APPENDIX B

SAMPLE COLLECTION LOGS AND ANALYSIS REQUEST/CHAIN-OF-CUSTODY RECORDS

SAMPLE COLLECTION LOGS

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 **Fort McClellan**

Manager: Jeanne Yacoub

RFA / COC Number: LFG-051303-AIR

Location Code: **LF1-78-GAS01**

Sample Number: **SH5001**

Sample Name: **LF1-78-GAS01-GS-SH5001-REG**

Sampling Method: **AC**

Sample Type: **GS** *Sample Purpose:* **REG**

Collection Date: 5/13/03

Collection Time: 15:57

~~Start~~ *Depth:* ≈ 3.0' BGS

~~End Depth:~~

Sample Matrix: **AIR**

Sample Team: Markuten / Denney

QC Partners:

(TB) N/A (ER) N/A (FB) N/A

ERPIMS Values:

Sacode:

Lot Control#:

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	1	6	L	Summa

Comments: Summa 00000 2546 (Airtoxic #/ Serial #)

~~Serial #~~ Canister 6613

Start Vacuum ≈-28 Hg End Vacuum -5 Hg/psI

~~Sketch Location:~~ NA Sample Location I-8

Logged BY / Date: [signature] 5/13/03 *Reviewed BY / Date:* AW 5/16/03

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: ~~No COC~~ LF6-060203-AIR

Location Code: **LF2-79-GAS01**
Sample Number: **SH5002R**
Sample Name: **LF2-79-GAS01-GS-SH5002R-REG**
Sampling Method: **AC**
Sample Type: **GS** *Sample Purpose:* **REG**

Collection Date: **02-JUN-03**
Collection Time: **11:15**
Start Depth: ~~0~~ N/A
End Depth: ~~0~~ 5ft K.M 6/2/03
Sample Matrix: **AIR**
Sample Team: **JR**

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	2	6	L	Summa

ERPIMS Values:
Sacode:
Lot Control#:

Comments:

Primary Summa#02246; Secondary Summa#9558 ; Sample location LF2-79.GAS01

Sketch Location:

Logged BY / Date: 6/2/03 *Reviewed BY / Date:* 6/2/03

Shaw™
Shaw E & I, Inc.

Sample Collection Log

796886 - Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: LF6-100203-AIR

Location Code: **OLF-80-GAS01**
Sample Number: **SH5003**
Sample Name: **OLF-80-GAS01-GS-SH5003-REG**
Sampling Method: **AC**
Sample Type: **GS** *Sample Purpose:* **REG**
Sampling Equip: Resulator w/ Summa

Task: **CK09:WAD01**
Collection Date: 10/1/03
Collection Time: 16:38
Start Depth: 3.0'
End Depth: 3.5'
Sample Matrix: **AIR**
Sample Team: J. Remo & T. Anderson

QC Partners:
(TB) N/A (ER) N/A (FB) N/A

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	1	6	L	Summa

ERPIMS Values:
Sacode:
Lot Control#:

Comments: Initial vaccum 29 in/Hg / Final Vaccum 2 in/Hg

Sketch Location:

Logged BY / Date: [signature] 10/1/03 *Reviewed BY / Date:* [signature] 10/2/03

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: ~~No COC~~ LFB-060203-AIR

Location Code: **PPMP-227-GAS01**
Sample Number: **SH5005R**
Sample Name: **PPMP-227-GAS01-GS-SH5005R-REG**
Sampling Method: **AC**
Sample Type: **GS** *Sample Purpose:* **REG**

Collection Date: **02-JUN-03**
Collection Time: **10:10**
Start Depth: ~~0~~ N/A. K.H. 6/2/02
End Depth: ~~0~~ 3 ft
Sample Matrix: **AIR**
Sample Team: **JR**

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	2	6	L	Summa

ERPIMS Values:
Sacode:
Lot Control#:

Comments:

Primary Summa#R-14; Secondary Summa#308426@1015

Sketch Location:

Logged BY / Date: [signature] 6/2/03 *Reviewed BY / Date:* [signature] 6/2/03

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: ~~No COC~~ LFG-060203-AIR

Location Code: **FTA-126-GAS01**
Sample Number: **SH5006R**
Sample Name: **FTA-126-GAS01-GS-SH5006R-REG**
Sampling Method: **AC**
Sample Type: **GS** *Sample Purpose:* **REG**

Collection Date: **02-JUN-03**
Collection Time: **10:40**
Start Depth: ~~0~~ NA
End Depth: ~~0~~ 3 ft
KW 6/2/03
Sample Matrix: **AIR**
Sample Team: **JR**

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	2	6	L	Summa

ERPIMS Values:
Sacode:
Lot Control#:

Comments:

Primary Summa#1226; Secondary Summa#14037

Sketch Location:

Logged BY / Date: [signature] 6/2/03 *Reviewed BY / Date:* [signature] 6/2/03

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 **Fort McClellan**

Manager: Jeanne Yacoub

RFA / COC Number: LFG-051403-AIR

Location Code: **PPMP-229-GAS01**

Sample Number: **SH5007**

Sample Name: **PPMP-229-GAS01-GS-SH5007-REG**

Sampling Method: **AC**

Sample Type: **GS** *Sample Purpose:* **REG**

Collection Date: 5/13/03

Collection Time: 14:31

Start Depth: ≈ 3.0' BGS

End Depth: WA

Sample Matrix: **AIR**

Sample Team: T. Anderson

QC Partners:

(TB) N/A (ER) N/A (FB) N/A

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	1	6	L	Summa

ERPIMS Values:

Sacode:

Lot Control#:

Comments: Summa Canister Serial # 0000001230 Canister # 1188; Sample Collected @ PPMP-229-12 Start / Intial Vaccuum 30 Hg Finial vaccuum 10 Hg/psI

Sketch Location:

Logged BY / Date: Jonathan W. R 5/14/03 *Reviewed BY / Date:* AN 5/16/03

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 Fort McClellan

Manager: Jeanne Yacoub

LFF-060203-AIR

RFA / COC Number: ~~No COC~~

Location Code: **PPMP-229-GAS01**
Sample Number: **SH5007R**
Sample Name: **PPMP-229-GAS01-GS-SH5007R-REG**
Sampling Method: **AC**
Sample Type: **GS** *Sample Purpose:* **REG**

Collection Date: **02-JUN-03**
Collection Time: **09:30**
Start Depth: ~~0~~ NA
End Depth: ~~0~~ 5 ft
Sample Matrix: **AIR**
Sample Team: **JR**

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	2	6	L	Summa

ERPIMS Values:
Sacode:
Lot Control#:

Comments:

Primary Summa #23886; Secondary Summa#34432 @ 0935

Sketch Location:

Logged BY / Date: 6/2/03 *Reviewed BY / Date:* 6/2/03

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: ~~No COC~~ LFF-060203-AIR

Location Code: PPMP-229-GAS01
Sample Number: SH5007R
Sample Name: PPMP-229-GAS01-GS-SH5007R-REG
Sampling Method: AC
Sample Type: GS *Sample Purpose:* REG

Collection Date: 02-JUN-03
Collection Time: 09:30
Start Depth: ~~0~~ 10 ft
End Depth: ~~0~~ 5 ft 10 ft 6/6/03
Sample Matrix: AIR
Sample Team: JR

Analytical Suite	Containers Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	2	6	L	Summa

ERPIMS Values:
Sacode:
Lot Control#:

Comments:

Primary Summa #23886; Secondary Summa#34432 @ 0935 ; Sample ~~collected~~ ppmp-229-12 collected @

Sketch Location:

Logged BY / Date: 6/2/03 *Reviewed BY / Date:* 6/2/03

haw™ Shaw Environmental, Inc.

Sample Collection Log

796886 - Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: LFG-060303-AIR

Location Code: **FTA-82-GAS01**

Task: **CK09:WAD01**

Sample Number: **SH5008**

Collection Date: 6/2/03

Sample Name: **FTA-82-GAS01-GS-SH5008-REG**

Collection Time: 16:25

Sampling Method: **AC**

~~Start~~ *Depth:* ≈ 3.0' BGS

Sample Type: **GS**

Sample Purpose: **REG**

~~End Depth~~

QC Partners:

(TB) N/A (ER) N/A (FB) N/A

Sample Matrix: **AIR**

Sample Team: J. Remo / C. Markoten

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	1	6	L	Summa

ERPIMS Values:

Sacode:

Lot Control#:

Comments: Secondary Summa canister # 02594
Intial vacuum 29" Hg Final vacuum 4" Hg
Sample collected @ I-13

Sketch Location:

Logged BY / Date: 6/3/03 *Reviewed BY / Date:* 6/3/03

Shaw™
Shaw E & I, Inc.

Sample Collection Log

796886 Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: No COC

Location Code: **PPMP-227-GASBK**
Sample Number: **SH5009**
Sample Name: **PPMP-227-GASBK-GS-SH5009-REG**
Sampling Method: **AC**
Sample Type: **GS** *Sample Purpose:* **REG**

Task: **CK09:WAD01**
Collection Date: **12-JUN-03**
Collection Time: **13:00**
Start Depth: ~2' above ground surface
End Depth:
Sample Matrix: **AIR**
Sample Team: **JR**

ERPIMS Values:
Sacode:
Lot Control#:

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
TO-15	N	A	1	6	L	Summa

Comments:

Ambient Air; Summa # 10772
Initial Vaccum 30 in Hg
Finial Vaccum 6 in Hg

Sketch Location:

Logged BY / Date: 6/12/03 *Reviewed BY / Date:* 6/12/03

ANALYSIS REQUEST/CHAIN-OF-CUSTODY RECORDS

IT CORPORATION
A Member of The IT Group

0305244

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LFG-051303-AIR
Page 1 of 1

Project Number: 756886
Project Name: Fort McClellan
Sample Coordinator: Oliver Allen
Turnaround Time: 72 HR.

Samples Shipment Date: 13 MAY 2003
Lab Destination: Air Toxics LTD
Lab Contact: Amanda Kilgore
Project Contact: Tim Roth
Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions:

Possible Hazard Indentification: Non-Hazard [X] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological [ ]

Sample Disposal: Return to Client [ ] Disposal by Lab [X] Archive (mos.)

1. Relinquished By (Signature/Affiliation) Nielsen/SHAW	Date: 051303 Time: 1800	1. Received By (Signature/Affiliation)	Date: Time:
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation) Lynnda Thomas ATL	Date: 5/14/03 Time: 945

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
01A 31530-1	LF1-78-GAS31-GS-20150ft-RFG	13 MAY 2003	15:57	6 L Summa	1	None Required	Soil Gas by TC-15	N		

7.8" Hg

CUSTODY SEAL INTACT?
Y N NONE TEMP.

0306030

Shaw™ Shaw Environmental, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LFG-060203-AIR

Project Number: 796086

Project Name: Fort McClellan

Sample Coordinator: ~~Oliver Allen~~

Turnaround Time: 72 HOUR TAT

Samples Shipment Date: 02 JUN 2003

Lab Destination: Air Toxics LTD

Lab Contact: Amanda Killgore

Project Contact: Tim Roth

Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions: None

Possible Hazard Indentification: Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐

Sample Disposal: Return to Client ☐ Disposal by Lab ☐ Archive (mos.)

