

Theodorellys, Penny

From: Andrew Gasparro [agasparro@jlcenvironmental.com]
Sent: Wednesday, March 19, 2003 3:50 PM
To: 'Theodorellys, Penny'
Subject: FW: Dioxin Wipe results



R03030259 Cover
Letter.pdf



R03030259 excel
Report.xls

Penny,

Call me if you have any questions.

Thank you

Andrew L. Gasparro
Vice President
JLC Environmental Consultants, Inc.
200 Park Ave. S. Suite 1001
New York, NY 10003
212-420-8119
212-420-6092 Fax
917-612-4803 Cell

—Original Message—

From: Usbeck, Fred [mailto:FUsbeck@contactpsc.com]
Sent: Wednesday, March 19, 2003 3:16 PM
To: agasparro@jlcenvironmental.com
Subject: Dioxin Wipe results

Andrew -

Attached are your results for the first round of dioxin wipe samples. I will mail the hard copy tomorrow. If you have any questions please get back to me.

Thanks! Fred

<<R03030259 Cover Letter.pdf>> <<R03030259 excel Report.xls>>

Fred Usbeck, CIH
PSC Analytical Services
4418 Pottsville Pike
Reading, PA 19605
fusbeck@contactpsc.com
(610) 921-8833 ext. 224



4418 Pottsville Pike Reading, PA 19605
(Tel) 610-921-8833 (Fax) 610-921-8867

INDUSTRIAL HYGIENE

•EPA PA-00136
•AIHA ACCREDITATION NO. 100499
•NC DENR 599

ENVIRONMENTAL TESTING

•NY DOH/NELAC 10908
•PA DEP 06-353
•NJ DEP PA020
•CT DPH PH-0238

March 19, 2003

Andrew Gasparro
JLC Env. Consultants Inc.
200 Park Ave S
Suite 1001
New York, NY 10003-1503

TEL: (212) 420-8119
FAX (212) 420-6092

RE: US DEP WTC - LBA (Dioxin wipes)

Order No.: R03030259

Dear Andrew Gasparro:

PSC Analytical Services received 30 samples on 3/6/2003 1:00:00 PM for the analyses presented in the following Certificate of Analytical Results.

The analyses and all data for associated QC met regulatory and/or laboratory specifications. Exceptions will be noted in an enclosed Case Narrative.

The results on the attached Certificate of Analytical results relate only to items tested or to the samples as received by the laboratory. This Certificate of Analytical Results shall not be reproduced, except in full, without the written approval of PSC Analytical, Reading, PA.

Please note that any unused portion of the samples will be disposed of 30 days following issuance of report, unless you have requested otherwise.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Fred Usbeck
Manager, CIH

4418 Pottsville Pike, Reading, PA 19605 610-921-8833 FAX 610-921-8407

Certificate of Analysis

CLIENT INFORMATION

Attention: Vaughan O'Neill
Client Name: Philip Analytical Services Inc
Project: JLC Environmental
Project Desc:

Address: 4418 Pottsville Pike
 Reading, Pennsylvania
 19605
Fax Number: 610 921-9667
Phone Number: 610 921-8833

LABORATORY INFORMATION

Contact: Julius Fulop, M.Sc., C.Chem.
Project: AN030286
Date Received: 06-Mar-2003
Date Reported: 19-Mar-2003

Submission No.: 3C0148
Sample No.: 009192-009222

NOTES: *"." = not analysed "<" = less than Method Detection Limit (MDL) "NA" = no data available*
LOQ can be 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', Twentieth 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:

