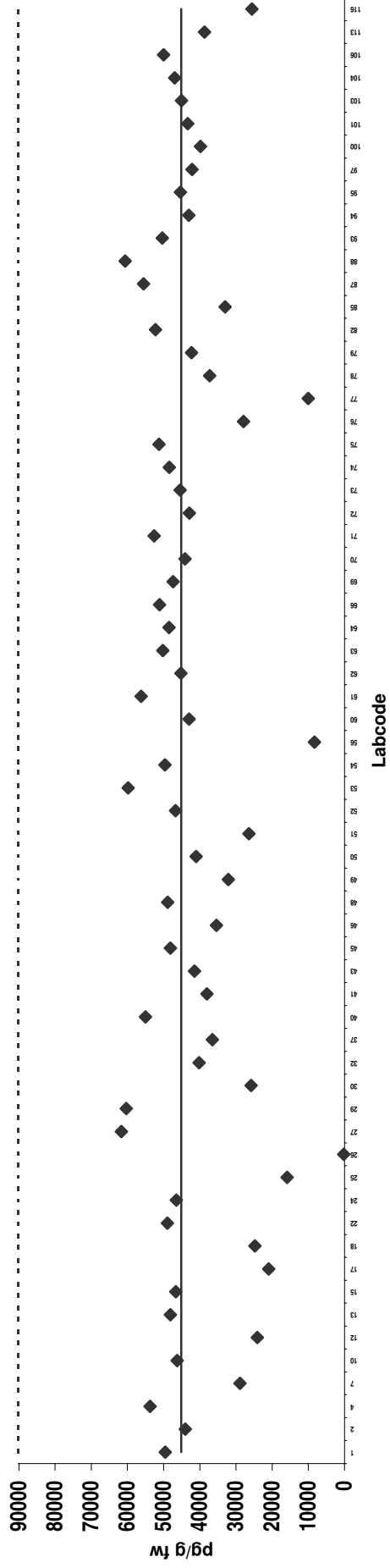
Eel
Congener: CB 52

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	49541		76	27928	
2	43990		77	10051	
4	53737		78	37306	
7	28900		79	42291	
10	46263		82	52282	
12	24100		85	33000	
13	48137		87	55531	
15	46600		88	60635	
17	20960		93	50407	
18	24781		94	43074	
22	48929		95	45353	
24	46488		97	42129	
25	15900		100	39800	
26	254		101	43306	
27	61676		103	45100	
29	60321		104	46900	
30	25800		106	50000	
32	40200		113	38679	
37	36543		116	25579	
40	55000				
41	38000				
43	41482				
45	48158				
46	35400				
48	48912				
49	32115				
50	41021				
51	26388				
52	46709				
53	59800				
54	49662				
56	8308				
60	43000				
61	56208				
62	45180				
63	50232				
64	48518				
66	51100				
69	47415				
70	44100				
71	52600				
72	42900				
73	45467				
74	48452				
75	51300				

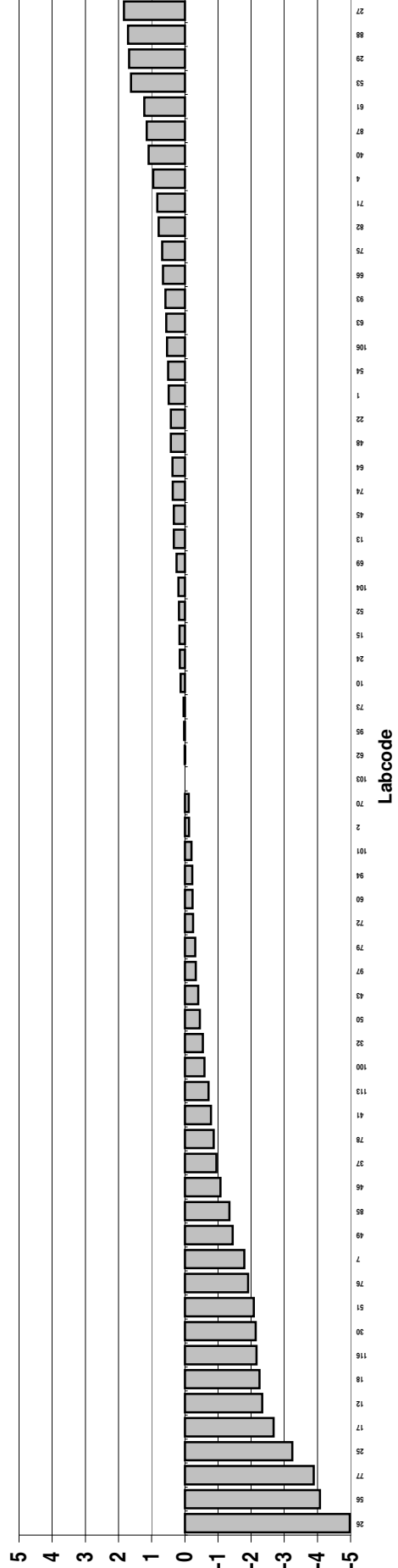
Consensus statistics

Consensus median, pg/g	45140
Median all values pg/g	45140
Consensus mean, pg/g	41717
Standard deviation, pg/g	12799
Relative standard deviation, %	31
No. of values reported	64
No. of values removed	0
No. of reported non-detects	0

CB 52



Z-score: CB 52

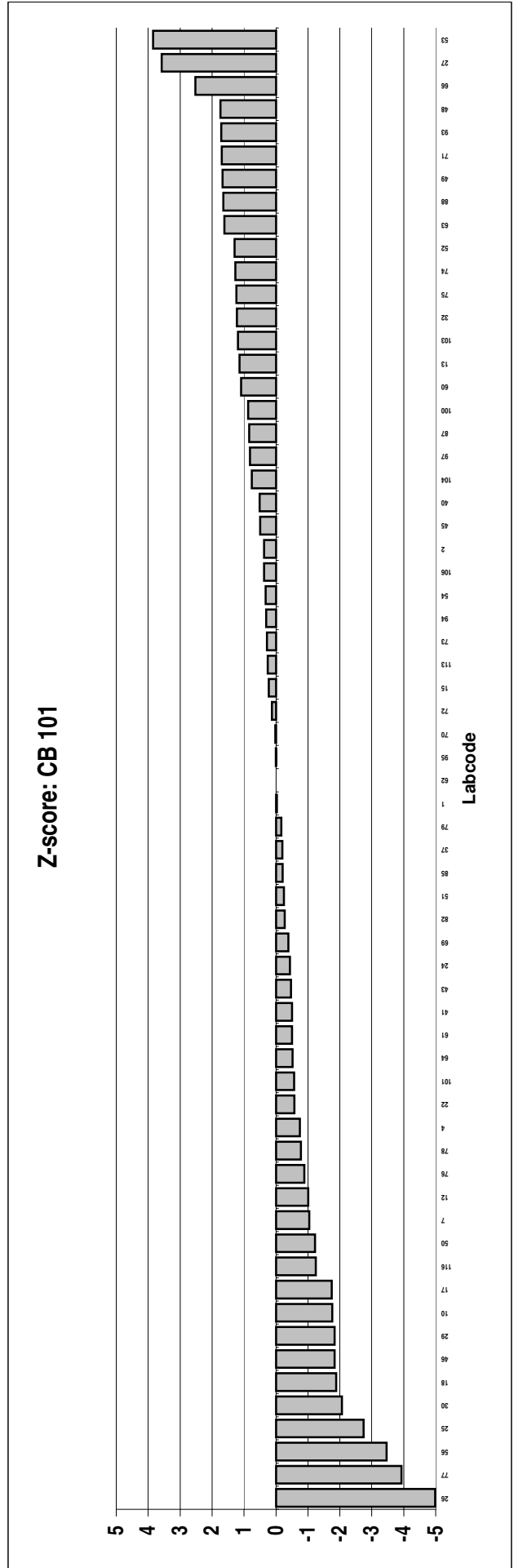
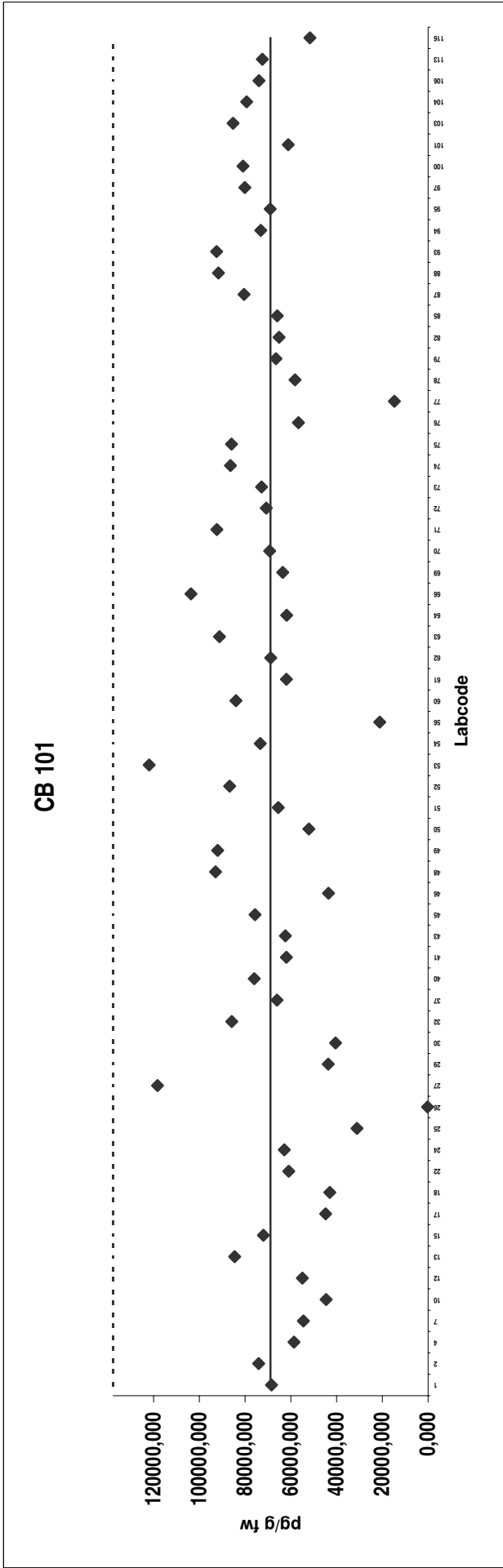


Eel
Congener: CB 101

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	68499		76	56719	
2	74035		77	14759	
4	58615		78	58126	
7	54500		79	66565	
10	44593		82	65112	
12	55000		85	66000	
13	84600		87	80451	
15	72000		88	91623	
17	44820		93	92519	
18	42982		94	73173	
22	60959		95	68984	
24	62865		97	80173	
25	31100		100	80900	
26	200		101	61101	
27	118251		103	85280	
29	43648		104	79320	
30	40500		106	74000	
32	85800		113	72479	
37	66105		116	51680	
40	76000				
41	62000				
43	62392				
45	75711				
46	43600				
48	92917				
49	91969				
50	52086				
51	65499				
52	86763				
53	122000				
54	73419				
56	21166				
60	84000				
61	61973				
62	68860				
63	91191				
64	61805				
66	103700				
69	63567				
70	69250				
71	92300				
72	70700				
73	72761				
74	86460				
75	86000				

Consensus statistics

Consensus median, pg/g	68922
Median all values pg/g	68922
Consensus mean, pg/g	68221
Standard deviation, pg/g	21608
Relative standard deviation, %	32
No. of values reported	64
No. of values removed	0
No. of reported non-detects	0

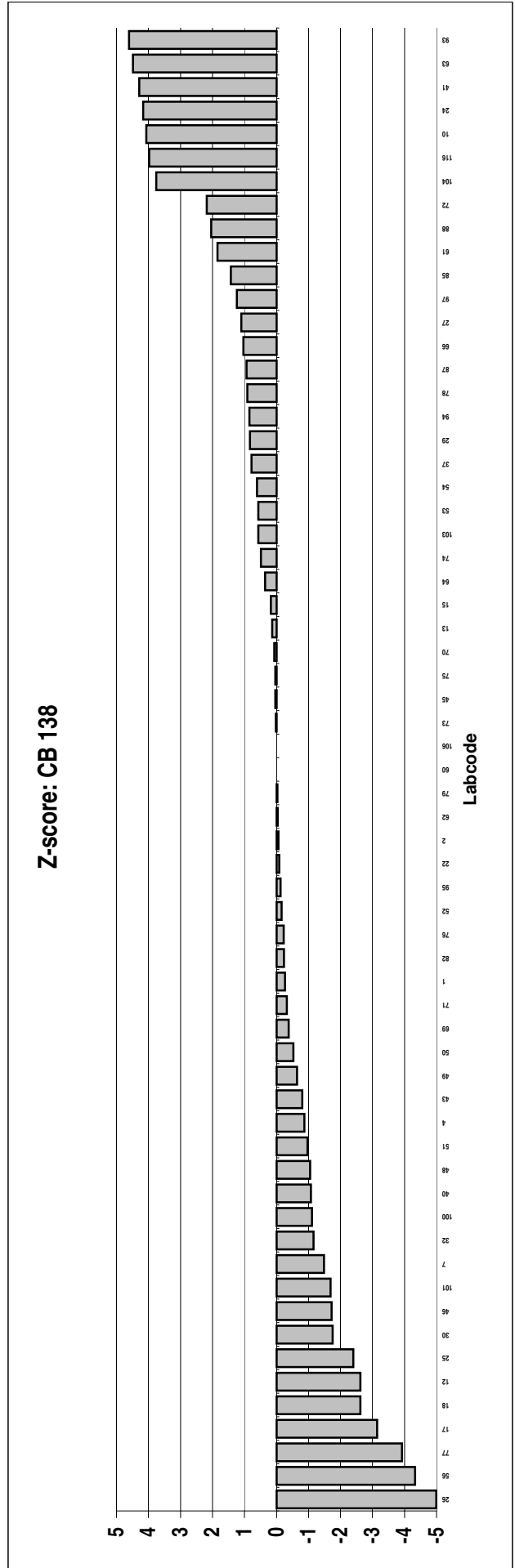
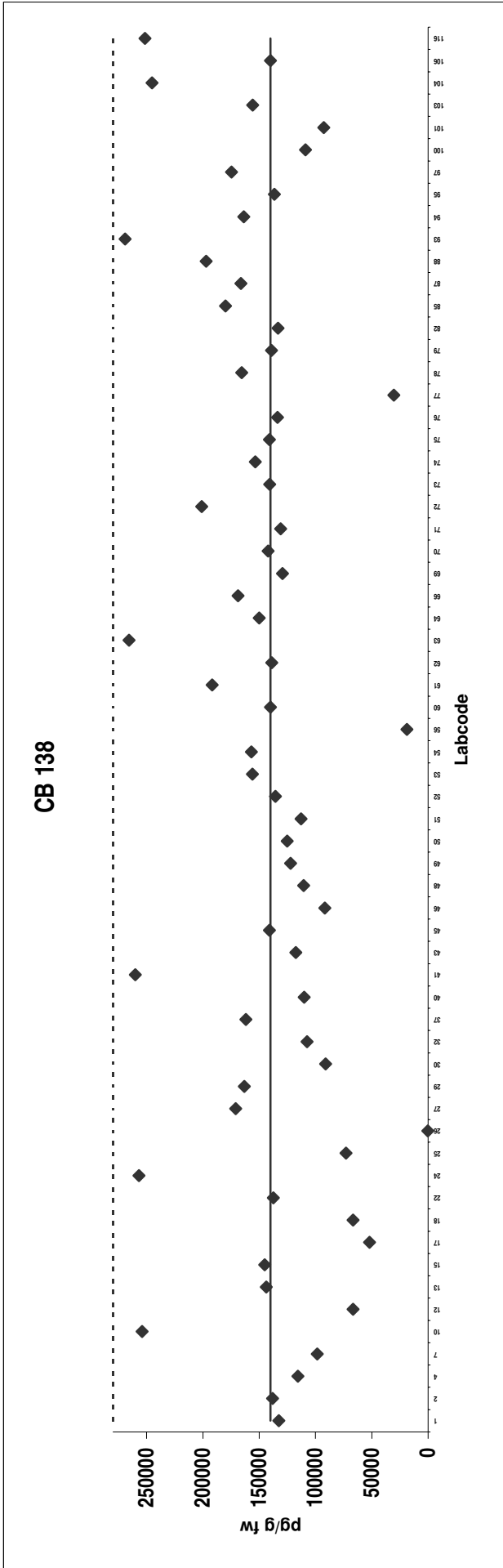


Eel
Congener: CB 138

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	132499		76	133782	
2	138224		77	30330	
4	115687		78	165496	
7	98500		79	139139	
10	253961		82	133381	
12	66700		85	180000	
13	143666		87	166172	
15	145000		88	197093	
17	51940		93	269030	
18	66691		94	163616	
22	137495		95	136511	
24	256709		97	174575	
25	72800		100	109000	
26	265		101	92725	
27	170815		103	155800	
29	163255		104	245140	
30	91000		106	140000	
32	107500		116	251397	
37	161807				
40	110000				
41	260000				
43	117418				
45	140971				
46	91700				
48	110472				
49	122128				
50	125161				
51	112777				
52	135541				
53	156000				
54	157021				
56	18843				
60	140000				
61	191692				
62	138950				
63	265677				
64	149908				
66	168900				
69	129296				
70	142000				
71	131000				
72	201000				
73	140666				
74	153556				
75	141000				

Consensus statistics

Consensus median, pg/g	140000
Median all values pg/g	140000
Consensus mean, pg/g	143006
Standard deviation, pg/g	56668
Relative standard deviation, %	40
No. of values reported	63
No. of values removed	0
No. of reported non-detects	0



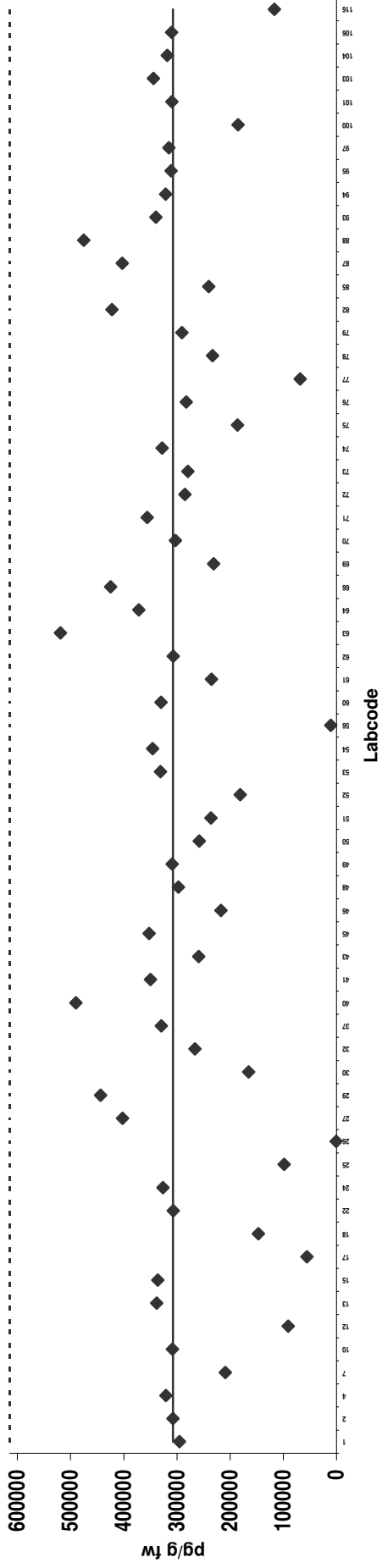
Eel
Congener: CB 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	295457		76	282270	
2	307494		77	68467	
4	320989		78	233133	
7	209000		79	290580	
10	308422		82	422236	
12	90700		85	240000	
13	338249		87	402946	
15	336000		88	475400	
17	55720		93	339638	
18	146818		94	321294	
22	306902		95	310961	
24	326288		97	315144	
25	98400		100	185000	
26	505		101	309350	
27	402440		103	344400	
29	443471		104	318180	
30	165000		106	310000	
32	266000		116	116738	
37	329538				
40	490000				
41	350000				
43	259174				
45	352319				
46	217000				
48	297075				
49	308954				
50	257846				
51	236077				
52	180813				
53	331000				
54	345889				
56	10729				
60	330000				
61	234839				
62	306960				
63	519100				
64	371707				
66	424900				
69	230889				
70	303000				
71	356000				
72	285000				
73	279371				
74	328083				
75	186000				

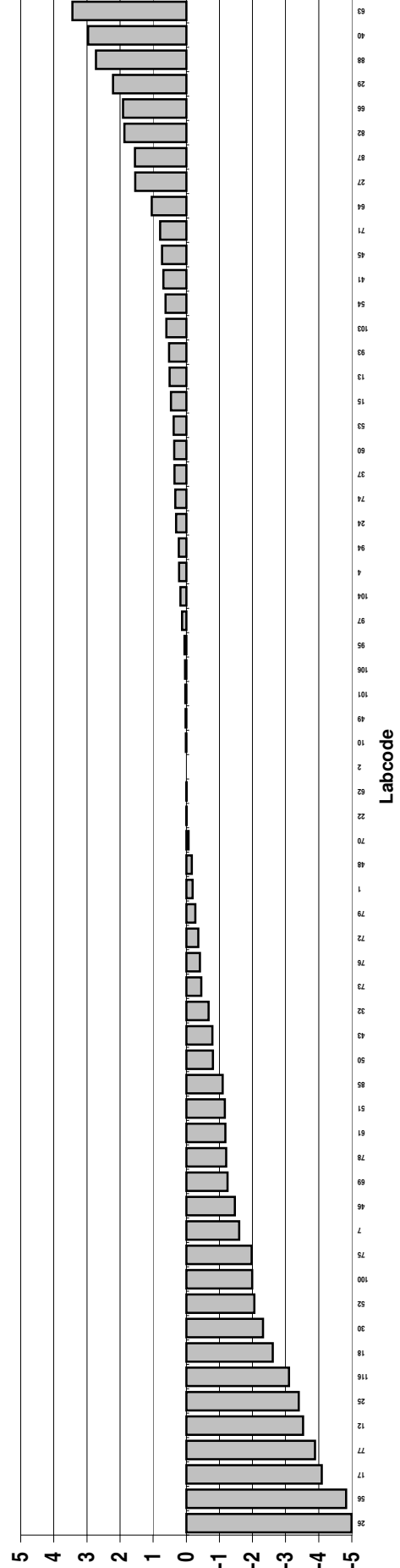
Consensus statistics

Consensus median, pg/g	307494
Median all values pg/g	307494
Consensus mean, pg/g	282950
Standard deviation, pg/g	108198
Relative standard deviation, %	38
No. of values reported	63
No. of values removed	0
No. of reported non-detects	0

CB 153



Z-score: CB 153

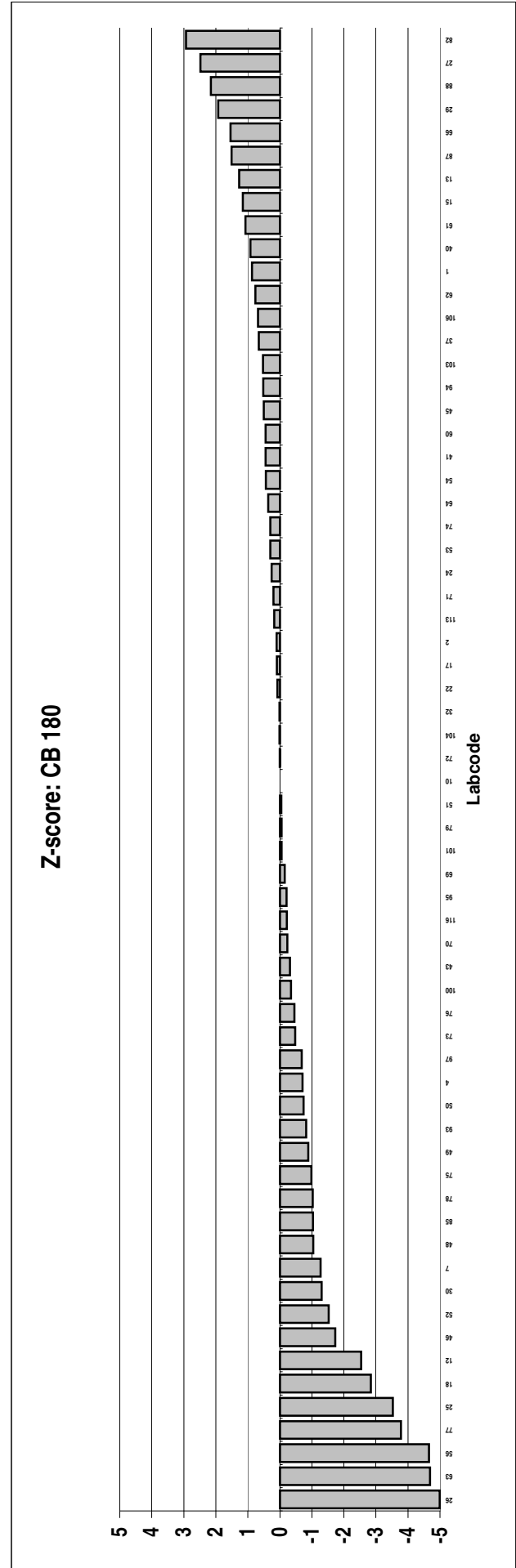
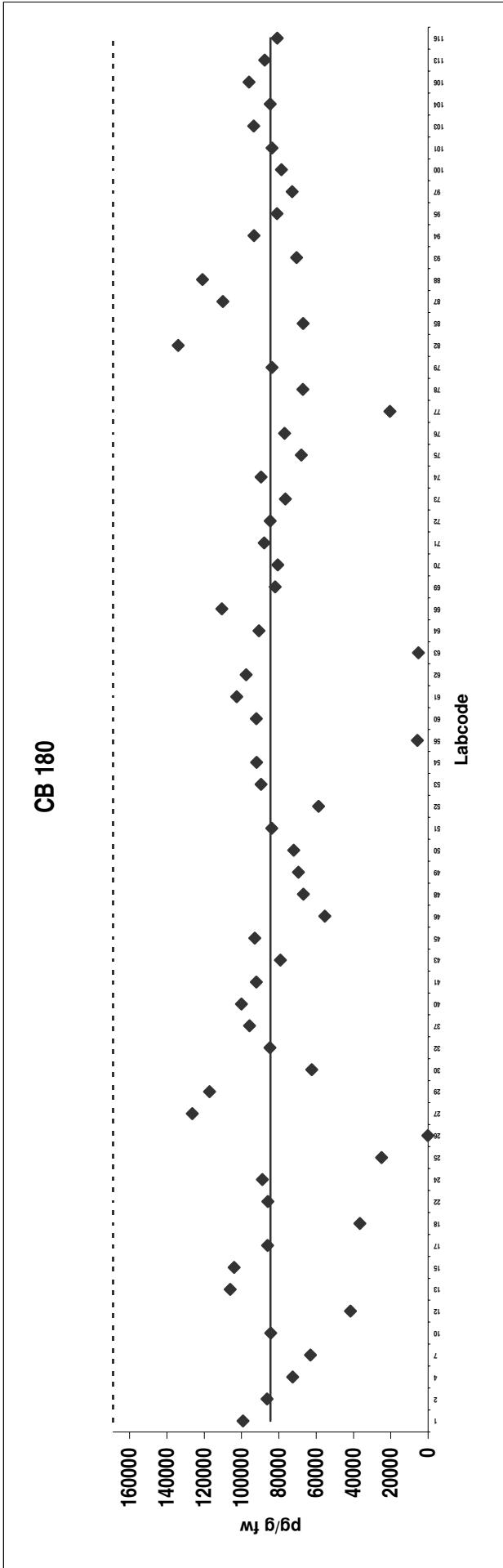


Eel
Congener: CB 180

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	99275		76	76866	
2	86289		77	20522	
4	72542		78	67175	
7	63000		79	83624	
10	84402		82	134028	
12	41600		85	67000	
13	106055		87	110051	
15	104000		88	120975	
17	86030		93	70548	
18	36512		94	93295	
22	85839		95	80984	
24	88824		97	72894	
25	24900		100	78600	
26	127		101	83601	
27	126425		103	93480	
29	117083		104	84670	
30	62400		106	96000	
32	84750		113	87528	
37	95671		116	80843	
40	100000				
41	92000				
43	79118				
45	92940				
46	55300				
48	66884				
49	69482				
50	71960				
51	83789				
52	58781				
53	89500				
54	91946				
56	5766				
60	92000				
61	102620				
62	97480				
63	5202				
64	90606				
66	110500				
69	81922				
70	80600				
71	87900				
72	84600				
73	76453				
74	89595				
75	67900				

Consensus statistics

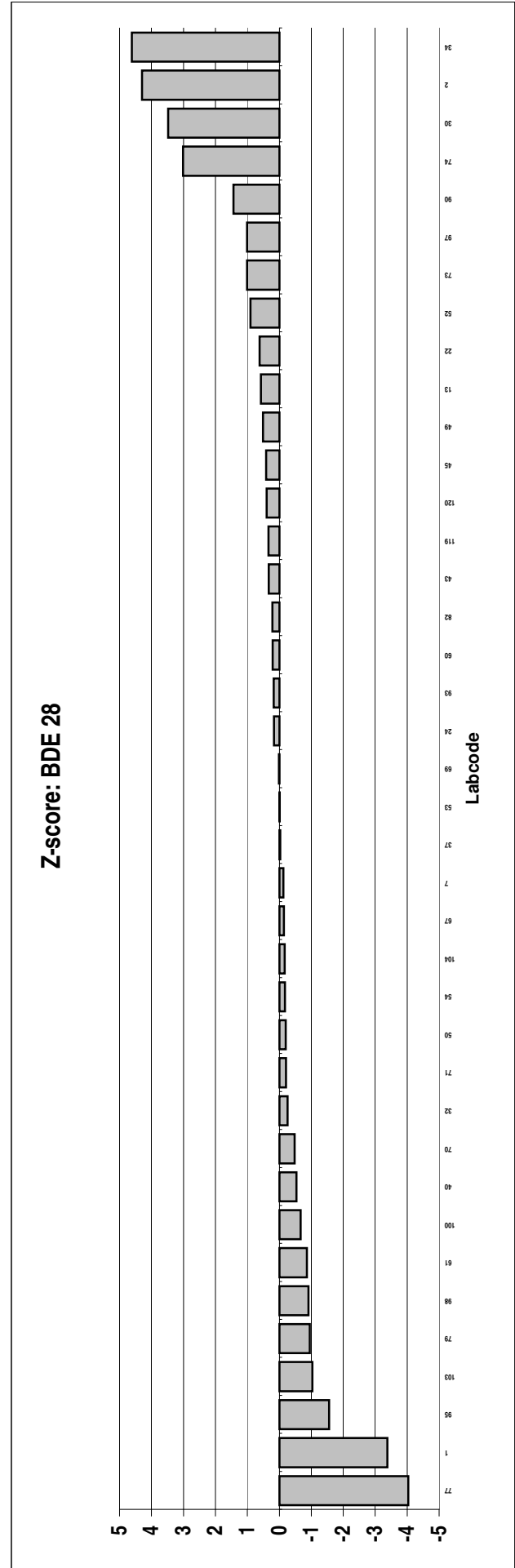
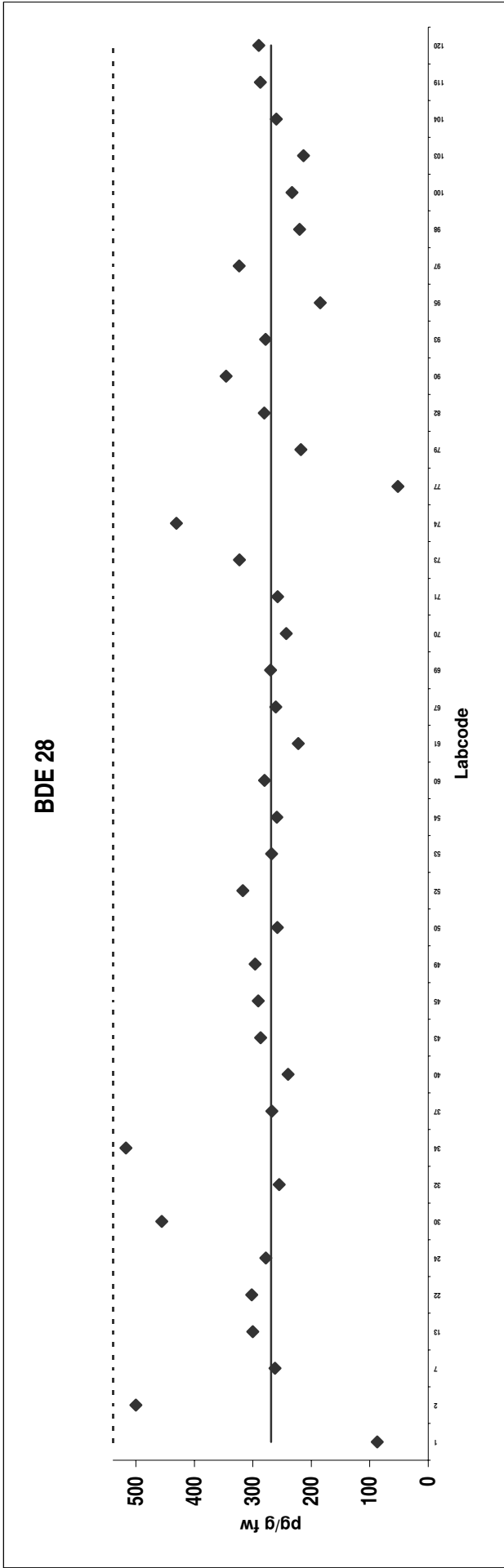
Consensus median, pg/g	84501
Median all values pg/g	84501
Consensus mean, pg/g	79582
Standard deviation, pg/g	26761
Relative standard deviation, %	34
No. of values reported	64
No. of values removed	0
No. of reported non-detects	0



Eel
Congener: BDE 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	87				
2	500	ND			
7	262				
13	300				
22	302				
24	278				
30	456				
32	255				
34	517				
37	267				
40	240				
43	287				
45	291				
49	296				
50	258				
52	317				
53	268				
54	259				
60	280				
61	222				
67	261				
69	270				
70	243				
71	258				
73	323				
74	431				
77	52				
79	218				
82	280				
90	346				
93	278				
95	185				
97	323				
98	220				
100	233				
103	213				
104	260				
119	287				
120	290				

Consensus statistics	
Consensus median, pg/g	269
Median all values pg/g	270
Consensus mean, pg/g	280
Standard deviation, pg/g	88
Relative standard deviation, %	31
No. of values reported	39
No. of values removed	0
No. of reported non-detects	1

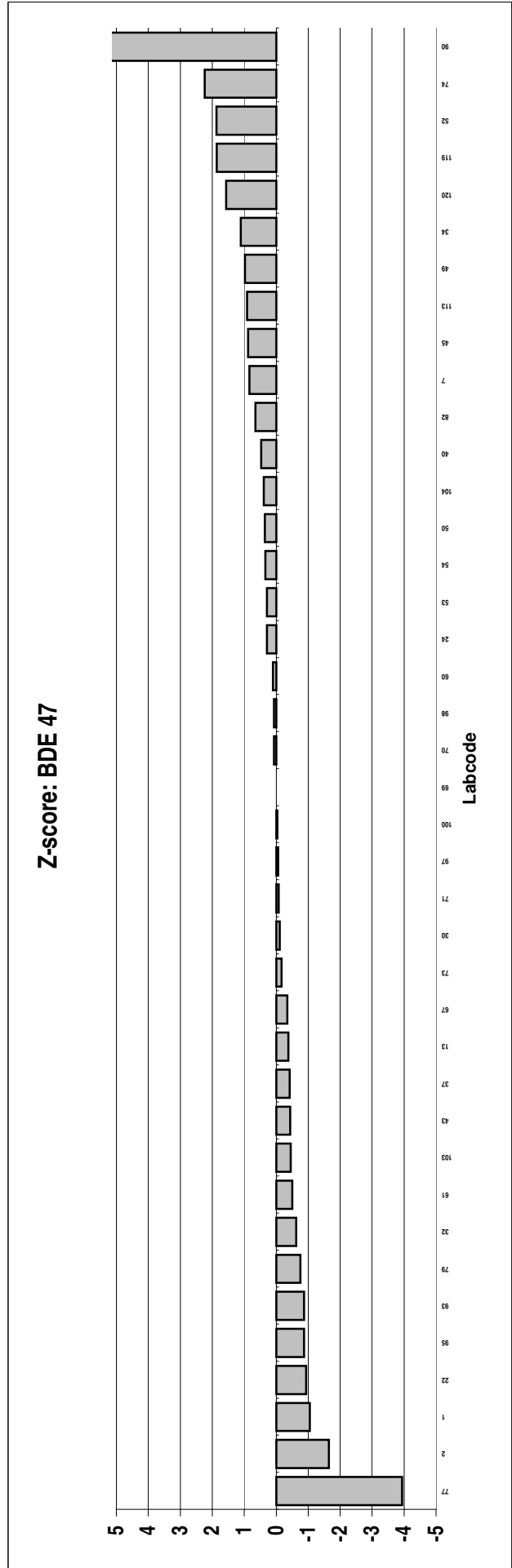
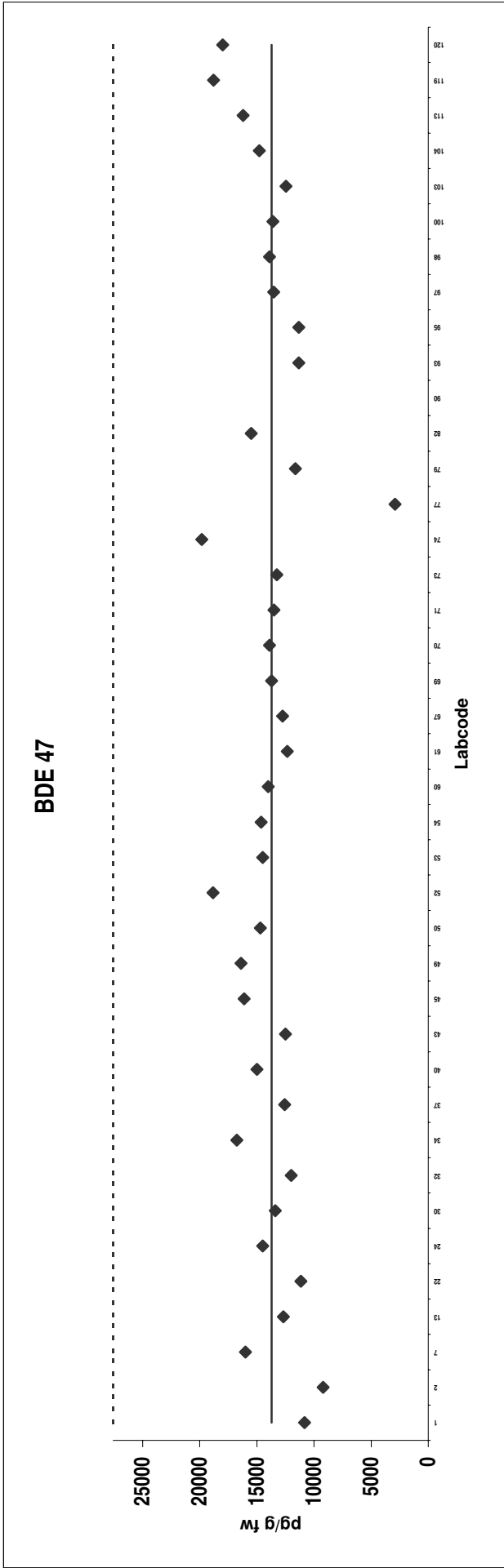


Eel
Congener: BDE 47

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	10831				
2	9193				
7	16000				
13	12675				
22	11152				
24	14495				
30	13400				
32	12000				
34	16755				
37	12564				
40	15000				
43	12499				
45	16121				
49	16394				
50	14689				
52	18830				
53	14500				
54	14637				
60	14000				
61	12337				
67	12750				
69	13709				
70	13900				
71	13500				
73	13260				
74	19831				
77	29113				
79	11627				
82	15488				
90	57310	Outlier			
93	11329				
95	11324				
97	13539				
98	13900				
100	13600				
103	12464				
104	14780				
113	16200				
119	18800				
120	18000				

Consensus statistics

Consensus median, pg/g	13709
Median all values pg/g	13804
Consensus mean, pg/g	13820
Standard deviation, pg/g	2945
Relative standard deviation, %	21
No. of values reported	40
No. of values removed	1
No. of reported non-detects	0



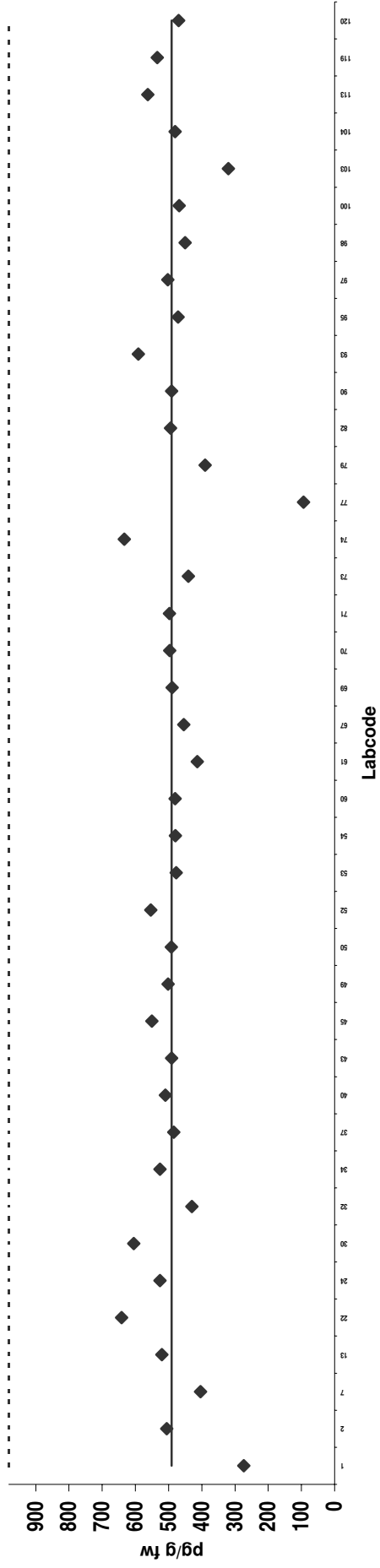
Eel
Congener: BDE 99

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	274				
2	506				
7	404				
13	520				
22	641				
24	526				
30	605				
32	430				
34	526				
37	485				
40	510				
43	491				
45	550				
49	502				
50	492				
52	554				
53	477				
54	479				
60	480				
61	414				
67	454				
69	489				
70	497				
71	497				
73	440				
74	633				
77	93				
79	390				
82	494				
90	491				
93	591				
95	472				
97	502				
98	450				
100	468				
103	320				
104	480				
113	563				
119	534				
120	470				

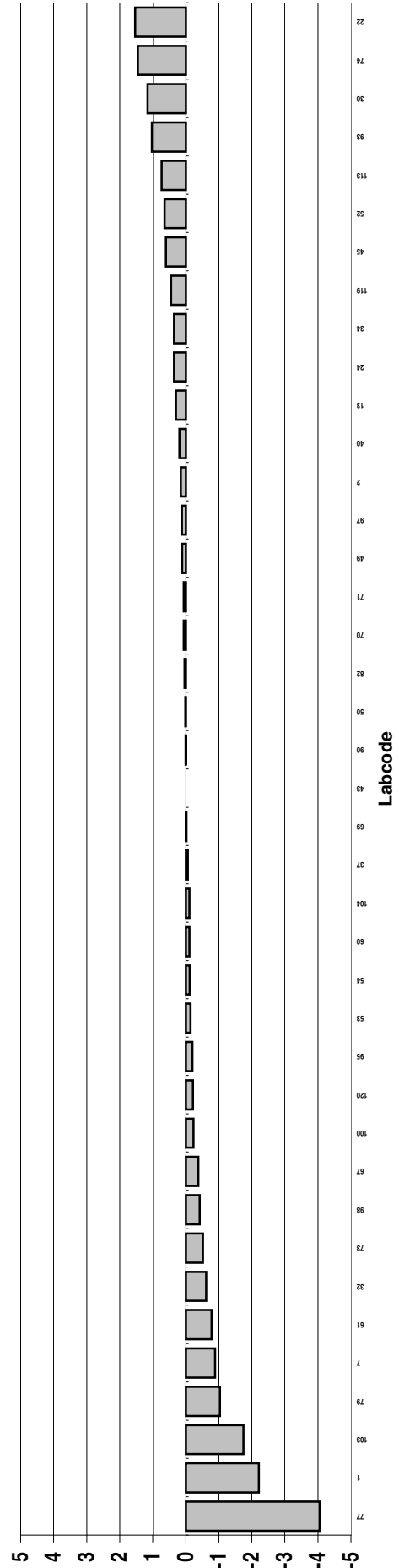
Consensus statistics

Consensus median, pg/g	491
Median all values pg/g	491
Consensus mean, pg/g	480
Standard deviation, pg/g	95
Relative standard deviation, %	20
No. of values reported	40
No. of values removed	0
No. of reported non-detects	0

