@AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

ATL Applications

INVENTORY SHEET

WORK ORDER # 0908629B

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Completed by:

Kara McKiernan — Kara McKiernan/ Document Control — 09/17/09

(Signature) (Print Name & Title) (Date)

WORK ORDER #: 0908629B

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:	09/15/2009		

FRACTION #	NAME	TEST
17A	101180	ATL Applications
18A	101181	ATL Applications
19A	101261	ATL Applications
20A	101262	ATL Applications
21A	101263	ATL Applications
22A	101264	ATL Applications
23A	101265	ATL Applications
24A	101266	ATL Applications
25A	101267	ATL Applications
26A	101569	ATL Applications
27A	101570	ATL Applications
28A(cancelled)	101571	ATL Applications
29A	101572	ATL Applications
29AA	101572 Lab Duplicate	ATL Applications
30A	101573	ATL Applications
30AA	101573 Lab Duplicate	ATL Applications
31A	101574	ATL Applications

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0908629B

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
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DATE RECEIVED:	08/28/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/15/2009		

FRACTION #	NAME	TEST
32A	101329	ATL Applications
33A	Method Blank	ATL Applications
33B	Method Blank	ATL Applications
34A	CCV	ATL Applications

CERTIFIED BY: Linda D. Truman

Laboratory Director

DATE: 09/15/09

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# 0908629B

Sixteen Radiello 170 (H2S) samples were received on August 28, 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

The number of samples received did not match the information on the Chain of Custody (COC). Sample 101571 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 # 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)
101180	0908629B-17A	8/25/2009	9/10/2009	1.00	0.80	0.50	0.97	0.61
101181	0908629B-18A	NA	9/10/2009	1.00	0.80	0.50	ND	ND
101261	0908629B-19A	8/25/2009	9/10/2009	1.00	0.80	0.54	ND	ND
101262	0908629B-20A	8/25/2009	9/10/2009	1.00	0.80	0.54	ND	ND
101263	0908629B-21A	8/25/2009	9/10/2009	1.00	0.80	0.54	ND	ND
101264	0908629B-22A	8/25/2009	9/10/2009	1.00	0.80	0.54	ND	ND
101265	0908629B-23A	8/25/2009	9/10/2009	1.00	0.80	0.54	ND	ND
101266	0908629B-24A	NA	9/10/2009	1.00	0.80	0.50	ND	ND
101267	0908629B-25A	NA	9/10/2009	1.00	0.80	0.50	ND	ND
101569	0908629B-26A	8/27/2009	9/10/2009	1.00	0.80	0.50	ND	ND
101570	0908629B-27A	8/27/2009	9/10/2009	1.00	0.80	0.50	ND	ND
101572	0908629B-29A	8/27/2009	9/10/2009	1.00	0.80	0.50	ND	ND
101572 Duplicate	0908629B-29AA	8/27/2009	9/10/2009	1.00	0.80	0.50	ND	ND
101573	0908629B-30A	8/27/2009	9/10/2009	1.00	0.80	0.50	ND	ND
101573 Duplicate	0908629B-30AA	8/27/2009	9/10/2009	1.00	0.80	0.50	ND	ND
101574	0908629B-31A	NA	9/10/2009	1.00	0.80	0.50	ND	ND
101329	0908629B-32A	8/25/2009	9/10/2009	1.00	0.80	0.58	ND	ND
Method Blank	0908629B-33A	NA	9/10/2009	1.00	0.80	0.50	ND	ND
Method Blank	0908629B-33B	NA	9/10/2009	1.00	0.80	0.50	ND	ND
							%Rec	
CCV	0908629B-34A	NA	9/10/2009	1.00	0.80	0.50	108	

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.

Hydrogen Sulfide Radiello Calculation Worksheet

Workorder #:	09086298	
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:	9/10/2009	
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

