

COMPREHENSIVE VALIDATION PACKAGE

ATL Applications

INVENTORY SHEET

WORK ORDER # 0909552B

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Completed by:

Kara McKiernan

(Signature)

Kara McKiernan/ Document Control

(Print Name & Title)

10/15/09

(Date)

WORK ORDER #: 0909552B

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:	09/25/2009	CONTACT:	Ausha Scott
DATE COMPLETED:	10/13/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
16A	106667	ATL Applications
17A	106668	ATL Applications
18A	106687	ATL Applications
19A	106688	ATL Applications
20A	106689	ATL Applications
21A	106690	ATL Applications
22A	106691	ATL Applications
23A	106692	ATL Applications
24A	106716	ATL Applications
25A	106717	ATL Applications
25AA	106717 Lab Duplicate	ATL Applications
26A	106718	ATL Applications
26AA	106718 Lab Duplicate	ATL Applications
27A	106719	ATL Applications
28A	106720	ATL Applications
29A	106721	ATL Applications
30A	106745	ATL Applications
31A	106746	ATL Applications

Continued on next page

WORK ORDER #: 0909552B

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: 09/25/2009 **CONTACT:** Ausha Scott

DATE COMPLETED: 10/13/2009

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
32A	Lab Blank	ATL Applications
32B	Lab Blank	ATL Applications
33A	CCV	ATL Applications

CERTIFIED BY: *Sinda A. Truman*
Laboratory Director

DATE: 10/13/09

**LABORATORY NARRATIVE
Nitrogen Dioxide by Radiello 166
Environmental Health & Engineering, Inc.
Workorder# 0909552B**

Sixteen Radiello 166 (NO₂) samples were received on September 25, 2009. The procedure involves extraction of nitrite from reaction of NO₂ with triethanolamine. Absorbance of nitrite is then measured at 537 nm using a spectrophotometer. Results are reported in uG and uG/m³.

Sampling rate of 141 mL/min was provided by the manufacturer.

Receiving Notes

There were no receiving discrepancies.

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 20160 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 # 61 for RAD 166 (Nitrogen Dioxide)

Spectrophotometer

Field	Lab	Collection Date	Analysis Date	Dilution Factor	Reporting Limit (ug)	Reporting Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
106667	0909552B-16A	9/21/2009	9/29/2009	1.00	0.32	0.23	9.0	6.4
106668	0909552B-17A	NA	9/29/2009	1.00	0.32	0.22	ND	ND
106687	0909552B-18A	9/21/2009	9/29/2009	1.00	0.32	0.23	4.0	2.9
106688	0909552B-19A	9/21/2009	9/29/2009	1.00	0.32	0.23	3.7	2.6
106689	0909552B-20A	9/21/2009	9/29/2009	1.00	0.32	0.23	3.2	2.3
106690	0909552B-21A	9/21/2009	9/29/2009	1.00	0.32	0.23	5.1	3.6
106691	0909552B-22A	9/21/2009	9/29/2009	1.00	0.32	0.23	4.7	3.3
106692	0909552B-23A	NA	9/29/2009	1.00	0.32	0.22	ND	ND
106716	0909552B-24A	9/21/2009	9/29/2009	1.00	0.32	0.23	13	9.2
106717	0909552B-25A	9/21/2009	9/29/2009	1.00	0.32	0.23	13	9.3
106717 Lab Duplicate	0909552B-25AA	9/21/2009	9/29/2009	1.00	0.32	0.23	13	9.3
106718	0909552B-26A	9/21/2009	9/29/2009	1.00	0.32	0.23	9.4	6.7
106718 Lab Duplicate	0909552B-26AA	9/21/2009	9/29/2009	1.00	0.32	0.23	9.9	7.0
106719	0909552B-27A	9/21/2009	9/29/2009	1.00	0.32	0.23	13	9.2
106720	0909552B-28A	9/21/2009	9/29/2009	1.00	0.32	0.23	8.1	5.8
106721	0909552B-29A	NA	9/29/2009	1.00	0.32	0.22	ND	ND
106745	0909552B-30A	9/22/2009	9/29/2009	1.00	0.32	0.22	8.2	5.4
106746	0909552B-31A	9/22/2009	9/29/2009	1.00	0.32	0.22	13	8.4
Method Blank	0909552B-32A	NA	9/29/2009	1.00	0.32	0.22	ND	ND
Method Blank	0909552B-32B	NA	9/29/2009	1.00	0.32	0.22	ND	ND
CCV	0909552B-33A	NA	9/29/2009	1.00	0.32	0.22	%Rec 100	

