NYC 9/11 Public Portal Document

CLIENT INFORMATION		LABORATORY INFORMATION	
Attention:	Michael Salum	**Contact:**	Ada Blythe, B.Sc., C.Chem.
Client Name:	Philip Analytical Services Inc	**Project:**	AN023026
Project:	Misc.	**Date Received**	17-Sep-2002
Project Desc:		**Date Reported**	22-Oct-2002
Address:	4418 Pottsville Pike Reading, Pennsylvania 19605	**Submission No.:**	2I0647
		Sample No.:	060266-060284
Fax Number:	610 921-9667		
Phone Numbe	610 921-8833		

NOTES: ***''-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available***
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Blank correction is only performed on oil and grease, BTEX, total purgeable hydrocarbons and VOC analyses when Canadian methods are utilized.
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Nineteenth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

L□"□T□i□m□e□s□ □N□e□w□ □R□o□m□a□n□,□B□o□l□d□ □I□t□a□l□i□c□"□1□2□ □ □ □ □ □ □ □ □
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		Method	Blank	Blank	R02090951	R02090951	R02090951
Client ID:		Blank10/04	Spike#1	Spike#1	01A	02A	03A
Lab No.:		060266 02	060266 02	%Recoveries	060267 02	060268 02	060269 02
Date Sampled:		12-Sep-2002	12-Sep-2002		12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**MDL**	**Units**					
Total Tetrachlorodibenzofurai		pg	<3.9	1100	-	<2.0	130	27
Total Pentachlorodibenzofura		"	17	6400	-	<2.2	55	<8.8
Total Hexachlorodibenzofurai		"	52	10000	-	<1.6	45	21
Total Heptachlorodibenzofura		"	42	5100	-	<2.1	46	57
Octachlorodibenzofuran		"	67	4400	-	3.5	33	53
Total Tetrachlorodibenzo-p-di		"	4.3	1100	-	4.3	110	56
Total Pentachlorodibenzo-p-d		"	12	2700	-	<2.9	16	5.1
Total Hexachlorodibenzo-p-di		"	35	7900	-	<8.9	<35	2.9
