



WAGENINGEN EVALUATING PROGRAMS FOR
ANALYTICAL LABORATORIES



International Sediment Exchange for Tests on Organic Contaminants



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WAGENINGEN UNIVERSITY
ENVIRONMENTAL SCIENCES

INTRODUCTION

Dear WEPAL-participants,

In this report for the first ringtest in 2009 WEPAL introduces a new method of statistical evaluation. There was no problem with the old statistical method to calculate the concensus value. The calculated mean was (and still is) reliable. The removal of outliers however had too much influence on the calculation of the standard deviation. In a number of datasets the standard deviation is underestimated by the old method. We have tested several other statistical routines which should give a better estimate of the variation of the data. The aim of our study was to find a method which is not influenced by the presence or removal of outliers.

The new statistical model (Cofino NDA) that is chosen to calculate the mean and standard deviation uses probability functions. It calculates a best fit based on the observed values. The model is tested on simulated data sets and datasets of several interlaboratory studies. It is demonstrated that the model is robust and insensitive to outliers. It can cope with asymmetric, strongly tailing and multimodal distributions. A publication describing the procedure in more detail with the results of the tests is in preparation.

This year we will report both new and old statistics. So you can see what the differences are between the two methods. In general you will see that the new NDA mean and old median and mean are similar. The differences between the two methods can be observed in the standard deviation. In the NDA method they are not influenced by the presence or removal of outliers. Marking of outliers (**) and stragglers (*) is based on the old statistics. All results, including marked values, are used in the new NDA method.

The Z-scores are now calculated with the NDA standard deviation. Because in a number of cases the NDA standard deviation is higher than the 'old' standard deviation the Z-scores will be lower than in the past.

Early May we will move to our new building. Our telephone numbers, email and postal address will remain unchanged. Only our visiting address will change. Please note that if you send your mail by courier you must change the address.

WEPAL has a webpage where you can check if we have received and processed your data. We have also added the number of results. This way you can also see if all your results were processed correctly. Because you can see the status of the results that you sent us yourself it is no longer necessary to ask for a confirmation of receipt. You can also spare yourself and us the extra work for sending and processing extra copies. This information is published on "log received" page of the WEPAL website www.wepal.nl. Please note that we use your client number in this table, not your labnumber (or code number).

The WEPAL programs are organised to help you to improve the quality of your results. When you have ideas or remarks on the programs that can help us to improve them please feel free to contact us. We are always looking forward to hear from you,

Yours sincerely,



Bram Eijgenraam
Manager WEPAL

Calculated 02-04-2009 (14:28)

IMPORTANT INFORMATION

The results of the April - June 2009 period will be processed in the beginning of July 2009. Participants are kindly requested to take care that the results of this series are in Wageningen **before the first of July 2009**. All results, which are received later, will not be reported.

The 2009.3 samples will be mailed at the end of May 2009.

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GENERAL INFORMATION

Accreditation

Accreditation

The Wageningen Evaluating Programmes for Analytical Laboratories organisation is accredited for the organisation of Interlaboratory Studies by the Dutch Accreditation Council RvA since April 26, 2000. The accreditation is based on the ILAC-requirements (Guidelines for the requirements for the competence of providers of proficiency testing schemes, ILAC-G13: 2000). In the following table the scope is given for all WEPAL programs.

**Table 1 Scope of the WEPAL programs.
IPE, International Plant-analytical Exchange Program**
(Parameters in bold are in the scope of the accreditation)

Group	Parameter
Inorganic Chemical Composition	Ag, As , B , Ba , Be, Bi, Br, Ca , Cd , Cl , Co , Cr , Cs, Cu , F, Fe , Ga, Hg, I, K, Li, Mg, Mn, Mo, N - Kjeldahl , N - NH ₄ , N - NO ₃ , Na, Ni, P, Pb , Pd, Pt, Rb, Rh, S , Sb, Se , Sn, SO ₄ , Sr , Ti, V, Zn
Real totals	Al , C - elementary, N - elementary, Si
Acid extractable (So-called totals)	Al , Si
Other determinations	13C, 15N, delta 13C, delta 15N
Nutritional values	ADF-ash-containing, ADF-ash-free, Crude fibre, NDF-ash-containing, NDF-ash-free, Polysaccharides (starch), TDF, TDF-non-soluble, TDF-soluble, Total ash , Total Disaccharides, Total fat, Total monosaccharides

ISE, International Soil-analytical Exchange Program
(Parameters in bold are in the scope of the accreditation)

Group	Parameter
Real totals	Ag, Al , As , B , Ba , Be , Bi, Br, C - elementary, Ca , Cd , Ce , Co , Cr , Cs, Cu , F, Fe , Ga, Ge, Hg, I, K, La, Li, Mg, Mn, Mo, N - elementary, Na, Nb, Nd, Ni, P, Pb , Pd, Pt, Rb, Rh, S , Sb , Sc, Se, Si , Sn, Sr, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr
Acid extractable (So-called totals)	Ag, Al , As , B , Ba , Be , Bi, Br, Ca , Cd , Ce , Co , Cr , Cu , F, Fe , Ga, Hg, I, K, La, Li, Mg, Mn, Mo, N, Na, Nb, Nd, Ni, P, Pb , Pt, Rb, S , Sb , Sc, Se, Si , Sn, Sr , Te, Th, Ti, Tl, U, V, Y, Zn, Zr
Aqua Regia (ISO 11466)	Ag, Al , As , B, Ba, Be , Bi, Br, Ca , Cd , Ce , Co , Cr , Cu , F, Fe , Ga, Hg, I, K, La, Li, Mg, Mn, Mo, N, Na, Nb, Nd, Ni, P, Pb , Pt, Rb, S , Sb, Sc, Se, Si, Sn, Sr, Te, Th, Ti, Tl, U, V, Y, Zn, Zr
Extraction with boiling 2M HNO ₃	Cd , Co , Cr , Cu , Hg, Mo, Ni, Pb , Tl, Zn
Extraction with 0.1M NaNO ₃	Cd , Cu , Ni, Pb, Zn
Extraction with 0.01M CaCl ₂ 1:10	Al, B, Cd, CN, Co, Cr, Cu, Fe, K , Mg , Mn, N - NH ₄ , N - NO ₃ , N total soluble, Na, Ni, P, Pb, SO ₄ , Zn
Extraction with 1M NH ₄ NO ₃ 1:2.5 (w/v) (DIN 19730)	As, Cd, Cr, Cu, Hg, Ni, Pb, Tl, Zn
Soil characteristics	C - org others (W&B a.o.), EC-SC (ISO 11265), Fraction < 16 µm, Fraction < 2 µm, Fraction < 63 µm, Fraction > 63 µm, Org.matter (L.O.I.), pH - CaCl ₂ , pH - H ₂ O, pH - KCl, TC=Total C (org.+inorg.), TIC=Tot.Inorg., C(CaCO ₃), TOC=Total Org. C
Other determinations	C ¹³ , N ¹⁵ , B - Hot water, CN - Free, CN - Total, delta 13C, delta 15N, K - HCl, Mg - NaCl, Moisture-content

Group	Parameter
Fluoride (Swiss standard procedure)	F - Total
Digestion with conc. HNO ₃ + conc. HCl + H ₂ O ₂ (UNEP-UN/EC 91075A)	Al, As, B, Ba, Be, Br, Ca, Cd, Co, Cr, Cu, F, Fe, Ga, Hg, I, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, S, Sb, Se, Si, Sn, Sr, Ti, V, Y, Zn, Zr
Pot. CEC using 1M NH ₄ -acetate at pH=7	Al, Ca , CEC , K , Mg , Na
Pot. CEC using 1M or 0.1M BaCl ₂ -TEA at pH=8.1 (ISO 13536 OR BZE)	Al, Ca, CEC , K, Mg, Na
Pot. CEC using 1M NH ₄ Cl (BZE)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Act. CEC using 0.01M BaCl ₂ (ISO 11260)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Act. CEC using 0.1M BaCl ₂ (UNEP-UN/EC 91065A)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Act. CEC using cobaltihexamine (AFNOR NFX 31 130)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Mehllich-3	Al, As, B, Ca , Cd, Cr, Cu , Fe , K , Mg , Mn , Na , P , Pb , Zn
Extraction with Ca-lactate (VDLUFA)	K, P
Extraction with double lactate (VDLUFA)	K , P
Water soluble 1:10 (w/v) (EN-12457-4)	Br, Cl, F, N - NO ₃
Extraction with 0.01M CaCl ₂ + 0.005M DTPA 1:10 (w/v)	Cu, Fe, Mn, Zn
Extraction with 1M KCl 1:10 (w/v)	N - NH ₄ , N - NO ₃
Phosphorus and related analysis	Al - Ox, Fe - Ox, P - Ox, P - AL, P - Bray , P - Olsen , Pw
Extraction with 1M HCl (Polish standard)	B, Cu, Fe, Mn, Zn
Water soluble 1:10 (w/v) (NL VPR C85-06)	Br, Cl, F, SO ₄

SETOC, International Sediment Exchange for Tests on Organic Contaminants

(Parameters in bold are in the scope of the accreditation)

Group	Parameter
Polycyclic aromatic hydrocarbons	acenaphtene, acenaphthylene, anthracene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenz(ah)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphtalene, phenanthrene, pyrene
Polychlorobiphenyls	PCB 028 , PCB 031, PCB 052 , PCB 077, PCB 081, PCB 101 , PCB 105 , PCB 114, PCB 118 , PCB 123, PCB 126, PCB 128 , PCB 138 , PCB 149, PCB 153 , PCB 156, PCB 157, PCB 167, PCB 169, PCB 180 , PCB 189
Organochlorine pesticides	1,2,3 trichlorobenzene, 1,2,3,4 tetrachlorobenzene, 1,2,3,5 tetrachlorobenzene, 1,2,4 trichlorobenzene, 1,2,4,5 tetrachlorobenzene, 1,3,5 trichlorobenzene, aldrin, alpha-endosulfan, alpha-HCH, beta-endosulfan, beta-HCH, chlordane, cis-chlordane, delta-HCH, dieldrin, endosulfan, endosulfan sulfate, endrin, gamma-HCH, heptachlor, heptachlor epoxide, hexachlorobenzene , hexachlorobutadiene , isodrin, o,p'-DDD, o,p'-DDE, o,p'-DDT, p,p'-DDD, p,p'-DDE, p,p'-DDT, pentachlorobenzene , Sum tetrachlorobenzenes, Sum trichlorobenzenes, telodrin, toxaphene, trans-chlordane
Other parameters	AOX , CN - Free, CN - Total , EOX , Inorganic carbon, Mineral oil (GC) , Mineral oil (IR) , Organic carbon , Particles < 2 µm , Particles < 63 µm, Particles > 63 µm

Group	Parameter
Metals (aqua regia)	As, Ba, Cd, Co, Cr, Cu, Hg, Mo, Ni, Pb, Zn
Dibenzo-P Dioxin	1,2,3,4,6,7,8 Cl₇DD, 1,2,3,4,7,8 Cl₆DD, 1,2,3,6,7,8 Cl₆DD, 1,2,3,7,8 Cl ₅ DD, 1,2,3,7,8,9 Cl₆DD, 2,3,7,8 Cl₄DD, Cl₈DD
Dibenzofuran	1,2,3,4,6,7,8 Cl₇DF, 1,2,3,4,7,8 Cl₆DF, 1,2,3,4,7,8,9 Cl₇DF, 1,2,3,6,7,8 Cl₆DF, 1,2,3,7,8 Cl₅DF, 1,2,3,7,8,9 Cl₆DF, 2,3,4,6,7,8 Cl₆DF, 2,3,4,7,8 Cl₅DF, 2,3,7,8 Cl₄DF, Cl₈DF
Brominated Flame Retarders	BDE 028, BDE 047, BDE 066, BDE 085, BDE 099, BDE 100, BDE 153, BDE 154, BDE 183, BDE 209
Experimental	DEHP, Tributyl Tin (TBT)

MARSEP, Manure and Refuse Sample Exchange Program

(Parameters in bold are in the scope of the accreditation)

Group	Parameter
Real totals	Ag, Al, As, B, Ba, Be, Bi, Br, C, Ca, Cd, Co, Cr, Cu, F, Fe, Ga, Hg, I, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ti, Tl, V, Zn
Acid extractable (So-called totals)	Ag, Al, As, B, Ba, Be, Bi, Br, C, Ca, Cd, Cl, Co, Cr, Cu, F, Fe, Ga, Hg, I, K, Li, Mg, Mn, Mo, N, N - NH₄, N - NO₃, Na, Ni, P, Pb, S, SO₄, Sb, Se, Si, Sn, Sr, Ti, Tl, V, Zn
Other determinations	AOX, loss-on-ignition

The selection of parameters included in the scope of accreditation is based on the information that can be given about the homogeneity of the parameters in the samples. This information is based on the relation between the Coefficient of Variation as given in the Annual Reports and the concentration in the different samples used in the WEPAL-programs during the last years. Only in case of a clear and consistent pattern, conclusions can be drawn concerning homogeneity of the material. In the case of a large variation in CV values no distinction can be made between inhomogeneity of the material and the variation in the analytical performance caused by the participating laboratories. These parameters are not (yet) included in the scope of the accreditation.

Some aspects of the proficiency testing scheme may from time to time be subcontracted. When subcontracting occurs it is placed with a competent subcontractor. WEPAL is responsible to the scheme participants for the subcontractor's work.

Homogeneity of the distributed samples

Homogeneity tests

WEPA has developed special equipment for the production of representative subsamples (Houba, 1993) from a bulk material. The proper functioning of this equipment is tested by a homogeneity test in the final subsamples. To perform this test, samples are collected at regular intervals during the preparation of the samples. The collected samples, with a minimum of 10, are analysed in duplicate measurements under repeatability conditions. A selection of critical parameters is chosen for the tests. The results of the homogeneity tests are published in the annual reports.

Check of results

Before distribution of the periodic reports to the participants, a final check is made based on the results found by the participants. This check is made for all reported parameters. The Coefficient of Variances and concentrations found in the periodic reports are compared with the patterns as found in the latest Annual Report (part B). The expected pattern is a high CV at a low concentration and a gradually decreasing CV at higher concentrations till a more or less constant level of CV-values is reached (Houba et al., 1986). Deviations from this expected pattern are mentioned in the periodic reports. This might be an indication of inhomogeneity of the material for the certain parameter.

All data of this period are compared with the general patterns as published in the latest year report. No deviating values were found.

The quarterly report

In order to evaluate the accuracy and precision of the analytical procedures used, four proficiency testing programs have been established. At this moment the WEPAL Exchange Programs comprises approximately 600 laboratories in many countries. The participating laboratories receive four air-dried samples every three months and analyse the samples according to their own procedures. The results of the determinations are collected and processed at Wageningen University and published every three months. The participating laboratories are informed of the results in the third week of the next three-month period. Each participant can compare his results with those of all the other members of the exchange program. WEPAL will not comment on results unless asked to do so.

Reporting of data

The analysed components must be reported in ovendry (105°C) material. For this purpose the moisture content has to be determined separately and the analytical results have to be recalculated (see the form to report the results). To get reproducible results of these moisture contents we recommend you to dry the material during at least 3 hours at 105°C and let cool down in a desiccator before weighing.

New statistics: normal distribution approximation (NDA)

Interlaboratory studies like the WEPAL proficiency testing ringtests frequently give rise to datasets that have complex distributions including excessive tailing and multiple modes. Consequently, sophisticated statistical methods are required to obtain meaningful assessments. The strategy that was used until now makes use of an outlier test followed by straightforward statistics. Problem with this strategy is that removal of outliers causes an underestimation of variance of the dataset. Therefore a methodology is needed that does not rely on arbitrary outlier removal or subjective manual interpretations. Ideally the new methodology must provide the characteristics of the highest mode of the dataset.

A new model is chosen to calculate population characteristics (mean and standard deviation) from experimental datasets (Cofino 2000). The model uses an estimate for the probability density function (pdf) of the measurement process and calculates a best fit based on all observed values. The implementation of the model that is used does not require uncertainty estimates for all data points. Instead it uses a normal distribution approximation (NDA) for the pdf of the individual data points. In essence, the pdf's of the individual datapoints are superposed on each other to create a continuous pdf representing the entire distribution (all datapoints).

With the mathematical model coefficients can be obtained by looking for the combination of data points that has the highest probability in the basis set. This maximization amounts to the identification of the first mode of the dataset. The coefficients can be used to calculate the weighted mean and standard deviation. Subsequent calculations give additional modes of the distribution and for each mode the expectation value (mean), the standard deviation and a percentage indicating the fraction of observations encompassed. In this report only mean and standard deviation for the first mode (combination with the highest probability in the dataset) are given.

The model is tested on simulated data sets and datasets of several interlaboratory studies. It is demonstrated that the model is robust and insensitive to outliers. It can cope with asymmetric, strongly tailing and multimodal distributions. Publications describing the procedure in more detail and results of the tests are in preparation.

With the NDA model mean and standard deviation are calculated using all reported data when at least 8 results are left after removal of reported 'lower than' (<) and 0 (= zero) values. No outliers are removed.

Table 2. The model summarised

- Each observation is attributed an ‘Observation measurement function’ (OMF, φ_i)
- An OMF is defined as the square root of the probability density function appropriate for the observation. If normal distributions are used: $\varphi_i = \sqrt{N(\mu_i, \sigma_i^2)}$
- The set of φ_i ’s constitutes a basisset in which the population measurement function Ψ is constructed: $\Psi_i = \sum C_{ik} \varphi_k$
- The coefficients are obtained by finding the combination which renders highest probability density (maximise $\int \Psi^2 dx$, x being concentration). Mathematically this amounts to solving the eigenvector-eigenvalue equation $S_c = \lambda c$, S_{ij} being an overlap integral defined as $\int \varphi_i \varphi_j dx$, $0 \leq S_{ij} \leq 1$
- Mean and standard deviation of Ψ_i are calculated from the first and second moment of the probability density function Ψ_i^2

$$\bar{m}_i = \frac{\int x \Psi_i^2 dx}{\int \Psi_i^2 dx},$$

$$s_i^2 = \frac{\int x^2 \Psi_i^2 dx}{\int \Psi_i^2 dx} - \bar{m}_i^2$$

- The variance calculated by the model represents the sum of the estimates for the within-laboratory and between-laboratory variances, i.e. $s_i^2 = s_{\text{between labs},i}^2 + s_{\text{within labs},i}^2$
- When the NDA approximation is used, s_i^2 estimates the between-laboratory variance

Old statistics: Calculation of median and MAD.

Starting with the first proficiency tests in 2009 a new statistical method was chosen. For reasons of continuity the statistical results of the old method will be reported in 2009. The old statistical method was preferred because strange values had less influence on the estimated central value (location) and the spread of this value (scale). Therefore estimators for location and scale were used which give less weight to observations in the tails (van Montfort, 1996). For each element a median value (μ_1) and a median of absolute deviations (MAD, σ_1) are calculated using all reported data except the reported ‘<’ and 0 (= zero) values. The median is the middle observation of the sorted array of observations in the case of an odd sample size. Otherwise it is the mean of the two middle observations. Using the median instead of mean, extreme data are of less influence. MAD is the median of the absolute values of the observations minus their median. In case more than 7 data are reported, the values with $|x - \mu_1| / (f * \sigma_1) > 2$ are marked with a double asterisk (**). The factor f , aiming at 5% (singly or doubly) asterisked data in a sample of size n ($n > 7$) from a Gaussian distribution, is approximated by $(0.7722 + 1.604 / n) * t$, where t is the 2½ percent point of Student’s t with $(n - 1)$ degrees of freedom. A second median (μ_2) and a second MAD (σ_2) are computed then leaving out the items labelled **; included values with $|x - \mu_2| / (f * \sigma_2) > 2$ are marked with a single asterisk (*). Finally a third median and MAD are calculated, discarding both * and **.

In the case of small results which are heavily rounded the MAD often becomes 0 (= zero). This is very unsatisfactory because all results other than the median are marked as outlier. Therefore no results are marked as outlier in cases where $MAD = 0$. Mean and standard deviation are only calculated when at least 8 results are left after removal of outliers (**) and stragglers (*).

Rounding of results

Rounding interval is based on the first decimal value lower than $sd / 2$ (standard deviation divided by 2). If no standard deviation is available (less than 8 results) the MAD is used. At least three significant digits are shown as a minimum. If no standard deviation and MAD are available rounding is also based on three (most) significant digits. For the statistical results (mean, standard deviation, median and MAD) one extra digit is shown.

Note that larger results are also rounded (e.g. 1809 may be rounded as 1810).

Z-score

For all analytical data a Z-score is calculated according to the formula:

$$Z\text{-score} = \frac{X - X_{\text{mean}}}{S_d}$$

in which:

X = the reported value

X_{mean} = the mean of all values calculated with the NDA model

S_d = standard deviation calculated with the NDA model

METHOD INDICATING CODE (MIC)

In order to evaluate the analytical results for each reported element (see **Table 3** for the different element groups), a Method Indicating Code (MIC) is used. Details of the analytical procedures used by the individual participants are indicated by characters, added at the end of each row with results. The first character indicates the method of extraction or digestion according to the codes explained in **Table 4**. The next two characters describe clean-up procedure (**Table 5**) and separation technique (**Table 6**). The last characters indicate the method of detection of the element in the extracts or digests (**Table 7**). In this way it is possible for all participants to compare the results of their analytical procedures more specifically with the results of other participants. This could be a further valuable tool in judgement of the individual results.

Table 3 Used abbreviations

Method	Abbreviation	Method
1	PAH	Polycyclic aromatic hydrocarbons
2	PCB	Polychlorobiphenyls
3	OCB	Organochlorine pesticides
4	OD	Other parameters
5	MET	Metals
6	DD	Dibenz-P Dioxin
7	DF	Dibenzofuran
8	EXP	Experimental

Table 4 Extraction

Code	Extraction
-	No extraction
A	Supercritical fluid extraction (SFE)
B	Soxhlet extraction
C	Pentane
D	Dichloromethane
E	Freon
F	Petroleum ether
J	Ultrasonic extraction
Q	Shaking
T	Microwave
U	aqua regia (using boiling under reflux)
V	Aqua Regia (using a Microwave system)
Y	Aqua Regia
Z	Other (specify)

Table 5 Clean-up procedure

Code	Clean up Procedure
-	No Clean-Up
A	Liquid-liquid partition
E	Liquid-liquid partition, sulphur removal
H	Liquid-liquid partition, column chromatography
K	Liquid-liquid partition, sulphur removal, column chromatography

Code	Clean up Procedure
N	Sulphur removal
R	Column chromatography
U	Sulphur removal, column chromatography
V	Filtration
W	Solid phase extraction (SPE)
X	Removal of polar compounds with Florisil
Y	Gel permeation chromatography (GPC)
Z	Others (specify)

Table 6 Separation technique

Code	Separation Technique
-	No Separation
A	HPLC, C-18
E	HPLC, C-8
H	GC, splitless
I	GC, splitless (2 columns)
J	GC, split (2 columns)
K	GC, on-column
Z	Others (specify)

Table 7 Detection technique

Code	Detection Technique
A	AAS-FLAME
AA	without background correction using air-acetylene
AC	without background correction using N ₂ O-acetylene
AE	with deuterium background correction using air-acetylene
AG	with deuterium background correction using N ₂ O-acetylene
AJ	with Zeeman background correction using air-acetylene
AL	with Zeeman background correction using N ₂ O-acetylene
AN	with pulsed hollow cathode lamp background correction using air-acetylene
AP	with pulsed hollow cathode lamp background correction using N ₂ O-acetylene
B	AAS-ETA
BA	without background correction without chemical modifier
BC	without background correction with chemical modifier*
BE	with deuterium background correction without chemical modifier
BG	with deuterium background correction with chemical modifier*
BJ	with Zeeman background correction without chemical modifier
BL	with Zeeman background correction with chemical modifier*
BN	with pulsed hollow cathode lamp without chemical modifier
BP	with pulsed hollow cathode lamp with chemical modifier*
C	Flame emission
CC	ICP-AES (different wavelengths are possible; indicate the used wavelength)
CE	other excitation source (dif. wavelengths possible; indicate used wavelength)
D	ICP-MS
E	Spectrophotometry
F	Hydride technique (similar techniques using analyte volatilization; specify)
G	Cold vapour technique
H	Ion selective electrode
IA	Direct voltammetry
IB	Stripping voltammetry
JA	Gas chromatography
JB	Liquid chromatography
JC	Ion chromatography
KA	X-ray fluorescence with material melted
KB	X-ray fluorescence with material pressed
L	Neutron Activation Analysis
M	Titrimetric

Code	Detection Technique
MA	Coulometry
N	Near Infrared
O	UV-absorption
OP	UV-absorption + fluorescence (O+P)
P	Fluorescence
Q	Electron capture
R	Mass selective
S	Flame ionisation
T	Infrared
Y	Fractions < 2 µm , < 63 µm and > 63 µm
YA	Pipet and sieve method
YB	Hydrometer method
YC	Instrumental methods (e.g. counters)
Z	Others

* specify concentration, type of chemical modifier and µl injected sample and modifiers

References and related literature

- Cofino, W.P., I. van Stokkum, D.E. Wells, R.A.L. Peerboom, F. Ariese (2000). A new model for the inference of population characteristics from experimental data using uncertainties. Application to interlaboratory studies. *Chemom. Intell. Lab. Syst.* 53, 37-55.
- Dijk, D. van and V.J.G. Houba (2000). Homogeneity and Stability of Materials Distributed Within the Wageningen Evaluating Programmes for Analytical Laboratories. *Commun. Soil Sci. Plant Anal.* 31 (11-14), 1745 -1756.
- Dijk, D. van, V.J.G. Houba and J.P.J. van Dalen (1996). Aspects of quality assurance within the Wageningen Evaluating Programmes for Analytical Laboratories (WEPAL). *Commun. Soil Sci. Plant Anal.* 27, 433 - 439.
- Eurachem (2000). Selection, use and interpretation of proficiency testing (PT) schemes by laboratories. Eurachem Nederland, task group 'proficiency testing schemes' and Laboratory of the Government Chemist (LGC), United Kingdom.
- Feinberg, M., E. Bugner, G. Theiller, V.J.G. Houba and F. Kadijk (1995). Expression of the reference value for proficiency tests. *J. Chemometrics* 9, 197-209.
- Houba, V.J.G. (1993). A device for automatic subsampling of soil, sediment and plant material for proficiency testing. *Fresenius J. Anal. Chem.* 345, 156 -157.
- Houba, V.J.G., W.J. Chardon and K. Roelse (1993). Influence of grinding of soil on apparent chemical composition. *Commun. Soil Sci. Plant Anal.* 24, 1591 - 1602.
- Houba, V.J.G., J.J. van der Lee and I. Novozamsky (1996). Evaluating the state-of-the-practice in soil measurements in relation to environmental regulations. *Accred. Qual. Assur.* 1, 92 - 98.
- Houba, V.J.G. and I. Novozamsky (1998). Influence of storage time and temperature of air-dried soils on pH and extractable nutrients using 0.01 M CaCl₂. *Fresenius J. Anal. Chem.* 360, 362 - 365.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1994a). Status and future of soil and plant analysis. *Commun. Soil Sci. Plant Anal.* 25, 753 - 765.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1994b). Standardization and validation of methods of soil and plant analysis as conditions for accreditation. *Commun. Soil Sci. Plant Anal.* 25, 827 - 841.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1994c). Aspects of pre-treatment of soils for inorganic chemical analysis. *QuRmica AnalitRca* 13, 94 - 99.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1995). Influence of storage of plant samples on their chemical composition. *The Science of the Total Environment* 176, 73 - 79.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1996). Quality aspects in laboratories for soil and plant analysis. *Commun. Soil Sci. Plant Anal.* 27, 327 - 348.
- Houba, V.J.G., J. Uittenbogaard and P. Pellen (1996). Wageningen Evaluating Programmes for Analytical Laboratories (WEPAL), organisation and purpose. *Commun. Soil Sci. Plant Anal.* 27, 421 - 431.
- ILAC-G13 (2000). ILAC Guidelines for the Requirements for the Competence of Providers of Proficiency Testing Schemes. 23 p.
- ISO/IEC (1997). Proficiency testing by interlaboratory comparisons - Part 1: Development and operation of proficiency testing schemes. ISO/IEC Guide 43, 2nd ed., ISO and IEC, Switzerland.
- Montfort, M. A.J. van (1996). Statistical remarks on laboratory-evaluating programs for comparing laboratories and methods. *Commun. Soil Sci. Plant Anal.* 27, 463 - 478.
- Novozamsky, I., V.J.G. Houba, R.Ch. Daniel and the members of CII (1993). Certification of cabbage and carnation samples and their use in an international proficiency study. *Fresenius J. Anal. Chem.* 345, 198 - 201.
- Thompson, M. and R. Wood (1993). The international harmonized protocol for the proficiency testing of (chemical) analytical laboratories. *Pure and Appl. Chem.* 65, 2123 - 2144.

MATERIALS ANALYSED

Table 8 Materials analysed in this period.

Sample	Sample ID	Type	Country
1	739	Sediment	Netherlands
2	767	Sediment	Netherlands
3	780	Sediment	Netherlands
4	764	Riverclay	Netherlands

NEW MEMBERS

Lam Laboratories Limited Room 1412, Honour Industrial Centre, Chai Wan, Hong Kong
 Service de la Protection de l'Environnement , Sion, Switzerland
 Umwelt-Technik-Weinfelden AG , Weinfelden, Switzerland

Used abbreviations and symbols

Table 9 Used abbreviations and symbols

Where	Abbreviation	Explanation
General Information	CV	coefficient of variation
General Information	MIC	method indicating code
General Information	MAD	median absolute deviation
General Information	Sd	standard deviation
General Information	f	f factor
General Information	μ_1	first median
General Information	μ_2	second median leaving out **
General Information	μ_3	third median leaving out * and **
General Information	σ_1	first MAD
General Information	σ_2	second MAD leaving out **
General Information	σ_3	third MAD leaving out * and **
General Information	<	value smaller than
General Information	*	straggler
General Information	**	outlier
Results	median "result" (0)	no median available
Results	median "result" (1)	first median (all results)
Results	median "result" (2)	second median leaving out **
Results	median "result" (3)	third median leaving out * and **
Results	-	no result was submitted
Results	x	zero (0) was submitted as result, not taken into account
Results	-	statistical values: not calculated
Z-scores	#	less than 8 values, no mean and Sd calculated
Z-scores	<	a smaller than value was reported
Z-scores	-	no result (or zero) was submitted
Errors	C	Correction participant
Errors	D	Results received after deadline (before publication date)
Errors	E	Error WEPAL
Errors	M	Modified results
Errors	N	New results
Errors	R	Results removed