BDE 99



Z-score: BDE 99

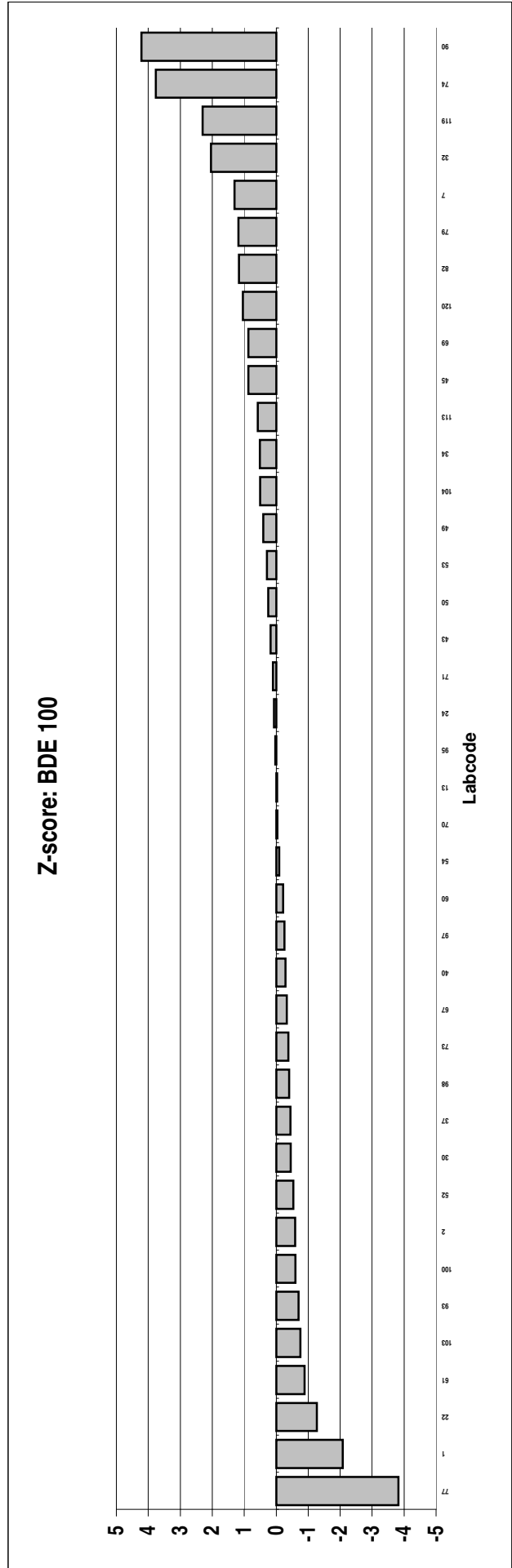
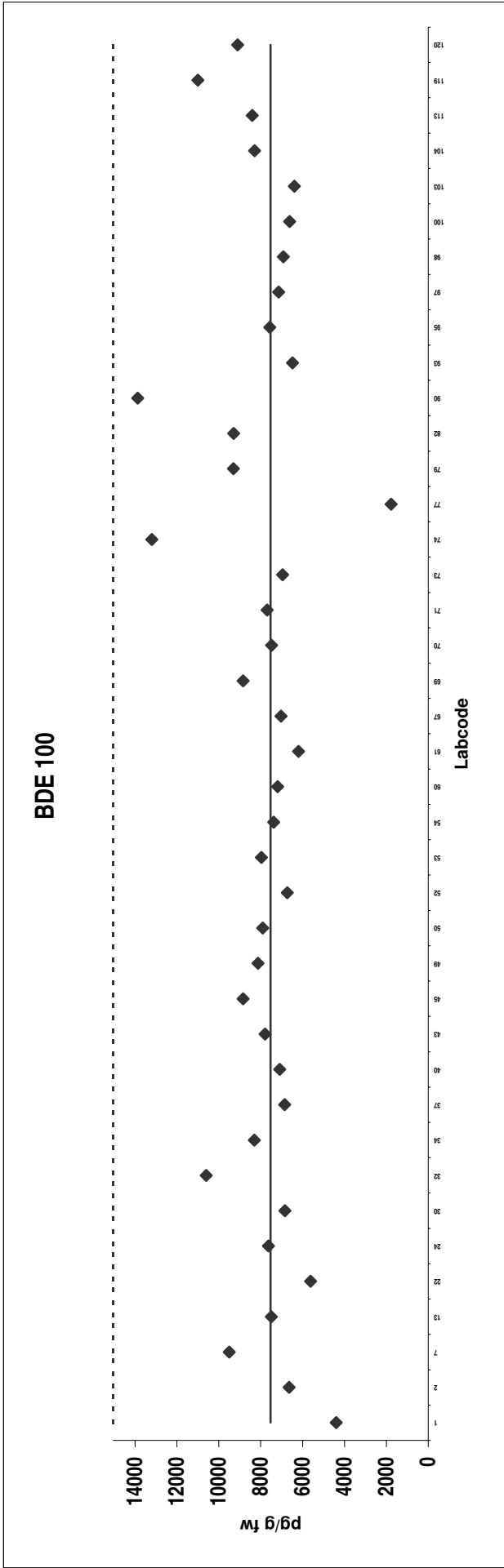


Eel
Congener: BDE 100

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	4392				
2	6639				
7	9500				
13	7490				
22	5618				
24	7634				
30	6850				
32	10600				
34	8303				
37	6859				
40	7100				
43	7796				
45	8837				
49	8136				
50	7908				
52	6729				
53	7970				
54	7385				
60	7200				
61	6194				
67	7030				
69	8842				
70	7480				
71	7690				
73	6956				
74	13198				
77	1774				
79	9311				
82	9291				
90	13880				
93	6478				
95	7572				
97	7149				
98	6920				
100	6620				
103	6396				
104	8290				
113	8400				
119	11000				
120	9100				

Consensus statistics

Consensus median, pg/g	7531
Median all values pg/g	7531
Consensus mean, pg/g	7813
Standard deviation, pg/g	2056
Relative standard deviation, %	26
No. of values reported	40
No. of values removed	0
No. of reported non-detects	0

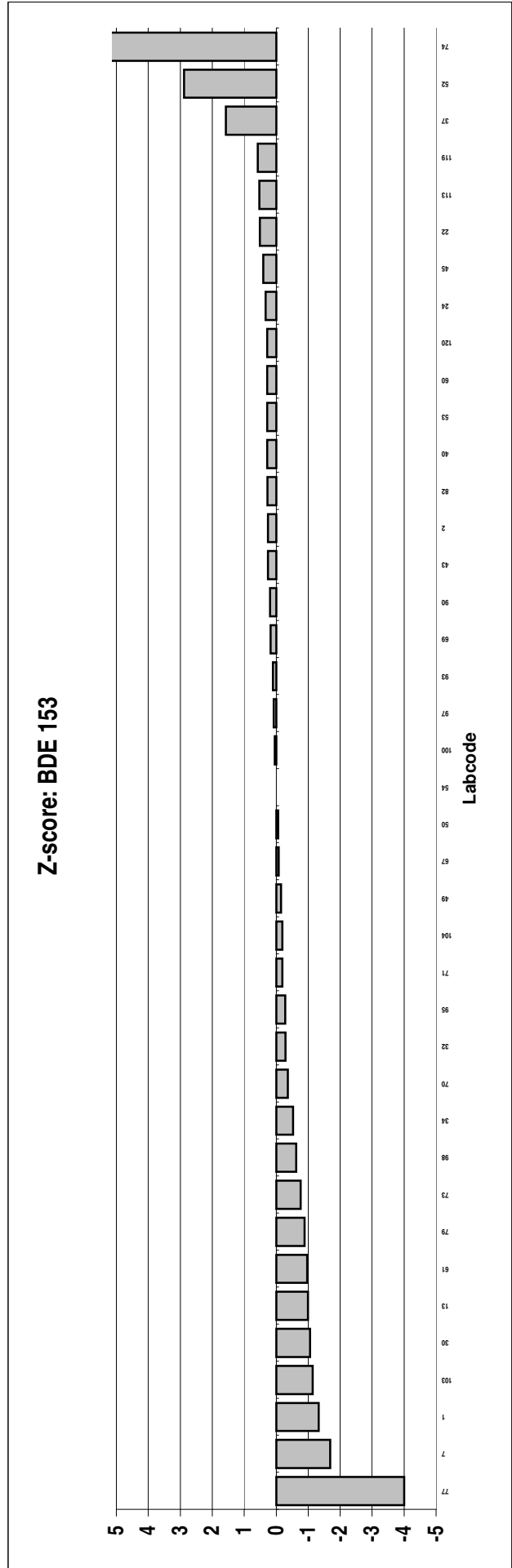
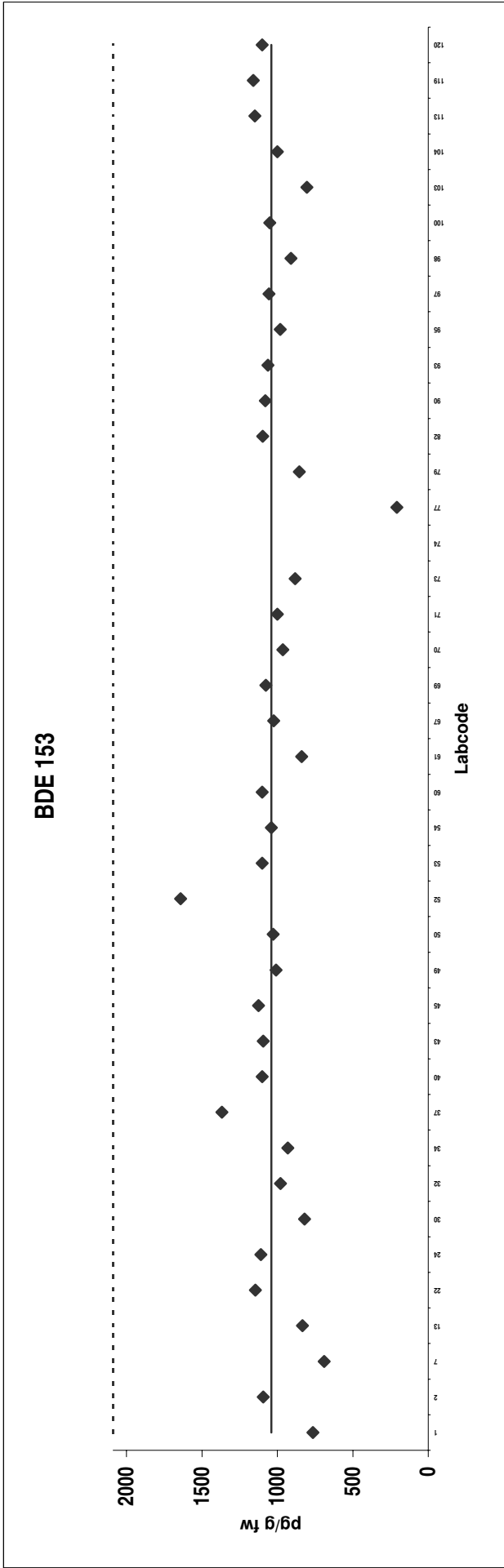


Eel
Congener: BDE 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	764				
2	1094				
7	690				
13	834				
22	1147				
24	1110				
30	820				
32	980				
34	931				
37	1368				
40	1100				
43	1094				
45	1125				
49	1009				
50	1028				
52	1641				
53	1100				
54	1041				
60	1100				
61	839				
67	1025				
69	1077				
70	964				
71	1000				
73	882				
74	2754				
77	208	Outlier			
79	855				
82	1098				
90	1080				
93	1062				
95	982				
97	1057				
98	910				
100	1050				
103	804				
104	1000				
113	1150				
119	1160				
120	1100				

Consensus statistics

Consensus median, pg/g	1041
Median all values pg/g	1045
Consensus mean, pg/g	1007
Standard deviation, pg/g	211
Relative standard deviation, %	21
No. of values reported	40
No. of values removed	1
No. of reported non-detects	0



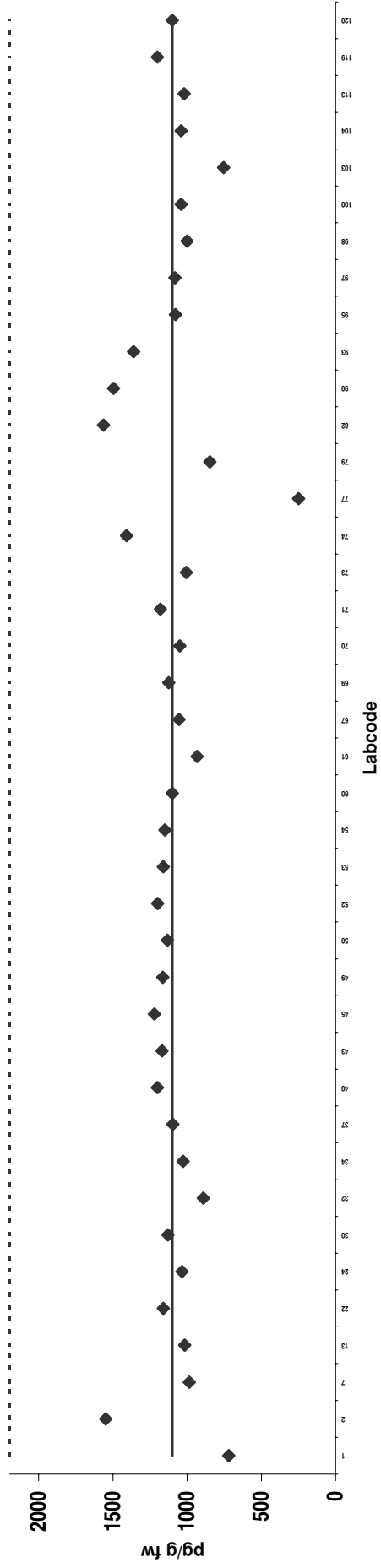
Eel
Congener: BDE 154

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	720				
2	1549				
7	985				
13	1016				
22	1160				
24	1034				
30	1130				
32	890				
34	1027				
37	1097				
40	1200				
43	1169				
45	1220				
49	1164				
50	1133				
52	1199				
53	1160				
54	1150				
60	1100				
61	932				
67	1054				
69	1123				
70	1050				
71	1180				
73	1006				
74	1408				
77	249				
79	846				
82	1562				
90	1495				
93	1361				
95	1078				
97	1082				
98	1000				
100	1040				
103	754				
104	1040				
113	1020				
119	1200				
120	1100				

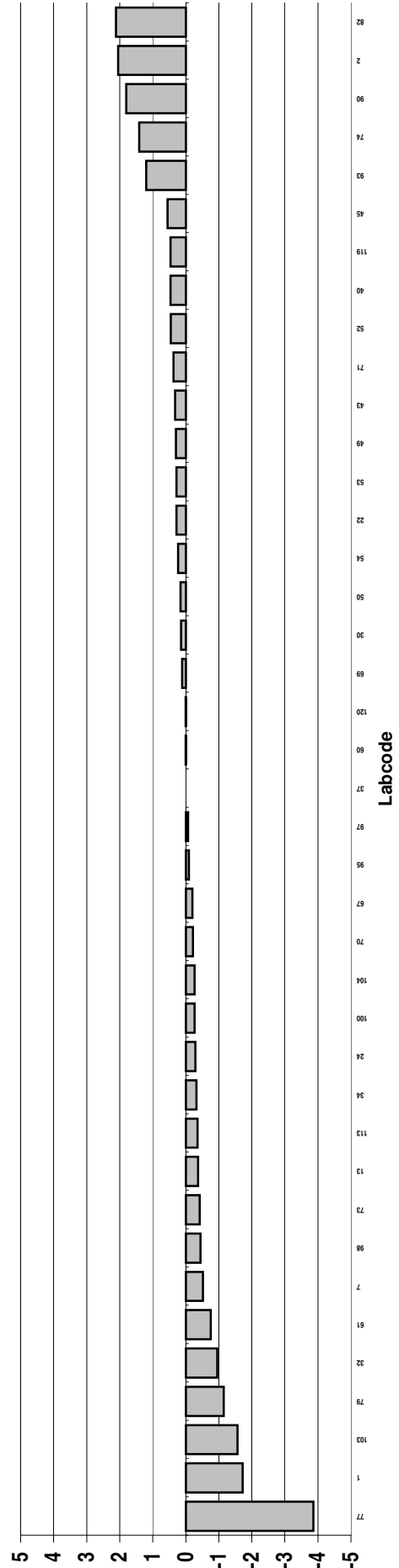
Consensus statistics

Consensus median, pg/g	1098
Median all values pg/g	1098
Consensus mean, pg/g	1092
Standard deviation, pg/g	226
Relative standard deviation, %	21
No. of values reported	40
No. of values removed	0
No. of reported non-detects	0

BDE 154



Z-score: BDE 154



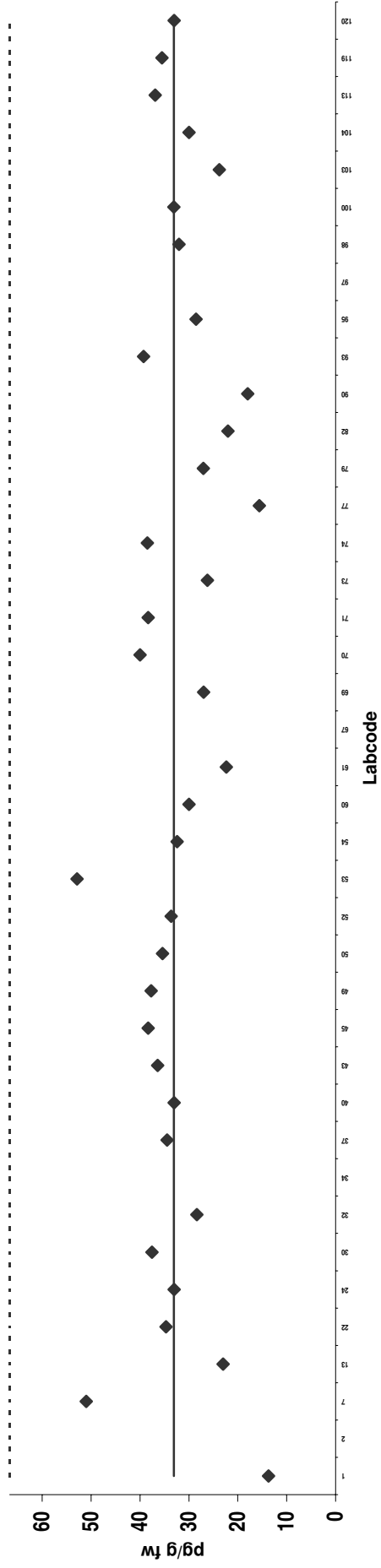
Eel
Congener: BDE 183

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	14				
2	500	Outlier,ND			
7	51				
13	23				
22	35				
24	33	ND			
30	38				
32	28				
34	106	Outlier			
37	34				
40	33				
43	36				
45	38				
49	38				
50	35				
52	34				
53	53				
54	32				
60	30				
61	22				
67	245	Outlier			
69	27				
70	40	ND			
71	38				
73	26				
74	39				
77	16	ND			
79	27				
82	22	ND			
90	18				
93	39				
95	29				
97	109	Outlier			
98	32				
100	33				
103	24				
104	30				
113	37				
119	35				
120	33				

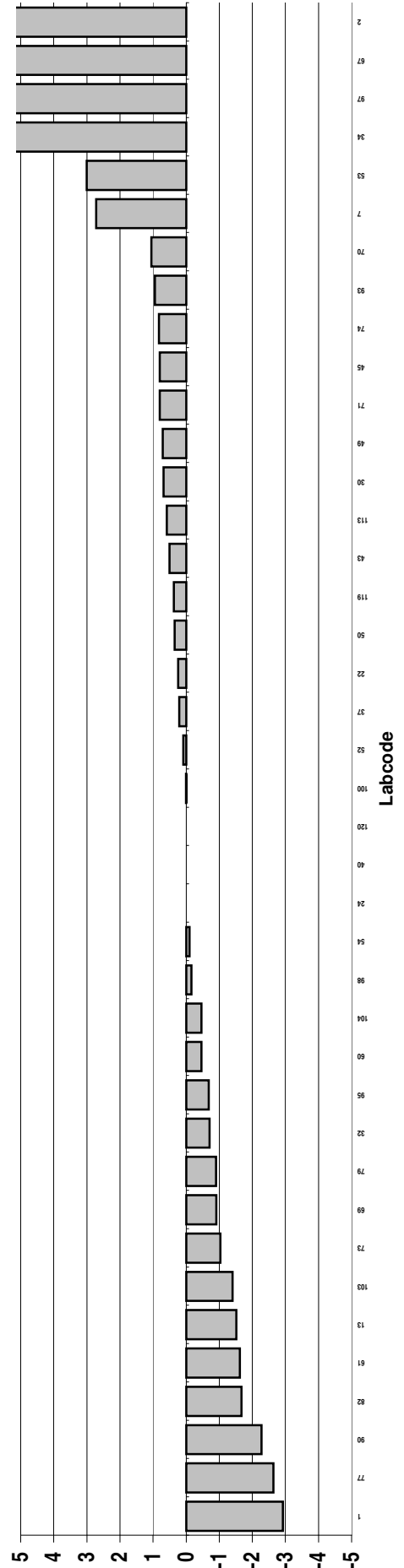
Consensus statistics

Consensus median, pg/g	33
Median all values pg/g	33
Consensus mean, pg/g	32
Standard deviation, pg/g	8,4
Relative standard deviation, %	26
No. of values reported	40
No. of values removed	4
No. of reported non-detects	5

BDE 183



Z-score: BDE 183

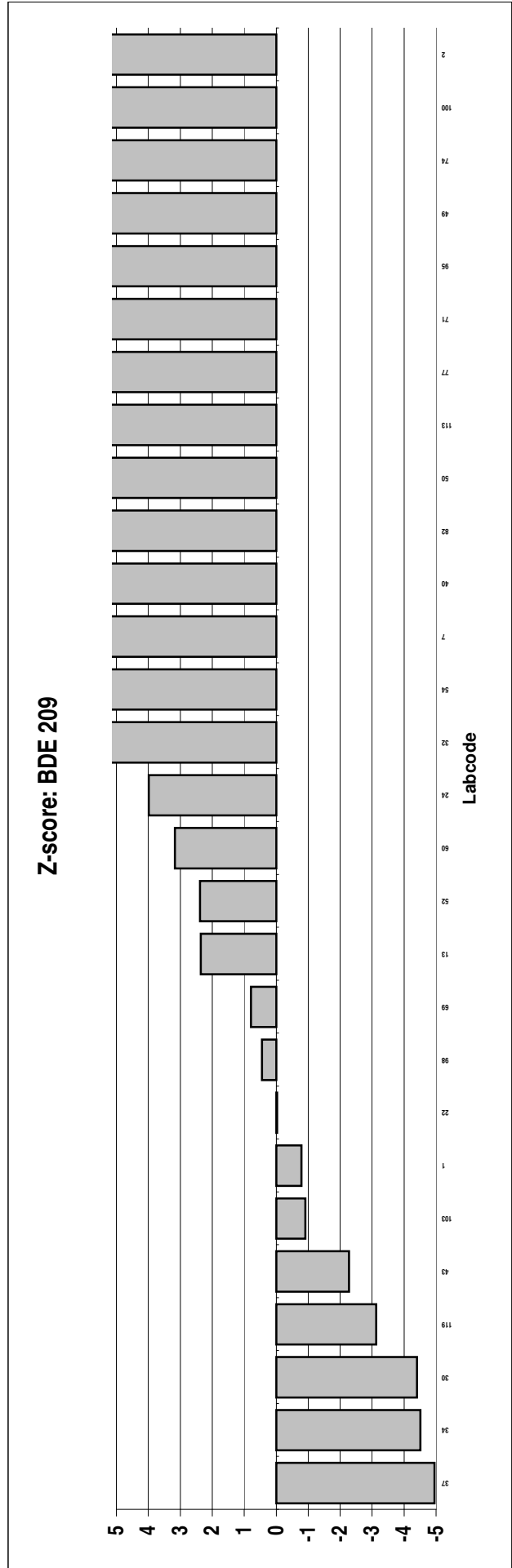
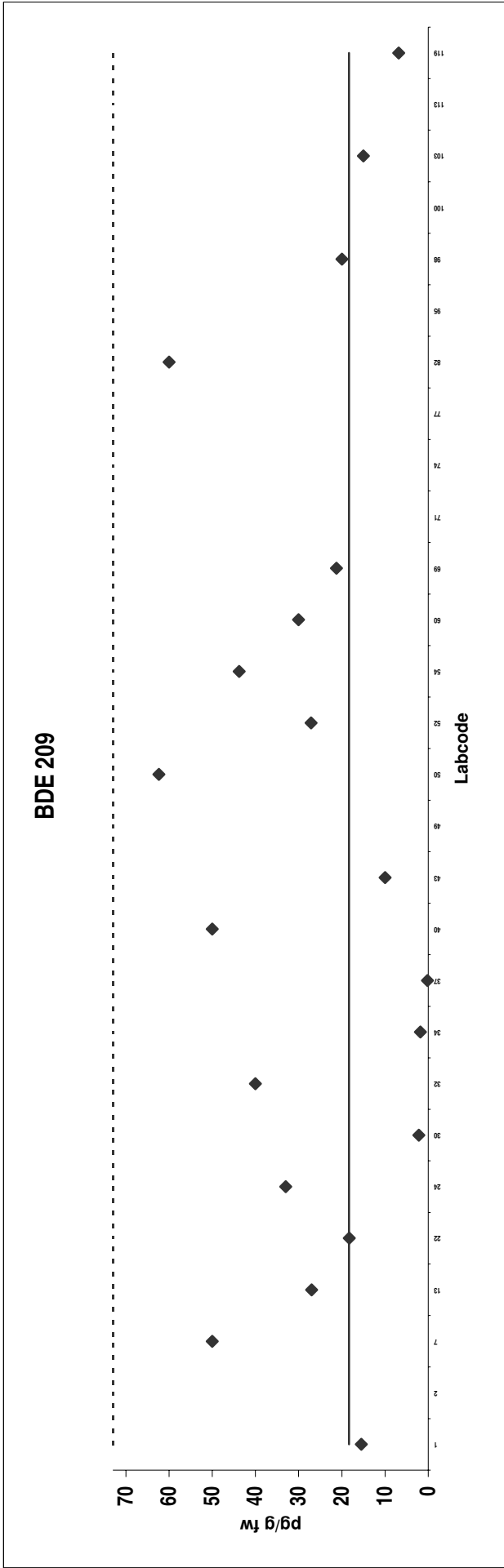


Eel
Congener: BDE 209

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	15				
2	2000	Outlier,ND			
7	50				
13	27	ND			
22	18	ND			
24	33	ND			
30	2,2				
32	40	ND			
34	1,8	ND			
37	0,18				
40	50				
43	10	ND			
49	203	Outlier			
50	62				
52	27	ND			
54	44				
60	30	ND			
69	21				
71	145	Outlier,ND			
74	735	Outlier			
77	124	Outlier,ND			
82	60	ND			
95	192	Outlier,ND			
98	20	ND			
100	1770	Outlier			
103	15				
113	84				
119	6,9	Outlier			

Consensus statistics

Consensus median, pg/g	18
Median all values pg/g	37
Consensus mean, pg/g	27
Standard deviation, pg/g	19
Relative standard deviation, %	72
No. of values reported	28
No. of values removed	8
No. of reported non-detects	14

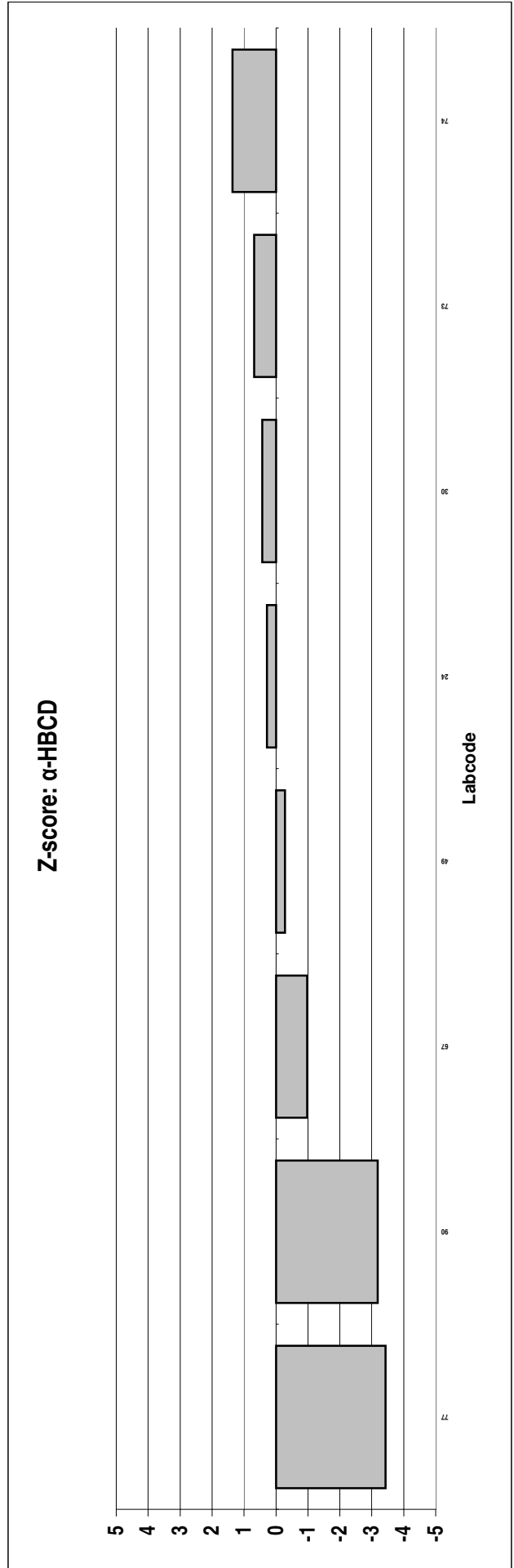
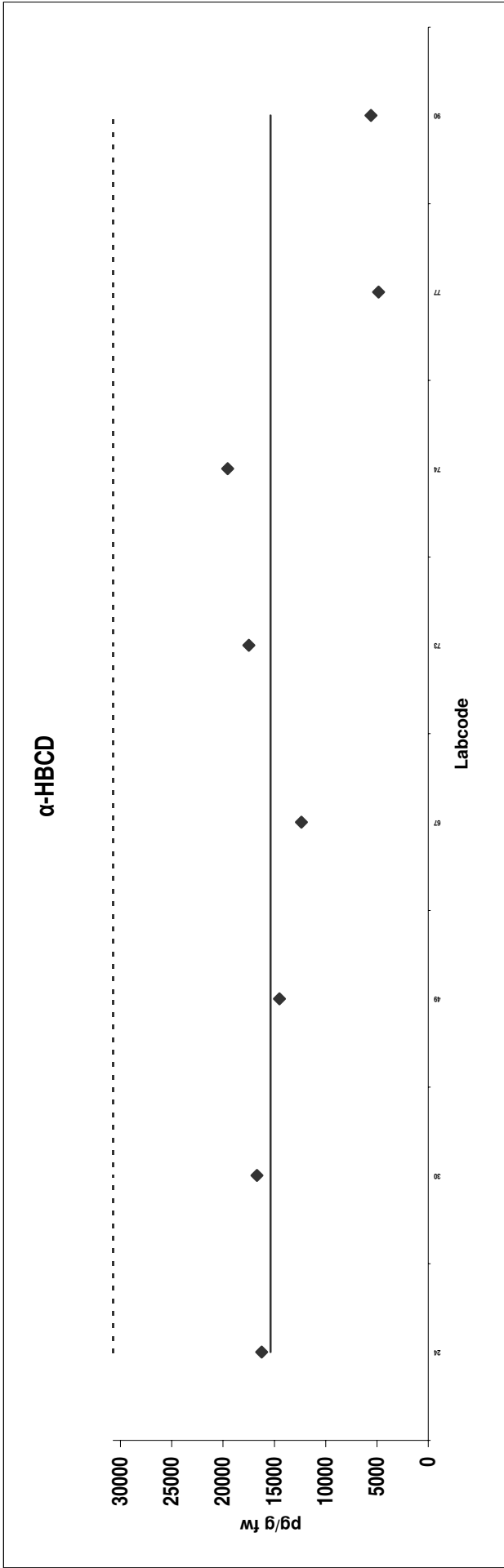


Eel
Congener: α -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
24	16238				
30	16700				
49	14503				
67	12370				
73	17477				
74	19546				
77	4835				
90	5590				

Consensus statistics

Consensus median, pg/g	15371
Median all values pg/g	15371
Consensus mean, pg/g	13407
Standard deviation, pg/g	5477
Relative standard deviation, %	41
No. of values reported	8
No. of values removed	0
No. of reported non-detects	0

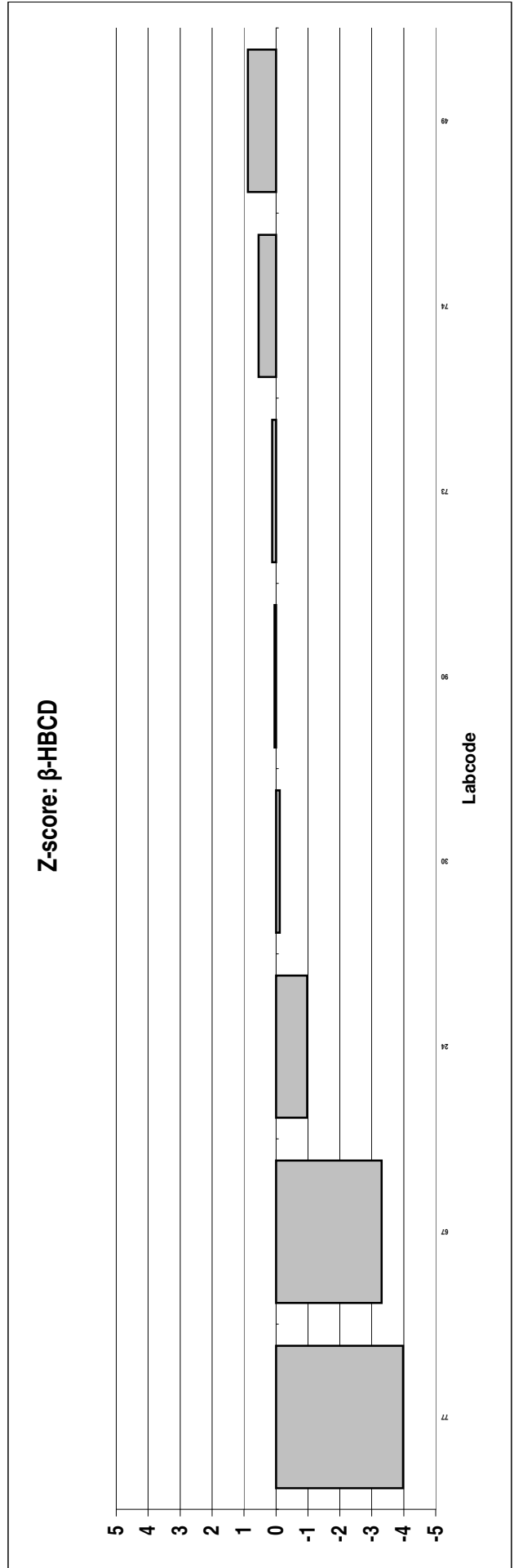
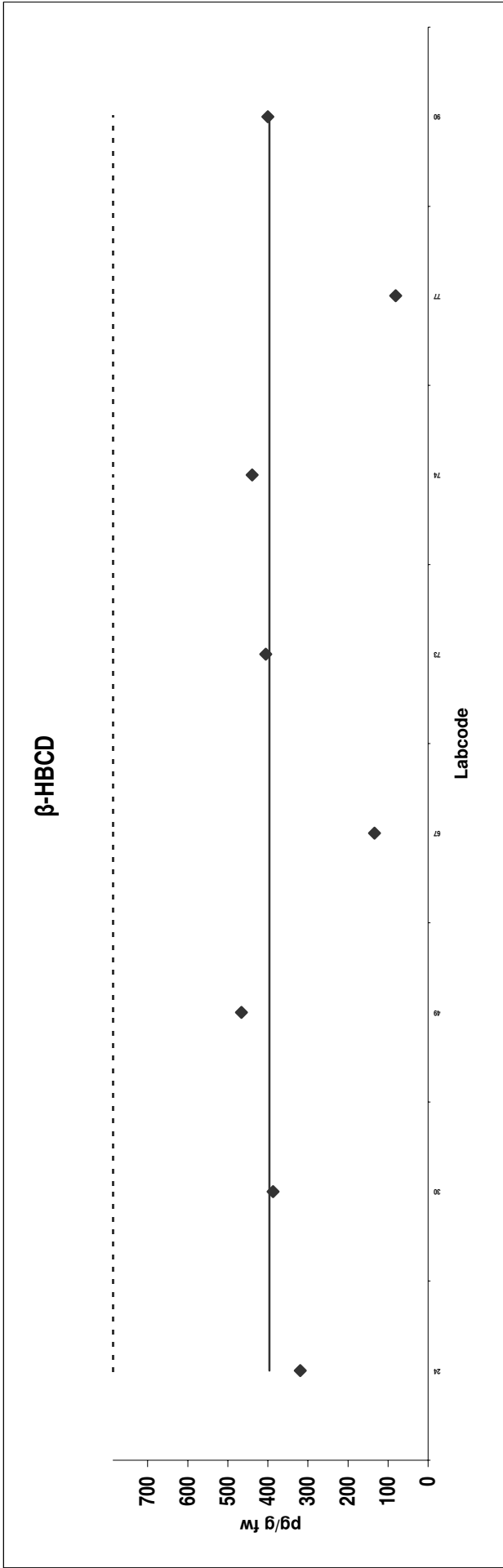


Eel
Congener: β -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
24	319				
30	387				
49	466				
67	134				
73	405				
74	439				
77	81	ND			
90	400	ND			

Consensus statistics

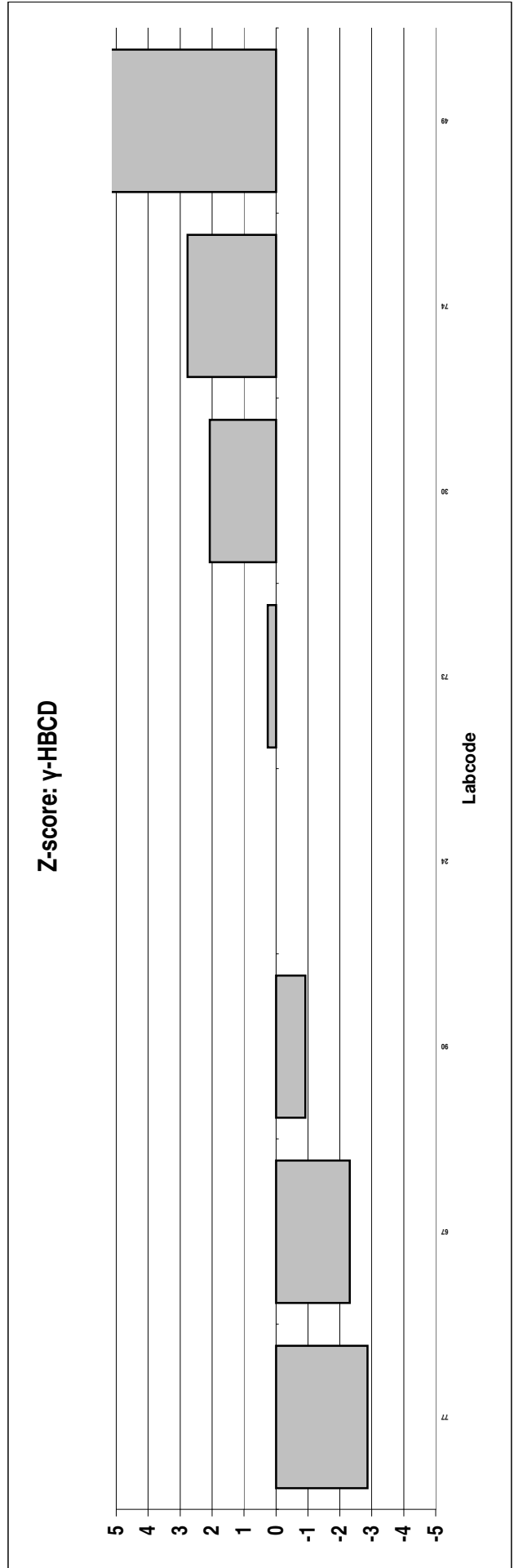
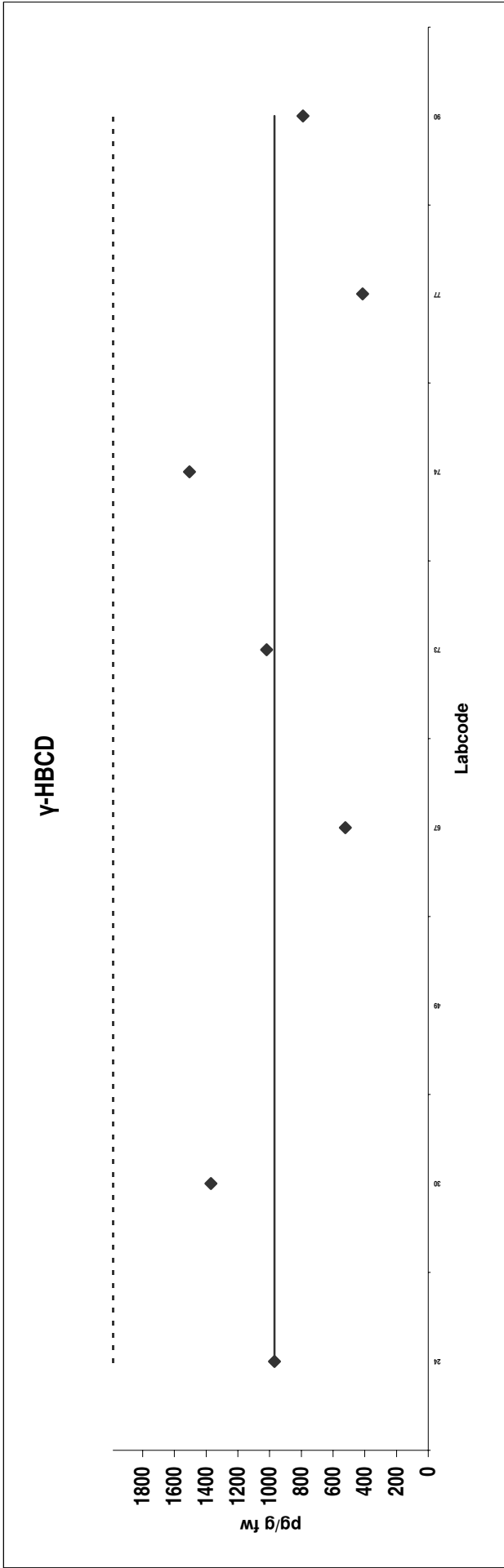
Consensus median, pg/g	396
Median all values pg/g	394
Consensus mean, pg/g	329
Standard deviation, pg/g	144
Relative standard deviation, %	44
No. of values reported	8
No. of values removed	0
No. of reported non-detects	2



Eel
Congener: γ -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
24	969				
30	1370				
49	2680				
67	522	Outlier			
73	1019				
74	1505				
77	414				
90	790				

Consensus statistics	
Consensus median, pg/g	969
Median all values pg/g	994
Consensus mean, pg/g	941
Standard deviation, pg/g	405
Relative standard deviation, %	43
No. of values reported	8
No. of values removed	1
No. of reported non-detects	0

