ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1504425

Client: FSL Associates, Inc

ATTN: Bruce Hoskins

Project Name: CUMMINGS BEVERLY

Project Number: CUMMINGS BEVERLY

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RDMS Doc ID 110962

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# Sample Delivery Group Information

# Sample Delivery Group Form

**Laboratory Job number:** L1504425
**Project Manager:** Chris Anderson **Review Date:** 03/11/2015
**Project Number:** CUMMINGS BEVERLY
**Project Name:** CUMMINGS BEVERLY **Received:** 03/10/2015 11:05
**Client Account:** FSL Associates **Received by:** KB

**Samples Delivered by:** COURIER **Call Tracker #**
**Bill Of Laden** N/A **Trackingnum**
**Coc Present** Present

**Container Status** Intact **Sample IDs**

**All Containers Accounted For?** Yes

**Were Extra Samples Received?** No

**Do Sample Labels and COC agree?** Yes

**Are Samples in Appropriate Containers?** Yes

**Are Samples Received within Holding time?** Yes

**pH of Samples upon Receipt** **Are samples Properly Preserved?** Yes
**Initial pH** **preserved in house with** **Final pH**
**Other Issues**
**Chlorine Check** N/A

**Are VOA/VPH Vials Present?** No
**Aqueous: Do Vials Contain Head Space?** N/A
**Soils: Is MeOHCovering the Soil?** N/A
**Reagent H2O Preserved vials Frozen on** N/A
**Frozen by Client** N/A

| Cooler | Seal | Ice Present | Blue Ice Present | Temp. (Celsius) | Frozen upon Receipt | Delivered Direct from Site |
|---|---|---|---|---|---|---|
| N/A | Absent | No | No | - | No | No |

# LIMS Chain of Custody

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jul 17 2015, 03:06 pm

Login Number: L1504425
Account: FSL FSL AssociatesProject: CUMMINGS BEVERLY
Received: 10MAR15 Due Date: 17MAR15

| Sample # | Client ID | Mat | PR | Collected | Container |
|---|---|---|---|---|---|
| L1504425-01 | OUTDOOR CONTROL | 10 | S0 | 08MAR15 13:31 | 1-Can-6 |

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds A2-DPKG-FULL Package Due Date: 07/20/15

A2-DPKG-FULL,APH-10,CAN-RENT,FLOW-RENT,MCP,TO15-LL,TO15-SIM

| L1504425-02 | S-157-J.1 | 10 | S0 | 08MAR15 13:23 | 1-Can-6 |
|---|---|---|---|---|---|

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

| L1504425-03 | S-157-J.2 | 10 | S0 | 08MAR15 13:22 | 1-Can-6 |
|---|---|---|---|---|---|

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jul 17 2015, 03:06 pm

Login Number: L1504425
Account: FSL FSL AssociatesProject: CUMMINGS BEVERLY
Received: 10MAR15 Due Date: 17MAR15

| Sample # | Client ID | Mat | PR | Collected | Container |
|---|---|---|---|---|---|
| L1504425-04 | S-157-J | 10 | S0 | 08MAR15 13:24 | 1-Can-6 |

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

| L1504425-05 | DUPLICATE | 10 | S0 | 08MAR15 13:24 | 1-Can-6 |

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

| L1504425-06 | BLANK | 10 | S0 | 06MAR15 00:00 | 1-Can-6 |

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

| L1504425-07 | SG-1 | 11 | S0 | 06MAR15 19:43 | 1-Can-2.7 |

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jul 17 2015, 03:06 pm

Login Number: L1504425
Account: FSL FSL AssociatesProject: CUMMINGS BEVERLY
Received: 10MAR15 Due Date: 17MAR15

| Sample # | Client ID | Mat | PR | Collected | Container |
|---|---|---|---|---|---|

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

L1504425-08 SG-2 11 S0 06MAR15 18:51 1-Can-2.7

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

L1504425-09 SG-3 11 S0 06MAR15 19:31 1-Can-2.7

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

L1504425-10 SG-4 11 S0 06MAR15 20:02 1-Can-2.7

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jul 17 2015, 03:06 pm

Login Number: L1504425
Account: FSL FSL AssociatesProject: CUMMINGS BEVERLY
Received: 10MAR15 Due Date: 17MAR15

| Sample # | Client ID | Mat | PR | Collected | Container |
|---|---|---|---|---|---|
| L1504425-11 | SG BLANK | 11 | S0 | 06MAR15 00:00 | 1-Can-2.7 |

Please report data to the MDL. TO-15: 1,4-DIOXANE, 2,2,4-TRIMETHYLPENTANE, 2-BUTANONE, 2-HEXANONE, 3-CHLOROPROPENE, 4-ETHYLTOLUENE, ACETONE, BENZYL CHLORIDE, CARBON DISULFIDE, CYCLOHEXANE, ETOH, ETHYL ACETATE, IPA, MIBK, HEPTANE, N-HEXANE, PROPYLENE, THF, VINYL ACETATE, VINYL BROMIDE Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Please subtract non-petro compounds Package Due Date: 07/20/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

Page 4

Logged By: Chris Anderson

# Communications

# Call Tracker Report

Call # 66768

| | | | |
|---|---|---|---|
| Call #: | 66768 | Contact: | Bruce Hoskins |
| Call Date: | 03/12/15 17:29 | Company: | FSL Associates |
| Status: | NEED | Acct #: | FSL |
| Date: | 03/12/15 17:29 | Project #: | CUMMINGS BEVERLY |
| Operator: | CANDERSON | Client Proj: | |
| Type: | Live | Login #: | L1504425 |

*Call Details*

```
Sent: Thursday, March 12, 2015 1:58 PM
To: Chris Anderson
Subject: Re: L1504425 FSL

Please subtract them.  We had a feeling this would happen based on previous results.

Bruce
----- Original Message -----
From: Chris Anderson
To: bhoskins@fslassociates.com
Sent: Thursday, March 12, 2015 12:00 PM
Subject: FW: L1504425 FSL

Bruce,

There are some non-petroleum compounds elevating the carbon ranges for the APH results for
the Cummings Center air work.  Do you want us to subtract them from the results?  The
MADEP allows it both ways, you can have them subtracted or leave them.  When we subtract
non-petro compounds we make a note in the narrative what was subtracted.

Thanks,
Chris
```

# Chain of Custody

# AIR ANALYSIS

PAGE 1 OF 2

**CHAIN OF CUSTODY**

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/10/15

ALPHA Job #: L1504425

**Client Information**

Client: FSL Associates, Inc.
Address: 358 Chestnut Hill Ave
Boston, MA 02135
Phone: (617) 232-0001
Fax: (617) 232-2800
Email: bhoskins@fslassociates.com

☐ These samples have been previously analyzed by Alpha

**Project Information**

Project Name: Cummings Beverly
Project Location: 181 Eliot Street
Project #:
Project Manager: Bruce Hoskins
ALPHA Quote #:

**Turn-Around Time**

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 3/17/15 Time:

**Report Information - Data Deliverables**

☐ FAX
☐ ADEx
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
Other Formats: _____
☑ EMAIL (standard pdf report)
☑ Additional Deliverables: 1 hard copy in mail
Report to: (if different than Project Manager)

**Billing Information**

☐ Same as Client info PO #:

**Regulatory Requirements/Report Limits**

| State/Fed | Program | Criteria |
|---|---|---|
| | | |
| | | |

Other Project Specific Requirements/Comments:
SIM analysis for TO-15; where SIM not possible for analytes, use regular TO-15.
Possibility of Presence of VOCs and Petroleum Hydrocarbons

**All Columns Below Must Be Filled Out**

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Start Time | End Time | Initial Vacuum | Final Vacuum | Sample Matrix* | Sampler's Initials | Can Size | I D Can | I D - Flow Controller | TO-14A by TO-15 | TO-15 | TO-15 SIM | APH | FIXED GASES | TO-13A | TO-4 / TO-10 | Sample Comments (i.e. PID) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04425.01 | Outdoor Control | 3/6-3/8/14 | 18:40 3/6 | 13:31 3/8 | -30.32 | -0.52 | AA | JC | 6L | 1889 | 0102 | | X | X | X | | | | |
| 02 | S-157-2.1 | 3/6-3/8/14 | 18:34 3/6 | 13:29 3/8 | -30.35 | 0.00 | AA | JC | 6L | 1662 | 0114 | | X | X | X | | | | |
| 03 | S-157-2.2 | 3/6-3/8/14 | 18:26 3/6 | 13:22 3/8 | -30.70 | 0.00 | AA | JC | 6L | 985 | 0285 | | X | X | X | | | | |
| 04 | S-157-2 | 3/6-3/8/14 | 18:34 3/6 | 13:24 3/8 | -26.05 | 0.00 | AA | JC | 6L | 1598 | 0354 | | X | X | X | | | | |
| 05 | Duplicate | 3/6-3/8/14 | 18:33 3/6 | 13:24 3/8 | -30.37 | 0.00 | AA | JC | 6L | 1794 | 0243 | | X | X | X | | | | |
| 06 | Blank | 3/6/14 | N/A | N/A | N/A | N/A | AA | JC | 6L | 1050 | 0551 | | X | X | X | | | | |
| 07 | SG-1 | 3/6/14 | 19:12 | 19:43 | -29.94 | 0.00 | SV | JC | 2.7L | 259 | 0309 | | X | X | X | | | | |
| 08 | SG-2 | 3/6/14 | 18:21 | 18:51 | -30.01 | -0.44 | SV | JC | 2.7L | 1748 | 0342 | | X | X | X | | | | |
| 09 | SG-3 | 3/6/14 | 19:01 | 19:31 | -28.96 | 0.00 | SV | JC | 2.7L | 383 | 0389 | | X | X | X | | | | |
| 10 | SG-4 | 3/6/14 | 19:32 | 20:02 | -30.25 | -1.40 | SV | JC | 2.7L | 2015 | 0259 | | X | X | X | | | | |

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

| Relinquished By: | Date/Time | Received By: | Date/Time: |
|---|---|---|---|
| [signature] | 3/10/15 11:05 | [signature] | 3/10/15 11:05 |
| [signature] | 3/10/15 12:00 | [signature] | 3/10/15 12:30 |
| [signature] | 3/11/15 03:00 | [signature] | 3/11/15 03:00 |

Form No: 101-02 (19-Jun-09)

# AIR ANALYSIS

PAGE 2 OF 2

**CHAIN OF CUSTODY**

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/10/15

ALPHA Job #: L1504475

## Client Information

Client: FSL Associates, Inc
Address: 358 Chestnut Hill Ave
Boston, MA 02135
Phone: 617-232-0001
Fax: 617-232-7800
Email: bhoskins@fslassociates.com

☐ These samples have been previously analyzed by Alpha

## Project Information

Project Name: Cummings Beverly
Project Location: 181 Eliott Street, Beverly
Project #:
Project Manager: Bruce Hoskins
ALPHA Quote #:

## Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 3/17/15 Time:

## Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☑ EMAIL (standard pdf report)
☑ Additional Deliverables: Hard copy in mail
Report to: (if different than Project Manager)

## Billing Information

☐ Same as Client info PO #:

## Regulatory Requirements/Report Limits

| State/Fed | Program | Criteria |
|---|---|---|
| | | |
| | | |
| | | |

Other Project Specific Requirements/Comments:

**All Columns Below Must Be Filled Out**

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Start Time | End Time | Initial Vacuum | Final Vacuum | Sample Matrix* | Sampler's Initials | Can Size | I D Can | I D - Flow Controller | TO-14A by TO-15 | TO-15 | TO-15 SIM | APH | FIXED GASES | TO-13A | TO-4 / TO-10 | Sample Comments (i.e. PID) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0405.11 | SG Blank | 3/6/14 | N/A | N/A | N/A | N/A | SV | JC | 2.7L | 1744 | 0182 | | X | X | X | | | | |

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

| Relinquished By: | Date/Time | Received By: | Date/Time: |
|---|---|---|---|
| [illegible] | 3/10/15 11:05 | [illegible] | 3-10-15 1105 |
| [illegible] | 3-10-15 12:50 | [illegible] | 3/10/15 12:50 |
| [illegible] | 3/11/15 0800 | [illegible] | 3/11/15 0800 |

Form No: 101-02 (19-Jun-09)

# Organics

# Air Petroleum Hydrocarbons Analysis

# Initial Calibration

# Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Method File : APH150101.M
Title : APH Analysis
Last Update : Sat Jan 03 12:12:55 2015
Response Via : Initial Calibration

Calibration Files
0.4 =R138798.D 0.8 =R138799.D 2.0 =R138800.D 10 =R138801.D 20 =R138802.D 50 =R138803.D
100 =R138804.D

| | | Compound | 0.4 | 0.8 | 2.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | bromochloromethane | ----------ISTD---------- | | | | | | | | |
| 2) | T | 1,3-butadiene | 0.477 | 0.463 | 0.487 | 0.393 | 0.390 | 0.408 | 0.390 | 0.4298 | 10.23 |
| 3) | | isopentane | 3.718 | 3.546 | 3.254 | 2.481 | 2.482 | 2.587 | 2.451 | 2.9312 | 18.97 |
| 4) | T | methyl tert butyl ether | 1.015 | 0.969 | 1.067 | 0.891 | 0.846 | 0.906 | 0.870 | 0.9379 | 8.68 |
| 5) | | hexane | 4.622 | 3.720 | 3.730 | 2.890 | 2.820 | 3.042 | 2.902 | 3.3894 | 19.71 |
| 6) | | cyclohexane | 2.904 | 2.881 | 3.102 | 2.635 | 2.467 | 2.669 | 2.547 | 2.7437 | 8.23 |
| 7) | I | 1,4-difluorobenzene | ----------ISTD---------- | | | | | | | | |
| 8) | | 2,3-dimethylpentane | 0.763 | 0.714 | 0.758 | 0.650 | 0.583 | 0.633 | 0.628 | 0.6755 | 10.34 |
| 9) | T | benzene | 0.284 | 0.282 | 0.326 | 0.256 | 0.247 | 0.267 | 0.260 | 0.2748 | 9.57 |
| 10) | | heptane | 0.658 | 0.664 | 0.783 | 0.628 | 0.587 | 0.629 | 0.606 | 0.6506 | 9.85 |
| 11) | H | C5-C8 Aliphatics Total | 0.787 | 0.735 | 0.815 | 0.653 | 0.608 | 0.653 | 0.632 | 0.6976 | 11.64 |
| 12) | I | chlorobenzene-D5 | ----------ISTD---------- | | | | | | | | |
| 13) | | toluene | 1.495 | 1.368 | 1.502 | 1.232 | 1.191 | 1.279 | 1.257 | 1.3321 | 9.44 |
| 14) | | n-octane | 3.497 | 3.281 | 3.669 | 2.971 | 2.900 | 3.080 | 2.931 | 3.1899 | 9.43 |
| 15) | | 2,3-dimethylheptane | 3.926 | 3.754 | 4.091 | 3.253 | 3.255 | 3.435 | 3.228 | 3.5632 | 10.03 |
| 16) | T | ethyl benzene | 1.599 | 1.527 | 1.707 | 1.426 | 1.413 | 1.527 | 1.470 | 1.5240 | 6.77 |
| 17) | T | m+p-xylene | 1.314 | 1.233 | 1.328 | 1.122 | 1.076 | 1.189 | 1.145 | 1.2010 | 7.97 |
| 18) | | n-nonane | 3.751 | 3.484 | 3.797 | 3.171 | 3.132 | 3.318 | 3.122 | 3.3964 | 8.46 |
| 19) | T | o-xylene | 1.281 | 1.262 | 1.393 | 1.130 | 1.130 | 1.223 | 1.176 | 1.2279 | 7.66 |
| 20) | | decane | 3.729 | 3.658 | 4.128 | 3.293 | 3.367 | 3.546 | 3.325 | 3.5780 | 8.25 |
| 21) | | butylcyclohexane | 4.220 | 4.233 | 4.479 | 3.642 | 3.639 | 4.110 | 3.650 | 3.9962 | 8.70 |
| 22) | | n-undecane | 3.527 | 3.318 | 4.118 | 3.528 | 3.534 | 3.657 | 3.477 | 3.5941 | 7.00 |
| 23) | T | naphthalene | 1.564 | 1.604 | 1.770 | 1.569 | 1.647 | 1.869 | 1.808 | 1.6901 | 7.33 |
| 24) | | n-dodecane | 2.957 | 2.775 | 3.414 | 3.302 | 3.485 | 3.818 | 3.571 | 3.3316 | 10.80 |
| 25) | H | C9-C12 Aliphatics Total | 3.653 | 3.505 | 3.988 | 3.370 | 3.413 | 3.656 | 3.409 | 3.5705 | 6.09 |
| 27) | | C9-C10 Aromatics Total | 0.599 | 0.555 | 0.631 | 0.527 | 0.520 | 0.572 | 0.555 | 0.5655 | 6.90 |
| 28) | s | bromochloromethane (TIC) | 7.878 | 6.772 | 7.291 | 7.118 | 7.151 | 6.887 | 6.747 | 7.1206 | 5.50 |
| 29) | s | 1,4-difluorobenzene (TIC) | 1.062 | 1.041 | 0.988 | 0.980 | 1.027 | 1.013 | 0.998 | 1.0156 | 2.92 |
| 30) | s | chlorobenzene-D5 (TIC) | 1.331 | 1.329 | 1.319 | 1.298 | 1.324 | 1.325 | 1.341 | 1.3240 | 1.01 |

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Method File : APH150101.M
Title : APH Analysis
Last Update : Sat Jan 03 12:12:55 2015
Response Via : Initial Calibration

Calibration Files
0.4 =R138798.D 0.8 =R138799.D 2.0 =R138800.D 10 =R138801.D 20 =R138802.D 50 =R138803.D
100 =R138804.D

| | Compound | 0.4 | 0.8 | 2.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 31) s | 1,2-dichloroethane-D4 (TIC) | 3.696 | 3.855 | 3.858 | 3.440 | 3.612 | 3.642 | 3.705 | 3.6867 | 3.94 |
| 32) s | toluene-D8 (TIC) | 1.016 | 1.071 | 1.075 | 1.115 | 1.133 | 1.237 | 1.229 | 1.1252 | 7.33 |
| 33) s | bromofluorobenzene (TIC) | 1.280 | 1.312 | 1.265 | 1.269 | 1.291 | 1.300 | 1.287 | 1.2865 | 1.31 |

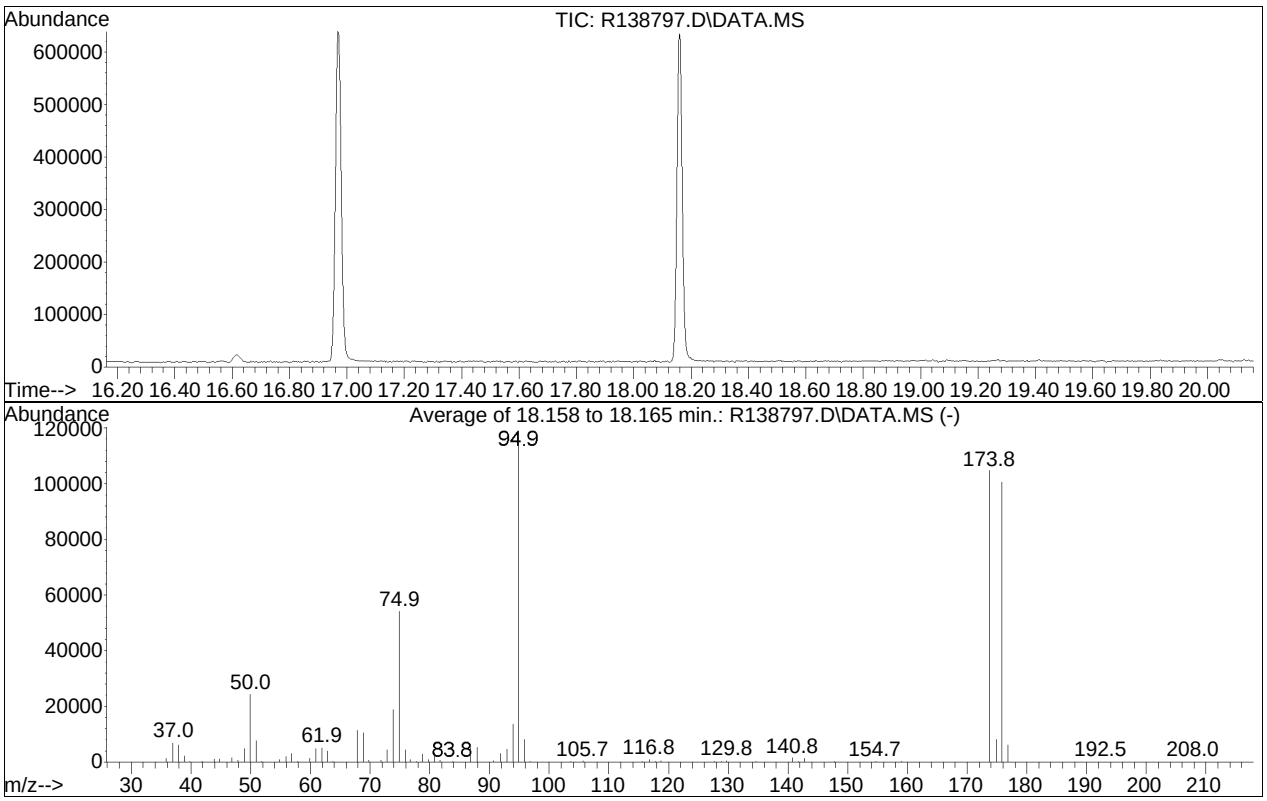
(#) = Out of Range

# BFB

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138797.D
Acq On : 1 Jan 2015 6:23 pm
Operator : AIRPIANO1:AR
Sample : WG753082-1,3,250,250
Misc : WG753082
ALS Vial : 1 Sample Multiplier: 1

Integration File: ALIP-Range-all.E

Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Title : APH Analysis
Last Update : Sat Jan 03 12:12:55 2015




AutoFind: Scans 1929, 1930, 1931; Background Corrected with Scan 1919

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 21.3 | 24464 | PASS |
| 75 | 95 | 30 | 66 | 47.2 | 54157 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 114733 | PASS |
| 96 | 95 | 5 | 9 | 7.2 | 8212 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 91.3 | 104800 | PASS |
| 175 | 174 | 4 | 9 | 7.8 | 8199 | PASS |
| 176 | 174 | 93 | 101 | 96.0 | 100632 | PASS |
| 177 | 176 | 5 | 9 | 6.2 | 6270 | PASS |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138798.D
Acq On : 1 Jan 2015 8:43 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD0.4
Misc : WG753082
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 12:12:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.23 | 128 | 695063 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 693110 | | | Recovery = 100.28% | | | |
| 7) 1,4-difluorobenzene | 12.52 | 114 | 3042026 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2890818 | | | Recovery = 105.23% | | | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 667996 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 680034 | | | Recovery = 98.23% | | | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 5262499M4 | 11.068 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 110.68% | | | |
| 29) 1,4-difluorobenzene (TIC) | 12.52 | TIC | 7094920 | 10.838 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 108.38% | | | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8894139 | 10.255 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 102.55% | | | |
| 31) 1,2-dichloroethane-D4 ... | 11.14 | TIC | 2468932 | 10.746 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 107.46% | | | |
| 32) toluene-D8 (TIC) | 15.28 | TIC | 7059564 | 9.475 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 94.75% | | | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 8552756 | 10.086 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.86% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 29154M4 | 1.067 | ug/m3 | |
| 3) isopentane | 6.21 | TIC | 304939M3 | 1.768 | ug/m3 | |
| 4) methyl tert butyl ether | 9.10 | 73 | 101544 | 1.640 | ug/m3# | 73 |
| 5) hexane | 10.26 | TIC | 453014M2 | 2.256 | ug/m3 | |
| 6) cyclohexane | 12.42 | TIC | 278534M4 | 1.521 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.69 | TIC | 380541M4 | 1.925 | ug/m3 | |
| 9) benzene | 12.10 | 78 | 110741 | 1.420 | ug/m3# | 67 |
| 10) heptane | 13.67 | TIC | 328508 | 1.721 | ug/m3# | 96 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 6157242 | -0.060 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 150760 | 1.832 | ug/m3 | 93 |
| 14) n-octane | 16.28 | TIC | 436781M4 | 2.201 | ug/m3 | |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 550799 | 2.535 | ug/m3 | 100 |
| 16) ethyl benzene | 17.30 | 91 | 185838 | 1.951 | ug/m3 | 97 |
| 17) m+p-xylene | 17.45 | 91 | 152717 | 2.038 | ug/m3 | 91 |
| 18) n-nonane | 17.95 | TIC | 526153M3 | 2.484 | ug/m3 | |
| 19) o-xylene | 17.81 | 91 | 148894 | 1.972 | ug/m3 | 97 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138798.D
Acq On : 1 Jan 2015 8:43 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD0.4
Misc : WG753082
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 12:12:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 20) decane | 19.14 | TIC | 580350M4 | 2.638 | ug/m3 | |
| 21) butylcyclohexane | 19.61 | TIC | 645478 | 2.653 | ug/m3 | 98 |
| 22) n-undecane | 20.12 | TIC | 603214 | 2.559 | ug/m3 | 99 |
| 23) naphthalene | 21.16 | 128 | 219377 | 2.093 | ug/m3# | 94 |
| 24) n-dodecane | 21.04 | TIC | 549081M4 | 2.489 | ug/m3 | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 5661157 | -5.519 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.79 | 120 | 333614M5 | 11.289 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.41 | 134 | 66478 | 11.724 | ug/m3 | 100 |
| 27) C9-C10 Aromatics Total | 0.00 | | 400092 | 70.561 | ug/m3 | |

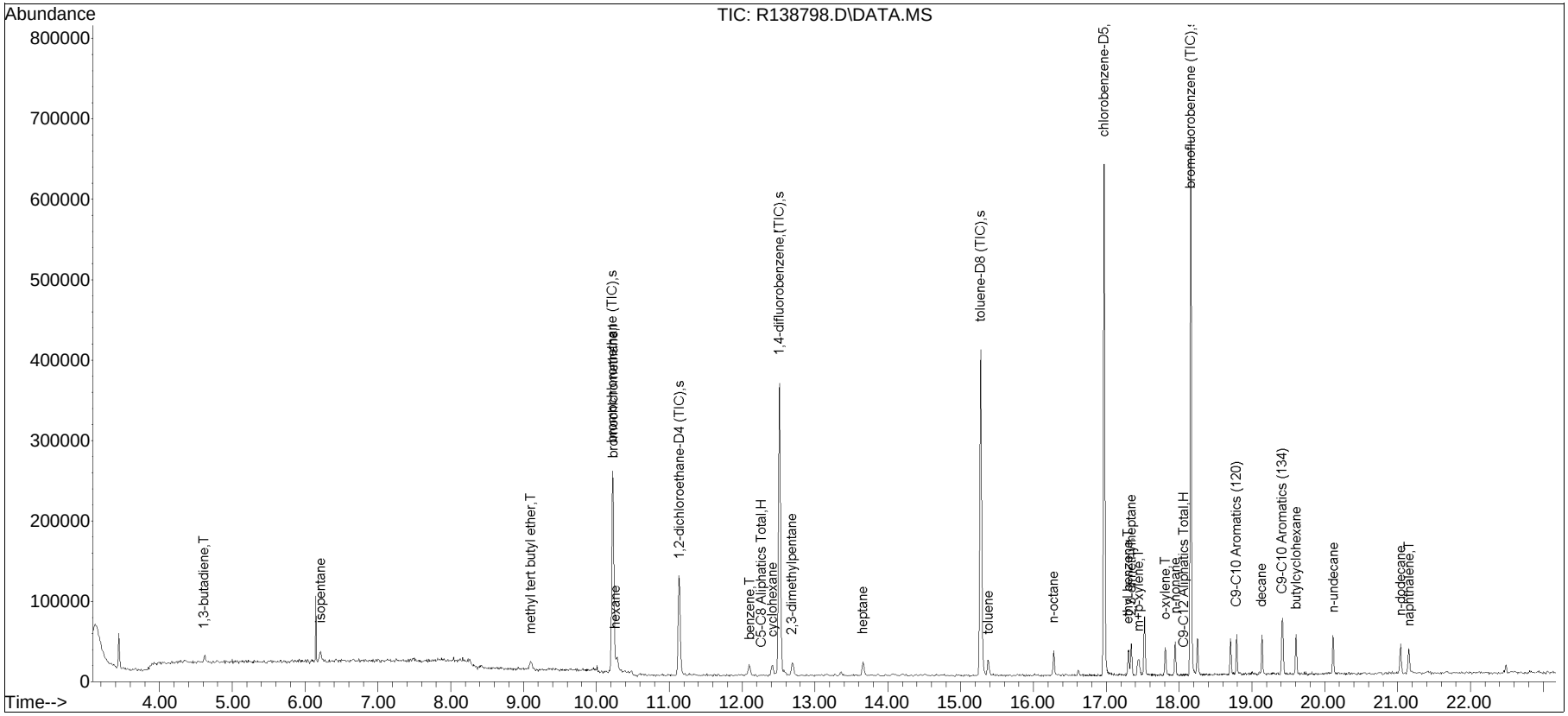
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138798.D
Acq On : 1 Jan 2015 8:43 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD0.4
Misc : WG753082
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 12:12:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

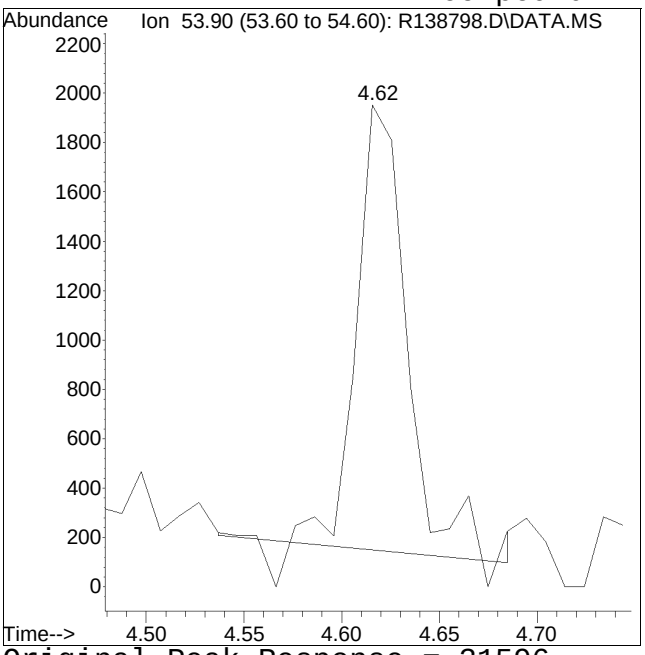
Sub List : Default - All compounds listed0101A_ICAL\R138801.D



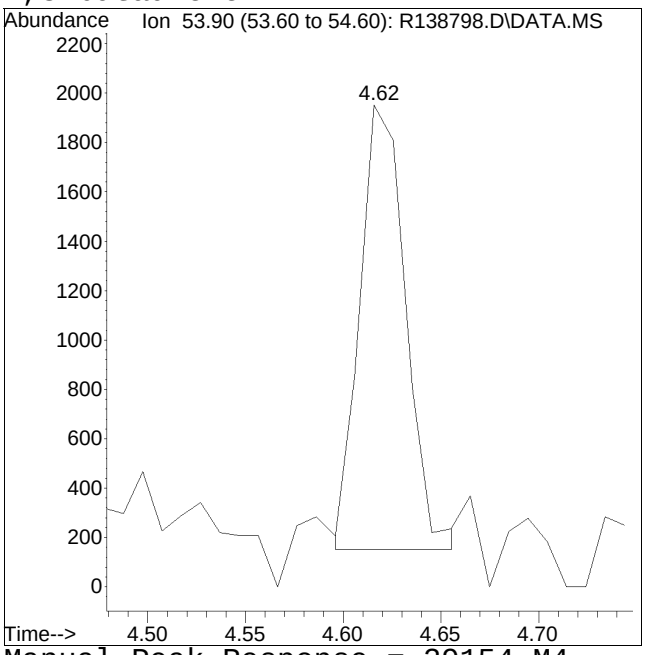
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138798.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 8:43 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 1/2/2015 7:46 am

Compound #2: 1,3-butadiene




Original Peak Response = 31596



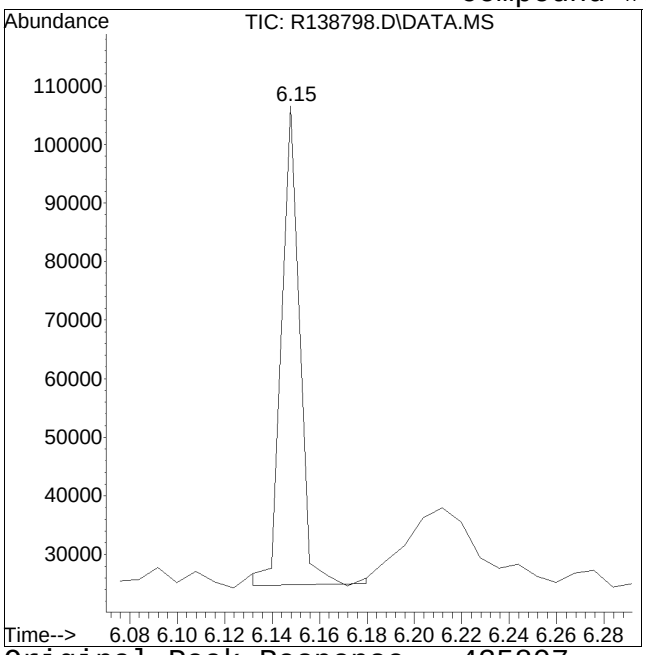

Manual Peak Response = 29154 M4

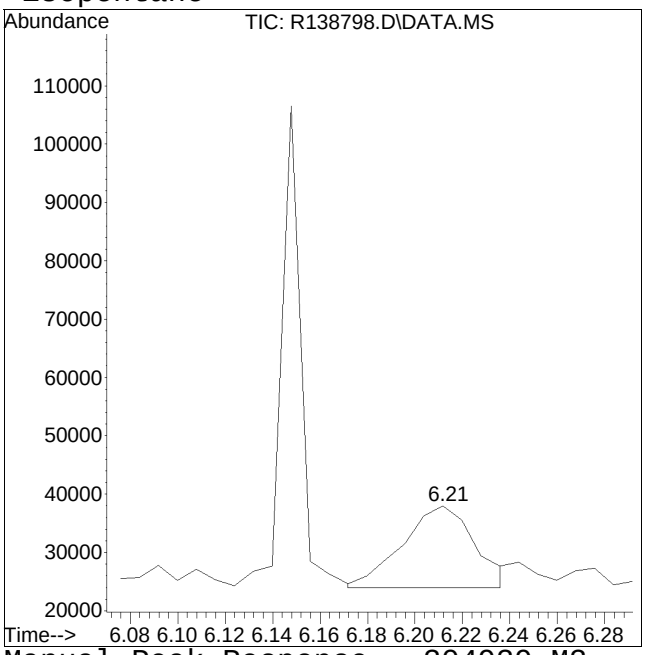
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #3: isopentane



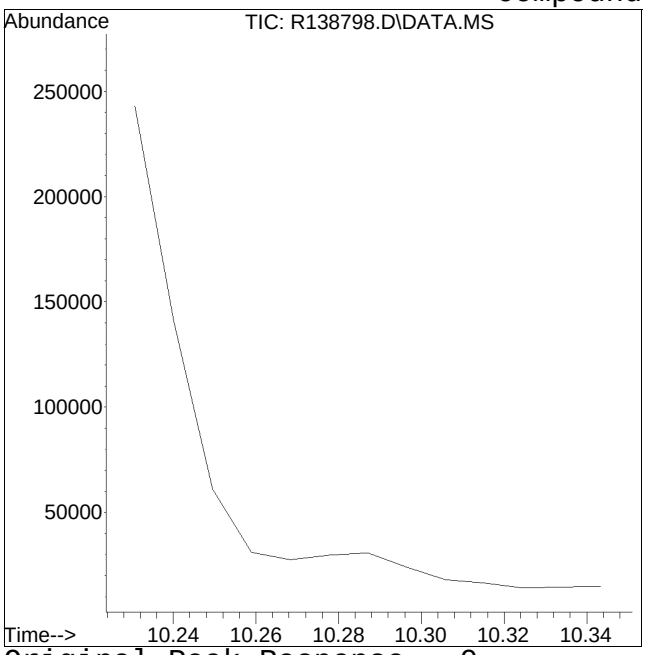

Original Peak Response = 435807 Manual Peak Response = 304939 M3

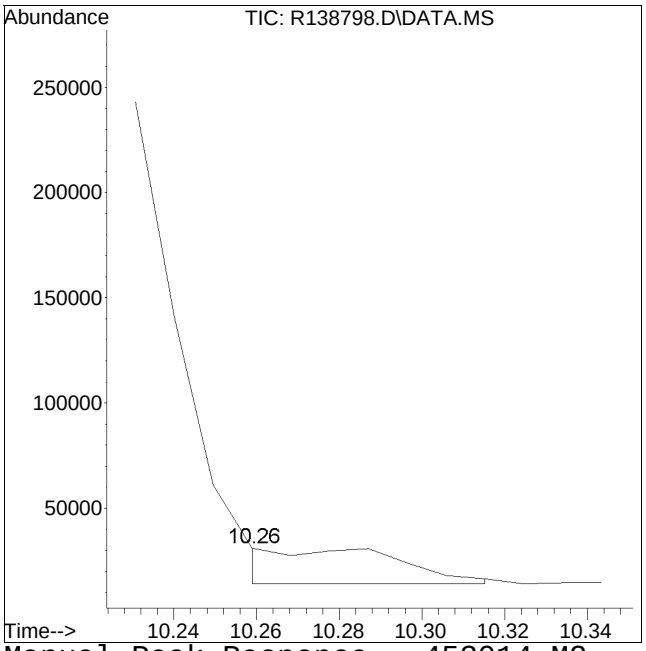
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #5: hexane



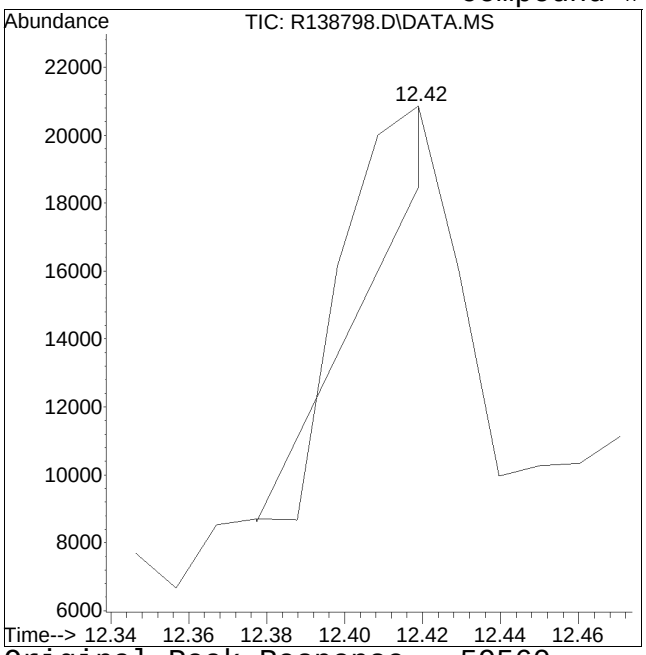



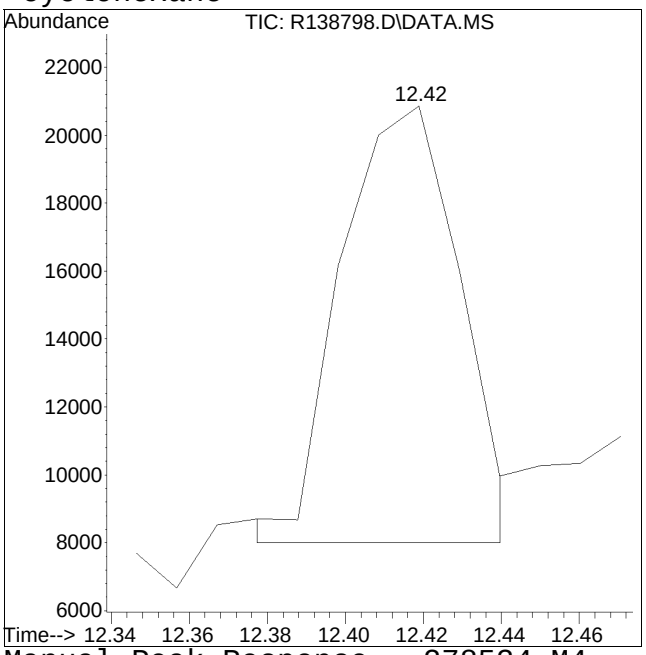

Original Peak Response = 0 Manual Peak Response = 453014 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138798.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 8:43 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 1/2/2015 7:46 am

Compound #6: cyclohexane



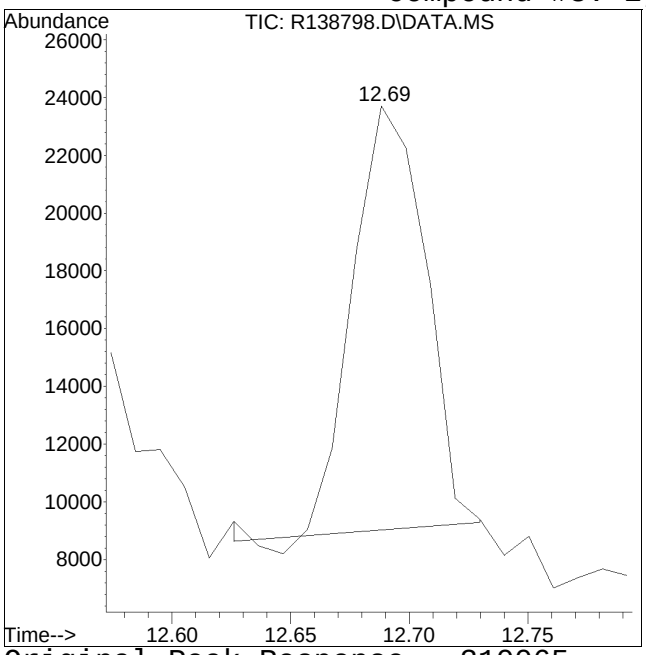



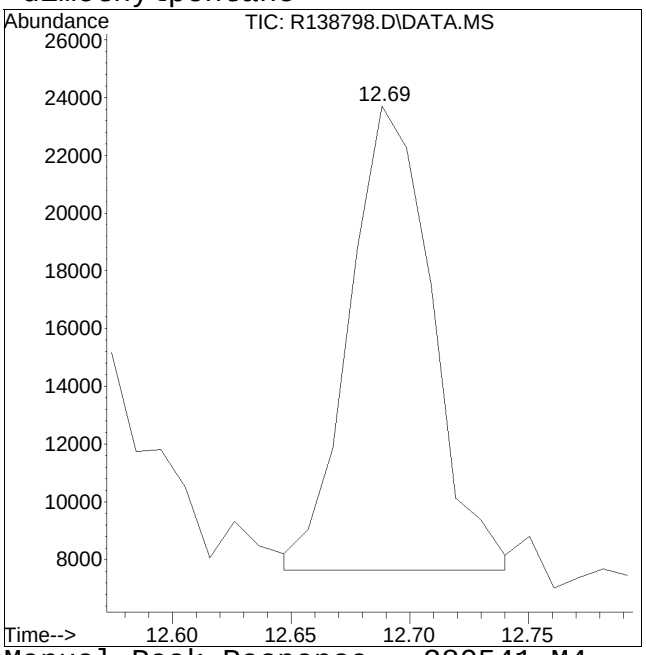

Original Peak Response = 59560 Manual Peak Response = 278534 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #8: 2,3-dimethylpentane



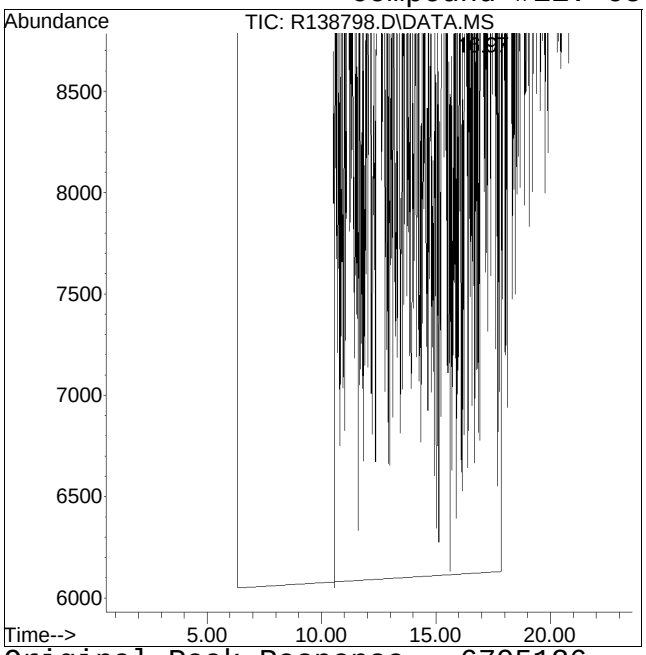

Original Peak Response = 310065 Manual Peak Response = 380541 M4
M4 = Poor automated baseline construction.

# Manual Integration/Negative Proof Report

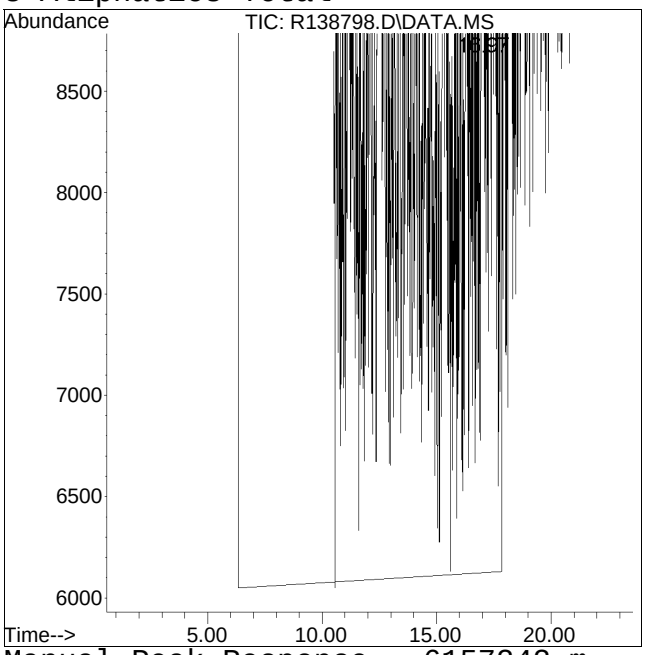
Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4

Method : 150101A_ICAL
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 6705126

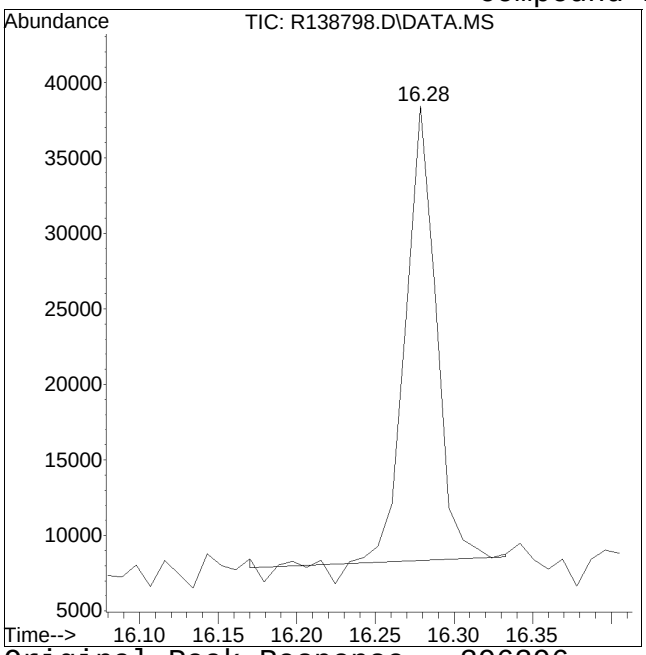


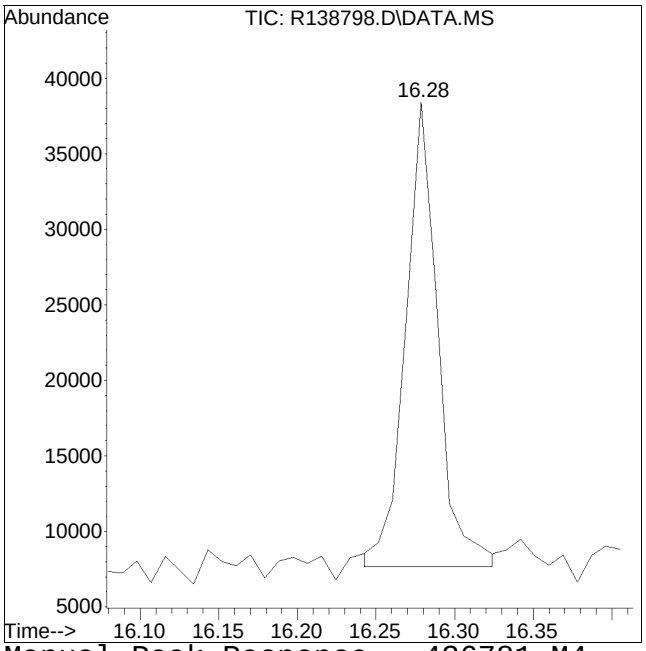

Manual Peak Response = 6157242 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #14: n-octane



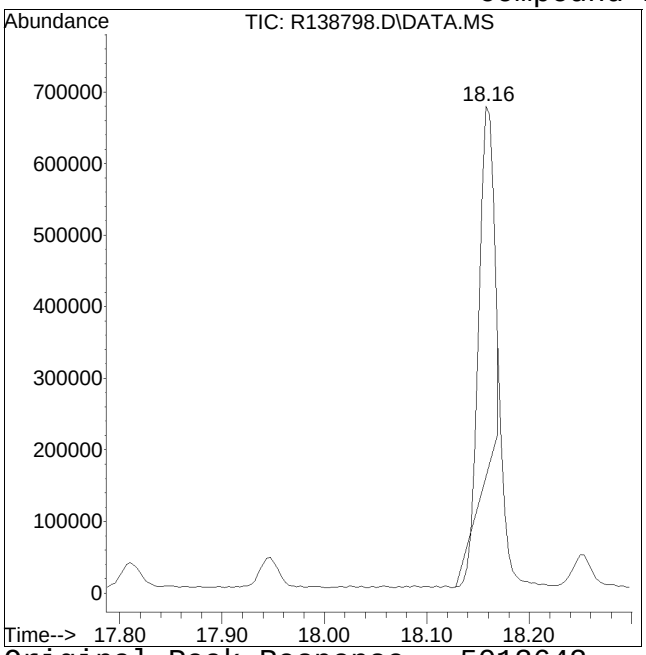



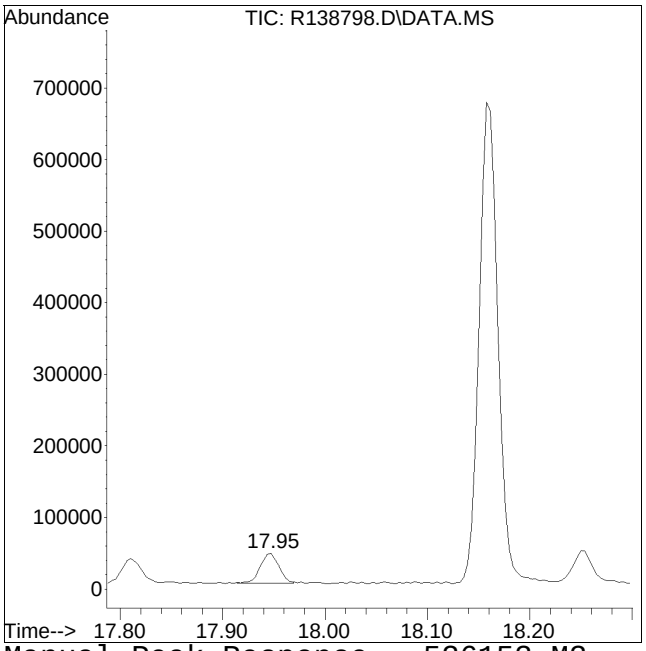

Original Peak Response = 396396 Manual Peak Response = 436781 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : 150101A_ICAL
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #18: n-nonane



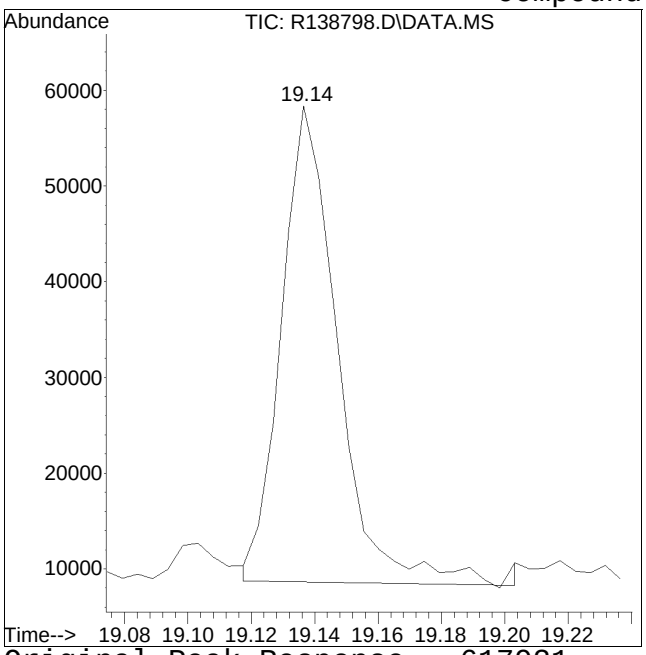



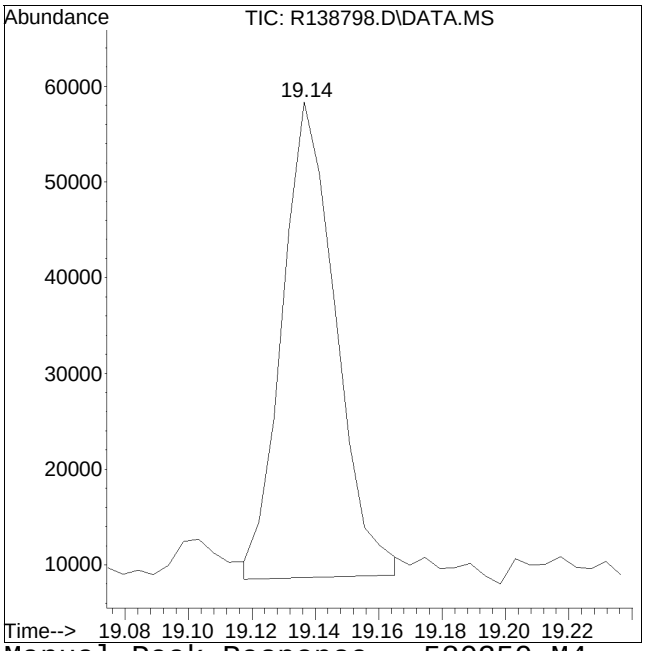

Original Peak Response = 5013642 Manual Peak Response = 526153 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #20: decane



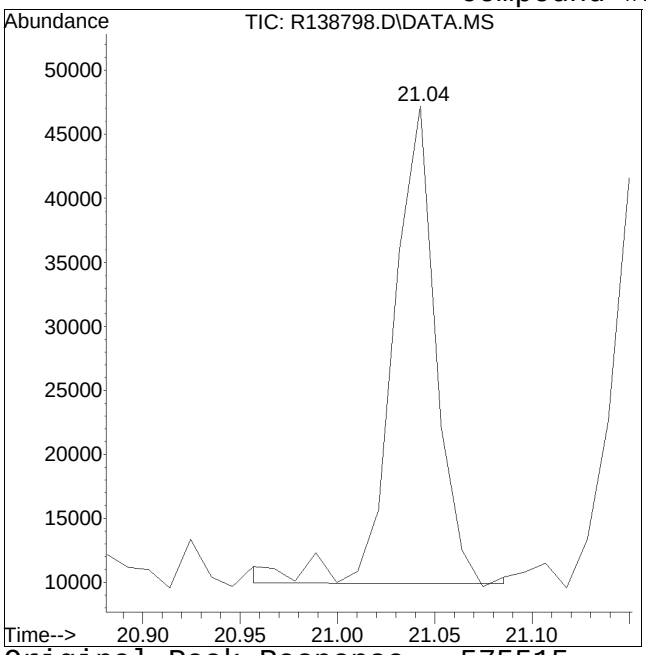



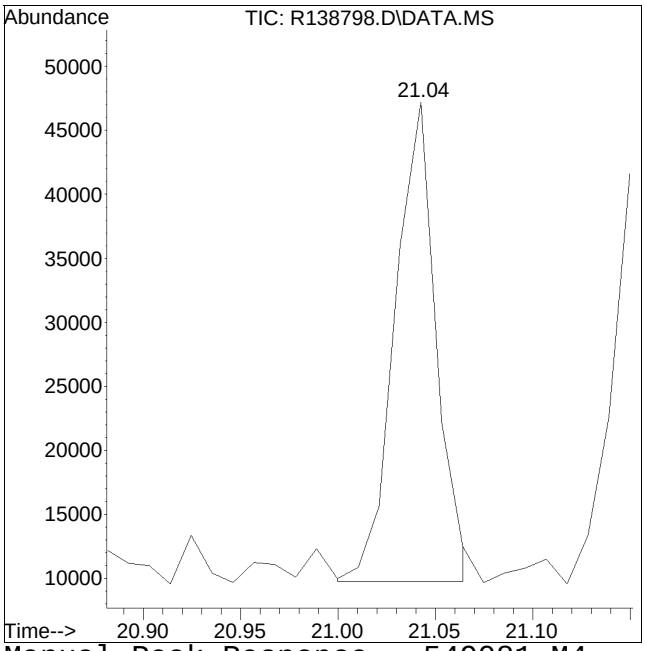

Original Peak Response = 617921 Manual Peak Response = 580350 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #24: n-dodecane



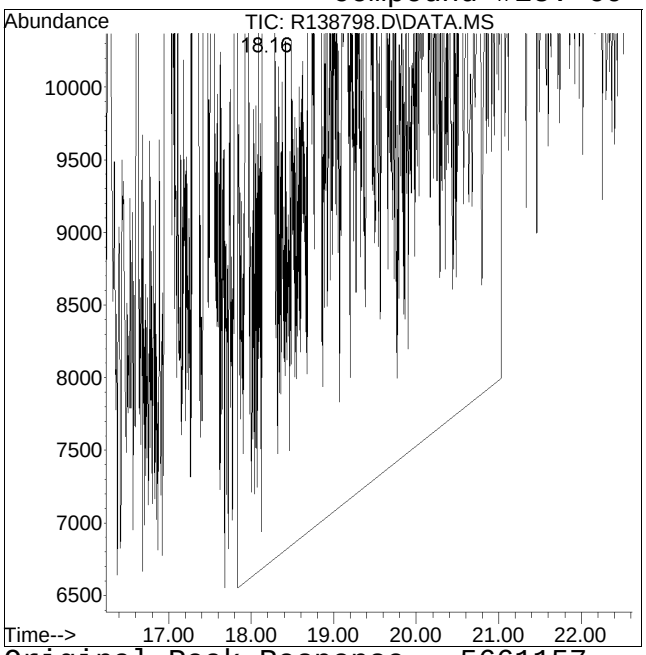




Original Peak Response = 575515 Manual Peak Response = 549081 M4
M4 = Poor automated baseline construction.

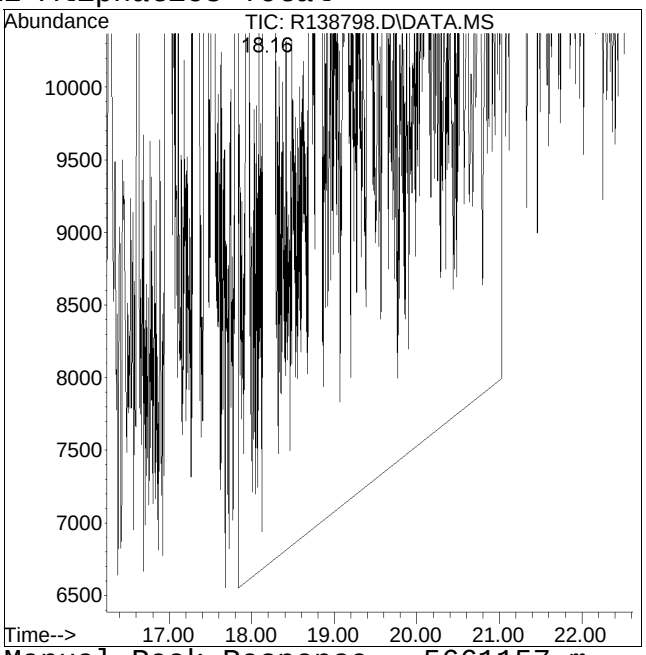
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 5661157



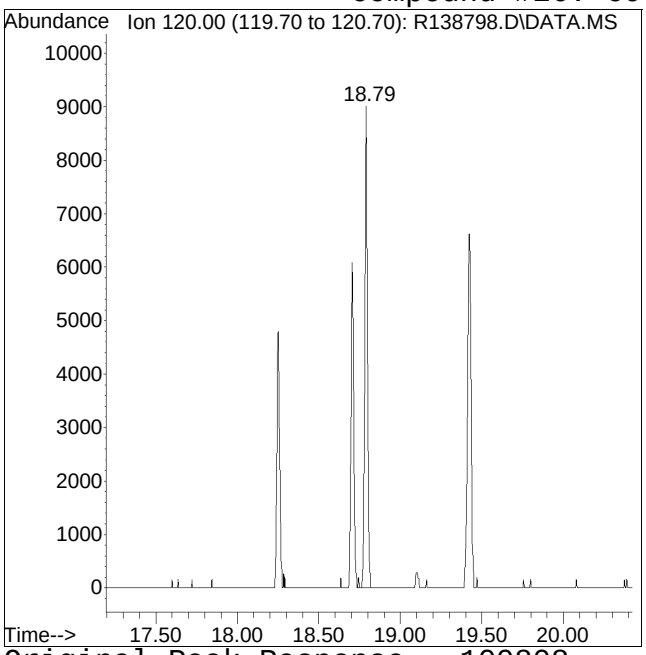

Manual Peak Response = 5661157 m

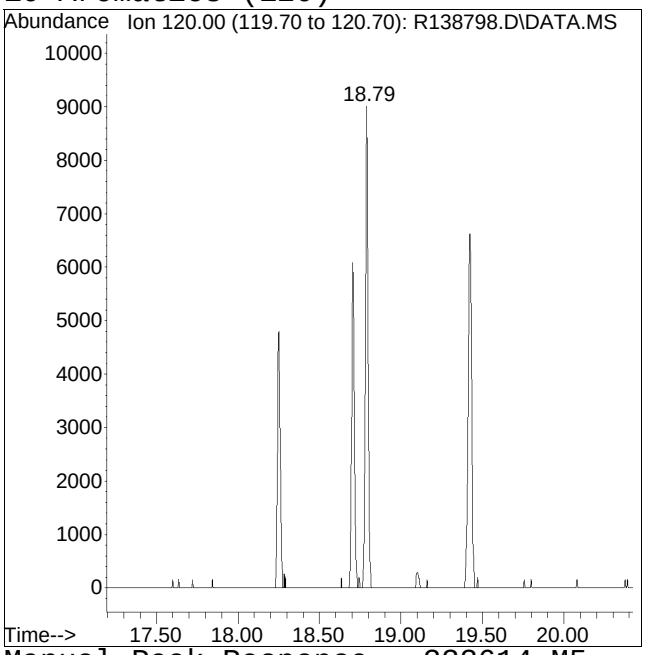
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #26: C9-C10 Aromatics (120)



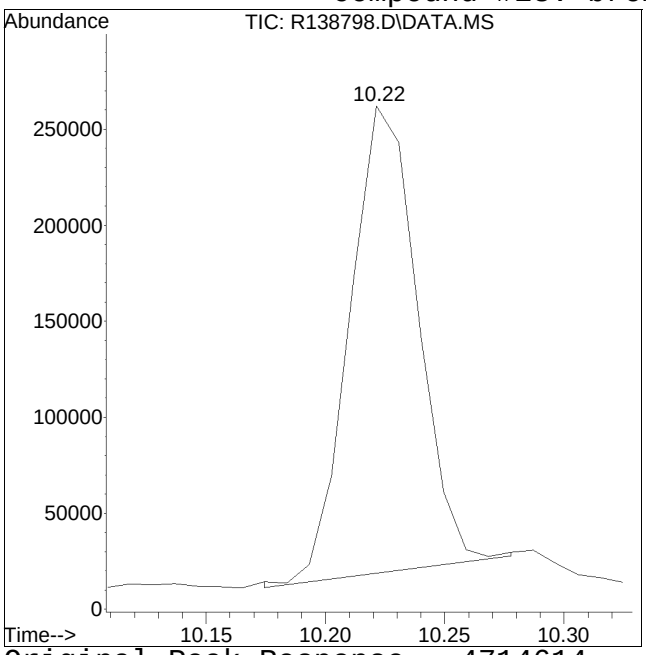



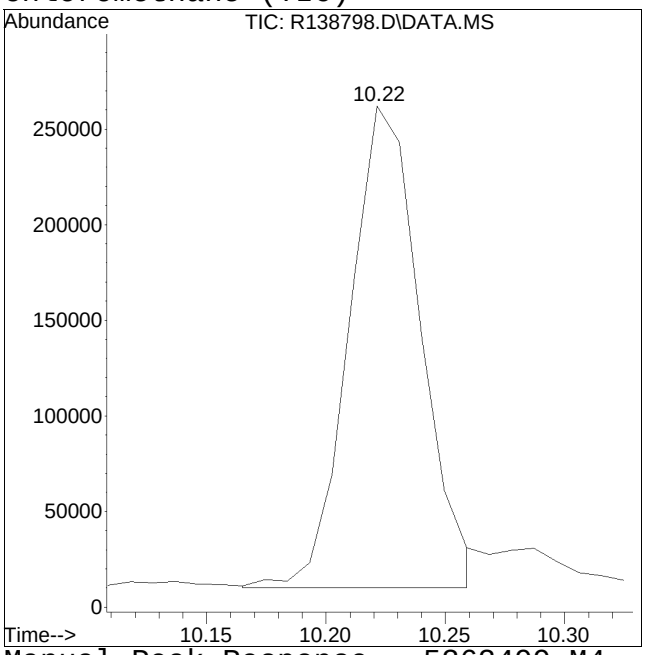

Original Peak Response = 100808 Manual Peak Response = 333614 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138798.D
Date Inj'd : 1/1/2015 8:43 pm
Sample : IAPH-10STD0.4
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #28: bromochloromethane (TIC)




Original Peak Response = 4714614 Manual Peak Response = 5262499 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138799.D
Acq On : 1 Jan 2015 9:16 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD0.8
Misc : WG753082
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 02 08:07:32 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.23 | 128 | 683609 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 693110 | | | Recovery | = | 98.63% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2968940 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2890818 | | | Recovery | = | 102.70% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 657661 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 680034 | | | Recovery | = | 96.71% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 4453640 | 9.514 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 95.14% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 6847851 | 10.625 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 106.25% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8739884 | 10.236 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 102.36% | |
| 31) 1,2-dichloroethane-D4 ... | 11.13 | TIC | 2535101 | 11.207 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 112.07% | |
| 32) toluene-D8 (TIC) | 15.28 | TIC | 7607167 | 10.370 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 103.70% | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 8631048 | 10.339 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 103.39% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.63 | 54 | 55725M4 | 2.074 | ug/m3 | |
| 3) isopentane | 6.21 | TIC | 572118M4 | 3.373 | ug/m3 | |
| 4) methyl tert butyl ether | 9.10 | 73 | 190862 | 3.134 | ug/m3# | 85 |
| 5) hexane | 10.28 | TIC | 717212M2 | 3.631 | ug/m3 | |
| 6) cyclohexane | 12.41 | TIC | 543666M4 | 3.018 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.69 | TIC | 695599M4 | 3.606 | ug/m3 | |
| 9) benzene | 12.10 | 78 | 214706 | 2.821 | ug/m3 | 95 |
| 10) heptane | 13.66 | TIC | 646254M4 | 3.468 | ug/m3 | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 12177758 | 1.128 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 271786 | 3.354 | ug/m3 | 96 |
| 14) n-octane | 16.28 | TIC | 807003M4 | 4.130 | ug/m3 | |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 1036893 | 4.847 | ug/m3 | 99 |
| 16) ethyl benzene | 17.30 | 91 | 349421 | 3.726 | ug/m3 | 100 |
| 17) m+p-xylene | 17.44 | 91 | 282148 | 3.824 | ug/m3# | 65 |
| 18) n-nonane | 17.94 | TIC | 962280 | 4.614 | ug/m3# | 99 |
| 19) o-xylene | 17.81 | 91 | 288765 | 3.884 | ug/m3 | 98 |
| 20) decane | 19.13 | TIC | 1121132M4 | 5.176 | ug/m3 | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138799.D
Acq On : 1 Jan 2015 9:16 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD0.8
Misc : WG753082
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 02 08:07:32 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 21) butylcyclohexane | 19.60 | TIC | 1275036 | 5.323 | ug/m3 | 99 |
| 22) n-undecane | 20.11 | TIC | 1117253 | 4.815 | ug/m3 | 99 |
| 23) naphthalene | 21.15 | 128 | 441984 | 4.283 | ug/m3 | 100 |
| 24) n-dodecane | 21.03 | TIC | 1014533M4 | 4.672 | ug/m3 | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 10814048 | -7.463 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.79 | 120 | 616953M5 | 21.205 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.41 | 134 | 112774 | 20.202 | ug/m3 | 100 |
| 27) C9-C10 Aromatics Total | 0.00 | | 729728 | 130.719 | ug/m3 | |

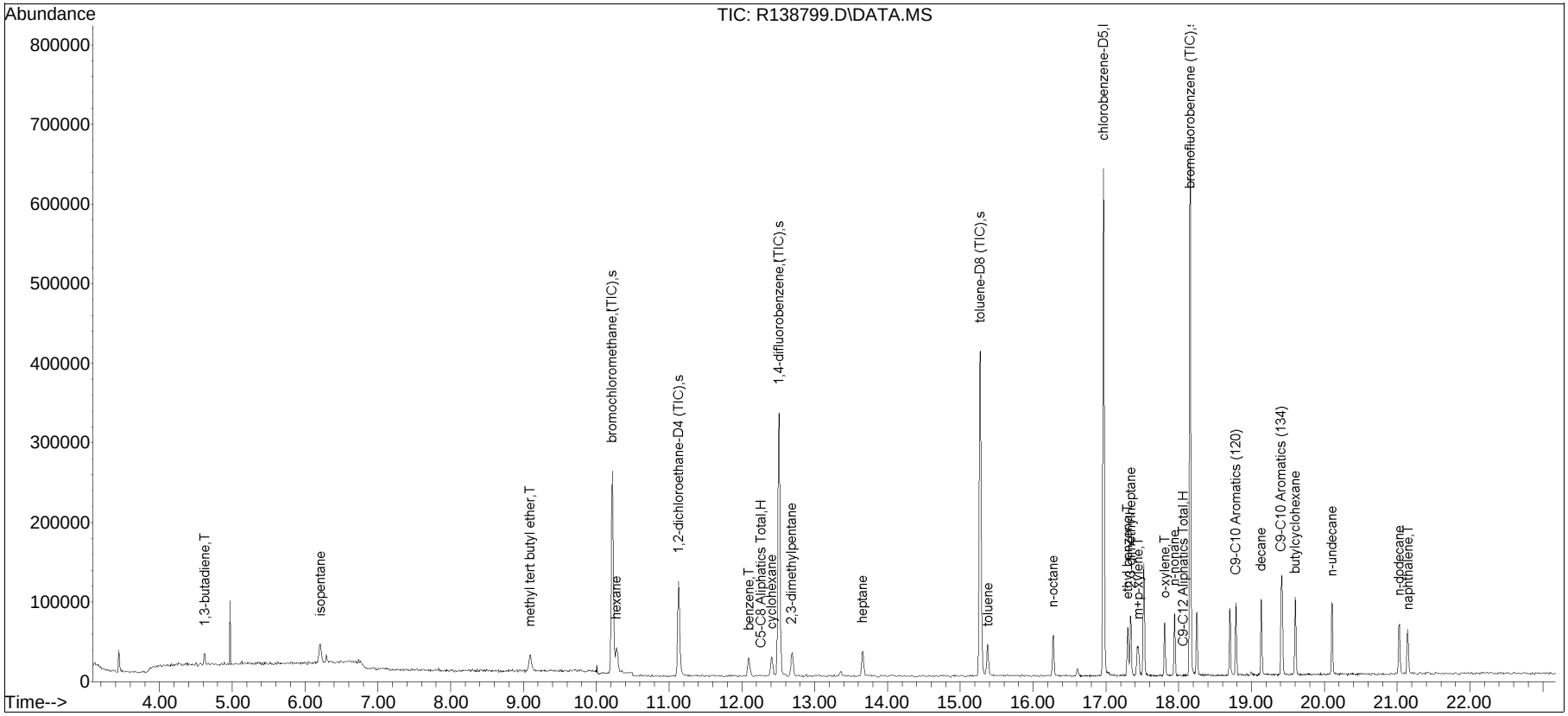
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138799.D
Acq On : 1 Jan 2015 9:16 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD0.8
Misc : WG753082
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 02 08:07:32 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

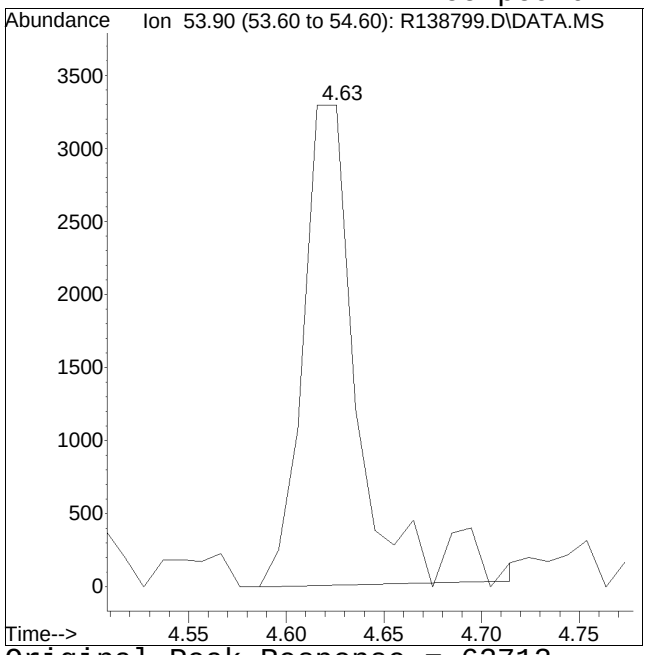
Sub List : Default - All compounds listed0101A_ICAL\R138801.D



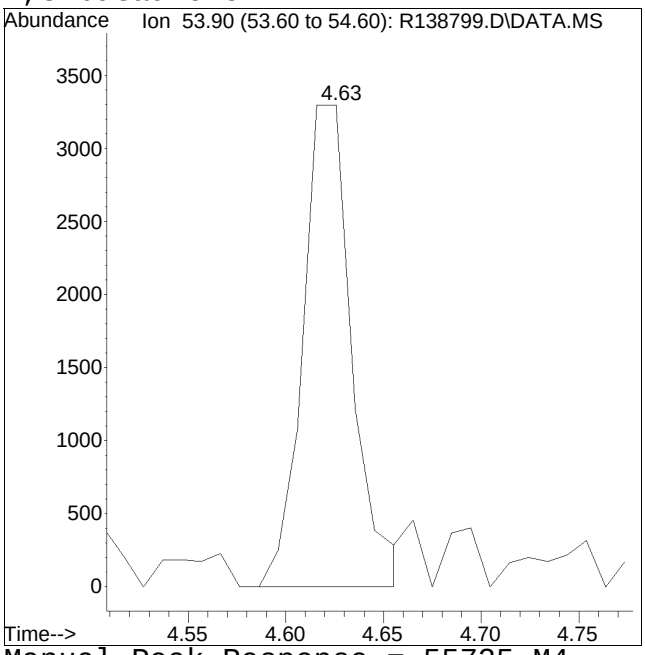
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138799.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 9:16 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.8 Quant Date : 1/2/2015 7:46 am

Compound #2: 1,3-butadiene




Original Peak Response = 63712



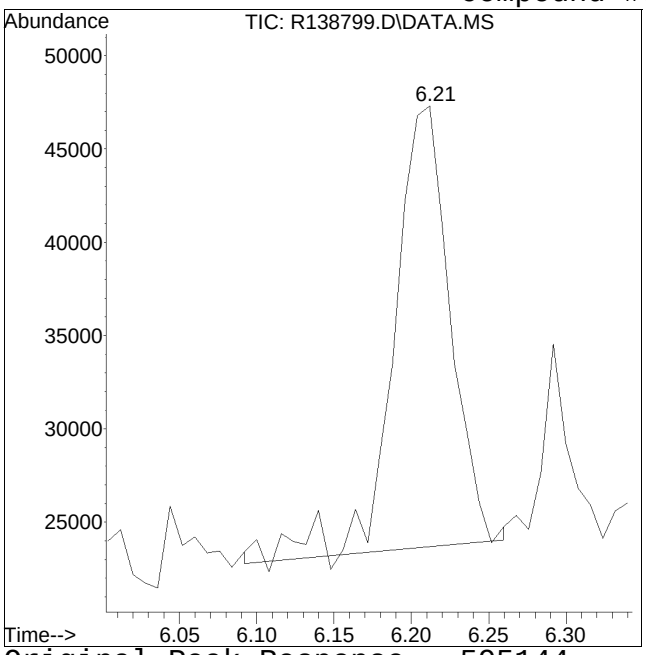

Manual Peak Response = 55725 M4

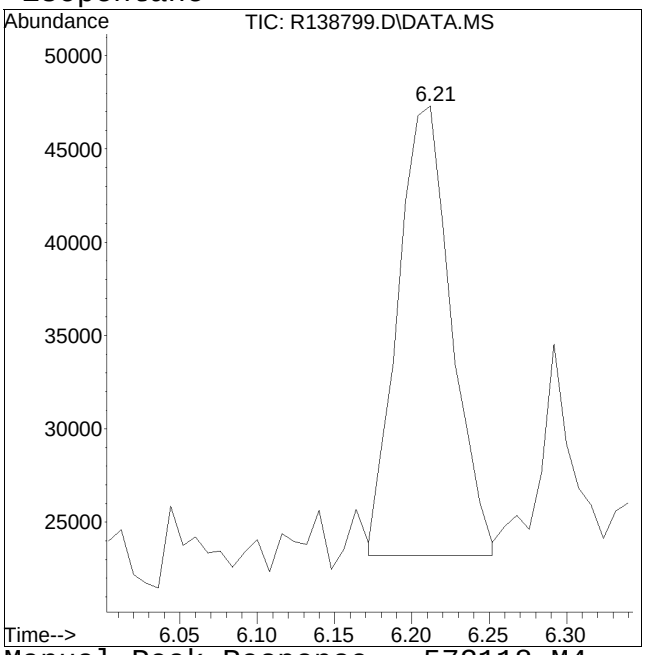
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #3: isopentane



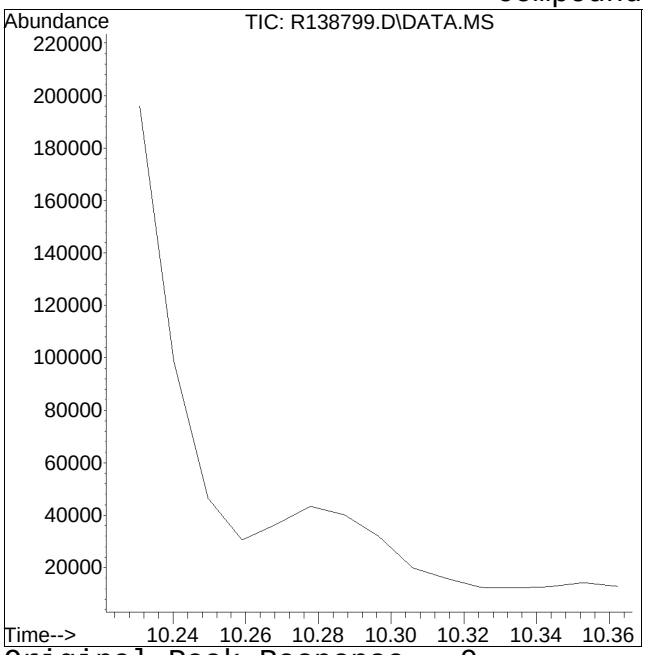




Original Peak Response = 595144 Manual Peak Response = 572118 M4
M4 = Poor automated baseline construction.

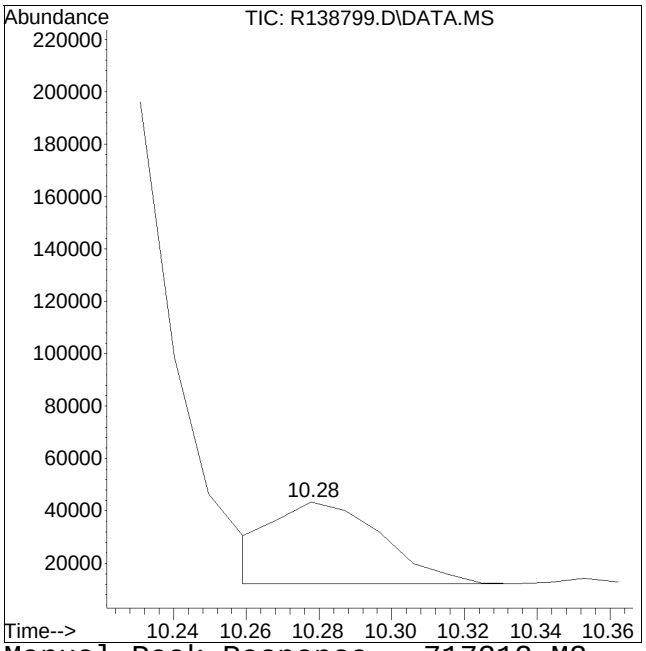
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #5: hexane




Original Peak Response = 0



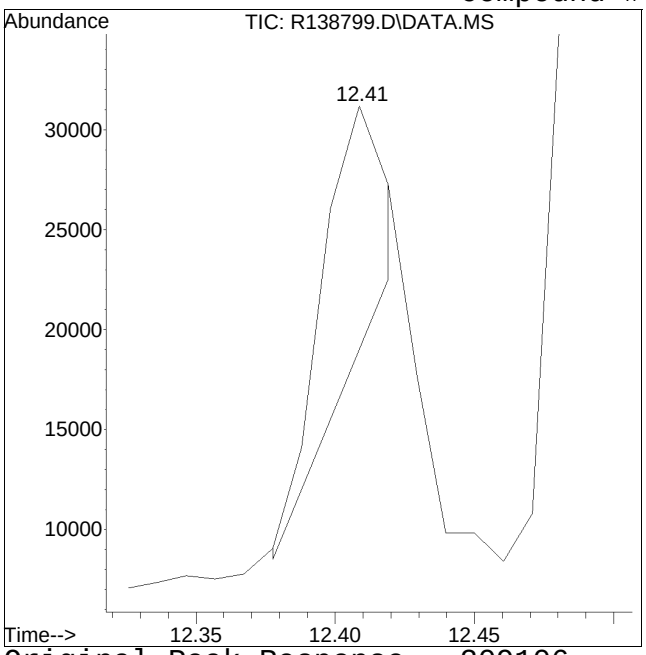

Manual Peak Response = 717212 M2

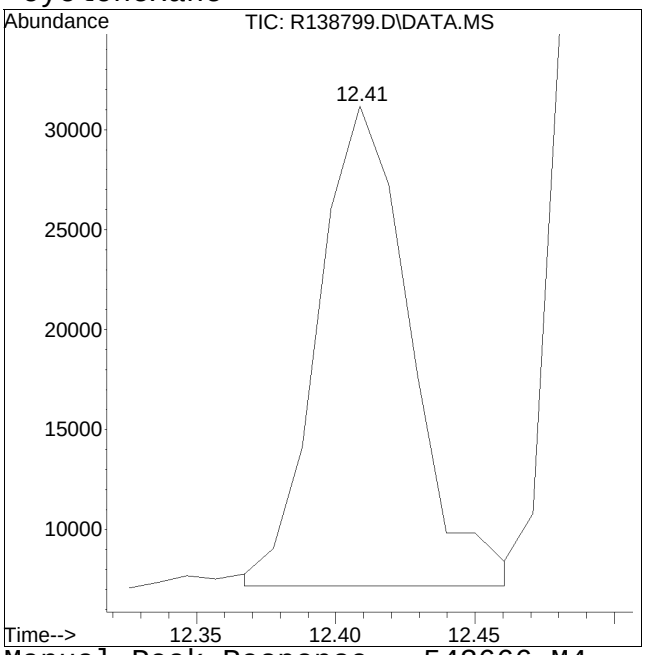
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #6: cyclohexane



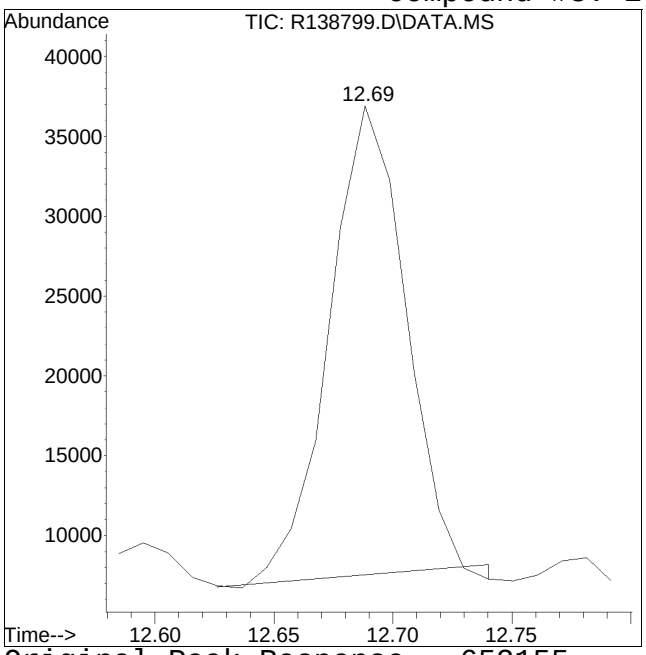




Original Peak Response = 209106 Manual Peak Response = 543666 M4
M4 = Poor automated baseline construction.

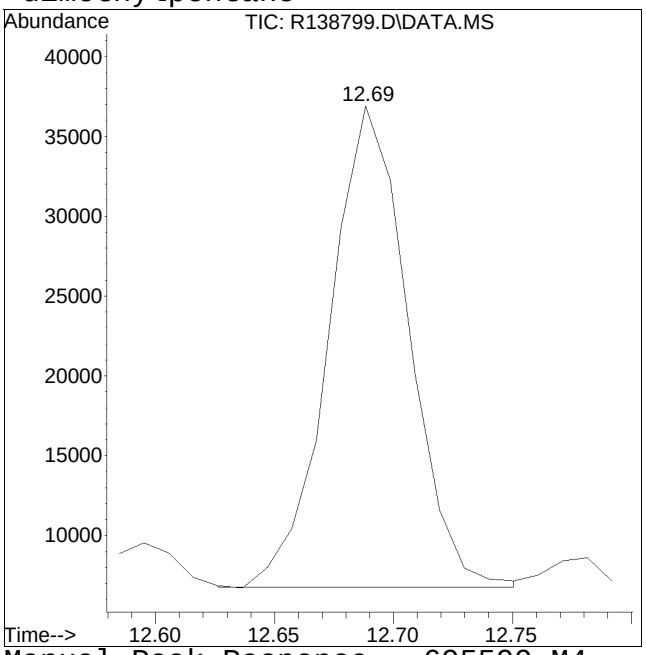
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : 150101A_ICAL
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #8: 2,3-dimethylpentane




Original Peak Response = 652155



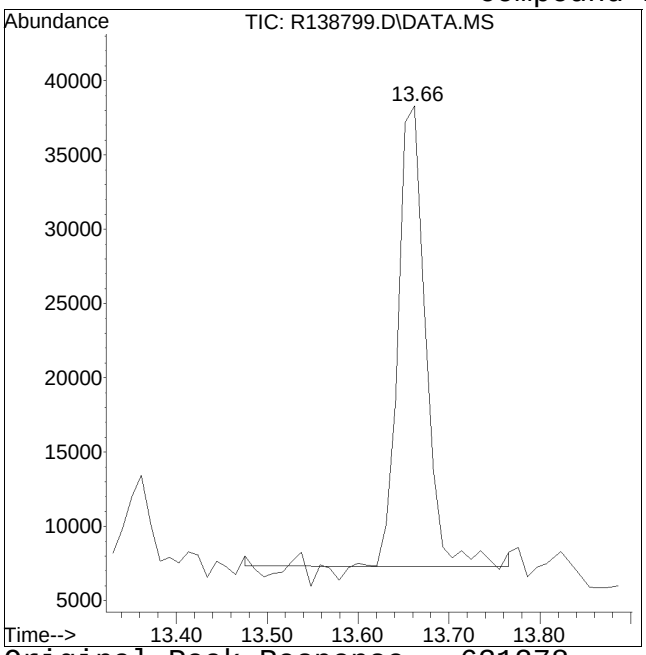

Manual Peak Response = 695599 M4

M4 = Poor automated baseline construction.

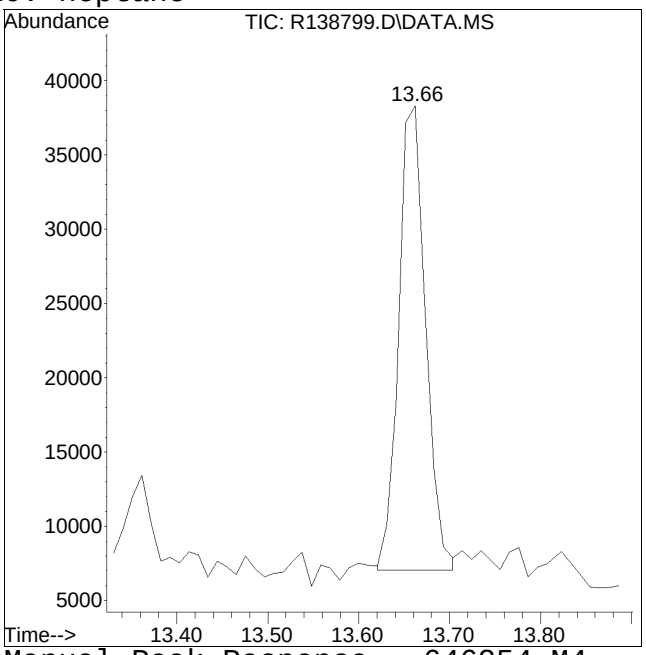
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : 150101A_ICAL
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #10: heptane




Original Peak Response = 631278



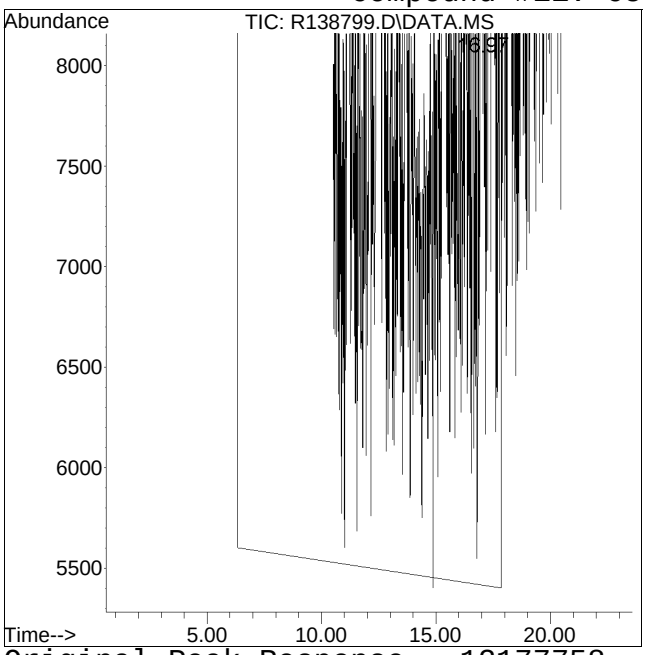

Manual Peak Response = 646254 M4

M4 = Poor automated baseline construction.

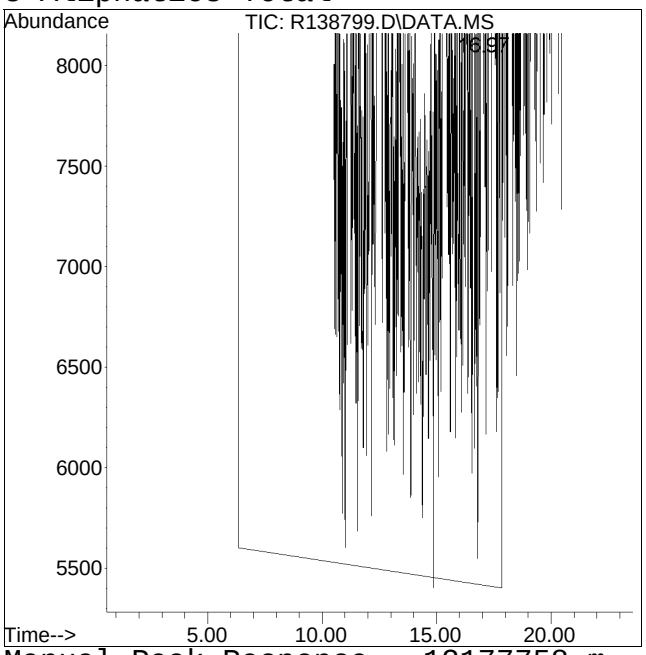
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 12177758

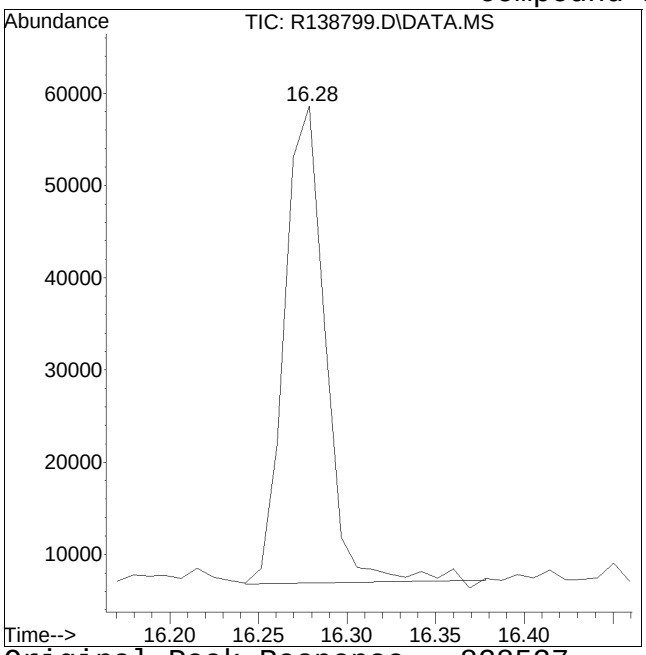


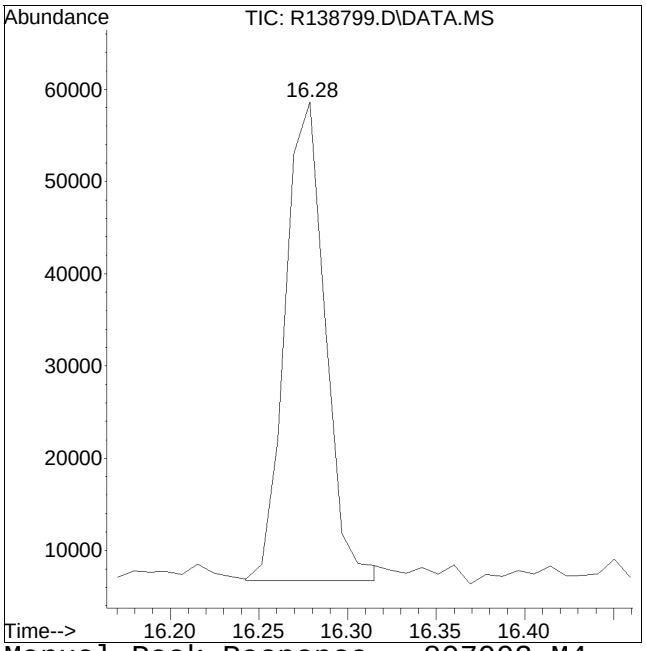

Manual Peak Response = 12177758 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #14: n-octane



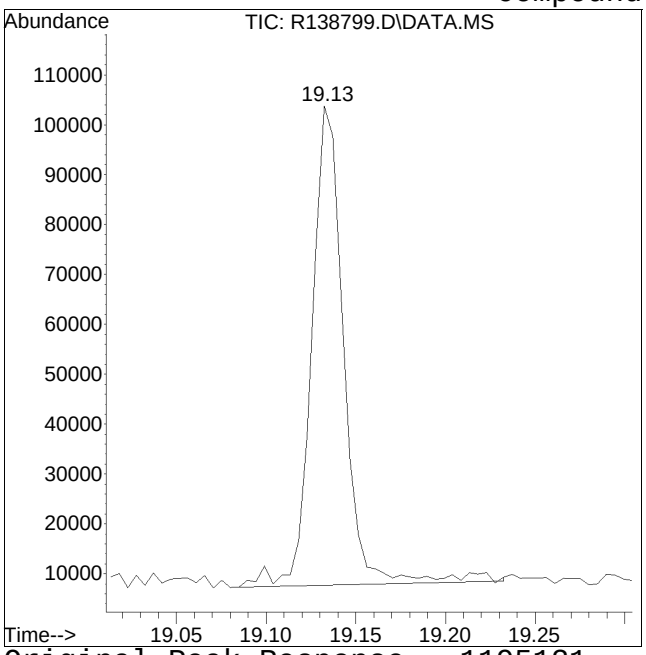



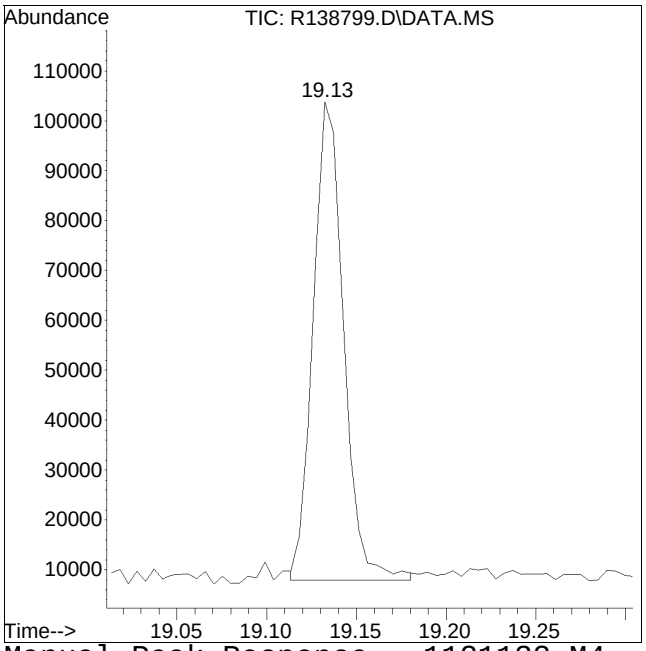

Original Peak Response = 828537 Manual Peak Response = 807003 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #20: decane



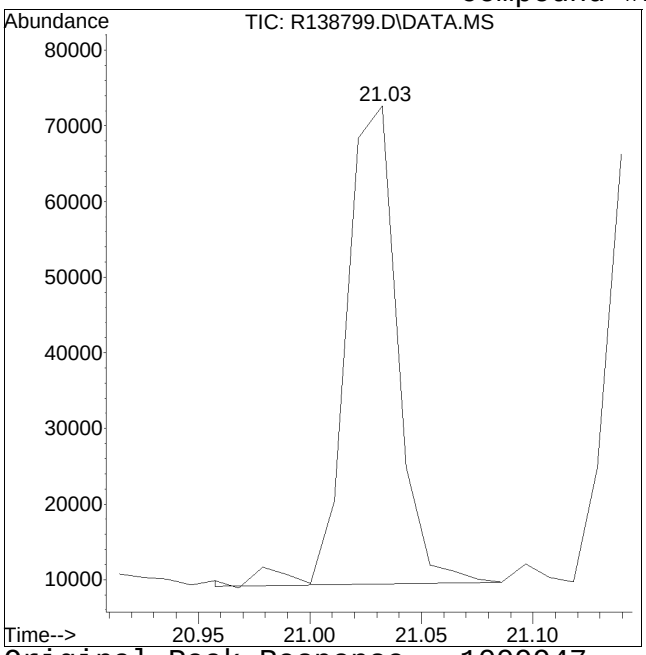



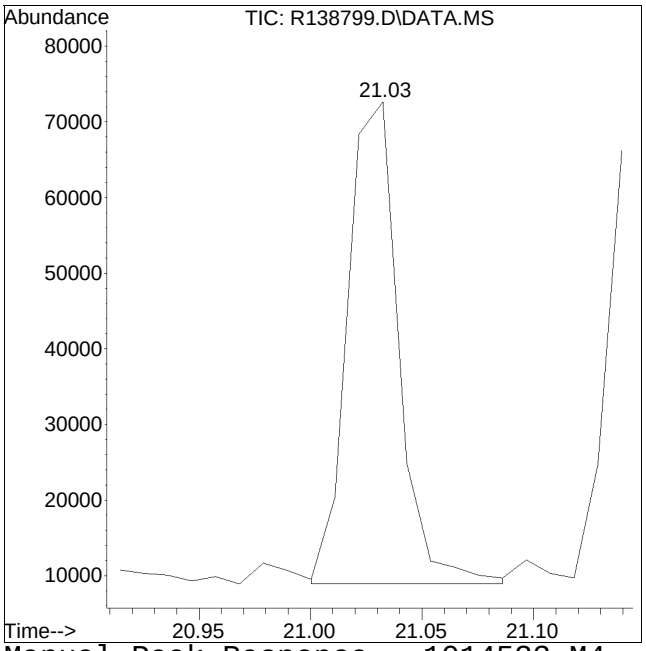

Original Peak Response = 1195121 Manual Peak Response = 1121132 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #24: n-dodecane



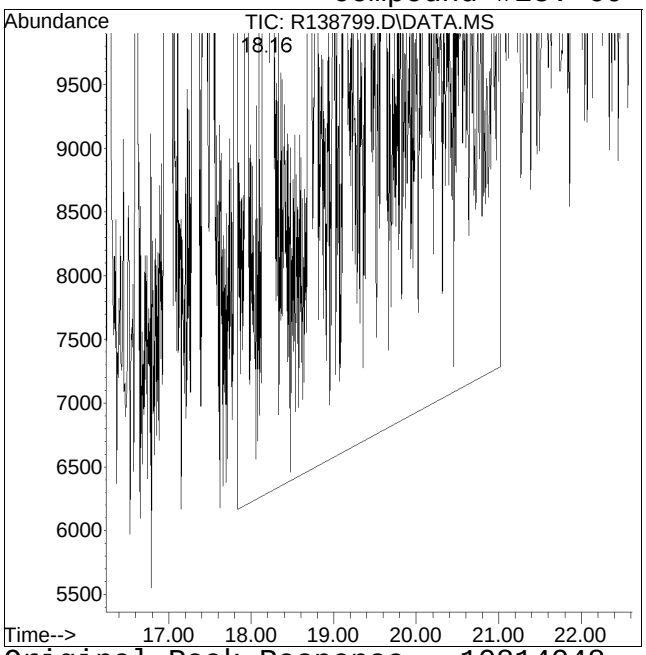

Original Peak Response = 1009947 Manual Peak Response = 1014533 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

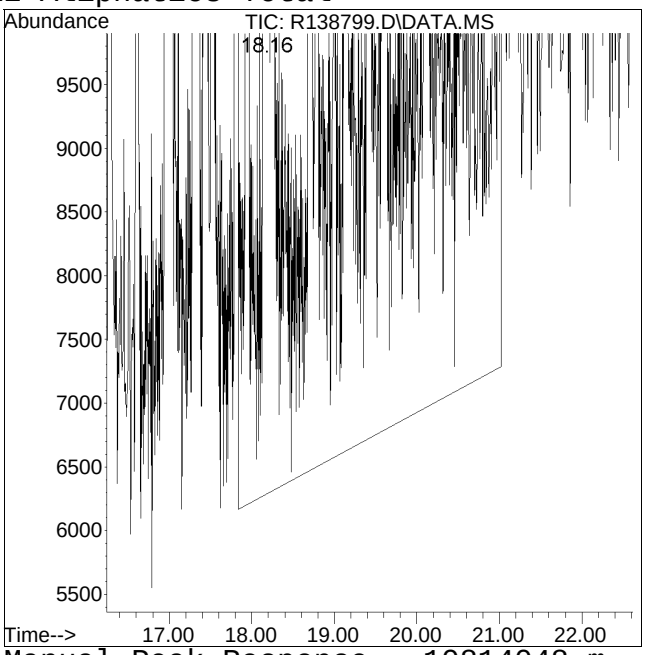
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 10814048

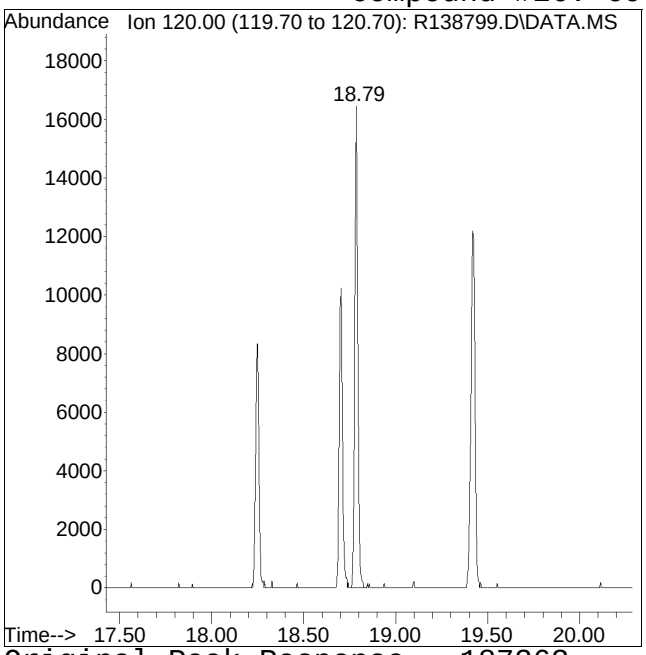


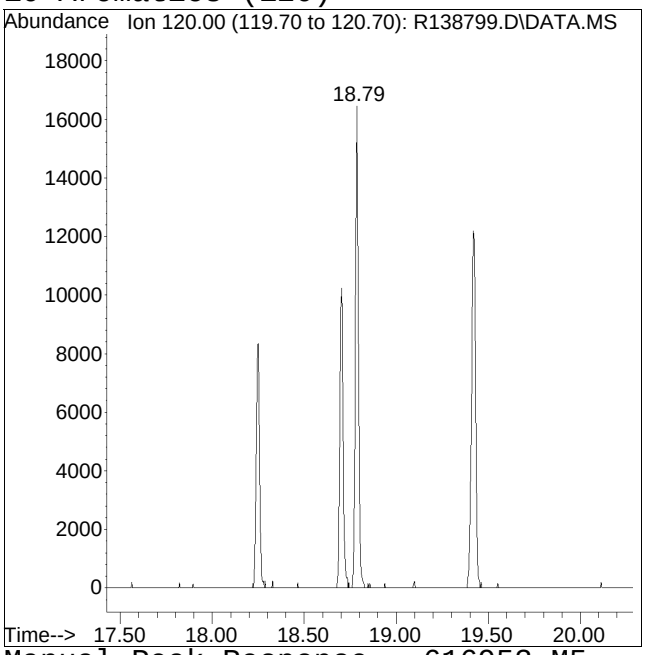

Manual Peak Response = 10814048 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138799.D
Date Inj'd : 1/1/2015 9:16 pm
Sample : IAPH-10STD0.8
Quant Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #26: C9-C10 Aromatics (120)




Original Peak Response = 187363 Manual Peak Response = 616953 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138800.D
Acq On : 1 Jan 2015 9:48 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD2.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 08:08:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 724924 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 693110 | | | Recovery | = | 104.59% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2922901 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2890818 | | | Recovery | = | 101.11% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 677786 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 680034 | | | Recovery | = | 99.67% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 4941704 | 10.244 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 102.44% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 6694948 | 10.079 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 100.79% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8938954 | 10.158 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 101.58% | |
| 31) 1,2-dichloroethane-D4 ... | 11.13 | TIC | 2614891 | 11.217 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 112.17% | |
| 32) toluene-D8 (TIC) | 15.27 | TIC | 8741903 | 11.563 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 115.63% | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 8571409 | 9.962 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 99.62% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 156159 | 5.480 | ug/m3# | 100 |
| 3) isopentane | 6.20 | TIC | 1391746M4 | 7.738 | ug/m3 | |
| 4) methyl tert butyl ether | 9.08 | 73 | 557076 | 8.625 | ug/m3 | 96 |
| 5) hexane | 10.28 | TIC | 1903341M4 | 9.086 | ug/m3 | |
| 6) cyclohexane | 12.41 | TIC | 1547257M2 | 8.100 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.69 | TIC | 1814385 | 9.554 | ug/m3# | 76 |
| 9) benzene | 12.10 | 78 | 607992 | 8.115 | ug/m3 | 99 |
| 10) heptane | 13.66 | TIC | 1873329 | 10.212 | ug/m3 | 99 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 30151693 | -2.277 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 766605 | 9.180 | ug/m3 | 98 |
| 14) n-octane | 16.28 | TIC | 2322933 | 11.536 | ug/m3# | 99 |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 2905660 | 13.178 | ug/m3 | 99 |
| 16) ethyl benzene | 17.30 | 91 | 1004141 | 10.391 | ug/m3 | 100 |
| 17) m+p-xylene | 17.44 | 91 | 781412 | 10.276 | ug/m3# | 76 |
| 18) n-nonane | 17.94 | TIC | 2697194 | 12.550 | ug/m3# | 100 |
| 19) o-xylene | 17.81 | 91 | 819543 | 10.696 | ug/m3 | 98 |
| 20) decane | 19.13 | TIC | 3254200 | 14.578 | ug/m3# | 100 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138800.D
Acq On : 1 Jan 2015 9:48 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD2.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 08:08:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 21) butylcyclohexane | 19.60 | TIC | 3482303 | 14.108 | ug/m3 | 99 |
| 22) n-undecane | 20.10 | TIC | 3566683 | 14.915 | ug/m3 | 100 |
| 23) naphthalene | 21.14 | 128 | 1257278 | 11.823 | ug/m3 | 96 |
| 24) n-dodecane | 21.03 | TIC | 3220583 | 14.390 | ug/m3 | 99 |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 28496368 | -32.909 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.78 | 120 | 1792319M5 | 59.773 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.41 | 134 | 344757 | 59.924 | ug/m3 | 100 |
| 27) C9-C10 Aromatics Total | 0.00 | | 2137077 | 371.457 | ug/m3 | |

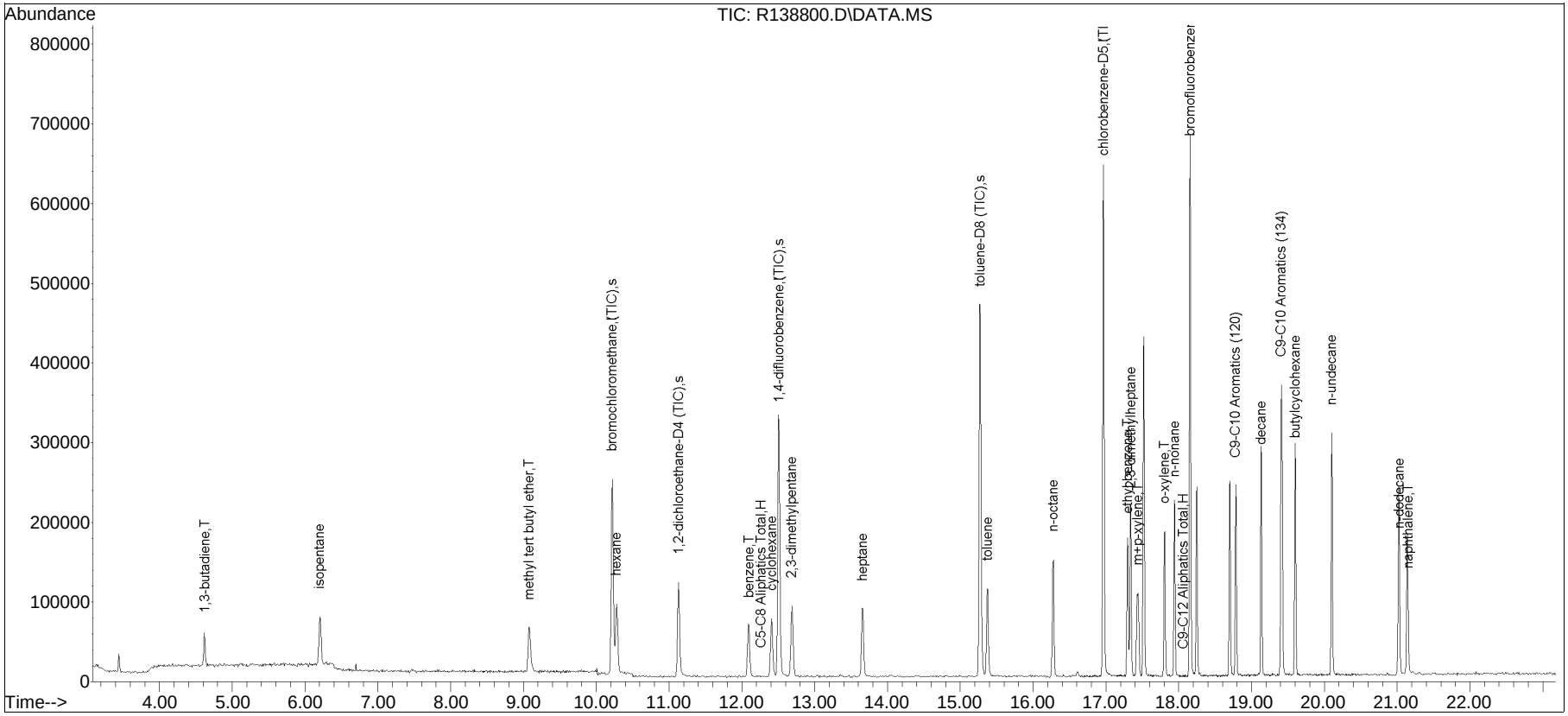
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138800.D
Acq On : 1 Jan 2015 9:48 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD2.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 08:08:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed0101A_ICAL\R138801.D

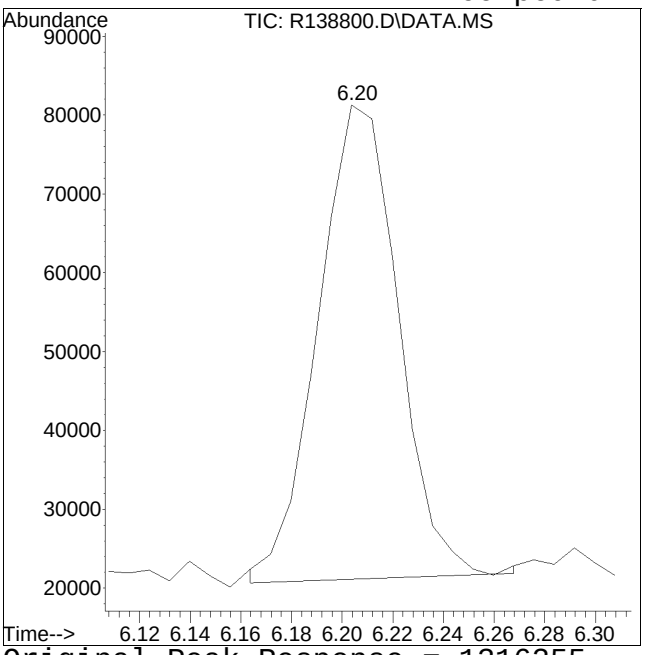


Manual Integration/Negative Proof Report

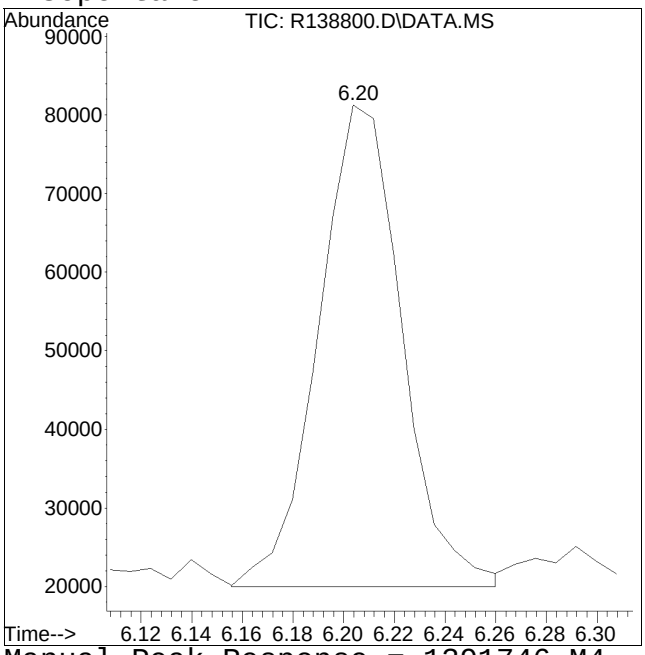
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138800.D
Date Inj'd : 1/1/2015 9:48 pm
Sample : IAPH-10STD2.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #3: isopentane




Original Peak Response = 1316255



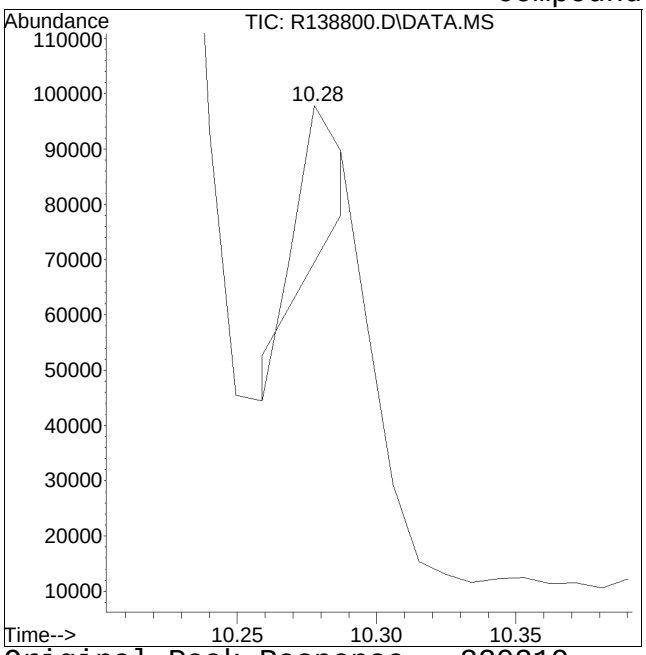

Manual Peak Response = 1391746 M4

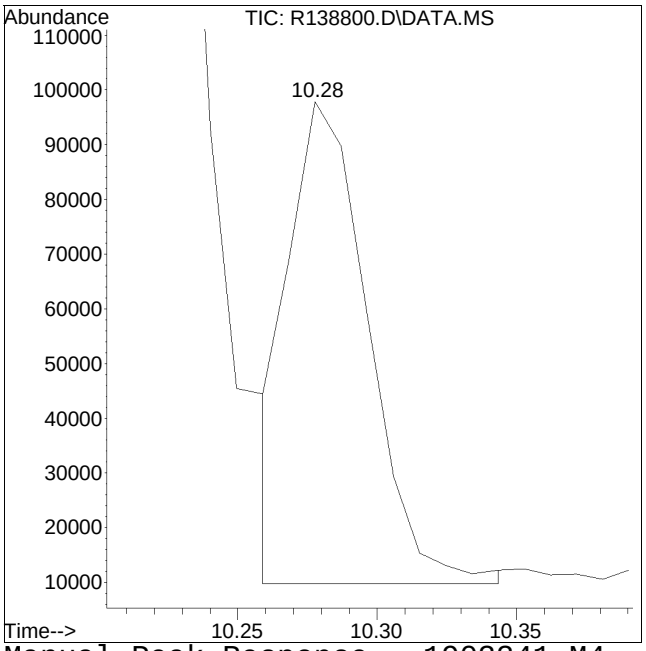
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138800.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 9:48 pm Instrument : Air Piano 1
Sample : IAPH-10STD2.0 Quant Date : 1/2/2015 7:46 am

Compound #5: hexane



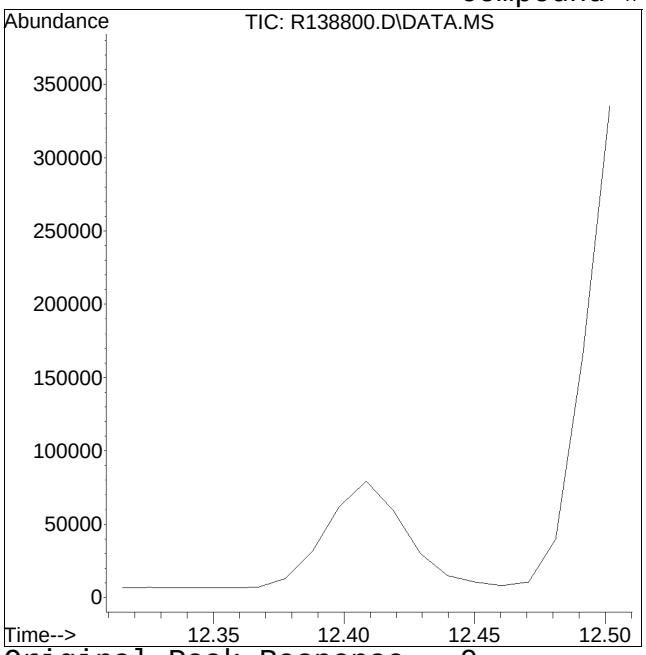



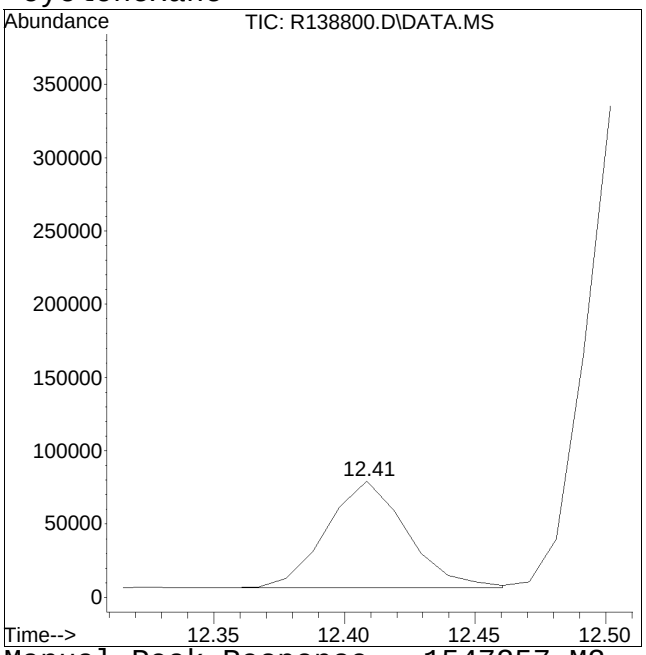

Original Peak Response = 220219 Manual Peak Response = 1903341 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138800.D
Date Inj'd : 1/1/2015 9:48 pm
Sample : IAPH-10STD2.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #6: cyclohexane



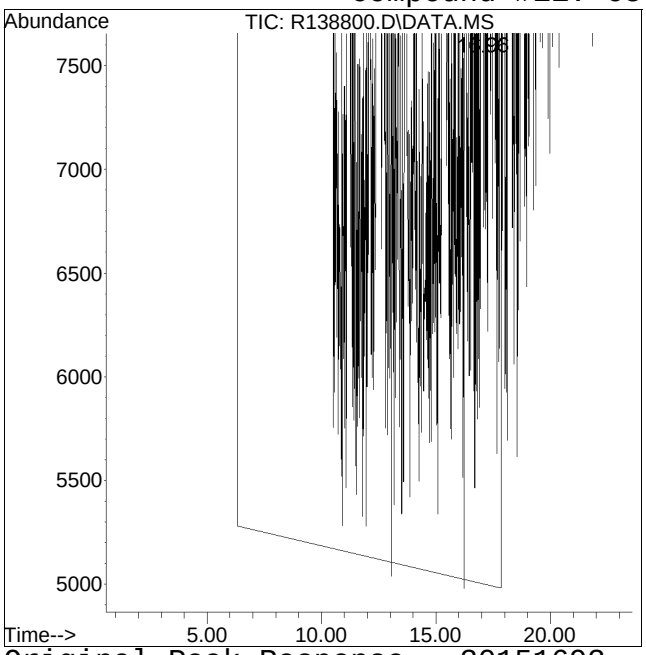




Original Peak Response = 0 Manual Peak Response = 1547257 M2
M2 = Peak not found by automatic integration algorithm.

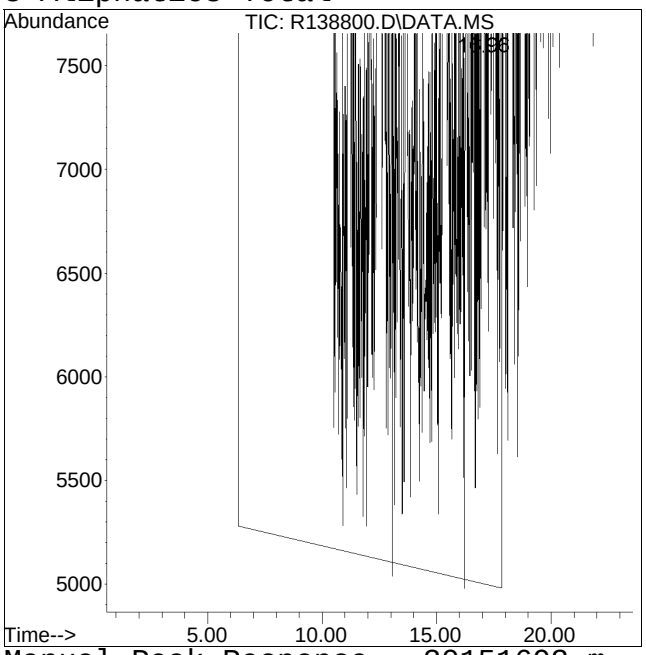
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138800.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 9:48 pm Instrument : Air Piano 1
Sample : IAPH-10STD2.0 Quant Date : 1/2/2015 7:46 am

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 30151693

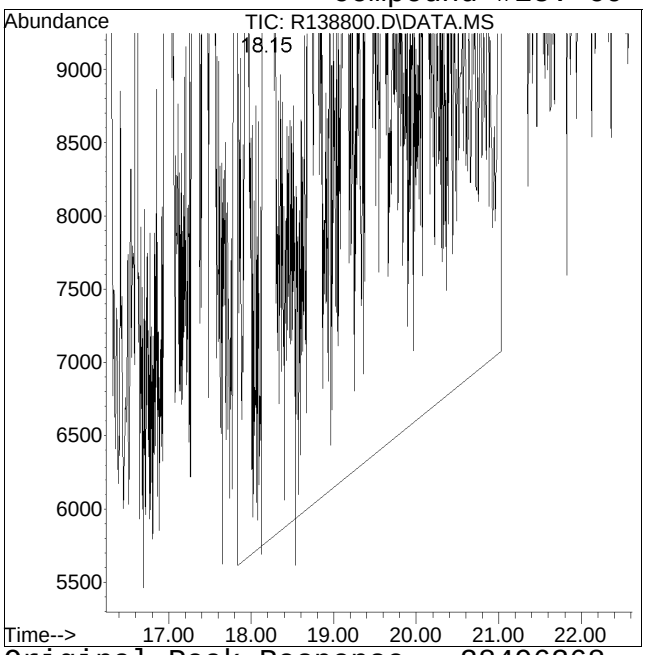



Manual Peak Response = 30151693 m

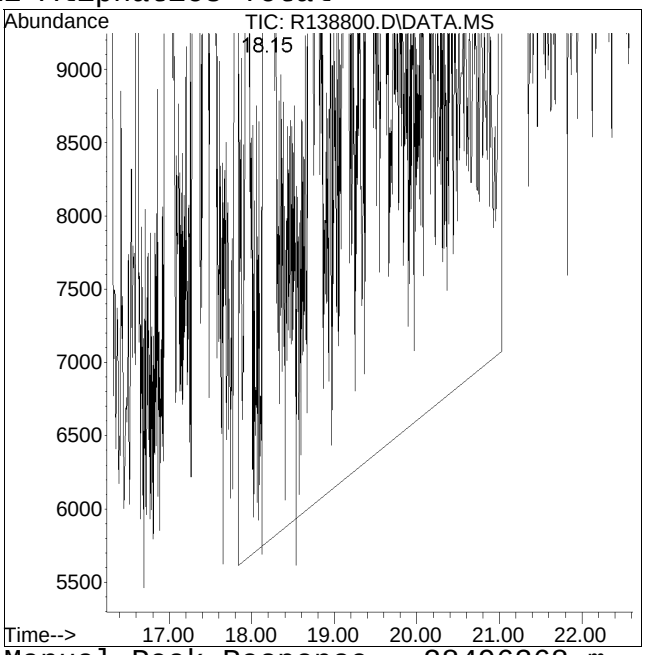
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138800.D
Date Inj'd : 1/1/2015 9:48 pm
Sample : IAPH-10STD2.0
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 28496368

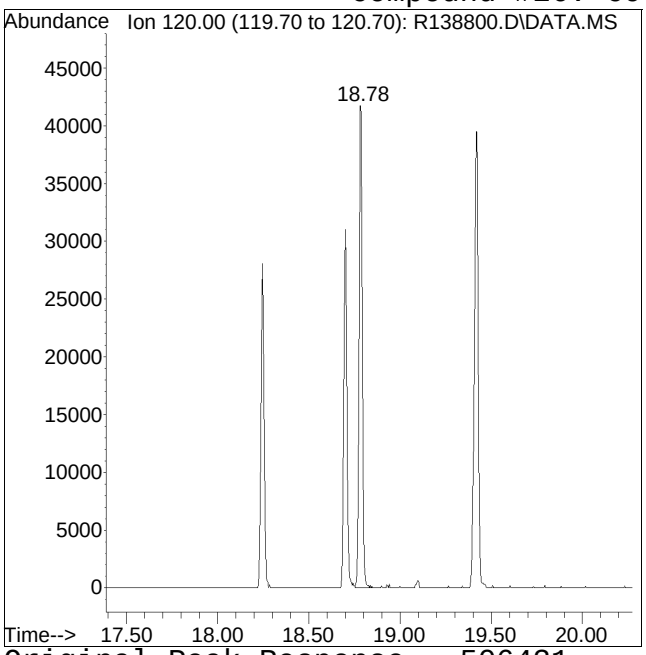


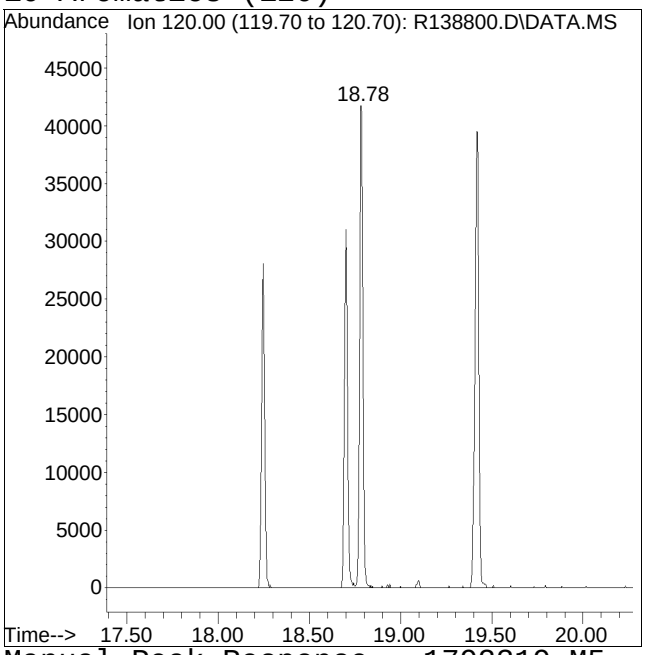

Manual Peak Response = 28496368 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138800.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 9:48 pm Instrument : Air Piano 1
Sample : IAPH-10STD2.0 Quant Date : 1/2/2015 7:46 am

Compound #26: C9-C10 Aromatics (120)




Original Peak Response = 506431 Manual Peak Response = 1792319 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138801.D
Acq On : 1 Jan 2015 10:19 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD10.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 07:45:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Tue Dec 09 05:21:04 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 693110 | 10.000 | ug/m3 | -0.04 |
| Standard Area = 693110 | | | Recovery | = | 100.00% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2890818 | 10.000 | ug/m3 | 0.03 |
| Standard Area = 2890818 | | | Recovery | = | 100.00% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 680034 | 10.000 | ug/m3 | 0.07 |
| Standard Area = 680034 | | | Recovery | = | 100.00% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 4840200 | 9.400 | ug/m3 | -0.04 |
| Spiked Amount 10.000 | | | Recovery | = | 94.00% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 6664354 | 8.532 | ug/m3 | 0.03 |
| Spiked Amount 10.000 | | | Recovery | = | 85.32% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8829154 | 8.969 | ug/m3 | 0.07 |
| Spiked Amount 10.000 | | | Recovery | = | 89.69% | |
| 31) 1,2-dichloroethane-D4 ... | 11.13 | TIC | 2339010 | 9.048 | ug/m3 | -0.01 |
| Spiked Amount 10.000 | | | Recovery | = | 90.48% | |
| 32) toluene-D8 (TIC) | 15.27 | TIC | 15170513 | 17.182 | ug/m3 | 0.07 |
| Spiked Amount 10.000 | | | Recovery | = | 171.82% | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 8632347 | 9.037 | ug/m3 | 0.07 |
| Spiked Amount 10.000 | | | Recovery | = | 90.37% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 602074M2 | 21.629 | ug/m3 | |
| 3) isopentane | 6.21 | TIC | 5073134 | 26.228 | ug/m3 | 99 |
| 4) methyl tert butyl ether | 9.07 | 73 | 2223158 | 29.202 | ug/m3# | 89 |
| 5) hexane | 10.28 | TIC | 7049917M4 | 31.630 | ug/m3 | |
| 6) cyclohexane | 12.41 | TIC | 6282522M4 | 33.616 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.69 | TIC | 7700430M4 | 44.277 | ug/m3 | |
| 9) benzene | 12.09 | 78 | 2363637 | 27.356 | ug/m3# | 90 |
| 10) heptane | 13.66 | TIC | 7438810 | 42.532 | ug/m3 | 98 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 123497704 | 499.036 | ug/m3 | |
| 13) toluene | 15.37 | 91 | 3158582 | 29.516 | ug/m3 | 100 |
| 14) n-octane | 16.28 | TIC | 9434767 | 44.501 | ug/m3 | 98 |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 11592132 | 47.984 | ug/m3 | 97 |
| 16) ethyl benzene | 17.30 | 91 | 4207999 | 34.178 | ug/m3 | 95 |
| 17) m+p-xylene | 17.43 | 91 | 3311078M3 | 34.313 | ug/m3 | |
| 18) n-nonane | 17.94 | TIC | 11298965 | 49.666 | ug/m3 | 96 |
| 19) o-xylene | 17.81 | 91 | 3336424 | 33.492 | ug/m3 | 93 |
| 20) decane | 19.13 | TIC | 13034909 | 54.580 | ug/m3 | 96 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138801.D
Acq On : 1 Jan 2015 10:19 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD10.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 07:45:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Tue Dec 09 05:21:04 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 21) butylcyclohexane | 19.60 | TIC | 14190870 | 51.115 | ug/m3 | 97 |
| 22) n-undecane | 20.10 | TIC | 15331578 | 63.854 | ug/m3 | 96 |
| 23) naphthalene | 21.14 | 128 | 5593118 | 49.604 | ug/m3 | 99 |
| 24) n-dodecane | 21.03 | TIC | 15628674 | 70.917 | ug/m3 | 97 |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 116553237 | 258.790 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.78 | 120 | 7521232M5 | 189.691 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.41 | 134 | 1443076M5 | 36.395 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 8964308 | 226.086 | ug/m3 | |

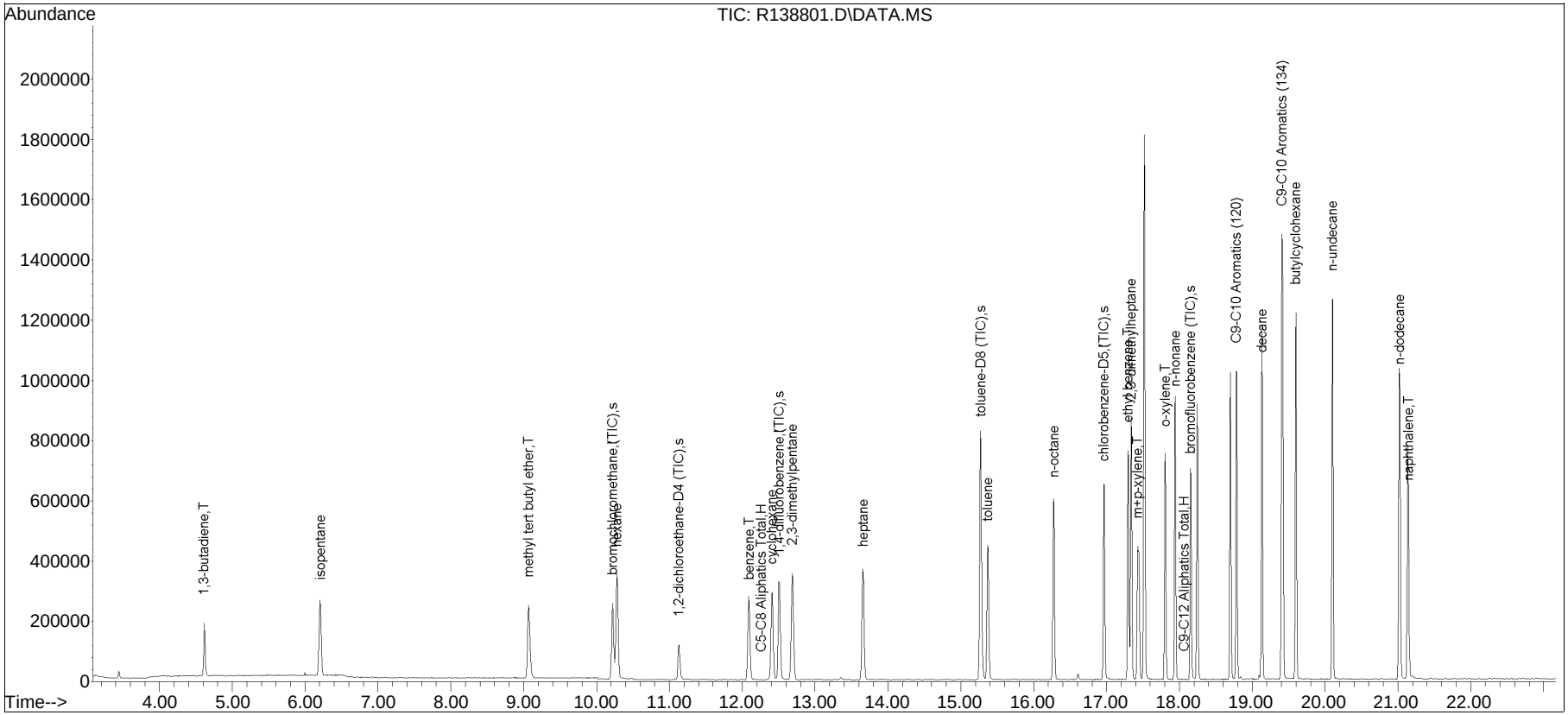
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138801.D
Acq On : 1 Jan 2015 10:19 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD10.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 07:45:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Tue Dec 09 05:21:04 2014
Response via : Initial Calibration

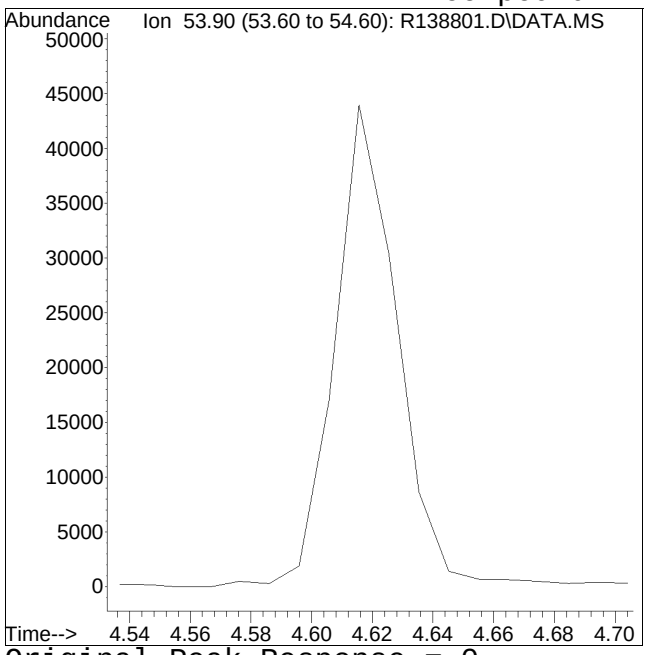
Sub List : Default - All compounds listed0101A_ICAL\R138801.D



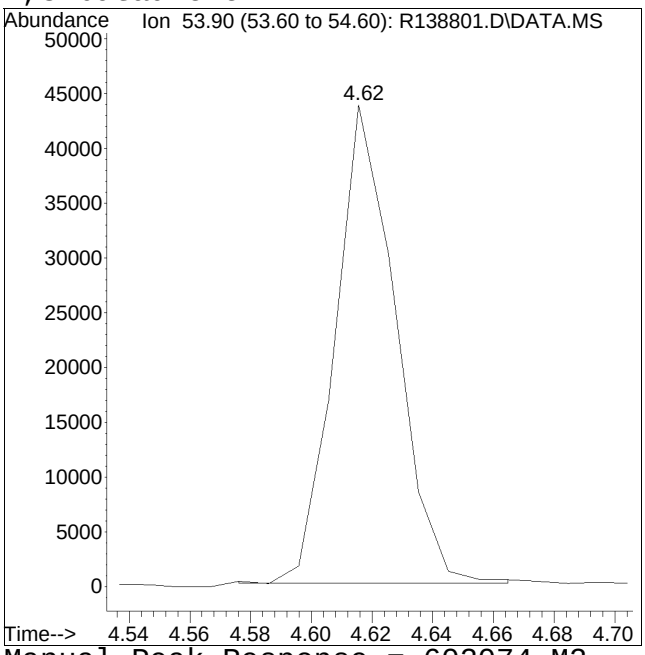
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138801.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 10:19 pm Instrument : Air Piano 1
Sample : IAPH-10STD10.0 Quant Date : 1/2/2015 7:44 am

Compound #2: 1,3-butadiene




Original Peak Response = 0



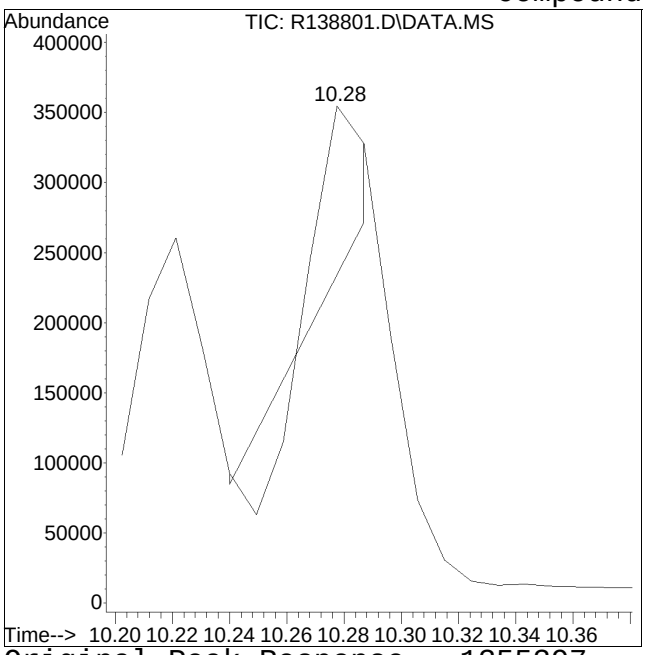

Manual Peak Response = 602074 M2

M2 = Peak not found by automatic integration algorithm.

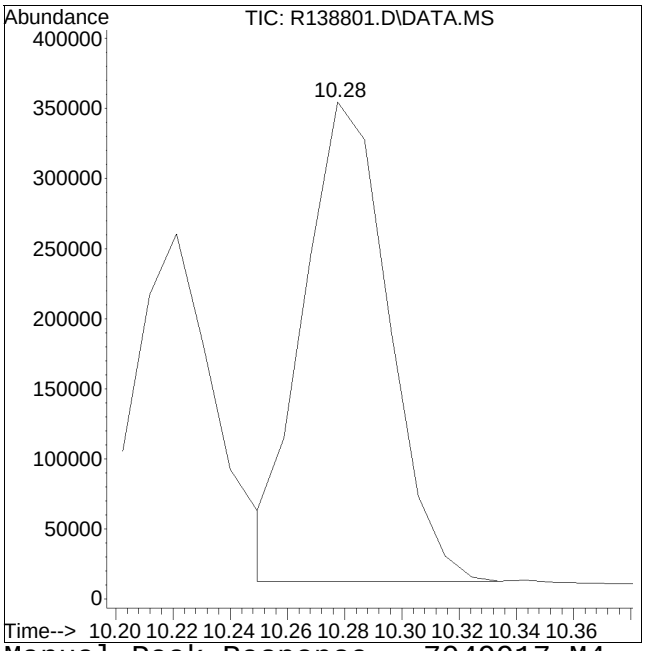
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138801.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 10:19 pm Instrument : Air Piano 1
Sample : IAPH-10STD10.0 Quant Date : 1/2/2015 7:44 am

Compound #5: hexane




Original Peak Response = 1355397



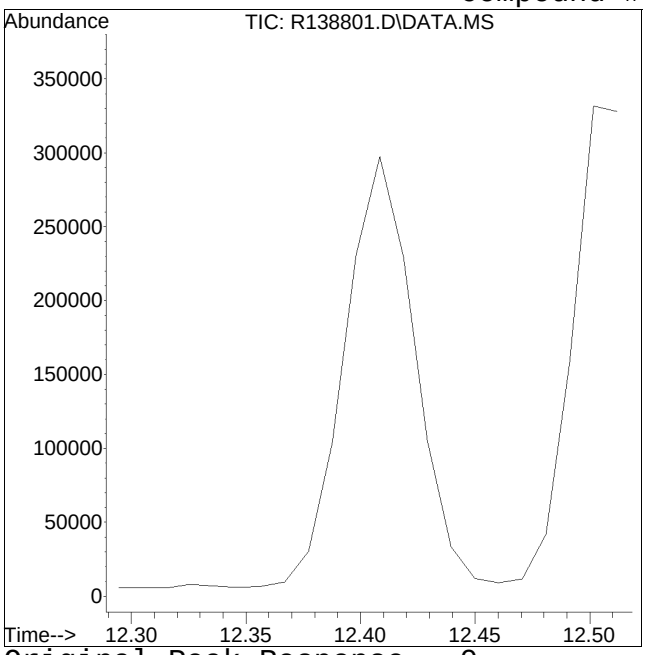

Manual Peak Response = 7049917 M4

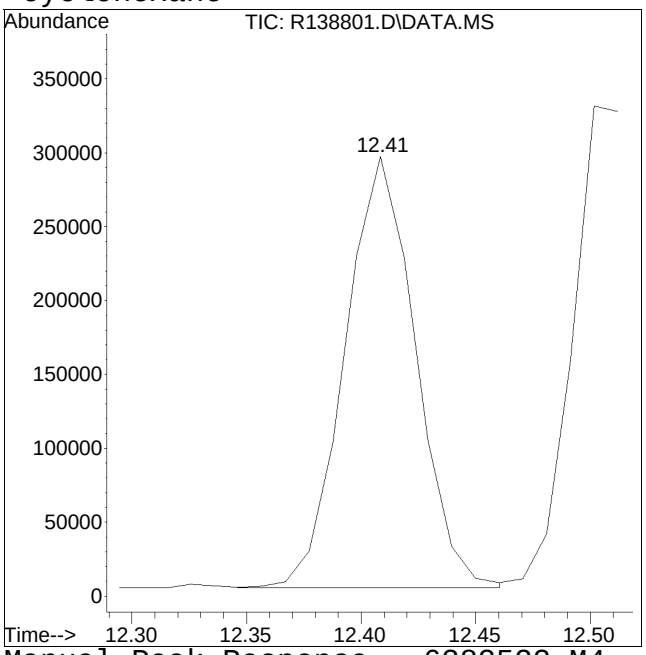
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138801.D
Date Inj'd : 1/1/2015 10:19 pm
Sample : IAPH-10STD10.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:44 am

Compound #6: cyclohexane



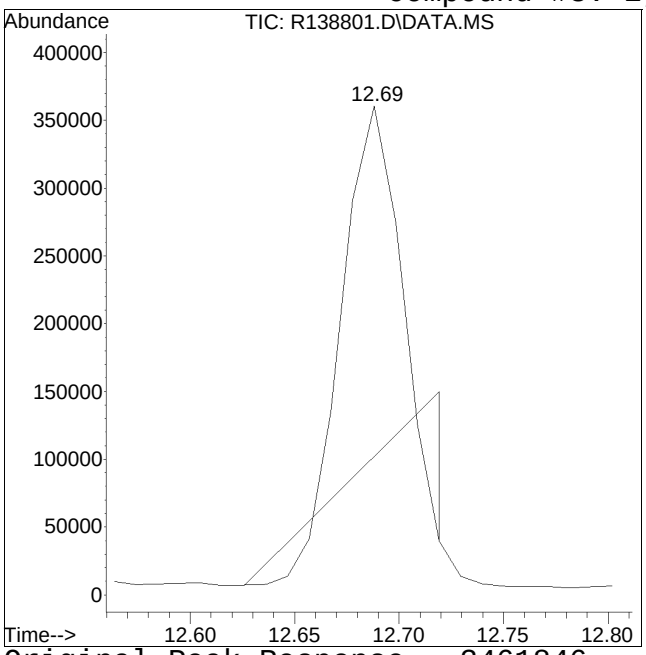



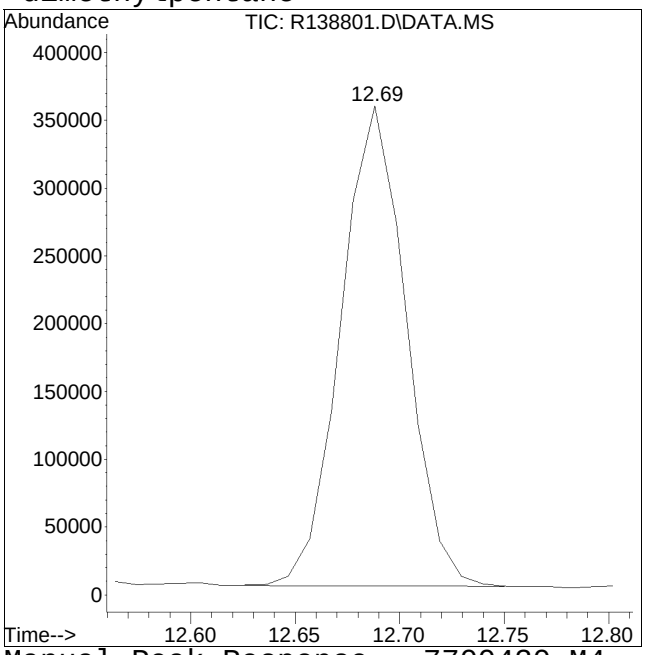

Original Peak Response = 0 Manual Peak Response = 6282522 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138801.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 10:19 pm Instrument : Air Piano 1
Sample : IAPH-10STD10.0 Quant Date : 1/2/2015 7:44 am

Compound #8: 2,3-dimethylpentane



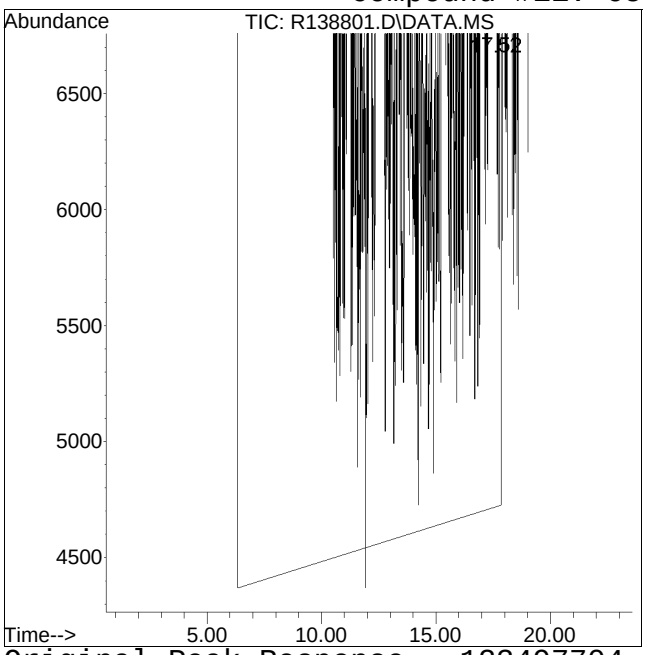

Original Peak Response = 3461846 Manual Peak Response = 7700430 M4
M4 = Poor automated baseline construction.

# Manual Integration/Negative Proof Report

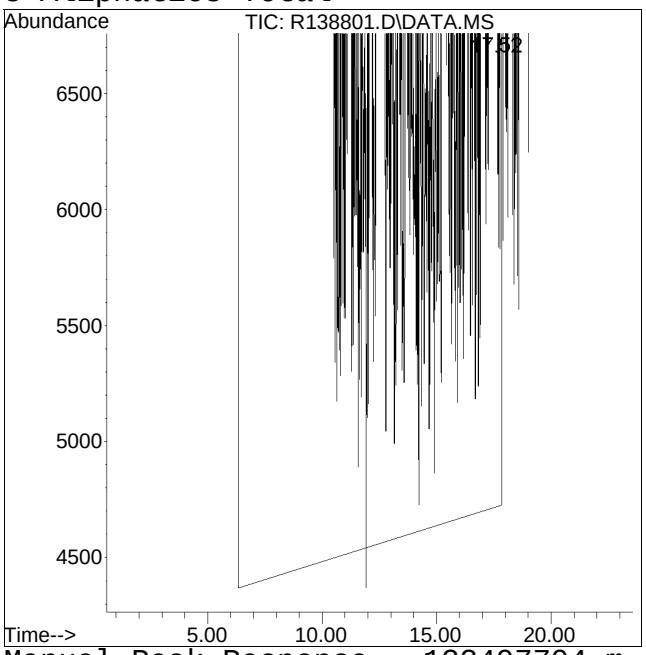
Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138801.D
Date Inj'd : 1/1/2015 10:19 pm
Sample : IAPH-10STD10.0

Method : 150101A_ICAL
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:44 am

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 123497704

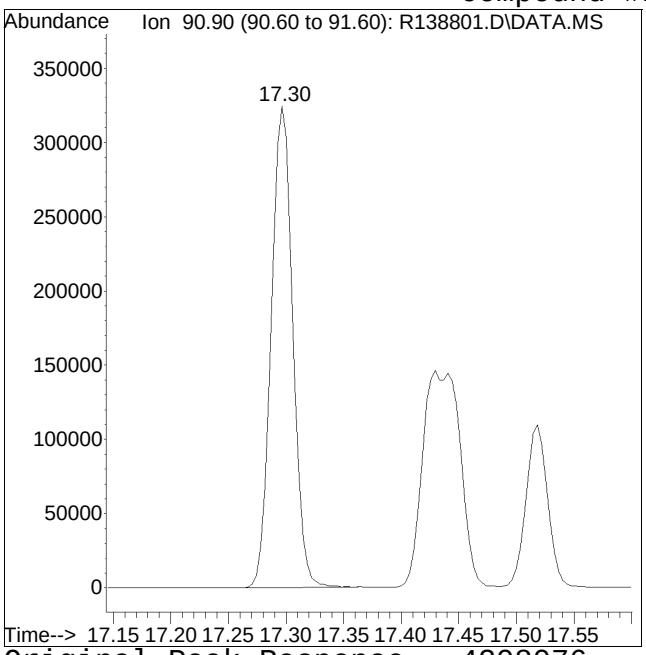


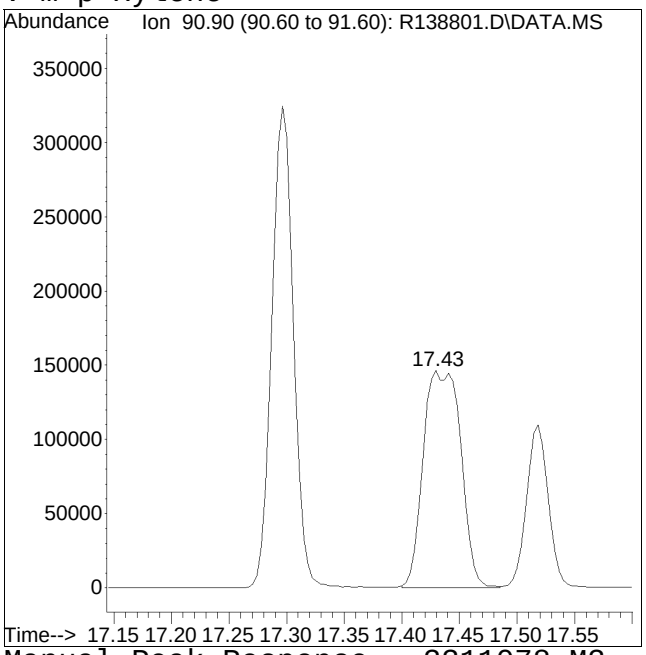

Manual Peak Response = 123497704 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138801.D
Date Inj'd : 1/1/2015 10:19 pm
Sample : IAPH-10STD10.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:44 am

Compound #17: m+p-xylene



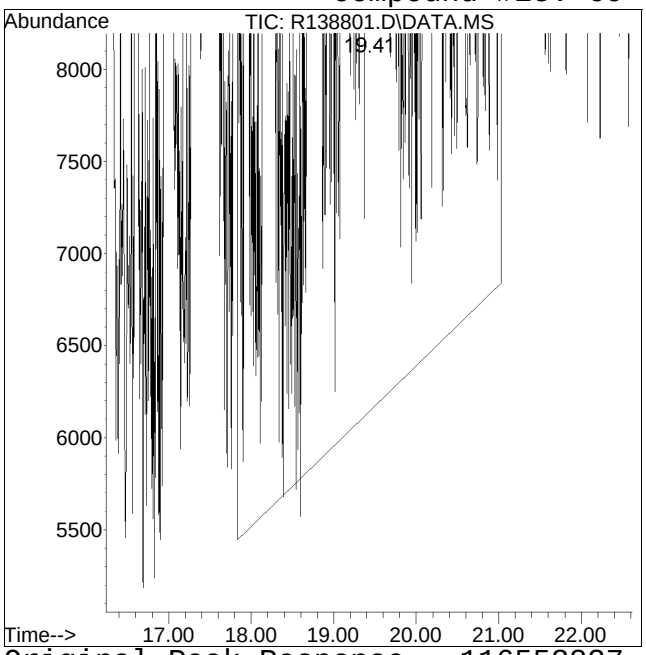

Original Peak Response = 4208076 Manual Peak Response = 3311078 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration/Negative Proof Report

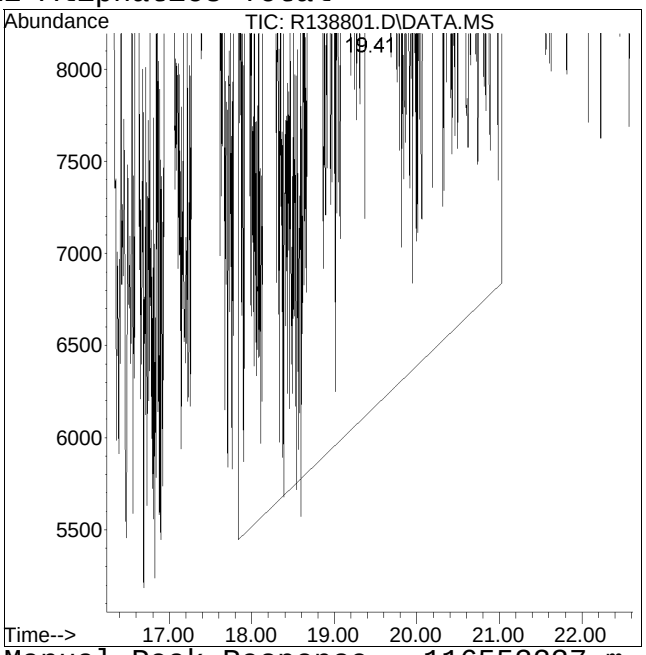
Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138801.D
Date Inj'd : 1/1/2015 10:19 pm
Sample : IAPH-10STD10.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:44 am

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 116553237

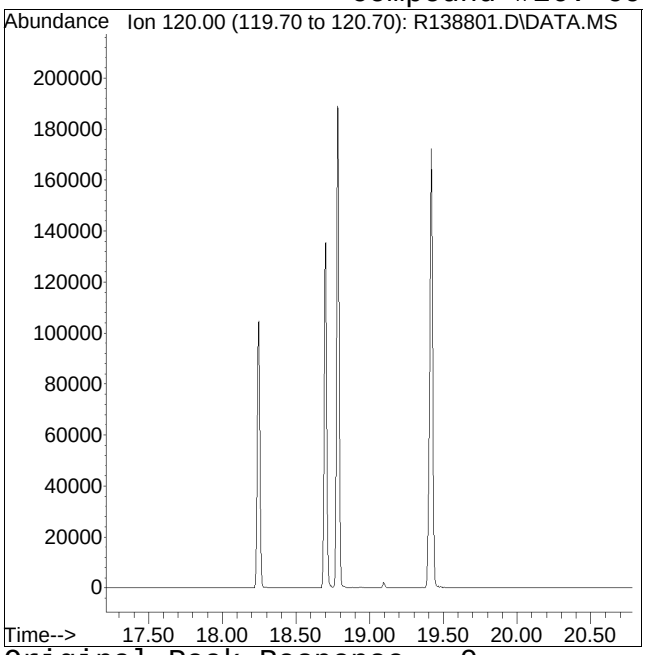


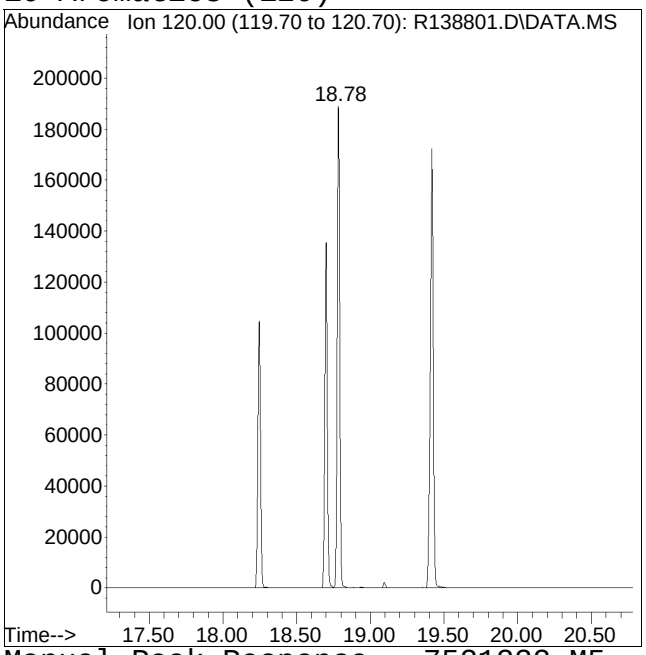

Manual Peak Response = 116553237 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138801.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 10:19 pm Instrument : Air Piano 1
Sample : IAPH-10STD10.0 Quant Date : 1/2/2015 7:44 am

Compound #26: C9-C10 Aromatics (120)



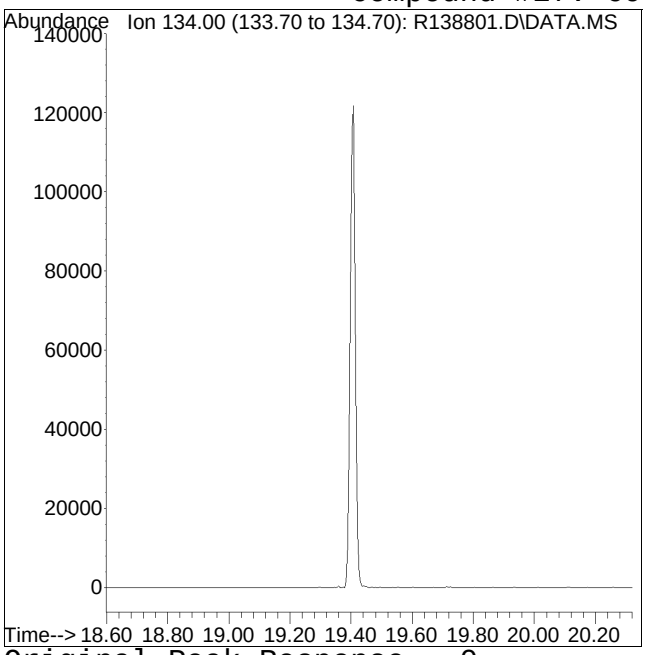



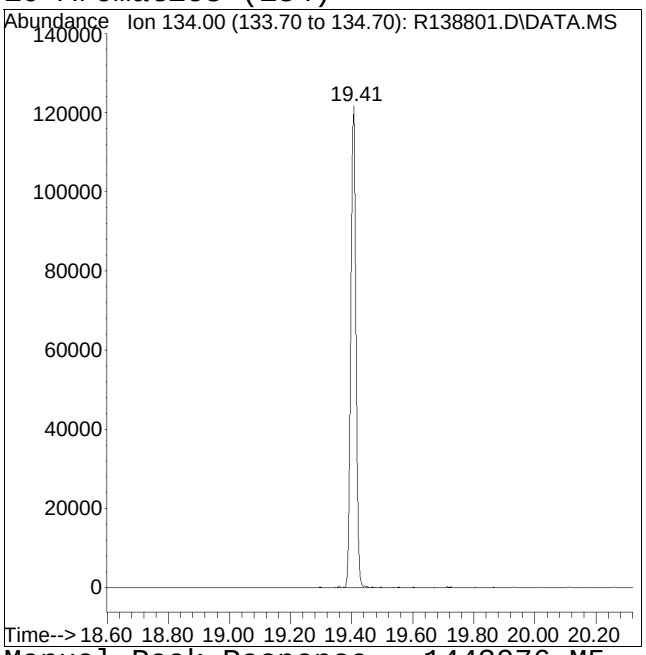

Original Peak Response = 0 Manual Peak Response = 7521232 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138801.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 10:19 pm Instrument : Air Piano 1
Sample : IAPH-10STD10.0 Quant Date : 1/2/2015 7:44 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 1443076 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138802.D
Acq On : 1 Jan 2015 10:52 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD20.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 08:09:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.23 | 128 | 695180 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 693110 | | | Recovery = 100.30% | | | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2970087 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2890818 | | | Recovery = 102.74% | | | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 662242 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 680034 | | | Recovery = 97.38% | | | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.23 | TIC | 4735959 | 10.048 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 100.48% | | | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 6800306 | 10.478 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 104.78% | | | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8768572 | 10.198 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.98% | | | |
| 31) 1,2-dichloroethane-D4 ... | 11.14 | TIC | 2391901 | 10.501 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 105.01% | | | |
| 32) toluene-D8 (TIC) | 15.27 | TIC | 22506837 | 30.469 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 304.69% | | | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 8550085 | 10.171 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 101.71% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 1199745 | 43.907 | ug/m3# | 100 |
| 3) isopentane | 6.21 | TIC | 10174106 | 58.986 | ug/m3 | 99 |
| 4) methyl tert butyl ether | 9.07 | 73 | 4237498 | 68.414 | ug/m3 | 99 |
| 5) hexane | 10.28 | TIC | 13809588M4 | 68.745 | ug/m3 | |
| 6) cyclohexane | 12.41 | TIC | 11796462M4 | 64.399 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.69 | TIC | 14179895 | 73.484 | ug/m3# | 78 |
| 9) benzene | 12.10 | 78 | 4688749 | 61.591 | ug/m3 | 99 |
| 10) heptane | 13.66 | TIC | 14290819 | 76.664 | ug/m3 | 100 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 236953872 | -33.519 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 5941033 | 72.816 | ug/m3 | 97 |
| 14) n-octane | 16.28 | TIC | 17928618 | 91.127 | ug/m3 | 100 |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 22596086 | 104.885 | ug/m3 | 99 |
| 16) ethyl benzene | 17.30 | 91 | 8127484 | 86.076 | ug/m3 | 100 |
| 17) m+p-xylene | 17.43 | 91 | 6189815 | 83.313 | ug/m3# | 85 |
| 18) n-nonane | 17.94 | TIC | 21745168 | 103.555 | ug/m3 | 100 |
| 19) o-xylene | 17.81 | 91 | 6492363 | 86.721 | ug/m3 | 100 |
| 20) decane | 19.13 | TIC | 25929662 | 118.885 | ug/m3 | 100 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138802.D
Acq On : 1 Jan 2015 10:52 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD20.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 08:09:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 21) butylcyclohexane | 19.60 | TIC | 27630267 | 114.563 | ug/m3 | 100 |
| 22) n-undecane | 20.10 | TIC | 29899540 | 127.965 | ug/m3 | 100 |
| 23) naphthalene | 21.14 | 128 | 11435256 | 110.053 | ug/m3 | 99 |
| 24) n-dodecane | 21.03 | TIC | 32131943 | 146.939 | ug/m3 | 100 |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 227219037 | -266.769 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.79 | 120 | 14533952M5 | 496.077 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.41 | 134 | 2692323 | 478.952 | ug/m3 | 100 |
| 27) C9-C10 Aromatics Total | 0.00 | | 17226275 | 3064.475 | ug/m3 | |

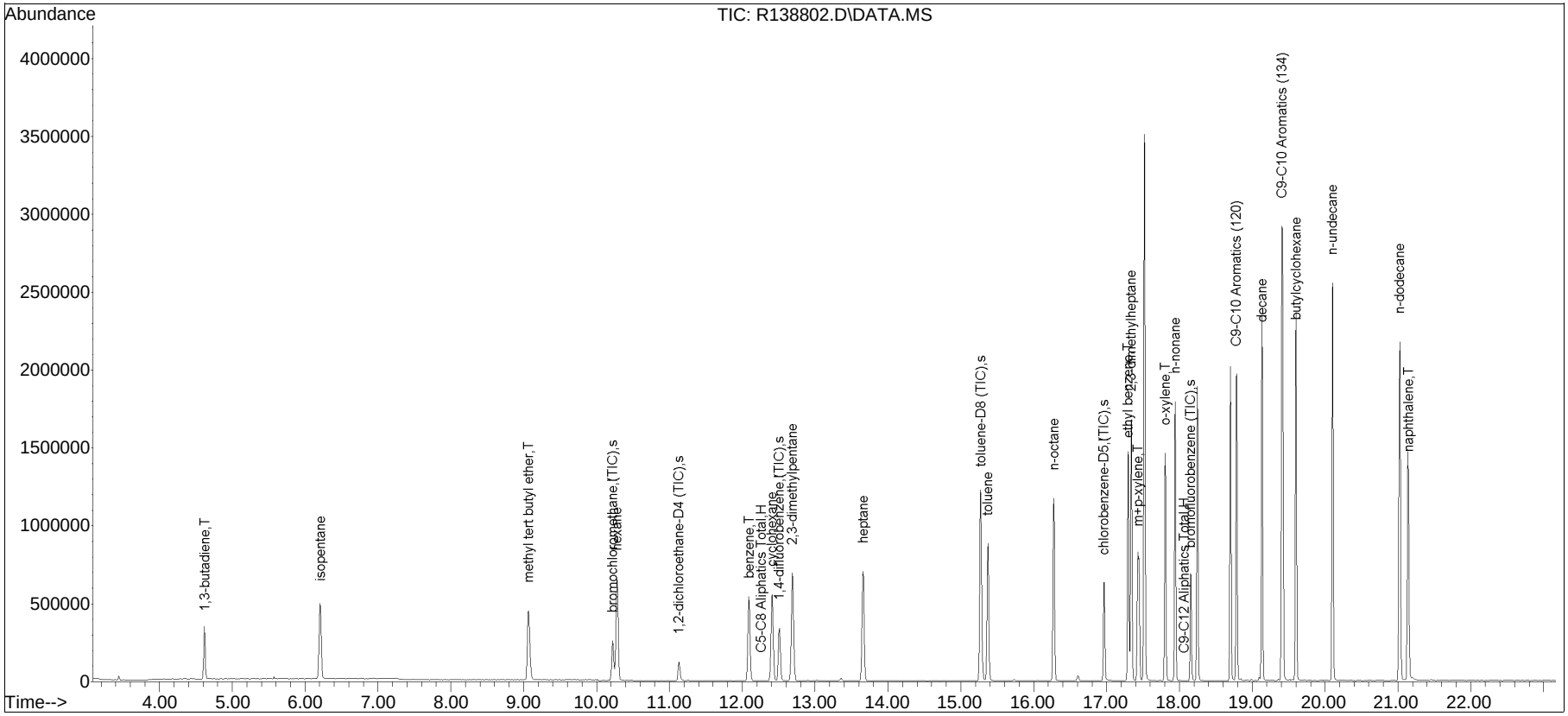
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138802.D
Acq On : 1 Jan 2015 10:52 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD20.0
Misc : WG753082
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 02 08:09:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

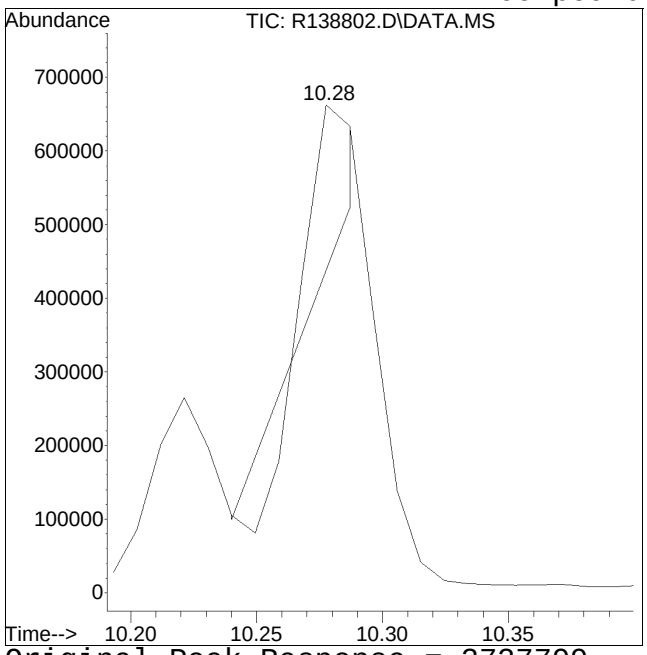
Sub List : Default - All compounds listed0101A_ICAL\R138801.D

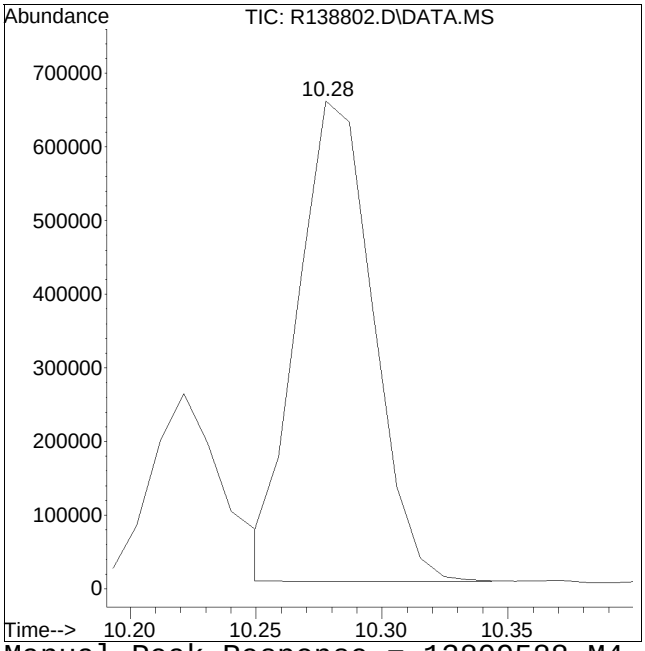


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138802.D
Date Inj'd : 1/1/2015 10:52 pm
Sample : IAPH-10STD20.0
Method : QM50101
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #5: hexane



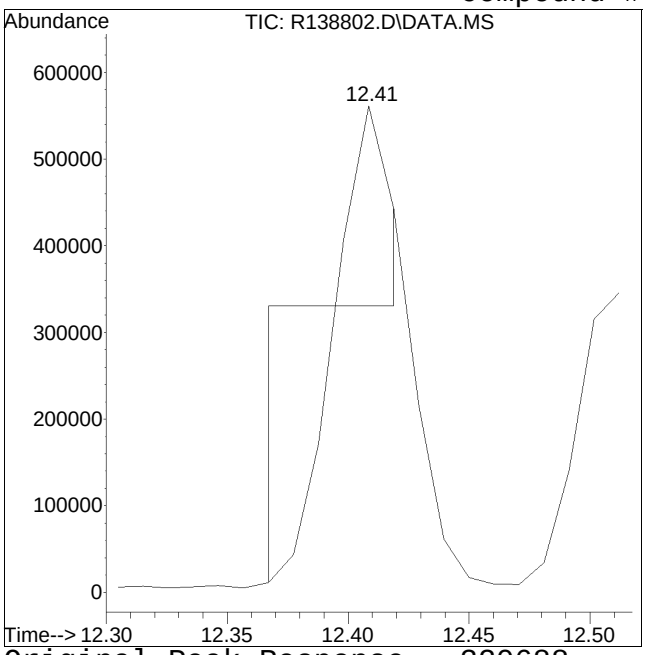



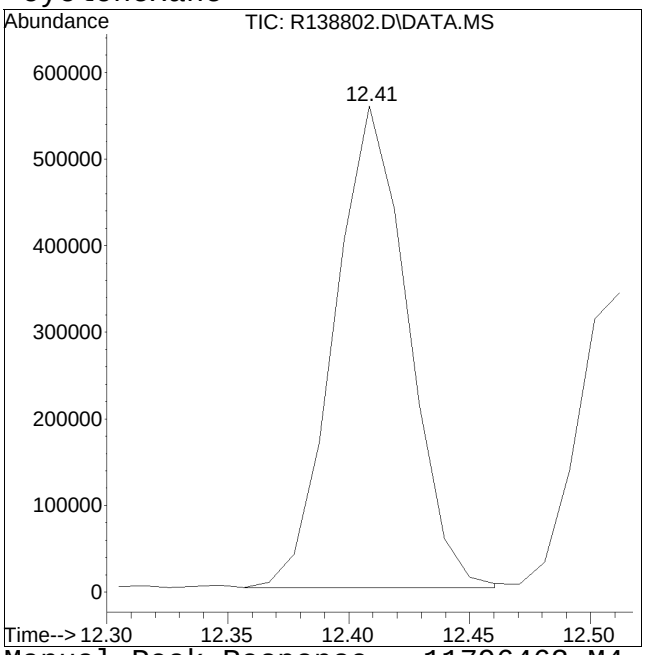

Original Peak Response = 2727799 Manual Peak Response = 13809588 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138802.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 10:52 pm Instrument : Air Piano 1
Sample : IAPH-10STD20.0 Quant Date : 1/2/2015 7:46 am

Compound #6: cyclohexane



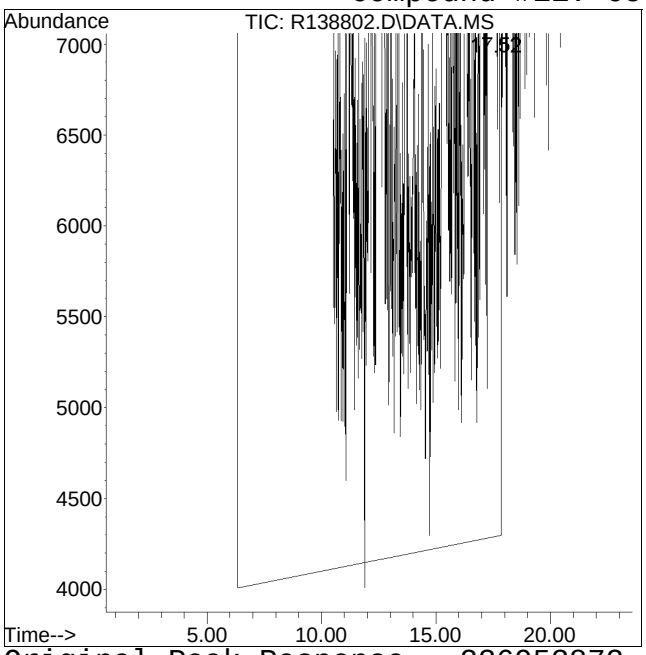

Original Peak Response = 320688 Manual Peak Response = 11796462 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

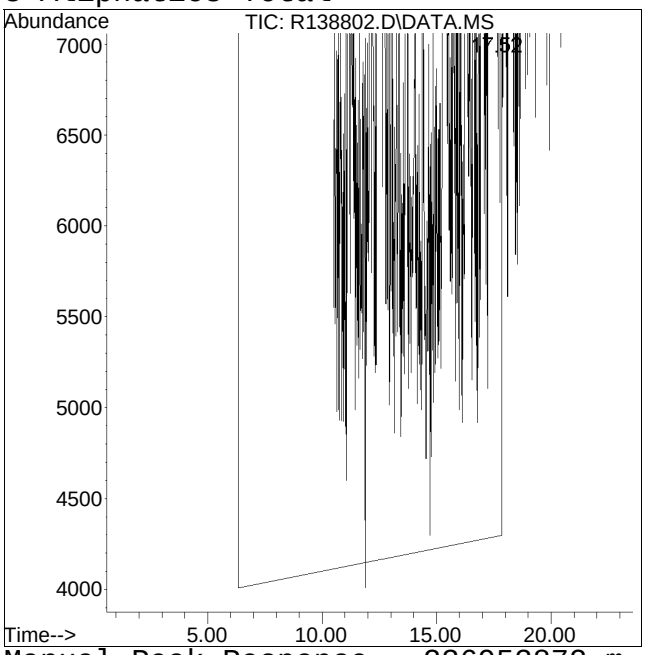
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138802.D
Date Inj'd : 1/1/2015 10:52 pm
Sample : IAPH-10STD20.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 236953872

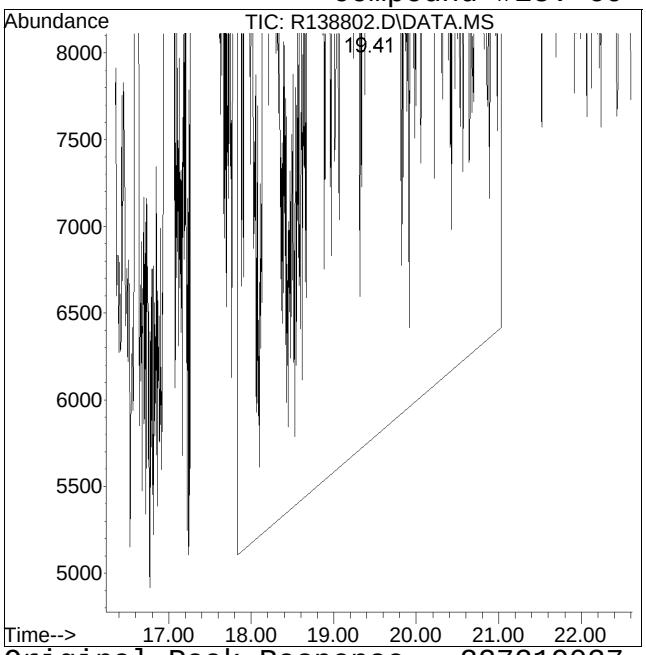



Manual Peak Response = 236953872 m

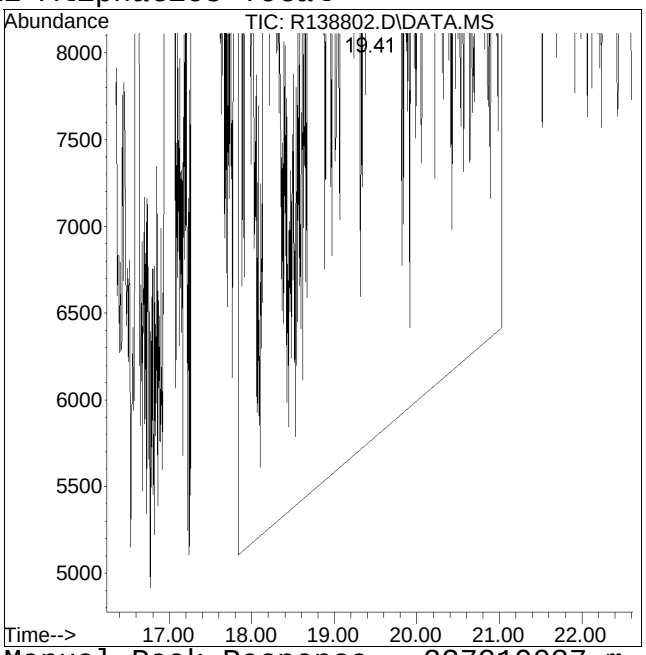
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101\ Method : O:\METHODS\AIR1\APH150101.M
Data File : R138802.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 10:52 pm Instrument : Air Piano 1
Sample : IAPH-10STD20.0 Quant Date : 1/2/2015 7:46 am

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 227219037

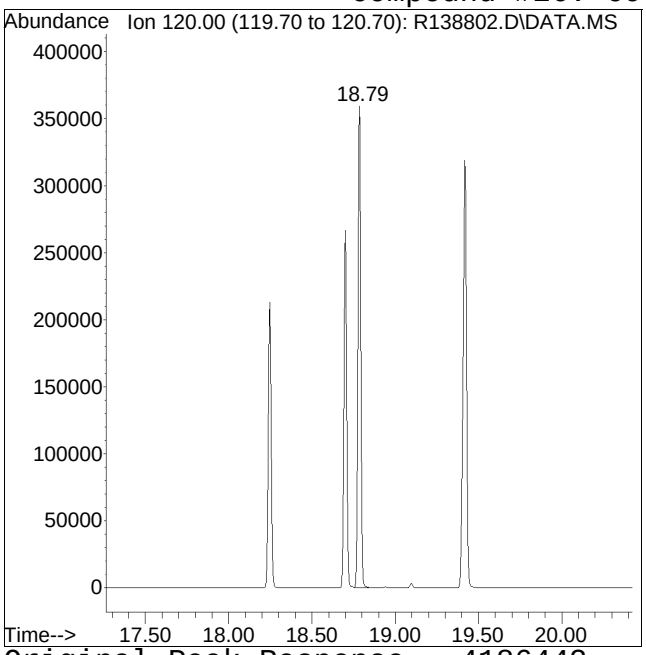


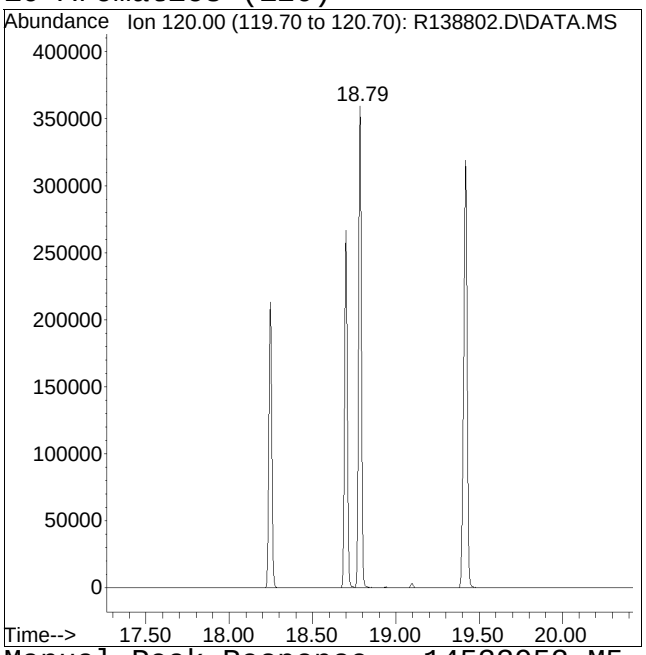

Manual Peak Response = 227219037 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138802.D
Date Inj'd : 1/1/2015 10:52 pm
Sample : IAPH-10STD20.0
Method : 150101A_ICAL
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #26: C9-C10 Aromatics (120)




Original Peak Response = 4186442 Manual Peak Response = 14533952 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138803.D
Acq On : 1 Jan 2015 11:24 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD50.0
Misc : WG753082
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 02 08:10:18 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 676728 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 693110 | | | Recovery | = | 97.64% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2882137 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2890818 | | | Recovery | = | 99.70% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 648253 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 680034 | | | Recovery | = | 95.33% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 4464483 | 9.676 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 96.76% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 6564697 | 10.333 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 103.33% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8590373 | 10.207 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 102.07% | |
| 31) 1,2-dichloroethane-D4 ... | 11.13 | TIC | 2361074 | 10.589 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 105.89% | |
| 32) toluene-D8 (TIC) | 15.27 | TIC | 48121032 | 66.550 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 665.50% | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 8429583 | 10.244 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 102.44% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 3053385 | 114.792 | ug/m3# | 100 |
| 3) isopentane | 6.21 | TIC | 25807624 | 153.703 | ug/m3 | 99 |
| 4) methyl tert butyl ether | 9.06 | 73 | 11058136 | 183.401 | ug/m3 | 99 |
| 5) hexane | 10.28 | TIC | 36799564M4 | 188.187 | ug/m3 | |
| 6) cyclohexane | 12.41 | TIC | 31062663M4 | 174.201 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.69 | TIC | 37332971 | 199.374 | ug/m3# | 78 |
| 9) benzene | 12.09 | 78 | 12294370 | 166.426 | ug/m3 | 98 |
| 10) heptane | 13.66 | TIC | 37135143 | 205.292 | ug/m3 | 100 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 616063302 | -103.238 | ug/m3 | |
| 13) toluene | 15.37 | 91 | 15623574 | 195.621 | ug/m3 | 97 |
| 14) n-octane | 16.28 | TIC | 46647610 | 242.215 | ug/m3 | 100 |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 58363533 | 276.755 | ug/m3 | 99 |
| 16) ethyl benzene | 17.30 | 91 | 21493580 | 232.546 | ug/m3 | 99 |
| 17) m+p-xylene | 17.43 | 91 | 16734185M1 | 230.097 | ug/m3 | |
| 18) n-nonane | 17.94 | TIC | 56410581 | 274.435 | ug/m3 | 100 |
| 19) o-xylene | 17.81 | 91 | 17217152 | 234.940 | ug/m3 | 99 |
| 20) decane | 19.14 | TIC | 66875907 | 313.236 | ug/m3 | 100 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138803.D
Acq On : 1 Jan 2015 11:24 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD50.0
Misc : WG753082
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 02 08:10:18 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 21) butylcyclohexane | 19.60 | TIC | 71569664 | 303.153 | ug/m3 | 99 |
| 22) n-undecane | 20.10 | TIC | 75769869 | 331.281 | ug/m3 | 100 |
| 23) naphthalene | 21.14 | 128 | 31755690 | 312.213 | ug/m3 | 98 |
| 24) n-dodecane | 21.03 | TIC | 86222285 | 402.803 | ug/m3 | 100 |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 593838950 | -798.242 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.79 | 120 | 39035522M5 | 1361.124 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.41 | 134 | 7307951 | 1328.107 | ug/m3 | 100 |
| 27) C9-C10 Aromatics Total | 0.00 | | 46343473 | 8422.206 | ug/m3 | |

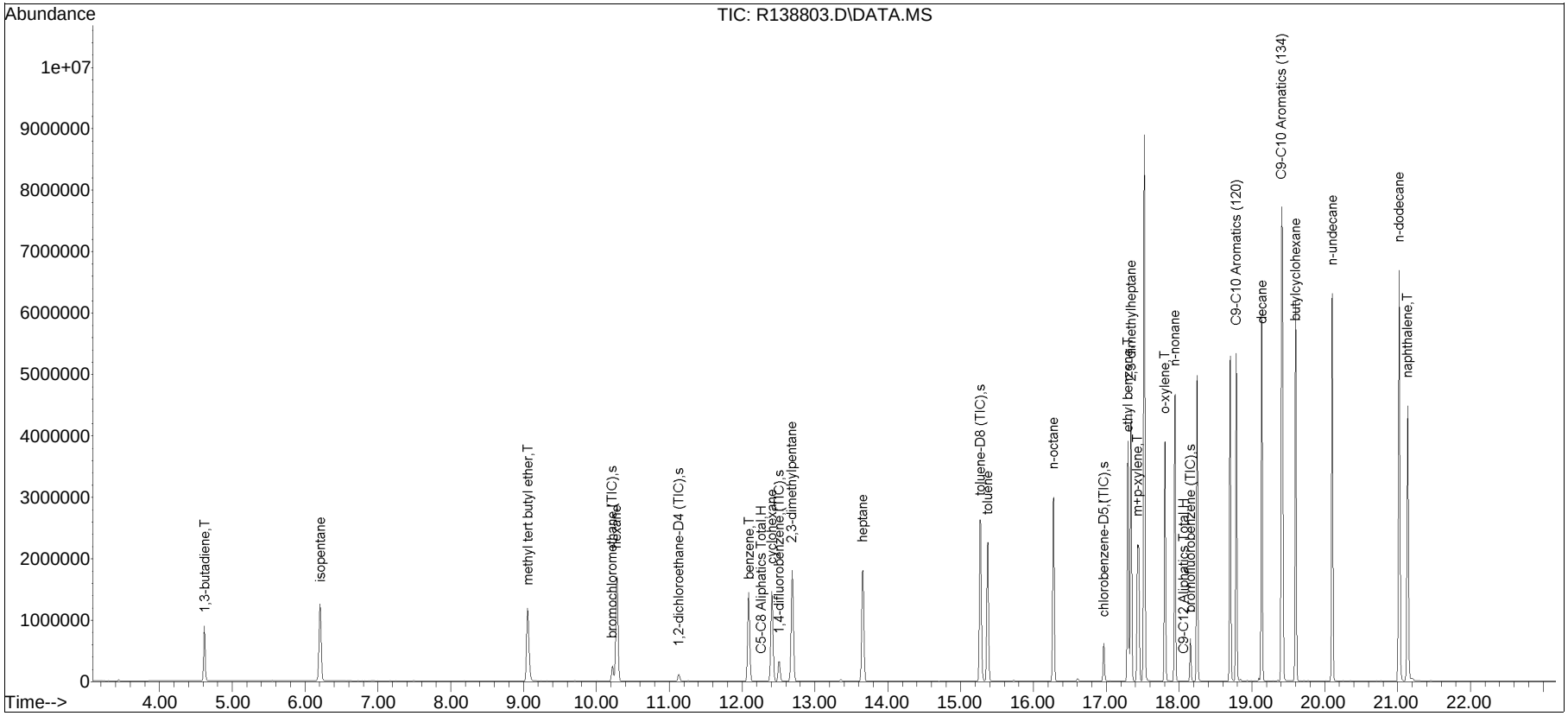
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138803.D
Acq On : 1 Jan 2015 11:24 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD50.0
Misc : WG753082
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 02 08:10:18 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

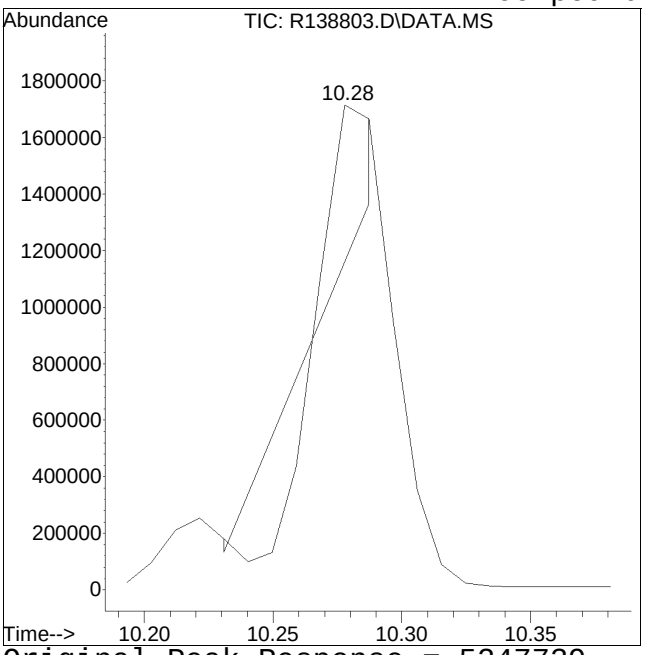
Sub List : Default - All compounds listed0101A_ICAL\R138801.D

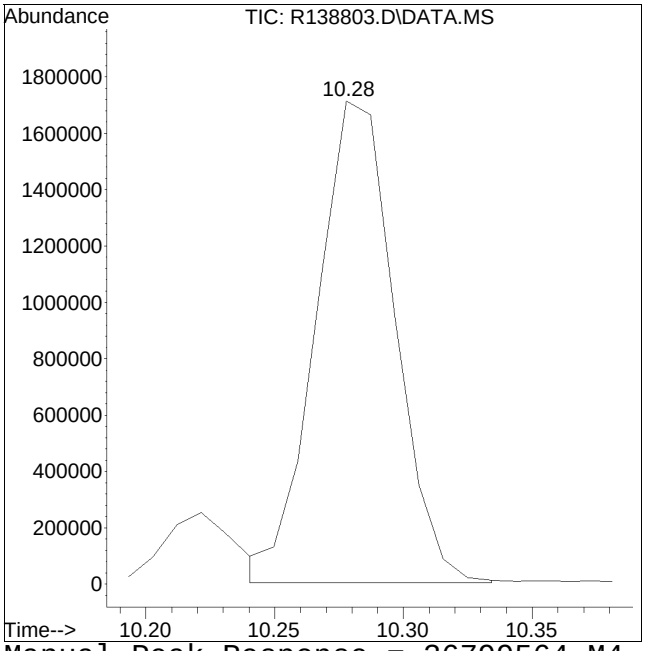


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138803.D
Date Inj'd : 1/1/2015 11:24 pm
Sample : IAPH-10STD50.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #5: hexane



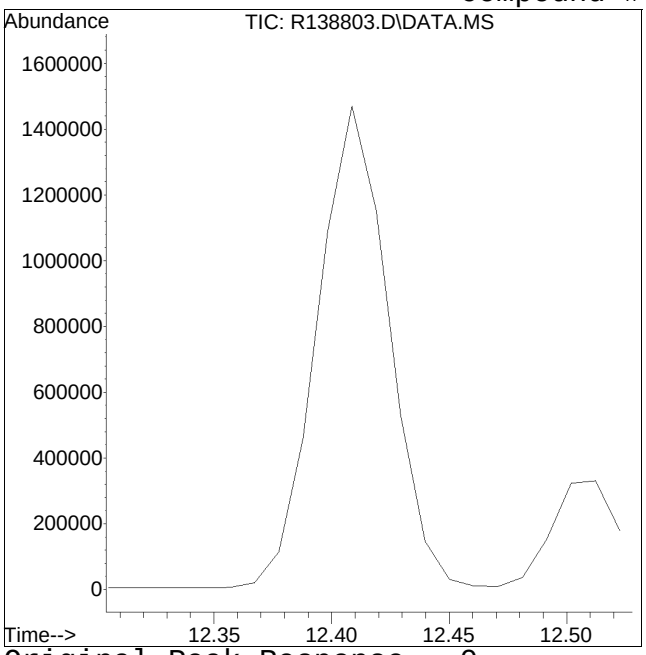

Original Peak Response = 5247739 Manual Peak Response = 36799564 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

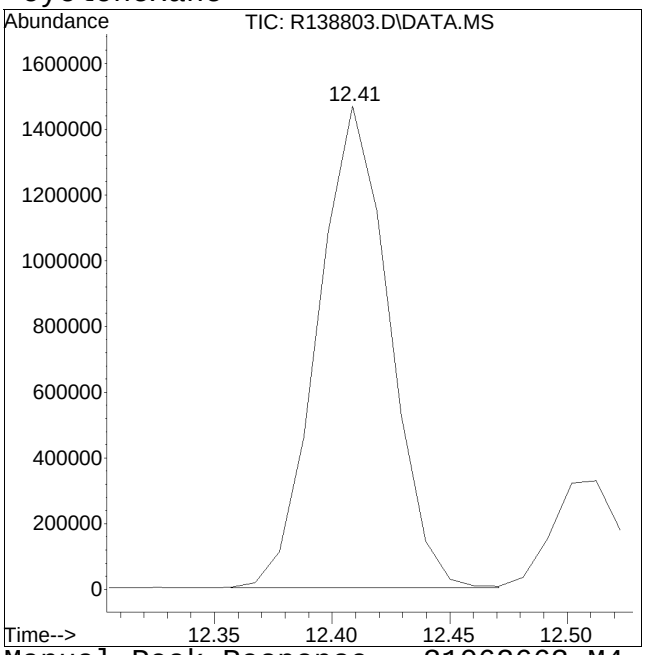
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138803.D
Date Inj'd : 1/1/2015 11:24 pm
Sample : IAPH-10STD50.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #6: cyclohexane




Original Peak Response = 0



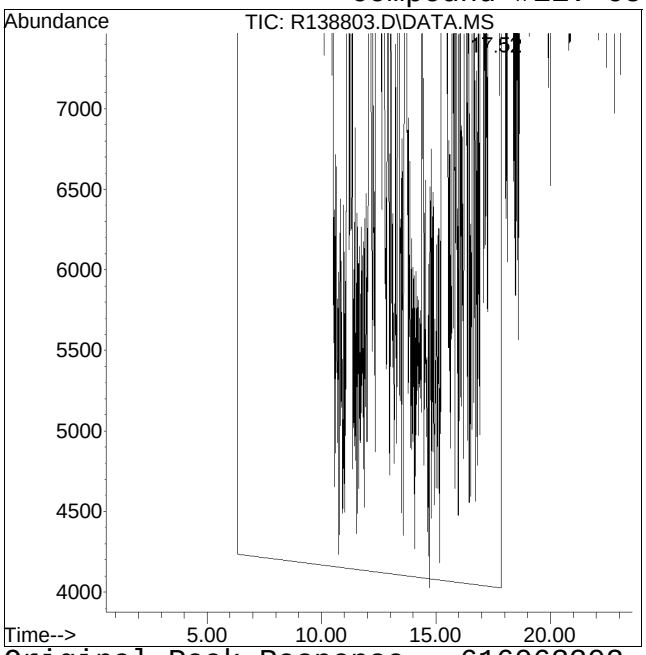

Manual Peak Response = 31062663 M4

M4 = Poor automated baseline construction.

