



AN ENVIRONMENTAL ANALYTICAL LABORATORY

11/24/2008

Mr. Doug Herlocker

Tetra Tech

3380 Americana Terrace, Suite 201

Boise ID 83706

Project Name: BMI

Project #: 103P0333

Dear Mr. Doug Herlocker

The following report includes the data for the above referenced project for sample(s) received on 11/6/2008 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-4A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

A handwritten signature in black ink that reads 'Kelly Buettner'. The signature is fluid and cursive, with the first and last names clearly legible.

Kelly Buettner

Project Manager



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0811109A

Work Order Summary

CLIENT:	Mr. Doug Herlocker Tetra Tech 3380 Americana Terrace, Suite 201 Boise, ID 83706	BILL TO:	Mr. Doug Herlocker Tetra Tech 3380 Americana Terrace, Suite 201 Boise, ID 83706
PHONE:	208-389-1030	P.O. #	
FAX:		PROJECT #	103P0333 BMI
DATE RECEIVED:	11/06/2008	CONTACT:	Kelly Buettner
DATE COMPLETED:	11/24/2008		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	OFF-01-110408	Modified TO-4A
02A	OFF-02-110408	Modified TO-4A
03A	Lab Blank	Modified TO-4A
04A	LCS	Modified TO-4A

CERTIFIED BY:

Laboratory Director

DATE: 11/24/08

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-4A
Tetra Tech
Workorder# 0811109A

Two PUF Cartridge samples were received on November 06, 2008. The laboratory performed analysis via Modified EPA Method TO-4A using GC/ECD. The PUF samples were extracted using Pressurized Fluid Extraction (PFE) by EPA Method 3545A. Following the extraction, the solvent is switched to hexane and the extract concentrated. Analysis is carried out on a HP 5890 GC/ECD and second column confirmation is used to positively identify pesticide results. Duplicate extraction cannot be performed on PUF media, therefore duplicate results are derived from analyzing the extract twice.

Method modifications taken to run these samples include:

<i>Requirement</i>	<i>Method TO-4A</i>	<i>ATL Modifications</i>
Extraction Solvent	10 % Diethyl Ether in Hexane	DCM, exchanging to Hexane during the concentration step.
Reagent Blank	Set up extraction system without filter/PUF; reflux with solvent	No Reagent Blank is extracted. Reagent lots are certified as acceptable prior to use.
Initial Calibration Verification (ICV)	Second source standard analyzed after ICAL; recovery 85 - 115 %	Recovery limits are 85-115% for pesticides; 80-120% for PCBs.
PCB Quantitation	Requires a minimum of 5 peaks	Use 4 peaks for quantitation.
Frequency of Continuing Calibration Verification	Every 10 samples.	Every 20 samples.

Receiving Notes

A Temperature Blank was not included with the shipment. Temperature was measured on a representative sample and was not within 4 ± 2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sample volume of 300 m3 was assumed for all QC samples.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the detection limit.

M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds MODIFIED EPA METHOD TO-4A GC/ECD

Client Sample ID: OFF-01-110408

Lab ID#: 0811109A-01A

No Detections Were Found.

Client Sample ID: OFF-02-110408

Lab ID#: 0811109A-02A

No Detections Were Found.



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: OFF-01-110408

Lab ID#: 0811109A-01A

MODIFIED EPA METHOD TO-4A GC/ECD

File Name:	8111111	Date of Collection: 11/4/08
Dil. Factor:	1.00	Date of Analysis: 11/11/08 02:40 PM
		Date of Extraction: 11/10/08

