Test report

61243-006-08N5161

Client: Environmental Protection Agency (EPA)
McCumiskey House
Richview
Clonskeagh Road
Dublin 14
Ireland

Order dated: July 22, 2008

Sample: Cow's milk samples, details see table

Sample-No.	Client's sample characterization	GfA sample No.
A1	Cow milk	8N5161.001
A2	Cow milk	8N5161.002
A3	Cow milk	8N5161.003
A4	Cow milk	8N5161.004
A5	Cow milk	8N5161.005
A6	Cow milk	8N5161.006
A7	Cow milk	8N5161.007
A8	Cow milk	8N5161.008
A9	Cow milk	8N5161.009
A10	Cow milk	8N5161.010
A11	Cow milk	8N5161.011
A12	Cow milk	8N5161.012
A13	Cow milk	8N5161.013
A14	Cow milk	8N5161.014
A15	Cow milk	8N5161.015
A16	Cow milk	8N5161.016
A18	Cow milk	8N5161.017
A19	Cow milk	8N5161.018
A20	Cow milk	8N5161.019
A21	Cow milk	8N5161.020
A22	Cow milk	8N5161.021
A23	Cow milk	8N5161.022
A24	Cow milk	8N5161.023
A25	Cow milk	8N5161.024

Sample-No.	Client's sample characterization	GfA sample No.
B1	Cow milk	8N5161.025
B2	Cow milk	8N5161.026
B3	Cow milk	8N5161.027
B4	Cow milk	8N5161.028
B5	Cow milk	8N5161.029
B6	Cow milk	8N5161.030
B7	Cow milk	8N5161.031
B8	Cow milk	8N5161.032
B9	Cow milk	8N5161.033
B13	Cow milk	8N5161.034
B14	Cow milk	8N5161.035
B15	Cow milk	8N5161.036
B17	Cow milk	8N5161.037

Testing: Analysis for polychlorinated Dibenzofurans and Dibenzodioxins (PCDF/Ds) and for polychlorinated Biphenyls (PCBs).

Sampling: The samples were sent to GfA by the client.

Sample entry: July 24, 2008

Test method: **Sample preparation**
Freeze drying; Homogenisation; ASE extraction of a representative sample amount by means of Hexane/Dichloromethane/Methanol. Addition of sixteen $^{13}C_{12}$-labelled internal Tetra- through OctaCDF/D standards and twelve $^{13}C_{12}$-labelled internal PCB standards prior to extraction. Gravimetrical determination of the fat content after evaporation of the solvents.

PCDF/D analysis:
For the PCDF/D analysis the solution was cleaned-up by multi-step liquid/solid chromatography. Prior to the gas chromatographic analysis, two further ^{13}C-labelled PCDF/D standards were added to the PCDF/D fraction for the determination of the recovery of the internal standards.

A capillary gas chromatograph (HRGC, HP 5890) equipped with a DB5 column coupled with a high resolution mass spectrometer (HRMS, VG-AutoSpec) was used for the PCDF/D analysis. The quantitative determination of native Tetra- through OctaCDF/Ds was achieved via the corresponding $^{13}C_{12}$-labelled internal standards (Isotope dilution method; QMA504-205; DIN EN ISO/IEC 17025:2005 accredited method).

The analytical methodology is in compliance with the requirement for the HRGC/HRMS confirmatory analysis of food for PCDD/Fs and PCBs as laid down by the EU directive 2002/69 and its amendment 2004/44 from April 2004.

PCB analysis:
For the PCB analysis the solution was cleaned-up by multi-step liquid/solid chromatography; addition of another ^{13}C-labelled PCB congener to the PCB fraction as recovery standard prior to the GC/MS analysis.

For analysis, a capillary gas chromatograph (HRGC, HP 5890) equipped with a HT5 column coupled with a high resolution mass spectrometer (HRMS, VG-AutoSpec) was used. The quantitative determination of native PCBs was achieved via the corresponding $^{13}C_{12}$-labeld internal standards (Isotope dilution method; QMA504-205; DIN EN ISO/IEC 17025:2005 accredited method; however HRMS instead of LRMS).

The analytical methodology is in compliance with the requirement for the HRGC/HRMS confirmatory analysis of food for PCDD/Fs and PCBs as laid down by the EU directive 2002/69 and its amendment 2004/44 from April 2004.

Start of testing: July 24, 2008

End of testing: October 13, 2008

Results: The results of the analysis of the samples are shown in the Tables 01 to 40.

Remarks: The PCDD/F and PCB data of the cow's milk samples A22, B3, B4 and B8 were verified by means of a duplicate analysis.

Tab. 01: Survey on the milk fat related PCDD/F and PCB-TEQ values determined in the background samples A 1 - A 25 of 2006 (upper bound values)

Sample	Dioxins		PCBs	Dioxins and PCBs
	I-TEQ incl. LOQ [a]	WHO-TEQ incl. LOQ [a]	WHO-TEQ incl. LOQ [a]	Total WHO-TEQ incl. LOQ [a]
Unit	pg/g milk fat	pg/g milk fat	pg/g milk fat	pg/g milk fat
A1	0,229	0,280	0,154	0,434
A2	0,215	0,244	0,161	0,405
A3	0,293	0,330	0,237	0,567
A4	0,262	0,300	0,207	0,507
A5	0,177	0,198	0,106	0,304
A6	0,212	0,236	0,164	0,400
A7	0,178	0,201	0,135	0,336
A8	0,201	0,223	0,169	0,392
A9	0,197	0,222	0,157	0,379
A10	0,196	0,213	0,141	0,354
A11	0,203	0,227	0,154	0,381
A12	0,203	0,225	0,178	0,403
A13	0,213	0,239	0,174	0,413
A14	0,170	0,190	0,128	0,318
A15	0,184	0,202	0,153	0,355
A16	0,213	0,238	0,167	0,405
A18	0,204	0,228	0,196	0,424
A19	0,260	0,300	0,239	0,539
A20	0,232	0,264	0,200	0,464
A21	0,197	0,224	0,127	0,351
A22	0,251	0,346	0,106	0,452
A23	0,227	0,259	0,150	0,409
A24	0,175	0,197	0,150	0,347
A25	0,237	0,227	0,108	0,385

[a] : TEQ value calculated by including the not detected congeners also by taking the full value of their limits of quantification (LOQ)

Tab. 02: Survey on the milk fat related PCDD/F and PCB-TEQ values determined in the potential impact samples B 1 - B 17 of 2006 (upper bound values)

Sample	Dioxins		PCBs	Dioxins and PCBs
	I-TEQ incl. LOD [a]	WHO-TEQ incl. LOD [a]	WHO-TEQ incl. LOD [a]	Total WHO-TEQ incl. LOD [a]
Unit	pg/g milk fat	pg/g milk fat	pg/g milk fat	pg/g milk fat
B1	0,282	0,325	0,161	0,486
B2	0,182	0,204	0,135	0,339
B3	0,421	0,673	0,162	0,835
B4	0,373	0,588	0,119	0,707
B5	0,174	0,196	0,111	0,307
B6	0,183	0,202	0,136	0,338
B7	0,219	0,248	0,143	0,391
B8	0,279	0,318	0,355	0,673
B9	0,210	0,230	0,170	0,400
B13	0,234	0,251	0,186	0,437
B14	0,238	0,269	0,152	0,421
B15	0,223	0,249	0,222	0,471
B17	0,332	0,370	0,388	0,758

[a] : TEQ value calculated by including the not detected congeners also by taking the full value of their limits of quantification (LOQ)