Analysis SETOC 2009.1

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample	739	767	780	764	MIC
acenaphtene (µg/kg)					
ZINDZIWE (1)	50 <	100 <	-	-	--A E
MLABTW (4)	105	170	310 <	250.0 <	ZWAOP
AL-West (5)	257 **	192	129	74.9	ZRAOP
Alconheinr (7)	160	190	130	60.0	Q-K R
ANAMIL (10)	142	165	67	134.0 **	DZK R
FRIDOLIN (15)	144	214	153	86.4	BWK R
HIDU (16)	215	184	155	58.0	ZUH R
PAULINE (18)	173	201	-	-	Z-AOP
ANATEK (29)	198	178	126	66.6	Q-H R
ELML (33)	128	160	141	56.0	QZH R
WELLAB (35)	141	173	134	68.2	BRHR
LAS (48)	102 <	207	153	104.0 <	ZVA P
CHEMLABSIT (52)	128	131	90	10.0 <	---
UMEG-GB3 (53)	113	152	124	57.2	ZRH R
32A (56)	140	210	150	100.0 **	Z-HS
HILL (58)	90	110 *	70	29.0	ZXHR
GGM (60)	153	191	102	56.4	ZVZ R
LABOR M (61)	168	144	158	71.0	Q-H R
SGSECOPD (62)	127	208	94	64.0	D-H R
COMALAB (67)	100 <	100 <	100 <	100.0 <	BZHR
ENN001 (70)	327 **	175	167	49.0	BRH R
SJEFSLABB (71)	96	218	177	111.0 **	BYHR
QSANAL (76)	156	148	101	66.0	B-H R
PLVHOLAB (81)	102	203	129	42.0	
WWRAYMOND (83)	100	168	119	45.9	BRHR
HKPC-EMD (85)	122	173	129	62.1	TWHR
GAL (91)	147	168	132	67.0	A-H R
STCRSC (92)	126	179	165	154.0 **	B-AOP
ADIRONDACK (93)	119	162	108	51.0	J-H R
ANDESITE (105)	101	73 **	65	40.1	Z-AP
XENOSOILBH (108)	146	173	124	59.2	BHK R
THO1808MAS (110)	150	210	192	62.0	ZRH R
APVROPAVA (112)	109	145	95	37.6	QWA P
FPLL (115)	96	116	203	108.0 **	QRHS
ORGDIMCH (120)	97	115	105	39.5	ZZZ R
HHAFU (134)	160	170	150	100.0 <	ARH R
URKANTONE (230)	220 *	183	100	46.0	BVH R
ECCM (841)	137	293 **	144	116.0 **	BHH R
LAB607 (862)	160	146	109	35.0	B-HR
CNRILBR (875)	102	182	173	94.0 **	ZRH R
LABAMB (878)	227 **	158	123	57.0	J-K R
TAMPERE (911)	164	184	162	48.2	Q-HR
SHI (912)	136	173	150	55.3	QAH R
FRESHERTEN (920)	110	120	110	49.0	Q-Z R
FRESKOELL (958)	103	137	152	57.0	Q-JR
SPE-VS (987)	97	116	102	31.0	JZAP
NDA mean	131.4	171.9	130.3	55.51	
NDA st dev	38.0	29.8	34.6	15.01	
NDA N	43	44	42	39	
Old statistics					
Median	128.0 (3)	173.0 (3)	129.2 (3)	56.69 (3)	
MAD	24.5	17.7	23.8	8.90	
Mean	132.3	170.5	130.0	54.61	
St Dev	29.8	28.0	32.3	13.12	
N	39	41	42	32	
acenaphtylene (µg/kg)					
ZINDZIWE (1)	50.0 <	100.0 <	-	-	--A E
MLABTW (4)	130.0 <	260.0 <	80.0 <	620 <	ZWAOP
AL-West (5)	200.0 <	200.0 <	50.0 <	50 <	ZRAOP
Alconheinr (7)	90.0	70.0	60.0	180	Q-A R
NDA mean	54.90	62.10	50.06	138.2	(cont.)
NDA st dev	29.84	31.47	26.52	56.6	
NDA N	34	34	33	37	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
acenaphthylene (µg/kg)	(cont.)					
ANAMIL	(10)	10.0 <	10.0 <	15.4	10 <	DZK R
FRIDOLIN	(15)	30.5	21.6	19.8	60	BWK R
HIDU	(16)	30.0	44.0	50.0 <	154	ZUH R
PAULINE	(18)	386.0 **	965.0 **	-	-	Z-AOP
ANATEK	(29)	24.5	43.4	22.8	54	Q-H R
ELML	(33)	104.0	126.0	108.0	319 **	QZH R
WELLAB	(35)	56.9	64.7	40.5	162	BRHR
LAS	(48)	305.0 <	307.0 <	310.0 <	311 <	ZVA P
CHEMLABSIT	(52)	10.0 <	10.0 <	10.0 <	10 <	---
UMEG-GB3	(53)	44.7	62.6	53.9	150	ZRH R
32A	(56)	70.0	100.0	90.0	250	Z-HS
HILL	(58)	27.0	32.0	25.0	83	ZXHR
GGM	(60)	124.2 *	124.8	93.1	277 **	ZVZ R
LABOR M	(61)	80.0	85.0	50.0 <	261	Q-H R
SGSECOPD	(62)	47.0	51.0	45.0	133	D-H R
COMALAB	(67)	100.0 <	100.0 <	100.0 <	133	BZHR
ENN001	(70)	70.0	72.0	72.0	121	BRH R
SJEFLSLABB	(71)	113.0 *	70.0	57.0	117	BYHR
QSANAL	(76)	64.0	71.0	46.0	168	B-H R
PLVHOLAB	(81)	47.0	53.0	46.0	127	
WWRAYMOND	(83)	60.3	51.5	47.6	120	BRHR
HKPC-EMD	(85)	68.0	82.2	58.4	181	TWHR
GAL	(91)	67.0	65.0	43.0	152	A-H R
STCRSC	(92)	0.0 <	0.0 <	76.8	42	B-AOP
ADIRONDACK	(93)	50.0 <	50.0 <	50.0 <	65	J-H R
ANDESITE	(105)	185.0 **	256.0 **	179.0 **	291 **	Z-AP
XENOSOILBH	(108)	15.2	23.6	14.7	63	BHK R
THO1808MAS	(110)	38.6	45.0	35.6	105	ZRH R
APVROPAVA	(112)	20.0 <	20.0 <	20.0 <	20 <	QWA P
FPLL	(115)	178.0 **	22.5	168.0 **	38	QRHS
ORGDIMCH	(120)	19.5	22.0	30.5	82	ZZZ R
HHAFU	(134)	100.0 <	100.0 <	100.0 <	130	ARH R
URKANTONE	(230)	81.0	88.0	62.0	212	BVH R
ECCM	(841)	130.0 **	262.0 **	110.0 *	295 **	BHH R
LAB607	(862)	56.0	34.0	25.0	68	B-HR
CNRLBR	(875)	51.0	44.0	34.0	155	ZRH R
LABAMB	(878)	52.0	66.0	51.0	148	J-K R
TAMPERE	(911)	10.3	104.0	70.0	259	Q-HR
SHI	(912)	59.4	91.6	58.6	184	QAHR
FRESHERTEN	(920)	54.0	65.0	56.0	180	Q-Z R
FRESKOELL	(958)	50.6	99.0	79.0	184	Q-JR
NDA mean		54.90	62.10	50.06	138.2	
NDA st dev		29.84	31.47	26.52	56.6	
NDA N		34	34	33	37	
Old statistics						
Median		53.00 (3)	65.00 (3)	49.30 (3)	133.0 (3)	
MAD		14.70	21.00	14.50	47.0	
Mean		52.45	64.34	51.22	136.9	
St Dev		22.75	28.77	23.56	60.4	
N		28	31	30	33	
anthracene (µg/kg)						
ZINDZIWE	(1)	110	300	120	160	--A E
MLABTW	(4)	126	270	158	218	ZWAOP
AL-West	(5)	172	446	208	276	ZRAOP
Alconheinr	(7)	190	380	190	290	Q-K R
ANAMIL	(10)	138	323	223	175	DZK R
BLAUWHUIS	(14)	155	352	222	211	---
FRIDOLIN	(15)	162	503	264	276	BWK R
HIDU	(16)	245 *	490	303	279	ZUH R
PAULINE	(18)	169	316	149	195	Z-AOP
NDA mean		150.0	370.7	210.6	244.4	(cont.)
NDA st dev		40.8	88.1	70.4	63.7	
NDA N		49	49	50	50	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample	739	767	780	764	MIC
anthracene (µg/kg) (cont.)					
EXACT (28)	160	330	140	220	Q-K R
ANATEK (29)	217	784 **	409 **	419 **	Q-H R
ELML (33)	156	392	237	345	QZH R
WELLAB (35)	157	425	257	281	BRHR
LAS (48)	125	571 *	311	289	ZVA P
CHEMLABSIT (52)	131	286	193	211	---
UMEG-GB3 (53)	98	269	164	259	ZRH R
ATM (54)	110	260	150	170	F-A P
32A (56)	160	560 *	320	400 **	Z-HS
HILL (58)	85	250	120	150	ZXHR
ARCHIMEDES (59)	-	-	130	186	FZAJB
GGM (60)	142	302	152	230	ZVZ R
LABOR M (61)	207	408	290	310	Q-H R
SGSECOPD (62)	162	416	199	462 **	D-H R
COMALAB (67)	122	330	167	226	BZHR
ENN001 (70)	205	330	216	240	BRH R
SJEFSLABB (71)	164	641 **	314	384 *	BYHR
QSANAL (76)	190	594 **	305	345	B-H R
PLVHOLAB (81)	147	378	209	267	B-HR
WWRAYMOND (83)	159	333	240	229	BRHR
HKPC-EMD (85)	148	449	261	292	TWHR
GAL (91)	130	324	167	248	A-H R
STCRSC (92)	90	360	165	209	B-AOP
ADIRONDACK (93)	100	298	149	153	J-H R
ANDESITE (105)	119	408	259	208	Z-AP
XENOSOILBH (108)	90	420	202	232	BHK R
THO1808MAS (110)	155	435	275	302	ZRH R
APVROPAVA (112)	170	362	228	208	QWA P
FPLL (115)	133	134 **	140	74 **	QRHS
ORGDIMCH (120)	76	395	145	180	ZZZ R
HHAFU (134)	160	480	270	250	ARH R
URKANTONE (230)	202	456	205	322	BVH R
ECCM (841)	177	919 **	359	477 **	BHH R
LAB607 (862)	157	320	161	206	B-HR
CNRLBR (875)	112	336	170	209	ZRH R
LABAMB (878)	273 **	465	239	279	J-K R
TAMPERE (911)	185	391	241	307	Q-HR
SHI (912)	184	391	222	317	QAHR
FRESHERTEN (920)	120	320	220	270	Q-Z R
FRESKOELL (958)	245 *	465	321	433 **	Q-JR
SPE-VS (987)	149	333	195	205	JZAP
NDA mean	150.0	370.7	210.6	244.4	
NDA st dev	40.8	88.1	70.4	63.7	
NDA N	49	49	50	50	
Old statistics					
Median	155.0 (3)	361.0 (3)	209.0 (3)	232.3 (3)	
MAD	24.5	47.0	48.0	43.8	
Mean	147.3	369.0	215.2	242.7	
St Dev	34.6	67.8	61.1	52.1	
N	46	42	49	43	
benz(a)anthracene (µg/kg)					
ZINDZIWE (1)	810	1100	730	920	--A E
MLABTW (4)	687	753	780	1060	ZWAOP
AL-West (5)	1018 *	1113	923	1050	ZRAOP
Alconheinr (7)	900	1000	810	1000	Q-K R
ANAMIL (10)	762	942	986	860	DZKR
BLAUWHUIS (14)	853	1024	975	920	---
FRIDOLIN (15)	876	1078	967	1190	BWK R
HIDU (16)	812	993	1021	1060	ZUH R
PAULINE (18)	926	910	722	940	Z-AOP
NDA mean	751.8	960.2	851.0	1029	(cont.)
NDA st dev	124.3	172.3	164.9	136	
NDA N	49	49	50	50	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
benz(a)anthracene (µg/kg)	(cont.)					
EXACT	(28)	790	930	620	1000	Q-K R
ANATEK	(29)	984	1114	864	860	Q-H R
ELML	(33)	720	838	799	950	QZH R
WELLAB	(35)	793	1010	867	1090	BRHR
LAS	(48)	677	994	796	960	ZVA P
CHEMLABSIT	(52)	742	790	804	950	---
UMEG-GB3	(53)	695	933	805	1030	ZRH R
ATM	(54)	700	830	860	960	F-A P
32A	(56)	760	1060	970	1220	Z-HS
HILL	(58)	580	720	550	770 *	ZXHR
ARCHIMEDES	(59)	-	-	631	910	FZAJB
GGM	(60)	751	917	741	1010	ZVZ R
LABOR M	(61)	756	812	928	1030	Q-H R
SGSECOPD	(62)	751	885	708	1630 **	D-H R
COMALAB	(67)	748	698	721	1880 **	BZHR
ENN001	(70)	1283 **	1077	999	1040	BRH R
SJEFSLABB	(71)	612	1625 **	1027	1260	BYHR
QSANAL	(76)	804	1200	956	1220	B-H R
PLVHOLAB	(81)	712	953	766	960	B-HR
WWRAYMOND	(83)	838	974	806	1050	BRHR
HKPC-EMD	(85)	788	1030	912	1070	TWHJA
GAL	(91)	708	843	929	1020	A-H R
STCRSC	(92)	837	1054	1990 **	1610 **	B-AOP
ADIRONDACK	(93)	588	816	633	720 **	J-H R
ANDESITE	(105)	531	708	852	630 **	Z-AP
XENOSOILBH	(108)	642	901	791	1080	BHK R
THO1808MAS	(110)	720	956	964	1110	ZRH R
APVROPAVA	(112)	666	745	558	710 **	QWA P
FPLL	(115)	375 **	237 **	148 **	580 **	QRHS
ORGDIMCH	(120)	605	950	885	1100	ZZZ R
HHAFU	(134)	1040 **	1240	1130	1270	ARH R
URKANTONE	(230)	1126 **	202 **	457 **	1230	BVH R
ECCM	(841)	974	1270	982	1230	BHH R
LAB607	(862)	1179 **	1486 **	1401 **	1370 **	B-HR
CNRLBR	(875)	715	909	726	960	ZRH R
LABAMB	(878)	997 *	974	856	1070	J-K R
TAMPERE	(911)	1067 **	1226	942	1250	Q-HR
SHI	(912)	664	1090	1060	1170	QAH R
FRESHERTEN	(920)	660	950	890	1000	Q-Z R
FRESKOELL	(958)	833	1228	1173	1060	Q-JR
SPE-VS	(987)	610	832	687	830	JZAP
NDA mean		751.8	960.2	851.0	1029	
NDA st dev		124.3	172.3	164.9	136	
NDA N		49	49	50	50	
Old statistics						
Median		748.0 (3)	953.0 (3)	858.0 (3)	1044 (3)	
MAD		64.0	110.0	107.5	84	
Mean		745.8	963.8	850.0	1048	
St Dev		104.9	147.0	143.0	116	
N		41	45	46	41	
benzo(a)pyrene (µg/kg)						
ZINDZIWE	(1)	820	1100	580	930	--A E
MLABTW	(4)	701	718	570	934	ZWAOP
AL-West	(5)	981 **	1030	678	1029	ZRAOP
Alconheinr	(7)	720	790	520	800	Q-K R
ANAMIL	(10)	588	734	618	577 **	DZK R
BLAUWHUIS	(14)	597	914	739	825	---
FRIDOLIN	(15)	780	967	755	1051	BWK R
HIDU	(16)	796	939	728	1063	ZUH R
PAULINE	(18)	1010 **	996	621	838	Z-AOP
NDA mean		684.9	885.7	650.0	943.7	(cont.)
NDA st dev		127.2	131.5	112.5	114.2	
NDA N		49	49	50	50	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
benzo(a)pyrene (µg/kg)	(cont.)					
EXACT	(28)	730	890	530	950	Q-K R
ANATEK	(29)	875	1038	747	916	Q-H R
ELML	(33)	672	800	650	878	QZH R
WELLAB	(35)	731	927	784	1030	BRHR
LAS	(48)	638	1035	743	957	ZVA P
CHEMLABSIT	(52)	741	816	670	906	---
UMEG-GB3	(53)	611	805	621	908	ZRH R
ATM	(54)	780	920	720	1040	F-A P
32A	(56)	570	880	690	1040	Z-HS
HILL	(58)	410 **	500 **	310 **	530 **	ZXHR
ARCHIMEDES	(59)	-	-	557	903	FZAJB
GGM	(60)	634	723	488	890	ZVZ R
LABOR M	(61)	705	752	698	974	Q-H R
SGSECOPD	(62)	890	1050	705	1520 **	D-H R
COMALAB	(67)	1038 **	892	543	1220 **	BZHR
ENN001	(70)	1398 **	1170 *	954 **	934	BRH R
SJEFSLABB	(71)	520	2032 **	674	973	BYHR
QSANAL	(76)	720	1080	728	1074	B-H R
PLVHOLAB	(81)	616	807	564	824	B-HR
WWRAYMOND	(83)	730	889	630	946	BRHR
HKPC-EMD	(85)	694	867	652	904	TWHJA
GAL	(91)	558	718	544	892	A-H R
STCRSC	(92)	730	819	742	1092	B-AOP
ADIRONDACK	(93)	503	707	462	599 **	J-H R
ANDESITE	(105)	538	733	621	725 *	Z-AP
XENOSOILBH	(108)	585	876	627	1005	BHK R
THO1808MAS	(110)	670	889	777	1023	ZRH R
APVROPAVA	(112)	678	887	546	880	QWA P
FPLL	(115)	894	569 **	88 **	713 *	QRHS
ORGDIMCH	(120)	625	1185 **	900 *	1100	ZZZ R
HHAFU	(134)	700	800	640	850	ARH R
URKANTONE	(230)	450 *	400 **	238 **	478 **	BVH R
ECCM	(841)	764	963	681	980	BHH R
LAB607	(862)	1083 **	1745 **	962 **	1984 **	B-HR
CNRLBR	(875)	739	953	596	1010	ZRH R
LABAMB	(878)	917	924	651	976	J-K R
TAMPERE	(911)	754	873	546	896	Q-HR
SHI	(912)	675	894	671	916	QAHR
FRESHERTEN	(920)	600	840	660	940	Q-Z R
FRESKOELL	(958)	494	1052	855	1165 *	Q-JR
SPE-VS	(987)	635	936	619	863	JZAP
NDA mean		684.9	885.7	650.0	943.7	
NDA st dev		127.2	131.5	112.5	114.2	
NDA N		49	49	50	50	
Old statistics						
Median		697.0 (3)	889.0 (3)	650.5 (3)	937.2 (3)	
MAD		69.5	76.0	70.0	52.2	
Mean		688.5	886.3	646.4	948.5	
St Dev		105.5	107.3	86.4	78.4	
N		42	42	44	40	
benzo(b)fluoranthene (µg/kg)						
ZINDZIWE	(1)	860	1400	-	-	--A E
MLABTW	(4)	677	870	880	1340	ZWAOP
AL-West	(5)	994	1250	990	1500	ZRAOP
Alconheinr	(7)	1100	1500	1100	1700	Q-K R
ANAMIL	(10)	1006	1500	1690 **	1330	DZKR
FRIDOLIN	(15)	937	1300	1140	1640	BWK R
HIDU	(16)	793	1100	1000	1520	ZUH R
PAULINE	(18)	966	1120	-	-	Z-AOP
ELML	(33)	1070	1490	1400 *	1930	QZH R
NDA mean		808.8	1192	1055	1483	(cont.)
NDA st dev		219.0	254	191	249	
NDA N		44	44	42	42	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
benzo(b)fluoranthene (µg/kg)	(cont.)					
WELLAB	(35)	857	1260	1030	1510	BRHR
LAS	(48)	736	1280	1110	1400	ZVA P
CHEMLABSIT	(52)	727	960	1000	1260	---
UMEG-GB3	(53)	680	1040	960	1330	ZRH R
32A	(56)	630	1050	1080	1510	Z-HS
HILL	(58)	1300 *	1800 **	1500 **	2200 **	ZXHR
GGM	(60)	750	900	950	1410	ZVZ R
LABOR M	(61)	369	1070	1220	1730	Q-H R
SGSECOPD	(62)	1060	1400	1250	2060 **	D-H R
COMALAB	(67)	857	870	890	1790	BZHR
ENN001	(70)	1373 **	1360	1190	1360	BRH R
QSANAL	(76)	1230	2050 **	1550 **	2370 **	B-H R
PLVHOLAB	(81)	705	1090	810	1260	
WWRAYMOND	(83)	827	1150	1030	1380	BRHR
HKPC-EMD	(85)	897	1240	1000	1490	TWHJA
GAL	(91)	752	1270	1100	1470	A-H R
STCRSC	(92)	700	940	980	1380	B-AOP
ADIRONDACK	(93)	501	870	730	900 **	J-H R
ANDESITE	(105)	767	1330	1170	1330	Z-AP
XENOSOILBH	(108)	668	1110	980	1530	BHK R
THO1808MAS	(110)	700	1070	1080	1360	ZRH R
APVROPAVA	(112)	606	890	730	1000	QWA P
FPLL	(115)	507	520 **	460 **	510 **	QRHS
ORGDIMCH	(120)	660	990	1080	1650	ZZZ R
HHAFU	(134)	1270 *	1590	1500 **	2010 *	ARH R
URKANTONE	(230)	815	970	500 **	1270	BVH R
ECCM	(841)	1070	1310	1140	1650	BHH R
LAB607	(862)	1552 **	1840 **	1200	1970	B-HR
CNRLBR	(875)	869	1310	1030	1620	ZRH R
LABAMB	(878)	907	1080	920	1330	J-K R
TAMPERE	(911)	865	1220	880	1310	Q-HR
SHI	(912)	648	1380	1300	1600	QAHR
FRESHERTEN	(920)	1000	1400	1300	1800	QA R
FRESKOELL	(958)	568	1530	1500 **	1910	Q-JR
SPE-VS	(987)	665	1130	930	1240	JZAP
NDA mean		808.8	1192	1055	1483	
NDA st dev		219.0	254	191	249	
NDA N		44	44	42	42	
Old statistics						
Median		780.0 (3)	1183 (3)	1030 (3)	1479 (3)	
MAD		116.0	144	91	148	
Mean		799.9	1189	1033	1495	
St Dev		184.6	205	145	220	
N		40	40	34	36	
benzo(ghi)perylene (µg/kg)						
ZINDZIWE	(1)	580	1000 **	630	910	--A E
MLABTW	(4)	577	528	471	854	ZWAOP
AL-West	(5)	705	848	693	1083	ZRAOP
Alconheinr	(7)	450	640	540	770	Q-K R
ANAMIL	(10)	325	464 *	476	415 **	DZKR
BLAUWHUIS	(14)	491	682	509	981	---
FRIDOLIN	(15)	528	707	558	1030	BWK R
HIDU	(16)	472	714	504	1018	ZUH R
PAULINE	(18)	645	762	685	842	Z-AOP
EXACT	(28)	550	760	580	930	Q-K R
ANATEK	(29)	664	922 *	792 **	1017	Q-H R
ELML	(33)	488	660	595	839	QZH R
WELLAB	(35)	466	701	574	930	BRHR
LAS	(48)	648	1212 **	1004 **	1447 **	ZVA P
CHEMLABSIT	(52)	404	706	434	592 *	---
NDA mean		484.6	688.9	550.2	895.7	(cont.)
NDA st dev		120.6	113.3	99.9	149.3	
NDA N		49	49	50	50	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
benzo(ghi)perylene (µg/kg)	(cont.)					
UMEG-GB3	(53)	415	668	534	969	ZRH R
ATM	(54)	480	620	570	810	F-A P
32A	(56)	560	870	710	1250 **	Z-HS
HILL	(58)	400	570	450	700	ZXHR
ARCHIMEDES	(59)	-	-	672	946	FZAJB
GGM	(60)	455	472 *	490	840	ZVZ R
LABOR M	(61)	430	607	623	1133 *	Q-H R
SGSECOPD	(62)	404	599	490	776	D-H R
COMALAB	(67)	584	762	480	847	BZHR
ENN001	(70)	773 **	785	757 *	854	BRH R
SJEFSLABB	(71)	421	878	487	859	BYHR
QSANAL	(76)	402	742	545	921	B-H R
PLVHOLAB	(81)	417	586	482	723	B-HR
WWRAYMOND	(83)	547	720	498	870	BRHR
HKPC-EMD	(85)	528	735	585	942	TWHR
GAL	(91)	533	757	719	1069	A-H R
STCRSC	(92)	492	625	528	859	B-AOP
ADIRONDACK	(93)	311	430 **	278 **	408 **	J-H R
ANDESITE	(105)	372	619	464	851	Z-AP
XENOSOILBH	(108)	394	698	590	983	BHK R
THO1808MAS	(110)	401	645	604	920	ZRH R
APVROPAVA	(112)	409	636	527	816	QWA P
FPLL	(115)	198 **	320 **	452	272 **	QRHS
ORGDIMCH	(120)	395	790	670	1035	ZZZ R
HHAFU	(134)	570	750	710	970	ARH R
URKANTONE	(230)	97 **	109 **	73 **	178 **	BVH R
ECCM	(841)	606	903 *	720	1150 *	BHH R
LAB607	(862)	677	1127 **	593	1466 **	B-HR
CNRLBR	(875)	499	745	593	1009	ZRH R
LABAMB	(878)	685	701	569	912	J-K R
TAMPERE	(911)	592	689	517	760	Q-HR
SHI	(912)	368	547	447	658	QAH R
FRESHERTEN	(920)	580	630	480	800	Q-Z R
FRESKOELL	(958)	224	465 *	352 *	594 *	Q-JR
SPE-VS	(987)	357	719	552	861	JZAP
NDA mean		484.6	688.9	550.2	895.7	
NDA st dev		120.6	113.3	99.9	149.3	
NDA N		49	49	50	50	
Old statistics						
Median		484.0 (3)	701.0 (3)	548.5 (3)	870.0 (3)	
MAD		82.5	60.0	58.4	70.0	
Mean		489.2	694.8	559.1	891.4	
St Dev		109.7	83.6	83.0	102.2	
N		46	38	44	39	
benzo(k)fluoranthene (µg/kg)						
ZINDZIWE	(1)	420	660	460	610	--A E
MLABTW	(4)	363	454	464	652	ZWAOP
AL-West	(5)	514	625	495	711	ZRAOP
Alconheinr	(7)	480	640	500	740	Q-K R
ANAMIL	(10)	334	495	596 *	451 *	DZK R
BLAUWHUIS	(14)	476	620	545	606	---
FRIDOLIN	(15)	479	635	525	760	BWK R
HIDU	(16)	403	527	479	715	ZUH R
PAULINE	(18)	463	527	440	572	Z-AOP
EXACT	(28)	410	560	440	650	Q-K R
ELML	(33)	397	534	471	600	QZH R
WELLAB	(35)	407	592	477	707	BRHR
LAS	(48)	367	651	525	657	ZVA P
CHEMLABSIT	(52)	391	502	480	621	---
UMEG-GB3	(53)	355	557	495	668	ZRH R
NDA mean		390.4	545.4	470.4	628.3	(cont.)
NDA st dev		89.9	78.5	66.0	84.2	
NDA N		47	47	48	48	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample	739	767	780	764	MIC
benzo(k)fluoranthene (µg/kg)	(cont.)				
ATM	(54)	350	460	400	590
32A	(56)	660 **	990 **	840 **	1210 **
HILL	(58)	400	550	470	620
ARCHIMEDES	(59)	-	-	364 *	608
GGM	(60)	301	510	340 *	577
LABOR M	(61)	369	443	481	672
SGSECOPD	(62)	530	637	560	945 **
COMALAB	(67)	443	512	381	BZHR
ENN001	(70)	624 **	567	658 **	BRH R
QSANAL	(76)	395	683 *	489	B-H R
PLVHOLAB	(81)	371	540	445	B-HR
WWRAYMOND	(83)	394	541	497	727
HKPC-EMD	(85)	393	571	478	625
GAL	(91)	324	515	490	612
STCRSC	(92)	276	363 **	340 *	483
ADIRONDACK	(93)	273	453	350 *	427 **
ANDESITE	(105)	332	835 **	1025 **	Z-AP
XENOSOILBH	(108)	314	463	450	BHK R
THO1808MAS	(110)	390	565	521	ZRH R
APVROPAVA	(112)	333	495	382	QWA P
FPLL	(115)	604 **	586	670 **	QRHS
ORGDIMCH	(120)	230	415 *	430	ZZZ R
HHAFU	(134)	470	590	580 *	ARH R
URKANTONE	(230)	269	316 **	217 **	386 **
ECCM	(841)	737 **	1130 **	743 **	BHH R
LAB607	(862)	501	569	478	B-HR
CNRLBR	(875)	375	508	425	ZRH R
LABAMB	(878)	451	527	447	J-K R
TAMPERE	(911)	704 **	921 **	632 **	Q-HR
SHI	(912)	284	562	455	621
FRESHERTEN	(920)	430	570	510	680
FRESKOELL	(958)	448	879 **	914 **	Q-Z R
SPE-VS	(987)	290	530	356 *	936 **
NDA mean		390.4	545.4	470.4	628.3
NDA st dev		89.9	78.5	66.0	84.2
NDA N		47	47	48	48
Old statistics					
Median		392.0 (3)	545.5 (3)	478.0 (3)	624.0 (3)
MAD		57.0	36.5	23.0	44.0
Mean		385.6	548.5	472.3	633.0
St Dev		72.6	58.1	41.8	68.5
N		42	38	33	39
chrysene (µg/kg)					
ZINDZIWE	(1)	780	1300	910	980
MLABTW	(4)	576	740	719	1010
AL-West	(5)	967	1270	1102	1300
Alconheinr	(7)	810	1100	880	1100
ANAMIL	(10)	816	1250	1204	1070
BLAUWHUIS	(14)	770	1030	1151	910
FRIDOLIN	(15)	1009	1430 *	1287	1510 **
HIDU	(16)	837	1120	1073	1200
PAULINE	(18)	779	890	748	1060
EXACT	(28)	750	1000	780	1000
ANATEK	(29)	700	1010	801	800
ELML	(33)	816	1080	1030	1150
WELLAB	(35)	798	1120	962	1210
LAS	(48)	659	1990 **	1048	1390
CHEMLABSIT	(52)	691	970	976	1190
UMEG-GB3	(53)	623	950	837	1040
ATM	(54)	1420 **	2180 **	2720 **	2480 **
NDA mean		770.2	1072	952.2	1099
NDA st dev		173.8	195	220.0	190
NDA N		49	49	50	50

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
chrysene (µg/kg)	(cont.)					
32A	(56)	880	1380	1270	1520 **	Z-HS
HILL	(58)	660	930	770	970	ZXHR
ARCHIMEDES	(59)	-	-	712	930	FZAJB
GGM	(60)	650	810	800	1160	ZVZ R
LABOR M	(61)	795	970	1084	1250	Q-H R
SGSECOPD	(62)	992	1270	1040	2000 **	D-H R
COMALAB	(67)	962	950	938	1400	BZHR
ENN001	(70)	1065	1070	1025	1080	BRH R
SJEFSLABB	(71)	809	2030 **	1525 **	1870 **	BYHR
QSANAL	(76)	943	1650 **	1290	1540 **	B-H R
PLVHOLAB	(81)	762	1180	1000	1130	B-HR
WWRAYMOND	(83)	768	1040	900	1010	BRHR
HKPC-EMD	(85)	731	1010	945	1070	TWHR
GAL	(91)	663	1060	974	1050	A-H R
STCRSC	(92)	416	720 *	1471 **	720 *	B-AOP
ADIRONDACK	(93)	504	880	636	720 *	J-H R
ANDESITE	(105)	358 **	460 **	705	470 **	Z-AP
XENOSOILBH	(108)	643	980	956	1200	BHK R
THO1808MAS	(110)	620	930	942	1050	ZRH R
APVROPAVA	(112)	711	1040	740	950	QWA P
FPLL	(115)	508	420 **	359 **	660 **	QRHS
ORGDIMCH	(120)	625	1070	705	1000	ZZZ R
HHAFU	(134)	900	1230	1110	1260	ARH R
URKANTONE	(230)	979	270 **	526	290 **	BVH R
ECCM	(841)	1020	1410 *	1210	1300	BHH R
LAB607	(862)	1112	1300	1254	1400 *	B-HR
CNRLBR	(875)	680	1030	806	1030	ZRH R
LABAMB	(878)	998	1150	942	1170	J-K R
TAMPERE	(911)	826	1120	875	1050	Q-HR
SHI	(912)	795	1470 *	1320	1390	QAH R
FRESHERTEN	(920)	780	1000	950	1100	Q-Z R
FRESKOELL	(958)	554	1110	1024	1080	Q-JR
SPE-VS	(987)	782	1210	896	930	JZAP
NDA mean		770.2	1072	952.2	1099	
NDA st dev		173.8	195	220.0	190	
NDA N		49	49	50	50	
Old statistics						
Median		780.0 (3)	1050 (3)	947.5 (3)	1073 (3)	
MAD		117.0	82	139.0	92	
Mean		776.9	1067	953.3	1104	
St Dev		156.3	142	188.8	140	
N		47	38	46	38	
dibenz(ah)anthracene (µg/kg)						
ZINDZIWE	(1)	280 **	100 <	-	-	--A E
MLABTW	(4)	82	160 <	76 **	170 <	ZWAOP
AL-West	(5)	144	184	132	203	ZRAOP
Alconheinr	(7)	140	180	160	210	Q-K R
ANAMIL	(10)	90	147	152	132	DZK R
FRIDOLIN	(15)	106	140	111	220	BWK R
HIDU	(16)	147	139	136	275	ZUH R
PAULINE	(18)	117	136	-	-	Z-AOP
ANATEK	(29)	172	252 *	210 **	310	Q-H R
ELML	(33)	131	188	181	279	QZH R
WELLAB	(35)	118	178	138	243	BRHR
LAS	(48)	290 **	478 **	329 **	566 **	ZVA P
CHEMLABSIT	(52)	151	197	146	151	---
UMEG-GB3	(53)	84	131	114	189	ZRH R
32A	(56)	160	150	180	320	Z-HS
HILL	(58)	130	180	130	210	ZXHR
GGM	(60)	101	100 *	91	210	ZVZ R
NDA mean		126.9	171.6	142.2	225.7	(cont.)
NDA st dev		35.7	36.6	30.0	56.5	
NDA N		44	42	42	41	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample	739	767	780	764	MIC
dibenz(ah)anthracene (µg/kg)	(cont.)				
LABOR M (61)	147	147	191	263	Q-H R
SGSECOPD (62)	111	172	139	251	D-H R
COMALAB (67)	189	179	128	211	BZHR
ENN001 (70)	232 **	207	219 **	200	BRH R
QSANAL (76)	167	258 *	197	314	B-H R
PLVHOLAB (81)	103	152	125	187	
WWRAYMOND (83)	128	170	153	286	BRHR
HKPC-EMD (85)	123	204	150	257	TWHR
GAL (91)	117	169	142	196	A-H R
STCRSC (92)	95	63 **	85	171	B-AOP
ADIRONDACK (93)	123	182	126	179	J-H R
ANDESITE (105)	55	87 **	101	116	Z-AP
XENOSOILBH (108)	104	177	147	208	BHK R
THO1808MAS (110)	96	153	135	220	ZRH R
APVROPAVA (112)	114	146	121	158	QWA P
FPLL (115)	180	158	116	71 **	QRHS
ORGDIMCH (120)	111	190	160	265	ZZZ R
HHAFU (134)	150	190	230 **	250	ARH R
ECCM (841)	135	185	155	201	BHH R
LAB607 (862)	152	199	154	314	B-HR
CNRLBR (875)	130	195	160	234	ZRH R
LABAMB (878)	182	195	164	258	J-K R
TAMPERE (911)	195	266 **	181	300	Q-HR
SHI (912)	126	233	186	287	QAHR
FRESHERTEN (920)	170	180	140	230	Q-Z R
FRESKOELL (958)	77	145	120	194	Q-JR
SPE-VS (987)	62	121	101	177	JZAP
NDA mean	126.9	171.6	142.2	225.7	
NDA st dev	35.7	36.6	30.0	56.5	
NDA N	44	42	42	41	
Old statistics					
Median	126.0 (3)	178.0 (3)	140.0 (3)	220.0 (3)	
MAD	23.0	19.0	19.0	37.0	
Mean	127.2	171.4	141.8	227.7	
St Dev	34.0	25.3	27.7	51.9	
N	41	35	37	39	
fluoranthene (µg/kg)					
ZINDZIWE (1)	1900	2500	1800	1800	--A E
MLABTW (4)	1820	1960	1850	2280 *	ZWAOP
AL-West (5)	2220	2430	2030	2140	ZRAOP
Alconheinr (7)	2000	2300	1900	1900	Q-K R
ANAMIL (10)	1900	2150	1820	1800	DZK R
BLAUWHUIS (14)	2010	2230	2460 **	1700	---
FRIDOLIN (15)	2080	2460	2300	2130	BWK R
HIDU (16)	2070	2210	1970	2010	ZUH R
PAULINE (18)	2180	2360	1880	1880	Z-AOP
EXACT (28)	1900	2400	1900	2100	Q-K R
ANATEK (29)	880 **	1170 **	410 **	840 **	Q-H R
ELML (33)	1550	1760	1740	1480 *	QZH R
WELLAB (35)	1760	2300	2070	1980	BRHR
LAS (48)	1490	2280	2120	1720	ZVA P
CHEMLABSIT (52)	1860	2060	2140	2100	---
UMEG-GB3 (53)	1580	2040	1880	1860	ZRH R
ATM (54)	1590	1970	1910	1660	F-A P
32A (56)	1720	2280	2290	2010	Z-HS
HILL (58)	1200	1500 **	1200 **	1200 **	ZXHR
ARCHIMEDES (59)	-	-	1400 *	1490 *	FZAJB
GGM (60)	2040	2240	1790	1930	ZVZ R
LABOR M (61)	1800	1810	1910	1790	Q-H R
SGSECOPD (62)	2000	2250	1950	4080 **	D-H R
NDA mean	1801	2192	1951	1878	(cont.)
NDA st dev	313	276	248	197	
NDA N	49	49	50	50	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample	739	767	780	764	MIC
fluoranthene (µg/kg) (cont.)					
COMALAB (67)	1980	1870	1670	1800	BZHR
ENN001 (70)	2750 **	2280	2210	1910	BRH R
SJEFSLABB (71)	1630	2660	2740 **	2720 **	BYHR
QSANAL (76)	1900	2690	2190	2130	B-H R
PLVHOLAB (81)	1610	2200	1800	1700	B-HR
WWRAYMOND (83)	1730	2140	2030	1880	BRHR
HKPC-EMD (85)	1740	2270	2120	1880	TWHR
GAL (91)	1640	2040	2070	1760	A-H R
STCRSC (92)	1300	1690	1620	1710	B-AOP
ADIRONDACK (93)	1300	1910	1670	1320 **	J-H R
ANDESITE (105)	1290	1850	1390 *	1880	Z-AP
XENOSOILBH (108)	1420	1820	1760	1900	BHK R
THO1808MAS (110)	1890	2110	2250	1900	ZRH R
APVROPAVA (112)	1500	2050	1670	1720	QWA P
FPLL (115)	200 **	120 **	20 **	220 **	QRHS
ORGDIMCH (120)	1480	2300	1800	1950	ZZZ R
HHAFU (134)	2220	2560	2510 **	2150	ARH R
URKANTONE (230)	1850	2010	1410 *	1810	BVH R
ECCM (841)	2180	2510	2290	2260 *	BHH R
LAB607 (862)	2020	2060	1990	2020	B-HR
CNRLBR (875)	1880	2410	2020	1890	ZRH R
LABAMB (878)	2040	2170	1930	1860	J-K R
TAMPERE (911)	1980	2450	2010	1900	Q-HR
SHI (912)	1550	2380	2250	1820	QAH R
FRESHERTEN (920)	1600	1900	2000	1700	Q-Z R
FRESKOELL (958)	2060	3980 **	3170 **	2360 **	Q-JR
SPE-VS (987)	1520	2280	1890	1810	JZAP
NDA mean	1801	2192	1951	1878	
NDA st dev	313	276	248	197	
NDA N	49	49	50	50	
Old statistics					
Median	1836 (3)	2232 (3)	1939 (3)	1880 (3)	
MAD	202	177	137	83	
Mean	1782	2191	1962	1886	
St Dev	269	242	187	138	
N	46	45	40	39	
fluorene (µg/kg)					
ZINDZIWE (1)	58.0	140	-	-	--A E
MLABTW (4)	84.6	160 <	147	170.0 <	ZWAOP
AL-West (5)	147.4 **	151	145	67.9	ZRAOP
Alconheinr (7)	100.0	160	130	70.0	Q-K R
ANAMIL (10)	84.6	131	59 **	139.0	DZK R
FRIDOLIN (15)	109.0	181	176	74.6	BWK R
HIDU (16)	136.0 **	185	175	77.0	ZUH R
PAULINE (18)	110.0	143	-	-	Z-AOP
ANATEK (29)	161.3 **	256 **	254 **	141.8 *	Q-H R
ELML (33)	93.0	169	187	97.0	QZH R
WELLAB (35)	92.1	170	161	84.4	BRHR
LAS (48)	59.0	150	155	52.0 <	ZVA P
CHEMLABSIT (52)	80.0	122	128	59.0	---
UMEG-GB3 (53)	78.4	146	150	85.3	ZRH R
32A (56)	100.0	220 **	200	150.0 **	Z-HS
HILL (58)	61.0	90 **	84 *	37.0	ZXHR
GGM (60)	102.7	140	167	133.7	ZVZ R
LABOR M (61)	117.0	142	183	102.0	Q-H R
SGSECOPD (62)	76.0	164	124	204.0 **	D-H R
COMALAB (67)	100.0 <	100 <	168	100.0 <	BZHR
ENN001 (70)	169.0 **	125	158	45.0	BRH R
SJEFSLABB (71)	89.0	200 **	229 *	138.0	BYHR
QSANAL (76)	120.0	156	128	88.5	B-H R
NDA mean	86.11	149.7	156.2	76.91	(cont.)
NDA st dev	20.60	19.8	35.4	28.66	
NDA N	45	44	44	40	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
fluorene (µg/kg)	(cont.)					
PLVHOLAB	(81)	69.0	141	134	45.0	
WWRAYMOND	(83)	81.6	151	150	63.7	BRHR
HKPC-EMD	(85)	94.2	172	167	88.2	TWHR
GAL	(91)	76.0	133	149	76.0	A-H R
STCRSC	(92)	95.9	163	305 **	123.0	B-AOP
ADIRONDACK	(93)	76.0	144	122	61.0	J-H R
ANDESITE	(105)	28.6 **	109	137	96.5	Z-AP
XENOSOILBH	(108)	72.4	146	140	49.4	BHK R
THO1808MAS	(110)	100.0	175	191	98.0	ZRH R
APVROPAVA	(112)	68.8	126	123	47.6	QWA P
FPLL	(115)	179.0 **	158	37 **	128.0	QRHS
ORGDIMCH	(120)	69.5	120	155	71.5	ZZZ R
HHAFU	(134)	100.0	160	180	100.0 <	ARH R
URKANTONE	(230)	108.0	184	136	97.0	BVH R
ECCM	(841)	85.0	1350 **	219	2450.0 **	BHH R
LAB607	(862)	89.0	144	167	43.0	B-HR
CNRLBR	(875)	59.0	163	186	95.0	ZRH R
LABAMB	(878)	99.0	162	154	94.0	J-K R
TAMPERE	(911)	140.0 **	151	185	56.4	Q-HR
SHI	(912)	82.9	146	168	63.9	QAHR
FRESHERTEN	(920)	62.0	110	130	63.0	Q-Z R
FRESKOELL	(958)	86.4	142	185	71.0	Q-JR
SPE-VS	(987)	60.0	104 **	103	46.0	JZAP
NDA mean		86.11	149.7	156.2	76.91	
NDA st dev		20.60	19.8	35.4	28.66	
NDA N		45	44	44	40	
Old statistics						
Median		84.80 (3)	148.2 (3)	155.0 (3)	75.30 (3)	
MAD		14.70	12.8	20.5	19.30	
Mean		85.50	149.4	156.9	79.88	
St Dev		17.07	19.1	25.6	28.07	
N		38	38	38	36	
indeno(1,2,3-cd)pyrene (µg/kg)						
ZINDZIWE	(1)	600	980 *	660	970	--A E
MLABTW	(4)	608	752	756	1170	ZWAOP
AL-West	(5)	728	848	694	1100	ZRAOP
Alconcheinr	(7)	490	640	540	830	Q-K R
ANAMIL	(10)	449	650	680	580 **	DZKR
BLAUWHUIS	(14)	553	713	658	880	---
FRIDOLIN	(15)	512	727	577	1070	BWK R
HIDU	(16)	546	700	576	1090	ZUHR
PAULINE	(18)	716	910	754	990	Z-AOP
EXACT	(28)	540	760	580	1000	Q-K R
ANATEK	(29)	636	920	793	1140	Q-H R
ELML	(33)	578	788	842	1240	QZH R
WELLAB	(35)	546	760	628	1060	BRHR
LAS	(48)	523	948	750	1060	ZVAP
CHEMLABSIT	(52)	520	672	665	930	---
UMEG-GB3	(53)	435	717	623	1070	ZRH R
ATM	(54)	510	570	760	870	F-AP
32A	(56)	590	100 **	900 *	1540 **	Z-HS
HILL	(58)	290	380 **	270 **	520 **	ZXHR
ARCHIMEDES	(59)	-	-	765	1070	FZAJB
GGM	(60)	491	620	617	950	ZVZR
LABOR M	(61)	486	627	707	1290 *	Q-H R
SGSECOPD	(62)	517	728	642	970	D-H R
COMALAB	(67)	695	739	548	920	BZHR
ENN001	(70)	1012 **	933	917 **	900	BRHR
SJEFSLABB	(71)	485	730	585	1050	BYHR
QSANAL	(76)	499	819	641	1160	B-H R
NDA mean		523.6	723.1	647.7	1009	(cont.)
NDA st dev		115.8	128.4	128.8	168	
NDA N		49	49	50	50	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample	739	767	780	764	MIC
indeno(1,2,3-cd)pyrene (µg/kg)	(cont.)				
PLVHOLAB (81)	448	653	525	830	B-HR
WWRAYMOND (83)	575	801	626	1050	BRHR
HKPC-EMD (85)	594	804	661	1130	TWHR
GAL (91)	620	740	754	1170	A-H R
STCRSC (92)	318	486	397 *	670 *	B-AOP
ADIRONDACK (93)	379	536	349 *	560 **	J-H R
ANDESITE (105)	383	577	490	1000	Z-AP
XENOSOILBH (108)	445	720	609	990	BHK R
THO1808MAS (110)	447	660	635	960	ZRH R
APVROPAVA (112)	456	663	537	840	QWA P
FPLL (115)	224 **	297 **	275 **	220 **	QRHS
ORGDIMCH (120)	420	670	605	940	ZZZ R
HHAFU (134)	630	790	790	1100	ARH R
URKANTONE (230)	140 **	152 **	84 **	260 **	BVH R
ECCM (841)	682	970 *	771	1170	BHH R
LAB607 (862)	671	1130 **	697	1330 *	B-HR
CNRLBR (875)	559	846	678	1080	ZRH R
LABAMB (878)	656	687	591	930	J-K R
TAMPERE (911)	798 **	1036 **	794	1130	Q-HR
SHI (912)	322	624	476	760	QAH R
FRESHERTEN (920)	490	530	420 *	690 *	Q-Z R
FRESKOELL (958)	247 **	455 *	342 **	540 **	Q-JR
SPE-VS (987)	429	799	624	940	JZAP
NDA mean	523.6	723.1	647.7	1009	
NDA st dev	115.8	128.4	128.8	168	
NDA N	49	49	50	50	
Old statistics					
Median	518.5 (3)	723.4 (3)	642.0 (3)	1000 (3)	
MAD	71.5	71.9	62.0	77	
Mean	524.2	721.4	656.2	1012	
St Dev	105.4	110.3	90.3	114	
N	44	40	41	39	
napthalene (µg/kg)					
ZINDZIWE (1)	53.0	250	100	620	--A E
MLABTW (4)	72.7	239	116	696	ZWAOP
AL-West (5)	128.6	406	173	903	ZRAOP
Alconcheinr (7)	70.0	250	90	560	Q-K R
ANAMIL (10)	99.1	180	762 **	123 **	C-K R
BLAUWHUIS (14)	82.0	129	143	650	---
FRIDOLIN (15)	122.0	425	195	854	BWK R
HIDU (16)	323.0 **	488	253	594	ZUH R
PAULINE (18)	63.3	256	92	562	Z-AOP
EXACT (28)	50.0	210	80	440	Q-K R
ANATEK (29)	197.8 **	521 *	242	754	Q-H R
ELML (33)	103.0	347	157	702	QZH R
WELLAB (35)	84.9	300	130	632	BRHR
LAS (48)	203.0 <	493	220	368	ZVA P
CHEMLABSIT (52)	231.0 **	526 *	266	1221 **	---
UMEG-GB3 (53)	98.4	368	163	832	ZRH R
ATM (54)	50.0 <	50 <	300 *	450	F-A P
32A (56)	110.0	470	210	920	Z-HS
HILL (58)	68.0	190	88	440	ZXHR
GGM (60)	99.2	247	126	463	ZVZ R
LABOR M (61)	188.0 **	302	220	720	Q-H R
SGSECOPD (62)	54.0	294	106	200	D-H R
COMALAB (67)	100.0 <	148	100 <	618	BZHR
ENN001 (70)	153.0	315	183	333	BRH R
QSANAL (76)	126.0	393	165	700	B-H R
PLVHOLAB (81)	59.0	245	108	432	B-HR
WWRAYMOND (83)	92.3	312	141	617	BRHR
NDA mean	90.04	290.6	143.6	578.6	(cont.)
NDA st dev	39.07	122.4	72.6	221.8	
NDA N	45	47	47	48	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample	739	767	780	764	MIC
naphtalene (µg/kg) (cont.)					
HKPC-EMD (85)	107.0	380	156	748	
GAL (91)	89.0	270	107	638	A-H R
STCRSC (92)	84.1	354	168	650	---
ADIRONDACK (93)	51.0	215	81	386	J-H R
ANDESITE (105)	53.0	200	44	284	Z-AP
XENOSOILBH (108)	144.8	426	254	594	BHK R
THO1808MAS (110)	80.0	267	130	612	ZRH R
APVROPAVA (112)	65.1	218	83	485	QWA P
FPLL (115)	80.5	19	27	25 **	QRHS
ORGDIMCH (120)	175.0 *	600 **	250	970	ZZZ R
HHAFU (134)	140.0	410	230	680	ARH R
URKANTONE (230)	140.0	446	224	886	BVH R
ECCM (841)	201.0 **	555 **	258	1170 **	BHH R
LAB607 (862)	106.0	211	118	283	B-HR
CNRLBR (875)	106.0	253	132	566	ZRH R
LABAMB (878)	113.0	399	170	728	J-K R
TAMPERE (911)	86.0	174	92	303	Q-HR
SHI (912)	58.8	220	91	516	QAH R
FRESHERTEN (920)	73.0	200	100	330	Q-Z R
FRESKOELL (958)	45.2	130	54	236	Q-JR
SPE-VS (987)	83.0	236	118	553	JZAP
NDA mean	90.04	290.6	143.6	578.6	
NDA st dev	39.07	122.4	72.6	221.8	
NDA N	45	47	47	48	
Old statistics					
Median	84.90 (3)	256.0 (3)	132.0 (3)	603.0 (3)	
MAD	21.10	59.0	41.1	132.5	
Mean	89.59	285.7	147.9	579.7	
St Dev	29.11	107.8	63.6	193.3	
N	39	43	45	44	
phenanthrene (µg/kg)					
ZINDZIWE (1)	820	1300	590	1000	--A E
MLABTW (4)	836	970	629	1090	ZWAOP
AL-West (5)	1308 *	1480	792	1270	ZRAOP
Alconcheinr (7)	1100	1200	660	1000	Q-K R
ANAMIL (10)	1094	1120	1142 **	700	DZK R
BLAUWHUIS (14)	1031	960	851	950	---
FRIDOLIN (15)	1154	1300	870	1270	BWK R
HIDU (16)	1346 **	1420	898	1090	ZUH R
PAULINE (18)	1080	1110	520	780	Z-AOP
EXACT (28)	1000	1200	600	1000	Q-K R
ANATEK (29)	825	930	683	710	Q-H R
ELML (33)	848	910	600	900	QZH R
WELLAB (35)	959	1120	712	1140	BRHR
LAS (48)	880	1340	884	1190	ZVA P
CHEMLABSIT (52)	1058	1260	799	1690 **	---
UMEG-GB3 (53)	855	1070	681	1090	ZRH R
ATM (54)	810	830	580	860	F-A P
32A (56)	1020	1320	880	1380 *	Z-HS
HILL (58)	580	720 **	420	650	ZXHR
ARCHIMEDES (59)	-	-	531	820	FZAJB
GGM (60)	897	990	549	840	ZVZ R
LABOR M (61)	1073	1070	815	1170	Q-H R
SGSECOPD (62)	980	1210	659	2390 **	D-H R
COMALAB (67)	824	820	670	1060	BZHR
ENN001 (70)	1617 **	1260	883	900	BRH R
SJEFSLABB (71)	882	1530 **	909	1680 **	BYHR
QSANAL (76)	1040	1380	781	1260	B-H R
PLVHOLAB (81)	824	1070	624	840	B-HR
WWRAYMOND (83)	939	1100	677	1000	BRHR
NDA mean	936.2	1108	683.6	1001	(cont.)
NDA st dev	173.9	176	137.6	203	
NDA N	49	49	50	50	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
phenanthrene (µg/kg)	(cont.)					
HKPC-EMD	(85)	1040	1340	820	1300	TWHR
GAL	(91)	963	1110	705	1060	A-H R
STCRSC	(92)	756	910	584	950	B-AOP
ADIRONDACK	(93)	711	920	529	710	J-H R
ANDESITE	(105)	681	1000	656	970	Z-AP
XENOSOILBH	(108)	791	1030	596	960	BHK R
THO1808MAS	(110)	1090	1150	737	1110	ZRH R
APVROPAVA	(112)	816	1140	678	1020	QWA P
FPLL	(115)	134 **	40 **	88 **	30 **	QRHS
ORGDIMCH	(120)	745	1100	525	1260	ZZZ R
HHAFU	(134)	1110	1210	840	1100	ARH R
URKANTONE	(230)	1276	1090	556	1060	BVH R
ECCM	(841)	1250	1470	921	1550 **	BHH R
LAB607	(862)	1035	1150	689	930	B-HR
CNRLBR	(875)	984	1100	628	1040	ZRH R
LABAMB	(878)	1038	1090	640	1120	J-K R
TAMPERE	(911)	895	1010	685	830	Q-HR
SHI	(912)	929	1170	772	1020	QAHR
FRESHERTEN	(920)	870	910	630	820	Q-Z R
FRESKOELL	(958)	816	990	695	750	Q-JR
SPE-VS	(987)	734	980	619	940	JZAP
NDA mean		936.2	1108	683.6	1001	
NDA st dev		173.9	176	137.6	203	
NDA N		49	49	50	50	
Old statistics						
Median		929.0 (3)	1108 (3)	677.5 (3)	1000 (3)	
MAD		109.0	114	90.5	105	
Mean		932.0	1122	692.7	989	
St Dev		150.4	164	123.1	168	
N		45	46	48	44	
pyrene (µg/kg)						
ZINDZIWE	(1)	1800 **	1800	-	-	--A E
MLABTW	(4)	1160	1570	1610	1660 *	ZWAOP
AL-West	(5)	1700 **	2020	1780	1700 *	ZRAOP
Alconcheinr	(7)	1400	1700	1500	1400	Q-K R
ANAMIL	(10)	1270	1570	1380	1630 *	DZKR
FRIDOLIN	(15)	1420	1800	1750	1560	BWK R
HIDU	(16)	1530	1790	1500	1490	ZUH R
PAULINE	(18)	1170	1390	-	-	Z-AOP
ANATEK	(29)	790	960 **	810 **	710 **	Q-H R
ELML	(33)	1080	1310	1380	1120 *	QZH R
WELLAB	(35)	1260	1700	1530	1460	BRHR
LAS	(48)	1080	1730	1650	1360	ZVAP
CHEMLABSIT	(52)	1220	1400	1510	1400	---
UMEG-GB3	(53)	1100	1520	1510	1410	ZRH R
32A	(56)	1170	1660	1750	1470	Z-HS
HILL	(58)	840	1100 *	940 **	910 **	ZXHR
GGM	(60)	1400	1420	1360	1430	ZVZR
LABOR M	(61)	1310	1420	1520	1360	Q-H R
SGSECOPD	(62)	1240	1530	1290	2780 **	D-H R
COMALAB	(67)	1470	1390	1370	1460	BZHR
ENN001	(70)	1890 **	1650	1660	1410	BRHR
SJEFLSLABB	(71)	1040	2190 **	2160 **	2010 **	BYHR
QSANAL	(76)	1320	1970	1740	1560	B-H R
PLVHOLAB	(81)	1110	1600	1410	1270	
WWRAYMOND	(83)	1210	1570	1590	1400	BRHR
HKPC-EMD	(85)	1110	1530	1570	1330	TWHR
GAL	(91)	1270	1600	1710	1400	A-H R
STCRSC	(92)	900	1340	1130	1460	B-AOP
ADIRONDACK	(93)	880	1380	1320	970 **	J-H R
NDA mean		1221	1592	1518	1430	(cont.)
NDA st dev		221	247	207	132	
NDA N		46	46	44	44	