Compound	Rpt. Limit (ug)	Rpt. Limit (uG/m3)	Amount (ug)	Amount (uG/m3)
Aldrin	0.10	0.00035	Not Detected	Not Detected
alpha-BHC	0.10	0.00035	Not Detected	Not Detected
beta-BHC	0.10	0.00035	Not Detected	Not Detected
delta-BHC	0.10	0.00035	Not Detected	Not Detected
gamma-BHC (Lindane)	0.10	0.00035	Not Detected	Not Detected
alpha-Chlordane	0.10	0.00035	Not Detected	Not Detected
gamma-Chlordane	0.10	0.00035	Not Detected	Not Detected
4,4'-DDD	0.10	0.00035	Not Detected	Not Detected
4,4'-DDE	0.10	0.00035	Not Detected	Not Detected
4,4'-DDT	0.10	0.00035	Not Detected	Not Detected
Dieldrin	0.10	0.00035	Not Detected	Not Detected
Endosulfan I	0.10	0.00035	Not Detected	Not Detected
Endosulfan II	0.10	0.00035	Not Detected	Not Detected
Endosulfan Sulfate	0.10	0.00035	Not Detected	Not Detected
Endrin	0.10	0.00035	Not Detected	Not Detected
Endrin Aldehyde	0.10	0.00035	Not Detected	Not Detected
Endrin Ketone	0.10	0.00035	Not Detected	Not Detected
Heptachlor	0.10	0.00035	Not Detected	Not Detected
Heptachlor Epoxide	0.10	0.00035	Not Detected	Not Detected
4,4'-Methoxychlor	1.0	0.0035	Not Detected	Not Detected
Toxaphene	1.0	0.0035	Not Detected	Not Detected
Aroclor 1016/1242	1.0	0.0035	Not Detected	Not Detected
Aroclor-1221	1.0	0.0035	Not Detected	Not Detected
Aroclor-1232	1.0	0.0035	Not Detected	Not Detected
Aroclor-1248	1.0	0.0035	Not Detected	Not Detected
Aroclor-1254	1.0	0.0035	Not Detected	Not Detected
Aroclor-1260	1.0	0.0035	Not Detected	Not Detected

Air Sample Volume(L): 285000

Pesticides were reported from file #8111111a, analyzed on 11/11/08 with a dilution factor of 1.00.

Container Type: PUF Cartridge

Surrogates	%Recovery	Method Limits
2,4,5,6-Tetrachloro-m-xylene	93	60-120
Decachlorobiphenyl	92	60-120



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: OFF-02-110408

Lab ID#: 0811109A-02A

MODIFIED EPA METHOD TO-4A GC/ECD

File Name:	8111112	Date of Collection: 11/4/08
Dil. Factor:	1.00	Date of Analysis: 11/11/08 03:19 PM
		Date of Extraction: 11/10/08

Compound	Rpt. Limit (ug)	Rpt. Limit (uG/m3)	Amount (ug)	Amount (uG/m3)
Aldrin	0.10	0.0010	Not Detected	Not Detected
alpha-BHC	0.10	0.0010	Not Detected	Not Detected
beta-BHC	0.10	0.0010	Not Detected	Not Detected
delta-BHC	0.10	0.0010	Not Detected	Not Detected
gamma-BHC (Lindane)	0.10	0.0010	Not Detected	Not Detected
alpha-Chlordane	0.10	0.0010	Not Detected	Not Detected
gamma-Chlordane	0.10	0.0010	Not Detected	Not Detected
4,4'-DDD	0.10	0.0010	Not Detected	Not Detected
4,4'-DDE	0.10	0.0010	Not Detected	Not Detected
4,4'-DDT	0.10	0.0010	Not Detected	Not Detected
Dieldrin	0.10	0.0010	Not Detected	Not Detected
Endosulfan I	0.10	0.0010	Not Detected	Not Detected
Endosulfan II	0.10	0.0010	Not Detected	Not Detected
Endosulfan Sulfate	0.10	0.0010	Not Detected	Not Detected
Endrin	0.10	0.0010	Not Detected	Not Detected
Endrin Aldehyde	0.10	0.0010	Not Detected	Not Detected
Endrin Ketone	0.10	0.0010	Not Detected	Not Detected
Heptachlor	0.10	0.0010	Not Detected	Not Detected
Heptachlor Epoxide	0.10	0.0010	Not Detected	Not Detected
4,4'-Methoxychlor	1.0	0.010	Not Detected	Not Detected
Toxaphene	1.0	0.010	Not Detected	Not Detected
Aroclor 1016/1242	1.0	0.010	Not Detected	Not Detected
Aroclor-1221	1.0	0.010	Not Detected	Not Detected
Aroclor-1232	1.0	0.010	Not Detected	Not Detected
Aroclor-1248	1.0	0.010	Not Detected	Not Detected
Aroclor-1254	1.0	0.010	Not Detected	Not Detected
Aroclor-1260	1.0	0.010	Not Detected	Not Detected

Air Sample Volume(L): 99600

Pesticides were reported from file #8111112a, analyzed on 11/11/08 with a dilution factor of 1.00.

