Electronic Supplementary Material (ESI) for Journal of Environmental Monitoring

Supplementary Information for

Bias from two analytical laboratories involved in a long-term air monitoring program measuring organic pollutants in the Arctic: a quality assurance/quality control assessment

Yushan Su[*a], Hayley Hung[a], Gary Stern[b], Ed Sverko[c], Randy Lao[a], Enzo Barresi[c], Bruno Rosenberg[b], Phil Fellin[d], Henrik Li[d], Hang Xiao[a]

[a] Air Quality Research Division, Science and Technology Branch, Environment Canada, 4905 Dufferin Street, Toronto, Ontario M3H 5T4, Canada

[b] Department of Fisheries and Oceans, Freshwater Institute, 501 University Crescent, Winnipeg, Manitoba R3T 2N6, Canada

[c] National Laboratory for Environmental Testing, Environment Canada, 867 Lakeshore Road, Burlington, Ontario L7R 4A6, Canada

[d] Airzone One Ltd., 222 Matheson Blvd. E., Mississauga, Ontario L4Z 1X1, Canada

[*] To whom correspondence should be addressed: yushan.su@utoronto.ca

Tables and Figures:

Table S1. Acronyms of chemicals.

Acronym	Full Name	CAS
1,2,3,4-TCB	1,2,3,4-tetrachlorobenzene	634-66-2
1,2,3-TCB	1,2,3-trichlorobenzene	87-61-6
1,2,4,5-TBB	1,2,4,5-tetrabromobenzene	636-28-2
1,2,4,5-TCB	1,2,4,5-tetrachlorobenzene	95-94-3
1,2,4-TCB	1,2,4-trichlorobenzene	120-82-1
1,2-DCB	1,2-dichlorobenzene	95-50-1
1,3,5-TBB	1,3,5-tribromobenzene	626-39-1
1,3,5-TCB	1,3,5-trichlorobenzene	108-70-3
1,3-DBB	1,3-dibromobenzene	108-36-1
1,3-DCB	1,3-dichlorobenzene	541-73-1
1,4-DCB	1,4-dichlorobenzene	106-46-7
1-M-Naph	1-methylnaphthalene	90-12-0
2-C-Naph	2-chloronaphthalene	91-58-7
2-M-Naph	2-methylnaphthalene	91-57-6
AcenE	acenaphthene	83-32-9
AcenY	acenaphthylene	208-96-8
a-Endos	alpha-endosulfan	959-98-8
a-HCH	alpha-hexachlorocyclohexane	319-84-6
Aldrin	aldrin	309-00-2
Anth	anthracene	120-12-7
B[a]A	benzo[a]anthracene	56-55-3
B[a]P	benzo[a]pyrene	50-32-8
B[b]F	benzo[b]fluoranthene	205-99-2
B[e]P	benzo[e]pyrene	192-97-2
B[ghi]P	benzo[ghi]perylene	191-24-2
B[k]F	benzo[k]fluoranthene	207-08-9
b-Endos	beta-endosulfan	33213-65-9
b-HCH	beta-hexachlorocyclohexane	319-85-7
CC	cis-chlordane	5103-71-9
Chry	chrysene	218-01-9
CN	cis-nonachlor	5103-73-1
D[ah]A	dibenzo[ah]anthracene	53-70-3
d-HCH	delta-hexachlorocyclohexane	319-86-8
Diben	dibenzothiophene	132-65-0
Dicofol	1,1-bis-(p-chlorophenyl)-2,2,2-trichloroethanol	115-32-2
Diel	dieldrin	60-57-1
EDK	endrin ketone	53494-70-5
Endos-S	endosulfan sulfate	1031-07-8
Endrin	endrin	72-20-8
FluoA	fluoranthene	206-44-0
FluoE	fluorene	86-73-7
g-HCH	gamma-hexachlorocyclohexane	58-89-9
HCB	hexachlorobenzene	118-74-1
HEPT	heptachlor	76-44-8
HEPX	heptachlor epoxide	1024-57-3
I[123,cd]P	indeno[123cd]pyrene	193-39-5
Indene	indene	95-13-6
Mirex	mirex	2385-85-5
MTC	methoxychlor	72-43-5
Naph	naphthalene	91-20-3
o,p'-DDD	1,1-dichloro-2-(2-chlorophenyl)-2-(4-chlorophenyl)ethane	53-19-0

o,p'-DDE	1,1-dichloro-2-(2-chlorophenyl)-2-(4-chlorophenyl)ethylene	3424-82-6
o,p'-DDT	1,1,1-trichloro-2-(2-chlorophenyl)-2-(4-chlorophenyl)ethane	789-02-6
OCS	octachlorostyrene	29082-74-4
OXY	oxychlordane	27304-13-8
p,p'-DDD	1,1-dichloro-2,2-bis(p-chlorophenyl)ethane	72-54-8
p,p'-DDE	1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene	72-55-9
p,p'-DDT	1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane	50-29-3
PCA	pentachloroanisole	1825-21-4
PCB-1	2-monochlorobiphenyl	2051-60-7
PCB-10	2,6-dichlorobiphenyl	33146-45-1
PCB-100	2,2',4,4',6-pentachlorobiphenyl	39485-83-1
PCB-101	2,2',4,5,5'-pentachlorobiphenyl	37680-73-2
PCB-102	2,2',4,5,6'-pentachlorobiphenyl	68194-06-9
PCB-103	2,2',4,5',6-pentachlorobiphenyl	60145-21-3
PCB-104	2,2',4,6,6'-pentachlorobiphenyl	56558-16-8
PCB-105	2,3,3',4,4'-pentachlorobiphenyl	32598-14-4
PCB-106	2,3,3',4,5-pentachlorobiphenyl	70424-69-0
PCB-107	2,3,3',4',5-pentachlorobiphenyl	70424-68-9
PCB-108	2,3,3',4,5'-pentachlorobiphenyl	70362-41-3
PCB-109	2,3,3',4,6-pentachlorobiphenyl	74472-35-8
PCB-11	3,3'-dichlorobiphenyl	2050-67-1
PCB-110	2,3,3',4',6-pentachlorobiphenyl	38380-03-9
PCB-111	2,3,3',5,5'-pentachlorobiphenyl	39635-32-0
PCB-112	2,3,3',5,6-pentachlorobiphenyl	74472-36-9
PCB-113	2,3,3',5',6-pentachlorobiphenyl	68194-10-5
PCB-114	2,3,4,4',5-pentachlorobiphenyl	74472-37-0
PCB-115	2,3,4,4',6-pentachlorobiphenyl	74472-38-1
PCB-116	2,3,4,5,6-pentachlorobiphenyl	18259-05-7
PCB-117	2,3,4',5,6-pentachlorobiphenyl	68194-11-6
PCB-118	2,3',4,4',5-pentachlorobiphenyl	31508-00-6
PCB-119	2,3',4,4',6-pentachlorobiphenyl	56558-17-9
PCB-12	3,4-dichlorobiphenyl	2974-92-7
PCB-120	2,3',4,5,5'-pentachlorobiphenyl	68194-12-7
PCB-121	2,3',4,5',6-pentachlorobiphenyl	56558-18-0
PCB-122	2,3,3’,4’,5’-pentachlorobiphenyl	76842-07-4
PCB-123	2,3’,4,4’,5’-pentachlorobiphenyl	65510-44-3
PCB-124	2,3’,4’,5,5’-pentachlorobiphenyl	70424-70-3
PCB-125	2,3’,4’,5’,6-pentachlorobiphenyl	74472-39-2
PCB-126	3,3’,4,4’,5-pentachlorobiphenyl	57465-28-8
PCB-127	3,3’,4,5,5’-pentachlorobiphenyl	39635-33-1
PCB-128	2,2’,3,3’,4,4’-hexachlorobiphenyl	38380-07-3
PCB-129	2,2’,3,3’,4,5-hexachlorobiphenyl	55215-18-4
PCB-13	3,4’-dichlorobiphenyl	2974-90-5
PCB-130	2,2’,3,3’,4,5’-hexachlorobiphenyl	52663-66-8
PCB-131	2,2’,3,3’,4,6-hexachlorobiphenyl	61798-70-7
PCB-132	2,2’,3,3’,4,6’-hexachlorobiphenyl	38380-05-1
PCB-133	2,2’,3,3’,5,5’-hexachlorobiphenyl	35694-04-3
PCB-134	2,2’,3,3’,5,6-hexachlorobiphenyl	52704-70-8
PCB-135	2,2’,3,3’,5,6’-hexachlorobiphenyl	52744-13-5
PCB-136	2,2’,3,3’,6,6’-hexachlorobiphenyl	38411-22-2
PCB-137	2,2’,3,4,4’,5-hexachlorobiphenyl	35694-06-5
PCB-138	2,2’,3,4,4’,5’-hexachlorobiphenyl	35065-28-2
PCB-139	2,2’,3,4,4’,6-hexachlorobiphenyl	56030-56-9

PCB-14	3,5-dichlorobiphenyl	34883-41-5
PCB-140	2,2’,3,4,4’,6’-hexachlorobiphenyl	59291-64-4
PCB-141	2,2’,3,4,5,5’-hexachlorobiphenyl	52712-04-6
PCB-142	2,2’,3,4,5,6-hexachlorobiphenyl	41411-61-4
PCB-143	2,2’,3,4,5,6’-hexachlorobiphenyl	68194-15-0
PCB-144	2,2’,3,4,5’,6-hexachlorobiphenyl	68194-14-9
PCB-145	2,2’,3,4,6,6’-hexachlorobiphenyl	74472-40-5
PCB-146	2,2’,3,4’,5,5’-hexachlorobiphenyl	51908-16-8
PCB-147	2,2’,3,4’,5,6-hexachlorobiphenyl	68194-13-8
PCB-148	2,2’,3,4’,5,6’-hexachlorobiphenyl	74472-41-6
PCB-149	2,2’,3,4’,5’,6-hexachlorobiphenyl	38380-04-0
PCB-15	4,4’-dichlorobiphenyl	2050-68-2
PCB-150	2,2’,3,4’,6,6’-hexachlorobiphenyl	68194-08-1
PCB-151	2,2’,3,5,5’,6-hexachlorobiphenyl	52663-63-5
PCB-152	2,2’,3,5,6,6’-hexachlorobiphenyl	68194-09-2
PCB-153	2,2’,4,4’,5,5’-hexachlorobiphenyl	35065-27-1
PCB-154	2,2’,4,4’,5,6’-hexachlorobiphenyl	60145-22-4
PCB-155	2,2’,4,4’,6,6’-hexachlorobiphenyl	33979-03-2
PCB-156	2,3,3’,4,4’,5-hexachlorobiphenyl	38380-08-4
PCB-157	2,3,3’,4,4’,5’-hexachlorobiphenyl	69782-90-7
PCB-158	2,3,3’,4,4’,6-hexachlorobiphenyl	74472-42-7
PCB-159	2,3,3’,4,5,5’-hexachlorobiphenyl	39635-35-3
PCB-16	2,2’,3-trichlorobiphenyl	38444-78-9
PCB-160	2,3,3’,4,5,6-hexachlorobiphenyl	41411-62-5
PCB-161	2,3,3’,4,5’,6-hexachlorobiphenyl	74472-43-8
PCB-162	2,3,3’,4’,5,5’-hexachlorobiphenyl	39635-34-2
PCB-163	2,3,3’,4’,5,6-hexachlorobiphenyl	74472-44-9
PCB-164	2,3,3’,4’,5’,6-hexachlorobiphenyl	74472-45-0
PCB-165	2,3,3’,5,5’,6-hexachlorobiphenyl	74472-46-1
PCB-166	2,3,4,4’,5,6-hexachlorobiphenyl	41411-63-6
PCB-167	2,3’,4,4’,5,5’-hexachlorobiphenyl	52663-72-6
PCB-168	2,3’,4,4’,5’,6-hexachlorobiphenyl	59291-65-5
PCB-169	3,3’,4,4’,5,5’-hexachlorobiphenyl	32774-16-6
PCB-17	2,2’,4-trichlorobiphenyl	37680-66-3
PCB-170	2,2’,3,3’,4,4’,5-heptachlorobiphenyl	35065-30-6
PCB-171	2,2’,3,3’,4,4’,6-heptachlorobiphenyl	52663-71-5
PCB-172	2,2',3,3',4,5,5'-heptachlorobiphenyl	52663-74-8
PCB-173	2,2',3,3',4,5,6-heptachlorobiphenyl	68194-16-1
PCB-174	2,2',3,3',4,5,6'-heptachlorobiphenyl	38411-25-5
PCB-175	2,2',3,3',4,5',6-heptachlorobiphenyl	40186-70-7
PCB-176	2,2',3,3',4,6,6'-heptachlorobiphenyl	52663-65-7
PCB-177	2,2',3,3',4,5',6'-heptachlorobiphenyl	52663-70-4
PCB-178	2,2',3,3',5,5',6-heptachlorobiphenyl	52663-67-9
PCB-179	2,2',3,3',5,6,6'-heptachlorobiphenyl	52663-64-6
PCB-18	2,2',5-trichlorobiphenyl	37680-65-2
PCB-180	2,2',3,4,4',5,5'-heptachlorobiphenyl	35065-29-3
PCB-181	2,2',3,4,4',5,6-heptachlorobiphenyl	74472-47-2
PCB-182	2,2',3,4,4',5,6'-heptachlorobiphenyl	60145-23-5
PCB-183	2,2',3,4,4',5',6-heptachlorobiphenyl	52663-69-1
PCB-184	2,2',3,4,4',6,6'-heptachlorobiphenyl	74472-48-3
PCB-185	2,2',3,4,5,5',6-heptachlorobiphenyl	52712-05-7
PCB-186	2,2',3,4,5,6,6'-heptachlorobiphenyl	74472-49-4
PCB-187	2,2',3,4',5,5',6-heptachlorobiphenyl	52663-68-0

PCB-188	2,2',3,4',5,6,6'-heptachlorobiphenyl	74487-85-7
PCB-189	2,3,3',4,4',5,5'-heptachlorobiphenyl	39635-31-9
PCB-19	2,2',6-trichlorobiphenyl	38444-73-4
PCB-190	2,3,3',4,4',5,6-heptachlorobiphenyl	41411-64-7
PCB-191	2,3,3',4,4',5',6-heptachlorobiphenyl	74472-50-7
PCB-192	2,3,3',4,5,5',6-heptachlorobiphenyl	74472-51-8
PCB-193	2,3,3',4',5,5',6-heptachlorobiphenyl	69782-91-8
PCB-194	2,2',3,3',4,4',5,5'-octachlorobiphenyl	35694-08-7
PCB-195	2,2',3,3',4,4',5,6-octachlorobiphenyl	52663-78-2
PCB-196	2,2',3,3',4,4',5,6'-octachlorobiphenyl	42740-50-1
PCB-197	2,2',3,3',4,4',6,6'-octachlorobiphenyl	33091-17-7
PCB-198	2,2',3,3',4,5,5',6-octachlorobiphenyl	68194-17-2
PCB-199	2,2',3,3',4,5,5',6'-octachlorobiphenyl	52663-75-9
PCB-2	3-monochlorobiphenyl	2051-61-8
PCB-20	2,3,3'-trichlorobiphenyl	38444-84-7
PCB-200	2,2',3,3',4,5,6,6'-octachlorobiphenyl	52663-73-7
PCB-201	2,2',3,3',4,5',6,6'-octachlorobiphenyl	40186-71-8
PCB-202	2,2',3,3',5,5',6,6'-octachlorobiphenyl	2136-99-4
PCB-203	2,2',3,4,4',5,5',6-octachlorobiphenyl	52663-76-0
PCB-204	2,2',3,4,4',5,6,6'-octachlorobiphenyl	74472-52-9
PCB-205	2,3,3',4,4',5,5',6-octachlorobiphenyl	74472-53-0
PCB-206	2,2',3,3',4,4',5,5',6-nonachlorobiphenyl	40186-72-9
PCB-207	2,2',3,3',4,4',5,6,6'-nonachlorobiphenyl	52663-79-3
PCB-208	2,2',3,3',4,5,5',6,6'-nonachlorobiphenyl	52663-77-1
PCB-209	2,2',3,3',4,4',5,5',6,6'-decachlorobiphenyl	2051-24-3
PCB-21	2,3,4-trichlorobiphenyl	55702-46-0
PCB-22	2,3,4'-trichlorobiphenyl	38444-85-8
PCB-23	2,3,5-trichlorobiphenyl	55720-44-0
PCB-24	2,3,6-trichlorobiphenyl	55702-45-9
PCB-25	2,3',4-trichlorobiphenyl	55712-37-3
PCB-26	2,3',5-trichlorobiphenyl	38444-81-4
PCB-27	2,3',6-trichlorobiphenyl	38444-76-7
PCB-28	2,4,4'-trichlorobiphenyl	7012-37-5
PCB-29	2,4,5-trichlorobiphenyl	15862-07-4
PCB-3	4-monochlorobiphenyl	2051-62-9
PCB-30	2,4,6-trichlorobiphenyl	35693-92-6
PCB-31	2,4',5-trichlorobiphenyl	16606-02-3
PCB-32	2,4',6-trichlorobiphenyl	38444-77-8
PCB-33	2,3',4'-trichlorobiphenyl	38444-86-9
PCB-34	2,3',5'-trichlorobiphenyl	37680-68-5
PCB-35	3,3',4-trichlorobiphenyl	37680-69-6
PCB-36	3,3',5-trichlorobiphenyl	38444-87-0
PCB-37	3,4,4'-trichlorobiphenyl	38444-90-5
PCB-38	3,4,5-trichlorobiphenyl	53555-66-1
PCB-39	3,4',5-trichlorobiphenyl	38444-88-1
PCB-4	2,2'-dichlorobiphenyl	13029-08-8
PCB-40	2,2',3,3'-tetrachlorobiphenyl	38444-93-8
PCB-41	2,2',3,4-tetrachlorobiphenyl	52663-59-9
PCB-42	2,2',3,4'-tetrachlorobiphenyl	36559-22-5
PCB-43	2,2',3,5-tetrachlorobiphenyl	70362-46-8
PCB-44	2,2',3,5'-tetrachlorobiphenyl	41464-39-5
PCB-45	2,2',3,6-tetrachlorobiphenyl	70362-45-7
PCB-46	2,2',3,6'-tetrachlorobiphenyl	41464-47-5

PCB-47	2,2’,4,4’-tetrachlorobiphenyl	2437-79-8
PCB-48	2,2’,4,5-tetrachlorobiphenyl	70362-47-9
PCB-49	2,2’,4,5’-tetrachlorobiphenyl	41464-40-8
PCB-5	2,3-dichlorobiphenyl	16605-91-7
PCB-50	2,2’,4,6-tetrachlorobiphenyl	62796-65-0
PCB-51	2,2’,4,6’-tetrachlorobiphenyl	68194-04-7
PCB-52	2,2’,5,5’-tetrachlorobiphenyl	35693-99-3
PCB-53	2,2’,5,6’-tetrachlorobiphenyl	41464-41-9
PCB-54	2,2’,6,6’-tetrachlorobiphenyl	15968-05-5
PCB-55	2,3,3’,4-tetrachlorobiphenyl	74338-24-2
PCB-56	2,3,3’,4’-tetrachlorobiphenyl	41464-43-1
PCB-57	2,3,3’,5-tetrachlorobiphenyl	70424-67-8
PCB-58	2,3,3’,5’-tetrachlorobiphenyl	41464-49-7
PCB-59	2,3,3’,6-tetrachlorobiphenyl	74472-33-6
PCB-6	2,3’-dichlorobiphenyl	25569-80-6
PCB-60	2,3,4,4’-tetrachlorobiphenyl	33025-41-1
PCB-61	2,3,4,5-tetrachlorobiphenyl	33284-53-6
PCB-62	2,3,4,6-tetrachlorobiphenyl	54230-22-7
PCB-63	2,3,4’,5-tetrachlorobiphenyl	74472-34-7
PCB-64	2,3,4’,6-tetrachlorobiphenyl	52663-58-8
PCB-65	2,3,5,6-tetrachlorobiphenyl	33284-54-7
PCB-66	2,3’,4,4’-tetrachlorobiphenyl	32598-10-0
PCB-67	2,3’,4,5-tetrachlorobiphenyl	73575-53-8
PCB-68	2,3’,4,5’-tetrachlorobiphenyl	73575-52-7
PCB-69	2,3’,4,6-tetrachlorobiphenyl	60233-24-1
PCB-7	2,4-dichlorobiphenyl	33284-50-3
PCB-70	2,3’,4’,5-tetrachlorobiphenyl	32598-11-1
PCB-71	2,3’,4’,6-tetrachlorobiphenyl	41464-46-4
PCB-72	2,3’,5,5’-tetrachlorobiphenyl	41464-42-0
PCB-73	2,3’,5’,6-tetrachlorobiphenyl	74338-23-1
PCB-74	2,4,4’,5-tetrachlorobiphenyl	32690-93-0
PCB-75	2,4,4’,6-tetrachlorobiphenyl	32598-12-2
PCB-76	2,3’,4’,5’-tetrachlorobiphenyl	70362-48-0
PCB-77	3,3’,4,4’-tetrachlorobiphenyl	32598-13-3
PCB-78	3,3’,4,5-tetrachlorobiphenyl	70362-49-1
PCB-79	3,3’,4,5’-tetrachlorobiphenyl	41464-48-6
PCB-8	2,4’-dichlorobiphenyl	34883-43-7
PCB-80	3,3’,5,5’-tetrachlorobiphenyl	33284-52-5
PCB-81	3,4,4’,5-tetrachlorobiphenyl	70362-50-4
PCB-82	2,2’,3,3’,4-pentachlorobiphenyl	52663-62-4
PCB-83	2,2',3,3',5-pentachlorobiphenyl	60145-20-2
PCB-84	2,2',3,3',6-pentachlorobiphenyl	52663-60-2
PCB-85	2,2',3,4,4'-pentachlorobiphenyl	65510-45-4
PCB-86	2,2',3,4,5-pentachlorobiphenyl	55312-69-1
PCB-87	2,2',3,4,5'-pentachlorobiphenyl	38380-02-8
PCB-88	2,2',3,4,6-pentachlorobiphenyl	55215-17-3
PCB-89	2,2',3,4,6'-pentachlorobiphenyl	73575-57-2
PCB-9	2,5-dichlorobiphenyl	34883-39-1
PCB-90	2,2',3,4',5-pentachlorobiphenyl	68194-07-0
PCB-91	2,2',3,4',6-pentachlorobiphenyl	68194-05-8
PCB-92	2,2',3,5,5'-pentachlorobiphenyl	52663-61-3
PCB-93	2,2',3,5,6-pentachlorobiphenyl	73575-56-1
PCB-94	2,2',3,5,6'-pentachlorobiphenyl	73575-55-0

PCB-95	2,2',3,5',6-pentachlorobiphenyl	38379-99-6
PCB-96	2,2',3,6,6'-pentachlorobiphenyl	73575-54-9
PCB-97	2,2',3,4',5'-pentachlorobiphenyl	41464-51-1
PCB-98	2,2',3,4',6'-pentachlorobiphenyl	60233-25-2
PCB-99	2,2',4,4',5-pentachlorobiphenyl	38380-01-7
PeCB	pentachlorobenzene	608-93-5
Pery	perylene	198-55-0
Phen	phenanthrene	85-01-8
Pyr	pyrene	129-00-0
Retene	1-methyl-7-isopropylphenanthrene	483-65-8
TC	trans-chlordane	5103-74-2
TeCV	tetrachloroveratrol	944-61-6
THN	1,2,3,4-tetrahydronaphthalene	119-64-2
TN	trans-nonachlor	39765-80-5
TriCV	trichloroveratrol	16766-29-3

Table S2. Target concentrations and analytical results (in $pg \cdot \mu L^{-1}$) for OCPs in Std 05.