SETOC 2009.1 - Polycyclic aromatic hydrocarbons

Sample		739	767	780	764	MIC
pyrene (µg/kg)	(cont.)					
ANDESITE	(105)	900	1260	1160	1110 **	Z-AP
XENOSOILBH	(108)	1010	1430	1420	1460	BHK R
THO1808MAS	(110)	1210	1570	1790	1450	ZRH R
APVROPAVA	(112)	1220	1710	1330	1420	QWA P
FPLL	(115)	450 **	40 **	30 **	90 **	QRHS
ORGDIMCH	(120)	1000	1700	1400	1420	ZZZ R
HHAFU	(134)	1520	1820	1900 *	1560	ARH R
URKANTONE	(230)	1380	2620 **	1450	2170 **	BVH R
ECCM	(841)	1390	1670	1650	1520	BHH R
LAB607	(862)	1450	1610	1490	1650 *	B-HR
CNRLBR	(875)	1270	1720	1500	1390	ZRH R
LABAMB	(878)	1390	1480	1410	1320	J-K R
TAMPERE	(911)	1370	1780	1650	1410	Q-HR
SHI	(912)	1090	1730	1800	1360	QAH R
FRESHERTEN	(920)	1100	1400	1500	1200 *	Q-Z R
FRESKOELL	(958)	1350	2190 **	2380 **	1700 *	Q-JR
SPE-VS	(987)	1070	1630	1450	1270	JZAP
NDA mean		1221	1592	1518	1430	
NDA st dev		221	247	207	132	
NDA N		46	46	44	44	
Old statistics						
Median		1213 (3)	1599 (3)	1500 (3)	1414 (3)	
MAD		138	127	120	46	
Mean		1202	1596	1513	1421	
St Dev		189	177	169	76	
N		42	40	38	29	

SETOC 2009.1 - Polychlorobiphenyls

Sample	739	767	780	764	MIC
PCB 028 (µg/kg)					
ZINDZIWE (1)	-	-	250	20.0	--HCE
MLABTW (4)	1.00 <	44.1	1018 **	34.9	ZZK R
AL-West (5)	1.00 <	34.9	263	18.8	ZZH R
Alconheinr (7)	2.00 <	61.0 *	650 **	38.0 *	Q-K R
ANAMIL (10)	2.00 <	65.5 **	34 **	585.0 **	DZK R
BLAUWHUIS (14)	0.80 <	30.9	265	19.3	---
FRIDOLIN (15)	1.07	42.1	389	24.9	BWK R
HIDU (16)	1.00 <	31.0	321	24.0	ZUH Q
PAULINE (18)	1.00 <	20.5	312	32.1	ZZK R
EXACT (28)	2.00 <	42.0	320	30.0	QRK R
ANATEK (29)	4.30 **	114.2 **	1019 **	72.3 **	Q-H R
ELML (33)	2.00 <	23.0	338	14.2	QZH R
WELLAB (35)	2.00 <	36.8	299	22.8	BKZQ
JYUIER (41)	1.34	37.3	364	24.1	ZZI Q
LAS (48)	5.09 <	39.7	296	22.5	ZUH Q
ARCHIMEDES (59)	-	-	267	24.0	FZI Q
GGM (60)	2.00 <	47.0	586 **	33.7	Z-Z R
LABOR M (61)	3.00 <	44.9	389	31.0	JRH R
SGSECOPD (62)	0.90	22.5	195	-	DUH Q
ENN001 (70)	1.00 <	17.3	165 *	11.9	BUH Q
SJEFSLABB (71)	-	28.4	263	18.0	BYHR
QSANAL (76)	1.00 <	25.0	301	20.0	BRH R
PLVHOLAB (81)	1.00 <	38.0	319	22.0	B-HR
HKPC-EMD (85)	2.50 <	37.5	277	27.4	TWHJA
GAL (91)	5.00 <	30.0	-	27.0	JXH Q
STCRSC (92)	1.00 <	26.4	303	18.7	BAH Q
ADIRONDACK (93)	50.00 <	50.0 <	206	50.0 <	JEH Q
ANDESITE (105)	25.00 <	25.0 <	330	25.0 <	ZUHQ
XENOSOILBH (108)	0.94	28.1	267	20.6	BRK R
THO1808MAS (110)	1.72	39.0	325	28.0	ZRH Q
ORGDIMCH (120)	2.35	30.0	654 **	28.1	ZZZ R
HHAFU (134)	1.00 <	10.0 **	140 **	10.0	BUH R
URKANTONE (230)	33.00 **	66.0 **	532 **	46.0 **	BVH R
ECCM (841)	1.18	39.1	350	28.3	BHH R
LAB607 (862)	3.40 *	69.2 **	323	38.2 *	BRHR
CNRLBLR (875)	1.19	31.1	321	22.7	ZUH R
TLR (900)	3.00 *	43.0	264	23.0	DRKR
TAMPERE (911)	1.00 <	21.0	196	13.3	Q-HR
SHI (912)	10.00 <	35.2	417	21.2	QEHR
FRESHERTEN (920)	3.00 <	13.1	189	3.1 **	Q-J Q
FRESKOELL (958)	5.00 <	5.0 <	5 <	6.4 **	Q-JQ
NDA mean	1.502	33.49	294.4	23.49	
NDA st dev	0.914	11.45	70.7	7.21	
NDA N	12	36	39	38	
Old statistics					
Median	1.185 (3)	33.00 (3)	301.9 (3)	22.80 (3)	
MAD	0.200	6.33	35.6	4.10	
Mean	1.336	32.63	297.2	23.11	
St Dev	0.484	8.83	57.1	6.16	
N	8	30	30	31	
PCB 031 (µg/kg)					
SGSECOPD (62)	1.50	23.6	236	-	DUH Q
ADIRONDACK (93)	50.00 <	50.0 <	50 <	50.0 <	JEH Q
ANDESITE (105)	25.00 <	25.0 <	25 <	25.0 <	ZUHQ
ORGDIMCH (120)	2.17	30.9	623	29.7	ZZZ R
SHI (912)	10.00 <	38.7	447	20.5	QEHR
Median	1.835 (1)	30.85 (1)	447.0 (1)	25.10 (1)	
MAD	0.335	7.25	176.0	4.60	
N	2	3	3	2	

SETOC 2009.1 - Polychlorobiphenyls

Sample	739	767	780	764	MIC
PCB 052 (µg/kg)					
ZINDZIWE (1)	-	-	130	33.0	--HCE
MLABTW (4)	1.00 <	25.7	345 **	37.7	ZZK R
AL-West (5)	1.47	28.2	157	33.2	ZZH R
Alconheinr (7)	2.00 <	30.0	150	37.0	Q-K R
ANAMIL (10)	2.00 <	32.8	37 **	145.0 **	DZK R
BLAUWHUIS (14)	0.80 <	27.8	150	32.9	
FRIDOLIN (15)	1.09	31.9	172	39.8	BWK R
HIDU (16)	1.00 <	23.0	127	33.0	ZUH Q
PAULINE (18)	1.00 <	26.2	122	58.3 **	ZZK R
EXACT (28)	2.00 <	31.0	85	34.0	QRK R
ANATEK (29)	7.41 **	63.2 **	215	47.0 *	Q-H R
ELML (33)	2.00 <	22.0	122	26.0	QZH R
WELLAB (35)	2.00 <	26.7	129	32.7	BKZQ
JYUIER (41)	1.42	32.1	167	37.3	ZZI Q
LAS (48)	5.09 <	34.8	183	37.2	ZUH Q
HILL (58)	1.00 <	22.0	94	26.0	ZXHR
ARCHIMEDES (59)	-	-	114	29.6	FZI Q
GGM (60)	2.00 <	24.1	134	35.2	Z-Z R
LABOR M (61)	2.00 <	18.2	105	26.0	JRH R
SGSECOPD (62)	0.94	15.7	60	25.4	DUH Q
ENN001 (70)	1.00 <	12.2 *	55	15.9 **	BUH Q
SJEFSLABB (71)	-	26.6	141	30.3	BYHR
QSANAL (76)	2.00 <	28.0	137	31.0	BRH R
PLVHOLAB (81)	1.00 <	30.0	161	33.0	B-HR
HKPC-EMD (85)	2.50 <	30.2	133	36.8	TWHQ
GAL (91)	5.00 <	23.0	-	29.0	JXH Q
STCRSC (92)	1.00 <	6.7 **	65	16.9 **	BAH Q
ADIRONDACK (93)	50.00 <	50.0 <	50 <	50.0 <	JEH Q
ANDESITE (105)	25.00 <	25.0 <	170	38.5	ZUHQ
XENOSOILBH (108)	1.76 *	33.6	176	44.9	BRK R
THO1808MAS (110)	1.97 *	32.0	127	31.0	ZRH Q
ORGDIMCH (120)	1.41	33.2	188	34.9	ZZZ R
HHAFU (134)	1.00	10.0 **	78	19.0 *	BUH R
URKANTONE (230)	25.00 **	53.0 **	195	66.0 **	BVH R
ECCM (841)	0.96	30.7	154	40.9	BHH R
LAB607 (862)	2.60 **	39.9	193	31.7	BRHR
CNRRLBR (875)	0.99	25.7	163	37.1	ZUH R
LABAMB (878)	0.80	25.3	145	28.5	J-K R
TLR (900)	1.00	39.0	144	39.0	
TAMPERE (911)	1.10	23.0	97	26.6	Q-HR
SHI (912)	10.00 <	46.5 **	232 *	49.5 **	QEHR
FRESHERTEN (920)	3.00 <	22.3	72	9.8 **	Q-J Q
FRESKOELL (958)	5.00 <	5.0 <	5 <	10.4 **	Q-JQ
NDA mean	1.163	27.66	138.7	33.19	
NDA st dev	0.396	7.03	44.1	6.75	
NDA N	16	38	40	42	
Old statistics					
Median	1.000 (3)	27.90 (3)	137.0 (3)	33.00 (3)	
MAD	0.090	4.05	26.0	4.00	
Mean	1.107	27.95	135.4	33.41	
St Dev	0.224	5.49	40.2	4.87	
N	11	32	37	32	
PCB 077 (µg/kg)					
WELLAB (35)	2.0000 <	2.18	3.35	6.37	
ENVIROPACE (36)	0.0580	2.28	3.92	5.62	
LAS (48)	5.0900 <	5.11 <	5.17 <	5.18 <	ZUH Q
HILL (58)	1.0000 <	1.00 <	1.00 <	1.00 <	
ORGDIMCH (120)	0.0910	2.86	6.01	6.55	ZZZ R
LABAMB (878)	-	-	-	4.16	J-K R
Median	0.07450 (1)	2.280 (1)	3.920 (1)	5.995 (1)	
MAD	0.01650	0.100	0.570	0.463	
N	2	3	3	4	

SETOC 2009.1 - Polychlorobiphenyls

Sample	739	767	780	764	MIC
PCB 077 (µg/kg) (cont.)					
Median	0.07450 (1)	2.280 (1)	3.920 (1)	5.995 (1)	
MAD	0.01650	0.100	0.570	0.463	
N	2	3	3	4	
PCB 081 (µg/kg)					
ENVIROPACE (36)	0.0100 <	0.0220	0.088	0.135	
HILL (58)	1.0000 <	1.0000 <	1.000 <	1.000 <	
EPILAB-1A (87)	0.0035	0.0590	0.110	0.150	
ORGDIMCH (120)	0.0020 <	0.0180	0.130	0.124	ZZZ R
LABAMB (878)	0.5000 <	0.5000 <	0.500 <	0.500 <	J-K R
Median	0.00350 (1)	0.02200 (1)	0.1100 (1)	0.1350 (1)	
MAD	-	0.00400	0.0200	0.0110	
N	1	3	3	3	
PCB 101 (µg/kg)					
ZINDZIWE (1)	-	-	14.0 *	45.0	--HCE
MLABTW (4)	2.00 <	31.5	50.0 <	58.3	ZZK R
AL-West (5)	1.09	34.4	33.9 *	57.1	ZZH R
Alconcheinr (7)	2.00 <	37.0	24.0	55.0	Q-K R
ANAMIL (10)	2.00 <	2.0 <	45.4 **	19.2 **	DZK R
BLAUWHUIS (14)	1.00	27.1	21.2	45.4	--- Z
FRIDOLIN (15)	1.30	37.1	25.7	61.7	BWK R
HIDU (16)	1.00	26.0	23.0	48.0	ZUH Q
PAULINE (18)	1.00 <	28.8	24.7	90.0 **	ZZK R
EXACT (28)	2.00 <	30.0	23.0	49.0	QRK R
ANATEK (29)	1.54	62.7 **	38.7 **	91.8 **	Q-H R
ELML (33)	2.00 <	29.9	24.0	51.0	QZH R
WELLAB (35)	2.00 <	29.7	18.9	50.9	BKZQ
JYUIER (41)	2.62 **	32.0	22.3	50.4	ZZI Q
LAS (48)	5.09 <	30.3	38.3 **	40.3	ZUH Q
ARCHIMEDES (59)	-	-	20.0 <	49.0	FZI Q
GGM (60)	2.00 <	27.3	24.1	49.2	Z-Z R
LABOR M (61)	2.00 <	19.1	18.0	37.8 *	JRH R
SGSECOPD (62)	0.45	11.9 **	7.1 **	20.7 **	DUH Q
ENN001 (70)	1.00 <	21.7	20.7	26.5 **	BUH Q
SJEFSLABB (71)	-	31.1	31.8 *	52.9	BYHR
QSANAL (76)	2.00 <	36.0	22.0	48.0	BRH R
PLVHOLAB (81)	1.00 <	35.0	25.0	53.0	B-HR
HKPC-EMD (85)	2.50 <	31.4	21.7	57.3	TWHQ
GAL (91)	5.00 <	22.0	-	38.0 *	JXH Q
STCRSC (92)	1.10	15.3 **	10.7 **	27.5 **	BAH Q
ADIRONDACK (93)	50.00 <	50.0 <	50.0 <	50.0 <	JEH Q
ANDESITE (105)	25.00 <	25.0 <	25.0 <	51.5	ZUHQ
XENOSOILBH (108)	3.90 **	35.5	25.0	55.0	BRK R
THO1808MAS (110)	1.40	34.0	23.4	50.0	ZRH Q
ORGDIMCH (120)	1.59	41.2	46.4 **	60.0	ZZZ R
HHAFU (134)	1.00 <	10.0 **	11.0 **	32.0 **	BUH R
URKANTONE (230)	31.00 **	38.0	30.0	49.0	BVH R
ECCM (841)	1.32	35.6	25.8	66.3 *	BHH R
LAB607 (862)	2.10 *	26.1	27.3	51.9	BRHR
CNRLBR (875)	1.43	30.6	26.6	54.3	ZUH R
LABAMB (878)	0.75	26.7	23.9	45.0	J-K R
TLR (900)	1.00	33.0	20.0	52.0	DRKR
TAMPERE (911)	1.00 <	28.0	11.6 **	45.9	Q-HR
SHI (912)	10.00 <	53.1 **	35.6 **	74.4 **	QEHR
FRESHERTEN (920)	3.00 <	19.8	16.5 *	16.0 **	Q-J Q
FRESKOELL (958)	5.00 <	18.5	37.6 **	17.3 **	Q-JQ
NDA mean	1.217	30.38	23.37	50.63	(cont.)
NDA st dev	0.453	6.39	5.08	7.27	
NDA N	17	37	37	41	

SETOC 2009.1 - Polychlorobiphenyls

Sample		739	767	780	764	MIC
PCB 101 (µg/kg)	(cont.)					
NDA mean		1.217	30.38	23.37	50.63	
NDA st dev		0.453	6.39	5.08	7.27	
NDA N		17	37	37	41	
	Old statistics					
Median		1.100 (3)	30.44 (3)	23.90 (3)	50.95 (3)	
MAD		0.223	3.85	1.80	2.95	
Mean		1.151	30.13	23.49	51.29	
St Dev		0.324	5.72	2.76	4.91	
N		13	32	23	28	
PCB 105 (µg/kg)						
WELLAB	(35)	2.000 <	2.36	3.18	14.1	BKZQ
ENVIROPACE	(36)	0.195	2.28	3.69	13.9	
JYUIER	(41)	1.000 <	2.27	3.25	11.6	ZZI Q
LAS	(48)	5.090 <	8.08 **	6.38 **	18.6	ZUH Q
SGSECOPD	(62)	0.530	6.40 **	3.50	21.9	DUH Q
HKPC-EMD	(85)	2.500 <	2.51	3.87	14.0	TWHJA
EPILAB-1A	(87)	0.190	2.50	3.70	12.0	
ORGDIMCH	(120)	0.293	2.85	8.39 **	15.4	ZZZ R
LABAMB	(878)	0.500 <	1.94	3.56	10.4	J-K R
NDA mean		-	2.383	3.555	13.64	
NDA st dev		-	0.315	0.275	2.91	
NDA N		4	9	9	9	
	Old statistics					
Median		0.2440 (1)	2.360 (2)	3.560 (2)	14.00 (3)	
MAD		0.0515	0.140	0.140	2.00	
Mean		-	-	-	14.66	
St Dev		-	-	-	3.61	
N		4	7	7	9	
PCB 114 (µg/kg)						
ENVIROPACE	(36)	0.0100	0.123	0.267	0.596	
EPILAB-1A	(87)	0.0100	0.110	0.290	0.530	
ORGDIMCH	(120)	0.0230	0.125	0.638	0.650	ZZZ R
LABAMB	(878)	0.5000 <	0.500 <	0.500 <	0.500 <	J-K R
Median		0.01000 (1)	0.1230 (1)	0.2900 (1)	0.5960 (1)	
MAD		-	0.0020	0.0230	0.0540	
N		3	3	3	3	
PCB 118 (µg/kg)						
ZINDZIWE	(1)	-	-	11.0	32.0	--HCE
MLABTW	(4)	1.000 <	15.3	30.0 <	32.1	ZZK R
AL-West	(5)	1.000 <	16.6	17.3	29.9	ZZH R
Alconheinr	(7)	2.000 <	19.0	17.0	35.0	Q-K R
ANAMIL	(10)	2.000 <	2.0 <	30.3 **	21.7 **	DZK R
BLAUWHUIS	(14)	0.800 <	16.4	13.7	25.9	---
FRIDOLIN	(15)	0.830	18.8	15.1	37.1	BWK R
HIDU	(16)	1.000 <	16.0	16.0	32.0	ZUH Q
PAULINE	(18)	1.000 <	14.3	5.0 <	57.9 **	ZZK R
ANATEK	(29)	2.200 **	47.5 **	40.6 **	76.1 **	Q-H R
ELML	(33)	2.000 <	16.0	15.0	30.9	QZH R
WELLAB	(35)	2.000 <	16.8	14.1	32.2	BKZQ
ENVIROPACE	(36)	0.674	18.6	15.5	34.7	
JYUIER	(41)	1.000 <	19.2	16.1	31.6	ZZI Q
LAS	(48)	5.090 <	16.7	14.7	29.6	ZUH Q
ARCHIMEDES	(59)	-	-	20.0 <	39.0	FZI Q
GGM	(60)	2.000 <	14.3	13.6	28.2	Z-Z R
LABOR M	(61)	5.000 <	16.9	14.0	24.6	JRH R
SGSECOPD	(62)	0.710	12.1	7.9 **	24.8	DUH Q
ENN001	(70)	1.000 <	11.7	10.4 *	14.2 **	BUH Q
NDA mean		0.7966	16.97	15.02	31.87	(cont.)
NDA st dev		0.3753	2.72	2.40	4.49	
NDA N		11	33	32	36	

SETOC 2009.1 - Polychlorobiphenyls

Sample		739	767	780	764	MIC
PCB 118 (µg/kg)	(cont.)					
SJEFSLABB	(71)	-	18.9	18.4	33.8	BYHR
QSANAL	(76)	2.000 <	23.0	17.0	35.0	BRH R
PLVHOLAB	(81)	1.000 <	19.0	15.0	32.0	B-HR
HKPC-EMD	(85)	2.500 <	18.7	15.1	35.6	TWHQ
EPILAB-1A	(87)	0.730	19.0	17.0	37.0	
GAL	(91)	5.000 <	17.0	9.0 **	29.0	JXH Q
ADIRONDACK	(93)	50.000 <	50.0 <	50.0 <	50.0 <	JEH Q
ANDESITE	(105)	25.000 <	25.0 <	25.0 <	25.0 <	ZUHQ
XENOSOILBH	(108)	1.710 *	18.8	16.5	33.1	BRK R
THO1808MAS	(110)	1.300	22.0	15.4	35.0	ZRH Q
ORGDIMCH	(120)	1.070	23.2 *	27.9 **	40.8	ZZZ R
LAB607	(862)	2.400 **	15.0	-	32.2	BRHR
CNRLBR	(875)	0.580	15.4	13.7	31.0	ZUH R
LABAMB	(878)	0.390	14.7	14.0	26.2	J-K R
TLR	(900)	1.000 <	17.0	13.0	30.0	DRKR
TAMPERE	(911)	1.000 <	15.0	5.0 **	25.5	Q-HR
SHI	(912)	10.000 <	28.4 **	25.0 **	42.7 **	QEHR
FRESHERTEN	(920)	3.000 <	3.0 <	3.0 <	3.0 <	Q-J Q
FRESKOELL	(958)	5.000 <	16.4	21.8 **	8.2 **	Q-JQ
NDA mean		0.7966	16.97	15.02	31.87	
NDA st dev		0.3753	2.72	2.40	4.49	
NDA N		11	33	32	36	
Old statistics						
Median		0.7200 (3)	16.76 (3)	15.10 (3)	32.00 (3)	
MAD		0.1250	1.89	1.15	2.85	
Mean		0.7855	16.96	15.13	31.86	
St Dev		0.2847	2.50	1.67	4.10	
N		8	30	23	30	
PCB 123 (µg/kg)						
ENVIROPACE	(36)	0.0110	0.122	0.296	0.81	
EPILAB-1A	(87)	0.0240	0.540	0.280	1.10	
ADIRONDACK	(93)	50.0000 <	50.000 <	50.000 <	50.00 <	JEH Q
ORGDIMCH	(120)	0.1430	4.750	4.045	6.15	ZZZ R
LABAMB	(878)	0.5000 <	0.500 <	0.500 <	0.50 <	J-K R
Median		0.02400 (1)	0.5400 (1)	0.2960 (1)	1.100 (1)	
MAD		0.01300	0.4180	0.0160	0.289	
N		3	3	3	3	
PCB 126 (µg/kg)						
WELLAB	(35)	2.0000 <	2.0000 <	2.000 <	2.000 <	
ENVIROPACE	(36)	0.0100 <	0.0540	0.089	0.188	
LAS	(48)	5.0900 <	5.1100 <	5.170 <	7.160	ZUH Q
HILL	(58)	1.0000 <	1.0000 <	1.000 <	1.000 <	
ORGDIMCH	(120)	0.0030 <	0.0910	0.157	0.617	ZZZ R
LABAMB	(878)	0.5000 <	0.5000 <	0.500 <	0.500 <	J-K R
Median		- (0)	0.07250 (1)	0.1230 (1)	0.6170 (1)	
MAD		-	0.01850	0.0340	0.4290	
N		-	2	2	3	
PCB 128 (µg/kg)						
WELLAB	(35)	2.000 <	3.49	2.20	12.5	BKZQ
JYUIER	(41)	1.000 <	3.18	1.98	10.9	ZZI Q
LAS	(48)	5.090 <	5.11 <	5.17 <	8.7	ZUH Q
HILL	(58)	1.000 <	1.00 <	1.00 <	9.4	ZXHR
SGSECOPD	(62)	0.700	3.90	2.50	20.3 **	DUH Q
HKPC-EMD	(85)	2.500 <	3.07	2.50 <	10.7	TWHJA
ORGDIMCH	(120)	0.323	4.29	5.32	15.4	ZZZ R
LABAMB	(878)	0.500 <	2.88	2.83	9.6	J-K R
NDA mean		-	-	-	10.50	(cont.)
NDA st dev		-	-	-	2.19	
NDA N		2	6	5	8	

SETOC 2009.1 - Polychlorobiphenyls

Sample	739	767	780	764	MIC
PCB 128 (µg/kg) (cont.)					
NDA mean	-	-	-	10.50	
NDA st dev	-	-	-	2.19	
NDA N	2	6	5	8	
Old statistics					
Median	0.5115 (1)	3.335 (1)	2.500 (1)	10.70 (2)	
MAD	0.1885	0.360	0.330	1.30	
N	2	6	5	7	
PCB 138 (µg/kg)					
ZINDZIWE (1)	-	-	9.7	53.0	--HCE
MLABTW (4)	3.00 <	27.2	55.0 <	90.3	ZZK R
AL-West (5)	1.71	27.7	21.7	83.1	ZZH R
Alconheinr (7)	2.00 <	27.0	15.0	72.0	Q-K R
ANAMIL (10)	5.00 <	5.0 <	93.1 **	19.3 **	DZK R
BLAUWHUIS (14)	1.40	23.9	15.6	74.2	---
FRIDOLIN (15)	1.48	21.7	17.4	107.0 *	BWK R
HIDU (16)	2.00	25.0	19.0	77.0	ZUH Q
PAULINE (18)	1.49	26.1	23.9	158.0 **	ZZK R
EXACT (28)	2.00 <	27.0	24.0	69.0	QRK R
ANATEK (29)	1.60	49.9 **	31.7 *	140.5 **	Q-H R
ELML (33)	3.00 *	21.0	23.5	80.1	QZH R
WELLAB (35)	2.00 <	20.1	15.5	80.2	BKZQ
JYUIER (41)	3.41 **	20.3	13.7	69.9	ZZI Q
LAS (48)	5.09 <	21.5	16.9	72.2	ZUH Q
HILL (58)	1.00 <	29.0	16.0	71.0	ZXHR
ARCHIMEDES (59)	-	-	20.0 <	81.8	FZI Q
GGM (60)	2.00 <	25.0	23.0	73.0	Z-Z R
LABOR M (61)	5.00 <	21.1	17.0	67.0	JRH R
SGSECOPD (62)	1.60	19.0	11.8	67.4	DUH Q
ENN001 (70)	1.00 <	23.4	14.3	40.8 *	BUH Q
SJEFSLABB (71)	-	20.8	23.1	74.0	BYHR
QSANAL (76)	2.00 <	57.0 **	24.0	106.0 *	BRH R
PLVHOLAB (81)	2.00	35.0 **	22.0	93.0	B-HR
HKPC-EMD (85)	2.50 <	20.0	12.5	69.9	TWHQ
GAL (91)	5.00 <	27.0	10.0	94.0	JXH Q
STCRSC (92)	1.30	24.2	16.1	41.3 *	BAH Q
ADIRONDACK (93)	50.00 <	50.0 <	50.0 <	54.0	JEH Q
ANDESITE (105)	25.00 <	25.0 <	25.0 <	63.7	ZUHQ
XENOSOILBH (108)	6.70 **	23.6	24.5	52.6	BRK R
THO1808MAS (110)	2.14	33.0	16.0	60.0	ZRH Q
ORGDIMCH (120)	2.14	27.6	27.6	95.6	ZZZ R
HHAFU (134)	1.00	11.0 **	11.0	53.0	BUH R
URKANTONE (230)	25.00 **	29.0	28.0	56.0	BVH R
ECCM (841)	1.33	20.7	13.6	76.2	BHH R
LAB607 (862)	4.30 **	23.6	17.7	94.9	BRHR
CNRLBR (875)	1.83	22.3	15.8	72.4	ZUH R
LABAMB (878)	1.21	18.4	16.8	62.9	J-K R
TLR (900)	2.00	27.0	15.0	72.0	DRKR
TAMPERE (911)	1.50	24.0	9.0	69.0	Q-HR
SHI (912)	10.00 <	53.3 **	42.9 **	133.0 **	QEHR
FRESHERTEN (920)	3.00 <	11.2 **	8.9	20.6 **	Q-J Q
FRESKOELL (958)	5.00 <	12.9 **	5.0 <	19.4 **	Q-JQ
NDA mean	1.649	23.78	17.34	71.65	
NDA st dev	0.505	4.58	6.92	16.38	
NDA N	22	38	38	43	
Old statistics					
Median	1.600 (3)	23.90 (3)	16.10 (3)	72.00 (3)	
MAD	0.266	3.10	3.60	8.10	
Mean	1.632	24.10	17.41	72.55	
St Dev	0.341	3.49	5.31	12.22	
N	17	31	35	33	

SETOC 2009.1 - Polychlorobiphenyls

Sample	739	767	780	764	MIC
PCB 149 (µg/kg)					
HILL (58)	1.00 <	28.0	14.0	51.0	ZXHR
SGSECOPD (62)	1.20	24.7	11.6	50.4	DUH Q
ADIRONDACK (93)	50.00 <	50.0 <	50.0 <	50.0 <	JEH Q
ANDESITE (105)	25.00 <	25.0 <	25.0 <	59.2	ZUHQ
LABAMB (878)	0.94	25.5	18.5	51.8	J-K R
Median	1.070 (1)	25.50 (1)	14.00 (1)	51.39 (1)	
MAD	0.130	0.80	2.40	0.69	
N	2	3	3	4	
PCB 153 (µg/kg)					
ZINDZIWE (1)	-	-	15.0	62.0	--HCE
MLABTW (4)	3.00 <	33.5	55.0 <	80.3	ZZK R
AL-West (5)	1.76	34.6	27.5	78.5	ZZH R
Alconcheinr (7)	2.40	44.0	24.0	86.0	Q-K R
ANAMIL (10)	5.00 <	5.0 <	92.1 **	28.4 **	DZK R
BLAUWHUIS (14)	1.90	38.6	22.3	84.7	---
FRIDOLIN (15)	1.76	38.7	25.8	92.7	BWK R
HIDU (16)	2.00	34.0	26.0	72.0	ZUH Q
PAULINE (18)	1.35	28.1	25.2	130.0 **	ZZK R
EXACT (28)	2.00 <	37.0	31.0	80.0	QRK R
ANATEK (29)	1.36	41.3	24.4	83.3	Q-H R
ELML (33)	3.00	40.8	25.4	85.6	QZH R
WELLAB (35)	2.00 <	32.2	20.2	80.4	BKZQ
JYUIER (41)	4.62 **	39.7	23.2	80.4	ZZI Q
LAS (48)	5.09 <	30.0	22.8	70.2	ZUH Q
HILL (58)	1.00 <	30.0	16.0	56.0	ZXHR
ARCHIMEDES (59)	-	-	20.8	82.2	FZI Q
GGM (60)	2.00 <	23.3	15.0	71.0	Z-Z R
LABOR M (61)	5.00 <	33.4	23.0	61.0	JRH R
SGSECOPD (62)	1.70	25.4	14.6	65.6	DUH Q
ENN001 (70)	1.35	25.8	16.7	41.0	BUH Q
SJEFSLABB (71)	-	43.5	45.1 **	92.1	BYHR
QSANAL (76)	2.00 <	67.0 **	30.0	108.0	BRH R
PLVHOLAB (81)	2.00	41.0	21.0	74.0	B-HR
HKPC-EMD (85)	2.50 <	35.8	18.6	71.6	TWHQ
GAL (91)	5.00 <	34.0	12.0	64.0	JXH Q
STCRSC (92)	2.00	15.8 **	11.6	45.0	BAH Q
ADIRONDACK (93)	50.00 <	50.0 <	50.0 <	50.0 <	JEH Q
ANDESITE (105)	25.00 <	25.0 <	25.0 <	59.7	ZUHQ
XENOSOILBH (108)	10.01 **	52.5	43.6 **	87.5	BRK R
THO1808MAS (110)	2.50	44.0	24.0	69.0	ZRH Q
ORGDIMCH (120)	2.45	47.0	42.5 **	49.6	ZZZ R
HHAFU (134)	2.00	16.0 **	14.0	60.0	BUH R
URKANTONE (230)	36.00 **	40.0	35.0	63.0	BVH R
ECCM (841)	1.96	42.1	24.2	92.8	BHH R
LAB607 (862)	5.90 **	39.4	27.6	95.8	BRHR
CNRQLBR (875)	2.74	41.2	27.4	93.7	ZUH R
LABAMB (878)	1.48	37.9	26.4	80.1	J-K R
TLR (900)	2.00	31.0	17.0	63.0	DRKR
TAMPERE (911)	1.20	25.0	8.0	51.2	Q-HR
SHI (912)	10.00 <	70.9 **	41.1 *	124.0 **	QEHR
FRESHERTEN (920)	3.00 <	20.4	14.2	24.7 **	Q-J Q
FRESKOELL (958)	5.00 <	22.0	13.3	30.3 **	Q-JQ
NDA mean	1.917	35.61	21.94	73.79	
NDA st dev	0.638	8.37	8.23	18.41	
NDA N	24	38	40	42	
Old statistics					
Median	1.978 (3)	36.40 (3)	22.75 (3)	74.00 (3)	
MAD	0.350	4.85	4.65	11.00	
Mean	1.945	35.50	21.23	73.86	
St Dev	0.485	7.59	6.28	15.41	
N	20	34	35	37	

SETOC 2009.1 - Polychlorobiphenyls

Sample		739	767	780	764	MIC
PCB 156 (µg/kg)						
ENVIROPACE	(36)	0.148	1.89	1.72	7.36	
JYUIER	(41)	1.000 <	1.52	1.54	5.88	ZZI Q
HILL	(58)	1.000 <	1.00 <	1.00 <	7.80	ZXHR
SGSECOPD	(62)	0.550	6.70	1.90	12.90 **	DUH Q
HKPC-EMD	(85)	2.500 <	2.50 <	2.50 <	8.84	TWHQ
EPILAB-1A	(87)	0.130	1.80	2.00	7.40	
ORGDIMCH	(120)	0.190	2.32	3.27	8.42	ZZZ R
LABAMB	(878)	0.500 <	2.02	2.34	7.14	J-K R
NDA mean		-	-	-	7.627	
NDA st dev		-	-	-	0.929	
NDA N		4	6	6	8	
Old statistics						
Median		0.1690 (1)	1.955 (1)	1.950 (1)	7.400 (2)	
MAD		0.0300	0.260	0.310	0.400	
N		4	6	6	7	
PCB 157 (µg/kg)						
ENVIROPACE	(36)	0.0240	0.327	0.303	1.45	
HILL	(58)	1.0000 <	1.000 <	1.000 <	1.00 <	
EPILAB-1A	(87)	0.0220	0.290	0.270	1.40	
ORGDIMCH	(120)	0.0200	0.414	0.566	1.57	ZZZ R
LABAMB	(878)	0.5000 <	0.500 <	0.500 <	0.98	J-K R
Median		0.02200 (1)	0.3270 (1)	0.3030 (1)	1.425 (1)	
MAD		0.00200	0.0370	0.0330	0.083	
N		3	3	3	4	
PCB 167 (µg/kg)						
ENVIROPACE	(36)	0.0700	1.00	0.89	3.79	
HILL	(58)	1.0000 <	1.00 <	1.00 <	3.30	
EPILAB-1A	(87)	0.0850	1.30	1.10	4.30	
ORGDIMCH	(120)	0.0940	1.12	1.31	4.27	ZZZ R
LABAMB	(878)	0.5000 <	0.87	1.03	3.18	J-K R
Median		0.08500 (1)	1.058 (1)	1.065 (1)	3.790 (1)	
MAD		0.00900	0.123	0.108	0.490	
N		3	4	4	5	
PCB 169 (µg/kg)						
WELLAB	(35)	2.0000 <	2.0000 <	2.00 <	2.0000 <	
ENVIROPACE	(36)	0.0100 <	0.0120	0.01 <	0.0230	
HILL	(58)	1.0000 <	1.0000 <	1.00 <	1.0000 <	
ORGDIMCH	(120)	0.0030 <	0.0300	0.00 <	0.0030 <	ZZZ R
LABAMB	(878)	0.5000 <	0.5000 <	0.50 <	0.5000 <	J-K R
Median		- (0)	0.02100 (1)	- (0)	0.02300 (1)	
MAD		-	0.00900	-	-	
N		-	2	-	1	
PCB 180 (µg/kg)						
ZINDZIWE	(1)	-	-	9.4	53.0	--HCE
MLABTW	(4)	2.00 <	11.2	12.0 <	42.0	ZZK R
AL-West	(5)	1.11	17.3	17.6 *	49.9	ZZH R
Alconheinr	(7)	2.00	22.0	14.0	56.0	Q-K R
ANAMIL	(10)	2.00 <	2.0 <	41.6 **	12.0 **	DZK R
BLAUWHUIS	(14)	1.20	14.7	10.3	48.5	
FRIDOLIN	(15)	1.23	17.0	11.9	55.3	BWK R
HIDU	(16)	1.00	15.0	13.0	46.0	ZUH Q
PAULINE	(18)	1.06	12.7	14.2	81.7 **	ZZK R
EXACT	(28)	2.00 <	29.0 **	20.0 **	59.0	QRK R
ANATEK	(29)	0.63	23.8 *	17.8 *	72.6	Q-H R
NDA mean		1.261	14.96	11.03	47.07	(cont.)
NDA st dev		0.429	4.54	3.52	13.66	
NDA N		22	37	37	40	

SETOC 2009.1 - Polychlorobiphenyls

Sample		739	767	780	764	MIC
PCB 180 (µg/kg)	(cont.)					
ELML	(33)	2.00	15.9	16.0	52.6	QZH R
WELLAB	(35)	2.00 <	14.4	9.7	50.1	BKZQ
JYUIER	(41)	3.45 **	16.2	11.6	50.8	ZZI Q
LAS	(48)	5.09 <	9.2	9.6	27.1	ZUH Q
HILL	(58)	1.00 <	16.0	9.4	39.0	ZXHR
ARCHIMEDES	(59)	-	-	20.0 <	57.7	FZI Q
GGM	(60)	2.00 <	13.0	12.7	44.1	Z-Z R
LABOR M	(61)	1.60	13.4	9.0	39.0	JRH R
SGSECOPD	(62)	1.00	15.8	7.5	51.5	DUH Q
ENN001	(70)	1.00 <	12.4	7.4	27.1	BUH Q
SJEFSLABB	(71)	-	19.5	25.5 **	60.8	BYHR
QSANAL	(76)	2.00 <	25.0 *	12.0	48.0	BRH R
PLVHOLAB	(81)	1.00	16.0	14.0	44.0	
HKPC-EMD	(85)	2.50 <	13.8	8.7	41.2	TWHQ
GAL	(91)	5.00 <	19.0	10.0	49.0	JXH Q
STCRSC	(92)	1.30	9.9	10.0	31.4	BAH Q
ADIRONDACK	(93)	50.00 <	50.0 <	50.0 <	50.0 <	JEH Q
ANDESITE	(105)	25.00 <	25.0 <	25.0 <	25.0 <	ZUHQ
XENOSOILBH	(108)	5.59 **	28.2 **	33.6 **	61.4	BRK R
THO1808MAS	(110)	1.70	19.0	11.0	38.0	ZRH Q
ORGDIMCH	(120)	1.45	20.2	18.0 *	62.3	ZZZ R
HHAFU	(134)	1.00 <	8.0	8.0	33.0	BUH R
URKANTONE	(230)	48.00 **	28.0 **	18.0 *	38.0	BVH R
ECCM	(841)	1.36	17.0	11.8	53.0	BHH R
LAB607	(862)	2.30	13.4	9.4	63.8	BRHR
CNRLBR	(875)	1.30	13.1	9.6	39.3	ZUH R
LABAMB	(878)	0.78	14.4	12.5	41.8	J-K R
TAMPERE	(911)	1.30	13.0	7.0	33.0	Q-HR
SHI	(912)	10.00 <	33.2 **	24.1 **	83.0 **	QEHR
FRESHERTEN	(920)	3.00 <	9.7	7.3	17.1 **	Q-J Q
FRESKOELL	(958)	5.00 <	9.8	5.0 <	10.0 **	Q-JQ
NDA mean		1.261	14.96	11.03	47.07	
NDA st dev		0.429	4.54	3.52	13.66	
NDA N		22	37	37	40	
Old statistics						
Median		1.300 (3)	14.40 (3)	10.00 (3)	48.50 (3)	
MAD		0.300	1.80	1.84	7.50	
Mean		1.332	14.58	10.61	47.41	
St Dev		0.430	3.42	2.36	10.86	
N		19	31	28	35	
PCB 189 (µg/kg)						
ENVIROPACE	(36)	0.0240	0.396	0.270	1.27	
EPILAB-1A	(87)	0.0320	0.570	0.400	1.70	
ORGDIMCH	(120)	0.0020 <	0.545	0.445	1.47	ZZZ R
LABAMB	(878)	0.5000 <	0.500 <	0.500 <	1.00	J-K R
Median		0.02800 (1)	0.5450 (1)	0.4000 (1)	1.370 (1)	
MAD		0.00400	0.0250	0.0450	0.215	
N		2	3	3	4	