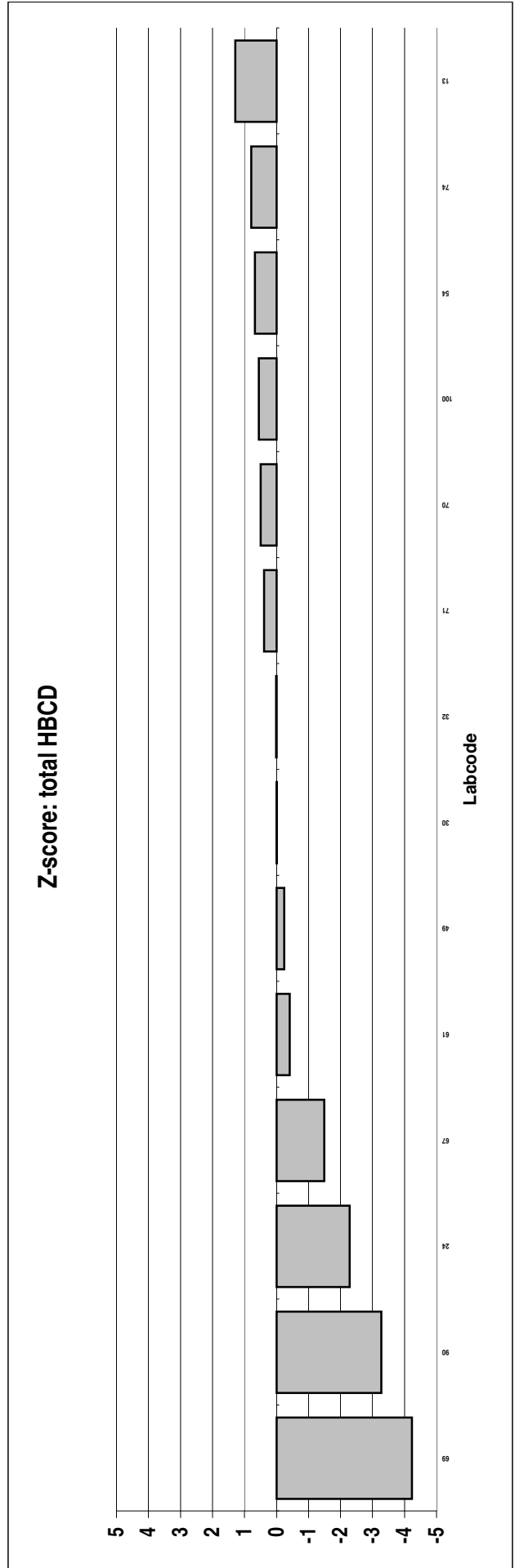
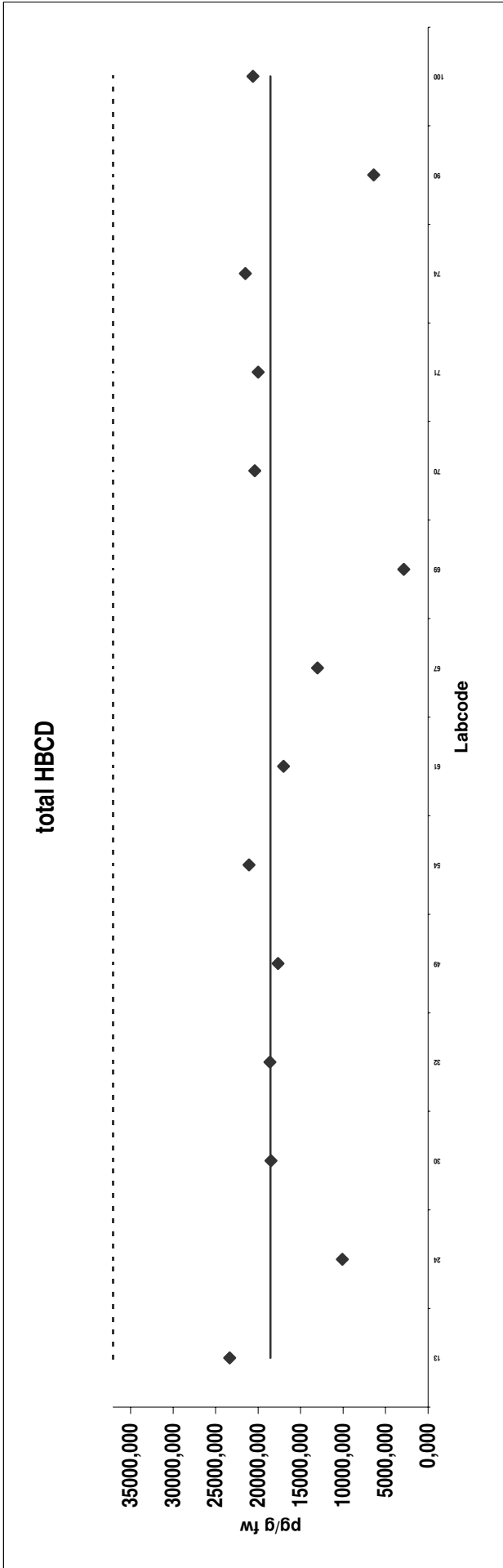


Eel
Congener: total HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
13	23334				
24	10083				
30	18500				
32	18600				
49	17649				
54	21058				
61	17024				
67	13026				
69	2859				
70	20400				
71	20000				
74	21490				
90	6400				
100	20600				

Consensus statistics

Consensus median, pg/g	18550
Median all values pg/g	18550
Consensus mean, pg/g	16502
Standard deviation, pg/g	6127
Relative standard deviation, %	37
No. of values reported	14
No. of values removed	0
No. of reported non-detects	0



Appendix 4:

Presentation of results
for deer meat

Appendix 4: Presentation of results: Deer meat

Statistic calculations for PCDDs, PCDFs and dioxin-like PCBs

For each congener, the outliers were removed and the consensus calculated according to the following procedure:

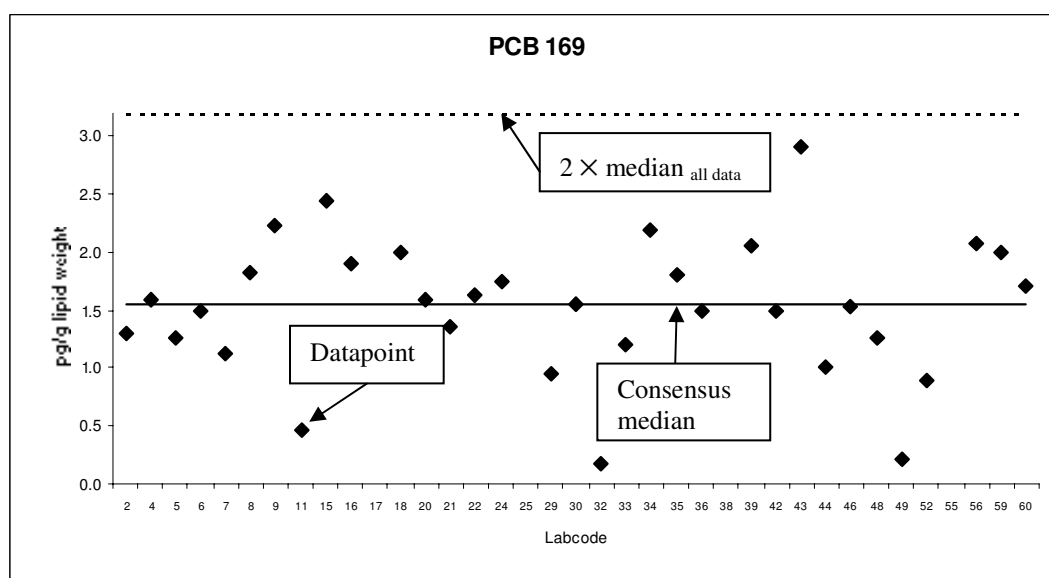
1. The median was calculated from all the reported data, using the detection limit as concentration for non-detected congeners.
2. Values exceeding $2 \times$ this median, were defined as outliers and removed from the data set.
3. Median, mean and standard deviation were re-calculated from the remaining data. This second median was called consensus.

Statistic calculations for indicator PCBs, PBDEs and HBCD

For each congener, the outliers were removed and the consensus calculated according to the following procedure:

1. The median was calculated from all the reported data, using the detection limit as concentration for non-detected congeners (NDs).
2. Values exceeding $2 \times$ this median, were defined as outliers and removed from the data set. The NDs were also removed.
3. Median, mean and standard deviation were re-calculated from the remaining data. This second median was called consensus.
4. For comparison, median, mean and standard deviation were also calculated without removing NDs.

The diagram shows the reported data up to approximately the limit for outliers ($2 \times$ the first median).



Z-Scores of individual congeners

Z-scores of each congener were calculated for each laboratory according to the following equation:

$$z = (x - X)/\sigma$$

where x = reported value; X = assigned value (consensus); σ = target value for standard deviation. A σ of 20% of the consensus was used, i.e. z-scores between +1 and -1 reflect a deviation of $\pm 20\%$ from the consensus value.

Deer meat

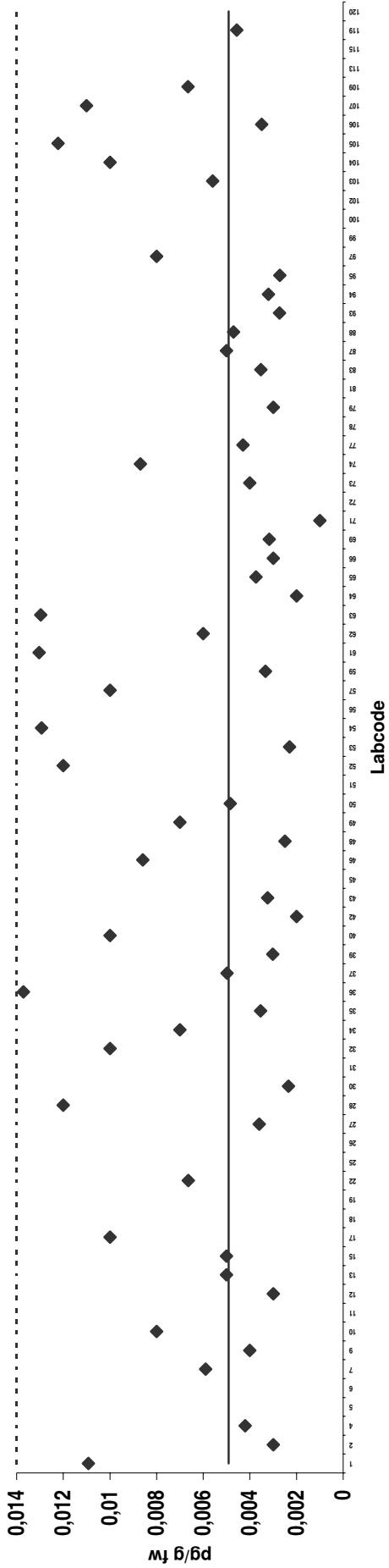
Congener: 2,3,7,8 TCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,011		63	0,013	ND
2	0,0030	ND	64	0,0020	ND
4	0,0042		65	0,0037	
5	0,015	Outlier	66	0,0030	ND
6	0,040	Outlier,ND	69	0,0032	
7	0,0059		71	0,0010	
9	0,0040		72	0,030	Outlier,ND
10	0,0080		73	0,0040	
11	0,035		74	0,0087	ND
12	0,0030	Outlier	77	0,0043	ND
13	0,0050		78	0,22	Outlier,ND
15	0,0050		79	0,0030	
17	0,010		81	0,050	Outlier,ND
18	0,020	Outlier,ND	83	0,0035	ND
19	0,049	Outlier,ND	87	0,0050	ND
22	0,0066		88	0,0047	
25	0,050	Outlier,ND	93	0,0027	
26	0,020	Outlier,ND	94	0,0032	ND
27	0,0036		95	0,0027	
28	0,012		97	0,0080	
30	0,0023		99	0,017	Outlier
31	0,035	Outlier	100	0,16	Outlier
32	0,010	ND	102	0,026	Outlier
34	0,0070		103	0,0056	
35	0,0035		104	0,010	ND
36	0,014	ND	105	0,012	ND
37	0,0050	ND	106	0,0035	ND
39	0,0030		107	0,011	
40	0,010	ND	109	0,0067	ND
42	0,0020	ND	113	0,020	Outlier
43	0,0032		115	0,11	Outlier,ND
45	0,015	Outlier	119	0,0046	
46	0,0086		120	0,020	Outlier,ND
48	0,0025	ND			
49	0,0070				
50	0,0048				
51	0,017	Outlier			
52	0,012				
53	0,0023	ND			
54	0,013	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,0033	ND			
61	0,013				
62	0,0060	ND			

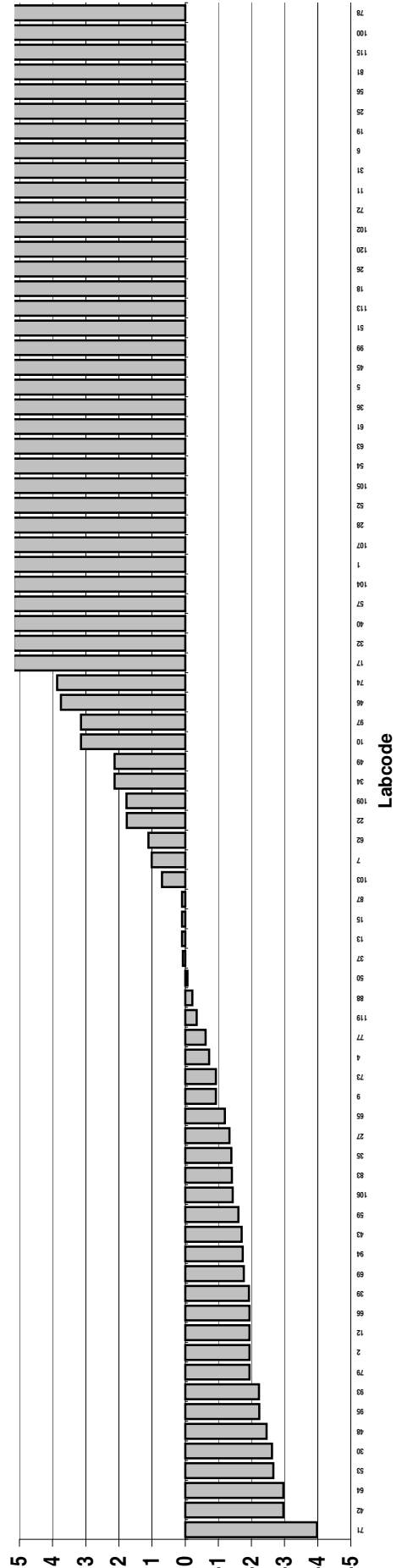
Consensus statistics

Consensus median, pg/g	0,0049
Median all values pg/g	0,0070
Consensus mean, pg/g	0,0061
Standard deviation, pg/g	0,0035
Relative standard deviation, %	58
No. of values reported	78
No. of values removed	20
No. of reported non-detects	40

2,3,7,8 TCDD



Z-score: 2,3,7,8 TCDD



Deer meat

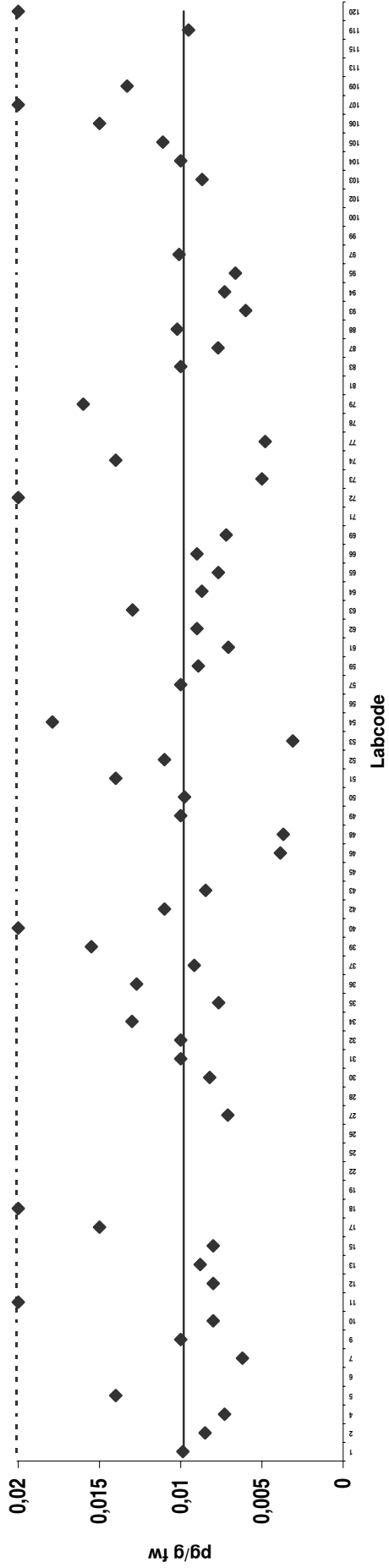
Congener: 1,2,3,7,8 PeCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,0099	ND	63	0,013	ND
2	0,0085		64	0,0087	
4	0,0073		65	0,0077	ND
5	0,014	ND	66	0,0090	
6	0,072	Outlier	69	0,0072	Outlier
7	0,0062		71	0,022	ND
9	0,010		72	0,020	
10	0,0080	ND	73	0,0050	
11	0,020	ND	74	0,014	
12	0,0080		77	0,0048	ND
13	0,0088		78	0,36	Outlier,ND
15	0,0080		79	0,016	
17	0,015	ND	81	0,050	Outlier,ND
18	0,020	ND	83	0,010	
19	0,049	Outlier,ND	87	0,0077	
22	0,030	Outlier	88	0,010	
25	0,050	Outlier,ND	93	0,0060	
26	0,033	Outlier	94	0,0073	
27	0,0071		95	0,0066	
28	0,066	Outlier	97	0,010	
30	0,0082		99	0,030	Outlier,ND
31	0,010		100	0,20	Outlier
32	0,010	ND	102	0,038	Outlier
34	0,013		103	0,0087	
35	0,0077		104	0,010	ND
36	0,013	ND	105	0,011	
37	0,0092	ND	106	0,015	
39	0,015		107	0,020	
40	0,020	ND	109	0,013	
42	0,011		113	0,023	Outlier
43	0,0085		115	0,10	Outlier,ND
45	0,023	Outlier	119	0,0095	
46	0,0039	ND	120	0,020	ND
48	0,0037				
49	0,010				
50	0,0098				
51	0,014				
52	0,011				
53	0,0031	ND			
54	0,018	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,0089	ND			
61	0,0071				
62	0,0090				

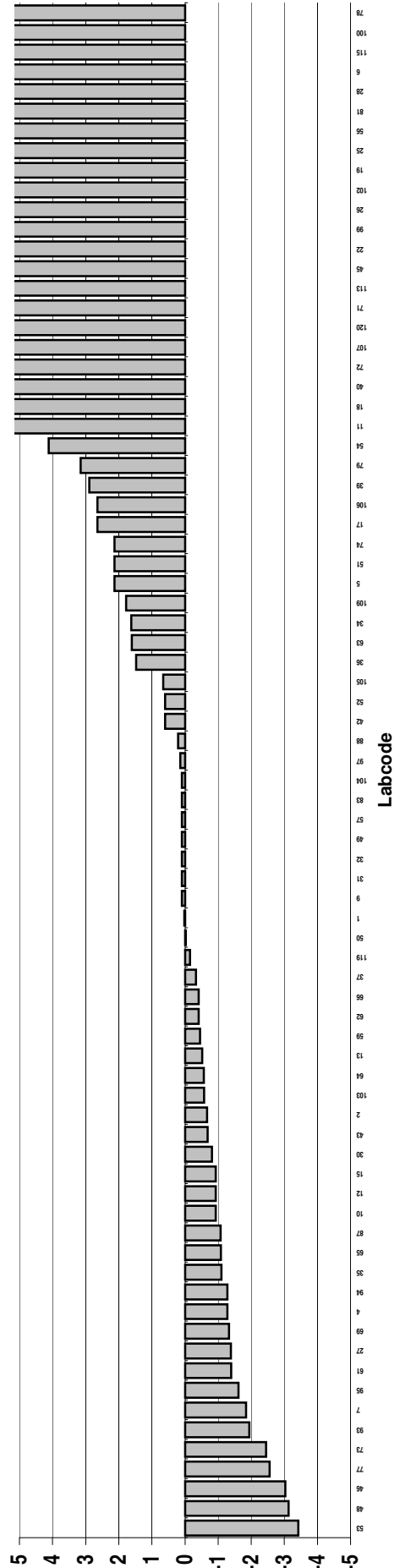
Consensus statistics

Consensus median, pg/g	0,010
Median all values pg/g	0,010
Consensus mean, pg/g	0,011
Standard deviation, pg/g	0,0043
Relative standard deviation, %	41
No. of values reported	78
No. of values removed	16
No. of reported non-detects	28

1,2,3,7,8 PeCDD



Z-score: 1,2,3,7,8 PeCDD



Deer meat

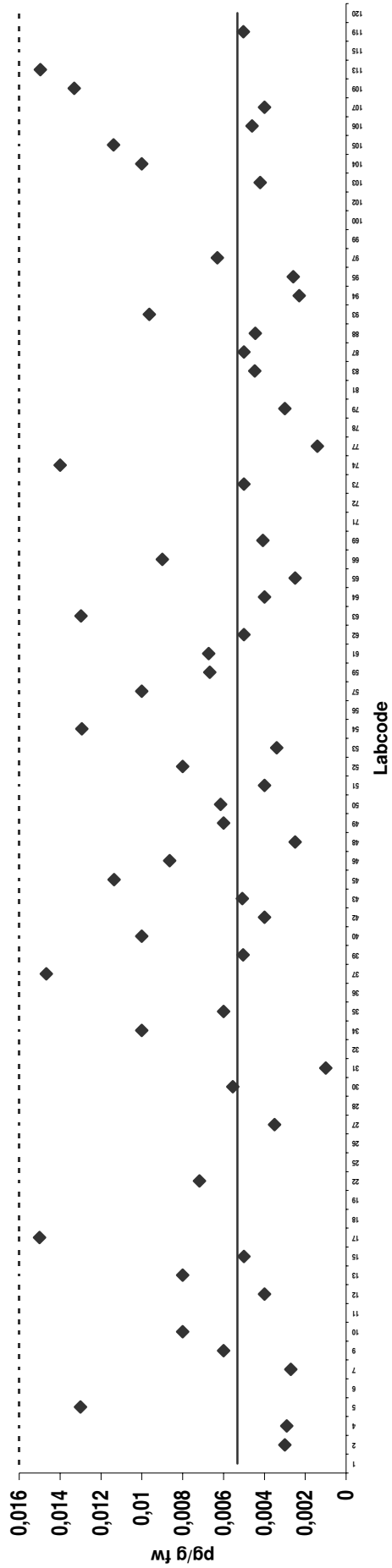
Congener: 1,2,3,4,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,029	Outlier	63	0,013	ND
2	0,0030	ND	64	0,0040	ND
4	0,0029		65	0,0025	
5	0,013	ND	66	0,0090	ND
6	0,084	Outlier	69	0,0041	
7	0,0027		71	0,018	Outlier
9	0,0060		72	0,040	Outlier,ND
10	0,0080		73	0,0050	
11	0,020	Outlier,ND	74	0,014	
12	0,0040	ND	77	0,0014	ND
13	0,0080	ND	78	0,36	Outlier,ND
15	0,0050	ND	79	0,0030	
17	0,015	ND	81	0,050	Outlier,ND
18	0,020	Outlier	83	0,0045	ND
19	0,049	Outlier,ND	87	0,0050	ND
22	0,0072		88	0,0044	
25	0,050	Outlier,ND	93	0,0096	
26	0,050	Outlier,ND	94	0,0023	ND
27	0,0035		95	0,0026	
28	0,099	Outlier	97	0,0063	ND
30	0,0055		99	0,027	Outlier,ND
31	0,0010	ND	100	0,073	Outlier
32	0,030	Outlier,ND	102	0,019	Outlier
34	0,010	ND	103	0,0042	ND
35	0,0060		104	0,010	ND
36	0,017	Outlier,ND	105	0,011	
37	0,015	ND	106	0,0046	ND
39	0,0050		107	0,0040	
40	0,010	ND	109	0,013	
42	0,0040		113	0,015	ND
43	0,0051		115	0,097	Outlier,ND
45	0,011		119	0,0050	
46	0,0086	ND	120	0,020	Outlier,ND
48	0,0025	ND			
49	0,0060				
50	0,0061				
51	0,0040				
52	0,0080	ND			
53	0,0034	ND			
54	0,013	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,0067	ND			
61	0,0067				
62	0,0050	ND			

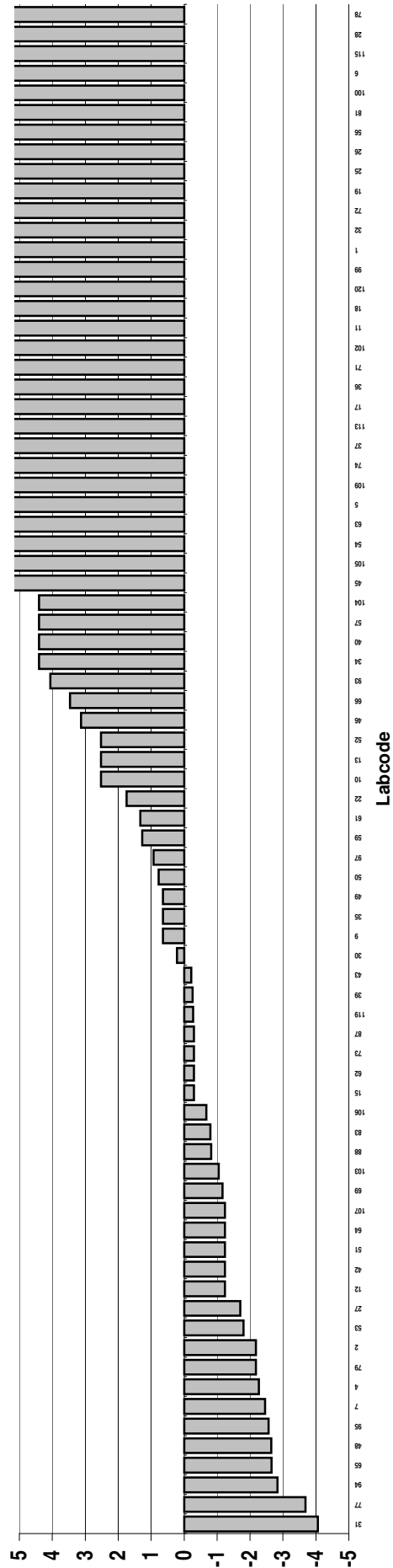
Consensus statistics

Consensus median, pg/g	0,0053
Median all values pg/g	0,0080
Consensus mean, pg/g	0,0067
Standard deviation, pg/g	0,0038
Relative standard deviation, %	57
No. of values reported	78
No. of values removed	20
No. of reported non-detects	44

1,2,3,4,7,8 HxCDD



Z-score: 1,2,3,4,7,8 HxCDD



Deer meat

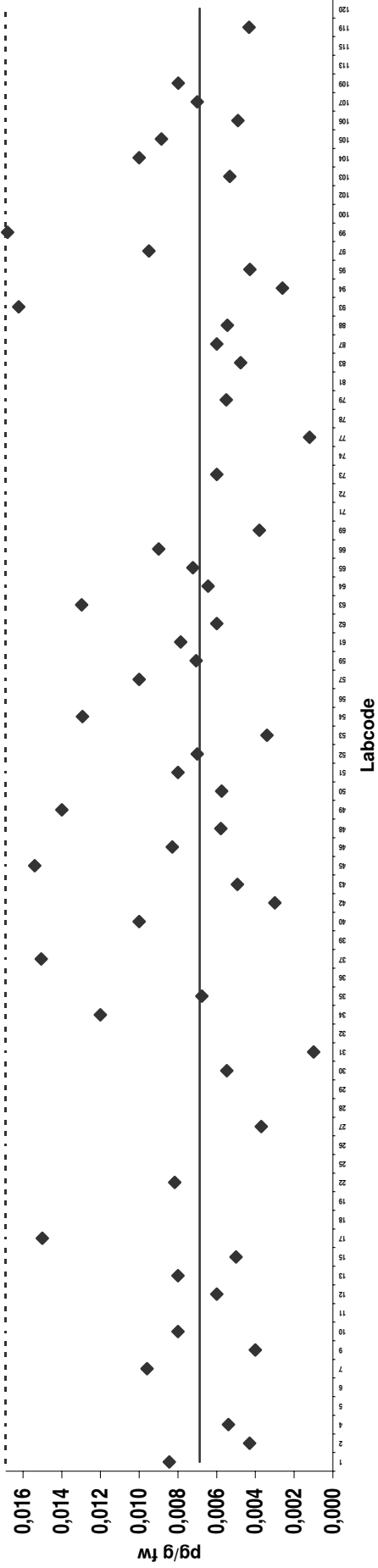
Congener: 1,2,3,6,7,8 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,0084	ND	62	0,0060	
2	0,0043		63	0,013	ND
4	0,0054		64	0,0065	
5	0,019	Outlier	65	0,0072	ND
6	0,041	Outlier	66	0,0090	
7	0,0096		69	0,0038	Outlier
9	0,0040		71	0,038	Outlier
10	0,0080	ND	72	0,030	Outlier
11	0,020	Outlier,ND	73	0,0060	
12	0,0060		74	0,022	Outlier
13	0,0080	ND	77	0,0012	ND
15	0,0050		78	0,38	Outlier,ND
17	0,015	ND	79	0,0055	
18	0,040	Outlier	81	0,050	Outlier,ND
19	0,049	Outlier,ND	83	0,0048	ND
22	0,0082		87	0,0060	
25	0,050	Outlier,ND	88	0,0055	
26	0,050	Outlier,ND	93	0,016	
27	0,0037		94	0,0026	ND
28	0,094	Outlier	95	0,0043	
29	0,056	Outlier	97	0,0095	
30	0,0055		99	0,017	ND
31	0,0010	ND	100	0,13	Outlier
32	0,030	Outlier,ND	102	0,039	Outlier
34	0,012		103	0,0053	Outlier
35	0,0068		104	0,010	ND
36	0,018	Outlier,ND	105	0,0089	
37	0,015	ND	106	0,0049	ND
39	0,021	Outlier	107	0,0070	
40	0,010	ND	109	0,0080	ND
42	0,0030		113	0,017	Outlier
43	0,0049		115	0,10	Outlier,ND
45	0,015		119	0,0043	
46	0,0083	ND	120	0,020	Outlier,ND
48	0,0058				
49	0,014				
50	0,0057				
51	0,0080	ND			
52	0,0070	ND			
53	0,0034	ND			
54	0,013	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,0071	ND			
61	0,0079				

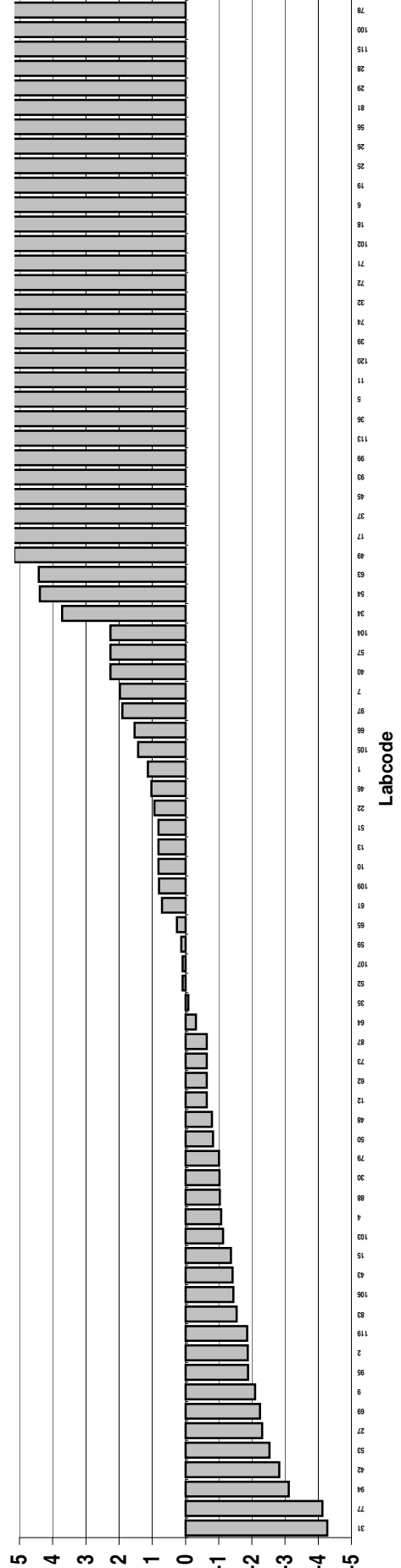
Consensus statistics

Consensus median, pg/g	0,0069
Median all values pg/g	0,0084
Consensus mean, pg/g	0,0075
Standard deviation, pg/g	0,0038
Relative standard deviation, %	50
No. of values reported	79
No. of values removed	23
No. of reported non-detects	33

1,2,3,6,7,8 HxCDD



Z-score: 1,2,3,6,7,8 HxCDD



Deer meat

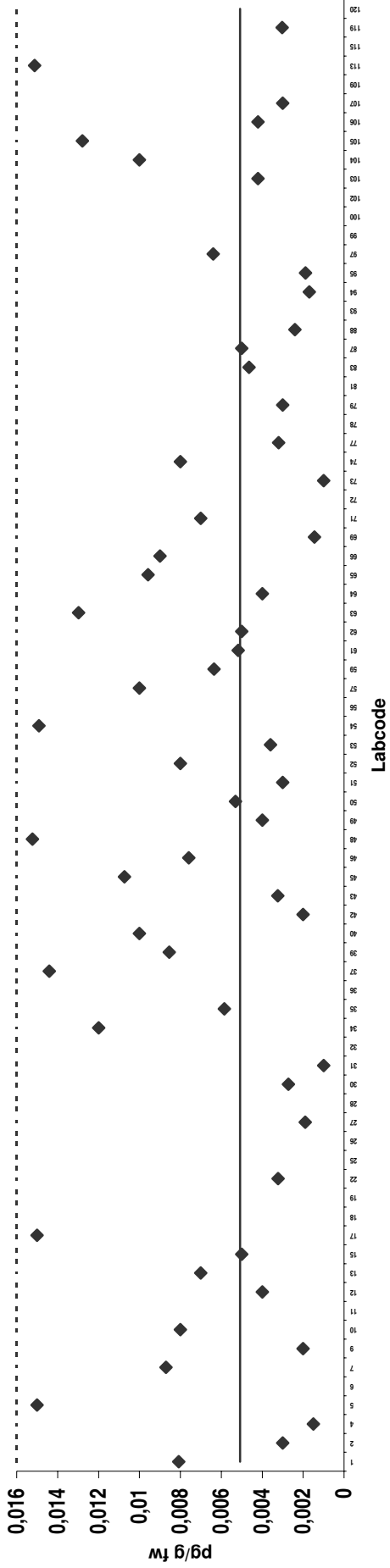
Congener: 1,2,3,7,8,9 HxCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,0081	ND	63	0,013	ND
2	0,0030	ND	64	0,0040	ND
4	0,0015		65	0,0096	
5	0,015	ND	66	0,0090	ND
6	0,11	Outlier	69	0,0014	
7	0,0087		71	0,0070	ND
9	0,0020		72	0,040	Outlier,ND
10	0,0080		73	0,0010	ND
11	0,020	Outlier,ND	74	0,0080	ND
12	0,0040	ND	77	0,0032	Outlier,ND
13	0,0070	ND	78	0,31	
15	0,0050	ND	79	0,0030	
17	0,015	ND	81	0,050	Outlier,ND
18	0,030	Outlier	83	0,0046	ND
19	0,049	Outlier,ND	87	0,0050	ND
22	0,0032	ND	88	0,0024	
25	0,050	Outlier,ND	93	0,019	Outlier
26	0,050	Outlier,ND	94	0,0017	ND
27	0,0019		95	0,0019	
28	0,079	Outlier	97	0,0064	ND
30	0,0027	ND	99	0,017	Outlier,ND
31	0,0010	ND	100	0,080	Outlier
32	0,030	Outlier,ND	102	0,048	Outlier
34	0,012		103	0,0042	ND
35	0,0059	ND	104	0,010	ND
36	0,018	Outlier,ND	105	0,013	
37	0,014	ND	106	0,0042	ND
39	0,0085		107	0,0030	
40	0,010	ND	109	0,027	Outlier
42	0,0020		113	0,015	ND
43	0,0032		115	0,11	Outlier,ND
45	0,011	ND	119	0,0030	
46	0,0076	ND	120	0,020	Outlier,ND
48	0,015				
49	0,0040				
50	0,0053	ND			
51	0,0030				
52	0,0080	ND			
53	0,0036	ND			
54	0,015	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,0064	ND			
61	0,0052				
62	0,0050	ND			

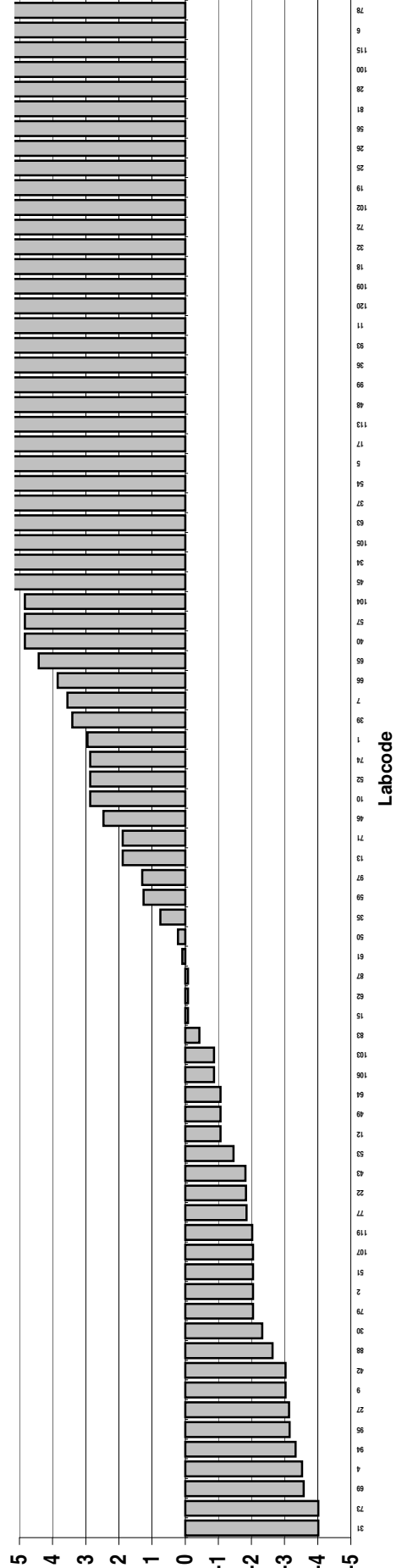
Consensus statistics

Consensus median, pg/g	0,0051
Median all values pg/g	0,0080
Consensus mean, pg/g	0,0065
Standard deviation, pg/g	0,0042
Relative standard deviation, %	66
No. of values reported	78
No. of values removed	20
No. of reported non-detects	51

1,2,3,7,8,9 HxCDD



Z-score: 1,2,3,7,8,9 HxCDD



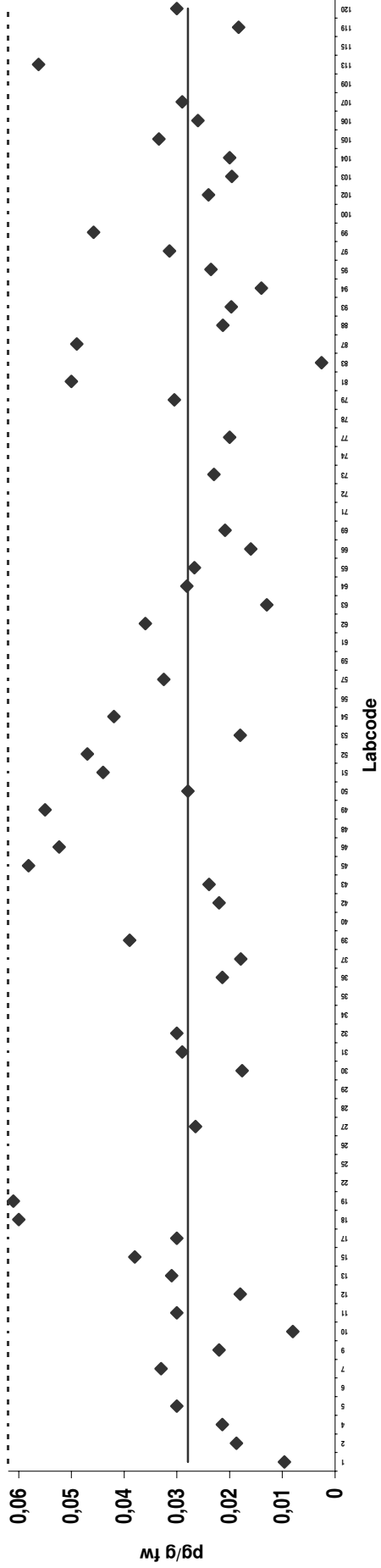
Deer meat
Congener: 1,2,3,4,6,7,8 HpCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,0096	ND	62	0,036	
2	0,019		63	0,013	ND
4	0,021		64	0,028	
5	0,030	ND	65	0,027	
6	0,20	Outlier	66	0,016	ND
7	0,033		69	0,021	Outlier
9	0,022		71	0,18	Outlier
10	0,0080	ND	72	0,11	Outlier
11	0,030	ND	73	0,023	
12	0,018		74	0,47	Outlier
13	0,031		77	0,020	
15	0,038		78	0,43	Outlier,ND
17	0,030	ND	79	0,030	
18	0,060		81	0,050	ND
19	0,061	ND	83	0,0026	ND
22	0,076	Outlier	87	0,049	
25	0,077	Outlier	88	0,021	
26	0,16	Outlier	93	0,020	
27	0,027		94	0,014	
28	0,17	Outlier	95	0,024	
29	0,070	Outlier	97	0,031	
30	0,018		99	0,046	
31	0,029		100	0,21	Outlier
32	0,030	ND	102	0,024	
34	0,35	Outlier	103	0,020	
35	0,073	Outlier,ND	104	0,020	
36	0,021	ND	105	0,033	
37	0,018		106	0,026	
39	0,039		107	0,029	
40	0,093	Outlier	109	0,14	Outlier
42	0,022		113	0,056	
43	0,024		115	0,33	Outlier
45	0,058		119	0,018	
46	0,052		120	0,030	
48	0,19	Outlier			
49	0,055				
50	0,028				
51	0,044				
52	0,047				
53	0,018				
54	0,042				
56	0,20	Outlier,ND			
57	0,033				
59	0,069	Outlier			
61	0,064	Outlier			

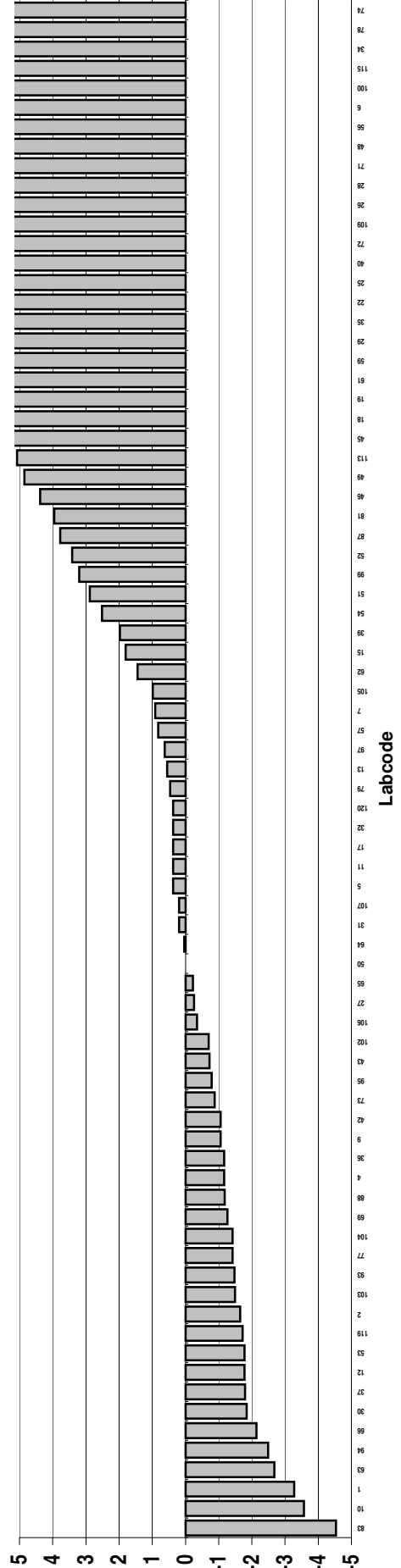
Consensus statistics

Consensus median, pg/g	0,028
Median all values pg/g	0,031
Consensus mean, pg/g	0,030
Standard deviation, pg/g	0,014
Relative standard deviation, %	46
No. of values reported	79
No. of values removed	20
No. of reported non-detects	15

