

COMPREHENSIVE VALIDATION PACKAGE

ATL Applications

INVENTORY SHEET

WORK ORDER # 0909375C

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Completed by:

Kara McKiernan

(Signature)

Kara McKiernan/ Document Control

(Print Name & Title)

10/05/09

(Date)

WORK ORDER #: 0909375C

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:	09/18/2009	CONTACT:	Ausha Scott
DATE COMPLETED:	10/01/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
26A	104942	ATL Applications
27A	104943	ATL Applications
28A	104944	ATL Applications
29A	104945	ATL Applications
30A	104946	ATL Applications
30AA	104946 Lab Duplicate	ATL Applications
31A	104947	ATL Applications
32A	102897	ATL Applications
33A	102898	ATL Applications
34A	102905	ATL Applications
35A	102909	ATL Applications
36A	102913	ATL Applications
37A	106259	ATL Applications
38A	106260	ATL Applications
39A	106270	ATL Applications
40A	106274	ATL Applications
41A	Lab Blank	ATL Applications
41B	Lab Blank	ATL Applications

Continued on next page

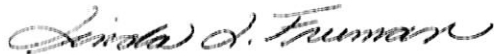
WORK ORDER #: 0909375C

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:	09/18/2009	CONTACT:	Ausha Scott
DATE COMPLETED:	10/01/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
42A	CCV	ATL Applications

CERTIFIED BY:



Laboratory Director

DATE: 10/01/09

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

**LABORATORY NARRATIVE
Nitrogen Dioxide by Radiello 166
Environmental Health & Engineering, Inc.
Workorder# 0909375C**

Fifteen Radiello 166 (NO₂) samples were received on September 18, 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

The Chain of Custody (COC) was not relinquished properly. A signature and date were not provided by the field sampler.

A Temperature Blank was not included with the shipment. Temperature was measured on a representative sample and was not within 4±2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Sample collection date was incomplete on the Chain of Custody for samples 102897, 102898, 102905, 102909, 102913, 106259, 106260, 106270 and 106274. The year of collection was assumed to be 2009.

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 18720 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.

An Independent Calibration Verification (ICV) was not performed with this workorder.

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 Sample ID.	Lab Sample ID.	Collection Date	Analysis Date	Dilution Factor	Reporting Limit (ug)	Reporting Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
104942	0909375C-26A	9/15/2009	9/18/2009	1.00	0.32	0.23	10	7.5
104943	0909375C-27A	9/15/2009	9/18/2009	1.00	0.32	0.23	12	8.3
104944	0909375C-28A	9/15/2009	9/18/2009	1.00	0.32	0.23	24	17
104945	0909375C-29A	N/A	9/18/2009	1.00	0.32	0.23	0.33	0.24
104946	0909375C-30A	9/15/2009	9/18/2009	1.00	0.32	0.23	12	8.6
104946 Lab Duplicate	0909375C-30AA	9/15/2009	9/18/2009	1.00	0.32	0.23	12	8.6
104947	0909375C-31A	9/15/2009	9/18/2009	1.00	0.32	0.23	7.6	5.4
102897	0909375C-32A	9/15/2009	9/18/2009	1.00	0.32	0.23	12	8.8
102898	0909375C-33A	9/15/2009	9/18/2009	1.00	0.32	0.23	9.7	6.9
102905	0909375C-34A	9/15/2009	9/18/2009	1.00	0.32	0.23	8.0	5.7
102909	0909375C-35A	9/15/2009	9/18/2009	1.00	0.32	0.23	13	9.0
102913	0909375C-36A	9/15/2009	9/18/2009	1.00	0.32	0.23	13	9.0
106259	0909375C-37A	9/15/2009	9/18/2009	1.00	0.32	0.23	38	27
106260	0909375C-38A	9/15/2009	9/18/2009	1.00	0.32	0.23	48	34
106270	0909375C-39A	9/15/2009	9/18/2009	1.00	0.32	0.23	54	39
106274	0909375C-40A	9/15/2009	9/18/2009	1.00	0.32	0.23	47	33
Method Blank	0909375C-41A	NA	9/18/2009	1.00	0.32	0.23	ND	ND
Method Blank	0909375C-41B	NA	9/18/2009	1.00	0.32	0.23	ND	ND
CCV	0909375C-42A	NA	9/18/2009	1.00	0.32	0.23	%Rec 108	

