@AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

ATL Applications

INVENTORY SHEET

WORK ORDER # 1012369A

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Completed by:

V. Belitsky	Vera Belitsky/ Document Control	01/03/11
(Signature)	(Print Name & Title)	(Date)

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1012369A

Work Order Summary

CLIENT:	Mr. Brian Baker 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. #**	17131
FAX:	781-247-4305	**PROJECT #**	17131
DATE RECEIVED:	12/16/2010	**CONTACT:**	Ausha Scott
DATE COMPLETED:	12/29/2010		

FRACTION #	NAME	TEST
01A	120261	ATL Applications
02A	120262	ATL Applications
03A	120263	ATL Applications
04A	120264	ATL Applications
05A	120265	ATL Applications
06A	120266	ATL Applications
07A	120277	ATL Applications
08A	120278	ATL Applications
09A	120279	ATL Applications
10A	120280	ATL Applications
11A	120281	ATL Applications
12A	120282	ATL Applications
13A	120293	ATL Applications
13AA	120293 Lab Duplicate	ATL Applications
14A	120294	ATL Applications
15A	120295	ATL Applications
16A	120296	ATL Applications
17A	Lab Blank	ATL Applications

Continued on next page

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DATE COMPLETED:	12/29/2010		

FRACTION #	NAME	TEST
17B	Lab Blank	ATL Applications
18A	LCS	ATL Applications

CERTIFIED BY: Linda J. Furman

Laboratory Director

DATE: 12/29/10

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# 1012369A

Sixteen Radiello 170 (H2S) samples were received on December 16, 2010. 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 20130 minutes was used for the QC 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)
120261	1012369A-01A	12/13/2010	12/28/2010	1.00	0.80	0.56	ND	ND
120262	1012369A-02A	12/13/2010	12/28/2010	1.00	0.80	0.56	ND	ND
120263	1012369A-03A	12/13/2010	12/28/2010	1.00	0.80	0.56	ND	ND
120264	1012369A-04A	NA	12/28/2010	1.00	0.80	0.54	ND	ND
120265	1012369A-05A	NA	12/28/2010	1.00	0.80	0.54	ND	ND
120266	1012369A-06A	12/13/2010	12/28/2010	1.00	0.80	0.54	ND	ND
120277	1012369A-07A	12/13/2010	12/28/2010	1.00	0.80	0.54	2.2	1.5
120278	1012369A-08A	12/13/2010	12/28/2010	1.00	0.80	0.54	1.9	1.3
120279	1012369A-09A	12/13/2010	12/28/2010	1.00	0.80	0.54	2.2	1.5
120280	1012369A-10A	12/13/2010	12/28/2010	1.00	0.80	0.54	ND	ND
120281	1012369A-11A	NA	12/28/2010	1.00	0.80	0.54	ND	ND
120282	1012369A-12A	NA	12/28/2010	1.00	0.80	0.54	ND	ND
120293	1012369A-13A	12/13/2010	12/28/2010	1.00	0.80	0.54	ND	ND
120293 Lab Duplicate	1012369A-13AA	12/13/2010	12/28/2010	1.00	0.80	0.54	ND	ND
120294	1012369A-14A	12/13/2010	12/28/2010	1.00	0.80	0.54	0.91	0.62
120295	1012369A-15A	12/13/2010	12/28/2010	1.00	0.80	0.54	ND	ND
120296	1012369A-16A	12/13/2010	12/28/2010	1.00	0.80	0.54	ND	ND
Method Blank	1012369A-17A	NA	12/28/2010	1.00	0.80	0.54	ND	ND
Method Blank	1012369A-17B	NA	12/28/2010	1.00	0.80	0.54	ND	ND
								%Rec
LCS	1012369A-18A	NA	12/28/2010	1.00	0.80	0.54		100

COMMENTS: 1. NA=Not Applicable
2. ND=Not Detected
3. Exposure time of 20130 minutes was assumed for the QC samples.
4. Background subtraction not performed.

