NILU: OR 23/2005

NILU : OR 23/2005
REFERANSE : O-90006/O-93062
DATO : MAI 2005
ISBN : 82-425-1663-4

Måledata fra langtransportert forurenset luft og nedbør

Datarapport fra programmene CAMP '04 og AMAP '04 (sporstoffer og organiske komponenter)

Stein Manø og Torunn Berg

Vedlegg til Statlig program for forurensningsovervåking. Rapport 929/2005.

Måledata fra langtransportert forurenset luft og nedbør

Datarapport fra programmene CAMP '04 og AMAP '04 (sporstoffer og organiske komponenter)

Måledataene i denne rapporten er innsamlet i forbindelse med Statlig program for forurensningsovervåkning ved Statens forurensningstilsyn. Målingene er utført på prøver som er innsamlet under programmene Comprehensive Atmospheric Monitoring Programme (CAMP) og Arctic Monitoring and Assessment Programme (AMAP) i 2004. CAMP er en av aktivitetene innen Oslo- og Paris-kommisjonens (OSPAR) studier for transport av landbasert forurensning til Nordsjøen. Rapporten inneholder ukentlige måledata for tungmetaller og de organiske stoffene α- og γ-heksaklorsykloheksan (HCH), heksaklorbenzen (HCB) og 7 PCB i luft og nedbør samlet på Birkenes.

Videre inneholder rapporten ukentlige måledata fra luftprøver samlet på Zeppelin-fjellet ved Ny-Ålesund som et ledd i AMAP. Resultatene omfatter 10 sporstoffer, to HCH-isomerer, HCB, seks isomerer tilhørende DDT-gruppen, syv klordan-isomerer, 32 enkeltkongenerer fra gruppen polyklorerte bifenyler (PCB) og sum av alle PCB med fra tre til ti kloratomer i molekylet, samt 38 forbindelser av typen polyaromatiske hydrokarboner (PAH).

En sammenfatning av resultatene finnes i NILU OR 26/2005 (Statens forurensningstilsyn: Overvåking av langtransportert forurenset luft og nedbør. Atmosfærisk tilførsel, 2004. Statlig program for forurensningsovervåking, rapport nr. 929/2005).

Analyseresultater

Side

Vedlegg 1

Organiske forbindelser i luft på Birkenes (O-2983)

Målerapport nr. O-2983

Oppdragsgiver: Statens forurensningstilsyn (SFT)
Postboks 8100 DEP
0032 OSLO

Prosjekt nr.: O-90006

Prøvetaking:

Sted: Birkenes
Ansvar: NILU
Kommentar:

Prøveinformasjon:

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/23	1-2.1.04 0720-0711 160-150	Luft	06.01.04	22.07.04 – 01.03.05
04/101	8-9.1.04 0643-0651 160-150	Luft	26.01.04	"
04/102	15-16.1.04 0634-0651 160-151	Luft	"	"
04/160	22-23.1.04 0636-0652 160-146	Luft	11.02.04	26.07.04 – 01.03.05
04/161	29-30.1.04 0636-0654 160-149	Luft	"	"
04/162	5-6.2.04 0632-0648 160-152	Luft	"	"
04/215	12-13.2.04 0630-0650 160-150	Luft	02.03.04	"
04/216	19-20.2.04 0631-0644 160-147	Luft	10.03.04	28.07.04 – 01.03.05
04/244	26-27.2.04 0631-0645 160-151	Luft	"	"
04/253	4-5.3.04 0626-0645 160-151	Luft	17.03.04	"
04/299	11-12.3.04 0929-0632 160-146	Luft	19.03.04	"
04/312	18-19.3.04 0630-0645 160-140	Luft	26.03.04	16.08.04 –01.03.05
04/350	25-26.3.04 0630-0645 160-152	Luft	15.04.04	16.08.04- 01.03.05
04/351	1-2.4.04 0531-0542 160-152	Luft	"	"
04/352	8-9.4.04 0603-0559 160-153	Luft	"	"
04/524	15-16.4.04 0531-0545 155-142	Luft	26.04.04	18.08.04 – 01.03.05
04/525	22-23.4.04 0533-0549 160-143	Luft	30.04.04	"
04/526	29-30.4.04 0531-0545 160-150	Luft	"	"
04/723	9-10.6.04 1230-0527 160-153	Luft	23.06.04	20.08.04 – 01.03.05
04/724	10-11.6.04 0532-0550 157-154	Luft	"	"
04/780	Bi 17-18.6.04 0532-0549 160-155	Luft	02.07.04	"
04/781	24-25.6.04 0533-0549 160-155	Luft	"	"
04/798	Bi 1-2.7.04 0833-0548 160-156	Luft	09.07.04	24.08.04 – 01.03.05
04/828	8-9.7.04 0534-0547 160-153	Luft	23.07.04	"
04/829	15-16.7.04 0530-0548 160-156	Luft	"	"
04/842	22-23.7.04 0530-0549 160-154	Luft	02.08.04	"
04/867	29-30.7.04 0550-0543 160-161	Luft	09.08.04	26.08.04 – 01.03.05
04/900	5-6.8.04 0547-0546 160-153	Luft	19.08.04	"
04/946	12-13.8.04 0538-0547 160-154	Luft	23.08.04	"
04/965	19-20.8.04 0536-0539 160-155	Luft	30.08.04	06.10.04 – 01.03.05
04/994	26-27.8.04 0533-0546 160-156	Luft	06.09.04	"
04/1032	2-3.9.04 0835-0547 160-157	Luft	10.09.04	"
04/1182	9-10.9.04 0529-0548 160-154	Luft	21.09.04	08.10.04 – 01.03.05
04/1168	16-17.9.04 0535-0546 160-152	Luft	24.09.04	"
04/1175	23-24.9.04 0533-0547 160-156	Luft	01.10.04	"
04/1177	30.9-1.10.04 0532-0540 160-155	Luft	06.10.04	04.02 – 11.03.05
04/11316	7-8.10.04 0530-0545 160-158	Luft	15.10.04	07.02 – 11.03.05
04/1331	14-15.10.04 0532-0545 160-155	Luft	21.10.04	"

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Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/1401	21-22.10.04 0532-0544 160-158	Luft	29.10.04	07.02 –11.03.05
04/1437	28-29.10.04 0650-0550 160-156	Luft	05.11.04	"
04/1502	4-5.11.04 0635-0647 160-156	Luft	16.11.04	09.02 – 11.03.05
04/1556	11-12.11.04 0632-0645 160-148	Luft	19.11.04	"
04/1596	18-19.11.04 0632-0650 160-158	Luft	01.12.04	"
04/1622	24-25.11.04 0632-0627 160-149	Luft	07.12.04	10.02. – 11.03.05
04/1623	25-26.11.04 0633-0643 160-158	Luft	"	"
04/1643	1-2.12.04 0634-0627 160-156	Luft	14.12.04	10.02 – 16.03.05
04/1644	2-3.12.04 0634-0646 160-158	Luft	"	11.02 – 16.03.04
04/1658	8-9.12.04 0632-0628 160-153	Luft	17.12.04	14.02 –11.03.05
04/1659	9-10.12.04 0634-0644 160-156	Luft	"	"
05/24	16-17.12.04 0629-0644 160-150	Luft	04.01.05	15.02 – 11.03.05
05/35	23-24.12.04 0630-0645 160-159	Luft	10.01.05	"
05/36	30-31.12.04 0638-0645 160-160	Luft	"	"

Analyser:

Utført av: Norsk institutt for luftforskning
Postboks 100
N-2027 KJELLER

Målemetode: NILU-O-2 ("Bestemmelse av tungflyktige persistente organiske forbindelser – pesticider og PCB'er")

Kommentarer:

Godkjenning: Kjeller, 16. mars 2005

Ole Anders Braathen
Avd.direktør, Kjemisk analyse

Vedlegg: 50 HCH/PCB-analyser: 50 sider
Målerapporten og vedleggene omfatter totalt 52 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/23
Customer: Camp 04
Customers sample ID: 1-2.1.04 0720-0711
: 160-150
Sample type: Air
Sample amount: 563 m3
Concentration units: pg/m3
Data files: DH649A_PCB7_20-08-2004

Compound		Concentration		Recovery
Structure	IUPAC-no.	pg/m3		%
HCB		134		46
α-HCH		10,0		44
γ-HCH		3,14	b	50
2,4,4'-TriCB	28	0,96	b	58
2,2',5,5'-TetCB	52	0,86	b	58
2,2',4,5,5'-PenCB	101	0,40	b	71
2,3',4,4',5-PenCB	118	0,11	b	78
2,2',3,4,4',5'-HexCB	138	0,14	b	86
2,2',4,4',5,5'-HexCB	153	0,24	b	79
2,2',3,4,4',5,5'-HepCB	180	0,08		98
Sum 7 PCB		**2,81**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/101
Customer: Camp 04
Customers sample ID: 8-9.1.04 0643-0651
: 160.150
Sample type: Air
Sample amount: 563 m3
Concentration units: pg/m3
Data files: DH649A_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		70,2		46
α-HCH		8,36		45
γ-HCH		5,92		53
2,4,4'-TriCB	28	1,66	b	64
2,2',5,5'-TetCB	52	1,66	b	61
2,2',4,5,5'-PenCB	101	0,96	b	79
2,3',4,4',5-PenCB	118	0,27	b	90
2,2',3,4,4',5'-HexCB	138	0,35	b	98
2,2',4,4',5,5'-HexCB	153	0,61	b	90
2,2',3,4,4',5,5'-HepCB	180	0,18		91
Sum 7 PCB		**5,69**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/102
Customer: Camp 04
Customers sample ID: 15-16.1.04 0634-0651
: 160-151
Sample type: Air
Sample amount: 570 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		62,6		32
α-HCH		7,54		43
γ-HCH		5,40		50
2,4,4'-TriCB	28	1,30	b	59
2,2',5,5'-TetCB	52	1,26	b	54
2,2',4,5,5'-PenCB	101	0,72	b	70
2,3',4,4',5-PenCB	118	0,20	b	78
2,2',3,4,4',5'-HexCB	138	0,28	b	75
2,2',4,4',5,5'-HexCB	153	0,47	b	70
2,2',3,4,4',5,5'-HepCB	180	0,15		78
Sum 7 PCB		**4,39**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/160
Customer: Camp 04
Customers sample ID: 22-23.1.04 0636-0652
: 160-146
Sample type: Air
Sample amount: 560 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		54,3		39
α-HCH		7,73		43
γ-HCH		4,72		51
2,4,4'-TriCB	28	1,34	b	61
2,2',5,5'-TetCB	52	1,17	b	53
2,2',4,5,5'-PenCB	101	0,61	b	69
2,3',4,4',5-PenCB	118	0,19	b	78
2,2',3,4,4',5'-HexCB	138	0,29	b	71
2,2',4,4',5,5'-HexCB	153	0,42	b	68
2,2',3,4,4',5,5'-HepCB	180	0,18		65
Sum 7 PCB		**4,21**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Encl. to measuring report: O-2984
NILU-Sample number: 04/161
Customer: Camp 04
Customers sample ID: 29-30.1.04 0636-0654
: 160-149
Sample type: Air
Sample amount: 565 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Kjeller, 25.02.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		60,2		41
α-HCH		7,24		38
γ-HCH		5,39		44
2,4,4'-TriCB	28	1,54	b	56
2,2',5,5'-TetCB	52	1,35	b	51
2,2',4,5,5'-PenCB	101	0,68	b	65
2,3',4,4',5-PenCB	118	0,19	b	70
2,2',3,4,4',5'-HexCB	138	0,25	b	63
2,2',4,4',5,5'-HexCB	153	0,41	b	60
2,2',3,4,4',5,5'-HepCB	180	0,13		56
Sum 7 PCB		**4,55**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/162
Customer: Camp 04
Customers sample ID: 5-6.2.04 0632-0648
: 160-152
Sample type: Air
Sample amount: 571 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		60,5		41
α-HCH		7,48		49
γ-HCH		6,01		57
2,4,4'-TriCB	28	1,31	b	63
2,2',5,5'-TetCB	52	1,21	b	66
2,2',4,5,5'-PenCB	101	0,85	b	75
2,3',4,4',5-PenCB	118	0,28	b	83
2,2',3,4,4',5'-HexCB	138	0,36	b	86
2,2',4,4',5,5'-HexCB	153	0,59	b	81
2,2',3,4,4',5,5'-HepCB	180	0,18		67
Sum 7 PCB		**4,77**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/215
Customer: Camp 04
Customers sample ID: 12-13.2.04 0630-0650
: 160-150
Sample type: Air
Sample amount: 567 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		59,2		43
α-HCH		6,49		52
γ-HCH		4,00	b	59
2,4,4'-TriCB	28	1,23	b	70
2,2',5,5'-TetCB	52	1,16	b	62
2,2',4,5,5'-PenCB	101	0,71	b	79
2,3',4,4',5-PenCB	118	0,20	b	88
2,2',3,4,4',5'-HexCB	138	0,27	b	81
2,2',4,4',5,5'-HexCB	153	0,46	b	78
2,2',3,4,4',5,5'-HepCB	180	0,12		78
Sum 7 PCB		**4,16**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/216
Customer: Camp 04
Customers sample ID: 19-20.2.04 0631-0644
: 160-147
Sample type: Air
Sample amount: 560 m3
Concentration units: pg/m3
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		44,0		39
α-HCH		8,04		41
γ-HCH		3,08	b	46
2,4,4'-TriCB	28	0,86	b	52
2,2',5,5'-TetCB	52	0,71	b	62
2,2',4,5,5'-PenCB	101	0,41	b	67
2,3',4,4',5-PenCB	118	0,14	b	57
2,2',3,4,4',5'-HexCB	138	0,16	b	60
2,2',4,4',5,5'-HexCB	153	0,27	b	63
2,2',3,4,4',5,5'-HepCB	180	0,08		39
Sum 7 PCB		**2,64**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/244
Customer: Camp 04
Customers sample ID: 26-27.2.04 0631-0645
: 160-151
Sample type: Air
Sample amount: 567 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		52,1		40
α-HCH		6,50		48
γ-HCH		2,19	b	55
2,4,4'-TriCB	28	0,93	b	65
2,2',5,5'-TetCB	52	0,89	b	56
2,2',4,5,5'-PenCB	101	0,43	b	71
2,3',4,4',5-PenCB	118	0,13	b	78
2,2',3,4,4',5'-HexCB	138	0,15	b	72
2,2',4,4',5,5'-HexCB	153	0,25	b	70
2,2',3,4,4',5,5'-HepCB	180	0,07		64
Sum 7 PCB		**2,85**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/253
Customer: Camp 04
Customers sample ID: 4-5.3.04 0626-0645
: 160-151
Sample type: Air
Sample amount: 570 m3
Concentration units: pg/m3
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		58,8		40
α-HCH		10,1		42
γ-HCH		3,30	b	48
2,4,4'-TriCB	28	1,14	b	52
2,2',5,5'-TetCB	52	0,92	b	61
2,2',4,5,5'-PenCB	101	0,40	b	76
2,3',4,4',5-PenCB	118	0,11	b	78
2,2',3,4,4',5'-HexCB	138	0,13	b	97
2,2',4,4',5,5'-HexCB	153	0,21	b	78
2,2',3,4,4',5,5'-HepCB	180	0,06		72
Sum 7 PCB		**2,96**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/299
Customer: Camp 04
Customers sample ID: 11-12.3.04 0929-0632
: 160-146
Sample type: Air
Sample amount: 553 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		69,5		39
α-HCH		11,0		49
γ-HCH		5,34		56
2,4,4'-TriCB	28	2,32	b	66
2,2',5,5'-TetCB	52	1,63	b	68
2,2',4,5,5'-PenCB	101	0,83	b	77
2,3',4,4',5-PenCB	118	0,30	b	88
2,2',3,4,4',5'-HexCB	138	0,27	b	87
2,2',4,4',5,5'-HexCB	153	0,44	b	83
2,2',3,4,4',5,5'-HepCB	180	0,14		77
Sum 7 PCB		**5,93**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/312
Customer: Camp 04
Customers sample ID: 18-19.3.04 0630-0645
: 160-140
Sample type: Air
Sample amount: 549 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound		Concentration		Recovery
Structure	IUPAC-no.	pg/m3		%
HCB		77,3		32
α-HCH		9,01		53
γ-HCH		8,54		61
2,4,4'-TriCB	28	1,64	b	70
2,2',5,5'-TetCB	52	1,58	b	61
2,2',4,5,5'-PenCB	101	1,12	b	73
2,3',4,4',5-PenCB	118	0,73	b	90
2,2',3,4,4',5'-HexCB	138	0,83	b	82
2,2',4,4',5,5'-HexCB	153	1,78	b	81
2,2',3,4,4',5,5'-HepCB	180	0,68		84
Sum 7 PCB		**8,35**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/350
Customer: Camp 04
Customers sample ID: 25-26.3.04 0630-0645
: 160-152
Sample type: Air
Sample amount: 571 m3
Concentration units: pg/m3
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		60,5		37
α-HCH		7,48		60
γ-HCH		4,43	b	64
2,4,4'-TriCB	28	1,54	b	75
2,2',5,5'-TetCB	52	1,23	b	61
2,2',4,5,5'-PenCB	101	0,64	b	57
2,3',4,4',5-PenCB	118	0,38	b	64
2,2',3,4,4',5'-HexCB	138	0,42	b	59
2,2',4,4',5,5'-HexCB	153	0,85	b	60
2,2',3,4,4',5,5'-HepCB	180	0,34		83
Sum 7 PCB		**5,38**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/351
Customer: Camp 04
Customers sample ID: 1-2.4.04 0531-0542
: 160-152
Sample type: Air
Sample amount: 569 m3
Concentration units: pg/m3
Data files: M_030205

Compound		Concentration		Recovery
Structure	IUPAC-no.	pg/m3		%
HCB		62,7		43
α-HCH		12,2		47
γ-HCH		4,90		53
2,4,4'-TriCB	28	1,26	b	57
2,2',5,5'-TetCB	52	1,10	b	67
2,2',4,5,5'-PenCB	101	0,61	b	80
2,3',4,4',5-PenCB	118	0,22	b	84
2,2',3,4,4',5'-HexCB	138	0,24	b	108
2,2',4,4',5,5'-HexCB	153	0,41	b	93
2,2',3,4,4',5,5'-HepCB	180	0,10		75
Sum 7 PCB		**3,95**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/352
Customer: Camp 04
Customers sample ID: 8-9.4.04 0603-0559
: 160-153
Sample type: Air
Sample amount: 564 m3
Concentration units: pg/m3
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		64,3		44
α-HCH		13,6		45
γ-HCH		12,6		51
2,4,4'-TriCB	28	1,91	b	58
2,2',5,5'-TetCB	52	1,43	b	70
2,2',4,5,5'-PenCB	101	0,71	b	86
2,3',4,4',5-PenCB	118	0,27	b	95
2,2',3,4,4',5'-HexCB	138	0,28	b	121
2,2',4,4',5,5'-HexCB	153	0,48	b	103
2,2',3,4,4',5,5'-HepCB	180	0,11		95
Sum 7 PCB		**5,19**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/524
Customer: Camp 04
Customers sample ID: 15-16.4.04 0531-0545
: 155-142
Sample type: Air
Sample amount: 542 m3
Concentration units: pg/m3
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		64,5		42
α-HCH		11,3		44
γ-HCH		18,8		50
2,4,4'-TriCB	28	1,56	b	56
2,2',5,5'-TetCB	52	1,39	b	71
2,2',4,5,5'-PenCB	101	1,02	b	89
2,3',4,4',5-PenCB	118	0,77	b	96
2,2',3,4,4',5'-HexCB	138	0,78	b	123
2,2',4,4',5,5'-HexCB	153	1,84	b	109
2,2',3,4,4',5,5'-HepCB	180	0,59		101
Sum 7 PCB		**7,95**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/525
Customer: Camp 04
Customers sample ID: 22-23.4.04 0533-0549
: 160-143
Sample type: Air
Sample amount: 555 m3
Concentration units: pg/m3
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		77,7		39
α-HCH		20,0		42
γ-HCH		37,0		50
2,4,4'-TriCB	28	2,43	b	54
2,2',5,5'-TetCB	52	2,10	b	66
2,2',4,5,5'-PenCB	101	1,30	b	78
2,3',4,4',5-PenCB	118	1,28	b	81
2,2',3,4,4',5'-HexCB	138	1,22	b	111
2,2',4,4',5,5'-HexCB	153	2,93	b	91
2,2',3,4,4',5,5'-HepCB	180	0,98		78
Sum 7 PCB		**12,2**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/526
Customer: Camp 04
Customers sample ID: 29-30.4.04 0531-0545
: 160-150
Sample type: Air
Sample amount: 565 m3
Concentration units: pg/m3
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		70,0		51
α-HCH		20,2		56
γ-HCH		10,9		65
2,4,4'-TriCB	28	1,96	b	70
2,2',5,5'-TetCB	52	1,49	b	84
2,2',4,5,5'-PenCB	101	0,86	b	99
2,3',4,4',5-PenCB	118	0,31	b	104
2,2',3,4,4',5'-HexCB	138	0,34	b	154
2,2',4,4',5,5'-HexCB	153	0,52	b	121
2,2',3,4,4',5,5'-HepCB	180	0,12		97
Sum 7 PCB		**5,60**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/723
Customer: Camp 04
Customers sample ID: 9-10.6.04 1230-0527
: 160-153
Sample type: Air
Sample amount: 399 m3
Concentration units: pg/m3
Data files: M_040205

Compound		Concentration		Recovery
Structure	IUPAC-no.	pg/m3		%
HCB		82,7		42
α-HCH		23,9		44
γ-HCH		20,1		51
2,4,4'-TriCB	28	3,51	b	58
2,2',5,5'-TetCB	52	2,79	b	67
2,2',4,5,5'-PenCB	101	1,51	b	79
2,3',4,4',5-PenCB	118	0,64	b	64
2,2',3,4,4',5'-HexCB	138	0,69	b	92
2,2',4,4',5,5'-HexCB	153	1,41	b	66
2,2',3,4,4',5,5'-HepCB	180	0,34		69
Sum 7 PCB		**10,9**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/724
Customer: Camp 04
Customers sample ID: 10-11.6.04 0532-0550
: 157-154
Sample type: Air
Sample amount: 575 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		47,8		42
α-HCH		21,0		42
γ-HCH		14,0		49
2,4,4'-TriCB	28	1,30	b	55
2,2',5,5'-TetCB	52	1,00	b	68
2,2',4,5,5'-PenCB	101	0,59	b	79
2,3',4,4',5-PenCB	118	0,63	b	71
2,2',3,4,4',5'-HexCB	138	0,54	b	115
2,2',4,4',5,5'-HexCB	153	1,27	b	76
2,2',3,4,4',5,5'-HepCB	180	0,26		70
Sum 7 PCB		**5,59**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/780
Customer: Camp 04
Customers sample ID: Bi 17-18.6.04 0532-0549
: 160-155
Sample type: Air
Sample amount: 577 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		55,8		44
α-HCH		17,1		47
γ-HCH		7,09		54
2,4,4'-TriCB	28	1,17	b	60
2,2',5,5'-TetCB	52	0,91	b	69
2,2',4,5,5'-PenCB	101	0,53	b	85
2,3',4,4',5-PenCB	118	0,22	b	72
2,2',3,4,4',5'-HexCB	138	0,25	b	131
2,2',4,4',5,5'-HexCB	153	0,41	b	78
2,2',3,4,4',5,5'-HepCB	180	0,11		77
Sum 7 PCB		**3,60**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/781
Customer: Camp 04
Customers sample ID: 24-25.6.04 0533-0549
: 160-155
Sample type: Air
Sample amount: 577 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		77,3		40
α-HCH		26,3		44
γ-HCH		29,5		50
2,4,4'-TriCB	28	2,31	b	58
2,2',5,5'-TetCB	52	2,11	b	67
2,2',4,5,5'-PenCB	101	1,26	b	81
2,3',4,4',5-PenCB	118	0,40	b	71
2,2',3,4,4',5'-HexCB	138	0,49	b	86
2,2',4,4',5,5'-HexCB	153	0,90	b	73
2,2',3,4,4',5,5'-HepCB	180	0,21		61
Sum 7 PCB		**7,67**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/798
Customer: Camp 04
Customers sample ID: Bi 1-2.7.04 0833-0548
: 160-156
Sample type: Air
Sample amount: 578 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		61,7		45
α-HCH		18,4		45
γ-HCH		12,6		52
2,4,4'-TriCB	28	1,49	b	59
2,2',5,5'-TetCB	52	1,16	b	72
2,2',4,5,5'-PenCB	101	0,67	b	83
2,3',4,4',5-PenCB	118	0,31	b	75
2,2',3,4,4',5'-HexCB	138	0,34	b	106
2,2',4,4',5,5'-HexCB	153	0,65	b	77
2,2',3,4,4',5,5'-HepCB	180	0,17		71
Sum 7 PCB		**4,78**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/828
Customer: Camp 04
Customers sample ID: 8-9.7.04 0534-0547
: 160-153
Sample type: Air
Sample amount: 571 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		63,9		76
α-HCH		21,1		77
γ-HCH		10,4		88
2,4,4'-TriCB	28	1,34	b	100
2,2',5,5'-TetCB	52	1,08	b	119
2,2',4,5,5'-PenCB	101	0,67	b	g
2,3',4,4',5-PenCB	118	0,23	b	126
2,2',3,4,4',5'-HexCB	138	0,31	b	g
2,2',4,4',5,5'-HexCB	153	0,47	b	g
2,2',3,4,4',5,5'-HepCB	180	0,14		122
Sum 7 PCB		**4,24**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/829
Customer: Camp 04
Customers sample ID: 15-16.7.04 0530-0548
: 160-156
Sample type: Air
Sample amount: 578 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		65,7		36
α-HCH		21,4		36
γ-HCH		5,74		42
2,4,4'-TriCB	28	1,57	b	51
2,2',5,5'-TetCB	52	1,12	b	63
2,2',4,5,5'-PenCB	101	0,68	b	79
2,3',4,4',5-PenCB	118	0,21	b	77
2,2',3,4,4',5'-HexCB	138	0,19	b	118
2,2',4,4',5,5'-HexCB	153	0,30	b	84
2,2',3,4,4',5,5'-HepCB	180	0,08		74
Sum 7 PCB		**4,14**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/842
Customer: Camp 04
Customers sample ID: 22-23.7.04 0530-0549
: 160-154
Sample type: Air
Sample amount: 575 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		63,9		41
α-HCH		31,3		42
γ-HCH		18,2		48
2,4,4'-TriCB	28	2,03	b	55
2,2',5,5'-TetCB	52	1,76	b	65
2,2',4,5,5'-PenCB	101	1,17	b	75
2,3',4,4',5-PenCB	118	0,36	b	66
2,2',3,4,4',5'-HexCB	138	0,47	b	98
2,2',4,4',5,5'-HexCB	153	0,77	b	66
2,2',3,4,4',5,5'-HepCB	180	0,20		68
Sum 7 PCB		**6,77**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/867
Customer: Camp 04
Customers sample ID: 29-30.7.04 0550-0543
: 160-161
Sample type: Air
Sample amount: 577 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		58,7		35
α-HCH		20,5		36
γ-HCH		9,21		42
2,4,4'-TriCB	28	1,21	b	47
2,2',5,5'-TetCB	52	0,98	b	55
2,2',4,5,5'-PenCB	101	0,68	b	67
2,3',4,4',5-PenCB	118	0,32	b	64
2,2',3,4,4',5'-HexCB	138	0,36	b	86
2,2',4,4',5,5'-HexCB	153	0,58	b	69
2,2',3,4,4',5,5'-HepCB	180	0,14		71
Sum 7 PCB		**4,28**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/900
Customer: Camp 04
Customers sample ID: 5-6.8.04 0547-0546
: 160-153
Sample type: Air
Sample amount: 566 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		71,7		47
α-HCH		51,9		46
γ-HCH		24,7		52
2,4,4'-TriCB	28	3,26		62
2,2',5,5'-TetCB	52	3,26	b	71
2,2',4,5,5'-PenCB	101	2,40	b	80
2,3',4,4',5-PenCB	118	0,75	b	75
2,2',3,4,4',5'-HexCB	138	1,17	b	108
2,2',4,4',5,5'-HexCB	153	1,96	b	78
2,2',3,4,4',5,5'-HepCB	180	0,48		69
Sum 7 PCB		**13,3**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/946
Customer: Camp 04
Customers sample ID: 12-13.8.04 0538-0547
: 160-154
Sample type: Air
Sample amount: 572 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		52,7		38
α-HCH		39,0		39
γ-HCH		17,3		46
2,4,4'-TriCB	28	2,42	b	55
2,2',5,5'-TetCB	52	2,22	b	69
2,2',4,5,5'-PenCB	101	1,76	b	84
2,3',4,4',5-PenCB	118	0,50	b	81
2,2',3,4,4',5'-HexCB	138	0,87	b	122
2,2',4,4',5,5'-HexCB	153	1,35	b	82
2,2',3,4,4',5,5'-HepCB	180	0,34		71
Sum 7 PCB		**9,45**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/965
Customer: Camp 04
Customers sample ID: 19-20.8.04 0536-0539
: 160-155
Sample type: Air
Sample amount: 572 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		61,4		36
α-HCH		34,8		39
γ-HCH		29,4		44
2,4,4'-TriCB	28	2,27	b	51
2,2',5,5'-TetCB	52	2,32	b	62
2,2',4,5,5'-PenCB	101	1,61	b	73
2,3',4,4',5-PenCB	118	0,43	b	65
2,2',3,4,4',5'-HexCB	138	0,61	b	86
2,2',4,4',5,5'-HexCB	153	1,01	b	68
2,2',3,4,4',5,5'-HepCB	180	0,26		54
Sum 7 PCB		**8,51**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/994
Customer: Camp 04
Customers sample ID: 26-27.08.04 0533-0546
: 160-156
Sample type: Air
Sample amount: 576 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		57,8		41
α-HCH		30,2		43
γ-HCH		13,2		49
2,4,4'-TriCB	28	1,90	b	57
2,2',5,5'-TetCB	52	1,40	b	66
2,2',4,5,5'-PenCB	101	0,86	b	78
2,3',4,4',5-PenCB	118	0,28	b	68
2,2',3,4,4',5'-HexCB	138	0,34	b	114
2,2',4,4',5,5'-HexCB	153	0,50	b	80
2,2',3,4,4',5,5'-HepCB	180	0,11		66
Sum 7 PCB		**5,40**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1032
Customer: Camp 04
Customers sample ID: 2-3.9.04 0835-0547
: 160-157
Sample type: Air
Sample amount: 578 m3
Concentration units: pg/m3
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		71,4		21
α-HCH		15,2		40
γ-HCH		7,94		47
2,4,4'-TriCB	28	1,13	b	61
2,2',5,5'-TetCB	52	1,14	b	49
2,2',4,5,5'-PenCB	101	0,69	b	66
2,3',4,4',5-PenCB	118	0,20	b	73
2,2',3,4,4',5'-HexCB	138	0,28	b	69
2,2',4,4',5,5'-HexCB	153	0,43	b	66
2,2',3,4,4',5,5'-HepCB	180	0,12		57
Sum 7 PCB		**3,99**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1182
Customer: Camp 04
Customers sample ID: 9-10.9.04 0529-0548
: 160-154
Sample type: Air
Sample amount: 575 m3
Concentration units: pg/m3
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		55,8		39
α-HCH		25,8		42
γ-HCH		6,36		50
2,4,4'-TriCB	28	0,93	b	54
2,2',5,5'-TetCB	52	0,77	b	62
2,2',4,5,5'-PenCB	101	0,52	b	76
2,3',4,4',5-PenCB	118	0,19	b	69
2,2',3,4,4',5'-HexCB	138	0,22	b	106
2,2',4,4',5,5'-HexCB	153	0,33	b	94
2,2',3,4,4',5,5'-HepCB	180	0,08		70
Sum 7 PCB		**3,02**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1168
Customer: Camp 04
Customers sample ID: 16-17.9.04 0535-0546
: 160-152
Sample type: Air
Sample amount: 569 m3
Concentration units: pg/m3
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		62,0		41
α-HCH		13,9		46
γ-HCH		6,02		52
2,4,4'-TriCB	28	1,03	b	59
2,2',5,5'-TetCB	52	0,95	b	61
2,2',4,5,5'-PenCB	101	0,58	b	71
2,3',4,4',5-PenCB	118	0,18	b	87
2,2',3,4,4',5'-HexCB	138	0,21	b	76
2,2',4,4',5,5'-HexCB	153	0,37	b	74
2,2',3,4,4',5,5'-HepCB	180	0,09		87
Sum 7 PCB		**3,41**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1175
Customer: Camp 04
Customers sample ID: 23-24.09.04 0533-0547
: 160-156
Sample type: Air
Sample amount: 576 m3
Concentration units: pg/m3
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		53,8		46
α-HCH		12,3		54
γ-HCH		3,85	b	61
2,4,4'-TriCB	28	0,84	b	68
2,2',5,5'-TetCB	52	0,81	b	66
2,2',4,5,5'-PenCB	101	0,46	b	75
2,3',4,4',5-PenCB	118	0,14	b	90
2,2',3,4,4',5'-HexCB	138	0,15	b	79
2,2',4,4',5,5'-HexCB	153	0,26	b	83
2,2',3,4,4',5,5'-HepCB	180	0,06		88
Sum 7 PCB		**2,72**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1177
Customer: Camp 04
Customers sample ID: 30.9-1.10.04 0532-0540
: 160-155
Sample type: Air
Sample amount: 572 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		49,4		41
α-HCH				
γ-HCH				
2,4,4'-TriCB	28	0,96	b	54
2,2',5,5'-TetCB	52	0,77	b	61
2,2',4,5,5'-PenCB	101	0,41	b	69
2,3',4,4',5-PenCB	118	0,11	b	69
2,2',3,4,4',5'-HexCB	138	0,13	b	71
2,2',4,4',5,5'-HexCB	153	0,21	b	69
2,2',3,4,4',5,5'-HepCB	180	0,05		59
Sum 7 PCB		**2,65**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1316
Customer: Camp 04
Customers sample ID: 7-8.10.04 0530-0545
: 160-158
Sample type: Air
Sample amount: 582 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		55,3		38
α-HCH				
γ-HCH				
2,4,4'-TriCB	28	1,04	b	49
2,2',5,5'-TetCB	52	0,88	b	58
2,2',4,5,5'-PenCB	101	0,56	b	65
2,3',4,4',5-PenCB	118	0,23	b	76
2,2',3,4,4',5'-HexCB	138	0,29	b	74
2,2',4,4',5,5'-HexCB	153	0,45	b	74
2,2',3,4,4',5,5'-HepCB	180	0,13		73
Sum 7 PCB		**3,56**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1331
Customer: Camp 04
Customers sample ID: 14-15.10.04 0532-0545
: 160-155
Sample type: Air
Sample amount: 575 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		82,0		37
α-HCH				
γ-HCH				
2,4,4'-TriCB	28	3,10		51
2,2',5,5'-TetCB	52	1,84	b	58
2,2',4,5,5'-PenCB	101	0,97	b	57
2,3',4,4',5-PenCB	118	0,29	b	59
2,2',3,4,4',5'-HexCB	138	0,47	b	57
2,2',4,4',5,5'-HexCB	153	0,70	b	54
2,2',3,4,4',5,5'-HepCB	180	0,30		44
Sum 7 PCB		**7,66**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1401
Customer: Camp 04
Customers sample ID: 21-22.10.04 0532-0544
: 160-158
Sample type: Air
Sample amount: 544 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		76,3		37
α-HCH				
γ-HCH				
2,4,4'-TriCB	28	2,59	b	51
2,2',5,5'-TetCB	52	1,76	b	59
2,2',4,5,5'-PenCB	101	0,99	b	64
2,3',4,4',5-PenCB	118	0,27	b	74
2,2',3,4,4',5'-HexCB	138	0,34	b	74
2,2',4,4',5,5'-HexCB	153	0,54	b	73
2,2',3,4,4',5,5'-HepCB	180	0,13		76
Sum 7 PCB		**6,61**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1437
Customer: Camp 04
Customers sample ID: 28-29.10.04 0650-0550
: 160-156
Sample type: Air
Sample amount: 547 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		63,4		41
α-HCH				
γ-HCH				
2,4,4'-TriCB	28	1,43	b	54
2,2',5,5'-TetCB	52	1,22	b	61
2,2',4,5,5'-PenCB	101	0,63	b	65
2,3',4,4',5-PenCB	118	0,17	b	75
2,2',3,4,4',5'-HexCB	138	0,23	b	74
2,2',4,4',5,5'-HexCB	153	0,37	b	74
2,2',3,4,4',5,5'-HepCB	180	0,12		76
Sum 7 PCB		**4,16**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1502
Customer: Camp 04
Customers sample ID: 4-5.11.04 0635-0647
: 160-156
Sample type: Air
Sample amount: 576 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		72,3		49
α-HCH		18,0		53
γ-HCH		21,1		58
2,4,4'-TriCB	28	2,39	b	61
2,2',5,5'-TetCB	52	2,38	b	71
2,2',4,5,5'-PenCB	101	1,48	b	73
2,3',4,4',5-PenCB	118	0,36	b	87
2,2',3,4,4',5'-HexCB	138	0,47	b	86
2,2',4,4',5,5'-HexCB	153	0,79	b	84
2,2',3,4,4',5,5'-HepCB	180	0,19		88
Sum 7 PCB		**8,06**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1556
Customer: Camp 04
Customers sample ID: 11-12.11.04 0632-0645
: 160-148
Sample type: Air
Sample amount: 561 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		68,6		41
α-HCH		19,8		45
γ-HCH		12,3		51
2,4,4'-TriCB	28	2,28	b	52
2,2',5,5'-TetCB	52	1,55	b	59
2,2',4,5,5'-PenCB	101	0,86	b	63
2,3',4,4',5-PenCB	118	0,22	b	76
2,2',3,4,4',5'-HexCB	138	0,29	b	76
2,2',4,4',5,5'-HexCB	153	0,48	b	72
2,2',3,4,4',5,5'-HepCB	180	0,13		76
Sum 7 PCB		**5,82**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1596
Customer: Camp 04
Customers sample ID: 18-19.11.04 0632-0650
: 160-158
Sample type: Air
Sample amount: 582 m3
Concentration units: pg/m3
Data files: M_010305

Compound		Concentration		Recovery
Structure	IUPAC-no.	pg/m3		%
HCB		48,0		37
α-HCH		11,8		44
γ-HCH		2,47	b	50
2,4,4'-TriCB	28	0,63	b	47
2,2',5,5'-TetCB	52	0,51	b	56
2,2',4,5,5'-PenCB	101	0,25	b	63
2,3',4,4',5-PenCB	118	0,06	b	74
2,2',3,4,4',5'-HexCB	138	0,07	b	75
2,2',4,4',5,5'-HexCB	153	0,11	b	73
2,2',3,4,4',5,5'-HepCB	180	0,03		75
Sum 7 PCB		**1,65**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1622
Customer: Camp 04
Customers sample ID: 24-25.11.04 0632-0627
: 160-149
Sample type: Air
Sample amount: 556 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		61,9		37
α-HCH		13,5		43
γ-HCH		5,38		49
2,4,4'-TriCB	28	1,25	b	50
2,2',5,5'-TetCB	52	0,97	b	59
2,2',4,5,5'-PenCB	101	0,52	b	62
2,3',4,4',5-PenCB	118	0,14	b	67
2,2',3,4,4',5'-HexCB	138	0,17	b	66
2,2',4,4',5,5'-HexCB	153	0,27	b	64
2,2',3,4,4',5,5'-HepCB	180	0,06		65
Sum 7 PCB		**3,37**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

NILU

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1623
Customer: Camp 04
Customers sample ID: 25-26.11.04 0633-0643
: 160-158
Sample type: Air
Sample amount: 580 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		63,6		35
α-HCH		13,9		43
γ-HCH		6,33		51
2,4,4'-TriCB	28	1,12	b	49
2,2',5,5'-TetCB	52	0,88	b	59
2,2',4,5,5'-PenCB	101	0,49	b	66
2,3',4,4',5-PenCB	118	0,13	b	81
2,2',3,4,4',5'-HexCB	138	0,17	b	82
2,2',4,4',5,5'-HexCB	153	0,27	b	77
2,2',3,4,4',5,5'-HepCB	180	0,07		82
Sum 7 PCB		**3,11**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 15.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1643
Customer: Camp 04
Customers sample ID: 1-2.12.04 0634-0627
: 160-156
Sample type: Air
Sample amount: 569 m3
Concentration units: pg/m3
Data files: M_140305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		52,1		44
α-HCH		10,2		46
γ-HCH		4,69		54
2,4,4'-TriCB	28	0,86	b	56
2,2',5,5'-TetCB	52	0,69	b	62
2,2',4,5,5'-PenCB	101	0,34	b	61
2,3',4,4',5-PenCB	118	0,11	b	60
2,2',3,4,4',5'-HexCB	138	0,13	b	46
2,2',4,4',5,5'-HexCB	153	0,22	b	53
2,2',3,4,4',5,5'-HepCB	180	0,09	b	51
Sum 7 PCB		**2,43**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

NILU

Kjeller, 15.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1644
Customer: Camp 04
Customers sample ID: 2-3.12.04 0634-0646
: 160-158
Sample type: Air
Sample amount: 580 m3
Concentration units: pg/m3
Data files: M_140305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		41,5		43
α-HCH		7,72		43
γ-HCH		3,35		50
2,4,4'-TriCB	28	0,86	b	50
2,2',5,5'-TetCB	52	0,76	b	63
2,2',4,5,5'-PenCB	101	0,35	b	65
2,3',4,4',5-PenCB	118	0,13	b	74
2,2',3,4,4',5'-HexCB	138	0,09	b	57
2,2',4,4',5,5'-HexCB	153	0,15	b	68
2,2',3,4,4',5,5'-HepCB	180	0,04	b	83
Sum 7 PCB		**2,37**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1658
Customer: Camp 04
Customers sample ID: 8-9.12.04 0632-0628
: 160-153
Sample type: Air
Sample amount: 564 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		54,3		43
α-HCH		12,8		52
γ-HCH		3,59		60
2,4,4'-TriCB	28	2,25	b	60
2,2',5,5'-TetCB	52	2,23	b	65
2,2',4,5,5'-PenCB	101	1,09	b	72
2,3',4,4',5-PenCB	118	0,71	b	81
2,2',3,4,4',5'-HexCB	138	0,39	b	80
2,2',4,4',5,5'-HexCB	153	0,61	b	76
2,2',3,4,4',5,5'-HepCB	180	0,53		83
Sum 7 PCB		**7,82**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 04/1659
Customer: Camp 04
Customers sample ID: 9-10.12.04 0634-0644
: 160-156
Sample type: Air
Sample amount: 576 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		65,5		41
α-HCH		12,3		49
γ-HCH		7,56		55
2,4,4'-TriCB	28	1,88	b	56
2,2',5,5'-TetCB	52	1,72	b	67
2,2',4,5,5'-PenCB	101	0,96	b	73
2,3',4,4',5-PenCB	118	0,49	b	84
2,2',3,4,4',5'-HexCB	138	0,37	b	81
2,2',4,4',5,5'-HexCB	153	0,60	b	80
2,2',3,4,4',5,5'-HepCB	180	0,37		84
Sum 7 PCB		**6,39**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 05/24
Customer: Camp 04
Customers sample ID: 16-17.12.04 0629-0644
: 160-150
Sample type: Air
Sample amount: 567 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		60,9		40
α-HCH		12,1		47
γ-HCH		9,58		54
2,4,4'-TriCB	28	2,54	b	53
2,2',5,5'-TetCB	52	2,50	b	60
2,2',4,5,5'-PenCB	101	1,09	b	63
2,3',4,4',5-PenCB	118	0,32	b	72
2,2',3,4,4',5'-HexCB	138	0,28	b	71
2,2',4,4',5,5'-HexCB	153	0,49	b	67
2,2',3,4,4',5,5'-HepCB	180	0,10	b	73
Sum 7 PCB		**7,32**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 05/35
Customer: Camp 04
Customers sample ID: 23-24.12.04 0630-0645
: 160-159
Sample type: Air
Sample amount: 584 m3
Concentration units: pg/m3
Data files: M_010305

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %
HCB		52,3		44
α-HCH		10,6		51
γ-HCH		2,67		57
2,4,4'-TriCB	28	0,83	b	62
2,2',5,5'-TetCB	52	0,78	b	67
2,2',4,5,5'-PenCB	101	0,38	b	71
2,3',4,4',5-PenCB	118	0,10	b	75
2,2',3,4,4',5'-HexCB	138	0,11	b	71
2,2',4,4',5,5'-HexCB	153	0,18	b	68
2,2',3,4,4',5,5'-HepCB	180	0,04	b	72
Sum 7 PCB		**2,42**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 08.03.05

Encl. to measuring report: O-2983
NILU-Sample number: 05/36
Customer: Camp 04
Customers sample ID: 30-31.12.04 0638-0645
: 160-160
Sample type: Air
Sample amount: 581 m3
Concentration units: pg/m3
Data files: M_010305

Compound		Concentration		Recovery
Structure	IUPAC-no.	pg/m3		%
HCB		54,8		35
α-HCH		10,6		45
γ-HCH		4,06		52
2,4,4'-TriCB	28	0,94	b	52
2,2',5,5'-TetCB	52	0,90	b	59
2,2',4,5,5'-PenCB	101	0,50	b	65
2,3',4,4',5-PenCB	118	0,16	b	74
2,2',3,4,4',5'-HexCB	138	0,18	b	72
2,2',4,4',5,5'-HexCB	153	0,29	b	69
2,2',3,4,4',5,5'-HepCB	180	0,06	b	76
Sum 7 PCB		**3,03**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Vedlegg 2

Organiske forbindelser i nedbør på Birkenes (O-2984)

NORSK AKKREDITERING P 008

Akkreditert etter ISO/IEC-17025

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Målerapport nr. O-2984

Oppdragsgiver: Statens forurensningstilsyn (SFT)
Postboks 8100 DEP
0032 OSLO

Prosjekt nr.: O-90006

Prøvetaking:

Sted: Birkenes
Ansvar: NILU
Kommentar:

Prøveinformasjon:

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/248+04/300	27.2-15.3.04	Nedbør	19.03.04	18.06 – 21.12.04
04/313	15-19.03.04	Nedbør	26.03.04	18.06 – 21.12.04
04/314	19-22.03.04	Nedbør	26.03.04	18.06 – 4.10.04
04/353	22-29.03.04	Nedbør	15.04.04	17.06 – 04.10.04
04/354	29.3-4.4.04	Nedbør	15.04.04	17.06 – 21.12.04
04/355	04-05.04.04	Nedbør	15.04.04	19.07 – 04.10.04
04/356	5-6.04.04	Nedbør	15.04.04	17.06 – 08.02.05
04/527	6-12.04.04 0600-0600	Nedbør	30.04.04	22.06 – 21.12.04
04/528	12-19.04.04	Nedbør	30.04.04	19.07 – 04.10.04
04/529	19-21.04.04	Nedbør	30.04.04	19.07 – 04.10.04
04/530	21-26.4.04 0600-0600	Nedbør		
04/547+04/548	26.04-05.05.04	Nedbør	12.05.04	20.07 – 04.10.04
04/549	5-6.5.04	Nedbør	12.05.04	22.06.04 – 08.02.05
04/550	06-07.05.04	Nedbør	12.05.04	20.07 – 04.10.04
04/635	07-10.05.04	Nedbør	04.06.04	21.07 – 04.10.04
04/636+04/637	17-31.05.04	Nedbør	04.06.04	21.07 – 04.10.04
04/742+04/743	31.05-14.06.04	Nedbør	25.06.04	23.07 – 04.10.04
04/744	14-20.06.04	Nedbør	25.06.04	23.07 – 04.10.04
04/745	20-21.06.04	Nedbør	25.06.04	23.07 – 04.10.04
04/782	21-23.06.04	Nedbør	02.07.04	26.07 – 04.10.04
04/783	23-24.06.04	Nedbør	02.07.04	26.07 – 04.10.04
04/784	24-24.06.04	Nedbør	02.07.04	26.07 – 04.10.04
04/785	24-25.6.04 1530-0600	Nedbør	02.07.04	27.07 – 21.12.04
04/811	28.6-05.07.04	Nedbør	15.07.04	27.07 –04.10.04
04/812	5-9.7.04 0600-0600	Nedbør	15.07.04	28.07 – 21.12.04
04/813	09.07.04	Nedbør	15.07.04	28.07 – 21.12.04
04/838	9-12.7.04 1700-0600	Nedbør	02.08.04	07.10 – 21.12.04
04/839+04/840	12-19.7.04 0600-0700, 0720-0600	Nedbør	02.08.04	08.10 – 21.12.04
04/841	19-26.7.04 0600-0600	Nedbør	02.08.04	07.10 – 21.12.04
04/952	2-9.8.04 0600-0600	Nedbør	23.08.04	07.10 – 21.12.04
04/954+04/966	16-19.8.04 0600-0600, 0600-1700	Nedbør	23.08.04	08.10 – 21.12.04
04/967	19-23.8.04 1700-1700, 1700-0545	Nedbør	26.08.04	08.10 – 21.12.04
04/968+04/995	23-25.8.04 0545-0605, 0605-1100	Nedbør	26.08.04	14.10.04 – 01.03.05

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/996+04/997	25-27.8.04 1100-0545, 0545-1530	Nedbør	06.09.04	14.10.04 – 01.03.05
04/998	27-30.8.04 1530-0600	Nedbør	06.09.04	11.10.04 – 01.03.05
04/1178	20-27.9.04 0600-0600	Nedbør	06.10.04	14.10.04 – 01.03.05
04/1179	30.8-6.9.04 0600-0600	Nedbør	17.09.04	11.10.04 – 01.03.05
04/1180	6-13.9.04 0600-0600	Nedbør	17.09.04	11.10.04– 01.03.05
04/1181+04/1169	13-14.9.04 0600-2130	Nedbør	17.09.04	20.10.04 – 01.03.05
04/1170+04/1171+04/1172	14-20.9.04 2130-0600	Nedbør	24.09.04	15.10.04 – 01.03.05
04/1248+04/1249	27.9-2.10.04 0600-1740	Nedbør	06.10.04	20.10.04 – 01.03.05
04/1297	2-4.10.04 1740-0645	Nedbør	11.10.04	15.10.04 - 01.03.05
04/1298+04/1319	4-6.10.04 0645-1815	Nedbør	11.10.04	05.01 – 01.03.05
04/1320	6-11.10.04 1815-0600	Nedbør	14.10.04	20.10.04 – 01.03.05
04/1335+04/1336+04/1407	16-18.11.04 2000-0600	Nedbør	21.10.04	06.01.04- 01.03.05
04/1408+04/1409	18-21.10.04 0600-1500	Nedbør	01.11.04	06.01 – 01.03.05
04/1410+04/1447+04/1448	21-25.10.04 1500-1700	Nedbør	01.11.04	07.01 – 01.03.05
04/1449+04/1450	25.10-01.11.04 1700-0700	Nedbør	05.11.04	10.01 – 01.03.05
04/1597	1-8.11.04 0700-0700	Nedbør	01.12.04	05.01 – 01.03.05
04/1598	8-15.11.04 0700-0700	Nedbør	01.12.04	06.01 – 01.03.05
04/1599	15-22.11.04 0700-0700	Nedbør	01.12.04	07.01 – 01.03.05
04/1678	22-29.11.04 0700-0700	Nedbør	21.12.04	07.01 – 01.03.05
04/1679	13-20.12.04 0700-0700	Nedbør	04.01.05	10.01 – 01.03.05
05/26	20-27.12.04 0700-0700	Nedbør	04.01.05	17.01 – 01.03.05
05/57	27.12.04 – 03.01.05 0700-0700	Nedbør	13.01.05	17.01 – 01.03.05

Analyser:

Utført av: Norsk institutt for luftforskning
Postboks 100
N-2027 KJELLER

Målemetode: NILU-O-2 ("Bestemmelse av tungflyktige persistente organiske forbindelser – pesticider og PCB'er")

Kommentarer:

Godkjenning: Kjeller, 2. mars 2005

Ole-Anders Braathen

Ole-Anders Braathen
Avd.direktør, Kjemisk analyse

NORSK AKKREDITERING P 008

Akkreditert etter ISO/IEC-17025

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Vedlegg: 55 HCH/PCB-analyser: 55 sider
Målerapporten og vedleggene omfatter totalt 58 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/248 + 04/300
Customer: Camp 04
Customers sample ID: 27.2-15.3.04
:
Sample type: Precipitation
Sample amount: 1,21 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		74,6	b	36
α-HCH		312		52
γ-HCH		599		52
2,4,4'-TriCB	28	15,1		54
2,2',5,5'-TetCB	52	21,0		57
2,2',4,5,5'-PenCB	101	32,9		68
2,3',4,4',5-PenCB	118	31,9		76
2,2',3,4,4',5'-HexCB	138	34,8		76
2,2',4,4',5,5'-HexCB	153	61,4		72
2,2',3,4,4',5,5'-HepCB	180	20,4		71
Sum 7 PCB		**217**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/313
Customer: Camp 04
Customers sample ID: 15-19.3.04
:
Sample type: Precipitation
Sample amount: 1,01 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		51,8	b	38
α-HCH		249		49
γ-HCH		1 169		63
2,4,4'-TriCB	28	13,1	i	61
2,2',5,5'-TetCB	52	19,0		60
2,2',4,5,5'-PenCB	101	30,3	i	77
2,3',4,4',5-PenCB	118	36,4		88
2,2',3,4,4',5'-HexCB	138	46,5		87
2,2',4,4',5,5'-HexCB	153	60,2		84
2,2',3,4,4',5,5'-HepCB	180	27,5		88
Sum 7 PCB		**233**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/314
Customer: Camp 04
Customers sample ID: 19-22.3.04
:
Sample type: Precipitation
Sample amount: 1,03 l
Concentration units: pg/l
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		83,8	b	39
α-HCH		230		50
γ-HCH		504		60
2,4,4'-TriCB	28	13,4	b	59
2,2',5,5'-TetCB	52	16,5	b	62
2,2',4,5,5'-PenCB	101	18,3	b	76
2,3',4,4',5-PenCB	118	17,8		84
2,2',3,4,4',5'-HexCB	138	23,7		88
2,2',4,4',5,5'-HexCB	153	32,3		81
2,2',3,4,4',5,5'-HepCB	180	14,9		70
Sum 7 PCB		**137**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/353
Customer: Camp 04
Customers sample ID: 22-29.3.04
:
Sample type: Precipitation
Sample amount: 0,58 l
Concentration units: pg/l
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		126	b	36
α-HCH		250		43
γ-HCH		373		53
2,4,4'-TriCB	28	21,4	b	55
2,2',5,5'-TetCB	52	30,3	b	50
2,2',4,5,5'-PenCB	101	33,3	b	68
2,3',4,4',5-PenCB	118	21,7	b	75
2,2',3,4,4',5'-HexCB	138	27,6		70
2,2',4,4',5,5'-HexCB	153	40,5		69
2,2',3,4,4',5,5'-HepCB	180	15,5		68
Sum 7 PCB		**190**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/354
Customer: Camp 04
Customers sample ID: 29.3-4.4.04
:
Sample type: Precipitation
Sample amount: 0,79 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		195	b	30
α-HCH		435		41
γ-HCH		2 668		45
2,4,4'-TriCB	28	42,2		50
2,2',5,5'-TetCB	52	104		51
2,2',4,5,5'-PenCB	101	153		68
2,3',4,4',5-PenCB	118	136		82
2,2',3,4,4',5'-HexCB	138	186		80
2,2',4,4',5,5'-HexCB	153	259		72
2,2',3,4,4',5,5'-HepCB	180	136		72
Sum 7 PCB		**1 016**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. version 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/355
Customer: Camp 04
Customers sample ID: 4-5.4.04
:
Sample type: Precipitation
Sample amount: 0,98 l
Concentration units: pg/l
Data files: DH649B_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		47,1	b	33
α-HCH		306		47
γ-HCH		5 482		57
2,4,4'-TriCB	28	22,3		55
2,2',5,5'-TetCB	52	18,5	b	54
2,2',4,5,5'-PenCB	101	18,9	b	67
2,3',4,4',5-PenCB	118	12,8	b	75
2,2',3,4,4',5'-HexCB	138	22,1		75
2,2',4,4',5,5'-HexCB	153	29,1		71
2,2',3,4,4',5,5'-HepCB	180	15,0		71
Sum 7 PCB		**139**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/356
Customer: Camp 04
Customers sample ID: 5-6.4.04
:
Sample type: Precipitation
Sample amount: 0,81 l
Concentration units: pg/l
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		88,5	b	34
α-HCH		375		47
γ-HCH		936		58
2,4,4'-TriCB	28	19,1		51
2,2',5,5'-TetCB	52	17,3		60
2,2',4,5,5'-PenCB	101	28,8		74
2,3',4,4',5-PenCB	118	39,2		74
2,2',3,4,4',5'-HexCB	138	41,3		96
2,2',4,4',5,5'-HexCB	153	55,5		73
2,2',3,4,4',5,5'-HepCB	180	23,4		57
Sum 7 PCB		**225**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/527
Customer: Camp 04
Customers sample ID: 6-12.4.04
: 0600-0600
Sample type: Precipitation
Sample amount: 0,49 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		71,2	bi	29
α-HCH		263		48
γ-HCH		563		54
2,4,4'-TriCB	28	23,2		53
2,2',5,5'-TetCB	52	33,6		54
2,2',4,5,5'-PenCB	101	47,2		70
2,3',4,4',5-PenCB	118	50,5		78
2,2',3,4,4',5'-HexCB	138	49,1		79
2,2',4,4',5,5'-HexCB	153	65,1		74
2,2',3,4,4',5,5'-HepCB	180	23,0		74
Sum 7 PCB		**292**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/528
Customer: Camp 04
Customers sample ID: 12-19.4.04
:
Sample type: Precipitation
Sample amount: 0,93 l
Concentration units: pg/l
Data files: DH649B_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		98,6	b	37
α-HCH		560		48
γ-HCH		3 742		58
2,4,4'-TriCB	28	17,6	b	55
2,2',5,5'-TetCB	52	21,8	b	57
2,2',4,5,5'-PenCB	101	40,9		68
2,3',4,4',5-PenCB	118	27,4		77
2,2',3,4,4',5'-HexCB	138	76,0		80
2,2',4,4',5,5'-HexCB	153	95,2		72
2,2',3,4,4',5,5'-HepCB	180	88,7		65
Sum 7 PCB		**368**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/529
Customer: Camp 04
Customers sample ID: 19-21.4.04
: 0600-0600
Sample type: Precipitation
Sample amount: 1,05 l
Concentration units: pg/l
Data files: DH649B_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		71,1	bi	35
α-HCH		860		48
γ-HCH		2 581		59
2,4,4'-TriCB	28	24,8		56
2,2',5,5'-TetCB	52	49,1		54
2,2',4,5,5'-PenCB	101	63,0		70
2,3',4,4',5-PenCB	118	36,0		82
2,2',3,4,4',5'-HexCB	138	58,2		81
2,2',4,4',5,5'-HexCB	153	81,8		75
2,2',3,4,4',5,5'-HepCB	180	39,8		75
Sum 7 PCB		**353**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/530
Customer: Camp 04
Customers sample ID: 21-26.4.04
: 0600-0600
Sample type: Precipitation
Sample amount: 0,49 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		77,1	b	29
α-HCH		301		42
γ-HCH		1 396		49
2,4,4'-TriCB	28	25,5	i	48
2,2',5,5'-TetCB	52	23,1		53
2,2',4,5,5'-PenCB	101	36,9	i	65
2,3',4,4',5-PenCB	118	55,3		72
2,2',3,4,4',5'-HexCB	138	57,4		74
2,2',4,4',5,5'-HexCB	153	75,2		70
2,2',3,4,4',5,5'-HepCB	180	32,3		74
Sum 7 PCB		**306**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/547 + 04/548
Customer: Camp 04
Customers sample ID: 26.4-5.5.04
:
Sample type: Presipitation
Sample amount: 1,18 l
Concentration units: pg/l
Data files: DH649B_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		57,7	b	31
α-HCH		392		43
γ-HCH		1 660		52
2,4,4'-TriCB	28	9,55	b	54
2,2',5,5'-TetCB	52	13,0	b	50
2,2',4,5,5'-PenCB	101	27,4		68
2,3',4,4',5-PenCB	118	16,4		80
2,2',3,4,4',5'-HexCB	138	40,0		77
2,2',4,4',5,5'-HexCB	153	56,9		74
2,2',3,4,4',5,5'-HepCB	180	36,8		73
Sum 7 PCB		**200**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/549
Customer: Camp 04
Customers sample ID: 5-6.5.04
:
Sample type: Precipitation
Sample amount: 0,89 l
Concentration units: pg/l
Data files: M_030205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		95,7	b	25
α-HCH		488		40
γ-HCH		3 120		48
2,4,4'-TriCB	28	14,6		45
2,2',5,5'-TetCB	52	14,2		54
2,2',4,5,5'-PenCB	101	22,0		72
2,3',4,4',5-PenCB	118	21,5		71
2,2',3,4,4',5'-HexCB	138	24,8		128
2,2',4,4',5,5'-HexCB	153	39,9		74
2,2',3,4,4',5,5'-HepCB	180	14,9		78
Sum 7 PCB		**152**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

NILU

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/550
Customer: Camp 04
Customers sample ID: 6-7.5.04
:
Sample type: Precipitation
Sample amount: 1,0 l
Concentration units: pg/l
Data files: DH649B_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		52,8	b	27
α-HCH		1 034		43
γ-HCH		1 987		53
2,4,4'-TriCB	28	9,32	b	52
2,2',5,5'-TetCB	52	8,97	b	50
2,2',4,5,5'-PenCB	101	13,6	b	66
2,3',4,4',5-PenCB	118	9,59	b	76
2,2',3,4,4',5'-HexCB	138	24,4		75
2,2',4,4',5,5'-HexCB	153	31,5		71
2,2',3,4,4',5,5'-HepCB	180	25,0		72
Sum 7 PCB		**122**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

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Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/635
Customer: Camp 04
Customers sample ID: 7-10.5.04
:
Sample type: Precipitation
Sample amount: 0,95 l
Concentration units: pg/l
Data files: DH649A_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		48,8	b	37
α-HCH		1 188		39
γ-HCH		1 300		45
2,4,4'-TriCB	28	16,9	b	49
2,2',5,5'-TetCB	52	17,6	b	48
2,2',4,5,5'-PenCB	101	26,9	b	63
2,3',4,4',5-PenCB	118	25,9		76
2,2',3,4,4',5'-HexCB	138	38,3		84
2,2',4,4',5,5'-HexCB	153	43,3		70
2,2',3,4,4',5,5'-HepCB	180	15,2		84
Sum 7 PCB		**184**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/636 + 04/637
Customer: Camp 04
Customers sample ID: 17-31.5.04
:
Sample type: Precipitation
Sample amount: 0,65 l
Concentration units: pg/l
Data files: DH649A_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		1 231		25
α-HCH		636		40
γ-HCH		519		48
2,4,4'-TriCB	28	32,3		48
2,2',5,5'-TetCB	52	28,7	b	50
2,2',4,5,5'-PenCB	101	25,0	b	66
2,3',4,4',5-PenCB	118	15,9	b	79
2,2',3,4,4',5'-HexCB	138	21,0		91
2,2',4,4',5,5'-HexCB	153	32,5		77
2,2',3,4,4',5,5'-HepCB	180	15,6		126
Sum 7 PCB		**171**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/742 + 04/743
Customer: Camp 04
Customers sample ID: 31.5 - 14.6.04
: 0600-0600
Sample type: Precipitation
Sample amount: 1,36 l
Concentration units: pg/l
Data files: DH649A_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		32,8	b	33
α-HCH		221		52
γ-HCH		509		65
2,4,4'-TriCB	28	5,37	b	58
2,2',5,5'-TetCB	52	10,5	bi	71
2,2',4,5,5'-PenCB	101	11,6	b	78
2,3',4,4',5-PenCB	118	6,97	b	91
2,2',3,4,4',5'-HexCB	138	8,99		116
2,2',4,4',5,5'-HexCB	153	14,8		102
2,2',3,4,4',5,5'-HepCB	180	9,40		111
Sum 7 PCB		**67,7**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/744
Customer: Camp 04
Customers sample ID: 14-20.6.04
: 0600-1715
Sample type: Precipitation
Sample amount: 1,02 l
Concentration units: pg/l
Data files: DH649A_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		57,5	b	33
α-HCH		307		49
γ-HCH		251		61
2,4,4'-TriCB	28	6,93	b	55
2,2',5,5'-TetCB	52	10,6	b	67
2,2',4,5,5'-PenCB	101	11,5	b	73
2,3',4,4',5-PenCB	118	6,26	b	86
2,2',3,4,4',5'-HexCB	138	12,5		106
2,2',4,4',5,5'-HexCB	153	18,4		94
2,2',3,4,4',5,5'-HepCB	180	10,4		107
Sum 7 PCB		**76,6**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/745
Customer: Camp 04
Customers sample ID: 20-21.6.04
: 1715-0600
Sample type: Precipitation
Sample amount: 0,48 l
Concentration units: pg/l
Data files: DH649A_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		83,8	b	37
α-HCH		282		46
γ-HCH		269	b	56
2,4,4'-TriCB	28	12,8	b	53
2,2',5,5'-TetCB	52	18,7	b	51
2,2',4,5,5'-PenCB	101	19,2	b	67
2,3',4,4',5-PenCB	118	11,5	b	77
2,2',3,4,4',5'-HexCB	138	15,3	b	83
2,2',4,4',5,5'-HexCB	153	22,8	b	73
2,2',3,4,4',5,5'-HepCB	180	6,94	i	82
Sum 7 PCB		**107**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/782
Customer: Camp 04
Customers sample ID: 21.6.04 - 23.6.04
: 0600-1850
Sample type: Precipitation
Sample amount: 1,15 l
Concentration units: pg/l
Data files: DH649B_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		44,8	b	43
α-HCH		291		48
γ-HCH		524		57
2,4,4'-TriCB	28	7,52	b	58
2,2',5,5'-TetCB	52	12,6	b	65
2,2',4,5,5'-PenCB	101	15,5	b	73
2,3',4,4',5-PenCB	118	6,53	b	81
2,2',3,4,4',5'-HexCB	138	12,7		86
2,2',4,4',5,5'-HexCB	153	19,3		79
2,2',3,4,4',5,5'-HepCB	180	11,8		79
Sum 7 PCB		**85,8**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/783
Customer: Camp 04
Customers sample ID: 23.6.04 1850 - 24.6.04 0520
: Overfull
Sample type: Precipitation
Sample amount: 1,14 l
Concentration units: pg/l
Data files: DH649B_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		34,8	b	40
α-HCH		307		45
γ-HCH		1 066		56
2,4,4'-TriCB	28	7,41	b	57
2,2',5,5'-TetCB	52	10,5	b	64
2,2',4,5,5'-PenCB	101	11,8	b	71
2,3',4,4',5-PenCB	118	5,88	b	78
2,2',3,4,4',5'-HexCB	138	7,27	b	84
2,2',4,4',5,5'-HexCB	153	11,8	b	78
2,2',3,4,4',5,5'-HepCB	180	5,40	i	84
Sum 7 PCB		**60,1**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/784
Customer: Camp 04
Customers sample ID: 24.6.04 0525 - 24.6.04 1530
: Overfull
Sample type: Precipitation
Sample amount: 1,10 l
Concentration units: pg/l
Data files: DH649A_PCB7_20-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		41,4	b	37
α-HCH		270		58
γ-HCH		1 124		71
2,4,4'-TriCB	28	8,48	b	67
2,2',5,5'-TetCB	52	13,2	b	77
2,2',4,5,5'-PenCB	101	14,4	b	85
2,3',4,4',5-PenCB	118	7,74	b	92
2,2',3,4,4',5'-HexCB	138	8,60	b	111
2,2',4,4',5,5'-HexCB	153	15,2		102
2,2',3,4,4',5,5'-HepCB	180	3,34		107
Sum 7 PCB		**71,0**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/785
Customer: Camp 04
Customers sample ID: 24-25.6.04
: 1530-0600 (overfull)
Sample type: Precipitation
Sample amount: 1,14 l
Concentration units: pg/l
Data files: DH687B

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		54,3	b	48
α-HCH		238		57
γ-HCH		1 028		63
2,4,4'-TriCB	28	8,63		54
2,2',5,5'-TetCB	52	15,0		63
2,2',4,5,5'-PenCB	101	16,4		71
2,3',4,4',5-PenCB	118	< 5,98		76
2,2',3,4,4',5'-HexCB	138	10,7		79
2,2',4,4',5,5'-HexCB	153	13,4		77
2,2',3,4,4',5,5'-HepCB	180	< 2,99		81
Sum 7 PCB		**73,0**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 16.02.2005