Tab. 03: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A1 8N5161.001		A2 8N5161.002	
Fat content [%]	3,6		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07	< 0,002
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,13	0,005	0,15	0,006
123478-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
1234678-HeptaCDF	0,13	0,005	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,006	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,002
12378-PentaCDD	0,10	0,004	0,06	0,002
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,15	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	0,12	0,004	< 0,10	< 0,003
OctaCDD	< 0,56	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,171	0,006	0,135	0,005
WHO-PCDD/F-TEQ incl. LOQ [b]	0,280	0,010	0,244	0,009
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,145	0,005	0,104	0,004
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,253	0,009	0,212	0,008
ITE-(NATO/CCMS) excl. LOQ [a]	0,120	0,004	0,106	0,004
ITE-(NATO/CCMS) incl. LOQ [b]	0,229	0,008	0,215	0,008
Recovery Rates	%		%	
13C12-2378-TetraCDF	108		107	
13C12-12378-PentaCDF	67,1		69,8	
13C12-23478-PentaCDF	77,2		79,1	
13C12-123478-HexaCDF	80,2		79,2	
13C12-123678-HexaCDF	76,4		77,6	
13C12-123789-HexaCDF	84,6		83,0	
13C12-234678-HexaCDF	79,3		79,4	
13C12-1234678-HeptaCDF	68,3		67,8	
13C12-1234789-HeptaCDF	83,0		75,1	
13C12-OctaCDF	72,2		58,8	
13C12-2378-TetraCDD	122		117	
13C12-12378-PentaCDD	62,9		66,5	
13C12-123478-HexaCDD	54,3		57,5	
13C12-123678-HexaCDD	79,4		79,6	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	76,0		71,9	
13C12-OctaCDD	66,5		51,7	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 04: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A3 8N5161.003		A4 8N5161.004	
Fat content [%]	3,6		3,7	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07	< 0,003
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,27	0,010	0,21	0,008
123478-HexaCDF	0,12	0,004	0,09	0,003
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	0,08	0,003	0,10	0,004
1234678-HeptaCDF	< 0,09	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,006	< 0,16	< 0,006
PCDD				
2378-TetraCDD	0,04	0,002	< 0,04	< 0,002
12378-PentaCDD	0,08	0,003	0,08	0,003
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	0,16	0,006	< 0,10	< 0,004
OctaCDD	< 0,56	< 0,02	< 0,56	< 0,020
WHO-PCDD/F-TEQ excl. LOQ [a]	0,276	0,010	0,203	0,008
WHO-PCDD/F-TEQ incl. LOQ [b]	0,330	0,012	0,300	0,011
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,222	0,008	0,161	0,006
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,275	0,010	0,256	0,009
ITE-(NATO/CCMS) excl. LOQ [a]	0,238	0,009	0,164	0,006
ITE-(NATO/CCMS) incl. LOQ [b]	0,293	0,011	0,262	0,010
Recovery Rates	%		%	
13C12-2378-TetraCDF	108		108	
13C12-12378-PentaCDF	66,8		70,9	
13C12-23478-PentaCDF	78,0		76,9	
13C12-123478-HexaCDF	82,8		75,3	
13C12-123678-HexaCDF	79,5		74,9	
13C12-123789-HexaCDF	84,8		76,2	
13C12-234678-HexaCDF	80,0		74,6	
13C12-1234678-HeptaCDF	67,0		66,3	
13C12-1234789-HeptaCDF	81,0		80,6	
13C12-OctaCDF	71,8		64,8	
13C12-2378-TetraCDD	103		111	
13C12-12378-PentaCDD	65,4		60,4	
13C12-123478-HexaCDD	42,3		49,6	
13C12-123678-HexaCDD	76,2		75,8	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	71,2		72,0	
13C12-OctaCDD	62,7		56,9	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 05: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A5 8N5161.005		A6 8N5161.006	
Fat content [%]	3,4		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07	< 0,003
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,10	0,003	0,15	0,006
123478-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
1234678-HeptaCDF	< 0,08	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,07	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,15	< 0,005	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,001	< 0,04	< 0,002
12378-PentaCDD	0,04	0,001	0,05	0,002
123478-HexaCDD	< 0,07	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,07	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	< 0,09	< 0,003	0,22	0,008
OctaCDD	< 0,54	< 0,02	1,13	0,04
WHO-PCDD/F-TEQ excl. LOQ [a]	0,092	0,003	0,127	0,005
WHO-PCDD/F-TEQ incl. LOQ [b]	0,198	0,007	0,236	0,009
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,073	0,002	0,097	0,004
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,178	0,006	0,205	0,008
ITE-(NATO/CCMS) excl. LOQ [a]	0,070	0,002	0,103	0,004
ITE-(NATO/CCMS) incl. LOQ [b]	0,177	0,006	0,212	0,008
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	108		101	
13C12-12378-PentaCDF	63,6		66,4	
13C12-23478-PentaCDF	77,3		74,5	
13C12-123478-HexaCDF	82,7		83,0	
13C12-123678-HexaCDF	80,9		78,1	
13C12-123789-HexaCDF	90,1		88,6	
13C12-234678-HexaCDF	85,2		79,0	
13C12-1234678-HeptaCDF	69,0		64,3	
13C12-1234789-HeptaCDF	82,0		79,3	
13C12-OctaCDF	68,5		69,5	
13C12-2378-TetraCDD	99,1		98,6	
13C12-12378-PentaCDD	68,2		65,6	
13C12-123478-HexaCDD	46,4		40,6	
13C12-123678-HexaCDD	79,5		76,0	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	74,1		70,8	
13C12-OctaCDD	60,9		62,0	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 06: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A7 8N5161.007		A8 8N5161.008	
Fat content [%]	4,0		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,003	< 0,07	< 0,002
12378-PentaCDF	< 0,06	< 0,003	< 0,06	< 0,002
23478-PentaCDF	0,09	0,004	0,14	0,005
123478-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
1234678-HeptaCDF	< 0,09	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,006	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,002
12378-PentaCDD	0,05	0,002	0,05	0,002
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,006	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	< 0,10	< 0,004	< 0,10	< 0,003
OctaCDD	< 0,56	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,092	0,004	0,113	0,004
WHO-PCDD/F-TEQ incl. LOQ [b]	0,201	0,008	0,223	0,008
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,074	0,003	0,086	0,003
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,182	0,007	0,194	0,007
ITE-(NATO/CCMS) excl. LOQ [a]	0,068	0,003	0,091	0,003
ITE-(NATO/CCMS) incl. LOQ [b]	0,178	0,007	0,201	0,007
Recovery Rates	%		%	
13C12-2378-TetraCDF	107		106	
13C12-12378-PentaCDF	63,6		67,6	
13C12-23478-PentaCDF	76,2		76,4	
13C12-123478-HexaCDF	79,8		81,5	
13C12-123678-HexaCDF	77,1		75,0	
13C12-123789-HexaCDF	85,2		83,5	
13C12-234678-HexaCDF	81,0		77,4	
13C12-1234678-HeptaCDF	67,2		65,2	
13C12-1234789-HeptaCDF	81,1		79,4	
13C12-OctaCDF	69,9		66,8	
13C12-2378-TetraCDD	106		106	
13C12-12378-PentaCDD	67,4		66,2	
13C12-123478-HexaCDD	42,0		41,1	
13C12-123678-HexaCDD	78,2		75,0	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	72,8		71,3	
13C12-OctaCDD	62,9		59,7	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 07: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A9 8N5161.009		A10 8N5161.010	
Fat content [%]	3,7		3,5	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,003	< 0,07	< 0,002
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,12	0,005	0,13	0,005
123478-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
1234678-HeptaCDF	< 0,09	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,006	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,001
12378-PentaCDD	0,05	0,002	< 0,04	< 0,001
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	< 0,10	< 0,004	0,10	0,003
OctaCDD	< 0,56	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,112	0,004	0,068	0,002
WHO-PCDD/F-TEQ incl. LOQ [b]	0,222	0,008	0,213	0,008
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,088	0,003	0,041	0,001
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,197	0,007	0,185	0,007
ITE-(NATO/CCMS) excl. LOQ [a]	0,087	0,003	0,068	0,002
ITE-(NATO/CCMS) incl. LOQ [b]	0,197	0,007	0,196	0,007
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	102		110	
13C12-12378-PentaCDF	67,7		60,0	
13C12-23478-PentaCDF	75,7		75,5	
13C12-123478-HexaCDF	81,0		82,3	
13C12-123678-HexaCDF	78,2		76,5	
13C12-123789-HexaCDF	84,6		85,2	
13C12-234678-HexaCDF	79,9		78,3	
13C12-1234678-HeptaCDF	65,7		63,4	
13C12-1234789-HeptaCDF	80,0		79,0	
13C12-OctaCDF	69,0		63,5	
13C12-2378-TetraCDD	96,7		94,3	
13C12-12378-PentaCDD	66,6		62,5	
13C12-123478-HexaCDD	42,5		41,2	
13C12-123678-HexaCDD	73,2		74,4	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	72,4		70,3	
13C12-OctaCDD	60,8		57,0	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 08: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A11 8N5161.011		A12 8N5161.012	
Fat content [%]	3,7		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07	< 0,003
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,13	0,005	0,14	0,005
123478-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
1234678-HeptaCDF	< 0,09	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,006	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,002
12378-PentaCDD	0,05	0,002	< 0,05	< 0,002
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	< 0,10	< 0,004	< 0,10	< 0,004
OctaCDD	< 0,56	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,117	0,004	0,069	0,003
WHO-PCDD/F-TEQ incl. LOQ [b]	0,227	0,008	0,225	0,008
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,090	0,003	0,041	0,002
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,198	0,007	0,196	0,007
ITE-(NATO/CCMS) excl. LOQ [a]	0,092	0,003	0,069	0,003
ITE-(NATO/CCMS) incl. LOQ [b]	0,203	0,007	0,203	0,008
Recovery Rates	%		%	
13C12-2378-TetraCDF	113		104	
13C12-12378-PentaCDF	67,8		65,7	
13C12-23478-PentaCDF	77,9		80,9	
13C12-123478-HexaCDF	80,9		71,9	
13C12-123678-HexaCDF	79,9		67,3	
13C12-123789-HexaCDF	90,3		82,8	
13C12-234678-HexaCDF	75,6		74,4	
13C12-1234678-HeptaCDF	77,8		78,7	
13C12-1234789-HeptaCDF	79,2		81,0	
13C12-OctaCDF	69,1		76,9	
13C12-2378-TetraCDD	128		106	
13C12-12378-PentaCDD	84,6		81,7	
13C12-123478-HexaCDD	58,1		40,2	
13C12-123678-HexaCDD	85,5		81,3	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	76,1		77,1	
13C12-OctaCDD	60,2		68,6	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 09: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A13 8N5161.013		A14 8N5161.014	
Fat content [%]	4,2		3,4	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,003	< 0,07	< 0,002
12378-PentaCDF	< 0,06	< 0,003	< 0,06	< 0,002
23478-PentaCDF	0,15	0,006	0,08	0,003
123478-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
1234678-HeptaCDF	< 0,09	< 0,004	< 0,08	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,07	< 0,003
OctaCDF	< 0,16	< 0,007	< 0,16	< 0,005
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,001
12378-PentaCDD	0,05	0,002	0,04	0,001
123478-HexaCDD	< 0,08	< 0,003	< 0,07	< 0,003
123678-HexaCDD	< 0,14	< 0,006	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,07	< 0,003
1234678-HeptaCDD	< 0,10	< 0,004	< 0,09	< 0,003
OctaCDD	< 0,56	< 0,02	< 0,55	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,129	0,005	0,082	0,003
WHO-PCDD/F-TEQ incl. LOQ [b]	0,239	0,010	0,190	0,006
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,099	0,004	0,066	0,002
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,207	0,009	0,172	0,006
ITE-(NATO/CCMS) excl. LOQ [a]	0,102	0,004	0,062	0,002
ITE-(NATO/CCMS) incl. LOQ [b]	0,213	0,009	0,170	0,006
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	105		101	
13C12-12378-PentaCDF	74,3		64,2	
13C12-23478-PentaCDF	82,5		74,7	
13C12-123478-HexaCDF	67,2		70,9	
13C12-123678-HexaCDF	63,0		69,1	
13C12-123789-HexaCDF	79,5		84,6	
13C12-234678-HexaCDF	71,5		74,0	
13C12-1234678-HeptaCDF	81,6		78,9	
13C12-1234789-HeptaCDF	83,0		80,1	
13C12-OctaCDF	71,9		75,8	
13C12-2378-TetraCDD	104		102	
13C12-12378-PentaCDD	83,8		76,7	
13C12-123478-HexaCDD	39,0		40,2	
13C12-123678-HexaCDD	80,5		78,4	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	80,7		77,1	
13C12-OctaCDD	64,3		65,3	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 10: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A15 8N5161.015		A16 8N5161.016	
Fat content [%]	3,9		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,003	< 0,07	< 0,003
12378-PentaCDF	< 0,06	< 0,003	< 0,06	< 0,002
23478-PentaCDF	0,11	0,004	0,15	0,006
123478-HexaCDF	< 0,06	< 0,003	0,06	0,002
123678-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,003	< 0,06	< 0,002
1234678-HeptaCDF	< 0,09	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,006	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,002
12378-PentaCDD	0,04	0,001	0,05	0,002
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,006	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	< 0,10	< 0,004	< 0,10	< 0,004
OctaCDD	< 0,56	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,092	0,004	0,134	0,005
WHO-PCDD/F-TEQ incl. LOQ [b]	0,202	0,008	0,238	0,009
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,070	0,003	0,103	0,004
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,179	0,007	0,206	0,008
ITE-(NATO/CCMS) excl. LOQ [a]	0,074	0,003	0,109	0,004
ITE-(NATO/CCMS) incl. LOQ [b]	0,184	0,007	0,213	0,008
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	104		94,9	
13C12-12378-PentaCDF	68,5		91,1	
13C12-23478-PentaCDF	75,0		90,0	
13C12-123478-HexaCDF	68,2		83,8	
13C12-123678-HexaCDF	61,1		75,3	
13C12-123789-HexaCDF	78,7		89,9	
13C12-234678-HexaCDF	70,2		78,5	
13C12-1234678-HeptaCDF	75,1		80,6	
13C12-1234789-HeptaCDF	79,6		79,9	
13C12-OctaCDF	62,3		89,5	
13C12-2378-TetraCDD	105		102	
13C12-12378-PentaCDD	79,9		86,3	
13C12-123478-HexaCDD	40,3		92,4	
13C12-123678-HexaCDD	79,6		81,6	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	81,3		71,1	
13C12-OctaCDD	57,0		73,8	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 11: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A18 8N5161.017		A19 8N5161.018	
Fat content [%]	3,1		3,4	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,06	< 0,002
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,14	0,004	0,22	0,007
123478-HexaCDF	< 0,06	< 0,002	0,09	0,003
123678-HexaCDF	< 0,06	< 0,002	0,07	0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	0,08	0,003
1234678-HeptaCDF	< 0,09	< 0,003	< 0,08	< 0,003
1234789-HeptaCDF	< 0,08	< 0,002	< 0,07	< 0,002
OctaCDF	< 0,16	< 0,005	< 0,15	< 0,005
PCDD				
2378-TetraCDD	< 0,04	< 0,001	< 0,04	< 0,001
12378-PentaCDD	0,05	0,002	0,08	0,003
123478-HexaCDD	< 0,08	< 0,002	< 0,07	< 0,002
123678-HexaCDD	< 0,15	< 0,005	< 0,13	< 0,005
123789-HexaCDD	< 0,08	< 0,002	< 0,07	< 0,002
1234678-HeptaCDD	< 0,10	< 0,003	0,10	0,003
OctaCDD	< 0,57	< 0,02	< 0,52	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,117	0,004	0,216	0,007
WHO-PCDD/F-TEQ incl. LOQ [b]	0,228	0,007	0,300	0,010
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,090	0,003	0,172	0,006
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,200	0,006	0,255	0,009
ITE-(NATO/CCMS) excl. LOQ [a]	0,093	0,003	0,175	0,006
ITE-(NATO/CCMS) incl. LOQ [b]	0,204	0,006	0,260	0,009
Recovery Rates	%		%	
13C12-2378-TetraCDF	99,1		96,3	
13C12-12378-PentaCDF	89,0		94,8	
13C12-23478-PentaCDF	93,5		92,1	
13C12-123478-HexaCDF	81,2		85,7	
13C12-123678-HexaCDF	73,1		76,1	
13C12-123789-HexaCDF	88,7		90,3	
13C12-234678-HexaCDF	76,1		78,2	
13C12-1234678-HeptaCDF	81,5		83,0	
13C12-1234789-HeptaCDF	83,8		85,9	
13C12-OctaCDF	84,7		77,2	
13C12-2378-TetraCDD	108		103	
13C12-12378-PentaCDD	88,2		87,2	
13C12-123478-HexaCDD	92,1		93,7	
13C12-123678-HexaCDD	80,2		81,4	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	72,6		75,7	
13C12-OctaCDD	77,8		77,3	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 12: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A20 8N5161.019		A 21 8N5161.020	
Fat content [%]	3,6		3,5	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,06	< 0,002	< 0,06	< 0,002
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,19	0,007	0,13	0,005
123478-HexaCDF	0,07	0,002	0,06	0,002
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
1234678-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
1234789-HeptaCDF	< 0,07	< 0,003	< 0,07	< 0,002
OctaCDF	< 0,15	< 0,005	< 0,15	< 0,005
PCDD				
2378-TetraCDD	< 0,04	< 0,001	< 0,04	< 0,001
12378-PentaCDD	0,06	0,002	< 0,05	< 0,002
123478-HexaCDD	< 0,07	< 0,003	< 0,07	< 0,002
123678-HexaCDD	< 0,13	< 0,005	< 0,13	< 0,005
123789-HexaCDD	< 0,07	< 0,003	< 0,07	< 0,002
1234678-HeptaCDD	< 0,09	< 0,003	< 0,09	< 0,003
OctaCDD	< 0,52	< 0,02	< 0,52	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,167	0,006	0,073	0,003
WHO-PCDD/F-TEQ incl. LOQ [b]	0,264	0,009	0,224	0,008
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,129	0,005	0,046	0,002
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,224	0,008	0,196	0,007
ITE-(NATO/CCMS) excl. LOQ [a]	0,135	0,005	0,073	0,003
ITE-(NATO/CCMS) incl. LOQ [b]	0,232	0,008	0,197	0,007
Recovery Rates	%		%	
13C12-2378-TetraCDF	94,3		90,6	
13C12-12378-PentaCDF	93,8		74,1	
13C12-23478-PentaCDF	92,3		85,8	
13C12-123478-HexaCDF	81,8		67,7	
13C12-123678-HexaCDF	73,6		68,7	
13C12-123789-HexaCDF	89,4		77,0	
13C12-234678-HexaCDF	76,6		76,1	
13C12-1234678-HeptaCDF	79,0		72,8	
13C12-1234789-HeptaCDF	83,9		77,1	
13C12-OctaCDF	84,1		67,9	
13C12-2378-TetraCDD	102		129	
13C12-12378-PentaCDD	85,7		87,1	
13C12-123478-HexaCDD	90,9		77,3	
13C12-123678-HexaCDD	79,4		72,5	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	73,8		74,2	
13C12-OctaCDD	75,7		66,0	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 13: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A22 8N5161.021		A23 8N5161.022	
Fat content [%]	3,8		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07 [c]	< 0,003 [c]	< 0,07	< 0,002
12378-PentaCDF	< 0,06 [c]	< 0,002 [c]	< 0,06	< 0,002
23478-PentaCDF	0,08 [c]	0,003 [c]	0,17	0,006
123478-HexaCDF	< 0,07 [c]	< 0,003 [c]	< 0,06	< 0,002
123678-HexaCDF	< 0,06 [c]	< 0,002 [c]	< 0,06	< 0,002
123789-HexaCDF	< 0,08 [c]	< 0,003 [c]	< 0,06	< 0,002
234678-HexaCDF	< 0,07 [c]	< 0,002 [c]	0,07	0,002
1234678-HeptaCDF	< 0,09 [c]	< 0,003 [c]	< 0,08	< 0,003
1234789-HeptaCDF	< 0,08 [c]	< 0,003 [c]	< 0,07	< 0,003
OctaCDF	0,25 [c]	0,009 [c]	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04 [c]	< 0,002 [c]	< 0,04	< 0,002
12378-PentaCDD	0,19 [c]	0,007 [c]	0,07	0,002
123478-HexaCDD	< 0,08 [c]	< 0,003 [c]	< 0,07	< 0,003
123678-HexaCDD	< 0,14 [c]	< 0,005 [c]	< 0,14	< 0,005
123789-HexaCDD	< 0,08 [c]	< 0,003 [c]	< 0,07	< 0,003
1234678-HeptaCDD	< 0,10 [c]	< 0,004 [c]	< 0,09	< 0,003
OctaCDD	< 0,56 [c]	< 0,02 [c]	< 0,55	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,234 [c]	0,009 [c]	0,157	0,006
WHO-PCDD/F-TEQ incl. LOQ [b]	0,346 [c]	0,013 [c]	0,259	0,009
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,218 [c]	0,008 [c]	0,123	0,004
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,329 [c]	0,012 [c]	0,224	0,008
ITE-(NATO/CCMS) excl. LOQ [a]	0,137 [c]	0,005 [c]	0,124	0,005
ITE-(NATO/CCMS) incl. LOQ [b]	0,251 [c]	0,009 [c]	0,227	0,008
Recovery Rates	%		%	
13C12-2378-TetraCDF	91,1		97,3	
13C12-12378-PentaCDF	74,5		75,1	
13C12-23478-PentaCDF	77,0		81,4	
13C12-123478-HexaCDF	70,4		67,5	
13C12-123678-HexaCDF	69,8		65,7	
13C12-123789-HexaCDF	73,3		71,5	
13C12-234678-HexaCDF	71,1		68,9	
13C12-1234678-HeptaCDF	70,0		70,1	
13C12-1234789-HeptaCDF	71,3		76,9	
13C12-OctaCDF	60,7		63,8	
13C12-2378-TetraCDD	79,8		80,8	
13C12-12378-PentaCDD	69,2		70,5	
13C12-123478-HexaCDD	81,2		76,9	
13C12-123678-HexaCDD	57,7		40,5	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	77,4		81,4	
13C12-OctaCDD	61,2		63,9	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)
[c] : Results verified by a duplicate analysis