1. Relinquished By (Signature/Affiliation)	Date: Time:	1. Received By (Signature/Affiliation) Amanda ATL	Date: 6/3/03 Time: 1000
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation)	Date: Time:

Comments: None

	Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
01A	SH5002R	LF2-70-GAS01-GS-SH5002R-REG	02 JUN 2003	11:15	6 L Summa	2	None Required	Soil Gas by TO-15	N		6.5"Hg
02A	SH5005R	PPMP-227-GAS01-GS-SH5005R-REG	02 JUN 2003	10:10	6 L Summa	2	None Required	Soil Gas by TO-15	N		7.0"Hg
03A	SH5006R	FTA-126-GAS01-GS-SH5006R-REG	02 JUN 2003	10:40	6 L Summa	2	None Required	Soil Gas by TO-15	N		3.0"Hg
04A	SH5007R	PPMF-220-GAS01-GS-SH5007R-REG	02 JUN 2003	09:30	6 L Summa	2	None Required	Soil Gas by TO-15	N		6.0"Hg

CUSTODY SEAL INTACT?
Y N NONE TEMP

0306061

Shaw Shaw Environmental, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LFG-060303-AIR

Project Number: 790886

Project Name: Fort McClellan

Sample Coordinator: ~~Oliver Allen~~ Mark Hayes

Turnaround Time: 72 HR TAT

Samples Shipment Date: 03 JUN 2003

Lab Destination: Air Toxics LTD

Lab Contact: Amanda Killgore

Project Contact: Tim Ruth

Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions: 72 HOUR TURNAROUND

Possible Hazard Indentification: Radiological ☐
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:
Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By (Signature/Affiliation)	Date: 6/3/03 Time: 1400	1. Received By (Signature/Affiliation)	Date: 6/4/03 Time: 1020
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation)	Date: Time:

Comments: None

CUSTODY SEAL INTACT?
Y N NONE TEMP

	Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
01A	[illegible]	FTA-02 G/S[illegible]-GS S/15000-REG	02 JUN 2003	16:25	6 L Summa	1	None Required	Soil Gas by TO-15	N		

4.0"Hg

Shaw Shaw Environmental, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

0306253

Reference Document No: LFG-061203-AIR

Project Number: 785886

Project Name: Fort McClellan

Sample Coordinator: ~~Oliver Allen~~ Kirk Hagne

Turnaround Time: 72 HOUR TURNAROUND TIME

Samples Shipment Date: 12 JUN 2003

Lab Destination: Air Toxics LTD

Lab Contact: Amanda Kilgore

Project Contact: Tim Roth

Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions: 72 HOUR TURNAROUND TIME

Possible Hazard Indentification: Radiological ☐
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:
Return to Client ☐ Disposal by Lab ☒ Archive (mos.) not viable

1. Relinquished By (Signature/Affiliation) [signature] Shaw E&E — Date: 6/12/03 Time: 1600
1. Received By (Signature/Affiliation) Nicole L Salvago ATL — Date: 6/13/03 Time: 1010
2. Relinquished By (Signature/Affiliation) — Date: Time:
2. Received By (Signature/Affiliation) — Date: Time:
3. Relinquished By (Signature/Affiliation) — Date: Time:
3. Received By (Signature/Affiliation) — Date: Time:

Comments: None

CUSTODY SEAL INTACT? Y N NONE TEMP ___

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil CID	Condition On Receipt
01A	[illegible] FPMT-227-GAS3K-GS-SH2[illegible]	12 JUN 2003	13:00	6 L Summa	1	None Required	Soil Gas by TO-15	N	

0310069

Shaw™ Shaw Environmental, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LFG-100203-AIR

Project Number: 796886
Project Name: Fort McClellan
Sample Coordinator: Keith Hague
Turnaround Time: 7 DAY TURNAROUND TIME

Samples Shipment Date: 02 OCT 2003
Lab Destination: Air Toxics LTD
Lab Contact: Amanda Killgore
Project Contact: Randy McBride
Carrier/Waybill No.: UPS/

Bill To: Randy McBride
312 Directors Drive
Knoxville TN 37923

Report To: Randy McBride
312 Directors Drive
Knoxville TN 37923

Special Instructions: 7 DAY TURNAROUND TIME

Possible Hazard Indentification: Radiological: ☐
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:
Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By (Signature/Affiliation) [signature] Shaw S&T	Date: 10/2/03 Time: 1400
2. Relinquished By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:

1. Received By (Signature/Affiliation) Nicole L Lalcrop ATL	Date: 10/3/03 Time: 1000
2. Received By (Signature/Affiliation)	Date: Time:
3. Received By (Signature/Affiliation)	Date: Time:

Comments: None

CUSTODY SEAL INTACT?
Y N NONE TEMP n/a

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
SH6205	OLF-30-GAS01-CS-SH5003-REC	01 OCT 2003	16:38	6 L Summa	1	None Required	Soil Gas by TO-15	N		

OIA

1.0

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN-OF-CUSTODY RECORD

REFERENCE COC NO.: LFG- 060203-AIR

PAGE 1 OF

Bill To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Report To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Project Name/No: FTMC
Sample Team Member: Jonathan Rano
Profit Center:
Project Manager: Jeanne Yacoub
Project No.: 796886
Required Report Date: 06/02/03

Sample Shipment Date:
Laboratory Destination: ~~EMAX~~ Airtoxics
Laboratory Contact: ~~Elizabeth McIntyre~~
Project Contact/Phone: Tim Roth/865-560-5272
Carrier Waybill No.:

Sample Number	Sample Type/ Description	Date/Time Collected	Container Type	Sample Volume	Pre-servative	Requested Testing Program	Condition on Receipt	Disposal Record
SH5000 7R	Subsurface Gas	6/2 11:15	Summa		none	TO-15		
SH5000 6R	"	6/2 10:40	Summa		none	TO-15		
SH5000 5R	"	6/2 10:10	Summa		none	TO-15		
SH5000 7R	"	6/2 9:30	Summa		none	TO-15		

Special Instructions:

Possible Hazard Identification:
Non-haz: ____ Flammable: ____ Poison B: ____ Unknown: X

Sample Disposal:
Return to Client: ____ Disposal by Lab: X Archive: ____

Turnaround Time:
Normal: [illegible] Rush: X 72 Hour Turn

Level of QC Required: Screening
Definitive: ~~X~~ Project Specific: X

1. Relinquished by: [signature] Shaw E and I, Inc.	Date: 6/2/03 Time: 13:00	1. Received by: [signature] Shaw E&I	Date: 6/2/03 Time: 13:00
2. Relinquished by:	Date: Time:	2. Received by:	Date: Time:
3. Relinquished by:	Date: Time:	2. Received by:	Date: Time:

Comments:

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN-OF-CUSTODY RECORD

REFERENCE COC NO.: ZFG-060303-AIR

PAGE 1 OF 1

Bill To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Report To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Project Name/No: FTMC
Sample Team Member: Jonathan Remo
Profit Center:
Project Manager: Jeanne Yacoub
Project No.: 796886
Required Report Date: 6/3/03

Sample Shipment Date: 6/3/03
Laboratory Destination: ~~EMAX~~ Airtoxics
Laboratory Contact: ~~Elizabeth McIntyre~~
Project Contact/Phone: Tim Roth/865-560-5272
Carrier Waybill No.:

Sample Number	Sample Type/ Description	Date/Time Collected	Container Type	Sample Volume	Pre-servative	Requested Testing Program	Condition on Receipt	Disposal Record
SH3088	Soil gas	6/2/03 16:25	Summa		None	TO-15		

Special Instructions:

Possible Hazard Identification:
Non-haz: ____ Flammable: ____ Poison B: ____ Unknown: X

Sample Disposal:
Return to Client: ____ Disposal by Lab: X Archive: ____

Turnaround Time:
Normal: ~~X~~ Rush: X 72 Hour

Level of QC Required: Screening
~~Definitive:~~ ~~X~~ Project Specific: X

1. Relinquished by: Jonathan Remo Shaw E and I, Inc.	Date: 6/3/03 Time: 07:30	1. Received by: Shaw E&I	Date: 6/3/03 Time: 0735
2. Relinquished by:	Date: Time:	2. Received by:	Date: Time:
3. Relinquished by:	Date: Time:	2. Received by:	Date: Time:

Comments:

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN-OF-CUSTODY RECORD

REFERENCE COC NO.: LFG-061203-AIR

PAGE 1 OF 1

Project Name/No: FTMC
Sample Team Member: Jonathan Reno
Profit Center:
Project Manager: Jeanne Yacoub
Project No.: 796886
Required Report Date: 6/12/03

Sample Shipment Date:
Laboratory Destination: EMAX
Laboratory Contact: Elizabeth McIntyre
Project Contact/Phone: Tim Roth/865-560-5272
Carrier Waybill No.:

Bill To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Report To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Sample Number	Sample Type/ Description	Date/Time Collected	Container Type	Sample Volume	Pre-servative	Requested Testing Program	Condition on Receipt	Disposal Record
PPMP-227-GASBK	Air	13:00 6/12/03	Summa	NA	NA	TO-15	good	

Special Instructions:

Possible Hazard Identification:
Non-haz: ____ Flammable: ____ Poison B: ____ Unknown: X

Sample Disposal:
Return to Client: ____ Disposal by Lab: X Archive: ____

Turnaround Time: 72 Hour Turn
~~Normal: X~~ Rush: X

Level of QC Required:
Definitive: X Project Specific: ____

1. Relinquished by: Shaw E and I, Inc.	Date: 6/12/03 Time: 13:30	1. Received by: Shaw E&I	Date: 6/12/03 Time: 1330
2. Relinquished by:	Date: Time:	2. Received by:	Date: Time:
3. Relinquished by:	Date: Time:	2. Received by:	Date: Time:

Comments:

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN-OF-CUSTODY RECORD

REFERENCE COC NO.: LFG-100203

PAGE 1 OF 1

Bill To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Report To: Duane Nielsen
Shaw E & I
312 Directors Drive
Knoxville, TN 37923

Project Name/No: FTMC
Sample Team Member: Jonathan W. Kerr
Profit Center:
Project Manager: Jeanne Yacoub
Project No.: 796886
Required Report Date:

Sample Shipment Date:
Laboratory Destination:
Laboratory Contact:
Project Contact/Phone: Tim Roth/865-560-5272
Carrier Waybill No.:

Sample Number	Sample Type/ Description	Date/Time Collected	Container Type	Sample Volume	Pre-servative	Requested Testing Program	Condition on Receipt	Disposal Record
SH 50003	Soil gas	10/1/03 16:38	Summa		none	TO-15		

Special Instructions:

Possible Hazard Identification:

Non-haz: ____ Flammable: ____ Poison B: ____ Unknown: X

Sample Disposal:

Return to Client: ____ Disposal by Lab: X Archive: ____

Turnaround Time:

Normal: X Rush:

Level of QC Required:

Definitive: X Project Specific: ____

1. Relinquished by: Jonathan W. Kerr Shaw E and I, Inc. Date: 10/1/03 Time: 16:38
2. Relinquished by: Date: Time:
3. Relinquished by: Date: Time:

1. Received by: Kristy Hogan Shaw E&I Date: 10/1/03 Time: 1638
2. Received by: Date: Time:
2. Received by: Date: Time:

Comments:

APPENDIX C

SUMMARY OF ANALYTICAL DATA

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0305244

Work Order Summary

CLIENT:	Mr. Duane Nielsen Shaw Environmental & Infrastructure 312 Directors Drive Knoxville, TN 37923	**BILL TO:**	Accounts Payable/Ft McClellan Shaw Environmental & Infrastructure PO Box 5040 Ft. McClellan, AL 36205
PHONE:	865-670-2700	**P.O. #**	213430 OP
FAX:		**PROJECT #**	796886 Fort McClellan
DATE RECEIVED:	5/14/03	**CONTACT:**	DeDe Dodge
DATE COMPLETED:	5/16/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SH5001	Modified TO-15	7.0 "Hg
02A	Lab Blank	Modified TO-15	NA
03A	CCV	Modified TO-15	NA
04A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 05/16/03

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified TO-15
Shaw Environmental & Infrastructure
Workorder# 0305244

One 6 Liter Summa Canister sample was received on May 14, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
IS recoveries	Within 40% of mean over ICAL for blanks, and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The following compound Bromomethane indicated low bias (less than 70% expected recovery) in the daily CCV analyzed on May 14, 2003. Associated non-detect in sample SH5001 was flagged to indicate estimated results with low bias.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

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 reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

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

AIR TOXICS LTD.