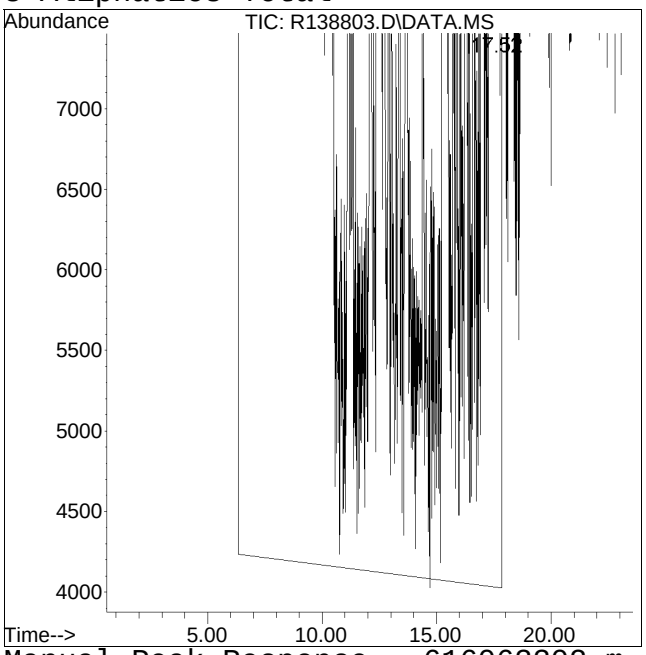
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138803.D
Date Inj'd : 1/1/2015 11:24 pm
Sample : IAPH-10STD50.0
Method :
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 616063302



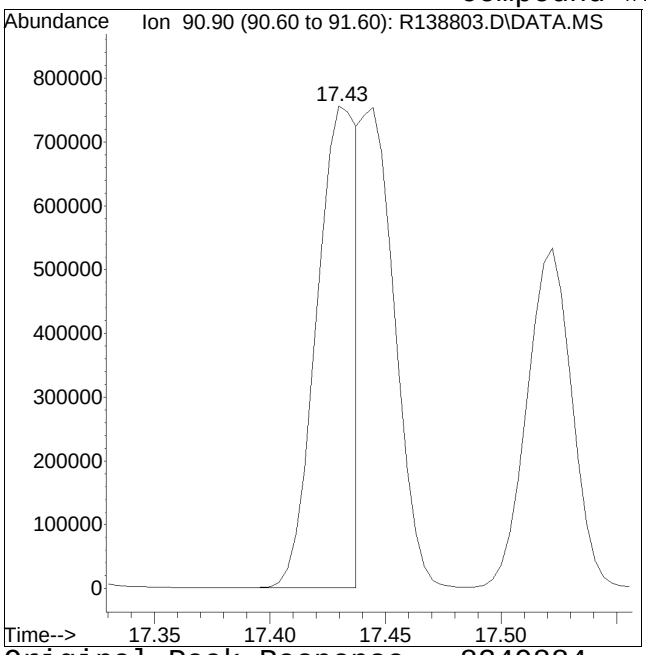

Manual Peak Response = 616063302 m

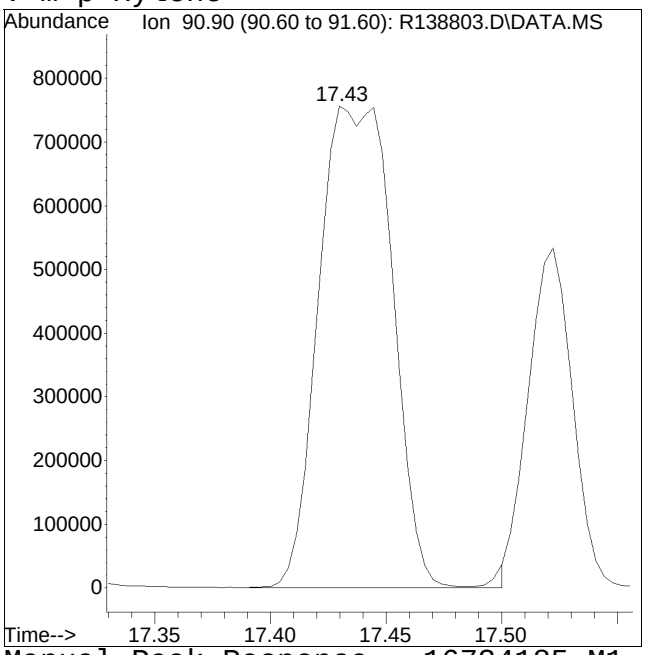
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138803.D
Date Inj'd : 1/1/2015 11:24 pm
Sample : IAPH-10STD50.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #17: m+p-xylene



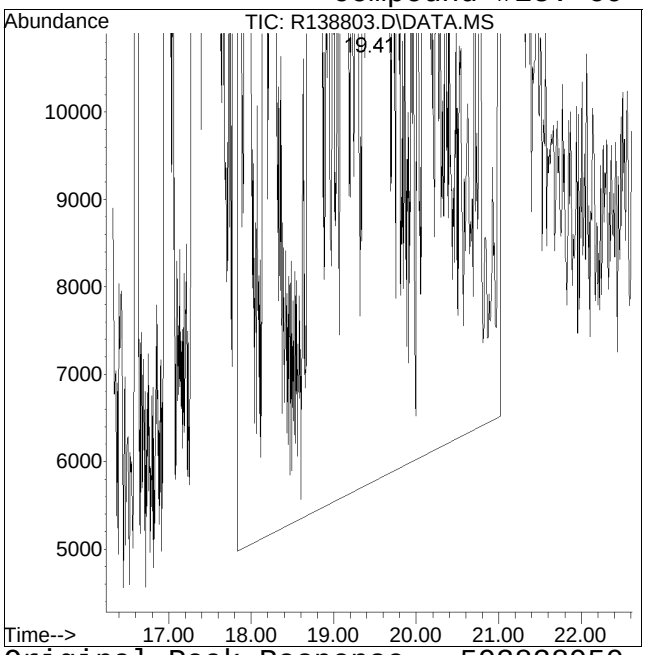

Original Peak Response = 8349884 Manual Peak Response = 16734185 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Manual Integration/Negative Proof Report

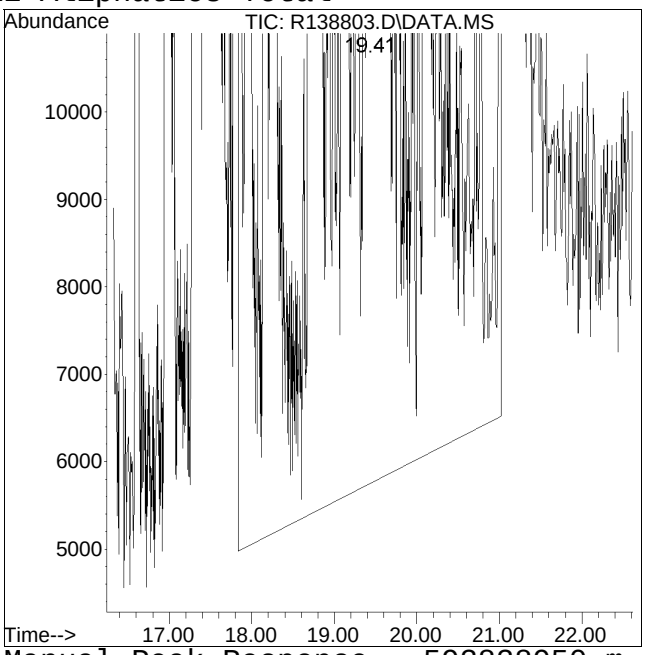
Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138803.D
Date Inj'd : 1/1/2015 11:24 pm
Sample : IAPH-10STD50.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 593838950

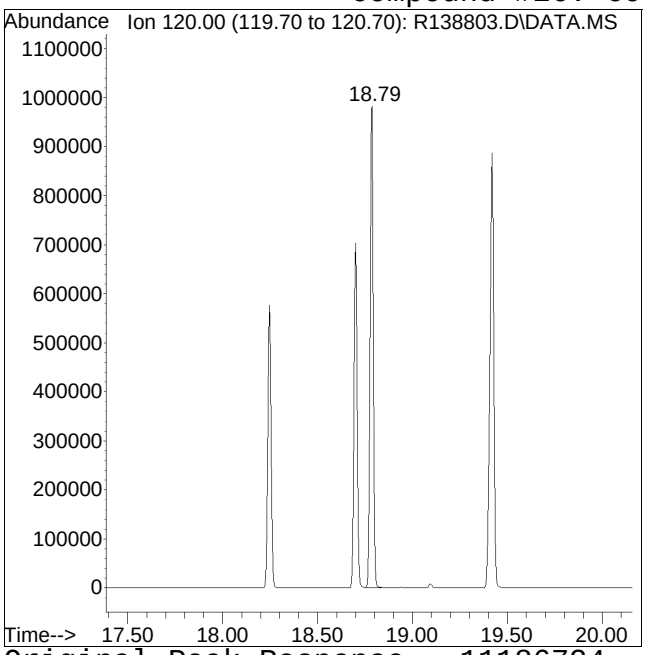


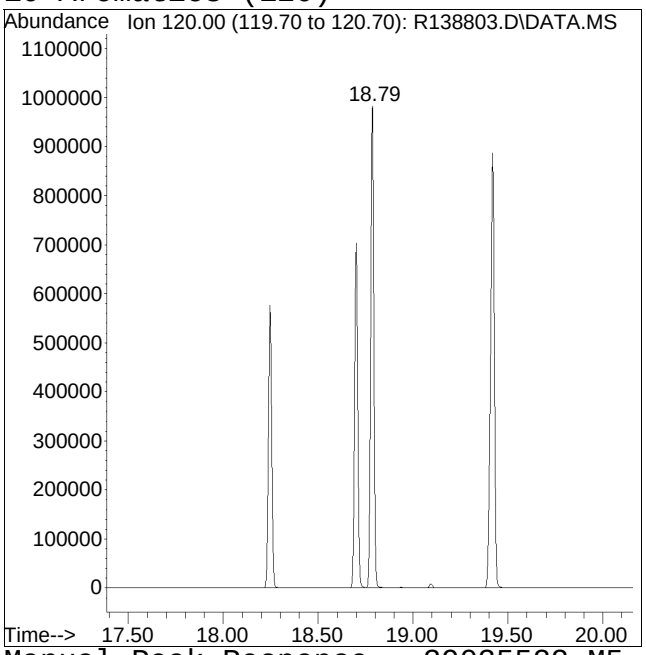

Manual Peak Response = 593838950 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138803.D
Date Inj'd : 1/1/2015 11:24 pm
Sample : IAPH-10STD50.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #26: C9-C10 Aromatics (120)




Original Peak Response = 11186724 Manual Peak Response = 39035522 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138804.D
Acq On : 1 Jan 2015 11:57 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD100.0
Misc : WG753082
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 02 08:11:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.23 | 128 | 671680 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 693110 | | | Recovery | = | 96.91% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2828239 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2890818 | | | Recovery | = | 97.84% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 645863 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 680034 | | | Recovery | = | 94.98% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.23 | TIC | 4357935 | 9.480 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 94.80% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 6448388 | 10.188 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 101.88% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8664006 | 10.332 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 103.32% | |
| 31) 1,2-dichloroethane-D4 ... | 11.14 | TIC | 2392681 | 10.771 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 107.71% | |
| 32) toluene-D8 (TIC) | 15.28 | TIC | 87297564 | 121.178 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 1211.78% | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 8312893 | 10.139 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 101.39% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 5799643 | 219.676 | ug/m3# | 100 |
| 3) isopentane | 6.21 | TIC | 48534219 | 291.228 | ug/m3 | 99 |
| 4) methyl tert butyl ether | 9.06 | 73 | 21078207 | 352.213 | ug/m3 | 98 |
| 5) hexane | 10.29 | TIC | 68693450M4 | 353.927 | ug/m3 | |
| 6) cyclohexane | 12.41 | TIC | 58840526M4 | 332.461 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.69 | TIC | 72718187M4 | 395.746 | ug/m3 | |
| 9) benzene | 12.10 | 78 | 23496006 | 324.122 | ug/m3 | 98 |
| 10) heptane | 13.66 | TIC | 70218340 | 395.581 | ug/m3 | 100 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 1155806195 | -224.480 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 30604016 | 384.608 | ug/m3 | 98 |
| 14) n-octane | 16.28 | TIC | 88443613 | 460.938 | ug/m3 | 99 |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 109291952 | 520.172 | ug/m3 | 99 |
| 16) ethyl benzene | 17.30 | 91 | 41225247 | 447.680 | ug/m3 | 99 |
| 17) m+p-xylene | 17.43 | 91 | 32121457M3 | 443.309 | ug/m3 | |
| 18) n-nonane | 17.95 | TIC | 105779134 | 516.515 | ug/m3 | 100 |
| 19) o-xylene | 17.81 | 91 | 32978958 | 451.685 | ug/m3 | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138804.D
Acq On : 1 Jan 2015 11:57 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD100.0
Misc : WG753082
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 02 08:11:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 20) decane | 19.14 | TIC | 124968119 | 587.496 ug/m3 | 99 |
| 21) butylcyclohexane | 19.60 | TIC | 135142291 | 574.550 ug/m3 | 99 |
| 22) n-undecane | 20.11 | TIC | 143570489 | 630.042 ug/m3 | 99 |
| 23) naphthalene | 21.15 | 128 | 61213994 | 604.066 ug/m3 | 99 |
| 24) n-dodecane | 21.03 | TIC | 160659213 | 753.327 ug/m3 | 99 |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 1124844596 | -1619.169 ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.79 | 120 | 75458248M5 | 2640.878 ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.41 | 134 | 14108224 | 2573.438 ug/m3 | 100 |
| 27) C9-C10 Aromatics Total | 0.00 | | 89566471 | 16337.545 ug/m3 | |

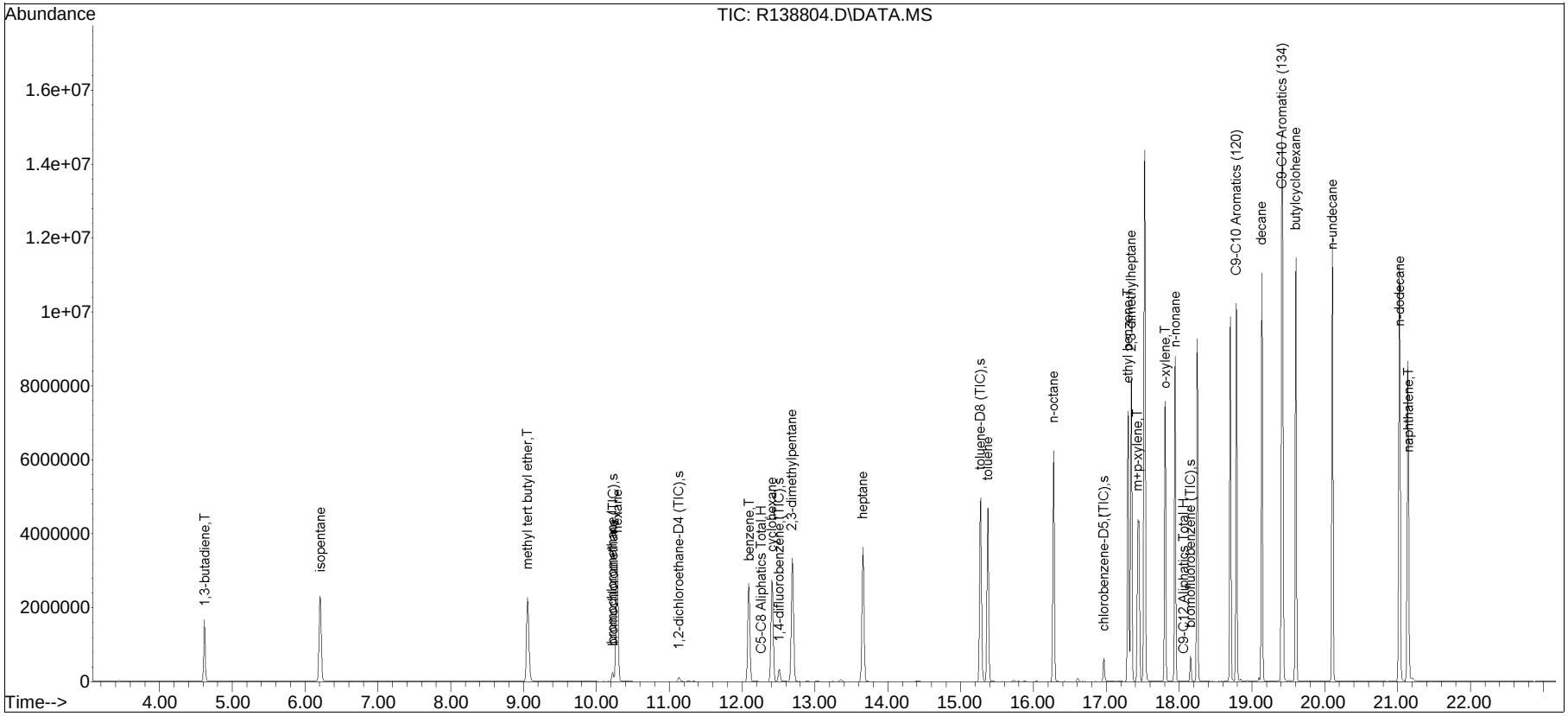
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138804.D
Acq On : 1 Jan 2015 11:57 pm
Operator : AIRPIANO1:AR
Sample : IAPH-10STD100.0
Misc : WG753082
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 02 08:11:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Fri Jan 02 07:46:11 2015
Response via : Initial Calibration

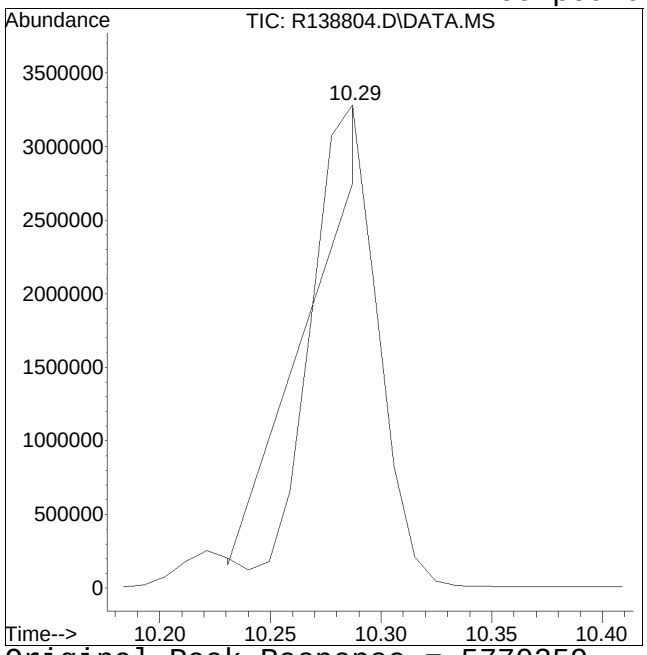
Sub List : Default - All compounds listed0101A_ICAL\R138801.D

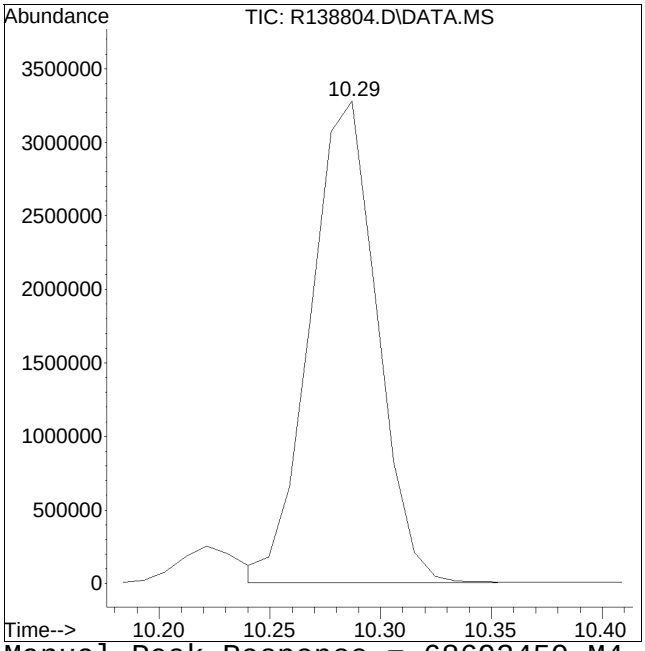


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138804.D
Date Inj'd : 1/1/2015 11:57 pm
Sample : IAPH-10STD100.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #5: hexane



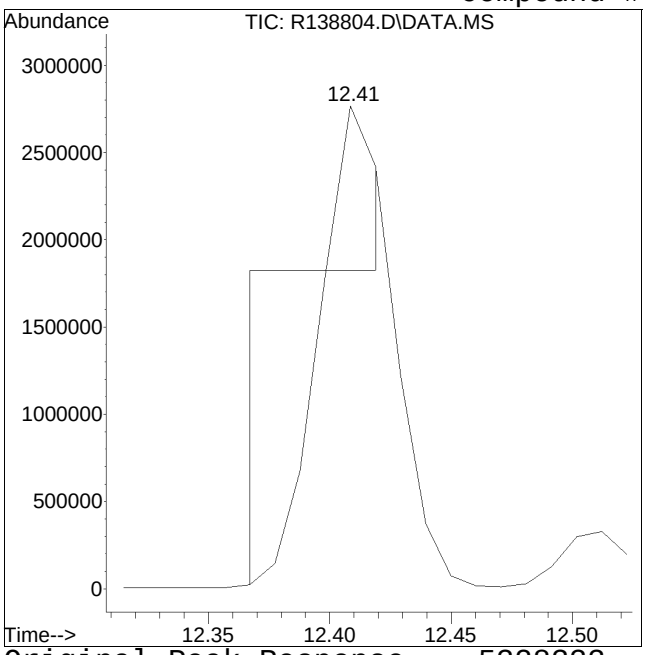

Original Peak Response = 5770259 Manual Peak Response = 68693450 M4
M4 = Poor automated baseline construction.

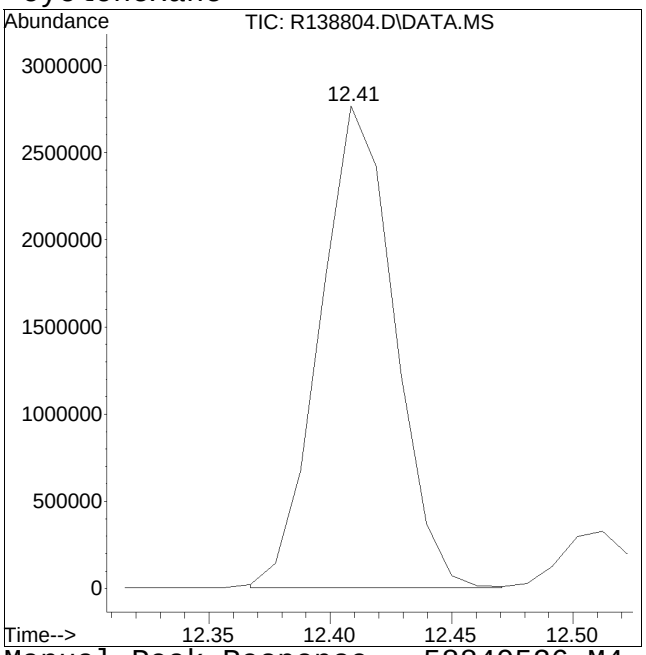
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138804.D
Date Inj'd : 1/1/2015 11:57 pm
Sample : IAPH-10STD100.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #6: cyclohexane



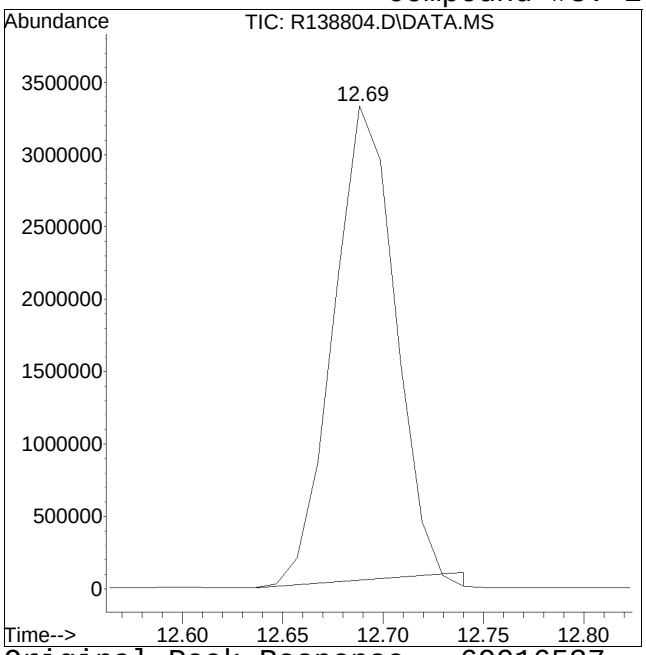

Original Peak Response = -5328333 Manual Peak Response = 58840526 M4
M4 = Poor automated baseline construction.

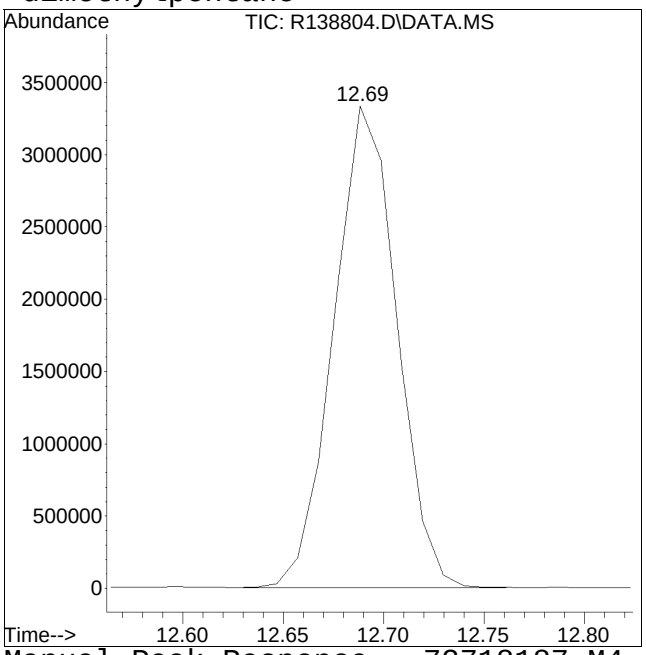
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138804.D
Date Inj'd : 1/1/2015 11:57 pm
Sample : IAPH-10STD100.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #8: 2,3-dimethylpentane



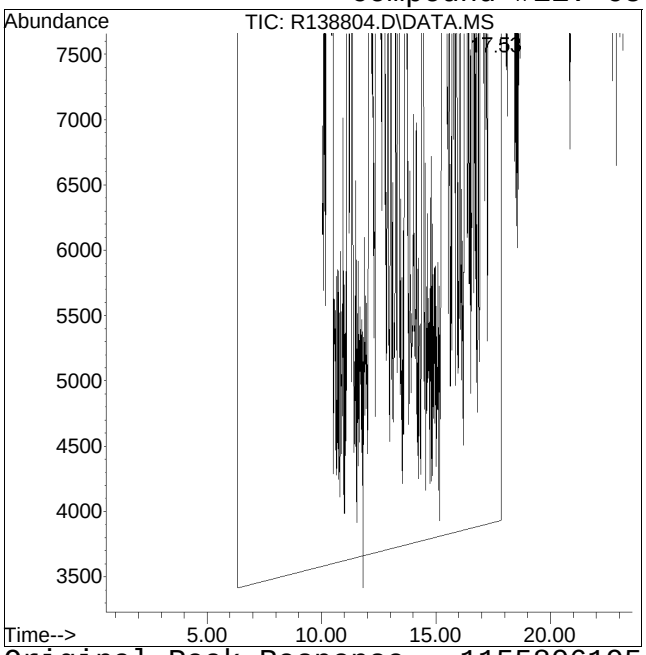

Original Peak Response = 69016537 Manual Peak Response = 72718187 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

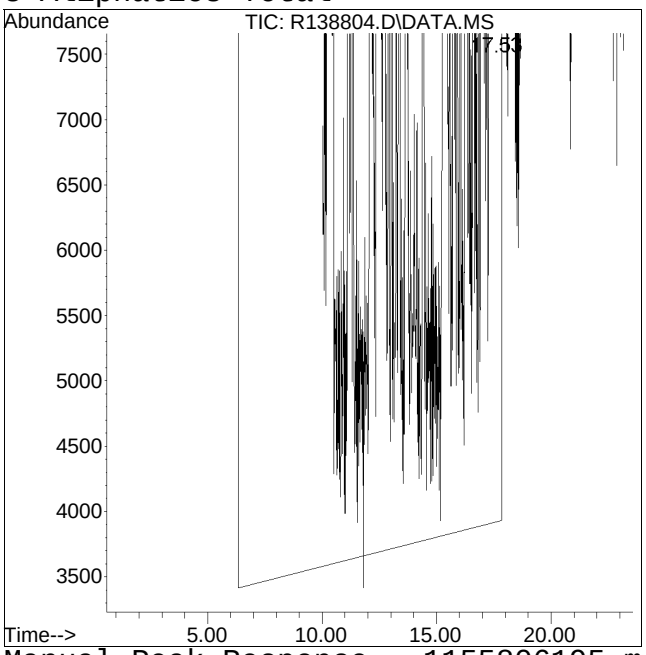
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138804.D
Date Inj'd : 1/1/2015 11:57 pm
Sample : IAPH-10STD100.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 1155806195

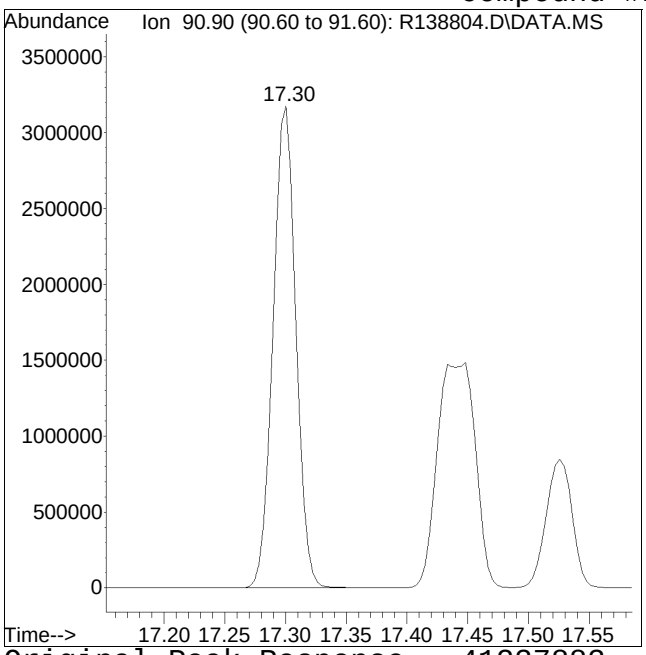


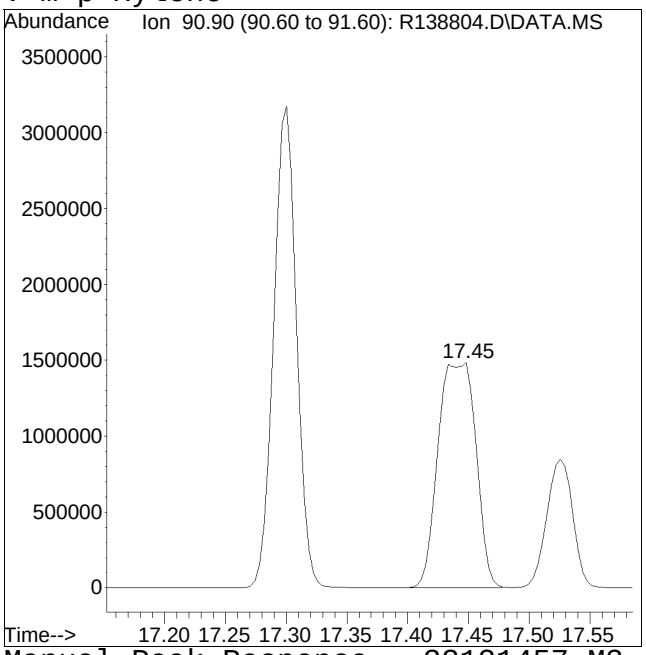

Manual Peak Response = 1155806195 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138804.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 11:57 pm Instrument : Air Piano 1
Sample : IAPH-10STD100.0 Quant Date : 1/2/2015 7:46 am

Compound #17: m+p-xylene



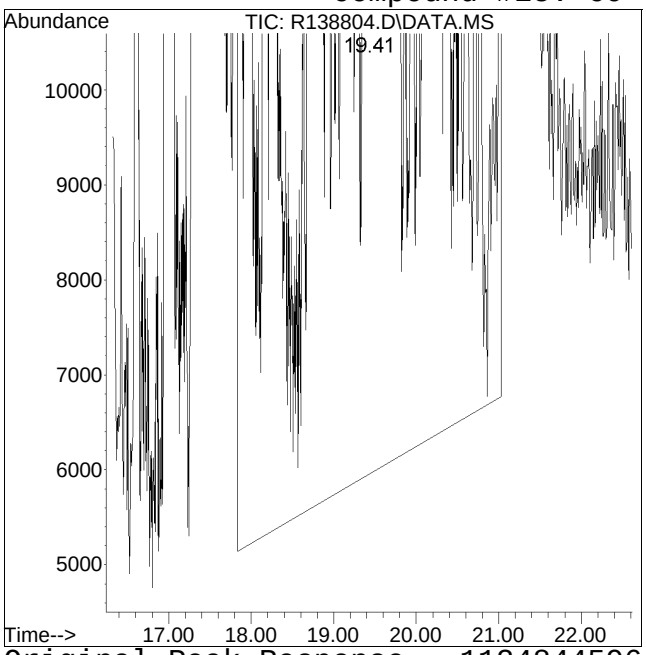

Original Peak Response = 41237883 Manual Peak Response = 32121457 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Manual Integration/Negative Proof Report

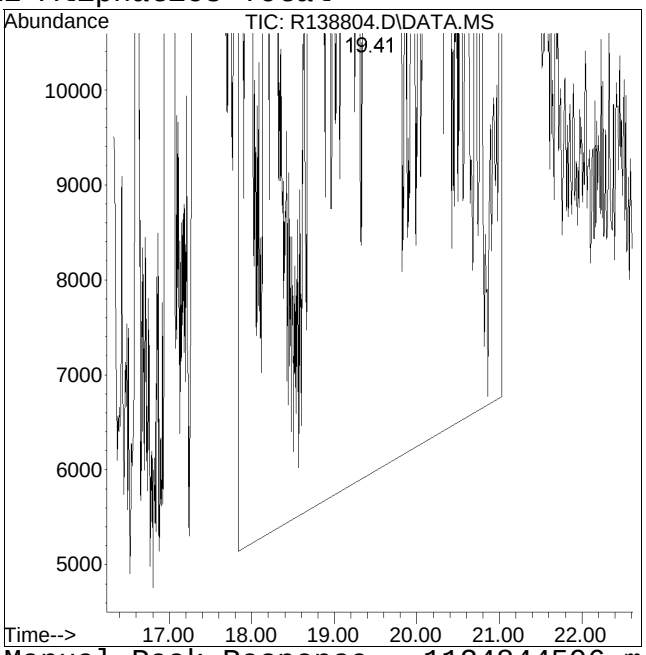
Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138804.D
Date Inj'd : 1/1/2015 11:57 pm
Sample : IAPH-10STD100.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/2/2015 7:46 am

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 1124844596

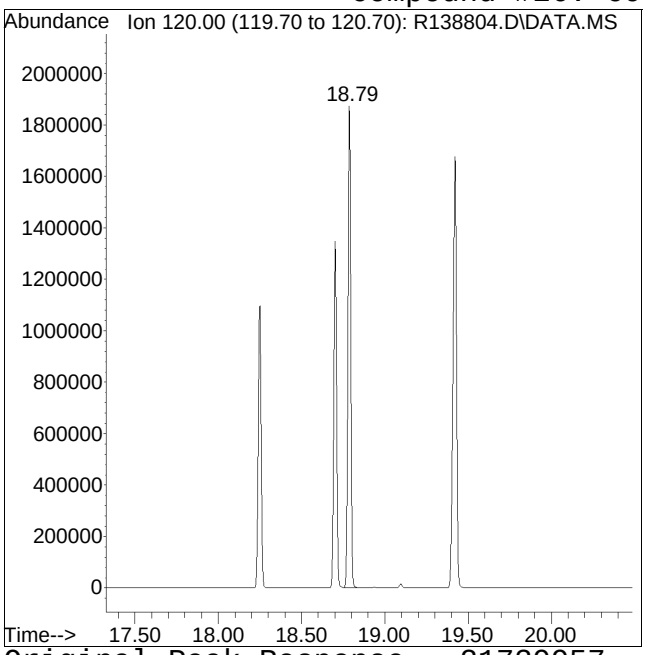


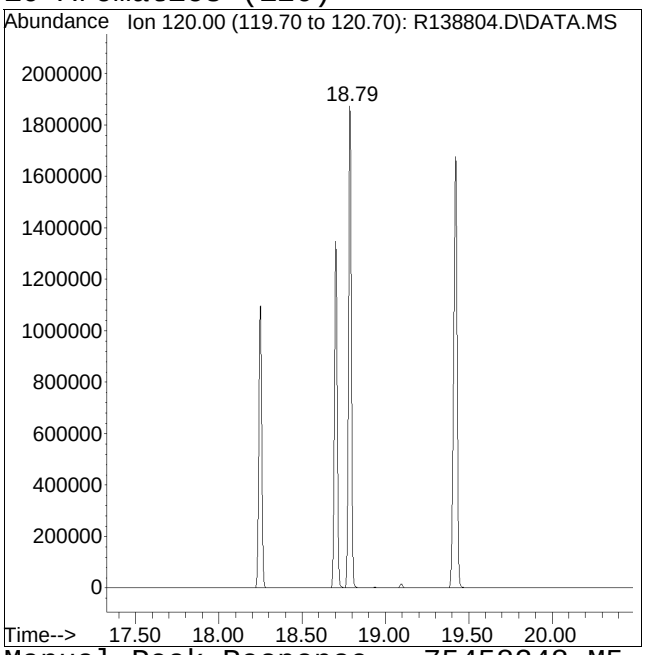

Manual Peak Response = 1124844596 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138804.D Operator : AIRPIANO1:AR
Date Inj'd : 1/1/2015 11:57 pm Instrument : Air Piano 1
Sample : IAPH-10STD100.0 Quant Date : 1/2/2015 7:46 am

Compound #26: C9-C10 Aromatics (120)




Original Peak Response = 21739957 Manual Peak Response = 75458248 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

RSF Update Summary Report

Method Path.....: O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Method File.....: APH150101.M
Method Title.....: APH Analysis
Last Update.....: Sat Jan 03 12:12:55 2015

Generating Sum Response Factor For: C5-C8 Aliphatics Total

| No | Compound | Level | Conc | Response |
|---|---|---|---|---|
| 3 | isopentane | 1 | 1.18000 | 304939.267 |
| 5 | hexane | 1 | 1.41000 | 453014.262 |
| 6 | cyclohexane | 1 | 1.38000 | 278533.594 |
| 8 | 2,3-dimethylpentane | 1 | 1.64000 | 380541.108 |
| 10 | heptane | 1 | 1.64000 | 328508.297 |
| 14 | n-octane | 1 | 1.87000 | 436780.852 |
| | Sum RSF For: C5-C8 Aliphatics Total | | 9.12000 | 2182317.379 |
| | ISTD: 1,4-difluorobenzene | | 10.00000 | 3042025.920 |

Level 1 Response Factor = 0.7866
Level 1 Data file = R138798.D

| | | | | |
|---|---|---|---|---|
| 3 | isopentane | 2 | 2.36000 | 572118.167 |
| 5 | hexane | 2 | 2.82000 | 717211.932 |
| 6 | cyclohexane | 2 | 2.76000 | 543666.057 |
| 8 | 2,3-dimethylpentane | 2 | 3.28000 | 695599.283 |
| 10 | heptane | 2 | 3.28000 | 646253.506 |
| 14 | n-octane | 2 | 3.74000 | 807003.085 |
| | Sum RSF For: C5-C8 Aliphatics Total | | 18.24000 | 3981852.031 |
| | ISTD: 1,4-difluorobenzene | | 10.00000 | 2968939.724 |

Level 2 Response Factor = 0.7353
Level 2 Data file = R138799.D

| | | | | |
|---|---|---|---|---|
| 3 | isopentane | 3 | 5.90000 | 1391745.995 |
| 5 | hexane | 3 | 7.04000 | 1903341.081 |
| 6 | cyclohexane | 3 | 6.88000 | 1547257.404 |
| 8 | 2,3-dimethylpentane | 3 | 8.19000 | 1814384.544 |
| 10 | heptane | 3 | 8.19000 | 1873328.607 |
| 14 | n-octane | 3 | 9.34000 | 2322932.579 |
| | Sum RSF For: C5-C8 Aliphatics Total | | 45.54000 | 10852990.211 |
| | ISTD: 1,4-difluorobenzene | | 10.00000 | 2922900.630 |

Level 3 Response Factor = 0.8153
Level 3 Data file = R138800.D

| | | | | |
|---|---|---|---|---|
| 3 | isopentane | 4 | 29.50000 | 5073133.837 |
| 5 | hexane | 4 | 35.20000 | 7049916.699 |
| 6 | cyclohexane | 4 | 34.40000 | 6282521.807 |
| 8 | 2,3-dimethylpentane | 4 | 41.00000 | 7700430.341 |
| 10 | heptane | 4 | 41.00000 | 7438810.471 |
| 14 | n-octane | 4 | 46.70000 | 9434766.900 |
| | Sum RSF For: C5-C8 Aliphatics Total | | 227.80000 | 42979580.055 |
| | ISTD: 1,4-difluorobenzene | | 10.00000 | 2890817.670 |

Level 4 Response Factor = 0.6527
Level 4 Data file = R138801.D

```
    3 isopentane                        5        58.97000     10174106.135
    5 hexane                            5        70.44000     13809588.306
    6 cyclohexane                       5        68.79000     11796462.347
    8 2,3-dimethylpentane               5        81.90000     14179895.261
   10 heptane                           5        81.90000     14290818.993
   14 n-octane                          5        93.36000     17928617.880
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total          455.36000     82179488.922
   ISTD: 1,4-difluorobenzene                    10.00000      2970087.120
Level 5 Response Factor =          0.6076
   Level 5 Data file = R138802.D

    3 isopentane                        6       147.43000     25807623.773
    5 hexane                            6       178.74000     36799563.760
    6 cyclohexane                       6       171.97000     31062663.067
    8 2,3-dimethylpentane               6       204.74000     37332970.801
   10 heptane                           6       204.91000     37135143.202
   14 n-octane                          6       233.60000     46647609.541
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total         1141.39000    214785574.144
   ISTD: 1,4-difluorobenzene                    10.00000      2882136.563
Level 6 Response Factor =          0.6529
   Level 6 Data file = R138803.D

    3 isopentane                        8       294.85000     48534218.817
    5 hexane                            8       352.47000     68693450.250
    6 cyclohexane                       8       343.93000     58840525.859
    8 2,3-dimethylpentane               8       409.48000     72718187.222
   10 heptane                           8       409.82000     70218340.158
   14 n-octane                          8       467.20000     88443613.231
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total         2277.75000    407448335.537
   ISTD: 1,4-difluorobenzene                    10.00000      2828238.660
Level 8 Response Factor =          0.6325
   Level 8 Data file = R138804.D

   Avg Response Factor =    0.6976
   Rel Standard Deviation =    11.64%


   Generating Sum Response Factor For:    C9-C12 Aliphatics Total

   No     Compound                   Level            Conc        Response
   ---------------------------------------------------------------------
   15 2,3-dimethylheptane              1          2.10000       550798.862
    18 n-nonane                        1          2.10000       526152.642
    20 decane                          1          2.33000       580350.127
    21 butylcyclohexane                1          2.29000       645477.619
    22 n-undecane                      1          2.56000       603214.234
    24 n-dodecane                      1          2.78000       549081.040
   ---------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total           14.16000      3455074.525
   ISTD: chlorobenzene-D5                        10.00000       667996.453
Level 1 Response Factor =          3.6528
   Level 1 Data file = R138798.D

    15 2,3-dimethylheptane              2          4.20000      1036893.470
    18 n-nonane                         2          4.20000       962279.768
    20 decane                           2          4.66000      1121132.348
    21 butylcyclohexane                 2          4.58000      1275036.181
    22 n-undecane                       2          5.12000      1117253.492
    24 n-dodecane                       2          5.56000      1014533.444
   ---------------------------------------------------------------------
```

```
   Sum RSF For: C9-C12 Aliphatics Total          28.32000      6527128.703
   ISTD: chlorobenzene-D5                       10.00000       657661.302
Level 2 Response Factor =          3.5045
   Level 2 Data file = R138799.D

   15 2,3-dimethylheptane              3        10.48000      2905659.649
   18 n-nonane                         3        10.48000      2697194.369
   20 decane                           3        11.63000      3254200.460
   21 butylcyclohexane                 3        11.47000      3482302.608
   22 n-undecane                       3        12.78000      3566683.340
   24 n-dodecane                       3        13.92000      3220582.872
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total           70.76000     19126623.298
   ISTD: chlorobenzene-D5                       10.00000       677786.250
Level 3 Response Factor =          3.9880
   Level 3 Data file = R138800.D

   15 2,3-dimethylheptane              4        52.40000     11592131.501
   18 n-nonane                         4        52.40000     11298964.809
   20 decane                           4        58.20000     13034908.990
   21 butylcyclohexane                 4        57.30000     14190869.980
   22 n-undecane                       4        63.90000     15331578.340
   24 n-dodecane                       4        69.60000     15628673.737
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total          353.80000     81077127.358
   ISTD: chlorobenzene-D5                       10.00000       680034.405
Level 4 Response Factor =          3.3698
   Level 4 Data file = R138801.D

   15 2,3-dimethylheptane              5       104.83000     22596085.561
   18 n-nonane                         5       104.83000     21745168.065
   20 decane                           5       116.29000     25929662.461
   21 butylcyclohexane                 5       114.65000     27630267.126
   22 n-undecane                       5       127.76000     29899539.740
   24 n-dodecane                       5       139.22000     32131943.270
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total          707.58000    159932666.222
   ISTD: chlorobenzene-D5                       10.00000       662242.266
Level 5 Response Factor =          3.4131
   Level 5 Data file = R138802.D

   15 2,3-dimethylheptane              6       262.08000     58363533.353
   18 n-nonane                         6       262.29000     56410580.820
   20 decane                           6       290.96000     66875907.003
   21 butylcyclohexane                 6       268.62000     71569663.807
   22 n-undecane                       6       319.65000     75769869.310
   24 n-dodecane                       6       348.33000     86222284.710
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total         1751.93000    415211839.004
   ISTD: chlorobenzene-D5                       10.00000       648252.648
Level 6 Response Factor =          3.6560
   Level 6 Data file = R138803.D

   15 2,3-dimethylheptane              8       524.15000    109291951.882
   18 n-nonane                         8       524.58000    105779134.240
   20 decane                           8       581.92000    124968118.789
   21 butylcyclohexane                 8       573.23000    135142290.948
   22 n-undecane                       8       639.30000    143570488.685
   24 n-dodecane                       8       696.65000    160659213.138
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total         3539.83000    779411197.683
   ISTD: chlorobenzene-D5                       10.00000       645862.815
Level 8 Response Factor =          3.4091
```

```
   Level 8 Data file = R138804.D

   Avg Response Factor =    3.5705
   Rel Standard Deviation =    6.09%


   Generating Sum Response Factor For:    C9-C10 Aromatics (120)

   No    Compound                  Level            Conc        Response
   ---------------------------------------------------------------------
   26 C9-C10 Aromatics (120)           1        10.00000       333613.780
   27 C9-C10 Aromatics (134)           1        10.00000        66478.050
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)           10.00000       400091.830
   ISTD: chlorobenzene-D5                       10.00000       667996.453
Level 1 Response Factor =          0.5989
   Level 1 Data file = R138798.D

   26 C9-C10 Aromatics (120)           2        20.00000       616953.075
   27 C9-C10 Aromatics (134)           2        20.00000       112774.480
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)           20.00000       729727.555
   ISTD: chlorobenzene-D5                       10.00000       657661.302
Level 2 Response Factor =          0.5548
   Level 2 Data file = R138799.D

   26 C9-C10 Aromatics (120)           3        50.00000      1792319.350
   27 C9-C10 Aromatics (134)           3        50.00000       344757.465
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)           50.00000      2137076.815
   ISTD: chlorobenzene-D5                       10.00000       677786.250
Level 3 Response Factor =          0.6306
   Level 3 Data file = R138800.D

   26 C9-C10 Aromatics (120)           4       250.00000      7521231.824
   27 C9-C10 Aromatics (134)           4       250.00000      1443076.270
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)          250.00000      8964308.094
   ISTD: chlorobenzene-D5                       10.00000       680034.405
Level 4 Response Factor =          0.5273
   Level 4 Data file = R138801.D

   26 C9-C10 Aromatics (120)           5       500.00000     14533952.237
   27 C9-C10 Aromatics (134)           5       500.00000      2692323.247
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)          500.00000     17226275.484
   ISTD: chlorobenzene-D5                       10.00000       662242.266
Level 5 Response Factor =          0.5202
   Level 5 Data file = R138802.D

   26 C9-C10 Aromatics (120)           6      1250.00000     39035521.637
   27 C9-C10 Aromatics (134)           6      1250.00000      7307951.040
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)         1250.00000     46343472.677
   ISTD: chlorobenzene-D5                       10.00000       648252.648
Level 6 Response Factor =          0.5719
   Level 6 Data file = R138803.D

   26 C9-C10 Aromatics (120)           8      2500.00000     75458247.732
   27 C9-C10 Aromatics (134)           8      2500.00000     14108223.690
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)         2500.00000     89566471.422
   ISTD: chlorobenzene-D5                       10.00000       645862.815
```

```
Level 8 Response Factor =          0.5547
   Level 8 Data file = R138804.D

   Avg Response Factor =    0.5655
   Rel Standard Deviation =    6.90%


   Generating Sum Response Factor For:    C9-C10 Aromatics (134)

   No    Compound                   Level            Conc        Response
   ---------------------------------------------------------------------------
   26 C9-C10 Aromatics (120)           1        10.00000       333613.780
   27 C9-C10 Aromatics (134)           1        10.00000        66478.050
   ---------------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)           10.00000       400091.830
   ISTD: chlorobenzene-D5                       10.00000       667996.453
Level 1 Response Factor =          0.5989
   Level 1 Data file = R138798.D

   26 C9-C10 Aromatics (120)           2        20.00000       616953.075
   27 C9-C10 Aromatics (134)           2        20.00000       112774.480
   ---------------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)           20.00000       729727.555
   ISTD: chlorobenzene-D5                       10.00000       657661.302
Level 2 Response Factor =          0.5548
   Level 2 Data file = R138799.D

   26 C9-C10 Aromatics (120)           3        50.00000      1792319.350
   27 C9-C10 Aromatics (134)           3        50.00000       344757.465
   ---------------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)           50.00000      2137076.815
   ISTD: chlorobenzene-D5                       10.00000       677786.250
Level 3 Response Factor =          0.6306
   Level 3 Data file = R138800.D

   26 C9-C10 Aromatics (120)           4       250.00000      7521231.824
   27 C9-C10 Aromatics (134)           4       250.00000      1443076.270
   ---------------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)          250.00000      8964308.094
   ISTD: chlorobenzene-D5                       10.00000       680034.405
Level 4 Response Factor =          0.5273
   Level 4 Data file = R138801.D

   26 C9-C10 Aromatics (120)           5       500.00000     14533952.237
   27 C9-C10 Aromatics (134)           5       500.00000      2692323.247
   ---------------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)          500.00000     17226275.484
   ISTD: chlorobenzene-D5                       10.00000       662242.266
Level 5 Response Factor =          0.5202
   Level 5 Data file = R138802.D

   26 C9-C10 Aromatics (120)           6      1250.00000     39035521.637
   27 C9-C10 Aromatics (134)           6      1250.00000      7307951.040
   ---------------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)         1250.00000     46343472.677
   ISTD: chlorobenzene-D5                       10.00000       648252.648
Level 6 Response Factor =          0.5719
   Level 6 Data file = R138803.D

   26 C9-C10 Aromatics (120)           8      2500.00000     75458247.732
   27 C9-C10 Aromatics (134)           8      2500.00000     14108223.690
   ---------------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)         2500.00000     89566471.422
```

```
   ISTD: chlorobenzene-D5                        10.00000       645862.815
Level 8 Response Factor =          0.5547
   Level 8 Data file = R138804.D

   Avg Response Factor =    0.5655
   Rel Standard Deviation =    6.90%


   Generating Reference Response Factors

  No     Compound                              No  Refrence Compound
  ----------------------------------------------------------------------

  ----------------------------------------------------------------------

         Abacus Response Factor Update Macro Ver. 1.0
```

# Initial Calibration Verification

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138807.D
Acq On : 2 Jan 2015 9:08 am
Operator : AIRPIANO1:AR
Sample : CTO15-LLSTD10.0
Misc : WG753082
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:19:02 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 10.000 | 10.000 | 0.0 | 104 | 0.00 |
| 2 | T | 1,3-butadiene | 22.100 | 19.965 | 9.7 | 103 | 0.00 |
| 4 | T | methyl tert butyl ether | 36.000 | 34.043 | 5.4 | 104 | 0.00 |
| 7 | I | 1,4-difluorobenzene | 10.000 | 10.000 | 0.0 | 105 | 0.00 |
| 9 | T | benzene | 31.900 | 28.673 | 10.1 | 101 | 0.00 |
| 11 | H | C5-C8 Aliphatics Total | 122.000 | 108.986 | 10.7 | 54 | 0.00 |
| 12 | I | chlorobenzene-D5 | 10.000 | 10.000 | 0.0 | 98 | 0.00 |
| 13 | | toluene | 37.700 | 34.386 | 8.8 | 97 | 0.00 |
| 16 | T | ethyl benzene | 43.400 | 40.771 | 6.1 | 99 | 0.00 |
| 17 | T | m+p-xylene | 86.800 | 81.720 | 5.9 | 198 | 0.01 |
| 19 | T | o-xylene | 43.400 | 41.296 | 4.8 | 102 | 0.00 |
| 23 | T | naphthalene | 52.420 | 56.805 | -8.4 | 115 | 0.00 |
| 25 | H | C9-C12 Aliphatics Total | 174.000 | 162.979 | 6.3 | 48 | 0.00 |
| 27 | | C9-C10 Aromatics Total | 465.000 | 377.314 | 18.9 | 159 | -0.27 |
| 28 | s | bromochloromethane (TIC) | 10.000 | 11.948 | -19.5 | 118 | 0.00 |
| 29 | s | 1,4-difluorobenzene (TIC) | 10.000 | 10.075 | -0.7 | 103 | 0.00 |
| 30 | s | chlorobenzene-D5 (TIC) | 10.000 | 10.245 | -2.4 | 103 | 0.00 |
| 31 | s | 1,2-dichloroethane-D4 (TIC) | 10.000 | 1.373 | 86.3# | 14 | 0.00 |
| 32 | s | toluene-D8 (TIC) | 20.000 | 1.206 | 94.0# | 6 | 0.00 |
| 33 | s | bromofluorobenzene (TIC) | 10.000 | 1.053 | 89.5# | 11 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138807.D
Acq On : 2 Jan 2015 9:08 am
Operator : AIRPIANO1:AR
Sample : CTO15-LLSTD10.0
Misc : WG753082
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:19:02 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 723401 | 10.000 ug/m3 | 0.00 |
| Standard Area = 693110 | | | Recovery | = 104.37% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 3031776 | 10.000 ug/m3 | 0.00 |
| Standard Area = 2890818 | | | Recovery | = 104.88% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 669315 | 10.000 ug/m3 | # 0.00 |
| Standard Area = 680034 | | | Recovery | = 98.42% | |
| System Monitoring Compounds | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 5694519M4 | 11.948 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 119.48% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 6848158 | 10.075 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 100.75% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 9079213M6 | 10.245 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 102.45% | |
| 31) 1,2-dichloroethane-D4 ... | 11.13 | TIC | 338760M3 | 1.373 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 13.73% | |
| 32) toluene-D8 (TIC) | 15.28 | TIC | 908278 | 1.206 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 12.06% | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 906960M3 | 1.053 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 10.53% | |
| Target Compounds | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 620698 | 19.965 ug/m3# | 100 |
| 4) methyl tert butyl ether | 9.07 | 73 | 2309710 | 34.043 ug/m3 | 98 |
| 9) benzene | 12.10 | 78 | 2388853 | 28.673 ug/m3 | 100 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 23048911m | 108.986 ug/m3 | |
| 13) toluene | 15.37 | 91 | 3065869 | 34.386 ug/m3 | 96 |
| 16) ethyl benzene | 17.30 | 91 | 4158969 | 40.771 ug/m3 | 99 |
| 17) m+p-xylene | 17.44 | 91 | 6569260M3 | 81.720 ug/m3 | |
| 19) o-xylene | 17.81 | 91 | 3393843 | 41.296 ug/m3 | 99 |
| 23) naphthalene | 21.14 | 128 | 6425848M4 | 56.805 ug/m3 | |
| 25) C9-C12 Aliphatics Total | 18.07 | TIC | 38948261m | 162.979 ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 9550760M5 | 252.334 ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.73 | 134 | 4730443M5 | 124.980 ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 14281202 | 377.314 ug/m3 | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138807.D
Acq On : 2 Jan 2015 9:08 am
Operator : AIRPIANO1:AR
Sample : CTO15-LLSTD10.0
Misc : WG753082
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:19:02 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150101A_ICAL\R138801.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

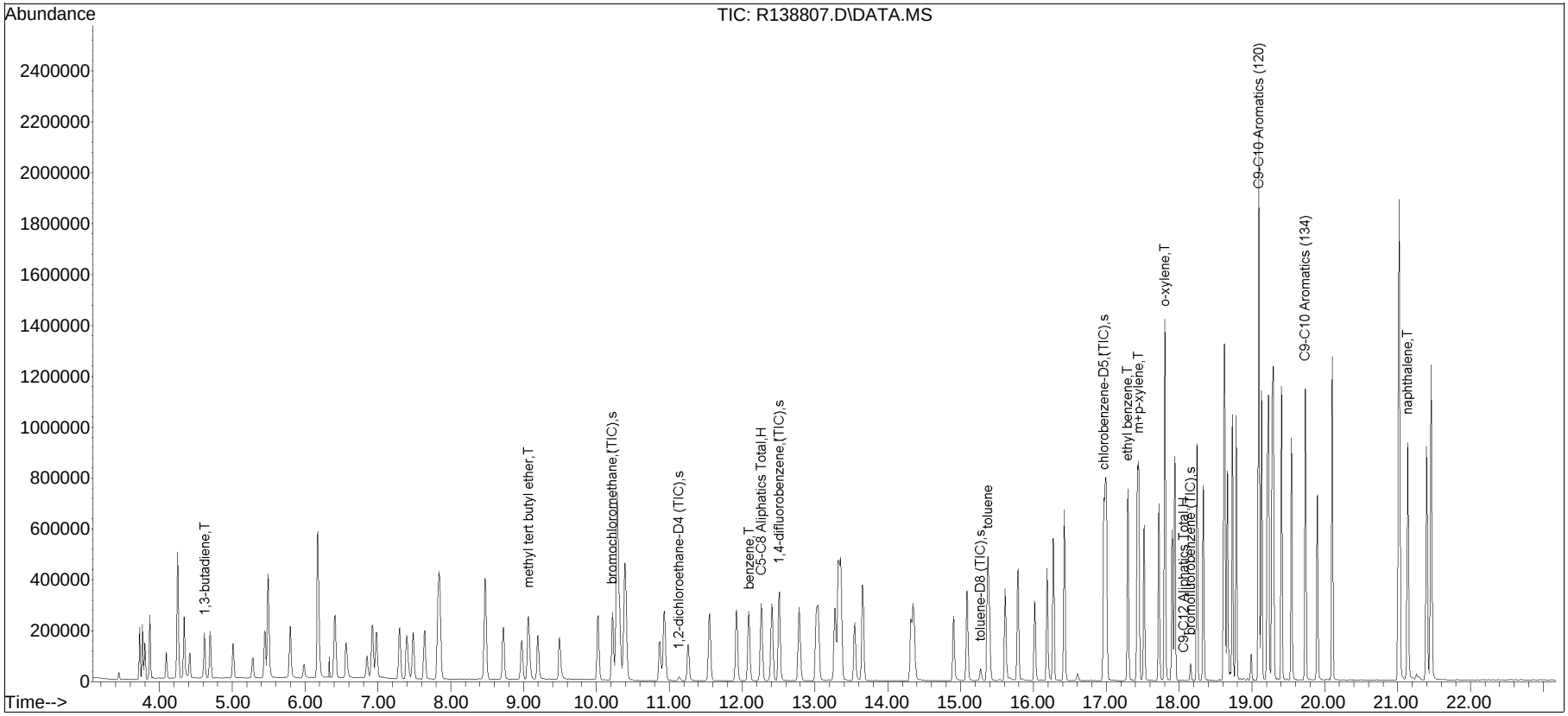
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\
Data File : R138807.D
Acq On : 2 Jan 2015 9:08 am
Operator : AIRPIANO1:AR
Sample : CTO15-LLSTD10.0
Misc : WG753082
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:19:02 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150101A_ICAL\R138801.D

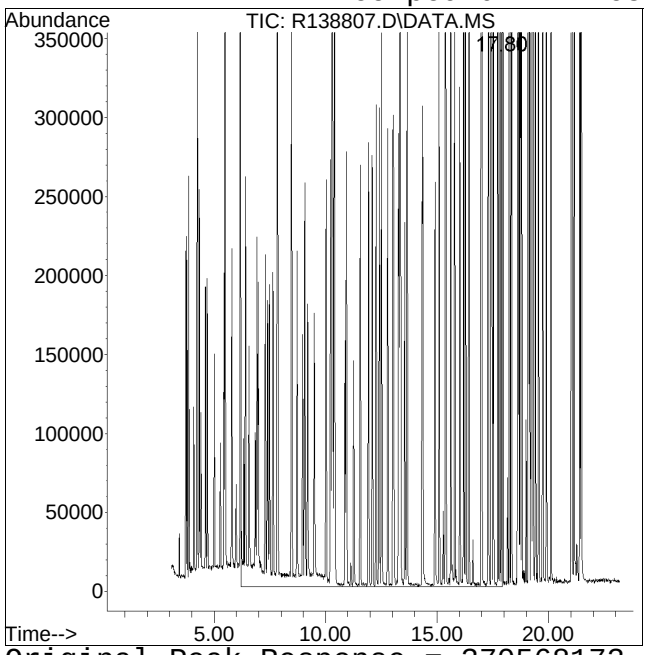


Manual Integration/Negative Proof Report

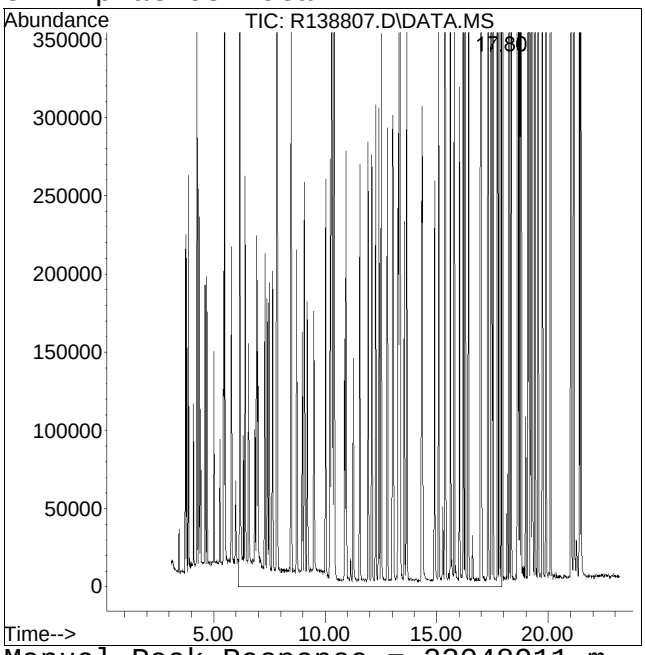
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138807.D
Date Inj'd : 1/2/2015 9:08 am
Sample : CTO15-LLSTD10.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:17 pm

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 370568173

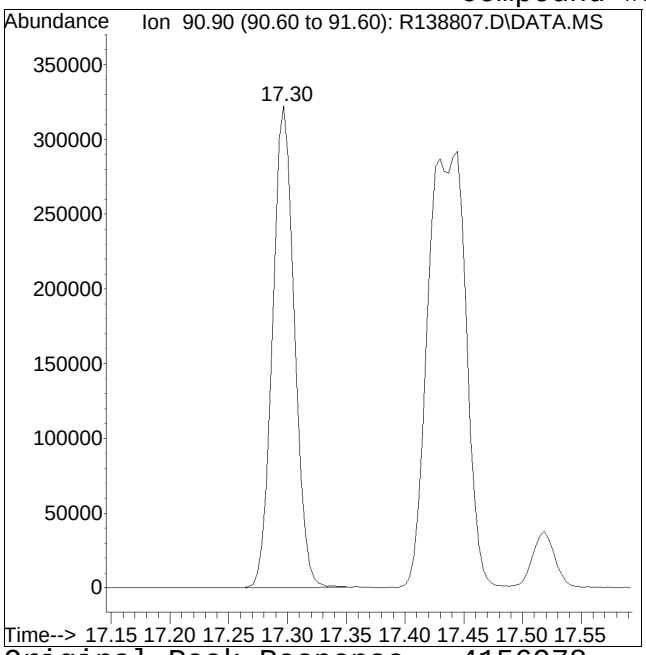


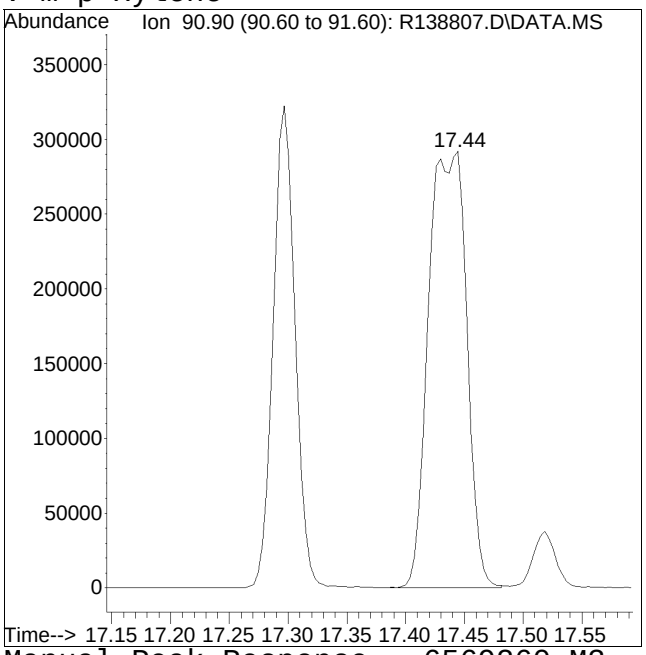

Manual Peak Response = 23048911 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138807.D Operator : AIRPIANO1:AR
Date Inj'd : 1/2/2015 9:08 am Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 1/3/2015 12:17 pm

Compound #17: m+p-xylene



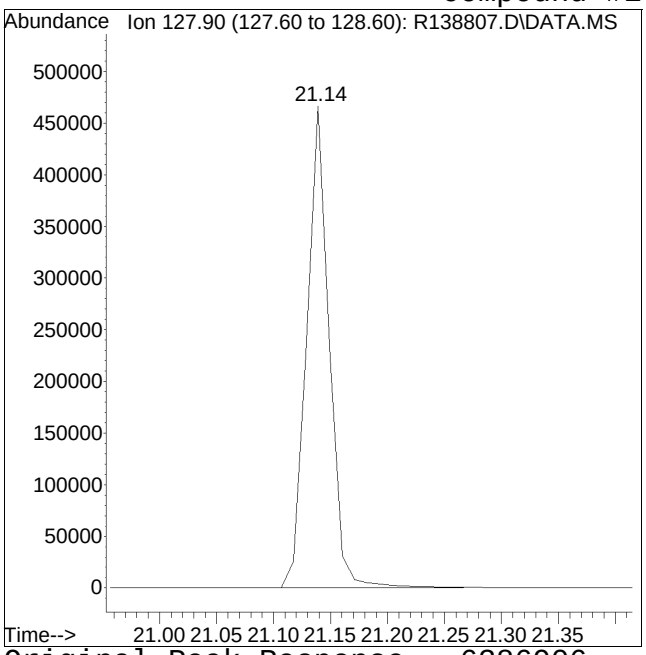




Original Peak Response = 4156978 Manual Peak Response = 6569260 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

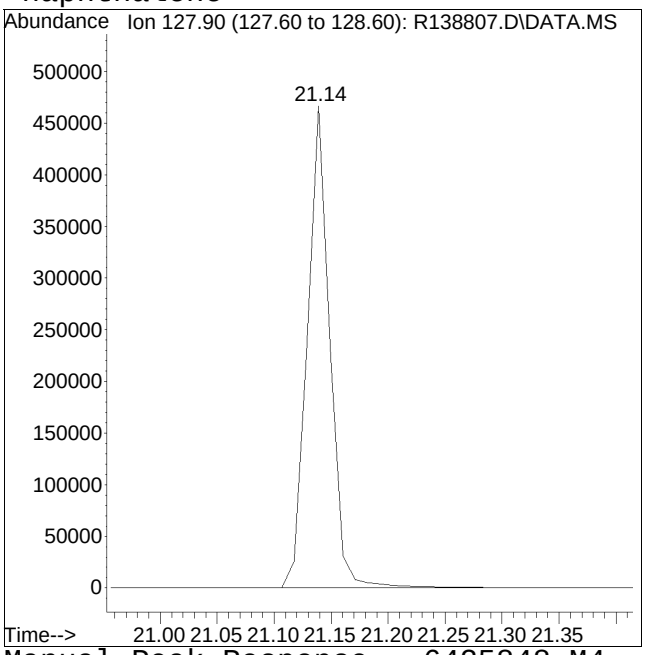
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138807.D Operator : AIRPIANO1:AR
Date Inj'd : 1/2/2015 9:08 am Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 1/3/2015 12:17 pm

Compound #23: naphthalene




Original Peak Response = 6386906



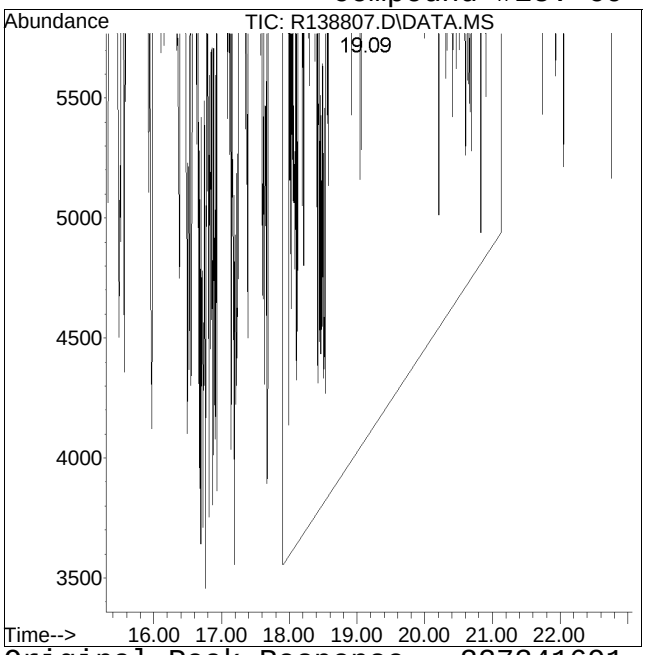

Manual Peak Response = 6425848 M4

M4 = Poor automated baseline construction.

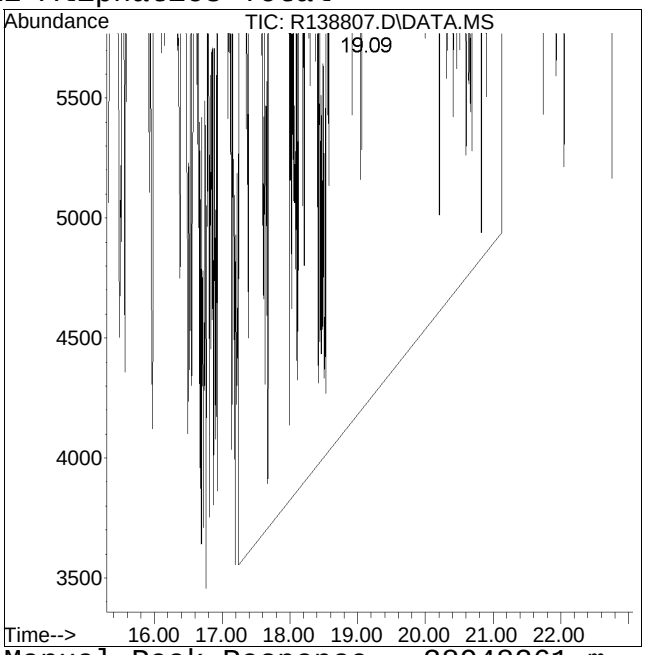
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138807.D
Date Inj'd : 1/2/2015 9:08 am
Sample : CTO15-LLSTD10.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:17 pm

Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 227341691

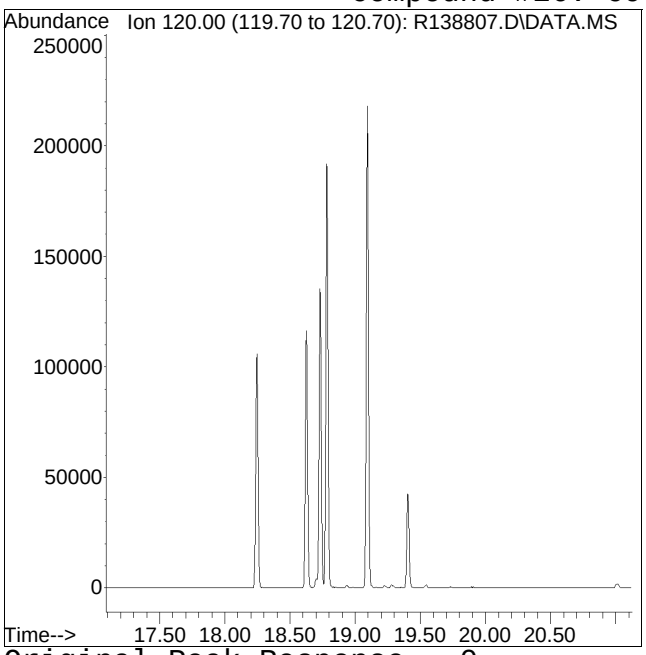


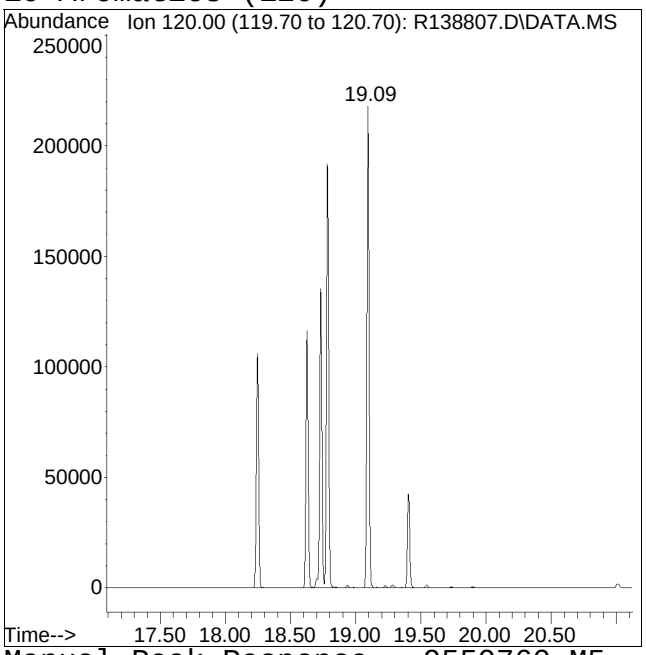

Manual Peak Response = 38948261 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138807.D
Date Inj'd : 1/2/2015 9:08 am
Sample : CTO15-LLSTD10.0
Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:17 pm

Compound #26: C9-C10 Aromatics (120)



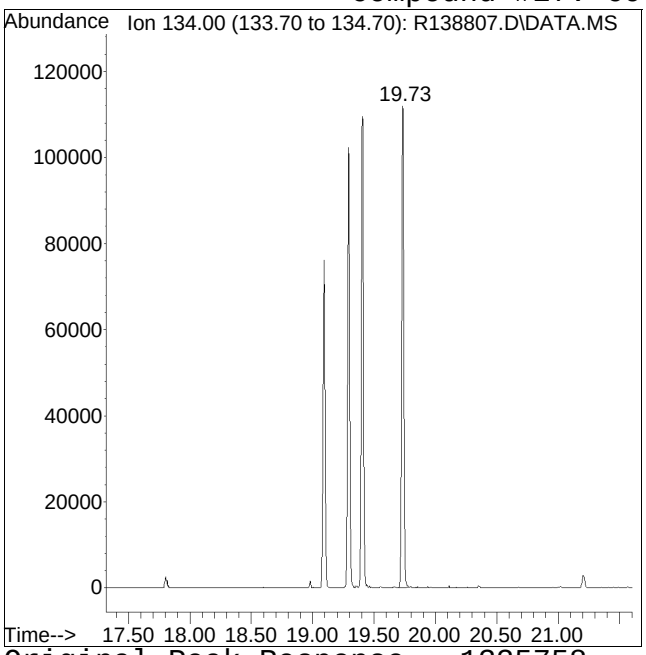

Original Peak Response = 0 Manual Peak Response = 9550760 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

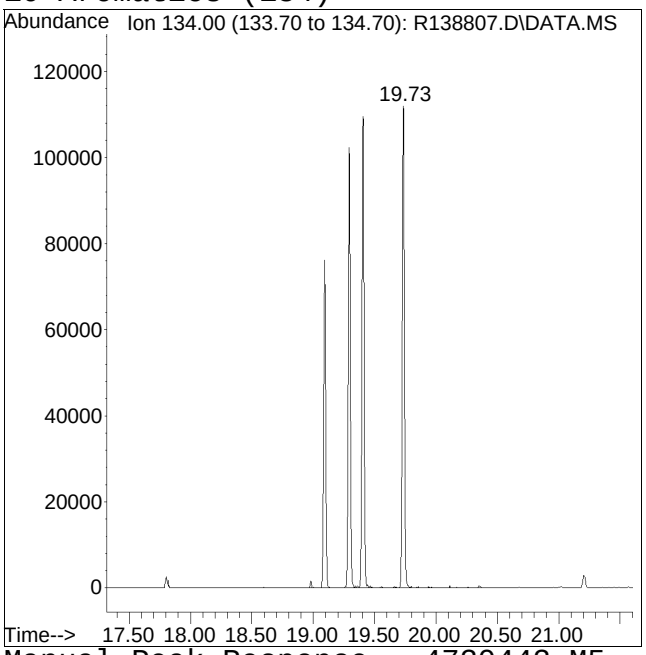
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138807.D
Date Inj'd : 1/2/2015 9:08 am
Sample : CTO15-LLSTD10.0

Method : APH150101.M
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:17 pm

Compound #27: C9-C10 Aromatics (134)



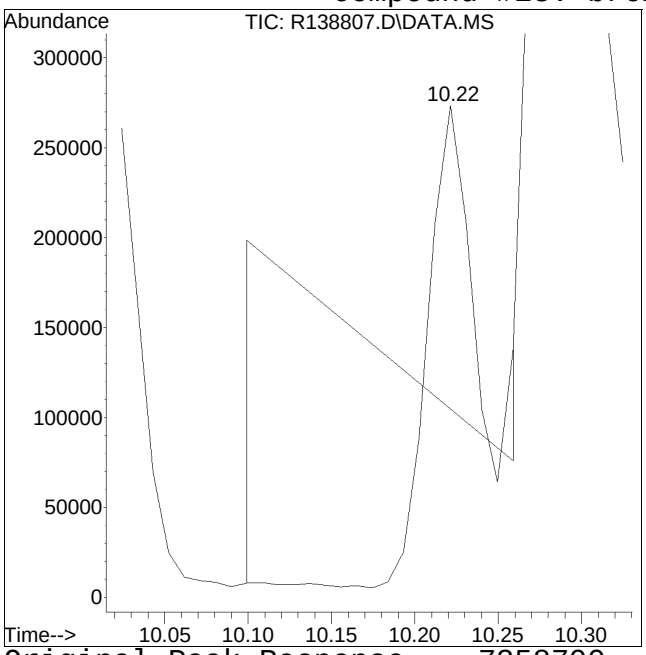



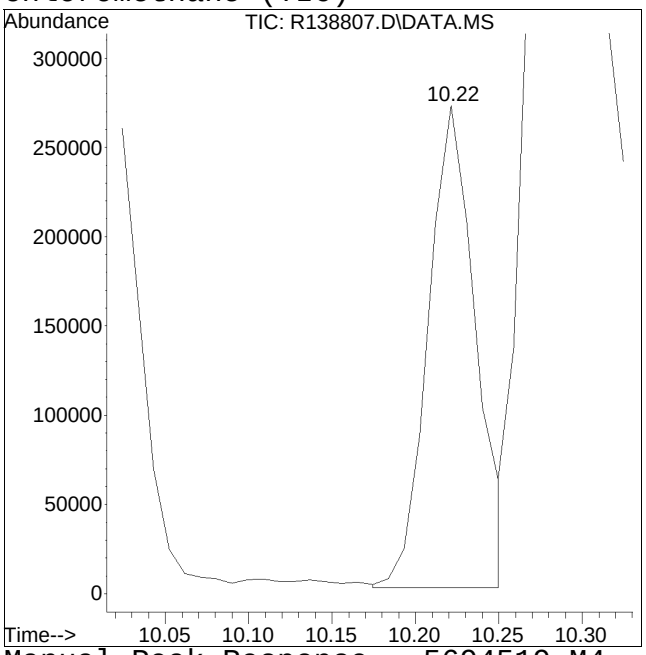

Original Peak Response = 1335758 Manual Peak Response = 4730443 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138807.D
Date Inj'd : 1/2/2015 9:08 am
Sample : CTO15-LLSTD10.0
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:17 pm

Compound #28: bromochloromethane (TIC)



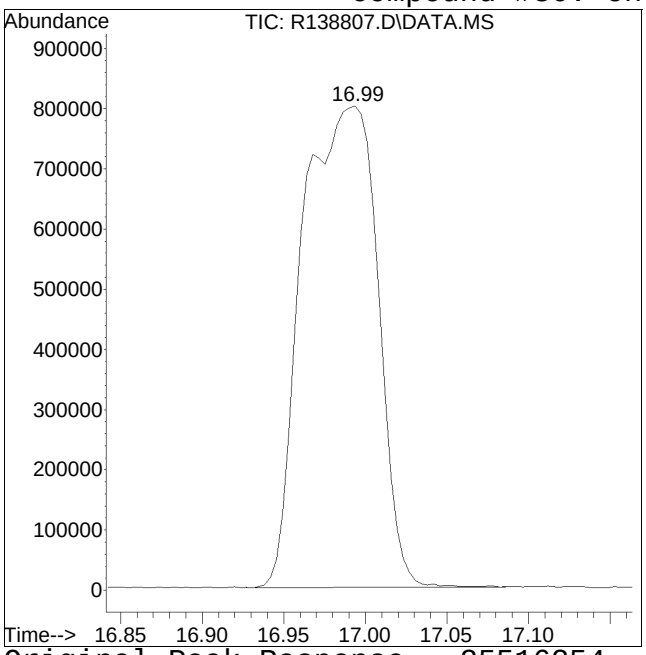




Original Peak Response = -7358790 Manual Peak Response = 5694519 M4
M4 = Poor automated baseline construction.

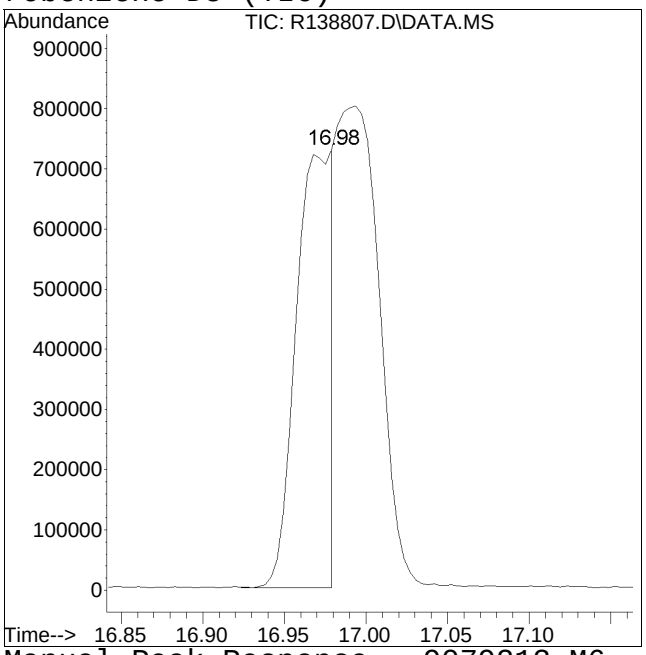
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138807.D
Date Inj'd : 1/2/2015 9:08 am
Sample : CTO15-LLSTD10.0
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:17 pm

Compound #30: chlorobenzene-D5 (TIC)




Original Peak Response = 25516254



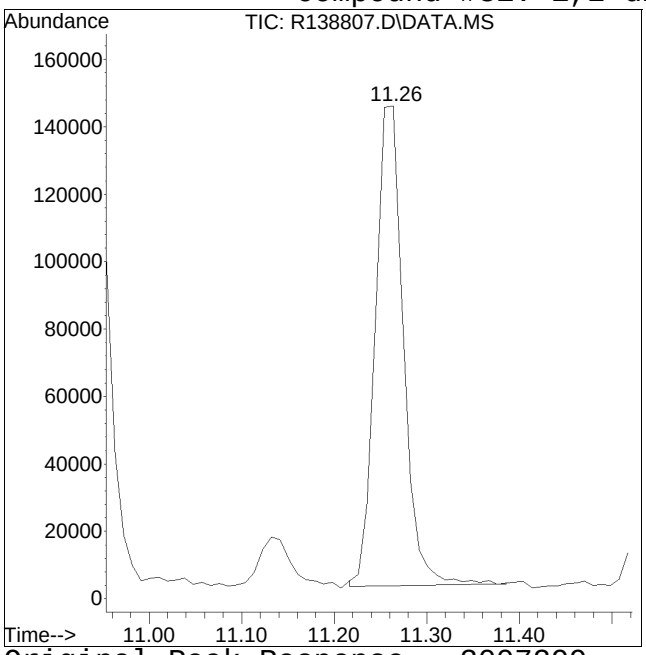

Manual Peak Response = 9079213 M6

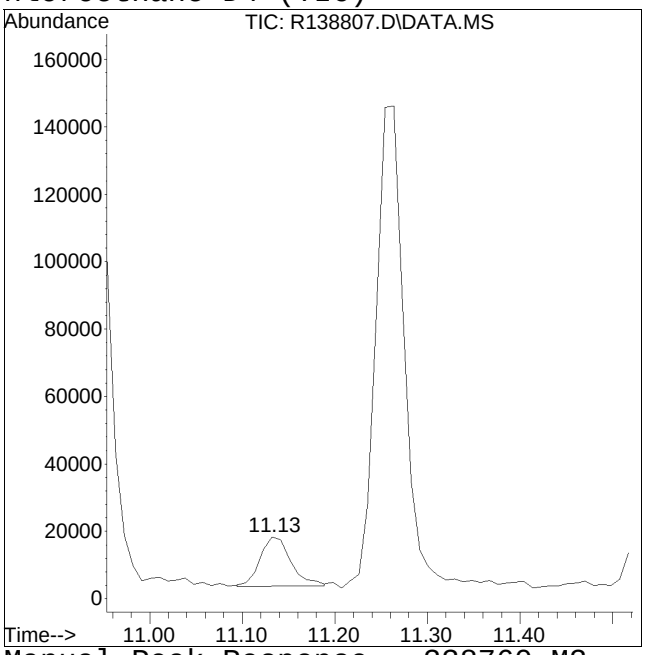
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138807.D Operator : AIRPIANO1:AR
Date Inj'd : 1/2/2015 9:08 am Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 1/3/2015 12:17 pm

Compound #31: 1,2-dichloroethane-D4 (TIC)



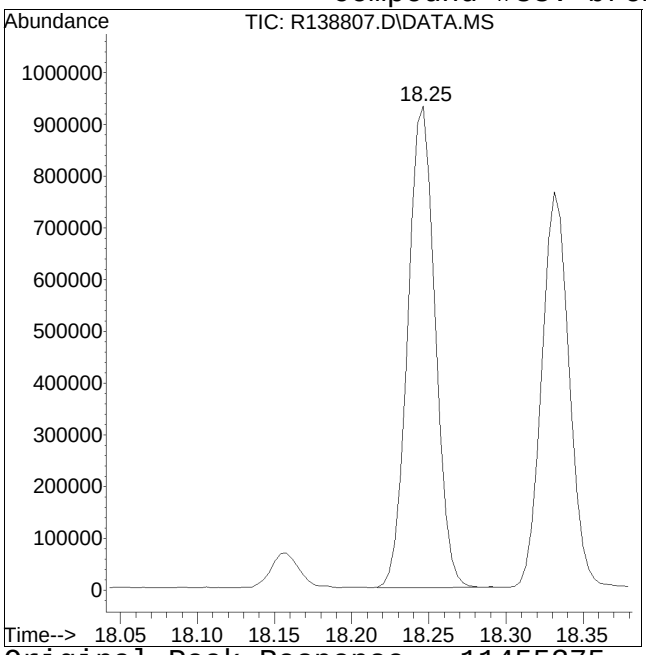



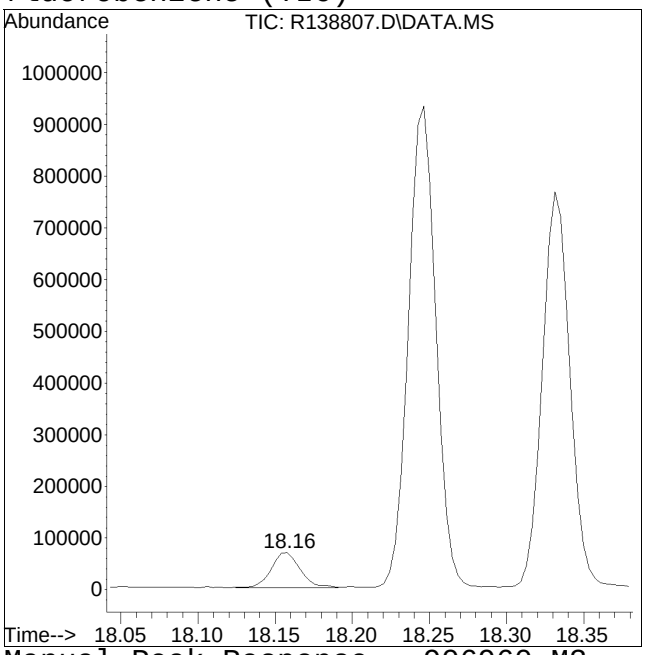

Original Peak Response = 3007299 Manual Peak Response = 338760 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150101A_ICAL\APH150101.M
Data File : R138807.D
Date Inj'd : 1/2/2015 9:08 am
Sample : CTO15-LLSTD10.0
Method : QM50101
Operator : AIRPIANO1:AR
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:17 pm

Compound #33: bromofluorobenzene (TIC)




Original Peak Response = 11455375 Manual Peak Response = 906960 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jul 16 2015, 02:16 pm

Work Group: WG767580 for Department: 3 GC/MS

Created: 11-MAR-15 Due: Operator: ry

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L1504264-03 | SV-3 | S | APH-10 | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-01 | OUTDOOR CONTROL | S | APH-10 | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-02 | S-157-J.1 | S | APH-10 | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-03 | S-157-J.2 | S | APH-10 | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-04 | S-157-J | S | APH-10 | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-05 | DUPLICATE | S | APH-10 | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-06 | BLANK | S | APH-10 | AIR | DONE | U | 0405 | 0317 | S0 | Can-6 |
| L1504425-07 | SG-1 | S | APH-10 | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-08 | SG-2 | S | APH-10 | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-09 | SG-3 | S | APH-10 | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-10 | SG-4 | S | APH-10 | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-11 | SG BLANK | S | APH-10 | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504467-01 | CAN 931 SHELF 41 | S | APH-10 | AIR | DONE | I | 0409 | 0318 | NC | Can-6 |
| L1504467-02 | CAN 1894 SHELF 42 | S | APH-10 | AIR | DONE | I | 0409 | 0318 | NC | Can-6 |
| L1504546-01 | CAN 1824 SHELF 56 | S | APH-10 | AIR | DONE | I | 0410 | 0318 | NC | Can-6 |
| L1504546-02 | CAN 1641 SHELF 57 | S | APH-10 | AIR | DONE | I | 0410 | 0318 | NC | Can-6 |
| L1504569-01 | CAN 151B SHELF 7 | S | APH-10 | AIR | DONE | I | 0409 | 0318 | NC | Can-2.7 |
| WG767580-1 | MS BFB Tune Standard | S | APH-10 | AIR | DONE | U | | | | |
| WG767580-1 | MS BFB Tune Standard | S | APH-10 | SOIL_VAPOR | DONE | U | | | | |
| WG767580-2 | Continuing Calibrati | S | APH-10 | AIR | DONE | U | | | | |
| WG767580-2 | Continuing Calibrati | S | APH-10 | SOIL_VAPOR | DONE | U | | | | |
| WG767580-3 | Laboratory Control S | S | APH-10 | AIR | DONE | U | | | | |
| WG767580-3 | Laboratory Control S | S | APH-10 | SOIL_VAPOR | DONE | U | | | | |
| WG767580-4 | Laboratory Method Bl | S | APH-10 | AIR | DONE | U | | | | |
| WG767580-4 | Laboratory Method Bl | S | APH-10 | SOIL_VAPOR | DONE | U | | | | |
| WG767580-5 | Duplicate Sample | S | APH-10 | AIR | DONE | U | | | | |
| WG767580-5 | Duplicate Sample | S | APH-10 | SOIL_VAPOR | DONE | U | | | | |

Comments:

WG767580-5 L1504425-07

# Sequence Logs

# Alpha Analytical Air Lab
# Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS13-005 / CSS12-019

Date: 01/01/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: AR

Sequence File Name: 150101.S

SIM ICAL# Full Scan ICAL# APH ICAL#

| AS Position # | Sample ID | Acquisition Method | Data File ID | Standard ID or Batch ID #, ICAL Ref # | Comment (s) | Product/ sublist | Leak Check Pass ? Y/N |
|---|---|---|---|---|---|---|---|
| 1 | TA1010101 | TO15_SFS | R138796 | 250ml | TUNE DO NOT USE | | NA |
| | | Pause | | | | | NA |
| 1 | TA1010101 | TO15_SFS | R138797 | 250ml | TUNE | | NA |
| | | Pause | | | | | NA |
| 5 | IAPH-10STD0.4 | TO15_SFS | R138798 | SS14-039C 125ML 0.4 | | | NA |
| 5 | IAPH-10STD0.8 | TO15_SFS | R138799 | SS14-039C 250ML 0.8 | | | NA |
| 6 | IAPH-10STD2.0 | TO15_SFS | R138800 | SS14-039B1 25ML 2.0 | | | NA |
| 6 | IAPH-10STD10.0 | TO15_SFS | R138801 | SS14-039B1 125ML 10.0 | | | NA |
| 6 | IAPH-10STD20.0 | TO15_SFS | R138802 | SS14-039B1 250ML 20.0 | | | NA |
| 7 | IAPH-10STD50.0 | TO15_SFS | R138803 | SS14-039A 125ML 50.0 | | | NA |
| 7 | IAPH-10STD100.0 | TO15_SFS | R138804 | SS14-039A 250ML 100.0 | | | NA |
| 1 | BA1010101 | TO15_SFS | R138805 | 250ml | | | NA |
| 1 | BA1010102 | TO15_SFS | R138806 | 250ml | | | NA |
| 2 | CTO15-LLSTD10.0 | TO15_SFS | R138807 | SS14-038B 250ML 10.0 | APH ICV | | NA |
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# Alpha Analytical Air Lab
# Instrument Run Log

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**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,2{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

# Alpha Analytical Air Lab
# Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS13-005 / CSS14-015

Date: 03/11/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: MB/RY

Sequence File Name: 150311.S

SIM ICAL# 10565 Full Scan ICAL# 10564 APH ICAL# 10563

| AS Position # | Sample ID | Acquisition Method | Data File ID | Standard ID or Batch ID #, ICAL Ref # | Comment (s) | Product/sublist | Leak Check Pass ? Y/N |
|---|---|---|---|---|---|---|---|
| 1 | TA1031101 | TO15_SFS | R140134 | 250ml | TUNE | | NA |
| 2 | CAPH-STD10 | TO15_SFS | R140135 | 125ml SS14-39B2 10.0 | APH CC | | NA |
| 3 | CTO15-LLSTD10 | TO15_SFS | R140136 | 250ml SS15-003C 10.0 | LL/ APH LCS | | NA |
| 3 | CTO15-SIMSTD5.0 | TO15_SFS | R140137 | 125ml SS15-003C 5.0 | SIM LCS | | NA |
| 1 | BA1031101 | TO15_SFS | R140138 | 250ml | LL BLANK, SIM FAILED | | NA |
| 1 | BA1031102 | TO15_SFS | R140139 | 250ml | SIM BLANK | | NA |
| 2 | L1504467-01,3,250,250 | TO15_SFS | R140140 | 250ml | | A, LL, SIM | NA |
| 3 | L1504467-02,3,250,250 | TO15_SFS | R140141 | 250ml | | A, LL, SIM | NA |
| 13 | L1504546-01,3,250,250 | TO15_SFS | R140142 | 250ml | RR CAN CLOSED | A, LL, SIM | NA |
| 14 | L1504546-02,3,250,250 | TO15_SFS | R140143 | 250ml | | A, LL, SIM | NA |
| | | Pause | | | | | NA |
| 13 | L1504546-01,3,250,250 | TO15_SFS | R140144 | WG767580,ICAL10563 | | A, LL, SIM | NA |
| 15 | L1504569-01,3,250,250 | TO15_SFS | R140145 | WG767580,ICAL10563 | | A, LL, SIM | NA |
| 1 | L1504425-06,3,250,250 | TO15_SFS | R140146 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 2 | L1504425-11,3,250,250 | TO15_SFS | R140147 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 3 | L1504425-01,3,250,250 | TO15_SFS | R140148 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 4 | L1504425-02,3,250,250 | TO15_SFS | R140149 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 5 | L1504425-03,3,250,250 | TO15_SFS | R140150 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 6 | L1504425-04,3,250,250 | TO15_SFS | R140151 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 7 | L1504425-05,3,250,250 | TO15_SFS | R140152 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07,3,250,250 | TO15_SFS | R140153 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07DUP,3,250,250 | TO15_SFS | R140154 | WG767580,ICAL10563 | DOES NOT MATCH, RR | A, LL, SIM | Y |
| 9 | L1504425-08,3,250,250 | TO15_SFS | R140155 | WG767580,ICAL10563 | RR, CARRYOVER | A, LL, SIM | Y |

# Alpha Analytical Air Lab
# Instrument Run Log

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10 | L1504425-09,3,250,250 | TO15_SFS | R140156 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 11 | L1504425-10,3,250,250 | TO15_SFS | R140157 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 12 | L1504264-03D,3,25,250 | TO15_SFS | R140158 | WG767580,ICAL10563 | | APH | Y |
| 16 | BA1031103 | TO15_SFS | R140159 | 250ml | | | NA |
| 9 | L1504425-08,3,250,250 | TO15_SFS | R140160 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07DUP,3,250,250 | TO15_SFS | R140161 | WG767580,ICAL10563 | APH/ TO15-LL/ TO15-SIM DUP | A, LL, SIM | Y |
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**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

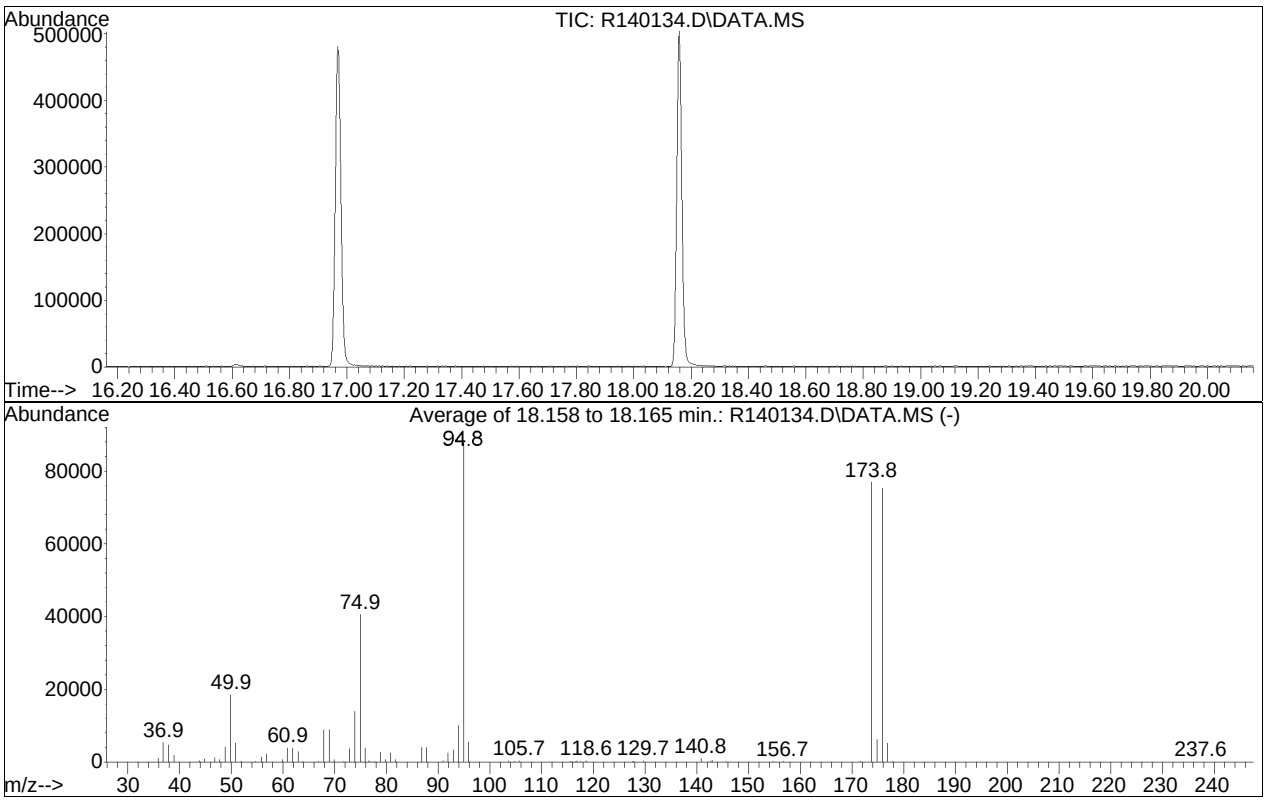
# Analytical Event

# Continuing Calibration
# BFB Tune

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140134.D
Acq On : 11 Mar 2015 11:12 am
Operator : AIRPIANO1:RY
Sample : WG767580-1,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 1 Sample Multiplier: 1

Integration File: ALIP-Range-all.E

Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Title : APH Analysis
Last Update : Sat Jan 03 12:12:55 2015




AutoFind: Scans 1934, 1935, 1936; Background Corrected with Scan 1927

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 21.0 | 18464 | PASS |
| 75 | 95 | 30 | 66 | 46.3 | 40605 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 87793 | PASS |
| 96 | 95 | 5 | 9 | 6.2 | 5481 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 87.6 | 76937 | PASS |
| 175 | 174 | 4 | 9 | 8.1 | 6197 | PASS |
| 176 | 174 | 93 | 101 | 98.0 | 75376 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 5216 | PASS |

# Continuing Calibration

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140135.D
Acq On : 11 Mar 2015 11:44 am
Operator : AIRPIANO1:RY
Sample : WG767580-2,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 12:29:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 77 | 0.00 |
| 2 | T | 1,3-butadiene | 0.430 | 0.362 | 15.8 | 71 | 0.00 |
| 3 | | isopentane | 2.931 | 2.444 | 16.6 | 76 | 0.00 |
| 4 | T | methyl tert butyl ether | 0.938 | 0.798 | 14.9 | 69 | 0.00 |
| 5 | | hexane | 3.389 | 2.793 | 17.6 | 75 | 0.00 |
| 6 | | cyclohexane | 2.744 | 2.454 | 10.6 | 72 | 0.00 |
| 7 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 76 | 0.00 |
| 8 | | 2,3-dimethylpentane | 0.675 | 0.620 | 8.1 | 72 | 0.00 |
| 9 | T | benzene | 0.275 | 0.244 | 11.3 | 72 | 0.00 |
| 10 | | heptane | 0.651 | 0.598 | 8.1 | 72 | 0.00 |
| 11 | H | C5-C8 Aliphatics Total | 0.698 | 0.624 | 10.6 | 72 | 0.00 |
| 12 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 72 | 0.00 |
| 13 | | toluene | 1.332 | 1.211 | 9.1 | 71 | 0.00 |
| 14 | | n-octane | 3.190 | 2.871 | 10.0 | 70 | 0.00 |
| 15 | | 2,3-dimethylheptane | 3.563 | 3.204 | 10.1 | 71 | 0.00 |
| 16 | T | ethyl benzene | 1.524 | 1.360 | 10.8 | 69 | 0.00 |
| 17 | T | m+p-xylene | 1.201 | 1.066 | 11.2 | 68 | 0.00 |
| 18 | | n-nonane | 3.396 | 3.106 | 8.5 | 71 | 0.00 |
| 19 | T | o-xylene | 1.228 | 1.113 | 9.4 | 71 | 0.00 |
| 20 | | decane | 3.578 | 3.272 | 8.6 | 72 | 0.00 |
| 21 | | butylcyclohexane | 3.996 | 3.570 | 10.7 | 71 | 0.00 |
| 22 | | n-undecane | 3.594 | 3.328 | 7.4 | 68 | 0.00 |
| 23 | T | naphthalene | 1.690 | 1.591 | 5.9 | 73 | 0.00 |
| 24 | | n-dodecane | 3.332 | 3.312 | 0.6 | 72 | 0.00 |
| 25 | H | C9-C12 Aliphatics Total | 3.570 | 3.325 | 6.9 | 71 | 0.00 |
| 27 | | C9-C10 Aromatics Total | 0.565 | 0.504 | 10.8 | 69 | -0.60# |
| 28 | s | bromochloromethane (TIC) | 7.121 | 7.628 | -7.1 | 77 | 0.00 |
| 29 | s | 1,4-difluorobenzene (TIC) | 10.156 | 10.269 | -1.1 | 75 | 0.00 |
| 30 | s | chlorobenzene-D5 (TIC) | 13.240 | 13.274 | -0.3 | 74 | 0.00 |
| 31 | s | 1,2-dichloroethane-D4 (TIC) | 3.687 | 3.662 | 0.7 | 77 | 0.00 |
| 32 | s | toluene-D8 (TIC) | 11.252 | 11.114 | 1.2 | 72 | 0.00 |
| 33 | s | bromofluorobenzene (TIC) | 12.865 | 12.436 | 3.3 | 71 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140135.D
Acq On : 11 Mar 2015 11:44 am
Operator : AIRPIANO1:RY
Sample : WG767580-2,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 12:29:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 536672 | 10.000 | ug/m3 | 0.00 |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2192438 | 10.000 | ug/m3 | 0.00 |
| 12) chlorobenzene-D5 | 16.97 | 54 | 489846 | 10.000 | ug/m3 | 0.00 |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3736654M4 | 10.713 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 107.13% | | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 5030462M4 | 10.112 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 101.12% | | |
| 30) chlorobenzene-D5 (TIC) | 16.96 | TIC | 6502256M4 | 10.025 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 100.25% | | |
| 31) 1,2-dichloroethane-D4 ... | 11.13 | TIC | 1793666M4 | 9.932 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 99.32% | | |
| 32) toluene-D8 (TIC) | 15.27 | TIC | 10888774 | 19.756 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 197.56% | | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 6091628 | 9.667 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 96.67% | | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 429885 | 18.638 | ug/m3# | 100 |
| 3) isopentane | 6.21 | TIC | 3869487M4 | 24.598 | ug/m3 | |
| 4) methyl tert butyl ether | 9.07 | 73 | 1540874 | 30.613 | ug/m3 | 99 |
| 5) hexane | 10.28 | TIC | 5276192M4 | 29.006 | ug/m3 | |
| 6) cyclohexane | 12.40 | TIC | 4531001M4 | 30.772 | ug/m3 | |
| 8) 2,3-dimethylpentane | 12.68 | TIC | 5569801M4 | 37.611 | ug/m3 | |
| 9) benzene | 12.09 | 78 | 1706684 | 28.327 | ug/m3 | 99 |
| 10) heptane | 13.66 | TIC | 5372358 | 37.662 | ug/m3 | 99 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 31148043m | 203.667 | ug/m3 | |
| 13) toluene | 15.37 | 91 | 2235877 | 34.265 | ug/m3 | 98 |
| 14) n-octane | 16.28 | TIC | 6567352 | 42.030 | ug/m3 | 99 |
| 15) 2,3-dimethylheptane | 17.34 | TIC | 8224769 | 47.121 | ug/m3 | 100 |
| 16) ethyl benzene | 17.30 | 91 | 2890455 | 38.718 | ug/m3 | 100 |
| 17) m+p-xylene | 17.43 | 91 | 2267026 | 38.534 | ug/m3# | 84 |
| 18) n-nonane | 17.94 | TIC | 7972630 | 47.921 | ug/m3 | 100 |
| 19) o-xylene | 17.81 | 91 | 2366380 | 39.343 | ug/m3 | 99 |
| 20) decane | 19.13 | TIC | 9327375M4 | 53.217 | ug/m3 | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140135.D
Acq On : 11 Mar 2015 11:44 am
Operator : AIRPIANO1:RY
Sample : WG767580-2,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 12:29:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 21) butylcyclohexane | 19.60 | TIC | 10020497 | 51.190 | ug/m3 | 100 |
| 22) n-undecane | 20.10 | TIC | 10418434 | 59.177 | ug/m3 | 100 |
| 23) naphthalene | 21.13 | 128 | 4084446M4 | 49.335 | ug/m3 | |
| 24) n-dodecane | 21.02 | TIC | 11290865M4 | 69.186 | ug/m3 | |
| 25) C9-C12 Aliphatics Total | 18.07 | TIC | 57631198m | 329.512 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.78 | 120 | 5209613M5 | 188.068 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.40 | 134 | 964970M5 | 34.836 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 6174584 | 222.903 | ug/m3 | |

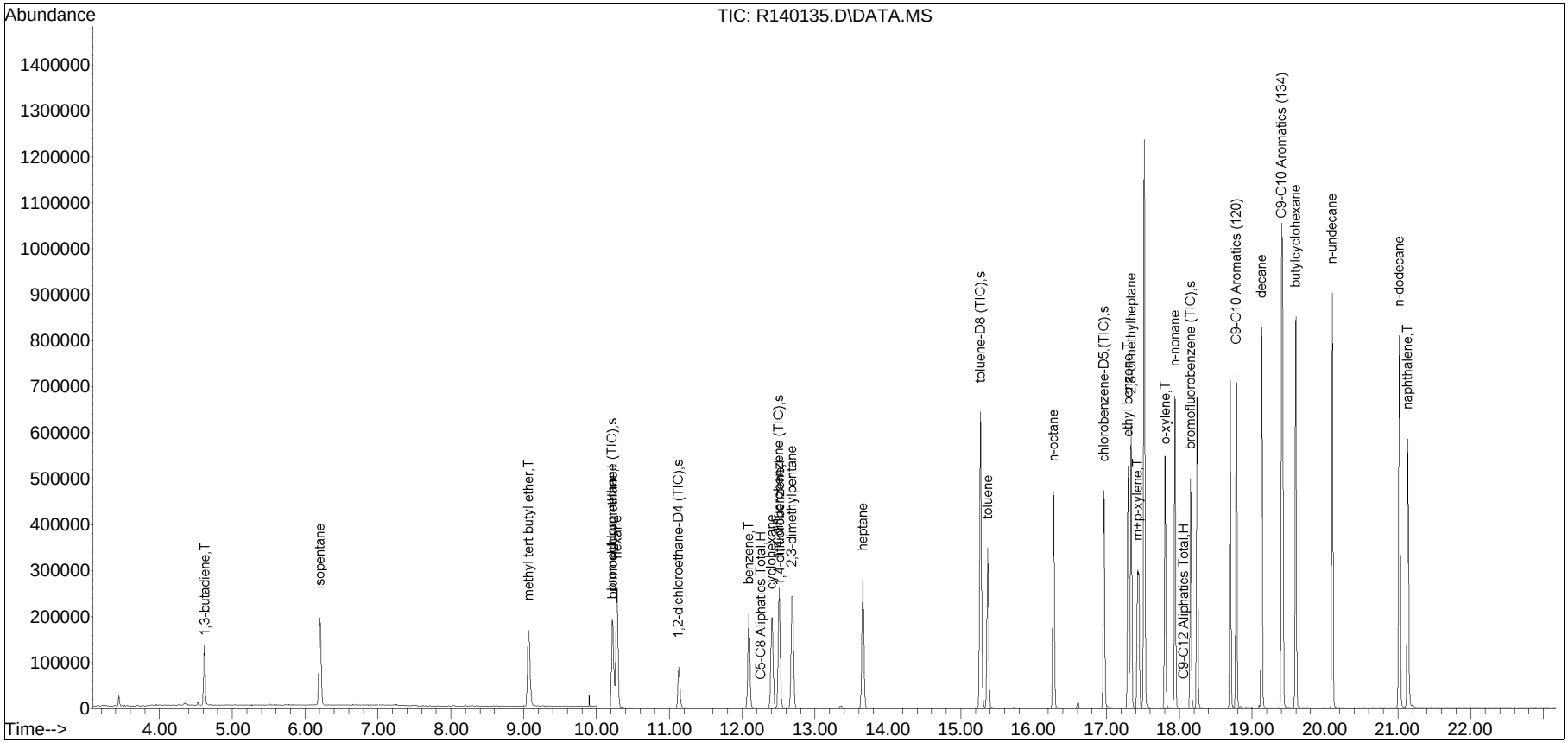
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140135.D
Acq On : 11 Mar 2015 11:44 am
Operator : AIRPIANO1:RY
Sample : WG767580-2,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 11 12:29:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

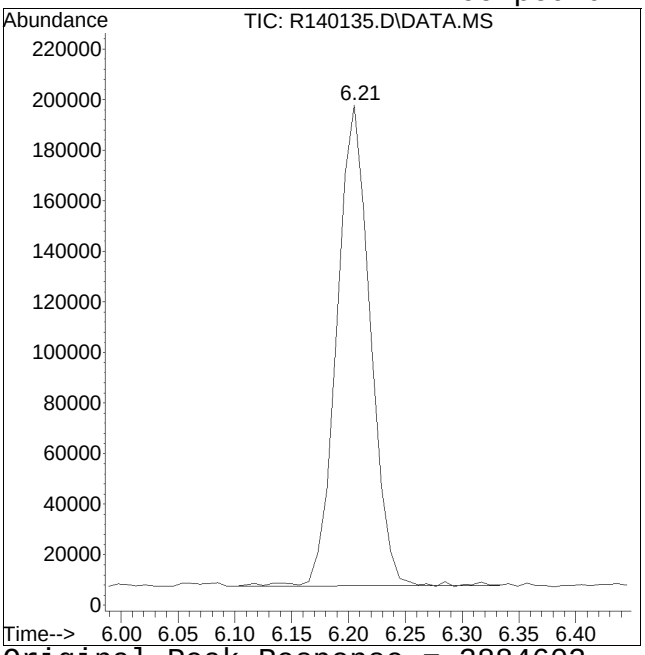
Sub List : Default - All compounds listed

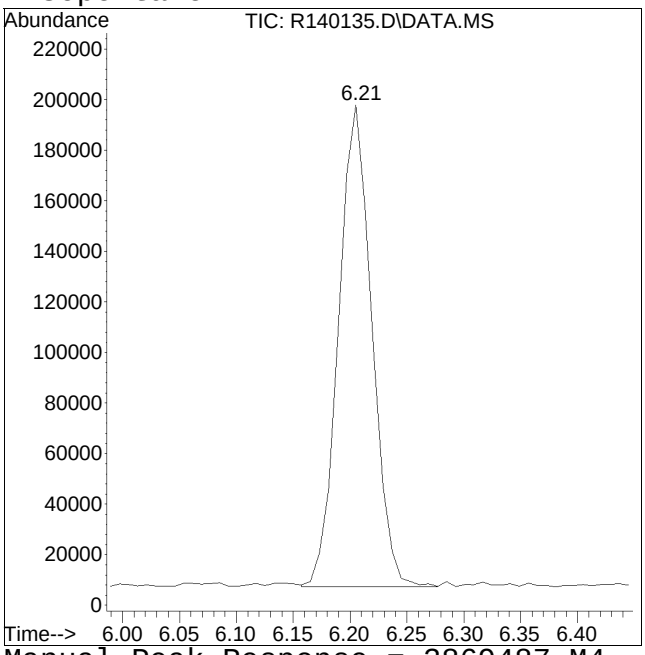


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #3: isopentane



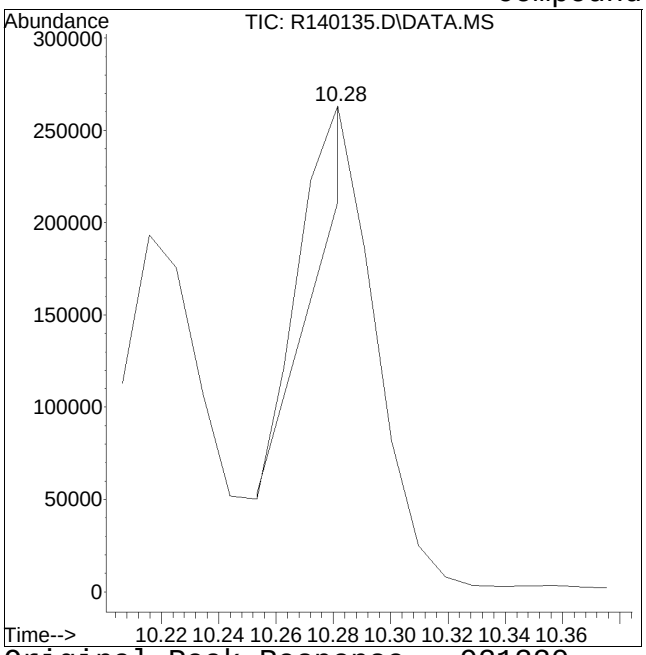

Original Peak Response = 3884602 Manual Peak Response = 3869487 M4
M4 = Poor automated baseline construction.

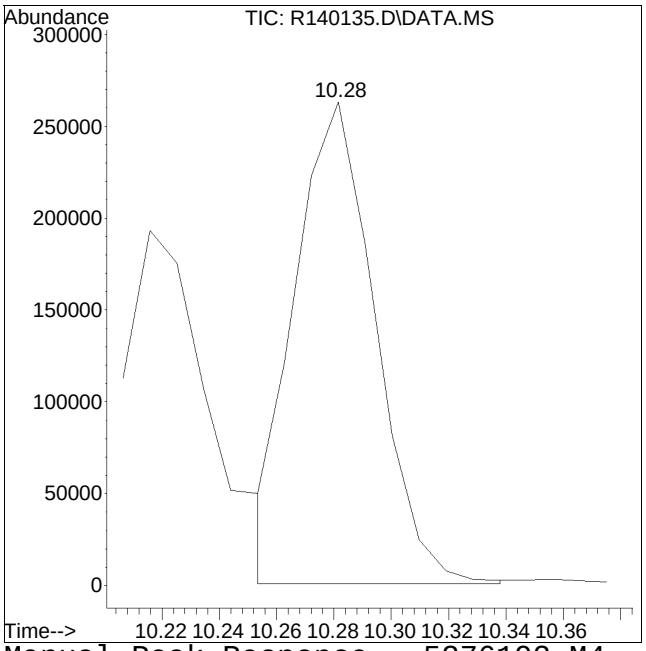
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R140135.D
Date Inj'd : 3/11/2015 11:44 am
Sample : WG767580-2,3,250,250

Method : APH150101.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/11/2015 12:26 pm

Compound #5: hexane



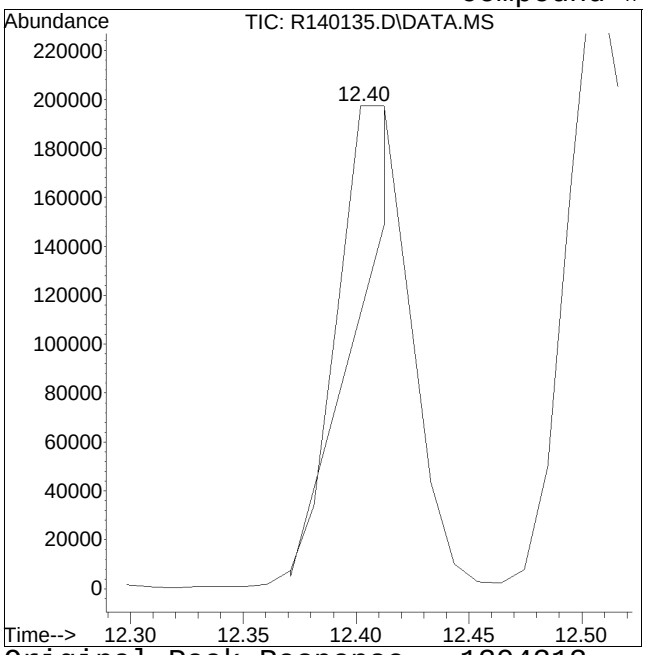



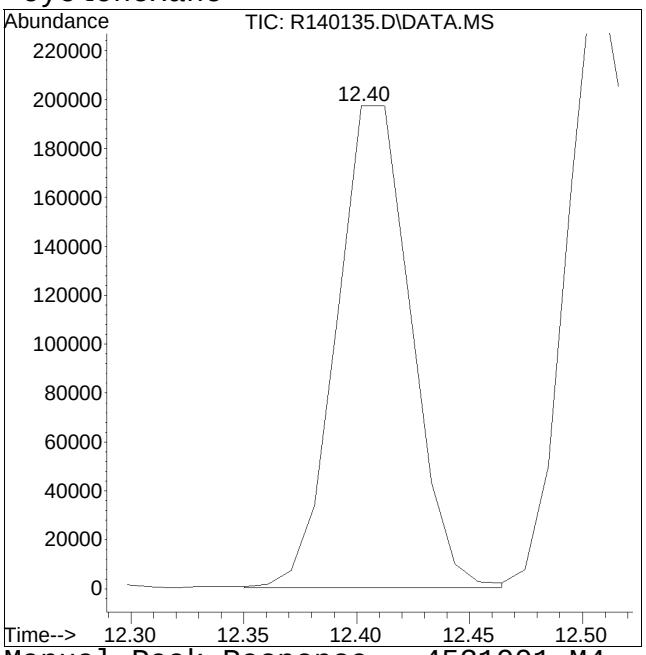

Original Peak Response = 921320 Manual Peak Response = 5276192 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #6: cyclohexane



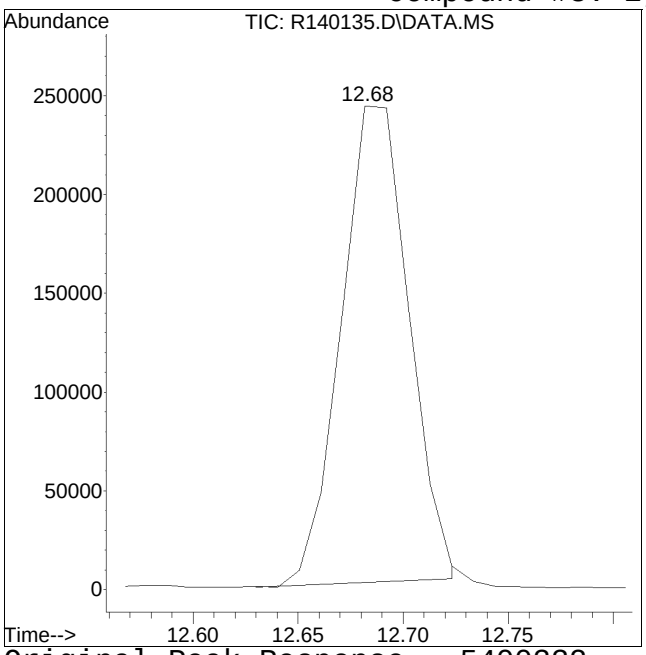



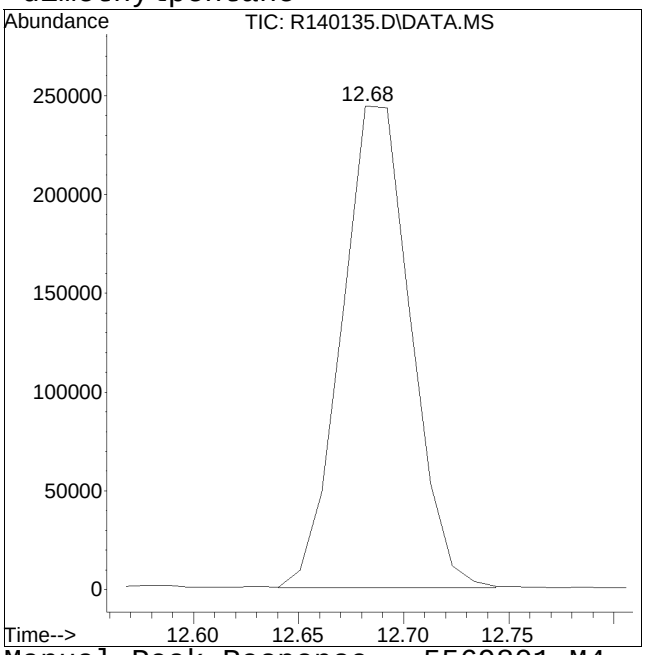

Original Peak Response = 1304313 Manual Peak Response = 4531001 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #8: 2,3-dimethylpentane



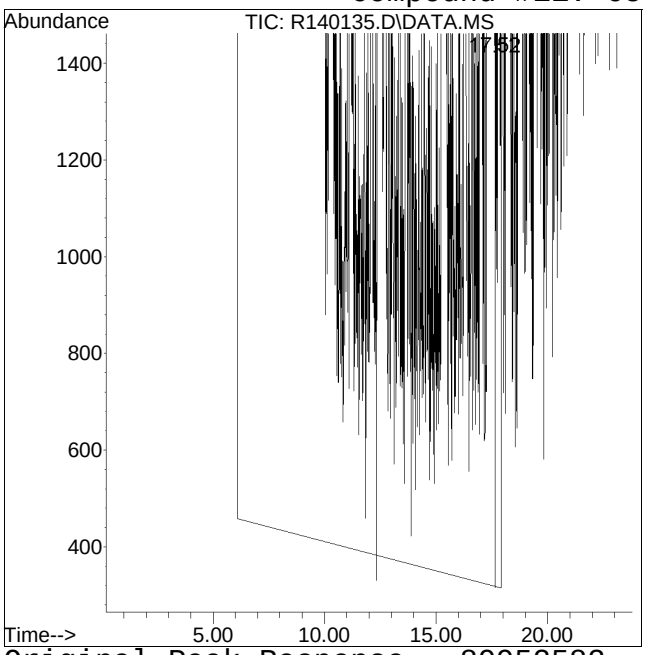




Original Peak Response = 5400332 Manual Peak Response = 5569801 M4
M4 = Poor automated baseline construction.

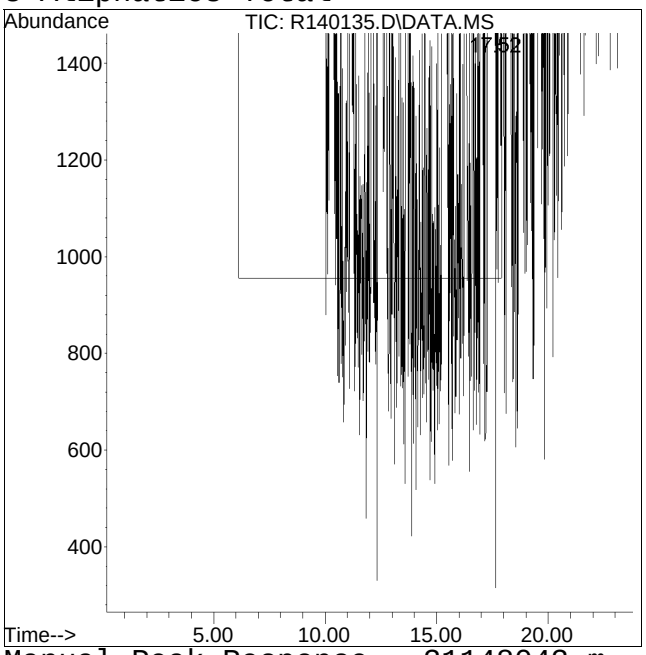
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 89952582

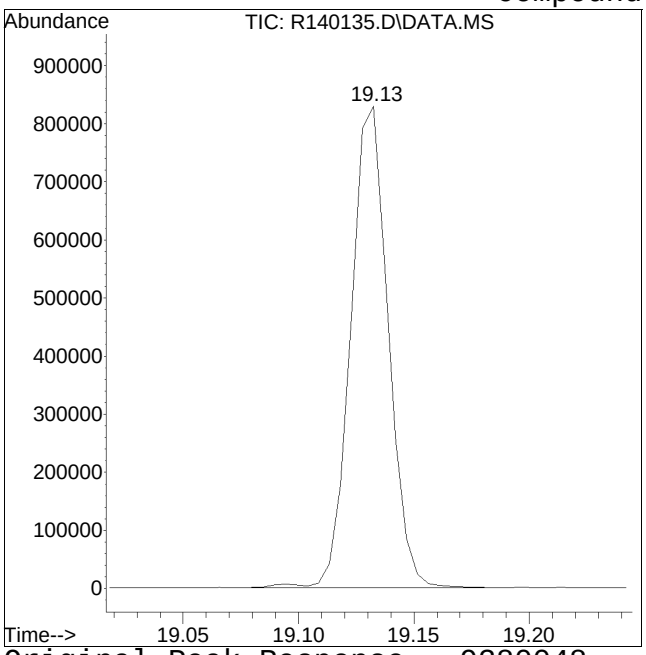


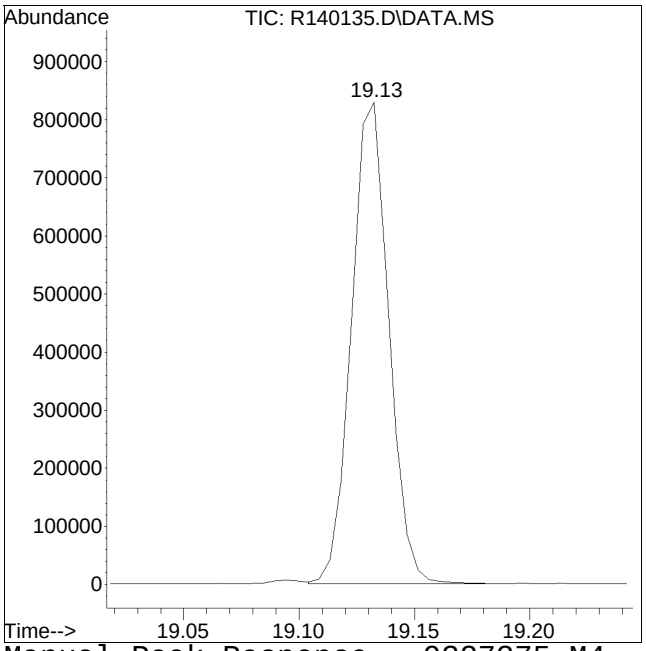

Manual Peak Response = 31148043 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #20: decane



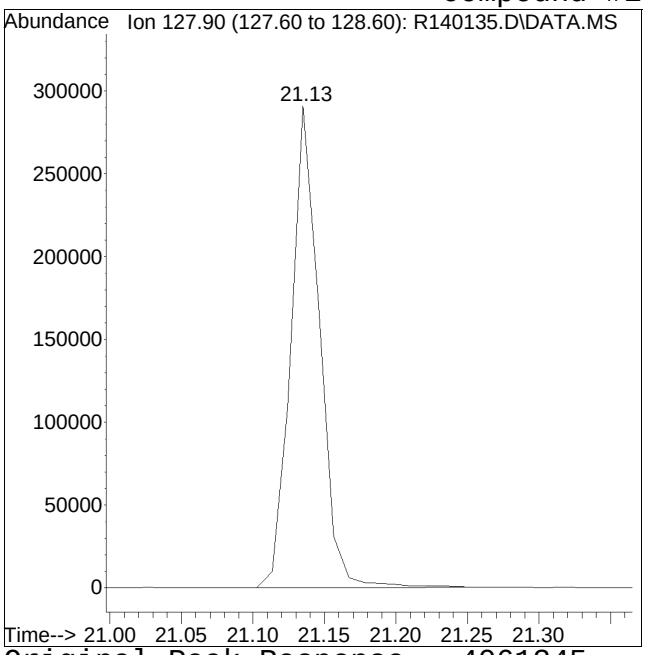




Original Peak Response = 9380048 Manual Peak Response = 9327375 M4
M4 = Poor automated baseline construction.

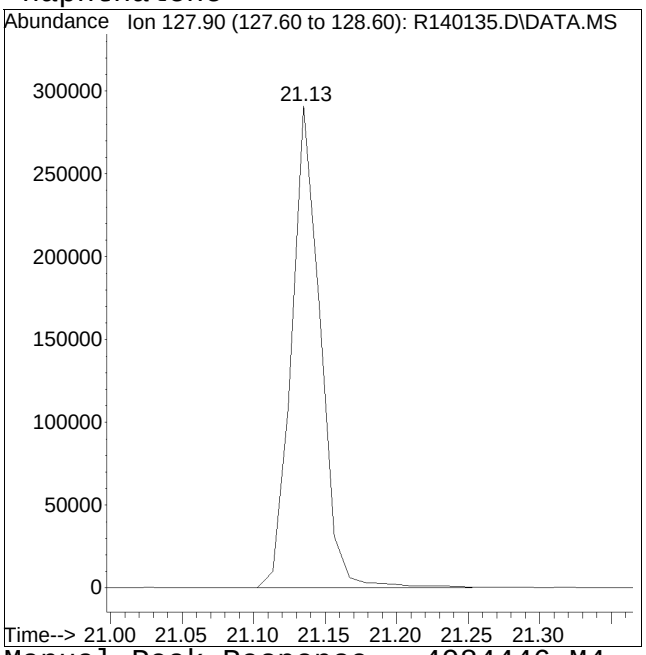
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #23: naphthalene




Original Peak Response = 4061345



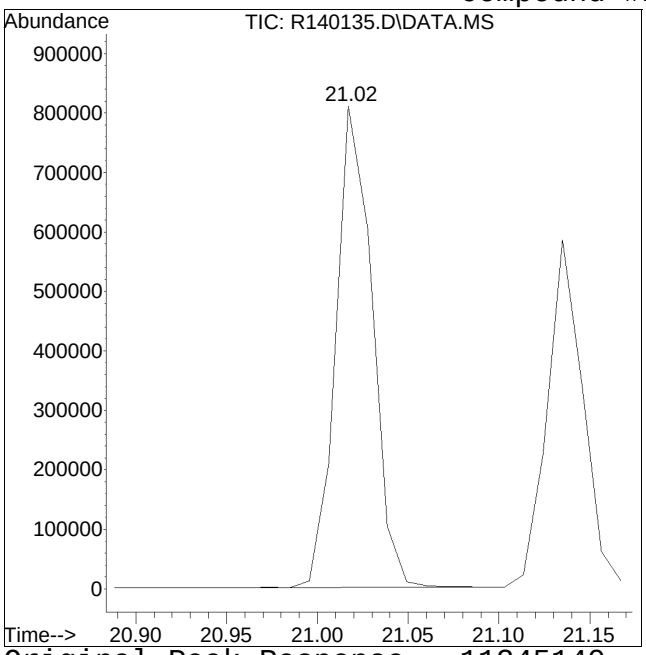

Manual Peak Response = 4084446 M4

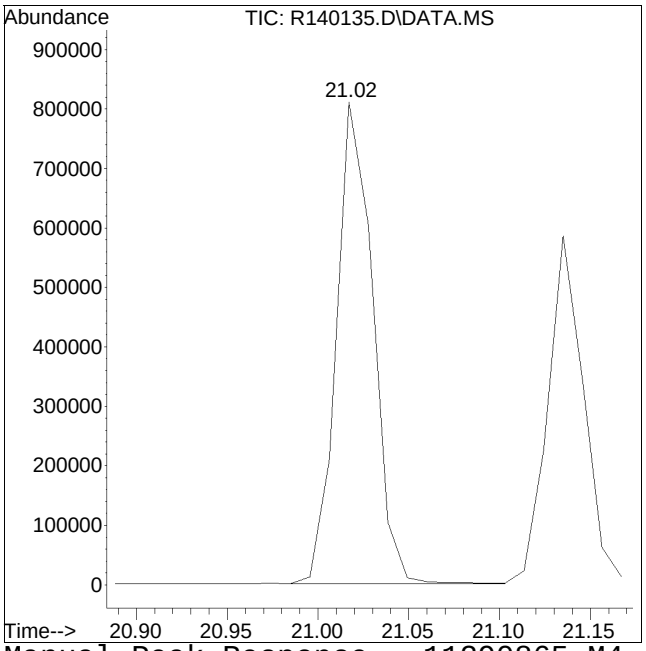
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #24: n-dodecane



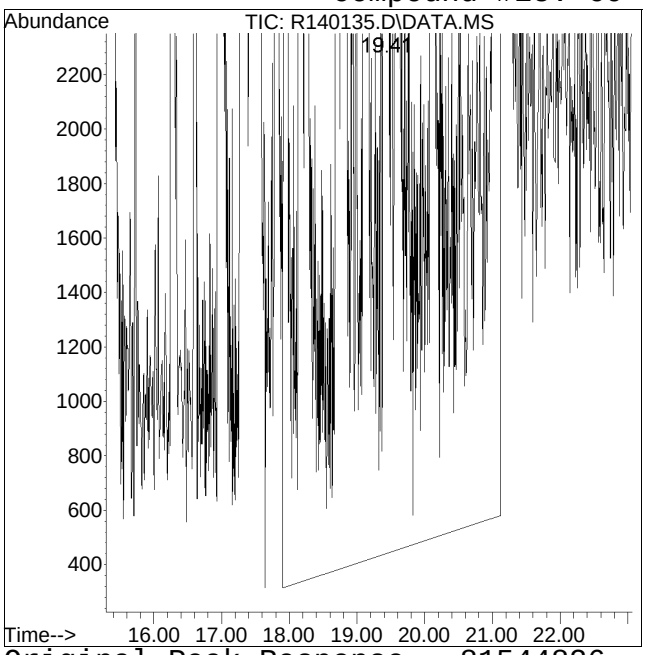




Original Peak Response = 11245140 Manual Peak Response = 11290865 M4
M4 = Poor automated baseline construction.

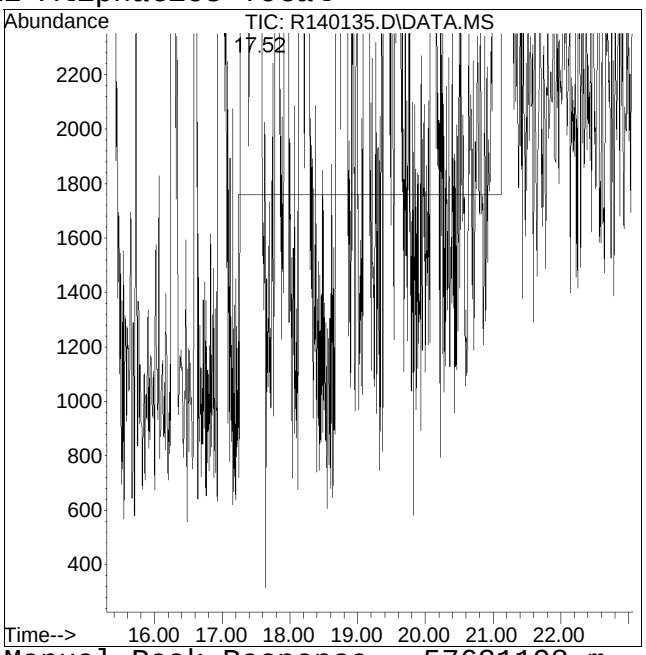
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM150311A\ | : APH150101.M |
| Data File | : R140135.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 11:44 am | Instrument | : Air Piano 1 |
| Sample | : WG767580-2,3,250,250 | Quant Date | : 3/11/2015 12:26 pm |

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 81544826

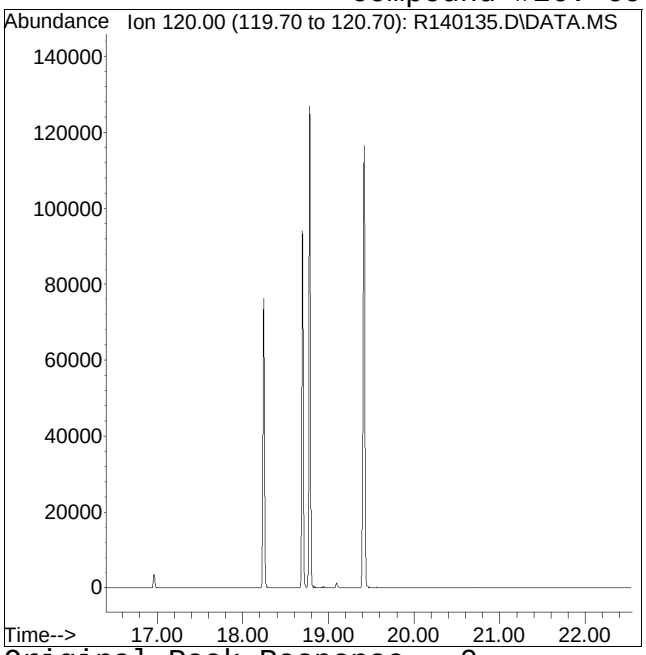


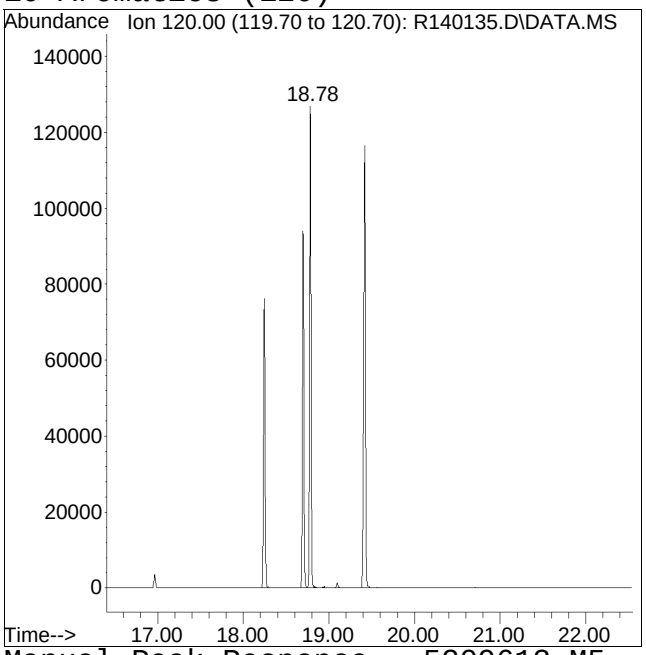

Manual Peak Response = 57631198 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #26: C9-C10 Aromatics (120)



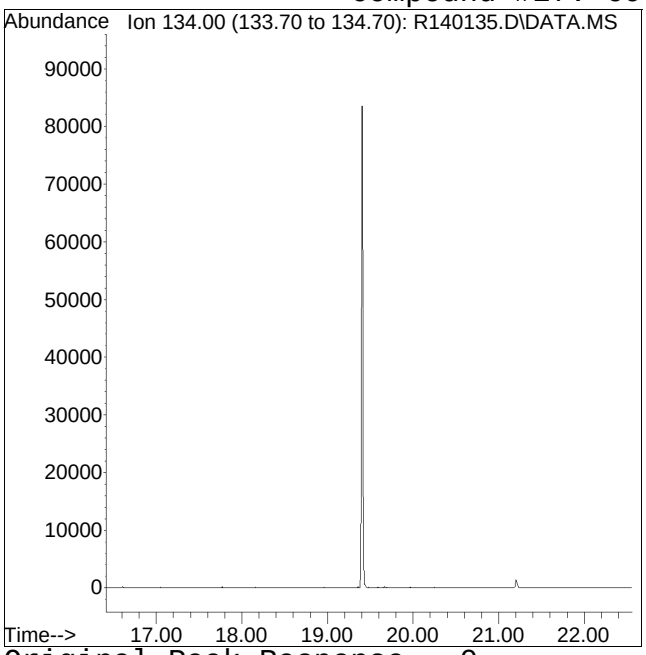



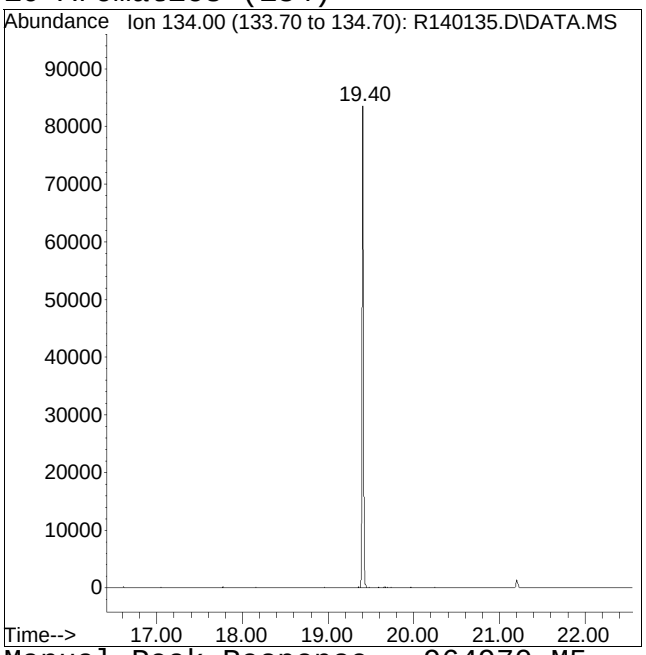

Original Peak Response = 0 Manual Peak Response = 5209613 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #27: C9-C10 Aromatics (134)



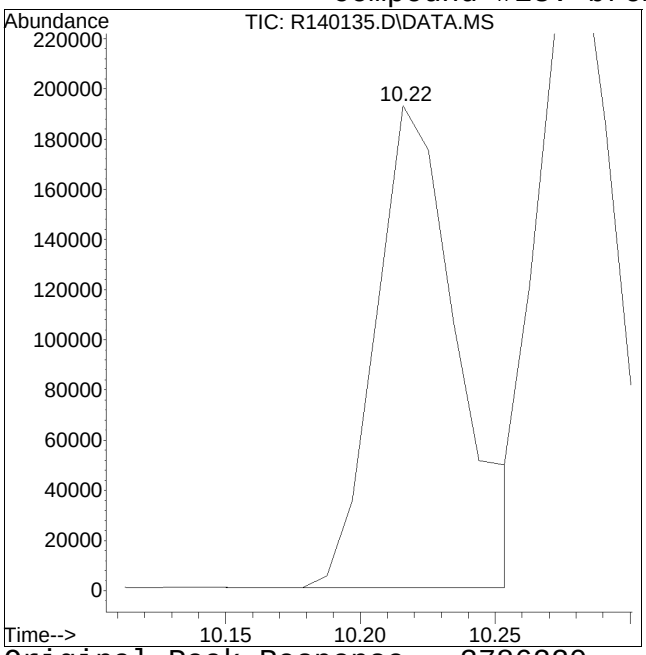

Original Peak Response = 0 Manual Peak Response = 964970 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

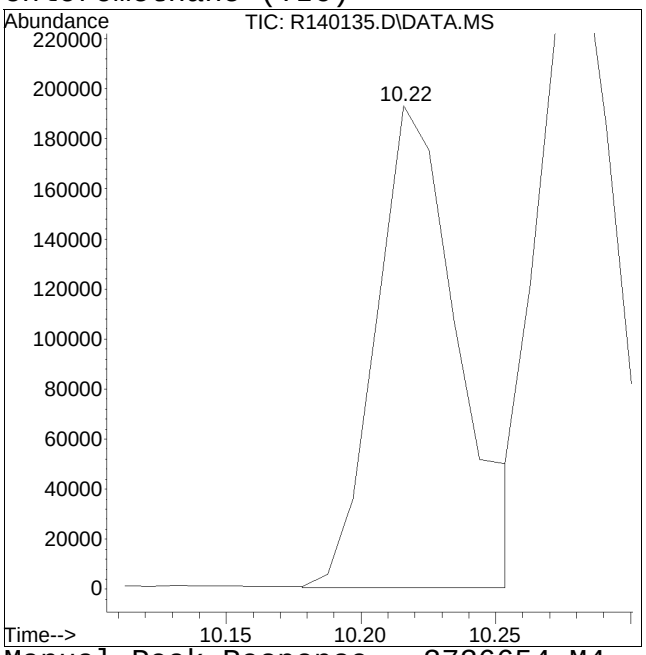
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R140135.D
Date Inj'd : 3/11/2015 11:44 am
Sample : WG767580-2,3,250,250

Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/11/2015 12:26 pm

Compound #28: bromochloromethane (TIC)



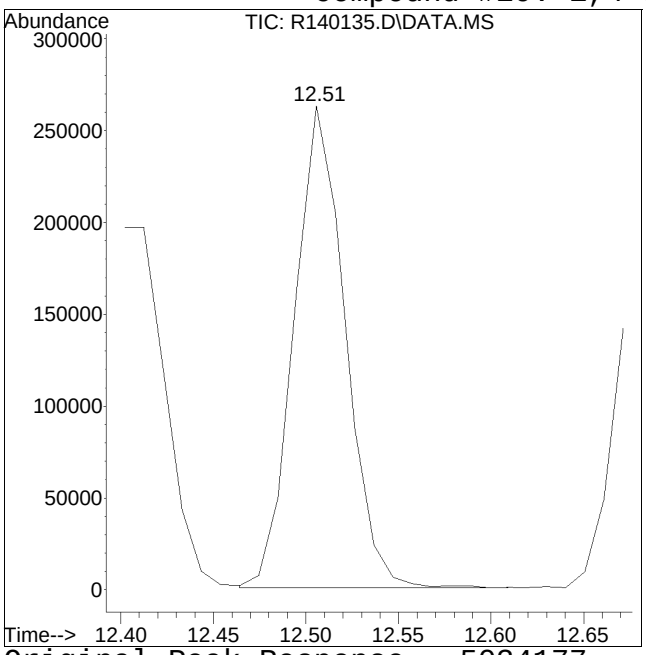




Original Peak Response = 3786220 Manual Peak Response = 3736654 M4
M4 = Poor automated baseline construction.

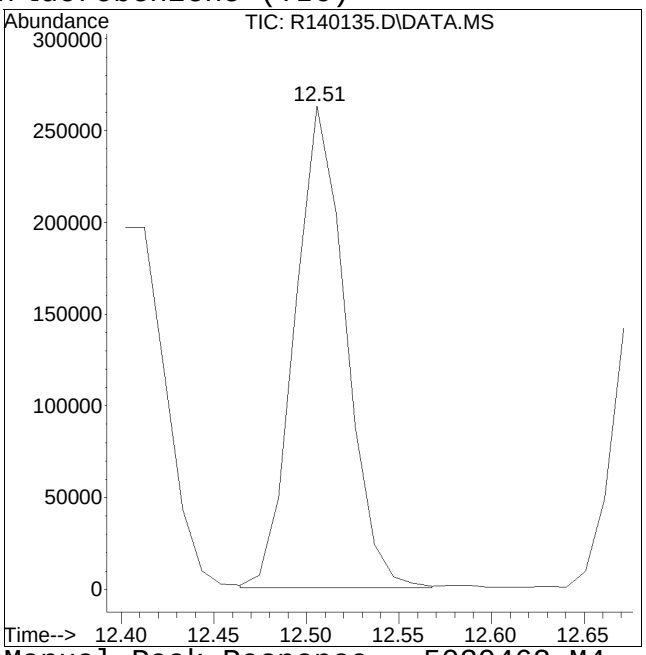
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R140135.D
Date Inj'd : 3/11/2015 11:44 am
Sample : WG767580-2,3,250,250
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/11/2015 12:26 pm

Compound #29: 1,4-difluorobenzene (TIC)




Original Peak Response = 5034177



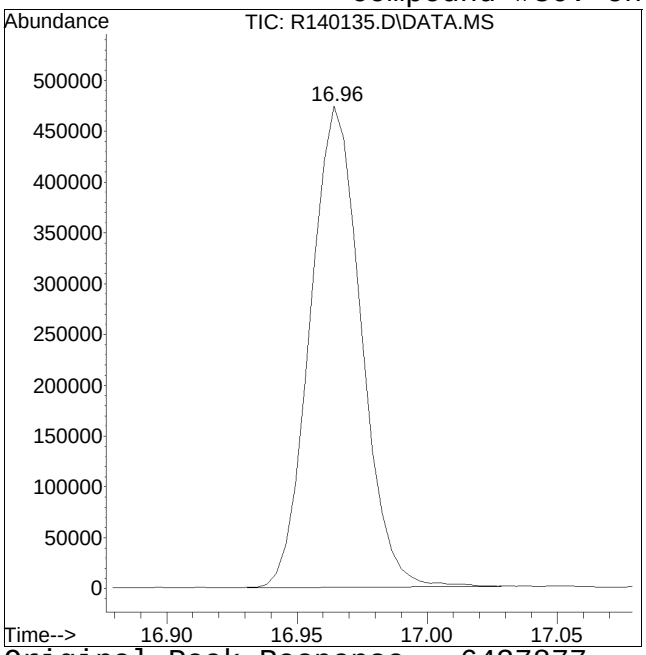

Manual Peak Response = 5030462 M4

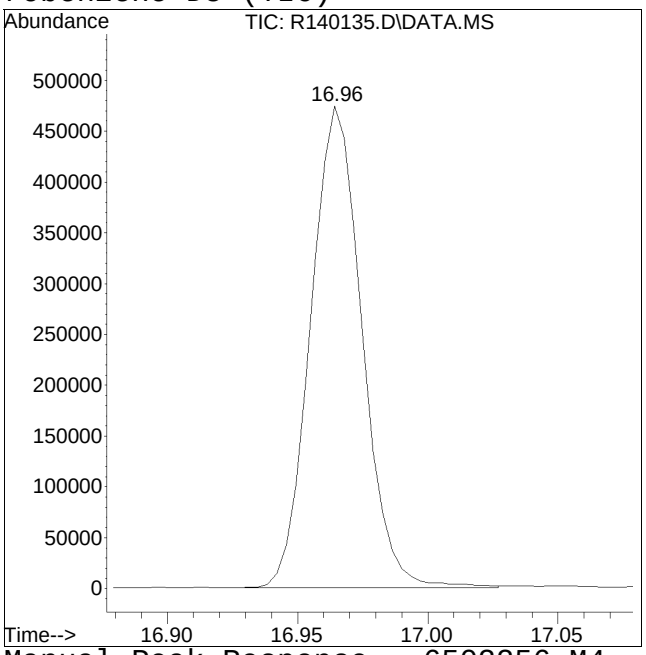
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #30: chlorobenzene-D5 (TIC)



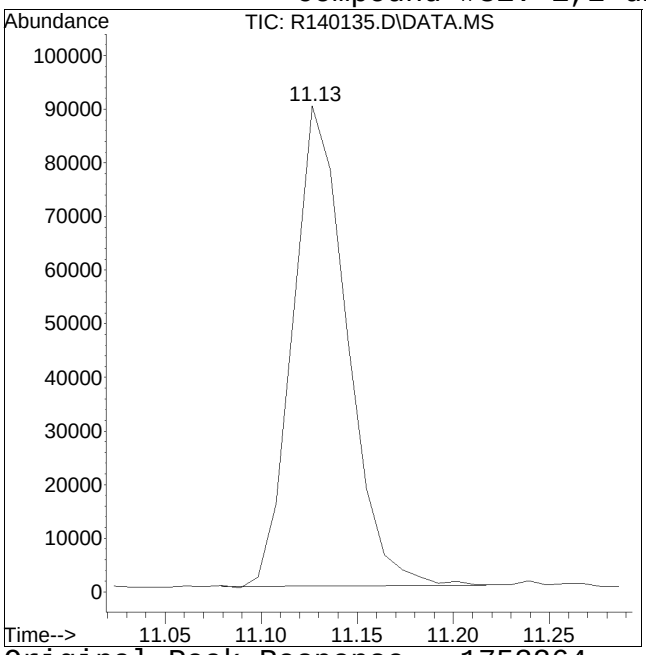



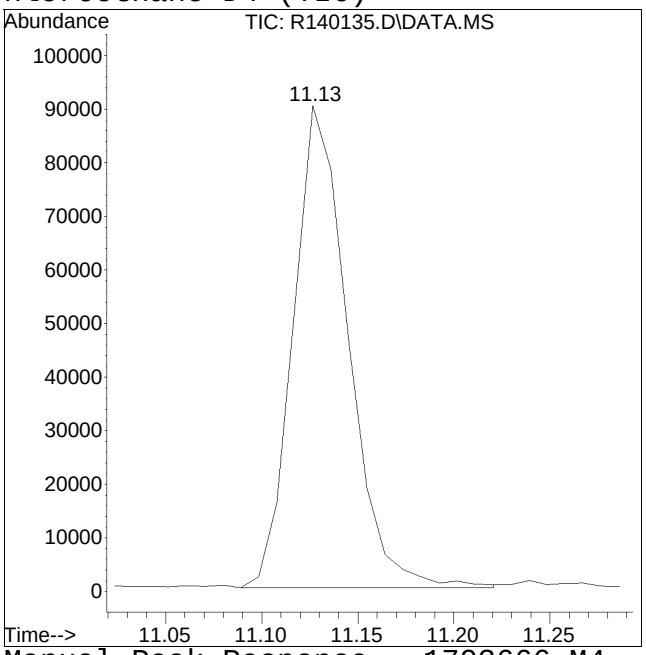

Original Peak Response = 6437877 Manual Peak Response = 6502256 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R140135.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:44 am Instrument : Air Piano 1
Sample : WG767580-2,3,250,250 Quant Date : 3/11/2015 12:26 pm

Compound #31: 1,2-dichloroethane-D4 (TIC)




Original Peak Response = 1753264 Manual Peak Response = 1793666 M4
M4 = Poor automated baseline construction.

# Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140146.D
Acq On : 11 Mar 2015 7:46 pm
Operator : AIRPIANO1:RY
Sample : L1504425-06,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:08:56 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 484859 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 90.35% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1893445 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 86.36% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 450021 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 91.87% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3614539 | 11.280 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 112.80% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4276506 | 9.357 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 93.57% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 5907209 | 9.914 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 99.14% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 0.00 | | 0 | N.D. | | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 296468 | 2.245 | ug/m3 | |
| 13) toluene | 0.00 | | 0 | N.D. | | |
| 16) ethyl benzene | 0.00 | | 0 | N.D. | | |
| 17) m+p-xylene | 0.00 | | 0 | N.D. | | |
| 19) o-xylene | 0.00 | | 0 | N.D. | | |
| 23) naphthalene | 0.00 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Total | 18.07 | | 0 | N.D. d | | |
| 27) C9-C10 Aromatics Total | 0.00 | | 0 | N.D. | | |

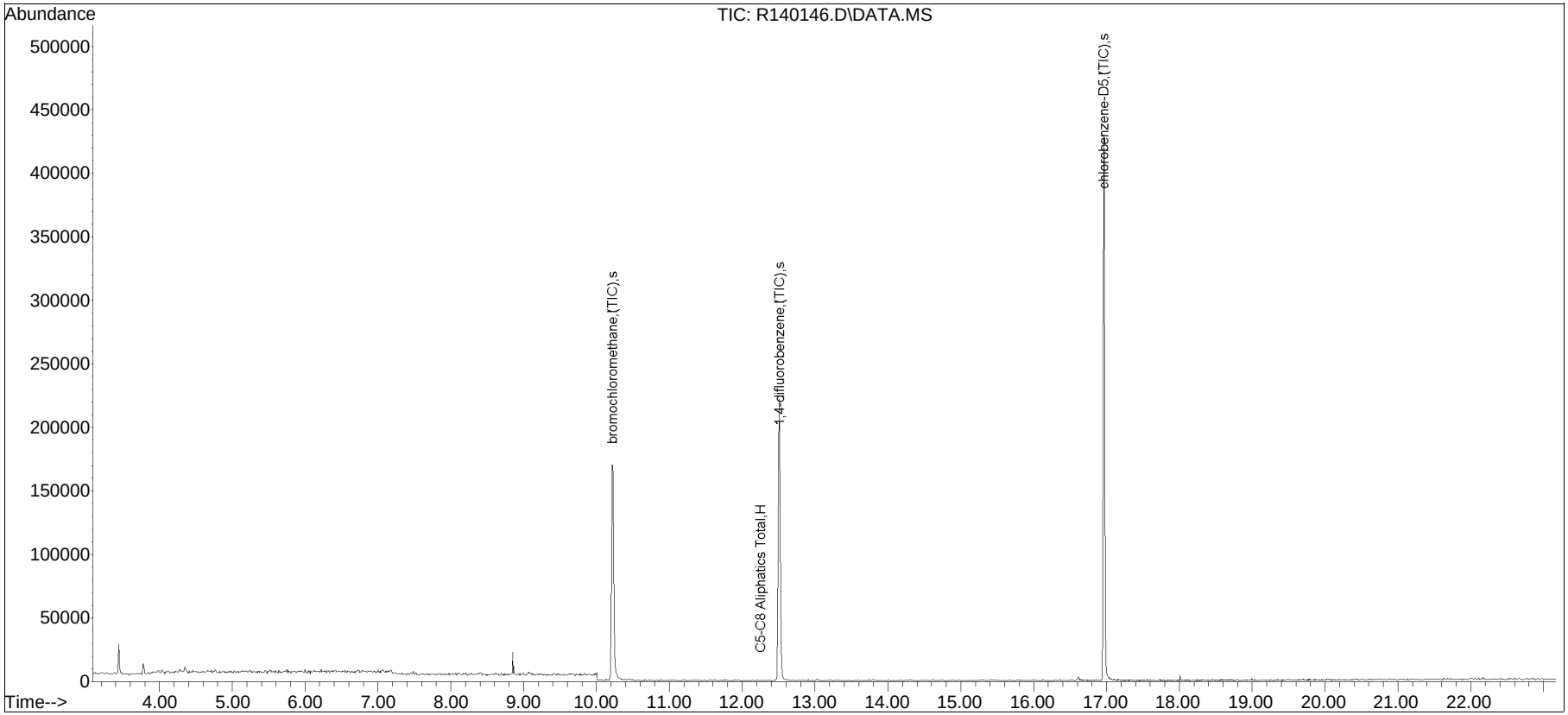
(#) = qualifier out of range (m) = manual integration (+) = signals summed

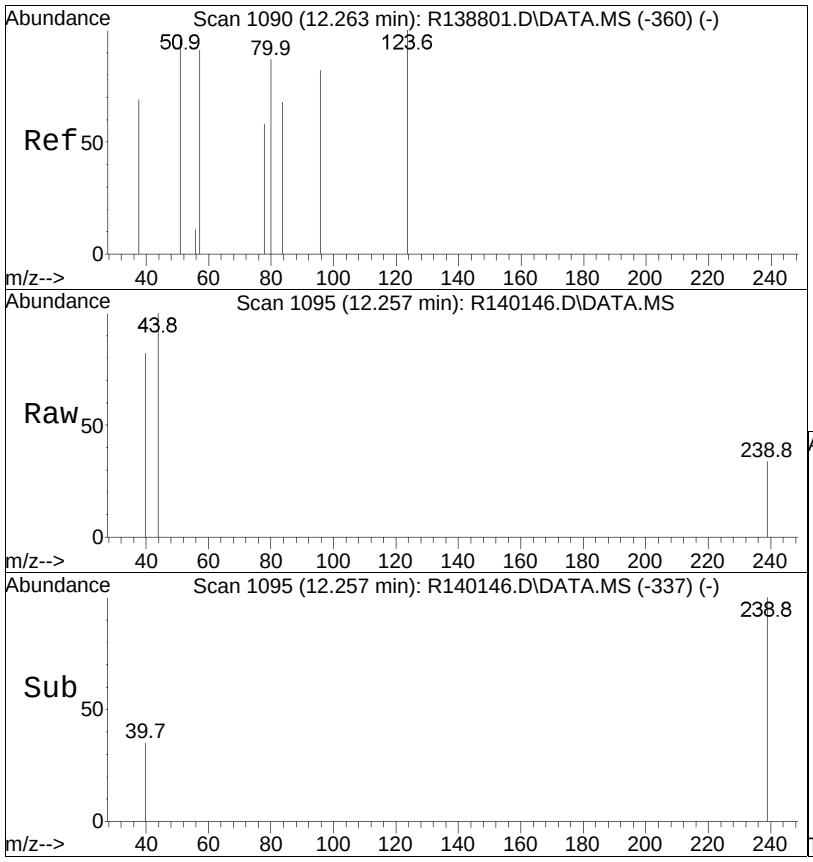
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140146.D
Acq On : 11 Mar 2015 7:46 pm
Operator : AIRPIANO1:RY
Sample : L1504425-06,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:08:56 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

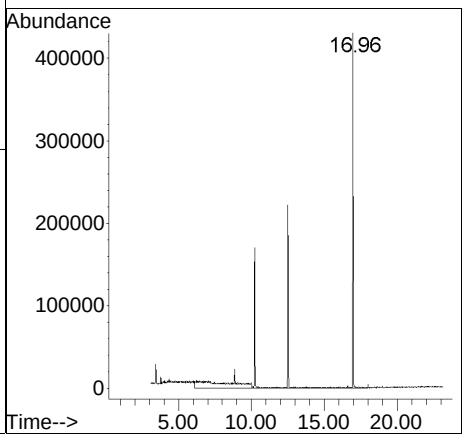
Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D






#11
C5-C8 Aliphatics Total
Concen: 2.24 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140146.D
Acq: 11 Mar 2015 7:46 pm

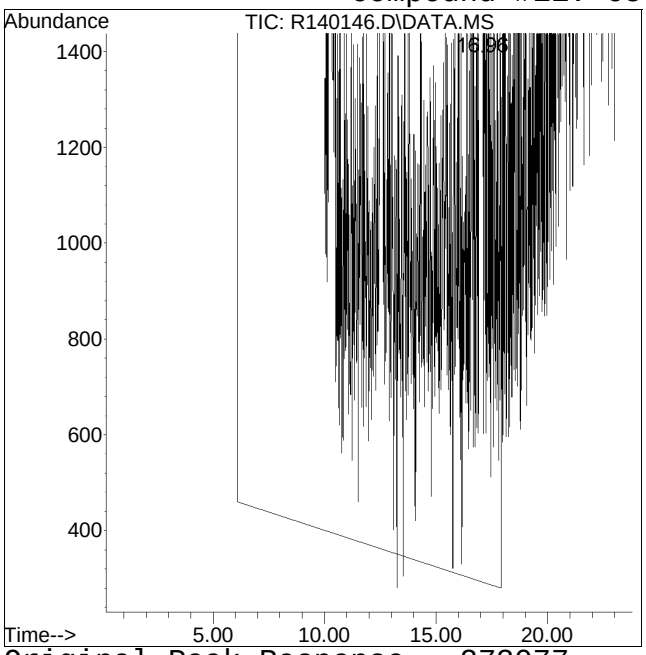
Tgt Ion:TIC Resp: 296468



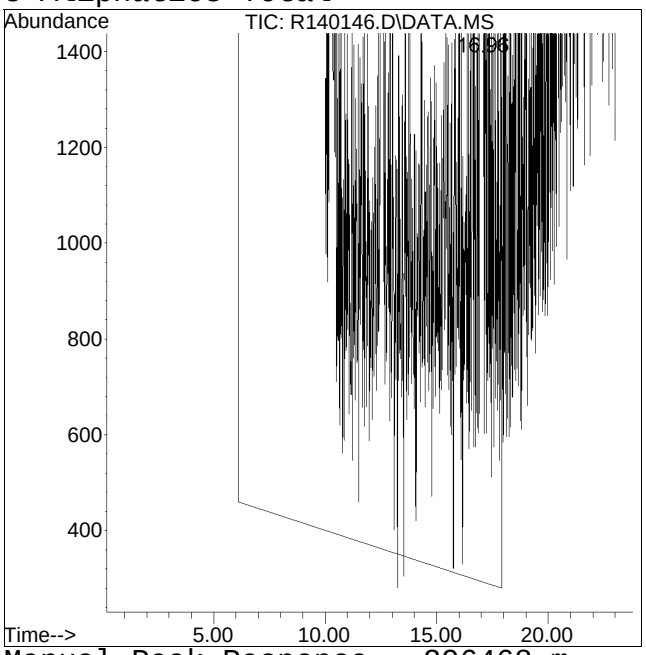
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140146.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 7:46 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-06,3,250,250 | Quant Date | : 3/12/2015 7:34 am |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 273077

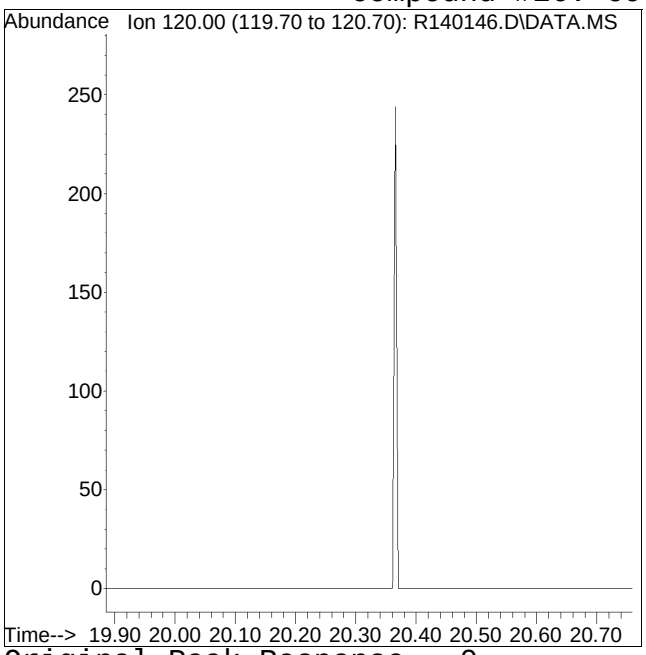


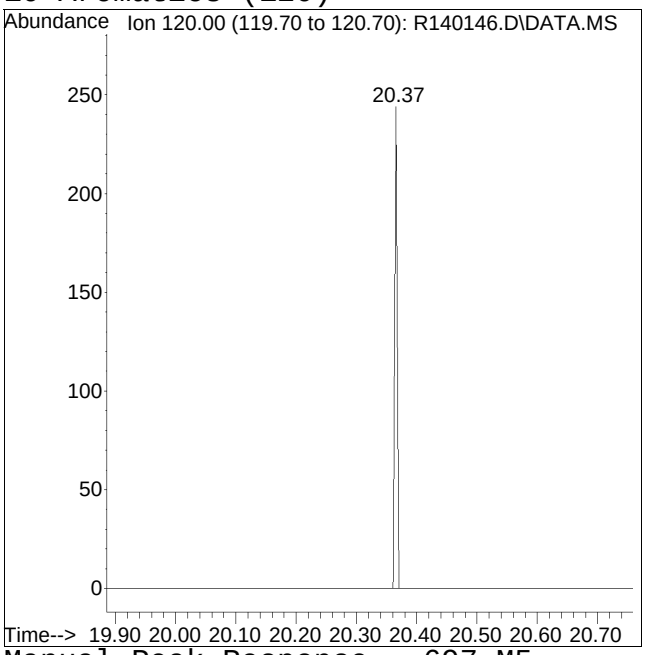

Manual Peak Response = 296468 m

# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM Method | : APH150101.M |
| Data File | : R140146.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 7:46 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-06,3,250,250 | Quant Date | : 3/12/2015 7:34 am |

## Compound #26: C9-C10 Aromatics (120)



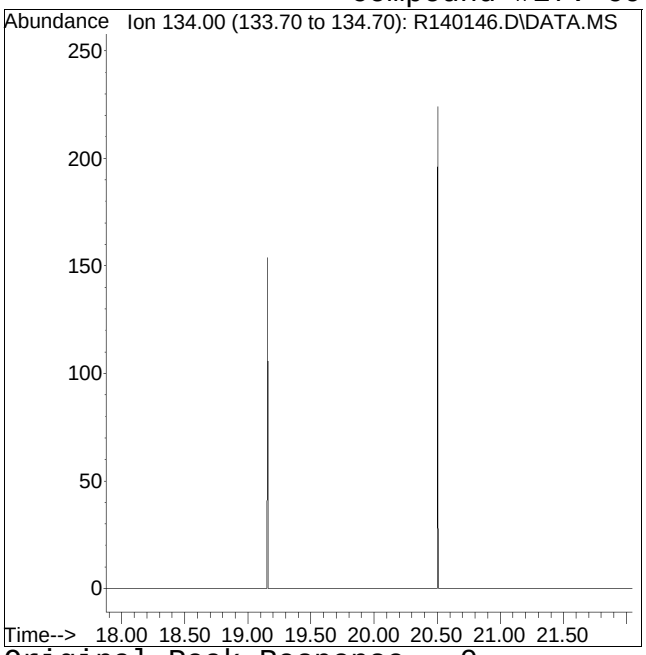

Original Peak Response = 0 Manual Peak Response = 697 M5

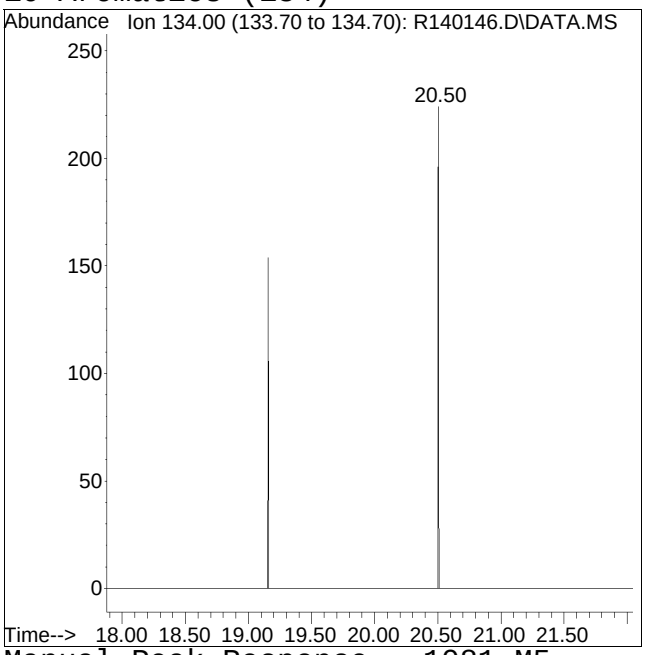
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140146.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 7:46 pm Instrument : Air Piano 1
Sample : L1504425-06,3,250,250 Quant Date : 3/12/2015 7:34 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 1081 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140147.D
Acq On : 11 Mar 2015 8:19 pm
Operator : AIRPIANO1:RY
Sample : L1504425-11,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 16 11:31:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

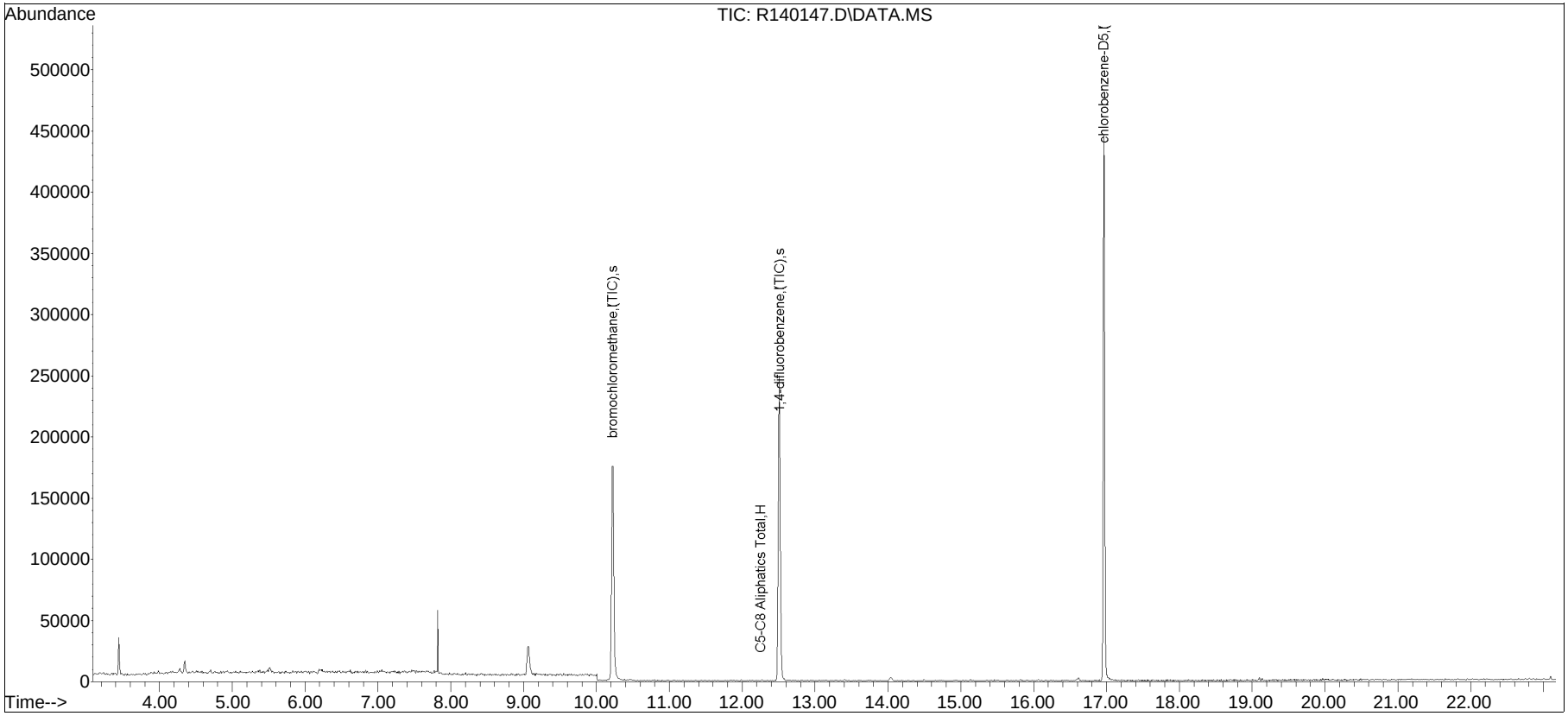
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 509765 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 94.99% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2090842 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 95.37% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 476588 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 97.29% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3810291 | 11.228 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 112.28% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4731689 | 9.776 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 97.76% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 6148157 | 9.743 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 97.43% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 0.00 | | 0 | N.D. | | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 420106 | 2.880 | ug/m3 | |
| 13) toluene | 0.00 | | 0 | N.D. | | |
| 16) ethyl benzene | 0.00 | | 0 | N.D. | | |
| 17) m+p-xylene | 0.00 | | 0 | N.D. | | |
| 19) o-xylene | 0.00 | | 0 | N.D. | | |
| 23) naphthalene | 0.00 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Total | 18.07 | | 0 | N.D. d | | |
| 27) C9-C10 Aromatics Total | 0.00 | | 0 | N.D. | | |

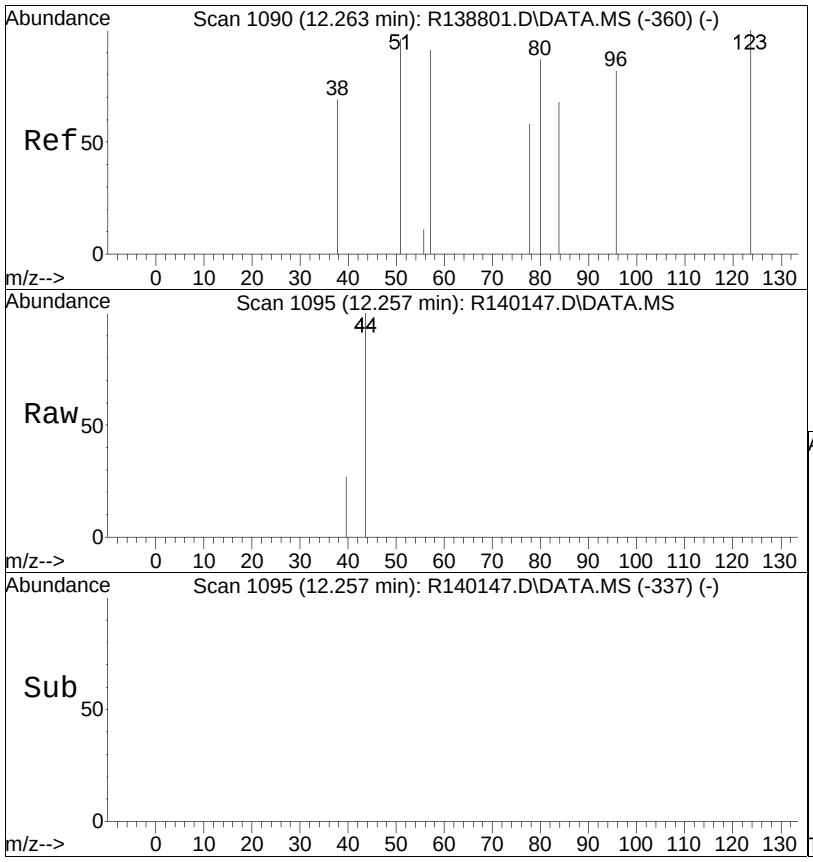
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140147.D
Acq On : 11 Mar 2015 8:19 pm
Operator : AIRPIANO1:RY
Sample : L1504425-11,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 2 Sample Multiplier: 1

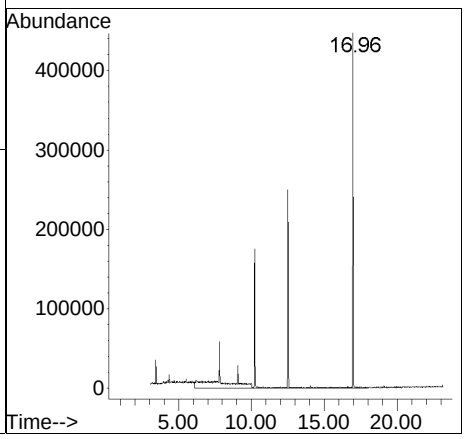
Quant Time: Mar 16 11:31:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration






#11
C5-C8 Aliphatics Total
Concen: 2.88 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

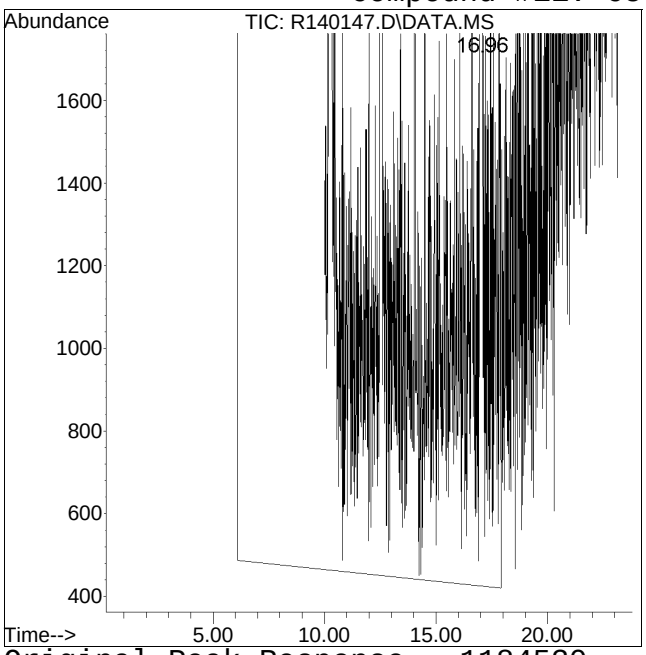
Tgt Ion:TIC Resp: 420106



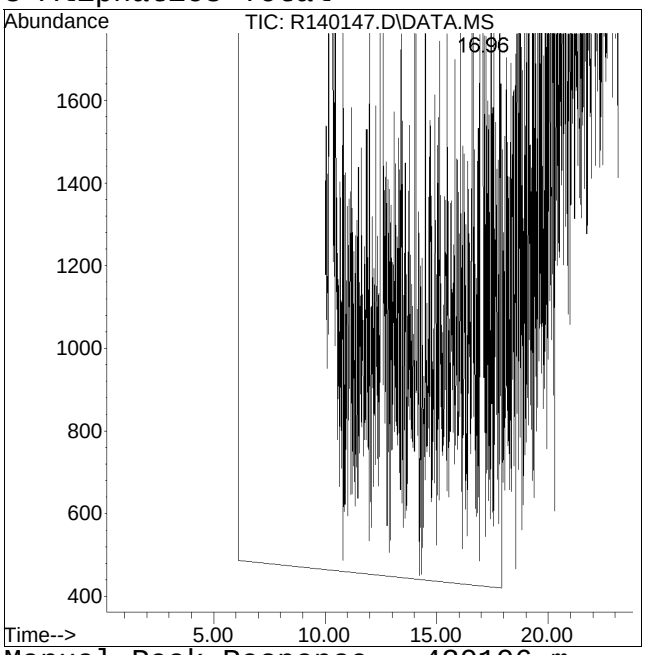
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140147.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 8:19 pm Instrument : Air Piano 1
Sample : L1504425-11,3,250,250 Quant Date : 3/12/2015 7:35 am

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 1184530

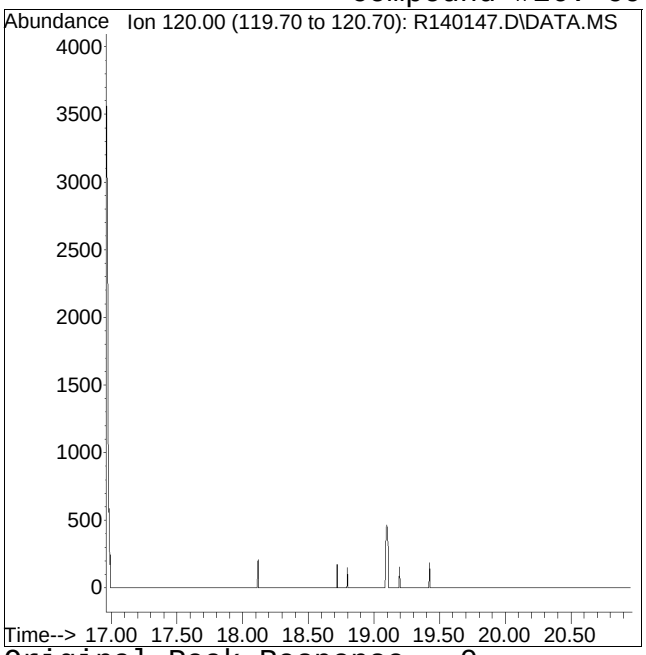


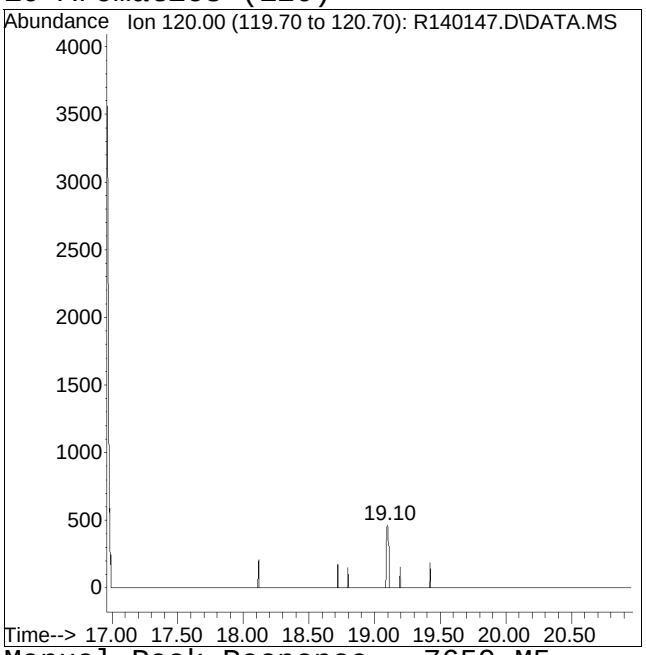

Manual Peak Response = 420106 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140147.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 8:19 pm Instrument : Air Piano 1
Sample : L1504425-11,3,250,250 Quant Date : 3/12/2015 7:35 am

Compound #26: C9-C10 Aromatics (120)



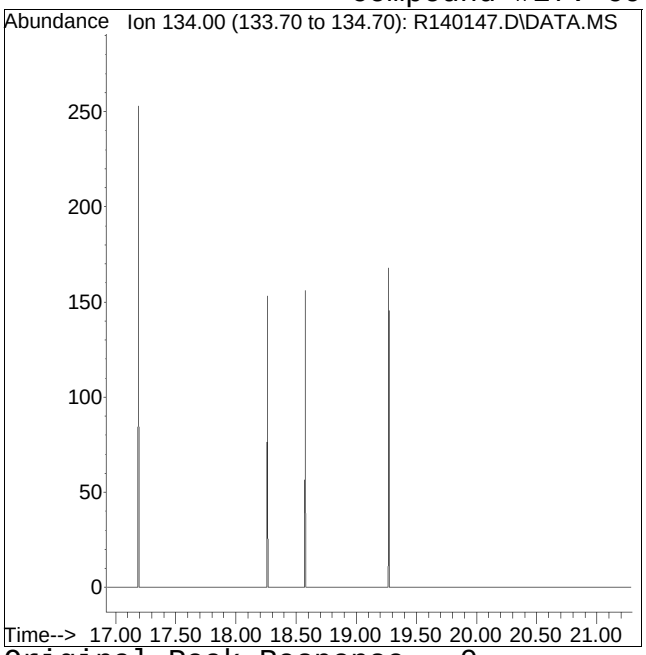



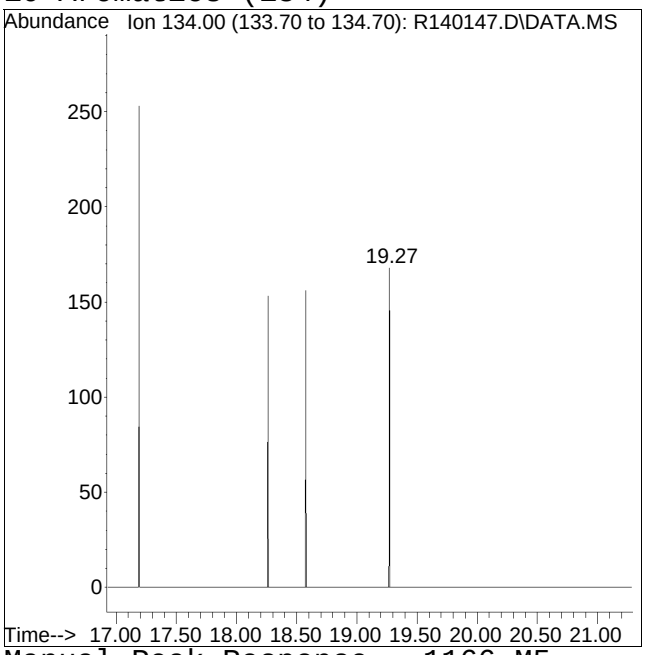

Original Peak Response = 0 Manual Peak Response = 7650 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140147.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 8:19 pm Instrument : Air Piano 1
Sample : L1504425-11,3,250,250 Quant Date : 3/12/2015 7:35 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 1166 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140148.D
Acq On : 11 Mar 2015 8:51 pm
Operator : AIRPIANO1:RY
Sample : L1504425-01,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 11:10:22 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 466430 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 86.91% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1813232 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 82.70% | |
| 12) chlorobenzene-D5 | 16.96 | 54 | 430008 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 87.78% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3442359 | 11.242 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 112.42% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4241719 | 9.713 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 97.13% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 5764126 | 10.124 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 101.24% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 12.10 | 78 | 39062 | 0.784 | ug/m3# | 57 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 890211 | 5.307 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 37618 | 0.657 | ug/m3# | 84 |
| 16) ethyl benzene | 0.00 | | 0 | N.D. | | |
| 17) m+p-xylene | 17.43 | | 0 | N.D. | | |
| 19) o-xylene | 0.00 | | 0 | N.D. | | |
| 23) naphthalene | 0.00 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 179208 | 0.965 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 0 | N.D. | | |

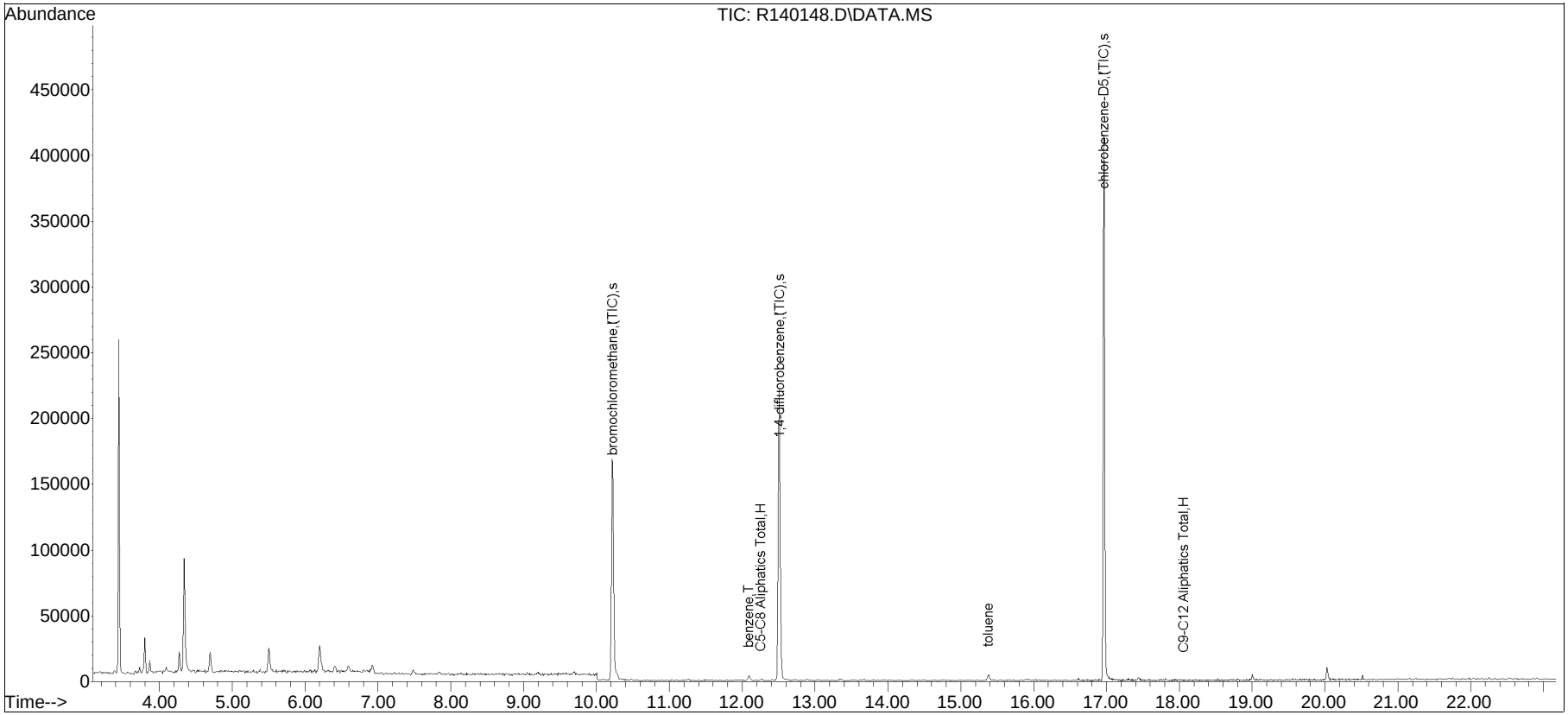
(#) = qualifier out of range (m) = manual integration (+) = signals summed

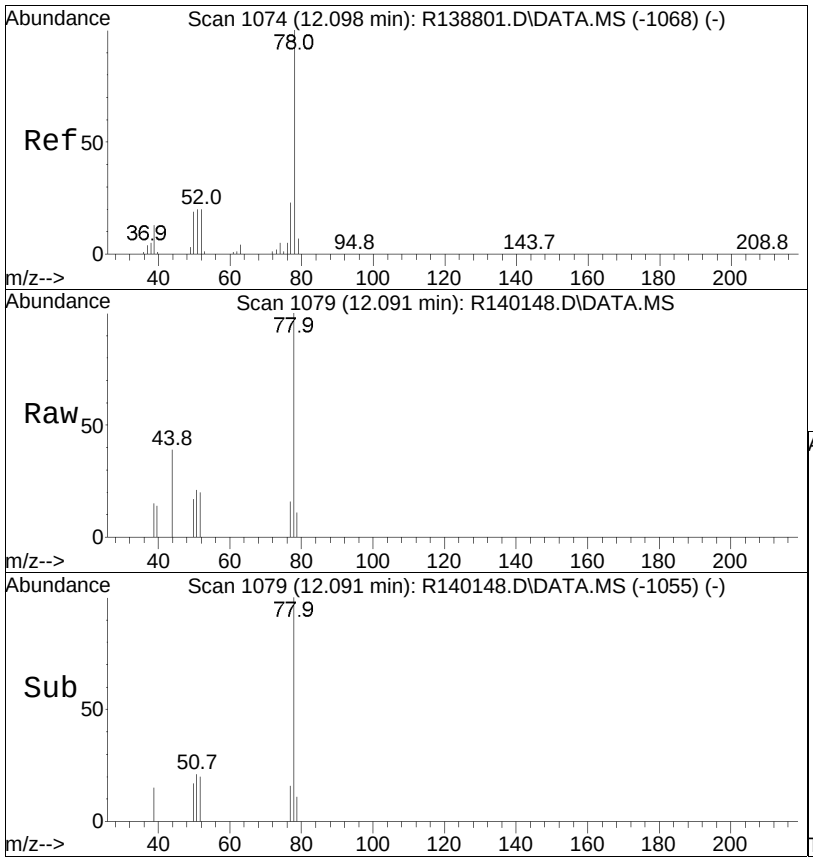
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140148.D
Acq On : 11 Mar 2015 8:51 pm
Operator : AIRPIANO1:RY
Sample : L1504425-01,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 11:10:22 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

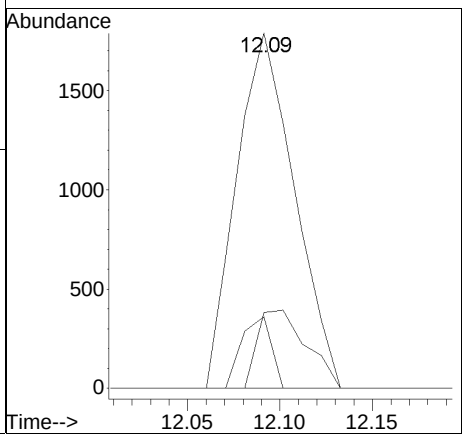


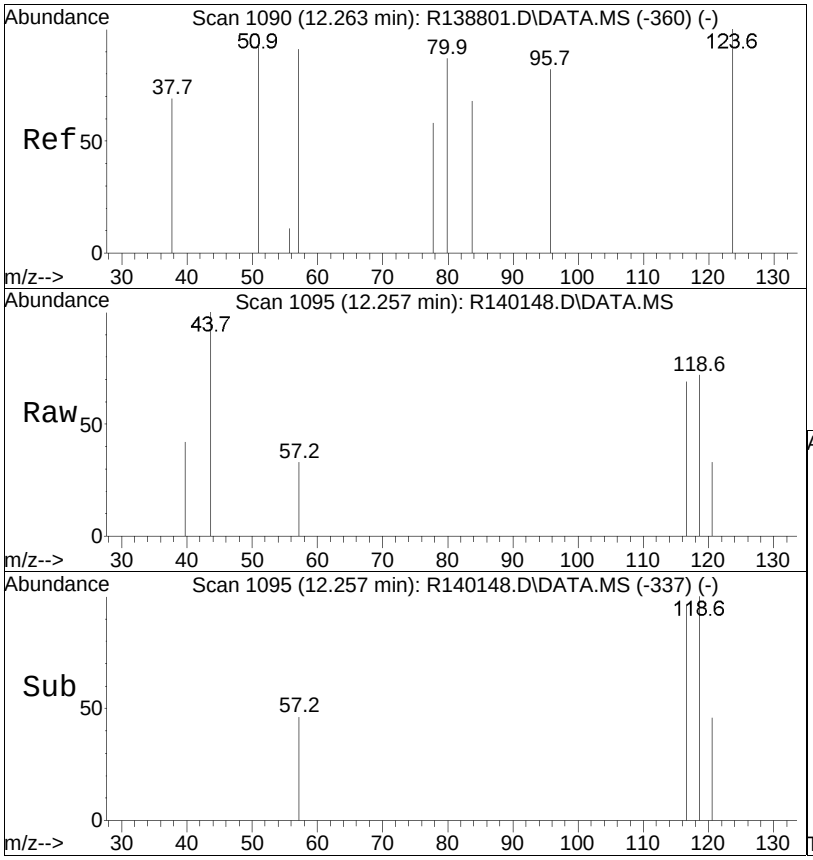



#9
benzene
Concen: 0.78 ug/m3
RT: 12.10 min Scan# 1079
Delta R.T. 0.002 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 78 Resp: 39062

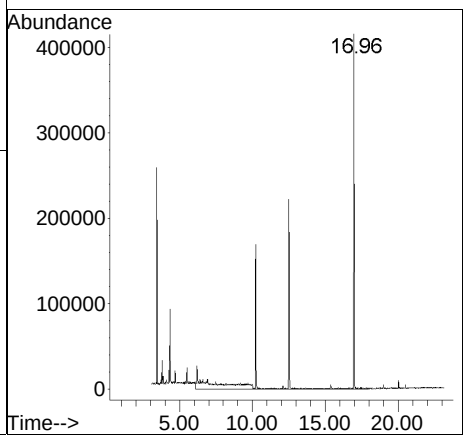
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 0.0 | 15.9 | 23.9# |
| 51 | 0.0 | 15.9 | 23.9# |

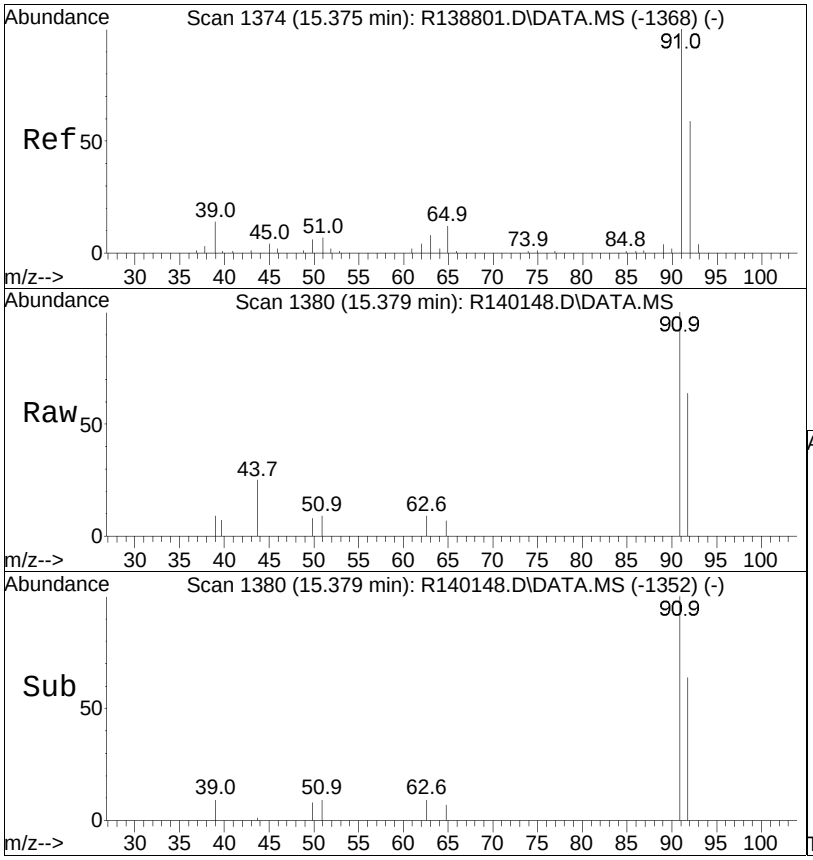





#11
C5-C8 Aliphatics Total
Concen: 7.04 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion:TIC Resp: 890211

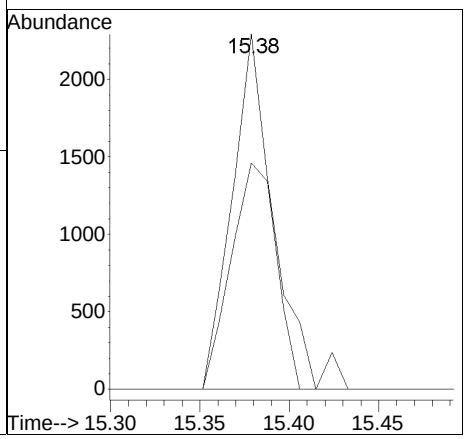


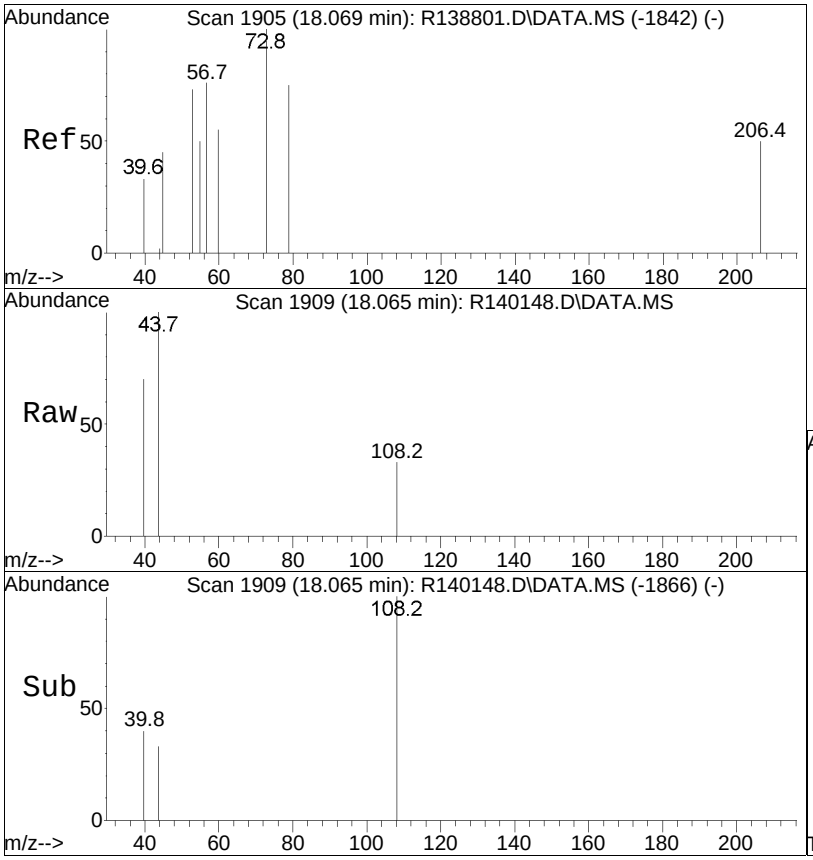



#13
toluene
Concen: 0.66 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.010 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 91 Resp: 37618

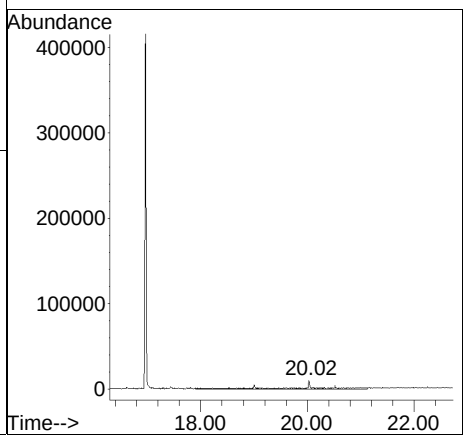
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 68.2 | 45.4 | 68.0# |






#25
C9-C12 Aliphatics Total
Concen: 1.17 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

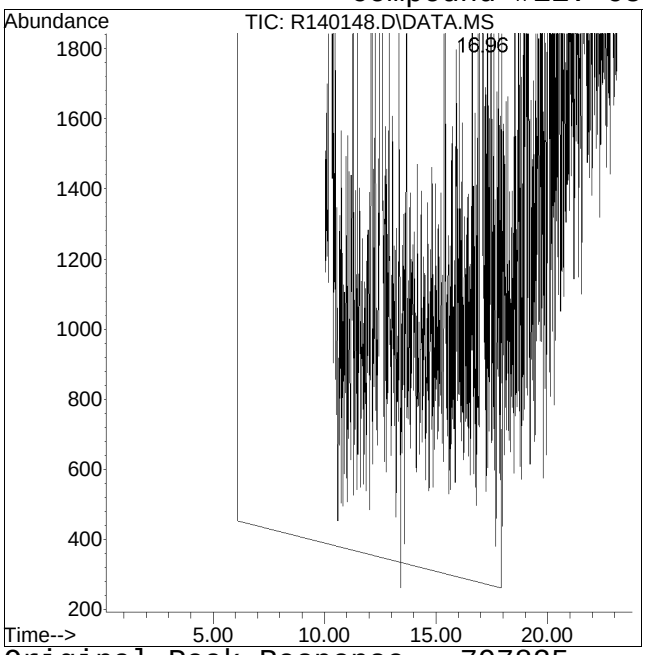
Tgt Ion:TIC Resp: 179208



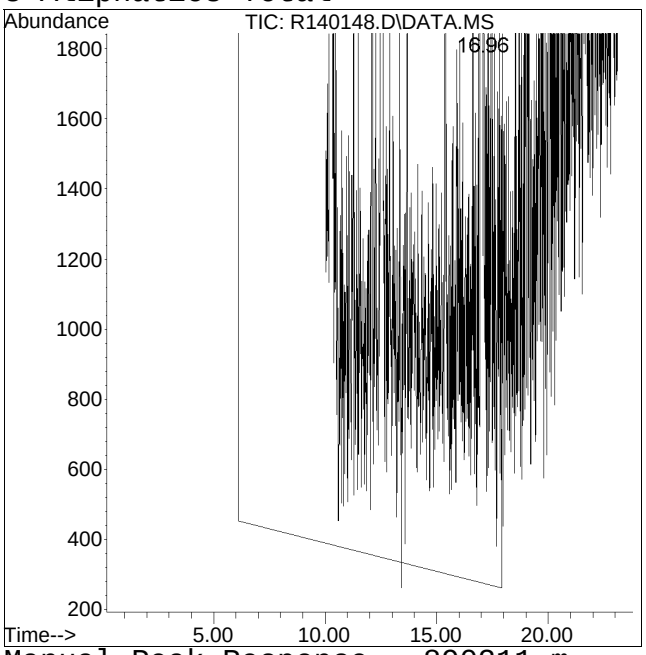
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140148.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 8:51 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-01,3,250,250 | Quant Date | : 3/12/2015 7:35 am |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 797825

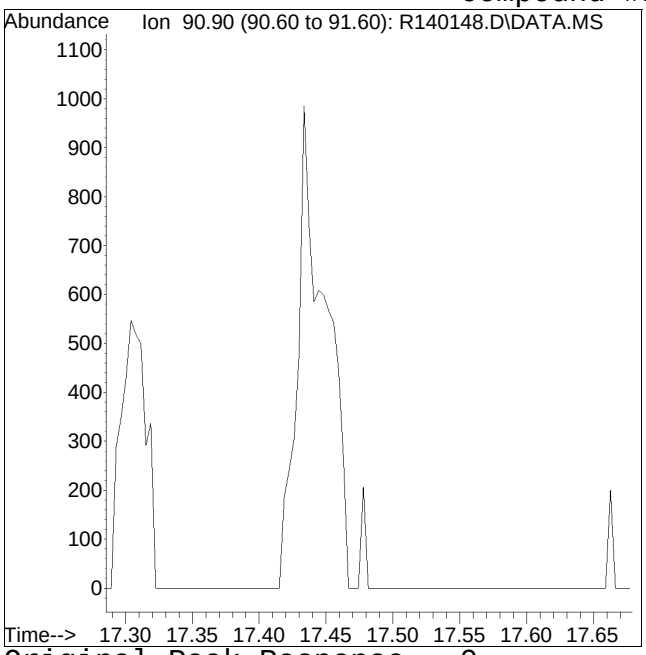


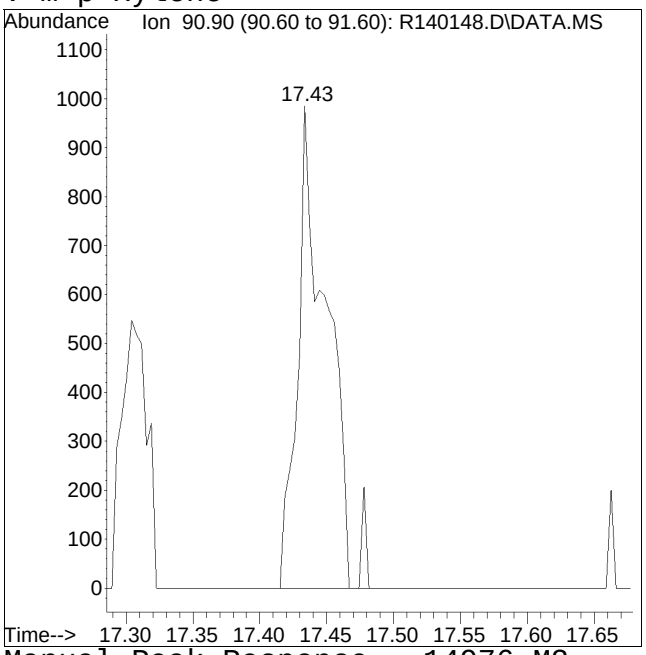

Manual Peak Response = 890211 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140148.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 8:51 pm Instrument : Air Piano 1
Sample : L1504425-01,3,250,250 Quant Date : 3/12/2015 7:35 am

Compound #17: m+p-xylene



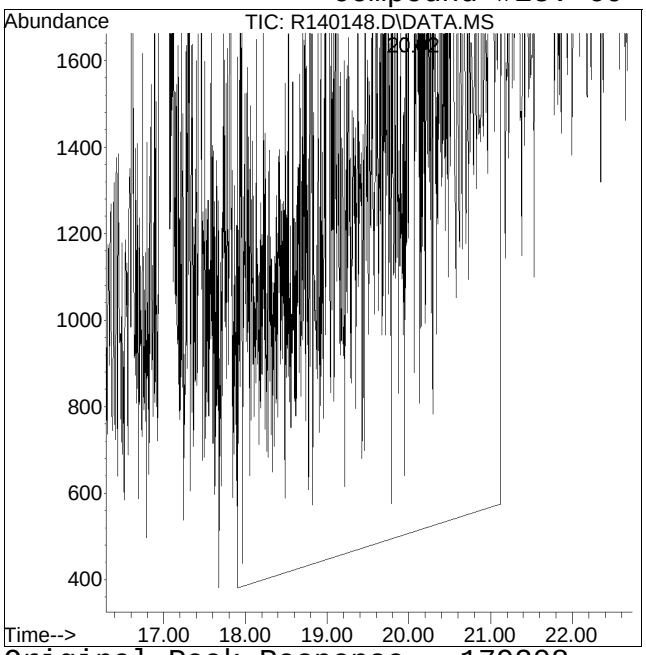




Original Peak Response = 0 Manual Peak Response = 14976 M2
M2 = Peak not found by automatic integration algorithm.