LabSampleID	Client	Date of Collection	Abs	Duration (min)	DF	Conc (ug/mL) of sulfide	Conc (ug) of sulfide	Conc (ug) of H2S	T Corrected, no Blank correction: Conc (ppb) of H2S	T Corrected, no Blank correction: Conc (ug/m3) of H2S
17A	101180	8/25/2009	0.108	21600	1.00	0.08710102	0.914560707	0.971938198	0.441	0.615
18A	101181	NA	0.020	21600	1.00	-0.00339197	-0.035615686	-0.037850135	-0.017	-0.024
19A	101261	8/25/2009	0.059	20160	1.00	0.036712878	0.385485215	0.409669695	0.199	0.278
20A	101262	8/25/2009	0.054	20160	1.00	0.03157123	0.33149792	0.352295358	0.171	0.239
21A	101263	8/25/2009	0.060	20160	1.00	0.037741207	0.396282674	0.421144562	0.205	0.285
22A	101264	8/25/2009	0.056	20160	1.00	0.033627889	0.353092838	0.375245092	0.182	0.254
23A	101265	8/25/2009	0.057	20160	1.00	0.034656219	0.363890297	0.38671996	0.188	0.262
24A	101266	NA	0.021	21600	1.00	-0.002363641	-0.024818227	-0.026375267	-0.012	-0.017
25A	101267	NA	0.022	21600	1.00	-0.001335311	-0.014020768	-0.0149004	-0.007	-0.009
26A	101569	8/27/2009	0.048	21600	1.00	0.025401254	0.266713166	0.283446153	0.129	0.179
27A	101570	8/27/2009	0.060	21600	1.00	0.037741207	0.396282674	0.421144562	0.191	0.266
28A	101571	8/27/2009	NA	21600	1.00	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
29A	101572	8/27/2009	0.060	21600	1.00	0.037741207	0.396282674	0.421144562	0.191	0.266
29AA	101572 Duplicate	8/27/2009	0.060	21600	1.00	0.037741207	0.396282674	0.421144562	0.191	0.266
30A	101573	8/27/2009	0.055	21600	1.00	0.03259956	0.342295379	0.363770225	0.165	0.230
30AA	101573 Duplicate	8/27/2009	0.054	21600	1.00	0.03157123	0.33149792	0.352295358	0.160	0.223
31A	101574	NA	0.015	21600	1.00	-0.008533617	-0.089602981	-0.095224472	-0.043	-0.060
32A	101329	8/25/2009	0.091	18720	1.00	0.069619419	0.731003904	0.776865452	0.407	0.567
					1.00	-0.023958559	-0.251564866	-0.267347483	#DIV/0!	#DIV/0!
					1.00	-0.023958559	-0.251564866	-0.267347483	#DIV/0!	#DIV/0!
					1.00	-0.023958559	-0.251564866	-0.267347483	#DIV/0!	#DIV/0!
					1.00	-0.023958559	-0.251564866	-0.267347483	#DIV/0!	#DIV/0!
33A	Method Blank	NA	0.021	21600	1.00	-0.002363641	-0.024818227	-0.026375267	-0.012	-0.017
33B	Method Blank	NA	0.022	21600	1.00	-0.001335311	-0.014020768	-0.0149004	-0.007	-0.009
34A	CCV	NA	0.622	21600	1.00	0.615662347	6.464454638	6.870020049	3.118	4.346

QC Duration	CCV Spike Amt
21600	0.572

Verified: HH and AW on 9/4/09

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	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
0.072	0.752	0.798966249	0.36	0.505	0.971938198	0.614799864	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
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	ND	ND	
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	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	#VALUE!	#VALUE!	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.42	0.583	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	0.36	0.505	ND	ND	
0.072	0.752	0.798966249	0.36	0.505	ND	ND	%Rec
0.072	0.752	0.798966249	0.36	0.505	6.870020049	4.345633706	108

Q includes conversion from Sulfide to H2S

Calibration Data

ug/ml of sulfide	absorbance
0	0
0.0716	0.074
0.143	0.151
0.286	0.316
0.572	0.613
1.145	1.119

Calibration Date 9/10/2009 Linear Regression

Slope	0.972451017
Y-int	0.023298525
R2	0.997046605

QC Results and Raw Data

Spectrophotometer Logbook

@Air Toxics Ltd.

Log Book #: 1873

Work Order: 0908629B

Method: Rad 170

Wavelength: 665 nm

Date: 9/10/09

Analyst: M. Skidmore

Prep. Notes:

Standard ID	Concentration	ABS
1858-36 E	0.0716 ug/mL	0.074
D	0.143 ug/mL	0.151
C	0.286 ug/mL	0.316
B	0.572 ug/mL	0.613
A	1.145 ug/mL	1.119

r = ~~0.9968~~ 0.9970
m = 0.9744 0.97245
b = ~~0.0215~~ 0.02329
9/15/09

Fraction	Dilution	ABS	Sample ID	Sample Volume
17A	1.00	0.108	101180	10.5 mL
18A		0.020	101181	
19A		0.059	101261	
20A		0.054	101262	
21A		0.060	101263	
22A		0.056	101264	
23A		0.057	101265	
24A		0.021	101266	
25A		0.022	101267	
26A		0.048	101569	
27A		0.060	101570	
29A		0.060	101572	
30A		0.055	101573	
31A		0.015	101574	
32A		0.091	101329	
BLK		0.021	N/A	
BLK		0.022		
CCV/LCS		0.622		
29AA		0.060	101572	
30AA		0.054	101573	

