

December 9, 2008

Ms. Kelly Buettner
Air Toxics LTD.
180 Blue Ravine Road, Suite.B
Folsom, CA 95630-1020

Dear Ms. Buettner,

Enclosed are the results for Frontier Analytical Laboratory project **5218**. This corresponds to your project number **103P0333** and purchase order number **0812007C**. The two PUF/filter samples received on 12/1/2008 were extracted and analyzed by EPA Method TO-9 for tetra through octa chlorinated dibenzo dioxins and furans. Air Toxics LTD. requested a Level IV data package and a turnaround time of fifteen business days for project **5218**.

The following level IV report consists of an Analytical Data section, a Sample Receipt section, a Laboratory Raw Data section, and an Instrument Raw Data section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your original chain of custody, our sample login form and the sample photos. The Laboratory Raw Data section contains our project request sheet, the cartridge request form, an extraction bench sheet, and the cleanup bench sheet. The instrument raw data section contains three sub-sections; the sample results section, the initial calibration section and the continuing/ending calibration section. The sample results sub-section consists of the quantitation summary forms with chromatograms for all samples and QC. The initial calibration sub-section consists of the individual quantitation summary forms and chromatograms for each point of the initial calibration curve as well as an overall quantitation summary form of the initial calibration curve. The continuing/ending calibration sub-section consists of the quantitation summary forms and chromatograms for all beginning and ending calibration injections associated with the samples and QC. You also requested Electronic Data Deliverables (EDD) for this project. The EDD and Level I summary have been sent to you via email. A copy of the entire Level IV data package on compact disk has been sent to you via OnTrac. The enclosed results are specifically for the samples referenced in this report only. These results meet all NELAC requirements and shall not be reproduced except in full.

If you have any questions regarding project **5218**, please feel free to contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Daniel P. Vickers

Daniel P. Vickers
Director of Air Toxics

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: 5218

Received on: 12/01/2008

Project Due: 12/23/2008 Storage: R2

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
5218-001-SA	0	103PO333	OFF01-112508	EPA TO-9 D/F	PUF / Filter	11/25/2008	07:05 am	12/02/2008
5218-002-SA	0	103PO333	OFF02-112508	EPA TO-9 D/F	PUF / Filter	11/25/2008	07:25 am	12/02/2008

EPA Method TO-9 PCDD/F



FAL ID: 5218-001-MB
Client ID: Method Blank
Matrix: PUF / Filter
Batch No: X1582

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

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

Acquired: 12-05-2008
WHO TEQ: 0.00

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	2.20		-	0.779				
1,2,3,7,8-PeCDD	ND	1.05		-	0.866				
1,2,3,4,7,8-HxCDD	ND	2.23		-	2.25				
1,2,3,6,7,8-HxCDD	ND	2.35		-	2.20	Total TCDD	ND	2.20	
1,2,3,7,8,9-HxCDD	ND	2.22		-	2.18	Total PeCDD	ND	1.05	
1,2,3,4,6,7,8-HpCDD	ND	2.12		-	2.71	Total HxCDD	ND	2.35	
OCDD	ND	4.34		-	5.66	Total HpCDD	ND	2.12	
2,3,7,8-TCDF	ND	2.17		-	0.744				
1,2,3,7,8-PeCDF	ND	2.20		-	0.941				
2,3,4,7,8-PeCDF	ND	2.33		-	0.982				
1,2,3,4,7,8-HxCDF	ND	1.39		-	1.47				
1,2,3,6,7,8-HxCDF	ND	1.34		-	1.31				
2,3,4,6,7,8-HxCDF	ND	1.51		-	1.51				
1,2,3,7,8,9-HxCDF	ND	1.79		-	1.85	Total TCDF	ND	2.17	
1,2,3,4,6,7,8-HpCDF	ND	1.10		-	1.12	Total PeCDF	ND	2.33	
1,2,3,4,7,8,9-HpCDF	ND	1.44		-	1.53	Total HxCDF	ND	1.79	
OCDF	ND	5.12		-	4.19	Total HpCDF	ND	1.44	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	93.3	40.0 - 130	
13C-1,2,3,7,8-PeCDD	88.4	40.0 - 130	
13C-1,2,3,6,7,8-HxCDD	92.8	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	95.6	25.0 - 130	
13C-OCDD	100	25.0 - 130	
13C-2,3,7,8-TCDF	89.2	40.0 - 130	
13C-1,2,3,7,8-PeCDF	93.6	40.0 - 130	
13C-1,2,3,6,7,8-HxCDF	90.9	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDF	83.6	25.0 - 130	
13C-OCDF	104	25.0 - 130	
Cleanup Surrogate			
13C-1,2,3,7,8,9-HxCDF	100	40.0 - 130	
Pre-Spike Surrogate			
37Cl-2,3,7,8-TCDD	97.8	70.0 - 130	
13C-1,2,3,4,7,8-HxCDD	99.3	70.0 - 130	
13C-2,3,4,7,8-PeCDF	72.0	70.0 - 130	
13C-1,2,3,4,7,8-HxCDF	93.3	70.0 - 130	
13C-1,2,3,4,7,8,9-HpCDF	119	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: [Signature]