Encl. to measuring report: O-2984
NILU-Sample number: 04/811
Customer: Camp 04
Customers sample ID: 28.6-5.7.04
: 0600-0600, litt overfull
Sample type: Precipitation
Sample amount: 1,14 l
Concentration units: pg/l
Data files: DH650_PCB7_24-08-2004

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		298		38
α-HCH		319		43
γ-HCH		875		52
2,4,4'-TriCB	28	11,0	b	56
2,2',5,5'-TetCB	52	14,7	b	58
2,2',4,5,5'-PenCB	101	12,0	b	71
2,3',4,4',5-PenCB	118	5,90	b	79
2,2',3,4,4',5'-HexCB	138	7,99	b	86
2,2',4,4',5,5'-HexCB	153	12,1		75
2,2',3,4,4',5,5'-HepCB	180	5,63		86
Sum 7 PCB		**69,3**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/812
Customer: Camp 04
Customers sample ID: 5-9.7.04
: 0600-0600
Sample type: Precipitation
Sample amount: 0,98 l
Concentration units: pg/l
Data files: DH687B

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		697		29
α-HCH		418		40
γ-HCH		714		45
2,4,4'-TriCB	28	26,1		46
2,2',5,5'-TetCB	52	28,3	i	46
2,2',4,5,5'-PenCB	101	30,7	i	60
2,3',4,4',5-PenCB	118	22,1		68
2,2',3,4,4',5'-HexCB	138	17,2	i	76
2,2',4,4',5,5'-HexCB	153	34,5		66
2,2',3,4,4',5,5'-HepCB	180	< 4,15		69
Sum 7 PCB		**163**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/813
Customer: Camp 04
Customers sample ID: 9/7.04
: 0600-1700
Sample type: Precipitation
Sample amount: 1,14 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.		Concentration pg/l	Recovery %
HCB			261	46
α-HCH			322	51
γ-HCH			630	64
2,4,4'-TriCB	28		14,0	57
2,2',5,5'-TetCB	52		13,3	60
2,2',4,5,5'-PenCB	101	<	4,55	69
2,3',4,4',5-PenCB	118	<	3,96	75
2,2',3,4,4',5'-HexCB	138		7,75	80
2,2',4,4',5,5'-HexCB	153		12,3	75
2,2',3,4,4',5,5'-HepCB	180	<	2,38	77
Sum 7 PCB			**58,3**	

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/838
Customer: Camp 04
Customers sample ID: 9-12.7.04
: 1700-0600
Sample type: Precipitation
Sample amount: 0,93 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l	Recovery %
HCB		662	24
α-HCH		626	42
γ-HCH		700	48
2,4,4'-TriCB	28	37,0	51
2,2',5,5'-TetCB	52	59,5	48
2,2',4,5,5'-PenCB	101	64,1	62
2,3',4,4',5-PenCB	118	49,8	68
2,2',3,4,4',5'-HexCB	138	58,8	72
2,2',4,4',5,5'-HexCB	153	103	67
2,2',3,4,4',5,5'-HepCB	180	19,2	62
Sum 7 PCB		**391**	

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/839 + 04/840
Customer: Camp 04
Customers sample ID: 12-19.7.04
: 0600-0700, 0720-0600
Sample type: Precipitation
Sample amount: 1,38 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		122	b	30
α-HCH		217		40
γ-HCH		872		50
2,4,4'-TriCB	28	12,9		52
2,2',5,5'-TetCB	52	32,5		55
2,2',4,5,5'-PenCB	101	64,3		65
2,3',4,4',5-PenCB	118	36,8		77
2,2',3,4,4',5'-HexCB	138	47,9		84
2,2',4,4',5,5'-HexCB	153	90,6		74
2,2',3,4,4',5,5'-HepCB	180	19,0		78
Sum 7 PCB		**304**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/841
Customer: Camp 04
Customers sample ID: 19-26.7.04
: 0600-0600
Sample type: Precipitation
Sample amount: 0,77 l
Concentration units: pg/l
Data files: DH687C

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		877		25
α-HCH		413		42
γ-HCH		858		52
2,4,4'-TriCB	28	20,5	i	53
2,2',5,5'-TetCB	52	24,0	i	49
2,2',4,5,5'-PenCB	101	< 5,44		60
2,3',4,4',5-PenCB	118	< 4,65		67
2,2',3,4,4',5'-HexCB	138	16,5		67
2,2',4,4',5,5'-HexCB	153	24,8		62
2,2',3,4,4',5,5'-HepCB	180	9,08	i	63
Sum 7 PCB		**105**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 21.12.2004

Encl. to measuring report: O-2984
NILU-Sample number: 04/952
Customer: Camp 04
Customers sample ID: 2-9.8.04
: 0600-0600
Sample type: Precipitation
Sample amount: 0,64 l
Concentration units: pg/l
Data files: DH687A

Compound Structure	IUPAC-no.	Concentration 0,64 l		Recovery %
HCB		785		33
α-HCH		536		44
γ-HCH		524		49
2,4,4'-TriCB	28	25,3		54
2,2',5,5'-TetCB	52	27,2	i	56
2,2',4,5,5'-PenCB	101	27,7		67
2,3',4,4',5-PenCB	118	20,6		60
2,2',3,4,4',5'-HexCB	138	22,3		67
2,2',4,4',5,5'-HexCB	153	33,9		65
2,2',3,4,4',5,5'-HepCB	180	< 5,91		67
Sum 7 PCB		**163**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/954 + 04/966
Customer: Camp 04
Customers sample ID: 16-19.8.04
: 0600-0600, 0600-1700
Sample type: Precipitation
Sample amount: 2,21 l
Concentration units: pg/l
Data files: DH687A

Compound Structure	IUPAC-no.	Concentration pg/l	Recovery %
HCB		410	26
α-HCH		404	44
γ-HCH		736	51
2,4,4'-TriCB	28	17,5	52
2,2',5,5'-TetCB	52	33,9	52
2,2',4,5,5'-PenCB	101	47,1	71
2,3',4,4',5-PenCB	118	28,5	67
2,2',3,4,4',5'-HexCB	138	32,6	77
2,2',4,4',5,5'-HexCB	153	61,9	70
2,2',3,4,4',5,5'-HepCB	180	11,7	75
Sum 7 PCB		**233**	

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 20.12.04

Encl. to measuring report: O-2984
NILU-Sample number: 04/967
Customer: Camp 04
Customers sample ID: 19-23.08.04
: 1700-1700, 1700-0545
Sample type: Precipitation
Sample amount: 1,11 l
Concentration units: pg/l
Data files: DH687B

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		55,8	b	47
α-HCH		248		47
γ-HCH		649		51
2,4,4'-TriCB	28	11,1		45
2,2',5,5'-TetCB	52	18,6		56
2,2',4,5,5'-PenCB	101	39,6		61
2,3',4,4',5-PenCB	118	30,6		71
2,2',3,4,4',5'-HexCB	138	30,7		73
2,2',4,4',5,5'-HexCB	153	55,9		69
2,2',3,4,4',5,5'-HepCB	180	6,96		74
Sum 7 PCB		**194**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/968 + 04/995
Customer: Camp 04
Customers sample ID: 23-25.8.04
: 0545-0605, 0605-1100
Sample type: Precipitation
Sample amount: 2,14 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		56,3	b	43
α-HCH		317		48
γ-HCH		618		56
2,4,4'-TriCB	28	7,87		55
2,2',5,5'-TetCB	52	12,8		62
2,2',4,5,5'-PenCB	101	18,9		72
2,3',4,4',5-PenCB	118	13,5		81
2,2',3,4,4',5'-HexCB	138	14,8		89
2,2',4,4',5,5'-HexCB	153	25,2		81
2,2',3,4,4',5,5'-HepCB	180	10,4		88
Sum 7 PCB		**103**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/996 + 04/997
Customer: Camp 04
Customers sample ID: 25-27.8.04
: 1100-0545, 0545-1530
Sample type: Precipitation
Sample amount: 2,09 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		44,6	b	43
α-HCH		329		50
γ-HCH		427		58
2,4,4'-TriCB	28	8,62		58
2,2',5,5'-TetCB	52	12,1		67
2,2',4,5,5'-PenCB	101	24,7		76
2,3',4,4',5-PenCB	118	17,2		88
2,2',3,4,4',5'-HexCB	138	28,0		97
2,2',4,4',5,5'-HexCB	153	45,7		91
2,2',3,4,4',5,5'-HepCB	180	12,1		94
Sum 7 PCB		**148**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

100

Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/998
Customer: Camp 04
Customers sample ID: 27-30.8.04
: 1530-0600
Sample type: Precipitation
Sample amount: 1,08 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		61,9	b	42
α-HCH		317		54
γ-HCH		452		64
2,4,4'-TriCB	28	15,4		63
2,2',5,5'-TetCB	52	24,4		64
2,2',4,5,5'-PenCB	101	41,6		78
2,3',4,4',5-PenCB	118	29,5		90
2,2',3,4,4',5'-HexCB	138	36,9		92
2,2',4,4',5,5'-HexCB	153	69,1		85
2,2',3,4,4',5,5'-HepCB	180	11,5		90
Sum 7 PCB		**229**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1178
Customer: Camp 04
Customers sample ID: 20-27.9.04
: 0600-0600
Sample type: Precipitation
Sample amount: 1,11 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		65,0	b	42
α-HCH		317		55
γ-HCH		390		66
2,4,4'-TriCB	28	10,1		62
2,2',5,5'-TetCB	52	14,5		68
2,2',4,5,5'-PenCB	101	16,9		78
2,3',4,4',5-PenCB	118	9,54		89
2,2',3,4,4',5'-HexCB	138	7,44		97
2,2',4,4',5,5'-HexCB	153	16,8		90
2,2',3,4,4',5,5'-HepCB	180	< 1,39		97
Sum 7 PCB		**76,7**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1179
Customer: Camp 04
Customers sample ID: 30.8-6.9.04
: 0600-0600
Sample type: Precipitation
Sample amount: 0,92 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		142	b	48
α-HCH		296		56
γ-HCH		716		66
2,4,4'-TriCB	28	18,0		65
2,2',5,5'-TetCB	52	31,0		70
2,2',4,5,5'-PenCB	101	40,1		82
2,3',4,4',5-PenCB	118	23,1		91
2,2',3,4,4',5'-HexCB	138	25,8		96
2,2',4,4',5,5'-HexCB	153	43,4		92
2,2',3,4,4',5,5'-HepCB	180	12,3	i	94
Sum 7 PCB		**194**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1180
Customer: Camp 04
Customers sample ID: 6-13.9.04
: 0600-0600
Sample type: Prcipitation
Sample amount: 1,09 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		75,1	bi	42
α-HCH		340		51
γ-HCH		432		60
2,4,4'-TriCB	28	12,7		61
2,2',5,5'-TetCB	52	14,5	i	65
2,2',4,5,5'-PenCB	101	16,5		77
2,3',4,4',5-PenCB	118	14,1		88
2,2',3,4,4',5'-HexCB	138	16,6		92
2,2',4,4',5,5'-HexCB	153	25,1		87
2,2',3,4,4',5,5'-HepCB	180	8,38	i	94
Sum 7 PCB		**108**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1181 + 04/1169
Customer: Camp 04
Customers sample ID: 13-14.9.04
: 0600-2130
Sample type: Precipitation
Sample amount: 2,11 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		51,3	bi	33
α-HCH		370		43
γ-HCH		414		50
2,4,4'-TriCB	28	7,19		49
2,2',5,5'-TetCB	52	11,3		52
2,2',4,5,5'-PenCB	101	21,5		64
2,3',4,4',5-PenCB	118	16,3		74
2,2',3,4,4',5'-HexCB	138	27,1		81
2,2',4,4',5,5'-HexCB	153	44,4		75
2,2',3,4,4',5,5'-HepCB	180	14,3	i	82
Sum 7 PCB		**142**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1170 + 04/1171 + 04/1172
Customer: Camp 04
Customers sample ID: 14-20.9.04
: 2130-0600
Sample type: Precipitation
Sample amount: 2,74 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		50,5	b	34
α-HCH		243		42
γ-HCH		649		50
2,4,4'-TriCB	28	28,9		47
2,2',5,5'-TetCB	52	72,5		52
2,2',4,5,5'-PenCB	101	135		62
2,3',4,4',5-PenCB	118	72,3		73
2,2',3,4,4',5'-HexCB	138	77,2		81
2,2',4,4',5,5'-HexCB	153	155		74
2,2',3,4,4',5,5'-HepCB	180	14,2		80
Sum 7 PCB		**555**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1248 + 04/1249
Customer: Camp 04
Customers sample ID: 27.9-2.10.04
: 0600-1740
Sample type: Precipitation
Sample amount: 2,07 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		44,2	b	42
α-HCH		310		52
γ-HCH		587		60
2,4,4'-TriCB	28	9,73		58
2,2',5,5'-TetCB	52	9,06		64
2,2',4,5,5'-PenCB	101	17,8		77
2,3',4,4',5-PenCB	118	12,3		88
2,2',3,4,4',5'-HexCB	138	20,2		94
2,2',4,4',5,5'-HexCB	153	29,0		88
2,2',3,4,4',5,5'-HepCB	180	16,7		97
Sum 7 PCB		**115**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1297
Customer: Camp 04
Customers sample ID: 2-4.10.04
: 1740-0645
Sample type: Precipitation
Sample amount: 1,19 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		64,5	b	40
α-HCH		432		51
γ-HCH		380		61
2,4,4'-TriCB	28	10,8		59
2,2',5,5'-TetCB	52	17,1		62
2,2',4,5,5'-PenCB	101	26,1		77
2,3',4,4',5-PenCB	118	19,9		89
2,2',3,4,4',5'-HexCB	138	32,8		94
2,2',4,4',5,5'-HexCB	153	56,3		91
2,2',3,4,4',5,5'-HepCB	180	22,6		102
Sum 7 PCB		**186**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1298 + 04/1319
Customer: Camp 04
Customers sample ID: 04-06.10.04
: 0645-1815
Sample type: Precipitation
Sample amount: 4,28 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		22,4	b	36
α-HCH		475		45
γ-HCH		1 049		55
2,4,4'-TriCB	28	6,36		53
2,2',5,5'-TetCB	52	13,5		62
2,2',4,5,5'-PenCB	101	13,4		83
2,3',4,4',5-PenCB	118	5,17		85
2,2',3,4,4',5'-HexCB	138	6,03		159
2,2',4,4',5,5'-HexCB	153	7,28		92
2,2',3,4,4',5,5'-HepCB	180	3,82		86
Sum 7 PCB		**55,5**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 24.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1320
Customer: Camp 04
Customers sample ID: 6-11.10.04
: 1815-0600
Sample type: Precipitation
Sample amount: 1,23 l
Concentration units: pg/l
Data files: DH707

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		123	b	37
α-HCH		352		53
γ-HCH		291		63
2,4,4'-TriCB	28	14,9		56
2,2',5,5'-TetCB	52	12,4	i	60
2,2',4,5,5'-PenCB	101	12,9		78
2,3',4,4',5-PenCB	118	9,10	i	90
2,2',3,4,4',5'-HexCB	138	15,5	i	95
2,2',4,4',5,5'-HexCB	153	19,0		91
2,2',3,4,4',5,5'-HepCB	180	14,9	i	98
Sum 7 PCB		**98,7**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1335 + 04/1336 + 04/1407
Customer: Camp 04
Customers sample ID: 16-18.11.04
: 2000-0600
Sample type: Precipitation
Sample amount: 2,83 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		36,5	b	30
α-HCH		661		39
γ-HCH		1 393		48
2,4,4'-TriCB	28	7,21		45
2,2',5,5'-TetCB	52	8,89		55
2,2',4,5,5'-PenCB	101	12,4		75
2,3',4,4',5-PenCB	118	6,31		74
2,2',3,4,4',5'-HexCB	138	8,00		120
2,2',4,4',5,5'-HexCB	153	9,09		78
2,2',3,4,4',5,5'-HepCB	180	7,86		75
Sum 7 PCB		**59,8**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1408 + 04/1409
Customer: Camp 04
Customers sample ID: 18-21.10.04
: 0600-1500
Sample type: Precipitation
Sample amount: 2,1 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		34,6	b	26
α-HCH		620		35
γ-HCH		1 255		44
2,4,4'-TriCB	28	6,83		40
2,2',5,5'-TetCB	52	7,87		47
2,2',4,5,5'-PenCB	101	7,49		70
2,3',4,4',5-PenCB	118	4,91		62
2,2',3,4,4',5'-HexCB	138	5,36		71
2,2',4,4',5,5'-HexCB	153	9,14		68
2,2',3,4,4',5,5'-HepCB	180	4,52		55
Sum 7 PCB		**46,1**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1410 + 04/1447 + 04/1448
Customer: Camp 04
Customers sample ID: 21-25.10.04
: 1500-1700
Sample type: Precipitation
Sample amount: 3,07 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l	Recovery %
HCB		123	29
α-HCH		478	41
γ-HCH		942	50
2,4,4'-TriCB	28	42,9	47
2,2',5,5'-TetCB	52	120	54
2,2',4,5,5'-PenCB	101	171	74
2,3',4,4',5-PenCB	118	79,3	74
2,2',3,4,4',5'-HexCB	138	48,5	92
2,2',4,4',5,5'-HexCB	153	120	74
2,2',3,4,4',5,5'-HepCB	180	10,1	63
Sum 7 PCB		**592**	

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1449 + 04/1450
Customer: Camp 04
Customers sample ID: 25.10-1.11.04
: 1700-0700
Sample type: Precipitation
Sample amount: 1,96 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		38,9	b	43
α-HCH		408		51
γ-HCH		479		57
2,4,4'-TriCB	28	5,69		56
2,2',5,5'-TetCB	52	6,21		62
2,2',4,5,5'-PenCB	101	7,64		70
2,3',4,4',5-PenCB	118	5,32		79
2,2',3,4,4',5'-HexCB	138	8,28		99
2,2',4,4',5,5'-HexCB	153	9,37		81
2,2',3,4,4',5,5'-HepCB	180	6,46		88
Sum 7 PCB		**49,0**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1597
Customer: Camp 04
Customers sample ID: 1-8.11.04
: 0700-0700
Sample type: Precipitation
Sample amount: 1,74 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l	Recovery %
HCB		196	32
α-HCH		468	43
γ-HCH		923	52
2,4,4'-TriCB	28	46,9	48
2,2',5,5'-TetCB	52	110	57
2,2',4,5,5'-PenCB	101	184	79
2,3',4,4',5-PenCB	118	116	76
2,2',3,4,4',5'-HexCB	138	74,6	91
2,2',4,4',5,5'-HexCB	153	176	81
2,2',3,4,4',5,5'-HepCB	180	17,3	67
Sum 7 PCB		**725**	

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1598
Customer: Camp 04
Customers sample ID: 8-15.11.04
: 0700-0700
Sample type: Precipitation
Sample amount: 0,99 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		180	b	33
α-HCH		461		46
γ-HCH		470		56
2,4,4'-TriCB	28	23,0		49
2,2',5,5'-TetCB	52	34,6		59
2,2',4,5,5'-PenCB	101	53,1		70
2,3',4,4',5-PenCB	118	26,7		82
2,2',3,4,4',5'-HexCB	138	21,0		109
2,2',4,4',5,5'-HexCB	153	21,6		91
2,2',3,4,4',5,5'-HepCB	180	8,33		92
Sum 7 PCB		**188**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1599
Customer: Camp 04
Customers sample ID: 15-22.11.04
: 0700-0700
Sample type: Precipitation
Sample amount: 1,06 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l	Recovery %
HCB		408	23
α-HCH		234	37
γ-HCH		132	46
2,4,4'-TriCB	28	37,9	39
2,2',5,5'-TetCB	52	23,4	47
2,2',4,5,5'-PenCB	101	26,3	57
2,3',4,4',5-PenCB	118	11,0	66
2,2',3,4,4',5'-HexCB	138	9,29	90
2,2',4,4',5,5'-HexCB	153	12,1	71
2,2',3,4,4',5,5'-HepCB	180	6,14	75
Sum 7 PCB		**126**	

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

NILU

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1678
Customer: Camp 04
Customers sample ID: 22-29.11.04
: 0700-0700
Sample type: Precipitation
Sample amount: 0,74 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l	Recovery %
HCB		356	14
α-HCH		453	44
γ-HCH		464	53
2,4,4'-TriCB	28	82,1	31
2,2',5,5'-TetCB	52	152	36
2,2',4,5,5'-PenCB	101	90,0	57
2,3',4,4',5-PenCB	118	20,7	63
2,2',3,4,4',5'-HexCB	138	16,0	86
2,2',4,4',5,5'-HexCB	153	22,0	70
2,2',3,4,4',5,5'-HepCB	180	10,9	71
Sum 7 PCB		**394**	

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 04/1679
Customer: Camp 04
Customers sample ID: 13-20.12.04
: 0700-0700
Sample type: Precipitation
Sample amount: 2,17 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		41,8	b	45
α-HCH		297		52
γ-HCH		720		60
2,4,4'-TriCB	28	9,59		58
2,2',5,5'-TetCB	52	10,9		65
2,2',4,5,5'-PenCB	101	12,0		85
2,3',4,4',5-PenCB	118	9,91		91
2,2',3,4,4',5'-HexCB	138	16,6		151
2,2',4,4',5,5'-HexCB	153	17,6		94
2,2',3,4,4',5,5'-HepCB	180	19,6		103
Sum 7 PCB		**96,2**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 05/26
Customer: Camp 04
Customers sample ID: 20-27.12.04
: 0700-0700
Sample type: Precipitation
Sample amount: 3,05 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		60,5	b	39
α-HCH		257		50
γ-HCH		200		59
2,4,4'-TriCB	28	11,1	b	56
2,2',5,5'-TetCB	52	9,89	b	65
2,2',4,5,5'-PenCB	101	12,0	b	75
2,3',4,4',5-PenCB	118	10,8		91
2,2',3,4,4',5'-HexCB	138	11,0		112
2,2',4,4',5,5'-HexCB	153	17,6		98
2,2',3,4,4',5,5'-HepCB	180	4,57		92
Sum 7 PCB		**77,0**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

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Results of HCH and 7 PCB

Kjeller, 04.03.2005

Encl. to measuring report: O-2984
NILU-Sample number: 05/57
Customer: Camp 04
Customers sample ID: 27.12.04-03.01.05
: 0700-0700
Sample type: Precipitation
Sample amount: 3,55 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		80,8	b	39
α-HCH		235		47
γ-HCH		234		56
2,4,4'-TriCB	28	11,0	b	54
2,2',5,5'-TetCB	52	10,5	b	64
2,2',4,5,5'-PenCB	101	12,9	b	83
2,3',4,4',5-PenCB	118	13,4		92
2,2',3,4,4',5'-HexCB	138	16,4		131
2,2',4,4',5,5'-HexCB	153	22,9		104
2,2',3,4,4',5,5'-HepCB	180	10,1		101
Sum 7 PCB		**97,2**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Results of HCH and 7 PCB

Kjeller, 25.02.05

Encl. to measuring report: O-2984
NILU-Sample number: 05/57
Customer: Camp 04
Customers sample ID: 27.1204-03.01.05
: 0700-0700
Sample type: Precipitation
Sample amount: 3,55 l
Concentration units: pg/l
Data files: M_040205

Compound Structure	IUPAC-no.	Concentration pg/l		Recovery %
HCB		80,8	b	39
α-HCH		235		47
γ-HCH		234		56
2,4,4'-TriCB	28	11,0	b	54
2,2',5,5'-TetCB	52	10,5	b	64
2,2',4,5,5'-PenCB	101	12,9	b	83
2,3',4,4',5-PenCB	118	13,4		92
2,2',3,4,4',5'-HexCB	138	16,4		131
2,2',4,4',5,5'-HexCB	153	22,9		104
2,2',3,4,4',5,5'-HepCB	180	10,1		101
Sum 7 PCB		**97,2**		

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria

1. versjon 10.09.2004 GSK

Vedlegg 3

Organiske forbindelser i luft i Ny-Ålesund (O-2872)

NORSK AKKREDITERING P 008

Akkreditert etter ISO/IEC-17025

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Målerapport nr. O-2872

Oppdragsgiver: Statens forurensningstilsyn
Postboks 8100 Dep
0032 OSLO

Prosjekt nr.: O-93062

Prøvetaking:

Sted: Ny-Ålesund
Ansvar: NILU/Norsk Polarinstitutt
Kommentar:

Prøveinformasjon:

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/129	5-7.1.04 0821-0834 160-150	Luft	19.01.04	26.05 – 09.09.04
04/260	12-14.1.04 0823-0854 160-159	"	17.03.04	01.06 – 09.09.04
04/263	19-21.1.04 0951-0912 160-163	"	17.03.04	01.06 – 09.09.04
04/266	26-28.1.04 0909-0810 160-150	"	"	"
04/269	2-4.2.04 0845-0752 160-160	"	"	"
04/272	9-11.2.04 0854-0815 160-152	"	"	03.06 – 09.09.04
04/274	13-15.2.04 0748-1014 160-162	"	"	"
04/278	23-25.2.04 0803-0902 160-156	"	"	"
04/281	1-3.3.04 0929-0839 160-142	"	"	"
04/581	12-14.3.04 0942-1052 160-153	"	10.05.04	07.06 – 09.09.04
04/583	15-17.3.04 1011-0805 160-158	"	"	"
04/585	19-21.3.04 0802-1139 160-154	"	"	"
04/589	31.3-2.4.04 0807-0721 160-152	"	"	"
04/591	5-7.4.04 0647-0716 160-156	"	"	09.06 – 09.09.04
04/594	14-16.4.04 0841-0713 160-160	"	"	"
04/596	19-21.4.04 0811-0757 160-157	"	"	"
04/599	26-28.4.04 0710-0737 160-160	"	"	"
04/727	3-5.5.04 0753-0727 160-156	"	16.06.04	04.01.05 – 17.02.05
04/730	10-12.05.04 0805-0657 160-153	"	"	"
04/734	19-21.05.04 0715-0836 160-151	"	"	"
04/736	24-26.05.04 0724-0812 160-152	"	"	06.01.05 – 17.02.05
04/739	31.5-2.6.04 0929-0713 160-155	"	"	"
04/873	7-9.6.04 0654-0745 160-157	"	11.08.04	"
04/878	18-20.6.04 0650-0947 160-159	"	"	"
04/881	25-27.6.04 0715-0917 160-158	"	"	10.01.05 – 17.02.05
04/884	2-4.7.04 0838-0730 160-158	"	"	"
04/887	9-11.7.04 0700-0950 160-152	"	"	"
04/890	16-18.7.04 0723-0925 160-156	"	"	"
04/1185	21-23.7.04 0731-0806 160-158	"	28.09.04	12.01.05 – 17.02.05
04/1188	28-30.7.04 0645-0925 160-155	"	"	"
04/1191	4-6.8.04 0911-0750 160-158	"	"	"
04/1194	11-13.8.04 0806-0702 160-161	"	"	"
04/1197	18-21.8.04 0902-0758 160-158	"	"	13.01.05 – 17.02.05
04/1199	25-27.8.04 0705-0650 160-160	"	"	"
04/1204	1-3.9.04 0753-0755 160-156	"	"	14.01.05 –17.02.05
04/1510	8-10.9.04 0755-0707 160-155	"	15.11.04	14.01.05 – 17.02.05
04/1514	17-19.9.04 1820-0934	"	"	17.01.05 – 17.02.05
04/1516	22-24.9.04 0717-0753 160-158	"	"	"

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/1518	27-29.9.04 0958-0707 160-150	Luft	15.11.04	18.01.05 – 17.02.05
04/1521	4-6.10.04 0744-0731 160-150	"	"	"
04/1524	11-13.10.04 0701-0752 160-161	"	"	"
04/1527	18-20.10.04 0839-0742 160-155	"	"	"
04/1530	25-27.10.04 0728-0715 160-157	"	"	19.01.05 – 17.02.05
05/3	1-3.11.04 0830-0806 160-162	"	03.01.05	20.01 –17.02.05
05/6	8-10.11.04 1343-0825 160-150	"	"	"
05/9	15-17.11.04 0828-0759 160-160	"	"	"
05/12	22-24.11.04 1345-0820 160-159	"	"	"
05/15	29.11-1.12.04 1002-0907 160-149	"	"	21.01- 17.02.05
05/17	3-6.12.04 0902-0806 160-150	"	"	"
05/21	13-15.12.04 0913-1348 160-138	"	"	24.01 –17.02.05
05/281	22-25.12.04 0756-0955 160-158	"	14.02.05	16.02 – 23.02.05
05/284	31.12-2.1.05 0933-1200 160-160	"	"	"

Analyser:

Utført av: Norsk institutt for luftforskning
Postboks 100
N-2027 KJELLER

Målemetode: NILU-O-3 ("Bestemmelse av polysykliske aromatiske hydrokarboner")

Kommentarer:

Godkjenning: Kjeller, 24. februar 2005

Ole-Anders Braathen
Avd.direktør, Kjemisk analyse

Vedlegg: PAH analyser : 52 sider
Målerapporten og vedleggene omfatter totalt 54 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/129
Customer: Amap 04
Customers sample ID: 5-7.1.04 0821-0834
: 160-150
Sample type: Air
Sample amount: 1126 m3
Concentration unit: pg/m3
Data files: TA_8140.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		372	b	27
2-Methylnaphtalene		115	b	
1-Methylnaphtalene		106	b	
Biphenyl		413	b	
Acenaphthylene *		1,00	b	33
Acenaphtene *		4,00	b	
Dibenzofuran		656		
Fluorene *		278		
Dibenzothiophene		14,0		45
Phenanthrene *		30,0		
Antrachene *		1,00	b	
3-Methylphenanthrene		4,00	b	
2-Methylphenanthrene		6,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		17,0	b	61
Pyrene *		6,00	b	
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	67
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00	b	
Chrysene */Triphenylene		3,00	b	
Benzo(b */j/k *)fluoranthenes		2,00	b	87
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		1,00	b	
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		83
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		
Anthanthrene	<	1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**1 006**		
Sum 3-7 ring PAH:		**1 048**		
Sum all:		**2 054**		
Sum Borneff 6		**22,0**		
Sum 16 EPA PAH *		**719**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

128

Encl. to measuring report: O-2872
NILU sample number: 04/260
Customer: Amap 04
Customers sample ID: 12-14.1.04 0823-0854
: 160-159
Sample type: Air
Sample amount: 1166 m3
Concentration unit: pg/m3
Data files: TA_8141.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3	Recovery %
Naphtalene *		3 459	
2-Methylnaphtalene		713	28
1-Methylnaphtalene		869	
Biphenyl		1 456	
Acenaphthylene *		7,00 b	
Acenaphtene *		12,0 b	32
Dibenzofuran		1 404	
Fluorene *		662	
Dibenzothiophene		24,0	
Phenanthrene *		172	
Antrachene *		5,00	48
3-Methylphenanthrene		11,0 b	
2-Methylphenanthrene		17,0	
2-Methylanthracene		1,00 b	
9-Methylphenanthrene		8,00 b	
1-Methylphenanthrene		13,0	
Fluoranthene *		140	
Pyrene *		103	63
Benzo(a)fluorene		14,0 i,b	
Retene		14,0	
Benzo(b)fluorene		8,00 i,b	
Benzo(ghi)fluoranthene		20,0	
Cyclopenta(cd)pyrene		8,00	
Benz(a)anthracene *		25,0	69
Chrysene */Triphenylene		64,0	
Benzo(b */j/k *)fluoranthenes		89,0	
Benzo(a)fluoranthene		4,00	
Benzo(e)pyrene		30,0	86
Benzo(a)pyrene *		20,0	
Perylene		3,00	
Indeno(1,2,3-cd)pyrene *		28,0	
Dibenzo(ac/ah *)anthracene		3,00	
Benzo(ghi)perylene *		29,0	83
Anthanthrene		2,00	
Coronene		28,0	
Dibenzo(ae)pyrene	<	1,00	
Dibenzo(ai)pyrene	<	1,00	
Dibenzo(ah)pyrene	<	1,00	
Sum bicyclic PAH:		**6 497**	
Sum 3-7 ring PAH:		**2 971**	
Sum all:		**9 468**	
Sum Borneff 6		**306**	
Sum 16 EPA PAH *		**4 818**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/263
Customer: Amap 04
Customers sample ID: 19-21.1.04 0951-0912
: 160-163
Sample type: Air
Sample amount: 1147 m3
Concentration unit: pg/m3
Data files: TA_8142.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3	Recovery %
Naphtalene *		3 938	
2-Methylnaphtalene		619	26
1-Methylnaphtalene		771	
Biphenyl		1 464	
Acenaphthylene *		4,00 b	
Acenaphtene *		10,0 b	31
Dibenzofuran		1 368	
Fluorene *		624	
Dibenzothiophene		22,0	
Phenanthrene *		126	
Antrachene *		2,00 b	45
3-Methylphenanthrene		8,00 b	
2-Methylphenanthrene		13,0 b	
2-Methylanthracene		1,00 b	
9-Methylphenanthrene		6,00 b	
1-Methylphenanthrene		9,00 b	
Fluoranthene *		101	
Pyrene *		61,0	59
Benzo(a)fluorene		8,00 i,b	
Retene		8,00 b	
Benzo(b)fluorene		5,00 i	
Benzo(ghi)fluoranthene		15,0	
Cyclopenta(cd)pyrene		2,00	
Benz(a)anthracene *		13,0	55
Chrysene */Triphenylene		48,0	
Benzo(b */j/k *)fluoranthenes		57,0	
Benzo(a)fluoranthene		2,00	
Benzo(e)pyrene		19,0	75
Benzo(a)pyrene *		6,00	
Perylene		1,00	
Indeno(1,2,3-cd)pyrene *		17,0	
Dibenzo(ac/ah *)anthracene		2,00	
Benzo(ghi)perylene *		15,0	69
Anthanthrene		1,00	
Coronene		16,0	
Dibenzo(ae)pyrene	<	1,00	
Dibenzo(ai)pyrene	<	1,00	
Dibenzo(ah)pyrene	<	1,00	
Sum bicyclic PAH:		**6 792**	
Sum 3-7 ring PAH:		**2 593**	
Sum all:		**9 385**	
Sum Borneff 6		**196**	
Sum 16 EPA PAH *		**5 024**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

130

Encl. to measuring report: O-2872
NILU sample number: 04/266
Customer: Amap 04
Customers sample ID: 26-28.1.04 0909-0810
: 160-150
Sample type: Air
Sample amount: 1097 m3
Concentration unit: pg/m3
Data files: TA_8143.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		1 666		
2-Methylnaphtalene		641		28
1-Methylnaphtalene		645		
Biphenyl		2 309		
Acenaphthylene *		9,00	b	
Acenaphtene *		18,0	b	32
Dibenzofuran		2 268		
Fluorene *		1 137		
Dibenzothiophene		29,0		
Phenanthrene *		311		
Antrachene *		6,00		52
3-Methylphenanthrene		17,0		
2-Methylphenanthrene		26,0		
2-Methylanthracene		1,00	b	
9-Methylphenanthrene		12,0	b	
1-Methylphenanthrene		19,0		
Fluoranthene *		243		
Pyrene *		156		66
Benzo(a)fluorene		17,0	i,b	
Retene		15,0		
Benzo(b)fluorene		13,0	i	
Benzo(ghi)fluoranthene		31,0		
Cyclopenta(cd)pyrene		7,00		
Benz(a)anthracene *		34,0		70
Chrysene */Triphenylene		101		
Benzo(b */j/k *)fluoranthenes		144		
Benzo(a)fluoranthene		6,00		
Benzo(e)pyrene		47,0		91
Benzo(a)pyrene *		29,0		
Perylene		4,00		
Indeno(1,2,3-cd)pyrene *		44,0		
Dibenzo(ac/ah *)anthracene		7,00		
Benzo(ghi)perylene *		43,0		87
Anthanthrene		3,00		
Coronene		42,0		
Dibenzo(ae)pyrene		8,00	i	
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**5 261**		
Sum 3-7 ring PAH:		**4 849**		
Sum all:		**10 110**		
Sum Borneff 6		**503**		
Sum 16 EPA PAH *		**3 948**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

131 NILU

Encl. to measuring report: O-2872
NILU sample number: 04/269
Customer: Amap 04
Customers sample ID: 2-4.2.04 0845-0752
: 160-160
Sample type: Air
Sample amount: 1135 m3
Concentration unit: pg/m3
Data files: TA_8144.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		2 784		
2-Methylnaphtalene		1 151		27
1-Methylnaphtalene		966		
Biphenyl		2 566		
Acenaphthylene *		7,00	b	
Acenaphtene *		52,0	b	31
Dibenzofuran		2 770		
Fluorene *		1 208		
Dibenzothiophene		52,0		
Phenanthrene *		311		
Antrachene *		6,00		45
3-Methylphenanthrene		13,0		
2-Methylphenanthrene		20,0		
2-Methylanthracene		2,00		
9-Methylphenanthrene		10,0	b	
1-Methylphenanthrene		13,0		
Fluoranthene *		180		
Pyrene *		113		60
Benzo(a)fluorene		15,0	i,b	
Retene		10,0	b	
Benzo(b)fluorene		10,0	i	
Benzo(ghi)fluoranthene		23,0		
Cyclopenta(cd)pyrene		11,0		
Benz(a)anthracene *		29,0		63
Chrysene */Triphenylene		73,0		
Benzo(b */j/k *)fluoranthenes		121		
Benzo(a)fluoranthene		7,00		
Benzo(e)pyrene		42,0		83
Benzo(a)pyrene *		32,0		
Perylene		4,00		
Indeno(1,2,3-cd)pyrene *		41,0		
Dibenzo(ac/ah *)anthracene		5,00		
Benzo(ghi)perylene *		42,0		81
Anthanthrene		4,00		
Coronene		42,0		
Dibenzo(ae)pyrene		8,00	i	
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**7 467**		
Sum 3-7 ring PAH:		**5 278**		
Sum all:		**12 745**		
Sum Borneff 6		**416**		
Sum 16 EPA PAH *		**5 004**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

132

Encl. to measuring report: O-2872
NILU sample number: 04/272
Customer: Amap 04
Customers sample ID: 9-11.2.04 0854-0815
: 160-152
Sample type: Air
Sample amount: 1112 m3
Concentration unit: pg/m3
Data files: TA_8145.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		642	b	
2-Methylnaphtalene		203	b	26
1-Methylnaphtalene		225	b	
Biphenyl		1 305		
Acenaphthylene *		1,00	b	
Acenaphtene *		5,00	b	33
Dibenzofuran		1 211		
Fluorene *		460		
Dibenzothiophene		25,0		
Phenanthrene *		45,0	b	
Antrachene *		1,00	b	42
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		26,0	b	
Pyrene *		13,0	b	55
Benzo(a)fluorene		2,00	i,b	
Retene		2,00	b	
Benzo(b)fluorene		1,00	i	
Benzo(ghi)fluoranthene		3,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		2,00		45
Chrysene */Triphenylene		11,0		
Benzo(b */j/k *)fluoranthenes		11,0		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		5,00		72
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		3,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		5,00		67
Anthanthrene	<	1,00		
Coronene		5,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**2 375**		
Sum 3-7 ring PAH:		**1 860**		
Sum all:		**4 235**		
Sum Borneff 6		**46,0**		
Sum 16 EPA PAH *		**1 227**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/274
Customer: Amap 04
Customers sample ID: 13-15.2.04 0748-1014
: 160-162
Sample type: Air
Sample amount: 1220 m3
Concentration unit: pg/m3
Data files: TA_8146.D

Kjeller, 28.02.2005

Component:	Concentration pg/m3	Recovery %
Naphtalene *	1 277	
2-Methylnaphtalene	275 b	27
1-Methylnaphtalene	287	
Biphenyl	1 489	
Acenaphthylene *	4,00 b	
Acenaphtene *	11,0 b	32
Dibenzofuran	1 709	
Fluorene *	706	
Dibenzothiophene	27,0	
Phenanthrene *	238	
Antrachene *	2,00 b	43
3-Methylphenanthrene	14,0	
2-Methylphenanthrene	23,0	
2-Methylanthracene	1,00 b	
9-Methylphenanthrene	7,00 b	
1-Methylphenanthrene	15,0	
Fluoranthene *	155	
Pyrene *	78,0	61
Benzo(a)fluorene	8,00 i,b	
Retene	7,00 b	
Benzo(b)fluorene	5,00 i	
Benzo(ghi)fluoranthene	17,0	
Cyclopenta(cd)pyrene	3,00	
Benz(a)anthracene *	13,0	60
Chrysene */Triphenylene	55,0	
Benzo(b */j/k *)fluoranthenes	69,0	
Benzo(a)fluoranthene	2,00	
Benzo(e)pyrene	24,0	85
Benzo(a)pyrene *	11,0	
Perylene	1,00	
Indeno(1,2,3-cd)pyrene *	20,0	
Dibenzo(ac/ah *)anthracene	2,00	
Benzo(ghi)perylene *	21,0	82
Anthanthrene	1,00	
Coronene	22,0	
Dibenzo(ae)pyrene	4,00 i	
Dibenzo(ai)pyrene	< 1,00	
Dibenzo(ah)pyrene	< 1,00	
Sum bicyclic PAH:	**3 328**	
Sum 3-7 ring PAH:	**3 277**	
Sum all:	**6 605**	
Sum Borneff 6	**276**	
Sum 16 EPA PAH *	**2 662**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

134

Encl. to measuring report: O-2872
NILU sample number: 04/278
Customer: Amap 04
Customers sample ID: 23-25.2.04 0803-0902
: 160-156
Sample type: Air
Sample amount: 1166 m3
Concentration unit: pg/m3
Data files: TA_8159.D

Kjeller, 28.02.2005

Component:	Concentration pg/m3	Recovery %
Naphtalene *	1 017 b	
2-Methylnaphtalene	167 b	28
1-Methylnaphtalene	171 b	
Biphenyl	1 199	
Acenaphthylene *	4,00 b	
Acenaphtene *	8,00 b	35
Dibenzofuran	1 435	
Fluorene *	452	
Dibenzothiophene	18,0	
Phenanthrene *	122	
Antrachene *	1,00 b	52
3-Methylphenanthrene	4,00 b	
2-Methylphenanthrene	7,00 b	
2-Methylanthracene	< 1,00	
9-Methylphenanthrene	3,00 b	
1-Methylphenanthrene	5,00 b	
Fluoranthene *	72,0	
Pyrene *	42,0	68
Benzo(a)fluorene	4,00 i,b	
Retene	2,00 b	
Benzo(b)fluorene	2,00 i	
Benzo(ghi)fluoranthene	9,00	
Cyclopenta(cd)pyrene	2,00	
Benz(a)anthracene *	7,00	70
Chrysene */Triphenylene	30,0	
Benzo(b */j/k *)fluoranthenes	41,0	
Benzo(a)fluoranthene	1,00	
Benzo(e)pyrene	14,0	89
Benzo(a)pyrene *	7,00	
Perylene	1,00	
Indeno(1,2,3-cd)pyrene *	12,0	
Dibenzo(ac/ah *)anthracene	1,00	
Benzo(ghi)perylene *	13,0 i	84
Anthanthrene	1,00	
Coronene	12,0	
Dibenzo(ae)pyrene	2,00	
Dibenzo(ai)pyrene	1,00	
Dibenzo(ah)pyrene	1,00	
Sum bicyclic PAH:	**2 554**	
Sum 3-7 ring PAH:	**2 337**	
Sum all:	**4 891**	
Sum Borneff 6	**145**	
Sum 16 EPA PAH *	**1 829**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/281
Customer: Amap 04
Customers sample ID: 1-3.3.04 0929-0839
: 160-142
Sample type: Air
Sample amount: 1074 m3
Concentration unit: pg/m3
Data files: TA_8150.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3	Recovery %
Naphtalene *		339 b	
2-Methylnaphtalene		73,0 b	29
1-Methylnaphtalene		65,0 b	
Biphenyl		640	
Acenaphthylene *		1,00 b	
Acenaphtene *		5,00 b	36
Dibenzofuran		1 135	
Fluorene *		352	
Dibenzothiophene		15,0	
Phenanthrene *		88,0	
Antrachene *		1,00 b	50
3-Methylphenanthrene		5,00 b	
2-Methylphenanthrene		8,00 b	
2-Methylanthracene	<	1,00	
9-Methylphenanthrene		4,00 b	
1-Methylphenanthrene		4,00 b	
Fluoranthene *		62,0	
Pyrene *		31,0	65
Benzo(a)fluorene		3,00 i,b	
Retene		2,00 b	
Benzo(b)fluorene		2,00 i	
Benzo(ghi)fluoranthene		6,00	
Cyclopenta(cd)pyrene		1,00	
Benz(a)anthracene *		3,00	69
Chrysene */Triphenylene		20,0	
Benzo(b */j/k *)fluoranthenes		25,0	
Benzo(a)fluoranthene		1,00	
Benzo(e)pyrene		8,00	91
Benzo(a)pyrene *		2,00	
Perylene	<	1,00	
Indeno(1,2,3-cd)pyrene *		7,00	
Dibenzo(ac/ah *)anthracene		1,00	
Benzo(ghi)perylene *		7,00	91
Anthanthrene	<	1,00	
Coronene		8,00	
Dibenzo(ae)pyrene		1,00 i	
Dibenzo(ai)pyrene	<	1,00	
Dibenzo(ah)pyrene	<	1,00	
Sum bicyclic PAH:		**1 117**	
Sum 3-7 ring PAH:		**1 813**	
Sum all:		**2 930**	
Sum Borneff 6		**103**	
Sum 16 EPA PAH *		**944**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

136

Encl. to measuring report: O-2872
NILU sample number: 04/581
Customer: Amap 04
Customers sample ID: 12-14.3.04 0942-1052
: 160-153
Sample type: Air
Sample amount: 1161 m3
Concentration unit: pg/m3
Data files: TA_8151.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		204	b	29
2-Methylnaphtalene		42,0	b	
1-Methylnaphtalene		38,0	b	
Biphenyl		418		
Acenaphthylene *		1,00	b	38
Acenaphtene *		3,00	b	
Dibenzofuran		96,7	b	
Fluorene *		281		
Dibenzothiophene		16,0		51
Phenanthrene *		82,0		
Antrachene *		1,00	b	
3-Methylphenanthrene		5,00	b	
2-Methylphenanthrene		8,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		4,00	b	
1-Methylphenanthrene		4,00	b	
Fluoranthene *		42,0		67
Pyrene *		14,0	b	
Benzo(a)fluorene		1,00	b	
Retene		1,00	b	
Benzo(b)fluorene		1,00		
Benzo(ghi)fluoranthene		3,00		55
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00	b	
Chrysene */Triphenylene		9,00		
Benzo(b */j/k *)fluoranthenes		8,00		80
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		3,00		
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		2,00		71
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		3,00	i	
Anthanthrene	<	1,00		
Coronene		3,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**702**		
Sum 3-7 ring PAH:		**603**		
Sum all:		**1 305**		
Sum Borneff 6		**56,0**		
Sum 16 EPA PAH *		**653**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/583
Customer: Amap 04
Customers sample ID: 15-17.3.04 1011-0805
: 160-158
Sample type: Air
Sample amount: 1099 m3
Concentration unit: pg/m3
Data files: TA_8152.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		255	b	
2-Methylnaphtalene		32,0	b	24
1-Methylnaphtalene		29,0	b	
Biphenyl		519		
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	29
Dibenzofuran		673		
Fluorene *		90,0		
Dibenzothiophene		5,00		
Phenanthrene *		25,0	b	
Antrachene *		1,00	b	41
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		19,0	b	
Pyrene *		13,0	b	57
Benzo(a)fluorene		2,00	i,b	
Retene		4,00	b	
Benzo(b)fluorene		1,00	i	
Benzo(ghi)fluoranthene		2,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00	b	53
Chrysene */Triphenylene		6,00		
Benzo(b */j/k *)fluoranthenes		6,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		2,00		79
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		2,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		2,00		73
Anthanthrene	<	1,00		
Coronene		2,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**835**		
Sum 3-7 ring PAH:		**884**		
Sum all:		**1 719**		
Sum Borneff 6		**30,0**		
Sum 16 EPA PAH *		**426**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

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Encl. to measuring report: O-2872
NILU sample number: 04/585
Customer: Amap 04
Customers sample ID: 19-21.3.04 0802-1139
: 160-154
Sample type: Air
Sample amount: 1220 m3
Concentration unit: pg/m3
Data files: TA_8153.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		169	b	
2-Methylnaphtalene		40,0	b	31
1-Methylnaphtalene		33,0	b	
Biphenyl		275		
Acenaphthylene *		1,00	b	
Acenaphtene *		5,00	b	39
Dibenzofuran		874		
Fluorene *		248		
Dibenzothiophene		11,0		
Phenanthrene *		75,0		
Antrachene *		1,00	b	53
3-Methylphenanthrene		5,00	b	
2-Methylphenanthrene		8,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		4,00	b	
Fluoranthene *		30,0		
Pyrene *		12,0	b	66
Benzo(a)fluorene		1,00	i,b	
Retene		3,00	b	
Benzo(b)fluorene		1,00	i	
Benzo(ghi)fluoranthene		2,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00		58
Chrysene */Triphenylene		5,00		
Benzo(b */j/k *)fluoranthenes		5,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		2,00		79
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		1,00	i,b	71
Anthanthrene	<	1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**517**		
Sum 3-7 ring PAH:		**1 310**		
Sum all:		**1 827**		
Sum Borneff 6		**38,0**		
Sum 16 EPA PAH *		**556**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

NILU

Encl. to measuring report: O-2872
NILU sample number: 04/589
Customer: Amap 04
Customers sample ID: 31.3-2.4.04 0807-0721
: 160-152
Sample type: Air
Sample amount: 1109 m3
Concentration unit: pg/m3
Data files: TA_8154.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		86,0	b	
2-Methylnaphtalene		23,0	b	29
1-Methylnaphtalene		18,0	b	
Biphenyl		147		
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	37
Dibenzofuran		419		
Fluorene *		64,0		
Dibenzothiophene		3,00	b	
Phenanthrene *		20,0	b	
Antrachene *	<	1,00		54
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		10,0	b	
Pyrene *		5,00	b	66
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		67
Chrysene */Triphenylene		2,00	b	
Benzo(b */j/k *)fluoranthenes		2,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		1,00	b	85
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		1,00	i,b	81
Anthanthrene	<	1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**274**		
Sum 3-7 ring PAH:		**561**		
Sum all:		**835**		
Sum Borneff 6		**15,0**		
Sum 16 EPA PAH *		**199**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

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Encl. to measuring report: O-2872
NILU sample number: 04/591
Customer: Amap 04
Customers sample ID: 5-7.4.04 0647-0716
: 160-156
Sample type: Air
Sample amount: 1154 m3
Concentration unit: pg/m3
Data files: TA_8155.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		77,0	b	
2-Methylnaphtalene		39,0	b	31
1-Methylnaphtalene		22,0	b	
Biphenyl		151		
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	38
Dibenzofuran		460		
Fluorene *		86,0		
Dibenzothiophene		6,00		
Phenanthrene *		25,0	b	
Antrachene *	<	1,00		59
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		14,0	b	
Pyrene *		7,00	b	72
Benzo(a)fluorene		1,00	i,b	
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00	b	69
Chrysene */Triphenylene		4,00		
Benzo(b */j/k *)fluoranthenes		5,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		2,00		92
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		2,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		2,00	i	90
Anthanthrene	<	1,00		
Coronene		2,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**289**		
Sum 3-7 ring PAH:		**647**		
Sum all:		**936**		
Sum Borneff 6		**24,0**		
Sum 16 EPA PAH *		**230**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/594
Customer: Amap 04
Customers sample ID: 14-16.4.04 0841-0713
: 160-160
Sample type: Air
Sample amount: 1145 m3
Concentration unit: pg/m3
Data files: TA_8156.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		77,0	b	
2-Methylnaphtalene		24,0	b	30
1-Methylnaphtalene		16,0	b	
Biphenyl		191		
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	36
Dibenzofuran		683		
Fluorene *		110		
Dibenzothiophene		8,00		
Phenanthrene *		33,0	b	
Antrachene *	<	1,00		49
3-Methylphenanthrene		4,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		11,0	b	
Pyrene *		7,00	b	63
Benzo(a)fluorene		1,00	i,b	
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00	b	50
Chrysene */Triphenylene		4,00		
Benzo(b */j/k *)fluoranthenes		6,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		2,00		76
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		2,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		2,00	i	70
Anthanthrene	<	1,00		
Coronene		2,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**308**		
Sum 3-7 ring PAH:		**905**		
Sum all:		**1 213**		
Sum Borneff 6		**22,0**		
Sum 16 EPA PAH *		**260**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

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Encl. to measuring report: O-2872
NILU sample number: 04/596
Customer: Amap 04
Customers sample ID: 19-21.4.04 0811-0757
: 160-157
Sample type: Air
Sample amount: 1142 m3
Concentration unit: pg/m3
Data files: TA_8157.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		51,0	b	
2-Methylnaphtalene		18,0	b	29
1-Methylnaphtalene		13,0	b	
Biphenyl		67,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		2,00	b	35
Dibenzofuran		256		
Fluorene *		35,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		19,0	b	
Antrachene *	<	1,00		48
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		6,00	b	
Pyrene *		4,00	b	63
Benzo(a)fluorene		1,00	i,b	
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	i,b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		47
Chrysene */Triphenylene		2,00	b	
Benzo(b */j/k *)fluoranthenes		3,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		1,00	b	74
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		1,00	i,b	65
Anthanthrene	<	1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**149**		
Sum 3-7 ring PAH:		**362**		
Sum all:		**511**		
Sum Borneff 6		**12,0**		
Sum 16 EPA PAH *		**129**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/599
Customer: Amap 04
Customers sample ID: 26-28.4.04 0710-0737
: 160-160
Sample type: Air
Sample amount: 1169 m3
Concentration unit: pg/m3
Data files: TA_8158.D

Kjeller, 28.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		77,0	b	
2-Methylnaphtalene		25,0	b	30
1-Methylnaphtalene		17,0	b	
Biphenyl		61,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	37
Dibenzofuran		124		
Fluorene *		45,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		16,0	b	
Antrachene *	<	1,00		54
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		3,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		5,00	b	
Pyrene *		2,00	b	69
Benzo(a)fluorene		2,00	i,b	
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		68
Chrysene */Triphenylene	<	1,00		
Benzo(b */j/k *)fluoranthenes	<	1,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		85
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		79
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**180**		
Sum 3-7 ring PAH:		**230**		
Sum all:		**410**		
Sum Borneff 6		**9,00**		
Sum 16 EPA PAH *		**157**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

144

Encl. to measuring report: O-2872
NILU sample number: 04/727
Customer: Amap 04
Customers sample ID: 3-5.5.04 0753-0727
: 160-156
Sample type: Air
Sample amount: 1133 m3
Concentration unit: pg/m3
Data files: TA_9123.D

Kjeller, 17.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		104	b	
2-Methylnaphtalene		33,0	b	34
1-Methylnaphtalene		18,0	b	
Biphenyl		52,0		
Acenaphthylene *		2,00	b	
Acenaphtene *		2,00	b	42
Dibenzofuran		142		
Fluorene *		39,0		
Dibenzothiophene		3,00	b	
Phenanthrene *		23,0	b	
Antrachene *		1,00	b	43
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		6,00	b	
Pyrene *		4,00	b	66
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		50
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		1,00	b	76
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		1,00	i,b	58
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**207**		
Sum 3-7 ring PAH:		**255**		
Sum all:		**462**		
Sum Borneff 6		**10,0**		
Sum 16 EPA PAH *		**188**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/730
Customer: Amap 04
Customers sample ID: 10-12.5.04 0805-0657
: 160-153
Sample type: Air
Sample amount: 1107 m3
Concentration unit: pg/m3
Data files: TA_9124.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		97,0	b	
2-Methylnaphtalene		31,0	b	32
1-Methylnaphtalene		17,0	b	
Biphenyl		16,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		2,00	b	44
Dibenzofuran		40,0		
Fluorene *		7,00	b	
Dibenzothiophene		1,00	b	
Phenanthrene *		16,0	b	
Antrachene *		1,00	b	43
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		6,00	b	
Pyrene *		4,00	b	68
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		52
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		81
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		65
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**161**		
Sum 3-7 ring PAH:		**111**		
Sum all:		**272**		
Sum Borneff 6		**10,0**		
Sum 16 EPA PAH *		**141**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

146

Encl. to measuring report: O-2872
NILU sample number: 04/734
Customer: Amap 04
Customers sample ID: 19-21.5.04 0715-0836
: 160-151
Sample type: Air
Sample amount: 1158 m3
Concentration unit: pg/m3
Data files: TA_9125.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		69,0	b	
2-Methylnaphtalene		19,0	b	33
1-Methylnaphtalene		12,0	b	
Biphenyl		31,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		2,00	b	43
Dibenzofuran		81,0		
Fluorene *		20,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		22,0	b	
Antrachene *		1,00	b	47
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		7,00	b	
Pyrene *		5,00	b	66
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00	b	43
Chrysene */Triphenylene		2,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		66
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		53
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**131**		
Sum 3-7 ring PAH:		**178**		
Sum all:		**309**		
Sum Borneff 6		**11,0**		
Sum 16 EPA PAH *		**135**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/736
Customer: Amap 04
Customers sample ID: 24-26.5.04 0724-0812
: 160-152
Sample type: Air
Sample amount: 1147 m3
Concentration unit: pg/m3
Data files: TA_9126.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		62,0	b	
2-Methylnaphtalene		20,0	b	36
1-Methylnaphtalene		10,0	b	
Biphenyl		18,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		2,00	b	44
Dibenzofuran		49,0		
Fluorene *		16,0	b	
Dibenzothiophene		3,00	b	
Phenanthrene *		24,0	b	
Antrachene *	<	1,00		47
3-Methylphenanthrene		5,00	b	
2-Methylphenanthrene		7,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		5,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		5,00	b	
Pyrene *		3,00	b	68
Benzo(a)fluorene		9,00	i	
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		56
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		88
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		76
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**110**		
Sum 3-7 ring PAH:		**153**		
Sum all:		**263**		
Sum Borneff 6		**9,00**		
Sum 16 EPA PAH *		**121**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

148

Encl. to measuring report: O-2872
NILU sample number: 04/739
Customer: Amap 04
Customers sample ID: 31.5-2.6.04 0929-0713
: 160-155
Sample type: Air
Sample amount: 1085 m3
Concentration unit: pg/m3
Data files: TA_9127.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		62,0	b	
2-Methylnaphtalene		18,0	b	37
1-Methylnaphtalene		10,0	b	
Biphenyl		13,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		2,00	b	48
Dibenzofuran		30,0	b	
Fluorene *		16,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		25,0	b	
Antrachene *	<	1,00		50
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00		
1-Methylphenanthrene		3,00	b	
Fluoranthene *		6,00	b	
Pyrene *		3,00	b	72
Benzo(a)fluorene	<	1,00		
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		60
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		80
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		69
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**103**		
Sum 3-7 ring PAH:		**121**		
Sum all:		**224**		
Sum Borneff 6		**10,0**		
Sum 16 EPA PAH *		**123**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

149 NILU

Encl. to measuring report: O-2872
NILU sample number: 04/873
Customer: Amap 04
Customers sample ID: 7-9.6.04 0654-0745
: 160-157
Sample type: Air
Sample amount: 1169 m3
Concentration unit: pg/m3
Data files: TA_9128.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		93,0	b	
2-Methylnaphtalene		27,0	b	42
1-Methylnaphtalene		16,0	b	
Biphenyl		16,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	52
Dibenzofuran		31,0	b	
Fluorene *		16,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		24,0	b	
Antrachene *	<	1,00		47
3-Methylphenanthrene		4,00	b	
2-Methylphenanthrene		6,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		4,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		6,00	b	
Pyrene *		4,00	b	64
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		43
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		71
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		60
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**152**		
Sum 3-7 ring PAH:		**127**		
Sum all:		**279**		
Sum Borneff 6		**10,0**		
Sum 16 EPA PAH *		**155**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

150

Encl. to measuring report: O-2872
NILU sample number: 04/878
Customer: Amap 04
Customers sample ID: 18-20.6.04 0650-0947
: 160-159
Sample type: Air
Sample amount: 1224 m3
Concentration unit: pg/m3
Data files: TA_9129.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		50,0	b	45
2-Methylnaphtalene		15,0	b	
1-Methylnaphtalene		9,00	b	
Biphenyl		28,0	b	
Acenaphthylene *		2,00	b	54
Acenaphtene *		3,00	b	
Dibenzofuran		57,0		
Fluorene *		30,0		
Dibenzothiophene		3,00		53
Phenanthrene *		64,0		
Antrachene *		1,00	b	
3-Methylphenanthrene		6,00	b	
2-Methylphenanthrene		11,0	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		5,00	b	
1-Methylphenanthrene		8,00	b	
Fluoranthene *		18,0	b	69
Pyrene *		10,0	b	
Benzo(a)fluorene		1,00	i,b	
Retene		12,0	b	
Benzo(b)fluorene		1,00	i	
Benzo(ghi)fluoranthene		2,00		56
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00		
Chrysene */Triphenylene		4,00		
Benzo(b */j/k *)fluoranthenes		3,00		86
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		1,00	b	
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		1,00	i	75
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		2,00	i,b	
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**102**		
Sum 3-7 ring PAH:		**257**		
Sum all:		**359**		
Sum Borneff 6		**25,0**		
Sum 16 EPA PAH *		**191**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

151

Encl. to measuring report: O-2872
NILU sample number: 04/881
Customer: Amap 04
Customers sample ID: 25-27.6.04 0715-0917
: 160-158
Sample type: Air
Sample amount: 1198 m3
Concentration unit: pg/m3
Data files: TA_9130.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		53,0	b	37
2-Methylnaphtalene		19,0	b	
1-Methylnaphtalene		12,0	b	
Biphenyl		15,0	b	
Acenaphthylene *		1,00	b	45
Acenaphtene *		2,00	b	
Dibenzofuran		36,0		
Fluorene *		17,0	b	
Dibenzothiophene		2,00	b	45
Phenanthrene *		31,0	b	
Antrachene *	<	1,00		
3-Methylphenanthrene		6,00	b	
2-Methylphenanthrene		9,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		6,00	b	
1-Methylphenanthrene		5,00	b	
Fluoranthene *		13,0	b	66
Pyrene *		10,0	b	
Benzo(a)fluorene		1,00	i,b	
Retene		5,00	b	
Benzo(b)fluorene		1,00	i	
Benzo(ghi)fluoranthene		1,00	b	48
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00		
Chrysene */Triphenylene		2,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	72
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		56
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**99,0**		
Sum 3-7 ring PAH:		**165**		
Sum all:		**264**		
Sum Borneff 6		**17,0**		
Sum 16 EPA PAH *		**136**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

152

Encl. to measuring report: O-2872
NILU sample number: 04/884
Customer: Amap 04
Customers sample ID: 2-4.7.04 0838-0730
: 160-158
Sample type: Air
Sample amount: 1128 m3
Concentration unit: pg/m3
Data files: TA_9133.D

Kjeller, 17.02.2005

Component:	Concentration pg/m3	Recovery %
Naphtalene *	63,0 b	
2-Methylnaphtalene	18,0 b	32
1-Methylnaphtalene	11,0 b	
Biphenyl	18,0 b	
Acenaphthylene *	< 1,00	
Acenaphtene *	3,00 b	39
Dibenzofuran	88,0	
Fluorene *	27,0 b	
Dibenzothiophene	3,00	
Phenanthrene *	25,0 b	
Antrachene *	< 1,00	45
3-Methylphenanthrene	4,00 b	
2-Methylphenanthrene	7,00 b	
2-Methylanthracene	< 1,00	
9-Methylphenanthrene	4,00 b	
1-Methylphenanthrene	4,00 b	
Fluoranthene *	12,0 b	
Pyrene *	8,00 b	64
Benzo(a)fluorene	1,00 b	
Retene	5,00 b	
Benzo(b)fluorene	< 1,00	
Benzo(ghi)fluoranthene	1,00 b	
Cyclopenta(cd)pyrene	< 1,00	
Benz(a)anthracene *	< 1,00	65
Chrysene */Triphenylene	3,00 b	
Benzo(b */j/k *)fluoranthenes	4,00 i	
Benzo(a)fluoranthene	< 1,00	
Benzo(e)pyrene	1,00 b	82
Benzo(a)pyrene *	< 1,00	
Perylene	< 1,00	
Indeno(1,2,3-cd)pyrene *	1,00	
Dibenzo(ac/ah *)anthracene	< 1,00	
Benzo(ghi)perylene *	1,00 i,b	76
Anthanthrene	< 1,00	
Coronene	< 1,00	
Dibenzo(ae)pyrene	< 1,00	
Dibenzo(ai)pyrene	< 1,00	
Dibenzo(ah)pyrene	< 1,00	
Sum bicyclic PAH:	**110**	
Sum 3-7 ring PAH:	**217**	
Sum all:	**327**	
Sum Borneff 6	**19,0**	
Sum 16 EPA PAH *	**152**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

153

Encl. to measuring report: O-2872
NILU sample number: 04/887
Customer: Amap 04
Customers sample ID: 9-11.7.04 0700-0950
: 160-152
Sample type: Air
Sample amount: 1194 m3
Concentration unit: pg/m3
Data files: TA_9137.D

Kjeller, 22.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		49,0	b	
2-Methylnaphtalene		30,0	b	34
1-Methylnaphtalene		21,0	b	
Biphenyl		17,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	42
Dibenzofuran		48,0		
Fluorene *		31,0		
Dibenzothiophene		4,00		
Phenanthrene *		36,0	b	
Antrachene *		1,00	b	47
3-Methylphenanthrene		9,00	b	
2-Methylphenanthrene		12,0	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		9,00	b	
1-Methylphenanthrene		7,00	b	
Fluoranthene *		6,00	b	
Pyrene *		4,00	b	68
Benzo(a)fluorene	<	1,00		
Retene		3,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		67
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		86
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		78
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**117**		
Sum 3-7 ring PAH:		**194**		
Sum all:		**311**		
Sum Borneff 6		**10,0**		
Sum 16 EPA PAH *		**138**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

154

Encl. to measuring report: O-2872
NILU sample number: 04/890
Customer: Amap 04
Customers sample ID: 16-18.7.04 0723-0925
: 160-156
Sample type: Air
Sample amount: 1190 m3
Concentration unit: pg/m3
Data files: TA_9134.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		50,0	b	
2-Methylnaphtalene		20,0	b	33
1-Methylnaphtalene		13,0	b	
Biphenyl		21,0	b	
Acenaphthylene *		1,00	b	
Acenaphtene *		3,00	b	43
Dibenzofuran		49,0		
Fluorene *		20,0	b	
Dibenzothiophene		5,00		
Phenanthrene *		47,0	b	
Antrachene *	<	1,00		50
3-Methylphenanthrene		10,0		
2-Methylphenanthrene		16,0		
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		9,00	b	
1-Methylphenanthrene		7,00	b	
Fluoranthene *		13,0	b	
Pyrene *		7,00	b	74
Benzo(a)fluorene		1,00	i,b	
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		73
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		93
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		86
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**104**		
Sum 3-7 ring PAH:		**210**		
Sum all:		**314**		
Sum Borneff 6		**17,0**		
Sum 16 EPA PAH *		**149**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

155

Encl. to measuring report: O-2872
NILU sample number: 04/1185
Customer: Amap 04
Customers sample ID: 21-23.7.04 0731-0806
: 160-158
Sample type: Air
Sample amount: 1164 m3
Concentration unit: pg/m3
Data files: TA_9139.D

Kjeller, 16.02.05

Component:	Concentration pg/m3	Recovery %
Naphtalene *	35,0 b	
2-Methylnaphtalene	13,0 b	34
1-Methylnaphtalene	8,00 b	
Biphenyl	11,0 b	
Acenaphthylene *	< 1,00	
Acenaphtene *	1,00 b	45
Dibenzofuran	46,0	
Fluorene *	17,0 b	
Dibenzothiophene	2,00 b	
Phenanthrene *	18,0 b	
Antrachene *	< 1,00	51
3-Methylphenanthrene	3,00 b	
2-Methylphenanthrene	5,00 b	
2-Methylanthracene	< 1,00	
9-Methylphenanthrene	3,00 b	
1-Methylphenanthrene	3,00 b	
Fluoranthene *	4,00 b	
Pyrene *	2,00 b	73
Benzo(a)fluorene	< 1,00	
Retene	1,00 b	
Benzo(b)fluorene	< 1,00	
Benzo(ghi)fluoranthene	< 1,00	
Cyclopenta(cd)pyrene	< 1,00	
Benz(a)anthracene *	< 1,00	69
Chrysene */Triphenylene	1,00 b	
Benzo(b */j/k *)fluoranthenes	1,00 b	
Benzo(a)fluoranthene	< 1,00	
Benzo(e)pyrene	< 1,00	89
Benzo(a)pyrene *	< 1,00	
Perylene	< 1,00	
Indeno(1,2,3-cd)pyrene *	< 1,00	
Dibenzo(ac/ah *)anthracene	< 1,00	
Benzo(ghi)perylene *	< 1,00	82
Anthanthrene	< 1,00	
Coronene	< 1,00	
Dibenzo(ae)pyrene	< 1,00	
Dibenzo(ai)pyrene	< 1,00	
Dibenzo(ah)pyrene	< 1,00	
Sum bicyclic PAH:	**67,0**	
Sum 3-7 ring PAH:	**127**	
Sum all:	**194**	
Sum Borneff 6	**8,00**	
Sum 16 EPA PAH *	**86,0**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