COMMENTS: 1. NA=Not Applicable

2. ND=Not Detected

3. Exposure time of 18720 minutes was assumed for the QC samples.

4. Background subtraction not performed.

Dioxide Radiello Calculation Worksheet

Workorder #: 0909375C

1000ng/1ug

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: 9/18/2009

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

Lab/SampleID	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)
26A	104942	9/15/2009	0.075	18720	1.00	1.056948535	10.56948535	4.004	7.534
27A	104943	9/15/2009	0.081	18720	1.00	1.161071227	11.61071227	4.399	8.276
28A	104944	9/15/2009	0.150	18720	1.00	2.358482193	23.58482193	8.935	16.811
29A	104945	N/A	0.016	18720	1.00	0.03307539	0.330753897	0.125	0.236
30A	104946	9/15/2009	0.084	18720	1.00	1.213132574	12.13132574	4.596	8.647
30AA	104946 Lab Duplicate	9/15/2009	0.084	18720	1.00	1.213132574	12.13132574	4.596	8.647
31A	104947	9/15/2009	0.058	18720	1.00	0.761934239	7.619342386	2.887	5.431
32A	102897	9/15/2009	0.085	18720	1.00	1.230486356	12.30486356	4.662	8.771
33A	102898	9/15/2009	0.070	18720	1.00	0.970179624	9.701796239	3.676	6.915
34A	102905	9/15/2009	0.060	18720	1.00	0.796641803	7.966418028	3.018	5.678
35A	102909	9/15/2009	0.087	18720	1.00	1.26519392	12.6519392	4.793	9.018
36A	102913	9/15/2009	0.087	18720	1.00	1.26519392	12.6519392	4.793	9.018
37A	106259	9/15/2009	0.236	18720	1.00	3.850907455	38.50907455	14.589	27.448
38A	106260	9/15/2009	0.289	18720	1.00	4.70657907	47.0657907	18.074	34.004
39A	106270	9/15/2009	0.327	18720	1.00	5.430101628	54.30101628	20.572	38.705
40A	106274	9/15/2009	0.283	18720	1.00	4.666535215	46.66535215	17.679	33.262
41A	Method Blank	NA	0.011	18720	1.00	-0.244585124	-2.445851241	#DIV/0!	#DIV/0!
41B	Method Blank	NA	0.010	18720	1.00	-0.053693521	-0.536935209	-0.203	-0.383
42A	CCV	NA	0.216	18720	1.00	-0.071047303	-0.71047303	-0.269	-0.506
						3.503831813	35.03831813	13.275	24.975

QC Duration 18720
CCV Spike Amt ug per 0.5 ml 3.25

1000ng/1ug

Low Point: $\frac{RL(\mu g) \times 1000}{RL(\mu g) \times 5 \text{ ml} \times Q \times \text{Duration}}$ ppb x mw
0.5ml 24.45

Calibration Data 9/18/2009 Linear Regression

0.5 ml Aliquot of Cal STD

Slope 0.057624326
Y-int 0.014094053
R2 0.996777647

RL(μg) for 0.5 ml aliquot	RL (μg) in full 5 ml of sample	RL (ppb)	RL ($\mu g/m^3$)	Result (μg)	Result ($\mu g/m^3$)	%Rec
0.033	0.325	0.1	0.232	10.56948535	7.533691846	
0.033	0.325	0.1	0.232	11.61071227	8.275855022	
0.033	0.325	0.1	0.232	23.58482193	16.81073154	
0.033	0.325	0.1	0.232	0.330753897	0.235753952	
0.033	0.325	0.1	0.232	12.13132574	8.64693661	
0.033	0.325	0.1	0.232	12.13132574	8.64693661	
0.033	0.325	0.1	0.232	7.619942386	5.430896182	
0.033	0.325	0.1	0.232	12.304486356	8.770630472	
0.033	0.325	0.1	0.232	9.701796239	6.915222533	
0.033	0.325	0.1	0.232	7.966418028	5.678283907	
0.033	0.325	0.1	0.232	12.6519392	9.018018198	
0.033	0.325	0.1	0.232	38.50907455	27.44840373	
0.033	0.325	0.1	0.232	47.70657907	34.00417845	
0.033	0.325	0.1	0.232	54.30101628	38.70454523	
0.033	0.325	0.1	0.232	46.66535215	33.26201527	
0.033	0.325	#DNV/0!	#DNV/0!	ND	#DNV/0!	
0.033	0.325	#DNV/0!	#DNV/0!	ND	#DNV/0!	
0.033	0.325	#DNV/0!	#DNV/0!	ND	#DNV/0!	
0.033	0.325	#DNV/0!	#DNV/0!	ND	#DNV/0!	
0.033	0.325	#DNV/0!	#DNV/0!	ND	#DNV/0!	
0.033	0.325	#DNV/0!	#DNV/0!	ND	#DNV/0!	
0.033	0.325	0.1	0.232	ND	ND	
0.033	0.325	0.1	0.232	ND	ND	
0.033	0.325	0.1	0.232	35.03831813	24.97452648	%Rec 108