Chemical	Sample ID	Target Concentration	NLET result	FWI result
1,2,3,4-TCB	High standard from NLET	50	NA	60
1,2,3,4-TCB	Low standard from NLET	100	NA	100
1,2,3,4-TCB	Standard from FWI Mixture 01	100	83	NA
1,2,3,4-TCB	Standard from FWI Mixture 02	1.9	1.9	NA
1,2,4,5-TCB	High standard from NLET	49	NA	63
1,2,4,5-TCB	Low standard from NLET	50	NA	57
1,2,4,5-TCB	Standard from FWI Mixture 01	100	100	NA
1,2,4,5-TCB	Standard from FWI Mixture 02	2	2.6	NA
Aldrin	High standard from NLET	50	NA	48
Aldrin	Low standard from NLET	99	NA	130
Aldrin	Standard from FWI Mixture 01	100	77	NA
Aldrin	Standard from FWI Mixture 02	1.9	1.6	NA
Aldrin	Standard from FWI Mixture 03	2	1.9	NA
Aldrin	Standard from FWI Mixture 05	200	190	NA
Aldrin	Standard from FWI Mixture 07	100	110	NA
Aldrin	Standard from FWI Mixture 08	2	2.3	NA
CC	High standard from NLET	96	NA	130
CC	Low standard from NLET	50	NA	58
CC	Standard from FWI Mixture 01	100	100	NA
CC	Standard from FWI Mixture 02	2	2.2	NA
CC	Standard from FWI Mixture 04	2	2	NA
CC	Standard from FWI Mixture 06	200	190	NA
CC	Standard from FWI Mixture 07	100	120	NA
CC	Standard from FWI Mixture 08	2	2.5	NA
CN	High standard from NLET	99	NA	110
CN	Low standard from NLET	98	NA	110
CN	Standard from FWI Mixture 04	2	2.4	NA
CN	Standard from FWI Mixture 06	200	190	NA
CN	Standard from FWI Mixture 07	100	120	NA
CN	Standard from FWI Mixture 08	2	2.5	NA
Diel	High standard from NLET	50	NA	54
Diel	Low standard from NLET	49	NA	53
Diel	Standard from FWI Mixture 01	100	110	NA
Diel	Standard from FWI Mixture 02	2	2.2	NA
Diel	Standard from FWI Mixture 03	2	2	NA

Diel	Standard from FWI Mixture 05	200	190	NA
Diel	Standard from FWI Mixture 07	100	120	NA
Diel	Standard from FWI Mixture 08	2	2.4	NA
EDK	High standard from NLET	50	NA	52
EDK	Low standard from NLET	99	NA	100
EDK	Standard from FWI Mixture 04	4	3.7	NA
EDK	Standard from FWI Mixture 06	400	330	NA
EDK	Standard from FWI Mixture 07	100	110	NA
EDK	Standard from FWI Mixture 08	2	2.6	NA
Endos I	High standard from NLET	540	NA	560
Endos I	Low standard from NLET	150	NA	140
Endos I	Standard from FWI Mixture 03	2	2.6	NA
Endos I	Standard from FWI Mixture 05	200	230	NA
Endos I	Standard from FWI Mixture 07	100	140	NA
Endos I	Standard from FWI Mixture 08	2	3.1	NA
Endos II	High standard from NLET	99	NA	98
Endos II	Low standard from NLET	150	NA	130
Endos II	Standard from FWI Mixture 03	4	4	NA
Endos II	Standard from FWI Mixture 05	400	370	NA
Endos II	Standard from FWI Mixture 07	100	120	NA
Endos II	Standard from FWI Mixture 08	2	2.6	NA
Endrin	High standard from NLET	50	NA	51
Endrin	Low standard from NLET	75	NA	75
Endrin	Standard from FWI Mixture 04	4	3.8	NA
Endrin	Standard from FWI Mixture 06	400	340	NA
Endrin	Standard from FWI Mixture 07	100	120	NA
Endrin	Standard from FWI Mixture 08	2	2.4	NA
HCB	High standard from NLET	150	NA	170
HCB	Low standard from NLET	100	NA	120
HCB	Standard from FWI Mixture 01	100	110	NA
HCB	Standard from FWI Mixture 02	2	2.5	NA
HEPT	High standard from NLET	150	NA	150
HEPT	Low standard from NLET	50	NA	86
HEPT	Standard from FWI Mixture 01	100	110	NA
HEPT	Standard from FWI Mixture 02	1.9	2	NA
HEPT	Standard from FWI Mixture 03	2	1.8	NA
HEPT	Standard from FWI Mixture 05	200	200	NA
HEPT	Standard from FWI Mixture 07	100	110	NA
HEPT	Standard from FWI Mixture 08	2	2.2	NA
HEPX	High standard from NLET	50	NA	58
HEPX	Low standard from NLET	50	NA	57
HEPX	Standard from FWI Mixture 01	100	96	NA
HEPX	Standard from FWI Mixture 02	2	2.2	NA
HEPX	Standard from FWI Mixture 03	2	1.8	NA
HEPX	Standard from FWI Mixture 05	200	160	NA
HEPX	Standard from FWI Mixture 07	100	180	NA
HEPX	Standard from FWI Mixture 08	2	4	NA
Mirex	High standard from NLET	54	NA	55
Mirex	Low standard from NLET	50	NA	55
Mirex	Standard from FWI Mixture 01	100	96	NA
Mirex	Standard from FWI Mixture 02	2	2.9	NA
MTC	High standard from NLET	100	NA	93
MTC	Low standard from NLET	49	NA	51

MTC	Standard from FWI Mixture 03	16	15	NA
MTC	Standard from FWI Mixture 05	1600	1600	NA
MTC	Standard from FWI Mixture 07	100	120	NA
MTC	Standard from FWI Mixture 08	2	2.4	NA
o,p'-DDD	Standard from FWI Mixture 01	100	100	NA
o,p'-DDD	Standard from FWI Mixture 02	2	2.4	NA
o,p'-DDD	Standard from FWI Mixture 07	100	160	NA
o,p'-DDD	High standard from NLET	100	NA	120
o,p'-DDD	Low standard from NLET	50	NA	52
o,p'-DDE	Standard from FWI Mixture 01	100	94	NA
o,p'-DDE	Standard from FWI Mixture 02	2	2.2	NA
o,p'-DDE	High standard from NLET	2.5	NA	3.4
o,p'-DDE	Low standard from NLET	5	NA	4.8
o,p'-DDT	High standard from NLET	2.5	NA	3.1
o,p'-DDT	Low standard from NLET	2.5	NA	3.2
o,p'-DDT	Standard from FWI Mixture 01	100	120	NA
o,p'-DDT	Standard from FWI Mixture 02	2	2.1	NA
OCS	High standard from NLET	2.5	NA	2.8
OCS	Low standard from NLET	4.9	NA	5.2
OCS	Standard from FWI Mixture 01	10	11	NA
OCS	Standard from FWI Mixture 02	0.2	0.2	NA
OXY	High standard from NLET	4.8	NA	4.9
OXY	Low standard from NLET	2.5	NA	2.6
p,p'-DDD	Standard from FWI Mixture 04	4	4.2	NA
p,p'-DDD	Standard from FWI Mixture 06	400	380	NA
p,p'-DDD	High standard from NLET	5	NA	4.8
p,p'-DDD	Low standard from NLET	4.9	NA	4.2
p,p'-DDE	Standard from FWI Mixture 01	100	110	NA
p,p'-DDE	Standard from FWI Mixture 02	2	2.1	NA
p,p'-DDE	Standard from FWI Mixture 04	2	1.9	NA
p,p'-DDE	Standard from FWI Mixture 06	200	190	NA
p,p'-DDE	Standard from FWI Mixture 07	100	120	NA
p,p'-DDE	Standard from FWI Mixture 08	2	2.3	NA
p,p'-DDE	High standard from NLET	2.5	NA	2.4
p,p'-DDE	Low standard from NLET	2.5	NA	1.9
p,p'-DDT	High standard from NLET	2.5	NA	2.5
p,p'-DDT	Low standard from NLET	5	NA	5.1
p,p'-DDT	Standard from FWI Mixture 05	400	410	NA
p,p'-DDT	Standard from FWI Mixture 07	100	110	NA
p,p'-DDT	Standard from FWI Mixture 08	2	2	NA
PCA	High standard from NLET	27	NA	25
PCA	Low standard from NLET	7.5	NA	7.5
PCA	Standard from FWI Mixture 07	100	120	NA
PCA	Standard from FWI Mixture 08	2	2.6	NA
PCA	Standard from FWI Mixture 09	40	24	NA
PCA	Standard from FWI Mixture 10	4	2.7	NA
PeCB	High standard from NLET	5	NA	5
PeCB	Low standard from NLET	7.5	NA	5.8
PeCB	Standard from FWI Mixture 01	100	99	NA
PeCB	Standard from FWI Mixture 02	2	2.2	NA
TC	High standard from NLET	2.5	NA	2.2
TC	Low standard from NLET	3.7	NA	4
TC	Standard from FWI Mixture 04	2	1.9	NA

TC	Standard from FWI Mixture 06	200	190	NA
TC	Standard from FWI Mixture 07	100	110	NA
TC	Standard from FWI Mixture 08	2	2.4	NA
TeCV	High standard from NLET	7.5	NA	7.8
TeCV	Low standard from NLET	5	NA	5.9
TeCV	Standard from FWI Mixture 09	40	40	NA
TeCV	Standard from FWI Mixture 10	4	4.1	NA
TN	High standard from NLET	7.4	NA	5.7
TN	Low standard from NLET	2.5	NA	4.7
TN	Standard from FWI Mixture 01	100	99	NA
TN	Standard from FWI Mixture 02	2	2.2	NA
TriCV	High standard from NLET	2.5	NA	2.7
TriCV	Low standard from NLET	2.5	NA	3
TriCV	Standard from FWI Mixture 09	40	54	NA
TriCV	Standard from FWI Mixture 10	4	5.8	NA
α-HCH	High standard from NLET	2.7	NA	2.6
α-HCH	Low standard from NLET	2.5	NA	2.4
α-HCH	Standard from FWI Mixture 04	1	0.8	NA
α-HCH	Standard from FWI Mixture 06	100	99	NA
α-HCH	Standard from FWI Mixture 07	100	120	NA
α-HCH	Standard from FWI Mixture 08	2	2.1	NA
β-HCH	High standard from NLET	5.2	NA	4.6
β-HCH	Low standard from NLET	2.5	NA	2.7
β-HCH	Standard from FWI Mixture 04	4	4.1	NA
β-HCH	Standard from FWI Mixture 06	400	390	NA
β-HCH	Standard from FWI Mixture 07	100	120	NA
β-HCH	Standard from FWI Mixture 08	2	2.6	NA
γ-HCH	High standard from NLET	5	NA	6.4
γ-HCH	Low standard from NLET	2.5	NA	2.8
γ-HCH	Standard from FWI Mixture 01	100	100	NA
γ-HCH	Standard from FWI Mixture 02	1.9	2	NA
γ-HCH	Standard from FWI Mixture 03	1	0.88	NA
γ-HCH	Standard from FWI Mixture 05	100	100	NA
γ-HCH	Standard from FWI Mixture 07	100	120	NA
γ-HCH	Standard from FWI Mixture 08	2	2.1	NA
δ-HCH	Standard from FWI Mixture 04	2	1.6	NA
δ-HCH	Standard from FWI Mixture 06	200	190	NA
δ-HCH	Standard from FWI Mixture 07	100	120	NA
δ-HCH	Standard from FWI Mixture 08	2	2	NA

NA = not analyzed

Table S3. Target concentrations and analytical results (in $pg \cdot \mu L^{-1}$) for PCBs in Std 05.

Chemical	Sample ID	Target Concentration	NLET result	FWI result
PCB-10/4	high standard from NLET	600	NA	310
PCB-10/4	low standard from NLET	1.2	NA	0.69
PCB-101	high standard from NLET	300	NA	300
PCB-101	low standard from NLET	0.60	NA	0.65
PCB-105	high standard from NLET	300	NA	330
PCB-105	low standard from NLET	0.59	NA	0.57
PCB-110	high standard from NLET	300	NA	320
PCB-110	low standard from NLET	0.60	NA	0.72
PCB-114	high standard from NLET	300	NA	380
PCB-114	low standard from NLET	0.59	NA	0.73

PCB-118	high standard from NLET	300	NA	260
PCB-118	low standard from NLET	0.60	NA	0.51
PCB-128/P.M.	high standard from NLET	300	NA	240
PCB-128/P.M.	low standard from NLET	0.60	NA	0.52
PCB-130/176	high standard from NLET	600	NA	530
PCB-130/176	low standard from NLET	1.2	NA	1.1
PCB-131	high standard from NLET	300	NA	290
PCB-131	low standard from NLET	0.60	NA	0.71
PCB-132	high standard from NLET	300	NA	240
PCB-132	low standard from NLET	0.59	NA	0.65
PCB-134	high standard from NLET	300	NA	260
PCB-134	low standard from NLET	0.60	NA	0.56
PCB-136	high standard from NLET	300	NA	290
PCB-136	low standard from NLET	0.59	NA	0.71
PCB-137	high standard from NLET	300	NA	260
PCB-137	low standard from NLET	0.59	NA	0.58
PCB-138	high standard from NLET	300	NA	320
PCB-138	low standard from NLET	0.60	NA	0.65
PCB-141	high standard from NLET	300	NA	280
PCB-141	low standard from NLET	0.60	NA	0.62
PCB-144/135	high standard from NLET	600	NA	250
PCB-144/135	low standard from NLET	1.2	NA	0.56
PCB-146	high standard from NLET	300	NA	290
PCB-146	low standard from NLET	0.59	NA	0.62
PCB-149	high standard from NLET	300	NA	270
PCB-149	low standard from NLET	0.60	NA	0.67
PCB-151	high standard from NLET	300	NA	270
PCB-151	low standard from NLET	0.60	NA	0.62
PCB-153	high standard from NLET	300	NA	260
PCB-153	low standard from NLET	0.60	NA	0.67
PCB-156	high standard from NLET	300	NA	320
PCB-156	low standard from NLET	0.59	NA	0.59
PCB-158	high standard from NLET	300	NA	290
PCB-158	low standard from NLET	0.60	NA	0.59
PCB-16/32	high standard from NLET	600	NA	290
PCB-16/32	low standard from NLET	1.2	NA	0.63
PCB-17	high standard from NLET	300	NA	280
PCB-17	low standard from NLET	0.60	NA	0.62
PCB-170	high standard from NLET	300	NA	240
PCB-170	low standard from NLET	0.60	NA	0.53
PCB-171	high standard from NLET	300	NA	280
PCB-171	low standard from NLET	0.60	NA	0.59
PCB-172/197	high standard from NLET	600	NA	200
PCB-172/197	low standard from NLET	1.2	NA	0.46
PCB-174	high standard from NLET	300	NA	230
PCB-174	low standard from NLET	0.60	NA	0.57
PCB-175	high standard from NLET	300	NA	300
PCB-175	low standard from NLET	0.60	NA	0.66
PCB-177	high standard from NLET	300	NA	230
PCB-177	low standard from NLET	0.60	NA	0.54
PCB-178/129	high standard from NLET	600	NA	320
PCB-178/129	low standard from NLET	1.2	NA	0.69
PCB-179	high standard from NLET	300	NA	320

PCB-179	low standard from NLET	0.60	NA	0.74
PCB-18	high standard from NLET	300	NA	260
PCB-18	low standard from NLET	0.60	NA	0.61
PCB-180	high standard from NLET	300	NA	250
PCB-180	low standard from NLET	0.60	NA	0.59
PCB-183	high standard from NLET	300	NA	300
PCB-183	low standard from NLET	0.60	NA	0.63
PCB-185	high standard from NLET	300	NA	330
PCB-185	low standard from NLET	0.60	NA	0.64
PCB-187	high standard from NLET	300	NA	320
PCB-187	low standard from NLET	0.59	NA	0.63
PCB-189	high standard from NLET	300	NA	280
PCB-189	low standard from NLET	0.60	NA	0.57
PCB-19	high standard from NLET	300	NA	270
PCB-19	low standard from NLET	0.60	NA	0.56
PCB-190	high standard from NLET	300	NA	270
PCB-190	low standard from NLET	0.60	NA	0.59
PCB-191	high standard from NLET	300	NA	300
PCB-191	low standard from NLET	0.60	NA	0.60
PCB-193	high standard from NLET	300	NA	300
PCB-193	low standard from NLET	0.60	NA	0.63
PCB-194	high standard from NLET	300	NA	290
PCB-194	low standard from NLET	0.60	NA	0.60
PCB-195	high standard from NLET	300	NA	370
PCB-195	low standard from NLET	0.60	NA	0.70
PCB-196/203	high standard from NLET	600	NA	380
PCB-196/203	low standard from NLET	1.2	NA	0.71
PCB-198	high standard from NLET	300	NA	300
PCB-198	low standard from NLET	0.60	NA	0.67
PCB-199	high standard from NLET	300	NA	250
PCB-199	low standard from NLET	0.60	NA	0.58
PCB-200	high standard from NLET	300	NA	250
PCB-200	low standard from NLET	0.60	NA	0.59
PCB-201/157	high standard from NLET	600	NA	350
PCB-201/157	low standard from NLET	1.2	NA	0.60
PCB-205	high standard from NLET	300	NA	280
PCB-205	low standard from NLET	0.60	NA	0.61
PCB-206	high standard from NLET	300	NA	290
PCB-206	low standard from NLET	0.59	NA	0.61
PCB-207	high standard from NLET	300	NA	280
PCB-207	low standard from NLET	0.60	NA	0.62
PCB-208	high standard from NLET	300	NA	270
PCB-208	low standard from NLET	0.60	NA	0.64
PCB-209	high standard from NLET	300	NA	290
PCB-209	low standard from NLET	0.60	NA	0.69
PCB-22	high standard from NLET	300	NA	270
PCB-22	low standard from NLET	0.60	NA	0.55
PCB-24	high standard from NLET	300	NA	250
PCB-24	low standard from NLET	0.60	NA	0.54
PCB-25	high standard from NLET	300	NA	260
PCB-25	low standard from NLET	0.60	NA	0.53
PCB-26	high standard from NLET	300	NA	260
PCB-26	low standard from NLET	0.60	NA	0.64