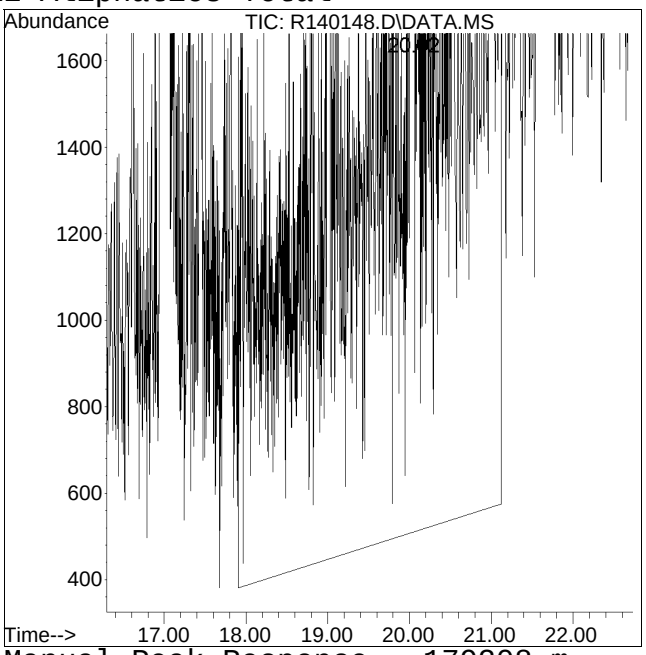
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM150311A\ | : APH150101.M |
| Data File | : R140148.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 8:51 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-01,3,250,250 | Quant Date | : 3/12/2015 7:35 am |

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 179208

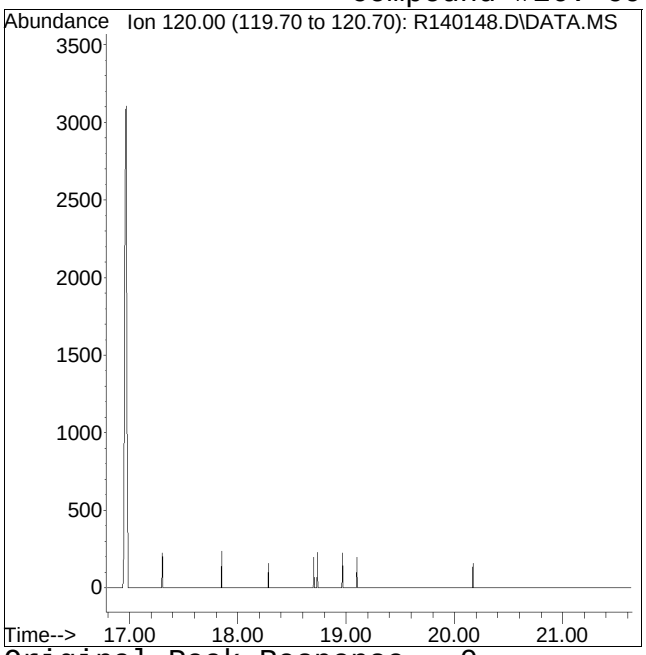


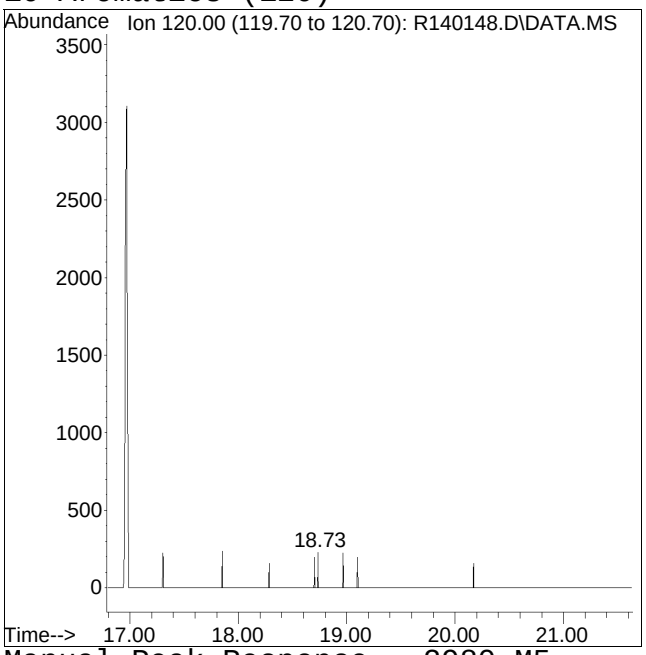

Manual Peak Response = 179208 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140148.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 8:51 pm Instrument : Air Piano 1
Sample : L1504425-01,3,250,250 Quant Date : 3/12/2015 7:35 am

Compound #26: C9-C10 Aromatics (120)



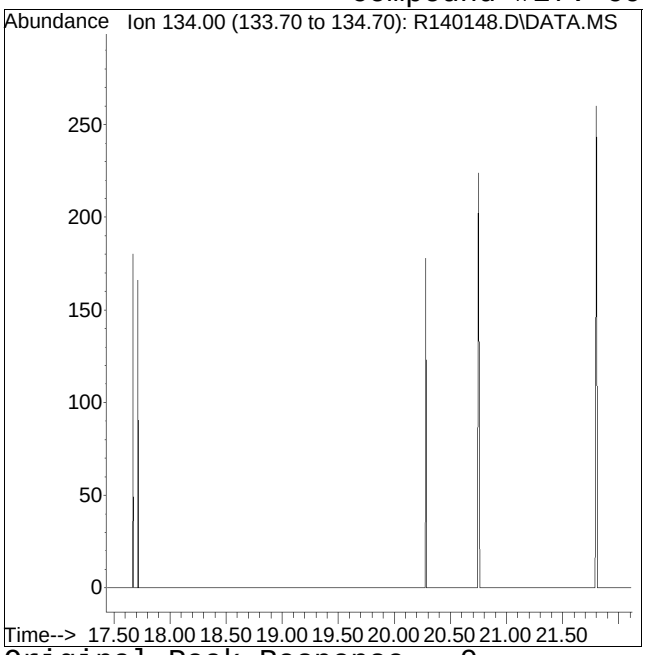



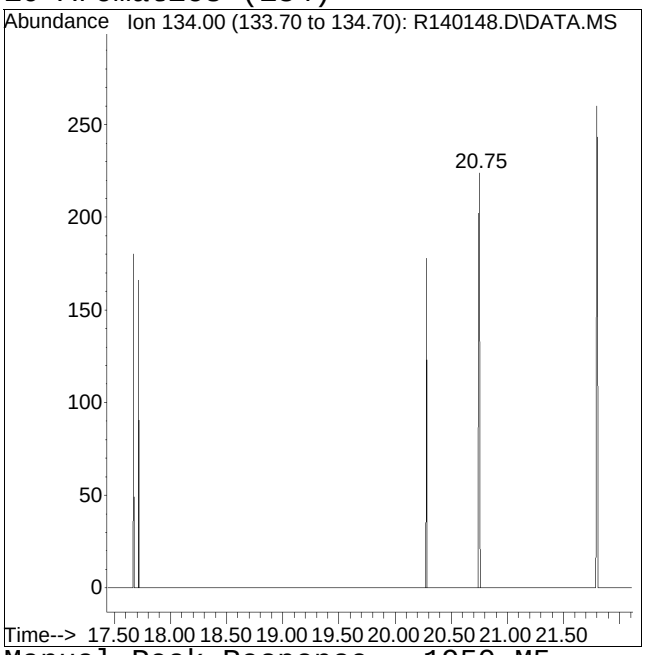

Original Peak Response = 0 Manual Peak Response = 2980 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140148.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 8:51 pm Instrument : Air Piano 1
Sample : L1504425-01,3,250,250 Quant Date : 3/12/2015 7:35 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 1950 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140149.D
Acq On : 11 Mar 2015 9:23 pm
Operator : AIRPIANO1:RY
Sample : L1504425-02,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 14:54:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 490092 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery = 91.32% | | | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1874925 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery = 85.52% | | | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 450015 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery = 91.87% | | | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3600026 | 11.235 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 112.35% | | | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4190430 | 9.169 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 91.69% | | | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 5930783 | 9.954 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery = 99.54% | | | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery = 0.00% | | | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery = 0.00% | | | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery = 0.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 12.10 | 78 | 48616 | 0.944 | ug/m3# | 57 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 1962370 | 9.195 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 130401 | 2.175 | ug/m3 | 97 |
| 16) ethyl benzene | 17.31 | | 0 | N.D. | | |
| 17) m+p-xylene | 17.43 | 91 | 77558 | 1.435 | ug/m3 | 91 |
| 19) o-xylene | 17.80 | 91 | 45235M4 | 0.819 | ug/m3 | |
| 23) naphthalene | 21.15 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 26778789M5 | 121.136 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 1067753M5 | 41.958 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.72 | 134 | 90806M5 | 3.568 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 1158559 | 45.526 | ug/m3 | |

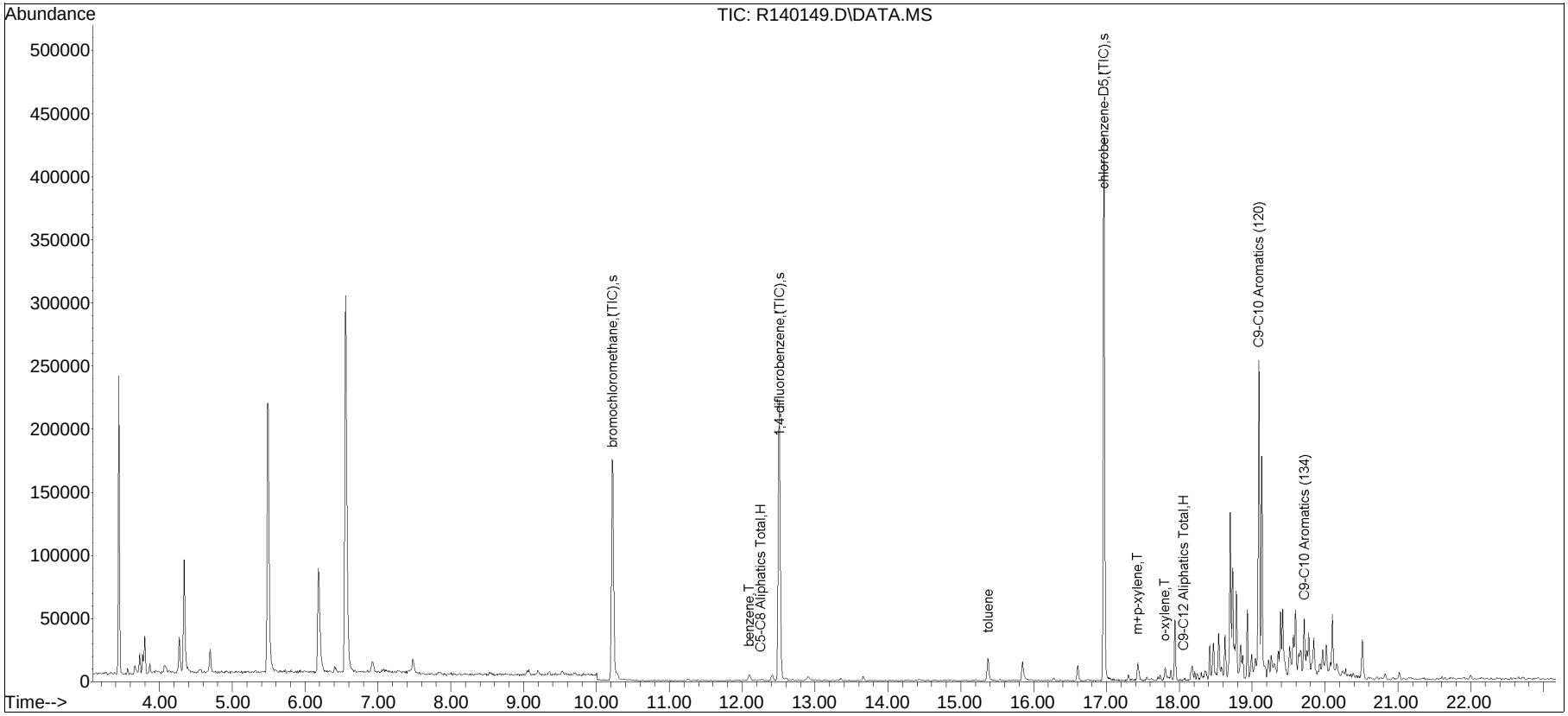
(#) = qualifier out of range (m) = manual integration (+) = signals summed

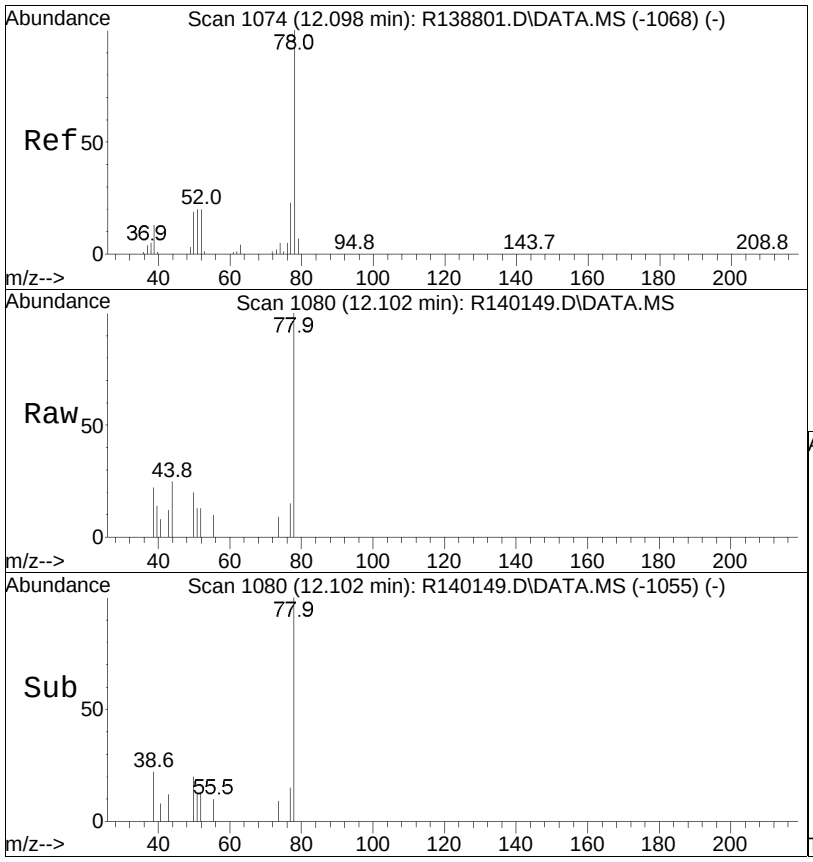
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140149.D
Acq On : 11 Mar 2015 9:23 pm
Operator : AIRPIANO1:RY
Sample : L1504425-02,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 14:54:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

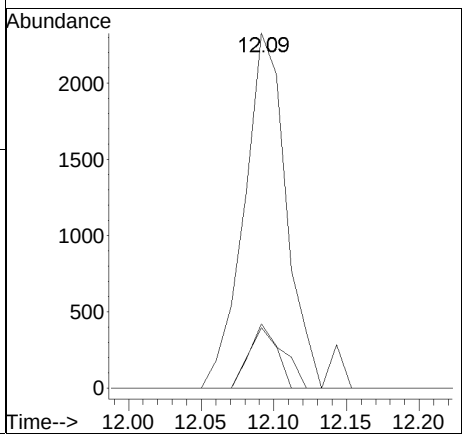


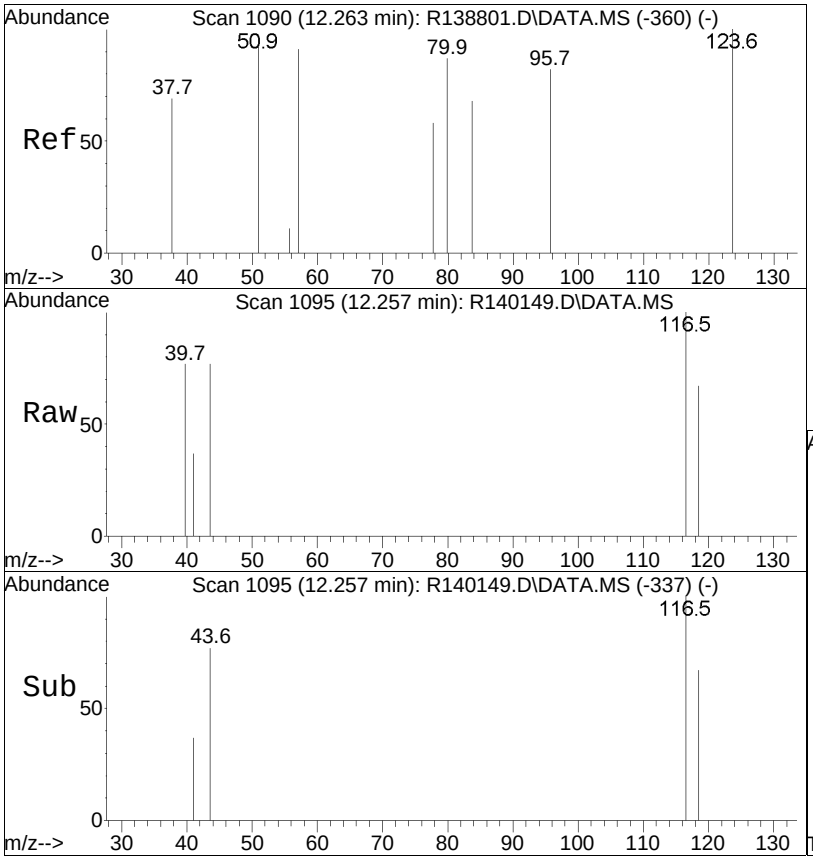



#9
benzene
Concen: 0.94 ug/m3
RT: 12.10 min Scan# 1080
Delta R.T. 0.005 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 78 Resp: 48616

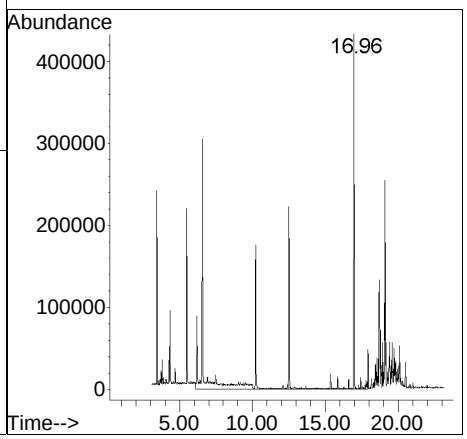
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 0.0 | 15.9 | 23.9# |
| 51 | 0.0 | 15.9 | 23.9# |

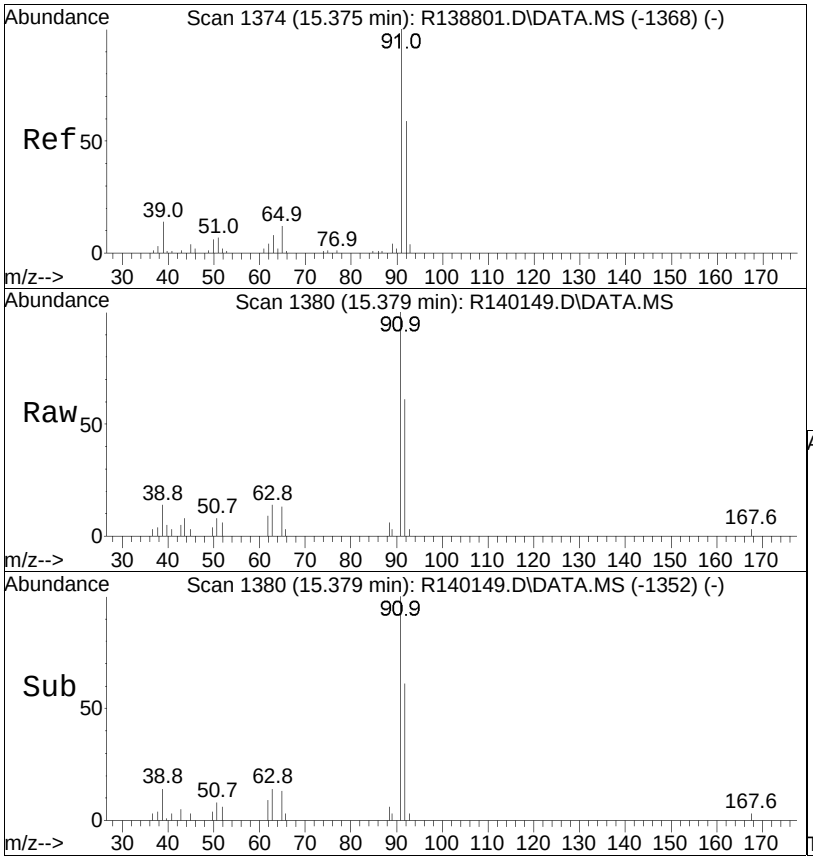





#11
C5-C8 Aliphatics Total
Concen: 15.00 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:TIC Resp: 1962370

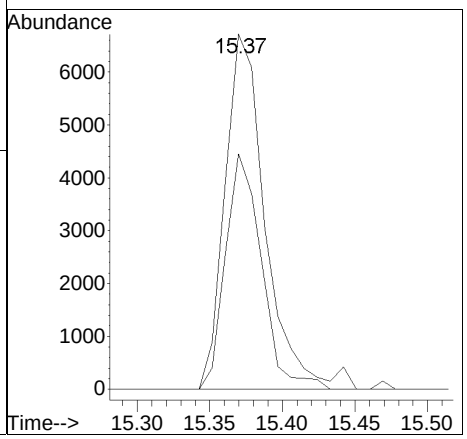


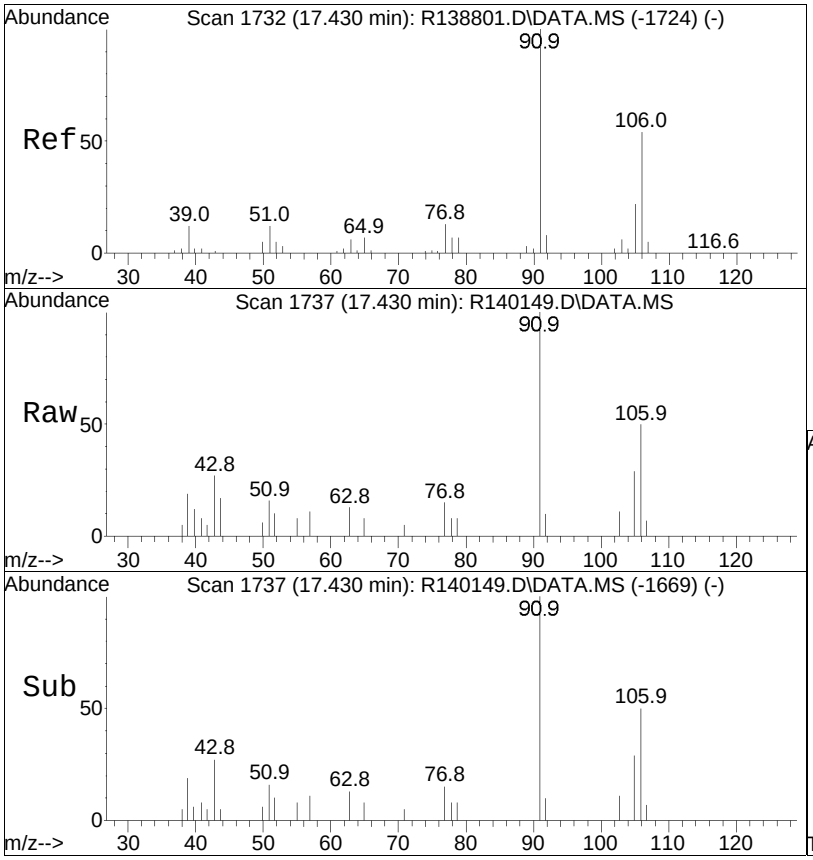



#13
toluene
Concen: 2.18 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.003 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 91 Resp: 130401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 59.2 | 45.4 | 68.0 |

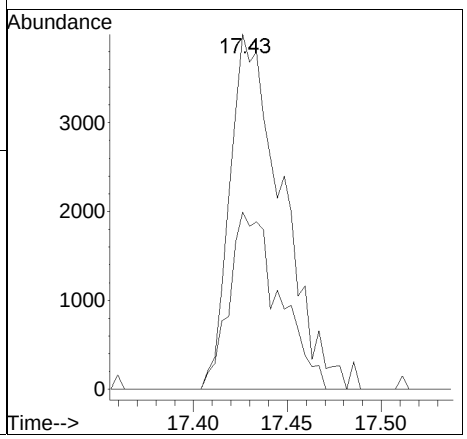


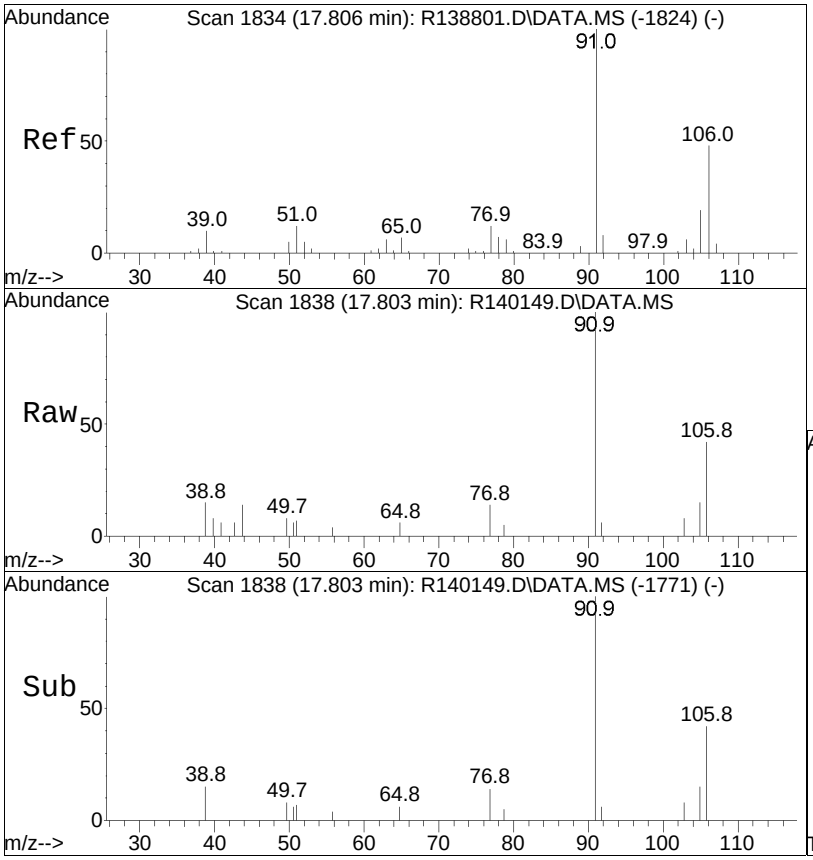



#17
m+p-xylene
Concen: 1.43 ug/m3
RT: 17.43 min Scan# 1737
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 91 Resp: 77558

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 47.7 | 33.4 | 50.2 |

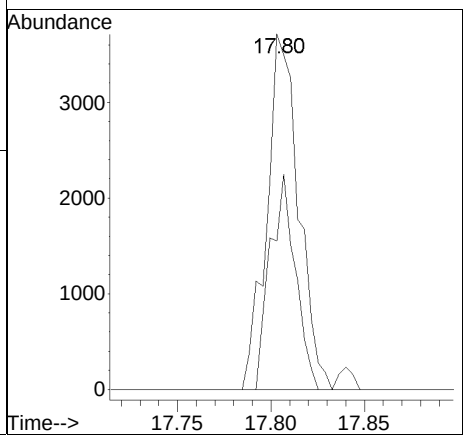


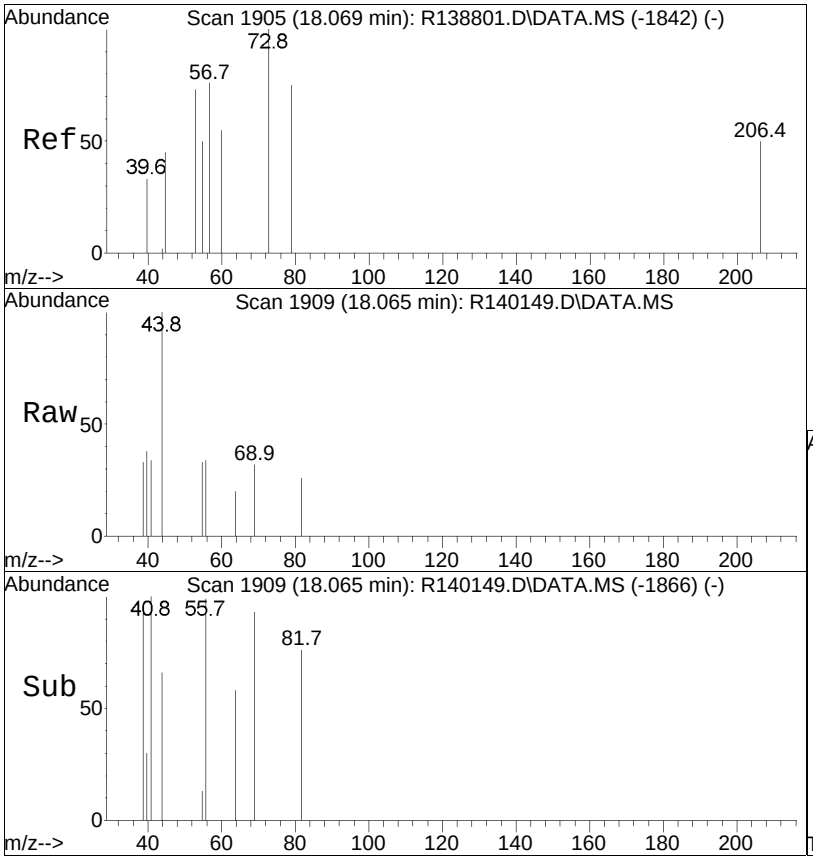



#19
o-xylene
Concen: 0.82 ug/m3 m
RT: 17.80 min Scan# 1838
Delta R.T. -0.003 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 91 Resp: 45235

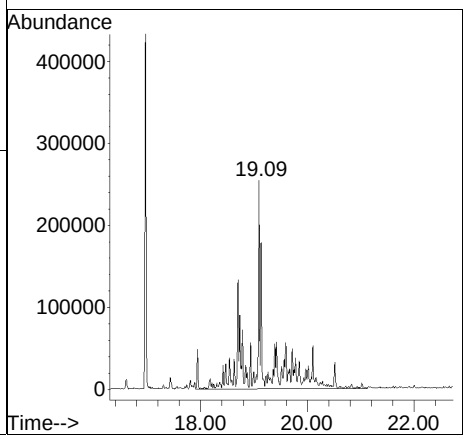
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 39.5 | 59.3# |

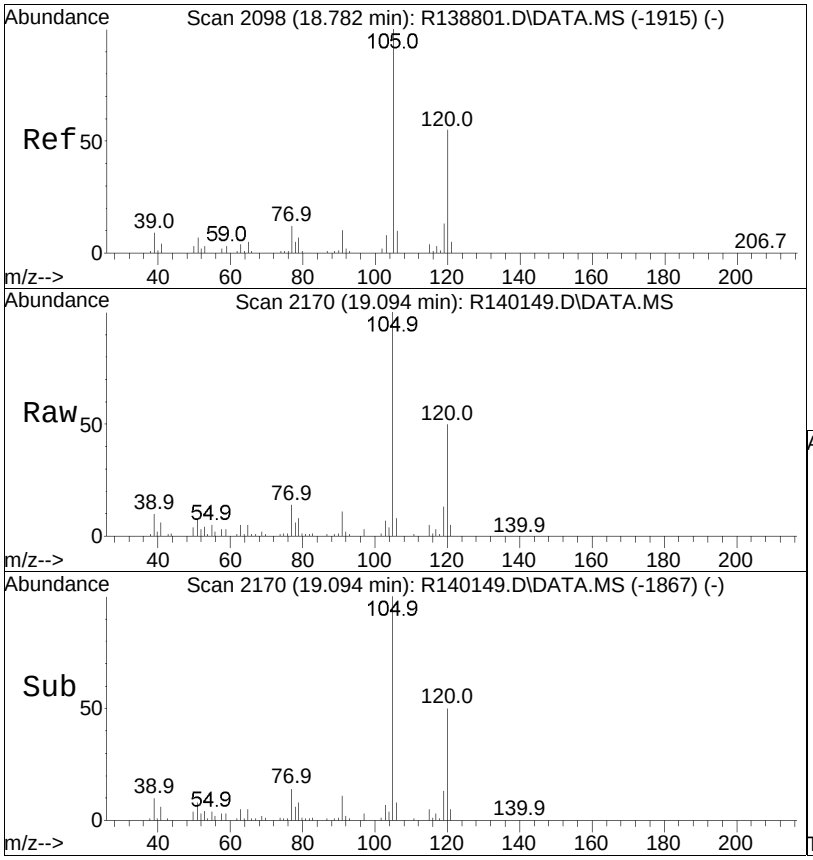





#25
C9-C12 Aliphatics Total
Concen: 166.66 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

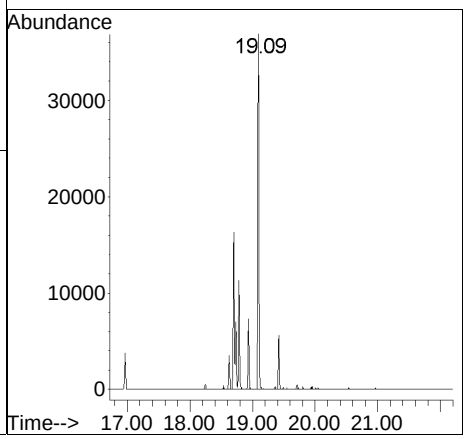
Tgt Ion:TIC Resp:26778789

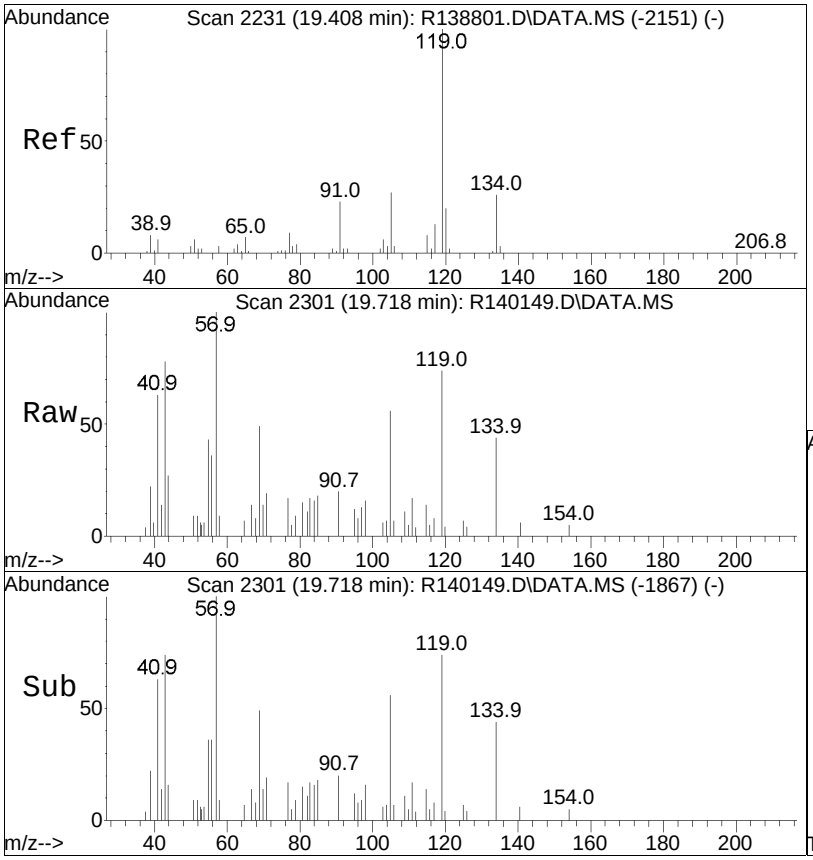





#26
C9-C10 Aromatics (120)
Concen: 41.96 ug/m3 m
RT: 19.09 min Scan# 2170
Delta R.T. -0.906 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

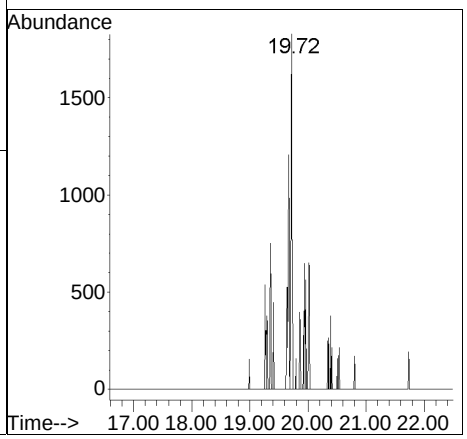
Tgt Ion:120 Resp: 1067753






#27
C9-C10 Aromatics (134)
Concen: 3.57 ug/m3 m
RT: 19.72 min Scan# 2301
Delta R.T. -0.282 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

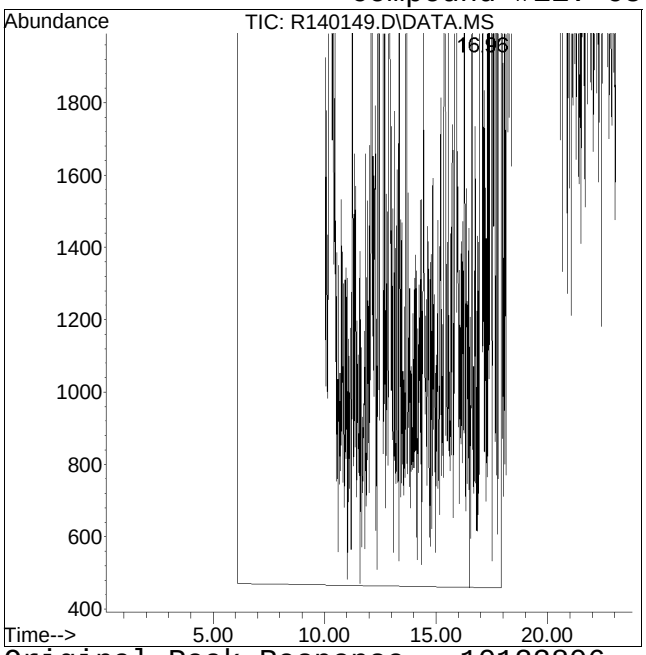
Tgt Ion:134 Resp: 90806



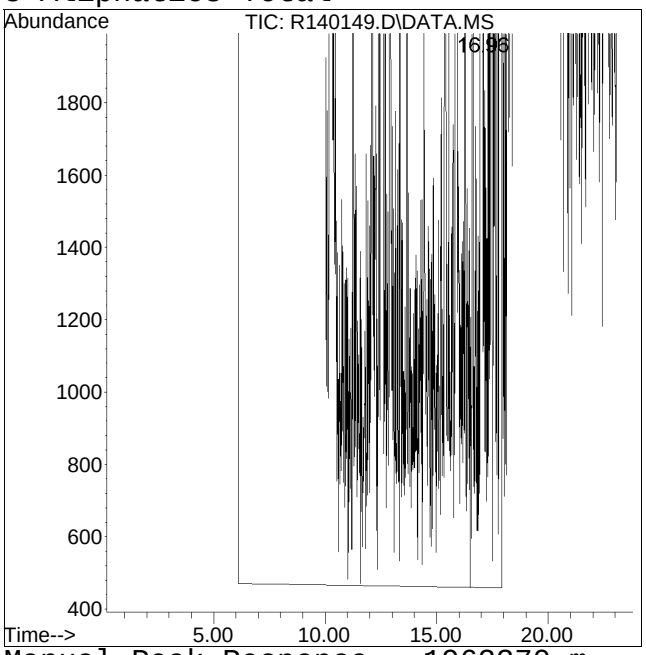
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140149.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 9:23 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-02,3,250,250 | Quant Date | : 3/12/2015 11:11 am |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 10123806

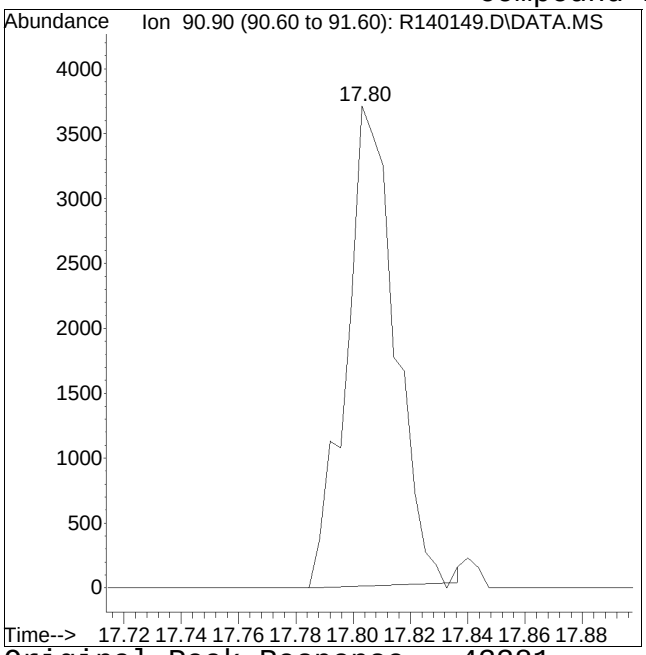



Manual Peak Response = 1962370 m

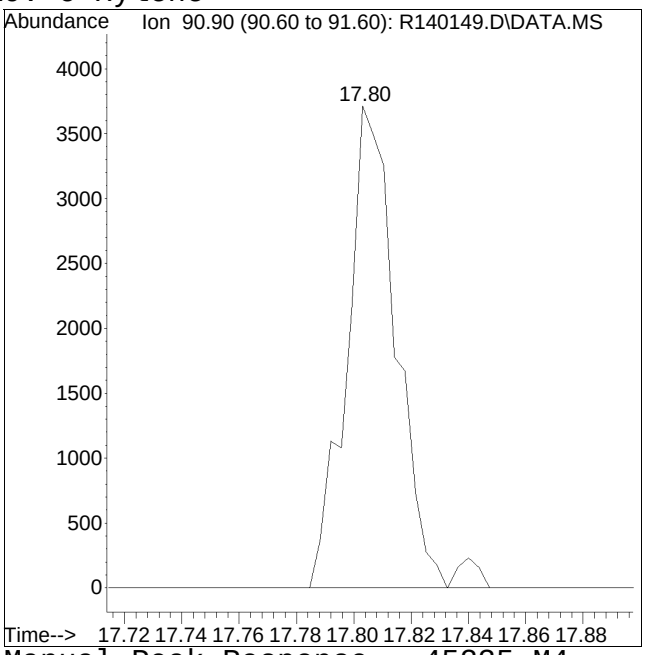
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140149.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:23 pm Instrument : Air Piano 1
Sample : L1504425-02,3,250,250 Quant Date : 3/12/2015 11:11 am

Compound #19: o-xylene




Original Peak Response = 43381



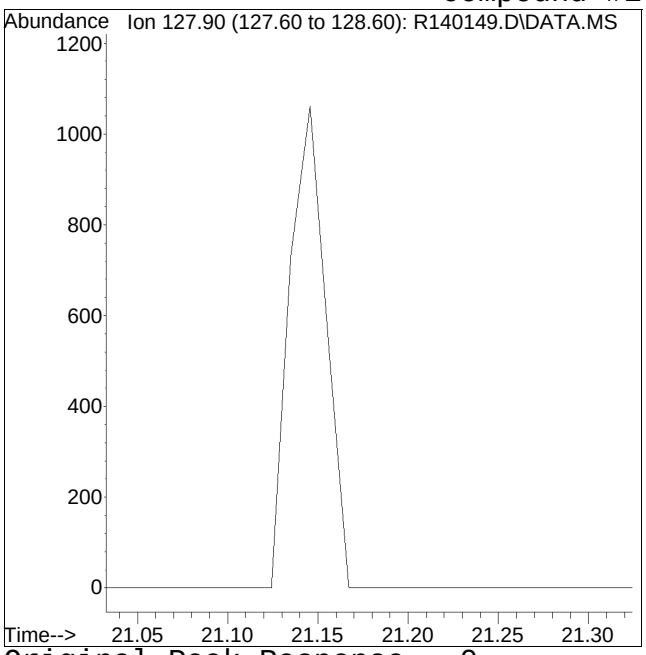

Manual Peak Response = 45235 M4

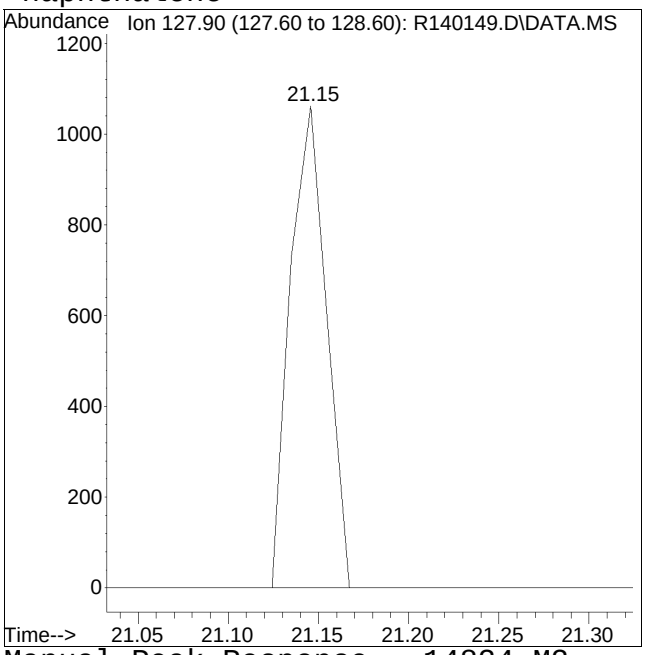
M4 = Poor automated baseline construction.

# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM150311A\ | : APH150101.M |
| Data File | : R140149.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 9:23 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-02,3,250,250 | Quant Date | : 3/12/2015 11:11 am |

## Compound #23: naphthalene



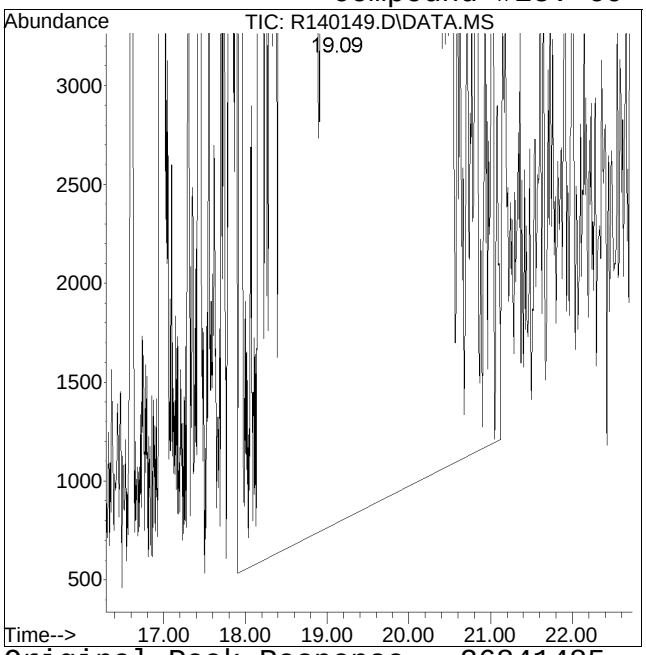

Original Peak Response = 0 Manual Peak Response = 14824 M2

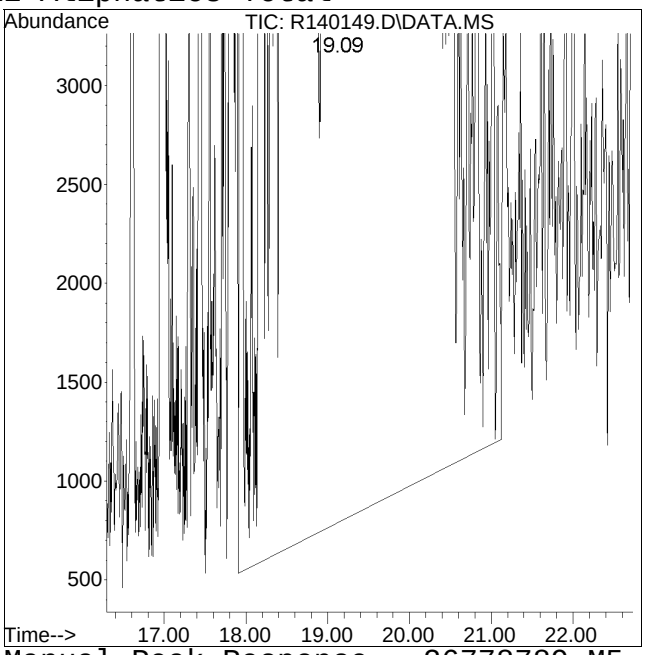
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140149.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:23 pm Instrument : Air Piano 1
Sample : L1504425-02,3,250,250 Quant Date : 3/12/2015 11:11 am

Compound #25: C9-C12 Aliphatics Total



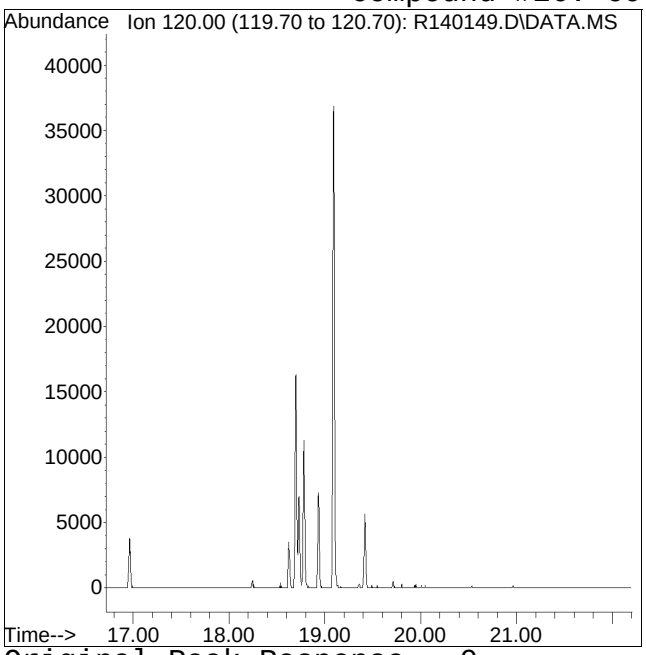



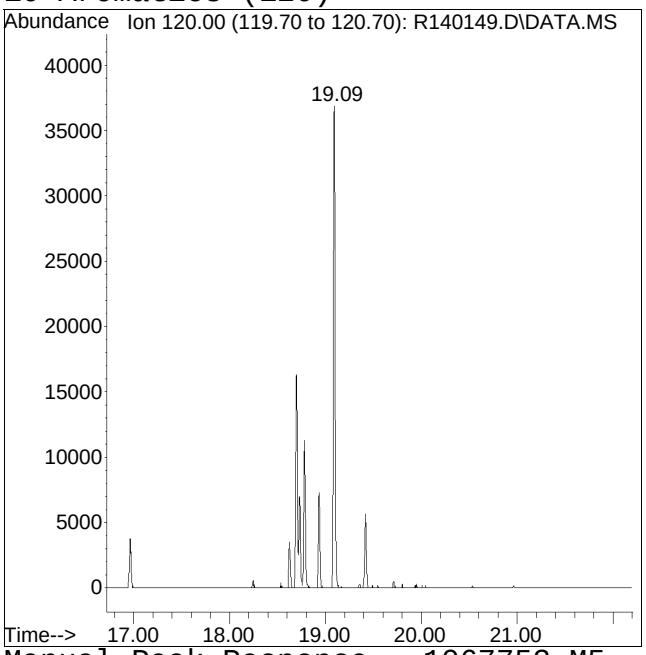

Original Peak Response = 26841485 Manual Peak Response = 26778789 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ QM150311A\ : APH150101.M
Data File : R140149.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:23 pm Instrument : Air Piano 1
Sample : L1504425-02,3,250,250 Quant Date : 3/12/2015 11:11 am

Compound #26: C9-C10 Aromatics (120)



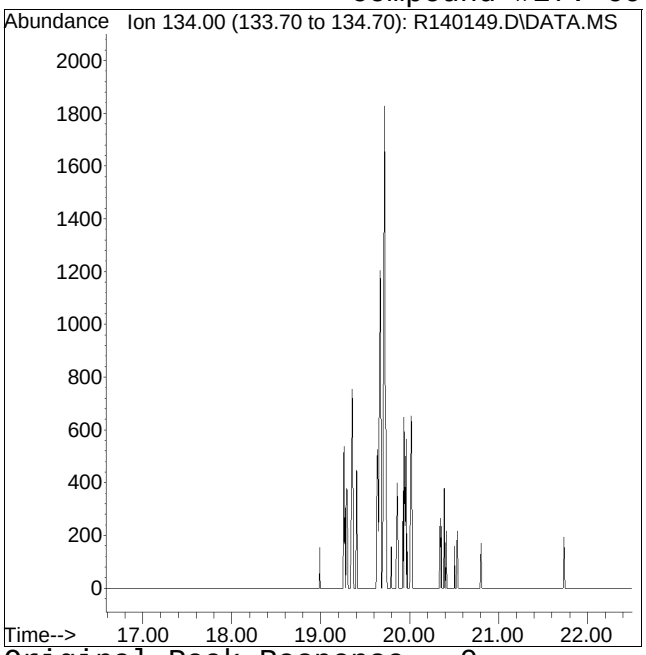



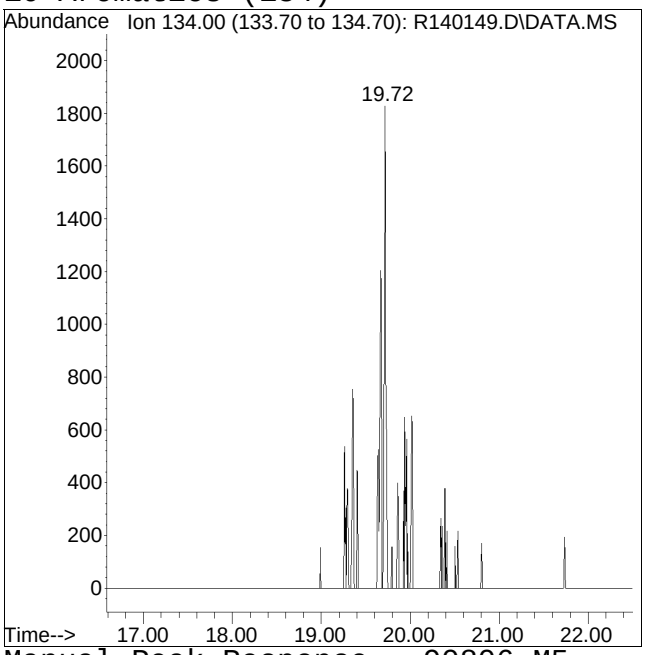

Original Peak Response = 0 Manual Peak Response = 1067753 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM150311A\ | : APH150101.M |
| Data File | : R140149.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 9:23 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-02,3,250,250 | Quant Date | : 3/12/2015 11:11 am |

## Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 90806 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140150.D
Acq On : 11 Mar 2015 9:55 pm
Operator : AIRPIANO1:RY
Sample : L1504425-03,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 14:46:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 466401 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 86.91% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1811050 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 82.60% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 470901 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 96.13% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3478226 | 10.373 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 103.73% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4034896 | 8.437 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 84.37% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 6093903 | 9.774 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 97.74% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 12.10 | 78 | 41095 | 0.826 | ug/m3# | 57 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 2476120M5 | 13.598 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 157345 | 2.508 | ug/m3 | 96 |
| 16) ethyl benzene | 17.30 | | 0 | N.D. | | |
| 17) m+p-xylene | 17.43 | 91 | 78141M4 | 1.382 | ug/m3 | |
| 19) o-xylene | 17.81 | 91 | 46177M4 | 0.799 | ug/m3 | |
| 23) naphthalene | 0.00 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 26054665 | 111.498 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 1059528M5 | 39.788 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.67 | 134 | 97934M5 | 3.678 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 1157462 | 43.466 | ug/m3 | |

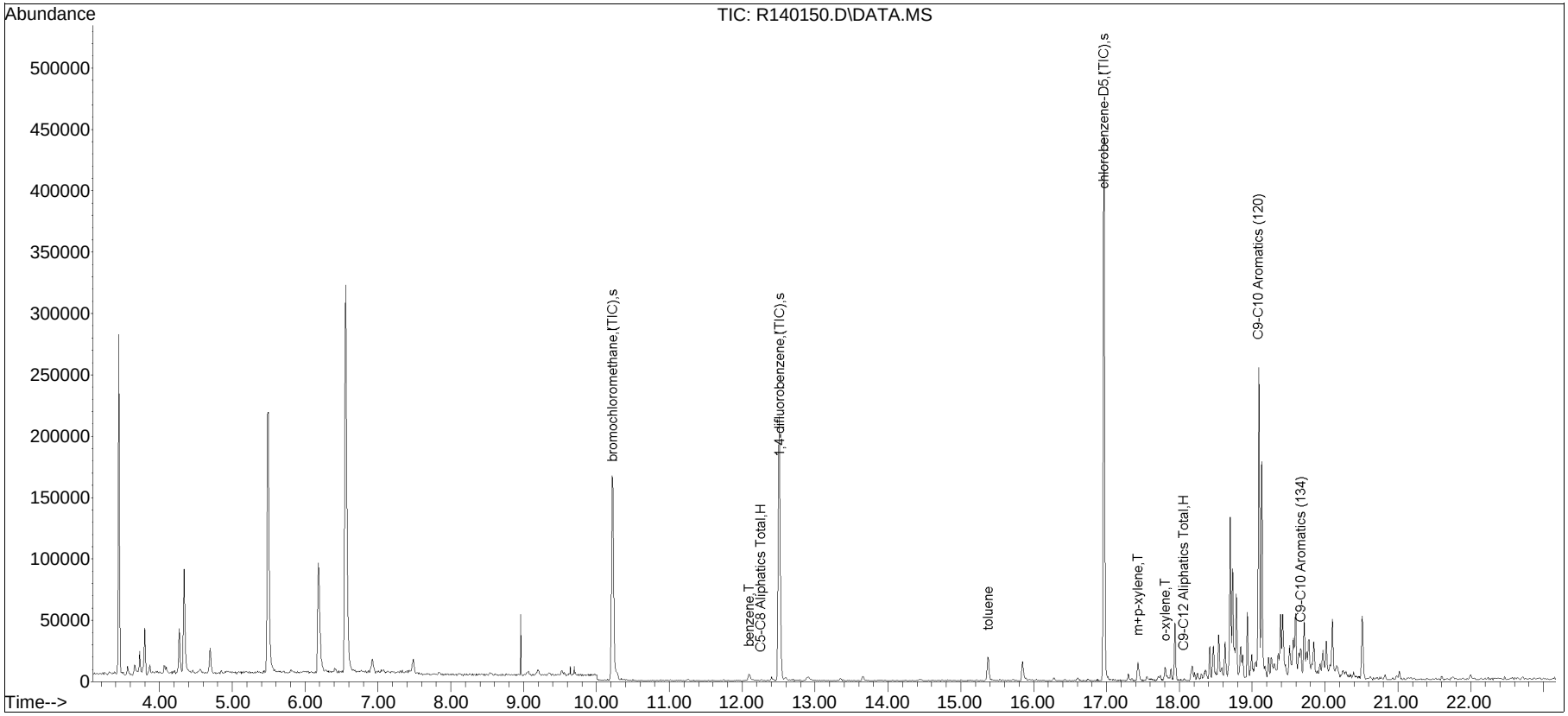
(#) = qualifier out of range (m) = manual integration (+) = signals summed

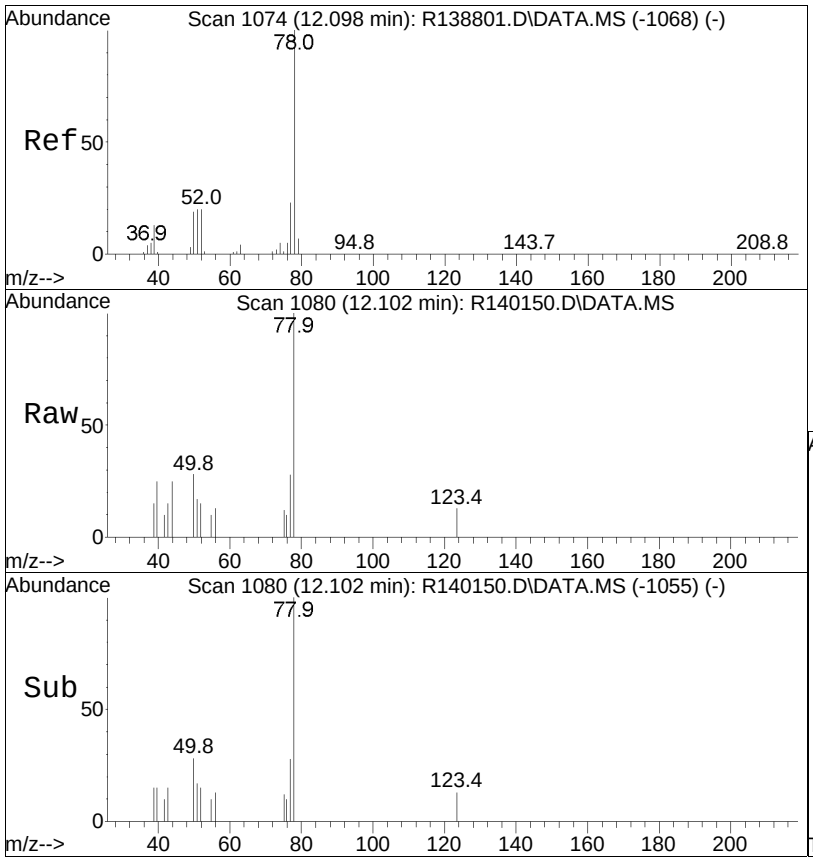
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140150.D
Acq On : 11 Mar 2015 9:55 pm
Operator : AIRPIANO1:RY
Sample : L1504425-03,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 14:46:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

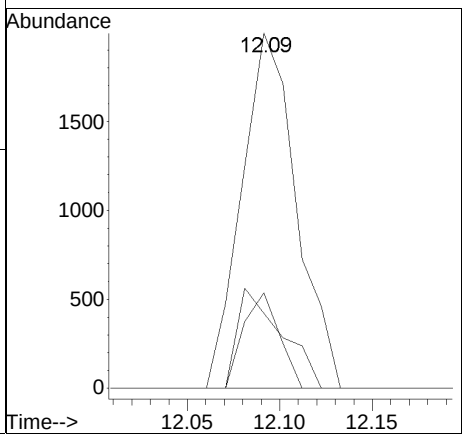


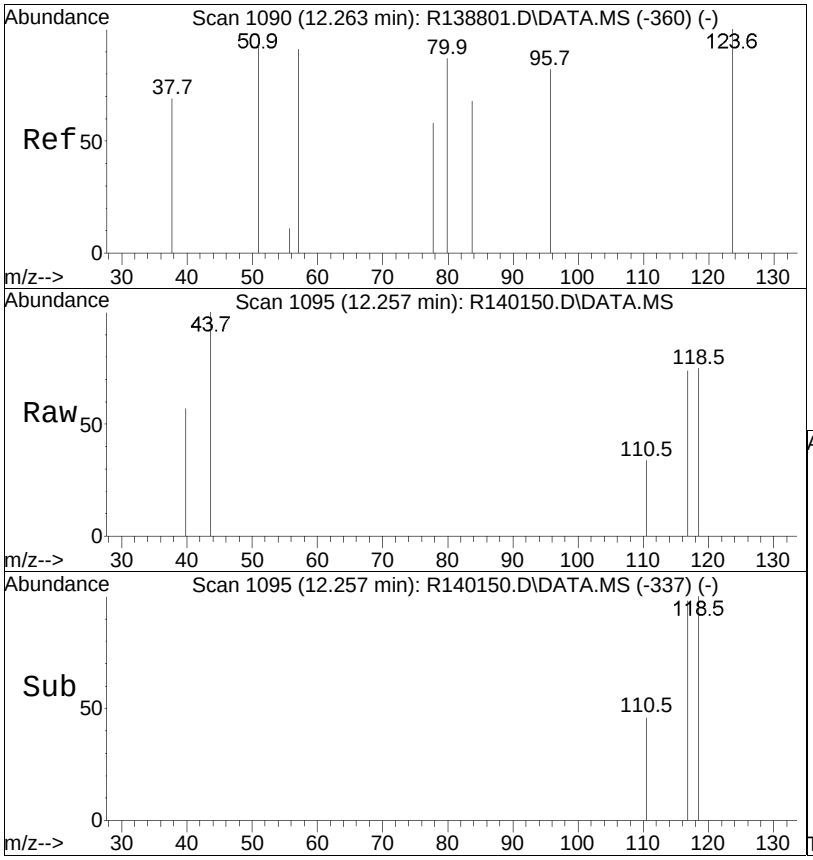



#9
benzene
Concen: 0.83 ug/m3
RT: 12.10 min Scan# 1080
Delta R.T. 0.004 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 78 Resp: 41095

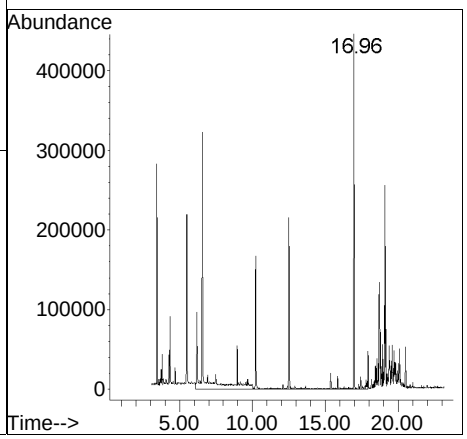
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 0.0 | 15.9 | 23.9# |
| 51 | 0.0 | 15.9 | 23.9# |

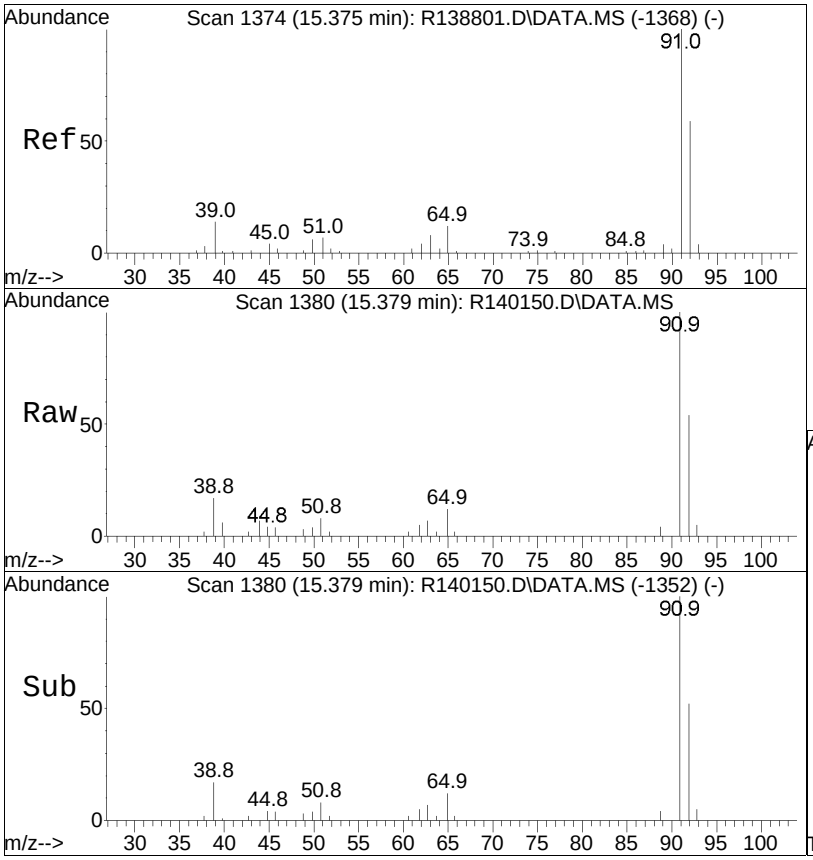





#11
C5-C8 Aliphatics Total
Concen: 19.60 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:TIC Resp: 2476120

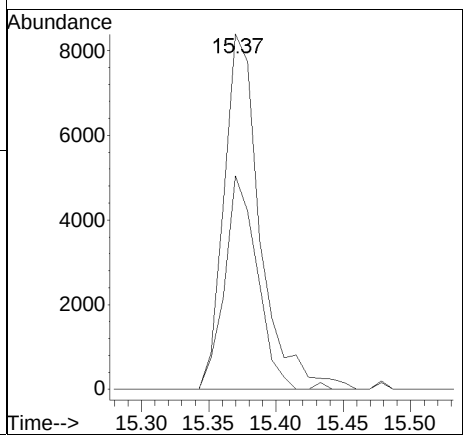


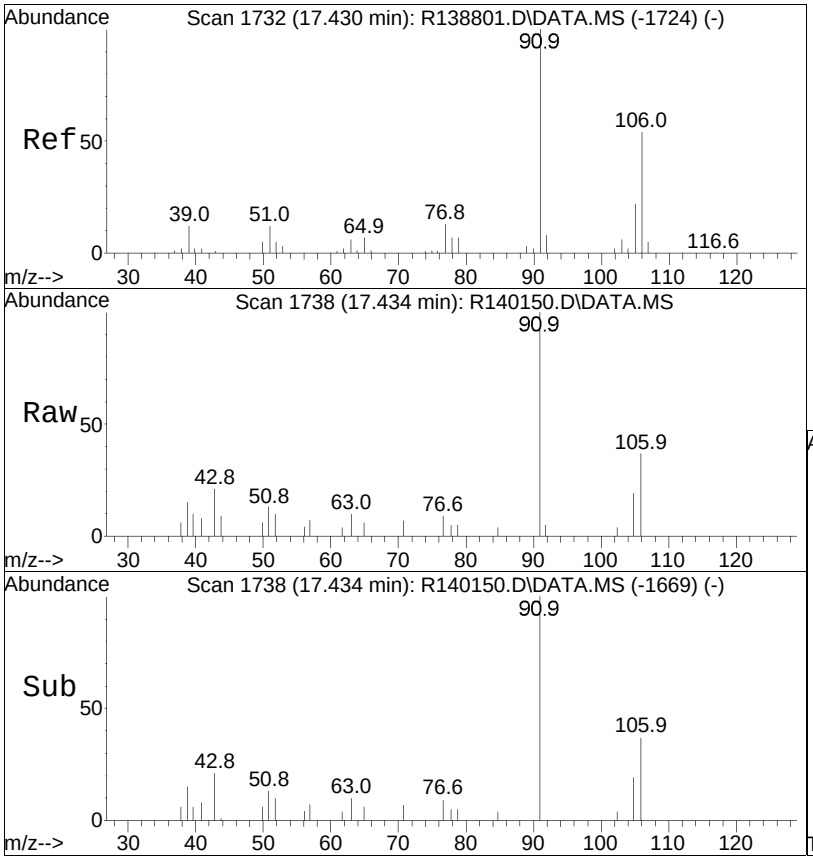



#13
toluene
Concen: 2.51 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.004 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 91 Resp: 157345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.9 | 45.4 | 68.0 |

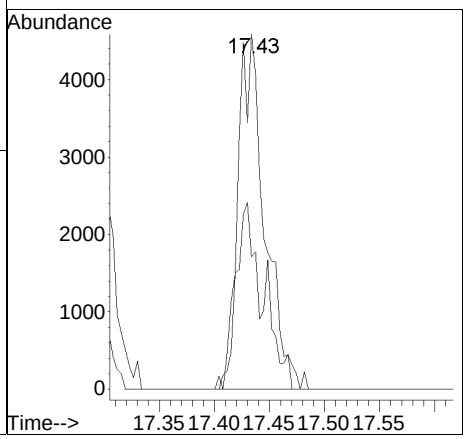


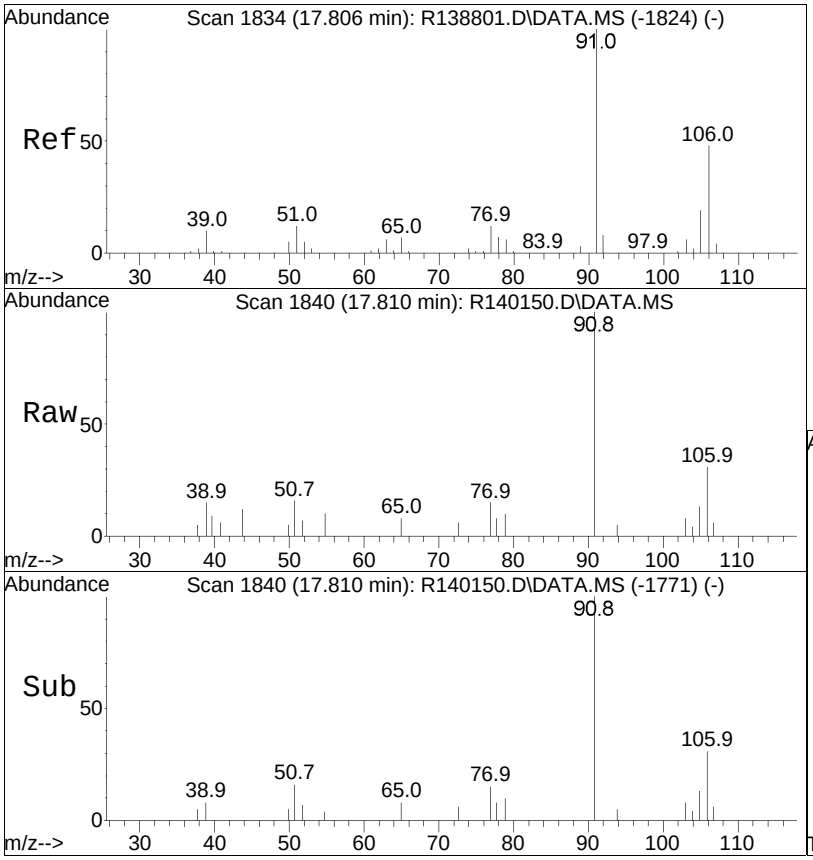



#17
m+p-xylene
Concen: 1.38 ug/m3 m
RT: 17.43 min Scan# 1738
Delta R.T. 0.004 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 91 Resp: 78141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 21.7 | 33.4 | 50.2# |

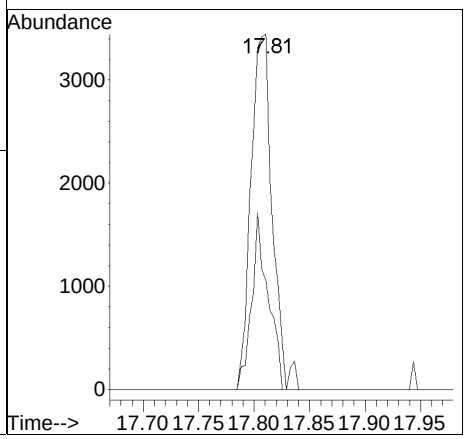


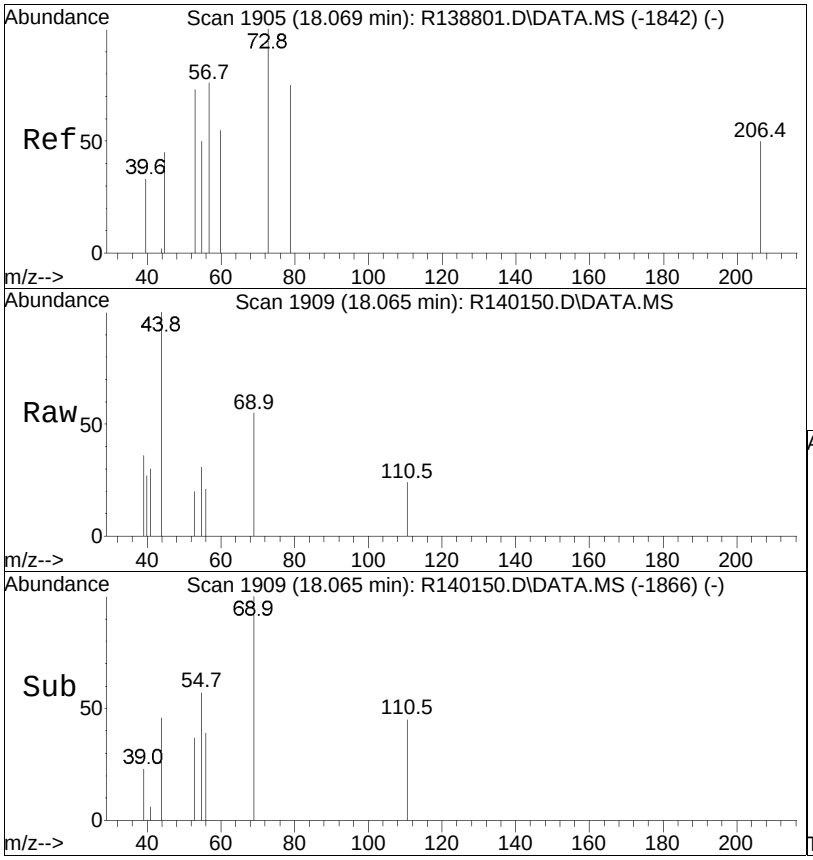



#19
o-xylene
Concen: 0.80 ug/m3 m
RT: 17.81 min Scan# 1840
Delta R.T. 0.004 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 91 Resp: 46177

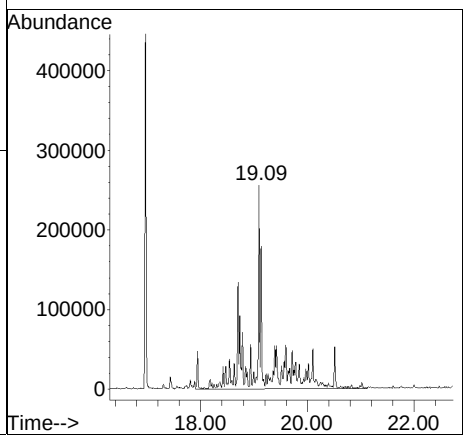
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 39.5 | 59.3# |

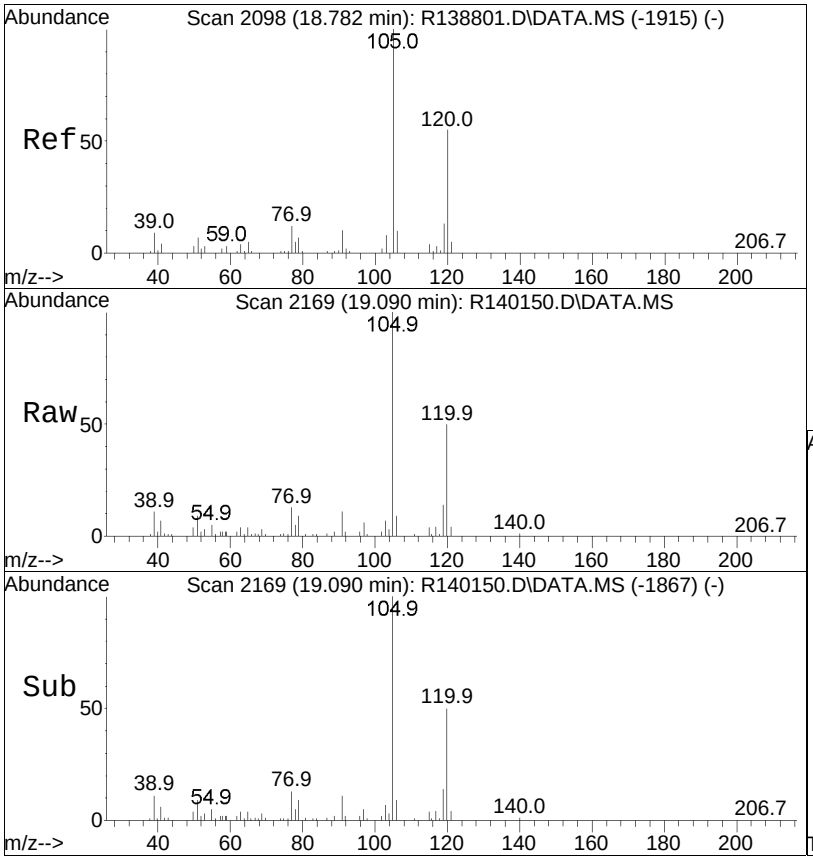





#25
C9-C12 Aliphatics Total
Concen: 154.96 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

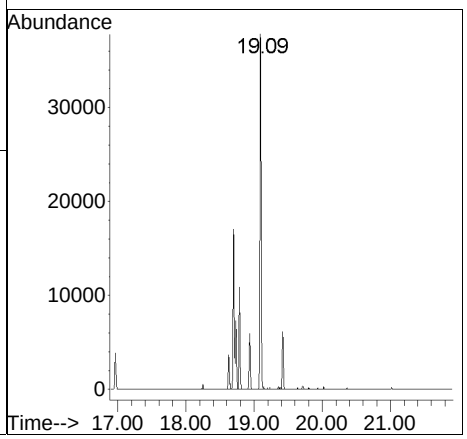
Tgt Ion:TIC Resp:26054665

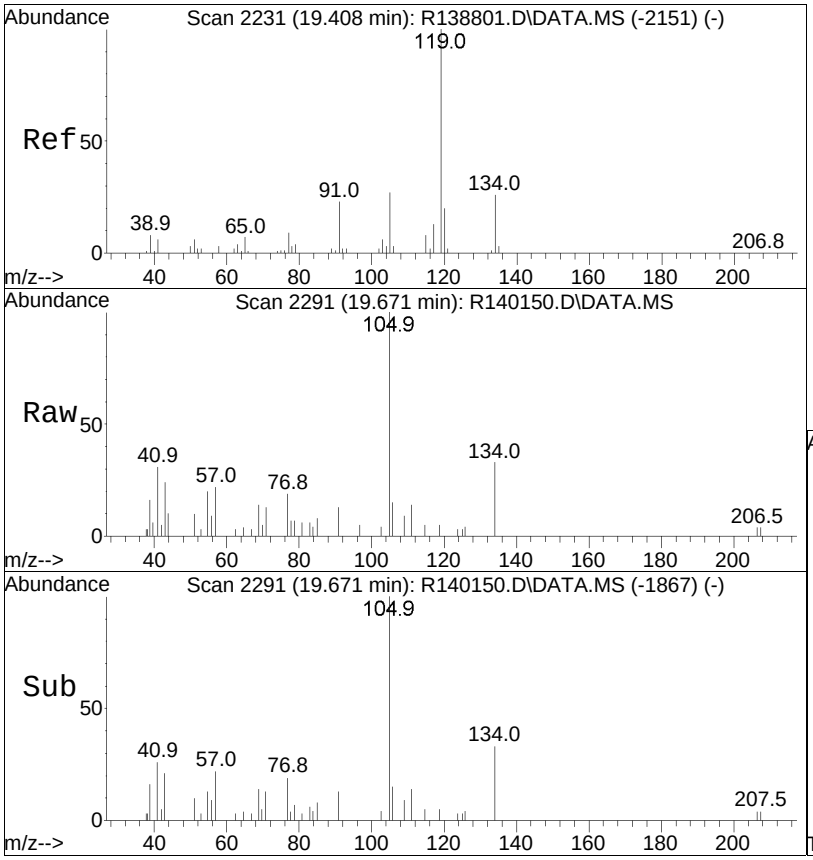





#26
C9-C10 Aromatics (120)
Concen: 39.79 ug/m3 m
RT: 19.09 min Scan# 2169
Delta R.T. -0.910 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

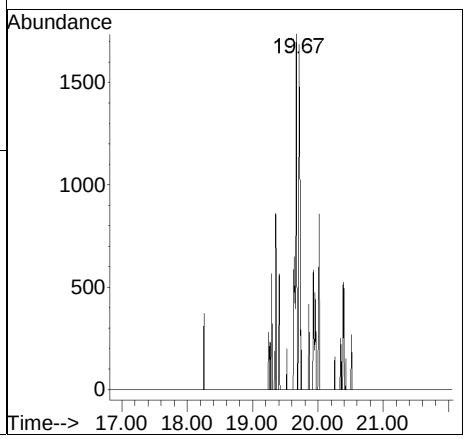
Tgt Ion:120 Resp: 1059528






#27
C9-C10 Aromatics (134)
Concen: 3.68 ug/m3 m
RT: 19.67 min Scan# 2291
Delta R.T. -0.329 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

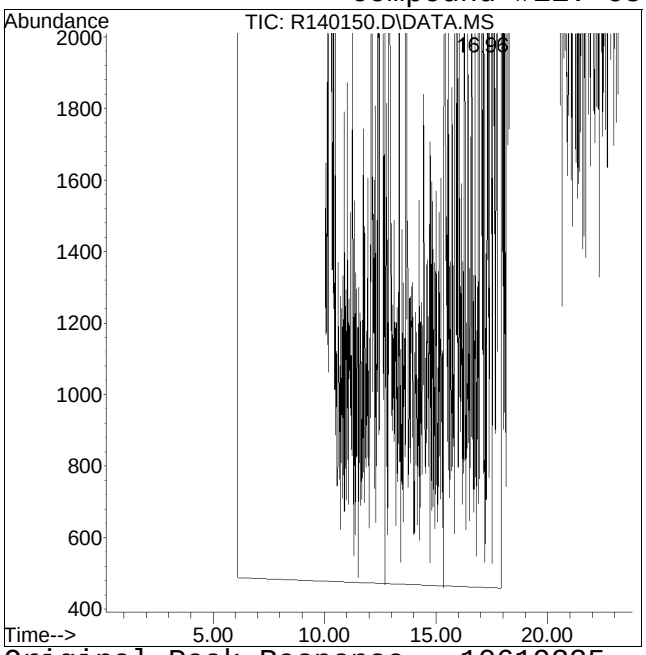
Tgt Ion:134 Resp: 97934

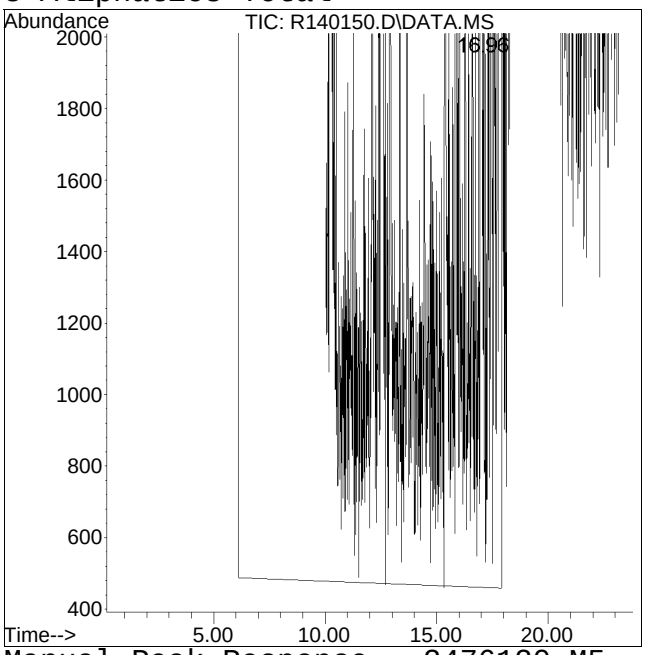


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R140150.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:55 pm Instrument : Air Piano 1
Sample : L1504425-03,3,250,250 Quant Date : 3/12/2015 11:14 am

Compound #11: C5-C8 Aliphatics Total



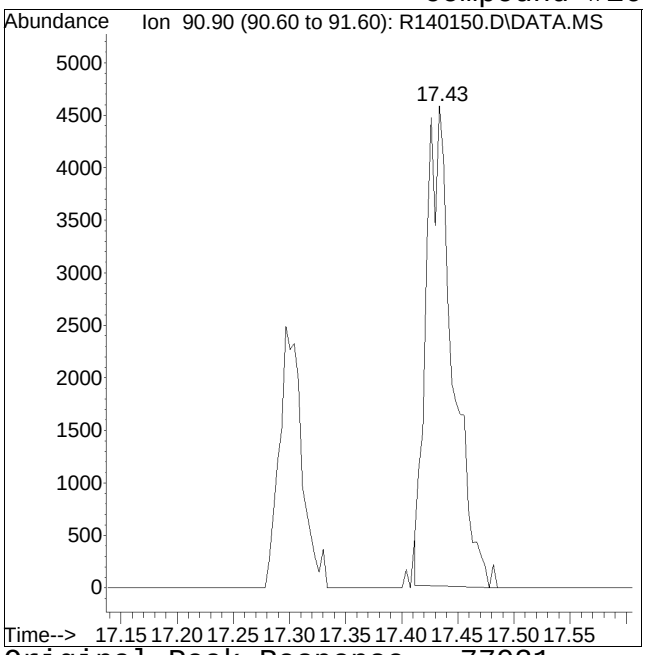



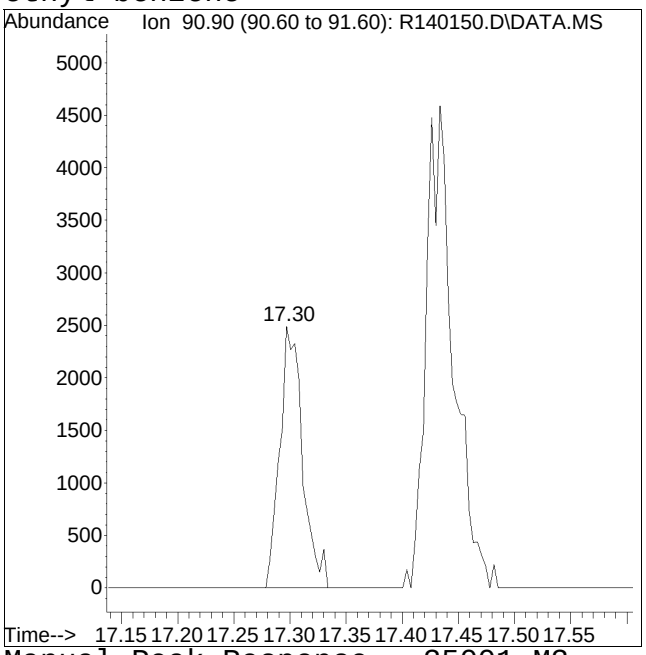

Original Peak Response = 10619235 Manual Peak Response = 2476120 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140150.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:55 pm Instrument : Air Piano 1
Sample : L1504425-03,3,250,250 Quant Date : 3/12/2015 11:14 am

Compound #16: ethyl benzene



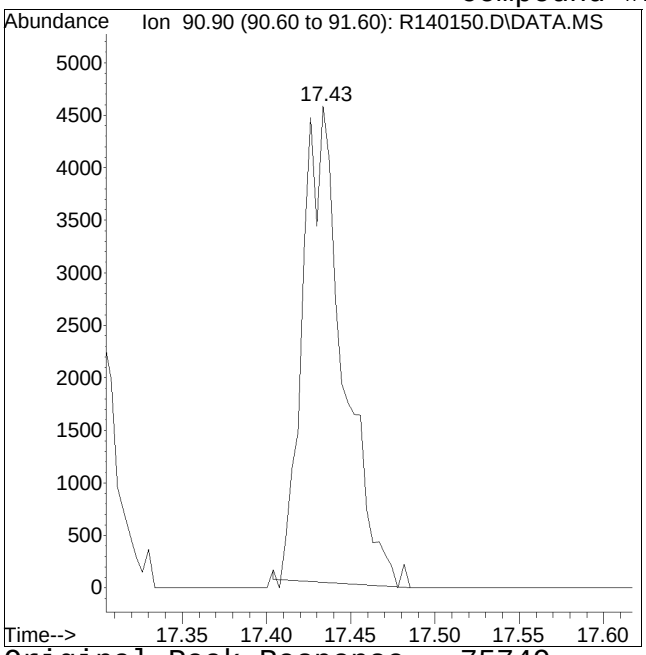

Original Peak Response = 77031 Manual Peak Response = 35001 M3

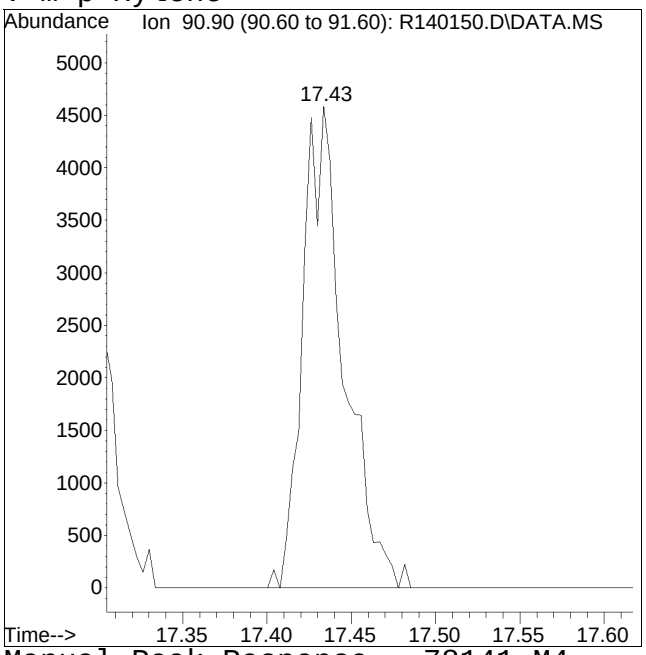
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140150.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:55 pm Instrument : Air Piano 1
Sample : L1504425-03,3,250,250 Quant Date : 3/12/2015 11:14 am

Compound #17: m+p-xylene



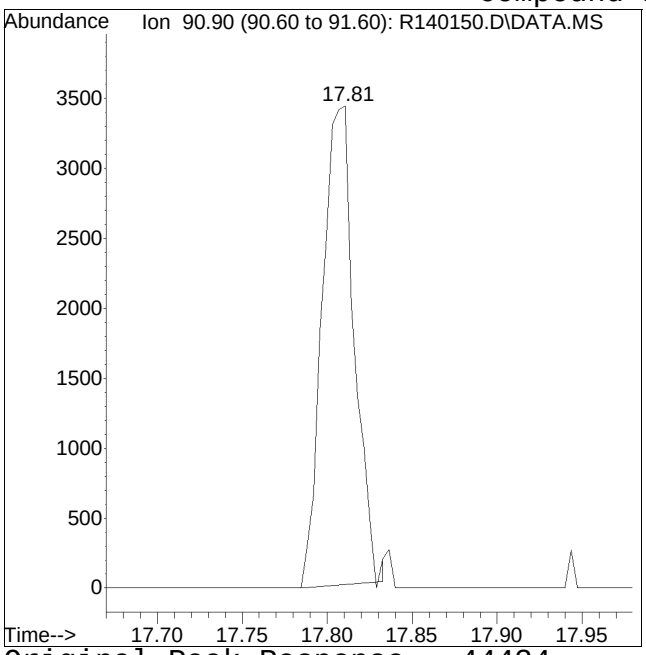



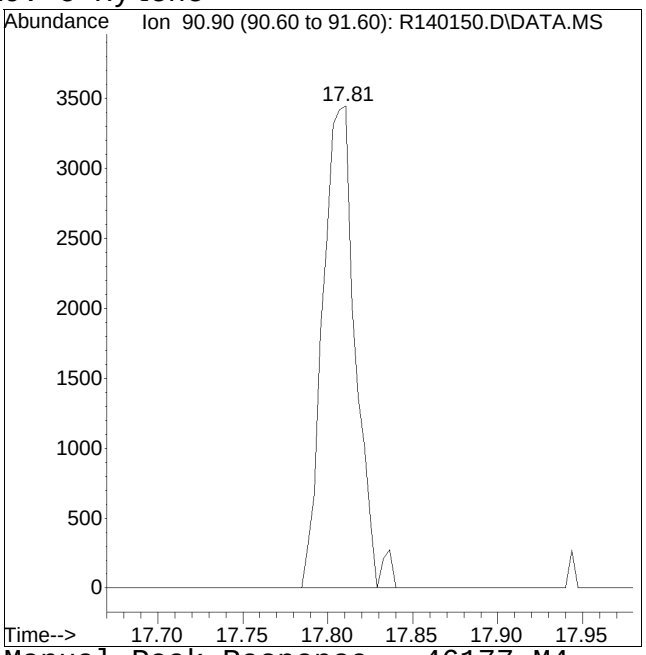

Original Peak Response = 75749 Manual Peak Response = 78141 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140150.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:55 pm Instrument : Air Piano 1
Sample : L1504425-03,3,250,250 Quant Date : 3/12/2015 11:14 am

Compound #19: o-xylene



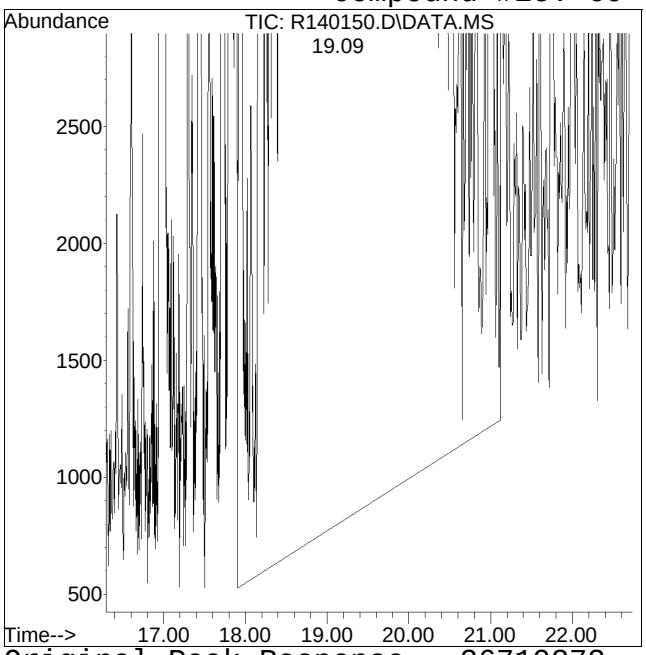




Original Peak Response = 44434 Manual Peak Response = 46177 M4
M4 = Poor automated baseline construction.

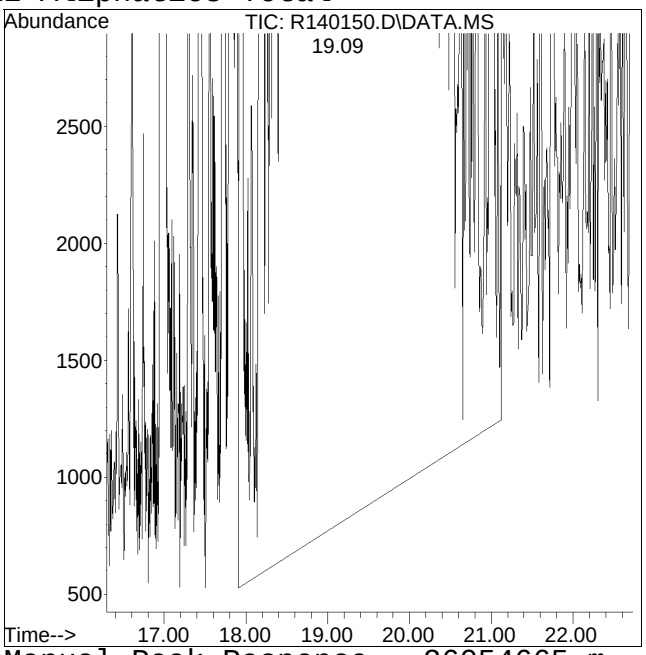
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R140150.D
Date Inj'd : 3/11/2015 9:55 pm
Sample : L1504425-03,3,250,250
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/12/2015 11:14 am

Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 26719272

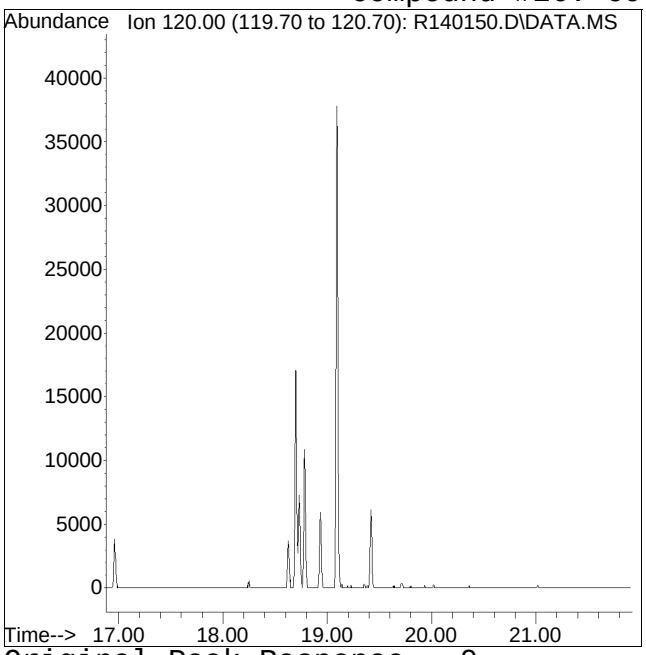


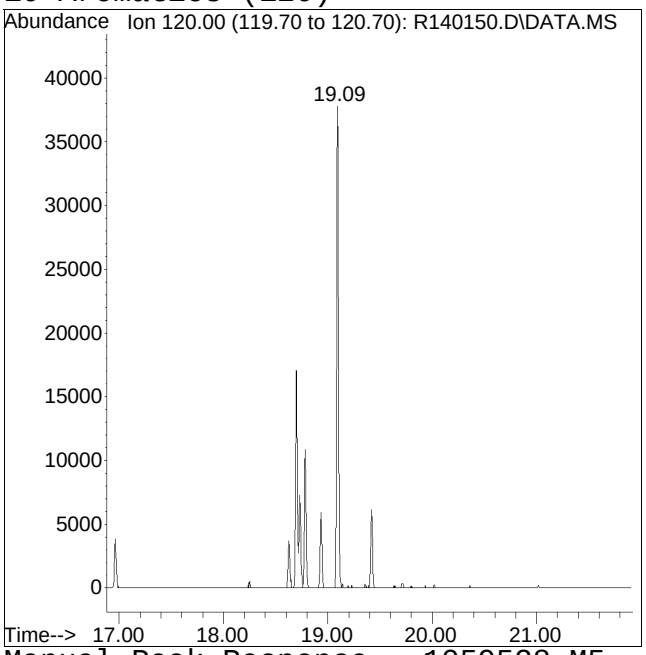

Manual Peak Response = 26054665 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140150.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:55 pm Instrument : Air Piano 1
Sample : L1504425-03,3,250,250 Quant Date : 3/12/2015 11:14 am

Compound #26: C9-C10 Aromatics (120)



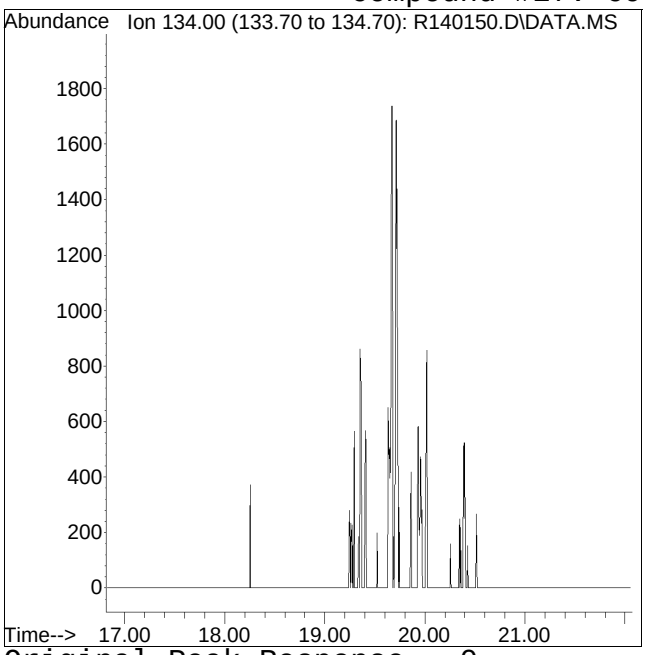



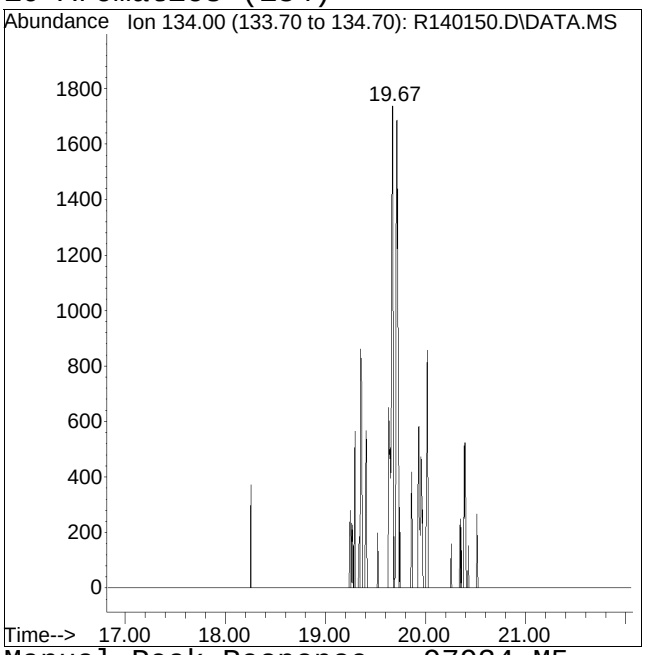

Original Peak Response = 0 Manual Peak Response = 1059528 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140150.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:55 pm Instrument : Air Piano 1
Sample : L1504425-03,3,250,250 Quant Date : 3/12/2015 11:14 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 97934 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140151.D
Acq On : 11 Mar 2015 10:27 pm
Operator : AIRPIANO1:RY
Sample : L1504425-04,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 14:47:32 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 498020 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 92.80% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1847484 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 84.27% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 451392 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 92.15% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3603322 | 11.211 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 112.11% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4148020 | 9.048 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 90.48% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 5768490 | 9.652 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 96.52% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 12.09 | 78 | 45714 | 0.900 | ug/m3# | 57 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 5789581 | 37.827 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 194394 | 3.233 | ug/m3 | 96 |
| 16) ethyl benzene | 17.30 | 91 | 36441 | 0.530 | ug/m3# | 42 |
| 17) m+p-xylene | 17.43 | 91 | 86376 | 1.593 | ug/m3# | 85 |
| 19) o-xylene | 17.81 | 91 | 46640 | 0.842 | ug/m3# | 28 |
| 23) naphthalene | 0.00 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 27839005M5 | 127.766 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 1060517M5 | 41.546 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.71 | 134 | 87308M5 | 3.420 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 1147825 | 44.967 | ug/m3 | |

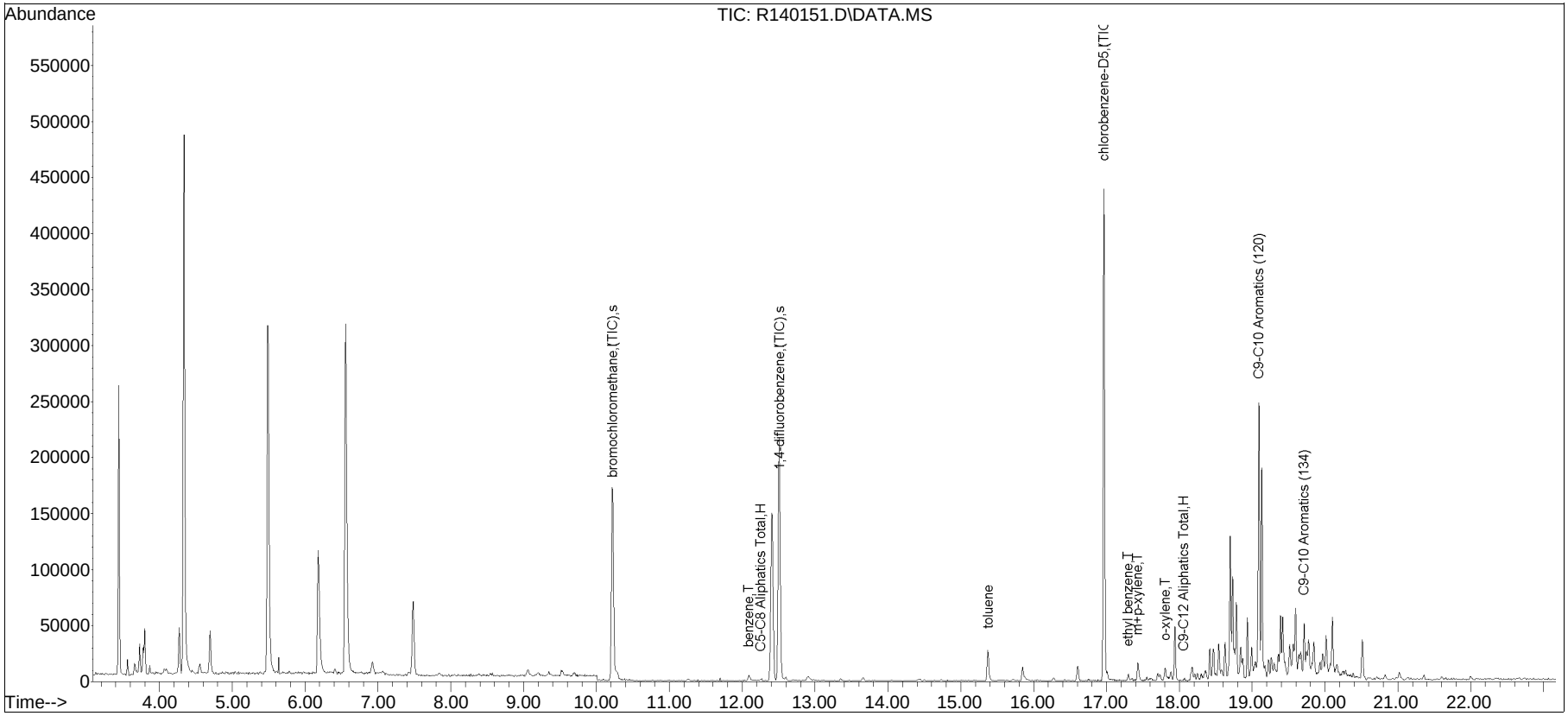
(#) = qualifier out of range (m) = manual integration (+) = signals summed

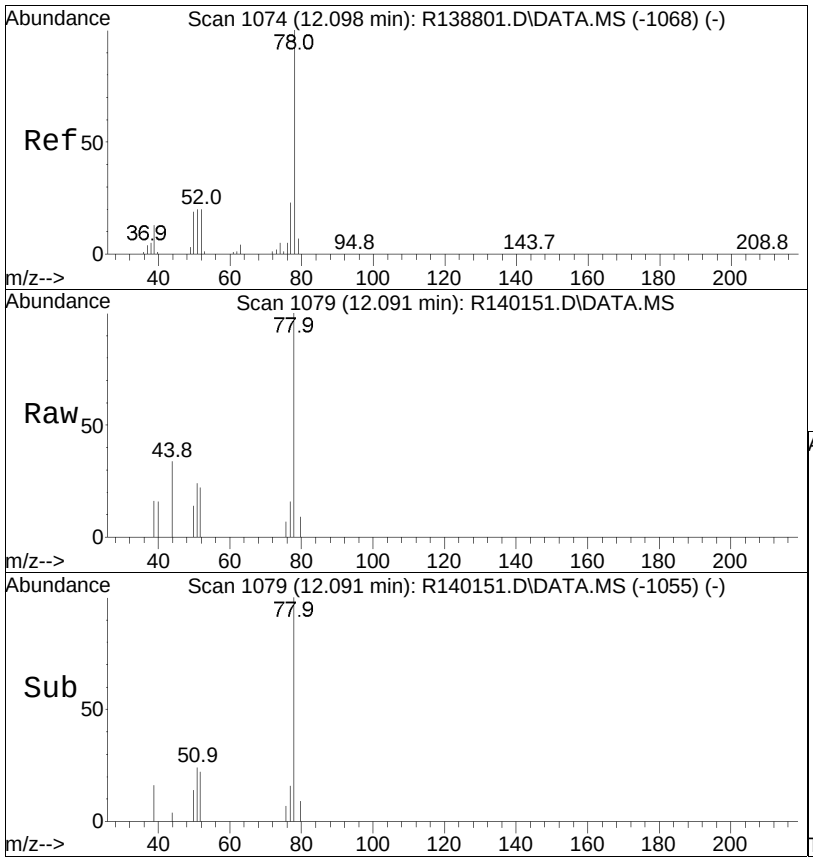
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140151.D
Acq On : 11 Mar 2015 10:27 pm
Operator : AIRPIANO1:RY
Sample : L1504425-04,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 14:47:32 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

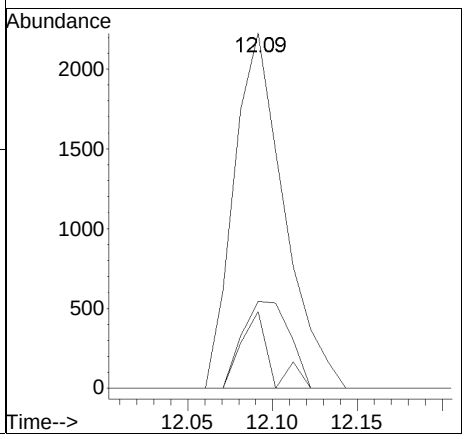


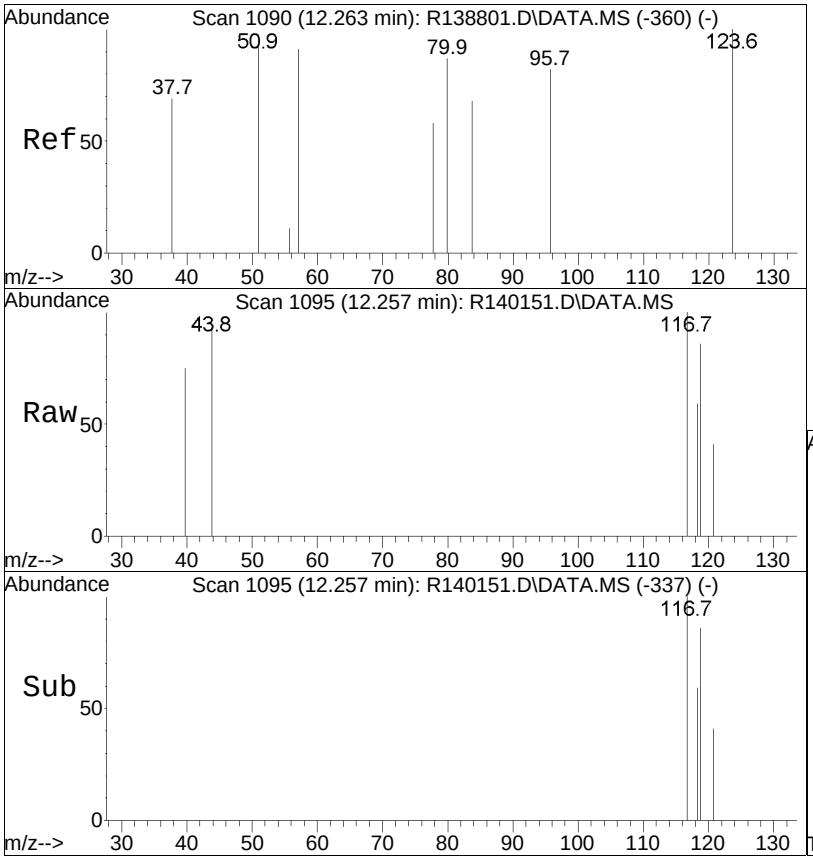



#9
benzene
Concen: 0.90 ug/m3
RT: 12.09 min Scan# 1079
Delta R.T. 0.001 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 78 Resp: 45714

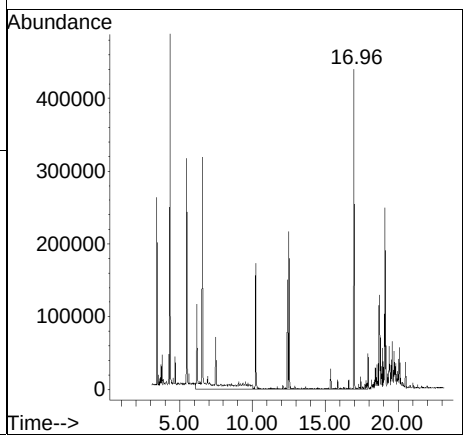
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 0.0 | 15.9 | 23.9# |
| 51 | 0.0 | 15.9 | 23.9# |

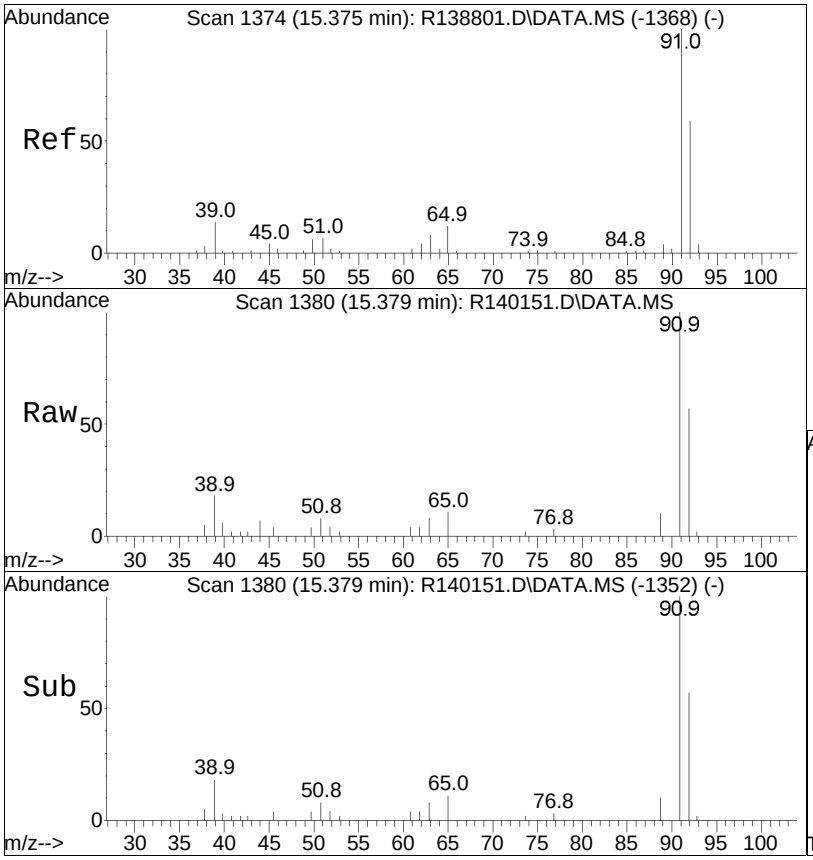





#11
C5-C8 Aliphatics Total
Concen: 44.92 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:TIC Resp: 5789581

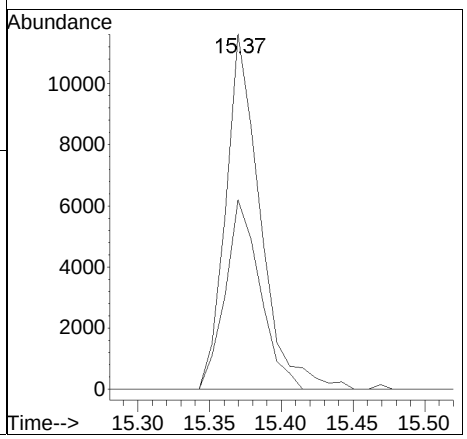


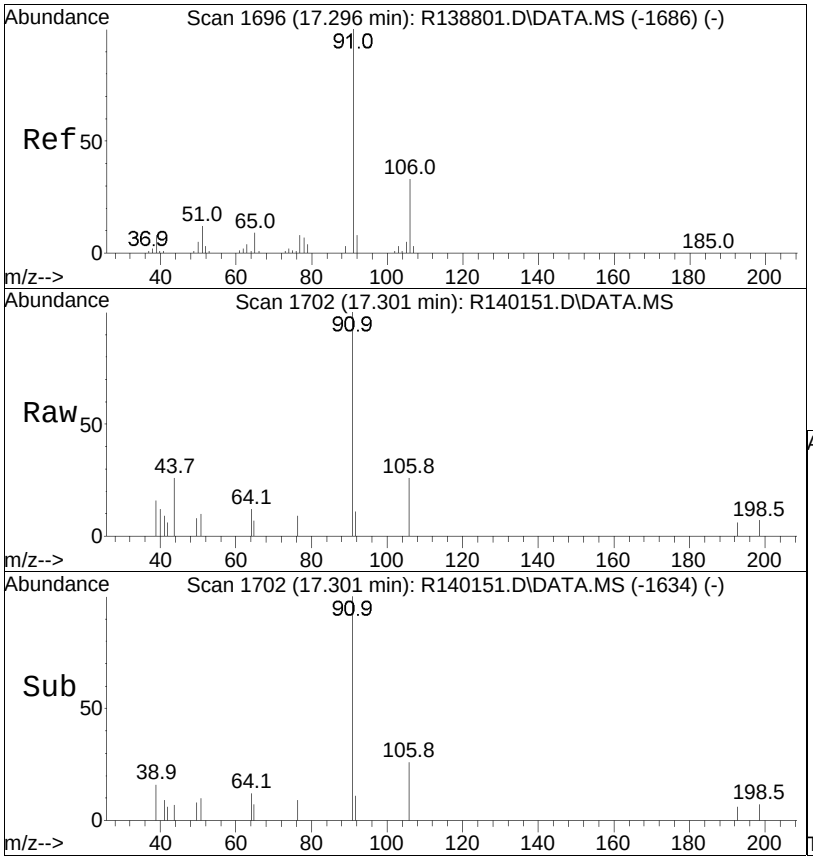



#13
toluene
Concen: 3.23 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.002 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 194394

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.1 | 45.4 | 68.0 |

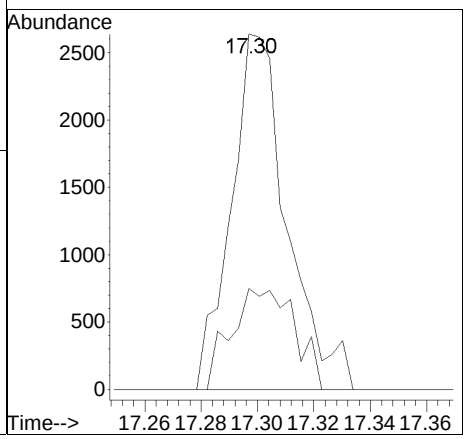


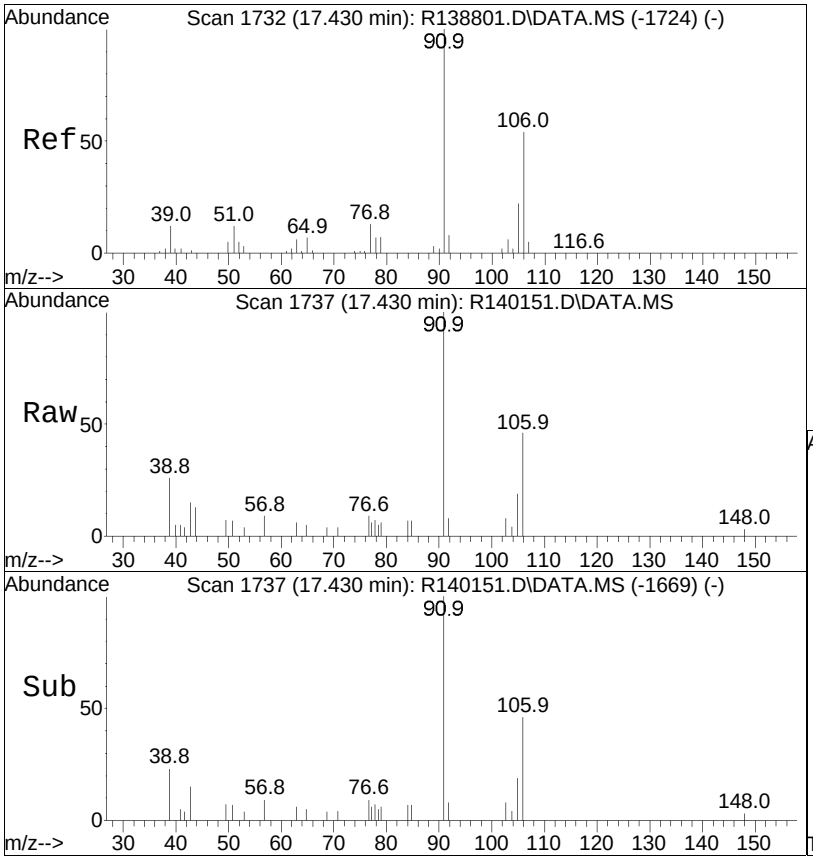



#16
ethyl benzene
Concen: 0.53 ug/m3
RT: 17.30 min Scan# 1702
Delta R.T. 0.003 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 36441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 26.3 | 39.5# |

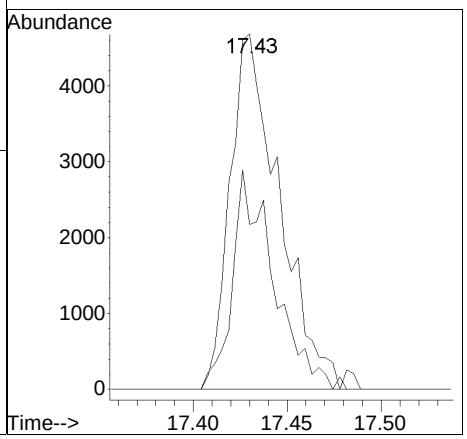


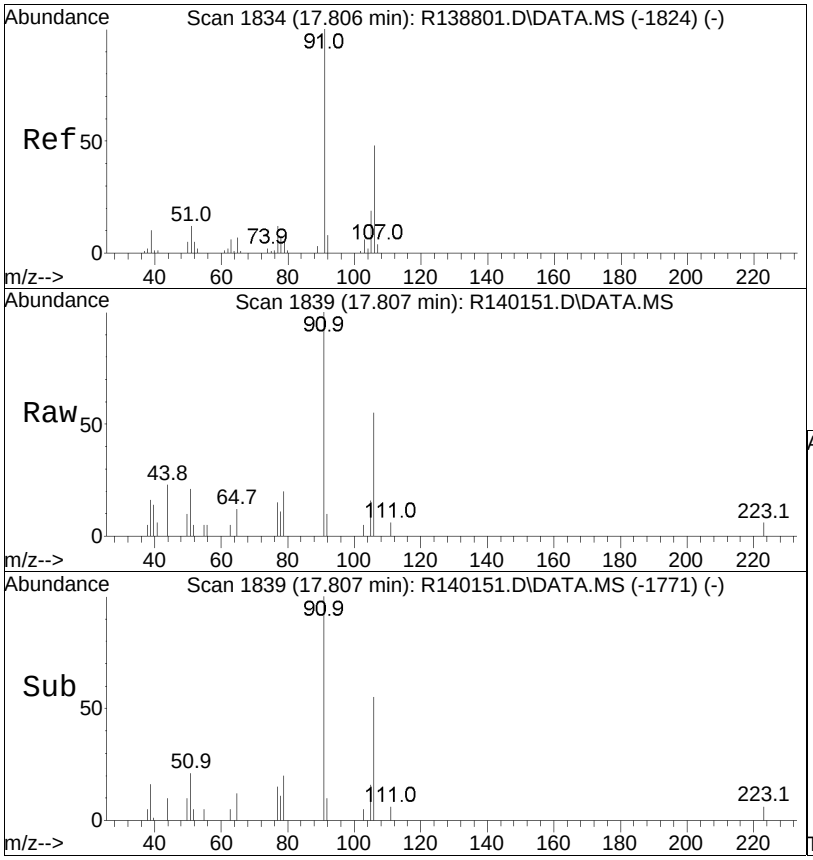



#17
m+p-xylene
Concen: 1.59 ug/m3
RT: 17.43 min Scan# 1737
Delta R.T. 0.001 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 86376

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 51.1 | 33.4 | 50.2# |

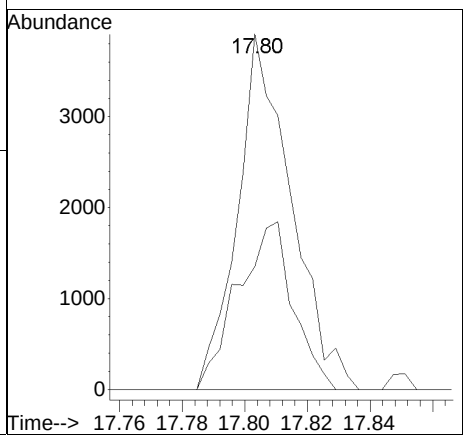


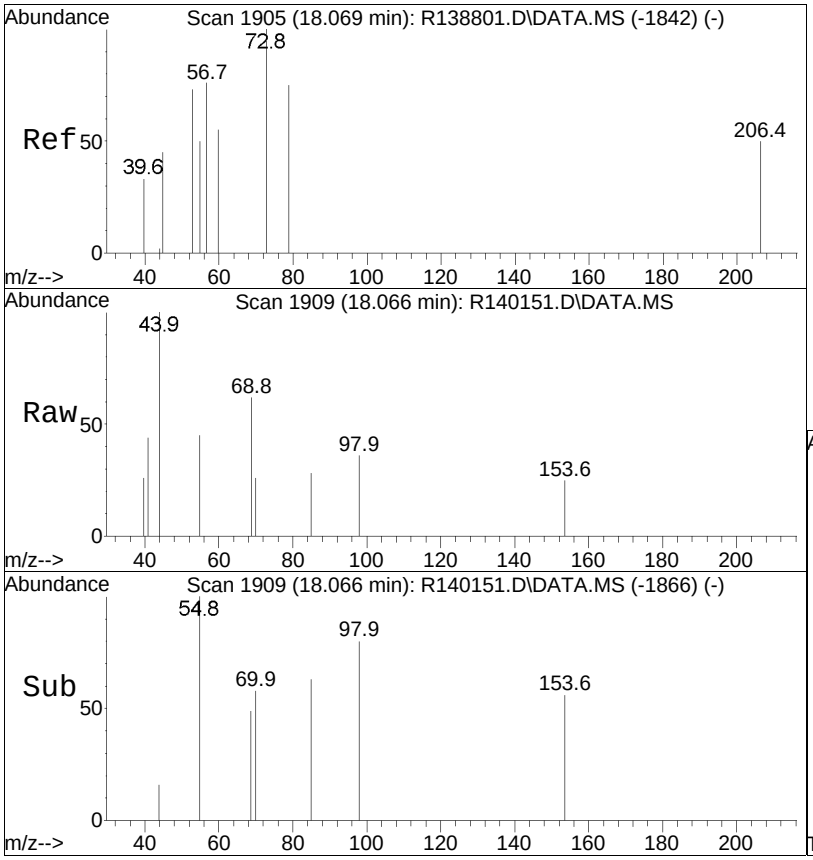



#19
o-xylene
Concen: 0.84 ug/m3
RT: 17.81 min Scan# 1839
Delta R.T. -0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 46640

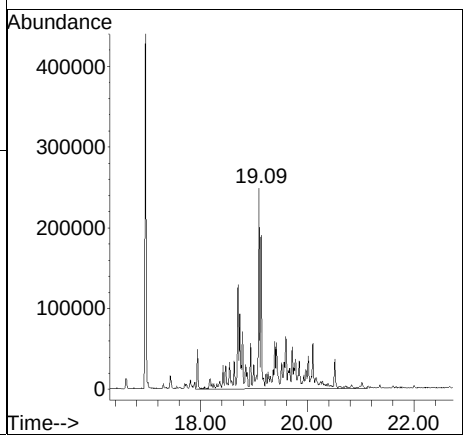
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 39.5 | 59.3# |

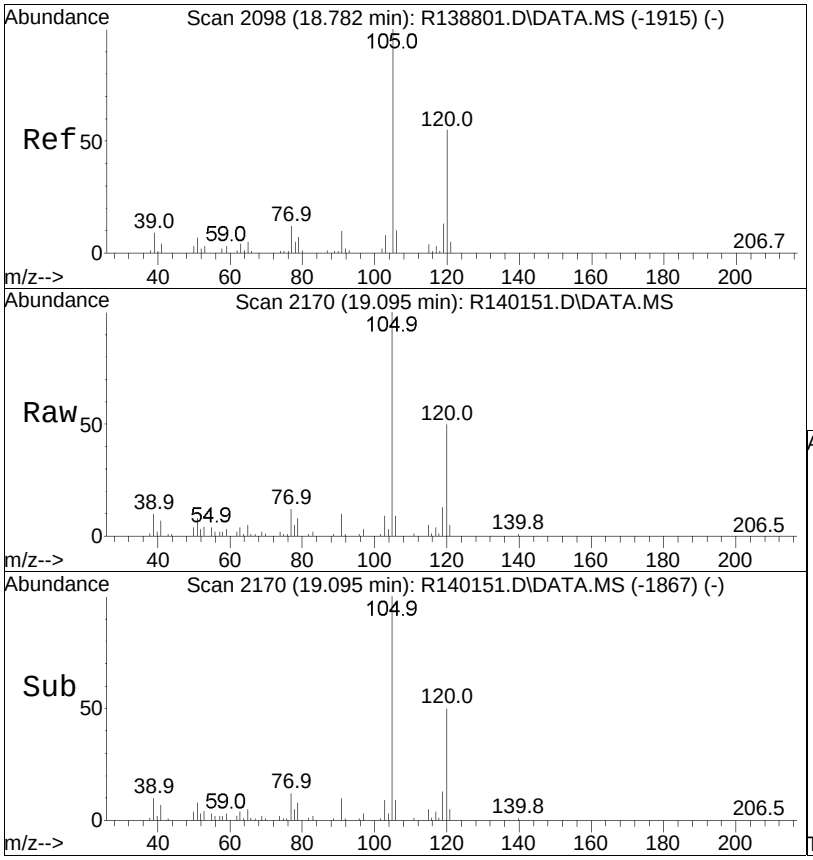





#25
C9-C12 Aliphatics Total
Concen: 172.73 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

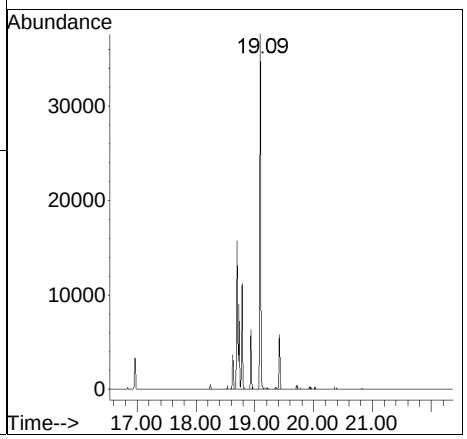
Tgt Ion:TIC Resp:27839005

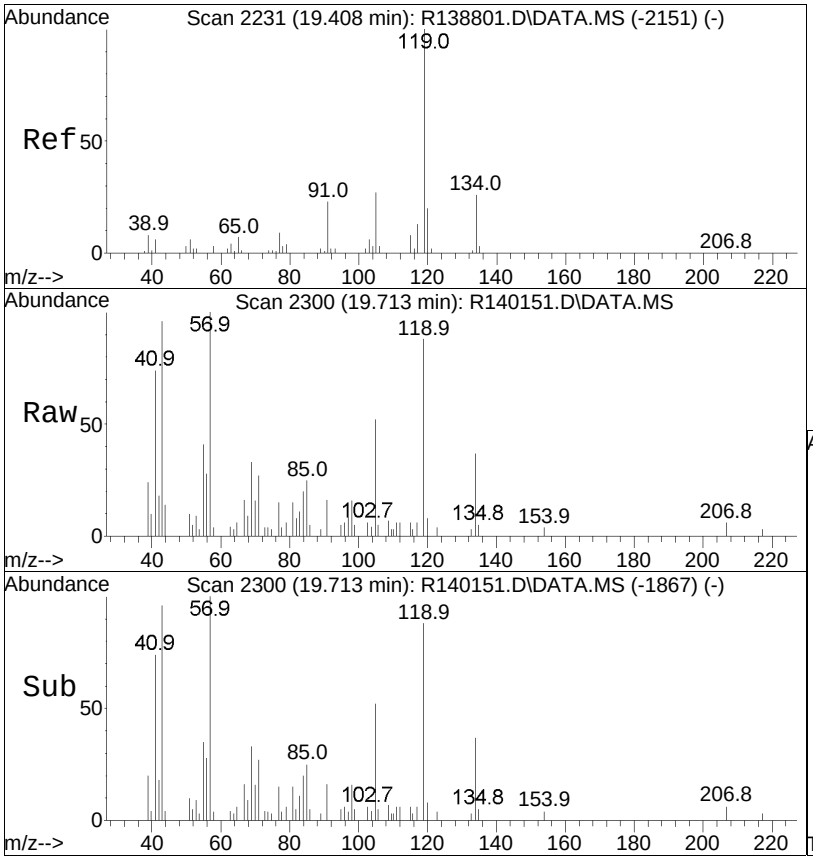





#26
C9-C10 Aromatics (120)
Concen: 41.55 ug/m3 m
RT: 19.09 min Scan# 2170
Delta R.T. -0.905 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

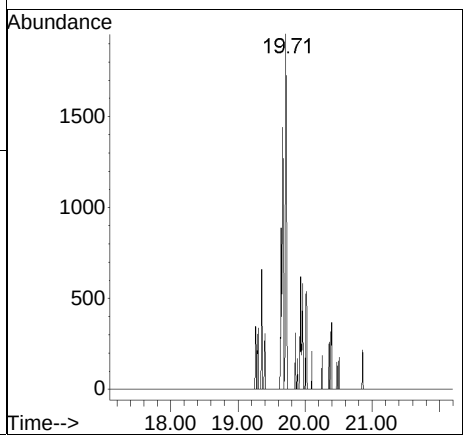
Tgt Ion:120 Resp: 1060517






#27
C9-C10 Aromatics (134)
Concen: 3.42 ug/m3 m
RT: 19.71 min Scan# 2300
Delta R.T. -0.287 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

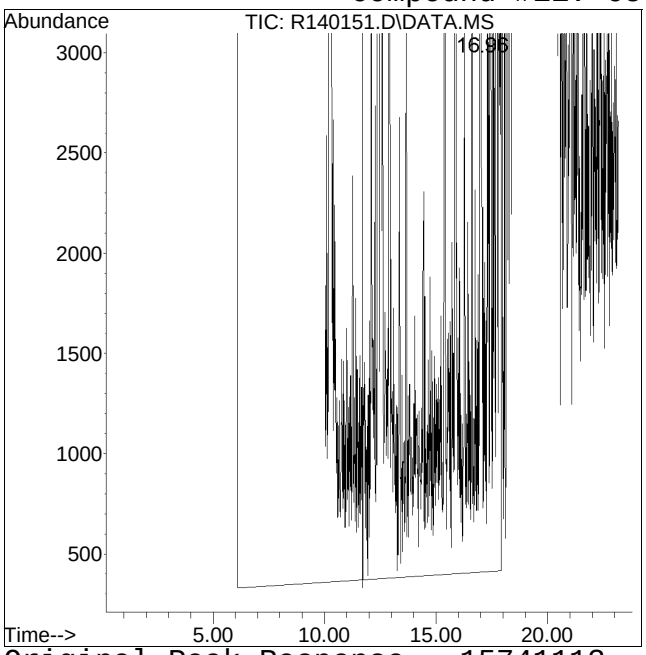
Tgt Ion:134 Resp: 87308



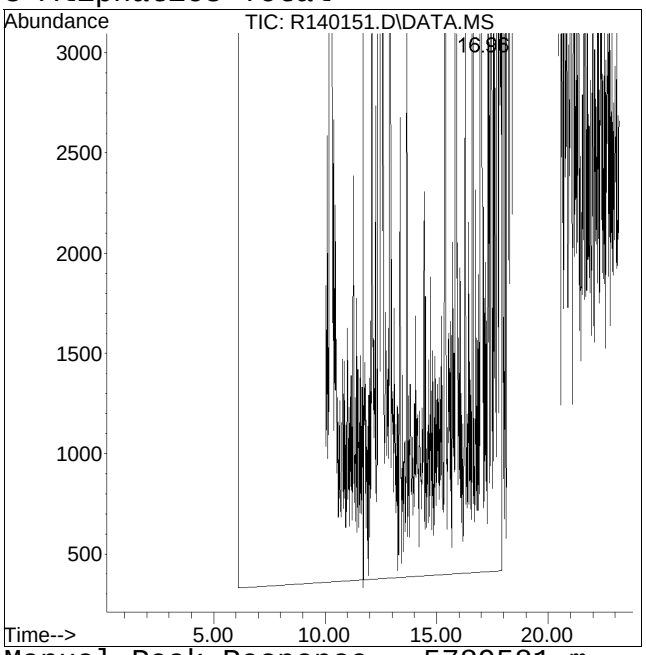
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM150311A\ | : APH150101.M |
| Data File | : R140151.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 10:27 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-04,3,250,250 | Quant Date | : 3/12/2015 11:16 am |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 15741113

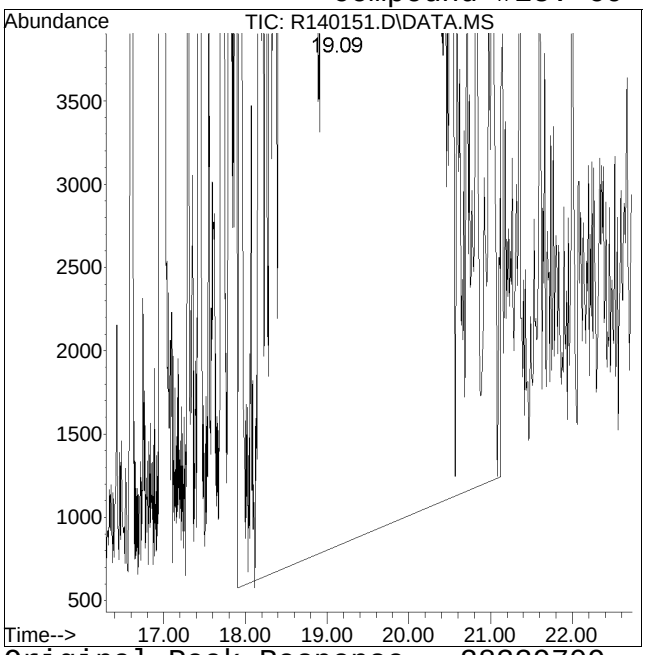



Manual Peak Response = 5789581 m

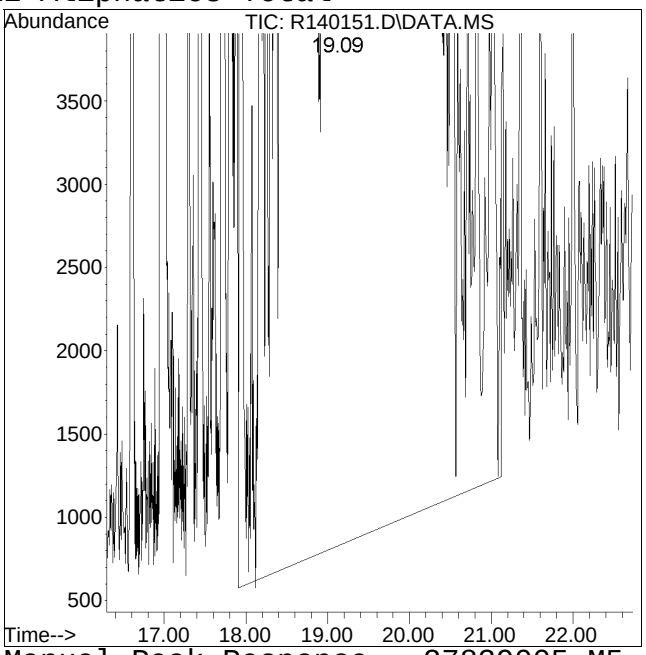
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140151.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:27 pm Instrument : Air Piano 1
Sample : L1504425-04,3,250,250 Quant Date : 3/12/2015 11:16 am

Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 28339709



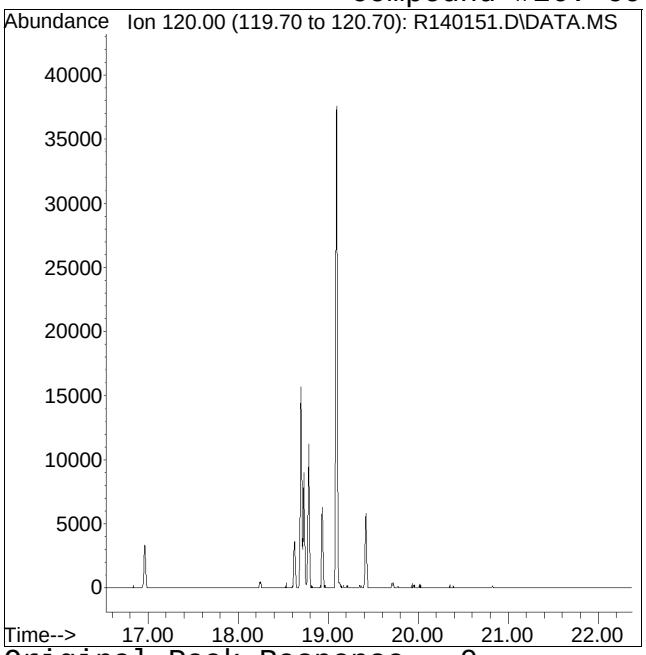

Manual Peak Response = 27839005 M5

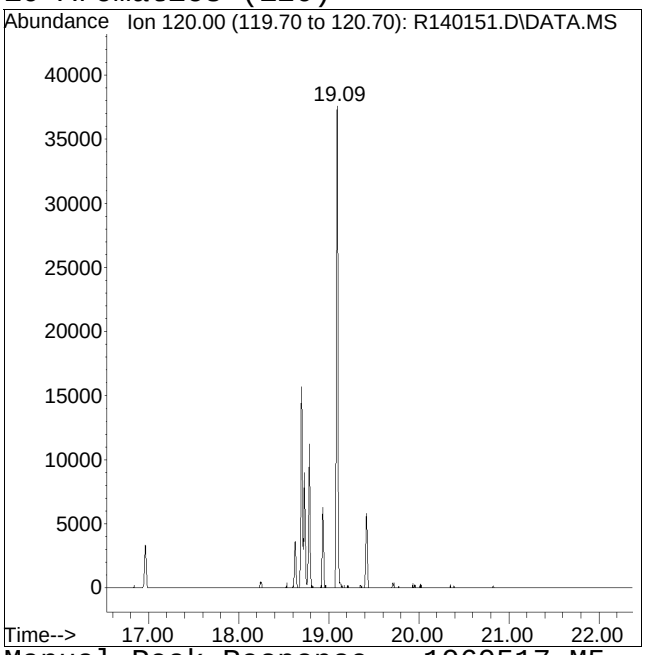
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140151.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:27 pm Instrument : Air Piano 1
Sample : L1504425-04,3,250,250 Quant Date : 3/12/2015 11:16 am

Compound #26: C9-C10 Aromatics (120)



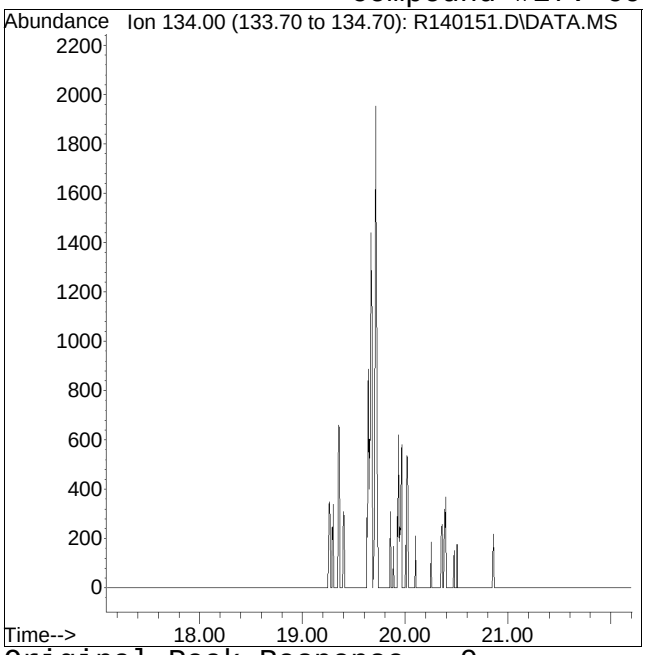



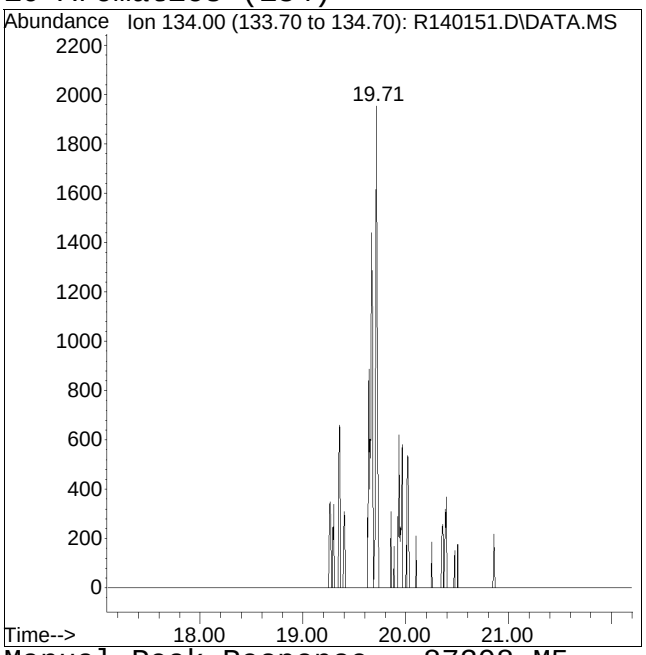

Original Peak Response = 0 Manual Peak Response = 1060517 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140151.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:27 pm Instrument : Air Piano 1
Sample : L1504425-04,3,250,250 Quant Date : 3/12/2015 11:16 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 87308 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140152.D
Acq On : 11 Mar 2015 10:59 pm
Operator : AIRPIANO1:RY
Sample : L1504425-05,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 14:48:05 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 457071 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 85.17% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1986275 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 90.60% | |
| 12) chlorobenzene-D5 | 16.96 | 54 | 457062 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 93.31% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3403790 | 10.459 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 104.59% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4435550 | 9.556 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 95.56% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 5961098 | 9.850 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 98.50% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 12.10 | 78 | 45138 | 0.827 | ug/m3# | 57 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 2192723 | 8.718 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 201594 | 3.311 | ug/m3 | 97 |
| 16) ethyl benzene | 17.31 | 91 | 39079 | 0.561 | ug/m3# | 42 |
| 17) m+p-xylene | 17.43 | 91 | 85491M4 | 1.557 | ug/m3 | |
| 19) o-xylene | 17.81 | 91 | 47760 | 0.851 | ug/m3# | 28 |
| 23) naphthalene | 21.13 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 31422689 | 141.142 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 1214232M5 | 46.978 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.71 | 134 | 114476M5 | 4.429 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 1328708 | 51.407 | ug/m3 | |

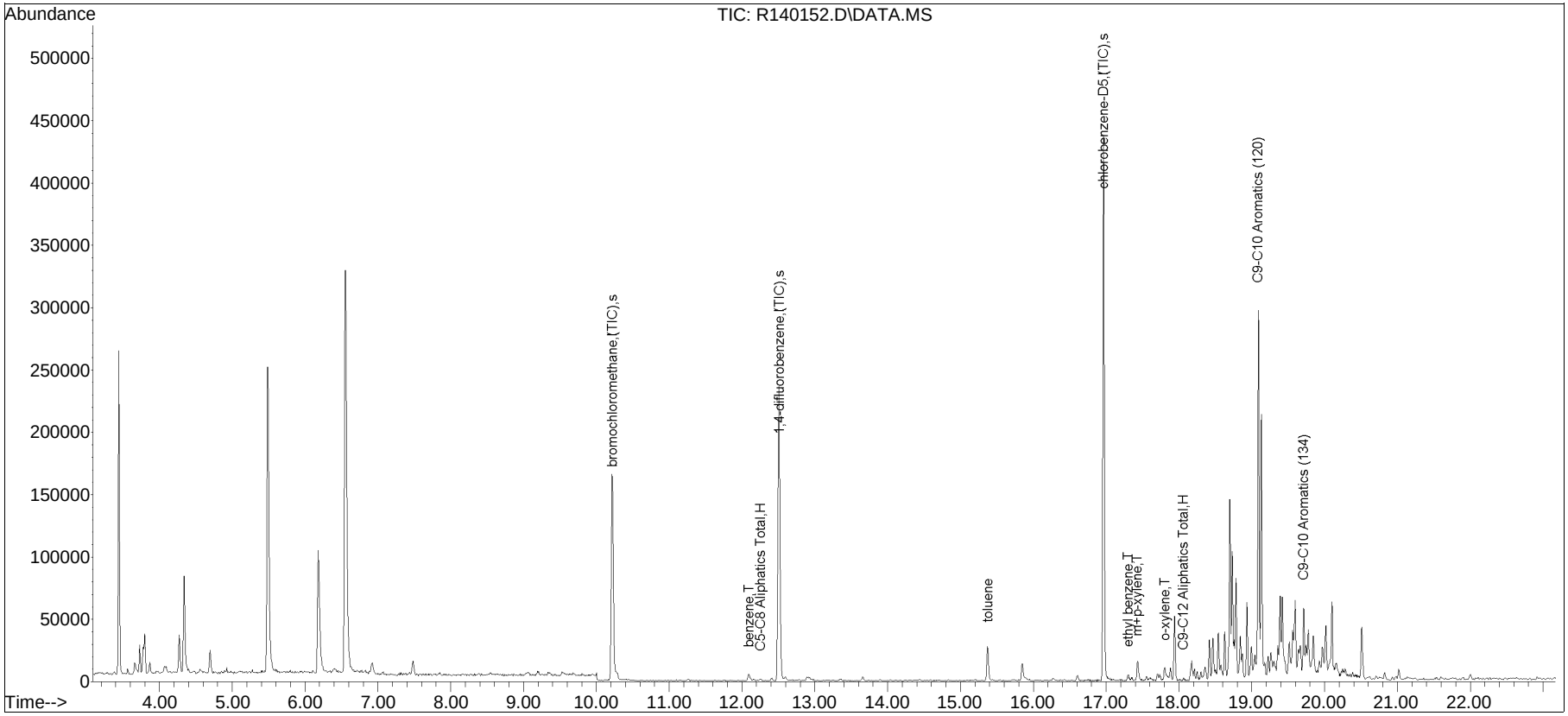
(#) = qualifier out of range (m) = manual integration (+) = signals summed

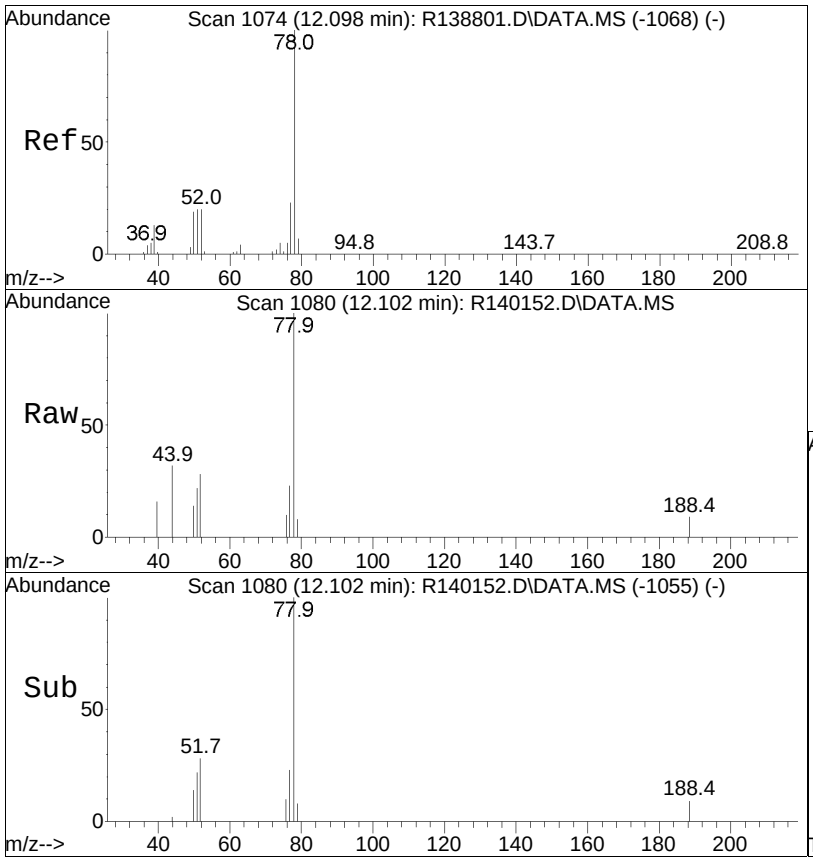
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140152.D
Acq On : 11 Mar 2015 10:59 pm
Operator : AIRPIANO1:RY
Sample : L1504425-05,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 14:48:05 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

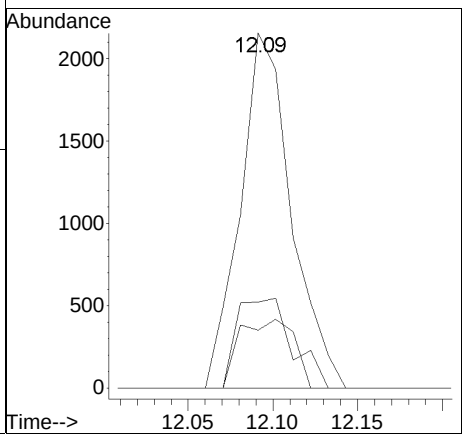


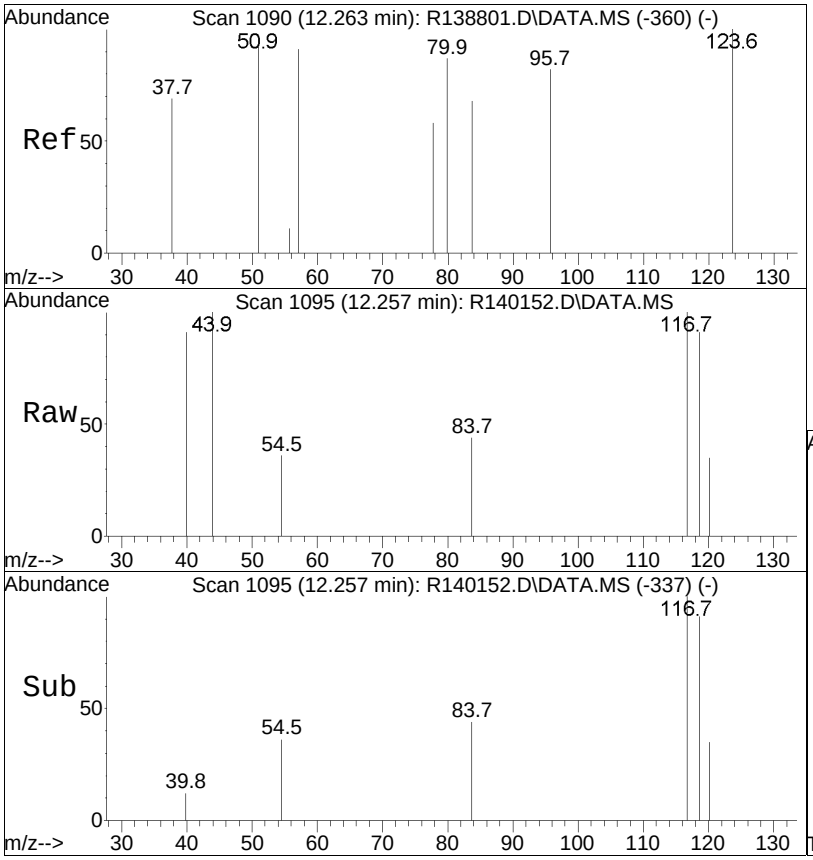



#9
benzene
Concen: 0.83 ug/m3
RT: 12.10 min Scan# 1080
Delta R.T. 0.005 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 78 Resp: 45138

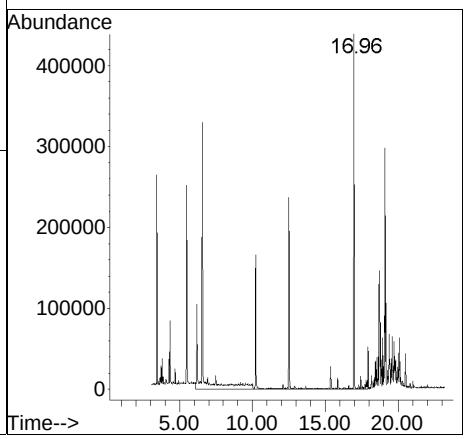
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 0.0 | 15.9 | 23.9# |
| 51 | 0.0 | 15.9 | 23.9# |

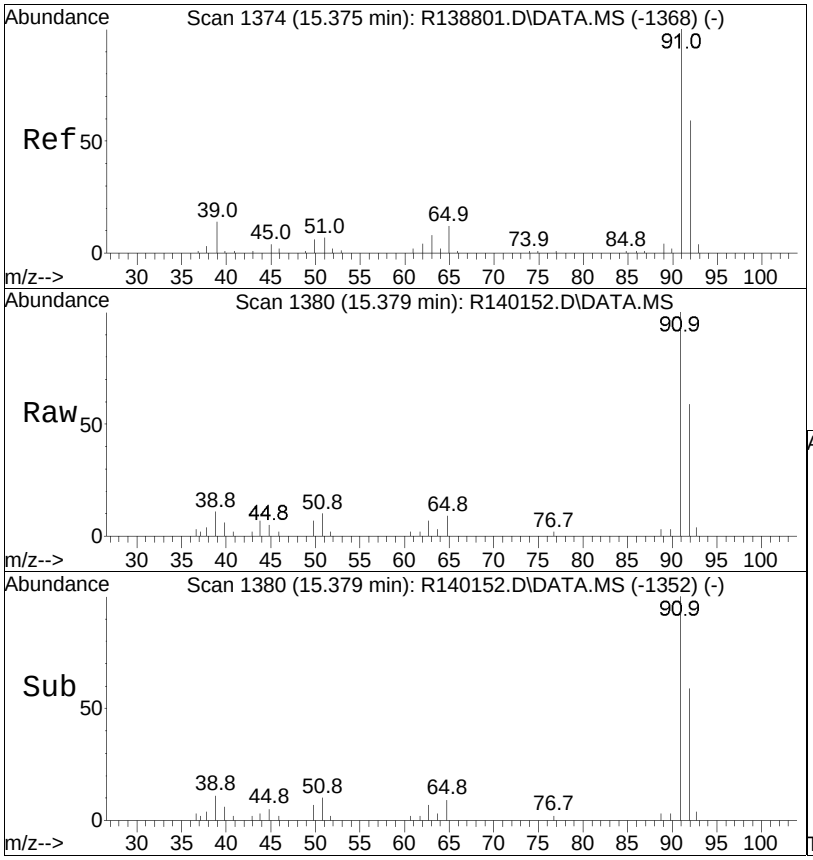





#11
C5-C8 Aliphatics Total
Concen: 15.83 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:TIC Resp: 2192723

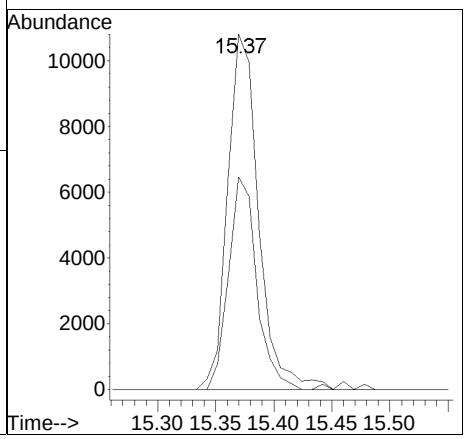


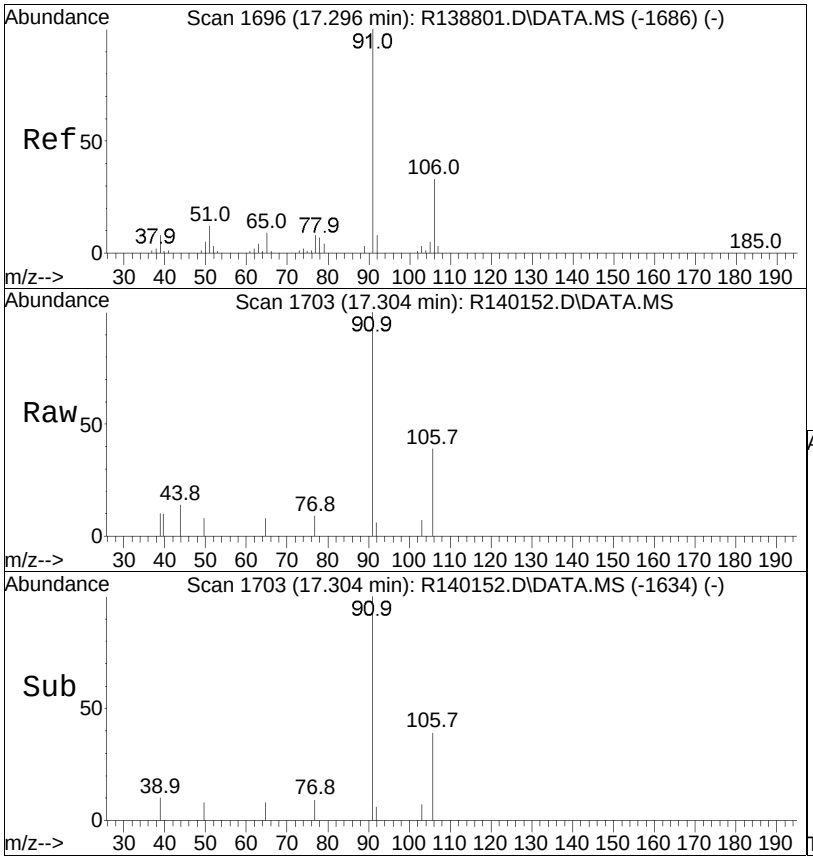



#13
toluene
Concen: 3.31 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.003 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 201594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.6 | 45.4 | 68.0 |

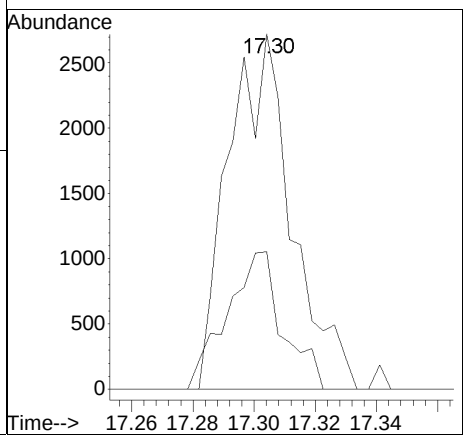


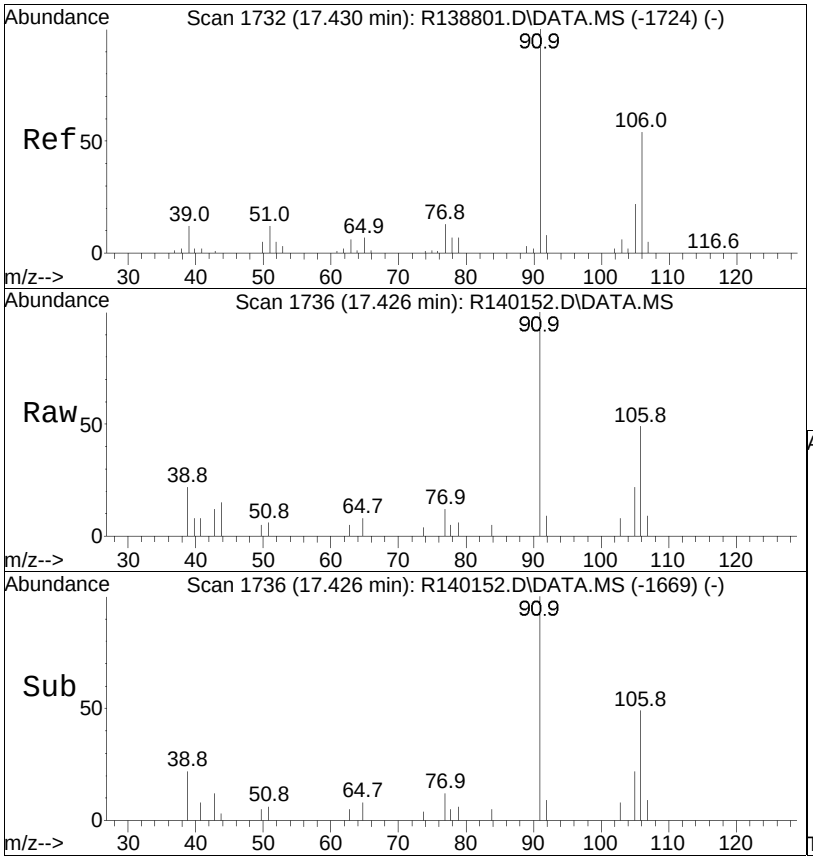



#16
ethyl benzene
Concen: 0.56 ug/m3
RT: 17.31 min Scan# 1703
Delta R.T. 0.008 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 39079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 26.3 | 39.5# |

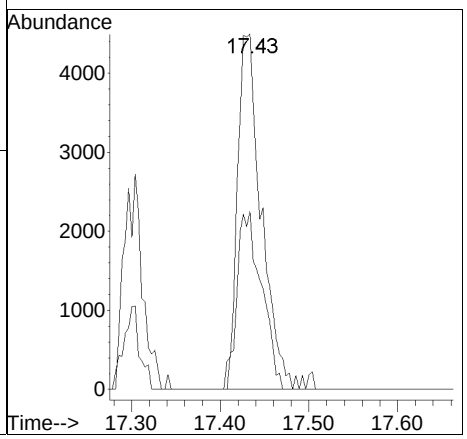


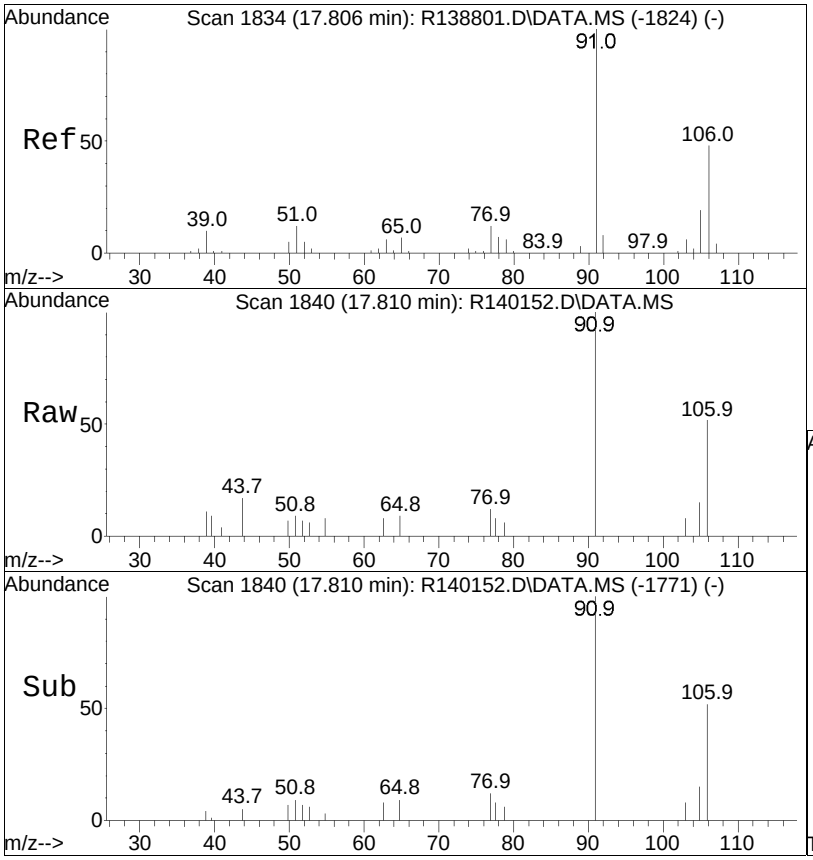



#17
m+p-xylene
Concen: 1.56 ug/m3 m
RT: 17.43 min Scan# 1736
Delta R.T. -0.003 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 85491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 50.1 | 33.4 | 50.2 |

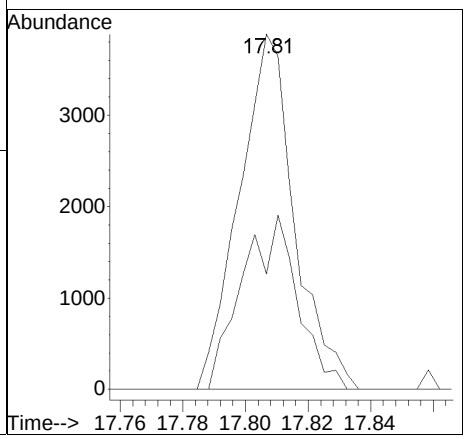


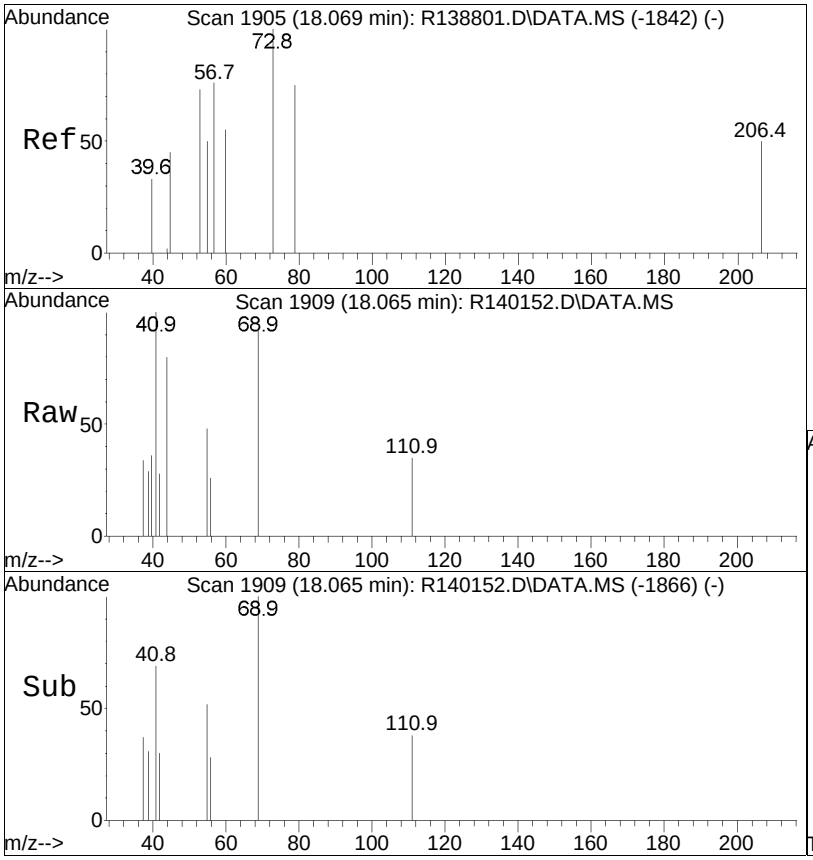



#19
o-xylene
Concen: 0.85 ug/m3
RT: 17.81 min Scan# 1840
Delta R.T. 0.003 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 47760

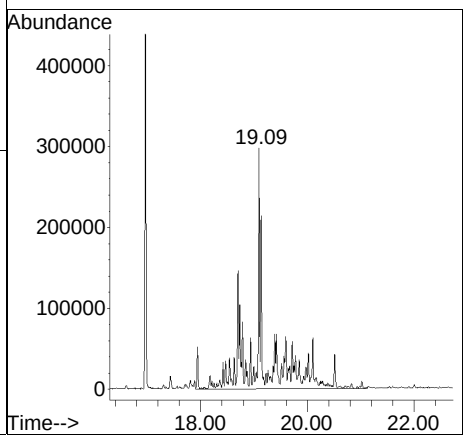
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 39.5 | 59.3# |

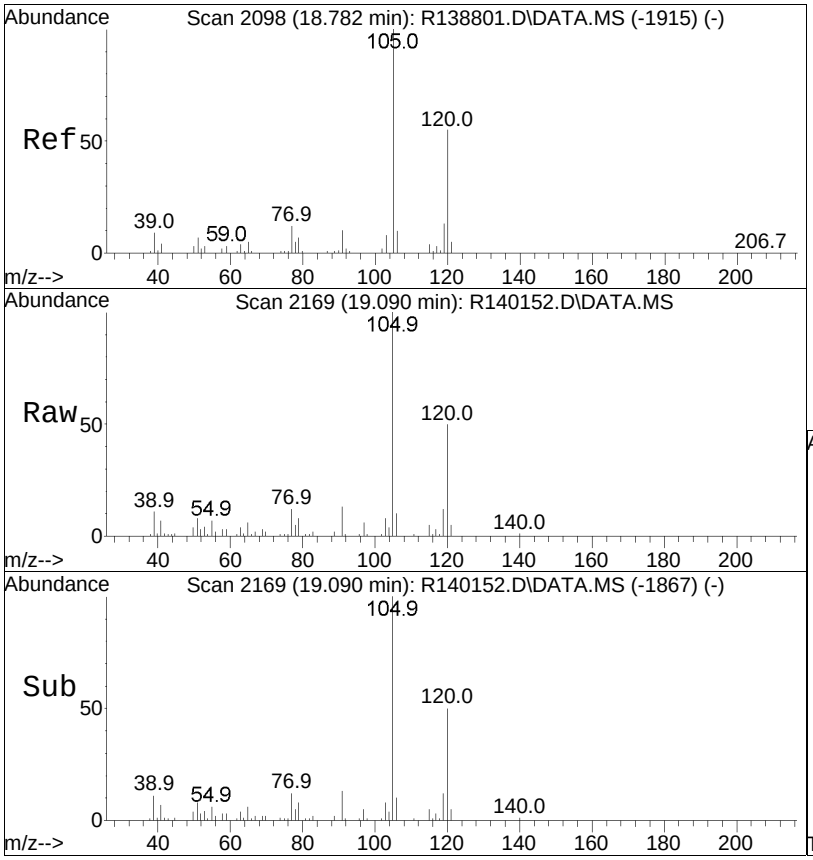





#25
C9-C12 Aliphatics Total
Concen: 192.55 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

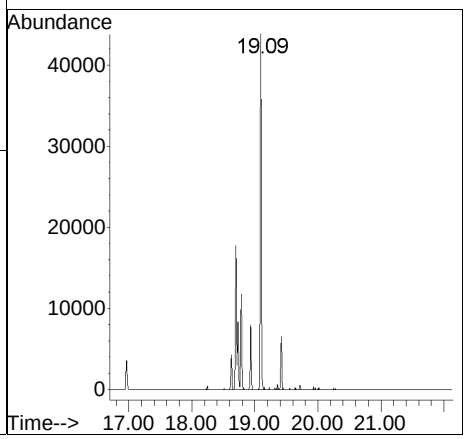
Tgt Ion:TIC Resp:31422689

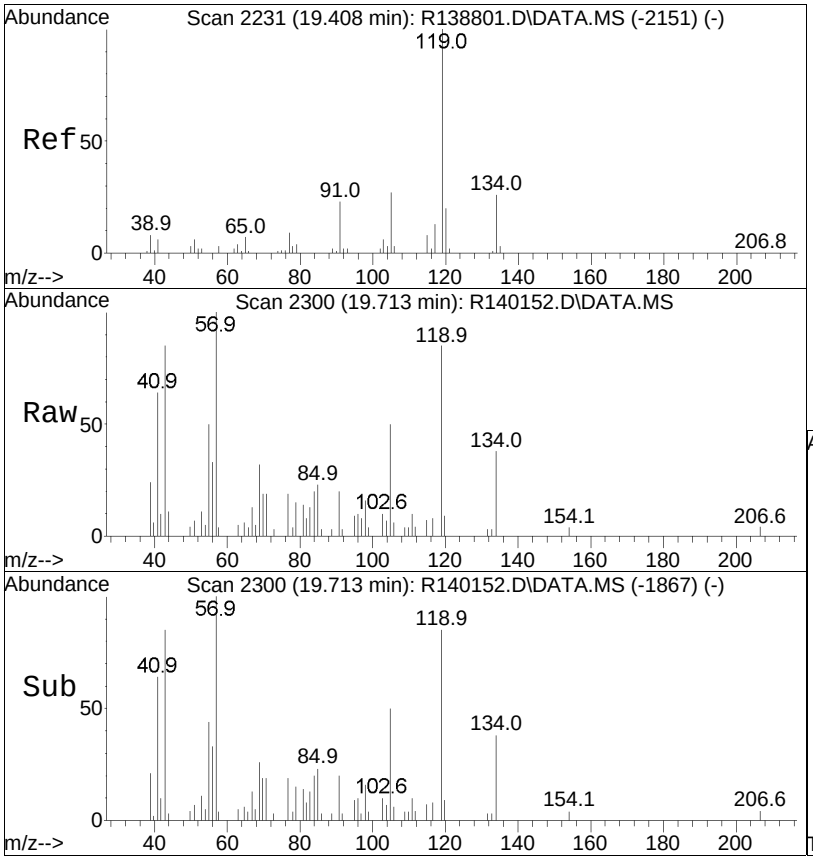





#26
C9-C10 Aromatics (120)
Concen: 46.98 ug/m3 m
RT: 19.09 min Scan# 2169
Delta R.T. -0.910 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

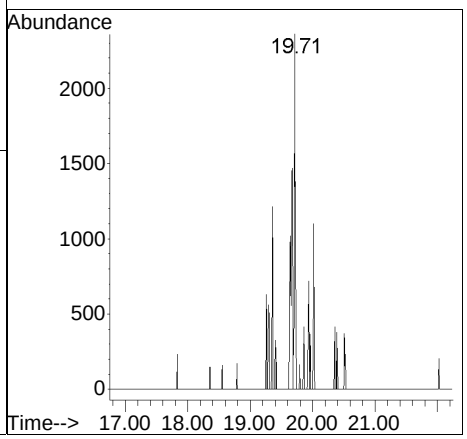
Tgt Ion:120 Resp: 1214232






#27
C9-C10 Aromatics (134)
Concen: 4.43 ug/m3 m
RT: 19.71 min Scan# 2300
Delta R.T. -0.287 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

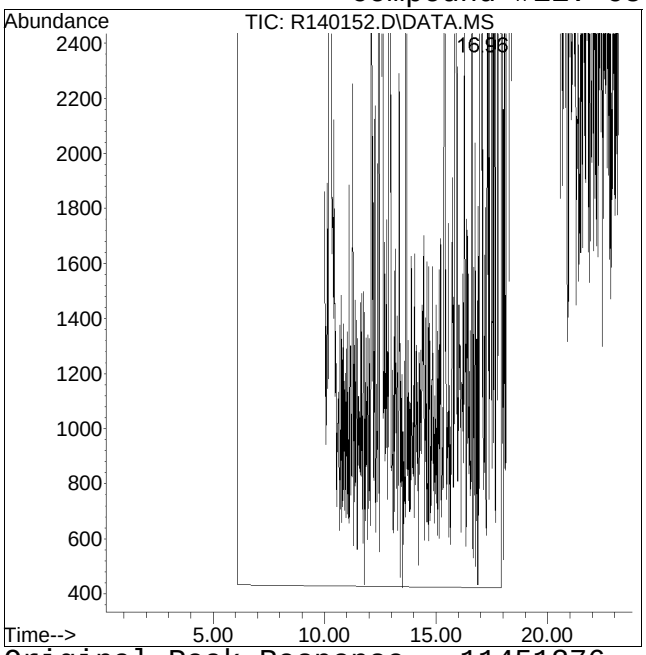
Tgt Ion:134 Resp: 114476



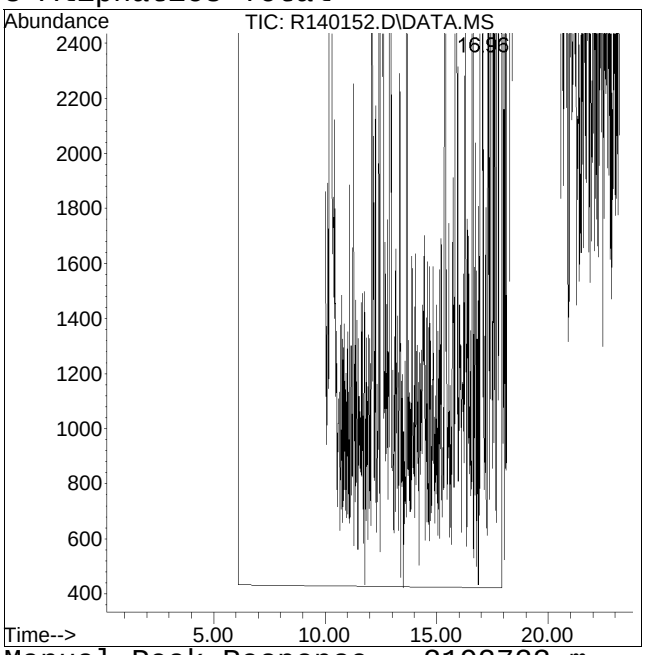
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140152.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 10:59 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-05,3,250,250 | Quant Date | : 3/12/2015 11:17 am |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 11451276

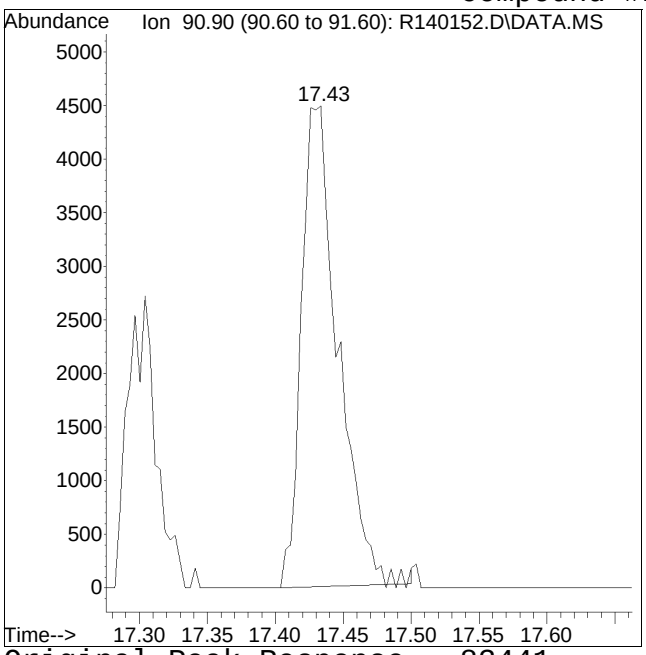



Manual Peak Response = 2192723 m

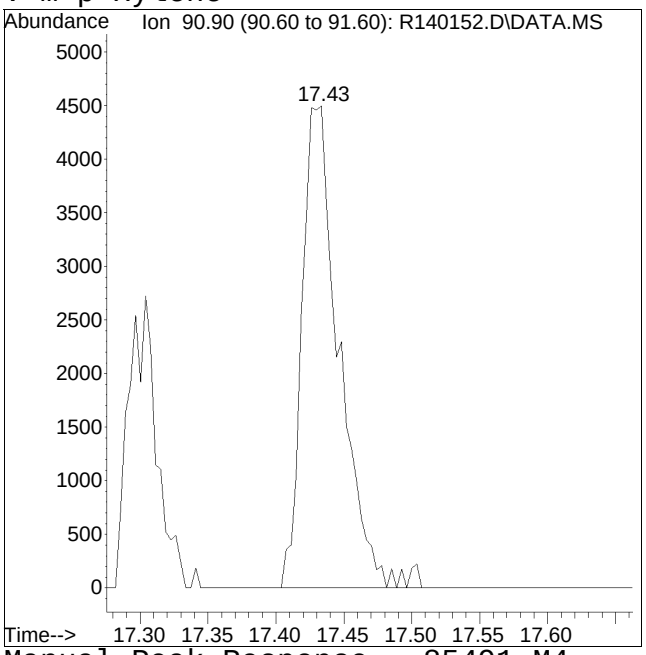
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140152.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:59 pm Instrument : Air Piano 1
Sample : L1504425-05,3,250,250 Quant Date : 3/12/2015 11:17 am

Compound #17: m+p-xylene




Original Peak Response = 83441



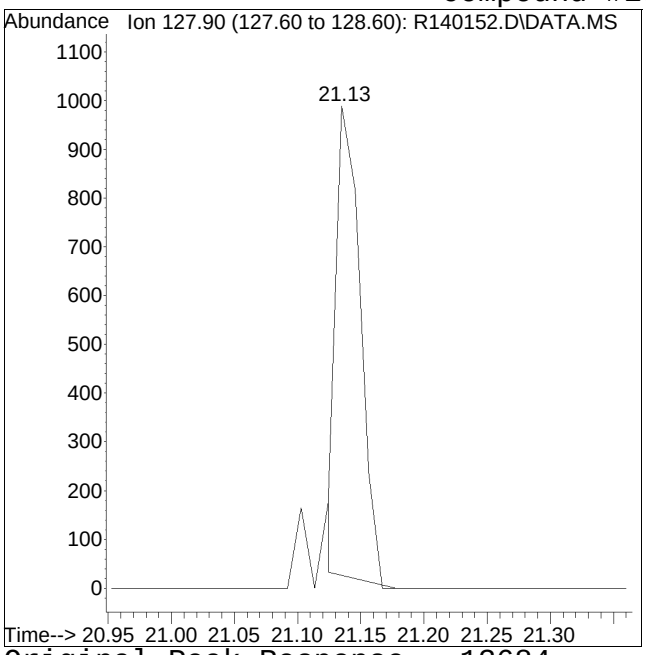

Manual Peak Response = 85491 M4

M4 = Poor automated baseline construction.

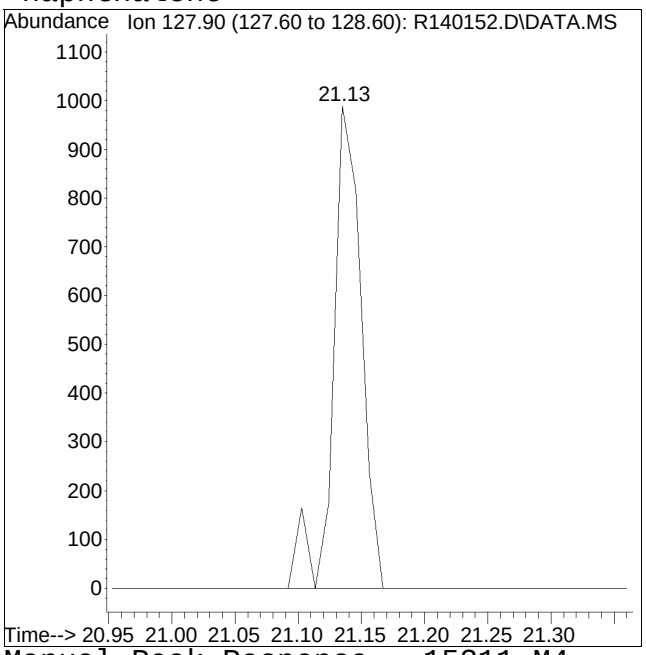
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140152.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:59 pm Instrument : Air Piano 1
Sample : L1504425-05,3,250,250 Quant Date : 3/12/2015 11:17 am

Compound #23: naphthalene




Original Peak Response = 13684



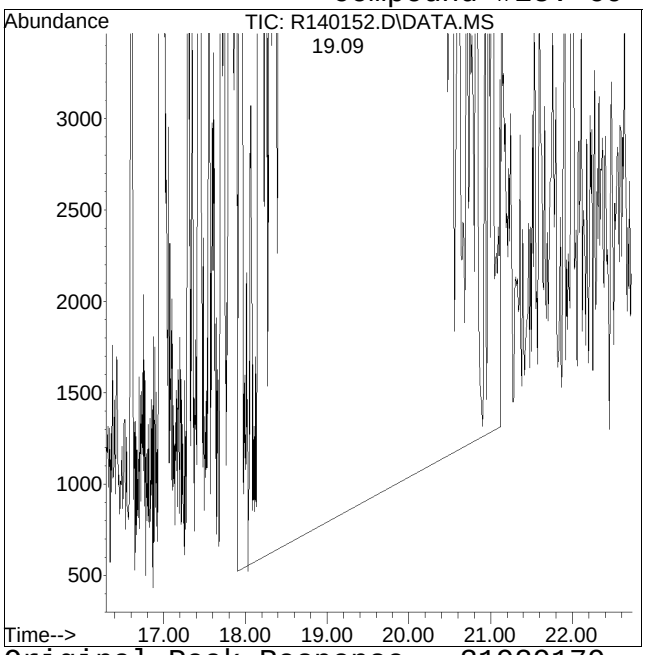

Manual Peak Response = 15311 M4

M4 = Poor automated baseline construction.

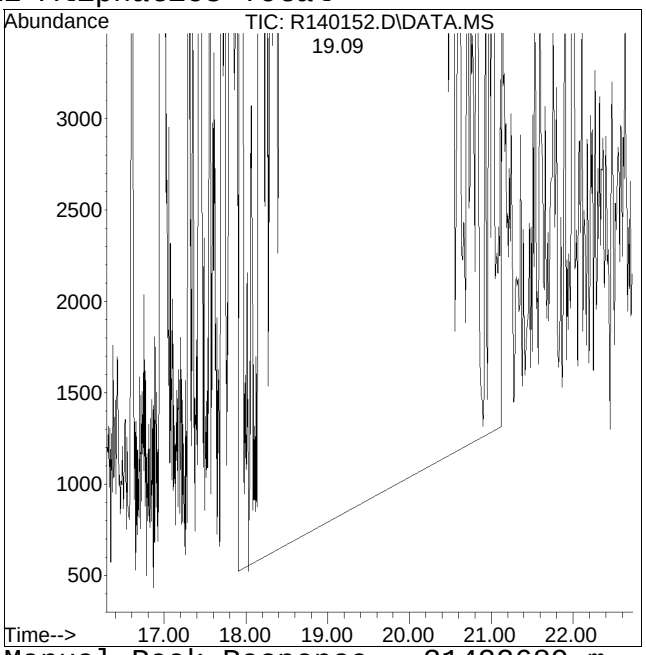
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140152.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:59 pm Instrument : Air Piano 1
Sample : L1504425-05,3,250,250 Quant Date : 3/12/2015 11:17 am

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 31929179

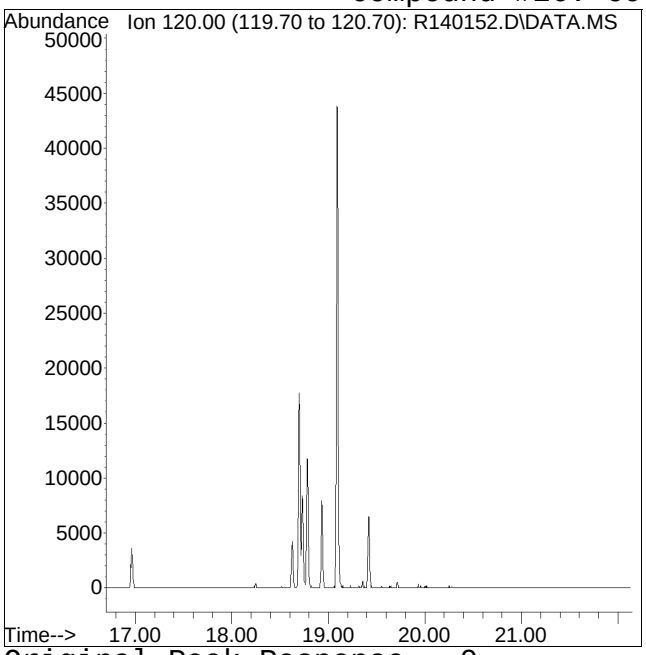


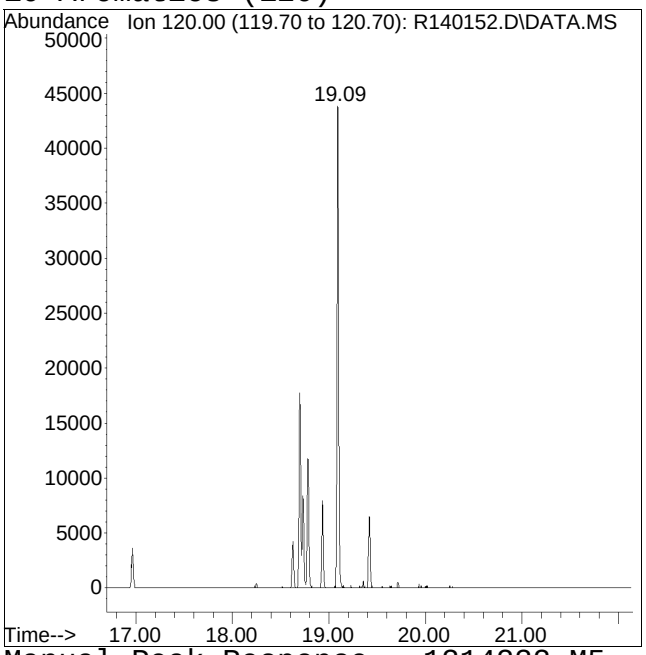

Manual Peak Response = 31422689 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140152.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:59 pm Instrument : Air Piano 1
Sample : L1504425-05,3,250,250 Quant Date : 3/12/2015 11:17 am

Compound #26: C9-C10 Aromatics (120)



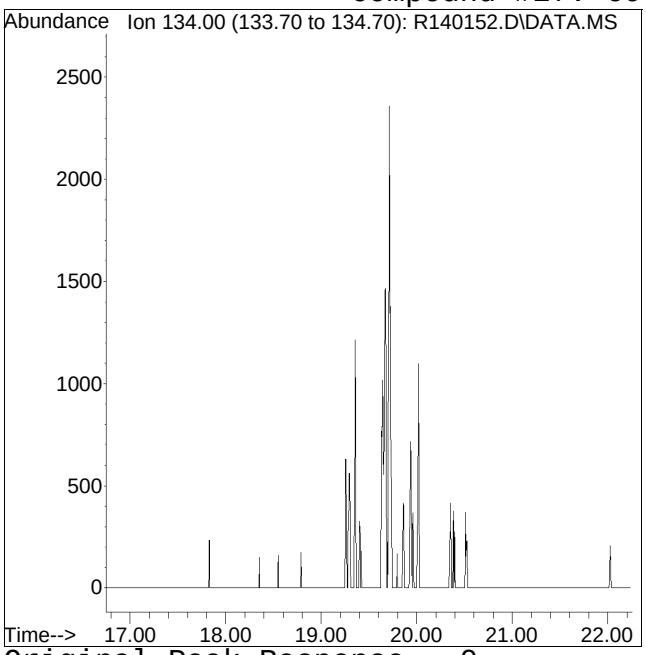



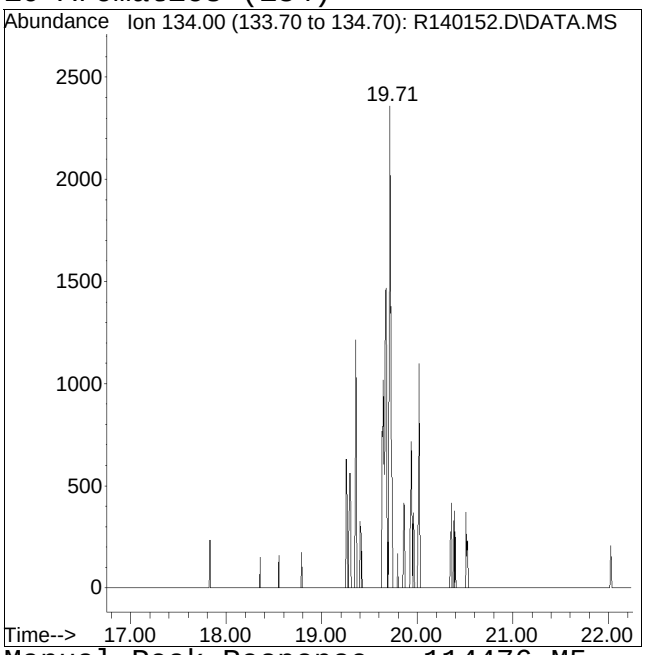

Original Peak Response = 0 Manual Peak Response = 1214232 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140152.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:59 pm Instrument : Air Piano 1
Sample : L1504425-05,3,250,250 Quant Date : 3/12/2015 11:17 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 114476 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140153.D
Acq On : 11 Mar 2015 11:31 pm
Operator : AIRPIANO1:RY
Sample : L1504425-07,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 11:23:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 453122 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 84.43% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1804576 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 82.31% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 453895 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 92.66% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3439340 | 10.641 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 106.41% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4154971 | 9.014 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 90.14% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 6130499 | 10.201 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 102.01% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 0.00 | | 0 | N.D. | | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 7000782 | 49.594 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 48143 | 0.796 | ug/m3# | 83 |
| 16) ethyl benzene | 17.30 | 91 | 53672 | 0.776 | ug/m3# | 42 |
| 17) m+p-xylene | 17.43 | 91 | 156614 | 2.873 | ug/m3# | 87 |
| 19) o-xylene | 17.81 | 91 | 87817 | 1.576 | ug/m3 | 98 |
| 23) naphthalene | 21.13 | 128 | 2127328M4 | 27.731 | ug/m3 | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 367717617 | 1929.221 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 3775970M5 | 147.110 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 20.38 | 134 | 4945101M5 | 192.658 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 8721071 | 339.768 | ug/m3 | |

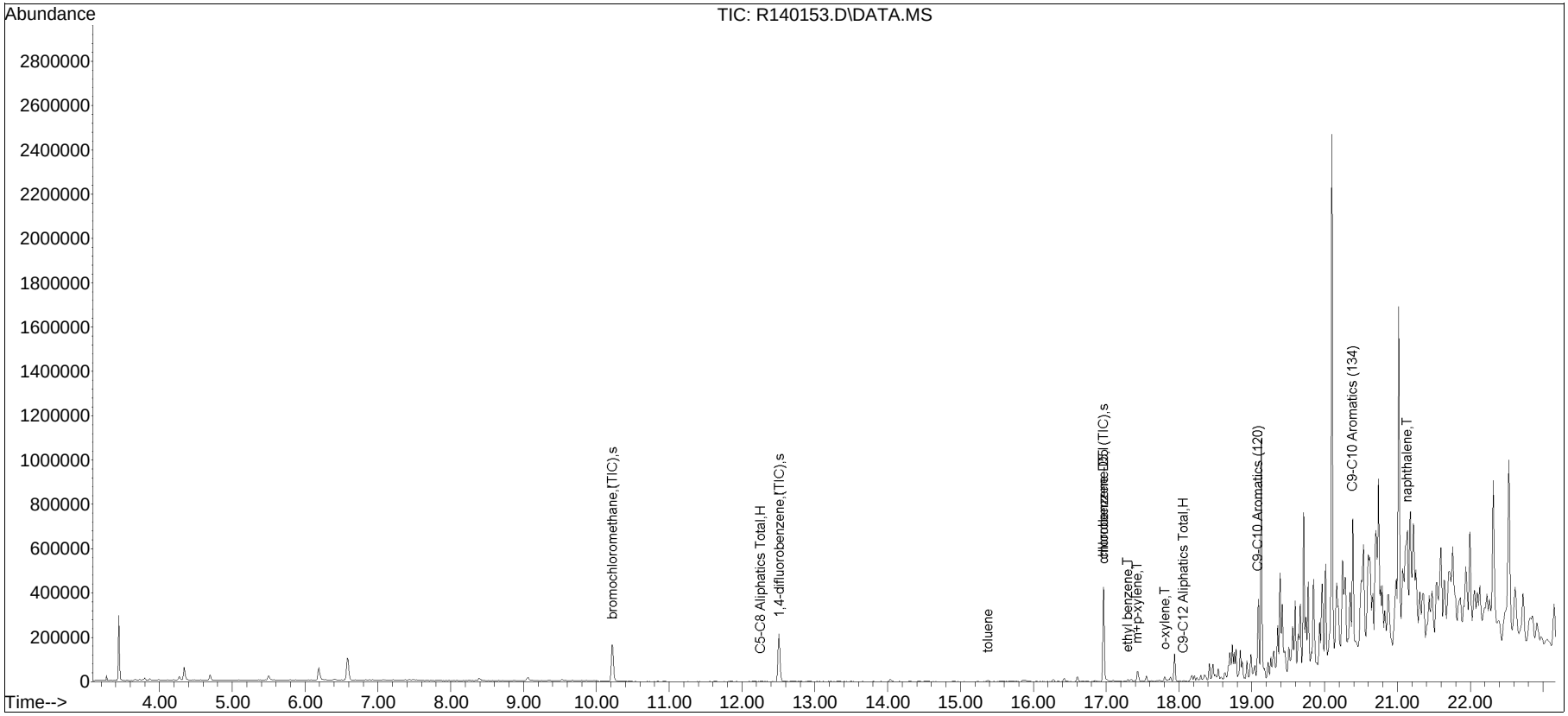
(#) = qualifier out of range (m) = manual integration (+) = signals summed

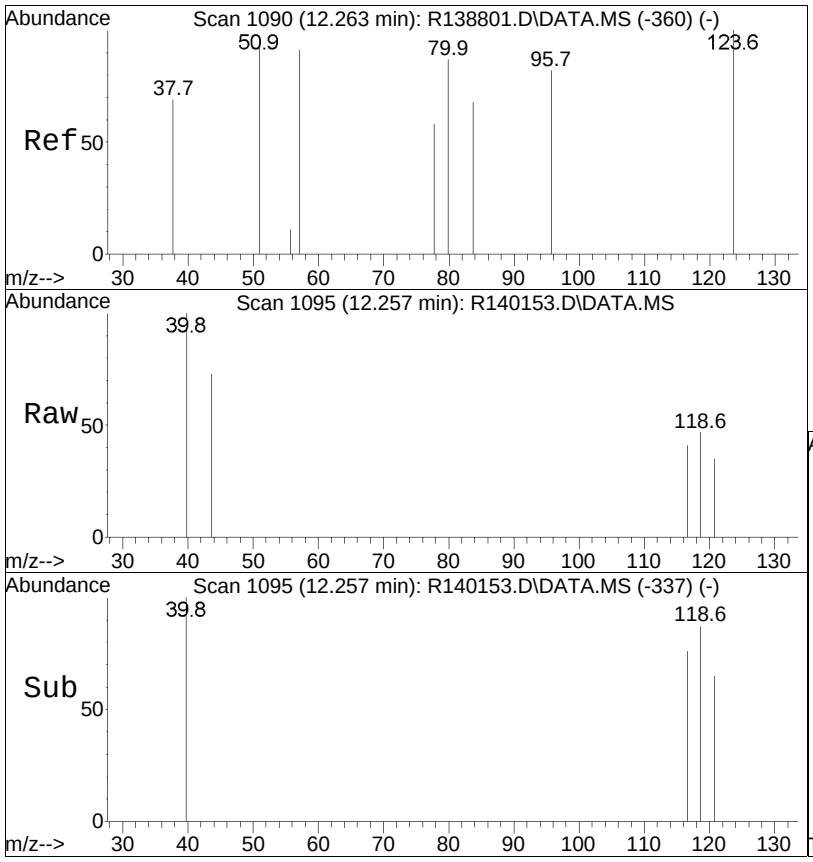
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140153.D
Acq On : 11 Mar 2015 11:31 pm
Operator : AIRPIANO1:RY
Sample : L1504425-07,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 11:23:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

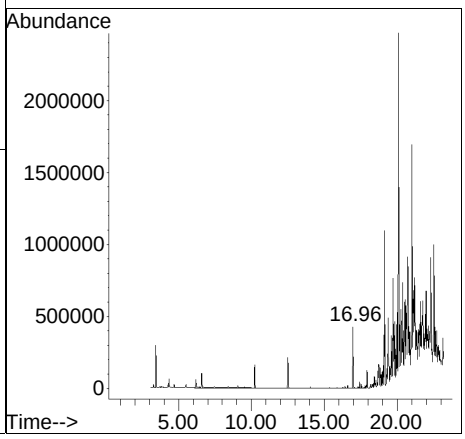
Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

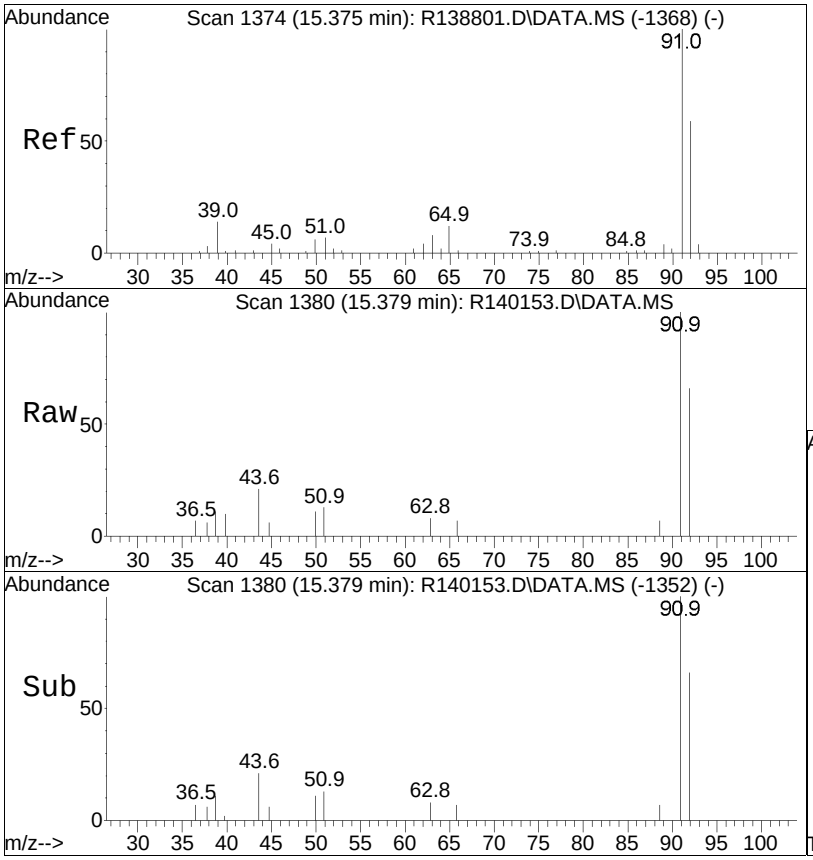





#11
C5-C8 Aliphatics Total
Concen: 55.61 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:TIC Resp: 7000782

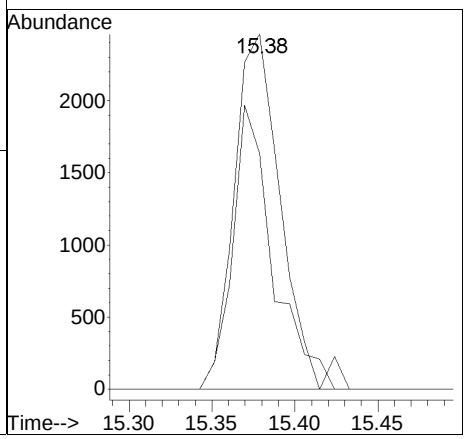


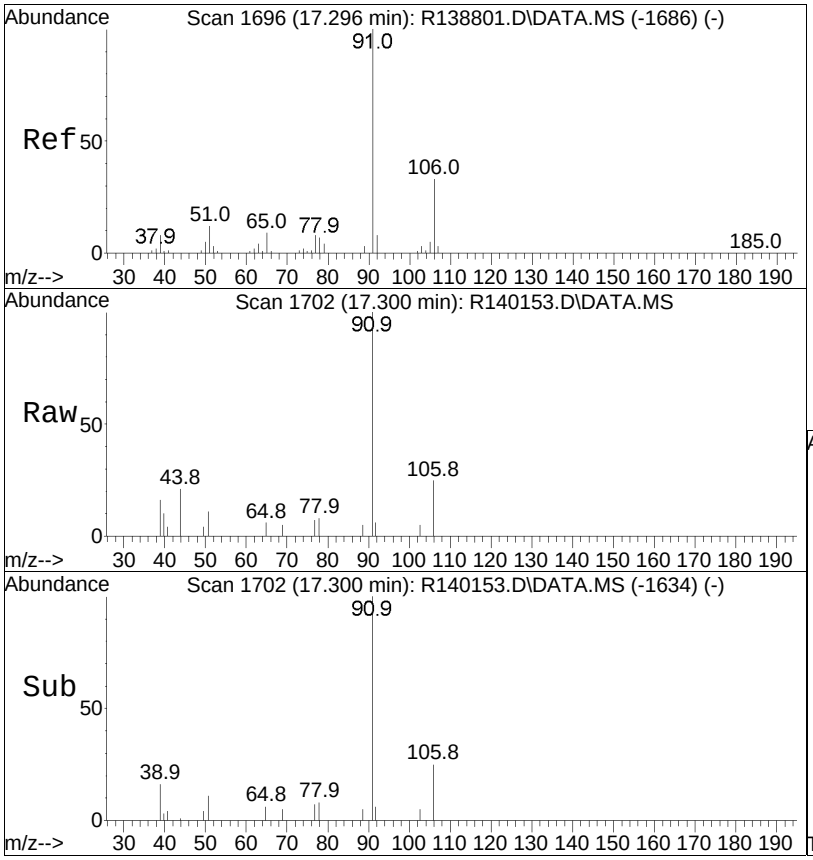



#13
toluene
Concen: 0.80 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.007 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 48143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 69.5 | 45.4 | 68.0# |

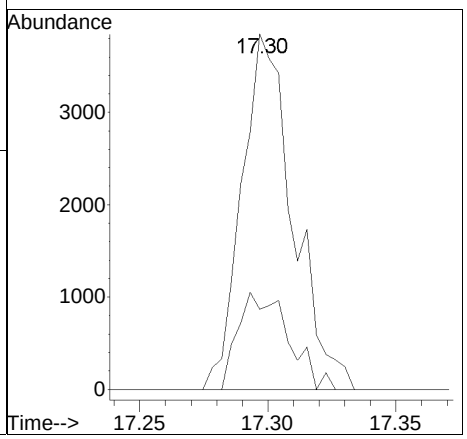


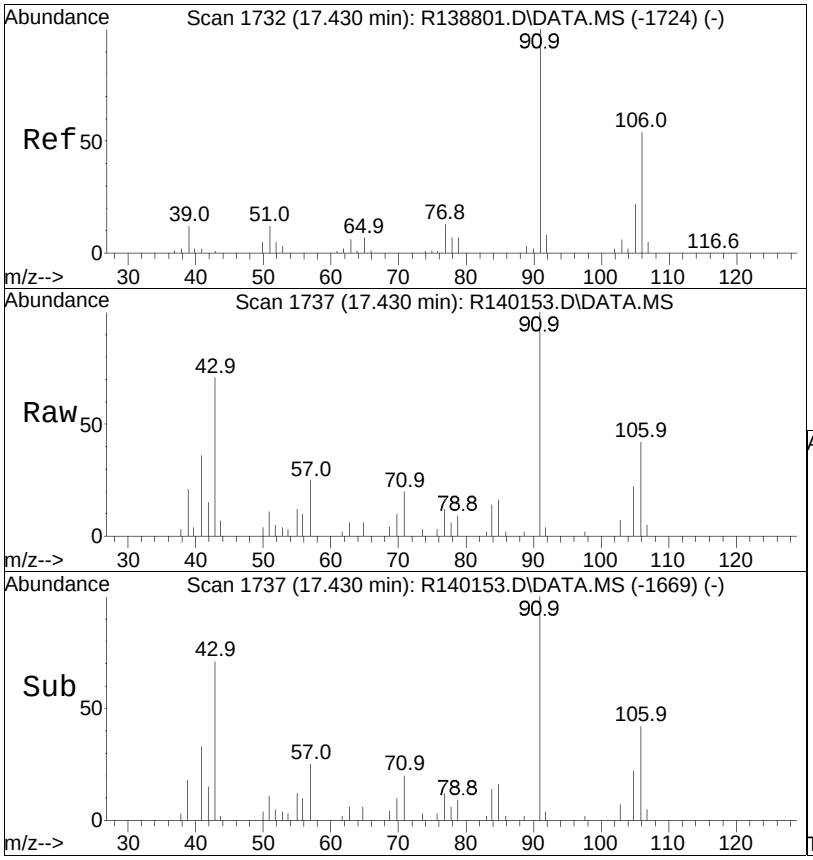



#16
ethyl benzene
Concen: 0.78 ug/m3
RT: 17.30 min Scan# 1702
Delta R.T. 0.002 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 53672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 26.3 | 39.5# |

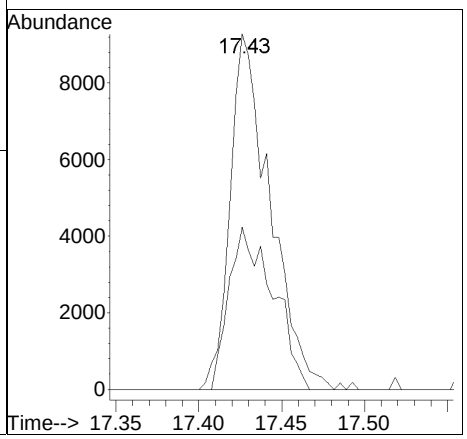


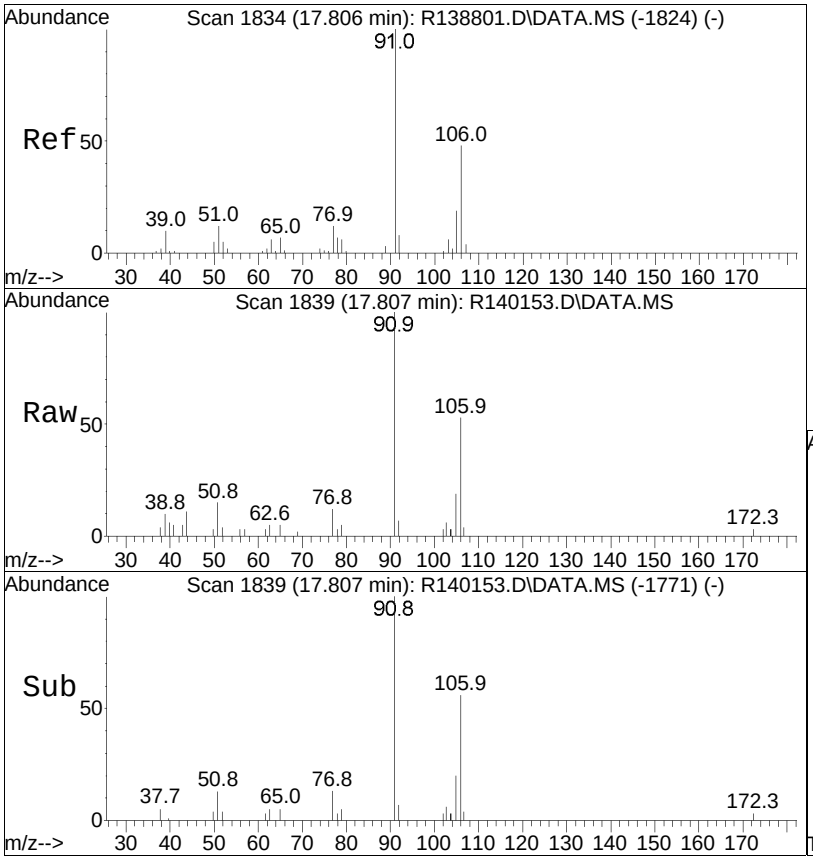



#17
m+p-xylene
Concen: 2.87 ug/m3
RT: 17.43 min Scan# 1737
Delta R.T. -0.001 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 156614

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 50.3 | 33.4 | 50.2# |

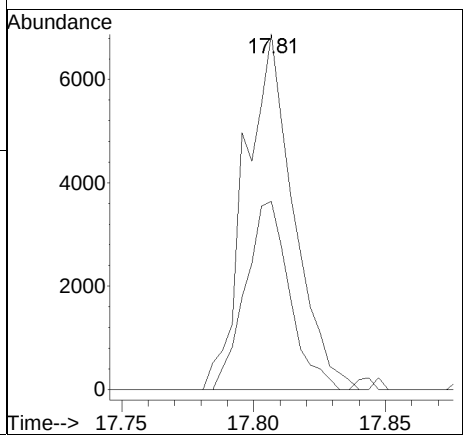


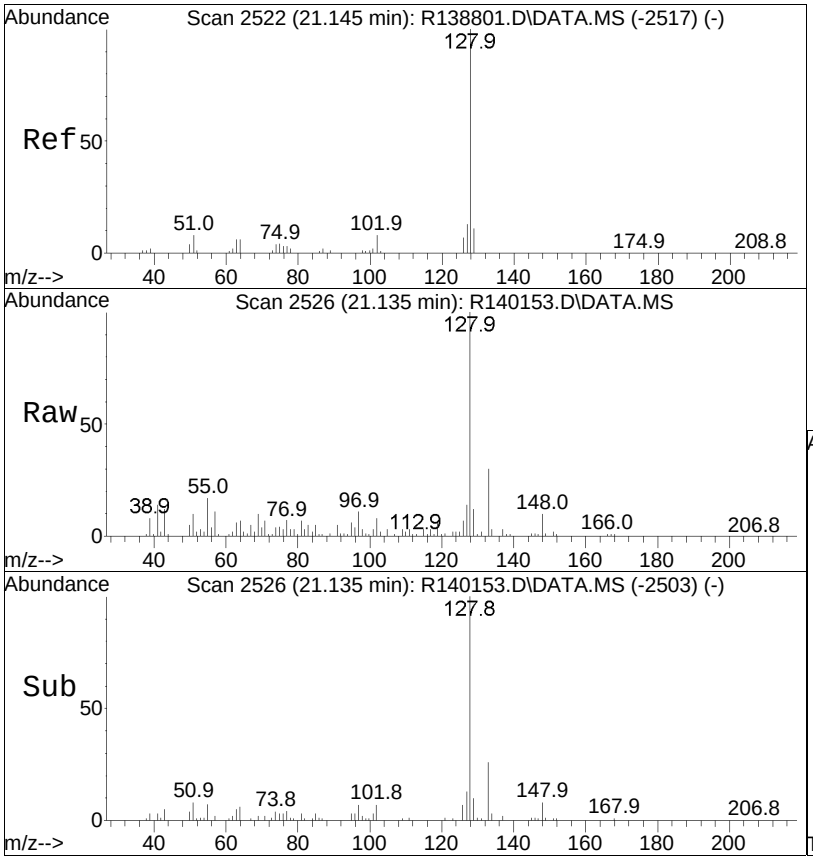



#19
o-xylene
Concen: 1.58 ug/m3
RT: 17.81 min Scan# 1839
Delta R.T. 0.002 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 87817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 48.1 | 39.5 | 59.3 |

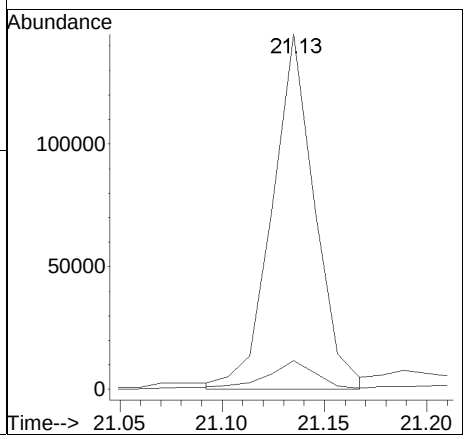


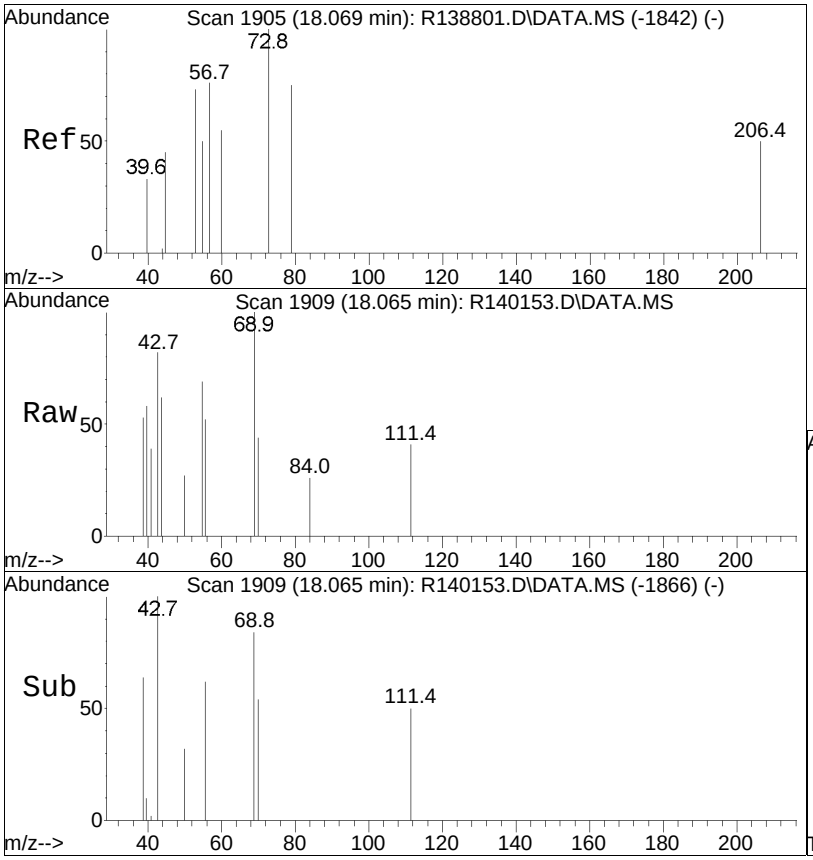



#23
naphthalene
Concen: 27.73 ug/m3 m
RT: 21.13 min Scan# 2526
Delta R.T. -0.007 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:128 Resp: 2127328

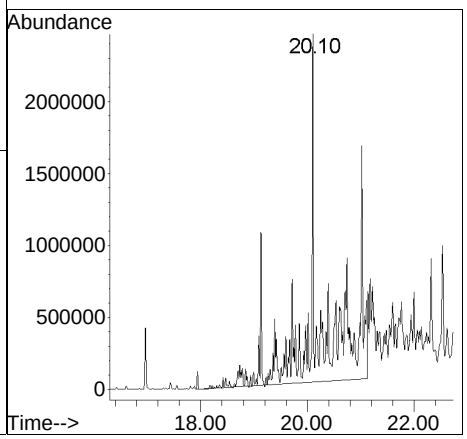
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 9.1 | 6.8 | 10.2 |

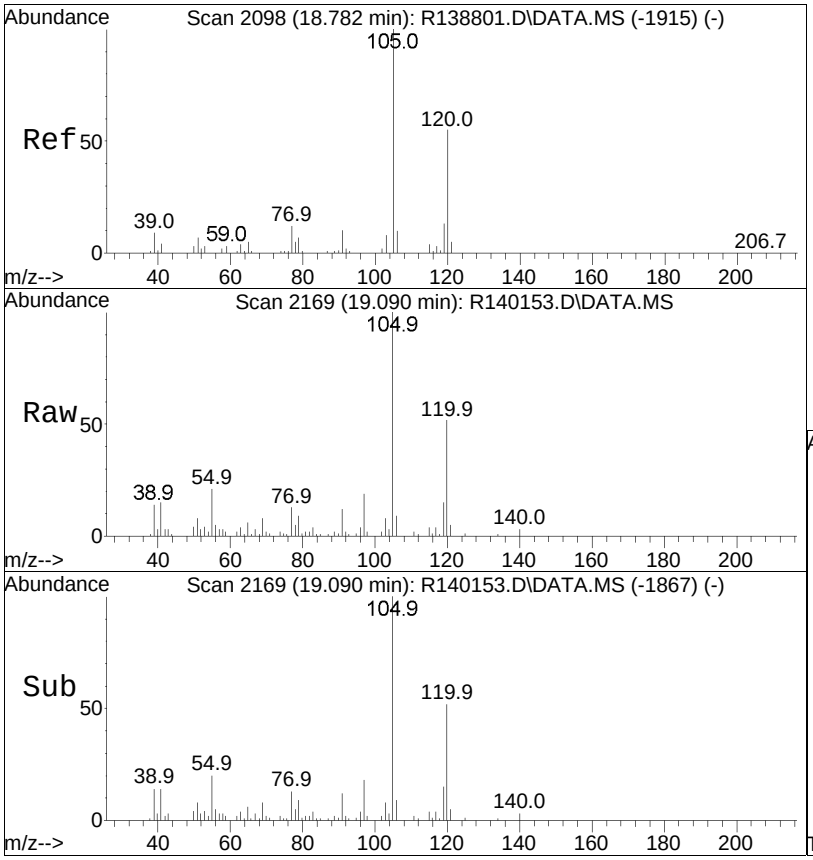





#25
C9-C12 Aliphatics Total
Concen: 2268.99 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

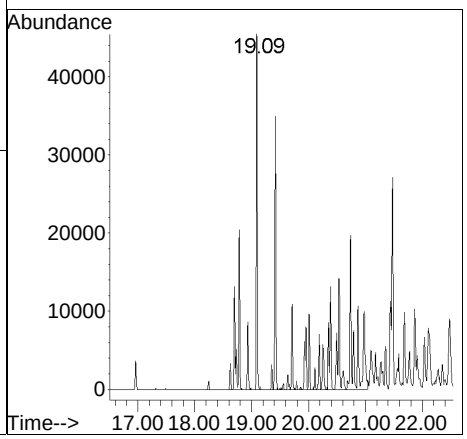
Tgt Ion:TIC Resp:367717617

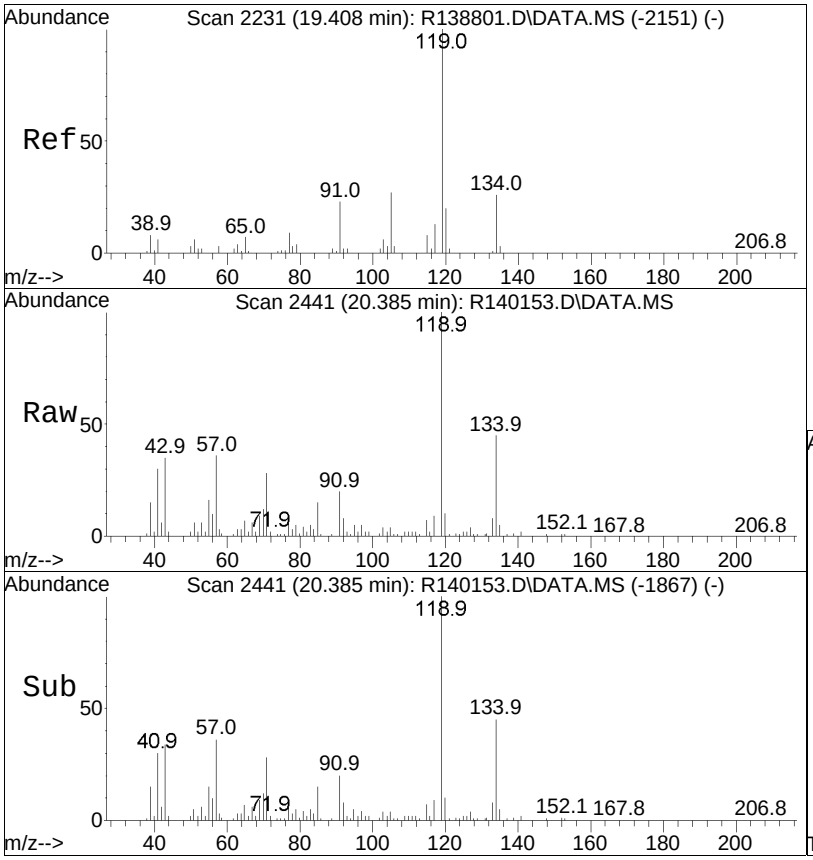





#26
C9-C10 Aromatics (120)
Concen: 147.11 ug/m3 m
RT: 19.09 min Scan# 2169
Delta R.T. -0.910 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

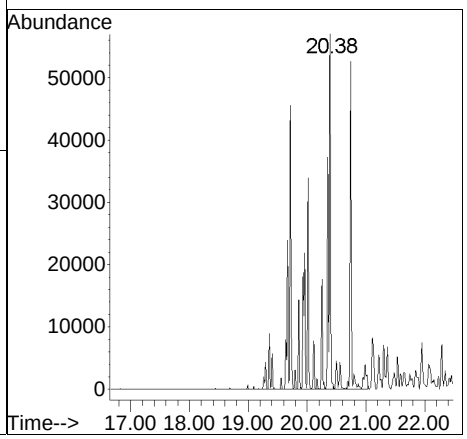
Tgt Ion:120 Resp: 3775970






#27
C9-C10 Aromatics (134)
Concen: 192.66 ug/m3 m
RT: 20.38 min Scan# 2441
Delta R.T. 0.385 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

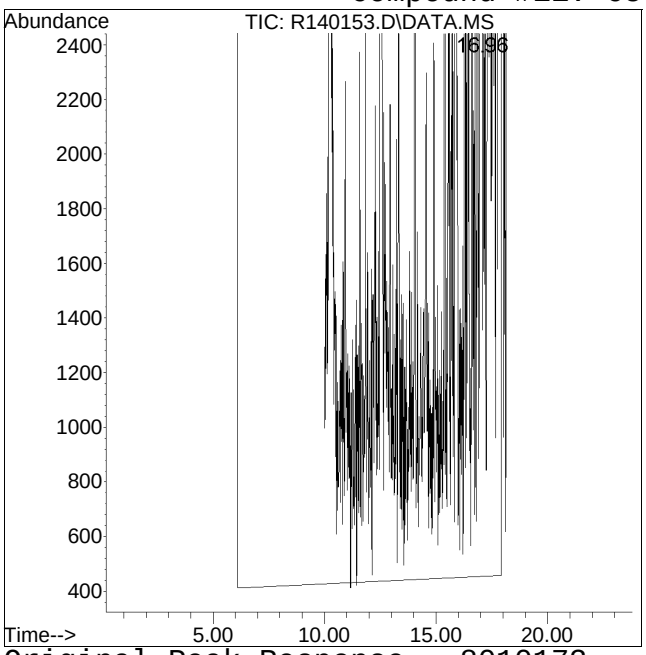
Tgt Ion:134 Resp: 4945101



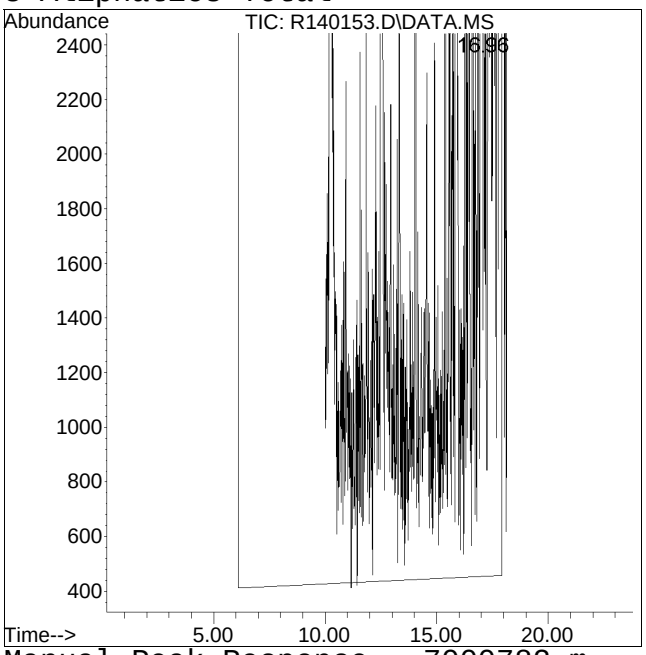
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140153.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 11:31 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-07,3,250,250 | Quant Date | : 3/12/2015 11:18 am |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 8010173

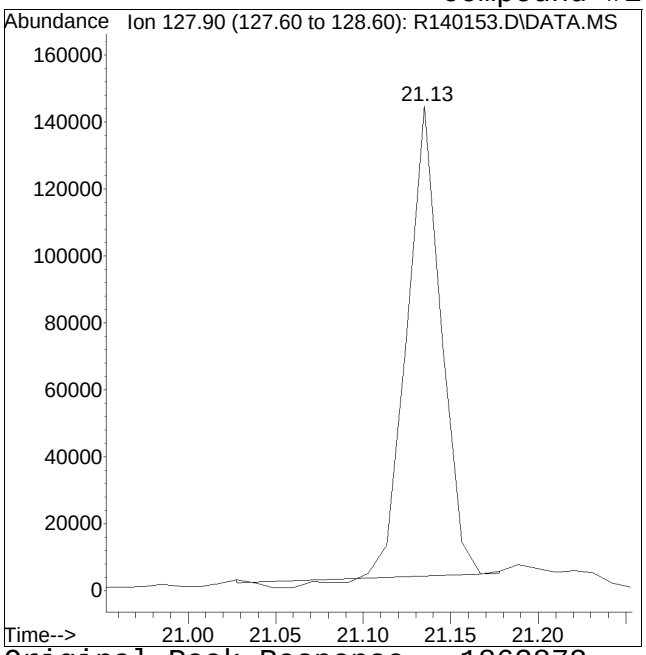



Manual Peak Response = 7000782 m

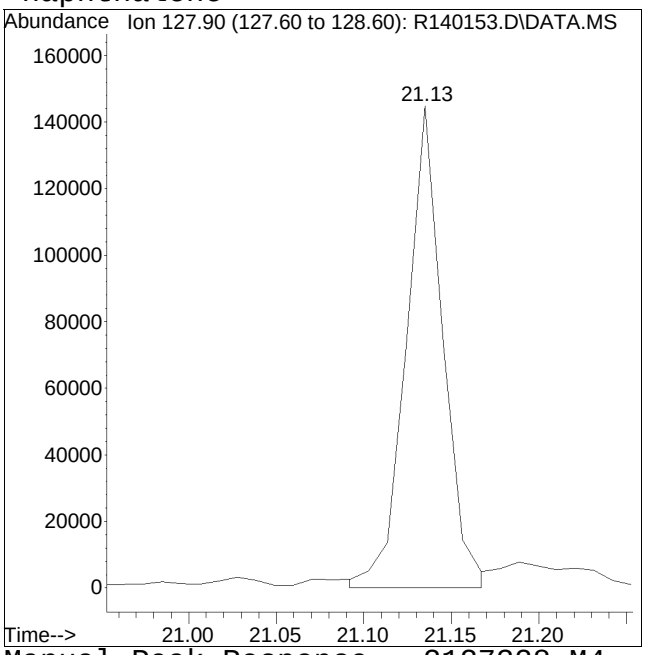
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140153.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:31 pm Instrument : Air Piano 1
Sample : L1504425-07,3,250,250 Quant Date : 3/12/2015 11:18 am

## Compound #23: naphthalene




Original Peak Response = 1863872



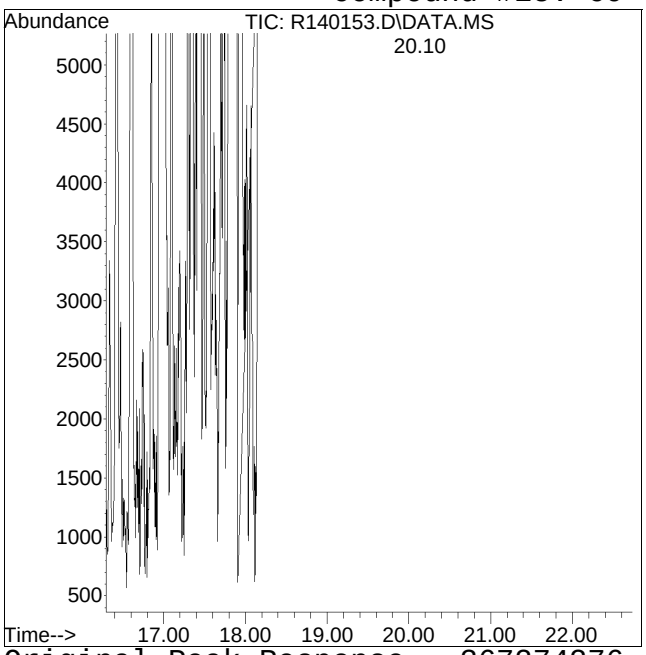

Manual Peak Response = 2127328 M4

M4 = Poor automated baseline construction.

