@AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

ATL Applications

INVENTORY SHEET

WORK ORDER # 0908628B

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Completed by:

Kara McKiernan	Kara McKiernan/ Document Control	09/21/09
(Signature)	(Print Name & Title)	(Date)

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0908628B

Work Order Summary

CLIENT:	Mr. Taeko Minegishi Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494	**BILL TO:**	Accounts Payable Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494
PHONE:	800-825-5343	**P.O. #**	16512
FAX:	781-247-4305	**PROJECT #**	16512
DATE RECEIVED:	08/28/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/17/2009		

FRACTION #	NAME	TEST
17A	101174	ATL Applications
18A	101175	ATL Applications
19A	101240	ATL Applications
20A	101241	ATL Applications
21A	101242	ATL Applications
21AA	101242 Lab Duplicate	ATL Applications
22A	101243	ATL Applications
23A	101244	ATL Applications
24A	101245	ATL Applications
25A	101246	ATL Applications
26A	101575	ATL Applications
27A	101576	ATL Applications
28A(cancelled)	101577	ATL Applications
29A	101578	ATL Applications
29AA	101578 Lab Duplicate	ATL Applications
30A	101579	ATL Applications
31A	101580	ATL Applications

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

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Work Order Summary

CLIENT:	Mr. Taeko Minegishi Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494	**BILL TO:**	Accounts Payable Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494
PHONE:	800-825-5343	**P.O. #**	16512
FAX:	781-247-4305	**PROJECT #**	16512
DATE RECEIVED:	08/28/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/17/2009		

FRACTION #	NAME	TEST
32A	Method Blank	ATL Applications
32B	Method Blank	ATL Applications
32C	Method Blank	ATL Applications
33A	CCV	ATL Applications

CERTIFIED BY: Linda S. Truman

Laboratory Director

DATE: 09/17/09

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

Air Toxics LTD.
Laboratory Services Since 1989

LABORATORY NARRATIVE
Ozone by Radiello 172
Environmental Health & Engineering, Inc.
Workorder# 0908628B

Fifteen Radiello 172 (Ozone) samples were received on August 28, 2009. The procedure involves reaction of 4-pyridylaldehyde with 3-methyl-2-benzothiazolinone hydrazone to yield the corresponding azide. The absorbance is then measured at 430 nm using a spectrophotometer. Results are reported in uG and uG/m3.

Sampling rate of 24.6 mL/min was provided by the manufacturer.

Receiving Notes

The number of samples received did not match the information on the Chain of Custody (COC). Sample 101577 was not received at Air Toxics Ltd. despite notation on the COC.

Analytical Notes

Results were calculated based on 25 deg C without temperature correction. The actual exposure time was used to calculate sample concentrations and reporting limits.

An exposure time of 21600 minutes was used for the QC samples.

All media used for the sampling were supplied by the client. Blank subtraction was not performed on the sample results since the media used for Method Blanks may be from a different lot than the media used for the samples.

Definition of Data Qualifying Flags

Eight 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.
N - The identification is based on presumptive evidence.

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

Sample Results and Raw Data

AIR TOXICS LTD.

ATL Application # 62 for RAD 172 (Ozone)

Spectrophotometer

Field Sample I.D.	Lab Sample I.D.	Collection Date	Analysis Date	Dilution Factor	Reporting. Limit (ug)	Reporting. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
101174	0908628B-17A	8/25/2009	8/31/2009	1.00	0.64	1.2	ND	ND
101175	0908628B-18A	NA	8/31/2009	1.00	0.64	1.2	ND	ND
101240	0908628B-19A	8/25/2009	8/31/2009	1.00	0.64	1.3	ND	ND
101241	0908628B-20A	8/25/2009	8/31/2009	1.00	0.64	1.3	ND	ND
101242	0908628B-21A	8/25/2009	8/31/2009	2.00	1.3	2.6	14	29
101242 Lab Duplicate	0908628B-21AA	8/25/2009	8/31/2009	2.00	1.3	2.6	14	28
101243	0908628B-22A	8/25/2009	8/31/2009	1.00	0.64	1.3	ND	ND
101244	0908628B-23A	8/25/2009	8/31/2009	1.00	0.64	1.3	ND	ND
101245	0908628B-24A	NA	8/31/2009	1.00	0.64	1.2	ND	ND
101246	0908628B-25A	NA	8/31/2009	1.00	0.64	1.2	ND	ND
101575	0908628B-26A	8/27/2009	8/31/2009	1.00	0.64	1.2	ND	ND
101576	0908628B-27A	8/27/2009	8/31/2009	1.00	0.64	1.2	ND	ND
101578	0908628B-29A	8/27/2009	8/31/2009	1.00	0.64	1.2	ND	ND
101578 Lab Duplicate	0908628B-29AA	8/27/2009	8/31/2009	1.00	0.64	1.2	ND	ND
101579	0908628B-30A	8/27/2009	8/31/2009	1.00	0.64	1.2	ND	ND
101580	0908628B-31A	NA	8/31/2009	1.00	0.64	1.2	ND	ND
Method Blank	0908628B-32A	NA	8/31/2009	1.00	0.64	1.2	ND	ND
Method Blank	0908628B-32B	NA	8/31/2009	1.00	0.64	1.2	ND	ND
Method Blank	0908628B-32C	NA	8/31/2009	1.00	0.64	1.2	ND	ND
							%Rec	
CCV	0908628B-33A	NA	8/31/2009	1.00	0.64	1.2	104	