Date: 12/6/08

Reviewed By: [Signature]

Date: 12/10/08

EPA Method TO-9 PCDD/F




FAL ID: 5218-001-LCS1/LCS2
Client ID: LCS1/LCS2
Matrix: PUF / Filter

Date Extracted: 12-02-2008
Date Received: NA
LCS1 Amount: 1.00 sample
LCS2 Amount: 1.00 sample


ICal: AIRFAL3-8-29-08
Batch No: X1582
Units: ng/ml

LCS1 Acquired: 12-05-2008
LCS2 Acquired: 12-05-2008
GC Column: DB5

Compound	Amount Spiked (pg)	LCS1 Amount	LCS2 Amount	% RSD	Qual
2,3,7,8-TCDD	200	3.97	3.93	1.01	
1,2,3,7,8-PeCDD	1000	22.5	21.8	3.16	
1,2,3,4,7,8-HxCDD	1000	21.5	21.5	0.00	
1,2,3,6,7,8-HxCDD	1000	23.0	22.9	0.436	
1,2,3,7,8,9-HxCDD	1000	21.4	21.4	0.00	
1,2,3,4,6,7,8-HpCDD	1000	25.5	25.1	1.58	
OCDD	2000	46.7	45.6	2.38	
2,3,7,8-TCDF	200	5.01	5.00	0.200	
1,2,3,7,8-PeCDF	1000	23.0	22.5	2.20	
2,3,4,7,8-PeCDF	1000	22.4	21.9	2.26	
1,2,3,4,7,8-HxCDF	1000	19.1	19.0	0.525	
1,2,3,6,7,8-HxCDF	1000	21.2	21.3	0.471	
2,3,4,6,7,8-HxCDF	1000	19.7	20.0	1.51	
1,2,3,7,8,9-HxCDF	1000	21.6	22.9	5.84	
1,2,3,4,6,7,8-HpCDF	1000	22.6	23.2	2.62	
1,2,3,4,7,8,9-HpCDF	1000	27.2	26.8	1.48	
OCDF	2000	45.3	43.9	3.14	
Internal Standards		% Rec	% Rec	QC Limits	
13C-2,3,7,8-TCDD	4000	76.3	68.0	40.0 - 130	
13C-1,2,3,7,8-PeCDD	4000	68.9	64.8	40.0 - 130	
13C-1,2,3,6,7,8-HxCDD	4000	76.5	68.6	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	4000	74.3	69.2	25.0 - 130	
13C-OCDD	8000	73.3	72.4	25.0 - 130	
13C-2,3,7,8-TCDF	4000	75.4	66.7	40.0 - 130	
13C-1,2,3,7,8-PeCDF	4000	74.3	68.9	40.0 - 130	
13C-1,2,3,6,7,8-HxCDF	4000	74.8	67.7	40.0 - 130	
13C-1,2,3,4,6,7,8-HpCDF	4000	67.9	61.1	25.0 - 130	
13C-OCDF	8000	79.7	75.8	25.0 - 130	
Cleanup Surrogate					
13C-1,2,3,7,8,9-HxCDF	4000	80.7	72.1	40.0 - 130	
Pre Spike Surrogate		% Rec	% Rec	QC Limits	
37Cl-2,3,7,8-TCDD	4000	106	103	70.0 - 130	
13C-1,2,3,4,7,8-HxCDD	4000	106	104	70.0 - 130	
13C-2,3,4,7,8-PeCDF	4000	76.3	73.1	70.0 - 130	
13C-1,2,3,4,7,8-HxCDF	4000	101	98.9	70.0 - 130	
13C-1,2,3,4,7,8,9-HpCDF	4000	125	123	70.0 - 130	