ug/ml of NO2	ug of NO2	absorbance
0	0	0
0.065	0.0325	0.012
0.325	0.1625	0.02
1.3	0.65	0.051
6.5	3.25	0.217
13	6.5	0.381

QC Results and Raw Data

Work Order: 0909375C

Date: 9/18/09

Method: Rad 166

Analyst: M. Skidmore

Wavelength: 537 nm

Standard ID	Concentration	ABS
Level 1	0.065 ug/mL	0.012
Level 2	0.325 ug/mL	0.020
Level 3	1.3 ug/mL	0.051
Level 4	6.5 ug/mL	0.217
Level 5	13 ug/mL	0.381
ICV		

$$r = \frac{0.9968}{0.05762}$$

$$m = \frac{0.05762}{0.01409}$$

ICV % Recovery = _____

Fraction	Dilution	ABS	Sample ID	Sample Volume	Comments
26A	1.00	0.075	104942		
27A		0.081	104943		
28A		0.150	104944		
29A		0.016	104945		
30A		0.084	104946		
30AA		0.084	104946		
31A		0.058	104947		
32A		0.085	102897		
33A		0.070	102898		
34A		0.060	102905		
35A		0.087	102909		
36A		0.087	102913		
37A		0.236	106251 106251		
38A		0.289	106260		
39A		0.327	106270		
40A		0.283	106274		
BIK		0.011	N/A		
BIK		0.010			
CCV		0.216			

MSS
9/23/09

Procedure:


Signed

9/23/09
Date

Spectrophotometer Standard Preparation Log

@Air Toxics Ltd. Log Book #: 1858

Standard ID: 1858-40
Project: Calibration Solution Rack 166
Analyst: M. Skidmore
Preparation Date: 9/18/09
Expiration Date: 9/18/09

Solvent: DI H₂O
Solvent Lot #: N/A

Procedure/Comments: Dissolve 5mg Sodium Nitrate, 97% (located ERAD) in 250 mL DI H₂O to yield 13 mg/mL or 13 mg/L. From this solution, dilute to make:

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

To each of these calibration levels, transfer 0.5 mL to vial and add 5 mL of sulfanilamide, cap tightly, stir and wait 5 minutes. Then add 1 mL of NEDA solution, stir and wait 10 minutes. Measure absorbance at 537 nm.

MSS
9/18/09

M. Skidmore
Signed Date 9/25/09

[Signature]
Reviewed Date 9/21/09

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 #: 0909375C
of pages (Including Cover): 4

10/5/2009

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.

Samples 102897, 102898, 102905, 102909, 102913, 106259, 106260, 106270 and 106274 were received without complete documentation regarding collection date on the Chain of Custody or sample tags. The year 2009 will be used to determine the extent of hold time.

Your prompt response is appreciated.