COMMENTS: 1. NA=Not Applicable
2. ND=Not Detected
3. Exposure time of 21600 minutes was assumed for the QC samples.
4. Background subtraction not performed.

Ozone Radiello Calculation Worksheet

Workorder #:	09086288	
Sampling Rate (mL/min))	24.6	Typically 24.6 for Ozone
Sampling T (deg C)	25	Typically 25
Volume (mL)	5	Typically 5 for Ozone
Date of Analysis:	8/31/2009	

(Abs-Y-int)xDF / Slope

Conc (ug) x 1000000 / Q x Duration

Low PointxDF

Corrected Q 24.6 Ozone taking into account Temp

LabSampleID	Client	Date of Collection	Abs	Duration (min)	DF	Ozone Conc (ug)	Conc (ug/m3)	RL(ug)
17A	101174	8/25/2009	0.069	21600	1.00	0.41827462	0.787	0.638
18A	101175	NA	0.037	21600	1.00	0.118343554	0.223	0.638
19A	101240	8/25/2009	0.058	20160	1.00	0.315173316	0.636	0.638
20A	101241	8/25/2009	0.062	20160	1.00	0.3526647	0.711	0.638
21A	101242	8/25/2009	0.783	20160	2.00	14.2209731	28.675	1.277
21AA	101242 Lab Duplicate	8/25/2009	0.778	20160	2.00	14.12724464	28.486	1.277
22A	101243	8/25/2009	0.079	20160	1.00	0.512003079	1.032	0.638
23A	101244	8/25/2009	0.074	20160	1.00	0.46513885	0.938	0.638
24A	101245	NA	0.034	21600	1.00	0.090225016	0.170	0.638
25A	101246	NA	0.035	21600	1.00	0.099597862	0.187	0.638
26A	101575	8/27/2009	0.064	21600	1.00	0.371410391	0.699	0.638
27A	101576	8/27/2009	0.071	21600	1.00	0.437020312	0.822	0.638
28A	101577	8/27/2009	NA	21600	1.00	#VALUE!	#VALUE!	0.638
29A	101578	8/27/2009	0.080	21600	1.00	0.521375925	0.981	0.638
29AA	101578 Lab Duplicate	8/27/2009	0.074	21600	1.00	0.46513885	0.875	0.638
30A	101579	8/27/2009	0.050	21600	1.00	0.240190549	0.452	0.638
31A	101580	NA	0.036	21600	1.00	0.108970708	0.205	0.638
					1.00	-0.228451743	#DIV/0!	0.638
					1.00	-0.228451743	#DIV/0!	0.638
					1.00	-0.228451743	#DIV/0!	0.638
					1.00	-0.228451743	#DIV/0!	0.638
					1.00	-0.228451743	#DIV/0!	0.638
32A	Method Blank	NA	0.035	21600	1.00	0.099597862	0.187	0.638
32B	Method Blank	NA	0.032	21600	1.00	0.071479324	0.135	0.638
32C	Method Blank	NA	0.027	21600	1.00	0.024615095	0.046	0.638
33A	CCV	NA	0.736	21600	1.00	6.669962797	12.553	0.638