Tab. 14: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A24 8N5161.023		A25 8N5161.024	
Fat content [%]	3,4		4,0	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07	< 0,003
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,003
23478-PentaCDF	0,09	0,003	0,17	0,007
123478-HexaCDF	< 0,06	< 0,002	0,08	0,003
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,003
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,003
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,003
1234678-HeptaCDF	< 0,09	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,005	< 0,16	< 0,007
PCDD				
2378-TetraCDD	< 0,04	< 0,001	< 0,04	< 0,002
12378-PentaCDD	< 0,05	< 0,002	0,08	0,003
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,006
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	< 0,10	< 0,003	< 0,10	< 0,004
OctaCDD	< 0,55	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,043	0,001	0,173	0,007
WHO-PCDD/F-TEQ incl. LOQ [b]	0,197	0,007	0,277	0,011
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,026	0,0009	0,139	0,006
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,179	0,006	0,242	0,010
ITE-(NATO/CCMS) excl. LOQ [a]	0,043	0,001	0,133	0,005
ITE-(NATO/CCMS) incl. LOQ [b]	0,175	0,006	0,237	0,010
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	106		103	
13C12-12378-PentaCDF	69,2		72,1	
13C12-23478-PentaCDF	82,8		80,9	
13C12-123478-HexaCDF	69,0		66,8	
13C12-123678-HexaCDF	65,3		65,1	
13C12-123789-HexaCDF	73,2		71,7	
13C12-234678-HexaCDF	69,6		67,6	
13C12-1234678-HeptaCDF	67,7		68,7	
13C12-1234789-HeptaCDF	74,1		76,8	
13C12-OctaCDF	61,6		63,0	
13C12-2378-TetraCDD	80,9		83,4	
13C12-12378-PentaCDD	69,2		68,9	
13C12-123478-HexaCDD	80,2		77,7	
13C12-123678-HexaCDD	46,0		40,5	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	78,3		79,2	
13C12-OctaCDD	62,5		61,9	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 15: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B1 8N5161.025		B2 8N5161.026	
Fat content [%]	3,6		3,4	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07	< 0,002
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,25	0,009	0,11	0,004
123478-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
1234678-HeptaCDF	< 0,09	< 0,003	< 0,08	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,07	< 0,003
OctaCDF	0,23	0,008	< 0,16	< 0,005
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,001
12378-PentaCDD	0,09	0,003	< 0,04	< 0,001
123478-HexaCDD	< 0,08	< 0,003	< 0,07	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,08	< 0,003	< 0,07	< 0,003
1234678-HeptaCDD	< 0,10	< 0,004	< 0,09	< 0,003
OctaCDD	< 0,56	< 0,02	< 0,54	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,215	0,008	0,053	0,002
WHO-PCDD/F-TEQ incl. LOQ [b]	0,325	0,012	0,204	0,007
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,164	0,006	0,032	0,001
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,273	0,010	0,181	0,006
ITE-(NATO/CCMS) excl. LOQ [a]	0,171	0,006	0,053	0,002
ITE-(NATO/CCMS) incl. LOQ [b]	0,282	0,010	0,182	0,006
Recovery Rates	%		%	
13C12-2378-TetraCDF	61,2		89,9	
13C12-12378-PentaCDF	101		67,2	
13C12-23478-PentaCDF	123		83,4	
13C12-123478-HexaCDF	71,9		66,5	
13C12-123678-HexaCDF	69,6		64,1	
13C12-123789-HexaCDF	35,0		74,3	
13C12-234678-HexaCDF	72,9		68,9	
13C12-1234678-HeptaCDF	67,8		69,2	
13C12-1234789-HeptaCDF	74,0		76,1	
13C12-OctaCDF	30,6		66,0	
13C12-2378-TetraCDD	50,0		81,5	
13C12-12378-PentaCDD	99,4		66,7	
13C12-123478-HexaCDD	85,7		82,4	
13C12-123678-HexaCDD	41,8		41,3	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	80,6		85,7	
13C12-OctaCDD	31,3		68,9	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 16: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B3 8N5161.027		B4 8N5161.028	
Fat content [%]	3,3		3,2	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07 [c]	< 0,002 [c]	0,11 [c]	0,004 [c]
12378-PentaCDF	< 0,06 [c]	< 0,002 [c]	< 0,07 [c]	< 0,002 [c]
23478-PentaCDF	0,11 [c]	0,004 [c]	0,08 [c]	0,003 [c]
123478-HexaCDF	< 0,06 [c]	< 0,002 [c]	< 0,07 [c]	< 0,002 [c]
123678-HexaCDF	< 0,06 [c]	< 0,002 [c]	< 0,07 [c]	< 0,002 [c]
123789-HexaCDF	< 0,06 [c]	< 0,002 [c]	< 0,07 [c]	< 0,002 [c]
234678-HexaCDF	< 0,06 [c]	< 0,002 [c]	< 0,07 [c]	< 0,002 [c]
1234678-HeptaCDF	< 0,08 [c]	< 0,003 [c]	< 0,09 [c]	< 0,003 [c]
1234789-HeptaCDF	< 0,07 [c]	< 0,002 [c]	< 0,08 [c]	< 0,003 [c]
OctaCDF	< 0,16 [c]	< 0,005 [c]	< 0,16 [c]	< 0,005 [c]
PCDD				
2378-TetraCDD	< 0,04 [c]	< 0,001 [c]	< 0,04 [c]	< 0,001 [c]
12378-PentaCDD	0,51 [c]	0,02 [c]	0,43 [c]	0,01 [c]
123478-HexaCDD	0,10 [c]	0,003 [c]	< 0,08 [c]	< 0,003 [c]
123678-HexaCDD	< 0,14 [c]	< 0,005 [c]	< 0,15 [c]	< 0,005 [c]
123789-HexaCDD	< 0,07 [c]	< 0,002 [c]	< 0,08 [c]	< 0,003 [c]
1234678-HeptaCDD	< 0,09 [c]	< 0,003 [c]	< 0,10 [c]	< 0,003 [c]
OctaCDD	< 0,55 [c]	< 0,02 [c]	< 0,57 [c]	< 0,02 [c]
WHO-PCDD/F-TEQ excl. LOQ [a]	0,573 [c]	0,019 [c]	0,482 [c]	0,016 [c]
WHO-PCDD/F-TEQ incl. LOQ [b]	0,673 [c]	0,022 [c]	0,588 [c]	0,019 [c]
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,550 [c]	0,018 [c]	0,466 [c]	0,015 [c]
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,649 [c]	0,021 [c]	0,571 [c]	0,019 [c]
ITE-(NATO/CCMS) excl. LOQ [a]	0,320 [c]	0,011 [c]	0,266 [c]	0,009 [c]
ITE-(NATO/CCMS) incl. LOQ [b]	0,421 [c]	0,014 [c]	0,373 [c]	0,012 [c]
Recovery Rates	%		%	
13C12-2378-TetraCDF	92,6		92,4	
13C12-12378-PentaCDF	65,7		78,5	
13C12-23478-PentaCDF	89,3		82,1	
13C12-123478-HexaCDF	72,2		71,9	
13C12-123678-HexaCDF	67,2		67,2	
13C12-123789-HexaCDF	76,1		74,8	
13C12-234678-HexaCDF	70,7		68,4	
13C12-1234678-HeptaCDF	73,4		72,6	
13C12-1234789-HeptaCDF	81,7		78,4	
13C12-OctaCDF	69,9		71,2	
13C12-2378-TetraCDD	86,3		81,3	
13C12-12378-PentaCDD	74,6		68,2	
13C12-123478-HexaCDD	80,6		82,6	
13C12-123678-HexaCDD	39,8		44,1	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	86,1		85,1	
13C12-OctaCDD	71,2		73,1	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)
[c] : Results verified by a duplicate analysis