COMMENTS: 1. NA=Not Applicable

2. ND=Not Detected

3. Exposure time of 20160 minutes was assumed for the QC samples.

4. Background subtraction not performed.

Dioxide Radiello Calculation Worksheet

Workorder #: **09095528**
 Sampling Rate (ng/(ppb*min)) 0.141 Typically 0.96 for NO2
 Sampling T (deg C) 25 Typically 25
 Volume (ml) 5 Typically 5 for NO2
 Date of Analysis: 9/29/2009

1000ng/Lug

(Abs-Y-int)/DF Conc (ug) in full 5 ml of sample
 Slope 0.5ml
 Conc (ug) x 1000 Q x Duration
 DOBox nmw 24.45

LabSampleID	Client	Date of Collection	Abs	Duration (min)	DF	Conc (ug) (for 0.5ml Aliquot)	Conc (ug) in full 5 ml of sample	Conc (ppb)	Conc (ug/m3)
16A	106667	9/21/2009	0.214	18720	1.00	0.9032618674	9.032618674	3.422	6.438
17A	106668	NA	0.011	20160	1.00	0.005172927	0.051729266	0.018	0.034
18A	106687	9/21/2009	0.101	18720	1.00	0.403340437	4.033404373	1.528	2.875
19A	106688	9/21/2009	0.093	18720	1.00	0.36794777	3.679477697	1.394	2.623
20A	106689	9/21/2009	0.083	18720	1.00	0.323706935	3.237069352	1.226	2.307
21A	106690	9/21/2009	0.125	18720	1.00	0.50951844	5.095184402	1.930	3.632
22A	106691	9/21/2009	0.115	18720	1.00	0.465277606	4.652776056	1.763	3.316
23A	106692	NA	0.011	20160	1.00	0.005172927	0.051729266	0.018	0.034
24A	106716	9/21/2009	0.302	18720	1.00	1.297581211	12.92581211	4.897	9.213
25A	106717	9/21/2009	0.305	18720	1.00	1.305853462	13.05853462	4.947	9.308
25AA	106717 Lab Duplicate	9/21/2009	0.306	18720	1.00	1.310277545	13.10277545	4.964	9.339
26A	106718	9/21/2009	0.223	18720	1.00	0.943078618	9.430786185	3.573	6.722
26AA	106718 Lab Duplicate	9/21/2009	0.233	18720	1.00	0.987319453	9.87319453	3.741	7.037
27A	106719	9/21/2009	0.301	18720	1.00	1.288157128	12.88157128	4.880	9.182
28A	106720	9/21/2009	0.194	18720	1.00	0.8147801983	8.147801983	3.087	5.808
29A	106721	NA	0.010	20160	1.00	0.000748843	0.007488432	0.003	0.005
30A	106745	9/22/2009	0.195	20160	1.00	0.819204282	8.192042818	2.882	5.422
31A	106746	9/22/2009	0.297	20160	1.00	1.270460794	12.70460794	4.469	8.409
32A	Method Blank	NA	0.012	20160	1.00	-0.043491991	-0.434919913	#DNV/01	#DNV/01
32B	Method Blank	NA	0.015	20160	1.00	-0.043491991	-0.434919913	#DNV/01	#DNV/01
33A	CCV	NA	0.157	20160	1.00	0.00959701	0.095970101	0.034	0.064
						0.651089111	6.510891106	2.291	4.309