QC Duration	CCV Spike Amt
21600	6.384

Verified by HH and AW on 9/4/09

RL (ug) x 1000000
Q x Duration

Calibration Data

Date of Calibration
8/31/2009 Linear Regression

4-PA
ug/ml*0.224*0.5mL

RL (ug/m3)	Result (ug)	Result (ug/m3)	%Rec	4-PA ug/mL	ug Ozone	absorbance
1.201	ND	ND		0	0	0
1.201	ND	ND		5.7	0.6384	0.078
1.287	ND	ND		11.4	1.2768	0.160
1.287	ND	ND		22.8	2.5536	0.300
2.575	14.2209731	28.67501674		57	6.384	0.729
2.575	14.12724464	28.48602369		114	12.768	1.375
1.287	ND	ND				
1.287	ND	ND		hand entry		
1.201	ND	ND				
1.201	ND	ND				
1.201	ND	ND				
1.201	ND	ND				
1.201	#VALUE!	#VALUE!				
1.201	ND	ND				
1.201	ND	ND				
1.201	ND	ND				
1.201	ND	ND				
#DIV/0!	ND	#DIV/0!				
#DIV/0!	ND	#DIV/0!				
#DIV/0!	ND	#DIV/0!				
#DIV/0!	ND	#DIV/0!				
#DIV/0!	ND	#DIV/0!				
1.201	ND	ND				
1.201	ND	ND				
1.201	ND	ND	%Rec			
1.201	6.669962797	12.55262496	104			

Slope	0.106691182
Y-int	0.024373786
R2	0.99920911

QC Results and Raw Data

Spectrophotometer Logbook

@Air Toxics Ltd.

Log Book #: 1564

Work Order: 0908628B

Date: 8/31/09

Analyst: A. Toyama

Method: Rad 172

Wavelength: 430 nm

Prep. Notes:

Standard ID	Concentration	ABS
1858-24-5.7	5.7 ng/mL	0.078
-11.4	11.4	0.160
-22.8	22.8	0.300
-57	57	0.729
-114	114	1.375

r = 0.99920911
m = 0.1066911182
b = 0.0243783786

Fraction	Dilution	ABS	Sample ID	Sample Volume
17A	1.00	0.069	101174	5.0 mL
18A		0.037	175	
19A		0.058	240	
20A		0.062	241	
21A	2.00	0.783	242	
22A	1.00	0.079	243	
23A		0.074	244	
24A		0.034	245	
25A		0.035	246	
26A		0.064	575	
27A		0.071	576	
29A		0.080	578	
30A		0.050	579	
31A		0.036	580	
29AA		0.074	578	

Notes: Blank cartridges : Lot 09146

Signed: _____ Date: 9/11/09

Spectrophotometer Logbook

@Air Toxics Ltd.

Log Book #: 1564

Work Order: 0908628B

Date: _____ **Method:** _____

Analyst: _____ **Wavelength:** _____

Prep. Notes:

8/31/09 AT

cont. from page 33

Standard ID	Concentration	ABS

r = _____

m = _____

b = _____

Fraction	Dilution	ABS	Sample ID	Sample Volume
21AA	2.00	0.778	101242	5.0 mL
BLK	1.00	0.035	NA	↓
BLK	↓	0.032	↓	
BLK		0.027		
LCS/CCV		0.736	NA	

8/31/09 AT

Notes: CCV/LCS prepared at 57 ug/mL

Signed: _____ Date: 8/31/09

Spectrophotometer Standard Preparation Log @Air Toxics Ltd. Log Book #: 1858

Standard ID: 1858-24
Project: Rad 172 Calibration Solution
Analyst: A. Toyama
Preparation Date: 8/31/09
Expiration Date: 8/31/09

Solvent: DI H_2O
Solvent Lot #: NA

Procedure/Comments: Dissolve 20 µl of 4-Pyridine-carboxaldehyde, 97% (14776-1103, Located F2214) in 200 mL DI H_2O. From this solution prepare dilutions at 1:2, 1:5, 1:10, 1:20 ~~and 1:40~~. 8/31/09 AT Stock Solution = 114 ug/mL

1:2) 250 µl Pyridine solution with 250 µl of DI H_2O = 57 ug/mL

1:5) 100 µl of Pyridine solution with 400 µl of DI H_2O = 22.8 ug/mL

1:10) 100 µl of Pyridine solution with 900 µl of DI H_2O = 11.4 ug/mL

1:20) 250 µl of Pyridine 1:10 solution with 250 µl of DI H_2O = 5.7 ug/mL (then remove 250 µl of 1:10 solution to yield final volume of 0.5 mL

Then add 4.5 mL of MBTH solution to each level, stir and let stand for 1 hour (cover with parafilm) Then read absorbance at 430 nm.