156

Encl. to measuring report: O-2872
NILU sample number: 04/1188
Customer: Amap 04
Customers sample ID: 28-30.7.04 0645-0925
: 160-155
Sample type: Air
Sample amount: 1204 m3
Concentration unit: pg/m3
Data files: TA_9140.D

Kjeller, 16.02.05

Component:		Concentration pg/m3	Recovery %
Naphtalene *		42,0 b	37
2-Methylnaphtalene		12,0 b	
1-Methylnaphtalene		8,00 b	
Biphenyl		17,0 b	
Acenaphthylene *	<	1,00	48
Acenaphtene *		1,00 b	
Dibenzofuran		68,0	
Fluorene *		30,0	
Dibenzothiophene		3,00	53
Phenanthrene *		23,0	
Antrachene *	<	1,00	
3-Methylphenanthrene		4,00 b	
2-Methylphenanthrene		6,00 b	
2-Methylanthracene	<	1,00	
9-Methylphenanthrene		4,00 b	
1-Methylphenanthrene		3,00 b	
Fluoranthene *		5,00 b	74
Pyrene *		3,00 b	
Benzo(a)fluorene	<	1,00	
Retene		1,00 b	
Benzo(b)fluorene	<	1,00	
Benzo(ghi)fluoranthene	<	1,00	67
Cyclopenta(cd)pyrene	<	1,00	
Benz(a)anthracene *		1,00	
Chrysene */Triphenylene		1,00 b	
Benzo(b */j/k *)fluoranthenes	<	1,00	91
Benzo(a)fluoranthene	<	1,00	
Benzo(e)pyrene	<	1,00	
Benzo(a)pyrene *	<	1,00	
Perylene	<	1,00	
Indeno(1,2,3-cd)pyrene *	<	1,00	83
Dibenzo(ac/ah *)anthracene	<	1,00	
Benzo(ghi)perylene *	<	1,00	
Anthanthrene	<	1,00	
Coronene	<	1,00	
Dibenzo(ae)pyrene	<	1,00	
Dibenzo(ai)pyrene	<	1,00	
Dibenzo(ah)pyrene	<	1,00	
Sum bicyclic PAH:		**79,0**	
Sum 3-7 ring PAH:		**173**	
Sum all:		**252**	
Sum Borneff 6		**9,00**	
Sum 16 EPA PAH *		**113**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

157

Encl. to measuring report: O-2872
NILU sample number: 04/1191
Customer: Amap 04
Customers sample ID: 4-6.8.04 0911-0750
: 160-158
Sample type: Air
Sample amount: 1116 m3
Concentration unit: pg/m3
Data files: TA_9133.D

Kjeller, 17.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		48,0	b	
2-Methylnaphtalene		13,0	b	34
1-Methylnaphtalene		8,00	b	
Biphenyl		17,0	b	
Acenaphthylene *	<	1,00		
Acenaphtene *		1,00	b	42
Dibenzofuran		56,0		
Fluorene *		20,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		12,0	b	
Antrachene *	<	1,00		49
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		4,00	b	
Pyrene *		2,00	b	70
Benzo(a)fluorene	<	1,00		
Retene	<	1,00		
Benzo(b)fluorene		1,00	b	
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		58
Chrysene */Triphenylene	<	1,00		
Benzo(b */j/k *)fluoranthenes	<	1,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		91
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		1,00	i,b	74
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**86,0**		
Sum 3-7 ring PAH:		**130**		
Sum all:		**216**		
Sum Borneff 6		**8,00**		
Sum 16 EPA PAH *		**96,0**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

158

Encl. to measuring report: O-2872
NILU sample number: 04/1194
Customer: Amap 04
Customers sample ID: 11-13.8.04 0806-0702
: 160-161
Sample type: Air
Sample amount: 1133 m3
Concentration unit: pg/m3
Data files: TA_9134.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		53,0	b	
2-Methylnaphtalene		16,0	b	43
1-Methylnaphtalene		8,00	b	
Biphenyl		11,0	b	
Acenaphthylene *	<	1,00		
Acenaphtene *		2,00	b	51
Dibenzofuran		25,0	b	
Fluorene *		11,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		18,0	b	
Antrachene *	<	1,00		48
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		6,00	b	
Pyrene *		3,00	b	68
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		59
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes	<	1,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		91
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		76
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**88,0**		
Sum 3-7 ring PAH:		**105**		
Sum all:		**193**		
Sum Borneff 6		**10,0**		
Sum 16 EPA PAH *		**102**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/1197
Customer: Amap 04
Customers sample ID: 18-21.8.04 0902-0758
: 160-158
Sample type: Air
Sample amount: 1698 m3
Concentration unit: pg/m3
Data files: TA_9135.D

Kjeller, 17.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		51,0	b	
2-Methylnaphtalene		18,0	b	37
1-Methylnaphtalene		11,0	b	
Biphenyl		12,0	b	
Acenaphthylene *	<	1,00		
Acenaphtene *		1,00	b	46
Dibenzofuran		30,0	b	
Fluorene *		14,0	b	
Dibenzothiophene	<	1,00		
Phenanthrene *		22,0	b	
Antrachene *	<	1,00		55
3-Methylphenanthrene		4,00	b	
2-Methylphenanthrene		6,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		4,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		5,00	b	
Pyrene *		3,00	b	77
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		76
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes	<	1,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		99
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	0,00		89
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**92,0**		
Sum 3-7 ring PAH:		**116**		
Sum all:		**208**		
Sum Borneff 6		**8,00**		
Sum 16 EPA PAH *		**104**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

160

Encl. to measuring report: O-2872
NILU sample number: 04/1199
Customer: Amap 04
Customers sample ID: 25-27.8.04 0705-0650
: 160-160
Sample type: Air
Sample amount: 1150 m3
Concentration unit: pg/m3
Data files: TA_9136.D

Kjeller, 17.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		60,0	b	38
2-Methylnaphtalene		26,0	b	
1-Methylnaphtalene		15,0	b	
Biphenyl		33,0	b	
Acenaphthylene *		1,00	b	45
Acenaphtene *		3,00	b	
Dibenzofuran		52,0		
Fluorene *		30,0		
Dibenzothiophene		4,00		48
Phenanthrene *		36,0	b	
Antrachene *	<	1,00		
3-Methylphenanthrene		9,00	b	
2-Methylphenanthrene		13,0	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		10,0	b	
1-Methylphenanthrene		8,00	b	
Fluoranthene *		5,00	b	70
Pyrene *		3,00	b	
Benzo(a)fluorene	<	1,00		
Retene		2,00		
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		71
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		
Chrysene */Triphenylene	<	1,00		
Benzo(b */j/k *)fluoranthenes	<	1,00		98
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		89
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**134**		
Sum 3-7 ring PAH:		**197**		
Sum all:		**331**		
Sum Borneff 6		**9,00**		
Sum 16 EPA PAH *		**146**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/1204
Customer: Amap 04
Customers sample ID: 1-3.9.04 0753-0755
: 160-156
Sample type: Air
Sample amount: 1142 m3
Concentration unit: pg/m3
Data files: TA_9138.D

Kjeller, 16.02.05

Component:	Concentration pg/m3	Recovery %
Naphtalene *	36,0 b	34
2-Methylnaphtalene	13,0 b	
1-Methylnaphtalene	8,00 b	
Biphenyl	11,0 b	
Acenaphthylene *	< 1,00	45
Acenaphtene *	1,00 b	
Dibenzofuran	47,0	
Fluorene *	18,0 b	
Dibenzothiophene	2,00 b	51
Phenanthrene *	18,0 b	
Antrachene *	< 1,00	
3-Methylphenanthrene	3,00 b	
2-Methylphenanthrene	5,00 b	
2-Methylanthracene	< 1,00	
9-Methylphenanthrene	3,00 b	
1-Methylphenanthrene	3,00 b	
Fluoranthene *	4,00 b	73
Pyrene *	2,00 b	
Benzo(a)fluorene	< 1,00	
Retene	1,00 b	
Benzo(b)fluorene	< 1,00	
Benzo(ghi)fluoranthene	< 1,00	69
Cyclopenta(cd)pyrene	< 1,00	
Benz(a)anthracene *	< 1,00	
Chrysene */Triphenylene	1,00 b	
Benzo(b */j/k *)fluoranthenes	1,00 b	89
Benzo(a)fluoranthene	< 1,00	
Benzo(e)pyrene	< 1,00	
Benzo(a)pyrene *	< 1,00	
Perylene	< 1,00	
Indeno(1,2,3-cd)pyrene *	< 1,00	82
Dibenzo(ac/ah *)anthracene	< 1,00	
Benzo(ghi)perylene *	< 1,00	
Anthanthrene	< 1,00	
Coronene	< 1,00	
Dibenzo(ae)pyrene	< 1,00	
Dibenzo(ai)pyrene	< 1,00	
Dibenzo(ah)pyrene	< 1,00	
Sum bicyclic PAH:	**68,0**	
Sum 3-7 ring PAH:	**129**	
Sum all:	**197**	
Sum Borneff 6	**8,00**	
Sum 16 EPA PAH *	**88,0**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

162

Encl. to measuring report: O-2872
NILU sample number: 04/1510
Customer: Amap 04
Customers sample ID: 8-10.9.04 0755-0707
: 160-155
Sample type: Air
Sample amount: 1121 m3
Concentration unit: pg/m3
Data files: TA_9149.D

Kjeller, 16.02.05

Component:	Concentration pg/m3	Recovery %
Naphtalene *	63,0 b	
2-Methylnaphtalene	17,0 b	49
1-Methylnaphtalene	13,0 b	
Biphenyl	393	
Acenaphthylene *	< 1,00	
Acenaphtene *	2,00 b	57
Dibenzofuran	344	
Fluorene *	52,0	
Dibenzothiophene	1,00 b	
Phenanthrene *	18,0 b	
Antrachene *	< 1,00	51
3-Methylphenanthrene	2,00 b	
2-Methylphenanthrene	3,00	
2-Methylanthracene	< 1,00	
9-Methylphenanthrene	2,00 b	
1-Methylphenanthrene	2,00 b	
Fluoranthene *	2,00 b	
Pyrene *	1,00 b	67
Benzo(a)fluorene	< 1,00	
Retene	1,00 b	
Benzo(b)fluorene	< 1,00	
Benzo(ghi)fluoranthene	1,00 b	
Cyclopenta(cd)pyrene	< 1,00	
Benz(a)anthracene *	< 1,00	41
Chrysene */Triphenylene	1,00 b	
Benzo(b */j/k *)fluoranthenes	1,00 b	
Benzo(a)fluoranthene	< 1,00	
Benzo(e)pyrene	< 1,00	74
Benzo(a)pyrene *	< 1,00	
Perylene	< 1,00	
Indeno(1,2,3-cd)pyrene *	< 1,00	
Dibenzo(ac/ah *)anthracene	< 1,00	
Benzo(ghi)perylene *	< 1,00	58
Anthanthrene	< 1,00	
Coronene	< 1,00	
Dibenzo(ae)pyrene	< 1,00	
Dibenzo(ai)pyrene	< 1,00	
Dibenzo(ah)pyrene	< 1,00	
Sum bicyclic PAH:	**486**	
Sum 3-7 ring PAH:	**452**	
Sum all:	**938**	
Sum Borneff 6	**6,00**	
Sum 16 EPA PAH *	**147**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/1514
Customer: Amap 04
Customers sample ID: 17-19.9.04 1820-0934
: 160-155
Sample type: Air
Sample amount: 930 m3
Concentration unit: pg/m3
Data files: TA_9132.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		36,0	b	
2-Methylnaphtalene		13,0	b	36
1-Methylnaphtalene		9,00	b	
Biphenyl		73,0		
Acenaphthylene *	<	1,00		
Acenaphtene *		2,00	b	43
Dibenzofuran		155		
Fluorene *		24,0	b	
Dibenzothiophene		2,00	b	
Phenanthrene *		17,0	b	
Antrachene *	<	1,00		51
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		4,00	b	
Pyrene *		2,00	b	74
Benzo(a)fluorene	<	1,00		
Retene		2,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		74
Chrysene */Triphenylene	<	1,00		
Benzo(b */j/k *)fluoranthenes	<	1,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		91
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		83
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**131**		
Sum 3-7 ring PAH:		**240**		
Sum all:		**371**		
Sum Borneff 6		**8,00**		
Sum 16 EPA PAH *		**94,0**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

164

Encl. to measuring report: O-2872
NILU sample number: 04/1516
Customer: Amap 04
Customers sample ID: 22-24.9.04 0717-0753
: 160-158
Sample type: Air
Sample amount: 1164 m3
Concentration unit: pg/m3
Data files: TA_9150.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		28,0	b	34
2-Methylnaphtalene		11,0	b	
1-Methylnaphtalene		9,00	b	
Biphenyl		54,0		
Acenaphthylene *	<	1,00		43
Acenaphtene *		1,00	b	
Dibenzofuran		155		
Fluorene *		42,0		
Dibenzothiophene		2,00	b	49
Phenanthrene *		17,0	b	
Antrachene *	<	0,01		
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		3,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		4,00	b	73
Pyrene *		1,00	b	
Benzo(a)fluorene	<	1,00		
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		66
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		
Chrysene */Triphenylene	<	1,00		
Benzo(b */j/k *)fluoranthenes	<	1,00		90
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		78
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**102**		
Sum 3-7 ring PAH:		**253**		
Sum all:		**355**		
Sum Borneff 6		**8,00**		
Sum 16 EPA PAH *		**101**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 04/1518
Customer: Amap 04
Customers sample ID: 27-29.9.04 0958-0707
: 160-150
Sample type: Air
Sample amount: 1053 m3
Concentration unit: pg/m3
Data files: TA_9151.D

Kjeller, 16.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		82,0	b	
2-Methylnaphtalene		22,0	b	32
1-Methylnaphtalene		17,0	b	
Biphenyl		130		
Acenaphthylene *	<	1,00		
Acenaphtene *		2,00	b	41
Dibenzofuran		311		
Fluorene *		85,0		
Dibenzothiophene		7,00		
Phenanthrene *		27,0	b	
Antrachene *	<	1,00		43
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		6,00	b	
Pyrene *		2,00	b	67
Benzo(a)fluorene	<	1,00		
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		1,00	b	
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		49
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		1,00		95
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		76
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**251**		
Sum 3-7 ring PAH:		**476**		
Sum all:		**727**		
Sum Borneff 6		**10,0**		
Sum 16 EPA PAH *		**213**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

166

Encl. to measuring report: O-2872
NILU sample number: 04/1521
Customer: Amap 04
Customers sample ID: 4-6.10.04 0744-0731
: 160-150
Sample type: Air
Sample amount: 1116 m3
Concentration unit: pg/m3
Data files: TA_9152.D

Kjeller, 16.02.05

Component:	Concentration pg/m3	Recovery %
Naphtalene *	50,0 b	
2-Methylnaphtalene	23,0 b	33
1-Methylnaphtalene	15,0 b	
Biphenyl	84,0	
Acenaphthylene *	< 1,00	
Acenaphtene *	2,00 b	41
Dibenzofuran	109	
Fluorene *	24,0 b	
Dibenzothiophene	2,00 b	
Phenanthrene *	12,0 b	
Antrachene *	< 1,00	43
3-Methylphenanthrene	2,00 b	
2-Methylphenanthrene	3,00 b	
2-Methylanthracene	< 1,00	
9-Methylphenanthrene	2,00 b	
1-Methylphenanthrene	2,00 b	
Fluoranthene *	2,00 b	
Pyrene *	1,00 b	65
Benzo(a)fluorene	4,00 i	
Retene	1,00 b	
Benzo(b)fluorene	< 1,00	
Benzo(ghi)fluoranthene	< 1,00	
Cyclopenta(cd)pyrene	< 1,00	
Benz(a)anthracene *	< 1,00	57
Chrysene */Triphenylene	< 1,00	
Benzo(b */j/k *)fluoranthenes	< 1,00	
Benzo(a)fluoranthene	< 1,00	
Benzo(e)pyrene	< 1,00	80
Benzo(a)pyrene *	< 1,00	
Perylene	< 1,00	
Indeno(1,2,3-cd)pyrene *	< 1,00	
Dibenzo(ac/ah *)anthracene	< 1,00	
Benzo(ghi)perylene *	< 1,00	68
Anthanthrene	< 1,00	
Coronene	< 1,00	
Dibenzo(ae)pyrene	< 1,00	
Dibenzo(ai)pyrene	< 1,00	
Dibenzo(ah)pyrene	< 1,00	
Sum bicyclic PAH:	**172**	
Sum 3-7 ring PAH:	**187**	
Sum all:	**359**	
Sum Borneff 6	**6,00**	
Sum 16 EPA PAH *	**100**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

NILU

Encl. to measuring report: O-2872
NILU sample number: 04/1524
Customer: Amap 04
Customers sample ID: 11-13.10.04 0701-0752
: 160-161
Sample type: Air
Sample amount: 1181 m3
Concentration unit: pg/m3
Data files: TA_9153.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		45,0	b	
2-Methylnaphtalene		14,0	b	51
1-Methylnaphtalene		11,0	b	
Biphenyl		74,0		
Acenaphthylene *	<	1,00		
Acenaphtene *		2,00	b	61
Dibenzofuran		113		
Fluorene *		29,0		
Dibenzothiophene		2,00	b	
Phenanthrene *		15,0	b	
Antrachene *	<	1,00		51
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		4,00	b	
Pyrene *		1,00	b	68
Benzo(a)fluorene	<	1,00		
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		51
Chrysene */Triphenylene	<	1,00		
Benzo(b */j/k *)fluoranthenes	<	1,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		79
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		70
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**144**		
Sum 3-7 ring PAH:		**199**		
Sum all:		**343**		
Sum Borneff 6		**8,00**		
Sum 16 EPA PAH *		**105**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

168

Encl. to measuring report: O-2872
NILU sample number: 04/1527
Customer: Amap 04
Customers sample ID: 18-20.10.04 0839-0742
: 160-155
Sample type: Air
Sample amount: 1114 m3
Concentration unit: pg/m3
Data files: TA_9154.D

Kjeller, 17.02.05

Component:	Concentration pg/m3	Recovery %
Naphtalene *	46,0 b	43
2-Methylnaphtalene	19,0 b	
1-Methylnaphtalene	14,0 b	
Biphenyl	85,0	
Acenaphthylene *	< 1,00	52
Acenaphtene *	2,00 b	
Dibenzofuran	168	
Fluorene *	43,0	
Dibenzothiophene	2,00 b	53
Phenanthrene *	13,0 b	
Antrachene *	< 1,00	
3-Methylphenanthrene	2,00 b	
2-Methylphenanthrene	2,00 b	
2-Methylanthracene	< 1,00	
9-Methylphenanthrene	1,00 b	
1-Methylphenanthrene	1,00 b	
Fluoranthene *	3,00 b	73
Pyrene *	1,00 b	
Benzo(a)fluorene	< 1,00	
Retene	1,00 b	
Benzo(b)fluorene	< 1,00	
Benzo(ghi)fluoranthene	< 1,00	70
Cyclopenta(cd)pyrene	< 1,00	
Benz(a)anthracene *	< 1,00	
Chrysene */Triphenylene	< 1,00	
Benzo(b */j/k *)fluoranthenes	< 1,00	92
Benzo(a)fluoranthene	< 1,00	
Benzo(e)pyrene	< 1,00	
Benzo(a)pyrene *	< 1,00	
Perylene	< 1,00	
Indeno(1,2,3-cd)pyrene *	< 1,00	81
Dibenzo(ac/ah *)anthracene	< 1,00	
Benzo(ghi)perylene *	< 1,00	
Anthanthrene	< 1,00	
Coronene	< 1,00	
Dibenzo(ae)pyrene	< 1,00	
Dibenzo(ai)pyrene	< 1,00	
Dibenzo(ah)pyrene	< 1,00	
Sum bicyclic PAH:	**164**	
Sum 3-7 ring PAH:	**261**	
Sum all:	**425**	
Sum Borneff 6	**7,00**	
Sum 16 EPA PAH *	**117**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

169

Encl. to measuring report: O-2872
NILU sample number: 04/1530
Customer: Amap 04
Customers sample ID: 25-27.10.04 0728-0715
: 160-157
Sample type: Air
Sample amount: 1142 m3
Concentration unit: pg/m3
Data files: TA_9165.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		103	b	
2-Methylnaphtalene		31,0	b	36
1-Methylnaphtalene		25,0	b	
Biphenyl		159		
Acenaphthylene *		1,00	b	
Acenaphtene *		2,00	b	45
Dibenzofuran		217		
Fluorene *		43,0		
Dibenzothiophene		3,00	b	
Phenanthrene *		15,0	b	
Antrachene *	<	1,00		52
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		3,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		3,00	b	
Pyrene *		2,00	b	77
Benzo(a)fluorene	<	1,00		
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		73
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		104
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		85
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**318**		
Sum 3-7 ring PAH:		**317**		
Sum all:		**635**		
Sum Borneff 6		**7,00**		
Sum 16 EPA PAH *		**177**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

170

Encl. to measuring report: O-2872
NILU sample number: 05/3
Customer: Amap 04
Customers sample ID: 1-3.11.04 0830-0806
: 160-162
Sample type: Air
Sample amount: 1152 m3
Concentration unit: pg/m3
Data files: TA_9158.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		142	b	
2-Methylnaphtalene		40,0	b	40
1-Methylnaphtalene		31,0	b	
Biphenyl		184		
Acenaphthylene *	<	1,00		
Acenaphtene *		3,00	b	52
Dibenzofuran		278		
Fluorene *		74,0		
Dibenzothiophene		5,00		
Phenanthrene *		30,0	b	
Antrachene *	<	1,00		43
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		5,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		3,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		7,00	b	
Pyrene *		2,00	b	67
Benzo(a)fluorene	<	1,00		
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene	<	1,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *	<	1,00		52
Chrysene */Triphenylene		1,00	b	
Benzo(b */j/k *)fluoranthenes		1,00	b	
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene	<	1,00		99
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *	<	1,00		74
Anthanthrene	<	1,00		
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**397**		
Sum 3-7 ring PAH:		**436**		
Sum all:		**833**		
Sum Borneff 6		**11,0**		
Sum 16 EPA PAH *		**267**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

171

Encl. to measuring report: O-2872
NILU sample number: 05/6
Customer: Amap 04
Customers sample ID: 8-10.11.04 1343-0825
: 160-150
Sample type: Air
Sample amount: 997 m3
Concentration unit: pg/m3
Data files: TA_9159.D

Kjeller, 17.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		758	b	
2-Methylnaphtalene		222	b	43
1-Methylnaphtalene		214	b	
Biphenyl		676		
Acenaphthylene *		1,00	b	
Acenaphtene *		8,00	b	55
Dibenzofuran		655		
Fluorene *		252		
Dibenzothiophene		16,0		
Phenanthrene *		71,0		
Antrachene *		1,00	b	46
3-Methylphenanthrene		8,00	b	
2-Methylphenanthrene		12,0	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		7,00	b	
1-Methylphenanthrene		8,00	b	
Fluoranthene *		41,0		
Pyrene *		23,0		70
Benzo(a)fluorene		2,00	i	
Retene		17,0		
Benzo(b)fluorene		1,00	i,b	
Benzo(ghi)fluoranthene		5,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		3,00	b	53
Chrysene */Triphenylene		22,0		
Benzo(b */j/k *)fluoranthenes		24,0		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		8,00		97
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *	<	1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		7,00	i	72
Anthanthrene	<	1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**1 870**		
Sum 3-7 ring PAH:		**1 204**		
Sum all:		**3 074**		
Sum Borneff 6		**74,0**		
Sum 16 EPA PAH *		**1 214**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

172

Encl. to measuring report: O-2872
NILU sample number: 05/9
Customer: Amap 04
Customers sample ID: 15-17.11.04 0828-0759
: 160-160
Sample type: Air
Sample amount: 1145 m3
Concentration unit: pg/m3
Data files: TA_9160.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		661	b	
2-Methylnaphtalene		182	b	34
1-Methylnaphtalene		183	b	
Biphenyl		816		
Acenaphthylene *		2,00	b	
Acenaphtene *		8,00	b	40
Dibenzofuran		845		
Fluorene *		355		
Dibenzothiophene		14,0		
Phenanthrene *		64,0		
Antrachene *		1,00	b	44
3-Methylphenanthrene		4,00	b	
2-Methylphenanthrene		7,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		4,00	b	
1-Methylphenanthrene		4,00	b	
Fluoranthene *		41,0		
Pyrene *		23,0		66
Benzo(a)fluorene		2,00	i	
Retene		3,00	b	
Benzo(b)fluorene		1,00	i,b	
Benzo(ghi)fluoranthene		6,00		
Cyclopenta(cd)pyrene		1,00		
Benz(a)anthracene *		5,00		49
Chrysene */Triphenylene		22,0		
Benzo(b */j/k *)fluoranthenes		27,0		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		8,00		82
Benzo(a)pyrene *		1,00		
Perylene		1,00		
Indeno(1,2,3-cd)pyrene *		5,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		8,00	i	71
Anthanthrene	<	1,00		
Coronene		2,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**1 842**		
Sum 3-7 ring PAH:		**1 471**		
Sum all:		**3 313**		
Sum Borneff 6		**82,0**		
Sum 16 EPA PAH *		**1 224**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

NILU

Encl. to measuring report: O-2872
NILU sample number: 05/12
Customer: Amap 04
Customers sample ID: 22-24.11.04 1345-0820
: 160-159
Sample type: Air
Sample amount: 1025 m3
Concentration unit: pg/m3
Data files: TA_9161.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		1 221	b	
2-Methylnaphtalene		274	b	36
1-Methylnaphtalene		298	b	
Biphenyl		818		
Acenaphthylene *		1,00	b	
Acenaphtene *		6,00	b	43
Dibenzofuran		832		
Fluorene *		331		
Dibenzothiophene		13,0		
Phenanthrene *		47,0	b	
Antrachene *		1,00	b	44
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		30,0		
Pyrene *		15,0	b	61
Benzo(a)fluorene		2,00	i	
Retene		2,00	b	
Benzo(b)fluorene		2,00	i	
Benzo(ghi)fluoranthene		4,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		3,00		37
Chrysene */Triphenylene		20,0		
Benzo(b */j/k *)fluoranthenes		23,0		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		7,00		71
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		4,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		7,00	i	58
Anthanthrene	<	1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**2 611**		
Sum 3-7 ring PAH:		**1 372**		
Sum all:		**3 983**		
Sum Borneff 6		**65,0**		
Sum 16 EPA PAH *		**1 711**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

174

Encl. to measuring report: O-2872
NILU sample number: 05/15
Customer: Amap 04
Customers sample ID: 29.11-1.12.04 1002-0907
: 160-149
Sample type: Air
Sample amount: 1095 m3
Concentration unit: pg/m3
Data files: TA_9162.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		980	b	
2-Methylnaphtalene		242	b	37
1-Methylnaphtalene		234		
Biphenyl		770		
Acenaphthylene *		1,00	b	
Acenaphtene *		6,00	b	44
Dibenzofuran		795		
Fluorene *		306		
Dibenzothiophene		14,0		
Phenanthrene *		34,0	b	
Antrachene *		1,00	b	53
3-Methylphenanthrene		3,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		3,00	b	
Fluoranthene *		24,0	b	
Pyrene *		13,0	b	77
Benzo(a)fluorene		2,00	i	
Retene		2,00	b	
Benzo(b)fluorene		1,00	i,b	
Benzo(ghi)fluoranthene		3,00		
Cyclopenta(cd)pyrene		1,00		
Benz(a)anthracene *		3,00		74
Chrysene */Triphenylene		12,0		
Benzo(b */j/k *)fluoranthenes		18,0		
Benzo(a)fluoranthene		1,00		
Benzo(e)pyrene		7,00		103
Benzo(a)pyrene *		2,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		5,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		6,00	i	87
Anthanthrene		1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**2 226**		
Sum 3-7 ring PAH:		**1 277**		
Sum all:		**3 503**		
Sum Borneff 6		**55,0**		
Sum 16 EPA PAH *		**1 412**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

Encl. to measuring report: O-2872
NILU sample number: 05/17
Customer: Amap 04
Customers sample ID: 3-6.12.04 0902-0806
: 160-150
Sample type: Air
Sample amount: 1660 m3
Concentration unit: pg/m3
Data files: TA_9163.D

Kjeller, 17.02.05

Component:		Concentration pg/m3		Recovery %
Naphtalene *		664	b	
2-Methylnaphtalene		251	b	37
1-Methylnaphtalene		196		
Biphenyl		464		
Acenaphthylene *		1,00	b	
Acenaphtene *		24,0	b	44
Dibenzofuran		855		
Fluorene *		430		
Dibenzothiophene		18,0		
Phenanthrene *		201		
Antrachene *		1,00	b	47
3-Methylphenanthrene		8,00		
2-Methylphenanthrene		14,0		
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		4,00	b	
1-Methylphenanthrene		7,00		
Fluoranthene *		67,0		
Pyrene *		22,0		78
Benzo(a)fluorene		2,00	i	
Retene		3,00	b	
Benzo(b)fluorene		1,00	i	
Benzo(ghi)fluoranthene		4,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		3,00		72
Chrysene */Triphenylene		14,0		
Benzo(b */j/k *)fluoranthenes		15,0		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		5,00		114
Benzo(a)pyrene *		1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		4,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		5,00	i	98
Anthanthrene	<	1,00		
Coronene		1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**1 575**		
Sum 3-7 ring PAH:		**1 719**		
Sum all:		**3 294**		
Sum Borneff 6		**92,0**		
Sum 16 EPA PAH *		**1 453**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

176

Encl. to measuring report: O-2872
NILU sample number: 05/21
Customer: Amap 04
Customers sample ID: 13-15.12.04 0913-1348
: 160-138
Sample type: Air
Sample amount: 1181 m3
Concentration unit: pg/m3
Data files: TA_9164.D

Kjeller, 18.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		496	b	
2-Methylnaphtalene		168	b	34
1-Methylnaphtalene		116	b	
Biphenyl		477		
Acenaphthylene *		1,00	b	
Acenaphtene *		4,00	b	40
Dibenzofuran		562		
Fluorene *		201		
Dibenzothiophene		15,0		
Phenanthrene *		37,0	b	
Antrachene *	<	1,00		31
3-Methylphenanthrene		2,00	b	
2-Methylphenanthrene		4,00	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		2,00	b	
1-Methylphenanthrene		2,00	b	
Fluoranthene *		16,0	b	
Pyrene *		7,00	b	56
Benzo(a)fluorene	<	1,00		
Retene		1,00	b	
Benzo(b)fluorene	<	1,00		
Benzo(ghi)fluoranthene		2,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		1,00		39
Chrysene */Triphenylene		7,00		
Benzo(b */j/k *)fluoranthenes		5,00		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		2,00		71
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		1,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		2,00	i	49
Anthanthrene		2,00	b	
Coronene	<	1,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**1 257**		
Sum 3-7 ring PAH:		**889**		
Sum all:		**2 146**		
Sum Borneff 6		**25,0**		
Sum 16 EPA PAH *		**781**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

177

Encl. to measuring report: O-2872
NILU sample number: 05/281
Customer: Amap 04
Customers sample ID: 22-25.12.04 0756-0955
: 160-158
Sample type: Air
Sample amount: 1772 m3
Concentration unit: pg/m3
Data files: TA_9274.D

Kjeller, 23.02.2005

Component:		Concentration pg/m3		Recovery %
Naphtalene *		474	b	
2-Methylnaphtalene		176	b	31
1-Methylnaphtalene		151		
Biphenyl		474		
Acenaphthylene *		1,00	b	
Acenaphtene *		17,0	b	38
Dibenzofuran		968		
Fluorene *		521		
Dibenzothiophene		29,0		
Phenanthrene *		254		
Antrachene *		2,00		32
3-Methylphenanthrene		10,0	b	
2-Methylphenanthrene		17,0	b	
2-Methylanthracene	<	1,00		
9-Methylphenanthrene		6,00	b	
1-Methylphenanthrene		9,00	b	
Fluoranthene *		77,0		
Pyrene *		27,0		57
Benzo(a)fluorene		3,00	i	
Retene		4,00	b	
Benzo(b)fluorene		2,00	i	
Benzo(ghi)fluoranthene		9,00		
Cyclopenta(cd)pyrene	<	1,00		
Benz(a)anthracene *		6,00		26 g
Chrysene */Triphenylene		32,0		
Benzo(b */j/k *)fluoranthenes		16,0		
Benzo(a)fluoranthene	<	1,00		
Benzo(e)pyrene		7,00		67
Benzo(a)pyrene *	<	1,00		
Perylene	<	1,00		
Indeno(1,2,3-cd)pyrene *		2,00		
Dibenzo(ac/ah *)anthracene	<	1,00		
Benzo(ghi)perylene *		6,00	i	41
Anthanthrene	<	1,00		
Coronene		2,00		
Dibenzo(ae)pyrene	<	1,00		
Dibenzo(ai)pyrene	<	1,00		
Dibenzo(ah)pyrene	<	1,00		
Sum bicyclic PAH:		**1 275**		
Sum 3-7 ring PAH:		**2 037**		
Sum all:		**3 312**		
Sum Borneff 6		**102**		
Sum 16 EPA PAH *		**1 437**		

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Results of PAH Analysis

178

Encl. to measuring report: O-2872
NILU sample number: 05/284
Customer: Amap 04
Customers sample ID: 31.12-2.1.05 0933-1200
: 160-160
Sample type: Air
Sample amount: 1217 m3
Concentration unit: pg/m3
Data files: TA_9275.D

Kjeller, 23.02.05

Component:		Concentration pg/m3	Recovery %
Naphtalene *		1 754	
2-Methylnaphtalene		734	34
1-Methylnaphtalene		612	
Biphenyl		1 570	
Acenaphthylene *		2,00 b	
Acenaphtene *		41,0 b	40
Dibenzofuran		1 911	
Fluorene *		1 063	
Dibenzothiophene		43,0	
Phenanthrene *		333	
Antrachene *		2,00	44
3-Methylphenanthrene		7,00 b	
2-Methylphenanthrene		13,0 b	
2-Methylanthracene	<	1,00	
9-Methylphenanthrene		4,00 b	
1-Methylphenanthrene		6,00 b	
Fluoranthene *		103	
Pyrene *		21,0	66
Benzo(a)fluorene		3,00 i	
Retene		3,00 b	
Benzo(b)fluorene		2,00 i	
Benzo(ghi)fluoranthene		6,00	
Cyclopenta(cd)pyrene		1,00	
Benz(a)anthracene *		6,00	46
Chrysene */Triphenylene		19,0	
Benzo(b */j/k *)fluoranthenes		19,0	
Benzo(a)fluoranthene	<	1,00	
Benzo(e)pyrene		7,00	69
Benzo(a)pyrene *		1,00	
Perylene		1,00	
Indeno(1,2,3-cd)pyrene *		5,00	
Dibenzo(ac/ah *)anthracene		1,00	
Benzo(ghi)perylene *		7,00 i	60
Anthanthrene	<	1,00	
Coronene		2,00	
Dibenzo(ae)pyrene	<	1,00	
Dibenzo(ai)pyrene	<	1,00	
Dibenzo(ah)pyrene	<	1,00	
Sum bicyclic PAH:		**4 670**	
Sum 3-7 ring PAH:		**3 638**	
Sum all:		**8 308**	
Sum Borneff 6		**135**	
Sum 16 EPA PAH *		**3 377**	

<: Lower than detection limit at signal:noice 3:1
(i): Possible interference
(s): Saturated signal
(b): Lower than 10 times method blank
(g): Recovery is not according to NILUs quality criteria

3. Versjon 03.06.2004 GSK

Vedlegg 4

Organiske forbindelser i luft i Ny-Ålesund (O-2772)

NORSK AKKREDITERING P 008

Akkreditert etter ISO/IEC-17025

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

NILU

Målerapport nr. O-2772

Oppdragsgiver: Statens forurensningstilsyn
Postboks 8100 Dep
0032 OSLO

Prosjekt nr.: O-93062

Prøvetaking:

Sted: Ny-Ålesund
Ansvar: NILU/Norsk Polarinstitutt
Kommentar:

Prøveinformasjon:

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/258	7-9.1.04 0843-0804 160-167	Luft	17.03.04	19.04 – 29.06.04
04/261	14-16.1.04 0901-0923 160-159	Luft	"	22.04 – 29.06.04
04/264	21-23.1.04 0919-0756 160-155	Luft	"	22.04 – 29.09.04
04/267	28-30.1.04 0815-0810 160-161	Luft	"	"
04/270	4-6.2.04 0755-0909 160-158	Luft	"	"
04/273	11-13.02.04 0822-0743 160-160	Luft	"	26.04 – 29.09.04
04/277	20-22.2.04 0810-1038 160-165	Luft	"	"
04/279	25-27.2.04 0906-0904 160-161	Luft	"	"
04/578	5-7.3.04 0932-1019 160-165	Luft	10.05.04	06.09 – 21.10.04
04/580	10-12.3.04 1043-0937 160-150	Luft	"	"
04/584	17-19.3.04 0810-0753 160-148	Luft	"	"
04/588	29-31.3.04 0829-0802 160-152	Luft	"	08.09 – 21.10.04
04/590	2-4.4.04 0726-0650 160-160	Luft	"	"
04/593	12-14.4.04 1332-0839 160-140	Luft	"	"
04/595	16-18.4.04 0718-1001 160-158	Luft	"	08.09. – 09.12.04
04/597	21-23.4.04 0802-0800 160-160	Luft	"	13.09 – 09.12.04
04/600	28-30.4.04 0742-0808 160-157	Luft	"	"
04/729	7-9.5.04 0745-0936 160-161	Luft	16.06.04	13.09 – 09.12.04
04/731	12-14.5.04 0703-0720 160-154	Luft	"	"
04/735	21-23.5.04 0843-1230 160-159	Luft	"	15.09 – 06.10.04
04/738	28-30.5.04 0802-1005 160-157	Luft	"	"
04/741	4-6.6.04 0705-0730 160-157	Luft	"	"
04/874	9-11.6.04 0750-0709 160-159	Luft	11.08.04	15.09 – 21.10.04
04/876	14-16.6.04 0645-0733 160-158	Luft	"	20.09 – 21.10.04
04/879	21-23.6.04 0837-0908 160-157	Luft	"	"
04/882	28-30.6.04 0712-0734 160-158	Luft	"	22.09 – 21.10.04
04/885	5-7.7.04 0740-0725 160-157	Luft	"	"
04/888	12-14.7.04 0817-0742 160-157	Luft	"	"
04/1184	19-21.7.04 0724-0727 160-156	Luft	24.09.04	24.01.05 – 28.02.05
04/1187	26-28.7.04 0713-0633 160-155	Luft	"	25.01.05 – 18.02.05
04/1190	2-4.8.04 0842-0905 160-155	Luft	"	"
04/1193	9-11.08.04 0705-0758 160-156	Luft	"	26.01.05 – 18.02.05
04/1196	16-18.8.04 0746-0853 160-159	Luft	"	"
04/1198	23-25.8.04 0738-0659 160-160	Luft	"	"
04/1203	30.8-1.9.04 0642-0741 160- 159	Luft	"	"
04/1206	6-8.9.04 0933-0745 160-164	Luft	"	27.01.05 – 02.03.05
04/1513	15-17.9.04 0755-1812 160-160	Luft	15.11.04	28.01.05 – 18.02.05
04/1515	20-22.9.04 0841-0712 160-160	Luft	"	"

NILU prøvenr.	Kundens prøvemerking	Prøvetype	Prøven mottatt	Prøven analysert
04/1520	1-3.10.04 0737-0958 160-162	Luft	15.11.04	28.01.05 – 18.02.05
04/1523	8-11.10.04 1321-0655 160-(145-150)	Luft	"	"
04/1525	13-15.10.04 0757-0727 160-164	Luft	"	31.01 – 18.02.05
04/1529	22-24.10.04 0815-1315 160-160	Luft	"	"
04/1532	29-31.10.04 0828-1015 160-145	Luft	"	01.02.05 – 02.03.05
05/4	3-5.11.04 0812-0833 160-150	Luft	03.01.05	"
05/7	10-12.11.04 0832-0934 160-155	Luft	"	"
05/10	17-19.11.04 0803-0851 160-156	Luft	"	"
05/14	26-28.11.04 0820-1108 160-163	Luft	"	28.02 – 08.03.05
05/16	1-3.12.04 0913-0857 160-155	Luft	"	"
05/19	8-10.12.04 0955-0919 160-145	Luft	"	"
05/22	15-17.12.04 1406-0817 160-160	Luft	"	"
05/280	20-22.12.04 0956-0752 160-155	Luft	14.02.05	16.02.05 – 02.03.05
05/283	29-31.12.04 0955-0931 160-155	Luft	"	"

Analyser:

Utført av: Norsk institutt for luftforskning
Postboks 100
N-2027 KJELLER

Målemetode: NILU-O-2 ("Bestemmelse av tungflyktige persistente organiske forbindelser – pesticider og PCB'er")

Kommentarer:

Godkjenning: Kjeller, 3. mars 2005

Ole-Anders Braathen

Ole-Anders Braathen
Avd.direktør, Kjemisk analyse

Vedlegg:
Pesticid analyser : 50 sider
PCB-analyser : 50 sider
HCH/DDT-analyser : 51 sider
Målerapporten og vedleggene omfatter totalt 153 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/258
Customer : Amap 04
Customers sample ID : 7-9.1.04 0843-0804
: 160-167
Sample type : Air
Sample amount : 1166 m3
Concentration units : pg/m3
Data files : PA_8115.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,61	81
cis-Chlordane	0,91	
trans-Nonachlor	0,84	92
cis-Nonachlor	0,07	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/261
Customer : Amap 04
Customers sample ID : 14-16.1.04 0901-0923
: 160-159
Sample type : Air
Sample amount : 1164 m3
Concentration units : pg/m3
Data files : PA_8116.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,30	82
cis-Chlordane	0,55	
trans-Nonachlor	0,44	88
cis-Nonachlor	0,02 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/264
Customer : Amap 04
Customers sample ID : 21-23.1.04 0919-0756
: 160-155
Sample type : Air
Sample amount : 1107 m3
Concentration units : pg/m3
Data files : PA_8119.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,21	79
cis-Chlordane	0,40	
trans-Nonachlor	0,34	88
cis-Nonachlor	0,05 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/267
Customer : Amap 04
Customers sample ID : 28-30.1.04 0815-0810
: 160-161
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : PA_8120.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,55	86
cis-Chlordane	0,87	
trans-Nonachlor	0,76	99
cis-Nonachlor	0,04 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/270
Customer : Amap 04
Customers sample ID : 4-6.2.04 0755-0909
: 160-158
Sample type : Air
Sample amount : 1178 m3
Concentration units : pg/m3
Data files : PA_8121.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,35	81
cis-Chlordane	0,56	
trans-Nonachlor	0,49	92
cis-Nonachlor	0,03 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/273
Customer : Amap 04
Customers sample ID : 11-13.2.04 0822-0743
: 160-160
Sample type : Air
Sample amount : 1140 m3
Concentration units : pg/m3
Data files : PA_8122.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,62	90
cis-Chlordane	1,05	
trans-Nonachlor	0,97	96
cis-Nonachlor	0,10	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/277
Customer : Amap 04
Customers sample ID : 20-22.2.04 0810-1038
: 160-165
Sample type : Air
Sample amount : 1232 m3
Concentration units : pg/m3
Data files : PA_8123.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,25	82
cis-Chlordane	0,47	
trans-Nonachlor	0,43	92
cis-Nonachlor	0,04 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/279
Customer : Amap 04
Customers sample ID : 25-27.2.04 0906-0904
: 160-161
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : PA_8124.D

Kjeller, 11.08.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,26	86
cis-Chlordane	0,47	
trans-Nonachlor	0,39	99
cis-Nonachlor	0,03 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/578
Customer : Amap 04
Customers sample ID : 5-7.3.04 0932-1019
: 160-165
Sample type : Air
Sample amount : 1196 m3
Concentration units : pg/m3
Data files : PA_8453.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,40	79
cis-Chlordane	0,73	
trans-Nonachlor	0,66	78
cis-Nonachlor	0,06 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/580
Customer : Amap 04
Customers sample ID : 10-12.3.04 1043-0937
: 160-150
Sample type : Air
Sample amount : 1100 m3
Concentration units : pg/m3
Data files : PA_8454.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,51	74
cis-Chlordane	0,87	
trans-Nonachlor	0,79	72
cis-Nonachlor	0,06 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/584
Customer : Amap 04
Customers sample ID : 17-19.3.04 0810-0753
: 160-148
Sample type : Air
Sample amount : 1107 m3
Concentration units : pg/m3
Data files : PA_8455.D

Kjeller, 13.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,41	83
cis-Chlordane	0,76	
trans-Nonachlor	0,70	82
cis-Nonachlor	0,04 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/588
Customer : Amap 04
Customers sample ID : 29-31.3.04 0829-0802
: 160-152
Sample type : Air
Sample amount : 1116 m3
Concentration units : pg/m3
Data files : PA_8456.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,32	76
cis-Chlordane	0,59	
trans-Nonachlor	0,52	76
cis-Nonachlor	0,03 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/590
Customer : Amap 04
Customers sample ID : 2-4.4.04 0726-0650
: 160-160
Sample type : Air
Sample amount : 1142 m3
Concentration units : pg/m3
Data files : PA_8457.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,32	80
cis-Chlordane	0,57	
trans-Nonachlor	0,54	79
cis-Nonachlor	0,04 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/593
Customer : Amap 04
Customers sample ID : 12-14.4.04 1332-0839
: 160-140
Sample type : Air
Sample amount : 970 m3
Concentration units : pg/m3
Data files : PA_8458.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,35	76
cis-Chlordane	0,68	
trans-Nonachlor	0,66	76
cis-Nonachlor	0,06 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/595
Customer : Amap 04
Customers sample ID : 16-18.4.04 0718-1001
: 160-158
Sample type : Air
Sample amount : 1214 m3
Concentration units : pg/m3
Data files : PA_8459.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,27	83
cis-Chlordane	0,61	
trans-Nonachlor	0,56	83
cis-Nonachlor	0,04 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/597
Customer : Amap 04
Customers sample ID : 21-23.4.04 0802-0800
: 160-160
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : PA_8465.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,32	89
cis-Chlordane	0,73	
trans-Nonachlor	0,72	89
cis-Nonachlor	0,06 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/600
Customer : Amap 04
Customers sample ID : 28-30.4.04 0742-0808
: 160-157
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : PA_8466.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,35	86
cis-Chlordane	0,78	
trans-Nonachlor	0,76	85
cis-Nonachlor	0,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/729
Customer : Amap 04
Customers sample ID : 7-9.5.04 0745-0936
: 160-161
Sample type : Air
Sample amount : 1205 m3
Concentration units : pg/m3
Data files : PA_8467.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,18	86
cis-Chlordane	0,59	
trans-Nonachlor	0,57	85
cis-Nonachlor	0,07	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/731
Customer : Amap 04
Customers sample ID : 12-14.5.04 0703-0720
: 160-154
Sample type : Air
Sample amount : 1142 m3
Concentration units : pg/m3
Data files : PA_8468.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,12	99
cis-Chlordane	0,50	
trans-Nonachlor	0,51	97
cis-Nonachlor	0,05 b	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/735
Customer : Amap 04
Customers sample ID : 21-23.5.04 0843-1230
: 160-159
Sample type : Air
Sample amount : 1246 m3
Concentration units : pg/m3
Data files : PA_8469.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,19	81
cis-Chlordane	0,73	
trans-Nonachlor	0,62	85
cis-Nonachlor	0,10	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/738
Customer : Amap 04
Customers sample ID : 28-30.5.04 0802-1005
: 160-157
Sample type : Air
Sample amount : 1195 m3
Concentration units : pg/m3
Data files : PA_8470.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,15	95
cis-Chlordane	0,60	
trans-Nonachlor	0,55	95
cis-Nonachlor	0,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/741
Customer : Amap 04
Customers sample ID : 4-6.6.04 0705-0730
: 160-157
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : PA_8471.D

Kjeller, 12.10.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,12	87
cis-Chlordane	0,57	
trans-Nonachlor	0,56	86
cis-Nonachlor	0,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/874
Customer : Amap 04
Customers sample ID : 9-11.6.04 0750-0709
: 160-159
Sample type : Air
Sample amount : 1138 m3
Concentration units : pg/m3
Data files : TA_8445.D

Kjeller, 20.12.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,10	89
cis-Chlordane	0,56	
trans-Nonachlor	0,54	89
cis-Nonachlor	0,11	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/876
Customer : Amap 04
Customers sample ID : 14-16.6.04 0645-0733
: 160-158
Sample type : Air
Sample amount : 1169 m3
Concentration units : pg/m3
Data files : TA_8446.D

Kjeller, 20.12.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,08	83
cis-Chlordane	0,48	
trans-Nonachlor	0,40	83
cis-Nonachlor	0,10	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/879
Customer : Amap 04
Customers sample ID : 21-23.6.04 0837-0908
: 160-157
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : TA_8447.D

Kjeller, 20.12.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,08	79
cis-Chlordane	0,50	
trans-Nonachlor	0,45	77
cis-Nonachlor	0,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/882
Customer : Amap 04
Customers sample ID : 28-30.6.04 0712-0734
: 160-158
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : TA_8448.D

Kjeller, 20.12.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,09	83
cis-Chlordane	0,47	
trans-Nonachlor	0,38	84
cis-Nonachlor	0,07	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/885
Customer : Amap 04
Customers sample ID : 5-7.7.04 0740-0725
: 160-157
Sample type : Air
Sample amount : 1140 m3
Concentration units : pg/m3
Data files : TA_8449.D

Kjeller, 20.12.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,11	89
cis-Chlordane	0,50	
trans-Nonachlor	0,40	89
cis-Nonachlor	0,07	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/888
Customer : Amap 04
Customers sample ID : 12-14.7.04 0817-0742
: 160-157
Sample type : Air
Sample amount : 1135 m3
Concentration units : pg/m3
Data files : TA_8450.D

Kjeller, 20.12.04

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,13	92
cis-Chlordane	0,66	
trans-Nonachlor	0,54	93
cis-Nonachlor	0,10	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1184
Customer : Amap 04
Customers sample ID : 19-21.7.04 0724-0727
: 160-156
Sample type : Air
Sample amount : 1142 m3
Concentration units : pg/m3
Data files : TA_9226.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,14 b	83
cis-Chlordane	0,71	
trans-Nonachlor	0,54	84
cis-Nonachlor	0,11	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1187
Customer : Amap 04
Customers sample ID : 26-28.7.04 0713-0633
: 160-155
Sample type : Air
Sample amount : 1123 m3
Concentration units : pg/m3
Data files : TA_9227.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,17	90
cis-Chlordane	0,88	
trans-Nonachlor	0,70	90
cis-Nonachlor	0,14	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1190
Customer : Amap 04
Customers sample ID : 2-4.8.04 0842-0905
: 160-155
Sample type : Air
Sample amount : 1150 m3
Concentration units : pg/m3
Data files : TA_9228.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,16	91
cis-Chlordane	0,63	
trans-Nonachlor	0,49	89
cis-Nonachlor	0,09	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1193
Customer : Amap 04
Customers sample ID : 9-11.8.04 0705-0758
: 160-156
Sample type : Air
Sample amount : 1164 m3
Concentration units : pg/m3
Data files : TA_9229.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,14 b	71
cis-Chlordane	0,63	
trans-Nonachlor	0,46	70
cis-Nonachlor	0,09	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1196
Customer : Amap 04
Customers sample ID : 16-18.8.04 0746-0853
: 160-159
Sample type : Air
Sample amount : 1181 m3
Concentration units : pg/m3
Data files : TA_9230.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,07 b	79
cis-Chlordane	0,61	
trans-Nonachlor	0,42	80
cis-Nonachlor	0,11	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1198
Customer : Amap 04
Customers sample ID : 23-25.8.04 0738-0659
: 160-160
Sample type : Air
Sample amount : 1140 m3
Concentration units : pg/m3
Data files : TA_9231.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,13 b	81
cis-Chlordane	0,73	
trans-Nonachlor	0,54	81
cis-Nonachlor	0,13	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1203
Customer : Amap 04
Customers sample ID : 30.8-1.9.04 0642-0741
: 160-159
Sample type : Air
Sample amount : 1178 m3
Concentration units : pg/m3
Data files : TA_9236.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,12 b	83
cis-Chlordane	0,69	
trans-Nonachlor	0,50	83
cis-Nonachlor	0,13	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1206
Customer : Amap 04
Customers sample ID : 6-8.9.04 0933-0745
: 160-164
Sample type : Air
Sample amount : 1127 m3
Concentration units : pg/m3
Data files : TA_9237.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,08 b	76
cis-Chlordane	0,49	
trans-Nonachlor	0,35	76
cis-Nonachlor	0,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1513
Customer : Amap 04
Customers sample ID : 15-17.9.04 0755-1812
: 160-160
Sample type : Air
Sample amount : 1405 m3
Concentration units : pg/m3
Data files : TA_9238.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,09 b	79
cis-Chlordane	0,68	
trans-Nonachlor	0,49	79
cis-Nonachlor	0,10	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1520
Customer : Amap 04
Customers sample ID : 1-3.10.04 0737-0958
: 160-162
Sample type : Air
Sample amount : 1220 m3
Concentration units : pg/m3
Data files : TA_9244.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,18	84
cis-Chlordane	0,66	
trans-Nonachlor	0,52	83
cis-Nonachlor	0,10	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1523
Customer : Amap 04
Customers sample ID : 8-11.10.04 1321-0655
: 160-(145-150)
Sample type : Air
Sample amount : 1476 m3
Concentration units : pg/m3
Data files : TA_9245.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,20	74
cis-Chlordane	0,86	
trans-Nonachlor	0,68	74
cis-Nonachlor	0,12	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1525
Customer : Amap 04
Customers sample ID : 13-15.10.04 0757-0727
: 160-164
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : TA_9246.D

Kjeller, 01.03.2005

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,17	77
cis-Chlordane	0,73	
trans-Nonachlor	0,56	77
cis-Nonachlor	0,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1529
Customer : Amap 04
Customers sample ID : 22-24.10.04 0815-1315
: 160-160
Sample type : Air
Sample amount : 1277 m3
Concentration units : pg/m3
Data files : TA_9247.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,24	91
cis-Chlordane	0,84	
trans-Nonachlor	0,70	91
cis-Nonachlor	0,10	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 04/1532
Customer : Amap 04
Customers sample ID : 29-31.10.04 0828-1015
: 160-145
Sample type : Air
Sample amount : 1145 m3
Concentration units : pg/m3
Data files : TA_9248.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,39	79
cis-Chlordane	0,93	
trans-Nonachlor	0,81	79
cis-Nonachlor	0,11	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/4
Customer : Amap 04
Customers sample ID : 3-5.11.04 0812-0833
: 160-150
Sample type : Air
Sample amount : 1130 m3
Concentration units : pg/m3
Data files : TA_9251.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,34	73
cis-Chlordane	0,80	
trans-Nonachlor	0,68	73
cis-Nonachlor	0,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/7
Customer : Amap 04
Customers sample ID : 10-12.11.04 0832-0934
: 160-155
Sample type : Air
Sample amount : 1164 m3
Concentration units : pg/m3
Data files : TA_9252.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,24	83
cis-Chlordane	0,61	
trans-Nonachlor	0,48	83
cis-Nonachlor	0,07	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/10
Customer : Amap 04
Customers sample ID : 17-19.11.04 0803-0851
: 160-156
Sample type : Air
Sample amount : 1161 m3
Concentration units : pg/m3
Data files : TA_9253.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,30	85
cis-Chlordane	0,78	
trans-Nonachlor	0,63	84
cis-Nonachlor	0,05	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/14
Customer : Amap 04
Customers sample ID : 26-28.11.04 0820-1108
: 160-163
Sample type : Air
Sample amount : 1232 m3
Concentration units : pg/m3
Data files : TA_9363.D

Kjeller, 08.03.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,35	91
cis-Chlordane	0,76	
trans-Nonachlor	0,64	91
cis-Nonachlor	0,07	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/16
Customer : Amap 04
Customers sample ID : 1-3.12.04 0913-0857
: 160-155
Sample type : Air
Sample amount : 1133 m3
Concentration units : pg/m3
Data files : TA_9255.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,29	80
cis-Chlordane	0,61	
trans-Nonachlor	0,49	80
cis-Nonachlor	0,03	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/19
Customer : Amap 04
Customers sample ID : 8-10.12.04 0955-0919
: 160-145
Sample type : Air
Sample amount : 1090 m3
Concentration units : pg/m3
Data files : TA_9256.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,37	79
cis-Chlordane	0,74	
trans-Nonachlor	0,61	79
cis-Nonachlor	0,05	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/22
Customer : Amap 04
Customers sample ID : 15-17.12.04 1406-0817
: 160-160
Sample type : Air
Sample amount : 1017 m3
Concentration units : pg/m3
Data files : TA_9257.D

Kjeller, 28.02.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,28	76
cis-Chlordane	0,51	
trans-Nonachlor	0,44	74
cis-Nonachlor	0,03	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/280
Customer : Amap 04
Customers sample ID : 20-22.12.04 0956-0752
: 160-155
Sample type : Air
Sample amount : 1093 m3
Concentration units : pg/m3
Data files : TA_9364.D

Kjeller, 08.03.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,21	79
cis-Chlordane	0,45	
trans-Nonachlor	0,35	79
cis-Nonachlor	0,03	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

Results of Pesticid Analysis

Encl. to measuring report : O-2772
NILU-Sample number : 05/283
Customer : Amap 04
Customers sample ID : 29-31.12.04 0955-0931
: 160-155
Sample type : Air
Sample amount : 1131 m3
Concentration units : pg/m3
Data files : TA_9365.D

Kjeller, 08.03.05

Compound Structure	Concentration pg/m3	Recovery %
trans-Chlordane	0,40	83
cis-Chlordane	0,66	
trans-Nonachlor	0,55	85
cis-Nonachlor	0,06	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank.
g : Recovery is not according to NILU's quality criteria

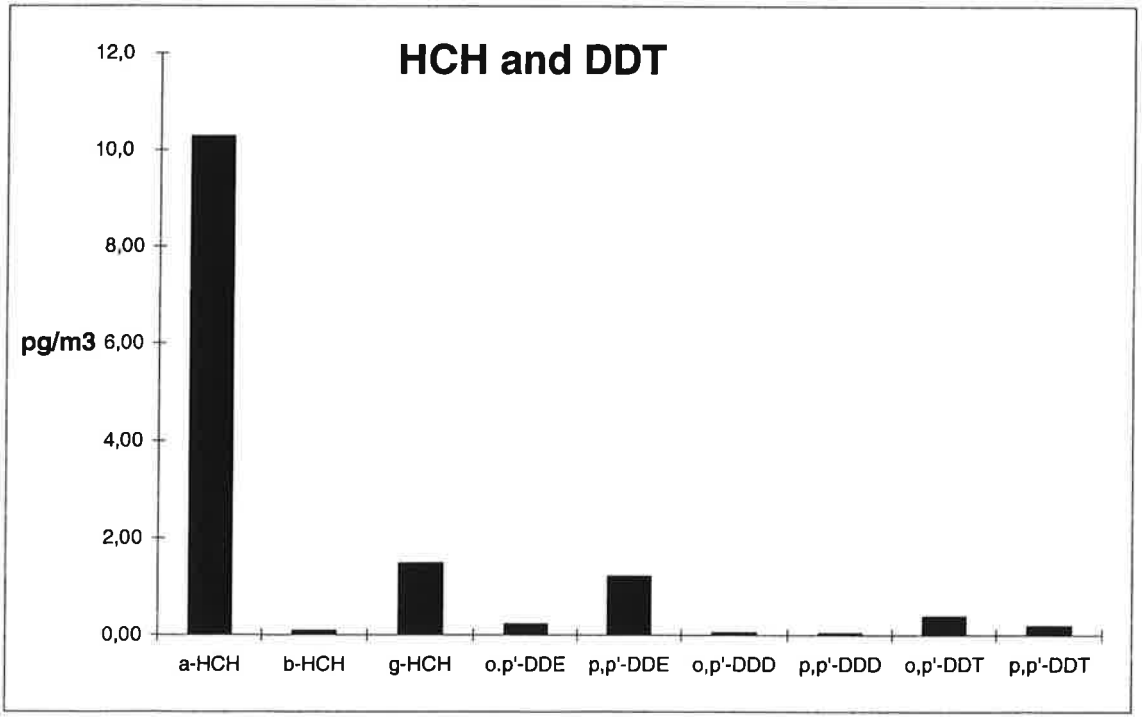
234 # Results of HCH and DDT Analysis

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/258
Customer : Amap 04
Customers sample ID : 7-9.1.04 0843-0804
: 160-167
Sample type : Air
Sample amount : 1166 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	10,3	61
β-HCH	0,07 bi	
γ-HCH	1,47	64
o.p'-DDE	0,22 i	
p,p'-DDE	1,20 b	65
o,p'-DDD	0,04	
p,p'-DDD	0,03	
o,p'-DDT	0,37 i	
p,p'-DDT	0,18	70
Sum DDT	2,03	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40258.xls

Results of HCH and DDT Analysis

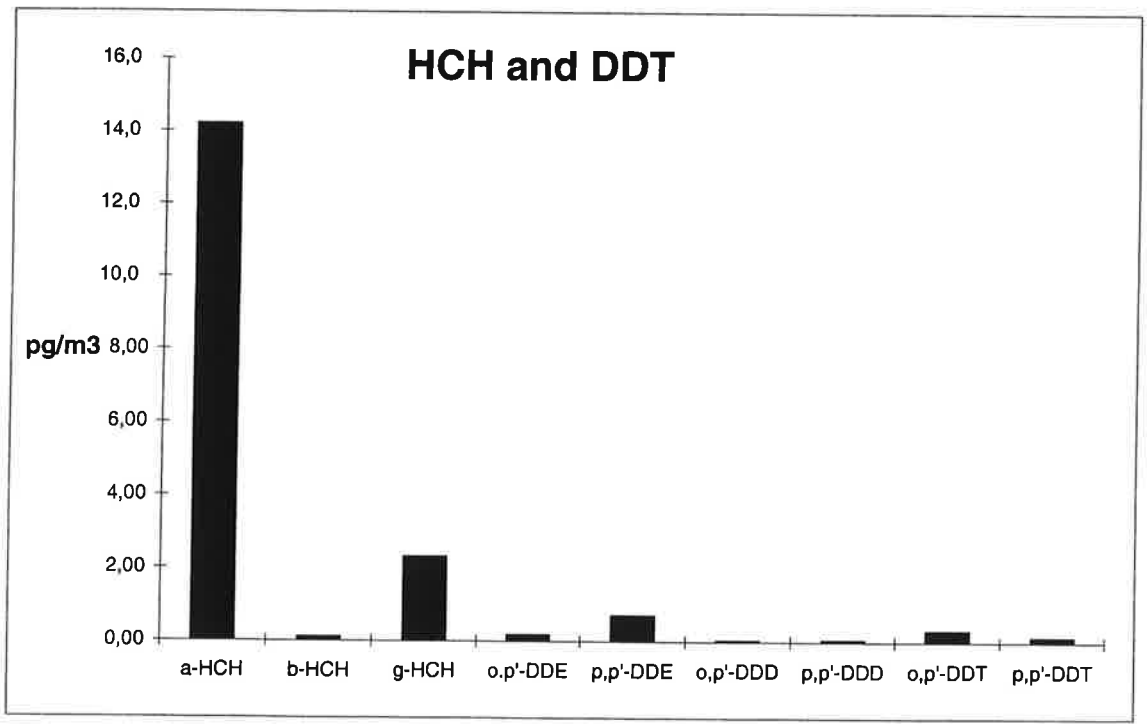
NILU

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/261
Customer : Amap 04
Customers sample ID : 14-16.1.04 0901-0923
: 160-159
Sample type : Air
Sample amount : 1164 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	14,2	64
β-HCH	0,10 i	
γ-HCH	2,30	65
o,p'-DDE	0,16	
p,p'-DDE	0,71 b	58
o,p'-DDD	0,02	
p,p'-DDD	0,05 i	
o,p'-DDT	0,30	
p,p'-DDT	0,12	65
Sum DDT	1,36	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40261.xls

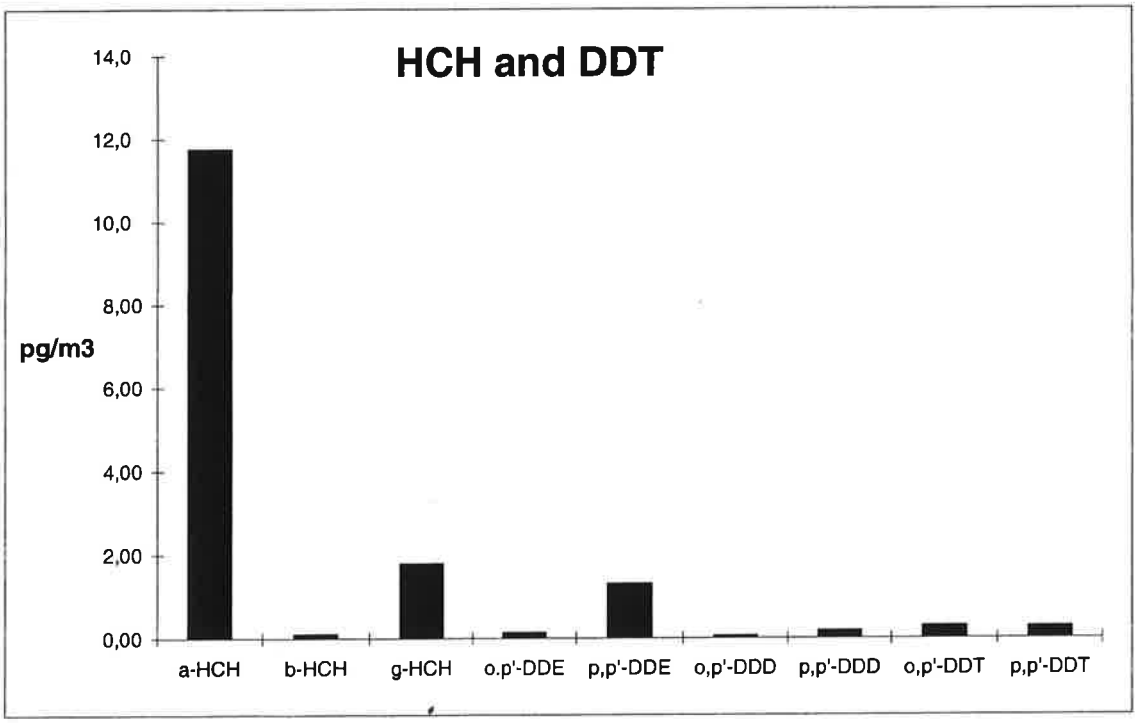
236 Results of HCH and DDT Analysis

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/264
Customer : Amap 04
Customers sample ID : 21-23.1.04 0919-0756
: 160-155
Sample type : Air
Sample amount : 1107 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	11,7	61
β-HCH	0,10	
γ-HCH	1,77	64
o.p'-DDE	0,13	
p,p'-DDE	1,29 b	84
o,p'-DDD	0,04	
p,p'-DDD	0,16	
o,p'-DDT	0,28	
p,p'-DDT	0,27 i	77
Sum DDT	2,17	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