Tab. 17: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B5 8N5161.029		B6 8N5161.030	
Fat content [%]	3,4		4,0	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07	< 0,003
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,003
23478-PentaCDF	0,08	0,003	0,11	0,004
123478-HexaCDF	< 0,06	< 0,002	0,07	0,003
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,003
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,003
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,003
1234678-HeptaCDF	< 0,08	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,08	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,005	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,001	< 0,04	< 0,002
12378-PentaCDD	< 0,05	< 0,002	0,04	0,002
123478-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,006
123789-HexaCDD	< 0,08	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	< 0,09	< 0,003	< 0,10	< 0,004
OctaCDD	< 0,55	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,042	0,001	0,099	0,004
WHO-PCDD/F-TEQ incl. LOQ [b]	0,196	0,007	0,202	0,008
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,025	0,0008	0,078	0,003
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,178	0,006	0,180	0,007
ITE-(NATO/CCMS) excl. LOQ [a]	0,042	0,001	0,079	0,003
ITE-(NATO/CCMS) incl. LOQ [b]	0,174	0,006	0,183	0,007
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	92,0		93,6	
13C12-12378-PentaCDF	69,2		70,2	
13C12-23478-PentaCDF	83,5		83,4	
13C12-123478-HexaCDF	68,4		64,8	
13C12-123678-HexaCDF	63,5		61,6	
13C12-123789-HexaCDF	73,8		72,2	
13C12-234678-HexaCDF	67,0		67,8	
13C12-1234678-HeptaCDF	65,4		67,7	
13C12-1234789-HeptaCDF	77,1		82,4	
13C12-OctaCDF	64,1		74,0	
13C12-2378-TetraCDD	77,0		77,3	
13C12-12378-PentaCDD	70,1		65,9	
13C12-123478-HexaCDD	77,7		80,2	
13C12-123678-HexaCDD	40,2		40,7	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	81,7		85,0	
13C12-OctaCDD	63,1		68,8	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 18: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B7 8N5161.031		B8 8N5161.032	
Fat content [%]	3,7		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,002	< 0,07 [c]	< 0,003 [c]
12378-PentaCDF	< 0,06	< 0,002	< 0,06 [c]	< 0,002 [c]
23478-PentaCDF	0,15	0,005	0,25 [c]	0,009 [c]
123478-HexaCDF	< 0,07	< 0,003	0,09 [c]	0,003 [c]
123678-HexaCDF	< 0,06	< 0,002	0,07 [c]	0,002 [c]
123789-HexaCDF	< 0,09	< 0,003	< 0,06 [c]	< 0,002 [c]
234678-HexaCDF	< 0,06	< 0,002	0,08 [c]	0,003 [c]
1234678-HeptaCDF	< 0,09	< 0,003	< 0,09 [c]	< 0,003 [c]
1234789-HeptaCDF	< 0,17	< 0,006	< 0,08 [c]	< 0,003 [c]
OctaCDF	0,21	0,008	< 0,16 [c]	< 0,006 [c]
PCDD				
2378-TetraCDD	< 0,04	< 0,002	0,04 [c]	0,002 [c]
12378-PentaCDD	< 0,06	< 0,002	0,08 [c]	0,003 [c]
123478-HexaCDD	< 0,08	< 0,003	< 0,08 [c]	< 0,003 [c]
123678-HexaCDD	< 0,14	< 0,005	< 0,14 [c]	< 0,005 [c]
123789-HexaCDD	< 0,08	< 0,003	< 0,08 [c]	< 0,003 [c]
1234678-HeptaCDD	< 0,20	< 0,007	< 0,10 [c]	< 0,004 [c]
OctaCDD	< 0,56	< 0,02	< 0,56 [c]	< 0,02 [c]
WHO-PCDD/F-TEQ excl. LOQ [a]	0,074	0,003	0,270 [c]	0,010 [c]
WHO-PCDD/F-TEQ incl. LOQ [b]	0,248	0,009	0,318 [c]	0,012 [c]
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,044	0,002	0,220 [c]	0,008 [c]
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,218	0,008	0,267 [c]	0,010 [c]
ITE-(NATO/CCMS) excl. LOQ [a]	0,074	0,003	0,230 [c]	0,009 [c]
ITE-(NATO/CCMS) incl. LOQ [b]	0,219	0,008	0,279 [c]	0,011 [c]
Recovery Rates	%		%	
13C12-2378-TetraCDF	111		76,0	
13C12-12378-PentaCDF	107		64,3	
13C12-23478-PentaCDF	134		76,9	
13C12-123478-HexaCDF	62,5		69,3	
13C12-123678-HexaCDF	63,8		69,0	
13C12-123789-HexaCDF	72,5		78,4	
13C12-234678-HexaCDF	74,5		71,3	
13C12-1234678-HeptaCDF	78,9		62,6	
13C12-1234789-HeptaCDF	82,5		73,1	
13C12-OctaCDF	89,6		64,0	
13C12-2378-TetraCDD	86,6		69,2	
13C12-12378-PentaCDD	86,8		76,1	
13C12-123478-HexaCDD	71,9		71,8	
13C12-123678-HexaCDD	73,0		70,0	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	81,7		66,4	
13C12-OctaCDD	78,9		60,9	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)
[c] : Results verified by a duplicate analysis