SETOC 2009.1 - Organochlorine pesticides

Sample		739	767	780	764	MIC
1,2,3 trichlorobenzene (µg/kg)						
Alconheinr	(7)	1.0000 <	1.90	1.0 <	7.1	QRK R
PAULINE	(18)	5.0000 <	5.00 <	15.9	11.0	ZZK R
EXACT	(28)	3.0000 <	3.00 <	3.0 <	7.6	QRK R
WELLAB	(35)	5.0000 <	5.00 <	10.6	11.5	
ADIRONDACK	(93)	50.0000 <	50.00 <	50.0 <	50.0 <	J-H R
ORGDIMCH	(120)	3.0000 <	6.70	3.0 <	15.0	ZZZ R
FRESHERTEN	(920)	1.0000 <	1.00 <	1.0 <	1.0 <	Q-J Q
Median		- (0)	4.300 (1)	13.25 (1)	11.00 (1)	
MAD		-	2.400	2.65	3.40	
N		-	2	2	5	
1,2,3,4 tetrachlorobenzene (µg/kg)						
Alconheinr	(7)	1.0000 <	1.90	1.30	11.0	QRK R
PAULINE	(18)	5.0000 <	5.00 <	5.00 <	19.0	ZZK R
EXACT	(28)	1.0000 <	1.60	1.30	9.1	QRK R
WELLAB	(35)	5.0000 <	5.00 <	5.00 <	17.0	
ADIRONDACK	(93)	50.0000 <	50.00 <	50.00 <	50.0 <	J-H R
LABAMB	(878)	5.0000 <	13.00	6.00	23.0	J-K R
FRESHERTEN	(920)	1.0000 <	1.00 <	1.00 <	1.0 <	Q-J Q
Median		- (0)	1.900 (1)	1.300 (1)	17.00 (1)	
MAD		-	0.300	-	6.00	
N		-	3	3	5	
aldrin (µg/kg)						
ZINDZIWE	(1)	-	-	1.00 <	1.00 <	--HCE
MLABTW	(4)	2.0000 <	3.00 <	21.00 <	4.00 <	ZZK R
Alconheinr	(7)	1.0000 <	1.00 <	1.00 <	1.00 <	QRK R
ANAMIL	(10)	2.0000 <	2.00 <	2.00 <	2.00 <	DZK R
PAULINE	(18)	1.0000 <	1.00 <	5.00 <	1.00 <	ZZK R
EXACT	(28)	1.0000 <	1.50	5.20	3.10	QRK R
WELLAB	(35)	5.0000 <	5.00 <	5.00 <	5.00 <	
LAS	(48)	2.0300 <	2.05 <	2.07 <	2.07 <	ZUH Q
ARCHIMEDES	(59)	-	-	10.00 <	10.00 <	FZI Q
SGSECOPD	(62)	0.2000 <	0.20 <	-	0.20 <	JUHQ
ENN001	(70)	1.0000 <	1.00 <	1.00 <	1.00 <	BUH Q
PLVHOLAB	(81)	1.0000 <	1.00 <	1.00 <	1.00 <	BRHR
ADIRONDACK	(93)	100.0000 <	100.00 <	100.00 <	100.00 <	J-H R
ORGDIMCH	(120)	3.0000 <	3.00 <	3.00 <	3.00 <	ZZZ R
TLR	(900)	1.0000 <	1.00 <	1.00 <	1.00 <	DRKR
FRESHERTEN	(920)	1.0000 <	1.00 <	1.00 <	1.00 <	Q-J Q
Median		- (0)	1.500 (1)	5.200 (1)	3.100 (1)	
MAD		-	-	-	-	
N		-	1	1	1	
alpha-endosulfan (µg/kg)						
ZINDZIWE	(1)	-	-	1.00 <	3.30	--HCE
MLABTW	(4)	2.0000 <	3.00 <	21.00 <	36.00 <	ZZK R
Alconheinr	(7)	1.0000 <	1.00 <	1.00 <	1.00 <	QRK R
ANAMIL	(10)	10.0000 <	10.00 <	10.00 <	10.00 <	DZK R
BLAUWHUIS	(14)	0.6000 <	0.60 <	0.60 <	0.60 <	---
PAULINE	(18)	1.0000 <	1.00 <	5.00 <	1.00 <	ZZK R
EXACT	(28)	1.0000 <	1.00 <	1.00 <	7.50	QRK R
WELLAB	(35)	5.0000 <	5.00 <	5.00 <	5.00 <	
LAS	(48)	2.0300 <	2.05 <	2.07 <	2.07 <	ZUH Q
ARCHIMEDES	(59)	-	-	10.00 <	10.00 <	FZI Q
ENN001	(70)	1.0000 <	1.00 <	1.00 <	1.00 <	BUH Q
ADIRONDACK	(93)	100.0000 <	100.00 <	100.00 <	100.00 <	J-H Q
ORGDIMCH	(120)	3.0000 <	3.00 <	3.00 <	3.00 <	ZZZ R
TLR	(900)	1.0000 <	1.00 <	1.00 <	1.00 <	DRKR
Median		- (0)	- (0)	- (0)	5.400 (1)	
MAD		-	-	-	2.100	
N		-	-	-	2	

SETOC 2009.1 - Organochlorine pesticides

Sample		739	767	780	764	MIC
alpha-endosulfan (µg/kg)	(cont.)					
FRESHERTEN (920)		1.0000 <	1.00 <	1.00 <	1.00 <	Q-J Q
Median		- (0)	- (0)	- (0)	5.400 (1)	
MAD		-	-	-	2.100	
N		-	-	-	2	
alpha-HCH (µg/kg)						
ZINDZIWE (1)		-	-	1.00 <	1.00 <	--HCE
MLABTW (4)		4.000 <	8.00 <	52.00 <	4.00 <	ZZK R
Alconheinr (7)		1.000 <	1.00 <	1.00 <	1.00 <	QRK R
ANAMIL (10)		50.000 <	50.00 <	50.00 <	50.00 <	DZK R
BLAUWHUIS (14)		0.700 <	0.70 <	0.70 <	0.70 <	
PAULINE (18)		1.000 <	1.00 <	5.00 <	1.00 <	ZZK R
EXACT (28)		1.000 <	1.70	1.20	1.20	QRK R
WELLAB (35)		5.000 <	5.00 <	5.00 <	5.00 <	
LAS (48)		2.030 <	2.05 <	2.07 <	2.07 <	ZUH Q
ARCHIMEDES (59)		-	-	10.00 <	10.00 <	FZI Q
SGSECOPD (62)		0.980	0.20 <	13.30	0.20 <	JUHQ
ENN001 (70)		1.000 <	1.00 <	1.00 <	1.00 <	BUH Q
PLVHOLAB (81)		3.000 <	3.00 <	8.00	3.00 <	BRHR
GAL (91)		10.000 <	10.00 <	10.00 <	10.00 <	JXH Q
ADIRONDACK (93)		40.000 <	40.00 <	40.00 <	40.00 <	J-H Q
ORGDIMCH (120)		3.000 <	3.00 <	3.00 <	3.00 <	ZZZ R
CNRLBR (875)		0.500 <	0.50 <	0.50 <	0.50 <	ZUH R
TLR (900)		1.000 <	1.00 <	1.00 <	1.00 <	DRKR
FRESHERTEN (920)		1.000 <	1.00 <	1.00 <	1.00 <	Q-J Q
Median		0.9800 (1)	1.700 (1)	8.000 (1)	1.200 (1)	
MAD		-	-	5.300	-	
N		1	1	3	1	
beta-endosulfan (µg/kg)						
Alconheinr (7)		1.000 <	1.0 <	1.0 <	1.0 <	QRK R
PAULINE (18)		1.000 <	1.0 <	-	-	ZZK R
WELLAB (35)		5.000 <	5.0 <	5.0 <	5.0 <	
LAS (48)		2.030 <	2.1 <	2.1 <	2.1 <	ZUH Q
PLVHOLAB (81)		1.000 <	14.0	38.0	12.0	BRHR
ADIRONDACK (93)		100.000 <	100.0 <	100.0 <	100.0 <	J-H R
ORGDIMCH (120)		3.000 <	3.0 <	3.0 <	3.0 <	ZZZ R
TLR (900)		1.000 <	1.0 <	1.0 <	1.0 <	DRKR
Median		- (0)	14.00 (1)	38.00 (1)	12.00 (1)	
MAD		-	-	-	-	
N		-	1	1	1	
beta-HCH (µg/kg)						
ZINDZIWE (1)		-	-	1.0 <	2.80	--HCE
MLABTW (4)		2.000 <	3.00 <	21.0 <	4.00 <	ZZK R
Alconheinr (7)		1.000 <	1.00 <	1.0 <	1.00 <	QRK R
ANAMIL (10)		5.000 <	5.00 <	5.0 <	5.00 <	DZK R
BLAUWHUIS (14)		0.700 <	0.70 <	0.7 <	0.70 <	
PAULINE (18)		1.000 <	1.00 <	5.0 <	1.00 <	ZZK R
EXACT (28)		1.000 <	1.70	5.1	32.00	QRK R
WELLAB (35)		5.000 <	5.00 <	5.0 <	5.00 <	
ARCHIMEDES (59)		-	-	10.0 <	10.00 <	FZI Q
SGSECOPD (62)		0.200 <	0.20 <	0.2 <	0.20 <	JUHQ
ENN001 (70)		1.000 <	1.00 <	1.0 <	1.00 <	BUH Q
PLVHOLAB (81)		1.000 <	5.00	18.0	4.00	BRHR
GAL (91)		10.000 <	10.00 <	10.0 <	10.00 <	JXH Q
ADIRONDACK (93)		40.000 <	40.00 <	40.0 <	40.00 <	J-H Q
ORGDIMCH (120)		3.000 <	3.00 <	3.0 <	3.00 <	ZZZ R
CNRLBR (875)		0.560	0.50 <	0.5 <	1.27	ZUH R
Median		0.5600 (1)	3.350 (1)	11.55 (1)	3.400 (1)	
MAD		-	1.650	6.45	1.365	
N		1	2	2	4	

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Sample		739	767	780	764	MIC
beta-HCH (µg/kg)	(cont.)					
TLR	(900)	1.000 <	1.00 <	1.0 <	1.00 <	DRKR
FRESHERTEN	(920)	1.000 <	1.00 <	1.0 <	1.00 <	Q-J Q
Median		0.5600 (1)	3.350 (1)	11.55 (1)	3.400 (1)	
MAD		-	1.650	6.45	1.365	
N		1	2	2	4	
chlordan (µg/kg)						
Alconheinr	(7)	2.000 <	2.00 <	2.0 <	2.00 <	QRK R
ANAMIL	(10)	2.000 <	2.00 <	2.0 <	2.00 <	DZK R
EXACT	(28)	2.000 <	2.20	2.0 <	2.00 <	QRK R
WELLAB	(35)	5.000 <	5.00 <	5.0 <	5.00 <	
ARCHIMEDES	(59)	-	-	10.0 <	10.00 <	FZI Q
TLR	(900)	1.000 <	1.00 <	1.0 <	1.00 <	
FRESHERTEN	(920)	1.000 <	1.00 <	1.0 <	1.00 <	Q-J Q
Median		- (0)	2.200 (1)	- (0)	- (0)	
MAD		-	-	-	-	
N		-	1	-	-	
cis-chlordan (µg/kg)						
Alconheinr	(7)	1.000 <	1.00 <	1.00 <	1.00 <	QRK R
ANAMIL	(10)	2.000 <	2.00 <	2.00 <	2.00 <	DZK R
PAULINE	(18)	1.000 <	1.00 <	5.00 <	1.00 <	ZZK R
EXACT	(28)	1.000 <	2.20	1.40	1.40	QRK R
WELLAB	(35)	5.000 <	5.00 <	5.00 <	5.00 <	
SGSECOPD	(62)	0.200 <	0.20 <	0.20 <	0.20 <	JUHQ
ADIRONDACK	(93)	100.000 <	100.00 <	100.00 <	100.00 <	J-H Q
ORGDIMCH	(120)	3.000 <	3.00 <	3.00 <	3.00 <	ZZZ R
TLR	(900)	1.000 <	1.00 <	1.00 <	1.00 <	DRKR
FRESHERTEN	(920)	1.000 <	1.00 <	1.00 <	1.00 <	Q-J Q
Median		- (0)	2.200 (1)	1.400 (1)	1.400 (1)	
MAD		-	-	-	-	
N		-	1	1	1	
delta-HCH (µg/kg)						
MLABTW	(4)	2.000 <	3.00 <	21.0 <	4.00 <	ZZK R
Alconheinr	(7)	1.000 <	1.00 <	1.0 <	1.00 <	QRK R
ANAMIL	(10)	20.000 <	20.00 <	20.0 <	20.00 <	DZK R
PAULINE	(18)	1.000 <	1.00 <	-	-	ZZK R
WELLAB	(35)	5.000 <	5.00 <	5.0 <	5.00 <	
LAS	(48)	2.030 <	2.05 <	2.1 <	2.07 <	ZUH Q
SGSECOPD	(62)	0.200 <	0.20 <	0.2 <	0.20 <	JUHQ
ENN001	(70)	1.000 <	1.00 <	1.0 <	1.00 <	BUH Q
PLVHOLAB	(81)	1.000 <	2.00	16.0	1.00 <	BRHR
ADIRONDACK	(93)	40.000 <	40.00 <	40.0 <	40.00 <	J-H Q
ORGDIMCH	(120)	3.000 <	3.00 <	3.0 <	3.00 <	ZZZ R
CNRRLBR	(875)	0.500 <	0.50 <	0.5 <	0.50 <	ZUH R
TLR	(900)	1.000 <	1.00 <	1.0 <	1.00 <	DRKR
FRESHERTEN	(920)	1.000 <	1.00 <	1.0 <	1.00 <	Q-J Q
Median		- (0)	2.000 (1)	16.00 (1)	- (0)	
MAD		-	-	-	-	
N		-	1	1	-	
dieldrin (µg/kg)						
ZINDZIWE	(1)	-	-	1.00 <	2.30	--HCE
MLABTW	(4)	6.000 <	3.00 <	21.00 <	4.00 <	ZZK R
Alconheinr	(7)	1.000 <	1.00 <	1.00 <	1.00 <	QRK R
ANAMIL	(10)	2.000 <	2.00 <	2.00 <	2.00 <	DZK R
PAULINE	(18)	1.000 <	1.00 <	5.00 <	1.00 <	ZZK R
Median		- (0)	4.750 (1)	2.050 (1)	4.000 (1)	
MAD		-	2.250	0.550	1.700	
N		-	2	2	3	

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Sample		739	767	780	764	MIC
dieldrin (µg/kg)	(cont.)					
EXACT	(28)	1.000 <	1.00 <	1.50	4.00	QRK R
WELLAB	(35)	5.000 <	5.00 <	5.00 <	5.00 <	
LAS	(48)	2.030 <	2.05 <	2.07 <	2.07 <	ZUH Q
ARCHIMEDES	(59)	-	-	10.00 <	10.00 <	FZI Q
SGSECOPD	(62)	0.200 <	2.50	2.60	9.40	JUHQ
ENN001	(70)	1.000 <	1.00 <	1.00 <	1.00 <	BUH Q
PLVHOLAB	(81)	3.000 <	7.00	3.00 <	3.00 <	BRHR
GAL	(91)	10.000 <	10.00 <	10.00 <	10.00 <	JXH Q
ADIRONDACK	(93)	100.000 <	100.00 <	100.00 <	100.00 <	J-H R
ORGDIMCH	(120)	3.000 <	3.00 <	3.00 <	3.00 <	ZZZ R
TLR	(900)	1.000 <	1.00 <	1.00 <	1.00 <	DRKR
FRESHERTEN	(920)	1.000 <	1.00 <	1.00 <	1.00 <	Q-J Q
Median		- (0)	4.750 (1)	2.050 (1)	4.000 (1)	
MAD		-	2.250	0.550	1.700	
N		-	2	2	3	
endosulfan (µg/kg)						
WELLAB	(35)	5.000 <	5.00 <	5.00 <	5.0 <	
SGSECOPD	(62)	0.520	7.70	3.70	18.2	JUHQ
PLVHOLAB	(81)	1.000 <	1.00 <	8.00	1.0 <	
ADIRONDACK	(93)	100.000 <	100.00 <	100.00 <	100.0 <	J-H R
TLR	(900)	1.000 <	1.00 <	1.00 <	1.0 <	DRKR
Median		0.5200 (1)	7.700 (1)	5.850 (1)	18.20 (1)	
MAD		-	-	2.150	-	
N		1	1	2	1	
endosulfan sulfate (µg/kg)						
ANAMIL	(10)	20.000 <	20.00 <	20.00 <	20.0 <	DZK R
PAULINE	(18)	1.000 <	1.00 <	-	-	ZZK R
WELLAB	(35)	5.000 <	5.00 <	5.00 <	5.0 <	
SGSECOPD	(62)	0.200 <	0.20 <	0.20 <	0.2 <	JUHQ
ADIRONDACK	(93)	100.000 <	100.00 <	100.00 <	100.0 <	J-H R
TLR	(900)	1.000 <	1.00 <	1.00 <	1.0 <	DRKR
Median		- (0)	- (0)	- (0)	- (0)	
MAD		-	-	-	-	
N		-	-	-	-	
endrin (µg/kg)						
ZINDZIWE	(1)	-	-	2.0 <	4.80	--HCE
MLABTW	(4)	2.00 <	3.00 <	21.0 <	4.00 <	ZZK R
Alconheinr	(7)	1.00 <	1.00 <	1.0 <	1.00 <	QRK R
ANAMIL	(10)	5.00 <	5.00 <	5.0 <	5.00 <	DZK R
PAULINE	(18)	1.00 <	1.00 <	5.0 <	1.00 <	ZZK R
EXACT	(28)	1.00 <	1.00 <	1.0 <	1.70	QRK R
WELLAB	(35)	5.00 <	5.00 <	5.0 <	5.00 <	
LAS	(48)	2.03 <	2.05 <	2.1 <	2.07 <	ZUH Q
ARCHIMEDES	(59)	-	-	10.0 <	10.00 <	FZI Q
SGSECOPD	(62)	3.20	5.00	191.0	0.20 <	JUHQ
ENN001	(70)	1.00 <	1.00 <	1.0 <	1.00 <	BUH Q
PLVHOLAB	(81)	1.00 <	10.00	4.0	1.00 <	BRHR
ADIRONDACK	(93)	100.00 <	100.00 <	100.0 <	100.00 <	J-H R
ORGDIMCH	(120)	3.00 <	3.00 <	3.0 <	3.00 <	ZZZ R
TLR	(900)	1.00 <	1.00 <	1.0 <	1.00 <	DRKR
FRESHERTEN	(920)	1.00 <	1.00 <	1.0 <	1.00 <	Q-J Q
Median		3.200 (1)	7.500 (1)	97.50 (1)	3.250 (1)	
MAD		-	2.500	93.50	1.550	
N		1	2	2	2	

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Sample	739	767	780	764	MIC
gamma-HCH (µg/kg)					
ZINDZIWE (1)	-	-	3.50	3.50	--HCE
MLABTW (4)	2.00 <	3.0 <	21.00 <	4.00 <	ZZK R
Alconheinr (7)	1.00 <	1.0 <	1.00 <	1.00 <	QRK R
ANAMIL (10)	5.00 <	5.0 <	5.00 <	5.00 <	DZK R
PAULINE (18)	1.00 <	1.0 <	5.00 <	1.00 <	ZZK R
EXACT (28)	1.00 <	1.0 <	1.00 <	1.00 <	QRK R
WELLAB (35)	5.00 <	5.0 <	5.00 <	5.00 <	
LAS (48)	2.03 <	2.9	2.29	3.12	ZUH Q
ARCHIMEDES (59)	-	-	10.00 <	10.00 <	FZI Q
SGSECOPD (62)	0.20 <	0.2 <	0.20 <	0.74	JUHQ
ENN001 (70)	1.00 <	1.0 <	1.00 <	1.00 <	BUH Q
PLVHOLAB (81)	7.00	84.0	60.00	80.00	BRHR
ADIRONDACK (93)	40.00 <	40.0 <	40.00 <	40.00 <	J-H Q
ORGDIMCH (120)	3.00 <	3.0 <	3.00 <	3.00 <	ZZZ R
CNRLBR (875)	0.50 <	0.5 <	0.50 <	0.50 <	ZUH R
TLR (900)	1.00 <	1.0 <	1.00 <	1.00 <	DRKR
FRESHERTEN (920)	1.00 <	1.0 <	1.00 <	1.00 <	Q-J Q
Median	7.000 (1)	43.46 (1)	3.500 (1)	3.310 (1)	
MAD	-	40.54	1.210	1.380	
N	1	2	3	4	
heptachlor (µg/kg)					
ZINDZIWE (1)	-	-	1.00 <	2.60	--HCE
MLABTW (4)	4.00 <	8.0 <	21.00 <	4.00 <	ZZK R
Alconheinr (7)	3.00 <	3.0 <	3.00 <	3.00 <	QRK R
ANAMIL (10)	2.00 <	2.0 <	2.00 <	2.00 <	DZK R
PAULINE (18)	1.00 <	1.0 <	5.00 <	1.00 <	ZZK R
EXACT (28)	1.00 <	1.0 <	2.30	1.00 <	QRK R
WELLAB (35)	5.00 <	5.0 <	5.00 <	5.00 <	
LAS (48)	2.03 <	2.1 <	2.07 <	2.07 <	ZUH Q
ARCHIMEDES (59)	-	-	20.00 <	20.00 <	FZI Q
SGSECOPD (62)	0.20 <	0.2 <	0.20 <	0.38	JUHQ
ENN001 (70)	1.00 <	1.0 <	1.00 <	1.00 <	BUH Q
PLVHOLAB (81)	1.00 <	1.0 <	2.00	1.00 <	BRHR
ADIRONDACK (93)	100.00 <	100.0 <	100.00 <	100.00 <	J-H R
ORGDIMCH (120)	3.00 <	3.0 <	3.00 <	3.00 <	ZZZ R
TLR (900)	1.00 <	1.0 <	1.00 <	1.00 <	DRKR
FRESHERTEN (920)	1.00 <	1.0 <	1.00 <	1.00 <	Q-J Q
Median	- (0)	- (0)	2.150 (1)	1.490 (1)	
MAD	-	-	0.150	1.110	
N	-	-	2	2	
heptachlor epoxide (µg/kg)					
ZINDZIWE (1)	-	-	4.00 <	4.00 <	--HCE
MLABTW (4)	7.00 <	13.0 <	82.00 <	17.00 <	ZZK R
Alconheinr (7)	2.00 <	2.0 <	2.00 <	2.00 <	QRK R
ANAMIL (10)	5.00 <	5.0 <	2.00 <	2.00 <	DZK R
PAULINE (18)	1.00 <	1.0 <	5.00 <	1.00 <	ZZK R
EXACT (28)	2.00 <	2.0 <	2.00 <	2.00 <	QRK R
WELLAB (35)	5.00 <	5.0 <	5.00 <	5.00 <	
ARCHIMEDES (59)	-	-	10.00 <	10.00 <	FZI Q
SGSECOPD (62)	0.20 <	0.2 <	0.20 <	0.20 <	JUHQ
ENN001 (70)	1.00 <	1.0 <	1.00 <	1.00 <	BUH Q
PLVHOLAB (81)	1.00 <	1.0 <	1.00 <	1.00 <	
ADIRONDACK (93)	100.00 <	100.0 <	100.00 <	100.00 <	J-H R
ORGDIMCH (120)	3.00 <	3.0 <	3.00 <	3.00 <	ZZZ R
TLR (900)	1.00 <	1.0 <	1.00 <	1.00 <	DRKR
FRESHERTEN (920)	1.00 <	1.0 <	1.00 <	5.92	Q-J Q
Median	- (0)	- (0)	- (0)	5.920 (1)	
MAD	-	-	-	-	
N	-	-	-	1	

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Sample	739	767	780	764	MIC
hexachlorobenzene (µg/kg)					
MLABTW (4)	2.00 <	16.2	21.00 <	184	ZZK R
Alconheinr (7)	1.00 <	7.3	1.00 <	130 *	QRK R
ANAMIL (10)	2.00 <	8.3	20.00 <	147	DZK R
BLAUWHUIS (14)	1.00 <	16.0	1.00 <	199	
PAULINE (18)	1.00 <	10.3	5.00 <	249 *	ZZK R
EXACT (28)	1.00 <	8.7	3.40	160	QRK R
WELLAB (35)	5.00 <	13.4	5.00 <	171	
ARCHIMEDES (59)	-	-	10.00 <	196	FZI Q
SGSECOPD (62)	0.20 <	8.8	0.20 <	149	JUHQ
ENN001 (70)	1.00 <	10.9	4.99	88 **	BUH Q
PLVHOLAB (81)	1.00 <	15.0	1.00	179	BRHR
GAL (91)	10.00 <	15.0	10.00 <	186	JXH Q
ADIRONDACK (93)	150.00 <	150.0 <	150.00 <	150 <	J-H R
ORGDIMCH (120)	3.00 <	34.5 **	9.50	495 **	ZZZ R
ECCM (841)	0.40 <	16.3	1.64	206	BHH R
CNRLBR (875)	0.50 <	11.5	1.44	199	ZUH R
LABAMB (878)	5.00 <	16.0	5.00 <	198	J-K R
TLR (900)	1.00 <	5.0	1.00 <	61 **	DRKR
FRESHERTEN (920)	7.07	1.0 <	1.00 <	34 **	Q-J Q
NDA mean	-	12.06	-	180.0	
NDA st dev	-	4.96	-	33.6	
NDA N	1	16	6	18	
Old statistics					
Median	7.070 (1)	11.46 (3)	2.520 (1)	184.8 (3)	
MAD	-	3.54	1.300	14.0	
Mean	-	11.91	-	181.1	
St Dev	-	3.77	-	20.3	
N	1	15	6	12	
hexachlorobutadiene (µg/kg)					
ZINDZIWE (1)	-	-	1.00 <	12.0	--HCE
Alconheinr (7)	1.00 <	2.90	1.00 <	6.0	QRK R
ANAMIL (10)	2.00 <	3.31	20.00 <	9.9	DZK R
PAULINE (18)	1.00 <	2.15	5.00 <	10.6	ZZK R
WELLAB (35)	5.00 <	5.00 <	5.00 <	7.0	
ENN001 (70)	1.00 <	1.00 <	1.00 <	1.0 <	BUH Q
PLVHOLAB (81)	3.00 <	5.00	3.00 <	8.0	BRHR
ORGDIMCH (120)	3.00 <	6.90	3.00 <	12.5	ZZZ R
LABAMB (878)	5.00 <	8.00	5.00 <	12.0	J-K R
FRESHERTEN (920)	1.00 <	1.00 <	1.00 <	1.0 <	Q-J Q
NDA mean	-	-	-	9.96	
NDA st dev	-	-	-	2.88	
NDA N	-	6	-	8	
Old statistics					
Median	- (0)	4.155 (1)	- (0)	10.25 (3)	
MAD	-	1.630	-	2.00	
Mean	-	-	-	9.75	
St Dev	-	-	-	2.48	
N	-	6	-	8	
isodrin (µg/kg)					
ZINDZIWE (1)	-	-	1.0 <	1.20	--HCE
MLABTW (4)	2.00 <	3.00 <	21.0 <	4.00 <	ZZK R
Alconheinr (7)	1.00 <	1.00 <	1.0 <	1.00 <	QRK R
ANAMIL (10)	5.00 <	5.00 <	5.0 <	5.00 <	DZK R
PAULINE (18)	1.00 <	1.00 <	5.0 <	1.00 <	ZZK R
EXACT (28)	1.00 <	1.00 <	1.0 <	3.20	QRK R
WELLAB (35)	5.00 <	5.00 <	5.0 <	5.00 <	
ENN001 (70)	1.00 <	1.00 <	1.0 <	1.00 <	BUH Q
PLVHOLAB (81)	7.00	5.00	21.0	1.00 <	BRHR
Median	7.000 (1)	5.000 (1)	21.00 (1)	2.200 (1)	
MAD	-	-	-	1.000	
N	1	1	1	2	

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Sample		739	767	780	764	MIC
isodrin (µg/kg)	(cont.)					
ORGDIMCH	(120)	3.00 <	3.00 <	3.0 <	3.00 <	ZZZ R
FRESHERTEN	(920)	1.00 <	1.00 <	1.0 <	1.00 <	Q-J Q
Median		7.000 (1)	5.000 (1)	21.00 (1)	2.200 (1)	
MAD		-	-	-	1.000	
N		1	1	1	2	
o,p`-DDD (µg/kg)						
ZINDZIWE	(1)	-	-	2.50	6.60	--HCE
MLABTW	(4)	2.00 <	3.00 <	21.00 <	4.76	ZZK R
Alconheinr	(7)	1.00 <	1.00 <	1.00 <	3.90	QRK R
ANAMIL	(10)	1.00 <	1.00 <	6.85	2.00 <	DZK R
PAULINE	(18)	1.00 <	1.00 <	5.00 <	7.73	ZZK R
EXACT	(28)	1.00 <	1.00 <	11.00	1.40	QRK R
WELLAB	(35)	5.00 <	5.00 <	5.00 <	5.00 <	
ARCHIMEDES	(59)	-	-	10.00 <	10.00 <	FZI Q
SGSECOPD	(62)	0.20 <	0.20 <	0.20 <	0.20 <	JUHQ
PLVHOLAB	(81)	3.00	7.00	3.00	7.00	BRHR
GAL	(91)	10.00 <	10.00 <	10.00 <	10.00 <	JXH Q
ORGDIMCH	(120)	3.00 <	3.00 <	3.00 <	13.50	ZZZ R
CNRLBR	(875)	0.66	1.18	3.77	3.84	ZUH R
TLR	(900)	1.00 <	1.00 <	1.00 <	1.00 <	DRKR
FRESHERTEN	(920)	1.00 <	1.00 <	1.00 <	1.00 <	Q-J Q
NDA mean		-	-	-	5.273	
NDA st dev		-	-	-	2.641	
NDA N		2	2	5	8	
Old statistics						
Median		1.830 (1)	4.090 (1)	3.770 (1)	5.680 (3)	
MAD		1.170	2.910	1.270	1.810	
Mean		-	-	-	6.091	
St Dev		-	-	-	3.631	
N		2	2	5	8	
o,p`-DDE (µg/kg)						
ZINDZIWE	(1)	-	-	1.00 <	1.00 <	--HCE
MLABTW	(4)	2.00 <	3.00 <	21.00 <	4.00 <	ZZK R
Alconheinr	(7)	1.00 <	1.00 <	1.00 <	1.00 <	QRK R
ANAMIL	(10)	1.00 <	1.00 <	1.00 <	1.00 <	DZK R
PAULINE	(18)	1.00 <	1.00 <	5.00 <	1.00 <	ZZK R
EXACT	(28)	1.00 <	2.90	11.00	3.60	QRK R
WELLAB	(35)	5.00 <	5.00 <	5.00 <	5.00 <	
ARCHIMEDES	(59)	-	-	10.00 <	10.00 <	FZI Q
SGSECOPD	(62)	0.20 <	2.70	4.90	5.20	JUHQ
PLVHOLAB	(81)	1.00 <	1.00 <	1.00 <	1.00	BRHR
GAL	(91)	10.00 <	10.00 <	10.00 <	10.00 <	JXH Q
ORGDIMCH	(120)	3.00 <	3.00 <	3.00 <	3.00 <	ZZZ R
CNRLBR	(875)	0.50 <	0.50 <	0.69	0.59	ZUH R
TLR	(900)	1.00 <	1.00 <	1.00 <	4.00	DRKR
FRESHERTEN	(920)	1.00 <	1.00 <	1.00 <	1.00 <	Q-J Q
Median		- (0)	2.800 (1)	4.900 (1)	3.600 (1)	
MAD		-	0.100	4.210	1.600	
N		-	2	3	5	
o,p`-DDT (µg/kg)						
ZINDZIWE	(1)	-	-	1.20	1.00 <	--HCE
MLABTW	(4)	2.00 <	3.000 <	21.00 <	4.00 <	ZZK R
Alconheinr	(7)	1.00 <	1.000 <	1.00 <	1.00 <	QRK R
PAULINE	(18)	1.00 <	1.000 <	5.00 <	1.00 <	ZZK R
EXACT	(28)	1.00 <	1.000 <	2.10	3.00	QRK R
WELLAB	(35)	5.00 <	5.000 <	5.00 <	5.00 <	
Median		- (0)	0.5000 (1)	1.200 (1)	3.550 (1)	
MAD		-	-	0.280	1.190	
N		-	1	3	4	

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Sample		739	767	780	764	MIC
o,p`-DDT (µg/kg)	(cont.)					
ARCHIMEDES	(59)	-	-	10.00 <	10.00 <	FZI Q
SGSECOPD	(62)	0.20 <	0.200 <	0.20 <	4.10	JUHQ
PLVHOLAB	(81)	25.00 <	25.000 <	25.00 <	40.00	BRHR
GAL	(91)	10.00 <	10.000 <	10.00 <	10.00 <	JXH Q
ORGDIMCH	(120)	3.00 <	3.000 <	3.00 <	3.00 <	ZZZ R
CNRLBR	(875)	0.50 <	0.500	0.92	1.72	ZUH R
TLR	(900)	1.00 <	1.000 <	1.00 <	1.00 <	DRKR
FRESHERTEN	(920)	1.00 <	1.000 <	1.00 <	1.00 <	Q-J Q
Median		- (0)	0.5000 (1)	1.200 (1)	3.550 (1)	
MAD		-	-	0.280	1.190	
N		-	1	3	4	
p,p`-DDD (µg/kg)						
ZINDZIWE	(1)	-	-	2.5	6.6	--HCE
MLABTW	(4)	2.00 <	3.00 <	26.0 <	17.7	ZZK R
Alconheinr	(7)	1.00 <	1.00 <	1.0 <	14.0	QRK R
PAULINE	(18)	1.91	1.00 <	5.0 <	22.3	ZZK R
EXACT	(28)	1.00 <	1.00 <	7.6	5.8	QRK R
WELLAB	(35)	5.00 <	5.00 <	5.0 <	17.1	
LAS	(48)	2.03 <	2.05 <	11.0	14.6	ZUH Q
ARCHIMEDES	(59)	-	-	10.8	11.2	FZI Q
SGSECOPD	(62)	0.36	0.20 <	3.6	8.9	JUHQ
ENN001	(70)	1.00 <	1.00 <	1.0 <	2.7	BUH Q
PLVHOLAB	(81)	10.00	11.00	20.0	26.0	BRHR
GAL	(91)	10.00 <	10.00 <	12.0	22.0	JXH Q
ADIRONDACK	(93)	100.00 <	100.00 <	100.0 <	100.0 <	J-H R
ORGDIMCH	(120)	3.00 <	3.00 <	3.0 <	34.0	ZZZ R
CNRLBR	(875)	1.76	2.81	13.7	10.3	ZUH R
TLR	(900)	1.00 <	1.00 <	1.0 <	6.0	DRKR
FRESHERTEN	(920)	1.00 <	1.00 <	1.0 <	1.0 <	Q-J Q
NDA mean		-	-	9.98	13.61	
NDA st dev		-	-	4.83	10.22	
NDA N		4	2	8	15	
	Old statistics					
Median		1.835 (1)	6.905 (1)	10.89 (3)	14.00 (3)	
MAD		0.775	4.095	3.07	7.40	
Mean		-	-	10.15	14.61	
St Dev		-	-	5.64	8.69	
N		4	2	8	15	
p,p`-DDE (µg/kg)						
ZINDZIWE	(1)	-	-	1.80	11.0	--HCE
MLABTW	(4)	2.000 <	3.00 <	21.00 <	11.1	ZZK R
Alconheinr	(7)	1.000 <	3.50	1.00 <	8.6	QRK R
ANAMIL	(10)	1.000 <	1.00 <	12.00	1.0 <	DZK R
PAULINE	(18)	1.000 <	5.07	5.00 <	19.5 **	ZZK R
EXACT	(28)	1.000 <	3.30	3.80	5.8	QRK R
WELLAB	(35)	5.000 <	5.00 <	5.00 <	11.9	
LAS	(48)	2.030 <	6.48	6.18	13.6	ZUH Q
ARCHIMEDES	(59)	-	-	10.00 <	10.0 <	FZI Q
SGSECOPD	(62)	0.270	3.10	2.50	9.5	JUHQ
ENN001	(70)	1.000 <	2.83	2.56	5.8	BUH Q
PLVHOLAB	(81)	1.000	5.00	8.00	12.0	BRHR
GAL	(91)	10.000 <	10.00 <	10.00 <	11.0	JXH Q
ADIRONDACK	(93)	100.000 <	100.00 <	100.00 <	100.0 <	J-H R
ORGDIMCH	(120)	3.000 <	3.00 <	3.00 <	3.0 <	ZZZ R
CNRLBR	(875)	0.630	4.65	6.83	10.3	ZUH R
TLR	(900)	1.000 <	1.00 <	1.00 <	6.0	DRKR
FRESHERTEN	(920)	1.000 <	1.00 <	1.00 <	1.0 <	Q-J Q
NDA mean		-	4.095	4.877	10.35	(cont.)
NDA st dev		-	1.375	3.554	2.37	
NDA N		3	8	8	13	

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Sample		739	767	780	764	MIC
p,p`-DDE (µg/kg)	(cont.)					
NDA mean		-	4.095	4.877	10.35	
NDA st dev		-	1.375	3.554	2.37	
NDA N		3	8	8	13	
	Old statistics					
Median		0.6300 (1)	4.075 (3)	4.990 (3)	10.67 (3)	
MAD		0.3600	0.950	2.460	1.28	
Mean		-	4.241	5.459	9.72	
St Dev		-	1.263	3.483	2.63	
N		3	8	8	12	
p,p`-DDT (µg/kg)						
ZINDZIWE	(1)	-	-	1.0 <	21.0	--HCE
MLABTW	(4)	2.00 <	3.00 <	21.0 <	17.9	ZZK R
Alconheinr	(7)	1.00 <	1.00 <	1.0 <	11.0	QRK R
ANAMIL	(10)	2.00 <	2.00 <	20.0	2.0 <	DZK R
BLAUWHUIS	(14)	0.40 <	0.40 <	0.4 <	18.0	
PAULINE	(18)	1.00 <	1.00 <	5.0 <	55.4 **	ZZK R
EXACT	(28)	3.00 <	3.00 <	26.0	26.0	QRK R
WELLAB	(35)	5.00 <	5.00 <	5.0 <	23.3	
LAS	(48)	2.03 <	2.68	2.1 <	4.1	ZUH Q
ARCHIMEDES	(59)	-	-	30.0 <	30.0 <	FZI Q
SGSECOPD	(62)	0.20 <	0.20 <	1.3	12.8	JUHQ
ENN001	(70)	1.00 <	3.18	1.0 <	5.4	BUH Q
PLVHOLAB	(81)	4.00	13.00	26.0	99.0 **	BRHR
GAL	(91)	10.00 <	10.00 <	10.0 <	22.0	JXH Q
ADIRONDACK	(93)	100.00 <	100.00 <	100.0 <	100.0 <	J-H R
ORGDIMCH	(120)	3.00 <	3.00 <	3.0 <	8.6	ZZZ R
CNRLBLR	(875)	0.52	1.09	6.7	21.6	ZUH R
TLR	(900)	1.00 <	1.00 <	1.0 <	1.0 <	DRKR
FRESHERTEN	(920)	1.00 <	1.00 <	1.0 <	1.0 <	Q-J Q
NDA mean		-	-	-	16.54	
NDA st dev		-	-	-	9.24	
NDA N		2	4	5	14	
	Old statistics					
Median		2.260 (1)	2.930 (1)	20.00 (1)	17.95 (3)	
MAD		1.740	1.045	6.00	5.25	
Mean		-	-	-	15.97	
St Dev		-	-	-	7.37	
N		2	4	5	12	
pentachlorobenzene (µg/kg)						
Alconheinr	(7)	1.00 <	1.00 <	1.00 <	46.0	QRK R
ANAMIL	(10)	2.00 <	3.31	20.00 <	46.8	DZK R
PAULINE	(18)	5.00 <	5.00 <	5.00 <	86.0	ZZK R
EXACT	(28)	0.40 <	3.90	0.64	57.0	QRK R
WELLAB	(35)	5.00 <	5.00 <	5.00 <	56.7	
ARCHIMEDES	(59)	-	-	4.00 <	55.2	FZI Q
ENN001	(70)	1.00 <	1.00 <	1.00 <	1.0 <	BUH Q
PLVHOLAB	(81)	1.00 <	6.00	2.00	67.0	BRHR
ADIRONDACK	(93)	100.00 <	100.00 <	100.00 <	100.0 <	J-H R
ORGDIMCH	(120)	3.00 <	3.00 <	3.00 <	3.0 <	ZZZ R
LABAMB	(878)	5.00 <	8.00	5.00 <	68.0	J-K R
FRESHERTEN	(920)	1.00 <	1.00 <	1.00 <	12.1	Q-J Q
NDA mean		-	-	-	57.84	
NDA st dev		-	-	-	14.60	
NDA N		-	4	2	9	
	Old statistics					
Median		- (0)	4.950 (1)	1.320 (1)	56.70 (3)	
MAD		-	1.345	0.680	10.30	
Mean		-	-	-	54.98	
St Dev		-	-	-	20.21	
N		-	4	2	9	

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Sample		739	767	780	764	MIC
Sum tetrachlorobenzenes (µg/kg)						
ANAMIL	(10)	5.00 <	8.00	40.0	30.0	DZK R
ARCHIMEDES	(59)	-	-	20.0 <	20.0 <	FZI Q
Median		- (0)	8.000 (1)	40.00 (1)	30.00 (1)	
MAD		-	-	-	-	
N		-	1	1	1	
Sum trichlorobenzenes (µg/kg)						
ANAMIL	(10)	30.00 <	100	120	100.0	DZK R
ARCHIMEDES	(59)	-	-	10 <	69.0	FZI Q
Median		- (0)	100.0 (1)	120.0 (1)	84.50 (1)	
MAD		-	-	-	15.50	
N		-	1	1	2	
telodrin (µg/kg)						
ZINDZIWE	(1)	-	-	1 <	1.20	--HCE
MLABTW	(4)	2.00 <	8 <	21 <	4.00 <	ZZK R
Alconheinr	(7)	1.00 <	1 <	1 <	1.00 <	QRK R
ANAMIL	(10)	5.00 <	5 <	5 <	5.00 <	DZK R
PAULINE	(18)	1.00 <	1 <	5 <	1.00 <	ZZK R
EXACT	(28)	1.00 <	1 <	1 <	1.00 <	QRK R
PLVHOLAB	(81)	1.00 <	1 <	1 <	1.00 <	BRHR
Median		- (0)	- (0)	- (0)	1.200 (1)	
MAD		-	-	-	-	
N		-	-	-	1	
toxaphene (µg/kg)						
WELLAB	(35)	5.00 <	5 <	5 <	5.00 <	
Median		- (0)	- (0)	- (0)	- (0)	
MAD		-	-	-	-	
N		-	-	-	-	
trans-chlordane (µg/kg)						
MLABTW	(4)	2.00 <	3 <	21 <	4.00 <	ZZK R
Alconheinr	(7)	1.00 <	1 <	1 <	1.00 <	QRK R
PAULINE	(18)	1.00 <	1 <	5 <	1.48	ZZK R
EXACT	(28)	1.00 <	1 <	1 <	1.00 <	QRK R
WELLAB	(35)	5.00 <	5 <	5 <	5.00 <	
SGSECOPD	(62)	0.20 <	0 <	0 <	0.20 <	JUHQ
ORGDIMCH	(120)	3.00 <	3 <	3 <	3.00 <	ZZZ R
TLR	(900)	1.00 <	1 <	1 <	1.00 <	DRKR
FRESHERTEN	(920)	1.00 <	1 <	1 <	1.00 <	Q-J Q
Median		- (0)	- (0)	- (0)	1.480 (1)	
MAD		-	-	-	-	
N		-	-	-	1	