Results of HCH and DDT Analysis

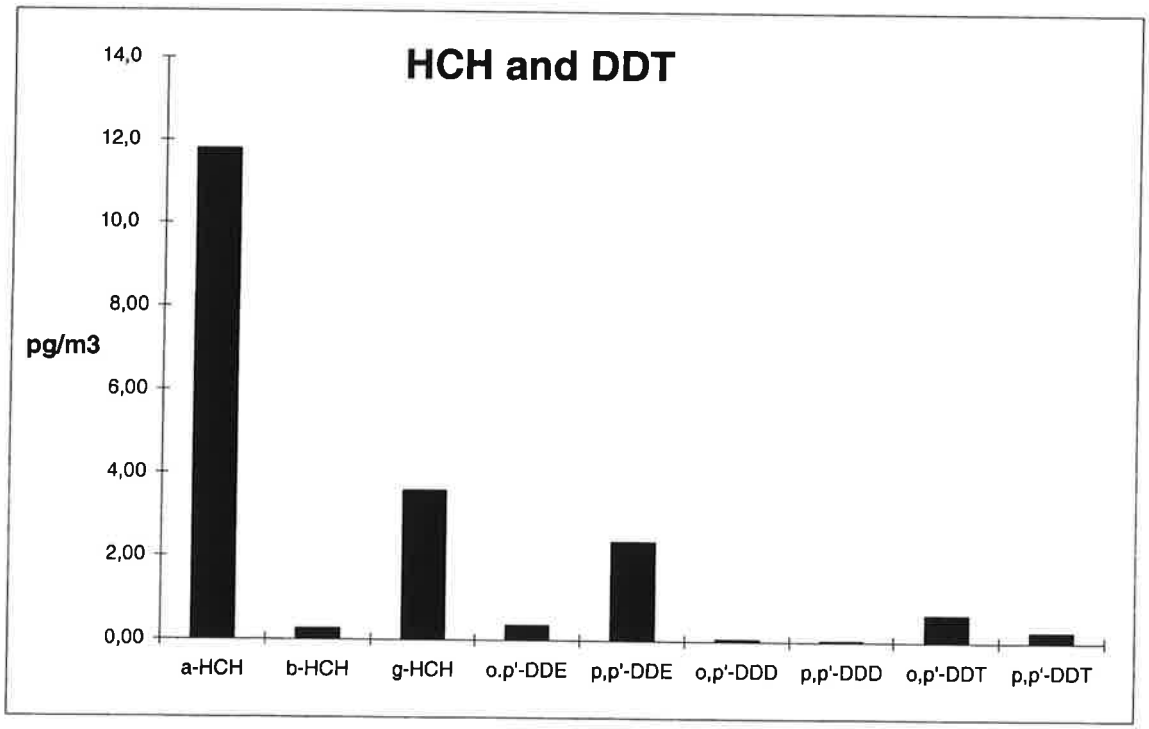
NILU

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/267
Customer : Amap 04
Customers sample ID : 28-30.1.04 0815-0810
: 160-161
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	11,8	58
β-HCH	0,25 i	
γ-HCH	3,58	59
o,p'-DDE	0,34	
p,p'-DDE	2,36	75
o,p'-DDD	0,04	
p,p'-DDD	0,02 i	
o,p'-DDT	0,64 i	
p,p'-DDT	0,24 i	79
Sum DDT	3,63	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40267.xls

Results of HCH and DDT Analysis

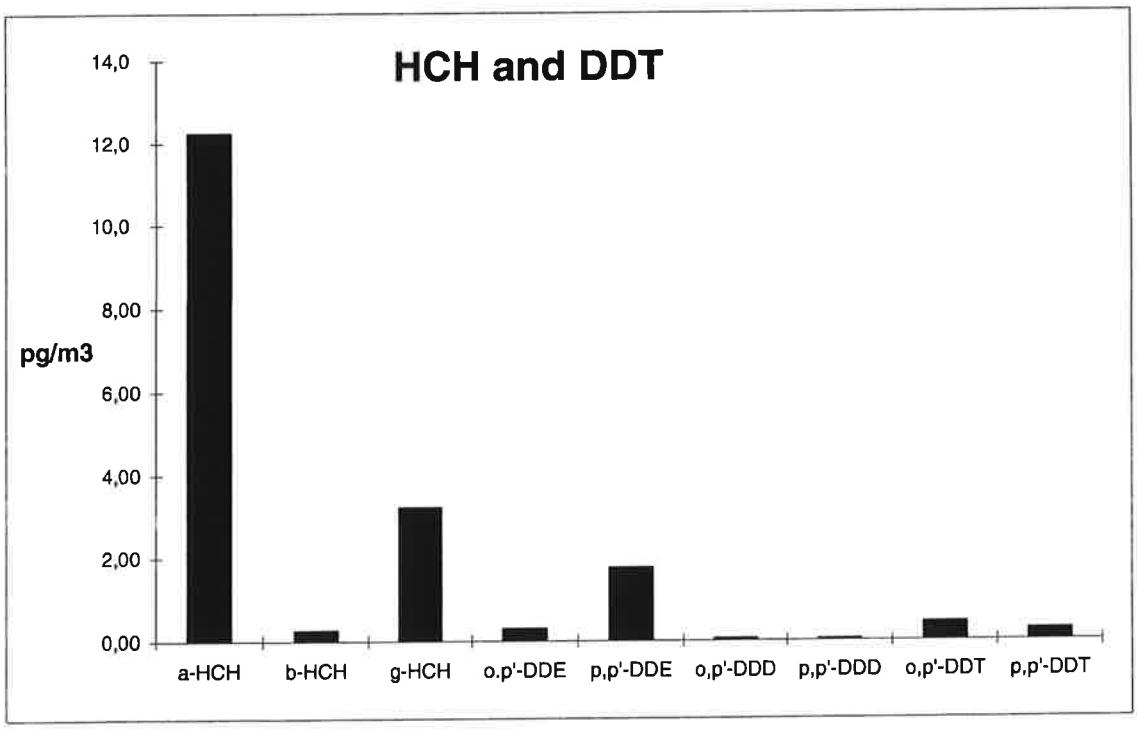
238

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/270
Customer : Amap 04
Customers sample ID : 4-6.2.04 0755-0909
: 160-158
Sample type : Air
Sample amount : 1178 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	12,2	58
β-HCH	0,25	
γ-HCH	3,21	59
o,p'-DDE	0,29	
p,p'-DDE	1,75	69
o,p'-DDD	0,04 i	
p,p'-DDD	0,03	
o,p'-DDT	0,42	
p,p'-DDT	0,25 i	69
Sum DDT	2,77	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

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Results of HCH and DDT Analysis

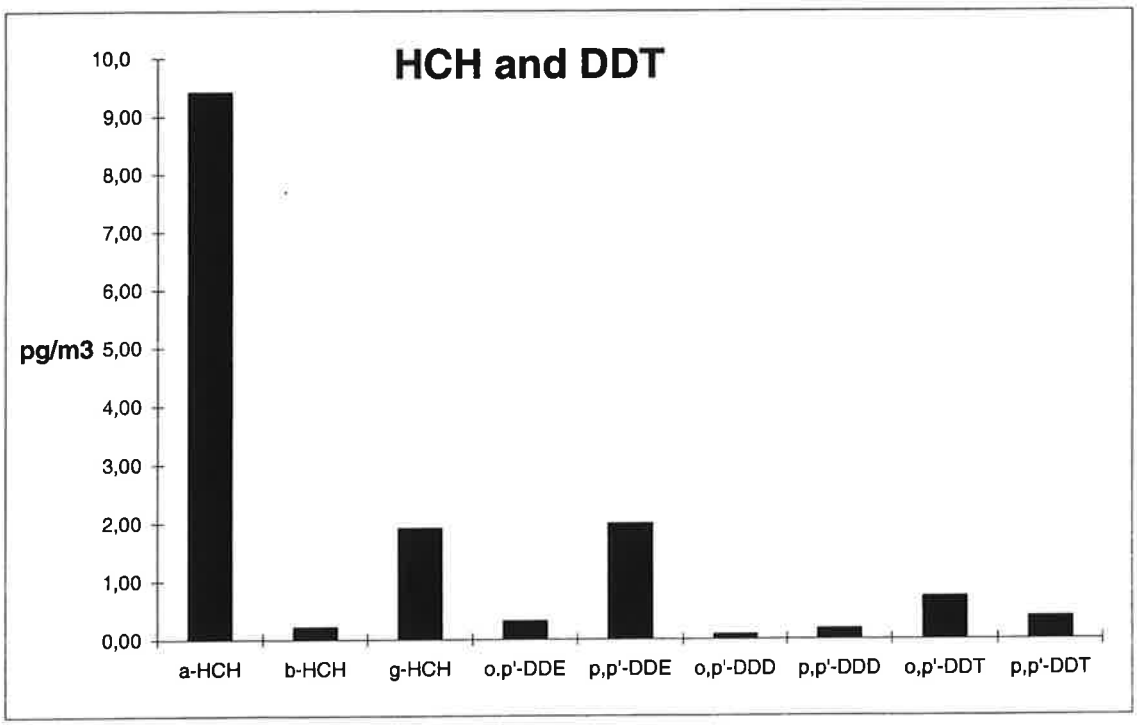
NILU

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/273
Customer : Amap 04
Customers sample ID : 11-13.2.04 0822-0743
: 160-160
Sample type : Air
Sample amount : 1140 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	9,40	62
β-HCH	0,20	
γ-HCH	1,90	65
o,p'-DDE	0,31	
p,p'-DDE	1,97	93
o,p'-DDD	0,07	
p,p'-DDD	0,17	
o,p'-DDT	0,72	
p,p'-DDT	0,37	89
Sum DDT	3,61	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

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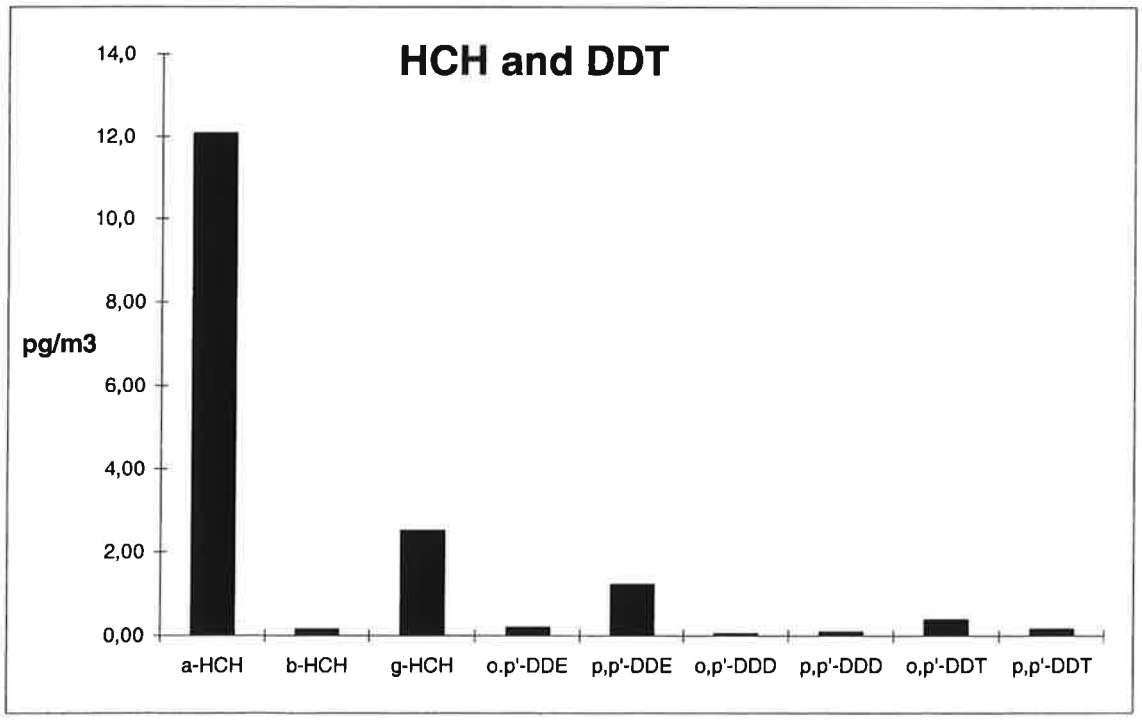
Results of HCH and DDT Analysis

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/277
Customer : Amap 04
Customers sample ID : 20-22.2.04 0810-1038
: 160-165
Sample type : Air
Sample amount : 1232 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	12,1	57
β-HCH	0,14	
γ-HCH	2,51	59
o,p'-DDE	0,18	
p,p'-DDE	1,22 b	83
o,p'-DDD	0,04	
p,p'-DDD	0,08	
o,p'-DDT	0,38 i	
p,p'-DDT	0,15	79
Sum DDT	2,04	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40277.xls

Results of HCH and DDT Analysis

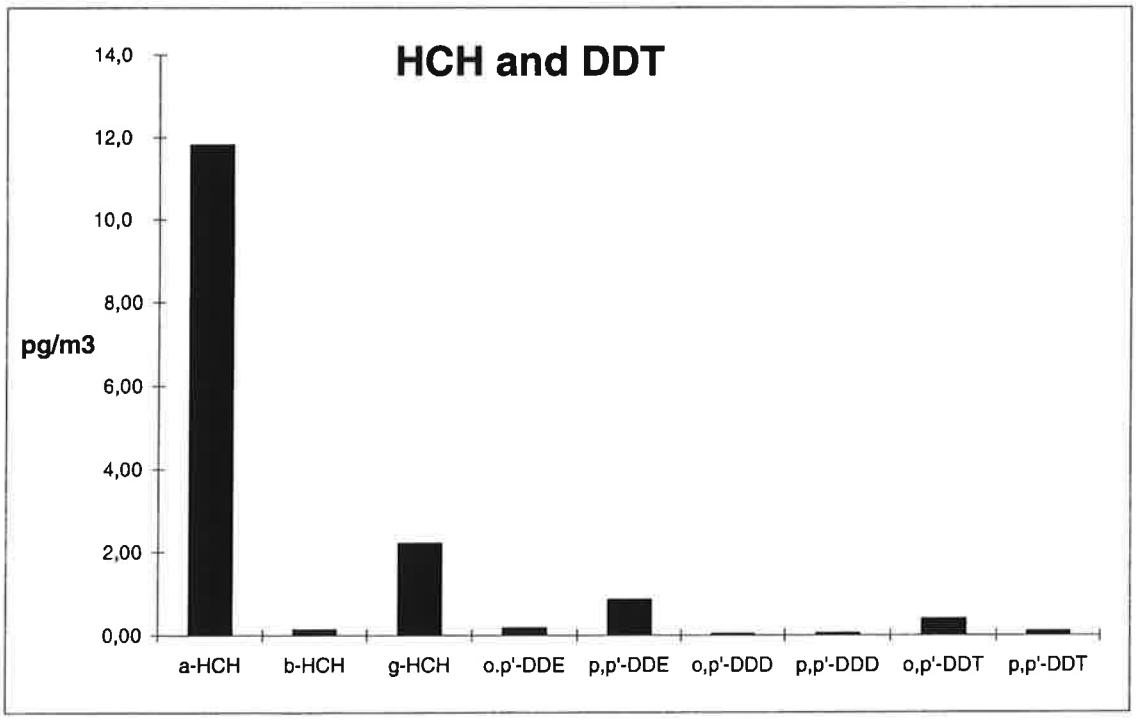
NILU

Kjeller, 16.06.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/279
Customer : Amap 04
Customers sample ID : 25-27.2.04 0906-0904
: 160-161
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : DH619ny_DDT_14-06-2004

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	11,8	62
β-HCH	0,12 i	
γ-HCH	2,21	69
o,p'-DDE	0,17	
p,p'-DDE	0,85 b	83
o,p'-DDD	0,02	
p,p'-DDD	0,04	
o,p'-DDT	0,38	
p,p'-DDT	0,08 i	96
Sum DDT	1,53	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



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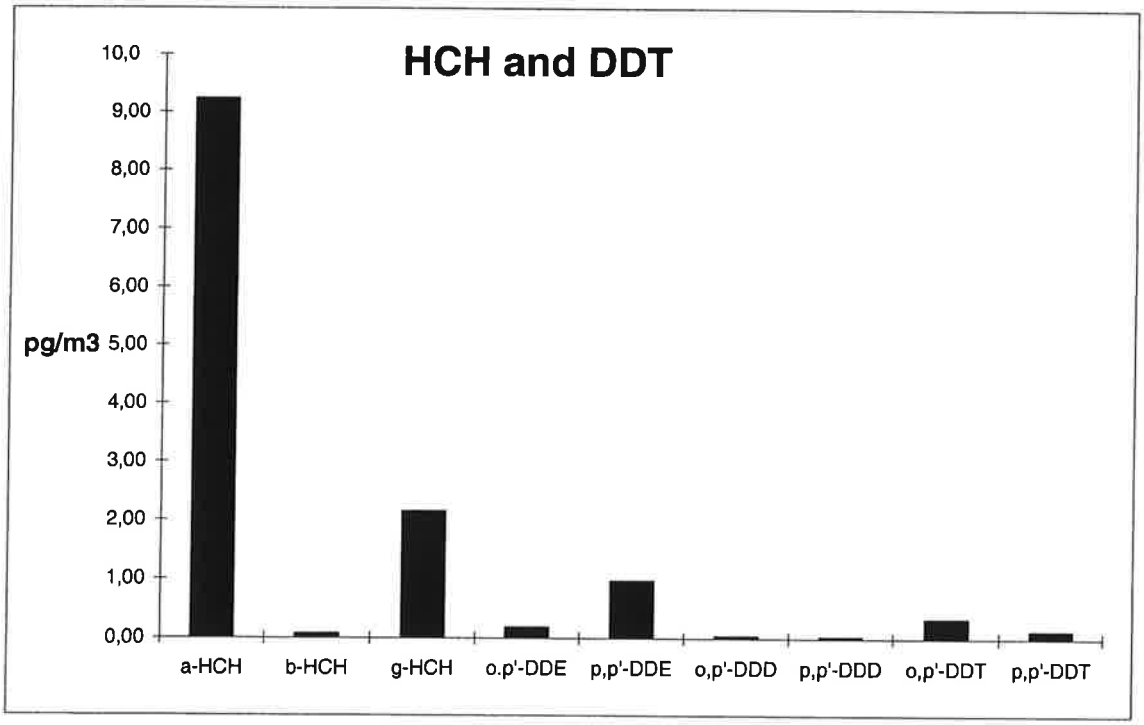
Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/578
Customer : Amap 04
Customers sample ID : 5-7.3.04 0932-1019
: 160-165
Sample type : Air
Sample amount : 1196 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	9,23	51
β-HCH	0,07	
γ-HCH	2,14	55
o,p'-DDE	0,18	
p,p'-DDE	0,96 b	86
o,p'-DDD	0,03 i	
p,p'-DDD	0,02 b	
o,p'-DDT	0,33 b	
p,p'-DDT	0,12	94
Sum DDT	1,65	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40578.xls

Results of HCH and DDT Analysis

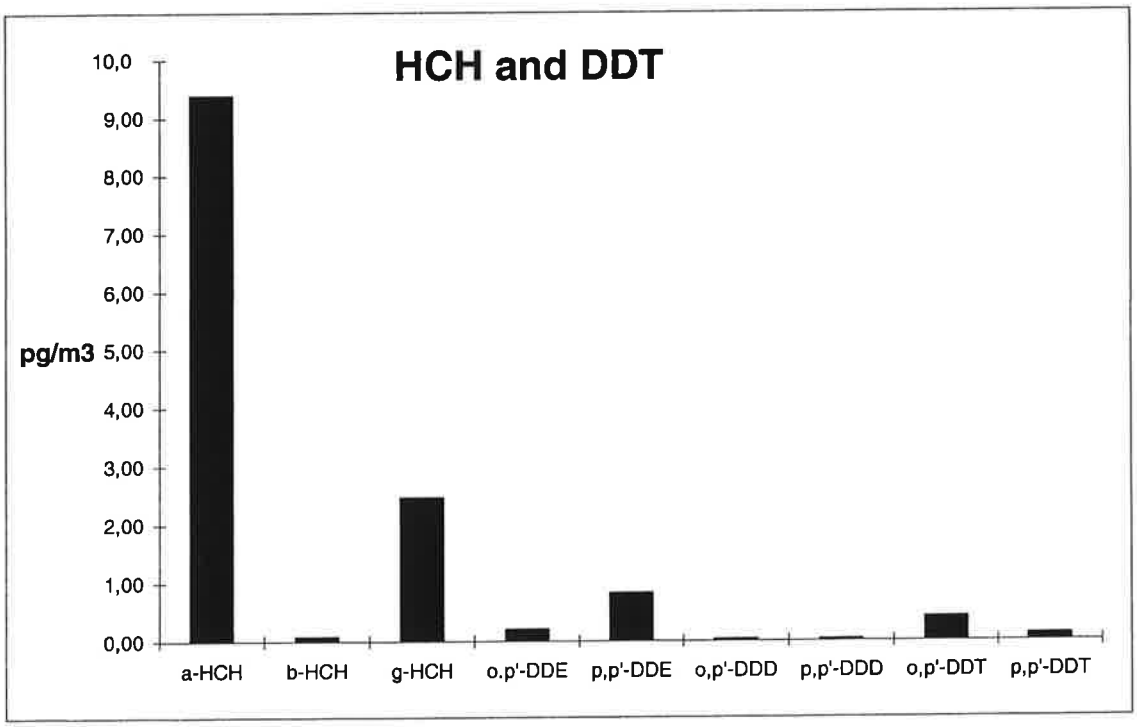
NILU

Kjeller, 21.10.2004

Encl. to measuring report : O-2772
NILU-Sample number : 04/580
Customer : Amap 04
Customers sample ID : 10-12.3.04 1043-0937
: 160-150
Sample type : Air
Sample amount : 1100 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	9,38	51
β-HCH	0,07	
γ-HCH	2,46	55
o,p'-DDE	0,20	
p,p'-DDE	0,82 b	86
o,p'-DDD	0,02	
p,p'-DDD	0,02 b	
o,p'-DDT	0,40 b	
p,p'-DDT	0,11	91
Sum DDT	1,57	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



244

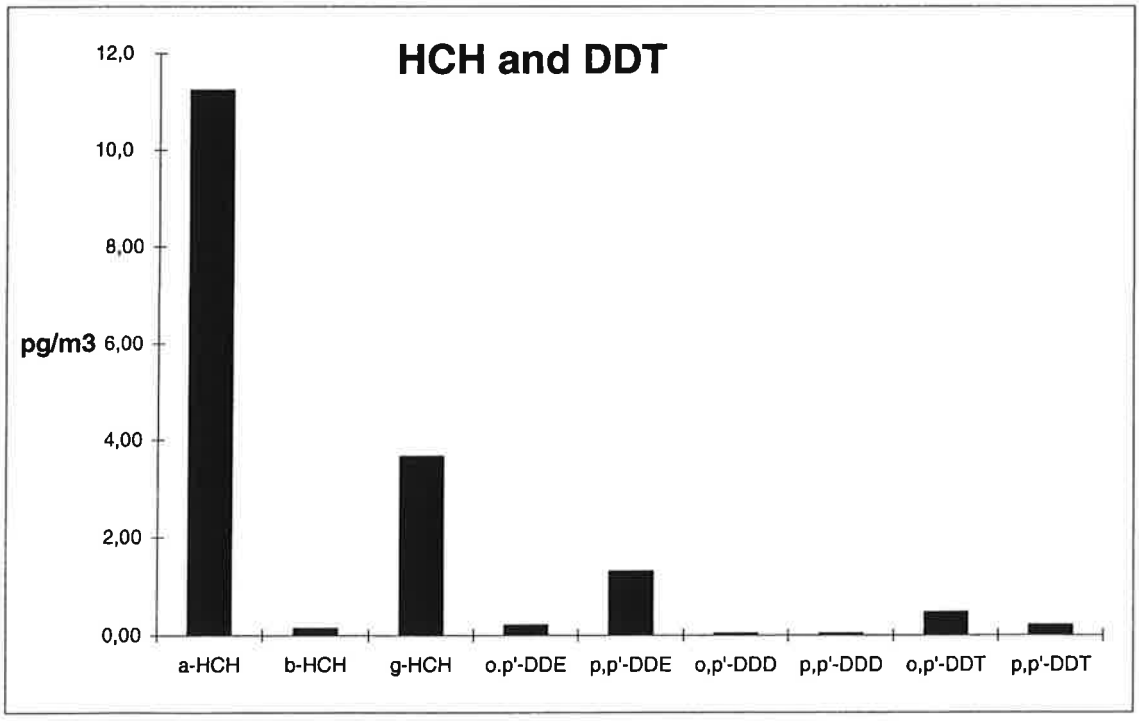
Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/584
Customer : Amap 04
Customers sample ID : 17-19.3.04 0810-0753
: 160-148
Sample type : Air
Sample amount : 1107 m3
Concentration units : pg/m3
Data files : DH671

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	11,2	61
β-HCH	0,13	
γ-HCH	3,66	65
o,p'-DDE	0,20	
p,p'-DDE	1,30 b	78
o,p'-DDD	0,03	
p,p'-DDD	0,03 b	
o,p'-DDT	0,46 b	
p,p'-DDT	0,20	80
Sum DDT	2,22	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40584.xls

Results of HCH and DDT Analysis

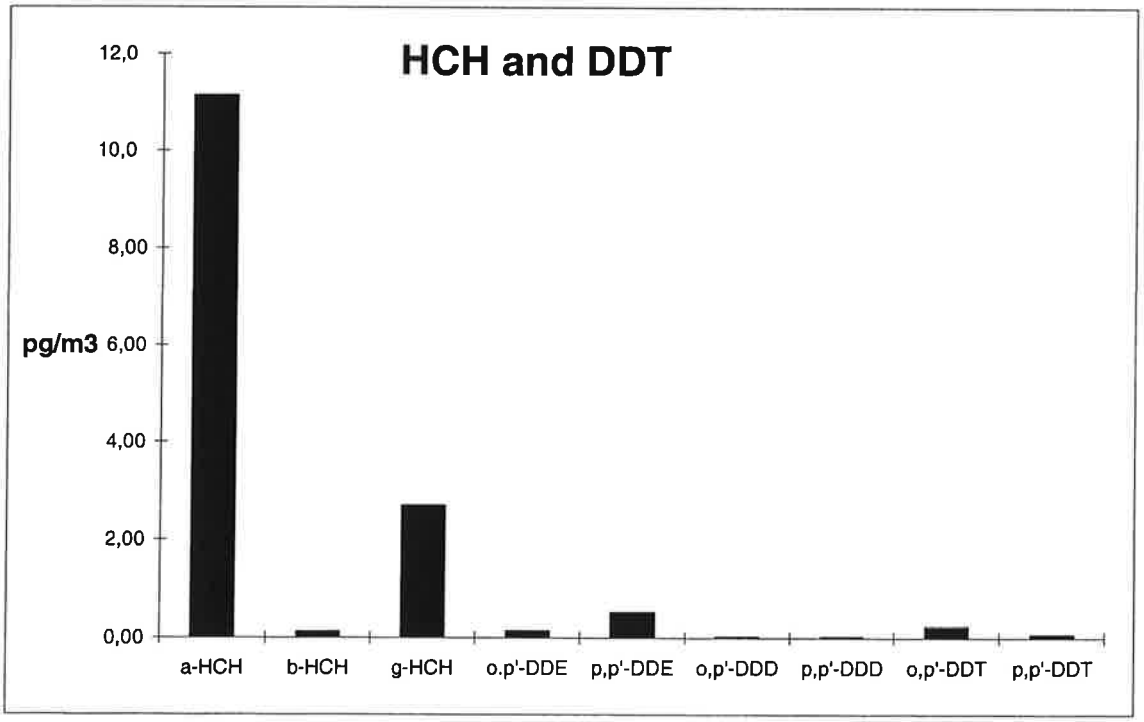
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/588
Customer : Amap 04
Customers sample ID : 29-31.3.04 0829-0802
: 160-152
Sample type : Air
Sample amount : 1116 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	11,1	51
β-HCH	0,11	
γ-HCH	2,68	56
o,p'-DDE	0,13	
p,p'-DDE	0,52 b	86
o,p'-DDD	0,01	
p,p'-DDD	0,01 b	
o,p'-DDT	0,23 b	
p,p'-DDT	0,06	89
Sum DDT	0,97	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40588.xls

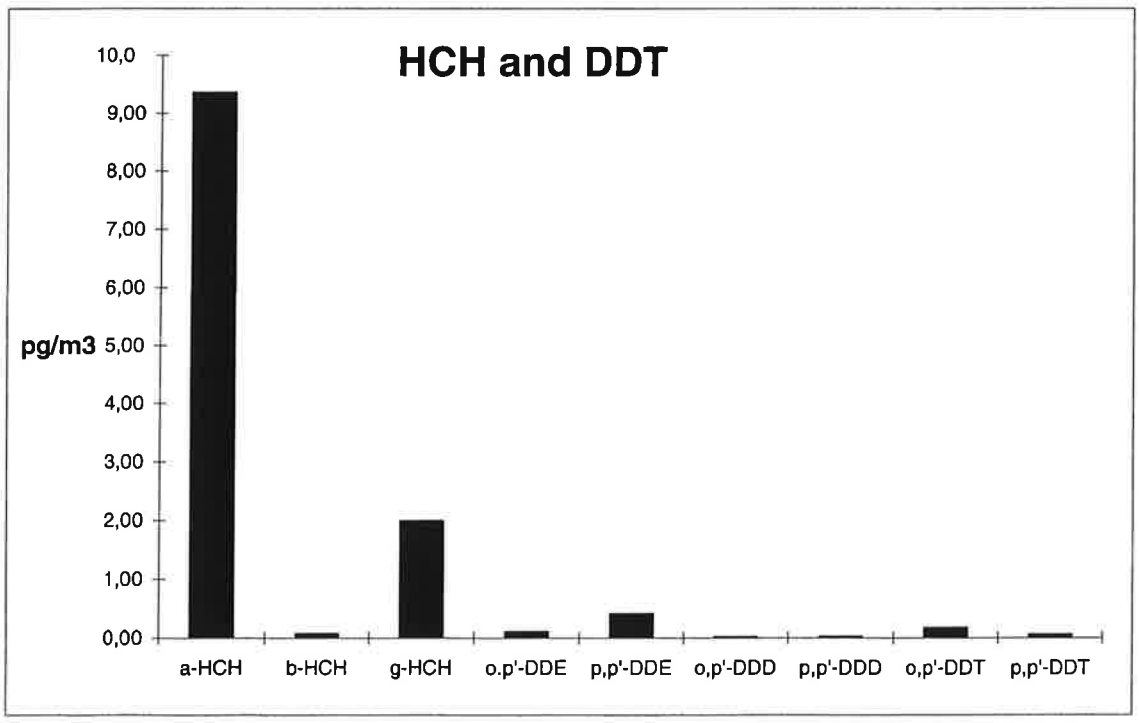
246 # Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/590
Customer : Amap 04
Customers sample ID : 2-4.4.04 0726-0650
: 160-160
Sample type : Air
Sample amount : 1142 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	9,35	53
β-HCH	0,07	
γ-HCH	1,98	59
o.p'-DDE	0,10	
p,p'-DDE	0,41 b	94
o,p'-DDD	0,01	
p,p'-DDD	0,01 b	
o,p'-DDT	0,17 bi	
p,p'-DDT	0,05	107
Sum DDT	0,75	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40590.xls

Results of HCH and DDT Analysis

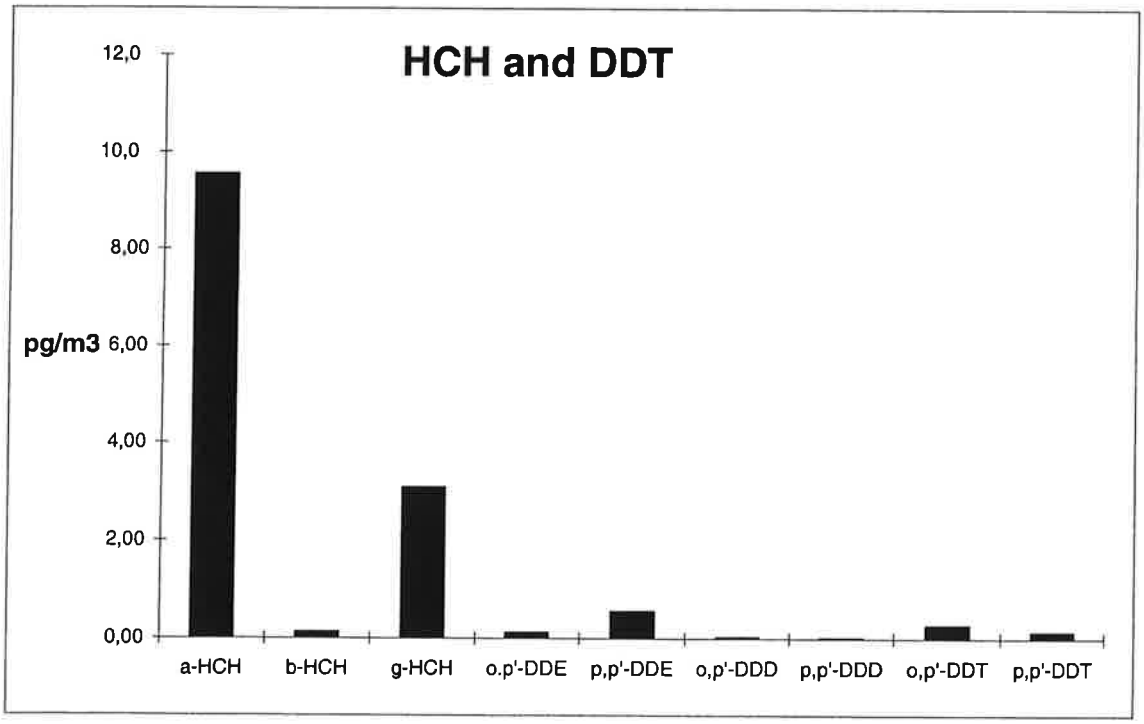
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/593
Customer : Amap 04
Customers sample ID : 12-14.4.04 1332-0839
: 160-140
Sample type : Air
Sample amount : 970 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	9,54	49
β-HCH	0,12	
γ-HCH	3,08	54
o,p'-DDE	0,11	
p,p'-DDE	0,55 b	87
o,p'-DDD	0,02	
p,p'-DDD	< 0,01	
o,p'-DDT	0,26 b	
p,p'-DDT	0,13	97
Sum DDT	1,08	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt40593.xls

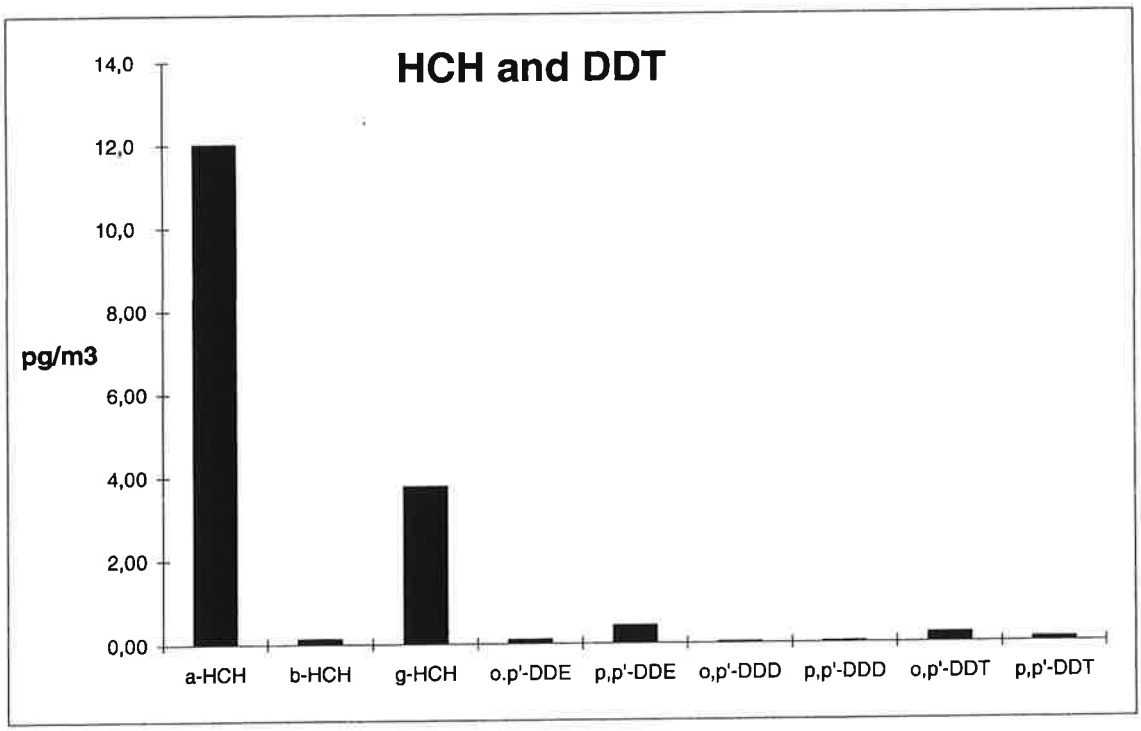
248 Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/595
Customer : Amap 04
Customers sample ID : 16-18.4.04 0718-1001
: 160-158
Sample type : Air
Sample amount : 1214 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	12,0	55
β-HCH	0,11	
γ-HCH	3,75	62
o,p'-DDE	0,09	
p,p'-DDE	0,41 b	86
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,20 b	
p,p'-DDT	0,07	99
Sum DDT	0,80	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

Results of HCH and DDT Analysis

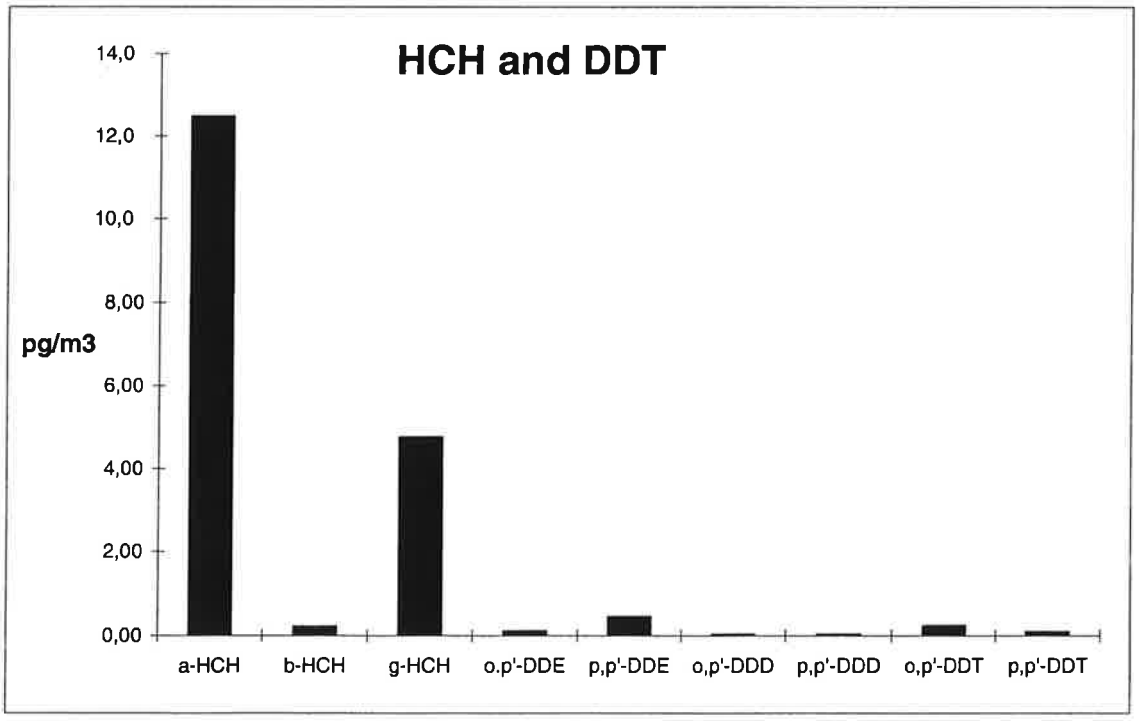
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/597
Customer : Amap 04
Customers sample ID : 21-23.4.04 0802-0800
: 160-160
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	12,5	53
β-HCH	0,21	
γ-HCH	4,76	60
o,p'-DDE	0,10	
p,p'-DDE	0,44 b	79
o,p'-DDD	0,02	
p,p'-DDD	0,02 b	
o,p'-DDT	0,24 b	
p,p'-DDT	0,09	86
Sum DDT	0,91	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

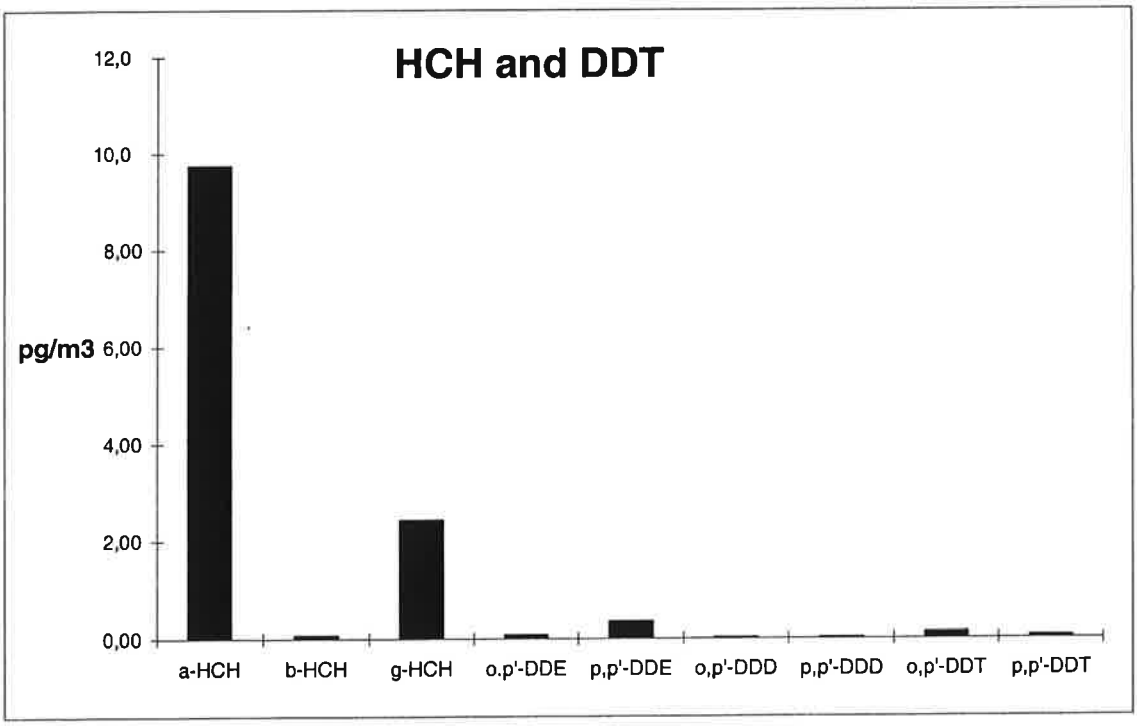
250 Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/600
Customer : Amap 04
Customers sample ID : 28-30.4.04 0742-0808
: 160-157
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	9,73	50
β-HCH	0,06	
γ-HCH	2,42	54
o,p'-DDE	0,07	
p,p'-DDE	0,34 b	78
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,13 b	
p,p'-DDT	0,04	90
Sum DDT	0,60	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

Results of HCH and DDT Analysis

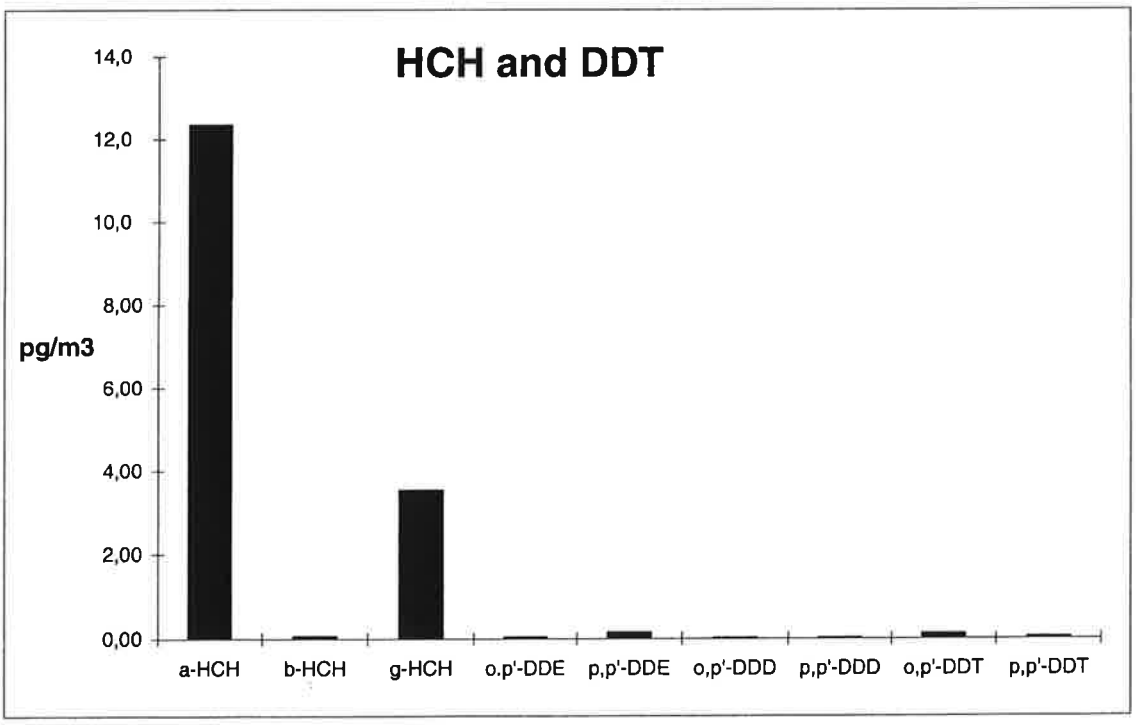
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/729
Customer : Amap 04
Customers sample ID : 7-9.5.04 0745-0936
: 160-161
Sample type : Air
Sample amount : 1205 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	12,3	53
β-HCH	0,06	
γ-HCH	3,52	60
o.p'-DDE	0,03	
p,p'-DDE	0,14 b	81
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,12 b	
p,p'-DDT	0,03	92
Sum DDT	0,34	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

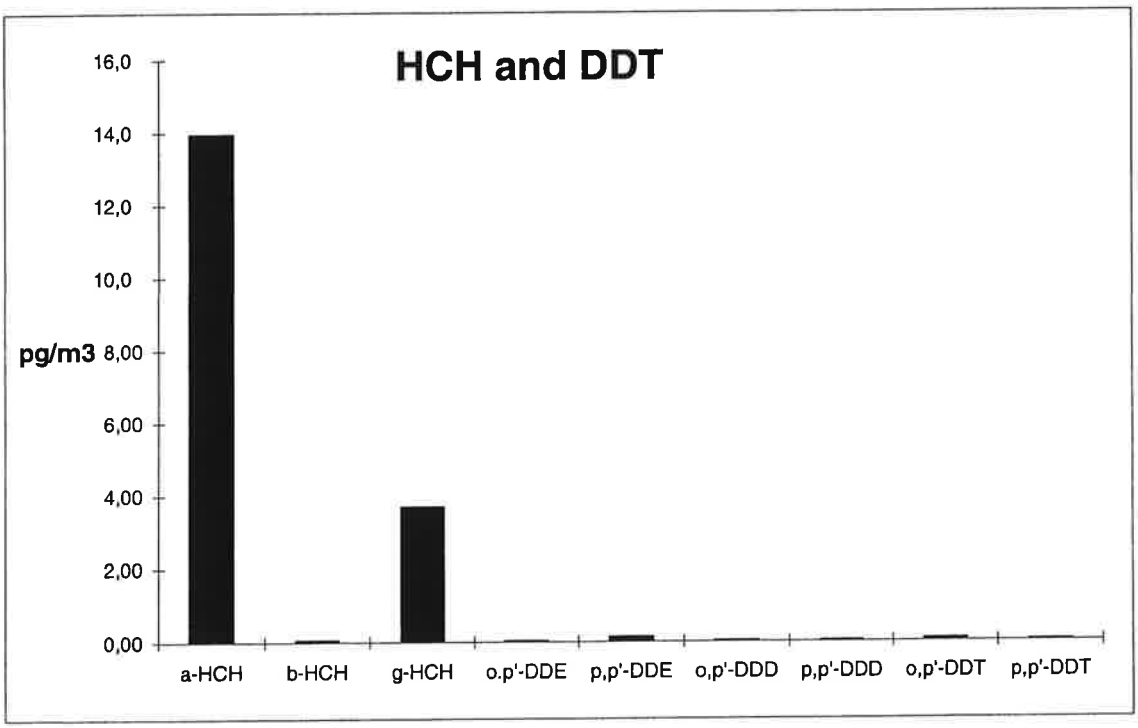
252 Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/731
Customer : Amap 04
Customers sample ID : 12-14.5.04 0703-0720
: 160-154
Sample type : Air
Sample amount : 1142 m3
Concentration units : pg/m3
Data files : DH672

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	13,9	57
β-HCH	0,05	
γ-HCH	3,68	65
o,p'-DDE	0,02	
p,p'-DDE	0,12 b	89
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,06 bi	
p,p'-DDT	0,01	99
Sum DDT	0,23	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

Results of HCH and DDT Analysis

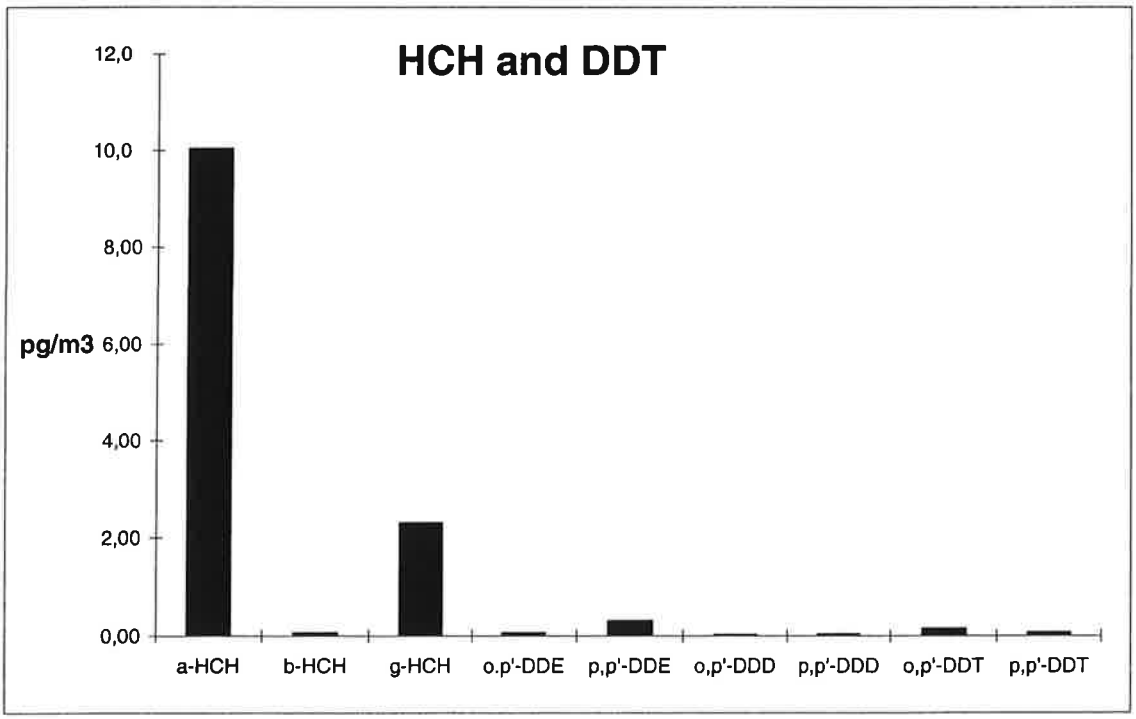
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/735
Customer : Amap 04
Customers sample ID : 21-23.5.04 0843-1230
: 160-159
Sample type : Air
Sample amount : 1246 m3
Concentration units : pg/m3
Data files : DH670

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	10,0	46
β-HCH	0,05	
γ-HCH	2,30	49
o,p'-DDE	0,05	
p,p'-DDE	0,30 b	69
o,p'-DDD	0,01	
p,p'-DDD	0,03 b	
o,p'-DDT	0,14 b	
p,p'-DDT	0,06	72
Sum DDT	0,59	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

254

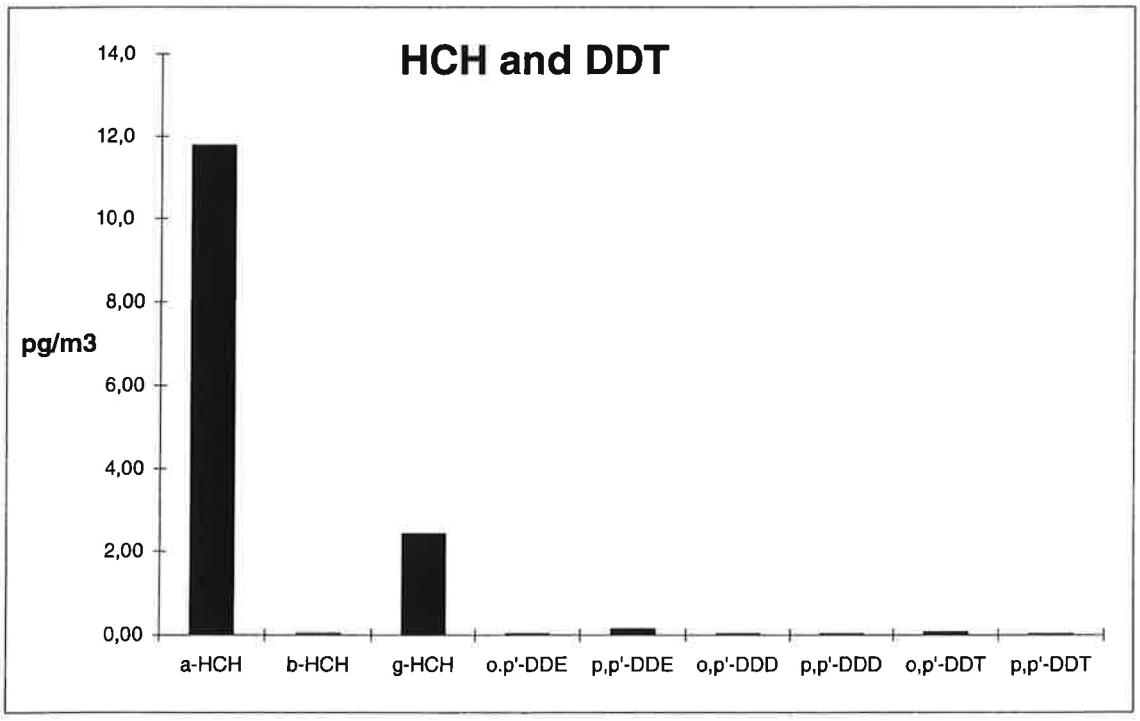
Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/738
Customer : Amap 04
Customers sample ID : 28-30.5.04 0802-1005
: 160-157
Sample type : Air
Sample amount : 1195 m3
Concentration units : pg/m3
Data files : DH670

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	11,8	47
β-HCH	0,04	
γ-HCH	2,42	53
o,p'-DDE	0,03	
p,p'-DDE	0,13 b	74
o,p'-DDD	0,01	
p,p'-DDD	0,02 b	
o,p'-DDT	0,06 bi	
p,p'-DDT	0,03	81
Sum DDT	0,28	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

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Results of HCH and DDT Analysis

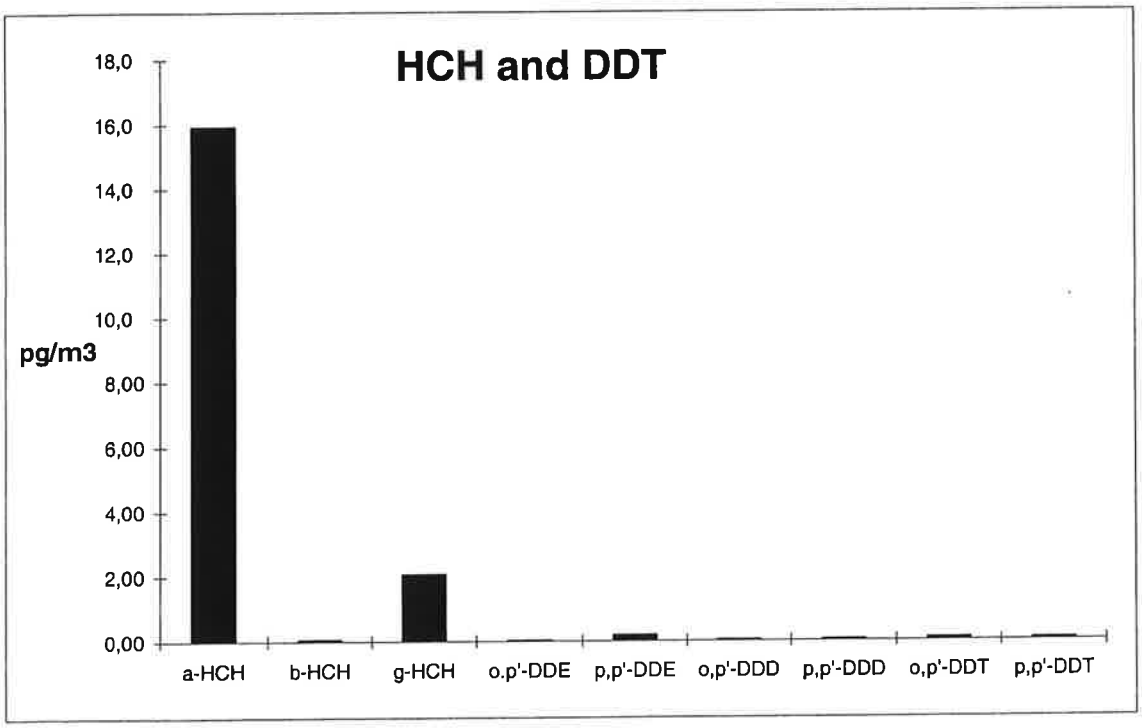
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/741
Customer : Amap 04
Customers sample ID : 4-6.6.04 0705-0730
: 160-157
Sample type : Air
Sample amount : 1157 m3
Concentration units : pg/m3
Data files : DH670

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	15,9	44
β-HCH	0,04 i	
γ-HCH	2,06	49
o,p'-DDE	0,01 i	
p,p'-DDE	0,17 b	68
o,p'-DDD	0,01	
p,p'-DDD	0,02 b	
o,p'-DDT	0,06 bi	
p,p'-DDT	0,04	79
Sum DDT	0,31	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



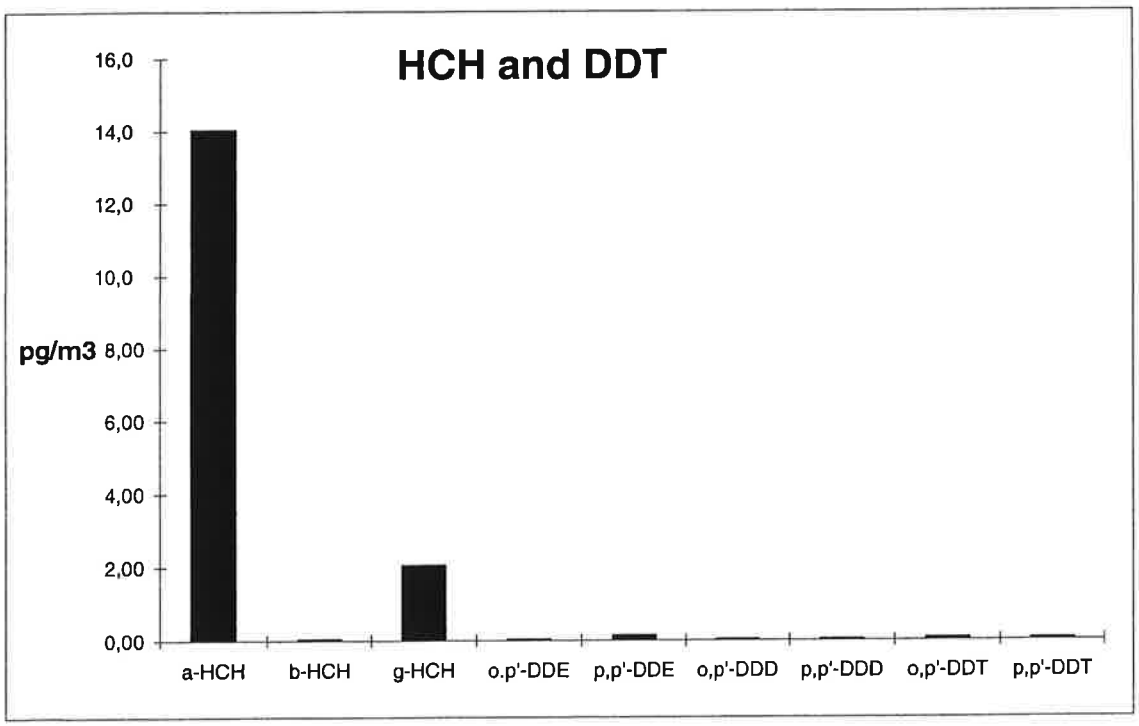
256 # Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/874
Customer : Amap 04
Customers sample ID : 9-11.6.04 0750-0709
: 160-159
Sample type : Air
Sample amount : 1138 m3
Concentration units : pg/m3
Data files : DH671

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	14,0	52
β-HCH	0,03 i	
γ-HCH	2,04	57
o,p'-DDE	0,01	
p,p'-DDE	0,13 b	86
o,p'-DDD	< 0,01	
p,p'-DDD	0,02 b	
o,p'-DDT	0,06 bi	
p,p'-DDT	0,03 i	103
Sum DDT	0,25	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

Results of HCH and DDT Analysis

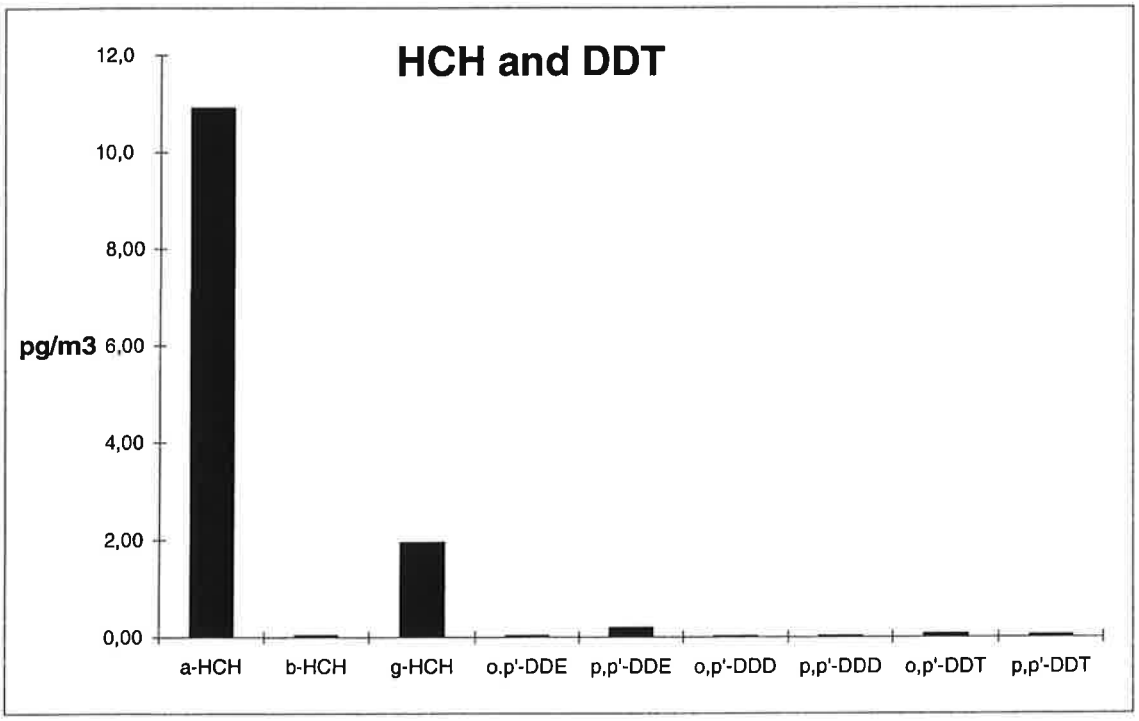
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/876
Customer : Amap 04
Customers sample ID : 14-16.6.04 0645-0733
: 160-158
Sample type : Air
Sample amount : 1169 m3
Concentration units : pg/m3
Data files : DH671

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	10,9	51
β-HCH	0,03	
γ-HCH	1,93	56
o,p'-DDE	0,02	
p,p'-DDE	0,19 b	79
o,p'-DDD	< 0,01	
p,p'-DDD	0,01 b	
o,p'-DDT	0,06 bi	
p,p'-DDT	0,03	84
Sum DDT	0,32	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

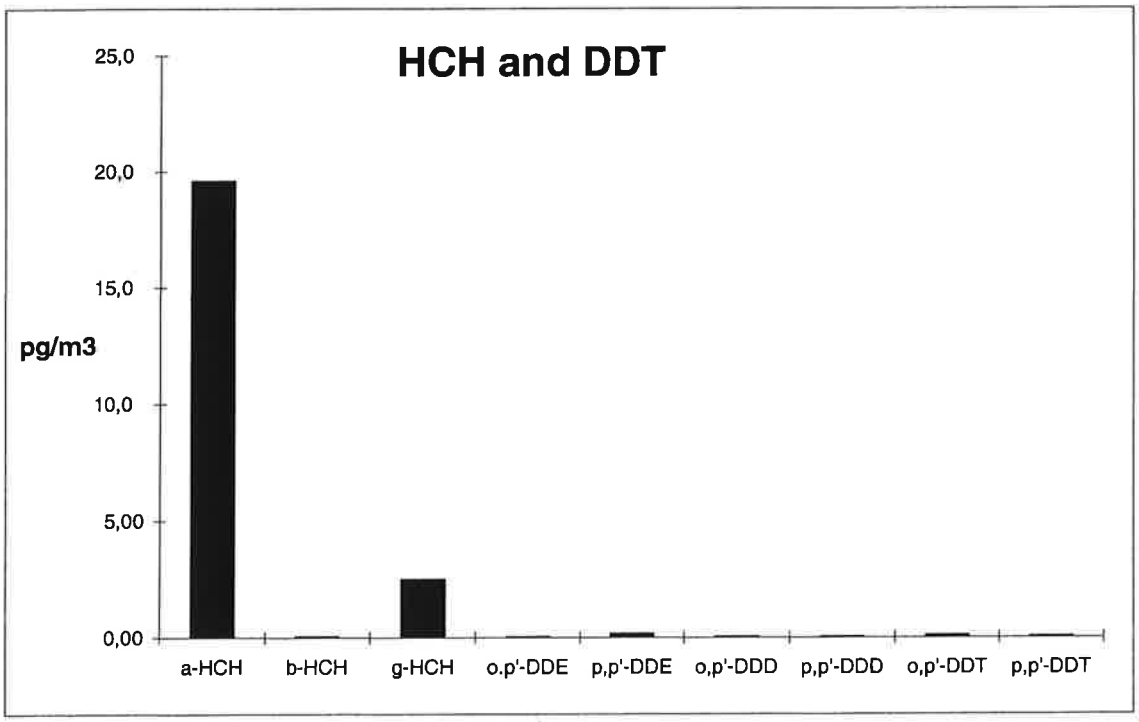
258 Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/879
Customer : Amap 04
Customers sample ID : 21-23.6.04 0837-0908
: 160-157
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : DH670

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	19,6	47
β-HCH	0,03	
γ-HCH	2,47	52
o,p'-DDE	0,02	
p,p'-DDE	0,16 b	71
o,p'-DDD	< 0,01	
p,p'-DDD	0,01 b	
o,p'-DDT	0,08 b	
p,p'-DDT	0,03	82
Sum DDT	0,31	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

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Results of HCH and DDT Analysis

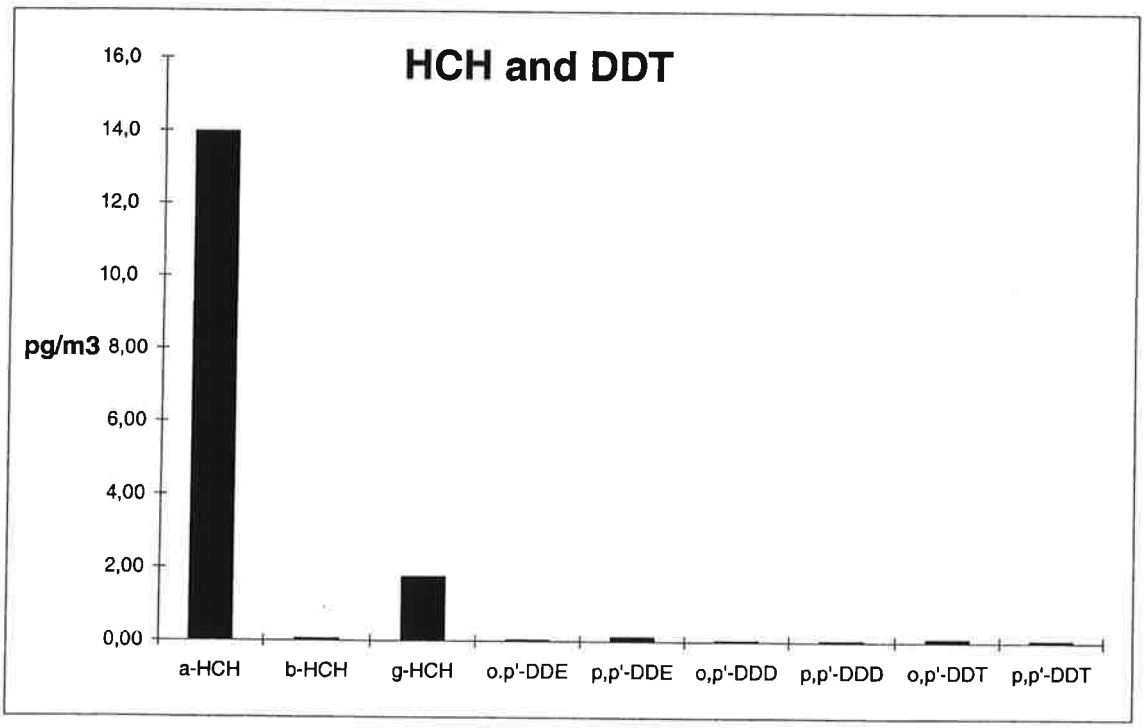
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/882
Customer : Amap 04
Customers sample ID : 28-30.6.04 0712-0734
: 160-158
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : DH670