PCB-28	high standard from NLET	300	NA	280
PCB-28	low standard from NLET	0.60	NA	0.56
PCB-31	high standard from NLET	300	NA	270
PCB-31	low standard from NLET	0.60	NA	0.51
PCB-33	high standard from NLET	300	NA	300
PCB-33	low standard from NLET	0.60	NA	0.60
PCB-40	high standard from NLET	300	NA	290
PCB-40	low standard from NLET	0.60	NA	0.67
PCB-41/71	high standard from NLET	600	NA	260
PCB-41/71	low standard from NLET	1.2	NA	0.58
PCB-42	high standard from NLET	300	NA	290
PCB-42	low standard from NLET	0.60	NA	0.62
PCB-44	high standard from NLET	300	NA	260
PCB-44	low standard from NLET	0.60	NA	0.61
PCB-45	high standard from NLET	300	NA	220
PCB-45	low standard from NLET	0.60	NA	0.57
PCB-46	high standard from NLET	300	NA	240
PCB-46	low standard from NLET	0.60	NA	0.63
PCB-47	high standard from NLET	300	NA	300
PCB-47	low standard from NLET	0.60	NA	0.68
PCB-48	high standard from NLET	300	NA	290
PCB-48	low standard from NLET	0.60	NA	0.66
PCB-49	high standard from NLET	300	NA	310
PCB-49	low standard from NLET	0.59	NA	0.69
PCB-5	high standard from NLET	300	NA	280
PCB-5	low standard from NLET	0.59	NA	0.70
PCB-52	high standard from NLET	300	NA	260
PCB-52	low standard from NLET	0.59	NA	0.63
PCB-6	high standard from NLET	300	NA	250
PCB-6	low standard from NLET	0.60	NA	0.58
PCB-60/56	high standard from NLET	600	NA	330
PCB-60/56	low standard from NLET	1.2	NA	0.60
PCB-64	high standard from NLET	300	NA	330
PCB-64	low standard from NLET	0.60	NA	0.59
PCB-66	high standard from NLET	300	NA	310
PCB-66	low standard from NLET	0.60	NA	0.67
PCB-7	high standard from NLET	300	NA	300
PCB-7	low standard from NLET	0.60	NA	0.63
PCB-70	high standard from NLET	300	NA	280
PCB-70	low standard from NLET	0.60	NA	0.56
PCB-74	high standard from NLET	300	NA	280
PCB-74	low standard from NLET	0.60	NA	0.60
PCB-8	high standard from NLET	300	NA	220
PCB-8	low standard from NLET	0.59	NA	0.58
PCB-82	high standard from NLET	300	NA	260
PCB-82	low standard from NLET	0.60	NA	0.59
PCB-83	high standard from NLET	300	NA	260
PCB-83	low standard from NLET	0.60	NA	0.58
PCB-84	high standard from NLET	300	NA	230
PCB-84	low standard from NLET	0.60	NA	0.59
PCB-85	high standard from NLET	300	NA	310
PCB-85	low standard from NLET	0.59	NA	0.67
PCB-87	high standard from NLET	300	NA	270

PCB-87	low standard from NLET	0.60	NA	0.53
PCB-91	high standard from NLET	300	NA	290
PCB-91	low standard from NLET	0.60	NA	0.66
PCB-97	high standard from NLET	300	NA	240
PCB-97	low standard from NLET	0.59	NA	0.57
PCB-99	high standard from NLET	300	NA	230
PCB-99	low standard from NLET	0.60	NA	0.58
PCB-1	FWI standard Mixture 1	80	77	NA
PCB-1	FWI standard Mixture 2	2.0	2.2	NA
PCB-101	FWI standard Mixture 1	80	88	NA
PCB-101	FWI standard Mixture 2	2.0	2.5	NA
PCB-105	FWI standard Mixture 1	80	97	NA
PCB-105	FWI standard Mixture 2	2.0	2.4	NA
PCB-110	FWI standard Mixture 3	80	72	NA
PCB-110	FWI standard Mixture 4	2.0	1.9	NA
PCB-114	FWI standard Mixture 1	80	93	NA
PCB-114	FWI standard Mixture 2	2.0	2.4	NA
PCB-118	FWI standard Mixture 1	80	99	NA
PCB-118	FWI standard Mixture 2	2.0	2.3	NA
PCB-128	FWI standard Mixture 1	80	80	NA
PCB-128	FWI standard Mixture 2	2.0	2.1	NA
PCB-129	FWI standard Mixture 1	80	73	NA
PCB-129	FWI standard Mixture 2	2.0	1.9	NA
PCB-130	FWI standard Mixture 3	80	110	NA
PCB-130	FWI standard Mixture 4	2.0	2.8	NA
PCB-132	FWI standard Mixture 3	80	73	NA
PCB-132	FWI standard Mixture 4	2.0	2.2	NA
PCB-133	FWI standard Mixture 1	80	81	NA
PCB-133	FWI standard Mixture 2	2.0	2.3	NA
PCB-134/131	FWI standard Mixture 1	160	80	NA
PCB-134/131	FWI standard Mixture 2	4.0	2.0	NA
PCB-135/144	FWI standard Mixture 1	80	100	NA
PCB-135/144	FWI standard Mixture 2	2.0	2.6	NA
PCB-136	FWI standard Mixture 1	80	83	NA
PCB-136	FWI standard Mixture 2	2.0	2.5	NA
PCB-137	FWI standard Mixture 1	80	76	NA
PCB-137	FWI standard Mixture 2	2.0	2.3	NA
PCB-141	FWI standard Mixture 1	80	76	NA
PCB-141	FWI standard Mixture 2	2.0	1.8	NA
PCB-149	FWI standard Mixture 1	80	81	NA
PCB-149	FWI standard Mixture 2	2.0	2.5	NA
PCB-151	FWI standard Mixture 1	80	93	NA
PCB-151	FWI standard Mixture 2	2.0	2.2	NA
PCB-153	FWI standard Mixture 1	80	81	NA
PCB-153	FWI standard Mixture 2	2.0	2.3	NA
PCB-156	FWI standard Mixture 3	80	91	NA
PCB-156	FWI standard Mixture 4	2.0	2.4	NA
PCB-157/200	FWI standard Mixture 1	80	170	NA
PCB-157/200	FWI standard Mixture 2	2.0	4.3	NA
PCB-158	FWI standard Mixture 1	80	100	NA
PCB-158	FWI standard Mixture 2	2.0	2.4	NA
PCB-16/32	FWI standard Mixture 1	80	75	NA
PCB-16/32	FWI standard Mixture 2	2.0	2.3	NA

PCB-163/138	FWI standard Mixture 1	80	79	NA
PCB-163/138	FWI standard Mixture 2	2.0	2.4	NA
PCB-170/190	FWI standard Mixture 1	160	180	NA
PCB-170/190	FWI standard Mixture 2	4.0	4.5	NA
PCB-172	FWI standard Mixture 3	80	110	NA
PCB-172	FWI standard Mixture 4	2.0	2.9	NA
PCB-174	FWI standard Mixture 3	80	110	NA
PCB-174	FWI standard Mixture 4	2.0	2.8	NA
PCB-178	FWI standard Mixture 3	80	110	NA
PCB-178	FWI standard Mixture 4	2.0	3.3	NA
PCB-18	FWI standard Mixture 1	80	83	NA
PCB-18	FWI standard Mixture 2	2.0	2.5	NA
PCB-180	FWI standard Mixture 1	80	86	NA
PCB-180	FWI standard Mixture 2	2.0	2.3	NA
PCB-182/187	FWI standard Mixture 3	80	91	NA
PCB-182/187	FWI standard Mixture 4	2.0	2.4	NA
PCB-183	FWI standard Mixture 1	80	79	NA
PCB-183	FWI standard Mixture 2	2.0	2.1	NA
PCB-185	FWI standard Mixture 1	80	76	NA
PCB-185	FWI standard Mixture 2	2.0	1.9	NA
PCB-189	FWI standard Mixture 1	80	86	NA
PCB-189	FWI standard Mixture 2	2.0	2.2	NA
PCB-19	FWI standard Mixture 1	80	84	NA
PCB-19	FWI standard Mixture 2	2.0	2.9	NA
PCB-191	FWI standard Mixture 1	80	84	NA
PCB-191	FWI standard Mixture 2	2.0	2.2	NA
PCB-193	FWI standard Mixture 1	80	89	NA
PCB-193	FWI standard Mixture 2	2.0	2.3	NA
PCB-194	FWI standard Mixture 1	80	84	NA
PCB-194	FWI standard Mixture 2	2.0	2.3	NA
PCB-198	FWI standard Mixture 3	80	84	NA
PCB-198	FWI standard Mixture 4	2.0	2.2	NA
PCB-199	FWI standard Mixture 1	80	87	NA
PCB-199	FWI standard Mixture 2	2.0	2.3	NA
PCB-201	FWI standard Mixture 3	80	99	NA
PCB-201	FWI standard Mixture 4	2.0	2.7	NA
PCB-202/171	FWI standard Mixture 1	80	99	NA
PCB-202/171	FWI standard Mixture 2	2.0	2.6	NA
PCB-203/196	FWI standard Mixture 1	80	88	NA
PCB-203/196	FWI standard Mixture 2	2.0	2.4	NA
PCB-205	FWI standard Mixture 3	80	89	NA
PCB-205	FWI standard Mixture 4	2.0	2.4	NA
PCB-206	FWI standard Mixture 1	80	78	NA
PCB-206	FWI standard Mixture 2	2.0	2.1	NA
PCB-207	FWI standard Mixture 1	80	84	NA
PCB-207	FWI standard Mixture 2	2.0	2.3	NA
PCB-209	FWI standard Mixture 1	80	77	NA
PCB-209	FWI standard Mixture 2	2.0	2.3	NA
PCB-22	FWI standard Mixture 1	80	98	NA
PCB-22	FWI standard Mixture 2	2.0	2.5	NA
PCB-24/27	FWI standard Mixture 1	80	100	NA
PCB-24/27	FWI standard Mixture 2	2.0	2.6	NA
PCB-24/27	FWI standard Mixture 3	80	65	NA

PCB-24/27	FWI standard Mixture 4	2.0	1.7	NA
PCB-25	FWI standard Mixture 1	80	93	NA
PCB-25	FWI standard Mixture 2	2.0	2.5	NA
PCB-26	FWI standard Mixture 1	80	84	NA
PCB-26	FWI standard Mixture 2	2.0	2.2	NA
PCB-3	FWI standard Mixture 1	80	84	NA
PCB-3	FWI standard Mixture 2	2.0	1.4	NA
PCB-31/28	FWI standard Mixture 1	160	170	NA
PCB-31/28	FWI standard Mixture 2	4.0	4.4	NA
PCB-33/20	FWI standard Mixture 1	80	67	NA
PCB-33/20	FWI standard Mixture 2	2.0	1.9	NA
PCB-4/10	FWI standard Mixture 1	80	150	NA
PCB-4/10	FWI standard Mixture 2	2.0	4.5	NA
PCB-40	FWI standard Mixture 1	80	82	NA
PCB-40	FWI standard Mixture 2	2.0	2.3	NA
PCB-42	FWI standard Mixture 1	80	140	NA
PCB-42	FWI standard Mixture 2	2.0	3.9	NA
PCB-44	FWI standard Mixture 1	80	79	NA
PCB-44	FWI standard Mixture 2	2.0	2.2	NA
PCB-45	FWI standard Mixture 3	80	100	NA
PCB-45	FWI standard Mixture 4	2.0	2.8	NA
PCB-46	FWI standard Mixture 3	80	95	NA
PCB-46	FWI standard Mixture 4	2.0	2.7	NA
PCB-47/48	FWI standard Mixture 1	80	93	NA
PCB-47/48	FWI standard Mixture 2	2.0	2.6	NA
PCB-49	FWI standard Mixture 1	80	94	NA
PCB-49	FWI standard Mixture 2	2.0	2.3	NA
PCB-52	FWI standard Mixture 1	80	83	NA
PCB-52	FWI standard Mixture 2	2.0	2.5	NA
PCB-56/60	FWI standard Mixture 1	80	100	NA
PCB-56/60	FWI standard Mixture 2	2.0	2.2	NA
PCB-6	FWI standard Mixture 1	80	85	NA
PCB-6	FWI standard Mixture 2	2.0	2.7	NA
PCB-66	FWI standard Mixture 1	80	90	NA
PCB-66	FWI standard Mixture 2	2.0	1.9	NA
PCB-7/9	FWI standard Mixture 1	80	110	NA
PCB-7/9	FWI standard Mixture 2	2.0	3.0	NA
PCB-70/76/98	FWI standard Mixture 1	80	87	NA
PCB-70/76/98	FWI standard Mixture 2	2.0	2.3	NA
PCB-71/41/64	FWI standard Mixture 3	80	110	NA
PCB-71/41/64	FWI standard Mixture 4	2.0	2.7	NA
PCB-74	FWI standard Mixture 3	80	87	NA
PCB-74	FWI standard Mixture 4	2.0	2.2	NA
PCB-8/5	FWI standard Mixture 1	80	74	NA
PCB-8/5	FWI standard Mixture 2	2.0	2.3	NA
PCB-8/5	FWI standard Mixture 3	80	110	NA
PCB-8/5	FWI standard Mixture 4	2.0	2.9	NA
PCB-81/87	FWI standard Mixture 1	80	100	NA
PCB-81/87	FWI standard Mixture 2	2.0	2.7	NA
PCB-82	FWI standard Mixture 1	80	80	NA
PCB-82	FWI standard Mixture 2	2.0	2.2	NA
PCB-84	FWI standard Mixture 3	80	120	NA
PCB-84	FWI standard Mixture 4	2.0	3.3	NA

PCB-95	FWI standard Mixture 3	80	73	NA
PCB-95	FWI standard Mixture 4	2.0	2.0	NA
PCB-97	FWI standard Mixture 1	80	88	NA
PCB-97	FWI standard Mixture 2	2.0	2.8	NA
PCB-99	FWI standard Mixture 3	80	100	NA
PCB-99	FWI standard Mixture 4	2.0	2.8	NA

NA = not analyzed

Table S4. Target concentrations and analytical results (in $pg \cdot \mu L^{-1}$) for PAHs in Std 05.

Chemical	Sample ID	Target concentration	NLET result	FWI result
1-M-Naph	High standard from FWI	790	380	NA
1-M-Naph	Low Standard from FWI	18	10	NA
2-M-Naph	Low Standard from FWI	17	15	NA
2-M-Naph	High standard from FWI	790	520	NA
AcenE	High standard from FWI	800	480	NA
AcenE	Low Standard from FWI	19	14	NA
AcenY	High standard from FWI	800	530	NA
AcenY	Low Standard from FWI	20	14	NA
Anth	High standard from FWI	790	590	NA
Anth	Low Standard from FWI	16	19	NA
B[a]A	High standard from FWI	800	580	NA
B[a]A	Low Standard from FWI	26	15	NA
B[a]P	High standard from FWI	780	1000	NA
B[a]P	Low Standard from FWI	19	26	NA
B[b]F	High standard from FWI	860	1100	NA
B[b]F	Low Standard from FWI	23	26	NA
B[ghi]P	High standard from FWI	780	970	NA
B[ghi]P	Low Standard from FWI	19	26	NA
B[k]F	High standard from FWI	800	980	NA
B[k]F	Low Standard from FWI	14	26	NA
Chry	Low Standard from FWI	15	26	NA
Chry	High standard from FWI	790	950	NA
D[ah]A	Low Standard from FWI	23	26	NA
D[ah]A	High standard from FWI	810	970	NA
FluoA	Low Standard from FWI	19	15	NA
FluoA	High standard from FWI	790	540	NA
FluoE	High standard from FWI	780	510	NA
FluoE	Low Standard from FWI	17	14	NA
I[123,cd]P	High standard from FWI	820	1000	NA
I[123,cd]P	Low Standard from FWI	27	25	NA
Phen	High standard from FWI	790	550	NA
Phen	Low Standard from FWI	21	17	NA
Pyr	High standard from FWI	790	520	NA
Pyr	Low Standard from FWI	19	15	NA
1-M-Naph	Low Standard from NLET	10	NA	7.7
1-M-Naph	High standard from NLET	2000	NA	2400
2-M-Naph	Low Standard from NLET	10	NA	4.8
2-M-Naph	High standard from NLET	2000	NA	1500
AcenE	Low Standard from NLET	10	NA	6.1
AcenE	High standard from NLET	2000	NA	1800
AcenY	Low Standard from NLET	10	NA	6.6
AcenY	High standard from NLET	2000	NA	2200
Anth	Low Standard from NLET	10	NA	3.9

Anth	High standard from NLET	2000	NA	1900
B[a]A	Low Standard from NLET	10	NA	7.9
B[a]A	High standard from NLET	2000	NA	2600
B[a]P	Low Standard from NLET	10	NA	5.6
B[a]P	High standard from NLET	2000	NA	1100
B[b]F	Low Standard from NLET	10	NA	7.5
B[b]F	High standard from NLET	2100	NA	2500
B[e]P	Low Standard from NLET	10	NA	5.7
B[e]P	High standard from NLET	2000	NA	2300
B[ghi]P	Low Standard from NLET	15	NA	9.1
B[ghi]P	High standard from NLET	3100	NA	1900
B[k]F	Low Standard from NLET	10	NA	4.5
B[k]F	High standard from NLET	2000	NA	2500
Chry	Low Standard from NLET	5.0	NA	1.9
Chry	High standard from NLET	990	NA	980
D[ah]A	Low Standard from NLET	16	NA	11
D[ah]A	High standard from NLET	3100	NA	2600
Diben	Low Standard from NLET	15	NA	7.0
Diben	High standard from NLET	3000	NA	2300
FluoA	Low Standard from NLET	5.1	NA	2.8
FluoA	High standard from NLET	1000	NA	890
FluoE	Low Standard from NLET	10	NA	4.6
FluoE	High standard from NLET	2000	NA	1800
I[123,cd]P	Low Standard from NLET	15	NA	15
I[123,cd]P	High standard from NLET	3000	NA	2500
Naph	Low Standard from NLET	10	NA	5.7
Naph	High standard from NLET	2000	NA	1500
Pery	Low Standard from NLET	15	NA	8.5
Pery	High standard from NLET	3000	NA	2700
Phen	Low Standard from NLET	10	NA	6.3
Phen	High standard from NLET	2000	NA	1800
Pyr	Low Standard from NLET	5.1	NA	2.9
Pyr	High standard from NLET	1000	NA	760
Rete	Low Standard from NLET	15	NA	1.3
Rete	High standard from NLET	3100	NA	560

NA = not analyzed

Table S5. Target concentrations and analytical results (in $pg \cdot \mu L^{-1}$) for OCPs in Std 08.

Chemical	Sample ID	Target Concentration	NLET result	FWI result
Aldrin	standard 1	52	56	53
Aldrin	standard 2	5.2	5.2	4.5
CC	standard 1	51	58	59
CC	standard 2	5.1	5.6	5.1
CN	standard 1	50	27	30
CN	standard 2	5	2.9	2.6
CN/o,p'-DDT	standard 1	100	78	NA
CN/o,p'-DDT	standard 2	10	7.3	NA
Diel	standard 1	50	55	54
Diel	standard 2	5	5.2	5
Diel/p,p'-DDE	standard 1	100	110	100
Diel/p,p'-DDE	standard 2	10	10	9.7
EDK	standard 1	NA	14	14
EDK	standard 2	NA	1.6	1.2

Endos I	standard 1	51	61	53
Endos I	standard 2	5.1	6	4.6
Endos II	standard 1	51	58	47
Endos II	standard 2	5.1	5.7	4.2
Endrin	standard 1	51	58	240
Endrin	standard 2	5.1	5.3	34
HCB	standard 1	50	61	53
HCB	standard 2	5	6.4	4.6
HCBD	standard 1	52	56	NA
HCBD	standard 2	5.2	5.6	NA
HEPT	standard 1	51	57	50
HEPT	standard 2	5.1	5.1	4.7
HEPX	standard 1	50	61	53
HEPX	standard 2	5	6	4.7
o,p'-DDD	standard 1	50	59	42
o,p'-DDD	standard 2	5	6	4
o,p'-DDE	standard 1	50	54	38
o,p'-DDE	standard 2	5	5.4	3.9
o,p'-DDT	standard 1	52	52	NA
o,p'-DDT	standard 2	5.2	4.4	NA
OCS	standard 1	50	59	45
OCS	standard 2	5	5.8	3.9
OXY	standard 1	50	52	44
OXY	standard 2	5	5.4	3.9
p,p'-DDD	standard 1	50	70	5.2
p,p'-DDD	standard 2	5	6.5	5.8
p,p'-DDE	standard 1	50	54	48
p,p'-DDE	standard 2	5	4.9	4.6
p,p'-DDT	standard 1	50	55	NA
p,p'-DDT	standard 2	5	4.1	NA
PCA	standard 1	50	55	58
PCA	standard 2	5	5.7	4.7
PCA/TeCV	standard 1	100	110	NA
PCA/TeCV	standard 2	10	12	NA
PeCB	standard 1	NA	0.52	NA
PeCB	standard 2	NA	0.055	NA
TC	standard 1	51	59	58
TC	standard 2	5.1	5.5	5
TeCV	standard 1	50	56	NA
TeCV	standard 2	5	5.9	NA
TN	standard 1	51	57	39
TN	standard 2	5.1	5.6	3.3
TriCV	standard 1	51	59	NA
TriCV	standard 2	5.1	6.5	NA
α-HCH	standard 1	50	58	56
α-HCH	standard 2	5	5	4.6
β-HCH	standard 1	50	53	43
β-HCH	standard 2	5	5.3	3.8
γ-HCH	standard 1	50	58	58
γ-HCH	standard 2	5	5.2	4.8

NA = not analyzed

Table S6. Target concentrations and analytical results (in $pg \cdot \mu L^{-1}$) for PCBs in Std 08.