SAMPLE NAME: SH5001

ID#: 0305244-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051412	Date of Collection:	5/13/03
Dil. Factor:	1.75	Date of Analysis:	5/14/03

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0305244-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051405	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/14/03

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0305244-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051403	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/14/03

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0305244-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051404	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/14/03

Compound	%Recovery
Freon 12	116
Freon 114	117
Chloromethane	103
Vinyl Chloride	113
Bromomethane	88
Chloroethane	106
Freon 11	100
1,1-Dichloroethene	96
Freon 113	99
Methylene Chloride	90
1,1-Dichloroethane	90
cis-1,2-Dichloroethene	104
Chloroform	100
1,1,1-Trichloroethane	102
Carbon Tetrachloride	119
Benzene	97
1,2-Dichloroethane	106
Trichloroethene	107
1,2-Dichloropropane	100
cis-1,3-Dichloropropene	118
Toluene	104
trans-1,3-Dichloropropene	117
1,1,2-Trichloroethane	98
Tetrachloroethene	107
1,2-Dibromoethane (EDB)	92
Chlorobenzene	101
Ethyl Benzene	100
m,p-Xylene	96
o-Xylene	93
Styrene	116
1,1,2,2-Tetrachloroethane	91
1,3,5-Trimethylbenzene	81
1,2,4-Trimethylbenzene	75
1,3-Dichlorobenzene	87
1,4-Dichlorobenzene	80
alpha-Chlorotoluene	114
1,2-Dichlorobenzene	81
1,2,4-Trichlorobenzene	78
Hexachlorobutadiene	78
Propylene	88
1,3-Butadiene	86
Acetone	88

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0305244-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051404	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 5/14/03	

Compound	%Recovery
Carbon Disulfide	100
2-Propanol	100
trans-1,2-Dichloroethene	106
Vinyl Acetate	101
2-Butanone (Methyl Ethyl Ketone)	98
Hexane	102
Tetrahydrofuran	97
Cyclohexane	104
1,4-Dioxane	100
Bromodichloromethane	101
4-Methyl-2-pentanone	96
2-Hexanone	89
Dibromochloromethane	107
Bromoform	93
4-Ethyltoluene	89
Ethanol	96
Methyl tert-butyl ether	98
Heptane	98

Container Type: NA - Not Applicable

IT CORPORATION
A Member of The IT Group

0305244

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LFG-051303-AIR
Page 1 of 1

Project Number: 796888
Project Name: Fort McClellan
Sample Coordinator: Oliver Allen
Turnaround Time: 72 HR.

Samples Shipment Date: 13 MAY 2003
Lab Destination: Air Toxics LTD
Lab Contact: Amanda Killgore
Project Contact: Tim Roth
Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions:

Possible Hazard Indentification: Non-Hazard [X] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological [ ]

Sample Disposal: Return to Client [ ] Disposal by Lab [X] Archive (mos.)

1. Relinquished By (Signature/Affiliation) Nielsen/Shaw	Date: 051303 Time: 1800	1. Received By (Signature/Affiliation)	Date: Time:
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation) Gerald Thomas ATC	Date: 5/14/03 Time: 945

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
01A SI5301	LF1-78-GAS31-GS-SH53R'-RFG	13 MAY 2003	15:57	6 L Summa	1	None Required	Soil Gas by TO-15	N		

CUSTODY SEAL INTACT?
Y N NONE TEMP.

IT CORPORATION
A Member of The IT Group

0305244

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LFG-051303-AIR

Project Number: 796886
Project Name: Fort McClellan
Sample Coordinator: Oliver Allen
Turnaround Time: 72 HR.

Samples Shipment Date: 13 MAY 2003
Lab Destination: Air Toxics LTD
Lab Contact: Amanda Kilgore
Project Contact: Tim Roth
Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions:

Possible Hazard Indentification: Non-Hazard [X] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological [ ]

Sample Disposal: Return to Client [ ] Disposal by Lab [X] Archive (mos.)

1. Relinquished By (Signature/Affiliation) ANDERSEN/SHAW	Date: 051303 Time: 1800	1. Received By (Signature/Affiliation)	Date: Time:
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation) Gerald Thomas ATC	Date: 5/14/03 Time: 945

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
OHA S15305	LF1-78-GAS01-GA-SH5081-RFG	13 MAY 2003	15:57	6 L Summa	1	None Required	Soil Gas by TO-15	N		

7.0" Hg

CUSTODY SEAL INTACT?
Y N NONE TEMP ____

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0305285

Work Order Summary

CLIENT:	Mr. Duane Nielsen Shaw Environmental & Infrastructure 312 Directors Drive Knoxville, TN 37923	**BILL TO:**	Accounts Payable/Ft McClellan Shaw Environmental & Infrastructure PO Box 5040 Ft. McClellan, AL 36205
PHONE:	865-670-2700	**P.O. #**	213430 OP
FAX:		**PROJECT #**	796886 Fort McClellan
DATE RECEIVED:	05/15/03	**CONTACT:**	DeDe Dodge
DATE COMPLETED:	05/19/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SH5007	Modified TO-15	11.0 "Hg
02A	Lab Blank	Modified TO-15	NA
03A	CCV	Modified TO-15	NA
04A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda J. Freeman

Laboratory Director

DATE: 05/19/03

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified TO-15
Shaw Environmental & Infrastructure
Workorder# 0305285

One 6 Liter Summa Canister sample was received on May 15, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limit
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
Daily CCV	</= 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106
IS Recoveries	Within 40% of mean over ICAL for blanks, and w/in 40 % of daily CCV for samples	Within 40% of CCV recoveries for blank and samples

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

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 reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

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

AIR TOXICS LTD.

SAMPLE NAME: SH5007

ID#: 0305285-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051612	Date of Collection:	5/13/03
Dil. Factor:	2.12	Date of Analysis:	5/16/03 03:08 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	1.1	5.3	Not Detected	Not Detected
Freon 114	1.1	7.5	Not Detected	Not Detected
Vinyl Chloride	1.1	2.8	Not Detected	Not Detected
Bromomethane	1.1	4.2	Not Detected	Not Detected
Chloroethane	1.1	2.8	Not Detected	Not Detected
Freon 11	1.1	6.0	Not Detected	Not Detected
1,1-Dichloroethene	1.1	4.3	Not Detected	Not Detected
Freon 113	1.1	8.2	Not Detected	Not Detected
Methylene Chloride	1.1	3.7	Not Detected	Not Detected
1,1-Dichloroethane	1.1	4.4	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.1	4.3	Not Detected	Not Detected
Chloroform	1.1	5.3	Not Detected	Not Detected
1,1,1-Trichloroethane	1.1	5.9	Not Detected	Not Detected
Carbon Tetrachloride	1.1	6.8	Not Detected	Not Detected
Benzene	1.1	3.4	1.9	6.3
1,2-Dichloroethane	1.1	4.4	Not Detected	Not Detected
Trichloroethene	1.1	5.8	Not Detected	Not Detected
1,2-Dichloropropane	1.1	5.0	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.1	4.9	Not Detected	Not Detected
Toluene	1.1	4.0	18	70
trans-1,3-Dichloropropene	1.1	4.9	Not Detected	Not Detected
1,1,2-Trichloroethane	1.1	5.9	Not Detected	Not Detected
Tetrachloroethene	1.1	7.3	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	1.1	8.3	Not Detected	Not Detected
Chlorobenzene	1.1	5.0	Not Detected	Not Detected
Ethyl Benzene	1.1	4.7	4.5	20
m,p-Xylene	1.1	4.7	9.2	40
o-Xylene	1.1	4.7	2.5	11
Styrene	1.1	4.6	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.1	7.4	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.1	5.3	Not Detected	Not Detected
1,2,4-Trimethylbenzene	1.1	5.3	Not Detected	Not Detected
1,3-Dichlorobenzene	1.1	6.5	Not Detected	Not Detected
1,4-Dichlorobenzene	1.1	6.5	Not Detected	Not Detected
alpha-Chlorotoluene	1.1	5.6	Not Detected	Not Detected
1,2-Dichlorobenzene	1.1	6.5	Not Detected	Not Detected
1,3-Butadiene	4.2	9.5	Not Detected	Not Detected
Hexane	4.2	15	Not Detected	Not Detected
Cyclohexane	4.2	15	Not Detected	Not Detected
Heptane	4.2	18	Not Detected	Not Detected
Bromodichloromethane	4.2	29	Not Detected	Not Detected
Dibromochloromethane	4.2	37	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: SH5007

ID#: 0305285-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051612	Date of Collection:	5/13/03
Dil. Factor:	2.12	Date of Analysis:	5/16/03 03:08 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	1.1	2.2	1.3	2.7
1,2,4-Trichlorobenzene	4.2	32	Not Detected	Not Detected
Hexachlorobutadiene	4.2	46	Not Detected	Not Detected
Acetone	4.2	10	5.3	13
Carbon Disulfide	4.2	13	Not Detected	Not Detected
2-Propanol	4.2	10	Not Detected	Not Detected
trans-1,2-Dichloroethene	4.2	17	Not Detected	Not Detected
Vinyl Acetate	4.2	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	13	4.3	13
Tetrahydrofuran	4.2	13	Not Detected	Not Detected
1,4-Dioxane	4.2	16	Not Detected	Not Detected
4-Methyl-2-pentanone	4.2	18	Not Detected	Not Detected
2-Hexanone	4.2	18	Not Detected	Not Detected
Bromoform	4.2	44	Not Detected	Not Detected
4-Ethyltoluene	4.2	21	Not Detected	Not Detected
Ethanol	4.2	8.1	57	110
Methyl tert-butyl ether	4.2	16	Not Detected	Not Detected
Propylene	4.2	7.4	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0305285-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051605	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/16/03 10:18 AM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0305285-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051605	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/16/03 10:18 AM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	0.50	1.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0305285-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051602	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/16/03 08:10 AM

Compound	%Recovery
Freon 12	103
Freon 114	106
Vinyl Chloride	105
Bromomethane	83
Chloroethane	99
Freon 11	102
1,1-Dichloroethene	107
Freon 113	108
Methylene Chloride	99
1,1-Dichloroethane	105
cis-1,2-Dichloroethene	107
Chloroform	104
1,1,1-Trichloroethane	105
Carbon Tetrachloride	114
Benzene	92
1,2-Dichloroethane	101
Trichloroethene	100
1,2-Dichloropropane	104
cis-1,3-Dichloropropene	106
Toluene	102
trans-1,3-Dichloropropene	106
1,1,2-Trichloroethane	101
Tetrachloroethene	103
1,2-Dibromoethane (EDB)	101
Chlorobenzene	100
Ethyl Benzene	100
m,p-Xylene	100
o-Xylene	100
Styrene	100
1,1,2,2-Tetrachloroethane	95
1,3,5-Trimethylbenzene	90
1,2,4-Trimethylbenzene	90
1,3-Dichlorobenzene	91
1,4-Dichlorobenzene	89
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	86
1,3-Butadiene	101
Hexane	105
Cyclohexane	105
Heptane	102
Bromodichloromethane	106
Dibromochloromethane	110