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	14,0	49
β-HCH	0,03	
γ-HCH	1,73	52
o,p'-DDE	0,02	
p,p'-DDE	0,11 b	78
o,p'-DDD	0,01	
p,p'-DDD	0,01 b	
o,p'-DDT	0,07 bi	
p,p'-DDT	0,04	92
Sum DDT	0,26	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



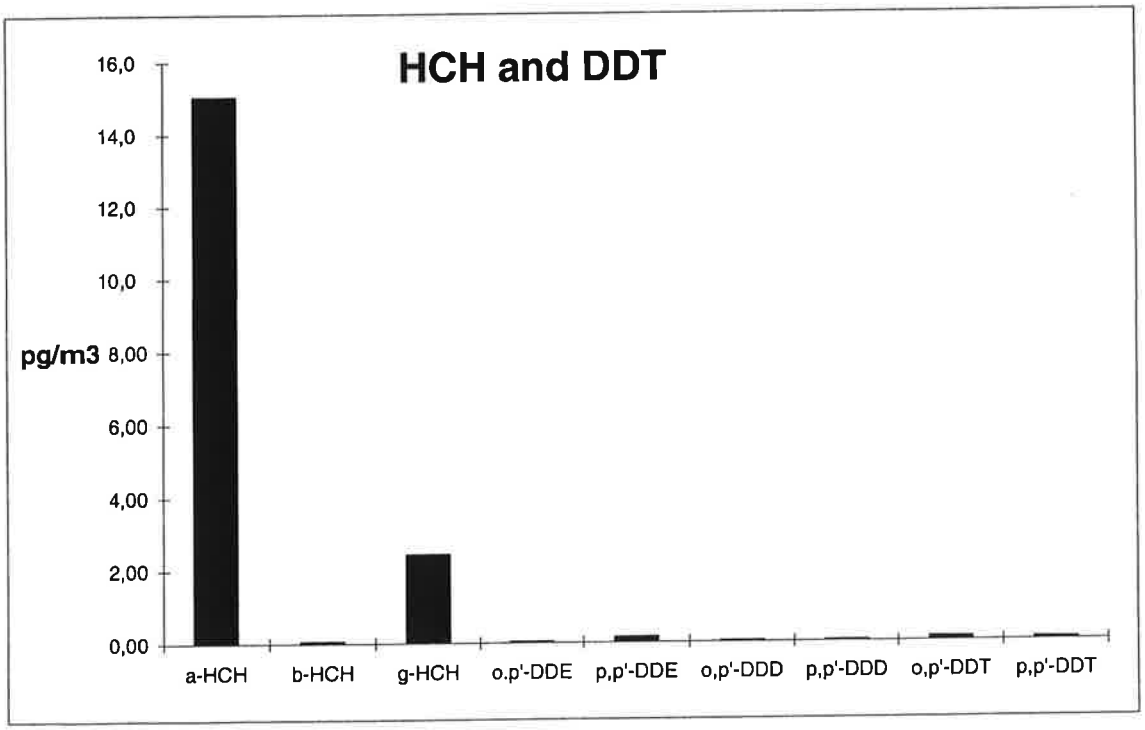
260 Results of HCH and DDT Analysis

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/885
Customer : Amap 04
Customers sample ID : 5-7.7.04 0740-0725
: 160-157
Sample type : Air
Sample amount : 1140 m3
Concentration units : pg/m3
Data files : DH670

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	15,0	52
β-HCH	0,04	
γ-HCH	2,42	56
o,p'-DDE	0,02	
p,p'-DDE	0,14 b	75
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,09 b	
p,p'-DDT	0,04	96
Sum DDT	0,31	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

Results of HCH and DDT Analysis

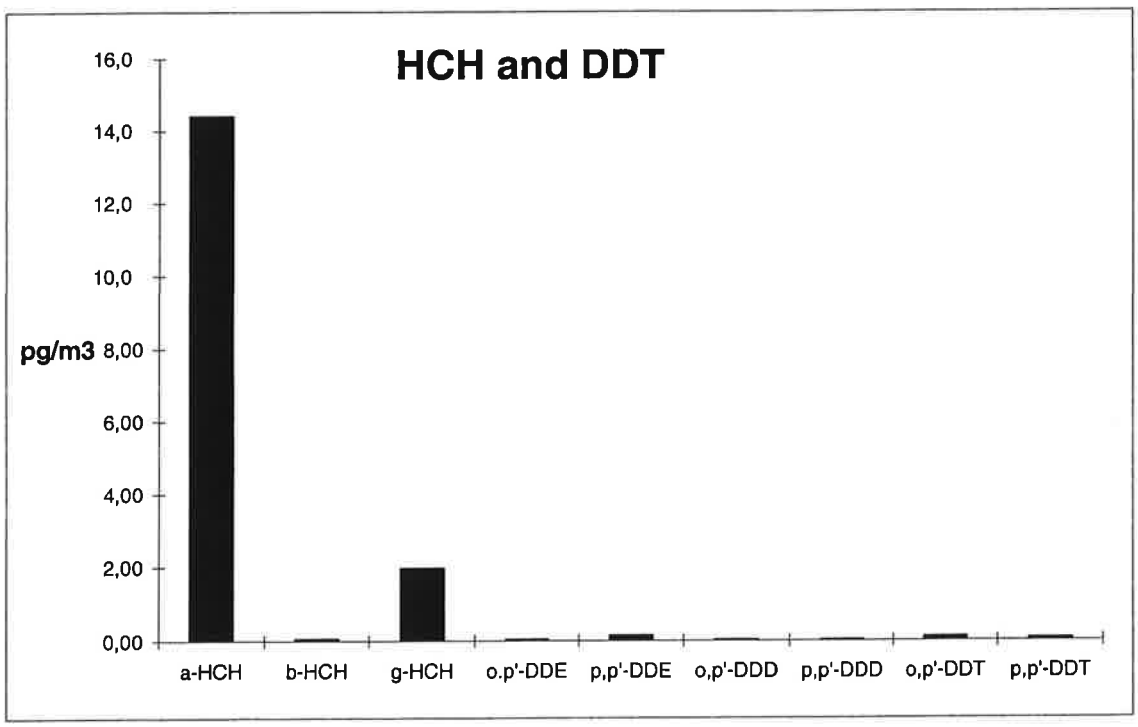
NILU

Kjeller, 13.10.04

Encl. to measuring report : O-2772
NILU-Sample number : 04/888
Customer : Amap 04
Customers sample ID : 12-14.7.04 0817-0742
: 160-157
Sample type : Air
Sample amount : 1135 m3
Concentration units : pg/m3
Data files : DH670

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	14,4	56
β-HCH	0,04	
γ-HCH	1,96	59
o,p'-DDE	0,02	
p,p'-DDE	0,13 b	85
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,09 b	
p,p'-DDT	0,05	104
Sum DDT	0,31	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

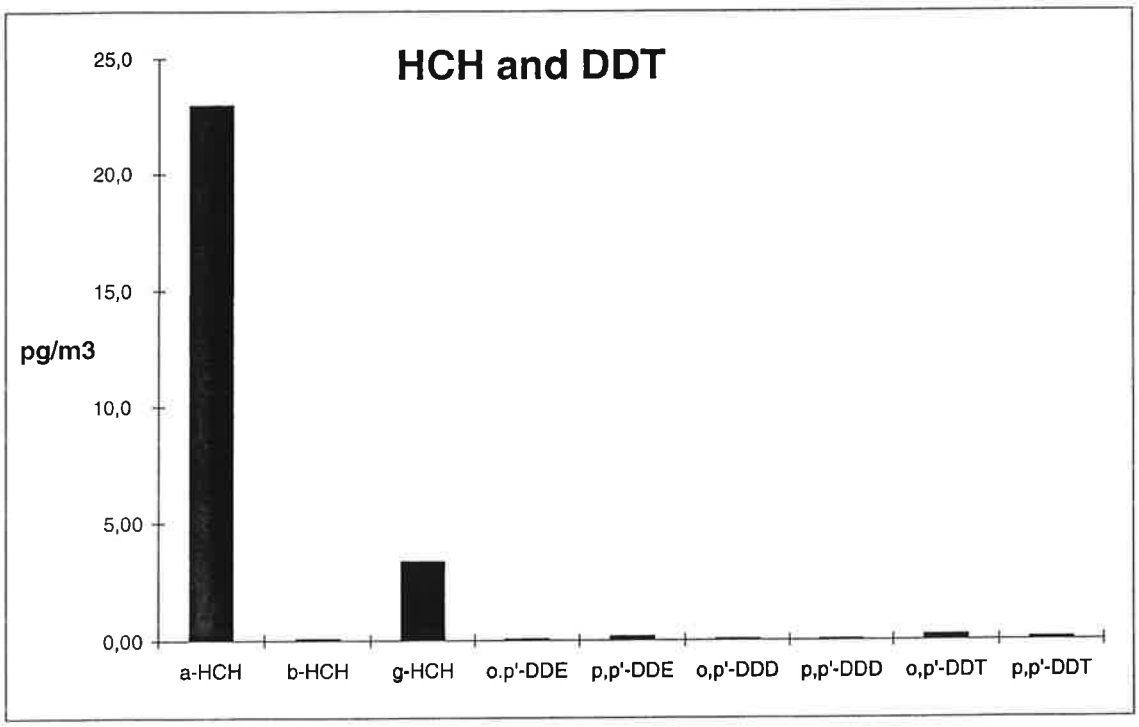
262 Results of HCH and DDT Analysis

Kjeller, 08.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1184
Customer : amap.04
Customers sample ID : 19-21.7.04 0724-0727
:
Sample type : Luft
Sample amount : 1142 m3
Concentration units : pg/m3
Data files : DH719-x-ddt-020205

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	23,0	41
β-HCH	0,04	
γ-HCH	3,32	45
o,p'-DDE	0,03	
p,p'-DDE	0,13	85
o,p'-DDD	0,02 i	
p,p'-DDD	< 0,01	
o,p'-DDT	0,20 i	
p,p'-DDT	0,07	74
Sum DDT	0,46	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41184.xls

Results of HCH and DDT Analysis

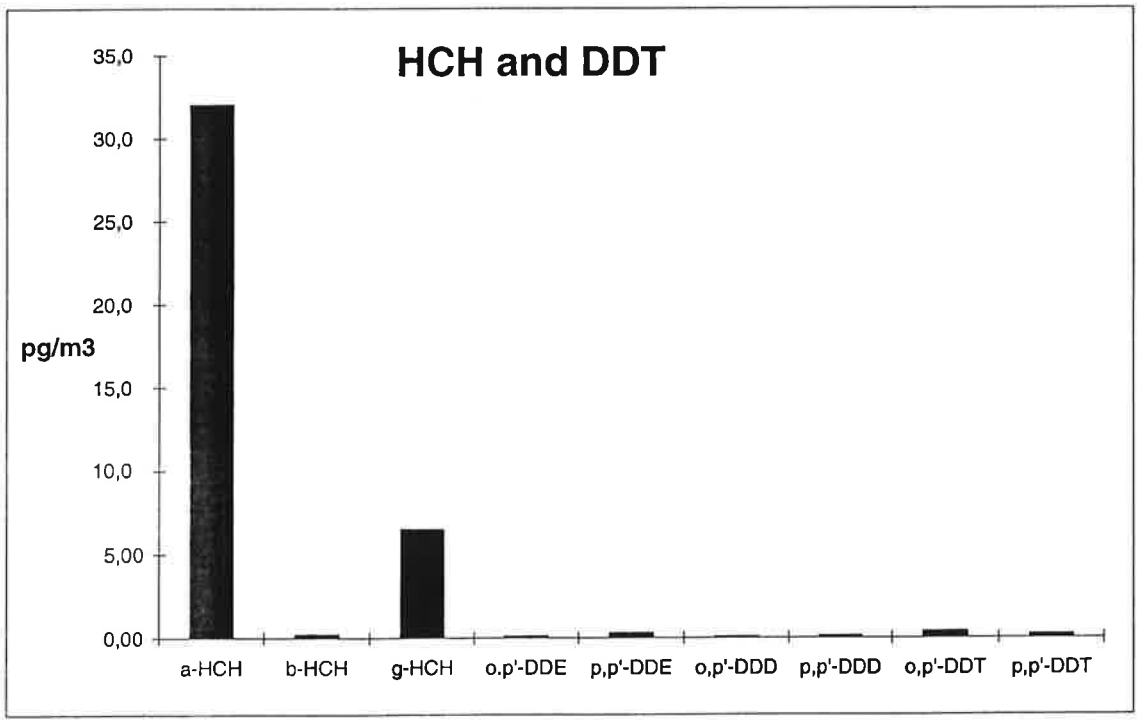
NILU

Kjeller, 08.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1187
Customer : Amap 04
Customers sample ID : 26-28.7.04 0713-0633
: 160-155
Sample type : Luft
Sample amount : 1123 m3
Concentration units : pg/m3
Data files : DH719-x-ddt-020205

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	32,0	57
β-HCH	0,17	
γ-HCH	6,45	65
o.p'-DDE	0,06	
p,p'-DDE	0,26	97
o,p'-DDD	0,02	
p,p'-DDD	0,09 i	
o,p'-DDT	0,35 i	
p,p'-DDT	0,18	99
Sum DDT	0,96	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

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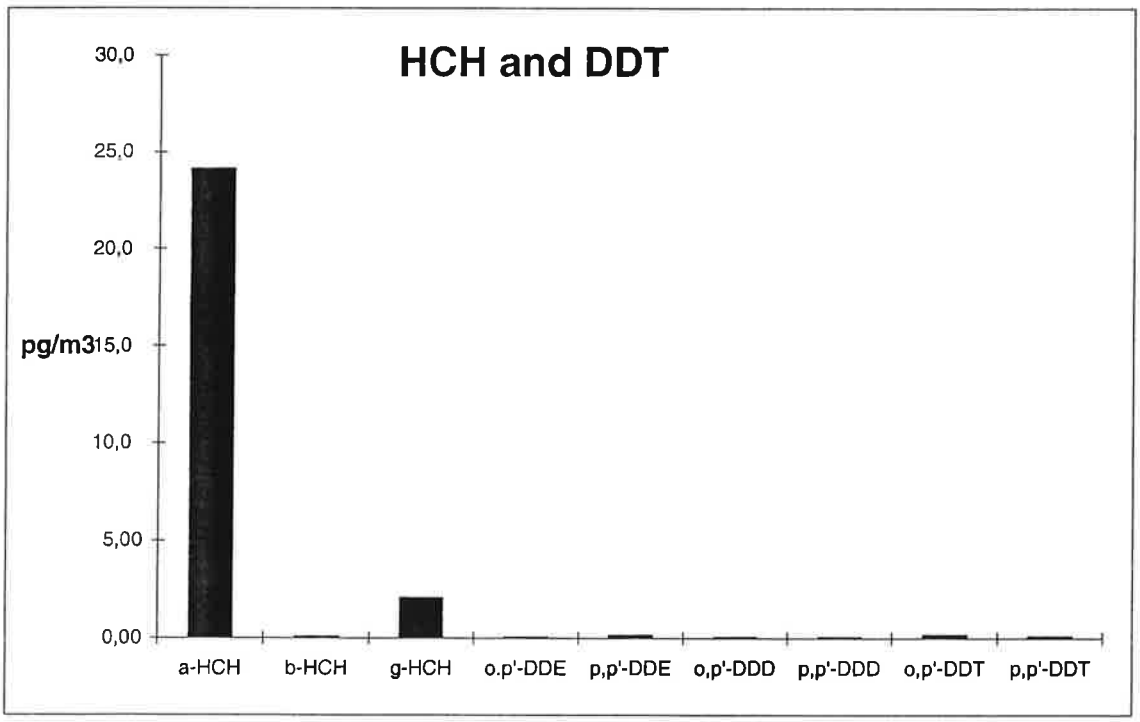
Results of HCH and DDT Analysis

Kjeller, 08.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1190
Customer : Amap 04
Customers sample ID : 2-4.8.04 0842-0905
: 160-155
Sample type : Luft
Sample amount : 1150 m3
Concentration units : pg/m3
Data files : DH719-x-ddt-020205

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	24,1	61
β-HCH	0,05 i	
γ-HCH	2,05	70
o,p'-DDE	0,02	
p,p'-DDE	0,12	102
o,p'-DDD	0,02 i	
p,p'-DDD	< 0,01	
o,p'-DDT	0,15 i	
p,p'-DDT	0,06 i	118
Sum DDT	0,38	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41190.xls

Results of HCH and DDT Analysis

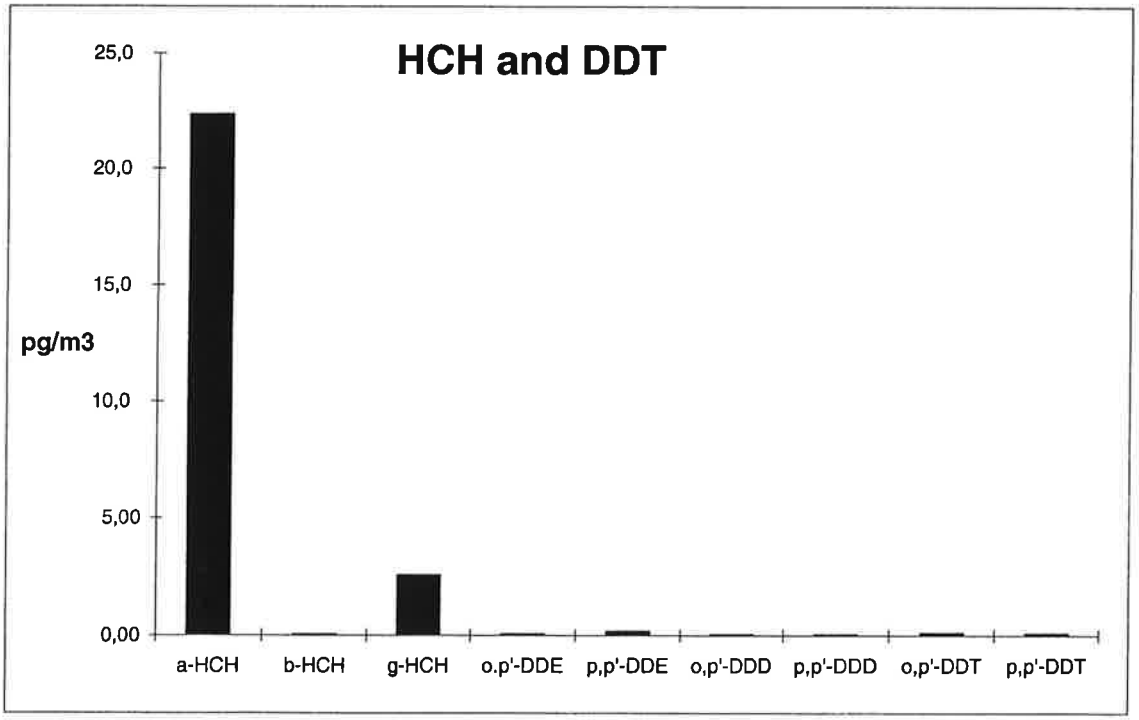
NILU

Kjeller, 14.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1193
Customer : Amap 04
Customers sample ID : 9-11.8.04 0705-0758
: 160-156
Sample type : Air
Sample amount : 1164 m3
Concentration units : pg/m3
Data files : DH720

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	22,3	43
β-HCH	< 0,02	
γ-HCH	2,53	50
o,p'-DDE	0,02	
p,p'-DDE	0,16 b	67
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,02	
o,p'-DDT	0,08 i	
p,p'-DDT	0,05	70
Sum DDT	0,34	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



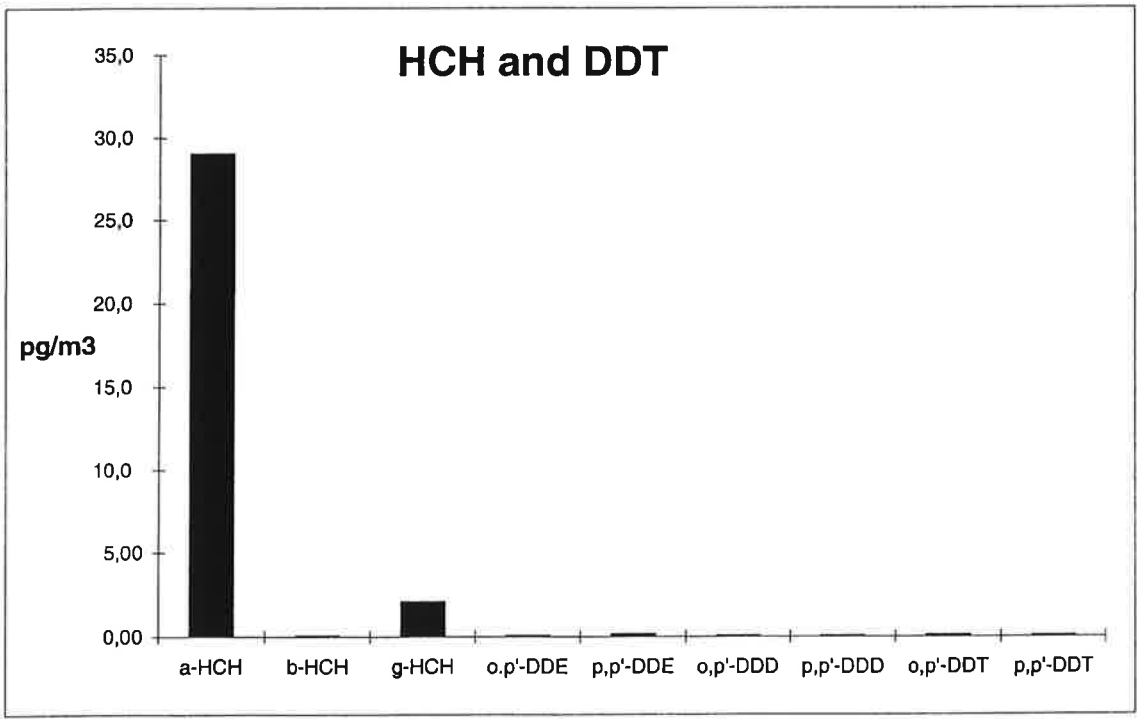
266 Results of HCH and DDT Analysis

Kjeller, 14.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1196
Customer : Amap 04
Customers sample ID : 16-18.8.04 0746-0853
: 160-159
Sample type : Air
Sample amount : 1181 m3
Concentration units : pg/m3
Data files : DH720

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	29,0	50
β-HCH	0,03	
γ-HCH	2,05	56
o.p'-DDE	0,01	
p,p'-DDE	0,13 b	81
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,06	
p,p'-DDT	< 0,03	77
Sum DDT	0,24	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41196.xls

Results of HCH and DDT Analysis

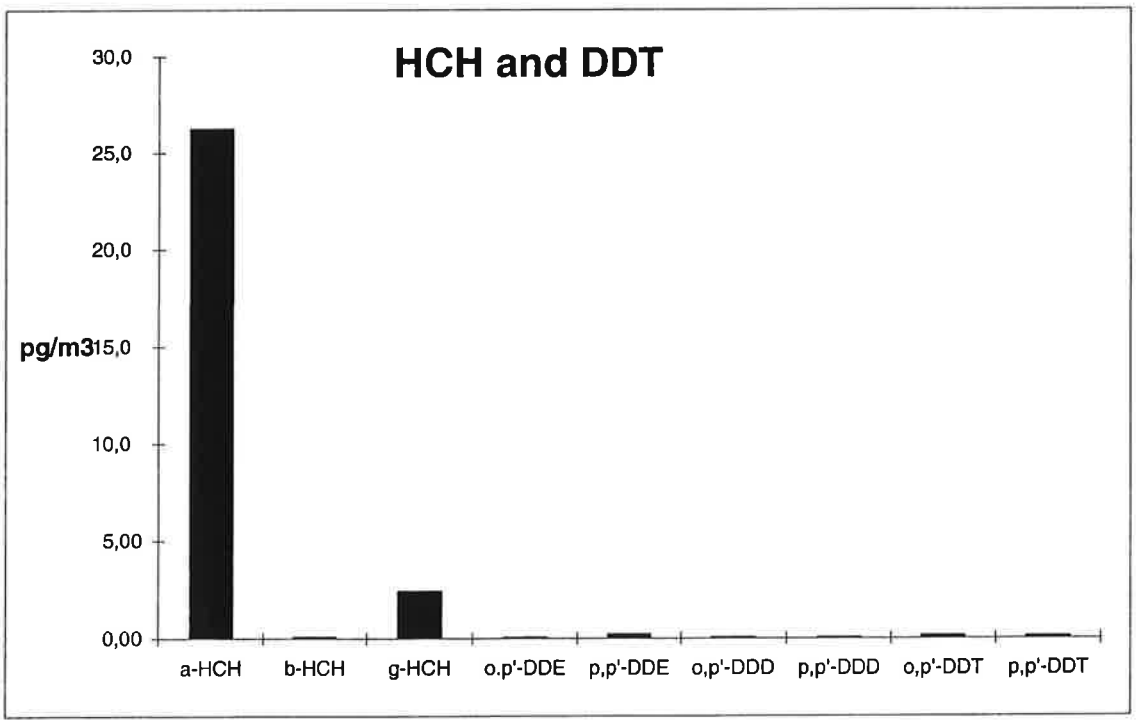
NILU

Kjeller, 14.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1198
Customer : Amap 04
Customers sample ID : 23-25.8.04 0738-0659
: 160-160
Sample type : Air
Sample amount : 1140 m3
Concentration units : pg/m3
Data files : DH720

Compound Structure		Concentration pg/m3	Recovery %
α-HCH		26,2	47
β-HCH		0,04 i	
γ-HCH		2,38	55
o.p'-DDE		0,02	
p,p'-DDE		0,19 b	68
o,p'-DDD	<	0,01	
p,p'-DDD	<	0,01	
o,p'-DDT		0,12 i	
p,p'-DDT		0,06 i	66
Sum DDT		0,41	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41198.xls

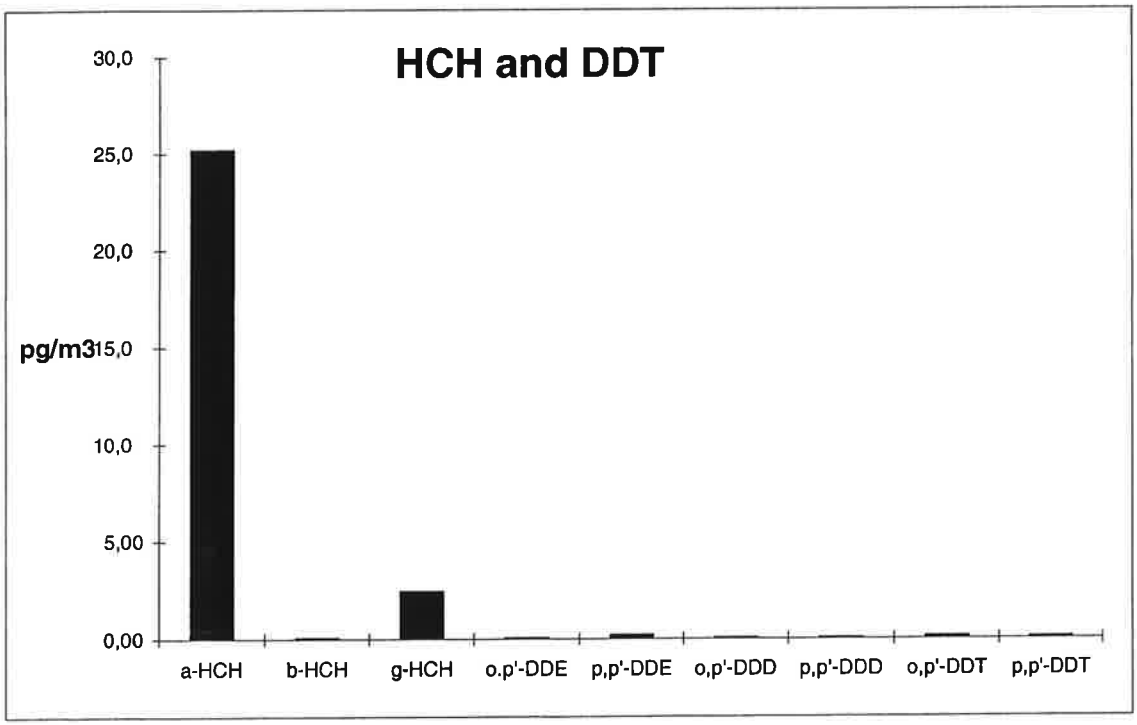
268 # Results of HCH and DDT Analysis

Kjeller, 14.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1203
Customer : Amap 04
Customers sample ID : 30.8-1.9.04 0642-0741
: 160-159
Sample type : Air
Sample amount : 1178 m3
Concentration units : pg/m3
Data files : DH720

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	25,2	59
β-HCH	0,04	
γ-HCH	2,40	67
o,p'-DDE	0,02	
p,p'-DDE	0,19 b	70
o,p'-DDD	0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,09	
p,p'-DDT	0,05	83
Sum DDT	0,38	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

Results of HCH and DDT Analysis

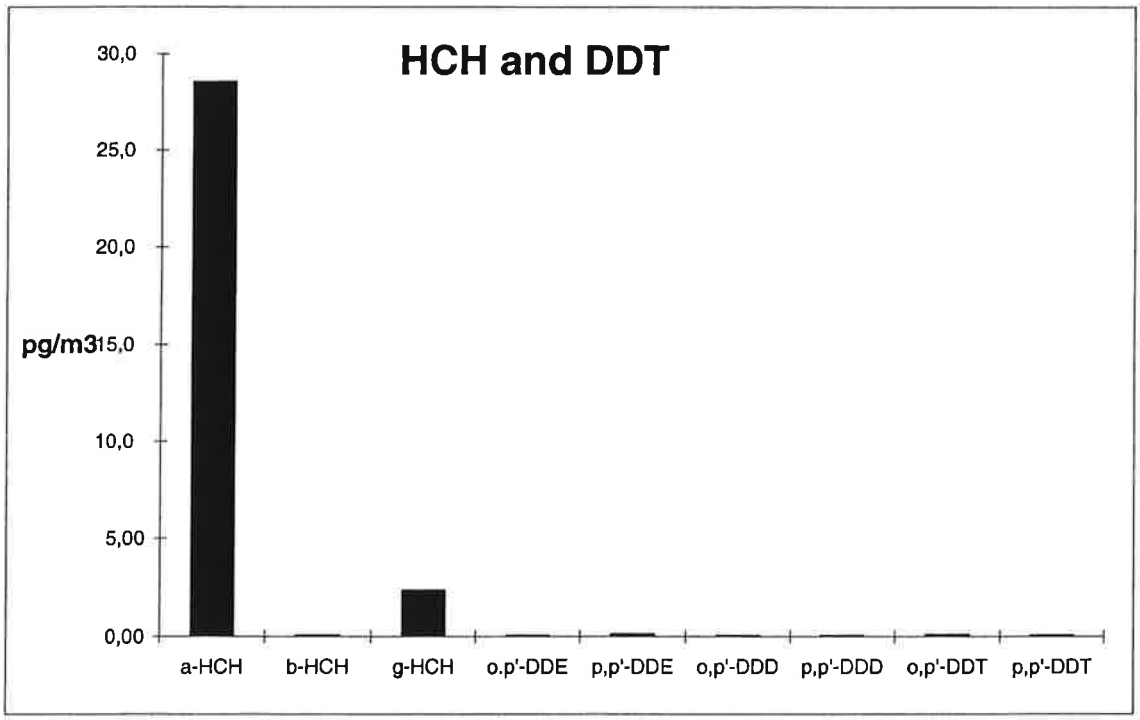
NILU

Kjeller, 14.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1206
Customer : Amap 04
Customers sample ID : 6-8.9.04 0933-0745
: 160-164
Sample type : Air
Sample amount : 1127 m3
Concentration units : pg/m3
Data files : DH720

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	28,5	41
β-HCH	0,04	
γ-HCH	2,32	47
o,p'-DDE	0,02 i	
p,p'-DDE	0,09 b	69
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,07 i	
p,p'-DDT	< 0,03	66
Sum DDT	0,23	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41206.xls

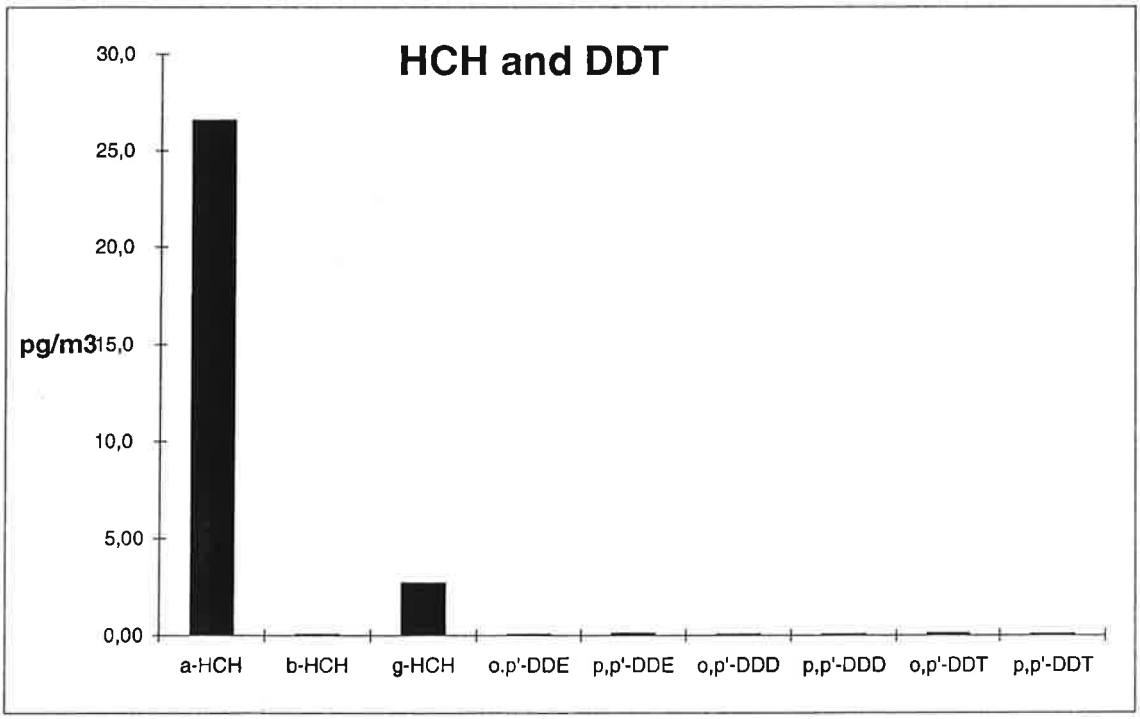
270 # Results of HCH and DDT Analysis

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1513
Customer : Amap 04
Customers sample ID : 15-17.9.04 0755-1812
: 160-160
Sample type : Air
Sample amount : 1405 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	26,6	42
β-HCH	0,02 i	
γ-HCH	2,68	47
o,p'-DDE	0,02 b	
p,p'-DDE	0,08 b	75
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,08	
p,p'-DDT	0,03	69
Sum DDT	0,23	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41513.xls

Results of HCH and DDT Analysis

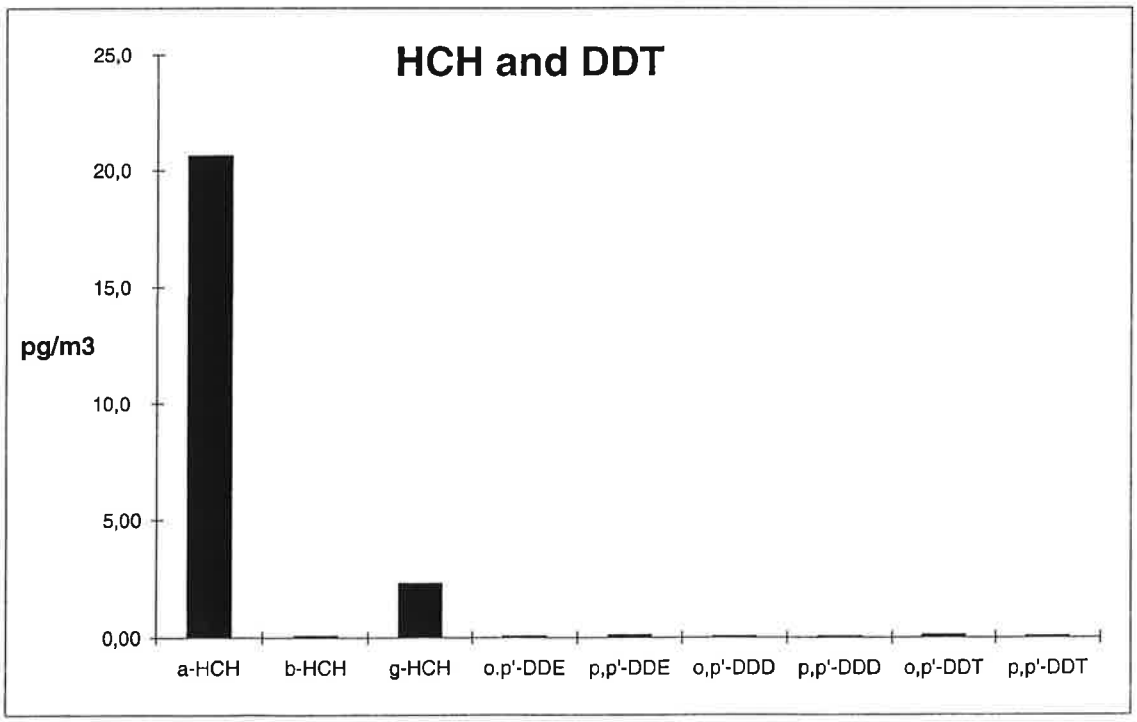
NILU

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1515
Customer : Amap 04
Customers sample ID : 20-22.9.04 0841-0712
: 160-160
Sample type : Air
Sample amount : 1121 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	20,6	51
β-HCH	0,04 i	
γ-HCH	2,26	56
o,p'-DDE	0,02 b	
p,p'-DDE	0,08 b	82
o,p'-DDD	< 0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,09	
p,p'-DDT	0,03 i	84
Sum DDT	0,24	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



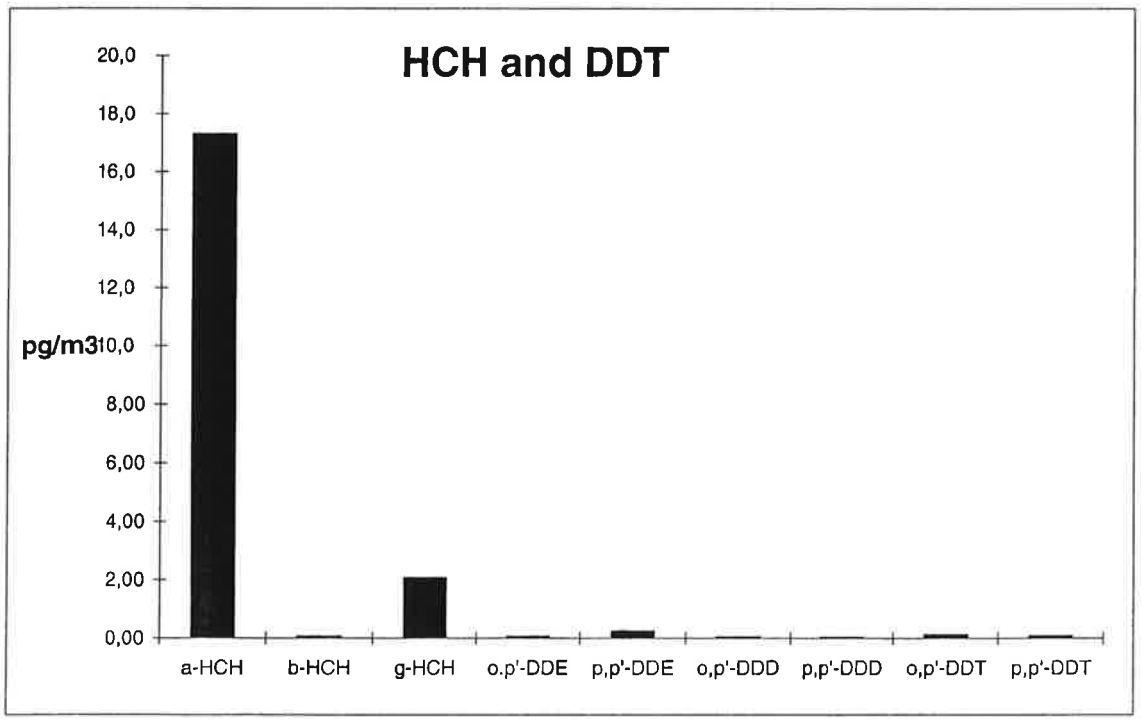
272 # Results of HCH and DDT Analysis

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1520
Customer : Amap 04
Customers sample ID : 1-3.10.04 0737-0958
: 160-162
Sample type : Air
Sample amount : 1220 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	17,3	44
β-HCH	0,04 i	
γ-HCH	2,06	51
o,p'-DDE	0,04 b	
p,p'-DDE	0,24 b	76
o,p'-DDD	0,02	
p,p'-DDD	0,01	
o,p'-DDT	0,11	
p,p'-DDT	0,07	84
Sum DDT	0,49	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41520.xls

Results of HCH and DDT Analysis

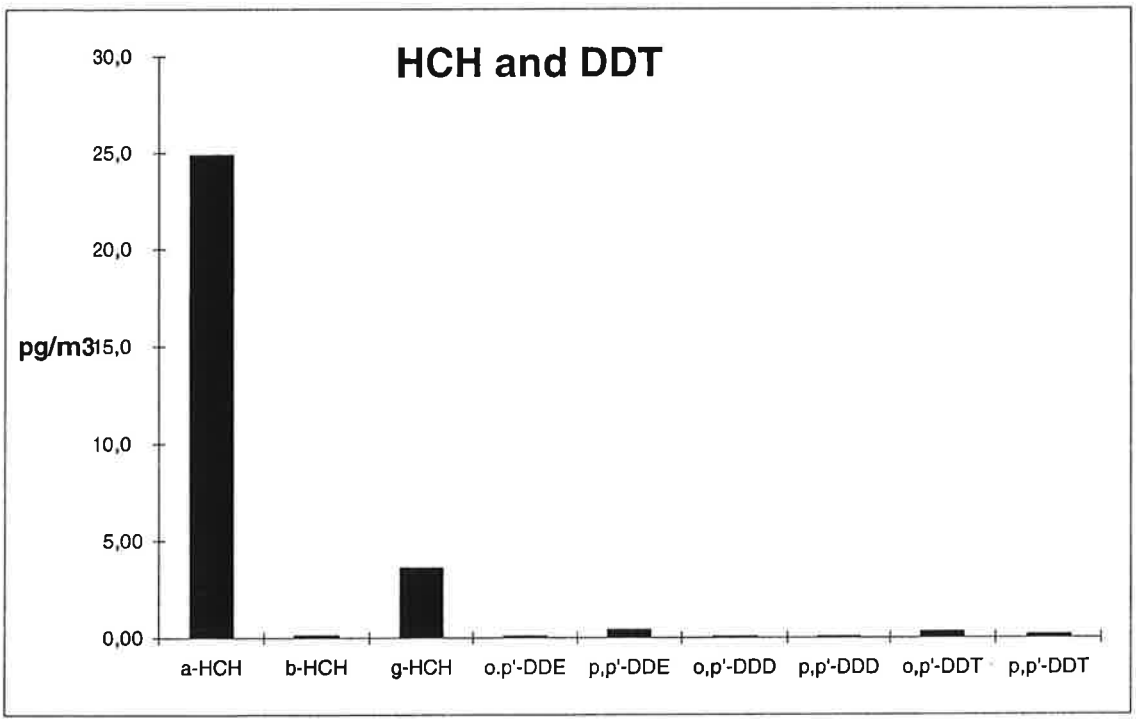
NILU

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1523
Customer : Amap 04
Customers sample ID : 8-11.10.04 1321-0655
: 160-(145-150)
Sample type : Air
Sample amount : 1476 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	24,9	40
β-HCH	0,09	
γ-HCH	3,57	44
o,p'-DDE	0,06	
p,p'-DDE	0,38 b	64
o,p'-DDD	0,02	
p,p'-DDD	0,01	
o,p'-DDT	0,29	
p,p'-DDT	0,14	65
Sum DDT	0,90	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41523.xls

274

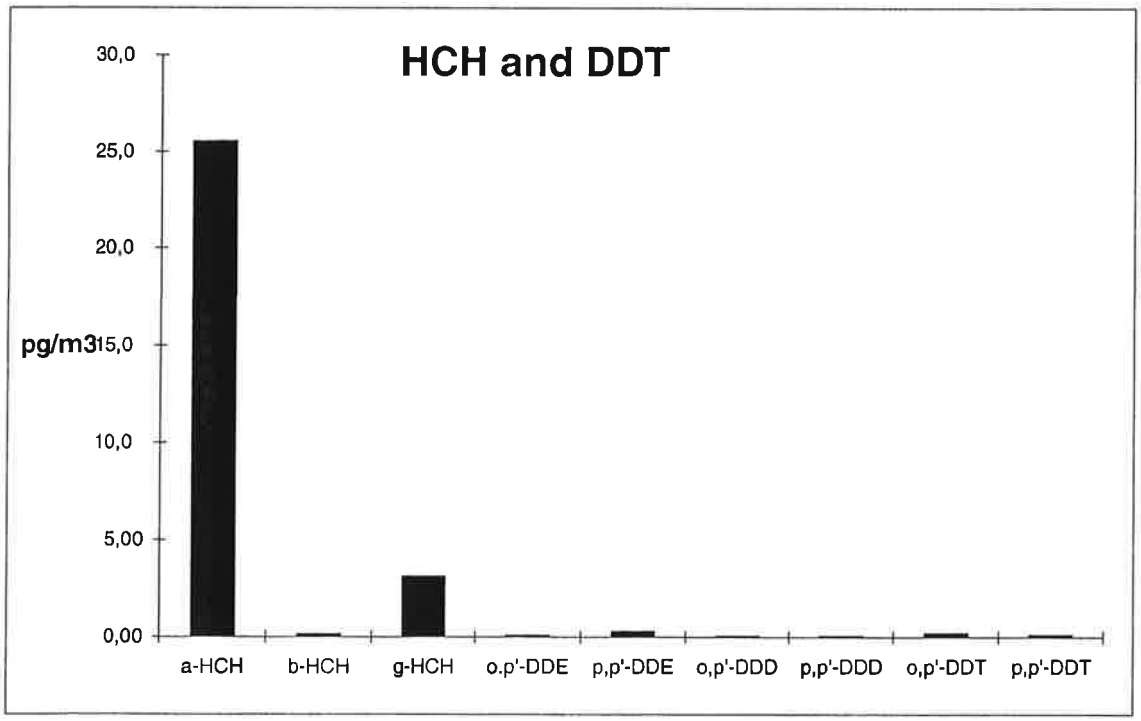
Results of HCH and DDT Analysis

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1525
Customer : Amap 04
Customers sample ID : 13-15.10.04 0757-0727
: 160-164
Sample type : Air
Sample amount : 1159 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	25,5	40
β-HCH	0,11	
γ-HCH	3,08	44
o,p'-DDE	0,05 b	
p,p'-DDE	0,27 b	68
o,p'-DDD	0,01 i	
p,p'-DDD	< 0,01	
o,p'-DDT	0,18	
p,p'-DDT	0,08	71
Sum DDT	0,61	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41525.xls

Results of HCH and DDT Analysis

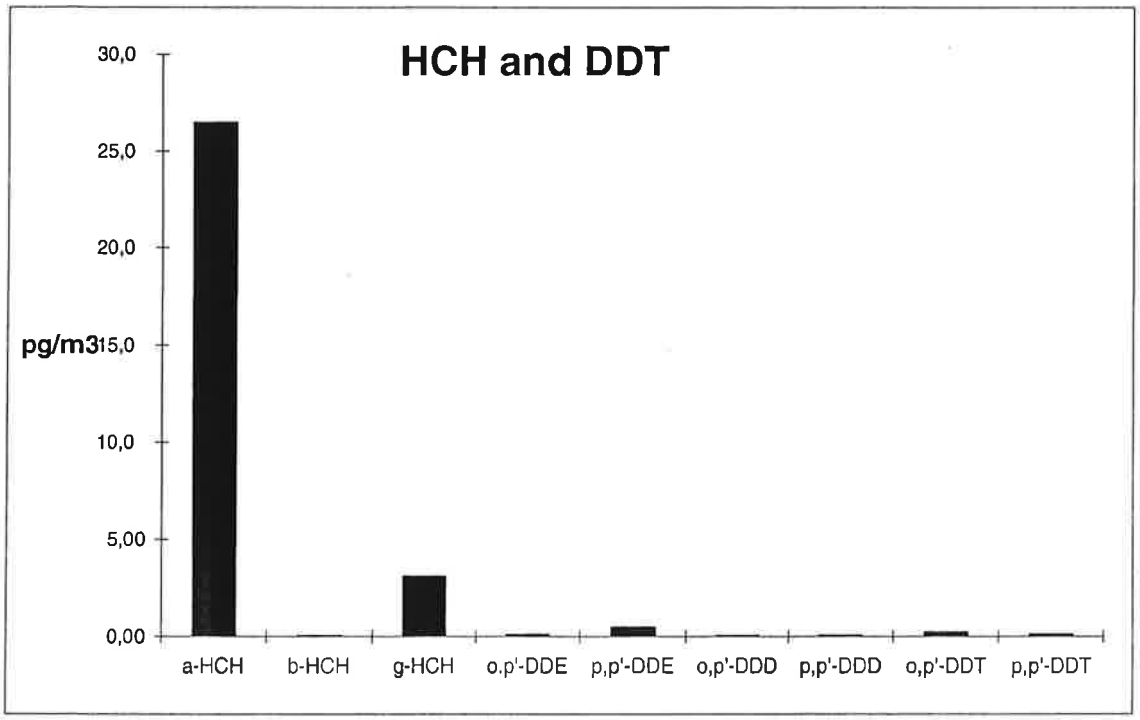
NILU

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1529
Customer : Amap 04
Customers sample ID : 22-24.10.04 0815-1315
: 160-160
Sample type : Air
Sample amount : 1277 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	26,5	43
β-HCH	< 0,01	
γ-HCH	3,07	53
o,p'-DDE	0,09	
p,p'-DDE	0,47	71
o,p'-DDD	0,02	
p,p'-DDD	0,03	
o,p'-DDT	0,21	
p,p'-DDT	0,10	94
Sum DDT	0,91	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41529.xls

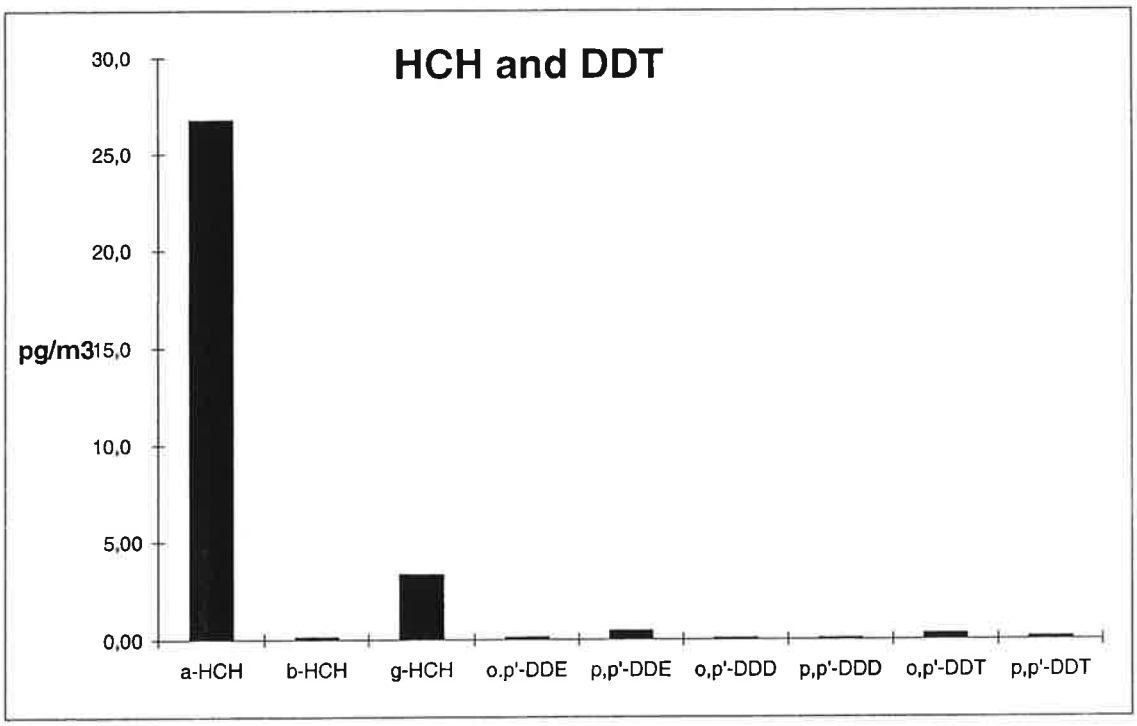
276 # Results of HCH and DDT Analysis

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 04/1532
Customer : Amap 04
Customers sample ID : 29-31.10.04 0828-1015
: 160-145
Sample type : Air
Sample amount : 1145 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	26,7	41
β-HCH	0,10	
γ-HCH	3,29	45
o.p'-DDE	0,08	
p,p'-DDE	0,42 b	64
o,p'-DDD	0,02	
p,p'-DDD	0,02 i	
o,p'-DDT	0,26	
p,p'-DDT	0,11	82
Sum DDT	0,91	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt41532.xls

Results of HCH and DDT Analysis

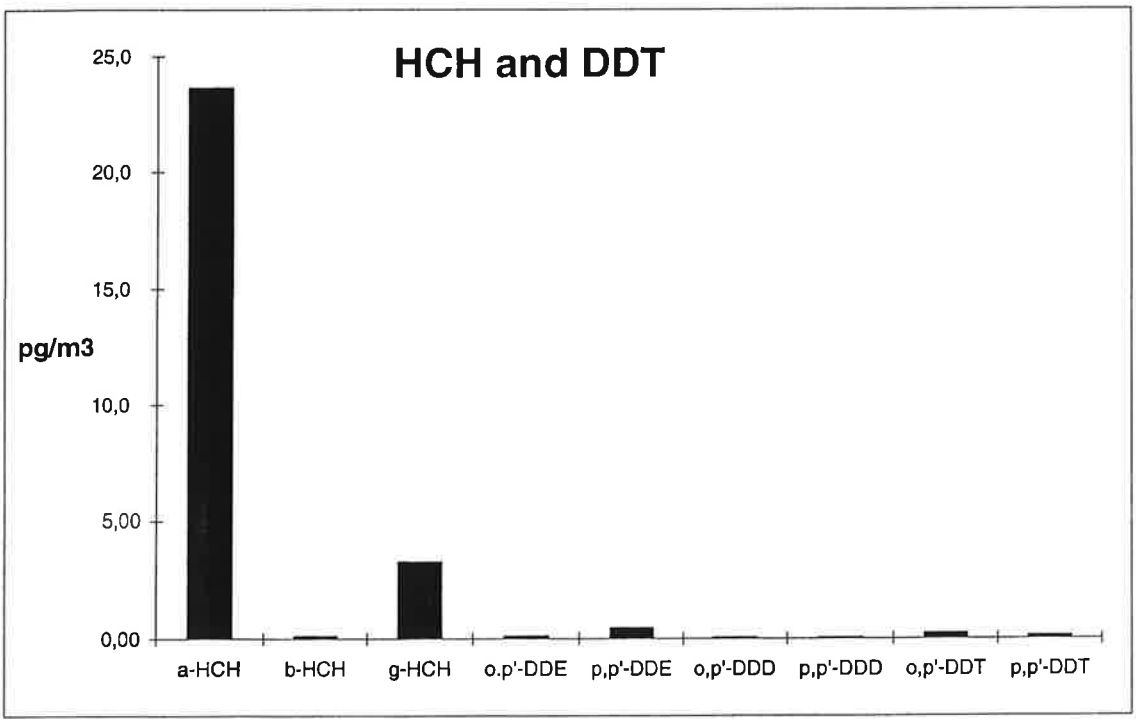
NILU

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/4
Customer : Amap 04
Customers sample ID : 3-5.11.04 0812-0833
: 160-150
Sample type : Air
Sample amount : 1130 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	23,6	42
β-HCH	0,09	
γ-HCH	3,24	49
o,p'-DDE	0,08	
p,p'-DDE	0,43 b	64
o,p'-DDD	0,02	
p,p'-DDD	0,02 i	
o,p'-DDT	0,21	
p,p'-DDT	0,10	89
Sum DDT	0,86	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



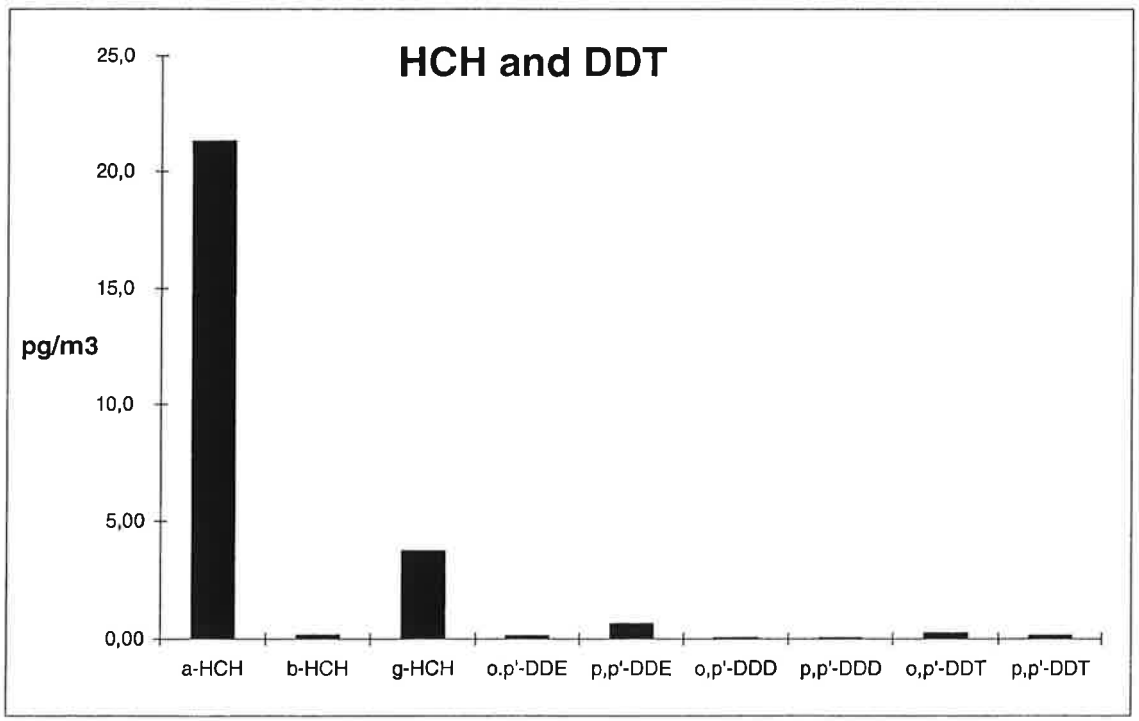
278 Results of HCH and DDT Analysis

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/7
Customer : Amap 04
Customers sample ID : 10-12.11.04 0832-0934
: 160-155
Sample type : Air
Sample amount : 1164 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	21,3	49
β-HCH	0,14	
γ-HCH	3,70	56
o,p'-DDE	0,11	
p,p'-DDE	0,62	78
o,p'-DDD	0,02	
p,p'-DDD	0,01	
o,p'-DDT	0,24	
p,p'-DDT	0,13	101
Sum DDT	1,13	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



Results of HCH and DDT Analysis

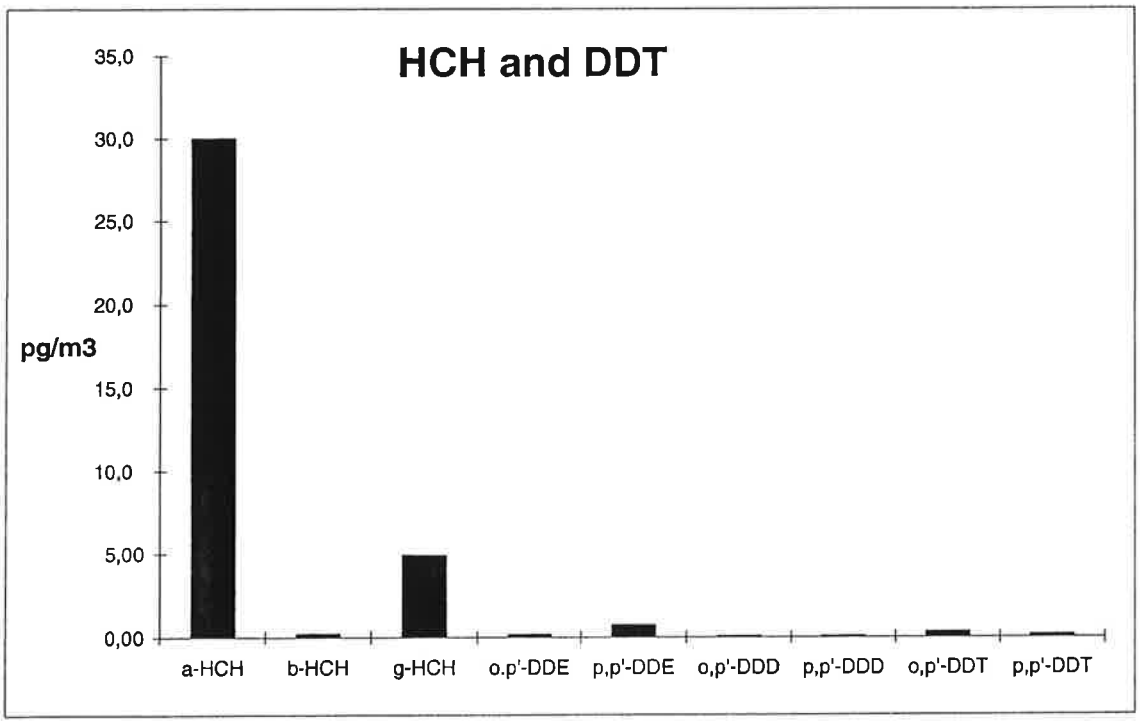
NILU

Kjeller, 15.02.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/10
Customer : Amap 04
Customers sample ID : 17-19.11.04 0803-0851
: 160-156
Sample type : Air
Sample amount : 1161 m3
Concentration units : pg/m3
Data files : DH721

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	30,0	51
β-HCH	0,17	
γ-HCH	4,89	58
o,p'-DDE	0,13	
p,p'-DDE	0,72	73
o,p'-DDD	0,02	
p,p'-DDD	< 0,01	
o,p'-DDT	0,30	
p,p'-DDT	0,13	92
Sum DDT	1,30	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt20050010.xls

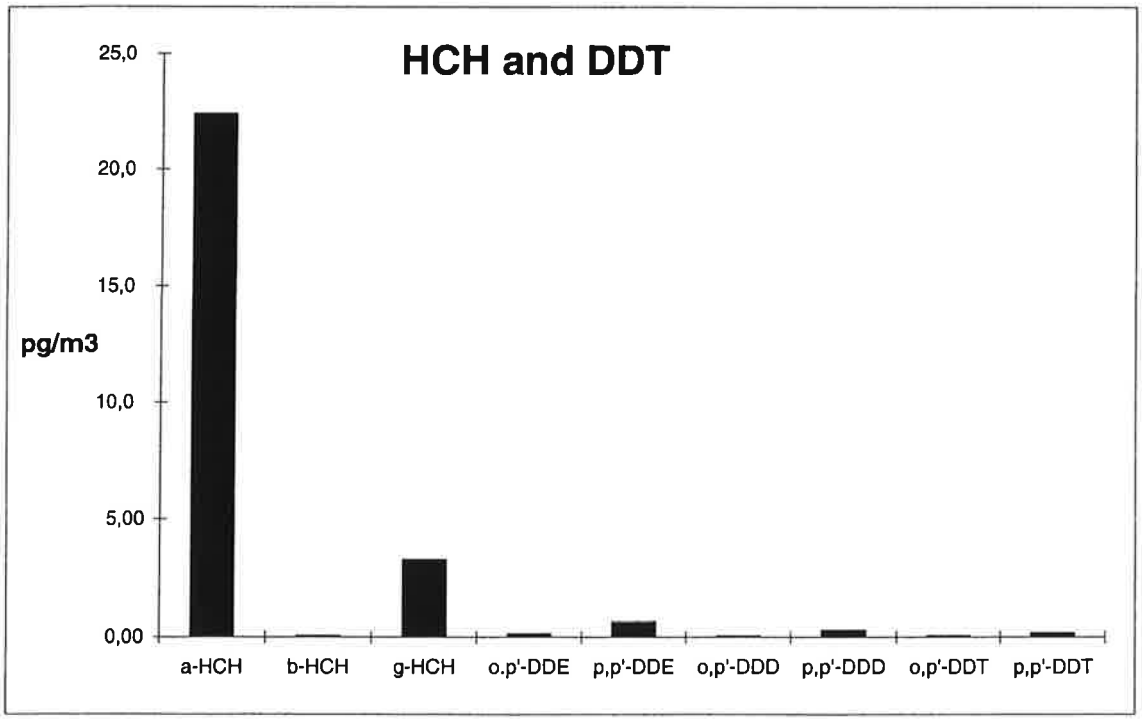
280 # Results of HCH and DDT Analysis

Kjeller, 10.03.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/14
Customer : Amap 04
Customers sample ID : 26-28.11.04 0820-1108
: 160-163
Sample type : Air
Sample amount : 1232 m3
Concentration units : pg/m3
Data files : DH729

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	22,4	47
β-HCH	< 0,03	
γ-HCH	3,23	50
o,p'-DDE	0,12	
p,p'-DDE	0,64	80
o,p'-DDD	0,02	
p,p'-DDD	0,27	
o,p'-DDT	< 0,02	
p,p'-DDT	0,15	104
Sum DDT	1,22	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt20050014.xls

Results of HCH and DDT Analysis

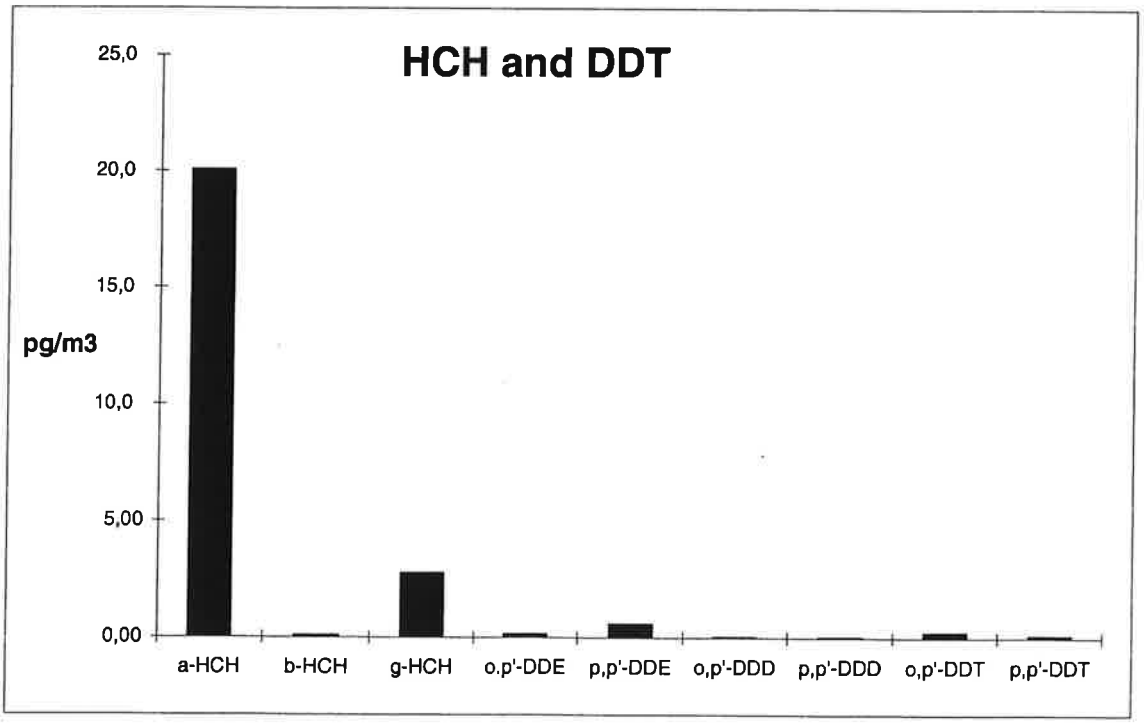
NILU

Kjeller, 01.03.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/16
Customer : Amap 04
Customers sample ID : 1-3.12.04 0913-0857
: 160-155
Sample type : Air
Sample amount : 1133 m3
Concentration units : pg/m3
Data files : DH725