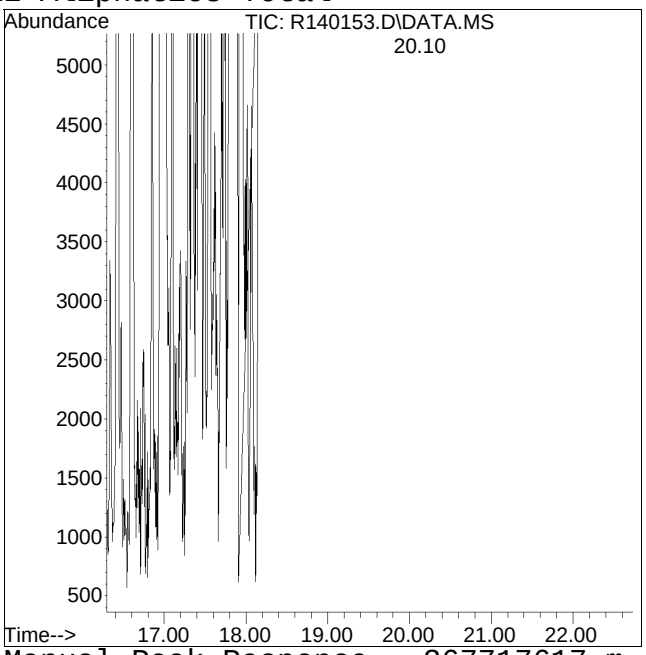
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM150311A\ | : APH150101.M |
| Data File | : R140153.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 11:31 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-07,3,250,250 | Quant Date | : 3/12/2015 11:18 am |

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 367274276

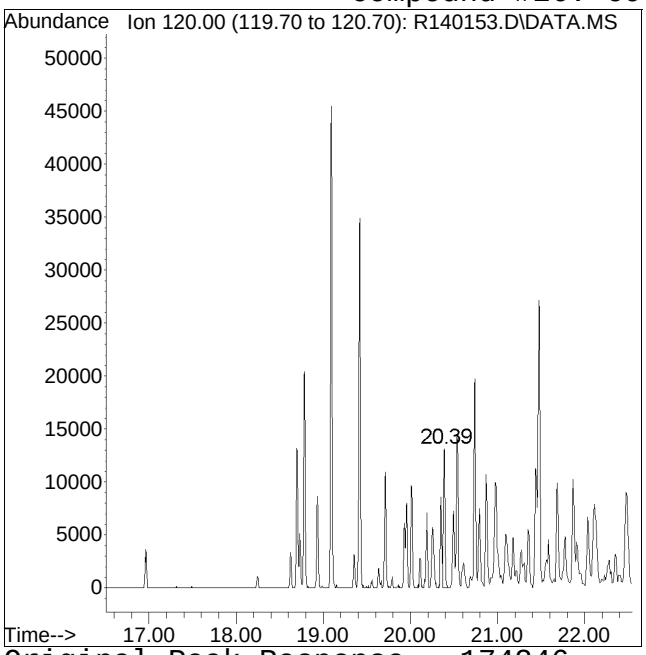


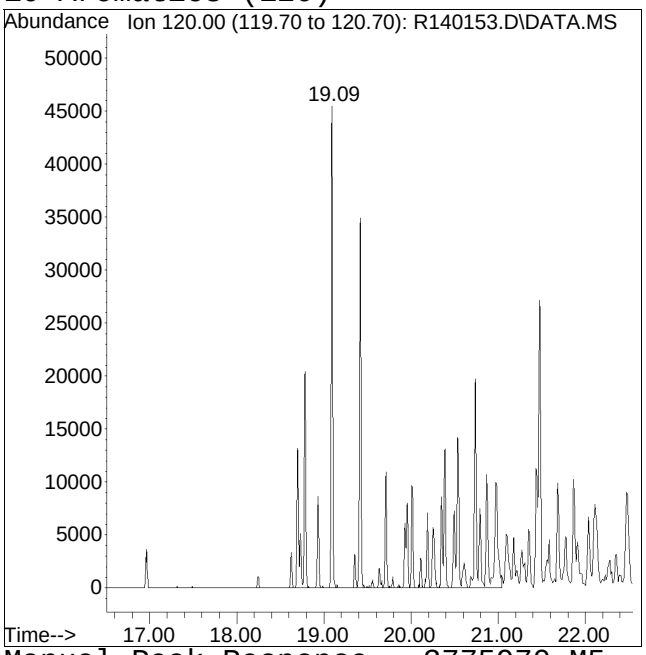

Manual Peak Response = 367717617 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140153.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:31 pm Instrument : Air Piano 1
Sample : L1504425-07,3,250,250 Quant Date : 3/12/2015 11:18 am

Compound #26: C9-C10 Aromatics (120)



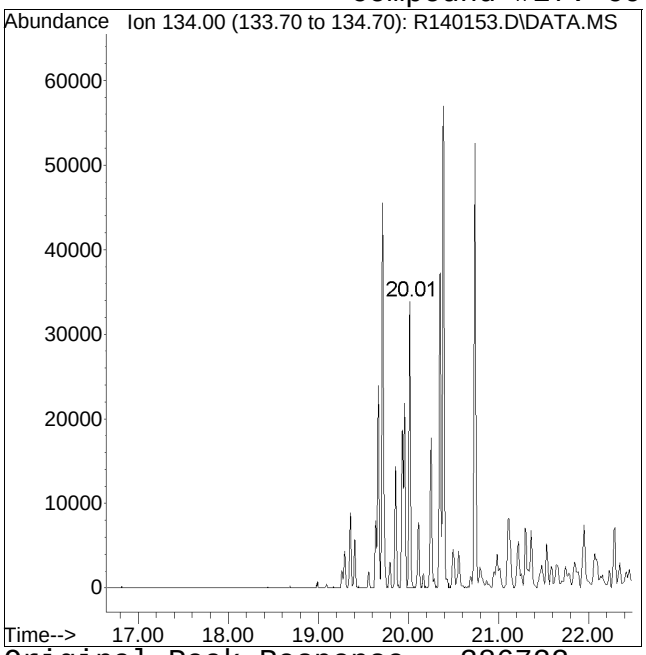



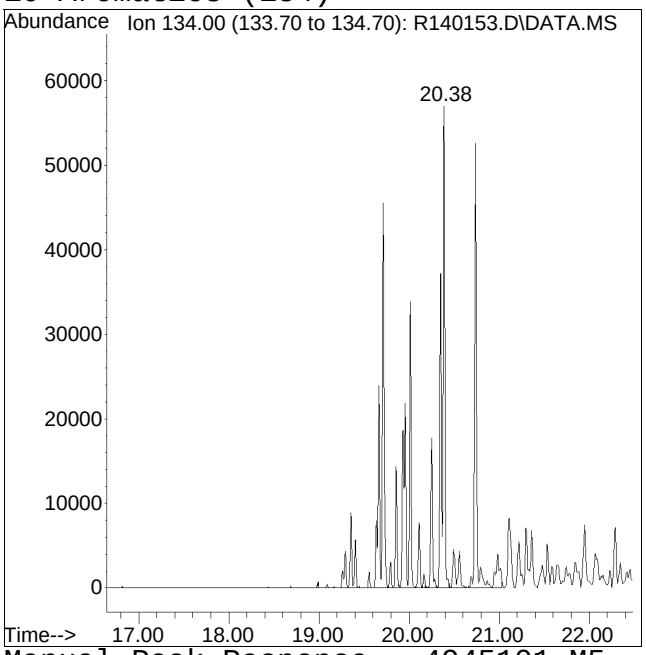

Original Peak Response = 174246 Manual Peak Response = 3775970 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140153.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:31 pm Instrument : Air Piano 1
Sample : L1504425-07,3,250,250 Quant Date : 3/12/2015 11:18 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 386722 Manual Peak Response = 4945101 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140156.D
Acq On : 12 Mar 2015 1:08 am
Operator : AIRPIANO1:RY
Sample : L1504425-09,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 12 14:50:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 495512 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 92.33% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1885121 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 85.98% | |
| 12) chlorobenzene-D5 | 16.96 | 54 | 475505 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 97.07% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3587176 | 10.594 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 105.94% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4312147 | 8.929 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 89.29% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 6215402 | 9.872 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 98.72% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 0.00 | | 0 | N.D. | | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 2240854M5 | 14.671 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 97633 | 1.541 | ug/m3 | 98 |
| 16) ethyl benzene | 17.30 | | 0 | N.D. | | |
| 17) m+p-xylene | 17.43 | 91 | 38348 | 0.671 | ug/m3# | 34 |
| 19) o-xylene | 0.00 | | 0 | N.D. | | |
| 23) naphthalene | 21.14 | 128 | 81743 | 1.017 | ug/m3# | 76 |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 9588114 | 53.766 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 26925M5 | 1.001 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 18.99 | 134 | 45904M5 | 1.707 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 72829 | 2.708 | ug/m3 | |

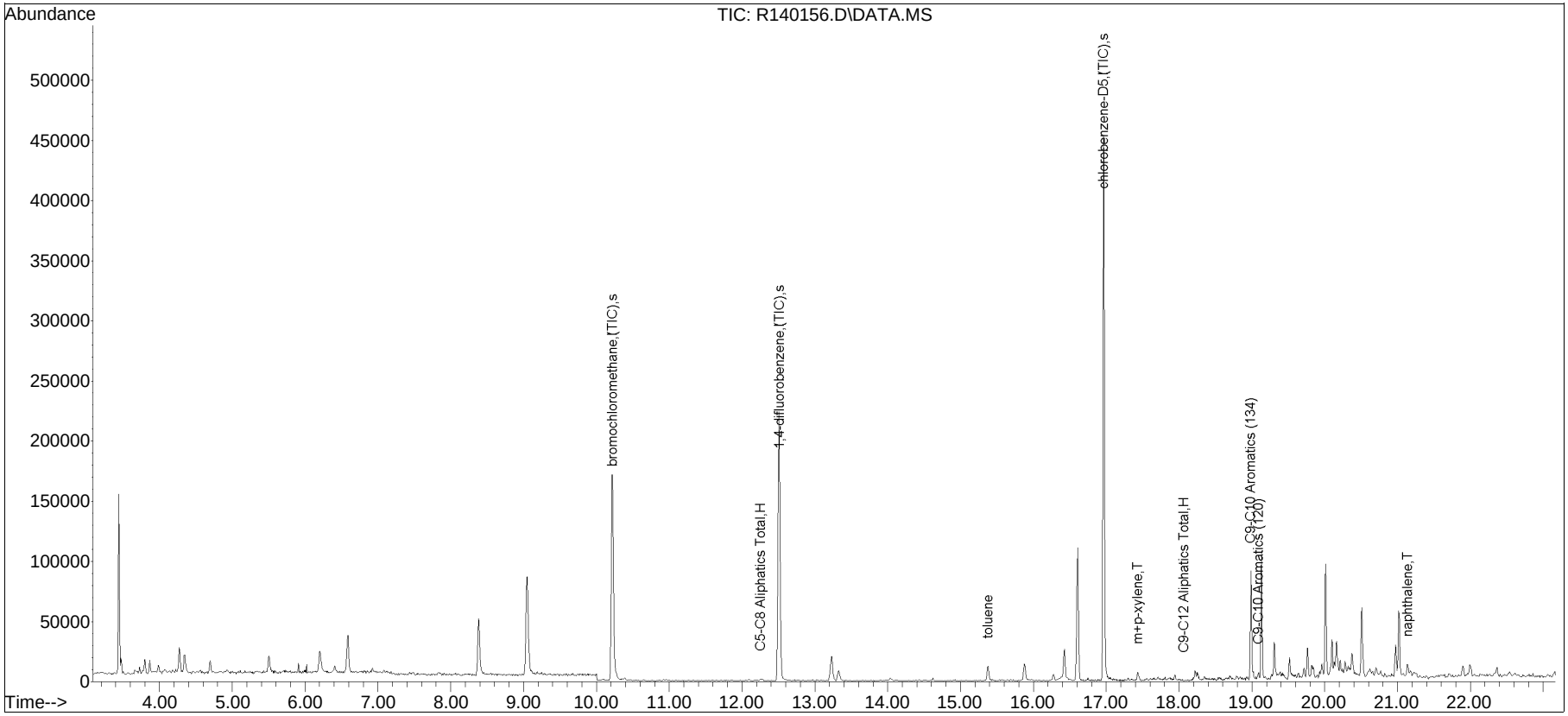
(#) = qualifier out of range (m) = manual integration (+) = signals summed

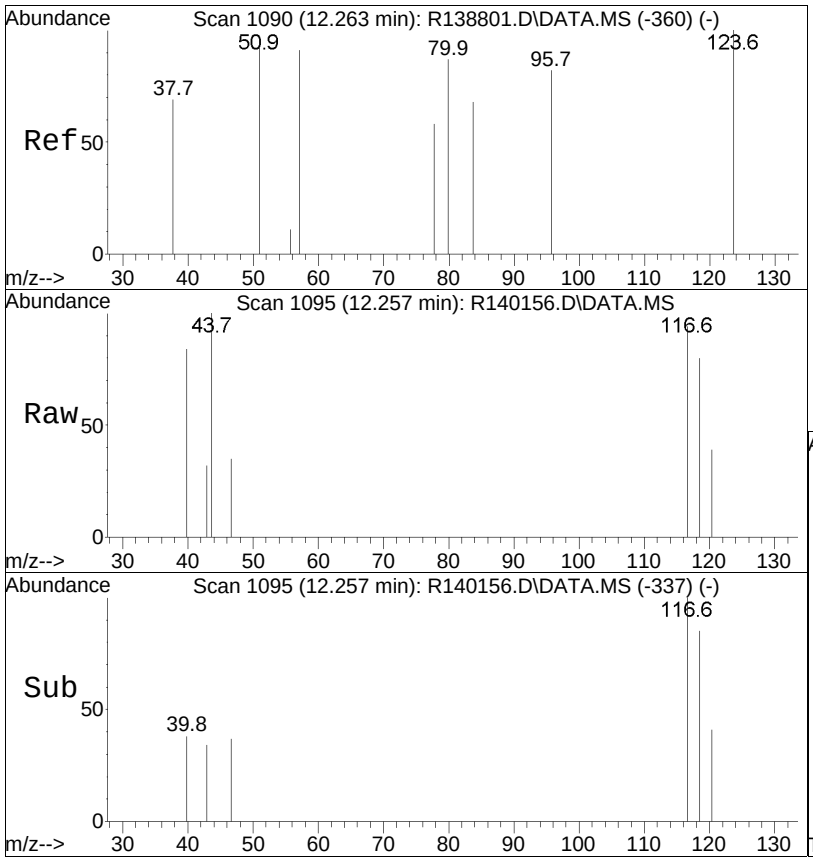
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140156.D
Acq On : 12 Mar 2015 1:08 am
Operator : AIRPIANO1:RY
Sample : L1504425-09,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 12 14:50:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

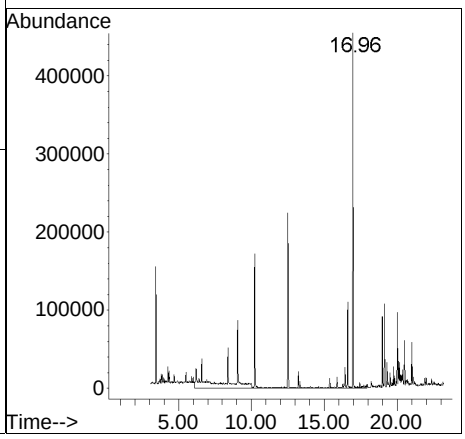
Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

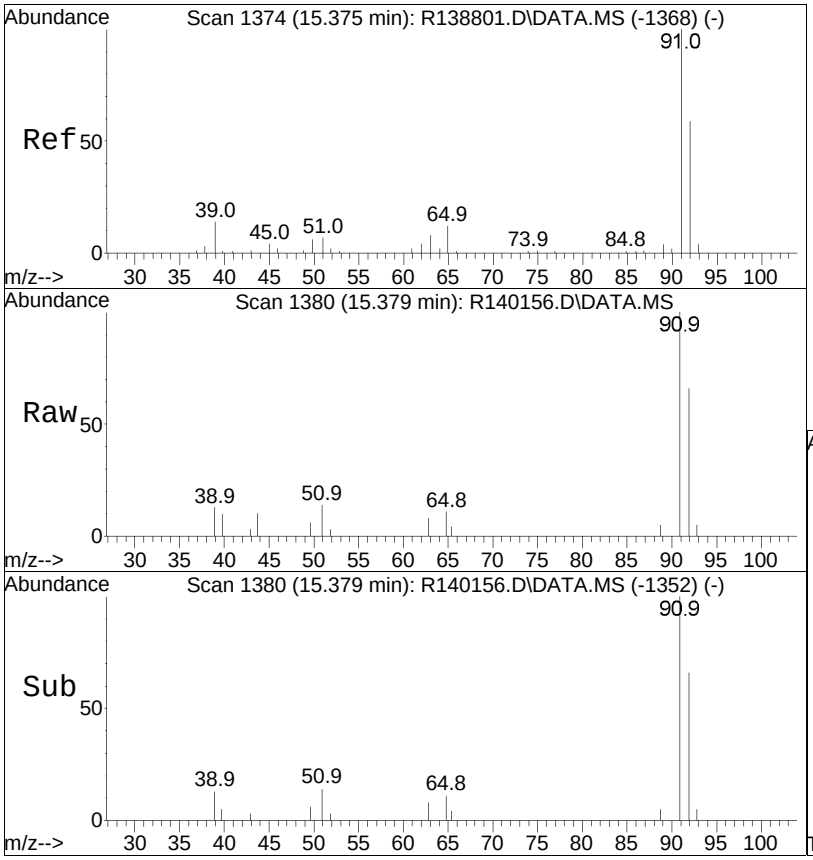





#11
C5-C8 Aliphatics Total
Concen: 17.04 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:TIC Resp: 2240854

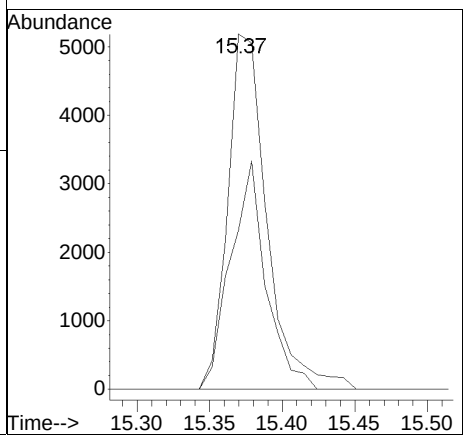


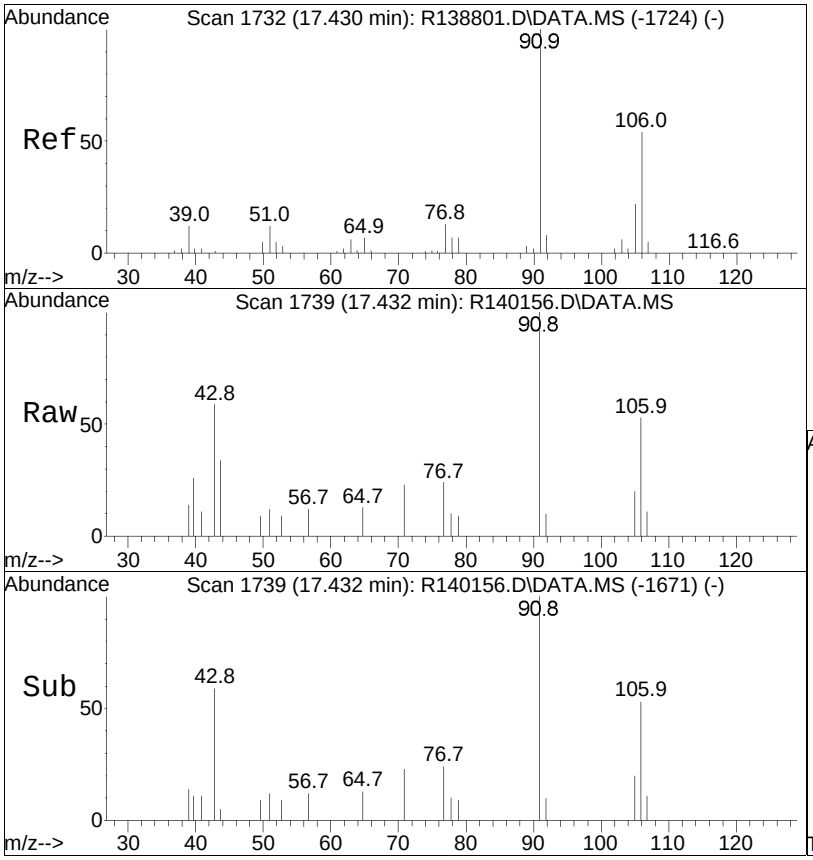



#13
toluene
Concen: 1.54 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.005 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 91 Resp: 97633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 58.3 | 45.4 | 68.0 |

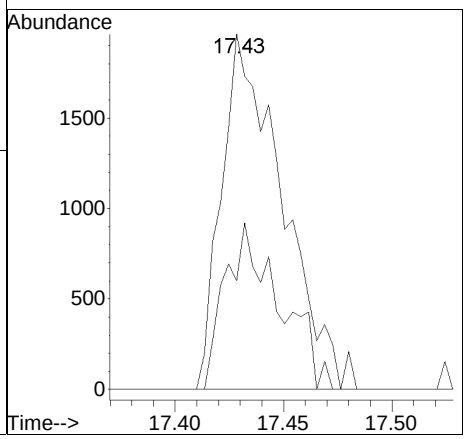


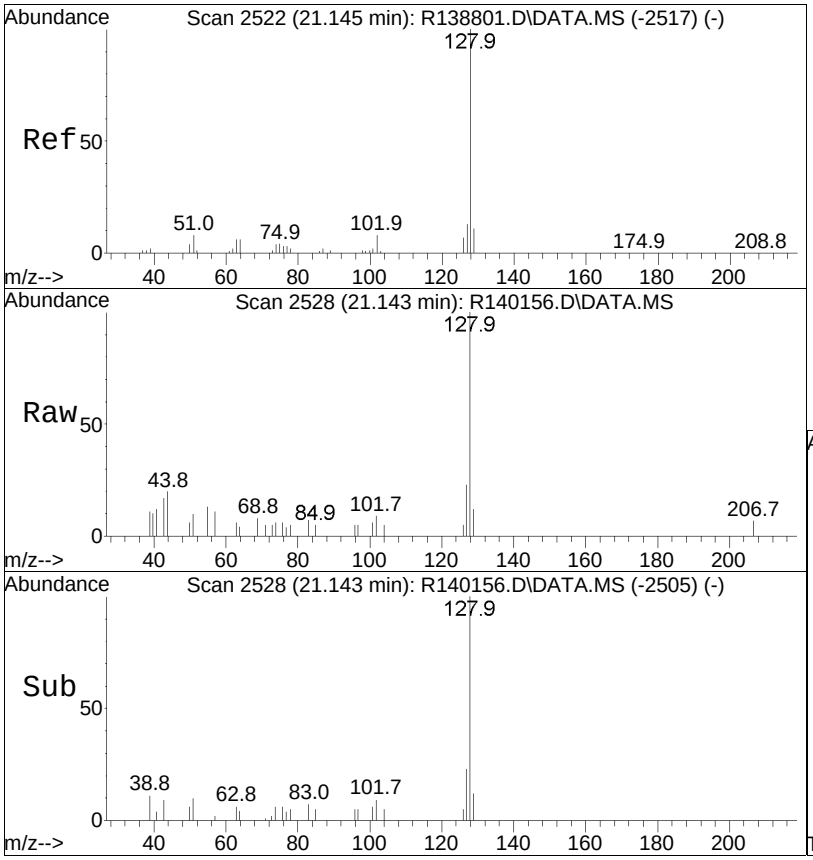



#17
m+p-xylene
Concen: 0.67 ug/m3
RT: 17.43 min Scan# 1739
Delta R.T. 0.002 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 91 Resp: 38348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 33.4 | 50.2# |

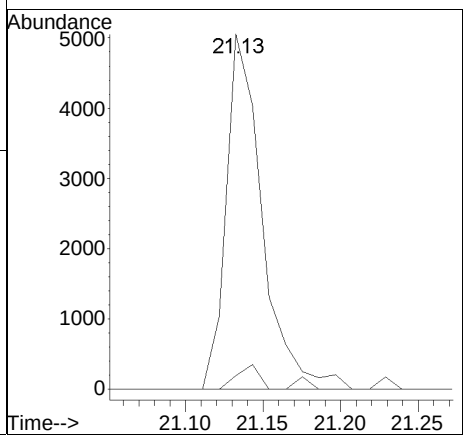


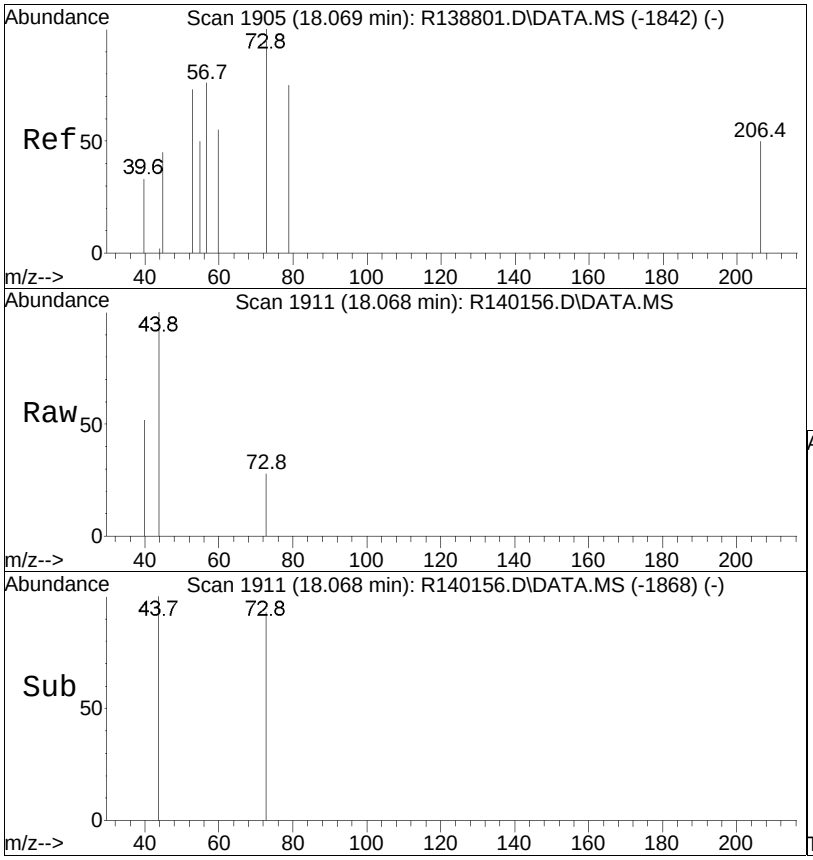



#23
naphthalene
Concen: 1.02 ug/m3
RT: 21.14 min Scan# 2528
Delta R.T. -0.001 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:128 Resp: 81743

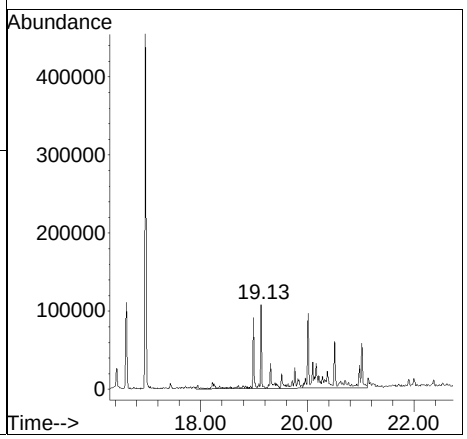
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 0.0 | 6.8 | 10.2# |

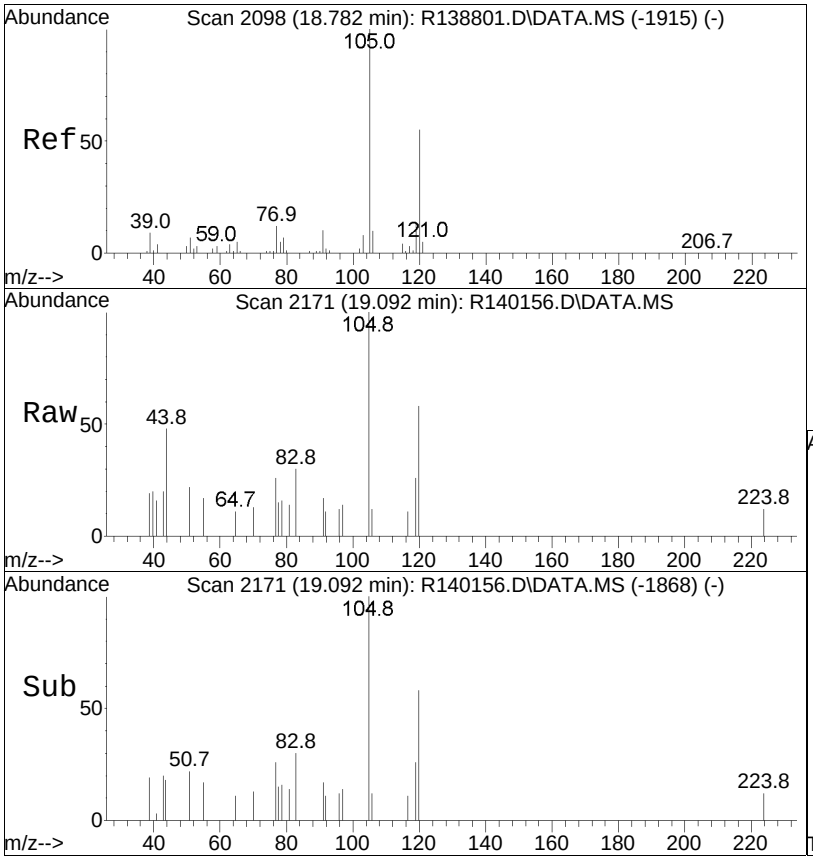





#25
C9-C12 Aliphatics Total
Concen: 56.47 ug/m3 m
RT: 18.07 min Scan# 1911
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

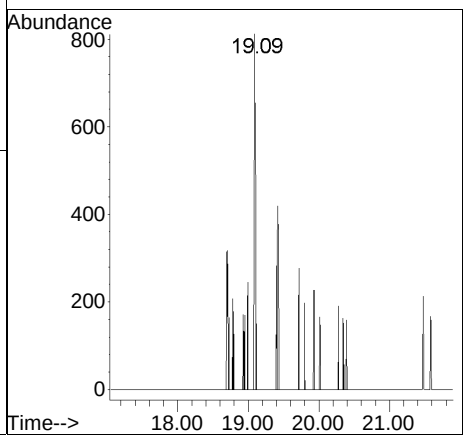
Tgt Ion:TIC Resp: 9588114

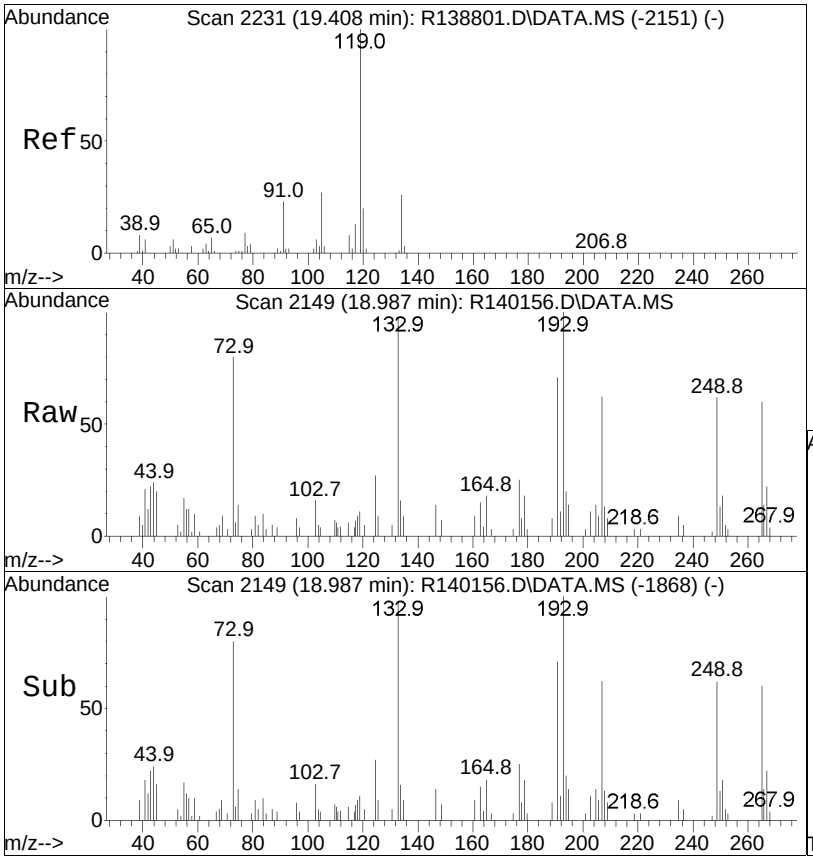





#26
C9-C10 Aromatics (120)
Concen: 1.00 ug/m3 m
RT: 19.09 min Scan# 2171
Delta R.T. -0.908 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

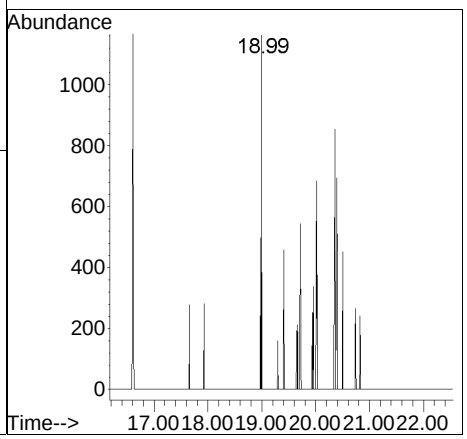
Tgt Ion:120 Resp: 26925






#27
C9-C10 Aromatics (134)
Concen: 1.71 ug/m3 m
RT: 18.99 min Scan# 2149
Delta R.T. -1.013 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

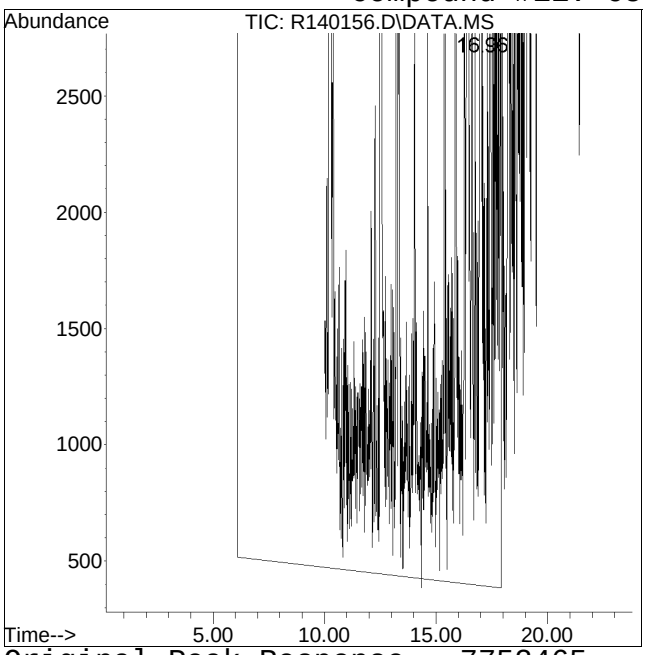
Tgt Ion:134 Resp: 45904

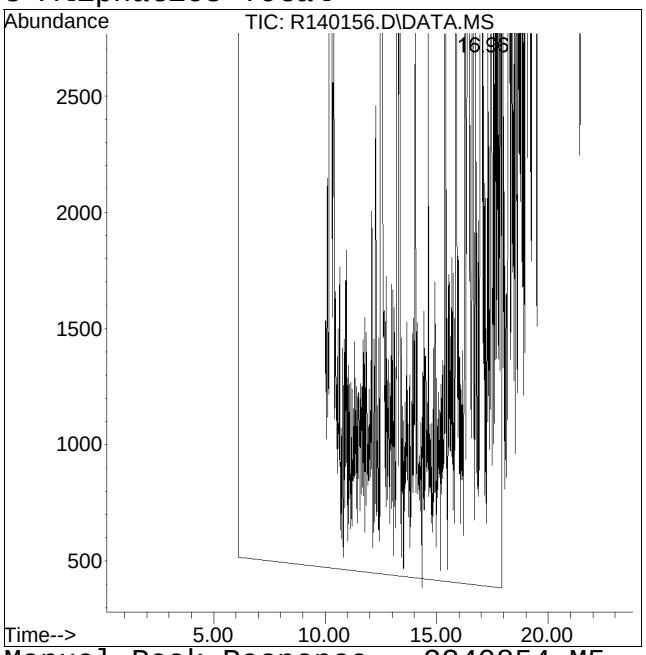


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140156.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:08 am Instrument : Air Piano 1
Sample : L1504425-09,3,250,250 Quant Date : 3/12/2015 11:25 am

Compound #11: C5-C8 Aliphatics Total



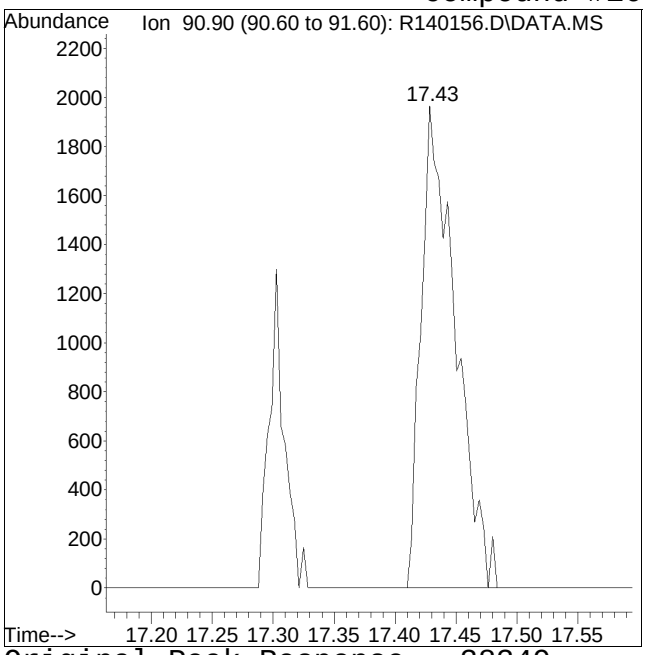



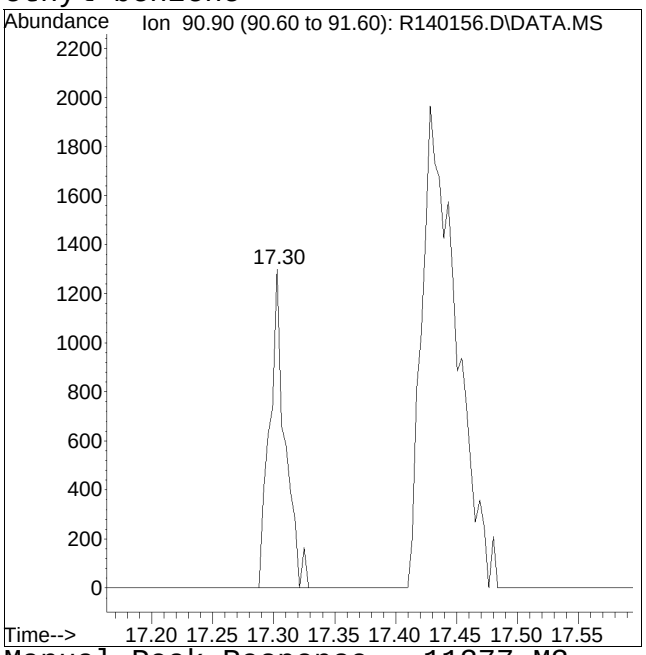

Original Peak Response = 7752465 Manual Peak Response = 2240854 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140156.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:08 am Instrument : Air Piano 1
Sample : L1504425-09,3,250,250 Quant Date : 3/12/2015 11:25 am

Compound #16: ethyl benzene



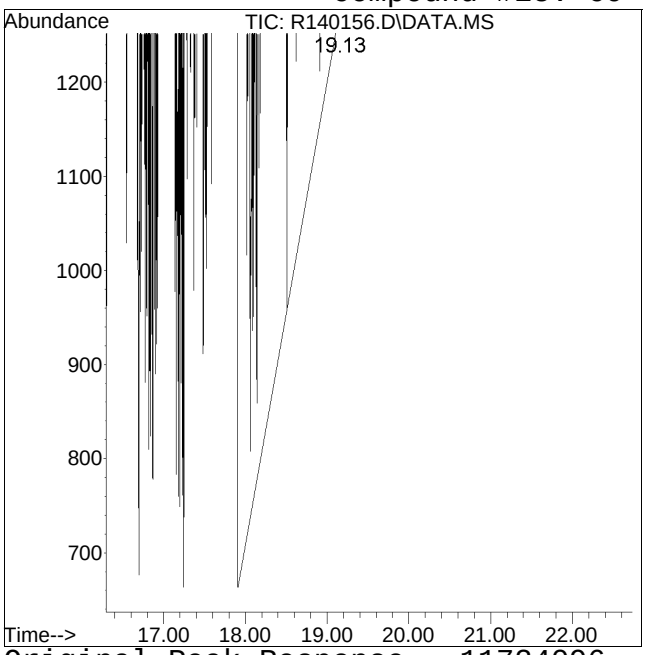

Original Peak Response = 38349 Manual Peak Response = 11377 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

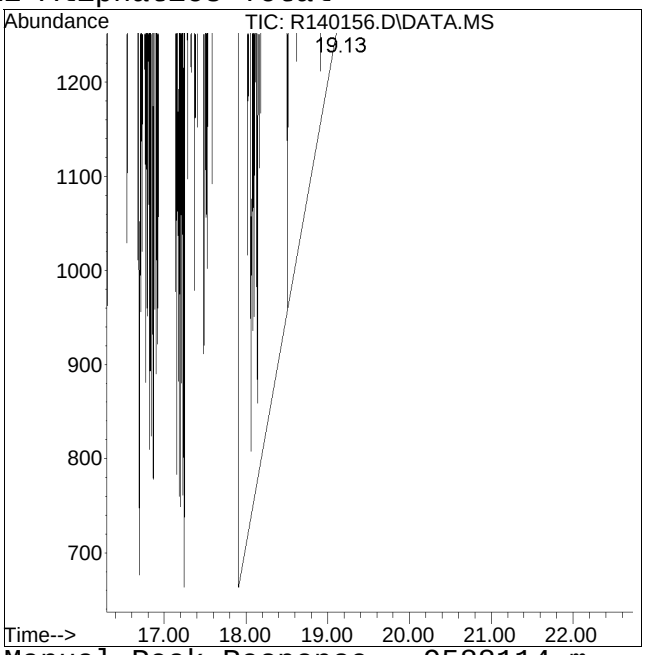
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140156.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:08 am Instrument : Air Piano 1
Sample : L1504425-09,3,250,250 Quant Date : 3/12/2015 11:25 am

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 11724096

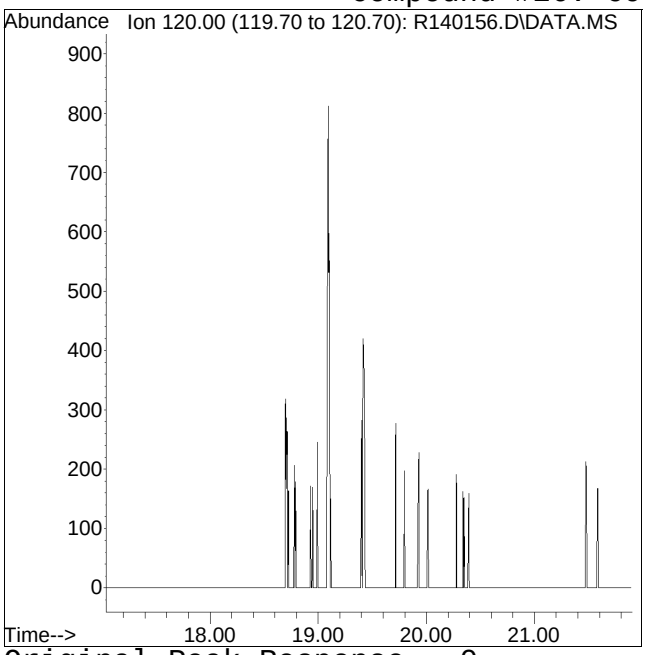


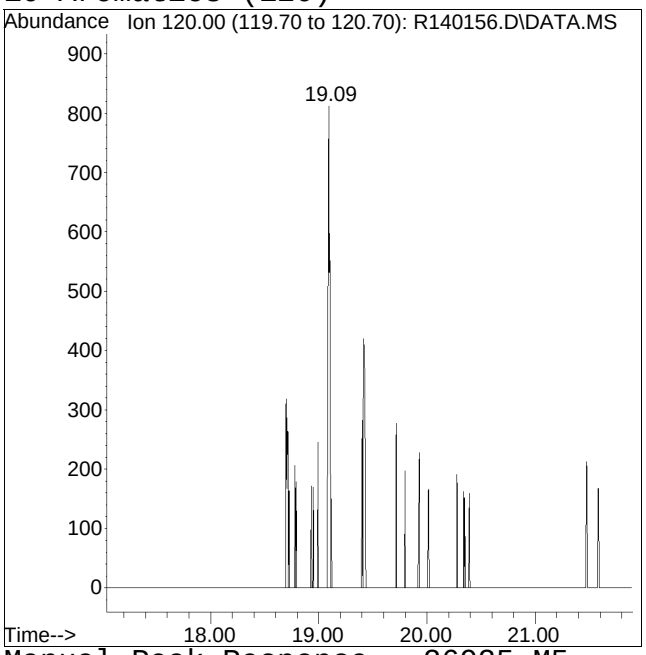

Manual Peak Response = 9588114 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140156.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:08 am Instrument : Air Piano 1
Sample : L1504425-09,3,250,250 Quant Date : 3/12/2015 11:25 am

Compound #26: C9-C10 Aromatics (120)



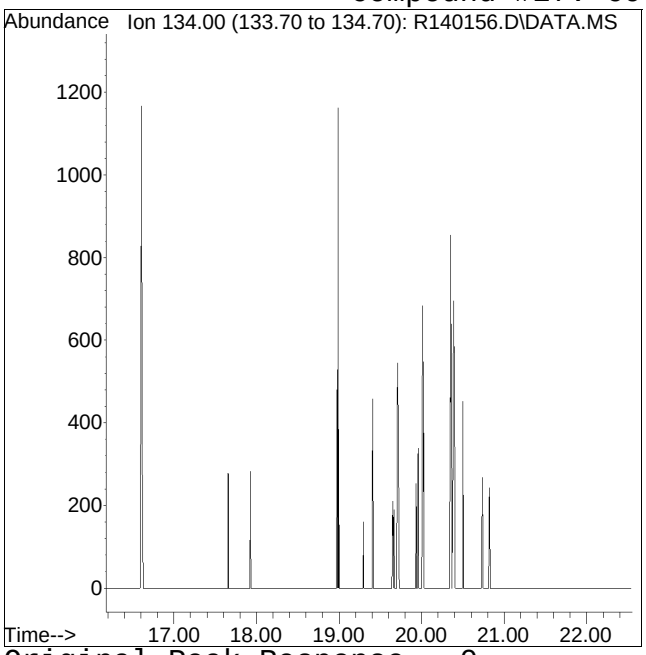



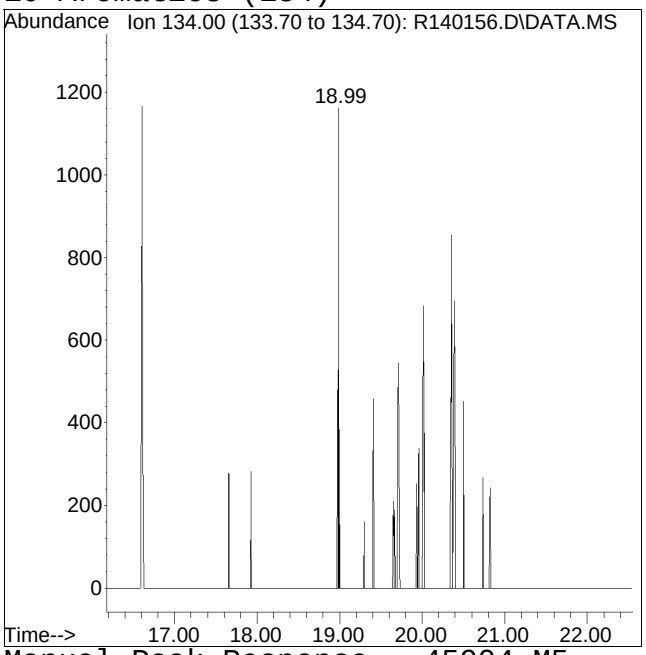

Original Peak Response = 0 Manual Peak Response = 26925 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140156.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:08 am Instrument : Air Piano 1
Sample : L1504425-09,3,250,250 Quant Date : 3/12/2015 11:25 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 45904 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140157.D
Acq On : 12 Mar 2015 1:40 am
Operator : AIRPIANO1:RY
Sample : L1504425-10,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 12 14:52:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 492890 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 91.84% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1913268 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 87.27% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 488751 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 99.78% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3461724 | 9.947 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 99.47% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4437377 | 8.940 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 89.40% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 8111225 | 12.534 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 125.34% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. d | | |
| 9) benzene | 12.10 | 78 | 164091 | 3.121 | ug/m3 | 98 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 150730007 | 1120.172 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 72454 | 1.113 | ug/m3 | 91 |
| 16) ethyl benzene | 17.30 | 91 | 38987 | 0.523 | ug/m3# | 42 |
| 17) m+p-xylene | 17.43 | 91 | 95401M4 | 1.625 | ug/m3 | |
| 19) o-xylene | 17.83 | 91 | 169678 | 2.827 | ug/m3# | 28 |
| 23) naphthalene | 21.13 | 128 | 79545M6 | 0.963 | ug/m3 | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 649968468 | 3713.737 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.99 | 120 | 178091M5 | 6.443 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.00 | 134 | 121739M5 | 4.405 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 299830 | 10.848 | ug/m3 | |

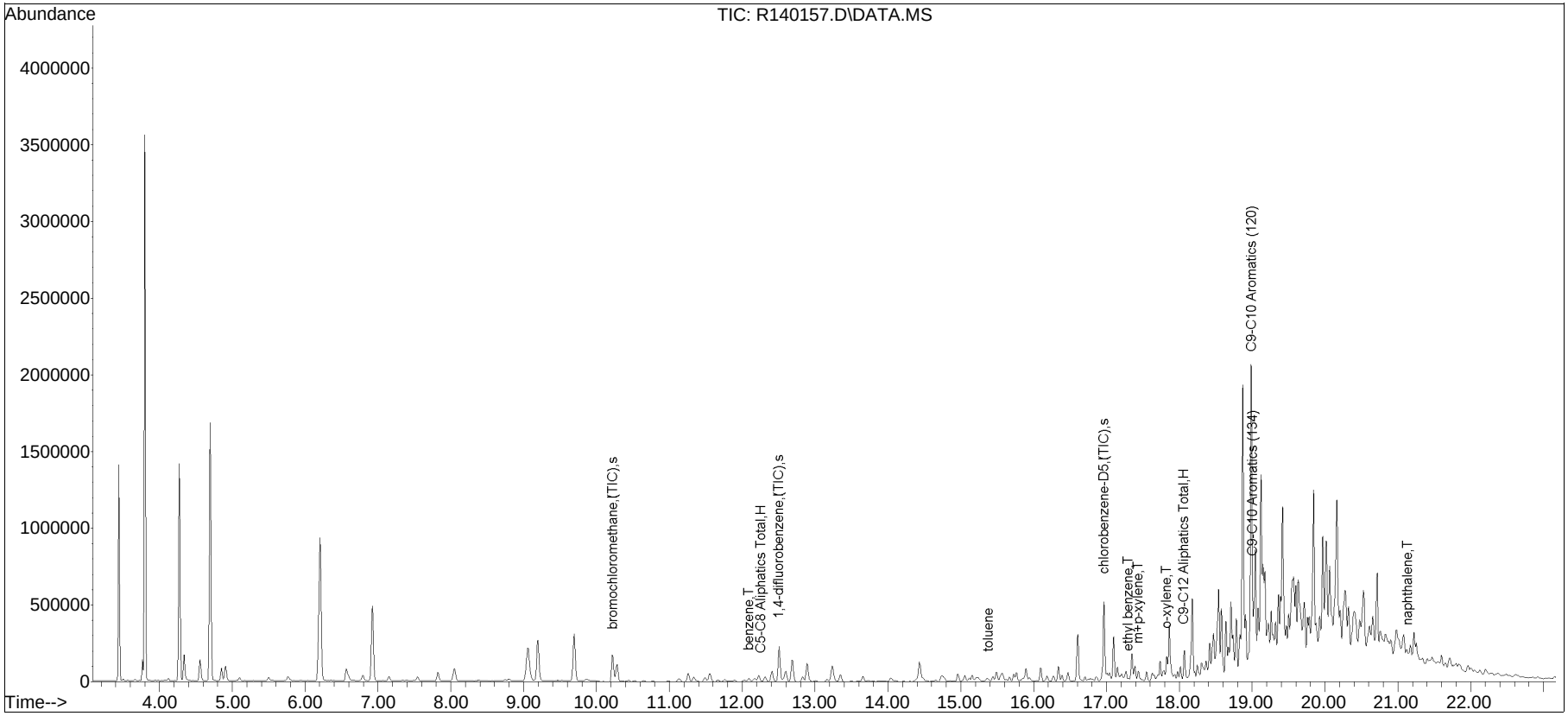
(#) = qualifier out of range (m) = manual integration (+) = signals summed

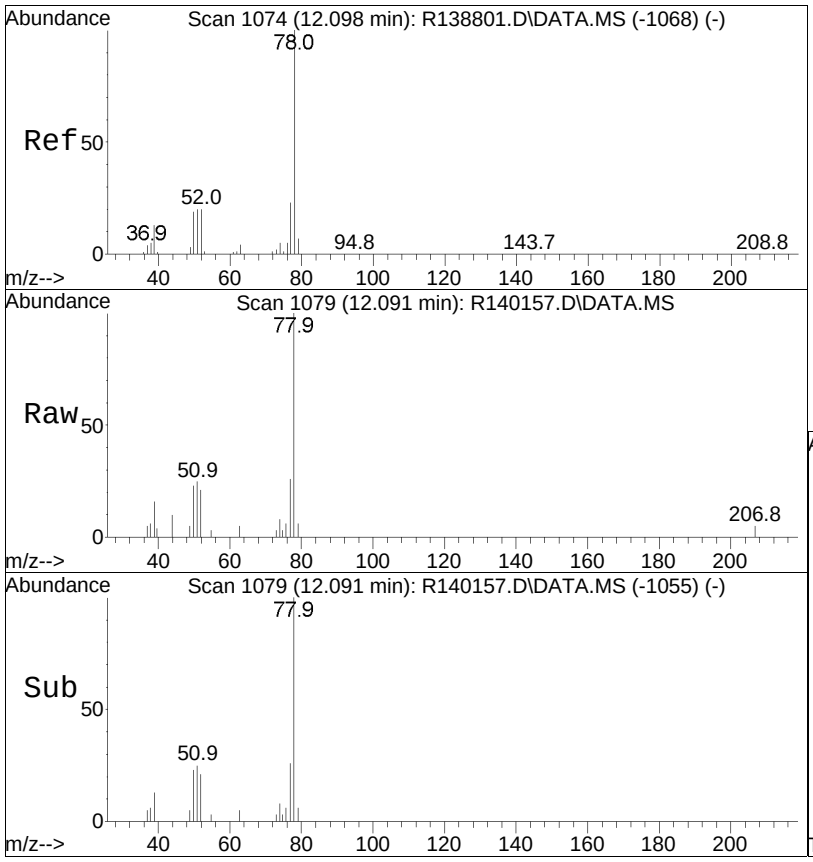
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140157.D
Acq On : 12 Mar 2015 1:40 am
Operator : AIRPIANO1:RY
Sample : L1504425-10,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 12 14:52:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

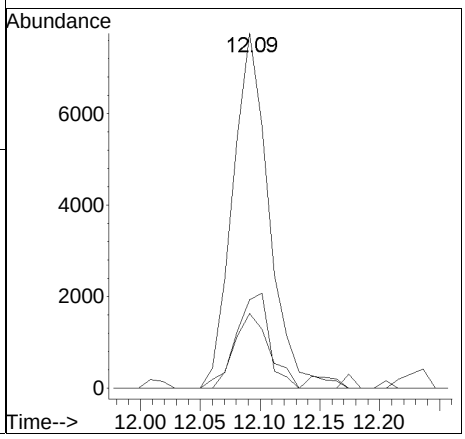


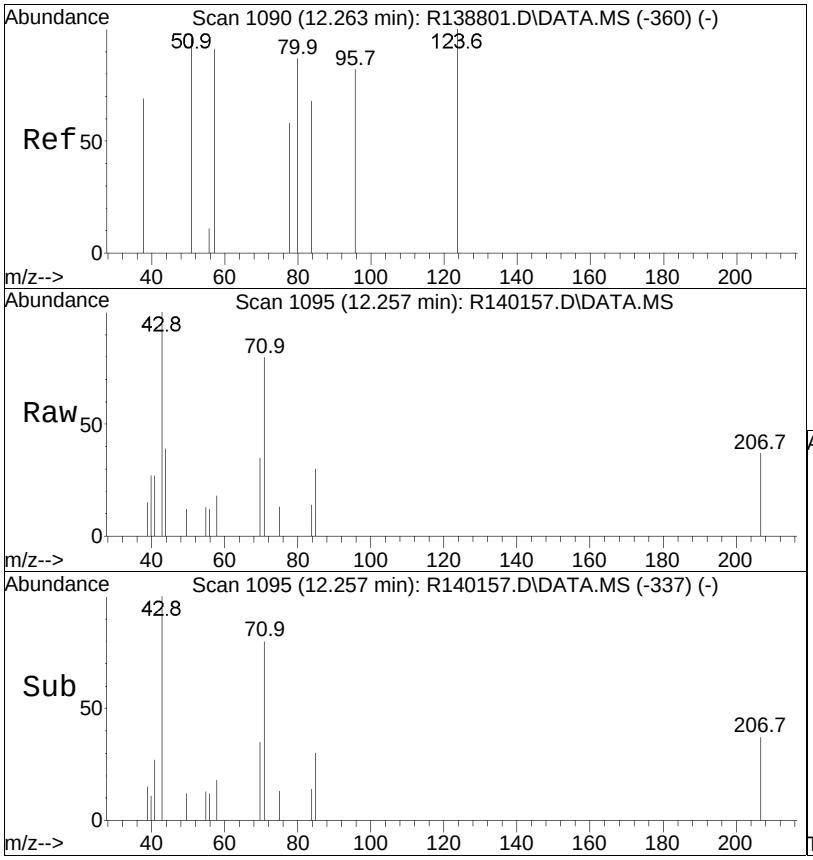



#9
benzene
Concen: 3.12 ug/m3
RT: 12.10 min Scan# 1079
Delta R.T. 0.002 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 78 Resp: 164091

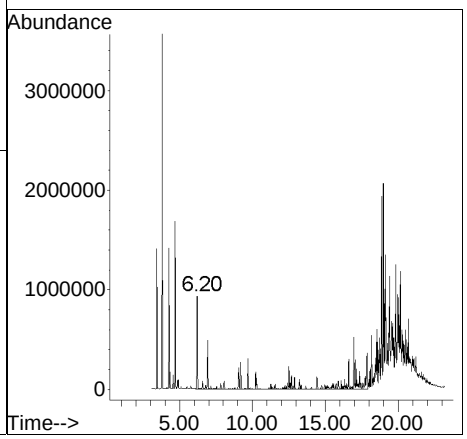
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 20.5 | 15.9 | 23.9 |
| 51 | 21.4 | 15.9 | 23.9 |

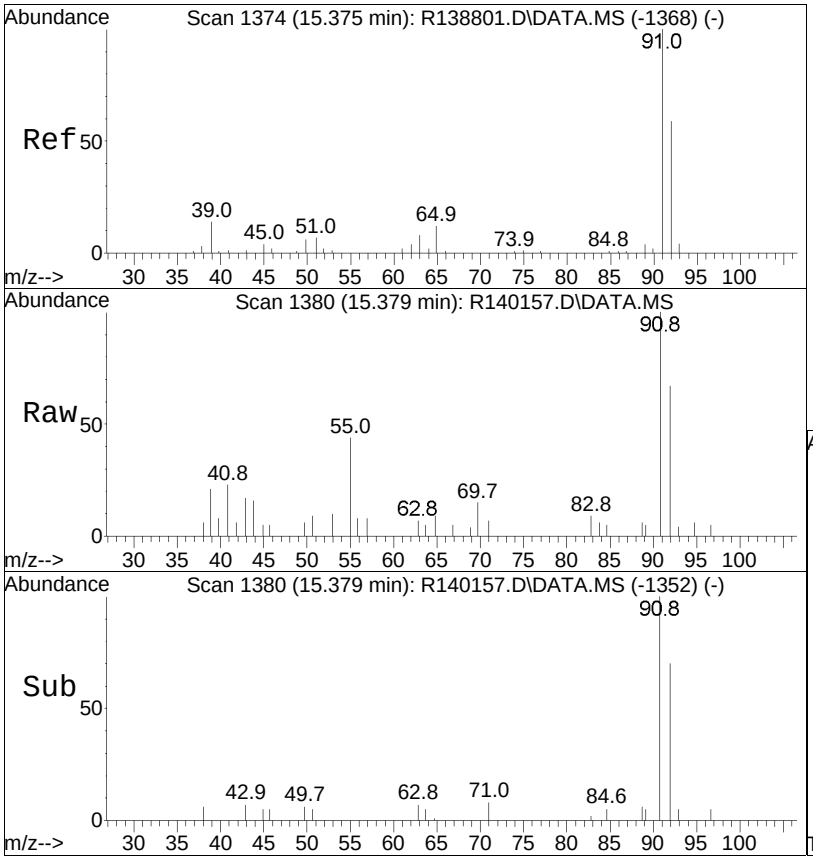





#11
C5-C8 Aliphatics Total
Concen: 1129.38 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:TIC Resp:150730007

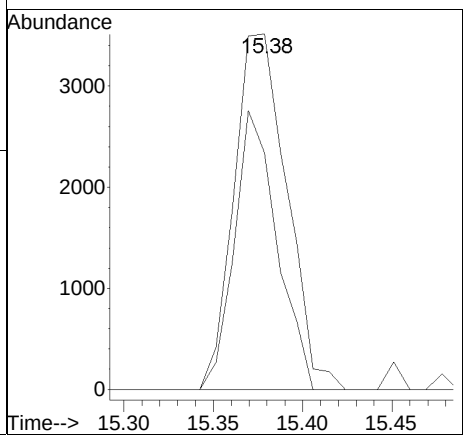


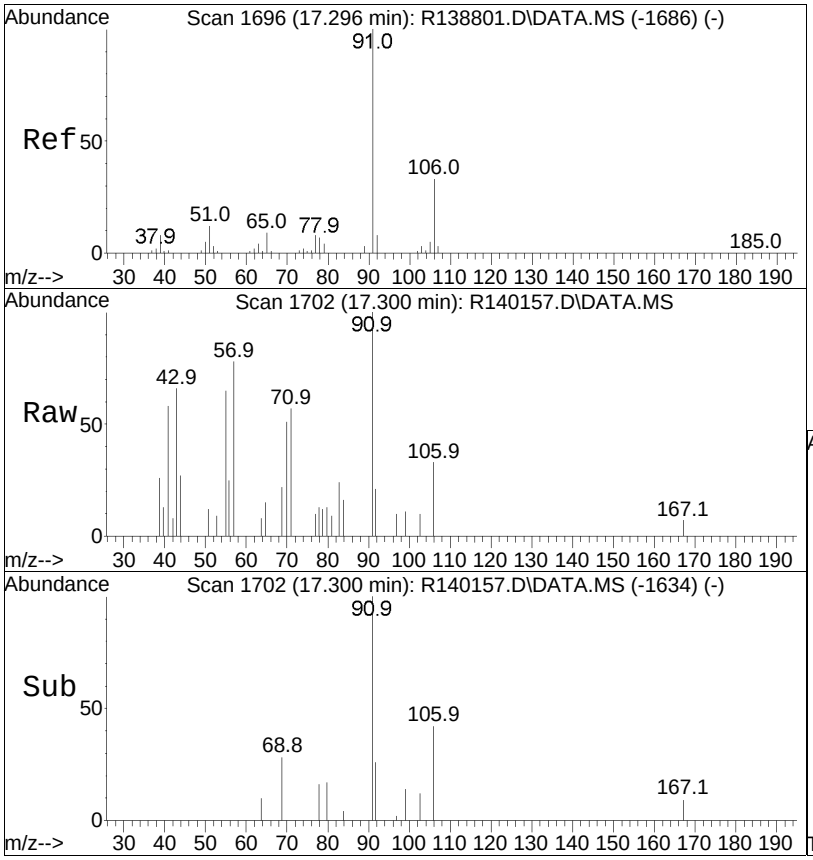



#13
toluene
Concen: 1.11 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.005 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 72454

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 63.2 | 45.4 | 68.0 |

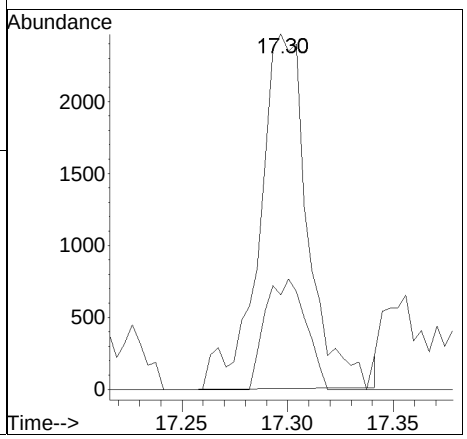


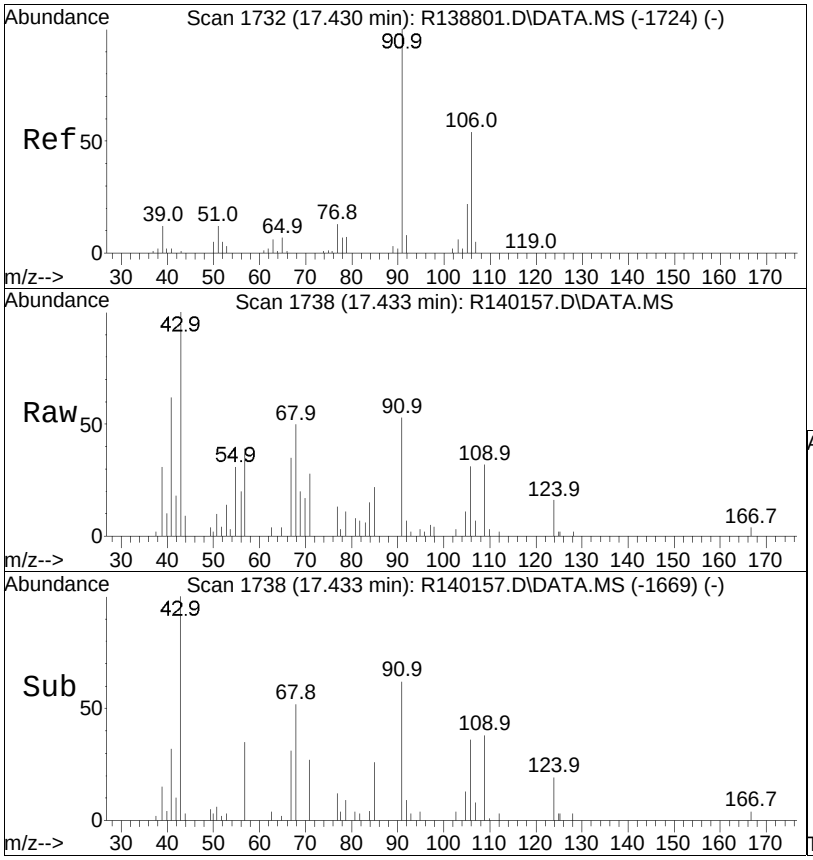



#16
ethyl benzene
Concen: 0.52 ug/m3
RT: 17.30 min Scan# 1702
Delta R.T. 0.002 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 38987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 26.3 | 39.5# |

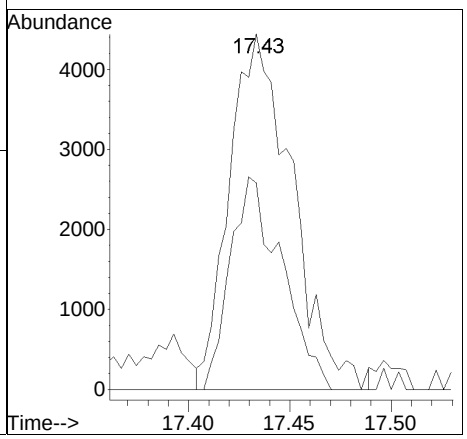


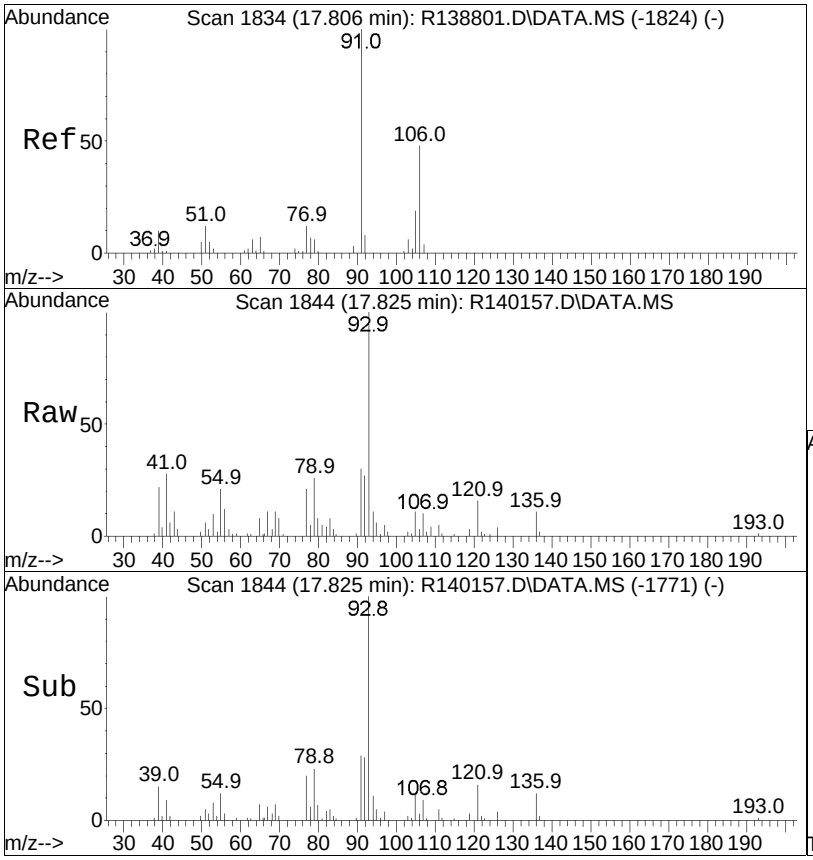



#17
m+p-xylene
Concen: 1.63 ug/m3 m
RT: 17.43 min Scan# 1738
Delta R.T. 0.004 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 95401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.3 | 33.4 | 50.2 |

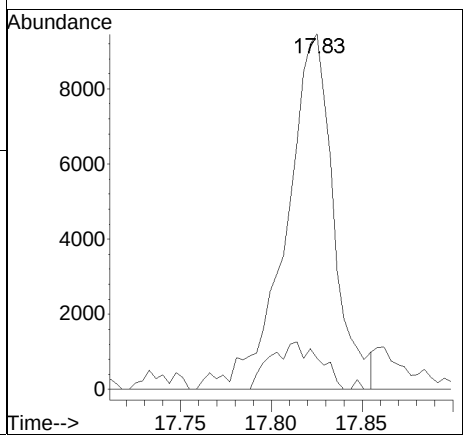


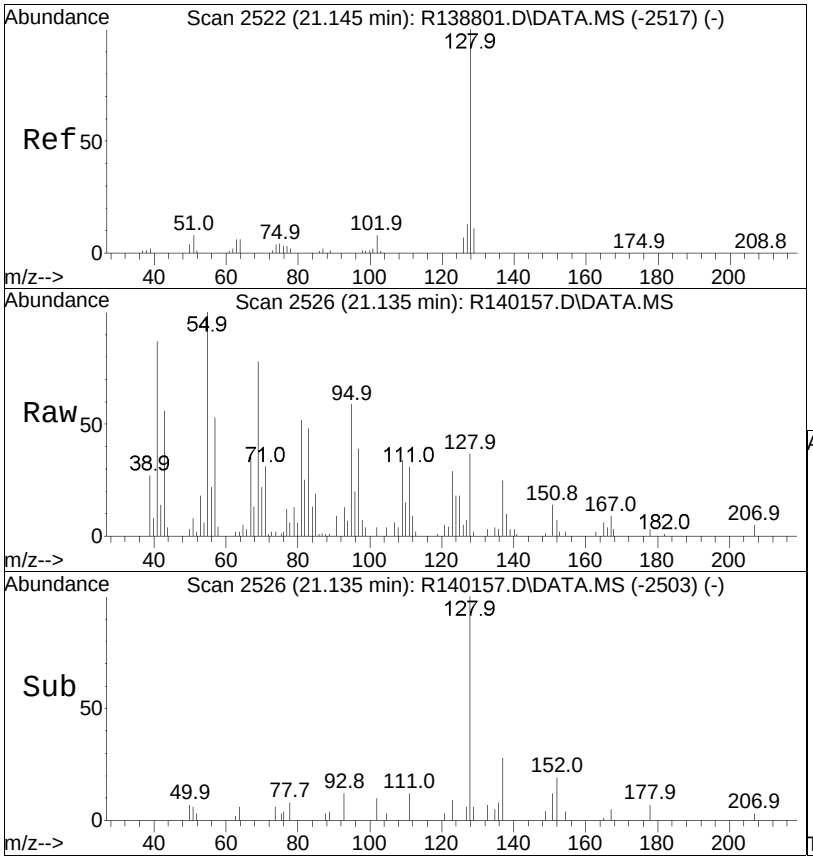



#19
o-xylene
Concen: 2.83 ug/m3
RT: 17.83 min Scan# 1844
Delta R.T. 0.019 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 169678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 39.5 | 59.3# |

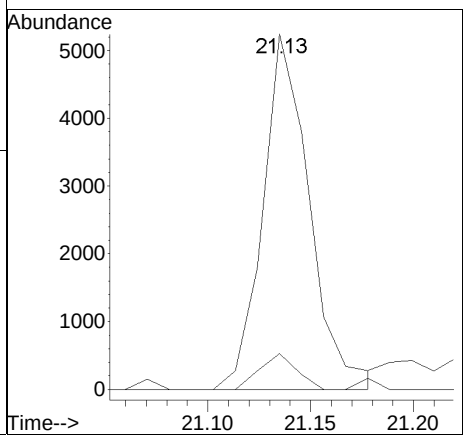


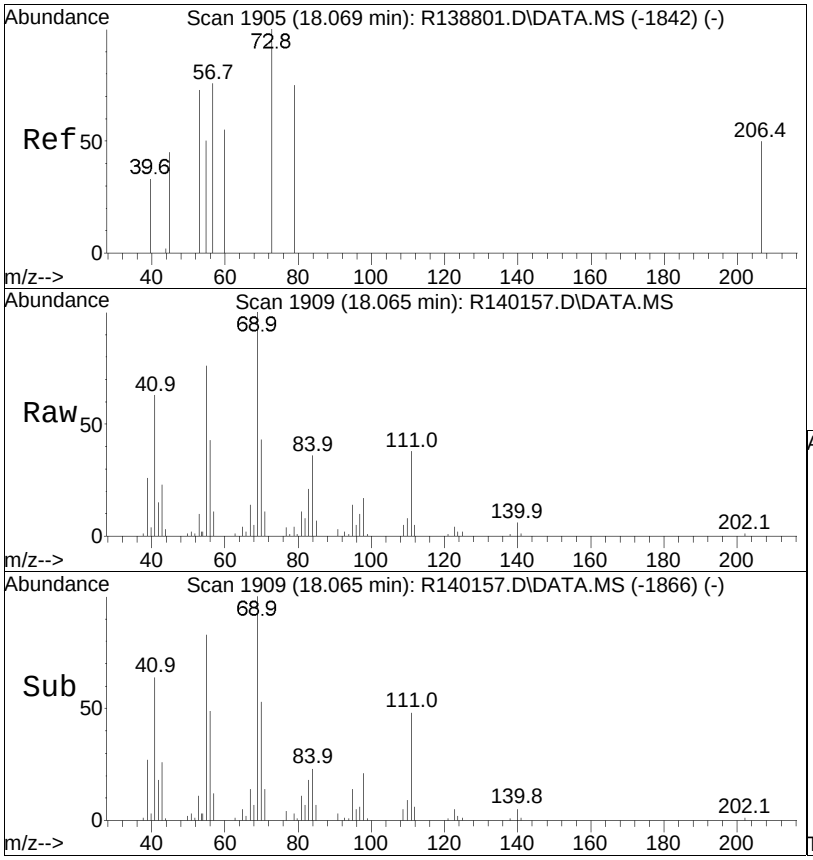



#23
naphthalene
Concen: 0.96 ug/m3 m
RT: 21.13 min Scan# 2526
Delta R.T. -0.007 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:128 Resp: 79545

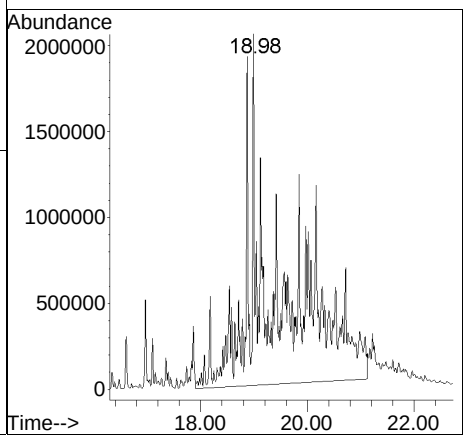
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 0.0 | 6.8 | 10.2# |

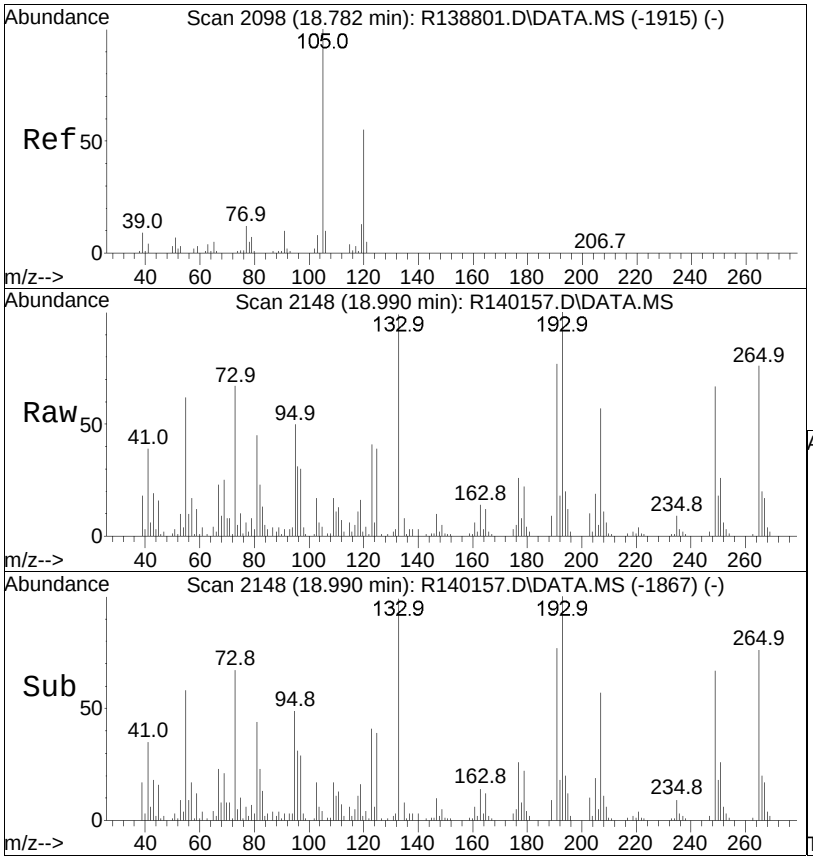





#25
C9-C12 Aliphatics Total
Concen: 3724.59 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

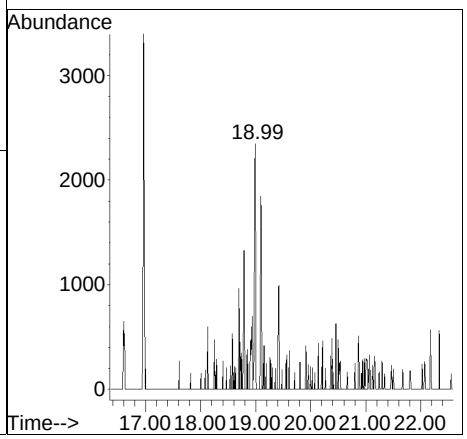
Tgt Ion:TIC Resp:649968468

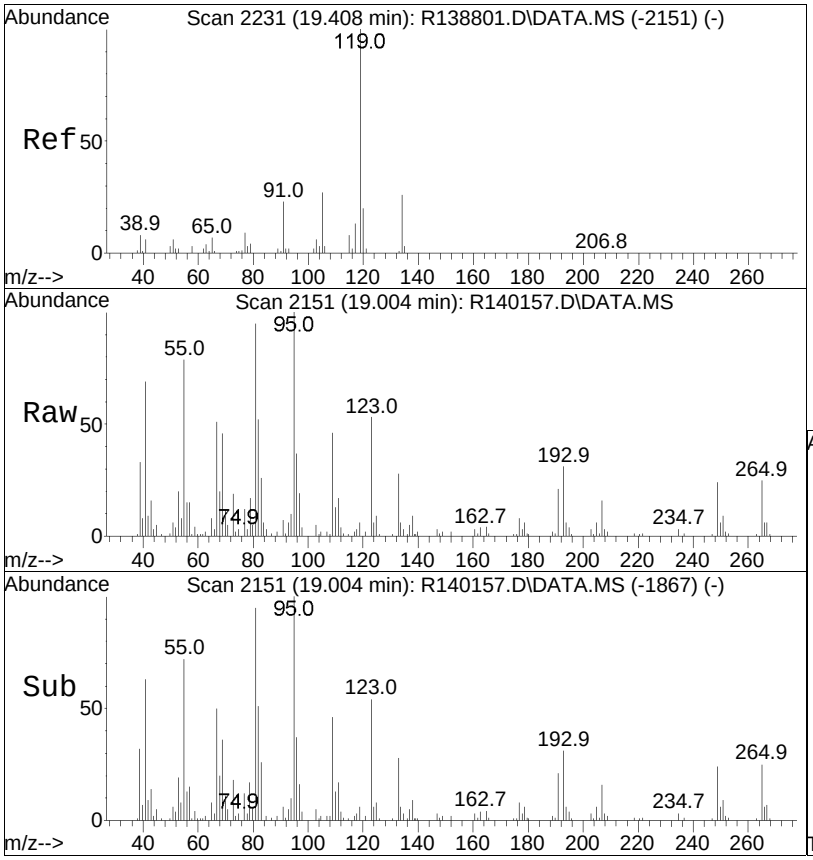





#26
C9-C10 Aromatics (120)
Concen: 6.44 ug/m3 m
RT: 18.99 min Scan# 2148
Delta R.T. -1.010 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

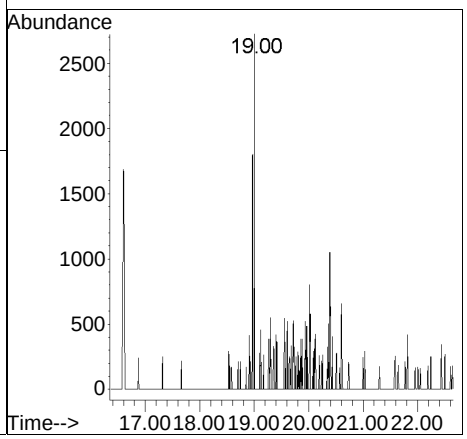
Tgt Ion:120 Resp: 178091






#27
C9-C10 Aromatics (134)
Concen: 4.40 ug/m3 m
RT: 19.00 min Scan# 2151
Delta R.T. -0.996 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

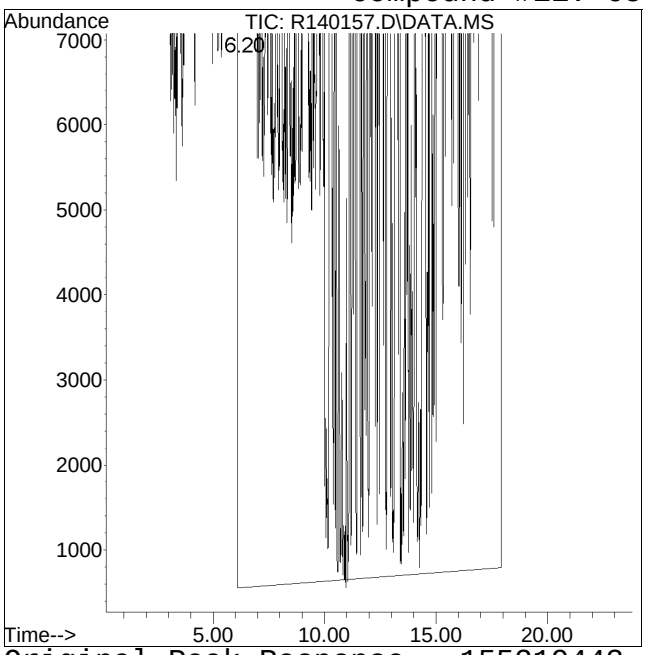
Tgt Ion:134 Resp: 121739



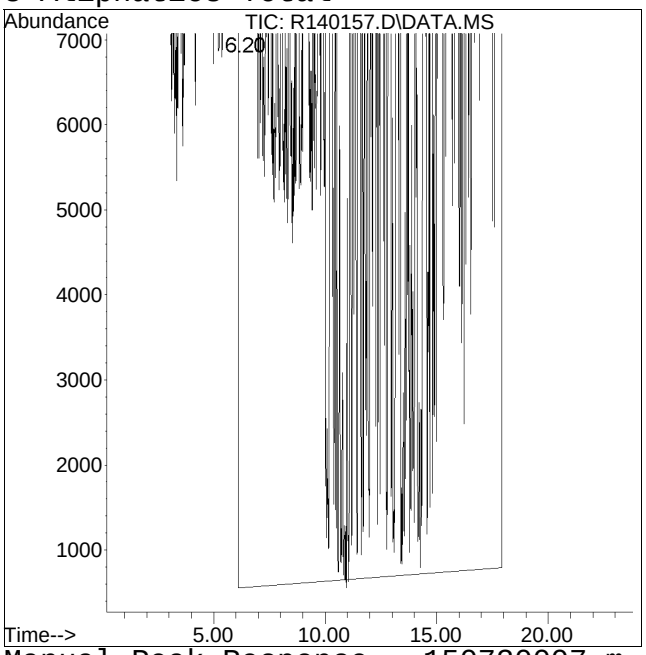
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM150311A\ | : APH150101.M |
| Data File | : R140157.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/12/2015 1:40 am | Instrument | : Air Piano 1 |
| Sample | : L1504425-10,3,250,250 | Quant Date | : 3/12/2015 11:28 am |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 155219443

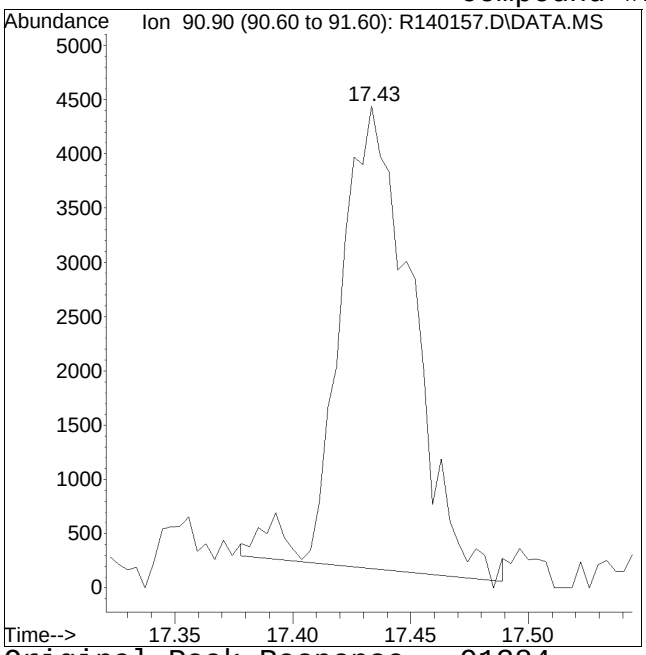


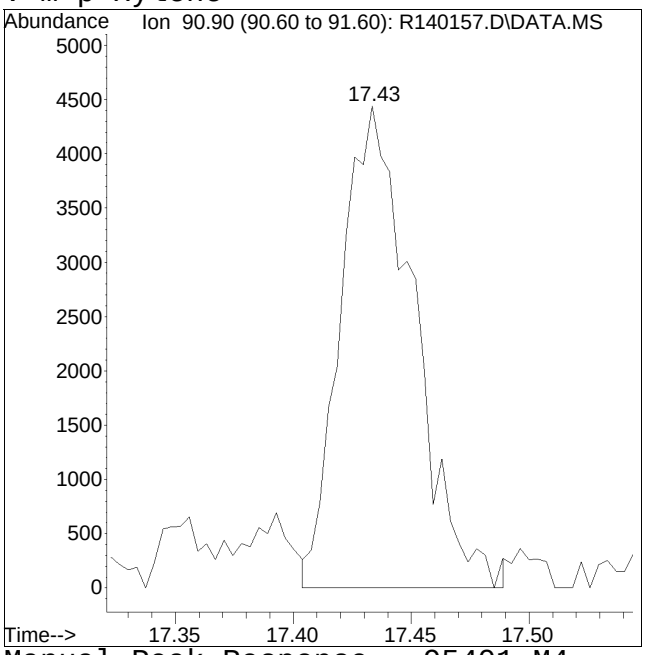

Manual Peak Response = 150730007 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140157.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:40 am Instrument : Air Piano 1
Sample : L1504425-10,3,250,250 Quant Date : 3/12/2015 11:28 am

Compound #17: m+p-xylene



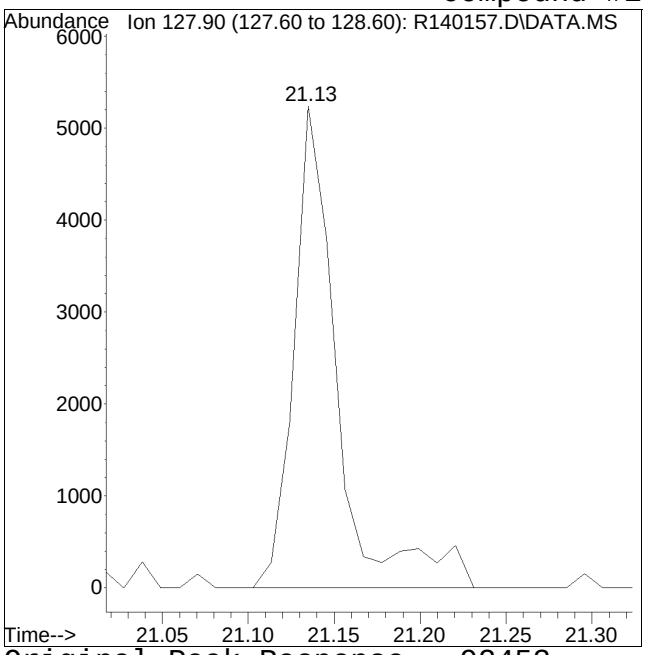




Original Peak Response = 91384 Manual Peak Response = 95401 M4
M4 = Poor automated baseline construction.

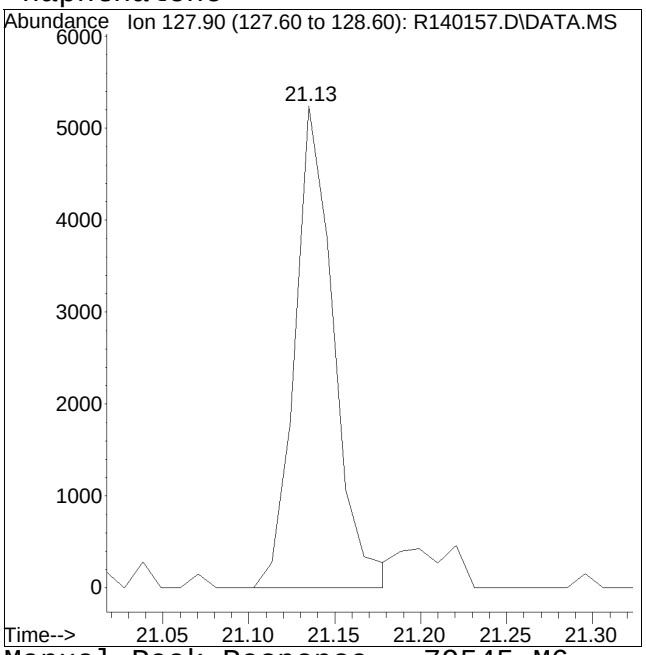
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140157.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:40 am Instrument : Air Piano 1
Sample : L1504425-10,3,250,250 Quant Date : 3/12/2015 11:28 am

Compound #23: naphthalene




Original Peak Response = 92453



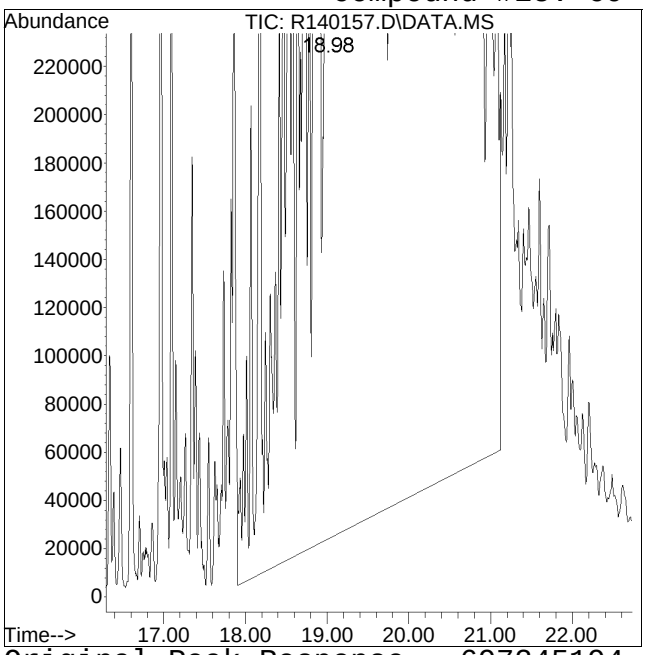

Manual Peak Response = 79545 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

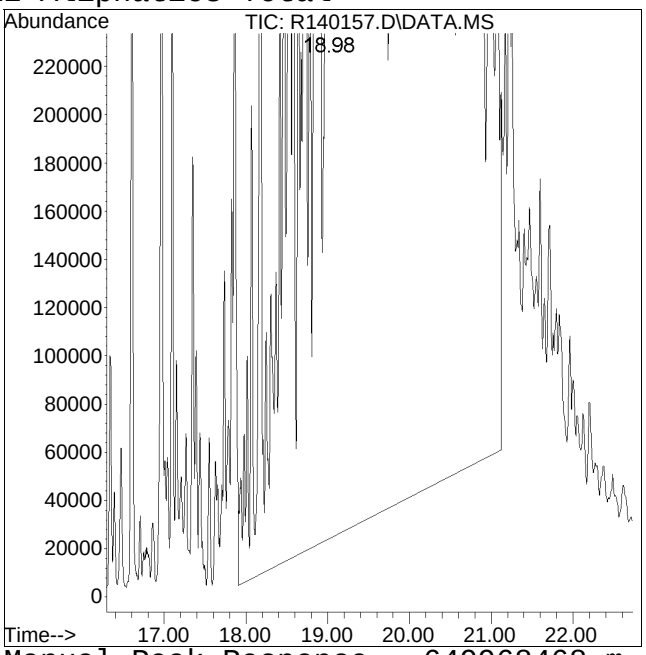
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140157.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/12/2015 1:40 am | Instrument | : Air Piano 1 |
| Sample | : L1504425-10,3,250,250 | Quant Date | : 3/12/2015 11:28 am |

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 697245194

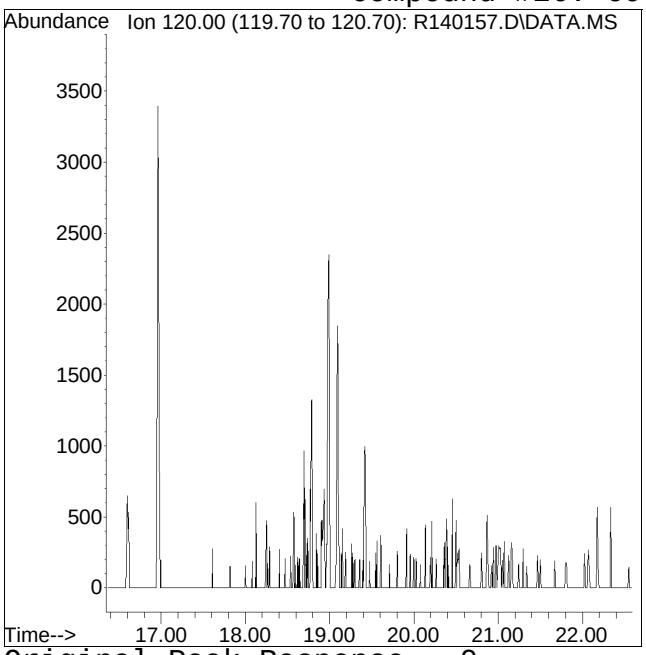


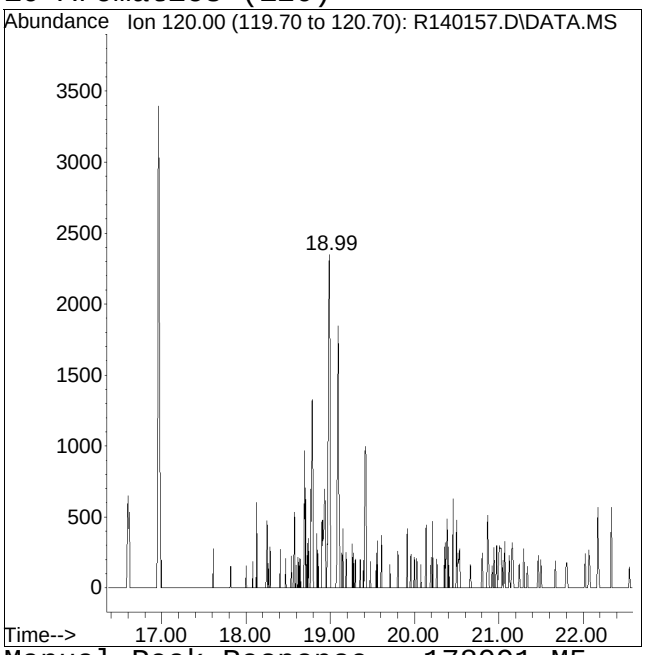

Manual Peak Response = 649968468 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140157.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:40 am Instrument : Air Piano 1
Sample : L1504425-10,3,250,250 Quant Date : 3/12/2015 11:28 am

Compound #26: C9-C10 Aromatics (120)



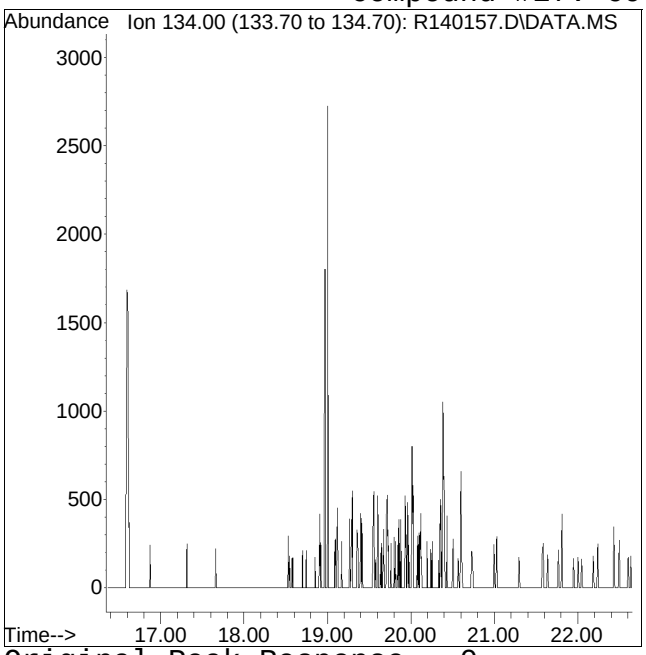



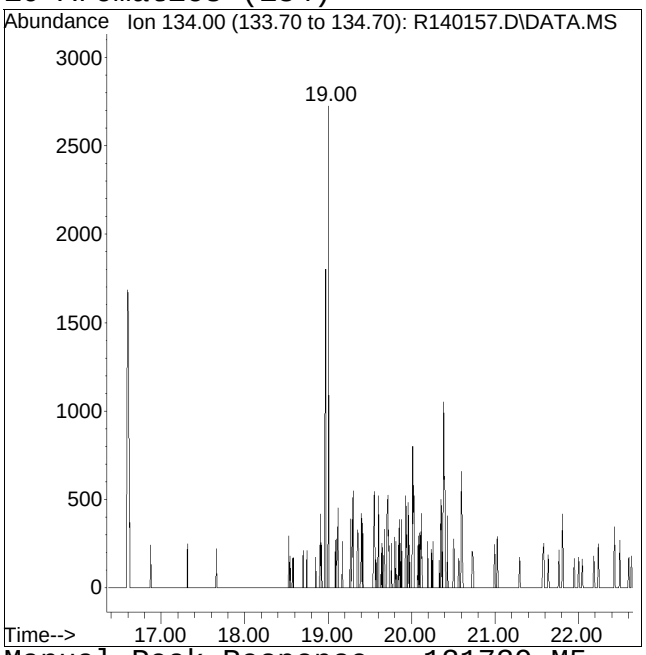

Original Peak Response = 0 Manual Peak Response = 178091 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140157.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:40 am Instrument : Air Piano 1
Sample : L1504425-10,3,250,250 Quant Date : 3/12/2015 11:28 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 121739 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140160.D
Acq On : 12 Mar 2015 8:45 am
Operator : AIRPIANO1:RY
Sample : L1504425-08,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 12 14:53:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 472948 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 88.13% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1844274 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 84.12% | |
| 12) chlorobenzene-D5 | 16.96 | 54 | 467688 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 95.48% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3468680 | 10.416 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 104.16% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4210979 | 8.866 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 88.66% | |
| 30) chlorobenzene-D5 (TIC) | 16.96 | TIC | 6313970 | 10.196 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 101.96% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. d | | |
| 9) benzene | 0.00 | | 0 | N.D. | | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 6421586 | 48.260 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 37975 | 0.610 | ug/m3# | 23 |
| 16) ethyl benzene | 17.30 | | 0 | N.D. | | |
| 17) m+p-xylene | 17.43 | 91 | 36376M4 | 0.648 | ug/m3 | |
| 19) o-xylene | 17.81 | | 0 | N.D. | | |
| 23) naphthalene | 21.14 | 128 | 87195 | 1.103 | ug/m3# | 76 |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 6327796 | 30.416 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 18.98 | 120 | 136489M5 | 5.161 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.00 | 134 | 61276M5 | 2.317 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 197766 | 7.478 | ug/m3 | |

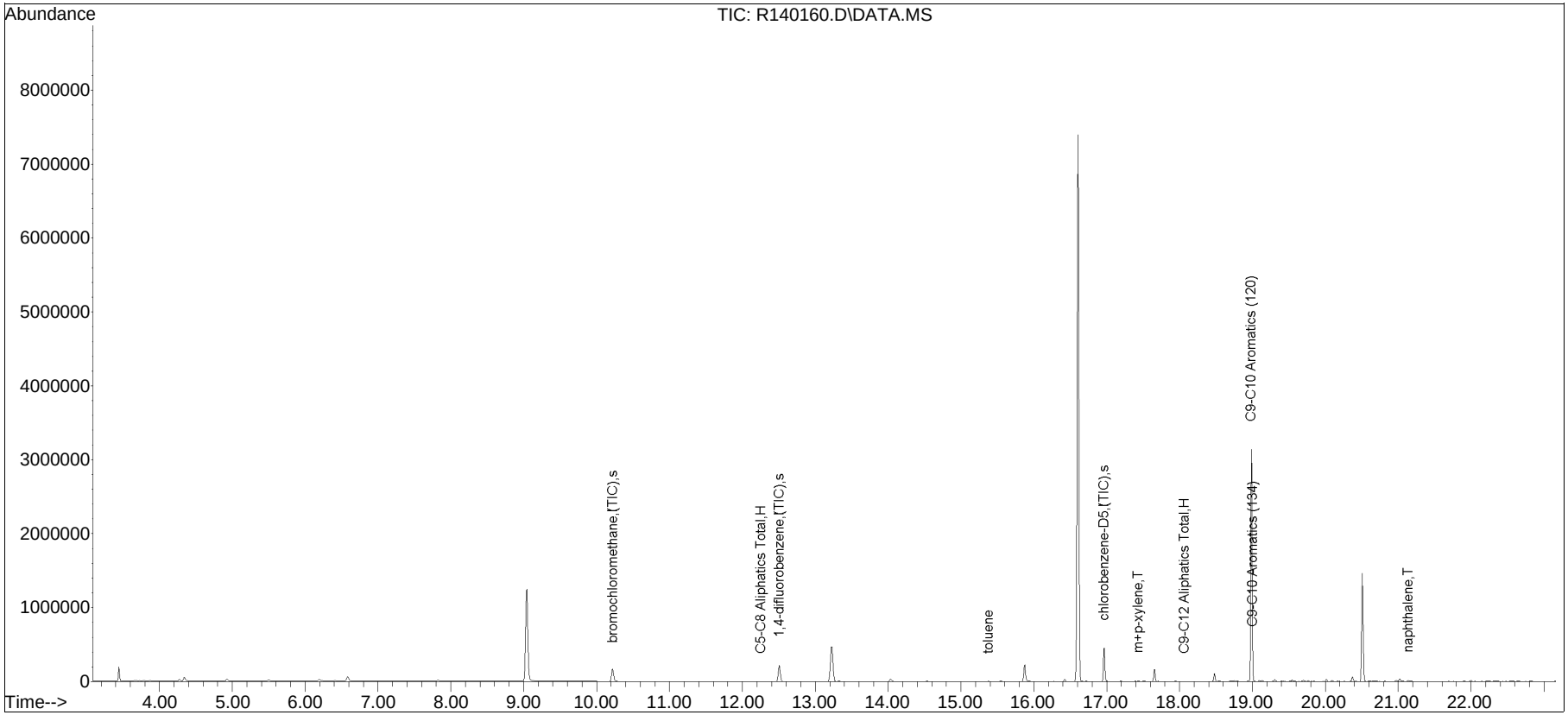
(#) = qualifier out of range (m) = manual integration (+) = signals summed

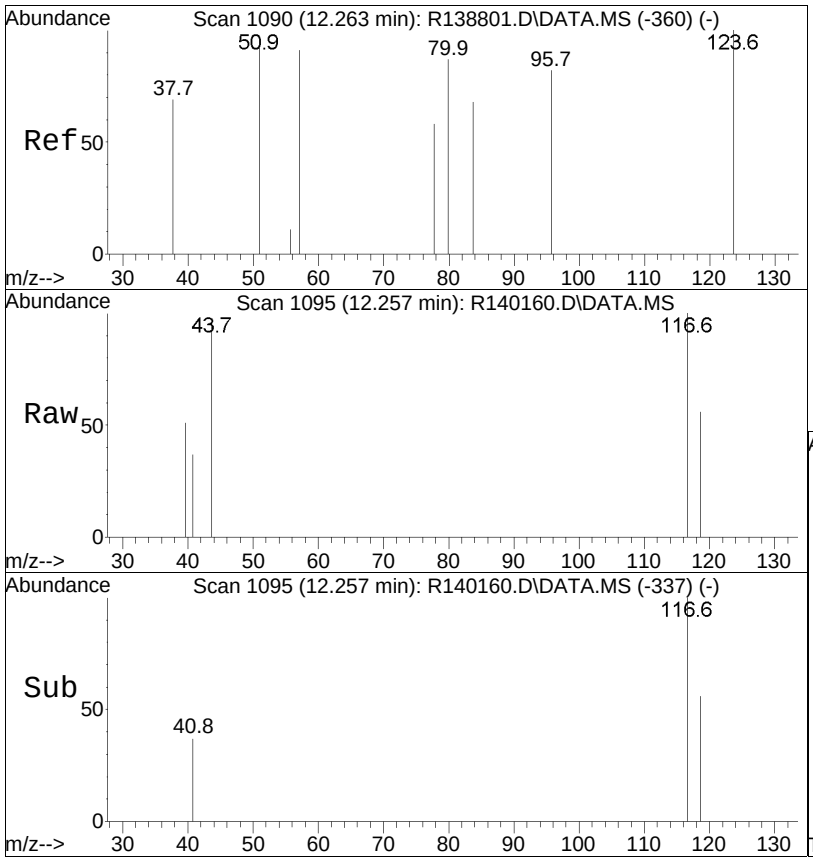
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140160.D
Acq On : 12 Mar 2015 8:45 am
Operator : AIRPIANO1:RY
Sample : L1504425-08,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 12 14:53:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

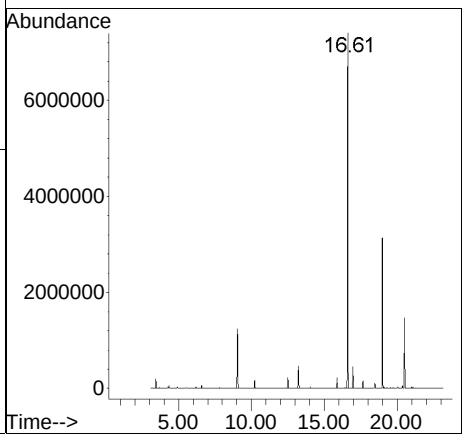
Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

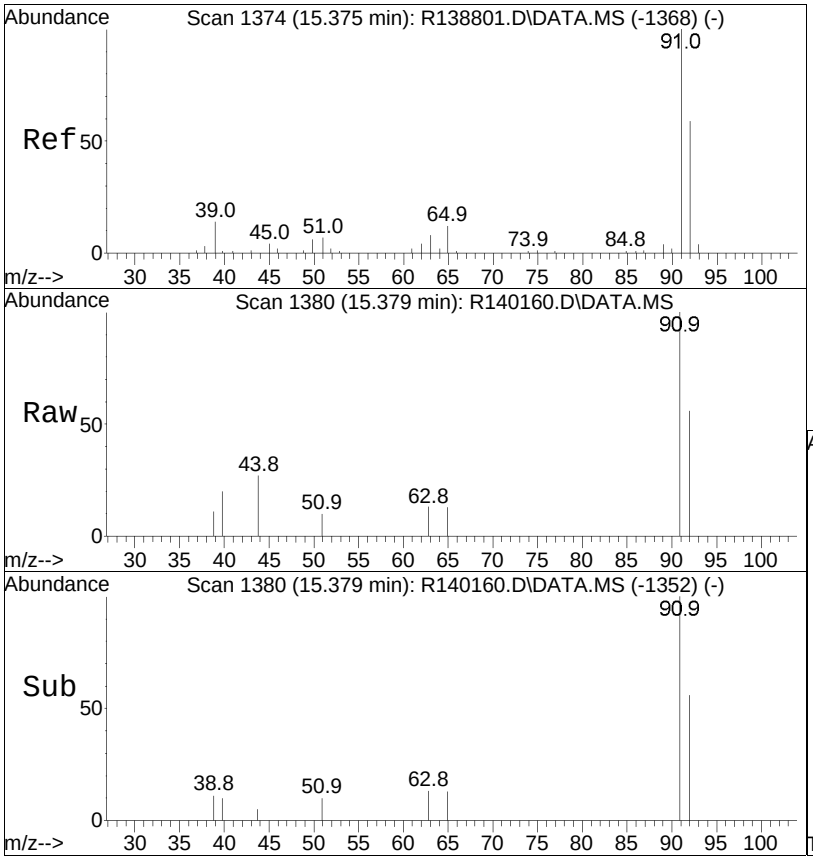





#11
C5-C8 Aliphatics Total
Concen: 49.92 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:TIC Resp: 6421586

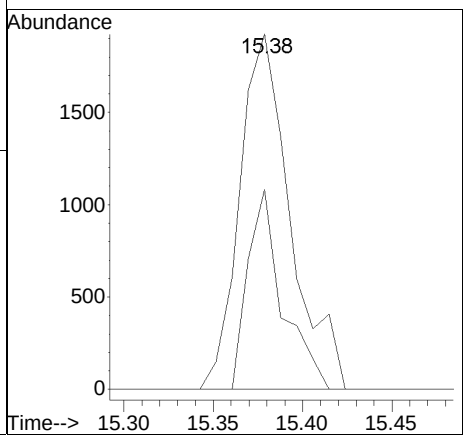


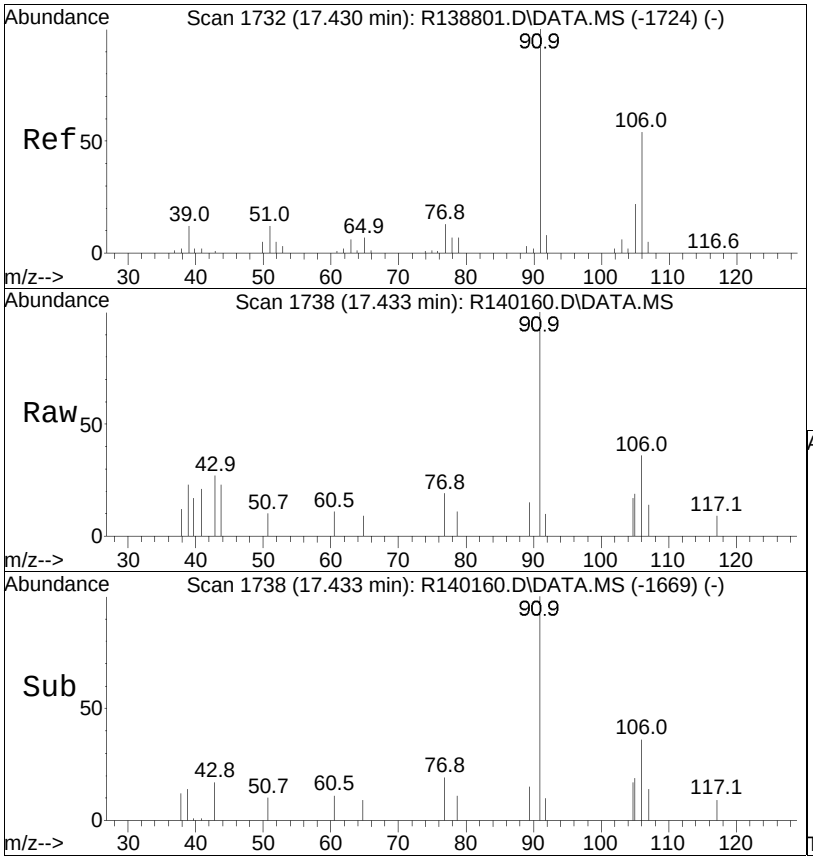



#13
toluene
Concen: 0.61 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.008 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 91 Resp: 37975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 0.0 | 45.4 | 68.0# |

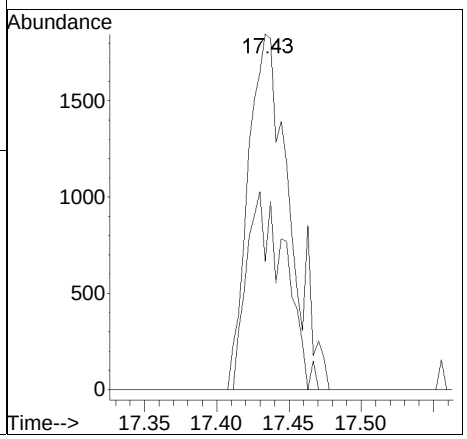


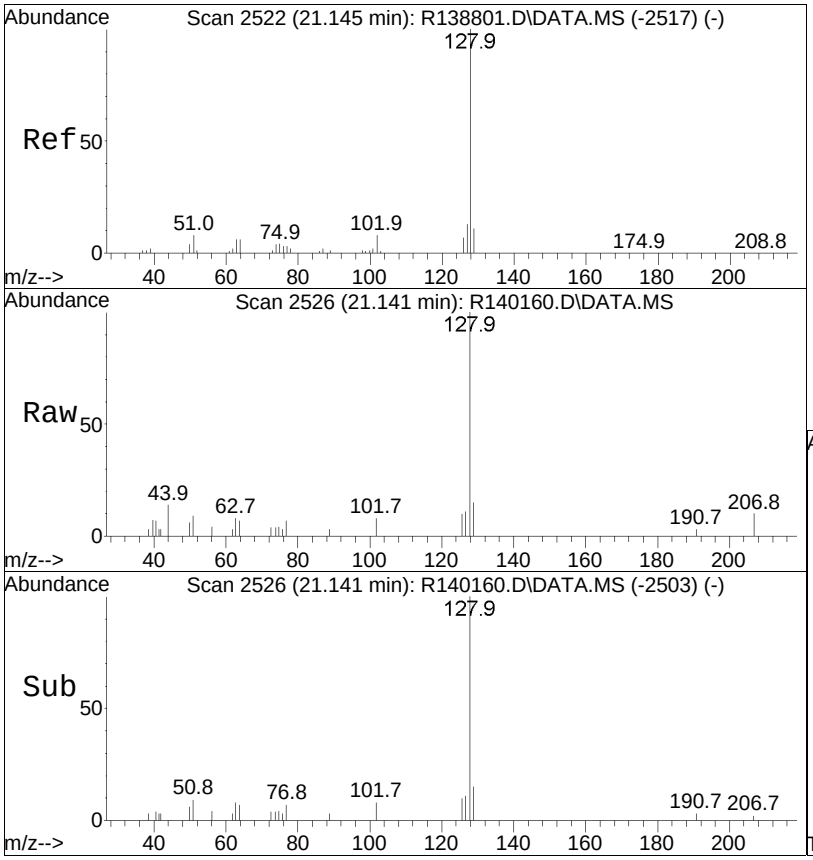



#17
m+p-xylene
Concen: 0.65 ug/m3 m
RT: 17.43 min Scan# 1738
Delta R.T. 0.004 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 91 Resp: 36376

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 33.4 | 50.2# |

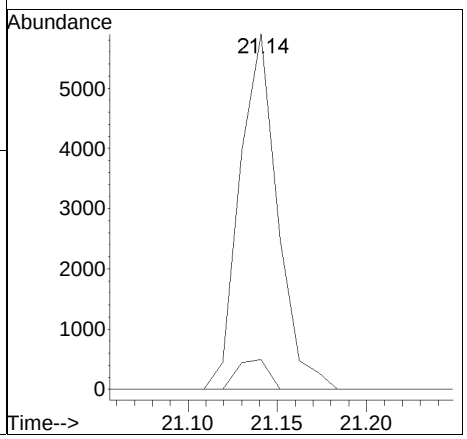


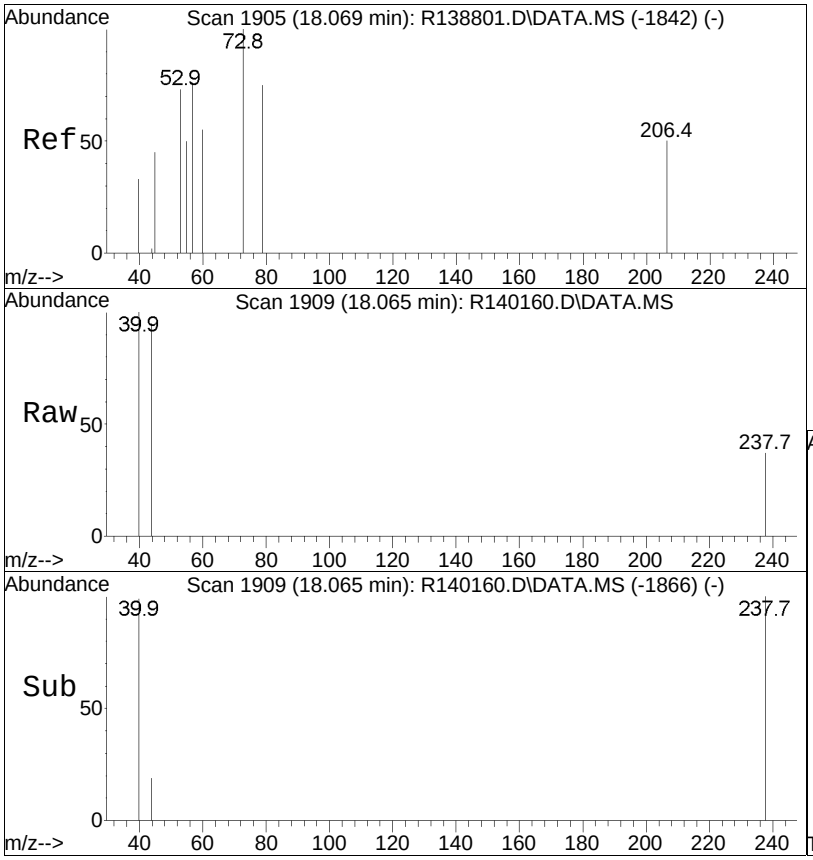



#23
naphthalene
Concen: 1.10 ug/m3
RT: 21.14 min Scan# 2526
Delta R.T. 0.002 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:128 Resp: 87195

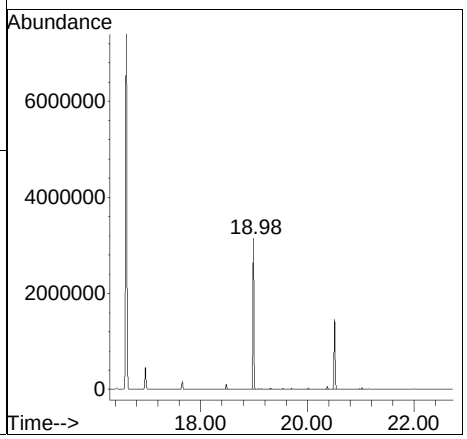
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 0.0 | 6.8 | 10.2# |

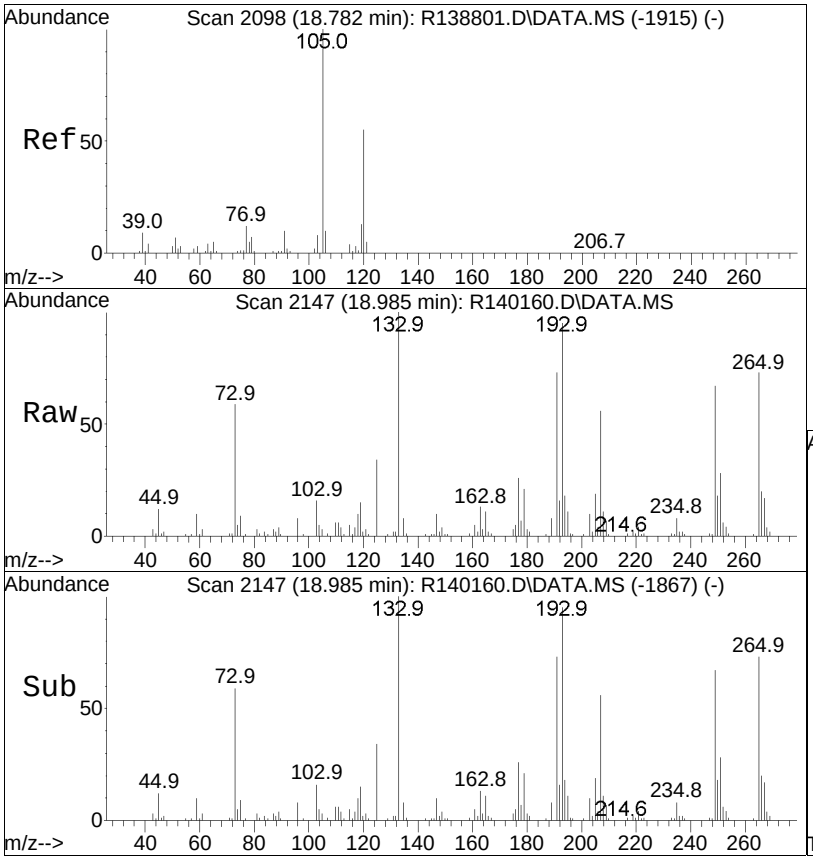





#25
C9-C12 Aliphatics Total
Concen: 37.89 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

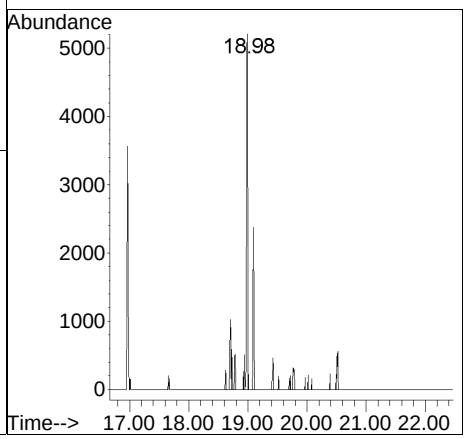
Tgt Ion:TIC Resp: 6327796

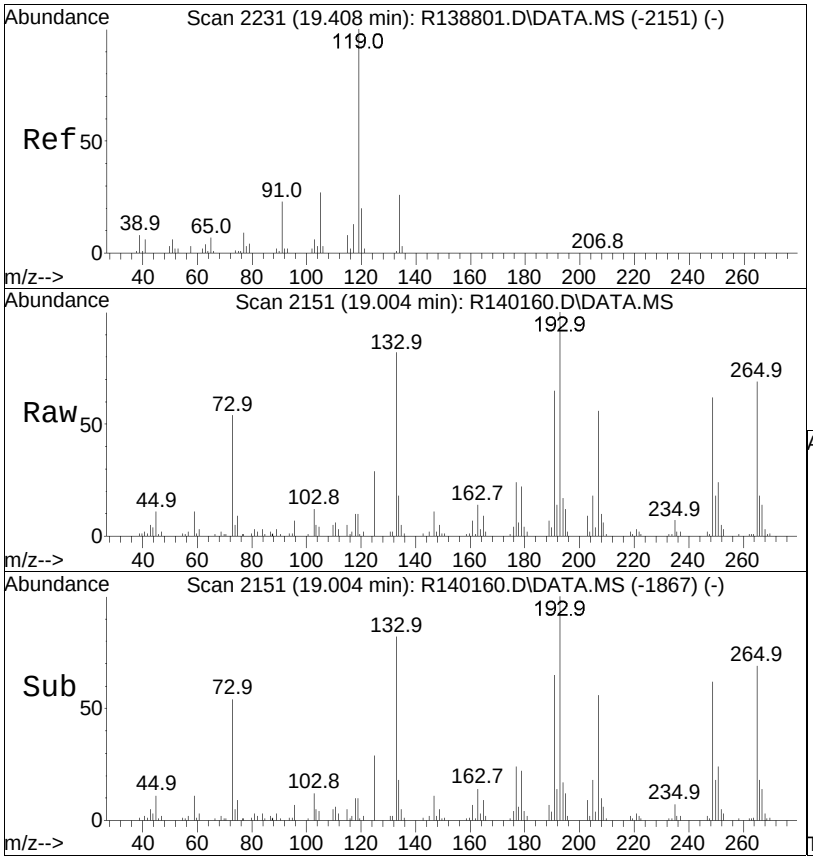





#26
C9-C10 Aromatics (120)
Concen: 5.16 ug/m3 m
RT: 18.98 min Scan# 2147
Delta R.T. -1.015 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

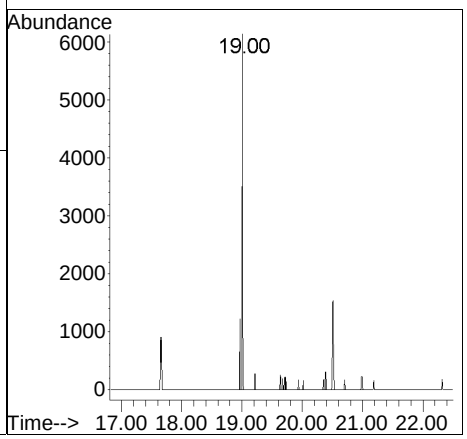
Tgt Ion:120 Resp: 136489






#27
C9-C10 Aromatics (134)
Concen: 2.32 ug/m3 m
RT: 19.00 min Scan# 2151
Delta R.T. -0.996 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

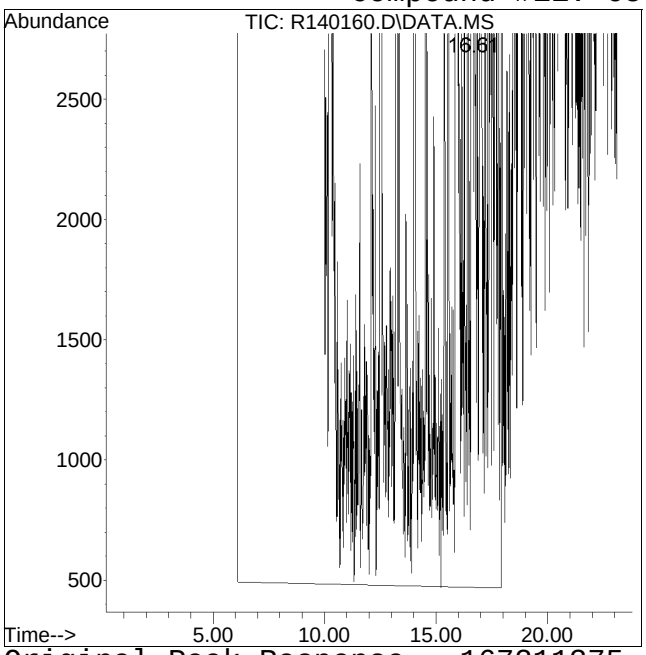
Tgt Ion:134 Resp: 61276



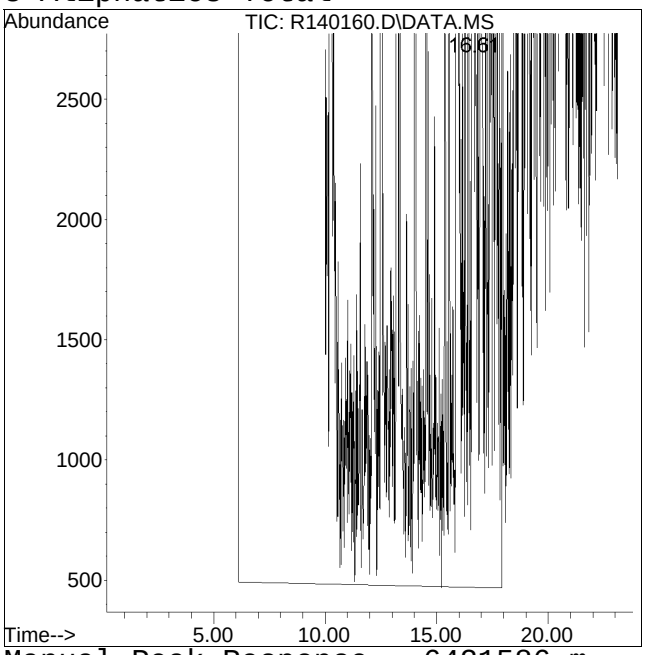
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140160.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 8:45 am Instrument : Air Piano 1
Sample : L1504425-08,3,250,250 Quant Date : 3/12/2015 11:44 am

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 167211375

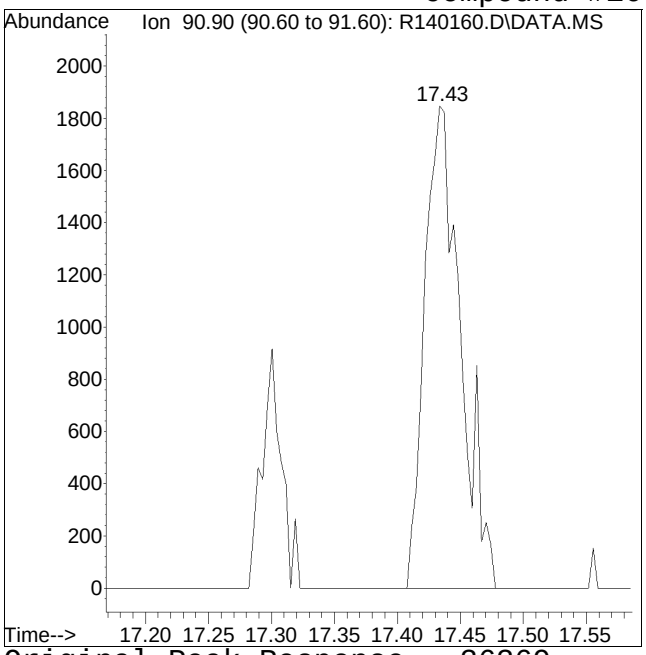


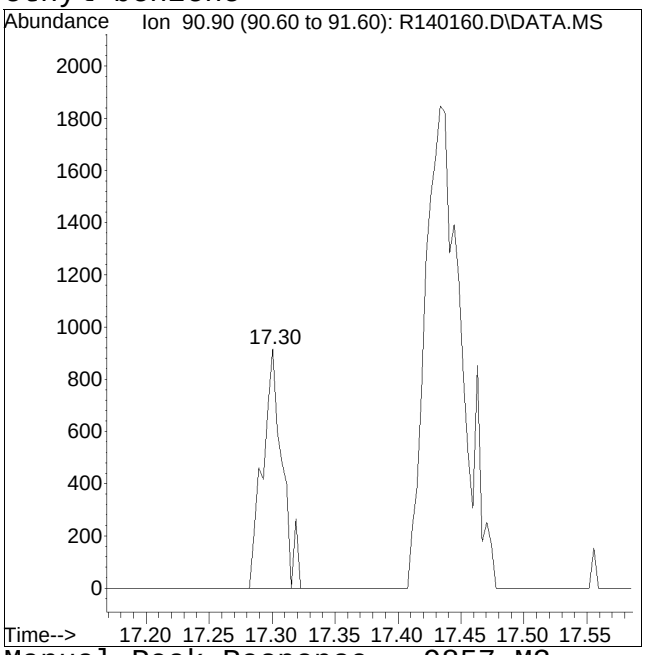

Manual Peak Response = 6421586 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140160.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 8:45 am Instrument : Air Piano 1
Sample : L1504425-08,3,250,250 Quant Date : 3/12/2015 11:44 am

Compound #16: ethyl benzene




Original Peak Response = 36369 Manual Peak Response = 9857 M3

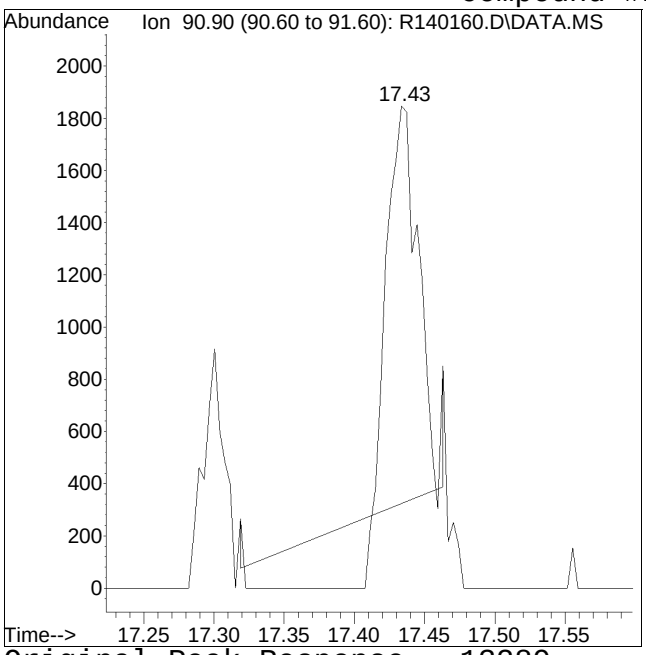
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

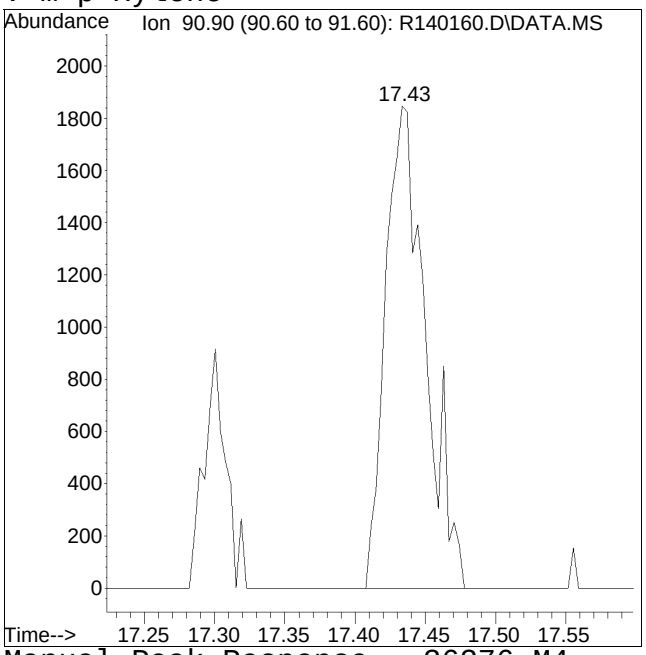
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R140160.D
Date Inj'd : 3/12/2015 8:45 am
Sample : L1504425-08,3,250,250

Method : APH150101.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/12/2015 11:44 am

Compound #17: m+p-xylene




Original Peak Response = 13289



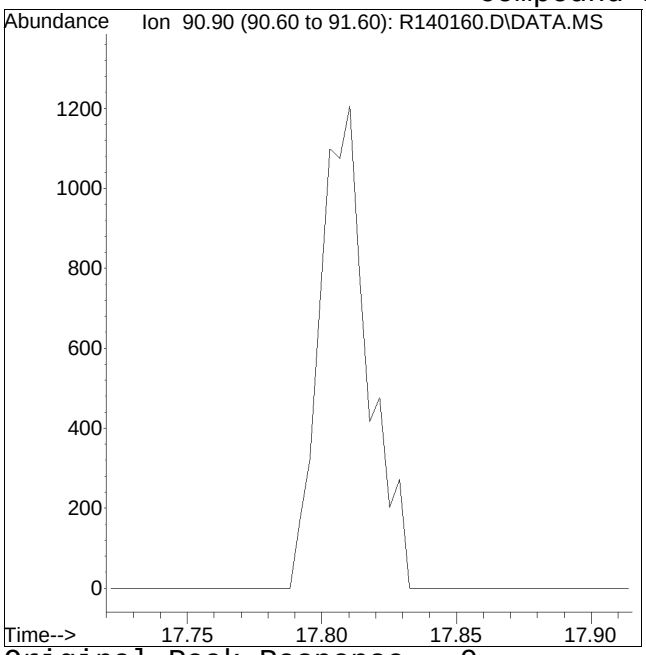

Manual Peak Response = 36376 M4

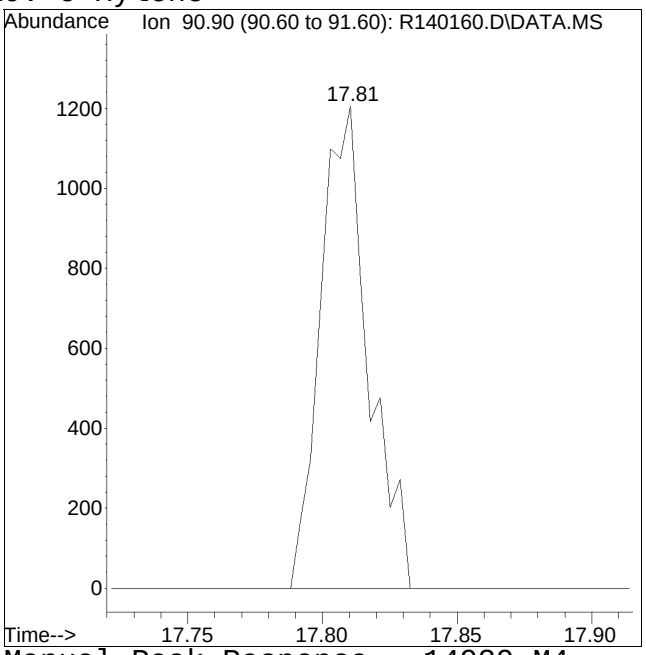
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140160.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 8:45 am Instrument : Air Piano 1
Sample : L1504425-08,3,250,250 Quant Date : 3/12/2015 11:44 am

Compound #19: o-xylene



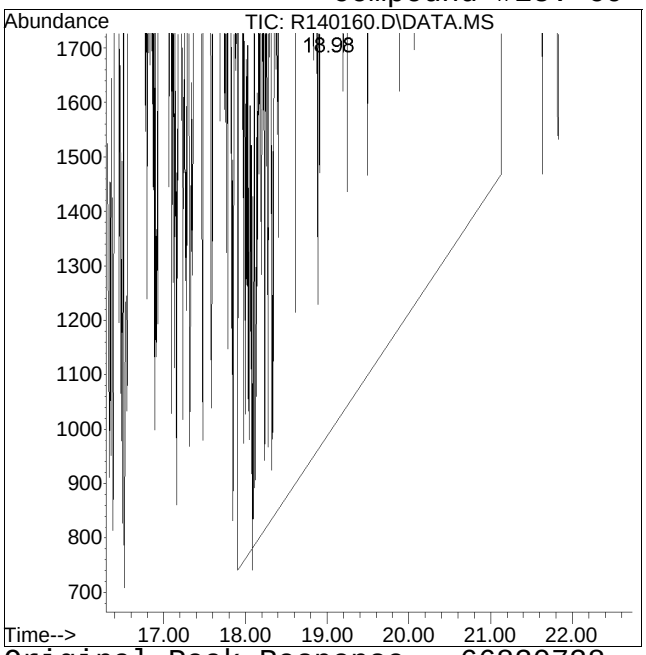




Original Peak Response = 0 Manual Peak Response = 14929 M4
M4 = Poor automated baseline construction.

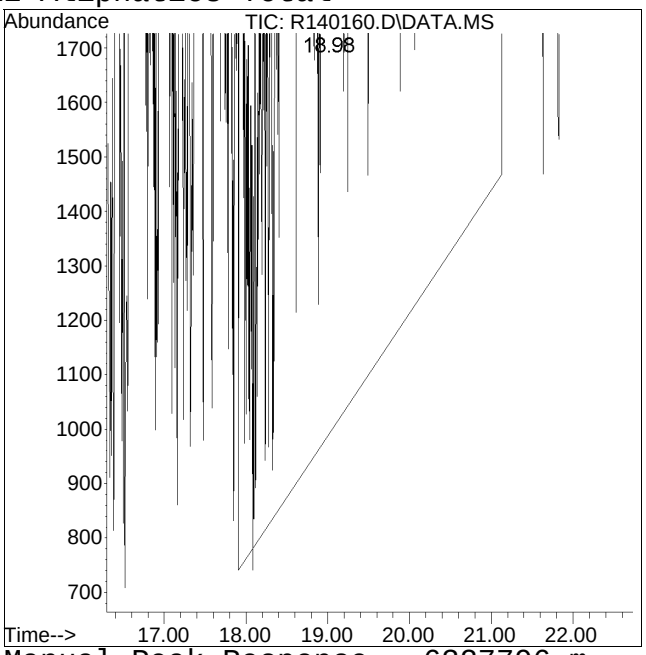
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM Method | : APH150101.M |
| Data File | : R140160.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/12/2015 8:45 am | Instrument | : Air Piano 1 |
| Sample | : L1504425-08,3,250,250 | Quant Date | : 3/12/2015 11:44 am |

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 66830738

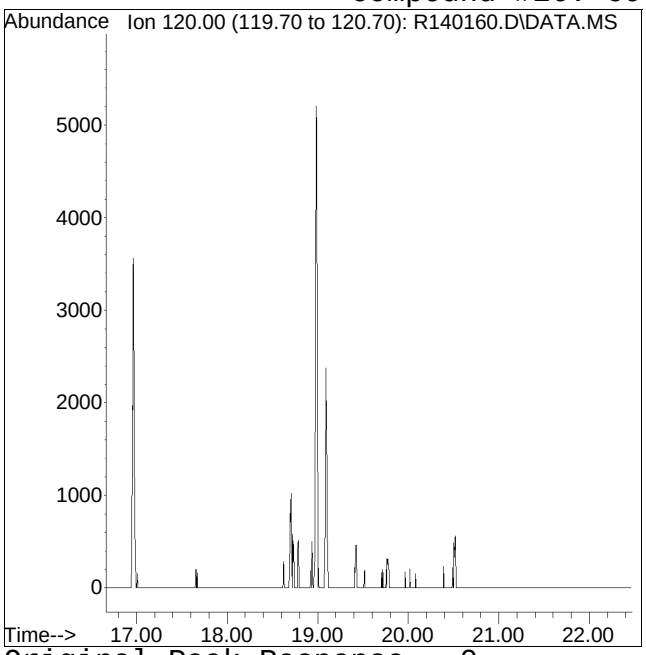


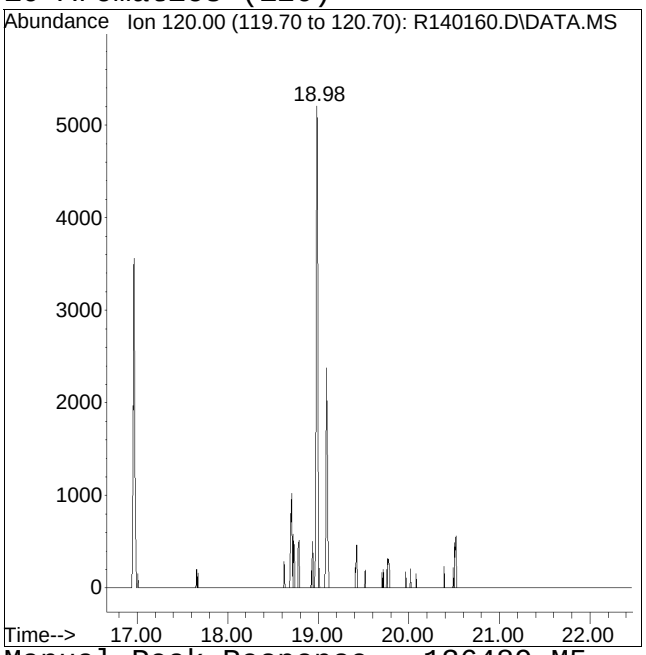

Manual Peak Response = 6327796 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140160.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 8:45 am Instrument : Air Piano 1
Sample : L1504425-08,3,250,250 Quant Date : 3/12/2015 11:44 am

Compound #26: C9-C10 Aromatics (120)



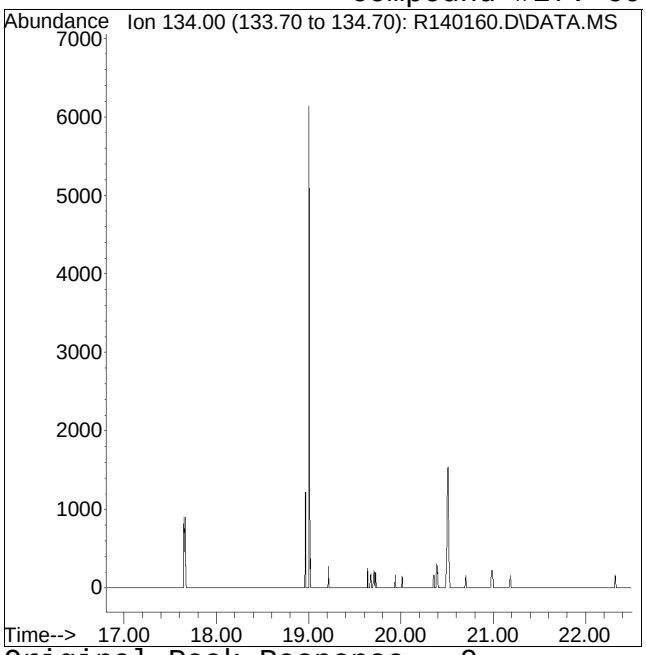



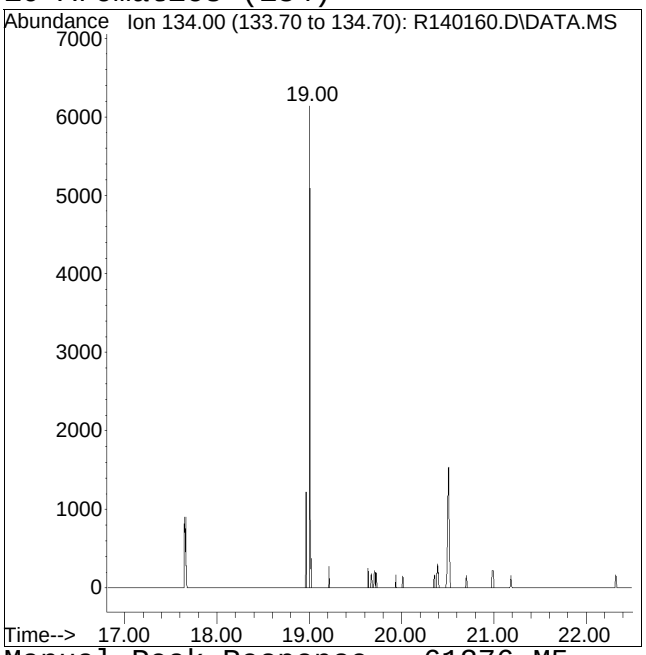

Original Peak Response = 0 Manual Peak Response = 136489 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140160.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 8:45 am Instrument : Air Piano 1
Sample : L1504425-08,3,250,250 Quant Date : 3/12/2015 11:44 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 0 Manual Peak Response = 61276 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

# Method Blank
# Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140138.D
Acq On : 11 Mar 2015 1:49 pm
Operator : AIRPIANO1:RY
Sample : WG767580-4,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:17:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.23 | 128 | 507372 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 94.54% | |
| 7) 1,4-difluorobenzene | 12.52 | 114 | 2074530 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 94.62% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 450676 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 92.00% | |
| System Monitoring Compounds | | | | | | |
| 28) bromochloromethane (TIC) | 10.23 | TIC | 3764486M4 | 11.731 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 117.31% | |
| 29) 1,4-difluorobenzene (TIC) | 12.52 | TIC | 4673365M4 | 10.211 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 102.11% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 6091552M4 | 10.209 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 102.09% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0 | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| Target Compounds | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 0.00 | | 0 | N.D. | | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 90269 | 0.624 | ug/m3 | |
| 13) toluene | 0.00 | | 0 | N.D. | | |
| 16) ethyl benzene | 0.00 | | 0 | N.D. | | |
| 17) m+p-xylene | 0.00 | | 0 | N.D. | | |
| 19) o-xylene | 0.00 | | 0 | N.D. | | |
| 23) naphthalene | 21.16 | | 0 | N.D. | | |
| 25) C9-C12 Aliphatics Total | 18.07 | | 0 | N.D. | | |
| 27) C9-C10 Aromatics Total | 0.00 | | 0 | N.D. | | |

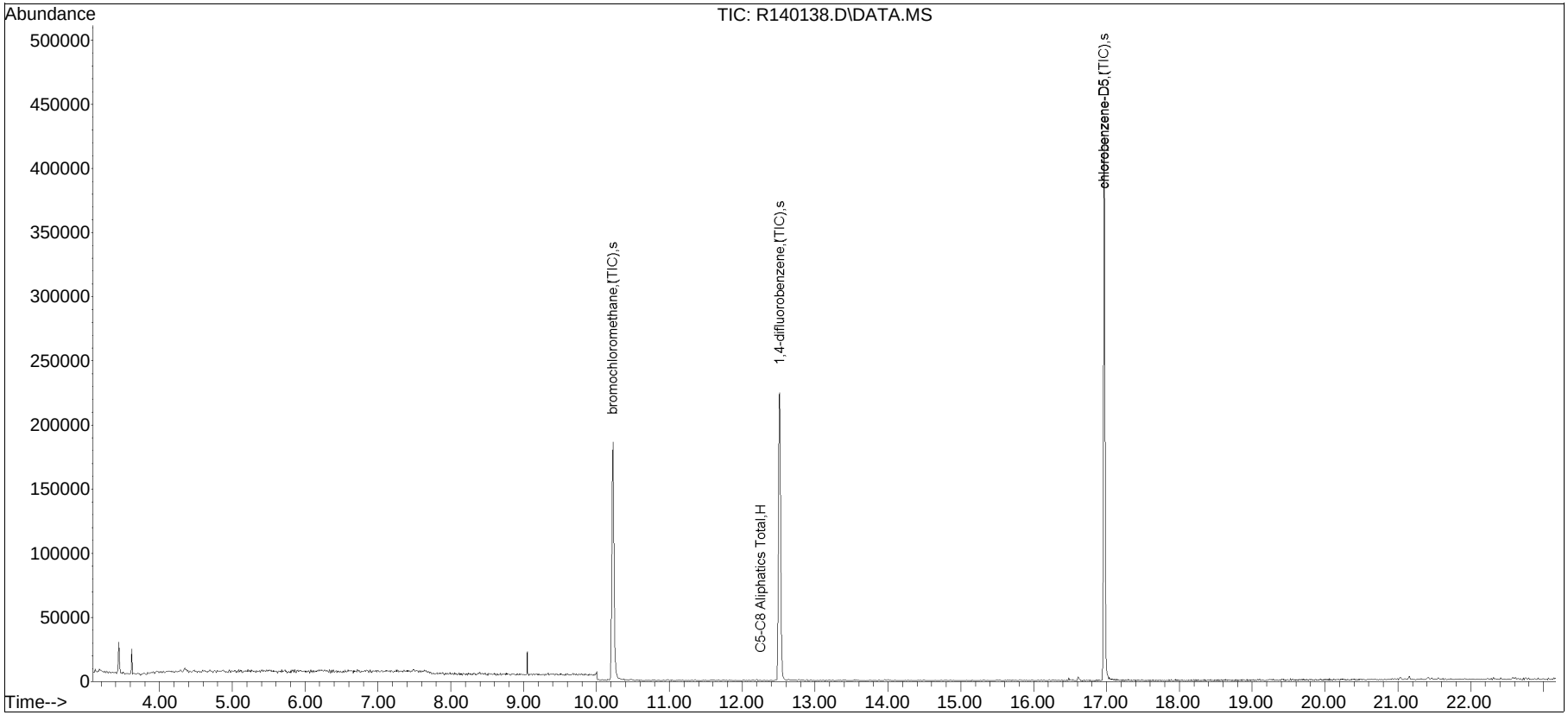
(#) = qualifier out of range (m) = manual integration (+) = signals summed

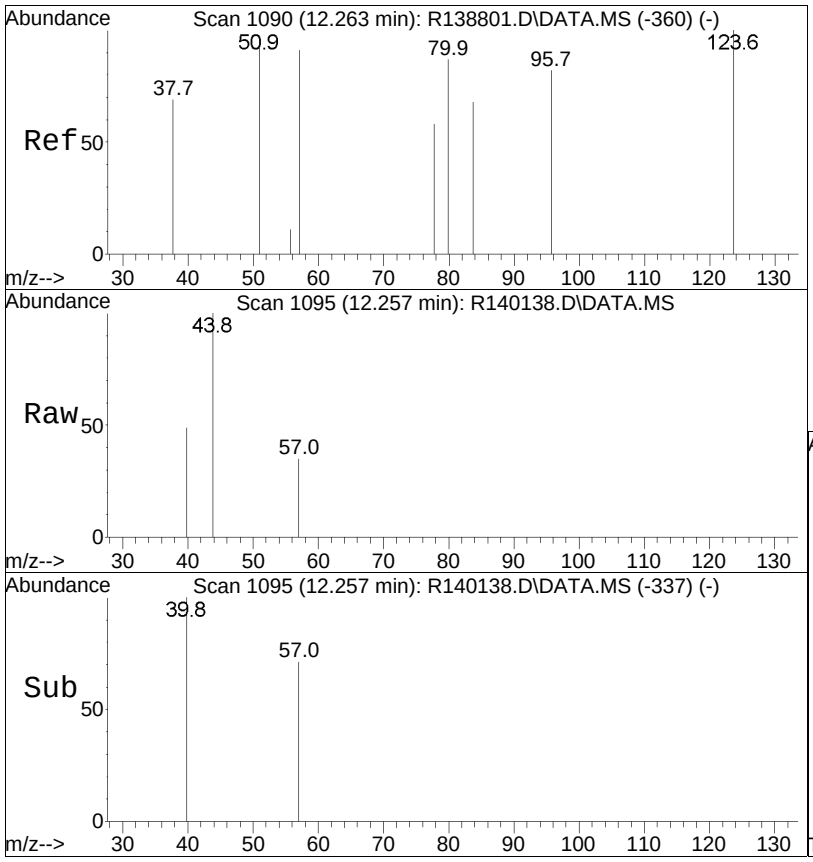
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140138.D
Acq On : 11 Mar 2015 1:49 pm
Operator : AIRPIANO1:RY
Sample : WG767580-4,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:17:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

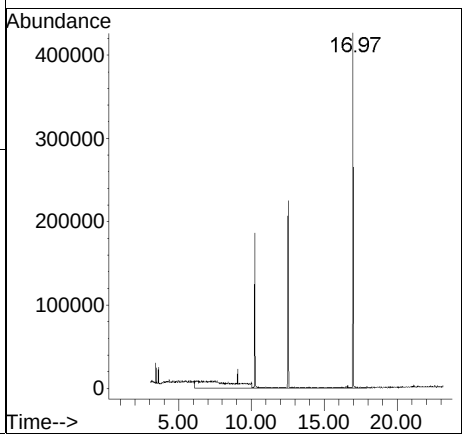
Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D






#11
C5-C8 Aliphatics Total
Concen: 0.62 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140138.D
Acq: 11 Mar 2015 1:49 pm

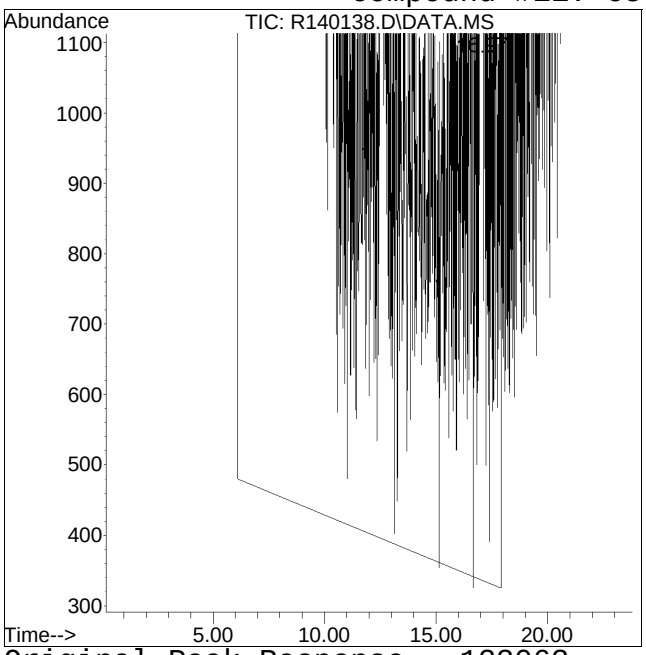
Tgt Ion:TIC Resp: 90269



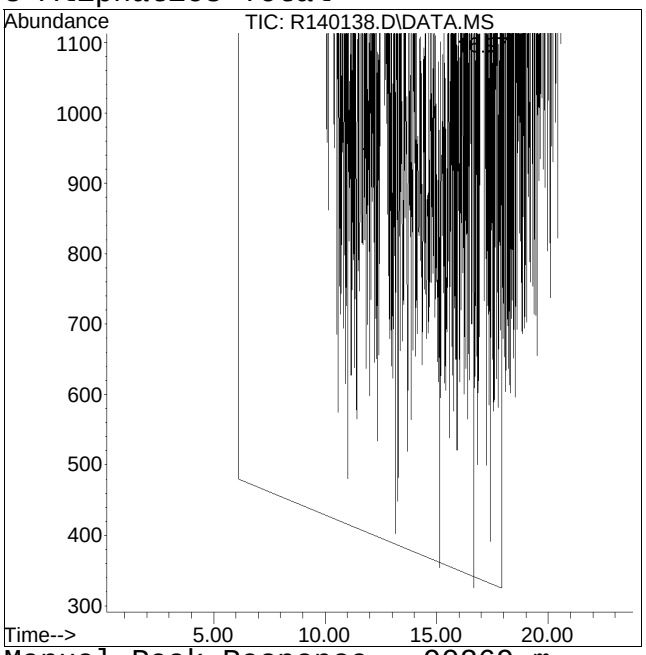
# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140138.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 1:49 pm | Instrument | : Air Piano 1 |
| Sample | : WG767580-4,3,250,250 | Quant Date | : 3/11/2015 2:16 pm |

## Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 123063

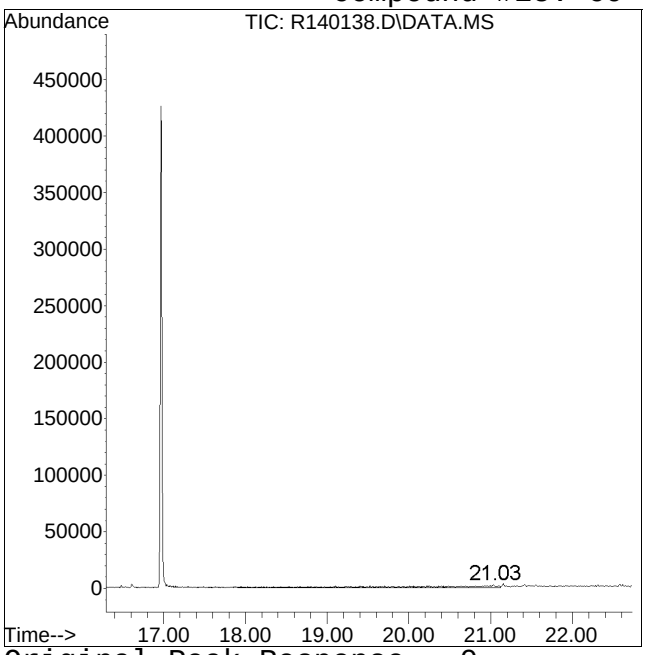



Manual Peak Response = 90269 m

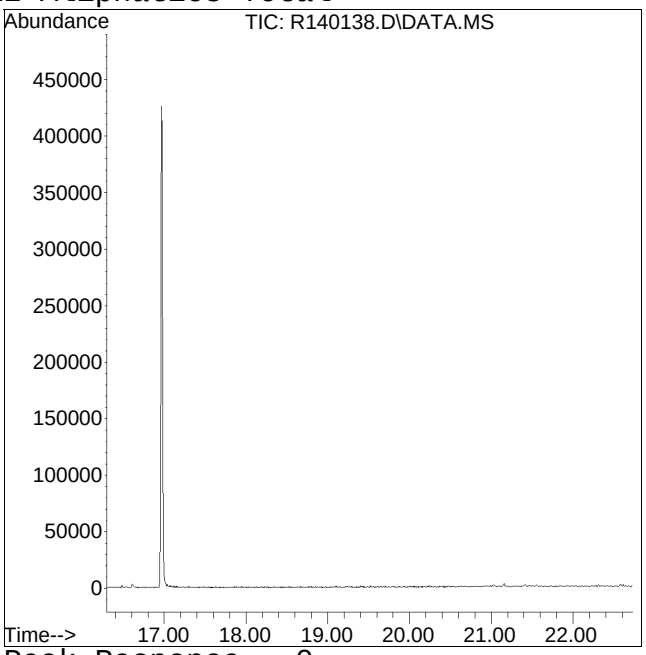
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140138.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 1:49 pm Instrument : Air Piano 1
Sample : WG767580-4,3,250,250 Quant Date : 3/11/2015 2:16 pm

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 0

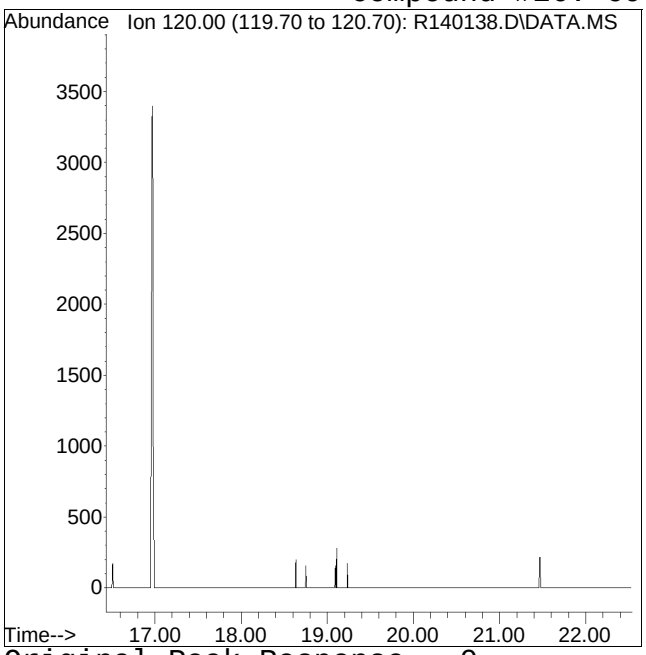


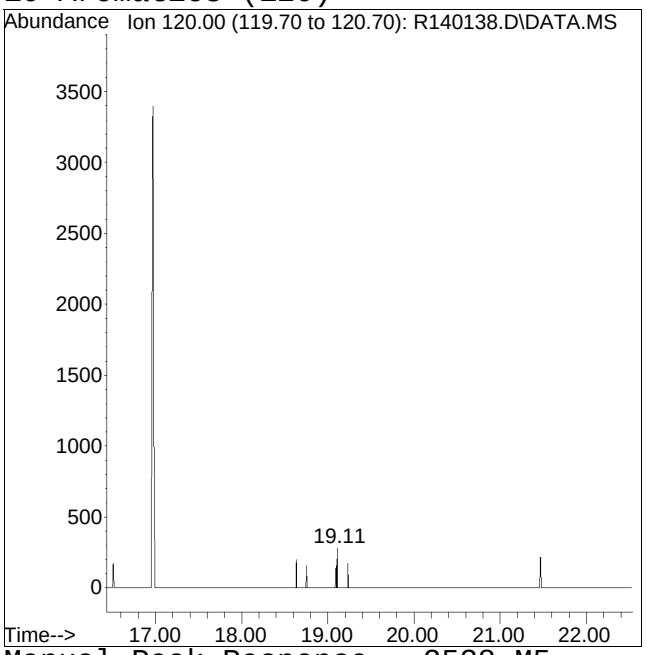

Peak Response = 0

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140138.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 1:49 pm Instrument : Air Piano 1
Sample : WG767580-4,3,250,250 Quant Date : 3/11/2015 2:16 pm

Compound #26: C9-C10 Aromatics (120)



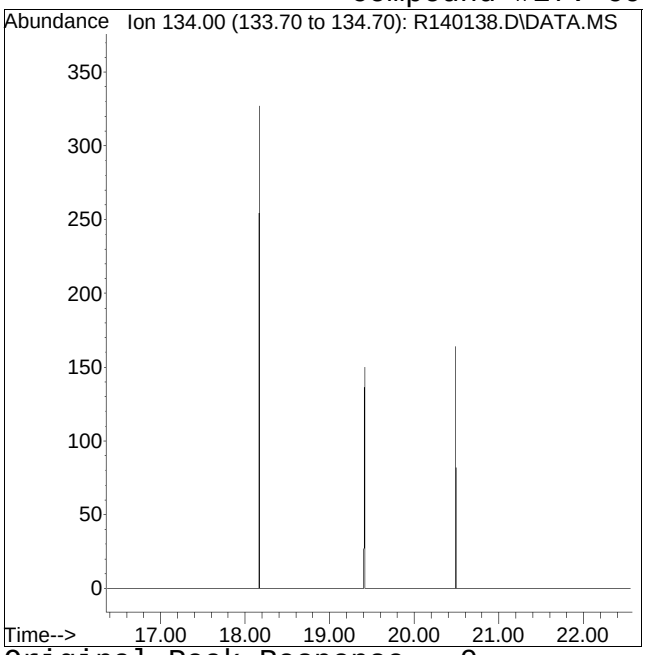



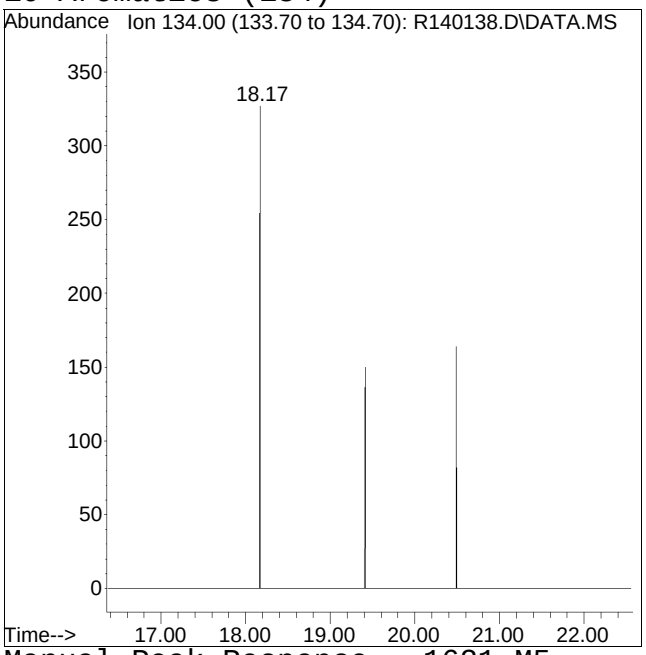

Original Peak Response = 0 Manual Peak Response = 2538 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : APH150101.M |
| Data File | : R140138.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 1:49 pm | Instrument | : Air Piano 1 |
| Sample | : WG767580-4,3,250,250 | Quant Date | : 3/11/2015 2:16 pm |

## Compound #27: C9-C10 Aromatics (134)



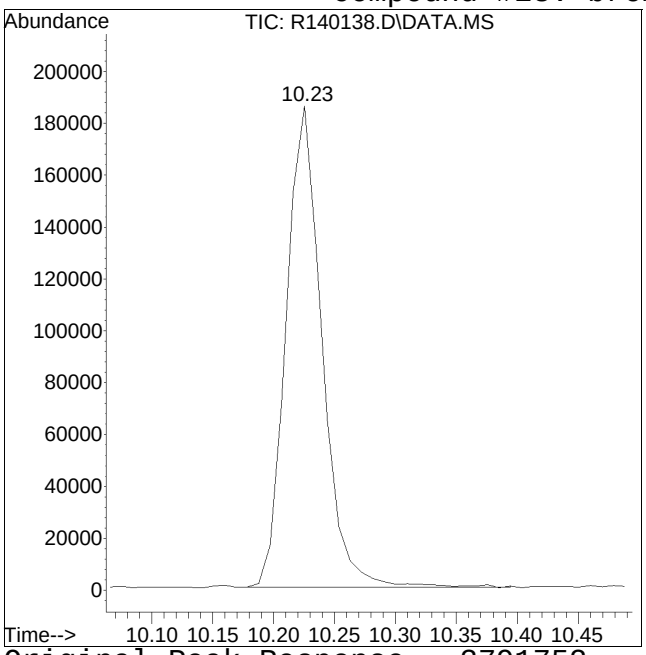

Original Peak Response = 0 Manual Peak Response = 1621 M5

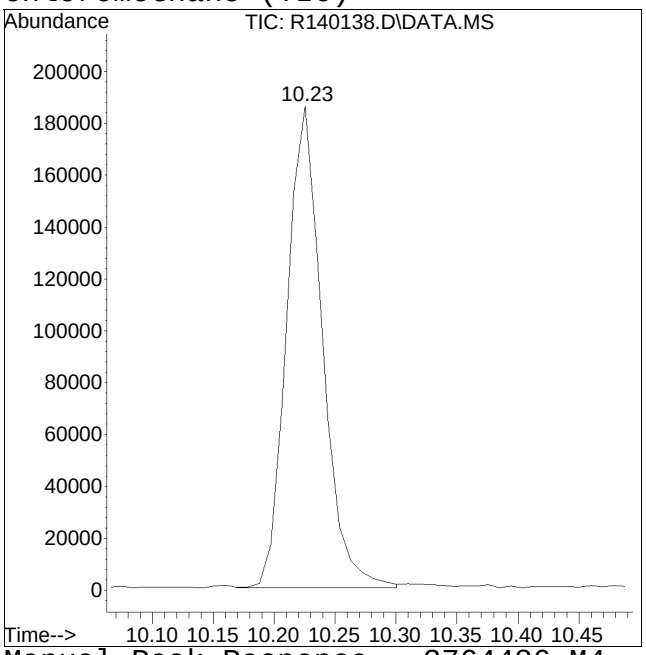
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140138.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 1:49 pm Instrument : Air Piano 1
Sample : WG767580-4,3,250,250 Quant Date : 3/11/2015 2:16 pm

Compound #28: bromochloromethane (TIC)



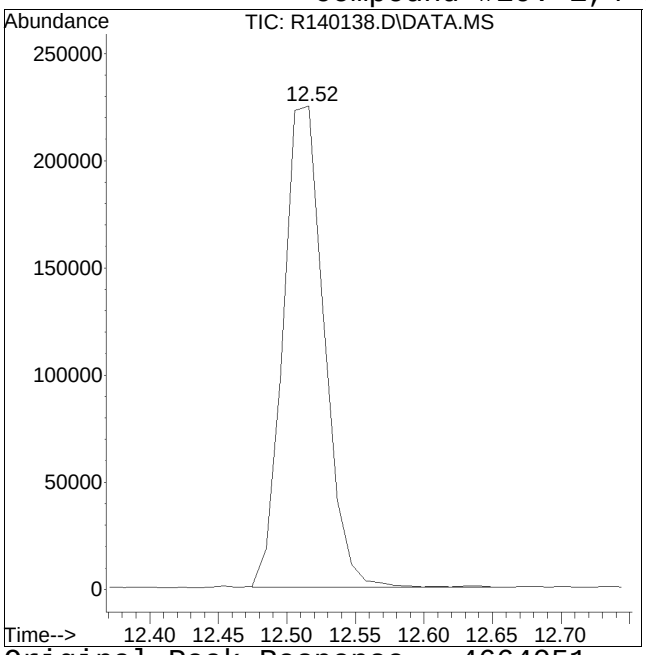



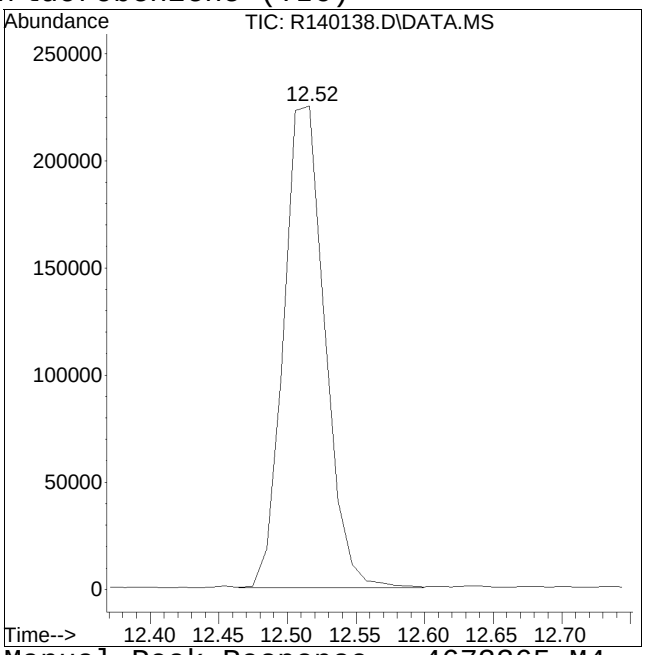

Original Peak Response = 3791752 Manual Peak Response = 3764486 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140138.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 1:49 pm Instrument : Air Piano 1
Sample : WG767580-4,3,250,250 Quant Date : 3/11/2015 2:16 pm

Compound #29: 1,4-difluorobenzene (TIC)



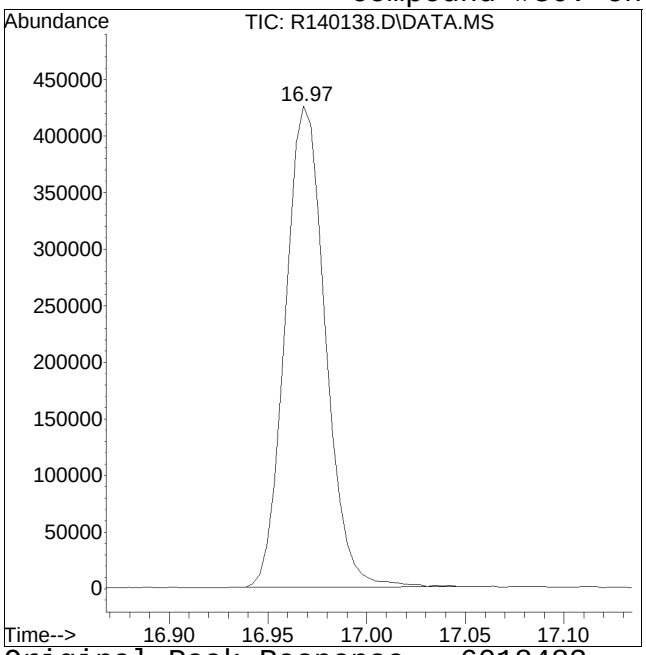



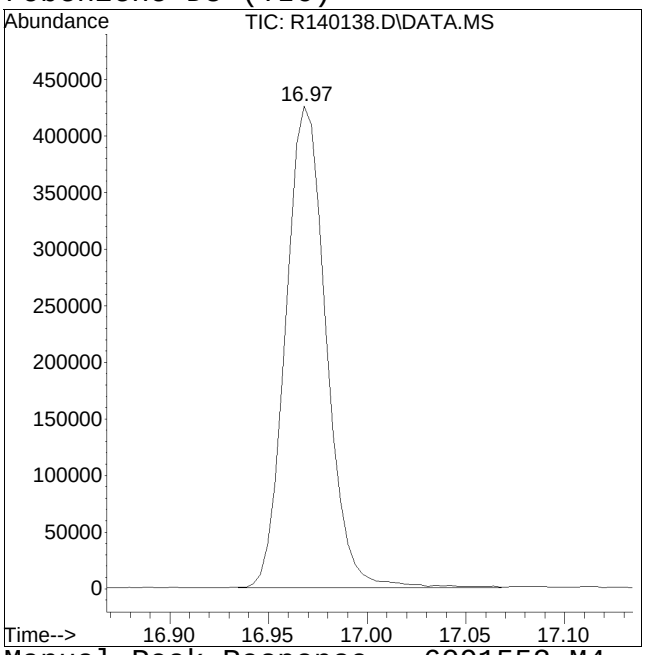

Original Peak Response = 4664051 Manual Peak Response = 4673365 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140138.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 1:49 pm Instrument : Air Piano 1
Sample : WG767580-4,3,250,250 Quant Date : 3/11/2015 2:16 pm

Compound #30: chlorobenzene-D5 (TIC)




Original Peak Response = 6018483 Manual Peak Response = 6091552 M4
M4 = Poor automated baseline construction.