SETOC 2009.1 - Other parameters

Sample		739	767	780	764	MIC
AOX (mg/kg)						
WELLAB	(35)	62.5	130	86.0	154	
EPILAB-1A	(87)	79.0	140	120.0	160	QV-MA
GAL	(91)	63.0	110	76.0	140	---MA
Median		63.00 (1)	130.0 (1)	86.00 (1)	154.0 (1)	
MAD		0.50	10.0	10.00	6.0	
N		3	3	3	3	
CN - Free (mg/kg)						
ZINDZIWE	(1)	1.000 <	1.000 <	1.0 <	1.00 <	--- E
BLAUWHUIS	(14)	1.000 <	1.000 <	1.0 <	1.00 <	---
PAULINE	(18)	1.000 <	0.980	1.0 <	0.77	Z-- E
ZANEDA	(32)	0.150 <	0.460	0.2 <	0.43	
WELLAB	(35)	0.800	0.680	0.5 <	0.50 <	
CHEMLABSIT	(52)	1.000 <	5.700	1.0 <	10.00	---
ARCHIMEDES	(59)	1.000 <	1.000 <	1.0 <	1.00 <	Z-- E
STCRSC	(92)	0.050 <	0.110	0.1 <	0.34	Z-- E
ADIRONDACK	(93)	0.150 <	0.060	0.2 <	0.15 <	Z-- O
ORGDIMCH	(120)	1.000 <	5.430	1.0 <	9.91	Q-- E
LABAMB	(878)	0.500 <	0.500 <	0.5 <	1.61	Z-- O
Median		0.8000 (1)	0.6800 (1)	- (0)	1.190 (1)	
MAD		-	0.5700	-	0.805	
N		1	7	-	6	
CN - Total (mg/kg)						
ZINDZIWE	(1)	1.000 <	5.70	1.000 <	9.30	--- E
AL-West	(5)	5.544	1.00 <	11.240	1.00 <	Z-Z E
BLAUWHUIS	(14)	1.000 <	5.60	1.000 <	9.44	---
PAULINE	(18)	0.580	5.41	1.000 <	10.10	Z-- E
ZANEDA	(32)	0.340	3.98	0.310	9.90	
WELLAB	(35)	1.050	6.46	0.600	10.34	
CHEMLABSIT	(52)	1.000 <	1.00 <	1.000 <	1.10 **	---
ATM	(54)	0.100	5.00	0.100 <	10.60	Q-- E
ARCHIMEDES	(59)	1.000 <	5.75	1.000 <	10.20	Z-- E
STCRSC	(92)	0.050 <	1.17 **	0.050 <	7.48 *	Z-- E
ADIRONDACK	(93)	1.000	4.80	0.700	8.00 *	Z-- O
FOCUS	(109)	4.000 <	4.00 <	4.000 <	9.10	QZ- E
ORGDIMCH	(120)	1.000 <	5.49	1.000 <	12.41 **	Q-- E
HHAFU	(134)	1.000 <	3.80 *	1.000 <	9.90	ZZZ M
LABAMB	(878)	0.500 <	0.50 <	0.500 <	1.67 **	Z-- O
NDA mean		-	5.399	-	9.788	
NDA st dev		-	0.633	-	0.899	
NDA N		6	11	4	14	
Old statistics						
Median		0.7900 (1)	5.490 (3)	0.6500 (1)	9.900 (3)	
MAD		0.3550	0.260	0.1950	0.440	
Mean		-	5.354	-	9.876	
St Dev		-	0.698	-	0.502	
N		6	9	4	9	
EOX (mg/kg)						
ZINDZIWE	(1)	0.560	4.00	5.70	3.80	---MA
MLABTW	(4)	0.447	3.38	5.74	2.72	F--MA
AL-West	(5)	0.545	3.41	4.94	3.46	F--MA
Alconheinr	(7)	0.650	3.00	5.00	3.60	Q--MA
BLAUWHUIS	(14)	0.426	2.51	3.88	3.21	---
PAULINE	(18)	0.360	3.06	4.01	2.88	Z--MA
EXACT	(28)	0.490	2.80	4.10	2.30	Q-- Q
WELLAB	(35)	0.414	2.99	4.24	3.17	
ENVIROPACE	(36)	5.000 <	5.00 <	5.22	5.00 <	J--MA
NDA mean		0.4389	3.037	4.458	2.978	(cont.)
NDA st dev		0.1018	0.493	0.678	0.559	
NDA N		13	14	15	14	

SETOC 2009.1 - Other parameters

Sample		739	767	780	764	MIC
EOX (mg/kg)	(cont.)					
CHEMLABSIT	(52)	0.330	2.80	4.20	3.20	---
ATM	(54)	0.300	3.50	4.70	3.10	F--MA
ARCHIMEDES	(59)	0.364	2.67	4.66	2.92	F--MA
GGM	(60)	0.551	3.01	3.80	2.38	FV-MA
ADIRONDACK	(93)	0.420	0.36 **	1.60 **	2.30	JA-MA
HHAFU	(134)	0.500 <	1.40 **	3.80	1.80	B--MA
NDA mean		0.4389	3.037	4.458	2.978	
NDA st dev		0.1018	0.493	0.678	0.559	
NDA N		13	14	15	14	
Old statistics						
Median		0.4260 (3)	3.004 (3)	4.450 (3)	3.010 (3)	
MAD		0.0660	0.269	0.521	0.370	
Mean		0.4505	3.094	4.571	2.917	
St Dev		0.1033	0.415	0.672	0.565	
N		13	12	14	14	
Inorganic carbon (g/kg)						
AL-West	(5)	9.13	12.4	14.8	10.50	--- Z
WELLAB	(35)	8.90	15.0	14.4	10.40	
COMALAB	(67)	10.90	14.3	12.7	10.40	--- T
EPILAB-1A	(87)	7.10	12.2	11.4	9.00	--- N
GAL	(91)	11.50	17.4	17.5	13.10	--- T
ANDESITE	(105)	9.30	15.5	15.8	10.80	Z--Z
Median		9.217 (1)	14.65 (1)	14.58 (1)	10.450 (1)	
MAD		1.000	1.57	1.55	0.200	
N		6	6	6	6	
Mineral oil, GC (mg/kg)						
ZINDZIWE	(1)	110	540	1700	340	--H C
MLABTW	(4)	130	634	2150	318	FXKJA
AL-West	(5)	141	602	1880	347	Z-H S
Alconheinr	(7)	85	550	1600	270	QXK S
ANAMIL	(10)	140	478	1150	274	DXK S
BLAUWHUIS	(14)	107	500	1530	291	---
HIDU	(16)	96	585	1710	277	QXH S
PAULINE	(18)	143	557	1540	287	FXK S
IMRN	(27)	130	540	1350	330	---
EXACT	(28)	70	480	1300	200	QXK S
ANATEK	(29)	117	520	1180	367	DWH S
ELML	(33)	160	710	2170	390	ZZZ S
WELLAB	(35)	107	556	1650	293	
JYUIER	(41)	124	722	2210	325	QZI S
CHEMLABSIT	(52)	86	230 **	730	200	---
ATM	(54)	128	350 *	110 **	215	F-H S
ANAPBO	(55)	190 *	400	280 **	1200 **	
ARCHIMEDES	(59)	-	-	500 *	105 **	FXK S
GGM	(60)	101	60 **	200 **	302	FXK S
ENN001	(70)	130	680	1850	480 **	BUH Q
QSANAL	(76)	92	542	1350	290	QXH S
BOREALIS	(78)	173	573	1210	365	CWH R
PLVHOLAB	(81)	70	410	1200	240	
EPILAB-1A	(87)	130	580	1900	290	
GAL	(91)	101	406	2020	267	JXH S
ADIRONDACK	(93)	214 **	527	1760	387	JXH S
THO1808MAS	(110)	70	450	1990	190	CXI S
ORGDIMCH	(120)	129	485	1240	288	ZZZ R
HHAFU	(134)	110	570	1800	250	QXK S
LABAMB	(878)	148	689	1970	397	J-K S
TAMPERE	(911)	126	613	0 **	369	QZHS
SHI	(912)	78	559	1700	258	QHH R
NDA mean		118.0	549.5	1613	299.1	(cont.)
NDA st dev		33.1	97.5	516	72.9	
NDA N		33	33	34	34	

SETOC 2009.1 - Other parameters

Sample		739	767	780	764	MIC
Mineral oil, GC (mg/kg)	(cont.)					
FRESHERTEN (920)		200 **	800 **	3100 **	790 **	QXK S
FRESKOELL (958)		206 **	786 **	1840	484 **	QXKS
NDA mean		118.0	549.5	1613	299.1	
NDA st dev		33.1	97.5	516	72.9	
NDA N		33	33	34	34	
	Old statistics					
Median		117.2 (3)	553.0 (3)	1700 (3)	290.0 (3)	
MAD		16.5	50.8	278	40.0	
Mean		114.9	552.1	1632	297.1	
St Dev		27.2	86.0	366	58.3	
N		29	28	28	29	
Mineral oil, IR (mg/kg)						
Alconheinr (7)		75.0	610	1800	320	B-- T
GAL (91)		93.0	533	1750	283	EX- T
STCRSC (92)		59.0	537	1700	253	BR- T
ANDESITE (105)		147.0	673	2150	446	ZX-T
FPLL (115)		173.0	752	2000	358	QV-T
LAB607 (862)		70.0	604	1900	321	ZV-T
LABAMB (878)		139.0	829	2620	421	J-K T
Median		93.00 (1)	610.0 (1)	1900 (1)	321.0 (1)	
MAD		34.00	72.8	152	38.0	
N		7	7	7	7	
Organic carbon (g/kg)						
AL-West (5)		43.5	41.4	44.1	60.9	Z-- M
BLAUWHUIS (14)		44.7	46.0	46.2	55.1	---
HIDU (16)		35.7	40.8	40.6	58.3	--- T
WELLAB (35)		44.0	45.2	45.5	56.3	
SGSECOPD (62)		31.0	22.0 **	38.0	53.0	-Z-YC
COMALAB (67)		32.0	40.0	40.7	55.0	---T
EPILAB-1A (87)		32.5	30.6	36.6	44.4	---N
GAL (91)		39.8	37.2	37.4	53.2	--- T
ADIRONDACK (93)		50.0	50.0 *	70.0 **	70.0 **	Z-- O
ANDESITE (105)		49.2	53.0 **	57.5	67.1 *	Z--Z
FOCUS (109)		41.0	38.0	57.0	40.0 *	Z-- T
FPLL (115)		50.1	37.0	66.3 *	32.6 **	Z--M
ORGDIMCH (120)		35.0	35.9	38.7	49.7	---YC
LABAMB (878)		41.1	39.2	51.3	51.0	Z-- M
TAMPERE (911)		20.8	33.9	43.8	20.3 **	
FRESKOELL (958)		35.2	39.7	47.2	50.7	---N
NDA mean		39.77	39.24	44.52	53.78	
NDA st dev		7.87	4.64	9.04	6.60	
NDA N		16	16	16	16	
	Old statistics					
Median		40.40 (3)	39.24 (3)	43.95 (3)	53.20 (3)	
MAD		5.28	2.13	4.28	2.50	
Mean		39.11	38.84	44.61	53.41	
St Dev		8.01	4.20	6.80	4.50	
N		16	13	14	11	
Particles < 2 µm (%)						
MLABTW (4)		9.13	25.2	25.7	29.3	ZZ-YA
AL-West (5)		8.81	24.1	26.4	30.7	ZZZYA
ANAMIL (10)		12.90 **	26.1	15.4	29.1	ZZZYA
BLAUWHUIS (14)		9.60	23.2	22.5	28.7	---
ZANEDA (32)		30.00 **	6.9 **	31.6	29.8	
WELLAB (35)		9.58	23.7	22.9	27.5	
GGM (60)		11.27	24.1	26.5	28.3	---YA
NDA mean		9.546	24.49	25.02	29.25	(cont.)
NDA st dev		0.841	1.48	4.35	1.18	
NDA N		9	9	9	9	

SETOC 2009.1 - Other parameters

Sample	739	767	780	764	MIC
Particles < 2 µm (%) (cont.)					
ADIRONDACK (93)	10.20	25.3	28.2	31.0	---
ANDESITE (105)	9.33	15.3 **	17.6	23.8 **	Y
NDA mean	9.546	24.49	25.02	29.25	
NDA st dev	0.841	1.48	4.35	1.18	
NDA N	9	9	9	9	
Old statistics					
Median	9.580 (2)	24.14 (2)	25.70 (3)	29.19 (3)	
MAD	0.455	0.94	2.80	0.74	
Mean	-	-	24.09	29.30	
St Dev	-	-	5.10	1.18	
N	7	7	9	8	
Particles < 63 µm (%)					
BLAUWHUIS (14)	35.0	79.2	78.6	87.1	---
ZANEDA (32)	77.6	21.7	76.5	87.8	
WELLAB (35)	21.2	71.0	77.0	89.7	
ADIRONDACK (93)	17.6	53.7	46.8	66.0	---
ANDESITE (105)	30.4	79.7	81.2	90.3	
Median	30.40 (1)	71.00 (1)	77.00 (1)	87.80 (1)	
MAD	9.20	8.66	1.60	1.90	
N	5	5	5	5	
Particles > 63 µm (%)					
BLAUWHUIS (14)	65.0	20.8	21.4	12.9	---
ZANEDA (32)	22.4	78.3	23.5	12.2	
WELLAB (35)	78.8	29.0	23.0	10.3	
ADIRONDACK (93)	82.4	46.3	53.2	34.0	---
ANDESITE (105)	69.6	20.1	18.8	9.7	
Median	69.60 (1)	29.00 (1)	23.00 (1)	12.20 (1)	
MAD	9.20	8.86	1.60	1.90	
N	5	5	5	5	

SETOC 2009.1 - Metals

Sample	739	767	780	764	MIC
As (aqua regia) (mg/kg)					
ZINDZIWE (1)	12.0	20.0	26.0	42.0	V--CC
MLABTW (4)	10.6	19.4	27.2	42.9	T--CC
ANAMIL (10)	11.3	19.7	28.2	44.4	V--CC
BLAUWHUIS (14)	9.8	16.6	24.2	37.9	---
EXTAQS (25)	11.6	20.5	29.2 *	43.5	YV-CC
ANATEK (29)	10.6	16.4	24.5	37.7	Y--CC
ZANEDA (32)	10.7	18.2	26.3	41.6	
ELML (33)	12.1	19.3	28.1	45.5	YV-CC
WELLAB (35)	10.1	17.6	25.1	42.9	YV-CC
US (39)	15.0 **	8.2 **	23.3	39.2	Z--CC
ATM (54)	8.5	15.7	19.0 **	36.1 *	U--CC
ANAPBO (55)	9.6	14.5	20.7 *	34.8 *	VV-BG
HILL (58)	10.0	17.0	24.0	40.0	Y--D
GGM (60)	10.5	18.1	25.0	41.4	VV- D
SGSECOPD (62)	10.0	18.0	25.0	43.0	Y--
COMALAB (67)	8.3	14.9	21.3	92.2 **	
ENN001 (70)	11.3	15.7	26.1	30.1 **	V--CC
EPILAB-1A (87)	10.2	18.0	25.0	42.5	
STCRSC (92)	11.7	17.8	27.6	47.4	T--CC
ADIRONDACK (93)	9.9	18.7	24.9	42.7	Y-- D
FOCUS (109)	8.8	13.0 *	18.0 **	31.0 **	UV- D
ORGDIMCH (120)	7.1 *	11.9 **	18.0 **	29.9 **	U--CC
LABAMB (878)	9.2	19.0	27.0	42.0	Y--CC
NDA mean	10.30	17.70	25.39	41.60	
NDA st dev	1.42	2.19	2.53	3.57	
NDA N	23	23	23	23	
Old statistics					
Median	10.20 (3)	18.00 (3)	25.05 (3)	42.50 (3)	
MAD	0.56	1.33	1.05	1.00	
Mean	10.32	17.75	25.48	42.15	
St Dev	1.09	1.70	1.78	2.49	
N	21	20	18	17	
Ba (mg/kg)					
MLABTW (4)	33.1	382	96	807	T--CC
ANAMIL (10)	42.9	421	102	810	V--CC
BLAUWHUIS (14)	54.9	440	152	780	
ATM (54)	38.0	350	97	742	U--CC
HILL (58)	35.0	450	110	880	Y--D
Median	38.00 (1)	421.0 (1)	102.0 (1)	806.9 (1)	
MAD	4.87	29.0	6.2	26.9	
N	5	5	5	5	
Cd (aqua regia) (mg/kg)					
ZINDZIWE (1)	0.460	5.10	1.60	8.30	V--CC
MLABTW (4)	0.700 <	4.80	1.80	7.61	T--CC
ANAMIL (10)	0.389	4.68	1.39	7.87	V--CC
BLAUWHUIS (14)	0.600	5.29	1.85	8.27	---
EXTAQS (25)	0.530	5.10	1.69	8.49	YV-CC
ANATEK (29)	0.430	4.58	1.47	7.81	Y--CC
ZANEDA (32)	0.700	5.21	2.04	8.29	
ELML (33)	0.505	5.17	1.66	8.99	YV-CC
WELLAB (35)	0.526	4.90	1.58	8.25	YV-CC
US (39)	4.480 **	0.40 **	1.44	7.72	Z--CC
ATM (54)	1.200 **	5.70	2.90 **	9.90	U--CC
ANAPBO (55)	1.000 <	6.00	2.00	10.00	UV-AE
HILL (58)	0.630	5.80	1.80	9.40	Y--D
GGM (60)	0.540	4.74	1.77	8.10	VV- D
SGSECOPD (62)	0.600	5.60	1.80	10.00	Y--
COMALAB (67)	0.700	5.60	2.10 *	9.30	
NDA mean	0.5339	5.126	1.693	8.384	(cont.)
NDA st dev	0.1044	0.560	0.203	0.940	
NDA N	21	24	22	24	

SETOC 2009.1 - Metals

Sample		739	767	780	764	MIC
Cd (aqua regia) (mg/kg)	(cont.)					
ENN001	(70)	2.000 <	5.20	2.00 <	8.02	V--CC
HKPC-EMD	(85)	0.510	-	-	-	Y--BL
EPILAB-1A	(87)	0.508	5.07	1.61	8.24	
STCRSC	(92)	0.680	5.55	1.88	9.51	T--CC
ADIRONDACK	(93)	0.500	5.41	1.75	9.34	Y-- D
FOCUS	(109)	1.800 <	4.00	1.80 <	6.60	UV- D
FPLL	(115)	0.080 **	3.76 *	1.58	6.77	YV-AE
ORGDIMCH	(120)	0.469	4.48	1.47	7.29	U--CC
LABAMB	(878)	0.500	4.80	1.60	8.30	Y--CC
NDA mean		0.5339	5.126	1.693	8.384	
NDA st dev		0.1044	0.560	0.203	0.940	
NDA N		21	24	22	24	
Old statistics						
Median		0.5180 (3)	5.135 (3)	1.675 (3)	8.280 (3)	
MAD		0.0535	0.365	0.125	0.618	
Mean		0.5432	5.127	1.689	8.432	
St Dev		0.0904	0.483	0.181	0.951	
N		18	22	20	24	
Co (mg/kg)						
MLABTW	(4)	5.44	12.8	8.30	16.8	T--CC
ANAMIL	(10)	5.76	13.2	8.57	18.0	V--CC
BLAUWHUIS	(14)	5.60	13.9	9.70	18.1	
ATM	(54)	6.00	13.3	7.90	17.5	U--CC
HILL	(58)	5.90	15.0	9.60	20.0	Y--D
Median		5.760 (1)	13.30 (1)	8.570 (1)	18.00 (1)	
MAD		0.160	0.53	0.670	0.50	
N		5	5	5	5	
Cr (aqua regia) (mg/kg)						
ZINDZIWE	(1)	26.0	140	57.0	180	V--CC
MLABTW	(4)	16.8	114	44.3	178	T--CC
ANAMIL	(10)	21.6	119	47.6	187	V--CC
BLAUWHUIS	(14)	22.5	119	53.1	189	---
EXTAQS	(25)	20.5	127	50.8	188	YV-CC
ANATEK	(29)	17.2	101	41.2	157	Y--CC
ZANEDA	(32)	26.9 *	135	57.4	187	
ELML	(33)	16.7	100	39.1	163	YV-CC
WELLAB	(35)	20.5	122	50.7	186	YV-CC
US	(39)	104.0 **	20 **	39.7	157	Z--CC
ATM	(54)	20.0	106	46.0	176	U--CC
ANAPBO	(55)	22.0	142	56.0	201	UV-CC
HILL	(58)	17.0	120	43.0	180	Y--D
GGM	(60)	20.2	114	46.5	174	VV- D
SGSECOPD	(62)	20.0	120	49.0	180	---
COMALAB	(67)	17.7	121	45.8	183	
ENN001	(70)	23.9	125	50.6	166	V--CC
HKPC-EMD	(85)	19.4	-	-	-	Y--AC
EPILAB-1A	(87)	20.1	115	49.0	169	
STCRSC	(92)	24.3	143	52.3	213	T--CC
ADIRONDACK	(93)	21.2	134	52.3	198	Y-- D
FOCUS	(109)	19.0	120	48.0	190	UV- D
FPLL	(115)	9.1 **	78 **	30.5 **	149	YV-AE
ORGDIMCH	(120)	18.6	110	42.2	155	U--CC
LABAMB	(878)	15.6	105	44.0	165	Y--CC
NDA mean		19.99	119.4	47.87	178.4	(cont.)
NDA st dev		3.39	12.8	6.06	14.7	
NDA N		25	24	24	24	

SETOC 2009.1 - Metals

Sample	739	767	780	764	MIC
Cr (aqua regia) (mg/kg) (cont.)					
NDA mean	19.99	119.4	47.87	178.4	
NDA st dev	3.39	12.8	6.06	14.7	
NDA N	25	24	24	24	
Old statistics					
Median	20.05 (3)	120.0 (3)	48.00 (3)	180.0 (3)	
MAD	1.75	6.7	4.00	9.5	
Mean	20.04	120.5	48.07	178.0	
St Dev	2.67	12.5	5.29	15.7	
N	22	22	23	24	
Cu (aqua regia) (mg/kg)					
ZINDZIWE (1)	19.0	100.0	74.0	160	V--CC
MLABTW (4)	14.9	84.4	66.6	150	T--CC
ANAMIL (10)	18.8	97.7	77.7	169	V--CC
BLAUWHUIS (14)	17.6	89.5	66.3	143	---
EXTAQS (25)	16.9	88.6	66.1	148	YV-CC
ANATEK (29)	13.8	81.0	58.8	137	Y--CC
ZANEDA (32)	15.7	84.8	60.9	138	
ELML (33)	20.8	99.5	72.5	173	YV-CC
WELLAB (35)	16.7	89.1	64.5	157	YV-CC
US (39)	91.3 **	18.5 **	69.8	153	Z--CC
ATM (54)	18.0	98.0	72.0	163	U--CC
ANAPBO (55)	22.0	96.0	70.0	162	UV-CC
HILL (58)	19.0	97.0	71.0	160	Y--D
GGM (60)	15.9	83.9	66.5	145	VV- D
SGSECOPD (62)	18.0	94.0	69.0	155	---
COMALAB (67)	17.6	55.9 **	73.0	159	
ENN001 (70)	18.3	91.4	64.6	149	V--CC
EPILAB-1A (87)	18.2	87.8	64.5	146	
STCRSC (92)	20.7	101.5	77.3	148	T--CC
ADIRONDACK (93)	16.8	97.2	71.4	158	Y-- D
FOCUS (109)	16.0	93.0	68.0	160	UV- D
FPLL (115)	12.9	67.0 *	60.7	135	YV-AE
ORGDIMCH (120)	16.6	86.4	65.0	142	U--CC
LABAMB (878)	14.2	83.0	64.0	140	Y--CC
NDA mean	17.31	91.42	67.86	152.0	
NDA st dev	2.10	8.98	4.73	12.1	
NDA N	24	24	24	24	
Old statistics					
Median	17.60 (3)	91.40 (3)	67.30 (3)	151.6 (3)	
MAD	1.40	5.79	3.05	8.4	
Mean	17.33	91.61	68.09	152.1	
St Dev	2.25	6.33	4.97	10.3	
N	23	21	24	24	
Hg (mg/kg)					
ZINDZIWE (1)	0.280	1.80	2.10	3.70	V--CC
MLABTW (4)	0.337	1.89	2.45	4.01	T-- G
ANAMIL (10)	0.273	1.53	1.81	3.25	V--CC
BLAUWHUIS (14)	0.310	1.98	2.30	3.24	---
EXTAQS (25)	0.330	1.86	2.25	3.94	YV-G
ANATEK (29)	0.360 *	2.43 **	2.98 **	4.94 **	Y--CC
ZANEDA (32)	0.280	1.65	1.84	3.57	
ELML (33)	0.237	1.59	2.00	3.49	YV-CC
WELLAB (35)	0.292	1.78	2.14	3.92	Y--G
US (39)	8.410 **	1.48	10.17 **	18.29 **	Z--CC
ATM (54)	0.400 **	1.90	2.00	3.80	U--CC
ANAPBO (55)	0.250	1.44	1.49 **	3.10	VV-G
HILL (58)	0.350	2.20	2.30	4.30	Y--D
GGM (60)	0.307	1.88	2.61	3.87	VV- D
SGSECOPD (62)	0.300	2.00	2.30	4.00	---
NDA mean	0.2967	1.805	2.142	3.715	(cont.)
NDA st dev	0.0378	0.200	0.244	0.415	
NDA N	25	25	25	25	

SETOC 2009.1 - Metals

Sample		739	767	780	764	MIC
Hg (mg/kg)	(cont.)					
COMALAB	(67)	0.700 **	1.50	2.40	4.10	
ENN001	(70)	0.270	1.68	1.96	3.36	Z-- G
HKPC-EMD	(85)	0.290	-	-	-	Y--G
EPILAB-1A	(87)	0.292	1.99	2.29	3.69	
GAL	(91)	0.310	1.86	2.16	3.91	Z-- Z
STCRSC	(92)	0.250 <	1.80	1.46 **	3.20	Y-- G
ADIRONDACK	(93)	0.320	1.88	2.00	3.59	Y-- D
FOCUS	(109)	0.280	1.56	2.05	3.51	U-- G
FPLL	(115)	0.850 **	2.42 **	2.67	4.16	ZV-G
ORGDIMCH	(120)	0.271	1.84	2.11	3.94	ZZZ G
LABAMB	(878)	0.300	1.90	2.00	3.40	Y--CC
NDA mean		0.2967	1.805	2.142	3.715	
NDA st dev		0.0378	0.200	0.244	0.415	
NDA N		25	25	25	25	
Old statistics						
Median		0.2920 (3)	1.840 (3)	2.140 (3)	3.700 (3)	
MAD		0.0180	0.140	0.150	0.240	
Mean		0.2940	1.782	2.178	3.697	
St Dev		0.0281	0.196	0.231	0.337	
N		20	23	21	23	
Mo (mg/kg)						
MLABTW	(4)	3.000 <	3.00 <	4.07	3.00 <	T--CC
ANAMIL	(10)	1.000 <	1.60	5.47	1.81	V--CC
BLAUWHUIS	(14)	1.000 <	1.20	4.48	1.26	
ATM	(54)	0.600	1.00	3.50	0.40	U--CC
HILL	(58)	0.410	0.95	4.40	1.00	Y--D
Median		0.5050 (1)	1.100 (1)	4.400 (1)	1.130 (1)	
MAD		0.0950	0.125	0.328	0.405	
N		2	4	5	4	
Ni (aqua regia) (mg/kg)						
ZINDZIWE	(1)	16.0	42.0	32.0	53.0	V--CC
MLABTW	(4)	13.4	38.1	28.5	53.4	T--CC
ANAMIL	(10)	15.3	41.5	31.8	55.1	V--CC
BLAUWHUIS	(14)	14.3	42.3	34.2	53.2	---
EXTAQS	(25)	14.8	42.9	33.6	55.6	YV-CC
ANATEK	(29)	12.1	33.5 *	27.4 *	47.0	Y--CC
ZANEDA	(32)	15.2	41.5	32.8	53.0	
ELML	(33)	12.7	33.1 *	26.2 **	46.3	YV-CC
WELLAB	(35)	14.1	40.8	33.4	53.4	YV-CC
US	(39)	37.7 **	14.7 **	27.9	48.3	Z--CC
ATM	(54)	13.0	36.0	28.0	49.0	U--CC
ANAPBO	(55)	19.0 **	50.0 *	40.0 **	63.0 *	UV-CC
HILL	(58)	16.0	45.0	34.0	59.0	Y--D
GGM	(60)	14.2	41.0	31.5	55.8	VV- D
SGSECOPD	(62)	15.0	40.0	33.0	52.0	---
COMALAB	(67)	13.4	44.1	34.0	58.2	
ENN001	(70)	12.4	37.5	31.6	48.1	V--CC
EPILAB-1A	(87)	15.2	42.3	33.9	55.5	
STCRSC	(92)	16.3	42.0	33.1	56.1	T--CC
ADIRONDACK	(93)	15.6	47.8	36.0	61.9	Y-- D
FOCUS	(109)	15.0	44.0	32.0	57.0	UV- D
FPLL	(115)	14.1	31.4 **	31.4	41.9 **	YV-AE
ORGDIMCH	(120)	13.5	41.5	32.1	49.7	U--CC
LABAMB	(878)	12.5	39.0	31.0	53.0	Y--CC
NDA mean		14.34	41.28	32.40	53.47	(cont.)
NDA st dev		1.56	3.68	2.14	4.74	
NDA N		24	24	24	24	

SETOC 2009.1 - Metals

Sample	739	767	780	764	MIC
Ni (aqua regia) (mg/kg) (cont.)					
NDA mean	14.34	41.28	32.40	53.47	
NDA st dev	1.56	3.68	2.14	4.74	
NDA N	24	24	24	24	
Old statistics					
Median	14.23 (3)	41.50 (3)	32.12 (3)	53.30 (3)	
MAD	0.97	1.40	1.12	2.65	
Mean	14.27	41.54	32.18	53.34	
St Dev	1.26	2.74	2.08	4.06	
N	22	19	21	22	
Pb (aqua regia) (mg/kg)					
ZINDZIWE (1)	40.0	150	180	280	V--CC
MLABTW (4)	35.1	136	155	271	T--CC
ANAMIL (10)	35.9	141	183	281	V--CC
BLAUWHUIS (14)	40.7	151	188	276	---
EXTAQS (25)	35.1	142	186	285	YV-CC
ANATEK (29)	31.5	121	157	250	Y--CC
ZANEDA (32)	34.9	138	167	266	
ELML (33)	32.3	112 **	153	234	YV-CC
WELLAB (35)	35.1	141	177	284	YV-CC
ATM (54)	42.0	136	177	286	U--CC
ANAPBO (55)	36.0	142	180	927 **	UV-CC
HILL (58)	38.0	150	190	310	Y--D
GGM (60)	35.5	144	170	293	VV- D
SGSECOPD (62)	37.0	150	190	300	---
COMALAB (67)	34.8	148	187	305	
ENN001 (70)	29.3	105 **	146	244	V--CC
EPILAB-1A (87)	38.0	149	194	289	
STCRSC (92)	38.7	144	177	315	T--CC
ADIRONDACK (93)	39.0	154	191	304	Y-- D
FOCUS (109)	31.0	120	160	250	UV- D
FPLL (115)	30.4	133	216 **	298	YV-AE
ORGDIMCH (120)	32.3	130	159	248	U--CC
LABAMB (878)	31.0	130	170	250	Y--CC
NDA mean	35.36	141.2	176.6	280.2	
NDA st dev	4.12	11.5	16.3	26.5	
NDA N	23	23	23	23	
Old statistics					
Median	35.11 (3)	142.0 (3)	177.0 (3)	282.5 (3)	
MAD	2.89	7.0	10.5	17.0	
Mean	35.37	140.5	174.5	278.1	
St Dev	3.50	9.6	14.2	23.6	
N	23	21	22	22	
Zn (aqua regia) (mg/kg)					
ZINDZIWE (1)	98	530	300	990	V--CC
MLABTW (4)	94	554	298	983	T--CC
ANAMIL (10)	110	540	308	965	V--CC
BLAUWHUIS (14)	113	592	352	977	---
EXTAQS (25)	107	545	315	955	YV-CC
ANATEK (29)	99	516	293	930	Y--CC
ZANEDA (32)	111	564	324	949	
ELML (33)	115	543	311	992	YV-CC
WELLAB (35)	101	563	324	1020	YV-CC
US (39)	501 **	97 **	286	860	Z--CC
ATM (54)	104	503	265	613 **	U--CC
ANAPBO (55)	146 **	6060 **	344	1020	---
HILL (58)	120	630	350	1100	Y--D
GGM (60)	106	572	320	982	VV- D
SGSECOPD (62)	100	560	310	990	--- Q
COMALAB (67)	106	609	359	1074	
NDA mean	102.3	555.8	319.7	981.9	(cont.)
NDA st dev	11.9	46.0	36.4	56.8	
NDA N	24	24	24	24	

SETOC 2009.1 - Metals

Sample		739	767	780	764	MIC
Zn (aqua regia) (mg/kg)	(cont.)					
ENN001	(70)	89	537	287	899	V--CC
EPILAB-1A	(87)	101	565	341	979	
STCRSC	(92)	118	634	363	1144 **	T--CC
ADIRONDACK	(93)	101	646	360	1088	Y-- D
FOCUS	(109)	90	530	290	930	UV- D
FPLL	(115)	86	484	369	998	YV-AE
ORGDIMCH	(120)	87	471	265	920	U--CC
LABAMB	(878)	93	600	335	1050	Y--CC
NDA mean		102.3	555.8	319.7	981.9	
NDA st dev		11.9	46.0	36.4	56.8	
NDA N		24	24	24	24	
Old statistics						
Median		101.1 (3)	556.8 (3)	317.5 (3)	982.3 (3)	
MAD		7.5	26.8	25.4	35.5	
Mean		102.2	558.5	319.6	984.1	
St Dev		9.9	46.4	30.7	59.7	
N		22	22	24	22	

SETOC 2009.1 - Dibenzo-P Dioxin

Sample		739	767	780	764	MIC
1,2,3,4,6,7,8 Cl7DD (ng/kg)						
ENVIROPACE	(36)	25.0	149.0	181	348	
JYUIER	(41)	20.0 <	20.0 <	20 <	265	ZZK R
LABOR M	(61)	38.0	145.0	97	420	BRH R
EPILAB-1A	(87)	35.0	150.0	220	330	
Median		35.00 (1)	149.00 (1)	181.0 (1)	339.0 (1)	
MAD		3.00	1.00	39.0	41.5	
N		3	3	3	4	
1,2,3,4,7,8 Cl6DD (ng/kg)						
ENVIROPACE	(36)	5.00 <	5.00 <	5.00	7.00	
JYUIER	(41)	34.00	20.00 <	20.00 <	55.00	ZZK R
LABOR M	(61)	1.00	2.00	5.80	8.20	BRH R
EPILAB-1A	(87)	0.40	4.30	4.70	8.30	
Median		1.000 (1)	3.150 (1)	5.000 (1)	8.250 (1)	
MAD		0.600	1.150	0.300	0.650	
N		3	2	3	4	
1,2,3,6,7,8 Cl6DD (ng/kg)						
ENVIROPACE	(36)	5.00 <	10.0	14.0	22.0	
LABOR M	(61)	3.20	16.0	6.2	27.6	BRH R
EPILAB-1A	(87)	1.80	10.0	14.0	24.0	
Median		2.500 (1)	10.00 (1)	14.00 (1)	24.00 (1)	
MAD		0.700	-	-	2.00	
N		2	3	3	3	
1,2,3,7,8 Cl5DD (ng/kg)						
ENVIROPACE	(36)	5.000 <	5.00 <	5.00 <	6.00	
LABOR M	(61)	1.000	6.50	9.20	7.40	BRH R
EPILAB-1A	(87)	0.900	3.10	2.60	7.90	
Median		0.9500 (1)	4.800 (1)	5.900 (1)	7.400 (1)	
MAD		0.0500	1.700	3.300	0.500	
N		2	2	2	3	
1,2,3,7,8,9 Cl6DD (ng/kg)						
ENVIROPACE	(36)	5.00 <	6.00	9.00	11.0	
LABOR M	(61)	2.30	8.20	11.10	21.3	BRH R
EPILAB-1A	(87)	1.20	6.20	8.30	14.0	
Median		1.750 (1)	6.200 (1)	9.000 (1)	14.00 (1)	
MAD		0.550	0.200	0.700	3.00	
N		2	3	3	3	
2,3,7,8 Cl4DD (ng/kg)						
ENVIROPACE	(36)	3.00 <	40.0	67.0	57.0	
JYUIER	(41)	27.00	93.0	182.0	372.0	ZZK R
LABOR M	(61)	2.60	43.0	86.5	65.2	BRH R
EPILAB-1A	(87)	4.10	40.0	71.0	54.0	
Median		4.100 (1)	41.50 (1)	78.75 (1)	61.10 (1)	
MAD		1.500	1.50	9.75	5.60	
N		3	4	4	4	
Cl8DD (ng/kg)						
ENVIROPACE	(36)	161.0	1760	972	3630	
JYUIER	(41)	135.0	1120	645	2310	ZZK R
LABOR M	(61)	160.0	1680	1140	4030	BRH R
Median		160.00 (1)	1680 (1)	972.0 (1)	3629 (1)	
MAD		1.00	75	168.0	404	
N		3	3	3	3	

SETOC 2009.1 - Dibenzofuran

Sample	739	767	780	764	MIC
1,2,3,4,6,7,8 Cl7DF (ng/kg)					
ENVIROPACE (36)	16.00	310	795	750	
JYUIER (41)	20.00 <	214	695	547	ZZK R
LABOR M (61)	16.10	280	690	863	BRH R
EPILAB-1A (87)	31.00	330	770	650	
Median	16.100 (1)	295.0 (1)	732.5 (1)	700.0 (1)	
MAD	0.100	25.0	40.0	101.5	
N	3	4	4	4	
1,2,3,4,7,8 Cl6DF (ng/kg)					
ENVIROPACE (36)	5.00	78.0	217	203	
JYUIER (41)	21.00	20.0 <	20 <	202	ZZK R
LABOR M (61)	3.60	33.2	119	108	BRH R
EPILAB-1A (87)	5.60	66.0	150	190	
Median	5.300 (1)	66.00 (1)	150.0 (1)	196.0 (1)	
MAD	1.000	12.00	31.0	6.5	
N	4	3	3	4	
1,2,3,4,7,8,9 Cl7DF (ng/kg)					
ENVIROPACE (36)	5.00 <	43.0	13.0	100	
LABOR M (61)	3.60	30.0	35.0	115	BRH R
EPILAB-1A (87)	1.60	48.0	18.0	90	
Median	2.600 (1)	43.00 (1)	18.00 (1)	100.0 (1)	
MAD	1.000	5.00	5.00	10.0	
N	2	3	3	3	
1,2,3,6,7,8 Cl6DF (ng/kg)					
ENVIROPACE (36)	5.00 <	34.0	22.0	76.0	
JYUIER (41)	20.00 <	20.0 <	170.0	20.0 <	ZZK R
LABOR M (61)	1.20	18.5	4.5	37.0	BRH R
EPILAB-1A (87)	1.70	29.0	13.0	73.0	
Median	1.450 (1)	29.00 (1)	17.50 (1)	73.00 (1)	
MAD	0.250	5.00	8.75	3.00	
N	2	3	4	3	
1,2,3,7,8 Cl5DF (ng/kg)					
ENVIROPACE (36)	5.000 <	18.0	14.0	47.0	
JYUIER (41)	20.000 <	20.0 <	20.0 <	52.0	ZZK R
LABOR M (61)	1.400	12.9	18.8	52.7	BRH R
EPILAB-1A (87)	0.300	17.0	12.0	46.0	
Median	0.8500 (1)	17.00 (1)	14.00 (1)	49.50 (1)	
MAD	0.5500	1.00	2.00	2.85	
N	2	3	3	4	
1,2,3,7,8,9 Cl6DF (ng/kg)					
ENVIROPACE (36)	5.00 <	5.00 <	5.00 <	6.00	
LABOR M (61)	2.40	11.90	15.70	32.10	BRH R
EPILAB-1A (87)	0.20	3.30	1.90	5.10	
Median	1.300 (1)	7.600 (1)	8.800 (1)	6.000 (1)	
MAD	1.100	4.300	6.900	0.900	
N	2	2	2	3	
2,3,4,6,7,8 Cl6DF (ng/kg)					
ENVIROPACE (36)	5.00 <	19.0	14.0	40.0	
LABOR M (61)	0.55	8.0	12.3	21.1	BRH R
EPILAB-1A (87)	2.00	18.0	9.4	40.0	
Median	1.275 (1)	18.00 (1)	12.30 (1)	40.00 (1)	
MAD	0.725	1.00	1.70	-	
N	2	3	3	3	

SETOC 2009.1 - Dibenzofuran

Sample		739	767	780	764	MIC
2,3,4,6,7,8 Cl6DF (ng/kg)	(cont.)					
Median		1.275 (1)	18.00 (1)	12.30 (1)	40.00 (1)	
MAD		0.725	1.00	1.70	-	
N		2	3	3	3	
2,3,4,7,8 Cl5DF (ng/kg)						
ENVIROPACE (36)		6.00	20.0	168	43.0	
LABOR M (61)		6.20	13.9	105	41.0	BRH R
EPILAB-1A (87)		3.10	20.0	180	46.0	
Median		6.000 (1)	20.00 (1)	168.0 (1)	43.00 (1)	
MAD		0.200	-	12.0	2.00	
N		3	3	3	3	
2,3,7,8 Cl4DF (ng/kg)						
ENVIROPACE (36)		3.00	24.0	40.0	41.0	
JYUIER (41)		30.00	55.0	461.0	57.0	ZZK R
LABOR M (61)		7.30	40.3	55.0	190.0	BRH R
EPILAB-1A (87)		4.80	30.0	50.0	46.0	
Median		6.050 (1)	35.15 (1)	52.50 (1)	51.50 (1)	
MAD		2.150	8.15	7.50	8.00	
N		4	4	4	4	
Cl8DF (ng/kg)						
ENVIROPACE (36)		24.0	1810	984	4080	
JYUIER (41)		20.0 <	1210	816	2760	ZZK R
LABOR M (61)		24.7	1850	960	4290	BRH R
EPILAB-1A (87)		41.0	1800	900	4600	
Median		24.70 (1)	1805 (1)	930.0 (1)	4184 (1)	
MAD		0.70	23	42.0	261	
N		3	4	4	4	