1,2,3,4,6,7,8 HpCDD



Z-score: 1,2,3,4,6,7,8 HpCDD

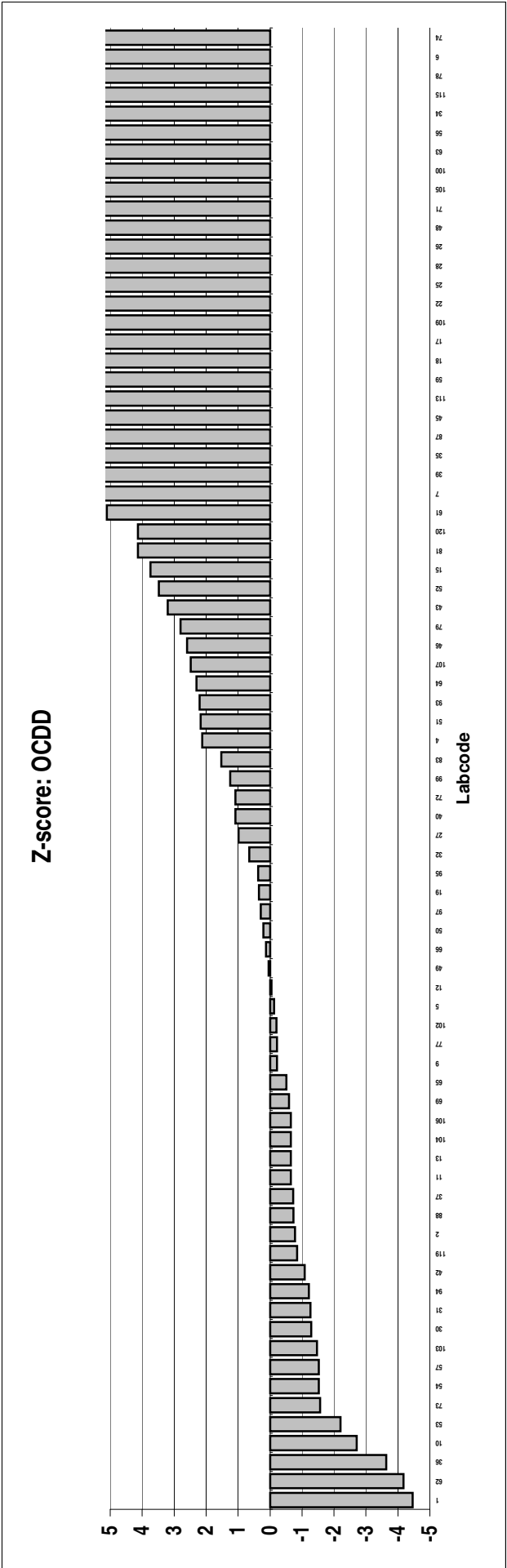
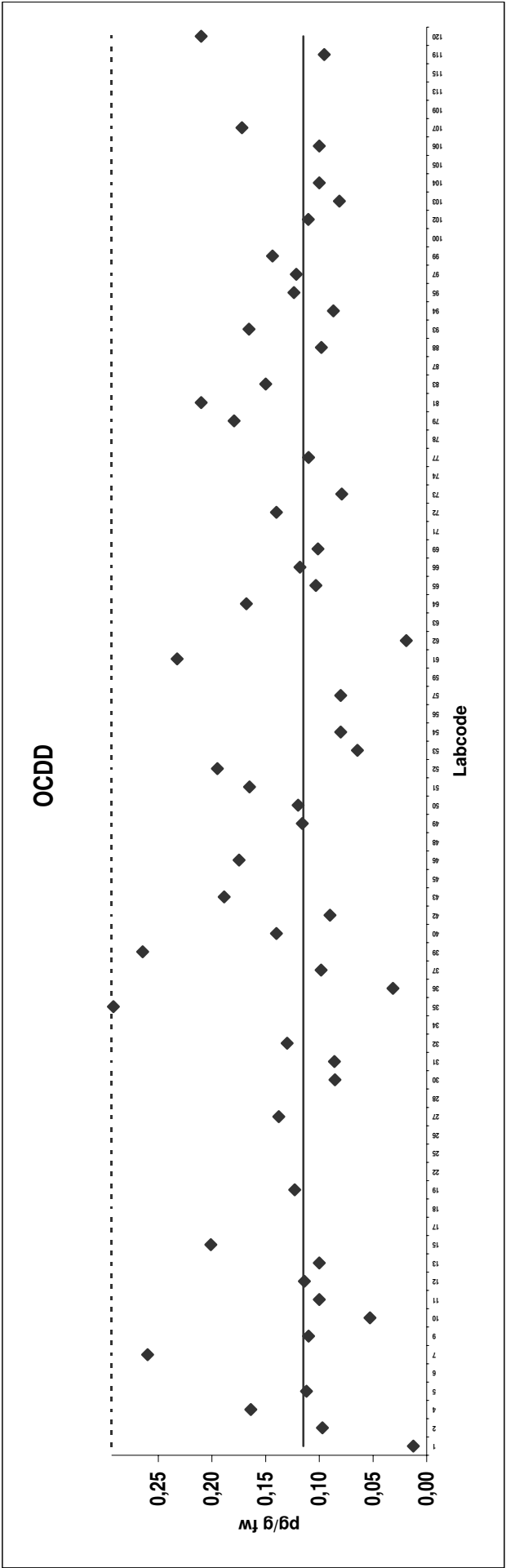


Deer meat
Congener: OCDD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,012	ND	63	0,84	Outlier
2	0,097		64	0,17	
4	0,16		65	0,10	
5	0,11		66	0,12	
6	3,5	Outlier	69	0,10	
7	0,26		71	0,55	Outlier
9	0,11		72	0,14	
10	0,053		73	0,079	
11	0,10		74	6,0	Outlier
12	0,11		77	0,11	
13	0,10		78	1,7	Outlier,ND
15	0,20		79	0,18	
17	0,35	Outlier	81	0,21	
18	0,33	Outlier	83	0,15	
19	0,12	ND	87	0,30	Outlier
22	0,41	Outlier	88	0,098	
25	0,41	Outlier	93	0,17	
26	0,49	Outlier	94	0,087	
27	0,14		95	0,12	
28	0,45	Outlier	97	0,12	
30	0,085		99	0,14	
31	0,086		100	0,69	Outlier
32	0,13		102	0,11	
34	1,1	Outlier	103	0,081	
35	0,29	ND	104	0,10	
36	0,031	ND	105	0,59	Outlier
37	0,098		106	0,10	
39	0,26		107	0,17	
40	0,14		109	0,37	Outlier
42	0,090		113	0,31	Outlier
43	0,19		115	1,1	Outlier
45	0,30	Outlier	119	0,096	
46	0,17		120	0,21	
48	0,49	Outlier			
49	0,12				
50	0,12				
51	0,17				
52	0,20				
53	0,064				
54	0,080				
56	1,0	Outlier,ND			
57	0,080				
59	0,33	Outlier			
61	0,23				
62	0,019				

Consensus statistics

Consensus median, pg/g	0,12
Median all values pg/g	0,15
Consensus mean, pg/g	0,13
Standard deviation, pg/g	0,058
Relative standard deviation, %	45
No. of values reported	78
No. of values removed	22
No. of reported non-detects	6



Deer meat

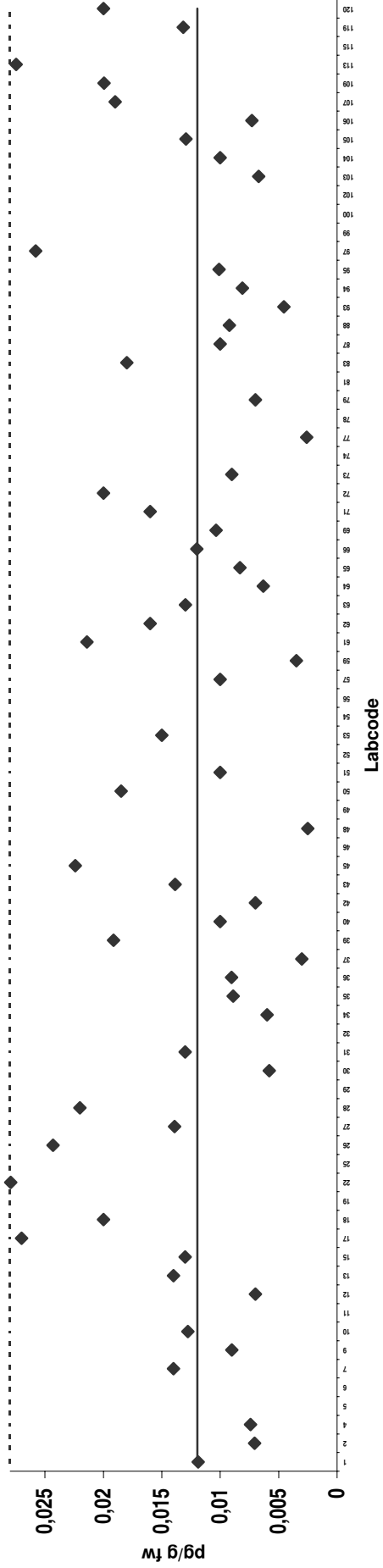
Congener: 2,3,7,8 TCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,012		62	0,016	
2	0,0071		63	0,013	ND
4	0,0074		64	0,0063	
5	0,053	Outlier	65	0,0083	
6	0,060	Outlier	66	0,012	
7	0,014		69	0,010	
9	0,0090		71	0,016	
10	0,013		72	0,020	ND
11	0,042		73	0,0090	
12	0,0070	Outlier	74	0,038	Outlier
13	0,014		77	0,0026	ND
15	0,013		78	0,13	Outlier,ND
17	0,027		79	0,0070	Outlier,ND
18	0,020		81	0,050	
19	0,040	ND	83	0,018	
22	0,028	Outlier	87	0,010	
25	0,050	Outlier,ND	88	0,0092	
26	0,024		93	0,0046	
27	0,014		94	0,0081	
28	0,022		95	0,010	
29	0,094		97	0,026	
30	0,0058	Outlier	99	0,051	Outlier
31	0,013		100	0,63	Outlier
32	0,030	Outlier,ND	102	0,083	Outlier
34	0,0060	ND	103	0,0067	Outlier
35	0,0089		104	0,010	
36	0,0090	ND	105	0,013	
37	0,0030	ND	106	0,0073	
39	0,019		107	0,019	
40	0,010	ND	109	0,020	
42	0,0070		113	0,027	Outlier,ND
43	0,014		115	0,10	
45	0,022		119	0,013	
46	0,035	Outlier	120	0,020	ND
48	0,0025	ND			
49	0,032	Outlier			
50	0,018				
51	0,010				
52	0,060	Outlier			
53	0,015				
54	0,031	Outlier			
56	0,050	Outlier,ND			
57	0,010				
59	0,0035	ND			
61	0,021				

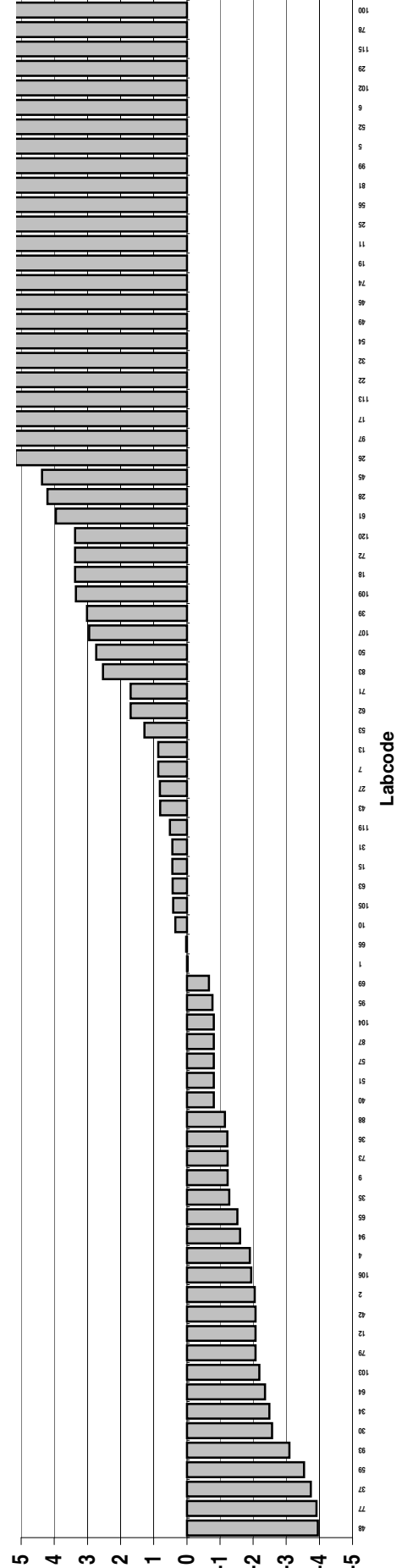
Consensus statistics

Consensus median, pg/g	0,012
Median all values pg/g	0,014
Consensus mean, pg/g	0,013
Standard deviation, pg/g	0,0066
Relative standard deviation, %	51
No. of values reported	79
No. of values removed	19
No. of reported non-detects	17

2,3,7,8 TCDF



Z-score: 2,3,7,8 TCDF



Deer meat

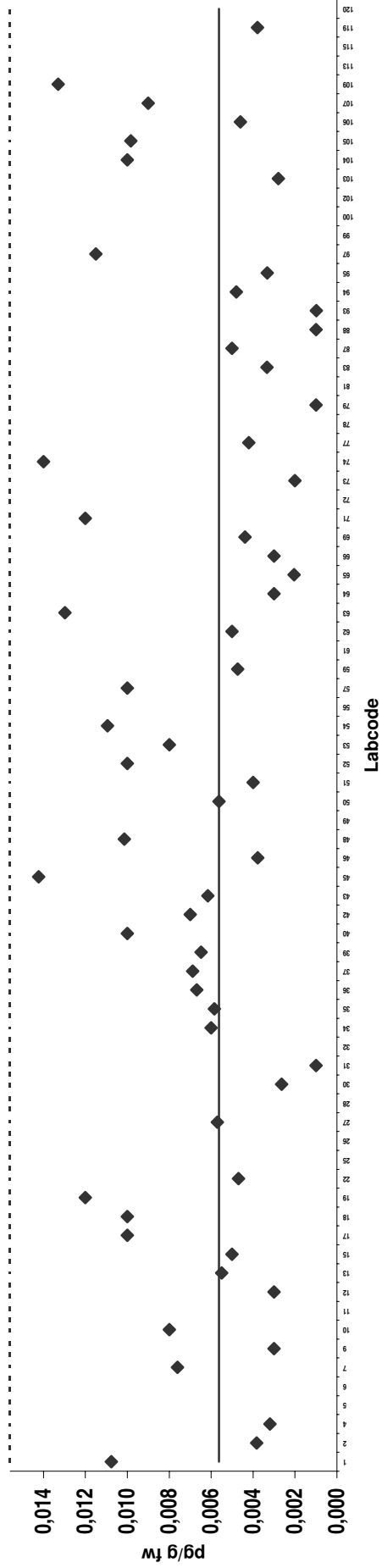
Congener: 1,2,3,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,011	ND	63	0,013	ND
2	0,0038		64	0,0030	ND
4	0,0032		65	0,0020	
5	0,029	Outlier	66	0,0030	ND
6	0,086	Outlier	69	0,0044	
7	0,0076		71	0,012	Outlier
9	0,0030		72	0,040	
10	0,0080		73	0,0020	
11	0,031	Outlier	74	0,014	
12	0,0030	ND	77	0,0042	ND
13	0,0055	ND	78	0,20	Outlier,ND
15	0,0050	ND	79	0,0010	ND
17	0,010	ND	81	0,050	Outlier,ND
18	0,010	ND	83	0,0033	ND
19	0,012	ND	87	0,0050	
22	0,0047	ND	88	0,0010	ND
25	0,050	Outlier,ND	93	0,00099	ND
26	0,019	Outlier	94	0,0048	
27	0,0057		95	0,0033	
28	0,057	Outlier	97	0,012	
30	0,0026		99	0,024	Outlier
31	0,0010	ND	100	0,22	Outlier
32	0,020	Outlier,ND	102	0,070	Outlier
34	0,0060	ND	103	0,0028	
35	0,0059	ND	104	0,010	ND
36	0,0067	ND	105	0,0098	
37	0,0069		106	0,0046	
39	0,0065		107	0,0090	
40	0,010	ND	109	0,013	
42	0,0070		113	0,018	Outlier
43	0,0062		115	0,11	Outlier,ND
45	0,014		119	0,0038	
46	0,0038		120	0,020	Outlier,ND
48	0,010				
49	0,027	Outlier			
50	0,0056				
51	0,0040				
52	0,010				
53	0,0080	ND			
54	0,011	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,0047	ND			
61	0,026	Outlier			
62	0,0050	ND			

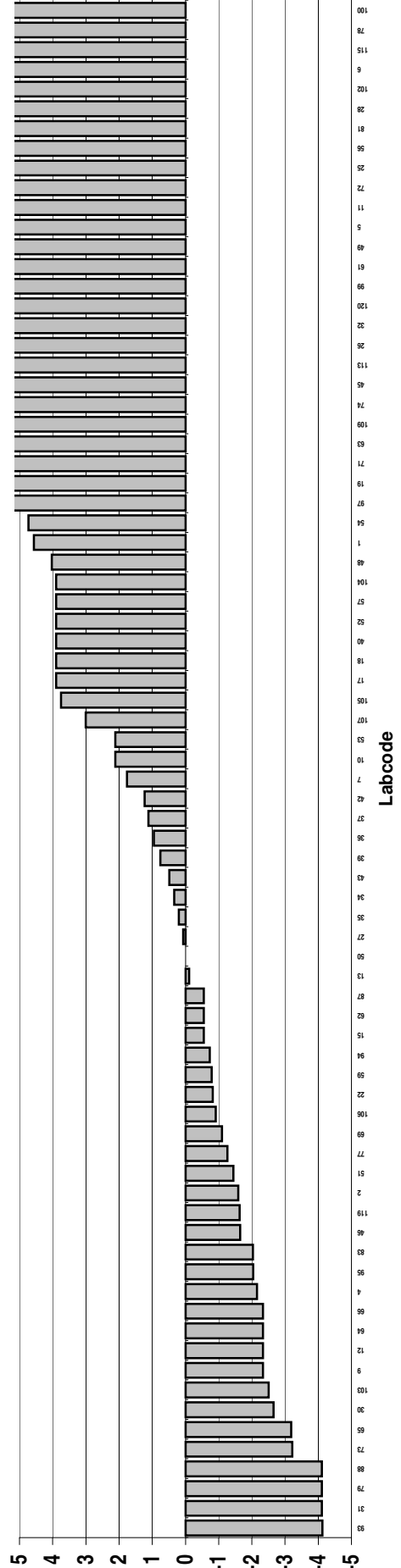
Consensus statistics

Consensus median, pg/g	0,0056
Median all values pg/g	0,0078
Consensus mean, pg/g	0,0064
Standard deviation, pg/g	0,0036
Relative standard deviation, %	57
No. of values reported	78
No. of values removed	19
No. of reported non-detects	34

1,2,3,7,8 PeCDF



Z-score: 1,2,3,7,8 PeCDF



Deer meat

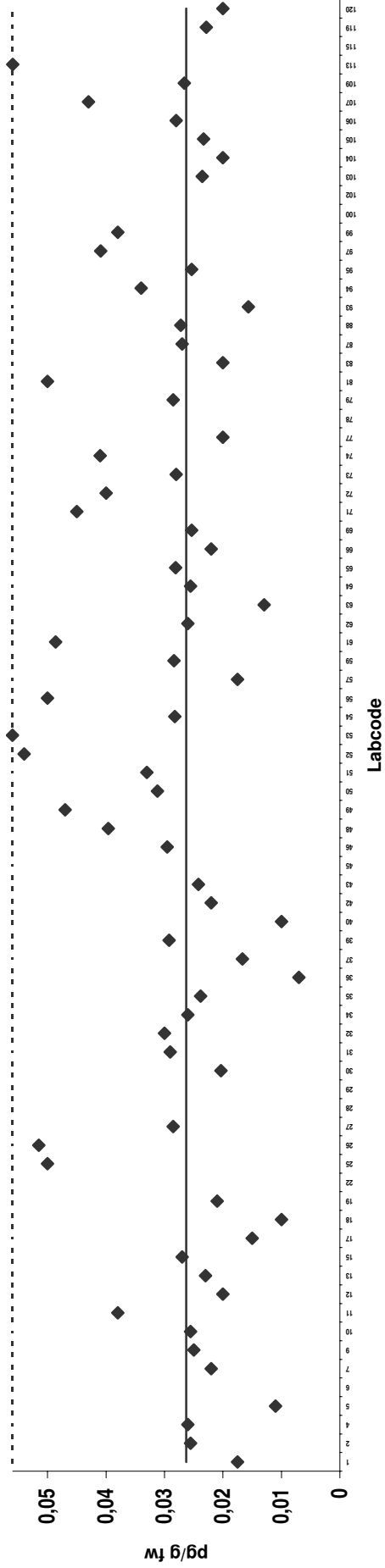
Congener: 2,3,4,7,8 PeCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,018	ND	62	0,026	
2	0,026		63	0,013	ND
4	0,026		64	0,026	
5	0,011	ND	65	0,028	
6	0,18	Outlier	66	0,022	
7	0,022		69	0,025	
9	0,025		71	0,045	
10	0,026		72	0,040	
11	0,038		73	0,028	
12	0,020		74	0,041	
13	0,023		77	0,020	
15	0,027		78	0,22	Outlier,ND
17	0,015		79	0,028	
18	0,010	ND	81	0,050	ND
19	0,021		83	0,020	
22	0,056	Outlier	87	0,027	
25	0,050	ND	88	0,027	
26	0,052		93	0,016	
27	0,029		94	0,034	
28	0,093	Outlier	95	0,025	
29	0,065	Outlier	97	0,041	
30	0,020		99	0,038	
31	0,029		100	0,53	Outlier
32	0,030		102	0,15	Outlier
34	0,026		103	0,024	
35	0,024		104	0,020	
36	0,0070		105	0,023	
37	0,017	ND	106	0,028	
39	0,029		107	0,043	
40	0,010	ND	109	0,027	
42	0,022		113	0,056	
43	0,024		115	0,11	Outlier
45	0,080	Outlier	119	0,023	
46	0,030		120	0,020	ND
48	0,040				
49	0,047				
50	0,031				
51	0,033				
52	0,054				
53	0,056				
54	0,028				
56	0,050	ND			
57	0,018				
59	0,028				
61	0,049				

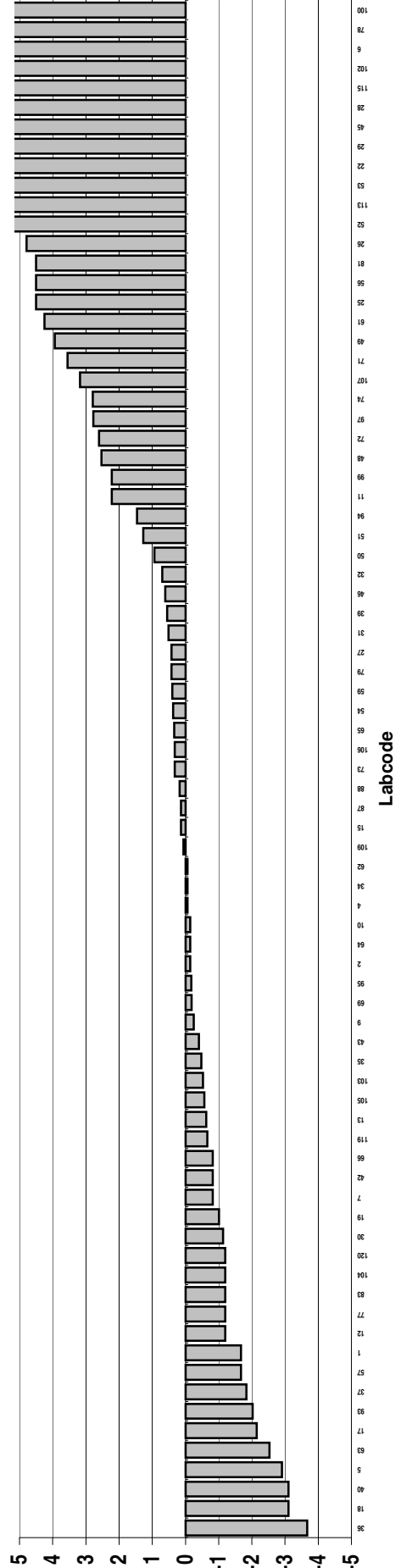
Consensus statistics

Consensus median, pg/g	0,026
Median all values pg/g	0,028
Consensus mean, pg/g	0,029
Standard deviation, pg/g	0,012
Relative standard deviation, %	40
No. of values reported	79
No. of values removed	9
No. of reported non-detects	11

2,3,4,7,8 PeCDF



Z-score: 2,3,4,7,8 PeCDF



Deer meat

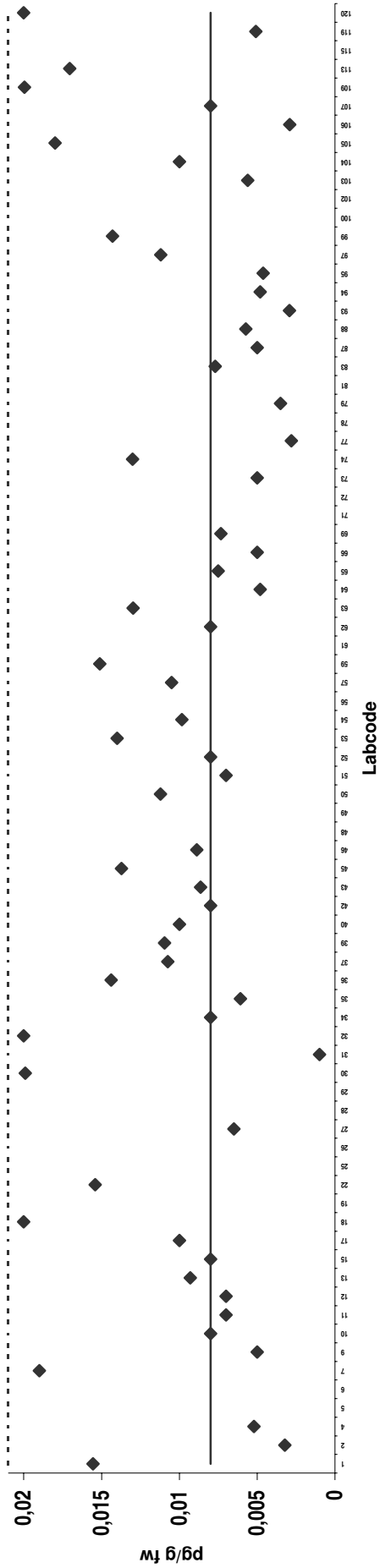
Congener: 1,2,3,4,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,016		62	0,0080	
2	0,0032		63	0,013	ND
4	0,0052		64	0,0048	
5	0,047	Outlier	65	0,0075	ND
6	0,057	Outlier	66	0,0050	
7	0,019		69	0,0073	Outlier
9	0,0050		71	0,036	Outlier
10	0,0080	ND	72	0,090	Outlier
11	0,0070	ND	73	0,0050	
12	0,0070		74	0,013	
13	0,0093		77	0,0028	ND
15	0,0080		78	0,33	Outlier,ND
17	0,010	ND	79	0,0035	Outlier,ND
18	0,020		81	0,050	
19	0,024	Outlier,ND	83	0,0077	
22	0,015		87	0,0050	ND
25	0,050	Outlier,ND	88	0,0057	
26	0,036	Outlier	93	0,0029	
27	0,0065		94	0,0048	
28	0,083	Outlier	95	0,0046	
29	0,075	Outlier	97	0,011	
30	0,020		99	0,014	
31	0,0010	ND	100	0,11	Outlier
32	0,020	ND	102	0,066	Outlier
34	0,0080		103	0,0056	
35	0,0061		104	0,010	ND
36	0,014	ND	105	0,018	
37	0,011	ND	106	0,0029	ND
39	0,011		107	0,0080	
40	0,010	ND	109	0,020	
42	0,0080		113	0,017	Outlier,ND
43	0,0086		115	0,10	
45	0,014		119	0,0051	
46	0,0089		120	0,020	ND
48	0,039	Outlier			
49	0,039	Outlier			
50	0,011				
51	0,0070				
52	0,0080				
53	0,014	ND			
54	0,0098				
56	0,050	Outlier,ND			
57	0,011				
59	0,015				
61	0,032	Outlier			

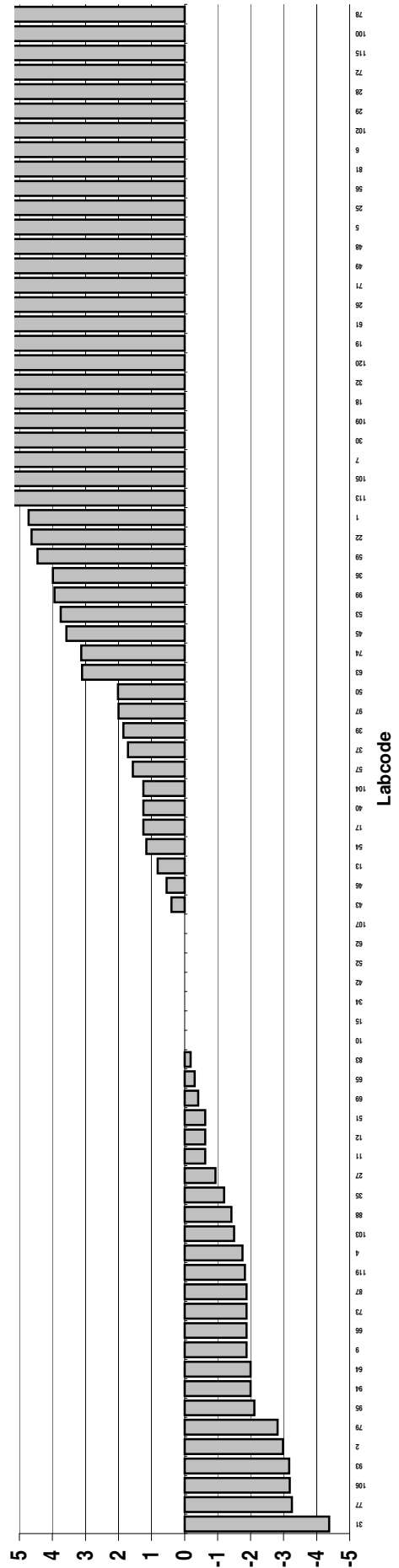
Consensus statistics

Consensus median, pg/g	0,0080
Median all values pg/g	0,011
Consensus mean, pg/g	0,010
Standard deviation, pg/g	0,0051
Relative standard deviation, %	53
No. of values reported	79
No. of values removed	18
No. of reported non-detects	22

1,2,3,4,7,8 HxCDF



Z-score: 1,2,3,4,7,8 HxCDF



Deer meat

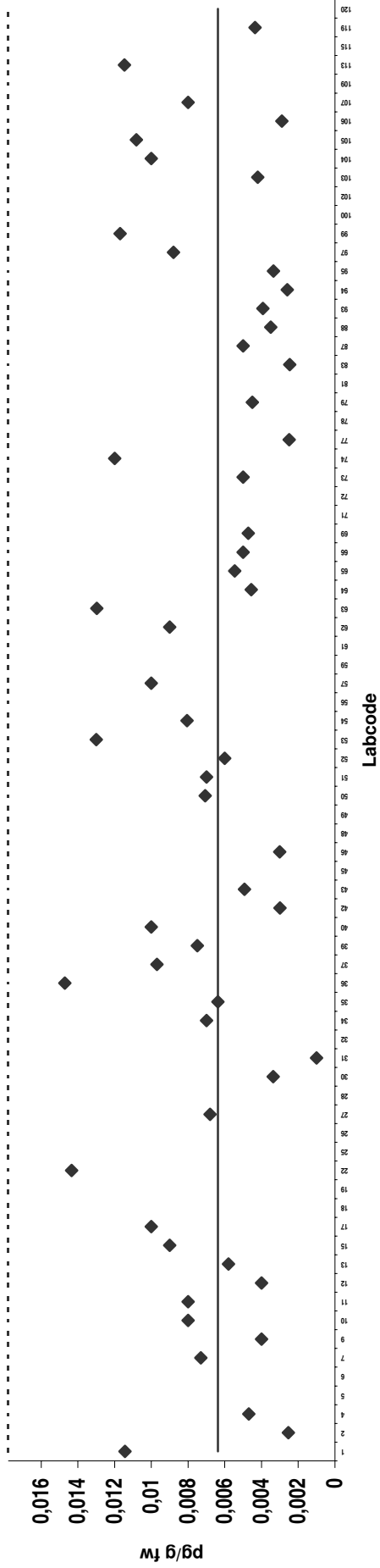
Congener: 1,2,3,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,011	ND	63	0,013	ND
2	0,0025		64	0,0046	
4	0,0047		65	0,0055	
5	0,029	Outlier,ND	66	0,0050	ND
6	0,081	Outlier	69	0,0047	
7	0,0073		71	0,036	Outlier
9	0,0040		72	0,020	Outlier,ND
10	0,0080		73	0,0050	
11	0,0080		74	0,012	
12	0,0040		77	0,0025	ND
13	0,0058		78	0,30	Outlier,ND
15	0,0090		79	0,0045	
17	0,010		81	0,050	Outlier,ND
18	0,020	ND	83	0,0025	ND
19	0,024	Outlier	87	0,0050	ND
22	0,014	Outlier,ND	88	0,0035	
25	0,050		93	0,0039	
26	0,031	Outlier,ND	94	0,0026	
27	0,0068	Outlier	95	0,0033	
28	0,066		97	0,0088	
30	0,0034		99	0,012	
31	0,0010	ND	100	0,14	Outlier
32	0,020	Outlier,ND	102	0,047	Outlier
34	0,0070	ND	103	0,0042	
35	0,0064		104	0,010	ND
36	0,015	ND	105	0,011	
37	0,0097	ND	106	0,0029	ND
39	0,0075		107	0,0080	
40	0,010	ND	109	0,020	Outlier
42	0,0030		113	0,011	
43	0,0049		115	0,11	Outlier,ND
45	0,019	Outlier	119	0,0044	
46	0,0030		120	0,020	Outlier,ND
48	0,032	Outlier			
49	0,035	Outlier			
50	0,0071				
51	0,0070				
52	0,0060				
53	0,013	ND			
54	0,0081				
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,023	Outlier			
61	0,033	Outlier			
62	0,0090				

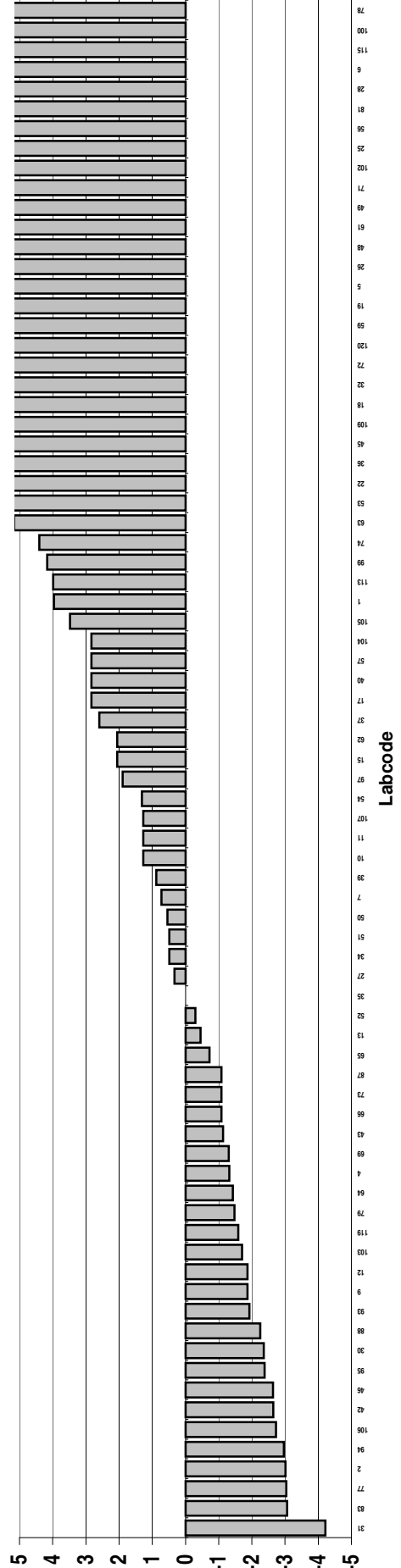
Consensus statistics

Consensus median, pg/g	0,0064
Median all values pg/g	0,0089
Consensus mean, pg/g	0,0068
Standard deviation, pg/g	0,0034
Relative standard deviation, %	50
No. of values reported	78
No. of values removed	23
No. of reported non-detects	27

1,2,3,6,7,8 HxCDF



Z-score: 1,2,3,6,7,8 HxCDF



Deer meat

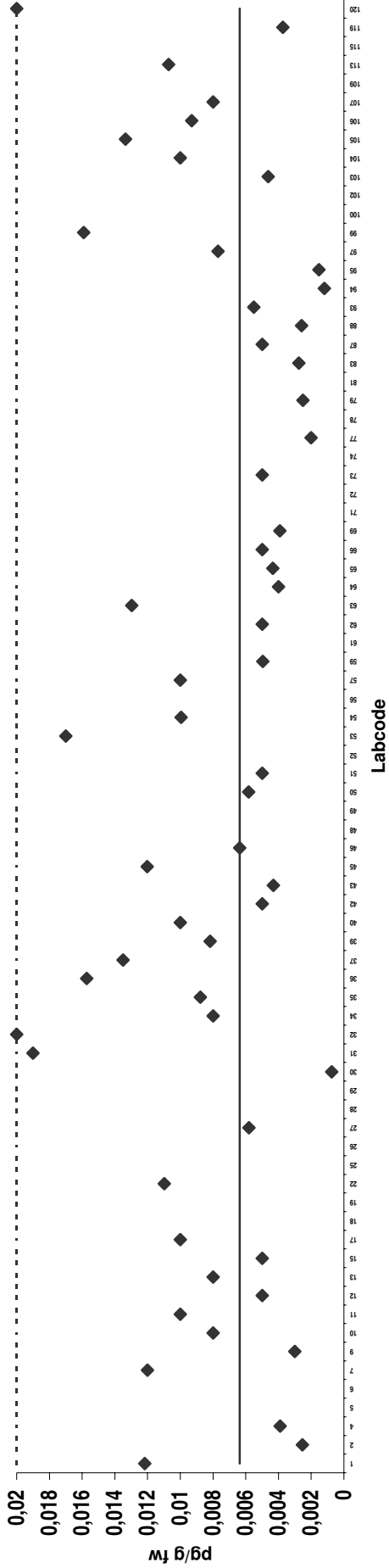
Congener: 2,3,4,6,7,8 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,012	ND	62	0,0050	ND
2	0,0025		63	0,013	ND
4	0,0039		64	0,0040	ND
5	0,032	Outlier,ND	65	0,0043	ND
6	0,044	Outlier	66	0,0050	ND
7	0,012		69	0,0039	Outlier
9	0,0030		71	0,038	Outlier
10	0,0080	ND	72	0,11	Outlier
11	0,010		73	0,0050	
12	0,0050		74	0,025	Outlier
13	0,0080		77	0,0020	ND
15	0,0050	ND	78	0,26	Outlier,ND
17	0,010	ND	79	0,0025	
18	0,040	Outlier	81	0,050	Outlier,ND
19	0,024	Outlier,ND	83	0,0028	ND
22	0,011		87	0,0050	ND
25	0,050	Outlier,ND	88	0,0026	
26	0,054	Outlier	93	0,0055	
27	0,0058		94	0,0012	
28	0,085	Outlier	95	0,0015	
29	0,066	Outlier	97	0,0077	
30	0,00075	ND	99	0,016	
31	0,019		100	0,070	Outlier
32	0,020	ND	102	0,056	Outlier
34	0,0080	ND	103	0,0046	
35	0,0088	ND	104	0,010	ND
36	0,016	ND	105	0,013	
37	0,013	ND	106	0,0093	
39	0,0082		107	0,0080	
40	0,010	ND	109	0,027	Outlier
42	0,0050		113	0,011	ND
43	0,0043		115	0,11	Outlier,ND
45	0,012	ND	119	0,0037	
46	0,0064		120	0,020	ND
48	0,092	Outlier			
49	0,030	Outlier			
50	0,0058				
51	0,0050				
52	0,029	Outlier			
53	0,017	ND			
54	0,0099	ND			
56	0,050	Outlier,ND			
57	0,010	ND			
59	0,0050	ND			
61	0,033	Outlier			

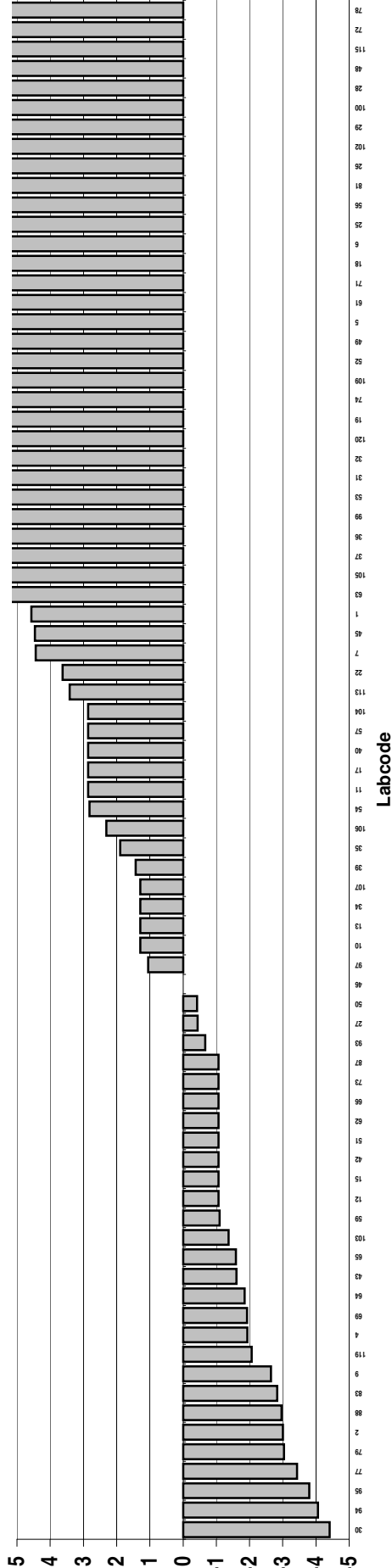
Consensus statistics

Consensus median, pg/g	0,0064
Median all values pg/g	0,010
Consensus mean, pg/g	0,0078
Standard deviation, pg/g	0,0048
Relative standard deviation, %	62
No. of values reported	79
No. of values removed	22
No. of reported non-detects	34