Total Heptachlorodibenzo-p-d		"	26	2600	-	3.9	88	62
Octachlorodibenzo-p-dioxin		"	65	4900	-	16	390	320
Internal Recoveries		%						
2,3,7,8-T4CDF-13C12			65	70	70	82	72	68
2,3,7,8-T4CDD-13C12			74	84	84	79	75	76
1,2,3,7,8-P5CDF-13C12			43	70	70	88	61	76
1,2,3,7,8-P5CDD-13C12			48	76	76	105	67	93
1,2,3,4,7,8-H6CDF-13C12			72	85	85	86	73	79
1,2,3,6,7,8-H6CDD-13C12			74	88	88	91	76	80
1,2,3,4,6,7,8-H7CDF-13C12			82	86	86	83	71	78
1,2,3,4,6,7,8-H7CDD-13C12			75	89	89	81	68	79
OCDD-13C12			84	108	108	94	75	91
2,3,7,8-Cl4-Dibenzofuran (Dl		pg	<3.9	1100	105	<2.0	20	11
2,3,7,8-Cl4-Dibenzo-p-dioxin		"	4.3	1100	109	<2.6	<2.5	<3.7
1,2,3,7,8-Cl5-Dibenzofuran		"	<9.6	2900	114	<2.1	4.0	<6.5
2,3,4,7,8-Cl5-Dibenzofuran		"	17	3500	139	<2.3	<5.0	<7.1
1,2,3,7,8-Cl5-Dibenzo-p-diox		"	12	2700	110	<2.9	<3.6	<4.2
1,2,3,4,7,8-Cl6-Dibenzofuran		"	11	2400	97	<1.4	8.2	5.2
1,2,3,6,7,8-Cl6-Dibenzofuran		"	14	2600	102	<1.4	4.5	3.0
2,3,4,6,7,8-Cl6-Dibenzofuran		"	<14	2500	100	<1.7	10	<2.7
1,2,3,7,8,9-Cl6-Dibenzofuran		"	29	2500	98	<2.0	<2.5	<3.3
1,2,3,4,7,8-Cl6-Dibenzo-p-di		"	<9.1	2700	108	<4.6	<2.4	<2.6
1,2,3,6,7,8-Cl6-Dibenzo-p-di		"	14	2600	105	<4.5	<3.4	<2.6
1,2,3,7,8,9-Cl6-Dibenzo-p-di		"	22	2600	102	<4.4	<2.3	<2.5
1,2,3,4,6,7,8-Cl7-Dibenzofur		"	18	2600	104	<1.8	21	33
1,2,3,4,7,8,9-Cl7-Dibenzofur		"	25	2400	97	<2.5	<3.1	<2.8
1,2,3,4,6,7,8-Cl7-Dibenzo-p-		"	26	2600	103	3.9	48	35
1,2,3,4,6,7,8,9-Cl8-Dibenzofi		"	67	4400	87	3.5	33	53
1,2,3,4,6,7,8,9-Cl8-Dibenzo-j		"	65	4900	99	16	390	320
2,3,7,8-TCDF (DB225)		pg	-	-		-	13	<6.5
Internal Recoveries		%						
2,3,7,8-TCDF-13C12			-	-		-	88	81
TEQ based on Nato Factors		pg	28.9			0.06	5.6	3.0
TEQ's converted into appropriate units		**ng/m²**	**1.39**	**0.000**	**0.000**	**0.003**	**0.269**	**0.144**

