@AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

ATL Applications

INVENTORY SHEET

WORK ORDER # 0909559C

	Page Nos. From	Page Nos. To
1. Work Order Cover Page & Laboratory Narrative & Table	1	3
2. Sample Results and Raw Data (Organized By Sample)	4	7
a. ATL Sample Results Form		
b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary (If Applicable)		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
3. QC Results and Raw Data		
a. Method Blank (Results + Raw Data)	-	-
b. Surrogate Recovery Summary Form (If Applicable)	-	-
c. Internal Standard Summary Form (If Applicable)	-	-
d. Duplicate Results Summary Sheet	-	-
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data)	-	-
f. Initial Calibration Data (Summary Sheet + Raw Data)	-	-
g. MDL Study (If Applicable)	-	-
h. Continuing Calibration Verification Data	-	-
i. Second Source LCS (Summary + Raw Data)	-	-
j. Extraction Logs	-	-
k. Instrument Run Logs/Software Verification	8	14
l. GC/MS Tune (Results + Raw Data)	-	-
4. Shipping/Receiving Documents:		
a. Login Receipt Summary Sheet	15	16
b. Chain-of-Custody Records	17	17
c. Sample Log-In Sheet	18	19
d. Misc. Shipping/Receiving Records (list individual records)		
Sample Receipt Discrepancy Report	-	-
5. Other Records (describe or list)		
a. Manual Spectral Defense	-	-
b. Manual Intergrations	-	-
c. Manual Calculations	-	-
d. Canister Dilution Factors	-	-
e. Laboratory Corrective Action Request	-	-
f. CAS Number Reference	20	21
g. Variance Table	-	-
h. Canister Certification	-	-
i. Data Review Check Sheet	22	22

Completed by:

Kara McKiernan	Kara McKiernan/ Document Control	10/20/09
(Signature)	(Print Name & Title)	(Date)

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0909559C

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:	10/16/2009		

FRACTION #	NAME	TEST
32A	106735	ATL Applications
33A	106736	ATL Applications
34A	106737	ATL Applications
34AA	106737 Lab Duplicate	ATL Applications
35A	106738	ATL Applications
36A	106762	ATL Applications
37A	106763	ATL Applications
38A	106764	ATL Applications
38AA	106764 Lab Duplicate	ATL Applications
39A	106765	ATL Applications
40A	106766	ATL Applications
41A	106767	ATL Applications
42A	106791	ATL Applications
43A	106792	ATL Applications
44A	106793	ATL Applications
45A	106794	ATL Applications
46A	106795	ATL Applications
47A	106796	ATL Applications

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0909559C

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:	10/16/2009		

FRACTION #	NAME	TEST
48A	Lab Blank	ATL Applications
48B	Lab Blank	ATL Applications
49A	CCV	ATL Applications

CERTIFIED BY: Linda J. Freeman

Laboratory Director

DATE: 10/16/09

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

LABORATORY NARRATIVE
Hydrogen Sulfide by Radiello 170
Environmental Health & Engineering, Inc.
Workorder# 0909559C

Sixteen Radiello 170 (H2S) samples were received on September 25, 2009. The procedure involves adsorption of H2S by zinc acetate to form zinc sulfide. The sulfide is then recovered by extraction with water and addition of ferric chloride in a strongly acidic solution to produce methylene blue. Methylene blue absorbance is then measured at 665 nm using a spectrophotometer. Results are reported in uG and uG/m3.

Sampling rate of 69 mL/min for H2S 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 # 59 for RAD 170 (Hydrogen Sulfide)