QC Duration 20160
 CCV Spike Amt ug per 0.5 ml 0.65

1000ng/1ug

Low PointKDF RL(ug)5 (ml) RL (ug) x 1000 ppbX mmw
0.5ml Q x Duration 24.45

Calibration Data

Calibration Date 9/29/2009 Linear Regression

0.5 ml Aliquot of Cal STD

Slope 0.226085519
Y-Int 0.0098830735
R2 0.999636861

RL(ug) for 0.5 ml aliquot	RL (ug) in full 5 ml of sample	RL (ppb)	RL (ug/m3)	Result (ug)	Result (ug/m3)	%Rec	ug/ml of NO2	ug of NO2	absorbance
0.033	0.325	0.1	0.232	9.032618674	6.438247789		0	0	0
0.033	0.325	0.1	0.215	ND	ND		0.065	0.0325	0.012
0.033	0.325	0.1	0.232	4.033404373	2.874920078		0.325	0.1625	0.042
0.033	0.325	0.1	0.232	3.679477697	2.62264909		1.3	0.65	0.156
0.033	0.325	0.1	0.232	3.237069352	2.307310355		6.5	3.25	0.765
0.033	0.325	0.1	0.232	5.095184402	3.631733043		13	6.5	1.469
0.033	0.325	0.1	0.232	4.652776056	3.316394308				
0.033	0.325	0.1	0.215	ND	ND				
0.033	0.325	0.1	0.232	12.92581211	9.213228661				
0.033	0.325	0.1	0.232	13.05853462	9.307830281				
0.033	0.325	0.1	0.232	13.10277545	9.339364155				
0.033	0.325	0.1	0.232	9.430786185	6.72052651				
0.033	0.325	0.1	0.232	9.87319453	7.037391386				
0.033	0.325	0.1	0.232	12.88157128	9.181694787				
0.033	0.325	0.1	0.232	8.147801983	5.807570318				
0.033	0.325	0.1	0.215	ND	ND				
0.033	0.325	0.1	0.215	8.192042818	5.422025321				
0.033	0.325	0.1	0.215	12.70460794	8.408733629				
0.033	0.325	#DNV/01	#DNV/01	ND	#DNV/01				
0.033	0.325	#DNV/01	#DNV/01	ND	#DNV/01				
0.033	0.325	#DNV/01	#DNV/01	ND	#DNV/01				
0.033	0.325	#DNV/01	#DNV/01	ND	#DNV/01				
0.033	0.325	0.1	0.215	ND	ND				
0.033	0.325	0.1	0.215	ND	ND	%Rec			
0.033	0.325	0.1	0.215	6.510891106	4.309330069	100			

QC Results and Raw Data

Work Order: 0909552B

Date: 9/29/09

Method: Rad 166

Analyst: M. Skidmore

Wavelength: 537 nm

Standard ID	Concentration	ABS
Level 1 1858-59-E	0.065 µg/mL	0.012
Level 2 -D	0.325 µg/mL	0.042
Level 3 -C	1.3 µg/mL	0.156
Level 4 -B	6.5 µg/mL	0.765
Level 5 -A	13 µg/mL	1.409
ICV 1858-61	1.3 µg/mL	0.161

$r = \frac{0.9996}{0.2260}$
 $m = \frac{0.2260}{0.00983}$
 $b = 0.00983$

ICV % Recovery = 103%

Fraction	Dilution	ABS	Sample ID	Sample Volume	Comments
16A	1.00	0.214	106667	5.0 mL	
17A		0.011	106668		
18A		0.101	106687		
19A		0.093	106688		
20A		0.083	106689		
21A		0.125	106690		
22A		0.115	106691		
23A		0.011	106692		
24A		0.302	106716		
25A		0.305	106717		
25AA		0.306	106717		
26A		0.223	106718		
26AA		0.223	106718		
27A		0.301	106719		
28A		0.194	106720		
29A		0.010	106721		
30A		0.195	106745		
31A		0.297	106746		
BIK		0.012	N/A		
BIK		0.015			
LCS		0.157			
CCV		0.157			

Procedure:

M. Skidmore
Signed

9/30/09
Date

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 1858

Standard ID: 1858-39

Solvent: DJ H₂O

Project: NEDA Solution Rad 166

Solvent Lot #: N/A

Analyst: M. Skidmore

Preparation Date: 9/18/09

Expiration Date: ~~11/18/09~~ until when solution turns brown

Procedure/Comments: Dissolve 250 mg of N-(1-Naphthyl)ethylenediamine d. hydrochloride, 98% (14-76-1105, located ERIA) in 250 mL DI H₂O.