MJS
9/11/09

Notes: CCV/LCS @ 0.572 ug/mL
Spiked cartridge: 0.145 (1.0 mL of 1000 ppm)

Page 7

Signed: [signature] Date: 9/10/09 MJS 9/11/09
9/11/09

0009

Revised 05/07

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

Standard ID: 1858-36
Project: Calibration Solution Rad 170
Analyst: M. Skidmore
Preparation Date: 9/10/09
Expiration Date: 9/10/09

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

Procedure/Comments:

Solution A: 2 mL of Code Rad 171 (1476-984, exp 8/6/2010 ERIB) with 98 mL DI water = 1.145 µg/mL

Solution B: 2.5 mL of Solution A with 2.5 mL DI water = 0.572 µg/mL.

Solution C: 1.25 mL of Solution A with 3.75 mL DI water = 0.286 µg/mL

Solution D: 0.625 mL of Solution A with 4.375 mL DI water = 0.143 µg/mL

Solution E: 0.375 mL of Solution A with 5.625 mL DI water = 0.076 µg/mL

MJS
9/10/09

Page 36 Signed 9/10/09 Date Reviewed 9/10/09 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. Taeko Minegishi
FAX #: 781-247-4305
FROM: Sample Receiving
Workorder #: 0908629B
# of pages (Including Cover): 4

9/17/2009

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 101571 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

0908629

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 START	OTHER: Time/Date/Vol. STOP
17A	101180	AIR/PASSIVE	H_2S ANALYSIS 8/10/09	8/25/09
18A	101181			⊘
19A	101261		8/11/09	8/25/09
20A	101262			
21A	101263			
22A	101264			
23A	101265			
24A	101266			⊘
25A	101267			⊘
26A	101569		8/12/09	8/27/09
27A	101570			
28A	101571			
29A	101572			
30A	101573			
31A	101574			⊘
32A	101329		8/12/09	8/25/09

Special Instructions:

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

☐ Fax results 781-247-4305

☐ **RETURN SAMPLES**

☒ Electronic transfer - datacoordinator@ehe.inc.com

☒ Additional report recipient mrogalus@ehe.inc.com

Fedex 870423331952

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: _____ 0850 of (company name) ATI Date: 8/27/09

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: _____

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 0908629B

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:
Date Received: 8/28/09
PO#: 16512
Project#: 16512

Total $: $ 825.00
Logged By: MG

Fraction	Sample #	Analysis	Collected	Amount$
17A	101180	ATL Applications	8/25/2009	$50.00
18A	101181	ATL Applications	NA	$50.00
19A	101261	ATL Applications	2/25/2009	$50.00
20A	101262	ATL Applications	8/25/2009	$50.00
21A	101263	ATL Applications	8/25/2009	$50.00
22A	101264	ATL Applications	8/25/2009	$50.00
23A	101265	ATL Applications	8/25/2009	$50.00
24A	101266	ATL Applications	NA	$50.00
25A	101267	ATL Applications	NA	$50.00
26A	101569	ATL Applications	8/27/2009	$50.00
27A	101570	ATL Applications	8/27/2009	$50.00
28A(cancelled	101571	ATL Applications	8/27/2009	$0.00
29A	101572	ATL Applications	8/27/2009	$50.00
30A	101573	ATL Applications	8/27/2009	$50.00
31A	101574	ATL Applications	NA	$50.00
32A	101329	ATL Applications	8/25/2009	$50.00

Misc. Charges eCVP (15) @ $5.00 each. $75.00

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

Sample Discrepancy Report

Identification

Initiated By: MG **Project ID:** 13297 **PM:** AS **Date:** 8/28/2009 **Discrepancy Type:** ☐ 1. ☒ 2. ☐ 3.

Workorder(s) affected: 0908629B **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: We did not received sample 28A (Their sample: 101571)

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.Bakr 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 #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 #: 0908629B

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)
		NA	☐	☐	☐	Sample Discrepancy Report (SDR) is completed
☐	☐	☐	☐	NA	☐	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
		NA	☐	NA	☐	Appropriate data qualifier flags are applied
		☐	☐	☐	☐	Manual integrations for samples and QC are properly documented
☐	☐	☐	☐		☐	Samples analyzed within the project or method specific clock
		NA	☐			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)
		NA	☐			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.)
☐	☐	NA	☐			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
		NA				Date MDL(s) performed per instrument(s) _____
☐	☐	☐				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.)
			NA	☐		MDL date(s) present for all instruments utilized
		NA	☐	☐	☐	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: dup on 29A & 30A

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: MY 9/15/09	MR 9/15/09	
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.