Hydrogen Sulfide Radiello Calculation Worksheet

Workorder #: 1012369A

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: 12/28/2010

Corrected Q 0.096 Takes into account temp

(Abs-Y-int)xDF / Slope

Conc(ug/mL)xVol (mL)

conc (ug sulfide) *MW H2S / MW Sulfide

Q includes conversion from Sulfide to H2S

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
01A	120261	12/13/2010	0.052	19590	1.00	0.017348565	0.182159931	0.193588237	0.097	0.135
02A	120262	12/13/2010	0.052	19590	1.00	0.017348565	0.182159931	0.193588237	0.097	0.135
03A	120263	12/13/2010	0.047	19590	1.00	0.012746282	0.133835956	0.142232524	0.071	0.099
04A	120264	NA	0.097	20130	1.00	0.058769115	0.617075704	0.655789652	0.319	0.445
05A	120265	NA	0.022	20130	1.00	-0.010265135	-0.107783918	-0.11454604	-0.056	-0.078
06A	120266	12/13/2010	0.021	20070	1.00	-0.011185592	-0.117448713	-0.124817183	-0.061	-0.085
07A	120277	12/13/2010	0.248	20070	1.00	0.197758071	2.076459744	2.206732179	1.078	1.502
08A	120278	12/13/2010	0.218	20070	1.00	0.170144371	1.786515895	1.898597903	0.927	1.293
09A	120279	12/13/2010	0.245	20070	1.00	0.194996701	2.047465359	2.175918752	1.063	1.481
10A	120280	12/13/2010	0.085	20070	1.00	0.047723635	0.501098165	0.532535941	0.260	0.363
11A	120281	NA	0.021	20130	1.00	-0.011185592	-0.117448713	-0.124817183	-0.061	-0.085
12A	120282	NA	0.021	20130	1.00	-0.011185592	-0.117448713	-0.124817183	-0.061	-0.085
13A	120293	12/13/2010	0.097	20130	1.00	0.058769115	0.617075704	0.655789652	0.319	0.445
13AA	120293 Lab Duplicate	12/13/2010	0.095	20130	1.00	0.056928201	0.597746114	0.635247367	0.309	0.431
14A	120294	12/13/2010	0.122	20130	1.00	0.081780531	0.858695578	0.912568216	0.444	0.619
15A	120295	12/13/2010	0.105	20130	1.00	0.066132768	0.694394064	0.737958793	0.359	0.501
16A	120296	12/13/2010	0.068	20130	1.00	0.032075871	0.33679665	0.357926518	0.174	0.243
					1.00	-0.030515182	-0.320409408	-0.340511177	#DIV/0!	#DIV/0!
					1.00	-0.030515182	-0.320409408	-0.340511177	#DIV/0!	#DIV/0!
					1.00	-0.030515182	-0.320409408	-0.340511177	#DIV/0!	#DIV/0!
					1.00	-0.030515182	-0.320409408	-0.340511177	#DIV/0!	#DIV/0!
					1.00	-0.030515182	-0.320409408	-0.340511177	#DIV/0!	#DIV/0!
17A	Method Blank	NA	0.021	20130	1.00	-0.011185592	-0.117448713	-0.124817183	-0.061	-0.085
17B	Method Blank	NA	0.022	20130	1.00	-0.010265135	-0.107783918	-0.11454604	-0.056	-0.078
18A	LCS	NA	0.177	20130	1.00	0.132405648	1.390259301	1.477481057	0.719	1.003