2,3,4,6,7,8 HxCDF



Z-score: 2,3,4,6,7,8 HxCDF



Deer meat

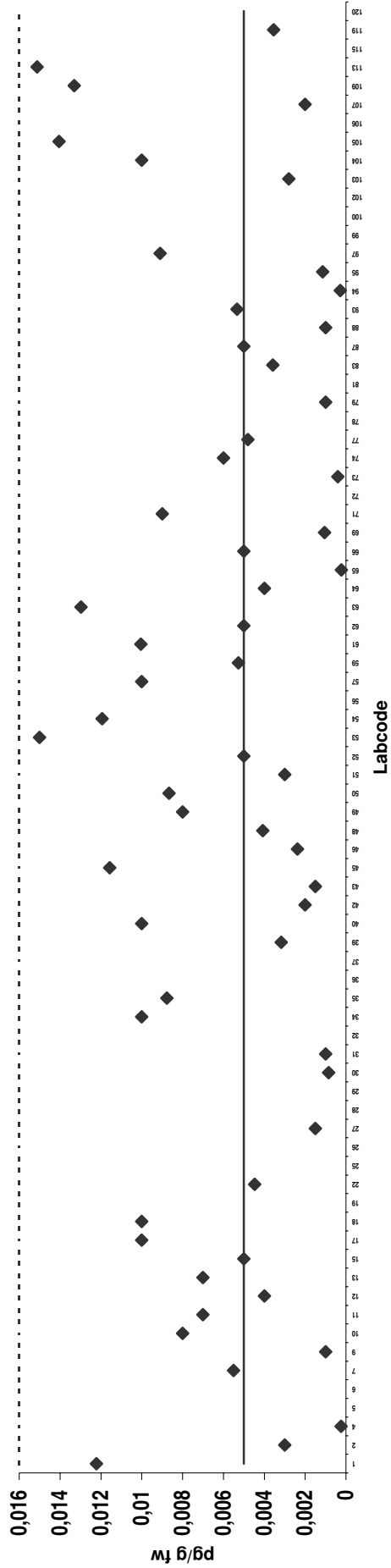
Congener: 1,2,3,7,8,9 HxCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,012	ND	62	0,0050	ND
2	0,0030	ND	63	0,013	ND
4	0,00024	ND	64	0,0040	ND
5	0,047	Outlier,ND	65	0,00023	ND
6	0,076	Outlier	66	0,0050	ND
7	0,0055		69	0,0010	
9	0,0010	ND	71	0,0090	Outlier
10	0,0080	ND	72	0,070	ND
11	0,0070	ND	73	0,00040	ND
12	0,0040	ND	74	0,0060	ND
13	0,0070	ND	77	0,0048	ND
15	0,0050	ND	78	0,34	Outlier,ND
17	0,010	ND	79	0,0010	ND
18	0,010	ND	81	0,050	Outlier,ND
19	0,024	Outlier,ND	83	0,0036	ND
22	0,0045	ND	87	0,0050	ND
25	0,050	Outlier,ND	88	0,0010	ND
26	0,020	Outlier,ND	93	0,0053	ND
27	0,0015		94	0,00028	ND
28	0,091	Outlier	95	0,0011	ND
29	0,028	Outlier	97	0,0091	ND
30	0,00084	ND	99	0,020	Outlier,ND
31	0,0010	ND	100	0,12	Outlier
32	0,020	Outlier,ND	102	0,032	Outlier
34	0,010	ND	103	0,0028	ND
35	0,0088	ND	104	0,010	ND
36	0,018	Outlier,ND	105	0,014	ND
37	0,020	Outlier,ND	106	0,023	Outlier
39	0,0032		107	0,0020	ND
40	0,010	ND	109	0,013	ND
42	0,0020	ND	113	0,015	ND
43	0,0015	ND	115	0,11	Outlier,ND
45	0,012	ND	119	0,0035	ND
46	0,0024	ND	120	0,020	Outlier,ND
48	0,0041				
49	0,0080				
50	0,0087	ND			
51	0,0030	ND			
52	0,0050	ND			
53	0,015	ND			
54	0,012	ND			
56	0,081	Outlier			
57	0,010	ND			
59	0,0053	ND			
61	0,010	ND			

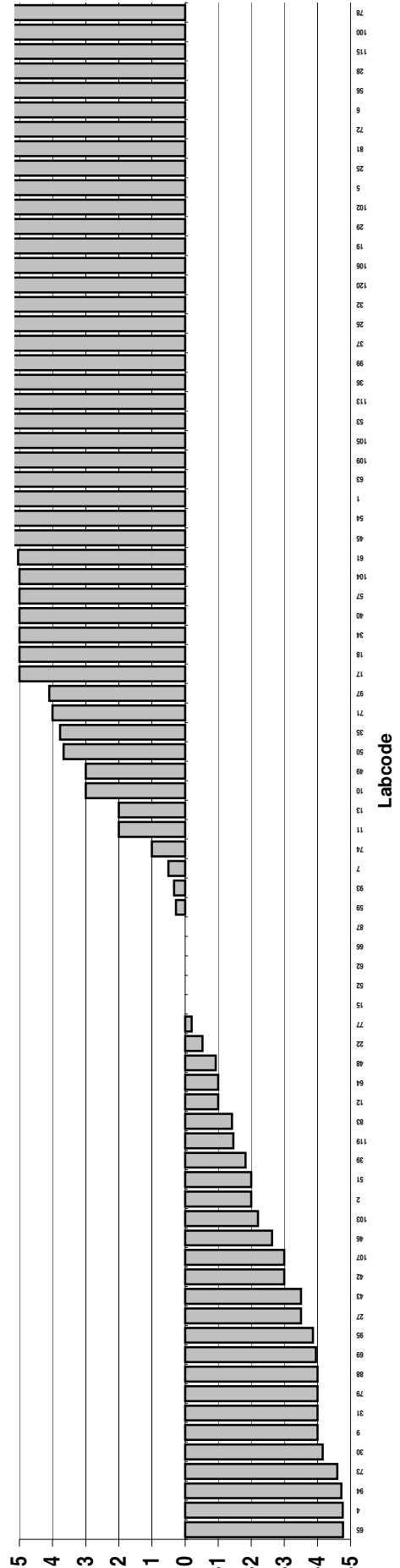
Consensus statistics

Consensus median, pg/g	0,0050
Median all values pg/g	0,0080
Consensus mean, pg/g	0,0059
Standard deviation, pg/g	0,0043
Relative standard deviation, %	72
No. of values reported	79
No. of values removed	20
No. of reported non-detects	55

1,2,3,7,8,9 HxCDF



Z-score: 1,2,3,7,8,9 HxCDF



Deer meat

Congener: 1,2,3,4,6,7,8 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,012	ND	62	0,015	
2	0,0084		63	0,31	Outlier
4	0,0081		64	0,012	
5	0,021		65	0,015	
6	0,30	Outlier	66	0,029	
7	0,040		69	0,011	Outlier
9	0,0090		71	0,15	Outlier
10	0,017		72	0,080	Outlier
11	0,030	ND	73	0,013	
12	0,025		74	0,19	Outlier
13	0,022		77	0,030	
15	0,015		78	0,22	Outlier,ND
17	0,013		79	0,0050	
18	0,040		81	0,070	Outlier
19	0,036	ND	83	0,0017	ND
22	0,060	Outlier	87	0,013	
25	3,1	Outlier	88	0,0086	
26	0,097	Outlier	93	0,066	Outlier
27	0,011	Outlier	94	0,015	
28	0,11	Outlier	95	0,010	
29	0,36	Outlier	97	0,014	
30	0,012		99	0,033	
31	0,013		100	0,11	Outlier
32	0,020	ND	102	0,076	Outlier
34	0,019		103	0,014	
35	0,011		104	0,010	
36	0,012	ND	105	0,027	
37	0,037		106	0,013	
39	0,024		107	0,019	
40	0,11	Outlier	109	0,060	Outlier
42	0,0090		113	0,031	Outlier,ND
43	0,031		115	0,098	
45	0,027		119	0,0100	
46	0,027		120	0,020	ND
48	0,27	Outlier			
49	0,099	Outlier			
50	0,013				
51	0,014				
52	0,11	Outlier			
53	0,016	ND			
54	0,0060	ND			
56	0,23	Outlier			
57	0,019				
59	0,032				
61	0,086	Outlier			

Consensus statistics

Consensus median, pg/g	0,015
Median all values pg/g	0,022
Consensus mean, pg/g	0,018
Standard deviation, pg/g	0,0095
Relative standard deviation, %	52
No. of values reported	79
No. of values removed	23
No. of reported non-detects	11

Deer meat

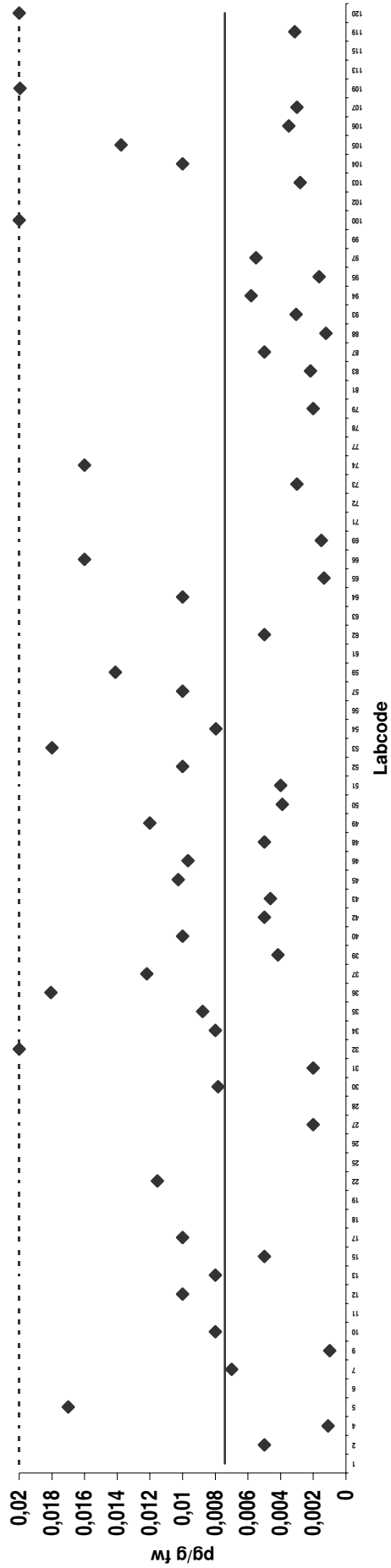
Congener: 1,2,3,4,7,8,9 HpCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,024	Outlier	63	0,032	Outlier
2	0,0050	ND	64	0,010	ND
4	0,0011		65	0,0013	
5	0,017		66	0,016	ND
6	0,21	Outlier	69	0,0015	
7	0,0070		71	0,023	Outlier
9	0,0010	ND	72	0,10	Outlier
10	0,0080	ND	73	0,0030	
11	0,030	Outlier,ND	74	0,016	
12	0,010	ND	77	0,040	Outlier
13	0,0080	ND	78	0,40	Outlier,ND
15	0,0050	ND	79	0,0020	ND
17	0,010	ND	81	0,050	Outlier,ND
18	0,030	Outlier	83	0,0022	ND
19	0,036	Outlier,ND	87	0,0050	ND
22	0,012		88	0,0012	
25	0,050	Outlier,ND	93	0,0031	
26	0,022	Outlier	94	0,0058	
27	0,0020	ND	95	0,0016	
28	0,13	Outlier	97	0,0055	ND
30	0,0078		99	0,023	Outlier,ND
31	0,0020	ND	100	0,020	ND
32	0,020	ND	102	0,025	Outlier
34	0,0080	ND	103	0,0028	ND
35	0,0088	ND	104	0,010	ND
36	0,018	ND	105	0,014	
37	0,012	ND	106	0,0035	ND
39	0,0042		107	0,0030	
40	0,010	ND	109	0,020	
42	0,0050		113	0,025	Outlier,ND
43	0,0046		115	0,11	Outlier,ND
45	0,010		119	0,0031	
46	0,0097	ND	120	0,020	ND
48	0,0050	ND			
49	0,012	ND			
50	0,0039	ND			
51	0,0040	ND			
52	0,010	ND			
53	0,018	ND			
54	0,0080	ND			
56	0,20	Outlier,ND			
57	0,010	ND			
59	0,014	ND			
61	0,023	Outlier			
62	0,0050	ND			

Consensus statistics

Consensus median, pg/g	0,0074
Median all values pg/g	0,010
Consensus mean, pg/g	0,0080
Standard deviation, pg/g	0,0057
Relative standard deviation, %	70
No. of values reported	78
No. of values removed	20
No. of reported non-detects	45

1,2,3,4,7,8,9 HpCDF

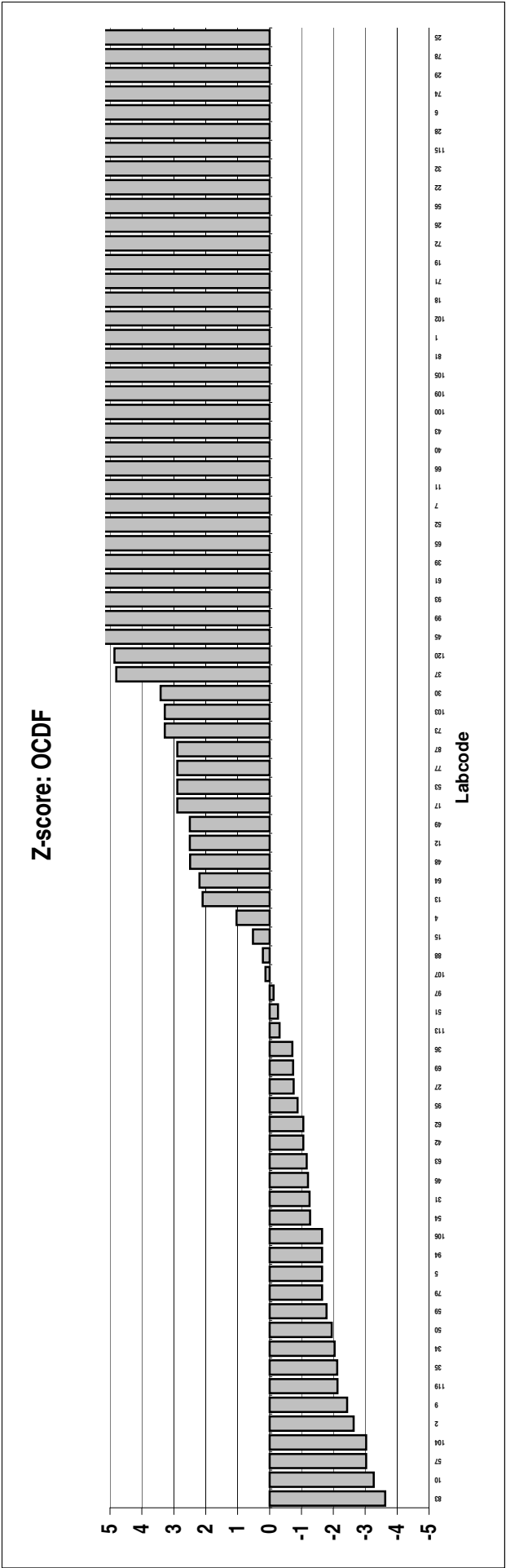
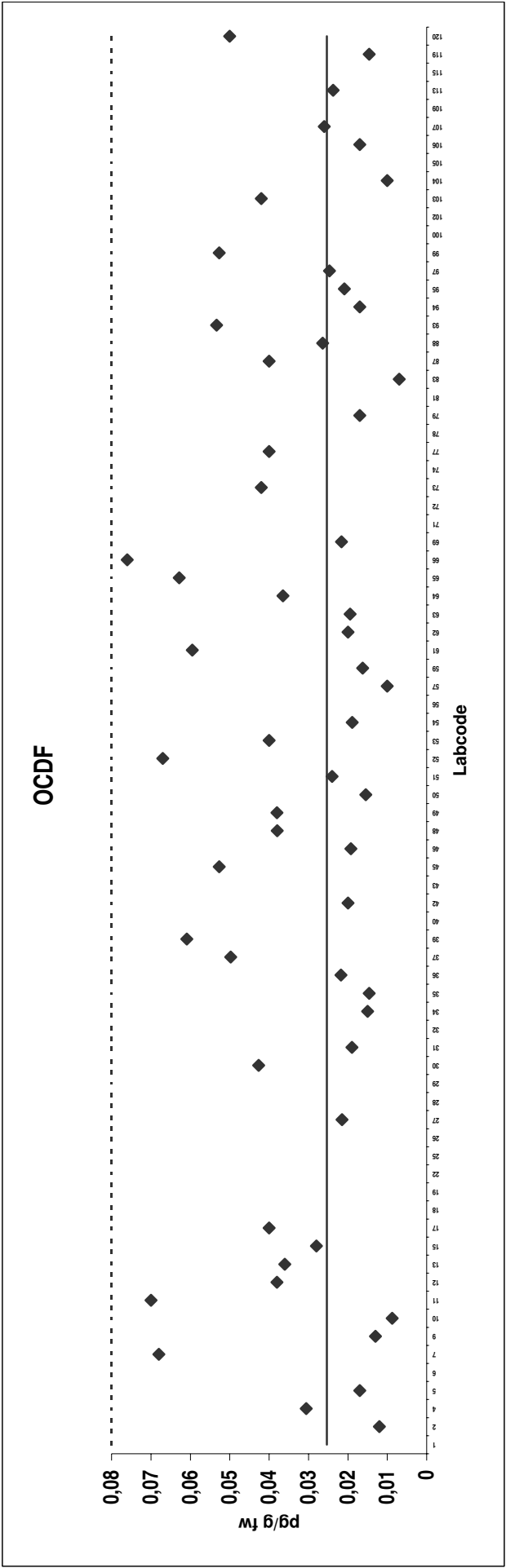


Deer meat
Congener: OCDF

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,099	Outlier	62	0,020	
2	0,012	ND	63	0,019	ND
4	0,031		64	0,037	
5	0,017	ND	65	0,063	
6	0,32	Outlier	66	0,076	
7	0,068		69	0,022	
9	0,013		71	0,11	Outlier
10	0,0088		72	0,14	Outlier
11	0,070	ND	73	0,042	
12	0,038		74	0,40	Outlier
13	0,036		77	0,040	
15	0,028		78	0,80	Outlier,ND
17	0,040		79	0,017	
18	0,10	ND	81	0,090	Outlier
19	0,12	Outlier,ND	83	0,0070	ND
22	0,22	Outlier	87	0,040	
25	2,9	Outlier	88	0,026	
26	0,15	Outlier	93	0,053	
27	0,022		94	0,017	
28	0,25	Outlier	95	0,021	
29	0,45	Outlier	97	0,025	
30	0,043		99	0,053	
31	0,019		100	0,085	Outlier
32	0,22	Outlier,ND	102	0,100	Outlier
34	0,015		103	0,042	
35	0,015	ND	104	0,010	
36	0,022	ND	105	0,090	
37	0,050		106	0,017	Outlier
39	0,061		107	0,026	
40	0,083		109	0,086	Outlier
42	0,020	Outlier	113	0,024	ND
43	0,084	Outlier	115	0,25	Outlier,ND
45	0,053		119	0,015	
46	0,019		120	0,050	ND
48	0,038				
49	0,038				
50	0,015				
51	0,024				
52	0,067				
53	0,040	ND			
54	0,019	ND			
56	0,20	Outlier,ND			
57	0,010	ND			
59	0,016	ND			
61	0,060				

Consensus statistics

Consensus median, pg/g	0,025
Median all values pg/g	0,040
Consensus mean, pg/g	0,032
Standard deviation, pg/g	0,018
Relative standard deviation, %	57
No. of values reported	79
No. of values removed	23
No. of reported non-detects	19



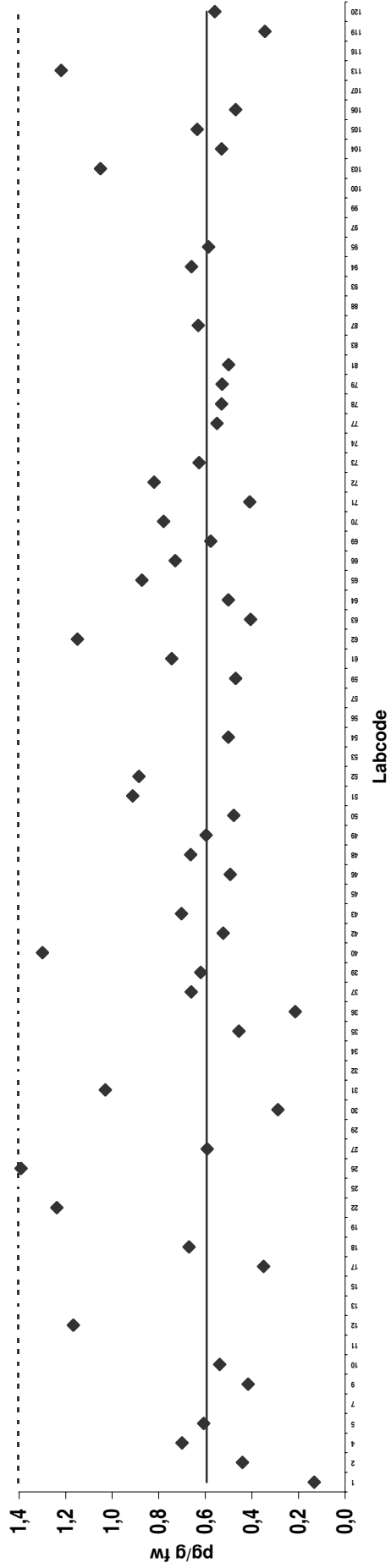
Deer meat
Congener: PCB 77

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,13		64	0,50	
2	0,44		65	0,87	
4	0,70		66	0,73	
5	0,61		69	0,58	
7	1,5	Outlier	70	0,78	ND
9	0,42		71	0,41	
10	0,54		72	0,82	
11	2,2		73	0,63	
12	1,2	Outlier	74	2,0	Outlier
13	1,9	Outlier	77	0,55	
15	1,4	Outlier	78	0,53	ND
17	0,35		79	0,53	
18	0,67		81	0,50	
19	2,0	Outlier	83	1,7	Outlier
22	1,2		87	0,63	
25	2,1	Outlier	88	1,5	Outlier
26	1,4		93	7,8	Outlier
27	0,59		94	0,66	
29	1,5	Outlier	95	0,59	
30	0,29		97	1,8	Outlier
31	1,0		99	3,8	Outlier
32	1,5	Outlier,ND	100	1,8	Outlier
34	2,2	Outlier	103	1,1	
35	0,46		104	0,53	
36	0,21		105	0,64	
37	0,66		106	0,47	
39	0,62		107	2,5	Outlier
40	1,3		113	1,2	
42	0,52		116	2,2	
43	0,70		119	0,34	
45	1,5	Outlier	120	0,56	
46	0,49				
48	0,66				
49	0,60				
50	0,48				
51	0,91				
52	0,89				
53	1,5	Outlier			
54	0,50				
56	2,0	Outlier,ND			
57	1,9	Outlier			
59	0,47				
61	0,74				
62	1,2				
63	0,41				

Consensus statistics

Consensus median, pg/g	0,59
Median all values pg/g	0,70
Consensus mean, pg/g	0,66
Standard deviation, pg/g	0,28
Relative standard deviation, %	42
No. of values reported	76
No. of values removed	22
No. of reported non-detects	5

PCB 77



Deer meat

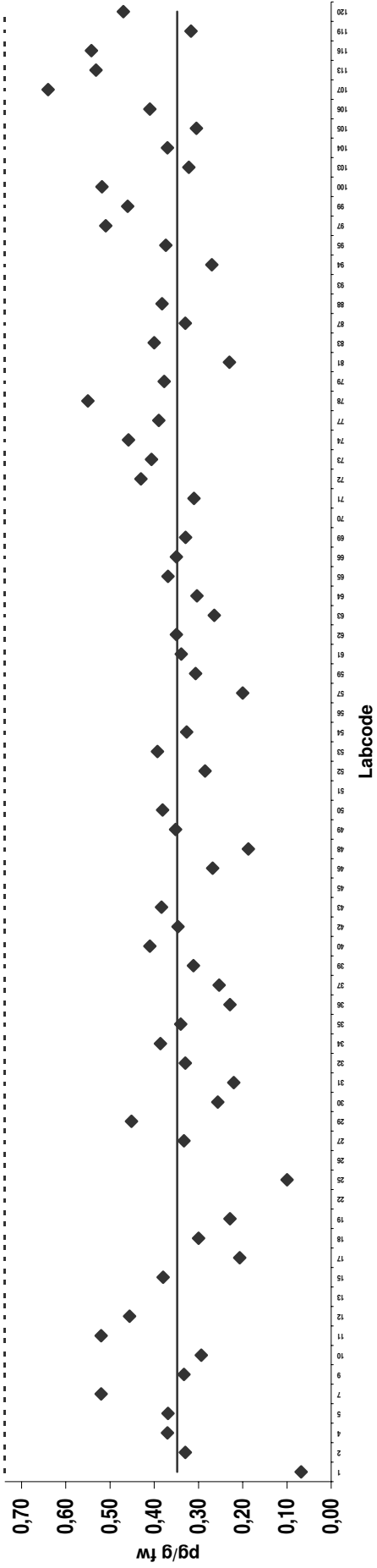
Congener: PCB 126

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,068		64	0,30	
2	0,33		65	0,37	
4	0,37		66	0,35	
5	0,37		69	0,33	
7	0,52		70	0,78	Outlier,ND
9	0,33		71	0,31	
10	0,29		72	0,43	
11	0,52		73	0,41	
12	0,46		74	0,46	
13	0,82		77	0,39	
15	0,38		78	0,55	ND
17	0,21		79	0,38	
18	0,30		81	0,23	
19	0,23		83	0,40	
22	0,79		87	0,33	
25	0,10	Outlier	88	0,38	
26	1,3	ND	93	2,9	Outlier
27	0,33		94	0,27	
29	0,45		95	0,37	
30	0,26		97	0,51	
31	0,22		99	0,46	
32	0,33		100	0,52	
34	0,39		103	0,32	
35	0,34		104	0,37	
36	0,23		105	0,30	
37	0,25		106	0,41	
39	0,31		107	0,64	
40	0,41		113	0,53	
42	0,35		116	0,54	
43	0,38		119	0,32	
45	0,89		120	0,47	
46	0,27	Outlier			
48	0,19				
49	0,35				
50	0,38				
51	0,81	Outlier			
52	0,29				
53	0,39				
54	0,33				
56	2,0	Outlier,ND			
57	0,20				
59	0,31				
61	0,34				
62	0,35				
63	0,26				

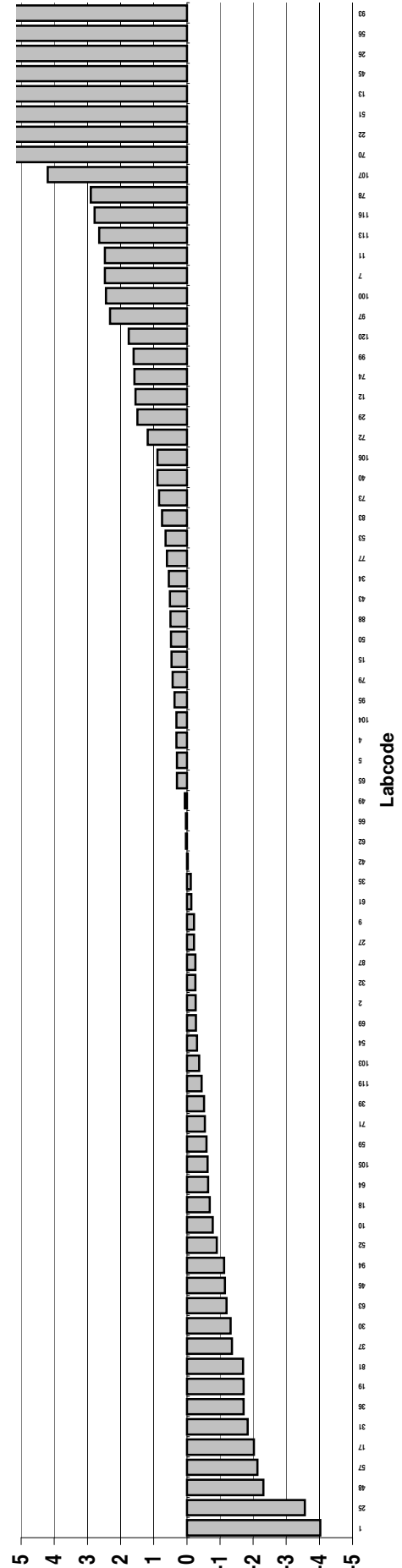
Consensus statistics

Consensus median, pg/g	0,35
Median all values pg/g	0,37
Consensus mean, pg/g	0,35
Standard deviation, pg/g	0,10
Relative standard deviation, %	30
No. of values reported	76
No. of values removed	8
No. of reported non-detects	5

PCB 126



Z-score: PCB 126



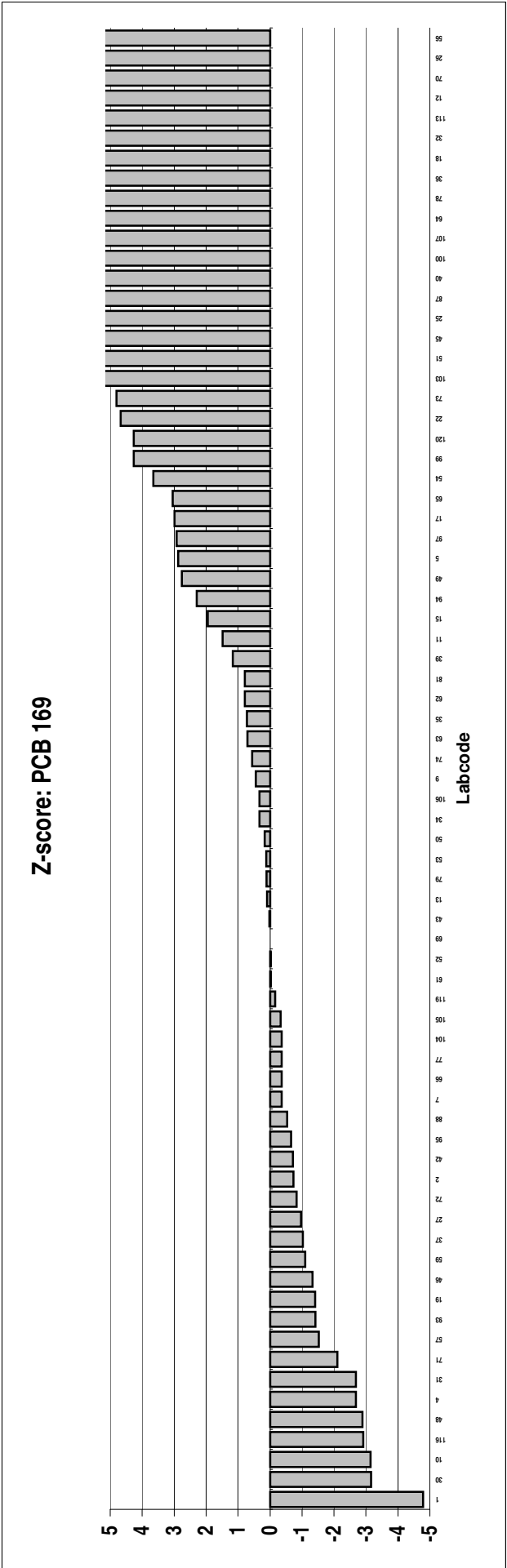
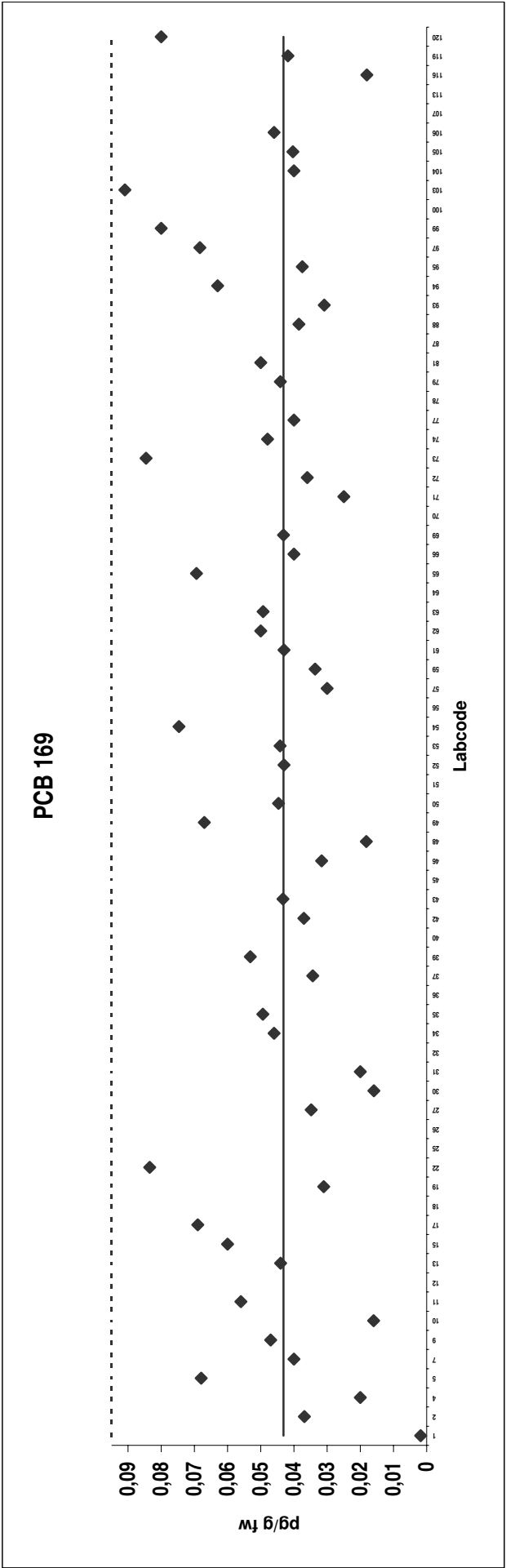
Deer meat

Congener: PCB 169

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,0018		65	0,069	ND
2	0,037		66	0,040	
4	0,020		69	0,043	Outlier,ND
5	0,068		70	0,78	ND
7	0,040		71	0,025	ND
9	0,047		72	0,036	
10	0,016	ND	73	0,085	ND
11	0,056		74	0,048	
12	0,42	Outlier	77	0,040	
13	0,044		78	0,26	Outlier,ND
15	0,060		79	0,044	
17	0,069		81	0,050	ND
18	0,30	Outlier,ND	87	0,10	Outlier,ND
19	0,031		88	0,039	
22	0,084		93	0,031	
25	0,10	Outlier,ND	94	0,063	
26	1,0	Outlier,ND	95	0,037	
27	0,035		97	0,068	
30	0,016		99	0,080	
31	0,020		100	0,14	Outlier
32	0,36	Outlier,ND	103	0,091	
34	0,046		104	0,040	
35	0,049		105	0,040	
36	0,28	Outlier	106	0,046	
37	0,034		107	0,16	Outlier
39	0,053		113	0,39	Outlier,ND
40	0,13	Outlier,ND	116	0,018	
42	0,037		119	0,042	
43	0,043	Outlier	120	0,080	
45	0,098				
46	0,032				
48	0,018				
49	0,067				
50	0,045				
51	0,097	Outlier			
52	0,043				
53	0,044				
54	0,075				
56	2,0	Outlier,ND			
57	0,030				
59	0,034				
61	0,043				
62	0,050				
63	0,049				
64	0,25	Outlier,ND			

Consensus statistics

Consensus median, pg/g	0,043
Median all values pg/g	0,048
Consensus mean, pg/g	0,045
Standard deviation, pg/g	0,019
Relative standard deviation, %	42
No. of values reported	74
No. of values removed	17
No. of reported non-detects	16

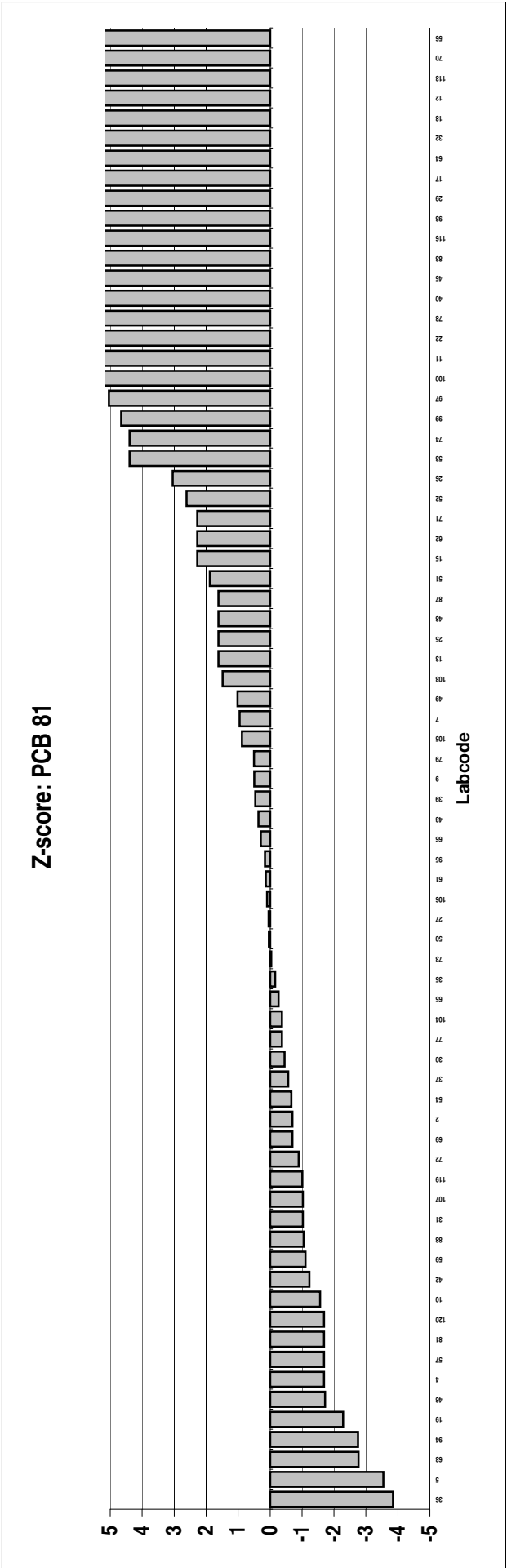
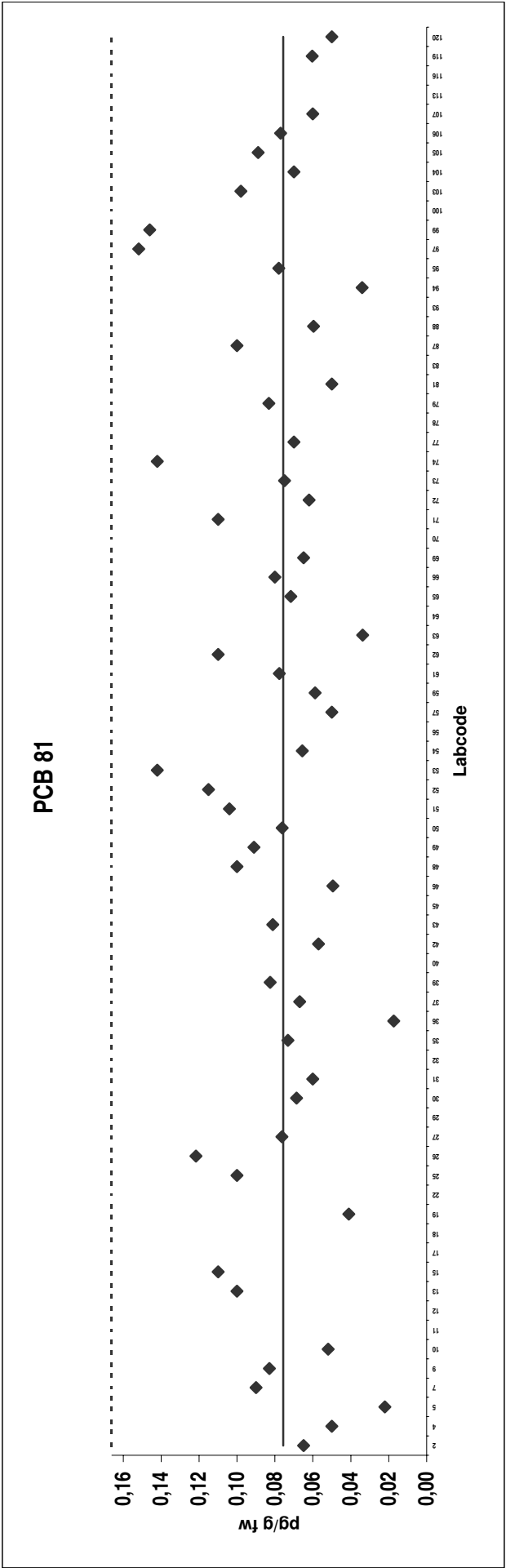


Deer meat
Congener: PCB 81

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
2	0,065		66	0,080	
4	0,050		69	0,065	Outlier,ND
5	0,022	ND	70	0,78	
7	0,090		71	0,11	
9	0,083		72	0,062	
10	0,052		73	0,075	
11	0,17	Outlier	74	0,14	
12	0,31	Outlier	77	0,070	Outlier,ND
13	0,10		78	0,18	
15	0,11		79	0,083	
17	0,25	Outlier	81	0,050	ND
18	0,30	Outlier,ND	83	0,21	Outlier
19	0,041		87	0,10	ND
22	0,17	Outlier	88	0,060	Outlier
25	0,10	ND	93	0,25	ND
26	0,12		94	0,034	Outlier
27	0,076		95	0,078	ND
29	0,25	Outlier	97	0,15	
30	0,069		99	0,15	
31	0,060		100	0,17	Outlier
32	0,29	Outlier,ND	103	0,098	
35	0,073		104	0,070	
36	0,017	ND	105	0,089	
37	0,067		106	0,077	
39	0,083		107	0,060	
40	0,20	Outlier	113	0,39	Outlier
42	0,057		116	0,22	Outlier
43	0,081		119	0,060	
45	0,20	Outlier	120	0,050	ND
46	0,050				
48	0,10	ND			
49	0,091				
50	0,076				
51	0,10				
52	0,12				
53	0,14				
54	0,066				
56	2,0	Outlier,ND			
57	0,050				
59	0,059				
61	0,078				
62	0,11				
63	0,034	Outlier,ND			
64	0,25				
65	0,072				

Consensus statistics

Consensus median, pg/g	0,076
Median all values pg/g	0,083
Consensus mean, pg/g	0,078
Standard deviation, pg/g	0,030
Relative standard deviation, %	38
No. of values reported	74
No. of values removed	18
No. of reported non-detects	14



Deer meat

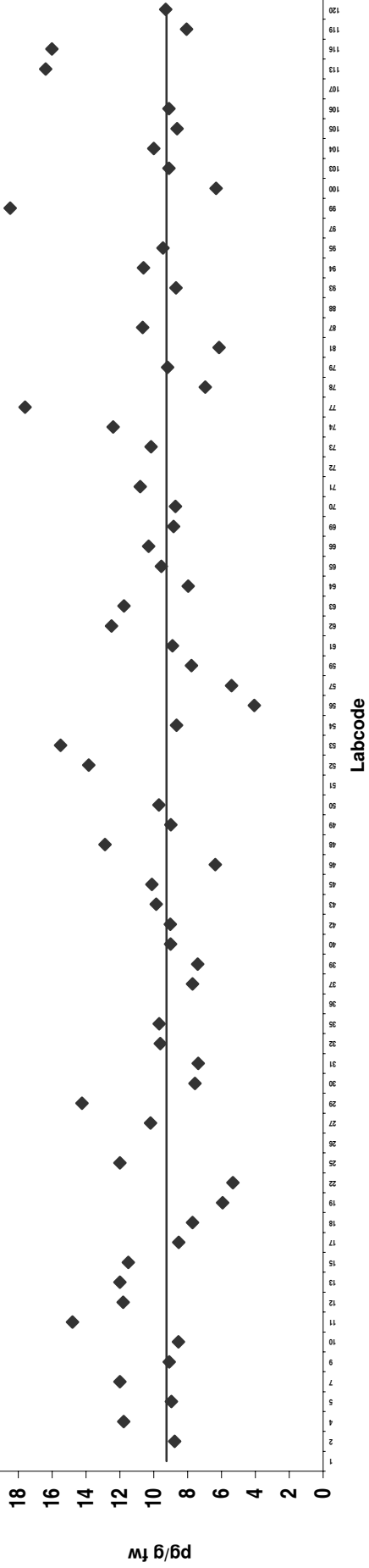
Congener: PCB 105

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	45	Outlier	65	9,6	
2	8,8		66	10	
4	12		69	8,8	
5	9,0		70	8,7	
7	12		71	11	
9	9,1		72	44	Outlier
10	8,5		73	10	
11	15		74	12	
12	12		77	18	
13	12		78	7,0	
15	12		79	9,2	
17	8,5		81	6,2	
18	7,7		87	11	
19	5,9		88	20	
22	5,3	ND	93	8,7	Outlier
25	12		94	11	
26	44	Outlier	95	9,5	
27	10		97	26	Outlier
29	14		99	18	
30	7,6		100	6,3	
31	7,4		103	9,1	
32	9,6		104	10	
35	9,7		105	8,6	
36	93	Outlier	106	9,1	
37	7,7		107	77	Outlier
39	7,4		113	16	
40	9,0		116	16	
42	9,0		119	8,1	
43	9,9		120	9,3	
45	10				
46	6,4				
48	13				
49	9,0				
50	9,7				
51	101	Outlier			
52	14				
53	16				
54	8,6				
56	4,1				
57	5,4				
59	7,8				
61	8,9				
62	13				
63	12				
64	8,0				