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
26A 104942	AIR/PASSIVE	NO ₂ SO ₂ HF ANALYSIS	9/2/09	9/15/09
27A 104943			9/2/09	9/15/09
28A 104944			9/2/09	9/15/09
29A 104945			9/2	0
30A 104946			9/2	9/15/09
31A 104947			9/2	9/15/09
32A 102897			9/2	9/15
33A 102898			9/2	9/15
34A 102905			9/2	9/15
35A 102909			9/2	9/15
36A 102913			9/2	9/15
37A 106259			9/2	9/15
38A 106260			9/2	9/15
39A 106270			9/2	9/15
40A 106274			9/2	9/15

Special Instructions:

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

Fedex 9682 2625 2202

CUSTODY SEAL INTACT?
N NONE TEMP 8.4°C

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

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: _____
 Received by: [Signature] of (company name) AHL 0956 Date: 9/18/09
 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 0909375C

Client

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

Phone

800-825-5343

Fax

781-247-4305

Date Promised: 09/29/09 11:59 pm

Date Completed: 10/1/09

Date Received: 9/18/09

PO#: 16512

Project#: 16512

Total \$: \$ 675.00

Logged By: MW

Sales Rep: TL

<u>Fraction</u>	<u>Sample #</u>	<u>Analysis</u>	<u>Collected</u>	<u>Amount\$</u>
26A	104942	ATL Applications	9/15/2009	\$40.00
27A	104943	ATL Applications	9/15/2009	\$40.00
28A	104944	ATL Applications	9/15/2009	\$40.00
29A	104945	ATL Applications	NA	\$40.00
30A	104946	ATL Applications	9/15/2009	\$40.00
30AA	104946 Lab Duplicate	ATL Applications	9/15/2009	\$0.00
31A	104947	ATL Applications	9/15/2009	\$40.00
32A	102897	ATL Applications	9/15/2009	\$40.00
33A	102898	ATL Applications	9/15/2009	\$40.00
34A	102905	ATL Applications	9/15/2009	\$40.00
35A	102909	ATL Applications	9/15/2009	\$40.00
36A	102913	ATL Applications	9/15/2009	\$40.00
37A	106259	ATL Applications	9/15/2009	\$40.00
38A	106260	ATL Applications	9/15/2009	\$40.00
39A	106270	ATL Applications	9/15/2009	\$40.00
40A	106274	ATL Applications	9/15/2009	\$40.00
41A	Lab Blank	ATL Applications	NA	\$0.00
41B	Lab Blank	ATL Applications	NA	\$0.00
42A	CCV	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:

Date Completed: 10/1/09

Date Received: 9/18/09

PO#: 16512

Project#: 16512

Total \$: \$ 675.00

Logged By: MW

Sales Rep:

<u>Fraction</u>	<u>Sample #</u>	<u>Analysis</u>	<u>Collected</u>	<u>Amount\$</u>
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 #61 NO2-Radiello 166

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

Sample Discrepancy Report

Identification

Initiated By: MW Project ID:13297 PM: AS Date: 9/18/2009 Discrepancy Type: 1. 2. 3.

Workorder(s) affected: 0909375 Sample(s) affected: all

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).

1.6: no relinq. signature and date

Describe the Discrepancy: 1.8: no yr of collection, will assume 09'

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 H₂O 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: samples rec'd at 8.4C

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: _____ Date: 9/22/2009

Waiting for Client Reply

Comments: _____

Notify Lab Name: _____ Date: _____ Notify Receiving:

Additional notifications attached.

Additional Comments:

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 #:

09093750

- A1 A2 R T M Q checkboxes for various criteria

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)

- Checkboxes for LUMEN validation criteria

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

- Checkboxes for additional validation and reporting criteria

Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
Correct amount of sample analyzed (i.e. sample not over-diluted)
Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
TICs resemble reference spectra
TICs between duplicate samples are consistent
Checked samples for trends (i.e. Influent vs. Effluent, Field Dups, Field/Trip Blank, etc.)
Data for multiple analyses of sample(s) has been evaluated for comparability of results
Special units for all samples in the final report are correctly calculated
Manually entered results checked (i.e. TPH/NMOC)
Chain of Custody verified for any special comments (i.e. different compounds/RLs, action levels)
Chain of Custody scanned correctly
Verify sample id's vs. chain of custody
Date MDL(s) performed per instrument(s)
Samples pressurized w/ appropriate gas (N2 or He)
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:

Dup - 30A
ICV not analyzed

M/Q:

Table with columns: A1/A2 (Analytical Review/Date), R/T (Reporting Review/Date), M (Management Review/Date), Q (QA Review/Date). Includes handwritten entries for dates and initials.

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply. Note (2): Management reviewer and reporting reviewer must be separate individuals. Rev. 02/20/09