(a 209 cm^2 area was wiped)

R□C□l□i□e□n□t□:□P□h□i□l□i□p□ □A□n□a□l□y□t□i□c□a□l□

NYC-WTC_000445816

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	Client ID:		R02090951 04A	R02090951 05A	R02090951 06A	R02090951 07A	R02090951 08A	R02090951 09A
	Lab No.:		060270 02	060271 02	060272 02	060273 02	060274 02	060275 02
	Date Sampled:		12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**MDL**	**Units**						
Total Tetrachlorodibenzofurai		pg	<1.9	<2.0	5.8	<1.7	<1.7	4.8
Total Pentachlorodibenzofura		"	<1.9	<3.4	<1.5	<1.6	<1.7	<9.5
Total Hexachlorodibenzofurai		"	<1.5	<1.2	2.5	<1.1	1.8	<4.1
Total Heptachlorodibenzofura		"	<1.9	<1.8	11	<2.1	<3.8	<6.3
Octachlorodibenzofuran		"	<2.7	<2.2	9.6	4.2	<2.5	<5.3
Total Tetrachlorodibenzo-p-di		"	<3.7	<3.4	20	<1.3	<2.0	10
Total Pentachlorodibenzo-p-d		"	<3.4	<5.8	<3.4	<2.9	<2.6	<5.9
Total Hexachlorodibenzo-p-di		"	<8.0	<11	1.7	<3.7	1.9	<16
Total Heptachlorodibenzo-p-d		"	<3.3	7.0	9.8	<2.0	4.2	7.7
Octachlorodibenzo-p-dioxin		"	16	13	68	8.6	12	46
Internal Recoveries		%						
2,3,7,8-T4CDF-13C12			65	81	72	75	71	81
2,3,7,8-T4CDD-13C12			73	85	85	92	83	76
1,2,3,7,8-P5CDF-13C12			60	86	67	83	70	74
1,2,3,7,8-P5CDD-13C12			67	96	76	91	79	79
1,2,3,4,7,8-H6CDF-13C12			79	96	86	96	90	79
1,2,3,6,7,8-H6CDD-13C12			77	94	90	95	94	82
1,2,3,4,6,7,8-H7CDF-13C12			85	97	92	97	92	77
1,2,3,4,6,7,8-H7CDD-13C12			82	91	93	97	97	78
OCDD-13C12			100	115	104	112	114	68
2,3,7,8-Cl4-Dibenzofuran (Dl		pg	<1.9	<2.0	4.0	<1.7	<1.7	<4.8
2,3,7,8-Cl4-Dibenzo-p-dioxin		"	<2.7	<2.5	<1.3	<1.3	<2.0	<5.9
1,2,3,7,8-Cl5-Dibenzofuran		"	<1.8	<3.2	<1.5	<1.5	<1.6	<9.2
2,3,4,7,8-Cl5-Dibenzofuran		"	<1.9	<3.5	<1.6	<1.6	<1.8	<9.8
1,2,3,7,8-Cl5-Dibenzo-p-diox		"	<3.4	<3.0	<2.8	<2.9	<2.6	<5.9
1,2,3,4,7,8-Cl6-Dibenzofuran		"	<1.3	<1.1	<0.92	<0.97	1.6	<4.1
1,2,3,6,7,8-Cl6-Dibenzofuran		"	<1.4	<1.1	<0.94	<0.99	<0.86	<3.4
2,3,4,6,7,8-Cl6-Dibenzofuran		"	<1.6	<1.3	<1.1	<1.2	<1.0	<4.4
1,2,3,7,8,9-Cl6-Dibenzofuran		"	<2.0	<1.6	<1.4	<1.4	<1.2	<4.8
1,2,3,4,7,8-Cl6-Dibenzo-p-di		"	<3.2	<3.3	<1.2	<1.6	<1.4	<20
1,2,3,6,7,8-Cl6-Dibenzo-p-di		"	<3.1	<3.3	<1.2	<1.6	<1.4	<14
1,2,3,7,8,9-Cl6-Dibenzo-p-di		"	<3.1	<3.2	<1.2	<1.6	<1.3	<15
1,2,3,4,6,7,8-Cl7-Dibenzofur		"	<1.6	<1.5	5.0	<3.2	<3.3	<5.5
1,2,3,4,7,8,9-Cl7-Dibenzofur		"	<2.3	<2.2	<2.2	<4.5	<4.6	<7.4
1,2,3,4,6,7,8-Cl7-Dibenzo-p-		"	<3.3	4.7	9.8	<2.7	4.2	7.7
1,2,3,4,6,7,8,9-Cl8-Dibenzofi		"	<2.7	<2.2	9.6	4.2	<2.5	<5.3
1,2,3,4,6,7,8,9-Cl8-Dibenzo-1		"	16	13	68	8.6	12	46
2,3,7,8-TCDF (DB225)		pg	-	-	<5.7	<3.1	<3.7	<4.8
Internal Recoveries		%						
2,3,7,8-TCDF-13C12			-	-	96	92	92	81
TEQ based on Nato Factors		pg	0.02	0.06	0.63	0.01	0.21	0.12
TEQ's converted into appropriate units		**ng/m²**	**0.001**	**0.003**	**0.030**	**0.000**	**0.010**	**0.006**

(a 209 cm^2 area was wiped)