# Batch Quality Control

# LCS Raw Data

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767580-3,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:46:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 10.000 | 10.000 | 0.0 | 79 | 0.00 |
| 2 | T | 1,3-butadiene | 22.100 | 21.777 | 1.5 | 86 | 0.00 |
| 4 | T | methyl tert butyl ether | 36.000 | 32.523 | 9.7 | 75 | 0.00 |
| 7 | I | 1,4-difluorobenzene | 10.000 | 10.000 | 0.0 | 76 | 0.00 |
| 9 | T | benzene | 31.900 | 31.587 | 1.0 | 81 | 0.00 |
| 11 | H | C5-C8 Aliphatics Total | 122.000 | 114.233 | 6.4 | 41 | 0.00 |
| 12 | I | chlorobenzene-D5 | 10.000 | 10.000 | 0.0 | 74 | 0.00 |
| 13 | | toluene | 37.700 | 36.018 | 4.5 | 76 | 0.00 |
| 16 | T | ethyl benzene | 43.400 | 40.557 | 6.6 | 74 | 0.00 |
| 17 | T | m+p-xylene | 86.800 | 81.893 | 5.7 | 149 | 0.02 |
| 19 | T | o-xylene | 43.400 | 42.254 | 2.6 | 78 | 0.00 |
| 23 | T | naphthalene | 52.420 | 55.487 | -5.9 | 84 | 0.00 |
| 25 | H | C9-C12 Aliphatics Total | 174.000 | 161.304 | 7.3 | 36 | 0.00 |
| 27 | | C9-C10 Aromatics Total | 465.000 | 377.073 | 18.9 | 119 | -0.60# |
| 28 | s | bromochloromethane (TIC) | 10.000 | 11.590 | -15.9 | 85 | 0.00 |
| 29 | s | 1,4-difluorobenzene (TIC) | 10.000 | 9.830 | 1.7 | 75 | 0.00 |
| 30 | s | chlorobenzene-D5 (TIC) | 10.000 | 8.554 | 14.5 | 64 | 0.00 |
| 31 | s | 1,2-dichloroethane-D4 (TIC) | 10.000 | 10.307 | -3.1 | 81 | 0.00 |
| 32 | s | toluene-D8 (TIC) | 20.000 | 9.093 | 54.5# | 34 | 0.00 |
| 33 | s | bromofluorobenzene (TIC) | 10.000 | 10.152 | -1.5 | 76 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767580-3,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:46:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.23 | 128 | 550034 | 10.000 ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = 102.49% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 2196599 | 10.000 ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = 100.19% | |
| 12) chlorobenzene-D5 | 16.97 | 54 | 501206 | 10.000 ug/m3 | # 0.00 |
| Standard Area = 489846 | | | Recovery | = 102.32% | |
| System Monitoring Compounds | | | | | |
| 28) bromochloromethane (TIC) | 10.23 | TIC | 4136301M4 | 11.590 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 115.90% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 5003569M4 | 9.830 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 98.30% | |
| 30) chlorobenzene-D5 (TIC) | 16.97 | TIC | 5676719M6 | 8.554 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 85.54% | |
| 31) 1,2-dichloroethane-D4 ... | 11.14 | TIC | 1904505 | 10.307 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 103.07% | |
| 32) toluene-D8 (TIC) | 15.27 | TIC | 5127758M4 | 9.093 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 90.93% | |
| 33) bromofluorobenzene (TIC) | 18.16 | TIC | 6545657 | 10.152 ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = 101.52% | |
| Target Compounds | | | | | Qvalue |
| 2) 1,3-butadiene | 4.62 | 54 | 514781 | 21.777 ug/m3# | 100 |
| 4) methyl tert butyl ether | 9.07 | 73 | 1677742 | 32.523 ug/m3 | 99 |
| 9) benzene | 12.10 | 78 | 1906685 | 31.587 ug/m3 | 98 |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 17503588m | 114.233 ug/m3 | |
| 13) toluene | 15.37 | 91 | 2404760 | 36.018 ug/m3 | 100 |
| 16) ethyl benzene | 17.30 | 91 | 3097954 | 40.557 ug/m3 | 99 |
| 17) m+p-xylene | 17.44 | 91 | 4929724M4 | 81.893 ug/m3 | |
| 19) o-xylene | 17.81 | 91 | 2600396 | 42.254 ug/m3 | 100 |
| 23) naphthalene | 21.13 | 128 | 4700282M4 | 55.487 ug/m3 | |
| 25) C9-C12 Aliphatics Total | 18.07 | TIC | 28866069m | 161.304 ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 7152361M5 | 252.349 ug/m3 | |
| 27) C9-C10 Aromatics (134) | 19.40 | 134 | 3535073M5 | 124.724 ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 10687434 | 377.073 ug/m3 | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767580-3,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:46:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

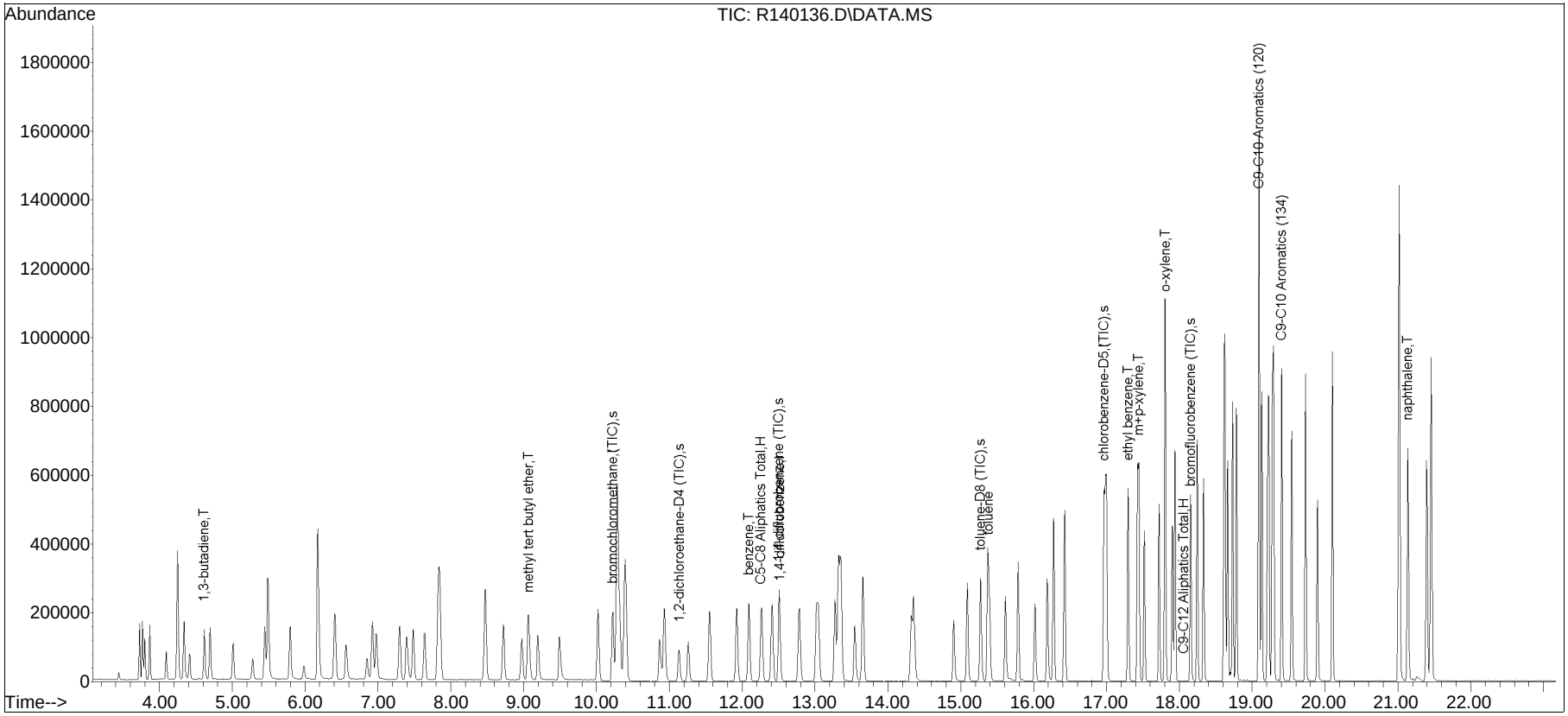
(#) = qualifier out of range (m) = manual integration (+) = signals summed

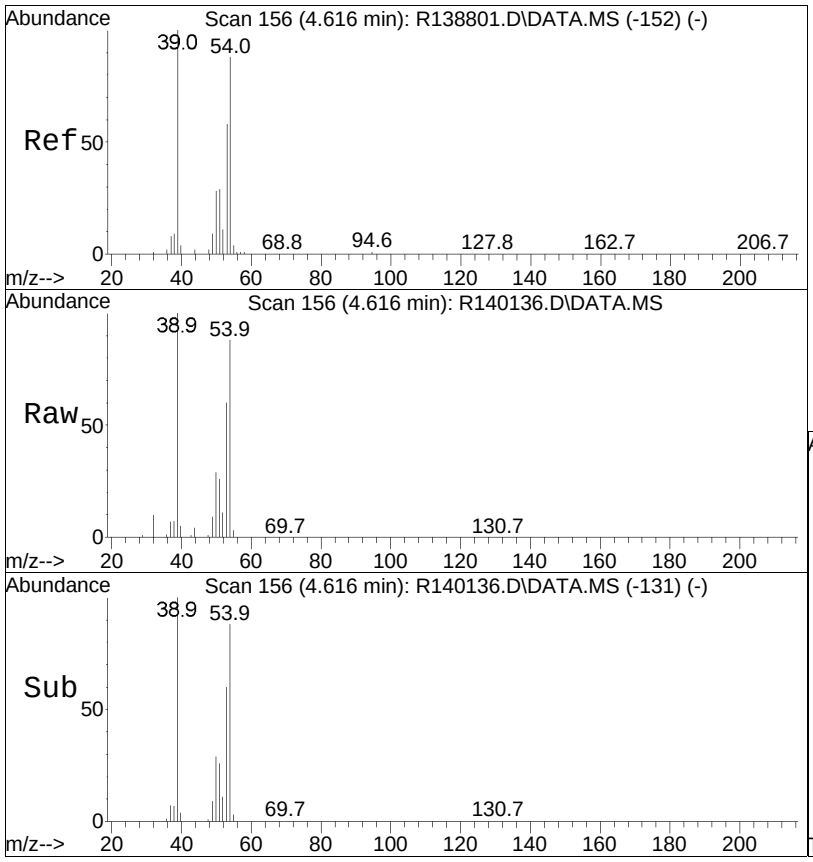
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767580-3,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:46:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

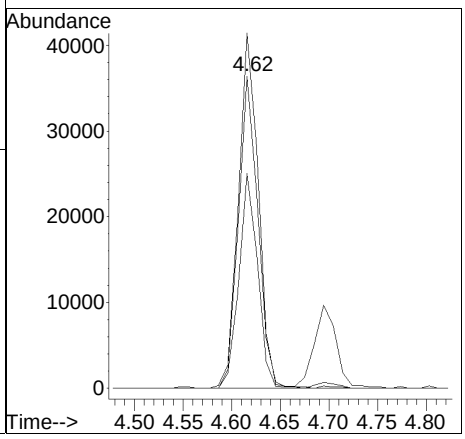


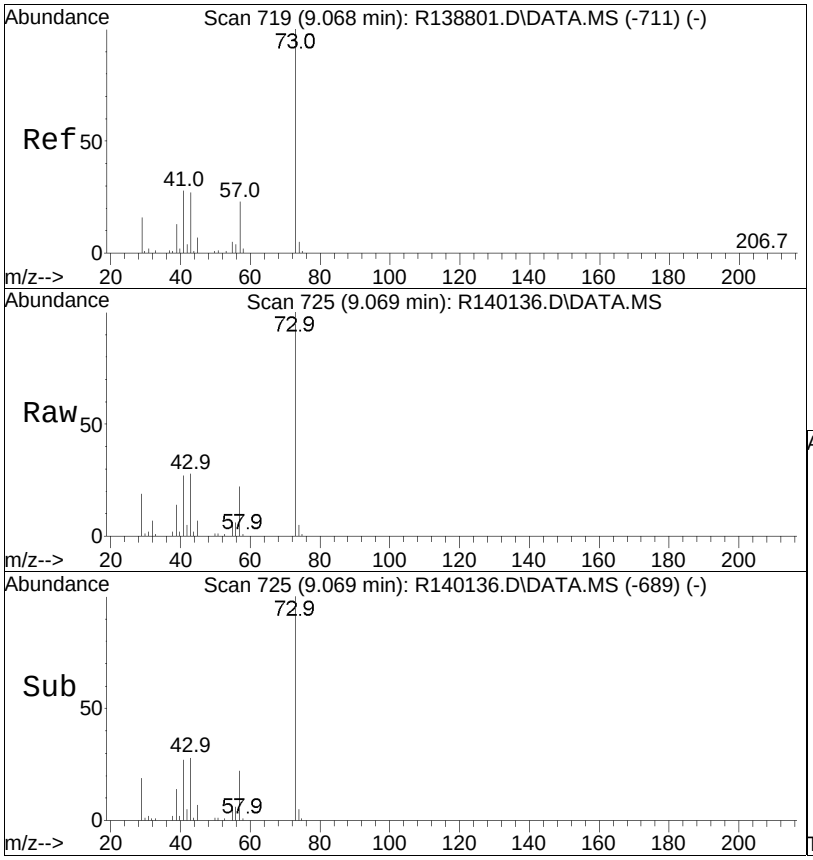



#2
1,3-butadiene
Concen: 21.78 ug/m3
RT: 4.62 min Scan# 156
Delta R.T. 0.005 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 54 Resp: 514781

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 53 | 65.1 | 0.0 | 0.0# |
| 39 | 114.2 | 0.0 | 0.0# |

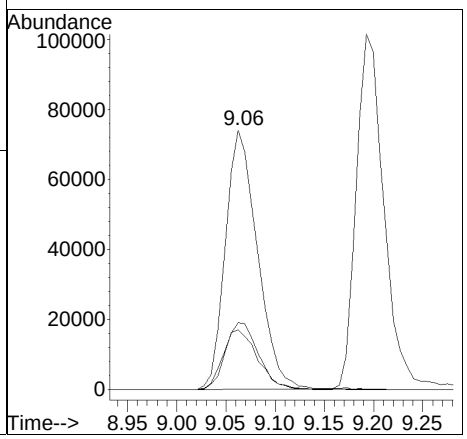


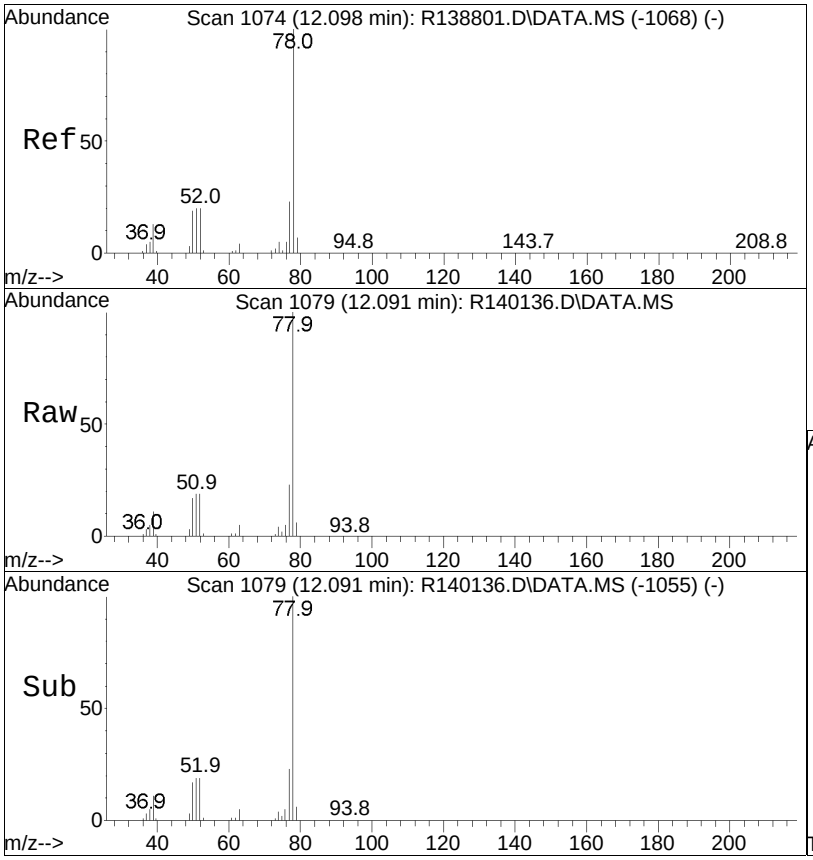



#4
methyl tert butyl ether
Concen: 32.52 ug/m3
RT: 9.07 min Scan# 725
Delta R.T. -0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 73 Resp: 1677742

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 24.1 | 19.4 | 29.2 |
| 43 | 27.1 | 22.2 | 33.2 |

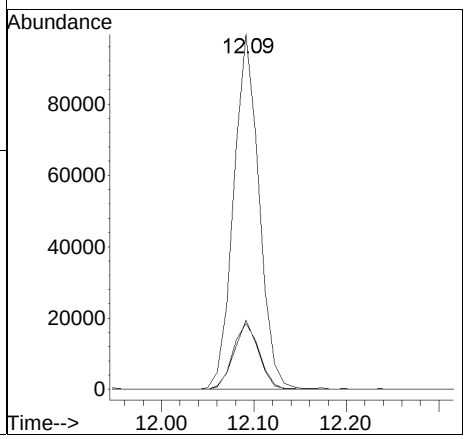


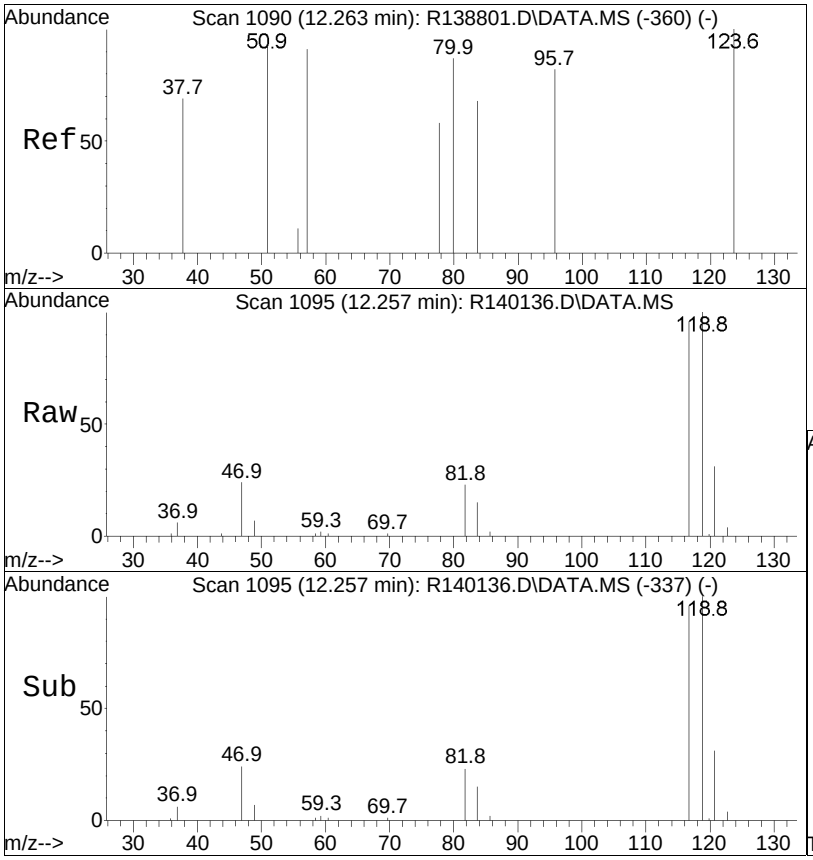



#9
benzene
Concen: 31.59 ug/m3
RT: 12.10 min Scan# 1079
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 78 Resp: 1906685

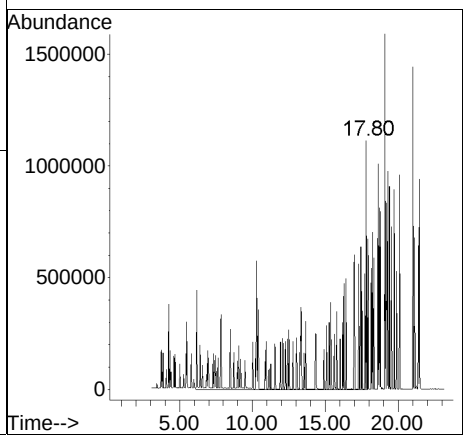
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 18.6 | 15.9 | 23.9 |
| 51 | 19.3 | 15.9 | 23.9 |

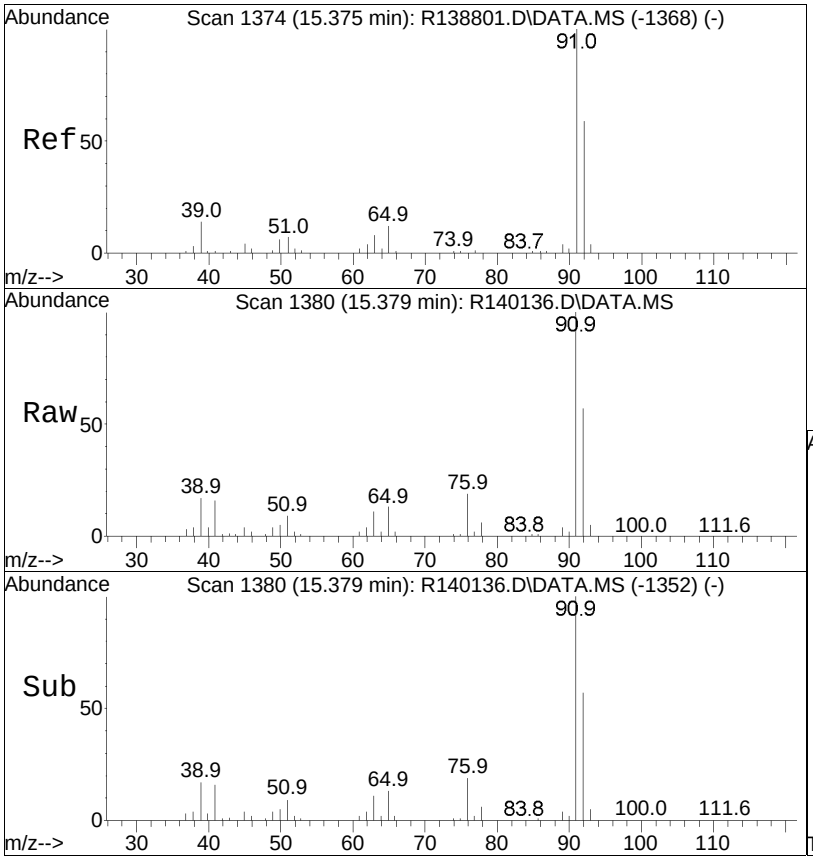





#11
C5-C8 Aliphatics Total
Concen: 114.23 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:TIC Resp:17503588

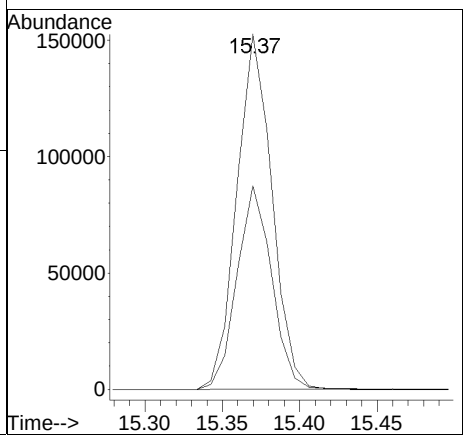


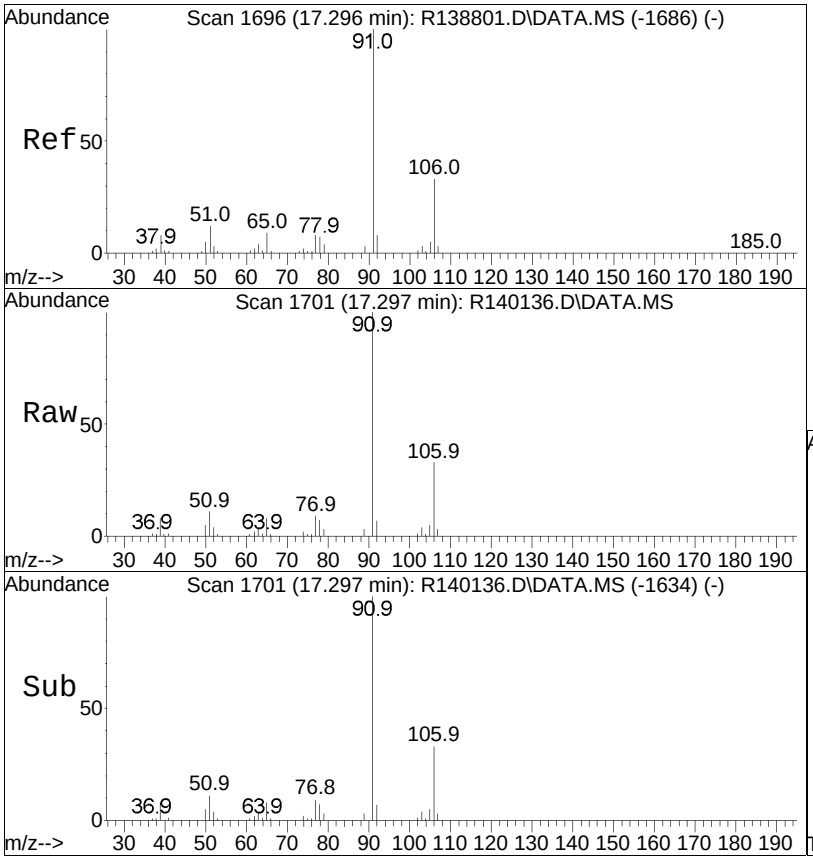



#13
toluene
Concen: 36.02 ug/m3
RT: 15.37 min Scan# 1380
Delta R.T. 0.001 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 2404760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 56.7 | 45.4 | 68.0 |

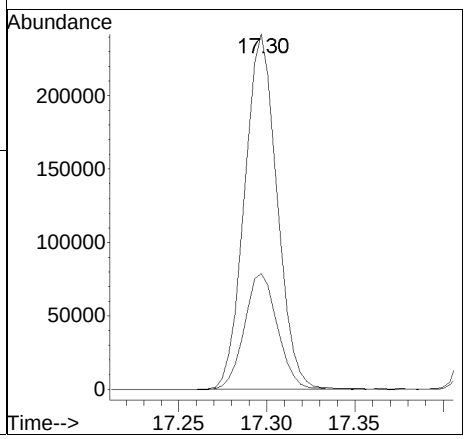


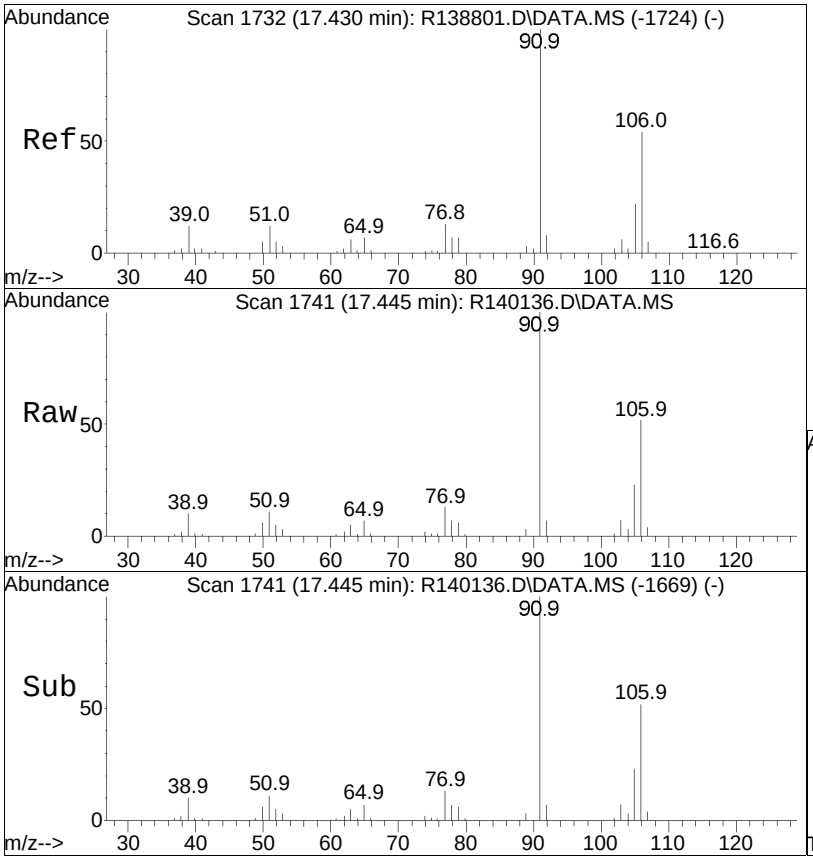



#16
ethyl benzene
Concen: 40.56 ug/m3
RT: 17.30 min Scan# 1701
Delta R.T. -0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 3097954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 33.2 | 26.3 | 39.5 |

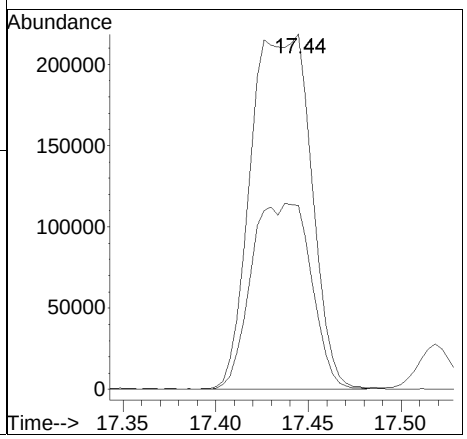


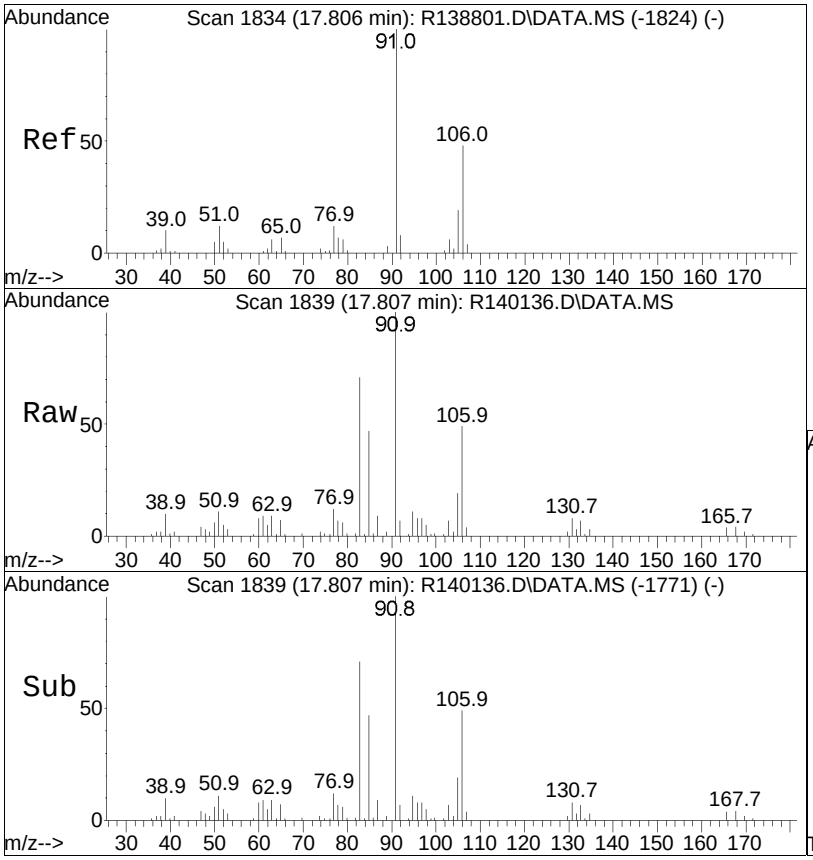



#17
m+p-xylene
Concen: 81.89 ug/m3 m
RT: 17.44 min Scan# 1741
Delta R.T. 0.015 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 4929724

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 33.4 | 50.2# |

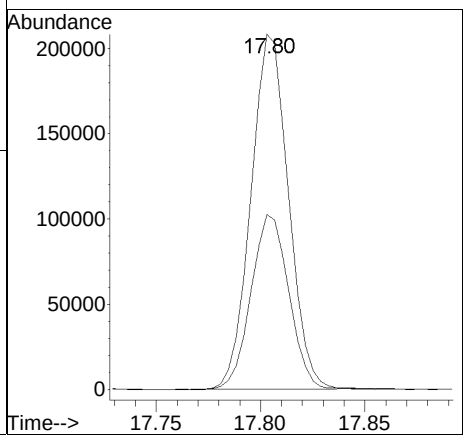


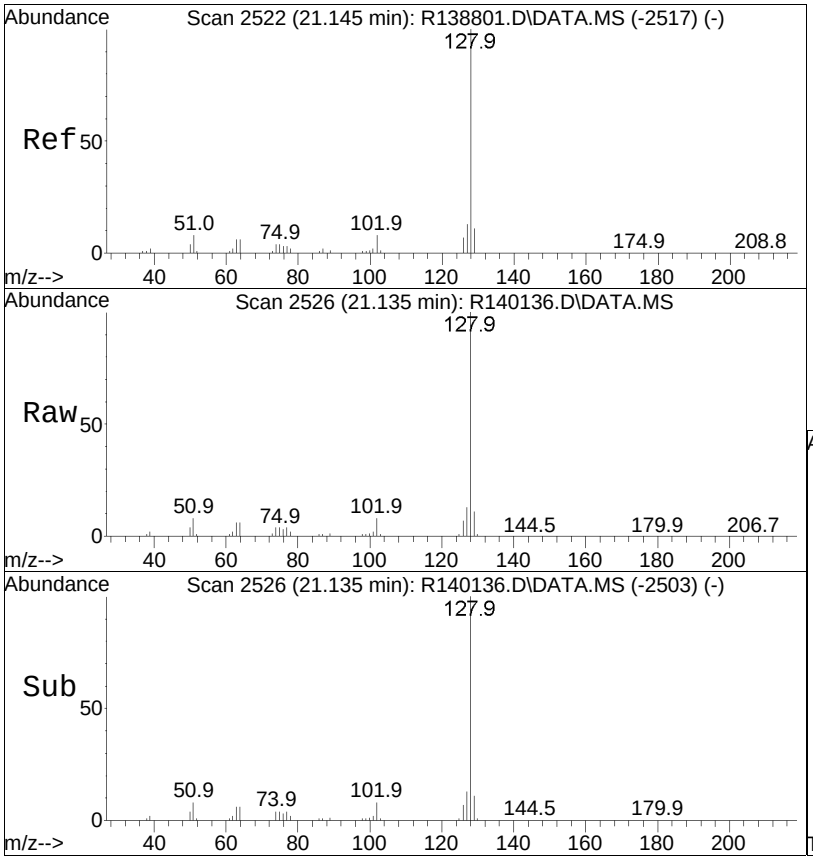



#19
o-xylene
Concen: 42.25 ug/m3
RT: 17.81 min Scan# 1839
Delta R.T. -0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 2600396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.7 | 39.5 | 59.3 |

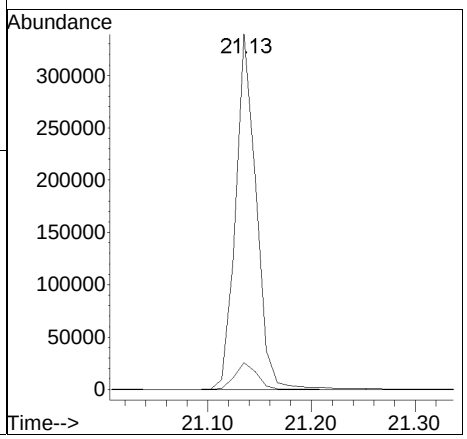


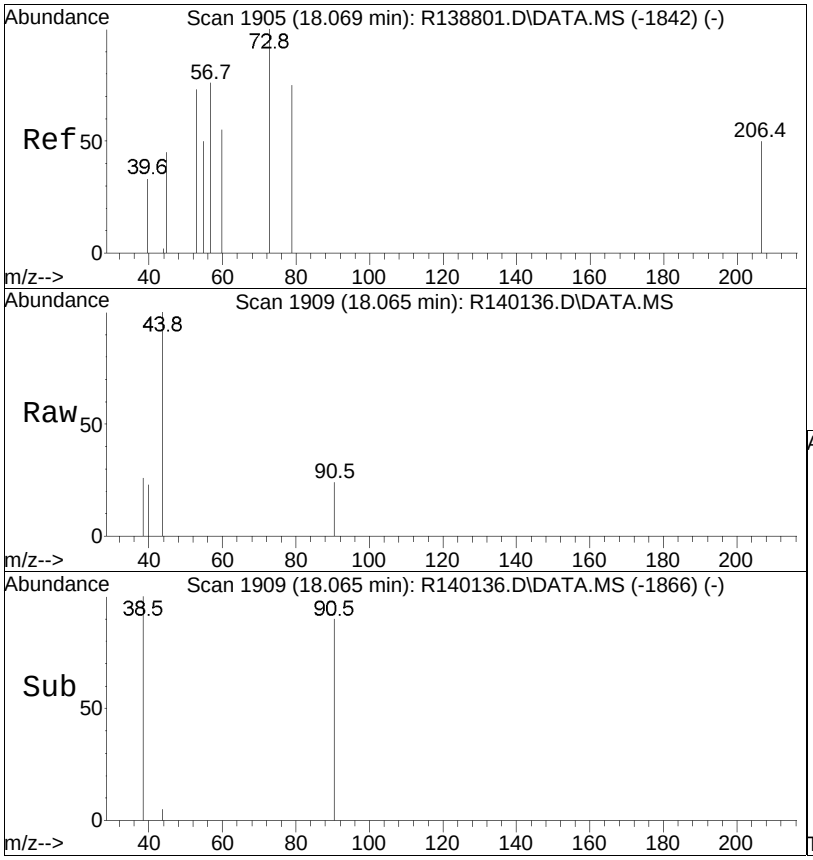



#23
naphthalene
Concen: 55.49 ug/m3 m
RT: 21.13 min Scan# 2526
Delta R.T. -0.007 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:128 Resp: 4700282

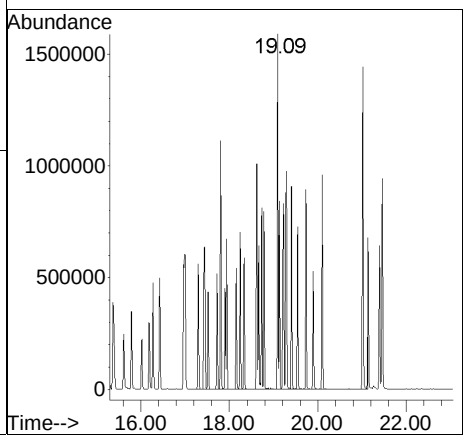
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 8.1 | 6.8 | 10.2 |

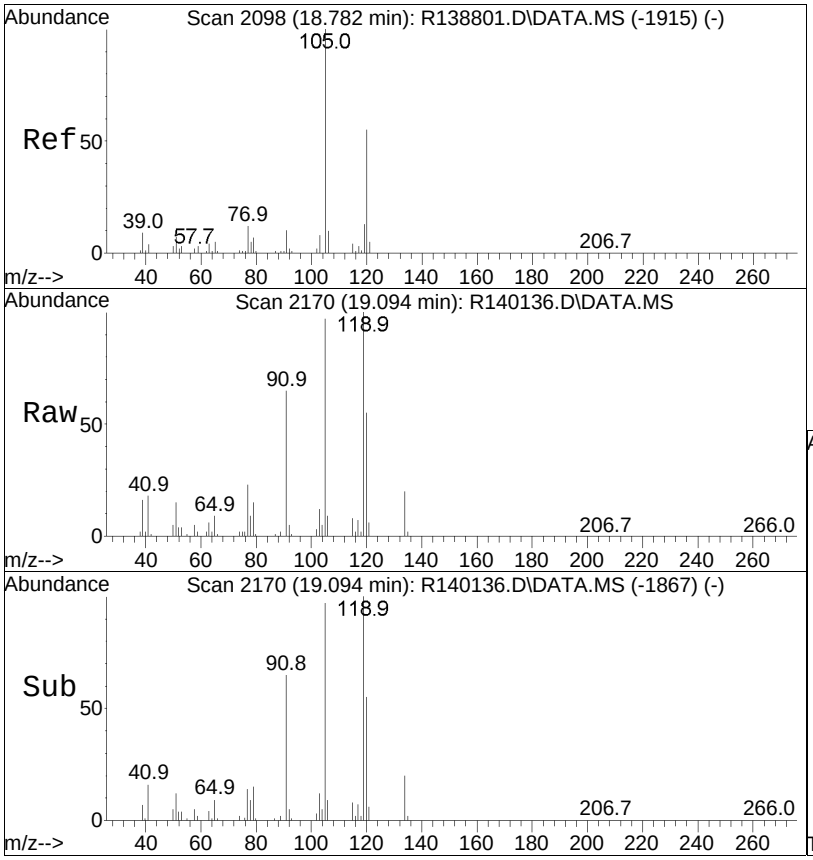





#25
C9-C12 Aliphatics Total
Concen: 161.30 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

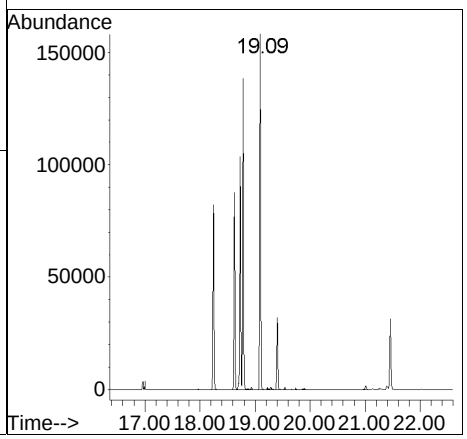
Tgt Ion:TIC Resp:28866069

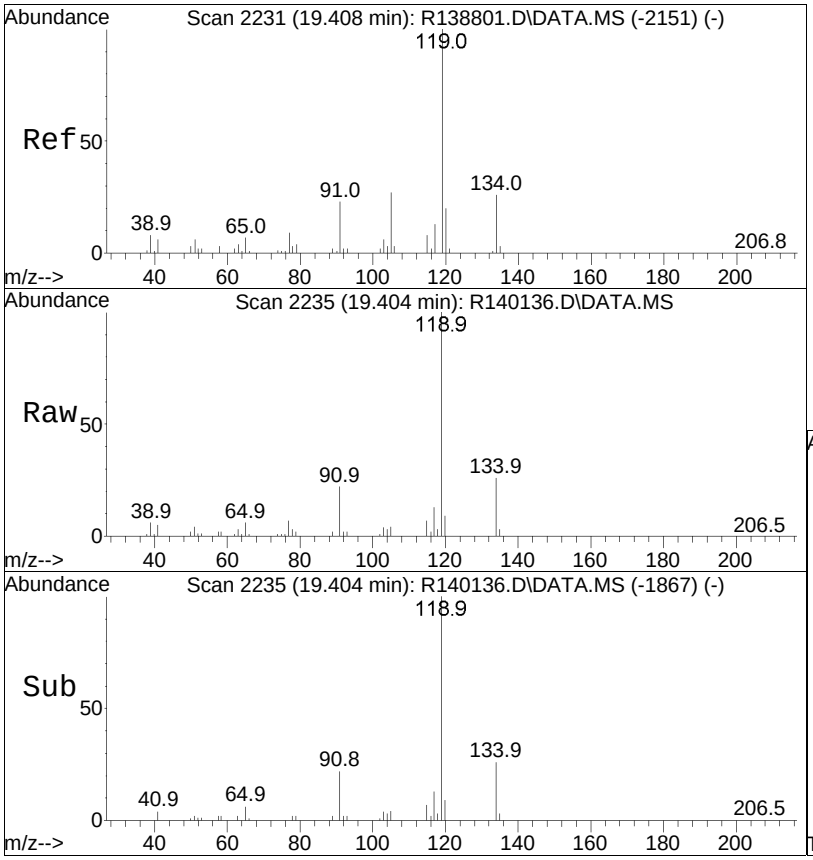





#26
C9-C10 Aromatics (120)
Concen: 252.35 ug/m3 m
RT: 19.09 min Scan# 2170
Delta R.T. -0.906 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

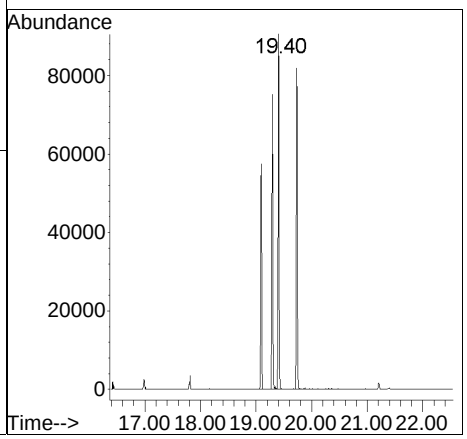
Tgt Ion:120 Resp: 7152361






#27
C9-C10 Aromatics (134)
Concen: 124.72 ug/m3 m
RT: 19.40 min Scan# 2235
Delta R.T. -0.596 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

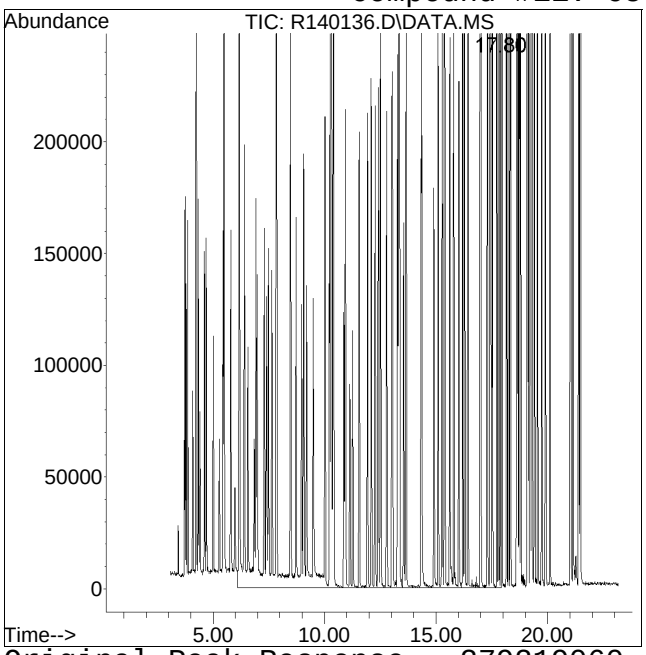
Tgt Ion:134 Resp: 3535073



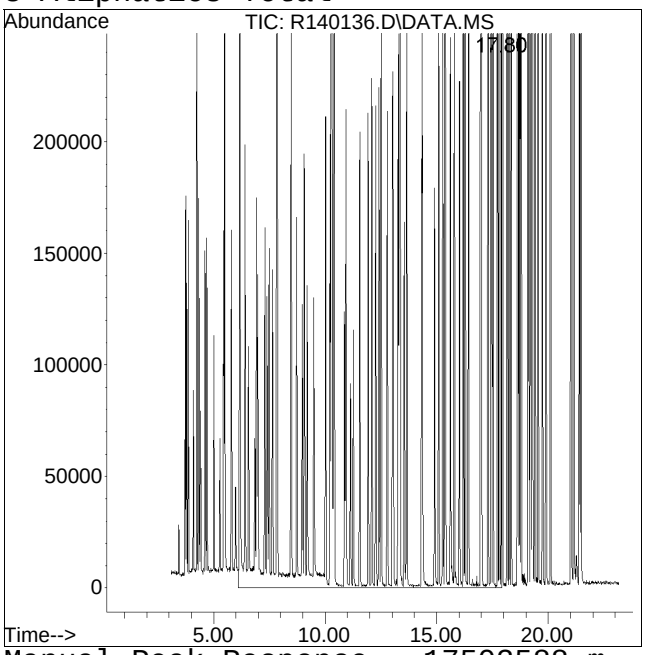
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 279219060

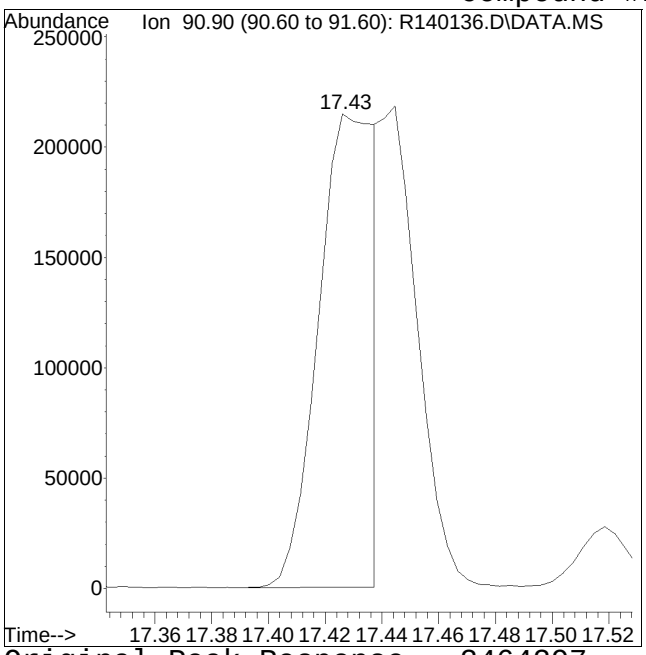



Manual Peak Response = 17503588 m

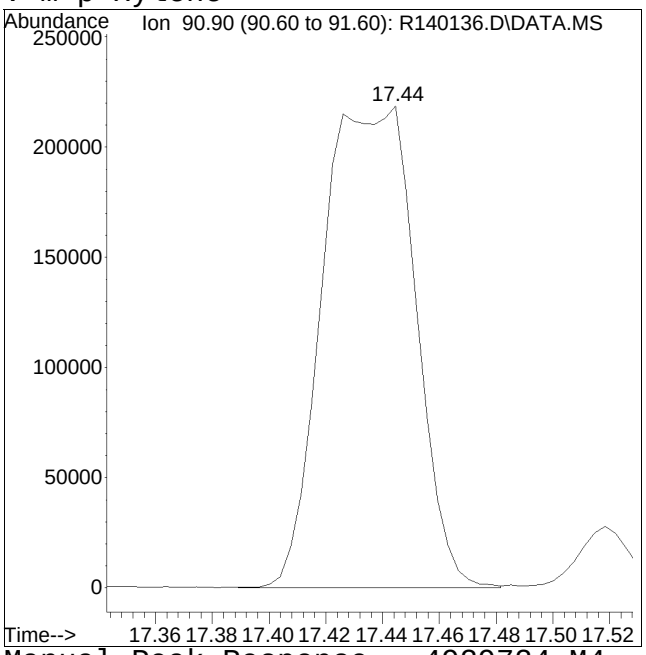
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #17: m+p-xylene




Original Peak Response = 2464297



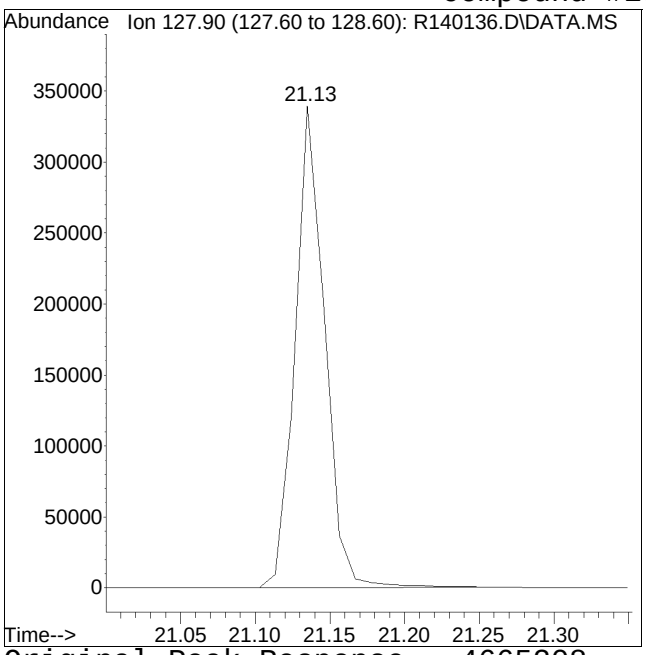

Manual Peak Response = 4929724 M4

M4 = Poor automated baseline construction.

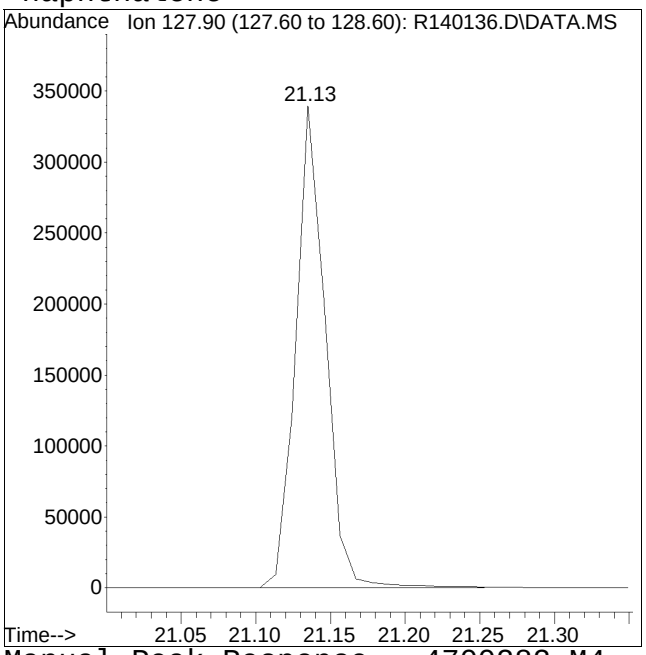
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #23: naphthalene




Original Peak Response = 4665208



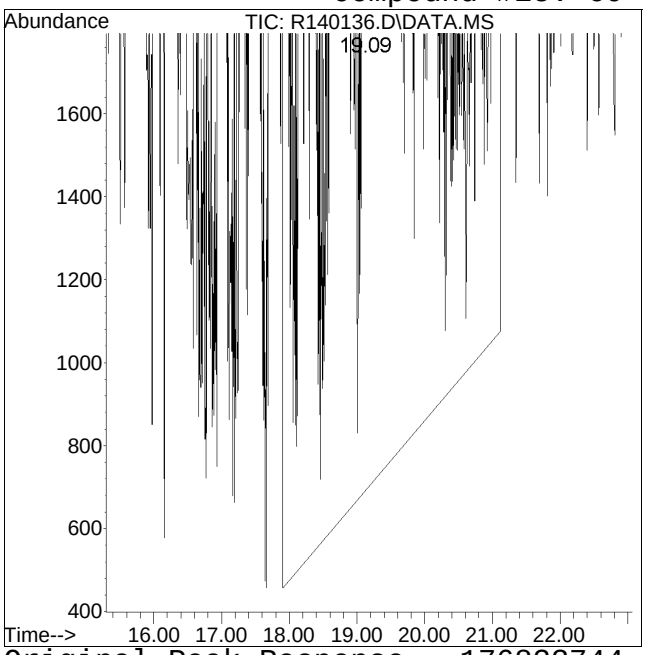

Manual Peak Response = 4700282 M4

M4 = Poor automated baseline construction.

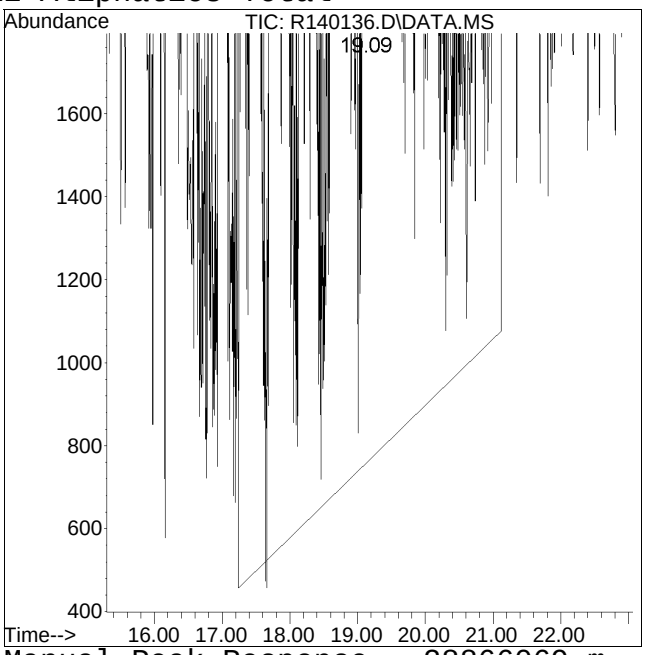
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 176833744

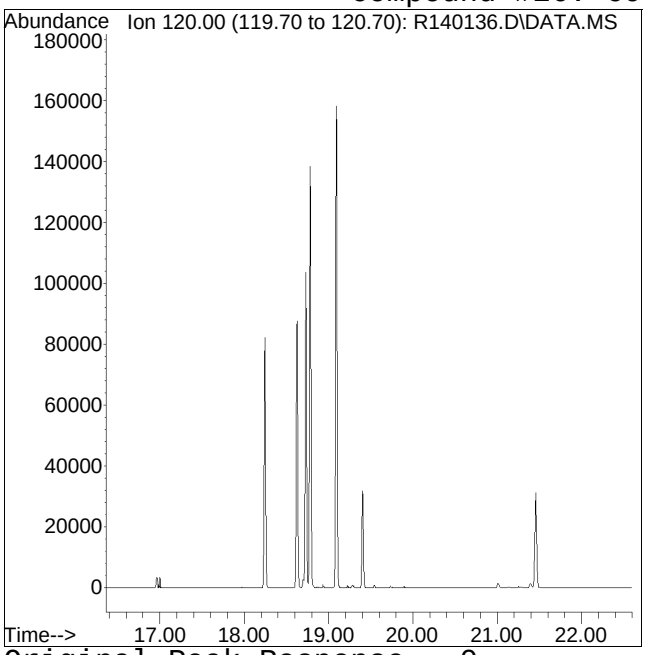


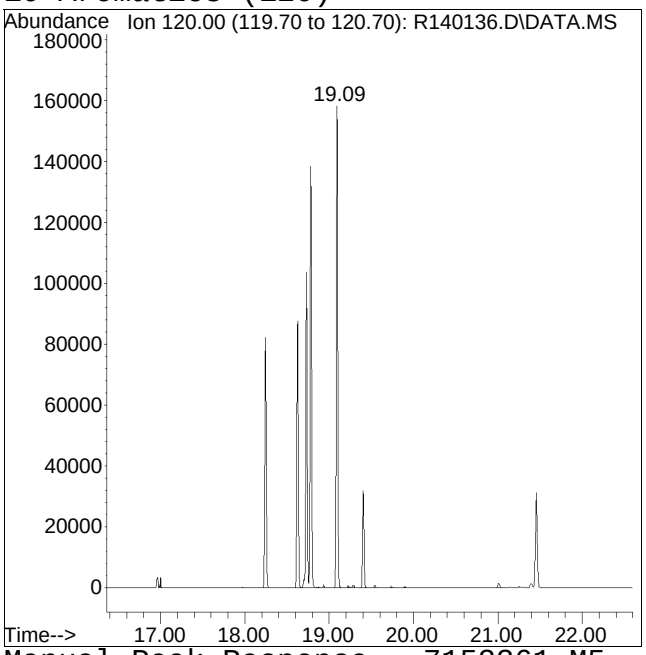

Manual Peak Response = 28866069 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #26: C9-C10 Aromatics (120)



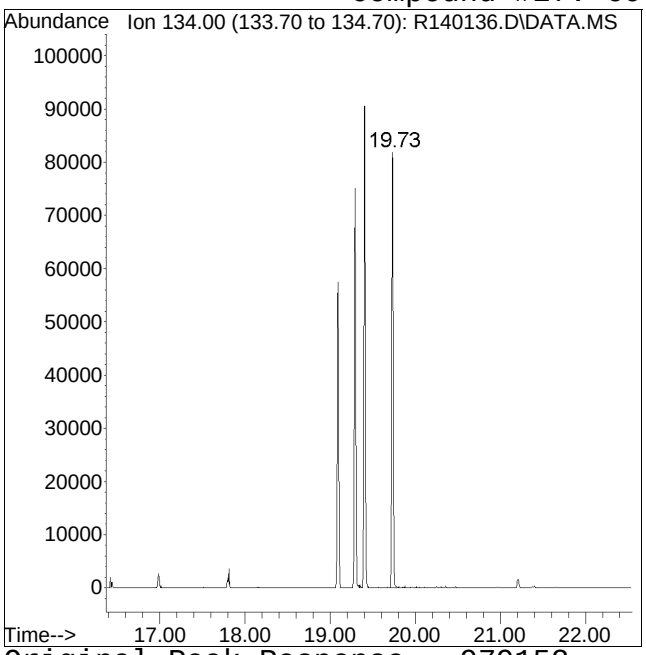



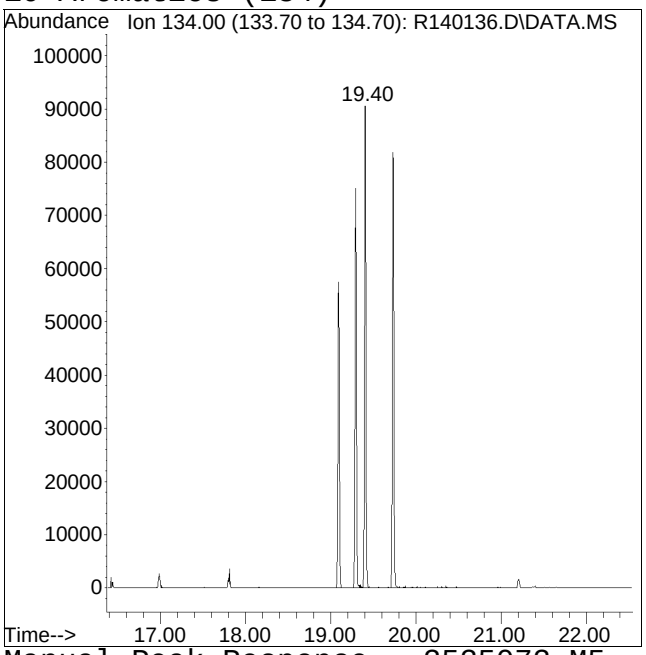

Original Peak Response = 0 Manual Peak Response = 7152361 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #27: C9-C10 Aromatics (134)



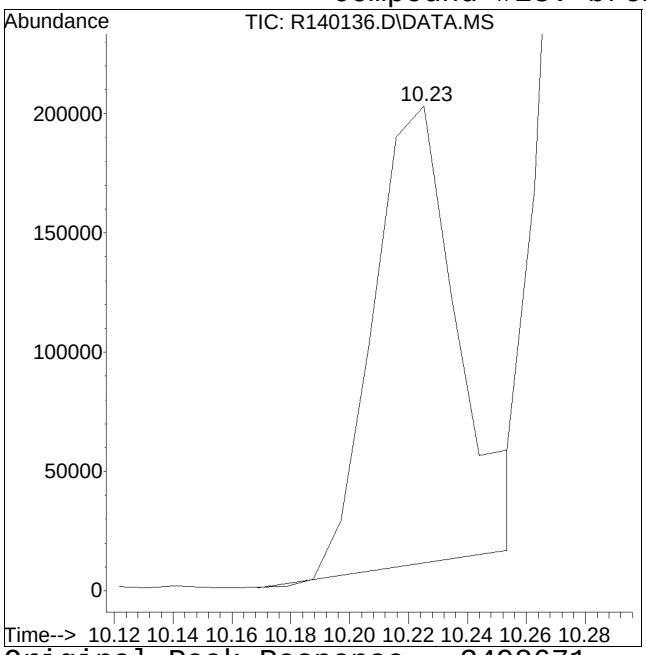



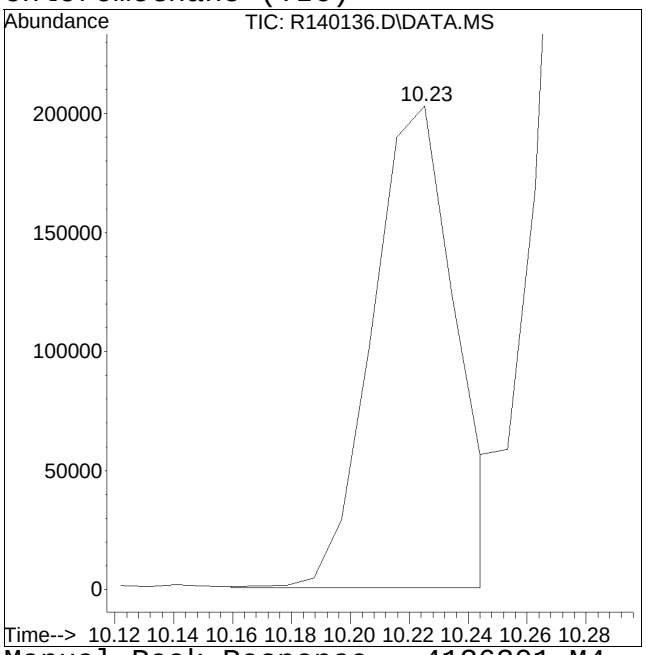

Original Peak Response = 979152 Manual Peak Response = 3535073 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #28: bromochloromethane (TIC)



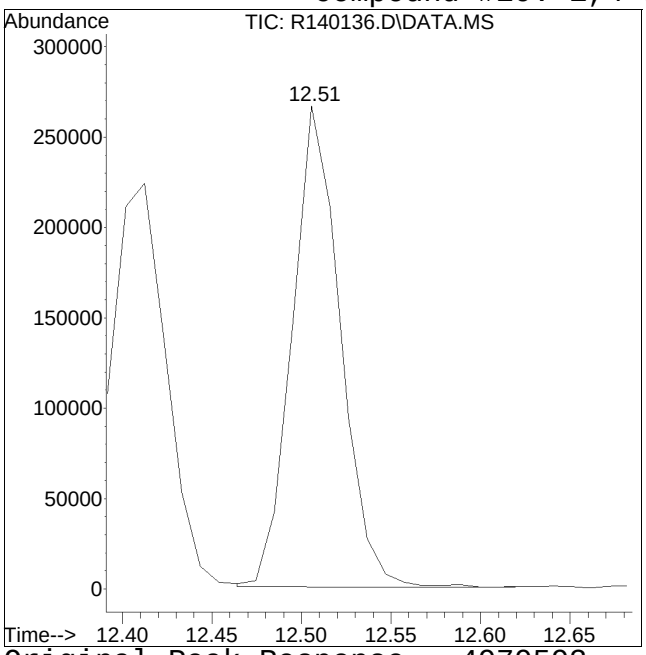




Original Peak Response = 3498671 Manual Peak Response = 4136301 M4
M4 = Poor automated baseline construction.

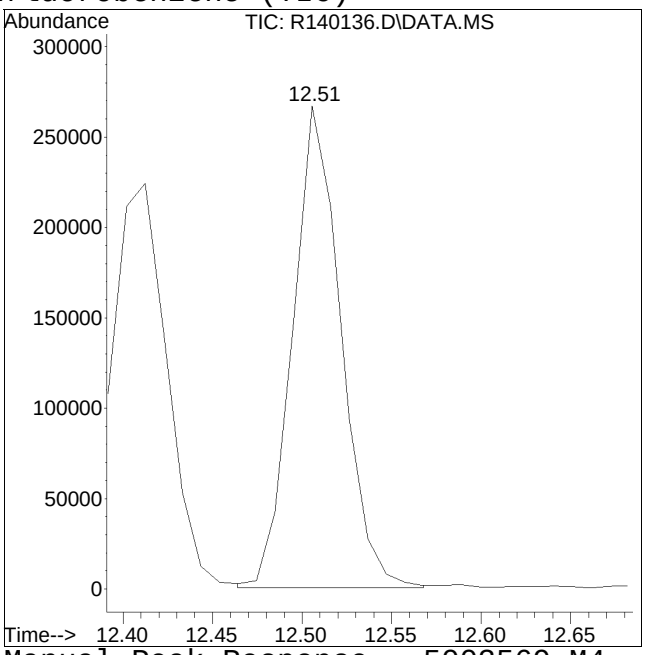
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R140136.D
Date Inj'd : 3/11/2015 12:18 pm
Sample : WG767580-3,3,250,250
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/11/2015 12:44 pm

Compound #29: 1,4-difluorobenzene (TIC)




Original Peak Response = 4979593



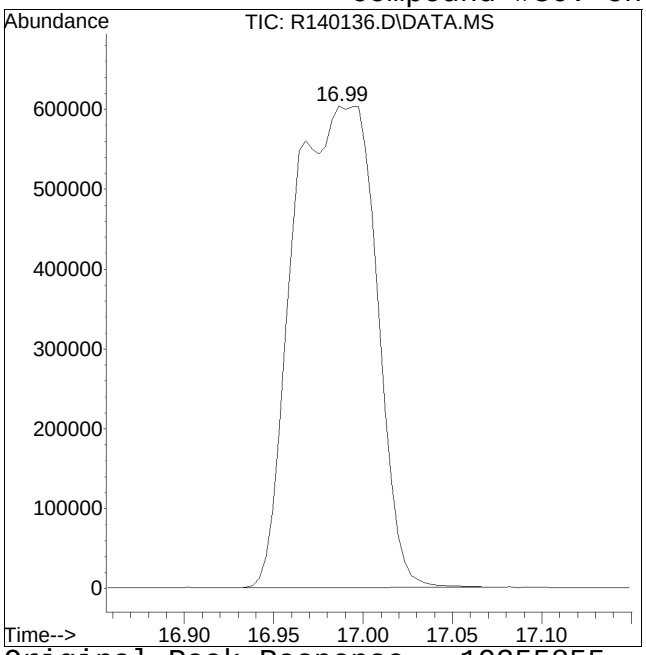

Manual Peak Response = 5003569 M4

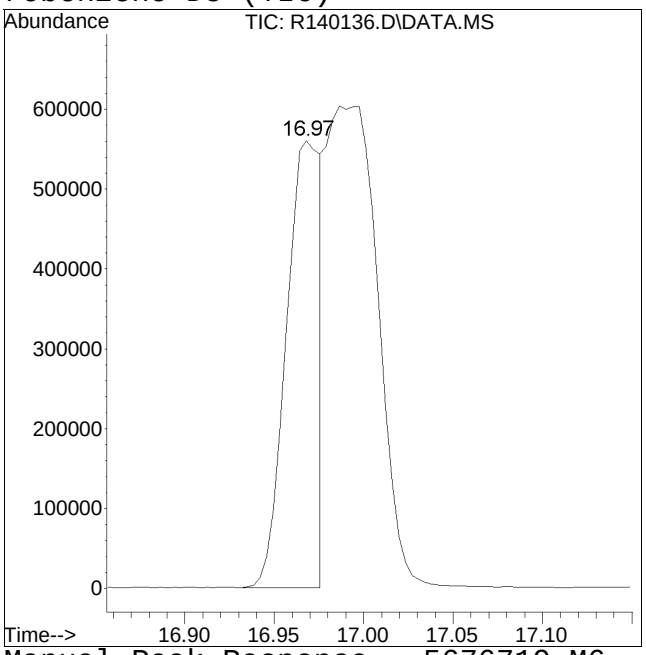
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #30: chlorobenzene-D5 (TIC)



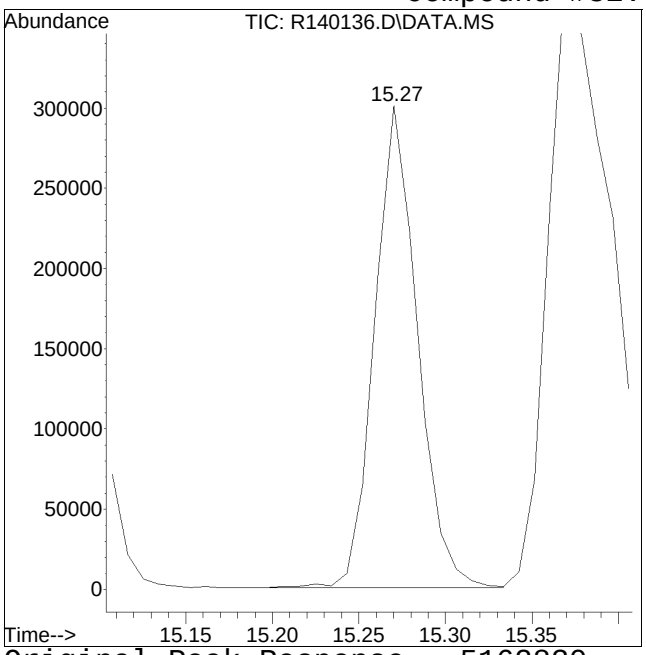



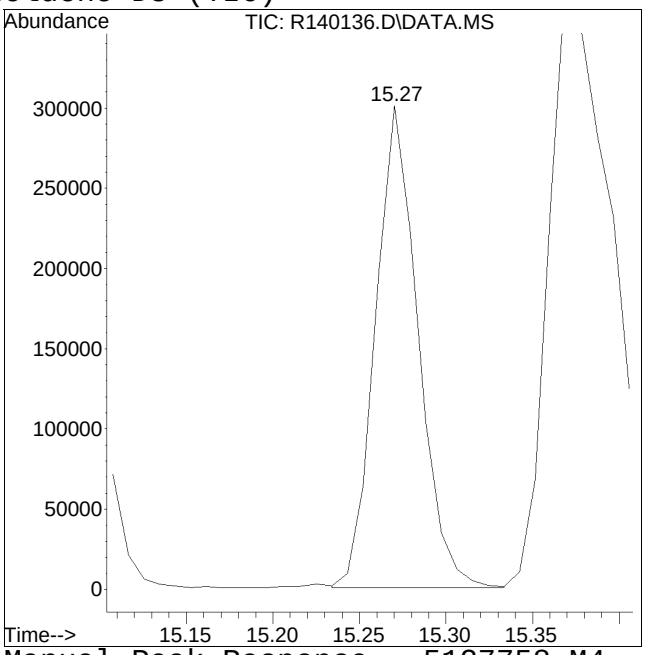

Original Peak Response = 19355855 Manual Peak Response = 5676719 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767580-3,3,250,250 Quant Date : 3/11/2015 12:44 pm

Compound #32: toluene-D8 (TIC)




Original Peak Response = 5162830 Manual Peak Response = 5127758 M4
M4 = Poor automated baseline construction.

# Duplicate Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140161.D
Acq On : 12 Mar 2015 9:18 am
Operator : AIRPIANO1:RY
Sample : WG767580-5,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 14:53:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311A\R140135.D
Sub List : APH_STD_M - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) bromochloromethane | 10.22 | 128 | 500103 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 536672 | | | Recovery | = | 93.19% | |
| 7) 1,4-difluorobenzene | 12.51 | 114 | 1840635 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 2192438 | | | Recovery | = | 83.95% | |
| 12) chlorobenzene-D5 | 16.96 | 54 | 453666 | 10.000 | ug/m3 | 0.00 |
| Standard Area = 489846 | | | Recovery | = | 92.61% | |
| **System Monitoring Compounds** | | | | | | |
| 28) bromochloromethane (TIC) | 10.22 | TIC | 3550139 | 10.990 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 109.90% | |
| 29) 1,4-difluorobenzene (TIC) | 12.51 | TIC | 4211292 | 9.140 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 91.40% | |
| 30) chlorobenzene-D5 (TIC) | 16.96 | TIC | 6364780 | 10.596 | ug/m3 | 0.00 |
| Spiked Amount 10.000 | | | Recovery | = | 105.96% | |
| 31) 1,2-dichloroethane-D4 ... | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 32) toluene-D8 (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| 33) bromofluorobenzene (TIC) | 0.00 | TIC | 0d | 0.000 | ug/m3 | |
| Spiked Amount 10.000 | | | Recovery | = | 0.00% | |
| **Target Compounds** | | | | | | Qvalue |
| 2) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 4) methyl tert butyl ether | 0.00 | | 0 | N.D. | | |
| 9) benzene | 0.00 | | 0 | N.D. | | |
| 11) C5-C8 Aliphatics Total | 12.26 | TIC | 7272328 | 50.305 | ug/m3 | |
| 13) toluene | 15.38 | 91 | 52208 | 0.864 | ug/m3 | 88 |
| 16) ethyl benzene | 17.30 | 91 | 54646M3 | 0.790 | ug/m3 | |
| 17) m+p-xylene | 17.43 | 91 | 169563 | 3.112 | ug/m3# | 84 |
| 19) o-xylene | 17.80 | 91 | 87406M4 | 1.569 | ug/m3 | |
| 23) naphthalene | 21.13 | 128 | 2662545M4 | 34.725 | ug/m3 | |
| 25) C9-C12 Aliphatics Tota | 18.07 | TIC | 405037708 | 2121.089 | ug/m3 | |
| 26) C9-C10 Aromatics (120) | 19.09 | 120 | 4176930M5 | 162.813 | ug/m3 | |
| 27) C9-C10 Aromatics (134) | 20.39 | 134 | 5557654M5 | 216.632 | ug/m3 | |
| 27) C9-C10 Aromatics Total | 0.00 | | 9734584 | 379.445 | ug/m3 | |

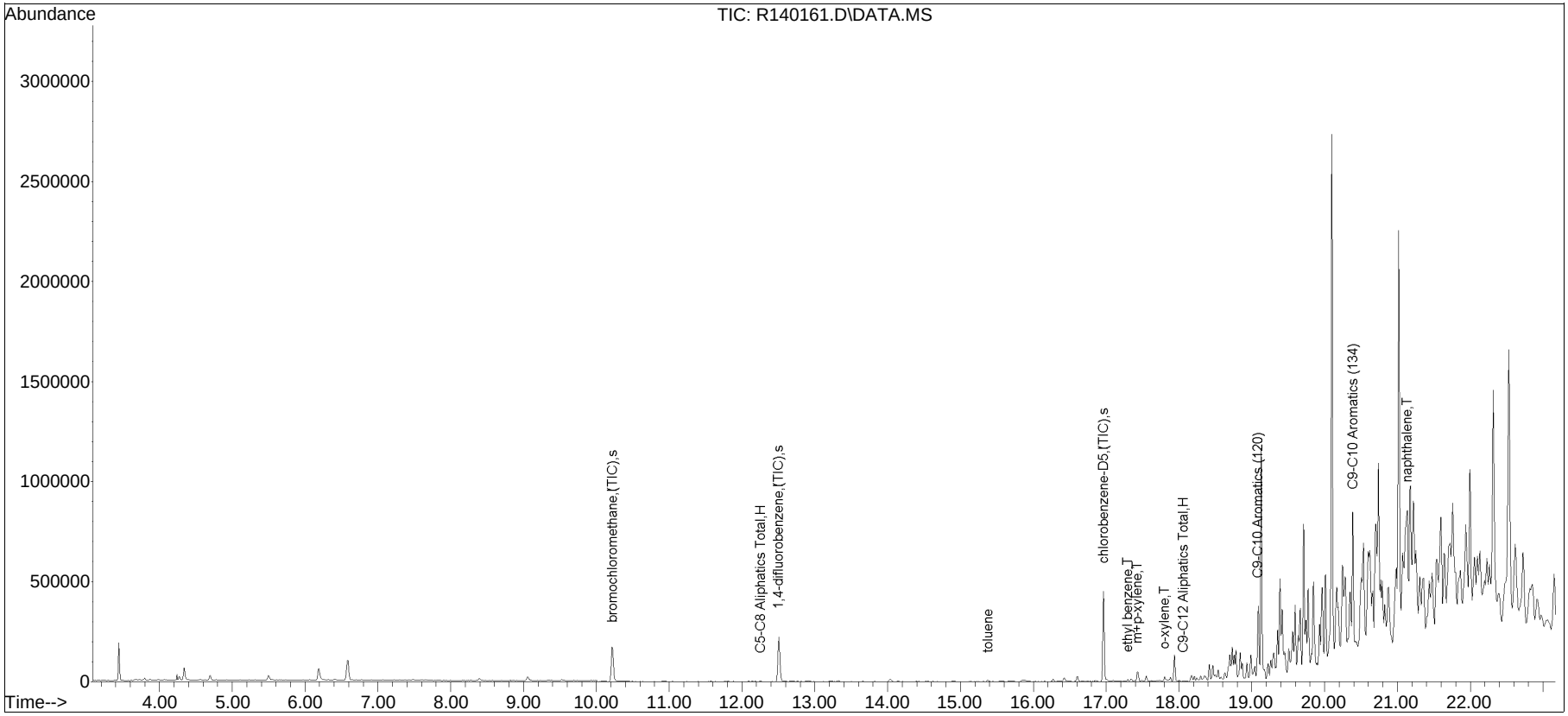
(#) = qualifier out of range (m) = manual integration (+) = signals summed

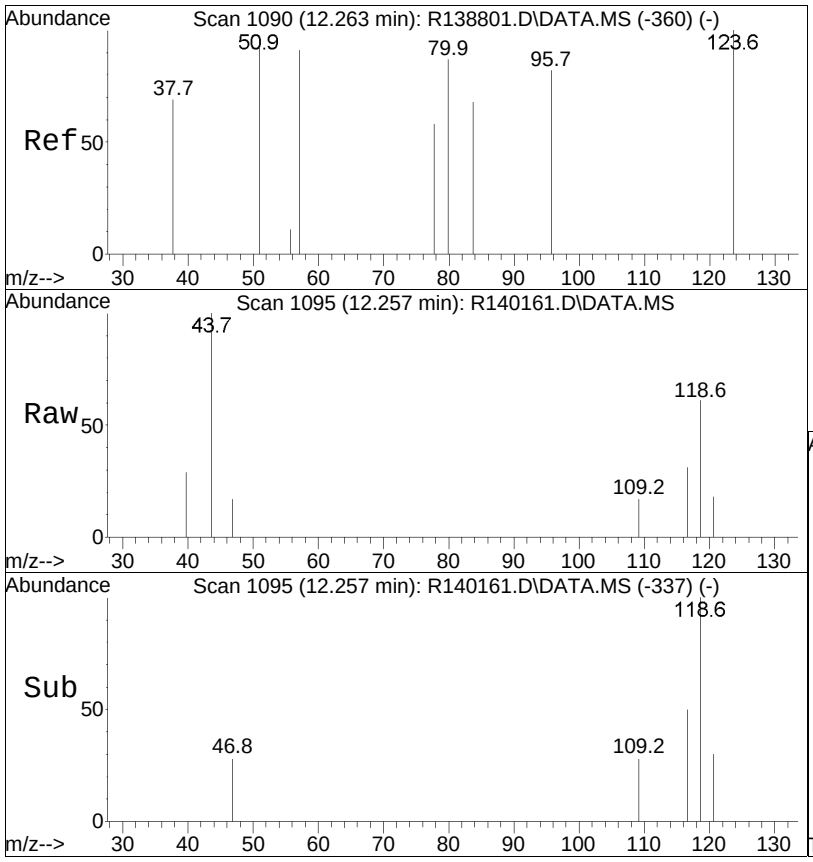
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311A\
Data File : R140161.D
Acq On : 12 Mar 2015 9:18 am
Operator : AIRPIANO1:RY
Sample : WG767580-5,3,250,250
Misc : WG767580,ICAL10563
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 14:53:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311A\APH150101.M
Quant Title : APH Analysis
QLast Update : Sat Jan 03 12:13:20 2015
Response via : Initial Calibration

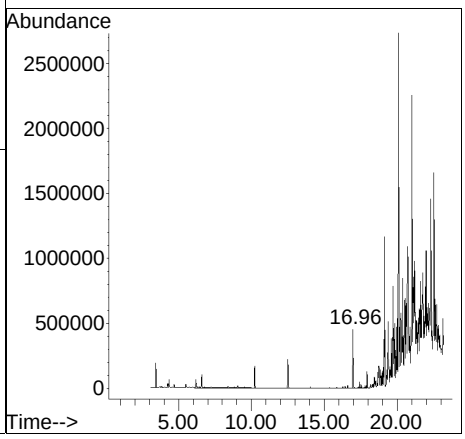
Sub List : APH_STD_M - .Data\AIR1\2015\150311A\R140135.D

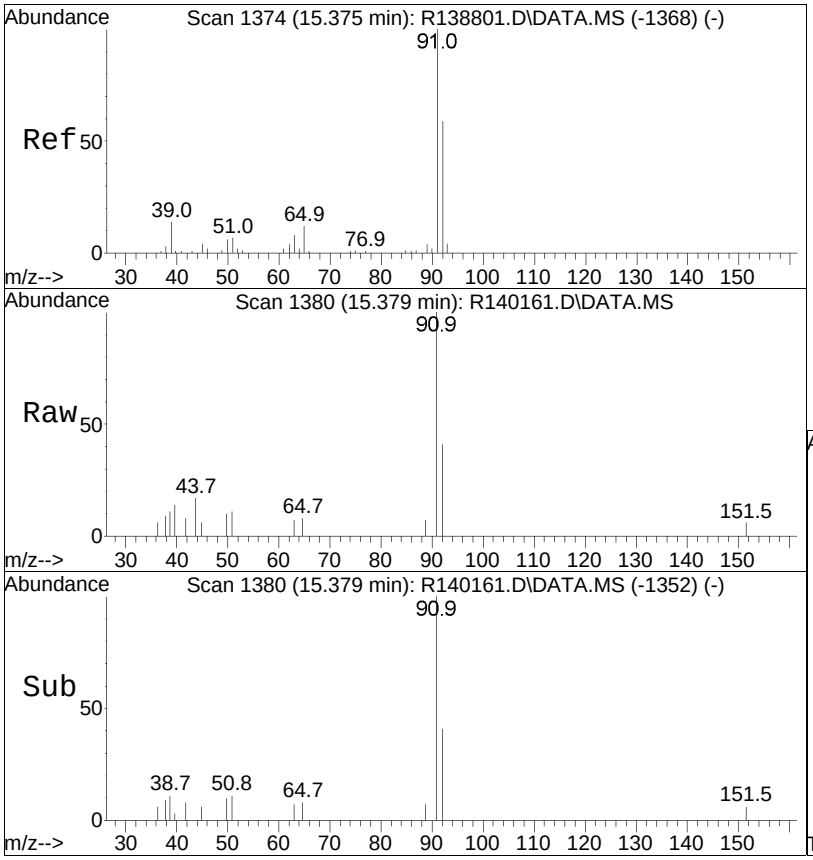





#11
C5-C8 Aliphatics Total
Concen: 56.64 ug/m3 m
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:TIC Resp: 7272328

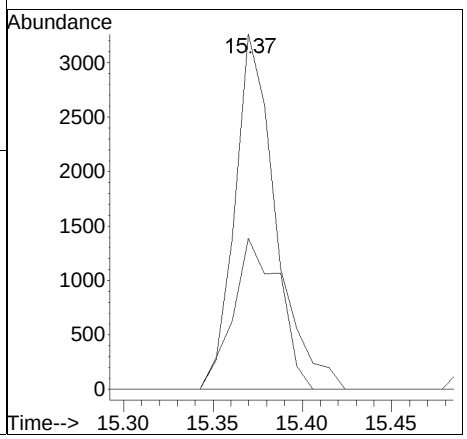


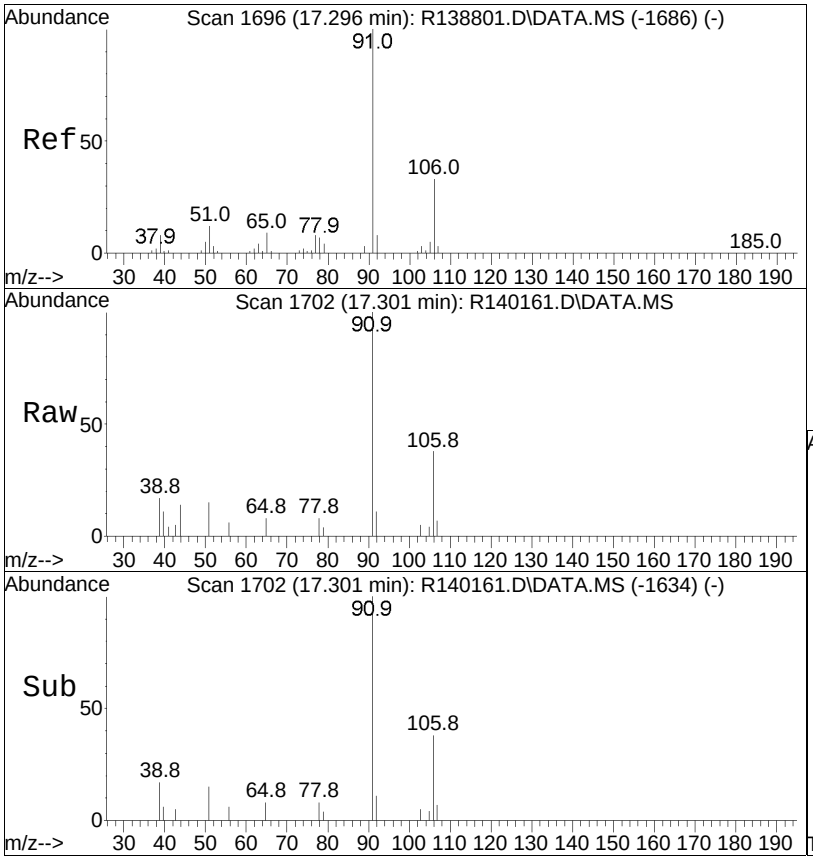



#13
toluene
Concen: 0.86 ug/m3
RT: 15.38 min Scan# 1380
Delta R.T. 0.003 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 52208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 48.3 | 45.4 | 68.0 |

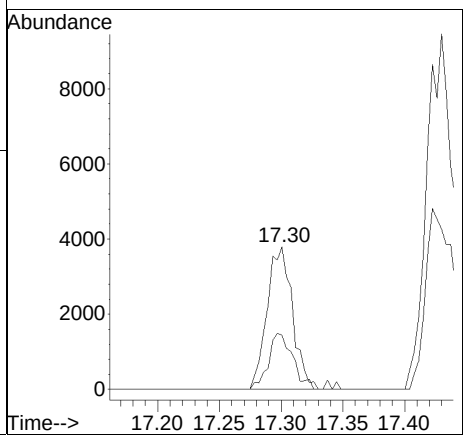


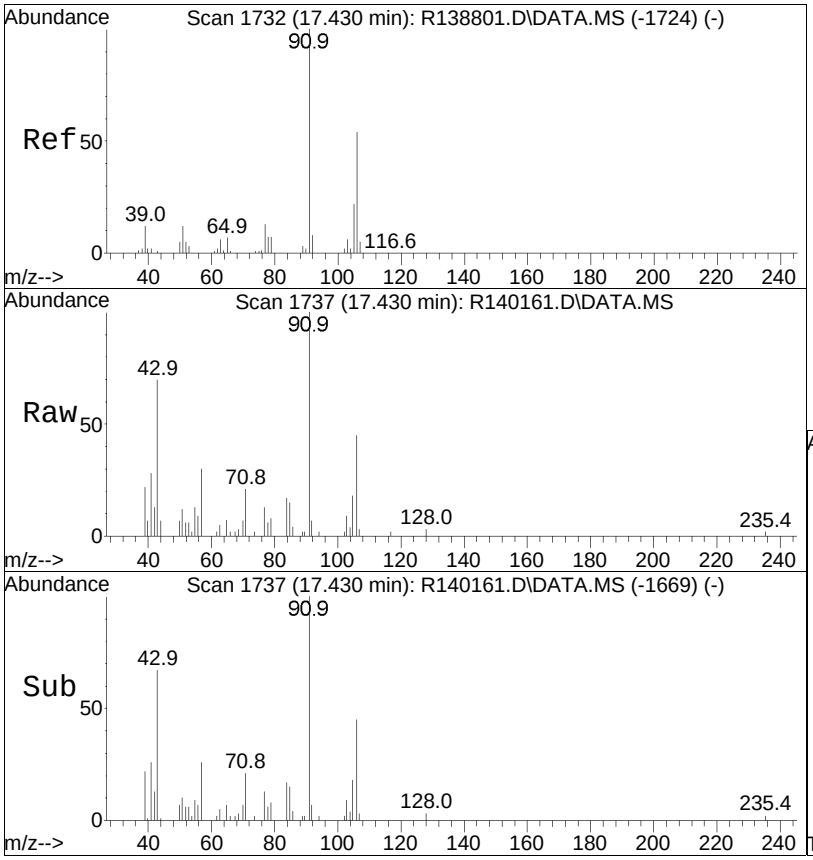



#16
ethyl benzene
Concen: 0.79 ug/m3 m
RT: 17.30 min Scan# 1702
Delta R.T. 0.002 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 54646

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 159.5 | 26.3 | 39.5# |

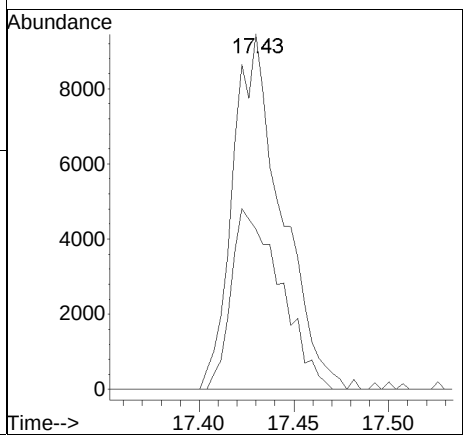


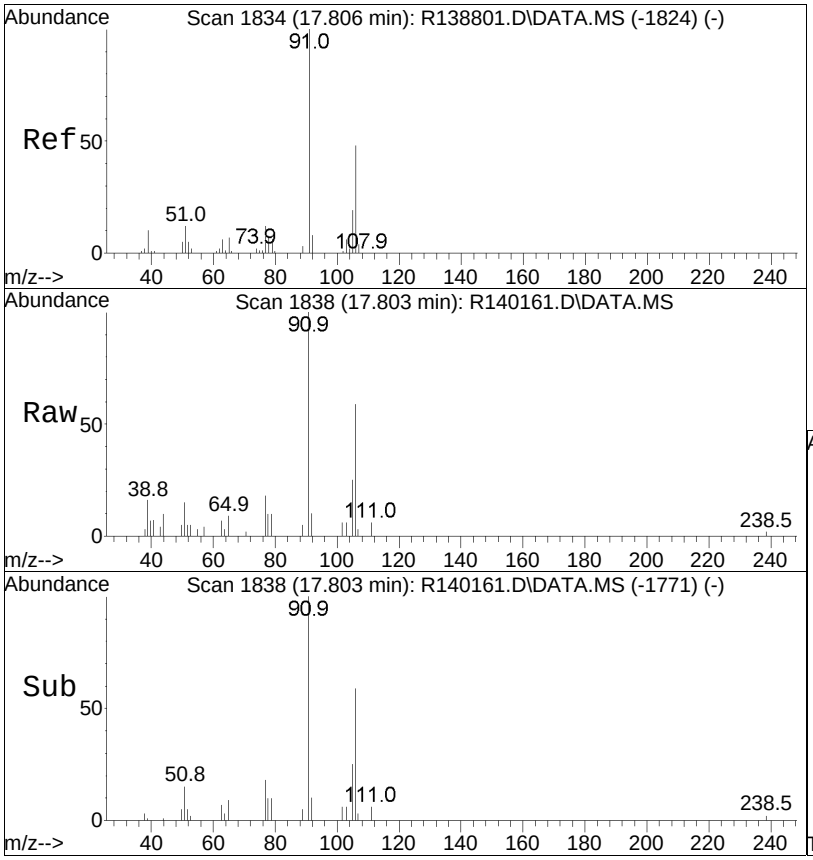



#17
m+p-xylene
Concen: 3.11 ug/m3
RT: 17.43 min Scan# 1737
Delta R.T. 0.002 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 169563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 51.7 | 33.4 | 50.2# |

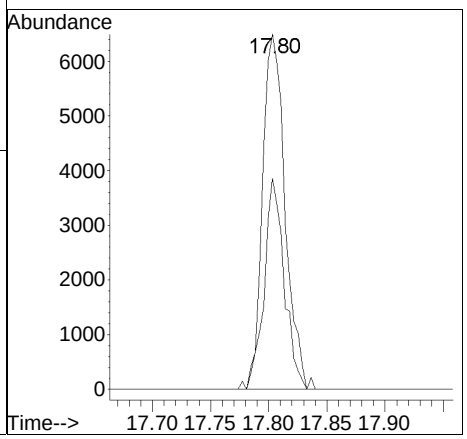


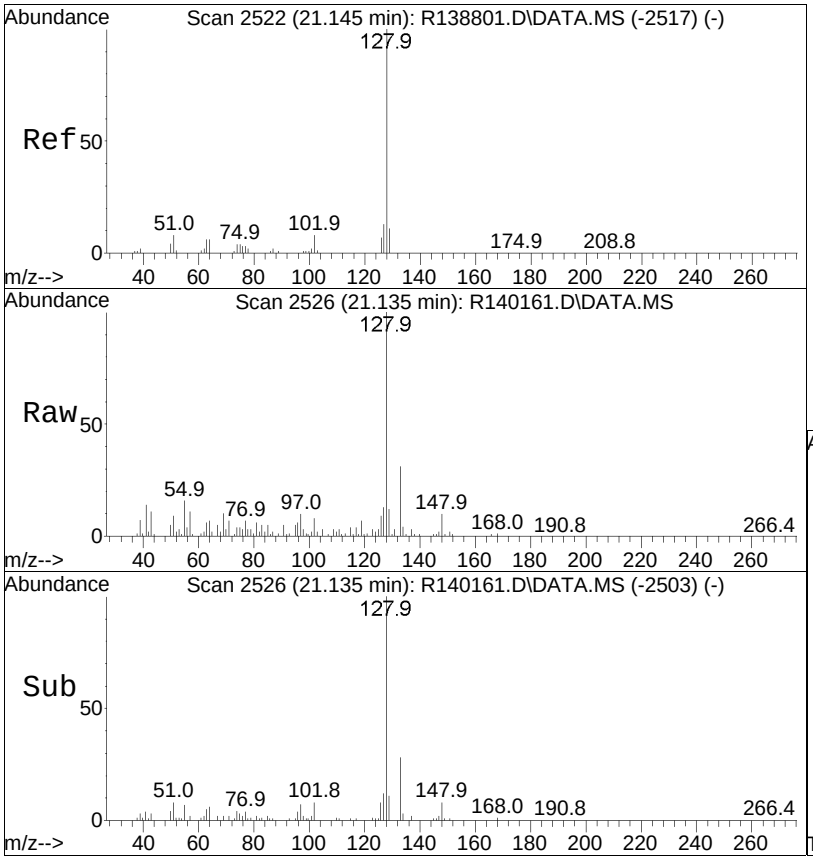



#19
o-xylene
Concen: 1.57 ug/m3 m
RT: 17.80 min Scan# 1838
Delta R.T. -0.003 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 87406

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 53.0 | 39.5 | 59.3 |

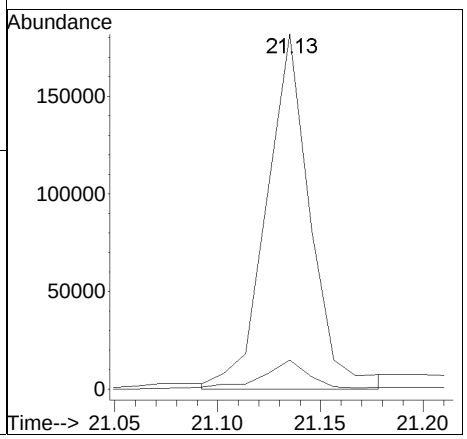


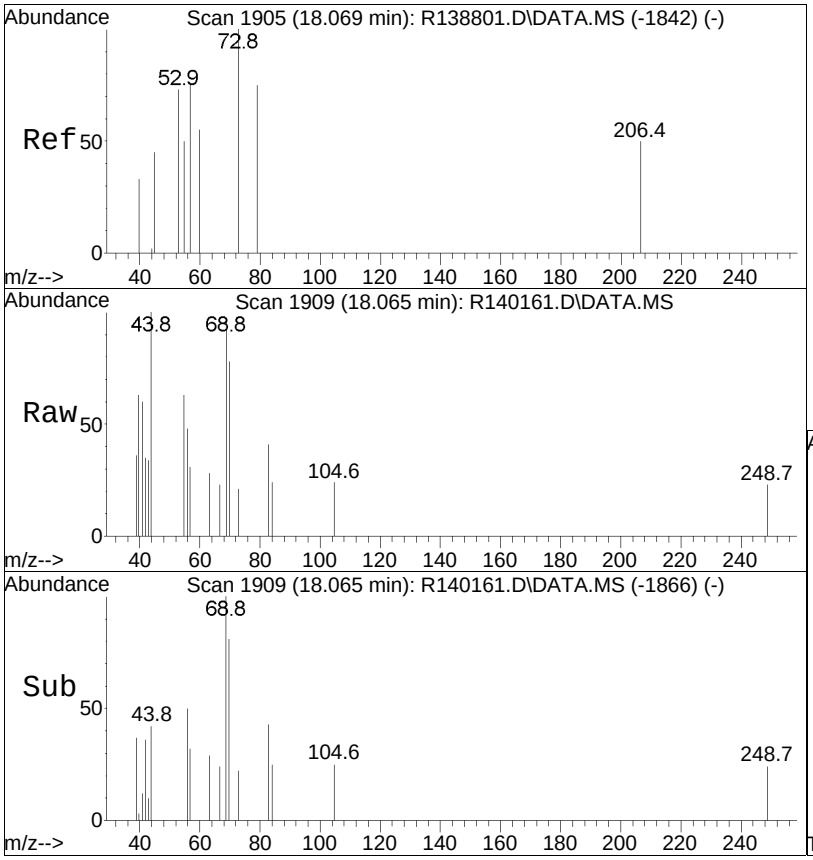



#23
naphthalene
Concen: 34.73 ug/m3 m
RT: 21.13 min Scan# 2526
Delta R.T. -0.007 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:128 Resp: 2662545

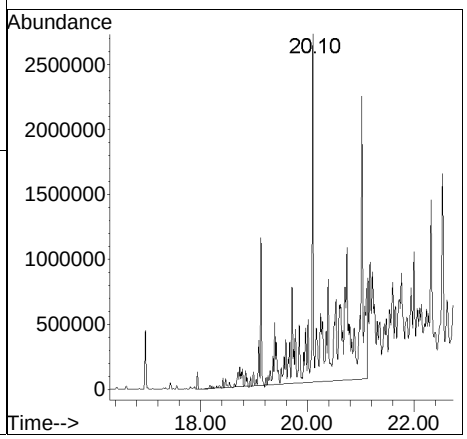
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 8.1 | 6.8 | 10.2 |

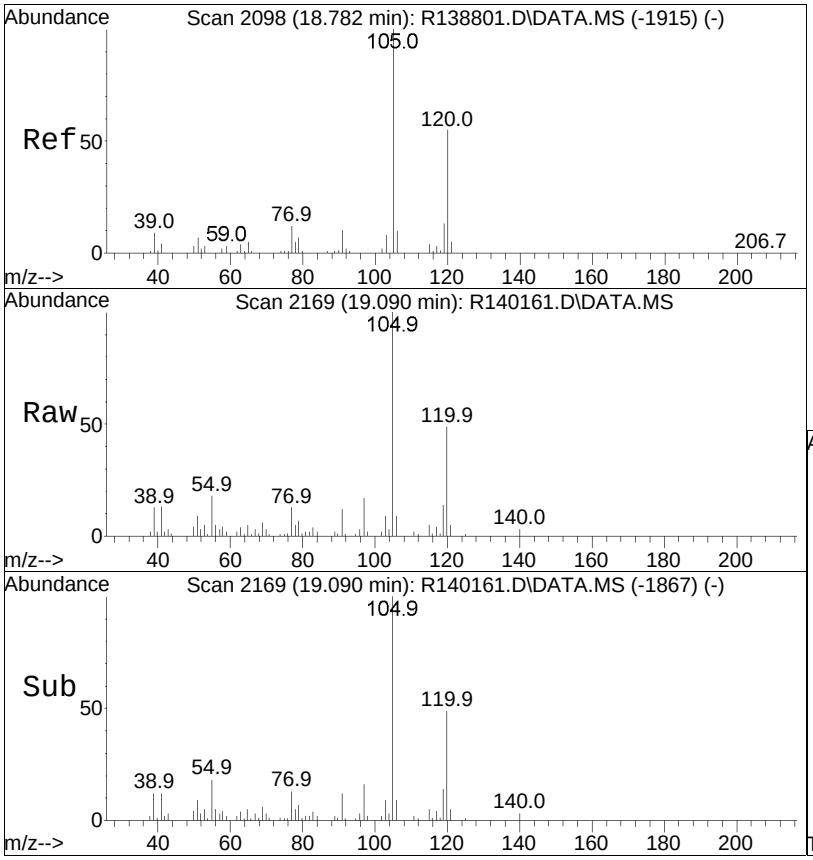





#25
C9-C12 Aliphatics Total
Concen: 2500.53 ug/m3 m
RT: 18.07 min Scan# 1909
Delta R.T. 0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

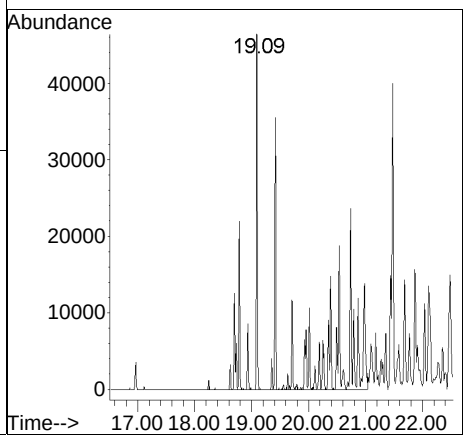
Tgt Ion:TIC Resp:405037708

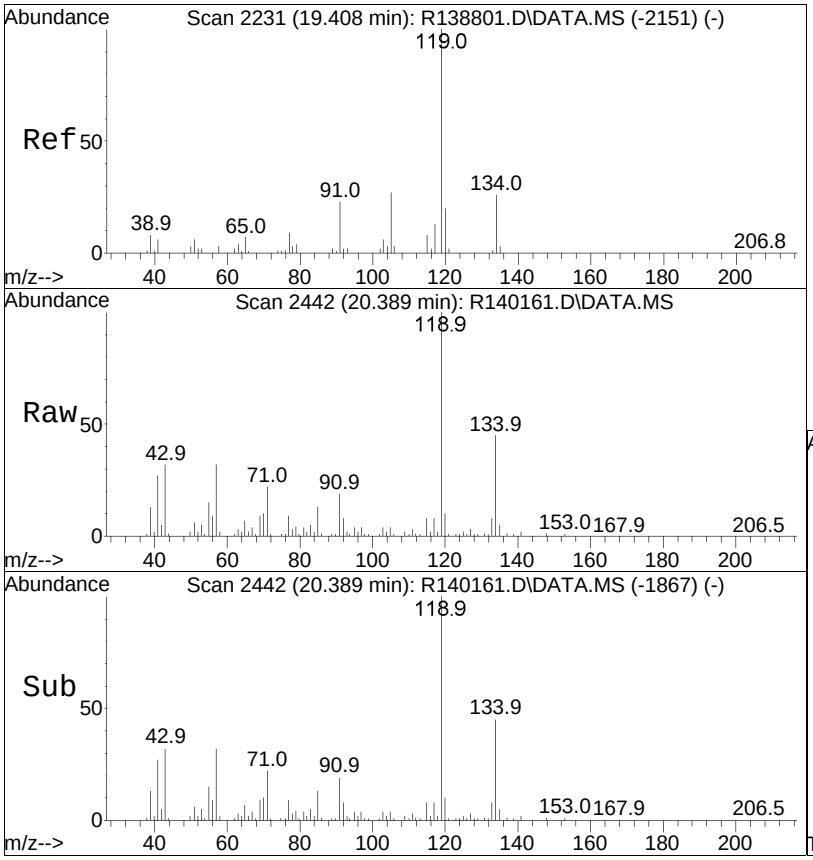





#26
C9-C10 Aromatics (120)
Concen: 162.81 ug/m3 m
RT: 19.09 min Scan# 2169
Delta R.T. -0.910 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

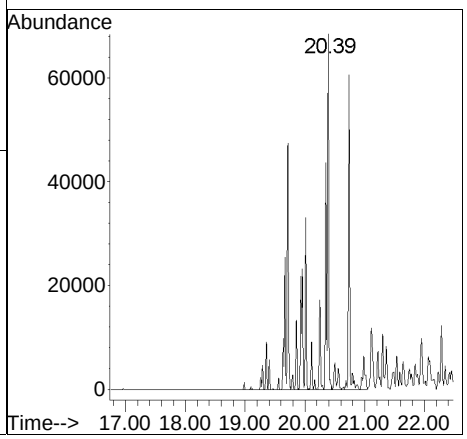
Tgt Ion:120 Resp: 4176930






#27
C9-C10 Aromatics (134)
Concen: 216.63 ug/m3 m
RT: 20.39 min Scan# 2442
Delta R.T. 0.389 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:134 Resp: 5557654

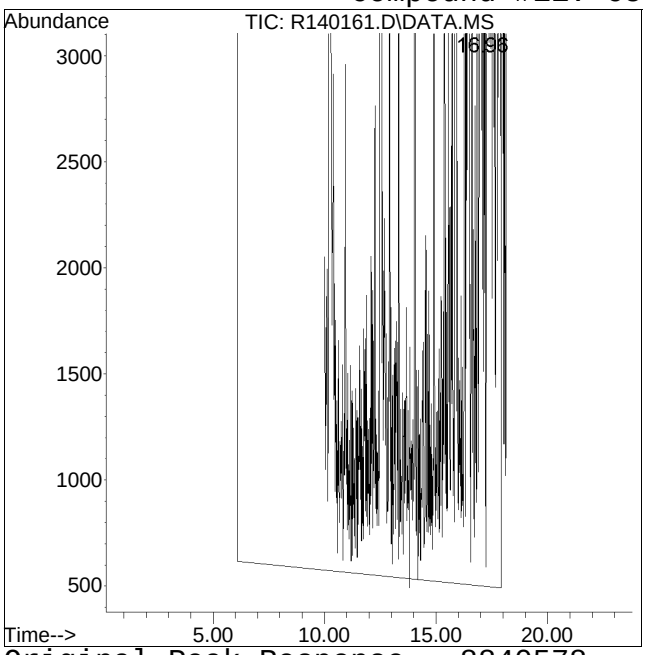


Manual Integration/Negative Proof Report

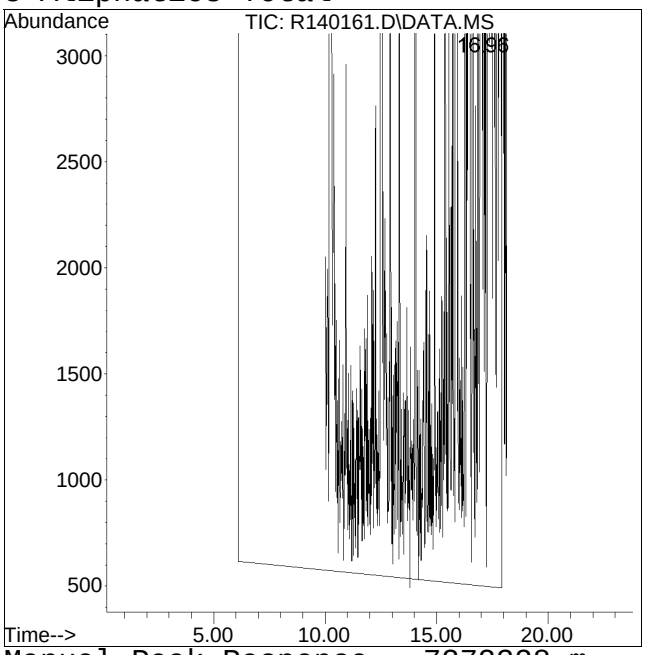
Data Path : O:\Forensics\Data\AIR1\2015
Data File : R140161.D
Date Inj'd : 3/12/2015 9:18 am
Sample : WG767580-5,3,250,250

Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/12/2015 11:24 am

Compound #11: C5-C8 Aliphatics Total




Original Peak Response = 8840578

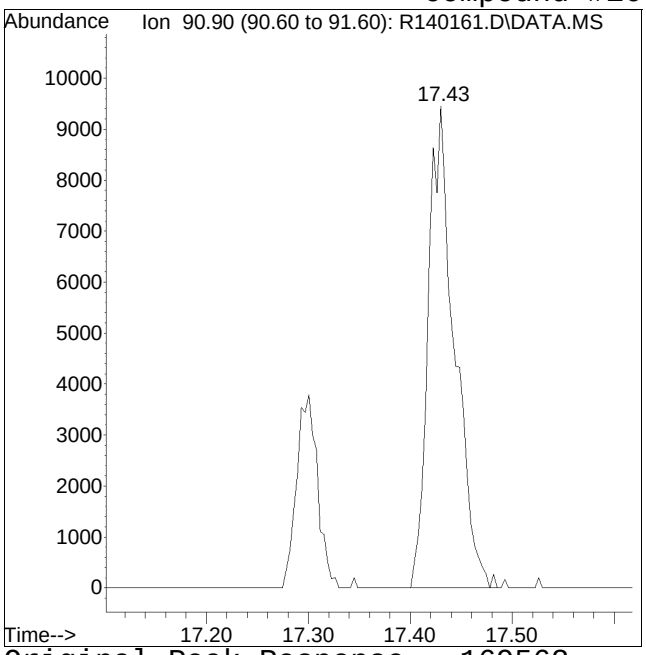


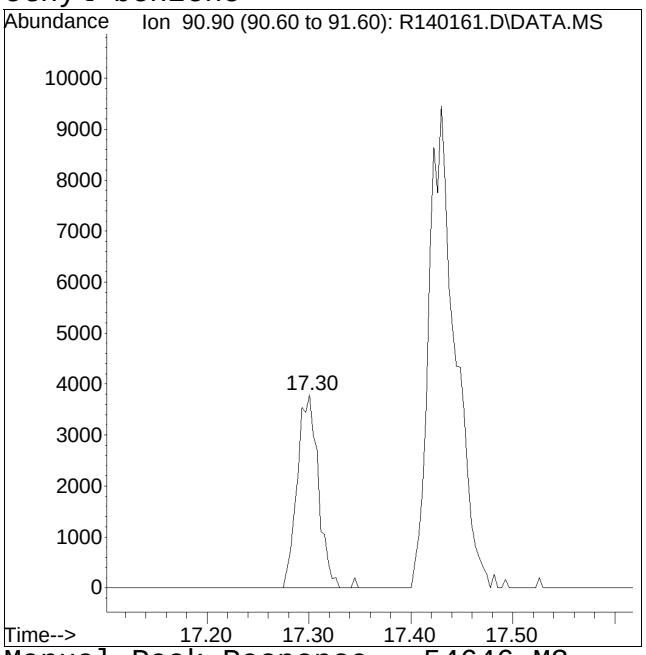

Manual Peak Response = 7272328 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140161.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 9:18 am Instrument : Air Piano 1
Sample : WG767580-5,3,250,250 Quant Date : 3/12/2015 11:24 am

Compound #16: ethyl benzene



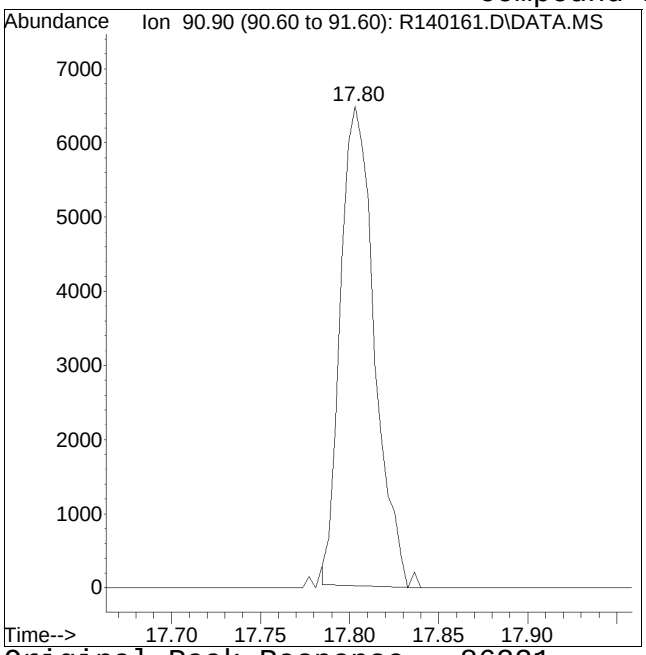

Original Peak Response = 169562 Manual Peak Response = 54646 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

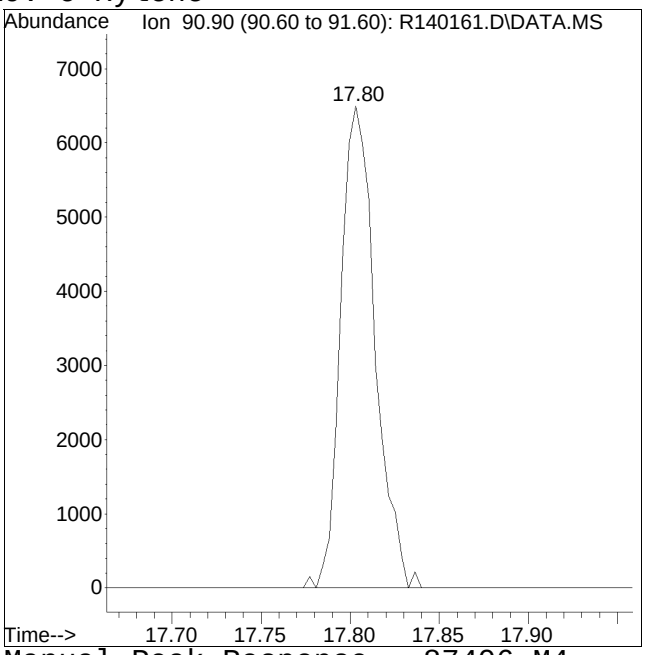
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140161.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 9:18 am Instrument : Air Piano 1
Sample : WG767580-5,3,250,250 Quant Date : 3/12/2015 11:24 am

Compound #19: o-xylene




Original Peak Response = 86221



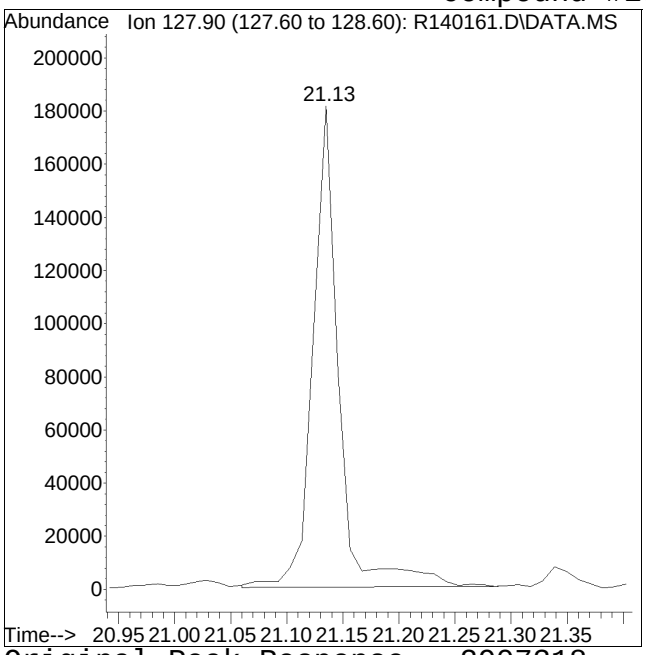

Manual Peak Response = 87406 M4

M4 = Poor automated baseline construction.

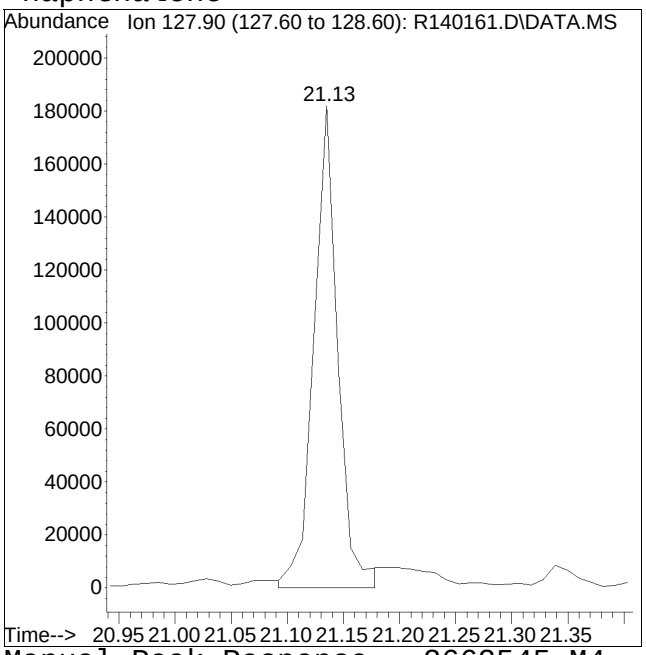
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140161.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 9:18 am Instrument : Air Piano 1
Sample : WG767580-5,3,250,250 Quant Date : 3/12/2015 11:24 am

Compound #23: naphthalene




Original Peak Response = 2907318



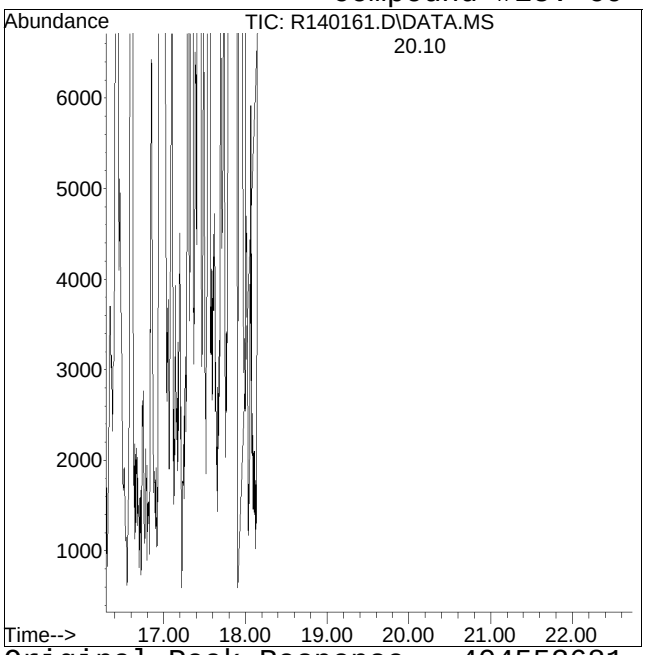

Manual Peak Response = 2662545 M4

M4 = Poor automated baseline construction.

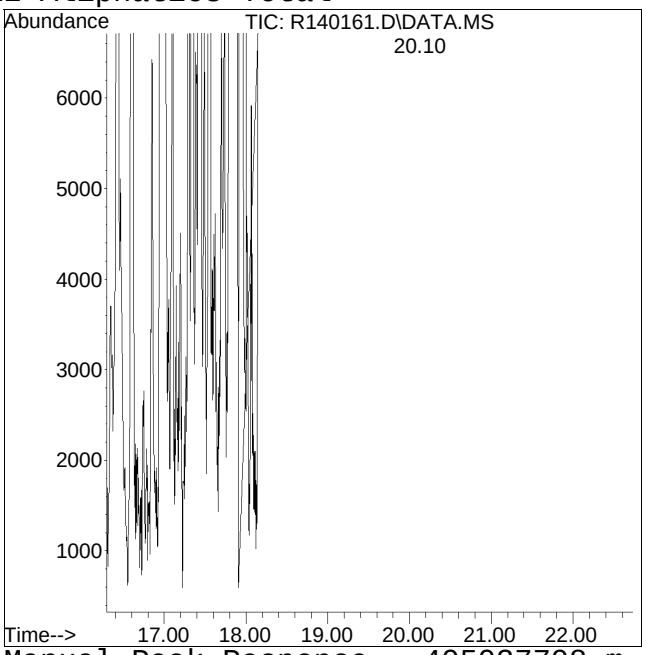
# Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\QM150311A\ Method : APH150101.M
Data File : R140161.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 9:18 am Instrument : Air Piano 1
Sample : WG767580-5,3,250,250 Quant Date : 3/12/2015 11:24 am

## Compound #25: C9-C12 Aliphatics Total




Original Peak Response = 404553681

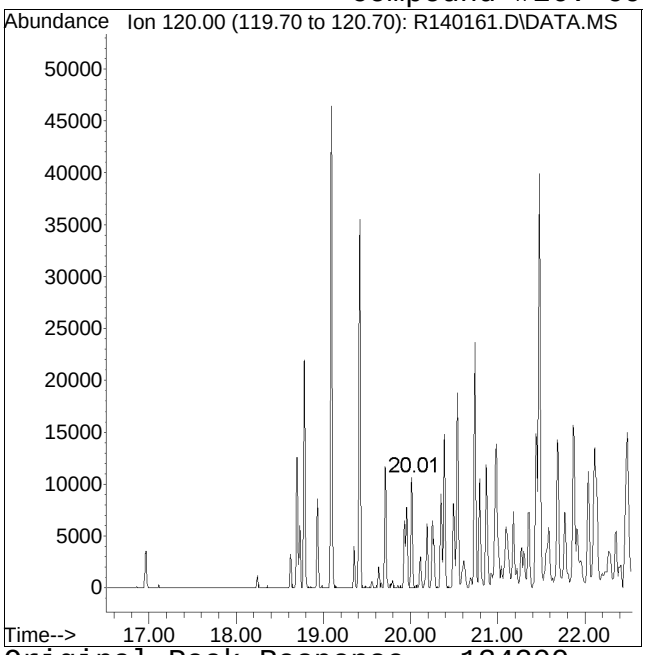


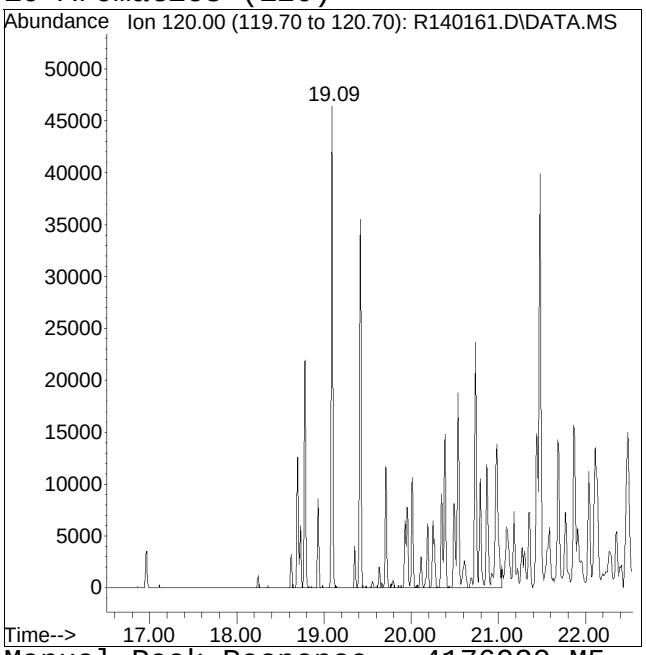

Manual Peak Response = 405037708 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140161.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 9:18 am Instrument : Air Piano 1
Sample : WG767580-5,3,250,250 Quant Date : 3/12/2015 11:24 am

Compound #26: C9-C10 Aromatics (120)



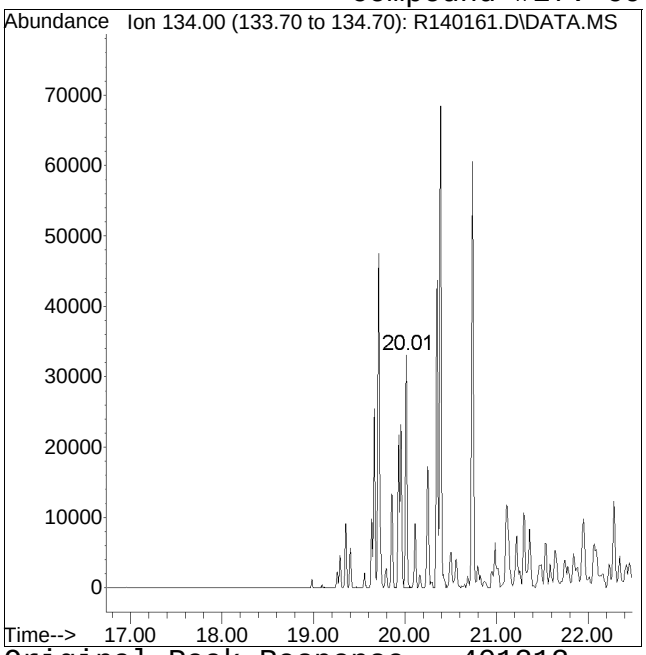



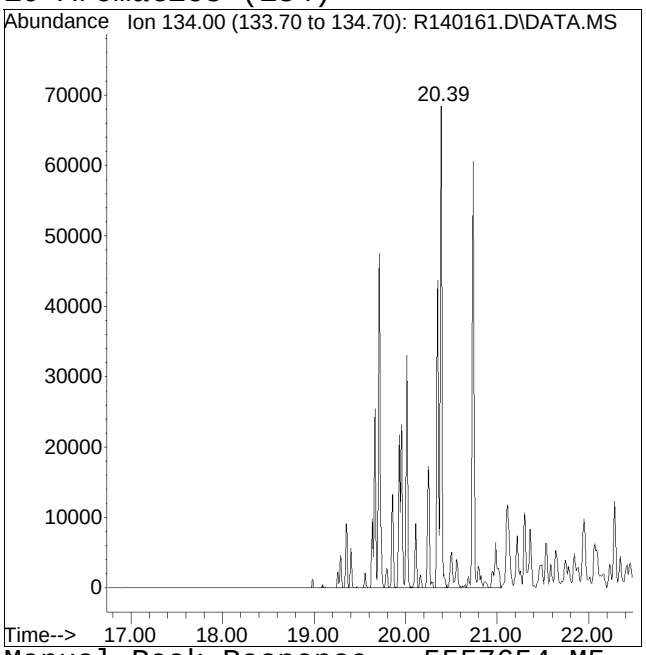

Original Peak Response = 134200 Manual Peak Response = 4176930 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : APH150101.M
Data File : R140161.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 9:18 am Instrument : Air Piano 1
Sample : WG767580-5,3,250,250 Quant Date : 3/12/2015 11:24 am

Compound #27: C9-C10 Aromatics (134)




Original Peak Response = 401212 Manual Peak Response = 5557654 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

# GC/MS VOA
# Air Analysis
# Selective Ion Monitoring

# Initial Calibration

# Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Method File : TSIM150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 13:54:27 2015
Response Via : Initial Calibration

Calibration Files
0.02=R138810.D 0.04=R138811.D 0.1 =R138812.D 0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D
5.0 =R138816.D 10.0=R138817.D 20.0=R138818.D 50.0=R138819.D

| | | Compound | 0.02 | 0.04 | 0.1 | 0.2 | 0.5 | 1.0 | 5.0 | 10.0 | 20.0 | 50.0 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | bromochloromethane | ----------ISTD---------- | | | | | | | | | | | |
| 2) | | propylene | | | 0.616 | 0.661 | 0.579 | 0.565 | 0.550 | 0.531 | 0.553 | 0.474 | 0.5663 | 9.88 |
| 3) | | dichlorodifluorome... | 1.914 | 1.216 | 1.103 | 1.508 | 1.264 | 1.203 | 1.289 | 0.880 | 1.256 | 0.890 | 1.2524 | 23.82 |
| 4) | C | chloromethane | | 0.848 | 0.654 | 0.726 | 0.638 | 0.617 | 0.600 | 0.584 | 0.597 | 0.534 | 0.6442 | 14.41 |
| 5) | | Freon-114 | 2.326 | 1.884 | 1.795 | 1.977 | 1.818 | 1.748 | 1.740 | 1.642 | 1.681 | 1.425 | 1.8035 | 13.09 |
| 6) | C | vinyl chloride | 0.800 | 0.733 | 0.699 | 0.756 | 0.661 | 0.641 | 0.631 | 0.607 | 0.626 | 0.559 | 0.6712 | 11.07 |
| 7) | C | 1,3-butadiene | 0.786 | 0.578 | 0.525 | 0.558 | 0.507 | 0.485 | 0.486 | 0.471 | 0.478 | 0.430 | 0.5306 | 18.78 |
| 8) | C | bromomethane | 0.829 | 0.651 | 0.653 | 0.698 | 0.630 | 0.620 | 0.607 | 0.586 | 0.606 | 0.544 | 0.6426 | 12.09 |
| 9) | C | chloroethane | 0.518 | 0.370 | 0.340 | 0.340 | 0.310 | 0.297 | 0.290 | 0.284 | 0.289 | 0.263 | 0.3300 | 22.20 |
| 10) | | ethanol | | | 0.587 | 0.623 | 0.566 | 0.529 | 0.531 | 0.528 | 0.535 | 0.467 | 0.5458 | 8.55 |
| 11) | C | vinyl bromide | 0.899 | 0.710 | 0.669 | 0.728 | 0.654 | 0.645 | 0.635 | 0.617 | 0.638 | 0.573 | 0.6769 | 13.22 |
| 12) | | acetone | | | 1.230 | 1.260 | 1.125 | 1.075 | 1.041 | 1.020 | 1.033 | 0.908 | 1.0865 | 10.62 |
| 13) | | trichlorofluoromet... | 2.113 | 1.774 | 1.662 | 1.855 | 1.681 | 1.659 | 1.632 | 1.582 | 1.590 | 1.424 | 1.6972 | 10.95 |
| 14) | | isopropyl alcohol | | | | | 1.371 | 1.275 | 1.256 | 1.203 | 1.211 | 1.093 | 1.2349 | 7.43 |
| 15) | C | acrylonitrile | 0.879 | 0.670 | 0.670 | 0.627 | 0.493 | 0.490 | 0.498 | 0.478 | 0.532 | 0.450 | 0.5787 | 23.03 |
| 16) | C | 1,1-dichloroethene | 1.533 | 1.248 | 1.152 | 1.302 | 1.170 | 1.148 | 1.068 | 1.092 | 1.128 | 1.010 | 1.1851 | 12.50 |
| 17) | C | methylene chloride | | | | | 1.088 | 0.985 | 0.911 | 0.882 | 0.894 | 0.801 | 0.9268 | 10.61 |
| 18) | C | 3-chloropropene | 1.228 | 1.383 | 1.122 | 1.176 | 1.087 | 1.050 | 1.036 | 0.999 | 1.028 | 0.920 | 1.1029 | 11.98 |
| 19) | C | carbon disulfide | | | 2.388 | 2.310 | 2.006 | 1.933 | 1.923 | 1.863 | 1.919 | 1.708 | 2.0062 | 11.42 |
| 20) | | Freon 113 | 1.828 | 1.448 | 1.390 | 1.570 | 1.399 | 1.370 | 1.374 | 1.331 | 1.372 | 1.240 | 1.4322 | 11.32 |
| 21) | | Halothane | 1.490 | 1.191 | 1.119 | 1.262 | 1.144 | 1.122 | 1.108 | 1.087 | 1.137 | 1.036 | 1.1697 | 10.91 |
| 22) | | trans-1,2-dichloro... | 1.364 | 1.140 | 1.082 | 1.208 | 1.114 | 1.095 | 1.103 | 1.065 | 1.087 | 0.977 | 1.1235 | 9.10 |
| 23) | C | 1,1-dichloroethane | 1.593 | 1.356 | 1.283 | 1.418 | 1.259 | 1.253 | 1.236 | 1.206 | 1.234 | 1.101 | 1.2939 | 10.41 |
| 24) | C | MTBE | 2.568 | 1.884 | 1.813 | 2.099 | 1.903 | 1.828 | 1.849 | 1.793 | 1.834 | 1.650 | 1.9223 | 13.14 |
| 25) | C | vinyl acetate | | | 1.283 | 1.745 | 1.647 | 1.698 | 1.856 | 1.868 | 1.932 | 1.781 | 1.7262 | 11.71 |
| 26) | C | 2-butanone | 1.894 | 1.611 | 1.175 | 1.491 | 1.503 | 1.569 | 1.682 | 1.658 | 1.699 | 1.546 | 1.5829 | 11.71 |
| 27) | | cis-1,2-dichloroet... | 1.334 | 1.210 | 1.111 | 1.229 | 1.157 | 1.137 | 1.138 | 1.091 | 1.123 | 1.003 | 1.1532 | 7.70 |
| 28) | | Ethyl Acetate | | | 0.418 | 0.193 | 0.197 | 0.224 | 0.267 | 0.270 | 0.282 | 0.260 | 0.2638 | 26.88 |
| 29) | C | chloroform | 2.293 | 1.793 | 1.702 | 1.836 | 1.668 | 1.624 | 1.603 | 1.563 | 1.595 | 1.422 | 1.7099 | 13.79 |
| 30) | | Tetrahydrofuran | | | 0.989 | 1.120 | 1.049 | 0.947 | 0.966 | 0.950 | 0.971 | 0.886 | 0.9846 | 7.21 |
| 31) | C | 1,2-dichloroethane | 1.287 | 1.090 | 0.997 | 1.106 | 1.017 | 0.996 | 0.986 | 0.968 | 0.989 | 0.890 | 1.0325 | 10.46 |

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Method File : TSIM150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 13:54:27 2015
Response Via : Initial Calibration

Calibration Files
0.02=R138810.D 0.04=R138811.D 0.1 =R138812.D 0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D
5.0 =R138816.D 10.0=R138817.D 20.0=R138818.D 50.0=R138819.D

| | | Compound | 0.02 | 0.04 | 0.1 | 0.2 | 0.5 | 1.0 | 5.0 | 10.0 | 20.0 | 50.0 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32) | I | 1,4-difluorobenzene | ----------ISTD---------- | | | | | | | | | | | |
| 33) | C | hexane | 0.795 | 0.661 | 0.589 | 0.675 | 0.603 | 0.600 | 0.611 | 0.590 | 0.591 | 0.551 | 0.6266 | 11.07 |
| 34) | s | 1,2-dichloroethane-D4 | 0.286 | 0.293 | 0.291 | 0.292 | 0.291 | 0.291 | 0.297 | 0.298 | 0.290 | 0.291 | 0.2920 | 1.15 |
| 35) | C | 1,1,1-trichloroethane | 0.834 | 0.700 | 0.636 | 0.716 | 0.671 | 0.655 | 0.680 | 0.661 | 0.673 | 0.627 | 0.6854 | 8.57 |
| 36) | C | benzene | | 1.086 | 0.935 | 0.999 | 0.931 | 0.900 | 0.926 | 0.899 | 0.907 | 0.846 | 0.9365 | 7.38 |
| 37) | C | carbon tetrachloride | 0.768 | 0.661 | 0.615 | 0.698 | 0.646 | 0.642 | 0.678 | 0.659 | 0.672 | 0.623 | 0.6663 | 6.53 |
| 38) | | cyclohexane | 0.802 | 0.615 | 0.533 | 0.582 | 0.536 | 0.518 | 0.532 | 0.515 | 0.509 | 0.482 | 0.5625 | 16.43 |
| 39) | C | 1,2-dichloropropane | 0.411 | 0.399 | 0.348 | 0.378 | 0.347 | 0.348 | 0.360 | 0.349 | 0.349 | 0.329 | 0.3618 | 7.15 |
| 40) | | bromodichloromethane | 0.893 | 0.763 | 0.683 | 0.803 | 0.723 | 0.714 | 0.735 | 0.718 | 0.725 | 0.682 | 0.7441 | 8.51 |
| 41) | C | 1,4-dioxane | | 0.194 | 0.184 | 0.213 | 0.206 | 0.207 | 0.224 | 0.221 | 0.226 | 0.214 | 0.2098 | 6.66 |
| 42) | C | trichloroethene | 0.546 | 0.453 | 0.442 | 0.494 | 0.453 | 0.445 | 0.461 | 0.449 | 0.451 | 0.424 | 0.4617 | 7.45 |
| 43) | C | 2,2,4-trimethylpen... | 1.971 | 1.732 | 1.603 | 1.816 | 1.668 | 1.627 | 1.658 | 1.604 | 1.627 | 1.510 | 1.6816 | 7.75 |
| 44) | | heptane | 1.072 | 0.689 | 0.698 | 0.771 | 0.703 | 0.688 | 0.694 | 0.680 | 0.686 | 0.628 | 0.7310 | 17.05 |
| 45) | C | cis-1,3-dichloropr... | 2.138 | 1.757 | 1.655 | 1.993 | 1.862 | 1.875 | 2.048 | 2.046 | 2.089 | 1.958 | 1.9421 | 7.91 |
| 46) | C | 4-methyl-2-pentanone | 0.765 | 0.662 | 0.844 | 0.853 | 0.870 | 0.888 | 0.957 | 0.940 | 0.958 | 0.871 | 0.8608 | 10.60 |
| 47) | | trans-1,3-dichloro... | 0.458 | 0.368 | 0.360 | 0.457 | 0.453 | 0.458 | 0.513 | 0.521 | 0.533 | 0.505 | 0.4626 | 12.99 |
| 48) | C | 1,1,2-trichloroethane | 0.461 | 0.398 | 0.384 | 0.437 | 0.392 | 0.385 | 0.405 | 0.399 | 0.400 | 0.375 | 0.4036 | 6.47 |
| 49) | I | chlorobenzene-D5 | ----------ISTD---------- | | | | | | | | | | | |
| 50) | C | toluene | | 5.688 | 5.188 | 5.715 | 5.275 | 5.097 | 5.271 | 5.021 | 5.180 | 4.843 | 5.2531 | 5.46 |
| 51) | s | toluene-D8 | 3.405 | 3.525 | 3.396 | 3.454 | 3.508 | 3.465 | 3.530 | 3.496 | 3.427 | 3.523 | 3.4729 | 1.47 |
| 52) | | 2-hexanone | | | 2.164 | 2.712 | 3.299 | 3.645 | 4.147 | 3.976 | 4.166 | 3.846 | 3.4944 | 20.74 |
| 53) | | dibromochloromethane | 4.328 | 3.452 | 3.394 | 3.764 | 3.531 | 3.412 | 3.616 | 3.515 | 3.693 | 3.535 | 3.6239 | 7.56 |
| 54) | C | 1,2-dibromoethane | 3.100 | 2.831 | 2.694 | 3.064 | 2.945 | 2.898 | 3.052 | 2.978 | 3.098 | 2.938 | 2.9598 | 4.36 |
| 55) | C | tetrachloroethene | 3.527 | 2.706 | 2.560 | 2.854 | 2.615 | 2.558 | 2.625 | 2.519 | 2.575 | 2.465 | 2.7003 | 11.47 |
| 56) | | 1,1,1,2-tetrachlor... | 3.225 | 2.689 | 2.443 | 2.687 | 2.529 | 2.476 | 2.556 | 2.504 | 2.602 | 2.459 | 2.6169 | 8.81 |
| 57) | C | chlorobenzene | 5.044 | 4.881 | 4.382 | 4.783 | 4.491 | 4.442 | 4.587 | 4.439 | 4.595 | 4.330 | 4.5973 | 5.09 |
| 58) | C | ethylbenzene | 8.386 | 7.080 | 6.441 | 7.454 | 6.732 | 6.668 | 7.054 | 6.774 | 6.936 | 6.539 | 7.0063 | 8.10 |
| 59) | C | m+p-xylene | 6.416 | 5.279 | 5.070 | 5.745 | 5.244 | 5.319 | 5.537 | 5.290 | 5.485 | 5.127 | 5.4512 | 7.22 |
| 60) | C | bromoform | 4.223 | 3.344 | 3.109 | 3.577 | 3.270 | 3.223 | 3.507 | 3.421 | 3.629 | 3.488 | 3.4790 | 8.85 |
| 61) | C | styrene | 4.394 | 3.742 | 3.678 | 4.162 | 3.958 | 4.030 | 4.359 | 4.226 | 4.388 | 4.184 | 4.1123 | 6.24 |

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Method File : TSIM150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 13:54:27 2015
Response Via : Initial Calibration

Calibration Files
0.02=R138810.D 0.04=R138811.D 0.1 =R138812.D 0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D
5.0 =R138816.D 10.0=R138817.D 20.0=R138818.D 50.0=R138819.D

| | Compound | 0.02 | 0.04 | 0.1 | 0.2 | 0.5 | 1.0 | 5.0 | 10.0 | 20.0 | 50.0 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62) C | 1,1,2,2-tetrachlor... | 4.853 | 4.205 | 3.850 | 4.389 | 4.060 | 4.004 | 4.195 | 4.013 | 4.118 | 3.897 | 4.1586 | 6.98 |
| 63) C | o-xylene | 7.408 | 5.897 | 5.299 | 6.047 | 5.613 | 5.413 | 5.704 | 5.461 | 5.628 | 5.311 | 5.7782 | 10.76 |
| 64) s | bromofluorobenzene | 2.607 | 2.725 | 2.690 | 2.698 | 2.703 | 2.668 | 2.783 | 2.730 | 2.722 | 2.762 | 2.7088 | 1.81 |
| 65) C | isopropylbenzene | 9.398 | 7.890 | 7.201 | 8.208 | 7.786 | 7.584 | 7.947 | 7.575 | 7.862 | 7.402 | 7.8853 | 7.67 |
| 66) | 4-ethyl toluene | 9.877 | 8.269 | 7.341 | 9.015 | 8.443 | 8.377 | 8.832 | 8.518 | 8.705 | 8.314 | 8.5690 | 7.50 |
| 67) | 1,3,5-trimethylben... | 9.483 | 8.198 | 7.057 | 8.589 | 7.695 | 7.366 | 8.113 | 7.815 | 7.931 | 7.543 | 7.9791 | 8.59 |
| 68) | tert-butylbenzene | 9.621 | 7.755 | 7.407 | 8.340 | 7.724 | 7.579 | 7.921 | 7.630 | 7.749 | 7.268 | 7.8994 | 8.49 |
| 69) | 1,2,4-trimethylben... | 8.222 | 6.766 | 6.264 | 7.184 | 6.712 | 6.586 | 6.985 | 6.727 | 6.815 | 6.462 | 6.8723 | 7.84 |
| 70) C | Benzyl Chloride | 6.988 | 5.016 | 4.752 | 5.697 | 5.493 | 5.556 | 6.306 | 6.245 | 6.482 | 6.376 | 5.8909 | 11.95 |
| 71) | 1,3-dichlorobenzene | 5.766 | 4.817 | 4.598 | 5.266 | 5.003 | 4.930 | 5.308 | 5.111 | 5.201 | 4.991 | 5.0992 | 6.22 |
| 72) C | 1,4-dichlorobenzene | 6.147 | 4.867 | 4.631 | 5.476 | 5.054 | 5.100 | 5.415 | 5.270 | 5.329 | 5.120 | 5.2410 | 7.78 |
| 73) | sec-butylbenzene | 1.213 | 0.962 | 0.928 | 1.064 | 0.999 | 0.988 | 1.043 | 0.982 | 1.013 | 0.963 | 1.0155 | 7.87 |
| 74) | p-isopropyltoluene | 1.137 | 0.924 | 0.870 | 0.969 | 0.928 | 0.922 | 0.990 | 0.945 | 0.946 | 0.905 | 0.9534 | 7.59 |
| 75) | 1,2-dichlorobenzene | 5.943 | 4.796 | 4.514 | 5.105 | 4.759 | 4.728 | 5.127 | 4.928 | 4.898 | 4.757 | 4.9555 | 7.91 |
| 76) | n-butylbenzene | 8.866 | 7.755 | 7.138 | 8.027 | 7.861 | 7.912 | 8.557 | 8.126 | 7.981 | 7.721 | 7.9945 | 5.87 |
| 77) C | 1,2,4-trichloroben... | | 3.715 | 3.532 | 3.834 | 3.910 | 4.011 | 4.696 | 4.629 | 3.662 | 3.926 | 3.9906 | 10.24 |
| 78) | naphthalene | | 1.055 | 0.868 | 1.313 | 1.014 | 0.967 | 1.146 | 1.104 | 0.832 | 0.889 | 1.0209 | 15.05 |
| 79) | 1,2,3-trichloroben... | | 3.614 | 3.340 | 3.554 | 3.573 | 3.678 | 4.391 | 4.410 | 3.196 | 3.460 | 3.6906 | 11.61 |
| 80) C | hexachlorobutadiene | | 3.097 | 2.901 | 3.010 | 2.960 | 3.008 | 3.374 | 3.347 | 2.578 | 2.779 | 3.0060 | 8.38 |

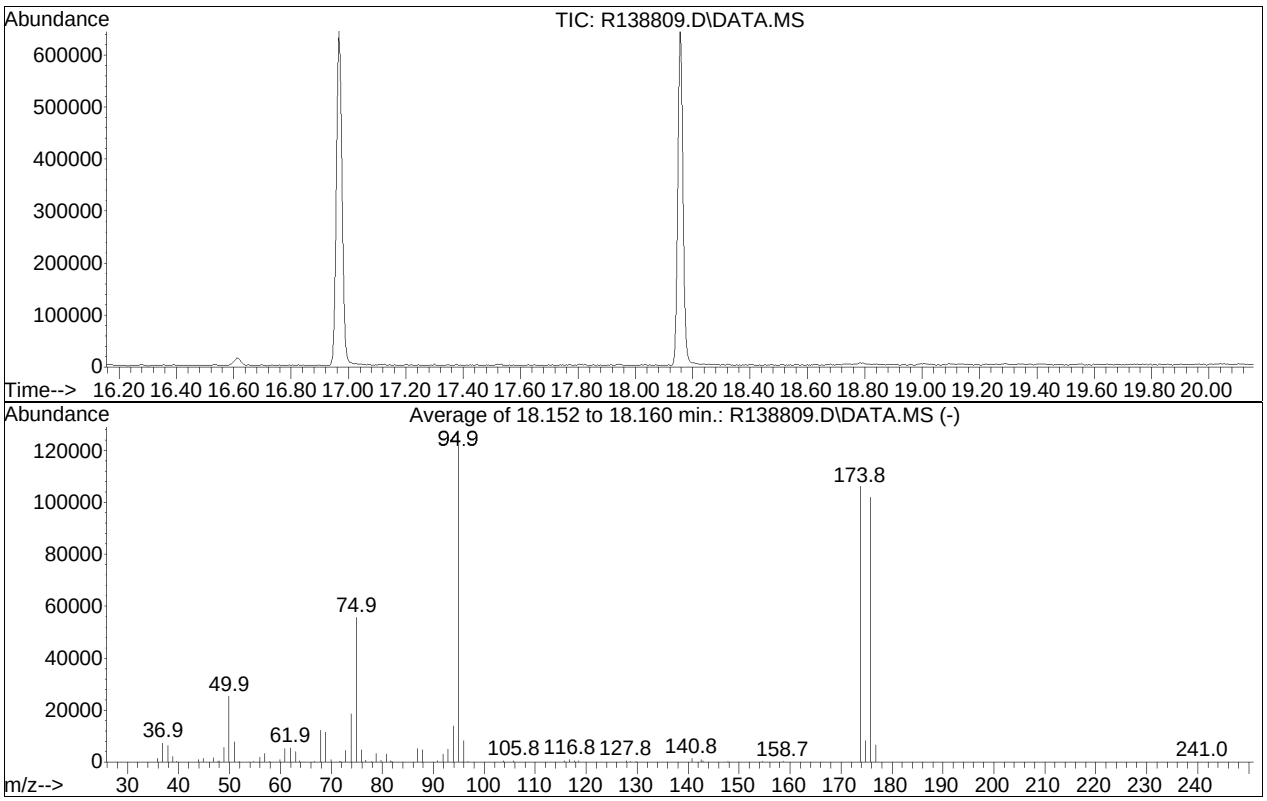
(#) = Out of Range

BFB

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138809.D
Acq On : 2 Jan 2015 6:33 pm
Operator : AIRPIANO1:RY
Sample : WG753109-1,3,250,250
Misc : WG753109
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 13:54:27 2015




AutoFind: Scans 1934, 1935, 1936; Background Corrected with Scan 1925

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 20.6 | 25389 | PASS |
| 75 | 95 | 30 | 66 | 45.4 | 55800 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 122997 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 8228 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 86.3 | 106125 | PASS |
| 175 | 174 | 4 | 9 | 7.8 | 8323 | PASS |
| 176 | 174 | 93 | 101 | 96.1 | 102003 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 6646 | PASS |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138810.D
Acq On : 2 Jan 2015 7:20 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:54:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 150703 | 10.000 ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery | = 101.03% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 347051 | 10.000 ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery | = 105.15% | |
| 49) chlorobenzene-D5 | 16.97 | 54 | 76135 | 10.000 ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery | = 104.89% | |
| System Monitoring Compounds | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 99335 | 9.634 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 96.34% | |
| 51) toluene-D8 | 15.27 | 98 | 259232 | 9.645 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 96.45% | |
| 64) bromofluorobenzene | 18.16 | 95 | 198500 | 9.370 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 93.70% | |

| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) propylene | 3.77 | 41 | 288M6 | 0.035 ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 577 | 0.030 ppbV # | 85 |
| 4) chloromethane | 4.09 | 50 | 336 | 0.037 ppbV # | 70 |
| 5) Freon-114 | 4.25 | 85 | 701 | 0.027 ppbV | 91 |
| 6) vinyl chloride | 4.42 | 62 | 241 | 0.025 ppbV # | 26 |
| 7) 1,3-butadiene | 4.62 | 54 | 237M4 | 0.032 ppbV | |
| 8) bromomethane | 5.02 | 94 | 250 | 0.027 ppbV # | 74 |
| 9) chloroethane | 5.28 | 64 | 156 | 0.036 ppbV # | 25 |
| 10) ethanol | 5.51 | 31 | 1527 | 0.191 ppbV # | 82 |
| 11) vinyl bromide | 5.80 | 106 | 271 | 0.028 ppbV | 98 |
| 12) acetone | 6.21 | 43 | 3142M4 | 0.200 ppbV | |
| 13) trichlorofluoromethane | 6.41 | 101 | 637 | 0.026 ppbV # | 74 |
| 14) isopropyl alcohol | 6.60 | 45 | 1053M3 | 0.056 ppbV | |
| 15) acrylonitrile | 6.86 | 53 | 265 | 0.035 ppbV # | 65 |
| 16) 1,1-dichloroethene | 7.30 | 61 | 462 | 0.029 ppbV # | 43 |
| 17) methylene chloride | 7.49 | 49 | 1445 | 0.105 ppbV # | 75 |
| 18) 3-chloropropene | 7.65 | 41 | 370M4 | 0.024 ppbV | |
| 19) carbon disulfide | 7.83 | 76 | 2166 | 0.075 ppbV # | 1 |
| 20) Freon 113 | 7.85 | 101 | 551 | 0.027 ppbV # | 81 |
| 21) Halothane | 8.47 | 117 | 449 | 0.027 ppbV # | 78 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 411 | 0.025 ppbV # | 63 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 480 | 0.026 ppbV # | 64 |
| 24) MTBE | 9.11 | 73 | 774 | 0.028 ppbV # | 1 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138810.D
Acq On : 2 Jan 2015 7:20 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:54:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) vinyl acetate | 9.22 | 43 | 526 | 0.019 ppbV # | 82 |
| 26) 2-butanone | 9.57 | 43 | 571M3 | 0.023 ppbV | |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 402 | 0.023 ppbV # | 54 |
| 28) Ethyl Acetate | 10.40 | 61 | 132 | 0.033 ppbV # | 32 |
| 29) chloroform | 10.39 | 83 | 691M4 | 0.029 ppbV | |
| 30) Tetrahydrofuran | 10.94 | 42 | 399 | 0.027 ppbV | 93 |
| 31) 1,2-dichloroethane | 11.27 | 62 | 388 | 0.026 ppbV # | 38 |
| 33) hexane | 10.28 | 57 | 552 | 0.026 ppbV # | 83 |
| 35) 1,1,1-trichloroethane | 11.56 | 97 | 579M4 | 0.025 ppbV | |
| 36) benzene | 12.09 | 78 | 899 | 0.028 ppbV # | 69 |
| 37) carbon tetrachloride | 12.27 | 117 | 533 | 0.023 ppbV # | 87 |
| 38) cyclohexane | 12.40 | 56 | 557 | 0.030 ppbV # | 59 |
| 39) 1,2-dichloropropane | 13.06 | 63 | 285 | 0.023 ppbV # | 16 |
| 40) bromodichloromethane | 13.28 | 83 | 620 | 0.024 ppbV # | 79 |
| 41) 1,4-dioxane | 13.41 | 88 | 173M3 | 0.022 ppbV | |
| 42) trichloroethene | 13.33 | 130 | 379 | 0.024 ppbV # | 86 |
| 43) 2,2,4-trimethylpentane | 13.36 | 57 | 1368 | 0.024 ppbV # | 47 |
| 44) heptane | 13.66 | 43 | 744 | 0.031 ppbV # | 93 |
| 45) cis-1,3-dichloropropene | 14.34 | 75 | 1484 | 0.021 ppbV # | 25 |
| 46) 4-methyl-2-pentanone | 14.41 | 43 | 531M3 | 0.016 ppbV | |
| 47) trans-1,3-dichloropropene | 14.95 | 75 | 318 | 0.018 ppbV # | 1 |
| 48) 1,1,2-trichloroethane | 15.11 | 97 | 320M3 | 0.023 ppbV | |
| 50) toluene | 15.38 | 91 | 1111 | 0.028 ppbV | 98 |
| 52) 2-hexanone | 15.63 | | 0 | N.D. | |
| 53) dibromochloromethane | 15.80 | 129 | 659 | 0.024 ppbV # | 94 |
| 54) 1,2-dibromoethane | 16.04 | 107 | 472 | 0.020 ppbV | 96 |
| 55) tetrachloroethene | 16.43 | 166 | 537 | 0.027 ppbV # | 87 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | 131 | 491 | 0.025 ppbV # | 84 |
| 57) chlorobenzene | 17.00 | 112 | 768 | 0.022 ppbV | 93 |
| 58) ethylbenzene | 17.31 | 91 | 1277 | 0.024 ppbV | 92 |
| 59) m+p-xylene | 17.44 | 91 | 1954 | 0.046 ppbV | 96 |
| 60) bromoform | 17.52 | 173 | 643 | 0.024 ppbV | 97 |
| 61) styrene | 17.74 | 104 | 669 | 0.020 ppbV # | 90 |
| 62) 1,1,2,2-tetrachloroethane | 17.81 | 83 | 739 | 0.023 ppbV | 100 |
| 63) o-xylene | 17.81 | 91 | 1128 | 0.026 ppbV | 88 |
| 65) isopropylbenzene | 18.25 | 105 | 1431 | 0.024 ppbV | 94 |
| 66) 4-ethyl toluene | 18.74 | 105 | 1504 | 0.022 ppbV # | 89 |
| 67) 1,3,5-trimethylbenzene | 18.79 | 105 | 1444 | 0.023 ppbV # | 88 |
| 68) tert-butylbenzene | 19.10 | 119 | 1465 | 0.024 ppbV | 92 |
| 69) 1,2,4-trimethylbenzene | 19.10 | 105 | 1252 | 0.024 ppbV | 97 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138810.D
Acq On : 2 Jan 2015 7:20 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:54:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.22 | 91 | 1064M3 | 0.022 | ppbV | |
| 71) 1,3-dichlorobenzene | 19.24 | 146 | 878 | 0.022 | ppbV # | 87 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 936 | 0.023 | ppbV # | 83 |
| 73) sec-butylbenzene | 19.30 | 105 | 1847 | 0.023 | ppbV | 93 |
| 74) p-isopropyltoluene | 19.41 | 119 | 1731 | 0.023 | ppbV | 94 |
| 75) 1,2-dichlorobenzene | 19.55 | 146 | 905 | 0.023 | ppbV # | 92 |
| 76) n-butylbenzene | 19.74 | 91 | 1350 | 0.021 | ppbV | 96 |
| 77) 1,2,4-trichlorobenzene | 21.03 | 180 | 752 | 0.021 | ppbV # | 89 |
| 78) naphthalene | 21.14 | 128 | 2592 | 0.030 | ppbV # | 91 |
| 79) 1,2,3-trichlorobenzene | 21.41 | 180 | 788 | 0.024 | ppbV # | 91 |
| 80) hexachlorobutadiene | 21.47 | 225 | 617 | 0.024 | ppbV # | 72 |

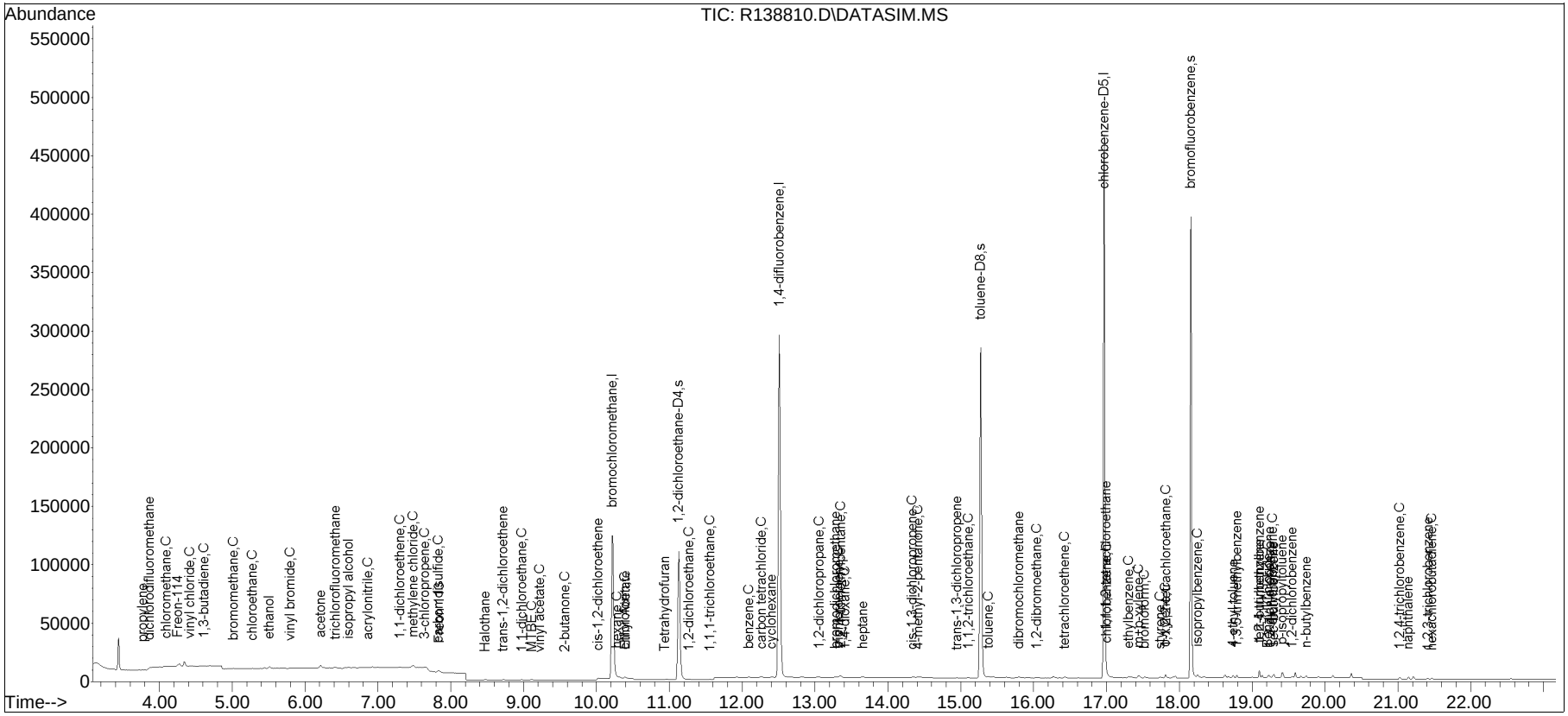
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138810.D
Acq On : 2 Jan 2015 7:20 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:54:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

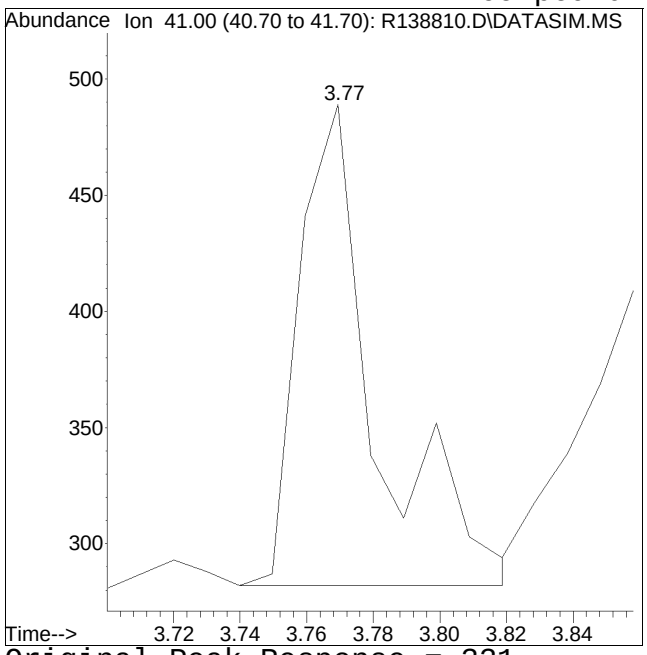
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



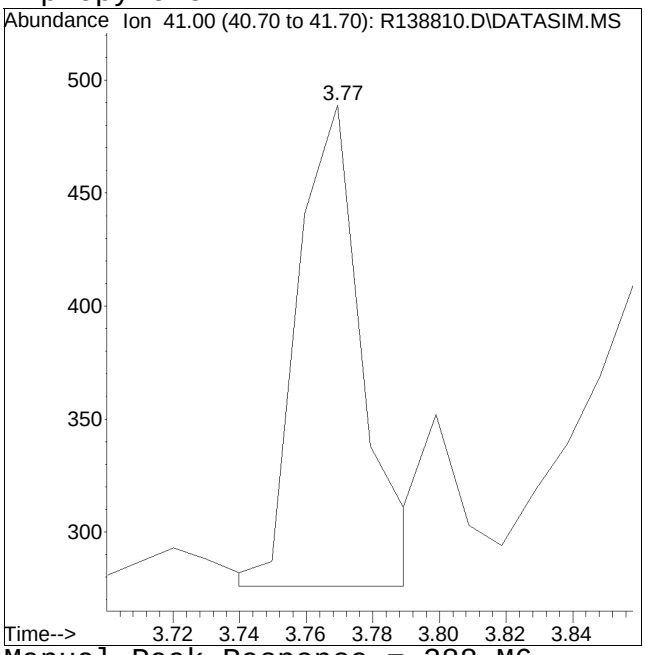
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 331



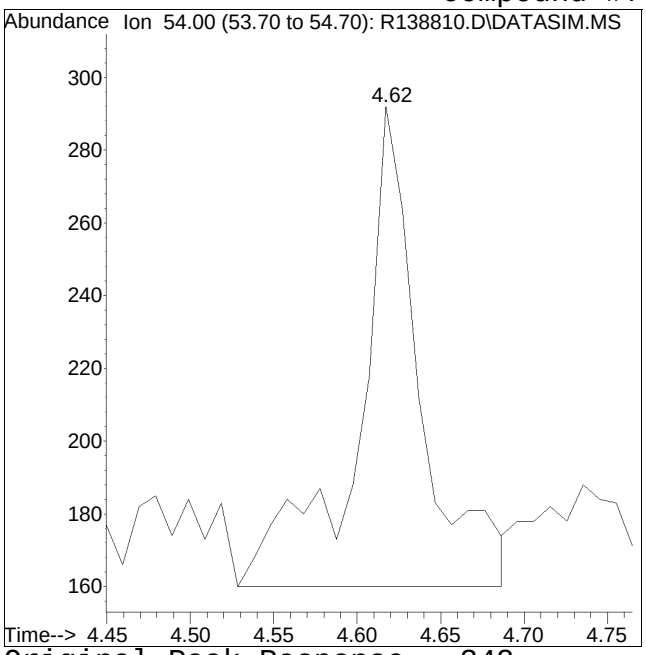

Manual Peak Response = 288 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

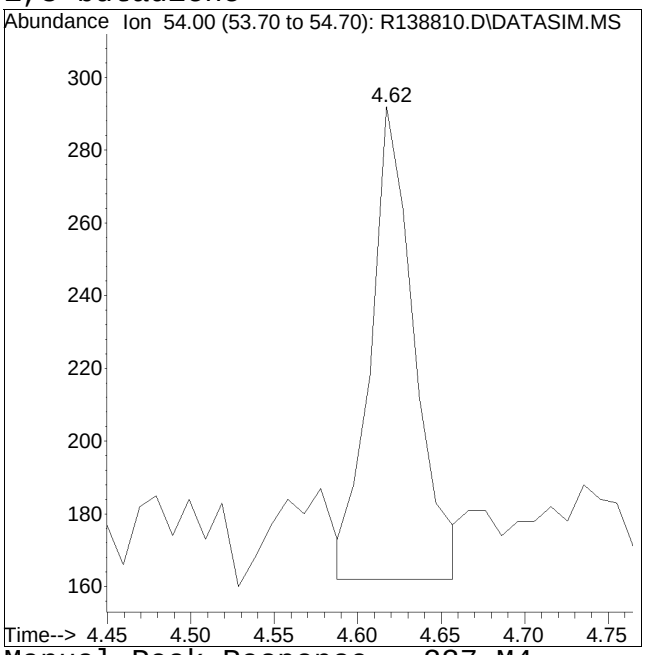
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D
Date Inj'd : 1/2/2015 7:20 pm
Sample : ITO15-SIMSTD0.02
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #7: 1,3-butadiene




Original Peak Response = 342



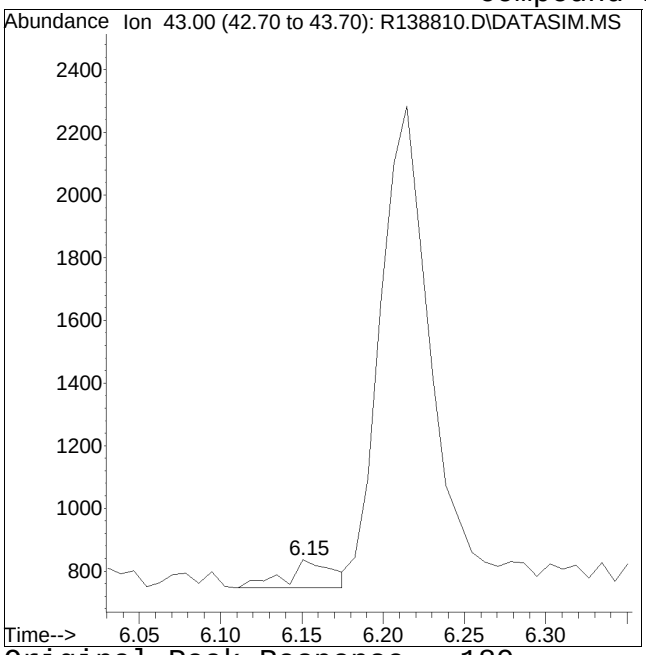

Manual Peak Response = 237 M4

M4 = Poor automated baseline construction.

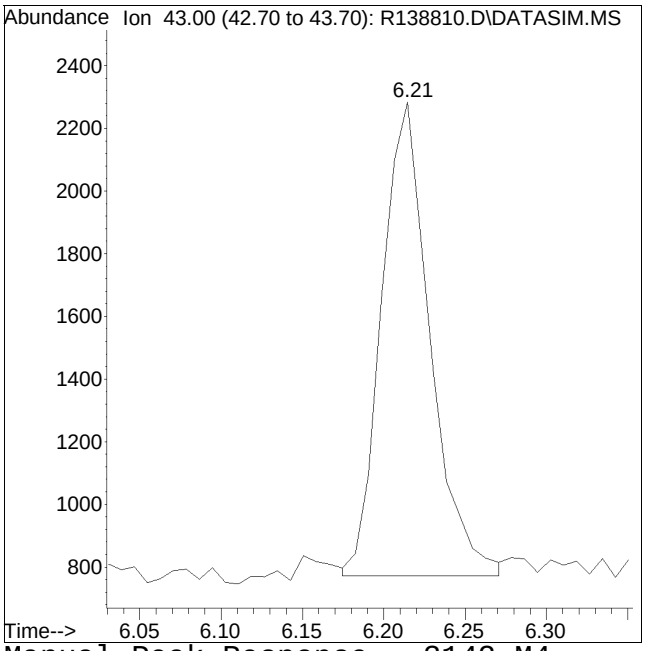
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #12: acetone




Original Peak Response = 180



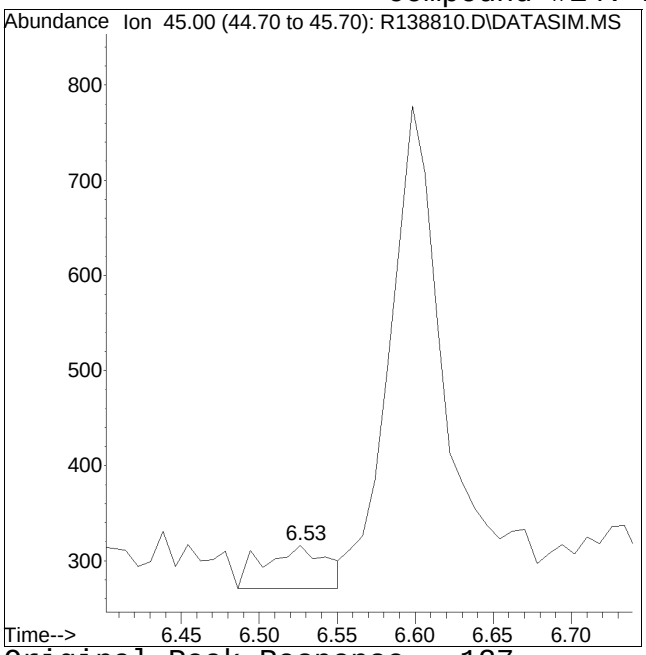

Manual Peak Response = 3142 M4

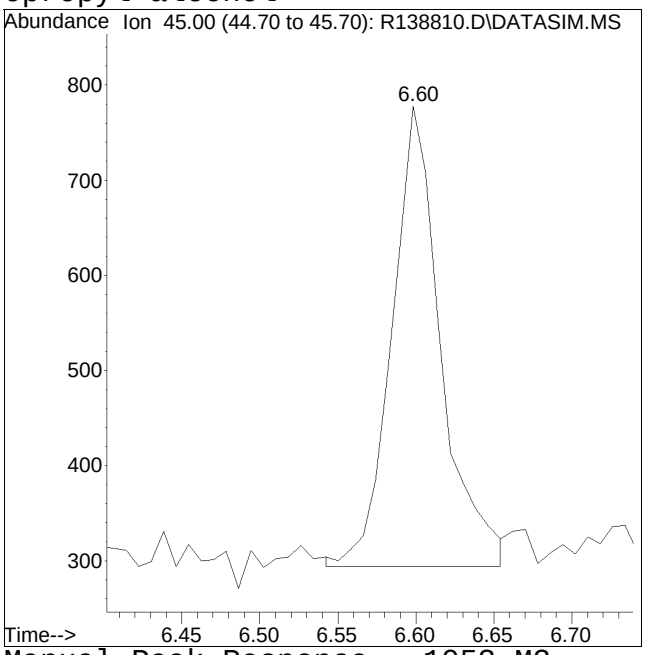
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #14: isopropyl alcohol



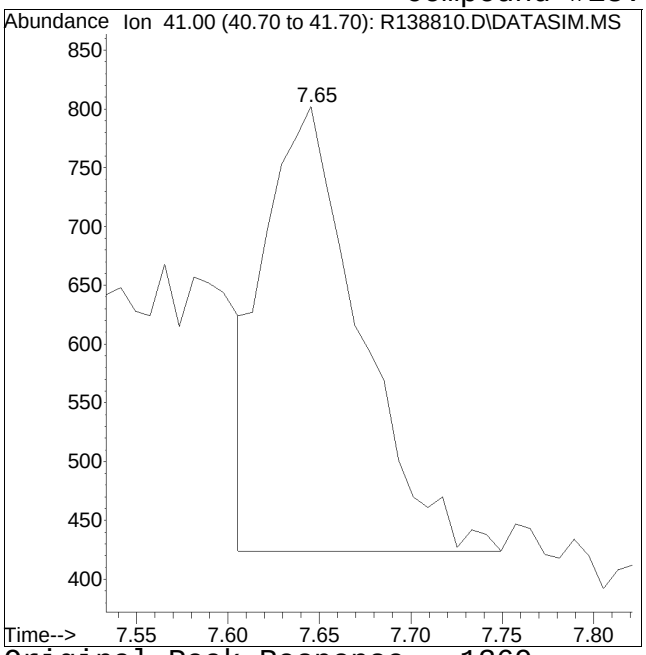

Original Peak Response = 127 Manual Peak Response = 1053 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

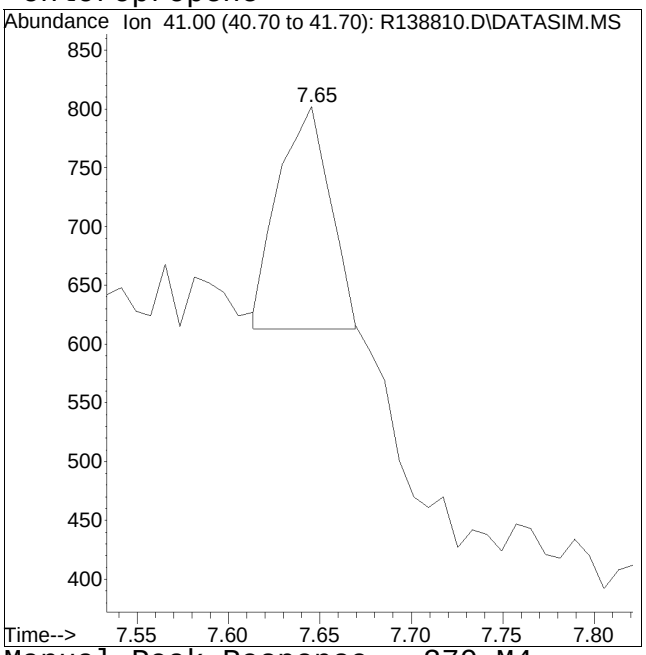
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #18: 3-chloropropene




Original Peak Response = 1369



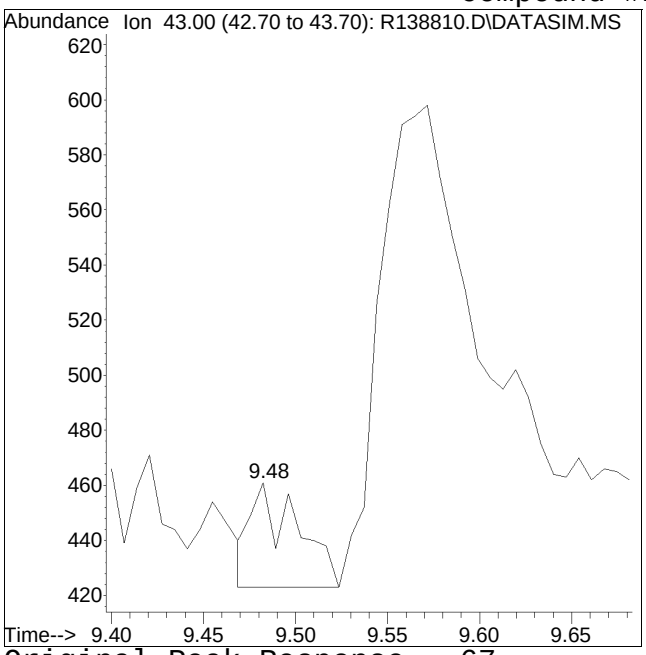

Manual Peak Response = 370 M4

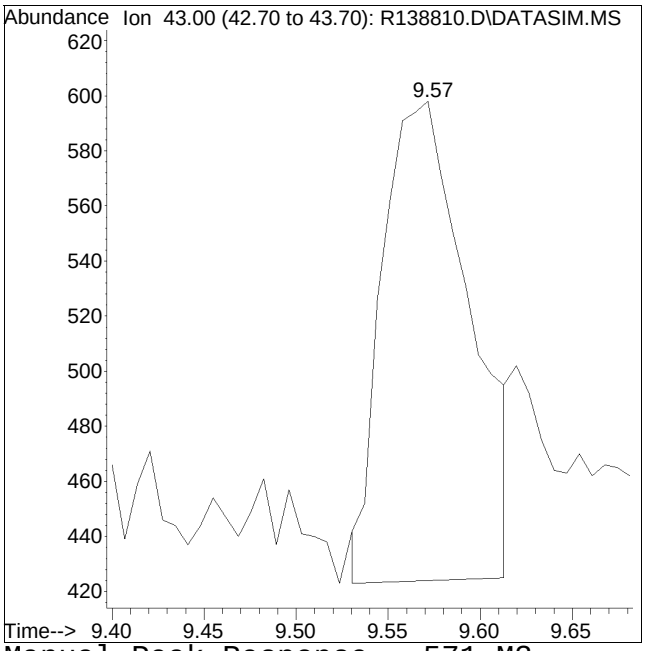
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #26: 2-butanone



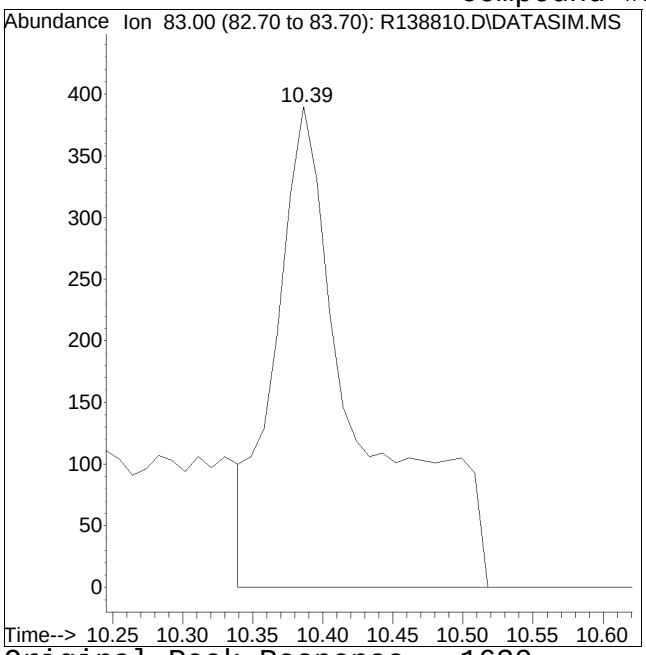

Original Peak Response = 67 Manual Peak Response = 571 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

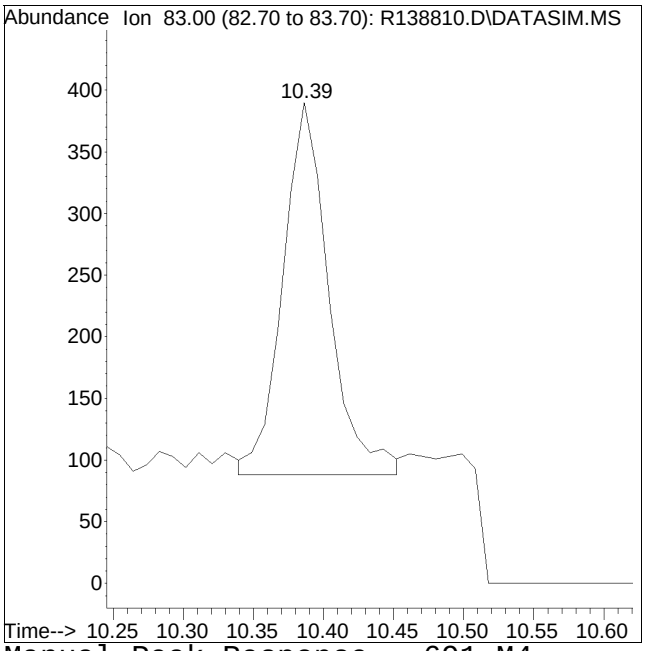
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 1630



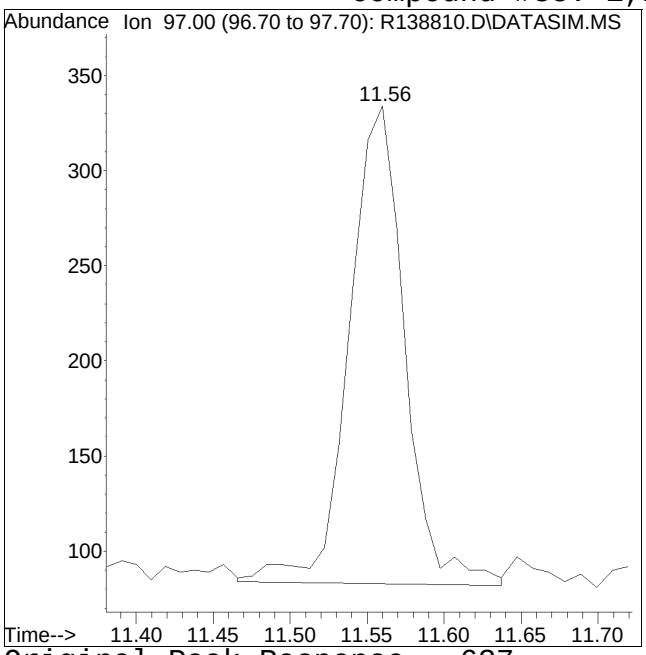

Manual Peak Response = 691 M4

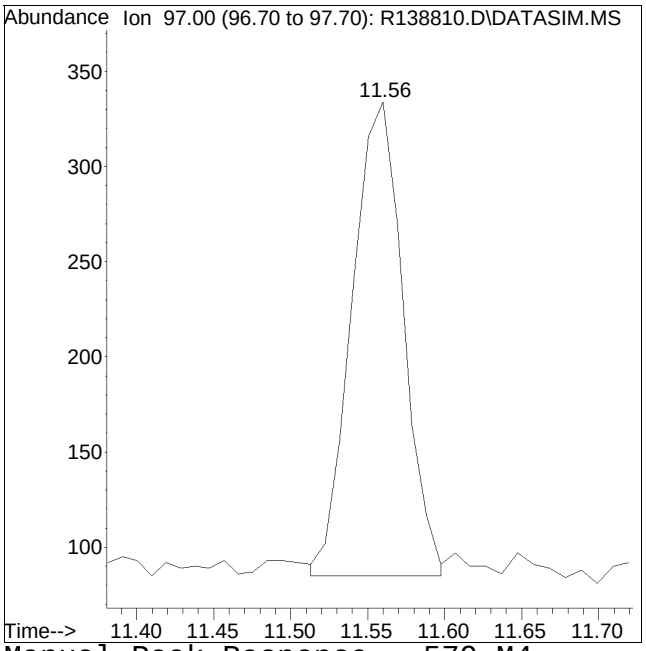
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #35: 1,1,1-trichloroethane



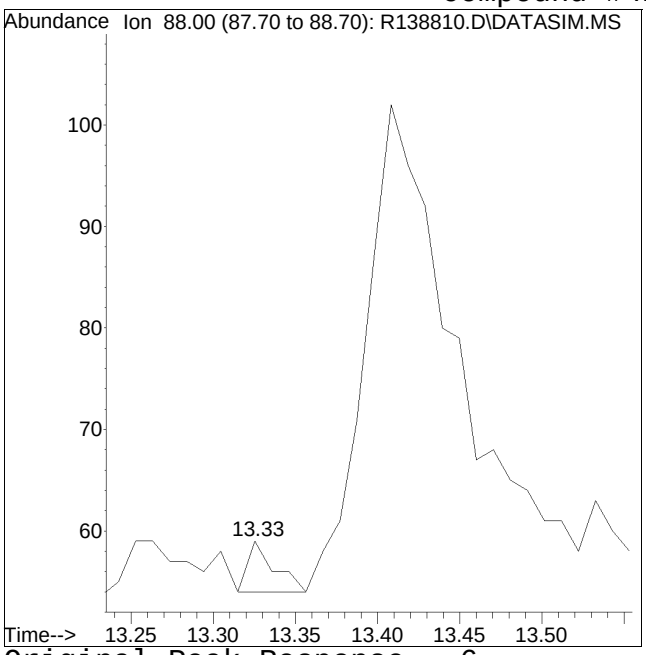



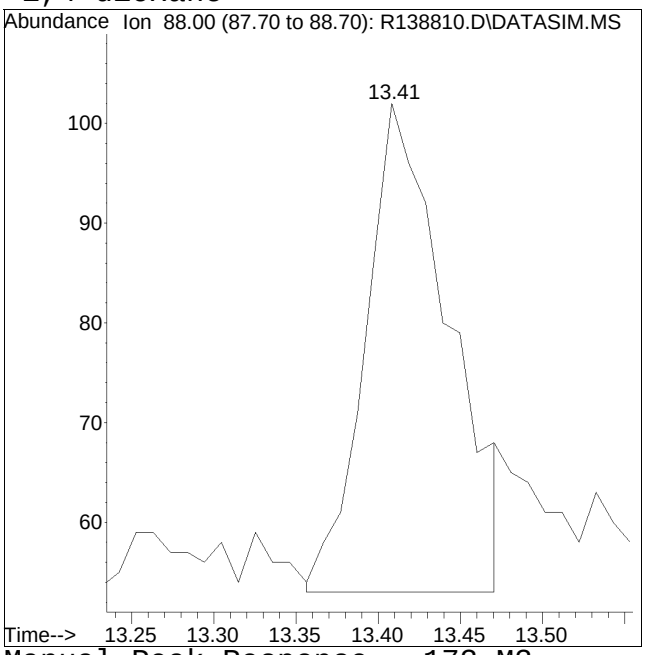

Original Peak Response = 637 Manual Peak Response = 579 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #41: 1,4-dioxane



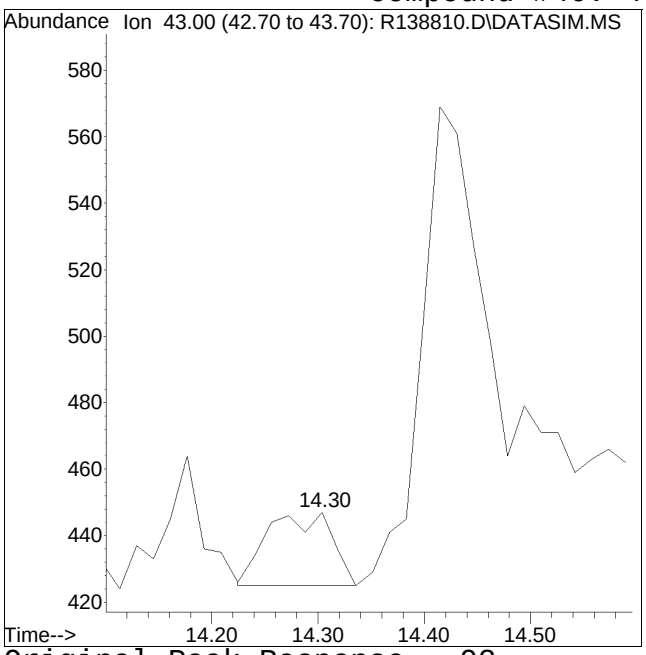



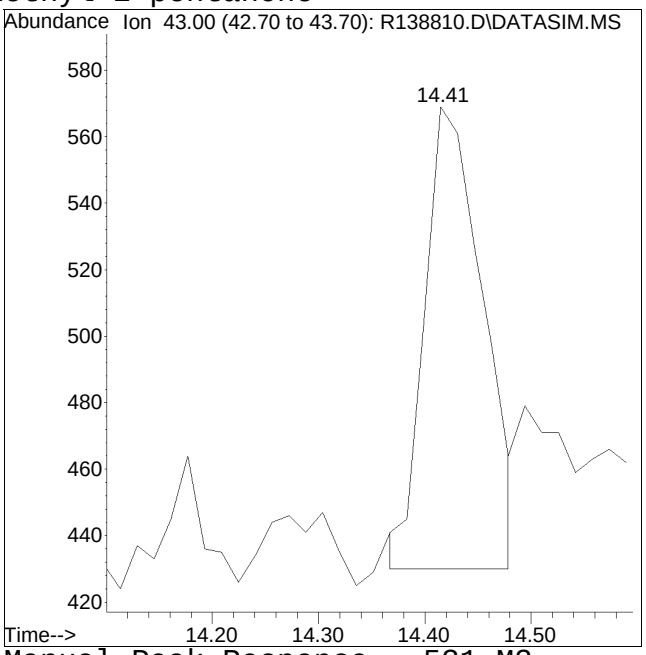

Original Peak Response = 6 Manual Peak Response = 173 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138810.D
Date Inj'd : 1/2/2015 7:20 pm
Sample : ITO15-SIMSTD0.02
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #46: 4-methyl-2-pentanone



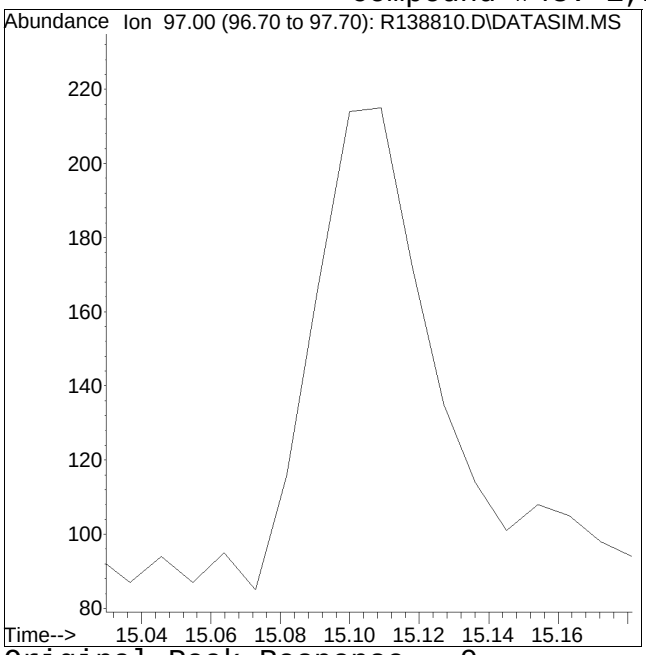

Original Peak Response = 92 Manual Peak Response = 531 M3

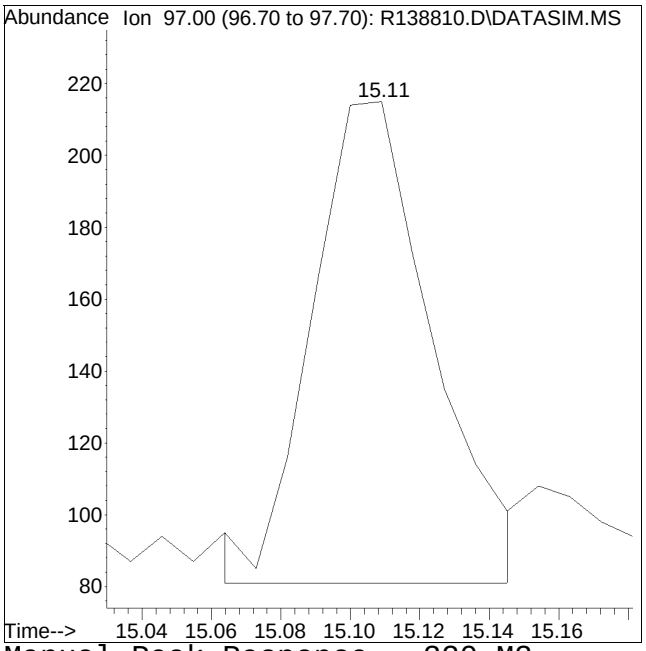
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #48: 1,1,2-trichloroethane



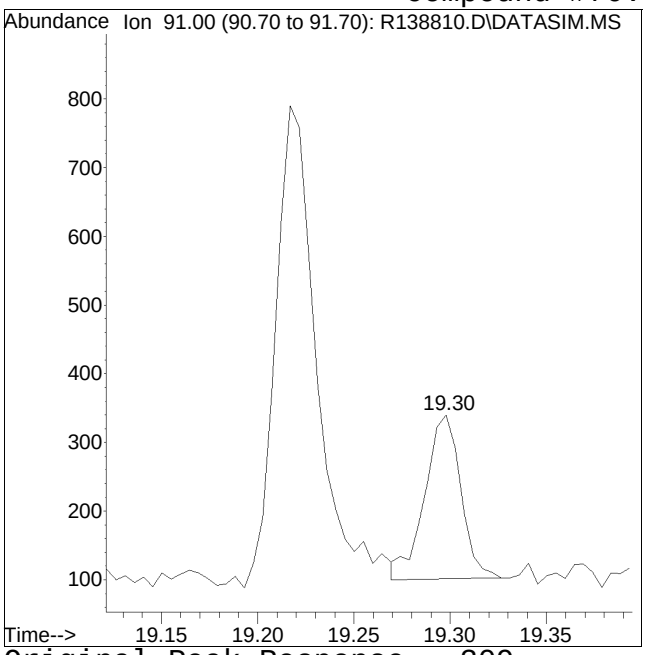

Original Peak Response = 0 Manual Peak Response = 320 M3

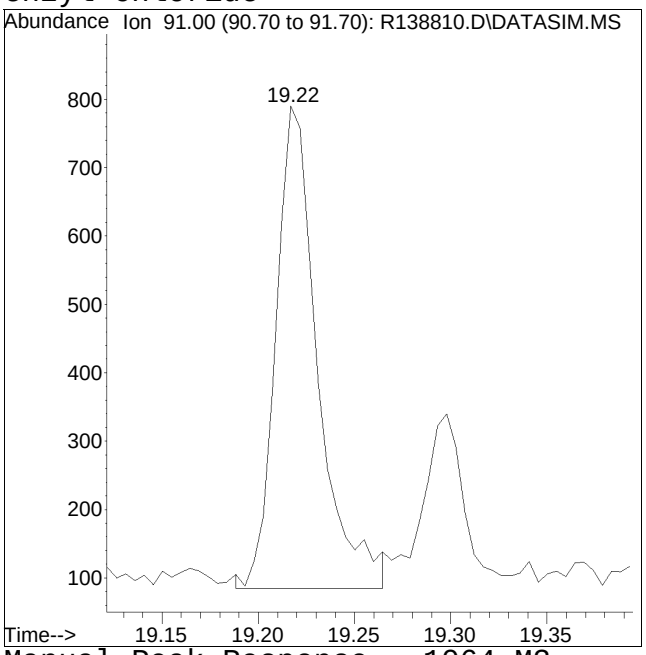
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138810.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:20 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 1/3/2015 1:21 pm

Compound #70: Benzyl Chloride




Original Peak Response = 309 Manual Peak Response = 1064 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138811.D
Acq On : 2 Jan 2015 7:52 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:43:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 150053 | 10.000 ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery | = 100.59% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 342087 | 10.000 ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery | = 103.65% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 74015 | 10.000 ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery | = 101.96% | |
| System Monitoring Compounds | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 100093 | 9.849 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 98.49% | |
| 51) toluene-D8 | 15.27 | 98 | 260905 | 9.986 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 99.86% | |
| 64) bromofluorobenzene | 18.15 | 95 | 201717 | 9.794 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 97.94% | |

| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) propylene | 3.77 | 41 | 460M6 | 0.056 ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 730 | 0.038 ppbV | 95 |
| 4) chloromethane | 4.09 | 50 | 509 | 0.057 ppbV # | 75 |
| 5) Freon-114 | 4.25 | 85 | 1131 | 0.043 ppbV | 96 |
| 6) vinyl chloride | 4.42 | 62 | 440 | 0.047 ppbV # | 47 |
| 7) 1,3-butadiene | 4.62 | 54 | 347 | 0.048 ppbV # | 1 |
| 8) bromomethane | 5.02 | 94 | 391 | 0.043 ppbV # | 78 |
| 9) chloroethane | 5.28 | 64 | 222 | 0.051 ppbV # | 31 |
| 10) ethanol | 5.50 | 31 | 2182 | 0.274 ppbV | 89 |
| 11) vinyl bromide | 5.80 | 106 | 426 | 0.045 ppbV | 98 |
| 12) acetone | 6.21 | 43 | 4459 | 0.285 ppbV # | 90 |
| 13) trichlorofluoromethane | 6.41 | 101 | 1065 | 0.043 ppbV | 89 |
| 14) isopropyl alcohol | 6.60 | 45 | 1353 | 0.072 ppbV # | 80 |
| 15) acrylonitrile | 6.86 | 53 | 402M4 | 0.054 ppbV | |
| 16) 1,1-dichloroethene | 7.29 | 61 | 749 | 0.047 ppbV # | 75 |
| 17) methylene chloride | 7.48 | 49 | 1718 | 0.126 ppbV | 96 |
| 18) 3-chloropropene | 7.64 | 41 | 830 | 0.053 ppbV # | 84 |
| 19) carbon disulfide | 7.82 | 76 | 1886 | 0.065 ppbV # | 1 |
| 20) Freon 113 | 7.85 | 101 | 869 | 0.042 ppbV # | 88 |
| 21) Halothane | 8.47 | 117 | 715 | 0.043 ppbV # | 82 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 684 | 0.041 ppbV # | 68 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 814 | 0.044 ppbV # | 74 |
| 24) MTBE | 9.10 | 73 | 1131 | 0.041 ppbV # | 1 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138811.D
Acq On : 2 Jan 2015 7:52 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:43:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) vinyl acetate | 9.23 | 43 | 896 | 0.032 ppbV # | 82 |
| 26) 2-butanone | 9.57 | 43 | 967M3 | 0.038 ppbV | |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 726 | 0.043 ppbV # | 63 |
| 28) Ethyl Acetate | 10.40 | 61 | 221 | 0.055 ppbV # | 15 |
| 29) chloroform | 10.39 | 83 | 1076M4 | 0.045 ppbV | |
| 30) Tetrahydrofuran | 10.94 | 42 | 675 | 0.047 ppbV | 95 |
| 31) 1,2-dichloroethane | 11.26 | 62 | 654 | 0.044 ppbV # | 57 |
| 33) hexane | 10.27 | 57 | 905 | 0.043 ppbV # | 92 |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 958 | 0.041 ppbV # | 75 |
| 36) benzene | 12.09 | 78 | 1486 | 0.047 ppbV # | 80 |
| 37) carbon tetrachloride | 12.26 | 117 | 905 | 0.039 ppbV # | 90 |
| 38) cyclohexane | 12.40 | 56 | 842 | 0.046 ppbV # | 72 |
| 39) 1,2-dichloropropane | 13.05 | 63 | 546 | 0.044 ppbV # | 49 |
| 40) bromodichloromethane | 13.27 | 83 | 1044 | 0.042 ppbV # | 92 |
| 41) 1,4-dioxane | 13.42 | 88 | 265 | 0.035 ppbV | 83 |
| 42) trichloroethene | 13.33 | 130 | 620 | 0.039 ppbV # | 84 |
| 43) 2,2,4-trimethylpentane | 13.35 | 57 | 2370 | 0.042 ppbV # | 63 |
| 44) heptane | 13.65 | 43 | 943 | 0.040 ppbV # | 90 |
| 45) cis-1,3-dichloropropene | 14.34 | 75 | 2404 | 0.034 ppbV # | 55 |
| 46) 4-methyl-2-pentanone | 14.41 | 43 | 906M3 | 0.028 ppbV | |
| 47) trans-1,3-dichloropropene | 14.95 | 75 | 503 | 0.029 ppbV # | 1 |
| 48) 1,1,2-trichloroethane | 15.10 | 97 | 545 | 0.039 ppbV | 97 |
| 50) toluene | 15.37 | 91 | 1684 | 0.043 ppbV | 98 |
| 52) 2-hexanone | 15.74 | 43 | 610M3 | 0.020 ppbV | |
| 53) dibromochloromethane | 15.80 | 129 | 1022 | 0.038 ppbV # | 91 |
| 54) 1,2-dibromoethane | 16.03 | 107 | 838 | 0.037 ppbV | 95 |
| 55) tetrachloroethene | 16.43 | 166 | 801 | 0.041 ppbV | 92 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | 131 | 796 | 0.042 ppbV # | 91 |
| 57) chlorobenzene | 17.00 | 112 | 1445 | 0.043 ppbV | 91 |
| 58) ethylbenzene | 17.30 | 91 | 2096 | 0.040 ppbV | 98 |
| 59) m+p-xylene | 17.43 | 91 | 3126 | 0.076 ppbV | 88 |
| 60) bromoform | 17.52 | 173 | 990 | 0.038 ppbV | 94 |
| 61) styrene | 17.73 | 104 | 1108 | 0.034 ppbV | 96 |
| 62) 1,1,2,2-tetrachloroethane | 17.81 | 83 | 1245 | 0.040 ppbV | 93 |
| 63) o-xylene | 17.80 | 91 | 1746 | 0.041 ppbV | 98 |
| 65) isopropylbenzene | 18.25 | 105 | 2336 | 0.040 ppbV | 100 |
| 66) 4-ethyl toluene | 18.73 | 105 | 2448 | 0.037 ppbV # | 92 |
| 67) 1,3,5-trimethylbenzene | 18.79 | 105 | 2427 | 0.040 ppbV # | 97 |
| 68) tert-butylbenzene | 19.10 | 119 | 2296 | 0.039 ppbV | 99 |
| 69) 1,2,4-trimethylbenzene | 19.10 | 105 | 2003 | 0.039 ppbV | 97 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138811.D
Acq On : 2 Jan 2015 7:52 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:43:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 1485 | 0.032 | ppbV | 82 |
| 71) 1,3-dichlorobenzene | 19.23 | 146 | 1426 | 0.036 | ppbV # | 88 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 1441 | 0.036 | ppbV # | 79 |
| 73) sec-butylbenzene | 19.30 | 105 | 2849 | 0.037 | ppbV | 98 |
| 74) p-isopropyltoluene | 19.41 | 119 | 2735 | 0.037 | ppbV | 97 |
| 75) 1,2-dichlorobenzene | 19.55 | 146 | 1420 | 0.037 | ppbV | 97 |
| 76) n-butylbenzene | 19.73 | 91 | 2296 | 0.036 | ppbV | 96 |
| 77) 1,2,4-trichlorobenzene | 21.02 | 180 | 1100 | 0.032 | ppbV | 96 |
| 78) naphthalene | 21.14 | 128 | 3122 | 0.037 | ppbV # | 93 |
| 79) 1,2,3-trichlorobenzene | 21.40 | 180 | 1070 | 0.033 | ppbV # | 91 |
| 80) hexachlorobutadiene | 21.46 | 225 | 917 | 0.037 | ppbV # | 83 |

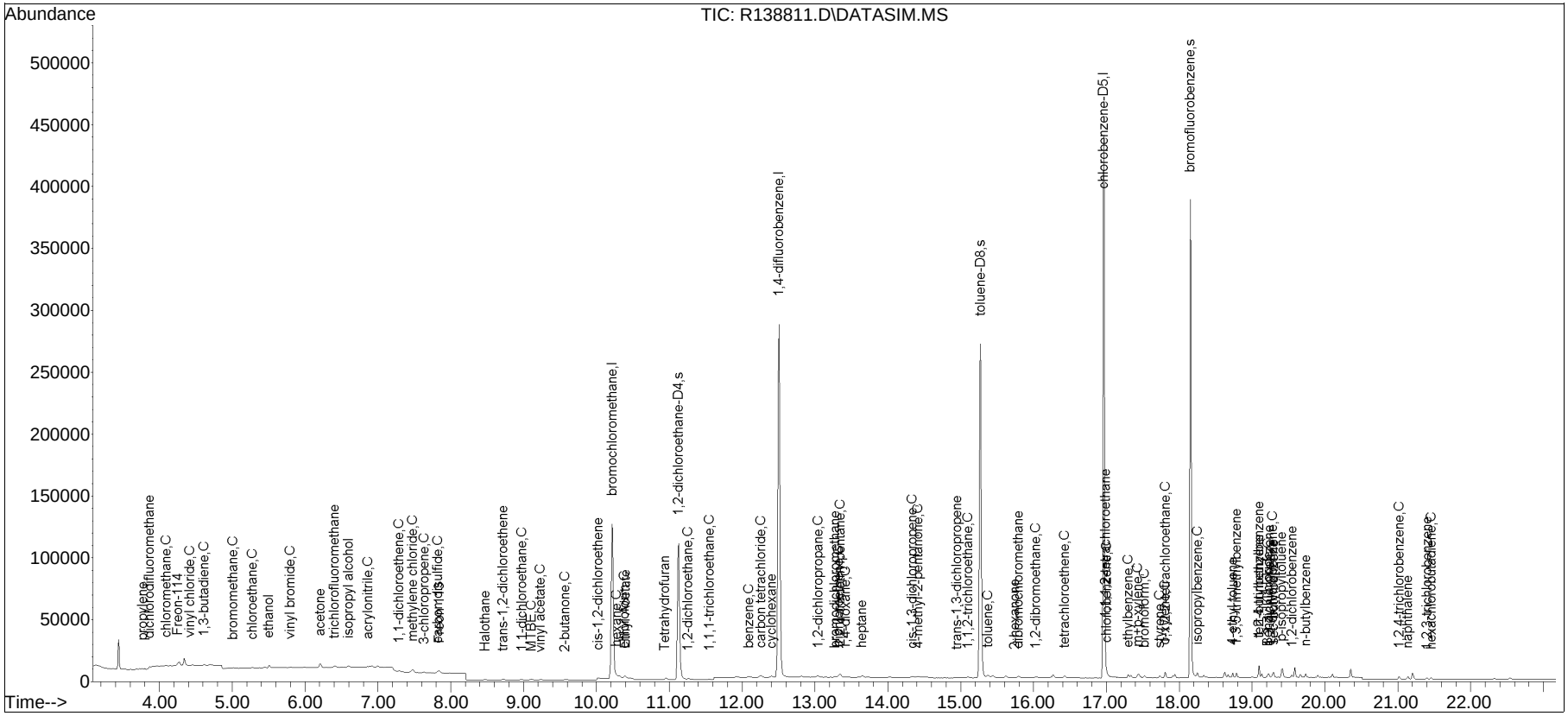
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138811.D
Acq On : 2 Jan 2015 7:52 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:43:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

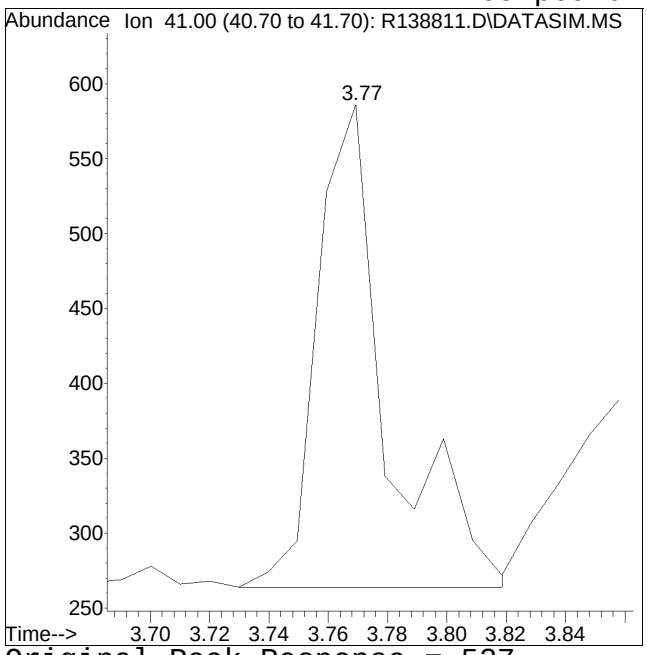
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



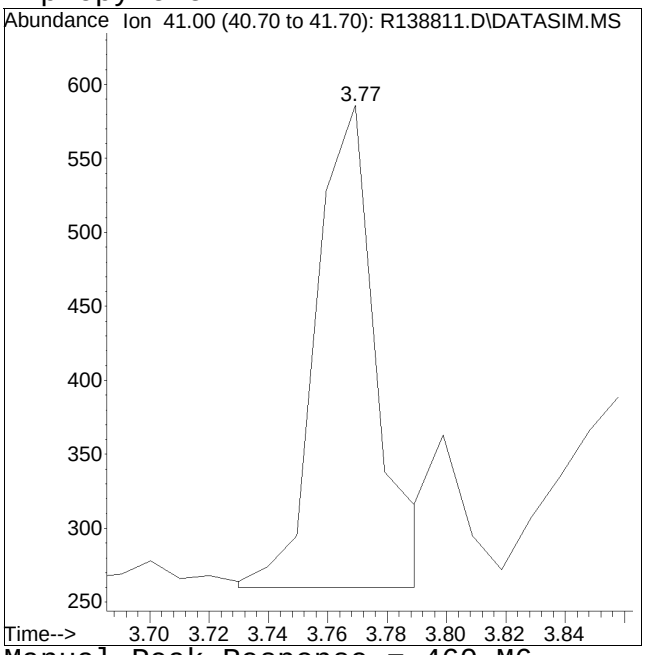
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138811.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:52 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 527



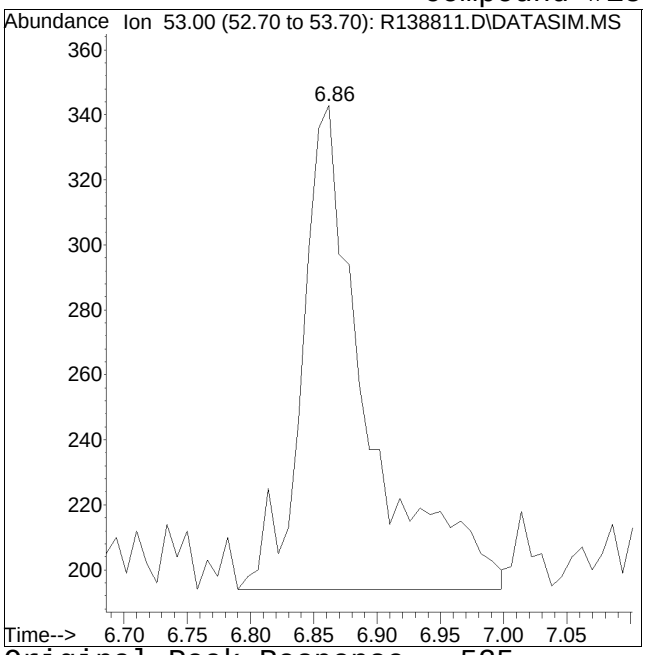

Manual Peak Response = 460 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

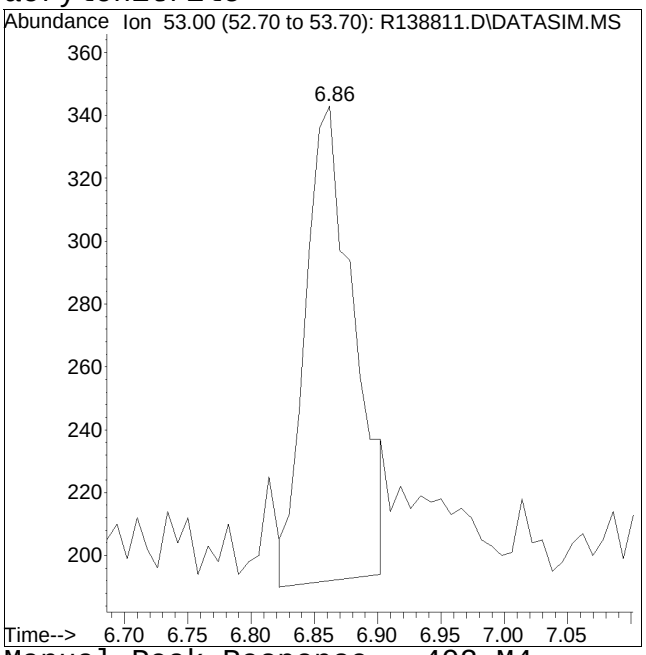
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138811.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:52 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 1/3/2015 1:21 pm

Compound #15: acrylonitrile




Original Peak Response = 525



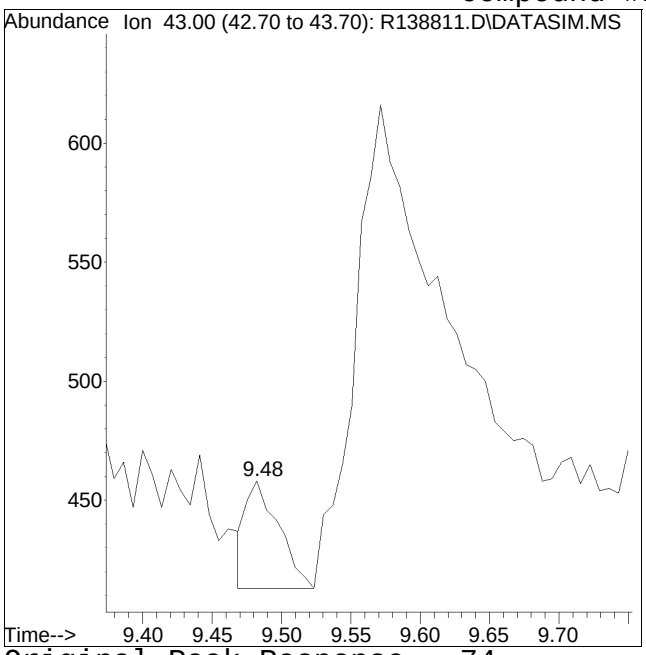

Manual Peak Response = 402 M4

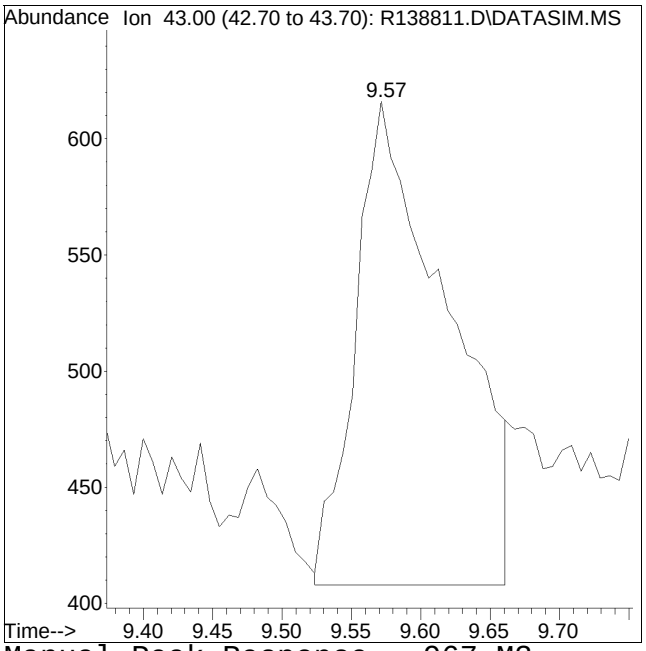
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138811.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:52 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 1/3/2015 1:21 pm

Compound #26: 2-butanone



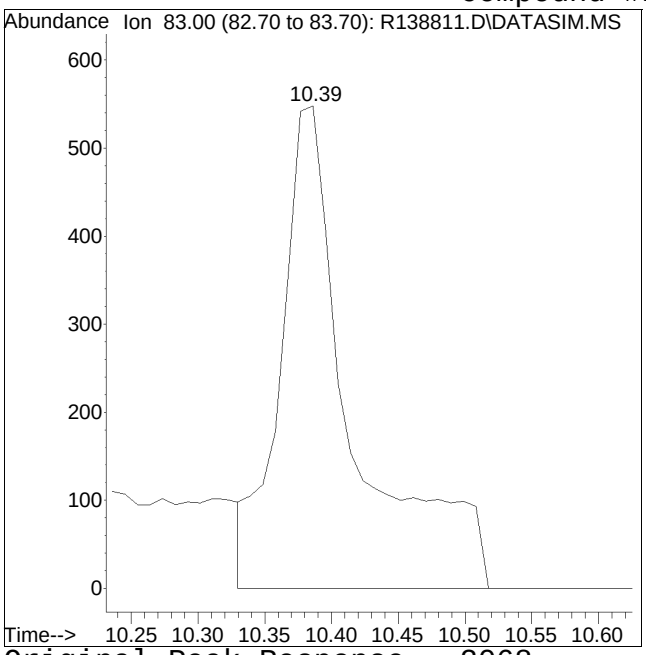

Original Peak Response = 74 Manual Peak Response = 967 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

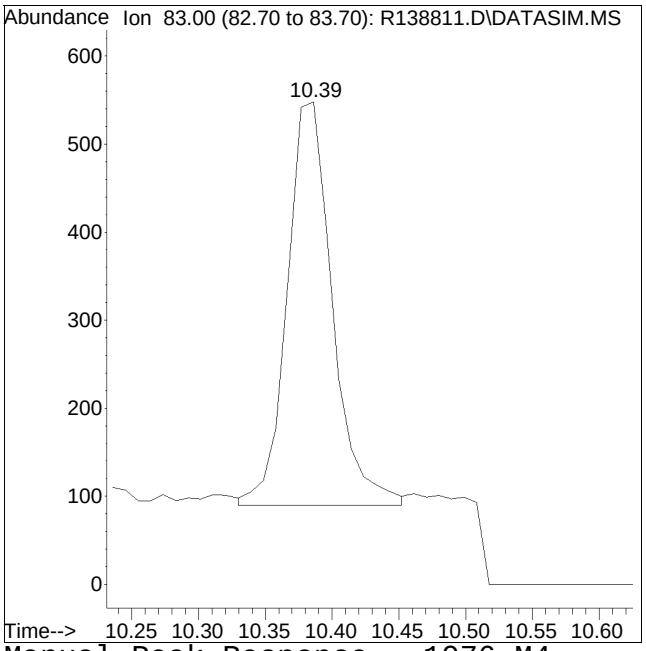
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138811.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:52 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 2068



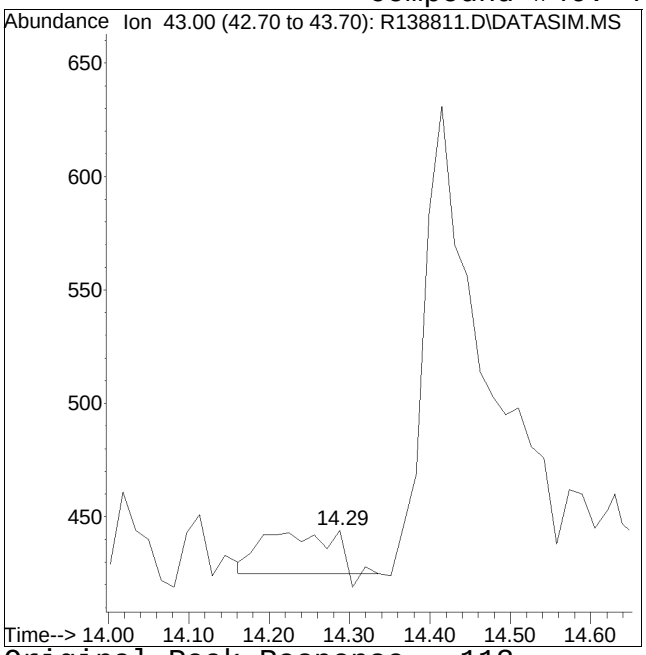

Manual Peak Response = 1076 M4

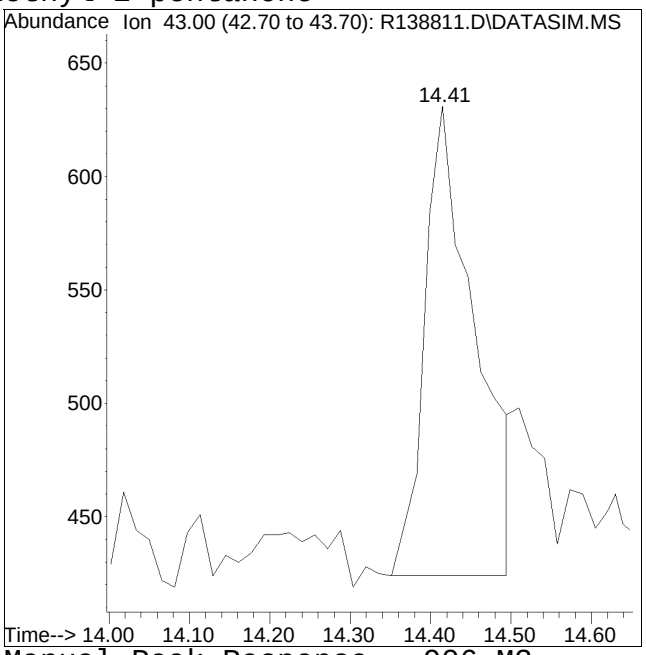
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138811.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:52 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 1/3/2015 1:21 pm