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)
106735	0909559C-32A	9/22/2009	10/1/2009	1.00	0.80	0.54	2.9	1.9
106736	0909559C-33A	9/22/2009	10/1/2009	1.00	0.80	0.54	1.6	1.0
106737	0909559C-34A	9/22/2009	10/1/2009	1.00	0.80	0.54	2.1	1.4
106737 Lab Duplicate	0909559C-34AA	9/22/2009	10/1/2009	1.00	0.80	0.54	2.3	1.6
106738	0909559C-35A	NA	10/1/2009	1.00	0.80	0.54	ND	ND
106762	0909559C-36A	9/22/2009	10/1/2009	1.00	0.80	0.54	0.98	0.67
106763	0909559C-37A	9/22/2009	10/1/2009	1.00	0.80	0.54	ND	ND
106764	0909559C-38A	9/22/2009	10/1/2009	1.00	0.80	0.54	3.0	2.0
106764 Lab Duplicate	0909559C-38AA	9/22/2009	10/1/2009	1.00	0.80	0.54	3.3	2.2
106765	0909559C-39A	9/22/2009	10/1/2009	1.00	0.80	0.54	0.82	0.55
106766	0909559C-40A	9/22/2009	10/1/2009	1.00	0.80	0.54	ND	ND
106767	0909559C-41A	NA	10/1/2009	1.00	0.80	0.54	ND	ND
106791	0909559C-42A	9/23/2009	10/1/2009	1.00	0.80	0.54	3.6	2.4
106792	0909559C-43A	9/23/2009	10/1/2009	1.00	0.80	0.54	4.1	2.8
106793	0909559C-44A	9/23/2009	10/1/2009	1.00	0.80	0.54	5.6	3.8
106794	0909559C-45A	9/23/2009	10/1/2009	1.00	0.80	0.54	3.3	2.2
106795	0909559C-46A	9/23/2009	10/1/2009	1.00	0.80	0.54	4.2	2.8
106796	0909559C-47A	NA	10/1/2009	1.00	0.80	0.54	ND	ND
Method Blank	0909559C-48A	NA	10/1/2009	1.00	0.80	0.54	ND	ND
Method Blank	0909559C-48B	NA	10/1/2009	1.00	0.80	0.54	ND	ND
							%Rec	
CCV	0909559C-49A	NA	10/1/2009	1.00	0.80	0.54	104	

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.

0005

Hydrogen Sulfide Radiello Calculation Worksheet

Workorder #: 0909559C

Sampling Rate (ng/ppb.min) 0.096 Typically0.096 for H2S

Sampling T (deg C) 25 Typically 25

Volume (mL) 10.5 Typically 10.5 for H2S

Date of Analysis: 10/1/2009

Corrected Q 0.096 Takes into account temp

Q includes conversion from Sulfide to H2S

(Abs-Y-int)xDF / Slope

Conc(ug/mL)xVol (mL)

conc (ug sulfide) *MW H2S / MW Sulfide

Conc (ug) x 1000 / Q x Duration

ppbx mw / 24.45

T Corrected, no Blank correction

LabSampleID	Client	Date of Collection	Abs	Duration (min)	DF	Conc (ug/mL) of sulfide	Conc (ug) of sulfide	Conc (ug) of H2S	Conc (ppb) of H2S	Conc (ug/m3) of H2S
32A	106735	9/22/2009	0.296	20160	1.00	0.257329394	2.701958636	2.871473471	1.396	1.946
33A	106736	9/22/2009	0.169	20160	1.00	0.139216472	1.461772955	1.553481318	0.755	1.053
34A	106737	9/22/2009	0.220	20160	1.00	0.186647645	1.959800276	2.082753758	1.013	1.412
34AA	106737 Lab Duplicate	9/22/2009	0.243	20160	1.00	0.208038175	2.184400832	2.32144525	1.129	1.573
35A	106738	NA	0.015	20160	1.00	-0.004007071	-0.042074248	-0.044713892	-0.022	-0.030
36A	106762	9/22/2009	0.114	20160	1.00	0.088065207	0.924684669	0.982697314	0.478	0.666
37A	106763	9/22/2009	0.08	20160	1.00	0.056444424	0.592666455	0.629849021	0.306	0.427
38A	106764	9/22/2009	0.307	20160	1.00	0.267559647	2.809376293	2.985630272	1.452	2.023
38AA	106764 Lab Duplicate	9/22/2009	0.337	20160	1.00	0.295460337	3.102333541	3.296967001	1.603	2.234
39A	106765	9/22/2009	0.098	20160	1.00	0.073184838	0.768440803	0.816651059	0.397	0.553
40A	106766	9/22/2009	0.093	20160	1.00	0.068534723	0.719614595	0.764761604	0.372	0.518
41A	106767	NA	0.019	20160	1.00	-0.000286979	-0.003013281	-0.003202328	-0.002	-0.002
42A	106791	9/23/2009	0.369	20160	1.00	0.325221073	3.414821271	3.629059512	1.764	2.460
43A	106792	9/23/2009	0.416	20160	1.00	0.368932155	3.873787625	4.116820388	2.002	2.790
44A	106793	9/23/2009	0.557	20160	1.00	0.500065399	5.250686688	5.580103015	2.713	3.782
45A	106794	9/23/2009	0.335	20160	1.00	0.293600291	3.082803057	3.276211219	1.593	2.220
46A	106795	9/23/2009	0.425	20160	1.00	0.377302362	3.9616748	4.210221407	2.047	2.853
47A	106796	NA	0.017	20160	1.00	-0.002147025	-0.022543765	-0.02395811	-0.012	-0.016
					1.00	-0.017957416	-0.188552871	-0.200382256	#DIV/0!	#DIV/0!
					1.00	-0.017957416	-0.188552871	-0.200382256	#DIV/0!	#DIV/0!
					1.00	-0.017957416	-0.188552871	-0.200382256	#DIV/0!	#DIV/0!
					1.00	-0.017957416	-0.188552871	-0.200382256	#DIV/0!	#DIV/0!
48A	Method Blank	NA	0.013	20160	1.00	-0.005867117	-0.061604731	-0.065469674	-0.032	-0.044
48B	Method Blank	NA	0.011	20160	1.00	-0.007727163	-0.081135214	-0.086225456	-0.042	-0.058
49A	CCV	NA	0.339	20160	1.00	0.297320383	3.121864024	3.317722783	1.613	2.249