NYC-WTC_000445817

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	Client ID:		R02090951 10A	R02090951 11A	R02090951 12A	R02090951 13A	R02090951 14A	R02090951 15A
	Lab No.:		060276 02	060277 02	060278 02	060279 02	060280 02	060281 02
	Date Sampled:		12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**MDL**	**Units**						
Total Tetrachlorodibenzofurai		pg	970	180	170	<2.0	140	81
Total Pentachlorodibenzofura		"	450	110	78	<2.7	95	64
Total Hexachlorodibenzofurai		"	250	45	45	<2.6	71	32
Total Heptachlorodibenzofura		"	35	11	11	<3.4	<27	16
Octachlorodibenzofuran		"	58	12	16	<5.1	22	18
Total Tetrachlorodibenzo-p-di		"	1700	230	170	6.6	190	130
Total Pentachlorodibenzo-p-d		"	290	130	56	<4.6	160	80
Total Hexachlorodibenzo-p-di		"	260	14	17	<13	120	47
Total Heptachlorodibenzo-p-d		"	190	90	80	5.0	77	58
Octachlorodibenzo-p-dioxin		"	730	350	320	13	240	200
Internal Recoveries		%						
2,3,7,8-T4CDF-13C12			93	87	92	86	94	78
2,3,7,8-T4CDD-13C12			80	80	85	81	88	86
1,2,3,7,8-P5CDF-13C12			88	82	84	79	85	77
1,2,3,7,8-P5CDD-13C12			95	88	87	85	93	80
1,2,3,4,7,8-H6CDF-13C12			95	90	85	86	88	81
1,2,3,6,7,8-H6CDD-13C12			93	93	88	87	91	85
1,2,3,4,6,7,8-H7CDF-13C12			85	86	80	78	82	73
1,2,3,4,6,7,8-H7CDD-13C12			88	91	85	87	90	82
OCDD-13C12			79	86	77	77	80	88
2,3,7,8-Cl4-Dibenzofuran (Dl		pg	140	28	21	<2.0	25	<17
2,3,7,8-Cl4-Dibenzo-p-dioxin		"	<10	<3.4	<3.3	<3.2	<2.7	<2.4
1,2,3,7,8-Cl5-Dibenzofuran		"	<12	<2.2	<6.1	<2.6	<5.7	6.3
2,3,4,7,8-Cl5-Dibenzofuran		"	31	13	8.0	<2.8	<13	6.5
1,2,3,7,8-Cl5-Dibenzo-p-diox		"	<4.6	<3.5	<3.9	<4.6	<2.3	<2.3
1,2,3,4,7,8-Cl6-Dibenzofuran		"	50	15	11	<2.5	17	9.4
1,2,3,6,7,8-Cl6-Dibenzofuran		"	19	<7.0	<5.3	<2.1	7.8	<4.1
2,3,4,6,7,8-Cl6-Dibenzofuran		"	22	<7.2	7.8	<2.8	6.7	<3.5
1,2,3,7,8,9-Cl6-Dibenzofuran		"	<8.0	<3.7	<4.3	<3.0	<5.8	<3.7
1,2,3,4,7,8-Cl6-Dibenzo-p-di		"	<3.5	<4.0	<6.2	<16	<6.3	<3.2
1,2,3,6,7,8-Cl6-Dibenzo-p-di		"	9.7	4.4	<4.4	<12	<4.5	<2.9
1,2,3,7,8,9-Cl6-Dibenzo-p-di		"	10	<5.3	<4.8	<13	<5.6	<2.6
1,2,3,4,6,7,8-Cl7-Dibenzofur		"	<68	<24	<23	<2.9	<24	<21
1,2,3,4,7,8,9-Cl7-Dibenzofur		"	19	<8.5	<5.2	<3.9	<32	<5.4
1,2,3,4,6,7,8-Cl7-Dibenzo-p-		"	100	47	40	5.0	42	32
1,2,3,4,6,7,8,9-Cl8-Dibenzofi		"	58	12	16	<5.1	22	18
1,2,3,4,6,7,8,9-Cl8-Dibenzo-1		"	730	350	320	13	240	200
2,3,7,8-TCDF (DB225)		pg	37	<9.8	<6.7	<8.9	8.1	<4.6
Internal Recoveries		%						
2,3,7,8-TCDF-13C12			87	86	93	94	94	94
TEQ based on Nato Factors		pg	42.1	11.9	8.7	0.06	6.4	5.04
TEQ's converted into appropriate units		**ng/m²**	**2.021**	**0.571**	**0.418**	**0.003**	**0.307**	**0.242**

(a 209 cm^2 area was wiped)