Certified by: _____

3/20/03

PASC - Certificate of Analysis

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Component	<i>Client ID:</i> R03030259-		Method	Blank	%	3rd	3rd
	<i>Lab No.:</i>		Blank	Spike		Floor-07	Floor-08
	<i>Date Sampled:</i>		009192 03	009192 03		-01A	-02A
	MDL		05-Mar-2003	05-Mar-2003		009193 03	009194 03
		Units			Recovery	05-Mar-2003	05-Mar-2003
Total Tetrachlorodibenzofurans		pg	<1.2	1100	-	<2.4	<1.4
Total Pentachlorodibenzofurans		"	<1.5	5400	-	<1.3	<1.7
Total Hexachlorodibenzofurans		"	<1.5	11000	-	<2.6	<1.5
Total Heptachlorodibenzofurans		"	<2.8	5200	-	<6.8	4.2
Octachlorodibenzofuran		"	<5.3	5400	-	14	6.2
Total Tetrachlorodibenzo-p-dioxins		"	<1.5	940	-	2.2	<1.6
Total Pentachlorodibenzo-p-dioxins		"	<1.4	2700	-	<6.0	<1.4
Total Hexachlorodibenzo-p-dioxins		"	<1.6	7700	-	4.6	<2.1
Total Heptachlorodibenzo-p-dioxins		"	12	2600	-	31	5.9
Octachlorodibenzo-p-dioxin		"	38	5300	-	130	41
Internal Recoveries		%					
2,3,7,8-T4CDF-13C12			80	77	-	80	81
2,3,7,8-T4CDD-13C12			88	82	-	86	93
1,2,3,7,8-P5CDF-13C12			86	92	-	76	81
1,2,3,7,8-P5CDD-13C12			85	83	-	72	75
1,2,3,4,7,8-H6CDF-13C12			100	91	-	91	97
1,2,3,6,7,8-H6CDD-13C12			97	88	-	84	91
1,2,3,4,6,7,8-H7CDF-13C12			114	101	-	89	100
1,2,3,4,6,7,8-H7CDD-13C12			111	97	-	82	96
OCDD-13C12			96	87	-	73	84
2,3,7,8-Cl4-Dibenzofuran (DB5)		pg	<1.2	1100	107	<3.5	<1.4
2,3,7,8-Cl4-Dibenzo-p-dioxin		"	<1.5	940	111	<2.4	<1.6
1,2,3,7,8-Cl5-Dibenzofuran		"	<1.5	2800	107	<1.3	<1.7
2,3,4,7,8-Cl5-Dibenzofuran		"	<1.5	2700	103	2.0	<1.7
1,2,3,7,8-Cl5-Dibenzo-p-dioxin		"	<1.4	2700	102	<1.6	<1.4
1,2,3,4,7,8-Cl6-Dibenzofuran		"	<1.4	2600	105	<2.4	<1.4
1,2,3,6,7,8-Cl6-Dibenzofuran		"	<1.4	2500	111	<1.2	<1.3
2,3,4,6,7,8-Cl6-Dibenzofuran		"	<1.6	2600	104	<1.4	<1.5
1,2,3,7,8,9-Cl6-Dibenzofuran		"	<1.9	2800	104	<1.6	<1.8
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin		"	<1.5	2600	107	<1.3	<2.0
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin		"	<1.7	2500	94	<1.5	<2.2
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin		"	<1.6	2600	107	<1.4	<2.0
1,2,3,4,6,7,8-Cl7-Dibenzofuran		"	<2.5	2600	102	<6.0	4.5
1,2,3,4,7,8,9-Cl7-Dibenzofuran		"	<3.3	2600	101	<7.2	<2.8
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin		"	6.0	2600	103	14	5.9
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran		"	<5.3	5400	102	14	6.2
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin		"	38	5300	106	130	41
2,3,7,8-TCDF (DB225)		pg	<5.4	-	-	<6.9	<2.8
Internal Recoveries		%					
2,3,7,8-TCDF-13C12			69	-	-	71	73