Tab. 19: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B9 8N5161.033		B13 8N5161.034	
Fat content [%]	3,6		3,7	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,06	< 0,002	< 0,07	< 0,003
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	< 0,06	< 0,002	0,13	0,005
123478-HexaCDF	< 0,10	< 0,003	< 0,08	< 0,003
123678-HexaCDF	< 0,07	< 0,003	< 0,06	< 0,002
123789-HexaCDF	< 0,12	< 0,004	< 0,09	< 0,003
234678-HexaCDF	< 0,08	< 0,003	< 0,06	< 0,002
1234678-HeptaCDF	< 0,08	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,13	< 0,005	< 0,15	< 0,005
OctaCDF	< 0,26	< 0,009	< 0,21	< 0,008
PCDD				
2378-TetraCDD	< 0,07	< 0,002	0,08	0,003
12378-PentaCDD	< 0,05	< 0,002	< 0,04	< 0,001
123478-HexaCDD	< 0,07	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,13	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,07	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	0,75	0,03	< 0,25	< 0,009
OctaCDD	4,85	0,17	1,71	0,06
WHO-PCDD/F-TEQ excl. LOQ [a]	0,008	0,0003	0,140	0,005
WHO-PCDD/F-TEQ incl. LOQ [b]	0,230	0,008	0,251	0,009
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,009	0,0003	0,115	0,004
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,218	0,008	0,225	0,008
ITE-(NATO/CCMS) excl. LOQ [a]	0,012	0,0004	0,142	0,005
ITE-(NATO/CCMS) incl. LOQ [b]	0,210	0,007	0,234	0,009
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	101		94,7	
13C12-12378-PentaCDF	69,5		121	
13C12-23478-PentaCDF	84,0		142	
13C12-123478-HexaCDF	64,1		67,7	
13C12-123678-HexaCDF	64,2		69,2	
13C12-123789-HexaCDF	73,8		83,0	
13C12-234678-HexaCDF	74,5		80,3	
13C12-1234678-HeptaCDF	80,7		82,4	
13C12-1234789-HeptaCDF	82,5		88,5	
13C12-OctaCDF	89,0		88,0	
13C12-2378-TetraCDD	103		97,4	
13C12-12378-PentaCDD	86,6		95,0	
13C12-123478-HexaCDD	71,5		81,1	
13C12-123678-HexaCDD	72,6		80,5	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	84,2		90,4	
13C12-OctaCDD	77,6		77,3	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 20: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B14 8N5161.035		B15 8N5161.036	
Fat content [%]	3,9		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
PCDF				
2378-TetraCDF	< 0,07	< 0,003	< 0,07	< 0,002
12378-PentaCDF	< 0,06	< 0,002	< 0,06	< 0,002
23478-PentaCDF	0,20	0,008	0,17	0,006
123478-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
123789-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
234678-HexaCDF	< 0,06	< 0,002	< 0,06	< 0,002
1234678-HeptaCDF	< 0,08	< 0,003	< 0,09	< 0,003
1234789-HeptaCDF	< 0,07	< 0,003	< 0,08	< 0,003
OctaCDF	< 0,15	< 0,006	< 0,16	< 0,006
PCDD				
2378-TetraCDD	< 0,04	< 0,002	< 0,04	< 0,001
12378-PentaCDD	< 0,06	< 0,003	< 0,05	< 0,002
123478-HexaCDD	< 0,07	< 0,003	< 0,08	< 0,003
123678-HexaCDD	< 0,14	< 0,005	< 0,14	< 0,005
123789-HexaCDD	< 0,07	< 0,003	< 0,08	< 0,003
1234678-HeptaCDD	0,11	0,004	0,12	0,004
OctaCDD	< 0,54	< 0,02	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,101	0,004	0,087	0,003
WHO-PCDD/F-TEQ incl. LOQ [b]	0,269	0,011	0,249	0,009
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,061	0,002	0,053	0,002
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,228	0,009	0,214	0,008
ITE-(NATO/CCMS) excl. LOQ [a]	0,101	0,004	0,087	0,003
ITE-(NATO/CCMS) incl. LOQ [b]	0,238	0,009	0,223	0,008
Recovery Rates	**%**		**%**	
13C12-2378-TetraCDF	90,4		101	
13C12-12378-PentaCDF	74,1		60,0	
13C12-23478-PentaCDF	94,0		82,8	
13C12-123478-HexaCDF	63,7		63,6	
13C12-123678-HexaCDF	58,5		74,9	
13C12-123789-HexaCDF	77,0		74,5	
13C12-234678-HexaCDF	77,0		74,6	
13C12-1234678-HeptaCDF	75,0		72,4	
13C12-1234789-HeptaCDF	80,4		71,7	
13C12-OctaCDF	58,6		67,5	
13C12-2378-TetraCDD	113		101	
13C12-12378-PentaCDD	94,0		83,2	
13C12-123478-HexaCDD	76,3		40,6	
13C12-123678-HexaCDD	72,0		66,0	
13C12-123789-HexaCDD	100		100	
13C12-1234678-HeptaCDD	86,0		74,6	
13C12-OctaCDD	56,0		67,5	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 21: Results of the analysis of milk samples for PCDF/Ds; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B17 8N5161.037	
Fat content [%]	3,6	
Unit	pg/g fat-weight	pg/g fresh-weight
PCDF		
2378-TetraCDF	< 0,07	< 0,002
12378-PentaCDF	< 0,06	< 0,002
23478-PentaCDF	0,32	0,01
123478-HexaCDF	0,12	0,004
123678-HexaCDF	0,12	0,004
123789-HexaCDF	< 0,06	< 0,002
234678-HexaCDF	0,13	0,005
1234678-HeptaCDF	0,10	0,003
1234789-HeptaCDF	< 0,08	< 0,003
OctaCDF	< 0,16	< 0,006
PCDD		
2378-TetraCDD	< 0,04	< 0,001
12378-PentaCDD	0,08	0,003
123478-HexaCDD	0,11	0,004
123678-HexaCDD	0,16	0,006
123789-HexaCDD	< 0,08	< 0,003
1234678-HeptaCDD	0,11	0,004
OctaCDD	< 0,56	< 0,02
WHO-PCDD/F-TEQ excl. LOQ [a]	0,304	0,011
WHO-PCDD/F-TEQ incl. LOQ [b]	0,370	0,013
WHO(2005)-PCDD/F-TEQ excl. LOQ [a]	0,240	0,009
WHO(2005)-PCDD/F-TEQ incl. LOQ [b]	0,305	0,011
ITE-(NATO/CCMS) excl. LOQ [a]	0,265	0,009
ITE-(NATO/CCMS) incl. LOQ [b]	0,332	0,012
Recovery Rates	**%**	
13C12-2378-TetraCDF	69,4	
13C12-12378-PentaCDF	60,3	
13C12-23478-PentaCDF	72,1	
13C12-123478-HexaCDF	68,4	
13C12-123678-HexaCDF	67,1	
13C12-123789-HexaCDF	74,3	
13C12-234678-HexaCDF	70,3	
13C12-1234678-HeptaCDF	59,6	
13C12-1234789-HeptaCDF	66,8	
13C12-OctaCDF	60,3	
13C12-2378-TetraCDD	70,4	
13C12-12378-PentaCDD	69,3	
13C12-123478-HexaCDD	69,9	
13C12-123678-HexaCDD	67,9	
13C12-123789-HexaCDD	100	
13C12-1234678-HeptaCDD	64,5	
13C12-OctaCDD	56,1	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 22: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A1 8N5161.001		A2 8N5161.002	
Fat content [%]	3,6		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,62	< 0,09	< 2,58	< 0,09
TetraCB(#81)	< 0,48	< 0,02	< 0,48	< 0,02
PentaCB(#105)	18,8	0,67	19,8	0,72
PentaCB(#114)	2,16	0,08	1,98	0,07
PentaCB(#118)	88,6	3,14	94,7	3,44
PentaCB(#123)	< 2,02	< 0,07	2,05	0,07
PentaCB(#126)	1,10	0,04	1,17	0,04
HexaCB(#156)	9,42	0,33	9,26	0,34
HexaCB(#157)	< 3,63	< 0,13	< 3,57	< 0,13
HexaCB(#167)	< 4,84	< 0,17	< 4,76	< 0,17
HexaCB(#169)	< 2,42	< 0,09	< 2,38	< 0,09
HeptaCB(#189)	< 3,43	< 0,12	< 3,37	< 0,12
WHO-PCB-TEQ excl. LOQ [a]	0,127	0,004	0,135	0,005
WHO-PCB-TEQ incl. LOQ [b]	0,154	0,005	0,161	0,006
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,114	0,004	0,121	0,004
WHO(2005)-PCB-TEQ incl. LOQ b]	0,187	0,007	0,193	0,007
Recovery Rates	%		%	
13C12-TriCB(#28)	94,9		92,9	
13C12-TetraCB(#52)	79,4		79,8	
13C12-TetraCB(#81)	94,7		92,9	
13C12-TetraCB(#77)	90,7		88,4	
13C12-PentaCB(#101)	91,9		87,9	
13C12-PentaCB(#123)	99,1		94,4	
13C12-PentaCB(#118)	95,1		94,2	
13C12-PentaCB(#114)	96,5		94,8	
13C12-PentaCB(#105)	95,4		93,0	
13C12-PentaCB(#126)	98,0		94,7	
13C12-HexaCB(#153)	96,8		90,9	
13C12-HexaCB(#138)	96,0		89,7	
13C12-HexaCB(#167)	95,8		90,0	
13C12-HexaCB(#156)	86,1		83,7	
13C12-HexaCB(#157)	85,4		85,2	
13C12-HexaCB(#169)	82,5		82,9	
13C12-HeptaCB(#180)	101		96,7	
13C12-HeptaCB(#189)	93,1		93,6	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 23: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A3 8N5161.003		A4 8N5161.004	
Fat content [%]	3,6		3,7	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,58	< 0,09	< 2,59	< 0,10
TetraCB(#81)	< 0,48	< 0,02	< 0,48	< 0,02
PentaCB(#105)	28,9	1,05	22,8	0,84
PentaCB(#114)	3,09	0,11	2,20	0,08
PentaCB(#118)	129	4,68	109	4,03
PentaCB(#123)	2,16	0,08	< 2,00	< 0,07
PentaCB(#126)	1,86	0,07	1,60	0,06
HexaCB(#156)	14,0	0,51	12,0	0,44
HexaCB(#157)	< 3,58	< 0,13	< 3,59	< 0,13
HexaCB(#167)	6,18	0,22	< 4,79	< 0,18
HexaCB(#169)	< 2,39	< 0,09	< 2,40	< 0,09
HeptaCB(#189)	< 3,38	< 0,12	< 3,39	< 0,13
WHO-PCB-TEQ excl. LOQ [a]	0,211	0,008	0,181	0,007
WHO-PCB-TEQ incl. LOQ [b]	0,237	0,009	0,207	0,008
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,191	0,007	0,165	0,006
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,264	0,010	0,237	0,009
Recovery Rates	%		%	
13C12-TriCB(#28)	95,8		95,4	
13C12-TetraCB(#52)	81,1		81,6	
13C12-TetraCB(#81)	93,5		93,6	
13C12-TetraCB(#77)	87,4		91,1	
13C12-PentaCB(#101)	93,0		93,4	
13C12-PentaCB(#123)	100		97,5	
13C12-PentaCB(#118)	97,3		94,6	
13C12-PentaCB(#114)	97,0		95,3	
13C12-PentaCB(#105)	94,5		97,5	
13C12-PentaCB(#126)	97,5		101	
13C12-HexaCB(#153)	96,3		89,4	
13C12-HexaCB(#138)	92,5		89,2	
13C12-HexaCB(#167)	80,5		83,8	
13C12-HexaCB(#156)	83,9		85,4	
13C12-HexaCB(#157)	85,8		86,0	
13C12-HexaCB(#169)	81,4		86,2	
13C12-HeptaCB(#180)	97,6		93,5	
13C12-HeptaCB(#189)	89,9		91,5	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 24: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A5 8N5161.005		A6 8N5161.006	
Fat content [%]	3,4		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,51	< 0,09	< 2,60	< 0,10
TetraCB(#81)	< 0,46	< 0,02	< 0,48	< 0,02
PentaCB(#105)	15,7	0,54	23,7	0,89
PentaCB(#114)	< 1,88	< 0,06	2,16	0,08
PentaCB(#118)	66,2	2,25	98,6	3,71
PentaCB(#123)	< 1,93	< 0,07	< 2,00	< 0,08
PentaCB(#126)	0,67	0,02	1,19	0,04
HexaCB(#156)	8,44	0,29	10,1	0,38
HexaCB(#157)	< 3,48	< 0,12	< 3,60	< 0,14
HexaCB(#167)	< 4,64	< 0,16	< 4,80	< 0,18
HexaCB(#169)	< 2,32	< 0,08	< 2,40	< 0,09
HeptaCB(#189)	< 3,29	< 0,11	< 3,40	< 0,13
WHO-PCB-TEQ excl. LOQ [a]	0,079	0,003	0,138	0,005
WHO-PCB-TEQ incl. LOQ [b]	0,106	0,004	0,164	0,006
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,070	0,002	0,123	0,005
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,140	0,005	0,196	0,007
Recovery Rates	%		%	
13C12-TriCB(#28)	91,3		93,5	
13C12-TetraCB(#52)	81,1		78,6	
13C12-TetraCB(#81)	92,8		90,4	
13C12-TetraCB(#77)	90,7		85,1	
13C12-PentaCB(#101)	90,6		89,5	
13C12-PentaCB(#123)	95,2		97,7	
13C12-PentaCB(#118)	91,6		95,6	
13C12-PentaCB(#114)	93,8		95,4	
13C12-PentaCB(#105)	93,8		93,7	
13C12-PentaCB(#126)	99,6		98,5	
13C12-HexaCB(#153)	92,0		91,3	
13C12-HexaCB(#138)	90,9		87,5	
13C12-HexaCB(#167)	79,9		86,9	
13C12-HexaCB(#156)	84,5		87,2	
13C12-HexaCB(#157)	84,4		87,5	
13C12-HexaCB(#169)	84,9		86,2	
13C12-HeptaCB(#180)	92,7		92,3	
13C12-HeptaCB(#189)	87,6		90,7	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 25: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A7 8N5161.007		A8 8N5161.008	
Fat content [%]	4,0		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,58	< 0,10	< 2,59	< 0,09
TetraCB(#81)	< 0,48	< 0,02	< 0,48	< 0,02
PentaCB(#105)	20,6	0,82	26,4	0,95
PentaCB(#114)	< 1,92	< 0,08	2,50	0,09
PentaCB(#118)	98,1	3,88	116	4,19
PentaCB(#123)	< 1,98	< 0,08	< 1,99	< 0,07
PentaCB(#126)	0,90	0,04	1,21	0,04
HexaCB(#156)	10,0	0,40	12,2	0,44
HexaCB(#157)	< 3,57	< 0,14	< 3,59	< 0,13
HexaCB(#167)	< 4,76	< 0,19	5,20	0,19
HexaCB(#169)	< 2,38	< 0,09	< 2,39	< 0,09
HeptaCB(#189)	< 3,37	< 0,13	< 3,39	< 0,12
WHO-PCB-TEQ excl. LOQ [a]	0,107	0,004	0,143	0,005
WHO-PCB-TEQ incl. LOQ [b]	0,135	0,005	0,169	0,006
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,094	0,004	0,126	0,005
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,167	0,007	0,198	0,007
Recovery Rates	%		%	
13C12-TriCB(#28)	92,2		95,7	
13C12-TetraCB(#52)	79,7		80,4	
13C12-TetraCB(#81)	90,6		93,2	
13C12-TetraCB(#77)	87,2		89,6	
13C12-PentaCB(#101)	91,4		92,8	
13C12-PentaCB(#123)	99,5		99,5	
13C12-PentaCB(#118)	94,2		97,1	
13C12-PentaCB(#114)	96,0		98,0	
13C12-PentaCB(#105)	93,2		94,9	
13C12-PentaCB(#126)	97,6		100	
13C12-HexaCB(#153)	89,3		90,5	
13C12-HexaCB(#138)	88,6		96,7	
13C12-HexaCB(#167)	86,8		90,7	
13C12-HexaCB(#156)	85,8		90,5	
13C12-HexaCB(#157)	87,7		91,5	
13C12-HexaCB(#169)	85,8		91,0	
13C12-HeptaCB(#180)	90,1		94,7	
13C12-HeptaCB(#189)	88,8		88,8	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 26: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A9 8N5161.009		A10 8N5161.010	
Fat content [%]	3,7		3,5	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,61	< 0,10	< 2,60	< 0,09
TetraCB(#81)	< 0,48	< 0,02	< 0,48	< 0,02
PentaCB(#105)	22,0	0,82	21,1	0,75
PentaCB(#114)	2,06	0,08	2,46	0,09
PentaCB(#118)	95,1	3,55	102	3,60
PentaCB(#123)	< 2,00	< 0,07	< 2,00	< 0,07
PentaCB(#126)	1,13	0,04	0,95	0,03
HexaCB(#156)	10,2	0,38	11,8	0,42
HexaCB(#157)	< 3,61	< 0,13	< 3,60	< 0,13
HexaCB(#167)	< 4,81	< 0,18	4,87	0,17
HexaCB(#169)	< 2,40	< 0,09	< 2,40	< 0,09
HeptaCB(#189)	< 3,41	< 0,13	< 3,40	< 0,12
WHO-PCB-TEQ excl. LOQ [a]	0,131	0,005	0,114	0,004
WHO-PCB-TEQ incl. LOQ [b]	0,157	0,006	0,141	0,005
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,117	0,004	0,099	0,004
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,190	0,007	0,172	0,006
Recovery Rates	%		%	
13C12-TriCB(#28)	98,2		95,1	
13C12-TetraCB(#52)	84,9		83,5	
13C12-TetraCB(#81)	95,8		91,3	
13C12-TetraCB(#77)	89,5		88,8	
13C12-PentaCB(#101)	96,4		91,2	
13C12-PentaCB(#123)	101		100	
13C12-PentaCB(#118)	97,6		98,4	
13C12-PentaCB(#114)	98,5		95,8	
13C12-PentaCB(#105)	96,5		98,4	
13C12-PentaCB(#126)	103		101	
13C12-HexaCB(#153)	92,2		88,4	
13C12-HexaCB(#138)	91,6		83,3	
13C12-HexaCB(#167)	94,7		97,9	
13C12-HexaCB(#156)	95,0		93,5	
13C12-HexaCB(#157)	94,2		92,6	
13C12-HexaCB(#169)	96,1		91,9	
13C12-HeptaCB(#180)	98,0		90,6	
13C12-HeptaCB(#189)	92,4		86,8	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 27: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A11 8N5161.011		A12 8N5161.012	
Fat content [%]	3,7		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,60	< 0,10	< 2,60	< 0,10
TetraCB(#81)	< 0,48	< 0,02	< 0,48	< 0,02
PentaCB(#105)	25,6	0,94	21,3	0,80
PentaCB(#114)	2,74	0,10	1,94	0,07
PentaCB(#118)	110	4,03	96,5	3,62
PentaCB(#123)	< 2,00	< 0,07	< 2,00	< 0,07
PentaCB(#126)	1,06	0,04	1,33	0,05
HexaCB(#156)	12,3	0,45	12,6	0,47
HexaCB(#157)	< 3,60	< 0,13	< 3,60	< 0,13
HexaCB(#167)	< 4,80	< 0,18	5,00	0,19
HexaCB(#169)	< 2,40	< 0,09	< 2,40	< 0,09
HeptaCB(#189)	< 3,40	< 0,12	< 3,40	< 0,13
WHO-PCB-TEQ excl. LOQ [a]	0,127	0,005	0,152	0,006
WHO-PCB-TEQ incl. LOQ [b]	0,154	0,006	0,178	0,007
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,111	0,004	0,137	0,005
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,183	0,007	0,210	0,008
Recovery Rates	%		%	
13C12-TriCB(#28)	88,7		88,4	
13C12-TetraCB(#52)	80,0		81,4	
13C12-TetraCB(#81)	94,4		94,2	
13C12-TetraCB(#77)	96,8		94,4	
13C12-PentaCB(#101)	90,0		86,3	
13C12-PentaCB(#123)	95,3		93,6	
13C12-PentaCB(#118)	98,3		95,5	
13C12-PentaCB(#114)	96,1		94,1	
13C12-PentaCB(#105)	96,4		96,1	
13C12-PentaCB(#126)	92,8		89,9	
13C12-HexaCB(#153)	90,4		89,1	
13C12-HexaCB(#138)	97,4		89,5	
13C12-HexaCB(#167)	83,5		82,9	
13C12-HexaCB(#156)	77,3		82,3	
13C12-HexaCB(#157)	76,9		83,4	
13C12-HexaCB(#169)	80,3		82,4	
13C12-HeptaCB(#180)	92,9		98,5	
13C12-HeptaCB(#189)	102		102	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 28: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A13 8N5161.013		A14 8N5161.014	
Fat content [%]	4,2		3,4	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,59	< 0,11	< 2,55	< 0,09
TetraCB(#81)	< 0,48	< 0,02	< 0,47	< 0,02
PentaCB(#105)	21,5	0,90	18,5	0,62
PentaCB(#114)	2,06	0,09	1,93	0,07
PentaCB(#118)	94,9	3,95	86,9	2,94
PentaCB(#123)	< 2,00	< 0,08	< 1,96	< 0,07
PentaCB(#126)	1,29	0,05	0,84	0,03
HexaCB(#156)	12,8	0,53	11,9	0,40
HexaCB(#157)	< 3,59	< 0,15	< 3,54	< 0,12
HexaCB(#167)	5,01	0,21	4,95	0,17
HexaCB(#169)	< 2,40	< 0,10	< 2,36	< 0,08
HeptaCB(#189)	< 3,39	< 0,14	< 3,34	< 0,11
WHO-PCB-TEQ excl. LOQ [a]	0,148	0,006	0,102	0,003
WHO-PCB-TEQ incl. LOQ [b]	0,174	0,007	0,128	0,004
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,133	0,006	0,088	0,003
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,205	0,009	0,159	0,005
Recovery Rates	%		%	
13C12-TriCB(#28)	90,6		91,0	
13C12-TetraCB(#52)	87,5		82,7	
13C12-TetraCB(#81)	98,8		93,7	
13C12-TetraCB(#77)	103		96,4	
13C12-PentaCB(#101)	97,6		89,3	
13C12-PentaCB(#123)	104		95,8	
13C12-PentaCB(#118)	109		98,6	
13C12-PentaCB(#114)	105		96,6	
13C12-PentaCB(#105)	105		97,2	
13C12-PentaCB(#126)	103		94,8	
13C12-HexaCB(#153)	89,5		87,9	
13C12-HexaCB(#138)	93,7		86,6	
13C12-HexaCB(#167)	84,8		85,7	
13C12-HexaCB(#156)	85,6		85,9	
13C12-HexaCB(#157)	85,9		86,5	
13C12-HexaCB(#169)	87,6		87,9	
13C12-HeptaCB(#180)	92,6		92,9	
13C12-HeptaCB(#189)	101		99,8	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 29: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A15 8N5161.015		A16 8N5161.016	
Fat content [%]	3,9		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,60	< 0,10	< 2,60	< 0,10
TetraCB(#81)	< 0,48	< 0,02	< 0,48	< 0,02
PentaCB(#105)	19,9	0,78	22,3	0,84
PentaCB(#114)	< 1,94	< 0,08	2,47	0,09
PentaCB(#118)	84,4	3,30	100	3,77
PentaCB(#123)	< 2,00	< 0,08	< 2,00	< 0,08
PentaCB(#126)	1,09	0,04	1,21	0,05
HexaCB(#156)	9,99	0,39	11,2	0,42
HexaCB(#157)	< 3,60	< 0,14	< 3,60	< 0,14
HexaCB(#167)	< 4,80	< 0,19	5,51	0,21
HexaCB(#169)	< 2,40	< 0,09	< 2,40	< 0,09
HeptaCB(#189)	< 3,40	< 0,13	< 3,40	< 0,13
WHO-PCB-TEQ excl. LOQ [a]	0,125	0,005	0,140	0,005
WHO-PCB-TEQ incl. LOQ [b]	0,153	0,006	0,167	0,006
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,113	0,004	0,125	0,005
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,186	0,007	0,198	0,007
Recovery Rates	%		%	
13C12-TriCB(#28)	88,1		87,5	
13C12-TetraCB(#52)	83,6		83,9	
13C12-TetraCB(#81)	95,6		94,3	
13C12-TetraCB(#77)	97,5		97,5	
13C12-PentaCB(#101)	91,4		84,7	
13C12-PentaCB(#123)	99,4		96,8	
13C12-PentaCB(#118)	104		100	
13C12-PentaCB(#114)	104		100	
13C12-PentaCB(#105)	101		98,4	
13C12-PentaCB(#126)	96,8		91,4	
13C12-HexaCB(#153)	89,9		82,3	
13C12-HexaCB(#138)	90,2		93,2	
13C12-HexaCB(#167)	88,8		89,4	
13C12-HexaCB(#156)	85,5		87,8	
13C12-HexaCB(#157)	86,2		88,7	
13C12-HexaCB(#169)	89,3		87,0	
13C12-HeptaCB(#180)	92,2		88,4	
13C12-HeptaCB(#189)	99,3		104	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 30: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A18 8N5161.017		A19 8N5161.018	
Fat content [%]	3,1		3,4	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,63	< 0,08	< 2,43	< 0,08
TetraCB(#81)	< 0,49	< 0,02	< 0,45	< 0,02
PentaCB(#105)	27,5	0,86	33,9	1,16
PentaCB(#114)	2,88	0,09	3,58	0,12
PentaCB(#118)	120	3,75	156	5,33
PentaCB(#123)	2,49	0,08	2,65	0,09
PentaCB(#126)	1,46	0,05	1,85	0,06
HexaCB(#156)	13,7	0,43	16,3	0,56
HexaCB(#157)	< 3,64	< 0,11	4,21	0,14
HexaCB(#167)	< 4,86	< 0,15	7,63	0,26
HexaCB(#169)	< 2,43	< 0,08	< 2,25	< 0,08
HeptaCB(#189)	< 3,44	< 0,11	< 3,18	< 0,11
WHO-PCB-TEQ excl. LOQ [a]	0,170	0,005	0,216	0,007
WHO-PCB-TEQ incl. LOQ [b]	0,196	0,006	0,239	0,008
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,151	0,005	0,192	0,007
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,225	0,007	0,259	0,009
Recovery Rates	%		%	
13C12-TriCB(#28)	89,1		89,2	
13C12-TetraCB(#52)	83,3		86,1	
13C12-TetraCB(#81)	94,3		93,1	
13C12-TetraCB(#77)	94,8		100	
13C12-PentaCB(#101)	89,8		91,5	
13C12-PentaCB(#123)	98,0		101	
13C12-PentaCB(#118)	95,5		105	
13C12-PentaCB(#114)	76,2		97,8	
13C12-PentaCB(#105)	101		103	
13C12-PentaCB(#126)	94,6		100	
13C12-HexaCB(#153)	87,2		88,9	
13C12-HexaCB(#138)	87,5		98,2	
13C12-HexaCB(#167)	84,5		94,9	
13C12-HexaCB(#156)	86,7		94,8	
13C12-HexaCB(#157)	86,9		95,5	
13C12-HexaCB(#169)	90,6		95,7	
13C12-HeptaCB(#180)	89,8		97,6	
13C12-HeptaCB(#189)	96,7		99,5	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 31: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A20 8N5161.019		A21 8N5161.020	
Fat content [%]	3,6		3,5	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,43	< 0,09	< 2,42	< 0,08
TetraCB(#81)	< 0,45	< 0,02	< 0,45	< 0,02
PentaCB(#105)	24,1	0,86	17,3	0,60
PentaCB(#114)	2,52	0,09	1,97	0,07
PentaCB(#118)	96,6	3,43	72,9	2,53
PentaCB(#123)	2,18	0,08	< 1,86	< 0,06
PentaCB(#126)	1,56	0,06	0,88	0,03
HexaCB(#156)	11,2	0,40	8,34	0,29
HexaCB(#157)	< 3,36	< 0,12	< 3,35	< 0,12
HexaCB(#167)	4,84	0,17	< 4,47	< 0,16
HexaCB(#169)	< 2,24	< 0,08	< 2,23	< 0,08
HeptaCB(#189)	< 3,18	< 0,11	< 3,17	< 0,11
WHO-PCB-TEQ excl. LOQ [a]	0,175	0,006	0,103	0,004
WHO-PCB-TEQ incl. LOQ [b]	0,200	0,007	0,127	0,004
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,160	0,006	0,091	0,003
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,228	0,008	0,159	0,006
Recovery Rates	%		%	
13C12-TriCB(#28)	88,1		84,2	
13C12-TetraCB(#52)	83,9		80,8	
13C12-TetraCB(#81)	93,4		93,4	
13C12-TetraCB(#77)	98,2		93,4	
13C12-PentaCB(#101)	89,2		88,7	
13C12-PentaCB(#123)	97,3		98,8	
13C12-PentaCB(#118)	102		100	
13C12-PentaCB(#114)	84,4		81,4	
13C12-PentaCB(#105)	100		102	
13C12-PentaCB(#126)	96,1		96,4	
13C12-HexaCB(#153)	92,5		86,1	
13C12-HexaCB(#138)	97,1		87,4	
13C12-HexaCB(#167)	81,7		87,3	
13C12-HexaCB(#156)	82,1		86,9	
13C12-HexaCB(#157)	82,1		87,4	
13C12-HexaCB(#169)	86,1		90,5	
13C12-HeptaCB(#180)	86,6		90,9	
13C12-HeptaCB(#189)	97,4		96,3	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 32: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A22 8N5161.021		A23 8N5161.022	
Fat content [%]	3,8		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,59 [c]	< 0,10 [c]	< 2,56	< 0,09
TetraCB(#81)	< 0,48 [c]	< 0,02 [c]	< 0,47	< 0,02
PentaCB(#105)	19,0 [c]	0,72 [c]	21,2	0,77
PentaCB(#114)	2,83 [c]	0,11 [c]	2,29	0,08
PentaCB(#118)	101 [c]	3,85 [c]	99,4	3,61
PentaCB(#123)	2,72 [c]	0,10 [c]	< 2,47	< 0,09
PentaCB(#126)	0,60 [c]	0,02 [c]	1,05	0,04
HexaCB(#156)	9,92 [c]	0,38 [c]	10,3	0,37
HexaCB(#157)	< 3,59 [c]	< 0,14 [c]	< 3,55	< 0,13
HexaCB(#167)	< 19,3 [c]	< 0,73 [c]	< 17,8	< 0,64
HexaCB(#169)	< 2,39 [c]	< 0,09 [c]	< 2,37	< 0,09
HeptaCB(#189)	< 3,39 [c]	< 0,13 [c]	< 3,35	< 0,12
WHO-PCB-TEQ excl. LOQ [a]	0,079 [c]	0,003 [c]	0,123	0,004
WHO-PCB-TEQ incl. LOQ [b]	0,106 [c]	0,004 [c]	0,150	0,005
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,065 [c]	0,002 [c]	0,109	0,004
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,137 [c]	0,005 [c]	0,181	0,007
Recovery Rates	%		%	
13C12-TriCB(#28)	103		91,2	
13C12-TetraCB(#52)	83,3		84,7	
13C12-TetraCB(#81)	90,2		92,5	
13C12-TetraCB(#77)	80,1		90,1	
13C12-PentaCB(#101)	96,9		87,3	
13C12-PentaCB(#123)	90,6		94,9	
13C12-PentaCB(#118)	86,5		93,0	
13C12-PentaCB(#114)	97,6		99,2	
13C12-PentaCB(#105)	97,7		89,8	
13C12-PentaCB(#126)	97,3		95,5	
13C12-HexaCB(#153)	86,9		82,2	
13C12-HexaCB(#138)	81,1		99,8	
13C12-HexaCB(#167)	97,8		94,0	
13C12-HexaCB(#156)	90,8		92,3	
13C12-HexaCB(#157)	95,0		91,9	
13C12-HexaCB(#169)	94,1		93,0	
13C12-HeptaCB(#180)	91,0		84,6	
13C12-HeptaCB(#189)	95,6		90,5	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)
[c] : Results verified by a duplicate analysis

