

# EPA Method TO-9 PCDD/F



FAL ID: 5225-001-SA  
Client ID: OFF01-120208  
Matrix: PUF / Filter  
Batch No: X1589

Date Extracted: 12-08-2008  
Date Received: 12-05-2008  
Amount: 1.00 sample

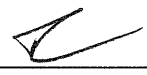
ICal: AIRFAL3-8-29-08  
GC Column: DB5  
Units: pg/sample


Acquired: 12-15-2008  
WHO TEQ: 14.4

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	2.03		-	0.779				
1,2,3,7,8-PeCDD	ND	2.18		-	0.866				
1,2,3,4,7,8-HxCDD	5.36	-	J	0.536	2.25				
1,2,3,6,7,8-HxCDD	8.32	-	J	0.832	2.20	Total TCDD	24.5	-	
1,2,3,7,8,9-HxCDD	7.41	-	J	0.741	2.18	Total PeCDD	10.2	-	J
1,2,3,4,6,7,8-HpCDD	160	-		1.60	2.71	Total HxCDD	80.7	-	
OCDD	479	-		0.0479	5.66	Total HpCDD	312	-	
2,3,7,8-TCDF	25.3	-	F	2.53	0.744				
1,2,3,7,8-PeCDF	11.8	-	J	0.590	0.941				
2,3,4,7,8-PeCDF	6.16	-	J	3.08	0.982				
1,2,3,4,7,8-HxCDF	15.2	-	J	1.52	1.47				
1,2,3,6,7,8-HxCDF	10.1	-	J	1.01	1.31				
2,3,4,6,7,8-HxCDF	8.73	-	J	0.873	1.51				
1,2,3,7,8,9-HxCDF	5.04	-	J	0.504	1.85	Total TCDF	604	-	
1,2,3,4,6,7,8-HpCDF	40.8	-	J	0.408	1.12	Total PeCDF	160	-	
1,2,3,4,7,8,9-HpCDF	13.5	-	J	0.135	1.53	Total HxCDF	102	-	
OCDF	112	-		0.0112	4.19	Total HpCDF	79.8	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	91.7	40.0 - 130	
13C-1,2,3,7,8-PeCDD	86.2	40.0 - 130	
13C-1,2,3,6,7,8-HxCDD	87.8	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	87.7	25.0 - 130	
13C-OCDD	81.5	25.0 - 130	
13C-2,3,7,8-TCDF	89.3	40.0 - 130	
13C-1,2,3,7,8-PeCDF	89.5	40.0 - 130	
13C-1,2,3,6,7,8-HxCDF	91.4	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDF	81.8	25.0 - 130	
13C-OCDF	92.5	25.0 - 130	
Cleanup Surrogate			
13C-1,2,3,7,8,9-HxCDF	105	40.0 - 130	
Pre-Spike Surrogate			
37Cl-2,3,7,8-TCDD	102	70.0 - 130	
13C-1,2,3,4,7,8-HxCDD	112	70.0 - 130	
13C-2,3,4,7,8-PeCDF	73.5	70.0 - 130	
13C-1,2,3,4,7,8-HxCDF	113	70.0 - 130	
13C-1,2,3,4,7,8,9-HpCDF	122	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:   
Date: 12/17/08

Reviewed By:   
Date: 12/17/08

# EPA Method TO-9 PCDD/F



FAL ID: 5225-002-SA  
Client ID: OFF02-120208  
Matrix: PUF / Filter  
Batch No: X1589

Date Extracted: 12-08-2008  
Date Received: 12-05-2008  
Amount: 1.00 sample

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

Acquired: 12-16-2008  
WHO TEQ: 14.4

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	1.71		-	0.779				
1,2,3,7,8-PeCDD	ND	2.81		-	0.866				
1,2,3,4,7,8-HxCDD	4.95	-	J	0.495	2.25	Total TCDD	16.4	-	
1,2,3,6,7,8-HxCDD	10.4	-	J	1.04	2.20	Total PeCDD	7.77	-	J
1,2,3,7,8,9-HxCDD	8.10	-	J	0.810	2.18	Total HxCDD	98.5	-	
1,2,3,4,6,7,8-HpCDD	185	-		1.85	2.71	Total HpCDD	362	-	
OCDD	564	-		0.0564	5.66				
2,3,7,8-TCDF	25.9	-	F	2.59	0.744				
1,2,3,7,8-PeCDF	10.3	-	J	0.515	0.941				
2,3,4,7,8-PeCDF	6.71	-	J	3.36	0.982				
1,2,3,4,7,8-HxCDF	12.4	-	J	1.24	1.47				
1,2,3,6,7,8-HxCDF	8.13	-	J	0.813	1.31				
2,3,4,6,7,8-HxCDF	7.98	-	J	0.798	1.51				
1,2,3,7,8,9-HxCDF	3.79	-	J	0.379	1.85	Total TCDF	511	-	
1,2,3,4,6,7,8-HpCDF	31.4	-	J	0.314	1.12	Total PeCDF	144	-	
1,2,3,4,7,8,9-HpCDF	8.69	-	J	0.0869	1.53	Total HxCDF	86.3	-	
OCDF	73.5	-	J	0.00736	4.19	Total HpCDF	59.1	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	97.1	40.0 - 130	
13C-1,2,3,7,8-PeCDD	95.5	40.0 - 130	
13C-1,2,3,6,7,8-HxCDD	85.6	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	92.0	25.0 - 130	
13C-OCDD	91.1	25.0 - 130	
13C-2,3,7,8-TCDF	96.1	40.0 - 130	
13C-1,2,3,7,8-PeCDF	97.2	40.0 - 130	
13C-1,2,3,6,7,8-HxCDF	91.7	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDF	83.8	25.0 - 130	
13C-OCDF	102	25.0 - 130	
Cleanup Surrogate			
13C-1,2,3,7,8,9-HxCDF	105	40.0 - 130	
Pre-Spike Surrogate			
37Cl-2,3,7,8-TCDD	102	70.0 - 130	
13C-1,2,3,4,7,8-HxCDD	111	70.0 - 130	
13C-2,3,4,7,8-PeCDF	75.5	70.0 - 130	
13C-1,2,3,4,7,8-HxCDF	107	70.0 - 130	
13C-1,2,3,4,7,8,9-HpCDF	122	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

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