Chemical	Sample ID	Target Concentration	NLET result	FWI result
PCB-100	standard 1	50	53	NA
PCB-100	standard 2	5.0	6.1	NA
PCB-101	standard 1	50	NA	98
PCB-101	standard 2	5.0	NA	9.2
PCB-105	standard 1	50	49	45
PCB-105	standard 2	5.0	5.3	4.0
PCB-105/132/153	standard 1	150	160	130
PCB-105/132/153	standard 2	15	17	12
PCB-110	standard 1	50	NA	58
PCB-110	standard 2	5.0	NA	5.5
PCB-114	standard 1	50	63	50
PCB-114	standard 2	5.0	6.6	5.0
PCB-118	standard 1	50	53	52
PCB-118	standard 2	5.0	6.0	4.2
PCB-119	standard 1	50	54	NA
PCB-119	standard 2	5.0	6.0	NA
PCB-123/149	standard 1	100	99	NA
PCB-123/149	standard 2	10	11	NA
PCB-128	standard 1	50	49	38
PCB-128	standard 2	5.0	5.3	3.7
PCB-128/167	standard 1	100	100	NA
PCB-128/167	standard 2	10	11	NA
PCB-131	standard 1	50	50	36
PCB-131	standard 2	5.0	5.6	3.3
PCB-132	standard 1	50	56	42
PCB-132	standard 2	5.0	6.0	4.0
PCB-132/153	standard 1	100	110	82
PCB-132/153	standard 2	10	12	7.8
PCB-135/144	standard 1	100	100	59
PCB-135/144	standard 2	10	11	6.0
PCB-138	standard 1	50	NA	130
PCB-138	standard 2	5.0	NA	12
PCB-149	standard 1	50	NA	64
PCB-149	standard 2	5.0	NA	6.1
PCB-15/17	standard 1	100	98	NA
PCB-15/17	standard 2	10	12	NA
PCB-153	standard 1	50	53	40
PCB-153	standard 2	5.0	6.1	3.8
PCB-156	standard 1	50	54	NA
PCB-156	standard 2	5.0	5.7	NA
PCB-156/171	standard 1	100	NA	120
PCB-156/171	standard 2	10	NA	10
PCB-16/32	standard 1	100	98	120
PCB-16/32	standard 2	10	11	11
PCB-167	standard 1	50	53	NA
PCB-167	standard 2	5.0	6.0	NA
PCB-169	standard 1	50	56	NA
PCB-169	standard 2	5.0	6.4	NA
PCB-17	standard 1	50	NA	66
PCB-17	standard 2	5.0	NA	6.2
PCB-170	standard 1	50	NA	36

PCB-170	standard 2	5.0	NA	3.3
PCB-170/190	standard 1	100	81	72
PCB-170/190	standard 2	10	8.8	6.8
PCB-171/202	standard 1	100	100	NA
PCB-171/202	standard 2	10	11	NA
PCB-172	standard 1	50	51	NA
PCB-172	standard 2	5.0	5.5	NA
PCB-174	standard 1	50	51	97
PCB-174	standard 2	5.0	5.7	8.8
PCB-18	standard 1	51	50	42
PCB-18	standard 2	5.1	6.0	4.1
PCB-180	standard 1	50	54	44
PCB-180	standard 2	5.0	5.9	3.9
PCB-19	standard 1	50	52	52
PCB-19	standard 2	5.0	6.5	5.3
PCB-190	standard 1	50	NA	36
PCB-190	standard 2	5.0	NA	3.5
PCB-194	standard 1	50	47	40
PCB-194	standard 2	5.0	5.3	3.7
PCB-199	standard 1	50	52	68
PCB-199	standard 2	5.0	5.6	6.3
PCB-200	standard 1	50	NA	37
PCB-200	standard 2	5.0	NA	3.3
PCB-205	standard 1	50	48	45
PCB-205	standard 2	5.0	5.6	4.1
PCB-206	standard 1	50	48	41
PCB-206	standard 2	5.0	5.7	3.6
PCB-207	standard 1	50	52	44
PCB-207	standard 2	5.0	5.8	4.2
PCB-22	standard 1	50	51	50
PCB-22	standard 2	5.0	5.7	5.2
PCB-26	standard 1	50	53	45
PCB-26	standard 2	5.0	6.1	4.5
PCB-28	standard 1	50	69	47
PCB-28	standard 2	5.0	7.6	4.2
PCB-28/31	standard 1	100	110	95
PCB-28/31	standard 2	10	12	8.7
PCB-31	standard 1	50	42	48
PCB-31	standard 2	5.0	4.7	4.5
PCB-33	standard 1	50	50	64
PCB-33	standard 2	5.0	5.7	6.3
PCB-33/53	standard 1	100	98	NA
PCB-33/53	standard 2	10	11	NA
PCB-37/42	standard 1	100	100	NA
PCB-37/42	standard 2	10	12	NA
PCB-4	standard 1	50	NA	55
PCB-4	standard 2	5.0	NA	5.3
PCB-4/10	standard 1	100	99	NA
PCB-4/10	standard 2	10	13	NA
PCB-41/64/71	standard 1	150	150	NA
PCB-41/64/71	standard 2	15	16	NA
PCB-41/71	standard 1	100	NA	68
PCB-41/71	standard 2	10	NA	6.5

PCB-42	standard 1	50	NA	47
PCB-42	standard 2	5.0	NA	4.6
PCB-44	standard 1	50	49	44
PCB-44	standard 2	5.0	5.7	4.3
PCB-45	standard 1	50	50	78
PCB-45	standard 2	5.0	5.9	7.8
PCB-45/95	standard 1	100	89	130
PCB-45/95	standard 2	10	10	13
PCB-47	standard 1	50	NA	47
PCB-47	standard 2	5.0	NA	4.6
PCB-47/48	standard 1	100	100	100
PCB-47/48	standard 2	10	12	10
PCB-47/49	standard 1	100	NA	90
PCB-47/49	standard 2	10	NA	8.8
PCB-48	standard 1	50	NA	57
PCB-48	standard 2	5.0	NA	5.4
PCB-49	standard 1	50	44	43
PCB-49	standard 2	5.0	5.1	4.2
PCB-5	standard 1	50	NA	54
PCB-5	standard 2	5.0	NA	5.4
PCB-5/8	standard 1	100	100	92
PCB-5/8	standard 2	10	12	9.3
PCB-52	standard 1	50	54	48
PCB-52	standard 2	5.0	6.4	4.9
PCB-53	standard 1	50	48	NA
PCB-53	standard 2	5.0	5.7	NA
PCB-56/60	standard 1	100	100	170
PCB-56/60	standard 2	10	11	14
PCB-6	standard 1	50	44	40
PCB-6	standard 2	5.0	5.4	3.7
PCB-64	standard 1	50	NA	210
PCB-64	standard 2	5.0	NA	19
PCB-66	standard 1	50	66	47
PCB-66	standard 2	5.0	7.3	4.6
PCB-66/91	standard 1	100	120	97
PCB-66/91	standard 2	10	13	9.6
PCB-66/95	standard 1	100	110	100
PCB-66/95	standard 2	10	12	9.6
PCB-7	standard 1	50	NA	60
PCB-7	standard 2	5.0	NA	7.7
PCB-7/9	standard 1	100	100	NA
PCB-7/9	standard 2	10	12	NA
PCB-70	standard 1	50	NA	54
PCB-70	standard 2	5.0	NA	5.2
PCB-70/76	standard 1	100	110	NA
PCB-70/76	standard 2	10	12	NA
PCB-74	standard 1	50	57	56
PCB-74	standard 2	5.0	6.4	5.4
PCB-77/110	standard 1	100	110	NA
PCB-77/110	standard 2	10	12	NA
PCB-8	standard 1	51	NA	38
PCB-8	standard 2	5.1	NA	3.9
PCB-81	standard 1	50	52	NA

PCB-81	standard 2	5.0	5.7	NA
PCB-83	standard 1	50	53	100
PCB-83	standard 2	5.0	6.1	9.8
PCB-83/119	standard 1	100	110	NA
PCB-83/119	standard 2	10	12	NA
PCB-83/99	standard 1	100	110	190
PCB-83/99	standard 2	10	13	18
PCB-84	standard 1	50	50	72
PCB-84	standard 2	5.0	5.8	8.0
PCB-84/92	standard 1	100	110	NA
PCB-84/92	standard 2	10	12	NA
PCB-85	standard 1	50	49	44
PCB-85	standard 2	5.0	5.3	4.1
PCB-87	standard 1	50	NA	59
PCB-87	standard 2	5.0	NA	5.6
PCB-89/101	standard 1	100	100	NA
PCB-89/101	standard 2	10	11	NA
PCB-91	standard 1	50	53	50
PCB-91	standard 2	5.0	6.2	5.0
PCB-92	standard 1	50	55	NA
PCB-92	standard 2	5.0	6.3	NA
PCB-95	standard 1	50	39	54
PCB-95	standard 2	5.0	4.6	5.0
PCB-97	standard 1	50	NA	41
PCB-97	standard 2	5.0	NA	3.9
PCB-99	standard 1	50	57	92
PCB-99	standard 2	5.0	6.5	8.7

NA = not analyzed

Table S7. Target concentrations and analytical results (in $pg \cdot \mu L^{-1}$) for OCPs in Blind 05.

Chemical	Sample ID	Target Concentration	NLET result	FWI result
Endos I	blind 1	79	71	34
Endos I	blind 2	53	45	31
Endos I	blind 3	26	26	17
Endrin	blind 1	0.89	1.2	1.6
Endrin	blind 2	0.59	0.86	1.5
Endrin	blind 3	0.3	0.44	0.69
HCB	blind 1	1100	680	190
HCB	blind 2	720	550	160
HCB	blind 3	360	280	110
PCA	blind 1	200	170	68
PCA	blind 2	130	120	52
PCA	blind 3	67	67	28
α-HCH	blind 1	230	170	74
α-HCH	blind 2	150	110	59
α-HCH	blind 3	75	62	30
β-HCH	blind 1	2.1	4.7	4.3
β-HCH	blind 2	1.4	3.3	3.3
β-HCH	blind 3	0.68	1.9	1.8
γ-HCH	blind 1	78	68	40
γ-HCH	blind 2	52	46	31
γ-HCH	blind 3	26	26	16

Table S8. Target concentrations and analytical results (in pg·µL^{-1}) for PCBs in Blind 05.

Chemical	Sample ID	Target concentration	NLET result	FWI result
PCB-118	blind 1	3.9	3.2	3.4
PCB-118	blind 2	2.6	2.6	2.8
PCB-118	blind 3	1.3	1.2	1.2
PCB-138	blind 1	1.8	NA	2.5
PCB-138	blind 2	1.2	NA	2.1
PCB-138	blind 3	0.59	NA	0.92
PCB-153	blind 1	3.3	3.2	4.3
PCB-153	blind 2	2.2	2.7	3.6
PCB-153	blind 3	1.1	1.3	1.6
PCB-18	blind 1	12	12	11
PCB-18	blind 2	7.7	11	9.6
PCB-18	blind 3	3.9	5.4	4.4
PCB-180	blind 1	1.0	1.8	2.8
PCB-180	blind 2	0.68	1.5	2.2
PCB-180	blind 3	0.34	0.66	0.94
PCB-28	blind 1	8.1	9.3	7.3
PCB-28	blind 2	5.4	7.5	6.4
PCB-28	blind 3	2.7	3.8	2.9
PCB-3	blind 1	1.3	BDL	BDL
PCB-3	blind 2	0.85	BDL	BDL
PCB-3	blind 3	0.43	BDL	BDL
PCB-31	blind 1	21	18	18
PCB-31	blind 2	14	15	15
PCB-31	blind 3	6.9	7.5	7.1
PCB-52	blind 1	14	13	12
PCB-52	blind 2	9.3	11	10
PCB-52	blind 3	4.7	5.5	4.5
PCB-66	blind 1	1.7	0.68	1.3
PCB-66	blind 2	1.1	0.46	1.1
PCB-66	blind 3	0.56	0.20	BDL
PCB-87	blind 1	2.9	2.4	2.9
PCB-87	blind 2	2.0	2.0	2.4
PCB-87	blind 3	0.98	1.0	1.1

NA = not analyzed; BDL = below detection limit

Table S9. Target concentrations and analytical results (in pg·µL^{-1}) for OCPs in Blind 08.

Chemical	Sample ID	Target Concentration	NLET result	FWI result
1,3-DBB	sample 2	NA	7.9	NA
Aldrin	sample 2	1.5	1.3	1.1
CC	sample 2	0.76	0.68	0.82
Diel	sample 2	0.75	0.8	1.1
Diel/p,p'-DDE	sample 2	1.5	1.6	2.1
EDK	sample 2	1.5	NA	0.59
Endos I	sample 2	0.75	0.75	0.87
Endos II	sample 2	1.5	1.5	0.074
Endrin	sample 2	0.76	NA	3.5
HEPT	sample 2	0.75	0.7	2.1
HEPX	sample 2	0.75	0.69	1.2
MTC	sample 2	NA	13	80
p,p'-DDD	sample 2	1.5	1.5	2.2
p,p'-DDE	sample 2	0.76	0.82	1

p,p'-DDT	sample 2	1.5	1.9	NA
TC	sample 2	0.75	0.59	1
α-HCH	sample 2	0.38	0.28	0.38
β-HCH	sample 2	0.76	0.77	0.98
γ-HCH	sample 2	0.37	0.34	0.56
δ-HCH	sample 2	0.76	NA	0.63

NA = not analyzed

Table S10. Target concentrations and analytical results (in $pg \cdot \mu L^{-1}$) for PCBs in Blind 08.

Chemical	Sample ID	Target concentration	NLET result	FWI result
PCB-101	sample 2	0.45	NA	0.39
PCB-105	sample 2	0.20	0.22	0.19
PCB-105/141	sample 2	0.34	0.40	0.29
PCB-114	sample 2	0.32	0.34	0.33
PCB-118	sample 2	0.20	0.27	0.10
PCB-128	sample 2	0.25	0.26	0.17
PCB-137	sample 2	0.37	0.35	NA
PCB-138	sample 2	0.21	NA	0.23
PCB-141	sample 2	0.14	0.17	0.095
PCB-151	sample 2	0.25	0.33	0.17
PCB-156	sample 2	0.075	0.071	NA
PCB-156/171	sample 2	0.34	NA	1.1
PCB-159/182/187	sample 2	0.41	0.42	NA
PCB-170	sample 2	0.15	NA	0.12
PCB-171/202	sample 2	0.44	0.52	NA
PCB-153	sample 2	0.64	0.74	0.55
PCB-180	sample 2	0.14	0.18	0.11
PCB-183	sample 2	0.33	0.35	0.27
PCB-185	sample 2	0.18	NA	0.11
PCB-187	sample 2	0.16	NA	0.29
PCB-189	sample 2	0.24	0.28	0.15
PCB-191	sample 2	0.25	0.27	0.15
PCB-194	sample 2	0.12	0.15	0.083
PCB-195	sample 2	0.13	0.29	0.092
PCB-195/207	sample 2	0.32	0.51	NA
PCB-196/203	sample 2	0.42	0.50	0.25
PCB-199	sample 2	0.42	0.0	0.54
PCB-201	sample 2	0.35	0.32	NA
PCB-205	sample 2	0.16	0.20	0.13
PCB-206	sample 2	0.34	0.40	0.27
PCB-207	sample 2	0.19	0.23	0.16
PCB-208	sample 2	0.12	NA	0.077
PCB-209	sample 2	0.69	0.78	0.62
PCB-31	sample 2	0.33	0.37	0.46
PCB-40	sample 2	0.25	NA	0.67
PCB-44	sample 2	0.30	0.34	0.28
PCB-49	sample 2	0.38	0.40	0.34
PCB-18	sample 2	0.59	0.57	0.52
PCB-87	sample 2	0.21	NA	0.16
PCB-52	sample 2	0.76	0.94	0.80

NA = not analyzed

Table S11. List of sample IDs for Extract 04 and Extract 05.

Extract 04	Extract 05
AA-02-01-AC	AA-04-02-AC
AA-02-02-F1	AA-04-07-AC
AA-02-02-PC	AA-04-12-AC
AA-02-06-F1	AA-04-17-AC
AA-02-06-PC	AA-04-22-AC
AA-02-13-AC	AA-04-27-AC
AA-02-17-AC	AA-04-32-AC
AA-02-25-AC	AA-04-37-AC
AA-02-32-F1	AA-04-42-AC
AA-02-32-PC	AA-04-47-AC
AA-02-34-AC	AA-04-52-AC
AA-02-43-AC	AB-04-18-F1
AA-02-52-AC	AB-04-18-P1
AB-02-01-F1	AB-04-41-F1
AB-02-01-P1	AB-04-41-P1
AB-02-33-F1	
AB-02-33-P1	
AB-02-41-F1	
AB-02-41-P1	

Note: Sample IDs use the format: AA-BB-CC-DD
AA = Sample type (AA: Alert sample; AB: Alert field blank)
BB = Year (02: 2002; 04: 2004)
CC = Week # (01: Week #1 from Dec. 31, 2001 to Jan. 7, 2002)
DD = Sample type (AC: 2 PUFs + 1 GFF; F1: GFF; P1: PUF#1; P2: PUF#2)

Table S12. Difference (%) and absolute difference (%) between analytical results and target concentrations for OCPs.

Difference (%)						
Sample type	**Lab**	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 05	NLET	4.7	-39	100	21	116
Std 08	NLET	10	-46	41	11	60
Std 05	FWI	4.7	-23	89	17	64
Std 08	FWI	-7.1	-90	580	20	48
Blind 05	NLET	-9.8	-37	180	51	21
Blind 08	NLET	-0.47	-26	29	15	15
Blind 05	FWI	-48	-82	170	140	21
Blind 08	FWI	35	-95	370	50	17
Absolute difference (%)						
Sample type	**Lab**	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 05	NLET	10	0.050	100	15	116
Std 08	NLET	12	0	46	9.3	60
Std 05	FWI	9.6	0.040	89	15	64
Std 08	FWI	12	0.29	580	14	48
Blind 05	NLET	23	0.93	180	25	21
Blind 08	NLET	8.1	0.47	29	7.9	15
Blind 05	FWI	66	35	170	26	21
Blind 08	FWI	42	0.66	370	32	17

Table S13. Difference (%) and absolute difference (%) between analytical results and target concentrations for PCBs.

Difference (%)						
Sample type	**Lab**	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 05	NLET	13	-51	120	21	158
Std 08	NLET	9.6	-22	51	15	140
Std 05	FWI	-3.8	-67	29	16	176
Std 08	FWI	-4.8	-41	320	33	138
Blind 05	NLET	6.1	-64	110	39	27
Blind 08	NLET	17	-8.0	120	18	30
Blind 05	FWI	9.9	-21	220	44	29
Blind 08	FWI	-18	-47	210	28	34
Absolute difference (%)						
Sample type	**Lab**	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 05	NLET	15	0.43	120	23	158
Std 08	NLET	11	0.076	51	14	140
Std 05	FWI	8.7	0.016	67	11	176
Std 08	FWI	17	0.0080	320	21	138
Blind 05	NLET	17	1.8	110	33	27
Blind 08	NLET	17	2.4	120	17	30
Blind 05	FWI	13	0.77	220	34	29
Blind 08	FWI	22	3.3	210	23	34

Table S14. Difference (%) and absolute difference (%) between analytical results and target concentrations for PAHs.

Difference (%)						
Sample type	**Lab**	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 05	NLET	-19	-52	87	53	34
Std 05	FWI	-28	-92	31	33	44
Absolute difference (%)						
Sample type	**Lab**	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 05	NLET	28	8.7	87	15	34
Std 05	FWI	29	1.0	92	28	44

Table S15. Analytical results (in $pg \cdot m^{-3}$) of OCPs in Extract 04.

