NYC 9/11 Public Portal Document

PASC - Certificate of Analysis

		R02090957	R02090957	R02090957	R02090957	R02090957
Client ID:		01A	02A	03A	04A	05A
Lab No.:		060285 02	060286 02	060287 02	060288 02	060289 02
Date Sampled:		12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**Units**					
Total Tetrachlorodibenzofurans	pg	100	270	150	860	160
Total Pentachlorodibenzofurans	"	250	97	65	720	77
Total Hexachlorodibenzofurans	"	70	32	20	350	33
Total Heptachlorodibenzofurans	"	13	<20	<15	32	<5.3
Octachlorodibenzofuran	"	17	13	13	41	7.9
Total Tetrachlorodibenzo-p-dioxins	"	940	310	150	1200	160
Total Pentachlorodibenzo-p-dioxins	"	370	130	28	1400	9.6
Total Hexachlorodibenzo-p-dioxins	"	110	55	29	670	18
Total Heptachlorodibenzo-p-dioxins	"	74	66	58	200	59
Octachlorodibenzo-p-dioxin	"	290	230	220	550	140
Internal Recoveries	%					
2,3,7,8-T4CDF-13C12		86	83	85	87	94
2,3,7,8-T4CDD-13C12		91	85	85	91	82
1,2,3,7,8-P5CDF-13C12		90	88	90	76	102
1,2,3,7,8-P5CDD-13C12		93	92	94	80	99
1,2,3,4,7,8-H6CDF-13C12		91	83	90	95	92
1,2,3,6,7,8-H6CDD-13C12		96	88	92	93	87
1,2,3,4,6,7,8-H7CDF-13C12		85	81	85	86	89
1,2,3,4,6,7,8-H7CDD-13C12		88	87	90	93	87
OCDD-13C12		93	88	97	100	76
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	<70	<42	<21	<170	<25
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<2.8	<2.1	<3.2	6.9	<5.1
1,2,3,7,8-Cl5-Dibenzofuran	"	<14	<5.9	<3.3	37	<1.5
2,3,4,7,8-Cl5-Dibenzofuran	"	<19	9.8	6.9	<68	<1.6
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<4.0	<2.6	<2.6	<17	<1.1
1,2,3,4,7,8-Cl6-Dibenzofuran	"	19	10	7.9	83	9.6
1,2,3,6,7,8-Cl6-Dibenzofuran	"	7.4	<3.5	<3.7	31	<4.6
2,3,4,6,7,8-Cl6-Dibenzofuran	"	7.0	<4.2	<4.4	30	4.0
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<3.5	<4.4	<4.7	3.3	<3.8
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<5.2	<4.7	<6.9	9.0	<4.8
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	<4.7	<4.2	<6.2	17	<3.5
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	<4.3	<3.8	<5.6	25	<3.8
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<19	<18	<14	<77	<13
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<11	<23	<17	<1.8	<6.2
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	40	34	32	100	<3.3
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	17	13	13	41	7.9
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	290	230	220	550	140
2,3,7,8-TCDF (DB225)	pg	10	5.4	4.4	27	<6.1
Internal Recoveries	%					
2,3,7,8-TCDF-13C12		97	90	92	100	90
TEQ based on Nato Factors	pg	4.1	6.5	4.8	30.3	1.5

Client:Philip Analytical Services Inc Project:Misc.