Analyst: 

Date: 12/8/08

Reviewed By: 

Date: 12/10/08

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				
1,2,3,7,8,9-HxCDF	3.42	-	J	0.342	1.85	Total TCDF	39.1	-	
1,2,3,4,6,7,8-HpCDF	23.1	-	J	0.231	1.12	Total PeCDF	23.5	-	J
1,2,3,4,7,8,9-HpCDF	10.2	-	J	0.102	1.53	Total HxCDF	40.8	-	J
OCDF	68.8	-	J	0.00688	4.19	Total HpCDF	48.5	-	J

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:

Date: 12/8/08

Reviewed By:

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				
1,2,3,7,8,9-HxCDF	5.62	-	J	0.562	1.85	Total TCDF	118	-	
1,2,3,4,6,7,8-HpCDF	45.1	-	J	0.451	1.12	Total PeCDF	77.1	-	
1,2,3,4,7,8,9-HpCDF	17.5	-	J	0.175	1.53	Total HxCDF	77.9	-	
OCDF	120	-		0.0120	4.19	Total HpCDF	91.0	-	

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	

- 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: [Signature]
Date: 12/8/08

Reviewed By: [Signature]
Date: 12/10/08

20



Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection handling or shipping of these samples. Relinquished signature also indicated agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

Page 1 of 1

000007 of 000243

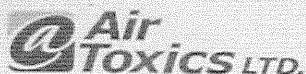
Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **5218**

Client:	Air Toxics
Client Project ID:	103PO333
Date Received:	12/01/2008
Time Received:	01:42 pm
Received By:	KZ
Logged In By:	DV
# of Samples Received:	2
Duplicates:	0
Storage Location:	R2

Method of Delivery:	Courier
Tracking Number:	NA
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	2
Cooling Method	Blue Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	No
Test for residual Chlorine	No
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	12/02/2008
Adequate Sample Volume	Yes
Anomalies or additional comments:	



Chain-of-Custody Record

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection handling or shipping of these samples. Relinquished signature also indicated agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

AIR TOXICS LTD.
180 BLUE RAVINE RD, SUITE B
FOLSOM, CA 95630-1020
916-985-1000 main line
916-985-1020 fax line

Page 1 of 1

Contact Person Kelly Buettner Company Air Toxics Ltd. Address 180-B Blue Ravine Zip 95630 Phone 916-605-3356 City Folsom State CA FAX 916-985-1020		Project Information: P.O. # 0812007C Project # 103PO333 Project Name BMI		Turn Around Time: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush Specify _____		Pressurized by: Date: _____ Press. Gas: N2 He	
Collected By: (Signature) _____							
Lab I.D.	Field Sample I.D.	Canister I.D.	Date & Time	Analysis Requested	Canister Pressure/Vacuum		
					Initial	Final	Receipt Final (psi)
	OFF01-112508		11/25/08 0705	TO-9	Hg		
	OFF02-112508		11/25/08 0725	TO-9	Hg		
					Hg		
					Hg		
					Hg		

OFF01-112508
TO9
11/25/08 0705

Frontier Analytical Laboratory
5218-001-SA
Client ID: OFF01-112508
Storage: R2 (01 of 01)



Not Found

OFF02-112508
TO9
11/25/08 0725

Frontier Analytical Laboratory
5218-002-SA
Client ID: OFF02-112508
Storage: R2 (01 of 01)



Not Found