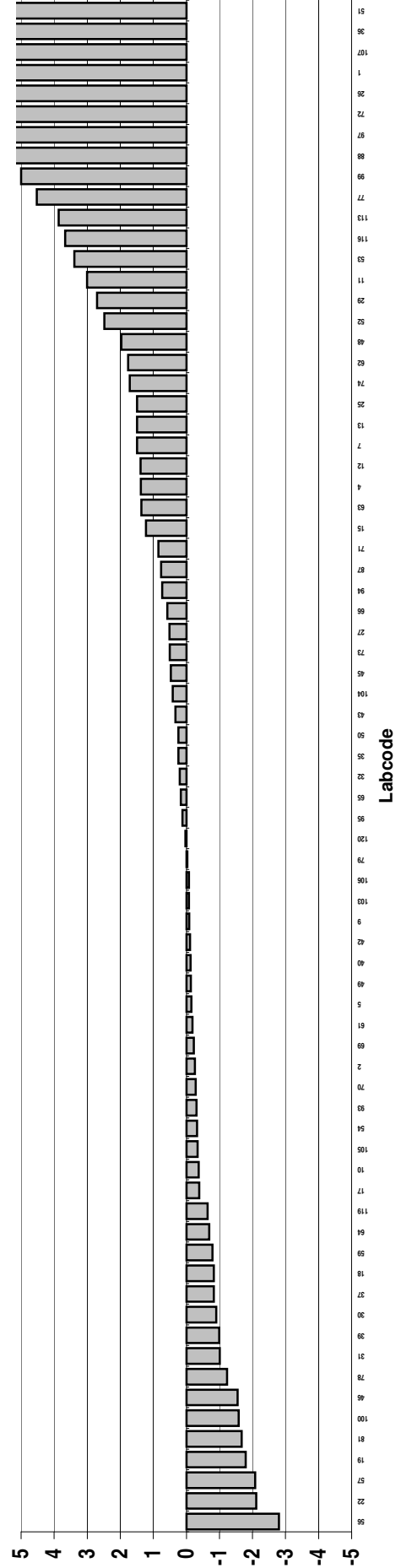
Consensus statistics

Consensus median, pg/g	9,2
Median all values pg/g	9,6
Consensus mean, pg/g	9,9
Standard deviation, pg/g	2,9
Relative standard deviation, %	29
No. of values reported	74
No. of values removed	8
No. of reported non-detects	1

PCB 105



Z-score: PCB 105



Deer meat

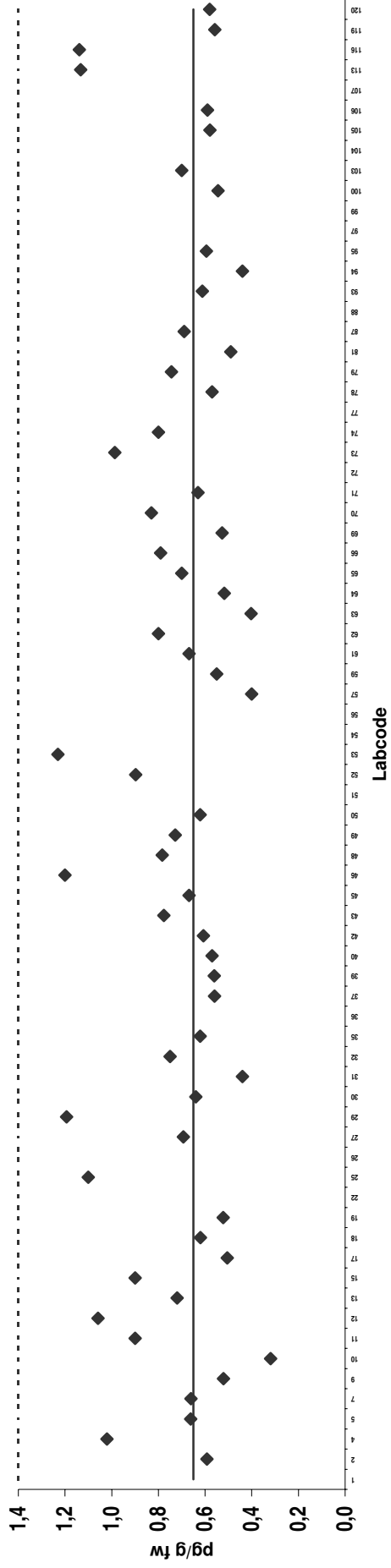
Congener: PCB 114

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	3,5	Outlier	65	0,70	
2	0,59		66	0,79	
4	1,0		69	0,53	ND
5	0,66		70	0,83	
7	0,66		71	0,63	
9	0,52		72	2,3	Outlier
10	0,32	ND	73	0,99	ND
11	0,90		74	0,80	
12	1,1		77	2,2	Outlier
13	0,72		78	0,57	ND
15	0,90		79	0,74	
17	0,51		81	0,49	
18	0,62		87	0,69	
19	0,52		88	2,0	Outlier
22	5,5	Outlier,ND	93	0,61	
25	1,1		94	0,44	
26	2,8	Outlier	95	0,59	
27	0,69		97	1,6	Outlier
29	1,2		99	1,5	Outlier
30	0,64		100	0,55	
31	0,44		103	0,70	
32	0,75		104	10	Outlier,ND
35	0,62		105	0,58	
36	3,7	Outlier	106	0,59	
37	0,56		107	5,0	Outlier
39	0,56		113	1,1	
40	0,57		116	1,1	
42	0,61		119	0,56	
43	0,78		120	0,58	
45	0,67				
46	1,2	ND			
48	0,78				
49	0,73				
50	0,62				
51	6,9	Outlier			
52	0,90				
53	1,2				
54	3,0	Outlier,ND			
56	2,0	Outlier,ND			
57	0,40				
59	0,55				
61	0,67				
62	0,80				
63	0,40				
64	0,52				

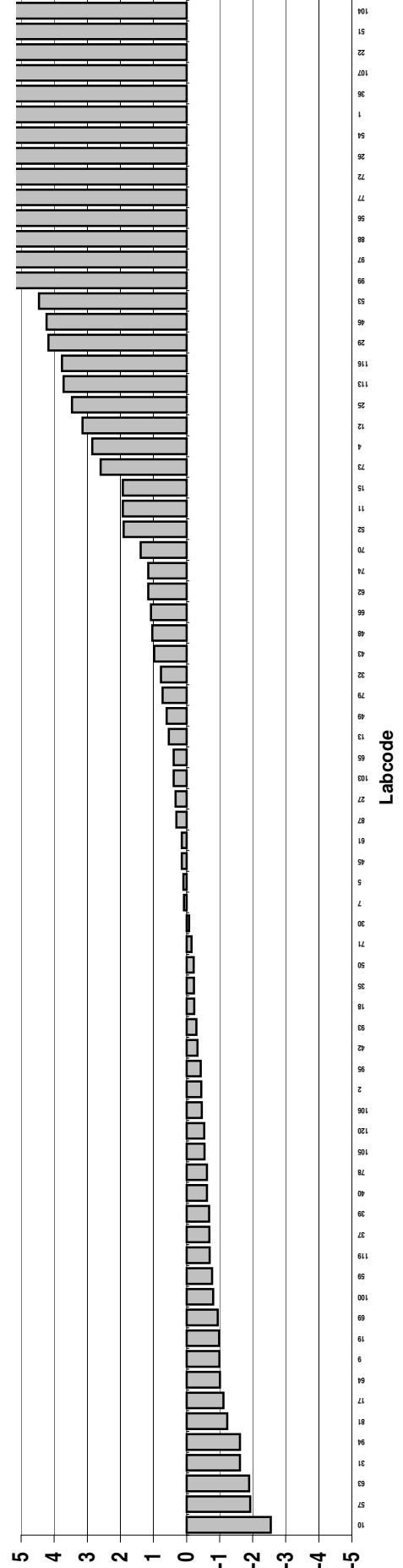
Consensus statistics

Consensus median, pg/g	0,65
Median all values pg/g	0,70
Consensus mean, pg/g	0,70
Standard deviation, pg/g	0,22
Relative standard deviation, %	31
No. of values reported	74
No. of values removed	14
No. of reported non-detects	9

PCB 114



Z-score: PCB 114



Deer meat

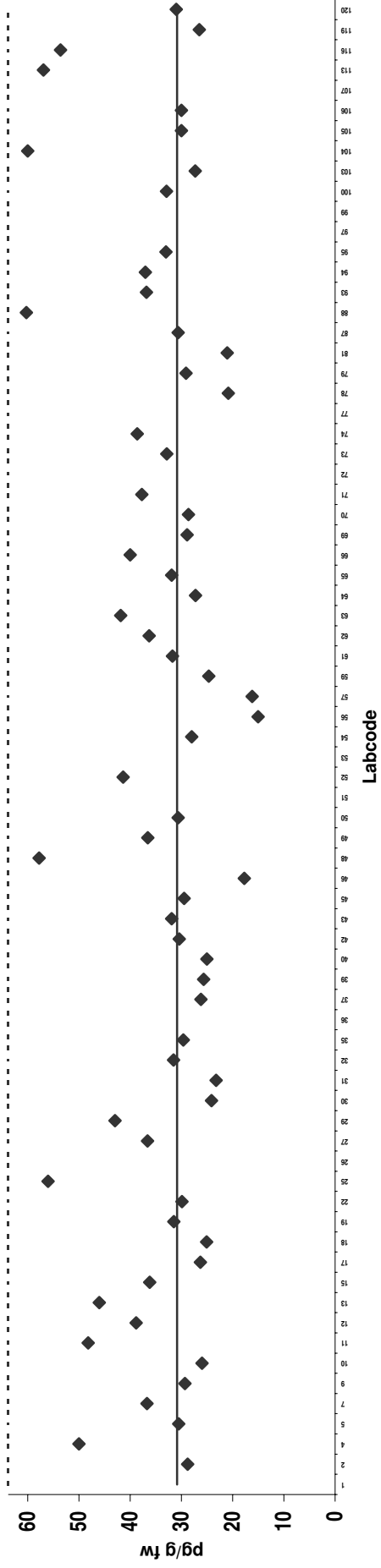
Congener: PCB 118

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	280		65	32	
2	29	Outlier	66	40	
4	50		69	29	
5	31		70	29	
7	37		71	38	
9	29		72	274	Outlier
10	26		73	33	
11	48		74	39	
12	39		77	67	Outlier
13	46		78	21	
15	36		79	29	
17	26		81	21	
18	25		87	31	
19	31		88	60	
22	30		93	37	
25	56		94	37	
26	152		95	33	
27	37	Outlier	97	127	Outlier
29	43		99	66	Outlier
30	24		100	33	
31	23		103	27	
32	32		104	60	
35	30		105	30	
36	513	Outlier	106	30	
37	26		107	292	Outlier
39	26		113	57	
40	25		116	54	
42	30		119	26	
43	32		120	31	
45	29				
46	18				
48	58				
49	37				
50	31				
51	757	Outlier			
52	41				
53	84	Outlier			
54	28				
56	15				
57	16				
59	25				
61	32				
62	36				
63	42				
64	27				

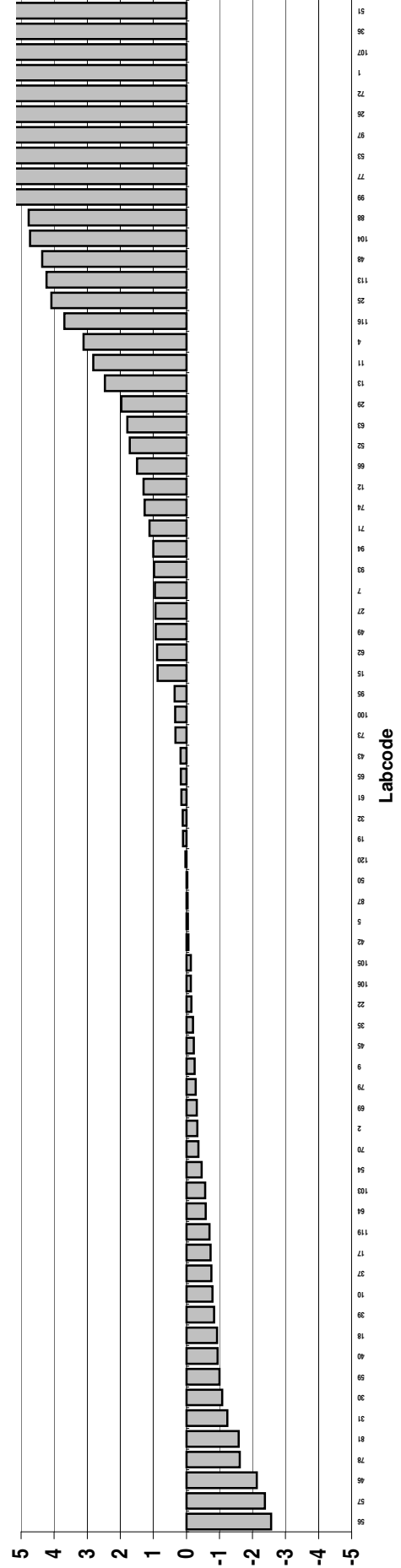
Consensus statistics

Consensus median, pg/g	31
Median all values pg/g	32
Consensus mean, pg/g	34
Standard deviation, pg/g	10
Relative standard deviation, %	31
No. of values reported	74
No. of values removed	10
No. of reported non-detects	0

PCB 118



Z-score: PCB 118



Deer meat

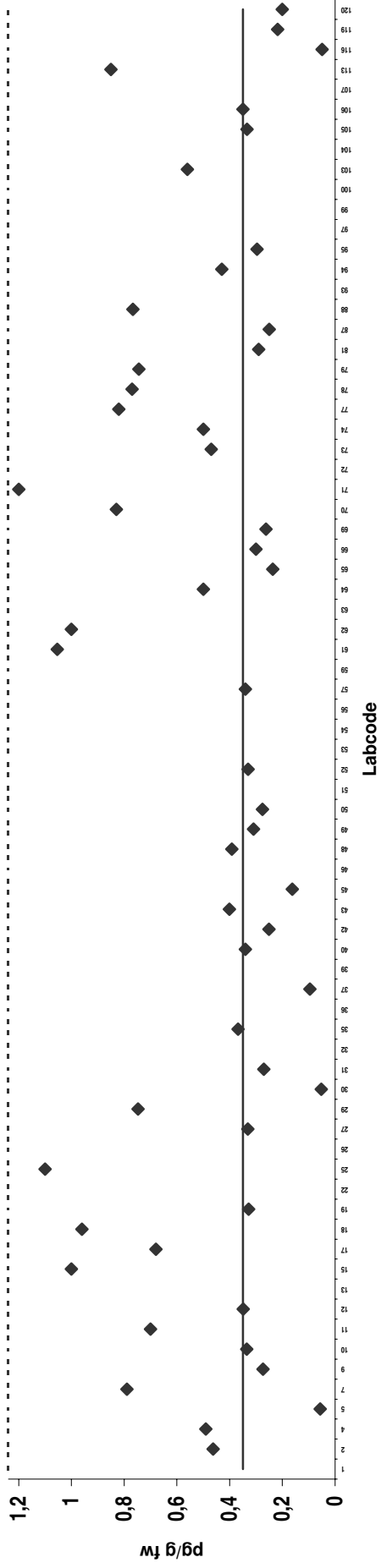
Congener: PCB 123

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	4,4	Outlier	65	0,24	
2	0,46		66	0,30	ND
4	0,49		69	0,26	
5	0,057	ND	70	0,83	ND
7	0,79		71	1,2	
9	0,27		72	2,4	Outlier
10	0,34		73	0,47	
11	0,70	ND	74	0,50	
12	0,35		77	0,82	
13	1,4	Outlier	78	0,77	ND
15	1,0	ND	79	0,74	
17	0,68		81	0,29	
18	0,96		87	0,25	
19	0,33		88	0,77	
22	5,5	Outlier,ND	93	1,6	Outlier
25	1,1		94	0,43	
26	2,0	Outlier	95	0,30	
27	0,33		97	2,2	Outlier
29	0,75		99	6,6	Outlier
30	0,053	ND	100	2,2	Outlier,ND
31	0,27		103	0,56	
32	1,5	Outlier,ND	104	10	Outlier,ND
35	0,37		105	0,33	
36	37	Outlier	106	0,35	
37	0,096	ND	107	7,2	Outlier
39	1,5	Outlier	113	0,85	
40	0,34		116	0,049	ND
42	0,25		119	0,22	
43	0,40		120	0,20	
45	0,16				
46	1,3	Outlier,ND			
48	0,39				
49	0,31				
50	0,28				
51	48	Outlier			
52	0,33				
53	1,8	Outlier			
54	4,0	Outlier			
56	2,0	Outlier,ND			
57	0,34				
59	1,5	Outlier			
61	1,1	ND			
62	1,0	Outlier			
63	42	ND			
64	0,50				

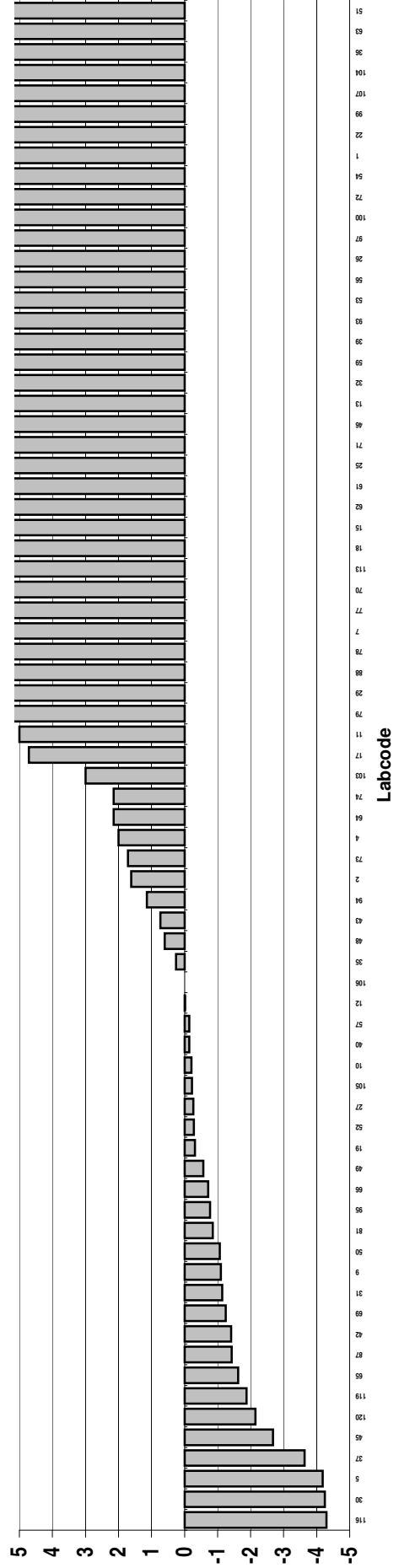
Consensus statistics

Consensus median, pg/g	0,35
Median all values pg/g	0,62
Consensus mean, pg/g	0,48
Standard deviation, pg/g	0,29
Relative standard deviation, %	61
No. of values reported	74
No. of values removed	21
No. of reported non-detects	17

PCB 123



Z-score: PCB 123



Deer meat

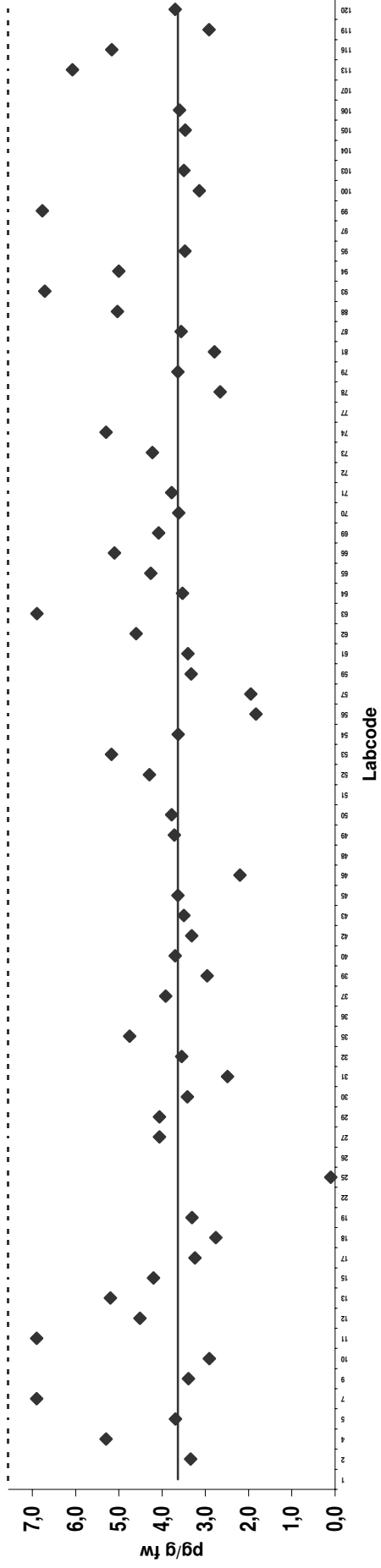
Congener: PCB 156

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	15		65	4,3	
2	3,3	Outlier	66	5,1	
4	5,3		69	4,1	
5	3,7		70	3,6	
7	6,9		71	3,8	
9	3,4		72	12	Outlier
10	2,9		73	4,2	
11	6,9		74	5,3	
12	4,5		77	8,6	Outlier
13	5,2		78	2,7	
15	4,2		79	3,6	
17	3,2		81	2,8	
18	2,8		87	3,6	
19	3,3		88	5,0	
22	7,8		93	6,7	
25	0,10	Outlier,ND	94	5,0	
26	22	ND	95	3,5	
27	4,1	Outlier	97	14	Outlier
29	4,1		99	6,8	
30	3,4		100	3,1	
31	2,5		103	3,5	
32	3,6		104	10	Outlier,ND
35	4,8		105	3,5	
36	23		106	3,6	
37	3,9	Outlier	107	19	Outlier
39	3,0		113	6,1	
40	3,7		116	5,2	
42	3,3		119	2,9	
43	3,5		120	3,7	
45	3,6				
46	2,2				
48	9,1	Outlier			
49	3,7				
50	3,8				
51	4,3	Outlier			
52	4,3				
53	5,2	ND			
54	3,6				
56	1,8				
57	2,0				
59	3,3				
61	3,4				
62	4,6				
63	6,9				
64	3,5				

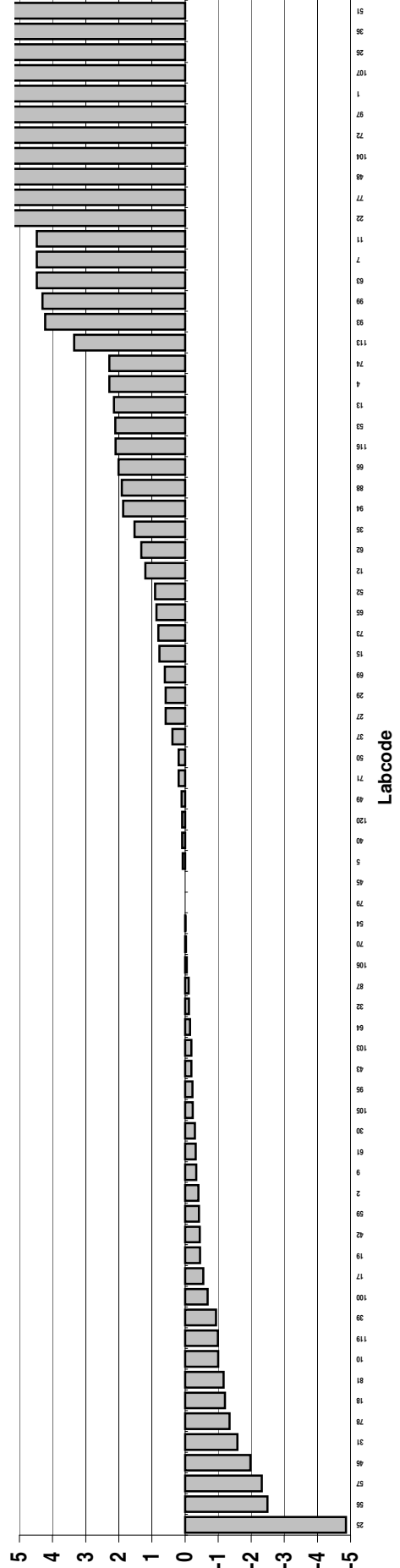
Consensus statistics

Consensus median, pg/g	3,6
Median all values pg/g	3,8
Consensus mean, pg/g	4,0
Standard deviation, pg/g	1,3
Relative standard deviation, %	32
No. of values reported	74
No. of values removed	11
No. of reported non-detects	4

PCB 156



Z-score: PCB 156



Deer meat

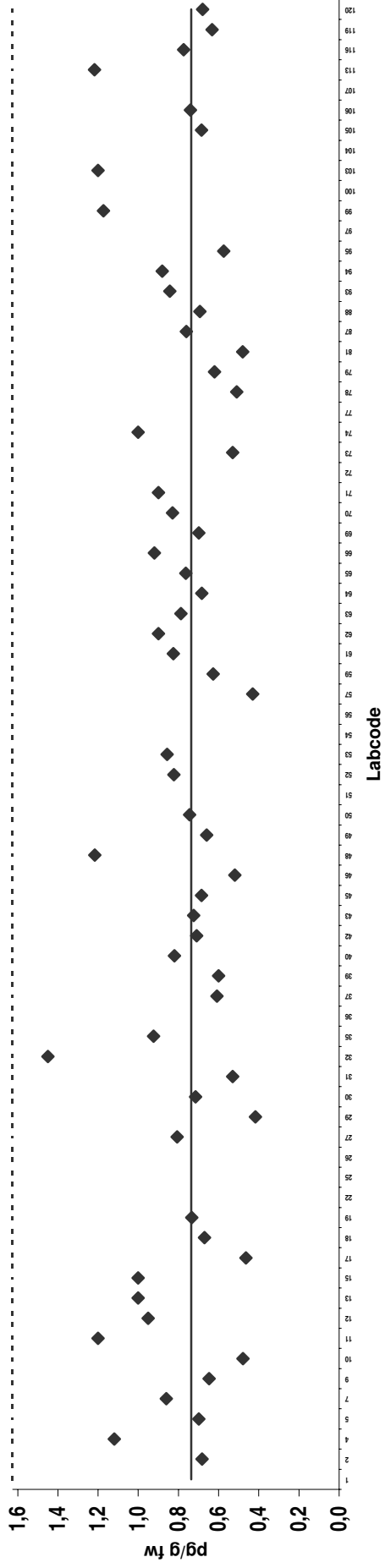
Congener: PCB 157

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	2,1		65	0,76	
2	0,68	Outlier	66	0,92	
4	1,1		69	0,70	ND
5	0,70		70	0,83	
7	0,86		71	0,90	Outlier
9	0,65		72	2,2	
10	0,48		73	0,53	
11	1,2		74	1,0	
12	0,95		77	2,1	Outlier
13	1,0		78	0,51	ND
15	1,0		79	0,62	
17	0,46		81	0,48	
18	0,67		87	0,76	
19	0,73		88	0,69	
22	5,8	Outlier,ND	93	0,84	
25	2,5	Outlier	94	0,88	
26	3,8	Outlier	95	0,58	
27	0,81		97	2,6	Outlier
29	0,42		99	1,2	
30	0,71		100	2,9	Outlier,ND
31	0,53		103	1,2	
32	1,5	ND	104	10	Outlier,ND
35	0,92		105	0,69	
36	3,5		106	0,74	
37	0,61	Outlier	107	3,2	
39	0,60		113	1,2	
40	0,82		116	0,77	
42	0,71		119	0,63	
43	0,72		120	0,68	
45	0,68				
46	0,52				
48	1,2				
49	0,66				
50	0,74				
51	7,4	Outlier			
52	0,82				
53	0,86				
54	3,4				
56	2,0				
57	0,43				
59	0,63	Outlier,ND			
61	0,82	Outlier,ND			
62	0,90				
63	0,79				
64	0,68				

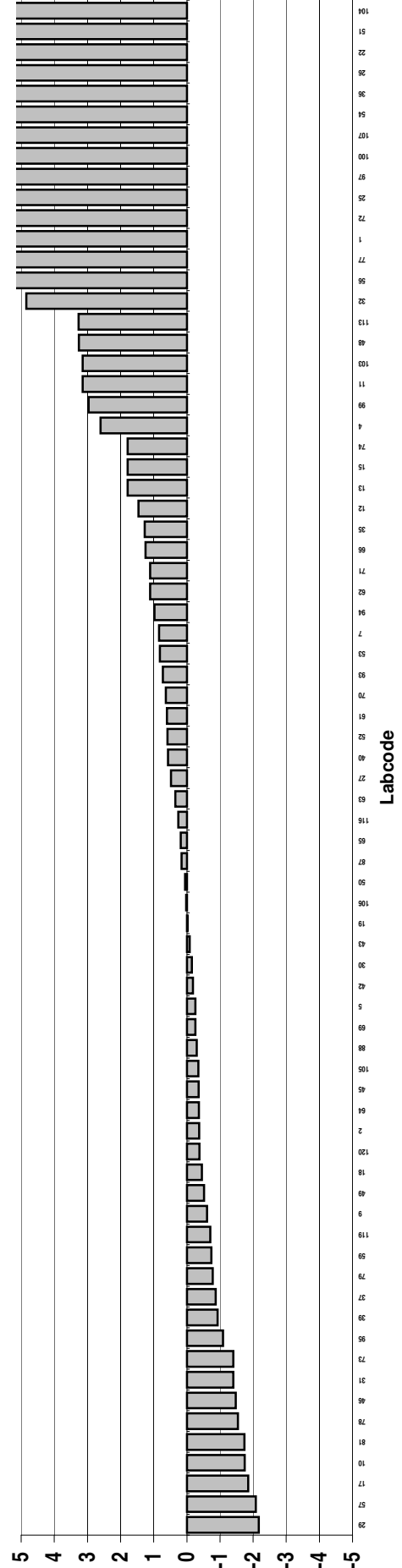
Consensus statistics

Consensus median, pg/g	0,74
Median all values pg/g	0,81
Consensus mean, pg/g	0,78
Standard deviation, pg/g	0,22
Relative standard deviation, %	28
No. of values reported	74
No. of values removed	14
No. of reported non-detects	8

PCB 157



Z-score: PCB 157



Deer meat

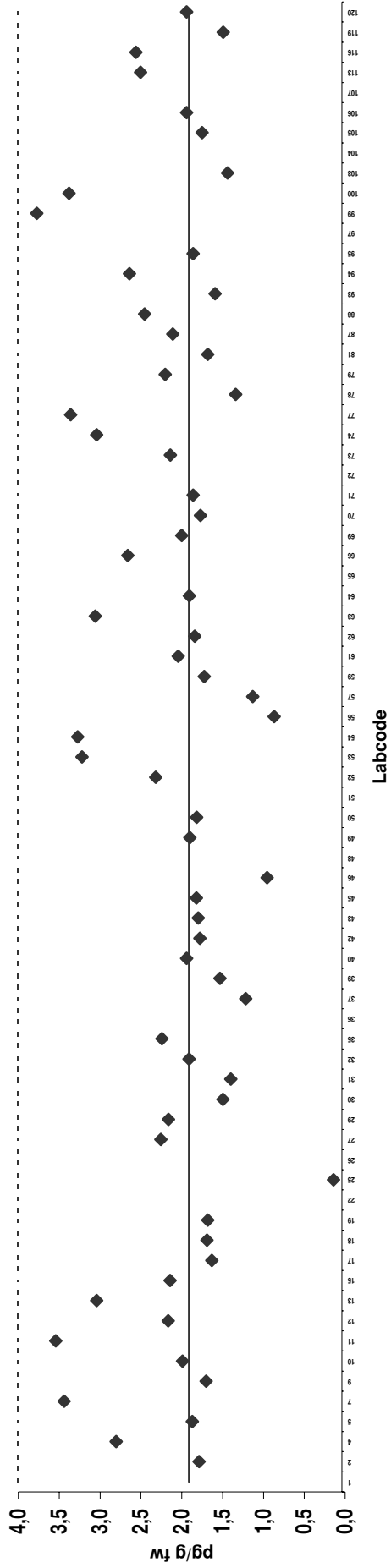
Congener: PCB 167

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	9,0	Outlier	65	4,5	Outlier
2	1,7		66	2,6	
4	2,8		69	2,0	
5	1,8		70	1,7	
7	3,4		71	1,8	
9	1,7		72	8,7	Outlier
10	1,9		73	2,1	
11	3,5		74	3,0	
12	2,1		77	3,3	
13	3,0		78	1,3	ND
15	2,1		79	2,2	
17	1,6		81	1,6	
18	1,7		87	2,1	
19	1,6		88	2,4	
22	6,0	Outlier,ND	93	1,6	
25	0,10	ND	94	2,6	
26	9,2	Outlier	95	1,8	
27	2,2		97	9,4	Outlier
29	2,1		99	3,7	
30	1,5		100	3,3	
31	1,4		103	1,4	
32	1,9		104	10	Outlier,ND
35	2,2		105	1,7	
36	20		106	1,9	
37	1,2	Outlier	107	15	Outlier
39	1,5		113	2,5	
40	1,9		116	2,5	
42	1,7		119	1,5	
43	1,8		120	1,9	
45	1,8				
46	0,91				
48	4,0	Outlier			
49	1,9				
50	1,8				
51	3,3	Outlier			
52	2,3				
53	3,2	ND			
54	3,2				
56	0,83				
57	1,1				
59	1,7				
61	2,0				
62	1,8				
63	3,0				
64	1,9				

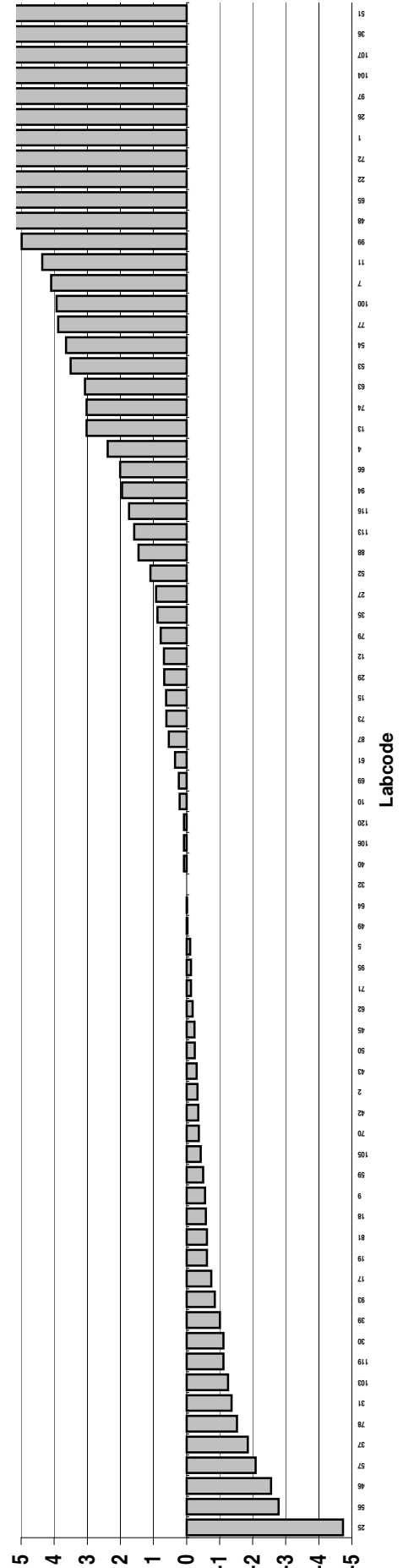
Consensus statistics

Consensus median, pg/g	1,9
Median all values pg/g	2,0
Consensus mean, pg/g	2,0
Standard deviation, pg/g	0,70
Relative standard deviation, %	34
No. of values reported	74
No. of values removed	11
No. of reported non-detects	5

PCB 167



Z-score: PCB 167



Deer meat

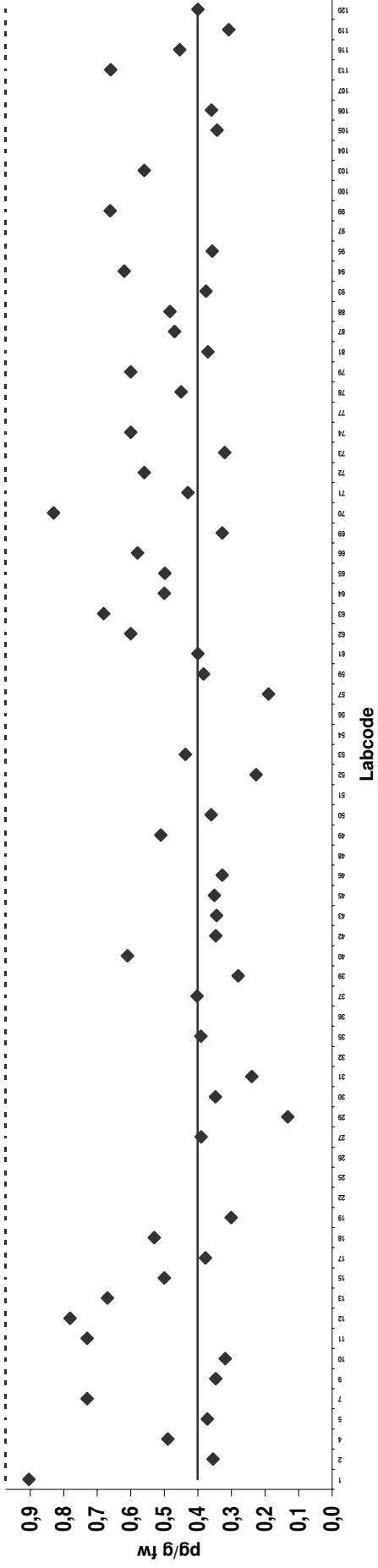
Congener: PCB 189

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,90		65	0,50	
2	0,35		66	0,58	
4	0,49		69	0,33	
5	0,37		70	0,83	ND
7	0,73		71	0,43	
9	0,35		72	0,56	
10	0,32	ND	73	0,32	
11	0,73		74	0,60	
12	0,78		77	1,1	Outlier
13	0,67		78	0,45	ND
15	0,50		79	0,60	ND
17	0,38		81	0,37	
18	0,53		87	0,47	
19	0,30		88	0,48	
22	6,0	Outlier,ND	93	0,38	
25	2,5	Outlier	94	0,62	
26	1,7	Outlier	95	0,36	
27	0,39		97	1,8	Outlier
29	0,13		99	0,66	
30	0,35		100	2,4	Outlier,ND
31	0,24		103	0,56	
32	1,5	Outlier,ND	104	10	Outlier,ND
35	0,39		105	0,34	
36	1,3		106	0,36	
37	0,40	Outlier	107	1,2	Outlier
39	0,28		113	0,66	
40	0,61		116	0,45	
42	0,35		119	0,31	
43	0,34		120	0,40	
45	0,35				
46	0,33				
48	1,1	ND			
49	0,51	Outlier			
50	0,36				
51	2,0				
52	0,23	Outlier			
53	0,44				
54	3,8				
56	2,0	Outlier,ND			
57	0,19	Outlier,ND			
59	0,38				
61	0,40				
62	0,60				
63	0,68				
64	0,50	ND			

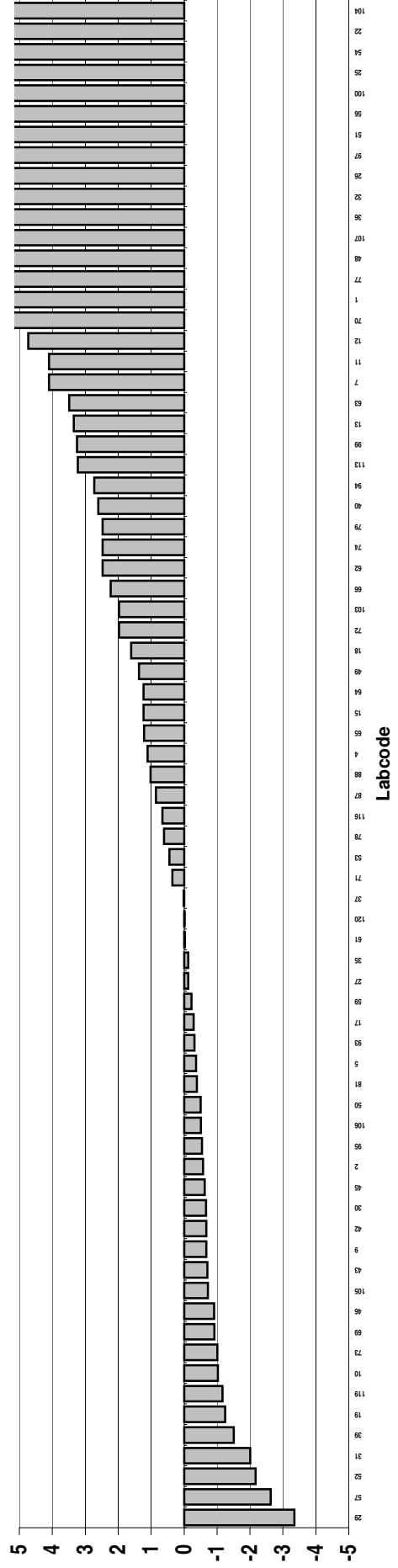
Consensus statistics

Consensus median, pg/g	0,40
Median all values pg/g	0,49
Consensus mean, pg/g	0,46
Standard deviation, pg/g	0,16
Relative standard deviation, %	35
No. of values reported	74
No. of values removed	14
No. of reported non-detects	12

PCB 189



Z-score: PCB 189



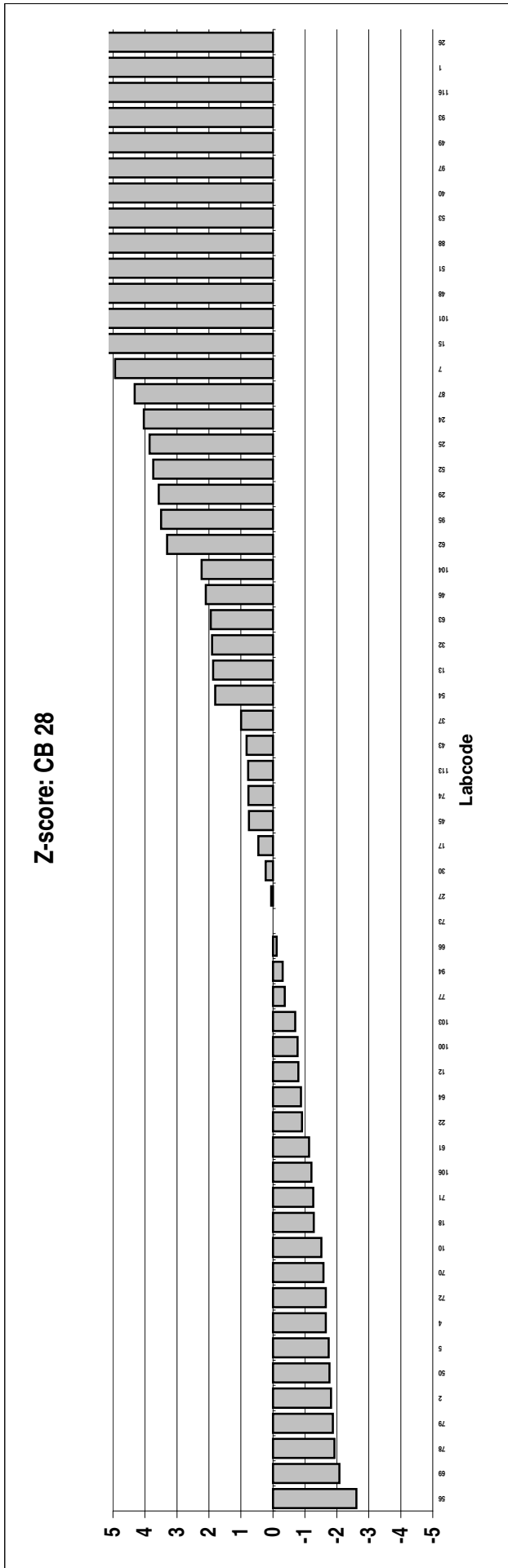
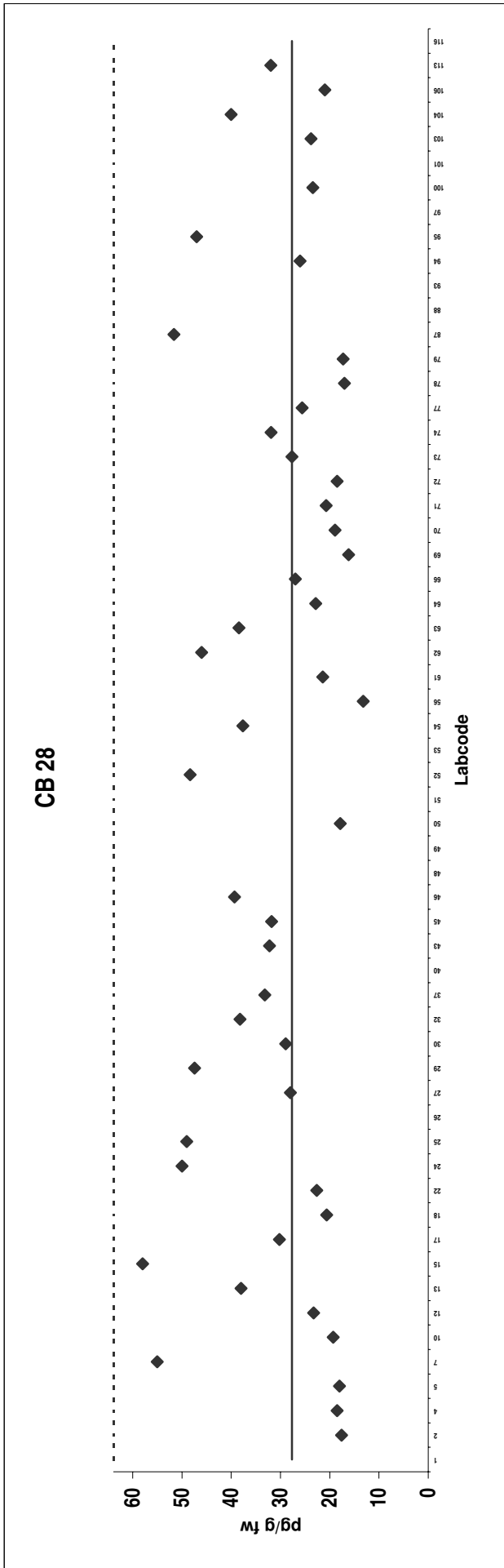
Deer meat