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0305285-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051602	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 5/16/03 08:10 AM	

Compound	%Recovery
Chloromethane	98
1,2,4-Trichlorobenzene	87
Hexachlorobutadiene	84
Acetone	96
Carbon Disulfide	101
2-Propanol	108
trans-1,2-Dichloroethene	98
Vinyl Acetate	107
2-Butanone (Methyl Ethyl Ketone)	103
Tetrahydrofuran	101
1,4-Dioxane	97
4-Methyl-2-pentanone	103
2-Hexanone	100
Bromoform	106
4-Ethyltoluene	92
Ethanol	107
Methyl tert-butyl ether	97
Propylene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0305285-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051603	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/16/03 08:53 AM

Compound	%Recovery
Freon 12	112
Freon 114	115
Vinyl Chloride	114
Bromomethane	79
Chloroethane	107
Freon 11	102
1,1-Dichloroethene	101
Freon 113	104
Methylene Chloride	96
1,1-Dichloroethane	93
cis-1,2-Dichloroethene	108
Chloroform	103
1,1,1-Trichloroethane	104
Carbon Tetrachloride	120
Benzene	101
1,2-Dichloroethane	107
Trichloroethene	111
1,2-Dichloropropane	107
cis-1,3-Dichloropropene	127
Toluene	110
trans-1,3-Dichloropropene	127
1,1,2-Trichloroethane	105
Tetrachloroethene	114
1,2-Dibromoethane (EDB)	97
Chlorobenzene	106
Ethyl Benzene	104
m,p-Xylene	100
o-Xylene	97
Styrene	123
1,1,2,2-Tetrachloroethane	95
1,3,5-Trimethylbenzene	82
1,2,4-Trimethylbenzene	78
1,3-Dichlorobenzene	89
1,4-Dichlorobenzene	81
alpha-Chlorotoluene	120
1,2-Dichlorobenzene	80
1,3-Butadiene	103
Hexane	77
Cyclohexane	78
Heptane	74
Bromodichloromethane	76
Dibromochloromethane	81

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0305285-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f051603	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 5/16/03 08:53 AM	

Compound	%Recovery
Chloromethane	101
1,2,4-Trichlorobenzene	72
Hexachlorobutadiene	72
Acetone	71
Carbon Disulfide	76
2-Propanol	80
trans-1,2-Dichloroethene	80
Vinyl Acetate	78
2-Butanone (Methyl Ethyl Ketone)	77
Tetrahydrofuran	76
1,4-Dioxane	80
4-Methyl-2-pentanone	77
2-Hexanone	72
Bromoform	65
4-Ethyltoluene	87
Ethanol	81
Methyl tert-butyl ether	72
Propylene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130

IT CORPORATION
A Member of The IT Group

0305285

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LFG-051403-AIR
Page 1 of 1

Project Number: 796388
Project Name: Fort McClellan
Sample Coordinator: Oliver Allen
Turnaround Time: 72 HRS

Samples Shipment Date: 14 MAY 2003
Lab Destination: Air Toxics LTD
Lab Contact: Amanda Killgore
Project Contact: Tim Roth
Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions:

Possible Hazard Indentification: Non-hazard [X] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological [ ]

Sample Disposal: Return to Client [ ] Disposal by Lab [X] Archive (mos.)

1. Relinquished By (Signature/Affiliation) D. NIELSEN/SHAW	Date: 051403 Time: 1600	1. Received By (Signature/Affiliation)	Date: Time:
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation) Lawrence Thomas AR	Date: 5/15/03 Time: 1015

Comments:

	Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
01A	SH5007	FFMF-22S-GA501-GS-SH5007-REG	13 MAY 2003	14:31	6 L Summa	1	None Required	Soil Gas by TO-15	N		Good

11.0 Kg
5/15/03

CUSTODY SEAL INTACT?
Y N NONE TEMP N/A

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0306061

Work Order Summary

CLIENT:	Mr. Duane Nielsen Shaw Environmental & Infrastructure 312 Directors Drive Knoxville, TN 37923	**BILL TO:**	Accounts Payable/Ft McClellan Shaw Environmental & Infrastructure PO Box 5040 Ft. McClellan, AL 36205
PHONE:	865-670-2700	**P.O. #**	213430 OP
FAX:		**PROJECT #**	796886 Fort McClellan
DATE RECEIVED:	6/4/03	**CONTACT:**	DeDe Dodge
DATE COMPLETED:	6/9/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SH5008	Modified TO-15	4.0 "Hg
02A	Lab Blank	Modified TO-15	NA
03A	CCV	Modified TO-15	NA
04A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 06/09/03

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified TO-15
Shaw Environmental & Infrastructure
Workorder# 0306061

One 6 Liter Summa Canister sample was received on June 04, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
IS recoveries	Within 40% of mean over ICAL for blanks, and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Sample SH5008 was found to be leaking at the time of pressurization.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

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 reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

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

AIR TOXICS LTD.

SAMPLE NAME: SH5008

ID#: 0306061-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060539	Date of Collection: 6/2/03
Dil. Factor:	1.55	Date of Analysis: 6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.78	3.9	Not Detected	Not Detected
Freon 114	0.78	5.5	Not Detected	Not Detected
Chloromethane	0.78	1.6	0.85	1.8
Vinyl Chloride	0.78	2.0	Not Detected	Not Detected
Bromomethane	0.78	3.0	Not Detected	Not Detected
Chloroethane	0.78	2.1	Not Detected	Not Detected
Freon 11	0.78	4.4	Not Detected	Not Detected
1,1-Dichloroethene	0.78	3.1	Not Detected	Not Detected
Freon 113	0.78	6.0	Not Detected	Not Detected
Methylene Chloride	0.78	2.7	1.1	3.8
1,1-Dichloroethane	0.78	3.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.78	3.1	Not Detected	Not Detected
Chloroform	0.78	3.8	Not Detected	Not Detected
1,1,1-Trichloroethane	0.78	4.3	Not Detected	Not Detected
Carbon Tetrachloride	0.78	5.0	Not Detected	Not Detected
Benzene	0.78	2.5	1.1	3.5
1,2-Dichloroethane	0.78	3.2	Not Detected	Not Detected
Trichloroethene	0.78	4.2	2.1	12
1,2-Dichloropropane	0.78	3.6	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.78	3.6	Not Detected	Not Detected
Toluene	0.78	3.0	91	350
trans-1,3-Dichloropropene	0.78	3.6	Not Detected	Not Detected
1,1,2-Trichloroethane	0.78	4.3	Not Detected	Not Detected
Tetrachloroethene	0.78	5.3	2.1	14
1,2-Dibromoethane (EDB)	0.78	6.0	Not Detected	Not Detected
Chlorobenzene	0.78	3.6	1.9	8.9
Ethyl Benzene	0.78	3.4	100	440
m,p-Xylene	0.78	3.4	200	870
o-Xylene	0.78	3.4	70	310
Styrene	0.78	3.4	24	110
1,1,2,2-Tetrachloroethane	0.78	5.4	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.78	3.9	35	180
1,2,4-Trimethylbenzene	0.78	3.9	94	470
1,3-Dichlorobenzene	0.78	4.7	Not Detected	Not Detected
1,4-Dichlorobenzene	0.78	4.7	19	110
alpha-Chlorotoluene	0.78	4.1	Not Detected	Not Detected
1,2-Dichlorobenzene	0.78	4.7	2.4	14
1,2,4-Trichlorobenzene	3.1	23	Not Detected	Not Detected
Hexachlorobutadiene	3.1	34	Not Detected	Not Detected
Propylene	3.1	5.4	Not Detected	Not Detected
1,3-Butadiene	3.1	7.0	Not Detected	Not Detected
Acetone	3.1	7.5	20	47

AIR TOXICS LTD.

SAMPLE NAME: SH5008

ID#: 0306061-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060539	Date of Collection:	6/2/03
Dil. Factor:	1.55	Date of Analysis:	6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	3.1	9.8	Not Detected	Not Detected
2-Propanol	3.1	7.7	5.8	14
trans-1,2-Dichloroethene	3.1	12	Not Detected	Not Detected
Vinyl Acetate	3.1	11	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.1	9.3	17	52
Hexane	3.1	11	Not Detected	Not Detected
Tetrahydrofuran	3.1	9.3	Not Detected	Not Detected
Cyclohexane	3.1	11	Not Detected	Not Detected
1,4-Dioxane	3.1	11	Not Detected	Not Detected
Bromodichloromethane	3.1	21	Not Detected	Not Detected
4-Methyl-2-pentanone	3.1	13	8.0	33
2-Hexanone	3.1	13	Not Detected	Not Detected
Dibromochloromethane	3.1	27	Not Detected	Not Detected
Bromoform	3.1	32	Not Detected	Not Detected
4-Ethyltoluene	3.1	15	86	430
Ethanol	3.1	5.9	34	65
Methyl tert-butyl ether	3.1	11	Not Detected	Not Detected
Heptane	3.1	13	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	105	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306061-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060522	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/5/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306061-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060522	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306061-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060518	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	%Recovery
Freon 12	82
Freon 114	89
Chloromethane	79
Vinyl Chloride	86
Bromomethane	86
Chloroethane	85
Freon 11	79
1,1-Dichloroethene	82
Freon 113	83
Methylene Chloride	85
1,1-Dichloroethane	85
cis-1,2-Dichloroethene	85
Chloroform	83
1,1,1-Trichloroethane	84
Carbon Tetrachloride	84
Benzene	84
1,2-Dichloroethane	85
Trichloroethene	85
1,2-Dichloropropane	88
cis-1,3-Dichloropropene	86
Toluene	87
trans-1,3-Dichloropropene	87
1,1,2-Trichloroethane	84
Tetrachloroethene	88
1,2-Dibromoethane (EDB)	86
Chlorobenzene	88
Ethyl Benzene	90
m,p-Xylene	89
o-Xylene	90
Styrene	92
1,1,2,2-Tetrachloroethane	89
1,3,5-Trimethylbenzene	89
1,2,4-Trimethylbenzene	89
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	89
alpha-Chlorotoluene	86
1,2-Dichlorobenzene	88
1,2,4-Trichlorobenzene	93
Hexachlorobutadiene	92
Propylene	90
1,3-Butadiene	88
Acetone	92

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306061-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060518	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	%Recovery
Carbon Disulfide	86
2-Propanol	89
trans-1,2-Dichloroethene	85
Vinyl Acetate	94
2-Butanone (Methyl Ethyl Ketone)	94
Hexane	90
Tetrahydrofuran	90
Cyclohexane	90
1,4-Dioxane	90
Bromodichloromethane	90
4-Methyl-2-pentanone	99
2-Hexanone	99
Dibromochloromethane	92
Bromoform	96
4-Ethyltoluene	93
Ethanol	84
Methyl tert-butyl ether	80
Heptane	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306061-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060519	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	%Recovery
Freon 12	101
Freon 114	104
Chloromethane	91
Vinyl Chloride	105
Bromomethane	78
Chloroethane	100
Freon 11	86
1,1-Dichloroethene	85
Freon 113	89
Methylene Chloride	92
1,1-Dichloroethane	84
cis-1,2-Dichloroethene	94
Chloroform	89
1,1,1-Trichloroethane	91
Carbon Tetrachloride	96
Benzene	94
1,2-Dichloroethane	91
Trichloroethene	95
1,2-Dichloropropane	91
cis-1,3-Dichloropropene	105
Toluene	93
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	88
Tetrachloroethene	96
1,2-Dibromoethane (EDB)	81
Chlorobenzene	91
Ethyl Benzene	94
m,p-Xylene	88
o-Xylene	86
Styrene	113
1,1,2,2-Tetrachloroethane	88
1,3,5-Trimethylbenzene	81
1,2,4-Trimethylbenzene	77
1,3-Dichlorobenzene	87
1,4-Dichlorobenzene	83
alpha-Chlorotoluene	114
1,2-Dichlorobenzene	87
1,2,4-Trichlorobenzene	92
Hexachlorobutadiene	97
Propylene	106
1,3-Butadiene	102
Acetone	74