1 µg of 4-pyridylaldehyde = 0.224 µg of ozone

8/31/09
AT

Signed — Date: 8/31/09 — Reviewed — Date: 8/31/09

Shipping/ Receiving Documents

Air Toxics LTD.
Laboratory Services Since 1989

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Environmental Health & Engineering, Inc.
ATTENTION: Mr. Taeko Minegishi
FAX #: 781-247-4305
FROM: Sample Receiving
Workorder #: 0908628B
# of pages (Including Cover): 4

9/18/2009

Thank you for selecting Air Toxics Ltd. We have received your samples and have found discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Ausha Scott at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

The following discrepancy has been observed:

The number of samples received did not match the information on the Chain of Custody (COC). Sample 101577 was not received at ATL despite notation on the COC. Unless otherwise notified ATL will proceed with the analysis of the samples that were received.

Your prompt response is appreciated.

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

0908628

DATE: 27 Aug 09

FROM: Environmental Health and Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494-2725

TO: Air Toxics

Please send invoices to ATTN: Accounts Payable
Please send reports to ATTN: Data Coordinator

In all correspondence regarding this matter, please refer to EH&E Project # 16512

The cost of this analysis will be covered by EH&E Purchase Order # 16512

For EH & E Data Coordinator - URGENT DATA ☒

	SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	OTHER: Time/Date/Vol.
17A	101174	AIR PASSIVE	OZONE ANALYSIS 8/10/09	8/25/09
18A	101175			⌀
19A	101240		8/11/09	8/25/09
20A	101241			
21A	101242			
22A	101243			
23A	101244			
24A	101245			⌀
25A	101246			⌀
	~~101574~~			
26A	101575		8/12/09	8/27/09
27A	101576			
28A	101577			
29A	101578			
30A	101579			
31A	101580			⌀

Special Instructions:

☒ Standard turn around time ☐ Rush by _____ date/time ☐ Other _____

☐ Fax results 781-247-4305

☐ **RETURN SAMPLES**

☒ Electronic transfer - datacoordinator@ehsinc.com

☒ Additional report recipient mfragala@ehsinc.com

Fed-ex 8704 2333 3918

CUSTODY SEAL INTACT? Y N NONE TEMP 6 °C

Each signatory please return one copy of this form to the above address

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 8/27/09

Received by: _____ 9/29/09 of (company name) OSD ATL Date: _____

Relinquished by: _____ of (company name) _____ Date: _____

Received by: _____ of (company name) _____ Date: _____

Relinquished by: _____ of (company name) _____ Date: _____

Received by: _____ of (company name) _____ Date: _____

Lab Data
Received by: _____ of Environmental Health & Engineering, Inc. Date: _____

WHITE-EH&E FILE COPY YELLOW-LAB COPY PINK-PROJECT MANAGER COPY GOLD-DATA COORDINATOR COPY

Air Toxics LTD.
Laboratory Services Since 1989

SAMPLE RECEIPT SUMMARY

WORKORDER 0908628B

Client

Mr. Taeko Minegishi
Environmental Health &
Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Sales Rep: TL

Phone

800-825-5343

Fax

781-247-4305

Date Promised: 09/09/09 11:59 pm
Date Completed: 9/17/09
Date Received: 8/28/09
PO#: 16512
Project#: 16512

Total $: $ 770.00
Logged By: MG

Fraction	Sample #	Analysis	Collected	Amount$
17A	101174	ATL Applications	8/25/2009	$50.00
18A	101175	ATL Applications	NA	$50.00
19A	101240	ATL Applications	8/25/2009	$50.00
20A	101241	ATL Applications	8/25/2009	$50.00
21A	101242	ATL Applications	8/25/2009	$50.00
21AA	101242 Lab Duplicate	ATL Applications	8/25/2009	$0.00
22A	101243	ATL Applications	8/25/2009	$50.00
23A	101244	ATL Applications	8/25/2009	$50.00
24A	101245	ATL Applications	NA	$50.00
25A	101246	ATL Applications	NA	$50.00
26A	101575	ATL Applications	8/27/2009	$50.00
27A	101576	ATL Applications	8/27/2009	$50.00
28A(cancelled	101577	ATL Applications	8/27/2009	$0.00
29A	101578	ATL Applications	8/27/2009	$50.00
29AA	101578 Lab Duplicate	ATL Applications	8/27/2009	$0.00
30A	101579	ATL Applications	8/27/2009	$50.00
31A	101580	ATL Applications	NA	$50.00
32A	Method Blank	ATL Applications	NA	$0.00
32B	Method Blank	ATL Applications	NA	$0.00
32C	Method Blank	ATL Applications	NA	$0.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: CPSC Indoor Air Monitoring/13297