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	20,1	25
β-HCH	0,07	
γ-HCH	2,74	31
o,p'-DDE	0,12	
p,p'-DDE	0,57	66
o,p'-DDD	0,01	
p,p'-DDD	< 0,01	
o,p'-DDT	0,22	
p,p'-DDT	0,09	83
Sum DDT	1,03	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt20050016.xls

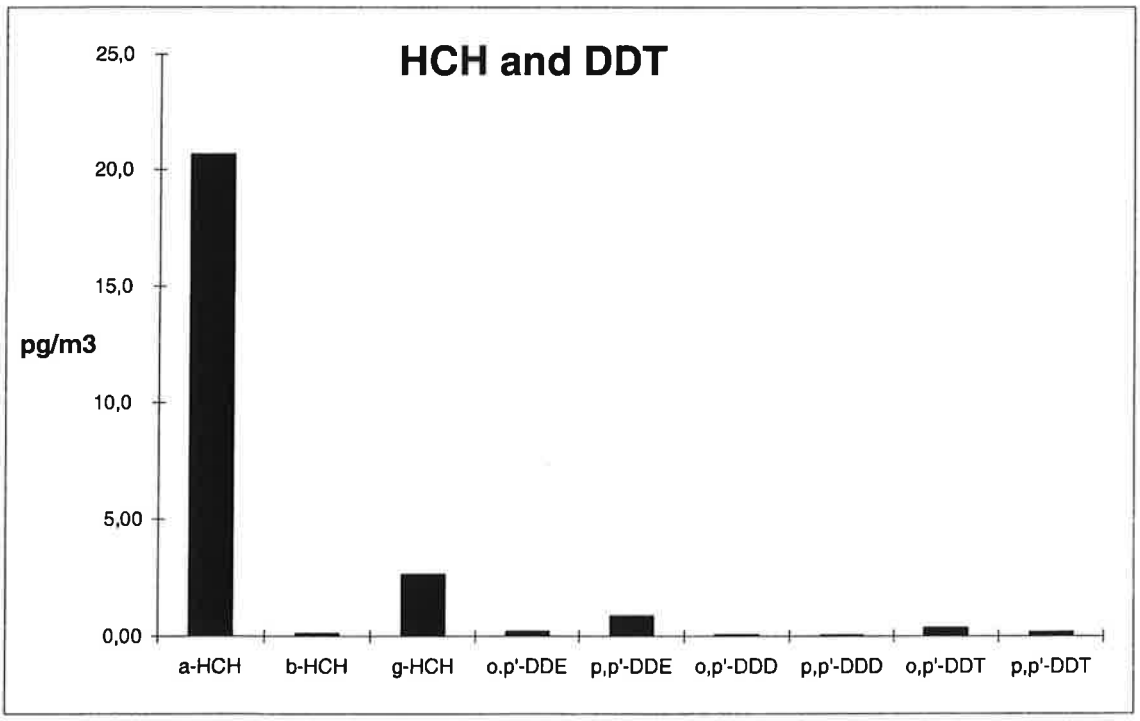
282 # Results of HCH and DDT Analysis

Kjeller, 01.03.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/19
Customer : Amap 04
Customers sample ID : 8-10.12.04 0955-0919
: 160-145
Sample type : Air
Sample amount : 1090 m3
Concentration units : pg/m3
Data files : DH725

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	20,6	32
β-HCH	0,10	
γ-HCH	2,60	36
o,p'-DDE	0,18	
p,p'-DDE	0,82	66
o,p'-DDD	0,03	
p,p'-DDD	0,02	
o,p'-DDT	0,33	
p,p'-DDT	0,15	92
Sum DDT	1,52	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt20050019.xls

Results of HCH and DDT Analysis

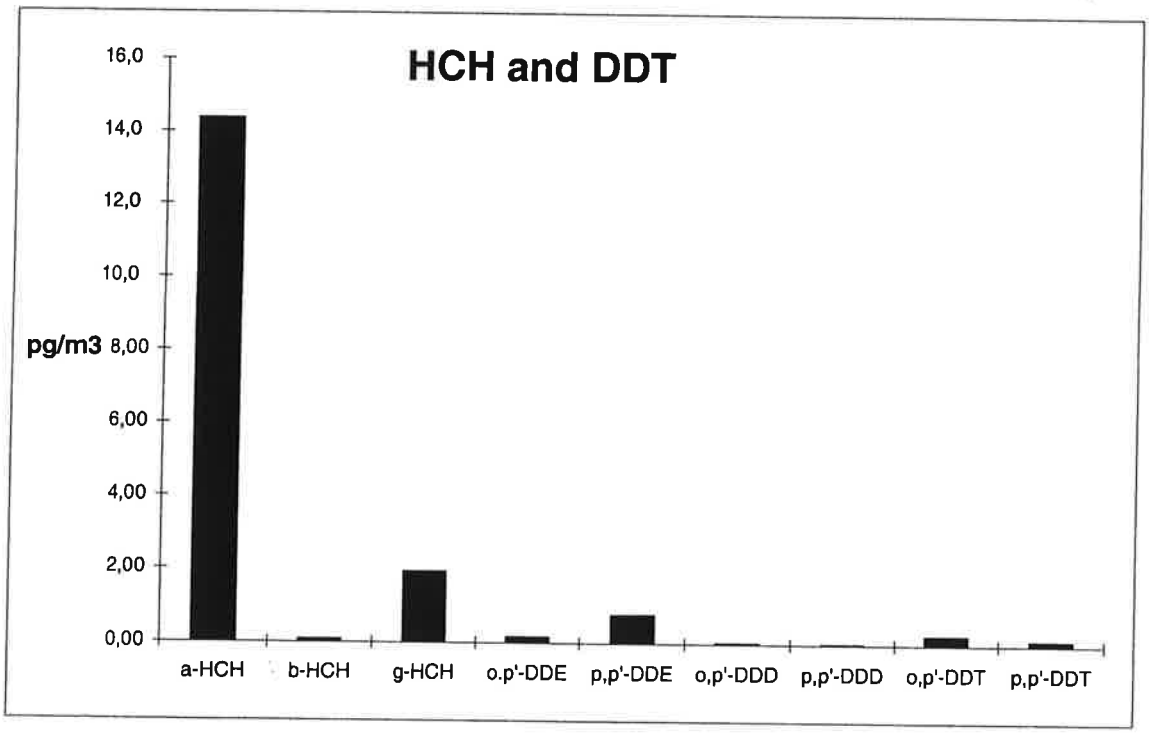
NILU

Kjeller, 01.03.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/22
Customer : Amap 04
Customers sample ID : 15-17.12.04 1406-0817
: 160-160
Sample type : Air
Sample amount : 1017 m3
Concentration units : pg/m3
Data files : DH725

Compound Structure		Concentration pg/m3	Recovery %
α-HCH		14,4	36
β-HCH		0,07	
γ-HCH		1,91	45
o.p'-DDE		0,15	
p,p'-DDE		0,77	68
o,p'-DDD		0,02	
p,p'-DDD	<	0,01	
o,p'-DDT		0,24 i	
p,p'-DDT		0,11	90
Sum DDT		1,29	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



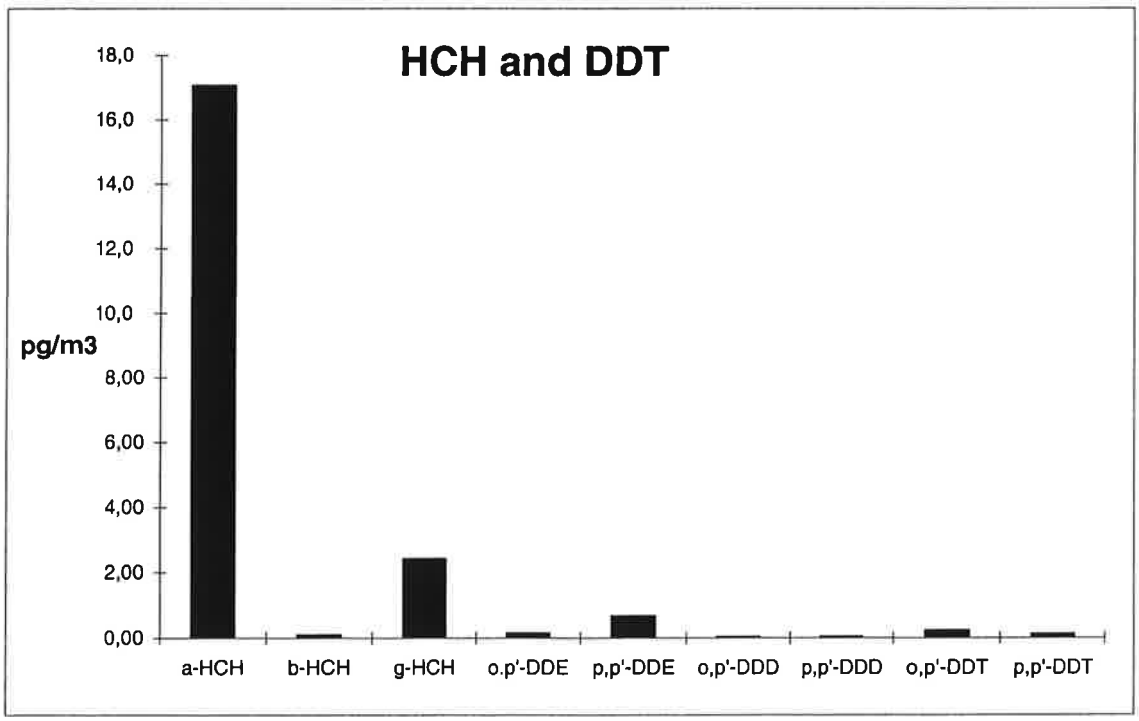
284 # Results of HCH and DDT Analysis

Kjeller, 01.03.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/280
Customer : Amap 04
Customers sample ID : 20-22.12.04 0956-0752
: 160-155
Sample type : Air
Sample amount : 1093 m3
Concentration units : pg/m3
Data files : DH725

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	17,0	31
β-HCH	0,08	
γ-HCH	2,41	39
o,p'-DDE	0,14	
p,p'-DDE	0,66	74
o,p'-DDD	0,02	
p,p'-DDD	0,03	
o,p'-DDT	0,22	
p,p'-DDT	0,11	99
Sum DDT	1,17	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt20050280.xls

Results of HCH and DDT Analysis

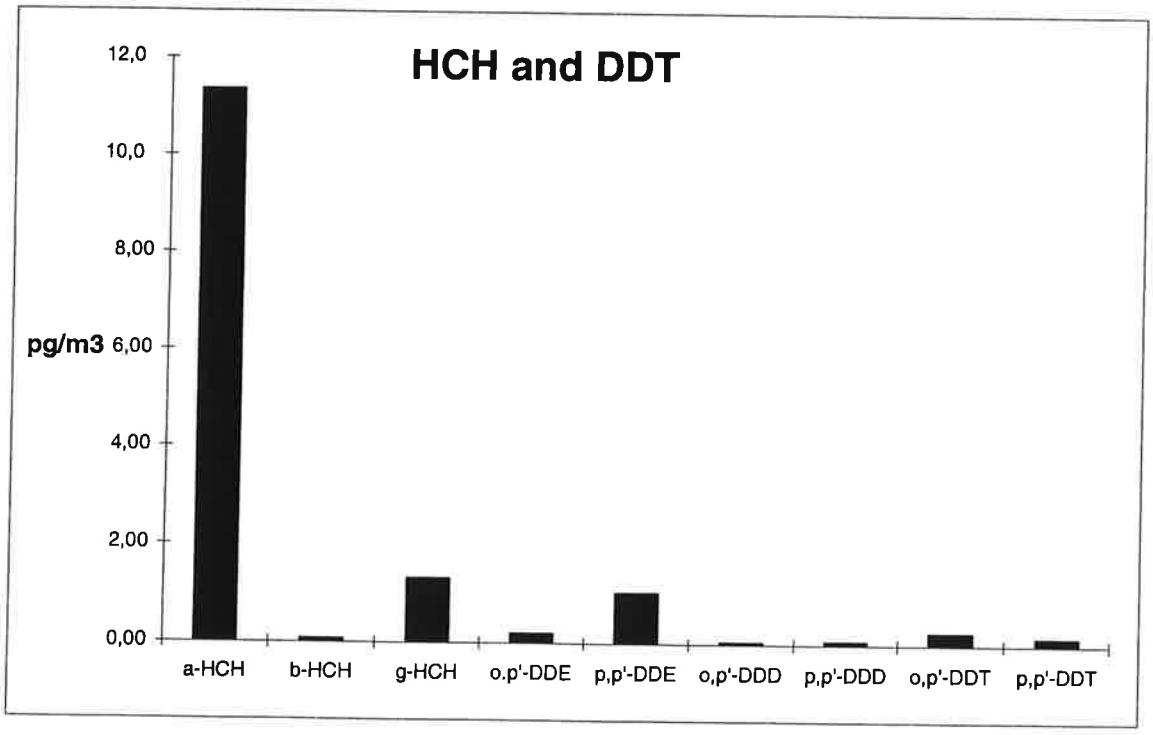
NILU

Kjeller, 01.03.05

Encl. to measuring report : O-2772
NILU-Sample number : 05/283
Customer : Amap 04
Customers sample ID : 29-31.12.04 0955-0931
: 160-155
Sample type : Air
Sample amount : 1131 m3
Concentration units : pg/m3
Data files : DH725

Compound Structure	Concentration pg/m3	Recovery %
α-HCH	11,3	51
β-HCH	0,07	
γ-HCH	1,30	59
o,p'-DDE	0,20	
p,p'-DDE	1,03	90
o,p'-DDD	0,04 i	
p,p'-DDD	0,07	
o,p'-DDT	0,24	
p,p'-DDT	0,15	132
Sum DDT	1,72	

< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value
This may be due to instrumental noise or/and chemical interference
b : Lower than 10 times method blank
g : Recovery is not according to NILUs quality criteria



5. versjon 06.06.03 GSK

dt20050283.xls

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/258
Customer: Amap 04
Customers sample ID: 7-9.1.04 0843-0804
: 160-167
Sample type: Air
Sample amount: 1166 m3
Concentration units: pg/m3
Data files: VA795ny_PCB_11-06-2004

Kjeller, 10.08.04

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			20,3		42	
HCB			65,4		48	
2,2',5-TriCB	18		1,86			
2,4,4'-TrICB	**28**		**1,32**		66	
2,4',5-TriCB	31		1,30			
2',3,4-TriCB	33		0,90			
3,4,4'-TriCB	37		0,13			
Sum-TriCB			***8,39***			
2,2',4,4'-TetCB	47		0,37			
2,2',5,5'-TetCB	**52**		**0,94**		66	
2,3',4,4'-TetCB	66		0,21			
2,4,4',5-TetCB	74		0,13			
Sum-TetCB			***3,95***			
2,2',4,4',5-PenCB	99		0,18			
2,2',4,5,5'-PenCB	**101**		**0,44**		68	
2,3,3',4,4'-PenCB	105		0,04	b	73	0,00
2,3,4,4',5-PenCB	114	<	0,01		68	0,01
2,3',4,4',5-PenCB	**118**		**0,13**	b	73	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		73	0,00
Sum-PenCB			***1,49***			
2,2',3,3',4,4'-HexCB	128		0,03	bi		
2,2',3,4,4',5'-HexCB	**138**		**0,12**	b	71	
2,2',3,4,5,5'-HexCB	141		0,03			
2,2',3,4',5',6-HexCB	149		0,25			
2,2',4,4',5,5'-HexCB	**153**		**0,20**	b	71	
2,3,3',4,4',5-HexCB	156	<	0,01		69	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		67	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		79	0,00
Sum-HexCB			***0,97***			
2,2',3,3',4,4',5-HepCB	170		0,02	i		
2,2',3,4,4',5,5'-HepCB	**180**	<	**0,02**		69	
2,2',3,4,4',5',6-HepCB	183	<	0,02	b		
2,2',3,4',5,5',6-HepCB	187		0,05			
2,3,3',4,4',5,5'-HepCB	189	<	0,02		74	0,00
Sum-HepCB			***0,11***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,02			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		79	
Sum 7 PCB			**3,18**			
Sum PCB			***14,9***			0,04

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 10.08.04

Encl. to measuring report: O-2772
NILU-Sample number: 04/261
Customer: Amap 04
Customers sample ID: 14-16.1.04 0901-0923
: 160-159
Sample type: Air
Sample amount: 1164 m3
Concentration units: pg/m3
Data files: VA796ny_PCB_15-06-2004

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			28,5		37	
HCB			67,2		47	
2,2',5-TriCB	18		1,82			
2,4,4'-TriCB	**28**		**1,10**		63	
2,4',5-TriCB	31		1,04			
2',3,4-TriCB	33		0,70			
3,4,4'-TriCB	37		0,10			
Sum-TriCB			***7,47***			
2,2',4,4'-TetCB	47		0,33			
2,2',5,5'-TetCB	**52**		**0,82**		66	
2,3',4,4'-TetCB	66		0,18			
2,4,4',5-TetCB	74		0,13			
Sum-TetCB			***3,38***			
2,2',4,4',5-PenCB	99		0,14			
2,2',4,5,5'-PenCB	**101**		**0,33**		71	
2,3,3',4,4'-PenCB	105		0,03	b	77	0,00
2,3,4,4',5-PenCB	114	<	0,01		75	0,01
2,3',4,4',5-PenCB	**118**		**0,11**	b	76	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		74	0,00
Sum-PenCB			***1,04***			
2,2',3,3',4,4'-HexCB	128		0,01	b		
2,2',3,4,4',5'-HexCB	**138**		**0,09**	b	78	
2,2',3,4,5,5'-HexCB	141		0,02			
2,2',3,4',5',6-HexCB	149		0,15	b		
2,2',4,4',5,5'-HexCB	**153**		**0,15**	b	73	
2,3,3',4,4',5-HexCB	156	<	0,01		82	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		82	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		78	0,00
Sum-HexCB			***0,66***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**	<	**0,01**		84	
2,2',3,4,4',5',6-HepCB	183	<	0,01	bi		
2,2',3,4',5,5',6-HepCB	187		0,03	i		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		91	0,00
Sum-HepCB			***0,06***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		82	
Sum 7 PCB			**2,61**			
Sum PCB			***12,6***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/264
Customer: Amap 04
Customers sample ID: 21-23.1.04 0919-0756
: 160-155
Sample type: Air
Sample amount: 1107 m3
Concentration units: pg/m3
Data files: VA796ny_PCB_15-06-2004

Kjeller, 10.08.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		29,1		32	
HCB		62,2		45	
2,2',5-TriCB	18	1,72			
2,4,4'-TriCB	**28**	**0,96**		63	
2,4',5-TriCB	31	0,91			
2',3,4-TriCB	33	0,61			
3,4,4'-TriCB	37	0,09			
Sum-TriCB		***6,67***			
2,2',4,4'-TetCB	47	0,27	b		
2,2',5,5'-TetCB	**52**	**0,75**		64	
2,3',4,4'-TetCB	66	0,19			
2,4,4',5-TetCB	74	0,14			
Sum-TetCB		***3,19***			
2,2',4,4',5-PenCB	99	0,17			
2,2',4,5,5'-PenCB	**101**	**0,38**		76	
2,3,3',4,4'-PenCB	105	0,06		87	0,01
2,3,4,4',5-PenCB	114	< 0,01		85	0,01
2,3',4,4',5-PenCB	**118**	**0,21**		85	0,02
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		83	0,00
Sum-PenCB		***1,48***			
2,2',3,3',4,4'-HexCB	128	0,03	bi		
2,2',3,4,4',5'-HexCB	**138**	**0,25**	b	87	
2,2',3,4,5,5'-HexCB	141	0,04			
2,2',3,4',5',6-HexCB	149	0,21	b		
2,2',4,4',5,5'-HexCB	**153**	**0,37**	b	82	
2,3,3',4,4',5-HexCB	156	0,02		94	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		92	0,01
2,3',4,4',5,5'-HexCB	167	0,01	i	91	0,00
Sum-HexCB		***1,32***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,07**		94	
2,2',3,4,4',5',6-HepCB	183	0,02	b		
2,2',3,4',5,5',6-HepCB	187	0,06			
2,3,3',4,4',5,5'-HepCB	189	< 0,01		99	0,00
Sum-HepCB		***0,20***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	0,01	i	85	
Sum 7 PCB		**2,99**			
Sum PCB		***12,9***			**0,05**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/267
Customer: amap 04
Customers sample ID: 28-30.1.04 0815-0810
: 160-161
Sample type: Air
Sample amount: 1157 m3
Concentration units: pg/m3
Data files: VA796ny_PCB_15-06-2004

Kjeller, 10.08.04

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			30,6		30	
HCB			64,0		46	
2,2',5-TriCB	18		3,27			
2,4,4'-TrICB	**28**		**2,86**		65	
2,4',5-TriCB	31		2,65			
2',3,4-TriCB	33		1,98			
3,4,4'-TriCB	37		0,36			
Sum-TriCB			***17,0***			
2,2',4,4'-TetCB	47		0,73			
2,2',5,5'-TetCB	**52**		**1,55**		66	
2,3',4,4'-TetCB	66		0,49			
2,4,4',5-TetCB	74		0,33			
Sum-TetCB			***7,59***			
2,2',4,4',5-PenCB	99		0,30			
2,2',4,5,5'-PenCB	**101**		**0,70**		72	
2,3,3',4,4'-PenCB	105		0,07		84	0,01
2,3,4,4',5-PenCB	114	<	0,01		80	0,01
2,3',4,4',5-PenCB	**118**		**0,25**		80	0,03
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		79	0,00
Sum-PenCB			***2,43***			
2,2',3,3',4,4'-HexCB	128		0,03	b		
2,2',3,4,4',5'-HexCB	**138**		**0,21**	b	82	
2,2',3,4,5,5'-HexCB	141		0,05			
2,2',3,4',5',6-HexCB	149		0,34			
2,2',4,4',5,5'-HexCB	**153**		**0,31**	b	77	
2,3,3',4,4',5-HexCB	156	<	0,01		86	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		87	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		83	0,00
Sum-HexCB			***1,54***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,05**		88	
2,2',3,4,4',5',6-HepCB	183		0,03	bi		
2,2',3,4',5,5',6-HepCB	187		0,07			
2,3,3',4,4',5,5'-HepCB	189	<	0,01		94	0,00
Sum-HepCB			***0,24***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		82	
Sum 7 PCB			**5,92**			
Sum PCB			***28,8***			**0,05**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/270
Customer: Amap 04
Customers sample ID: 4-6.2.04 0755-0909
: 160-158
Sample type: Air
Sample amount: 1178 m3
Concentration units: pg/m3
Data files: VA796ny_PCB_15-06-2004

Kjeller, 10.08.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		31,9		30	
HCB		65,0		46	
2,2',5-TriCB	18	3,00			
2,4,4'-TriCB	**28**	**2,05**		64	
2,4',5-TriCB	31	1,88			
2',3,4-TriCB	33	1,34			
3,4,4'-TriCB	37	0,22			
Sum-TriCB		***13,2***			
2,2',4,4'-TetCB	47	0,55			
2,2',5,5'-TetCB	**52**	**1,33**		65	
2,3',4,4'-TetCB	66	0,37			
2,4,4',5-TetCB	74	0,26			
Sum-TetCB		***6,14***			
2,2',4,4',5-PenCB	99	0,25			
2,2',4,5,5'-PenCB	**101**	**0,59**		69	
2,3,3',4,4'-PenCB	105	0,06		80	0,01
2,3,4,4',5-PenCB	114	< 0,01		75	0,01
2,3',4,4',5-PenCB	**118**	**0,22**		75	0,02
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		75	0,00
Sum-PenCB		***1,95***			
2,2',3,3',4,4'-HexCB	128	0,03	b		
2,2',3,4,4',5'-HexCB	**138**	**0,18**	b	81	
2,2',3,4,5,5'-HexCB	141	0,04			
2,2',3,4',5',6-HexCB	149	0,28			
2,2',4,4',5,5'-HexCB	**153**	**0,28**	b	74	
2,3,3',4,4',5-HexCB	156	< 0,01		88	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		88	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		84	0,00
Sum-HexCB		***1,25***			
2,2',3,3',4,4',5-HepCB	170	0,02			
2,2',3,4,4',5,5'-HepCB	**180**	**0,06**		88	
2,2',3,4,4',5',6-HepCB	183	0,02	bi		
2,2',3,4',5,5',6-HepCB	187	0,06			
2,3,3',4,4',5,5'-HepCB	189	< 0,01		96	0,00
Sum-HepCB		***0,21***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	0,01		82	
Sum 7 PCB		**4,72**			
Sum PCB		***22,8***			**0,05**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/273
Customer: Amap 04
Customers sample ID: 11-13.2.04 0822-0743
: 160-160
Sample type: Air
Sample amount: 1140 m3
Concentration units: pg/m3
Data files: VA796ny_PCB_15-06-2004

Kjeller, 10.08.04

Compound Structure	IUPAC-no.		Concentration pg/m3	Recovery %	TE (WHO) fg/g
PeCB			23,2	34	
HCB			55,9	52	
2,2',5-TriCB	18		1,63		
2,4,4'-TriCB	**28**		**1,25**	75	
2,4',5-TriCB	31		1,19		
2',3,4-TriCB	33		0,85		
3,4,4'-TriCB	37		0,15		
Sum-TriCB			***7,79***		
2,2',4,4'-TetCB	47		0,45		
2,2',5,5'-TetCB	**52**		**0,94**	78	
2,3',4,4'-TetCB	66		0,31		
2,4,4',5-TetCB	74		0,19		
Sum-TetCB			***4,51***		
2,2',4,4',5-PenCB	99		0,25		
2,2',4,5,5'-PenCB	**101**		**0,57**	87	
2,3,3',4,4'-PenCB	105		0,09	94	0,01
2,3,4,4',5-PenCB	114		0,01	94	0,01
2,3',4,4',5-PenCB	**118**		**0,29**	93	0,03
2'3,3',4,5-PenCB	122	<	0,01		
2',3,4,4',5-PenCB	123	<	0,01	93	0,00
Sum-PenCB			***2,31***		
2,2',3,3',4,4'-HexCB	128		0,05		
2,2',3,4,4',5'-HexCB	**138**		**0,35**	95	
2,2',3,4,5,5'-HexCB	141		0,06		
2,2',3,4',5',6-HexCB	149		0,39		
2,2',4,4',5,5'-HexCB	**153**		**0,54**	91	
2,3,3',4,4',5-HexCB	156		0,02	98	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01	99	0,01
2,3',4,4',5,5'-HexCB	167		0,01	96	0,00
Sum-HexCB			***2,15***		
2,2',3,3',4,4',5-HepCB	170	<	0,01		
2,2',3,4,4',5,5'-HepCB	**180**		**0,10**	104	
2,2',3,4,4',5',6-HepCB	183		0,04		
2,2',3,4',5,5',6-HepCB	187		0,12		
2,3,3',4,4',5,5'-HepCB	189	<	0,01	108	0,00
Sum-HepCB			***0,35***		
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01		
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01		
DecaCB	209	<	0,01	90	
Sum 7 PCB			**4,05**		
Sum PCB			***17,1***		**0,06**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/277
Customer: Amap 04
Customers sample ID: 20-22.2.04 0810-1038
: 160-165
Sample type: Air
Sample amount: 1232 m3
Concentration units: pg/m3
Data files: VA796ny_PCB_15-06-2004

Kjeller, 10.08.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		29,0		33	
HCB		60,0		48	
2,2',5-TriCB	18	2,05			
2,4,4'-TriCB	**28**	**1,32**		67	
2,4',5-TriCB	31	1,23			
2',3,4-TriCB	33	0,82			
3,4,4'-TriCB	37	0,11			
Sum-TriCB		***8,55***			
2,2',4,4'-TetCB	47	0,33			
2,2',5,5'-TetCB	**52**	**0,88**		71	
2,3',4,4'-TetCB	66	0,23			
2,4,4',5-TetCB	74	0,16			
Sum-TetCB		***3,79***			
2,2',4,4',5-PenCB	99	0,19			
2,2',4,5,5'-PenCB	**101**	**0,41**		79	
2,3,3',4,4'-PenCB	105	0,05	b	92	0,01
2,3,4,4',5-PenCB	114	< 0,01		88	0,01
2,3',4,4',5-PenCB	**118**	**0,17**		89	0,02
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		87	0,00
Sum-PenCB		***1,47***			
2,2',3,3',4,4'-HexCB	128	0,03	bi		
2,2',3,4,4',5'-HexCB	**138**	**0,14**	b	94	
2,2',3,4,5,5'-HexCB	141	0,03			
2,2',3,4',5',6-HexCB	149	0,19	b		
2,2',4,4',5,5'-HexCB	**153**	**0,24**	b	87	
2,3,3',4,4',5-HexCB	156	0,01	i	101	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		100	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		98	0,00
Sum-HexCB		***1,02***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,04**		104	
2,2',3,4,4',5',6-HepCB	183	0,02	b		
2,2',3,4',5,5',6-HepCB	187	0,04			
2,3,3',4,4',5,5'-HepCB	189	< 0,01		110	0,00
Sum-HepCB		***0,10***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	0,02		96	
Sum 7 PCB		**3,20**			
Sum PCB		***15,0***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 10.08.04

Encl. to measuring report: O-2772
NILU-Sample number: 04/279
Customer: Amap 04
Customers sample ID: 25-27.2.04 0906-0904
: 160-161
Sample type: Air
Sample amount: 1159 m3
Concentration units: pg/m3
Data files: VA796ny_PCB_15-06-2004

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			29,0		33	
HCB			61,6		50	
2,2',5-TriCB	18		1,57			
2,4,4'-TriCB	**28**		**0,89**		68	
2,4',5-TriCB	31		0,85			
2',3,4-TriCB	33		0,54			
3,4,4'-TriCB	37		0,07			
Sum-TriCB			***6,09***			
2,2',4,4'-TetCB	47		0,27			
2,2',5,5'-TetCB	**52**		**0,75**		74	
2,3',4,4'-TetCB	66		0,16			
2,4,4',5-TetCB	74		0,12			
Sum-TetCB			***3,12***			
2,2',4,4',5-PenCB	99		0,14			
2,2',4,5,5'-PenCB	**101**		**0,32**		81	
2,3,3',4,4'-PenCB	105		0,03	b	95	0,00
2,3,4,4',5-PenCB	114	<	0,01		91	0,01
2,3',4,4',5-PenCB	**118**		**0,11**	b	90	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		89	0,00
Sum-PenCB			***0,99***			
2,2',3,3',4,4'-HexCB	128		0,02	bi		
2,2',3,4,4',5'-HexCB	**138**		**0,10**	b	98	
2,2',3,4,5,5'-HexCB	141		0,02			
2,2',3,4',5',6-HexCB	149		0,16	b		
2,2',4,4',5,5'-HexCB	**153**		**0,17**	b	91	
2,3,3',4,4',5-HexCB	156	<	0,01		102	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		102	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		100	0,00
Sum-HexCB			***0,71***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	i	106	
2,2',3,4,4',5',6-HepCB	183		0,01	b		
2,2',3,4',5,5',6-HepCB	187		0,03			
2,3,3',4,4',5,5'-HepCB	189	<	0,01		110	0,00
Sum-HepCB			***0,08***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		97	
Sum 7 PCB			**2,35**			
Sum PCB			***11,0***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/578
Customer: Amap 04
Customers sample ID: 5-7.3.04 0932-1019
: 160-165
Sample type: Air
Sample amount: 1196 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		20,7		43	
HCB		61,4		51	
2,2',5-TriCB	18	2,13			
2,4,4'-TriCB	**28**	**1,72**		80	
2,4',5-TriCB	31	1,63			
2',3,4-TriCB	33	1,20			
3,4,4'-TriCB	37	0,18			
Sum-TriCB		***10,0***			
2,2',4,4'-TetCB	47	0,54	b		
2,2',5,5'-TetCB	**52**	**1,18**	b	80	
2,3',4,4'-TetCB	66	0,29			
2,4,4',5-TetCB	74	0,18			
Sum-TetCB		***5,07***			
2,2',4,4',5-PenCB	99	0,21			
2,2',4,5,5'-PenCB	**101**	**0,54**		86	
2,3,3',4,4'-PenCB	105	0,05	b	88	0,00
2,3,4,4',5-PenCB	114	< 0,01		80	0,01
2,3',4,4',5-PenCB	**118**	**0,17**	b	88	0,02
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		89	0,00
Sum-PenCB		***1,71***			
2,2',3,3',4,4'-HexCB	128	0,03			
2,2',3,4,4',5'-HexCB	**138**	**0,18**	b	93	
2,2',3,4,5,5'-HexCB	141	0,05			
2,2',3,4',5',6-HexCB	149	0,32	b		
2,2',4,4',5,5'-HexCB	**153**	**0,30**	b	88	
2,3,3',4,4',5-HexCB	156	< 0,01		91	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		95	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		94	0,00
Sum-HexCB		***1,42***			
2,2',3,3',4,4',5-HepCB	170	0,02	i		
2,2',3,4,4',5,5'-HepCB	**180**	**0,06**	b	91	
2,2',3,4,4',5',6-HepCB	183	0,02			
2,2',3,4',5,5',6-HepCB	187	0,06	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		90	0,00
Sum-HepCB		***0,27***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		87	
Sum 7 PCB		**4,14**			
Sum PCB		***18,5***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 13.10.04

Encl. to measuring report: O-2772
NILU-Sample number: 04/580
Customer: Amap 04
Customers sample ID: 10-12.3.04 1043-0937
: 160-150
Sample type: Air
Sample amount: 1100 m3
Concentration units: pg/m3
Data files: DH669

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		18,8		40	
HCB		63,6		45	
2,2',5-TriCB	18	1,72			
2,4,4'-TriCB	**28**	**1,26**		73	
2,4',5-TriCB	31	1,20			
2',3,4-TriCB	33	0,85			
3,4,4'-TriCB	37	0,12			
Sum-TriCB		***7,48***			
2,2',4,4'-TetCB	47	0,39	b		
2,2',5,5'-TetCB	**52**	**0,98**	b	70	
2,3',4,4'-TetCB	66	0,22			
2,4,4',5-TetCB	74	0,15			
Sum-TetCB		***4,01***			
2,2',4,4',5-PenCB	99	0,17	b		
2,2',4,5,5'-PenCB	**101**	**0,42**	b	79	
2,3,3',4,4'-PenCB	105	0,04	b	86	0,00
2,3,4,4',5-PenCB	114	< 0,01		78	0,01
2,3',4,4',5-PenCB	**118**	**0,13**	b	87	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		87	0,00
Sum-PenCB		***1,41***			
2,2',3,3',4,4'-HexCB	128	0,02			
2,2',3,4,4',5'-HexCB	**138**	**0,13**	b	84	
2,2',3,4,5,5'-HexCB	141	0,03			
2,2',3,4',5',6-HexCB	149	0,25	b		
2,2',4,4',5,5'-HexCB	**153**	**0,23**	b	79	
2,3,3',4,4',5-HexCB	156	< 0,01		88	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		90	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		87	0,00
Sum-HexCB		***1,09***			
2,2',3,3',4,4',5-HepCB	170	0,01	i		
2,2',3,4,4',5,5'-HepCB	**180**	**0,04**	b	76	
2,2',3,4,4',5',6-HepCB	183	0,02			
2,2',3,4',5,5',6-HepCB	187	0,05	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		79	0,00
Sum-HepCB		***0,19***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		86	
Sum 7 PCB		**3,19**			
Sum PCB		***14,2***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/584
Customer: Amap 04
Customers sample ID: 17-19.3.04 0810-0753
: 160-148
Sample type: Air
Sample amount: 1107 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			24,8		45	
HCB			70,3		48	
2,2',5-TriCB	18		2,10			
2,4,4'-TriCB	**28**		**1,43**		77	
2,4',5-TriCB	31		1,34			
2',3,4-TriCB	33		0,89			
3,4,4'-TriCB	37		0,12			
Sum-TriCB			***8,62***			
2,2',4,4'-TetCB	47		0,48	b		
2,2',5,5'-TetCB	**52**		**1,12**	b	74	
2,3',4,4'-TetCB	66		0,26			
2,4,4',5-TetCB	74		0,18			
Sum-TetCB			***4,76***			
2,2',4,4',5-PenCB	99		0,20	b		
2,2',4,5,5'-PenCB	**101**		**0,52**		80	
2,3,3',4,4'-PenCB	105		0,05	b	83	0,00
2,3,4,4',5-PenCB	114	<	0,01		79	0,01
2,3',4,4',5-PenCB	**118**		**0,16**	b	85	0,02
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		84	0,00
Sum-PenCB			***1,67***			
2,2',3,3',4,4'-HexCB	128		0,02			
2,2',3,4,4',5'-HexCB	**138**		**0,17**	b	84	
2,2',3,4,5,5'-HexCB	141		0,05			
2,2',3,4',5',6-HexCB	149		0,33	b		
2,2',4,4',5,5'-HexCB	**153**		**0,28**	b	81	
2,3,3',4,4',5-HexCB	156	<	0,01		86	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		87	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		87	0,00
Sum-HexCB			***1,39***			
2,2',3,3',4,4',5-HepCB	170		0,02	i		
2,2',3,4,4',5,5'-HepCB	**180**		**0,06**	b	76	
2,2',3,4,4',5',6-HepCB	183		0,02			
2,2',3,4',5,5',6-HepCB	187		0,07	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		78	0,00
Sum-HepCB			***0,26***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		84	
Sum 7 PCB			**3,73**			
Sum PCB			***16,7***			0,04

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 13.10.04

Encl. to measuring report: O-2772
NILU-Sample number: 04/588
Customer: Amap 04
Customers sample ID: 29-31.3.04 0829-0802
: 160-152
Sample type: Air
Sample amount: 1116 m3
Concentration units: pg/m3
Data files: DH669

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		27,6		43	
HCB		71,7		46	
2,2',5-TriCB	18	2,06			
2,4,4'-TriCB	**28**	**1,37**		71	
2,4',5-TriCB	31	1,29			
2',3,4-TriCB	33	0,87			
3,4,4'-TriCB	37	0,12			
Sum-TriCB		***8,29***			
2,2',4,4'-TetCB	47	0,41	b		
2,2',5,5'-TetCB	**52**	**0,99**	b	68	
2,3',4,4'-TetCB	66	0,23			
2,4,4',5-TetCB	74	0,16			
Sum-TetCB		***4,16***			
2,2',4,4',5-PenCB	99	0,17	b		
2,2',4,5,5'-PenCB	**101**	**0,42**	b	79	
2,3,3',4,4'-PenCB	105	0,04	b	81	0,00
2,3,4,4',5-PenCB	114	< 0,01		77	0,01
2,3',4,4',5-PenCB	**118**	**0,13**	b	83	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		83	0,00
Sum-PenCB		***1,28***			
2,2',3,3',4,4'-HexCB	128	0,02			
2,2',3,4,4',5'-HexCB	**138**	**0,12**	b	80	
2,2',3,4,5,5'-HexCB	141	0,03			
2,2',3,4',5',6-HexCB	149	0,21	b		
2,2',4,4',5,5'-HexCB	**153**	**0,18**	b	76	
2,3,3',4,4',5-HexCB	156	< 0,01		83	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		86	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		86	0,00
Sum-HexCB		***0,92***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	75	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		80	0,00
Sum-HepCB		***0,09***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		87	
Sum 7 PCB		**3,24**			
Sum PCB		***14,8***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/590
Customer: Amap 04
Customers sample ID: 2-4.4.04 0726-0650
: 160-160
Sample type: Air
Sample amount: 1142 m3
Concentration units: pg/m3
Data files: DH684

Kjeller, 06.12.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		27,1		40	
HCB		63,3		48	
2,2',5-TriCB	18	1,67			
2,4,4'-TriCB	**28**	**1,07**		70	
2,4',5-TriCB	31	1,02			
2',3,4-TriCB	33	0,70			
3,4,4'-TriCB	37	0,09			
Sum-TriCB		***6,61***			
2,2',4,4'-TetCB	47	0,29	b		
2,2',5,5'-TetCB	**52**	**0,78**	b	70	
2,3',4,4'-TetCB	66	0,17	b		
2,4,4',5-TetCB	74	0,12	b		
Sum-TetCB		***3,18***			
2,2',4,4',5-PenCB	99	0,14	b		
2,2',4,5,5'-PenCB	**101**	**0,35**	b	77	
2,3,3',4,4'-PenCB	105	0,03	b	90	0,00
2,3,4,4',5-PenCB	114	< 0,01		83	0,01
2,3',4,4',5-PenCB	**118**	**0,10**	b	88	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		86	0,00
Sum-PenCB		***1,08***			
2,2',3,3',4,4'-HexCB	128	0,02			
2,2',3,4,4',5'-HexCB	**138**	**0,10**	b	87	
2,2',3,4,5,5'-HexCB	141	0,02			
2,2',3,4',5',6-HexCB	149	0,16	b		
2,2',4,4',5,5'-HexCB	**153**	**0,15**	b	83	
2,3,3',4,4',5-HexCB	156	< 0,01		102	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		104	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		98	0,00
Sum-HexCB		***0,73***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,02**	b	95	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		109	0,00
Sum-HepCB		***0,11***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		100	
Sum 7 PCB		**2,58**			
Sum PCB		***11,7***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/593
Customer: Amap 04
Customers sample ID: 12-14.4.04 1332-0839
: 160-140
Sample type: Air
Sample amount: 970 m3
Concentration units: pg/m3
Data files: DH684

Kjeller, 06.12.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		22,3		36	
HCB		66,7		45	
2,2',5-TriCB	18	2,73			
2,4,4'-TriCB	**28**	**2,05**		61	
2,4',5-TriCB	31	1,94			
2',3,4-TriCB	33	1,48			
3,4,4'-TriCB	37	0,22			
Sum-TriCB		***12,3***			
2,2',4,4'-TetCB	47	0,51	b		
2,2',5,5'-TetCB	**52**	**1,25**	b	64	
2,3',4,4'-TetCB	66	0,33			
2,4,4',5-TetCB	74	0,23			
Sum-TetCB		***5,56***			
2,2',4,4',5-PenCB	99	0,26			
2,2',4,5,5'-PenCB	**101**	**0,59**		73	
2,3,3',4,4'-PenCB	105	0,07	b	86	0,01
2,3,4,4',5-PenCB	114	< 0,01		82	0,01
2,3',4,4',5-PenCB	**118**	**0,22**	b	83	0,02
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		81	0,00
Sum-PenCB		***1,94***			
2,2',3,3',4,4'-HexCB	128	0,03			
2,2',3,4,4',5'-HexCB	**138**	**0,20**	b	84	
2,2',3,4,5,5'-HexCB	141	0,05			
2,2',3,4',5',6-HexCB	149	0,28	b		
2,2',4,4',5,5'-HexCB	**153**	**0,26**	b	79	
2,3,3',4,4',5-HexCB	156	0,01		95	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		99	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		94	0,00
Sum-HexCB		***1,37***			
2,2',3,3',4,4',5-HepCB	170	0,02			
2,2',3,4,4',5,5'-HepCB	**180**	**0,05**	b	91	
2,2',3,4,4',5',6-HepCB	183	0,02			
2,2',3,4',5,5',6-HepCB	187	0,04	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		109	0,00
Sum-HepCB		***0,23***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		99	
Sum 7 PCB		**4,63**			
Sum PCB		***21,4***			**0,05**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/595
Customer: Amap 04
Customers sample ID: 16-18.4.04 0718-1001
: 160-158
Sample type: Air
Sample amount: 1214 m3
Concentration units: pg/m3
Data files: DH684

Kjeller, 06.12.04

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			21,0		39	
HCB			68,7		49	
2,2',5-TriCB	18		1,79			
2,4,4'-TriCB	**28**		**1,32**		72	
2,4',5-TriCB	31		1,23			
2',3,4-TriCB	33		0,88			
3,4,4'-TriCB	37		0,12			
Sum-TriCB			***7,71***			
2,2',4,4'-TetCB	47		0,35	b		
2,2',5,5'-TetCB	**52**		**0,91**	b	73	
2,3',4,4'-TetCB	66		0,22			
2,4,4',5-TetCB	74		0,16			
Sum-TetCB			***3,85***			
2,2',4,4',5-PenCB	99		0,20			
2,2',4,5,5'-PenCB	**101**		**0,45**	b	77	
2,3,3',4,4'-PenCB	105		0,04	b	85	0,00
2,3,4,4',5-PenCB	114	<	0,01		83	0,01
2,3',4,4',5-PenCB	**118**		**0,14**	b	83	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		86	0,00
Sum-PenCB			***1,51***			
2,2',3,3',4,4'-HexCB	128		0,02			
2,2',3,4,4',5'-HexCB	**138**		**0,13**	b	86	
2,2',3,4,5,5'-HexCB	141		0,03			
2,2',3,4',5',6-HexCB	149		0,23	b		
2,2',4,4',5,5'-HexCB	**153**		**0,19**	b	81	
2,3,3',4,4',5-HexCB	156	<	0,01		95	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		95	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		93	0,00
Sum-HexCB			***1,03***			
2,2',3,3',4,4',5-HepCB	170		0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,04**	b	91	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,04	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		95	0,00
Sum-HepCB			***0,17***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		86	
Sum 7 PCB			**3,18**			
Sum PCB			***14,3***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 06.12.04

Encl. to measuring report: O-2772
NILU-Sample number: 04/597
Customer: Amap 04
Customers sample ID: 21-23.4.04 0802-0800
: 160-160
Sample type: Air
Sample amount: 1157 m3
Concentration units: pg/m3
Data files: DH684

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		17,9		39	
HCB		68,7		47	
2,2',5-TriCB	18	1,98			
2,4,4'-TrICB	**28**	**1,61**		67	
2,4',5-TriCB	31	1,49			
2',3,4-TriCB	33	1,10			
3,4,4'-TriCB	37	0,15			
Sum-TriCB		***9,17***			
2,2',4,4'-TetCB	47	0,41	b		
2,2',5,5'-TetCB	**52**	**1,01**	b	69	
2,3',4,4'-TetCB	66	0,25			
2,4,4',5-TetCB	74	0,17			
Sum-TetCB		***4,40***			
2,2',4,4',5-PenCB	99	0,20	b		
2,2',4,5,5'-PenCB	**101**	**0,49**		69	
2,3,3',4,4'-PenCB	105	0,04	b	79	0,00
2,3,4,4',5-PenCB	114	< 0,01		74	0,01
2,3',4,4',5-PenCB	**118**	**0,15**	b	77	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		77	0,00
Sum-PenCB		***1,63***			
2,2',3,3',4,4'-HexCB	128	0,03			
2,2',3,4,4',5'-HexCB	**138**	**0,14**	b	81	
2,2',3,4,5,5'-HexCB	141	0,03			
2,2',3,4',5',6-HexCB	149	0,25	b		
2,2',4,4',5,5'-HexCB	**153**	**0,22**	b	76	
2,3,3',4,4',5-HexCB	156	< 0,01		89	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		88	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		88	0,00
Sum-HexCB		***1,14***			
2,2',3,3',4,4',5-HepCB	170	0,02			
2,2',3,4,4',5,5'-HepCB	**180**	**0,05**	b	85	
2,2',3,4,4',5',6-HepCB	183	0,02			
2,2',3,4',5,5',6-HepCB	187	0,05	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		92	0,00
Sum-HepCB		***0,19***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		82	
Sum 7 PCB		**3,67**			
Sum PCB		***16,6***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/600
Customer: Amap 04
Customers sample ID: 28-30.4.04 0742-0808
: 160-157
Sample type: Air
Sample amount: 1157 m3
Concentration units: pg/m3
Data files: DH684

Kjeller, 06.12.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		17,6		34	
HCB		64,4		43	
2,2',5-TriCB	18	1,88			
2,4,4'-TriCB	**28**	**1,64**		61	
2,4',5-TriCB	31	1,52			
2',3,4-TriCB	33	1,18			
3,4,4'-TriCB	37	0,18			
Sum-TriCB		***9,21***			
2,2',4,4'-TetCB	47	0,41	b		
2,2',5,5'-TetCB	**52**	**0,94**	b	61	
2,3',4,4'-TetCB	66	0,21			
2,4,4',5-TetCB	74	0,15			
Sum-TetCB		***4,10***			
2,2',4,4',5-PenCB	99	0,14	b		
2,2',4,5,5'-PenCB	**101**	**0,36**	b	65	
2,3,3',4,4'-PenCB	105	0,03	b	80	0,00
2,3,4,4',5-PenCB	114	< 0,01		77	0,01
2,3',4,4',5-PenCB	**118**	**0,10**	b	77	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		78	0,00
Sum-PenCB		***1,03***			
2,2',3,3',4,4'-HexCB	128	0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,09**	b	84	
2,2',3,4,5,5'-HexCB	141	0,02			
2,2',3,4',5',6-HexCB	149	0,18	b		
2,2',4,4',5,5'-HexCB	**153**	**0,16**	b	75	
2,3,3',4,4',5-HexCB	156	< 0,01		94	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		94	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		94	0,00
Sum-HexCB		***0,78***			
2,2',3,3',4,4',5-HepCB	170	0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	88	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		102	0,00
Sum-HepCB		***0,14***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		97	
Sum 7 PCB		**3,31**			
Sum PCB		***15,3***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/729
Customer: Amap 04
Customers sample ID: 7-9.5.04 0745-0936
: 160-161
Sample type: Air
Sample amount: 1205 m3
Concentration units: pg/m3
Data files: DH684

Kjeller, 06.12.04

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			20,7		37	
HCB			69,5		47	
2,2',5-TriCB	18		1,96			
2,4,4'-TriCB	**28**		**1,69**		62	
2,4',5-TriCB	31		1,61			
2',3,4-TriCB	33		1,25			
3,4,4'-TriCB	37		0,18			
Sum-TriCB			***9,62***			
2,2',4,4'-TetCB	47		0,39	b		
2,2',5,5'-TetCB	**52**		**0,92**	b	64	
2,3',4,4'-TetCB	66		0,22			
2,4,4',5-TetCB	74		0,15			
Sum-TetCB			***4,09***			
2,2',4,4',5-PenCB	99		0,15	b		
2,2',4,5,5'-PenCB	**101**		**0,38**	b	68	
2,3,3',4,4'-PenCB	105		0,03	b	82	0,00
2,3,4,4',5-PenCB	114	<	0,01		76	0,01
2,3',4,4',5-PenCB	**118**		**0,11**	b	78	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		78	0,00
Sum-PenCB			***1,23***			
2,2',3,3',4,4'-HexCB	128		0,02			
2,2',3,4,4',5'-HexCB	**138**		**0,11**	b	84	
2,2',3,4,5,5'-HexCB	141		0,03			
2,2',3,4',5',6-HexCB	149		0,20	b		
2,2',4,4',5,5'-HexCB	**153**		**0,15**	b	75	
2,3,3',4,4',5-HexCB	156	<	0,01		97	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		97	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		93	0,00
Sum-HexCB			***0,85***			
2,2',3,3',4,4',5-HepCB	170		0,01	i		
2,2',3,4,4',5,5'-HepCB	**180**		**0,03**	b	91	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		108	0,00
Sum-HepCB			***0,13***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01	i		
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		100	
Sum 7 PCB			**3,38**			
Sum PCB			***16,0***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/731
Customer: Amap 04
Customers sample ID: 12-14.5.04 0703-0720
: 160-154
Sample type: Air
Sample amount: 1142 m3
Concentration units: pg/m3
Data files: DH684

Kjeller, 06.12.04

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			21,3		39	
HCB			68,2		52	
2,2',5-TriCB	18		1,37			
2,4,4'-TriCB	**28**		**1,38**		73	
2,4',5-TriCB	31		1,35			
2',3,4-TriCB	33		1,07			
3,4,4'-TriCB	37		0,16			
Sum-TriCB			***7,62***			
2,2',4,4'-TetCB	47		0,31	b		
2,2',5,5'-TetCB	**52**		**0,67**	b	75	
2,3',4,4'-TetCB	66		0,15	b		
2,4,4',5-TetCB	74		0,11	b		
Sum-TetCB			***3,03***			
2,2',4,4',5-PenCB	99		0,09	b		
2,2',4,5,5'-PenCB	**101**		**0,24**	b	82	
2,3,3',4,4'-PenCB	105		0,02	b	95	0,00
2,3,4,4',5-PenCB	114	<	0,01		90	0,01
2,3',4,4',5-PenCB	**118**		**0,06**	b	91	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		93	0,00
Sum-PenCB			***0,75***			
2,2',3,3',4,4'-HexCB	128	<	0,01			
2,2',3,4,4',5'-HexCB	**138**		**0,06**	b	96	
2,2',3,4,5,5'-HexCB	141		0,01			
2,2',3,4',5',6-HexCB	149		0,12	b		
2,2',4,4',5,5'-HexCB	**153**		**0,11**	b	91	
2,3,3',4,4',5-HexCB	156	<	0,01		107	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		111	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		107	0,00
Sum-HexCB			***0,52***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	b	100	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,02	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		122	0,00
Sum-HepCB			***0,08***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		108	
Sum 7 PCB			**2,55**			
Sum PCB			***12,0***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 06.10.04

Encl. to measuring report: O-2772
NILU-Sample number: 04/735
Customer: Amap 04
Customers sample ID: 21-23.5.04 0843-1230
: 160-159
Sample type: Air
Sample amount: 1246 m3
Concentration units: pg/m3
Data files: DH668

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		12,3		34	
HCB		67,0		40	
2,2',5-TriCB	18	1,84			
2,4,4'-TriCB	**28**	**1,66**		61	
2,4',5-TriCB	31	1,56			
2',3,4-TriCB	33	1,19			
3,4,4'-TriCB	37	0,19			
Sum-TriCB		***9,27***			
2,2',4,4'-TetCB	47	0,41	b		
2,2',5,5'-TetCB	**52**	**1,00**	b	62	
2,3',4,4'-TetCB	66	0,27			
2,4,4',5-TetCB	74	0,19			
Sum-TetCB		***4,36***			
2,2',4,4',5-PenCB	99	0,22			
2,2',4,5,5'-PenCB	**101**	**0,48**		77	
2,3,3',4,4'-PenCB	105	0,06	b	84	0,01
2,3,4,4',5-PenCB	114	< 0,01		79	0,01
2,3',4,4',5-PenCB	**118**	**0,18**	b	83	0,02
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		84	0,00
Sum-PenCB		***1,74***			
2,2',3,3',4,4'-HexCB	128	0,03			
2,2',3,4,4',5'-HexCB	**138**	**0,16**	b	77	
2,2',3,4,5,5'-HexCB	141	0,03			
2,2',3,4',5',6-HexCB	149	0,23	b		
2,2',4,4',5,5'-HexCB	**153**	**0,21**	b	74	
2,3,3',4,4',5-HexCB	156	0,01		80	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		81	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		81	0,00
Sum-HexCB		***1,13***			
2,2',3,3',4,4',5-HepCB	170	0,02	i		
2,2',3,4,4',5,5'-HepCB	**180**	**0,05**	b	57	
2,2',3,4,4',5',6-HepCB	183	0,02			
2,2',3,4',5,5',6-HepCB	187	0,04	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		56	0,00
Sum-HepCB		***0,20***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		75	
Sum 7 PCB		**3,75**			
Sum PCB		***16,7***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/738
Customer: Amap 04
Customers sample ID: 28-30.5.04 0802-1005
: 160-157
Sample type: Air
Sample amount: 1195 m3
Concentration units: pg/m3
Data files: DH668

Kjeller, 06.10.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		14,8		37	
HCB		70,2		44	
2,2',5-TriCB	18	1,20			
2,4,4'-TriCB	**28**	**1,23**		66	
2,4',5-TriCB	31	1,18			
2',3,4-TriCB	33	0,97			
3,4,4'-TriCB	37	0,16			
Sum-TriCB		***6,82***			
2,2',4,4'-TetCB	47	0,34	b		
2,2',5,5'-TetCB	**52**	**0,63**	b	65	
2,3',4,4'-TetCB	66	0,16	b		
2,4,4',5-TetCB	74	0,11	b		
Sum-TetCB		***2,97***			
2,2',4,4',5-PenCB	99	0,09	b		
2,2',4,5,5'-PenCB	**101**	**0,25**	b	80	
2,3,3',4,4'-PenCB	105	0,02	b	89	0,00
2,3,4,4',5-PenCB	114	< 0,01		84	0,01
2,3',4,4',5-PenCB	**118**	**0,07**	b	87	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		87	0,00
Sum-PenCB		***0,89***			
2,2',3,3',4,4'-HexCB	128	0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,07**	b	79	
2,2',3,4,5,5'-HexCB	141	0,02			
2,2',3,4',5',6-HexCB	149	0,12	b		
2,2',4,4',5,5'-HexCB	**153**	**0,10**	b	76	
2,3,3',4,4',5-HexCB	156	< 0,01		86	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		85	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		88	0,00
Sum-HexCB		***0,53***			
2,2',3,3',4,4',5-HepCB	170	0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,02**	b	57	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,02	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		57	0,00
Sum-HepCB		***0,06***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		77	
Sum 7 PCB		**2,37**			
Sum PCB		***11,3***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/741
Customer: Amap 04
Customers sample ID: 4-6.6.04 0705-0730
: 160-157
Sample type: Air
Sample amount: 1157 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			15,9		35	
HCB			79,5		43	
2,2',5-TriCB	18		1,42			
2,4,4'-TriCB	**28**		**1,70**		64	
2,4',5-TriCB	31		1,63			
2',3,4-TriCB	33		1,31			
3,4,4'-TriCB	37		0,22			
Sum-TriCB			***8,99***			
2,2',4,4'-TetCB	47		0,42	b		
2,2',5,5'-TetCB	**52**		**0,76**	b	63	
2,3',4,4'-TetCB	66		0,21			
2,4,4',5-TetCB	74		0,14			
Sum-TetCB			***3,48***			
2,2',4,4',5-PenCB	99		0,09	b		
2,2',4,5,5'-PenCB	**101**		**0,25**	b	71	
2,3,3',4,4'-PenCB	105		0,02	b	79	0,00
2,3,4,4',5-PenCB	114	<	0,01		70	0,01
2,3',4,4',5-PenCB	**118**		**0,07**	b	78	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		78	0,00
Sum-PenCB			***0,73***			
2,2',3,3',4,4'-HexCB	128		0,01			
2,2',3,4,4',5'-HexCB	**138**		**0,07**	b	77	
2,2',3,4,5,5'-HexCB	141		0,01			
2,2',3,4',5',6-HexCB	149		0,12	b		
2,2',4,4',5,5'-HexCB	**153**		**0,10**	b	72	
2,3,3',4,4',5-HexCB	156	<	0,01		82	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		83	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		80	0,00
Sum-HexCB			***0,52***			
2,2',3,3',4,4',5-HepCB	170		0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	b	71	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,02	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		75	0,00
Sum-HepCB			***0,07***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		81	
Sum 7 PCB			**2,98**			
Sum PCB			***13,8***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/874
Customer: Amap 04
Customers sample ID: 9-11.6.04 0750-0709
: 160-159
Sample type: Air
Sample amount: 1138 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		13,7		38	
HCB		79,6		43	
2,2',5-TriCB	18	1,55			
2,4,4'-TriCB	**28**	**2,06**		69	
2,4',5-TriCB	31	1,95			
2',3,4-TriCB	33	1,64			
3,4,4'-TriCB	37	0,29			
Sum-TriCB		***10,7***			
2,2',4,4'-TetCB	47	0,46	b		
2,2',5,5'-TetCB	**52**	**0,76**	b	67	
2,3',4,4'-TetCB	66	0,23			
2,4,4',5-TetCB	74	0,14			
Sum-TetCB		***3,85***			
2,2',4,4',5-PenCB	99	0,07	b		
2,2',4,5,5'-PenCB	**101**	**0,23**	b	76	
2,3,3',4,4'-PenCB	105	0,02	b	83	0,00
2,3,4,4',5-PenCB	114	< 0,01		74	0,01
2,3',4,4',5-PenCB	**118**	**0,06**	b	83	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		82	0,00
Sum-PenCB		***0,81***			
2,2',3,3',4,4'-HexCB	128	0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,06**	b	81	
2,2',3,4,5,5'-HexCB	141	0,02			
2,2',3,4',5',6-HexCB	149	0,12	b		
2,2',4,4',5,5'-HexCB	**153**	**0,09**	b	76	
2,3,3',4,4',5-HexCB	156	< 0,01		85	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		86	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		84	0,00
Sum-HexCB		***0,46***			
2,2',3,3',4,4',5-HepCB	170	0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,02**	b	72	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,02	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		76	0,00
Sum-HepCB		***0,06***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		85	
Sum 7 PCB		**3,29**			
Sum PCB		***15,9***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 13.10.04

Encl. to measuring report: O-2772
NILU-Sample number: 04/876
Customer: Amap 04
Customers sample ID: 14-16.6.04 0645-0733
: 160-158
Sample type: Air
Sample amount: 1169 m3
Concentration units: pg/m3
Data files: DH669

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			9,30		45	
HCB			63,9		54	
2,2',5-TriCB	18		2,38			
2,4,4'-TriCB	**28**		**3,16**		74	
2,4',5-TriCB	31		2,99			
2',3,4-TriCB	33		2,51			
3,4,4'-TriCB	37		0,42			
Sum-TriCB			***16,5***			
2,2',4,4'-TetCB	47		0,70	b		
2,2',5,5'-TetCB	**52**		**1,18**	b	78	
2,3',4,4'-TetCB	66		0,35			
2,4,4',5-TetCB	74		0,22			
Sum-TetCB			***5,89***			
2,2',4,4',5-PenCB	99		0,13	b		
2,2',4,5,5'-PenCB	**101**		**0,39**	b	82	
2,3,3',4,4'-PenCB	105		0,04	b	84	0,00
2,3,4,4',5-PenCB	114	<	0,01		76	0,01
2,3',4,4',5-PenCB	**118**		**0,12**	b	85	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		83	0,00
Sum-PenCB			***1,38***			
2,2',3,3',4,4'-HexCB	128		0,02			
2,2',3,4,4',5'-HexCB	**138**		**0,10**	b	88	
2,2',3,4,5,5'-HexCB	141		0,02			
2,2',3,4',5',6-HexCB	149		0,17	b		
2,2',4,4',5,5'-HexCB	**153**		**0,15**	b	86	
2,3,3',4,4',5-HexCB	156	<	0,01		87	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		89	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		90	0,00
Sum-HexCB			***0,70***			
2,2',3,3',4,4',5-HepCB	170		0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,03**	b	90	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		88	0,00
Sum-HepCB			***0,10***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		87	
Sum 7 PCB			**5,14**			
Sum PCB			***24,6***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/879
Customer: Amap 04
Customers sample ID: 21-23.6.04 0837-0908
: 160-157
Sample type: Air
Sample amount: 1159 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		8,98		40	
HCB		74,0		47	
2,2',5-TriCB	18	2,14			
2,4,4'-TriCB	**28**	**2,62**		68	
2,4',5-TriCB	31	2,49			
2',3,4-TriCB	33	1,99			
3,4,4'-TriCB	37	0,34			
Sum-TriCB		***13,8***			
2,2',4,4'-TetCB	47	0,63	b		
2,2',5,5'-TetCB	**52**	**1,20**	b	70	
2,3',4,4'-TetCB	66	0,33			
2,4,4',5-TetCB	74	0,21			
Sum-TetCB		***5,63***			
2,2',4,4',5-PenCB	99	0,18	b		
2,2',4,5,5'-PenCB	**101**	**0,48**		72	
2,3,3',4,4'-PenCB	105	0,04	b	74	0,00
2,3,4,4',5-PenCB	114	< 0,01		69	0,01
2,3',4,4',5-PenCB	**118**	**0,13**	b	77	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		75	0,00
Sum-PenCB		***1,69***			
2,2',3,3',4,4'-HexCB	128	0,02			
2,2',3,4,4',5'-HexCB	**138**	**0,12**	b	78	
2,2',3,4,5,5'-HexCB	141	0,03	i		
2,2',3,4',5',6-HexCB	149	0,22	b		
2,2',4,4',5,5'-HexCB	**153**	**0,18**	b	75	
2,3,3',4,4',5-HexCB	156	< 0,01		78	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		78	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		78	0,00
Sum-HexCB		***0,92***			
2,2',3,3',4,4',5-HepCB	170	0,02			
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	75	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		74	0,00
Sum-HepCB		***0,15***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		76	
Sum 7 PCB		**4,77**			
Sum PCB		***22,2***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/882
Customer: Amap 04
Customers sample ID: 28-30.6.04 0712-0734
: 160-158
Sample type: Air
Sample amount: 1159 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		9,52		47	
HCB		69,9		51	
2,2',5-TriCB	18	2,25			
2,4,4'-TriCB	**28**	**3,04**		75	
2,4',5-TriCB	31	2,90			
2',3,4-TriCB	33	2,41			
3,4,4'-TriCB	37	0,40			
Sum-TriCB		***15,8***			
2,2',4,4'-TetCB	47	0,62	b		
2,2',5,5'-TetCB	**52**	**1,06**	b	74	
2,3',4,4'-TetCB	66	0,30			
2,4,4',5-TetCB	74	0,18			
Sum-TetCB		***5,27***			
2,2',4,4',5-PenCB	99	0,11	b		
2,2',4,5,5'-PenCB	**101**	**0,36**	b	81	
2,3,3',4,4'-PenCB	105	0,03	b	81	0,00
2,3,4,4',5-PenCB	114	< 0,01		74	0,01
2,3',4,4',5-PenCB	**118**	**0,10**	b	83	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		82	0,00
Sum-PenCB		***1,07***			
2,2',3,3',4,4'-HexCB	128	0,02			
2,2',3,4,4',5'-HexCB	**138**	**0,08**	b	78	
2,2',3,4,5,5'-HexCB	141	0,02	i		
2,2',3,4',5',6-HexCB	149	0,16	b		
2,2',4,4',5,5'-HexCB	**153**	**0,12**	b	77	
2,3,3',4,4',5-HexCB	156	< 0,01		78	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		80	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		79	0,00
Sum-HexCB		***0,62***			
2,2',3,3',4,4',5-HepCB	170	0,02			
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	75	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,02	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		74	0,00
Sum-HepCB		***0,11***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		76	
Sum 7 PCB		**4,79**			
Sum PCB		***22,9***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/885
Customer: Amap 04
Customers sample ID: 5-7.7.04 0740-0725
: 160-157
Sample type: Air
Sample amount: 1140 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		8,73		42	
HCB		66,7		48	
2,2',5-TriCB	18	3,09			
2,4,4'-TriCB	**28**	**4,11**		72	
2,4',5-TriCB	31	3,94			
2',3,4-TriCB	33	3,25			
3,4,4'-TriCB	37	0,53			
Sum-TriCB		***21,4***			
2,2',4,4'-TetCB	47	0,98	b		
2,2',5,5'-TetCB	**52**	**1,48**		70	
2,3',4,4'-TetCB	66	0,43			
2,4,4',5-TetCB	74	0,27			
Sum-TetCB		***7,37***			
2,2',4,4',5-PenCB	99	0,18	b		
2,2',4,5,5'-PenCB	**101**	**0,55**		80	
2,3,3',4,4'-PenCB	105	0,04	b	89	0,00
2,3,4,4',5-PenCB	114	< 0,01		80	0,01
2,3',4,4',5-PenCB	**118**	**0,14**	b	88	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		88	0,00
Sum-PenCB		***1,76***			
2,2',3,3',4,4'-HexCB	128	0,02			
2,2',3,4,4',5'-HexCB	**138**	**0,12**	b	85	
2,2',3,4,5,5'-HexCB	141	0,03			
2,2',3,4',5',6-HexCB	149	0,22	b		
2,2',4,4',5,5'-HexCB	**153**	**0,17**	b	80	
2,3,3',4,4',5-HexCB	156	< 0,01		89	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		92	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		89	0,00
Sum-HexCB		***0,96***			
2,2',3,3',4,4',5-HepCB	170	0,02			
2,2',3,4,4',5,5'-HepCB	**180**	**0,04**	b	85	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		91	0,00
Sum-HepCB		***0,16***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		90	
Sum 7 PCB		**6,62**			
Sum PCB		***31,7***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/888
Customer: Amap 04
Customers sample ID: 12-14.7.04 0817-0742
: 160-157
Sample type: Air
Sample amount: 1135 m3
Concentration units: pg/m3
Data files: DH669