MJS
9/18/09

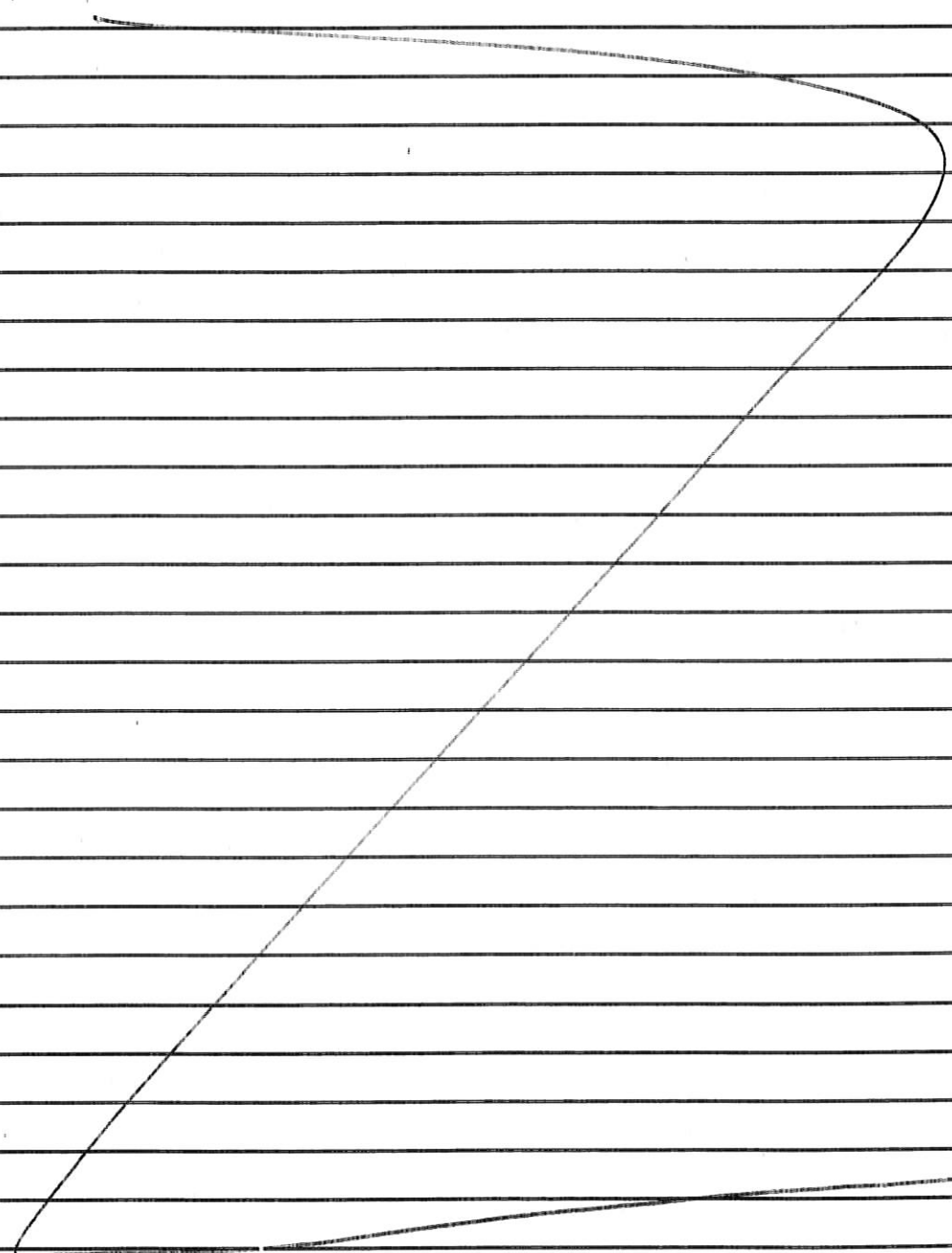
Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 1858

Standard ID: 1858-58
Project: Sulfanilamide Solution Reel 166
Analyst: M. Skidmore
Preparation Date: 9/29/09
Expiration Date: 9/29/09

Solvent: HCl/H₂O
Solvent Lot #: HCl: 49198

Procedure/Comments: Dissolve 5.0 g of Sulfanilamide, 99% (1476-1104)
(located in ERIA) in 50 mL of concentrated HCl and
dilute to 500 mL with D.I. H₂O.