Congener: CB 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	959	Outlier	79	17	
2	18		87	52	Outlier
4	19		88	124	Outlier
5	18	ND	93	212	
7	55		94	26	
10	19		95	47	
12	23		97	153	Outlier
13	38		100	23	
15	58		101	66	Outlier
17	30		103	24	
18	21		104	40	
22	23		106	21	
24	50		113	32	
25	49	ND	116	637	Outlier
26	8705	Outlier			
27	28				
29	47				
30	29				
32	38				
37	33				
40	150	Outlier			
43	32				
45	32				
46	39				
48	70	Outlier			
49	211	Outlier			
50	18				
51	111	Outlier			
52	48				
53	130	Outlier			
54	38				
56	13				
61	21				
62	46				
63	38				
64	23				
66	27				
69	16				
70	19				
71	21				
72	19				
73	28				
74	32				
77	26				
78	17				

Consensus statistics

Consensus median, pg/g	28
Median all values pg/g	32
Consensus mean, pg/g	30
Standard deviation, pg/g	12
Relative standard deviation, %	40
No. of values reported	59
No. of values removed	12
No. of reported non-detects	2



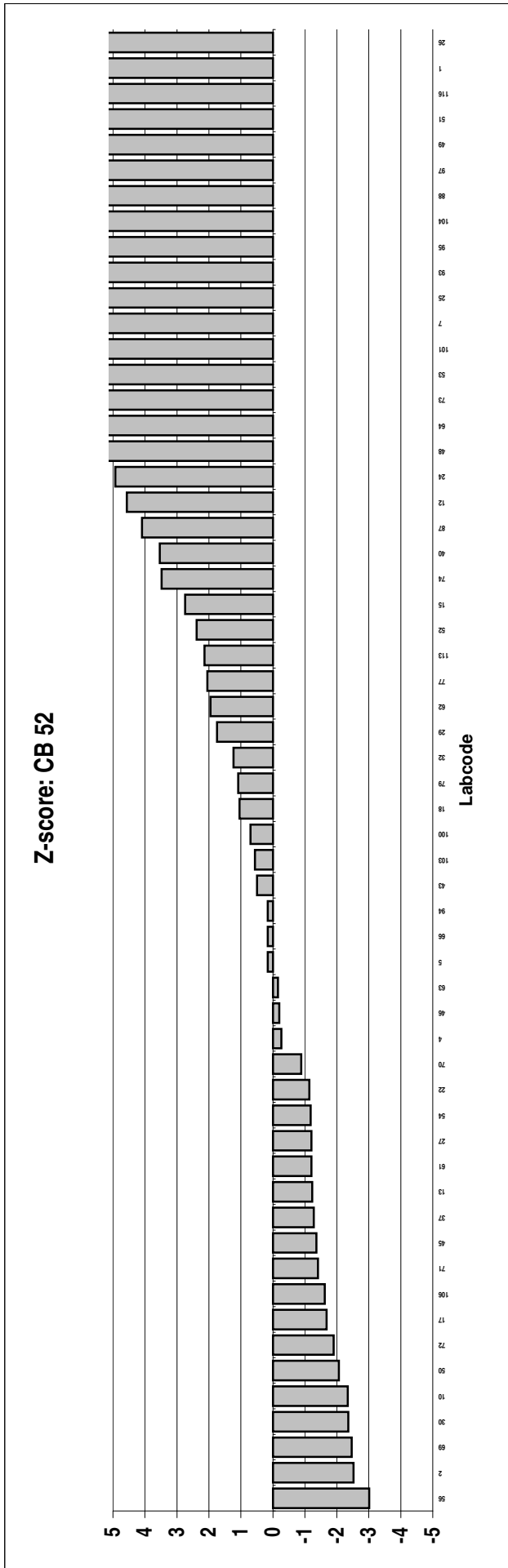
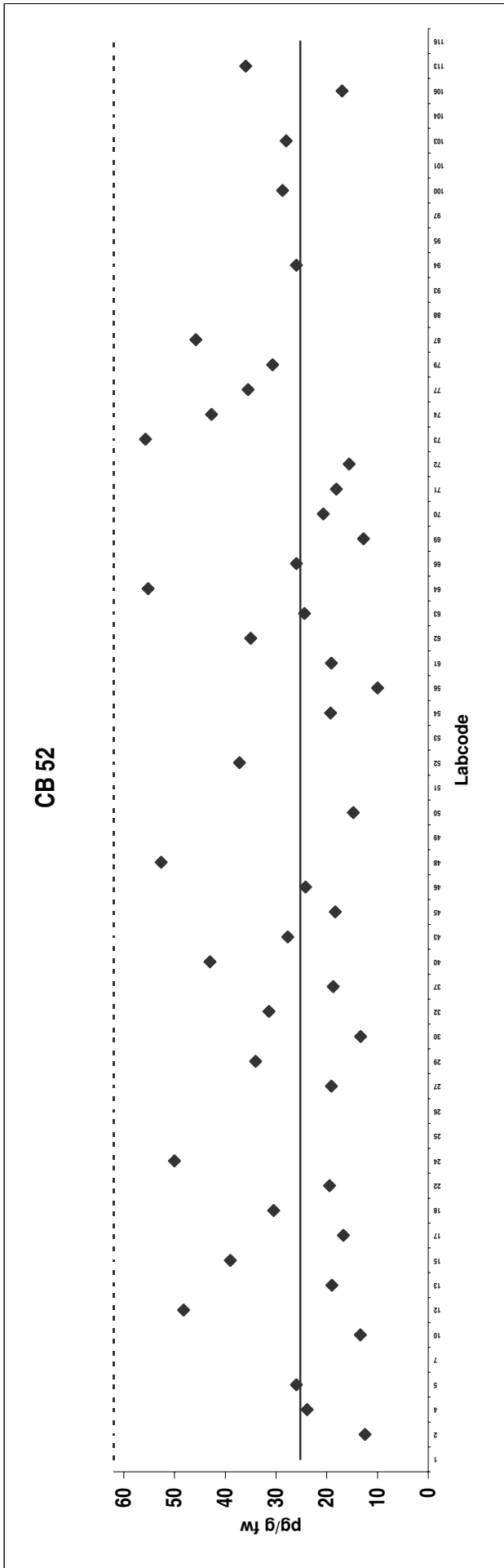
Deer meat

Congener: CB 52

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1890		87	46	
2	12	Outlier	88	328	Outlier
4	24		93	112	Outlier
5	26	ND	94	26	
7	89	Outlier	95	156	Outlier
10	13		97	433	Outlier
12	48		100	29	
13	19		101	81	Outlier
15	39		103	28	
17	17		104	170	Outlier
18	30		106	17	
22	19		113	36	
24	50		116	1086	Outlier
25	95	ND			
26	64186	Outlier			
27	19	Outlier			
29	34				
30	13				
32	31				
37	19				
40	43				
43	28				
45	18				
46	24				
48	53				
49	437	Outlier			
50	15				
51	651	Outlier			
52	37				
53	73	Outlier			
54	19				
56	10				
61	19				
62	35				
63	24				
64	55				
66	26				
69	13				
70	21				
71	18				
72	16				
73	56				
74	43				
77	36				
79	31				

Consensus statistics

Consensus median, pg/g	25
Median all values pg/g	31
Consensus mean, pg/g	28
Standard deviation, pg/g	13
Relative standard deviation, %	45
No. of values reported	58
No. of values removed	14
No. of reported non-detects	2



Deer meat

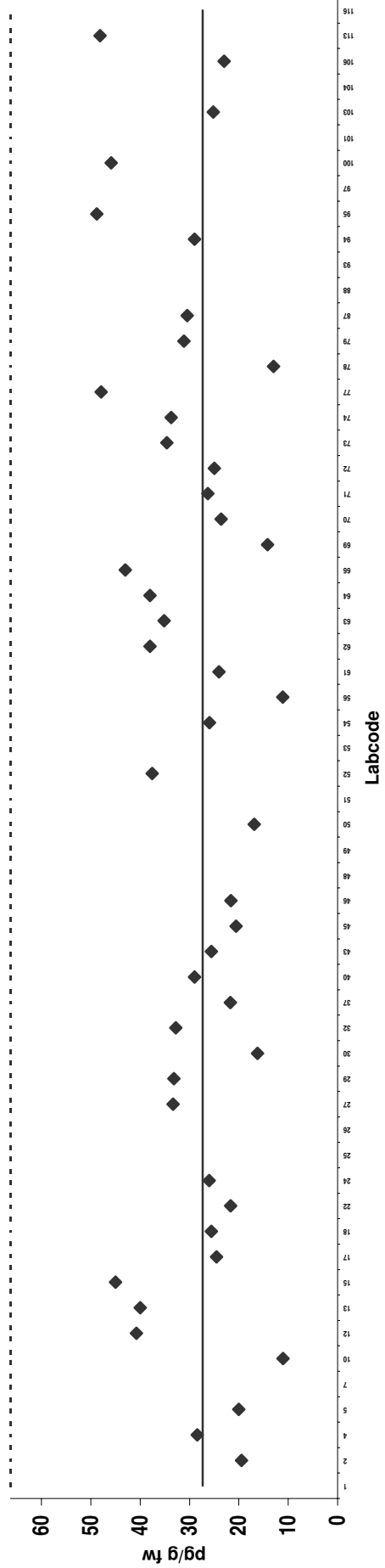
Congener: CB 101

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	599	Outlier	79	31	
2	19		87	31	Outlier
4	28		88	145	Outlier
5	20	ND	93	366	Outlier
7	84	Outlier	94	29	
10	11		95	49	
12	41		97	248	Outlier
13	40		100	46	
15	45		101	115	Outlier
17	25		103	25	
18	26		104	100	Outlier
22	22		106	23	
24	26		113	48	
25	250	Outlier	116	774	Outlier
26	98314	Outlier			
27	33				
29	33				
30	16				
32	33				
37	22				
40	29				
43	26				
45	21				
46	22				
48	107	Outlier			
49	295	Outlier			
50	17				
51	1221	Outlier			
52	38				
53	180	Outlier			
54	26				
56	11				
61	24				
62	38				
63	35				
64	38				
66	43				
69	14				
70	24				
71	26				
72	25				
73	35				
74	34				
77	48				
78	13				

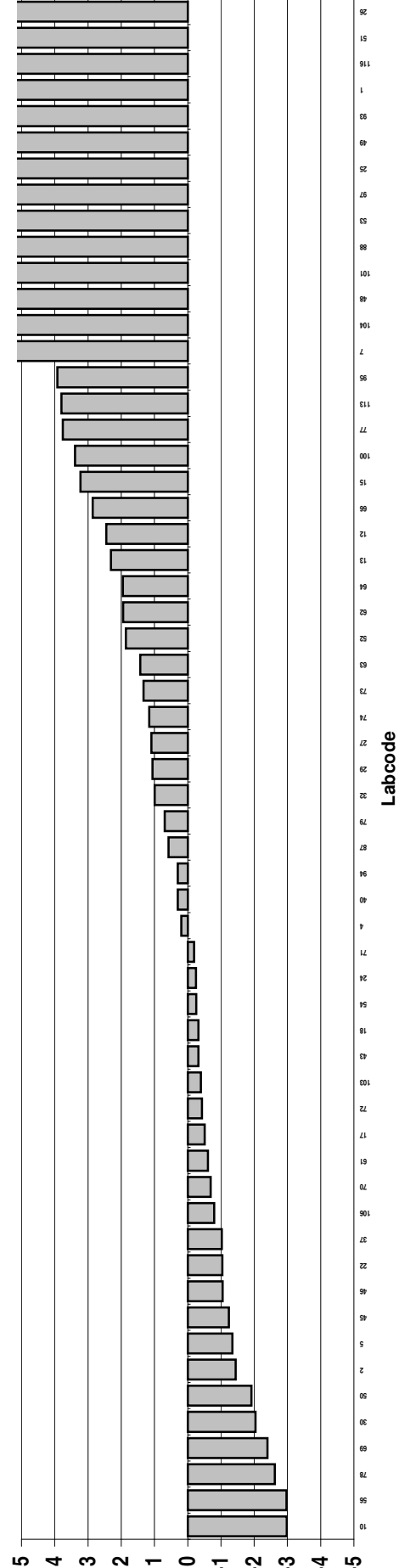
Consensus statistics

Consensus median, pg/g	27
Median all values pg/g	33
Consensus mean, pg/g	29
Standard deviation, pg/g	10
Relative standard deviation, %	35
No. of values reported	59
No. of values removed	14
No. of reported non-detects	1

CB 101



Z-score: CB 101



Deer meat

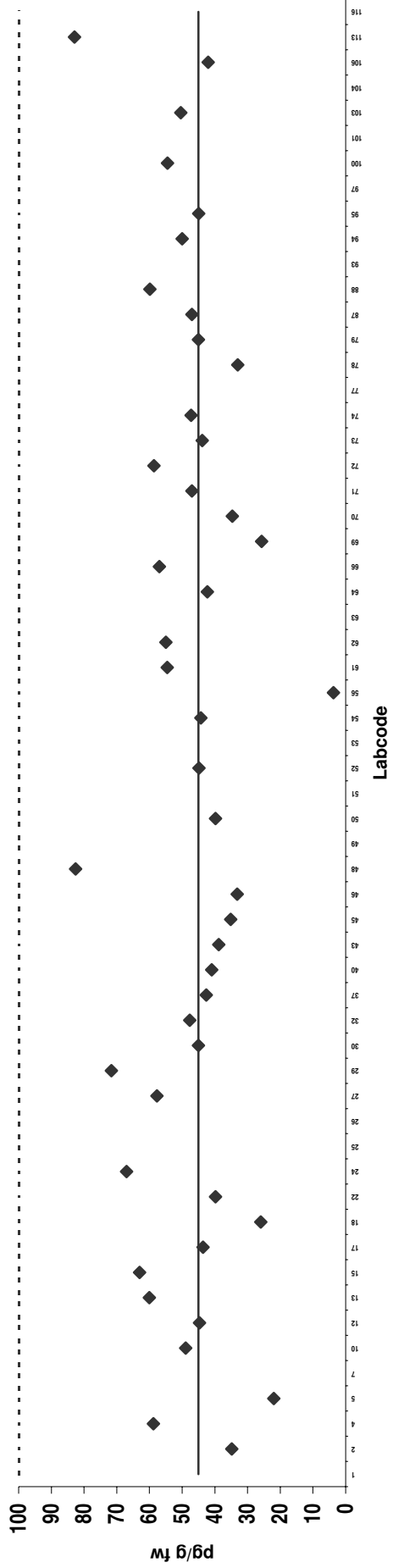
Congener: CB 138

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	409	Outlier	79	45	
2	35		87	47	
4	59		88	60	
5	22		93	367	Outlier
7	104	Outlier	94	50	
10	49		95	45	
12	45		97	225	Outlier
13	60		100	55	
15	63		101	164	Outlier
17	44		103	50	
18	26		104	140	Outlier
22	40		106	42	
24	67		113	83	
25	320	Outlier	116	843	Outlier
26	208971	Outlier			
27	58				
29	72				
30	45				
32	48				
37	43				
40	41				
43	39				
45	35				
46	33				
48	83				
49	160	Outlier			
50	40				
51	1103	Outlier			
52	45				
53	270	Outlier			
54	44				
56	4				
61	55				
62	55				
63	119	Outlier			
64	42				
66	57				
69	26				
70	35				
71	47				
72	59				
73	44				
74	47				
77	112	Outlier			
78	33				

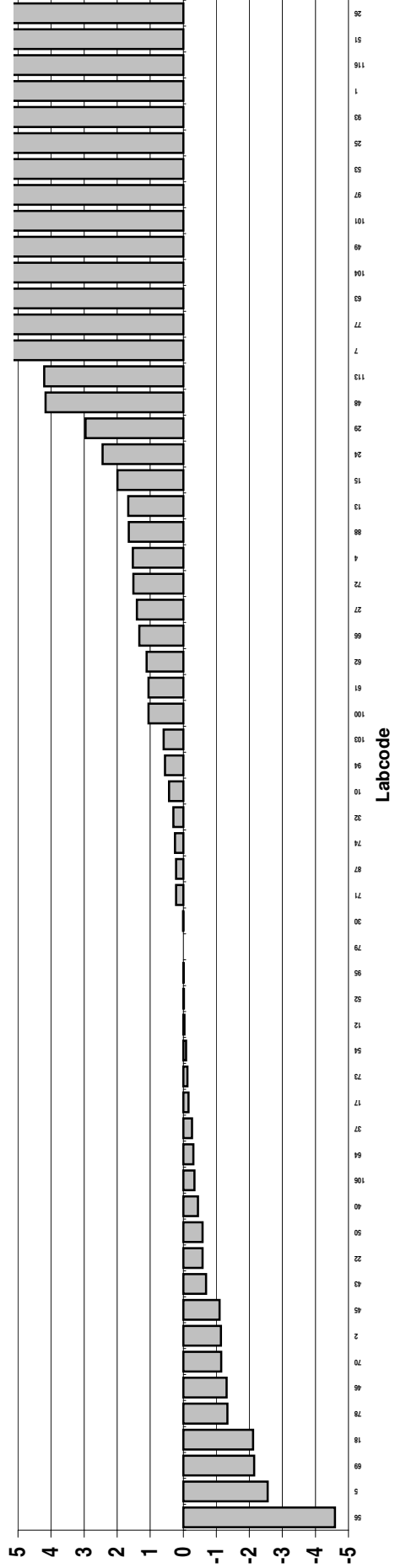
Consensus statistics

Consensus median, pg/g	45
Median all values pg/g	50
Consensus mean, pg/g	47
Standard deviation, pg/g	15
Relative standard deviation, %	31
No. of values reported	59
No. of values removed	14
No. of reported non-detects	0

CB 138



Z-score: CB 138



Deer meat

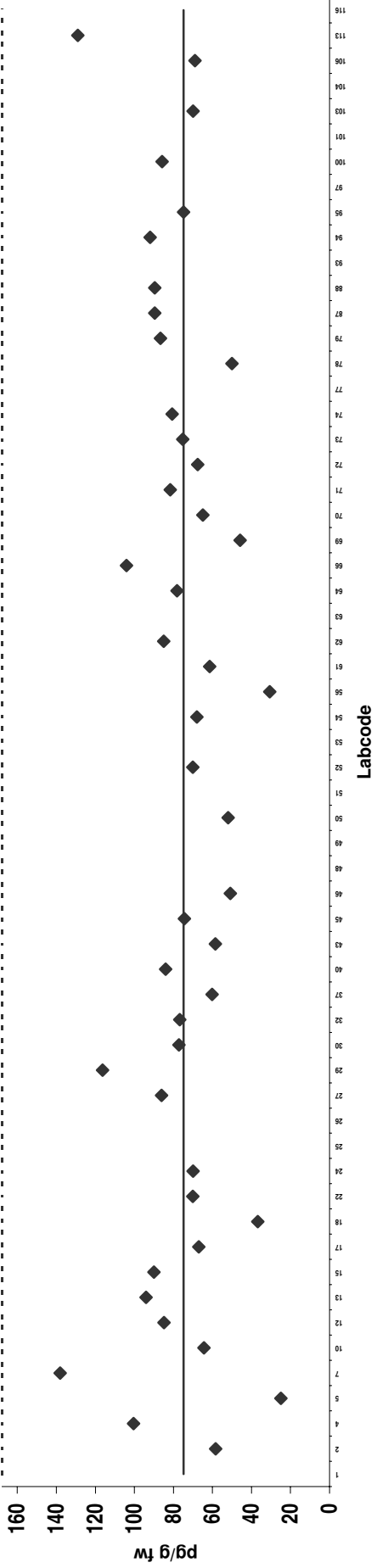
Congener: CB 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	778	Outlier	79	87	
2	58		87	90	
4	100		88	90	
5	25		93	382	Outlier
7	138		94	92	
10	64		95	75	
12	85		97	445	Outlier
13	94		100	86	
15	90		101	184	Outlier
17	67		103	70	
18	37		104	200	Outlier
22	70		106	69	
24	70		113	129	
25	270	Outlier	116	415	Outlier
26	479374	Outlier			
27	86				
29	116				
30	77				
32	77				
37	60				
40	84				
43	59				
45	74				
46	51				
48	217	Outlier			
49	316	Outlier			
50	52				
51	2671	Outlier			
52	70				
53	540	Outlier			
54	68				
56	31				
61	61				
62	85				
63	168				
64	78	Outlier			
66	104				
69	46				
70	65				
71	82				
72	68				
73	75				
74	81				
77	213	Outlier			
78	50				

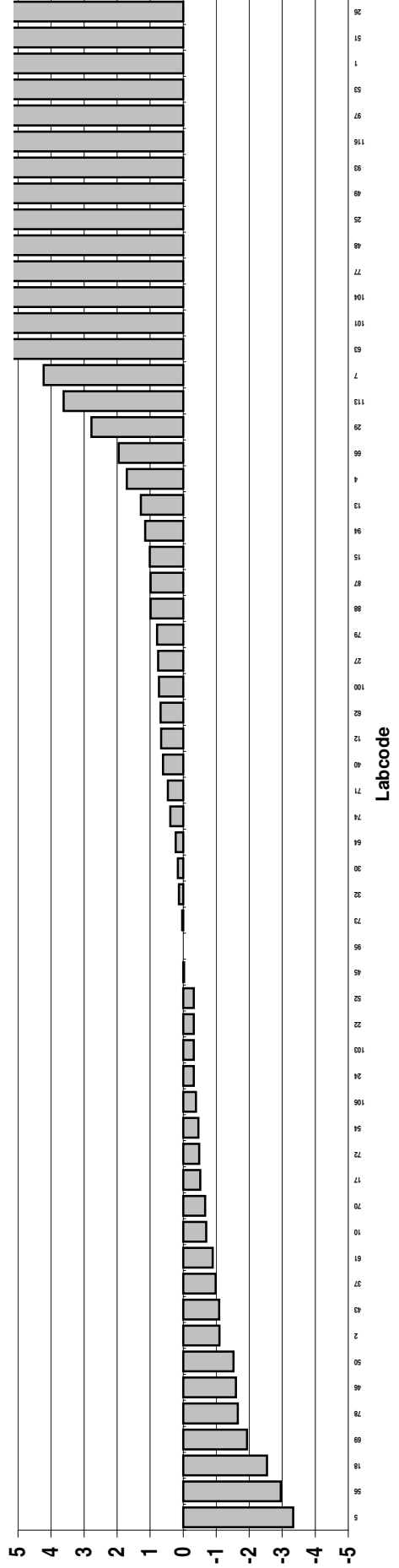
Consensus statistics

Consensus median, pg/g	75
Median all values pg/g	84
Consensus mean, pg/g	75
Standard deviation, pg/g	22
Relative standard deviation, %	30
No. of values reported	59
No. of values removed	14
No. of reported non-detects	0

CB 153



Z-score: CB 153



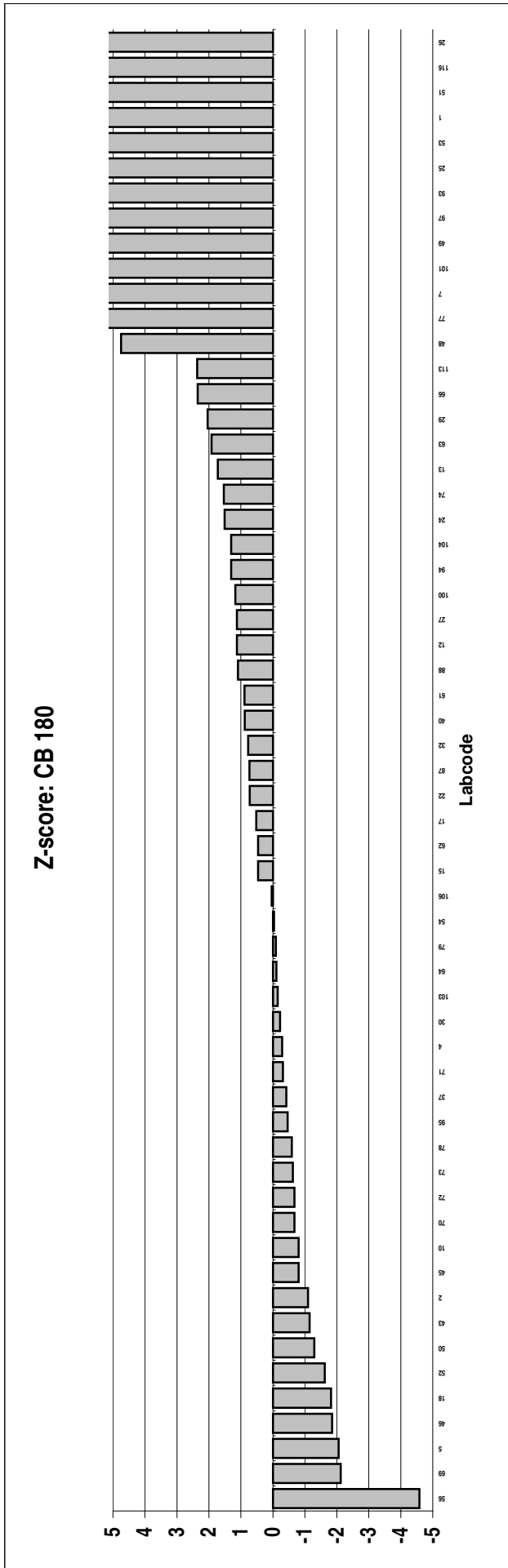
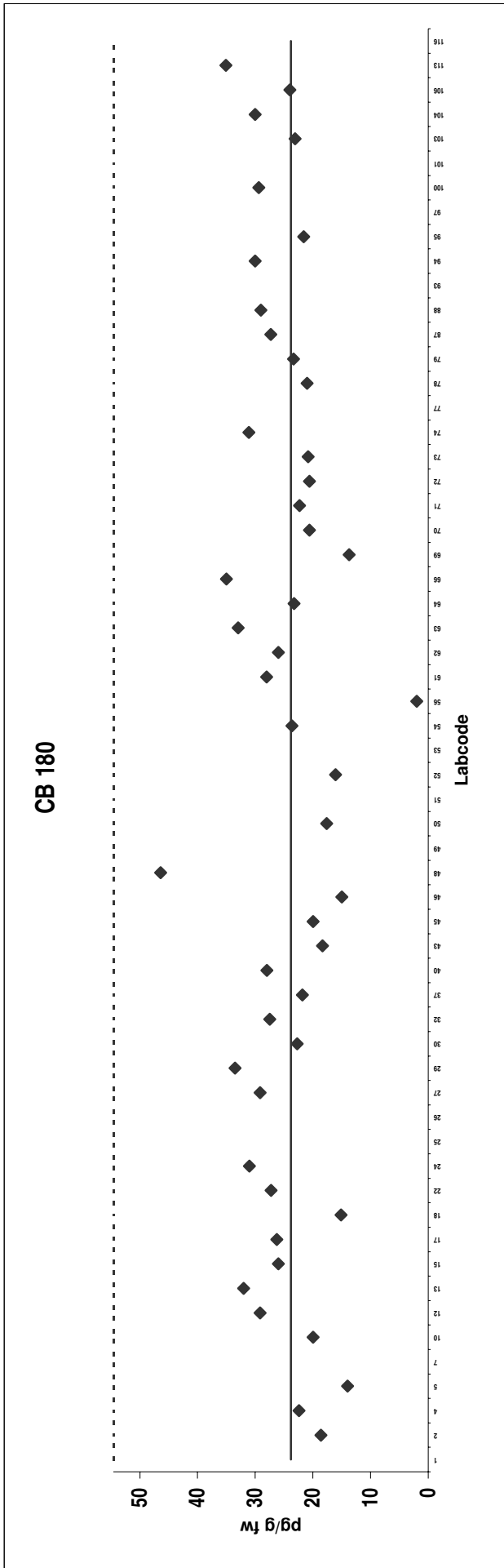
Deer meat

Congener: CB 180

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	155	Outlier	79	23	
2	19		87	27	
4	22		88	29	
5	14		93	113	Outlier
7	66	Outlier	94	30	
10	20		95	22	
12	29		97	113	Outlier
13	32		100	29	
15	26		101	76	Outlier
17	26		103	23	
18	15		104	30	
22	27		106	24	
24	31		113	35	
25	130	Outlier	116	300	Outlier,ND
26	118	Outlier			
27	29				
29	34				
30	23				
32	28				
37	22				
40	28				
43	18				
45	20				
46	15				
48	46				
49	82	Outlier			
50	18				
51	277	Outlier			
52	16				
53	140	Outlier			
54	24				
56	2.0	ND			
61	28				
62	26				
63	33				
64	23				
66	35				
69	14				
70	21				
71	22				
72	21				
73	21				
74	31				
77	66	Outlier			
78	21				

Consensus statistics

Consensus median, pg/g	24
Median all values pg/g	27
Consensus mean, pg/g	25
Standard deviation, pg/g	7.3
Relative standard deviation, %	30
No. of values reported	59
No. of values removed	12
No. of reported non-detects	2



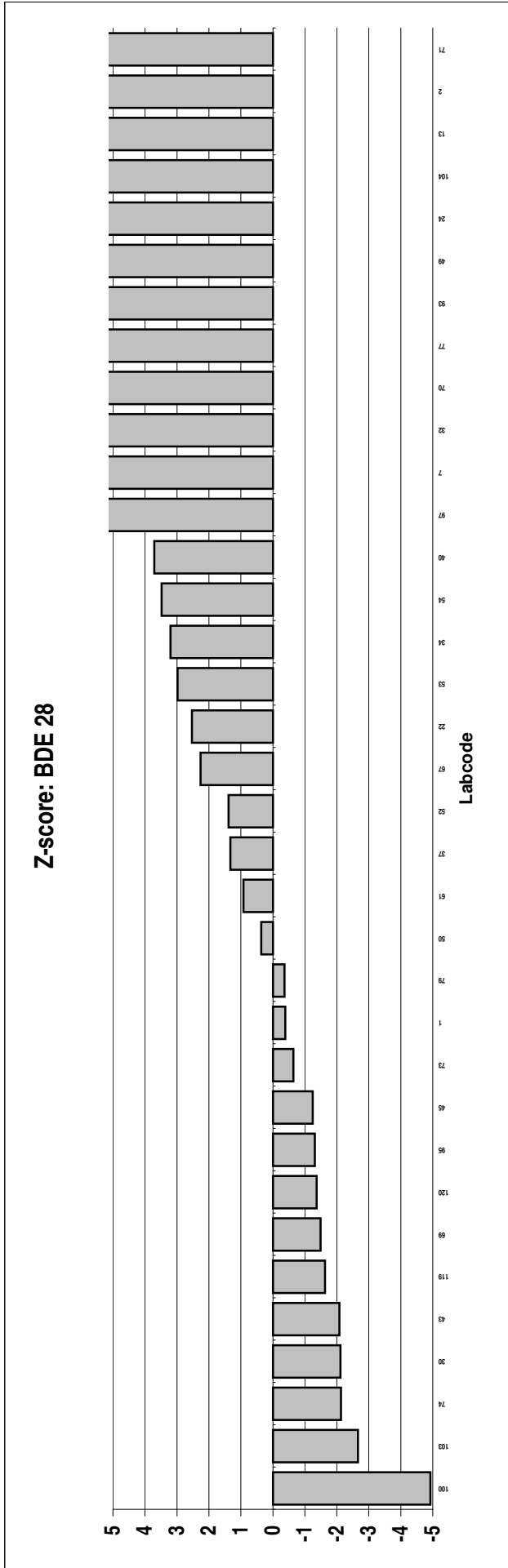
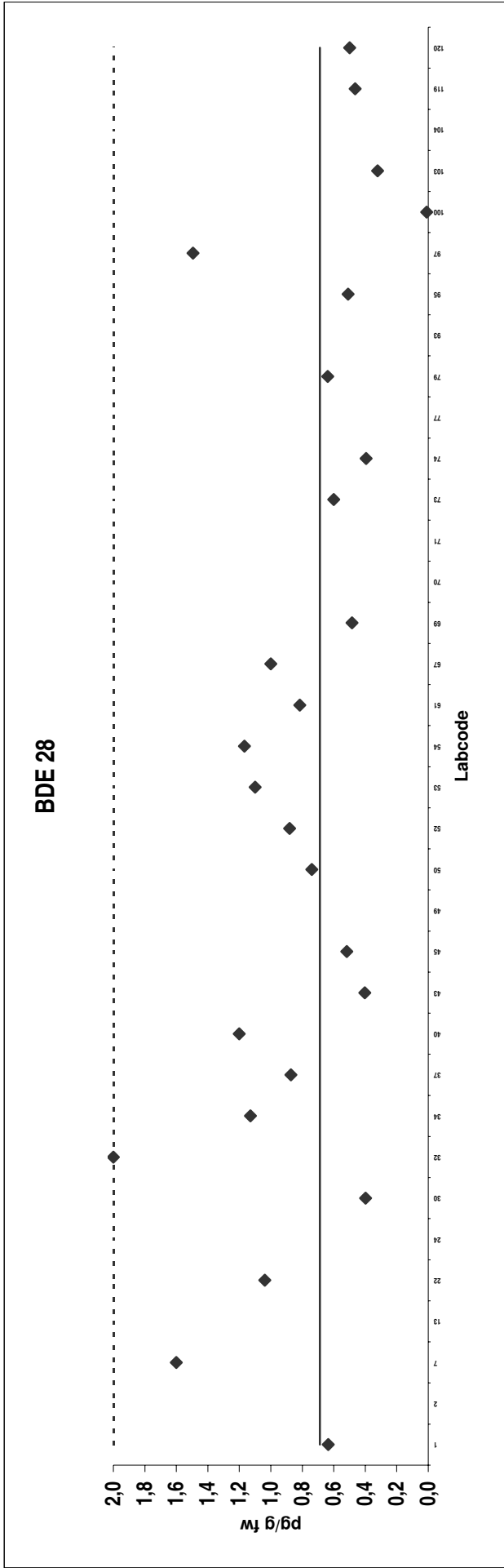
Deer meat

Congener: BDE 28

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	0,63	ND			
2	25	Outlier,ND			
7	1,6				
13	11	Outlier,ND			
22	1,0				
24	8,0	Outlier,ND			
30	0,40				
32	2,0	ND			
34	1,1				
37	0,87				
40	1,2				
43	0,40				
45	0,52				
49	4,5	Outlier			
50	0,74				
52	0,88				
53	1,1				
54	1,2				
61	0,82				
67	1,0	ND			
69	0,48				
70	2,5	Outlier,ND			
71	30	Outlier			
73	0,60				
74	0,40				
77	2,6	Outlier,ND			
79	0,64				
93	2,7	Outlier			
95	0,51				
97	1,5				
100	0,010	ND			
103	0,32				
104	10	Outlier,ND			
119	0,46				
120	0,50				

Consensus statistics

Consensus median, pg/g	0,69
Median all values pg/g	1,0
Consensus mean, pg/g	0,80
Standard deviation, pg/g	0,45
Relative standard deviation, %	56
No. of values reported	35
No. of values removed	9
No. of reported non-detects	10

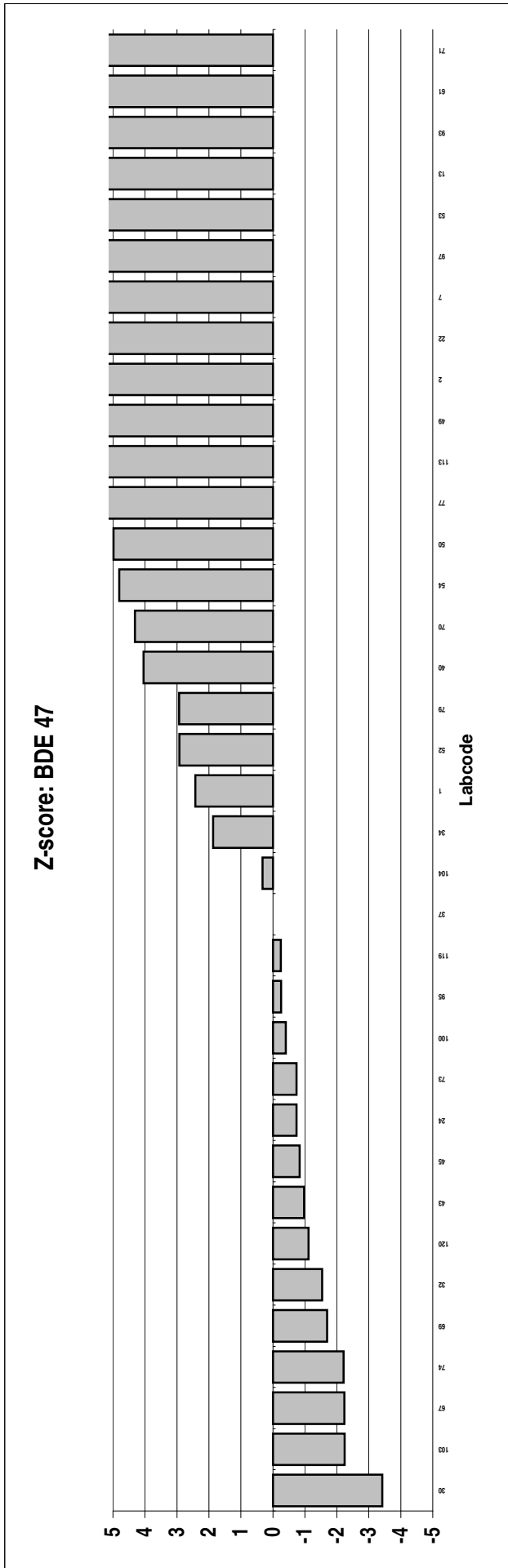
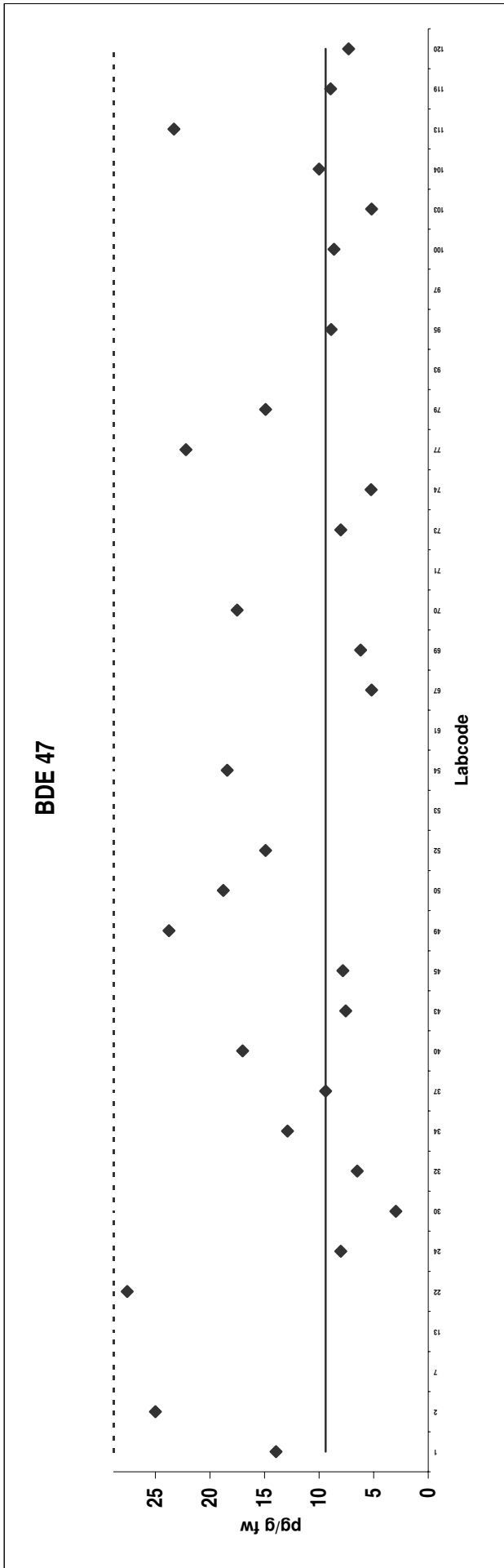


Deer meat
Congener: BDE 47

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	14				
2	25	ND			
7	31	Outlier			
13	33	Outlier,ND			
22	28				
24	8,0				
30	3,0	ND			
32	6,5				
34	13				
37	9,4				
40	17				
43	7,6				
45	7,8				
49	24				
50	19				
52	15				
53	31	Outlier			
54	18				
61	57	Outlier			
67	5,2				
69	6,2				
70	18				
71	915	Outlier			
73	8,0				
74	5,2				
77	22				
79	15				
93	33	Outlier			
95	8,9				
97	31	Outlier			
100	8,6				
103	5,2				
104	10				
113	23				
119	8,9				
120	7,3				

Consensus statistics

Consensus median, pg/g	9,4
Median all values pg/g	14
Consensus mean, pg/g	13
Standard deviation, pg/g	6,9
Relative standard deviation, %	55
No. of values reported	36
No. of values removed	7
No. of reported non-detects	3

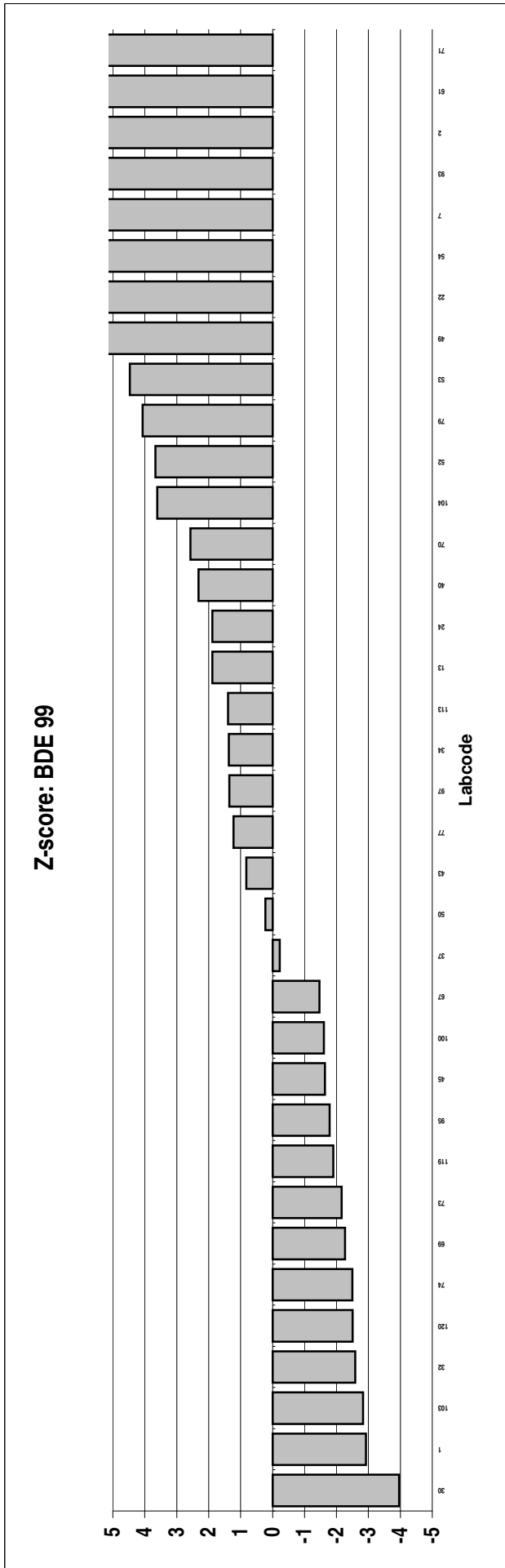
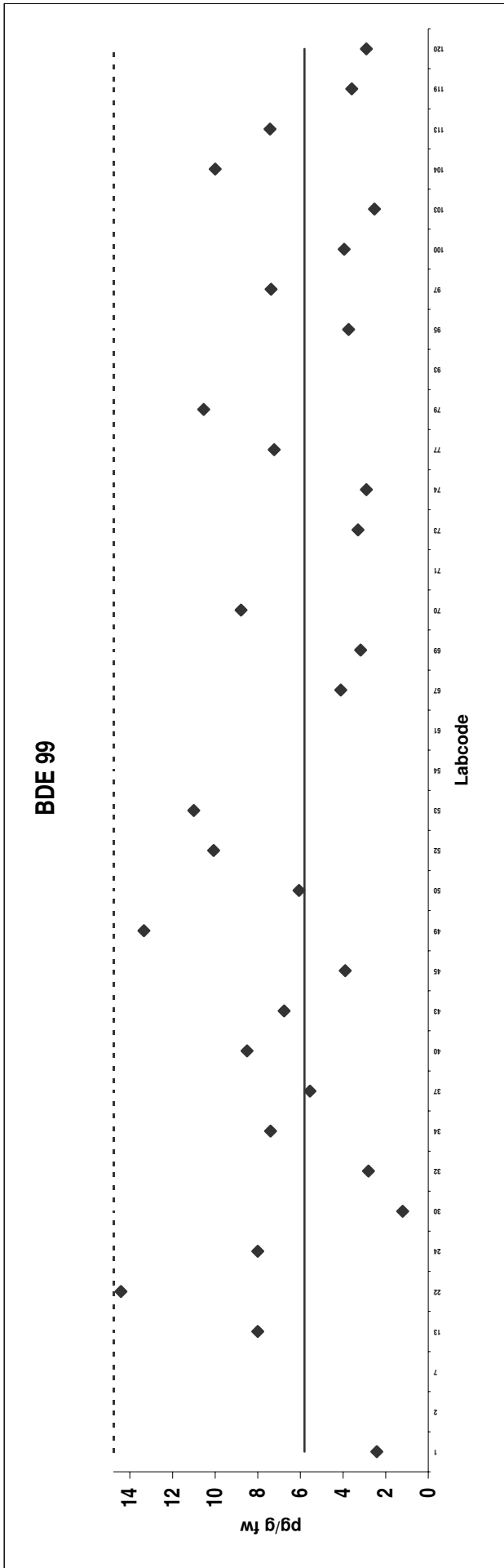