NYC-WTC_000332016

NYC 9/11 Public Portal Document

		R02090957	R02090957	R02090957	R02090957	R02090957
Client ID:		06A	07A	08A	09A	10A
Lab No.:		060290 02	060291 02	060292 02	060293 02	060323 02
Date Sampled:		12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**Units**					
Total Tetrachlorodibenzofurans	pg	69	<2.9	88	330	78
Total Pentachlorodibenzofurans	"	19	<4.3	38	340	23
Total Hexachlorodibenzofurans	"	9.7	<1.2	15	170	8.6
Total Heptachlorodibenzofurans	"	<13	<1.8	<13	20	<9.7
Octachlorodibenzofuran	"	6.7	<3.8	11	72	9.9
Total Tetrachlorodibenzo-p-dioxins	"	89	9.9	160	360	120
Total Pentachlorodibenzo-p-dioxins	"	23	<3.8	13	370	23
Total Hexachlorodibenzo-p-dioxins	"	5.1	<13	15	440	21
Total Heptachlorodibenzo-p-dioxins	"	38	<3.3	60	300	21
Octachlorodibenzo-p-dioxin	"	210	16	210	890	47
Internal Recoveries	%					
2,3,7,8-T4CDF-13C12		106	83	84	102	93
2,3,7,8-T4CDD-13C12		91	74	73	88	87
1,2,3,7,8-P5CDF-13C12		119	89	84	101	99
1,2,3,7,8-P5CDD-13C12		118	88	83	98	98
1,2,3,4,7,8-H6CDF-13C12		98	94	85	97	96
1,2,3,6,7,8-H6CDD-13C12		94	85	78	90	92
1,2,3,4,6,7,8-H7CDF-13C12		93	86	81	100	91
1,2,3,4,6,7,8-H7CDD-13C12		89	78	77	97	93
OCDD-13C12		81	68	68	84	87
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	13	<2.9	<23	<56	<18
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<3.3	<4.8	<3.8	<4.7	<2.4
1,2,3,7,8-Cl5-Dibenzofuran	"	<5.2	<4.1	<6.8	12	4.8
2,3,4,7,8-Cl5-Dibenzofuran	"	<5.5	<4.4	<7.2	32	5.6
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<2.9	<3.8	<3.6	<6.0	<2.2
1,2,3,4,7,8-Cl6-Dibenzofuran	"	5.9	<1.2	7.4	51	4.8
1,2,3,6,7,8-Cl6-Dibenzofuran	"	3.1	<0.99	2.9	20	<2.8
2,3,4,6,7,8-Cl6-Dibenzofuran	"	<2.5	<1.3	<2.8	<14	<3.3
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<1.9	<1.4	<3.1	<4.6	<3.5
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<3.5	<4.0	<4.4	<6.1	<3.0
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	<2.5	<2.9	<3.2	14	<2.7
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	<2.7	<3.1	<3.4	24	<2.4
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<11	<1.6	<12	<89	<8.7
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<1.6	<1.7	<6.6	<2.8	<11
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	38	<3.3	35	160	12
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	6.7	<3.8	11	72	9.9
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	210	16	210	890	47
2,3,7,8-TCDF (DB225)	pg	<4.1	<4.2	<5.4	12	<3.6
Internal Recoveries	%					
2,3,7,8-TCDF-13C12		96	79	79	97	97
TEQ based on Nato Factors	pg	2.8	0.02	1.6	30.3	3.7

Client:Philip Analytical Services Inc Project:Misc.