Kjeller, 13.10.04

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		7,70		42	
HCB		57,9		48	
2,2',5-TriCB	18	2,17			
2,4,4'-TriCB	**28**	**2,82**		73	
2,4',5-TriCB	31	2,71			
2',3,4-TriCB	33	2,25			
3,4,4'-TriCB	37	0,43			
Sum-TriCB		***14,8***			
2,2',4,4'-TetCB	47	0,63	b		
2,2',5,5'-TetCB	**52**	**1,10**	b	72	
2,3',4,4'-TetCB	66	0,33			
2,4,4',5-TetCB	74	0,21			
Sum-TetCB		***5,41***			
2,2',4,4',5-PenCB	99	0,16	b		
2,2',4,5,5'-PenCB	**101**	**0,49**		81	
2,3,3',4,4'-PenCB	105	0,05	b	88	0,00
2,3,4,4',5-PenCB	114	< 0,01		81	0,01
2,3',4,4',5-PenCB	**118**	**0,14**	b	89	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		88	0,00
Sum-PenCB		***1,81***			
2,2',3,3',4,4'-HexCB	128	0,03	i		
2,2',3,4,4',5'-HexCB	**138**	**0,13**	b	84	
2,2',3,4,5,5'-HexCB	141	0,03			
2,2',3,4',5',6-HexCB	149	0,21	b		
2,2',4,4',5,5'-HexCB	**153**	**0,16**	b	81	
2,3,3',4,4',5-HexCB	156	0,02		89	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		90	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		89	0,00
Sum-HexCB		***0,93***			
2,2',3,3',4,4',5-HepCB	170	0,03			
2,2',3,4,4',5,5'-HepCB	**180**	**0,05**	b	87	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		93	0,00
Sum-HepCB		***0,18***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		89	
Sum 7 PCB		**4,90**			
Sum PCB		***23,2***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/1184
Customer: Amap 04
Customers sample ID: 19-21.7.04 0724-0727
: 160-156
Sample type: Air
Sample amount: 1142 m3
Concentration units: pg/m3
Data files: M_14-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			11,0		34	
HCB			63,7		41	
2,2',5-TriCB	18		5,46			
2,4,4'-TrICB	**28**		**7,20**		56	
2,4',5-TriCB	31		6,81			
2',3,4-TriCB	33		5,82			
3,4,4'-TriCB	37		1,05			
Sum-TriCB			***37,7***			
2,2',4,4'-TetCB	47		1,55			
2,2',5,5'-TetCB	**52**		**2,37**		60	
2,3',4,4'-TetCB	66		0,74			
2,4,4',5-TetCB	74		0,43			
Sum-TetCB			***12,0***			
2,2',4,4',5-PenCB	99		0,19	b		
2,2',4,5,5'-PenCB	**101**		**0,66**		71	
2,3,3',4,4'-PenCB	105		0,04	b	73	0,00
2,3,4,4',5-PenCB	114	<	0,01		70	0,01
2,3',4,4',5-PenCB	**118**		**0,15**	b	72	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		68	0,00
Sum-PenCB			***2,01***			
2,2',3,3',4,4'-HexCB	128		0,02			
2,2',3,4,4',5'-HexCB	**138**		**0,12**	b	75	
2,2',3,4,5,5'-HexCB	141		0,03			
2,2',3,4',5',6-HexCB	149		0,25	b		
2,2',4,4',5,5'-HexCB	**153**		**0,18**	b	67	
2,3,3',4,4',5-HexCB	156		0,01		79	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		78	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		74	0,00
Sum-HexCB			***1,05***			
2,2',3,3',4,4',5-HepCB	170		0,03			
2,2',3,4,4',5,5'-HepCB	**180**		**0,05**	b	74	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		78	0,00
Sum-HepCB			***0,21***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		70	
Sum 7 PCB			**10,7**			
Sum PCB			***53,0***			0,04

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/1187
Customer: Amap 04
Customers sample ID: 26-28.7.04 0713-0633
: 160-155
Sample type: Air
Sample amount: 1123 m3
Concentration units: pg/m3
Data files: M_14-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		11,6		35	
HCB		56,8		44	
2,2',5-TriCB	18	8,69			
2,4,4'-TriCB	**28**	**11,3**		59	
2,4',5-TriCB	31	10,8			
2',3,4-TriCB	33	8,96			
3,4,4'-TriCB	37	1,61			
Sum-TriCB		***59,1***			
2,2',4,4'-TetCB	47	2,34			
2,2',5,5'-TetCB	**52**	**3,83**		64	
2,3',4,4'-TetCB	66	1,23			
2,4,4',5-TetCB	74	0,75			
Sum-TetCB		***19,3***			
2,2',4,4',5-PenCB	99	0,45			
2,2',4,5,5'-PenCB	**101**	**1,31**		77	
2,3,3',4,4'-PenCB	105	0,11	b	78	0,01
2,3,4,4',5-PenCB	114	< 0,01		76	0,01
2,3',4,4',5-PenCB	**118**	**0,37**		77	0,04
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		74	0,00
Sum-PenCB		***4,36***			
2,2',3,3',4,4'-HexCB	128	0,05			
2,2',3,4,4',5'-HexCB	**138**	**0,31**	b	84	
2,2',3,4,5,5'-HexCB	141	0,07			
2,2',3,4',5',6-HexCB	149	0,59			
2,2',4,4',5,5'-HexCB	**153**	**0,42**	b	73	
2,3,3',4,4',5-HexCB	156	0,02		83	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		82	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		80	0,00
Sum-HexCB		***2,44***			
2,2',3,3',4,4',5-HepCB	170	0,05			
2,2',3,4,4',5,5'-HepCB	**180**	**0,09**	b	79	
2,2',3,4,4',5',6-HepCB	183	0,03			
2,2',3,4',5,5',6-HepCB	187	0,07	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		83	0,00
Sum-HepCB		***0,43***			
2,2',3,3',4,4',5,5'-OctCB	194	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		75	
Sum 7 PCB		**17,6**			
Sum PCB		***85,7***			0,07

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 05/1190
Customer: Amap 04
Customers sample ID: 2-4.8.04 0842-0905
: 160-155
Sample type: Air
Sample amount: 1150 m3
Concentration units: pg/m3
Data files: M_14-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			10,2		34	
HCB			73,9		43	
2,2',5-TriCB	18		1,74			
2,4,4'-TriCB	**28**		**2,16**		57	
2,4',5-TriCB	31		2,07			
2',3,4-TriCB	33		1,72			
3,4,4'-TriCB	37		0,32			
Sum-TriCB			***11,3***			
2,2',4,4'-TetCB	47		0,59	b		
2,2',5,5'-TetCB	**52**		**0,88**	b	60	
2,3',4,4'-TetCB	66		0,26			
2,4,4',5-TetCB	74		0,15			
Sum-TetCB			***4,18***			
2,2',4,4',5-PenCB	99		0,10	b		
2,2',4,5,5'-PenCB	**101**		**0,33**	b	71	
2,3,3',4,4'-PenCB	105		0,02	b	76	0,00
2,3,4,4',5-PenCB	114	<	0,01		73	0,01
2,3',4,4',5-PenCB	**118**		**0,08**	b	74	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		72	0,00
Sum-PenCB			***0,99***			
2,2',3,3',4,4'-HexCB	128		0,01			
2,2',3,4,4',5'-HexCB	**138**		**0,07**	b	73	
2,2',3,4,5,5'-HexCB	141		0,02			
2,2',3,4',5',6-HexCB	149		0,13	b		
2,2',4,4',5,5'-HexCB	**153**		**0,10**	b	70	
2,3,3',4,4',5-HexCB	156	<	0,01		77	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		78	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		76	0,00
Sum-HexCB			***0,56***			
2,2',3,3',4,4',5-HepCB	170		0,02			
2,2',3,4,4',5,5'-HepCB	**180**		**0,03**	b	77	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,02	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		83	0,00
Sum-HepCB			***0,11***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		71	
Sum 7 PCB			**3,64**			
Sum PCB			***17,2***			0,03

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 17.02.05

Encl. to measuring report: O-2772
NILU-Sample number: 04/1193
Customer: Amap 04
Customers sample ID: 9-11.8.04 0705-0758
: 160-156
Sample type: Air
Sample amount: 1164 m3
Concentration units: pg/m3
Data files: M_15-02-05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			15,0		27	
HCB			70,5		31	
2,2',5-TriCB	18		2,43			
2,4,4'-TriCB	**28**		**3,08**		44	
2,4',5-TriCB	31		2,96			
2',3,4-TriCB	33		2,50			
3,4,4'-TriCB	37		0,39			
Sum-TriCB			***16,2***			
2,2',4,4'-TetCB	47		0,66	b		
2,2',5,5'-TetCB	**52**		**1,12**	b	48	
2,3',4,4'-TetCB	66		0,32			
2,4,4',5-TetCB	74		0,19			
Sum-TetCB			***5,33***			
2,2',4,4',5-PenCB	99		0,11	b		
2,2',4,5,5'-PenCB	**101**		**0,36**	b	59	
2,3,3',4,4'-PenCB	105		0,02	b	50	0,00
2,3,4,4',5-PenCB	114	<	0,01		49	0,01
2,3',4,4',5-PenCB	**118**		**0,08**	b	52	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		50	0,00
Sum-PenCB			***1,09***			
2,2',3,3',4,4'-HexCB	128		0,01			
2,2',3,4,4',5'-HexCB	**138**		**0,08**	b	51	
2,2',3,4,5,5'-HexCB	141		0,02			
2,2',3,4',5',6-HexCB	149		0,17	b		
2,2',4,4',5,5'-HexCB	**153**		**0,12**	b	48	
2,3,3',4,4',5-HexCB	156	<	0,01		55	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		54	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		51	0,00
Sum-HexCB			***0,67***			
2,2',3,3',4,4',5-HepCB	170		0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	b	52	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		54	0,00
Sum-HepCB			***0,12***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		59	
Sum 7 PCB			**4,86**			
Sum PCB			***23,4***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/1196
Customer: Amap 04
Customers sample ID: 16-18.8.04 0746-0853
: 160-159
Sample type: Air
Sample amount: 1181 m3
Concentration units: pg/m3
Data files: M_15-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			12,6		29	
HCB			71,9		36	
2,2',5-TriCB	18		1,37			
2,4,4'-TriCB	**28**		**1,66**		51	
2,4',5-TriCB	31		1,64			
2',3,4-TriCB	33		1,38			
3,4,4'-TriCB	37		0,24			
Sum-TriCB			***8,96***			
2,2',4,4'-TetCB	47		0,37	b		
2,2',5,5'-TetCB	**52**		**0,64**	b	55	
2,3',4,4'-TetCB	66		0,20			
2,4,4',5-TetCB	74		0,12	b		
Sum-TetCB			***3,09***			
2,2',4,4',5-PenCB	99		0,07	b		
2,2',4,5,5'-PenCB	**101**		**0,25**	b	68	
2,3,3',4,4'-PenCB	105		0,02	b	63	0,00
2,3,4,4',5-PenCB	114	<	0,01		62	0,01
2,3',4,4',5-PenCB	**118**		**0,07**	b	64	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		62	0,00
Sum-PenCB			***0,73***			
2,2',3,3',4,4'-HexCB	128	<	0,01			
2,2',3,4,4',5'-HexCB	**138**		**0,05**	b	65	
2,2',3,4,5,5'-HexCB	141		0,01			
2,2',3,4',5',6-HexCB	149		0,12	b		
2,2',4,4',5,5'-HexCB	**153**		**0,08**	b	60	
2,3,3',4,4',5-HexCB	156	<	0,01		70	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		70	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		65	0,00
Sum-HexCB			***0,44***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,01**	b	66	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,02	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		72	0,00
Sum-HepCB			***0,06***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		74	
Sum 7 PCB			**2,77**			
Sum PCB			***13,3***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value. This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 17.02.05

Encl. to measuring report: O-2772
NILU-Sample number: 04/1198
Customer: Amap 04
Customers sample ID: 23-25.8.04 0738-0659
: 160-160
Sample type: Air
Sample amount: 1140 m3
Concentration units: pg/m3
Data files: M_15-02-05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		9,11		25	
HCB		68,7		34	
2,2',5-TriCB	18	1,47			
2,4,4'-TriCB	**28**	**2,05**		50	
2,4',5-TriCB	31	2,00			
2',3,4-TriCB	33	1,70			
3,4,4'-TriCB	37	0,31			
Sum-TriCB		***10,6***			
2,2',4,4'-TetCB	47	0,46	b		
2,2',5,5'-TetCB	**52**	**0,83**	b	58	
2,3',4,4'-TetCB	66	0,30			
2,4,4',5-TetCB	74	0,16			
Sum-TetCB		***3,98***			
2,2',4,4',5-PenCB	99	0,10	b		
2,2',4,5,5'-PenCB	**101**	**0,35**	b	74	
2,3,3',4,4'-PenCB	105	0,03	b	68	0,00
2,3,4,4',5-PenCB	114	< 0,01		69	0,01
2,3',4,4',5-PenCB	**118**	**0,11**	b	76	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		68	0,00
Sum-PenCB		***1,15***			
2,2',3,3',4,4'-HexCB	128	0,02			
2,2',3,4,4',5'-HexCB	**138**	**0,09**	b	69	
2,2',3,4,5,5'-HexCB	141	0,02			
2,2',3,4',5',6-HexCB	149	0,19	b		
2,2',4,4',5,5'-HexCB	**153**	**0,14**	b	69	
2,3,3',4,4',5-HexCB	156	0,01		68	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		63	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01	i	64	0,00
Sum-HexCB		***0,75***			
2,2',3,3',4,4',5-HepCB	170	0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	58	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,04	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		49	0,00
Sum-HepCB		***0,17***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		49	
Sum 7 PCB		**3,59**			
Sum PCB		***16,7***			0,03

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/1203
Customer: Amap 04
Customers sample ID: 30.8-1.9.04 0642-0741
: 160-159
Sample type: Air
Sample amount: 1178 m3
Concentration units: pg/m3
Data files: M_240205

Kjeller, 01.03.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		12,3		34	
HCB		70,0		41	
2,2',5-TriCB	18	1,31			
2,4,4'-TriCB	**28**	**1,54**		58	
2,4',5-TriCB	31	1,49			
2',3,4-TriCB	33	1,20			
3,4,4'-TriCB	37	0,19	b		
Sum-TriCB		***8,08***			
2,2',4,4'-TetCB	47	0,48	b		
2,2',5,5'-TetCB	**52**	**0,69**	b	59	
2,3',4,4'-TetCB	66	0,18	b		
2,4,4',5-TetCB	74	0,12	b		
Sum-TetCB		***3,15***			
2,2',4,4',5-PenCB	99	0,10	b		
2,2',4,5,5'-PenCB	**101**	**0,32**	b	60	
2,3,3',4,4'-PenCB	105	0,03	b	55	0,00
2,3,4,4',5-PenCB	114	< 0,01		56	0,01
2,3',4,4',5-PenCB	**118**	**0,09**	b	57	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		57	0,00
Sum-PenCB		***1,09***			
2,2',3,3',4,4'-HexCB	128	0,02	b		
2,2',3,4,4',5'-HexCB	**138**	**0,09**	b	52	
2,2',3,4,5,5'-HexCB	141	0,02	b		
2,2',3,4',5',6-HexCB	149	0,18	b		
2,2',4,4',5,5'-HexCB	**153**	**0,13**	b	54	
2,3,3',4,4',5-HexCB	156	< 0,01		45	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		44	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		46	0,00
Sum-HexCB		***0,71***			
2,2',3,3',4,4',5-HepCB	170	0,02	b		
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	42	
2,2',3,4,4',5',6-HepCB	183	0,01	b		
2,2',3,4',5,5',6-HepCB	187	0,04	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		34 g	0,00
Sum-HepCB		***0,14***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		27 g	
Sum 7 PCB		**2,89**			
Sum PCB		***13,2***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 01.03.05

Encl. to measuring report: O-2772
NILU-Sample number: 04/1206
Customer: Amap 04
Customers sample ID: 6-8.9.04 0933-0745
: 160-164
Sample type: Air
Sample amount: 1127 m3
Concentration units: pg/m3
Data files: M_240205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		16,6		27	
HCB		66,6		32	
2,2',5-TriCB	18	1,50			
2,4,4'-TriCB	**28**	**1,81**		46	
2,4',5-TriCB	31	1,71			
2',3,4-TriCB	33	1,43			
3,4,4'-TriCB	37	0,25	b		
Sum-TriCB		***9,46***			
2,2',4,4'-TetCB	47	0,38	b		
2,2',5,5'-TetCB	**52**	**0,65**	b	49	
2,3',4,4'-TetCB	66	0,19	b		
2,4,4',5-TetCB	74	0,11	b		
Sum-TetCB		***3,04***			
2,2',4,4',5-PenCB	99	0,07	b		
2,2',4,5,5'-PenCB	**101**	**0,21**	b	57	
2,3,3',4,4'-PenCB	105	0,01	b	68	0,00
2,3,4,4',5-PenCB	114	< 0,01		65	0,01
2,3',4,4',5-PenCB	**118**	**0,05**	b	66	0,00
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		64	0,00
Sum-PenCB		***0,62***			
2,2',3,3',4,4'-HexCB	128	< 0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,05**	b	69	
2,2',3,4,5,5'-HexCB	141	0,01	b		
2,2',3,4',5',6-HexCB	149	0,09	b		
2,2',4,4',5,5'-HexCB	**153**	**0,07**	b	66	
2,3,3',4,4',5-HexCB	156	< 0,01		71	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		69	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		69	0,00
Sum-HexCB		***0,38***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,01**	b	69	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,02	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		67	0,00
Sum-HepCB		***0,06***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01	i	66	
Sum 7 PCB		**2,85**			
Sum PCB		***13,6***			**0,02**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/1513
Customer: Amap 04
Customers sample ID: 15-17.9.04 0755-1812
: 160-160
Sample type: Air
Sample amount: 1405 m3
Concentration units: pg/m3
Data files: M_15-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		13,6		31	
HCB		72,2		38	
2,2',5-TriCB	18	1,17			
2,4,4'-TriCB	**28**	**1,21**		52	
2,4',5-TriCB	31	1,14			
2',3,4-TriCB	33	0,88			
3,4,4'-TriCB	37	0,14			
Sum-TriCB		***6,48***			
2,2',4,4'-TetCB	47	0,27	b		
2,2',5,5'-TetCB	**52**	**0,60**	b	59	
2,3',4,4'-TetCB	66	0,16	b		
2,4,4',5-TetCB	74	0,10	b		
Sum-TetCB		***2,56***			
2,2',4,4',5-PenCB	99	0,09	b		
2,2',4,5,5'-PenCB	**101**	**0,25**	b	70	
2,3,3',4,4'-PenCB	105	0,02	b	73	0,00
2,3,4,4',5-PenCB	114	< 0,01		69	0,01
2,3',4,4',5-PenCB	**118**	**0,06**	b	71	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		70	0,00
Sum-PenCB		***0,77***			
2,2',3,3',4,4'-HexCB	128	< 0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,06**	b	78	
2,2',3,4,5,5'-HexCB	141	0,01			
2,2',3,4',5',6-HexCB	149	0,14	b		
2,2',4,4',5,5'-HexCB	**153**	**0,09**	b	71	
2,3,3',4,4',5-HexCB	156	< 0,01		79	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		78	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		75	0,00
Sum-HexCB		***0,51***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,01**	b	77	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,02	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		76	0,00
Sum-HepCB		***0,09***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		74	
Sum 7 PCB		**2,29**			
Sum PCB		***10,4***			**0,02**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/1515
Customer: Amap 04
Customers sample ID: 20-22.9.04 0841-0712
: 160-160
Sample type: Air
Sample amount: 1121 m3
Concentration units: pg/m3
Data files: M_15-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3	Recovery %	TE (WHO) fg/g
PeCB			11,5	37	
HCB			60,5	45	
2,2',5-TriCB	18		1,28		
2,4,4'-TriCB	**28**		**1,50**	63	
2,4',5-TriCB	31		1,39		
2',3,4-TriCB	33		1,14		
3,4,4'-TriCB	37		0,21		
Sum-TriCB			***7,89***		
2,2',4,4'-TetCB	47		0,30		
2,2',5,5'-TetCB	**52**		**0,66**	72	
2,3',4,4'-TetCB	66		0,21		
2,4,4',5-TetCB	74		0,12		
Sum-TetCB			***2,98***		
2,2',4,4',5-PenCB	99		0,09		
2,2',4,5,5'-PenCB	**101**		**0,28**	90	
2,3,3',4,4'-PenCB	105		0,02	83	0,00
2,3,4,4',5-PenCB	114	<	0,01	84	0,01
2,3',4,4',5-PenCB	**118**		**0,08**	87	0,01
2'3,3',4,5-PenCB	122	<	0,01		
2',3,4,4',5-PenCB	123	<	0,01	91	0,00
Sum-PenCB			***0,88***		
2,2',3,3',4,4'-HexCB	128	<	0,01		
2,2',3,4,4',5'-HexCB	**138**		**0,06**	86	
2,2',3,4,5,5'-HexCB	141		0,01		
2,2',3,4',5',6-HexCB	149		0,13		
2,2',4,4',5,5'-HexCB	**153**		**0,09**	82	
2,3,3',4,4',5-HexCB	156	<	0,01	95	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01	93	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01	94	0,00
Sum-HexCB			***0,50***		
2,2',3,3',4,4',5-HepCB	170	<	0,01		
2,2',3,4,4',5,5'-HepCB	**180**		**0,01**	91	
2,2',3,4,4',5',6-HepCB	183		0,01		
2,2',3,4',5,5',6-HepCB	187		0,02		
2,3,3',4,4',5,5'-HepCB	189	<	0,01	90	0,00
Sum-HepCB			***0,08***		
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01		
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01		
DecaCB	209	<	0,01	85	
Sum 7 PCB			**2,68**		
Sum PCB			***12,4***		**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/1520
Customer: Amap 04
Customers sample ID: 1-3.10.04 0737-0958
: 160-162
Sample type: Air
Sample amount: 1220 m3
Concentration units: pg/m3
Data files: M_15-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			10,7		29	
HCB			58,4		36	
2,2',5-TriCB	18		1,54			
2,4,4'-TriCB	**28**		**1,64**		54	
2,4',5-TriCB	31		1,56			
2',3,4-TriCB	33		1,27			
3,4,4'-TriCB	37		0,23			
Sum-TriCB			***8,92***			
2,2',4,4'-TetCB	47		0,39	b		
2,2',5,5'-TetCB	**52**		**0,80**	b	59	
2,3',4,4'-TetCB	66		0,24			
2,4,4',5-TetCB	74		0,14			
Sum-TetCB			***3,61***			
2,2',4,4',5-PenCB	99		0,11	b		
2,2',4,5,5'-PenCB	**101**		**0,32**	b	77	
2,3,3',4,4'-PenCB	105		0,03	b	70	0,00
2,3,4,4',5-PenCB	114	<	0,01		68	0,01
2,3',4,4',5-PenCB	**118**		**0,09**	b	71	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		69	0,00
Sum-PenCB			***1,01***			
2,2',3,3',4,4'-HexCB	128		0,02			
2,2',3,4,4',5'-HexCB	**138**		**0,09**	b	74	
2,2',3,4,5,5'-HexCB	141		0,02			
2,2',3,4',5',6-HexCB	149		0,17	b		
2,2',4,4',5,5'-HexCB	**153**		**0,13**	b	66	
2,3,3',4,4',5-HexCB	156	<	0,01		79	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		79	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		74	0,00
Sum-HexCB			***0,71***			
2,2',3,3',4,4',5-HepCB	170		0,02			
2,2',3,4,4',5,5'-HepCB	**180**		**0,03**	b	77	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		75	0,00
Sum-HepCB			***0,15***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		76	
Sum 7 PCB			**3,11**			
Sum PCB			***14,4***			0,03

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

325

Encl. to measuring report: O-2772
NILU-Sample number: 04/1523
Customer: Amap 04
Customers sample ID: 8-11.10.04 1321-0655
: 160-(145-150)
Sample type: Air
Sample amount: 1476 m3
Concentration units: pg/m3
Data files: M_15-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			18,2		29	
HCB			68,1		35	
2,2',5-TriCB	18		1,43			
2,4,4'-TriCB	**28**		**1,17**		48	
2,4',5-TriCB	31		1,09			
2',3,4-TriCB	33		0,74			
3,4,4'-TriCB	37		0,12			
Sum-TriCB			***6,50***			
2,2',4,4'-TetCB	47		0,31	b		
2,2',5,5'-TetCB	**52**		**0,77**	b	53	
2,3',4,4'-TetCB	66		0,21			
2,4,4',5-TetCB	74		0,14			
Sum-TetCB			***3,20***			
2,2',4,4',5-PenCB	99		0,14	b		
2,2',4,5,5'-PenCB	**101**		**0,37**	b	66	
2,3,3',4,4'-PenCB	105		0,03	b	63	0,00
2,3,4,4',5-PenCB	114	<	0,01		61	0,01
2,3',4,4',5-PenCB	**118**		**0,11**	b	62	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		61	0,00
Sum-PenCB			***1,18***			
2,2',3,3',4,4'-HexCB	128		0,01			
2,2',3,4,4',5'-HexCB	**138**		**0,10**	b	65	
2,2',3,4,5,5'-HexCB	141		0,02			
2,2',3,4',5',6-HexCB	149		0,21	b		
2,2',4,4',5,5'-HexCB	**153**		**0,15**	b	60	
2,3,3',4,4',5-HexCB	156	<	0,01		69	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		68	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		68	0,00
Sum-HexCB			***0,79***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	b	67	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		65	0,00
Sum-HepCB			***0,14***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		67	
Sum 7 PCB			**2,69**			
Sum PCB			***11,8***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/1525
Customer: Amap 04
Customers sample ID: 13-15.10.04 0757-0727
: 160-164
Sample type: pg/m3
Sample amount: 1159 m3
Concentration units: pg/m3
Data files: M_15-02-05

Kjeller, 17.02.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		24,1		30	
HCB		67,8		38	
2,2',5-TriCB	18	1,44			
2,4,4'-TriCB	**28**	**1,17**		51	
2,4',5-TriCB	31	1,09			
2',3,4-TriCB	33	0,77			
3,4,4'-TriCB	37	0,11			
Sum-TriCB		***6,49***			
2,2',4,4'-TetCB	47	0,29	b		
2,2',5,5'-TetCB	**52**	**0,69**	b	56	
2,3',4,4'-TetCB	66	0,18	b		
2,4,4',5-TetCB	74	0,12	b		
Sum-TetCB		***2,87***			
2,2',4,4',5-PenCB	99	0,11	b		
2,2',4,5,5'-PenCB	**101**	**0,30**	b	72	
2,3,3',4,4'-PenCB	105	0,02	b	59	0,00
2,3,4,4',5-PenCB	114	< 0,01		60	0,01
2,3',4,4',5-PenCB	**118**	**0,08**	b	64	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		63	0,00
Sum-PenCB		***0,99***			
2,2',3,3',4,4'-HexCB	128	0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,07**	b	61	
2,2',3,4,5,5'-HexCB	141	0,02	i		
2,2',3,4',5',6-HexCB	149	0,17	b		
2,2',4,4',5,5'-HexCB	**153**	**0,11**	b	56	
2,3,3',4,4',5-HexCB	156	< 0,01		64	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		64	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		60	0,00
Sum-HexCB		***0,63***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,02**	b	60	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,02	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		66	0,00
Sum-HepCB		***0,09***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		73	
Sum 7 PCB		**2,43**			
Sum PCB		***11,1***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Encl. to measuring report: O-2772
NILU-Sample number: 04/1529
Customer: Amap 04
Customers sample ID: 22-24.10.04 0815-1315
: 160-160
Sample type: Air
Sample amount: 1277 m3
Concentration units: pg/m3
Data files: M_160205

Kjeller, 24.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			23,3		37	
HCB			58,5		49	
2,2',5-TriCB	18		2,18			
2,4,4'-TriCB	**28**		**2,17**		63	
2,4',5-TriCB	31		2,07			
2',3,4-TriCB	33		1,60			
3,4,4'-TriCB	37		0,24			
Sum-TriCB			***11,8***			
2,2',4,4'-TetCB	47		0,50	b		
2,2',5,5'-TetCB	**52**		**0,95**		71	
2,3',4,4'-TetCB	66		0,23			
2,4,4',5-TetCB	74		0,16			
Sum-TetCB			***4,11***			
2,2',4,4',5-PenCB	99		0,15			
2,2',4,5,5'-PenCB	**101**		**0,37**		70	
2,3,3',4,4'-PenCB	105		0,03	b	65	0,00
2,3,4,4',5-PenCB	114	<	0,01		64	0,01
2,3',4,4',5-PenCB	**118**		**0,11**	b	70	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		72	0,00
Sum-PenCB			***1,28***			
2,2',3,3',4,4'-HexCB	128		0,01			
2,2',3,4,4',5'-HexCB	**138**		**0,08**	b	58	
2,2',3,4,5,5'-HexCB	141		0,02	b		
2,2',3,4',5',6-HexCB	149		0,18			
2,2',4,4',5,5'-HexCB	**153**		**0,15**	b	63	
2,3,3',4,4',5-HexCB	156	<	0,01		57	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		55	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		61	0,00
Sum-HexCB			***0,73***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	b	54	
2,2',3,4,4',5',6-HepCB	183		0,01			
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		42	0,00
Sum-HepCB			***0,14***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		33	
Sum 7 PCB			**3,84**			
Sum PCB			***18,1***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 04/1532
Customer: Amap 04
Customers sample ID: 29-31.10.04 0828-1015
: 160-145
Sample type: Air
Sample amount: 1145 m3
Concentration units: pg/m3
Data files: M_160205

Kjeller, 24.02.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		20,7		28	
HCB		56,8		36	
2,2',5-TriCB	18	1,40			
2,4,4'-TriCB	**28**	**1,26**		50	
2,4',5-TriCB	31	1,19			
2',3,4-TriCB	33	0,85			
3,4,4'-TriCB	37	0,14			
Sum-TriCB		***6,86***			
2,2',4,4'-TetCB	47	0,44	b		
2,2',5,5'-TetCB	**52**	**0,74**		57	
2,3',4,4'-TetCB	66	0,19	b		
2,4,4',5-TetCB	74	0,12	b		
Sum-TetCB		***3,17***			
2,2',4,4',5-PenCB	99	0,12			
2,2',4,5,5'-PenCB	**101**	**0,33**	b	65	
2,3,3',4,4'-PenCB	105	0,03	b	73	0,00
2,3,4,4',5-PenCB	114	< 0,01		68	0,01
2,3',4,4',5-PenCB	**118**	**0,09**	b	73	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		71	0,00
Sum-PenCB		***1,07***			
2,2',3,3',4,4'-HexCB	128	0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,09**	b	71	
2,2',3,4,5,5'-HexCB	141	0,02	b		
2,2',3,4',5',6-HexCB	149	0,17			
2,2',4,4',5,5'-HexCB	**153**	**0,13**	b	71	
2,3,3',4,4',5-HexCB	156	< 0,01		78	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		76	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		77	0,00
Sum-HexCB		***0,69***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	78	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		72	0,00
Sum-HepCB		***0,13***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		67	
Sum 7 PCB		**2,67**			
Sum PCB		***12,0***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value. This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 24.02.05

Encl. to measuring report: O-2772
NILU-Sample number: 05/4
Customer: Amap 04
Customers sample ID: 3-5.11.04 0812-0833
: 160-150
Sample type: Air
Sample amount: 1130 m3
Concentration units: pg/m3
Data files: M_160205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		24,4		29	
HCB		56,6		37	
2,2',5-TriCB	18	1,81			
2,4,4'-TriCB	**28**	**1,57**		49	
2,4',5-TriCB	31	1,49			
2',3,4-TriCB	33	1,10			
3,4,4'-TriCB	37	0,17			
Sum-TriCB		***8,82***			
2,2',4,4'-TetCB	47	0,58	b		
2,2',5,5'-TetCB	**52**	**0,87**		54	
2,3',4,4'-TetCB	66	0,22			
2,4,4',5-TetCB	74	0,15			
Sum-TetCB		***3,89***			
2,2',4,4',5-PenCB	99	0,14			
2,2',4,5,5'-PenCB	**101**	**0,37**		59	
2,3,3',4,4'-PenCB	105	0,03	b	67	0,00
2,3,4,4',5-PenCB	114	< 0,01		63	0,01
2,3',4,4',5-PenCB	**118**	**0,10**	b	66	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		66	0,00
Sum-PenCB		***1,17***			
2,2',3,3',4,4'-HexCB	128	0,01			
2,2',3,4,4',5'-HexCB	**138**	**0,08**	b	64	
2,2',3,4,5,5'-HexCB	141	0,02	b		
2,2',3,4',5',6-HexCB	149	0,16	b		
2,2',4,4',5,5'-HexCB	**153**	**0,13**	b	65	
2,3,3',4,4',5-HexCB	156	< 0,01		69	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		68	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		68	0,00
Sum-HexCB		***0,69***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,02**	b	67	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		60	0,00
Sum-HepCB		***0,11***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		59	
Sum 7 PCB		**3,13**			
Sum PCB		***14,7***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value. This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

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Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 05/7
Customer: Amap 04
Customers sample ID: 10-12.11.04 0832-0934
: 160-155
Sample type: Air
Sample amount: 1164 m3
Concentration units: pg/m3
Data files: M_160205

Kjeller, 24.02.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			25,0		29	
HCB			54,0		37	
2,2',5-TriCB	18		2,06			
2,4,4'-TriCB	**28**		**1,43**		52	
2,4',5-TriCB	31		1,29			
2',3,4-TriCB	33		0,92			
3,4,4'-TriCB	37		0,18	b		
Sum-TriCB			***8,57***			
2,2',4,4'-TetCB	47		0,45	b		
2,2',5,5'-TetCB	**52**		**0,91**	b	58	
2,3',4,4'-TetCB	66		0,27	b		
2,4,4',5-TetCB	74		0,17	b		
Sum-TetCB			***3,96***			
2,2',4,4',5-PenCB	99		0,19	b		
2,2',4,5,5'-PenCB	**101**		**0,44**	b	68	
2,3,3',4,4'-PenCB	105		0,05	b	77	0,00
2,3,4,4',5-PenCB	114	<	0,01		71	0,01
2,3',4,4',5-PenCB	**118**		**0,16**	b	76	0,02
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		74	0,00
Sum-PenCB			***1,59***			
2,2',3,3',4,4'-HexCB	128		0,02	b		
2,2',3,4,4',5'-HexCB	**138**		**0,11**	b	75	
2,2',3,4,5,5'-HexCB	141		0,03	b		
2,2',3,4',5',6-HexCB	149		0,19	b		
2,2',4,4',5,5'-HexCB	**153**		**0,16**	b	73	
2,3,3',4,4',5-HexCB	156	<	0,01	b	79	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		75	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		77	0,00
Sum-HexCB			***0,83***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	b	74	
2,2',3,4,4',5',6-HepCB	183		0,01	b		
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		72	0,00
Sum-HepCB			***0,12***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		72	
Sum 7 PCB			**3,23**			
Sum PCB			***15,1***			**0,04**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value. This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 24.02.05

Encl. to measuring report: O-2772
NILU-Sample number: 05/10
Customer: Amap 04
Customers sample ID: 17-19.11.04 0803-0851
: 160-156
Sample type: Air
Sample amount: 1161 m3
Concentration units: pg/m3
Data files: M_160205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		26,5		33	
HCB		58,0		42	
2,2',5-TriCB	18	1,79			
2,4,4'-TriCB	**28**	**1,19**	b	54	
2,4',5-TriCB	31	1,09	b		
2',3,4-TriCB	33	0,73	b		
3,4,4'-TriCB	37	0,12	b		
Sum-TriCB		***7,16***			
2,2',4,4'-TetCB	47	0,39	b		
2,2',5,5'-TetCB	**52**	**0,82**	b	58	
2,3',4,4'-TetCB	66	0,21	b		
2,4,4',5-TetCB	74	0,14	b		
Sum-TetCB		***3,43***			
2,2',4,4',5-PenCB	99	0,16	b		
2,2',4,5,5'-PenCB	**101**	**0,38**	b	69	
2,3,3',4,4'-PenCB	105	0,03	b	80	0,00
2,3,4,4',5-PenCB	114	< 0,01		75	0,01
2,3',4,4',5-PenCB	**118**	**0,12**	b	81	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		78	0,00
Sum-PenCB		***1,27***			
2,2',3,3',4,4'-HexCB	128	0,01	b		
2,2',3,4,4',5'-HexCB	**138**	**0,09**	b	77	
2,2',3,4,5,5'-HexCB	141	0,02	b		
2,2',3,4',5',6-HexCB	149	0,18	b		
2,2',4,4',5,5'-HexCB	**153**	**0,15**	b	76	
2,3,3',4,4',5-HexCB	156	< 0,01		82	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		79	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		80	0,00
Sum-HexCB		***0,75***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,02**	b	78	
2,2',3,4,4',5',6-HepCB	183	0,01	b		
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		79	0,00
Sum-HepCB		***0,13***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		82	
Sum 7 PCB		**2,77**			
Sum PCB		***12,8***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 05/14
Customer: Amap 04
Customers sample ID: 26-28.11.04 0820-1108
: 160-163
Sample type: Air
Sample amount: 1232 m3
Concentration units: pg/m3
Data files: M_090305

Kjeller, 10.03.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		27,0		34	
HCB		71,2		41	
2,2',5-TriCB	18	1,81			
2,4,4'-TrICB	**28**	**1,35**		57	
2,4',5-TriCB	31	1,29			
2',3,4-TriCB	33	0,97			
3,4,4'-TriCB	37	0,14	b		
Sum-TriCB		***8,00***			
2,2',4,4'-TetCB	47	0,39	b		
2,2',5,5'-TetCB	**52**	**0,78**	b	63	
2,3',4,4'-TetCB	66	0,19	b		
2,4,4',5-TetCB	74	0,12	b		
Sum-TetCB		***3,24***			
2,2',4,4',5-PenCB	99	0,12	b		
2,2',4,5,5'-PenCB	**101**	**0,32**	b	74	
2,3,3',4,4'-PenCB	105	0,03	b	77	0,00
2,3,4,4',5-PenCB	114	< 0,01		75	0,01
2,3',4,4',5-PenCB	**118**	**0,10**	b	76	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		76	0,00
Sum-PenCB		***1,02***			
2,2',3,3',4,4'-HexCB	128	0,02	b		
2,2',3,4,4',5'-HexCB	**138**	**0,10**	b	80	
2,2',3,4,5,5'-HexCB	141	0,02	b		
2,2',3,4',5',6-HexCB	149	0,15	b		
2,2',4,4',5,5'-HexCB	**153**	**0,13**	b	77	
2,3,3',4,4',5-HexCB	156	< 0,01		81	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		80	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		77	0,00
Sum-HexCB		***0,68***			
2,2',3,3',4,4',5-HepCB	170	0,01	b		
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	78	
2,2',3,4,4',5',6-HepCB	183	0,01	b		
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		77	0,00
Sum-HepCB		***0,13***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		74	
Sum 7 PCB		**2,80**			
Sum PCB		***13,1***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 05/16
Customer: Amap 04
Customers sample ID: 1-3.12.04 0913-0857
: 160-155
Sample type: Air
Sample amount: 1133 m3
Concentration units: pg/m3
Data files: M_240205

Kjeller, 01.03.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			28,2		32	
HCB			62,2		38	
2,2',5-TriCB	18		1,71			
2,4,4'-TriCB	**28**		**1,17**	b	56	
2,4',5-TriCB	31		1,11	b		
2',3,4-TriCB	33		0,75	b		
3,4,4'-TriCB	37		0,11	b		
Sum-TriCB			***6,97***			
2,2',4,4'-TetCB	47		0,49	b		
2,2',5,5'-TetCB	**52**		**0,79**	b	58	
2,3',4,4'-TetCB	66		0,18	b		
2,4,4',5-TetCB	74		0,12	b		
Sum-TetCB			***3,29***			
2,2',4,4',5-PenCB	99		0,13	b		
2,2',4,5,5'-PenCB	**101**		**0,36**	b	61	
2,3,3',4,4'-PenCB	105		0,02	b	60	0,00
2,3,4,4',5-PenCB	114	<	0,01		61	0,01
2,3',4,4',5-PenCB	**118**		**0,09**	b	63	0,01
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		62	0,00
Sum-PenCB			***1,11***			
2,2',3,3',4,4'-HexCB	128		0,01	b		
2,2',3,4,4',5'-HexCB	**138**		**0,08**	b	59	
2,2',3,4,5,5'-HexCB	141		0,02	b		
2,2',3,4',5',6-HexCB	149		0,16	b		
2,2',4,4',5,5'-HexCB	**153**		**0,13**	b	60	
2,3,3',4,4',5-HexCB	156	<	0,01		53	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		51	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		53	0,00
Sum-HexCB			***0,64***			
2,2',3,3',4,4',5-HepCB	170	<	0,01			
2,2',3,4,4',5,5'-HepCB	**180**		**0,02**	b	47	
2,2',3,4,4',5',6-HepCB	183		0,01	bi		
2,2',3,4',5,5',6-HepCB	187		0,03	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		40	0,00
Sum-HepCB			***0,08***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		36 g	
Sum 7 PCB			**2,65**			
Sum PCB			***12,1***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 05/19
Customer: Amap 04
Customers sample ID: 8-10.12.04 0955-0919
: 160-145
Sample type: Air
Sample amount: 1090 m3
Concentration units: pg/m3
Data files: M_090305

Kjeller, 10.03.05

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		22,1		30	
HCB		69,7		37	
2,2',5-TriCB	18	1,73			
2,4,4'-TriCB	**28**	**1,26**	b	49	
2,4',5-TriCB	31	1,21	b		
2',3,4-TriCB	33	0,85			
3,4,4'-TriCB	37	0,13	b		
Sum-TriCB		***7,41***			
2,2',4,4'-TetCB	47	0,52	b		
2,2',5,5'-TetCB	**52**	**0,84**	b	54	
2,3',4,4'-TetCB	66	0,23	b		
2,4,4',5-TetCB	74	0,15	b		
Sum-TetCB		***3,65***			
2,2',4,4',5-PenCB	99	0,15	b		
2,2',4,5,5'-PenCB	**101**	**0,40**	b	64	
2,3,3',4,4'-PenCB	105	0,04	b	66	0,00
2,3,4,4',5-PenCB	114	< 0,01		65	0,01
2,3',4,4',5-PenCB	**118**	**0,12**	b	67	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		65	0,00
Sum-PenCB		***1,19***			
2,2',3,3',4,4'-HexCB	128	0,02	b		
2,2',3,4,4',5'-HexCB	**138**	**0,10**	b	67	
2,2',3,4,5,5'-HexCB	141	0,03	b		
2,2',3,4',5',6-HexCB	149	0,19	b		
2,2',4,4',5,5'-HexCB	**153**	**0,16**	b	65	
2,3,3',4,4',5-HexCB	156	< 0,01		69	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		67	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		64	0,00
Sum-HexCB		***0,81***			
2,2',3,3',4,4',5-HepCB	170	0,01	b		
2,2',3,4,4',5,5'-HepCB	**180**	**0,03**	b	65	
2,2',3,4,4',5',6-HepCB	183	0,01	b		
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		65	0,00
Sum-HepCB		***0,16***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		63	
Sum 7 PCB		**2,91**			
Sum PCB		***13,3***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

NILU

Kjeller, 01.03.05

Encl. to measuring report: O-2772
NILU-Sample number: 05/22
Customer: Amap 04
Customers sample ID: 15-07.12.04 1406-0817
: 160-160
Sample type: Air
Sample amount: 1017 m3
Concentration units: pg/m3
Data files: M_240205

Compound Structure	IUPAC-no.	Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB		27,0		26	
HCB		55,2		33	
2,2',5-TriCB	18	1,62			
2,4,4'-TriCB	**28**	**1,13**	b	51	
2,4',5-TriCB	31	1,05	b		
2',3,4-TriCB	33	0,71	b		
3,4,4'-TriCB	37	0,11	b		
Sum-TriCB		***6,60***			
2,2',4,4'-TetCB	47	0,27	b		
2,2',5,5'-TetCB	**52**	**0,72**	b	53	
2,3',4,4'-TetCB	66	0,19	b		
2,4,4',5-TetCB	74	0,12	b		
Sum-TetCB		***2,88***			
2,2',4,4',5-PenCB	99	0,13	b		
2,2',4,5,5'-PenCB	**101**	**0,33**	b	63	
2,3,3',4,4'-PenCB	105	0,03	b	72	0,00
2,3,4,4',5-PenCB	114	< 0,01		70	0,01
2,3',4,4',5-PenCB	**118**	**0,11**	b	73	0,01
2'3,3',4,5-PenCB	122	< 0,01			
2',3,4,4',5-PenCB	123	< 0,01		69	0,00
Sum-PenCB		***1,12***			
2,2',3,3',4,4'-HexCB	128	0,02	b		
2,2',3,4,4',5'-HexCB	**138**	**0,09**	b	70	
2,2',3,4,5,5'-HexCB	141	0,02	b		
2,2',3,4',5',6-HexCB	149	0,14	b		
2,2',4,4',5,5'-HexCB	**153**	**0,14**	b	70	
2,3,3',4,4',5-HexCB	156	< 0,01		73	0,01
2,3,3',4,4',5'-HexCB	157	< 0,01		70	0,01
2,3',4,4',5,5'-HexCB	167	< 0,01		69	0,00
Sum-HexCB		***0,64***			
2,2',3,3',4,4',5-HepCB	170	< 0,01			
2,2',3,4,4',5,5'-HepCB	**180**	**0,02**	b	67	
2,2',3,4,4',5',6-HepCB	183	0,01			
2,2',3,4',5,5',6-HepCB	187	0,03	b		
2,3,3',4,4',5,5'-HepCB	189	< 0,01		70	0,00
Sum-HepCB		***0,09***			
2,2',3,3',4,4',5,5'-OctCB	194	< 0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	< 0,01			
DecaCB	209	< 0,01		69	
Sum 7 PCB		**2,54**			
Sum PCB		***11,4***			**0,03**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

Encl. to measuring report: O-2772
NILU-Sample number: 05/283
Customer: Amap 04
Customers sample ID: 29-31.12.04 0955-0931
: 160-155
Sample type: Air
Sample amount: 1131 m3
Concentration units: pg/m3
Data files: M_240205

Kjeller, 01.03.05

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			16,7		28	
HCB			54,5		34	
2,2',5-TriCB	18		1,79			
2,4,4'-TriCB	**28**		**1,97**		53	
2,4',5-TriCB	31		1,85			
2',3,4-TriCB	33		1,19			
3,4,4'-TriCB	37		0,32	b		
Sum-TriCB			***10,1***			
2,2',4,4'-TetCB	47		0,80	b		
2,2',5,5'-TetCB	**52**		**1,72**		57	
2,3',4,4'-TetCB	66		2,27			
2,4,4',5-TetCB	74		1,04			
Sum-TetCB			***12,7***			
2,2',4,4',5-PenCB	99		0,58			
2,2',4,5,5'-PenCB	**101**		**1,12**		73	
2,3,3',4,4'-PenCB	105		0,34		81	0,03
2,3,4,4',5-PenCB	114		0,02		82	0,01
2,3',4,4',5-PenCB	**118**		**0,73**		83	0,07
2'3,3',4,5-PenCB	122		0,01	i		
2',3,4,4',5-PenCB	123		0,02		80	0,00
Sum-PenCB			***5,19***			
2,2',3,3',4,4'-HexCB	128		0,05			
2,2',3,4,4',5'-HexCB	**138**		**0,31**		82	
2,2',3,4,5,5'-HexCB	141		0,07	b		
2,2',3,4',5',6-HexCB	149		0,43	b		
2,2',4,4',5,5'-HexCB	**153**		**0,51**		83	
2,3,3',4,4',5-HexCB	156		0,02	b	83	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		80	0,01
2,3',4,4',5,5'-HexCB	167		0,01		80	0,00
Sum-HexCB			***2,09***			
2,2',3,3',4,4',5-HepCB	170		0,07			
2,2',3,4,4',5,5'-HepCB	**180**		**0,31**		77	
2,2',3,4,4',5',6-HepCB	183		0,07			
2,2',3,4',5,5',6-HepCB	187		0,24			
2,3,3',4,4',5,5'-HepCB	189	<	0,01		72	0,00
Sum-HepCB			***1,13***			
2,2',3,3',4,4',5,5'-OctCB	194		0,09			
2,2',3,3',4,4',5,5',6-NonCB	206		0,05			
DecaCB	209	<	0,01		76	
Sum 7 PCB			**6,67**			
Sum PCB			***31,3***			**0,13**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Results, PCB

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NILU

Kjeller, 01.03.05

Encl. to measuring report: O-2772
NILU-Sample number: 05/280
Customer: Amap 04
Customers sample ID: 20-22.12.04 0956-0752
: 160-155
Sample type: Air
Sample amount: 1093 m3
Concentration units: pg/m3
Data files: M_240205

Compound Structure	IUPAC-no.		Concentration pg/m3		Recovery %	TE (WHO) fg/g
PeCB			29,2		30	
HCB			55,2		36	
2,2',5-TriCB	18		2,01			
2,4,4'-TriCB	**28**		**1,41**		54	
2,4',5-TriCB	31		1,31			
2',3,4-TriCB	33		0,83	b		
3,4,4'-TriCB	37		0,17	b		
Sum-TriCB			***8,27***			
2,2',4,4'-TetCB	47		0,46	b		
2,2',5,5'-TetCB	**52**		**1,06**	b	56	
2,3',4,4'-TetCB	66		0,81			
2,4,4',5-TetCB	74		0,41			
Sum-TetCB			***5,92***			
2,2',4,4',5-PenCB	99		0,26	b		
2,2',4,5,5'-PenCB	**101**		**0,51**	b	68	
2,3,3',4,4'-PenCB	105		0,09	b	76	0,01
2,3,4,4',5-PenCB	114	<	0,01		75	0,01
2,3',4,4',5-PenCB	**118**		**0,25**	b	76	0,02
2'3,3',4,5-PenCB	122	<	0,01			
2',3,4,4',5-PenCB	123	<	0,01		75	0,00
Sum-PenCB			***2,03***			
2,2',3,3',4,4'-HexCB	128		0,02	b		
2,2',3,4,4',5'-HexCB	**138**		**0,13**	b	77	
2,2',3,4,5,5'-HexCB	141		0,03	b		
2,2',3,4',5',6-HexCB	149		0,17	b		
2,2',4,4',5,5'-HexCB	**153**		**0,18**	b	73	
2,3,3',4,4',5-HexCB	156	<	0,01		76	0,01
2,3,3',4,4',5'-HexCB	157	<	0,01		74	0,01
2,3',4,4',5,5'-HexCB	167	<	0,01		73	0,00
Sum-HexCB			***0,83***			
2,2',3,3',4,4',5-HepCB	170		0,01	b		
2,2',3,4,4',5,5'-HepCB	**180**		**0,05**	b	69	
2,2',3,4,4',5',6-HepCB	183		0,02	b		
2,2',3,4',5,5',6-HepCB	187		0,05	b		
2,3,3',4,4',5,5'-HepCB	189	<	0,01		73	0,00
Sum-HepCB			***0,21***			
2,2',3,3',4,4',5,5'-OctCB	194	<	0,01			
2,2',3,3',4,4',5,5',6-NonCB	206	<	0,01			
DecaCB	209	<	0,01		76	
Sum 7 PCB			**3,59**			
Sum PCB			***17,3***			**0,05**

Sum 7 PCB: PCB(28+52+101+118+138+153+180)
Sum PCB: Sum of observed PCB (mono- and di-CB are not included)
<: Lower than detection limit at signal-to-noise 3 to 1
i: Isotope ratio deviates more than 20 % from theoretical value.
This may be due to instrumental noise or/and chemical interference
b: Lower than 10 times method blank.
g: Recovery is not according to NILUs quality criteria
TE (WHO): 2378-TCDD toxicity equivalents of the mono-ortho PCB according to the WHO model (M. Van den Berg et al., 1998)

8. versjon 31.03.2004 GSK

Vedlegg 5

Organiske forbindelser i luft i Ny-Ålesund (O-3291)

Norwegian Institute for Air Research
P.O. Box 100, N-2027 Kjeller

Measuring report No. O-3291

Customer: Statens forurensningstilsyn
Postboks 8100 Dep
0032 OSLO

Project No.: O-93062

Sampling:

Location:
Responsibility: Customer
Comments:

Sample information:

NILU Sample ID	Customer's Sample ID	Sample type	Sample received	Sample Analysed
04/258	7-9.1.04 0843-0804 160-167	Air	17.03.04	19.04 – 29.06.04
04/261	14-16.1.04 0901-0923 160-159	"	"	22.04 – 29.06.04
04/264	21-23.1.04 0919-0756 160-155	"	"	22.04 – 29.09.04
04/267	28-30.1.04 0815-0810 160-161	"	"	"
04/270	4-6.2.04 0755-0909 160-158	"	"	"
04/273	11-13.02.04 0822-0743 160-160	"	"	26.04 – 29.09.04
04/277	20-22.2.04 0810-1038 160-165	"	"	"
04/279	25-27.2.04 0906-0904 160-161	"	"	"
04/578	5-7.3.04 0932-1019 160-165	"	10.05.04	06.09 – 21.10.04
04/580	10-12.3.04 1043-0937 160-150	"	"	"
04/584	17-19.3.04 0810-0753 160-148	"	"	"
04/588	29-31.3.04 0829-0802 160-152	"	"	08.09 – 21.10.04
04/590	2-4.4.04 0726-0650 160-160	"	"	"
04/593	12-14.4.04 1332-0839 160-140	"	"	"
04/595	16-18.4.04 0718-1001 160-158	"	"	08.09. – 09.12.04
04/597	21-23.4.04 0802-0800 160-160	"	"	13.09 – 09.12.04
04/600	28-30.4.04 0742-0808 160-157	"	"	"
04/729	7-9.5.04 0745-0936 160-161	"	16.06.04	13.09 – 09.12.04
04/731	12-14.5.04 0703-0720 160-154	"	"	"
04/735	21-23.5.04 0843-1230 160-159	"	"	15.09 – 06.10.04
04/738	28-30.5.04 0802-1005 160-157	"	"	"
04/741	4-6.6.04 0705-0730 160-157	"	"	"
04/874	9-11.6.04 0750-0709 160-159	"	11.08.04	15.09 – 21.10.04
04/876	14-16.6.04 0645-0733 160-158	"	"	20.09 – 21.10.04
04/879	21-23.6.04 0837-0908 160-157	"	"	"
04/882	28-30.6.04 0712-0734 160-158	"	"	22.09 – 21.10.04
04/885	5-7.7.04 0740-0725 160-157	"	"	"
04/888	12-14.7.04 0817-0742 160-157	"	"	"
04/1184	19-21.7.04 0724-0727 160-156	"	24.09.04	24.01.05 – 28.02.05
04/1187	26-28.7.04 0713-0633 160-155	"	"	25.01.05 – 18.02.05
04/1190	2-4.8.04 0842-0905 160-155	"	"	"
04/1193	9-11.08.04 0705-0758 160-156	"	"	26.01.05 – 18.02.05
04/1196	16-18.8.04 0746-0853 160-159	"	"	"
04/1198	23-25.8.04 0738-0659 160-160	"	"	"
04/1203	30.8-1.9.04 0642-0741 160- 159	"	"	"
04/1206	6-8.9.04 0933-0745 160-164	"	"	27.01.05 – 02.03.05
04/1513	15-17.9.04 0755-1812 160-160	"	15.11.04	28.01.05 – 18.02.05
04/1515	20-22.9.04 0841-0712 160-160	"	"	"

Norwegian Institute for Air Research
P.O. Box 100, N-2027 Kjeller

NILU Sample ID	Customer's Sample ID	Sample type	Sample received	Sample Analysed
04/1520	1-3.10.04 0737-0958 160-162	Air	15.11.04	28.01.05 – 18.02.05
04/1523	8-11.10.04 1321-0655 160-(145-150)	"	"	"
04/1525	13-15.10.04 0757-0727 160-164	"	"	31.01 – 18.02.05
04/1529	22-24.10.04 0815-1315 160-160	"	"	"
04/1532	29-31.10.04 0828-1015 160-145	"	"	01.02.05 – 02.03.05
05/4	3-5.11.04 0812-0833 160-150	"	03.01.05	"
05/7	10-12.11.04 0832-0934 160-155	"	"	"
05/10	17-19.11.04 0803-0851 160-156	"	"	"
05/14	26-28.11.04 0820-1108 160-163	"	"	28.02 – 08.03.05
05/16	1-3.12.04 0913-0857 160-155	"	"	"
05/19	8-10.12.04 0955-0919 160-145	"	"	"
05/22	15-17.12.04 1406-0817 160-160	"	"	"
05/280	20-22.12.04 0956-0752 160-155	"	14.02.05	16.02.05 – 02.03.05
05/283	29-31.12.04 0955-0931 160-155	"	"	"

Analyses:

Performed by: Norwegian Institute for Air Research
P.O. Box 100
N-2027 KJELLER

Method: NILU-O-2 ("Determination of semivolatile persistent organic compounds – pesticides and PCB's")

Comments:

Accepted: Kjeller, 5 May 2005

Ole-Anders Braathen
Dept. director, Chemical Analysis

Enclosures: Results of 55 U-82, MC-5 and MC-7 analyses: 2 pages
Measuring report and enclosures cover 4 pages in all

Measuring results represent only the samples analysed. This report shall not be reproduced except in full, without the written approval of the measuring laboratory.

Results of U-82, MC-5 and MC-7

Encl. to measuring report : O-3291
Customer : Amap 04
Project : O-93062
Sample type : Air
Concentration units : pg/m^3

Kjeller, 17.03.2005

Week no.	NILU-Sample number	Customers sample ID	Sample amount m^3	Data files	U-82	MC-5	MC-7
2	04/258	7-9.1.04	1166	PA_8115.D	< 0,01	< 0,01	< 0,01
3	04/261	14-16.1.04	1164	PA_8116.D	< 0,01	< 0,01	< 0,01
4	04/264	21-23.1.04	1107	PA_8119.D	< 0,01	< 0,01	< 0,01
5	04/267	28-30.1.04	1157	PA_8120.D	< 0,01	< 0,01	< 0,01
6	04/270	4-6.2.04	1178	PA_8121.D	< 0,01	< 0,01	< 0,01
7	04/273	11-13.2.04	1140	PA_8122.D	< 0,01	< 0,01	< 0,01
8	04/277	20-22.2.04	1232	PA_8123.D	< 0,01	< 0,01	< 0,01
9	04/279	25-27.2.04	1159	PA_8124.D	< 0,01	< 0,01	< 0,01
10	04/578	5-7.3.04	1196	PA_8453.D	< 0,01	< 0,01	< 0,01
11	04/580	10-12.3.04	1100	PA_8454.D	< 0,01	< 0,01	< 0,01
12	04/584	17-19.3.04	1107	PA_8455.D	< 0,01	< 0,01	< 0,01
14	04/588	29-31.3.04	1116	PA_8456.D	< 0,01	< 0,01	< 0,01
14	04/590	2-4.4.04	1142	PA_8457.D	< 0,01	< 0,01	< 0,01
16	04/593	12-14.4.04	970	PA_8458.D	< 0,01	< 0,01	< 0,01
16	04/595	16-18.4.04	1214	PA_8459.D	< 0,01	< 0,01	< 0,01
17	04/597	21-23.4.04	1157	PA_8465.D	< 0,01	< 0,01	< 0,01
18	04/600	28-30.4.04	1157	PA_8466.D	< 0,01	< 0,01	< 0,01
19	04/729	7-9.5.04	1205	PA_8467.D	< 0,01	< 0,01	< 0,01
20	04/731	12-14.5.04	1142	PA_8468.D	< 0,01	< 0,01	< 0,01
21	04/735	21-23.5.04	1246	PA_8469.D	< 0,01	< 0,01	< 0,01
22	04/738	28-30.5.04	1195	PA_8470.D	< 0,01	< 0,01	< 0,01
23	04/741	4-6.6.04	1157	PA_8471.D	< 0,01	< 0,01	< 0,01
24	04/874	9-11.6.04	1138	TA_8445.D	< 0,01	< 0,01	< 0,01
25	04/876	14-16.6.04	1169	TA_8446.D	< 0,01	< 0,01	< 0,01
26	04/879	21-23.6.04	1159	TA_8447.D	< 0,01	< 0,01	< 0,01
27	04/882	28-30.6.04	1159	TA_8448.D	< 0,01	< 0,01	< 0,01
28	04/885	5-7.7.04	1140	TA_8449.D	< 0,01	< 0,01	< 0,01
29	04/888	12-14.7.04	1135	TA_8450.D	< 0,01	< 0,01	< 0,01
30	04/1184	19-21.7.04	1142	TA_9226.D	< 0,01	< 0,01	< 0,01
31	04/1187	26-28.7.04	1123	TA_9227.D	< 0,02	< 0,02	< 0,02

Based on internal standard 13C-PCB-118.
< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.

1. Versjon 09.05.2003 GSK

Results of U-82, MC-5 and MC-7

Encl. to measuring report : O-3291
Customer : Amap 04
Project : O-93062
Sample type : Air
Concentration units : pg/m^3

Kjeller, 17.03.2005

Week no.	NILU-Sample number	Customers sample ID	Sample amount m^3	Data files	U-82	MC-5	MC-7
32	04/1190	2-4.8.04	1150	TA_9228.D	< 0,01	< 0,01	< 0,01
33	04/1193	9-11.8.04	1164	TA_9229.D	< 0,02	< 0,02	< 0,02
34	04/1196	16-18.8.04	1181	TA_9230.D	< 0,01	< 0,01	< 0,01
35	04/1198	23-25.8.04	1140	TA_9231.D	< 0,02	< 0,02	< 0,02
36	04/1203	30.8-1.9.04	1178	TA_9236.D	< 0,02	< 0,02	< 0,02
37	04/1206	6-8.9.04	1127	TA_9237.D	< 0,02	< 0,02	< 0,02
38	04/513	15-17.9.04	1405	TA_9238.D	< 0,01	< 0,01	< 0,01
39	04/1515	20-22.9.04	1121	TA_9239.D	< 0,01	< 0,01	< 0,01
40	04/1520	1-3.10.04	1220	TA_9244.D	< 0,01	< 0,01	< 0,01
41	04/1523	8-11.10.04	1476	TA_9245.D	< 0,01	< 0,01	< 0,01
42	04/1525	13-15.10.04	1159	TA_9246.D	< 0,02	< 0,02	< 0,02
43	04/1529	22-24.10.04	1277	TA_9247.D	< 0,01	< 0,01	< 0,01
44	04/1532	29-31.10.04	1145	TA_9248.D	< 0,01	< 0,01	< 0,01
45	05/4	3-5.11.04	1130	TA_9251.D	< 0,01	< 0,01	< 0,01
46	05/7	10-12.11.04	1164	TA_9252.D	< 0,01	< 0,01	< 0,01
47	05/10	17-19.11.04	1161	TA_9253.D	< 0,01	< 0,01	< 0,01
48	05/14	26-28.11.04	1232	TA_9363.D	< 0,02	< 0,02	< 0,02
49	05/16	1-3.12.04	1133	TA_9255.D	< 0,01	< 0,01	< 0,01
50	05/19	8-10.12.04	1090	TA_9256.D	< 0,02	< 0,02	< 0,02
51	05/22	15-17.12.04	1017	TA_9257.D	< 0,02	< 0,02	< 0,02
52	05/280	20-22.12.04	1093	TA_9364.D	< 0,02	< 0,02	< 0,02
53	05/283	29-31.12.04	1131	TA_9365.D	< 0,02	< 0,02	< 0,02

Based on internal standard 13C-PCB-118.
< : Lower than detection limit at signal-to-noise 3 to 1
i : Isotope ratio deviates more than 20 % from theoretical value.

Vedlegg 6

Tungmetaller i luft på Birkenes (U-1072-05)

NORSK AKKREDITERING P 008

Akkreditert etter ISO/IEC-17025 Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Målerapport nr. U-1072-05

Oppdragsgiver: Jozef M. Pacyna
NILU
Her
Kopi : WAa

Prosjekt nr.: O-90006

Prøvetaking:
Sted: Birkenes
Ansvar: NILU
Kommentar: Prøver for perioden 01.01.2004-31.12.2004

Prøveinformasjon:
Prøvetype: Tungmetaller, luftprøver (Kleinfiltergeret)
Prøven mottatt:
Kommentar: Resultatene er korrigerte med filterblank, Whatman Qma. Deteksjonsgrensen er basert på 1 standardavvik av filtterblank for elementene Cu og Cr.

Analyser:
Utført av Norsk institutt for luftforskning
Postboks 100
N-2027 KJELLER

Målemetode: NILU-U-47: Forskrift for måling av masse svevestøv, hovedkomponenter og tungmetaller i svevestøv i luft med sierra dichotomous eller NILUs to-filterprøvetaker.

Analysemetoden NILU-U-47 er akkreditert av Norsk Akkreditering i henhold til ISO/IEC-17025.

NILU-U-116: Forskrift for bruk av mikrobølgeovn.

Kommentar:

Kontaktperson: Marit Vadset

Godkjenning: Kjeller, 25. april 2005

Marit Vadset

Marit Vadset
Ingeniør, Kjemisk analyse

Vedlegg: Analyseresultater for prøver: 2 sider
Målerapporten og vedleggene omfatter totalt 3 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Analyseresultatene for ICPMS følger som et eget vedlegg med overskrift "NILU ICPMS RAPPORT".

Oppdragsgivers prøveidentifikasjon er angitt i målerapporten for hver enkelt prøve. Analyseresultatene i rapportvedlegget er gitt med varierende antall gjeldende siffer. Med metodens beregnede usikkerhet som grunnlag, anbefales det å ikke benytte mer enn 3 gjeldende siffer ved vurdering eller i presentasjon av resultatene.