Deer meat
Congener: BDE 99

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	2,4				
2	25	Outlier,ND			
7	18	Outlier			
13	8,0	ND			
22	14				
24	8,0				
30	1,2				
32	2,8				
34	7,4				
37	5,5				
40	8,5				
43	6,8				
45	3,9				
49	13				
50	6,1				
52	10				
53	11				
54	15	Outlier			
61	93	Outlier			
67	4,1				
69	3,2				
70	8,8				
71	271	Outlier			
73	3,3				
74	2,9				
77	7,2				
79	11				
93	19	Outlier			
95	3,7				
97	7,4				
100	3,9				
103	2,5				
104	10	ND			
113	7,4				
119	3,6				
120	2,9				

Consensus statistics

Consensus median, pg/g	5,8
Median all values pg/g	7,4
Consensus mean, pg/g	6,4
Standard deviation, pg/g	3,4
Relative standard deviation, %	54
No. of values reported	36
No. of values removed	6
No. of reported non-detects	3



Deer meat

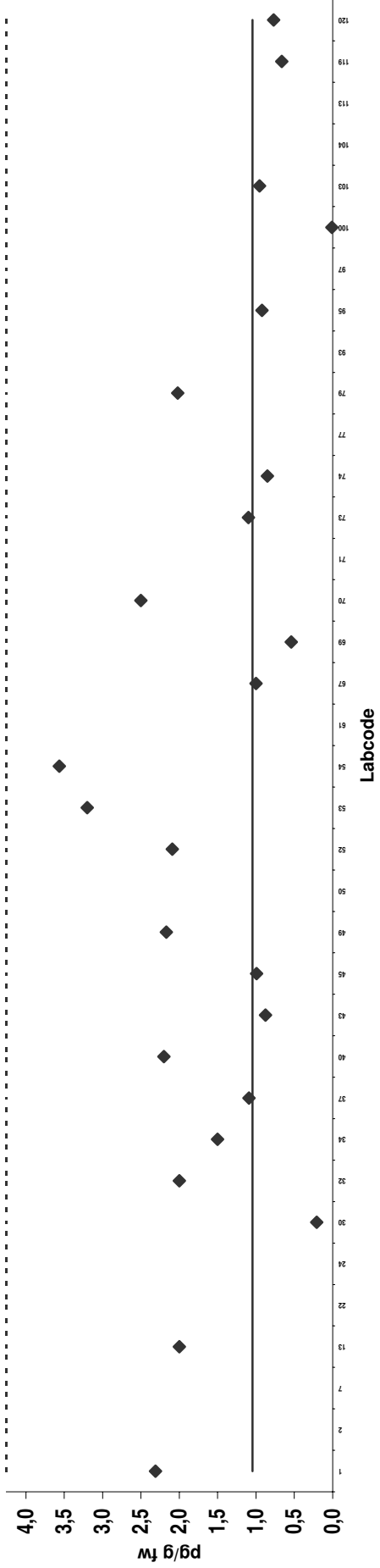
Congener: BDE 100

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	2,3				
2	25	Outlier,ND			
7	4,3	Outlier			
13	2,0	ND			
22	4,6	Outlier			
24	8,0	Outlier,ND			
30	0,21				
32	2,0	ND			
34	1,5				
37	1,1				
40	2,2				
43	0,88				
45	0,99				
49	2,2				
50	5,0	Outlier			
52	2,1				
53	3,2				
54	3,6				
61	18	Outlier			
67					
69	0,54				
70	2,5	ND			
71	62	Outlier			
73	1,1				
74	0,85				
77	5,9	Outlier			
79	2,0				
93	7,2	Outlier			
95	0,92				
97	7,1	Outlier			
100	0,010	ND			
103	0,95				
104	10,0	Outlier,ND			
113	4,3	Outlier,ND			
119	0,66				
120	0,77				

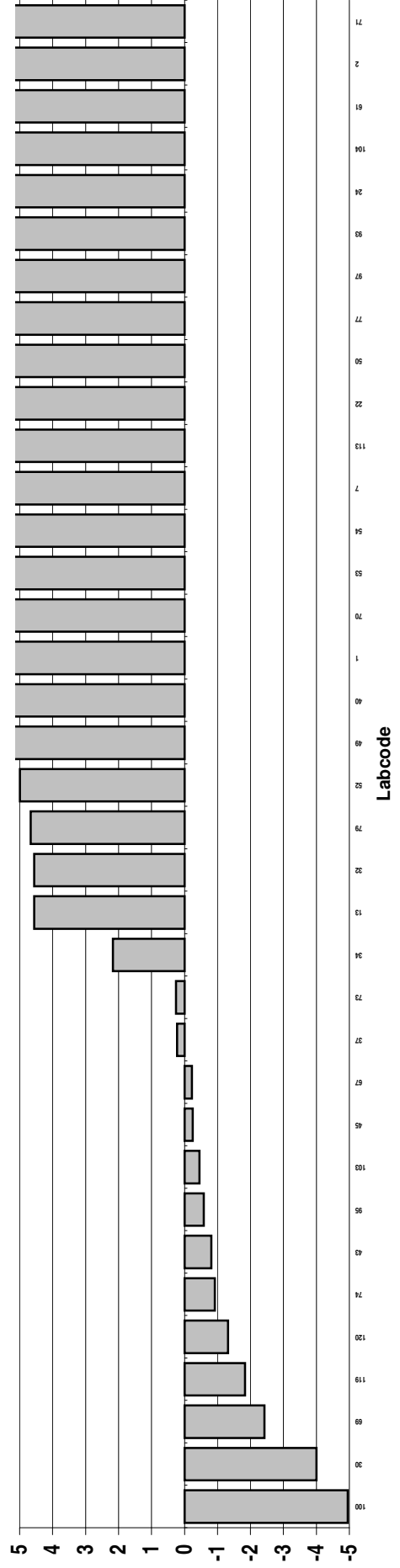
Consensus statistics

Consensus median, pg/g	1,0
Median all values pg/g	2,1
Consensus mean, pg/g	1,5
Standard deviation, pg/g	0,91
Relative standard deviation, %	62
No. of values reported	36
No. of values removed	12
No. of reported non-detects	8

BDE 100



Z-score: BDE 100

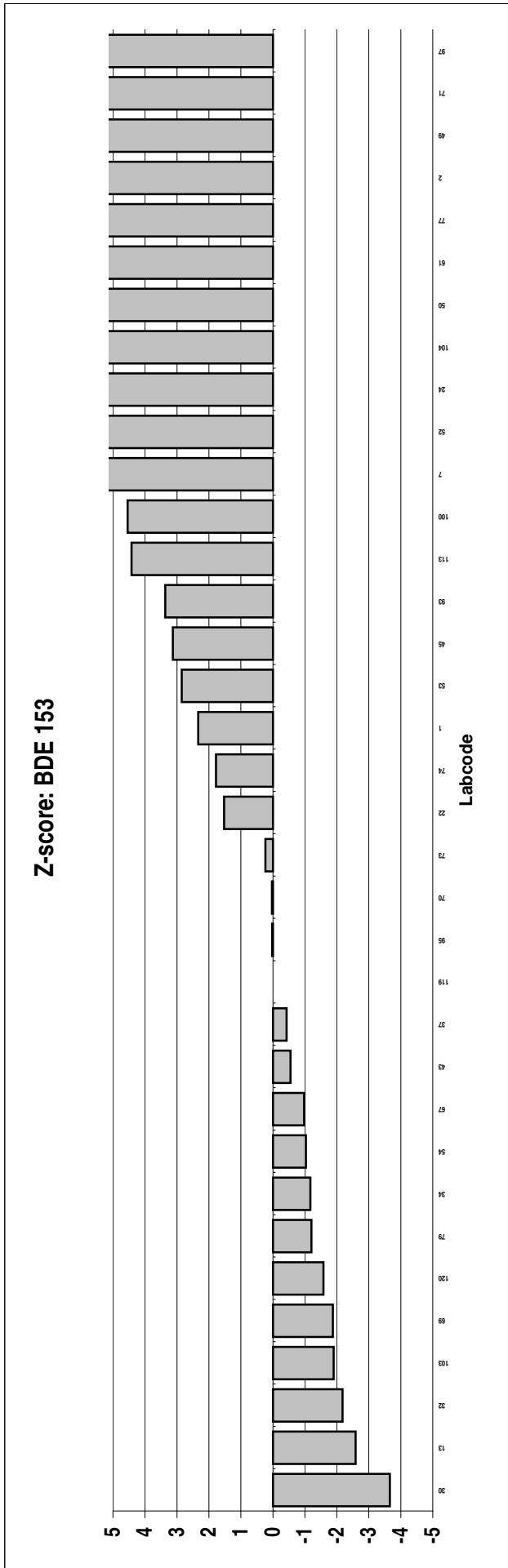
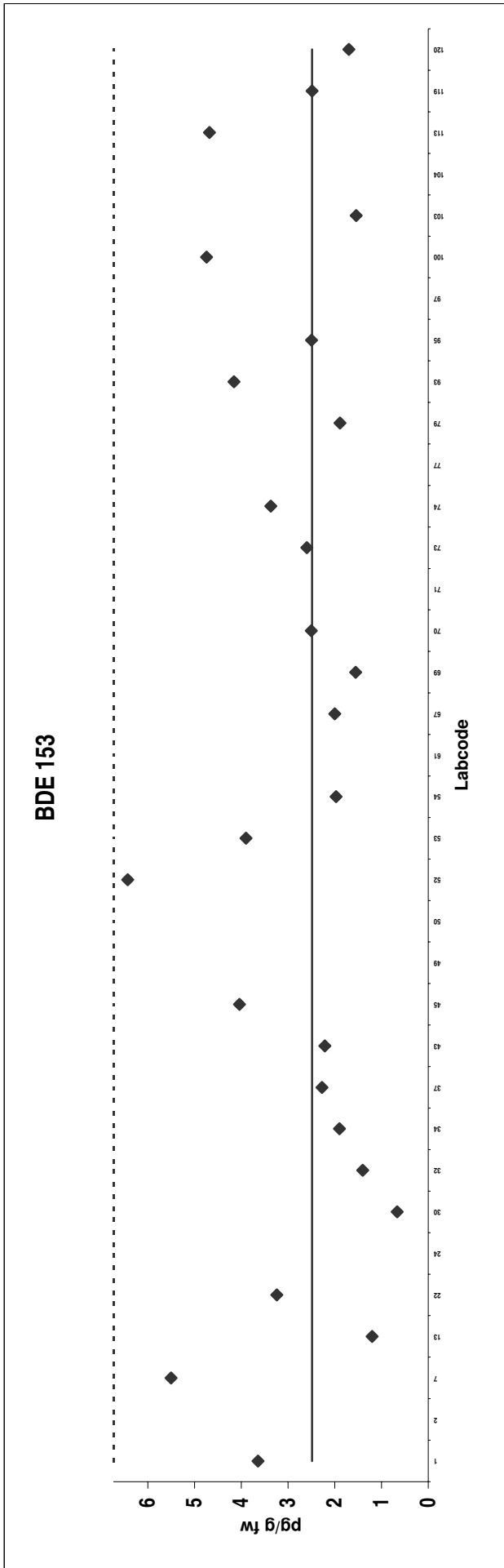


Deer meat
Congener: BDE 153

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	4	ND			
2	25	Outlier,ND			
7	5,5				
13	1,2				
22	3,2				
24	8,0	Outlier,ND			
30	0,67				
32	1,4				
34	1,9				
37	2,3				
43	2,2				
45	4,0				
49	31	Outlier			
50	11	Outlier			
52	6,4				
53	3,9				
54	2,0				
61	15	Outlier			
67	2,0	ND			
69	1,6				
70	2,5	ND			
71	34	Outlier,ND			
73	2,6				
74	3,4				
77	16	Outlier,ND			
79	1,9				
93	4,2				
95	2,5				
97	36	Outlier			
100	4,7				
103	1,5				
104	10	Outlier,ND			
113	4,7				
119	2,5				
120	1,7				

Consensus statistics

Consensus median, pg/g	2,5
Median all values pg/g	3,4
Consensus mean, pg/g	2,8
Standard deviation, pg/g	1,4
Relative standard deviation, %	50
No. of values reported	35
No. of values removed	9
No. of reported non-detects	8



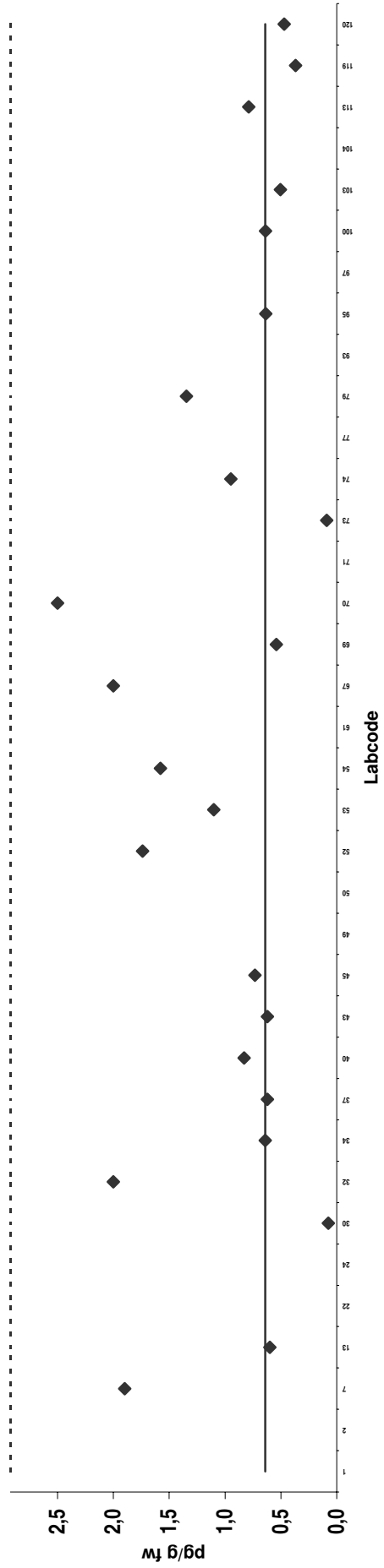
Deer meat
Congener: BDE 154

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	6,1	Outlier			
2	25	Outlier,ND			
7	1,9				
13	0,60	ND			
22	4,1	Outlier,ND			
24	8,0	Outlier,ND			
30	0,075				
32	2,0	ND			
34	0,64				
37	0,62				
40	0,83				
43	0,62				
45	0,73				
49	4,6	Outlier			
50	3,2	Outlier			
52	1,7				
53	1,1				
54	1,6				
61	11				
67	2,0	Outlier			
69	0,54	ND			
70	2,5	ND			
71	44	Outlier,ND			
73	0,090	ND			
74	0,95				
77	11	Outlier,ND			
79	1,3				
93	7,9	Outlier			
95	0,64				
97	11	Outlier			
100	0,64				
103	0,50				
104	10				
113	0,79	Outlier,ND			
119	0,37				
120	0,47				

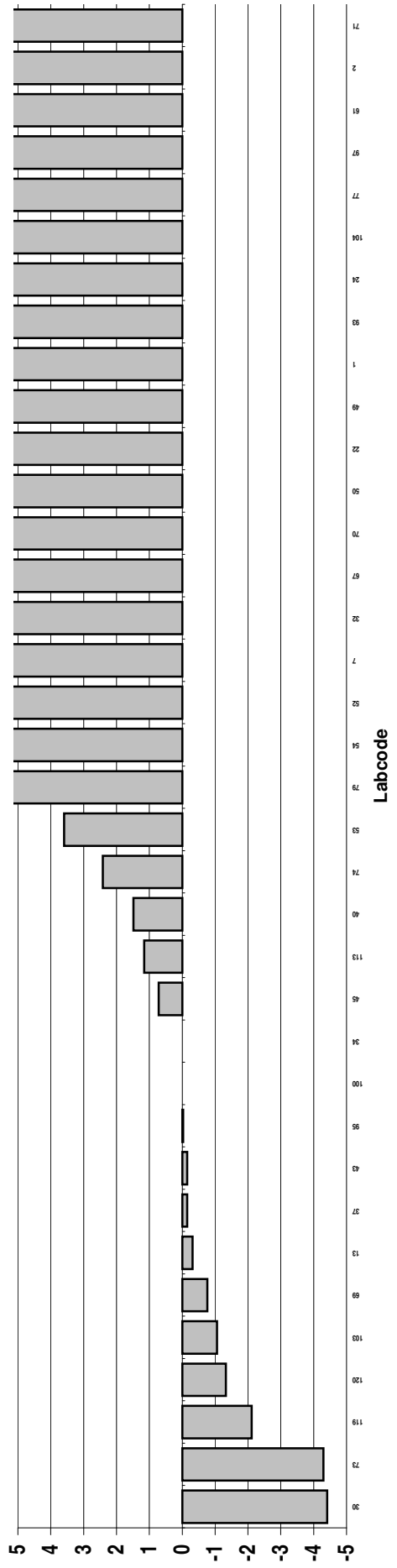
Consensus statistics

Consensus median, pg/g	0,64
Median all values pg/g	1,5
Consensus mean, pg/g	0,97
Standard deviation, pg/g	0,65
Relative standard deviation, %	68
No. of values reported	36
No. of values removed	12
No. of reported non-detects	11

BDE 154



Z-score: BDE 154



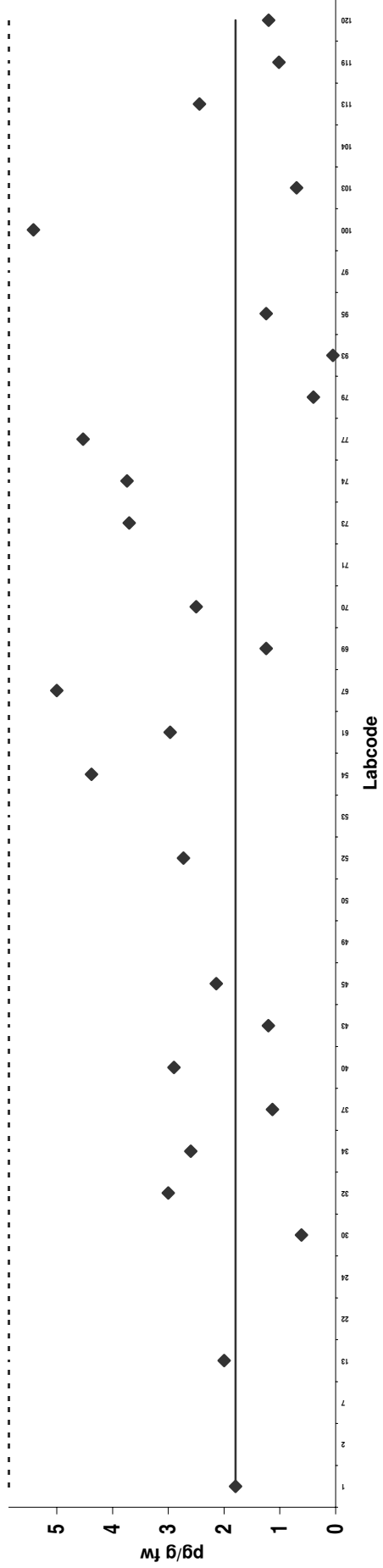
Deer meat
Congener: BDE 183

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	1,8				
2	25	Outlier,ND			
7	7,8	Outlier			
13	2,0	ND			
22	6,1	Outlier,ND			
24	8,0	Outlier,ND			
30	0,61				
32	3,0	ND			
34	2,6				
37	1,1				
40	2,9				
43	1,2				
45	2,1				
49	8,6	Outlier			
50	130	Outlier			
52	2,7				
53	6,9	Outlier			
54	4,4	ND			
61	3,0	ND			
67	5,0	ND			
69	1,2				
70	2,5	ND			
71	15	Outlier,ND			
73	3,7				
74	3,7				
77	4,5	ND			
79	0,40				
93	0,050	ND			
95	1,2				
97	160	Outlier			
100	5,4				
103	0,70				
104	10	Outlier,ND			
113	2,4				
119	1,0				
120	1,2				

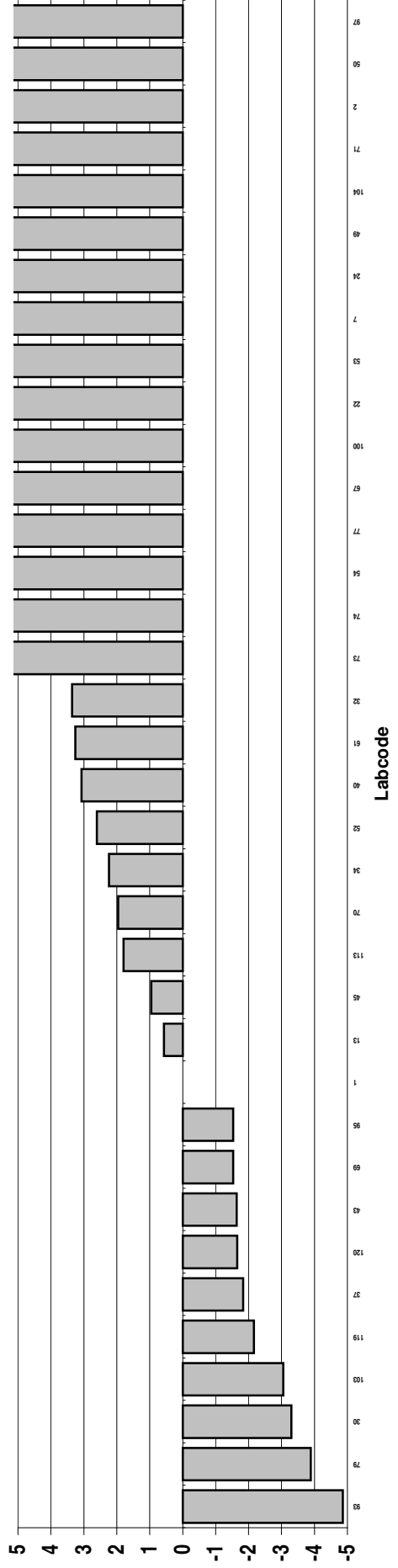
Consensus statistics

Consensus median, pg/g	1,8
Median all values pg/g	2,9
Consensus mean, pg/g	2,3
Standard deviation, pg/g	1,5
Relative standard deviation, %	63
No. of values reported	36
No. of values removed	10
No. of reported non-detects	12

BDE 183



Z-score: BDE 183

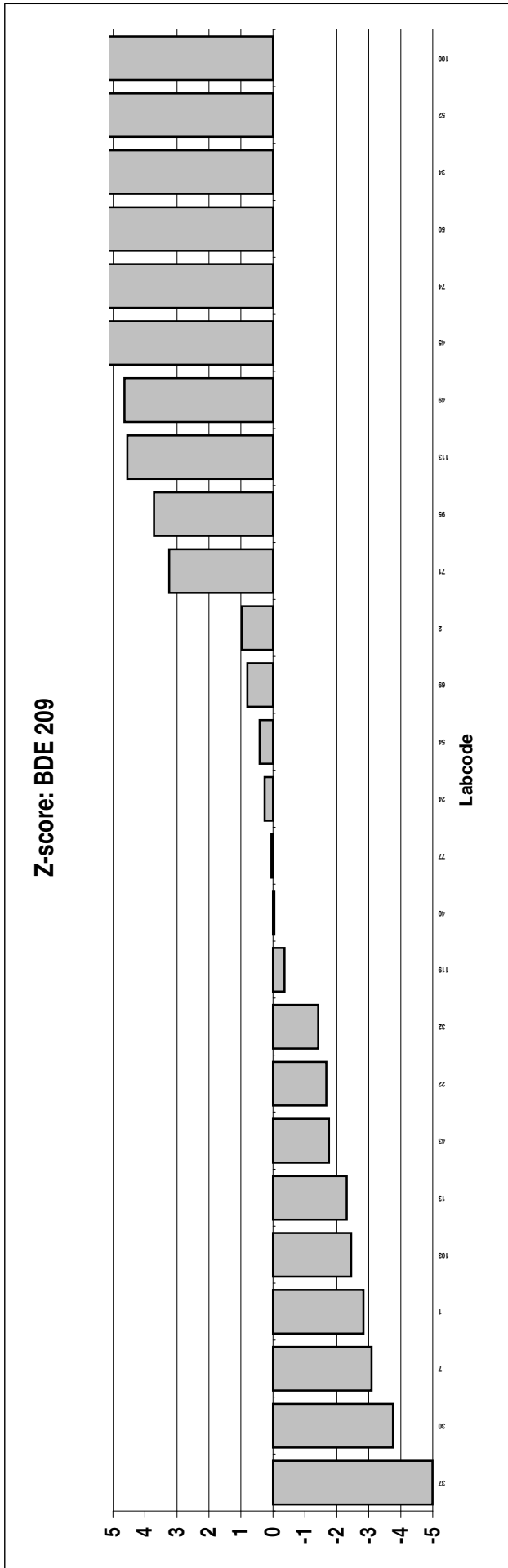
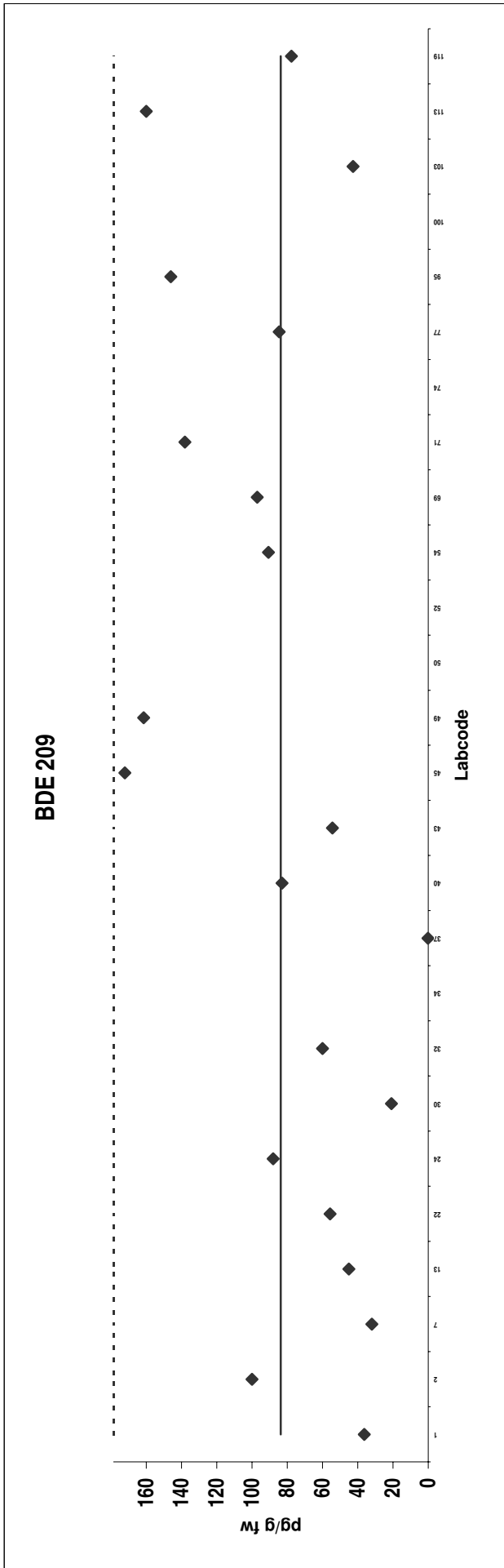


Deer meat
Congener: BDE 209

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
1	36				
2	100	ND			
7	32				
13	45	ND			
22	56	ND			
24	88				
30	21				
32	60	ND			
34	278	Outlier			
37	0,13				
40	83				
43	54				
45	172				
49	161				
50	226	Outlier			
52	2185	Outlier			
54	91				
69	97				
71	138	ND			
74	193	Outlier			
77	85				
95	146				
100	7080	Outlier			
103	43				
113	160				
119	78				

Consensus statistics

Consensus median, pg/g	84
Median all values pg/g	89
Consensus mean, pg/g	83
Standard deviation, pg/g	49
Relative standard deviation, %	59
No. of values reported	26
No. of values removed	5
No. of reported non-detects	5

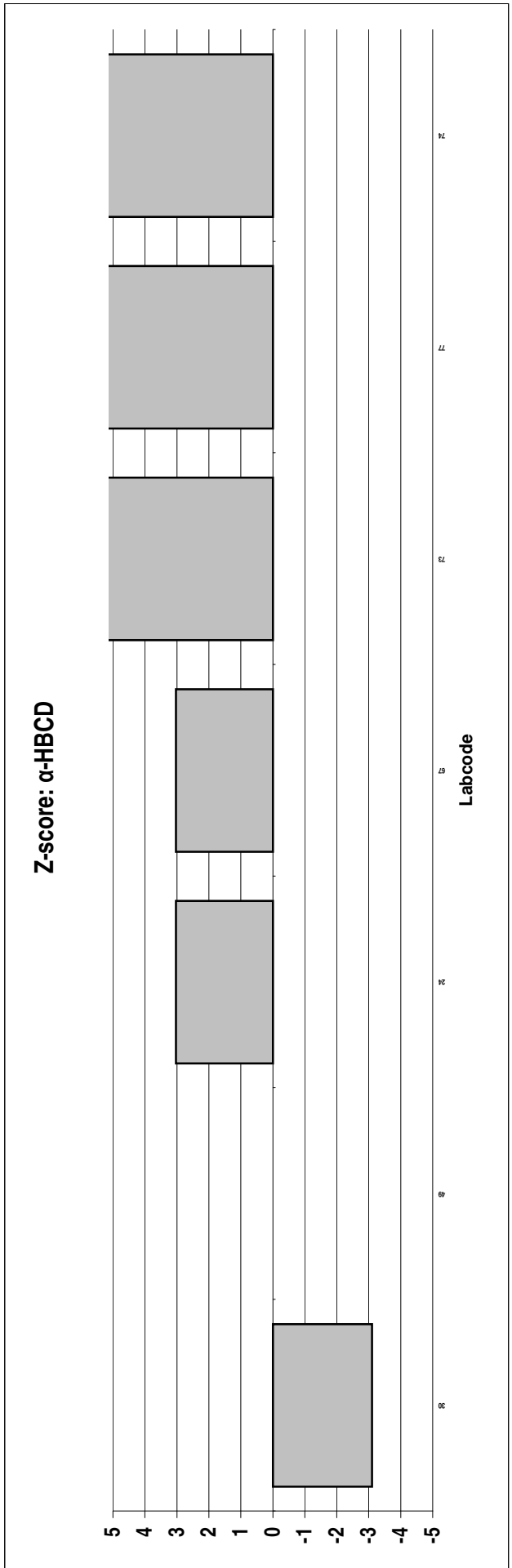
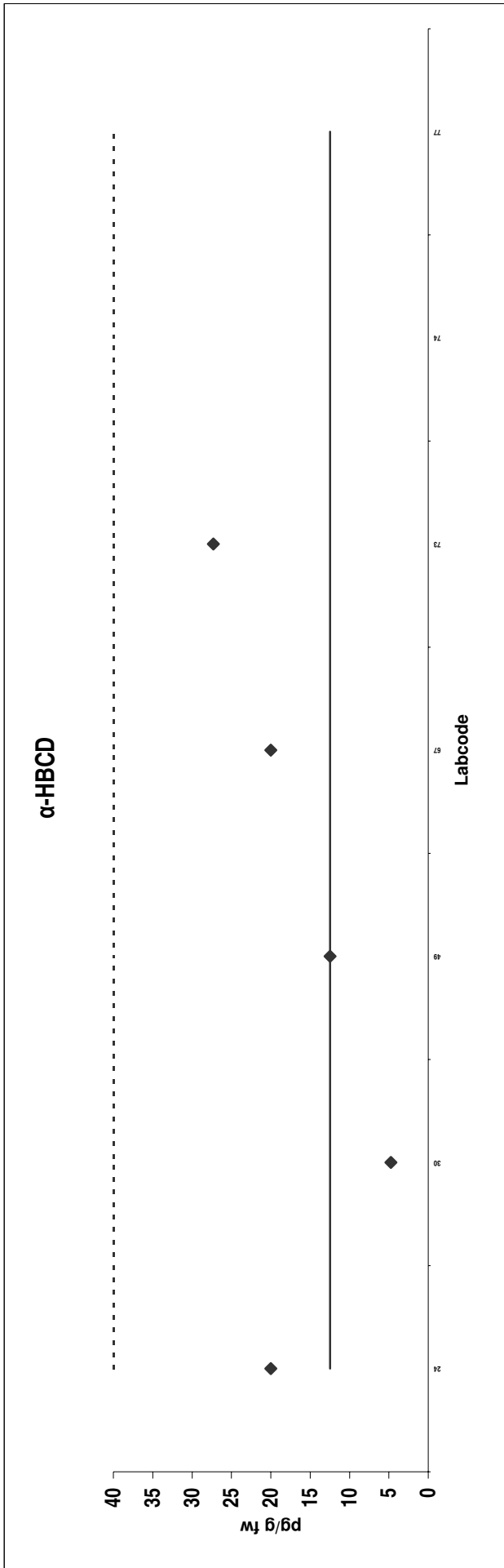


Deer meat
Congener: α -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
24	20	ND			
30	4,7				
49	12				
67	20				
73	27	ND			
74	121	Outlier			
77	78	Outlier,ND			

Consensus statistics

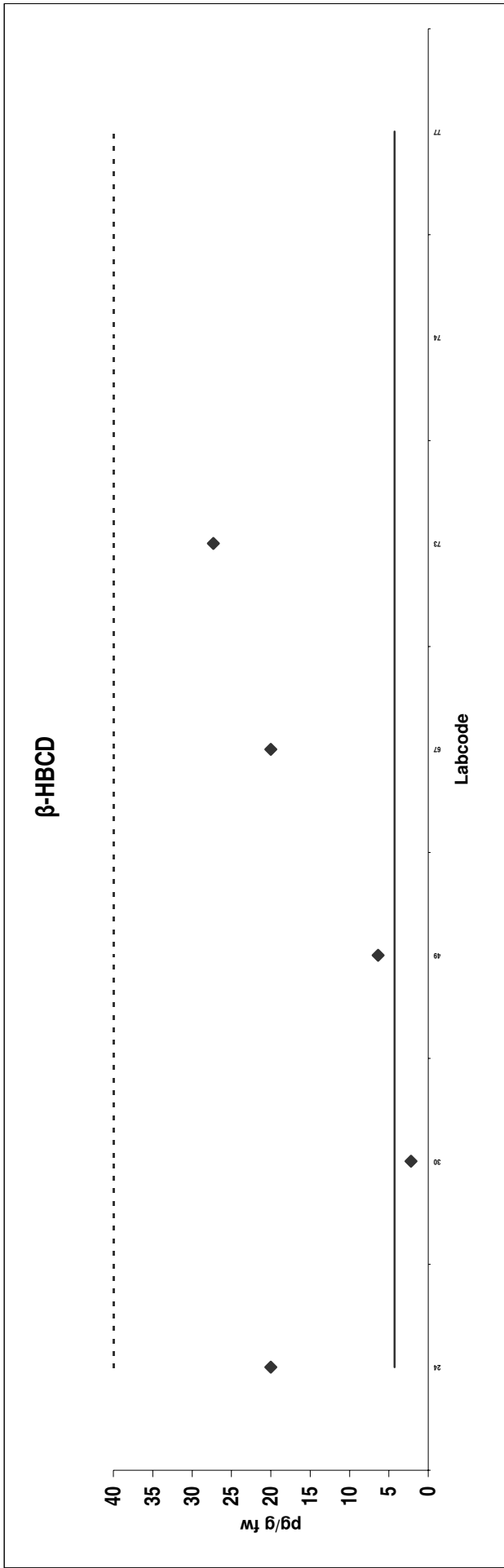
Consensus median, pg/g	12
Median all values pg/g	20
Consensus mean, pg/g	17
Standard deviation, pg/g	8,6
Relative standard deviation, %	51
No. of values reported	7
No. of values removed	2
No. of reported non-detects	3



Deer meat
Congener: β -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
24	20	ND			
30	2,2				
49	6,4				
67	20	ND			
73	27	ND			
74	67	Outlier			
77	1432	Outlier,ND			

Consensus statistics	
Consensus median, pg/g	4,3
Median all values pg/g	20
Consensus mean, pg/g	15
Standard deviation, pg/g	10
Relative standard deviation, %	69
No. of values reported	7
No. of values removed	2
No. of reported non-detects	4

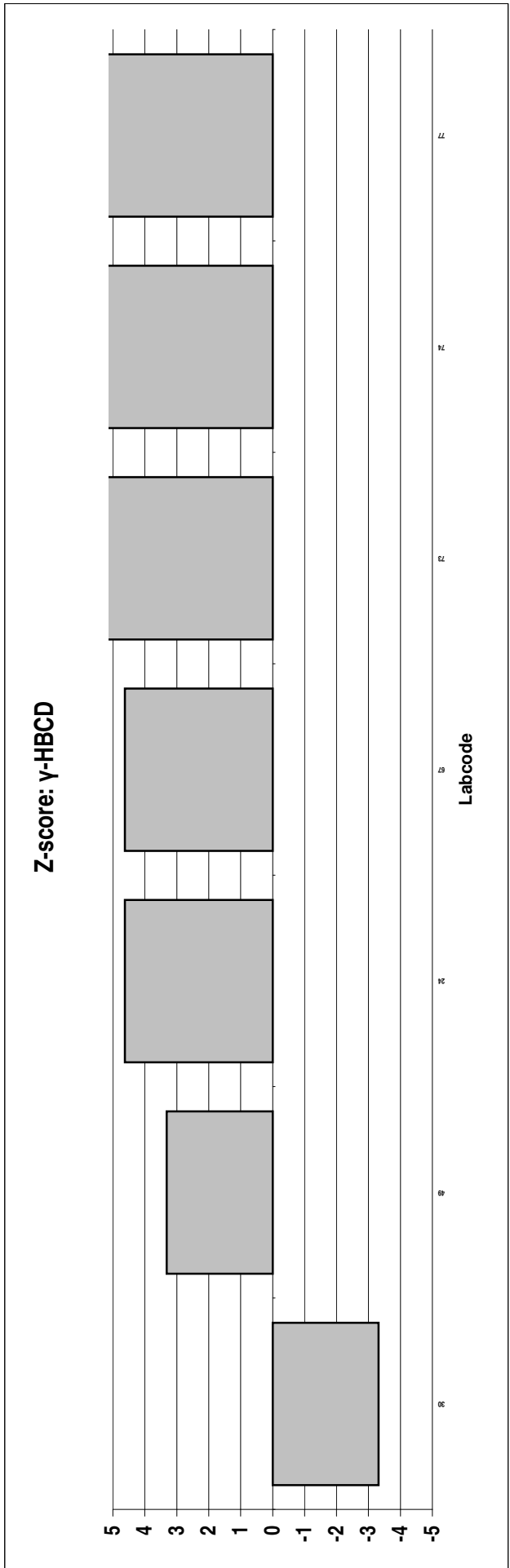
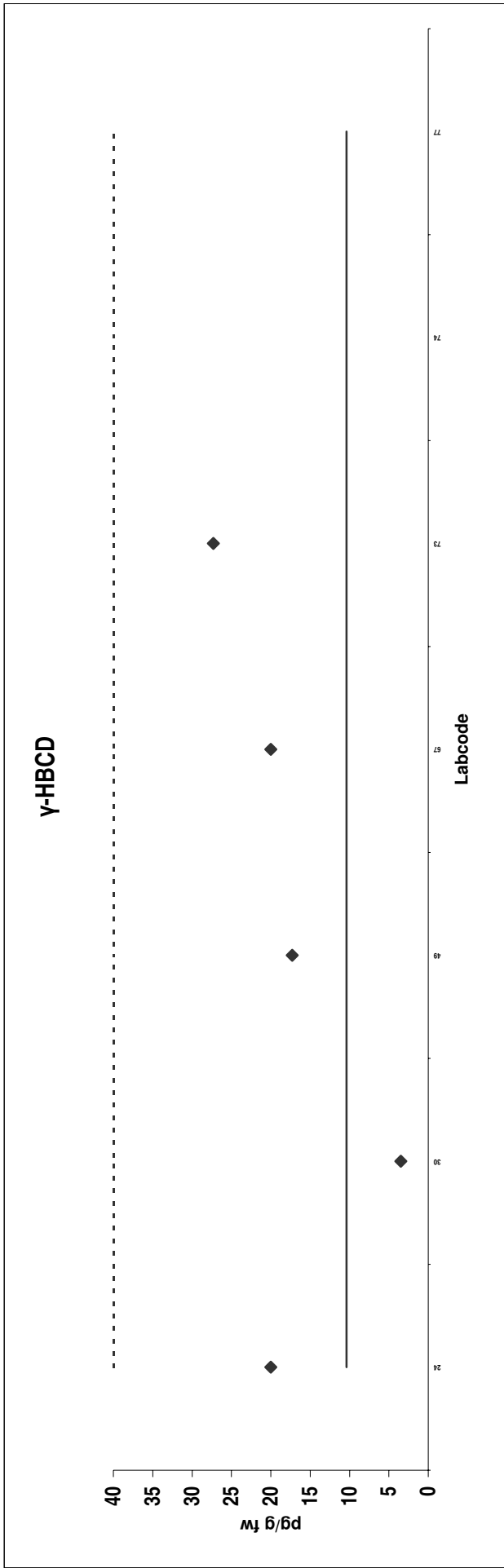


Deer meat
Congener: γ -HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
24	20	ND			
30	3,5				
49	17				
67	20	ND			
73	27	ND			
74	117	Outlier			
77	1777	Outlier,ND			

Consensus statistics

Consensus median, pg/g	10
Median all values pg/g	20
Consensus mean, pg/g	18
Standard deviation, pg/g	8,7
Relative standard deviation, %	50
No. of values reported	7
No. of values removed	2
No. of reported non-detects	4



Deer meat
Congener: total HBCD

Lab code	Conc. pg/g fw.	Notes	Lab code	Conc. pg/g fw.	Notes
13	23	ND			
24	42				
30	10				
32	100	Outlier,ND			
49	36				
54	80	Outlier,ND			
61	24				
67	20				
70	9.2				
71	103	Outlier			
74	305	Outlier			
100	679	Outlier			

Consensus statistics

Consensus median, pg/g	22
Median all values pg/g	39
Consensus mean, pg/g	24
Standard deviation, pg/g	12
Relative standard deviation, %	52
No. of values reported	12
No. of values removed	5
No. of reported non-detects	3