NYC-WTC_000332017

NYC 9/11 Public Portal Document

		R02090957	R02090957	R02090957	R02090957	R02090957
Client ID:		11A	12A	13A	14A	15A
Lab No.:		060324 02	060325 02	060326 02	060327 02	060328 02
Date Sampled:		12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**Units**					
Total Tetrachlorodibenzofurans	pg	33	79	2.8	17	170
Total Pentachlorodibenzofurans	"	25	45	<3.5	39	40
Total Hexachlorodibenzofurans	"	10	20	<2.6	29	19
Total Heptachlorodibenzofurans	"	<13	<15	<10	<18	<20
Octachlorodibenzofuran	"	6.9	14	<4.5	17	16
Total Tetrachlorodibenzo-p-dioxins	"	62	150	5.7	83	160
Total Pentachlorodibenzo-p-dioxins	"	19	31	<2.0	65	37
Total Hexachlorodibenzo-p-dioxins	"	22	43	<2.6	69	41
Total Heptachlorodibenzo-p-dioxins	"	34	100	10	50	25
Octachlorodibenzo-p-dioxin	"	110	250	28	110	150
Internal Recoveries	%					
2,3,7,8-T4CDF-13C12		90	94	88	98	66
2,3,7,8-T4CDD-13C12		83	86	83	88	63
1,2,3,7,8-P5CDF-13C12		88	104	94	105	66
1,2,3,7,8-P5CDD-13C12		87	100	100	106	65
1,2,3,4,7,8-H6CDF-13C12		94	97	99	103	72
1,2,3,6,7,8-H6CDD-13C12		93	91	99	98	71
1,2,3,4,6,7,8-H7CDF-13C12		89	91	96	96	70
1,2,3,4,6,7,8-H7CDD-13C12		90	90	99	94	69
OCDD-13C12		90	88	93	96	70
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	<14	<18	<2.8	<11	<25
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<2.4	<2.0	<2.3	<2.8	<3.3
1,2,3,7,8-Cl5-Dibenzofuran	"	<4.1	<2.7	<3.4	<5.6	<4.6
2,3,4,7,8-Cl5-Dibenzofuran	"	<4.2	5.2	<3.6	<8.4	<4.8
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<2.5	<3.2	<2.0	<3.5	<3.0
1,2,3,4,7,8-Cl6-Dibenzofuran	"	4.1	5.9	<2.4	9.3	7.9
1,2,3,6,7,8-Cl6-Dibenzofuran	"	<2.3	3.0	<2.3	<6.1	<4.5
2,3,4,6,7,8-Cl6-Dibenzofuran	"	<2.7	<2.9	<2.7	7.0	<5.4
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<2.9	<3.1	<2.9	<2.9	<5.7
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<2.9	<2.8	<2.9	3.8	<3.2
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	<2.6	3.2	<2.6	4.2	<2.9
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	<2.4	<2.3	<2.4	6.0	<2.6
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<11	<13	<9.2	<16	<18
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<15	<17	<12	<20	<22
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	18	59	6.6	28	<23
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	6.9	14	<4.5	17	16
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	110	250	28	110	150
2,3,7,8-TCDF (DB225)	pg	<3.7	<4.3	<4.2	<3.1	<8.8
Internal Recoveries	%					
2,3,7,8-TCDF-13C12		93	99	94	99	73
TEQ based on Nato Factors	pg	0.71	4.7	0.09	3.4	0.95

Client:Philip Analytical Services Inc Project:Misc.

NYC-WTC_000332018

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		R02090957	R02090957	R02090957	Method	Method
Client ID:		16A	17A	18A	Blank 10/08	Blank 10/09
Lab No.:		060329 02	060330 02	060331 02		
Date Sampled:		12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**Units**					
Total Tetrachlorodibenzofurans	pg	5.9	36	90	<4.4	<1.5
Total Pentachlorodibenzofurans	"	<3.9	13	39	<10	<1.8
Total Hexachlorodibenzofurans	"	<1.2	5.4	20	5.4	<3.0
Total Heptachlorodibenzofurans	"	<1.8	<1.1	<2.0	21	<3.3
Octachlorodibenzofuran	"	<3.1	<3.6	12	33	<5.3
Total Tetrachlorodibenzo-p-dioxins	"	21	30	86	<6.0	<1.8
Total Pentachlorodibenzo-p-dioxins	"	5.7	<4.7	38	<5.2	<2.5
Total Hexachlorodibenzo-p-dioxins	"	<13	<19	6.0	<7.4	<2.7
Total Heptachlorodibenzo-p-dioxins	"	5.4	4.3	80	21	10
Octachlorodibenzo-p-dioxin	"	27	28	340	42	30
Internal Recoveries	%					
2,3,7,8-T4CDF-13C12		95	111	102	74	86
2,3,7,8-T4CDD-13C12		87	74	84	77	80
1,2,3,7,8-P5CDF-13C12		93	103	104	75	86
1,2,3,7,8-P5CDD-13C12		94	104	106	80	87
1,2,3,4,7,8-H6CDF-13C12		92	96	95	74	100
1,2,3,6,7,8-H6CDD-13C12		92	96	91	78	100
1,2,3,4,6,7,8-H7CDF-13C12		94	93	91	69	98
1,2,3,4,6,7,8-H7CDD-13C12		93	92	89	80	100
OCDD-13C12		81	81	79	78	94
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	<3.4	11	17	<4.4	<1.5
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<3.6	<4.8	<3.3	<6.0	<1.8
1,2,3,7,8-Cl5-Dibenzofuran	"	<3.8	<5.5	<3.6	<10	<1.8
2,3,4,7,8-Cl5-Dibenzofuran	"	<4.1	<5.8	<4.4	<10	<1.9
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<3.7	<4.7	<4.9	<5.2	<2.5
1,2,3,4,7,8-Cl6-Dibenzofuran	"	<1.2	2.1	7.1	5.2	<2.8
1,2,3,6,7,8-Cl6-Dibenzofuran	"	<0.98	<1.4	<2.8	<3.7	<2.6
2,3,4,6,7,8-Cl6-Dibenzofuran	"	<1.3	<1.8	<3.6	<4.5	<3.2
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<1.4	<2.0	<4.0	<4.7	<3.4
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<3.6	<3.8	<4.4	<8.2	<3.0
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	<2.6	<2.7	<3.3	<7.4	<2.7
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	<2.8	<3.0	<3.5	<6.7	<2.5
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<1.6	<2.1	<15	11	<3.0
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<2.1	<1.2	<2.3	<5.7	<3.8
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	5.4	4.3	41	21	6.7
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	<3.1	<3.6	12	33	<5.3
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	27	28	340	42	30
2,3,7,8-TCDF (DB225)	pg	<4.1	<3.8	<3.9	-	
Internal Recoveries	%					
2,3,7,8-TCDF-13C12		102	92	98	-	
TEQ based on Nato Factors	pg	0.08	1.4	3.2		