Client: Philip Analytical Services Inc Project: JLC Environmental

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Component	Client ID: 3rd Floor-09 R03030259- Floor-07 Lab No.: Floor-08 Date Sampled: Floor-09 009195 03 009196 03 009197 03 009198 03 05-Mar-2003 05-Mar-2003 05-Mar-2003 05-Mar-2003				
	MDL Units				
Total Tetrachlorodibenzofurans	pg	<2.2	85	<1.7	31
Total Pentachlorodibenzofurans	"	<1.9	66	<1.6	28
Total Hexachlorodibenzofurans	"	<1.9	30	<1.8	14
Total Heptachlorodibenzofurans	"	<3.1	2.9	2.3	4.2
Octachlorodibenzofuran	"	6.3	19	7.1	<11
Total Tetrachlorodibenzo-p-dioxins	"	<2.9	120	<2.1	35
Total Pentachlorodibenzo-p-dioxins	"	<1.9	30	<1.8	4.5
Total Hexachlorodibenzo-p-dioxins	"	<6.8	57	<7.0	36
Total Heptachlorodibenzo-p-dioxins	"	15	53	20	36
Octachlorodibenzo-p-dioxin	"	43	160	56	100
Internal Recoveries	%				
2,3,7,8-T4CDF-13C12		83	93	86	84
2,3,7,8-T4CDD-13C12		94	101	94	97
1,2,3,7,8-P5CDF-13C12		88	88	93	89
1,2,3,7,8-P5CDD-13C12		85	79	86	80
1,2,3,4,7,8-H6CDF-13C12		102	107	105	106
1,2,3,6,7,8-H6CDD-13C12		97	91	99	98
1,2,3,4,6,7,8-H7CDF-13C12		109	106	111	113
1,2,3,4,6,7,8-H7CDD-13C12		105	97	105	109
OCDD-13C12		85	90	97	104
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	<2.2	<21	<2.3	<8.1
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<2.5	<2.1	<2.1	<2.1
1,2,3,7,8-Cl5-Dibenzofuran	"	<1.8	4.6	<1.6	<2.1
2,3,4,7,8-Cl5-Dibenzofuran	"	<1.9	6.0	<1.7	4.2
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<1.9	<2.1	<1.8	<2.0
1,2,3,4,7,8-Cl6-Dibenzofuran	"	<1.7	8.9	<1.6	<2.8
1,2,3,6,7,8-Cl6-Dibenzofuran	"	<1.7	<4.8	<1.6	3.4
2,3,4,6,7,8-Cl6-Dibenzofuran	"	<1.9	3.8	<1.9	2.5
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<2.3	<2.7	<2.2	<2.5
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<1.8	<2.1	<1.9	<2.2
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	<2.0	<2.3	<2.1	<2.5
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	<1.8	<2.1	<2.0	<2.2
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<2.8	<15	<3.5	<8.7
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<1.9	<2.9	<2.4	<2.5
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	6.8	23	8.0	16
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	6.3	19	7.1	<11
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	43	160	56	100
2,3,7,8-TCDF (DB225)	pg	<2.9	14	<4.9	<5.7
Internal Recoveries	%				
2,3,7,8-TCDF-13C12		73	82	75	78

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		5th	5th	5th	6th
<i>Client ID:</i>		Floor-07	Floor-08	Floor-09	Floor-07
R03030259-		-07A	-08A	-09A	-10A
<i>Lab No.:</i>		009199 03	009200 03	009201 03	009202 03
<i>Date Sampled:</i>		05-Mar-2003	05-Mar-2003	05-Mar-2003	05-Mar-2003
Component	MDL	Units			
Total Tetrachlorodibenzofurans	pg	100	<1.6	13	76
Total Pentachlorodibenzofurans	"	36	<2.2	27	25
Total Hexachlorodibenzofurans	"	17	<1.5	27.	18
Total Heptachlorodibenzofurans	"	<14	<3.8	5.6	<13
Octachlorodibenzofuran	"	19	8.2	20	29
Total Tetrachlorodibenzo-p-dioxins	"	91	<2.0	24	62
Total Pentachlorodibenzo-p-dioxins	"	24	<1.7	20	17
Total Hexachlorodibenzo-p-dioxins	"	37	<2.7	49	33
Total Heptachlorodibenzo-p-dioxins	"	45	20	46	41
Octachlorodibenzo-p-dioxin	"	170	61	97	120
Internal Recoveries	%				
2,3,7,8-T4CDF-13C12		95	64	97	96
2,3,7,8-T4CDD-13C12		97	65	101	103
1,2,3,7,8-P5CDF-13C12		94	91	98	94
1,2,3,7,8-P5CDD-13C12		89	71	85	80
1,2,3,4,7,8-H6CDF-13C12		99	78	107	109
1,2,3,6,7,8-H6CDD-13C12		92	74	95	99
1,2,3,4,6,7,8-H7CDF-13C12		105	85	112	110
1,2,3,4,6,7,8-H7CDD-13C12		97	80	103	100
OCDD-13C12		90	66	99	87
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	<17	<1.6	<6.6	<14
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<3.2	<2.0	<2.3	<2.9
1,2,3,7,8-Cl5-Dibenzofuran	"	<2.9	<2.2	<3.3	<3.8
2,3,4,7,8-Cl5-Dibenzofuran	"	5.4	<2.3	<3.8	<4.0
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<2.2	<1.7	<4.1	<4.8
1,2,3,4,7,8-Cl6-Dibenzofuran	"	<4.0	<1.4	7.0	6.1
1,2,3,6,7,8-Cl6-Dibenzofuran	"	<3.2	<1.3	4.0	3.9
2,3,4,6,7,8-Cl6-Dibenzofuran	"	<2.2	<1.5	3.0	<2.8
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<1.8	<1.8	<3.0	<3.3
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<1.6	<1.4	<2.3	<2.5
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	2.4	<1.6	<2.6	<2.8
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	2.8	<1.4	<2.3	<2.6
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<13	<3.3	<15	<11
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<2.9	<2.3	<3.3	<3.6
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	22	8.8	20	17
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	19	8.2	20	29
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	170	61	97	120
2,3,7,8-TCDF (DB225)	pg	11	<4.4	<2.9	<7.2
Internal Recoveries	%				
2,3,7,8-TCDF-13C12		85	53	80	79