Tab. 33: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	A24 8N5161.023		A25 8N5161.024	
Fat content [%]	3,4		4,0	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,57	< 0,09	< 2,61	< 0,11
TetraCB(#81)	< 0,48	< 0,02	< 0,48	< 0,02
PentaCB(#105)	27,6	0,92	24,8	1,00
PentaCB(#114)	2,04	0,07	< 3,75	< 0,15
PentaCB(#118)	121	4,04	102	4,12
PentaCB(#123)	2,46	0,08	2,50	0,10
PentaCB(#126)	1,02	0,03	0,61	0,02
HexaCB(#156)	12,7	0,43	10,6	0,43
HexaCB(#157)	< 3,56	< 0,12	< 3,61	< 0,15
HexaCB(#167)	< 21,6	< 0,72	< 19,6	< 0,79
HexaCB(#169)	< 2,38	< 0,08	< 2,41	< 0,10
HeptaCB(#189)	< 3,37	< 0,11	< 3,41	< 0,14
WHO-PCB-TEQ excl. LOQ [a]	0,124	0,004	0,079	0,003
WHO-PCB-TEQ incl. LOQ [b]	0,150	0,005	0,108	0,004
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,106	0,004	0,065	0,003
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,179	0,006	0,139	0,006
Recovery Rates	%		%	
13C12-TriCB(#28)	83,5		79,0	
13C12-TetraCB(#52)	77,6		82,3	
13C12-TetraCB(#81)	89,9		88,5	
13C12-TetraCB(#77)	90,4		91,2	
13C12-PentaCB(#101)	81,7		82,0	
13C12-PentaCB(#123)	91,5		94,2	
13C12-PentaCB(#118)	92,0		89,9	
13C12-PentaCB(#114)	92,5		89,9	
13C12-PentaCB(#105)	87,6		89,2	
13C12-PentaCB(#126)	101		96,4	
13C12-HexaCB(#153)	93,7		86,8	
13C12-HexaCB(#138)	91,3		90,3	
13C12-HexaCB(#167)	94,4		94,8	
13C12-HexaCB(#156)	90,2		94,8	
13C12-HexaCB(#157)	91,9		95,2	
13C12-HexaCB(#169)	92,6		91,7	
13C12-HeptaCB(#180)	87,0		85,1	
13C12-HeptaCB(#189)	91,0		87,2	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 34: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B1 8N5161.025		B2 8N5161.026	
Fat content [%]	3,6		3,4	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,61	< 0,10	< 2,53	< 0,09
TetraCB(#81)	< 0,48	< 0,02	< 0,47	< 0,02
PentaCB(#105)	33,7	1,23	24,7	0,85
PentaCB(#114)	4,04	0,15	2,62	0,09
PentaCB(#118)	145	5,29	135	4,63
PentaCB(#123)	3,58	0,13	4,84	0,17
PentaCB(#126)	1,07	0,04	0,83	0,03
HexaCB(#156)	13,9	0,51	17,0	0,58
HexaCB(#157)	< 3,61	< 0,13	< 3,50	< 0,12
HexaCB(#167)	< 24,1	< 0,88	< 27,4	< 0,94
HexaCB(#169)	< 2,41	< 0,09	< 2,33	< 0,08
HeptaCB(#189)	< 3,41	< 0,12	< 3,31	< 0,11
WHO-PCB-TEQ excl. LOQ [a]	0,135	0,005	0,109	0,004
WHO-PCB-TEQ incl. LOQ [b]	0,161	0,006	0,135	0,005
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,113	0,004	0,088	0,003
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,187	0,007	0,160	0,005
Recovery Rates	%		%	
13C12-TriCB(#28)	93,1		86,6	
13C12-TetraCB(#52)	82,0		87,6	
13C12-TetraCB(#81)	97,6		93,9	
13C12-TetraCB(#77)	93,3		94,4	
13C12-PentaCB(#101)	86,0		81,2	
13C12-PentaCB(#123)	97,5		94,3	
13C12-PentaCB(#118)	92,3		87,1	
13C12-PentaCB(#114)	96,3		90,9	
13C12-PentaCB(#105)	91,3		85,7	
13C12-PentaCB(#126)	94,0		93,0	
13C12-HexaCB(#153)	91,5		89,6	
13C12-HexaCB(#138)	97,7		97,5	
13C12-HexaCB(#167)	91,9		92,4	
13C12-HexaCB(#156)	93,5		90,8	
13C12-HexaCB(#157)	94,2		93,9	
13C12-HexaCB(#169)	91,9		94,7	
13C12-HeptaCB(#180)	90,7		85,0	
13C12-HeptaCB(#189)	90,1		92,0	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 35: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B3 8N5161.027		B4 8N5161.028	
Fat content [%]	3,3		3,2	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,64 [c]	< 0,09 [c]	< 2,67 [c]	< 0,09 [c]
TetraCB(#81)	< 0,49 [c]	< 0,02 [c]	< 0,49 [c]	< 0,02 [c]
PentaCB(#105)	25,8 [c]	0,85 [c]	23,3 [c]	0,76 [c]
PentaCB(#114)	2,31 [c]	0,08 [c]	2,45 [c]	0,08 [c]
PentaCB(#118)	104 [c]	3,40 [c]	106 [c]	3,43 [c]
PentaCB(#123)	3,37 [c]	0,11 [c]	5,65 [c]	0,18 [c]
PentaCB(#126)	1,15 [c]	0,04 [c]	< 0,70 [c]	< 0,02 [c]
HexaCB(#156)	12,2 [c]	0,40 [c]	14,3 [c]	0,46 [c]
HexaCB(#157)	< 3,66 [c]	< 0,12 [c]	< 3,70 [c]	< 0,12 [c]
HexaCB(#167)	< 21,4 [c]	< 0,70 [c]	< 23,1 [c]	< 0,75 [c]
HexaCB(#169)	< 2,44 [c]	< 0,08 [c]	< 2,46 [c]	< 0,08 [c]
HeptaCB(#189)	< 3,46 [c]	< 0,11 [c]	< 3,49 [c]	< 0,11 [c]
WHO-PCB-TEQ excl. LOQ [a]	0,135 [c]	0,004 [c]	0,022 [c]	0,0007 [c]
WHO-PCB-TEQ incl. LOQ [b]	0,162 [c]	0,005 [c]	0,119 [c]	0,004 [c]
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,119 [c]	0,004 [c]	0,005 [c]	0,0001 [c]
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,194 [c]	0,006 [c]	0,150 [c]	0,005 [c]
Recovery Rates	%		%	
13C12-TriCB(#28)	83,6		82,1	
13C12-TetraCB(#52)	82,8		88,9	
13C12-TetraCB(#81)	88,9		92,1	
13C12-TetraCB(#77)	89,6		92,6	
13C12-PentaCB(#101)	88,3		84,8	
13C12-PentaCB(#123)	93,8		97,5	
13C12-PentaCB(#118)	95,4		90,3	
13C12-PentaCB(#114)	96,0		88,5	
13C12-PentaCB(#105)	91,4		80,3	
13C12-PentaCB(#126)	95,1		97,6	
13C12-HexaCB(#153)	94,3		92,9	
13C12-HexaCB(#138)	99,2		97,9	
13C12-HexaCB(#167)	100		88,8	
13C12-HexaCB(#156)	94,6		93,8	
13C12-HexaCB(#157)	93,2		92,7	
13C12-HexaCB(#169)	90,0		91,3	
13C12-HeptaCB(#180)	83,2		84,4	
13C12-HeptaCB(#189)	91,3		88,9	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)
[c] : Results verified by a duplicate analysis