Chemical	**Sample ID**	**NLET result**	**FWI result**
1,2,3,4-TCB	AA-02-02-F1	0.059	0.099
1,2,3,4-TCB	AA-02-02-PC	18	29
1,2,3,4-TCB	AA-02-06-PC	30	36
1,2,3,4-TCB	AA-02-13-AC	33	34
1,2,3,4-TCB	AA-02-17-AC	9.5	12
1,2,3,4-TCB	AA-02-25-AC	2.1	1.6
1,2,3,4-TCB	AA-02-32-AC	1.2	2.0
1,2,3,4-TCB	AA-02-32-PC	1.2	1.8
1,2,3,4-TCB	AA-02-34-AC	2.2	1.5
1,2,3,4-TCB	AA-02-43-AC	5.4	4.4
1,2,3,4-TCB	AA-02-52-AC	11	10
1,2,3,4-TCB	AB-02-01-P1	0.38	0.81
1,2,3,4-TCB	AB-02-33-P1	0.21	0.17
1,2,3,4-TCB	AB-02-41-P1	0.082	0.094
1,2,4,5-TCB	AA-02-01-AC	8.9	11
1,2,4,5-TCB	AA-02-02-PC	7.4	6.6

1,2,4,5-TCB	AA-02-06-PC	17	13
1,2,4,5-TCB	AA-02-13-AC	17	19
1,2,4,5-TCB	AA-02-17-AC	3.8	5.3
1,2,4,5-TCB	AA-02-25-AC	0.91	3.9
1,2,4,5-TCB	AA-02-32-AC	0.43	8.1
1,2,4,5-TCB	AA-02-32-PC	0.44	7.8
1,2,4,5-TCB	AA-02-34-AC	0.84	0.43
1,2,4,5-TCB	AA-02-43-AC	2.6	1.3
1,2,4,5-TCB	AA-02-52-AC	3.6	1.9
1,2,4,5-TCB	AB-02-01-P1	0.17	1.0
1,2,4,5-TCB	AB-02-41-P1	0.085	0.095
CC	AA-02-02-PC	0.40	0.38
CC	AA-02-06-PC	0.28	0.21
CC	AA-02-13-AC	0.34	0.25
CC	AA-02-17-AC	0.85	0.60
CC	AA-02-25-AC	0.55	0.54
CC	AA-02-32-AC	0.41	0.75
CC	AA-02-32-PC	0.43	0.73
CC	AA-02-34-AC	0.53	0.36
CC	AA-02-43-AC	0.76	0.59
CC	AA-02-52-AC	0.37	0.14
Diel	AA-02-02-PC	0.46	0.44
Diel	AA-02-06-F1	0.10	0.079
Diel	AA-02-06-PC	0.11	0.10
Diel	AA-02-17-AC	1.0	0.62
Diel	AA-02-25-AC	0.72	0.56
Diel	AA-02-32-AC	0.54	0.86
Diel	AA-02-32-PC	0.55	0.83
Diel	AA-02-34-AC	0.55	0.44
Diel	AA-02-43-AC	1.2	1.0
Diel	AA-02-52-AC	0.34	0.17
Endos I	AA-02-02-PC	3.2	5.9
Endos I	AA-02-06-PC	1.7	1.2
Endos I	AA-02-13-AC	2.7	3.2
Endos I	AA-02-17-AC	7.4	9.9
Endos I	AA-02-25-AC	2.9	4.3
Endos I	AA-02-32-AC	2.1	4.5
Endos I	AA-02-32-PC	2.2	4.3
Endos I	AA-02-34-AC	3.9	4.5
Endos I	AA-02-43-AC	8.4	12
Endos I	AA-02-52-AC	2.0	0.86
HCB	AA-02-06-PC	40	66
HCB	AA-02-13-AC	45	81
HCB	AA-02-17-AC	45	80
HCB	AA-02-25-AC	35	55
HCB	AA-02-32-AC	19	90
HCB	AA-02-32-PC	19	87
HCB	AA-02-34-AC	31	49
HCB	AA-02-43-AC	49	67
HCB	AA-02-52-AC	19	30
HEPX	AA-02-02-F1	0.039	0.027
HEPX	AA-02-02-PC	0.44	0.34
HEPX	AA-02-06-PC	0.25	0.18

HEPX	AA-02-13-AC	0.40	0.28
HEPX	AA-02-17-AC	0.78	0.50
HEPX	AA-02-25-AC	0.73	0.65
HEPX	AA-02-32-AC	0.57	1.0
HEPX	AA-02-32-PC	0.59	1.0
HEPX	AA-02-34-AC	0.65	0.48
HEPX	AA-02-43-AC	0.90	0.68
HEPX	AA-02-52-AC	0.17	0.16
o,p'-DDT	AA-02-02-PC	0.11	0.15
o,p'-DDT	AA-02-17-AC	0.40	0.23
o,p'-DDT	AA-02-43-AC	0.42	0.28
OCS	AA-02-06-PC	0.52	0.41
OCS	AA-02-17-AC	0.57	0.35
OCS	AA-02-25-AC	0.56	0.023
OCS	AA-02-32-AC	0.51	0.094
OCS	AA-02-32-PC	0.53	0.092
OCS	AA-02-34-AC	0.48	0.35
OCS	AA-02-43-AC	0.45	0.32
OCS	AA-02-52-AC	0.16	0.082
OXY	AA-02-02-PC	0.28	0.21
OXY	AA-02-06-PC	0.49	0.14
OXY	AA-02-17-AC	0.57	0.28
OXY	AA-02-25-AC	0.62	0.42
OXY	AA-02-32-AC	0.51	0.74
OXY	AA-02-32-PC	0.53	0.72
OXY	AA-02-34-AC	0.43	0.29
OXY	AA-02-43-AC	0.46	0.27
p,p'-DDE	AA-02-02-PC	0.40	0.45
p,p'-DDE	AA-02-06-PC	0.25	0.20
p,p'-DDE	AA-02-25-AC	0.57	0.36
p,p'-DDE	AA-02-43-AC	0.65	0.51
p,p'-DDE	AA-02-52-AC	0.30	0.19
PCA	AA-02-01-AC	19	9.6
PCA	AA-02-02-F1	0.11	0.022
PCA	AA-02-06-PC	7.7	11
PCA	AA-02-13-AC	22	7.0
PCA	AA-02-17-AC	22	9.1
PCA	AA-02-25-AC	24	1.9
PCA	AA-02-32-AC	0.029	1.4
PCA	AA-02-32-F1	0.029	0.027
PCA	AA-02-34-AC	40	0.94
PCA	AA-02-43-AC	55	2.8
PCA	AA-02-52-AC	16	1.1
PCA	AB-02-01-P1	0.11	0.16
PCA	AB-02-33-P1	0.18	0.13
PCA	AB-02-41-P1	0.050	0.025
PeCB	AA-02-02-PC	15	19
PeCB	AA-02-06-PC	18	17
PeCB	AA-02-13-AC	20	19
PeCB	AA-02-17-AC	16	16
PeCB	AA-02-25-AC	3.6	2.2
PeCB	AA-02-32-AC	1.8	2.6
PeCB	AA-02-32-PC	1.9	2.6

PeCB	AA-02-34-AC	3.5	2.3
PeCB	AA-02-43-AC	9.9	12
PeCB	AA-02-52-AC	11	12
TC	AA-02-02-PC	0.24	0.21
TC	AA-02-06-PC	0.080	0.13
TC	AA-02-13-AC	0.13	0.16
TC	AA-02-17-AC	0.43	0.28
TC	AA-02-43-AC	0.075	0.21
TeCV	AA-02-01-AC	1.3	0.36
TeCV	AA-02-02-PC	1.3	3.5
TeCV	AA-02-13-AC	1.5	1.3
TeCV	AA-02-17-AC	0.92	0.084
TeCV	AA-02-32-AC	0.53	0.26
TeCV	AA-02-32-PC	0.55	0.25
TeCV	AA-02-43-AC	2.6	2.2
TeCV	AA-02-52-AC	1.2	0.27
TN	AA-02-06-PC	0.20	0.11
TN	AA-02-17-AC	1.0	0.41
TN	AA-02-25-AC	0.78	0.40
TN	AA-02-32-AC	0.34	0.42
TN	AA-02-32-PC	0.35	0.40
TN	AA-02-43-AC	0.71	0.35
TN	AA-02-52-AC	0.18	0.065
α-HCH	AA-02-02-F1	0.064	0.15
α-HCH	AA-02-02-PC	11	14
α-HCH	AA-02-06-PC	10	17
α-HCH	AA-02-13-AC	12	13
α-HCH	AA-02-17-AC	15	13
α-HCH	AA-02-25-AC	11	8.7
α-HCH	AA-02-32-AC	16	43
α-HCH	AA-02-32-PC	17	41
α-HCH	AA-02-34-AC	21	22
α-HCH	AA-02-43-AC	19	11
α-HCH	AA-02-52-AC	3.7	4.8
γ-HCH	AA-02-02-F1	0.067	0.059
γ-HCH	AA-02-02-PC	2.2	7.4
γ-HCH	AA-02-06-F1	0.040	0.035
γ-HCH	AA-02-06-PC	2.1	5.6
γ-HCH	AA-02-13-AC	3.2	5.8
γ-HCH	AA-02-17-AC	4.8	7.4
γ-HCH	AA-02-25-AC	2.0	1.9
γ-HCH	AA-02-32-AC	1.7	3.3
γ-HCH	AA-02-32-PC	1.7	3.1
γ-HCH	AA-02-34-AC	2.2	2.3
γ-HCH	AA-02-43-AC	3.5	3.5
γ-HCH	AA-02-52-AC	0.90	0.50

Table S16. Analytical results (in $pg \cdot m^{-3}$) of PCBs in Extract 04.

Chemical	Sample ID	NLET result	FWI result
PCB-105	AA-02-01-AC	0.020	0.019
PCB-105	AA-02-52-AC	0.028	0.014
PCB-153	AA-02-01-AC	0.11	0.12
PCB-138	AA-02-01-AC	0.087	0.11

PCB-138	AA-02-02-PC	0.11	0.095
PCB-138	AA-02-06-F1	0.037	0.018
PCB-138	AA-02-06-PC	0.055	0.034
PCB-138	AA-02-13-AC	0.14	0.071
PCB-138	AA-02-25-AC	0.20	0.087
PCB-138	AA-02-32-PC	0.086	0.12
PCB-138	AA-02-34-AC	0.17	0.088
PCB-138	AA-02-43-AC	0.57	0.32
PCB-138	AA-02-52-AC	0.19	0.081
PCB-138	AB-02-01-P1	0.020	0.027
PCB-138	AB-02-33-P1	0.014	0.010
PCB-180	AA-02-01-AC	0.023	0.021
PCB-146	AA-02-02-PC	0.020	0.049
PCB-146	AA-02-06-PC	0.014	0.017
PCB-146	AA-02-13-AC	0.026	0.022
PCB-146	AA-02-25-AC	0.033	0.029
PCB-146	AA-02-43-AC	0.063	0.059
PCB-146	AA-02-52-AC	0.031	0.014
PCB-153	AA-02-02-F1	0.034	0.032
PCB-153	AA-02-02-PC	0.15	0.10
PCB-153	AA-02-06-PC	0.083	0.047
PCB-153	AA-02-13-AC	0.18	0.071
PCB-153	AA-02-17-AC	0.74	0.084
PCB-153	AA-02-25-AC	0.27	0.099
PCB-153	AA-02-32-PC	0.13	0.11
PCB-153	AA-02-34-AC	0.22	0.073
PCB-153	AA-02-43-AC	0.52	0.28
PCB-153	AA-02-52-AC	0.22	0.078
PCB-153	AB-02-01-P1	0.018	0.017
PCB-31	AA-02-01-AC	0.85	0.59
PCB-52	AA-02-01-AC	0.61	0.37
PCB-17	AA-02-01-AC	0.64	0.31
PCB-17	AA-02-02-PC	0.78	0.50
PCB-17	AA-02-06-PC	0.70	0.34
PCB-17	AA-02-13-AC	1.1	0.44
PCB-17	AA-02-25-AC	1.1	0.24
PCB-17	AA-02-32-PC	0.49	0.45
PCB-17	AA-02-34-AC	0.79	0.18
PCB-17	AA-02-43-AC	0.79	0.18
PCB-17	AA-02-52-AC	1.0	0.20
PCB-170	AA-02-01-AC	0.017	0.0052
PCB-170	AA-02-02-PC	0.014	0.0069
PCB-170	AA-02-43-AC	0.19	0.066
PCB-170	AA-02-52-AC	0.033	0.0030
PCB-179	AA-02-25-AC	0.054	0.025
PCB-179	AA-02-32-PC	0.030	0.024
PCB-180	AA-02-02-PC	0.028	0.021
PCB-180	AA-02-32-PC	0.024	0.015
PCB-180	AA-02-43-AC	0.35	0.16
PCB-183	AA-02-01-AC	0.020	0.018
PCB-183	AA-02-02-PC	0.014	0.024
PCB-183	AA-02-25-AC	0.033	0.027
PCB-183	AA-02-32-PC	0.018	0.022

PCB-183	AA-02-34-AC	0.051	0.021
PCB-183	AA-02-43-AC	0.13	0.051
PCB-187	AA-02-01-AC	0.017	0.021
PCB-187	AA-02-02-PC	0.040	0.038
PCB-187	AA-02-06-F1	0.0029	0.0025
PCB-187	AA-02-06-PC	0.0029	0.0063
PCB-187	AA-02-13-AC	0.026	0.014
PCB-187	AA-02-17-AC	0.12	0.019
PCB-187	AA-02-25-AC	0.063	0.015
PCB-187	AA-02-32-PC	0.024	0.028
PCB-187	AA-02-34-AC	0.054	0.023
PCB-187	AA-02-43-AC	0.19	0.099
PCB-187	AA-02-52-AC	0.017	0.012
PCB-24/27	AA-02-32-PC	0.036	0.098
PCB-24/27	AA-02-34-AC	0.087	0.031
PCB-52	AA-02-02-F1	0.022	0.024
PCB-31	AA-02-02-PC	1.3	1.7
PCB-31	AA-02-06-PC	1.4	0.76
PCB-31	AA-02-13-AC	1.8	0.61
PCB-31	AA-02-17-AC	3.6	0.48
PCB-31	AA-02-25-AC	1.6	0.48
PCB-31	AA-02-32-PC	0.90	1.1
PCB-31	AA-02-34-AC	0.51	0.55
PCB-31	AA-02-43-AC	1.3	0.66
PCB-31	AA-02-52-AC	1.7	0.15
PCB-33	AA-02-01-AC	0.24	0.26
PCB-33	AA-02-02-PC	0.37	0.24
PCB-33	AA-02-06-F1	0.029	0.057
PCB-33	AA-02-06-PC	0.36	0.24
PCB-33	AA-02-13-AC	0.46	0.24
PCB-33	AA-02-17-AC	1.0	0.17
PCB-33	AA-02-25-AC	0.57	0.26
PCB-33	AA-02-32-PC	0.24	0.42
PCB-33	AA-02-34-AC	0.17	0.12
PCB-33	AA-02-43-AC	0.35	0.20
PCB-33	AA-02-52-AC	0.53	0.21
PCB-33	AB-02-33-P1	0.014	0.020
PCB-41/71	AA-02-06-PC	0.040	0.0049
PCB-41/71	AA-02-13-AC	0.080	0.0082
PCB-41/71	AA-02-17-AC	0.23	0.0056
PCB-41/71	AA-02-34-AC	0.054	0.0029
PCB-41/71	AA-02-43-AC	0.075	0.0045
PCB-41/71	AA-02-52-AC	0.39	0.012
PCB-47	AA-02-01-AC	0.18	0.061
PCB-46	AA-02-13-AC	0.026	0.022
PCB-46	AA-02-25-AC	0.048	0.024
PCB-47	AA-02-02-PC	0.29	0.12
PCB-47	AA-02-06-PC	0.28	0.073
PCB-47	AA-02-13-AC	0.40	0.11
PCB-47	AA-02-17-AC	1.0	0.047
PCB-47	AA-02-25-AC	0.44	0.13
PCB-47	AA-02-32-PC	0.19	0.14
PCB-47	AA-02-34-AC	0.27	0.090

PCB-47	AA-02-43-AC	0.31	0.074
PCB-47	AA-02-52-AC	0.41	0.21
PCB-52	AA-02-02-PC	0.86	0.42
PCB-52	AA-02-06-F1	0.049	0.029
PCB-52	AA-02-06-PC	0.96	0.45
PCB-52	AA-02-13-AC	1.0	0.44
PCB-52	AA-02-17-AC	2.4	0.44
PCB-52	AA-02-25-AC	1.2	0.50
PCB-52	AA-02-32-F1	0.040	0.032
PCB-52	AA-02-32-PC	0.69	0.54
PCB-52	AA-02-34-AC	0.95	0.32
PCB-52	AA-02-43-AC	0.85	0.36
PCB-52	AA-02-52-AC	1.3	0.39
PCB-87	AA-02-01-AC	0.078	0.049
PCB-87	AA-02-13-AC	0.17	0.039
PCB-87	AA-02-17-AC	0.74	0.047
PCB-87	AA-02-25-AC	0.23	0.050
PCB-87	AA-02-34-AC	0.22	0.055
PCB-87	AA-02-43-AC	0.25	0.071
PCB-87	AA-02-52-AC	0.31	0.052
PCB-87	AA-02-02-F1	0.017	0.0090
PCB-87	AA-02-02-PC	0.13	0.054
PCB-87	AA-02-06-PC	0.11	0.041
PCB-87	AA-02-32-PC	0.12	0.072
PCB-87	AB-02-33-P1	0.012	0.052
PCB-87	AB-02-41-P1	0.013	0.041

Table S17. Analytical results (in $pg \cdot m^{-3}$) of PAHs in Extract 04.

Chemical	Sample ID	NLET result	FWI result
AcenE	AA-02-01-AC	14	23
AcenE	AA-02-02-F1	0.16	0.36
AcenE	AA-02-02-PC	2.0	2.7
AcenE	AA-02-06-F1	0.46	0.98
AcenE	AA-02-06-PC	7.9	11
AcenE	AA-02-13-AC	12	11
AcenE	AA-02-17-AC	1.4	2.1
AcenE	AA-02-25-AC	1.5	0.22
AcenE	AA-02-32-F1	5.7	7.7
AcenE	AA-02-32-PC	21	41
AcenE	AA-02-34-AC	9.1	11
AcenE	AA-02-43-AC	2.5	4.6
AcenE	AA-02-52-AC	0.89	1.5
AcenE	AB-02-01-P1	110	150
AcenE	AB-02-33-F1	0.43	0.69
AcenE	AB-02-33-P1	0.23	0.31
AcenE	AB-02-41-F1	4.9	4.3
AcenE	AB-02-41-P1	2.6	0.93
AcenY	AA-02-01-AC	0.65	1.4
AcenY	AA-02-02-F1	1.9	5.6
AcenY	AA-02-02-PC	3.7	7.8
AcenY	AA-02-06-F1	6.3	18
AcenY	AA-02-06-PC	2.2	3.7
AcenY	AA-02-13-AC	0.68	0.71

AcenY	AA-02-17-AC	0.57	0.92
AcenY	AA-02-25-AC	2.4	2.2
AcenY	AA-02-32-F1	6.6	8.9
AcenY	AA-02-32-PC	1.8	1.5
AcenY	AA-02-34-AC	230	320
AcenY	AA-02-43-AC	7.8	17
AcenY	AA-02-52-AC	940	21
AcenY	AB-02-33-P1	0.14	0.22
Anth	AA-02-01-AC	1.1	2.1
Anth	AA-02-06-F1	22	53
Anth	AA-02-13-AC	7.9	7.8
Anth	AA-02-52-AC	540	5.1
B[a]A	AA-02-01-AC	0.27	0.55
B[a]A	AA-02-02-F1	0.063	0.17
B[a]A	AA-02-06-F1	21	39
B[a]A	AA-02-13-AC	0.57	0.59
B[a]A	AA-02-17-AC	1.3	2.1
B[a]A	AA-02-32-PC	0.51	0.61
B[a]A	AA-02-43-AC	5.0	8.2
B[a]A	AA-02-52-AC	680	38
B[a]P	AA-02-01-AC	20	27
B[a]P	AA-02-02-F1	0.16	0.33
B[a]P	AA-02-06-F1	5.9	12
B[a]P	AA-02-13-AC	0.63	0.51
B[a]P	AA-02-52-AC	0.39	0.44
B[b]F	AA-02-01-AC	3.4	6.8
B[b]F	AA-02-02-F1	0.085	0.30
B[b]F	AA-02-06-F1	0.89	3.2
B[b]F	AA-02-13-AC	15	17
B[b]F	AA-02-17-AC	0.33	0.76
B[b]F	AA-02-32-PC	0.36	0.44
B[b]F	AA-02-43-AC	0.42	0.71
B[b]F	AA-02-52-AC	0.43	0.27
B[e]P	AA-02-01-AC	0.72	1.4
B[e]P	AA-02-02-F1	0.13	0.29
B[e]P	AA-02-06-F1	0.80	2.6
B[e]P	AA-02-13-AC	0.34	0.17
B[e]P	AA-02-17-AC	2.4	3.4
B[e]P	AA-02-32-F1	33	46
B[e]P	AA-02-32-PC	6.6	6.9
B[e]P	AA-02-43-AC	10	16
B[e]P	AA-02-52-AC	870	16
B[ghi]P	AA-02-01-AC	0.71	0.41
B[ghi]P	AA-02-02-F1	0.19	0.33
B[ghi]P	AA-02-06-F1	12	34
B[ghi]P	AA-02-13-AC	0.79	0.62
B[ghi]P	AA-02-17-AC	3.3	4.2
B[ghi]P	AA-02-43-AC	1900	2400
B[ghi]P	AA-02-52-AC	2.0	3.8
B[k]F	AA-02-01-AC	0.31	1.5
B[k]F	AA-02-02-F1	0.85	1.7
B[k]F	AA-02-06-F1	0.51	1.2
B[k]F	AA-02-13-AC	1.2	1.1
B[k]F	AA-02-17-AC	14	19