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Component	<i>Client ID:</i>		6th	6th	7th	7th
	<i>R03030259-</i>		Floor-08	Floor-09	Floor-07	Floor-08
	<i>Lab No.:</i>		-11A	-12A	-13A	-14A
	<i>Date Sampled:</i>		009203 03	009204 03	009205 03	009206 03
	MDL	Units	05-Mar-2003	05-Mar-2003	05-Mar-2003	05-Mar-2003
Total Tetrachlorodibenzofurans	pg		7.4	7.5	24	<2.1
Total Pentachlorodibenzofurans	"		<3.1	10	11	<3.2
Total Hexachlorodibenzofurans	"		2.9	8.3	7.8	<1.7
Total Heptachlorodibenzofurans	"		<7.0	<7.4	3.7	2.2
Octachlorodibenzofuran	"		10.0	11	12	7.3
Total Tetrachlorodibenzo-p-dioxins	"		14	27	36	3.3
Total Pentachlorodibenzo-p-dioxins	"		3.5	<14	26	<2.7
Total Hexachlorodibenzo-p-dioxins	"		3.2	14	14	2.8
Total Heptachlorodibenzo-p-dioxins	"		32	24	27	17
Octachlorodibenzo-p-dioxin	"		84	73	86	55
Internal Recoveries	%					
2,3,7,8-T4CDF-13C12			94	83	102	84
2,3,7,8-T4CDD-13C12			107	99	112	105
1,2,3,7,8-P5CDF-13C12			101	84	100	86
1,2,3,7,8-P5CDD-13C12			88	70	85	79
1,2,3,4,7,8-H6CDF-13C12			118	107	111	112
1,2,3,6,7,8-H6CDD-13C12			106	95	100	102
1,2,3,4,6,7,8-H7CDF-13C12			123	108	108	112
1,2,3,4,6,7,8-H7CDD-13C12			112	99	96	105
OCDD-13C12			100	88	75	95
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg		<4.5	<7.5	<8.2	<2.1
2,3,7,8-Cl4-Dibenzo-p-dioxin	"		<2.5	<2.7	<2.5	<2.4
1,2,3,7,8-Cl5-Dibenzofuran	"		<3.0	<3.2	<2.6	<3.2
2,3,4,7,8-Cl5-Dibenzofuran	"		<3.1	<3.3	2.9	<3.3
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"		<2.9	<5.1	<3.1	<2.7
1,2,3,4,7,8-Cl6-Dibenzofuran	"		<1.7	3.2	3.7	<1.5
1,2,3,6,7,8-Cl6-Dibenzofuran	"		<1.7	<2.3	<1.7	<1.5
2,3,4,6,7,8-Cl6-Dibenzofuran	"		<2.0	1.9	<1.8	<1.7
1,2,3,7,8,9-Cl6-Dibenzofuran	"		<2.3	<2.0	<2.1	<2.1
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"		<2.0	<2.4	<2.1	<1.9
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"		<2.3	<2.7	<2.3	<2.1
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"		<2.1	<2.5	<2.1	<1.9
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"		<6.2	<6.5	<6.5	<2.4
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"		<2.6	<3.1	<2.9	<2.2
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"		16	10	11	7.5
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"		10.0	11	12	7.3
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"		84	73	86	55
2,3,7,8-TCDF (DB225)	pg		<6.1	<3.9	<5.3	<2.5
Internal Recoveries	%					
2,3,7,8-TCDF-13C12			83	78	86	85