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306061-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s060519	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	%Recovery
Carbon Disulfide	75
2-Propanol	76
trans-1,2-Dichloroethene	77
Vinyl Acetate	79
2-Butanone (Methyl Ethyl Ketone)	77
Hexane	74
Tetrahydrofuran	75
Cyclohexane	74
1,4-Dioxane	75
Bromodichloromethane	66
4-Methyl-2-pentanone	74
2-Hexanone	71
Dibromochloromethane	68
Bromoform	60
4-Ethyltoluene	85
Ethanol	85
Methyl tert-butyl ether	71
Heptane	73

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0306253

Work Order Summary

CLIENT:	Mr. Duane Nielsen Shaw Environmental & Infrastructure 312 Directors Drive Knoxville, TN 37923	**BILL TO:**	Accounts Payable/Ft McClellan Shaw Environmental & Infrastructure PO Box 5040 Ft. McClellan, AL 36205
PHONE:	865-670-2700	**P.O. #**	213430 OP
FAX:		**PROJECT #**	796886 Fort McClellan
DATE RECEIVED:	06/13/2003	**CONTACT:**	DeDe Dodge
DATE COMPLETED:	06/17/2003		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SH5009	Modified TO-15	6.0 "Hg
02A	Lab Blank	Modified TO-15	NA
03A	CCV	Modified TO-15	NA
04A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda J. Freeman

Laboratory Director

DATE: 06/17/03

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified TO-15
Shaw Environmental & Infrastructure
Workorder# 0306253

One 6 Liter Summa Canister sample was received on June 13, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The following compound, 4-Ethyltoluene, indicated low bias (less than 70% expected recovery) in the daily CCV analyzed on 06/15/2003. Associated non-detects in sample SH5009 were flagged to indicate estimated results with low bias.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

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 reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

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

AIR TOXICS LTD.

SAMPLE NAME: SH5009

ID#: 0306253-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061515	Date of Collection:	6/12/03
Dil. Factor:	1.68	Date of Analysis:	6/15/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.84	4.2	Not Detected	Not Detected
Freon 114	0.84	6.0	Not Detected	Not Detected
Chloromethane	0.84	1.8	Not Detected	Not Detected
Vinyl Chloride	0.84	2.2	Not Detected	Not Detected
Bromomethane	0.84	3.3	Not Detected	Not Detected
Chloroethane	0.84	2.2	Not Detected	Not Detected
Freon 11	0.84	4.8	Not Detected	Not Detected
1,1-Dichloroethene	0.84	3.4	Not Detected	Not Detected
Freon 113	0.84	6.5	Not Detected	Not Detected
Methylene Chloride	0.84	3.0	Not Detected	Not Detected
1,1-Dichloroethane	0.84	3.4	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.84	3.4	Not Detected	Not Detected
Chloroform	0.84	4.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.84	4.6	Not Detected	Not Detected
Carbon Tetrachloride	0.84	5.4	Not Detected	Not Detected
Benzene	0.84	2.7	Not Detected	Not Detected
1,2-Dichloroethane	0.84	3.4	Not Detected	Not Detected
Trichloroethene	0.84	4.6	Not Detected	Not Detected
1,2-Dichloropropane	0.84	3.9	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.84	3.9	Not Detected	Not Detected
Toluene	0.84	3.2	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.84	3.9	Not Detected	Not Detected
1,1,2-Trichloroethane	0.84	4.6	Not Detected	Not Detected
Tetrachloroethene	0.84	5.8	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.84	6.6	Not Detected	Not Detected
Chlorobenzene	0.84	3.9	Not Detected	Not Detected
Ethyl Benzene	0.84	3.7	Not Detected	Not Detected
m,p-Xylene	0.84	3.7	Not Detected	Not Detected
o-Xylene	0.84	3.7	Not Detected	Not Detected
Styrene	0.84	3.6	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.84	5.9	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.84	4.2	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.84	4.2	Not Detected	Not Detected
1,3-Dichlorobenzene	0.84	5.1	Not Detected	Not Detected
1,4-Dichlorobenzene	0.84	5.1	Not Detected	Not Detected
alpha-Chlorotoluene	0.84	4.4	Not Detected	Not Detected
1,2-Dichlorobenzene	0.84	5.1	Not Detected	Not Detected
1,2,4-Trichlorobenzene	3.4	25	Not Detected	Not Detected
Hexachlorobutadiene	3.4	36	Not Detected	Not Detected
Propylene	3.4	5.9	Not Detected	Not Detected
1,3-Butadiene	3.4	7.6	Not Detected	Not Detected
Acetone	3.4	8.1	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: SH5009

ID#: 0306253-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061515	Date of Collection:	6/12/03
Dil. Factor:	1.68	Date of Analysis:	6/15/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	3.4	11	Not Detected	Not Detected
2-Propanol	3.4	8.4	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
Vinyl Acetate	3.4	12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	10	Not Detected	Not Detected
Hexane	3.4	12	Not Detected	Not Detected
Tetrahydrofuran	3.4	10	Not Detected	Not Detected
Cyclohexane	3.4	12	Not Detected	Not Detected
1,4-Dioxane	3.4	12	Not Detected	Not Detected
Bromodichloromethane	3.4	23	Not Detected	Not Detected
4-Methyl-2-pentanone	3.4	14	Not Detected	Not Detected
2-Hexanone	3.4	14	Not Detected	Not Detected
Dibromochloromethane	3.4	29	Not Detected	Not Detected
Bromoform	3.4	35	Not Detected	Not Detected
4-Ethyltoluene	3.4	17	Not Detected U J	Not Detected U J
Ethanol	3.4	6.4	Not Detected	Not Detected
Methyl tert-butyl ether	3.4	12	Not Detected	Not Detected
Heptane	3.4	14	Not Detected	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	90	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306253-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061506	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/15/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306253-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061506	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 6/15/03	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected U J	Not Detected U J
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	89	70-130
4-Bromofluorobenzene	90	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306253-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061502	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/15/03

Compound	%Recovery
Freon 12	111
Freon 114	127
Chloromethane	91
Vinyl Chloride	102
Bromomethane	71
Chloroethane	99
Freon 11	105
1,1-Dichloroethene	102
Freon 113	101
Methylene Chloride	98
1,1-Dichloroethane	106
cis-1,2-Dichloroethene	104
Chloroform	102
1,1,1-Trichloroethane	109
Carbon Tetrachloride	113
Benzene	99
1,2-Dichloroethane	104
Trichloroethene	103
1,2-Dichloropropane	101
cis-1,3-Dichloropropene	99
Toluene	98
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	104
Tetrachloroethene	107
1,2-Dibromoethane (EDB)	105
Chlorobenzene	102
Ethyl Benzene	101
m,p-Xylene	104
o-Xylene	107
Styrene	101
1,1,2,2-Tetrachloroethane	102
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	91
1,4-Dichlorobenzene	88
alpha-Chlorotoluene	86
1,2-Dichlorobenzene	87
1,2,4-Trichlorobenzene	74
Hexachlorobutadiene	93
Propylene	103
1,3-Butadiene	100
Acetone	82

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306253-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061502	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/15/03

Compound	%Recovery
Carbon Disulfide	82
2-Propanol	81
trans-1,2-Dichloroethene	83
Vinyl Acetate	86
2-Butanone (Methyl Ethyl Ketone)	83
Hexane	77
Tetrahydrofuran	86
Cyclohexane	81
1,4-Dioxane	84
Bromodichloromethane	83
4-Methyl-2-pentanone	82
2-Hexanone	89
Dibromochloromethane	91
Bromoform	87
4-Ethyltoluene	69 Q
Ethanol	90
Methyl tert-butyl ether	88
Heptane	79

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306253-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061505	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/15/03

Compound	%Recovery
Freon 12	115
Freon 114	118
Chloromethane	101
Vinyl Chloride	108
Bromomethane	113
Chloroethane	112
Freon 11	102
1,1-Dichloroethene	96
Freon 113	98
Methylene Chloride	96
1,1-Dichloroethane	92
cis-1,2-Dichloroethene	102
Chloroform	96
1,1,1-Trichloroethane	101
Carbon Tetrachloride	111
Benzene	103
1,2-Dichloroethane	104
Trichloroethene	106
1,2-Dichloropropane	100
cis-1,3-Dichloropropene	110
Toluene	98
trans-1,3-Dichloropropene	117
1,1,2-Trichloroethane	102
Tetrachloroethene	112
1,2-Dibromoethane (EDB)	93
Chlorobenzene	101
Ethyl Benzene	100
m,p-Xylene	97
o-Xylene	97
Styrene	113
1,1,2,2-Tetrachloroethane	97
1,3,5-Trimethylbenzene	90
1,2,4-Trimethylbenzene	83
1,3-Dichlorobenzene	85
1,4-Dichlorobenzene	78
alpha-Chlorotoluene	108
1,2-Dichlorobenzene	80
1,2,4-Trichlorobenzene	92
Hexachlorobutadiene	104
Propylene	100
1,3-Butadiene	105
Acetone	80

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306253-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d061505	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 6/15/03	

Compound	%Recovery
Carbon Disulfide	81
2-Propanol	80
trans-1,2-Dichloroethene	87
Vinyl Acetate	83
2-Butanone (Methyl Ethyl Ketone)	80
Hexane	74
Tetrahydrofuran	79
Cyclohexane	76
1,4-Dioxane	82
Bromodichloromethane	74
4-Methyl-2-pentanone	78
2-Hexanone	79
Dibromochloromethane	79
Bromoform	60
4-Ethyltoluene	89
Ethanol	82
Methyl tert-butyl ether	79
Heptane	73

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0306030

Work Order Summary

CLIENT:	Mr. Duane Nielsen Shaw Environmental & Infrastructure 312 Directors Drive Knoxville, TN 37923	**BILL TO:**	Accounts Payable/Ft McClellan Shaw Environmental & Infrastructure PO Box 5040 Ft. McClellan, AL 36205
PHONE:	865-670-2700	**P.O. #**	213430 OP
FAX:		**PROJECT #**	796886 Fort McClellan
DATE RECEIVED:	6/3/03	**CONTACT:**	DeDe Dodge
DATE COMPLETED:	6/6/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SH5002R	Modified TO-15	6.5 "Hg
02A	SH5005R	Modified TO-15	7.0 "Hg
03A	SH5006R	Modified TO-15	3.0 "Hg
04A	SH5007R	Modified TO-15	6.0 "Hg
05A	Lab Blank	Modified TO-15	NA
05B	Lab Blank	Modified TO-15	NA
06A	CCV	Modified TO-15	NA
06B	CCV	Modified TO-15	NA
07A	LCS	Modified TO-15	NA
07B	LCS	Modified TO-15	NA

CERTIFIED BY: Linda J. Freeman

Laboratory Director

DATE: 06/06/03

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified TO-15
Shaw Environmental & Infrastructure
Workorder# 0306030

Four 6 Liter Summa Canister samples were received on June 03, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
IS recoveries	Within 40% of mean over ICAL for blanks, and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

The chain of custody was not relinquished properly. The discrepancy was noted in the Login email.