QC Duration	CCV Spike Amt
20160	0.286

Verified: HH and AW on 9/4/09

Q includes conversion from Sulfide to H2S

Calibration Date

Low PointxDF	RL(ug/mL)xVol (mL)	RL (ug sulfide) *MW H2S / MW Sulfide	RL (ug) x 1000 / Q x Duration	ppbx mw / 24.45					Calibration Data	10/1/2009 Linear Regression		
					T Corrected, no Blank correction							
RL(ug/ml) of sulfide	RL (ug) of sulfide	RL (ug) of H2S	RL (ppb) of H2S	RL (ug/m3)	Result (ug) H2S	Result (ug/m3) H2S	%Rec		ug/ml of sulfide	absorbance		
0.072	0.752	0.798966249	0.39	0.541	2.871473471	1.946090999			0	0	Slope	1.075242217
0.072	0.752	0.798966249	0.39	0.541	1.553481318	1.052844834			0.0716	0.086	Y-int	0.019308572
0.072	0.752	0.798966249	0.39	0.541	2.082753758	1.411549987			0.143	0.169	R2	0.999566265
0.072	0.752	0.798966249	0.39	0.541	2.32144525	1.573318977			0.286	0.338		
0.072	0.752	0.798966249	0.39	0.541	ND	ND			0.572	0.644		
0.072	0.752	0.798966249	0.39	0.541	0.982697314	0.666005943			1.145	1.244		
0.072	0.752	0.798966249	0.39	0.541	ND	ND						
0.072	0.752	0.798966249	0.39	0.541	2.985630272	2.023458777						
0.072	0.752	0.798966249	0.39	0.541	3.296967001	2.234461808						
0.072	0.752	0.798966249	0.39	0.541	0.816651059	0.553470994						
0.072	0.752	0.798966249	0.39	0.541	ND	ND						
0.072	0.752	0.798966249	0.39	0.541	ND	ND						
0.072	0.752	0.798966249	0.39	0.541	3.629059512	2.459531708						
0.072	0.752	0.798966249	0.39	0.541	4.116820388	2.790103124						
0.072	0.752	0.798966249	0.39	0.541	5.580103015	3.78181737						
0.072	0.752	0.798966249	0.39	0.541	3.276211219	2.22039494						
0.072	0.752	0.798966249	0.39	0.541	4.210221407	2.853404033						
0.072	0.752	0.798966249	0.39	0.541	ND	ND						
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.072	0.752	0.798966249	0.39	0.541	ND	ND						
0.072	0.752	0.798966249	0.39	0.541	ND	ND	%Rec					
0.072	0.752	0.798966249	0.39	0.541	3.317722783	2.248528677	104					