Compound #46: 4-methyl-2-pentanone



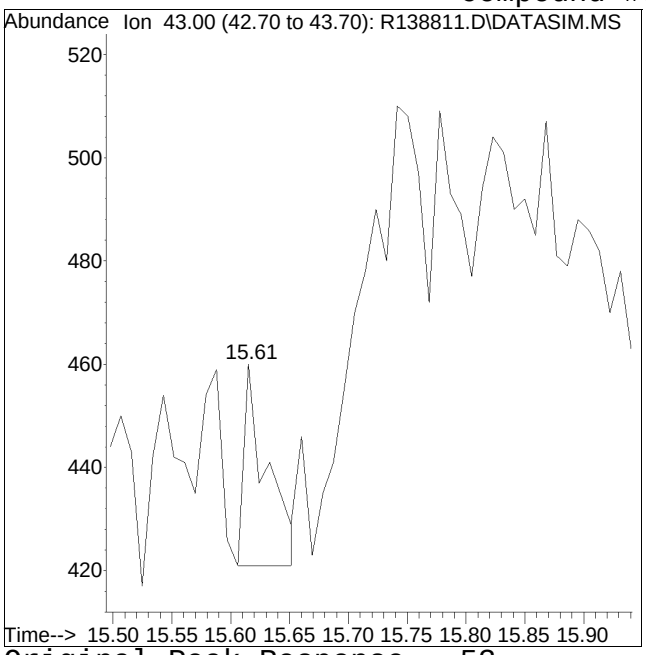

Original Peak Response = 113 Manual Peak Response = 906 M3

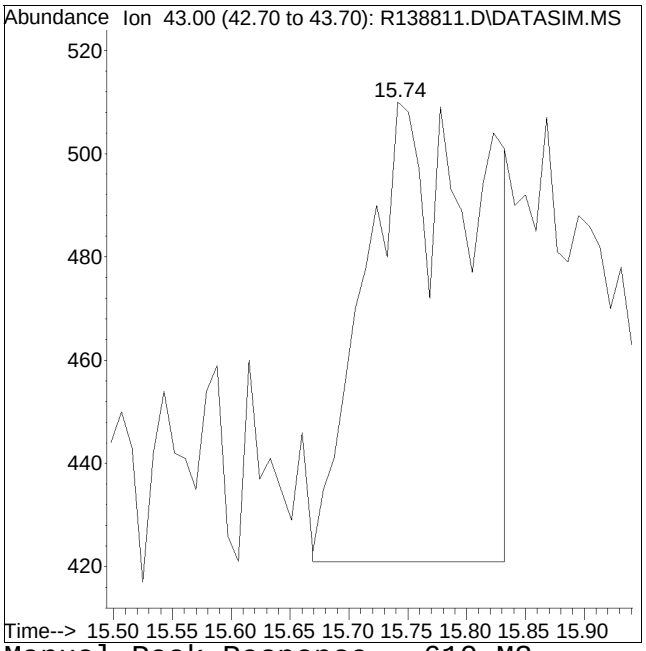
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138811.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 7:52 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 1/3/2015 1:21 pm

Compound #52: 2-hexanone




Original Peak Response = 53 Manual Peak Response = 610 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138812.D
Acq On : 2 Jan 2015 8:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:45:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 148662 | 10.000 | ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery = 99.66% | | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 343632 | 10.000 | ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery = 104.11% | | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 74460 | 10.000 | ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery = 102.58% | | | |
| System Monitoring Compounds | | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 100056 | 9.801 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.01% | | | |
| 51) toluene-D8 | 15.27 | 98 | 252877 | 9.621 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.21% | | | |
| 64) bromofluorobenzene | 18.15 | 95 | 200291 | 9.667 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.67% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) propylene | 3.77 | 41 | 916M6 | 0.112 | ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 1640 | 0.086 | ppbV | 98 |
| 4) chloromethane | 4.09 | 50 | 972M3 | 0.109 | ppbV | |
| 5) Freon-114 | 4.25 | 85 | 2668 | 0.103 | ppbV | 98 |
| 6) vinyl chloride | 4.42 | 62 | 1039 | 0.111 | ppbV # | 77 |
| 7) 1,3-butadiene | 4.62 | 54 | 780 | 0.108 | ppbV # | 41 |
| 8) bromomethane | 5.02 | 94 | 971 | 0.108 | ppbV | 96 |
| 9) chloroethane | 5.28 | 64 | 505 | 0.117 | ppbV # | 55 |
| 10) ethanol | 5.50 | 31 | 4363 | 0.552 | ppbV | 92 |
| 11) vinyl bromide | 5.80 | 106 | 995 | 0.105 | ppbV | 100 |
| 12) acetone | 6.21 | 43 | 9142 | 0.591 | ppbV # | 98 |
| 13) trichlorofluoromethane | 6.41 | 101 | 2471 | 0.102 | ppbV | 96 |
| 14) isopropyl alcohol | 6.59 | 45 | 2503 | 0.134 | ppbV # | 90 |
| 15) acrylonitrile | 6.85 | 53 | 996 | 0.135 | ppbV # | 83 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 1712 | 0.108 | ppbV # | 89 |
| 17) methylene chloride | 7.48 | 49 | 2548 | 0.188 | ppbV | 96 |
| 18) 3-chloropropene | 7.64 | 41 | 1668 | 0.108 | ppbV | 91 |
| 19) carbon disulfide | 7.82 | 76 | 3550 | 0.124 | ppbV # | 1 |
| 20) Freon 113 | 7.85 | 101 | 2066 | 0.101 | ppbV | 96 |
| 21) Halothane | 8.47 | 117 | 1664 | 0.101 | ppbV # | 90 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 1609 | 0.098 | ppbV # | 83 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 1908 | 0.104 | ppbV # | 84 |
| 24) MTBE | 9.10 | 73 | 2695 | 0.098 | ppbV # | 56 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138812.D
Acq On : 2 Jan 2015 8:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:45:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) vinyl acetate | 9.22 | 43 | 1908 | 0.069 ppbV # | 89 |
| 26) 2-butanone | 9.56 | 43 | 1747 | 0.070 ppbV # | 89 |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 1652 | 0.098 ppbV # | 80 |
| 28) Ethyl Acetate | 10.40 | 61 | 621 | 0.156 ppbV # | 1 |
| 29) chloroform | 10.39 | 83 | 2530M4 | 0.106 ppbV | |
| 30) Tetrahydrofuran | 10.93 | 42 | 1470 | 0.102 ppbV | 95 |
| 31) 1,2-dichloroethane | 11.26 | 62 | 1482 | 0.101 ppbV # | 80 |
| 33) hexane | 10.27 | 57 | 2025 | 0.096 ppbV # | 67 |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 2187 | 0.094 ppbV # | 89 |
| 36) benzene | 12.09 | 78 | 3212 | 0.101 ppbV | 93 |
| 37) carbon tetrachloride | 12.27 | 117 | 2115 | 0.091 ppbV | 98 |
| 38) cyclohexane | 12.40 | 56 | 1832 | 0.100 ppbV # | 85 |
| 39) 1,2-dichloropropane | 13.05 | 63 | 1196 | 0.097 ppbV # | 74 |
| 40) bromodichloromethane | 13.27 | 83 | 2347 | 0.093 ppbV # | 96 |
| 41) 1,4-dioxane | 13.40 | 88 | 632 | 0.082 ppbV | 93 |
| 42) trichloroethene | 13.33 | 130 | 1518 | 0.096 ppbV | 97 |
| 43) 2,2,4-trimethylpentane | 13.35 | 57 | 5507 | 0.097 ppbV # | 85 |
| 44) heptane | 13.65 | 43 | 2399 | 0.101 ppbV | 99 |
| 45) cis-1,3-dichloropropene | 14.34 | 75 | 5688 | 0.081 ppbV # | 81 |
| 46) 4-methyl-2-pentanone | 14.40 | 43 | 2901M3 | 0.088 ppbV | |
| 47) trans-1,3-dichloropropene | 14.94 | 75 | 1236 | 0.070 ppbV # | 29 |
| 48) 1,1,2-trichloroethane | 15.10 | 97 | 1319 | 0.095 ppbV | 90 |
| 50) toluene | 15.37 | 91 | 3863 | 0.098 ppbV | 99 |
| 52) 2-hexanone | 15.70 | 43 | 1611M3 | 0.052 ppbV | |
| 53) dibromochloromethane | 15.80 | 129 | 2527 | 0.094 ppbV | 97 |
| 54) 1,2-dibromoethane | 16.03 | 107 | 2006 | 0.088 ppbV | 99 |
| 55) tetrachloroethene | 16.43 | 166 | 1906 | 0.098 ppbV | 98 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | 131 | 1819 | 0.096 ppbV | 97 |
| 57) chlorobenzene | 17.00 | 112 | 3263 | 0.096 ppbV | 96 |
| 58) ethylbenzene | 17.30 | 91 | 4796 | 0.091 ppbV | 99 |
| 59) m+p-xylene | 17.45 | 91 | 7550 | 0.183 ppbV | 94 |
| 60) bromoform | 17.52 | 173 | 2315 | 0.089 ppbV | 95 |
| 61) styrene | 17.73 | 104 | 2739 | 0.084 ppbV | 98 |
| 62) 1,1,2,2-tetrachloroethane | 17.81 | 83 | 2867 | 0.092 ppbV | 99 |
| 63) o-xylene | 17.81 | 91 | 3946 | 0.093 ppbV | 100 |
| 65) isopropylbenzene | 18.25 | 105 | 5362 | 0.091 ppbV | 98 |
| 66) 4-ethyl toluene | 18.73 | 105 | 5466 | 0.083 ppbV # | 97 |
| 67) 1,3,5-trimethylbenzene | 18.79 | 105 | 5255 | 0.087 ppbV | 98 |
| 68) tert-butylbenzene | 19.09 | 119 | 5515 | 0.094 ppbV | 99 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 4664 | 0.090 ppbV | 95 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138812.D
Acq On : 2 Jan 2015 8:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:45:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 3538 | 0.075 | ppbV | 93 |
| 71) 1,3-dichlorobenzene | 19.23 | 146 | 3424 | 0.087 | ppbV | 97 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 3448M3 | 0.086 | ppbV | |
| 73) sec-butylbenzene | 19.29 | 105 | 6910 | 0.089 | ppbV | 98 |
| 74) p-isopropyltoluene | 19.41 | 119 | 6477 | 0.088 | ppbV | 96 |
| 75) 1,2-dichlorobenzene | 19.55 | 146 | 3361 | 0.088 | ppbV | 98 |
| 76) n-butylbenzene | 19.74 | 91 | 5315 | 0.083 | ppbV | 96 |
| 77) 1,2,4-trichlorobenzene | 21.02 | 180 | 2630 | 0.075 | ppbV | 98 |
| 78) naphthalene | 21.13 | 128 | 6462 | 0.076 | ppbV | 97 |
| 79) 1,2,3-trichlorobenzene | 21.40 | 180 | 2487 | 0.076 | ppbV | 97 |
| 80) hexachlorobutadiene | 21.46 | 225 | 2160 | 0.086 | ppbV # | 81 |

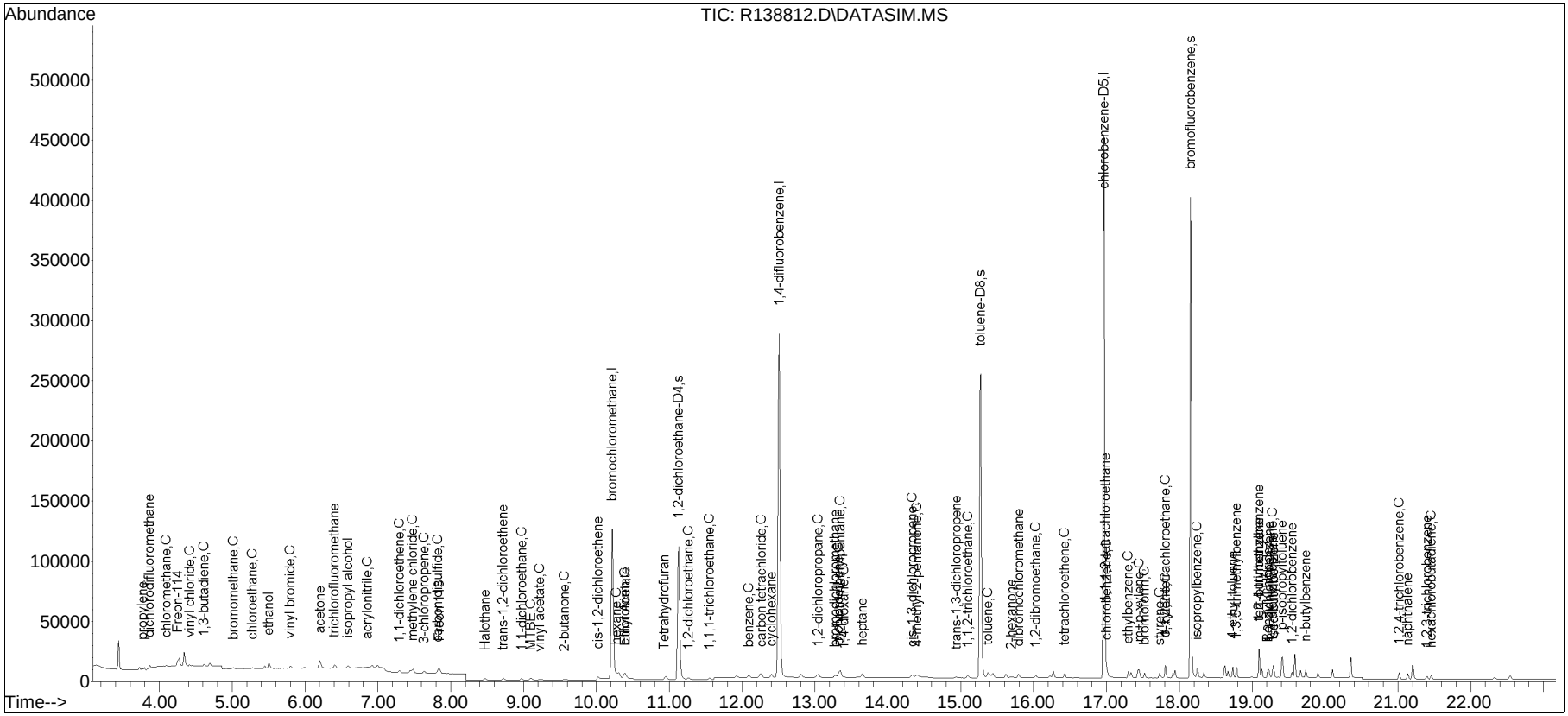
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138812.D
Acq On : 2 Jan 2015 8:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG753109
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:45:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

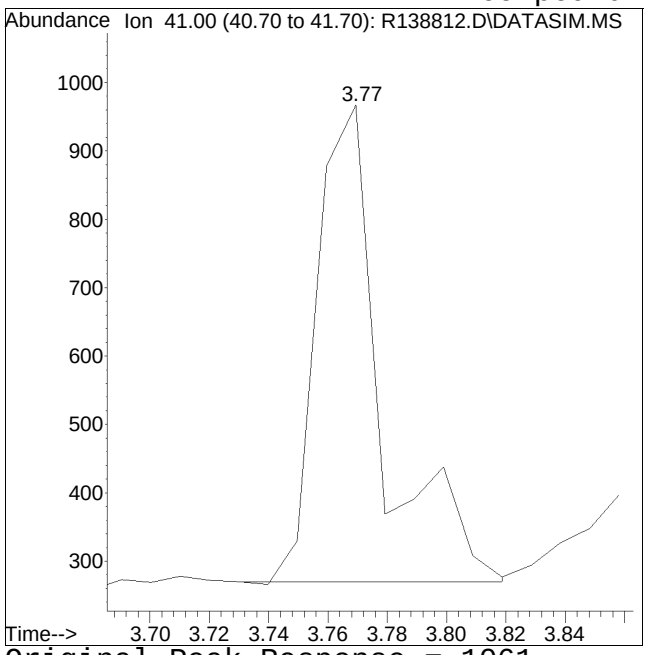
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



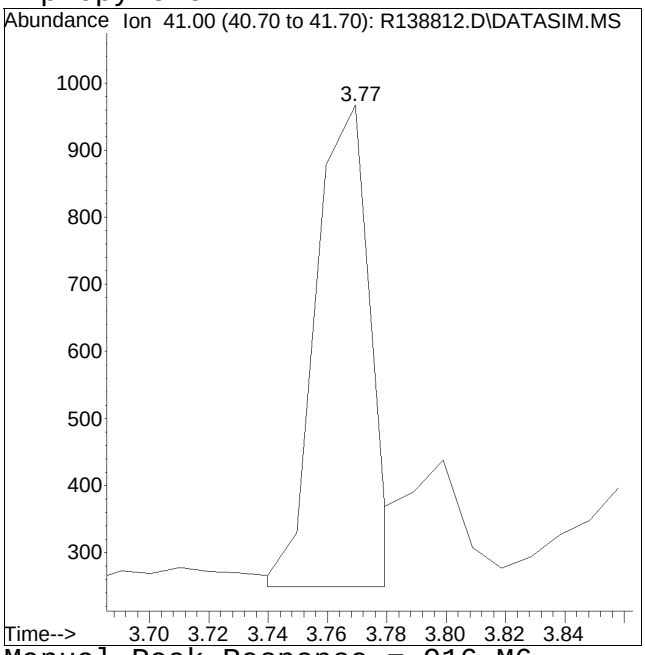
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138812.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:25 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.1 Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 1061



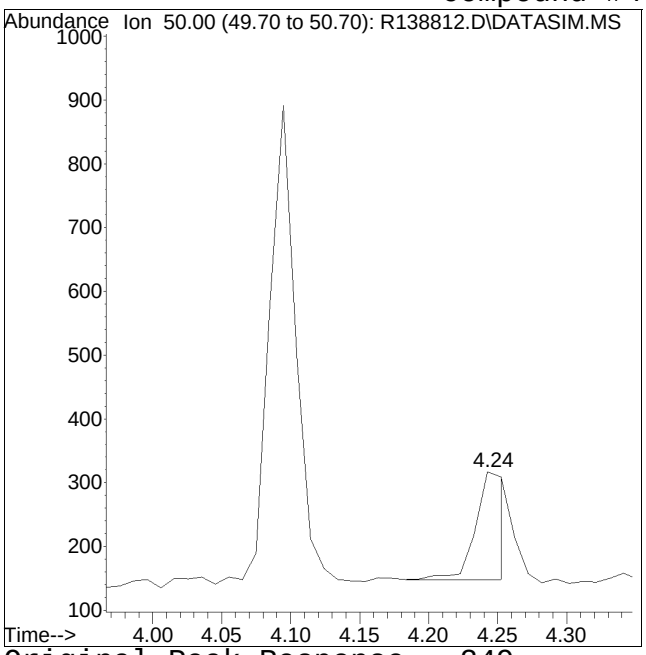

Manual Peak Response = 916 M6

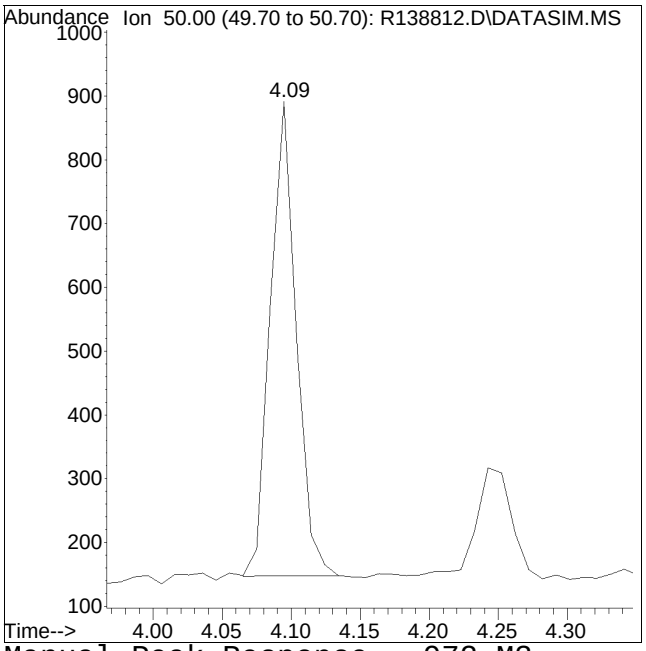
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138812.D
Date Inj'd : 1/2/2015 8:25 pm
Sample : ITO15-SIMSTD0.1
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #4: chloromethane



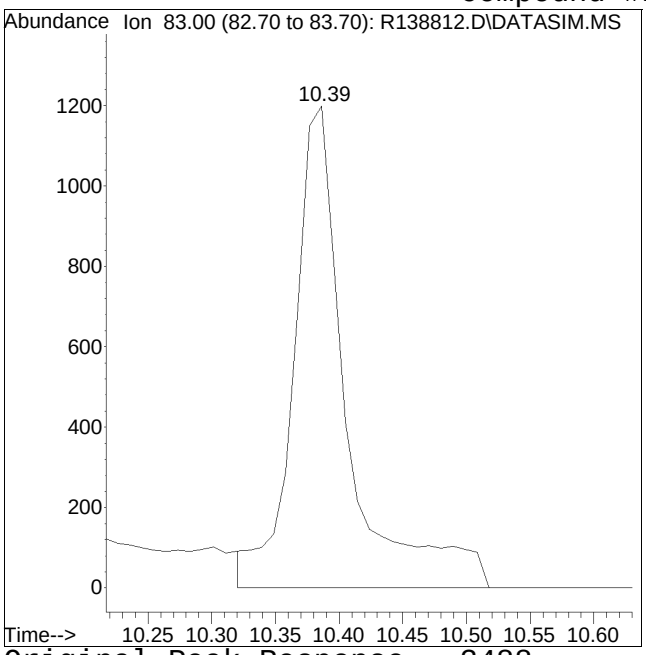

Original Peak Response = 249 Manual Peak Response = 972 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

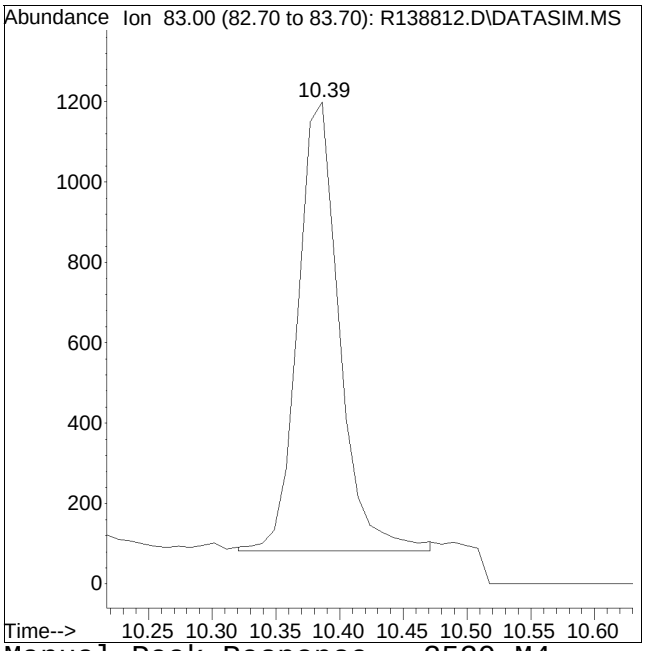
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138812.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:25 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.1 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 3488



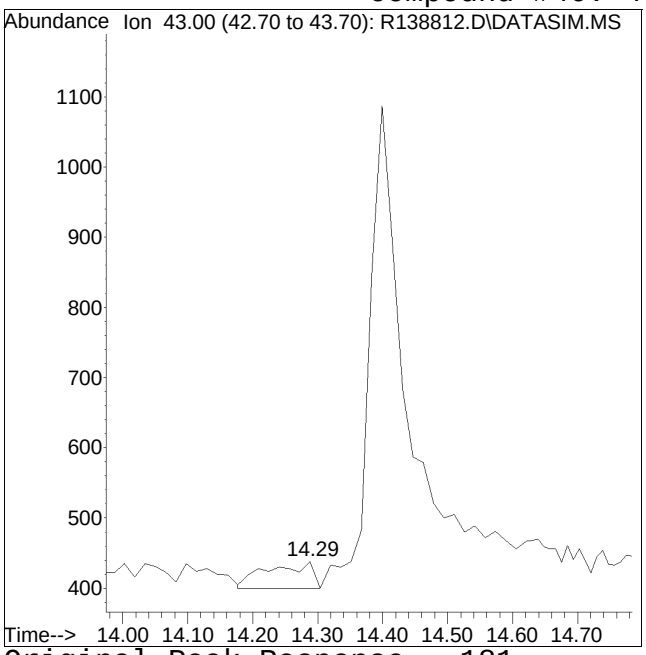

Manual Peak Response = 2530 M4

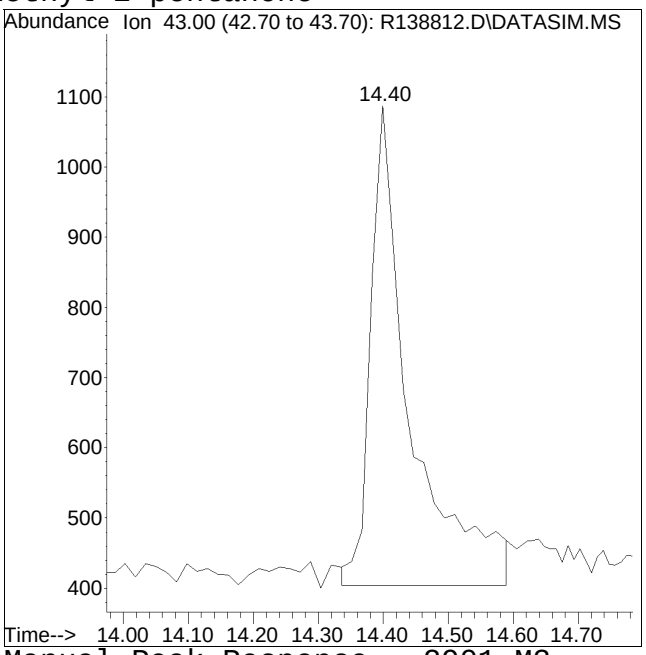
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138812.D
Date Inj'd : 1/2/2015 8:25 pm
Sample : ITO15-SIMSTD0.1
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #46: 4-methyl-2-pentanone



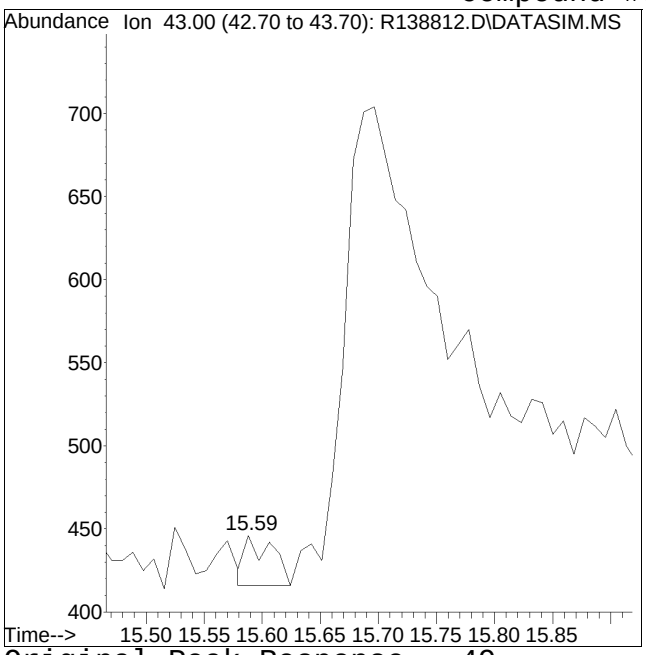

Original Peak Response = 181 Manual Peak Response = 2901 M3

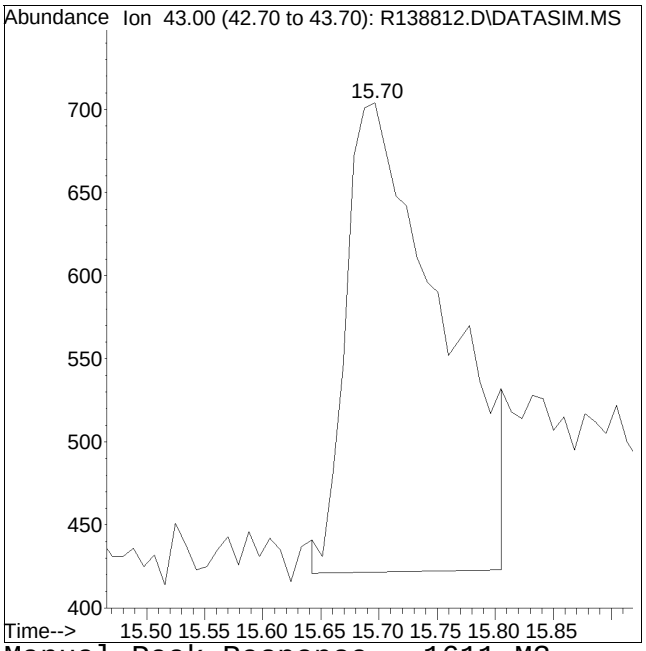
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138812.D
Date Inj'd : 1/2/2015 8:25 pm
Sample : ITO15-SIMSTD0.1
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #52: 2-hexanone



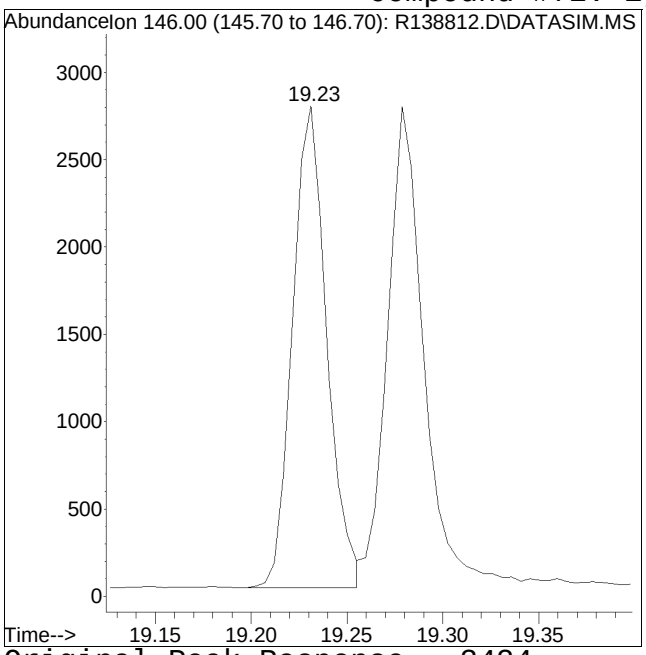

Original Peak Response = 49 Manual Peak Response = 1611 M3

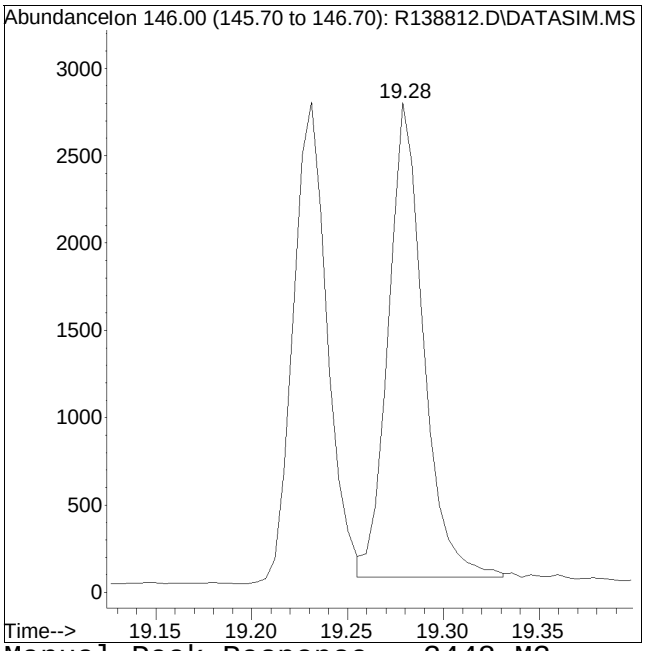
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138812.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:25 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.1 Quant Date : 1/3/2015 1:21 pm

Compound #72: 1,4-dichlorobenzene




Original Peak Response = 3424 Manual Peak Response = 3448 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:46:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 148833 | 10.000 | ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery = 99.77% | | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 341324 | 10.000 | ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery = 103.41% | | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 74737 | 10.000 | ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery = 102.96% | | | |
| System Monitoring Compounds | | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 99767 | 9.839 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.39% | | | |
| 51) toluene-D8 | 15.27 | 98 | 258116 | 9.784 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.84% | | | |
| 64) bromofluorobenzene | 18.15 | 95 | 201661 | 9.697 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 96.97% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 1969M6 | 0.241 | ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4488 | 0.234 | ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 2161 | 0.242 | ppbV | 92 |
| 5) Freon-114 | 4.25 | 85 | 5884 | 0.227 | ppbV | 98 |
| 6) vinyl chloride | 4.41 | 62 | 2250 | 0.240 | ppbV | 90 |
| 7) 1,3-butadiene | 4.62 | 54 | 1662 | 0.230 | ppbV # | 70 |
| 8) bromomethane | 5.02 | 94 | 2078 | 0.230 | ppbV | 96 |
| 9) chloroethane | 5.28 | 64 | 1011 | 0.234 | ppbV # | 77 |
| 10) ethanol | 5.50 | 31 | 9275 | 1.173 | ppbV | 95 |
| 11) vinyl bromide | 5.80 | 106 | 2166 | 0.229 | ppbV | 100 |
| 12) acetone | 6.20 | 43 | 18750 | 1.210 | ppbV # | 95 |
| 13) trichlorofluoromethane | 6.41 | 101 | 5522 | 0.227 | ppbV | 96 |
| 14) isopropyl alcohol | 6.58 | 45 | 4639 | 0.248 | ppbV # | 92 |
| 15) acrylonitrile | 6.85 | 53 | 1867 | 0.252 | ppbV # | 92 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 3876 | 0.244 | ppbV | 93 |
| 17) methylene chloride | 7.48 | 49 | 4203 | 0.310 | ppbV | 93 |
| 18) 3-chloropropene | 7.64 | 41 | 3502 | 0.227 | ppbV | 96 |
| 19) carbon disulfide | 7.82 | 76 | 6877 | 0.240 | ppbV # | 1 |
| 20) Freon 113 | 7.85 | 101 | 4672 | 0.228 | ppbV | 97 |
| 21) Halothane | 8.47 | 117 | 3758 | 0.228 | ppbV | 97 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 3595 | 0.219 | ppbV # | 88 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 4222 | 0.230 | ppbV | 94 |
| 24) MTBE | 9.09 | 73 | 6248 | 0.227 | ppbV # | 83 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:46:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) vinyl acetate | 9.21 | 43 | 5193M3 | 0.188 | ppbV | |
| 26) 2-butanone | 9.54 | 43 | 4438 | 0.177 | ppbV # | 95 |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 3657 | 0.216 | ppbV # | 83 |
| 28) Ethyl Acetate | 10.38 | 61 | 574M6 | 0.144 | ppbV | |
| 29) chloroform | 10.38 | 83 | 5465M4 | 0.229 | ppbV | |
| 30) Tetrahydrofuran | 10.91 | 42 | 3333 | 0.232 | ppbV | 95 |
| 31) 1,2-dichloroethane | 11.26 | 62 | 3291 | 0.224 | ppbV # | 91 |
| 33) hexane | 10.27 | 57 | 4606 | 0.221 | ppbV # | 64 |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 4891 | 0.211 | ppbV | 95 |
| 36) benzene | 12.09 | 78 | 6819 | 0.216 | ppbV | 99 |
| 37) carbon tetrachloride | 12.26 | 117 | 4765 | 0.206 | ppbV | 97 |
| 38) cyclohexane | 12.40 | 56 | 3971 | 0.219 | ppbV | 93 |
| 39) 1,2-dichloropropane | 13.05 | 63 | 2580 | 0.210 | ppbV # | 88 |
| 40) bromodichloromethane | 13.27 | 83 | 5485 | 0.219 | ppbV # | 95 |
| 41) 1,4-dioxane | 13.37 | 88 | 1457 | 0.191 | ppbV # | 73 |
| 42) trichloroethene | 13.33 | 130 | 3372 | 0.215 | ppbV | 99 |
| 43) 2,2,4-trimethylpentane | 13.35 | 57 | 12400 | 0.219 | ppbV # | 93 |
| 44) heptane | 13.65 | 43 | 5264 | 0.222 | ppbV | 97 |
| 45) cis-1,3-dichloropropene | 14.32 | 75 | 13603 | 0.195 | ppbV # | 93 |
| 46) 4-methyl-2-pentanone | 14.38 | 43 | 5822 | 0.178 | ppbV # | 92 |
| 47) trans-1,3-dichloropropene | 14.92 | 75 | 3121 | 0.178 | ppbV # | 78 |
| 48) 1,1,2-trichloroethane | 15.09 | 97 | 2981 | 0.216 | ppbV | 98 |
| 50) toluene | 15.37 | 91 | 8542 | 0.217 | ppbV | 99 |
| 52) 2-hexanone | 15.65 | 43 | 4054 | 0.131 | ppbV # | 85 |
| 53) dibromochloromethane | 15.79 | 129 | 5626 | 0.208 | ppbV | 97 |
| 54) 1,2-dibromoethane | 16.02 | 107 | 4580 | 0.201 | ppbV | 99 |
| 55) tetrachloroethene | 16.43 | 166 | 4266 | 0.217 | ppbV | 96 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | 131 | 4016 | 0.210 | ppbV | 97 |
| 57) chlorobenzene | 17.00 | 112 | 7149 | 0.209 | ppbV | 93 |
| 58) ethylbenzene | 17.30 | 91 | 11142 | 0.211 | ppbV | 98 |
| 59) m+p-xylene | 17.44 | 91 | 17175 | 0.415 | ppbV | 98 |
| 60) bromoform | 17.52 | 173 | 5347 | 0.204 | ppbV | 98 |
| 61) styrene | 17.73 | 104 | 6221 | 0.191 | ppbV | 99 |
| 62) 1,1,2,2-tetrachloroethane | 17.81 | 83 | 6561 | 0.209 | ppbV | 97 |
| 63) o-xylene | 17.81 | 91 | 9038 | 0.212 | ppbV | 98 |
| 65) isopropylbenzene | 18.25 | 105 | 12269 | 0.207 | ppbV | 99 |
| 66) 4-ethyl toluene | 18.73 | 105 | 13475 | 0.204 | ppbV | 98 |
| 67) 1,3,5-trimethylbenzene | 18.79 | 105 | 12838 | 0.212 | ppbV | 98 |
| 68) tert-butylbenzene | 19.09 | 119 | 12466 | 0.211 | ppbV | 100 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 10738 | 0.206 | ppbV | 97 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:46:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 8515 | 0.181 | ppbV | 90 |
| 71) 1,3-dichlorobenzene | 19.23 | 146 | 7871 | 0.198 | ppbV | 95 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 8185 | 0.202 | ppbV | 96 |
| 73) sec-butylbenzene | 19.29 | 105 | 15904 | 0.204 | ppbV | 98 |
| 74) p-isopropyltoluene | 19.41 | 119 | 14482 | 0.196 | ppbV | 97 |
| 75) 1,2-dichlorobenzene | 19.55 | 146 | 7631 | 0.199 | ppbV | 94 |
| 76) n-butylbenzene | 19.73 | 91 | 11999 | 0.188 | ppbV | 99 |
| 77) 1,2,4-trichlorobenzene | 21.02 | 180 | 5731 | 0.163 | ppbV | 95 |
| 78) naphthalene | 21.13 | 128 | 19629 | 0.229 | ppbV | 99 |
| 79) 1,2,3-trichlorobenzene | 21.40 | 180 | 5312 | 0.162 | ppbV | 96 |
| 80) hexachlorobutadiene | 21.46 | 225 | 4499 | 0.178 | ppbV # | 88 |

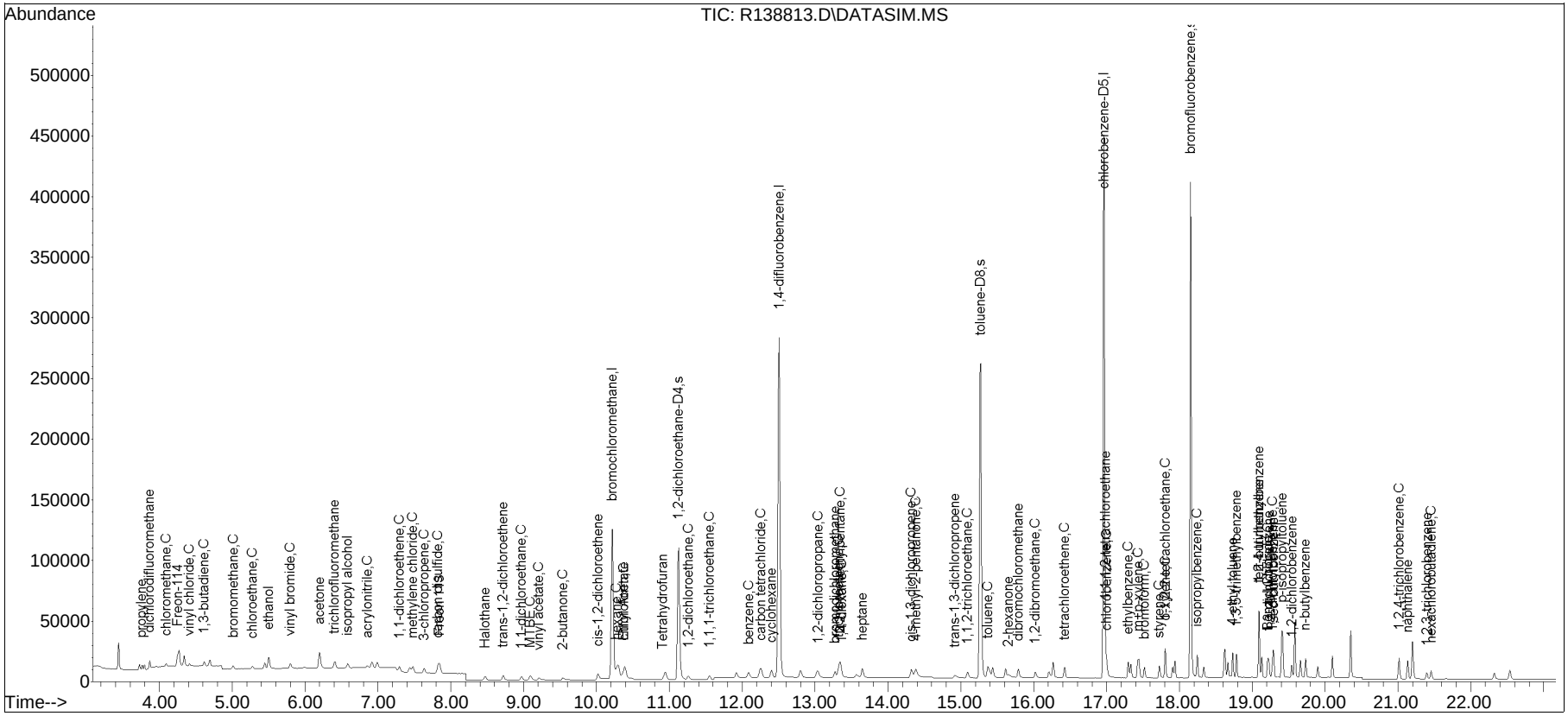
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:46:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

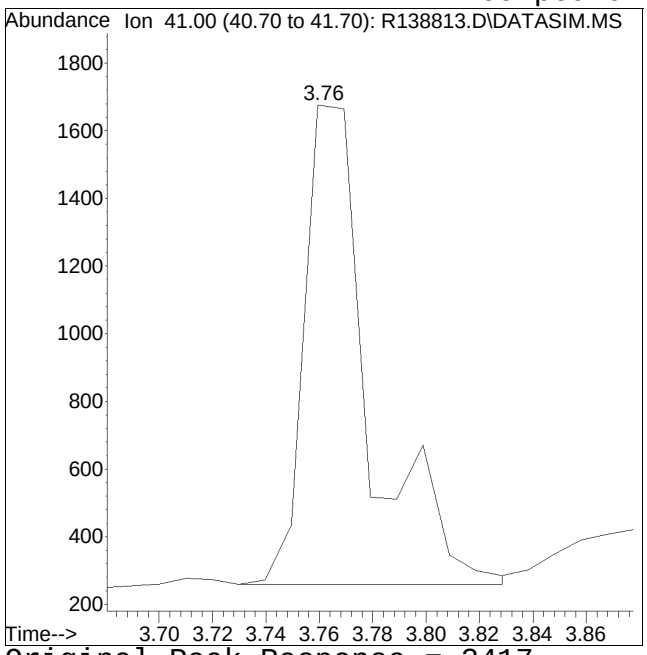
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



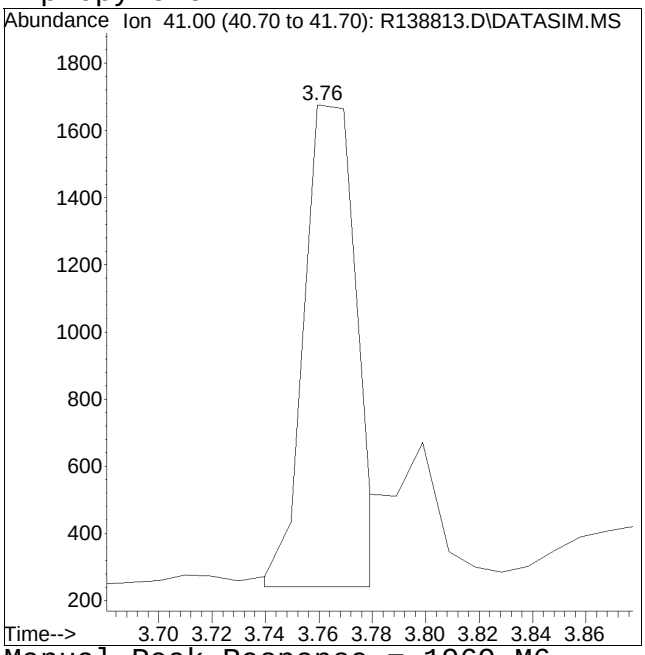
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138813.D
Date Inj'd : 1/2/2015 8:57 pm
Sample : ITO15-SIMSTD0.2
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 2417



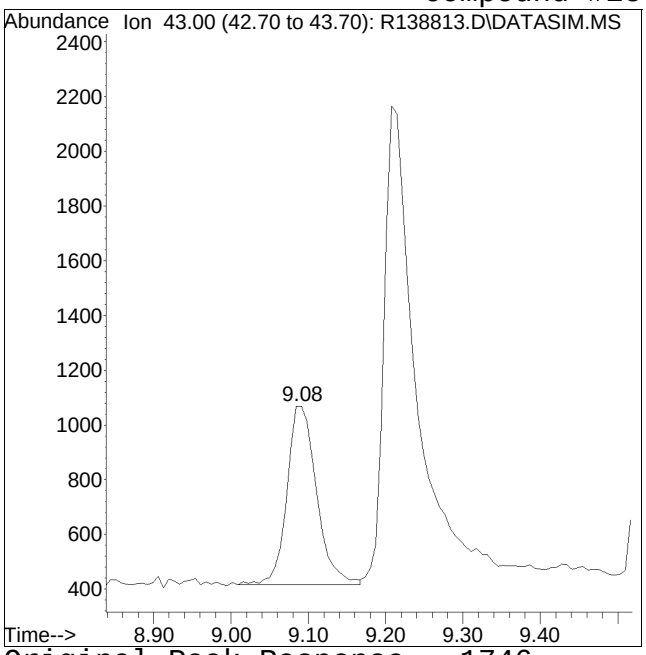

Manual Peak Response = 1969 M6

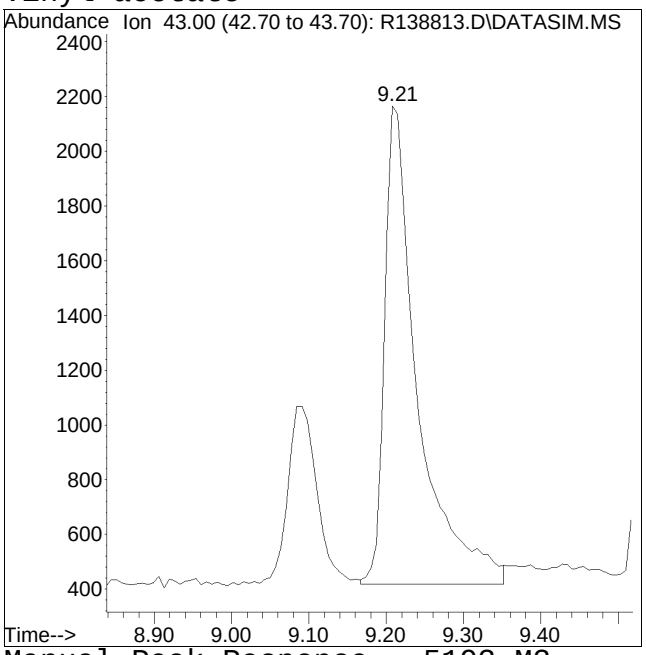
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 1/3/2015 1:21 pm

Compound #25: vinyl acetate



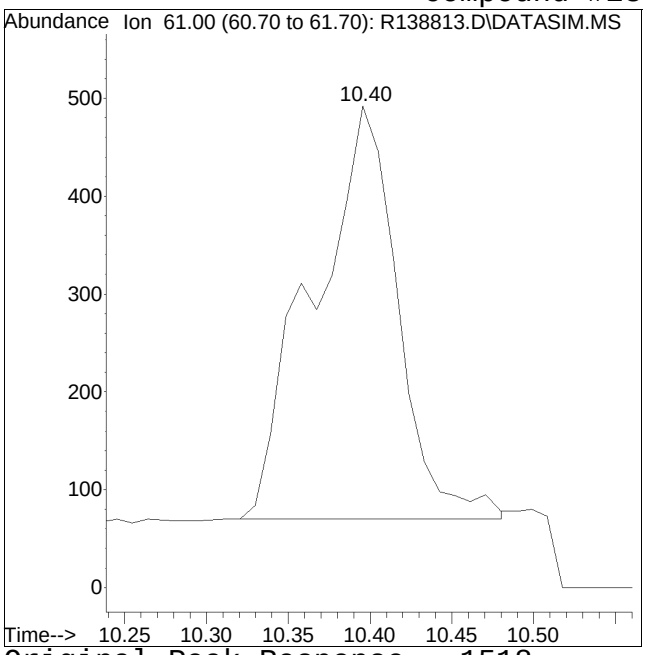

Original Peak Response = 1746 Manual Peak Response = 5193 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

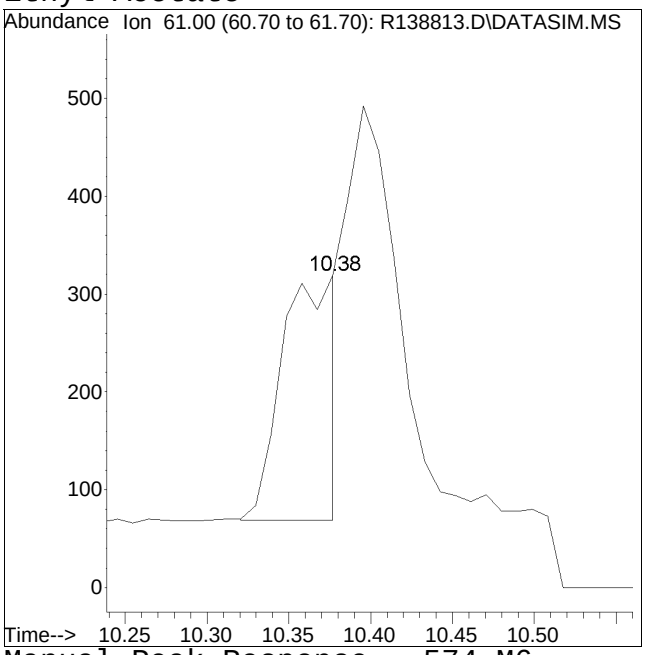
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 1/3/2015 1:21 pm

Compound #28: Ethyl Acetate




Original Peak Response = 1518



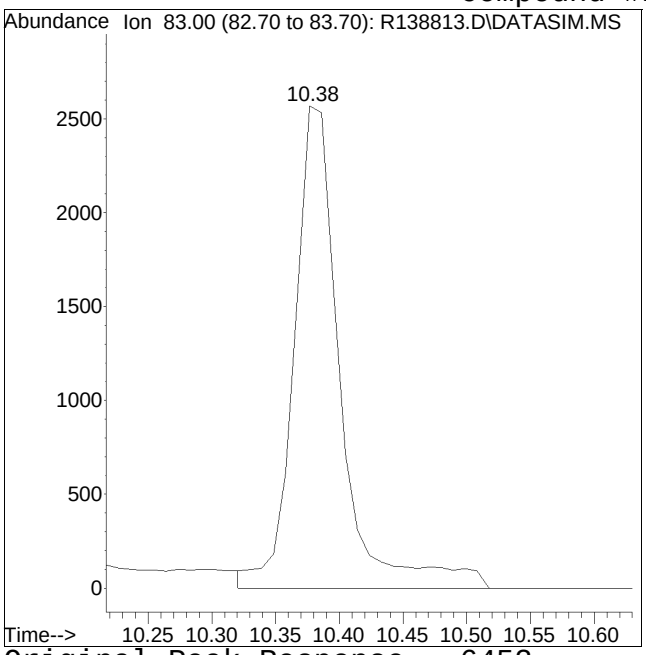

Manual Peak Response = 574 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

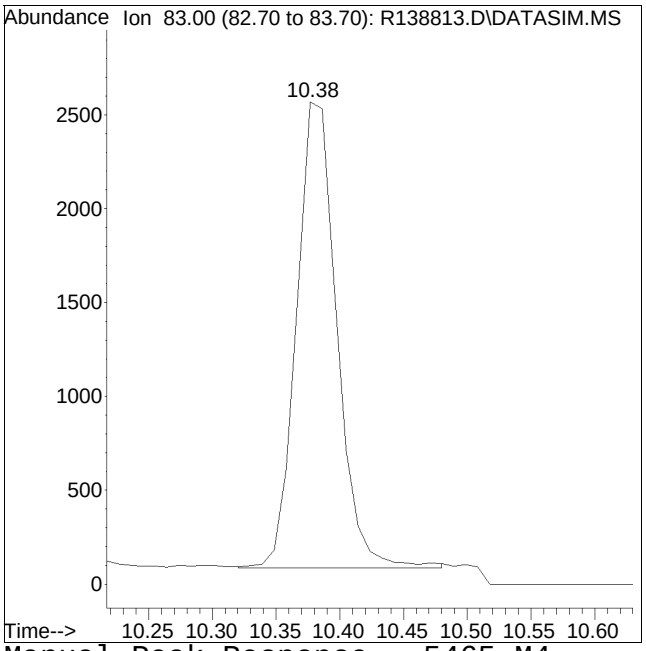
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 6452




Manual Peak Response = 5465 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:48:26 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 149745 | 10.000 ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery | = 100.38% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 344207 | 10.000 ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery | = 104.29% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 74896 | 10.000 ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery | = 103.18% | |
| System Monitoring Compounds | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 100105 | 9.789 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 97.89% | |
| 51) toluene-D8 | 15.27 | 98 | 262767 | 9.939 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 99.39% | |
| 64) bromofluorobenzene | 18.15 | 95 | 202478 | 9.715 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 97.15% | |
| Target Compounds | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 4336M6 | 0.526 ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 9466 | 0.491 ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 4776 | 0.532 ppbV | 97 |
| 5) Freon-114 | 4.25 | 85 | 13612 | 0.522 ppbV | 98 |
| 6) vinyl chloride | 4.41 | 62 | 4948 | 0.524 ppbV | 95 |
| 7) 1,3-butadiene | 4.62 | 54 | 3799 | 0.522 ppbV | 81 |
| 8) bromomethane | 5.02 | 94 | 4719 | 0.519 ppbV | 100 |
| 9) chloroethane | 5.28 | 64 | 2319 | 0.533 ppbV | 90 |
| 10) ethanol | 5.50 | 31 | 21179 | 2.662 ppbV | 100 |
| 11) vinyl bromide | 5.80 | 106 | 4895 | 0.515 ppbV | 96 |
| 12) acetone | 6.19 | 43 | 42109 | 2.701 ppbV # | 97 |
| 13) trichlorofluoromethane | 6.41 | 101 | 12589 | 0.515 ppbV | 98 |
| 14) isopropyl alcohol | 6.58 | 45 | 10262 | 0.546 ppbV # | 97 |
| 15) acrylonitrile | 6.85 | 53 | 3693M6 | 0.496 ppbV | |
| 16) 1,1-dichloroethene | 7.29 | 61 | 8761 | 0.548 ppbV | 99 |
| 17) methylene chloride | 7.48 | 49 | 8143 | 0.597 ppbV | 98 |
| 18) 3-chloropropene | 7.64 | 41 | 8136 | 0.525 ppbV | 98 |
| 19) carbon disulfide | 7.82 | 76 | 15020 | 0.522 ppbV # | 49 |
| 20) Freon 113 | 7.85 | 101 | 10475 | 0.509 ppbV | 98 |
| 21) Halothane | 8.47 | 117 | 8563 | 0.516 ppbV | 97 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 8343 | 0.505 ppbV | 91 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 9423 | 0.509 ppbV | 98 |
| 24) MTBE | 9.08 | 73 | 14248 | 0.515 ppbV # | 93 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:48:26 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) vinyl acetate | 9.20 | 43 | 12329 | 0.444 ppbV | 99 |
| 26) 2-butanone | 9.52 | 43 | 11256 | 0.447 ppbV # | 97 |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 8663 | 0.508 ppbV # | 85 |
| 28) Ethyl Acetate | 10.34 | 61 | 1472 | 0.368 ppbV | 84 |
| 29) chloroform | 10.38 | 83 | 12491M4 | 0.520 ppbV | |
| 30) Tetrahydrofuran | 10.90 | 42 | 7855 | 0.543 ppbV | 99 |
| 31) 1,2-dichloroethane | 11.26 | 62 | 7618 | 0.516 ppbV | 96 |
| 33) hexane | 10.27 | 57 | 10370 | 0.493 ppbV # | 68 |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 11545 | 0.493 ppbV | 98 |
| 36) benzene | 12.08 | 78 | 16017 | 0.502 ppbV | 97 |
| 37) carbon tetrachloride | 12.26 | 117 | 11121 | 0.477 ppbV | 98 |
| 38) cyclohexane | 12.40 | 56 | 9229 | 0.504 ppbV | 97 |
| 39) 1,2-dichloropropane | 13.05 | 63 | 5966 | 0.481 ppbV | 96 |
| 40) bromodichloromethane | 13.27 | 83 | 12451 | 0.492 ppbV # | 94 |
| 41) 1,4-dioxane | 13.36 | 88 | 3544 | 0.460 ppbV # | 75 |
| 42) trichloroethene | 13.33 | 130 | 7803 | 0.492 ppbV | 96 |
| 43) 2,2,4-trimethylpentane | 13.35 | 57 | 28710 | 0.503 ppbV | 98 |
| 44) heptane | 13.65 | 43 | 12099 | 0.506 ppbV | 99 |
| 45) cis-1,3-dichloropropene | 14.32 | 75 | 32044 | 0.454 ppbV | 97 |
| 46) 4-methyl-2-pentanone | 14.37 | 43 | 14977 | 0.455 ppbV # | 94 |
| 47) trans-1,3-dichloropropene | 14.91 | 75 | 7800 | 0.442 ppbV | 90 |
| 48) 1,1,2-trichloroethane | 15.09 | 97 | 6751 | 0.484 ppbV | 96 |
| 50) toluene | 15.37 | 91 | 19753 | 0.500 ppbV | 99 |
| 52) 2-hexanone | 15.63 | 43 | 12354 | 0.398 ppbV | 93 |
| 53) dibromochloromethane | 15.79 | 129 | 13222 | 0.488 ppbV | 100 |
| 54) 1,2-dibromoethane | 16.02 | 107 | 11028 | 0.482 ppbV | 98 |
| 55) tetrachloroethene | 16.42 | 166 | 9794 | 0.498 ppbV | 98 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | 131 | 9471 | 0.495 ppbV | 100 |
| 57) chlorobenzene | 17.00 | 112 | 16818 | 0.490 ppbV | 99 |
| 58) ethylbenzene | 17.30 | 91 | 25209 | 0.477 ppbV | 99 |
| 59) m+p-xylene | 17.44 | 91 | 39272 | 0.947 ppbV | 100 |
| 60) bromoform | 17.52 | 173 | 12244 | 0.466 ppbV | 98 |
| 61) styrene | 17.73 | 104 | 14823 | 0.454 ppbV | 97 |
| 62) 1,1,2,2-tetrachloroethane | 17.80 | 83 | 15203 | 0.484 ppbV | 99 |
| 63) o-xylene | 17.80 | 91 | 21020 | 0.492 ppbV | 98 |
| 65) isopropylbenzene | 18.25 | 105 | 29156 | 0.490 ppbV | 99 |
| 66) 4-ethyl toluene | 18.73 | 105 | 31617 | 0.478 ppbV | 99 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 28818 | 0.474 ppbV | 99 |
| 68) tert-butylbenzene | 19.09 | 119 | 28925 | 0.488 ppbV | 100 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 25136 | 0.481 ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:48:26 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 20571 | 0.436 | ppbV | 99 |
| 71) 1,3-dichlorobenzene | 19.23 | 146 | 18735 | 0.471 | ppbV | 100 |
| 72) 1,4-dichlorobenzene | 19.27 | 146 | 18927M3 | 0.467 | ppbV | |
| 73) sec-butylbenzene | 19.29 | 105 | 37419 | 0.479 | ppbV | 97 |
| 74) p-isopropyltoluene | 19.40 | 119 | 34744 | 0.469 | ppbV | 99 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 17821 | 0.464 | ppbV | 100 |
| 76) n-butylbenzene | 19.73 | 91 | 29439 | 0.459 | ppbV | 99 |
| 77) 1,2,4-trichlorobenzene | 21.02 | 180 | 14641 | 0.416 | ppbV # | 90 |
| 78) naphthalene | 21.13 | 128 | 37987 | 0.443 | ppbV | 98 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 13381 | 0.407 | ppbV # | 89 |
| 80) hexachlorobutadiene | 21.46 | 225 | 11085 | 0.439 | ppbV # | 92 |

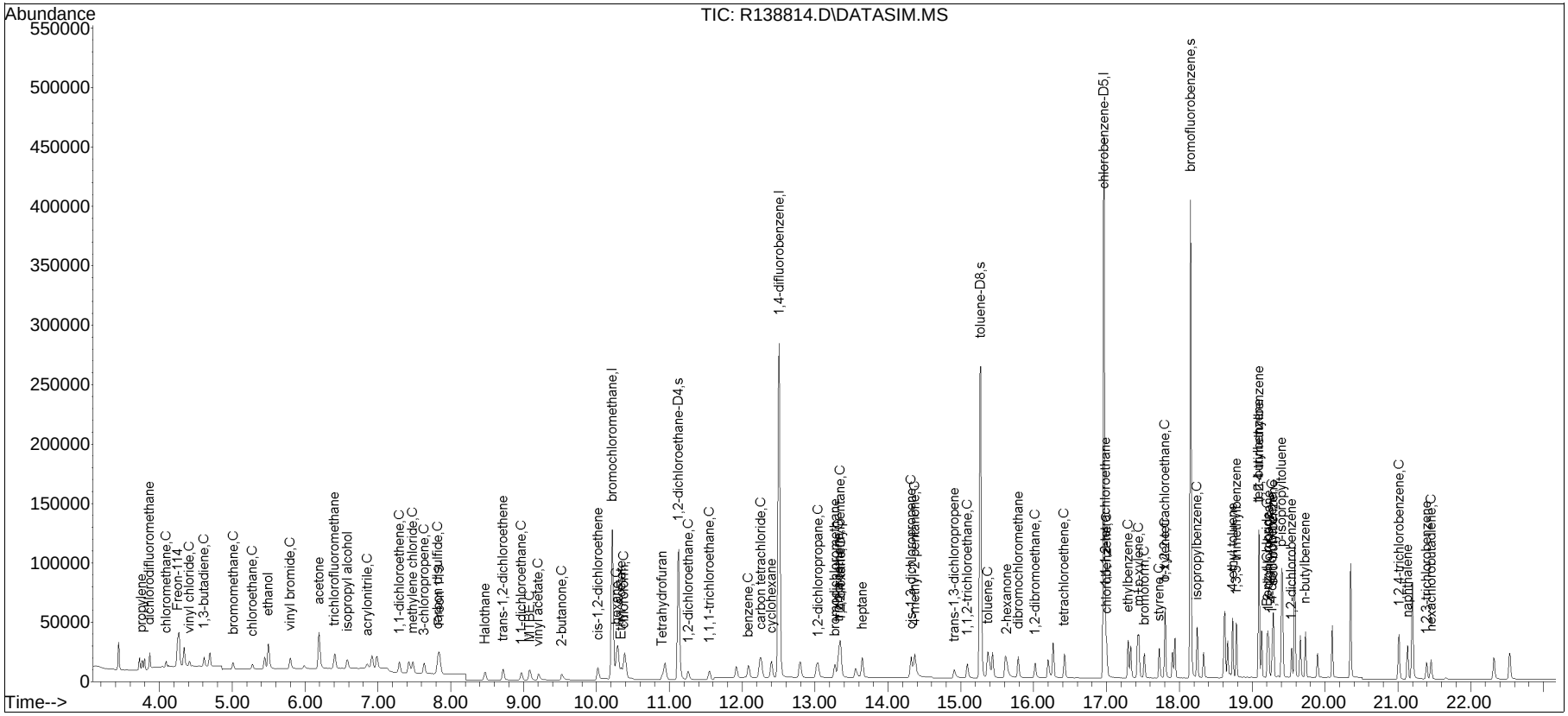
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:48:26 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

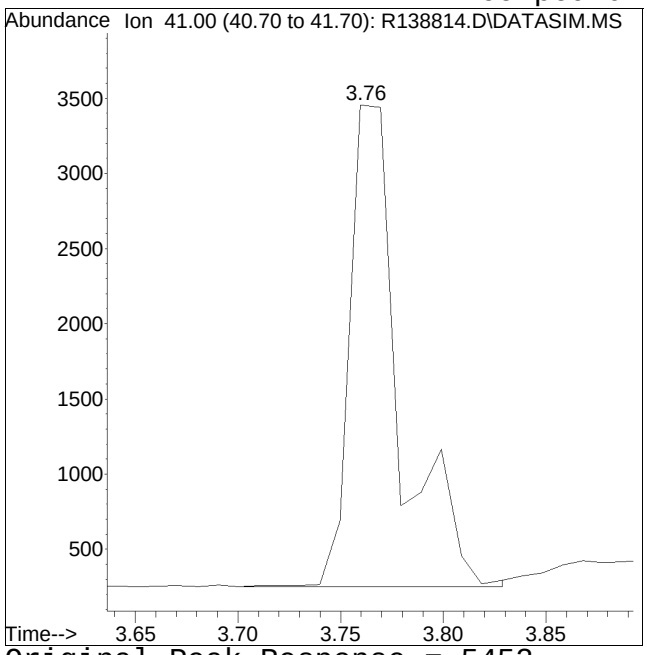
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



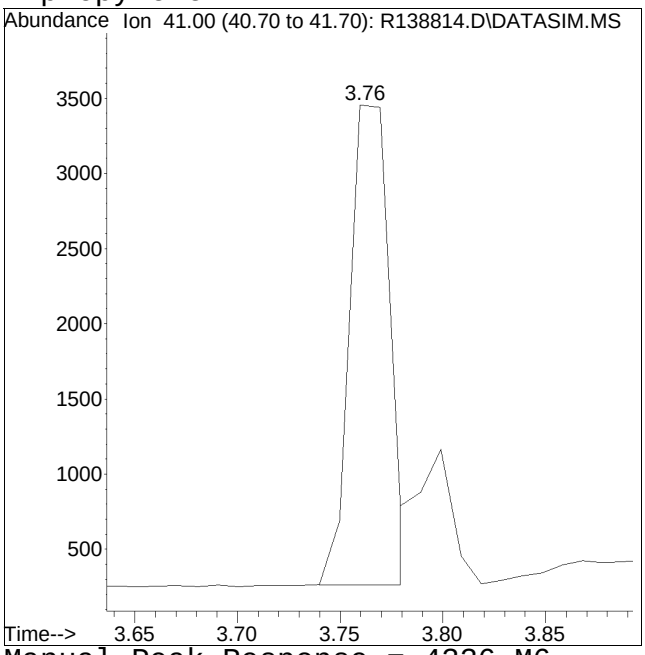
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138814.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 9:29 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.5 Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 5452



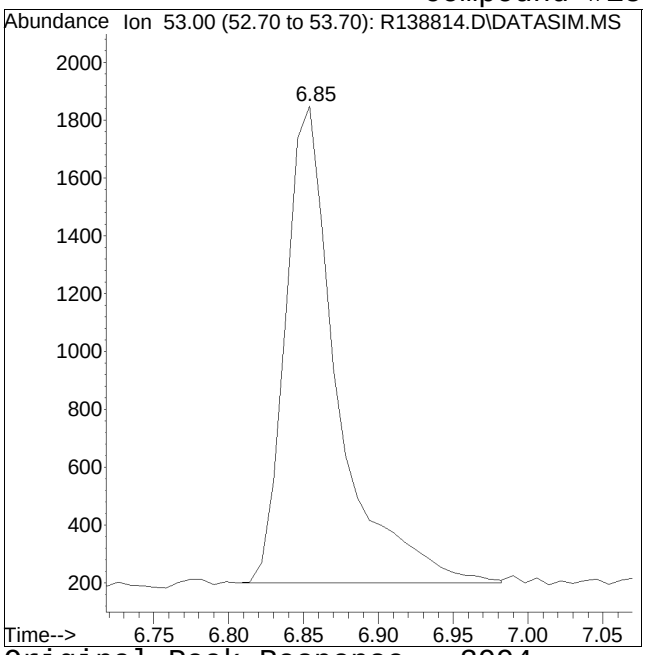

Manual Peak Response = 4336 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

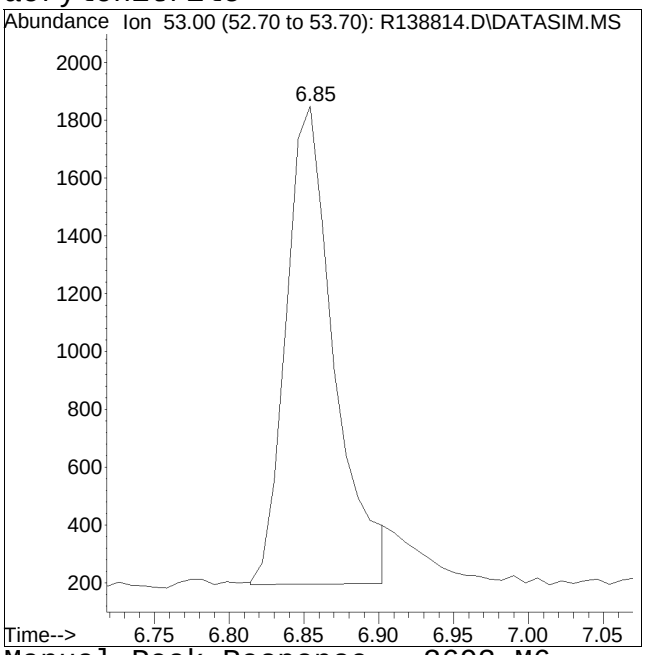
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TSIM_ICAL
Data File : R138814.D Quant Method : TSIM150102.M
Date Inj'd : 1/2/2015 9:29 pm Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5 Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #15: acrylonitrile




Original Peak Response = 3994



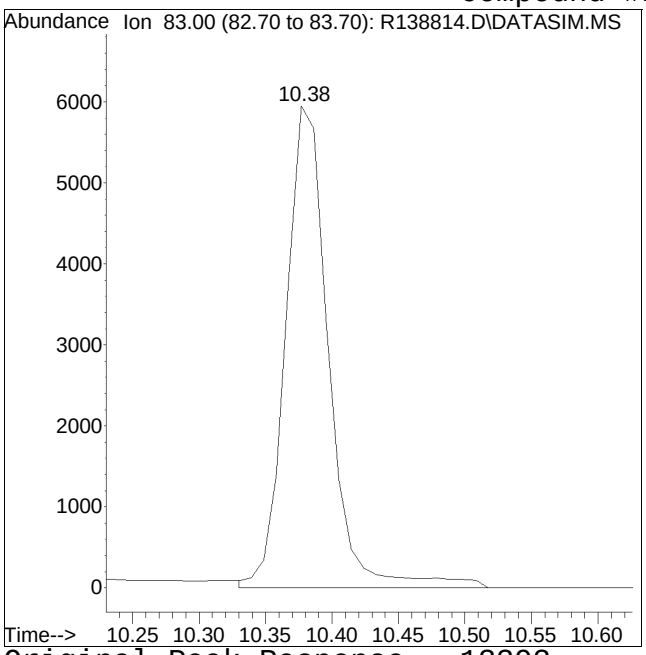

Manual Peak Response = 3693 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

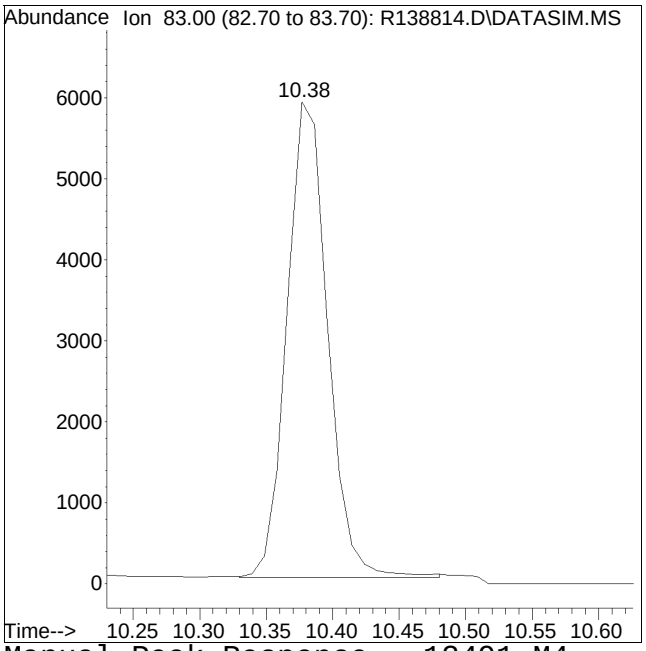
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138814.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 9:29 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.5 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 13393



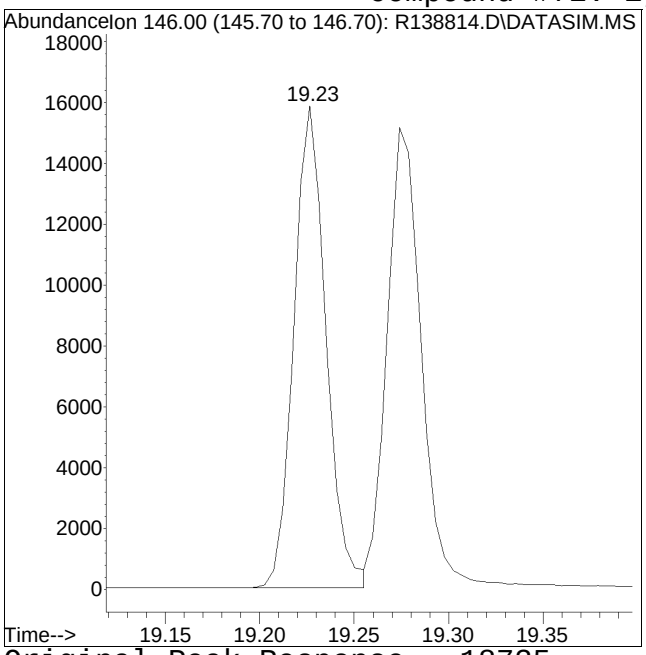

Manual Peak Response = 12491 M4

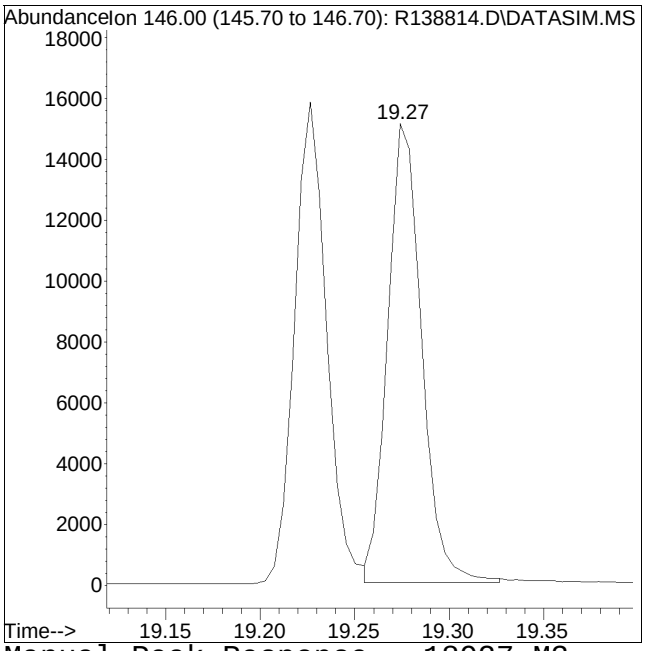
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138814.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 9:29 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.5 Quant Date : 1/3/2015 1:21 pm

Compound #72: 1,4-dichlorobenzene




Original Peak Response = 18735 Manual Peak Response = 18927 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:49:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 150193 | 10.000 ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery | = 100.68% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 341938 | 10.000 ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery | = 103.60% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 74392 | 10.000 ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery | = 102.48% | |
| System Monitoring Compounds | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 99656 | 9.810 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 98.10% | |
| 51) toluene-D8 | 15.27 | 98 | 257792 | 9.817 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 98.17% | |
| 64) bromofluorobenzene | 18.15 | 95 | 198465 | 9.587 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 95.87% | |
| Target Compounds | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 8490M6 | 1.028 ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 18073 | 0.934 ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 9261 | 1.028 ppbV | 100 |
| 5) Freon-114 | 4.25 | 85 | 26261 | 1.005 ppbV | 98 |
| 6) vinyl chloride | 4.41 | 62 | 9627 | 1.017 ppbV | 98 |
| 7) 1,3-butadiene | 4.62 | 54 | 7279 | 0.997 ppbV | 90 |
| 8) bromomethane | 5.02 | 94 | 9315 | 1.022 ppbV | 98 |
| 9) chloroethane | 5.28 | 64 | 4456 | 1.021 ppbV | 95 |
| 10) ethanol | 5.49 | 31 | 39763 | 4.983 ppbV | 100 |
| 11) vinyl bromide | 5.80 | 106 | 9692 | 1.016 ppbV | 100 |
| 12) acetone | 6.18 | 43 | 80726 | 5.163 ppbV # | 96 |
| 13) trichlorofluoromethane | 6.41 | 101 | 24913 | 1.016 ppbV | 100 |
| 14) isopropyl alcohol | 6.57 | 45 | 19151 | 1.015 ppbV | 99 |
| 15) acrylonitrile | 6.85 | 53 | 7353M6 | 0.984 ppbV | |
| 16) 1,1-dichloroethene | 7.29 | 61 | 17241 | 1.075 ppbV | 99 |
| 17) methylene chloride | 7.48 | 49 | 14794 | 1.081 ppbV | 98 |
| 18) 3-chloropropene | 7.64 | 41 | 15775 | 1.014 ppbV | 99 |
| 19) carbon disulfide | 7.82 | 76 | 29026 | 1.005 ppbV # | 75 |
| 20) Freon 113 | 7.85 | 101 | 20573 | 0.997 ppbV | 99 |
| 21) Halothane | 8.47 | 117 | 16859 | 1.013 ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 16449 | 0.993 ppbV | 91 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 18825 | 1.014 ppbV | 99 |
| 24) MTBE | 9.08 | 73 | 27459 | 0.989 ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:49:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) | vinyl acetate | 9.20 | 43 | 25499 | 0.915 ppbV | 100 |
| 26) | 2-butanone | 9.51 | 43 | 23562 | 0.933 ppbV | 99 |
| 27) | cis-1,2-dichloroethene | 10.02 | 61 | 17070 | 0.999 ppbV # | 87 |
| 28) | Ethyl Acetate | 10.33 | 61 | 3369 | 0.839 ppbV | 77 |
| 29) | chloroform | 10.38 | 83 | 24397M4 | 1.013 ppbV | |
| 30) | Tetrahydrofuran | 10.89 | 42 | 14218M6 | 0.980 ppbV | |
| 31) | 1,2-dichloroethane | 11.26 | 62 | 14956 | 1.010 ppbV | 97 |
| 33) | hexane | 10.27 | 57 | 20508 | 0.981 ppbV # | 75 |
| 35) | 1,1,1-trichloroethane | 11.55 | 97 | 22405 | 0.964 ppbV | 99 |
| 36) | benzene | 12.08 | 78 | 30767 | 0.971 ppbV | 97 |
| 37) | carbon tetrachloride | 12.26 | 117 | 21942 | 0.947 ppbV | 99 |
| 38) | cyclohexane | 12.40 | 56 | 17728 | 0.975 ppbV | 97 |
| 39) | 1,2-dichloropropane | 13.05 | 63 | 11888 | 0.965 ppbV | 99 |
| 40) | bromodichloromethane | 13.27 | 83 | 24426 | 0.971 ppbV # | 96 |
| 41) | 1,4-dioxane | 13.35 | 88 | 7076 | 0.925 ppbV # | 69 |
| 42) | trichloroethene | 13.33 | 130 | 15211 | 0.966 ppbV | 96 |
| 43) | 2,2,4-trimethylpentane | 13.35 | 57 | 55641 | 0.981 ppbV | 99 |
| 44) | heptane | 13.65 | 43 | 23511 | 0.990 ppbV | 99 |
| 45) | cis-1,3-dichloropropene | 14.32 | 75 | 64108 | 0.915 ppbV | 95 |
| 46) | 4-methyl-2-pentanone | 14.35 | 43 | 30363 | 0.928 ppbV | 97 |
| 47) | trans-1,3-dichloropropene | 14.91 | 75 | 15671 | 0.894 ppbV | 98 |
| 48) | 1,1,2-trichloroethane | 15.09 | 97 | 13158 | 0.950 ppbV | 93 |
| 50) | toluene | 15.37 | 91 | 37915 | 0.967 ppbV | 100 |
| 52) | 2-hexanone | 15.62 | 43 | 27114 | 0.879 ppbV | 98 |
| 53) | dibromochloromethane | 15.79 | 129 | 25381 | 0.943 ppbV | 100 |
| 54) | 1,2-dibromoethane | 16.02 | 107 | 21562 | 0.950 ppbV | 98 |
| 55) | tetrachloroethene | 16.43 | 166 | 19027 | 0.974 ppbV | 95 |
| 56) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 18420 | 0.969 ppbV | 97 |
| 57) | chlorobenzene | 17.00 | 112 | 33044 | 0.968 ppbV | 98 |
| 58) | ethylbenzene | 17.30 | 91 | 49604 | 0.945 ppbV | 100 |
| 59) | m+p-xylene | 17.44 | 91 | 79144 | 1.921 ppbV | 100 |
| 60) | bromoform | 17.52 | 173 | 23979 | 0.919 ppbV | 98 |
| 61) | styrene | 17.72 | 104 | 29983 | 0.925 ppbV | 100 |
| 62) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 29790 | 0.955 ppbV | 100 |
| 63) | o-xylene | 17.80 | 91 | 40272 | 0.949 ppbV | 100 |
| 65) | isopropylbenzene | 18.25 | 105 | 56419 | 0.954 ppbV | 100 |
| 66) | 4-ethyl toluene | 18.73 | 105 | 62321 | 0.949 ppbV | 99 |
| 67) | 1,3,5-trimethylbenzene | 18.78 | 105 | 54799 | 0.908 ppbV | 100 |
| 68) | tert-butylbenzene | 19.09 | 119 | 56382 | 0.957 ppbV | 99 |
| 69) | 1,2,4-trimethylbenzene | 19.09 | 105 | 48996 | 0.943 ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:49:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 41332 | 0.881 | ppbV | 99 |
| 71) 1,3-dichlorobenzene | 19.23 | 146 | 36677 | 0.929 | ppbV | 99 |
| 72) 1,4-dichlorobenzene | 19.27 | 146 | 37941 | 0.942 | ppbV | 93 |
| 73) sec-butylbenzene | 19.29 | 105 | 73480 | 0.947 | ppbV | 99 |
| 74) p-isopropyltoluene | 19.40 | 119 | 68595 | 0.932 | ppbV | 99 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 35170 | 0.922 | ppbV | 100 |
| 76) n-butylbenzene | 19.73 | 91 | 58860 | 0.925 | ppbV | 100 |
| 77) 1,2,4-trichlorobenzene | 21.02 | 180 | 29839 | 0.854 | ppbV # | 91 |
| 78) naphthalene | 21.13 | 128 | 71927 | 0.844 | ppbV | 98 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 27362 | 0.838 | ppbV # | 87 |
| 80) hexachlorobutadiene | 21.46 | 225 | 22380 | 0.892 | ppbV # | 90 |

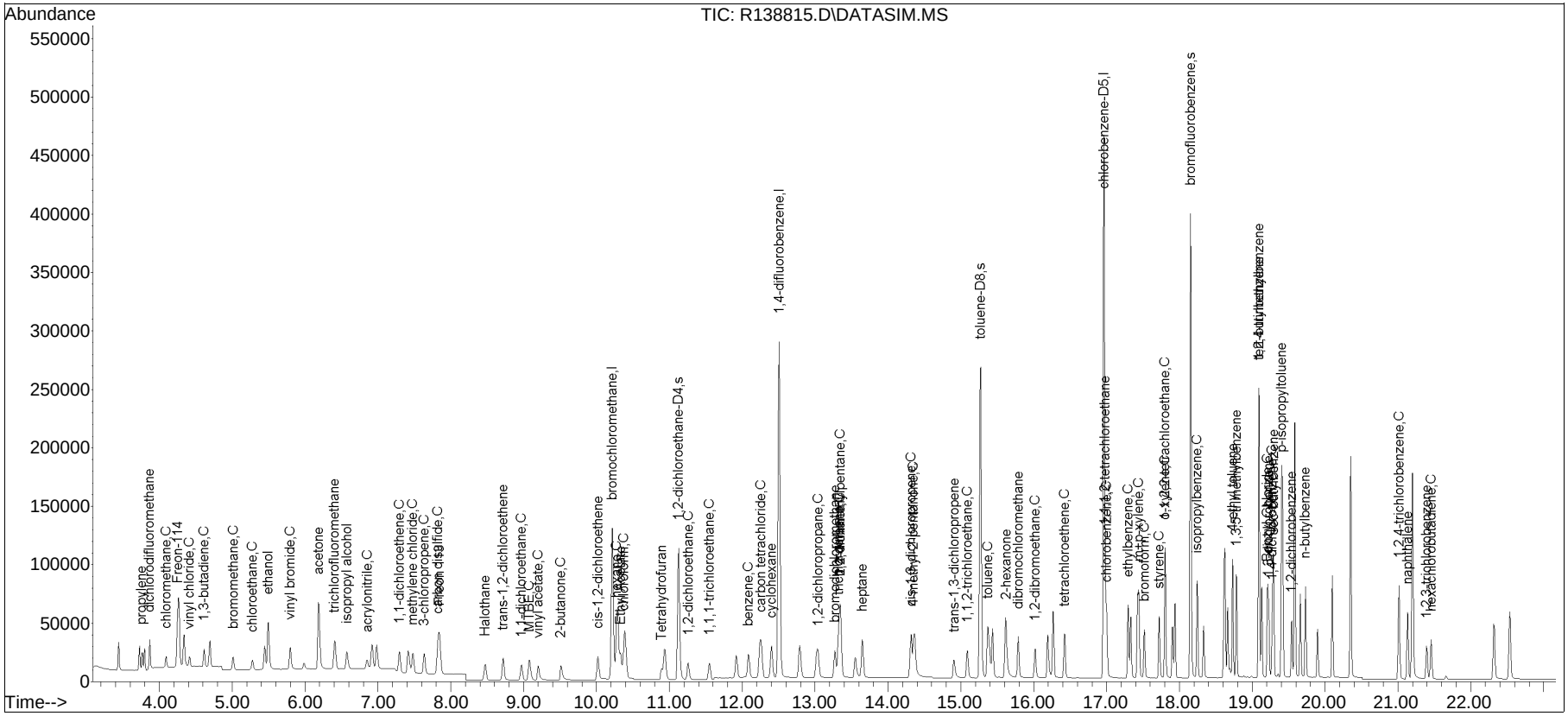
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG753109
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:49:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

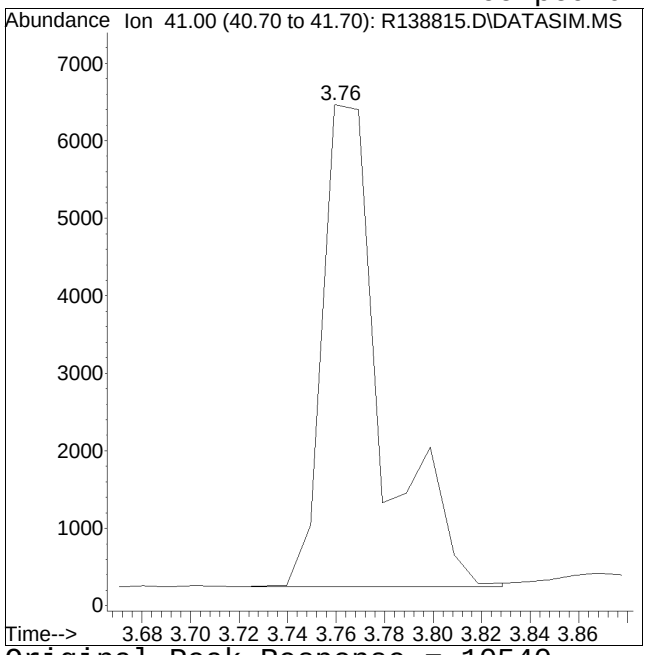
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



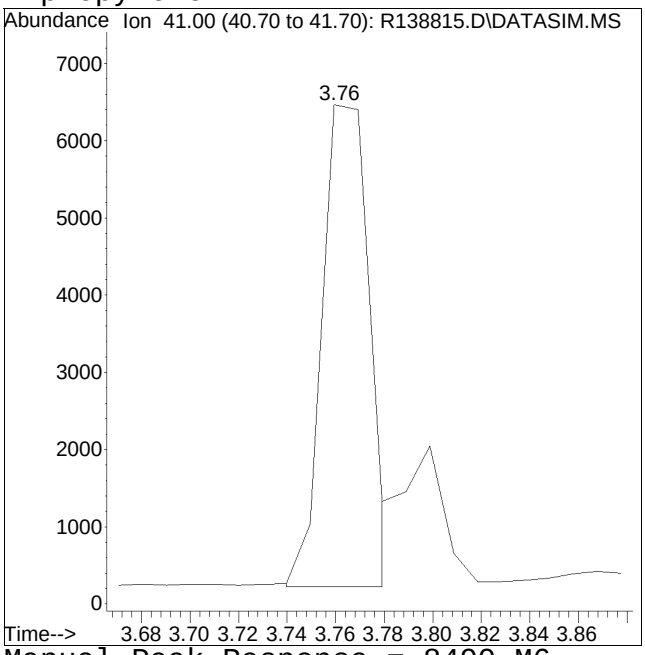
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138815.D
Date Inj'd : 1/2/2015 10:02 pm
Sample : ITO15-SIMSTD1.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 10540



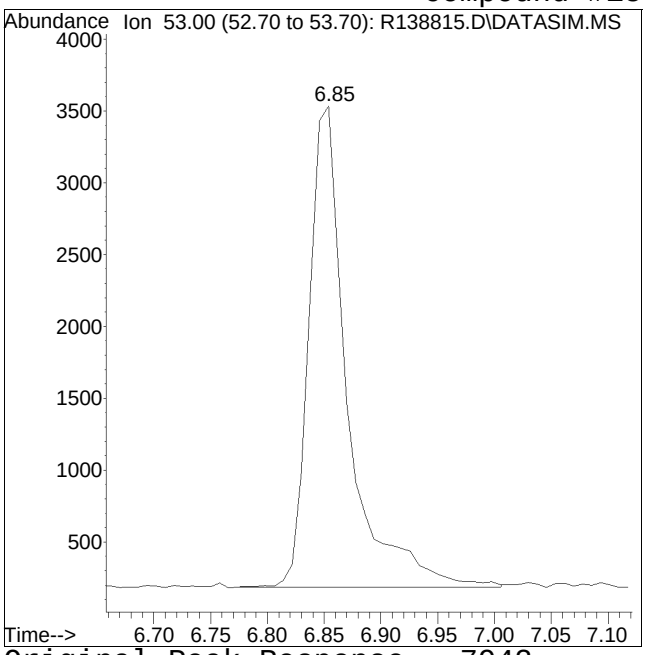

Manual Peak Response = 8490 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

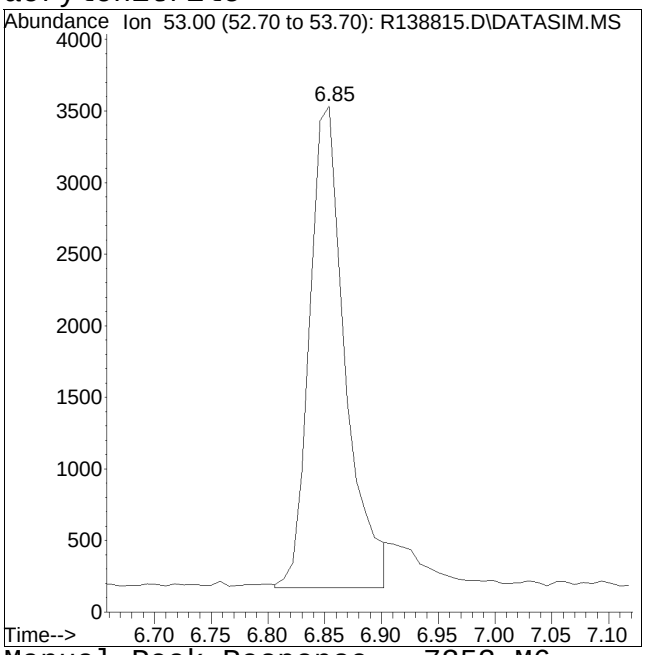
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138815.D
Date Inj'd : 1/2/2015 10:02 pm
Sample : ITO15-SIMSTD1.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #15: acrylonitrile




Original Peak Response = 7942



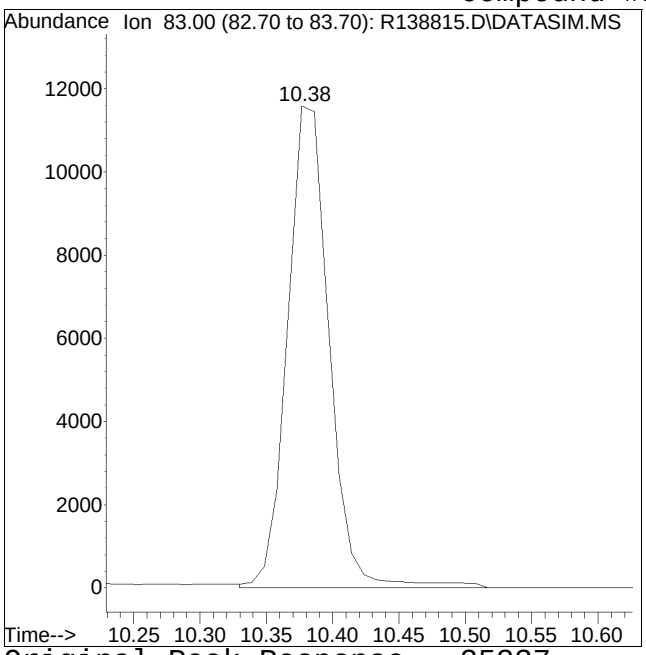

Manual Peak Response = 7353 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

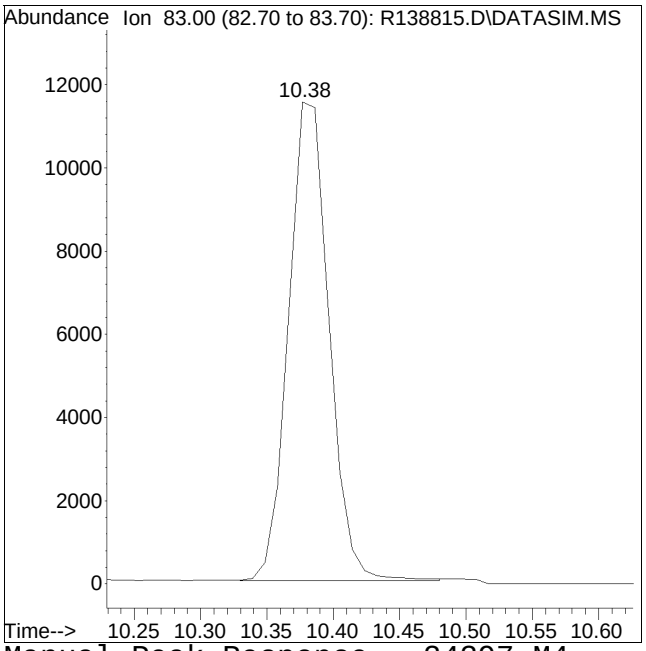
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138815.D
Date Inj'd : 1/2/2015 10:02 pm
Sample : ITO15-SIMSTD1.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 25337



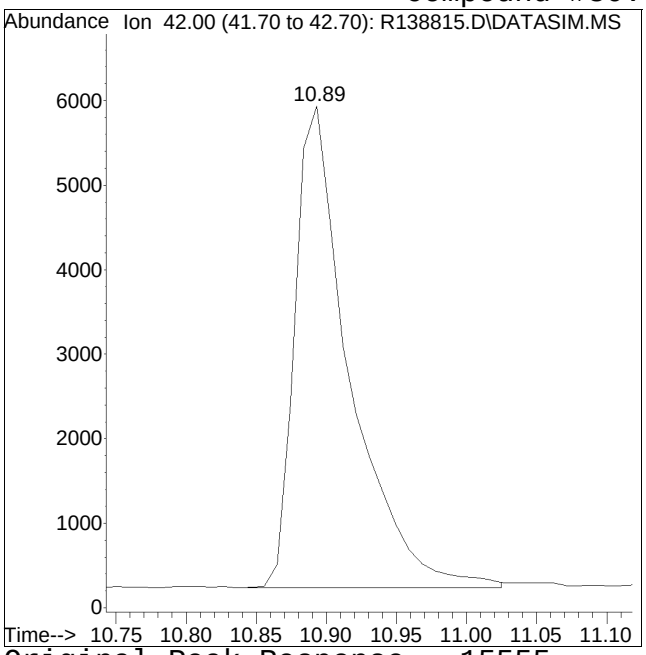

Manual Peak Response = 24397 M4

M4 = Poor automated baseline construction.

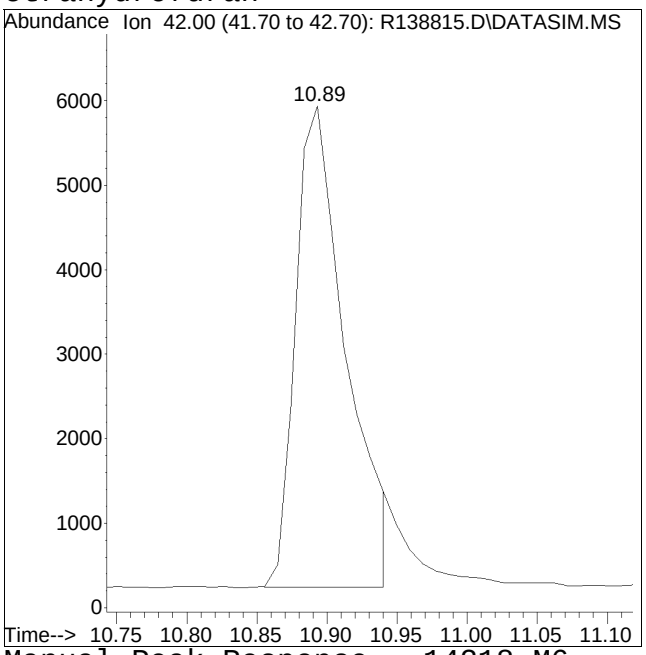
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138815.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:02 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD1.0 Quant Date : 1/3/2015 1:21 pm

Compound #30: Tetrahydrofuran




Original Peak Response = 15555




Manual Peak Response = 14218 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:20:43 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 16:05:23 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 149173 | 10.000 ppbV | -0.04 |
| Standard Area = 149173 | | | Recovery | = 100.00% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 330054 | 10.000 ppbV | 0.02 |
| Standard Area = 330054 | | | Recovery | = 100.00% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 72589 | 10.000 ppbV | 0.07 |
| Standard Area = 72589 | | | Recovery | = 100.00% | |
| System Monitoring Compounds | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 98054 | 10.604 ppbV | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 106.04% | |
| 51) toluene-D8 | 15.26 | 98 | 256243 | 9.038 ppbV | 0.06 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 90.38% | |
| 64) bromofluorobenzene | 18.15 | 95 | 201990 | 9.742 ppbV | 0.07 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 97.42% | |

| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) propylene | 3.76 | 41 | 41021M3 | 4.771 ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 96111M3 | 5.477 ppbV | |
| 4) chloromethane | 4.09 | 50 | 44745M3 | 4.495 ppbV | |
| 5) Freon-114 | 4.25 | 85 | 129788M3 | 3.999 ppbV | |
| 6) vinyl chloride | 4.41 | 62 | 47032M2 | 4.070 ppbV | |
| 7) 1,3-butadiene | 4.62 | 54 | 36264M2 | 4.549 ppbV | |
| 8) bromomethane | 5.01 | 94 | 45255M3 | 3.818 ppbV | |
| 9) chloroethane | 5.28 | 64 | 21666M3 | 3.838 ppbV | |
| 10) ethanol | 5.49 | 31 | 198150M2 | 22.440 ppbV | |
| 11) vinyl bromide | 5.79 | 106 | 47383M2 | 3.922 ppbV | |
| 12) acetone | 6.17 | 43 | 388240M2 | 22.312 ppbV | |
| 13) trichlorofluoromethane | 6.41 | 101 | 121733M2 | 3.828 ppbV | |
| 14) isopropyl alcohol | 6.56 | 45 | 93687M2 | 4.786 ppbV | |
| 15) acrylonitrile | 6.85 | 53 | 37121M4 | 4.486 ppbV | |
| 16) 1,1-dichloroethene | 7.29 | 61 | 79660M4 | 4.218 ppbV | |
| 17) methylene chloride | 7.48 | 49 | 67972 | 4.933 ppbV | 87 |
| 18) 3-chloropropene | 7.64 | 41 | 77248 | 4.984 ppbV | 94 |
| 19) carbon disulfide | 7.82 | 76 | 143395 | 3.865 ppbV | 94 |
| 20) Freon 113 | 7.85 | 101 | 102503 | 4.141 ppbV | 98 |
| 21) Halothane | 8.47 | 117 | 82649 | 4.133 ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.71 | 61 | 82241 | 4.546 ppbV | 87 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 92183 | 4.167 ppbV | 99 |
| 24) MTBE | 9.06 | 73 | 137925 | 3.864 ppbV # | 89 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:20:43 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 16:05:23 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) | vinyl acetate | 9.19 | 43 | 138407 | 5.091 ppbV | 99 |
| 26) | 2-butanone | 9.49 | 43 | 125460 | 4.635 ppbV # | 89 |
| 27) | cis-1,2-dichloroethene | 10.01 | 61 | 84883 | 4.756 ppbV | 94 |
| 28) | Ethyl Acetate | 10.32 | 61 | 19941 | 4.292 ppbV | 95 |
| 29) | chloroform | 10.38 | 83 | 119583M4 | 3.981 ppbV | |
| 30) | Tetrahydrofuran | 10.87 | 42 | 72047M6 | 4.836 ppbV | |
| 31) | 1,2-dichloroethane | 11.25 | 62 | 73505 | 3.944 ppbV # | 94 |
| 33) | hexane | 10.27 | 57 | 100865 | 5.957 ppbV | 98 |
| 35) | 1,1,1-trichloroethane | 11.55 | 97 | 112167 | 5.025 ppbV | 98 |
| 36) | benzene | 12.08 | 78 | 152877 | 4.910 ppbV # | 92 |
| 37) | carbon tetrachloride | 12.26 | 117 | 111873 | 5.436 ppbV | 98 |
| 38) | cyclohexane | 12.40 | 56 | 87789 | 5.928 ppbV | 95 |
| 39) | 1,2-dichloropropane | 13.04 | 63 | 59479 | 5.388 ppbV | 97 |
| 40) | bromodichloromethane | 13.26 | 83 | 121358 | 5.133 ppbV | 98 |
| 41) | 1,4-dioxane | 13.33 | 88 | 36935 | 5.318 ppbV | 96 |
| 42) | trichloroethene | 13.31 | 130 | 76004 | 5.529 ppbV | 96 |
| 43) | 2,2,4-trimethylpentane | 13.35 | 57 | 273649 | 5.728 ppbV | 100 |
| 44) | heptane | 13.65 | 43 | 114574 | 6.288 ppbV # | 92 |
| 45) | cis-1,3-dichloropropene | 14.30 | 75 | 338052 | 5.236 ppbV # | 90 |
| 46) | 4-methyl-2-pentanone | 14.34 | 43 | 157906 | 6.639 ppbV # | 82 |
| 47) | trans-1,3-dichloropropene | 14.90 | 75 | 84611 | 5.210 ppbV | 93 |
| 48) | 1,1,2-trichloroethane | 15.08 | 97 | 66824 | 5.389 ppbV | 92 |
| 50) | toluene | 15.37 | 91 | 191308 | 4.570 ppbV | 100 |
| 52) | 2-hexanone | 15.61 | 43 | 150510 | 6.355 ppbV | 94 |
| 53) | dibromochloromethane | 15.79 | 129 | 131251 | 5.360 ppbV | 99 |
| 54) | 1,2-dibromoethane | 16.01 | 107 | 110775 | 5.132 ppbV | 99 |
| 55) | tetrachloroethene | 16.42 | 166 | 95280 | 4.926 ppbV | 98 |
| 56) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 92760 | 5.265 ppbV | 96 |
| 57) | chlorobenzene | 17.00 | 112 | 166465 | 5.001 ppbV | 98 |
| 58) | ethylbenzene | 17.29 | 91 | 256029 | 4.767 ppbV | 97 |
| 59) | m+p-xylene | 17.43 | 91 | 401917 | 9.572 ppbV | 96 |
| 60) | bromoform | 17.52 | 173 | 127277 | 5.481 ppbV | 99 |
| 61) | styrene | 17.72 | 104 | 158195 | 5.310 ppbV | 97 |
| 62) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 152263 | 5.170 ppbV | 99 |
| 63) | o-xylene | 17.80 | 91 | 207041 | 4.720 ppbV | 96 |
| 65) | isopropylbenzene | 18.24 | 105 | 288427 | 4.977 ppbV | 97 |
| 66) | 4-ethyl toluene | 18.73 | 105 | 320538 | 5.093 ppbV | 97 |
| 67) | 1,3,5-trimethylbenzene | 18.78 | 105 | 294474 | 5.595 ppbV | 96 |
| 68) | tert-butylbenzene | 19.09 | 119 | 287493 | 4.952 ppbV | 99 |
| 69) | 1,2,4-trimethylbenzene | 19.09 | 105 | 253499 | 4.856 ppbV | 92 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:20:43 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 16:05:23 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 228870 | 5.799 | ppbV | 89 |
| 71) 1,3-dichlorobenzene | 19.22 | 146 | 192654 | 5.097 | ppbV | 96 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 196533M3 | 5.011 | ppbV | |
| 73) sec-butylbenzene | 19.29 | 105 | 378430 | 4.980 | ppbV | 98 |
| 74) p-isopropyltoluene | 19.40 | 119 | 359268 | 5.237 | ppbV | 99 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 186090 | 4.795 | ppbV | 99 |
| 76) n-butylbenzene | 19.73 | 91 | 310584 | 5.007 | ppbV | 95 |
| 77) 1,2,4-trichlorobenzene | 21.01 | 180 | 170431 | 6.232 | ppbV # | 89 |
| 78) naphthalene | 21.13 | 128 | 416003 | 6.179 | ppbV | 98 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 159360 | 6.207 | ppbV | 97 |
| 80) hexachlorobutadiene | 21.46 | 225 | 122447 | 5.344 | ppbV # | 85 |

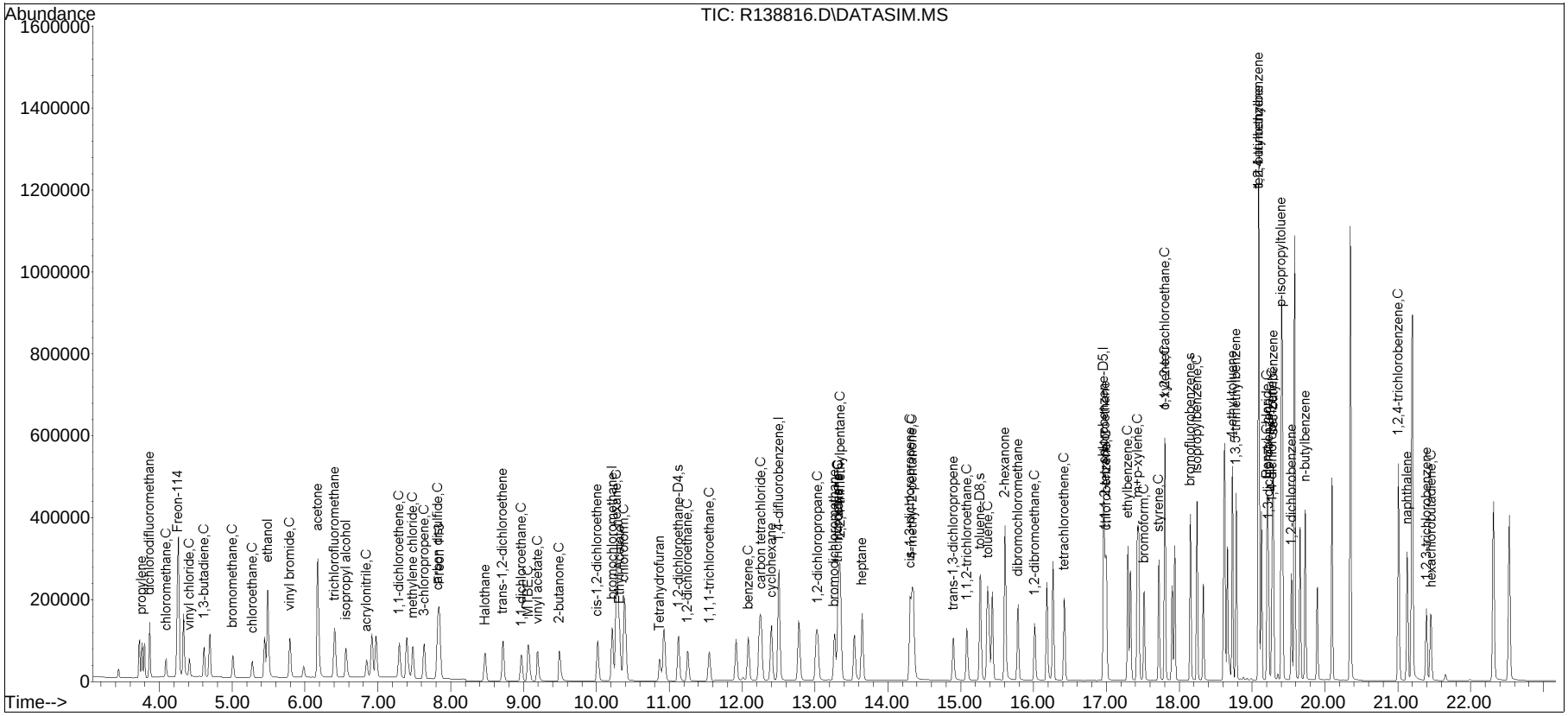
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:20:43 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 16:05:23 2014
Response via : Initial Calibration

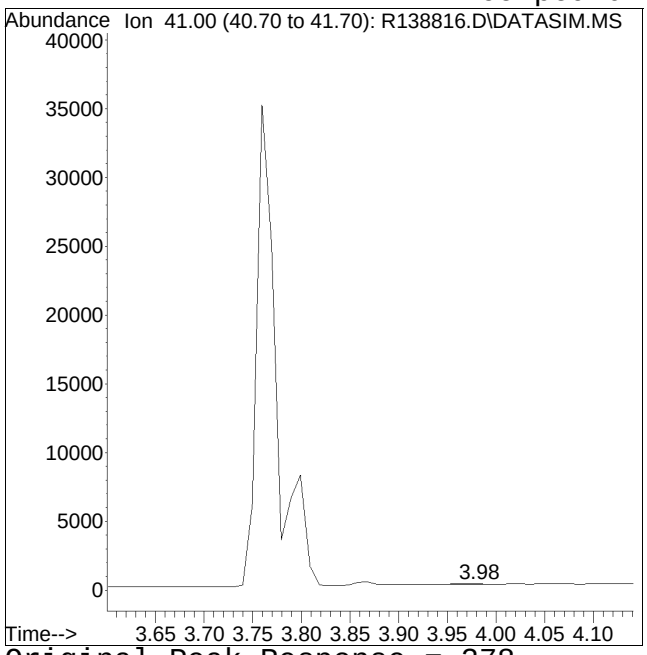
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D

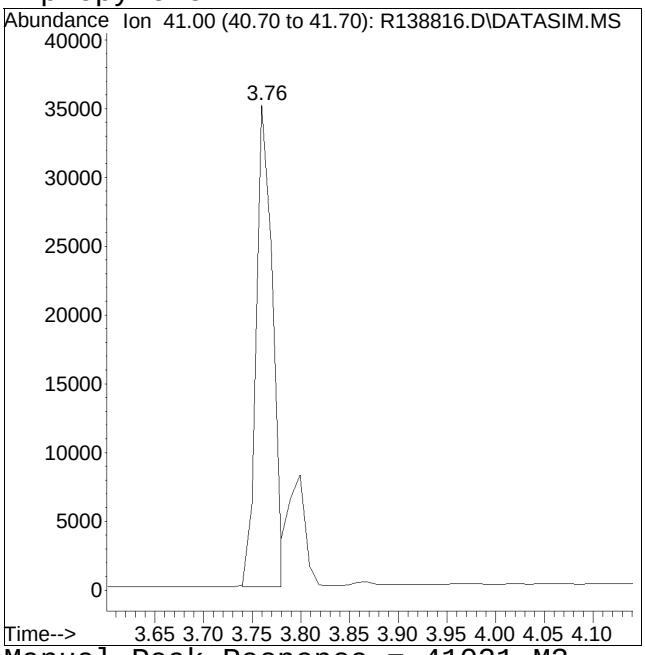


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #2: propylene



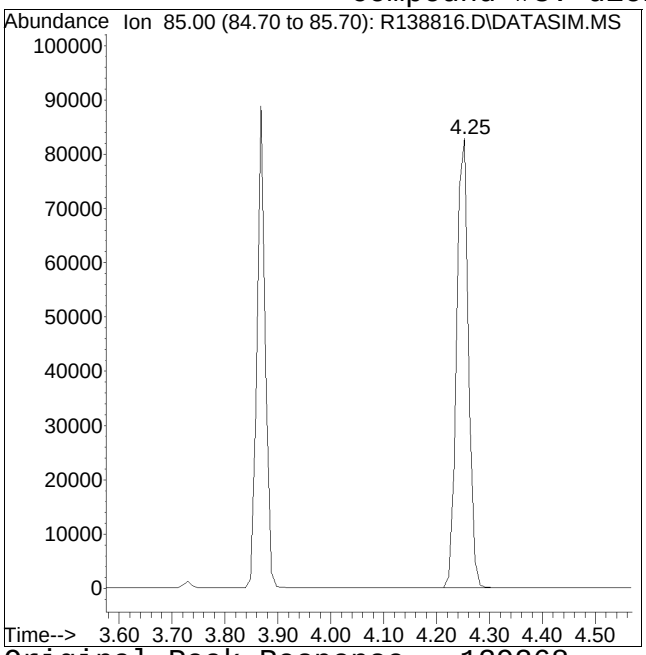

Original Peak Response = 278 Manual Peak Response = 41021 M3

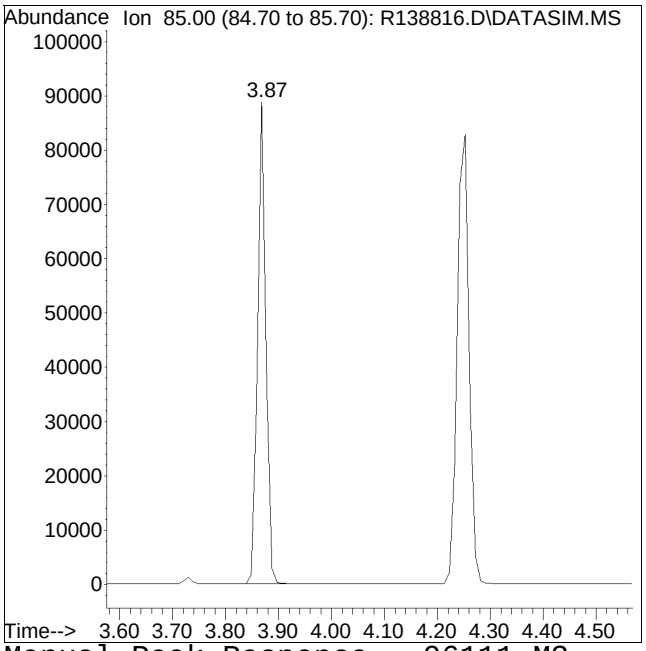
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138816.D
Date Inj'd : 1/2/2015 10:34 pm
Sample : ITO15-SIMSTD5.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:18 pm

Compound #3: dichlorodifluoromethane



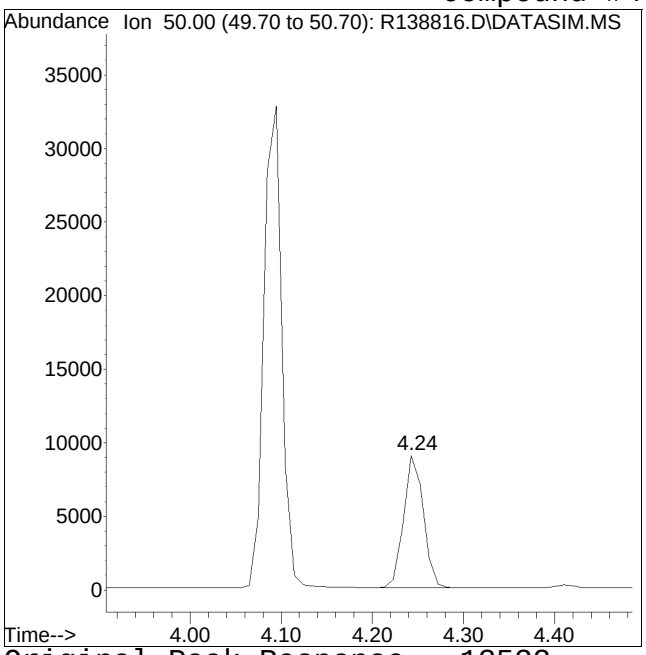

Original Peak Response = 129268 Manual Peak Response = 96111 M3

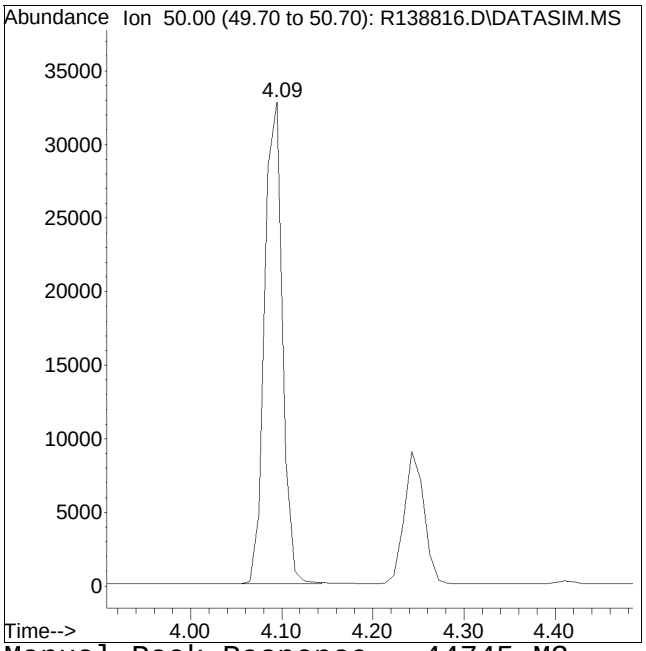
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #4: chloromethane



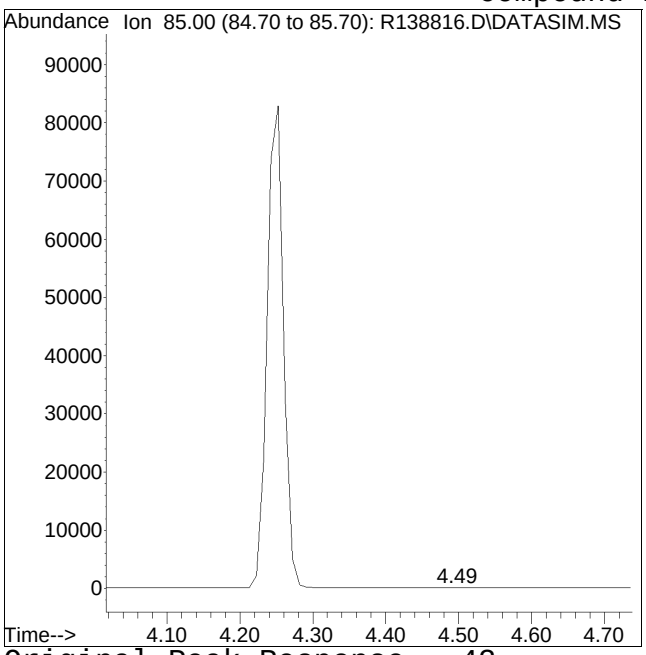

Original Peak Response = 13532 Manual Peak Response = 44745 M3

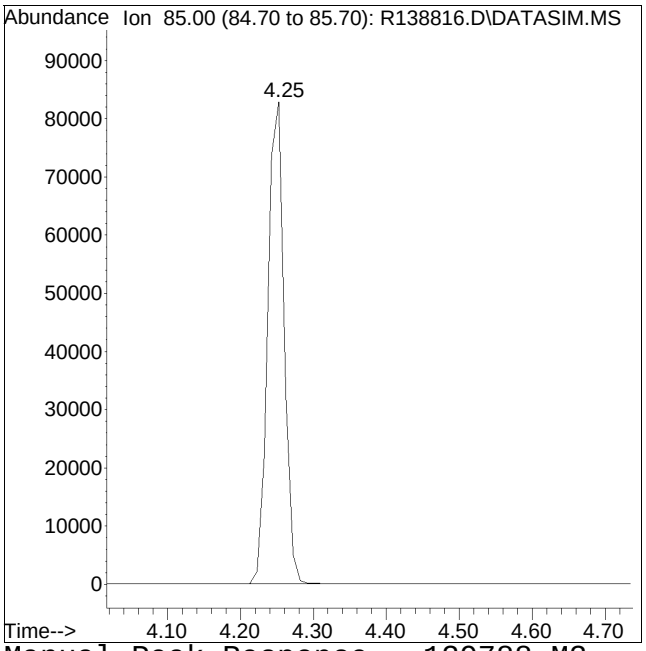
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #5: Freon-114



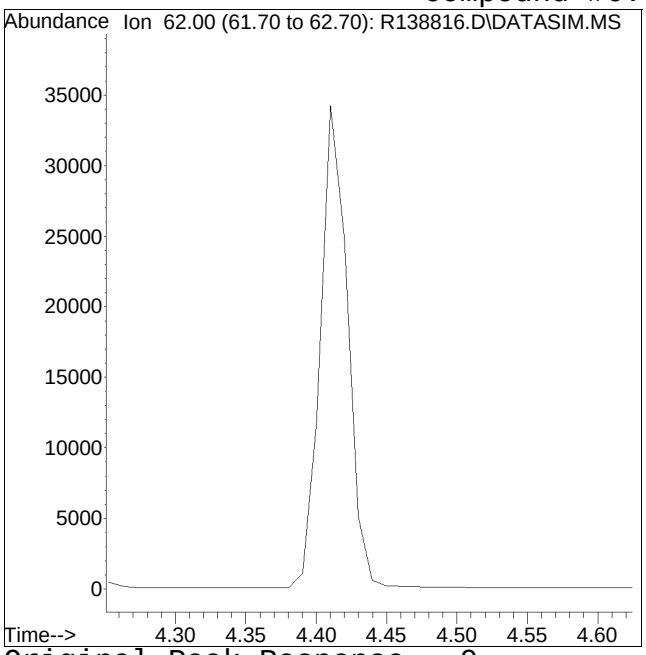

Original Peak Response = 42 Manual Peak Response = 129788 M3

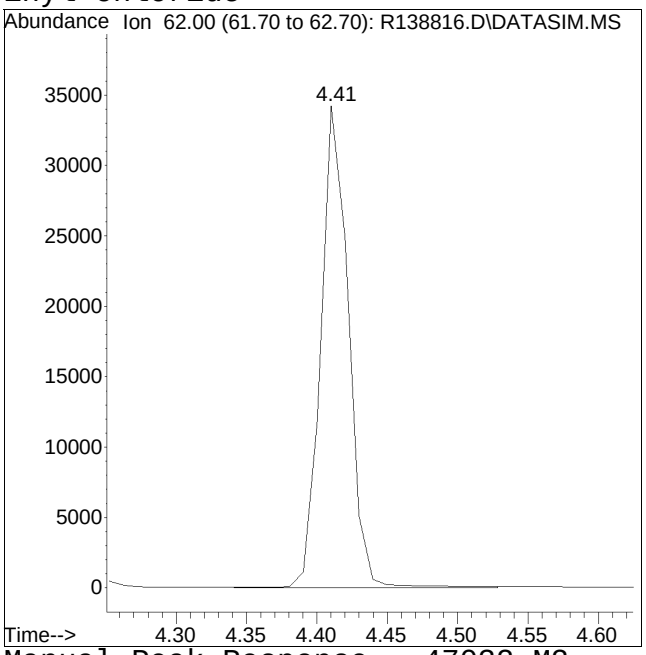
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #6: vinyl chloride



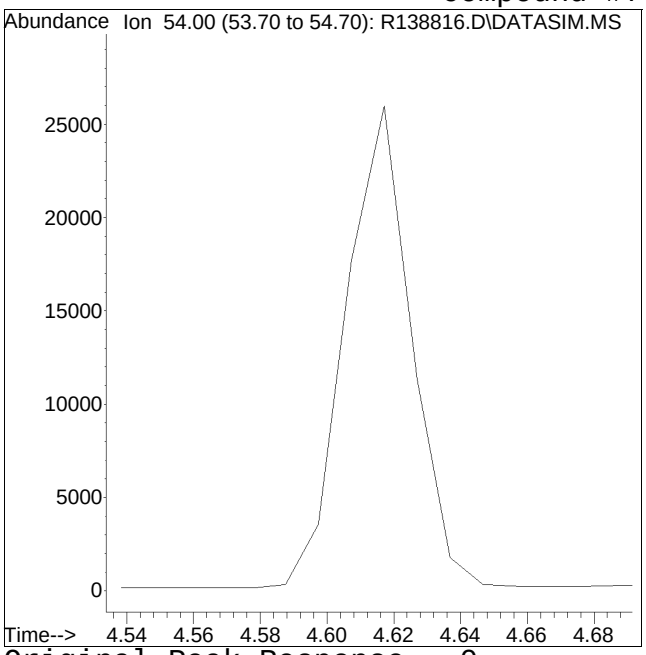



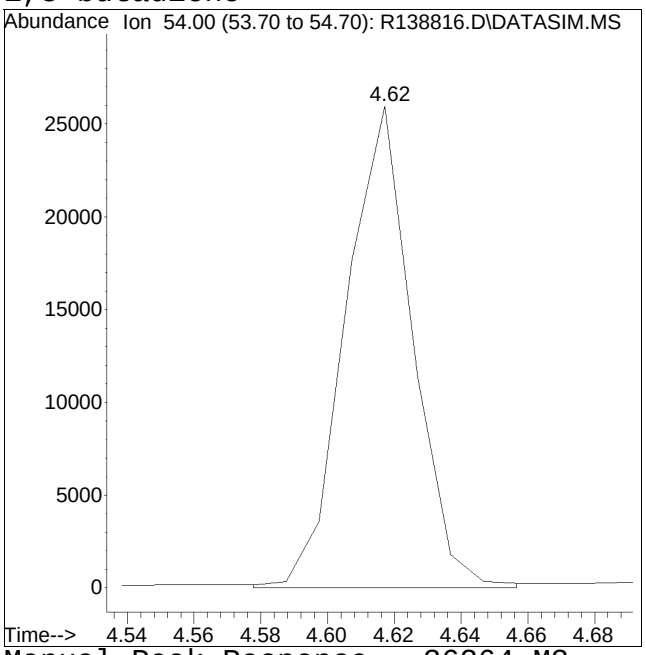

Original Peak Response = 0 Manual Peak Response = 47032 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #7: 1,3-butadiene



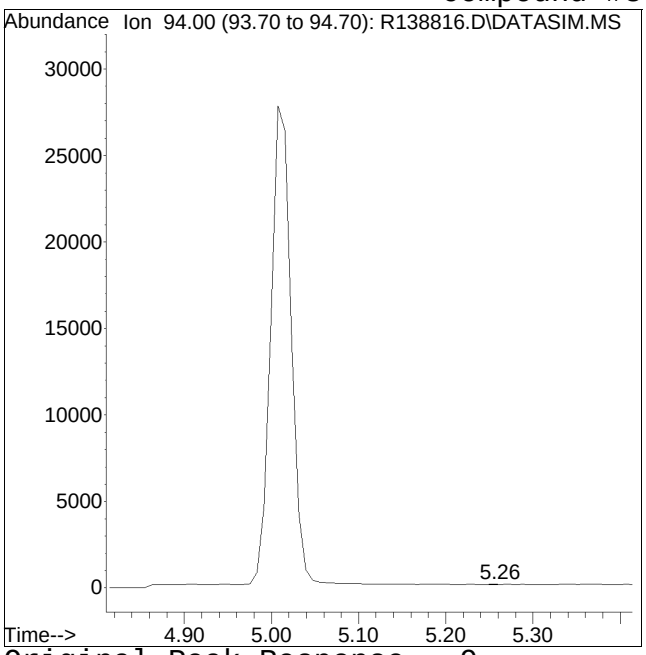



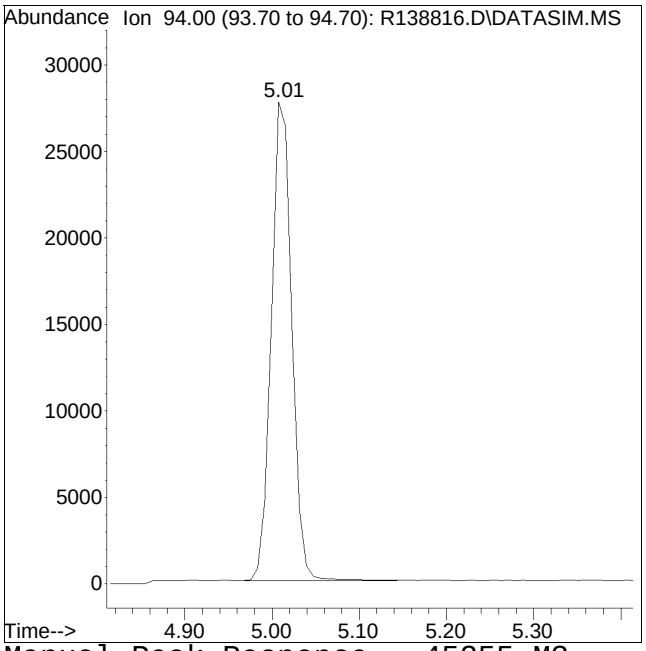

Original Peak Response = 0 Manual Peak Response = 36264 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #8: bromomethane



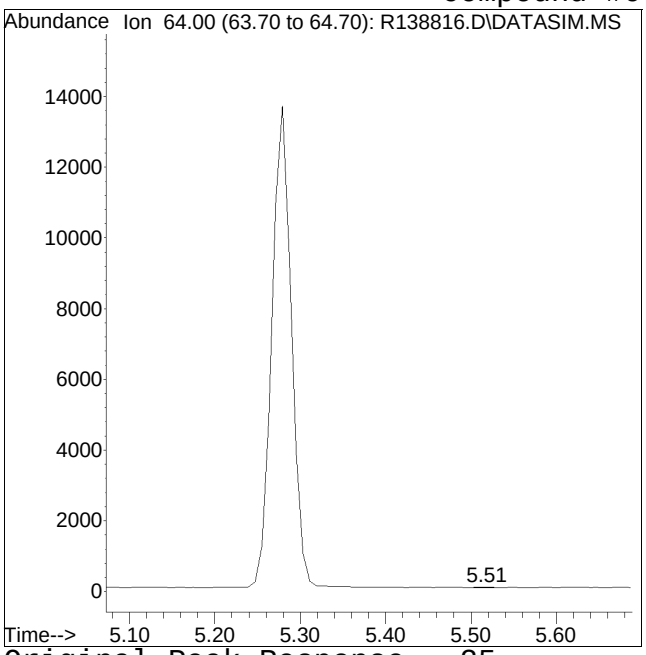

Original Peak Response = 9 Manual Peak Response = 45255 M3

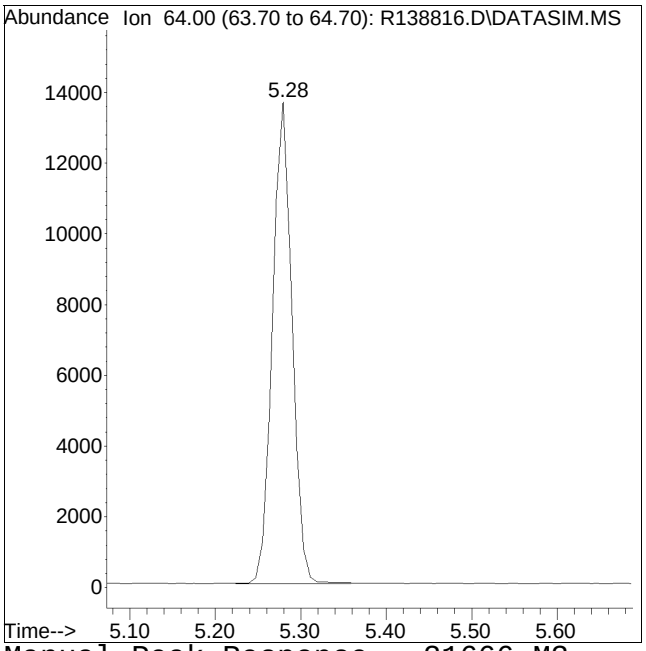
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #9: chloroethane



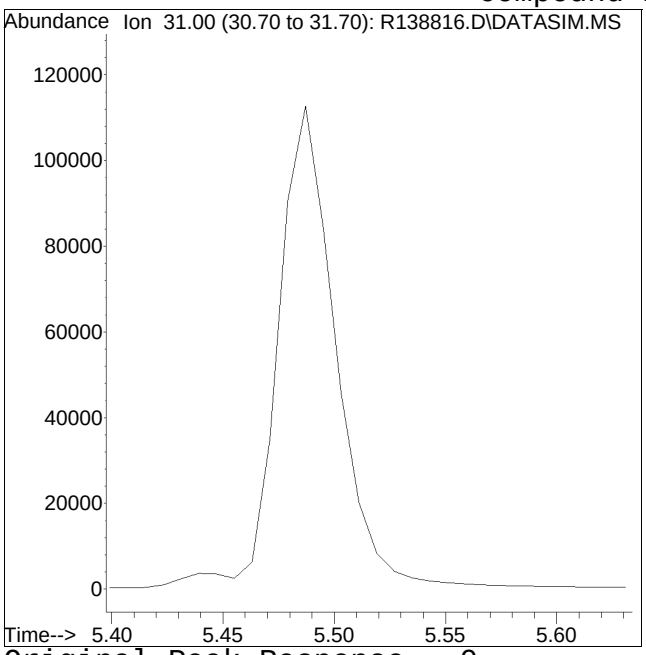

Original Peak Response = 25 Manual Peak Response = 21666 M3

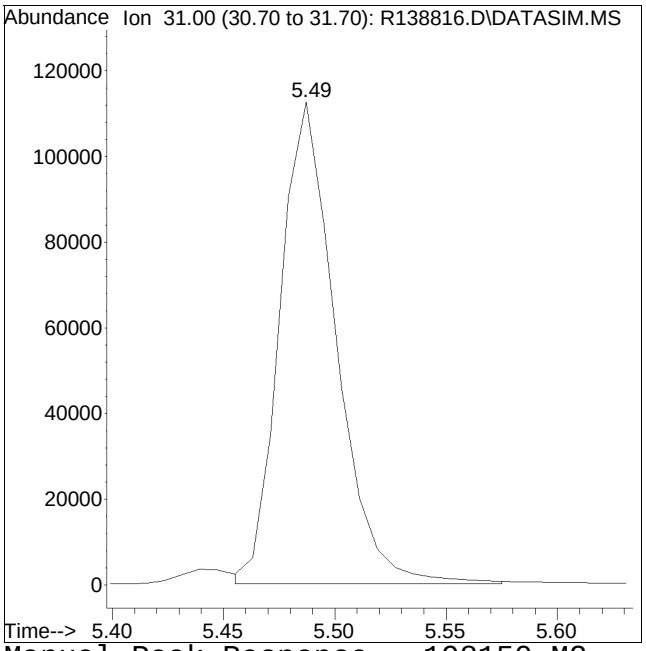
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #10: ethanol



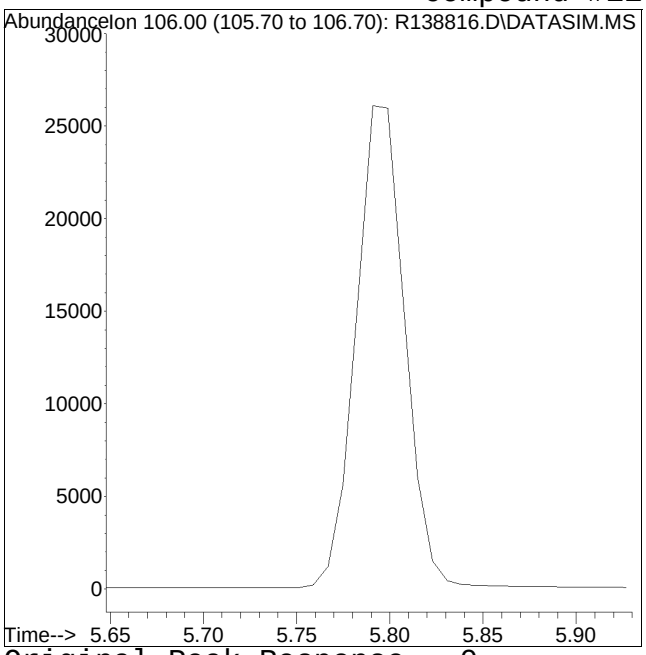




Original Peak Response = 0 Manual Peak Response = 198150 M2
M2 = Peak not found by automatic integration algorithm.

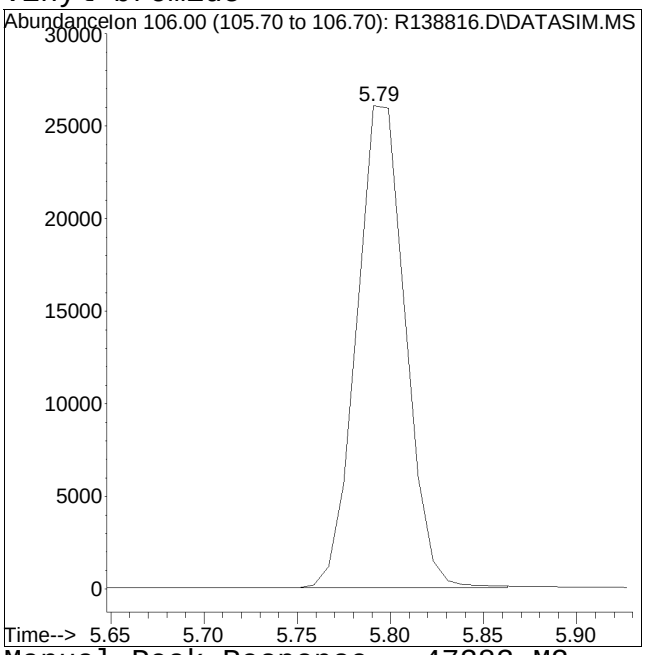
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #11: vinyl bromide




Original Peak Response = 0



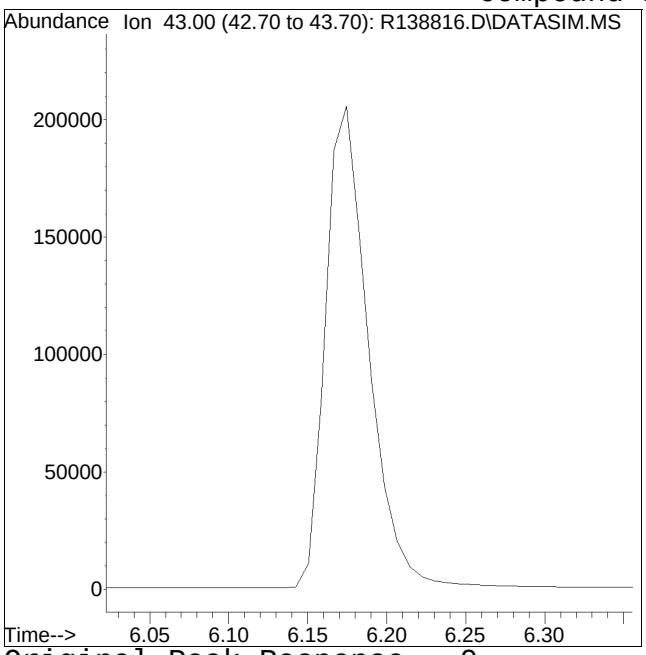

Manual Peak Response = 47383 M2

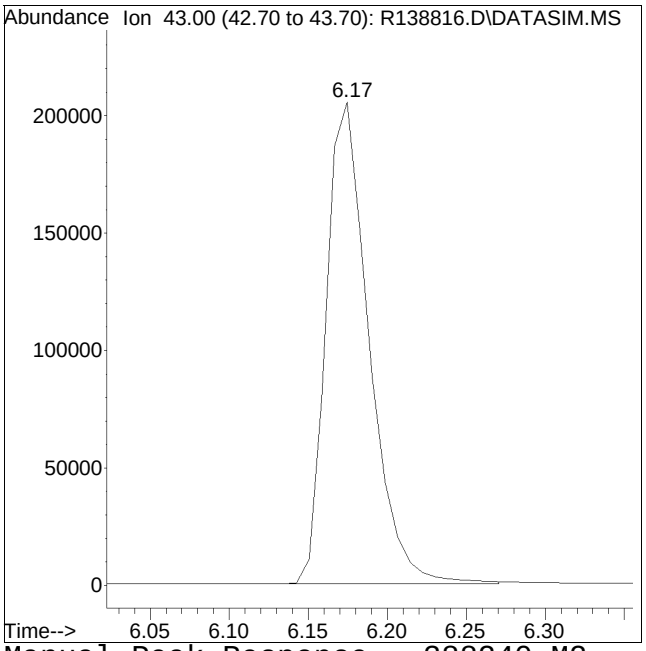
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #12: acetone



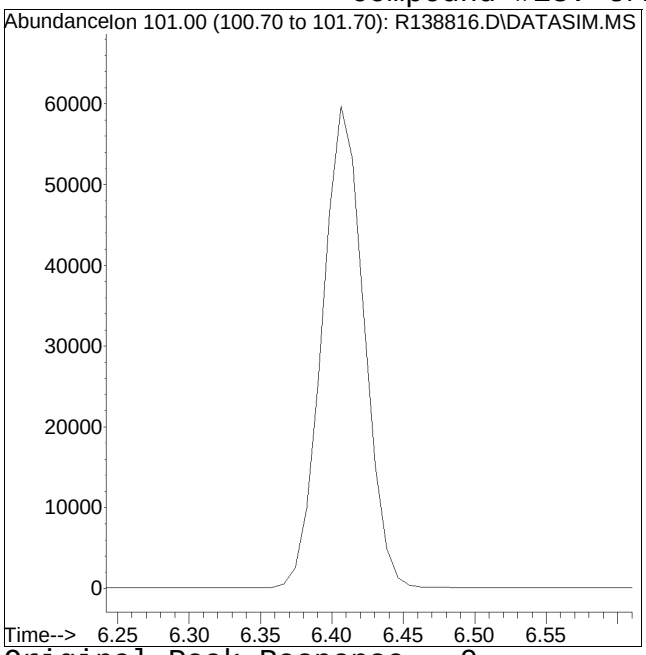



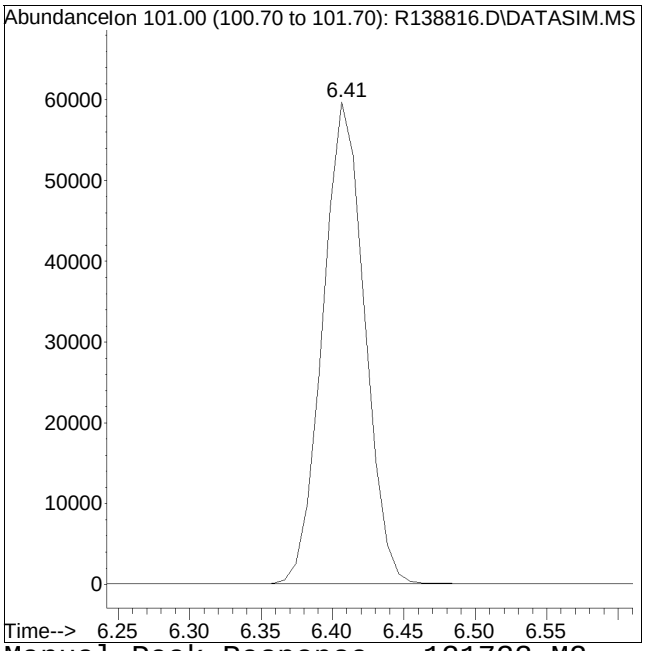

Original Peak Response = 0 Manual Peak Response = 388240 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #13: trichlorofluoromethane



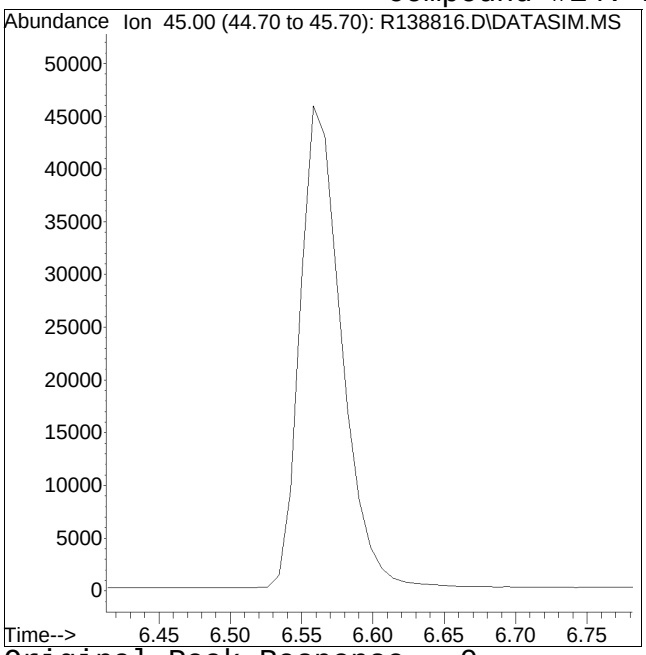




Original Peak Response = 0 Manual Peak Response = 121733 M2
M2 = Peak not found by automatic integration algorithm.

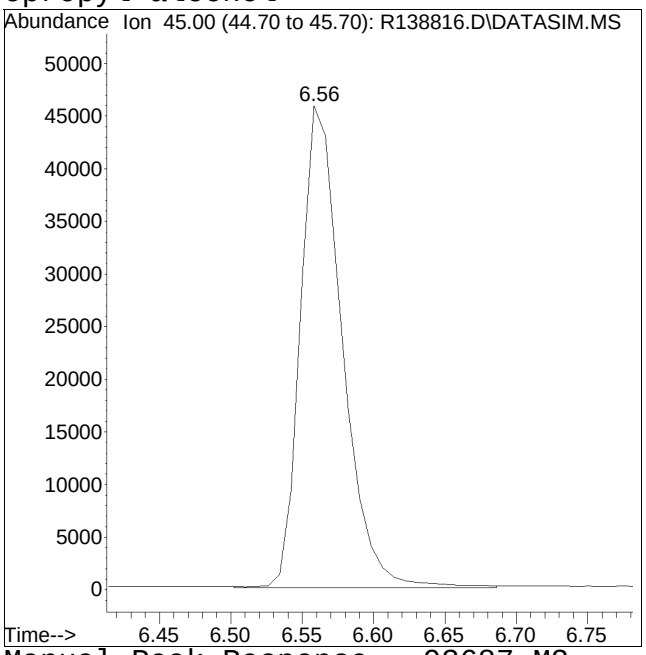
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TSIM150102.M
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #14: isopropyl alcohol




Original Peak Response = 0



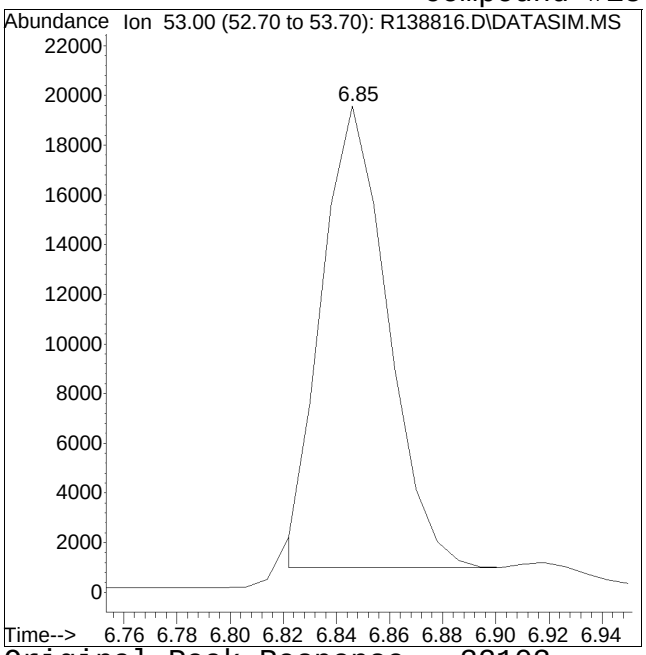

Manual Peak Response = 93687 M2

M2 = Peak not found by automatic integration algorithm.

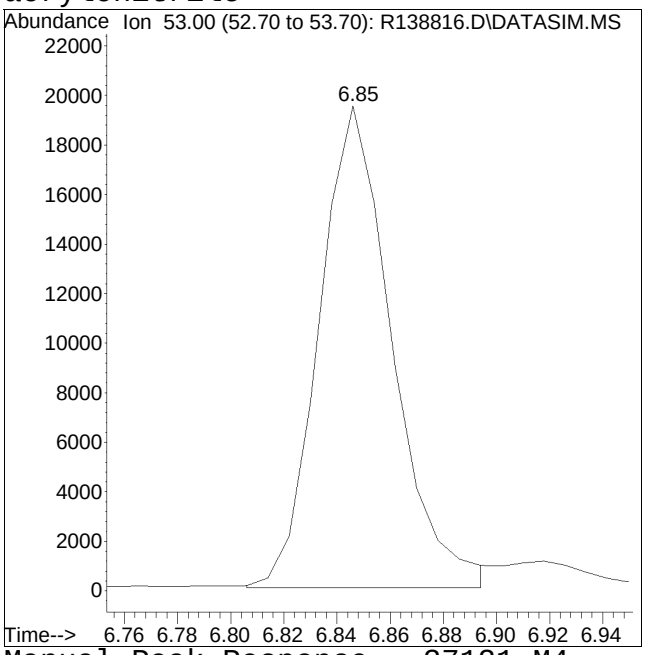
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #15: acrylonitrile




Original Peak Response = 32103



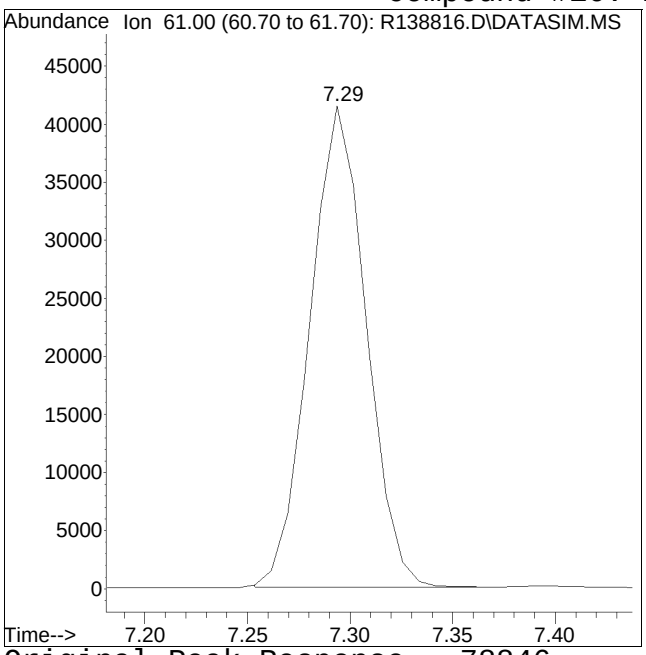

Manual Peak Response = 37121 M4

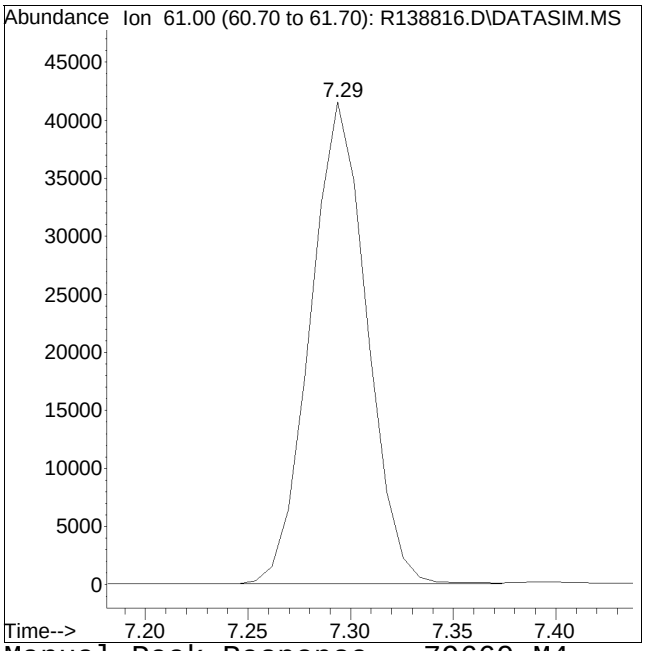
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #16: 1,1-dichloroethene



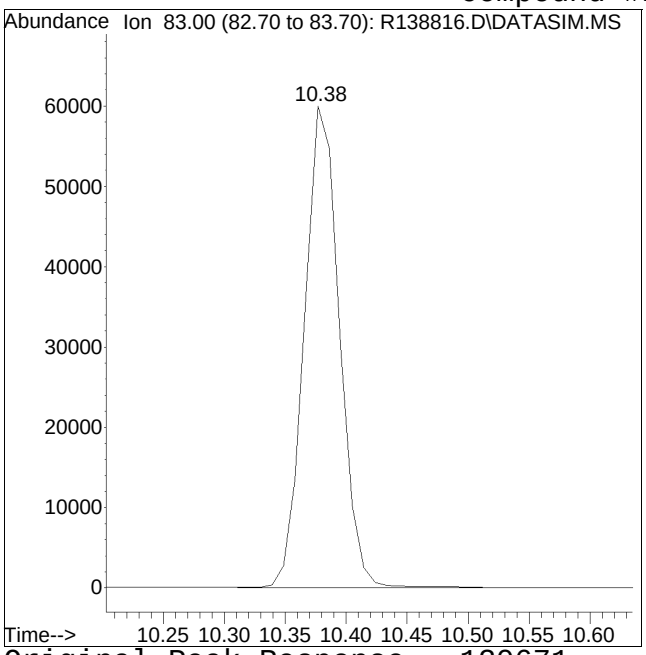




Original Peak Response = 78846 Manual Peak Response = 79660 M4
M4 = Poor automated baseline construction.

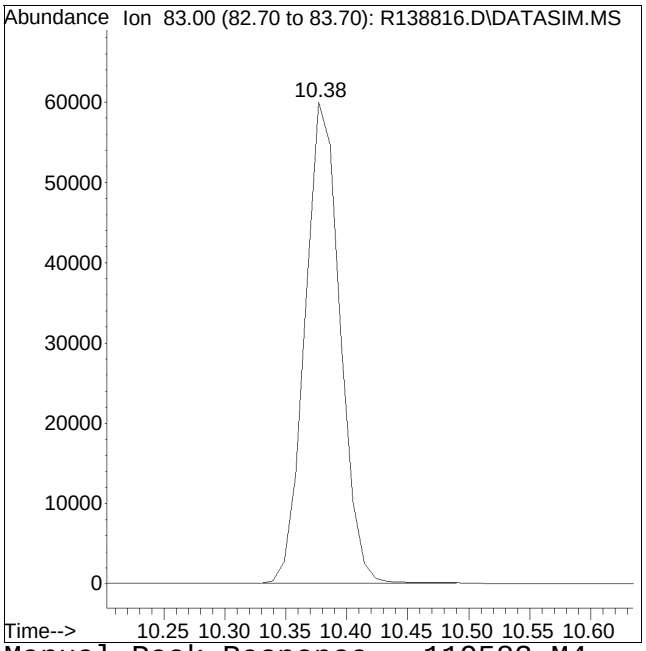
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #29: chloroform




Original Peak Response = 120671



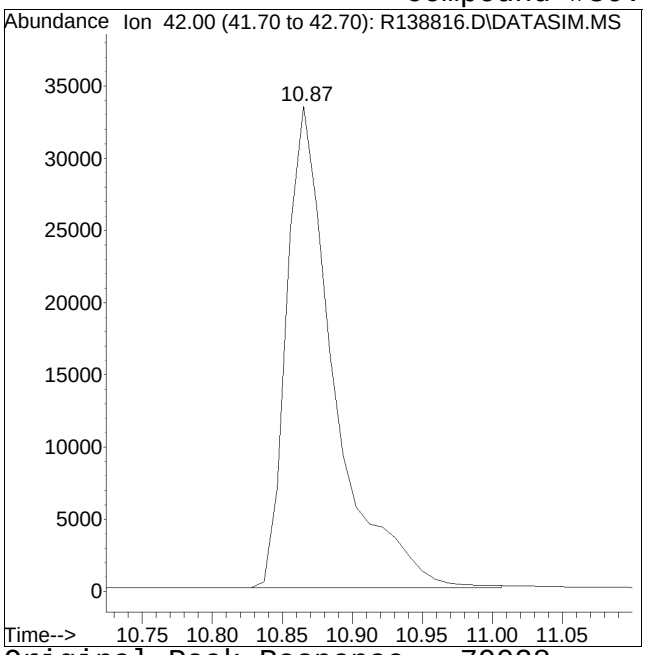

Manual Peak Response = 119583 M4

M4 = Poor automated baseline construction.

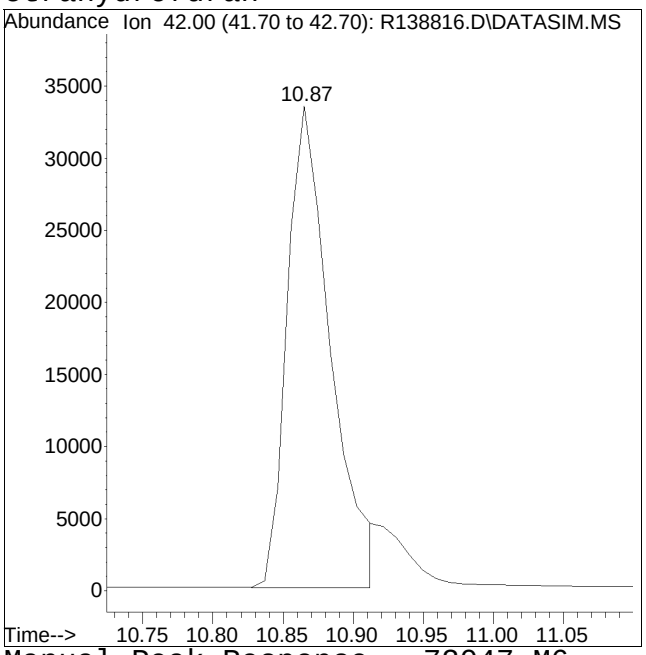
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 1/3/2015 1:18 pm

Compound #30: Tetrahydrofuran




Original Peak Response = 79028



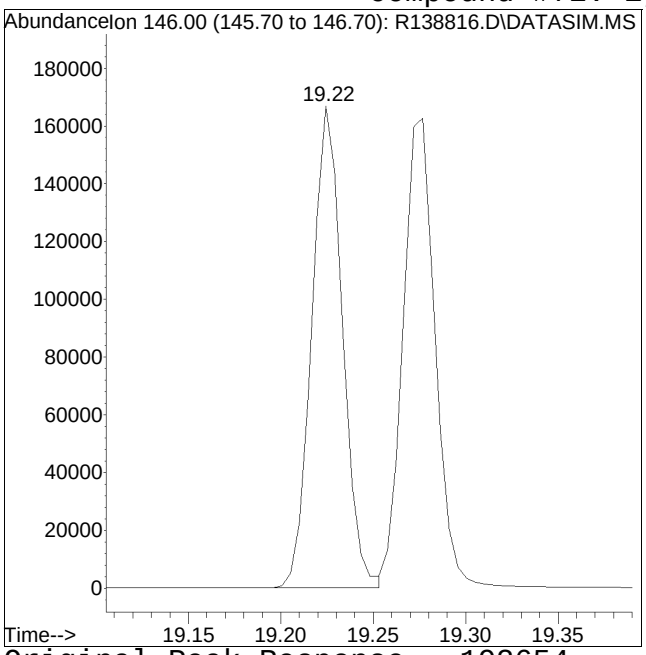

Manual Peak Response = 72047 M6

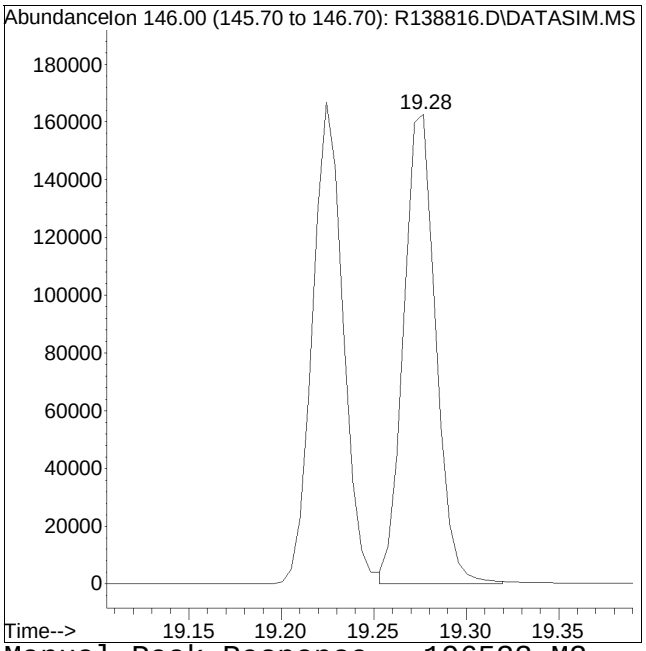
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138816.D
Date Inj'd : 1/2/2015 10:34 pm
Sample : ITO15-SIMSTD5.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:18 pm

Compound #72: 1,4-dichlorobenzene




Original Peak Response = 192654 Manual Peak Response = 196533 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:50:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 147896 | 10.000 | ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery = 99.14% | | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 327921 | 10.000 | ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery = 99.35% | | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 73431 | 10.000 | ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery = 101.16% | | | |
| System Monitoring Compounds | | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 97648 | 10.023 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.23% | | | |
| 51) toluene-D8 | 15.27 | 98 | 256746 | 9.905 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.05% | | | |
| 64) bromofluorobenzene | 18.15 | 95 | 200440 | 9.809 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.09% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 78561M6 | 9.658 | ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 130090 | 6.826 | ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 86429 | 9.741 | ppbV | 100 |
| 5) Freon-114 | 4.25 | 85 | 242818 | 9.435 | ppbV | 99 |
| 6) vinyl chloride | 4.41 | 62 | 89803 | 9.629 | ppbV | 100 |
| 7) 1,3-butadiene | 4.62 | 54 | 69728 | 9.697 | ppbV | 100 |
| 8) bromomethane | 5.02 | 94 | 86701 | 9.662 | ppbV | 98 |
| 9) chloroethane | 5.28 | 64 | 41945 | 9.763 | ppbV | 100 |
| 10) ethanol | 5.49 | 31 | 390746 | 49.725 | ppbV | 100 |
| 11) vinyl bromide | 5.80 | 106 | 91295 | 9.717 | ppbV | 99 |
| 12) acetone | 6.17 | 43 | 754369 | 48.996 | ppbV | 96 |
| 13) trichlorofluoromethane | 6.41 | 101 | 233900 | 9.690 | ppbV | 99 |
| 14) isopropyl alcohol | 6.56 | 45 | 177987 | 9.581 | ppbV | 100 |
| 15) acrylonitrile | 6.85 | 53 | 70748 | 9.612 | ppbV | 100 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 161516 | 10.225 | ppbV | 98 |
| 17) methylene chloride | 7.48 | 49 | 130453 | 9.679 | ppbV | 99 |
| 18) 3-chloropropene | 7.64 | 41 | 147777 | 9.648 | ppbV | 99 |
| 19) carbon disulfide | 7.82 | 76 | 275502 | 9.689 | ppbV | 98 |
| 20) Freon 113 | 7.85 | 101 | 196923 | 9.689 | ppbV | 100 |
| 21) Halothane | 8.47 | 117 | 160728 | 9.807 | ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 157550 | 9.661 | ppbV | 91 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 178411 | 9.761 | ppbV | 100 |
| 24) MTBE | 9.06 | 73 | 265242 | 9.698 | ppbV | 97 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:50:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 25) | vinyl acetate | 9.19 | 43 | 276280 | 10.067 | ppbV | | 98 |
| 26) | 2-butanone | 9.49 | 43 | 245169 | 9.855 | ppbV | | 97 |
| 27) | cis-1,2-dichloroethene | 10.02 | 61 | 161318 | 9.584 | ppbV | # | 86 |
| 28) | Ethyl Acetate | 10.31 | 61 | 39865 | 10.082 | ppbV | | 71 |
| 29) | chloroform | 10.38 | 83 | 231146M4 | 9.748 | ppbV | | |
| 30) | Tetrahydrofuran | 10.86 | 42 | 140445M6 | 9.831 | ppbV | | |
| 31) | 1,2-dichloroethane | 11.25 | 62 | 143100 | 9.818 | ppbV | | 100 |
| 33) | hexane | 10.27 | 57 | 193383 | 9.649 | ppbV | | 93 |
| 35) | 1,1,1-trichloroethane | 11.55 | 97 | 216635 | 9.720 | ppbV | | 100 |
| 36) | benzene | 12.08 | 78 | 294914 | 9.708 | ppbV | | 100 |
| 37) | carbon tetrachloride | 12.26 | 117 | 216211 | 9.726 | ppbV | | 100 |
| 38) | cyclohexane | 12.40 | 56 | 168742 | 9.673 | ppbV | | 98 |
| 39) | 1,2-dichloropropane | 13.04 | 63 | 114493 | 9.687 | ppbV | | 100 |
| 40) | bromodichloromethane | 13.27 | 83 | 235374 | 9.761 | ppbV | # | 95 |
| 41) | 1,4-dioxane | 13.31 | 88 | 72569 | 9.888 | ppbV | | 92 |
| 42) | trichloroethene | 13.31 | 130 | 147140 | 9.743 | ppbV | | 99 |
| 43) | 2,2,4-trimethylpentane | 13.35 | 57 | 525922 | 9.672 | ppbV | | 100 |
| 44) | heptane | 13.65 | 43 | 223014 | 9.796 | ppbV | | 99 |
| 45) | cis-1,3-dichloropropene | 14.30 | 75 | 670855 | 9.987 | ppbV | | 99 |
| 46) | 4-methyl-2-pentanone | 14.34 | 43 | 308198 | 9.822 | ppbV | # | 96 |
| 47) | trans-1,3-dichloropropene | 14.90 | 75 | 170874 | 10.163 | ppbV | | 98 |
| 48) | 1,1,2-trichloroethane | 15.08 | 97 | 130811 | 9.851 | ppbV | | 99 |
| 50) | toluene | 15.37 | 91 | 368724 | 9.526 | ppbV | | 100 |
| 52) | 2-hexanone | 15.61 | 43 | 291996 | 9.589 | ppbV | | 97 |
| 53) | dibromochloromethane | 15.79 | 129 | 258098 | 9.719 | ppbV | | 100 |
| 54) | 1,2-dibromoethane | 16.01 | 107 | 218689 | 9.758 | ppbV | | 100 |
| 55) | tetrachloroethene | 16.42 | 166 | 184964 | 9.595 | ppbV | | 99 |
| 56) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 183863 | 9.797 | ppbV | | 100 |
| 57) | chlorobenzene | 17.00 | 112 | 325967 | 9.679 | ppbV | | 98 |
| 58) | ethylbenzene | 17.30 | 91 | 497408 | 9.603 | ppbV | | 99 |
| 59) | m+p-xylene | 17.44 | 91 | 776851 | 19.107 | ppbV | | 99 |
| 60) | bromoform | 17.52 | 173 | 251187 | 9.755 | ppbV | | 99 |
| 61) | styrene | 17.72 | 104 | 310354 | 9.697 | ppbV | | 99 |
| 62) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 294671 | 9.565 | ppbV | | 99 |
| 63) | o-xylene | 17.80 | 91 | 400986 | 9.573 | ppbV | | 99 |
| 65) | isopropylbenzene | 18.24 | 105 | 556221 | 9.532 | ppbV | | 99 |
| 66) | 4-ethyl toluene | 18.73 | 105 | 625483 | 9.645 | ppbV | | 99 |
| 67) | 1,3,5-trimethylbenzene | 18.78 | 105 | 573864 | 9.632 | ppbV | | 99 |
| 68) | tert-butylbenzene | 19.09 | 119 | 560251 | 9.632 | ppbV | | 98 |
| 69) | 1,2,4-trimethylbenzene | 19.09 | 105 | 493988 | 9.632 | ppbV | | 96 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:50:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 458544 | 9.903 | ppbV | 95 |
| 71) 1,3-dichlorobenzene | 19.23 | 146 | 375334 | 9.629 | ppbV | 97 |
| 72) 1,4-dichlorobenzene | 19.27 | 146 | 386983 | 9.732 | ppbV | 96 |
| 73) sec-butylbenzene | 19.29 | 105 | 720865 | 9.415 | ppbV | 97 |
| 74) p-isopropyltoluene | 19.40 | 119 | 693793 | 9.545 | ppbV | 98 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 361872 | 9.612 | ppbV | 97 |
| 76) n-butylbenzene | 19.73 | 91 | 596718 | 9.496 | ppbV | 98 |
| 77) 1,2,4-trichlorobenzene | 21.00 | 180 | 339943 | 9.859 | ppbV # | 92 |
| 78) naphthalene | 21.13 | 128 | 810793 | 9.633 | ppbV | 96 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 323845 | 10.044 | ppbV # | 94 |
| 80) hexachlorobutadiene | 21.46 | 225 | 245763 | 9.920 | ppbV # | 94 |

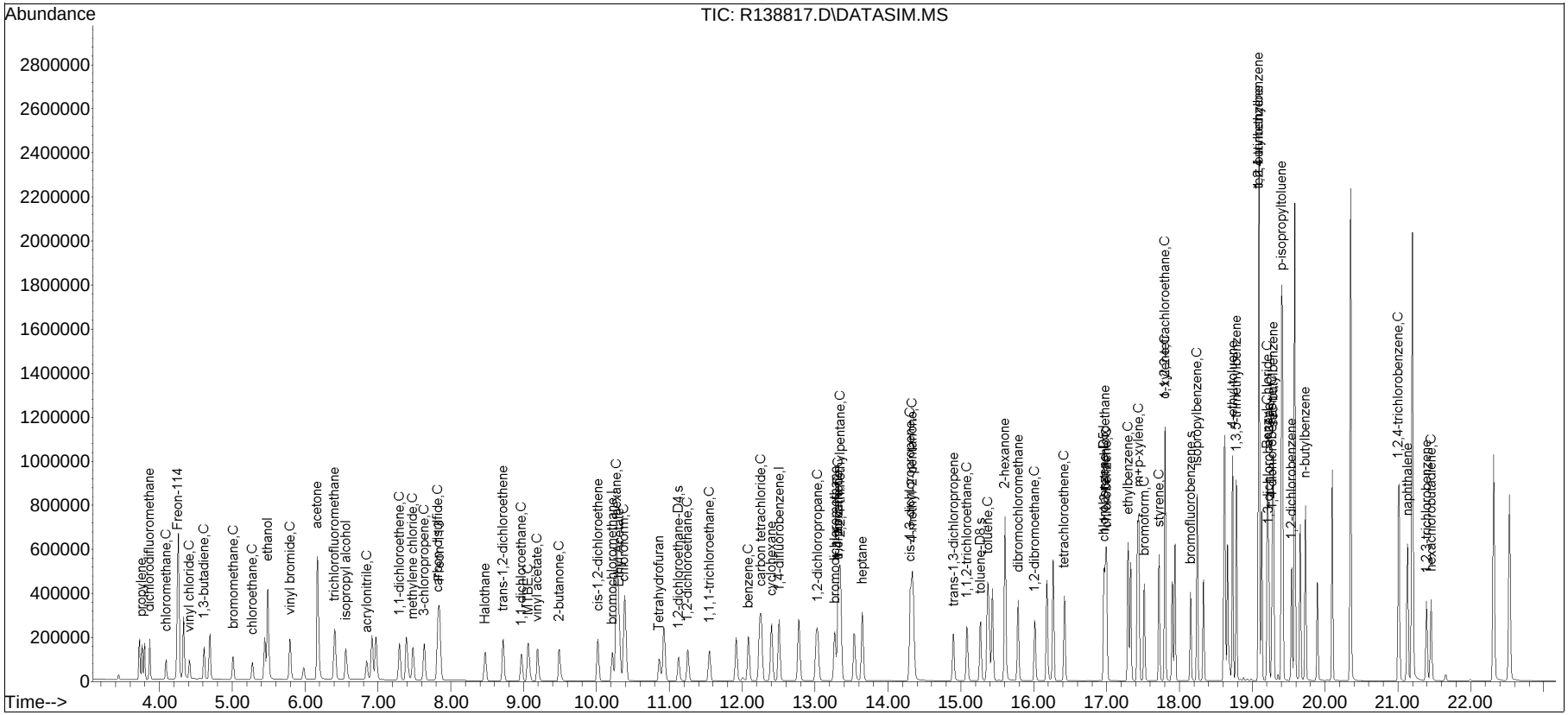
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG753109
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:50:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

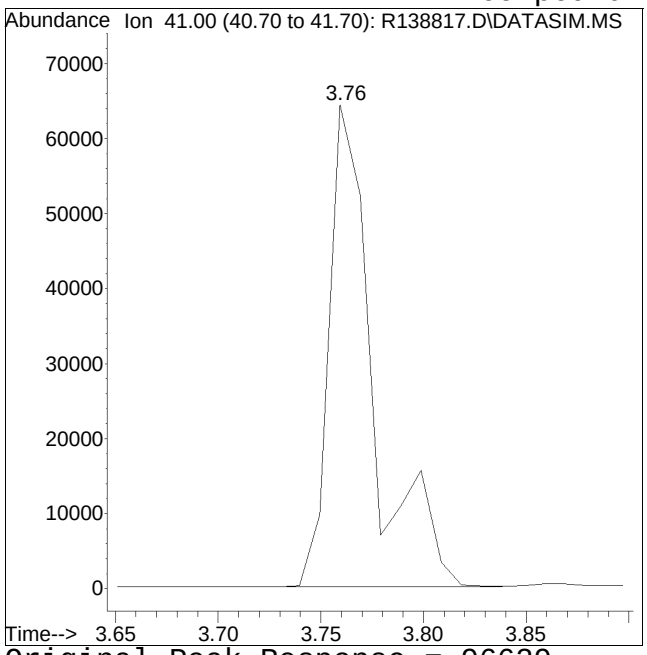
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



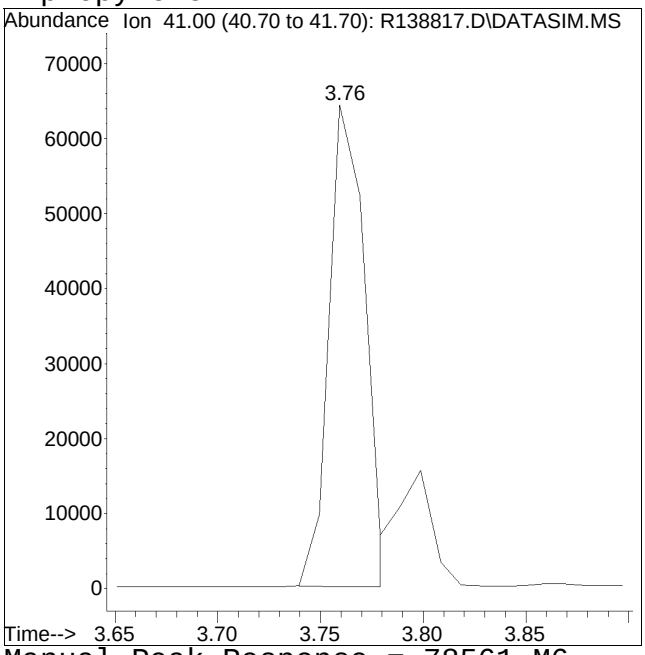
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TSIM_ICAL
Data File : R138817.D Operator : TSIM150102.M
Date Inj'd : 1/2/2015 11:08 pm Instrument : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0 Quant Date : Air Piano 1
: 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 96629



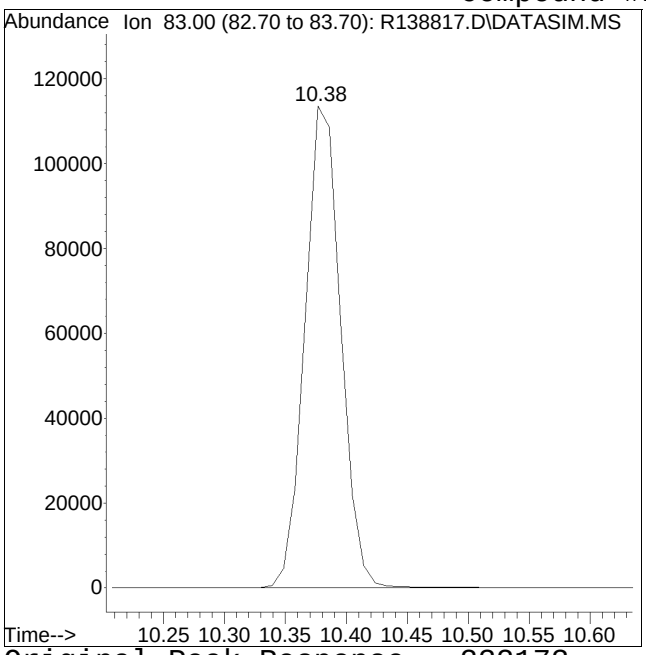

Manual Peak Response = 78561 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

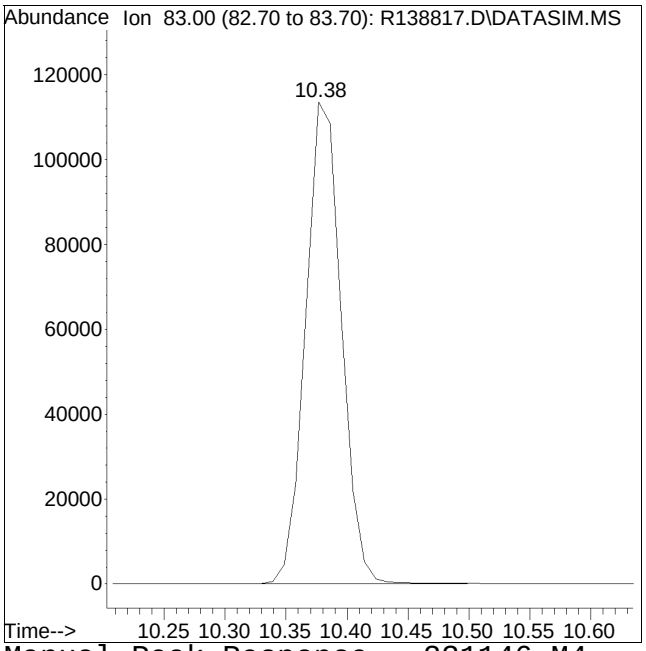
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 232173



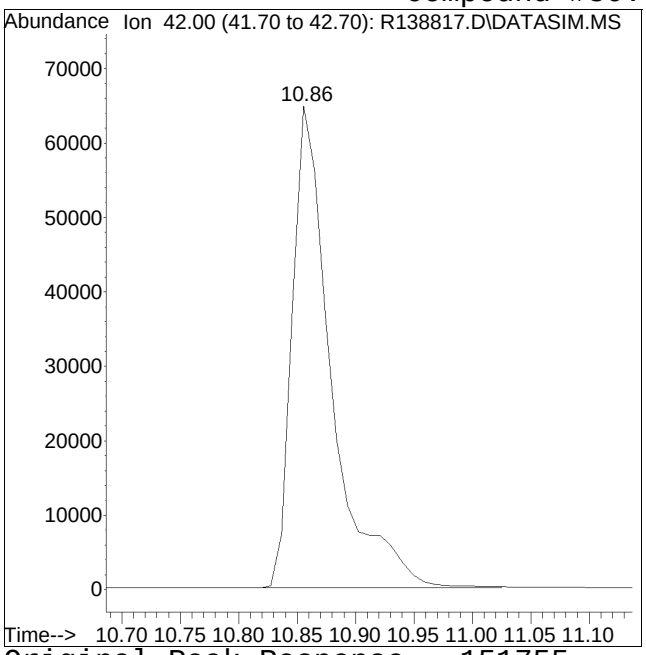

Manual Peak Response = 231146 M4

M4 = Poor automated baseline construction.

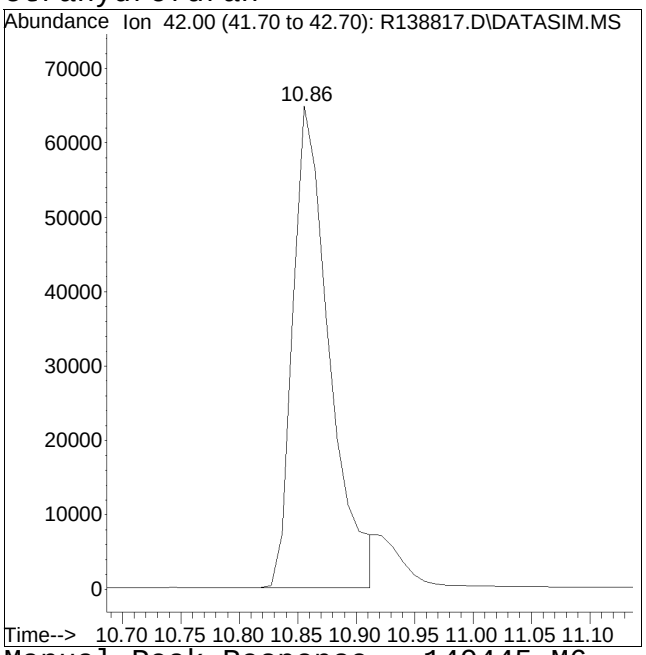
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 1/3/2015 1:21 pm

Compound #30: Tetrahydrofuran




Original Peak Response = 151755




Manual Peak Response = 140445 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 146994 | 10.000 | ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery = 98.54% | | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 329711 | 10.000 | ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery = 99.90% | | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 72180 | 10.000 | ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery = 99.44% | | | |
| System Monitoring Compounds | | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 95576 | 9.757 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.57% | | | |
| 51) toluene-D8 | 15.27 | 98 | 247337 | 9.707 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.07% | | | |
| 64) bromofluorobenzene | 18.15 | 95 | 196469 | 9.782 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.82% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 162644M6 | 20.118 | ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 369302 | 19.497 | ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 175579 | 19.911 | ppbV | 100 |
| 5) Freon-114 | 4.25 | 85 | 494056 | 19.315 | ppbV | 99 |
| 6) vinyl chloride | 4.41 | 62 | 184049 | 19.856 | ppbV | 100 |
| 7) 1,3-butadiene | 4.62 | 54 | 140508 | 19.660 | ppbV | 99 |
| 8) bromomethane | 5.01 | 94 | 178128 | 19.972 | ppbV | 100 |
| 9) chloroethane | 5.28 | 64 | 84968 | 19.899 | ppbV | 99 |
| 10) ethanol | 5.49 | 31 | 785883 | 100.622 | ppbV | 100 |
| 11) vinyl bromide | 5.80 | 106 | 187666 | 20.097 | ppbV | 99 |
| 12) acetone | 6.17 | 43 | 1518760 | 99.247 | ppbV | 99 |
| 13) trichlorofluoromethane | 6.41 | 101 | 467379 | 19.481 | ppbV | 99 |
| 14) isopropyl alcohol | 6.56 | 45 | 356035 | 19.283 | ppbV | 100 |
| 15) acrylonitrile | 6.85 | 53 | 156460 | 21.387 | ppbV | 99 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 331701 | 21.128 | ppbV | 99 |
| 17) methylene chloride | 7.48 | 49 | 262802 | 19.618 | ppbV | 100 |
| 18) 3-chloropropene | 7.64 | 41 | 302279 | 19.856 | ppbV | 99 |
| 19) carbon disulfide | 7.82 | 76 | 564217 | 19.965 | ppbV | 96 |
| 20) Freon 113 | 7.85 | 101 | 403412 | 19.970 | ppbV | 99 |
| 21) Halothane | 8.47 | 117 | 334344 | 20.527 | ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.71 | 61 | 319471 | 19.711 | ppbV | 100 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 362635 | 19.961 | ppbV | 99 |
| 24) MTBE | 9.06 | 73 | 539318 | 19.841 | ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) vinyl acetate | 9.19 | 43 | 568003 | 20.823 | ppbV | 99 |
| 26) 2-butanone | 9.48 | 43 | 499559 | 20.204 | ppbV | 97 |
| 27) cis-1,2-dichloroethene | 10.01 | 61 | 330169 | 19.737 | ppbV | 100 |
| 28) Ethyl Acetate | 10.31 | 61 | 82965 | 21.111 | ppbV | 96 |
| 29) chloroform | 10.38 | 83 | 468966M4 | 19.899 | ppbV | |
| 30) Tetrahydrofuran | 10.85 | 42 | 285408M6 | 20.101 | ppbV | |
| 31) 1,2-dichloroethane | 11.25 | 62 | 290615 | 20.061 | ppbV | 99 |
| 33) hexane | 10.27 | 57 | 389454 | 19.326 | ppbV | 87 |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 444026 | 19.814 | ppbV | 100 |
| 36) benzene | 12.08 | 78 | 598407 | 19.592 | ppbV | 100 |
| 37) carbon tetrachloride | 12.26 | 117 | 443098 | 19.824 | ppbV | 99 |
| 38) cyclohexane | 12.40 | 56 | 335703 | 19.140 | ppbV | 99 |
| 39) 1,2-dichloropropane | 13.04 | 63 | 230433 | 19.391 | ppbV | 99 |
| 40) bromodichloromethane | 13.26 | 83 | 478005 | 19.714 | ppbV | 99 |
| 41) 1,4-dioxane | 13.30 | 88 | 148836 | 20.169 | ppbV | 94 |
| 42) trichloroethene | 13.31 | 130 | 297119 | 19.567 | ppbV | 100 |
| 43) 2,2,4-trimethylpentane | 13.35 | 57 | 1072763 | 19.621 | ppbV | 99 |
| 44) heptane | 13.65 | 43 | 452492 | 19.767 | ppbV | 99 |
| 45) cis-1,3-dichloropropene | 14.30 | 75 | 1377594 | 20.397 | ppbV | 98 |
| 46) 4-methyl-2-pentanone | 14.34 | 43 | 631939 | 20.031 | ppbV # | 90 |
| 47) trans-1,3-dichloropropene | 14.89 | 75 | 351771 | 20.809 | ppbV | 93 |
| 48) 1,1,2-trichloroethane | 15.08 | 97 | 263920 | 19.768 | ppbV | 98 |
| 50) toluene | 15.37 | 91 | 747774 | 19.654 | ppbV | 100 |
| 52) 2-hexanone | 15.60 | 43 | 601409 | 20.092 | ppbV # | 97 |
| 53) dibromochloromethane | 15.79 | 129 | 533083 | 20.423 | ppbV | 100 |
| 54) 1,2-dibromoethane | 16.01 | 107 | 447171 | 20.298 | ppbV | 99 |
| 55) tetrachloroethene | 16.42 | 166 | 371665 | 19.614 | ppbV | 99 |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | 131 | 375603 | 20.361 | ppbV | 99 |
| 57) chlorobenzene | 17.00 | 112 | 663354 | 20.038 | ppbV | 99 |
| 58) ethylbenzene | 17.29 | 91 | 1001242 | 19.664 | ppbV | 99 |
| 59) m+p-xylene | 17.44 | 91 | 1583705M1 | 39.627 | ppbV | |
| 60) bromoform | 17.52 | 173 | 523902 | 20.698 | ppbV | 99 |
| 61) styrene | 17.72 | 104 | 633492 | 20.136 | ppbV | 99 |
| 62) 1,1,2,2-tetrachloroethane | 17.80 | 83 | 594485 | 19.632 | ppbV | 100 |
| 63) o-xylene | 17.80 | 91 | 812456 | 19.732 | ppbV | 100 |
| 65) isopropylbenzene | 18.24 | 105 | 1134977 | 19.787 | ppbV | 99 |
| 66) 4-ethyl toluene | 18.73 | 105 | 1256704 | 19.714 | ppbV | 100 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 1144903 | 19.550 | ppbV | 99 |
| 68) tert-butylbenzene | 19.09 | 119 | 1118707 | 19.566 | ppbV | 100 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 983863 | 19.516 | ppbV | 100 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 935807 | 20.560 | ppbV | 99 |
| 71) 1,3-dichlorobenzene | 19.22 | 146 | 750831 | 19.597 | ppbV | 99 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 769311 | 19.683 | ppbV | 99 |
| 73) sec-butylbenzene | 19.29 | 105 | 1462346 | 19.431 | ppbV | 100 |
| 74) p-isopropyltoluene | 19.40 | 119 | 1365072 | 19.106 | ppbV | 99 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 707032 | 19.105 | ppbV | 99 |
| 76) n-butylbenzene | 19.73 | 91 | 1152071 | 18.652 | ppbV | 99 |
| 77) 1,2,4-trichlorobenzene | 21.01 | 180 | 528582 | 15.595 | ppbV | 99 |
| 78) naphthalene | 21.13 | 128 | 1200691 | 14.513 | ppbV | 100 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 461333 | 14.557 | ppbV | 97 |
| 80) hexachlorobutadiene | 21.46 | 225 | 372172 | 15.283 | ppbV | 98 |

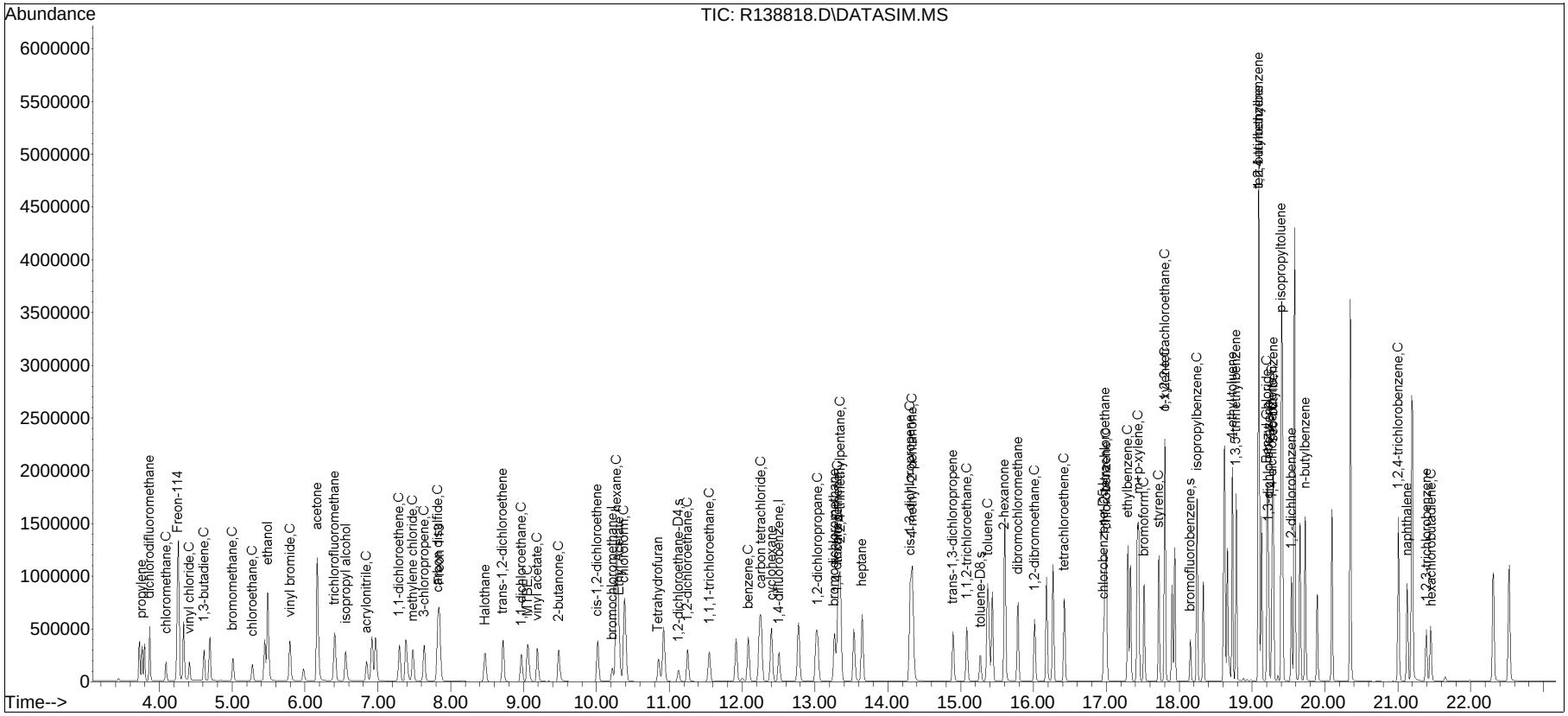
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

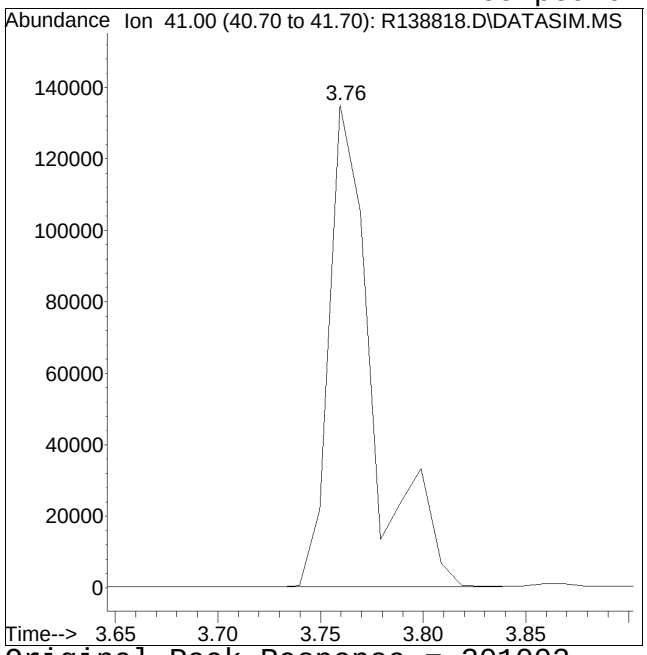
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



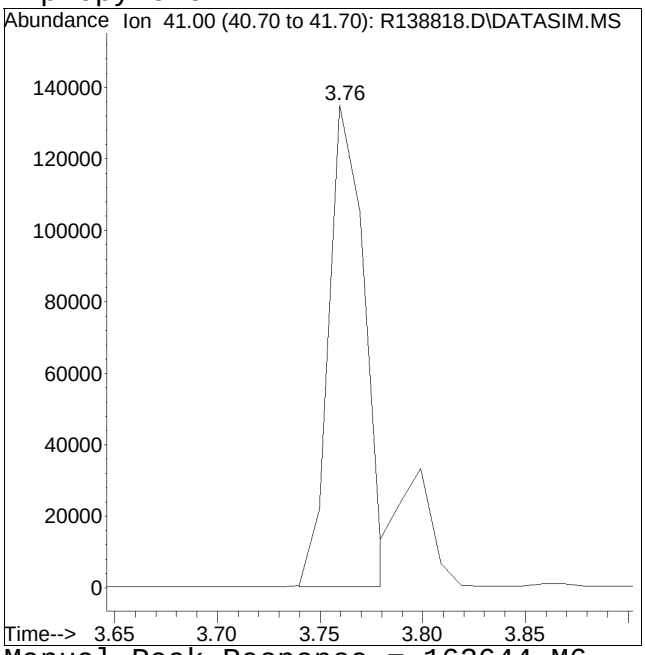
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138818.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:39 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 201002



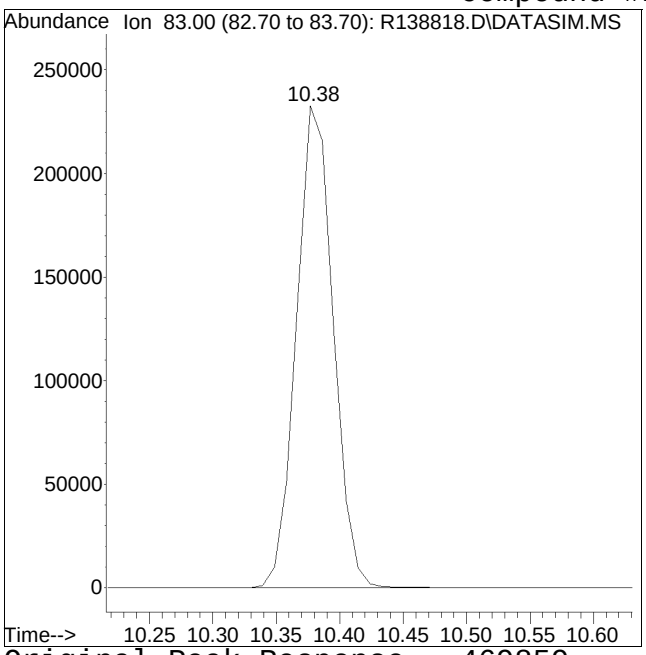

Manual Peak Response = 162644 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

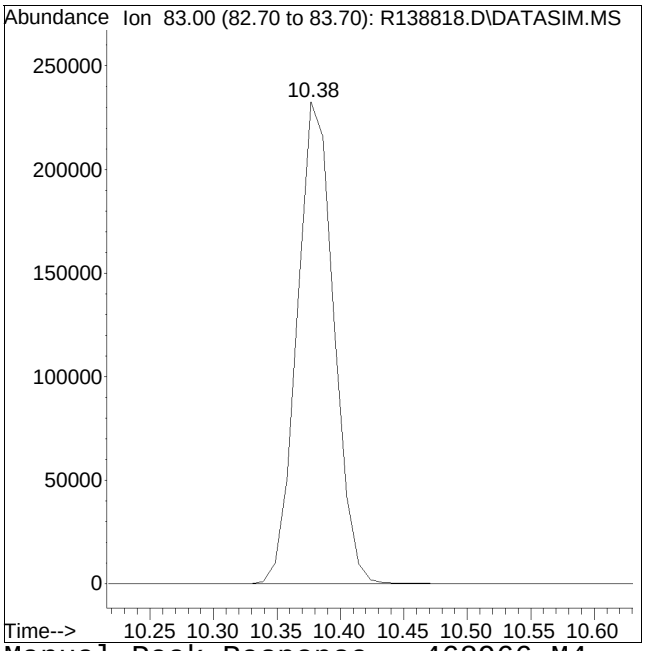
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138818.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:39 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 469859



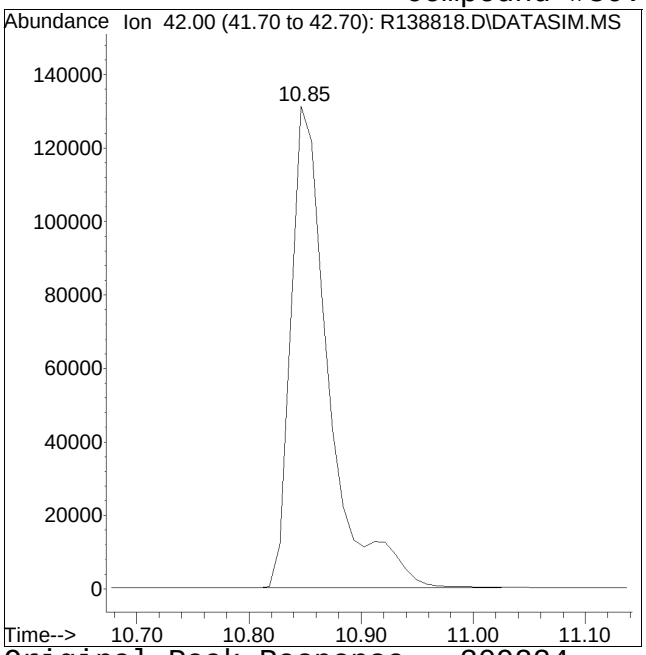

Manual Peak Response = 468966 M4

M4 = Poor automated baseline construction.