Analytical Notes

The summa canister for sample SH5006R was leaking upon arrival. The client was notified and analysis proceeded on a rush basis.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

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 reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

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

AIR TOXICS LTD.

SAMPLE NAME: SH5002R

ID#: 0306030-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060611	Date of Collection: 6/2/03
Dil. Factor:	3.42	Date of Analysis: 6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	1.7	8.6	Not Detected	Not Detected
Freon 114	1.7	12	Not Detected	Not Detected
Chloromethane	1.7	3.6	Not Detected	Not Detected
Vinyl Chloride	1.7	4.4	Not Detected	Not Detected
Bromomethane	1.7	6.7	Not Detected	Not Detected
Chloroethane	1.7	4.6	Not Detected	Not Detected
Freon 11	1.7	9.8	Not Detected	Not Detected
1,1-Dichloroethene	1.7	6.9	Not Detected	Not Detected
Freon 113	1.7	13	Not Detected	Not Detected
Methylene Chloride	1.7	6.0	Not Detected	Not Detected
1,1-Dichloroethane	1.7	7.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.7	6.9	Not Detected	Not Detected
Chloroform	1.7	8.5	Not Detected	Not Detected
1,1,1-Trichloroethane	1.7	9.5	Not Detected	Not Detected
Carbon Tetrachloride	1.7	11	Not Detected	Not Detected
Benzene	1.7	5.6	3.1	10
1,2-Dichloroethane	1.7	7.0	Not Detected	Not Detected
Trichloroethene	1.7	9.3	2.0	11
1,2-Dichloropropane	1.7	8.0	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.7	7.9	Not Detected	Not Detected
Toluene	1.7	6.5	150	580
trans-1,3-Dichloropropene	1.7	7.9	Not Detected	Not Detected
1,1,2-Trichloroethane	1.7	9.5	Not Detected	Not Detected
Tetrachloroethene	1.7	12	3.4	24
1,2-Dibromoethane (EDB)	1.7	13	Not Detected	Not Detected
Chlorobenzene	1.7	8.0	3.4	16
Ethyl Benzene	1.7	7.5	170	750
m,p-Xylene	1.7	7.5	330	1500
o-Xylene	1.7	7.5	120	510
Styrene	1.7	7.4	32	140
1,1,2,2-Tetrachloroethane	1.7	12	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.7	8.5	56	280
1,2,4-Trimethylbenzene	1.7	8.5	140	720
1,3-Dichlorobenzene	1.7	10	Not Detected	Not Detected
1,4-Dichlorobenzene	1.7	10	24	150
alpha-Chlorotoluene	1.7	9.0	Not Detected	Not Detected
1,2-Dichlorobenzene	1.7	10	3.4	21
1,2,4-Trichlorobenzene	6.8	52	Not Detected	Not Detected
Hexachlorobutadiene	6.8	74	Not Detected	Not Detected
Propylene	6.8	12	Not Detected	Not Detected
1,3-Butadiene	6.8	15	Not Detected	Not Detected
Acetone	6.8	16	13	32

AIR TOXICS LTD.

SAMPLE NAME: SH5002R

ID#: 0306030-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060611	Date of Collection:	6/2/03
Dil. Factor:	3.42	Date of Analysis:	6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	6.8	22	15	47
2-Propanol	6.8	17	8.3	21
trans-1,2-Dichloroethene	6.8	28	Not Detected	Not Detected
Vinyl Acetate	6.8	24	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.8	20	23	68
Hexane	6.8	24	57	200
Tetrahydrofuran	6.8	20	Not Detected	Not Detected
Cyclohexane	6.8	24	Not Detected	Not Detected
1,4-Dioxane	6.8	25	Not Detected	Not Detected
Bromodichloromethane	6.8	46	Not Detected	Not Detected
4-Methyl-2-pentanone	6.8	28	9.2	38
2-Hexanone	6.8	28	Not Detected	Not Detected
Dibromochloromethane	6.8	59	Not Detected	Not Detected
Bromoform	6.8	72	Not Detected	Not Detected
4-Ethyltoluene	6.8	34	120	630
Ethanol	6.8	13	55	110
Methyl tert-butyl ether	6.8	25	Not Detected	Not Detected
Heptane	6.8	28	28	120

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	105	70-130

AIR TOXICS LTD.

SAMPLE NAME: SH5005R

ID#: 0306030-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060519	Date of Collection:	6/2/03
Dil. Factor:	3.50	Date of Analysis:	6/5/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	1.8	8.8	Not Detected	Not Detected
Freon 114	1.8	12	Not Detected	Not Detected
Chloromethane	1.8	3.7	Not Detected	Not Detected
Vinyl Chloride	1.8	4.5	Not Detected	Not Detected
Bromomethane	1.8	6.9	Not Detected	Not Detected
Chloroethane	1.8	4.7	Not Detected	Not Detected
Freon 11	1.8	10	Not Detected	Not Detected
1,1-Dichloroethene	1.8	7.0	Not Detected	Not Detected
Freon 113	1.8	14	Not Detected	Not Detected
Methylene Chloride	1.8	6.2	2.0	7.2
1,1-Dichloroethane	1.8	7.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.8	7.0	3.2	13
Chloroform	1.8	8.7	Not Detected	Not Detected
1,1,1-Trichloroethane	1.8	9.7	Not Detected	Not Detected
Carbon Tetrachloride	1.8	11	Not Detected	Not Detected
Benzene	1.8	5.7	4.9	16
1,2-Dichloroethane	1.8	7.2	Not Detected	Not Detected
Trichloroethene	1.8	9.6	5.2	28
1,2-Dichloropropane	1.8	8.2	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.8	8.1	Not Detected	Not Detected
Toluene	1.8	6.7	400	1500
trans-1,3-Dichloropropene	1.8	8.1	Not Detected	Not Detected
1,1,2-Trichloroethane	1.8	9.7	Not Detected	Not Detected
Tetrachloroethene	1.8	12	8.6	59
1,2-Dibromoethane (EDB)	1.8	14	Not Detected	Not Detected
Chlorobenzene	1.8	8.2	7.3	34
Ethyl Benzene	1.8	7.7	360	1600
m,p-Xylene	1.8	7.7	680	3000
o-Xylene	1.8	7.7	240	1100
Styrene	1.8	7.6	76	330
1,1,2,2-Tetrachloroethane	1.8	12	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.8	8.7	120	580
1,2,4-Trimethylbenzene	1.8	8.7	320	1600
1,3-Dichlorobenzene	1.8	11	Not Detected	Not Detected
1,4-Dichlorobenzene	1.8	11	65	400
alpha-Chlorotoluene	1.8	9.2	Not Detected	Not Detected
1,2-Dichlorobenzene	1.8	11	9.6	58
1,2,4-Trichlorobenzene	7.0	53	Not Detected	Not Detected
Hexachlorobutadiene	7.0	76	Not Detected	Not Detected
Propylene	7.0	12	Not Detected	Not Detected
1,3-Butadiene	7.0	16	Not Detected	Not Detected
Acetone	7.0	17	54	130

AIR TOXICS LTD.

SAMPLE NAME: SH5005R

ID#: 0306030-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060519	Date of Collection:	6/2/03
Dil. Factor:	3.50	Date of Analysis:	6/5/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	7.0	22	Not Detected	Not Detected
2-Propanol	7.0	17	56	140
trans-1,2-Dichloroethene	7.0	28	Not Detected	Not Detected
Vinyl Acetate	7.0	25	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	7.0	21	86	260
Hexane	7.0	25	Not Detected	Not Detected
Tetrahydrofuran	7.0	21	15	44
Cyclohexane	7.0	24	Not Detected	Not Detected
1,4-Dioxane	7.0	26	Not Detected	Not Detected
Bromodichloromethane	7.0	48	Not Detected	Not Detected
4-Methyl-2-pentanone	7.0	29	34	140
2-Hexanone	7.0	29	Not Detected	Not Detected
Dibromochloromethane	7.0	61	Not Detected	Not Detected
Bromoform	7.0	74	Not Detected	Not Detected
4-Ethyltoluene	7.0	35	270	1300
Ethanol	7.0	13	360	680
Methyl tert-butyl ether	7.0	26	Not Detected	Not Detected
Heptane	7.0	29	7.9	33

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	120	70-130

AIR TOXICS LTD.

SAMPLE NAME: SH5006R

ID#: 0306030-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060520	Date of Collection: 6/2/03
Dil. Factor:	2.98	Date of Analysis: 6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	1.5	7.5	Not Detected	Not Detected
Freon 114	1.5	10	Not Detected	Not Detected
Chloromethane	1.5	3.1	Not Detected	Not Detected
Vinyl Chloride	1.5	3.9	Not Detected	Not Detected
Bromomethane	1.5	5.9	Not Detected	Not Detected
Chloroethane	1.5	4.0	Not Detected	Not Detected
Freon 11	1.5	8.5	Not Detected	Not Detected
1,1-Dichloroethene	1.5	6.0	Not Detected	Not Detected
Freon 113	1.5	12	Not Detected	Not Detected
Methylene Chloride	1.5	5.3	Not Detected	Not Detected
1,1-Dichloroethane	1.5	6.1	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.5	6.0	Not Detected	Not Detected
Chloroform	1.5	7.4	Not Detected	Not Detected
1,1,1-Trichloroethane	1.5	8.3	Not Detected	Not Detected
Carbon Tetrachloride	1.5	9.5	Not Detected	Not Detected
Benzene	1.5	4.8	2.4	7.7
1,2-Dichloroethane	1.5	6.1	Not Detected	Not Detected
Trichloroethene	1.5	8.1	2.6	14
1,2-Dichloropropane	1.5	7.0	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.5	6.9	Not Detected	Not Detected
Toluene	1.5	5.7	170	660
trans-1,3-Dichloropropene	1.5	6.9	Not Detected	Not Detected
1,1,2-Trichloroethane	1.5	8.3	Not Detected	Not Detected
Tetrachloroethene	1.5	10	3.8	26
1,2-Dibromoethane (EDB)	1.5	12	Not Detected	Not Detected
Chlorobenzene	1.5	7.0	3.5	16
Ethyl Benzene	1.5	6.6	170	750
m,p-Xylene	1.5	6.6	330	1400
o-Xylene	1.5	6.6	110	500
Styrene	1.5	6.4	34	150
1,1,2,2-Tetrachloroethane	1.5	10	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.5	7.4	54	270
1,2,4-Trimethylbenzene	1.5	7.4	140	720
1,3-Dichlorobenzene	1.5	9.1	Not Detected	Not Detected
1,4-Dichlorobenzene	1.5	9.1	26	160
alpha-Chlorotoluene	1.5	7.8	Not Detected	Not Detected
1,2-Dichlorobenzene	1.5	9.1	3.8	23
1,2,4-Trichlorobenzene	6.0	45	Not Detected	Not Detected
Hexachlorobutadiene	6.0	65	Not Detected	Not Detected
Propylene	6.0	10	Not Detected	Not Detected
1,3-Butadiene	6.0	13	Not Detected	Not Detected
Acetone	6.0	14	23	55

AIR TOXICS LTD.