Container Type: PUF Cartridge

Surrogates	%Recovery	Method Limits
2,4,5,6-Tetrachloro-m-xylene	98	60-120
Decachlorobiphenyl	90	60-120



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0811109A-03A

MODIFIED EPA METHOD TO-4A GC/ECD

File Name:	8111108	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/11/08 12:42 PM
		Date of Extraction: 11/10/08

Compound	Rpt. Limit (ug)	Rpt. Limit (uG/m3)	Amount (ug)	Amount (uG/m3)
Aldrin	0.10	0.00033	Not Detected	Not Detected
alpha-BHC	0.10	0.00033	Not Detected	Not Detected
beta-BHC	0.10	0.00033	Not Detected	Not Detected
delta-BHC	0.10	0.00033	Not Detected	Not Detected
gamma-BHC (Lindane)	0.10	0.00033	Not Detected	Not Detected
alpha-Chlordane	0.10	0.00033	Not Detected	Not Detected
gamma-Chlordane	0.10	0.00033	Not Detected	Not Detected
4,4'-DDD	0.10	0.00033	Not Detected	Not Detected
4,4'-DDE	0.10	0.00033	Not Detected	Not Detected
4,4'-DDT	0.10	0.00033	Not Detected	Not Detected
Dieldrin	0.10	0.00033	Not Detected	Not Detected
Endosulfan I	0.10	0.00033	Not Detected	Not Detected
Endosulfan II	0.10	0.00033	Not Detected	Not Detected
Endosulfan Sulfate	0.10	0.00033	Not Detected	Not Detected
Endrin	0.10	0.00033	Not Detected	Not Detected
Endrin Aldehyde	0.10	0.00033	Not Detected	Not Detected
Endrin Ketone	0.10	0.00033	Not Detected	Not Detected
Heptachlor	0.10	0.00033	Not Detected	Not Detected
Heptachlor Epoxide	0.10	0.00033	Not Detected	Not Detected
4,4'-Methoxychlor	1.0	0.0033	Not Detected	Not Detected
Toxaphene	1.0	0.0033	Not Detected	Not Detected
Aroclor 1016/1242	1.0	0.0033	Not Detected	Not Detected
Aroclor-1221	1.0	0.0033	Not Detected	Not Detected
Aroclor-1232	1.0	0.0033	Not Detected	Not Detected
Aroclor-1248	1.0	0.0033	Not Detected	Not Detected
Aroclor-1254	1.0	0.0033	Not Detected	Not Detected
Aroclor-1260	1.0	0.0033	Not Detected	Not Detected

Air Sample Volume(L): 300000

Pesticides were reported from file #8111108a, analyzed on 11/11/08 with a dilution factor of 1.00.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2,4,5,6-Tetrachloro-m-xylene	88	60-120
Decachlorobiphenyl	90	60-120



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0811109A-04A

MODIFIED EPA METHOD TO-4A GC/ECD

File Name:	8111109	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/11/08 01:21 PM
		Date of Extraction: 11/10/08

Compound	%Recovery
Aldrin	82
alpha-BHC	Not Spiked
beta-BHC	Not Spiked
delta-BHC	Not Spiked
gamma-BHC (Lindane)	83
alpha-Chlordane	Not Spiked
gamma-Chlordane	Not Spiked
4,4'-DDD	Not Spiked
4,4'-DDE	Not Spiked
4,4'-DDT	83
Dieldrin	86
Endosulfan I	Not Spiked
Endosulfan II	Not Spiked
Endosulfan Sulfate	Not Spiked
Endrin	90
Endrin Aldehyde	Not Spiked
Endrin Ketone	Not Spiked
Heptachlor	86
Heptachlor Epoxide	Not Spiked
4,4'-Methoxychlor	Not Spiked
Toxaphene	Not Spiked
Aroclor 1016/1242	91
Aroclor-1221	Not Spiked
Aroclor-1232	Not Spiked
Aroclor-1248	Not Spiked
Aroclor-1254	Not Spiked
Aroclor-1260	100

Air Sample Volume(L): 300000

Pesticides were reported from file #8111110, analyzed on 11/11/08 with a dilution factor of 1.00.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2,4,5,6-Tetrachloro-m-xylene	83	60-120
Decachlorobiphenyl	88	60-120