QC Duration 20130

CCV Spike Amt 0.133

Verified: HH and AW on 9/4/09

Low PointxDF	RL(ug/mL)xVol (mL)	RL (ug sulfide) *MW H2S / MW Sulfide	Q includes conversion from Sulfide to H2S: RL (ug) x 1000 / Q x Duration	ppbx mw / 24.45				
					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	Result (ppb) H2S	%Rec
0.072	0.752	0.798966249	0.40	0.557	ND	ND	ND	
0.072	0.752	0.798966249	0.40	0.557	ND	ND	ND	
0.072	0.752	0.798966249	0.40	0.557	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.544	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.544	2.206732179	1.502280808	1.077717439	
0.072	0.752	0.798966249	0.39	0.544	1.898597903	1.292511714	0.927231718	
0.072	0.752	0.798966249	0.39	0.544	2.175918752	1.481303899	1.062668867	
0.072	0.752	0.798966249	0.39	0.544	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	0.912568216	0.619398896	0.444349012	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!	#DIV/0!	
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!	#DIV/0!	
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!	#DIV/0!	
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!	#DIV/0!	
0.072	0.752	0.798966249	#DIV/0!	#DIV/0!	ND	#DIV/0!	#DIV/0!	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	
0.072	0.752	0.798966249	0.39	0.542	ND	ND	ND	%Rec
0.072	0.752	0.798966249	0.39	0.542	1.477481057	1.00282929	0.719417175	100

Calibration Data

Calibration Date 12/28/2010 Linear Regression

ug/ml of sulfide	absorbance
0	0
0.0716	0.092
0.143	0.179
0.286	0.351
0.572	0.696
1.145	1.257

Slope	1.086417253
Y-int	0.03315222
R2	0.997096148

QC Results and Raw Data

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 2061

Standard ID: 2061-7
Project: Rad 171 Calibration Curve
Analyst: D. Randolph
Preparation Date: 12/28/10
Expiration Date: 12/28/10

Solvent: HPLC H_2O
Solvent Lot #: 08812

Procedure/Comments:

Solution A: 2 mL of Code Rad 171 (1476-2077, exp 6/16/11) (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.

DR 12/28/10

DR 12/28/10

David Randolph 12/28/10
Signed Date

12/29/10
Reviewed Date

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 2061

Standard ID: 2061-8
Project: Rad 170 ICV
Analyst: FM
Preparation Date: 12/28/10
Expiration Date: 12/28/10

Solvent: HPLC H_2O
Solvent Lot #: DB812

Procedure/Comments:

Solution A: 2 mL of Code Rad 171 (1476-2077, exp 6/16/11) (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. DR 12/28/10

DR 12/28/10

Signed 12/28/10 Date Reviewed 12/29/10 Date

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 2061

Standard ID: 2061-4
Project: Rad 170 H_2S LCS
Analyst: D. Randolph
Preparation Date: 12/28/10
Expiration Date: 12/28/10

Solvent: HPLC H_2O
Solvent Lot #: DB812

Procedure/Comments:

1498
1476

A Rad 170 cartridge (lot: 10101) was placed in a 40 mL VOA vial. 10.0 mL of D.I. H_2O was aliquoted into the vial. 1.0 mL of H_2S gas (1476-1497, 1000ppm) was injected into the vial, into the H_2O. The solution was allowed to gently shake for 2 hours. Then 0.5 of the ferric-chloride-amine (2061-5) was added to the vial and capped immediately. The solution was allowed to sit for 30 minutes and the absorbance was measured at 665 nm.

DR 12/28/10

* The H_2S canister failed to provide enough positive pressure to push back the syringe. A second canister was tried with the same effect. Most likely there is something wrong with the syringe. * A new syringe was used.

DR 12/28/10

David Randolph — Signed — 12/28/10 — Date

Reviewed — 12/29/2010 — Date

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 2061

Standard ID: 2061-5
Project: Ferric Chloride Amine Solution
Analyst: D. Randolph
Preparation Date: 12/28/10
Expiration Date: 12/28/10

Solvent: HPLC H_2O
Solvent Lot #: OB812

Procedure/Comments: Add 4.0mL of ferric chloride solution (1993-77, exp 10/18/11) with 20mL of amine solution (2061-6; exp 1/28/11).

