



Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

Method 8290 Blank Analysis Results

Client - ATC

Lab Sample ID	BLANK-1592	Matrix	WIPE
Filename	F20429A_04	Dilution	NA
Total Amount Extracted	1 m2	Extracted	04/24/2002
ICAL Date	04/12/2002	Analyzed	04/29/2002 12:41
CCal Filename(s)	F20429A_01 & F20429A_15	Injected By	BAL

Native Isomers	Conc ng/m2	EMPC ng/m2	LRL ng/m2	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	-----	0.00200	2,3,7,8-TCDF-13C	2.00	75
Total TCDF	ND	-----	0.00200	2,3,7,8-TCDD-13C	2.00	78
				1,2,3,7,8-PeCDF-13C	2.00	87
2,3,7,8-TCDD	ND	-----	0.00200	2,3,4,7,8-PeCDF-13C	2.00	81
Total TCDD	0.051	-----	0.00200	1,2,3,7,8-PeCDD-13C	2.00	87
				1,2,3,4,7,8-HxCDF-13C	2.00	97
1,2,3,7,8-PeCDF	ND	-----	0.01000	1,2,3,6,7,8-HxCDF-13C	2.00	81
2,3,4,7,8-PeCDF	ND	-----	0.01000	2,3,4,6,7,8-HxCDF-13C	2.00	83
Total PeCDF	ND	-----	0.01000	1,2,3,7,8,9-HxCDF-13C	2.00	84
				1,2,3,4,7,8-HxCDD-13C	2.00	97
1,2,3,7,8-PeCDD	ND	-----	0.01000	1,2,3,6,7,8-HxCDD-13C	2.00	89
Total PeCDD	ND	-----	0.01000	1,2,3,4,6,7,8-HpCDF-13C	2.00	87
				1,2,3,4,7,8,9-HpCDF-13C	2.00	81
1,2,3,4,7,8-HxCDF	ND	-----	0.01000	1,2,3,4,6,7,8-HpCDD-13C	2.00	98
1,2,3,6,7,8-HxCDF	ND	-----	0.01000	OCDD-13C	4.00	68
2,3,4,6,7,8-HxCDF	ND	-----	0.01000			
1,2,3,7,8,9-HxCDF	ND	-----	0.01000	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	-----	0.01000	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	-----	0.01000	2,3,7,8-TCDD-37Cl4	0.20	87
1,2,3,6,7,8-HxCDD	ND	-----	0.01000			
1,2,3,7,8,9-HxCDD	ND	-----	0.01000			
Total HxCDD	ND	-----	0.01000			
1,2,3,4,6,7,8-HpCDF	ND	-----	0.01000	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	-----	0.01000	Equivalence: 0.00 ng/m2		
Total HpCDF	ND	-----	0.01000	(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	ND	-----	0.01000			
Total HpCDD	ND	-----	0.01000			
OCDF	ND	-----	0.02000			
OCDD	ND	-----	0.02000			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
LRL = Lower Reporting Limit
J = Concentration detected is below the calibration range
P = Recovery outside of target range
A = Detection Limit based on signal-to-noise measurement

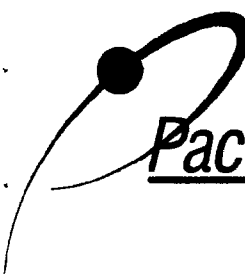
I = Interference
E = PCDE Interference
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion

Report No.....02-1056372

REPORT OF LABORATORY ANALYSIS

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Pace Analytical™

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

Method 8290 Analysis Results

Client - ATC

Client's Sample ID	ATC-0410STY-DX1		
Lab Sample ID	103468237		
Filename	F20429A_09		
Injected By	BAL		
Total Amount Extracted	1 m2	Matrix	WIPE
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	04/10/2002
ICAL Date	04/12/2002	Received	04/16/2002
CCal Filename(s)	F20429A_01 & F20429A_15	Extracted	04/24/2002
Method Blank ID	BLANK-1592	Analyzed	04/29/2002 16:47