NYC-WTC_000445818

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			R02090951	R02090951	R02090951
	Client ID:		16A	17A	18A
	Lab No.:		060282 02	060283 02	060284 02
	Date Sampled:		12-Sep-2002	12-Sep-2002	12-Sep-2002
Component	**MDL**	**Units**			
Total Tetrachlorodibenzofurai		pg	120	65	130
Total Pentachlorodibenzofura		"	250	19	62
Total Hexachlorodibenzofurai		"	83	8.5	21
Total Heptachlorodibenzofura		"	21	<8.9	14
Octachlorodibenzofuran		"	31	7.9	22
Total Tetrachlorodibenzo-p-di		"	670	94	110
Total Pentachlorodibenzo-p-d		"	210	17	35
Total Hexachlorodibenzo-p-di		"	92	18	59
Total Heptachlorodibenzo-p-d		"	110	12	74
Octachlorodibenzo-p-dioxin		"	440	100	300
Internal Recoveries		%			
2,3,7,8-T4CDF-13C12			84	79	90
2,3,7,8-T4CDD-13C12			91	83	102
1,2,3,7,8-P5CDF-13C12			83	84	94
1,2,3,7,8-P5CDD-13C12			92	88	98
1,2,3,4,7,8-H6CDF-13C12			87	79	94
1,2,3,6,7,8-H6CDD-13C12			97	85	98
1,2,3,4,6,7,8-H7CDF-13C12			78	70	80
1,2,3,4,6,7,8-H7CDD-13C12			86	80	88
OCDD-13C12			90	82	92
2,3,7,8-Cl4-Dibenzofuran (Dl		pg	<49	<13	<20
2,3,7,8-Cl4-Dibenzo-p-dioxin		"	<3.8	<2.0	<2.4
1,2,3,7,8-Cl5-Dibenzofuran		"	<9.1	<3.5	<2.7
2,3,4,7,8-Cl5-Dibenzofuran		"	16	<3.7	5.9
1,2,3,7,8-Cl5-Dibenzo-p-diox		"	<3.0	<2.6	<2.5
1,2,3,4,7,8-Cl6-Dibenzofuran		"	23	3.8	8.4
1,2,3,6,7,8-Cl6-Dibenzofuran		"	8.3	<2.4	<3.2
2,3,4,6,7,8-Cl6-Dibenzofuran		"	<9.2	<2.9	<3.9
1,2,3,7,8,9-Cl6-Dibenzofuran		"	<3.7	<3.1	<4.1
1,2,3,4,7,8-Cl6-Dibenzo-p-di		"	<3.0	<3.0	<2.9
1,2,3,6,7,8-Cl6-Dibenzo-p-di		"	4.8	<2.7	2.8
1,2,3,7,8,9-Cl6-Dibenzo-p-di		"	5.3	<2.5	3.4
1,2,3,4,6,7,8-Cl7-Dibenzofur		"	<39	<7.9	<17
1,2,3,4,7,8,9-Cl7-Dibenzofur		"	<13	<10	<13
1,2,3,4,6,7,8-Cl7-Dibenzo-p-		"	61	<18	43
1,2,3,4,6,7,8,9-Cl8-Dibenzofi		"	31	7.9	22
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p		"	440	100	300
2,3,7,8-TCDF (DB225)		pg	10	<3.6	<5.1
Internal Recoveries		%			
2,3,7,8-TCDF-13C12			97	87	109
TEQ based on Nato Factors		pg	13.2	0.5	5.18
TEQ's converted into appropriate units		**ng/m²**	**0.634**	**0.024**	**0.249**

(a 209 cm² area was wiped)

NYC-WTC_000445819

L□D□C□"□T□i□m□e□s□ □N□e□w□ □R□o□m□a□n□,□B□o□l□d□ □I□t□a□l□i□c□"□1□4□P□A□S□C□ □-□
□S□u□

Batch Code:	**1004HW01**	**1004HW01**	**1008HW01**	**1008HW01**
PCDD/F (DB5	060266 02	060272 02	060275 02	060281 02
	060267 02	060273 02	060276 02	060282 02
	060268 02	060274 02	060277 02	060283 02
	060269 02		060278 02	060284 02
	060270 02		060279 02	
	060271 02		060280 02	
Date Analysed	02/10/09	02/10/10	02/10/19	02/10/21
Date Prepared:	02/10/04	02/10/04	02/10/08	02/10/08

Batch Code:	**1004HW01**	**1008HW01**
2,3,7,8-TCDF	060268 02	060281 02
	060269 02	060282 02
	060272 02	060283 02
	060273 02	060284 02
	060274 02	
	060275 02	
	060276 02	
	060277 02	
	060278 02	
	060279 02	
	060280 02	
Date Analysed	02/10/20	02/10/22
Date Prepared:	02/10/04	02/10/08

R□C□l□i□e□n□t□:□P□h□i□l□i□p□ □A□n□a□l□y□t□i□c□a□l□