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Component	Client ID:		7th	8th	8th	8th
	R03030259-		Floor-09	Floor-07	Floor-08	Floor-09
	Lab No.:		-15A	-16A	-17A	-18A
	Date Sampled:		009207 03	009208 03	009209 03	009210 03
			05-Mar-2003	05-Mar-2003	05-Mar-2003	05-Mar-2003
	MDL	Units				
Total Tetrachlorodibenzofurans		pg	<3.1	30	<3.6	5.4
Total Pentachlorodibenzofurans		"	<3.6	12	<3.3	<5.1
Total Hexachlorodibenzofurans		"	<2.3	6.9	<3.5	<4.0
Total Heptachlorodibenzofurans		"	<3.0	<9.1	<4.3	<8.6
Octachlorodibenzofuran		"	<4.7	<4.3	<4.9	<7.1
Total Tetrachlorodibenzo-p-dioxins		"	<4.6	50	<5.6	7.6
Total Pentachlorodibenzo-p-dioxins		"	<4.8	28	<7.3	<6.6
Total Hexachlorodibenzo-p-dioxins		"	<5.3	6.2	<31	<58
Total Heptachlorodibenzo-p-dioxins		"	<5.6	12	<4.7	9.1
Octachlorodibenzo-p-dioxin		"	13	44	9.9	33
Internal Recoveries		%				
2,3,7,8-T4CDF-13C12			69	77	69	74
2,3,7,8-T4CDD-13C12			92	102	91	95
1,2,3,7,8-P5CDF-13C12			74	86	77	81
1,2,3,7,8-P5CDD-13C12			78	92	81	87
1,2,3,4,7,8-H6CDF-13C12			105	101	91	98
1,2,3,6,7,8-H6CDD-13C12			99	100	93	99
1,2,3,4,6,7,8-H7CDF-13C12			99	93	93	96
1,2,3,4,6,7,8-H7CDD-13C12			101	98	96	96
OCDD-13C12			102	91	84	81
2,3,7,8-Cl4-Dibenzofuran (DB5)		pg	<3.1	12	<3.6	5.4
2,3,7,8-Cl4-Dibenzo-p-dioxin		"	<4.6	<4.8	<3.6	<5.0
1,2,3,7,8-Cl5-Dibenzofuran		"	<3.5	<6.4	<3.3	<5.1
2,3,4,7,8-Cl5-Dibenzofuran		"	<3.6	<6.6	<3.3	<5.2
1,2,3,7,8-Cl5-Dibenzo-p-dioxin		"	<4.8	<7.5	<7.3	<6.6
1,2,3,4,7,8-Cl6-Dibenzofuran		"	<2.0	6.0	<3.0	<3.4
1,2,3,6,7,8-Cl6-Dibenzofuran		"	<2.0	<3.1	<3.1	<3.6
2,3,4,6,7,8-Cl6-Dibenzofuran		"	<2.4	<3.6	<3.6	<4.1
1,2,3,7,8,9-Cl6-Dibenzofuran		"	<2.8	<4.3	<4.4	<5.0
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin		"	<5.3	<5.3	<6.6	<5.3
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin		"	<5.6	<5.6	<7.0	<5.6
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin		"	<5.2	<5.2	<6.5	<5.2
1,2,3,4,6,7,8-Cl7-Dibenzofuran		"	<2.6	<7.9	<3.7	<7.4
1,2,3,4,7,8,9-Cl7-Dibenzofuran		"	<3.5	<4.8	<5.1	<5.3
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin		"	<5.6	12	<4.7	9.1
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran		"	<4.7	<4.3	<4.9	<7.1
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin		"	13	44	9.9	33
2,3,7,8-TCDF (DB225)		pg	<4.0	7.1	<2.8	4.6
Internal Recoveries		%				
2,3,7,8-TCDF-13C12			73	77	75	80