MS
9/29/09

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 1858

Standard ID: 1858-59
Project: Calibration Solutions Rad 166
Analyst: M. Skidmore
Preparation Date: 9/29/09
Expiration Date: 9/29/09

Solvent: D.I. H₂O
Solvent Lot #: N/A

Procedure/Comments: _____

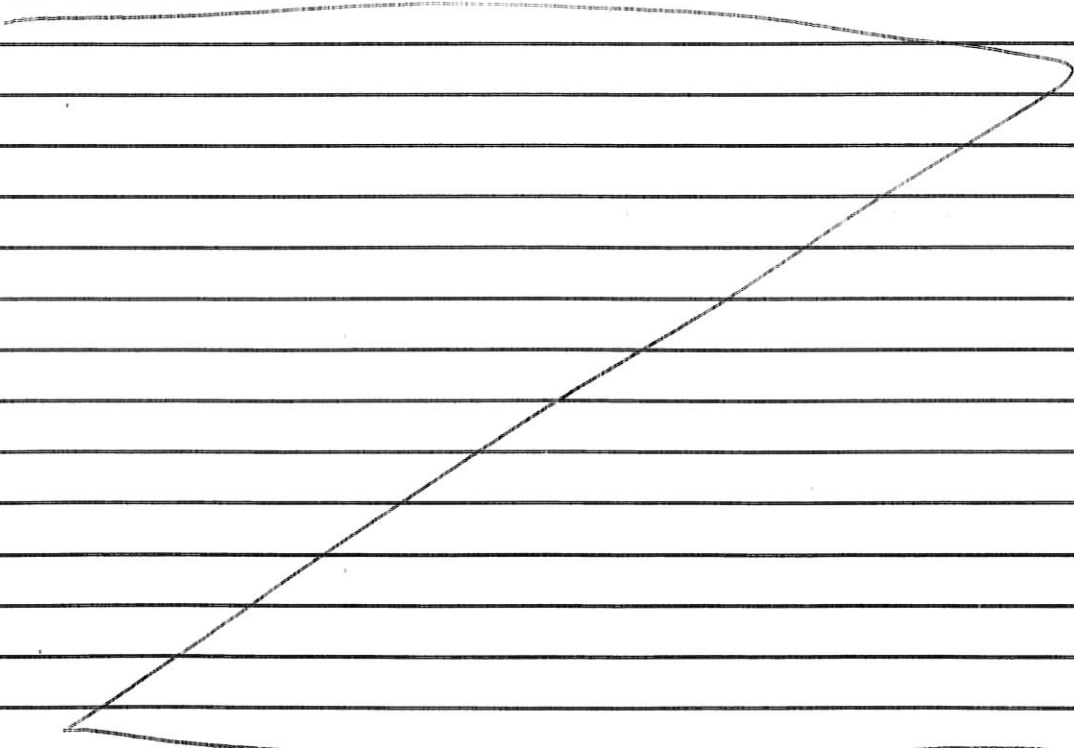
Dissolve 5 mg of Sodium Nitrate, 97% (located in ER2D) in 250 mL of D.I. H₂O to yield 13 µg/mL or 13 mg/L. From this solution, dilute to make:

6.5 µg/mL	1.3 µg/mL	0.325 µg/mL	0.065 µg/mL
(315:630)	(130:650)	(150:600)	(100:500)

Each of these uses serial dilution from the previous solution.

To each of these calibration levels, add 5 mL of sulfanilamide solution, cap tightly, stir and wait 5 minutes. Then add 1 mL of NEDA solution, stir and wait 10 minutes. Measure the absorbance at 537 nm.