QC Results and Raw Data

Spectrophotometer Logbook **@Air Toxics Ltd.** **Logbook#: 1875**

Work Order: 0909554C **Date:** 10/01/09 **Method:** Rad 170

Analyst: M. Skidmore **Wavelength:** 665 nm

Standard ID	Concentration	ABS
Level 1 1858-70-E	0.0716 µg/mL	0.086
Level 2 -D	0.143 µg/mL	0.169
Level 3 -C	0.286 µg/mL	0.338
Level 4 -B	0.572 µg/mL	0.644
Level 5 -A	1.145 µg/mL	1.244
ICV 1858-71	0.286 µg/mL	0.324

r = 0.9996
m = 1.075
b = 0.019

ICV % Recovery = 100

Fraction	Dilution	ABS	Sample ID	Sample Volume	Comments
32A	1.00	0.296	106735	10.5 mL	
33A		0.169	106736		
34A		0.220	106737		
34AA		0.243	106737		
35A		0.015	106738		
36A		0.114	106762		
37A		0.080	106763		
38A		0.307	106764		
38AA		0.337	106764		
39A		0.098	106765		
40A		0.093	106766		
41A		0.019	106767		
42A		0.369	106791		
43A		0.416	106792		
44A		0.557	106793		
45A		0.335	106794		
46A		0.425	106795		
47A		0.017	106796		
BLK		0.013	N/A		lot: 09075
BLK		0.011			
LCS		0.165			0.133 µg/mL
CCV		0.339			0.286 µg/mL

Procedure:

Signed

10/2/09
Date

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

Standard ID: 1858-47
Project: Ferric Chloride Solution Rad170
Analyst: M. Skidmore
Preparation Date: 9/23/09
Expiration Date: 3 ~~/23/09~~ MJS 9/23/09 9/23/09

Solvent: D.I. H_2O
Solvent Lot #: N/A

Procedure/Comments: Dissolve 25g of ferric chloride hexahydrate (Located in ER2C lot: 73297 MJ) in 10.0 mL of D.I. H_2O.

MJS
9/23/09

Signed 9/25/09 Date Reviewed 9/24/09 Date

 Rev. 8/97

0010

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

Standard ID: 1858-64
Project: Rad 170 Amine Solution
Analyst: M. Skidmore
Preparation Date: 9/30/09
Expiration Date: 10/30/09

Solvent: H_2SO_4 / H_2O
Solvent Lot #: N/A

Procedure/Comments:

Sulfuric acid solution:

Slowly add 6.25 mL of concentrated sulfuric acid to 2.5 mL of DI H_2O, and let the solution cool. (sulfuric acid lot: 06011DA)

Amine solutions

Dissolve 1.6875 g of N,N-dimethyl-p-phenylendiammonium oxalate (located ERIA, lot: 63797PJ) in the above mentioned sulfuric acid solution. Dilute this solution to 250 mL with sulfuric acid - water 1:1 v/v. (this is roughly 120 mL H_2O + 120 mL H_2SO_4)

MTS
9/30/09

Signed: [signature] Date: 9/30/09 Reviewed: [signature] Date: 10/6/09

 0011 Rev. 8/97

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

Standard ID: 1858-70
Project: Calibration Solution Rad 170
Analyst: M. Skidmore
Preparation Date: 10/1/09
Expiration Date: 10/1/09

Solvent: D.I. H_2O
Solvent Lot #: N/A

Procedure/Comments:

Solution A: 2 mL of Code Rad 171 (1476-984, exp 8/6/10) (located in ER1B) with 98 mL of D.I. H_2O = 1.145 µg/mL

Solution B: 2.5 mL of Solution A with 2.5 mL of D.I. H_2O = 0.572 µg/mL

Solution C: 1.25 mL of Solution A with 3.75 mL of D.I. H_2O = 0.286 µg/mL

Solution D: 0.625 mL of Solution A with 4.375 mL of D.I. H_2O = 0.143 µg/mL

Solution E: 0.375 mL of Solution A with 5.625 mL of D.I. H_2O = 0.0716 µg/mL

Note: Each solution was measured immediately after it was prepared. Solution A is only stable in the flask it was prepared in.