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Component	<i>Client ID:</i>		9th	9th	9th	10th
	<i>R03030259-</i>		Floor-07	Floor-08	Floor-09	Floor-07
	<i>Lab No.:</i>		-19A	-20A	-21A	-22A
	<i>Date Sampled:</i>		009211 03	009212 03	009213 03	009214 03
	MDL	Units	05-Mar-2003	05-Mar-2003	05-Mar-2003	04-Mar-2003
Total Tetrachlorodibenzofurans	pg	140	<2.7	100	160	
Total Pentachlorodibenzofurans	"	64	<2.7	54	15	
Total Hexachlorodibenzofurans	"	36	<2.6	25	12	
Total Heptachlorodibenzofurans	"	<24	<2.4	<17	<14	
Octachlorodibenzofuran	"	5.9	<3.5	8.5	16	
Total Tetrachlorodibenzo-p-dioxins	"	110	<4.0	130	180	
Total Pentachlorodibenzo-p-dioxins	"	16	<7.0	28	30	
Total Hexachlorodibenzo-p-dioxins	"	14	<35	10	<84	
Total Heptachlorodibenzo-p-dioxins	"	22	<4.9	33	17	
Octachlorodibenzo-p-dioxin	"	120	9.8	52	85	
Internal Recoveries	%					
2,3,7,8-T4CDF-13C12		73	65	78	59	
2,3,7,8-T4CDD-13C12		90	86	102	71	
1,2,3,7,8-P5CDF-13C12		79	72	83	65	
1,2,3,7,8-P5CDD-13C12		83	82	94	71	
1,2,3,4,7,8-H6CDF-13C12		78	92	91	73	
1,2,3,6,7,8-H6CDD-13C12		77	94	90	72	
1,2,3,4,6,7,8-H7CDF-13C12		76	89	87	68	
1,2,3,4,6,7,8-H7CDD-13C12		76	94	92	70	
OCDD-13C12		63	87	80	53	
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	32	<2.7	31	<37	
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<4.9	<3.3	<4.3	<5.8	
1,2,3,7,8-Cl5-Dibenzofuran	"	6.6	<2.7	<5.8	<10.0	
2,3,4,7,8-Cl5-Dibenzofuran	"	6.8	<2.7	9.3	<10	
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<7.6	<7.0	<7.3	<7.6	
1,2,3,4,7,8-Cl6-Dibenzofuran	"	13	<2.3	10	11	
1,2,3,6,7,8-Cl6-Dibenzofuran	"	6.7	<2.4	<3.1	<5.2	
2,3,4,6,7,8-Cl6-Dibenzofuran	"	<6.9	<2.7	<3.5	<5.9	
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<8.4	<3.3	<4.3	<7.2	
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<4.2	<3.4	<5.1	<8.2	
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	<4.5	<3.6	<5.4	<8.7	
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	<4.2	<3.3	<5.0	<8.1	
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<20	<2.1	<15	<12	
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<7.1	<2.9	<4.0	<7.0	
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	<18	<4.9	16	<14	
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	20	<3.5	8.5	16	
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	120	9.8	52	85	
2,3,7,8-TCDF (DB225)	pg	15	<2.4	16	17	
Internal Recoveries	%					
2,3,7,8-TCDF-13C12		78	70	76	64	