B[k]F	AA-02-32-PC	14	25
B[k]F	AA-02-43-AC	58	56
B[k]F	AA-02-52-AC	71	110
Chry	AA-02-01-AC	0.29	2.7
Chry	AA-02-02-F1	0.097	0.054
Chry	AA-02-02-PC	6.3	8.1
Chry	AA-02-06-F1	9.7	14
Chry	AA-02-13-AC	1.1	1.2
Chry	AA-02-17-AC	9.4	13
Chry	AA-02-32-PC	13	25
Chry	AA-02-34-AC	0.34	0.93
Chry	AA-02-43-AC	1.2	0.98
Chry	AA-02-52-AC	18	33
D[ah]A	AA-02-01-AC	17	25
D[ah]A	AA-02-02-F1	0.20	0.47
D[ah]A	AA-02-06-F1	0.38	1.3
D[ah]A	AA-02-52-AC	1400	1.2
Diben	AA-02-01-AC	1.6	2.8
Diben	AA-02-02-F1	1.6	2.6
Diben	AA-02-02-PC	2.8	3.8
Diben	AA-02-06-F1	0.26	0.45
Diben	AA-02-06-PC	0.46	0.60
Diben	AA-02-13-AC	18	19
Diben	AA-02-17-AC	11	16
Diben	AA-02-25-AC	0.12	0.19
Diben	AA-02-32-F1	7.5	9.5
Diben	AA-02-32-PC	0.78	2.1
Diben	AA-02-34-AC	180	230
Diben	AA-02-43-AC	6.5	13
Diben	AA-02-52-AC	0.97	1.2
Diben	AB-02-33-P1	21	29
FluoA	AA-02-01-AC	3.1	3.5
FluoA	AA-02-02-F1	1.3	2.7
FluoA	AA-02-02-PC	1.3	1.6
FluoA	AA-02-06-F1	0.53	0.99
FluoA	AA-02-06-PC	0.66	0.46
FluoA	AA-02-13-AC	22	25
FluoA	AA-02-17-AC	2.4	4.4
FluoA	AA-02-25-AC	5.9	9.8
FluoA	AA-02-32-F1	36	50
FluoA	AA-02-32-PC	2.6	5.8
FluoA	AA-02-34-AC	2.2	6.6
FluoA	AA-02-43-AC	2.8	4.8
FluoA	AA-02-52-AC	0.091	0.24
FluoA	AB-02-01-F1	69	100
FluoA	AB-02-01-P1	32	33
FluoA	AB-02-33-F1	0.65	1.0
FluoA	AB-02-33-P1	4.4	4.4
FluoA	AB-02-41-F1	2.8	0.62
FluoA	AB-02-41-P1	2.6	0.74
FluoE	AA-02-01-AC	0.098	0.14
FluoE	AA-02-02-F1	1.7	2.9
FluoE	AA-02-02-PC	4.3	6.2
FluoE	AA-02-06-F1	3.4	6.9

FluoE	AA-02-06-PC	4.6	5.8
FluoE	AA-02-13-AC	0.37	0.19
FluoE	AA-02-17-AC	1.6	2.0
FluoE	AA-02-25-AC	2.1	0.89
FluoE	AA-02-32-F1	0.91	1.2
FluoE	AA-02-32-PC	0.42	0.88
FluoE	AA-02-34-AC	48	63
FluoE	AA-02-43-AC	950	2200
FluoE	AA-02-52-AC	3.5	6.6
FluoE	AB-02-01-P1	34	43
FluoE	AB-02-33-F1	3.2	5.0
FluoE	AB-02-33-P1	5.4	7.6
FluoE	AB-02-41-F1	7.8	7.4
FluoE	AB-02-41-P1	5.2	6.3
I[123,cd]P	AA-02-01-AC	6.3	11
I[123,cd]P	AA-02-02-F1	0.15	0.65
I[123,cd]P	AA-02-06-F1	0.24	0.23
I[123,cd]P	AA-02-13-AC	12	13
I[123,cd]P	AA-02-17-AC	0.31	0.79
I[123,cd]P	AA-02-43-AC	0.27	0.45
I[123,cd]P	AA-02-52-AC	830	3.7
Naph	AA-02-01-AC	0.090	0.13
Naph	AA-02-02-F1	8.4	19
Naph	AA-02-02-PC	0.38	0.71
Naph	AA-02-06-F1	0.15	0.10
Naph	AA-02-06-PC	4.1	5.2
Naph	AA-02-13-AC	0.44	0.32
Naph	AA-02-17-AC	2.9	3.3
Naph	AA-02-25-AC	8.8	13
Naph	AA-02-32-F1	58	73
Naph	AA-02-32-PC	0.26	0.37
Naph	AA-02-34-AC	3.2	3.8
Naph	AA-02-43-AC	1400	1100
Naph	AA-02-52-AC	0.75	0.73
Naph	AB-02-01-F1	1.6	2.3
Naph	AB-02-01-P1	36	42
Naph	AB-02-33-F1	3.2	4.9
Naph	AB-02-33-P1	28	36
Naph	AB-02-41-F1	3.6	5.4
Naph	AB-02-41-P1	0.41	0.19
Pery	AA-02-01-AC	4.5	6.6
Pery	AA-02-02-F1	0.79	1.7
Pery	AA-02-52-AC	20	36
Phen	AA-02-01-AC	0.31	0.50
Phen	AA-02-02-F1	0.13	0.21
Phen	AA-02-02-PC	6.5	9.9
Phen	AA-02-06-F1	11	19
Phen	AA-02-06-PC	9.4	12
Phen	AA-02-13-AC	0.86	0.96
Phen	AA-02-17-AC	1.2	2.4
Phen	AA-02-25-AC	0.20	0.37
Phen	AA-02-32-F1	14	19
Phen	AA-02-32-PC	6.3	13
Phen	AA-02-34-AC	0.18	0.21

Phen	AA-02-43-AC	3.7	7.0
Phen	AA-02-52-AC	2100	0.62
Phen	AB-02-01-F1	46	71
Phen	AB-02-01-P1	53	73
Phen	AB-02-33-F1	16	5.3
Phen	AB-02-33-P1	41	51
Phen	AB-02-41-F1	6.1	5.4
Phen	AB-02-41-P1	0.84	0.41
Pyr	AA-02-01-AC	0.86	0.89
Pyr	AA-02-02-F1	0.74	1.2
Pyr	AA-02-02-PC	0.15	0.19
Pyr	AA-02-06-F1	0.32	0.37
Pyr	AA-02-06-PC	0.47	0.23
Pyr	AA-02-13-AC	7.1	6.1
Pyr	AA-02-17-AC	3.1	4.5
Pyr	AA-02-25-AC	0.83	1.2
Pyr	AA-02-32-F1	10	13
Pyr	AA-02-32-PC	0.22	0.42
Pyr	AA-02-34-AC	3.2	2.5
Pyr	AA-02-43-AC	53	74
Pyr	AA-02-52-AC	0.60	1.4
Pyr	AB-02-01-P1	35	34
Pyr	AB-02-33-F1	0.13	0.22
Pyr	AB-02-33-P1	4.7	5.6
Pyr	AB-02-41-F1	5.2	3.7
Pyr	AB-02-41-P1	5.0	1.6
Rete	AA-02-01-AC	0.62	0.14
Rete	AA-02-02-F1	0.19	0.48
Rete	AA-02-25-AC	6.8	9.8
Rete	AA-02-32-PC	160	240
Rete	AA-02-34-AC	2.2	1.0
Rete	AA-02-43-AC	0.73	0.60
Rete	AA-02-52-AC	29	44

Table S18. Analytical results (in $pg \cdot m^{-3}$) of OCPs in Extract 05.

Chemical	Sample ID	NLET result	FWI result
1,2,3,4-TCB	AA-04-02-AC	21	8.7
1,2,3,4-TCB	AA-04-07-AC	30	16
1,2,3,4-TCB	AA-04-12-AC	33	14
1,2,3,4-TCB	AA-04-17-AC	6.2	7.4
1,2,3,4-TCB	AA-04-22-AC	6.0	3.4
1,2,3,4-TCB	AA-04-27-AC	5.6	3.2
1,2,3,4-TCB	AA-04-32-AC	3.4	1.1
1,2,3,4-TCB	AA-04-37-AC	5.5	1.9
1,2,3,4-TCB	AA-04-42-AC	9.8	5.3
1,2,3,4-TCB	AA-04-47-AC	3.6	6.1
1,2,3,4-TCB	AA-04-52-AC	17	10
1,2,4,5-TCB	AA-04-02-AC	8.4	1.6
1,2,4,5-TCB	AA-04-07-AC	17	8.5
1,2,4,5-TCB	AA-04-12-AC	17	6.5
1,2,4,5-TCB	AA-04-17-AC	4.9	2.3
1,2,4,5-TCB	AA-04-22-AC	3.1	1.2
1,2,4,5-TCB	AA-04-27-AC	3.8	1.7

1,2,4,5-TCB	AA-04-42-AC	1.7	0.71
1,2,4,5-TCB	AA-04-47-AC	1.1	1.7
1,2,4,5-TCB	AA-04-52-AC	6.6	3.1
CC	AA-04-02-AC	0.57	0.45
CC	AA-04-12-AC	0.32	0.23
CC	AA-04-17-AC	1.1	0.83
CC	AA-04-22-AC	0.71	0.65
CC	AA-04-27-AC	0.62	0.53
CC	AA-04-32-AC	0.43	0.44
CC	AA-04-37-AC	0.84	0.64
CC	AA-04-42-AC	0.75	0.58
CC	AA-04-52-AC	0.74	0.57
Diel	AA-04-02-AC	0.50	0.61
Diel	AA-04-07-AC	0.31	0.22
Diel	AA-04-12-AC	0.41	0.21
Diel	AA-04-17-AC	1.6	1.2
Diel	AA-04-22-AC	1.1	0.92
Diel	AA-04-27-AC	0.71	0.61
Diel	AA-04-32-AC	0.59	0.62
Diel	AA-04-37-AC	1.3	1.0
Diel	AA-04-42-AC	1.1	0.97
Endos I	AA-04-02-AC	4.0	3.0
Endos I	AA-04-07-AC	1.7	1.1
Endos I	AA-04-12-AC	0.87	0.79
Endos I	AA-04-17-AC	10	7.1
Endos I	AA-04-22-AC	3.6	2.9
Endos I	AA-04-27-AC	2.4	2.0
Endos I	AA-04-32-AC	2.8	2.5
Endos I	AA-04-37-AC	8.4	6.2
Endos I	AA-04-42-AC	9.4	5.9
Endos I	AA-04-52-AC	5.5	3.9
Endos I	AB-04-18-P1	0.20	0.14
HCB	AA-04-02-AC	45	19
HCB	AA-04-07-AC	49	26
HCB	AA-04-12-AC	54	22
HCB	AA-04-17-AC	46	24
HCB	AA-04-22-AC	41	22
HCB	AA-04-27-AC	35	17
HCB	AA-04-32-AC	39	20
HCB	AA-04-37-AC	69	35
HCB	AA-04-42-AC	50	24
HCB	AA-04-47-AC	2.3	24
HCB	AA-04-52-AC	42	23
HCB	AB-04-18-P1	4.8	4.6
HEPX	AA-04-02-AC	0.61	0.40
HEPX	AA-04-07-AC	1.4	0.23
HEPX	AA-04-12-AC	0.63	0.15
HEPX	AA-04-17-AC	1.3	0.84
HEPX	AA-04-22-AC	1.2	0.71
HEPX	AA-04-27-AC	1.1	0.60
HEPX	AA-04-32-AC	0.71	0.57
HEPX	AA-04-37-AC	1.1	0.80
HEPX	AA-04-42-AC	1.1	0.77

HEPX	AA-04-52-AC	0.69	0.70
o,p'-DDT	AA-04-52-AC	0.38	0.54
OCS	AA-04-02-AC	0.33	0.19
OCS	AA-04-07-AC	0.41	0.28
OCS	AA-04-12-AC	0.48	0.23
OCS	AA-04-17-AC	0.54	0.39
OCS	AA-04-22-AC	0.49	0.33
OCS	AA-04-27-AC	0.67	0.39
OCS	AA-04-32-AC	0.32	0.35
OCS	AA-04-37-AC	0.63	0.41
OCS	AA-04-42-AC	0.47	0.27
OCS	AA-04-52-AC	0.46	0.30
OXY	AA-04-17-AC	1.5	0.48
OXY	AA-04-22-AC	1.3	0.48
OXY	AA-04-27-AC	1.0	0.53
OXY	AA-04-32-AC	1.3	0.50
OXY	AA-04-37-AC	1.3	0.56
OXY	AA-04-42-AC	1.2	0.41
OXY	AA-04-52-AC	0.88	0.39
p,p'-DDE	AA-04-52-AC	0.64	0.60
PCA	AA-04-02-AC	1.5	1.2
PCA	AA-04-07-AC	2.0	1.5
PCA	AA-04-12-AC	1.6	1.1
PCA	AA-04-17-AC	1.7	1.4
PCA	AA-04-22-AC	0.82	0.81
PCA	AA-04-27-AC	0.16	0.44
PCA	AA-04-32-AC	0.50	0.87
PCA	AA-04-37-AC	0.58	1.3
PCA	AA-04-42-AC	0.11	1.6
PCA	AA-04-47-AC	0.12	1.7
PCA	AA-04-52-AC	2.5	1.8
PeCB	AA-04-02-AC	20	8.4
PeCB	AA-04-07-AC	23	12
PeCB	AA-04-12-AC	24	9.0
PeCB	AA-04-17-AC	16	8.6
PeCB	AA-04-22-AC	8.0	4.3
PeCB	AA-04-27-AC	3.3	1.4
PeCB	AA-04-32-AC	4.7	1.9
PeCB	AA-04-37-AC	11	4.4
PeCB	AA-04-42-AC	15	7.8
PeCB	AA-04-47-AC	4.8	8.6
PeCB	AA-04-52-AC	17	9.2
TC	AA-04-02-AC	0.23	0.15
TC	AA-04-17-AC	0.38	0.34
TC	AA-04-52-AC	0.20	0.22
TeCV	AA-04-02-AC	2.0	1.8
TeCV	AA-04-07-AC	1.6	1.7
TeCV	AA-04-12-AC	1.2	1.2
TeCV	AA-04-17-AC	1.4	1.5
TeCV	AA-04-22-AC	0.59	0.78
TeCV	AA-04-27-AC	0.85	0.97
TeCV	AA-04-32-AC	1.3	1.3
TeCV	AA-04-37-AC	2.2	2.4

TeCV	AA-04-42-AC	2.9	3.1
TeCV	AA-04-52-AC	2.8	2.9
TN	AA-04-07-AC	0.17	0.26
TN	AA-04-12-AC	0.27	0.18
TN	AA-04-17-AC	0.86	0.89
TN	AA-04-22-AC	2.5	0.72
TN	AA-04-27-AC	0.71	0.63
TN	AA-04-32-AC	0.46	0.35
TN	AA-04-37-AC	0.65	0.59
TN	AA-04-42-AC	0.61	0.51
TN	AA-04-52-AC	0.49	0.49
α-HCH	AA-04-02-AC	11	6.2
α-HCH	AA-04-07-AC	9.9	5.3
α-HCH	AA-04-12-AC	7.8	4.5
α-HCH	AA-04-17-AC	13	6.9
α-HCH	AA-04-22-AC	12	7.1
α-HCH	AA-04-27-AC	13	7.2
α-HCH	AA-04-32-AC	7.1	6.1
α-HCH	AA-04-37-AC	27	15
α-HCH	AA-04-42-AC	19	9.7
α-HCH	AA-04-47-AC	0.11	8.6
α-HCH	AA-04-52-AC	13	6.6
γ-HCH	AA-04-02-AC	2.0	1.6
γ-HCH	AA-04-07-AC	1.3	1.3
γ-HCH	AA-04-12-AC	0.98	1.1
γ-HCH	AA-04-17-AC	4.9	3.2
γ-HCH	AA-04-22-AC	2.3	1.9
γ-HCH	AA-04-27-AC	1.5	1.1
γ-HCH	AA-04-32-AC	0.77	0.93
γ-HCH	AA-04-37-AC	2.3	2.1
γ-HCH	AA-04-42-AC	3.3	2.1
γ-HCH	AA-04-52-AC	4.7	2.1

Table S19. Analytical results (in $pg \cdot m^{-3}$) of PCBs in Extract 05.

Chemical	Sample ID	NLET result	FWI result
PCB-101	AA-04-02-AC	0.35	0.27
PCB-101	AA-04-07-AC	0.34	0.31
PCB-101	AA-04-12-AC	0.48	0.33
PCB-101	AA-04-17-AC	0.46	0.49
PCB-101	AA-04-22-AC	0.20	0.23
PCB-101	AA-04-27-AC	0.39	0.31
PCB-101	AA-04-32-AC	0.51	0.46
PCB-101	AA-04-37-AC	0.26	0.31
PCB-101	AA-04-42-AC	0.28	0.29
PCB-101	AA-04-47-AC	0.18	0.37
PCB-101	AA-04-52-AC	0.60	0.53
PCB-101	AB-04-18-F1	0.079	0.077
PCB-101	AB-04-18-P1	0.12	0.12
PCB-101	AB-04-41-P1	0.064	0.068
PCB-110	AA-04-02-AC	0.21	0.19
PCB-110	AA-04-07-AC	0.20	0.22
PCB-110	AA-04-12-AC	0.27	0.25
PCB-110	AA-04-17-AC	0.29	0.37

PCB-110	AA-04-22-AC	0.13	0.17
PCB-110	AA-04-27-AC	0.18	0.22
PCB-110	AA-04-32-AC	0.30	0.35
PCB-110	AA-04-37-AC	0.16	0.26
PCB-110	AA-04-42-AC	0.19	0.20
PCB-110	AA-04-47-AC	0.11	0.34
PCB-110	AA-04-52-AC	0.33	0.38
PCB-110	AB-04-18-P1	0.070	0.088
PCB-132	AA-04-02-AC	0.050	0.069
PCB-132	AA-04-12-AC	0.044	0.051
PCB-132	AA-04-17-AC	0.054	0.10
PCB-132	AA-04-32-AC	0.051	0.12
PCB-132	AA-04-52-AC	0.063	0.11
PCB-136	AA-04-02-AC	0.055	0.063
PCB-136	AA-04-07-AC	0.048	0.052
PCB-136	AA-04-17-AC	0.071	0.11
PCB-136	AA-04-27-AC	0.082	0.078
PCB-136	AA-04-32-AC	0.096	0.082
PCB-136	AA-04-52-AC	0.057	0.076
PCB-151	AA-04-02-AC	0.052	0.076
PCB-151	AA-04-17-AC	0.085	0.10
PCB-151	AA-04-27-AC	0.088	0.16
PCB-151	AA-04-32-AC	0.12	0.14
PCB-151	AA-04-52-AC	0.046	0.075
PCB-16/32	AA-04-02-AC	0.76	0.42
PCB-16/32	AA-04-07-AC	0.76	0.63
PCB-16/32	AA-04-12-AC	0.68	0.46
PCB-16/32	AA-04-17-AC	0.56	0.48
PCB-16/32	AA-04-22-AC	0.27	0.20
PCB-16/32	AA-04-27-AC	0.42	0.30
PCB-16/32	AA-04-32-AC	0.81	0.56
PCB-16/32	AA-04-37-AC	0.32	0.31
PCB-16/32	AA-04-42-AC	0.34	0.36
PCB-16/32	AA-04-52-AC	1.2	0.76
PCB-16/32	AB-04-18-P1	0.071	0.059
PCB-18	AA-04-02-AC	2.2	1.3
PCB-18	AA-04-07-AC	1.4	2.0
PCB-18	AA-04-12-AC	1.1	1.2
PCB-18	AA-04-17-AC	1.7	1.6
PCB-18	AA-04-22-AC	0.84	0.73
PCB-18	AA-04-27-AC	1.2	0.83
PCB-18	AA-04-32-AC	1.6	1.2
PCB-18	AA-04-37-AC	0.52	1.2
PCB-18	AA-04-42-AC	0.53	1.5
PCB-18	AA-04-47-AC	0.33	1.3
PCB-18	AA-04-52-AC	2.6	2.6
PCB-18	AB-04-18-F1	0.17	0.19
PCB-18	AB-04-18-P1	0.090	0.079
PCB-180	AA-04-02-AC	0.073	0.092
PCB-180	AA-04-12-AC	0.13	0.052
PCB-180	AA-04-17-AC	0.15	0.069
PCB-22	AA-04-02-AC	0.090	0.23
PCB-22	AA-04-07-AC	0.23	0.34