MJS 10/1/09

MJS 10/5/09

10/5/09 10/6/09

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

Standard ID: 1858-71
Project: H_2S ICV Rad 170
Analyst: Ly
Preparation Date: 10/1/09
Expiration Date: 10/1/09

Solvent: DI H_2O
Solvent Lot #: NA

Procedure/Comments:

Solution A: 2 mL of Code Rad 171 (1476-984, exp 8/6/10) (located in ER1B) with 98 mL of D.I. H_2O = 1.145 µg/mL

Solution C: 1.25 mL of Solution A with 3.75 mL of D.I. H_2O = 0.286 µg/mL

Note: Each solution was measured immediately after it was prepared. Solution A is only stable in the flask it was prepared in.

Ly 10/1/09

Signed	10/1/09	Reviewed	10/6/09	
	Date		Date	

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

Standard ID: 1858-72
Project: Ferric Chloride - Amine
Analyst: M. Skidmore
Preparation Date: 10/1/09
Expiration Date: 10/1/09

Solvent: DI H_2O
Solvent Lot #: N/A

Procedure/Comments: 6.5 mL of ferric chloride (1858-47) with 32.5 mL of amine solution (1858-64).

MJS
10/1/09

Signed: [signature] Date: 10/1/09 Reviewed: [signature] Date: 10/6/09

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 #: 0909559C
# of pages (Including Cover): 4

10/20/2009

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.

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 9/24/09

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

0909559

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.	STOP
32A	106735	AIR/PASSIVE	H_2S ANALYSIS	9/8/09		9/22/09
33A	106736					
34A	106737					
35A	106738				ϕ	
36A	106762			9/8/09		9/22/09
37A	106763					
38A	106764					
39A	106765					
40A	106766					
41A	106767				ϕ	
42A	106791			9/9/09		9/23/09
43A	106792					
44A	106793					
45A	106794					
46A	106795					
47A	106796				Fedex ϕ	

CUSTODY SEAL INTACT? Y N NONE TEMP 3.6°C

Special Instructions:

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

☐ Fax results 781-247-4305

☐ **RETURN SAMPLES** ☒ Electronic transfer - datacoordinator@eheinc.com

☒ Additional report recipient mfragala@eheinc.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: 9/25/09

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: _____

Page 3 of 4

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 0909559C

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: 10/16/09
Date Received: 9/25/09
PO#: 16512
Project#: 16512

Sales Rep: TL

Total $: $ 880.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Amount$
32A	106735	ATL Applications	9/22/2009	$50.00
33A	106736	ATL Applications	9/22/2009	$50.00
34A	106737	ATL Applications	9/22/2009	$50.00
34AA	106737 Lab Duplicate	ATL Applications	9/22/2009	$0.00
35A	106738	ATL Applications	NA	$50.00
36A	106762	ATL Applications	9/22/2009	$50.00
37A	106763	ATL Applications	9/22/2009	$50.00
38A	106764	ATL Applications	9/22/2009	$50.00
38AA	106764 Lab Duplicate	ATL Applications	9/22/2009	$0.00
39A	106765	ATL Applications	9/22/2009	$50.00
40A	106766	ATL Applications	9/22/2009	$50.00
41A	106767	ATL Applications	NA	$50.00
42A	106791	ATL Applications	9/23/2009	$50.00
43A	106792	ATL Applications	9/23/2009	$50.00
44A	106793	ATL Applications	9/23/2009	$50.00
45A	106794	ATL Applications	9/23/2009	$50.00
46A	106795	ATL Applications	9/23/2009	$50.00
47A	106796	ATL Applications	NA	$50.00
48A	Lab Blank	ATL Applications	NA	$0.00
48B	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 #59 H2S-Radiello 170

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: 10/06/09 11:59 pm
Date Completed: 10/16/09
Date Received: 9/25/09
PO#: 16512
Project#: 16512

Total $: $ 880.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Amount$
49A	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 #59 H2S-Radiello 170

Other Records

Air Toxics LTD.
Laboratory Services Since 1989

Method : ATL Application #59 H2S-Radiello 170

CAS Number	Compound	Rpt. Limit (ug)
7783-06-4	Hydrogen Sulfide	1.2

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 0909559C

A_1	A_2	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) 9/4/09
☐	☐	☑				Samples pressurized w/ appropriate gas (N_2 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:

A_1/A_2 (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
A_1:	R: [signature]	[signature] 10/16/09	
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.