DR 12/28/10

David Randolph — Signed — 12/28/10 — Date

Reviewed — 12/29/10 — Date

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 2061

Standard ID: 2061-6
Project: Rad 170 Amine Solution
Analyst: D. Randolph
Preparation Date: 12/28/10
Expiration Date: ~~12/28/10~~ 1/28/11
OR 12/28/10

Solvent: HPLC H_2O
Solvent Lot #: DB812

Procedure/Comments: Dissolve ~~.16875~~ 0.16875g OR 12/28/10 of N,N-dimethyl-p-phenylendiammenium Oxalate (located in ERIA; lot: 63797PJ) in a 1:1 mixture of concentrated sulfuric acid (lot: ~~0142~~ OR 12/28/10 0142BLS) and water (lot: DB812). 25mL of solution were made.

OR 12/28/10

David Randolph 12/28/10
Signed Date

Reviewed 12/29/10 Date

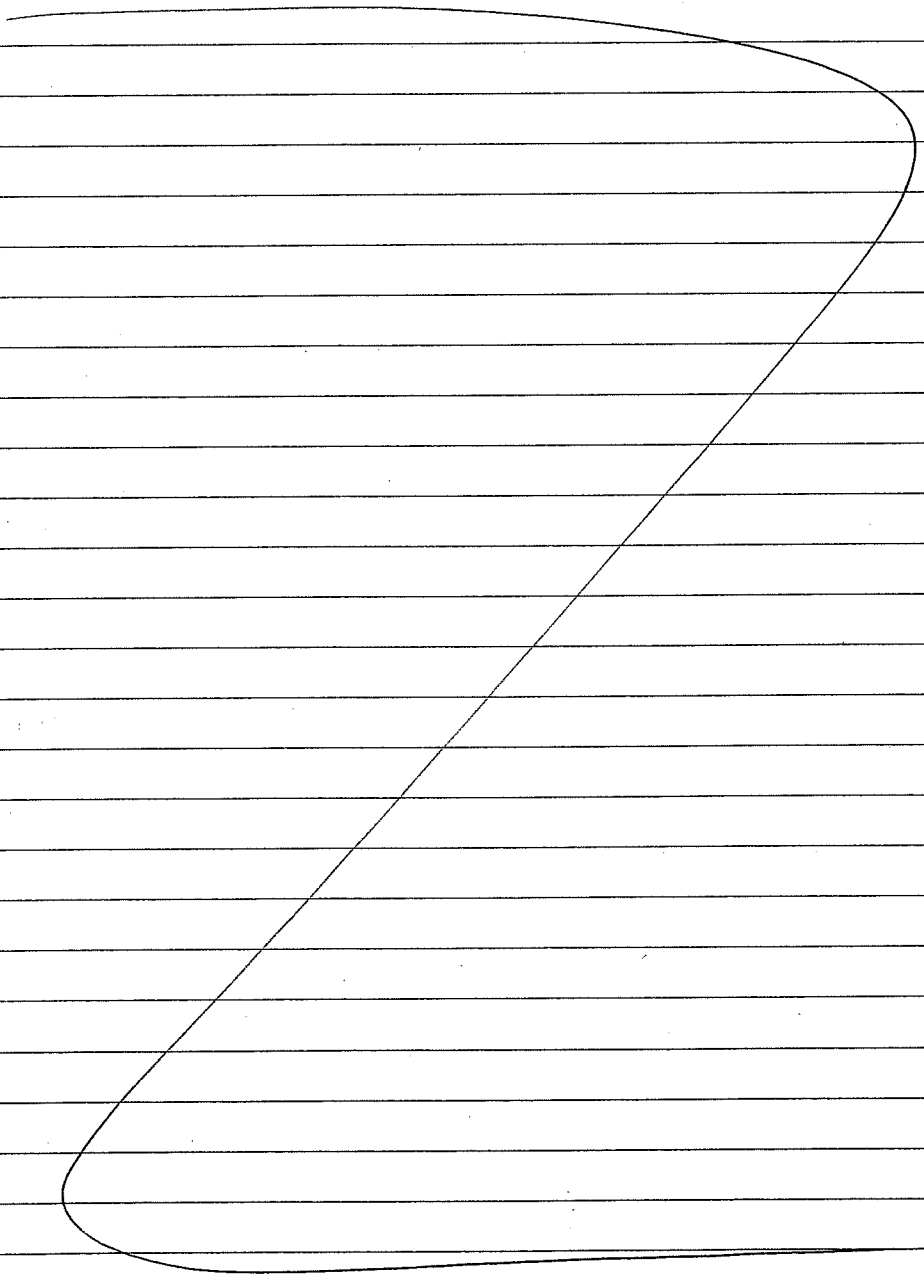
Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 1993