Client:Philip Analytical Services Inc Project:Misc.

NYC-WTC_000332019

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		Blank	Blank
Client ID:		Spike	Spike
Lab No.:			%Recoveries
Date Sampled:			
Component	**Units**		
Total Tetrachlorodibenzofurans	pg	1100	-
Total Pentachlorodibenzofurans	"	5300	-
Total Hexachlorodibenzofurans	"	9100	-
Total Heptachlorodibenzofurans	"	5000	-
Octachlorodibenzofuran	"	4700	-
Total Tetrachlorodibenzo-p-dioxins	"	1000	-
Total Pentachlorodibenzo-p-dioxins	"	2700	-
Total Hexachlorodibenzo-p-dioxins	"	7200	-
Total Heptachlorodibenzo-p-dioxins	"	2500	-
Octachlorodibenzo-p-dioxin	"	4800	-
Internal Recoveries	%		
2,3,7,8-T4CDF-13C12		86	86
2,3,7,8-T4CDD-13C12		81	81
1,2,3,7,8-P5CDF-13C12		88	88
1,2,3,7,8-P5CDD-13C12		90	90
1,2,3,4,7,8-H6CDF-13C12		93	93
1,2,3,6,7,8-H6CDD-13C12		95	95
1,2,3,4,6,7,8-H7CDF-13C12		95	95
1,2,3,4,6,7,8-H7CDD-13C12		95	95
OCDD-13C12		86	86
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	1000	104
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	1000	102
1,2,3,7,8-Cl5-Dibenzofuran	"	2600	102
2,3,4,7,8-Cl5-Dibenzofuran	"	2700	107
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	2700	108
1,2,3,4,7,8-Cl6-Dibenzofuran	"	2400	94
1,2,3,6,7,8-Cl6-Dibenzofuran	"	2200	88
2,3,4,6,7,8-Cl6-Dibenzofuran	"	2400	95
1,2,3,7,8,9-Cl6-Dibenzofuran	"	2100	85
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	2500	98
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	2500	98
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	2300	92
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	2500	100
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	2500	99
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	2400	97
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	4700	95
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	4800	96
2,3,7,8-TCDF (DB225)	pg		
Internal Recoveries	%		
2,3,7,8-TCDF-13C12			
TEQ based on Nato Factors	pg		

Client:Philip Analytical Services Inc Project:Misc.

NYC-WTC_000332020