BILL TO: Accounts Payable
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Analysis Code: Other GC

TERMS:

Reporting Method: ATL Application #62 Ozone-Radiello 172

Air Toxics LTD.
Laboratory Services Since 1989

SAMPLE RECEIPT SUMMARY Continued

Client

Mr. Taeko Minegishi
Environmental Health &
Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Sales Rep: TL

Phone

800-825-5343

Fax

781-247-4305

Date Promised: 09/09/09 11:59 pm
Date Completed: 9/17/09
Date Received: 8/28/09
PO#: 16512
Project#: 16512

Total $: $ 770.00
Logged By: MG

Fraction	Sample #	Analysis	Collected	Amount$
33A	CCV	ATL Applications	NA	$0.00
Misc. Charges	eCVP (14) @ $5.00 each.			$70.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: CPSC Indoor Air Monitoring/13297

BILL TO: Accounts Payable
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Analysis Code: Other GC

TERMS:

Reporting Method: ATL Application #62 Ozone-Radiello 172

Sample Discrepancy Report

Identification

Initiated By: MG **Project ID:** 13297 **PM:** AS **Date:** 8/18/2009 **Discrepancy Type:** ☐ 1. ☒ 2. ☐ 3.

Workorder(s) affected: 0908628B **Sample(s) affected:** 28A

1. Sample Receipt Discrepancies

Narration Not Required:

1.1. ☐ Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.

1.2. ☐ No brass cap on canister.

1.3. ☐ Date of Collection noted on first sample, but no arrow down to indicate all samples.

Notify Lab for further determination:

1.4. ☐ Tedlar bag received with minimal volume.

Initials: _____ Date: _____

Narration Required in Lab Narrative and Sample Confirmation:

1.5. ☐ COC was not filled out in ink.

1.6. ☐ COC improperly relinquished / received.

1.7. ☐ Sample tags / can numbers do not match the COC.

1.8. ☐ Sample date ☐ error / ☐ missing on COC but noted on sample tag (check one).

1.9. ☐ Custody Seal on the outside of the container was ☐ broken / ☐ improperly placed (check one).

1.10. ☐ ID-none on the sample Tag/Blank

1.11. ☐ Other (describe below).

Describe the Discrepancy: _____

2. Sample Receipt/Screening Discrepancies requiring PM notification

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

If Section II. is filled out PM must be notified within 24 hrs of initiation

2.1. ☐ COC was not received with samples.

2.2. ☐ Analysis method(s) is ☐ not specified / ☐ incorrectly specified (check one) on the COC.

2.3. ☐ Incorrect sampling media / container for analysis requested.

2.4. ☒ Number of samples on the COC does not match the number of samples that were received.

2.5. ☐ Samples were received expired.

2.6. ☐ Sampling date (time for sulfur) is not documented for ☐ *some* / ☐ *any* samples (check one).

2.7. ☐ Sample received with amount of H_2O in the Tedlar Bag.

2.8. ☐ Sample cannot be analyzed. Container was ☐ received broken / ☐ leaking / ☐ flat / ☐ defective.

2.9. ☐ Tedlar bag / canister received emitting a strong odor; Sample ☐ can / ☐ cannot (check one) be analyzed.

2.10. ☐ Tedlar Bag for Sulfur analysis has metal fitting.

2.11. ☐ Environmental Supply Company valves

2.12. ☐ Sorbent samples-sampling volume was not provided

2.13. ☐ Flow controller used – canister samples received at ambient or under pressure.

2.14. ☐ Canister was at ambient pressure at time of pressurization and (check all that apply):

- ☐ Canister failed leak check on two manifolds,
- ☐ Canister valve was open,
- ☐ Brass nut was loose/not present.
- ☐ Sample can be analyzed
- ☐ Cannot be analyzed

2.15. ☐ Canister sample received with a vacuum difference >5.0"Hg between the receipt vac. And the final vac. reported on the COC, indicating loss of vacuum.

2.16. ☐ Canister sample received at >15"Hg (*not* identified as a Trip/Field Blank).

2.17. ☐ Canister Trip Blank received at low vacuum (< 25"Hg).