Standard ID: 1993-77
Project: Ferric Chloride Solution Rad 170
Analyst: M. Skidmore
Preparation Date: 10/18/10
Expiration Date: 10/18/11

Solvent: HPLC H_2O
Solvent Lot #: DB270

Procedure/Comments: Dissolve 125 g of ferric chloride hexahydrate (located in ERAC, lot: 73297) in 50 mL of H_2O,



MJS 10/18/10

Signed 10/18/10 Date

Reviewed 10/22/10 Date

Spectrophotometer Logbook **@Air Toxics Ltd.** **Logbook#: 1927**

Work Order: 1012369A **Date:** 12/28/10 **Method:** Rad 170

Analyst: D. Randolph **Wavelength:** 665

Standard ID	Concentration	ABS
	Sulfide (ug/mL)	
Level 1 2061-7-E	0.0716	0.092
Level 2 -D	0.143	0.179
Level 3 -C	0.286	0.351
Level 4 -B	0.572	0.696
Level 5 -A	1.145	1.257
ICV 2061-8	0.286	0.357

r = 0.9971
m = 1.086
b = 0.03315

ICV % Recovery = 104

Fraction	Dilution	ABS	Sample ID	Sample Volume	Comments
01A	1.00	0.052	120261	10.5mL	
02A		0.052	2		
03A		0.047	3		
04A		0.097	4		
05A		0.022	5		
06A		0.021	6		
07A		0.248	77		
08A		0.218	8		
09A		0.245	9		
10A		0.085	80		
11A		0.021	1		
12A		0.021	2		
13A		0.097	93		
13AA		DR 12/28/10 ~~0.122~~ 0.095	~~+93~~		
14A		0.122	DR 12/28/10 ~~5~~ ~~194~~		
15A		0.105	~~6~~ 95		
16A		0.068	120296		
BLK-1		0.021	N/A		Lot: 10101
BLK-2		0.022			
LCS		0.177			0.133 mg/mL
CCV		0.352		5.0mL	0.286 mg/mL

DR 12/28/10

Procedure:

1.) Add 10 mL of H_2O to sample tube, cap and vortex for 1 minute.
2.) Add 0.5 mL of Ferric Chloride-Amine solution and cap immediately.
3.) Allow color to develop for 30 minutes.
4.) Measure absorbance at 665nm. DR 12/28/10

David Randolph
Signed

12/29/10
Date

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. Brian Baker
FAX #: 781-247-4305
FROM: Sample Receiving
Workorder #: 1012369A
# of pages (Including Cover): 4

1/3/2011

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.

In accordance with your company's contract, this account is required to have a PO that is fully executed by both parties which also covers the cost of the workorder before any data can be released. Please ensure that you have given all appropriate information to our Project Manager so that there will be no delay in reporting of the data you are requesting.

Your prompt response is appreciated.