Native Isomers	Conc ng/m2	EMPC ng/m2	LRL ng/m2		Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	0.0057	----	0.00200	J	2,3,7,8-TCDF-13C	2.00	71
Total TCDF	0.1300	----	0.00200		2,3,7,8-TCDD-13C	2.00	77
					1,2,3,7,8-PeCDF-13C	2.00	88
2,3,7,8-TCDD	ND	----	0.00200		2,3,4,7,8-PeCDF-13C	2.00	80
Total TCDD	0.3200	----	0.00200	B	1,2,3,7,8-PeCDD-13C	2.00	90
					1,2,3,4,7,8-HxCDF-13C	2.00	91
1,2,3,7,8-PeCDF	ND	----	0.01000		1,2,3,6,7,8-HxCDF-13C	2.00	67
2,3,4,7,8-PeCDF	ND	----	0.01000		2,3,4,6,7,8-HxCDF-13C	2.00	79
Total PeCDF	0.0110	----	0.01000	J	1,2,3,7,8,9-HxCDF-13C	2.00	75
					1,2,3,4,7,8-HxCDD-13C	2.00	98
1,2,3,7,8-PeCDD	ND	----	0.01000		1,2,3,6,7,8-HxCDD-13C	2.00	89
Total PeCDD	0.1000	----	0.01000		1,2,3,4,6,7,8-HpCDF-13C	2.00	83
					1,2,3,4,7,8,9-HpCDF-13C	2.00	72
1,2,3,4,7,8-HxCDF	ND	----	0.01000		1,2,3,4,6,7,8-HpCDD-13C	2.00	95
1,2,3,6,7,8-HxCDF	ND	----	0.01000		OCDD-13C	4.00	63
2,3,4,6,7,8-HxCDF	ND	----	0.01000				
1,2,3,7,8,9-HxCDF	ND	----	0.01000		1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	----	0.01000		1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	----	0.01000		2,3,7,8-TCDD-37Cl4	0.20	87
1,2,3,6,7,8-HxCDD	ND	----	0.01000				
1,2,3,7,8,9-HxCDD	ND	----	0.01000				
Total HxCDD	0.0300	----	0.01000	J			
1,2,3,4,6,7,8-HpCDF	ND	----	0.01000		Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	----	0.01000		Equivalence: 0.00082 ng/m2		
Total HpCDF	ND	----	0.01000		(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	0.0140	----	0.01000	J			
Total HpCDD	0.0270	----	0.01000	J			
OCDF	ND	----	0.02000				
OCDD	0.1100	----	0.02000				

Conc = Concentration (Totals include 2,3,7,8-substituted isomers)
EMPC = Estimated Maximum Possible Concentration
A = Detection Limit based on signal-to-noise measurement
J = Concentration detected is below the calibration range
B = Less than 10 times higher than method blank level
P = Recovery outside of target range
Nn = Value obtained from additional analysis

LRL = Lower Reporting Limit
I = Interference
E = PCDE Interference
S = Saturated signal
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion

Report No.....02-1056372

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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Method 8290 Analysis Results

Client - ATC

Client's Sample ID	ATC-0410STY-DX2		
Lab Sample ID	103468245		
Filename	F20429A_10		
Injected By	BAL		
Total Amount Extracted	1 m2	Matrix	WIPE
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	04/10/2002
ICAL Date	04/12/2002	Received	04/16/2002
CCal Filename(s)	F20429A_01 & F20429A_15	Extracted	04/24/2002
Method Blank ID	BLANK-1592	Analyzed	04/29/2002 17:36