SAMPLE NAME: SH5006R

ID#: 0306030-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060520	Date of Collection:	6/2/03
Dil. Factor:	2.98	Date of Analysis:	6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	6.0	19	Not Detected	Not Detected
2-Propanol	6.0	15	20	50
trans-1,2-Dichloroethene	6.0	24	Not Detected	Not Detected
Vinyl Acetate	6.0	21	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.0	18	34	100
Hexane	6.0	21	Not Detected	Not Detected
Tetrahydrofuran	6.0	18	Not Detected	Not Detected
Cyclohexane	6.0	21	Not Detected	Not Detected
1,4-Dioxane	6.0	22	Not Detected	Not Detected
Bromodichloromethane	6.0	40	Not Detected	Not Detected
4-Methyl-2-pentanone	6.0	25	13	54
2-Hexanone	6.0	25	Not Detected	Not Detected
Dibromochloromethane	6.0	52	Not Detected	Not Detected
Bromoform	6.0	63	Not Detected	Not Detected
4-Ethyltoluene	6.0	30	120	620
Ethanol	6.0	11	100	190
Methyl tert-butyl ether	6.0	22	Not Detected	Not Detected
Heptane	6.0	25	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	110	70-130

AIR TOXICS LTD.

SAMPLE NAME: SH5007R

ID#: 0306030-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060521	Date of Collection: 6/2/03
Dil. Factor:	6.72	Date of Analysis: 6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	3.4	17	Not Detected	Not Detected
Freon 114	3.4	24	Not Detected	Not Detected
Chloromethane	3.4	7.0	Not Detected	Not Detected
Vinyl Chloride	3.4	8.7	Not Detected	Not Detected
Bromomethane	3.4	13	Not Detected	Not Detected
Chloroethane	3.4	9.0	Not Detected	Not Detected
Freon 11	3.4	19	Not Detected	Not Detected
1,1-Dichloroethene	3.4	14	Not Detected	Not Detected
Freon 113	3.4	26	Not Detected	Not Detected
Methylene Chloride	3.4	12	Not Detected	Not Detected
1,1-Dichloroethane	3.4	14	Not Detected	Not Detected
cis-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
Chloroform	3.4	17	Not Detected	Not Detected
1,1,1-Trichloroethane	3.4	19	Not Detected	Not Detected
Carbon Tetrachloride	3.4	21	Not Detected	Not Detected
Benzene	3.4	11	Not Detected	Not Detected
1,2-Dichloroethane	3.4	14	Not Detected	Not Detected
Trichloroethene	3.4	18	3.3 J	18 J
1,2-Dichloropropane	3.4	16	Not Detected	Not Detected
cis-1,3-Dichloropropene	3.4	16	Not Detected	Not Detected
Toluene	3.4	13	220	860
trans-1,3-Dichloropropene	3.4	16	Not Detected	Not Detected
1,1,2-Trichloroethane	3.4	19	Not Detected	Not Detected
Tetrachloroethene	3.4	23	5.0	35
1,2-Dibromoethane (EDB)	3.4	26	Not Detected	Not Detected
Chlorobenzene	3.4	16	3.6	17
Ethyl Benzene	3.4	15	180	780
m,p-Xylene	3.4	15	330	1400
o-Xylene	3.4	15	110	490
Styrene	3.4	14	29	130
1,1,2,2-Tetrachloroethane	3.4	23	Not Detected	Not Detected
1,3,5-Trimethylbenzene	3.4	17	41	200
1,2,4-Trimethylbenzene	3.4	17	100	510
1,3-Dichlorobenzene	3.4	20	Not Detected	Not Detected
1,4-Dichlorobenzene	3.4	20	16	98
alpha-Chlorotoluene	3.4	18	Not Detected	Not Detected
1,2-Dichlorobenzene	3.4	20	Not Detected	Not Detected
1,2,4-Trichlorobenzene	13	100	Not Detected	Not Detected
Hexachlorobutadiene	13	140	Not Detected	Not Detected
Propylene	13	24	Not Detected	Not Detected
1,3-Butadiene	13	30	Not Detected	Not Detected
Acetone	13	32	53	130

AIR TOXICS LTD.

SAMPLE NAME: SH5007R

ID#: 0306030-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060521	Date of Collection:	6/2/03
Dil. Factor:	6.72	Date of Analysis:	6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	13	42	Not Detected	Not Detected
2-Propanol	13	34	120	290
trans-1,2-Dichloroethene	13	54	Not Detected	Not Detected
Vinyl Acetate	13	48	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	13	40	79	240
Hexane	13	48	Not Detected	Not Detected
Tetrahydrofuran	13	40	14	41
Cyclohexane	13	47	Not Detected	Not Detected
1,4-Dioxane	13	49	Not Detected	Not Detected
Bromodichloromethane	13	92	Not Detected	Not Detected
4-Methyl-2-pentanone	13	56	24	99
2-Hexanone	13	56	Not Detected	Not Detected
Dibromochloromethane	13	120	Not Detected	Not Detected
Bromoform	13	140	Not Detected	Not Detected
4-Ethyltoluene	13	67	94	470
Ethanol	13	26	1200	2200
Methyl tert-butyl ether	13	49	Not Detected	Not Detected
Heptane	13	56	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306030-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060505	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/5/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306030-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060505	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306030-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060604	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0306030-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060604	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/6/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306030-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060502	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 6/5/03	

Compound	%Recovery
Freon 12	96
Freon 114	112
Chloromethane	90
Vinyl Chloride	94
Bromomethane	92
Chloroethane	99
Freon 11	92
1,1-Dichloroethene	90
Freon 113	91
Methylene Chloride	89
1,1-Dichloroethane	95
cis-1,2-Dichloroethene	94
Chloroform	89
1,1,1-Trichloroethane	96
Carbon Tetrachloride	97
Benzene	90
1,2-Dichloroethane	94
Trichloroethene	94
1,2-Dichloropropane	92
cis-1,3-Dichloropropene	92
Toluene	89
trans-1,3-Dichloropropene	96
1,1,2-Trichloroethane	96
Tetrachloroethene	100
1,2-Dibromoethane (EDB)	95
Chlorobenzene	96
Ethyl Benzene	95
m,p-Xylene	94
o-Xylene	98
Styrene	94
1,1,2,2-Tetrachloroethane	96
1,3,5-Trimethylbenzene	98
1,2,4-Trimethylbenzene	94
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	86
alpha-Chlorotoluene	87
1,2-Dichlorobenzene	83
1,2,4-Trichlorobenzene	83
Hexachlorobutadiene	93
Propylene	96
1,3-Butadiene	94
Acetone	96

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306030-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060502	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	%Recovery
Carbon Disulfide	96
2-Propanol	96
trans-1,2-Dichloroethene	96
Vinyl Acetate	97
2-Butanone (Methyl Ethyl Ketone)	97
Hexane	91
Tetrahydrofuran	93
Cyclohexane	95
1,4-Dioxane	94
Bromodichloromethane	96
4-Methyl-2-pentanone	95
2-Hexanone	98
Dibromochloromethane	103
Bromoform	100
4-Ethyltoluene	96
Ethanol	99
Methyl tert-butyl ether	110
Heptane	93

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306030-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060602	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 6/6/03	

Compound	%Recovery
Freon 12	92
Freon 114	106
Chloromethane	87
Vinyl Chloride	92
Bromomethane	87
Chloroethane	94
Freon 11	91
1,1-Dichloroethene	90
Freon 113	90
Methylene Chloride	87
1,1-Dichloroethane	94
cis-1,2-Dichloroethene	92
Chloroform	88
1,1,1-Trichloroethane	92
Carbon Tetrachloride	96
Benzene	89
1,2-Dichloroethane	90
Trichloroethene	93
1,2-Dichloropropane	91
cis-1,3-Dichloropropene	92
Toluene	90
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	92
Tetrachloroethene	93
1,2-Dibromoethane (EDB)	95
Chlorobenzene	92
Ethyl Benzene	90
m,p-Xylene	92
o-Xylene	94
Styrene	93
1,1,2,2-Tetrachloroethane	92
1,3,5-Trimethylbenzene	92
1,2,4-Trimethylbenzene	93
1,3-Dichlorobenzene	87
1,4-Dichlorobenzene	85
alpha-Chlorotoluene	89
1,2-Dichlorobenzene	83
1,2,4-Trichlorobenzene	81
Hexachlorobutadiene	87
Propylene	93
1,3-Butadiene	92
Acetone	96

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0306030-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060602	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 6/6/03	

Compound	%Recovery
Carbon Disulfide	94
2-Propanol	94
trans-1,2-Dichloroethene	95
Vinyl Acetate	98
2-Butanone (Methyl Ethyl Ketone)	96
Hexane	91
Tetrahydrofuran	92
Cyclohexane	91
1,4-Dioxane	93
Bromodichloromethane	96
4-Methyl-2-pentanone	96
2-Hexanone	99
Dibromochloromethane	100
Bromoform	99
4-Ethyltoluene	94
Ethanol	100
Methyl tert-butyl ether	89
Heptane	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306030-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060503	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 6/5/03	

Compound	%Recovery
Freon 12	107
Freon 114	122
Chloromethane	98
Vinyl Chloride	105
Bromomethane	126
Chloroethane	122
Freon 11	95
1,1-Dichloroethene	89
Freon 113	92
Methylene Chloride	89
1,1-Dichloroethane	87
cis-1,2-Dichloroethene	97
Chloroform	90
1,1,1-Trichloroethane	95
Carbon Tetrachloride	104
Benzene	97
1,2-Dichloroethane	96
Trichloroethene	98
1,2-Dichloropropane	92
cis-1,3-Dichloropropene	108
Toluene	95
trans-1,3-Dichloropropene	110
1,1,2-Trichloroethane	94
Tetrachloroethene	103
1,2-Dibromoethane (EDB)	89
Chlorobenzene	96
Ethyl Benzene	94
m,p-Xylene	92
o-Xylene	91
Styrene	113
1,1,2,2-Tetrachloroethane	93
1,3,5-Trimethylbenzene	87
1,2,4-Trimethylbenzene	83
1,3-Dichlorobenzene	89
1,4-Dichlorobenzene	82
alpha-Chlorotoluene	116
1,2-Dichlorobenzene	83
1,2,4-Trichlorobenzene	90
Hexachlorobutadiene	98
Propylene	100
1,3-Butadiene	100
Acetone	73

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306030-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060503	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/5/03

Compound	%Recovery
Carbon Disulfide	77
2-Propanol	77
trans-1,2-Dichloroethene	82
Vinyl Acetate	78
2-Butanone (Methyl Ethyl Ketone)	75
Hexane	71
Tetrahydrofuran	74
Cyclohexane	72
1,4-Dioxane	76
Bromodichloromethane	70
4-Methyl-2-pentanone	74
2-Hexanone	73
Dibromochloromethane	74
Bromoform	59 Q
4-Ethyltoluene	87
Ethanol	80
Methyl tert-butyl ether	74
Heptane	68

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306030-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060603	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/6/03

Compound	%Recovery
Freon 12	106
Freon 114	118
Chloromethane	94
Vinyl Chloride	104
Bromomethane	111
Chloroethane	111
Freon 11	93
1,1-Dichloroethene	88
Freon 113	91
Methylene Chloride	87
1,1-Dichloroethane	86
cis-1,2-Dichloroethene	95
Chloroform	88
1,1,1-Trichloroethane	92
Carbon Tetrachloride	102
Benzene	96
1,2-Dichloroethane	96
Trichloroethene	99
1,2-Dichloropropane	93
cis-1,3-Dichloropropene	107
Toluene	94
trans-1,3-Dichloropropene	111
1,1,2-Trichloroethane	95
Tetrachloroethene	102
1,2-Dibromoethane (EDB)	89
Chlorobenzene	96
Ethyl Benzene	93
m,p-Xylene	91
o-Xylene	91
Styrene	111
1,1,2,2-Tetrachloroethane	92
1,3,5-Trimethylbenzene	85
1,2,4-Trimethylbenzene	81
1,3-Dichlorobenzene	87
1,4-Dichlorobenzene	80
alpha-Chlorotoluene	113
1,2-Dichlorobenzene	82
1,2,4-Trichlorobenzene	87
Hexachlorobutadiene	96
Propylene	97
1,3-Butadiene	98
Acetone	72

