

EPA Method TO-9 PCDD/F



FAL ID: 5218-001-SA
Client ID: OFF01-112508
Matrix: PUF / Filter
Batch No: X1582

Date Extracted: 12-02-2008
Date Received: 12-01-2008
Amount: 1.00 sample

ICal: AIRFAL3-8-29-08
GC Column: DB5
Units: pg/sample

Acquired: 12-05-2008
WHO TEQ: 3.36

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	2.86		-	0.779				
1,2,3,7,8-PeCDD	ND	1.92		-	0.866				
1,2,3,4,7,8-HxCDD	ND	3.89		-	2.25				
1,2,3,6,7,8-HxCDD	ND	4.12		-	2.20	Total TCDD	ND	2.86	
1,2,3,7,8,9-HxCDD	ND	3.89		-	2.18	Total PeCDD	ND	1.92	
1,2,3,4,6,7,8-HpCDD	6.78	-	J	0.0678	2.71	Total HxCDD	ND	4.12	
OCDD	19.8	-	J	0.00198	5.66	Total HpCDD	12.5	-	J
2,3,7,8-TCDF	4.28	-	J	0.428	0.744				
1,2,3,7,8-PeCDF	4.79	-	J	0.239	0.941				
2,3,4,7,8-PeCDF	ND	3.60		-	0.982				
1,2,3,4,7,8-HxCDF	9.79	-	J	0.979	1.47				
1,2,3,6,7,8-HxCDF	5.61	-	J	0.561	1.31				
2,3,4,6,7,8-HxCDF	4.00	-	J	0.400	1.51	Total TCDF	39.1	-	
1,2,3,7,8,9-HxCDF	3.42	-	J	0.342	1.85	Total PeCDF	23.5	-	J
1,2,3,4,6,7,8-HpCDF	23.1	-	J	0.231	1.12	Total HxCDF	40.8	-	J
1,2,3,4,7,8,9-HpCDF	10.2	-	J	0.102	1.53	Total HpCDF	48.5	-	J
OCDF	68.8	-	J	0.00688	4.19				

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	76.5	40.0 - 130	
13C-1,2,3,7,8-PeCDD	73.1	40.0 - 130	
13C-1,2,3,6,7,8-HxCDD	77.2	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	77.3	25.0 - 130	
13C-OCDD	80.8	25.0 - 130	
13C-2,3,7,8-TCDF	76.3	40.0 - 130	
13C-1,2,3,7,8-PeCDF	79.0	40.0 - 130	
13C-1,2,3,6,7,8-HxCDF	74.5	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDF	68.7	25.0 - 130	
13C-OCDF	84.8	25.0 - 130	
Cleanup Surrogate			
13C-1,2,3,7,8,9-HxCDF	98.1	40.0 - 130	
Pre-Spike Surrogate			
37Cl-2,3,7,8-TCDD	102	70.0 - 130	
13C-1,2,3,4,7,8-HxCDD	107	70.0 - 130	
13C-2,3,4,7,8-PeCDF	74.1	70.0 - 130	
13C-1,2,3,4,7,8-HxCDF	101	70.0 - 130	
13C-1,2,3,4,7,8,9-HpCDF	126	70.0 - 130	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Chemical Interference
- D Presence of Diphenyl Ethers
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected
- NP Not Provided
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: TC

Date: 12/3/08

Reviewed By: J

Date: 12/10/08

EPA Method TO-9 PCDD/F



FAL ID: 5218-002-SA
Client ID: OFF02-112508
Matrix: PUF / Filter
Batch No: X1582

Date Extracted: 12-02-2008
Date Received: 12-01-2008
Amount: 1.00 sample

ICal: AIRFAL3-8-29-08
GC Column: DB5
Units: pg/sample

Acquired: 12-05-2008
WHO TEQ: 10.2


Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	3.09		-	0.779				
1,2,3,7,8-PeCDD	ND	3.40		-	0.866				
1,2,3,4,7,8-HxCDD	ND	7.06		-	2.25				
1,2,3,6,7,8-HxCDD	ND	7.46		-	2.20	Total TCDD	ND	3.09	
1,2,3,7,8,9-HxCDD	ND	7.04		-	2.18	Total PeCDD	ND	3.40	
1,2,3,4,6,7,8-HpCDD	14.8	-	J	0.148	2.71	Total HxCDD	ND	7.46	
OCDD	40.6	-	J	0.00406	5.66	Total HpCDD	29.5	-	J
2,3,7,8-TCDF	10.3	-		1.03	0.744				
1,2,3,7,8-PeCDF	8.54	-	J	0.427	0.941				
2,3,4,7,8-PeCDF	7.60	-	J	3.80	0.982				
1,2,3,4,7,8-HxCDF	16.6	-	J	1.66	1.47				
1,2,3,6,7,8-HxCDF	10.9	-	J	1.09	1.31				
2,3,4,6,7,8-HxCDF	8.08	-	J	0.808	1.51	Total TCDF	118	-	
1,2,3,7,8,9-HxCDF	5.62	-	J	0.562	1.85	Total PeCDF	77.1	-	
1,2,3,4,6,7,8-HpCDF	45.1	-	J	0.451	1.12	Total HxCDF	77.9	-	
1,2,3,4,7,8,9-HpCDF	17.5	-	J	0.175	1.53	Total HpCDF	91.0	-	
OCDF	120	-		0.0120	4.19				

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	92.3	40.0 - 130	
13C-1,2,3,7,8-PeCDD	88.0	40.0 - 130	
13C-1,2,3,6,7,8-HxCDD	88.6	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	88.8	25.0 - 130	
13C-OCDD	85.7	25.0 - 130	
13C-2,3,7,8-TCDF	90.2	40.0 - 130	
13C-1,2,3,7,8-PeCDF	91.3	40.0 - 130	
13C-1,2,3,6,7,8-HxCDF	85.7	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDF	77.3	25.0 - 130	
13C-OCDF	93.2	25.0 - 130	
Cleanup Surrogate			
13C-1,2,3,7,8,9-HxCDF	97.4	40.0 - 130	
Pre-Spike Surrogate			
37Cl-2,3,7,8-TCDD	102	70.0 - 130	
13C-1,2,3,4,7,8-HxCDD	103	70.0 - 130	
13C-2,3,4,7,8-PeCDF	71.7	70.0 - 130	
13C-1,2,3,4,7,8-HxCDF	99.3	70.0 - 130	
13C-1,2,3,4,7,8,9-HpCDF	124	70.0 - 130	

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- ND Analyte Not Detected
- NP Not Provided
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 

Date: 12/8/08

Reviewed By: 

Date: 12/19/08