MJS 9/29/09



MJS
9/29/09

M. Skidmore 9/29/09
Signed Date

Reviewed Date

Spectrophotometer Standard Preparation Log

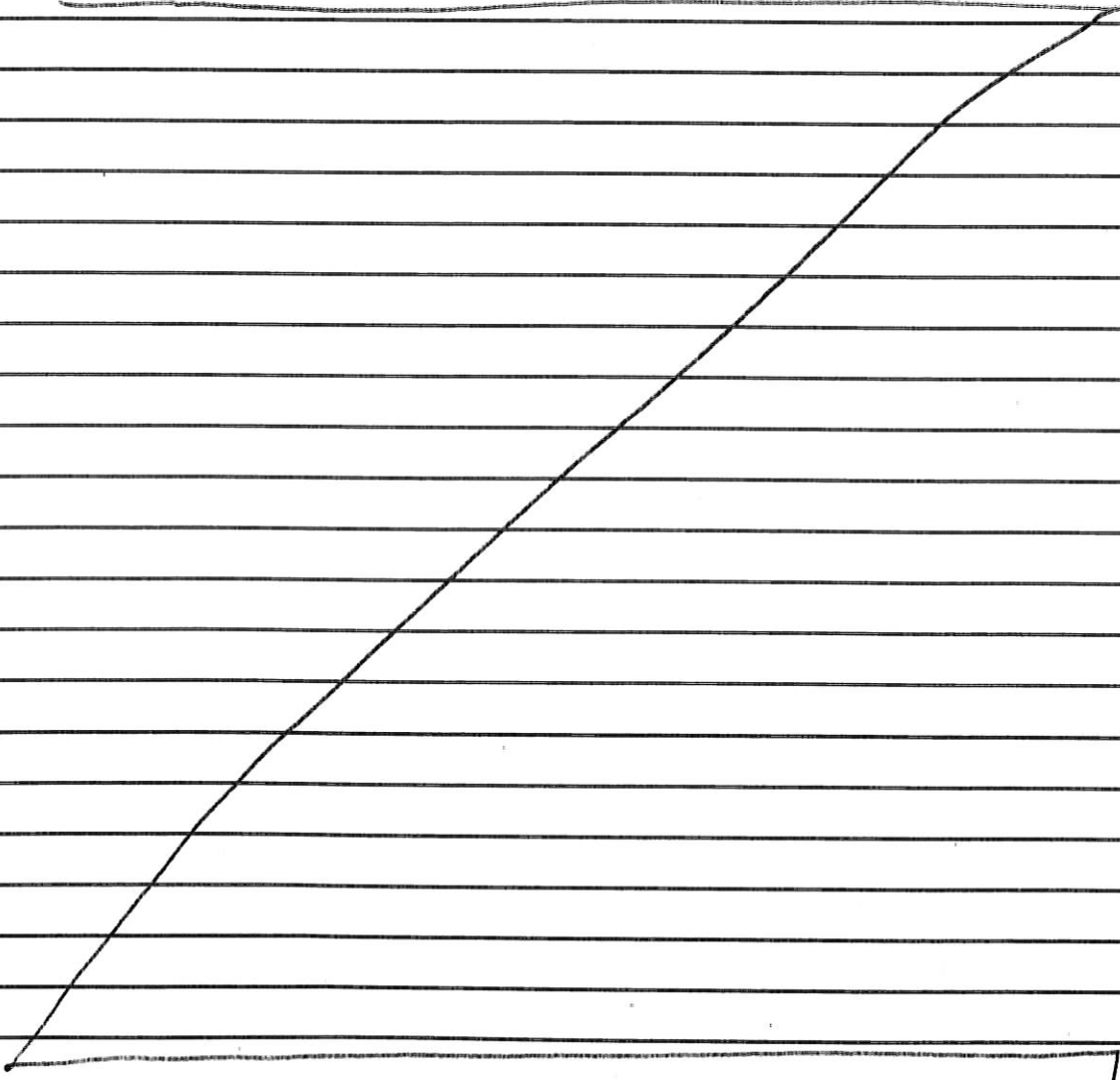
@Air Toxics Ltd. Log Book #: 1858

Standard ID: 1858-61
Project: TCV Rad 166
Analyst: U
Preparation Date: 9/29/09
Expiration Date: 9/29/09

Solvent: DI H2O
Solvent Lot #: NA

Procedure/Comments:

Dissolve 5 mg of Sodium Nitrate, 97% (located in ER2D) in 250 mL of D.I. H₂O to yield 13 µg/mL or 13 mg/L. 100 µL of this solution was diluted with D.I. H₂O to a volume of 1.0 mL. 0.5 mL of this solution was added to a cuvette. 5 mL of sulfanilamide solution was added to the cuvette. The solution was parafilmmed and stirred and allowed to stand for 5 minutes. 1.0 mL of NEDA solution was then added and was stirred and allowed to sit for 10 minutes. The absorbance was then read at 537 nm.



Signed: [Signature] Date: 9/29/09 Reviewed: [Signature] Date: 10/9/09

Shipping/ Receiving Documents

**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 #: 0909552B
of pages (Including Cover): 4

10/15/2009

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no 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.