Native Isomers	Conc ng/m2	EMPC ng/m2	LRL ng/m2		Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	0.0051	----	0.0040	JA	2,3,7,8-TCDF-13C	2.00	57
Total TCDF	0.2000	----	0.0020		2,3,7,8-TCDD-13C	2.00	62
					1,2,3,7,8-PeCDF-13C	2.00	67
2,3,7,8-TCDD	ND	----	0.0037	A	2,3,4,7,8-PeCDF-13C	2.00	62
Total TCDD	0.4100	----	0.0020	B	1,2,3,7,8-PeCDD-13C	2.00	68
					1,2,3,4,7,8-HxCDF-13C	2.00	81
1,2,3,7,8-PeCDF	ND	----	0.0100		1,2,3,6,7,8-HxCDF-13C	2.00	62
2,3,4,7,8-PeCDF	ND	----	0.0100		2,3,4,6,7,8-HxCDF-13C	2.00	67
Total PeCDF	0.0300	----	0.0100	J	1,2,3,7,8,9-HxCDF-13C	2.00	62
					1,2,3,4,7,8-HxCDD-13C	2.00	83
1,2,3,7,8-PeCDD	ND	----	0.0100		1,2,3,6,7,8-HxCDD-13C	2.00	71
Total PeCDD	0.1100	----	0.0100		1,2,3,4,6,7,8-HpCDF-13C	2.00	68
					1,2,3,4,7,8,9-HpCDF-13C	2.00	60
1,2,3,4,7,8-HxCDF	ND	----	0.0100		1,2,3,4,6,7,8-HpCDD-13C	2.00	76
1,2,3,6,7,8-HxCDF	ND	----	0.0100		OCDD-13C	4.00	50
2,3,4,6,7,8-HxCDF	ND	----	0.0100				
1,2,3,7,8,9-HxCDF	ND	----	0.0100		1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	0.0120	----	0.0100	J	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	----	0.0100		2,3,7,8-TCDD-37Cl4	0.20	68
1,2,3,6,7,8-HxCDD	ND	----	0.0100				
1,2,3,7,8,9-HxCDD	ND	----	0.0100				
Total HxCDD	0.0550	----	0.0100				
1,2,3,4,6,7,8-HpCDF	ND	----	0.0100		Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	----	0.0100		Equivalence: 0.00099 ng/m2		
Total HpCDF	ND	----	0.0100		(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	0.0240	----	0.0100	J			
Total HpCDD	0.0490	----	0.0100	J			
OCDF	0.0240	----	0.0200	J			
OCDD	0.2100	----	0.0200				

Conc = Concentration (Totals include 2,3,7,8-substituted isomers)
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Nn = Value obtained from additional analysis

LRL = Lower Reporting Limit
I = Interference
E = PCDE Interference
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REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
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Method 8290 Analysis Results

Client - ATC

Client's Sample ID	ATC-0410STY-DX3		
Lab Sample ID	103468252		
Filename	F20429A_11		
Injected By	BAL		
Total Amount Extracted	1 m2	Matrix	WIPE
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	04/10/2002
ICAL Date	04/12/2002	Received	04/16/2002
CCal Filename(s)	F20429A_01 & F20429A_15	Extracted	04/24/2002
Method Blank ID	BLANK-1592	Analyzed	04/29/2002 18:25

Native Isomers	Conc ng/m2	EMPC ng/m2	LRL ng/m2		Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	0.0039	-----	0.00200	J	2,3,7,8-TCDF-13C	2.00	66
Total TCDF	0.1000	-----	0.00200		2,3,7,8-TCDD-13C	2.00	72
					1,2,3,7,8-PeCDF-13C	2.00	80
2,3,7,8-TCDD	ND	-----	0.00200		2,3,4,7,8-PeCDF-13C	2.00	75
Total TCDD	0.2600	-----	0.00200	B	1,2,3,7,8-PeCDD-13C	2.00	85
					1,2,3,4,7,8-HxCDF-13C	2.00	85
1,2,3,7,8-PeCDF	ND	-----	0.01000		1,2,3,6,7,8-HxCDF-13C	2.00	60
2,3,4,7,8-PeCDF	ND	-----	0.01000		2,3,4,6,7,8-HxCDF-13C	2.00	71
Total PeCDF	0.0180	-----	0.01000	J	1,2,3,7,8,9-HxCDF-13C	2.00	68
					1,2,3,4,7,8-HxCDD-13C	2.00	93
1,2,3,7,8-PeCDD	ND	-----	0.01000		1,2,3,6,7,8-HxCDD-13C	2.00	79
Total PeCDD	0.0390	-----	0.01000	J	1,2,3,4,6,7,8-HpCDF-13C	2.00	71
					1,2,3,4,7,8,9-HpCDF-13C	2.00	62
1,2,3,4,7,8-HxCDF	ND	-----	0.01000		1,2,3,4,6,7,8-HpCDD-13C	2.00	86
1,2,3,6,7,8-HxCDF	ND	-----	0.01000		OCDD-13C	4.00	54
2,3,4,6,7,8-HxCDF	ND	-----	0.01000				
1,2,3,7,8,9-HxCDF	ND	-----	0.01000		1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	-----	0.01000		1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	-----	0.01000		2,3,7,8-TCDD-37Cl4	0.20	85
1,2,3,6,7,8-HxCDD	ND	-----	0.01000				
1,2,3,7,8,9-HxCDD	ND	-----	0.01000				
Total HxCDD	0.0230	-----	0.01000	J			
1,2,3,4,6,7,8-HpCDF	ND	-----	0.01000		Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	-----	0.01000		Equivalence: 0.00062 ng/m2		
Total HpCDF	ND	-----	0.01000		(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	0.0130	-----	0.01000	J			
Total HpCDD	0.0130	-----	0.01000	J			
OCDF	ND	-----	0.02000				
OCDD	0.0990	-----	0.02000	J			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers)
EMPC = Estimated Maximum Possible Concentration
A = Detection Limit based on signal-to-noise measurement
J = Concentration detected is below the calibration range
B = Less than 10 times higher than method blank level
P = Recovery outside of target range
Nn = Value obtained from additional analysis