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0306030-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d060603	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/6/03

Compound	%Recovery
Carbon Disulfide	76
2-Propanol	76
trans-1,2-Dichloroethene	81
Vinyl Acetate	76
2-Butanone (Methyl Ethyl Ketone)	74
Hexane	69
Tetrahydrofuran	74
Cyclohexane	70
1,4-Dioxane	76
Bromodichloromethane	70
4-Methyl-2-pentanone	72
2-Hexanone	72
Dibromochloromethane	74
Bromoform	58 Q
4-Ethyltoluene	86
Ethanol	78
Methyl tert-butyl ether	70
Heptane	68

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0310069

Work Order Summary

CLIENT:	Mr. Duane Nielsen Shaw Environmental & Infrastructure 312 Directors Drive Knoxville, TN 37923	**BILL TO:**	Accounts Payable/Ft McClellan Shaw Environmental & Infrastructure PO Box 5040 Ft. McClellan, AL 36205
PHONE:	865-670-2700	**P.O. #**	213430 OP
FAX:		**PROJECT #**	796886 Fort McClellan
DATE RECEIVED:	10/03/03	**CONTACT:**	DeDe Dodge
DATE COMPLETED:	10/10/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SH5003	Modified TO-15	1.0 "Hg
02A	Lab Blank	Modified TO-15	NA
03A	CCV	Modified TO-15	NA
04A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 10/10/03

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified TO-15
Shaw Environmental & Infrastructure
Workorder# 0310069

One 6 Liter Summa Canister sample was received on October 03, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limit
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
Daily CCV	</= 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106
IS Recoveries	Within 40% of mean over ICAL for blanks, and w/in 40 % of daily CCV for samples	Within 40% of CCV recoveries for blank and samples

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample SH5003 due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

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 reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

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

AIR TOXICS LTD.

SAMPLE NAME: SH5003

ID#: 0310069-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s100418	Date of Collection:	10/1/03
Dil. Factor:	2.78	Date of Analysis:	10/4/03 11:25 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	1.4	7.0	5.7	29
Freon 114	1.4	9.9	16	120
Vinyl Chloride	1.4	3.6	Not Detected	Not Detected
Bromomethane	1.4	5.5	Not Detected	Not Detected
Chloroethane	1.4	3.7	Not Detected	Not Detected
Freon 11	1.4	7.9	Not Detected	Not Detected
1,1-Dichloroethene	1.4	5.6	Not Detected	Not Detected
Freon 113	1.4	11	Not Detected	Not Detected
Methylene Chloride	1.4	4.9	Not Detected	Not Detected
1,1-Dichloroethane	1.4	5.7	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.4	5.6	Not Detected	Not Detected
Chloroform	1.4	6.9	Not Detected	Not Detected
1,1,1-Trichloroethane	1.4	7.7	Not Detected	Not Detected
Carbon Tetrachloride	1.4	8.9	Not Detected	Not Detected
Benzene	1.4	4.5	Not Detected	Not Detected
1,2-Dichloroethane	1.4	5.7	Not Detected	Not Detected
Trichloroethene	1.4	7.6	Not Detected	Not Detected
1,2-Dichloropropane	1.4	6.5	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.4	6.4	Not Detected	Not Detected
Toluene	1.4	5.3	Not Detected	Not Detected
trans-1,3-Dichloropropene	1.4	6.4	Not Detected	Not Detected
1,1,2-Trichloroethane	1.4	7.7	Not Detected	Not Detected
Tetrachloroethene	1.4	9.6	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	1.4	11	Not Detected	Not Detected
Chlorobenzene	1.4	6.5	Not Detected	Not Detected
Ethyl Benzene	1.4	6.1	Not Detected	Not Detected
m,p-Xylene	1.4	6.1	Not Detected	Not Detected
o-Xylene	1.4	6.1	Not Detected	Not Detected
Styrene	1.4	6.0	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.4	9.7	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.4	6.9	Not Detected	Not Detected
1,2,4-Trimethylbenzene	1.4	6.9	Not Detected	Not Detected
1,3-Dichlorobenzene	1.4	8.5	Not Detected	Not Detected
1,4-Dichlorobenzene	1.4	8.5	Not Detected	Not Detected
alpha-Chlorotoluene	1.4	7.3	Not Detected	Not Detected
1,2-Dichlorobenzene	1.4	8.5	Not Detected	Not Detected
1,3-Butadiene	1.4	3.1	Not Detected	Not Detected
Hexane	1.4	5.0	Not Detected	Not Detected
Cyclohexane	1.4	4.9	Not Detected	Not Detected
Heptane	1.4	5.8	Not Detected	Not Detected
Bromodichloromethane	1.4	9.5	Not Detected	Not Detected
Dibromochloromethane	1.4	12	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: SH5003

ID#: 0310069-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s100418	Date of Collection:	10/1/03
Dil. Factor:	2.78	Date of Analysis:	10/4/03 11:25 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Cumene	1.4	6.9	Not Detected	Not Detected
Propylbenzene	1.4	6.9	Not Detected	Not Detected
Chloromethane	5.6	12	Not Detected	Not Detected
1,2,4-Trichlorobenzene	5.6	42	Not Detected	Not Detected
Hexachlorobutadiene	5.6	60	Not Detected	Not Detected
Acetone	5.6	13	40	96
Carbon Disulfide	5.6	18	Not Detected	Not Detected
2-Propanol	5.6	14	Not Detected	Not Detected
trans-1,2-Dichloroethene	5.6	22	Not Detected	Not Detected
Vinyl Acetate	5.6	20	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.6	17	Not Detected	Not Detected
Tetrahydrofuran	5.6	17	Not Detected	Not Detected
1,4-Dioxane	5.6	20	Not Detected	Not Detected
4-Methyl-2-pentanone	5.6	23	Not Detected	Not Detected
2-Hexanone	5.6	23	Not Detected	Not Detected
Bromoform	5.6	58	Not Detected	Not Detected
4-Ethyltoluene	5.6	28	Not Detected	Not Detected
Ethanol	5.6	11	Not Detected	Not Detected
Methyl tert-butyl ether	5.6	20	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0310069-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s100404a	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/4/03 10:27 AM	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,3-Butadiene	0.50	1.1	Not Detected	Not Detected
Hexane	0.50	1.8	Not Detected	Not Detected
Cyclohexane	0.50	1.7	Not Detected	Not Detected
Heptane	0.50	2.1	Not Detected	Not Detected
Bromodichloromethane	0.50	3.4	Not Detected	Not Detected
Dibromochloromethane	0.50	4.3	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0310069-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s100404a	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/4/03 10:27 AM	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Cumene	0.50	2.5	Not Detected	Not Detected
Propylbenzene	0.50	2.5	Not Detected	Not Detected
Chloromethane	2.0	4.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	91	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0310069-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s100402	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/4/03 08:44 AM	

Compound	%Recovery
Freon 12	94
Freon 114	96
Vinyl Chloride	94
Bromomethane	90
Chloroethane	113
Freon 11	91
1,1-Dichloroethene	89
Freon 113	89
Methylene Chloride	93
1,1-Dichloroethane	95
cis-1,2-Dichloroethene	93
Chloroform	89
1,1,1-Trichloroethane	98
Carbon Tetrachloride	107
Benzene	87
1,2-Dichloroethane	92
Trichloroethene	89
1,2-Dichloropropane	94
cis-1,3-Dichloropropene	99
Toluene	92
trans-1,3-Dichloropropene	96
1,1,2-Trichloroethane	90
Tetrachloroethene	92
1,2-Dibromoethane (EDB)	92
Chlorobenzene	92
Ethyl Benzene	92
m,p-Xylene	92
o-Xylene	92
Styrene	90
1,1,2,2-Tetrachloroethane	94
1,3,5-Trimethylbenzene	88
1,2,4-Trimethylbenzene	89
1,3-Dichlorobenzene	89
1,4-Dichlorobenzene	89
alpha-Chlorotoluene	87
1,2-Dichlorobenzene	89
1,3-Butadiene	89
Hexane	94
Cyclohexane	93
Heptane	96
Bromodichloromethane	97
Dibromochloromethane	98

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0310069-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s100402	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/4/03 08:44 AM	

Compound	%Recovery
Cumene	87
Propylbenzene	91
Chloromethane	89
1,2,4-Trichlorobenzene	92
Hexachlorobutadiene	95
Acetone	94
Carbon Disulfide	91
2-Propanol	99
trans-1,2-Dichloroethene	91
Vinyl Acetate	86
2-Butanone (Methyl Ethyl Ketone)	100
Tetrahydrofuran	98
1,4-Dioxane	93
4-Methyl-2-pentanone	102
2-Hexanone	101
Bromoform	96
4-Ethyltoluene	93
Ethanol	104
Methyl tert-butyl ether	84

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0310069-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	s100403	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/4/03 09:32 AM	

Compound	%Recovery
Freon 12	95
Freon 114	101
Vinyl Chloride	95
Bromomethane	106
Chloroethane	94
Freon 11	88
1,1-Dichloroethene	85
Freon 113	84
Methylene Chloride	88
1,1-Dichloroethane	81
cis-1,2-Dichloroethene	90
Chloroform	84
1,1,1-Trichloroethane	88
Carbon Tetrachloride	104
Benzene	90
1,2-Dichloroethane	92
Trichloroethene	91
1,2-Dichloropropane	91
cis-1,3-Dichloropropene	97
Toluene	91
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	87
Tetrachloroethene	92
1,2-Dibromoethane (EDB)	80
Chlorobenzene	89
Ethyl Benzene	88
m,p-Xylene	85
o-Xylene	80
Styrene	90
1,1,2,2-Tetrachloroethane	84
1,3,5-Trimethylbenzene	71
1,2,4-Trimethylbenzene	68 Q
1,3-Dichlorobenzene	76
1,4-Dichlorobenzene	71
alpha-Chlorotoluene	90
1,2-Dichlorobenzene	73
1,3-Butadiene	100
Hexane	87
Cyclohexane	86
Heptane	89
Bromodichloromethane	86
Dibromochloromethane	91

APPENDIX D

SURVEY DATA

Appendix D

Survey Data
Landfill Gas Investigation
Parcels 78(6), 79(6), 80(6), 227(7)
126(7), 229(7), and 82(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Northing	Easting	Ground Elevation (ft amsl)
LF1-78-GAS01	1170084.50	664936.00	800.66
LF2-79-GAS01	1175263.22	673011.52	804.32
OLF-80-GAS01	1180435.08	669511.28	737.65
PPMP-227-GAS01	1180918.65	673353.32	749.62
FTA-126-GAS01	1181502.64	673319.22	748.74
PPMP-229-GAS01	1181045.30	670008.31	738.14
FTA-82-GAS01	1170388.92	677794.09	992.38

Horizontal coordinated referenced to the U.S. State Plane Coordinate System, Alabama East Zone, North America Datum of 1983 (NAD83).

Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

ft amsl - Feet above mean sea level.