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

0909552

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

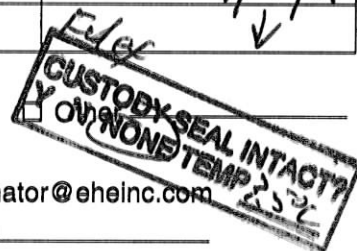
The cost of this analysis will be covered by EH&E Purchase Order # 16512

For EH & E Data Coordinator - URGENT DATA

SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	START	OTHER: Time/Date/Vol.	
106667	AIR/PASSIVE	NO ₂ SO ₂ HF ANALYSIS	9/8/09	9/21/09	
106668			↓	φ	
106687			9/8/09	9/21/09	
106688			↓	φ	9/21/09
106689					
106690			↓	φ	9/21/09
106691					
106692					
106716			9/8/09	φ	9/21/09
106717			↓	φ	9/22/09
106718					
106719					
106720					
106721	↓	φ	9/22/09		
106745					
106746	↓	↓	↓		

Special Instructions:

- Standard turn around time
- Fax results 781-247-4305
- RETURN SAMPLES
- Additional report recipient rrfragala@ehinc.com
- Rush by _____ date/time
- Electronic transfer - datacoordinator@ehinc.com



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

Relinquished by: [Signature] of Environmental Health & Engineering, Inc. Date: 9/24/09
 Received by: [Signature] of (company name) ATI Date: 9/23/09
 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: _____

SAMPLE RECEIPT SUMMARY

WORKORDER 0909552B

Client	Phone	Date Promised: 10/06/09 11:59 pm
Mr. Taeko Minegishi	800-825-5343	Date Completed: 10/13/09
Environmental Health & Engineering, Inc.	Fax	Date Received: 9/25/09
117 Fourth Avenue	781-247-4305	PO#: 16512
Needham, MA 02494		Project#: 16512
Sales Rep: TL		Total \$: \$ 720.00
		Logged By: MW

<u>Fraction</u>	<u>Sample #</u>	<u>Analysis</u>	<u>Collected</u>	<u>Amount\$</u>
16A	106667	ATL Applications	9/21/2009	\$40.00
17A	106668	ATL Applications	NA	\$40.00
18A	106687	ATL Applications	9/21/2009	\$40.00
19A	106688	ATL Applications	9/21/2009	\$40.00
20A	106689	ATL Applications	9/21/2009	\$40.00
21A	106690	ATL Applications	9/21/2009	\$40.00
22A	106691	ATL Applications	9/21/2009	\$40.00
23A	106692	ATL Applications	NA	\$40.00
24A	106716	ATL Applications	9/21/2009	\$40.00
25A	106717	ATL Applications	9/21/2009	\$40.00
25AA	106717 Lab Duplicate	ATL Applications	9/21/2009	\$0.00
26A	106718	ATL Applications	9/21/2009	\$40.00
26AA	106718 Lab Duplicate	ATL Applications	9/21/2009	\$0.00
27A	106719	ATL Applications	9/21/2009	\$40.00
28A	106720	ATL Applications	9/21/2009	\$40.00
29A	106721	ATL Applications	NA	\$40.00
30A	106745	ATL Applications	9/22/2009	\$40.00
31A	106746	ATL Applications	9/22/2009	\$40.00
32A	Lab Blank	ATL Applications	NA	\$0.00
32B	Lab 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 #61 NO2-Radiello 166

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

SAMPLE RECEIPT SUMMARY Continued

Client

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

Phone

800-825-5343

Fax

781-247-4305

Date Promised: 10/06/09 11:59 pm

Date Completed: 10/13/09

Date Received: 9/25/09

PO#: 16512

Project#: 16512

Total \$: \$ 720.00

Logged By: MW

Sales Rep: TL

<u>Fraction</u>	<u>Sample #</u>	<u>Analysis</u>	<u>Collected</u>	<u>Amount\$</u>
33A	CCV	ATL Applications	NA	\$0.00
Misc. Charges eCVP (16) @ \$5.00 each.				\$80.00

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 #61 NO2-Radiello 166

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

Other Records



Method : ATL Application #61 NO2-Radiello 166

CAS Number	Compound	Rpt. Limit (ug)
10102-44-0	Nitrogen Dioxide	1.0

DATA REVIEW CHECKLIST

Work Order #:

0909552B

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) 9/21/09
Samples pressurized w/ appropriate gas (N2 or He) Other (i.e. Tedlar bag, cartridge, sorbent)
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:
M/Q:

A1/A2 (Analytical Review/Date) R/T (Reporting Review/Date) M (Management Review/Date) Q (QA Review/Date)
A1: R: M: 10/13/09
A2: 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.