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 15 Dec 10

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

1012369

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 # 17131

The cost of this analysis will be covered by EH&E Purchase Order # 17131

For EH & E Data Coordinator - URGENT DATA ☐

	SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	OTHER:Time/Date/Vol.
01A	120261	Air/Passive	H_2S Analysis 11/29/10 – 12/13/10	13D 14H 30M
02A	120262			
03A	120263			
04A	120264			
05A	120265			∅
06A	120266			
07A	120277		11/29/10 – 12/13/10	13D 22H 30M
08A	120278		11/29/10 – 12/13/10	
09A	120279			
10A	120280			
11A	120281			∅
12A	120282			
13A	120293		11/29/10 – 12/13/10	13D 23H 30M
14A	120294			
15A	120295			
16A	120296			

Special instructions:

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

☐ Fax results 781-247-4305

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

☒ Additional report recipient bbaker@eheinc.com

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

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 12/15/10

Received by: Brian Whittaker of (company name) ATL Date: 12/16/10

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

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

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

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

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

CUSTODY SEAL INTACT? N (NONE) ITEM 4°C

Page 1 of 3

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 1012369A

Client

Mr. Brian Baker
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Phone

800-825-5343

Fax

781-247-4305

Sales Rep: TL

Date Promised: 12/30/10 11:59 pm
Date Completed: 12/30/10
Date Received: 12/16/10
PO#: 17131
Project#: 17131

Total $: $ 1,360.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Amount$
01A	120261	ATL Applications	12/13/2010	$80.00
02A	120262	ATL Applications	12/13/2010	$80.00
03A	120263	ATL Applications	12/13/2010	$80.00
04A	120264	ATL Applications	NA	$80.00
05A	120265	ATL Applications	NA	$80.00
06A	120266	ATL Applications	12/13/2010	$80.00
07A	120277	ATL Applications	12/13/2010	$80.00
08A	120278	ATL Applications	12/13/2010	$80.00
09A	120279	ATL Applications	12/13/2010	$80.00
10A	120280	ATL Applications	12/13/2010	$80.00
11A	120281	ATL Applications	NA	$80.00
12A	120282	ATL Applications	NA	$80.00
13A	120293	ATL Applications	12/13/2010	$80.00
13AA	120293 Lab Duplicate	ATL Applications	12/13/2010	$0.00
14A	120294	ATL Applications	12/13/2010	$80.00
15A	120295	ATL Applications	12/13/2010	$80.00
16A	120296	ATL Applications	12/13/2010	$80.00
17A	Lab Blank	ATL Applications	NA	$0.00
17B	Lab Blank	ATL Applications	NA	$0.00
18A	LCS	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/14482

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

SAMPLE RECEIPT SUMMARY Continued

Client	**Phone**	**Date Promised:**	
		Date Completed:	
		Date Received:	
	Fax	**PO#:**	
		Project#:	
Sales Rep:		**Total $:**	$ 1,360.00
		Logged By:	MW

Fraction	Sample #	Analysis	Collected	Amount$
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/14482

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	Title: Data Review Checklist			Release Date: 07/28/10
	Form #: F1.27	Revision #: 2	Revision Date:07/27/10	Page #: 1 of 2

DATA REVIEW CHECKLIST

Work Order #: 1012369A

A_1	A_2	W	T	R	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.
☐	☐	☒				Non-Standard sublist printed/verified, LOQ and LOD verified
		☑	☐	☐	☐	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, %RSD Recalculation
		☑	☐		☐	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) 10/25/10
☐	☐	☒				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.)
		☑	☐	☐		Final PDF report reviewed for correctness

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

A/R: 13A – Duplicate

T/Q:

A_1/A_2 (Analytical Review/Date)	W/T (Write-up/Tech Review/Date)	R* (Report Review/Date)	Q (QA Review/Date)
A_1:	W: [signature] 12/29/10	R:	
A_2:	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.
Note (2): Report reviewer and write-up reviewer must be separate individuals for DoD & Client Specific projects.
* Report Review is completed for DoD & Client Specific projects only.