PCB-22	AA-04-12-AC	0.26	0.27
PCB-22	AA-04-17-AC	0.22	0.33
PCB-22	AA-04-22-AC	0.081	0.27
PCB-22	AA-04-27-AC	0.14	0.085
PCB-22	AA-04-32-AC	0.25	0.36
PCB-22	AA-04-52-AC	0.28	0.32
PCB-24/27	AA-04-07-AC	0.089	0.26
PCB-24/27	AA-04-12-AC	0.13	0.10
PCB-24/27	AA-04-17-AC	0.090	0.12
PCB-24/27	AA-04-27-AC	0.048	0.081
PCB-24/27	AA-04-32-AC	0.098	0.084
PCB-24/27	AA-04-42-AC	0.072	0.093
PCB-24/27	AA-04-52-AC	0.14	0.29
PCB-26	AA-04-02-AC	1.7	0.30
PCB-26	AA-04-07-AC	0.88	0.24
PCB-26	AA-04-12-AC	0.30	0.20
PCB-26	AA-04-17-AC	0.33	0.23
PCB-26	AA-04-22-AC	0.20	0.15
PCB-26	AA-04-27-AC	0.24	0.15
PCB-26	AA-04-32-AC	0.24	0.18
PCB-26	AA-04-37-AC	0.35	0.35
PCB-26	AA-04-42-AC	0.27	0.17
PCB-26	AA-04-47-AC	0.17	0.27
PCB-26	AA-04-52-AC	0.76	0.35
PCB-42	AA-04-02-AC	0.068	0.093
PCB-42	AA-04-07-AC	0.11	0.12
PCB-42	AA-04-12-AC	0.10	0.099
PCB-42	AA-04-17-AC	0.089	0.12
PCB-42	AA-04-27-AC	0.076	0.086
PCB-42	AA-04-32-AC	0.093	0.12
PCB-42	AA-04-52-AC	0.086	0.099
PCB-44	AA-04-02-AC	0.37	0.28
PCB-44	AA-04-07-AC	0.41	0.36
PCB-44	AA-04-12-AC	0.46	0.33
PCB-44	AA-04-17-AC	0.46	0.41
PCB-44	AA-04-22-AC	0.15	0.23
PCB-44	AA-04-27-AC	0.21	0.32
PCB-44	AA-04-32-AC	0.29	0.51
PCB-44	AA-04-37-AC	0.15	0.31
PCB-44	AA-04-42-AC	0.32	0.25
PCB-44	AA-04-47-AC	0.079	0.37
PCB-44	AA-04-52-AC	0.56	0.41
PCB-44	AB-04-18-P1	0.089	0.072
PCB-52	AA-04-02-AC	0.56	0.64
PCB-52	AA-04-07-AC	0.72	0.77
PCB-52	AA-04-12-AC	0.96	0.71
PCB-52	AA-04-17-AC	0.74	0.86
PCB-52	AA-04-22-AC	0.39	0.46
PCB-52	AA-04-27-AC	0.66	0.68
PCB-52	AA-04-32-AC	0.84	1.3
PCB-52	AA-04-37-AC	0.53	0.60
PCB-52	AA-04-42-AC	0.54	0.55
PCB-52	AA-04-47-AC	0.23	0.74

PCB-52	AA-04-52-AC	0.97	0.96
PCB-52	AB-04-18-F1	0.11	0.14
PCB-52	AB-04-18-P1	0.17	0.18
PCB-52	AB-04-41-F1	0.058	0.070
PCB-52	AB-04-41-P1	0.088	0.11
PCB-56/60	AA-04-12-AC	0.13	0.075
PCB-56/60	AA-04-52-AC	0.13	0.081
PCB-6	AA-04-02-AC	0.79	2.0
PCB-6	AA-04-07-AC	0.93	2.4
PCB-6	AA-04-12-AC	0.62	0.76
PCB-6	AA-04-17-AC	0.34	0.87
PCB-6	AA-04-42-AC	0.51	0.90
PCB-6	AA-04-52-AC	1.6	3.4
PCB-74	AA-04-02-AC	0.063	0.067
PCB-74	AA-04-07-AC	0.095	0.10
PCB-74	AA-04-12-AC	0.12	0.11
PCB-74	AA-04-17-AC	0.060	0.12
PCB-74	AA-04-27-AC	0.054	0.073
PCB-74	AA-04-32-AC	0.094	0.12
PCB-74	AA-04-42-AC	0.071	0.075
PCB-74	AA-04-52-AC	0.13	0.16
PCB-8/5	AA-04-12-AC	1.1	1.1
PCB-8/5	AA-04-32-AC	0.73	0.78
PCB-8/5	AA-04-42-AC	0.46	0.73
PCB-97	AA-04-02-AC	0.066	0.058
PCB-97	AA-04-07-AC	0.063	0.063
PCB-97	AA-04-12-AC	0.071	0.078
PCB-97	AA-04-17-AC	0.069	0.10
PCB-97	AA-04-27-AC	0.049	0.067
PCB-97	AA-04-32-AC	0.074	0.11
PCB-97	AA-04-52-AC	0.11	0.12
PCB-99	AA-04-07-AC	0.19	0.13
PCB-99	AA-04-12-AC	0.24	0.12
PCB-99	AA-04-17-AC	0.29	0.19
PCB-99	AA-04-22-AC	0.13	0.086
PCB-99	AA-04-27-AC	0.21	0.084
PCB-99	AA-04-32-AC	0.28	0.15
PCB-99	AA-04-37-AC	0.22	0.10
PCB-99	AA-04-42-AC	0.20	0.13
PCB-99	AA-04-47-AC	0.060	0.12
PCB-99	AA-04-52-AC	0.32	0.28

Table S20. Analytical results (in $pg \cdot m^{-3}$) of PAHs in Extract 05.

Chemical	Sample ID	NLET result	FWI result
AcenE	AA-04-47-AC	0.99	2.8
AcenE	AA-04-37-AC	1.1	1.5
AcenE	AA-04-22-AC	0.72	0.78
AcenE	AA-04-27-AC	0.63	0.60
AcenE	AA-04-32-AC	1.4	1.0
AcenE	AB-04-18-P1	2.2	1.5
AcenE	AB-04-18-F1	1.7	1.2
AcenE	AA-04-12-AC	9.2	5.8
AcenE	AA-04-42-AC	1.8	1.1

AcenE	AA-04-17-AC	6.3	3.7
AcenE	AA-04-07-AC	8.0	4.2
AcenE	AA-04-02-AC	3.9	1.6
AcenY	AA-04-52-AC	0.90	3.4
AcenY	AA-04-47-AC	0.33	1.1
AcenY	AA-04-07-AC	1.3	3.1
AcenY	AA-04-02-AC	1.1	2.4
AcenY	AA-04-42-AC	0.59	0.64
Anth	AA-04-12-AC	0.71	2.1
Anth	AA-04-07-AC	0.79	1.7
Anth	AA-04-52-AC	0.83	1.6
Anth	AA-04-47-AC	0.57	1.0
Anth	AA-04-17-AC	1.5	1.7
Anth	AA-04-27-AC	0.63	0.60
Anth	AA-04-02-AC	1.6	1.5
Anth	AA-04-42-AC	0.87	0.74
Anth	AA-04-32-AC	1.3	0.91
Anth	AA-04-22-AC	1.5	0.92
Anth	AB-04-41-F1	0.85	0.38
Anth	AB-04-18-P1	1.4	0.60
Anth	AB-04-18-F1	1.4	0.57
Anth	AB-04-41-P1	0.75	0.23
Anth	AA-04-37-AC	3.1	0.66
B[a]A	AA-04-02-AC	4.2	7.5
B[a]A	AA-04-12-AC	0.61	0.84
B[a]A	AA-04-47-AC	0.60	0.75
B[a]A	AA-04-52-AC	9.5	11
B[a]A	AA-04-07-AC	5.0	2.4
B[a]P	AA-04-02-AC	1.4	2.1
B[a]P	AA-04-52-AC	9.4	7.0
B[a]P	AA-04-07-AC	5.1	0.62
B[b]F	AA-04-02-AC	9.5	24
B[b]F	AA-04-12-AC	1.6	3.5
B[b]F	AA-04-52-AC	38	46
B[b]F	AA-04-07-AC	20	3.9
B[e]P	AA-04-12-AC	1.4	1.4
B[e]P	AA-04-02-AC	8.2	7.6
B[e]P	AA-04-47-AC	1.3	1.1
B[e]P	AA-04-52-AC	22	16
B[e]P	AA-04-07-AC	12	1.5
B[ghi]P	AA-04-02-AC	5.5	7.2
B[ghi]P	AA-04-52-AC	17	16
B[ghi]P	AA-04-07-AC	9.0	0.66
B[k]F	AA-04-02-AC	13	4.2
B[k]F	AA-04-52-AC	29	8.2
B[k]F	AA-04-12-AC	2.2	0.51
B[k]F	AA-04-07-AC	20	0.58
Chry	AA-04-02-AC	18	11
Chry	AA-04-52-AC	42	20
Chry	AA-04-12-AC	3.1	1.4
Chry	AA-04-47-AC	2.5	0.91
Chry	AA-04-17-AC	1.4	0.44
Chry	AA-04-07-AC	28	3.4

D[ah]A	AA-04-52-AC	2.1	3.2
Diben	AA-04-47-AC	0.90	4.1
Diben	AA-04-32-AC	1.4	1.5
Diben	AA-04-17-AC	3.2	2.7
Diben	AA-04-52-AC	17	14
Diben	AA-04-22-AC	0.87	0.67
Diben	AA-04-07-AC	12	8.7
Diben	AA-04-27-AC	1.5	1.1
Diben	AA-04-02-AC	11	8.0
Diben	AA-04-12-AC	5.6	3.8
Diben	AA-04-37-AC	0.95	0.61
Diben	AA-04-42-AC	2.3	1.4
FluoA	AA-04-47-AC	5.2	5.5
FluoA	AB-04-41-P1	0.60	0.58
FluoA	AA-04-02-AC	48	40
FluoA	AA-04-52-AC	89	73
FluoA	AA-04-37-AC	3.6	2.9
FluoA	AA-04-12-AC	21	17
FluoA	AA-04-32-AC	6.1	4.9
FluoA	AB-04-18-F1	4.2	3.2
FluoA	AA-04-22-AC	4.0	2.9
FluoA	AB-04-18-P1	2.8	1.9
FluoA	AA-04-17-AC	12	8.5
FluoA	AA-04-07-AC	63	39
FluoA	AA-04-27-AC	3.9	2.4
FluoA	AB-04-41-F1	6.5	0.63
FluoE	AA-04-47-AC	3.0	53
FluoE	AA-04-32-AC	5.4	5.0
FluoE	AA-04-37-AC	11	8.5
FluoE	AA-04-22-AC	4.7	3.8
FluoE	AB-04-18-P1	2.9	2.3
FluoE	AA-04-52-AC	330	260
FluoE	AA-04-02-AC	170	130
FluoE	AB-04-18-F1	2.8	2.1
FluoE	AA-04-17-AC	19	13
FluoE	AA-04-07-AC	270	190
FluoE	AA-04-42-AC	18	12
FluoE	AA-04-12-AC	51	34
FluoE	AA-04-27-AC	5.0	2.8
I[123,cd]P	AA-04-02-AC	5.3	12
I[123,cd]P	AA-04-12-AC	1.0	1.4
I[123,cd]P	AA-04-47-AC	0.97	1.2
I[123,cd]P	AA-04-52-AC	20	24
I[123,cd]P	AA-04-07-AC	12	1.1
Naph	AA-04-47-AC	34	63
Naph	AB-04-41-P1	4.8	4.7
Naph	AA-04-52-AC	430	420
Naph	AA-04-07-AC	1300	1200
Naph	AA-04-02-AC	520	470
Naph	AA-04-12-AC	150	120
Naph	AB-04-18-P1	31	24
Naph	AB-04-18-F1	8.9	6.2
Naph	AA-04-22-AC	15	10

Naph	AB-04-41-F1	2.9	1.5
Naph	AA-04-17-AC	35	17
Naph	AA-04-42-AC	23	10
Naph	AA-04-37-AC	23	9.7
Naph	AA-04-32-AC	47	12
Naph	AA-04-27-AC	25	5.8
Phen	AA-04-47-AC	8.8	15
Phen	AB-04-41-P1	1.5	1.9
Phen	AB-04-41-F1	2.0	2.2
Phen	AA-04-32-AC	23	23
Phen	AA-04-37-AC	14	13
Phen	AA-04-02-AC	54	51
Phen	AA-04-52-AC	99	92
Phen	AB-04-18-P1	13	12
Phen	AA-04-12-AC	75	66
Phen	AA-04-07-AC	86	74
Phen	AA-04-22-AC	11	9.5
Phen	AB-04-18-F1	16	13
Phen	AA-04-42-AC	15	11
Phen	AA-04-17-AC	59	42
Phen	AA-04-27-AC	16	10
Pyr	AB-04-41-P1	0.44	0.42
Pyr	AA-04-47-AC	4.3	3.9
Pyr	AA-04-37-AC	2.1	1.8
Pyr	AA-04-52-AC	58	48
Pyr	AA-04-02-AC	32	25
Pyr	AB-04-18-F1	1.4	1.2
Pyr	AA-04-12-AC	11	8.1
Pyr	AA-04-17-AC	5.7	3.6
Pyr	AB-04-18-P1	1.8	1.1
Pyr	AA-04-42-AC	2.5	1.5
Pyr	AA-04-07-AC	38	22
Pyr	AA-04-27-AC	3.4	1.9
Pyr	AA-04-22-AC	4.2	1.6
Pyr	AA-04-32-AC	16	4.5
Rete	AA-04-07-AC	3.2	0.68
Rete	AA-04-52-AC	5.5	1.0
Rete	AA-04-02-AC	4.4	0.67

Table S21. Inter-laboratory difference (%) and absolute inter-laboratory difference (%) for OCPs, PCBs, and PAHs.

Inter-laboratory difference (%) for OCPs					
Sample type	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 08	13	-150	170	23	48
Blind 05	52	-53	110	73	21
Blind 08	-30	-150	180	30	15
Extract 04	7.4	-190	190	79	168
Extract 05	36	-200	140	53	155
Absolute inter-laboratory difference (%) for OCPs					
Sample type	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 08	14	0.30	170	25	48
Blind 05	53	0.64	110	43	21
Blind 08	32	14	180	31	15

Extract 04	39	0.46	190	42	168
Extract 05	42	0.045	200	46	155
Inter-laboratory difference (%) for PCBs					
Sample type	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 08	15	-64	60	37	102
Blind 05	-4.0	-83	27	35	26
Blind 08	31	-20	100	39	32
Extract 04	66	-130	190	83	136
Extract 05	-7.1	-130	140	50	165
Absolute inter-laboratory difference (%) for PCBs					
Sample type	**Median**	**Min**	**Max**	**IQR**	**Observation**
Std 08	27	0.64	64	21	102
Blind 05	18	0.96	83	23	26
Blind 08	31	0.58	100	38	32
Extract 04	69	4.2	190	68	136
Extract 05	29	0.32	140	34	165
Inter-laboratory difference (%) for PAHs					
Sample type	**Median**	**Min**	**Max**	**IQR**	**Observation**
Extract 04	-34	-160	200	52	219
Extract 05	-25	-180	190	46	153
Absolute inter-laboratory difference (%) for PAHs					
Sample type	**Median**	**Min**	**Max**	**IQR**	**Observation**
Extract 04	43	0.78	200	43	219
Extract 05	36	0.078	190	55	153

Note: Inter-laboratory differences cannot be derived for Std 05, since neither laboratory analyzed the standards that it provided to the other.

Table S22. Regression results with Eq. 4 (i.e., $C_{NLET} = m \times C_{FWI} + b$) for OCPs.

Std 05					
	m	***b***	R^2	***P* value**	**Observation**
Aldrn	0.95	-1.0	0.97	<0.0001	8
CC	0.98	1.2	0.99	<0.0001	8
CN	0.97	2.8	0.99	<0.0001	6
Diel	0.96	1.5	0.97	<0.0001	8
Endos I	1.2	-0.60	0.98	<0.0001	6
Endos II	0.91	4.2	0.99	<0.0001	6
Endrin	0.84	8.0	0.99	<0.0001	6
HCB	1.1	-1.2	0.99	<0.005	4
HEPT	1.0	0.95	0.99	<0.0001	8
HEPX	0.94	8.1	0.78	<0.005	8
MTC	0.99	2.3	1.0	<0.0001	6
o,p'-DDD	1.1	3.8	0.86	<0.05	5
o,p'-DDE	0.97	0.21	0.99	<0.005	4
o,p'-DDT	1.2	0.54	1.0	<0.0001	4
OCS	0.98	0.36	1.0	<0.0001	4
p,p'-DDD	0.95	-3.0	1.0	<0.0001	4
p,p'-DDE	0.98	1.9	0.97	<0.0001	8
p,p'-DDT	1.0	0.39	1.0	<0.01	5
PCA	0.93	-3.9	0.81	<0.0001	6
TC	0.95	1.2	0.99	<0.0001	6
TeCV	0.98	0.18	1.0	<0.0001	4
TN	0.98	-0.57	1.0	<0.005	4

TriCV	1.1	2.7	0.99	<0.005	4
a-HCH	1.1	-1.3	0.98	<0.0001	6
b-HCH	0.97	0.30	0.99	<0.0001	6
g-HCH	1.1	-0.79	0.98	<0.0001	8
Std 08					
	m	***b***	***R*^{2}**	***P* value**	**Observation**
Aldrn	1.0	0.54	--	--	2
CC	0.96	0.70	--	--	2
CN	0.88	0.64	--	--	2
Diel	1.0	0.089	--	--	2
Endos I	1.2	0.48	--	--	2
Endos II	0.26	-3.7	--	--	2
Endrin	1.1	1.3	--	--	2
HCB	1.1	1.3	--	--	2
HEPT	1.1	-0.24	--	--	2
HEPX	1.4	0.52	--	--	2
o,p'-DDD	1.4	0.52	--	--	2
o,p'-DDE	1.4	-0.16	--	--	2
o,p'-DDT	1.0	-0.86	--	--	2
OCS	1.3	0.78	--	--	2
p,p'-DDD	-100	580	--	--	2
p,p'-DDE	1.1	-0.39	--	--	2
p,p'-DDT	1.1	-1.5	--	--	2
PCA	0.93	1.3	--	--	2
TC	1.0	0.50	--	--	2
TeCV	1.1	0.27	--	--	2
TN	1.4	0.79	--	--	2
TriCV	1.1	0.65	--	--	2
a-HCH	1.0	0.29	--	--	2
b-HCH	1.2	0.72	--	--	2
g-HCH	1.0	0.43	--	--	2
Extract 04					
	m	***b***	***R*^{2}**	***P* value**	**Observation**
CC	0.42	0.30	0.15	NS	10
Diel	0.89	0.11	0.61	<0.005	10
Endos I	0.62	0.48	0.88	<0.0001	10
HCB	0.080	28	-0.12	NS	9
HEPX	0.56	0.23	0.43	<0.05	11
p,p'-DDE	0.97	0.11	0.58	NS	5
PCA	0.99	12	-0.025	NS	14
TC	2.2	-0.24	0.60	NS	5
TeCV	0.29	0.92	0.20	NS	8
TN	1.4	0.085	0.30	NS	7
a-HCH	0.28	7.6	0.29	<0.05	11
PeCB	0.92	0.62	0.92	<0.0001	9
Extract 05 & Blind 05					
	m	***b***	***R*^{2}**	***P* value**	**Observation**
CC	1.4	-0.062	0.90	<0.0001	9
Diel	1.2	-0.013	0.90	<0.0001	9
Endos I	1.8	-1.6	0.96	<0.0001	14
HCB	3.6	-41	0.98	<0.0001	15
HEPX	0.35	0.77	-0.031	NS	10
PCA	2.5	-2.3	1.0	NS	14

TeCV	0.96	-0.010	0.97	<0.0001	10
TN	1.8	-0.20	0.27	NS	9
a-HCH	2.2	-4.5	0.98	<0.0001	14
PeCB	1.8	1.0	0.60	<0.005	11

Note: Regressions were conducted for OCPs reported for 4 or more pairs of data. NS = not significant at 95% confidence level

Table S23. Regression results with Eq. 4 (i.e., $C_{NLET} = m \times C_{FWI} + b$) for PCBs.