SETOC 2009.1 - Experimental

Sample	739	767	780	764	MIC
DEHP (µg/kg)					
ADIRONDACK (93)	200.0 <	200 <	200 <	200 <	J-H R
Median	- (0)	- (0)	- (0)	- (0)	
MAD	-	-	-	-	
N	-	-	-	-	
Tributyl Tin (TBT) (µg/kg)					
HKPC-EMD (85)	156	57.3	195	1.50	
ANDESITE (105)	221	22.0	75	17.00 <	
ORGDIMCH (120)	179	43.3	177	3.00 <	ZZZ R
LABAMB (878)	100	31.0	125	5.00 <	Z-HJA
Median	167.6 (1)	37.15 (1)	151.2 (1)	1.500 (1)	
MAD	32.5	10.65	35.0	-	
N	4	4	4	1	

SETOC 2009.1

Z - Scores

SETOC 2009.1 Z - Scores - Per Participant

Sample	739	767	780	764
ZINDZIWE (1)				
acenaphtene (PAH)	<	<	-	-
acenaphthylene (PAH)	<	<	-	-
anthracene (PAH)	-0.98	-0.80	-1.29	-1.33
benz(a)anthracene (PAH)	0.47	0.81	-0.73	-0.80
benzo(a)pyrene (PAH)	1.06	1.63	-0.62	-0.12
benzo(b)fluoranthene (PAH)	0.23	0.82	-	-
benzo(ghi)perylene (PAH)	0.79	2.74	0.80	0.10
benzo(k)fluoranthene (PAH)	0.33	1.46	-0.16	-0.22
chrysene (PAH)	0.06	1.17	-0.19	-0.62
dibenz(ah)anthracene (PAH)	4.29	<	-	-
fluoranthene (PAH)	0.32	1.12	-0.61	-0.40
fluorene (PAH)	-1.37	-0.49	-	-
indeno(1,2,3-cd)pyrene (PAH)	0.66	2.00	0.10	-0.23
naphthalene (PAH)	-0.95	-0.33	-0.60	0.19
phenanthrene (PAH)	-0.67	1.09	-0.68	0.00
pyrene (PAH)	2.63	0.84	-	-
PCB 028 (PCB)	-	-	-0.63	-0.48
PCB 052 (PCB)	-	-	-0.20	-0.03
PCB 101 (PCB)	-	-	-1.84	-0.77
PCB 118 (PCB)	-	-	-1.67	0.03
PCB 138 (PCB)	-	-	-1.10	-1.14
PCB 153 (PCB)	-	-	-0.84	-0.64
PCB 180 (PCB)	-	-	-0.46	0.43
aldrin (OCB)	-	-	<	<
alpha-endosulfan (OCB)	-	-	<	#
alpha-HCH (OCB)	-	-	<	<
beta-HCH (OCB)	-	-	<	#
dieldrin (OCB)	-	-	<	#
endrin (OCB)	-	-	<	#
gamma-HCH (OCB)	-	-	#	#
heptachlor (OCB)	-	-	<	#
heptachlor epoxide (OCB)	-	-	<	<
hexachlorobutadiene (OCB)	-	-	<	0.71
isodrin (OCB)	-	-	<	#
o,p'-DDD (OCB)	-	-	#	0.50
o,p'-DDE (OCB)	-	-	<	<
o,p'-DDT (OCB)	-	-	#	<
p,p'-DDD (OCB)	-	-	-1.55	-0.69
p,p'-DDE (OCB)	-	-	-0.87	0.27
p,p'-DDT (OCB)	-	-	<	0.48
telodrin (OCB)	-	-	<	#
CN - Free (OD)	<	<	<	<
CN - Total (OD)	<	0.48	<	-0.54
EOX (OD)	1.19	1.96	1.83	1.47
Mineral oil, GC (OD)	-0.24	-0.10	0.17	0.56
As (aqua regia) (MET)	1.20	1.05	0.24	0.11
Cd (aqua regia) (MET)	-0.71	-0.05	-0.46	-0.09
Cr (aqua regia) (MET)	1.77	1.61	1.51	0.11
Cu (aqua regia) (MET)	0.80	0.96	1.30	0.67
Hg (MET)	-0.44	-0.02	-0.17	-0.04
Ni (aqua regia) (MET)	1.07	0.20	-0.19	-0.10
Pb (aqua regia) (MET)	1.13	0.76	0.21	-0.01
Zn (aqua regia) (MET)	-0.36	-0.56	-0.54	0.14
MLABTW (4)				
acenaphtene (PAH)	-0.68	-0.08	<	<
acenaphthylene (PAH)	<	<	<	<
anthracene (PAH)	-0.59	-1.15	-0.75	-0.41
benz(a)anthracene (PAH)	-0.52	-1.20	-0.43	0.24
benzo(a)pyrene (PAH)	0.13	-1.27	-0.71	-0.08
benzo(b)fluoranthene (PAH)	-0.60	-1.26	-0.94	-0.56
benzo(ghi)perylene (PAH)	0.77	-1.42	-0.79	-0.28
benzo(k)fluoranthene (PAH)	-0.31	-1.17	-0.10	0.28
chrysene (PAH)	-1.11	-1.69	-1.06	-0.48
dibenz(ah)anthracene (PAH)	-1.26	<	-2.22	<
fluoranthene (PAH)	0.06	-0.86	-0.41	2.05

(cont)

SETOC 2009.1 Z - Scores - Per Participant

Sample	739	767	780	764
MLABTW (4) (cont.)				
fluorene (PAH)	-0.07	<	-0.25	<
indeno(1,2,3-cd)pyrene (PAH)	0.73	0.22	0.84	0.94
naphtalene (PAH)	-0.44	-0.42	-0.38	0.53
phenanthrene (PAH)	-0.57	-0.76	-0.39	0.46
pyrene (PAH)	-0.27	-0.10	0.43	1.72
PCB 028 (PCB)	<	0.93	10.23	1.58
PCB 052 (PCB)	<	-0.28	4.68	0.66
PCB 101 (PCB)	<	0.17	<	1.05
PCB 118 (PCB)	<	-0.61	<	0.06
PCB 138 (PCB)	<	0.74	<	1.14
PCB 153 (PCB)	<	-0.26	<	0.35
PCB 180 (PCB)	<	-0.84	<	-0.37
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	0.84	<	0.10
isodrin (OCB)	<	<	<	<
o,p`-DDD (OCB)	<	<	<	-0.19
o,p`-DDE (OCB)	<	<	<	<
o,p`-DDT (OCB)	<	<	<	<
p,p`-DDD (OCB)	<	<	<	0.40
p,p`-DDE (OCB)	<	<	<	0.30
p,p`-DDT (OCB)	<	<	<	0.15
telodrin (OCB)	<	<	<	<
trans-chlordane (OCB)	<	<	<	<
EOX (OD)	0.08	0.70	1.90	-0.46
Mineral oil, GC (OD)	0.35	0.87	1.04	0.25
Particles < 2 µm (OD)	-0.50	0.48	0.16	0.02
As (aqua regia) (MET)	0.22	0.76	0.72	0.36
Ba (MET)	#	#	#	#
Cd (aqua regia) (MET)	<	-0.58	0.55	-0.83
Co (MET)	#	#	#	#
Cr (aqua regia) (MET)	-0.94	-0.45	-0.58	-0.01
Cu (aqua regia) (MET)	-1.15	-0.78	-0.27	-0.15
Hg (MET)	1.07	0.41	1.25	0.70
Mo (MET)	<	<	#	<
Ni (aqua regia) (MET)	-0.63	-0.87	-1.85	-0.02
Pb (aqua regia) (MET)	-0.06	-0.41	-1.33	-0.35
Zn (aqua regia) (MET)	-0.67	-0.05	-0.59	0.02
AL-West (5)				
acenaphthene (PAH)	3.31	0.66	-0.03	1.29
acenaphthylene (PAH)	<	<	<	<
anthracene (PAH)	0.54	0.85	-0.04	0.50
benz(a)anthracene (PAH)	2.14	0.89	0.44	0.14
benzo(a)pyrene (PAH)	2.33	1.10	0.25	0.75
benzo(b)fluoranthene (PAH)	0.84	0.21	-0.35	0.07
benzo(ghi)perylene (PAH)	1.83	1.40	1.43	1.25
benzo(k)fluoranthene (PAH)	1.37	1.02	0.38	0.98
chrysene (PAH)	1.13	1.03	0.68	1.05
dibenz(ah)anthracene (PAH)	0.48	0.34	-0.33	-0.40
fluoranthene (PAH)	1.35	0.85	0.33	1.34
fluorene (PAH)	2.98	0.07	-0.33	-0.31
indeno(1,2,3-cd)pyrene (PAH)	1.77	0.97	0.36	0.57
naphtalene (PAH)	0.99	0.95	0.41	1.46
phenanthrene (PAH)	2.14	2.08	0.78	1.32
pyrene (PAH)	2.19	1.73	1.27	2.04
PCB 028 (PCB)	<	0.12	-0.45	-0.65
PCB 052 (PCB)	0.77	0.08	0.41	-0.01

(cont)

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Sample	739	767	780	764
AL-West (5) (cont.)				
PCB 101 (PCB)	-0.29	0.63	2.08	0.89
PCB 118 (PCB)	<	-0.13	0.93	-0.43
PCB 138 (PCB)	0.13	0.85	0.63	0.70
PCB 153 (PCB)	-0.24	-0.13	0.68	0.26
PCB 180 (PCB)	-0.34	0.51	1.87	0.20
CN - Total (OD)	#	<	#	<
EOX (OD)	1.04	0.76	0.71	0.86
Inorganic carbon (OD)	#	#	#	#
Mineral oil, GC (OD)	0.70	0.53	0.52	0.66
Organic carbon (OD)	0.48	0.46	-0.05	1.08
Particles < 2 µm (OD)	-0.88	-0.28	0.32	1.23
Alconheinr (7)				
acenaphtene (PAH)	0.75	0.61	-0.01	0.30
acenaphthylene (PAH)	1.18	0.25	0.37	0.74
anthracene (PAH)	0.98	0.11	-0.29	0.72
benz(a)anthracene (PAH)	1.19	0.23	-0.25	-0.21
benzo(a)pyrene (PAH)	0.28	-0.73	-1.16	-1.26
benzo(b)fluoranthene (PAH)	1.33	1.21	0.24	0.87
benzo(ghi)perylene (PAH)	-0.29	-0.43	-0.10	-0.84
benzo(k)fluoranthene (PAH)	1.00	1.21	0.45	1.33
chrysene (PAH)	0.23	0.14	-0.33	0.01
dibenz(ah)anthracene (PAH)	0.37	0.23	0.59	-0.28
fluoranthene (PAH)	0.64	0.39	-0.21	0.11
fluorene (PAH)	0.67	0.52	-0.74	-0.24
indeno(1,2,3-cd)pyrene (PAH)	-0.29	-0.65	-0.84	-1.06
napthalene (PAH)	-0.51	-0.33	-0.74	-0.08
phenanthrene (PAH)	0.94	0.52	-0.17	0.00
pyrene (PAH)	0.81	0.44	-0.09	-0.23
PCB 028 (PCB)	<	2.40	5.03	2.01
PCB 052 (PCB)	<	0.33	0.26	0.56
PCB 101 (PCB)	<	1.04	0.12	0.60
PCB 118 (PCB)	<	0.75	0.83	0.70
PCB 138 (PCB)	<	0.70	-0.34	0.02
PCB 153 (PCB)	0.76	1.00	0.25	0.66
PCB 180 (PCB)	1.72	1.55	0.85	0.65
1,2,3 trichlorobenzene (OCB)	<	#	<	#
1,2,3,4 tetrachlorobenzene (OCB)	<	#	#	#
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-endosulfan (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
chlordan (OCB)	<	<	<	<
cis-chlordan (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-0.96	<	-1.49
hexachlorobutadiene (OCB)	<	#	<	-1.37
isodrin (OCB)	<	<	<	<
o,p'-DDD (OCB)	<	<	<	-0.52
o,p'-DDE (OCB)	<	<	<	<
o,p'-DDT (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	<	0.04
p,p'-DDE (OCB)	<	-0.43	<	-0.74
p,p'-DDT (OCB)	<	<	<	-0.60
pentachlorobenzene (OCB)	<	<	<	-0.81
telodrin (OCB)	<	<	<	<
trans-chlordan (OCB)	<	<	<	<
EOX (OD)	2.07	-0.07	0.80	1.11
Mineral oil, GC (OD)	-1.00	0.01	-0.03	-0.40
Mineral oil, IR (OD)	#	#	#	#

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Sample	739	767	780	764
ANAMIL (10)				
acenaphtene (PAH)	0.28	-0.23	-1.82	5.23
acenaphthylene (PAH)	<	<	-1.31	<
anthracene (PAH)	-0.29	-0.54	0.18	-1.09
benz(a)anthracene (PAH)	0.08	-0.11	0.82	-1.24
benzo(a)pyrene (PAH)	-0.76	-1.15	-0.28	-3.21
benzo(b)fluoranthene (PAH)	0.90	1.21	3.31	-0.62
benzo(ghi)perylene (PAH)	-1.32	-1.98	-0.74	-3.22
benzo(k)fluoranthene (PAH)	-0.63	-0.64	1.90	-2.11
chrysene (PAH)	0.26	0.89	1.14	-0.17
dibenz(ah)anthracene (PAH)	-1.05	-0.67	0.33	-1.66
fluoranthene (PAH)	0.32	-0.17	-0.55	-0.40
fluorene (PAH)	-0.07	-0.95	-2.76	2.17
indeno(1,2,3-cd)pyrene (PAH)	-0.64	-0.57	0.25	-2.55
naphthalene (PAH)	0.23	-0.90	8.52	-2.05
phenanthrene (PAH)	0.91	0.09	3.33	-1.48
pyrene (PAH)	0.20	-0.08	-0.67	1.52
PCB 028 (PCB)	<	2.80	-3.68	77.92
PCB 052 (PCB)	<	0.73	-2.32	16.57
PCB 101 (PCB)	<	<	4.34	-4.32
PCB 118 (PCB)	<	<	6.37	-2.26
PCB 138 (PCB)	<	<	10.95	-3.20
PCB 153 (PCB)	<	<	8.52	-2.47
PCB 180 (PCB)	<	<	8.69	-2.57
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
chlordanne (OCB)	<	<	<	<
cis-chlordanne (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endosulfan sulfate (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-0.76	<	-0.98
hexachlorobutadiene (OCB)	<	#	<	-0.02
isodrin (OCB)	<	<	<	<
o,p`-DDD (OCB)	<	<	#	<
o,p`-DDE (OCB)	<	<	<	<
p,p`-DDE (OCB)	<	<	2.00	<
p,p`-DDT (OCB)	<	<	#	<
pentachlorobenzene (OCB)	<	#	<	-0.76
Sum tetrachlorobenzenes (OCB)	<	#	#	#
Sum trichlorobenzenes (OCB)	<	#	#	#
telodrin (OCB)	<	<	<	<
Mineral oil, GC (OD)	0.67	-0.73	-0.90	-0.34
Particles < 2 µm (OD)	3.99	1.07	-2.21	-0.13
As (aqua regia) (MET)	0.70	0.90	1.11	0.79
Ba (MET)	#	#	#	#
Cd (aqua regia) (MET)	-1.39	-0.80	-1.49	-0.55
Co (MET)	#	#	#	#
Cr (aqua regia) (MET)	0.47	-0.03	-0.04	0.59
Cu (aqua regia) (MET)	0.71	0.70	2.08	1.41
Hg (MET)	-0.63	-1.37	-1.36	-1.12
Mo (MET)	<	#	#	#
Ni (aqua regia) (MET)	0.62	0.06	-0.28	0.34
Pb (aqua regia) (MET)	0.13	-0.02	0.39	0.03
Zn (aqua regia) (MET)	0.65	-0.34	-0.32	-0.30

BLAUWHUIS (14)

anthracene (PAH)	0.12	-0.21	0.16	-0.53
benz(a)anthracene (PAH)	0.81	0.37	0.75	-0.79
benzo(a)pyrene (PAH)	-0.69	0.22	0.79	-1.04
benzo(ghi)perylene (PAH)	0.05	-0.06	-0.41	0.57

(cont)

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Sample	739	767	780	764
BLAUWHUIS (14) (cont.)				
benzo(k)fluoranthene (PAH)	0.95	0.95	1.13	-0.26
chrysene (PAH)	0.00	-0.24	0.90	-1.02
fluoranthene (PAH)	0.67	0.14	2.06	-0.92
indeno(1,2,3-cd)pyrene (PAH)	0.25	-0.08	0.08	-0.75
napthalene (PAH)	-0.21	-1.32	-0.01	0.32
phenanthrene (PAH)	0.55	-0.86	1.22	-0.25
PCB 028 (PCB)	<	-0.23	-0.42	-0.58
PCB 052 (PCB)	<	0.02	0.26	-0.04
PCB 101 (PCB)	-0.48	-0.51	-0.43	-0.72
PCB 118 (PCB)	<	-0.21	-0.55	-1.33
PCB 138 (PCB)	-0.49	0.03	-0.25	0.16
PCB 153 (PCB)	-0.03	0.36	0.04	0.59
PCB 180 (PCB)	-0.14	-0.06	-0.21	0.10
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	0.79	<	0.57
p,p'-DDT (OCB)	<	<	<	0.16
CN - Free (OD)	<	<	<	<
CN - Total (OD)	<	0.32	<	-0.39
EOX (OD)	-0.13	-1.07	-0.85	0.42
Mineral oil, GC (OD)	-0.33	-0.51	-0.16	-0.11
Organic carbon (OD)	0.63	1.46	0.19	0.20
Particles < 2 µm (OD)	0.06	-0.87	-0.58	-0.47
Particles < 63 µm (OD)	#	#	#	#
Particles > 63 µm (OD)	#	#	#	#
As (aqua regia) (MET)	-0.36	-0.50	-0.47	-1.04
Ba (MET)	#	#	#	#
Cd (aqua regia) (MET)	0.63	0.29	0.78	-0.12
Co (MET)	#	#	#	#
Cr (aqua regia) (MET)	0.74	-0.03	0.86	0.72
Cu (aqua regia) (MET)	0.14	-0.21	-0.33	-0.74
Hg (MET)	0.35	0.88	0.65	-1.15
Mo (MET)	<	#	#	#
Ni (aqua regia) (MET)	-0.03	0.28	0.84	-0.06
Pb (aqua regia) (MET)	1.30	0.85	0.70	-0.16
Zn (aqua regia) (MET)	0.91	0.79	0.89	-0.09
FRIDOLIN (15)				
acenaphtene (PAH)	0.33	1.41	0.66	2.06
acenaphthylene (PAH)	-0.82	-1.29	-1.14	-1.39
anthracene (PAH)	0.29	1.50	0.76	0.50
benz(a)anthracene (PAH)	1.00	0.68	0.70	1.16
benzo(a)pyrene (PAH)	0.75	0.62	0.93	0.94
benzo(b)fluoranthene (PAH)	0.59	0.44	0.43	0.64
benzo(ghi)perylene (PAH)	0.36	0.16	0.08	0.90
benzo(k)fluoranthene (PAH)	0.99	1.14	0.83	1.56
chrysene (PAH)	1.37	1.81	1.52	2.18
dibenz(ah)anthracene (PAH)	-0.58	-0.86	-1.04	-0.10
fluoranthene (PAH)	0.87	0.97	1.39	1.27
fluorene (PAH)	1.11	1.58	0.56	-0.08
indeno(1,2,3-cd)pyrene (PAH)	-0.10	0.03	-0.55	0.35
napthalene (PAH)	0.82	1.10	0.71	1.24
phenanthrene (PAH)	1.25	1.10	1.35	1.31
pyrene (PAH)	0.90	0.83	1.12	1.00
PCB 028 (PCB)	-0.47	0.75	1.34	0.20
PCB 052 (PCB)	-0.18	0.60	0.76	0.98
PCB 101 (PCB)	0.18	1.05	0.46	1.52
PCB 118 (PCB)	0.09	0.68	0.03	1.16
PCB 138 (PCB)	-0.34	-0.45	0.01	2.16
PCB 153 (PCB)	-0.25	0.37	0.47	1.03
PCB 180 (PCB)	-0.07	0.45	0.25	0.60

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Sample	739	767	780	764
HIDU (16)				
acenaphtene (PAH)	2.20	0.41	0.71	0.17
acenaphthylene (PAH)	-0.83	-0.58	<	0.28
anthracene (PAH)	2.33	1.35	1.31	0.54
benz(a)anthracene (PAH)	0.48	0.19	1.03	0.23
benzo(a)pyrene (PAH)	0.87	0.41	0.69	1.04
benzo(b)fluoranthene (PAH)	-0.07	-0.37	-0.29	0.16
benzo(ghi)perylene (PAH)	-0.10	0.22	-0.46	0.82
benzo(k)fluoranthene (PAH)	0.14	-0.23	0.13	1.03
chrysene (PAH)	0.38	0.25	0.55	0.53
dibenz(ah)anthracene (PAH)	0.56	-0.89	-0.21	0.87
fluoranthene (PAH)	0.86	0.07	0.07	0.66
fluorene (PAH)	2.42	1.78	0.53	0.00
indeno(1,2,3-cd)pyrene (PAH)	0.19	-0.18	-0.56	0.47
naphtalene (PAH)	5.96	1.61	1.51	0.07
phenanthrene (PAH)	2.36	1.79	1.56	0.42
pyrene (PAH)	1.42	0.78	-0.11	0.44
PCB 028 (PCB)	<	-0.22	0.38	0.07
PCB 052 (PCB)	<	-0.66	-0.27	-0.03
PCB 101 (PCB)	-0.48	-0.68	-0.07	-0.36
PCB 118 (PCB)	<	-0.36	0.41	0.03
PCB 138 (PCB)	0.69	0.27	0.24	0.33
PCB 153 (PCB)	0.13	-0.19	0.49	-0.10
PCB 180 (PCB)	-0.61	0.01	0.56	-0.08
Mineral oil, GC (OD)	-0.67	0.36	0.19	-0.30
Organic carbon (OD)	-0.52	0.34	-0.43	0.68
PAULINE (18)				
acenaphtene (PAH)	1.10	0.98	-	-
acenaphthylene (PAH)	11.10	28.69	-	-
anthracene (PAH)	0.47	-0.62	-0.87	-0.78
benz(a)anthracene (PAH)	1.40	-0.29	-0.78	-0.64
benzo(a)pyrene (PAH)	2.56	0.84	-0.26	-0.93
benzo(b)fluoranthene (PAH)	0.72	-0.28	-	-
benzo(ghi)perylene (PAH)	1.33	0.64	1.35	-0.36
benzo(k)fluoranthene (PAH)	0.81	-0.23	-0.46	-0.67
chrysene (PAH)	0.05	-0.92	-0.93	-0.21
dibenz(ah)anthracene (PAH)	-0.28	-0.97	-	-
fluoranthene (PAH)	1.21	0.59	-0.29	-0.01
fluorene (PAH)	1.16	-0.34	-	-
indeno(1,2,3-cd)pyrene (PAH)	1.66	1.46	0.83	-0.12
naphtalene (PAH)	-0.68	-0.28	-0.71	-0.07
phenanthrene (PAH)	0.83	0.02	-1.19	-1.09
pyrene (PAH)	-0.23	-0.82	-	-
PCB 028 (PCB)	<	-1.13	0.25	1.19
PCB 052 (PCB)	<	-0.21	-0.38	3.72
PCB 101 (PCB)	<	-0.25	0.26	5.41
PCB 118 (PCB)	<	-0.98	<	5.79
PCB 138 (PCB)	-0.32	0.51	0.95	5.27
PCB 153 (PCB)	-0.89	-0.90	0.40	3.05
PCB 180 (PCB)	-0.47	-0.50	0.90	2.53
1,2,3 trichlorobenzene (OCB)	<	<	#	#
1,2,3,4 tetrachlorobenzene (OCB)	<	<	<	#
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-endosulfan (OCB)	<	<	-	-
beta-HCH (OCB)	<	<	<	<
cis-chlordane (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	-	-
dieldrin (OCB)	<	<	<	<
endosulfan sulfate (OCB)	<	<	-	-
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-0.36	<	2.06

(cont)

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Sample	739	767	780	764
PAULINE (18) (cont.)				
hexachlorobutadiene (OCB)	<	#	<	0.22
isodrin (OCB)	<	<	<	<
o,p'-DDD (OCB)	<	<	<	0.93
o,p'-DDE (OCB)	<	<	<	<
o,p'-DDT (OCB)	<	<	<	<
p,p'-DDD (OCB)	#	<	<	0.85
p,p'-DDE (OCB)	<	0.71	<	3.86
p,p'-DDT (OCB)	<	<	<	4.20
pentachlorobenzene (OCB)	<	<	<	1.93
telodrin (OCB)	<	<	<	<
trans-chlordane (OCB)	<	<	<	#
CN - Free (OD)	<	#	<	#
CN - Total (OD)	#	0.02	<	0.35
EOX (OD)	-0.78	0.05	-0.66	-0.18
Mineral oil, GC (OD)	0.75	0.08	-0.14	-0.17
EXTAQS (25)				
As (aqua regia) (MET)	0.92	1.28	1.50	0.53
Cd (aqua regia) (MET)	-0.04	-0.05	-0.01	0.11
Cr (aqua regia) (MET)	0.15	0.59	0.48	0.65
Cu (aqua regia) (MET)	-0.20	-0.31	-0.37	-0.33
Hg (MET)	0.88	0.28	0.44	0.54
Ni (aqua regia) (MET)	0.30	0.44	0.56	0.45
Pb (aqua regia) (MET)	-0.06	0.07	0.57	0.18
Zn (aqua regia) (MET)	0.40	-0.23	-0.13	-0.47
IMRN (27)				
Mineral oil, GC (OD)	0.36	-0.10	-0.51	0.42
EXACT (28)				
anthracene (PAH)	0.25	-0.46	-1.00	-0.38
benz(a)anthracene (PAH)	0.31	-0.18	-1.40	-0.21
benzo(a)pyrene (PAH)	0.36	0.03	-1.07	0.05
benzo(ghi)perylene (PAH)	0.54	0.63	0.30	0.23
benzo(k)fluoranthene (PAH)	0.22	0.19	-0.46	0.26
chrysene (PAH)	-0.12	-0.37	-0.78	-0.52
fluoranthene (PAH)	0.32	0.75	-0.21	1.13
indeno(1,2,3-cd)pyrene (PAH)	0.14	0.29	-0.53	-0.05
napthalene (PAH)	-1.02	-0.66	-0.88	-0.62
phenanthrene (PAH)	0.37	0.52	-0.61	0.00
PCB 028 (PCB)	<	0.74	0.36	0.90
PCB 052 (PCB)	<	0.47	-1.22	0.12
PCB 101 (PCB)	<	-0.06	-0.07	-0.22
PCB 138 (PCB)	<	0.70	0.96	-0.16
PCB 153 (PCB)	<	0.17	1.10	0.34
PCB 180 (PCB)	<	3.09	2.55	0.87
1,2,3 trichlorobenzene (OCB)	<	<	<	#
1,2,3,4 tetrachlorobenzene (OCB)	<	#	#	#
aldrin (OCB)	<	#	#	#
alpha-endosulfan (OCB)	<	<	<	#
alpha-HCH (OCB)	<	#	#	#
beta-HCH (OCB)	<	#	#	#
chlordanne (OCB)	<	#	<	<
cis-chlordane (OCB)	<	#	#	#
dieldrin (OCB)	<	<	#	#
endrin (OCB)	<	<	<	#
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	#	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-0.68	#	-0.60
isodrin (OCB)	<	<	<	#
o,p'-DDD (OCB)	<	<	#	-1.47
o,p'-DDE (OCB)	<	#	#	#
o,p'-DDT (OCB)	<	<	#	#
p,p'-DDD (OCB)	<	<	-0.49	-0.76
p,p'-DDE (OCB)	<	-0.58	-0.30	-1.92

(cont)

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Sample	739	767	780	764
EXACT (28) (cont.)				
p,p'-DDT (OCB)	<	<	#	1.02
pentachlorobenzene (OCB)	<	#	#	-0.06
telodrin (OCB)	<	<	<	<
trans-chlordane (OCB)	<	<	<	<
EOX (OD)	0.50	-0.48	-0.53	-1.21
Mineral oil, GC (OD)	-1.45	-0.71	-0.61	-1.36
ANATEK (29)				
acenaphtene (PAH)	1.76	0.20	-0.14	0.74
acenaphthylene (PAH)	-1.02	-0.59	-1.03	-1.49
anthracene (PAH)	1.65	4.69	2.81	2.75
benz(a)anthracene (PAH)	1.87	0.89	0.08	-1.21
benzo(a)pyrene (PAH)	1.50	1.16	0.86	-0.24
benzo(ghi)perylene (PAH)	1.49	2.05	2.42	0.82
chrysene (PAH)	-0.40	-0.31	-0.69	-1.55
dibenz(ah)anthracene (PAH)	1.26	2.18	2.25	1.49
fluoranthene (PAH)	-2.95	-3.72	-6.22	-5.28
fluorene (PAH)	3.65	5.36	2.77	2.26
indeno(1,2,3-cd)pyrene (PAH)	0.97	1.53	1.12	0.79
naphthalene (PAH)	2.76	1.88	1.35	0.79
phenanthrene (PAH)	-0.64	-1.01	-0.01	-1.43
pyrene (PAH)	-1.97	-2.54	-3.40	-5.47
PCB 028 (PCB)	3.06	7.05	10.25	6.77
PCB 052 (PCB)	15.77	5.06	1.73	2.05
PCB 101 (PCB)	0.71	5.06	3.02	5.66
PCB 118 (PCB)	3.74	11.25	10.66	9.84
PCB 138 (PCB)	-0.10	5.70	2.08	4.20
PCB 153 (PCB)	-0.87	0.68	0.30	0.52
PCB 180 (PCB)	-1.47	1.95	1.93	1.87
Mineral oil, GC (OD)	-0.03	-0.30	-0.84	0.93
As (aqua regia) (MET)	0.18	-0.59	-0.37	-1.09
Cd (aqua regia) (MET)	-0.99	-0.97	-1.10	-0.61
Cr (aqua regia) (MET)	-0.81	-1.43	-1.11	-1.48
Cu (aqua regia) (MET)	-1.65	-1.17	-1.93	-1.25
Hg (MET)	1.67	3.13	3.43	2.95
Ni (aqua regia) (MET)	-1.42	-2.12	-2.35	-1.37
Pb (aqua regia) (MET)	-0.93	-1.78	-1.19	-1.13
Zn (aqua regia) (MET)	-0.24	-0.87	-0.73	-0.92
ZANEDA (32)				
CN - Free (OD)	<	#	<	#
CN - Total (OD)	#	-2.24	#	0.12
Particles < 2 µm (OD)	24.31	-11.89	1.51	0.46
Particles < 63 µm (OD)	#	#	#	#
Particles > 63 µm (OD)	#	#	#	#
As (aqua regia) (MET)	0.28	0.23	0.36	0.00
Cd (aqua regia) (MET)	1.59	0.15	1.71	-0.10
Cr (aqua regia) (MET)	2.04	1.22	1.57	0.59
Cu (aqua regia) (MET)	-0.77	-0.74	-1.47	-1.16
Hg (MET)	-0.44	-0.77	-1.24	-0.35
Ni (aqua regia) (MET)	0.55	0.06	0.19	-0.10
Pb (aqua regia) (MET)	-0.11	-0.28	-0.59	-0.54
Zn (aqua regia) (MET)	0.74	0.18	0.12	-0.58
ELML (33)				
acenaphtene (PAH)	-0.09	-0.40	0.31	0.03
acenaphthylene (PAH)	1.65	2.03	2.19	3.19
anthracene (PAH)	0.15	0.24	0.38	1.58
benz(a)anthracene (PAH)	-0.26	-0.71	-0.31	-0.58
benzo(a)pyrene (PAH)	-0.10	-0.65	0.00	-0.58
benzo(b)fluoranthene (PAH)	1.19	1.17	1.81	1.80
benzo(ghi)perylene (PAH)	0.03	-0.26	0.45	-0.38
benzo(k)fluoranthene (PAH)	0.07	-0.14	0.01	-0.34
chrysene (PAH)	0.26	0.05	0.35	0.27
dibenz(ah)anthracene (PAH)	0.12	0.45	1.29	0.94
fluoranthene (PAH)	-0.80	-1.57	-0.85	-2.02

(cont)

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Sample	739	767	780	764
ELML (33) (cont.)				
fluorene (PAH)	0.33	0.97	0.87	0.70
indeno(1,2,3-cd)pyrene (PAH)	0.47	0.51	1.51	1.38
napthalene (PAH)	0.33	0.46	0.18	0.56
phenanthrene (PAH)	-0.51	-1.11	-0.61	-0.50
pyrene (PAH)	-0.64	-1.14	-0.67	-2.36
PCB 028 (PCB)	<	-0.92	0.62	-1.29
PCB 052 (PCB)	<	-0.81	-0.38	-1.07
PCB 101 (PCB)	<	-0.07	0.12	0.05
PCB 118 (PCB)	<	-0.36	-0.01	-0.22
PCB 138 (PCB)	2.68	-0.61	0.89	0.52
PCB 153 (PCB)	1.70	0.62	0.42	0.64
PCB 180 (PCB)	1.72	0.21	1.41	0.40
Mineral oil, GC (OD)	1.27	1.65	1.08	1.25
As (aqua regia) (MET)	1.27	0.73	1.07	1.09
Cd (aqua regia) (MET)	-0.28	0.08	-0.16	0.65
Cr (aqua regia) (MET)	-0.97	-1.52	-1.45	-1.05
Cu (aqua regia) (MET)	1.66	0.90	0.98	1.75
Hg (MET)	-1.58	-1.07	-0.58	-0.54
Ni (aqua regia) (MET)	-1.05	-2.23	-2.90	-1.51
Pb (aqua regia) (MET)	-0.74	-2.53	-1.45	-1.75
Zn (aqua regia) (MET)	1.07	-0.28	-0.24	0.18
WELLAB (35)				
acenaphtene (PAH)	0.25	0.04	0.11	0.85
acenaphthylene (PAH)	0.07	0.08	-0.36	0.42
anthracene (PAH)	0.17	0.62	0.66	0.57
benz(a)anthracene (PAH)	0.33	0.29	0.10	0.45
benzo(a)pyrene (PAH)	0.36	0.31	1.19	0.76
benzo(b)fluoranthene (PAH)	0.22	0.27	-0.13	0.11
benzo(ghi)perylene (PAH)	-0.15	0.11	0.24	0.23
benzo(k)fluoranthene (PAH)	0.19	0.59	0.10	0.94
chrysene (PAH)	0.16	0.25	0.04	0.58
dibenz(ah)anthracene (PAH)	-0.25	0.17	-0.14	0.31
fluoranthene (PAH)	-0.13	0.39	0.48	0.52
fluorene (PAH)	0.29	1.02	0.14	0.26
indeno(1,2,3-cd)pyrene (PAH)	0.19	0.29	-0.15	0.31
napthalene (PAH)	-0.13	0.08	-0.19	0.24
phenanthrene (PAH)	0.13	0.07	0.21	0.69
pyrene (PAH)	0.18	0.44	0.06	0.22
PCB 028 (PCB)	<	0.29	0.06	-0.10
PCB 052 (PCB)	<	-0.14	-0.22	-0.07
PCB 077 (PCB)	<	#	#	#
PCB 101 (PCB)	<	-0.11	-0.88	0.04
PCB 105 (PCB)	<	-0.07	-1.36	0.16
PCB 118 (PCB)	<	-0.06	-0.38	0.07
PCB 126 (PCB)	<	<	<	<
PCB 128 (PCB)	<	#	#	0.91
PCB 138 (PCB)	<	-0.80	-0.27	0.52
PCB 153 (PCB)	<	-0.41	-0.21	0.36
PCB 169 (PCB)	<	<	<	<
PCB 180 (PCB)	<	-0.12	-0.38	0.22
1,2,3 trichlorobenzene (OCB)	<	<	#	#
1,2,3,4 tetrachlorobenzene (OCB)	<	<	<	#
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-endosulfan (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
chlordan (OCB)	<	<	<	<
cis-chlordan (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endosulfan (OCB)	<	<	<	<
endosulfan sulfate (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<

(cont)

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Sample	739	767	780	764
WELLAB (35) (cont.)				
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	0.27	<	-0.27
hexachlorobutadiene (OCB)	<	<	<	-1.03
isodrin (OCB)	<	<	<	<
o,p'-DDD (OCB)	<	<	<	<
o,p'-DDE (OCB)	<	<	<	<
o,p'-DDT (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	<	0.34
p,p'-DDE (OCB)	<	<	<	0.65
p,p'-DDT (OCB)	<	<	<	0.73
pentachlorobenzene (OCB)	<	<	<	-0.08
toxaphene (OCB)	<	<	<	<
trans-chlordane (OCB)	<	<	<	<
AOX (OD)	#	#	#	#
CN - Free (OD)	#	#	<	<
CN - Total (OD)	#	1.68	#	0.61
EOX (OD)	-0.24	-0.09	-0.32	0.34
Inorganic carbon (OD)	#	#	#	#
Mineral oil, GC (OD)	-0.33	0.07	0.07	-0.08
Organic carbon (OD)	0.54	1.28	0.11	0.38
Particles < 2 µm (OD)	0.04	-0.53	-0.49	-1.48
Particles < 63 µm (OD)	#	#	#	#
Particles > 63 µm (OD)	#	#	#	#
As (aqua regia) (MET)	-0.14	-0.05	-0.12	0.36
Cd (aqua regia) (MET)	-0.08	-0.40	-0.56	-0.14
Cr (aqua regia) (MET)	0.15	0.20	0.47	0.52
Cu (aqua regia) (MET)	-0.29	-0.26	-0.71	0.42
Hg (MET)	-0.12	-0.12	-0.01	0.49
Ni (aqua regia) (MET)	-0.15	-0.13	0.47	-0.02
Pb (aqua regia) (MET)	-0.06	-0.02	0.02	0.14
Zn (aqua regia) (MET)	-0.11	0.16	0.12	0.67
ENVIROPACE (36)				
PCB 077 (PCB)	#	#	#	#
PCB 081 (PCB)	<	#	#	#
PCB 105 (PCB)	#	-0.33	0.49	0.09
PCB 114 (PCB)	#	#	#	#
PCB 118 (PCB)	-0.33	0.60	0.20	0.63
PCB 123 (PCB)	#	#	#	#
PCB 126 (PCB)	<	#	#	#
PCB 156 (PCB)	#	#	#	-0.29
PCB 157 (PCB)	#	#	#	#
PCB 167 (PCB)	#	#	#	#
PCB 169 (PCB)	<	#	<	#
PCB 189 (PCB)	#	#	#	#
EOX (OD)	<	<	1.12	<
1,2,3,4,6,7,8 Cl7DD (DD)	#	#	#	#
1,2,3,4,7,8 Cl6DD (DD)	<	<	#	#
1,2,3,6,7,8 Cl6DD (DD)	<	#	#	#
1,2,3,7,8 Cl5DD (DD)	<	<	<	#
1,2,3,7,8,9 Cl6DD (DD)	<	#	#	#
2,3,7,8 Cl4DD (DD)	<	#	#	#
Cl8DD (DD)	#	#	#	#
1,2,3,4,6,7,8 Cl7DF (DF)	#	#	#	#
1,2,3,4,7,8 Cl6DF (DF)	#	#	#	#
1,2,3,4,7,8,9 Cl7DF (DF)	<	#	#	#
1,2,3,6,7,8 Cl6DF (DF)	<	#	#	#
1,2,3,7,8 Cl5DF (DF)	<	#	#	#
1,2,3,7,8,9 Cl6DF (DF)	<	<	<	#
2,3,4,6,7,8 Cl6DF (DF)	<	#	#	#
2,3,4,7,8 Cl5DF (DF)	#	#	#	#
2,3,7,8 Cl4DF (DF)	#	#	#	#
Cl8DF (DF)	#	#	#	#

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Sample	739	767	780	764
US (39)				
As (aqua regia) (MET)	3.32	-4.33	-0.83	-0.67
Cd (aqua regia) (MET)	37.79	-8.43	-1.25	-0.71
Cr (aqua regia) (MET)	24.76	-7.78	-1.35	-1.46
Cu (aqua regia) (MET)	35.17	-8.12	0.41	0.09
Hg (MET)	214.48	-1.62	32.89	35.10
Ni (aqua regia) (MET)	14.99	-7.23	-2.11	-1.09
Zn (aqua regia) (MET)	33.64	-9.98	-0.93	-2.15
JYUIER (41)				
PCB 028 (PCB)	-0.18	0.33	0.98	0.08
PCB 052 (PCB)	0.65	0.63	0.64	0.61
PCB 101 (PCB)	3.10	0.25	-0.21	-0.03
PCB 105 (PCB)	<	-0.36	-1.11	-0.70
PCB 118 (PCB)	<	0.82	0.45	-0.06
PCB 128 (PCB)	<	#	#	0.18
PCB 138 (PCB)	3.49	-0.76	-0.53	-0.11
PCB 153 (PCB)	4.24	0.49	0.15	0.36
PCB 156 (PCB)	<	#	#	-1.88
PCB 180 (PCB)	5.10	0.27	0.16	0.27
Mineral oil, GC (OD)	0.18	1.77	1.16	0.35
1,2,3,4,6,7,8 Cl7DD (DD)	<	<	<	#
1,2,3,4,7,8 Cl6DD (DD)	#	<	<	#
2,3,7,8 Cl4DD (DD)	#	#	#	#
Cl8DD (DD)	#	#	#	#
1,2,3,4,6,7,8 Cl7DF (DF)	<	#	#	#
1,2,3,4,7,8 Cl6DF (DF)	#	<	<	#
1,2,3,6,7,8 Cl6DF (DF)	<	<	#	<
1,2,3,7,8 Cl5DF (DF)	<	<	<	#
2,3,7,8 Cl4DF (DF)	#	#	#	#
Cl8DF (DF)	<	#	#	#
LAS (48)				
acenaphtene (PAH)	<	1.16	0.66	<
acenaphthylene (PAH)	<	<	<	<
anthracene (PAH)	-0.61	2.27	1.43	0.70
benz(a)anthracene (PAH)	-0.61	0.20	-0.33	-0.52
benzo(a)pyrene (PAH)	-0.37	1.13	0.83	0.11
benzo(b)fluoranthene (PAH)	-0.33	0.36	0.30	-0.35
benzo(ghi)perylene (PAH)	1.36	4.61	4.54	3.69
benzo(k)fluoranthene (PAH)	-0.26	1.35	0.83	0.34
chrysene (PAH)	-0.64	4.68	0.44	1.52
dibenz(ah)anthracene (PAH)	4.57	8.36	6.21	6.02
fluoranthene (PAH)	-1.01	0.32	0.67	-0.83
fluorene (PAH)	-1.32	0.03	-0.03	<
indeno(1,2,3-cd)pyrene (PAH)	-0.01	1.75	0.80	0.28
napthalene (PAH)	<	1.65	1.06	-0.95
phenanthrene (PAH)	-0.32	1.33	1.46	0.92
pyrene (PAH)	-0.65	0.58	0.66	-0.57
PCB 028 (PCB)	<	0.54	0.03	-0.14
PCB 052 (PCB)	<	1.01	1.01	0.59
PCB 077 (PCB)	<	<	<	<
PCB 101 (PCB)	<	-0.02	2.94	-1.42
PCB 105 (PCB)	<	18.08	10.27	1.72
PCB 118 (PCB)	<	-0.09	-0.15	-0.50
PCB 126 (PCB)	<	<	<	#
PCB 128 (PCB)	<	<	<	-0.82
PCB 138 (PCB)	<	-0.51	-0.07	0.03
PCB 153 (PCB)	<	-0.67	0.10	-0.19
PCB 180 (PCB)	<	-1.27	-0.39	-1.46
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-endosulfan (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dielein (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<