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Component	<i>Client ID:</i>		10th	10th	11th Floor	11th Floor
	<i>R03030259-</i>		Floor-08	Floor-09	Down-07	Down-08
	<i>Lab No.:</i>		-23A	-24A	-25A	-26A
	<i>Date Sampled:</i>		009215 03	009216 03	009217 03	009218 03
	MDL	Units	04-Mar-2003	04-Mar-2003	04-Mar-2003	04-Mar-2003
Total Tetrachlorodibenzofurans		pg	<3.8	36	<2.9	90
Total Pentachlorodibenzofurans		"	<5.2	<14	<4.2	21
Total Hexachlorodibenzofurans		"	<3.3	25	<2.2	22
Total Heptachlorodibenzofurans		"	<2.6	<15	<3.6	<14
Octachlorodibenzofuran		"	<3.4	11	<4.5	12
Total Tetrachlorodibenzo-p-dioxins		"	<7.9	62	<8.5	110
Total Pentachlorodibenzo-p-dioxins		"	<6.2	30	<8.9	19
Total Hexachlorodibenzo-p-dioxins		"	<29	8.4	<34	<59
Total Heptachlorodibenzo-p-dioxins		"	5.1	27	3.7	14
Octachlorodibenzo-p-dioxin		"	15	49	15	68
Internal Recoveries		%				
2,3,7,8-T4CDF-13C12			74	73	64	77
2,3,7,8-T4CDD-13C12			104	96	88	105
1,2,3,7,8-P5CDF-13C12			84	82	67	87
1,2,3,7,8-P5CDD-13C12			88	86	72	92
1,2,3,4,7,8-H6CDF-13C12			107	91	86	99
1,2,3,6,7,8-H6CDD-13C12			108	94	85	97
1,2,3,4,6,7,8-H7CDF-13C12			115	98	88	101
1,2,3,4,6,7,8-H7CDD-13C12			117	104	93	109
OCDD-13C12			116	94	84	105
2,3,7,8-Cl4-Dibenzofuran (DB5)		pg	<3.8	<23	<2.9	<22
2,3,7,8-Cl4-Dibenzo-p-dioxin		"	<4.7	<4.6	<4.0	<4.0
1,2,3,7,8-Cl5-Dibenzofuran		"	<5.2	<10	<4.1	<8.2
2,3,4,7,8-Cl5-Dibenzofuran		"	<5.3	<10	<4.2	<8.3
1,2,3,7,8-Cl5-Dibenzo-p-dioxin		"	<6.2	<6.8	<8.9	<6.9
1,2,3,4,7,8-Cl6-Dibenzofuran		"	<2.9	12	<1.9	7.8
1,2,3,6,7,8-Cl6-Dibenzofuran		"	<3.0	<4.9	<2.0	<3.4
2,3,4,6,7,8-Cl6-Dibenzofuran		"	<3.5	<5.6	<2.3	<3.7
1,2,3,7,8,9-Cl6-Dibenzofuran		"	<4.2	<6.8	<2.8	<4.5
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin		"	<5.0	<4.7	<4.6	<5.1
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin		"	<5.3	<5.1	<4.9	<5.4
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin		"	<4.9	<4.7	<4.5	<5.0
1,2,3,4,6,7,8-Cl7-Dibenzofuran		"	<2.3	<13	<3.1	<12
1,2,3,4,7,8,9-Cl7-Dibenzofuran		"	<3.1	<5.3	<4.2	<2.9
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin		"	5.1	13	3.7	14
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran		"	<3.4	11	<4.5	12
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin		"	15	49	15	68
2,3,7,8-TCDF (DB225)		pg	<3.5	13	<4.2	<11
Internal Recoveries		%				
2,3,7,8-TCDF-13C12			83	77	68	88