Std 05					
	m	***b***	R^2	***P* value**	**Observation**
PCB-6	1.2	-2.1	1.0	<0.005	4
PCB-5/8	1.1	0.32	0.90	<0.05	4
PCB-16/32	2.1	-25	0.96	<0.05	4
PCB-17	1.1	-0.062	--	--	2
PCB-18	1.1	-2.2	1.0	<0.005	4
PCB-19	1.1	-0.56	1.0	<0.0001	4
PCB-22	1.1	2.8	1.0	<0.005	4
PCB-24/27	1.0	0.12	0.86	<0.05	4
PCB-25	1.2	-0.15	1.0	<0.0001	4
PCB-26	1.2	-2.3	1.0	<0.005	4
PCB-28	1.1	-0.012	--	--	2
PCB-31	1.1	0.047	--	--	2
PCB-33	0.99	0.0048	--	--	2
PCB-40	1.0	-0.096	1.0	<0.0001	4
PCB-41/71	2.3	-0.13	--	--	2
PCB-42	1.0	17	0.93	<0.05	4
PCB-44	1.1	-3.2	1.0	<0.005	4
PCB-45	1.4	-1.4	1.0	<0.005	4
PCB-46	1.3	-1.3	1.0	<0.005	4
PCB-47/48	1.2	0.27	--	--	2
PCB-49	0.96	4.6	1.0	<0.005	4
PCB-52	1.1	-2.0	1.0	<0.005	4
PCB-56/60	1.2	-0.25	--	--	2
PCB-66	0.96	3.4	1.0	<0.005	4
PCB-74	1.1	0.10	1.0	<0.0001	4
PCB-82	1.1	-2.9	1.0	<0.005	4
PCB-83	1.1	-0.057	--	--	2
PCB-84	1.3	5.0	0.99	<0.005	4
PCB-85	0.94	-0.035	--	--	2
PCB-87	1.1	0.0034	--	--	2
PCB-91	1.0	-0.075	--	--	2
PCB-95	0.91	0.16	--	--	2
PCB-97	1.2	-2.3	1.0	<0.005	4
PCB-99	1.3	-0.37	1.0	<0.0001	4
PCB-101	1.0	2.0	1.0	<0.005	4
PCB-105	0.88	7.4	0.99	<0.005	4
PCB-110	0.95	-0.96	1.0	<0.0001	4
PCB-114	0.76	9.5	0.98	<0.01	4
PCB-118	1.1	2.4	1.0	<0.005	4
PCB-128	1.0	0.058	--	--	2
PCB-135/144	1.3	0.060	--	--	2
PCB-136	1.0	0.56	1.0	<0.0001	4
PCB-137	1.1	-3.8	1.0	<0.005	4

PCB-138	0.92	-0.0048	--	--	2
PCB-141	1.1	-2.6	1.0	<0.005	4
PCB-146	1.0	-0.035	--	--	2
PCB-149	1.1	-2.0	1.0	<0.005	4
PCB-151	1.1	0.62	1.0	<0.0001	4
PCB-153	1.1	-2.7	1.0	<0.005	4
PCB-156	0.92	4.9	0.99	<0.005	4
PCB-158	1.0	4.2	1.0	<0.005	4
PCB-170/190	1.1	0.041	--	--	2
PCB-174	1.3	-0.039	1.0	<0.0001	4
PCB-180	1.2	-2.6	1.0	<0.005	4
PCB-183	1.0	-0.35	1.0	<0.0001	4
PCB-185	0.91	0.96	1.0	<0.0001	4
PCB-189	1.1	-0.040	1.0	<0.0001	4
PCB-191	1.0	1.2	1.0	<0.005	4
PCB-193	0.99	2.9	1.0	<0.005	4
PCB-194	1.0	0.39	1.0	<0.0001	4
PCB-198	1.0	1.1	1.0	<0.0001	4
PCB-199	1.2	-2.4	1.0	<0.005	4
PCB-205	1.1	0.84	1.0	<0.0001	4
PCB-206	1.0	-1.3	1.0	<0.005	4
PCB-207	1.1	-0.23	1.0	<0.0001	4
PCB-209	1.0	-1.1	1.0	<0.005	4
Std 08					
	m	***b***	***R*^{2}**	***P* value**	**Observation**
PCB-6	1.1	1.5	--	--	2
PCB-16/32	0.83	2.4	--	--	2
PCB-19	0.98	1.2	--	--	2
PCB-22	1.0	0.43	--	--	2
PCB-26	1.1	1.0	--	--	2
PCB-28	1.4	1.6	--	--	2
PCB-31	0.86	0.89	--	--	2
PCB-33	0.76	0.93	--	--	2
PCB-44	1.1	0.96	--	--	2
PCB-45	0.63	0.99	--	--	2
PCB-47/48	0.98	1.8	--	--	2
PCB-49	1.0	0.91	--	--	2
PCB-52	1.1	1.0	--	--	2
PCB-56/60	0.59	2.4	--	--	2
PCB-66	1.4	0.86	--	--	2
PCB-74	0.99	1.0	--	--	2
PCB-83	0.51	1.1	--	--	2
PCB-84	0.70	0.25	--	--	2
PCB-85	1.1	0.93	--	--	2
PCB-91	1.0	0.93	--	--	2
PCB-95	0.71	0.99	--	--	2
PCB-99	0.61	1.3	--	--	2
PCB-105	1.1	1.0	--	--	2
PCB-114	1.3	0.31	--	--	2
PCB-118	0.98	1.9	--	--	2
PCB-128	1.3	0.60	--	--	2
PCB-135/144	1.7	0.89	--	--	2
PCB-153	1.3	1.2	--	--	2

PCB-170/190	1.1	1.2	--	--	2
PCB-174	0.52	1.2	--	--	2
PCB-180	1.2	1.2	--	--	2
PCB-194	1.1	1.1	--	--	2
PCB-199	0.75	0.91	--	--	2
PCB-205	1.0	1.3	--	--	2
PCB-206	1.1	1.6	--	--	2
PCB-207	1.2	1.0	--	--	2
Extract 04					
	m	***b***	R^2	***P* value**	**Observation**
PCB-17	-0.39	0.94	-0.075	NS	9
PCB-31	-0.49	1.8	-0.055	NS	10
PCB-33	0.77	0.20	0.00058	NS	12
PCB-41/71	34	-0.068	0.52	NS	6
PCB-47	-1.2	0.50	-0.062	NS	10
PCB-52	2.4	0.033	0.43	<0.01	13
PCB-87	2.4	0.069	-0.050	NS	13
PCB-138	1.7	-0.013	0.85	<0.0001	12
PCB-146	0.59	0.012	0.23	NS	6
PCB-153	1.6	0.070	0.20	NS	12
PCB-180	2.2	-0.017	1.0	<0.001	4
PCB-183	3.6	-0.051	0.83	<0.01	6
PCB-187	1.7	0.0066	0.62	<0.005	11
Extract 05 & Blind 05					
	m	***b***	R^2	***P* value**	**Observation**
PCB-6	0.40	0.11	0.86	<0.005	6
PCB-18	1.1	-0.22	0.98	<0.0001	16
PCB-22	0.52	0.052	0.22	NS	8
PCB-24/27	0.19	0.068	0.12	NS	7
PCB-26	3.1	-0.23	0.17	NS	11
PCB-42	0.63	0.023	0.26	NS	7
PCB-44	0.72	0.063	0.17	NS	12
PCB-52	1.1	-0.091	0.99	<0.0001	18
PCB-74	0.65	0.019	0.44	<0.05	8
PCB-97	0.56	0.024	0.47	NS	7
PCB-99	0.85	0.096	0.34	<0.05	10
PCB-101	1.0	0.0017	0.76	<0.0001	14
PCB-136	0.56	0.026	0.14	NS	6
PCB-151	0.64	0.0076	0.57	NS	5
PCB-180	0.64	0.071	1.0	<0.0001	6

Note: Regressions were conducted for OCPs reported for 4 or more pairs of data. NS = not significant at 95% confidence level

Table S24. Regression results with Eq. 4 (i.e., $C_{NLET} = m \times C_{FWI} + b$) for PAHs.

Std 05					
	m	***b***	R^2	***P* value**	**Observation**
1-M-Naph	0.83	-71	0.97	<0.05	4
2-M-Naph	1.2	-91	0.89	<0.05	4
AcenE	1.1	-82	0.94	<0.05	4
AcenY	0.93	-51	0.98	<0.01	4
Anth	1.0	-50	0.97	<0.01	4
B[a]A	0.76	-10	1.0	<0.005	4
B[a]P	1.7	-44	0.94	<0.05	4

B[b]F	0.84	99	0.95	<0.05	4
B[ghi]P	1.6	-66	0.98	<0.01	4
B[e]P	0.86	5.2	--	--	2
B[k]F	0.82	90	0.96	<0.05	4
Chry	1.1	15	0.98	<0.01	4
D[ah]A	1.2	3.4	1.0	<0.0001	4
Diben	1.3	6.0	--	--	2
FluoA	0.95	-11	0.84	NS	4
FluoE	1.1	-78	0.94	<0.05	4
I[123,cd]P	1.2	4.1	1.0	<0.0001	4
Naph	1.4	2.2	--	--	2
Pery	1.1	5.5	--	--	2
Phen	1.1	-70	0.96	<0.05	4
Pyr	0.98	5.4	0.70	NS	4
Rete	5.5	8.2	--	--	2
Extract 04					
	m	***b***	***R*^{2}**	***P* value**	**Observation**
AcenE	0.68	-0.095	0.98	<0.0001	18
AcenY	0.32	0.036	0.80	<0.0001	14
Anth	0.78	-0.48	0.97	<0.05	4
B[a]A	0.48	0.25	0.95	<0.0001	8
B[a]P	0.75	-0.018	0.99	<0.001	5
B[b]F	0.44	-0.44	0.96	<0.0001	8
B[ghi]P	0.76	0.064	0.99	<0.0001	7
B[e]P	0.59	-0.092	0.98	<0.0001	9
B[k]F	0.97	0.093	0.97	<0.0001	8
Chry	0.91	0.29	0.99	<0.0001	10
D[ah]A	0.84	-0.25	0.95	<0.05	4
Diben	0.67	0.39	0.97	<0.0001	14
FluoA	0.76	-0.17	1.0	<0.0001	19
FluoE	0.73	-1.0	0.99	<0.0001	18
I[123,cd]P	0.54	-0.14	0.92	<0.001	7
Naph	0.45	470	0.20	<0.05	19
Pery	0.66	-0.016	1.0	<0.0001	5
Phen	0.69	1.9	0.96	<0.0001	19
Pyr	0.76	1.0	0.99	<0.0001	13
Extract 05					
	m	***b***	***R*^{2}**	***P* value**	**Observation**
AcenE	1.7	-0.46	0.82	<0.0001	12
AcenY	0.26	0.30	0.49	NS	5
Anth	-0.15	1.3	-0.057	NS	15
B[a]A	0.71	0.76	0.72	<0.05	5
B[b]F	0.60	5.7	0.37	NS	4
B[e]P	1.2	2.6	0.65	NS	5
B[k]F	2.2	8.4	0.27	NS	4
Chry	1.8	4.5	0.66	<0.05	6
Diben	1.3	-0.16	0.92	<0.0001	11
FluoA	1.3	1.1	0.97	<0.0001	14
FluoE	1.3	-4.3	0.97	<0.0001	13
I[123,cd]P	0.59	3.0	0.43	NS	5
Naph	1.1	6.0	1.0	<0.0001	15
Phen	1.1	0.29	0.98	<0.0001	15
Pyr	1.2	1.8	0.94	<0.0001	14

Note: Regressions were conducted for OCPs reported for 4 or more

pairs of data. NS = not significant at 95% confidence level

Table S25. Regression results commonly available for both Extract 04 and Extract 05&Blind 05.

	Extract 04					Extract 05 & Blind 05				
	m	***b***	R^2	***P* value**	**Observation**	***m***	***b***	R^2	***P* value**	**Observation**
CC	0.42	0.30	0.15	NS	10	1.4	-0.062	0.90	<0.0001	9
Diel	0.89	0.11	0.61	<0.005	10	1.2	-0.013	0.90	<0.0001	9
Endos I	0.62	0.48	0.88	<0.0001	10	1.8	-1.6	0.96	<0.0001	14
HCB	0.080	28	-0.12	NS	9	3.6	-41	0.98	<0.0001	15
HEPX	0.56	0.23	0.43	<0.05	11	0.35	0.77	-0.031	NS	10
PCA	0.99	12	-0.025	NS	14	2.5	-2.3	1.0	NS	14
TC	2.2	-0.24	0.60	NS	5	0.91	0.053	0.46	NS	3
TeCV	0.29	0.92	0.20	NS	8	0.96	-0.010	0.97	<0.0001	10
TN	1.4	0.085	0.30	NS	7	1.8	-0.20	0.27	NS	9
a-HCH	0.28	7.6	0.29	<0.05	11	2.2	-4.5	0.98	<0.0001	14
PeCB	0.92	0.62	0.92	<0.0001	9	1.8	1.0	0.6	<0.005	11
PCB-52	2.4	0.033	0.43	<0.01	13	1.1	-0.091	0.99	<0.0001	18
PCB-180	2.2	-0.017	1.0	<0.001	4	0.64	0.071	1.0	<0.0001	6
AcenE	0.68	-0.095	0.98	<0.0001	18	1.7	-0.46	0.82	<0.0001	12
AcenY	0.32	0.036	0.80	<0.0001	14	0.26	0.3	0.49	NS	5
Anth	0.78	-0.48	0.97	<0.05	4	-0.15	1.3	-0.057	NS	15
B[a]A	0.48	0.25	0.95	<0.0001	8	0.71	0.76	0.72	<0.05	5
B[b]F	0.44	-0.44	0.96	<0.0001	8	0.60	5.7	0.37	NS	4
B[e]P	0.59	-0.092	0.98	<0.0001	9	1.2	2.6	0.65	NS	5
B[k]F	0.97	0.093	0.97	<0.0001	8	2.2	8.4	0.27	NS	4
Chry	0.91	0.29	0.99	<0.0001	10	1.8	4.5	0.66	<0.05	6
Diben	0.67	0.39	0.97	<0.0001	14	1.3	-0.16	0.92	<0.0001	11
FluoA	0.76	-0.17	1.0	<0.0001	19	1.3	1.1	0.97	<0.0001	14
FluoE	0.73	-1.0	0.99	<0.0001	18	1.3	-4.3	0.97	<0.0001	13
I[123,cd]P	0.54	-0.14	0.92	<0.001	7	0.59	3.0	0.43	NS	5
Naph	0.45	470	0.20	<0.05	19	1.1	6.0	1.0	<0.0001	15
Phen	0.69	1.9	0.96	<0.0001	19	1.1	0.29	0.98	<0.0001	15
Pyr	0.76	1.0	0.99	<0.0001	13	1.2	1.8	0.94	<0.0001	14

NS = not significant at 95% confidence level

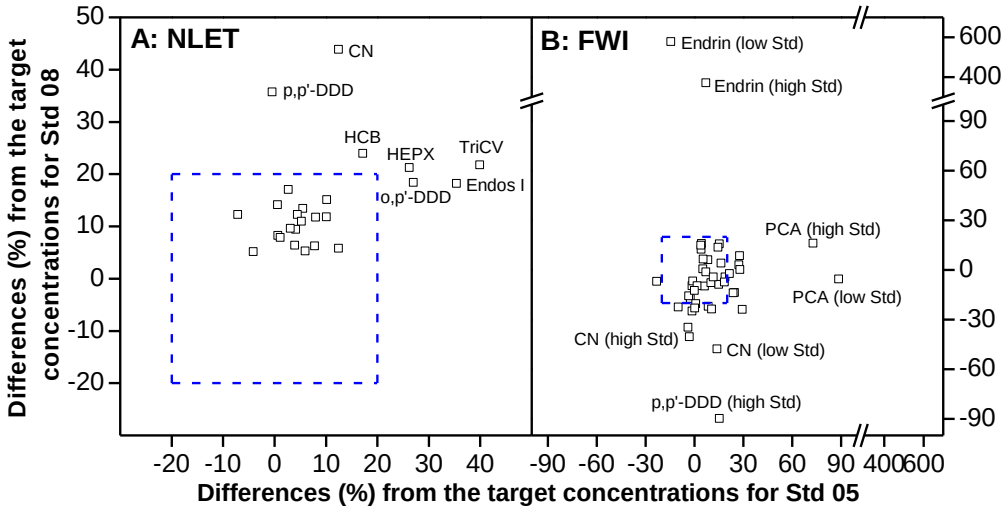

Figure S1. Comparison of measurement accuracy between Std 05 and Std 08 for the analysis of OCPs by NLET (A) and FWI (B).

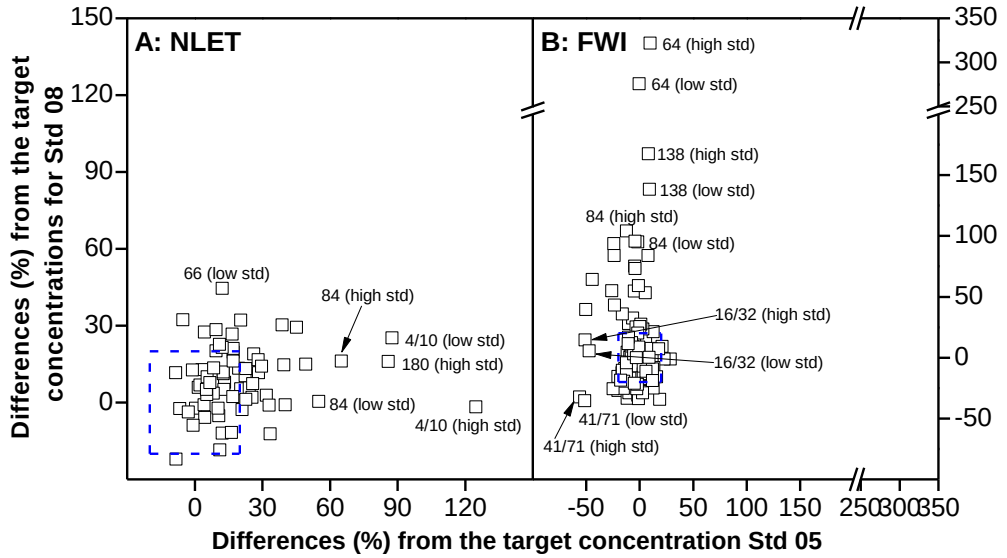

Figure S2. Comparison of measurement accuracy between Std 05 and Std 08 for the analysis of PCBs by NLET (A) and FWI (B).

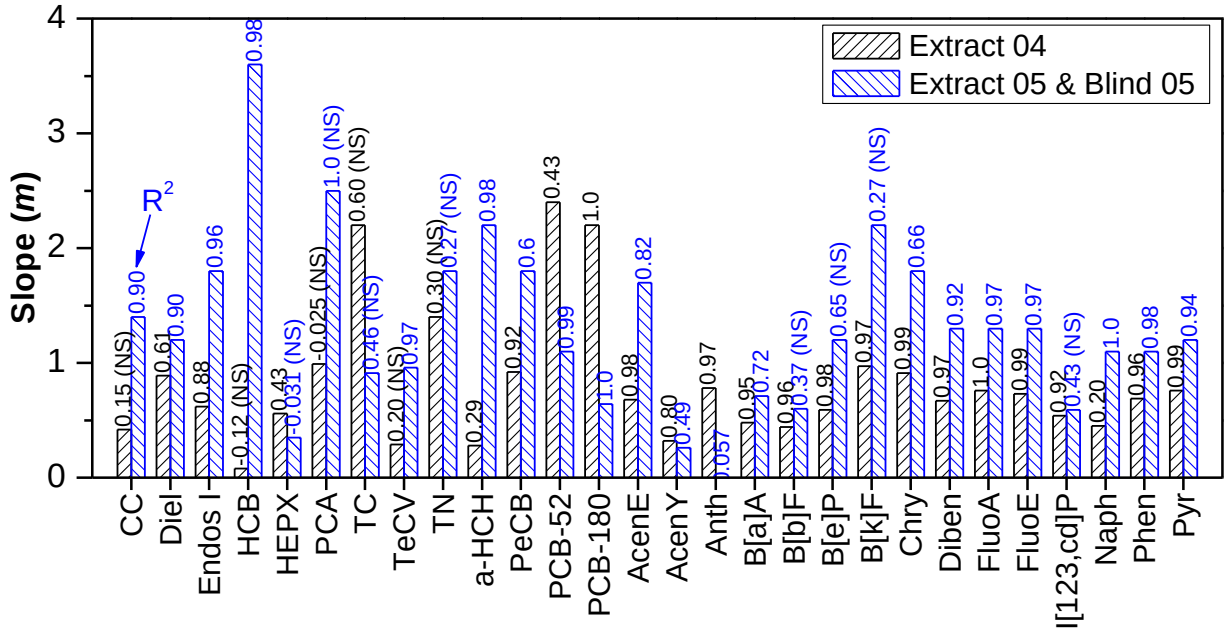

Figure S3. Slope *m* (bars) and correlation of determination R^2 (numbers above bars) obtained from linear regressions of Extract 04 (in black color) and Extract 05 & Blind 05 (in blue color). NS = not significant at 95% confidence level.