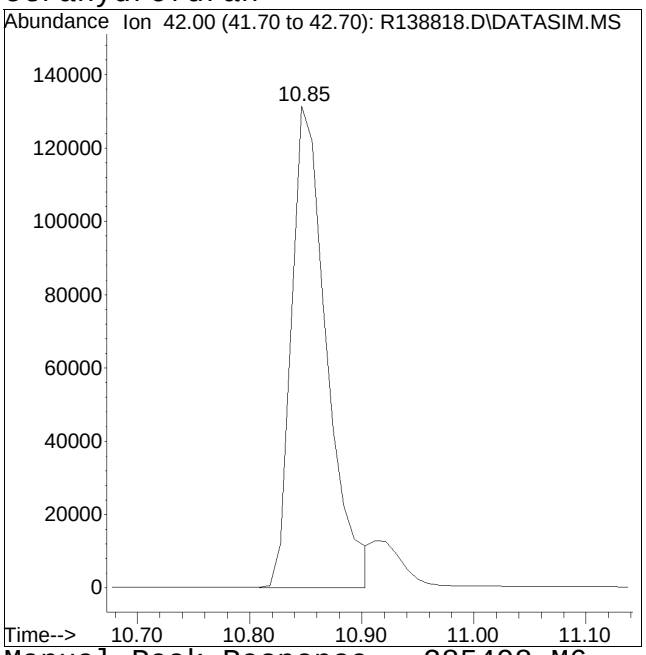
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138818.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:39 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 1/3/2015 1:21 pm

Compound #30: Tetrahydrofuran




Original Peak Response = 309224




Manual Peak Response = 285408 M6

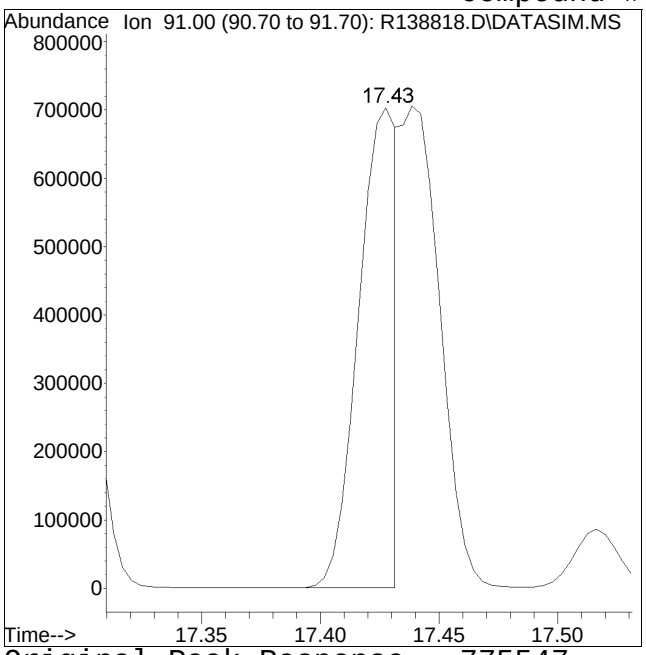
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

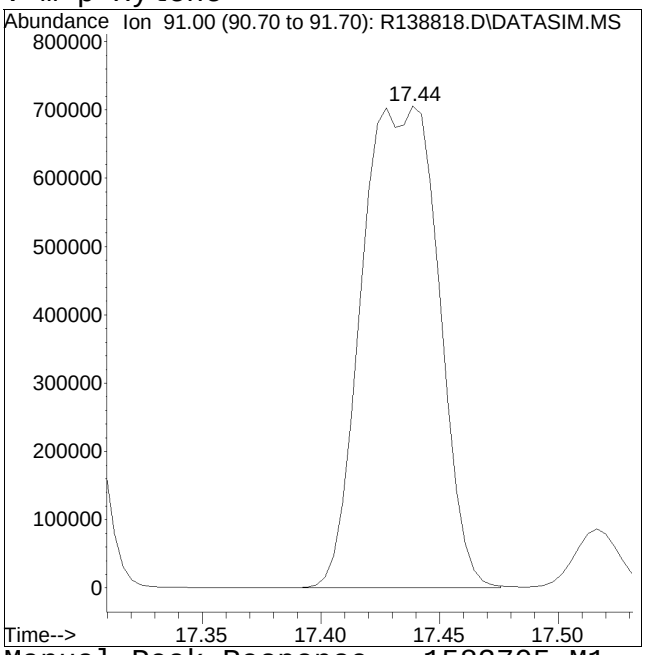
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138818.D
Date Inj'd : 1/2/2015 11:39 pm
Sample : ITO15-SIMSTD20.0

Method : TSIM150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 1:21 pm

Compound #59: m+p-xylene




Original Peak Response = 775547 Manual Peak Response = 1583705 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 149920 | 10.000 | ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery = 100.50% | | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 325118 | 10.000 | ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery = 98.50% | | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 70343 | 10.000 | ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery = 96.91% | | | |
| System Monitoring Compounds | | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 94572 | 9.791 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.91% | | | |
| 51) toluene-D8 | 15.27 | 98 | 247800 | 9.979 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.79% | | | |
| 64) bromofluorobenzene | 18.15 | 95 | 194288 | 9.926 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.26% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 355283M6 | 43.089 | ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 667170 | 34.535 | ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 400467 | 44.527 | ppbV | 99 |
| 5) Freon-114 | 4.25 | 85 | 1068086 | 40.942 | ppbV | 100 |
| 6) vinyl chloride | 4.41 | 62 | 418791 | 44.300 | ppbV | 100 |
| 7) 1,3-butadiene | 4.62 | 54 | 322626 | 44.261 | ppbV | 99 |
| 8) bromomethane | 5.02 | 94 | 407882 | 44.840 | ppbV | 98 |
| 9) chloroethane | 5.28 | 64 | 197447 | 45.339 | ppbV | 99 |
| 10) ethanol | 5.50 | 31 | 1749237 | 219.596 | ppbV | 98 |
| 11) vinyl bromide | 5.80 | 106 | 429858 | 45.134 | ppbV | 99 |
| 12) acetone | 6.17 | 43 | 3404380 | 218.126 | ppbV | 100 |
| 13) trichlorofluoromethane | 6.41 | 101 | 1067219 | 43.616 | ppbV | 100 |
| 14) isopropyl alcohol | 6.56 | 45 | 819556 | 43.521 | ppbV | 100 |
| 15) acrylonitrile | 6.85 | 53 | 337205 | 45.193 | ppbV | 99 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 757297 | 47.296 | ppbV | 99 |
| 17) methylene chloride | 7.49 | 49 | 600577 | 43.958 | ppbV | 89 |
| 18) 3-chloropropene | 7.64 | 41 | 689629 | 44.415 | ppbV | 98 |
| 19) carbon disulfide | 7.82 | 76 | 1280565 | 44.429 | ppbV | 95 |
| 20) Freon 113 | 7.85 | 101 | 929779 | 45.128 | ppbV | 99 |
| 21) Halothane | 8.47 | 117 | 776489 | 46.741 | ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 732585 | 44.317 | ppbV | 90 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 825369 | 44.545 | ppbV | 99 |
| 24) MTBE | 9.06 | 73 | 1236985 | 44.619 | ppbV | 97 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) vinyl acetate | 9.19 | 43 | 1335407 | 48.002 | ppbV | 99 |
| 26) 2-butanone | 9.48 | 43 | 1158839 | 45.953 | ppbV | 99 |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 752178 | 44.086 | ppbV # | 85 |
| 28) Ethyl Acetate | 10.31 | 61 | 194911 | 48.628 | ppbV | 97 |
| 29) chloroform | 10.39 | 83 | 1065807M4 | 44.341 | ppbV | |
| 30) Tetrahydrofuran | 10.85 | 42 | 664464 | 45.883 | ppbV | 97 |
| 31) 1,2-dichloroethane | 11.25 | 62 | 667493 | 45.178 | ppbV | 99 |
| 33) hexane | 10.27 | 57 | 895879 | 45.084 | ppbV | 90 |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 1019212 | 46.123 | ppbV | 100 |
| 36) benzene | 12.08 | 78 | 1374540 | 45.638 | ppbV | 100 |
| 37) carbon tetrachloride | 12.26 | 117 | 1012631 | 45.945 | ppbV | 99 |
| 38) cyclohexane | 12.40 | 56 | 782742 | 45.258 | ppbV | 98 |
| 39) 1,2-dichloropropane | 13.04 | 63 | 535339 | 45.686 | ppbV | 99 |
| 40) bromodichloromethane | 13.27 | 83 | 1109413 | 46.402 | ppbV # | 95 |
| 41) 1,4-dioxane | 13.30 | 88 | 347586 | 47.768 | ppbV | 88 |
| 42) trichloroethene | 13.31 | 130 | 689938 | 46.077 | ppbV | 100 |
| 43) 2,2,4-trimethylpentane | 13.35 | 57 | 2454510 | 45.529 | ppbV | 99 |
| 44) heptane | 13.65 | 43 | 1021342 | 45.248 | ppbV | 99 |
| 45) cis-1,3-dichloropropene | 14.30 | 75 | 3183617 | 47.803 | ppbV | 98 |
| 46) 4-methyl-2-pentanone | 14.34 | 43 | 1415446 | 45.500 | ppbV # | 86 |
| 47) trans-1,3-dichloropropene | 14.89 | 75 | 820325 | 49.212 | ppbV | 95 |
| 48) 1,1,2-trichloroethane | 15.08 | 97 | 609812 | 46.321 | ppbV | 98 |
| 50) toluene | 15.37 | 91 | 1703521 | 45.945 | ppbV | 99 |
| 52) 2-hexanone | 15.60 | 43 | 1352675 | 46.371 | ppbV | 98 |
| 53) dibromochloromethane | 15.79 | 129 | 1243481 | 48.883 | ppbV | 100 |
| 54) 1,2-dibromoethane | 16.01 | 107 | 1033499 | 48.138 | ppbV | 100 |
| 55) tetrachloroethene | 16.43 | 166 | 867025 | 46.952 | ppbV # | 92 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | 131 | 864909 | 48.109 | ppbV | 99 |
| 57) chlorobenzene | 17.00 | 112 | 1522958 | 47.205 | ppbV | 98 |
| 58) ethylbenzene | 17.30 | 91 | 2299770 | 46.346 | ppbV | 98 |
| 59) m+p-xylene | 17.44 | 91 | 3606221 | 92.590 | ppbV | 98 |
| 60) bromoform | 17.52 | 173 | 1226665 | 49.727 | ppbV | 99 |
| 61) styrene | 17.72 | 104 | 1471659 | 47.999 | ppbV | 99 |
| 62) 1,1,2,2-tetrachloroethane | 17.80 | 83 | 1370797 | 46.451 | ppbV | 100 |
| 63) o-xylene | 17.80 | 91 | 1867819 | 46.548 | ppbV | 99 |
| 65) isopropylbenzene | 18.25 | 105 | 2603279 | 46.570 | ppbV | 99 |
| 66) 4-ethyl toluene | 18.73 | 105 | 2924050 | 47.068 | ppbV | 99 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 2653046 | 46.486 | ppbV | 98 |
| 68) tert-butylbenzene | 19.09 | 119 | 2556246 | 45.877 | ppbV | 99 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 2272735 | 46.259 | ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 2242419 | 50.553 | ppbV | 97 |
| 71) 1,3-dichlorobenzene | 19.23 | 146 | 1755418 | 47.013 | ppbV | 99 |
| 72) 1,4-dichlorobenzene | 19.27 | 146 | 1800912 | 47.280 | ppbV | 93 |
| 73) sec-butylbenzene | 19.29 | 105 | 3388281 | 46.197 | ppbV | 98 |
| 74) p-isopropyltoluene | 19.40 | 119 | 3182821 | 45.710 | ppbV | 99 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 1673180 | 46.392 | ppbV | 99 |
| 76) n-butylbenzene | 19.73 | 91 | 2715427 | 45.111 | ppbV | 97 |
| 77) 1,2,4-trichlorobenzene | 21.00 | 180 | 1380916 | 41.806 | ppbV # | 92 |
| 78) naphthalene | 21.13 | 128 | 3127182 | 38.786 | ppbV | 97 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 1216781 | 39.396 | ppbV | 96 |
| 80) hexachlorobutadiene | 21.46 | 225 | 977322 | 41.182 | ppbV | 96 |

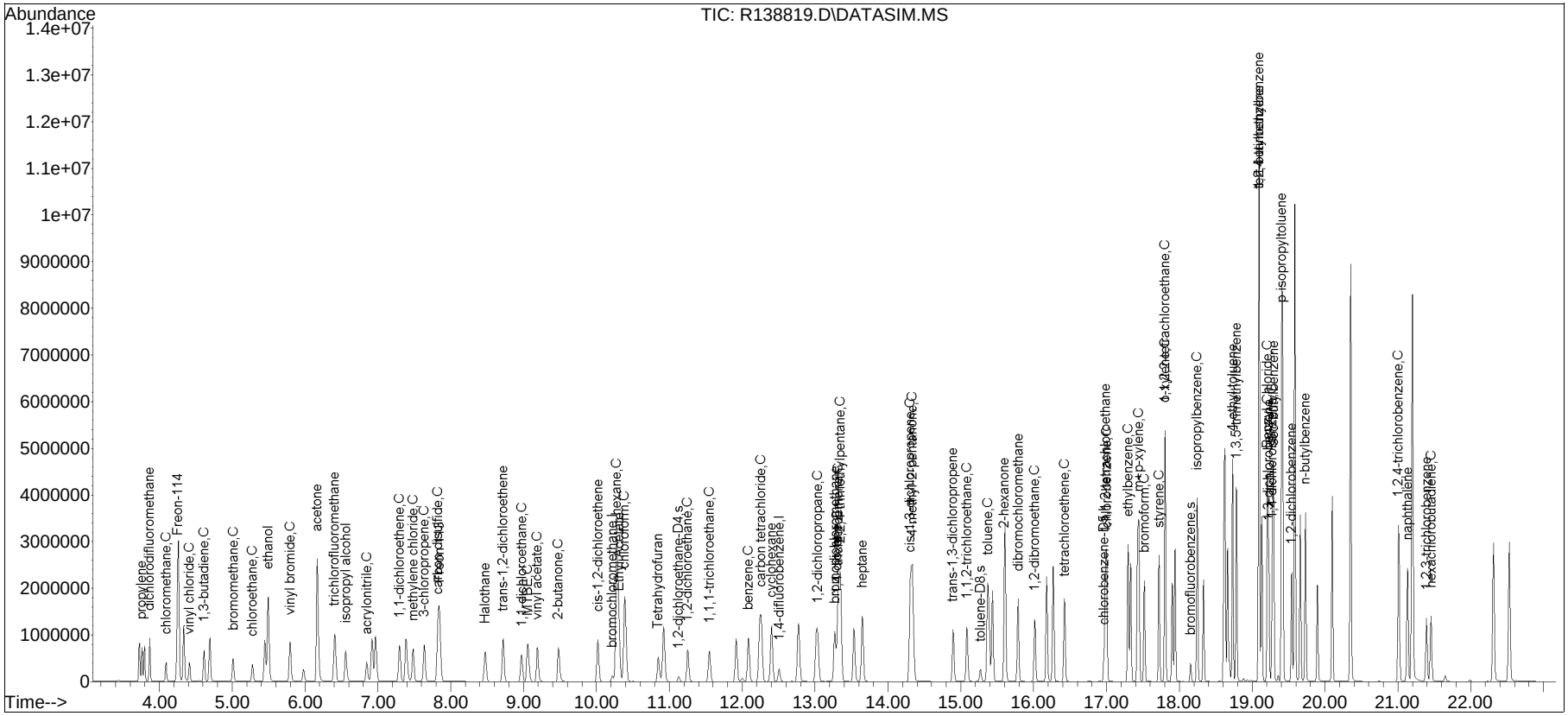
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG753109
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:52:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:21:04 2015
Response via : Initial Calibration

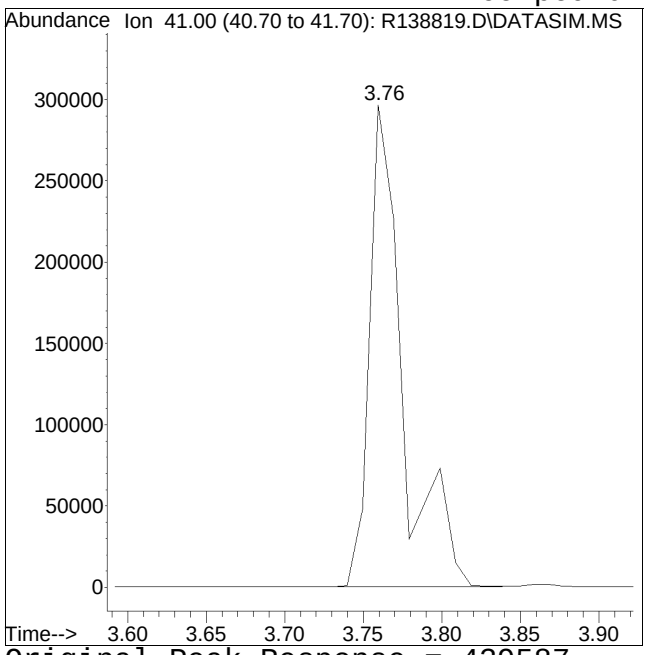
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



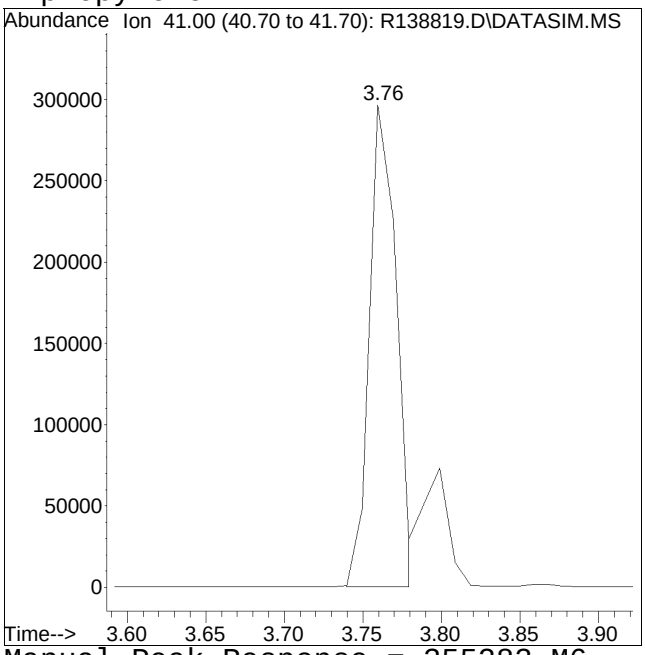
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138819.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 12:11 am Instrument : Air Piano 1
Sample : ITO15-SIMSTD50.0 Quant Date : 1/3/2015 1:21 pm

Compound #2: propylene




Original Peak Response = 439587



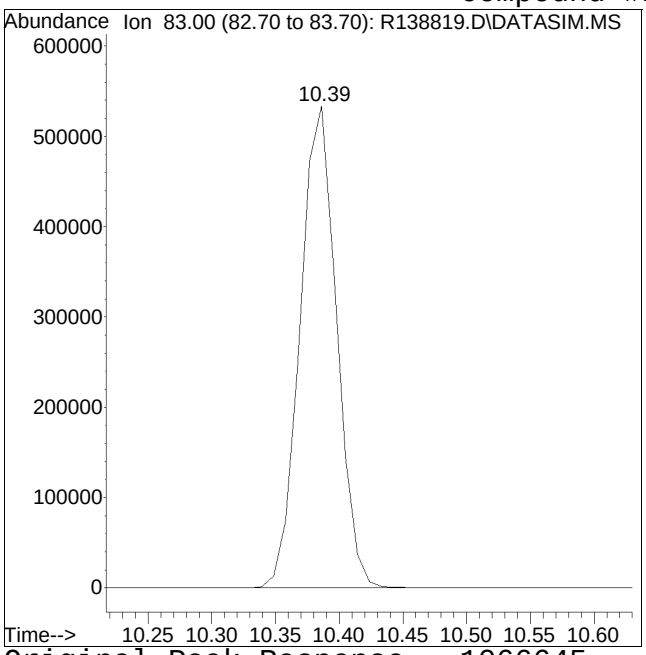

Manual Peak Response = 355283 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

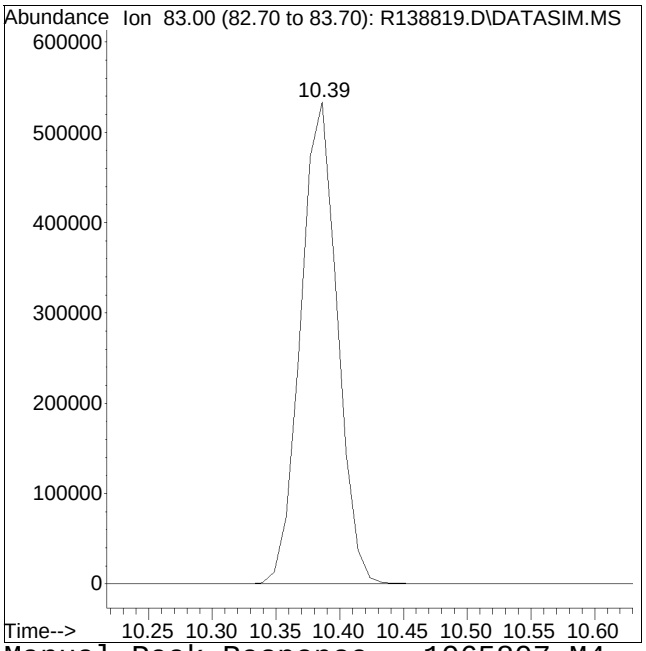
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TSIM_ICAL
Data File : R138819.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 12:11 am Instrument : Air Piano 1
Sample : ITO15-SIMSTD50.0 Quant Date : 1/3/2015 1:21 pm

Compound #29: chloroform




Original Peak Response = 1066645




Manual Peak Response = 1065807 M4

M4 = Poor automated baseline construction.

# Initial Calibration Verification

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138824.D
Acq On : 3 Jan 2015 9:46 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:58:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 2 | | propylene | 0.566 | 0.558 | 1.4 | 100 | 0.00 |
| 3 | | dichlorodifluoromethane | 1.252 | 1.238 | 1.1 | 94 | 0.00 |
| 4 | C | chloromethane | 0.644 | 0.568 | 11.8 | 93 | 0.00 |
| 5 | | Freon-114 | 1.804 | 1.638 | 9.2 | 92 | 0.00 |
| 6 | C | vinyl chloride | 0.671 | 0.597 | 11.0 | 93 | 0.00 |
| 7 | C | 1,3-butadiene | 0.531 | 0.483 | 9.0 | 97 | 0.00 |
| 8 | C | bromomethane | 0.643 | 0.577 | 10.3 | 93 | 0.00 |
| 9 | C | chloroethane | 0.330 | 0.277 | 16.1 | 93 | 0.00 |
| 10 | | ethanol | 0.546 | 0.514 | 5.9 | 95 | 0.00 |
| 11 | C | vinyl bromide | 0.677 | 0.605 | 10.6 | 93 | 0.00 |
| 12 | | acetone | 1.087 | 1.081 | 0.6 | 102 | 0.00 |
| 13 | | trichlorofluoromethane | 1.697 | 1.554 | 8.4 | 93 | 0.00 |
| 14 | | isopropyl alcohol | 1.235 | 1.277 | -3.4 | 100 | 0.00 |
| 15 | C | acrylonitrile | 0.579 | 0.465 | 19.7 | 92 | 0.00 |
| 16 | C | 1,1-dichloroethene | 1.185 | 1.075 | 9.3 | 99 | 0.00 |
| 17 | C | methylene chloride | 0.927 | 0.871 | 6.0 | 94 | 0.00 |
| 18 | C | 3-chloropropene | 1.103 | 1.054 | 4.4 | 100 | 0.00 |
| 19 | C | carbon disulfide | 2.006 | 1.803 | 10.1 | 92 | 0.00 |
| 20 | | Freon 113 | 1.432 | 1.321 | 7.8 | 94 | 0.00 |
| 21 | | Halothane | 1.170 | 1.233 | -5.4 | 109 | 0.00 |
| 22 | | trans-1,2-dichloroethene | 1.123 | 0.956 | 14.9 | 85 | 0.00 |
| 23 | C | 1,1-dichloroethane | 1.294 | 1.191 | 8.0 | 94 | 0.00 |
| 24 | C | MTBE | 1.922 | 1.807 | 6.0 | 96 | 0.00 |
| 25 | C | vinyl acetate | 1.726 | 2.084 | -20.7 | 110 | 0.00 |
| 26 | C | 2-butanone | 1.583 | 1.595 | -0.8 | 93 | 0.00 |
| 27 | | cis-1,2-dichloroethene | 1.153 | 1.226 | -6.3 | 106 | 0.00 |
| 28 | | Ethyl Acetate | 0.264 | 0.254 | 3.8 | 93 | 0.00 |
| 29 | C | chloroform | 1.710 | 1.570 | 8.2 | 96 | 0.00 |
| 30 | | Tetrahydrofuran | 0.985 | 0.898 | 8.8 | 91 | 0.00 |
| 31 | C | 1,2-dichloroethane | 1.032 | 0.946 | 8.3 | 94 | 0.00 |
| 32 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 33 | C | hexane | 0.627 | 0.556 | 11.3 | 92 | 0.00 |
| 34 | s | 1,2-dichloroethane-D4 | 0.292 | 0.286 | 2.1 | 98 | 0.00 |
| 35 | C | 1,1,1-trichloroethane | 0.685 | 0.637 | 7.0 | 95 | 0.00 |
| 36 | C | benzene | 0.937 | 0.849 | 9.4 | 93 | 0.00 |
| 37 | C | carbon tetrachloride | 0.666 | 0.639 | 4.1 | 96 | 0.00 |
| 38 | | cyclohexane | 0.562 | 0.497 | 11.6 | 95 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138824.D
Acq On : 3 Jan 2015 9:46 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:58:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 39 | C | 1,2-dichloropropane | 0.362 | 0.338 | 6.6 | 95 | 0.00 |
| 40 | | bromodichloromethane | 0.744 | 0.688 | 7.5 | 95 | 0.00 |
| 41 | C | 1,4-dioxane | 0.210 | 0.207 | 1.4 | 94 | 0.00 |
| 42 | C | trichloroethene | 0.462 | 0.430 | 6.9 | 95 | 0.00 |
| 43 | C | 2,2,4-trimethylpentane | 1.682 | 1.544 | 8.2 | 95 | 0.00 |
| 44 | | heptane | 0.731 | 0.657 | 10.1 | 96 | 0.00 |
| 45 | C | cis-1,3-dichloropropene | 1.942 | 2.023 | -4.2 | 100 | 0.00 |
| 46 | C | 4-methyl-2-pentanone | 0.861 | 0.882 | -2.4 | 94 | 0.00 |
| 47 | | trans-1,3-dichloropropene | 0.463 | 0.438 | 5.4 | 87 | 0.00 |
| 48 | C | 1,1,2-trichloroethane | 0.404 | 0.383 | 5.2 | 96 | 0.00 |
| 49 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 50 | C | toluene | 5.253 | 5.065 | 3.6 | 94 | 0.00 |
| 51 | s | toluene-D8 | 3.473 | 3.557 | -2.4 | 98 | 0.00 |
| 52 | | 2-hexanone | 3.494 | 4.079 | -16.7 | 96 | 0.00 |
| 53 | | dibromochloromethane | 3.624 | 3.541 | 2.3 | 96 | 0.00 |
| 54 | C | 1,2-dibromoethane | 2.960 | 2.989 | -1.0 | 96 | 0.00 |
| 55 | C | tetrachloroethene | 2.700 | 2.545 | 5.7 | 95 | 0.00 |
| 56 | | 1,1,1,2-tetrachloroethane | 2.617 | 2.334 | 10.8 | 89 | 0.00 |
| 57 | C | chlorobenzene | 4.597 | 4.426 | 3.7 | 94 | 0.00 |
| 58 | C | ethylbenzene | 7.006 | 6.752 | 3.6 | 93 | 0.00 |
| 59 | C | m+p-xylene | 5.451 | 5.238 | 3.9 | 92 | 0.00 |
| 60 | C | bromoform | 3.479 | 3.312 | 4.8 | 92 | 0.00 |
| 61 | C | styrene | 4.112 | 4.134 | -0.5 | 93 | 0.00 |
| 62 | C | 1,1,2,2-tetrachloroethane | 4.159 | 4.094 | 1.6 | 95 | 0.00 |
| 63 | C | o-xylene | 5.778 | 5.527 | 4.3 | 95 | 0.00 |
| 64 | s | bromofluorobenzene | 2.709 | 2.751 | -1.6 | 97 | 0.00 |
| 65 | C | isopropylbenzene | 7.885 | 7.390 | 6.3 | 91 | 0.00 |
| 66 | | 4-ethyl toluene | 8.569 | 8.072 | 5.8 | 89 | 0.00 |
| 67 | | 1,3,5-trimethylbenzene | 7.979 | 7.753 | 2.8 | 93 | 0.00 |
| 68 | | tert-butylbenzene | 7.899 | 7.161 | 9.3 | 88 | 0.00 |
| 69 | | 1,2,4-trimethylbenzene | 6.872 | 6.768 | 1.5 | 95 | 0.00 |
| 70 | C | Benzyl Chloride | 5.891 | 6.095 | -3.5 | 94 | 0.00 |
| 71 | | 1,3-dichlorobenzene | 5.099 | 5.150 | -1.0 | 95 | 0.00 |
| 72 | C | 1,4-dichlorobenzene | 5.241 | 5.265 | -0.5 | 95 | 0.00 |
| 73 | | sec-butylbenzene | 10.155 | 9.451 | 6.9 | 88 | 0.00 |
| 74 | | p-isopropyltoluene | 9.534 | 8.296 | 13.0 | 82 | 0.00 |
| 75 | | 1,2-dichlorobenzene | 4.956 | 4.990 | -0.7 | 95 | 0.00 |
| 76 | | n-butylbenzene | 7.994 | 8.024 | -0.4 | 92 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138824.D
Acq On : 3 Jan 2015 9:46 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:58:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 77 C | 1,2,4-trichlorobenzene | 3.991 | 4.598 | -15.2 | 96 | 0.00 |
| 78 | naphthalene | 10.209 | 10.437 | -2.2 | 89 | 0.00 |
| 79 | 1,2,3-trichlorobenzene | 3.691 | 4.272 | -15.7 | 95 | 0.00 |
| 80 C | hexachlorobutadiene | 3.006 | 3.248 | -8.1 | 94 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138824.D
Acq On : 3 Jan 2015 9:46 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:58:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 146215 | 10.000 | ppbV | 0.00 |
| Standard Area = 149173 | | | Recovery = 98.02% | | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 335445 | 10.000 | ppbV | 0.00 |
| Standard Area = 330054 | | | Recovery = 101.63% | | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 70865 | 10.000 | ppbV | 0.00 |
| Standard Area = 72589 | | | Recovery = 97.62% | | | |
| System Monitoring Compounds | | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 96048 | 9.805 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.05% | | | |
| 51) toluene-D8 | 15.26 | 98 | 252093 | 10.243 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.43% | | | |
| 64) bromofluorobenzene | 18.15 | 95 | 194937 | 10.155 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.55% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 40828M6 | 4.931 | ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 90503 | 4.942 | ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 41531 | 4.409 | ppbV | 99 |
| 5) Freon-114 | 4.25 | 85 | 119728 | 4.540 | ppbV | 99 |
| 6) vinyl chloride | 4.41 | 62 | 43655 | 4.448 | ppbV | 100 |
| 7) 1,3-butadiene | 4.62 | 54 | 35306 | 4.551 | ppbV | 100 |
| 8) bromomethane | 5.01 | 94 | 42194 | 4.491 | ppbV | 99 |
| 9) chloroethane | 5.28 | 64 | 20245 | 4.196 | ppbV | 98 |
| 10) ethanol | 5.49 | 31 | 187879 | 23.542 | ppbV | 99 |
| 11) vinyl bromide | 5.79 | 106 | 44248 | 4.471 | ppbV | 100 |
| 12) acetone | 6.17 | 43 | 395023 | 24.865 | ppbV | 99 |
| 13) trichlorofluoromethane | 6.41 | 101 | 113593 | 4.577 | ppbV | 100 |
| 14) isopropyl alcohol | 6.56 | 45 | 93346 | 5.170 | ppbV | 100 |
| 15) acrylonitrile | 6.85 | 53 | 33994 | 4.017 | ppbV | 99 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 78596 | 4.536 | ppbV | 99 |
| 17) methylene chloride | 7.48 | 49 | 63671 | 4.698 | ppbV | 98 |
| 18) 3-chloropropene | 7.64 | 41 | 77054 | 4.778 | ppbV | 99 |
| 19) carbon disulfide | 7.82 | 76 | 131817 | 4.494 | ppbV | 99 |
| 20) Freon 113 | 7.85 | 101 | 96544 | 4.610 | ppbV | 100 |
| 21) Halothane | 8.47 | 117 | 90119 | 5.269 | ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.71 | 61 | 69921 | 4.257 | ppbV | 99 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 87097 | 4.604 | ppbV | 100 |
| 24) MTBE | 9.06 | 73 | 132136 | 4.701 | ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138824.D
Acq On : 3 Jan 2015 9:46 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:58:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) vinyl acetate | 9.19 | 43 | 152321 | 6.035 | ppbV | | 98 |
| 26) 2-butanone | 9.49 | 43 | 116634 | 5.039 | ppbV | | 99 |
| 27) cis-1,2-dichloroethene | 10.01 | 61 | 89620 | 5.315 | ppbV | | 98 |
| 28) Ethyl Acetate | 10.32 | 61 | 18602 | 4.822 | ppbV | | 94 |
| 29) chloroform | 10.38 | 83 | 114760M4 | 4.590 | ppbV | | |
| 30) Tetrahydrofuran | 10.87 | 42 | 65655M6 | 4.560 | ppbV | | |
| 31) 1,2-dichloroethane | 11.25 | 62 | 69192 | 4.583 | ppbV | | 99 |
| 33) hexane | 10.27 | 57 | 93208 | 4.435 | ppbV | | 99 |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 106834 | 4.647 | ppbV | | 99 |
| 36) benzene | 12.08 | 78 | 142454 | 4.535 | ppbV | | 98 |
| 37) carbon tetrachloride | 12.26 | 117 | 107187 | 4.796 | ppbV | | 99 |
| 38) cyclohexane | 12.40 | 56 | 83300 | 4.415 | ppbV | | 98 |
| 39) 1,2-dichloropropane | 13.04 | 63 | 56612 | 4.664 | ppbV | | 99 |
| 40) bromodichloromethane | 13.26 | 83 | 115370 | 4.622 | ppbV | | 98 |
| 41) 1,4-dioxane | 13.33 | 88 | 34739 | 4.935 | ppbV | | 98 |
| 42) trichloroethene | 13.31 | 130 | 72055 | 4.652 | ppbV | | 99 |
| 43) 2,2,4-trimethylpentane | 13.35 | 57 | 259046 | 4.592 | ppbV | | 99 |
| 44) heptane | 13.65 | 43 | 110177 | 4.493 | ppbV | | 99 |
| 45) cis-1,3-dichloropropene | 14.30 | 75 | 339255 | 5.207 | ppbV | | 98 |
| 46) 4-methyl-2-pentanone | 14.34 | 43 | 147987 | 5.125 | ppbV | | 98 |
| 47) trans-1,3-dichloropropene | 14.90 | 75 | 73460 | 4.734 | ppbV | | 98 |
| 48) 1,1,2-trichloroethane | 15.08 | 97 | 64196 | 4.742 | ppbV | | 98 |
| 50) toluene | 15.36 | 91 | 179481 | 4.821 | ppbV | | 99 |
| 52) 2-hexanone | 15.61 | 43 | 144537 | 5.837 | ppbV | # | 94 |
| 53) dibromochloromethane | 15.79 | 129 | 125477 | 4.886 | ppbV | | 99 |
| 54) 1,2-dibromoethane | 16.01 | 107 | 105911 | 5.049 | ppbV | | 100 |
| 55) tetrachloroethene | 16.42 | 166 | 90184 | 4.713 | ppbV | | 99 |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | 131 | 82695 | 4.459 | ppbV | | 99 |
| 57) chlorobenzene | 17.00 | 112 | 156818 | 4.813 | ppbV | | 98 |
| 58) ethylbenzene | 17.29 | 91 | 239237 | 4.818 | ppbV | | 100 |
| 59) m+p-xylene | 17.44 | 91 | 371210M1 | 9.609 | ppbV | | |
| 60) bromoform | 17.51 | 173 | 117350 | 4.760 | ppbV | | 99 |
| 61) styrene | 17.72 | 104 | 146484 | 5.027 | ppbV | | 99 |
| 62) 1,1,2,2-tetrachloroethane | 17.80 | 83 | 145048 | 4.922 | ppbV | | 100 |
| 63) o-xylene | 17.80 | 91 | 195846 | 4.783 | ppbV | | 98 |
| 65) isopropylbenzene | 18.24 | 105 | 261840 | 4.686 | ppbV | | 100 |
| 66) 4-ethyl toluene | 18.73 | 105 | 286018 | 4.710 | ppbV | | 99 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 274691 | 4.858 | ppbV | | 100 |
| 68) tert-butylbenzene | 19.09 | 119 | 253745 | 4.533 | ppbV | | 99 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 239808 | 4.924 | ppbV | | 96 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138824.D
Acq On : 3 Jan 2015 9:46 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:58:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\R138816.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 215958 | 5.173 | ppbV | 93 |
| 71) 1,3-dichlorobenzene | 19.22 | 146 | 182465 | 5.050 | ppbV | 97 |
| 72) 1,4-dichlorobenzene | 19.27 | 146 | 186541 | 5.023 | ppbV | 98 |
| 73) sec-butylbenzene | 19.29 | 105 | 334867 | 4.653 | ppbV | 98 |
| 74) p-isopropyltoluene | 19.40 | 119 | 293946 | 4.351 | ppbV | 98 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 176806 | 5.035 | ppbV | 95 |
| 76) n-butylbenzene | 19.73 | 91 | 284312 | 5.019 | ppbV | 98 |
| 77) 1,2,4-trichlorobenzene | 21.01 | 180 | 162907 | 5.761 | ppbV | 98 |
| 78) naphthalene | 21.12 | 128 | 369816 | 5.112 | ppbV | 100 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 151358 | 5.787 | ppbV | 98 |
| 80) hexachlorobutadiene | 21.46 | 225 | 115091 | 5.403 | ppbV | 99 |

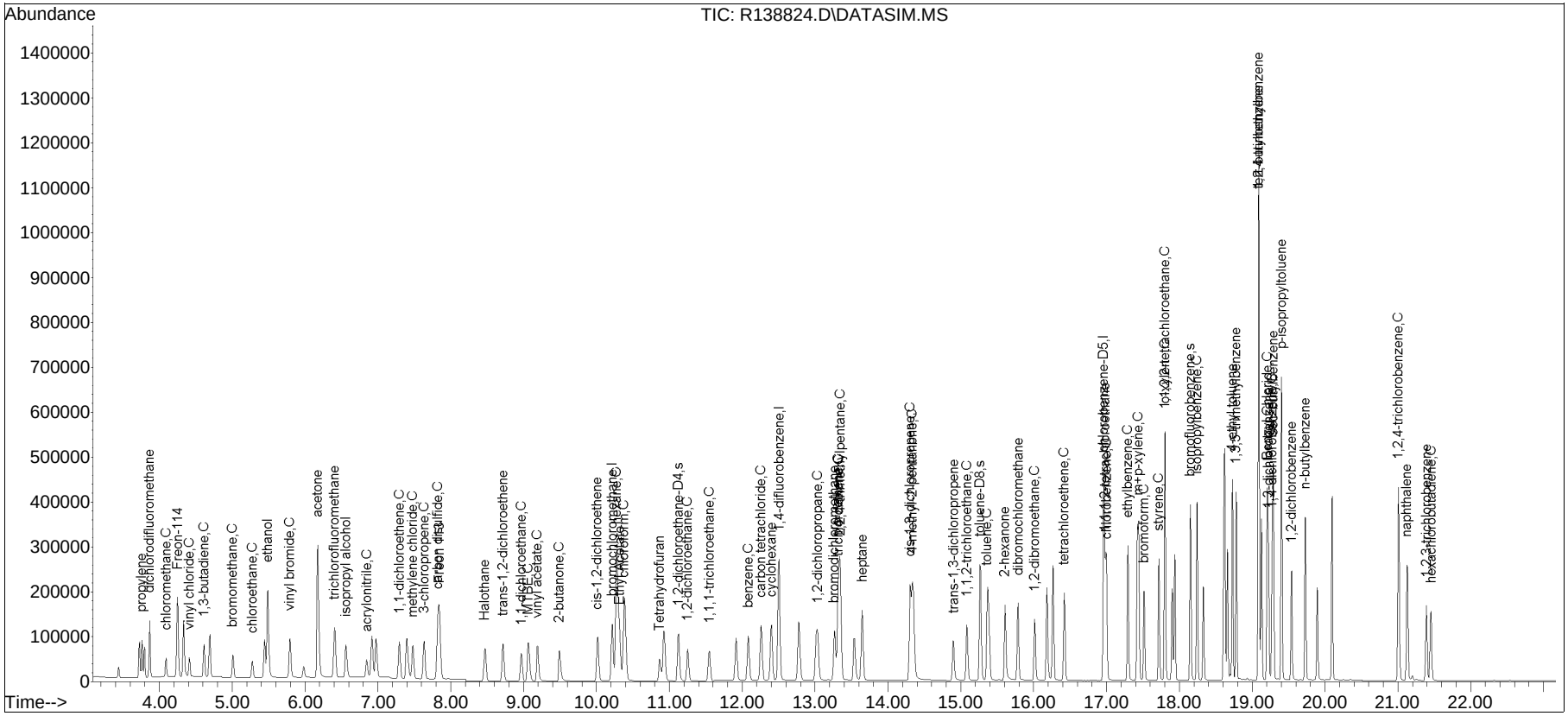
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\
Data File : R138824.D
Acq On : 3 Jan 2015 9:46 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG753109
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:58:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102SIM_ICAL\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

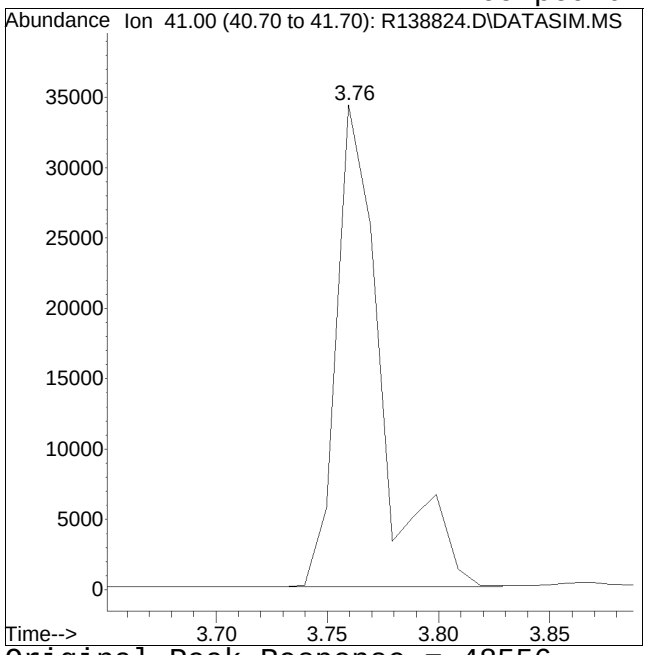
Sub List : Default - All compounds listed0102SIM_ICAL\R138816.D



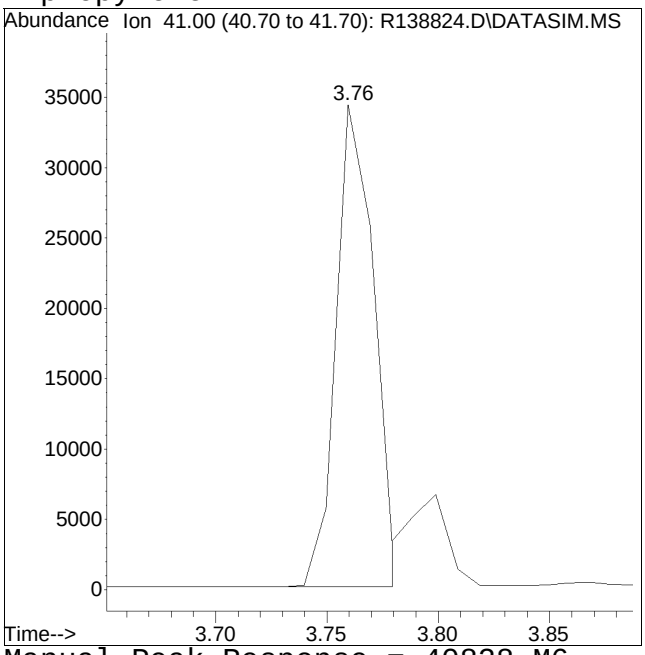
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138824.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 9:46 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 1/3/2015 1:55 pm

Compound #2: propylene




Original Peak Response = 48556



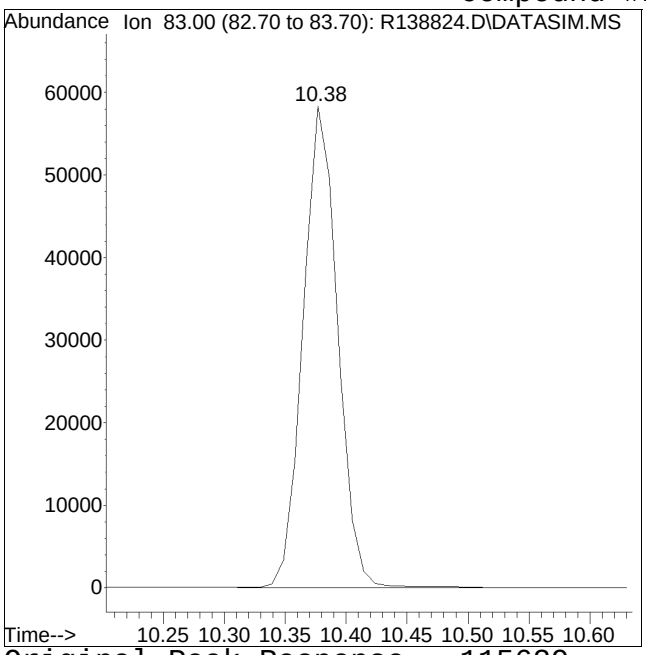

Manual Peak Response = 40828 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

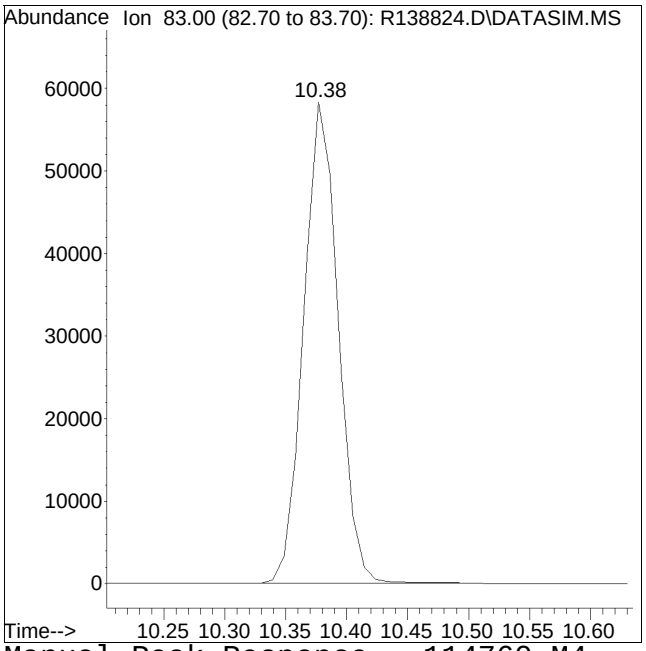
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138824.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 9:46 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 1/3/2015 1:55 pm

Compound #29: chloroform




Original Peak Response = 115629



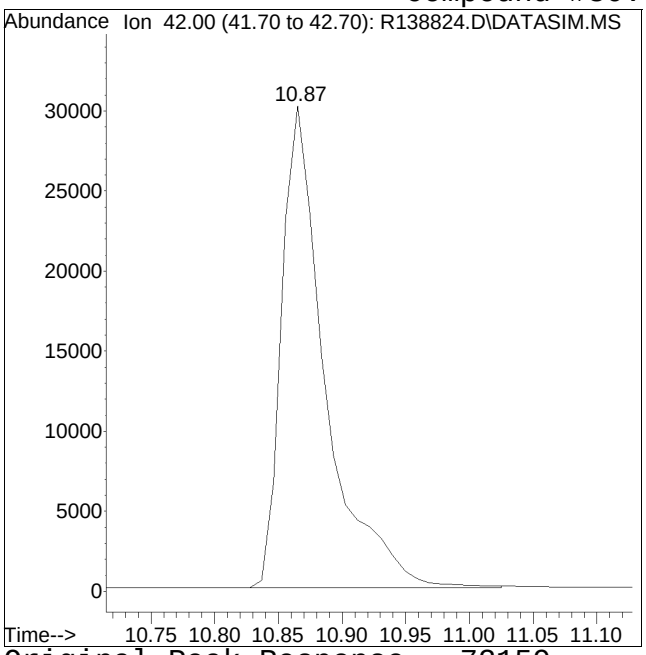

Manual Peak Response = 114760 M4

M4 = Poor automated baseline construction.

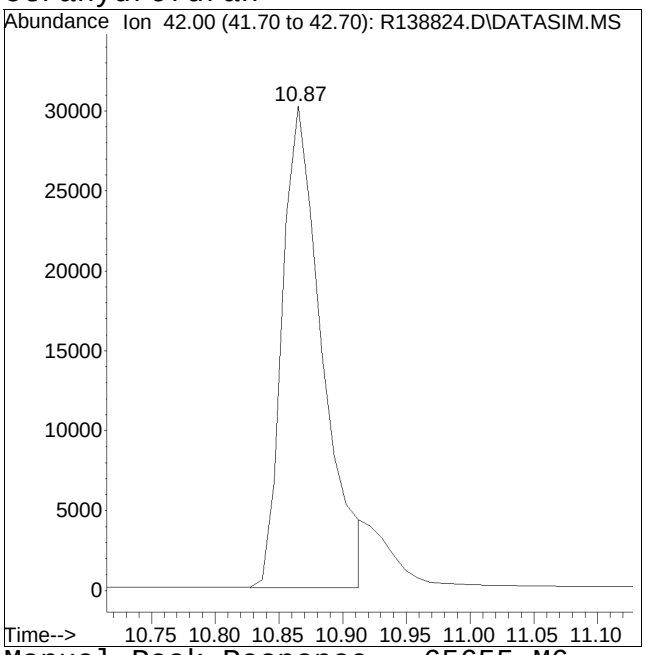
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138824.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 9:46 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 1/3/2015 1:55 pm

Compound #30: Tetrahydrofuran




Original Peak Response = 72159



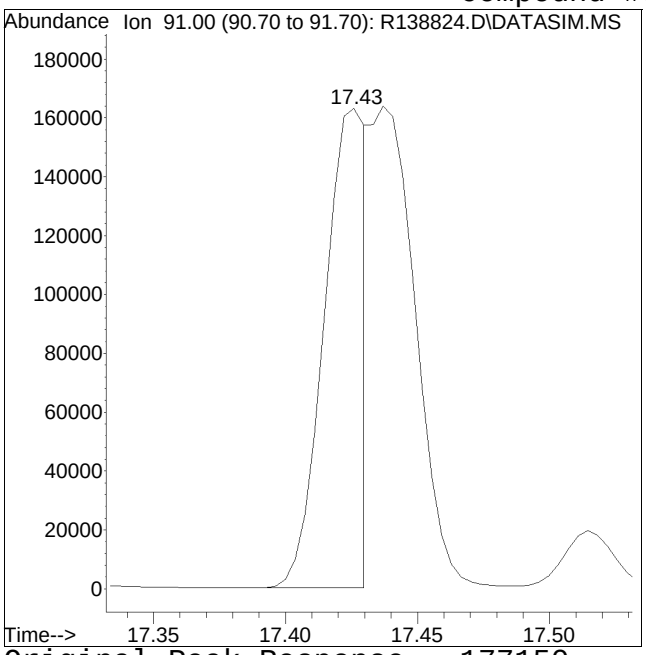

Manual Peak Response = 65655 M6

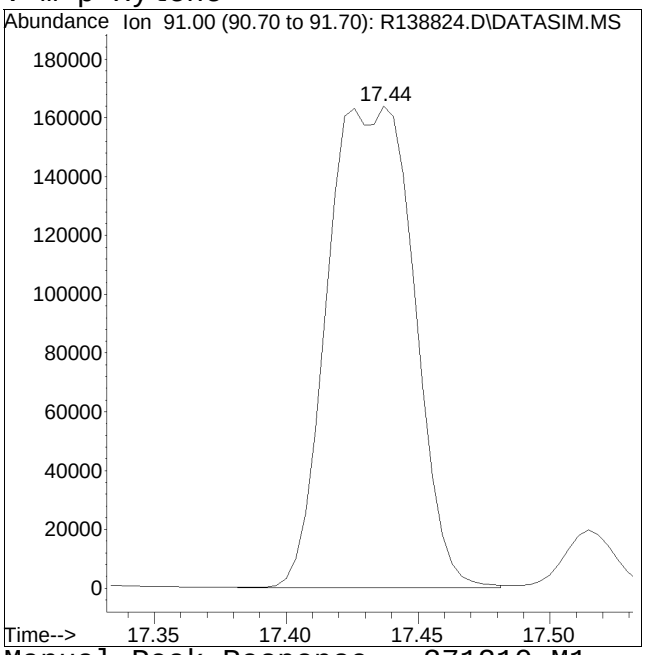
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TSIM150102.M
Data File : R138824.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 9:46 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 1/3/2015 1:55 pm

Compound #59: m+p-xylene




Original Peak Response = 177150 Manual Peak Response = 371210 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jul 16 2015, 02:19 pm

Work Group: WG767579 for Department: 3 GC/MS

Created: 11-MAR-15 Due: Operator: ry

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L1504425-01 | OUTDOOR CONTROL | S | TO15-SIM | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-02 | S-157-J.1 | S | TO15-SIM | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-03 | S-157-J.2 | S | TO15-SIM | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-04 | S-157-J | S | TO15-SIM | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-05 | DUPLICATE | S | TO15-SIM | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-06 | BLANK | S | TO15-SIM | AIR | DONE | U | 0405 | 0317 | S0 | Can-6 |
| L1504425-07 | SG-1 | S | TO15-SIM | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-08 | SG-2 | S | TO15-SIM | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-09 | SG-3 | S | TO15-SIM | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-10 | SG-4 | S | TO15-SIM | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-11 | SG BLANK | S | TO15-SIM | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504467-01 | CAN 931 SHELF 41 | S | TO15-SIM | AIR | DONE | I | 0409 | 0318 | NC | Can-6 |
| L1504467-02 | CAN 1894 SHELF 42 | S | TO15-SIM | AIR | DONE | I | 0409 | 0318 | NC | Can-6 |
| L1504546-01 | CAN 1824 SHELF 56 | S | TO15-SIM | AIR | DONE | I | 0410 | 0318 | NC | Can-6 |
| L1504546-02 | CAN 1641 SHELF 57 | S | TO15-SIM | AIR | DONE | I | 0410 | 0318 | NC | Can-6 |
| L1504569-01 | CAN 151B SHELF 7 | S | TO15-SIM | AIR | DONE | I | 0409 | 0318 | NC | Can-2.7 |
| WG767579-1 | MS BFB Tune Standard | S | TO15-SIM | AIR | DONE | U | | | | |
| WG767579-1 | MS BFB Tune Standard | S | TO15-SIM | SOIL_VAPOR | DONE | U | | | | |
| WG767579-2 | Continuing Calibrati | S | TO15-SIM | AIR | DONE | U | | | | |
| WG767579-2 | Continuing Calibrati | S | TO15-SIM | SOIL_VAPOR | DONE | U | | | | |
| WG767579-3 | Laboratory Control S | S | TO15-SIM | AIR | DONE | U | | | | |
| WG767579-3 | Laboratory Control S | S | TO15-SIM | SOIL_VAPOR | DONE | U | | | | |
| WG767579-4 | Laboratory Method Bl | S | TO15-SIM | AIR | DONE | U | | | | |
| WG767579-4 | Laboratory Method Bl | S | TO15-SIM | SOIL_VAPOR | DONE | U | | | | |
| WG767579-5 | Duplicate Sample | S | TO15-SIM | AIR | DONE | U | | | | |
| WG767579-5 | Duplicate Sample | S | TO15-SIM | SOIL_VAPOR | DONE | U | | | | |

Comments:

WG767579-5 L1504425-07

# Sequence Logs

# Alpha Analytical Air Lab
# Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS13-005 / CSS12-019

Date: 01/02/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: AR

Sequence File Name: 150102.S

SIM ICAL# Full Scan ICAL# APH ICAL#

| AS Position # | Sample ID | Acquisition Method | Data File ID | Standard ID or Batch ID #, ICAL Ref # | Comment (s) | Product/ sublist | Leak Check Pass ? Y/N |
|---|---|---|---|---|---|---|---|
| 1 | TA1010201 | TO15_SFS | R138809 | 250ml | TUNE | | NA |
| | | Pause | | | | | NA |
| 5 | ITO15-SIMSTD0.02 | TO15_SFS | R138810 | SS14-040D 50ML 0.02 | SIM ONLY | | NA |
| 5 | ITO15-SIMSTD0.04 | TO15_SFS | R138811 | SS14-040D 100ML 0.04 | SIM ONLY | | NA |
| 5 | ITO15-SIMSTD0.1 | TO15_SFS | R138812 | SS14-040D 250ML 0.1 | SIM ONLY | | NA |
| 6 | ITO15-SIMSTD0.2 | TO15_SFS | R138813 | SS14-040C 50ML 0.2 | | | NA |
| 6 | ITO15-SIMSTD0.5 | TO15_SFS | R138814 | SS14-040C 125ML 0.5 | | | NA |
| 6 | ITO15-SIMSTD1.0 | TO15_SFS | R138815 | SS14-040C 250ML 1.0 | | | NA |
| 7 | ITO15-SIMSTD5.0 | TO15_SFS | R138816 | SS14-040B1 125ML 5.0 | | | NA |
| 7 | ITO15-SIMSTD10.0 | TO15_SFS | R138817 | SS14-040B1 250ML 10.0 | | | NA |
| 8 | ITO15-SIMSTD20.0 | TO15_SFS | R138818 | SS14-040A 50ML 20.0 | | | NA |
| 8 | ITO15-SIMSTD50.0 | TO15_SFS | R138819 | SS14-040A 125ML 50.0 | | | NA |
| 8 | ITO15-LLSTD100.0 | TO15_SFS | R138820 | SS14-040A 250ML 100.0 | NOT USED FOR SIM | | NA |
| 1 | BA1010201 | TO15_SFS | R138821 | 250ml | | | NA |
| | | Pause | | | | | NA |
| 1 | BA1010202 | TO15_SFS | R138822 | 250ml | | | NA |
| 2 | CTO15-LLSTD10.0 | TO15_SFS | R138823 | SS14-038A 250ML 10.0 | FULL SCAN ICV | | NA |
| 2 | CTO15-SIMSTD5.0 | TO15_SFS | R138824 | SS14-038A 125ML 5.0 | SIM ICV | | NA |
| | | | | | | | |
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# Alpha Analytical Air Lab
# Instrument Run Log

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**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,2{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

# Alpha Analytical Air Lab
# Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS13-005 / CSS14-015

Date: 03/11/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: MB/RY

Sequence File Name: 150311.S

SIM ICAL# 10565 Full Scan ICAL# 10564 APH ICAL# 10563

| AS Position # | Sample ID | Acquisition Method | Data File ID | Standard ID or Batch ID #, ICAL Ref # | Comment (s) | Product/sublist | Leak Check Pass ? Y/N |
|---|---|---|---|---|---|---|---|
| 1 | TA1031101 | TO15_SFS | R140134 | 250ml | TUNE | | NA |
| 2 | CAPH-STD10 | TO15_SFS | R140135 | 125ml SS14-39B2 10.0 | APH CC | | NA |
| 3 | CTO15-LLSTD10 | TO15_SFS | R140136 | 250ml SS15-003C 10.0 | LL/ APH LCS | | NA |
| 3 | CTO15-SIMSTD5.0 | TO15_SFS | R140137 | 125ml SS15-003C 5.0 | SIM LCS | | NA |
| 1 | BA1031101 | TO15_SFS | R140138 | 250ml | LL BLANK, SIM FAILED | | NA |
| 1 | BA1031102 | TO15_SFS | R140139 | 250ml | SIM BLANK | | NA |
| 2 | L1504467-01,3,250,250 | TO15_SFS | R140140 | 250ml | | A, LL, SIM | NA |
| 3 | L1504467-02,3,250,250 | TO15_SFS | R140141 | 250ml | | A, LL, SIM | NA |
| 13 | L1504546-01,3,250,250 | TO15_SFS | R140142 | 250ml | RR CAN CLOSED | A, LL, SIM | NA |
| 14 | L1504546-02,3,250,250 | TO15_SFS | R140143 | 250ml | | A, LL, SIM | NA |
| | | Pause | | | | | NA |
| 13 | L1504546-01,3,250,250 | TO15_SFS | R140144 | WG767580,ICAL10563 | | A, LL, SIM | NA |
| 15 | L1504569-01,3,250,250 | TO15_SFS | R140145 | WG767580,ICAL10563 | | A, LL, SIM | NA |
| 1 | L1504425-06,3,250,250 | TO15_SFS | R140146 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 2 | L1504425-11,3,250,250 | TO15_SFS | R140147 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 3 | L1504425-01,3,250,250 | TO15_SFS | R140148 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 4 | L1504425-02,3,250,250 | TO15_SFS | R140149 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 5 | L1504425-03,3,250,250 | TO15_SFS | R140150 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 6 | L1504425-04,3,250,250 | TO15_SFS | R140151 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 7 | L1504425-05,3,250,250 | TO15_SFS | R140152 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07,3,250,250 | TO15_SFS | R140153 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07DUP,3,250,250 | TO15_SFS | R140154 | WG767580,ICAL10563 | DOES NOT MATCH, RR | A, LL, SIM | Y |
| 9 | L1504425-08,3,250,250 | TO15_SFS | R140155 | WG767580,ICAL10563 | RR, CARRYOVER | A, LL, SIM | Y |

# Alpha Analytical Air Lab
# Instrument Run Log

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10 | L1504425-09,3,250,250 | TO15_SFS | R140156 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 11 | L1504425-10,3,250,250 | TO15_SFS | R140157 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 12 | L1504264-03D,3,25,250 | TO15_SFS | R140158 | WG767580,ICAL10563 | | APH | Y |
| 16 | BA1031103 | TO15_SFS | R140159 | 250ml | | | NA |
| 9 | L1504425-08,3,250,250 | TO15_SFS | R140160 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07DUP,3,250,250 | TO15_SFS | R140161 | WG767580,ICAL10563 | APH/ TO15-LL/ TO15-SIM DUP | A, LL, SIM | Y |
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**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

# Analytical Event

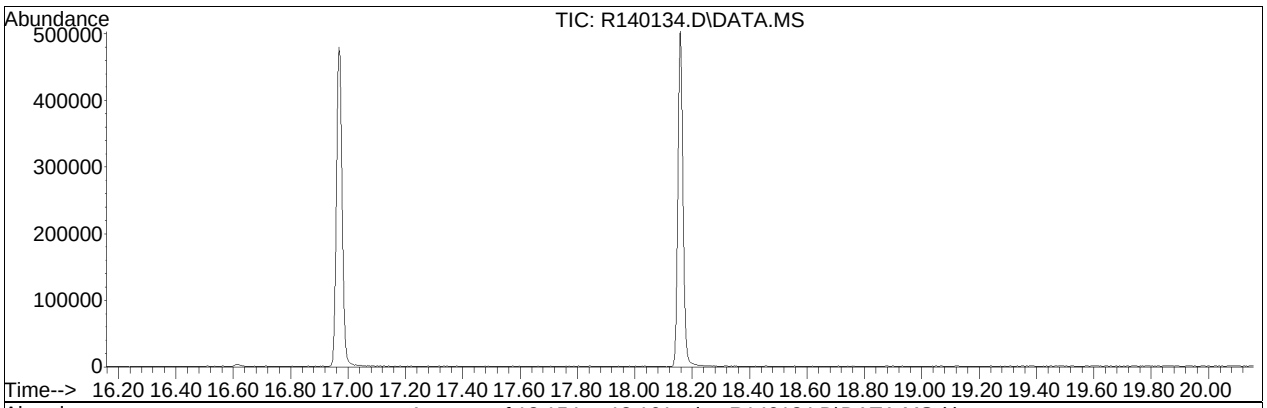
# Continuing Calibration
# BFB Tune

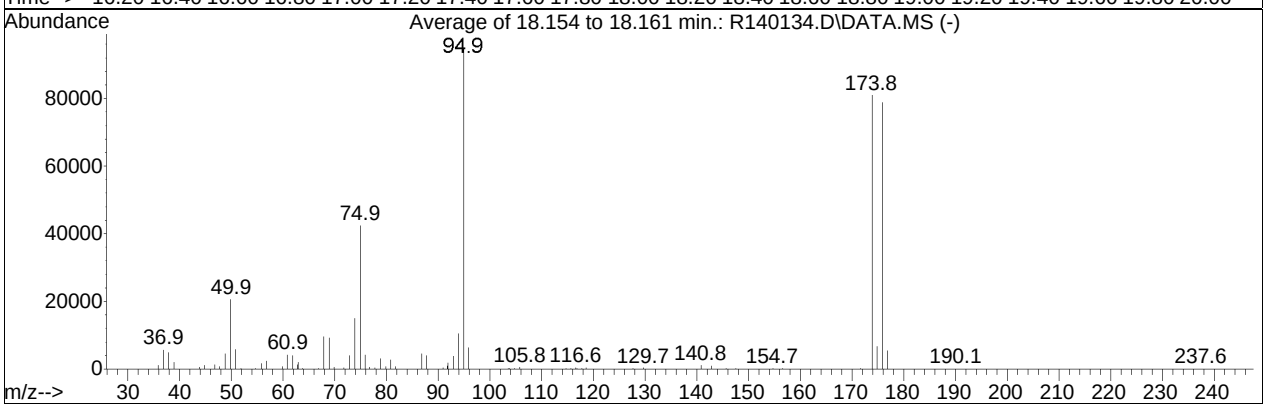
BFB

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140134.D
Acq On : 11 Mar 2015 11:12 am
Operator : AIRPIANO1:RY
Sample : WG767579-1,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 13:54:27 2015




AutoFind: Scans 1933, 1934, 1935; Background Corrected with Scan 1923

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 21.8 | 20592 | PASS |
| 75 | 95 | 30 | 66 | 44.9 | 42424 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 94421 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 6309 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 85.7 | 80941 | PASS |
| 175 | 174 | 4 | 9 | 8.2 | 6655 | PASS |
| 176 | 174 | 93 | 101 | 97.3 | 78752 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 5447 | PASS |

# Continuing Calibration

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 80 | 0.00 |
| 2 | | propylene | 0.566 | 0.578 | -2.1 | 84 | 0.00 |
| 3 | | dichlorodifluoromethane | 1.252 | 1.093 | 12.7 | 68 | 0.00 |
| 4 | C | chloromethane | 0.644 | 0.587 | 8.9 | 78 | 0.00 |
| 5 | | Freon-114 | 1.804 | 1.673 | 7.3 | 77 | 0.00 |
| 6 | C | vinyl chloride | 0.671 | 0.601 | 10.4 | 76 | 0.00 |
| 7 | C | 1,3-butadiene | 0.531 | 0.474 | 10.7 | 78 | 0.00 |
| 8 | C | bromomethane | 0.643 | 0.590 | 8.2 | 78 | 0.00 |
| 9 | C | chloroethane | 0.330 | 0.281 | 14.8 | 77 | 0.00 |
| 10 | | ethanol | 0.546 | 0.467 | 14.5 | 70 | 0.00 |
| 11 | C | vinyl bromide | 0.677 | 0.598 | 11.7 | 75 | 0.00 |
| 12 | | acetone | 1.087 | 1.046 | 3.8 | 80 | 0.00 |
| 13 | | trichlorofluoromethane | 1.697 | 1.585 | 6.6 | 77 | 0.00 |
| 14 | | isopropyl alcohol | 1.235 | 1.193 | 3.4 | 76 | 0.00 |
| 15 | C | acrylonitrile | 0.579 | 0.445 | 23.1 | 71 | 0.00 |
| 16 | C | 1,1-dichloroethene | 1.185 | 1.066 | 10.0 | 80 | 0.00 |
| 17 | C | methylene chloride | 0.927 | 0.897 | 3.2 | 79 | 0.00 |
| 18 | C | 3-chloropropene | 1.103 | 1.013 | 8.2 | 78 | 0.00 |
| 19 | C | carbon disulfide | 2.006 | 1.751 | 12.7 | 73 | 0.00 |
| 20 | | Freon 113 | 1.432 | 1.343 | 6.2 | 78 | 0.00 |
| 21 | | Halothane | 1.170 | 0.988 | 15.6 | 71 | 0.00 |
| 22 | | trans-1,2-dichloroethene | 1.123 | 0.948 | 15.6 | 69 | 0.00 |
| 23 | C | 1,1-dichloroethane | 1.294 | 1.187 | 8.3 | 77 | 0.00 |
| 24 | C | MTBE | 1.922 | 1.683 | 12.4 | 73 | 0.00 |
| 25 | C | vinyl acetate | 1.726 | 1.929 | -11.8 | 83 | 0.00 |
| 26 | C | 2-butanone | 1.583 | 1.536 | 3.0 | 73 | 0.00 |
| 27 | | cis-1,2-dichloroethene | 1.153 | 1.158 | -0.4 | 81 | 0.00 |
| 28 | | Ethyl Acetate | 0.264 | 0.235 | 11.0 | 70 | 0.00 |
| 29 | C | chloroform | 1.710 | 1.548 | 9.5 | 77 | 0.00 |
| 30 | | Tetrahydrofuran | 0.985 | 0.860 | 12.7 | 71 | 0.00 |
| 31 | C | 1,2-dichloroethane | 1.032 | 0.937 | 9.2 | 76 | 0.00 |
| 32 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 81 | 0.00 |
| 33 | C | hexane | 0.627 | 0.541 | 13.7 | 71 | 0.00 |
| 34 | s | 1,2-dichloroethane-D4 | 0.292 | 0.299 | -2.4 | 81 | 0.00 |
| 35 | C | 1,1,1-trichloroethane | 0.685 | 0.639 | 6.7 | 76 | 0.00 |
| 36 | C | benzene | 0.937 | 0.846 | 9.7 | 74 | 0.00 |
| 37 | C | carbon tetrachloride | 0.666 | 0.614 | 7.8 | 73 | 0.00 |
| 38 | | cyclohexane | 0.562 | 0.482 | 14.2 | 73 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 39 | C | 1,2-dichloropropane | 0.362 | 0.337 | 6.9 | 76 | 0.00 |
| 40 | | bromodichloromethane | 0.744 | 0.668 | 10.2 | 73 | 0.01 |
| 41 | C | 1,4-dioxane | 0.210 | 0.201 | 4.3 | 73 | 0.00 |
| 42 | C | trichloroethene | 0.462 | 0.422 | 8.7 | 74 | 0.00 |
| 43 | C | 2,2,4-trimethylpentane | 1.682 | 1.537 | 8.6 | 75 | 0.00 |
| 44 | | heptane | 0.731 | 0.643 | 12.0 | 75 | 0.00 |
| 45 | C | cis-1,3-dichloropropene | 1.942 | 1.897 | 2.3 | 75 | 0.00 |
| 46 | C | 4-methyl-2-pentanone | 0.861 | 0.873 | -1.4 | 74 | 0.00 |
| 47 | | trans-1,3-dichloropropene | 0.463 | 0.397 | 14.3 | 62 | 0.00 |
| 48 | C | 1,1,2-trichloroethane | 0.404 | 0.388 | 4.0 | 77 | 0.00 |
| 49 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 80 | 0.00 |
| 50 | C | toluene | 5.253 | 4.897 | 6.8 | 75 | 0.00 |
| 51 | s | toluene-D8 | 3.473 | 3.536 | -1.8 | 80 | 0.00 |
| 52 | | 2-hexanone | 3.494 | 3.800 | -8.8 | 74 | 0.00 |
| 53 | | dibromochloromethane | 3.624 | 3.196 | 11.8 | 71 | 0.00 |
| 54 | C | 1,2-dibromoethane | 2.960 | 2.861 | 3.3 | 75 | 0.00 |
| 55 | C | tetrachloroethene | 2.700 | 2.343 | 13.2 | 72 | 0.00 |
| 56 | | 1,1,1,2-tetrachloroethane | 2.617 | 2.185 | 16.5 | 69 | 0.00 |
| 57 | C | chlorobenzene | 4.597 | 4.304 | 6.4 | 75 | 0.00 |
| 58 | C | ethylbenzene | 7.006 | 6.446 | 8.0 | 73 | 0.00 |
| 59 | C | m+p-xylene | 5.451 | 5.121 | 6.1 | 74 | 0.01 |
| 60 | C | bromoform | 3.479 | 2.885 | 17.1 | 66 | 0.00 |
| 61 | C | styrene | 4.112 | 3.932 | 4.4 | 72 | 0.00 |
| 62 | C | 1,1,2,2-tetrachloroethane | 4.159 | 4.041 | 2.8 | 77 | 0.00 |
| 63 | C | o-xylene | 5.778 | 5.381 | 6.9 | 76 | 0.00 |
| 64 | s | bromofluorobenzene | 2.709 | 2.726 | -0.6 | 79 | 0.00 |
| 65 | C | isopropylbenzene | 7.885 | 7.194 | 8.8 | 73 | 0.00 |
| 66 | | 4-ethyl toluene | 8.569 | 7.720 | 9.9 | 70 | 0.00 |
| 67 | | 1,3,5-trimethylbenzene | 7.979 | 7.564 | 5.2 | 75 | 0.00 |
| 68 | | tert-butylbenzene | 7.899 | 6.941 | 12.1 | 70 | 0.00 |
| 69 | | 1,2,4-trimethylbenzene | 6.872 | 6.474 | 5.8 | 74 | 0.00 |
| 70 | C | Benzyl Chloride | 5.891 | 4.971 | 15.6 | 63 | 0.00 |
| 71 | | 1,3-dichlorobenzene | 5.099 | 4.893 | 4.0 | 74 | 0.00 |
| 72 | C | 1,4-dichlorobenzene | 5.241 | 4.929 | 6.0 | 73 | 0.00 |
| 73 | | sec-butylbenzene | 10.155 | 9.060 | 10.8 | 70 | 0.00 |
| 74 | | p-isopropyltoluene | 9.534 | 7.839 | 17.8 | 64 | 0.00 |
| 75 | | 1,2-dichlorobenzene | 4.956 | 4.667 | 5.8 | 73 | 0.00 |
| 76 | | n-butylbenzene | 7.994 | 7.567 | 5.3 | 71 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 77 C | 1,2,4-trichlorobenzene | 3.991 | 4.097 | -2.7 | 70 | 0.00 |
| 78 | naphthalene | 10.209 | 9.520 | 6.7 | 67 | 0.00 |
| 79 | 1,2,3-trichlorobenzene | 3.691 | 3.827 | -3.7 | 70 | 0.00 |
| 80 C | hexachlorobutadiene | 3.006 | 2.951 | 1.8 | 70 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 119028 | 10.000 ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = 100.00% | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 266408 | 10.000 ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = 100.00% | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 58247 | 10.000 ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = 100.00% | | |
| System Monitoring Compounds | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 79626 | 10.235 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.35% | | |
| 51) toluene-D8 | 15.27 | 98 | 205960 | 10.182 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.82% | | |
| 64) bromofluorobenzene | 18.15 | 95 | 158765 | 10.062 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.62% | | |
| Target Compounds | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 34400M6 | 5.103 ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 65065 | 4.365 ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 34946 | 4.557 ppbV | 100 |
| 5) Freon-114 | 4.25 | 85 | 99558 | 4.638 ppbV | 99 |
| 6) vinyl chloride | 4.41 | 62 | 35755 | 4.476 ppbV | 99 |
| 7) 1,3-butadiene | 4.62 | 54 | 28198 | 4.465 ppbV | 95 |
| 8) bromomethane | 5.01 | 94 | 35092 | 4.588 ppbV | 98 |
| 9) chloroethane | 5.28 | 64 | 16738 | 4.262 ppbV | 98 |
| 10) ethanol | 5.49 | 31 | 139030M6 | 21.400 ppbV | |
| 11) vinyl bromide | 5.79 | 106 | 35586 | 4.417 ppbV | 100 |
| 12) acetone | 6.17 | 43 | 311246 | 24.067 ppbV | 98 |
| 13) trichlorofluoromethane | 6.41 | 101 | 94339 | 4.670 ppbV | 100 |
| 14) isopropyl alcohol | 6.56 | 45 | 70985 | 4.829 ppbV | 100 |
| 15) acrylonitrile | 6.85 | 53 | 26482 | 3.845 ppbV | 98 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 63421 | 4.496 ppbV | 99 |
| 17) methylene chloride | 7.48 | 49 | 53366 | 4.837 ppbV | 99 |
| 18) 3-chloropropene | 7.64 | 41 | 60292 | 4.593 ppbV | 100 |
| 19) carbon disulfide | 7.82 | 76 | 104235 | 4.365 ppbV | 98 |
| 20) Freon 113 | 7.85 | 101 | 79925 | 4.688 ppbV | 100 |
| 21) Halothane | 8.47 | 117 | 58786 | 4.222 ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.71 | 61 | 56412 | 4.219 ppbV | 99 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 70637 | 4.586 ppbV | 100 |
| 24) MTBE | 9.06 | 73 | 100156 | 4.377 ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) | vinyl acetate | 9.19 | 43 | 114794 | 5.587 ppbV | 100 |
| 26) | 2-butanone | 9.49 | 43 | 91427 | 4.853 ppbV | 100 |
| 27) | cis-1,2-dichloroethene | 10.02 | 61 | 68905 | 5.020 ppbV # | 85 |
| 28) | Ethyl Acetate | 10.32 | 61 | 13957 | 4.445 ppbV | 99 |
| 29) | chloroform | 10.38 | 83 | 92142M4 | 4.527 ppbV | |
| 30) | Tetrahydrofuran | 10.86 | 42 | 51174M6 | 4.366 ppbV | |
| 31) | 1,2-dichloroethane | 11.25 | 62 | 55793 | 4.540 ppbV | 100 |
| 33) | hexane | 10.27 | 57 | 72095 | 4.319 ppbV | 99 |
| 35) | 1,1,1-trichloroethane | 11.55 | 97 | 85083 | 4.660 ppbV | 99 |
| 36) | benzene | 12.08 | 78 | 112625 | 4.514 ppbV | 100 |
| 37) | carbon tetrachloride | 12.26 | 117 | 81815 | 4.609 ppbV | 100 |
| 38) | cyclohexane | 12.40 | 56 | 64248 | 4.288 ppbV | 99 |
| 39) | 1,2-dichloropropane | 13.04 | 63 | 44940 | 4.662 ppbV | 99 |
| 40) | bromodichloromethane | 13.27 | 83 | 88921 | 4.486 ppbV # | 95 |
| 41) | 1,4-dioxane | 13.33 | 88 | 26793M4 | 4.793 ppbV | |
| 42) | trichloroethene | 13.31 | 130 | 56261 | 4.574 ppbV | 100 |
| 43) | 2,2,4-trimethylpentane | 13.35 | 57 | 204736 | 4.570 ppbV | 100 |
| 44) | heptane | 13.65 | 43 | 85636 | 4.398 ppbV | 99 |
| 45) | cis-1,3-dichloropropene | 14.30 | 75 | 252709 | 4.884 ppbV | 99 |
| 46) | 4-methyl-2-pentanone | 14.34 | 43 | 116233 | 5.068 ppbV | 99 |
| 47) | trans-1,3-dichloropropene | 14.90 | 75 | 52876 | 4.290 ppbV | 99 |
| 48) | 1,1,2-trichloroethane | 15.09 | 97 | 51737 | 4.812 ppbV | 90 |
| 50) | toluene | 15.37 | 91 | 142607 | 4.661 ppbV | 100 |
| 52) | 2-hexanone | 15.61 | 43 | 110658 | 5.437 ppbV # | 92 |
| 53) | dibromochloromethane | 15.79 | 129 | 93083 | 4.410 ppbV | 100 |
| 54) | 1,2-dibromoethane | 16.01 | 107 | 83331 | 4.834 ppbV | 100 |
| 55) | tetrachloroethene | 16.43 | 166 | 68225 | 4.338 ppbV | 95 |
| 56) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 63635 | 4.175 ppbV | 99 |
| 57) | chlorobenzene | 17.00 | 112 | 125361 | 4.681 ppbV | 98 |
| 58) | ethylbenzene | 17.29 | 91 | 187738 | 4.600 ppbV | 100 |
| 59) | m+p-xylene | 17.44 | 91 | 298272 | 9.394 ppbV | 99 |
| 60) | bromoform | 17.52 | 173 | 84007 | 4.146 ppbV | 99 |
| 61) | styrene | 17.72 | 104 | 114522 | 4.781 ppbV | 99 |
| 62) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 117689 | 4.859 ppbV | 100 |
| 63) | o-xylene | 17.80 | 91 | 156720 | 4.657 ppbV | 99 |
| 65) | isopropylbenzene | 18.24 | 105 | 209525 | 4.562 ppbV | 100 |
| 66) | 4-ethyl toluene | 18.73 | 105 | 224830M6 | 4.505 ppbV | |
| 67) | 1,3,5-trimethylbenzene | 18.78 | 105 | 220288 | 4.740 ppbV | 99 |
| 68) | tert-butylbenzene | 19.09 | 119 | 202137 | 4.393 ppbV | 100 |
| 69) | 1,2,4-trimethylbenzene | 19.09 | 105 | 188545 | 4.710 ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 144766 | 4.219 | ppbV | 95 |
| 71) 1,3-dichlorobenzene | 19.22 | 146 | 142489 | 4.797 | ppbV | 99 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 143556 | 4.703 | ppbV | 98 |
| 73) sec-butylbenzene | 19.29 | 105 | 263872 | 4.461 | ppbV | 99 |
| 74) p-isopropyltoluene | 19.41 | 119 | 228313 | 4.111 | ppbV | 97 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 135921 | 4.709 | ppbV | 95 |
| 76) n-butylbenzene | 19.73 | 91 | 220366 | 4.732 | ppbV | 98 |
| 77) 1,2,4-trichlorobenzene | 21.01 | 180 | 119320 | 5.133 | ppbV | 97 |
| 78) naphthalene | 21.13 | 128 | 277247 | 4.662 | ppbV | 99 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 111460 | 5.185 | ppbV | 98 |
| 80) hexachlorobutadiene | 21.46 | 225 | 85943 | 4.908 | ppbV | 97 |

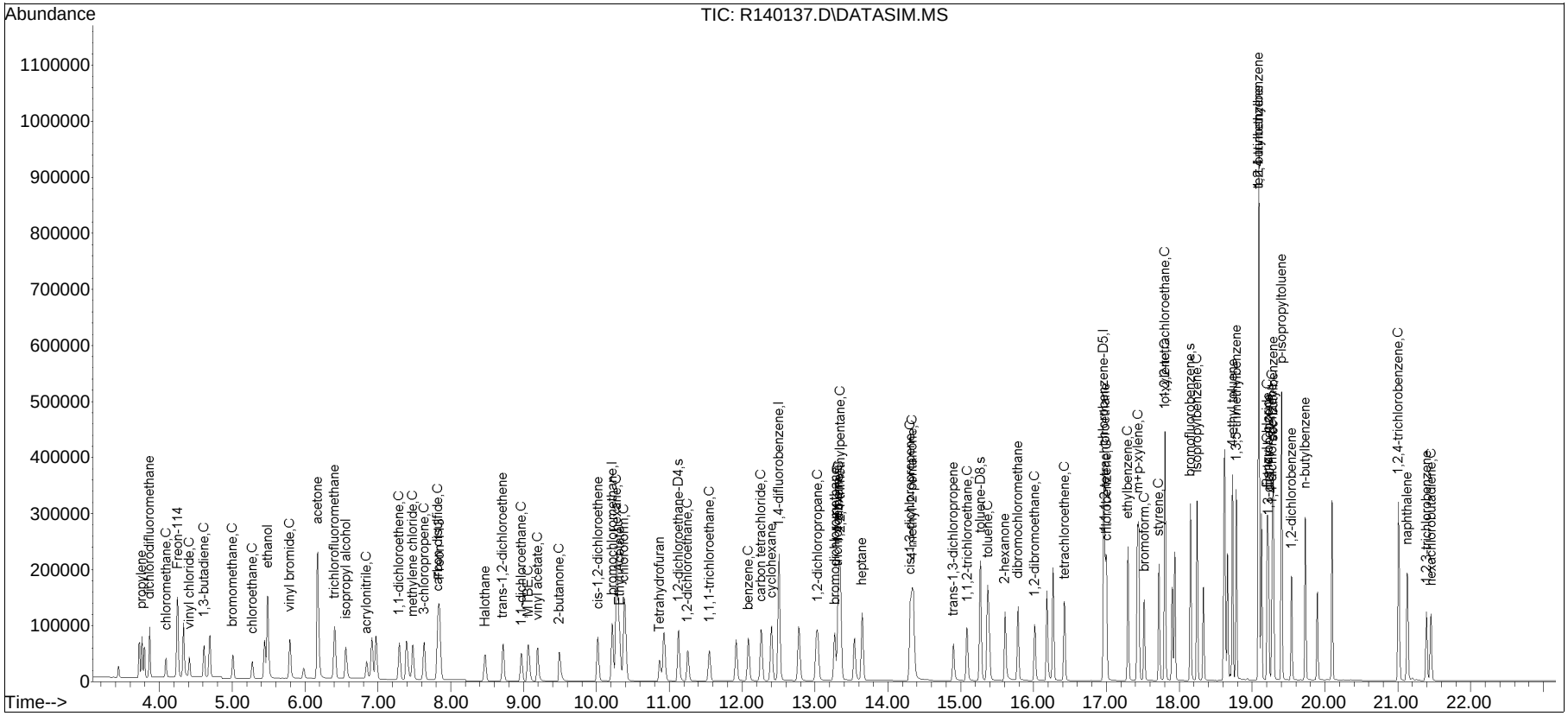
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

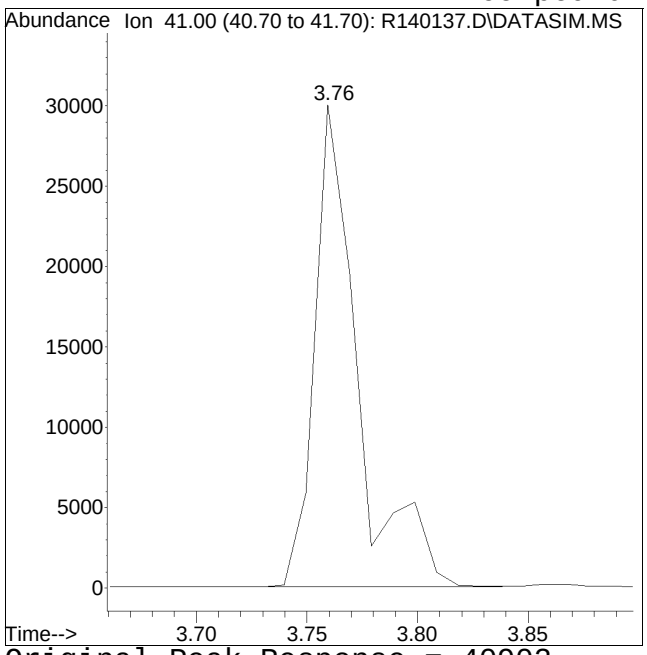
Sub List : Default - All compounds listed0311SIM\R140137.D



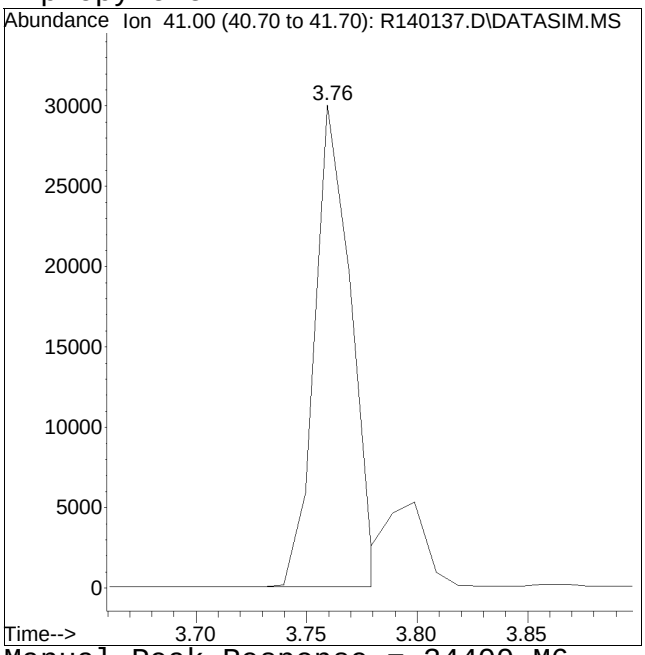
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\0311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-2,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #2: propylene




Original Peak Response = 40902



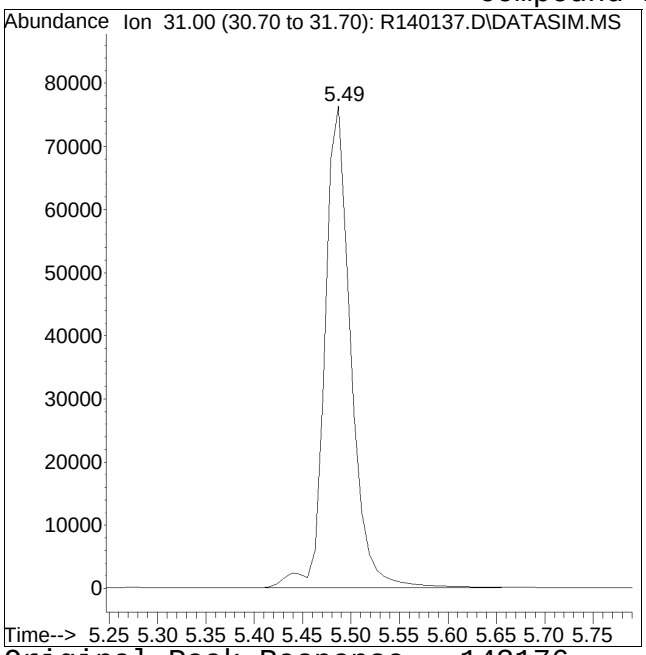

Manual Peak Response = 34400 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

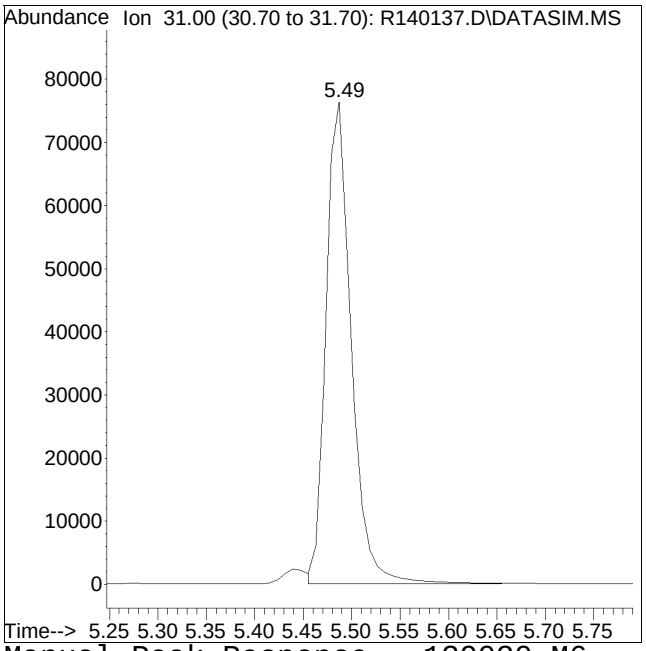
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-2,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #10: ethanol




Original Peak Response = 143176



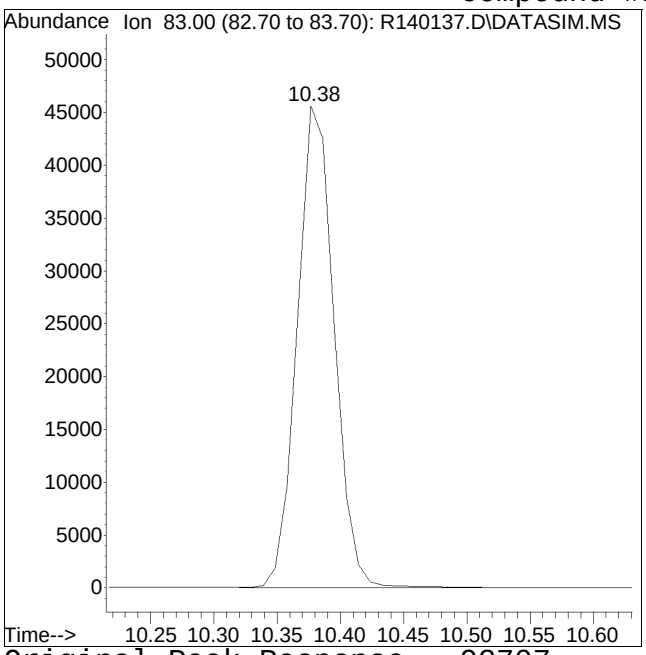

Manual Peak Response = 139030 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

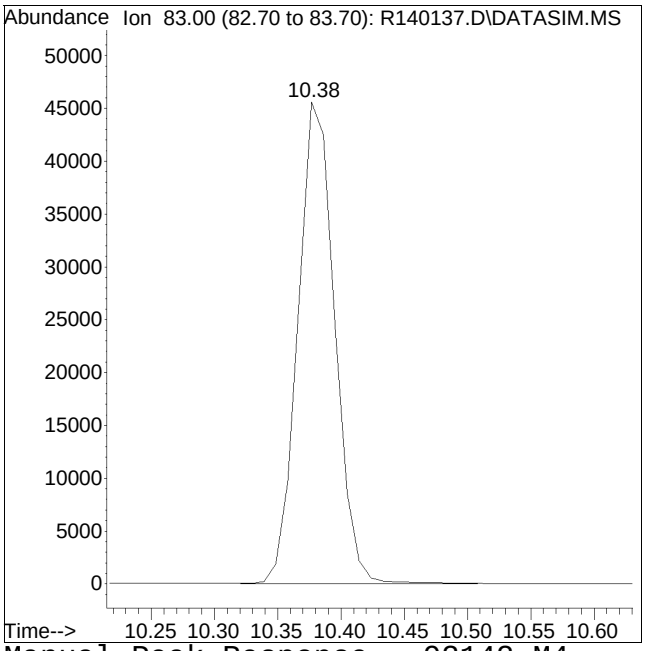
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-2,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #29: chloroform




Original Peak Response = 92707



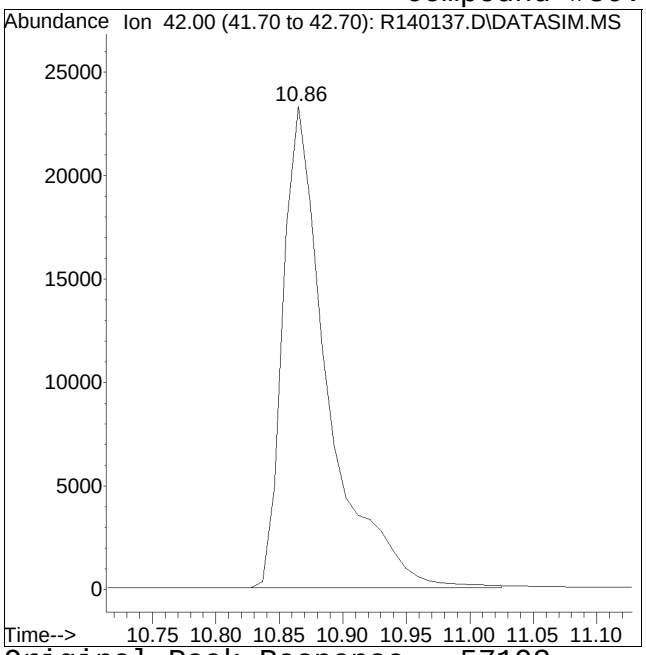

Manual Peak Response = 92142 M4

M4 = Poor automated baseline construction.

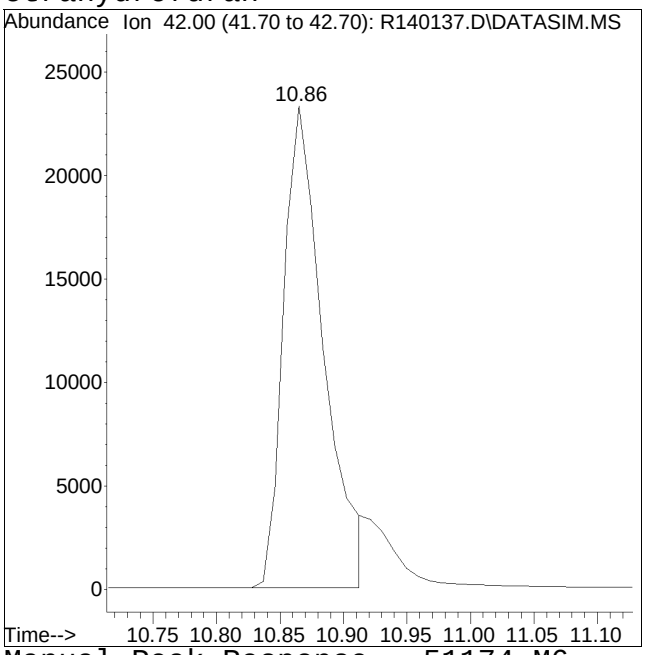
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-2,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #30: Tetrahydrofuran




Original Peak Response = 57192



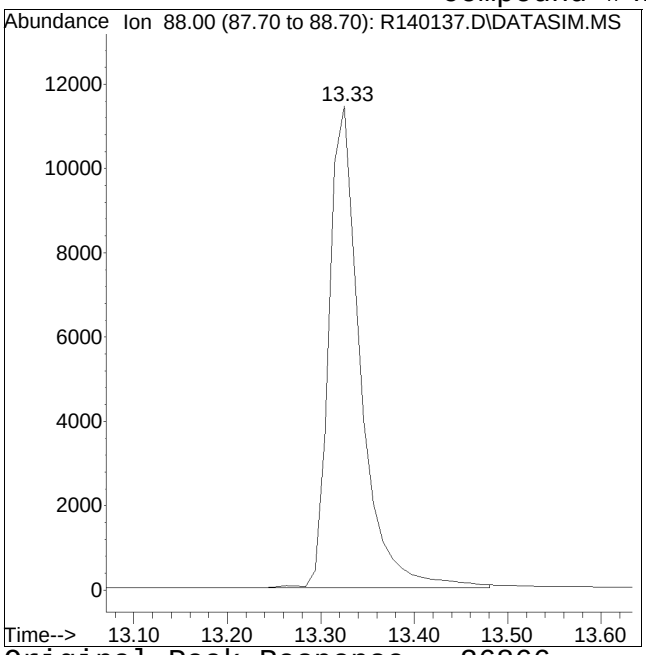

Manual Peak Response = 51174 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

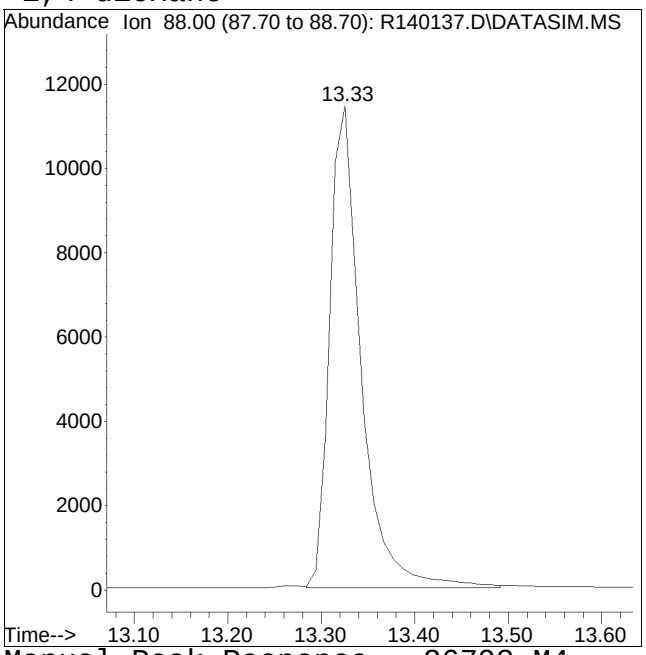
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-2,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #41: 1,4-dioxane




Original Peak Response = 26866



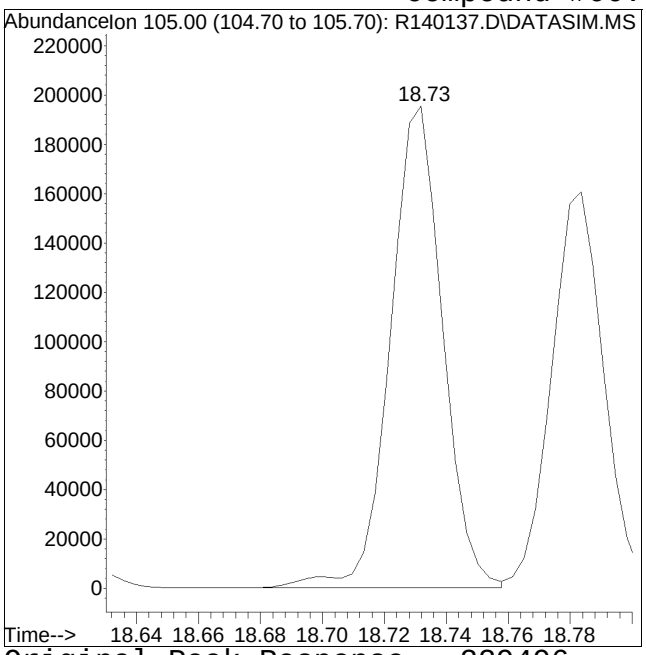

Manual Peak Response = 26793 M4

M4 = Poor automated baseline construction.

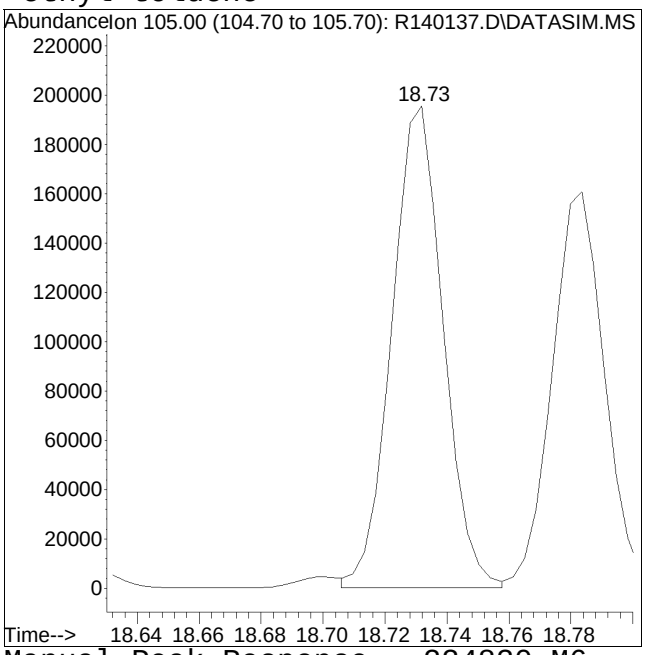
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-2,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #66: 4-ethyl toluene




Original Peak Response = 229496




Manual Peak Response = 224830 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140146.D
Acq On : 11 Mar 2015 7:46 pm
Operator : AIRPIANO1:RY
Sample : L1504425-06,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 16 10:05:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 108241 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 90.94% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 229717 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 86.23% | |
| 49) chlorobenzene-D5 | 16.97 | 54 | 53423 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 91.72% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | | 0 | N.D. | | |
| 4) chloromethane | 4.09 | | 0 | N.D. | | |
| 5) Freon-114 | 4.25 | | 0 | N.D. | | |
| 6) vinyl chloride | 4.32 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.66 | | 0 | N.D. | | |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 5.26 | | 0 | N.D. | | |
| 13) trichlorofluoromethane | 6.41 | | 0 | N.D. | | |
| 16) 1,1-dichloroethene | 7.29 | | 0 | N.D. | | |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 7.84 | 101 | 108 | 0.007 | ppbV # | 77 |
| 22) trans-1,2-dichloroethene | 8.70 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.98 | | 0 | N.D. | | |
| 24) MTBE | 9.08 | | 0 | N.D. | | |
| 27) cis-1,2-dichloroethene | 10.01 | | 0 | N.D. | | |
| 29) chloroform | 0.00 | | 0 | N.D. | | |
| 31) 1,2-dichloroethane | 11.27 | | 0 | N.D. | | |
| 35) 1,1,1-trichloroethane | 11.54 | | 0 | N.D. | | |
| 36) benzene | 12.10 | | 0 | N.D. | | |
| 37) carbon tetrachloride | 12.28 | | 0 | N.D. | | |
| 39) 1,2-dichloropropane | 13.02 | | 0 | N.D. | | |
| 40) bromodichloromethane | 13.25 | | 0 | N.D. | | |
| 42) trichloroethene | 13.34 | | 0 | N.D. | | |
| 45) cis-1,3-dichloropropene | 14.27 | | 0 | N.D. | | |
| 47) trans-1,3-dichloropropene | 14.88 | | 0 | N.D. | | |
| 48) 1,1,2-trichloroethane | 15.09 | | 0 | N.D. | | |
| 50) toluene | 15.40 | | 0 | N.D. | | |
| 53) dibromochloromethane | 15.80 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140146.D
Acq On : 11 Mar 2015 7:46 pm
Operator : AIRPIANO1:RY
Sample : L1504425-06,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 16 10:05:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 15.98 | | 0 | | N.D. | |
| 55) tetrachloroethene | 0.00 | | 0 | | N.D. | |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | | 0 | | N.D. | |
| 57) chlorobenzene | 17.00 | | 0 | | N.D. | |
| 58) ethylbenzene | 17.28 | | 0 | | N.D. | |
| 59) m+p-xylene | 17.42 | | 0 | | N.D. | |
| 60) bromoform | 17.51 | | 0 | | N.D. | |
| 61) styrene | 17.72 | | 0 | | N.D. | |
| 62) 1,1,2,2-tetrachloroethane | 17.80 | | 0 | | N.D. | |
| 63) o-xylene | 17.80 | | 0 | | N.D. | |
| 67) 1,3,5-trimethylbenzene | 18.78 | | 0 | | N.D. | |
| 69) 1,2,4-trimethylbenzene | 19.11 | | 0 | | N.D. | |
| 71) 1,3-dichlorobenzene | 19.24 | | 0 | | N.D. | |
| 72) 1,4-dichlorobenzene | 19.27 | | 0 | | N.D. | |
| 75) 1,2-dichlorobenzene | 19.54 | | 0 | | N.D. | |
| 77) 1,2,4-trichlorobenzene | 21.02 | | 0 | | N.D. | |
| 78) naphthalene | 21.15 | | 0 | | N.D. | |
| 80) hexachlorobutadiene | 21.46 | | 0 | | N.D. | |

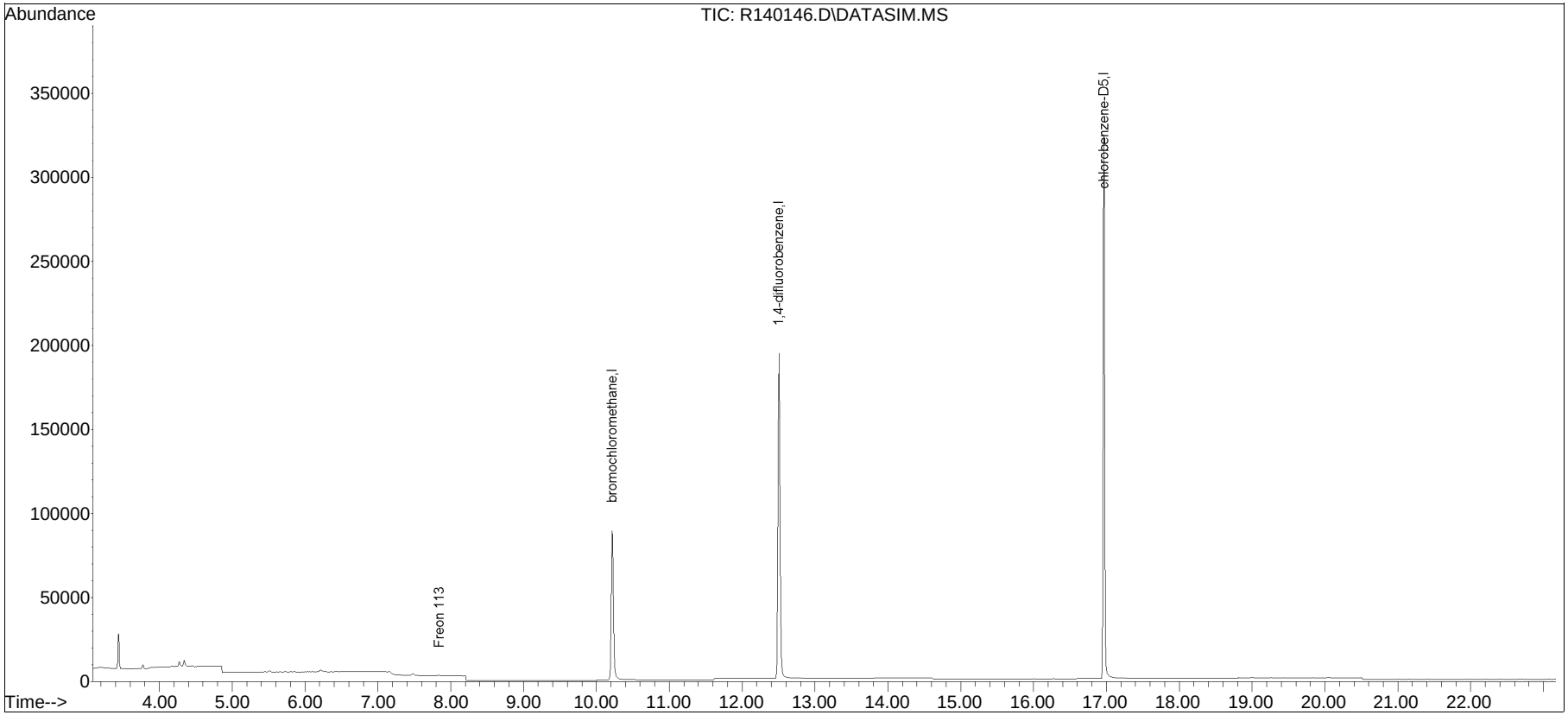
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

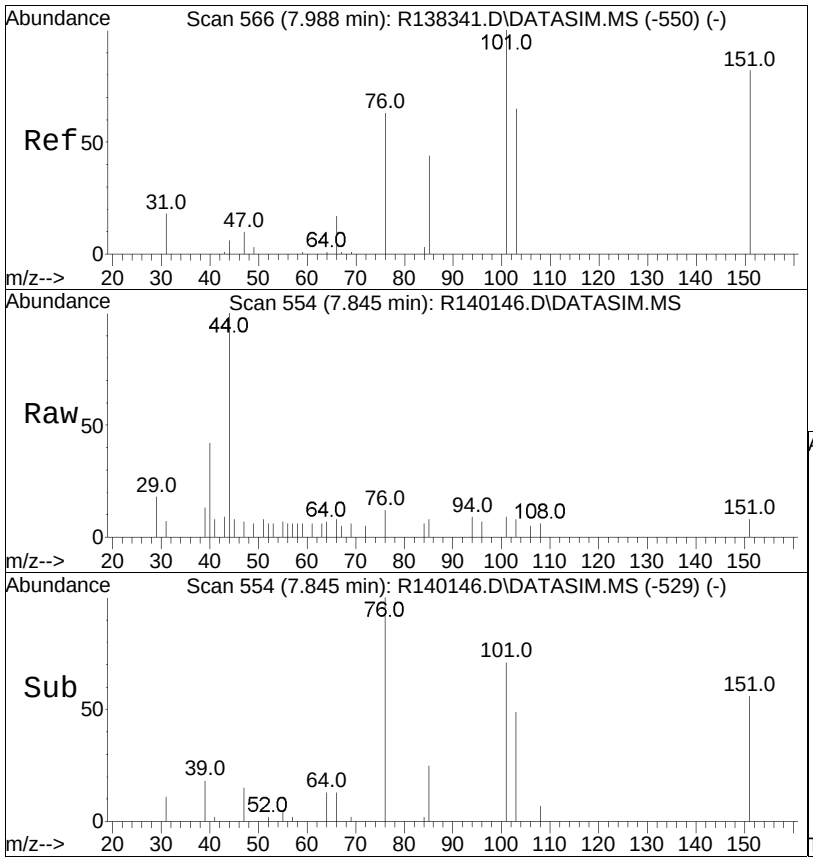
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140146.D
Acq On : 11 Mar 2015 7:46 pm
Operator : AIRPIANO1:RY
Sample : L1504425-06,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 16 10:05:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



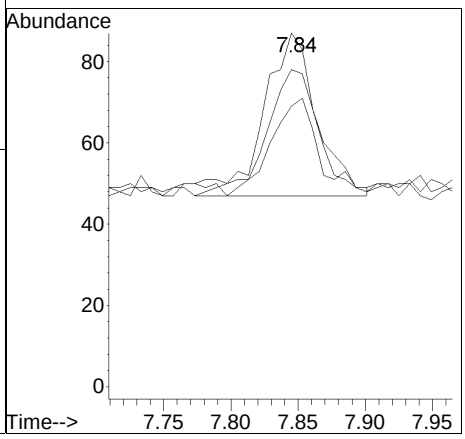

TSIM150102.M Wed Mar 25 12:02:21 2015




#20
Freon 113
Concen: 0.01 ppbV
RT: 7.84 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140146.D
Acq: 11 Mar 2015 7:46 pm

Tgt Ion:101 Resp: 108

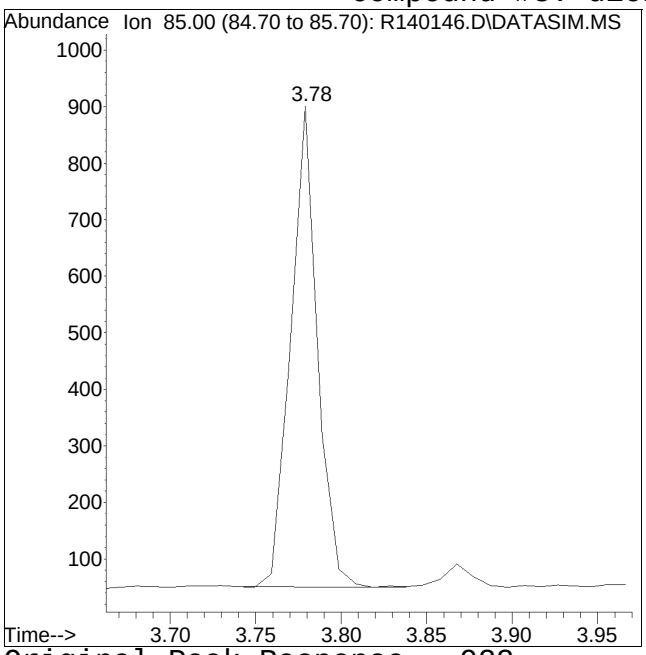
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 79.3 | 34.5 | 51.7# |
| 151 | 89.7 | 67.4 | 101.2 |

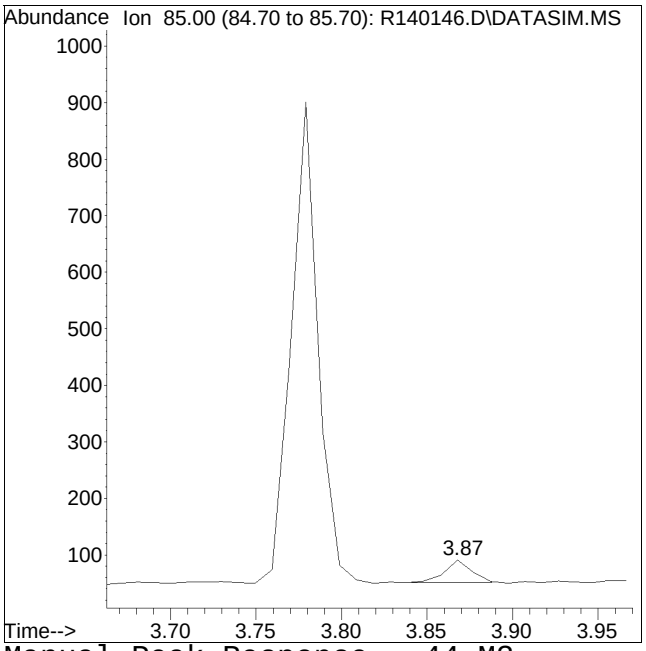


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140146.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 7:46 pm Instrument : Air Piano 1
Sample : L1504425-06,3,250,250 Quant Date : 3/12/2015 7:16 am

Compound #3: dichlorodifluoromethane




Original Peak Response = 922 Manual Peak Response = 44 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140147.D
Acq On : 11 Mar 2015 8:19 pm
Operator : AIRPIANO1:RY
Sample : L1504425-11,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 10:23:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 112817 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 94.78% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 248625 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 93.32% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 55162 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 94.70% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 104 | 0.007 | ppbV # | 55 |
| 4) chloromethane | 4.09 | | 0 | N.D. | | |
| 5) Freon-114 | 4.24 | | 0 | N.D. | | |
| 6) vinyl chloride | 4.47 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.61 | | 0 | N.D. | | |
| 8) bromomethane | 0.00 | | 0 | N.D. d | | |
| 9) chloroethane | 5.29 | | 0 | N.D. | | |
| 13) trichlorofluoromethane | 6.41 | | 0 | N.D. | | |
| 16) 1,1-dichloroethene | 7.31 | | 0 | N.D. | | |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 7.85 | | 0 | N.D. | | |
| 22) trans-1,2-dichloroethene | 8.71 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.98 | | 0 | N.D. | | |
| 24) MTBE | 0.00 | | 0 | N.D. d | | |
| 27) cis-1,2-dichloroethene | 10.00 | | 0 | N.D. | | |
| 29) chloroform | 0.00 | | 0 | N.D. d | | |
| 31) 1,2-dichloroethane | 0.00 | | 0 | N.D. d | | |
| 35) 1,1,1-trichloroethane | 11.55 | | 0 | N.D. | | |
| 36) benzene | 12.09 | | 0 | N.D. | | |
| 37) carbon tetrachloride | 12.27 | | 0 | N.D. | | |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. d | | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. d | | |
| 42) trichloroethene | 13.33 | | 0 | N.D. | | |
| 45) cis-1,3-dichloropropene | 0.00 | | 0 | N.D. d | | |
| 47) trans-1,3-dichloropropene | 14.92 | | 0 | N.D. | | |
| 48) 1,1,2-trichloroethane | 15.07 | | 0 | N.D. | | |
| 50) toluene | 15.38 | 91 | 634 | 0.022 | ppbV | 91 |
| 53) dibromochloromethane | 15.78 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140147.D
Acq On : 11 Mar 2015 8:19 pm
Operator : AIRPIANO1:RY
Sample : L1504425-11,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 10:23:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 16.04 | | 0 | N.D. | | |
| 55) tetrachloroethene | 16.43 | | 0 | N.D. | | |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.31 | | 0 | N.D. | | |
| 59) m+p-xylene | 17.44 | 91 | 543M4 | 0.018 | ppbV | |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 17.71 | | 0 | N.D. | | |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.82 | | 0 | N.D. | | |
| 67) 1,3,5-trimethylbenzene | 18.79 | 105 | 329 | 0.007 | ppbV # | 78 |
| 69) 1,2,4-trimethylbenzene | 19.10 | 105 | 1314 | 0.035 | ppbV # | 70 |
| 71) 1,3-dichlorobenzene | 19.23 | | 0 | N.D. | | |
| 72) 1,4-dichlorobenzene | 19.29 | | 0 | N.D. | | |
| 75) 1,2-dichlorobenzene | 19.55 | | 0 | N.D. | | |
| 77) 1,2,4-trichlorobenzene | 21.02 | | 0 | N.D. | | |
| 78) naphthalene | 21.14 | | 0 | N.D. | | |
| 80) hexachlorobutadiene | 21.47 | | 0 | N.D. | | |

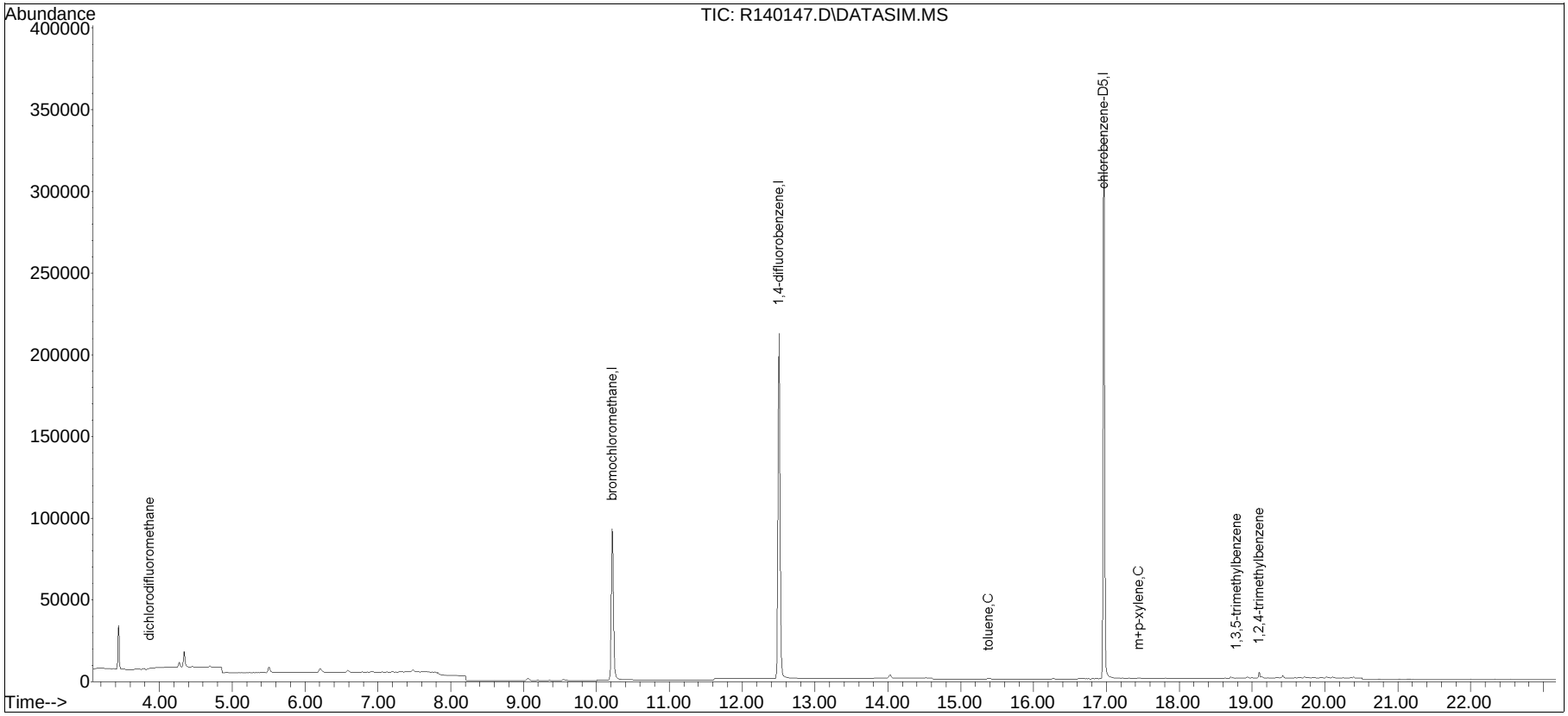
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

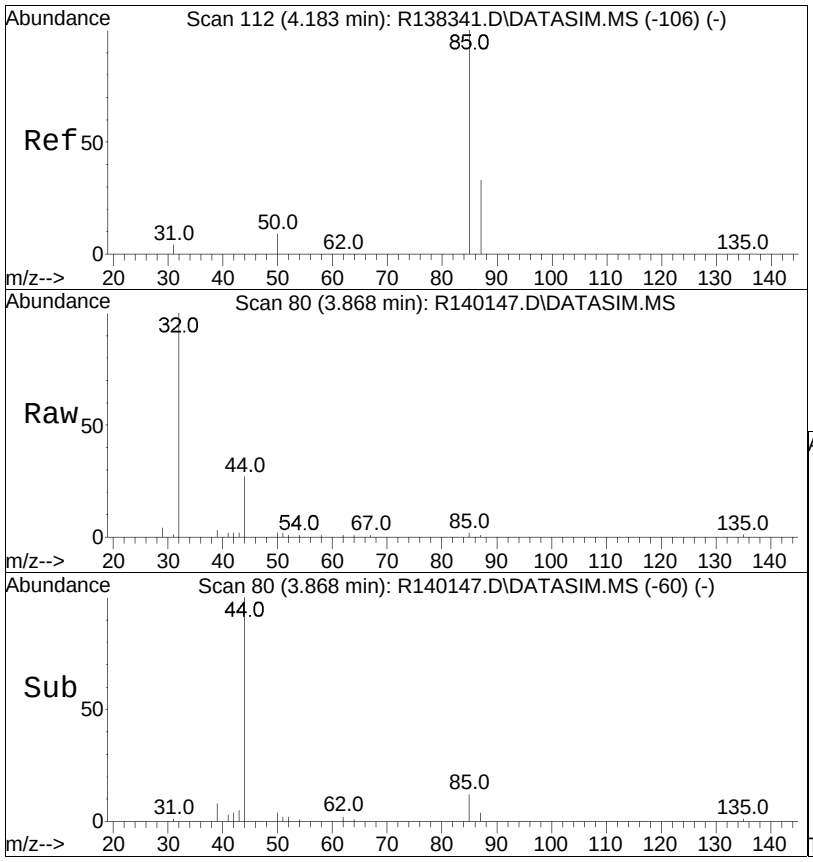
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140147.D
Acq On : 11 Mar 2015 8:19 pm
Operator : AIRPIANO1:RY
Sample : L1504425-11,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 10:23:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



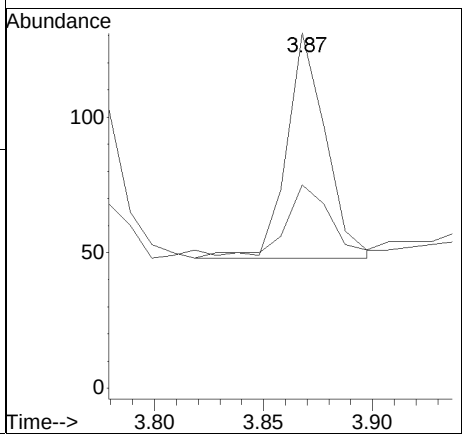

TSIM150102.M Wed Mar 25 12:02:37 2015

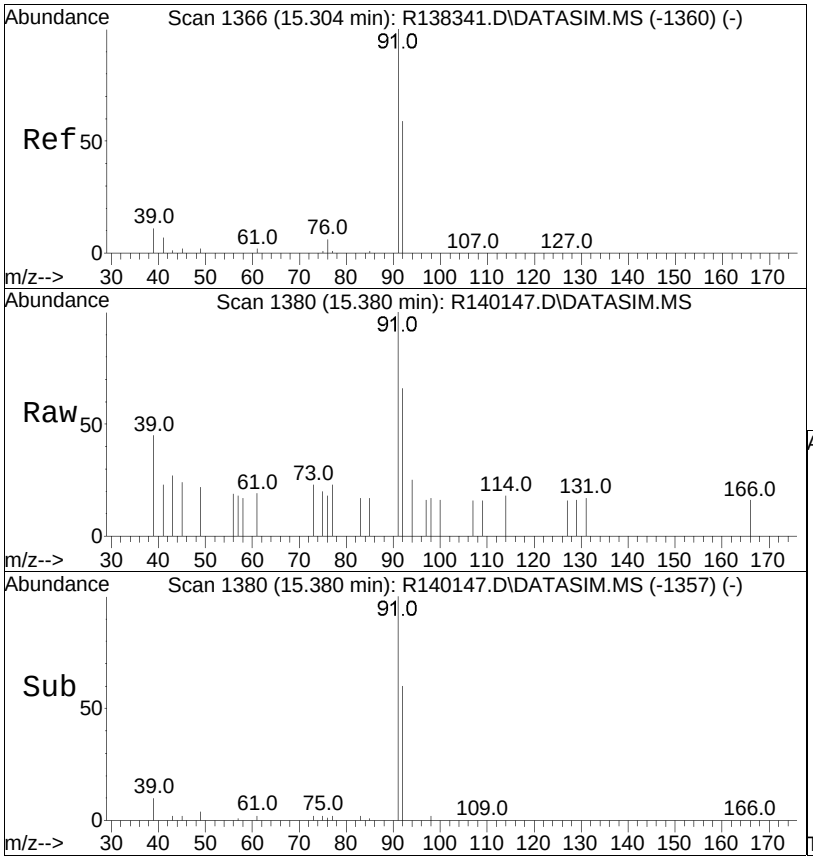



#3
dichlorodifluoromethane
Concen: 0.01 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion: 85 Resp: 104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 57.3 | 25.8 | 38.8# |

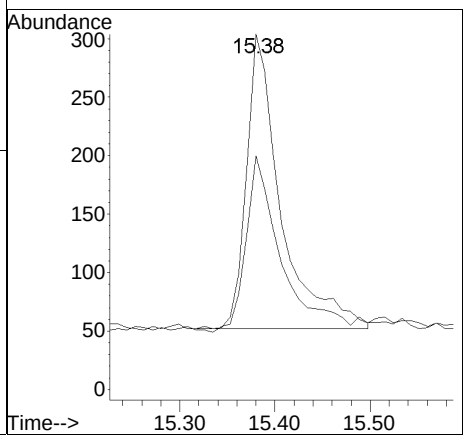


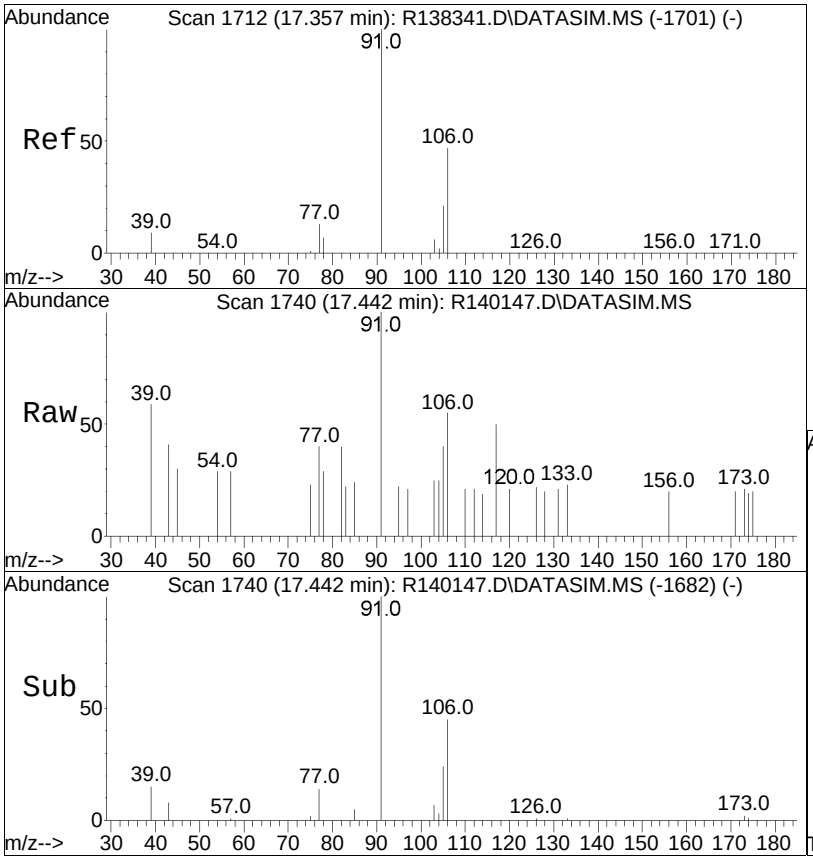



#50
toluene
Concen: 0.02 ppbV
RT: 15.38 min Scan# 1380
Delta R.T. 0.009 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion: 91 Resp: 634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 65.8 | 47.2 | 70.8 |

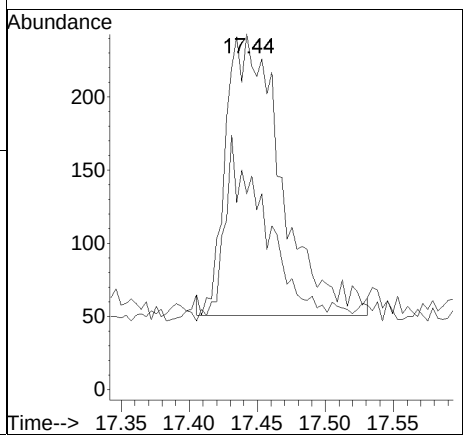


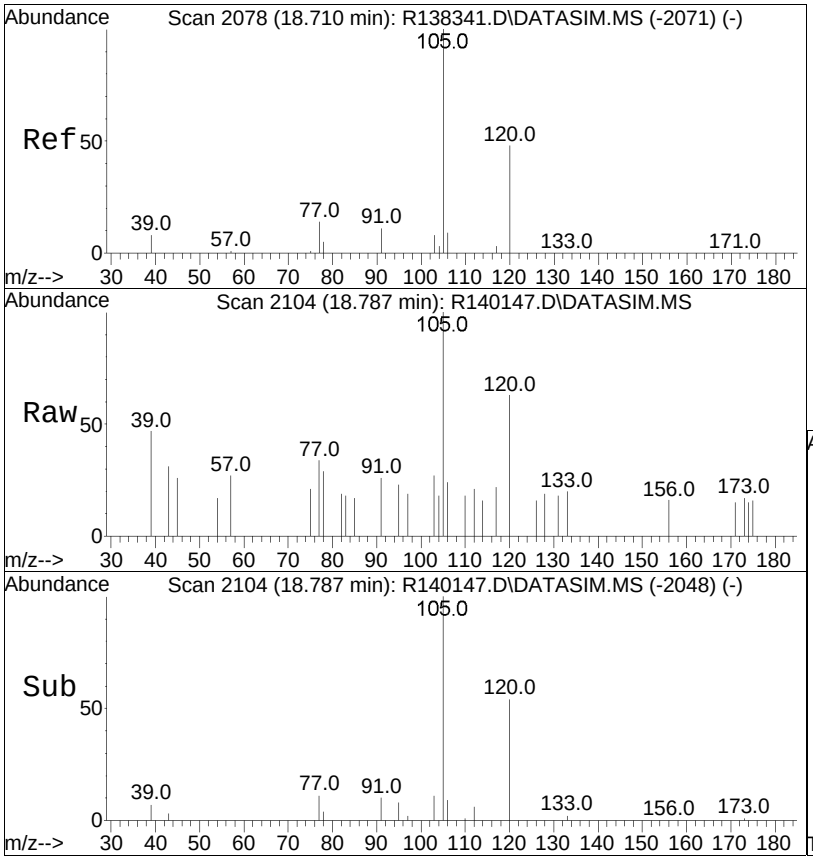



#59
m+p-xylene
Concen: 0.02 ppbV m
RT: 17.44 min Scan# 1740
Delta R.T. 0.015 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion: 91 Resp: 543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 55.1 | 39.7 | 59.5 |

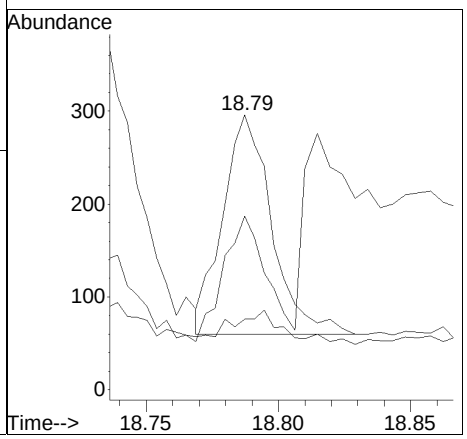


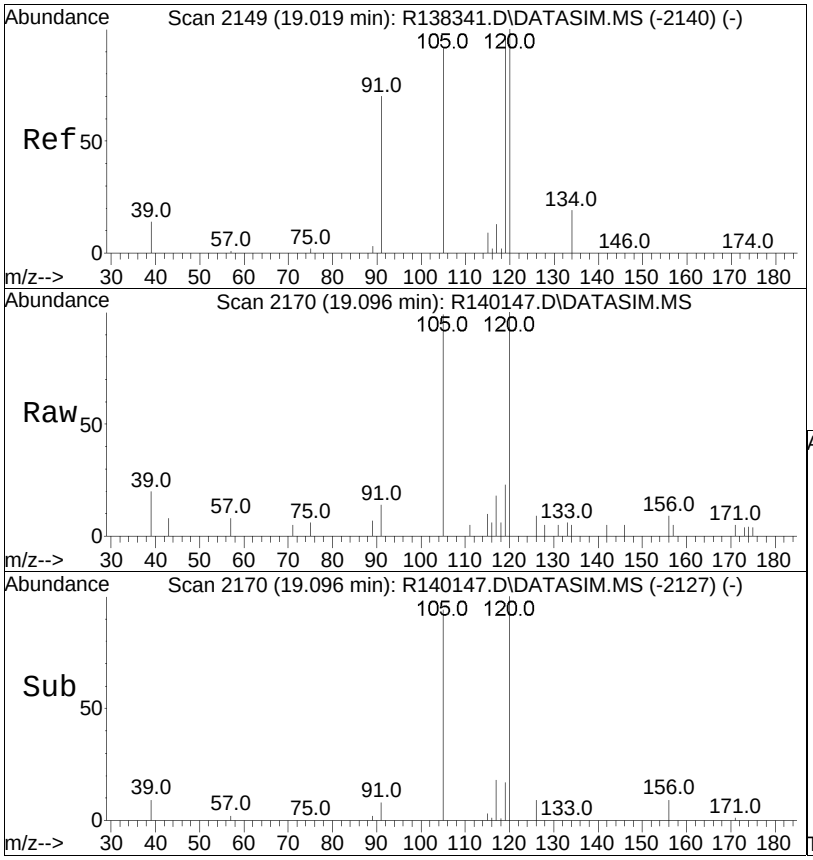



#67
1,3,5-trimethylbenzene
Concen: 0.01 ppbV
RT: 18.79 min Scan# 2104
Delta R.T. 0.007 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion:105 Resp: 329

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 63.2 | 40.4 | 60.6# |
| 91 | 25.7 | 8.4 | 12.6# |

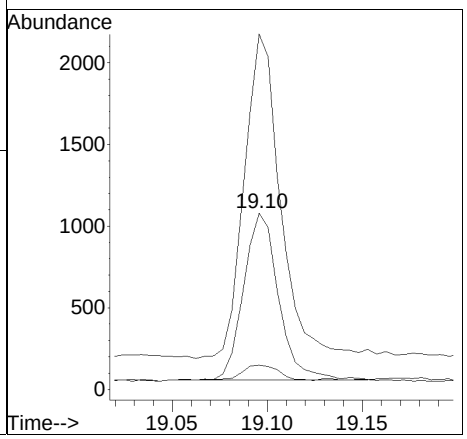





#69
1,2,4-trimethylbenzene
Concen: 0.03 ppbV
RT: 19.10 min Scan# 2170
Delta R.T. 0.005 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion:105 Resp: 1314

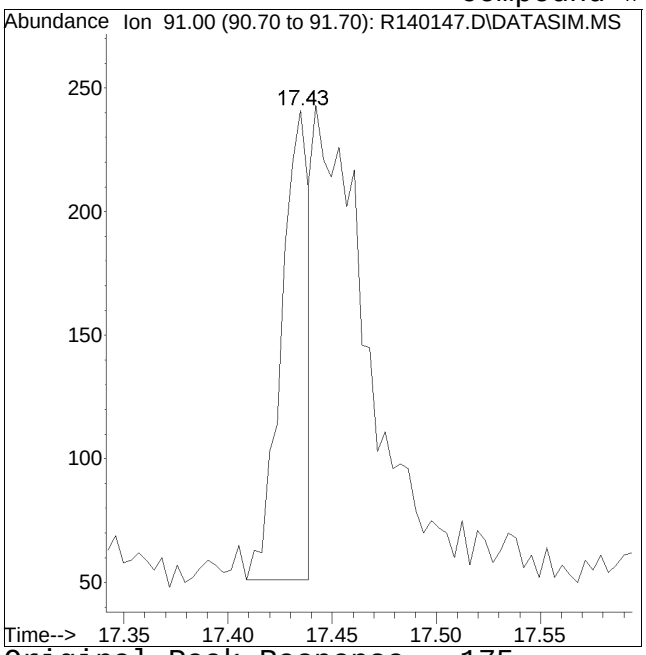
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 201.7 | 184.1 | 276.1 |
| 91 | 13.9 | 57.4 | 86.2# |

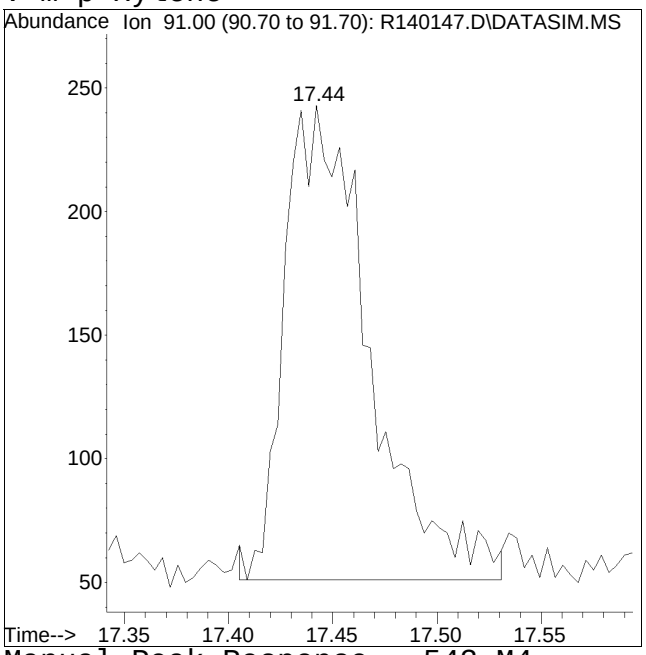


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140147.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 8:19 pm Instrument : Air Piano 1
Sample : L1504425-11,3,250,250 Quant Date : 3/12/2015 7:17 am

Compound #59: m+p-xylene




Original Peak Response = 175 Manual Peak Response = 543 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140148.D
Acq On : 11 Mar 2015 8:51 pm
Operator : AIRPIANO1:RY
Sample : L1504425-01,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 10:25:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 100826 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 84.71% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 222593 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 83.55% | |
| 49) chlorobenzene-D5 | 16.97 | 54 | 51639 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 88.66% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4853 | 0.384 | ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 3445 | 0.530 | ppbV | 99 |
| 5) Freon-114 | 4.25 | 85 | 257 | 0.014 | ppbV # | 82 |
| 6) vinyl chloride | 4.41 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | 54 | 92 | 0.017 | ppbV # | 17 |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 0.00 | | 0 | N.D. | d | |
| 13) trichlorofluoromethane | 6.41 | 101 | 3610 | 0.211 | ppbV | 99 |
| 16) 1,1-dichloroethene | 7.29 | | 0 | N.D. | | |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 7.85 | 101 | 1002 | 0.069 | ppbV | 94 |
| 22) trans-1,2-dichloroethene | 8.72 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.98 | | 0 | N.D. | | |
| 24) MTBE | 9.10 | | 0 | N.D. | | |
| 27) cis-1,2-dichloroethene | 10.03 | | 0 | N.D. | | |
| 29) chloroform | 10.39 | 83 | 255 | 0.015 | ppbV # | 74 |
| 31) 1,2-dichloroethane | 11.28 | 62 | 154 | 0.015 | ppbV # | 17 |
| 35) 1,1,1-trichloroethane | 11.55 | | 0 | N.D. | | |
| 36) benzene | 12.09 | 78 | 4594 | 0.220 | ppbV | 96 |
| 37) carbon tetrachloride | 12.26 | 117 | 1020 | 0.069 | ppbV # | 96 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.34 | | 0 | N.D. | | |
| 45) cis-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 47) trans-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 48) 1,1,2-trichloroethane | 0.00 | | 0 | N.D. | d | |
| 50) toluene | 15.37 | 91 | 4920 | 0.181 | ppbV | 98 |
| 53) dibromochloromethane | 15.79 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140148.D
Acq On : 11 Mar 2015 8:51 pm
Operator : AIRPIANO1:RY
Sample : L1504425-01,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 10:25:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 16.03 | | 0 | N.D. | | |
| 55) tetrachloroethene | 16.43 | 166 | 170 | 0.012 | ppbV # | 67 |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 1006 | 0.028 | ppbV | 100 |
| 59) m+p-xylene | 17.43 | 91 | 2024 | 0.072 | ppbV | 97 |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 0.00 | | 0 | N.D. | d | |
| 62) 1,1,2,2-tetrachloroethane | 17.83 | | 0 | N.D. | | |
| 63) o-xylene | 17.81 | 91 | 794 | 0.027 | ppbV | 97 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 207 | 0.005 | ppbV # | 86 |
| 69) 1,2,4-trimethylbenzene | 19.10 | 105 | 598 | 0.017 | ppbV # | 78 |
| 71) 1,3-dichlorobenzene | 19.23 | | 0 | N.D. | | |
| 72) 1,4-dichlorobenzene | 19.28 | | 0 | N.D. | | |
| 75) 1,2-dichlorobenzene | 19.55 | | 0 | N.D. | | |
| 77) 1,2,4-trichlorobenzene | 21.02 | | 0 | N.D. | | |
| 78) naphthalene | 21.15 | | 0 | N.D. | | |
| 80) hexachlorobutadiene | 21.46 | | 0 | N.D. | | |

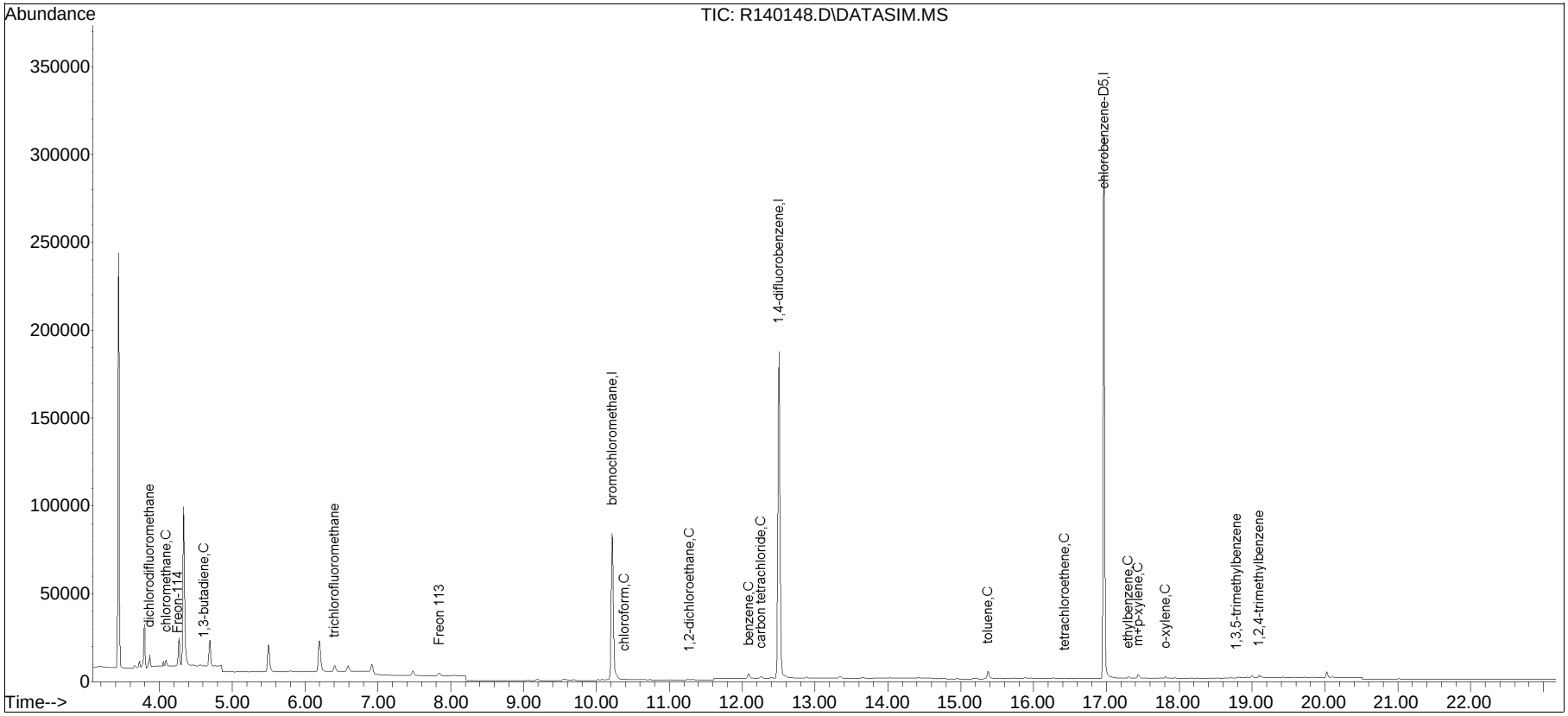
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

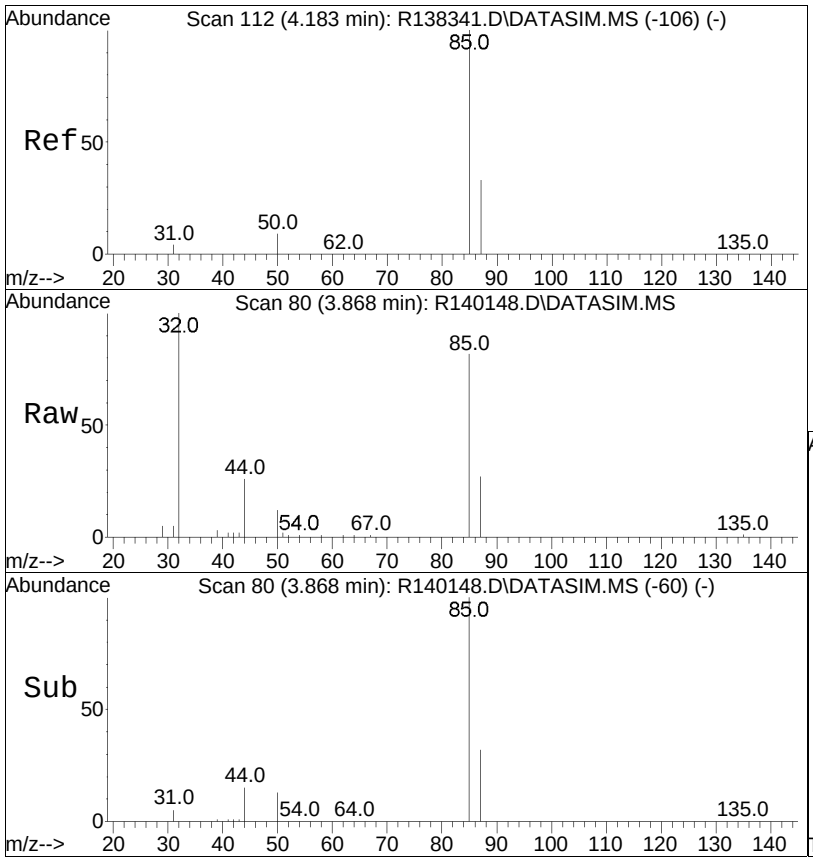
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140148.D
Acq On : 11 Mar 2015 8:51 pm
Operator : AIRPIANO1:RY
Sample : L1504425-01,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 10:25:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



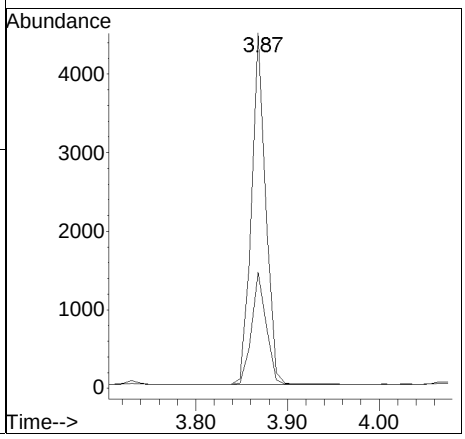

TSIM150102.M Wed Mar 25 12:02:53 2015

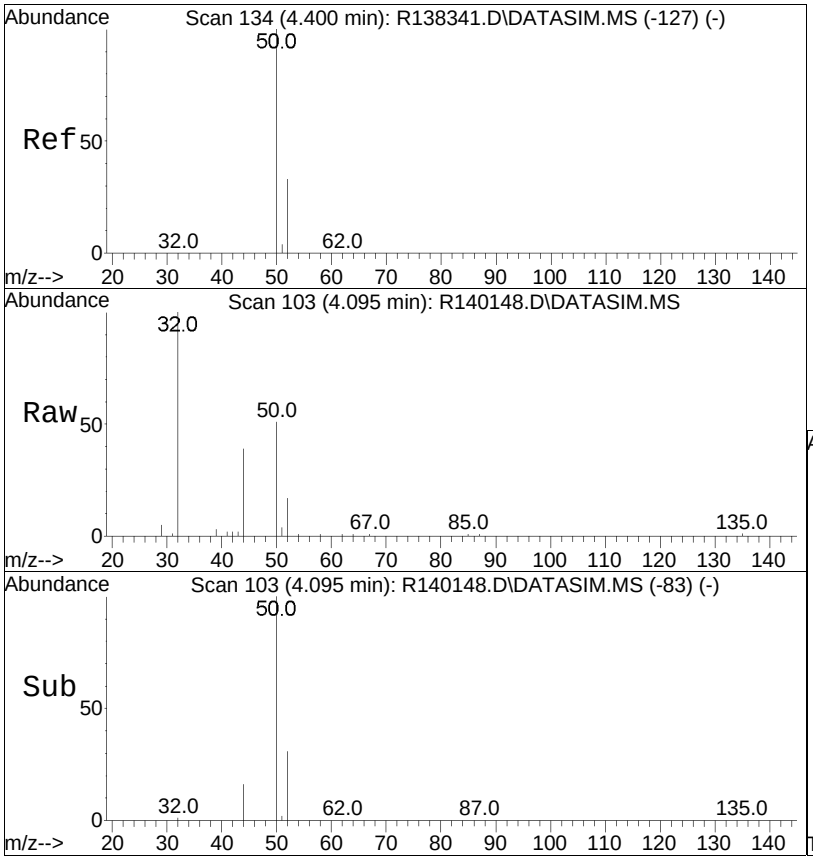



#3
dichlorodifluoromethane
Concen: 0.38 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 85 Resp: 4853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.7 | 25.8 | 38.8 |

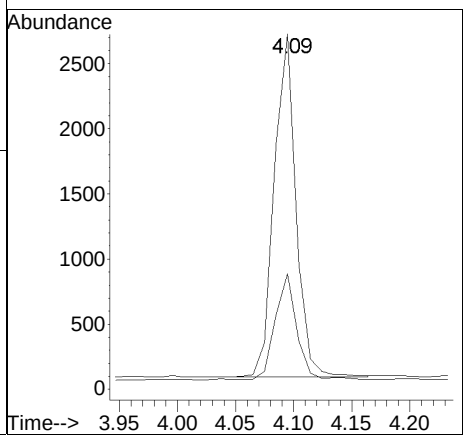


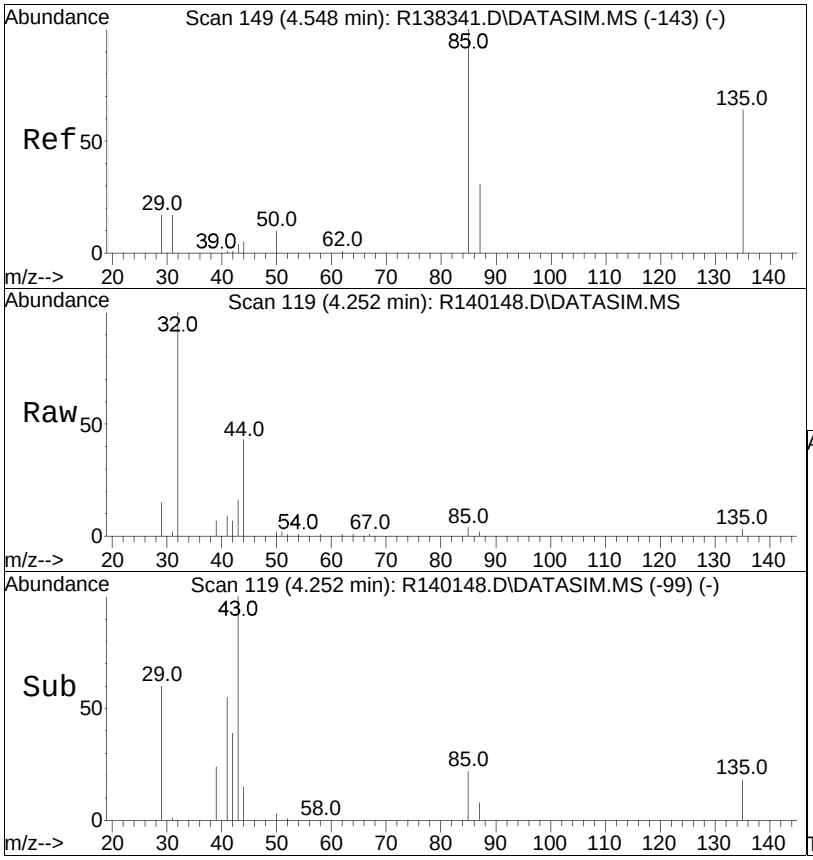



#4
chloromethane
Concen: 0.53 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 50 Resp: 3445

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.6 | 26.4 | 39.6 |

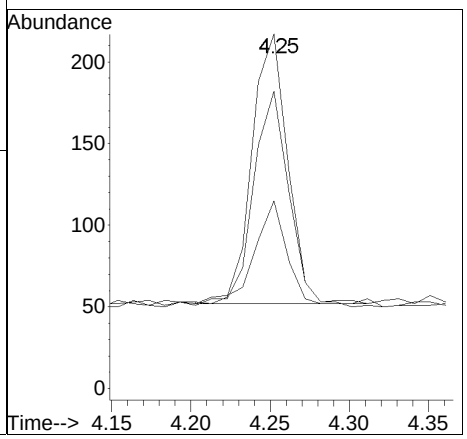


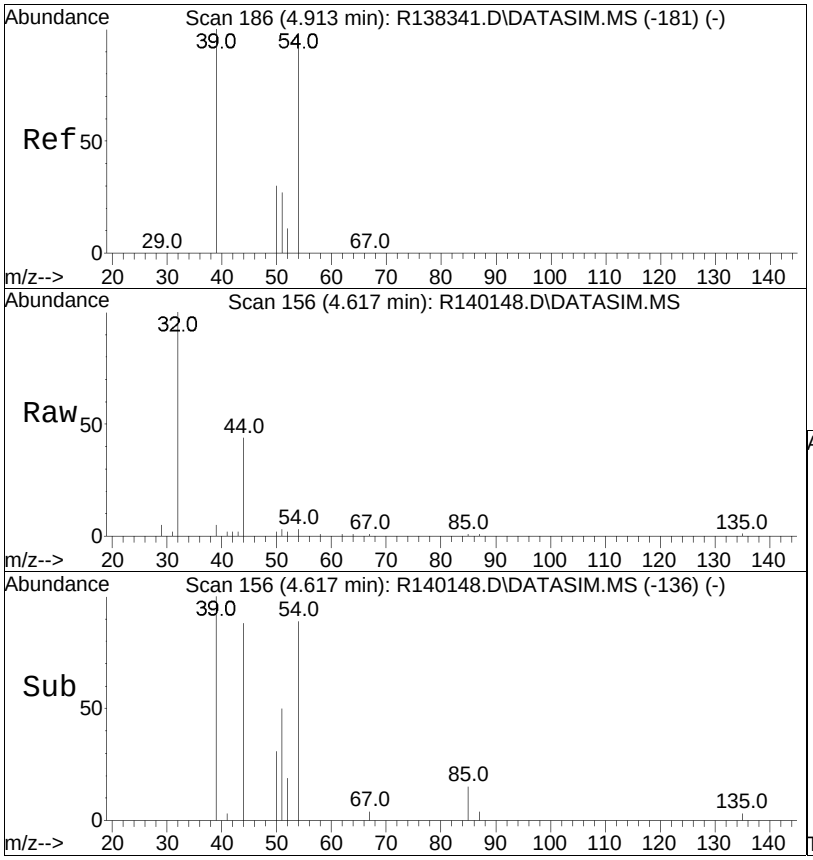



#5
Freon-114
Concen: 0.01 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 85 Resp: 257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 53.0 | 26.3 | 39.5# |
| 135 | 83.9 | 60.5 | 90.7 |

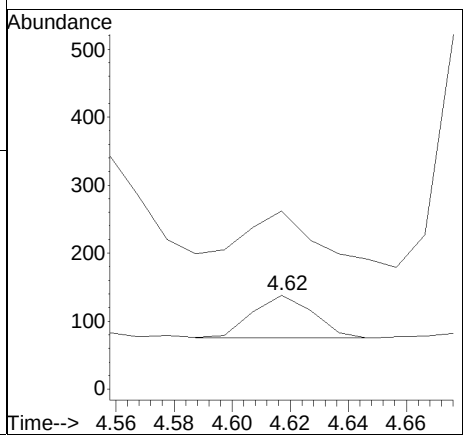


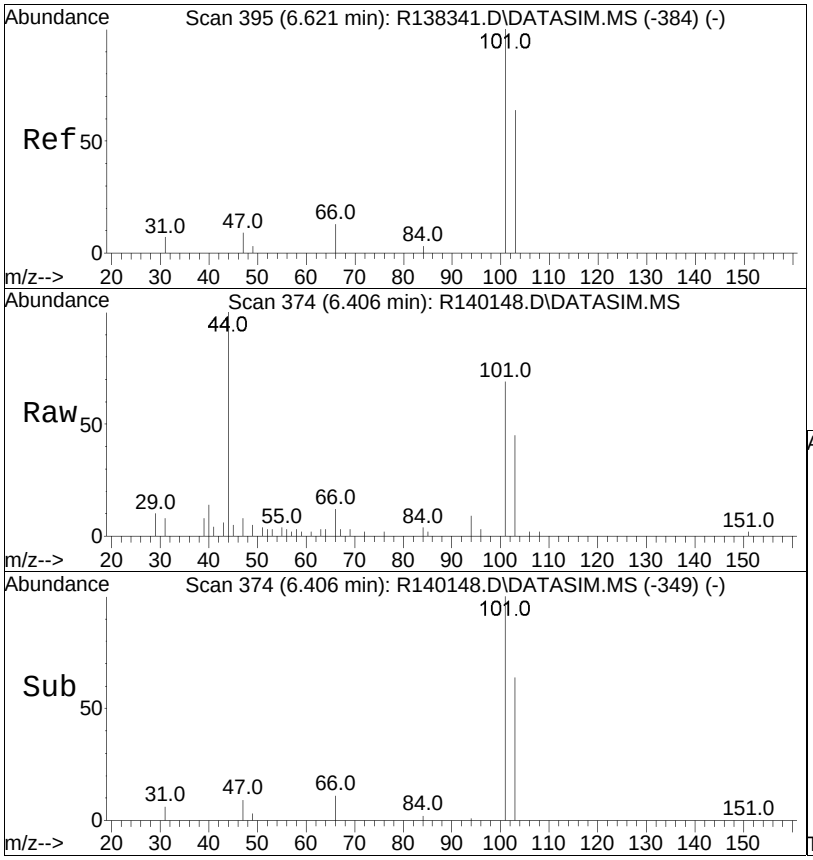



#7
1,3-butadiene
Concen: 0.02 ppbV
RT: 4.62 min Scan# 156
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 54 Resp: 92

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 189.9 | 84.0 | 126.0# |

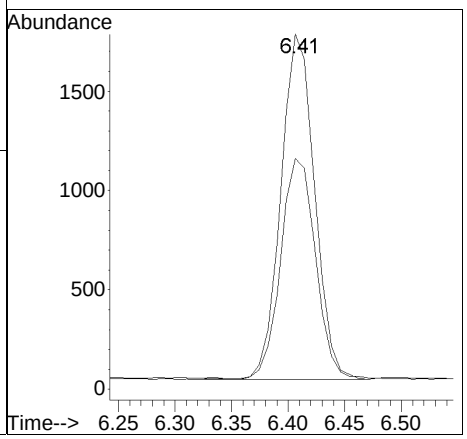


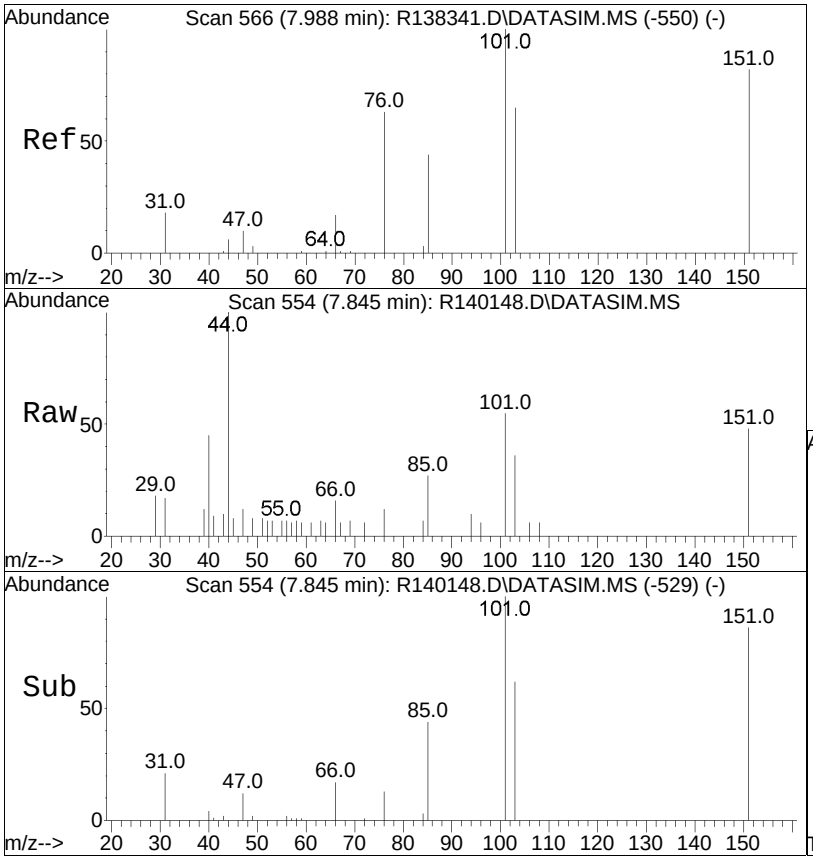



#13
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion:101 Resp: 3610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.0 | 51.2 | 76.8 |

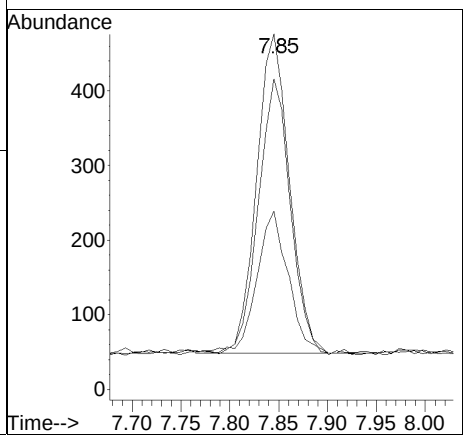


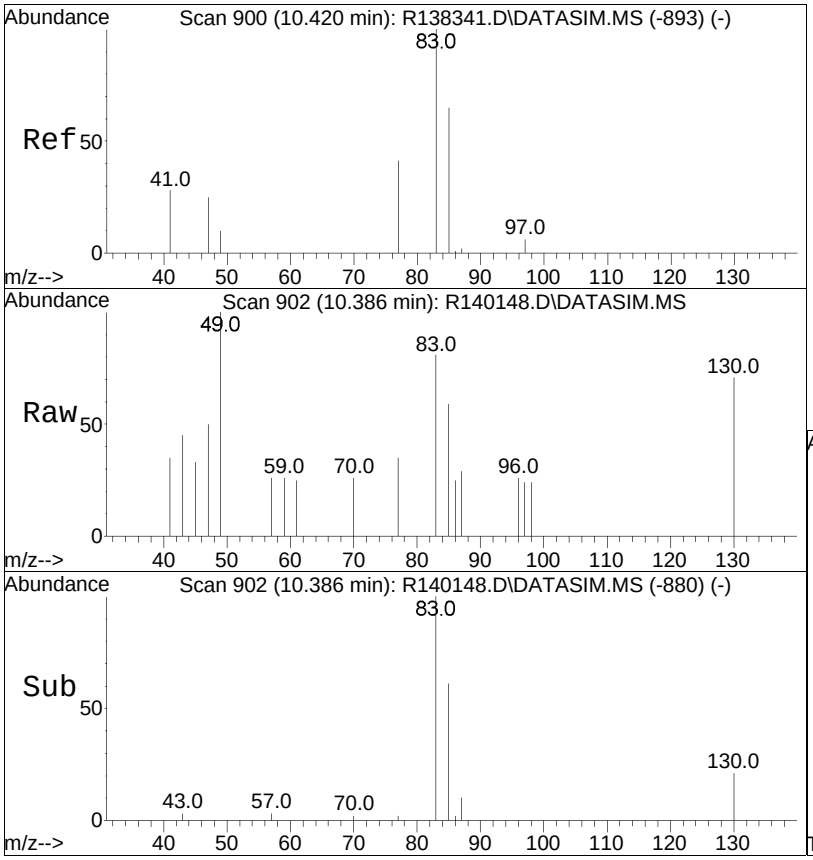



#20
Freon 113
Concen: 0.07 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion:101 Resp: 1002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 50.2 | 34.5 | 51.7 |
| 151 | 87.4 | 67.4 | 101.2 |

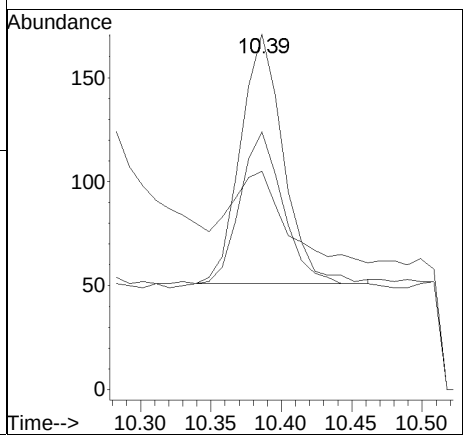


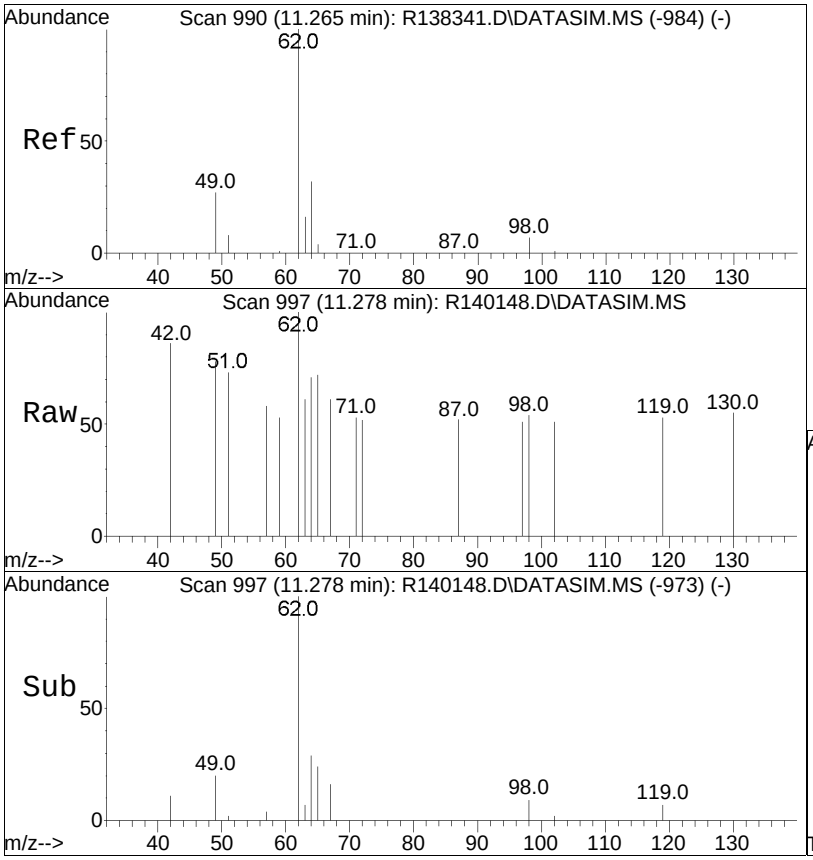



#29
chloroform
Concen: 0.01 ppbV
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 83 Resp: 255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 72.5 | 50.9 | 76.3 |
| 47 | 61.4 | 24.9 | 37.3# |

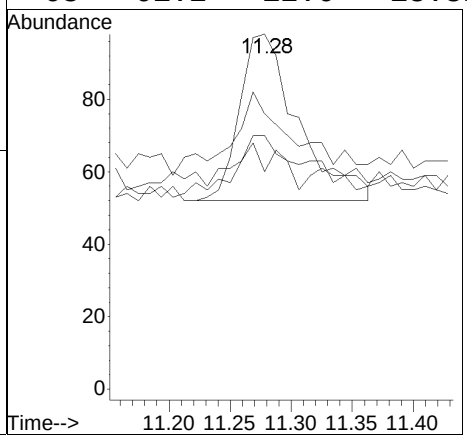


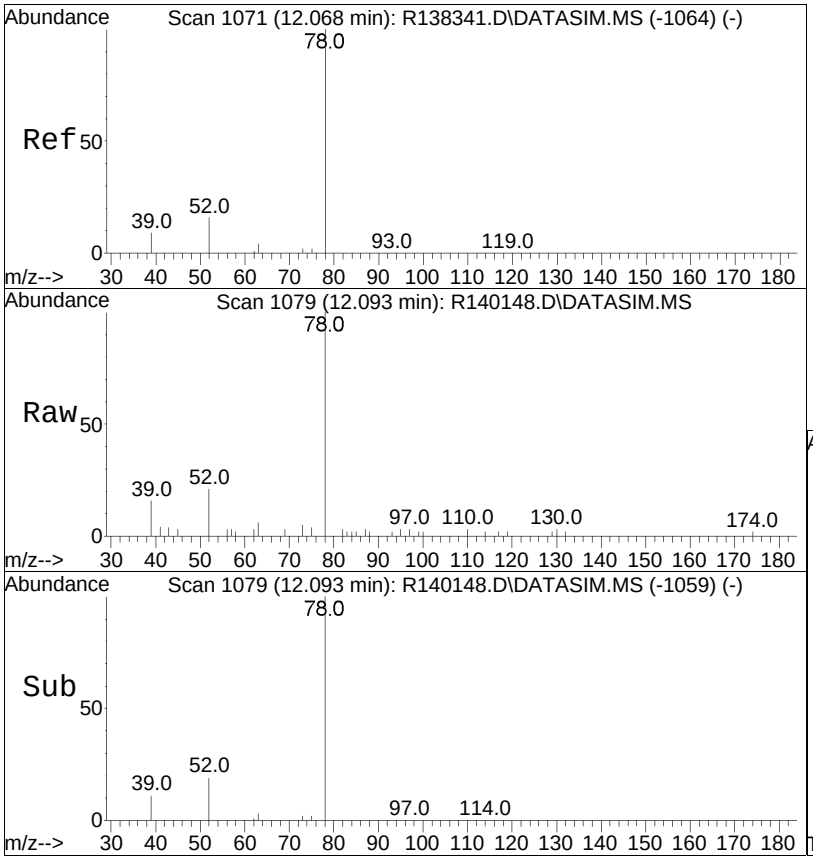



#31
1,2-dichloroethane
Concen: 0.01 ppbV
RT: 11.28 min Scan# 997
Delta R.T. 0.028 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 62 Resp: 154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 71.4 | 24.4 | 36.6# |
| 49 | 77.6 | 26.7 | 40.1# |
| 63 | 61.2 | 12.6 | 18.8# |

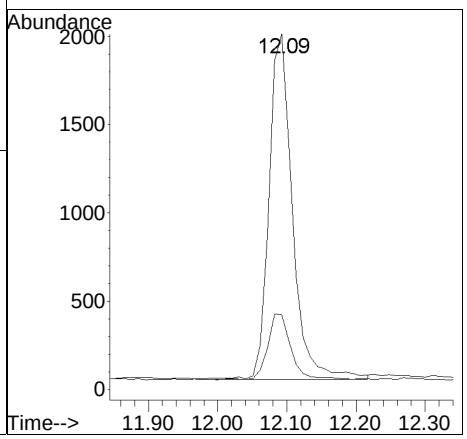


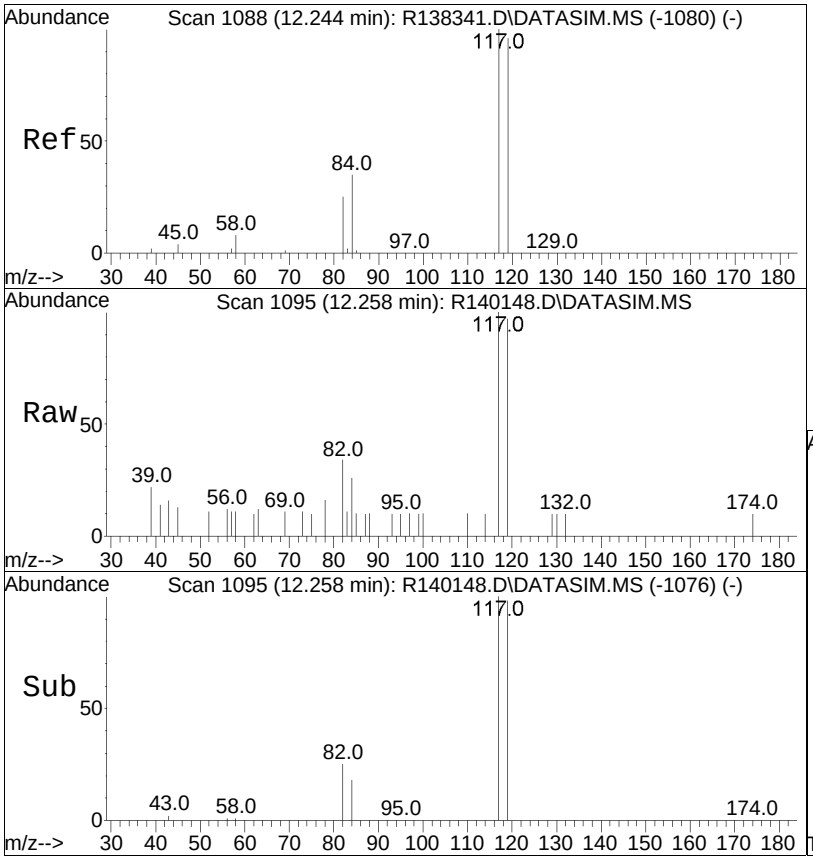



#36
benzene
Concen: 0.22 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 78 Resp: 4594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 21.0 | 15.4 | 23.0 |

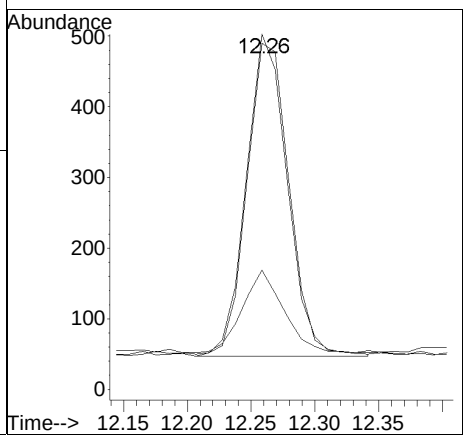


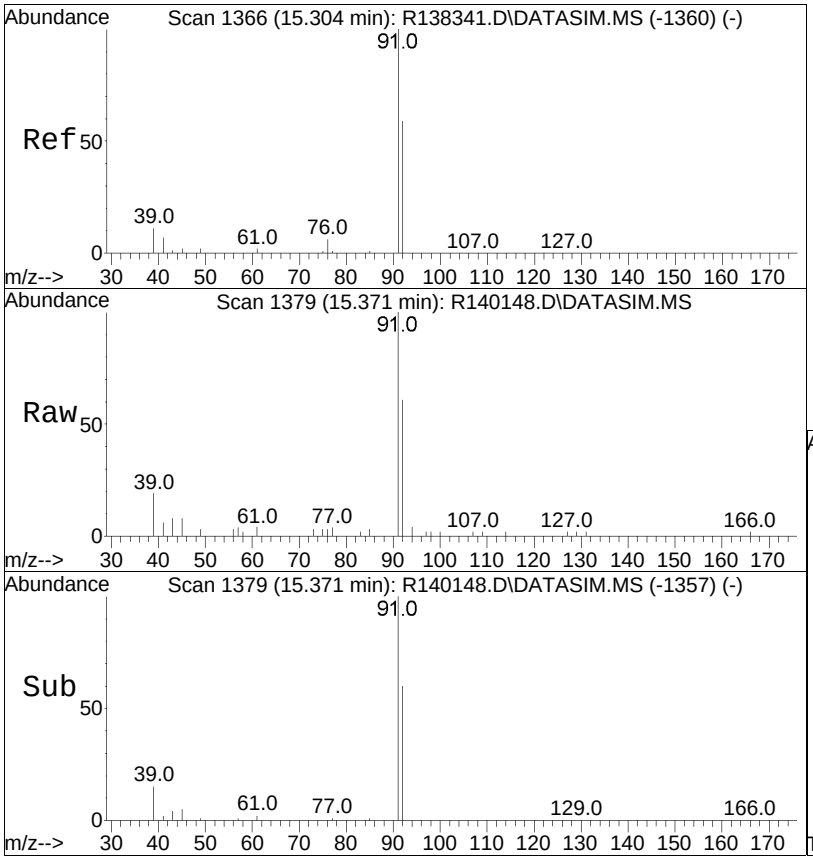



#37
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion:117 Resp: 1020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.4 | 78.5 | 117.7 |
| 82 | 33.6 | 19.8 | 29.8# |

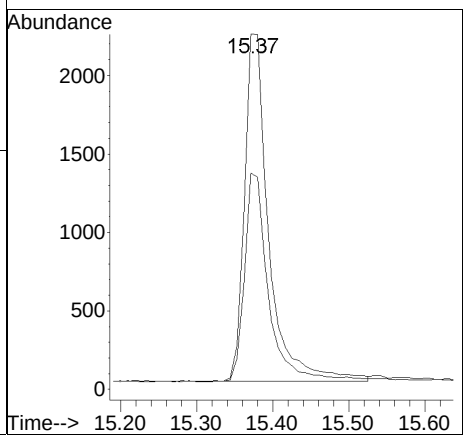


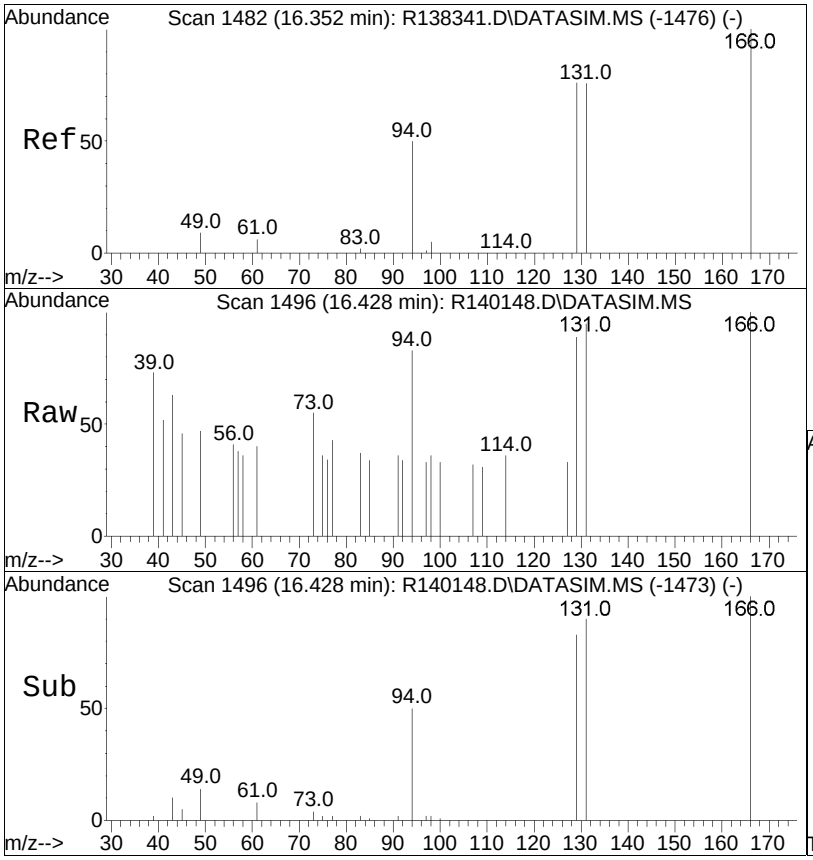



#50
toluene
Concen: 0.18 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 91 Resp: 4920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 60.9 | 47.2 | 70.8 |

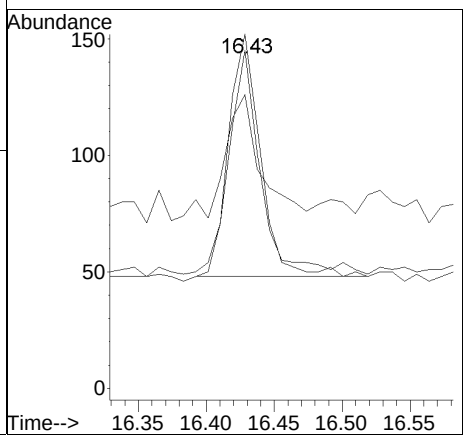


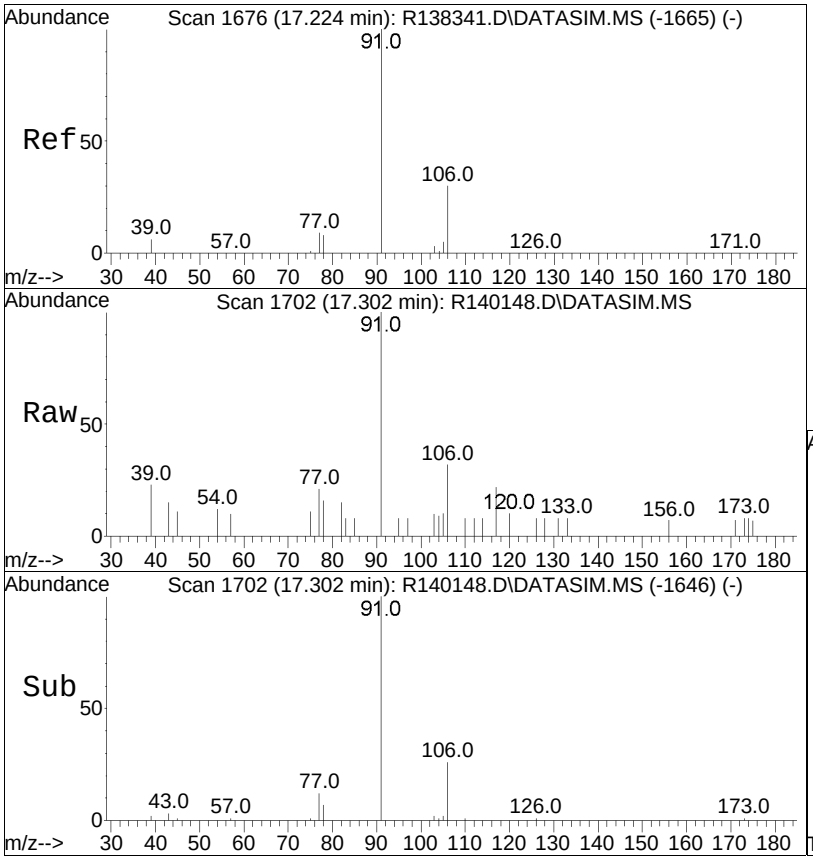



#55
tetrachloroethene
Concen: 0.01 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion:166 Resp: 170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 95.4 | 61.7 | 92.5# |
| 94 | 82.9 | 38.0 | 57.0# |

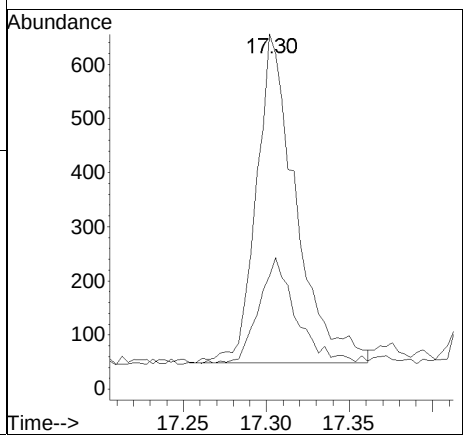


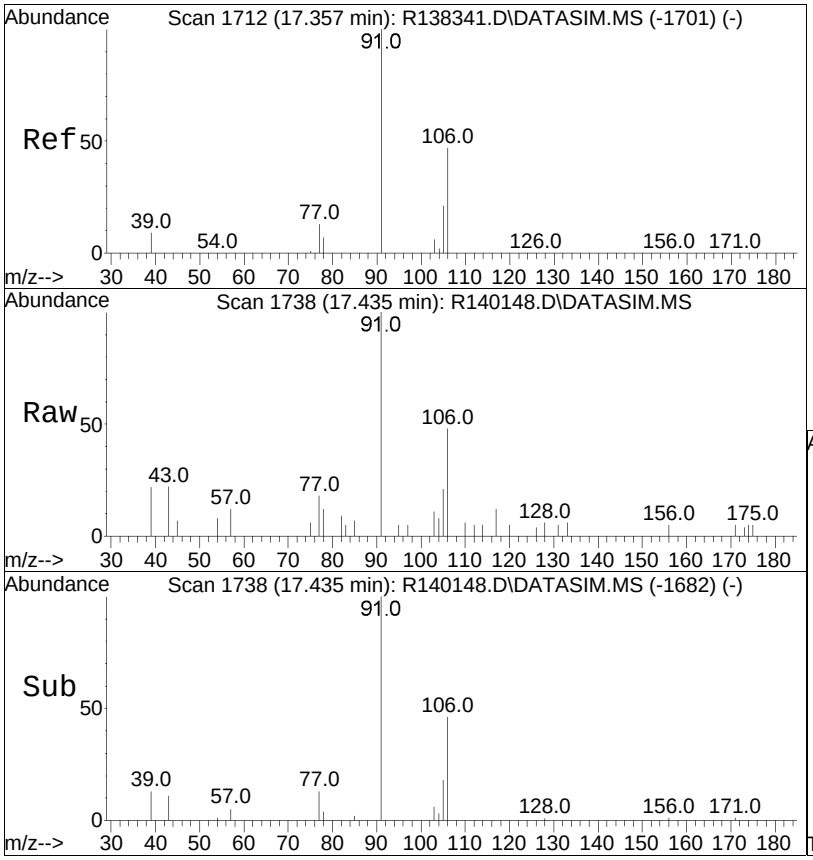



#58
ethylbenzene
Concen: 0.03 ppbV
RT: 17.30 min Scan# 1702
Delta R.T. 0.007 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 91 Resp: 1006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.9 | 25.4 | 38.0 |

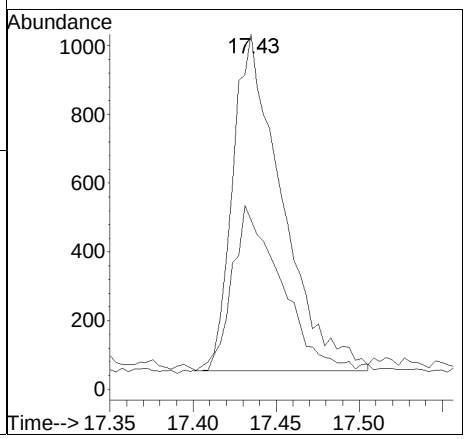


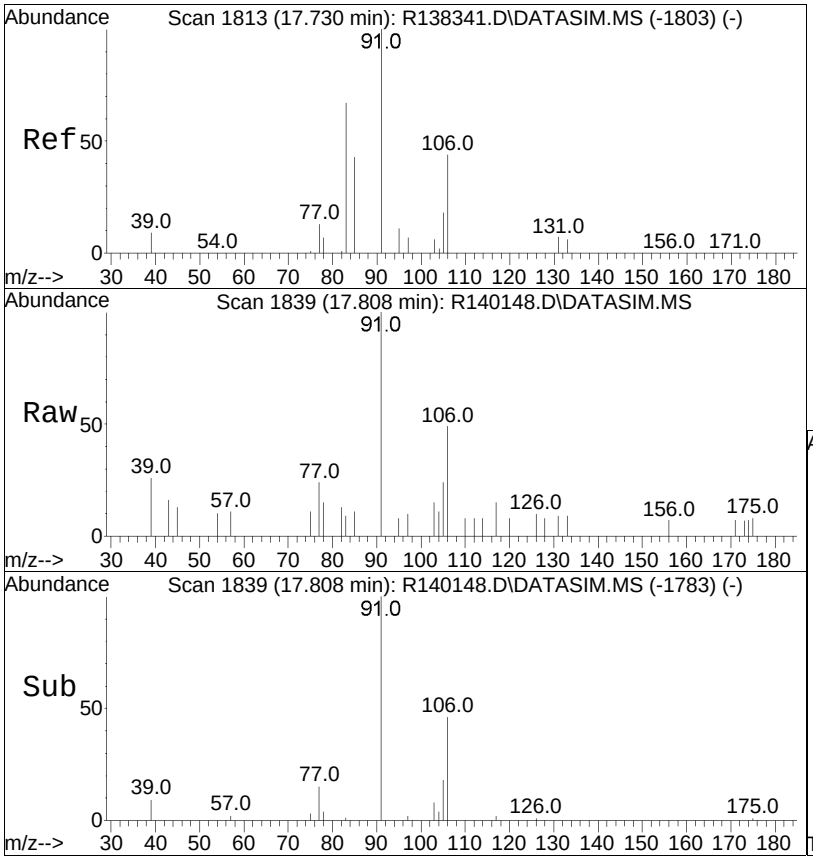



#59
m+p-xylene
Concen: 0.07 ppbV
RT: 17.43 min Scan# 1738
Delta R.T. 0.007 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 91 Resp: 2024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 47.7 | 39.7 | 59.5 |

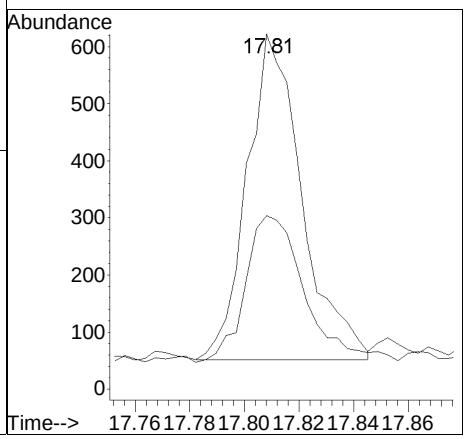


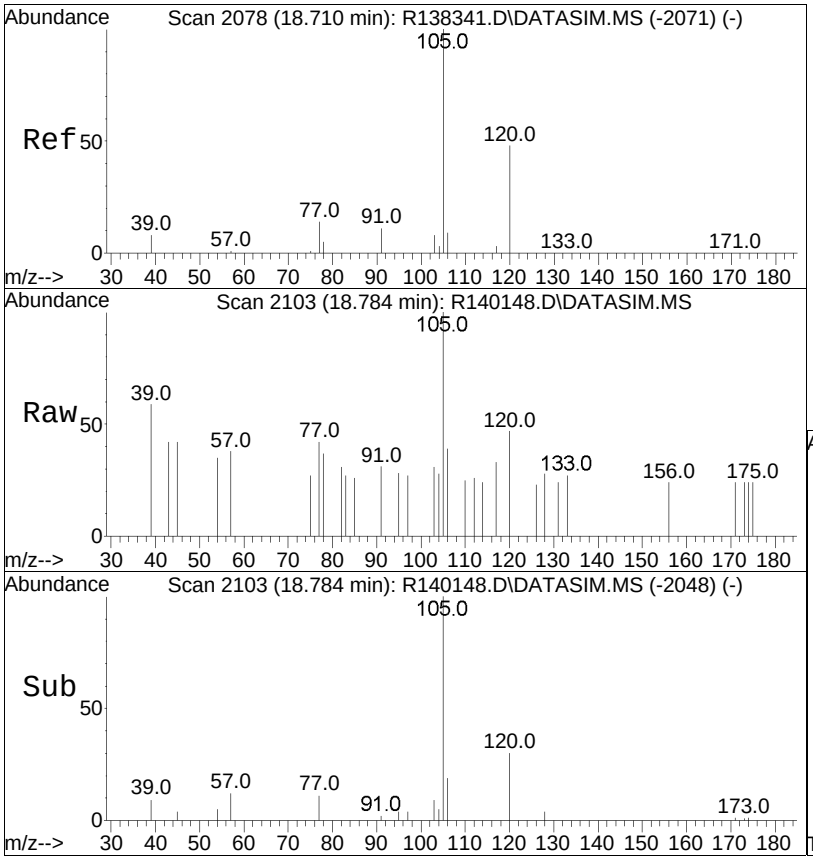



#63
o-xylene
Concen: 0.03 ppbV
RT: 17.81 min Scan# 1839
Delta R.T. 0.007 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 91 Resp: 794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 48.9 | 37.6 | 56.4 |

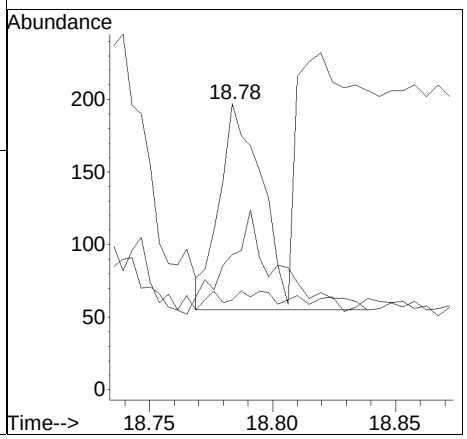


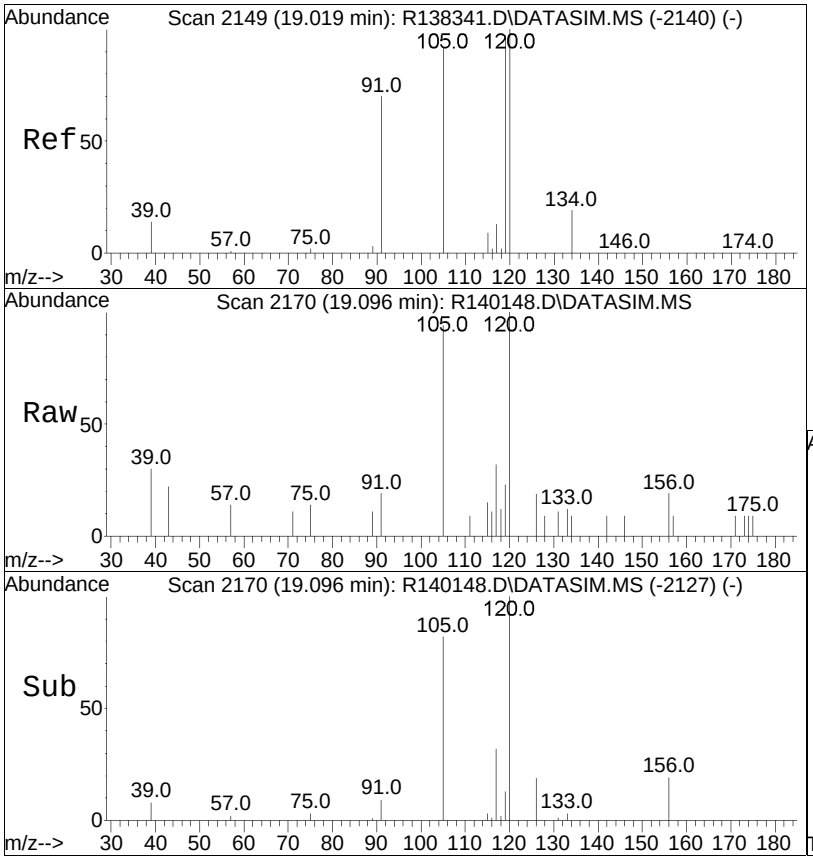



#67
1,3,5-trimethylbenzene
Concen: 0.01 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion:105 Resp: 207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.2 | 40.4 | 60.6 |
| 91 | 31.5 | 8.4 | 12.6# |

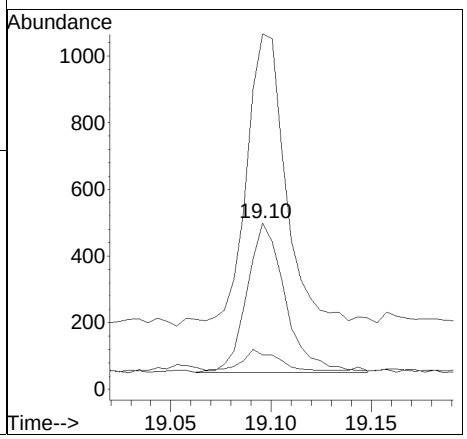





#69
1,2,4-trimethylbenzene
Concen: 0.02 ppbV
RT: 19.10 min Scan# 2170
Delta R.T. 0.005 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion:105 Resp: 598

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 213.6 | 184.1 | 276.1 |
| 91 | 20.6 | 57.4 | 86.2# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TSIM150102.M |
| Data File | : R140148.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 8:51 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-01,3,250,250 | Quant Date | : 3/12/2015 7:17 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140149.D
Acq On : 11 Mar 2015 9:23 pm
Operator : AIRPIANO1:RY
Sample : L1504425-02,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 10:27:58 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 106001 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 89.06% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 225038 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 84.47% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 53521 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 91.89% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4341 | 0.327 | ppbV | 98 |
| 4) chloromethane | 4.09 | 50 | 3532 | 0.517 | ppbV | 99 |
| 5) Freon-114 | 4.25 | 85 | 258 | 0.013 | ppbV # | 81 |
| 6) vinyl chloride | 4.42 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | 54 | 161 | 0.029 | ppbV # | 34 |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 0.00 | | 0 | N.D. | d | |
| 13) trichlorofluoromethane | 6.41 | 101 | 3701 | 0.206 | ppbV | 97 |
| 16) 1,1-dichloroethene | 0.00 | | 0 | N.D. | d | |
| 17) methylene chloride | 7.48 | 49 | 5879 | 0.598 | ppbV | 96 |
| 20) Freon 113 | 7.85 | 101 | 999 | 0.066 | ppbV | 93 |
| 22) trans-1,2-dichloroethene | 8.72 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 0.00 | | 0 | N.D. | d | |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 314 | 0.026 | ppbV # | 79 |
| 29) chloroform | 10.39 | 83 | 384 | 0.021 | ppbV # | 80 |
| 31) 1,2-dichloroethane | 11.27 | 62 | 179M4 | 0.016 | ppbV | |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 113 | 0.007 | ppbV # | 1 |
| 36) benzene | 12.09 | 78 | 5378 | 0.255 | ppbV | 100 |
| 37) carbon tetrachloride | 12.26 | 117 | 1028 | 0.069 | ppbV # | 93 |
| 39) 1,2-dichloropropane | 13.05 | 63 | 75 | 0.009 | ppbV # | 37 |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 132 | 0.013 | ppbV # | 87 |
| 45) cis-1,3-dichloropropene | 14.26 | | 0 | N.D. | | |
| 47) trans-1,3-dichloropropene | 14.93 | | 0 | N.D. | | |
| 48) 1,1,2-trichloroethane | 15.07 | | 0 | N.D. | | |
| 50) toluene | 15.37 | 91 | 16791 | 0.597 | ppbV | 99 |
| 53) dibromochloromethane | 15.80 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140149.D
Acq On : 11 Mar 2015 9:23 pm
Operator : AIRPIANO1:RY
Sample : L1504425-02,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 10:27:58 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 16.02 | | 0 | N.D. | | |
| 55) tetrachloroethene | 16.43 | 166 | 296 | 0.020 | ppbV # | 88 |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 3942 | 0.105 | ppbV | 100 |
| 59) m+p-xylene | 17.43 | 91 | 9224 | 0.316 | ppbV | 100 |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 17.73 | 104 | 681 | 0.031 | ppbV # | 90 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.80 | 91 | 5355 | 0.173 | ppbV | 98 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 32513 | 0.761 | ppbV | 99 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 112868 | 3.069 | ppbV # | 64 |
| 71) 1,3-dichlorobenzene | 0.00 | | 0 | N.D. | d | |
| 72) 1,4-dichlorobenzene | 0.00 | | 0 | N.D. | d | |
| 75) 1,2-dichlorobenzene | 0.00 | | 0 | N.D. | d | |
| 77) 1,2,4-trichlorobenzene | 21.02 | | 0 | N.D. | | |
| 78) naphthalene | 21.14 | 128 | 1924 | 0.035 | ppbV # | 93 |
| 80) hexachlorobutadiene | 21.46 | | 0 | N.D. | | |

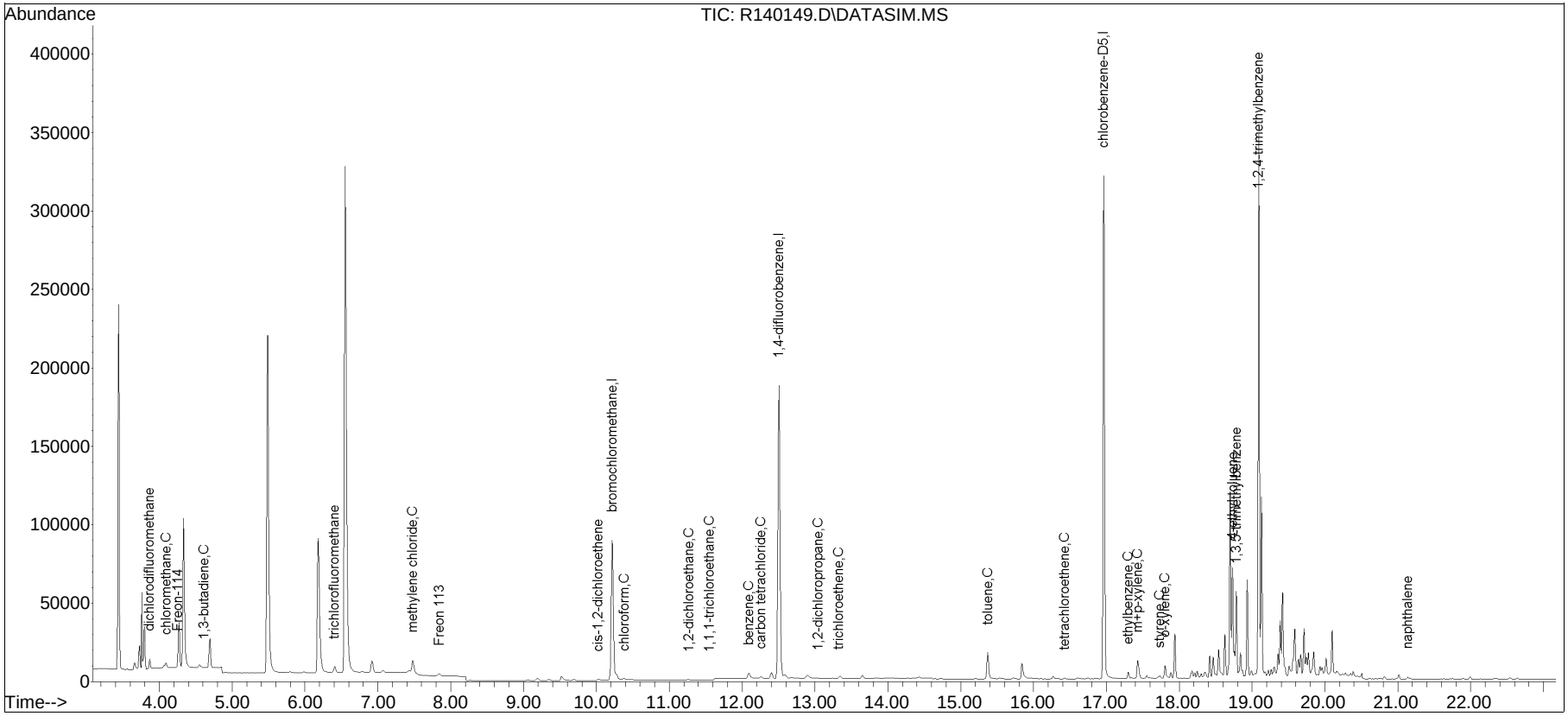
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

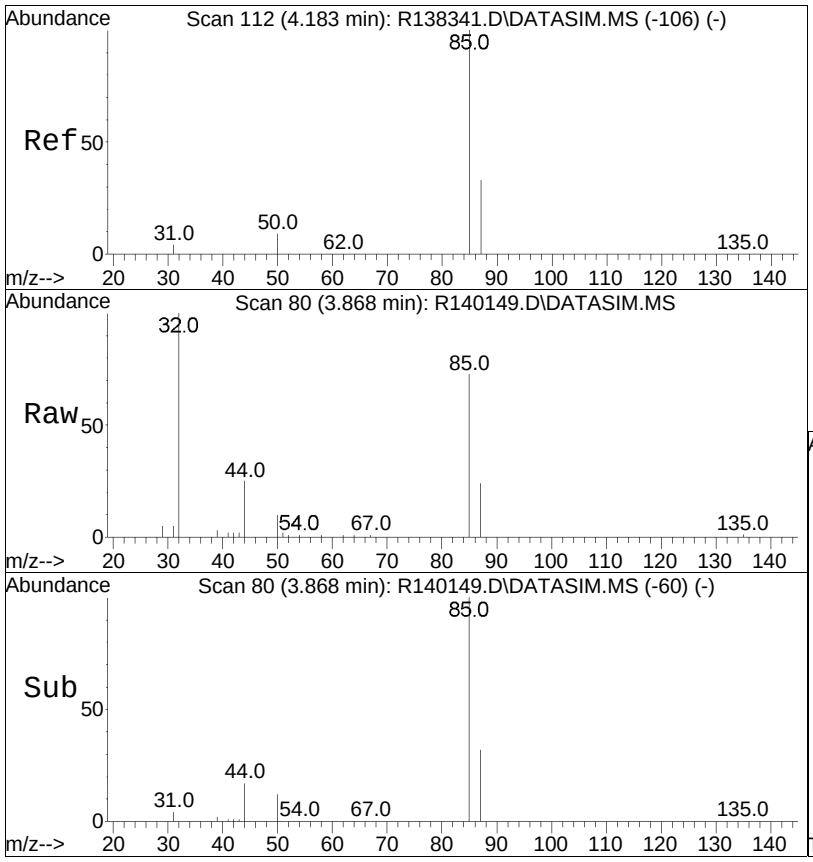
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140149.D
Acq On : 11 Mar 2015 9:23 pm
Operator : AIRPIANO1:RY
Sample : L1504425-02,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 10:27:58 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



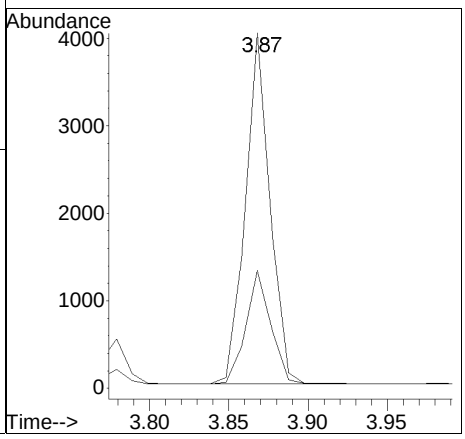

TSIM150102.M Wed Mar 25 12:03:11 2015

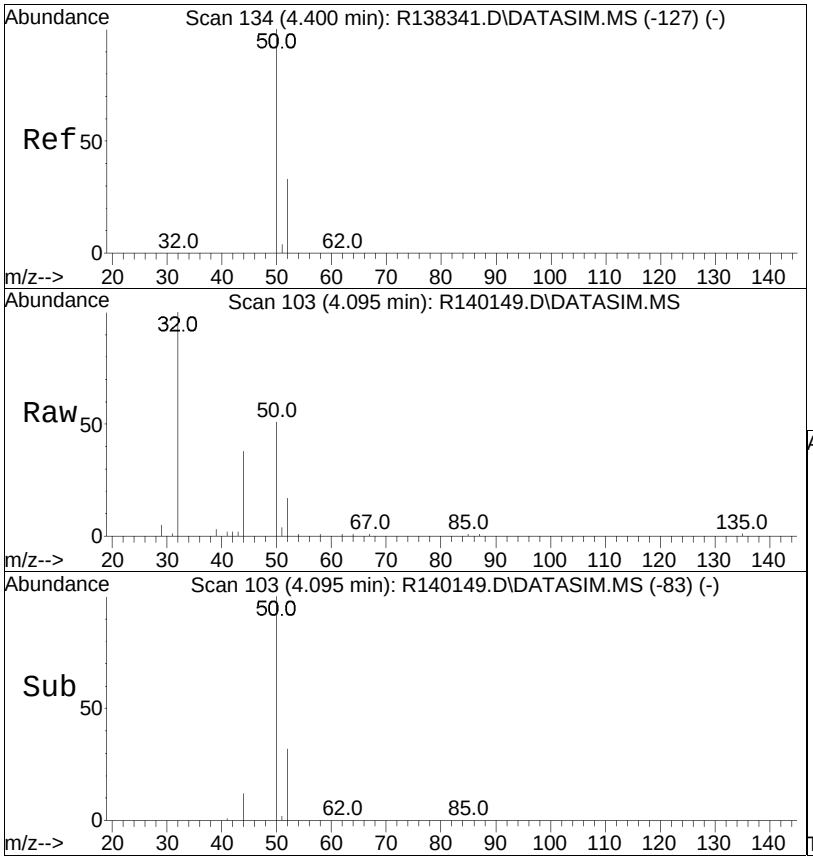



#3
dichlorodifluoromethane
Concen: 0.33 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 85 Resp: 4341

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.2 | 25.8 | 38.8 |

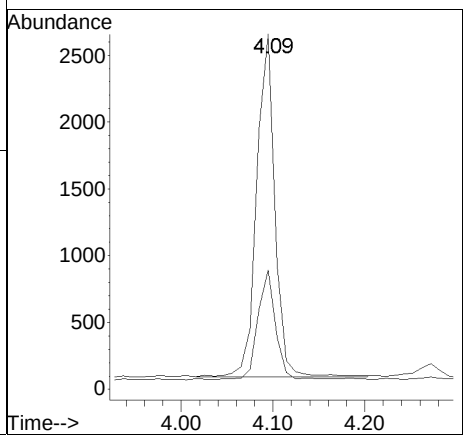


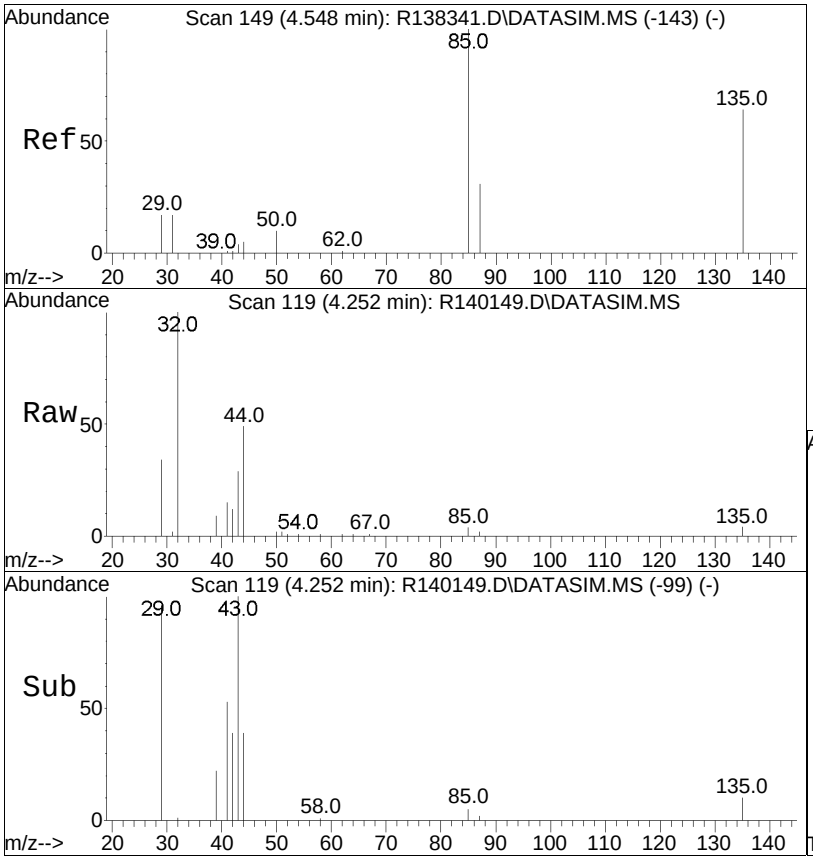



#4
chloromethane
Concen: 0.52 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 50 Resp: 3532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.7 | 26.4 | 39.6 |

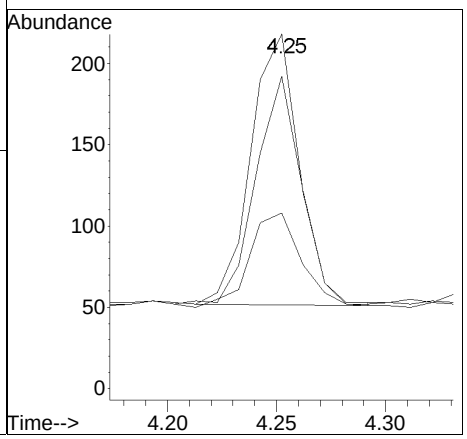


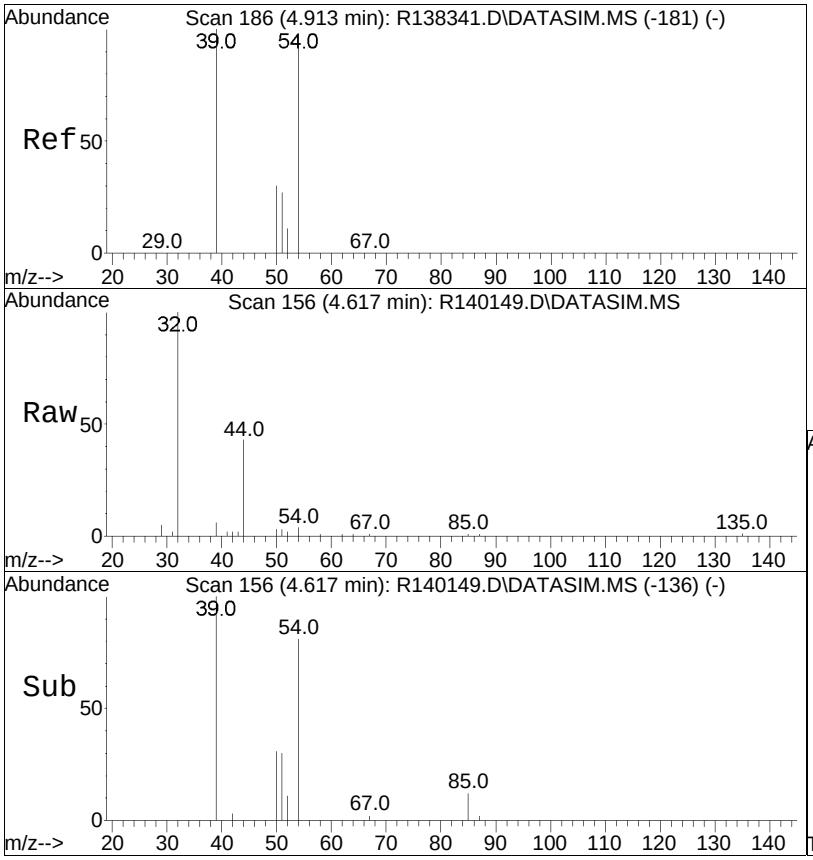



#5
Freon-114
Concen: 0.01 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 85 Resp: 258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 49.5 | 26.3 | 39.5# |
| 135 | 88.1 | 60.5 | 90.7 |

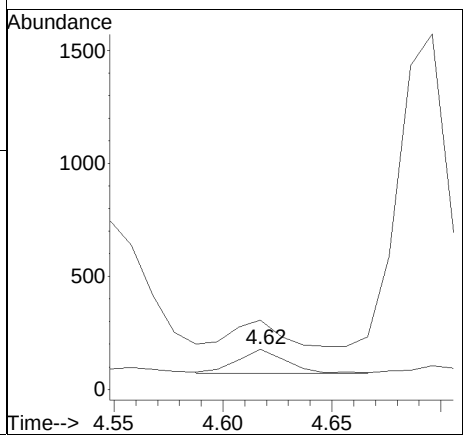


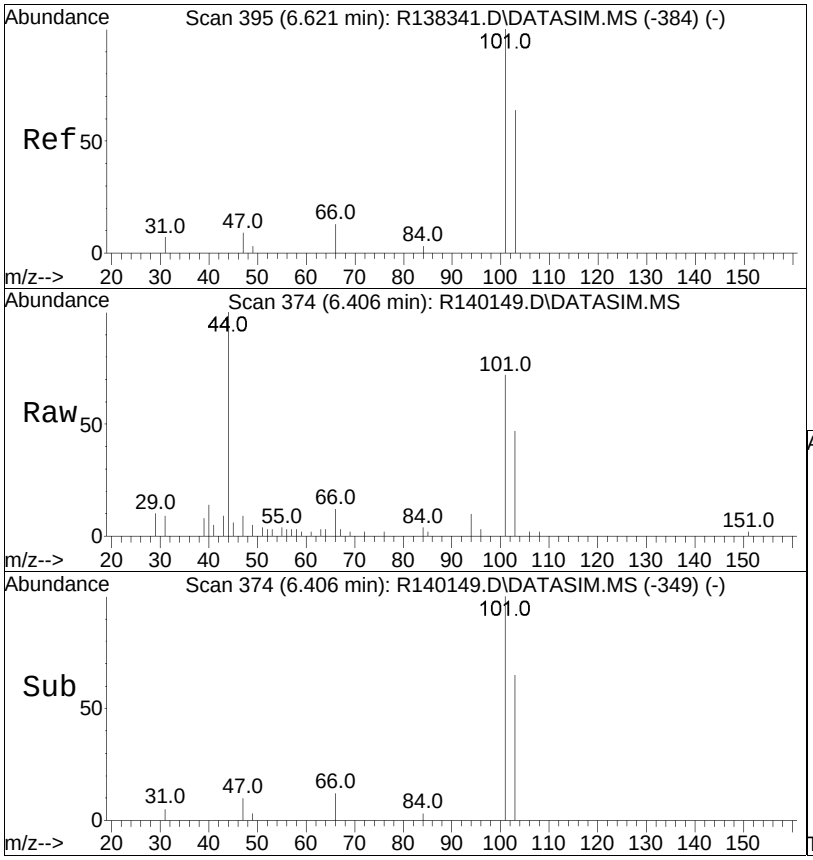



#7
1,3-butadiene
Concen: 0.03 ppbV
RT: 4.62 min Scan# 156
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 54 Resp: 161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 172.5 | 84.0 | 126.0# |