(cont)

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Sample	739	767	780	764
LAS (48) (cont.)				
gamma-HCH (OCB)	<	#	#	#
heptachlor (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	0.21	0.10
p,p'-DDE (OCB)	<	1.73	0.37	1.37
p,p'-DDT (OCB)	<	#	<	-1.35
CHEMLABSIT (52)				
acenaphtene (PAH)	-0.09	-1.37	-1.16	<
acenaphthylene (PAH)	<	<	<	<
anthracene (PAH)	-0.47	-0.96	-0.25	-0.53
benz(a)anthracene (PAH)	-0.08	-0.99	-0.28	-0.55
benzo(a)pyrene (PAH)	0.44	-0.53	0.18	-0.33
benzo(b)fluoranthene (PAH)	-0.37	-0.92	-0.31	-0.91
benzo(ghi)perylene (PAH)	-0.67	0.15	-1.16	-2.03
benzo(k)fluoranthene (PAH)	0.01	-0.55	0.15	-0.09
chrysene (PAH)	-0.46	-0.54	0.11	0.48
dibenz(ah)anthracene (PAH)	0.68	0.69	0.13	-1.32
fluoranthene (PAH)	0.19	-0.46	0.77	1.15
fluorene (PAH)	-0.30	-1.40	-0.80	-0.62
indeno(1,2,3-cd)pyrene (PAH)	-0.03	-0.40	0.13	-0.48
napthalene (PAH)	3.61	1.92	1.69	2.90
phenanthrene (PAH)	0.70	0.86	0.84	3.37
pyrene (PAH)	-0.01	-0.76	-0.02	-0.20
CN - Free (OD)	<	#	<	#
CN - Total (OD)	<	<	<	-9.66
EOX (OD)	-1.07	-0.48	-0.38	0.40
Mineral oil, GC (OD)	-0.97	-3.28	-1.71	-1.36
UMEG-GB3 (53)				
acenaphtene (PAH)	-0.48	-0.67	-0.18	0.11
acenaphthylene (PAH)	-0.34	0.02	0.14	0.21
anthracene (PAH)	-1.29	-1.15	-0.66	0.23
benz(a)anthracene (PAH)	-0.46	-0.16	-0.28	-0.02
benzo(a)pyrene (PAH)	-0.58	-0.61	-0.26	-0.31
benzo(b)fluoranthene (PAH)	-0.59	-0.61	-0.50	-0.60
benzo(ghi)perylene (PAH)	-0.58	-0.18	-0.16	0.49
benzo(k)fluoranthene (PAH)	-0.39	0.15	0.37	0.47
chrysene (PAH)	-0.85	-0.64	-0.52	-0.29
dibenz(ah)anthracene (PAH)	-1.20	-1.11	-0.94	-0.65
fluoranthene (PAH)	-0.69	-0.54	-0.31	-0.09
fluorene (PAH)	-0.37	-0.19	-0.17	0.29
indeno(1,2,3-cd)pyrene (PAH)	-0.76	-0.05	-0.19	0.35
napthalene (PAH)	0.21	0.63	0.27	1.14
phenanthrene (PAH)	-0.47	-0.21	-0.02	0.41
pyrene (PAH)	-0.57	-0.29	-0.06	-0.18
ATM (54)				
anthracene (PAH)	-0.98	-1.26	-0.86	-1.17
benz(a)anthracene (PAH)	-0.42	-0.76	0.05	-0.51
benzo(a)pyrene (PAH)	0.75	0.26	0.62	0.84
benzo(ghi)perylene (PAH)	-0.04	-0.61	0.20	-0.57
benzo(k)fluoranthene (PAH)	-0.45	-1.09	-1.07	-0.46
chrysene (PAH)	3.74	5.68	8.04	7.25
fluoranthene (PAH)	-0.67	-0.81	-0.17	-1.11
indeno(1,2,3-cd)pyrene (PAH)	-0.12	-1.19	0.87	-0.82
napthalene (PAH)	<	<	2.16	-0.58
phenanthrene (PAH)	-0.73	-1.58	-0.75	-0.69
CN - Total (OD)	#	-0.63	<	0.90
EOX (OD)	-1.36	0.94	0.36	0.22
Mineral oil, GC (OD)	0.30	-2.05	-2.91	-1.15
As (aqua regia) (MET)	-1.27	-0.91	-2.52	-1.54
Ba (MET)	#	#	#	#
Cd (aqua regia) (MET)	6.38	1.03	5.96	1.61
Co (MET)	#	#	#	#
Cr (aqua regia) (MET)	0.00	-1.05	-0.31	-0.16
Cu (aqua regia) (MET)	0.33	0.73	0.88	0.92

(cont)

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Sample	739	767	780	764
ATM (54) (cont.)				
Hg (MET)	2.73	0.48	-0.58	0.20
Mo (MET)	#	#	#	#
Ni (aqua regia) (MET)	-0.86	-1.44	-2.06	-0.94
Pb (aqua regia) (MET)	1.61	-0.45	0.02	0.22
Zn (aqua regia) (MET)	0.15	-1.15	-1.50	-6.50
ANAPBO (55)				
Mineral oil, GC (OD)	2.17	-1.53	-2.58	12.36
As (aqua regia) (MET)	-0.47	-1.45	-1.86	-1.92
Cd (aqua regia) (MET)	<	1.56	1.52	1.72
Cr (aqua regia) (MET)	0.59	1.77	1.34	1.54
Cu (aqua regia) (MET)	2.23	0.51	0.45	0.83
Hg (MET)	-1.23	-1.82	-2.67	-1.48
Ni (aqua regia) (MET)	2.99	2.37	3.56	2.01
Pb (aqua regia) (MET)	0.16	0.07	0.21	24.44
Zn (aqua regia) (MET)	3.69	119.66	0.67	0.67
32A (56)				
acenaphtene (PAH)	0.23	1.28	0.57	2.96
acenaphthylene (PAH)	0.51	1.20	1.51	1.98
anthracene (PAH)	0.25	2.15	1.55	2.44
benz(a)anthracene (PAH)	0.07	0.58	0.72	1.40
benzo(a)pyrene (PAH)	-0.90	-0.04	0.36	0.84
benzo(b)fluoranthene (PAH)	-0.82	-0.56	0.13	0.11
benzo(ghi)perylene (PAH)	0.63	1.60	1.60	2.37
benzo(k)fluoranthene (PAH)	3.00	5.67	5.60	6.91
chrysene (PAH)	0.63	1.58	1.45	2.21
dibenz(ah)anthracene (PAH)	0.93	-0.59	1.26	1.67
fluoranthene (PAH)	-0.26	0.32	1.37	0.67
fluorene (PAH)	0.67	3.55	1.24	2.55
indeno(1,2,3-cd)pyrene (PAH)	0.57	-4.85	1.96	3.16
naphtalene (PAH)	0.51	1.47	0.92	1.54
phenanthrene (PAH)	0.48	1.20	1.43	1.87
pyrene (PAH)	-0.23	0.28	1.12	0.30
HILL (58)				
acenaphtene (PAH)	-1.09	-2.08	-1.74	-1.77
acenaphthylene (PAH)	-0.94	-0.96	-0.95	-0.97
anthracene (PAH)	-1.59	-1.37	-1.29	-1.48
benz(a)anthracene (PAH)	-1.38	-1.39	-1.82	-1.90
benzo(a)pyrene (PAH)	-2.16	-2.93	-3.02	-3.62
benzo(b)fluoranthene (PAH)	2.24	2.39	2.33	2.88
benzo(ghi)perylene (PAH)	-0.70	-1.05	-1.00	-1.31
benzo(k)fluoranthene (PAH)	0.11	0.06	-0.01	-0.10
chrysene (PAH)	-0.63	-0.73	-0.83	-0.68
dibenz(ah)anthracene (PAH)	0.09	0.23	-0.41	-0.28
fluoranthene (PAH)	-1.92	-2.51	-3.03	-3.44
fluorene (PAH)	-1.22	-3.02	-2.04	-1.39
indeno(1,2,3-cd)pyrene (PAH)	-2.02	-2.67	-2.93	-2.90
naphtalene (PAH)	-0.56	-0.82	-0.77	-0.62
phenanthrene (PAH)	-2.05	-2.20	-1.92	-1.73
pyrene (PAH)	-1.73	-1.99	-2.79	-3.95
PCB 052 (PCB)	<	-0.81	-1.01	-1.07
PCB 077 (PCB)	<	<	<	<
PCB 081 (PCB)	<	<	<	<
PCB 126 (PCB)	<	<	<	<
PCB 128 (PCB)	<	<	<	-0.50
PCB 138 (PCB)	<	1.14	-0.19	-0.04
PCB 149 (PCB)	<	#	#	#
PCB 153 (PCB)	<	-0.67	-0.72	-0.97
PCB 156 (PCB)	<	<	<	0.19
PCB 157 (PCB)	<	<	<	<
PCB 167 (PCB)	<	<	<	#
PCB 169 (PCB)	<	<	<	<
PCB 180 (PCB)	<	0.23	-0.46	-0.59
As (aqua regia) (MET)	-0.21	-0.32	-0.55	-0.45

(cont)

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Sample	739	767	780	764
HILL (58) (cont.)				
Ba (MET)	#	#	#	#
Cd (aqua regia) (MET)	0.92	1.20	0.53	1.08
Co (MET)	#	#	#	#
Cr (aqua regia) (MET)	-0.88	0.05	-0.80	0.11
Cu (aqua regia) (MET)	0.80	0.62	0.66	0.67
Hg (MET)	1.41	1.98	0.65	1.41
Mo (MET)	#	#	#	#
Ni (aqua regia) (MET)	1.07	1.01	0.75	1.17
Pb (aqua regia) (MET)	0.64	0.76	0.82	1.13
Zn (aqua regia) (MET)	1.50	1.61	0.83	2.08

ARCHIMEDES (59)

anthracene (PAH)	-	-	-1.14	-0.92
benz(a)anthracene (PAH)	-	-	-1.33	-0.85
benzo(a)pyrene (PAH)	-	-	-0.83	-0.36
benzo(ghi)perylene (PAH)	-	-	1.22	0.34
benzo(k)fluoranthene (PAH)	-	-	-1.61	-0.24
chrysene (PAH)	-	-	-1.09	-0.90
fluoranthene (PAH)	-	-	-2.23	-1.97
indeno(1,2,3-cd)pyrene (PAH)	-	-	0.91	0.37
phenanthrene (PAH)	-	-	-1.11	-0.87
PCB 028 (PCB)	-	-	-0.39	0.07
PCB 052 (PCB)	-	-	-0.56	-0.53
PCB 101 (PCB)	-	-	<	-0.22
PCB 118 (PCB)	-	-	<	1.59
PCB 138 (PCB)	-	-	<	0.62
PCB 153 (PCB)	-	-	-0.14	0.46
PCB 180 (PCB)	-	-	<	0.78
aldrin (OCB)	-	-	<	<
alpha-endosulfan (OCB)	-	-	<	<
alpha-HCH (OCB)	-	-	<	<
beta-HCH (OCB)	-	-	<	<
chlordan (OCB)	-	-	<	<
dieldrin (OCB)	-	-	<	<
endrin (OCB)	-	-	<	<
gamma-HCH (OCB)	-	-	<	<
heptachlor (OCB)	-	-	<	<
heptachlor epoxide (OCB)	-	-	<	<
hexachlorobenzene (OCB)	-	-	<	0.48
o,p`-DDD (OCB)	-	-	<	<
o,p`-DDE (OCB)	-	-	<	<
o,p`-DDT (OCB)	-	-	<	<
p,p`-DDD (OCB)	-	-	0.17	-0.24
p,p`-DDE (OCB)	-	-	<	<
p,p`-DDT (OCB)	-	-	<	<
pentachlorobenzene (OCB)	-	-	<	-0.18
Sum tetrachlorobenzenes (OCB)	-	-	<	<
Sum trichlorobenzenes (OCB)	-	-	<	#
CN - Free (OD)	<	<	<	<
CN - Total (OD)	<	0.55	<	0.46
EOX (OD)	-0.74	-0.74	0.30	-0.10
Mineral oil, GC (OD)	-	-	-2.16	-2.66

GGM (60)

acenaphtene (PAH)	0.56	0.63	-0.83	0.06
acenaphthylene (PAH)	2.32	1.99	1.62	2.44
anthracene (PAH)	-0.21	-0.78	-0.83	-0.23
benz(a)anthracene (PAH)	-0.01	-0.25	-0.67	-0.16
benzo(a)pyrene (PAH)	-0.40	-1.24	-1.44	-0.47
benzo(b)fluoranthene (PAH)	-0.27	-1.14	-0.55	-0.28
benzo(ghi)perylene (PAH)	-0.24	-1.91	-0.60	-0.37
benzo(k)fluoranthene (PAH)	-1.00	-0.45	-1.98	-0.61
chrysene (PAH)	-0.69	-1.34	-0.69	0.34
dibenz(ah)anthracene (PAH)	-0.73	-1.96	-1.71	-0.28
fluoranthene (PAH)	0.75	0.19	-0.65	0.25
fluorene (PAH)	0.81	-0.47	0.29	1.98

(cont)

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Sample	739	767	780	764
GGM (60) (cont.)				
indeno(1,2,3-cd)pyrene (PAH)	-0.28	-0.80	-0.24	-0.35
napthalene (PAH)	0.23	-0.36	-0.25	-0.52
phenanthrene (PAH)	-0.23	-0.70	-0.98	-0.77
pyrene (PAH)	0.83	-0.71	-0.75	-0.03
PCB 028 (PCB)	<	1.18	4.13	1.41
PCB 052 (PCB)	<	-0.51	-0.10	0.29
PCB 101 (PCB)	<	-0.48	0.15	-0.19
PCB 118 (PCB)	<	-0.97	-0.58	-0.83
PCB 138 (PCB)	<	0.27	0.82	0.08
PCB 153 (PCB)	<	-1.47	-0.84	-0.15
PCB 180 (PCB)	<	-0.43	0.49	-0.22
EOX (OD)	1.10	-0.06	-0.97	-1.07
Mineral oil, GC (OD)	-0.52	-5.02	-2.75	0.04
Particles < 2 µm (OD)	2.05	-0.24	0.33	-0.79
As (aqua regia) (MET)	0.14	0.20	-0.17	-0.06
Cd (aqua regia) (MET)	0.06	-0.69	0.38	-0.30
Cr (aqua regia) (MET)	0.05	-0.42	-0.22	-0.29
Cu (aqua regia) (MET)	-0.67	-0.83	-0.29	-0.54
Hg (MET)	0.27	0.37	1.92	0.37
Ni (aqua regia) (MET)	-0.11	-0.07	-0.42	0.49
Pb (aqua regia) (MET)	0.02	0.24	-0.39	0.50
Zn (aqua regia) (MET)	0.28	0.35	0.01	-0.01
LABOR M (61)				
acenaphtene (PAH)	0.96	-0.94	0.80	1.03
acenaphthylene (PAH)	0.84	0.73	<	2.17
anthracene (PAH)	1.40	0.42	1.13	1.03
benz(a)anthracene (PAH)	0.03	-0.86	0.47	-0.01
benzo(a)pyrene (PAH)	0.16	-1.02	0.43	0.27
benzo(b)fluoranthene (PAH)	-2.01	-0.49	0.85	1.00
benzo(ghi)perylene (PAH)	-0.45	-0.72	0.73	1.59
benzo(k)fluoranthene (PAH)	-0.24	-1.30	0.16	0.52
chrysene (PAH)	0.14	-0.53	0.60	0.79
dibenz(ah)anthracene (PAH)	0.56	-0.67	1.62	0.66
fluoranthene (PAH)	0.01	-1.39	-0.18	-0.47
fluorene (PAH)	1.50	-0.39	0.76	0.88
indeno(1,2,3-cd)pyrene (PAH)	-0.32	-0.75	0.46	1.69
napthalene (PAH)	2.51	0.09	1.05	0.64
phenanthrene (PAH)	0.79	-0.23	0.95	0.84
pyrene (PAH)	0.40	-0.70	-0.01	-0.50
PCB 028 (PCB)	<	1.00	1.34	1.04
PCB 052 (PCB)	<	-1.35	-0.76	-1.07
PCB 101 (PCB)	<	-1.76	-1.06	-1.77
PCB 118 (PCB)	<	-0.02	-0.42	-1.62
PCB 138 (PCB)	<	-0.59	-0.05	-0.28
PCB 153 (PCB)	<	-0.26	0.13	-0.69
PCB 180 (PCB)	0.79	-0.34	-0.58	-0.59
1,2,3,4,6,7,8 Cl7DD (DD)	#	#	#	#
1,2,3,4,7,8 Cl6DD (DD)	#	#	#	#
1,2,3,6,7,8 Cl6DD (DD)	#	#	#	#
1,2,3,7,8 Cl5DD (DD)	#	#	#	#
1,2,3,7,8,9 Cl6DD (DD)	#	#	#	#
2,3,7,8 Cl4DD (DD)	#	#	#	#
Cl8DD (DD)	#	#	#	#
1,2,3,4,6,7,8 Cl7DF (DF)	#	#	#	#
1,2,3,4,7,8 Cl6DF (DF)	#	#	#	#
1,2,3,4,7,8,9 Cl7DF (DF)	#	#	#	#
1,2,3,6,7,8 Cl6DF (DF)	#	#	#	#
1,2,3,7,8 Cl5DF (DF)	#	#	#	#
1,2,3,7,8,9 Cl6DF (DF)	#	#	#	#
2,3,4,6,7,8 Cl6DF (DF)	#	#	#	#
2,3,4,7,8 Cl5DF (DF)	#	#	#	#
2,3,7,8 Cl4DF (DF)	#	#	#	#
Cl8DF (DF)	#	#	#	#

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Sample	739	767	780	764
SGSECOPD (62)				
acenaphtene (PAH)	-0.12	1.21	-1.05	0.57
acenaphtylene (PAH)	-0.26	-0.35	-0.19	-0.09
anthracene (PAH)	0.29	0.51	-0.16	3.42
benz(a)anthracene (PAH)	-0.01	-0.44	-0.87	4.40
benzo(a)pyrene (PAH)	1.61	1.25	0.49	5.05
benzo(b)fluoranthene (PAH)	1.15	0.82	1.02	2.32
benzo(ghi)perylene (PAH)	-0.67	-0.79	-0.60	-0.80
benzo(k)fluoranthene (PAH)	1.55	1.17	1.36	3.76
chrysene (PAH)	1.28	1.01	0.40	4.73
dibenz(ah)anthracene (PAH)	-0.44	0.01	-0.11	0.45
fluoranthene (PAH)	0.64	0.21	0.00	11.18
fluorene (PAH)	-0.49	0.72	-0.91	4.43
indeno(1,2,3-cd)pyrene (PAH)	-0.06	0.04	-0.04	-0.25
naphthalene (PAH)	-0.92	0.03	-0.52	-1.71
phenanthrene (PAH)	0.25	0.58	-0.18	6.84
pyrene (PAH)	0.09	-0.25	-1.10	10.26
PCB 028 (PCB)	-0.66	-0.96	-1.41	-
PCB 031 (PCB)	#	#	#	-
PCB 052 (PCB)	-0.56	-1.70	-1.78	-1.16
PCB 101 (PCB)	-1.69	-2.89	-3.20	-4.12
PCB 105 (PCB)	#	12.75	-0.20	2.84
PCB 118 (PCB)	-0.23	-1.79	-2.96	-1.57
PCB 128 (PCB)	#	#	#	4.48
PCB 138 (PCB)	-0.10	-1.04	-0.80	-0.26
PCB 149 (PCB)	#	#	#	#
PCB 153 (PCB)	-0.34	-1.22	-0.89	-0.44
PCB 156 (PCB)	#	#	#	5.68
PCB 180 (PCB)	-0.61	0.18	-1.00	0.32
aldrin (OCB)	<	<	-	<
alpha-HCH (OCB)	#	<	#	<
beta-HCH (OCB)	<	<	<	<
cis-chlordane (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	#	#	#
endosulfan (OCB)	#	#	#	#
endosulfan sulfate (OCB)	<	<	<	<
endrin (OCB)	#	#	#	<
gamma-HCH (OCB)	<	<	<	#
heptachlor (OCB)	<	<	<	#
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-0.66	<	-0.92
o,p'-DDD (OCB)	<	<	<	<
o,p'-DDE (OCB)	<	#	#	#
o,p'-DDT (OCB)	<	<	<	#
p,p'-DDD (OCB)	#	<	-1.32	-0.46
p,p'-DDE (OCB)	#	-0.72	-0.67	-0.36
p,p'-DDT (OCB)	<	<	#	-0.40
trans-chlordane (OCB)	<	<	<	<
Organic carbon (OD)	-1.11	-3.72	-0.72	-0.12
As (aqua regia) (MET)	-0.21	0.14	-0.16	0.39
Cd (aqua regia) (MET)	0.63	0.85	0.53	1.72
Cr (aqua regia) (MET)	0.00	0.05	0.19	0.11
Cu (aqua regia) (MET)	0.33	0.29	0.24	0.25
Hg (MET)	0.09	0.98	0.65	0.69
Ni (aqua regia) (MET)	0.42	-0.35	0.28	-0.31
Pb (aqua regia) (MET)	0.40	0.76	0.82	0.75
Zn (aqua regia) (MET)	-0.19	0.09	-0.27	0.14

COMALAB (67)

acenaphtene (PAH)	<	<	<	<
acenaphtylene (PAH)	<	<	<	-0.09
anthracene (PAH)	-0.69	-0.46	-0.62	-0.29
benz(a)anthracene (PAH)	-0.03	-1.52	-0.79	6.26
benzo(a)pyrene (PAH)	2.78	0.05	-0.95	2.42
benzo(b)fluoranthene (PAH)	0.22	-1.26	-0.86	1.25
benzo(ghi)perylene (PAH)	0.82	0.64	-0.70	-0.33

(cont)

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Sample	739	767	780	764
COMALAB (67) (cont.)				
benzo(k)fluoranthene (PAH)	0.59	-0.43	-1.35	1.70
chrysene (PAH)	1.10	-0.64	-0.06	1.56
dibenz(ah)anthracene (PAH)	1.74	0.20	-0.47	-0.26
fluoranthene (PAH)	0.56	-1.17	-1.13	-0.41
fluorene (PAH)	<	<	0.33	<
indeno(1,2,3-cd)pyrene (PAH)	1.48	0.12	-0.77	-0.53
napthalene (PAH)	<	-1.16	<	0.18
phenanthrene (PAH)	-0.65	-1.64	-0.10	0.28
pyrene (PAH)	1.13	-0.84	-0.71	0.22
Inorganic carbon (OD)	#	#	#	#
Organic carbon (OD)	-0.99	0.16	-0.42	0.18
As (aqua regia) (MET)	-1.42	-1.28	-1.62	14.19
Cd (aqua regia) (MET)	1.59	0.85	2.01	0.98
Cr (aqua regia) (MET)	-0.68	0.13	-0.34	0.31
Cu (aqua regia) (MET)	0.14	-3.96	1.09	0.58
Hg (MET)	10.66	-1.52	1.06	0.93
Ni (aqua regia) (MET)	-0.60	0.77	0.75	1.00
Pb (aqua regia) (MET)	-0.14	0.59	0.63	0.94
Zn (aqua regia) (MET)	0.32	1.16	1.08	1.62
ENN001 (70)				
acenaphthene (PAH)	5.15	0.10	1.06	-0.43
acenaphthylene (PAH)	0.51	0.31	0.83	-0.30
anthracene (PAH)	1.35	-0.46	0.08	-0.07
benz(a)anthracene (PAH)	4.27	0.68	0.90	0.11
benzo(a)pyrene (PAH)	5.61	2.16	2.70	-0.09
benzo(b)fluoranthene (PAH)	2.58	0.65	0.68	-0.48
benzo(ghi)perylene (PAH)	2.39	0.85	2.07	-0.28
benzo(k)fluoranthene (PAH)	2.60	0.28	2.84	0.19
chrysene (PAH)	1.70	-0.03	0.33	-0.09
dibenz(ah)anthracene (PAH)	2.94	0.97	2.56	-0.45
fluoranthene (PAH)	3.04	0.32	1.02	0.16
fluorene (PAH)	4.02	-1.25	0.05	-1.11
indeno(1,2,3-cd)pyrene (PAH)	4.22	1.64	2.09	-0.64
napthalene (PAH)	1.61	0.20	0.54	-1.11
phenanthrene (PAH)	3.92	0.88	1.45	-0.49
pyrene (PAH)	3.02	0.23	0.68	-0.12
PCB 028 (PCB)	<	-1.41	-1.83	-1.61
PCB 052 (PCB)	<	-2.21	-1.90	-2.56
PCB 101 (PCB)	<	-1.36	-0.52	-3.32
PCB 118 (PCB)	<	-1.94	-1.92	-3.93
PCB 138 (PCB)	<	-0.08	-0.44	-1.88
PCB 153 (PCB)	-0.89	-1.17	-0.63	-1.78
PCB 180 (PCB)	<	-0.57	-1.03	-1.46
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-0.24	#	-2.74
hexachlorobutadiene (OCB)	<	<	<	<
isodrin (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	<	-1.07
p,p'-DDE (OCB)	<	-0.92	-0.65	-1.92
p,p'-DDT (OCB)	<	#	<	-1.21
pentachlorobenzene (OCB)	<	<	<	<
Mineral oil, GC (OD)	0.36	1.34	0.46	2.48
As (aqua regia) (MET)	0.70	-0.91	0.28	-3.22
Cd (aqua regia) (MET)	<	0.13	<	-0.39
Cr (aqua regia) (MET)	1.15	0.44	0.45	-0.85
Cu (aqua regia) (MET)	0.47	0.00	-0.69	-0.25

(cont)

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Sample	739	767	780	764
ENN001 (70) (cont.)				
Hg (MET)	-0.70	-0.62	-0.74	-0.86
Ni (aqua regia) (MET)	-1.24	-1.03	-0.38	-1.13
Pb (aqua regia) (MET)	-1.47	-3.14	-1.88	-1.37
Zn (aqua regia) (MET)	-1.09	-0.41	-0.90	-1.46
SJEFLSLABB (71)				
acenaphtene (PAH)	-0.93	1.55	1.35	3.70
acenaphthylene (PAH)	1.95	0.25	0.26	-0.37
anthracene (PAH)	0.34	3.07	1.47	2.19
benz(a)anthracene (PAH)	-1.12	3.86	1.07	1.67
benzo(a)pyrene (PAH)	-1.30	8.72	0.21	0.26
benzo(ghi)perylene (PAH)	-0.53	1.67	-0.63	-0.25
chrysene (PAH)	0.22	4.91	2.60	4.05
fluoranthene (PAH)	-0.54	1.69	3.20	4.29
fluorene (PAH)	0.14	2.54	2.06	2.13
indeno(1,2,3-cd)pyrene (PAH)	-0.33	0.05	-0.49	0.24
phenanthrene (PAH)	-0.31	2.40	1.64	3.35
pyrene (PAH)	-0.81	2.44	3.11	4.40
PCB 028 (PCB)	-	-0.44	-0.44	-0.76
PCB 052 (PCB)	-	-0.15	0.05	-0.43
PCB 101 (PCB)	-	0.11	1.66	0.31
PCB 118 (PCB)	-	0.71	1.41	0.43
PCB 138 (PCB)	-	-0.65	0.83	0.14
PCB 153 (PCB)	-	0.94	2.81	0.99
PCB 180 (PCB)	-	1.00	4.12	1.00
QSANAL (76)				
acenaphtene (PAH)	0.65	-0.80	-0.85	0.70
acenaphthylene (PAH)	0.31	0.28	-0.15	0.53
anthracene (PAH)	0.98	2.53	1.34	1.58
benz(a)anthracene (PAH)	0.42	1.39	0.64	1.40
benzo(a)pyrene (PAH)	0.28	1.48	0.69	1.14
benzo(b)fluoranthene (PAH)	1.92	3.38	2.59	3.56
benzo(ghi)perylene (PAH)	-0.68	0.47	-0.05	0.17
benzo(k)fluoranthene (PAH)	0.05	1.75	0.28	0.94
chrysene (PAH)	0.99	2.96	1.54	2.32
dibenz(ah)anthracene (PAH)	1.12	2.36	1.82	1.56
fluoranthene (PAH)	0.32	1.80	0.96	1.28
fluorene (PAH)	1.65	0.32	-0.80	0.40
indeno(1,2,3-cd)pyrene (PAH)	-0.21	0.75	-0.05	0.90
napthalene (PAH)	0.92	0.84	0.29	0.55
phenanthrene (PAH)	0.60	1.54	0.71	1.28
pyrene (PAH)	0.45	1.53	1.07	0.98
PCB 028 (PCB)	<	-0.74	0.09	-0.48
PCB 052 (PCB)	<	0.05	-0.04	-0.33
PCB 101 (PCB)	<	0.88	-0.27	-0.36
PCB 118 (PCB)	<	2.22	0.83	0.70
PCB 138 (PCB)	<	7.25	0.96	2.10
PCB 153 (PCB)	<	3.75	0.98	1.86
PCB 180 (PCB)	<	2.21	0.28	0.07
Mineral oil, GC (OD)	-0.79	-0.08	-0.50	-0.13
BOREALIS (78)				
Mineral oil, GC (OD)	1.66	0.24	-0.77	0.90
PLVHOLAB (81)				
acenaphtene (PAH)	-0.77	1.04	-0.04	-0.90
acenaphthylene (PAH)	-0.26	-0.29	-0.15	-0.20
anthracene (PAH)	-0.07	0.08	-0.02	0.35
benz(a)anthracene (PAH)	-0.32	-0.04	-0.52	-0.53
benzo(a)pyrene (PAH)	-0.54	-0.60	-0.77	-1.05
benzo(b)fluoranthene (PAH)	-0.47	-0.40	-1.31	-0.89
benzo(ghi)perylene (PAH)	-0.56	-0.91	-0.68	-1.16
benzo(k)fluoranthene (PAH)	-0.22	-0.07	-0.38	-1.33
chrysene (PAH)	-0.05	0.55	0.22	0.16
dibenz(ah)anthracene (PAH)	-0.67	-0.54	-0.57	-0.68

(cont)

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Sample	739	767	780	764
PLVHOLAB (81) (cont.)				
fluoranthene (PAH)	-0.61	0.03	-0.61	-0.90
fluorene (PAH)	-0.83	-0.44	-0.63	-1.11
indeno(1,2,3-cd)pyrene (PAH)	-0.65	-0.55	-0.95	-1.09
naphtalene (PAH)	-0.79	-0.37	-0.49	-0.66
phenanthrene (PAH)	-0.65	-0.22	-0.43	-0.78
pyrene (PAH)	-0.50	0.03	-0.52	-1.22
PCB 028 (PCB)	<	0.39	0.35	-0.21
PCB 052 (PCB)	<	0.33	0.51	-0.03
PCB 101 (PCB)	<	0.72	0.32	0.33
PCB 118 (PCB)	<	0.75	-0.01	0.03
PCB 138 (PCB)	0.69	2.45	0.67	1.30
PCB 153 (PCB)	0.13	0.64	-0.11	0.01
PCB 180 (PCB)	-0.61	0.23	0.85	-0.23
aldrin (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	#	<
beta-endosulfan (OCB)	<	#	#	#
beta-HCH (OCB)	<	#	#	#
delta-HCH (OCB)	<	#	#	<
dieldrin (OCB)	<	#	<	<
endosulfan (OCB)	<	<	#	<
endrin (OCB)	<	#	#	<
gamma-HCH (OCB)	#	#	#	#
heptachlor (OCB)	<	<	#	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	0.59	#	-0.03
hexachlorobutadiene (OCB)	<	#	<	-0.68
isodrin (OCB)	#	#	#	<
o,p`-DDD (OCB)	#	#	#	0.65
o,p`-DDE (OCB)	<	<	<	#
o,p`-DDT (OCB)	<	<	<	#
p,p`-DDD (OCB)	#	#	2.08	1.21
p,p`-DDE (OCB)	#	0.66	0.88	0.70
p,p`-DDT (OCB)	#	#	#	8.92
pentachlorobenzene (OCB)	<	#	#	0.63
telodrin (OCB)	<	<	<	<
Mineral oil, GC (OD)	-1.45	-1.43	-0.80	-0.81

WWRAYMOND (83)

acenaphtene (PAH)	-0.83	-0.13	-0.33	-0.64
acenaphthylene (PAH)	0.18	-0.34	-0.09	-0.32
anthracene (PAH)	0.22	-0.43	0.42	-0.24
benz(a)anthracene (PAH)	0.69	0.08	-0.27	0.15
benzo(a)pyrene (PAH)	0.36	0.03	-0.18	0.02
benzo(b)fluoranthene (PAH)	0.08	-0.16	-0.13	-0.41
benzo(ghi)perylene (PAH)	0.52	0.27	-0.52	-0.17
benzo(k)fluoranthene (PAH)	0.04	-0.06	0.40	1.17
chrysene (PAH)	-0.01	-0.16	-0.24	-0.47
dibenz(ah)anthracene (PAH)	0.03	-0.04	0.36	1.07
fluoranthene (PAH)	-0.23	-0.19	0.32	0.01
fluorene (PAH)	-0.22	0.06	-0.17	-0.46
indeno(1,2,3-cd)pyrene (PAH)	0.44	0.61	-0.17	0.25
naphtalene (PAH)	0.06	0.18	-0.04	0.17
phenanthrene (PAH)	0.02	-0.05	-0.05	0.00
pyrene (PAH)	-0.05	-0.09	0.35	-0.23

HKPC-EMD (85)

acenaphtene (PAH)	-0.25	0.04	-0.04	0.44
acenaphthylene (PAH)	0.44	0.64	0.31	0.76
anthracene (PAH)	-0.05	0.89	0.72	0.75
benz(a)anthracene (PAH)	0.29	0.41	0.37	0.30
benzo(a)pyrene (PAH)	0.07	-0.14	0.02	-0.35
benzo(b)fluoranthene (PAH)	0.40	0.19	-0.29	0.03
benzo(ghi)perylene (PAH)	0.36	0.41	0.35	0.31
benzo(k)fluoranthene (PAH)	0.03	0.33	0.12	-0.04
chrysene (PAH)	-0.23	-0.32	-0.03	-0.15
dibenz(ah)anthracene (PAH)	-0.11	0.88	0.26	0.55

(cont)

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Sample	739	767	780	764
HKPC-EMD (85) (cont.)				
fluoranthene (PAH)	-0.21	0.28	0.68	0.01
fluorene (PAH)	0.39	1.12	0.31	0.39
indeno(1,2,3-cd)pyrene (PAH)	0.61	0.63	0.10	0.72
naphtalene (PAH)	0.43	0.73	0.17	0.76
phenanthrene (PAH)	0.60	1.32	0.99	1.47
pyrene (PAH)	-0.50	-0.25	0.25	-0.76
PCB 028 (PCB)	<	0.35	-0.25	0.54
PCB 052 (PCB)	<	0.36	-0.13	0.53
PCB 101 (PCB)	<	0.16	-0.33	0.92
PCB 105 (PCB)	<	0.40	1.15	0.12
PCB 118 (PCB)	<	0.64	0.03	0.83
PCB 128 (PCB)	<	#	<	0.09
PCB 138 (PCB)	<	-0.83	-0.70	-0.11
PCB 153 (PCB)	<	0.02	-0.41	-0.12
PCB 156 (PCB)	<	<	<	1.31
PCB 180 (PCB)	<	-0.26	-0.66	-0.43
Cd (aqua regia) (MET)	-0.23	-	-	-
Cr (aqua regia) (MET)	-0.18	-	-	-
Hg (MET)	-0.18	-	-	-
Tributyl Tin (TBT) (EXP)	#	#	#	#
EPILAB-1A (87)				
PCB 081 (PCB)	#	#	#	#
PCB 105 (PCB)	#	0.37	0.53	-0.56
PCB 114 (PCB)	#	#	#	#
PCB 118 (PCB)	-0.18	0.75	0.83	1.14
PCB 123 (PCB)	#	#	#	#
PCB 156 (PCB)	#	#	#	-0.24
PCB 157 (PCB)	#	#	#	#
PCB 167 (PCB)	#	#	#	#
PCB 189 (PCB)	#	#	#	#
AOX (OD)	#	#	#	#
Inorganic carbon (OD)	#	#	#	#
Mineral oil, GC (OD)	0.36	0.31	0.56	-0.13
Organic carbon (OD)	-0.92	-1.86	-0.88	-1.42
As (aqua regia) (MET)	-0.07	0.14	-0.16	0.25
Cd (aqua regia) (MET)	-0.25	-0.10	-0.41	-0.15
Cr (aqua regia) (MET)	0.03	-0.34	0.19	-0.64
Cu (aqua regia) (MET)	0.42	-0.40	-0.71	-0.49
Hg (MET)	-0.12	0.93	0.61	-0.06
Ni (aqua regia) (MET)	0.55	0.28	0.70	0.43
Pb (aqua regia) (MET)	0.64	0.67	1.06	0.33
Zn (aqua regia) (MET)	-0.11	0.20	0.58	-0.05
1,2,3,4,6,7,8 Cl7DD (DD)	#	#	#	#
1,2,3,4,7,8 Cl6DD (DD)	#	#	#	#
1,2,3,6,7,8 Cl6DD (DD)	#	#	#	#
1,2,3,7,8 Cl5DD (DD)	#	#	#	#
1,2,3,7,8,9 Cl6DD (DD)	#	#	#	#
2,3,7,8 Cl4DD (DD)	#	#	#	#
1,2,3,4,6,7,8 Cl7DF (DF)	#	#	#	#
1,2,3,4,7,8 Cl6DF (DF)	#	#	#	#
1,2,3,4,7,8,9 Cl7DF (DF)	#	#	#	#
1,2,3,6,7,8 Cl6DF (DF)	#	#	#	#
1,2,3,7,8 Cl5DF (DF)	#	#	#	#
1,2,3,7,8,9 Cl6DF (DF)	#	#	#	#
2,3,4,6,7,8 Cl6DF (DF)	#	#	#	#
2,3,4,7,8 Cl5DF (DF)	#	#	#	#
2,3,7,8 Cl4DF (DF)	#	#	#	#
Cl8DF (DF)	#	#	#	#
GAL (91)				
acenaphtene (PAH)	0.41	-0.13	0.05	0.77
acenaphthylene (PAH)	0.41	0.09	-0.27	0.24
anthracene (PAH)	-0.49	-0.53	-0.62	0.06
benz(a)anthracene (PAH)	-0.35	-0.68	0.47	-0.05
benzo(a)pyrene (PAH)	-1.00	-1.28	-0.94	-0.45

(cont)

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Sample	739	767	780	764
GAL (91) (cont.)				
benzo(b)fluoranthene (PAH)	-0.26	0.30	0.22	-0.06
benzo(ghi)perylene (PAH)	0.40	0.60	1.69	1.16
benzo(k)fluoranthene (PAH)	-0.74	-0.39	0.30	-0.19
chrysene (PAH)	-0.62	-0.07	0.10	-0.27
dibenz(ah)anthracene (PAH)	-0.28	-0.07	-0.01	-0.53
fluoranthene (PAH)	-0.53	-0.56	0.50	-0.61
fluorene (PAH)	-0.49	-0.85	-0.20	-0.03
indeno(1,2,3-cd)pyrene (PAH)	0.83	0.13	0.83	0.96
naphtalene (PAH)	-0.03	-0.17	-0.50	0.27
phenanthrene (PAH)	0.15	0.03	0.16	0.29
pyrene (PAH)	0.23	0.02	0.90	-0.24
PCB 028 (PCB)	<	-0.30	-	0.49
PCB 052 (PCB)	<	-0.66	-	-0.62
PCB 101 (PCB)	<	-1.31	-	-1.74
PCB 118 (PCB)	<	0.01	-2.51	-0.64
PCB 138 (PCB)	<	0.70	-1.06	1.36
PCB 153 (PCB)	<	-0.19	-1.21	-0.53
PCB 180 (PCB)	<	0.89	-0.29	0.14
alpha-HCH (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	0.59	<	0.18
o,p`-DDD (OCB)	<	<	<	<
o,p`-DDE (OCB)	<	<	<	<
o,p`-DDT (OCB)	<	<	<	<
p,p`-DDD (OCB)	<	<	0.42	0.82
p,p`-DDE (OCB)	<	<	<	0.27
p,p`-DDT (OCB)	<	<	<	0.59
AOX (OD)	#	#	#	#
Inorganic carbon (OD)	#	#	#	#
Mineral oil, GC (OD)	-0.51	-1.47	0.79	-0.44
Mineral oil, IR (OD)	#	#	#	#
Organic carbon (OD)	0.00	-0.44	-0.79	-0.09
Hg (MET)	0.35	0.28	0.07	0.47

STCRSC (92)	739	767	780	764
acenaphtene (PAH)	-0.14	0.24	1.00	6.56
acenaphtylene (PAH)	<	<	1.01	-1.71
anthracene (PAH)	-1.48	-0.12	-0.65	-0.56
benz(a)anthracene (PAH)	0.69	0.54	6.91	4.24
benzo(a)pyrene (PAH)	0.36	-0.51	0.82	1.30
benzo(b)fluoranthene (PAH)	-0.50	-0.98	-0.41	-0.42
benzo(ghi)perylene (PAH)	0.06	-0.56	-0.22	-0.25
benzo(k)fluoranthene (PAH)	-1.27	-2.32	-1.98	-1.73
chrysene (PAH)	-2.04	-1.82	2.36	-1.97
dibenz(ah)anthracene (PAH)	-0.88	-2.96	-1.90	-0.97
fluoranthene (PAH)	-1.60	-1.81	-1.34	-0.85
fluorene (PAH)	0.48	0.67	4.20	1.61
indeno(1,2,3-cd)pyrene (PAH)	-1.78	-1.85	-1.95	-2.04
naphtalene (PAH)	-0.15	0.52	0.34	0.32
phenanthrene (PAH)	-1.04	-1.13	-0.72	-0.24
pyrene (PAH)	-1.44	-1.02	-1.87	0.26
PCB 028 (PCB)	<	-0.62	0.12	-0.66
PCB 052 (PCB)	<	-2.98	-1.67	-2.41
PCB 101 (PCB)	-0.26	-2.36	-2.49	-3.18
PCB 138 (PCB)	-0.69	0.09	-0.18	-1.85
PCB 153 (PCB)	0.13	-2.37	-1.26	-1.56
PCB 180 (PCB)	0.09	-1.12	-0.29	-1.15
CN - Free (OD)	<	#	<	#
CN - Total (OD)	<	-6.68	<	-2.57
Mineral oil, IR (OD)	#	#	#	#
As (aqua regia) (MET)	0.97	0.05	0.86	1.61
Cd (aqua regia) (MET)	1.40	0.76	0.92	1.20
Cr (aqua regia) (MET)	1.28	1.84	0.73	2.33
Cu (aqua regia) (MET)	1.61	1.12	2.00	-0.32
Hg (MET)	<	-0.02	-2.79	-1.24