2.18. ☐ Sorbent Sample received outside method required temperature of 2°C to 6°C; ☐ ice / ☐ blue ice (check one) was present. A temp. Blank ☐ was / ☐ was not present (check one).

2.19. ☐ Other (describe below)

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐

Describe the Discrepancy: 2.4: Sample 28A was not received (Their sample 101577)

3. Lab Discrepancies requiring Team Leader/PM notification

Document in Analytical Notes of Lab Narrative

If Section III. is filled out PM must be notified within 24 hrs of initiation

3.1. ☐ Tedlar Bag found to be leaking at the time of analysis; sample ☐ can / ☐ cannot (check one) be analyzed.

3.2. ☐ Tedlar Bag found to be flat/low volume; sample cannot be analyzed.

3.3. ☐ Sulfur samples received with insufficient time to analyze prior to expiration.

3.4. ☐ Canister found to be leaking at the time of analysis.

3.5. ☐ VOST tube saturated; bag dilution necessary.

3.6. ☐ Sample loss due to instrument malfunction / broken glassware.

3.7. ☐ Low/high surrogate recoveries noted in QC/sample(s) for extractable samples.

3.8. ☐ Reporting Limit was raised.

3.9. ☐ Post weight > Pre weight in field/lab Blank for PM10/TSP samples.

3.10. ☐ Other (describe below).

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐ _____

Team Lead Initials: _____ **Date:** _____

Describe the Discrepancy: _____

_____

_____

How Does this Affect Client: _____

_____

_____

Project Manager Use Only

Project Manager Notification ☒ **Section 2 Complete** ☐ **Section 3 Complete**

Action:

☐ It is not necessary to notify the client. Narrate the discrepancy in Receiving Notes/Analytical Notes of Lab Narrative.

PM Initials:_____ Date: _____

☒ Client notification required. See attached client contact / email, or comments below:

Client Notification:

PM Initials:AS Person notified: B.Baker Date: 8/31/2009

☐ Waiting for Client Reply

Comments: **Client did not indicate the missing samples would be submitted. Please narrate and proceed.**

_____

☐ Notify Lab Name: _____ Date: _____ **Notify Receiving:** ☒

☐ **Additional notifications attached.**

Additional Comments:

____

Other Records

Air Toxics LTD.
Laboratory Services Since 1989

Method : ATL Application #62 Ozone-Radiello 172

CAS Number	Compound	Rpt. Limit (ug)
10028-15-6	Ozone	1.0

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0908628B

A1 A2 R T M Q

- Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
- The final report has the correct reporting list, special units, and header info.
- Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
- Sample Discrepancy Report (SDR) is completed
- Corrective Action issued - # ______________
- Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* ***CIRCLE (YES / NO)***

- Lab Blank, CCV, LCS and DUP met QC criteria
- Hold time is met for all samples
- Appropriate data qualifier flags are applied
- Manual integrations for samples and QC are properly documented
- Samples analyzed within the project or method specific clock
- Retention times have been verified
- Appropriate ICAL(s) included
- At least one result per sample is verified against the target quant sheets/raw data

- Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
- Correct amount of sample analyzed (i.e. sample not over-diluted)
- Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
- TICs resemble reference spectra
- TICs between duplicate samples are consistent
- Checked samples for trends (i.e. Influent vs. Effluent, Field Dups, Field/Trip Blank, etc.)
- Data for multiple analyses of sample(s) has been evaluated for comparability of results
- Special units for all samples in the final report are correctly calculated
- Manually entered results checked (i.e. TPH/NMOC)
- Chain of Custody verified for any special comments (i.e. different compounds/RLs, action levels)
- Chain of Custody scanned correctly
- Verify sample id's vs. chain of custody
- Date MDL(s) performed per instrument(s) ______________
- Samples pressurized w/ appropriate gas (N_2 or He) — Other (i.e. Tedlar bag, cartridge, sorbent) Rard 172
- Final pressure consistent with canister size (6L vs. 1L)
- Verify receipt pressures
- Verify canister ID #'s
- Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
- MDL date(s) present for all instruments utilized
- Client LUMEN report reviewed for accuracy and completeness

Notes: *(to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)*

A/R:

#28: Cancelled

Dup. 21A, 29A

M/Q:

A_1/A_2 (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
A_1: 9/11/09	R:	9/17/09	
A_2:	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply. Rev. 02/20/09

Note (2): Management reviewer and reporting reviewer must be separate individuals.