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		11th Floor Down-09 -27A 009219 03 04-Mar-2003	11th Floor Up-07 -28A 009220 03 04-Mar-2003	11th Floor Up-08 -29A 009221 03 04-Mar-2003	11th Floor Up-09 -30A 009222 03 04-Mar-2003
Client ID: R03030259- Lab No.: Date Sampled:					
Component	MDL	Units			
Total Tetrachlorodibenzofurans	pg	43	29	<2.3	6.5
Total Pentachlorodibenzofurans	"	68	6.9	<3.5	<5.2
Total Hexachlorodibenzofurans	"	31	<3.4	<1.5	<3.3
Total Heptachlorodibenzofurans	"	<35	<8.6	<3.1	<6.7
Octachlorodibenzofuran	"	19	7.6	<2.4	<5.3
Total Tetrachlorodibenzo-p-dioxins	"	99	51	<4.3	9.1
Total Pentachlorodibenzo-p-dioxins	"	21	<9.0	<7.6	<12
Total Hexachlorodibenzo-p-dioxins	"	22	<50	<36	<53
Total Heptachlorodibenzo-p-dioxins	"	61	16	<3.0	9.7
Octachlorodibenzo-p-dioxin	"	97	39	<11	34
Internal Recoveries	%				
2,3,7,8-T4CDF-13C12		56	75	71	71
2,3,7,8-T4CDD-13C12		72	99	98	95
1,2,3,7,8-P5CDF-13C12		66	82	80	79
1,2,3,7,8-P5CDD-13C12		74	88	86	87
1,2,3,4,7,8-H6CDF-13C12		74	88	94	93
1,2,3,6,7,8-H6CDD-13C12		75	92	96	93
1,2,3,4,6,7,8-H7CDF-13C12		73	91	97	95
1,2,3,4,6,7,8-H7CDD-13C12		76	101	109	103
OCDD-13C12		60	95	109	93
2,3,7,8-Cl4-Dibenzofuran (DB5)	pg	<30	13	<2.3	<6.5
2,3,7,8-Cl4-Dibenzo-p-dioxin	"	<6.0	<5.2	<2.4	<4.7
1,2,3,7,8-Cl5-Dibenzofuran	"	<9.4	<5.2	<3.4	<5.2
2,3,4,7,8-Cl5-Dibenzofuran	"	15	<5.3	<3.5	<5.3
1,2,3,7,8-Cl5-Dibenzo-p-dioxin	"	<8.8	<9.0	<7.6	<6.6
1,2,3,4,7,8-Cl6-Dibenzofuran	"	19	<2.9	<1.3	<2.9
1,2,3,6,7,8-Cl6-Dibenzofuran	"	<12	<3.0	<1.4	<3.0
2,3,4,6,7,8-Cl6-Dibenzofuran	"	10	<3.5	<1.6	<3.5
1,2,3,7,8,9-Cl6-Dibenzofuran	"	<6.7	<4.2	<1.9	<4.2
1,2,3,4,7,8-Cl6-Dibenzo-p-dioxin	"	<5.4	<3.4	<4.5	<4.0
1,2,3,6,7,8-Cl6-Dibenzo-p-dioxin	"	<5.7	<3.7	<4.8	<4.3
1,2,3,7,8,9-Cl6-Dibenzo-p-dioxin	"	<5.3	<3.4	<4.4	<4.0
1,2,3,4,6,7,8-Cl7-Dibenzofuran	"	<30	<7.5	<2.7	<5.8
1,2,3,4,7,8,9-Cl7-Dibenzofuran	"	<6.7	<4.6	<3.7	<4.6
1,2,3,4,6,7,8-Cl7-Dibenzo-p-dioxin	"	31	9.6	<3.0	<9.5
1,2,3,4,6,7,8,9-Cl8-Dibenzofuran	"	19	7.6	<2.4	<5.3
1,2,3,4,6,7,8,9-Cl8-Dibenzo-p-dioxin	"	97	39	<11	34
2,3,7,8-TCDF (DB225)	pg	19	6.6	<4.1	<4.5
Internal Recoveries	%				
2,3,7,8-TCDF-13C12		65	81	79	78

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Batch Code:	0307FB01	0309FB01	0307FB01	0307FB01
Total Tetrachlorodibenzofurans	009192 03	009199 03	009207 03	009215 03
	009193 03	009200 03	009208 03	009216 03
	009194 03	009201 03	009209 03	009217 03
	009195 03	009202 03	009210 03	009218 03
	009196 03	009203 03	009211 03	009219 03
	009197 03	009204 03	009212 03	009220 03
	009198 03	009205 03	009213 03	009221 03
		009206 03	009214 03	009222 03
Date Analysed:	03/03/14	03/03/14	03/03/14	03/03/15
Date Prepared:	03/03/07	03/03/09	03/03/07	03/03/07

Batch Code:	0307FB01	0309FB01	0307FB01	0307FB01
2,3,7,8-Cl4-Dibenzofuran (DB5)	009192 03	009199 03	009207 03	009215 03
	009193 03	009200 03	009208 03	009216 03
	009194 03	009201 03	009209 03	009217 03
	009195 03	009202 03	009210 03	009218 03
	009196 03	009203 03	009211 03	009219 03
	009197 03	009204 03	009212 03	009220 03
	009198 03	009205 03	009213 03	009221 03
		009206 03	009214 03	009222 03
Date Analysed:	03/03/14	03/03/14	03/03/14	03/03/15
Date Prepared:	03/03/07	03/03/09	03/03/07	03/03/07

Batch Code:	0307FB01	0307FB01
2,3,7,8-TCDF (DB225)	009192 03	009206 03
	009193 03	009207 03
	009194 03	009208 03
	009195 03	009209 03
	009196 03	009210 03
	009197 03	009211 03
	009198 03	009212 03
	009199 03	009213 03
	009200 03	009214 03
	009201 03	009215 03
	009202 03	009216 03
	009203 03	009217 03
	009204 03	009218 03
	009205 03	009219 03
		009220 03
		009221 03
		009222 03
Date Analysed:	03/03/12	03/03/13
Date Prepared:	03/03/07	03/03/07