Tab. 36: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B5 8N5161.029		B6 8N5161.030	
Fat content [%]	3,4		4,0	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,57	< 0,09	< 2,59	< 0,10
TetraCB(#81)	< 0,47	< 0,02	< 0,48	< 0,02
PentaCB(#105)	20,1	0,67	20,0	0,80
PentaCB(#114)	2,95	0,10	3,14	0,13
PentaCB(#118)	101	3,37	88,5	3,53
PentaCB(#123)	5,48	0,18	< 1,99	< 0,08
PentaCB(#126)	0,64	0,02	< 0,91	< 0,04
HexaCB(#156)	13,0	0,44	11,7	0,47
HexaCB(#157)	< 3,56	< 0,12	< 3,59	< 0,14
HexaCB(#167)	< 22,6	< 0,76	< 20,5	< 0,82
HexaCB(#169)	< 2,37	< 0,08	< 2,39	< 0,10
HeptaCB(#189)	< 3,36	< 0,11	< 3,39	< 0,14
WHO-PCB-TEQ excl. LOQ [a]	0,084	0,003	0,018	0,0007
WHO-PCB-TEQ incl. LOQ [b]	0,111	0,004	0,136	0,005
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,068	0,002	0,004	0,0001
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,140	0,005	0,167	0,007
Recovery Rates	%		%	
13C12-TriCB(#28)	86,8		89,6	
13C12-TetraCB(#52)	82,1		79,1	
13C12-TetraCB(#81)	91,5		83,3	
13C12-TetraCB(#77)	95,5		90,1	
13C12-PentaCB(#101)	81,3		80,4	
13C12-PentaCB(#123)	93,0		95,3	
13C12-PentaCB(#118)	91,4		96,5	
13C12-PentaCB(#114)	100		93,6	
13C12-PentaCB(#105)	89,2		91,8	
13C12-PentaCB(#126)	100		103	
13C12-HexaCB(#153)	88,2		96,0	
13C12-HexaCB(#138)	87,4		89,2	
13C12-HexaCB(#167)	97,3		90,4	
13C12-HexaCB(#156)	96,5		89,1	
13C12-HexaCB(#157)	94,8		92,4	
13C12-HexaCB(#169)	94,2		94,0	
13C12-HeptaCB(#180)	85,2		86,4	
13C12-HeptaCB(#189)	93,3		91,7	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 37: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B7 8N5161.031		B8 8N5161.032	
Fat content [%]	3,7		3,8	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,60	< 0,10	< 2,58 [c]	< 0,10 [c]
TetraCB(#81)	< 0,48	< 0,02	< 0,48 [c]	< 0,02 [c]
PentaCB(#105)	19,7	0,72	53,8 [c]	2,05 [c]
PentaCB(#114)	2,29	0,08	6,39 [c]	0,24 [c]
PentaCB(#118)	92,5	3,40	245 [c]	9,31 [c]
PentaCB(#123)	< 2,00	< 0,07	4,61 [c]	0,18 [c]
PentaCB(#126)	0,98	0,04	2,83 [c]	0,11 [c]
HexaCB(#156)	10,9	0,40	21,8 [c]	0,83 [c]
HexaCB(#157)	< 3,60	< 0,13	5,16 [c]	0,20 [c]
HexaCB(#167)	< 4,80	< 0,18	8,55 [c]	0,33 [c]
HexaCB(#169)	< 2,40	< 0,09	< 2,38 [c]	< 0,09 [c]
HeptaCB(#189)	< 3,40	< 0,12	< 3,37 [c]	< 0,13 [c]
WHO-PCB-TEQ excl. LOQ [a]	0,116	0,004	0,330 [c]	0,013 [c]
WHO-PCB-TEQ incl. LOQ [b]	0,143	0,005	0,355 [c]	0,013 [c]
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,102	0,004	0,294 [c]	0,011 [c]
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,175	0,006	0,365 [c]	0,014 [c]
Recovery Rates	%		%	
13C12-TriCB(#28)	85,2		81,8	
13C12-TetraCB(#52)	83,6		76,3	
13C12-TetraCB(#81)	88,7		88,8	
13C12-TetraCB(#77)	91,7		91,1	
13C12-PentaCB(#101)	82,9		86,8	
13C12-PentaCB(#123)	92,5		91,3	
13C12-PentaCB(#118)	101		90,8	
13C12-PentaCB(#114)	90,8		86,3	
13C12-PentaCB(#105)	102		99,4	
13C12-PentaCB(#126)	89,7		83,1	
13C12-HexaCB(#153)	85,3		94,7	
13C12-HexaCB(#138)	82,8		78,7	
13C12-HexaCB(#167)	72,0		87,8	
13C12-HexaCB(#156)	83,9		96,3	
13C12-HexaCB(#157)	83,9		92,4	
13C12-HexaCB(#169)	81,3		94,9	
13C12-HeptaCB(#180)	81,0		92,4	
13C12-HeptaCB(#189)	93,9		98,5	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)
[c] : Results verified by a duplicate analysis