LRL = Lower Reporting Limit
I = Interference
E = PCDE Interference
S = Saturated signal
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NA = Not Applicable
NC = Not Calculated
* = See Discussion

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REPORT OF LABORATORY ANALYSIS

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CITY_21MC100_002889984

Pace Analytical™Tel: 612-607-1700
Fax: 612-607-6444**Method 8290 Laboratory Control Spike Results**

Client - ATC

Lab Sample ID	SPIKE-1607	Matrix	WIPE
Filename	F20429A_02	Dilution	NA
Total Amount Extracted	1 m2	Extracted	04/24/2002
ICAL Date	04/12/2002	Analyzed	04/29/2002 11:04
CCal Filename(s)	F20429A_01 & F20429A_15	Injected By	BAL
Method Blank ID	BLANK-1592		

Native Isomers	Qs (ng)	Qm (ng)	% Rec.	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	0.20	0.18	90	2,3,7,8-TCDF-13C	2.00	74
				2,3,7,8-TCDD-13C	2.00	77
				1,2,3,7,8-PeCDF-13C	2.00	85
2,3,7,8-TCDD	0.20	0.17	87	2,3,4,7,8-PeCDF-13C	2.00	79
				1,2,3,7,8-PeCDD-13C	2.00	83
				1,2,3,4,7,8-HxCDF-13C	2.00	96
1,2,3,7,8-PeCDF	1.00	0.90	90	1,2,3,6,7,8-HxCDF-13C	2.00	74
2,3,4,7,8-PeCDF	1.00	0.91	91	2,3,4,6,7,8-HxCDF-13C	2.00	81
				1,2,3,7,8,9-HxCDF-13C	2.00	81
				1,2,3,4,7,8-HxCDD-13C	2.00	95
1,2,3,7,8-PeCDD	1.00	0.93	93	1,2,3,6,7,8-HxCDD-13C	2.00	85
				1,2,3,4,6,7,8-HpCDF-13C	2.00	85
				1,2,3,4,7,8,9-HpCDF-13C	2.00	77
1,2,3,4,7,8-HxCDF	1.00	0.86	86	1,2,3,4,6,7,8-HpCDD-13C	2.00	94
1,2,3,6,7,8-HxCDF	1.00	0.93	93	OCDD-13C	4.00	67
2,3,4,6,7,8-HxCDF	1.00	0.91	91			
1,2,3,7,8,9-HxCDF	1.00	0.90	90	1,2,3,4-TCDD-13C	2.00	NA
				1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	1.00	0.92	92	2,3,7,8-TCDD-37Cl4	0.20	91
1,2,3,6,7,8-HxCDD	1.00	0.95	95			
1,2,3,7,8,9-HxCDD	1.00	0.92	92			
1,2,3,4,6,7,8-HpCDF	1.00	0.97	97			
1,2,3,4,7,8,9-HpCDF	1.00	0.92	92			
1,2,3,4,6,7,8-HpCDD	1.00	0.91	91			
OCDF	2.00	1.55	77			
OCDD	2.00	2.01	101			

Qs = Quantity Spiked
 Qm = Quantity Measured
 Rec. = Recovery (Expressed as Percent)
 P = Recovery outside of target range
 X = Background subtracted value
 Nn = Value obtained from additional analysis
 NA = Not Applicable
 * = See Discussion

Report No.....02-1056372

REPORT OF LABORATORY ANALYSIS

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