(cont)

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Sample	739	767	780	764
STCRSC (92) (cont.)				
Ni (aqua regia) (MET)	1.23	0.21	0.33	0.55
Pb (aqua regia) (MET)	0.80	0.25	0.02	1.32
Zn (aqua regia) (MET)	1.34	1.70	1.20	2.85
ADIRONDACK (93)				
acenaphtene (PAH)	-0.33	-0.33	-0.64	-0.30
acenaphthylene (PAH)	<	<	<	-1.29
anthracene (PAH)	-1.23	-0.82	-0.87	-1.44
benz(a)anthracene (PAH)	-1.32	-0.84	-1.32	-2.24
benzo(a)pyrene (PAH)	-1.43	-1.36	-1.67	-3.02
benzo(b)fluoranthene (PAH)	-1.41	-1.26	-1.71	-2.33
benzo(ghi)perylene (PAH)	-1.44	-2.28	-2.72	-3.27
benzo(k)fluoranthene (PAH)	-1.31	-1.18	-1.82	-2.39
chrysene (PAH)	-1.53	-0.97	-1.44	-1.99
dibenz(ah)anthracene (PAH)	-0.11	0.28	-0.54	-0.83
fluoranthene (PAH)	-1.61	-1.02	-1.13	-2.86
fluorene (PAH)	-0.49	-0.29	-0.97	-0.56
indeno(1,2,3-cd)pyrene (PAH)	-1.25	-1.46	-2.32	-2.66
naphthalene (PAH)	-1.00	-0.62	-0.86	-0.87
phenanthrene (PAH)	-1.30	-1.07	-1.12	-1.44
pyrene (PAH)	-1.53	-0.85	-0.98	-3.51
PCB 028 (PCB)	<	<	-1.25	<
PCB 031 (PCB)	<	<	<	<
PCB 052 (PCB)	<	<	<	<
PCB 101 (PCB)	<	<	<	<
PCB 118 (PCB)	<	<	<	<
PCB 123 (PCB)	<	<	<	<
PCB 138 (PCB)	<	<	<	-1.08
PCB 149 (PCB)	<	<	<	<
PCB 153 (PCB)	<	<	<	<
PCB 180 (PCB)	<	<	<	<
1,2,3 trichlorobenzene (OCB)	<	<	<	<
1,2,3,4 tetrachlorobenzene (OCB)	<	<	<	<
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-endosulfan (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
cis-chlordane (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dielein (OCB)	<	<	<	<
endosulfan (OCB)	<	<	<	<
endosulfan sulfate (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	<	<
p,p'-DDE (OCB)	<	<	<	<
p,p'-DDT (OCB)	<	<	<	<
pentachlorobenzene (OCB)	<	<	<	<
CN - Free (OD)	<	#	<	<
CN - Total (OD)	#	-0.95	#	-1.99
EOX (OD)	-0.19	-5.43	-4.22	-1.21
Mineral oil, GC (OD)	2.90	-0.23	0.29	1.21
Organic carbon (OD)	1.30	2.32	2.82	2.46
Particles < 2 µm (OD)	0.78	0.51	0.73	1.47
Particles < 63 µm (OD)	#	#	#	#
Particles > 63 µm (OD)	#	#	#	#
As (aqua regia) (MET)	-0.26	0.45	-0.20	0.31
Cd (aqua regia) (MET)	-0.32	0.51	0.28	1.02
Cr (aqua regia) (MET)	0.36	1.10	0.73	1.33
Cu (aqua regia) (MET)	-0.24	0.64	0.74	0.53
Hg (MET)	0.62	0.38	-0.58	-0.30
Ni (aqua regia) (MET)	0.78	1.76	1.68	1.78

(cont)

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Sample	739	767	780	764
ADIRONDACK (93) (cont.)				
Pb (aqua regia) (MET)	0.88	1.12	0.90	0.88
Zn (aqua regia) (MET)	-0.09	1.96	1.11	1.88
DEHP (EXP)	<	<	<	<
ANDESITE (105)				
acenaphtene (PAH)	-0.80	-3.32	-1.89	-1.03
acenaphthylene (PAH)	4.36	6.16	4.86	2.70
anthracene (PAH)	-0.76	0.42	0.69	-0.57
benz(a)anthracene (PAH)	-1.78	-1.46	0.01	-2.95
benzo(a)pyrene (PAH)	-1.15	-1.16	-0.26	-1.92
benzo(b)fluoranthene (PAH)	-0.19	0.52	0.60	-0.62
benzo(ghi)perylene (PAH)	-0.93	-0.62	-0.86	-0.30
benzo(k)fluoranthene (PAH)	-0.65	3.69	8.41	-0.05
chrysene (PAH)	-2.37	-3.14	-1.12	-3.31
dibenz(ah)anthracene (PAH)	-2.02	-2.31	-1.37	-1.94
fluoranthene (PAH)	-1.62	-1.25	-2.27	0.00
fluorene (PAH)	-2.79	-2.06	-0.54	0.68
indeno(1,2,3-cd)pyrene (PAH)	-1.21	-1.14	-1.22	-0.05
napthalene (PAH)	-0.95	-0.74	-1.38	-1.33
phenanthrene (PAH)	-1.47	-0.62	-0.20	-0.15
pyrene (PAH)	-1.44	-1.36	-1.71	-2.43
PCB 028 (PCB)	<	<	0.50	<
PCB 031 (PCB)	<	<	<	<
PCB 052 (PCB)	<	<	0.71	0.79
PCB 101 (PCB)	<	<	<	0.12
PCB 118 (PCB)	<	<	<	<
PCB 138 (PCB)	<	<	<	-0.49
PCB 149 (PCB)	<	<	<	#
PCB 153 (PCB)	<	<	<	-0.77
PCB 180 (PCB)	<	<	<	<
Inorganic carbon (OD)	#	#	#	#
Mineral oil, IR (OD)	#	#	#	#
Organic carbon (OD)	1.20	2.97	1.44	2.02
Particles < 2 µm (OD)	-0.26	-6.19	-1.70	-4.65
Particles < 63 µm (OD)	#	#	#	#
Particles > 63 µm (OD)	#	#	#	#
Tributyl Tin (TBT) (EXP)	#	#	#	<
XENOSOILBH (108)				
acenaphtene (PAH)	0.39	0.03	-0.17	0.24
acenaphthylene (PAH)	-1.33	-1.22	-1.33	-1.33
anthracene (PAH)	-1.47	0.56	-0.12	-0.19
benz(a)anthracene (PAH)	-0.89	-0.34	-0.36	0.39
benzo(a)pyrene (PAH)	-0.79	-0.07	-0.20	0.54
benzo(b)fluoranthene (PAH)	-0.64	-0.32	-0.40	0.19
benzo(ghi)perylene (PAH)	-0.75	0.08	0.40	0.58
benzo(k)fluoranthene (PAH)	-0.85	-1.04	-0.31	-0.09
chrysene (PAH)	-0.73	-0.46	0.02	0.55
dibenz(ah)anthracene (PAH)	-0.64	0.15	0.16	-0.32
fluoranthene (PAH)	-1.21	-1.36	-0.75	0.10
fluorene (PAH)	-0.67	-0.19	-0.46	-0.96
indeno(1,2,3-cd)pyrene (PAH)	-0.68	-0.03	-0.30	-0.13
napthalene (PAH)	1.40	1.11	1.53	0.07
phenanthrene (PAH)	-0.84	-0.47	-0.64	-0.22
pyrene (PAH)	-0.96	-0.67	-0.48	0.21
PCB 028 (PCB)	-0.61	-0.47	-0.39	-0.40
PCB 052 (PCB)	1.51	0.84	0.86	1.73
PCB 101 (PCB)	5.92	0.81	0.31	0.60
PCB 118 (PCB)	2.43	0.67	0.62	0.26
PCB 138 (PCB)	10.01	-0.03	1.03	-1.16
PCB 153 (PCB)	12.69	2.01	2.63	0.75
PCB 180 (PCB)	10.10	2.93	6.41	1.05

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Sample	739	767	780	764
FOCUS (109)				
CN - Total (OD)	<	<	<	-0.77
Organic carbon (OD)	0.16	-0.27	1.38	-2.09
As (aqua regia) (MET)	-1.06	-2.15	-2.92	-2.97
Cd (aqua regia) (MET)	<	-2.01	<	-1.90
Cr (aqua regia) (MET)	-0.29	0.05	0.02	0.79
Cu (aqua regia) (MET)	-0.62	0.18	0.03	0.67
Hg (MET)	-0.44	-1.22	-0.38	-0.49
Ni (aqua regia) (MET)	0.42	0.74	-0.19	0.74
Pb (aqua regia) (MET)	-1.06	-1.84	-1.02	-1.14
Zn (aqua regia) (MET)	-1.03	-0.56	-0.82	-0.91
THO1808MAS (110)				
acenaphtene (PAH)	0.49	1.28	1.78	0.43
acenaphthylene (PAH)	-0.55	-0.54	-0.55	-0.59
anthracene (PAH)	0.12	0.73	0.91	0.90
benz(a)anthracene (PAH)	-0.26	-0.02	0.69	0.61
benzo(a)pyrene (PAH)	-0.12	0.03	1.13	0.69
benzo(b)fluoranthene (PAH)	-0.50	-0.48	0.12	-0.50
benzo(ghi)perylene (PAH)	-0.69	-0.39	0.54	0.16
benzo(k)fluoranthene (PAH)	0.00	0.25	0.77	-1.61
chrysene (PAH)	-0.86	-0.73	-0.05	-0.23
dibenz(ah)anthracene (PAH)	-0.88	-0.51	-0.24	-0.10
fluoranthene (PAH)	0.28	-0.32	1.19	0.09
fluorene (PAH)	0.67	1.28	0.98	0.74
indeno(1,2,3-cd)pyrene (PAH)	-0.66	-0.49	-0.10	-0.32
napthalene (PAH)	-0.26	-0.19	-0.19	0.15
phenanthrene (PAH)	0.88	0.24	0.39	0.53
pyrene (PAH)	-0.05	-0.09	1.32	0.17
PCB 028 (PCB)	0.24	0.48	0.43	0.63
PCB 052 (PCB)	2.04	0.62	-0.27	-0.33
PCB 101 (PCB)	0.40	0.57	0.01	-0.09
PCB 118 (PCB)	1.34	1.85	0.16	0.70
PCB 138 (PCB)	0.97	2.01	-0.19	-0.71
PCB 153 (PCB)	0.91	1.00	0.25	-0.26
PCB 180 (PCB)	1.02	0.89	-0.01	-0.66
Mineral oil, GC (OD)	-1.45	-1.02	0.73	-1.50
APVROPAVA (112)				
acenaphtene (PAH)	-0.59	-0.90	-1.03	-1.19
acenaphthylene (PAH)	<	<	<	<
anthracene (PAH)	0.49	-0.10	0.25	-0.57
benz(a)anthracene (PAH)	-0.69	-1.25	-1.78	-2.38
benzo(a)pyrene (PAH)	-0.05	0.01	-0.93	-0.56
benzo(b)fluoranthene (PAH)	-0.93	-1.18	-1.72	-1.94
benzo(ghi)perylene (PAH)	-0.63	-0.47	-0.23	-0.53
benzo(k)fluoranthene (PAH)	-0.64	-0.64	-1.34	-1.05
chrysene (PAH)	-0.34	-0.18	-0.96	-0.79
dibenz(ah)anthracene (PAH)	-0.36	-0.70	-0.71	-1.20
fluoranthene (PAH)	-0.95	-0.52	-1.13	-0.79
fluorene (PAH)	-0.84	-1.20	-0.94	-1.02
indeno(1,2,3-cd)pyrene (PAH)	-0.58	-0.47	-0.86	-1.01
napthalene (PAH)	-0.64	-0.59	-0.84	-0.42
phenanthrene (PAH)	-0.69	0.16	-0.04	0.08
pyrene (PAH)	-0.02	0.48	-0.91	-0.07
FPLL (115)				
acenaphtene (PAH)	-0.93	-1.88	2.10	3.50
acenaphthylene (PAH)	4.13	-1.26	4.45	-1.77
anthracene (PAH)	-0.42	-2.69	-1.00	-2.68
benz(a)anthracene (PAH)	-3.03	-4.20	-4.26	-3.28
benzo(a)pyrene (PAH)	1.64	-2.41	-5.00	-2.02
benzo(b)fluoranthene (PAH)	-1.38	-2.65	-3.11	-3.92
benzo(ghi)perylene (PAH)	-2.38	-3.26	-0.98	-4.18
benzo(k)fluoranthene (PAH)	2.38	0.52	3.03	0.02
chrysene (PAH)	-1.51	-3.34	-2.70	-2.30
dibenz(ah)anthracene (PAH)	1.49	-0.37	-0.87	-2.75

(cont)

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Sample	739	767	780	764
FPLL (115) (cont.)				
fluoranthene (PAH)	-5.11	-7.52	-7.78	-8.41
fluorene (PAH)	4.51	0.42	-3.36	1.78
indeno(1,2,3-cd)pyrene (PAH)	-2.59	-3.32	-2.89	-4.68
naphtalene (PAH)	-0.24	-2.22	-1.61	-2.50
phenanthrene (PAH)	-4.61	-6.06	-4.33	-4.80
pyrene (PAH)	-3.51	-6.28	-7.20	-10.19
Mineral oil, IR (OD)	#	#	#	#
Organic carbon (OD)	1.31	-0.48	2.41	-3.21
Cd (aqua regia) (MET)	-4.35	-2.44	-0.56	-1.72
Cr (aqua regia) (MET)	-3.22	-3.21	-2.86	-2.00
Cu (aqua regia) (MET)	-2.10	-2.72	-1.51	-1.41
Hg (MET)	14.63	3.08	2.16	1.07
Ni (aqua regia) (MET)	-0.15	-2.69	-0.47	-2.44
Pb (aqua regia) (MET)	-1.20	-0.71	2.41	0.67
Zn (aqua regia) (MET)	-1.40	-1.56	1.35	0.28
ORGDIMCH (120)				
acenaphtene (PAH)	-0.92	-1.91	-0.73	-1.07
acenaphthylene (PAH)	-1.19	-1.27	-0.74	-1.00
anthracene (PAH)	-1.83	0.28	-0.93	-1.01
benz(a)anthracene (PAH)	-1.18	-0.06	0.21	0.52
benzo(a)pyrene (PAH)	-0.47	2.28	2.22	1.37
benzo(b)fluoranthene (PAH)	-0.68	-0.79	0.11	0.67
benzo(ghi)perylene (PAH)	-0.74	0.89	1.20	0.93
benzo(k)fluoranthene (PAH)	-1.78	-1.66	-0.61	-2.12
chrysene (PAH)	-0.84	-0.04	-1.12	-0.52
dibenz(ah)anthracene (PAH)	-0.44	0.50	0.59	0.70
fluoranthene (PAH)	-1.02	0.39	-0.61	0.36
fluorene (PAH)	-0.81	-1.50	-0.03	-0.19
indeno(1,2,3-cd)pyrene (PAH)	-0.89	-0.41	-0.33	-0.41
naphtalene (PAH)	2.17	2.53	1.47	1.76
phenanthrene (PAH)	-1.10	-0.05	-1.15	1.28
pyrene (PAH)	-1.02	0.44	-0.57	-0.12
PCB 028 (PCB)	0.93	-0.30	5.08	0.63
PCB 031 (PCB)	#	#	#	#
PCB 052 (PCB)	0.62	0.78	1.11	0.25
PCB 077 (PCB)	#	#	#	#
PCB 081 (PCB)	<	#	#	#
PCB 101 (PCB)	0.82	1.69	4.53	1.29
PCB 105 (PCB)	#	1.48	17.56	0.59
PCB 114 (PCB)	#	#	#	#
PCB 118 (PCB)	0.73	2.30	5.37	1.99
PCB 123 (PCB)	#	#	#	#
PCB 126 (PCB)	<	#	#	#
PCB 128 (PCB)	#	#	#	2.24
PCB 138 (PCB)	0.97	0.83	1.48	1.46
PCB 153 (PCB)	0.83	1.35	2.50	-1.31
PCB 156 (PCB)	#	#	#	0.85
PCB 157 (PCB)	#	#	#	#
PCB 167 (PCB)	#	#	#	#
PCB 169 (PCB)	<	#	<	<
PCB 180 (PCB)	0.43	1.15	1.97	1.11
PCB 189 (PCB)	<	#	#	#
1,2,3 trichlorobenzene (OCB)	<	#	<	#
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-endosulfan (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
cis-chlordane (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<

(cont)

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Sample	739	767	780	764
ORGDIMCH (120) (cont.)				
hexachlorobenzene (OCB)	<	4.52	#	9.38
hexachlorobutadiene (OCB)	<	#	<	0.88
isodrin (OCB)	<	<	<	<
o,p'-DDD (OCB)	<	<	<	3.12
o,p'-DDE (OCB)	<	<	<	<
o,p'-DDT (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	<	1.99
p,p'-DDE (OCB)	<	<	<	<
p,p'-DDT (OCB)	<	<	<	-0.86
pentachlorobenzene (OCB)	<	<	<	<
trans-chlordane (OCB)	<	<	<	<
CN - Free (OD)	<	#	<	#
CN - Total (OD)	<	0.14	<	2.92
Mineral oil, GC (OD)	0.34	-0.66	-0.73	-0.15
Organic carbon (OD)	-0.60	-0.73	-0.64	-0.63
As (aqua regia) (MET)	-2.23	-2.64	-2.92	-3.28
Cd (aqua regia) (MET)	-0.62	-1.15	-1.09	-1.16
Cr (aqua regia) (MET)	-0.40	-0.74	-0.94	-1.57
Cu (aqua regia) (MET)	-0.33	-0.56	-0.60	-0.83
Hg (MET)	-0.68	0.18	-0.13	0.53
Ni (aqua regia) (MET)	-0.52	0.06	-0.14	-0.80
Pb (aqua regia) (MET)	-0.75	-0.98	-1.06	-1.24
Zn (aqua regia) (MET)	-1.31	-1.84	-1.50	-1.09
Tributyl Tin (TBT) (EXP)	#	#	#	<
HHAFU (134)				
acenaphtene (PAH)	0.75	-0.06	0.57	<
acenaphthylene (PAH)	<	<	<	-0.14
anthracene (PAH)	0.25	1.24	0.84	0.09
benz(a)anthracene (PAH)	2.32	1.62	1.69	1.76
benzo(a)pyrene (PAH)	0.12	-0.65	-0.09	-0.82
benzo(b)fluoranthene (PAH)	2.11	1.57	2.33	2.12
benzo(ghi)perylene (PAH)	0.71	0.54	1.60	0.50
benzo(k)fluoranthene (PAH)	0.89	0.57	1.66	0.85
chrysene (PAH)	0.75	0.81	0.72	0.85
dibenz(ah)anthracene (PAH)	0.65	0.50	2.92	0.43
fluoranthene (PAH)	1.34	1.33	2.25	1.38
fluorene (PAH)	0.67	0.52	0.67	<
indeno(1,2,3-cd)pyrene (PAH)	0.92	0.52	1.11	0.54
napthalene (PAH)	1.28	0.98	1.19	0.46
phenanthrene (PAH)	1.00	0.58	1.14	0.49
pyrene (PAH)	1.36	0.92	1.85	0.98
PCB 028 (PCB)	<	-2.05	-2.18	-1.87
PCB 052 (PCB)	-0.41	-2.51	-1.38	-2.10
PCB 101 (PCB)	<	-3.19	-2.44	-2.56
PCB 138 (PCB)	-1.29	-2.79	-0.92	-1.14
PCB 153 (PCB)	0.13	-2.34	-0.96	-0.75
PCB 180 (PCB)	<	-1.53	-0.86	-1.03
CN - Total (OD)	<	-2.52	<	0.12
EOX (OD)	<	-3.32	-0.97	-2.11
Mineral oil, GC (OD)	-0.24	0.21	0.36	-0.67
URKANTONE (230)				
acenaphtene (PAH)	2.33	0.37	-0.87	-0.63
acenaphthylene (PAH)	0.87	0.82	0.45	1.30
anthracene (PAH)	1.28	0.97	-0.08	1.22
benz(a)anthracene (PAH)	3.01	-4.40	-2.39	1.44
benzo(a)pyrene (PAH)	-1.85	-3.69	-3.66	-4.08
benzo(b)fluoranthene (PAH)	0.03	-0.88	-2.91	-0.85
benzo(ghi)perylene (PAH)	-3.21	-5.12	-4.77	-4.81
benzo(k)fluoranthene (PAH)	-1.35	-2.92	-3.84	-2.88
chrysene (PAH)	1.20	-4.13	-1.94	-4.24
fluoranthene (PAH)	0.16	-0.67	-2.19	-0.36
fluorene (PAH)	1.06	1.73	-0.57	0.70
indeno(1,2,3-cd)pyrene (PAH)	-3.31	-4.45	-4.38	-4.48
napthalene (PAH)	1.28	1.27	1.11	1.39

(cont)

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Sample	739	767	780	764
URKANTONE (230) (cont.)				
phenanthrene (PAH)	1.95	-0.08	-0.93	0.30
pyrene (PAH)	0.70	4.16	-0.33	5.62
PCB 028 (PCB)	34.45	2.84	3.36	3.12
PCB 052 (PCB)	60.18	3.61	1.28	4.86
PCB 101 (PCB)	65.75	1.19	1.30	-0.22
PCB 138 (PCB)	46.26	1.14	1.54	-0.96
PCB 153 (PCB)	53.44	0.52	1.59	-0.59
PCB 180 (PCB)	108.99	2.87	1.98	-0.66
ECCM (841)				
acenaphtene (PAH)	0.15	4.06	0.40	4.03
acenaphthylene (PAH)	2.52	6.35	2.26	2.77
anthracene (PAH)	0.66	6.22	2.11	3.65
benz(a)anthracene (PAH)	1.79	1.80	0.79	1.47
benzo(a)pyrene (PAH)	0.62	0.59	0.28	0.32
benzo(b)fluoranthene (PAH)	1.19	0.47	0.45	0.67
benzo(ghi)perylene (PAH)	1.01	1.89	1.70	1.70
benzo(k)fluoranthene (PAH)	3.86	7.45	4.13	2.87
chrysene (PAH)	1.44	1.73	1.17	1.06
dibenz(ah)anthracene (PAH)	0.23	0.37	0.43	-0.44
fluoranthene (PAH)	1.21	1.15	1.37	1.94
fluorene (PAH)	-0.05	60.63	1.77	82.79
indeno(1,2,3-cd)pyrene (PAH)	1.37	1.92	0.96	0.96
naphtalene (PAH)	2.84	2.16	1.58	2.67
phenanthrene (PAH)	1.80	2.05	1.73	2.70
pyrene (PAH)	0.77	0.32	0.64	0.68
PCB 028 (PCB)	-0.35	0.49	0.78	0.67
PCB 052 (PCB)	-0.51	0.43	0.34	1.14
PCB 101 (PCB)	0.23	0.82	0.48	2.16
PCB 138 (PCB)	-0.62	-0.66	-0.54	0.28
PCB 153 (PCB)	0.06	0.77	0.28	1.03
PCB 180 (PCB)	0.22	0.44	0.21	0.43
hexachlorobenzene (OCB)	<	0.85	#	0.77
LAB607 (862)				
acenaphtene (PAH)	0.75	-0.87	-0.61	-1.37
acenaphthylene (PAH)	0.04	-0.89	-0.95	-1.24
anthracene (PAH)	0.17	-0.58	-0.70	-0.60
benz(a)anthracene (PAH)	3.44	3.05	3.33	2.50
benzo(a)pyrene (PAH)	3.13	6.53	2.77	9.11
benzo(b)fluoranthene (PAH)	3.39	2.55	0.76	1.94
benzo(ghi)perylene (PAH)	1.60	3.87	0.43	3.82
benzo(k)fluoranthene (PAH)	1.23	0.30	0.12	-0.74
chrysene (PAH)	1.97	1.14	1.37	1.60
dibenz(ah)anthracene (PAH)	0.70	0.75	0.39	1.56
fluoranthene (PAH)	0.71	-0.49	0.17	0.73
fluorene (PAH)	0.14	-0.29	0.31	-1.18
indeno(1,2,3-cd)pyrene (PAH)	1.27	3.17	0.38	1.91
naphtalene (PAH)	0.41	-0.65	-0.35	-1.33
phenanthrene (PAH)	0.57	0.24	0.04	-0.35
pyrene (PAH)	1.05	0.09	-0.15	1.64
PCB 028 (PCB)	2.08	3.12	0.40	2.04
PCB 052 (PCB)	3.63	1.74	1.22	-0.22
PCB 101 (PCB)	1.95	-0.67	0.77	0.17
PCB 118 (PCB)	4.27	-0.72	-	0.07
PCB 138 (PCB)	5.25	-0.04	0.05	1.42
PCB 153 (PCB)	6.25	0.45	0.69	1.20
PCB 180 (PCB)	2.42	-0.34	-0.46	1.22
Mineral oil, IR (OD)	#	#	#	#
CNRLBR (875)				
acenaphtene (PAH)	-0.77	0.34	1.23	2.56
acenaphthylene (PAH)	-0.13	-0.58	-0.61	0.30
anthracene (PAH)	-0.93	-0.39	-0.58	-0.56
benz(a)anthracene (PAH)	-0.30	-0.30	-0.76	-0.50
benzo(a)pyrene (PAH)	0.43	0.51	-0.48	0.58

(cont)

SETOC 2009.1 Z - Scores - Per Participant

Sample	739	767	780	764
CNRLBR (875) (cont.)				
benzo(b)fluoranthene (PAH)	0.27	0.47	-0.12	0.56
benzo(ghi)perylene (PAH)	0.12	0.49	0.43	0.76
benzo(k)fluoranthene (PAH)	-0.17	-0.48	-0.69	-0.26
chrysene (PAH)	-0.52	-0.20	-0.66	-0.36
dibenz(ah)anthracene (PAH)	0.09	0.64	0.59	0.15
fluoranthene (PAH)	0.27	0.79	0.26	0.06
fluorene (PAH)	-1.32	0.67	0.84	0.63
indeno(1,2,3-cd)pyrene (PAH)	0.31	0.96	0.24	0.41
napthalene (PAH)	0.41	-0.31	-0.16	-0.06
phenanthrene (PAH)	0.27	-0.03	-0.40	0.17
pyrene (PAH)	0.21	0.51	-0.09	-0.35
PCB 028 (PCB)	-0.34	-0.21	0.38	-0.12
PCB 052 (PCB)	-0.44	-0.28	0.55	0.58
PCB 101 (PCB)	0.47	0.04	0.63	0.50
PCB 118 (PCB)	-0.58	-0.57	-0.55	-0.19
PCB 138 (PCB)	0.36	-0.33	-0.22	0.05
PCB 153 (PCB)	1.29	0.67	0.66	1.08
PCB 180 (PCB)	0.09	-0.41	-0.39	-0.57
alpha-HCH (OCB)	<	<	<	<
beta-HCH (OCB)	#	<	<	#
delta-HCH (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-0.12	#	0.57
o,p`-DDD (OCB)	#	#	#	-0.54
o,p`-DDE (OCB)	<	<	#	#
o,p`-DDT (OCB)	<	#	#	#
p,p`-DDD (OCB)	#	#	0.78	-0.32
p,p`-DDE (OCB)	#	0.40	0.55	0.00
p,p`-DDT (OCB)	#	#	#	0.55
LABAMB (878)				
acenaphtene (PAH)	2.52	-0.47	-0.21	0.10
acenaphthylene (PAH)	-0.10	0.12	0.04	0.17
anthracene (PAH)	3.02	1.07	0.40	0.54
benz(a)anthracene (PAH)	1.97	0.08	0.03	0.28
benzo(a)pyrene (PAH)	1.83	0.29	0.01	0.28
benzo(b)fluoranthene (PAH)	0.45	-0.43	-0.72	-0.60
benzo(ghi)perylene (PAH)	1.66	0.11	0.19	0.11
benzo(k)fluoranthene (PAH)	0.67	-0.23	-0.35	0.01
chrysene (PAH)	1.31	0.37	-0.05	0.38
dibenz(ah)anthracene (PAH)	1.54	0.64	0.73	0.57
fluoranthene (PAH)	0.75	-0.08	-0.09	-0.12
fluorene (PAH)	0.63	0.62	-0.06	0.60
indeno(1,2,3-cd)pyrene (PAH)	1.14	-0.28	-0.44	-0.47
napthalene (PAH)	0.59	0.89	0.36	0.67
phenanthrene (PAH)	0.59	-0.11	-0.32	0.60
pyrene (PAH)	0.78	-0.47	-0.53	-0.85
PCB 052 (PCB)	-0.92	-0.34	0.15	-0.69
PCB 077 (PCB)	-	-	-	#
PCB 081 (PCB)	<	<	<	<
PCB 101 (PCB)	-1.03	-0.58	0.10	-0.77
PCB 105 (PCB)	<	-1.41	0.02	-1.10
PCB 114 (PCB)	<	<	<	<
PCB 118 (PCB)	-1.08	-0.85	-0.44	-1.26
PCB 123 (PCB)	<	<	<	<
PCB 126 (PCB)	<	<	<	<
PCB 128 (PCB)	<	#	#	-0.41
PCB 138 (PCB)	-0.87	-1.18	-0.09	-0.53
PCB 149 (PCB)	#	#	#	#
PCB 153 (PCB)	-0.68	0.27	0.54	0.34
PCB 156 (PCB)	<	#	#	-0.52
PCB 157 (PCB)	<	<	<	#
PCB 167 (PCB)	<	#	#	#
PCB 169 (PCB)	<	<	<	<
PCB 180 (PCB)	-1.12	-0.13	0.42	-0.39
PCB 189 (PCB)	<	<	<	#

(cont)

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Sample	739	767	780	764
LABAMB (878) (cont.)				
1,2,3,4 tetrachlorobenzene (OCB)	<	#	#	#
hexachlorobenzene (OCB)	<	0.79	<	0.54
hexachlorobutadiene (OCB)	<	#	<	0.71
pentachlorobenzene (OCB)	<	#	<	0.70
CN - Free (OD)	<	<	<	#
CN - Total (OD)	<	<	<	-9.03
Mineral oil, GC (OD)	0.90	1.43	0.68	1.34
Mineral oil, IR (OD)	#	#	#	#
Organic carbon (OD)	0.17	0.00	0.74	-0.42
As (aqua regia) (MET)	-0.78	0.59	0.63	0.11
Cd (aqua regia) (MET)	-0.32	-0.58	-0.46	-0.09
Cr (aqua regia) (MET)	-1.30	-1.13	-0.64	-0.91
Cu (aqua regia) (MET)	-1.48	-0.94	-0.82	-0.99
Hg (MET)	0.09	0.48	-0.58	-0.76
Ni (aqua regia) (MET)	-1.18	-0.62	-0.66	-0.10
Pb (aqua regia) (MET)	-1.06	-0.97	-0.41	-1.14
Zn (aqua regia) (MET)	-0.78	0.96	0.42	1.20
Tributyl Tin (TBT) (EXP)	#	#	#	<
TLR (900)				
PCB 028 (PCB)	1.64	0.83	-0.43	-0.07
PCB 052 (PCB)	-0.41	1.61	0.12	0.86
PCB 101 (PCB)	-0.48	0.41	-0.66	0.19
PCB 118 (PCB)	<	0.01	-0.84	-0.42
PCB 138 (PCB)	0.69	0.70	-0.34	0.02
PCB 153 (PCB)	0.13	-0.55	-0.60	-0.59
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<
alpha-HCH (OCB)	<	<	<	<
beta-endosulfan (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
chlordan (OCB)	<	<	<	<
cis-chlordan (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endosulfan (OCB)	<	<	<	<
endosulfan sulfate (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	<
hexachlorobenzene (OCB)	<	-1.42	<	-3.55
o,p'-DDD (OCB)	<	<	<	<
o,p'-DDE (OCB)	<	<	<	#
o,p'-DDT (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	<	-0.74
p,p'-DDE (OCB)	<	<	<	-1.84
p,p'-DDT (OCB)	<	<	<	<
trans-chlordan (OCB)	<	<	<	<
TAMPERE (911)				
acenaphtene (PAH)	0.86	0.41	0.92	-0.49
acenaphthylene (PAH)	-1.49	1.33	0.75	2.13
anthracene (PAH)	0.86	0.23	0.43	0.98
benz(a)anthracene (PAH)	2.54	1.54	0.55	1.58
benzo(a)pyrene (PAH)	0.54	-0.10	-0.93	-0.42
benzo(b)fluoranthene (PAH)	0.26	0.10	-0.90	-0.69
benzo(ghi)perylene (PAH)	0.89	0.00	-0.33	-0.91
benzo(k)fluoranthene (PAH)	3.49	4.79	2.45	4.08
chrysene (PAH)	0.32	0.25	-0.35	-0.25
dibenz(ah)anthracene (PAH)	1.91	2.58	1.29	1.32
fluoranthene (PAH)	0.56	0.94	0.23	0.09
fluorene (PAH)	2.62	0.06	0.81	-0.72
indeno(1,2,3-cd)pyrene (PAH)	2.37	2.44	1.14	0.73
napthalene (PAH)	-0.10	-0.95	-0.71	-1.24
phenanthrene (PAH)	-0.24	-0.56	0.01	-0.85

(cont)

SETOC 2009.1 Z - Scores - Per Participant

Sample	739	767	780	764
TAMPERE (911) (cont.)				
pyrene (PAH)	0.68	0.76	0.65	-0.19
PCB 028 (PCB)	<	-1.09	-1.39	-1.41
PCB 052 (PCB)	-0.16	-0.66	-0.95	-0.98
PCB 101 (PCB)	<	-0.37	-2.32	-0.65
PCB 118 (PCB)	<	-0.72	-4.17	-1.42
PCB 138 (PCB)	-0.30	0.05	-1.21	-0.16
PCB 153 (PCB)	-1.12	-1.27	-1.69	-1.23
PCB 180 (PCB)	0.09	-0.43	-1.15	-1.03
Mineral oil, GC (OD)	0.24	0.65	-3.12	0.96
Organic carbon (OD)	-2.41	-1.15	-0.08	-5.07
SHI (912)				
acenaphtene (PAH)	0.12	0.04	0.57	-0.01
acenaphthylene (PAH)	0.15	0.94	0.32	0.81
anthracene (PAH)	0.83	0.23	0.16	1.14
benz(a)anthracene (PAH)	-0.71	0.75	1.27	1.03
benzo(a)pyrene (PAH)	-0.08	0.06	0.19	-0.24
benzo(b)fluoranthene (PAH)	-0.73	0.74	1.28	0.47
benzo(ghi)perylene (PAH)	-0.97	-1.25	-1.03	-1.59
benzo(k)fluoranthene (PAH)	-1.18	0.21	-0.23	-0.09
chrysene (PAH)	0.14	2.04	1.67	1.53
dibenz(ah)anthracene (PAH)	-0.02	1.68	1.46	1.09
fluoranthene (PAH)	-0.80	0.68	1.21	-0.30
fluorene (PAH)	-0.16	-0.19	0.33	-0.45
indeno(1,2,3-cd)pyrene (PAH)	-1.74	-0.77	-1.33	-1.47
naphtalene (PAH)	-0.80	-0.58	-0.73	-0.28
phenanthrene (PAH)	-0.04	0.35	0.64	0.09
pyrene (PAH)	-0.59	0.56	1.36	-0.54
PCB 028 (PCB)	<	0.15	1.73	-0.32
PCB 031 (PCB)	<	#	#	#
PCB 052 (PCB)	<	2.68	2.12	2.42
PCB 101 (PCB)	<	3.56	2.41	3.27
PCB 118 (PCB)	<	4.21	4.16	2.41
PCB 138 (PCB)	<	6.44	3.69	3.75
PCB 153 (PCB)	<	4.22	2.33	2.73
PCB 180 (PCB)	<	4.02	3.72	2.63
Mineral oil, GC (OD)	-1.22	0.10	0.17	-0.56
FRESHERTEN (920)				
acenaphtene (PAH)	-0.56	-1.74	-0.59	-0.43
acenaphthylene (PAH)	-0.03	0.09	0.22	0.74
anthracene (PAH)	-0.74	-0.58	0.13	0.40
benz(a)anthracene (PAH)	-0.74	-0.06	0.24	-0.21
benzo(a)pyrene (PAH)	-0.67	-0.35	0.09	-0.03
benzo(b)fluoranthene (PAH)	0.87	0.82	1.28	1.27
benzo(ghi)perylene (PAH)	0.79	-0.52	-0.70	-0.64
benzo(k)fluoranthene (PAH)	0.44	0.31	0.60	0.61
chrysene (PAH)	0.06	-0.37	-0.01	0.01
dibenz(ah)anthracene (PAH)	1.21	0.23	-0.07	0.08
fluoranthene (PAH)	-0.64	-1.06	0.20	-0.90
fluorene (PAH)	-1.17	-2.01	-0.74	-0.49
indeno(1,2,3-cd)pyrene (PAH)	-0.29	-1.50	-1.77	-1.89
naphtalene (PAH)	-0.44	-0.74	-0.60	-1.12
phenanthrene (PAH)	-0.38	-1.13	-0.39	-0.89
pyrene (PAH)	-0.55	-0.78	-0.09	-1.75
PCB 028 (PCB)	<	-1.78	-1.49	-2.83
PCB 052 (PCB)	<	-0.77	-1.51	-3.46
PCB 101 (PCB)	<	-1.65	-1.34	-4.76
PCB 118 (PCB)	<	<	<	<
PCB 138 (PCB)	<	-2.75	-1.22	-3.12
PCB 153 (PCB)	<	-1.81	-0.94	-2.67
PCB 180 (PCB)	<	-1.15	-1.07	-2.20
1,2,3 trichlorobenzene (OCB)	<	<	<	<
1,2,3,4 tetrachlorobenzene (OCB)	<	<	<	<
aldrin (OCB)	<	<	<	<
alpha-endosulfan (OCB)	<	<	<	<

(cont)

SETOC 2009.1 Z - Scores - Per Participant

Sample	739	767	780	764
FRESHERTEN (920) (cont.)				
alpha-HCH (OCB)	<	<	<	<
beta-HCH (OCB)	<	<	<	<
chlordanne (OCB)	<	<	<	<
cis-chlordanne (OCB)	<	<	<	<
delta-HCH (OCB)	<	<	<	<
dieldrin (OCB)	<	<	<	<
endrin (OCB)	<	<	<	<
gamma-HCH (OCB)	<	<	<	<
heptachlor (OCB)	<	<	<	<
heptachlor epoxide (OCB)	<	<	<	#
hexachlorobenzene (OCB)	#	<	<	-4.34
hexachlorobutadiene (OCB)	<	<	<	<
isodrin (OCB)	<	<	<	<
o,p'-DDD (OCB)	<	<	<	<
o,p'-DDE (OCB)	<	<	<	<
o,p'-DDT (OCB)	<	<	<	<
p,p'-DDD (OCB)	<	<	<	<
p,p'-DDE (OCB)	<	<	<	<
p,p'-DDT (OCB)	<	<	<	<
pentachlorobenzene (OCB)	<	<	<	-3.13
trans-chlordanne (OCB)	<	<	<	<
Mineral oil, GC (OD)	2.47	2.57	2.88	6.73
FRESKOELL (958)				
acenaphtene (PAH)	-0.75	-1.17	0.63	0.10
acenaphthylene (PAH)	-0.14	1.17	1.09	0.81
anthracene (PAH)	2.33	1.07	1.57	2.96
benz(a)anthracene (PAH)	0.65	1.55	1.95	0.20
benzo(a)pyrene (PAH)	-1.50	1.26	1.82	1.94
benzo(b)fluoranthene (PAH)	-1.10	1.33	2.32	1.73
benzo(ghi)perylene (PAH)	-2.16	-1.98	-1.98	-2.02
benzo(k)fluoranthene (PAH)	0.64	4.25	6.72	3.66
chrysene (PAH)	-1.24	0.20	0.33	-0.12
dibenz(ah)anthracene (PAH)	-1.39	-0.73	-0.74	-0.56
fluoranthene (PAH)	0.83	6.47	4.90	2.43
fluorene (PAH)	0.01	-0.39	0.81	-0.21
indeno(1,2,3-cd)pyrene (PAH)	-2.39	-2.09	-2.37	-2.80
napthalene (PAH)	-1.15	-1.31	-1.23	-1.54
phenanthrene (PAH)	-0.69	-0.68	0.08	-1.22
pyrene (PAH)	0.59	2.41	4.16	2.01
PCB 028 (PCB)	<	<	<	-2.37
PCB 052 (PCB)	<	<	<	-3.38
PCB 101 (PCB)	<	-1.86	2.80	-4.58
PCB 118 (PCB)	<	-0.21	2.83	-5.27
PCB 138 (PCB)	<	-2.37	<	-3.19
PCB 153 (PCB)	<	-1.63	-1.05	-2.36
PCB 180 (PCB)	<	-1.14	<	-2.71
Mineral oil, GC (OD)	2.65	2.42	0.44	2.54
Organic carbon (OD)	-0.58	0.10	0.30	-0.47
SPE-VS (987)				
acenaphtene (PAH)	-0.91	-1.88	-0.82	-1.63
anthracene (PAH)	-0.02	-0.43	-0.22	-0.62
benz(a)anthracene (PAH)	-1.14	-0.74	-0.99	-1.44
benzo(a)pyrene (PAH)	-0.39	0.38	-0.28	-0.71
benzo(b)fluoranthene (PAH)	-0.66	-0.26	-0.65	-0.99
benzo(ghi)perylene (PAH)	-1.06	0.27	0.02	-0.23
benzo(k)fluoranthene (PAH)	-1.12	-0.20	-1.73	-0.85
chrysene (PAH)	0.07	0.71	-0.26	-0.87
dibenz(ah)anthracene (PAH)	-1.82	-1.38	-1.37	-0.86
fluoranthene (PAH)	-0.90	0.30	-0.23	-0.37
fluorene (PAH)	-1.27	-2.31	-1.50	-1.08
indeno(1,2,3-cd)pyrene (PAH)	-0.82	0.59	-0.18	-0.43
napthalene (PAH)	-0.18	-0.45	-0.35	-0.12
phenanthrene (PAH)	-1.16	-0.72	-0.47	-0.32
pyrene (PAH)	-0.67	0.13	-0.34	-1.22

Errors and Corrections

SETOC 2008 Period 4

Errors and Corrections SETOC 2008 Period 4

Sample	774	764	759	769	Code
Other parameters					
Mineral oil, GC (mg/kg)					
ARCHIMEDES (59)	-	-	230	240	C, M
NDA mean	386.7	303.3	272.7	234.6	
NDA st dev	96.5	40.3	45.8	54.6	
NDA N	32	32	32	32	
Old statistics					
Median	382.0 (3)	299.3 (3)	270.0 (3)	230.5 (3)	
MAD	52.2	20.0	27.0	23.2	
Mean	390.8	302.4	271.8	229.2	
St Dev	75.1	29.7	41.2	36.7	
N	30	23	29	24	

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Fee € 870,- (EUR) per year

In this period 86 participants



International Manure and Refuse Sample Exchange Program

Fee € 715,- (EUR) per year

In this period 43 participants



International Biomass Exchange Program

Fee € 600,- (EUR) per year

In this period 13 participants

For more information and application, please contact:

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