Tab. 38: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B9 8N5161.033		B13 8N5161.034	
Fat content [%]	3,6		3,7	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,41	< 0,09	< 2,61	< 0,10
TetraCB(#81)	< 0,45	< 0,02	< 0,48	< 0,02
PentaCB(#105)	23,0	0,82	22,6	0,83
PentaCB(#114)	2,72	0,10	2,29	0,08
PentaCB(#118)	111	3,96	108	3,98
PentaCB(#123)	< 1,86	< 0,07	< 2,01	< 0,07
PentaCB(#126)	1,25	0,04	1,39	0,05
HexaCB(#156)	12,2	0,44	12,5	0,46
HexaCB(#157)	< 3,34	< 0,12	< 3,61	< 0,13
HexaCB(#167)	5,90	0,21	5,77	0,21
HexaCB(#169)	< 2,23	< 0,08	< 2,41	< 0,09
HeptaCB(#189)	< 3,15	< 0,11	< 3,41	< 0,13
WHO-PCB-TEQ excl. LOQ [a]	0,146	0,005	0,160	0,006
WHO-PCB-TEQ incl. LOQ [b]	0,170	0,006	0,186	0,007
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,129	0,005	0,144	0,005
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,197	0,007	0,216	0,008
Recovery Rates	%		%	
13C12-TriCB(#28)	84,2		86,2	
13C12-TetraCB(#52)	85,4		87,2	
13C12-TetraCB(#81)	89,3		91,6	
13C12-TetraCB(#77)	92,7		97,3	
13C12-PentaCB(#101)	84,7		82,8	
13C12-PentaCB(#123)	96,5		94,8	
13C12-PentaCB(#118)	101		106	
13C12-PentaCB(#114)	99,7		108	
13C12-PentaCB(#105)	102		95,7	
13C12-PentaCB(#126)	92,9		89,8	
13C12-HexaCB(#153)	85,7		88,3	
13C12-HexaCB(#138)	86,9		89,6	
13C12-HexaCB(#167)	62,6		76,0	
13C12-HexaCB(#156)	81,5		87,2	
13C12-HexaCB(#157)	81,4		87,6	
13C12-HexaCB(#169)	82,3		84,8	
13C12-HeptaCB(#180)	77,6		84,3	
13C12-HeptaCB(#189)	93,1		99,2	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 39: Results of the analysis of milk samples for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B14 8N5161.035		B15 8N5161.036	
Fat content [%]	3,9		3,6	
Unit	pg/g fat-weight	pg/g fresh-weight	pg/g fat-weight	pg/g fresh-weight
WHO - PCB				
TetraCB(#77)	< 2,49	< 0,10	< 2,60	< 0,09
TetraCB(#81)	< 0,46	< 0,02	< 0,48	< 0,02
PentaCB(#105)	22,8	0,89	29,9	1,07
PentaCB(#114)	2,22	0,09	3,32	0,12
PentaCB(#118)	107	4,19	133	4,75
PentaCB(#123)	< 1,91	< 0,07	2,08	0,07
PentaCB(#126)	1,06	0,04	1,70	0,06
HexaCB(#156)	13,0	0,51	15,0	0,54
HexaCB(#157)	< 3,44	< 0,13	< 3,60	< 0,13
HexaCB(#167)	6,08	0,24	7,84	0,28
HexaCB(#169)	< 2,29	< 0,09	< 2,40	< 0,09
HeptaCB(#189)	< 3,25	< 0,13	< 3,40	< 0,12
WHO-PCB-TEQ excl. LOQ [a]	0,126	0,005	0,196	0,007
WHO-PCB-TEQ incl. LOQ [b]	0,152	0,006	0,222	0,008
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,110	0,004	0,176	0,006
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,180	0,007	0,248	0,009
Recovery Rates	%		%	
13C12-TriCB(#28)	90,6		85,2	
13C12-TetraCB(#52)	89,5		80,7	
13C12-TetraCB(#81)	92,0		86,0	
13C12-TetraCB(#77)	97,9		80,9	
13C12-PentaCB(#101)	88,3		81,8	
13C12-PentaCB(#123)	97,4		97,5	
13C12-PentaCB(#118)	110		101	
13C12-PentaCB(#114)	106		78,9	
13C12-PentaCB(#105)	98,4		100	
13C12-PentaCB(#126)	91,1		90,7	
13C12-HexaCB(#153)	88,3		85,6	
13C12-HexaCB(#138)	87,1		88,7	
13C12-HexaCB(#167)	77,0		72,3	
13C12-HexaCB(#156)	86,6		84,6	
13C12-HexaCB(#157)	86,1		84,9	
13C12-HexaCB(#169)	81,8		82,4	
13C12-HeptaCB(#180)	82,2		79,9	
13C12-HeptaCB(#189)	101		93,5	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

Tab. 40: Results of the analysis of a milk sample for PCBs; the results refer to the fat-weight and to the fresh-weight

Original Sample Name GfA Sample No.	B17 8N5161.037	
Fat content [%]	3,6	
Unit	pg/g fat-weight	pg/g fresh-weight
WHO - PCB		
TetraCB(#77)	< 2,46	< 0,09
TetraCB(#81)	< 0,45	< 0,02
PentaCB(#105)	45,7	1,61
PentaCB(#114)	5,73	0,20
PentaCB(#118)	220	7,77
PentaCB(#123)	3,91	0,14
PentaCB(#126)	3,20	0,11
HexaCB(#156)	23,7	0,84
HexaCB(#157)	5,41	0,19
HexaCB(#167)	10,9	0,38
HexaCB(#169)	< 2,27	< 0,08
HeptaCB(#189)	< 3,21	< 0,11
WHO-PCB-TEQ excl. LOQ [a]	0,364	0,013
WHO-PCB-TEQ incl. LOQ [b]	0,388	0,014
WHO(2005)-PCB-TEQ excl. LOQ [a]	0,329	0,012
WHO(2005)-PCB-TEQ incl. LOQ [b]	0,398	0,014
Recovery Rates	**%**	
13C12-TriCB(#28)	83,1	
13C12-TetraCB(#52)	77,9	
13C12-TetraCB(#81)	85,4	
13C12-TetraCB(#77)	78,4	
13C12-PentaCB(#101)	79,8	
13C12-PentaCB(#123)	92,3	
13C12-PentaCB(#118)	104	
13C12-PentaCB(#114)	94,6	
13C12-PentaCB(#105)	99,1	
13C12-PentaCB(#126)	88,7	
13C12-HexaCB(#153)	83,3	
13C12-HexaCB(#138)	86,2	
13C12-HexaCB(#167)	67,7	
13C12-HexaCB(#156)	81,6	
13C12-HexaCB(#157)	85,0	
13C12-HexaCB(#169)	78,2	
13C12-HeptaCB(#180)	82,7	
13C12-HeptaCB(#189)	90,8	

< : Concentration below the indicated limit of quantification (LOQ)
[a] : TE-value calculated by including the detected PCDF/D congeners only
[b] : TE-value calculated by including the not detected PCDF/D congeners also by taking the full value of their detection limit (LOD)

October 22, 2008

Dr. R. Grümping

Remark: The test results relate only to the items tested. Extracts of the report shall not be reproduced without written approval of the GfA mbH.

Environmental Protection Agency (EPA)
Mr. Colman Concannon
McCumiskey House
Richview
Clonskeagh Road
Dublin 14

Ireland

October 22, 2008

Our ref.: 61243-006 P01-139-Kr
Please include in all correspondences

Your ref.: ./.
Project manager: Dr. R. Grümping
Direct dial: -154

Analysis of 37 cow's milk samples for PCDD/Fs and PCBs;
Your order PO 018588 dated July 22, 2008

Dear Mr. Concannon,

Enclosed please find our test report concerning the investigations mentioned above

If you have any questions please don't hesitate to contact us.

Best regards

Dr. R. Grümping