Usikkerheten i resultatene kan fås ved henvendelse til NILUs laboratorium

PRO_NR	stasnr	PROVETY	Måleperio	FRADATO	tILDATO	aprocnvn	UT_ENHE	UTV_VOL	DIL_FKT	LUFTVOL	FILTDEL	Pb	Cd	Cu	Zn	Cr	Ni	Co	V	As
			Uke	Prøvetaker Kleinfiltergeret, filtertype :Whatman Qma																
O-90006	Birkenes	fp-t	2	07.01.2004	13.01.2004	h0906ha[2	ng/m3	10	1	331.7	0.5	11.08	0.091	4.42	8.36	2.17	1.11	0.02	1.04	0.40
O-90006	Birkenes	fp-t	2	14.01.2004	20.01.2004	h0906ha[2	ng/m3	10	1	331.9	0.5	2.21	0.037	0.32	4.96	*-0.149477	0.32	*0.0084061	0.47	0.41
O-90006	Birkenes	fp-t	2	21.01.2004	27.02.2004	h0906ha[2	ng/m3	10	1	331.8	0.5	3.54	0.083	4.33	10.40	1.30	0.97	0.03	1.43	0.52
O-90006	Birkenes	fp-t	2	28.01.2004	03.02.2004	h0906ha[3	ng/m3	10	1	327.6	0.5	0.81	0.024	0.52	3.38	*0.712149	0.29	*0.007906	0.31	0.30
O-90006	Birkenes	fp-t	2	04.02.2004	10.02.2004	h0906ha[3	ng/m3	10	1	326.2	0.5	0.69	0.018	0.39	1.74	*0.3614347	0.27	*0.0073881	0.19	0.17
O-90006	Birkenes	fp-t	2	11.02.2004	17.02.2004	h1006ha[2	ng/m3	10	1	331.3	0.5	1.04	0.043	5.40	3.55	*0.9009961	0.63	0.11	0.72	0.22
O-90006	Birkenes	fp-t	2	18.02.2004	24.02.2004	h1006ha[3	ng/m3	10	1	331.8	0.5	0.50	0.021	0.31	1.81	*-0.149522	0.27	0.01	0.33	0.10
O-90006	Birkenes	fp-t	2	25.02.2004	02.03.2004	h1006ha[4	ng/m3	10	1	328.8	0.5	0.52	0.021	*0.184403	2.74	*-0.150887	0.21	*0.0049574	0.27	0.10
O-90006	Birkenes	fp-t	2	03.03.2004	09.03.2004	h1006ha[5	ng/m3	10	1	331.6	0.5	1.53	0.044	0.96	5.97	*0.199336	2.07	0.04	0.77	0.24
O-90006	Birkenes	fp-t	2	10.03.2004	16.03.2004	h1006ha[6	ng/m3	10	1	332.1	0.5	3.31	0.111	0.54	7.79	*0.415838	0.82	0.02	1.56	0.22
O-90006	Birkenes	fp-t	2	17.03.2004	23.03.2004	h1006ha[7	ng/m3	10	1	331.6	0.5	0.18	0.009	0.37	1.05	*-0.149613	0.20	*0.008232	0.22	0.18
O-90006	Birkenes	fp-t	2	24.03.2004	30.03.2004	h1006ha[8	ng/m3	10	1	329.3	0.5	0.66	0.023	0.46	3.44	*-0.150657	0.67	0.02	0.52	0.41
O-90006	Birkenes	fp-t	2	31.03.2004	06.04.2004	m1401ma[	ng/m3	10	1	331.9	0.5	1.55	0.064	0.55	5.31	*-0.149477	0.64	0.03	1.07	0.24
O-90006	Birkenes	fp-t	2	07.04.2004	13.04.2004	m1401ma[	ng/m3	10	1	331.6	0.5	0.98	0.026	0.36	2.50	*-0.149613	0.28	0.01	0.18	0.10
O-90006	Birkenes	fp-t	2	14.04.2004	20.04.2004	m1401ma[	ng/m3	10	1	331.6	0.5	7.89	0.266	1.22	12.88	*0.350120	2.20	0.05	3.16	0.64
O-90006	Birkenes	fp-t	2	21.04.2004	27.04.2004	m1401ma[	ng/m3	10	1	328.3	0.5	2.18	0.067	1.92	6.72	*0.881815	1.25	0.05	1.46	0.60
O-90006	Birkenes	fp-t	2	28.04.2004	01.05.2004	m1401ma[	ng/m3	10	1	331.6	0.5	3.55	0.155	0.78	8.53	*-0.149613	0.90	0.05	1.62	0.48
O-90006	Birkenes	fp-t	2	05.05.2004	11.05.2004	m1401ma[	ng/m3	10	1	233.5	0.5	7.18	0.226	0.76	9.98	*-0.212469	0.70	0.06	1.21	0.35
O-90006	Birkenes	fp-t	2	12.05.2004	18.05.2004	m1401ma[	ng/m3	10	1	331.7	0.5	0.66	0.018	0.21	1.63	*-0.149567	0.20	0.02	0.22	0.09
O-90006	Birkenes	fp-t	2	19.05.2004	25.05.2004	m1401ma[	ng/m3	10	1	331.6	0.5	0.22	0.007	*0.041532	0.51	*-0.149613	*-0.039445	*0.005579	0.06	*0.0298492
O-90006	Birkenes	fp-t	2	26.05.2004	01.06.2004	m1401ma[	ng/m3	10	1	331.7	0.5	1.32	0.035	0.47	4.49	*-0.149567	0.64	0.04	1.27	0.21
O-90006	Birkenes	fp-t	2	02.06.2004	08.06.2004	m1401ma[	ng/m3	10	1	331.3	0.5	0.90	0.020	0.42	2.19	*-0.149748	0.52	0.04	0.97	0.14
O-90006	Birkenes	fp-t	2	09.06.2004	15.06.2004	m1401ma[	ng/m3	10	1	324.8	0.5	0.43	0.010	0.20	1.18	*-0.152745	0.26	0.01	0.54	0.12
O-90006	Birkenes	fp-t	2	16.06.2004	22.06.2004	m1401ma[	ng/m3	10	1	326.5	0.5	0.30	0.010	0.28	1.99	*-0.15195	0.44	0.03	0.57	0.14
O-90006	Birkenes	fp-t	2	23.06.2004	29.06.2004	m1401ma[	ng/m3	10	1	316.5	0.5	1.27	0.029	0.78	3.40	*-0.156750	0.57	0.02	1.13	0.31
O-90006	Birkenes	fp-t	2	30.06.2004	06.07.2004	m1401ma[	ng/m3	10	1	321.4	0.5	1.54	0.022	0.35	2.25	*-0.154361	1.08	0.02	1.27	0.24
O-90006	Birkenes	fp-t	2	07.07.2004	13.07.2004	m1401ma[	ng/m3	10	1	301.5	0.5	0.70	0.027	0.22	2.36	*-0.164549	0.25	0.01	0.49	0.19
O-90006	Birkenes	fp-t	2	14.07.2004	20.07.2004	m1401ma[	ng/m3	10	1	320.1	0.5	0.77	0.021	0.27	1.91	*-0.154988	0.46	0.01	0.85	0.11
O-90006	Birkenes	fp-t	2	21.07.2004	27.07.2004	m1401ma[	ng/m3	10	1	308.3	0.5	0.76	0.022	0.22	2.47	*-0.160920	0.32	0.01	0.69	0.21
O-90006	Birkenes	fp-t	2	28.07.2004	03.08.2004	m1401ma[	ng/m3	10	1	309.4	0.5	0.55	0.020	0.30	1.76	*-0.160348	0.59	0.02	1.18	0.23
O-90006	Birkenes	fp-t	2	04.08.2004	10.08.2004	m1401ma[	ng/m3	10	1	331.3	0.5	3.77	0.099	1.68	7.83	*0.784485	1.49	0.05	1.85	0.54
O-90006	Birkenes	fp-t	2	18.08.2004	24.08.2004	m1401ma[	ng/m3	10	1	331.4	0.5	0.71	0.013	0.23	1.96	*-0.149703	0.32	0.01	0.58	0.15
O-90006	Birkenes	fp-t	2	25.08.2004	31.08.2004	m1401ma[	ng/m3	10	1	331.7	0.5	0.76	0.025	0.49	1.95	*-0.149567	0.41	*0.006903	0.53	0.13
O-90006	Birkenes	fp-t	2	01.09.2004	07.09.2004	m1401ma[	ng/m3	10	1	331.9	0.5	2.99	0.063	0.78	6.04	*0.434166	1.21	0.04	2.48	0.36
O-90006	Birkenes	fp-t	2	08.09.2004	14.09.2004	m1401ma[	ng/m3	10	1	320.9	0.5	1.07	0.029	0.45	3.18	*-0.154601	0.47	0.02	0.72	0.22
O-90006	Birkenes	fp-t	2	15.09.2004	21.09.2004	m1401ma[	ng/m3	10	1	321.3	0.5	0.96	0.017	0.32	2.18	*-0.154409	0.59	0.02	0.57	0.14
O-90006	Birkenes	fp-t	2	22.09.2004	28.09.2004	m1401ma[	ng/m3	10	1	331.8	0.5	0.14	0.010	*0.038794	0.72	*-0.149522	*-0.039421	*-0.004677	*-0.035163	*0.0242254
O-90006	Birkenes	fp-t	2	29.09.2004	05.10.2004	m1401ma[	ng/m3	10	1	331.4	0.5	0.87	0.024	0.29	2.55	*-0.149703	0.45	0.01	0.53	0.17
O-90006	Birkenes	fp-t	2	06.10.2004	12.10.2004	m1401ma[	ng/m3	10	1	328.1	0.5	0.73	0.030	0.23	2.98	*-0.151209	0.27	0.01	0.19	0.17
O-90006	Birkenes	fp-t	2	13.10.2004	19.10.2004	m1401ma[	ng/m3	10	1	331.9	0.5	6.09	0.300	0.87	13.33	*-0.149477	0.54	0.03	0.67	0.34
O-90006	Birkenes	fp-t	2	20.10.2004	26.10.2004	m1401ma[	ng/m3	10	1	286.1	0.5	0.91	0.026	0.35	3.03	*-0.173406	0.55	0.02	0.39	0.12
O-90006	Birkenes	fp-t	2	27.10.2004	02.11.2004	l0803la[4]	ng/m3	10	1	309.3	0.5	0.94	0.019	0.78	2.75	*-0.160399	0.62	0.02	0.27	0.20
O-90006	Birkenes	fp-t	2	03.11.2004	09.11.2004	l0803la[5]	ng/m3	10	1	331.7	0.5	1.56	0.040	0.85	4.04	*-0.149567	0.74	0.01	0.82	0.22
O-90006	Birkenes	fp-t	2	10.11.2004	16.11.2004	l0803la[6]	ng/m3	10	1	331.5	0.5	0.41	0.014	1.39	1.17	*-0.149658	0.15	*0.0058824	0.22	0.08
O-90006	Birkenes	fp-t	2	17.11.2004	23.11.2004	l0803la[7]	ng/m3	10	1	331.8	0.5	0.27	0.017	*0.114321	1.02	*-0.149522	*-0.039421	*-0.004677	*-0.035163	*0.028686
O-90006	Birkenes	fp-t	2	24.11.2004	30.11.2004	l0803la[8]	ng/m3	10	1	331.7	0.5	0.79	0.022	2.08	2.08	*-0.149567	0.28	*0.008893	0.23	0.15
O-90006	Birkenes	fp-t	2	01.12.2004	07.12.2004	l0803la[9]	ng/m3	10	1	238.6	0.5	1.45	0.027	0.58	2.26	*-0.207928	0.53	0.02	0.58	0.16
O-90006	Birkenes	fp-t	2	08.12.2004	14.12.2004	l0803la[10]	ng/m3	10	1	332	0.5	1.79	0.045	2.07	4.85	*0.587650	1.13	0.02	1.18	0.23
O-90006	Birkenes	fp-t	2	15.12.2004	21.12.2004	l0803la[11]	ng/m3	10	1	331.9	0.5	0.59	0.017	*0.152130	2.15	*-0.149477	0.17	*0.0052124	0.30	0.07
O-90006	Birkenes	fp-t	2	22.12.2004	28.12.2004	l0803la[12]	ng/m3	10	1	237.9	0.5	0.37	0.013	0.38	2.07	*-0.20854	0.18	*-0.006524	0.25	0.09
O-90006	Birkenes	fp-t	2	29.12.2004	04.01.2005	l0803la[31]	ng/m3	10	1	325.7	0.5	0.66	0.018	0.74	2.00	*-0.152323	0.10	*-0.004765	0.14	0.08

* Målingen er utenfor akkreditert område.

PRO_NR	stasnr	PROVETY	Måleperio	FRADATO	tILDATO	aprocnvn	UT_ENHE	UTV_VOL	DIL_FKT	LUFTVOL	FILTDEL	Pb	Cd	Cu	Zn	Cr	Ni	Co	V	As
			Døgn			Prøvetaker Kleinfiltergeret, filtertype :Whatman Qma														
O-90006	Birkenes	fp-t	1	06.01.2004	07.01.2004	l1503la[5]	ng/m3	10	1	55.1	0.5	1.47	0.037	1.23	3.04	*-0.900393	1.15	*-0.028168	0.50	*0.2025045
O-90006	Birkenes	fp-t	1	13.01.2004	14.01.2004	h0906ha[1	ng/m3	10	1	54.9	0.5	2.39	0.027	*0.575081	3.72	*-0.903673	0.56	*-0.028271	0.81	*-0.1161679
O-90006	Birkenes	fp-t	1	20.01.2004	21.01.2004	h0906ha[1	ng/m3	10	1	54.8	0.5	2.26	0.073	*0.436715	7.51	*-0.905322	0.64	*-0.028323	0.60	0.30
O-90006	Birkenes	fp-t	1	27.01.2004	28.01.2004	h0906ha[1	ng/m3	10	1	55.1	0.5	2.23	0.035	1.57	4.81	*-0.900393	0.56	*-0.028168	0.38	*0.1411615
O-90006	Birkenes	fp-t	1	03.02.2004	04.02.2004	h0906ha[1	ng/m3	10	1	54.8	0.5	1.73	0.030	*0.715547	9.27	*-0.905322	0.83	0.07	0.66	*0.2043431
O-90006	Birkenes	fp-t	1	10.02.2004	11.02.2004	h0906ha[1	ng/m3	10	1	55.3	0.5	*0.539963	*0.010217	*0.650126	2.10	*-0.897136	*0.512947	*-0.028066	*-0.210978	*-0.1153276
O-90006	Birkenes	fp-t	1	17.02.2004	18.02.2004	h0906ha[1	ng/m3	10	1	55	0.5	*0.351272	*0.012090	*-0.201421	*0.604323	*-0.902030	*0.4332	*-0.02822	*-0.212128	*-0.1159567
O-90006	Birkenes	fp-t	1	24.02.2004	25.02.2004	h0906ha[2	ng/m3	10	1	55	0.5	*-0.303440	*-0.009590	*-0.201421	*0.452686	*-0.902030	*-0.237821	*-0.02822	*-0.212128	*-0.1159567
O-90006	Birkenes	fp-t	1	02.03.2004	03.03.2004	h0906ha[2	ng/m3	10	1	55.2	0.5	*0.483695	0.025	*0.244058	2.10	*1.893116	2.41	0.08	*-0.211360	*-0.1155365
O-90006	Birkenes	fp-t	1	09.03.2004	10.03.2004	h0906ha[2	ng/m3	10	1	54.6	0.5	1.24	0.028	*0.264322	4.85	*-0.908638	0.58	*-0.028426	*-0.213682	*0.1241392
O-90006	Birkenes	fp-t	1	16.03.2004	17.03.2004	h0906ha[2	ng/m3	10	1	55.1	0.5	2.89	0.028	*0.741415	2.62	*-0.900393	1.15	*0.038294	1.00	0.37
O-90006	Birkenes	fp-t	1	23.03.2004	24.03.2004	h0906ha[2	ng/m3	10	1	55.2	0.5	1.04	0.031	2.37	11.42	*-0.898761	*0.299746	*-0.028117	0.52	0.43
O-90006	Birkenes	fp-t	1	30.03.2004	31.03.2004	h0906ha[2	ng/m3	10	1	55.1	0.5	0.79	0.023	2.70	7.53	*1.972777	1.32	*0.033575	0.54	0.28
O-90006	Birkenes	fp-t	1	06.04.2004	07.04.2004	m2001ma[	ng/m3	10	1	55	0.5	1.30	0.041	*0.430036	4.48	*-0.902030	0.56	*-0.02822	0.83	*0.1592364
O-90006	Birkenes	fp-t	1	13.04.2004	14.04.2004	m2001ma[	ng/m3	10	1	55.1	0.5	0.95	0.024	*-0.201055	2.03	*-0.900393	0.72	*-0.028168	0.43	*-0.1157462
O-90006	Birkenes	fp-t	1	20.04.2004	21.04.2004	m2001ma[	ng/m3	10	1	55.2	0.5	3.82	0.128	*0.719782	7.68	*-0.898761	0.95	*0.038224	0.72	0.31
O-90006	Birkenes	fp-t	1	27.04.2004	28.04.2004	m2001ma[	ng/m3	10	1	55.2	0.5	3.45	0.174	*1.008913	9.04	*-0.898761	2.17	0.06	2.56	0.55
O-90006	Birkenes	fp-t	1	04.05.2004	05.05.2004	m2001ma[	ng/m3	10	1	55.2	0.5	2.60	0.074	2.12	6.81	*-0.898761	1.33	*-0.028117	2.51	0.37
O-90006	Birkenes	fp-t	1	11.05.2004	12.05.2004	m2001ma[	ng/m3	10	1	55.1	0.5	1.51	0.040	*0.367186	3.80	*-0.900393	*0.402649	*-0.028168	*0.311324	*0.1916152
O-90006	Birkenes	fp-t	1	18.05.2004	19.05.2004	m2001ma[	ng/m3	10	1	55.1	0.5	*0.332849	*0.009891	*-0.201055	*-0.376773	*-0.900393	*-0.23739	*-0.028168	*-0.211743	*-0.1157462
O-90006	Birkenes	fp-t	1	25.05.2004	26.05.2004	m2001ma[	ng/m3	10	1	55.2	0.5	*0.340579	*-0.009556	*-0.200691	3.05	*-0.898761	*-0.236959	*-0.028117	*-0.211360	*-0.1155365
O-90006	Birkenes	fp-t	1	01.06.2004	02.06.2004	l2701la[14]	ng/m3	10	1	55.2	0.5	1.11	0.023	*0.203115	3.27	*-0.898761	*0.408079	*-0.028117	0.94	*-0.1155365
O-90006	Birkenes	fp-t	1	08.06.2004	09.06.2004	m2001ma[	ng/m3	10	1	55	0.5	*-0.303440	*-0.009590	*0.420945	*0.638141	*-0.902030	*-0.237821	*-0.02822	0.47	*-0.1159567
O-90006	Birkenes	fp-t	1	15.06.2004	16.06.2004	l1503la[9]	ng/m3	10	1	55.1	0.5	*0.329219	*-0.009573	6.87	*0.458399	*-0.900393	*-0.23739	*-0.028168	*-0.211743	*-0.1157462
O-90006	Birkenes	fp-t	1	22.06.2004	23.06.2004	l1503la[10]	ng/m3	10	1	55.2	0.5	*0.444565	*0.014583	*1.125217	*1.338366	*-0.898761	*0.348659	*-0.028117	0.37	*-0.1155365
O-90006	Birkenes	fp-t	1	29.06.2004	30.06.2004	l1503la[11]	ng/m3	10	1	55.1	0.5	*0.357531	*0.009891	*0.283702	*1.172374	*-0.900393	1.38	*-0.028168	0.36	*-0.1157462
O-90006	Birkenes	fp-t	1	06.07.2004	07.07.2004	l1503la[12]	ng/m3	10	1	55	0.5	*-0.303440	*-0.009590	*0.254763	*0.705777	*-0.902030	*-0.237821	*-0.02822	*-0.212128	*-0.1159567
O-90006	Birkenes	fp-t	1	13.07.2004	14.07.2004	l1503la[13]	ng/m3	10	1	55.1	0.5	*-0.302890	*-0.009573	*-0.201055	*1.319016	*-0.900393	*-0.23739	*-0.028168	*-0.211743	*-0.1157462
O-90006	Birkenes	fp-t	1	20.07.2004	21.07.2004	l1503la[14]	ng/m3	10	1	55.1	0.5	1.07	0.025	*0.336334	1.53	*-0.900393	*0.361996	*-0.028168	0.72	*-0.1157462
O-90006	Birkenes	fp-t	1	27.07.2004	28.07.2004	m2001ma[	ng/m3	10	1	55.1	0.5	*0.563702	*0.016787	*0.399491	1.79	*-0.900393	*-0.23739	*0.030308	*0.259782	*0.2329946
O-90006	Birkenes	fp-t	1	03.08.2004	04.08.2004	m2001ma[	ng/m3	10	1	331.4	0.5	*0.140796	*0.003636	*0.111140	*0.360765	*-0.149703	*-0.039469	*-0.004683	*0.038787	*0.0242547
O-90006	Birkenes	fp-t	1	10.08.2004	11.08.2004	l2701la[4]	ng/m3	10	1	55.4	0.5	2.45	0.089	*1.153285	6.10	*-0.895517	*0.409494	*-0.028016	0.84	0.24
O-90006	Birkenes	fp-t	1	24.08.2004	25.08.2004	l2701la[5]	ng/m3	10	1	53	0.5	1.52	0.051	*0.400603	4.98	*1.730188	*0.432188	*-0.029284	0.79	0.42
O-90006	Birkenes	fp-t	1	31.08.2004	01.09.2004	l2701la[6]	ng/m3	10	1	53.9	0.5	*0.588497	*0.015306	*-0.205532	2.77	*-0.920438	*-0.242675	*-0.028795	0.44	*-0.1183231
O-90006	Birkenes	fp-t	1	07.09.2004	08.09.2004	l2701la[7]	ng/m3	10	1	55	0.5	*-0.303440	*-0.009590	*-0.201421	*0.467596	*-0.902030	*-0.237821	*-0.02822	*-0.212128	*-0.1159567
O-90006	Birkenes	fp-t	1	14.09.2004	15.09.2004	l2701la[8]	ng/m3	10	1	40.1	0.5	*-0.416190	*-0.013154	*-0.276263	*1.024384	*-1.237198	*-0.326189	*-0.038705	*-0.290949	*-0.1590428
O-90006	Birkenes	fp-t	1	21.09.2004	22.09.2004	l2701la[9]	ng/m3	10	1	55.1	0.5	*-0.302890	*-0.009573	*-0.201055	*-0.376773	*-0.900393	*-0.23739	*-0.028168	*-0.211743	*-0.1157462
O-90006	Birkenes	fp-t	1	28.09.2004	29.09.2004	l2701la[10]	ng/m3	10	1	55.1	0.5	*0.315789	*-0.009573	*-0.201055	*0.514660	*-0.900393	*-0.23739	*-0.028168	*-0.211743	*-0.1157462
O-90006	Birkenes	fp-t	1	05.10.2004	06.10.2004	l2701la[11]	ng/m3	10	1	55.1	0.5	1.30	0.031	1.43	4.80	*-0.900393	*0.501742	*-0.028168	0.69	*-0.1157462
O-90006	Birkenes	fp-t	1	12.10.2004	13.10.2004	l2701la[13]	ng/m3	10	1	55.1	0.5	2.01	0.066	*0.657205	7.92	*-0.900393	0.58	*-0.028168	0.66	*0.1538657
O-90006	Birkenes	fp-t	1	19.10.2004	20.10.2004	l1503la[6]	ng/m3	10	1	55.1	0.5	1.82	0.081	*0.640508	13.78	*-0.900393	*0.510090	*-0.028168	*0.244174	0.34
O-90006	Birkenes	fp-t	1	26.10.2004	27.10.2004	l1503la[7]	ng/m3	10	1	55.2	0.5	*-0.302341	*-0.009556	*0.354927	3.25	*-0.898761	1.91	*-0.028117	*-0.211360	*-0.1155365
O-90006	Birkenes	fp-t	1	02.11.2004	03.11.2004	l0803la[16]	ng/m3	10	1	55.2	0.5	1.00	0.029	*0.741159	3.68	*-0.898761	0.55	*-0.028117	0.71	*0.2144565
O-90006	Birkenes	fp-t	1	09.11.2004	10.11.2004	l0803la[17]	ng/m3	10	1	48.8	0.5	1.86	0.073	*0.606803	5.19	*-1.016632	1.20	*-0.031805	2.08	0.31
O-90006	Birkenes	fp-t	1	16.11.2004	17.11.2004	l0803la[18]	ng/m3	10	1	55.1	0.5	*-0.302890	*-0.009573	*0.643775	*0.541157	*-0.900393	*-0.23739	*-0.028168	*-0.211743	*-0.1157462
O-90006	Birkenes	fp-t	1	23.11.2004	24.11.2004	l0803la[19]	ng/m3	10	1	55	0.5	*0.525090	0.028	3.95	2.76	*-0.902030	*0.520109	*-0.02822	*-0.212128	*-0.1159567
O-90006	Birkenes	fp-t	1	30.11.2004	01.12.2004	l0803la[20]	ng/m3	10	1	55.3	0.5	1.49	0.023	*-0.200328	2.13	*-0.897136	1.49	0.09	0.61	*0.141736
O-90006	Birkenes	fp-t	1	07.12.2004	08.12.2004	l0803la[21]	ng/m3	10	1	54.9	0.5	*-0.303993	*-0.009608	*-0.201788	*-0.378145	*-0.903673	*-0.238254	*-0.028271	*-0.212515	*-0.1161679
O-90006	Birkenes	fp-t	1	14.12.2004	15.12.2004	l0803la[22]	ng/m3	10	1	55	0.5	7.45	0.109	1.52	14.40	*-0.902030	1.09	*0.041636	1.70	0.42
O-90006	Birkenes	fp-t	1	21.12.2004	22.12.2004	l0803la[23]	ng/m3	10	1	55.1	0.5	0.77	0.027	*1.142142	6.32	*-0.900393	1.17	*-0.028168	0.34	*0.1937931
O-90006	Birkenes	fp-t	1	28.12.2004	29.12.2004	l1503la[8]	ng/m3	10	1	48.3	0.5	0.93	*0.013768	*0.521159	7.13	*-1.027156	*0.389358	*-0.032134	0.36	*-0.1320417

* Målingen er utenfor akkreditert område.

Vedlegg 7

Tungmetaller i nedbør på Birkenes (U-1098-05)

NORSK AKKREDITERING P 008

Akkreditert etter ISO/IEC-17025 Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Målerapport nr. U-1098-05

Oppdragsgiver: NILU
v/WAA
Her
Kopi : JP (O-90006)

Prosjekt nr.: O-8118

Prøvetaking:
Sted: Birkenes
Ansvar: NILU
Kommentar: Prøver for perioden 01.1.2004-31.12.2004

Prøveinformasjon:
Prøvetype: Tungmetaller i nedbør. Rapport for elementene Cu, Cr, Ni, Co, V og As.

Prøven mottatt:
Kommentar: Parallelle analyser er utført for følgende prøvedatoer, og samsvarende måleresultat oppnådd:

Birkenes:	05/01/04,08/03/04,12/04/04,19/04/04,01/05/04,11/10/04
Hurdal:	01/04/04,05/04/04,03/05/04,06/09/04,11/10/04,01/11/04
Karasjok:	21/06/04,12/07/04,19/07/04,01/09/04
Kårvatn	09/08/04,
Svanvik	03/05/04,10/05/04,17/05/04,07/06/04,14/06/04,05/07/04,12/07/04,01/09/04,06/09/04,20/09/04,11/10/04

Analyser:
Utført av Norsk institutt for luftforskning
Postboks 100
N-2007 KJELLER

Målemetode:

Analysene er utført ved NILUs avdeling for Uorganisk analyse med teknikken ICPMS i henhold til metoden:

NILU-U-22: Forskrift for behandling av nedbørsprøver for analyse av hovedkomponenter og tungmetaller.

Analysemetoden NILU-U-22 er akkreditert av Norsk Akkreditering i henhold til ISO/IEC-17025.

Kontaktperson: Marit Vadset

Godkjenning: Kjeller, 24. mai 2005

Marit Vadset
Ingeniør, Kjemisk analyse

Vedlegg: 42 analyseresultater: 1 side
Målerapporten og vedleggene omfatter totalt 3 sider.

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Oppdragsgivers prøveidentifikasjon er angitt i målerapporten for hver enkelt prøve.

Analyseresultatene i rapportvedlegget er gitt med varierende antall gjeldende siffer. Siden det vanligvis er vanskelig å spesifisere total måleusikkerhet bedre enn 10%, anbefales det å ikke benytte mer enn 3 gjeldende siffer ved vurdering eller i presentasjon av resultatene.

Usikkerheten i resultatene kan fås ved hendvendelse til NILUs laboratorium.

Et minus "-" foran måleresultatet, betyr at det er mindre enn deteksjonsgrensen for analysemetoden. Er måleresultatet oppgitt som f.eks. "-0.01", betyr det at deteksjonsgrensen for metoden er 0.01.

PRO_NR	stasnr	PROVETY	MÅLEPER	FRADATO	tilDATO	FRAKL	TILKL	aprocnvn	UT_ENHE	UTV_VOL	DIL_FKT	Cu	Cr	Ni	Co	V	As
O-8118	Birkenes	nb-nilutm	2	01.01.2004	05.01.2004	07:00	07:00	h1205ha[3	ng/ml	1	1	0,69	*-0.2	*-0.2	*-0.01	0.72	0.17
O-8118	Birkenes	nb-nilutm	2	05.01.2004	12.01.2004	07:00	07:00	h1205ha[4	ng/ml	1	1	*0.126	*-0.2	*0.295	*-0.01	0.93	0.31
O-8118	Birkenes	nb-nilutm	2	12.01.2004	19.01.2004	07:00	07:00	h1205ha[5	ng/ml	1	1	*0.473	*-0.2	*-0.2	*-0.01	0.91	0.15
O-8118	Birkenes	nb-nilutm	2	19.01.2004	26.01.2004	07:00	07:00	h1205ha[6	ng/ml	1	1	0.96	*-0.2	*0.269	*0.012	0.99	0.25
O-8118	Birkenes	nb-nilutm	2	26.01.2004	01.02.2004	07:00	07:00	h1205ha[1	ng/ml	1	1	*0.336	*-0.2	*0.311	*-0.01	*0.239	0.15
O-8118	Birkenes	nb-nilutm	2	01.02.2004	02.02.2004	07:00	07:00	h1205ha[7	ng/ml	1	1	*0.326	*-0.2	*-0.2	*-0.01	1.01	0.16
O-8118	Birkenes	nb-nilutm	2	02.02.2004	09.02.2004	07:00	07:00	h1205ha[8	ng/ml	1	1	*0.362	*-0.2	*-0.2	*-0.01	*0.448	0.11
O-8118	Birkenes	nb-nilutm	2	09.02.2004	16.02.2002	07:00	07:00	h1205ha[9	ng/ml	1	1	0.53	*-0.2	*-0.2	*-0.01	*0.133	*-0.1
O-8118	Birkenes	nb-nilutm	2	16.02.2004	23.02.2002	07:00	07:00	h1205ha[1	ng/ml	1	1	*0.118	*-0.2	*-0.2	*-0.01	*-0.1	*-0.1
O-8118	Birkenes	nb-nilutm	2	23.02.2004	01.03.2004	07:00	07:00	h1205ha[1	ng/ml	1	1	0.63	*-0.2	*-0.2	*-0.01	*0.203	*-0.1
O-8118	Birkenes	nb-nilutm	2	01.03.2004	08.03.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	08.03.2004	15.03.2004	07:00	07:00	h1205ha[1	ng/ml	1	1	0,56	*-0.2	*0.212	*0.012	0,95	0.23
O-8118	Birkenes	nb-nilutm	2	15.03.2004	22.03.2004	07:00	07:00	h1205ha[1	ng/ml	1	1	*0.392	*-0.2	*0.228	*-0.01	0,62	0.12
O-8118	Birkenes	nb-nilutm	2	22.03.2004	29.03.2004	07:00	07:00	h1205ha[1	ng/ml	1	1	*0.491	*-0.2	*-0.2	*-0.01	*0.188	*-0.1
O-8118	Birkenes	nb-nilutm	2	29.03.2004	01.04.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	01.04.2004	05.04.2004	07:00	07:00	h1205ha[1	ng/ml	1	1	0.71	*-0.2	*0.349	*0.015	1,05	0.28
O-8118	Birkenes	nb-nilutm	2	05.04.2004	12.04.2004	07:00	07:00	h1205ha[1	ng/ml	1	1	*0.161	*-0.2	*0.228	*-0.01	0.65	*-0.1
O-8118	Birkenes	nb-nilutm	2	12.04.2004	19.04.2004	07:00	07:00	l3101la[12]	ng/ml	1	1	3.78	0.70	0.87	0.153	1.38	0.60
O-8118	Birkenes	nb-nilutm	2	19.04.2004	26.04.2004	07:00	07:00	l3101la[5]	ng/ml	1	1	1.18	*-0.2	*0.253	*0.047	0.74	0.29
O-8118	Birkenes	nb-nilutm	2	26.04.2004	01.05.2004	07:00	07:00	h2206ha[5	ng/ml	1	1	0.85	*-0.2	*0.362	*0.02	1.16	0.25
O-8118	Birkenes	nb-nilutm	2	01.05.2004	03.05.2004	07:00	07:00	h2206ha[6	ng/ml	1	1	1.92	*0.3	*0.412	*0.078	0.81	0.49
O-8118	Birkenes	nb-nilutm	2	03.05.2004	10.05.2004	07:00	07:00	h2206ha[7	ng/ml	1	1	0.56	*-0.2	*0.272	*0.039	0.65	0.16
O-8118	Birkenes	nb-nilutm	2	10.05.2004	17.05.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	17.05.2004	24.05.2004	07:00	07:00	h2206ha[8	ng/ml	1	1	1.04	*0.333	*0.335	*0.064	*0.41	0.15
O-8118	Birkenes	nb-nilutm	2	24.05.2004	31.05.2004	07:00	07:00	h2206ha[9	ng/ml	1	1	0.77	*-0.2	*0.209	*0.022	*0.275	*-0.1
O-8118	Birkenes	nb-nilutm	2	31.05.2004	01.06.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	01.06.2004	07.06.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	*0.499	*-0.2	*0.242	*0.043	0.66	*-0.1
O-8118	Birkenes	nb-nilutm	2	07.06.2004	14.06.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	*0.265	*-0.2	*0.208	*-0.01	0.56	*-0.1
O-8118	Birkenes	nb-nilutm	2	14.06.2004	21.06.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	*0.147	*-0.2	*-0.2	*-0.01	*0.327	*-0.1
O-8118	Birkenes	nb-nilutm	2	21.06.2004	28.06.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.302	*-0.1
O-8118	Birkenes	nb-nilutm	2	28.06.2004	01.07.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	0.54	*-0.2	0.87	*-0.01	1.04	0.16
O-8118	Birkenes	nb-nilutm	2	01.07.2004	05.07.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	*0.473	*-0.2	*0.469	*-0.01	1.05	*-0.1
O-8118	Birkenes	nb-nilutm	2	05.07.2004	12.07.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.249	*-0.1
O-8118	Birkenes	nb-nilutm	2	12.07.2004	19.07.2004	07:00	07:00	h0610ha[1	ng/ml	1	1	*0.272	*-0.2	*-0.2	*-0.01	*0.496	*-0.1
O-8118	Birkenes	nb-nilutm	2	19.07.2004	26.07.2004	07:00	07:00	h0610ha[2	ng/ml	1	1	*0.338	*-0.2	*0.431	*-0.01	0.67	0.15
O-8118	Birkenes	nb-nilutm	2	26.07.2004	01.08.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	01.08.2004	02.08.2004	07:00	07:00	h0610ha[2	ng/ml	1	1	*0.376	*-0.2	*-0.2	*-0.01	*0.184	*-0.1
O-8118	Birkenes	nb-nilutm	2	02.08.2004	09.08.2004	07:00	07:00	h0610ha[2	ng/ml	1	1	*0.457	*0.216	*0.322	*-0.01	*0.346	0.13
O-8118	Birkenes	nb-nilutm	2	09.08.2004	16.08.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	16.08.2004	23.08.2004	07:00	07:00	h0610ha[2	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.22	*-0.1
O-8118	Birkenes	nb-nilutm	2	23.08.2004	30.08.2004	07:00	07:00	h0610ha[2	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.341	*-0.1
O-8118	Birkenes	nb-nilutm	2	30.08.2004	01.09.2004	07:00	07:00	h0610ha[2	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.459	*-0.1
O-8118	Birkenes	nb-nilutm	2	01.09.2004	06.09.2004	07:00	07:00	h0610ha[2	ng/ml	1	1	2.16	*-0.2	*-0.2	*-0.01	*0.259	*-0.1
O-8118	Birkenes	nb-nilutm	2	06.09.2004	13.09.2004	07:00	07:00	h2511ha[1	ng/ml	1	1	0.71	*-0.2	*0.428	*0.035	1.20	0.17
O-8118	Birkenes	nb-nilutm	2	13.09.2004	20.09.2004	07:00	07:00	h2511ha[1	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	0.56	*-0.1
O-8118	Birkenes	nb-nilutm	2	20.09.2004	27.09.2004	07:00	07:00	h2511ha[1	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.176	*-0.1
O-8118	Birkenes	nb-nilutm	2	27.09.2004	01.10.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	01.10.2004	04.10.2004	07:00	07:00	h2511ha[1	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	0.85	*-0.1
O-8118	Birkenes	nb-nilutm	2	04.10.2004	11.10.2004	07:00	07:00	h2511ha[1	ng/ml	1	1	*-0.1	*-0.2	*0.273	*0.016	*0.372	*-0.1
O-8118	Birkenes	nb-nilutm	2	11.10.2004	18.10.2004	07:00	07:00	l3101la[6]	ng/ml	1	1	*0.328	*-0.2	*-0.2	*-0.01	*0.441	0.15
O-8118	Birkenes	nb-nilutm	2	18.10.2004	25.10.2004	07:00	07:00	h2511ha[2	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.458	*-0.1
O-8118	Birkenes	nb-nilutm	2	25.10.2004	01.11.2004	07:00	07:00	h2511ha[2	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	0.66	*-0.1
O-8118	Birkenes	nb-nilutm	2	01.11.2004	08.11.2004	07:00	07:00	l1101la[14]	ng/ml	1	1	0.54	*-0.2	*0.441	*0.03	1.05	0.18
O-8118	Birkenes	nb-nilutm	2	08.11.2004	15.11.2004	07:00	07:00	l1101la[15]	ng/ml	1	1	*0.463	*-0.2	*0.269	*0.014	0.58	0.15
O-8118	Birkenes	nb-nilutm	2	15.11.2004	22.11.2004	07:00	07:00	l1101la[16]	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.21	*-0.1
O-8118	Birkenes	nb-nilutm	2	22.11.2004	29.11.2004	07:00	07:00	l1101la[17]	ng/ml	1	1	2.18	*0.408	0.54	*0.032	0.65	0.16
O-8118	Birkenes	nb-nilutm	2	29.11.2004	01.12.2004	07:00	07:00	l1101la[18]	ng/ml	1	1	1.36	*0.211	0.87	*0.045	1.14	0.23
O-8118	Birkenes	nb-nilutm	2	01.12.2004	06.12.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	06.12.2004	13.12.2004	07:00	07:00		ng/ml								
O-8118	Birkenes	nb-nilutm	2	13.12.2004	20.12.2004	07:00	07:00	l2001la[20]	ng/ml	1	1	1.32	*-0.2	0.57	*0.028	1.44	0.25
O-8118	Birkenes	nb-nilutm	2	20.12.2004	27.12.2004	07:00	07:00	l2001la[21]	ng/ml	1	1	*-0.1	*-0.2	*-0.2	*-0.01	*0.162	*-0.1
O-8118	Birkenes	nb-nilutm	2	27.12.2004	01.01.2005	07:00	07:00	l2001la[22]	ng/ml	1	1	0.51	*-0.2	*0.473	*-0.01	1.28	0.13

*Målingen er lavere enn nedre kvantifiseringsgrense og rapporteres ikke akkreditert

Vedlegg 8

Tungmetaller i luft i Ny-Ålesund (U-1042-05)

Målerapport nr. U-1042-05

Oppdragsgiver:	NILU v/Stein Manø Her
Prosjekt nr.:	O-93062
Prøvetaking:	
Sted:	Zeppelinfjellet, Ny-Ålesund
Ansvar:	NILU
Kommentar:	
Prøveinformasjon:	
Prøvetype:	Luftprøver, fp-hivol
Prøven mottatt:	
Kommentar:	Tungmetaller i perioden 01.01.-31.12..2004
Analyser:	
Utført av	Norsk institutt for luftforskning Postboks 100 N-2027 KJELLER
Målemetode:	NILU-U-49: Forskrift for måling av svevestøv, hoved-komponenter og tungmetaller i svevestøv med Anderson Highvolum prøvetaker. NILU-U-116: Forskrift for bruk av mikrobølgeovn. NILU-U-100: Forskrift for bruk av Induktivt Koplet Plasma Masse Spektrometer (ICP-MS). Analysemetoden NILU-U-49 er akkreditert av Norsk Akkreditering i henhold til ISO/IEC-17025.
Kommentar:	For luftprøver beregnes måleresultatet i rapporten på basis av luftvolum. I slike tilfeller vil deteksjongrensen som rapporteres kunne variere fra prøve til prøve dersom luftvolumet varierer. I de tilfellene der NILU ikke har hatt ansvar for prøvetakingen, kan vi ikke tallfeste dette bidraget til usikkerheten.

Deteksjonsgrensen er basert på tre standardavvik for 9 blankfilter, Kvalitet: Whatman 41, med unntak for krom (Cr) og kobber (Cu), der deteksjonsgrensen er basert på ett standardavvik.

Filter merket Zeppelin 16-19.02.04, Masse snø på filteret.
Filter merket Zeppelin 25-27.02.04, litt snø på filteret.
Filter merket Zeppelin 3.-5.03.04, snø regn på filteret.
Filter merket Zeppelin 10-12.03.04, skiftet til impaktor B, snø på filter.
Filter merket Zeppelin 31.3.-02.04.04, snø på filter
Filter merket Zeppelin 21.-23.04.04, litt snø på filteret
Filter merket Zeppelin 10.-12.10.04, snø på filteret.

Kontaktperson: Marit Vadset

Godkjenning: Kjeller, 11. mars 2005

Marit Vadset
Ingeniør, Kjemisk analyse

Vedlegg: Analyseresultater for 50 prøver: 1 side
Målerapporten og vedleggene omfatter totalt 3 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Analyseresultatene for ICPMS følger som et eget vedlegg med overskrift "NILU ICPMS RAPPORT".

Oppdragsgivers prøveidentifikasjon er angitt i målerapporten for hver enkelt prøve. Analyseresultatene i rapportvedlegget er gitt med varierende antall gjeldende siffer. Med metodens beregnede usikkerhet som grunnlag, anbefales det å ikke benytte mer enn 3 gjeldende siffer ved vurdering eller i presentasjon av resultatene.

Usikkerheten i resultatene kan fås ved henvendelse til NILUs laboratorium.

Et minus "-" foran måleresultatet, betyr at det er mindre enn deteksjonsgrensen for analysemetoden. Er måleresultatet oppgitt som f.eks. "-0.01", betyr det at deteksjonsgrensen for metoden er 0.01.

PRO_NR	stasnr	STASKOD	PROVETY	MÅLEPER	FRADATO	TILDATO	lopenr	aprocnvn	IN_ENHE	UT_ENHE	UTV_VOL	DIL_FKT	LUFTVOL	Pb	Cd	Cu	Zn	Cr	Ni	Co	Mn	V	As
O-93062	Zeppelin	801	fp-hivol	6	07.01.2004	09.01.2004		l2701la[15]	ppb	ng/m3	50	1	3189	0.77	*0.003411	0.17	1.75	*0.141925	0.04	0.005	0.03	*-0.032266	*-0.022796
O-93062	Zeppelin	801	fp-hivol	6	14.01.2004	16.01.2004		l2701la[16]	ppb	ng/m3	50	1	3188	0.66	0.017	*0.070361	*0.756838	*0.072521	*0.033089	0.003	0.14	0.05	0.092
O-93062	Zeppelin	801	fp-hivol	6	21.01.2004	23.01.2004		l2701la[17]	ppb	ng/m3	50	1	2975	4.53	0.108	0.49	4.82	0.25	0.16	0.023	0.63	0.18	0.763
O-93062	Zeppelin	801	fp-hivol	6	28.01.2004	30.01.2004		l2701la[18]	ppb	ng/m3	50	1	3189	0.88	0.025	0.11	1.13	*0.045155	0.12	0.004	0.14	0.18	0.115
O-93062	Zeppelin	801	fp-hivol	6	04.02.2004	06.02.2004		l2701la[19]	ppb	ng/m3	50	1	3234	2.04	0.075	0.31	3.13	*0.080086	0.21	0.009	0.31	0.34	0.204
O-93062	Zeppelin	801	fp-hivol	6	11.02.2004	13.02.2004		l2701la[20]	ppb	ng/m3	50	1	3133	0.66	0.023	0.21	1.81	*0.065517	0.07	0.009	0.25	0.04	0.113
O-93062	Zeppelin	801	fp-hivol	6	16.02.2004	19.02.2004		l2701la[21]	ppb	ng/m3	50	1	2616	0.68	0.022	0.29	2.29	0.17	0.12	0.010	0.20	0.09	0.091
O-93062	Zeppelin	801	fp-hivol	6	25.02.2004	27.02.2004		l2701la[22]	ppb	ng/m3	50	1	3199	0.49	0.013	0.10	0.88	*-0.033645	*0.028786	*0.002747	0.15	0.04	0.062
O-93062	Zeppelin	801	fp-hivol	6	03.03.2004	05.03.2004		l2701la[23]	ppb	ng/m3	50	1	3337	2.50	0.073	1.55	85.63	*0.143002	0.20	0.023	0.20	0.03	0.022
O-93062	Zeppelin	801	fp-hivol	6	10.03.2004	12.03.2004		l0803la[27]	ppb	ng/m3	50	1	3041	0.53	0.040	1.97	7.13	*0.145412	0.19	0.871	0.22	0.05	0.035
O-93062	Zeppelin	801	fp-hivol	6	17.03.2004	19.03.2004	2	m3101ma[	ppb	ng/m3	50	1	3159	0.82	0.030	0.32	3.07	0.37	0.27	0.021	0.30	0.12	0.076
O-93062	Zeppelin	801	fp-hivol	6	22.03.2004	24.03.2004	2	m3101ma[	ppb	ng/m3	50	1	2864	2.74	0.064	0.38	4.55	0.20	0.14	0.023	0.90	0.19	0.373
O-93062	Zeppelin	801	fp-hivol	6	31.03.2004	02.04.2004	2	m3101ma[	ppb	ng/m3	50	1	3154	66.44	1.797	39.96	38.57	0.67	2.77	0.532	0.95	0.07	0.037
O-93062	Zeppelin	801	fp-hivol	6	14.04.2004	16.04.2004	2	m3101ma[	ppb	ng/m3	50	1	3056	1.48	0.042	0.27	2.16	0.30	0.12	0.013	0.47	0.10	0.201
O-93062	Zeppelin	801	fp-hivol	6	21.04.2004	22.04.2004	2	m3101ma[	ppb	ng/m3	50	1	3193	0.61	0.019	0.13	1.26	*-0.033708	0.05	0.044	0.29	0.05	0.060
O-93062	Zeppelin	801	fp-hivol	6	28.04.2004	30.04.2004	2	m3101ma[	ppb	ng/m3	50	1	3244	0.06	*-0.001124	0.12	*0.321455	*-0.033178	*-0.026001	0.008	0.02	*-0.031719	*-0.022409
O-93062	Zeppelin	801	fp-hivol	6	05.05.2004	07.05.2004	2	m3101ma[	ppb	ng/m3	50	1	3214	0.15	0.004	*0.088024	*0.426011	*-0.033488	0.08	0.007	0.04	0.05	*-0.022618
O-93062	Zeppelin	801	fp-hivol	6	12.05.2004	14.05.2004	2	m3101ma[	ppb	ng/m3	50	1	3238	0.77	0.027	0.13	1.24	*0.042866	0.06	0.018	0.73	0.09	0.088
O-93062	Zeppelin	801	fp-hivol	6	19.05.2004	21.05.2004		m3101ma[	ppb	ng/m3	50	1	3259	0.33	0.010	0.14	*0.626204	*0.083093	0.09	0.021	0.71	0.13	0.044
O-93062	Zeppelin	801	fp-hivol	6	26.05.2004	28.05.2004		m3101ma[	ppb	ng/m3	50	1	3199	0.29	0.010	0.24	0.85	*0.049953	*0.029224	0.006	0.21	0.03	0.032
O-93062	Zeppelin	801	fp-hivol	6	02.06.2004	04.06.2004		m3101ma[	ppb	ng/m3	50	1	3184	0.16	0.005	0.11	*0.487688	*0.056595	*-0.026491	0.004	0.15	*-0.032317	*-0.022832
O-93062	Zeppelin	801	fp-hivol	6	09.06.2004	11.06.2004		m3101ma[	ppb	ng/m3	50	1	3199	0.07	*0.003587	*0.096502	*0.291466	*-0.033645	*-0.026367	0.004	0.08	*-0.032165	*-0.022724
O-93062	Zeppelin	801	fp-hivol	6	16.06.2004	18.06.2004		m3101ma[	ppb	ng/m3	50	1	3069	0.24	0.007	0.13	*0.524861	*0.074161	*0.036001	0.008	0.31	0.04	0.035
O-93062	Zeppelin	801	fp-hivol	6	23.06.2004	25.06.2004		m3101ma[	ppb	ng/m3	50	1	3100	0.03	*0.001186	0.11	*0.233096	*0.059612	*-0.027209	0.006	0.11	*-0.033193	*-0.023450
O-93062	Zeppelin	801	fp-hivol	6	28.06.2004	30.06.2004		m3101ma[	ppb	ng/m3	50	1	3247	0.07	*0.001625	*0.054669	*0.179919	*-0.033147	*-0.025977	*0.002768	0.09	0.05	*-0.022389
O-93062	Zeppelin	801	fp-hivol	6	21.07.2004	23.07.2004		m3101ma[	ppb	ng/m3	50	1	3342	0.05	*-0.001091	0.25	*0.354638	*0.067444	0.14	0.012	0.05	*-0.030789	*-0.021752
O-93062	Zeppelin	801	fp-hivol	6	28.07.2004	30.07.2004		m3101ma[	ppb	ng/m3	50	1	3468	0.06	*0.001464	0.23	*0.420069	*0.057266	0.05	0.010	0.28	0.07	*-0.020962
O-93062	Zeppelin	801	fp-hivol	6	04.08.2004	06.08.2004		l0802la[19]	ppb	ng/m3	50	1	3136	0.04	*-0.001163	*0.085239	*0.190178	*0.048278	0.04	0.003	0.05	0.05	*-0.023181
O-93062	Zeppelin	801	fp-hivol	6	11.08.2004	13.08.2004		l0802la[20]	ppb	ng/m3	50	1	3124	*-0.01889	*-0.001168	*0.077180	*0.334122	*0.060499	*-0.027000	*0.002685	0.06	*-0.032937	*-0.023270
O-93062	Zeppelin	801	fp-hivol	6	18.08.2004	21.08.2004		l0802la[21]	ppb	ng/m3	50	1	3115	0.06	*0.001437	0.34	*0.657078	0.16	0.07	0.021	0.82	0.12	*-0.023337
O-93062	Zeppelin	801	fp-hivol	6	25.08.2004	27.08.2004		l0802la[22]	ppb	ng/m3	50	1	3181	0.02	*-0.001147	*0.090949	*0.500094	*0.070858	0.21	0.009	0.11	*-0.032347	*-0.022853
O-93062	Zeppelin	801	fp-hivol	6	01.09.2004	03.09.2004		l0803la[28]	ppb	ng/m3	50	1	3218	2.03	0.024	1.38	6.81	0.29	0.60	0.135	0.41	*-0.031975	*-0.022590
O-93062	Zeppelin	801	fp-hivol	6	08.09.2004	10.09.2004		l0802la[24]	ppb	ng/m3	50	1	3102	0.04	*-0.001176	0.14	*0.442230	0.16	0.06	0.014	0.44	0.08	*-0.023435
O-93062	Zeppelin	801	fp-hivol	6	15.09.2004	17.09.2004		l0802la[25]	ppb	ng/m3	50	1	3918	0.02	*0.000938	*0.062203	*0.184532	*0.056304	*-0.021528	0.003	0.13	*-0.026262	*-0.018554
O-93062	Zeppelin	801	fp-hivol	6	22.09.2004	24.09.2004		l0802la[26]	ppb	ng/m3	50	1	3236	0.04	*-0.001127	0.11	*0.331026	*0.050247	*0.036739	0.012	0.44	0.07	*-0.022465
O-93062	Zeppelin	801	fp-hivol	6	29.09.2004	01.10.2004		l0802la[27]	ppb	ng/m3	50	1	3280	0.03	*-0.001112	0.20	*0.661829	*0.129695	*0.036795	0.007	0.17	*-0.031371	*-0.022163
O-93062	Zeppelin	801	fp-hivol	6	06.10.2004	08.10.2004		l0802la[28]	ppb	ng/m3	50	1	3173	0.04	*-0.00115	*0.089099	*0.36445	*0.113394	*-0.026583	0.009	0.38	0.05	*-0.022911
O-93062	Zeppelin	801	fp-hivol	6	13.10.2004	15.10.2004		l0802la[29]	ppb	ng/m3	50	1	3190	0.09	*0.002845	0.29	*0.686144	0.19	0.09	0.018	0.59	0.09	*-0.022789
O-93062	Zeppelin	801	fp-hivol	6	20.10.2004	22.10.2004		l0802la[30]	ppb	ng/m3	50	1	3200	0.03	*-0.001140	*0.042034	*0.135312	*0.11325	*-0.026358	0.011	0.08	*-0.032155	*-0.022717
O-93062	Zeppelin	801	fp-hivol	6	27.10.2004	29.10.2004		l0802la[31]	ppb	ng/m3	50	1	3231	0.16	*0.003119	0.27	*0.738718	*0.122191	0.08	0.019	0.60	0.10	*-0.022499
O-93062	Zeppelin	801	fp-hivol	6	03.11.2004	05.11.2004		l0303la[18]	ppb	ng/m3	50	1	3190	0.11	0.011	*-0.037430	*0.551348	*0.060501	0.07	*-0.001642	0.49	*-0.032256	0.185
O-93062	Zeppelin	801	fp-hivol	6	10.11.2004	12.11.2004		l0203la[15]	ppb	ng/m3	50	1	3189	1.23	0.027	0.64	4.08	*0.082972	0.15	0.029	0.47	0.05	0.137
O-93062	Zeppelin	801	fp-hivol	6	17.11.2004	19.11.2004		l0203la[16]	ppb	ng/m3	50	1	3194	0.63	0.013	0.30	1.90	*-0.033697	0.05	0.011	0.38	0.05	0.084
O-93062	Zeppelin	801	fp-hivol	6	24.11.2004	26.11.2004		l0203la[17]	ppb	ng/m3	50	1	3176	0.33	0.011	0.21	1.20	*-0.033888	0.04	0.021	0.15	*-0.032398	0.032
O-93062	Zeppelin	801	fp-hivol	6	01.12.2004	03.12.2004		l2802la[4]	ppb	ng/m3	50	1	3152	0.20	0.008	0.38	1.03	*0.050507	0.12	0.012	0.10	*-0.032645	*-0.023063
O-93062	Zeppelin	801	fp-hivol	6	08.12.2004	10.12.2004		l2802la[6]	ppb	ng/m3	50	1	3080	0.21	0.007	0.35	1.35	*0.102857	0.10	0.036	1.19	0.15	0.034
O-93062	Zeppelin	801	fp-hivol	6	15.12.2004	17.12.2004		l2802la[5]	ppb	ng/m3	50	1	2809	0.93	0.027	0.40	1.67	*0.135635	0.13	0.028	0.65	0.14	0.163
O-93062	Zeppelin	801	fp-hivol	6	22.12.2004	25.12.2004		l2802la[7]	ppb	ng/m3	50	1	3319	0.44	0.015	0.25	2.12	0.16	0.15	0.029	1.08	0.21	0.061
O-93062	Zeppelin	801	fp-hivol	6	29.12.2004	03.01.2005		l2802la[9]	ppb	ng/m3	50	1	3208	1.08	0.061	0.92	35.62	*0.123815	0.26	0.085	0.65	0.08	*-0.022661
O-93062	Zeppelin	801	fp-hivol	6	07.04.2004	11.04.2004		m3101ma[	ppb	ng/m3	50	1	3232	1.95	0.061	0.61	4.04	0.34	0.32	0.098	2.46	0.41	0.261

*Målingen er utenfor akkreditert område.

Vedlegg 9

Kvikksølv i luft på Birkenes (U-1101-05)

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Målerapport nr. U-1101-05

Oppdragsgiver:	NILU v/Torunn Berg Her
Prosjekt nr:	O-90006
Prøvetaking:	
Sted:	Birkenes
Ansvar:	NILU
Kommentar:	
Prøveinformasjon:	
Prøve type:	Totalt gassfasekvikksølv (TGM)
Prøver mottatt:	Fortløpende
Antall prøver:	35 (TGM)
Kommentar:	
Analyser:	
Utført av:	Norsk institutt for luftforskning Postboks 100 N-2007 KJELLER
Målemetode:	Analysene er utført ved NILUs avdeling for Uorganisk analyse. Følgende metoder er brukt: TGM: Gullfeller (NILU-U-53) Gullfelle 1 er rapportert.
Måleusikkerhet:	
Kontakt person:	Torunn Berg

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Godkjenning: Kjeller, 30. mai 2005

Torunn Berg
Seniorforsker

Vedlegg: Analyseresultater : 1 side
Målerapporten og vedleggene omfatter i alt 3 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Totalt gassfasekvikksølv, Birkenes

Prøve ID	Kons. Hg
Dato	
01.03.2004	1.70
08.03.2004	1.67
15.03.2004	1.43
22.03.2004	2.78
29.03.2004	2.12
05.04.2004	1.75
12.04.2004	2.32
19.04.2004	1.52
26.04.2004	2.30
03.05.2004	0.71
10.05.2004	1.26
17.05.2004	1.49
24.05.2004	1.41
14.06.2004	1.47
21.06.2004	1.54
05.07.2004	1.84
12.07.2004	1.35
19.07.2004	1.54
26.07.2004	1.71
02.08.2004	1.99
09.08.2004	2.67
16.08.2004	1.55
04.10.2004	1.69
11.10.2004	2.07
18.10.2004	1.40
25.10.2004	1.35
01.11.2004	1.37
08.11.2004	1.67
15.11.2004	1.77
22.11.2004	2.06
29.11.2004	1.52
06.12.2004	1.53
13.12.2004	1.59
20.12.2004	1.51
27.12.2004	1.24

Vedlegg 10

Kvikksølv i nedbør på Birkenes (U-1083-05)

NORSK AKKREDITERING P 008

Akkreditert etter ISO/IEC-17025 Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Målerapport nr. U-1083-05

Oppdragsgiver: NILU v/Torunn Berg
Her

Prosjekt nr: O-90006

Prøvetaking:
Sted: Birkenes, Nedbør
Ansvar: NILU
Kommentar:

Prøveinformasjon:
Prøve type: Kvikksølv

Prøver mottatt: Månedlig
Antall prøver: 17
Kommentar:

Analyser:
Utført av: Norsk institutt for luftforskning
Postboks 100
N-2007 KJELLER

Målemetode: Analysene er utført ved NILUs avdeling for Uorganisk analyse. Følgende metoder er brukt:

NILU-U-60: Forskrift for prøvetaking av Hg i vann.

Måleusikkerhet: Analyseusikkerheten ligger innenfor 20% ved det målte nivå.

Kontakt person: Torunn Berg

Godkjenning: Kjeller, 4. mai 2005

Torunn Berg
Seniorforsker

Vedlegg: Analyseresultater : 1 side
Målerapporten og vedleggene omfatter i alt 3 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Totalt kvikksølv i nedbør, Birkenes, 2005

Fradato	Tildato	Hg (ng/l)
01.03.2004	20.03.2004	7.2
20.03.2004	01.04.2004	7.1
01.04.2004	01.05.2004	11.7
01.05.2004	01.06.2004	13.3
01.06.2004	24.06.2004	5.2
24.06.2004	01.07.2004	5.0
01.07.2004	19.07.2004	25.4
19.07.2004	01.08.2004	15.4
01.08.2004	25.08.2004	13.3
25.08.2004	01.09.2004	12.8
01.09.2004	19.09.2004	11.3
19.09.2004	01.10.2004	7.3
01.10.2004	05.10.2004	7.5
05.10.2004	25.10.2004	9.8
25.10.2004	01.11.2004	4.8
01.11.2004	01.12.2004	9.9
01.12.2004	01.01.2005	1.9

Vedlegg 11

Kvikksølv i luft i Ny-Ålesund (U-1088-05)

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Målerapport nr. U-1088-05

Oppdragsgiver: NILU v/Torunn Berg
Her

Prosjekt nr: O-99137

Prøvetaking:
Sted: Zeppelin
Ansvar: NILU
Kommentar:

Prøveinformasjon:
Prøve type: Elementært kvikksølv i gassfase (GEM)

Prøver mottatt:
Antall prøver:
Kommentar:

Analyser:
Utført av: Norsk institutt for luftforskning
Postboks 100
N-2007 KJELLER

Målemetode: Analysene er utført ved NILUs avdeling for Uorganisk analyse. Følgende metoder er brukt:

GEM: Tekran Hg-monitor

Måleusikkerhet:

Kontakt person: Torunn Berg

Norsk institutt for luftforskning
Postboks 100, N-2027 Kjeller

Godkjenning: Kjeller, 10. mai 2005

Torunn Berg
Seniorforsker

Vedlegg: Analyseresultater : 7 sider
Målerapporten og vedleggene omfatter i alt 9 sider

Måleresultatene gjelder bare de prøvene som er analysert. Denne rapporten skal ikke gjengis i utdrag, uten skriftlig godkjenning fra laboratoriet.

Elementært kvikksølv i gassfase (GEM), Zeppelin, 2004

Dato	TGM (ng/m3)
01.01.2004	1.50
02.01.2004	1.72
03.01.2004	1.99
04.01.2004	1.99
05.01.2004	1.71
06.01.2004	2.06
07.01.2004	1.91
08.01.2004	1.73
09.01.2004	1.55
10.01.2004	1.54
11.01.2004	1.54
12.01.2004	1.52
13.01.2004	1.72
14.01.2004	1.66
15.01.2004	1.71
16.01.2004	1.69
17.01.2004	1.63
18.01.2004	1.60
19.01.2004	1.59
20.01.2004	1.45
21.01.2004	1.45
22.01.2004	1.62
23.01.2004	1.58
24.01.2004	1.61
25.01.2004	1.58
26.01.2004	1.53
27.01.2004	1.63
28.01.2004	1.73
29.01.2004	1.71
30.01.2004	1.71
31.01.2004	1.75
01.02.2004	1.77
02.02.2004	1.68
03.02.2004	1.72
04.02.2004	1.55
05.02.2004	1.72
06.02.2004	1.55
07.02.2004	1.25
08.02.2004	1.29
09.02.2004	1.18
10.02.2004	1.54
11.02.2004	1.87
12.02.2004	1.82
13.02.2004	1.66
14.02.2004	1.59
15.02.2004	1.71
16.02.2004	1.70
17.02.2004	1.68
18.02.2004	1.67
19.02.2004	1.61
20.02.2004	1.57
21.02.2004	1.70

22.02.2004	1.58
23.02.2004	
24.02.2004	
25.02.2004	
26.02.2004	
27.02.2004	
28.02.2004	
29.02.2004	
01.03.2004	
02.03.2004	
03.03.2004	
04.03.2004	
05.03.2004	
06.03.2004	
07.03.2004	
08.03.2004	
09.03.2004	
10.03.2004	
11.03.2004	1.72
12.03.2004	1.70
13.03.2004	1.94
14.03.2004	1.90
15.03.2004	1.79
16.03.2004	1.25
17.03.2004	1.60
18.03.2004	1.88
19.03.2004	1.75
20.03.2004	1.81
21.03.2004	1.82
22.03.2004	1.72
23.03.2004	1.68
24.03.2004	1.82
25.03.2004	1.70
26.03.2004	1.78
27.03.2004	1.55
28.03.2004	1.49
29.03.2004	1.45
30.03.2004	1.52
31.03.2004	1.61
01.04.2004	1.79
02.04.2004	1.66
03.04.2004	1.44
04.04.2004	1.61
05.04.2004	1.77
06.04.2004	1.73
07.04.2004	1.66
08.04.2004	
09.04.2004	
10.04.2004	
11.04.2004	1.53
12.04.2004	1.31
13.04.2004	1.37
14.04.2004	1.44
15.04.2004	1.50
16.04.2004	1.40

17.04.2004	1.32
18.04.2004	1.38
19.04.2004	1.40
20.04.2004	1.38
21.04.2004	1.58
22.04.2004	1.58
23.04.2004	1.50
24.04.2004	1.65
25.04.2004	1.66
26.04.2004	1.73
27.04.2004	1.74
28.04.2004	1.58
29.04.2004	1.11
30.04.2004	1.04
01.05.2004	1.11
02.05.2004	1.31
03.05.2004	1.49
04.05.2004	1.31
05.05.2004	1.43
06.05.2004	1.35
07.05.2004	1.36
08.05.2004	1.33
09.05.2004	1.38
10.05.2004	1.19
11.05.2004	0.97
12.05.2004	1.34
13.05.2004	1.02
14.05.2004	1.16
15.05.2004	1.52
16.05.2004	1.23
17.05.2004	1.51
18.05.2004	1.17
19.05.2004	1.28
20.05.2004	1.49
21.05.2004	1.65
22.05.2004	1.62
23.05.2004	0.90
24.05.2004	0.93
25.05.2004	1.27
26.05.2004	1.39
27.05.2004	1.40
28.05.2004	1.48
29.05.2004	1.47
30.05.2004	1.42
31.05.2004	1.27
01.06.2004	1.60
02.06.2004	1.47
03.06.2004	1.13
04.06.2004	1.01
05.06.2004	1.14
06.06.2004	1.47
07.06.2004	1.34
08.06.2004	1.57
09.06.2004	1.53
10.06.2004	1.45

11.06.2004	1.48
12.06.2004	1.48
13.06.2004	1.59
14.06.2004	1.60
15.06.2004	1.70
16.06.2004	1.61
17.06.2004	1.60
18.06.2004	1.57
19.06.2004	1.69
20.06.2004	1.67
21.06.2004	1.67
22.06.2004	1.64
23.06.2004	1.66
24.06.2004	1.61
25.06.2004	2.02
26.06.2004	1.73
27.06.2004	1.59
28.06.2004	1.54
29.06.2004	1.63
30.06.2004	1.58
01.07.2004	1.62
02.07.2004	1.71
03.07.2004	1.68
04.07.2004	1.65
05.07.2004	1.61
06.07.2004	1.85
07.07.2004	1.46
08.07.2004	1.60
09.07.2004	1.62
10.07.2004	1.65
11.07.2004	1.58
12.07.2004	1.46
13.07.2004	1.77
14.07.2004	1.60
15.07.2004	1.42
16.07.2004	1.36
17.07.2004	1.42
18.07.2004	1.49
19.07.2004	1.45
20.07.2004	1.57
21.07.2004	1.50
22.07.2004	1.48
23.07.2004	1.44
24.07.2004	1.47
25.07.2004	1.44
26.07.2004	1.53
27.07.2004	1.49
28.07.2004	1.46
29.07.2004	1.53
30.07.2004	1.51
31.07.2004	1.51
01.08.2004	1.50
02.08.2004	1.48
03.08.2004	1.51
04.08.2004	1.53

05.08.2004	1.46
06.08.2004	1.53
07.08.2004	1.45
08.08.2004	1.53
09.08.2004	1.55
10.08.2004	1.52
11.08.2004	1.47
12.08.2004	1.45
13.08.2004	1.29
14.08.2004	1.34
15.08.2004	1.29
16.08.2004	
17.08.2004	
18.08.2004	
19.08.2004	1.43
20.08.2004	1.43
21.08.2004	
22.08.2004	1.42
23.08.2004	1.48
24.08.2004	1.45
25.08.2004	1.42
26.08.2004	1.49
27.08.2004	1.45
28.08.2004	
29.08.2004	1.42
30.08.2004	1.41
31.08.2004	1.39
01.09.2004	
02.09.2004	
03.09.2004	
04.09.2004	1.55
05.09.2004	1.55
06.09.2004	1.46
07.09.2004	
08.09.2004	
09.09.2004	
10.09.2004	
11.09.2004	
12.09.2004	
13.09.2004	1.39
14.09.2004	1.44
15.09.2004	1.42
16.09.2004	1.42
17.09.2004	1.43
18.09.2004	1.43
19.09.2004	1.42
20.09.2004	1.41
21.09.2004	1.42
22.09.2004	1.41
23.09.2004	1.41
24.09.2004	1.40
25.09.2004	1.40
26.09.2004	1.42
27.09.2004	1.42
28.09.2004	1.42

29.09.2004	1.43
30.09.2004	1.42
01.10.2004	1.42
02.10.2004	1.48
03.10.2004	1.41
04.10.2004	1.42
05.10.2004	1.39
06.10.2004	1.39
07.10.2004	1.36
08.10.2004	1.32
09.10.2004	1.34
10.10.2004	1.37
11.10.2004	1.50
12.10.2004	1.41
13.10.2004	1.34
14.10.2004	1.29
15.10.2004	1.35
16.10.2004	1.38
17.10.2004	1.36
18.10.2004	1.37
19.10.2004	1.37
20.10.2004	1.35
21.10.2004	1.36
22.10.2004	1.33
23.10.2004	1.30
24.10.2004	
25.10.2004	
26.10.2004	1.42
27.10.2004	1.43
28.10.2004	1.43
29.10.2004	1.44
30.10.2004	1.40
31.10.2004	1.46
01.11.2004	1.46
02.11.2004	1.43
03.11.2004	1.41
04.11.2004	1.42
05.11.2004	1.43
06.11.2004	1.42
07.11.2004	1.42
08.11.2004	1.40
09.11.2004	1.38
10.11.2004	1.39
11.11.2004	1.41
12.11.2004	1.43
13.11.2004	1.38
14.11.2004	1.36
15.11.2004	1.35
16.11.2004	1.33
17.11.2004	1.42
18.11.2004	1.39
19.11.2004	1.40
20.11.2004	1.44
21.11.2004	1.43
22.11.2004	1.44

23.11.2004	1.43
24.11.2004	1.44
25.11.2004	1.45
26.11.2004	1.51
27.11.2004	1.49
28.11.2004	1.45
29.11.2004	1.49
30.11.2004	1.50
01.12.2004	1.44
02.12.2004	1.50
03.12.2004	
04.12.2004	
05.12.2004	
06.12.2004	
07.12.2004	1.51
08.12.2004	1.41
09.12.2004	1.46
10.12.2004	1.51
11.12.2004	1.36
12.12.2004	1.46
13.12.2004	1.41
14.12.2004	1.48
15.12.2004	1.44
16.12.2004	1.44
17.12.2004	1.39
18.12.2004	1.38
19.12.2004	1.42
20.12.2004	1.39
21.12.2004	1.41
22.12.2004	1.47
23.12.2004	1.62
24.12.2004	1.53
25.12.2004	1.55
26.12.2004	1.56
27.12.2004	1.54
28.12.2004	1.58
29.12.2004	1.57
30.12.2004	1.52
31.12.2004	1.49

Norsk institutt for luftforskning (NILU)
Postboks 100, N-2027 Kjeller

RAPPORTTYPE	RAPPORT NR. OR 23/2005	ISBN 82-425-1663-4	
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TITLE
Data from long range transported polluted air and deposition

ABSTRACT

* *Kategorier:*
- *A* *Åpen - kan bestilles fra NILU*
- *B* *Begrenset distribusjon*
- *C* *Kan ikke utleveres*