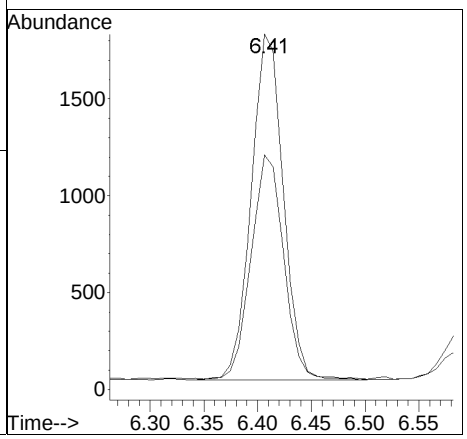


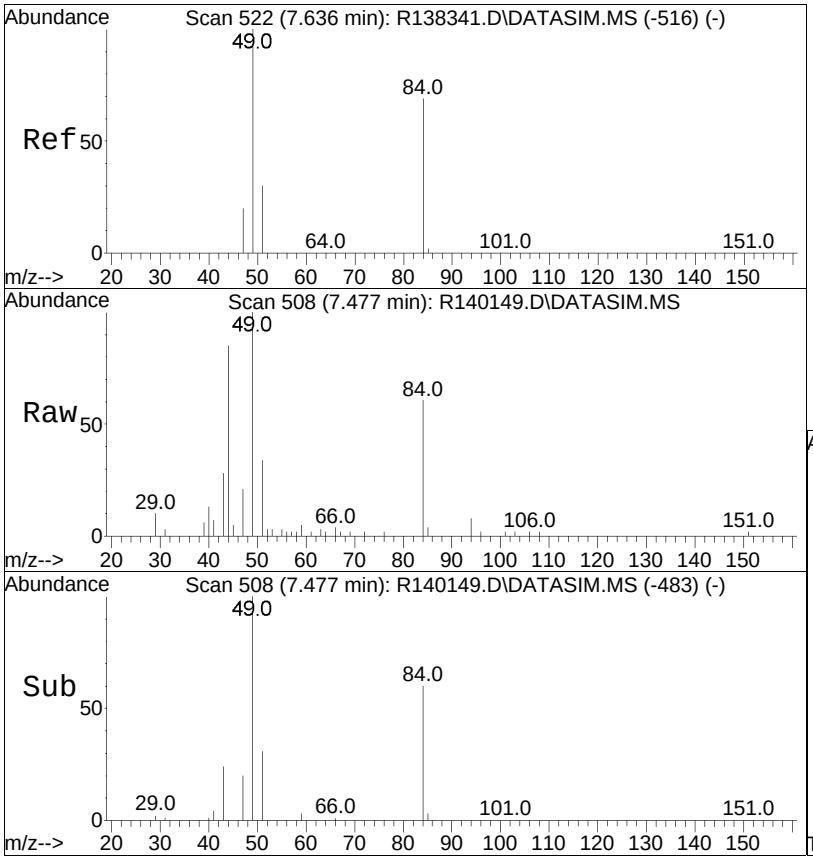



#13
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:101 Resp: 3701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.0 | 51.2 | 76.8 |

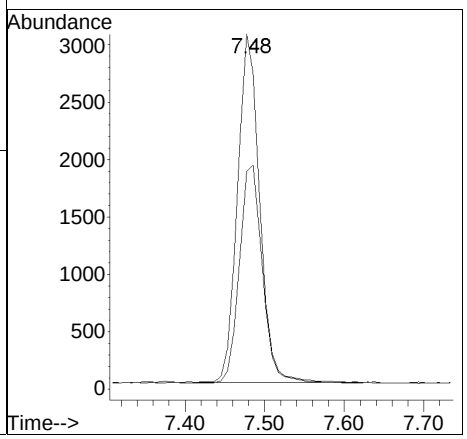


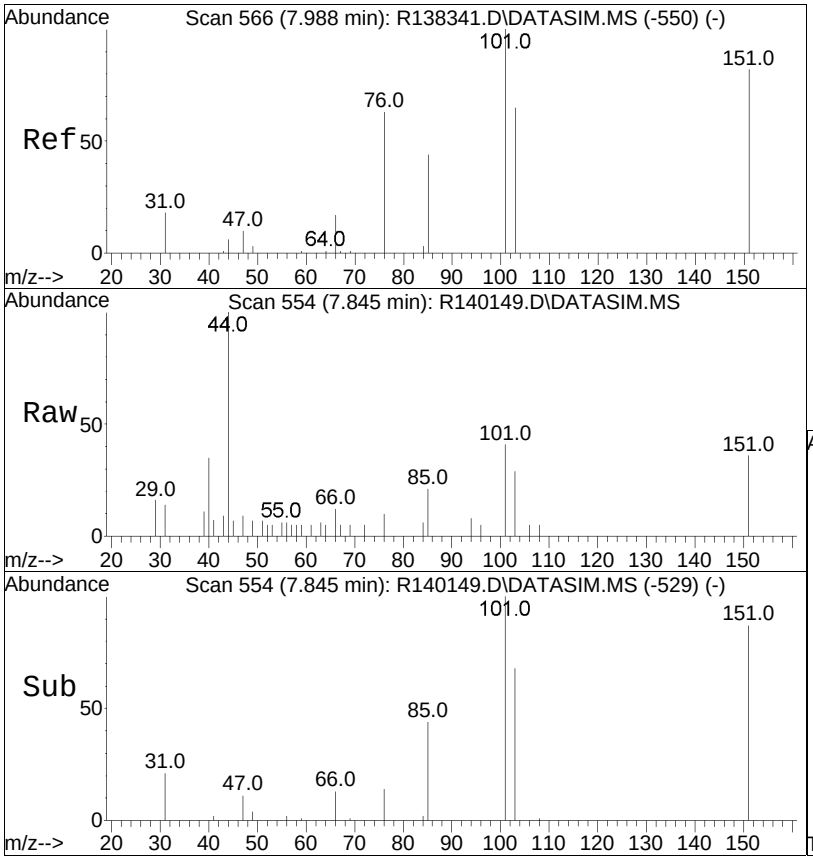



#17
methylene chloride
Concen: 0.60 ppbV
RT: 7.48 min Scan# 508
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 49 Resp: 5879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 61.3 | 46.7 | 70.1 |

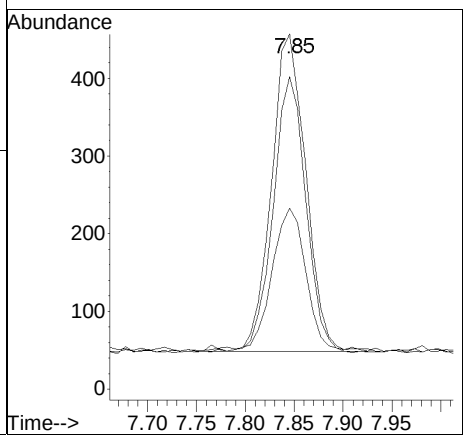


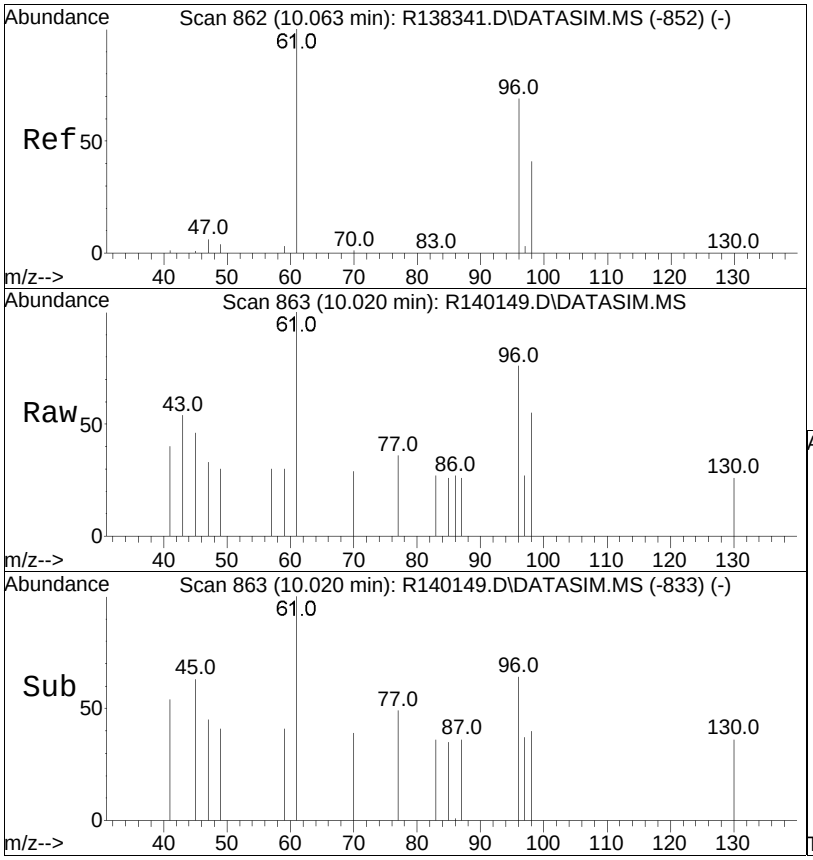



#20
Freon 113
Concen: 0.07 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:101 Resp: 999

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 51.0 | 34.5 | 51.7 |
| 151 | 88.0 | 67.4 | 101.2 |

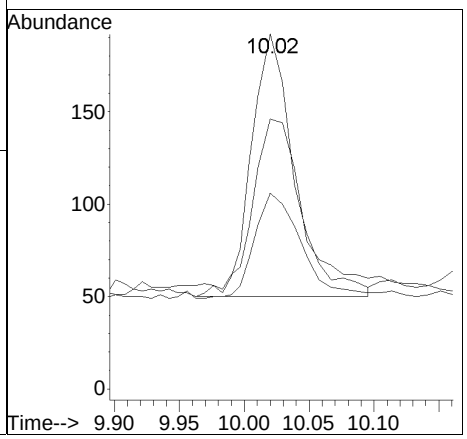


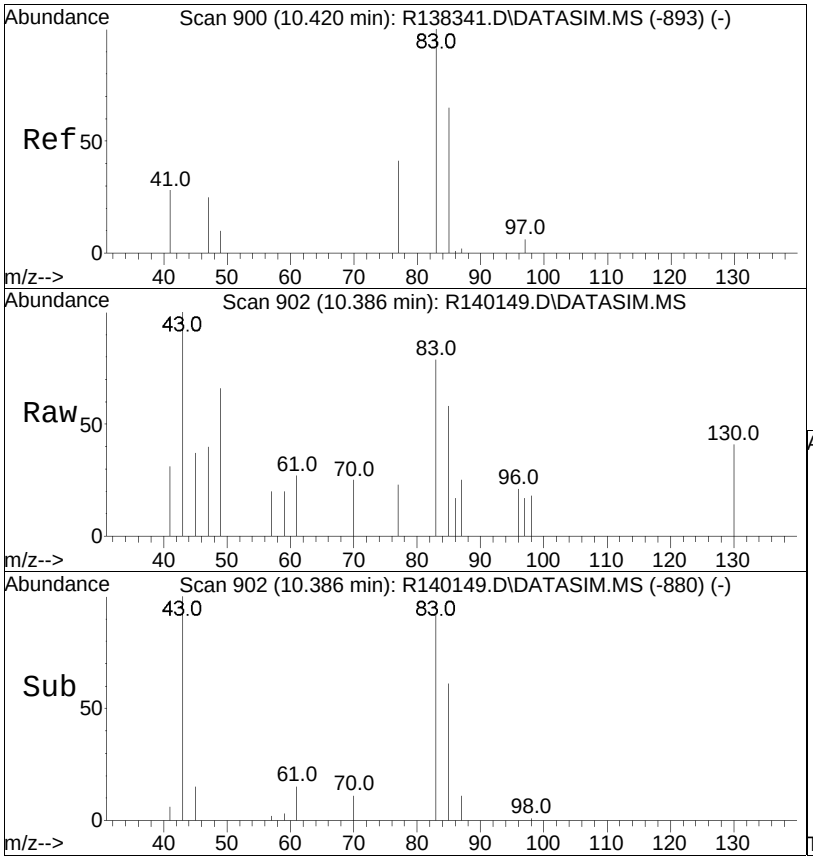



#27
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 10.02 min Scan# 863
Delta R.T. 0.009 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 61 Resp: 314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 76.0 | 50.6 | 76.0# |
| 98 | 55.2 | 30.6 | 45.8# |

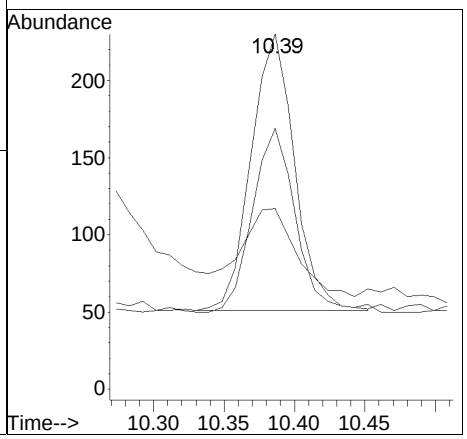


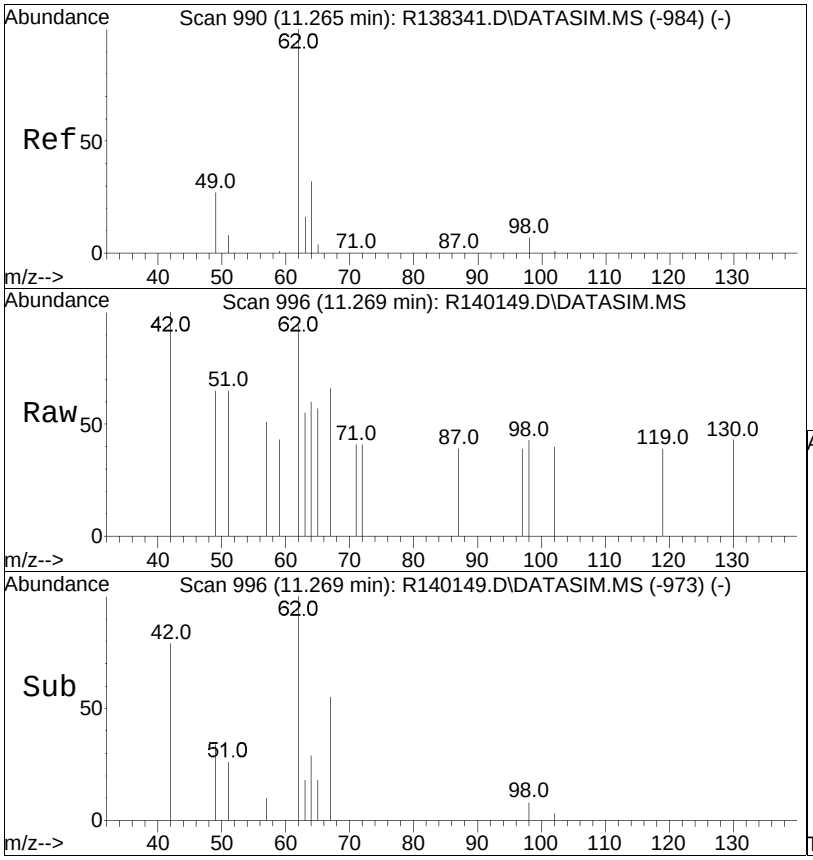



#29
chloroform
Concen: 0.02 ppbV
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 83 Resp: 384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 73.5 | 50.9 | 76.3 |
| 47 | 50.9 | 24.9 | 37.3# |

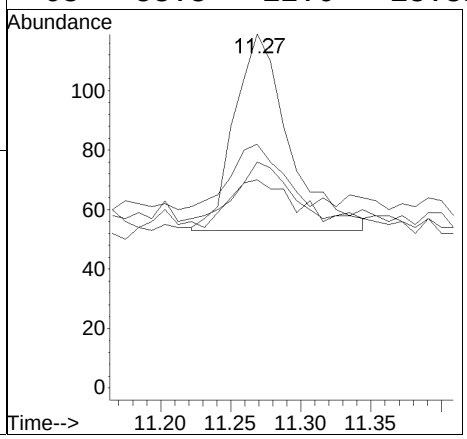


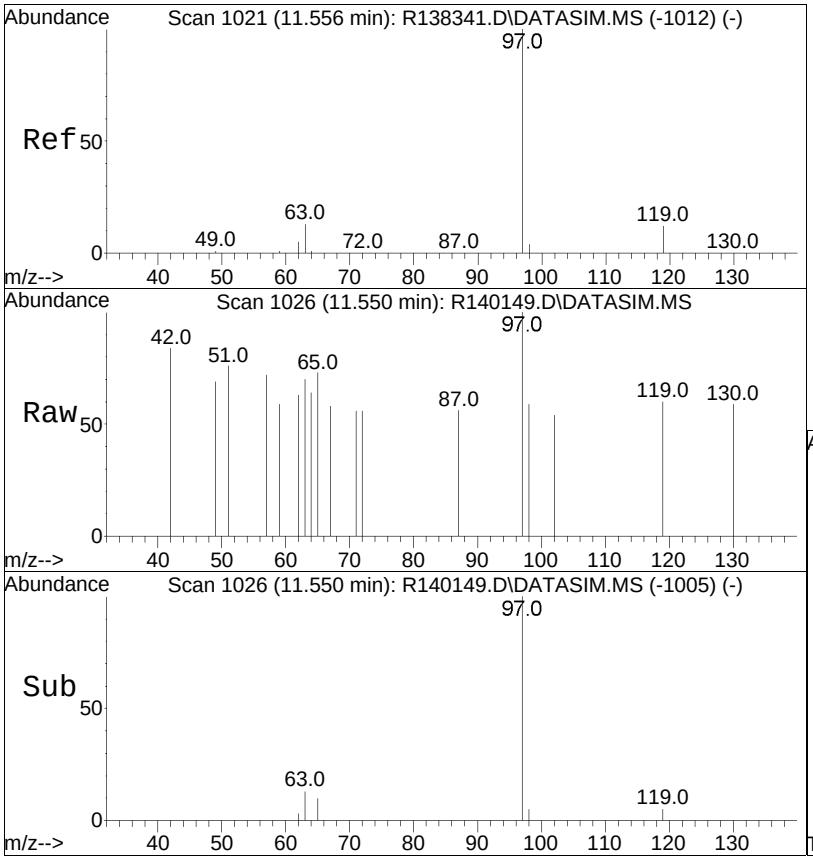



#31
1,2-dichloroethane
Concen: 0.02 ppbV m
RT: 11.27 min Scan# 996
Delta R.T. 0.019 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 62 Resp: 179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 63.9 | 24.4 | 36.6# |
| 49 | 68.9 | 26.7 | 40.1# |
| 63 | 58.8 | 12.6 | 18.8# |

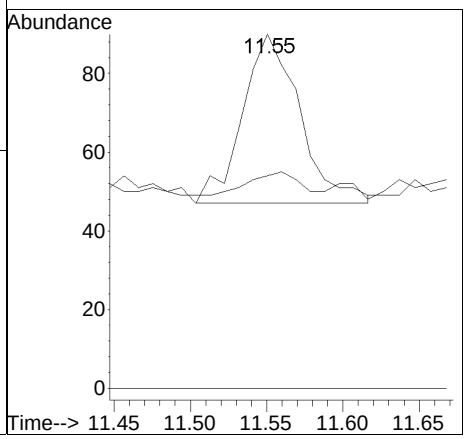


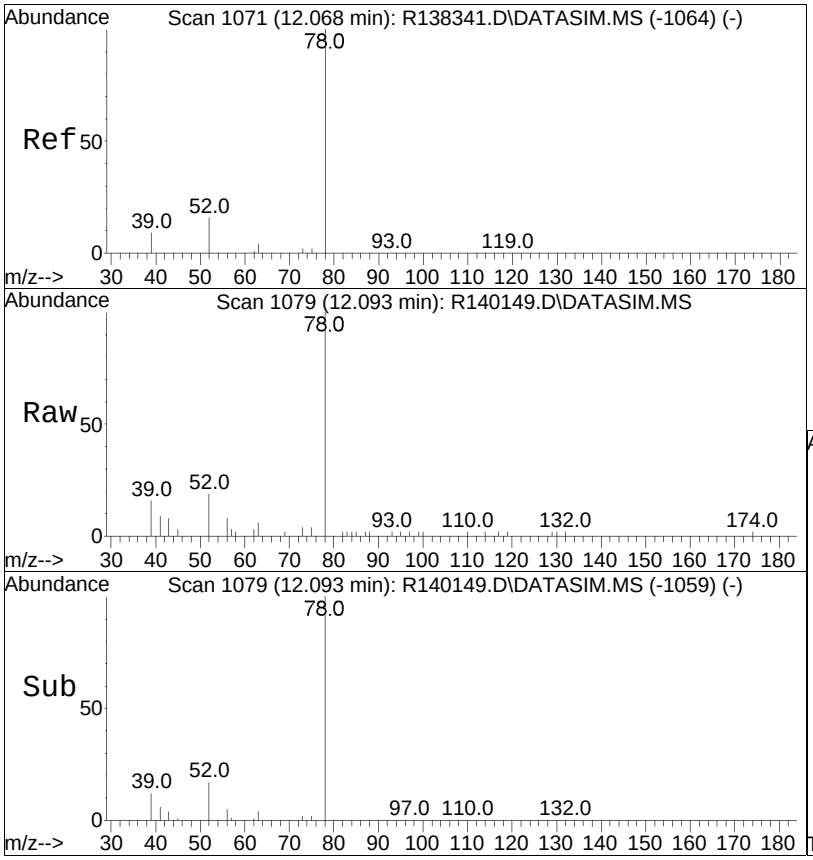



#35
1,1,1-trichloroethane
Concen: 0.01 ppbV
RT: 11.55 min Scan# 1026
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 97 Resp: 113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 61 | 0.0 | 0.0 | 0.0 |
| 119 | 60.0 | 10.7 | 16.1# |

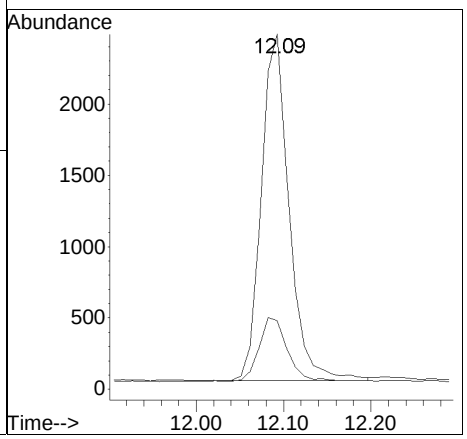


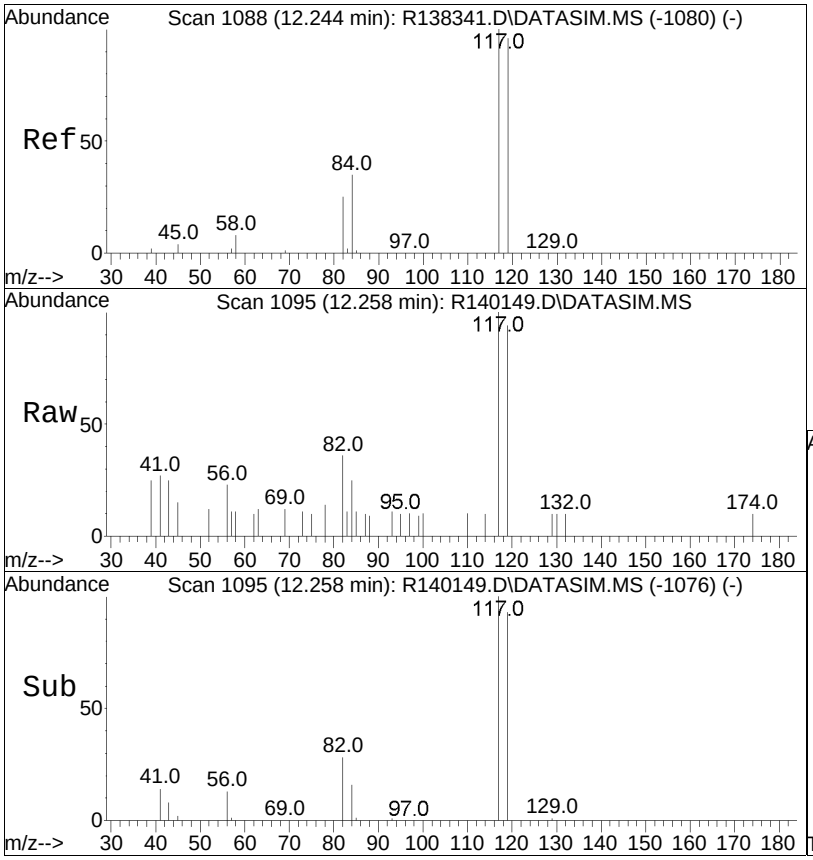



#36
benzene
Concen: 0.26 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 78 Resp: 5378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 19.3 | 15.4 | 23.0 |

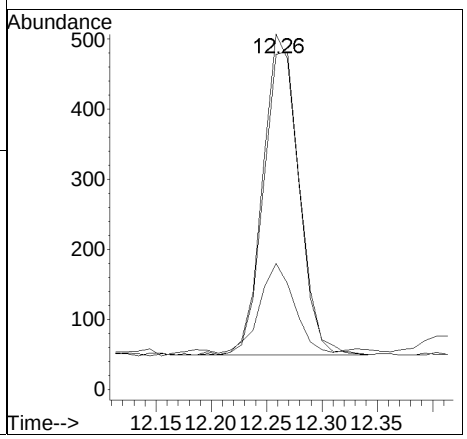


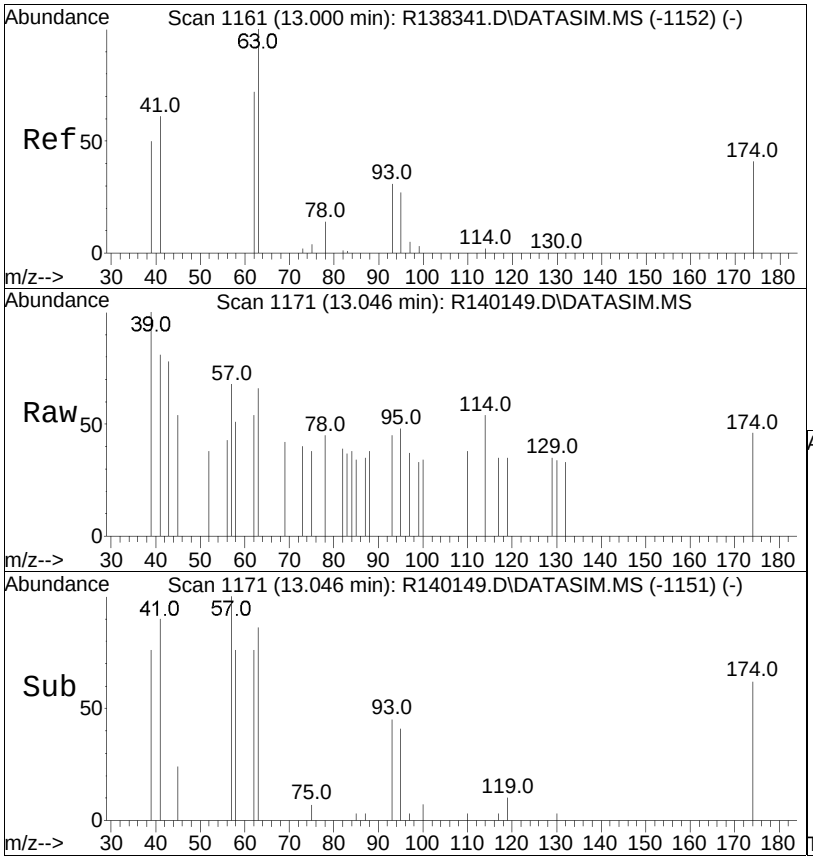



#37
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:117 Resp: 1028

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.3 | 78.5 | 117.7 |
| 82 | 35.5 | 19.8 | 29.8# |

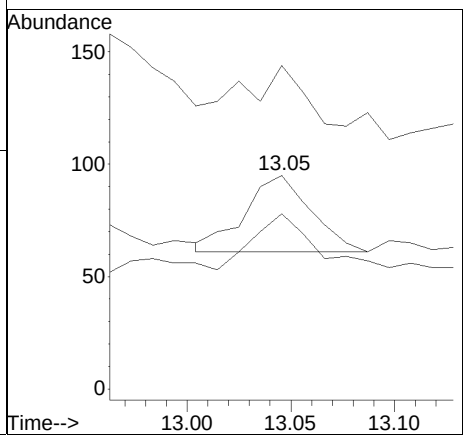


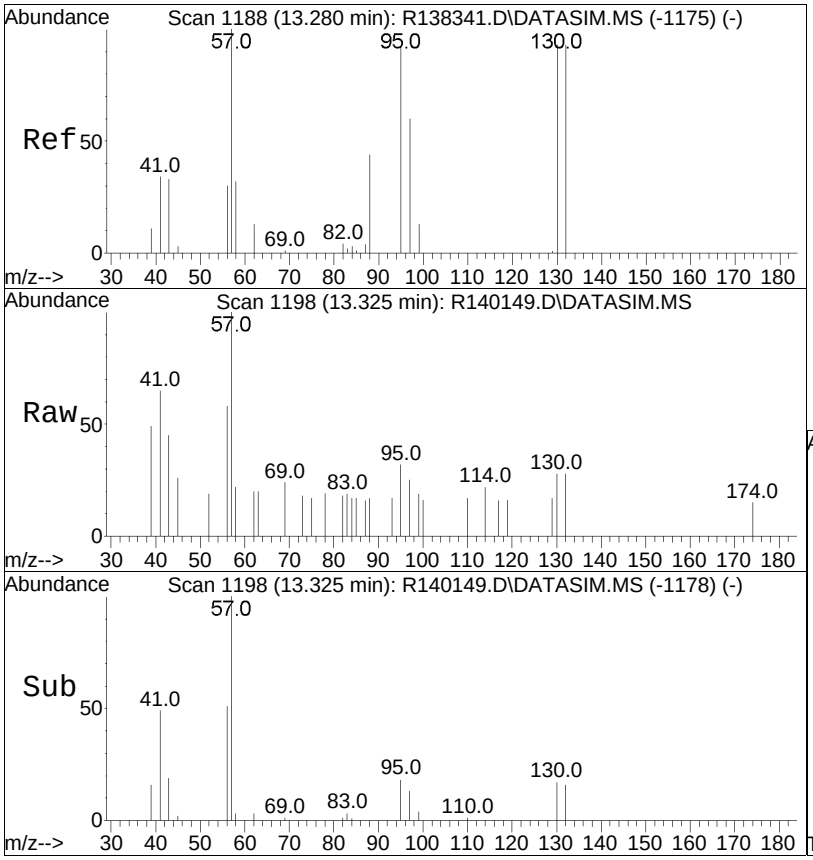



#39
1,2-dichloropropane
Concen: 0.01 ppbV
RT: 13.05 min Scan# 1171
Delta R.T. 0.010 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 63 Resp: 75

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 82.1 | 59.8 | 89.6 |
| 39 | 151.6 | 41.5 | 62.3# |

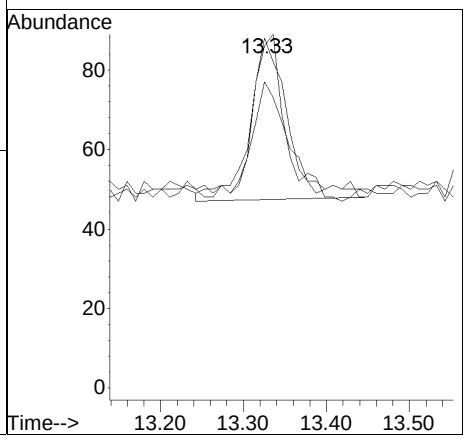


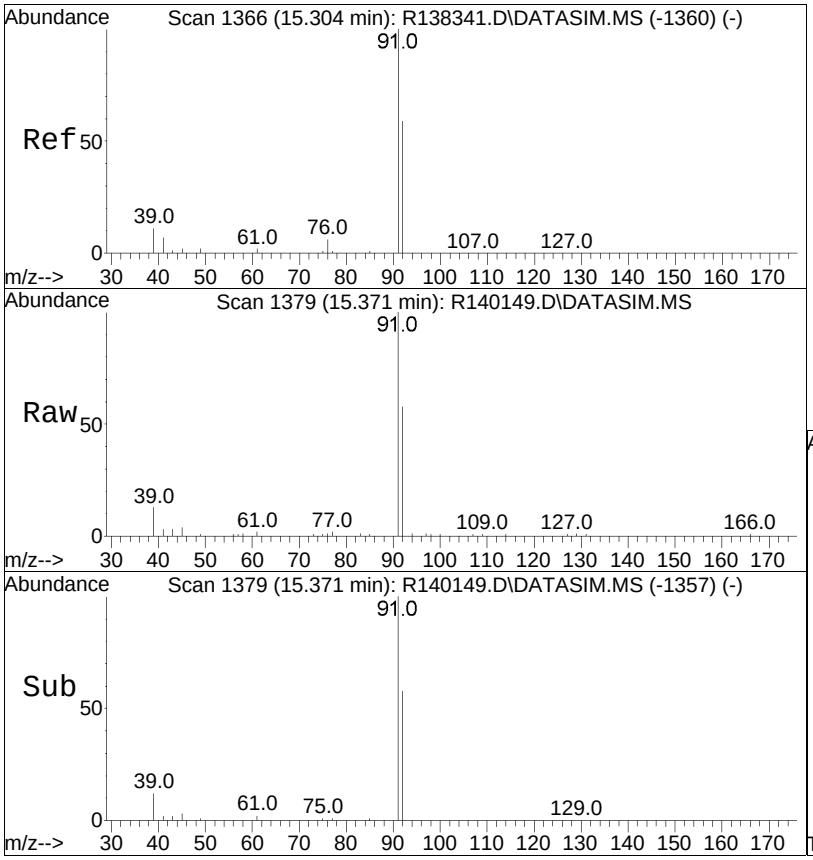



#42
trichloroethene
Concen: 0.01 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:130 Resp: 132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 97.7 | 76.0 | 114.0 |
| 97 | 87.5 | 51.8 | 77.8# |

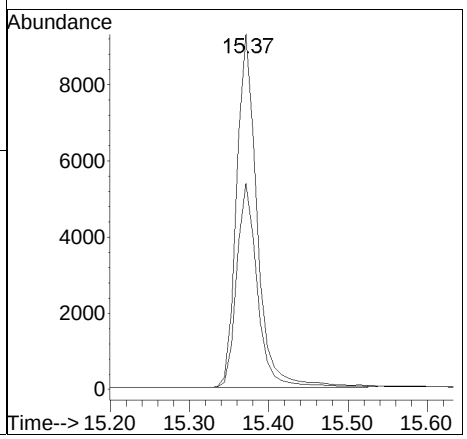


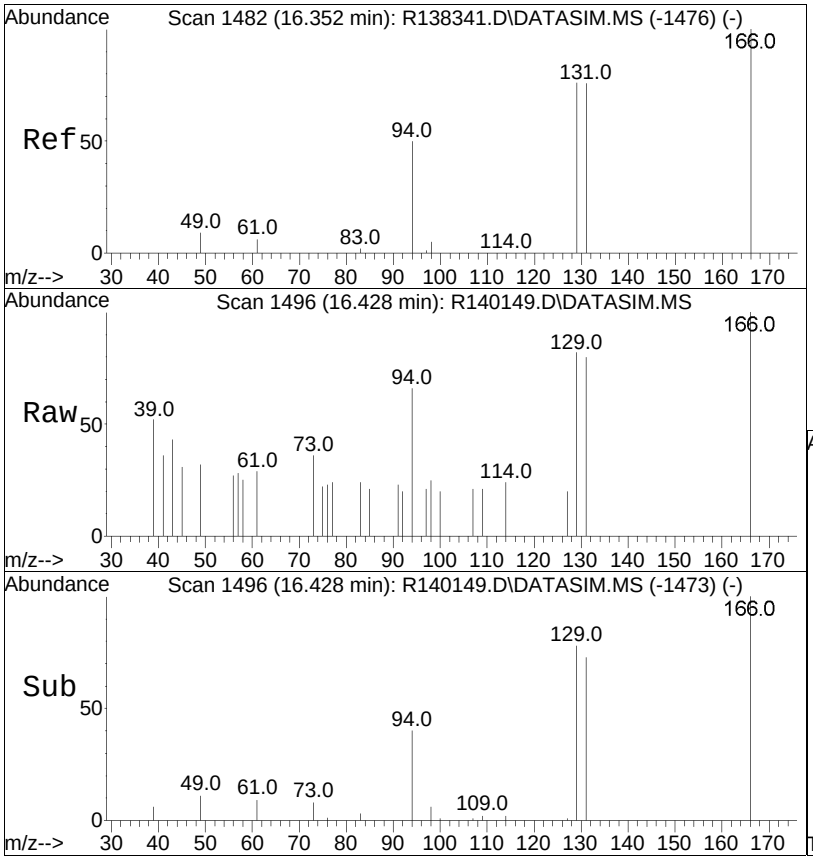



#50
toluene
Concen: 0.60 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 91 Resp: 16791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 58.0 | 47.2 | 70.8 |

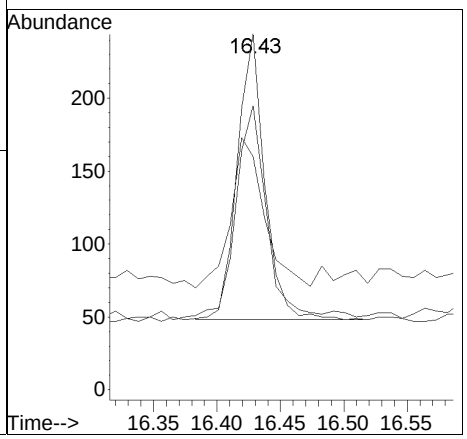


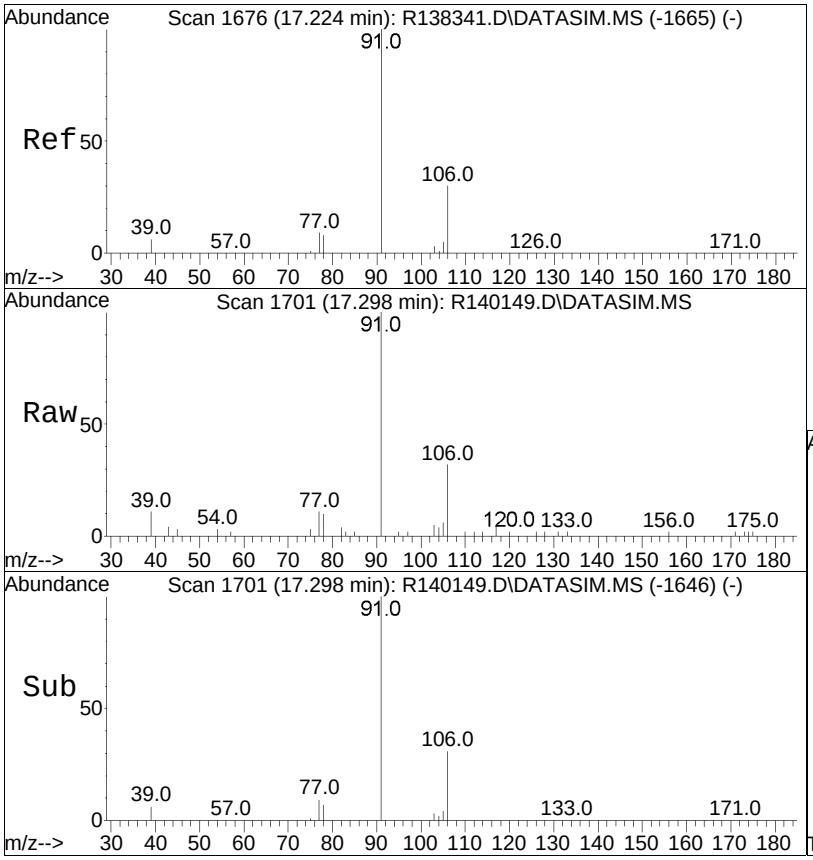



#55
tetrachloroethene
Concen: 0.02 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:166 Resp: 296

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 79.9 | 61.7 | 92.5 |
| 94 | 65.6 | 38.0 | 57.0# |

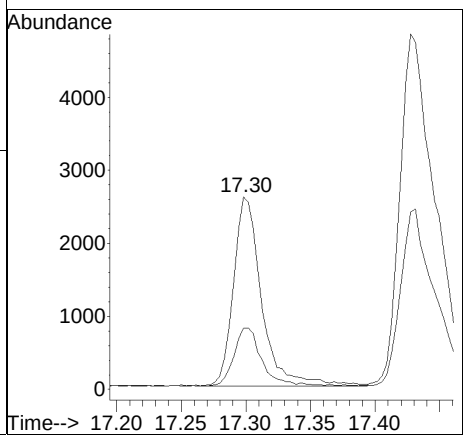


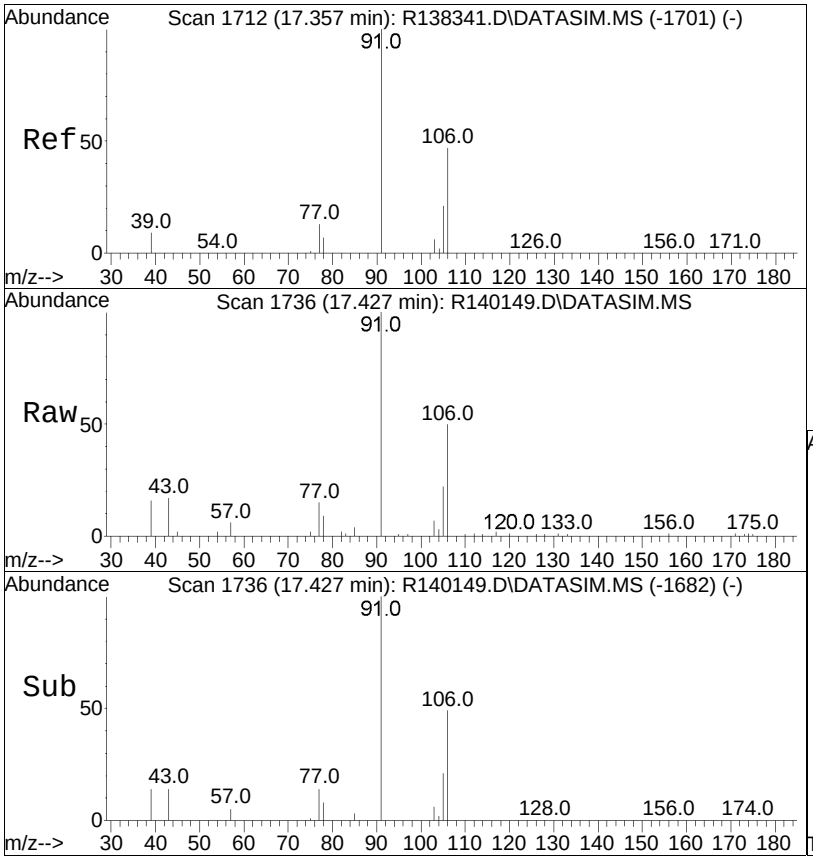



#58
ethylbenzene
Concen: 0.11 ppbV
RT: 17.30 min Scan# 1701
Delta R.T. 0.004 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 91 Resp: 3942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.9 | 25.4 | 38.0 |

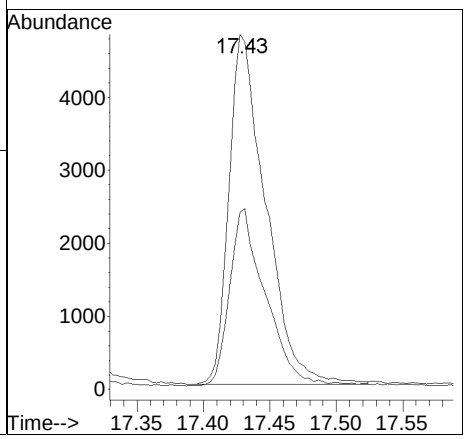


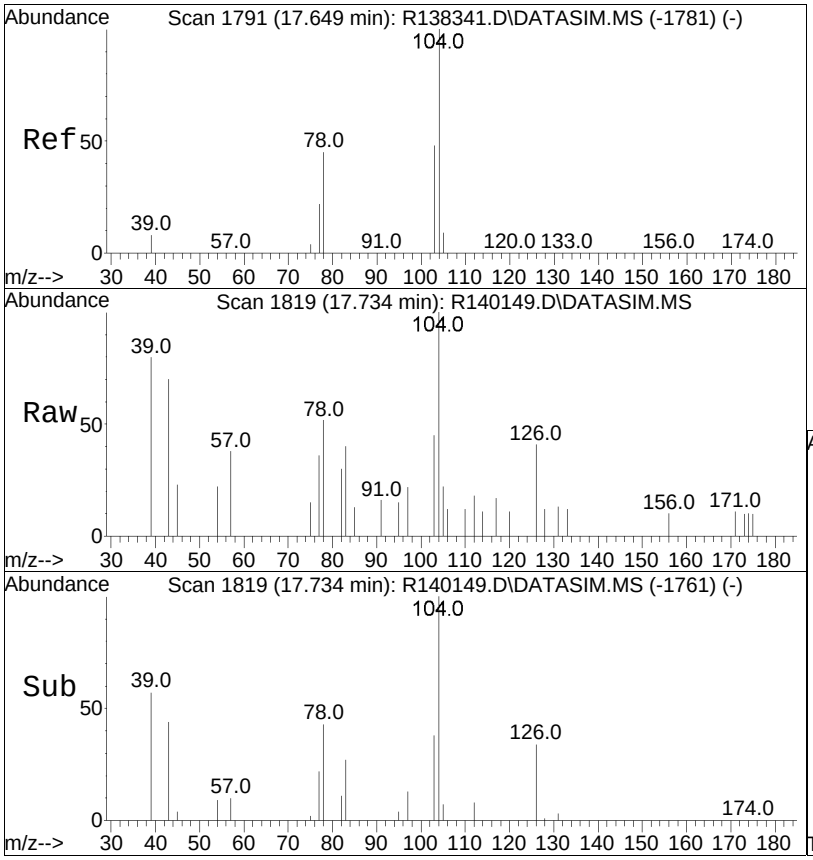



#59
m+p-xylene
Concen: 0.32 ppbV
RT: 17.43 min Scan# 1736
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 91 Resp: 9224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.9 | 39.7 | 59.5 |

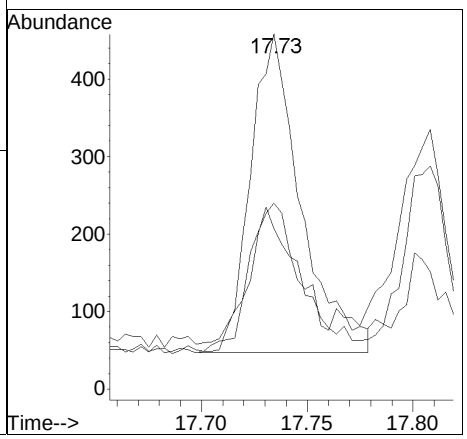


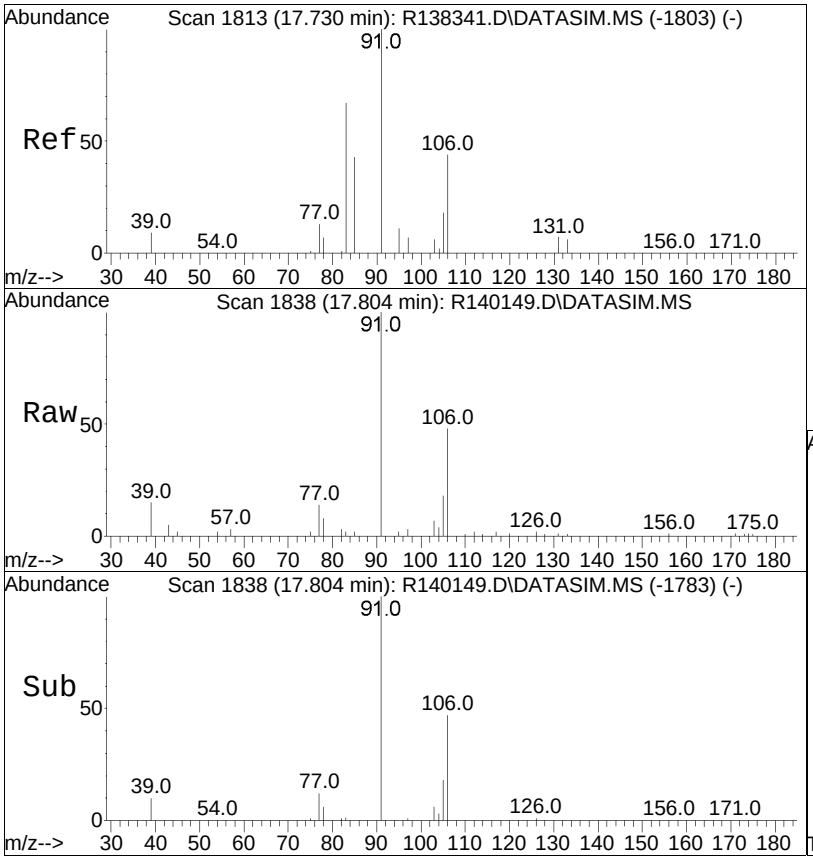



#61
styrene
Concen: 0.03 ppbV
RT: 17.73 min Scan# 1819
Delta R.T. 0.015 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:104 Resp: 681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 45.2 | 38.5 | 57.7 |
| 78 | 52.4 | 33.7 | 50.5# |

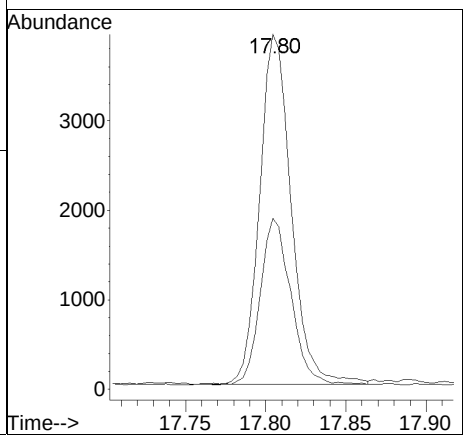


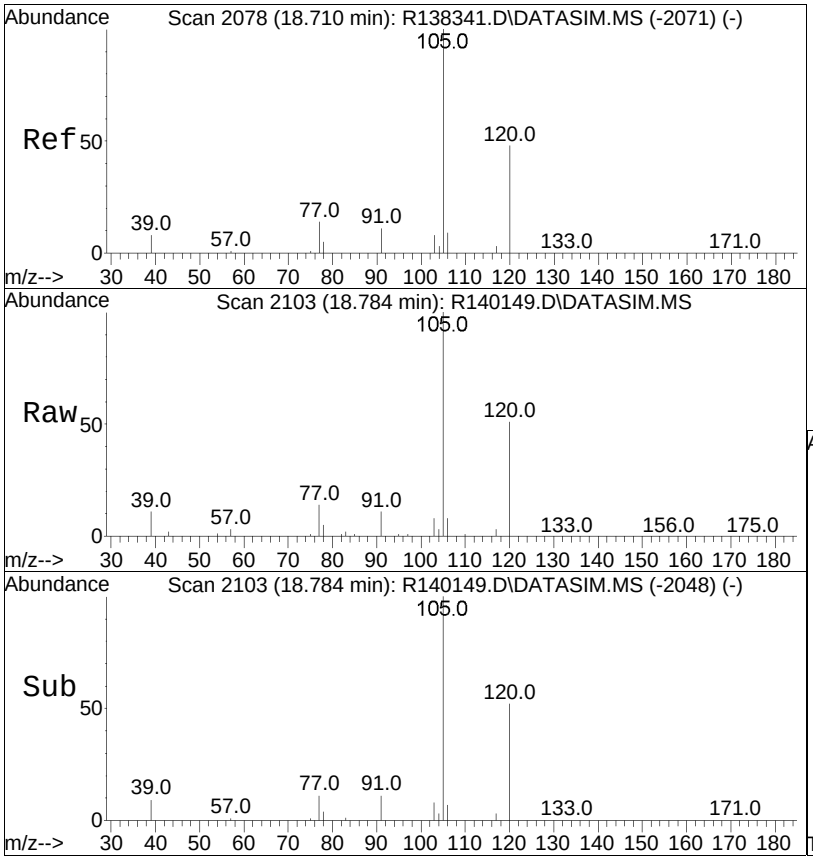



#63
o-xylene
Concen: 0.17 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.004 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 91 Resp: 5355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 48.1 | 37.6 | 56.4 |

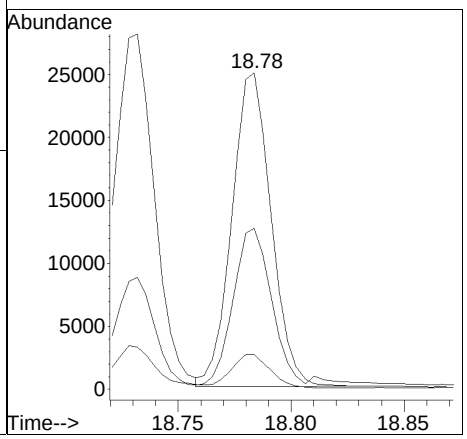


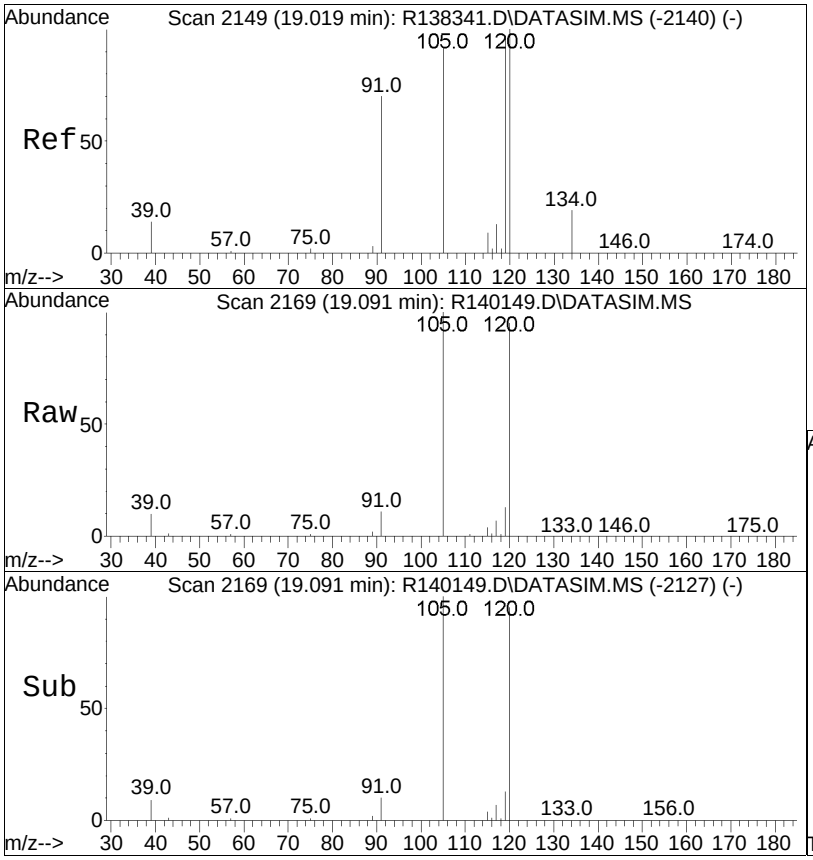



#67
1,3,5-trimethylbenzene
Concen: 0.76 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:105 Resp: 32513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.9 | 40.4 | 60.6 |
| 91 | 11.0 | 8.4 | 12.6 |

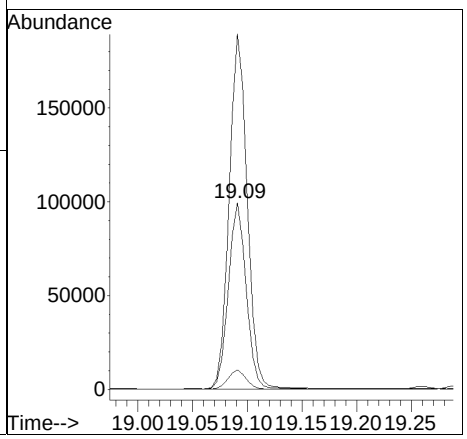


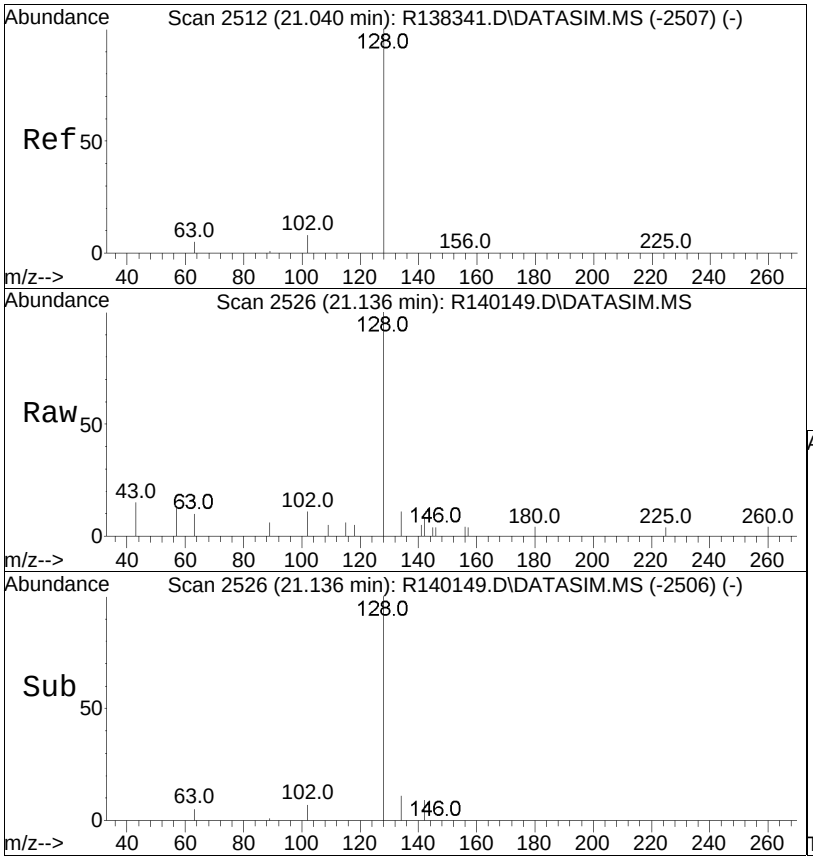



#69
1,2,4-trimethylbenzene
Concen: 3.07 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:105 Resp: 112868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 190.4 | 184.1 | 276.1 |
| 91 | 10.6 | 57.4 | 86.2# |

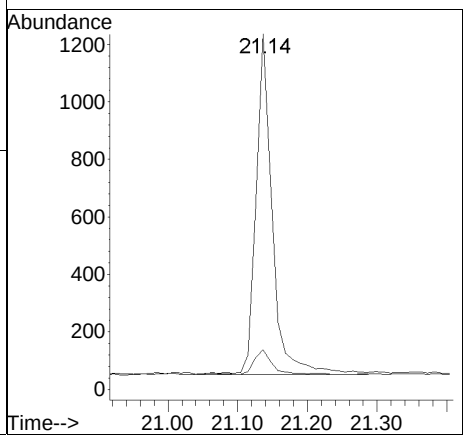





#78
naphthalene
Concen: 0.04 ppbV
RT: 21.14 min Scan# 2526
Delta R.T. 0.011 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:128 Resp: 1924

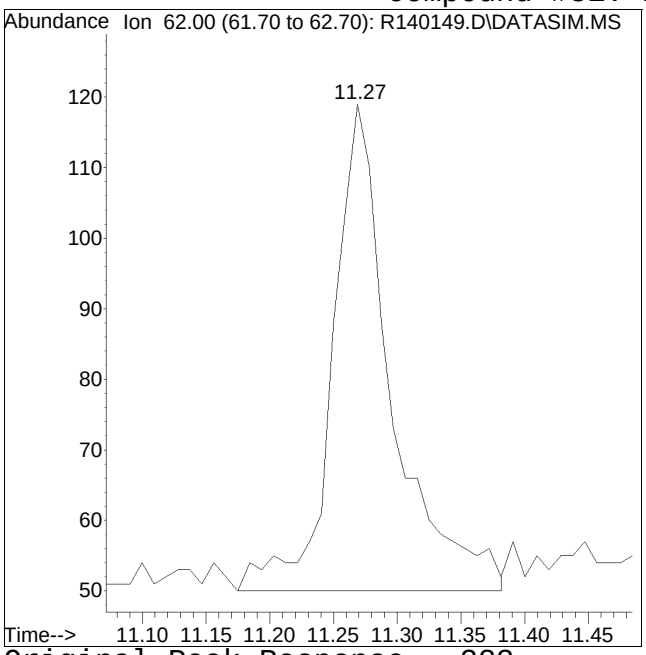
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 11.2 | 6.9 | 10.3# |



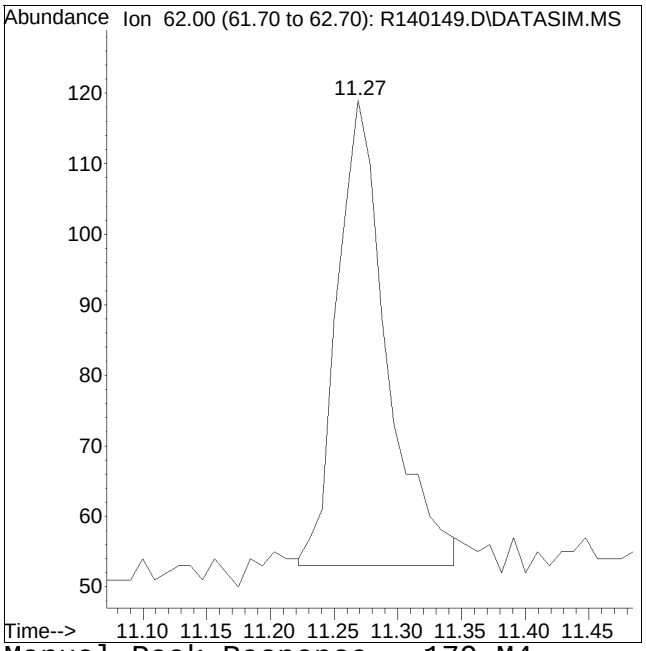
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140149.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:23 pm Instrument : Air Piano 1
Sample : L1504425-02,3,250,250 Quant Date : 3/12/2015 7:17 am

Compound #31: 1,2-dichloroethane




Original Peak Response = 223




Manual Peak Response = 179 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140150.D
Acq On : 11 Mar 2015 9:55 pm
Operator : AIRPIANO1:RY
Sample : L1504425-03,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 10:30:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 103716 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 87.14% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 220030 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 82.59% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 54389 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 93.38% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4832 | 0.372 | ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 3626 | 0.543 | ppbV | 99 |
| 5) Freon-114 | 4.25 | 85 | 271 | 0.014 | ppbV # | 88 |
| 6) vinyl chloride | 4.41 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | 54 | 176 | 0.032 | ppbV # | 50 |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 0.00 | | 0 | N.D. | d | |
| 13) trichlorofluoromethane | 6.41 | 101 | 3746 | 0.213 | ppbV | 96 |
| 16) 1,1-dichloroethene | 0.00 | | 0 | N.D. | d | |
| 17) methylene chloride | 7.48 | 49 | 5977 | 0.622 | ppbV | 100 |
| 20) Freon 113 | 7.85 | 101 | 1026 | 0.069 | ppbV | 96 |
| 22) trans-1,2-dichloroethene | 8.71 | 61 | 72 | 0.006 | ppbV # | 50 |
| 23) 1,1-dichloroethane | 0.00 | | 0 | N.D. | d | |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 321 | 0.027 | ppbV # | 80 |
| 29) chloroform | 10.39 | 83 | 396 | 0.022 | ppbV # | 84 |
| 31) 1,2-dichloroethane | 11.27 | 62 | 205 | 0.019 | ppbV # | 26 |
| 35) 1,1,1-trichloroethane | 11.55 | | 0 | N.D. | | |
| 36) benzene | 12.09 | 78 | 5800 | 0.281 | ppbV | 100 |
| 37) carbon tetrachloride | 12.26 | 117 | 1020 | 0.070 | ppbV # | 96 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 207 | 0.020 | ppbV | 94 |
| 45) cis-1,3-dichloropropene | 14.34 | | 0 | N.D. | | |
| 47) trans-1,3-dichloropropene | 14.92 | | 0 | N.D. | | |
| 48) 1,1,2-trichloroethane | 15.07 | | 0 | N.D. | | |
| 50) toluene | 15.37 | 91 | 17347 | 0.607 | ppbV | 99 |
| 53) dibromochloromethane | 15.80 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140150.D
Acq On : 11 Mar 2015 9:55 pm
Operator : AIRPIANO1:RY
Sample : L1504425-03,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 10:30:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 16.04 | | 0 | N.D. | | |
| 55) tetrachloroethene | 16.43 | 166 | 331 | 0.023 | ppbV # | 81 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 3858 | 0.101 | ppbV | 93 |
| 59) m+p-xylene | 17.43 | 91 | 9129 | 0.308 | ppbV | 100 |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 17.73 | 104 | 676 | 0.030 | ppbV # | 82 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.80 | 91 | 5210 | 0.166 | ppbV | 98 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 34877 | 0.804 | ppbV | 100 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 111171 | 2.974 | ppbV # | 65 |
| 71) 1,3-dichlorobenzene | 19.23 | | 0 | N.D. | | |
| 72) 1,4-dichlorobenzene | 19.28 | | 0 | N.D. | | |
| 75) 1,2-dichlorobenzene | 19.55 | | 0 | N.D. | | |
| 77) 1,2,4-trichlorobenzene | 21.02 | | 0 | N.D. | | |
| 78) naphthalene | 21.14 | 128 | 1866 | 0.034 | ppbV # | 92 |
| 80) hexachlorobutadiene | 21.46 | | 0 | N.D. | | |

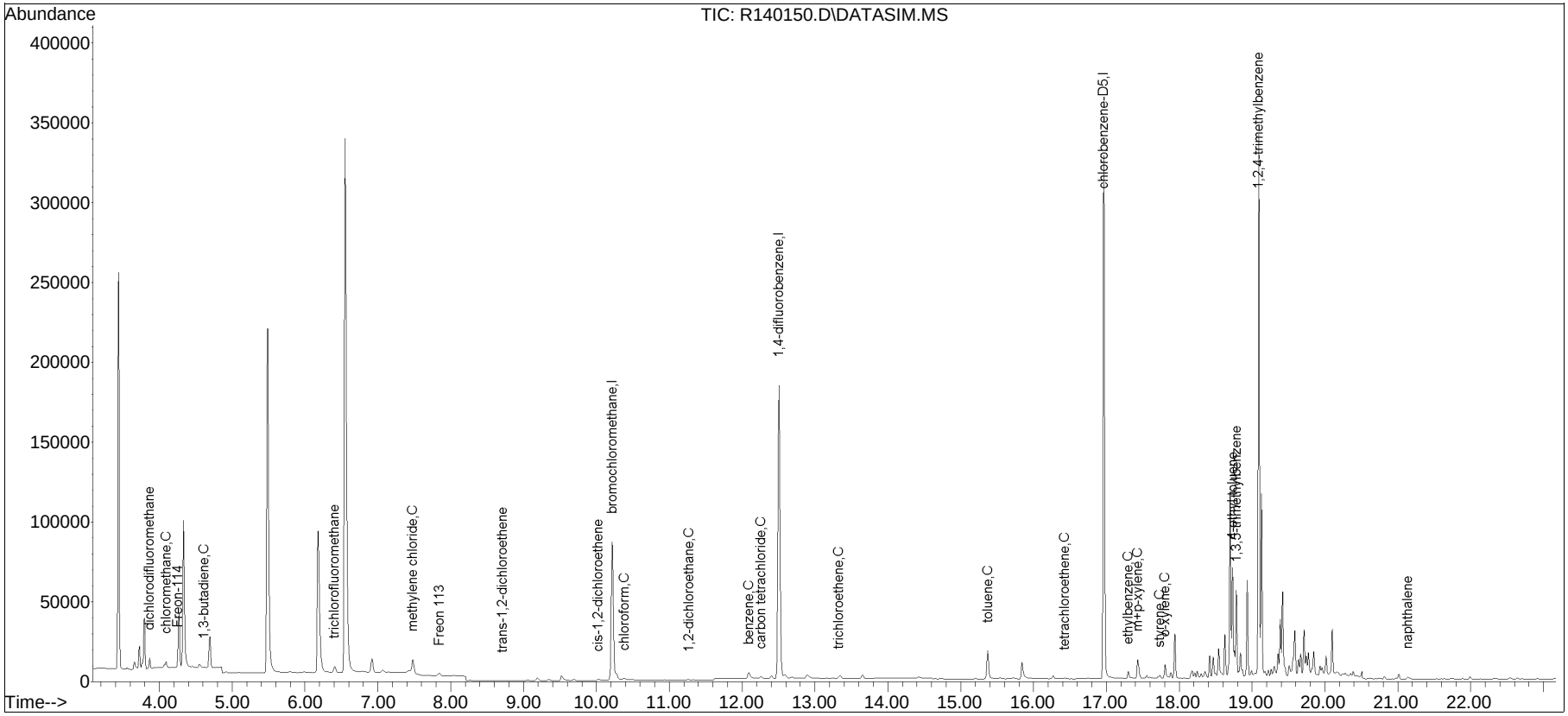
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

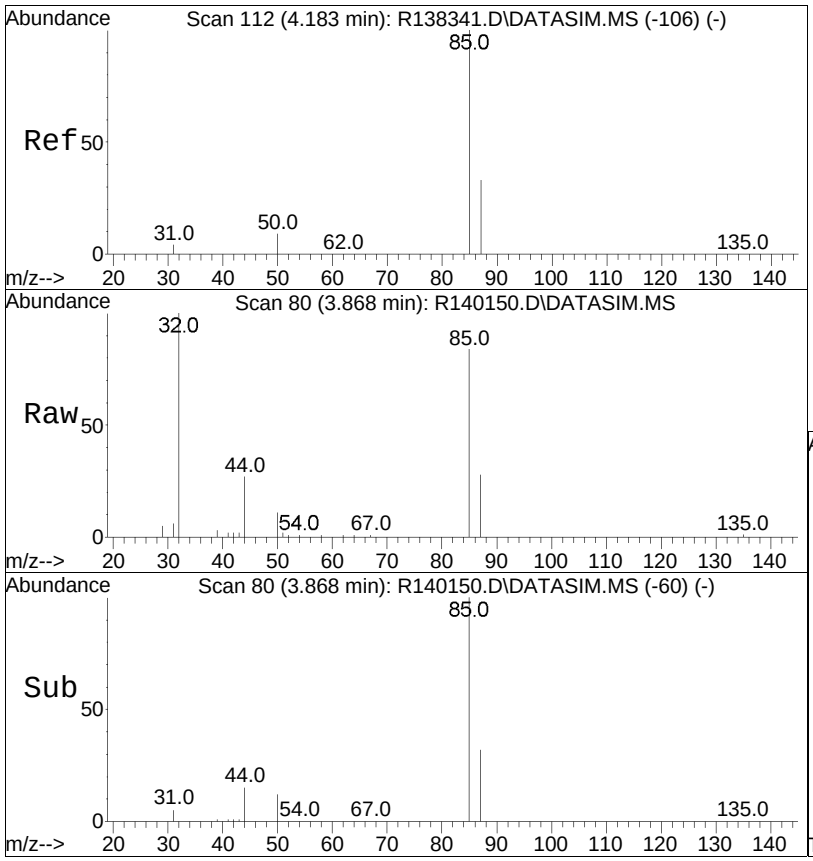
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140150.D
Acq On : 11 Mar 2015 9:55 pm
Operator : AIRPIANO1:RY
Sample : L1504425-03,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 10:30:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



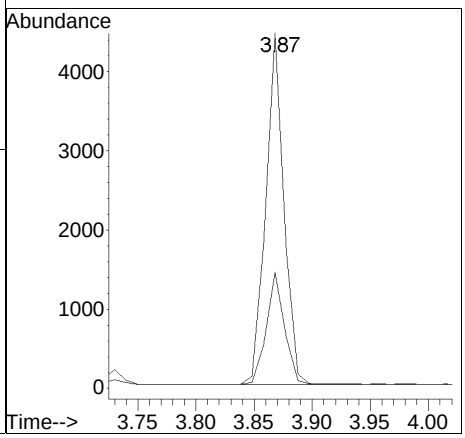

TSIM150102.M Wed Mar 25 12:03:27 2015

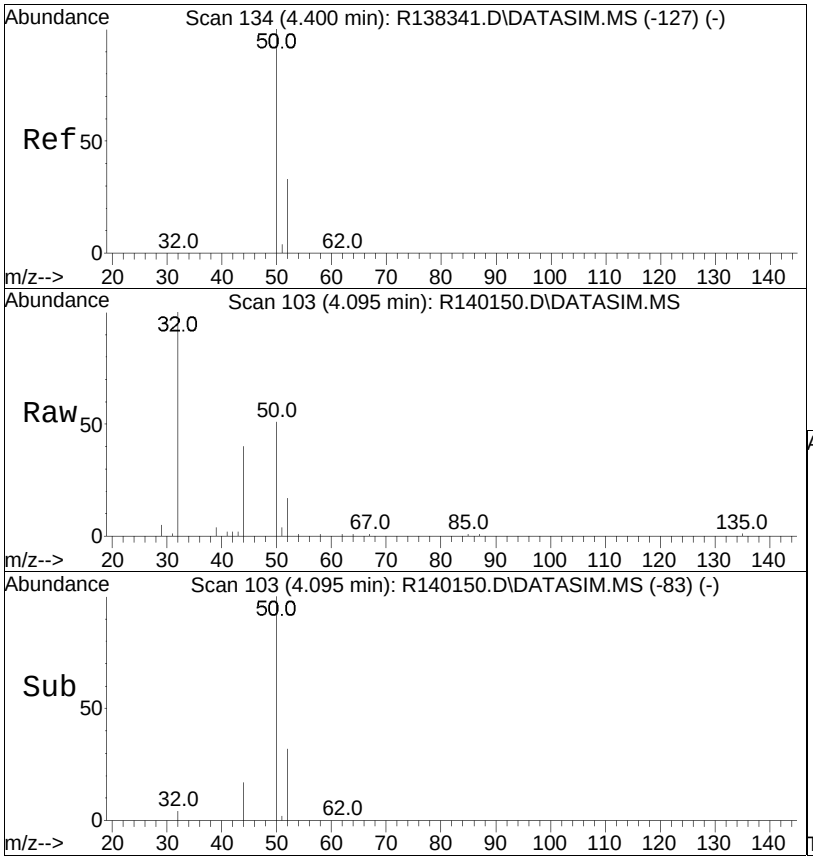



#3
dichlorodifluoromethane
Concen: 0.37 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 85 Resp: 4832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.6 | 25.8 | 38.8 |

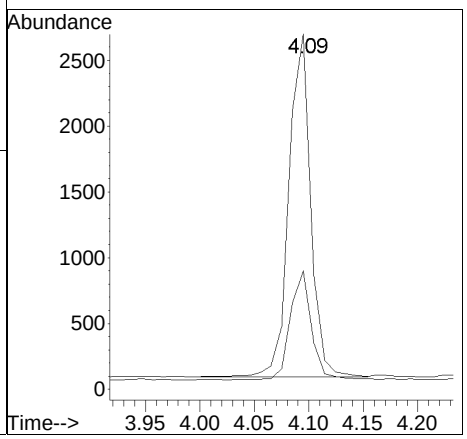


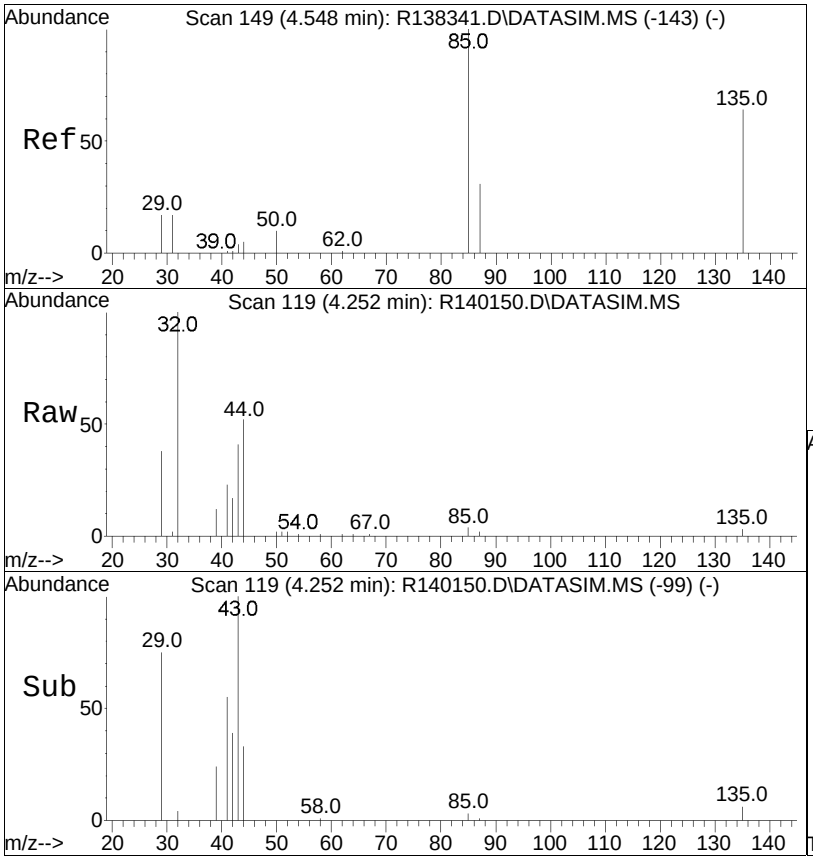



#4
chloromethane
Concen: 0.54 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 50 Resp: 3626

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.3 | 26.4 | 39.6 |

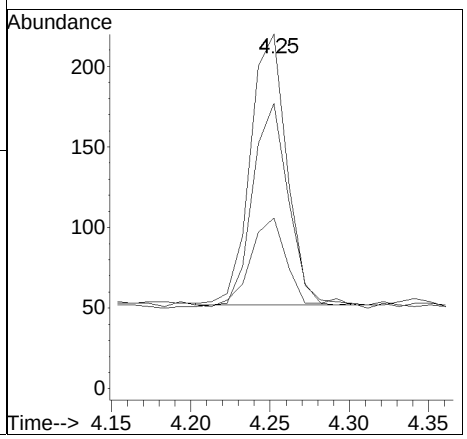


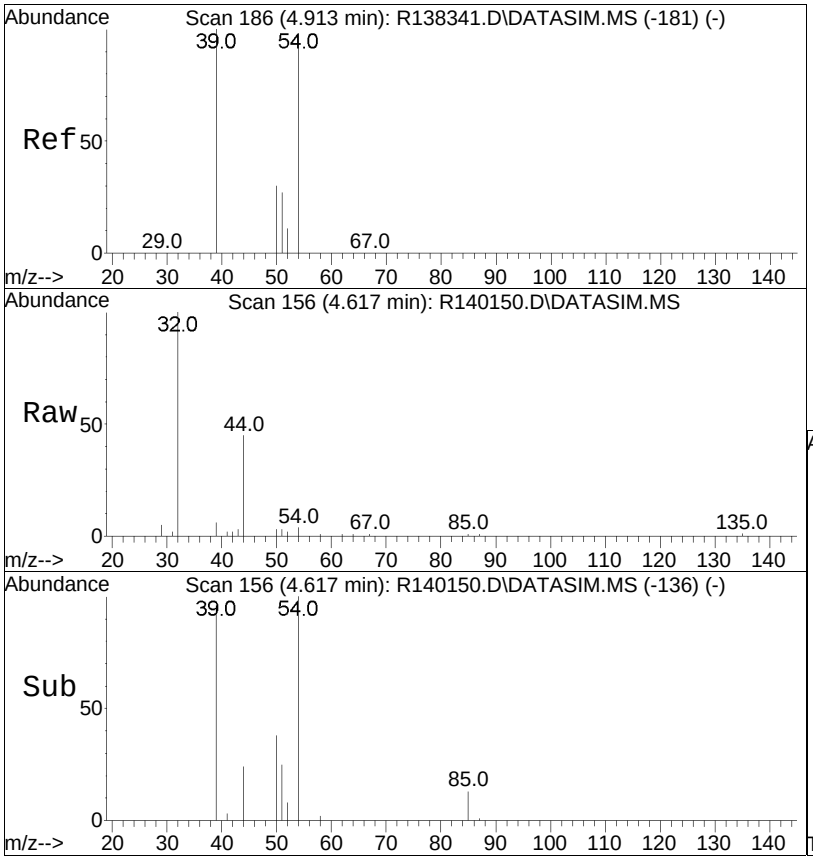



#5
Freon-114
Concen: 0.01 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 85 Resp: 271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 48.2 | 26.3 | 39.5# |
| 135 | 80.5 | 60.5 | 90.7 |

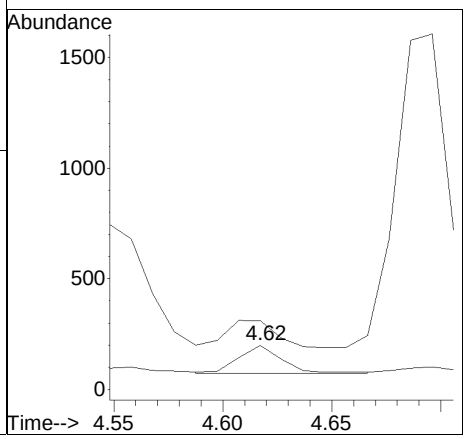


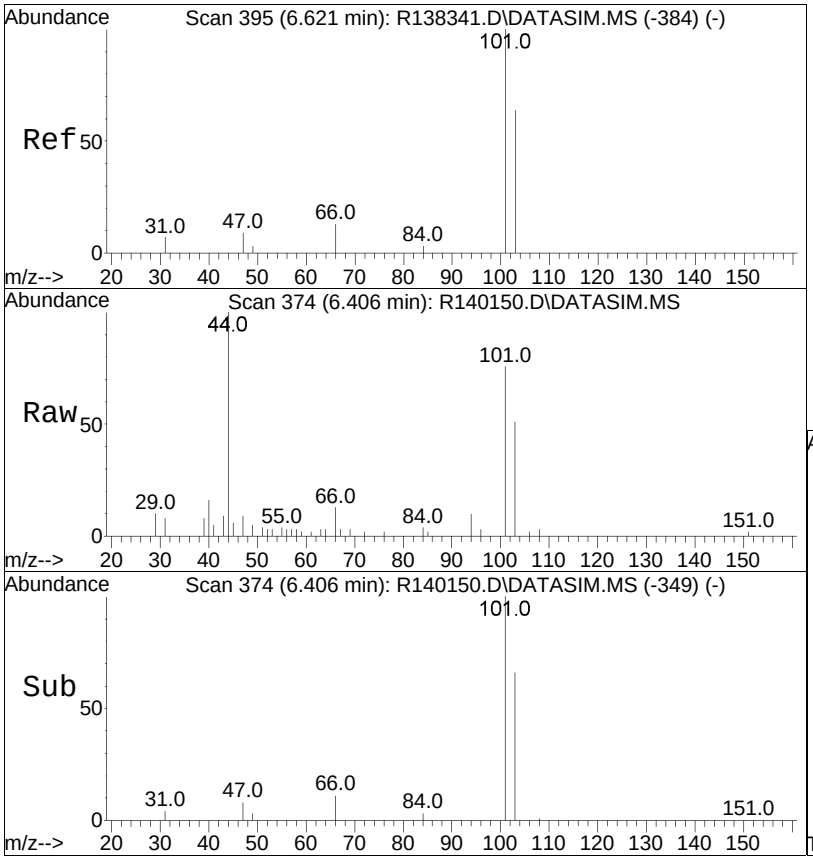



#7
1,3-butadiene
Concen: 0.03 ppbV
RT: 4.62 min Scan# 156
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 54 Resp: 176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 156.3 | 84.0 | 126.0# |

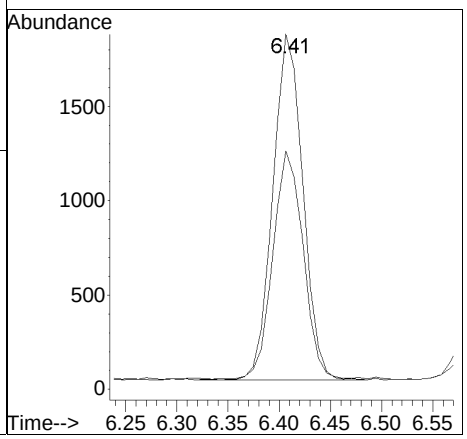


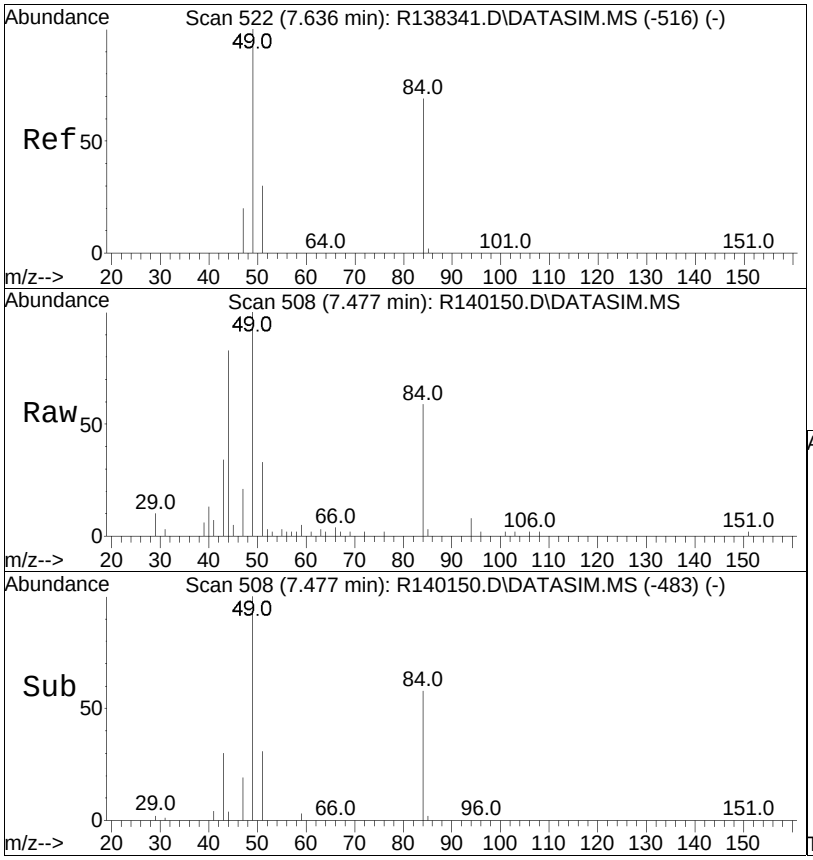



#13
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:101 Resp: 3746

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.1 | 51.2 | 76.8 |

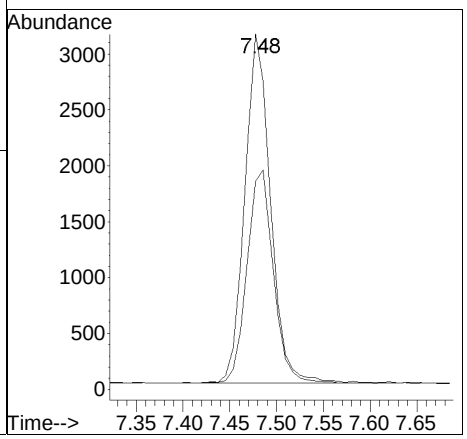


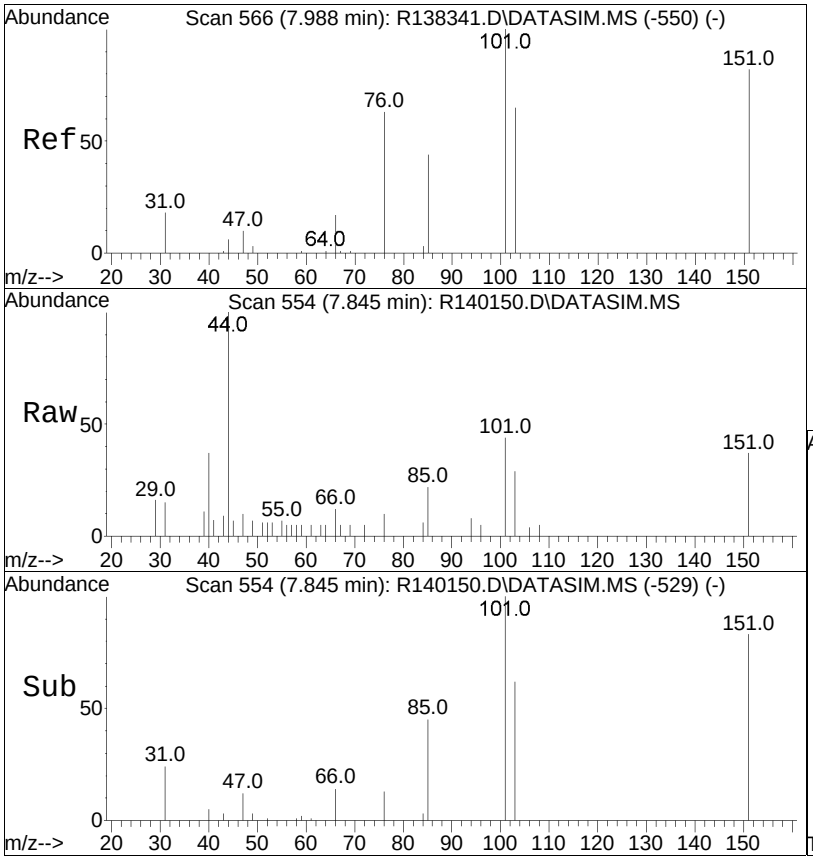



#17
methylene chloride
Concen: 0.62 ppbV
RT: 7.48 min Scan# 508
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 49 Resp: 5977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 58.6 | 46.7 | 70.1 |

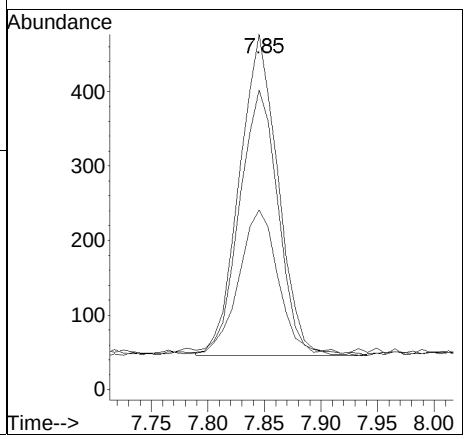


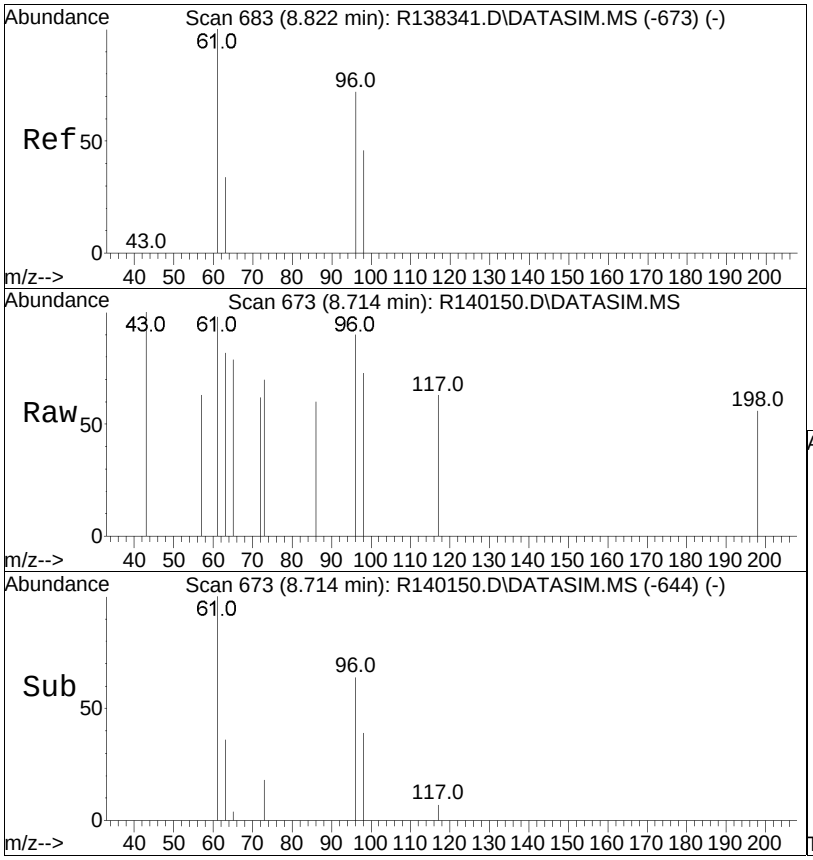



#20
Freon 113
Concen: 0.07 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:101 Resp: 1026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 50.5 | 34.5 | 51.7 |
| 151 | 84.3 | 67.4 | 101.2 |

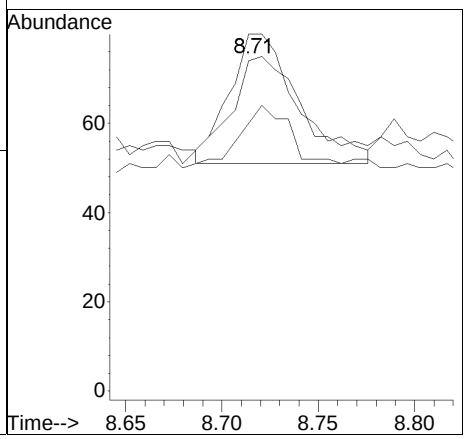


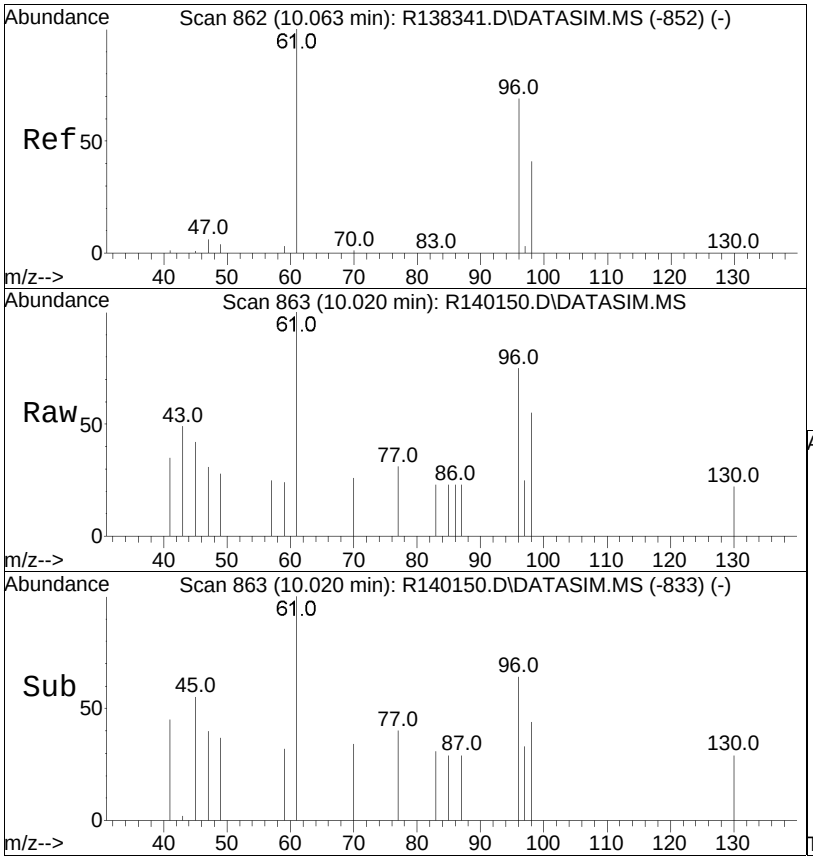



#22
trans-1,2-dichloroethene
Concen: 0.01 ppbV
RT: 8.71 min Scan# 673
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 61 Resp: 72

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 92.5 | 48.2 | 72.4# |
| 98 | 75.0 | 29.9 | 44.9# |

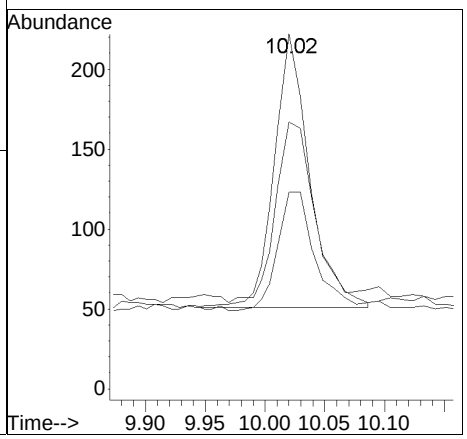


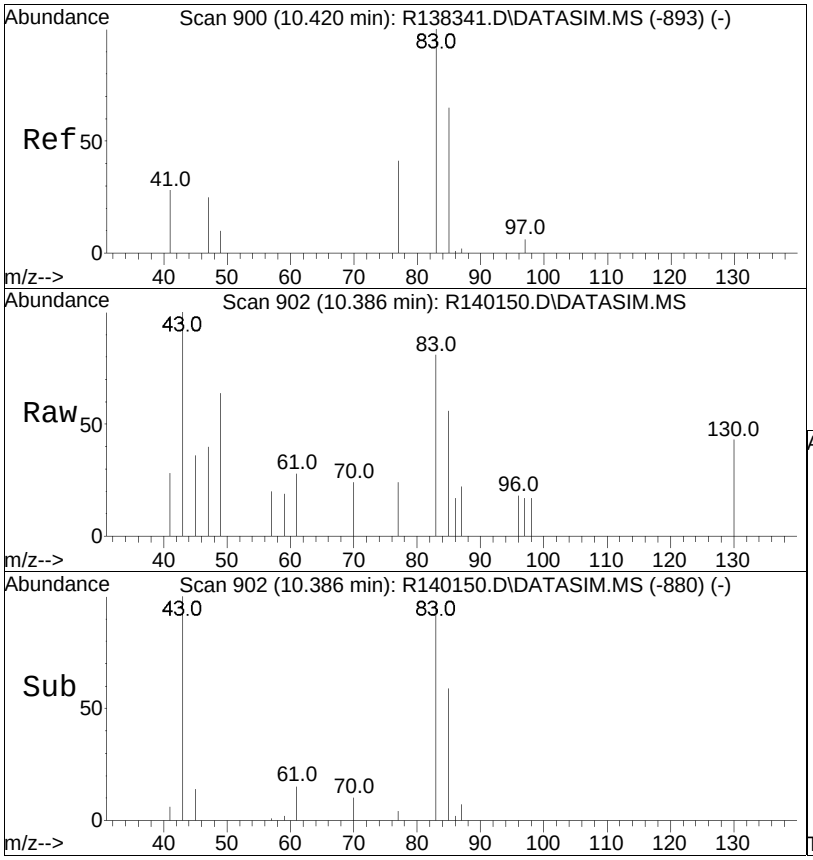



#27
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 10.02 min Scan# 863
Delta R.T. 0.009 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 61 Resp: 321

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 75.2 | 50.6 | 76.0 |
| 98 | 55.4 | 30.6 | 45.8# |

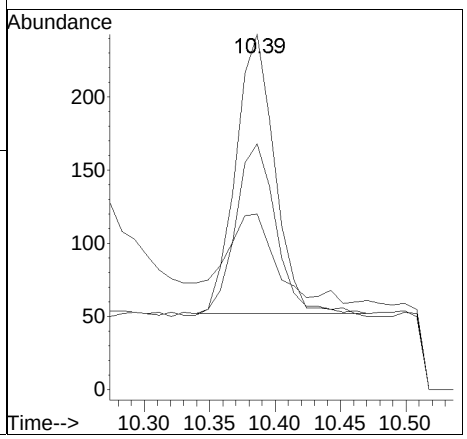


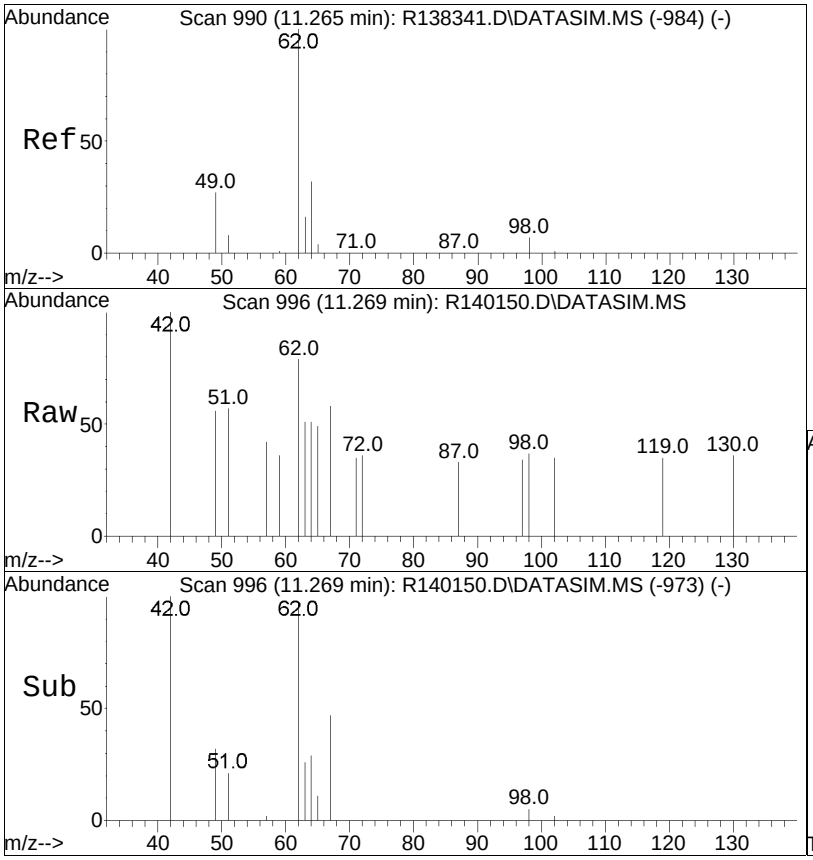



#29
chloroform
Concen: 0.02 ppbV
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 83 Resp: 396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 69.1 | 50.9 | 76.3 |
| 47 | 49.4 | 24.9 | 37.3# |

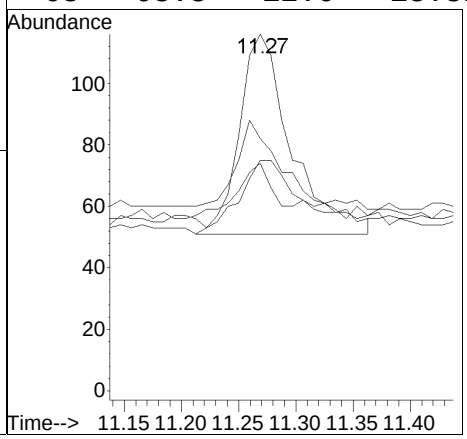


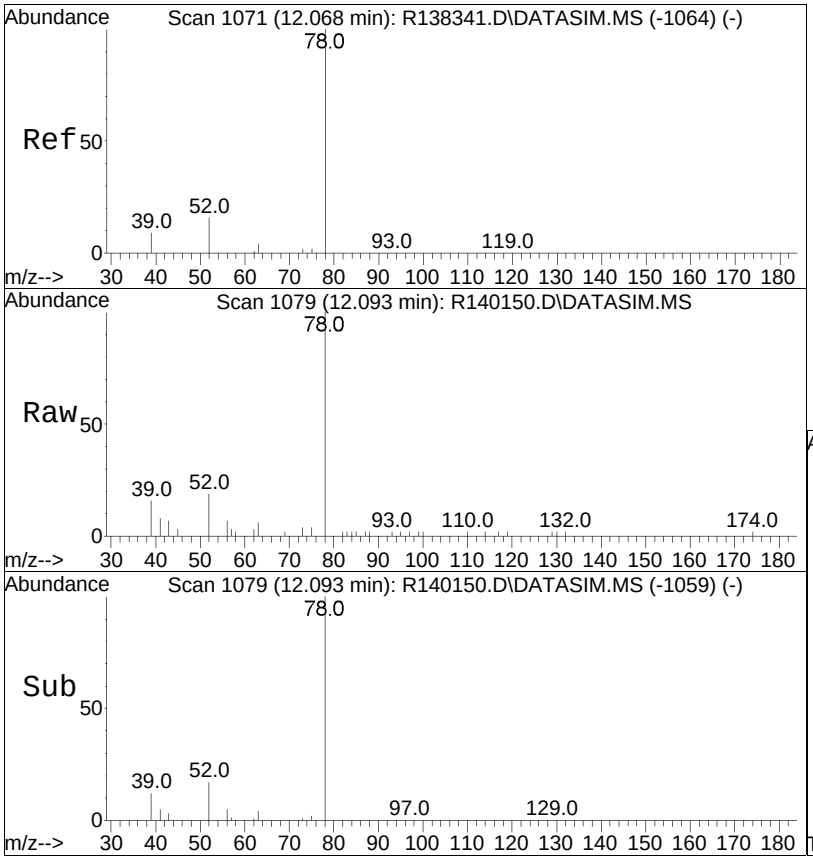



#31
1,2-dichloroethane
Concen: 0.02 ppbV
RT: 11.27 min Scan# 996
Delta R.T. 0.019 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 62 Resp: 205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 64.7 | 24.4 | 36.6# |
| 49 | 70.7 | 26.7 | 40.1# |
| 63 | 63.8 | 12.6 | 18.8# |

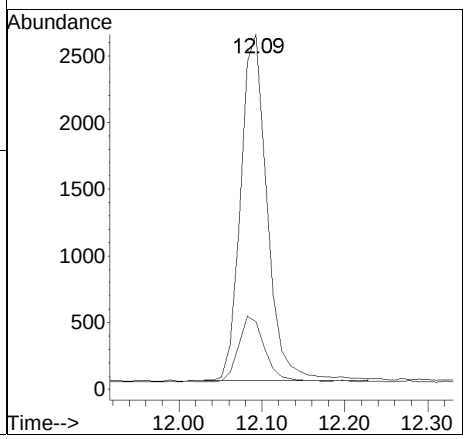


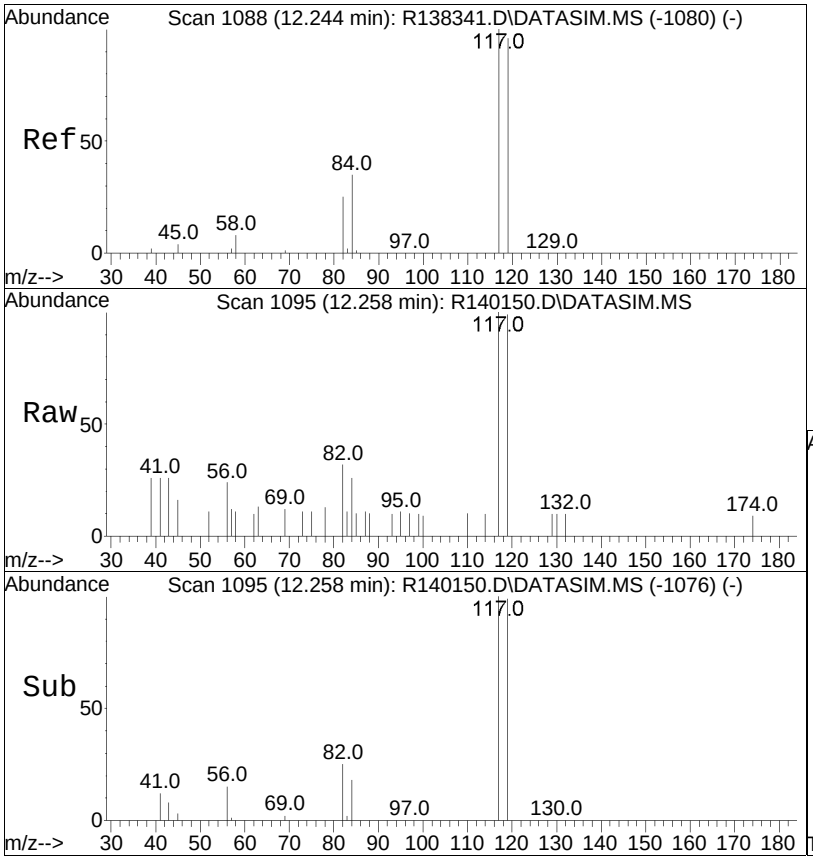



#36
benzene
Concen: 0.28 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 78 Resp: 5800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 19.0 | 15.4 | 23.0 |

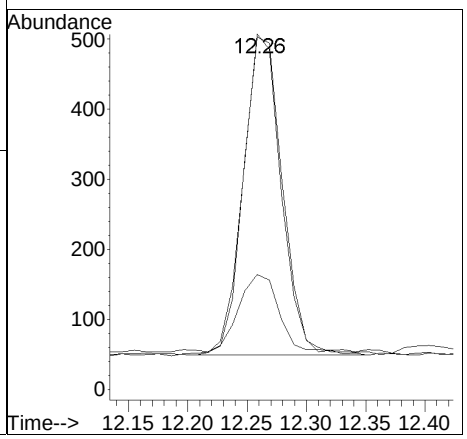


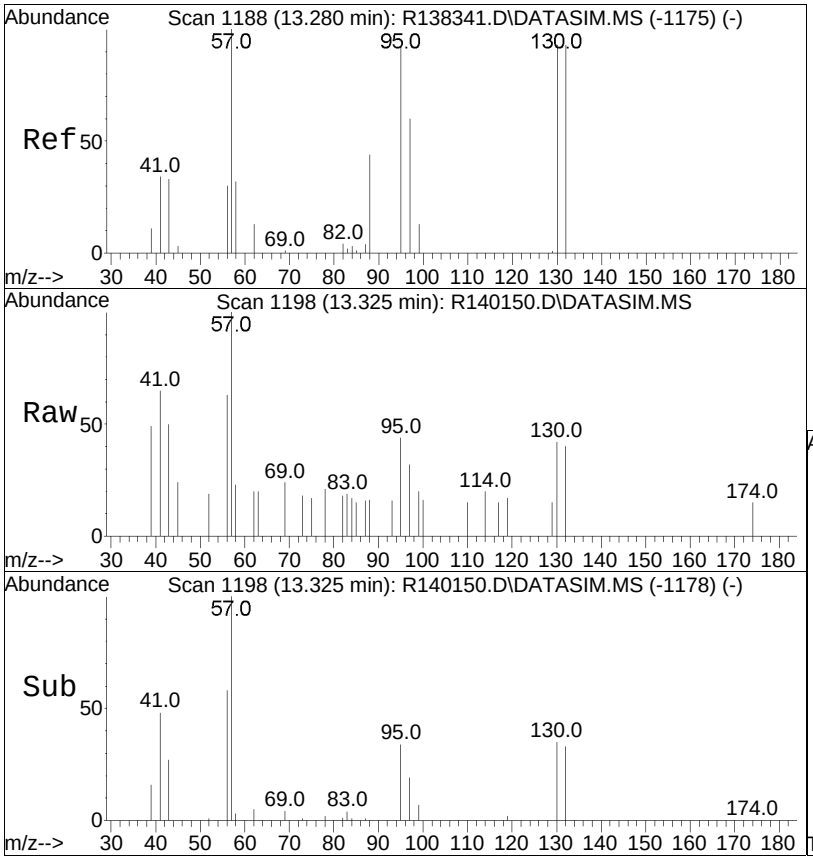



#37
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:117 Resp: 1020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 99.2 | 78.5 | 117.7 |
| 82 | 32.3 | 19.8 | 29.8# |

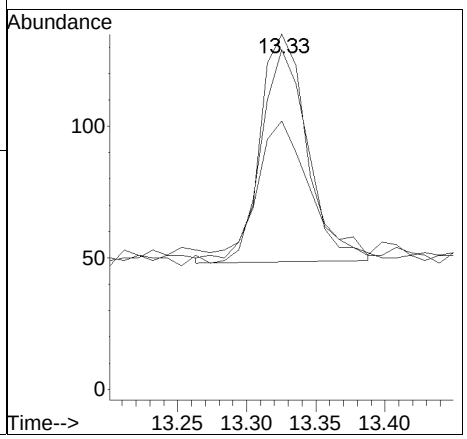


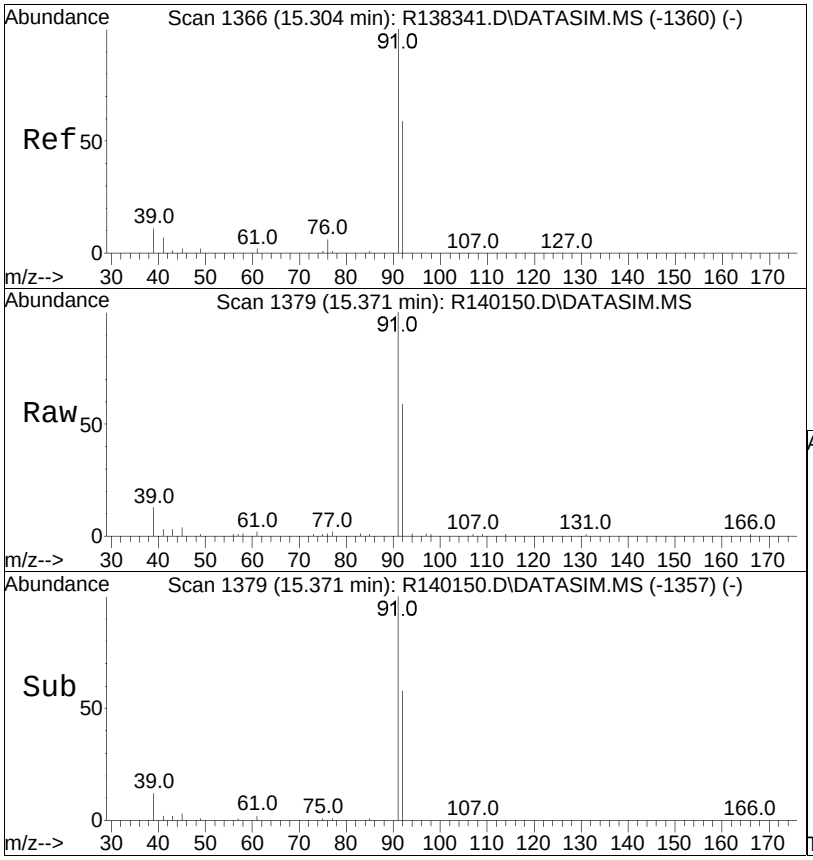



#42
trichloroethene
Concen: 0.02 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:130 Resp: 207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 95.6 | 76.0 | 114.0 |
| 97 | 75.6 | 51.8 | 77.8 |

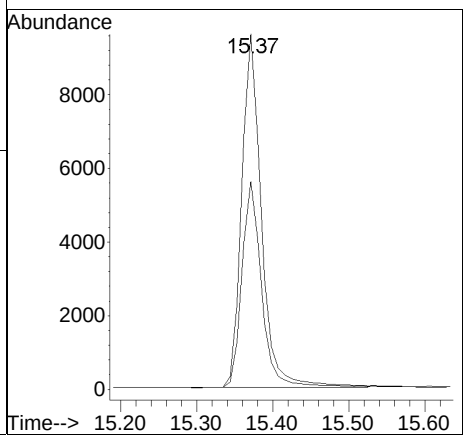


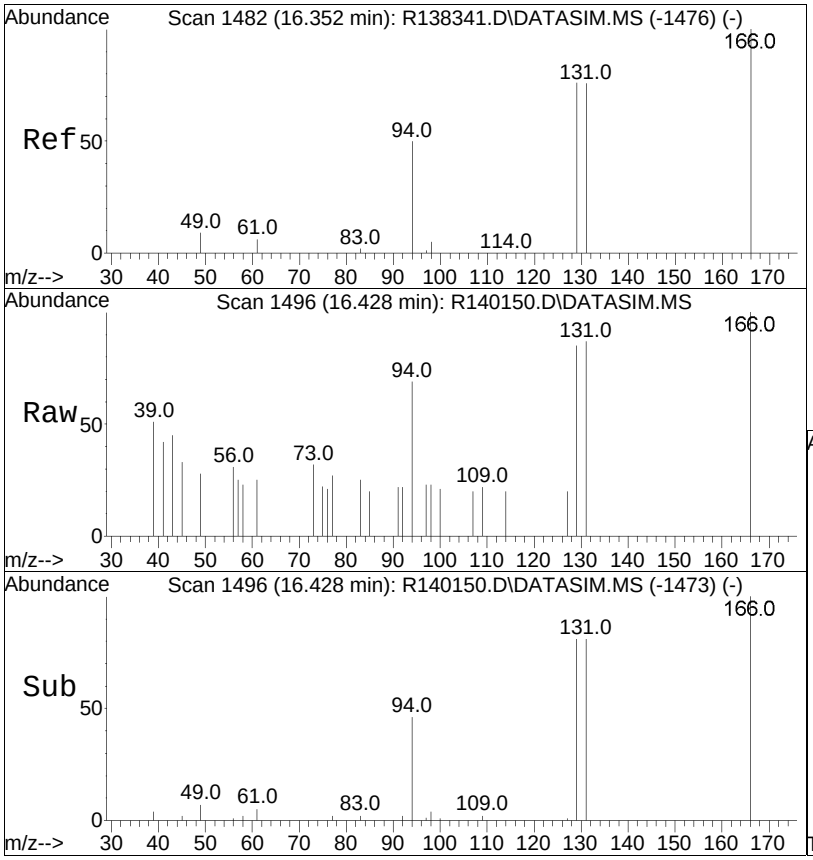



#50
toluene
Concen: 0.61 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 91 Resp: 17347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 58.6 | 47.2 | 70.8 |

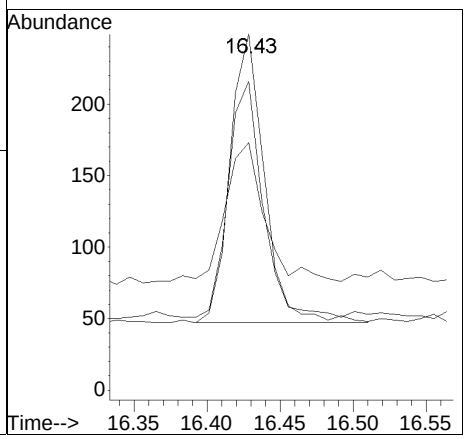


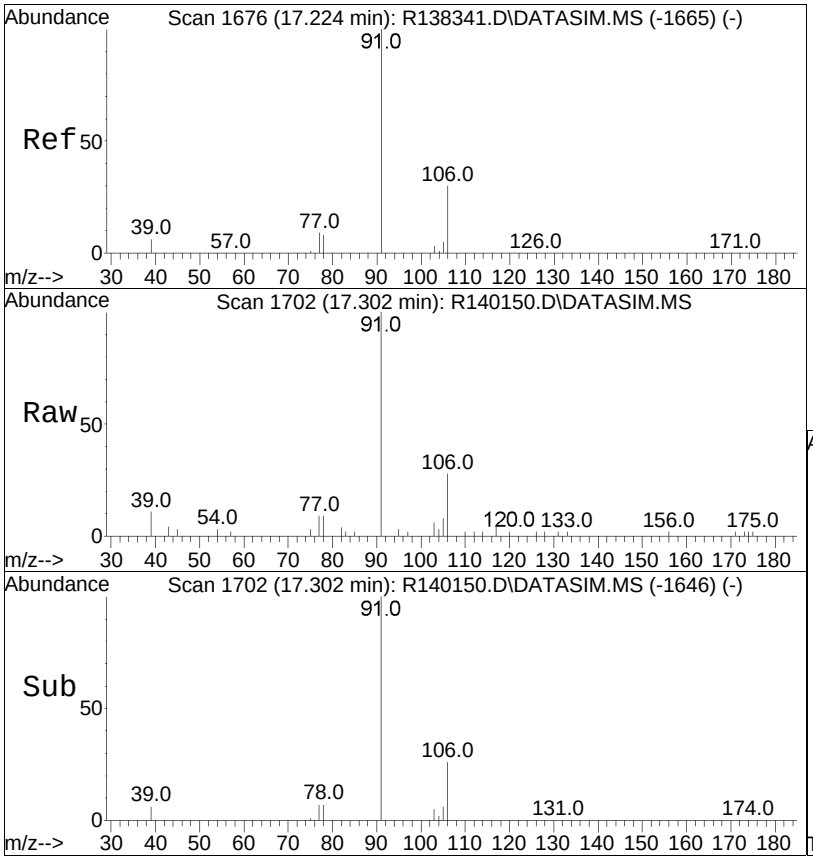



#55
tetrachloroethene
Concen: 0.02 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:166 Resp: 331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 86.7 | 61.7 | 92.5 |
| 94 | 69.5 | 38.0 | 57.0# |

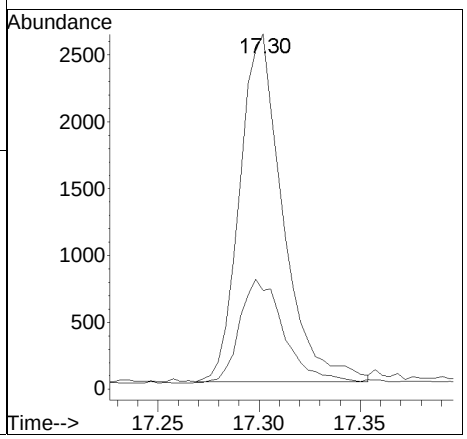


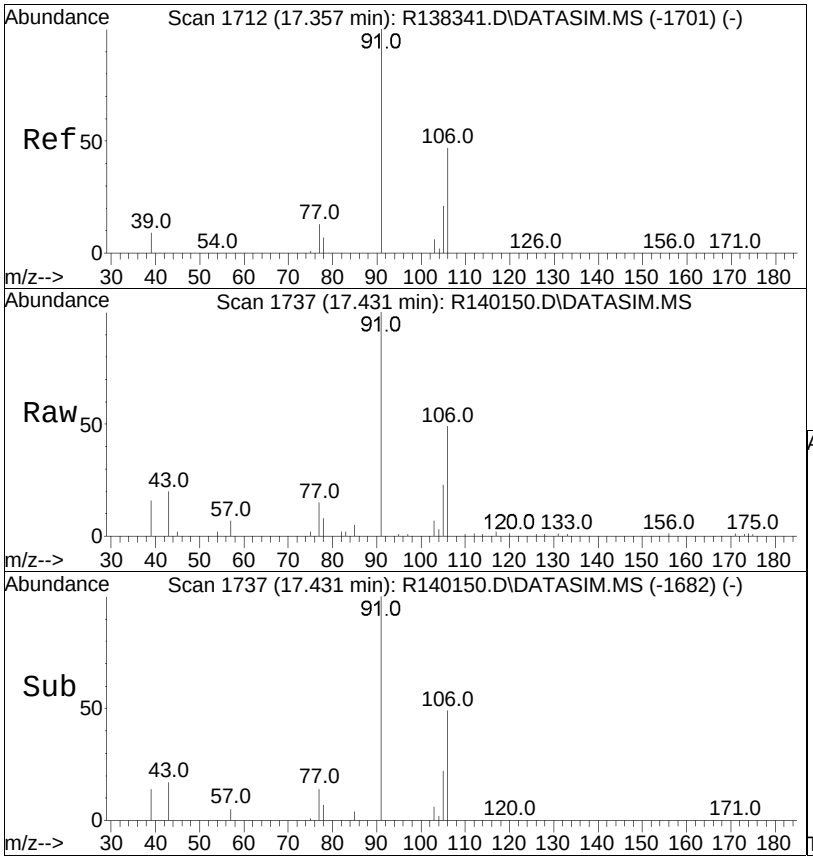



#58
ethylbenzene
Concen: 0.10 ppbV
RT: 17.30 min Scan# 1702
Delta R.T. 0.007 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 91 Resp: 3858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 27.8 | 25.4 | 38.0 |

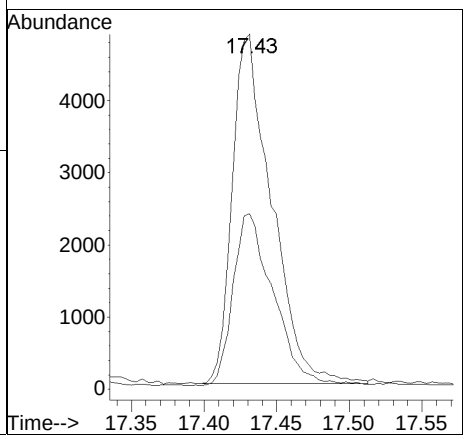


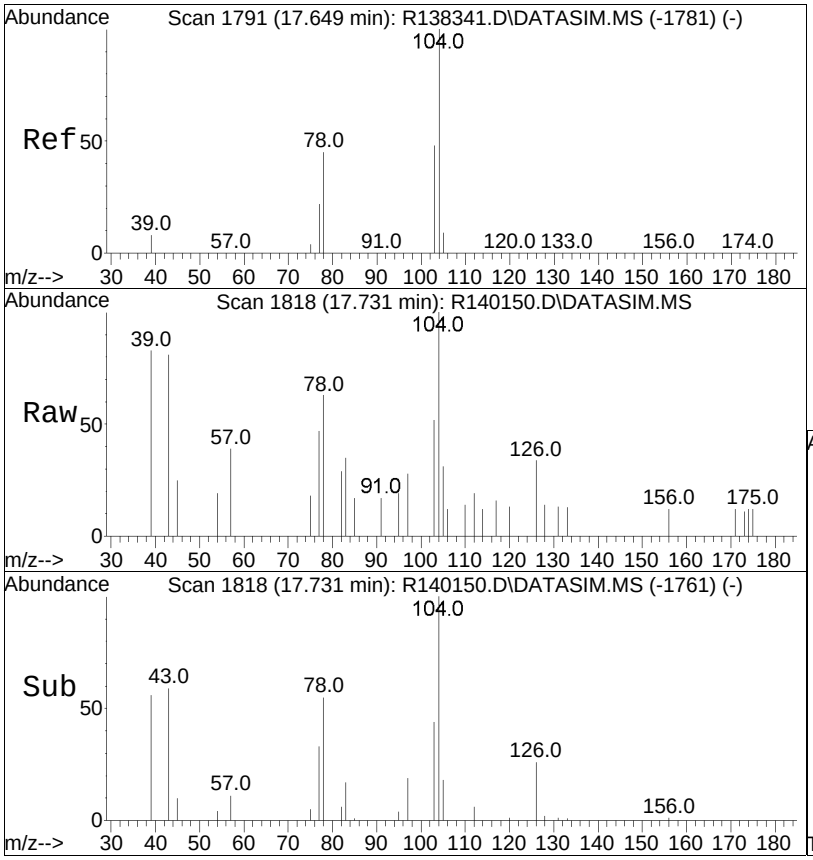



#59
m+p-xylene
Concen: 0.31 ppbV
RT: 17.43 min Scan# 1737
Delta R.T. 0.004 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 91 Resp: 9129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.5 | 39.7 | 59.5 |

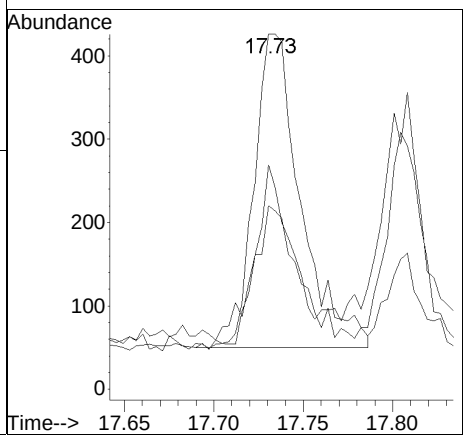


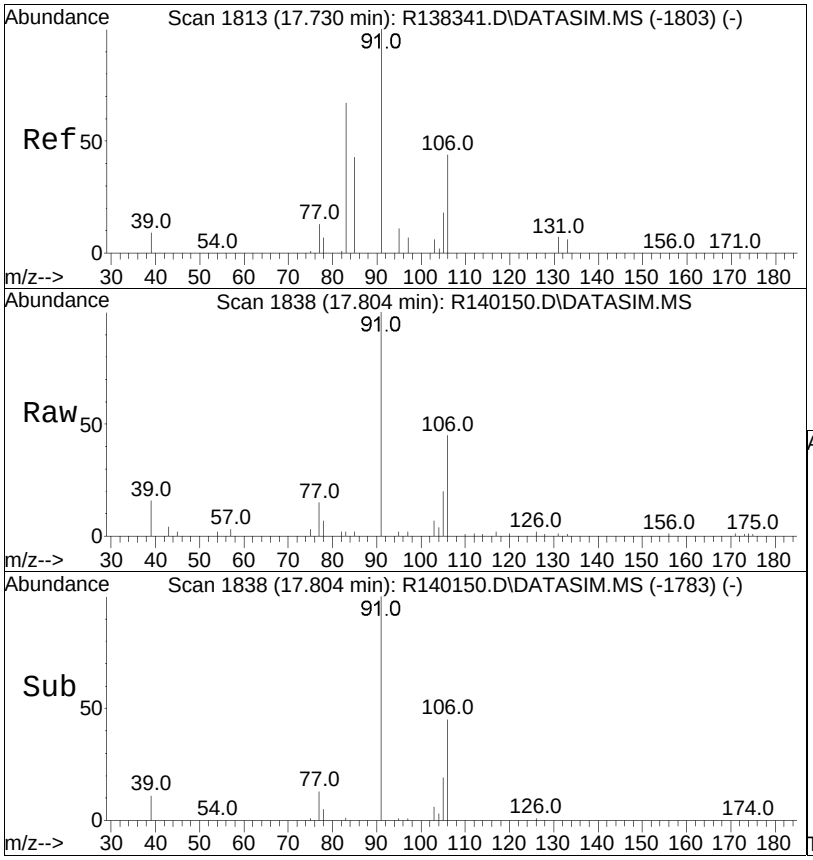



#61
styrene
Concen: 0.03 ppbV
RT: 17.73 min Scan# 1818
Delta R.T. 0.011 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:104 Resp: 676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 51.6 | 38.5 | 57.7 |
| 78 | 63.1 | 33.7 | 50.5# |

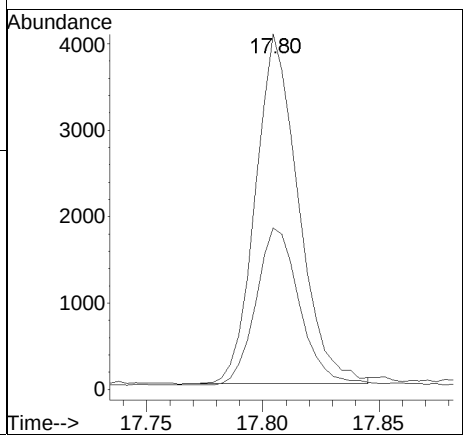


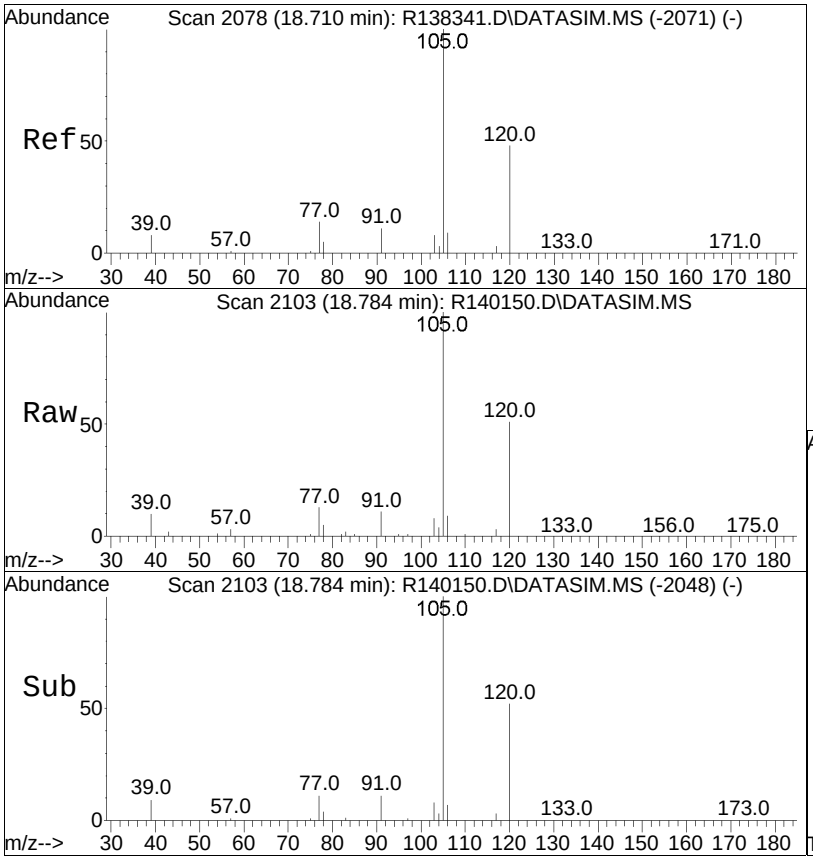



#63
o-xylene
Concen: 0.17 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.004 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 91 Resp: 5210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 45.5 | 37.6 | 56.4 |

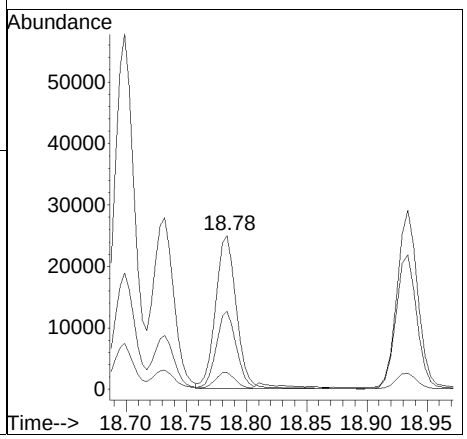


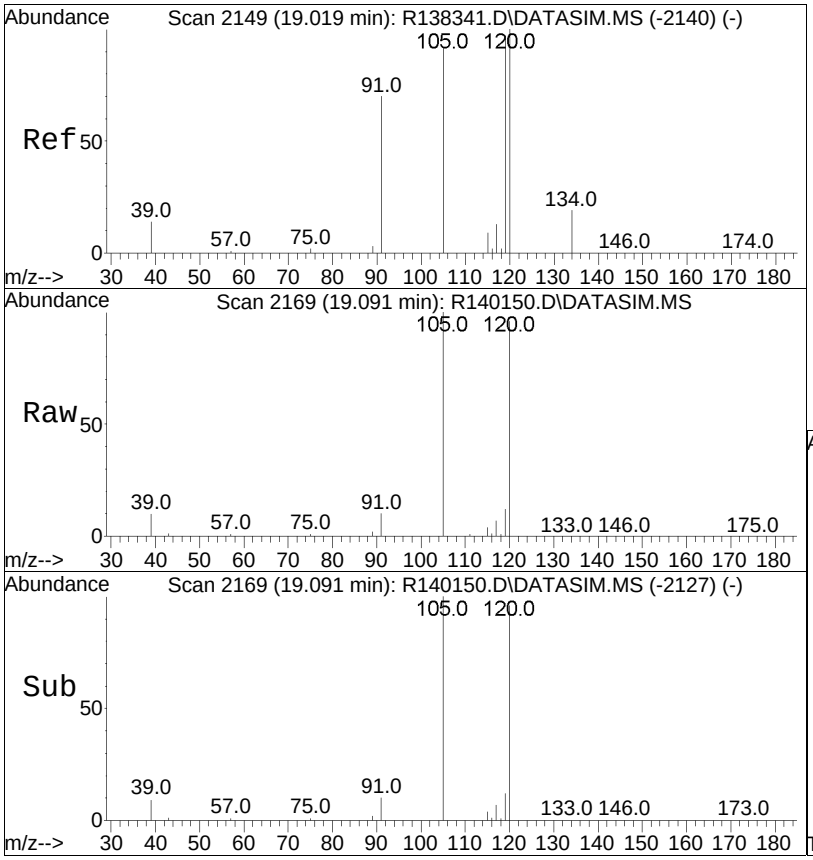



#67
1,3,5-trimethylbenzene
Concen: 0.80 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:105 Resp: 34877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.7 | 40.4 | 60.6 |
| 91 | 11.1 | 8.4 | 12.6 |

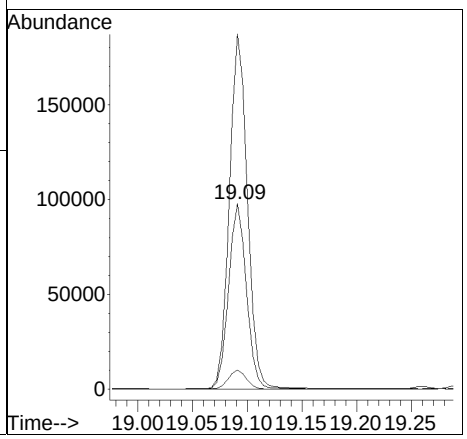


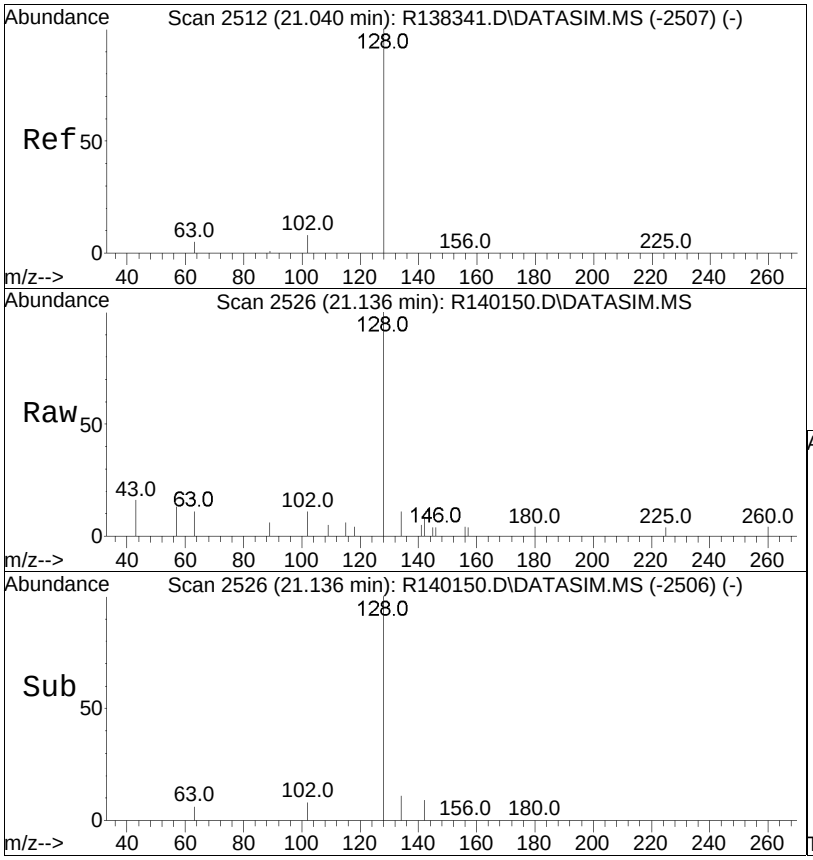



#69
1,2,4-trimethylbenzene
Concen: 2.97 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:105 Resp: 111171

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 191.4 | 184.1 | 276.1 |
| 91 | 10.4 | 57.4 | 86.2# |

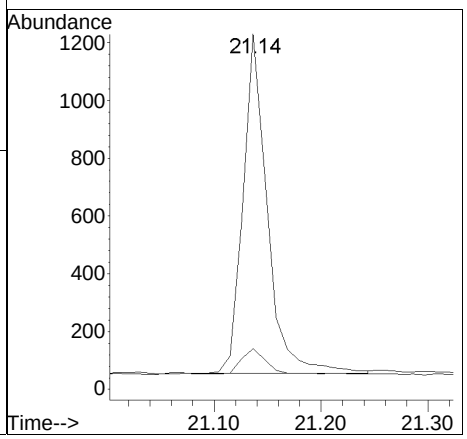





#78
naphthalene
Concen: 0.03 ppbV
RT: 21.14 min Scan# 2526
Delta R.T. 0.011 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:128 Resp: 1866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 11.5 | 6.9 | 10.3# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TSIM150102.M |
| Data File | : R140150.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 9:55 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-03,3,250,250 | Quant Date | : 3/12/2015 7:17 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140151.D
Acq On : 11 Mar 2015 10:27 pm
Operator : AIRPIANO1:RY
Sample : L1504425-04,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 10:32:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 106095 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 89.13% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 225913 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 84.80% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 53169 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 91.28% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4700 | 0.354 | ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 3628 | 0.531 | ppbV | 98 |
| 5) Freon-114 | 4.25 | 85 | 274 | 0.014 | ppbV # | 84 |
| 6) vinyl chloride | 4.39 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | 54 | 144 | 0.026 | ppbV # | 35 |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 0.00 | | 0 | N.D. | d | |
| 13) trichlorofluoromethane | 6.41 | 101 | 3856 | 0.214 | ppbV | 96 |
| 16) 1,1-dichloroethene | 7.31 | | 0 | N.D. | | |
| 17) methylene chloride | 7.48 | 49 | 45931 | 4.671 | ppbV | 99 |
| 20) Freon 113 | 7.85 | 101 | 1229 | 0.081 | ppbV | 94 |
| 22) trans-1,2-dichloroethene | 8.72 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.97 | | 0 | N.D. | | |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 333 | 0.027 | ppbV # | 78 |
| 29) chloroform | 10.39 | 83 | 427 | 0.024 | ppbV # | 80 |
| 31) 1,2-dichloroethane | 11.27 | 62 | 211 | 0.019 | ppbV # | 31 |
| 35) 1,1,1-trichloroethane | 11.56 | | 0 | N.D. | | |
| 36) benzene | 12.09 | 78 | 5480 | 0.259 | ppbV | 99 |
| 37) carbon tetrachloride | 12.26 | 117 | 1045 | 0.069 | ppbV # | 94 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 88 | 0.008 | ppbV # | 90 |
| 45) cis-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 47) trans-1,3-dichloropropene | 14.89 | | 0 | N.D. | | |
| 48) 1,1,2-trichloroethane | 15.12 | | 0 | N.D. | | |
| 50) toluene | 15.37 | 91 | 23595 | 0.845 | ppbV | 99 |
| 53) dibromochloromethane | 15.79 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140151.D
Acq On : 11 Mar 2015 10:27 pm
Operator : AIRPIANO1:RY
Sample : L1504425-04,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 10:32:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 16.05 | | 0 | N.D. | | |
| 55) tetrachloroethene | 16.43 | 166 | 404 | 0.028 | ppbV | 92 |
| 56) 1,1,1,2-tetrachloroethane | 16.96 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 4261 | 0.114 | ppbV | 98 |
| 59) m+p-xylene | 17.43 | 91 | 10219 | 0.353 | ppbV | 97 |
| 60) bromoform | 0.00 | | 0 | N.D. | d | |
| 61) styrene | 17.73 | 104 | 881 | 0.040 | ppbV | 96 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.80 | 91 | 5555 | 0.181 | ppbV | 99 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 34837 | 0.821 | ppbV | 99 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 112076 | 3.067 | ppbV # | 65 |
| 71) 1,3-dichlorobenzene | 19.23 | | 0 | N.D. | | |
| 72) 1,4-dichlorobenzene | 19.28 | | 0 | N.D. | | |
| 75) 1,2-dichlorobenzene | 19.55 | | 0 | N.D. | | |
| 77) 1,2,4-trichlorobenzene | 21.02 | | 0 | N.D. | | |
| 78) naphthalene | 21.14 | 128 | 1797 | 0.033 | ppbV # | 91 |
| 80) hexachlorobutadiene | 21.46 | | 0 | N.D. | | |

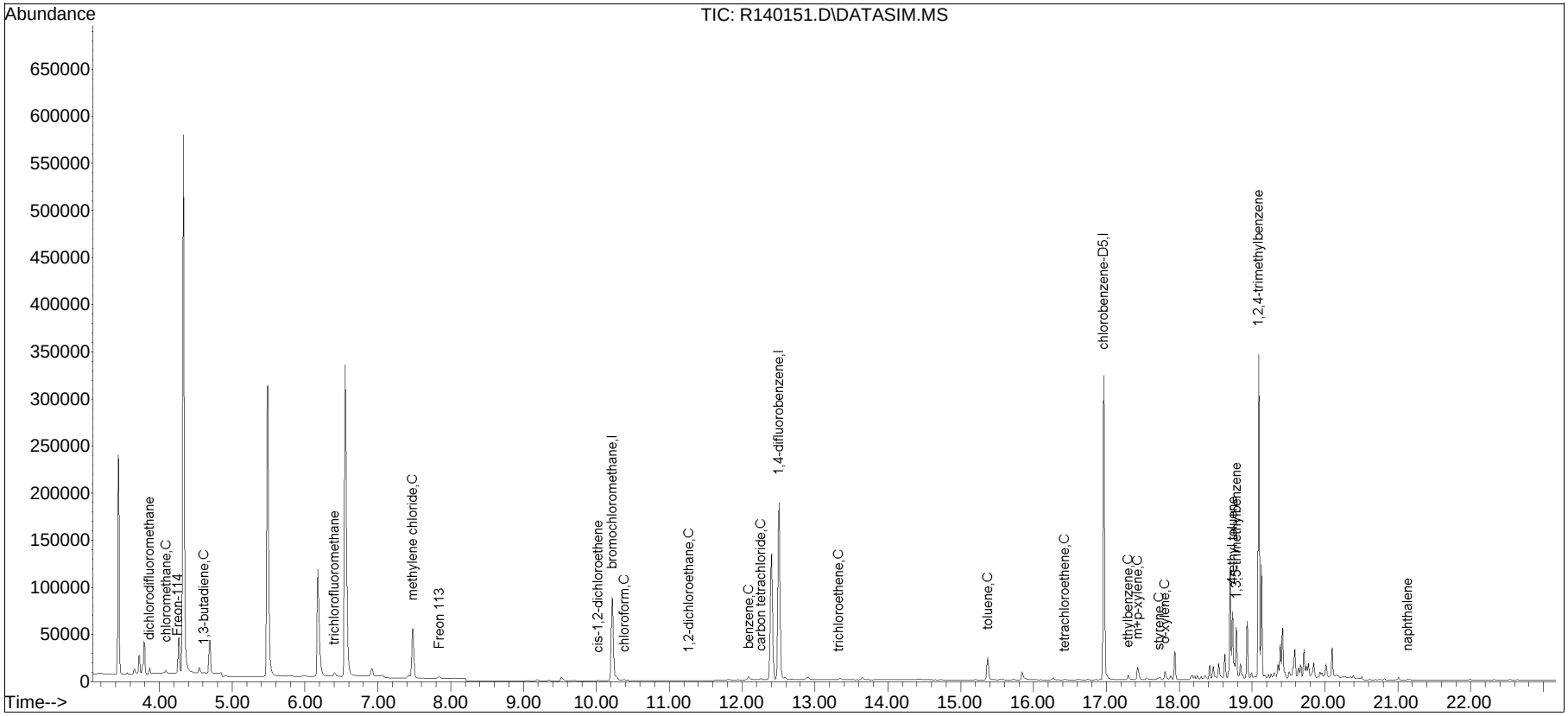
(#) = qualifier out of range (m) = manual integration (+) = signals summed

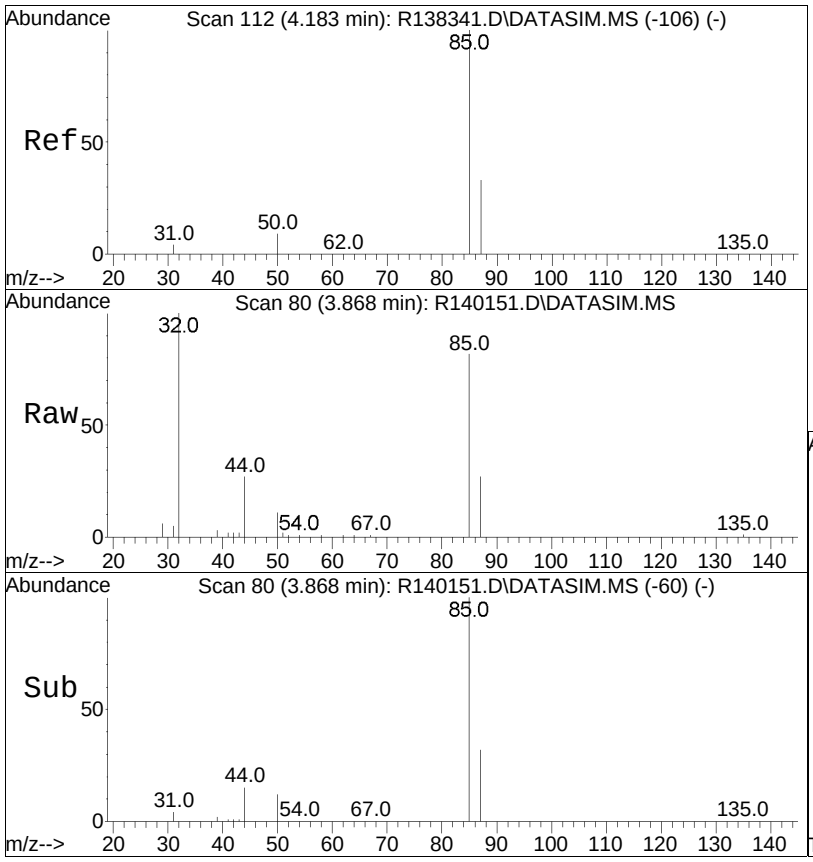
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140151.D
Acq On : 11 Mar 2015 10:27 pm
Operator : AIRPIANO1:RY
Sample : L1504425-04,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 10:32:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D

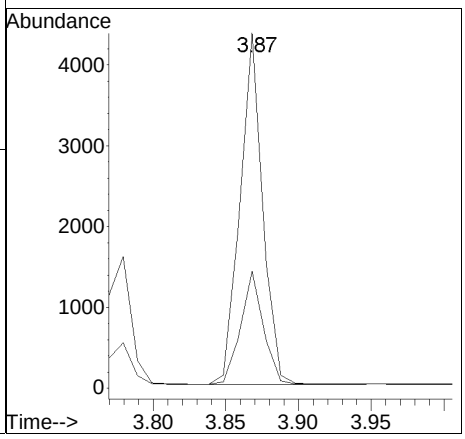


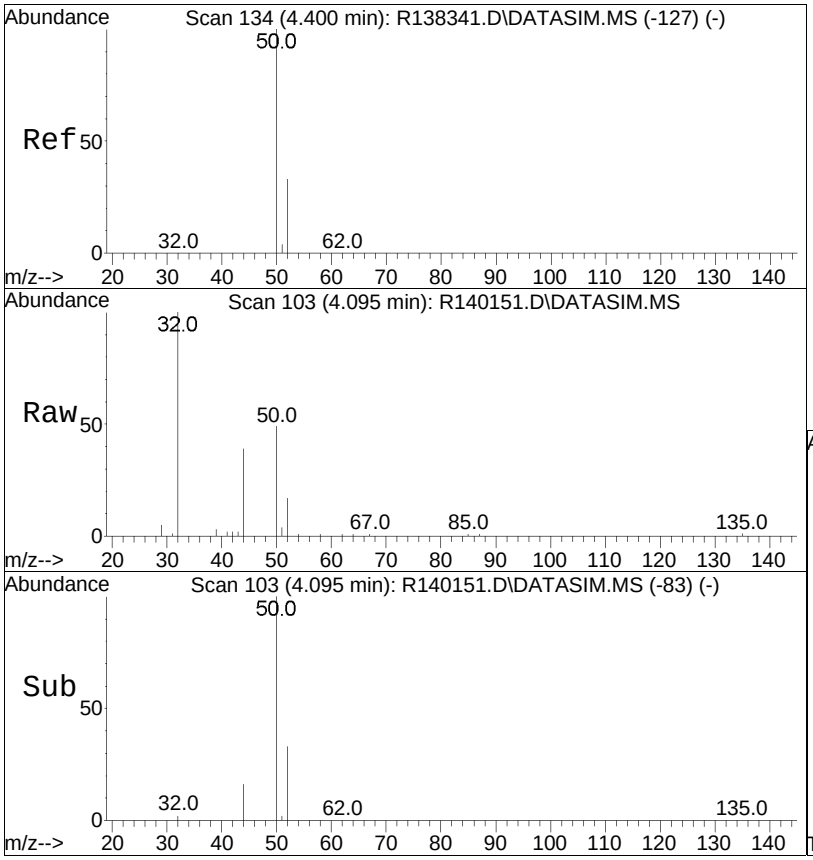



#3
dichlorodifluoromethane
Concen: 0.35 ppbV
RT: 3.87 min Scan# 80
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 85 Resp: 4700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.0 | 25.8 | 38.8 |

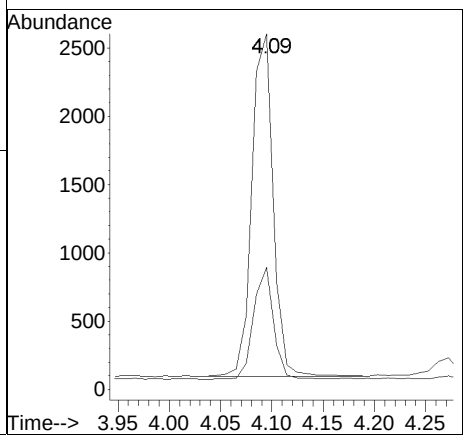


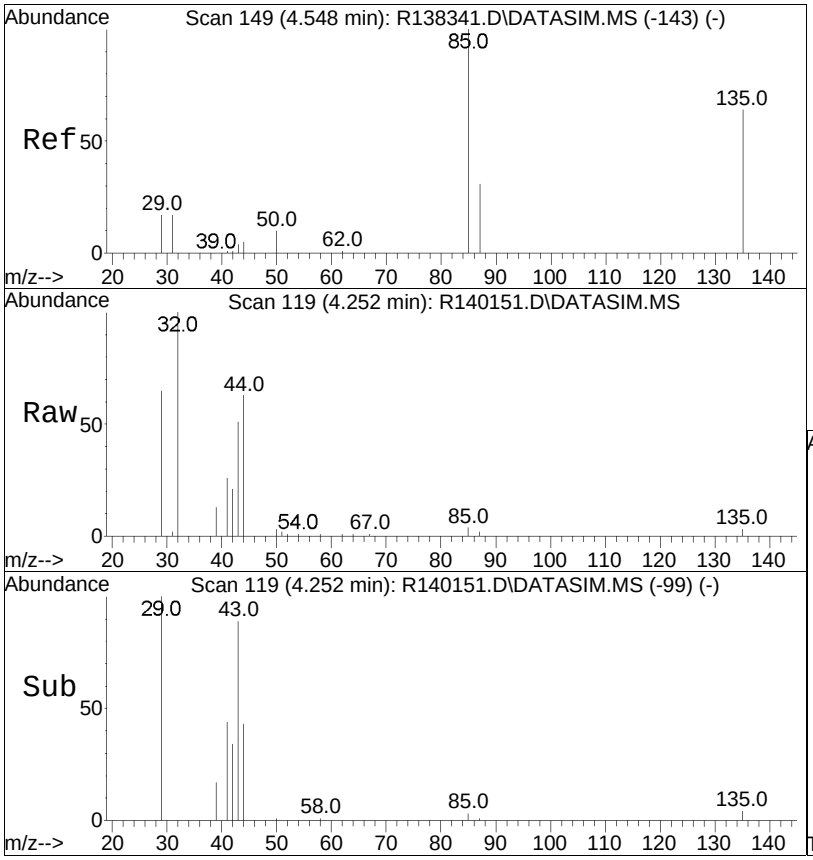



#4
chloromethane
Concen: 0.53 ppbV
RT: 4.09 min Scan# 103
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 50 Resp: 3628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.3 | 26.4 | 39.6 |

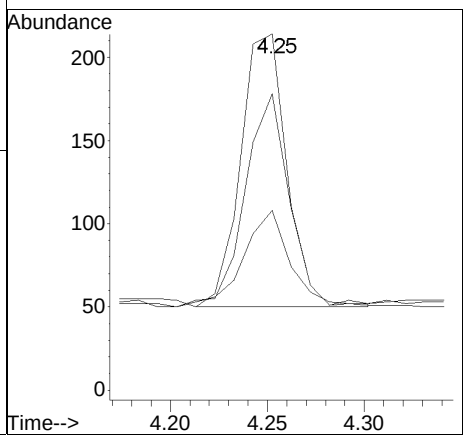


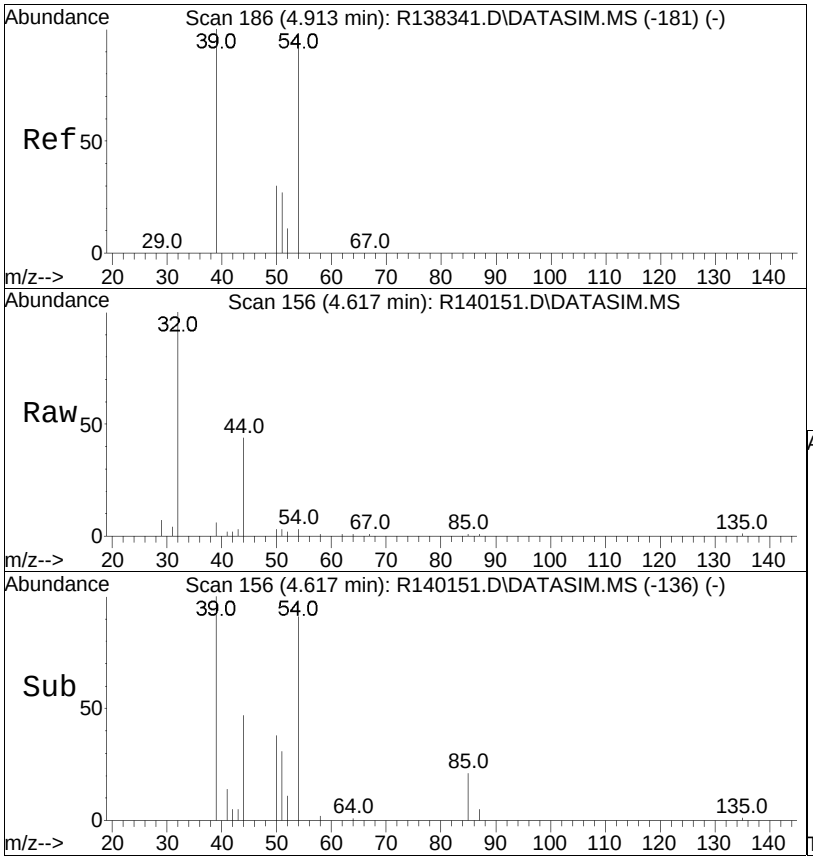



#5
Freon-114
Concen: 0.01 ppbV
RT: 4.25 min Scan# 119
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 85 Resp: 274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 50.5 | 26.3 | 39.5# |
| 135 | 83.2 | 60.5 | 90.7 |

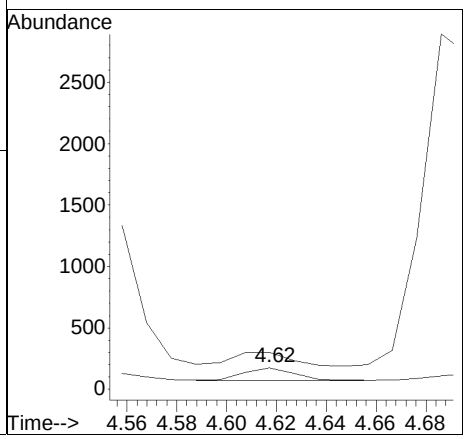


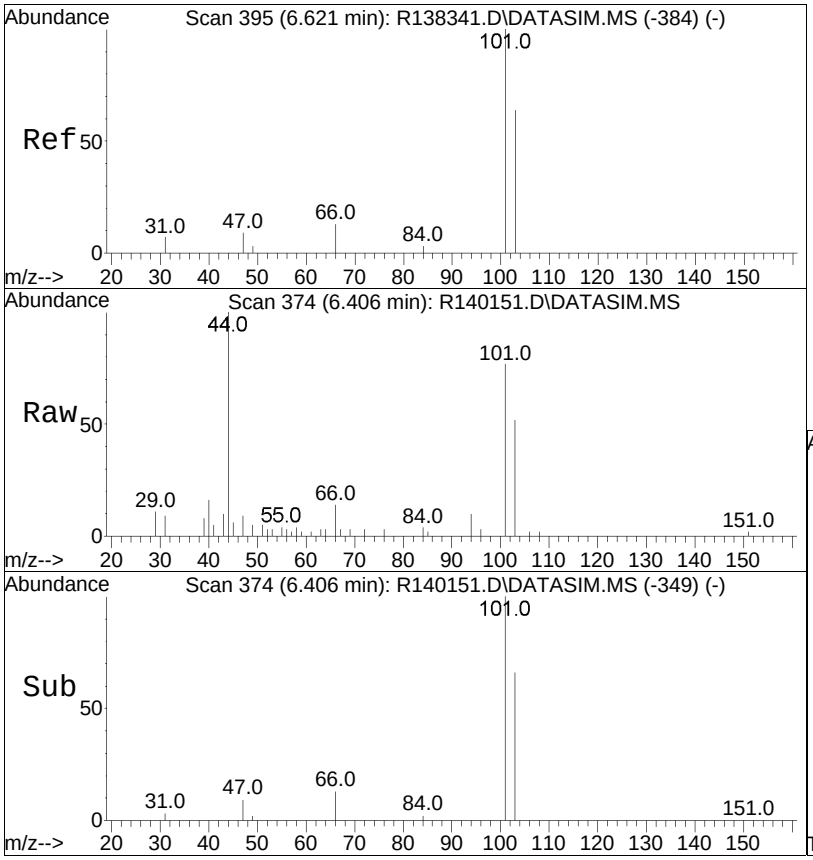



#7
1,3-butadiene
Concen: 0.03 ppbV
RT: 4.62 min Scan# 156
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 54 Resp: 144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 172.0 | 84.0 | 126.0# |

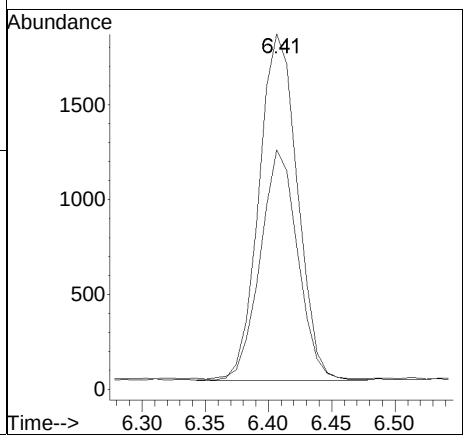


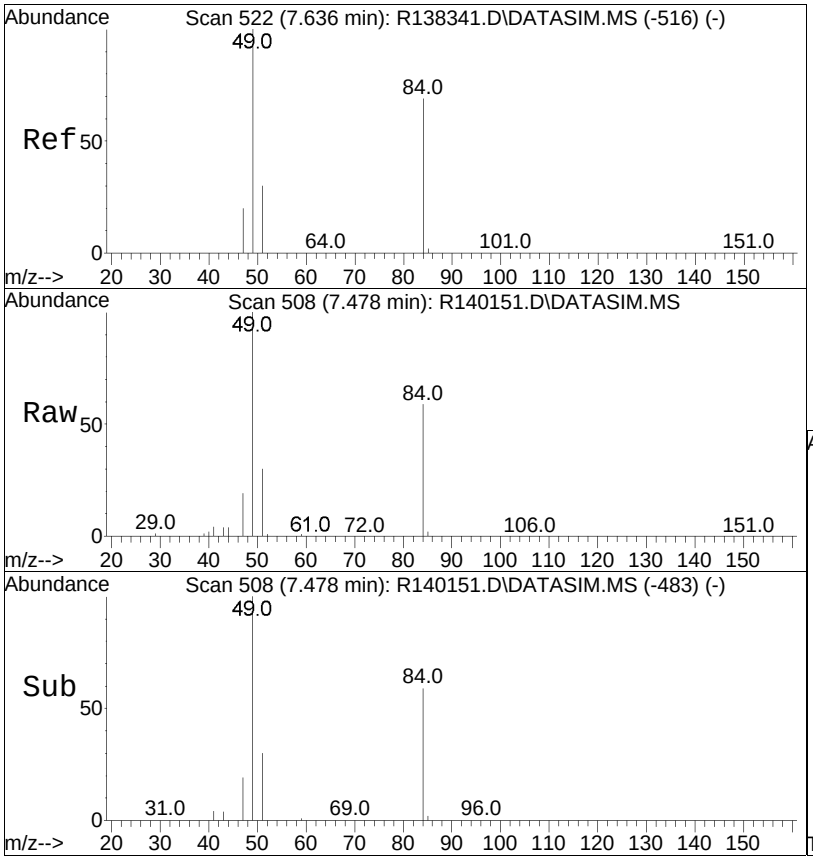



#13
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 6.41 min Scan# 374
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:101 Resp: 3856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.4 | 51.2 | 76.8 |

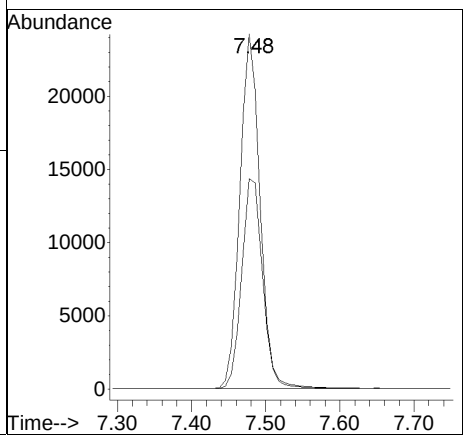


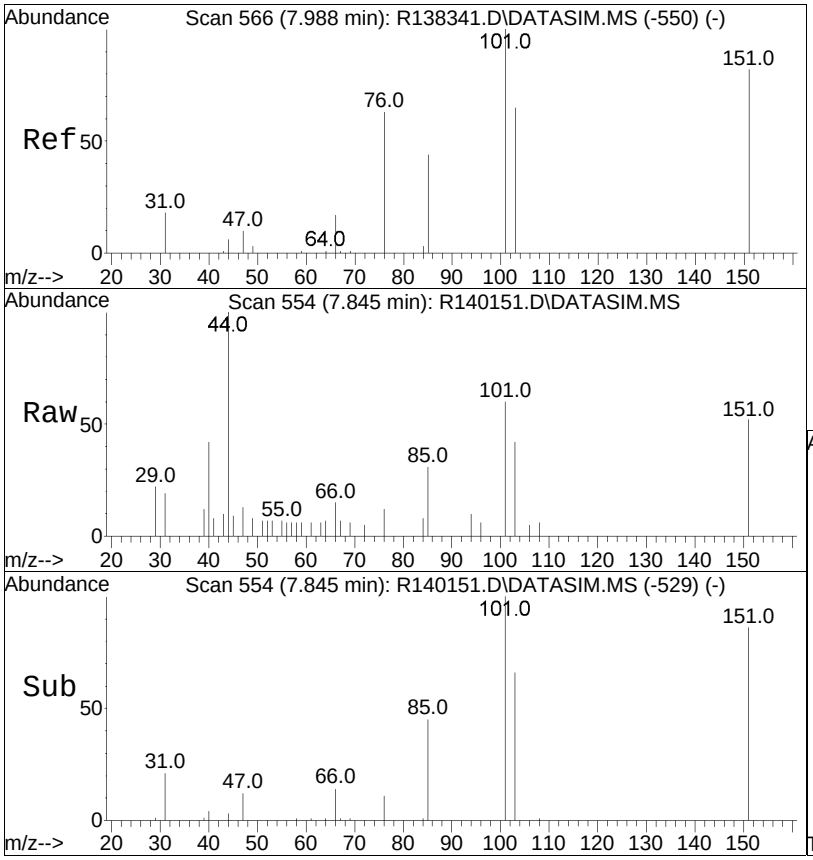



#17
methylene chloride
Concen: 4.67 ppbV
RT: 7.48 min Scan# 508
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 49 Resp: 45931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 59.3 | 46.7 | 70.1 |

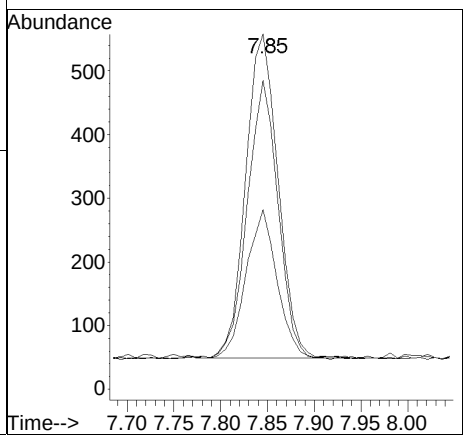


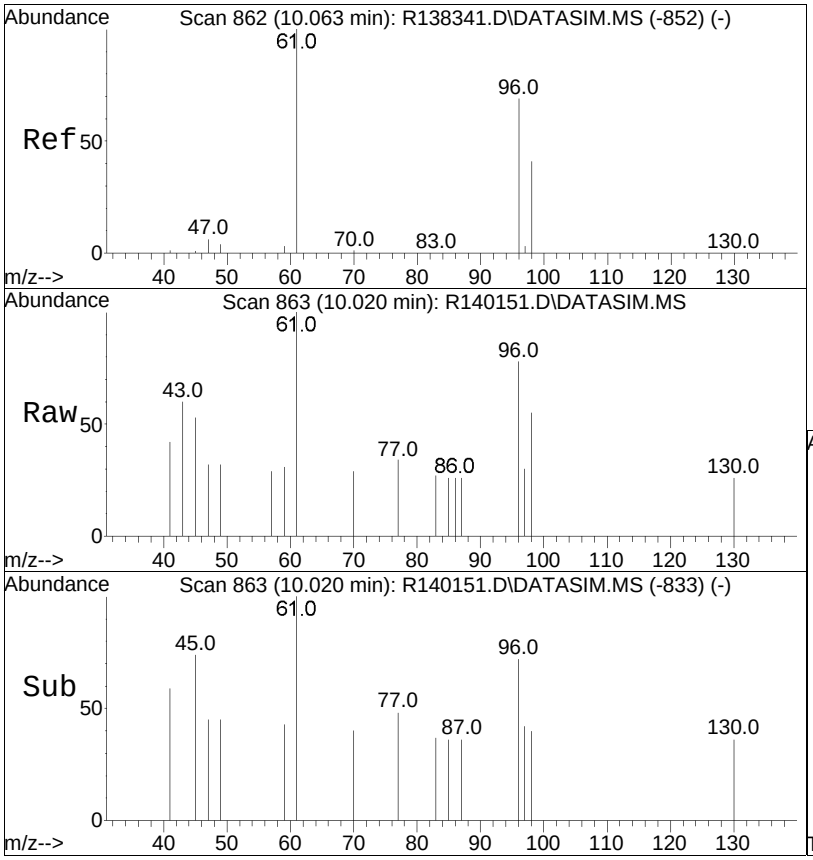



#20
Freon 113
Concen: 0.08 ppbV
RT: 7.85 min Scan# 554
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:101 Resp: 1229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 50.5 | 34.5 | 51.7 |
| 151 | 86.9 | 67.4 | 101.2 |

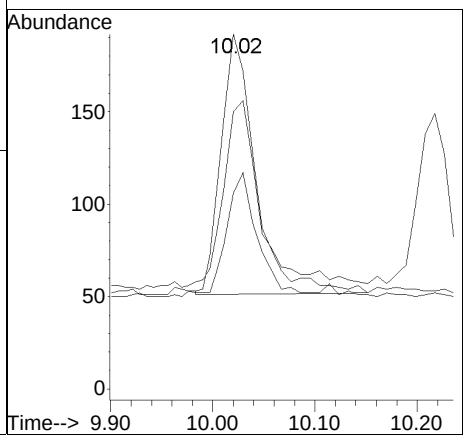


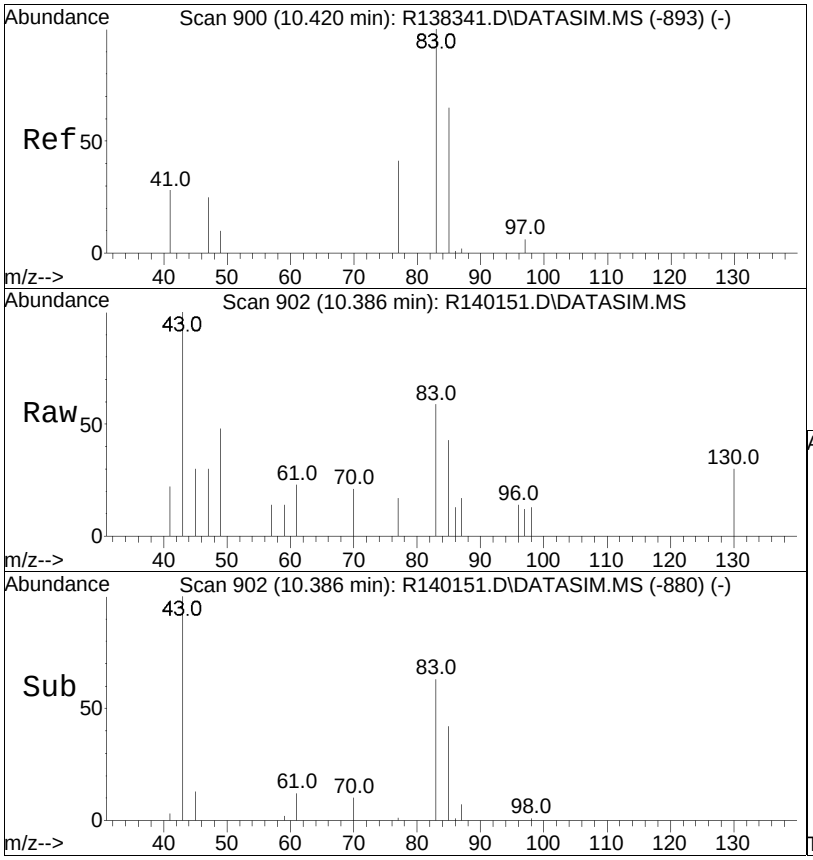



#27
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 10.02 min Scan# 863
Delta R.T. 0.009 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 61 Resp: 333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 78.1 | 50.6 | 76.0# |
| 98 | 55.2 | 30.6 | 45.8# |

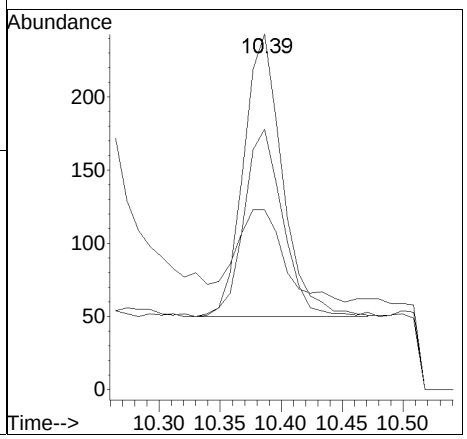


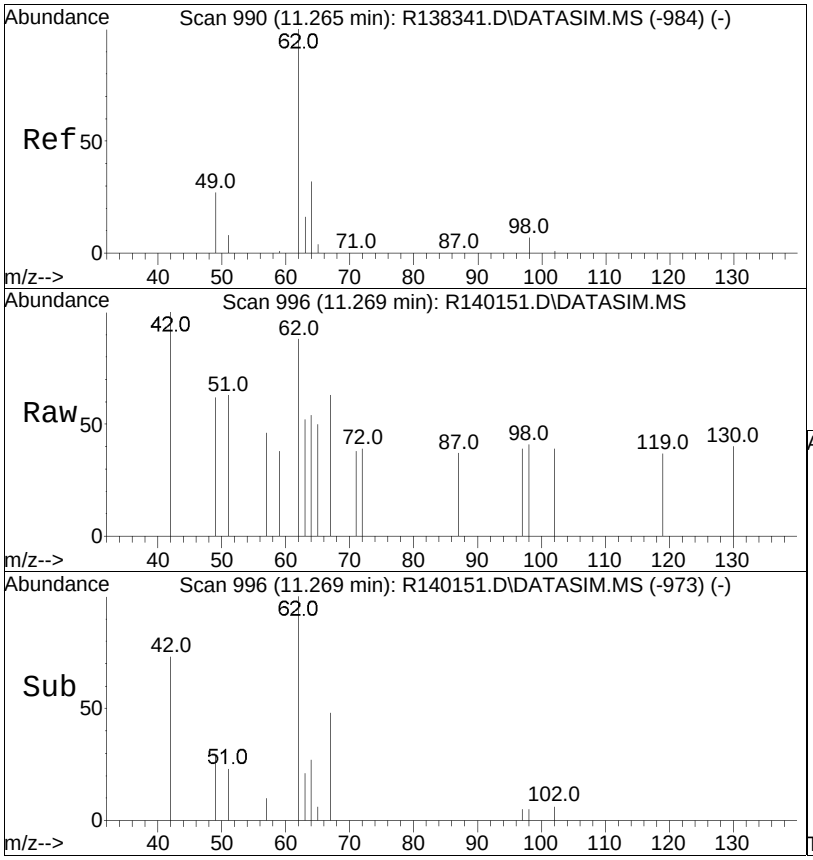



#29
chloroform
Concen: 0.02 ppbV
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 83 Resp: 427

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 73.3 | 50.9 | 76.3 |
| 47 | 50.6 | 24.9 | 37.3# |

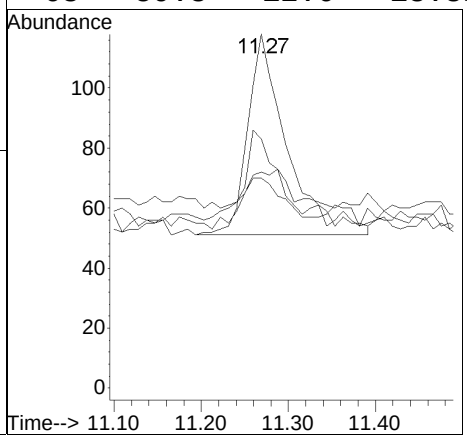


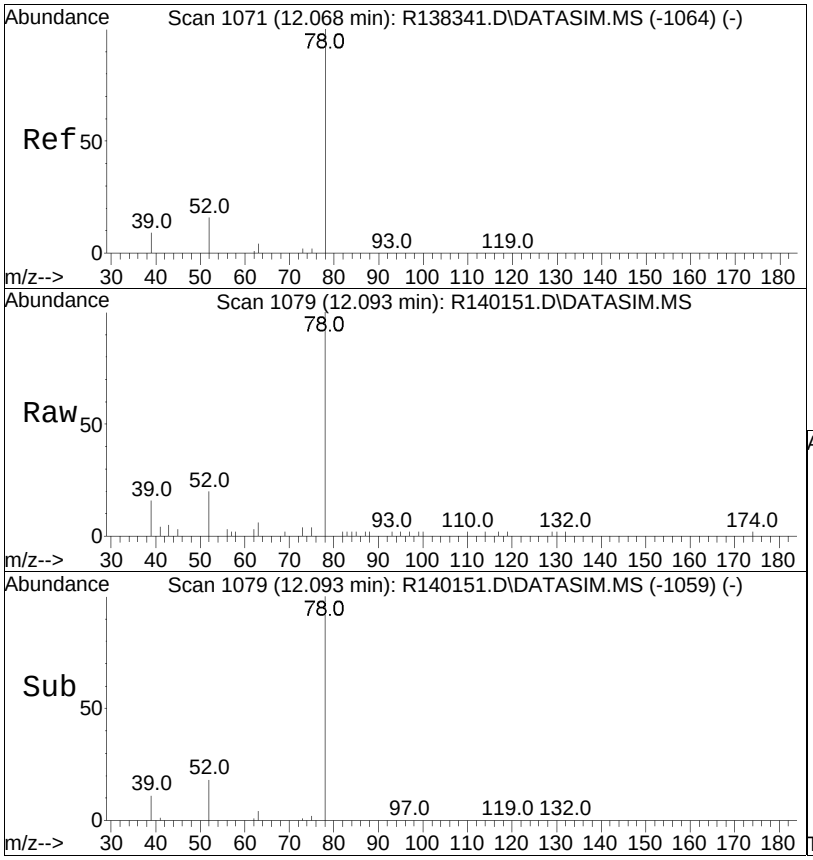



#31
1,2-dichloroethane
Concen: 0.02 ppbV
RT: 11.27 min Scan# 996
Delta R.T. 0.019 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 62 Resp: 211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 61.0 | 24.4 | 36.6# |
| 49 | 70.3 | 26.7 | 40.1# |
| 63 | 59.3 | 12.6 | 18.8# |

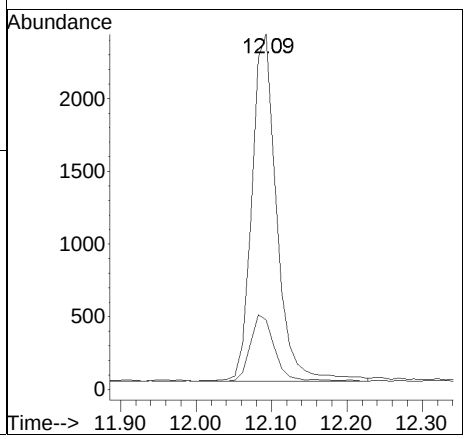


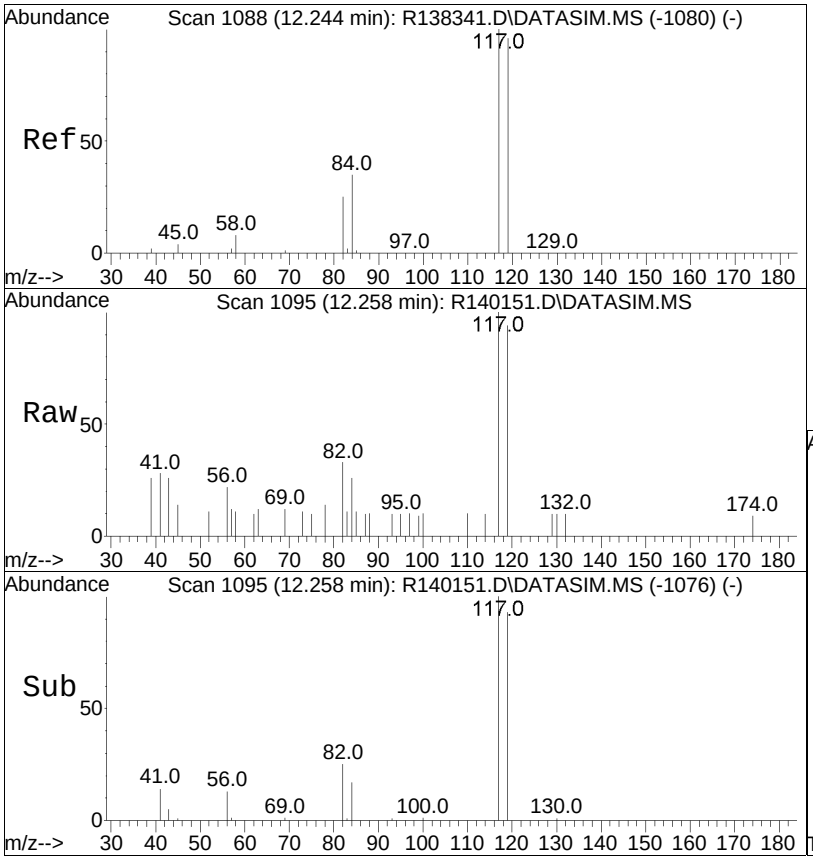



#36
benzene
Concen: 0.26 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 78 Resp: 5480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 19.6 | 15.4 | 23.0 |

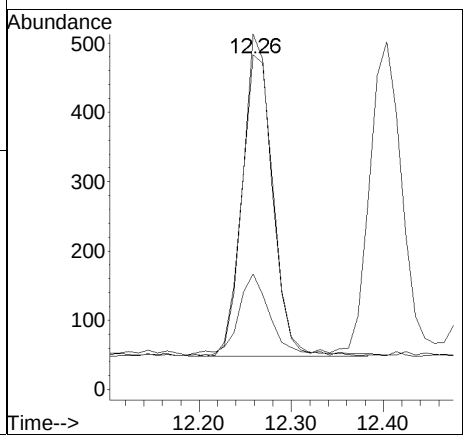


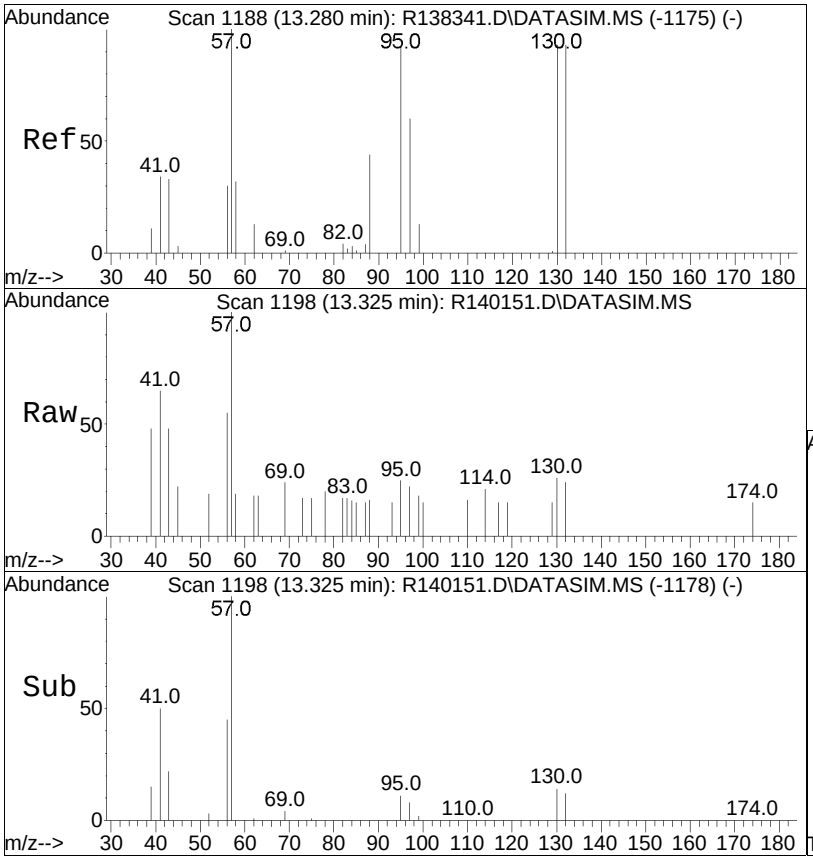



#37
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:117 Resp: 1045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.2 | 78.5 | 117.7 |
| 82 | 32.6 | 19.8 | 29.8# |

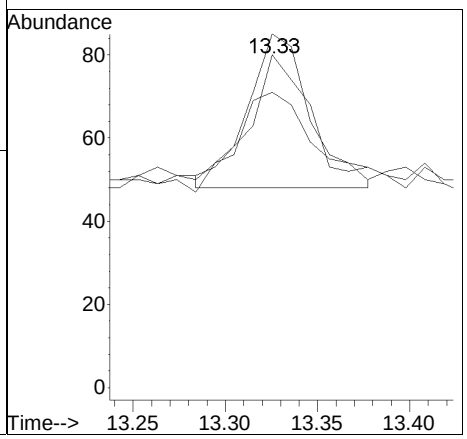


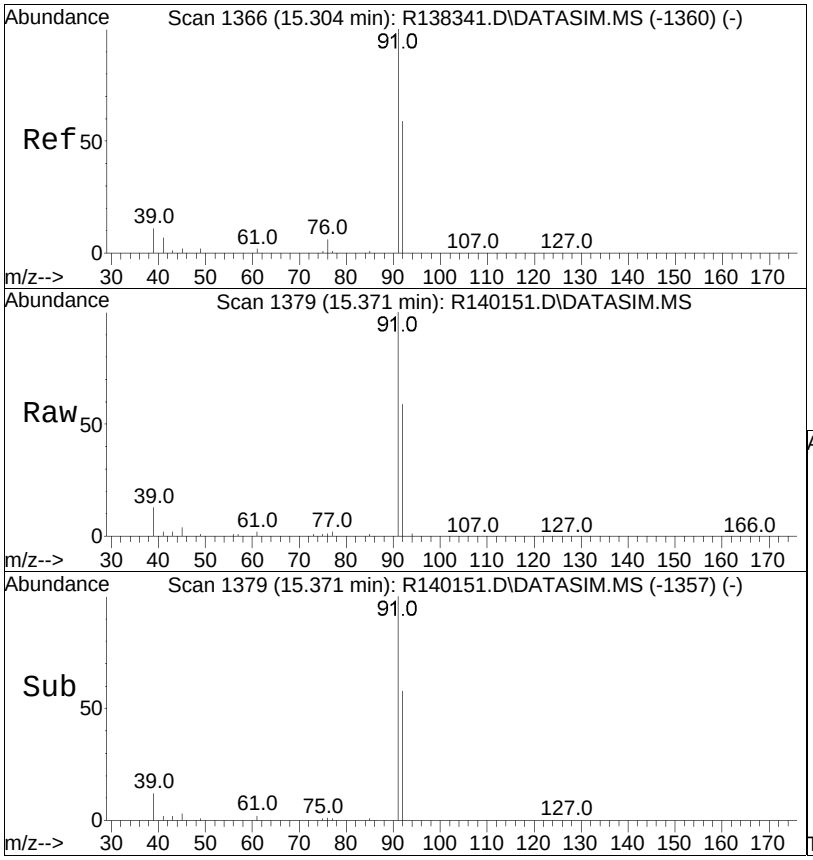



#42
trichloroethene
Concen: 0.01 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:130 Resp: 88

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 94.1 | 76.0 | 114.0 |
| 97 | 83.5 | 51.8 | 77.8# |

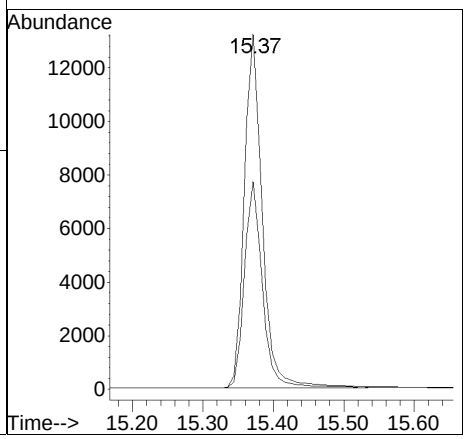


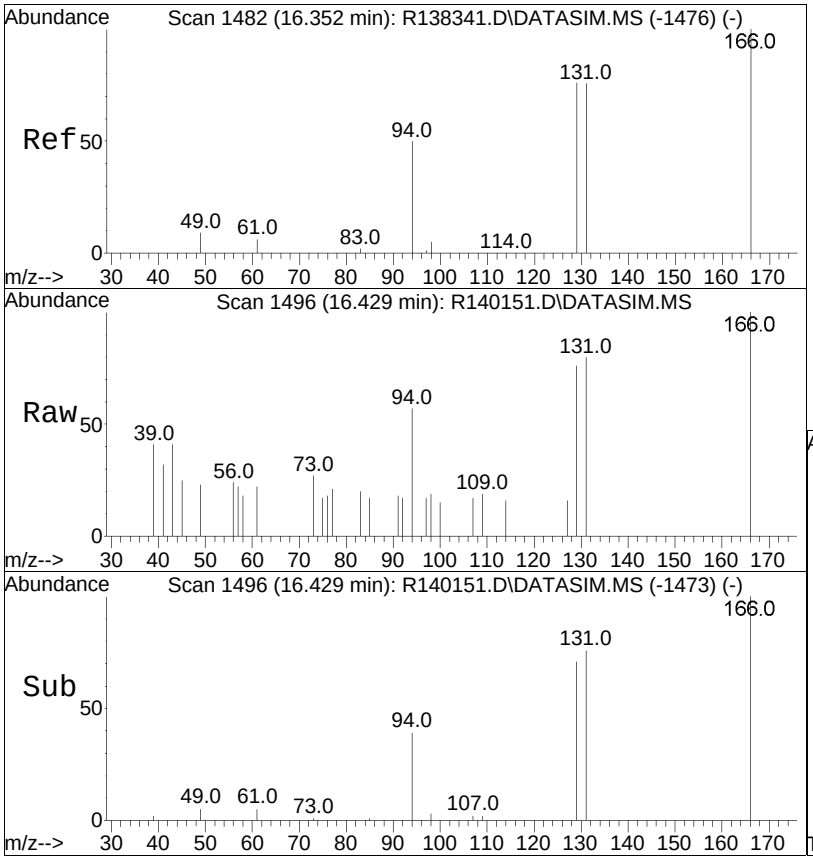



#50
toluene
Concen: 0.84 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 23595

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 58.5 | 47.2 | 70.8 |

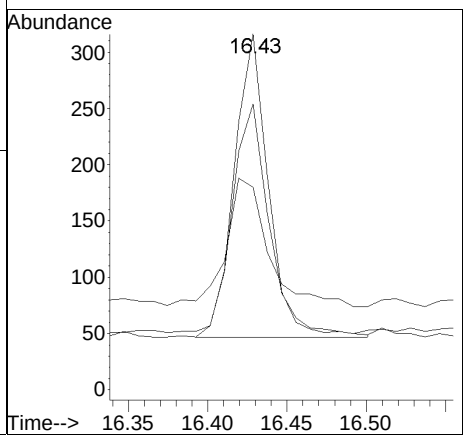


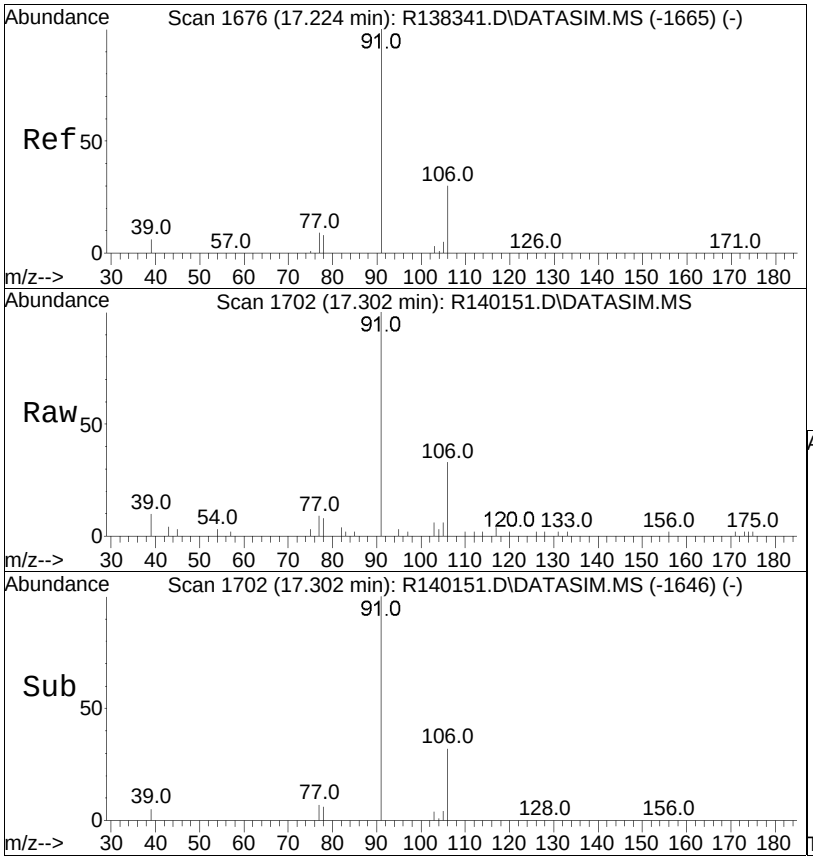



#55
tetrachloroethene
Concen: 0.03 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:166 Resp: 404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 80.4 | 61.7 | 92.5 |
| 94 | 57.0 | 38.0 | 57.0 |

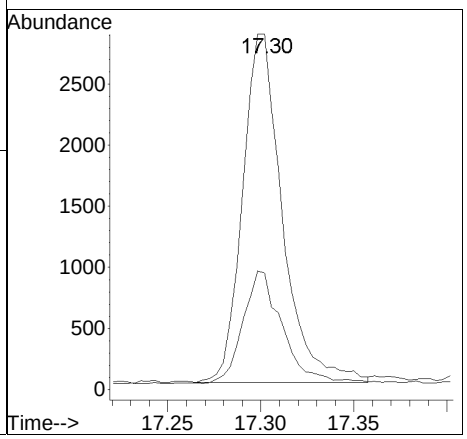


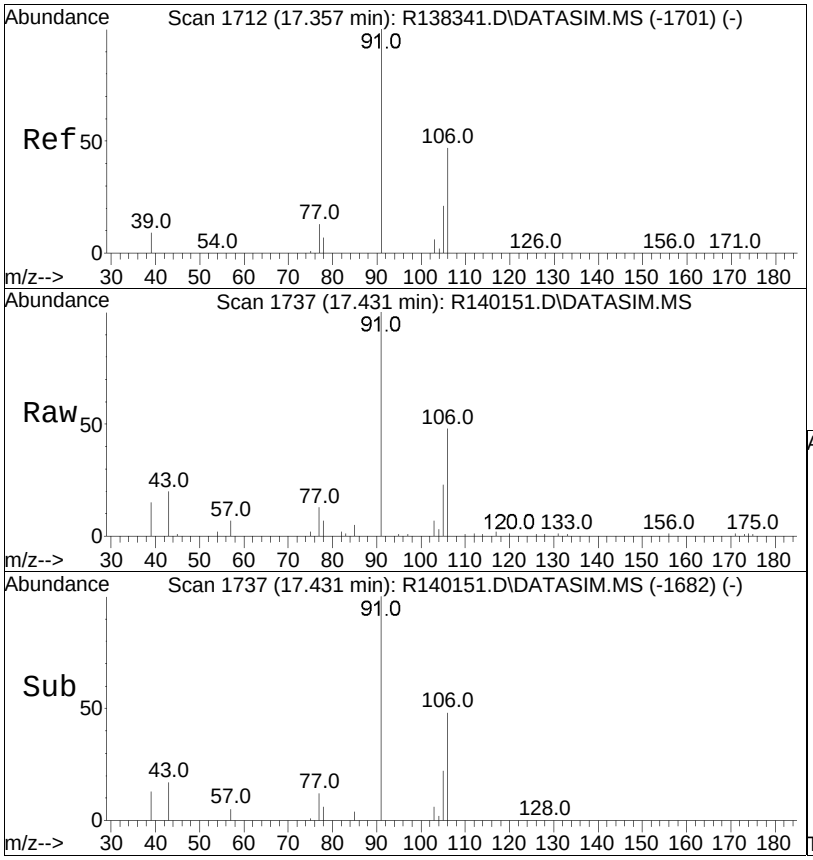



#58
ethylbenzene
Concen: 0.11 ppbV
RT: 17.30 min Scan# 1702
Delta R.T. 0.007 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 4261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.8 | 25.4 | 38.0 |

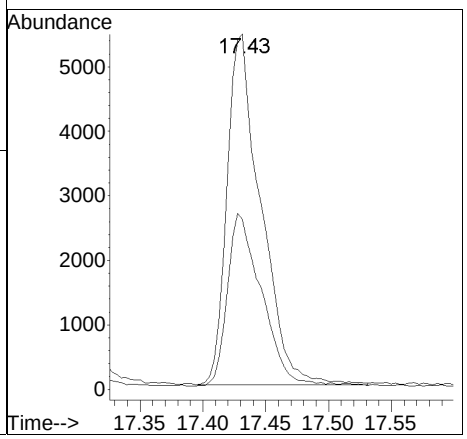


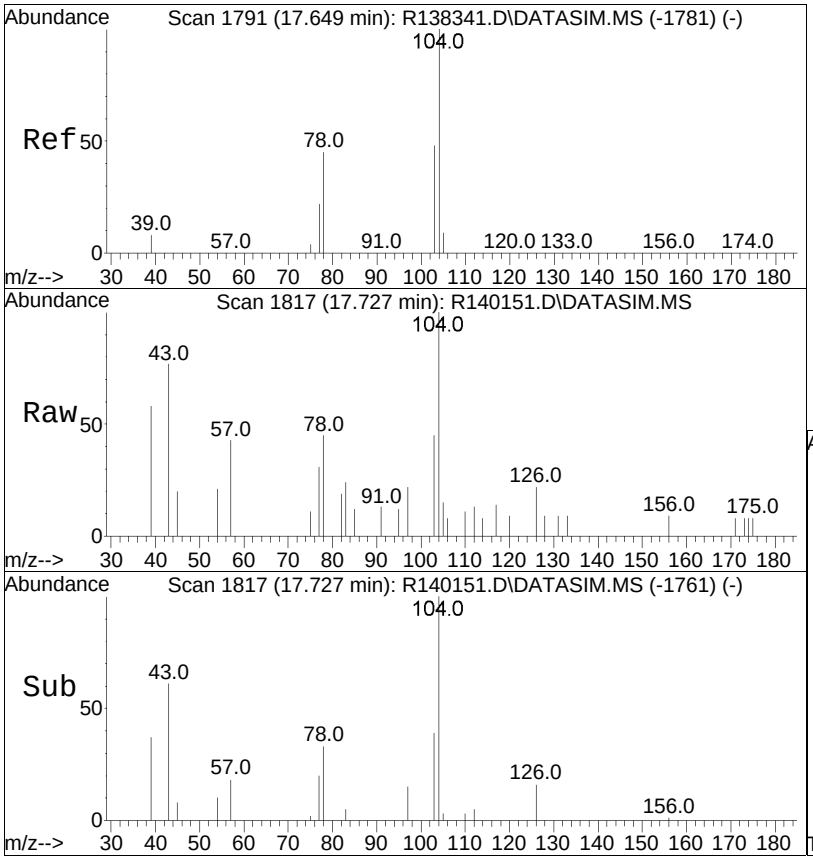



#59
m+p-xylene
Concen: 0.35 ppbV
RT: 17.43 min Scan# 1737
Delta R.T. 0.004 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 10219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 47.9 | 39.7 | 59.5 |

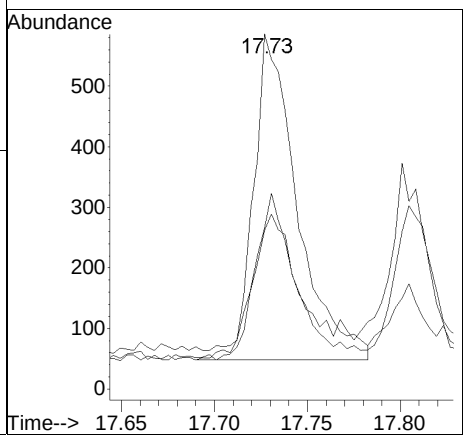


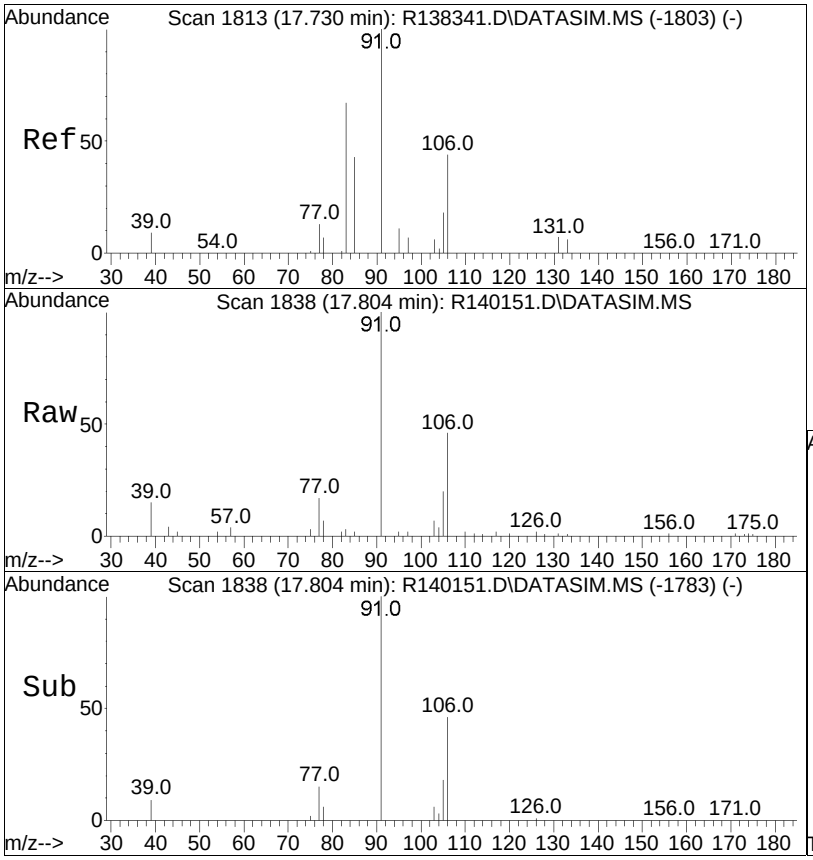



#61
styrene
Concen: 0.04 ppbV
RT: 17.73 min Scan# 1817
Delta R.T. 0.007 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:104 Resp: 881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 45.4 | 38.5 | 57.7 |
| 78 | 44.7 | 33.7 | 50.5 |

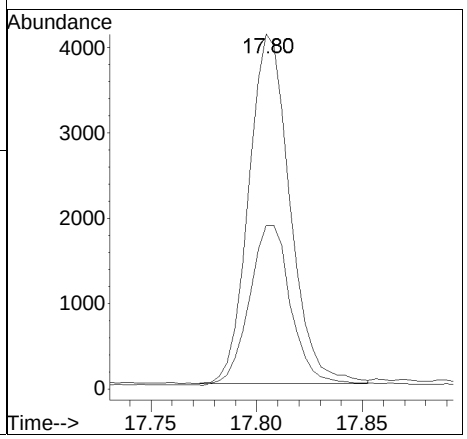


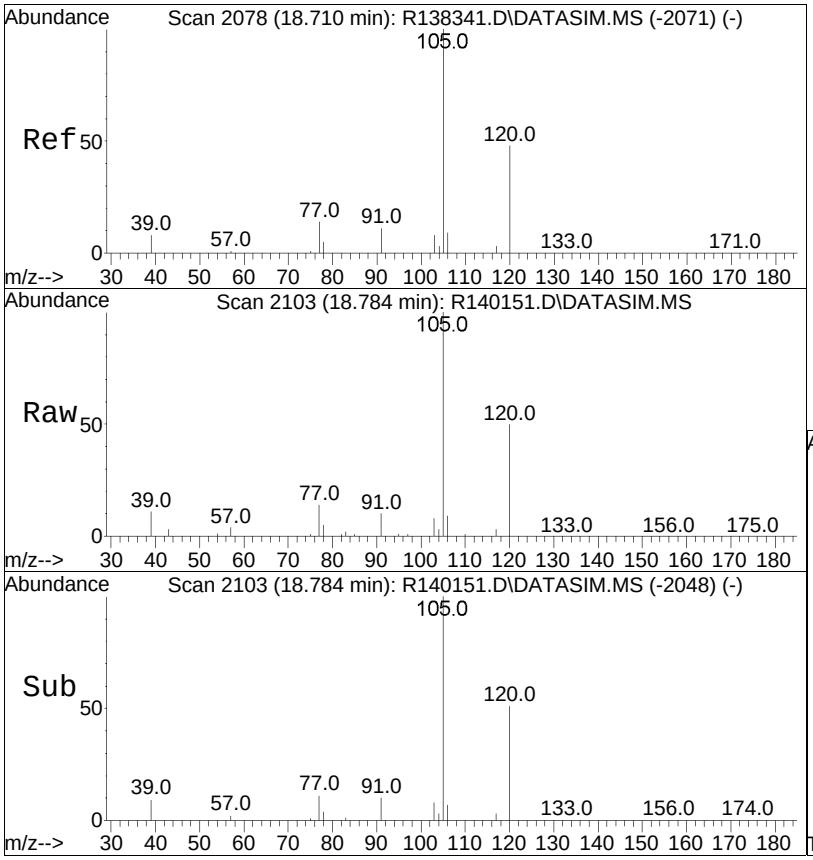



#63
o-xylene
Concen: 0.18 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.004 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 91 Resp: 5555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 46.2 | 37.6 | 56.4 |

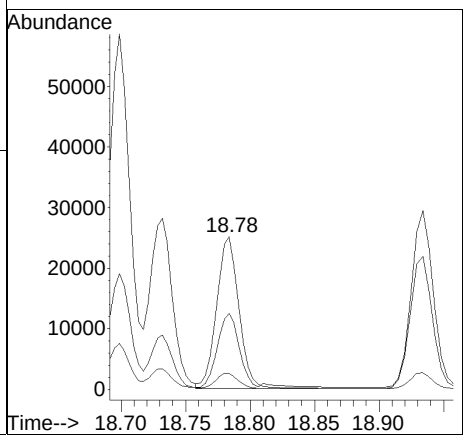


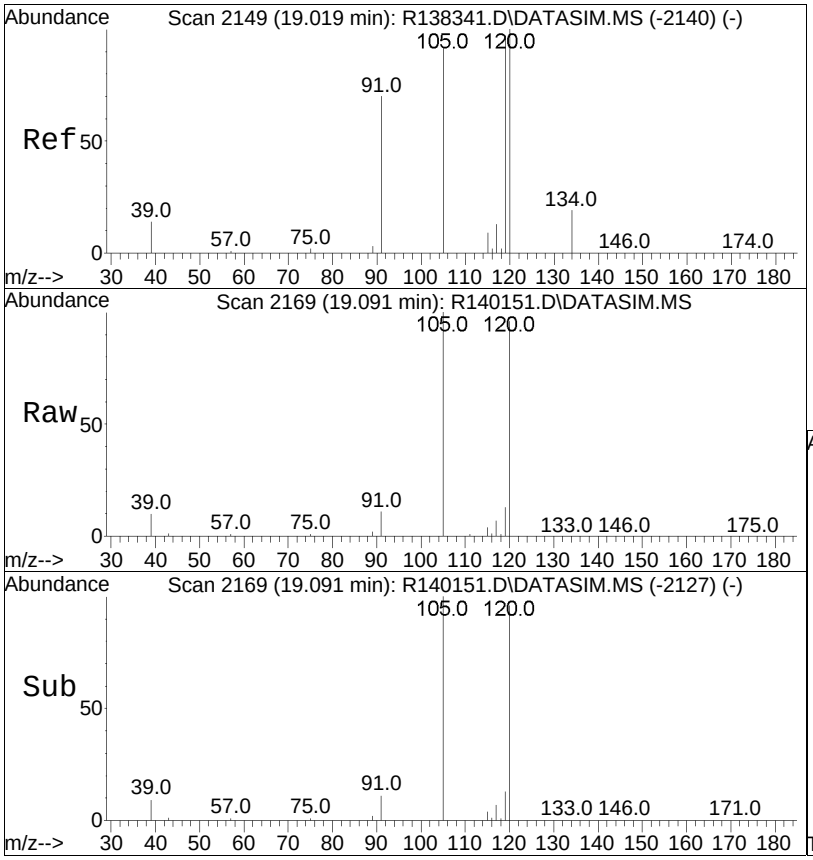



#67
1,3,5-trimethylbenzene
Concen: 0.82 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:105 Resp: 34837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.8 | 40.4 | 60.6 |
| 91 | 10.4 | 8.4 | 12.6 |

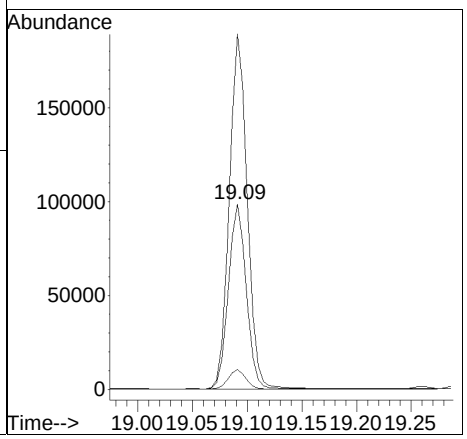


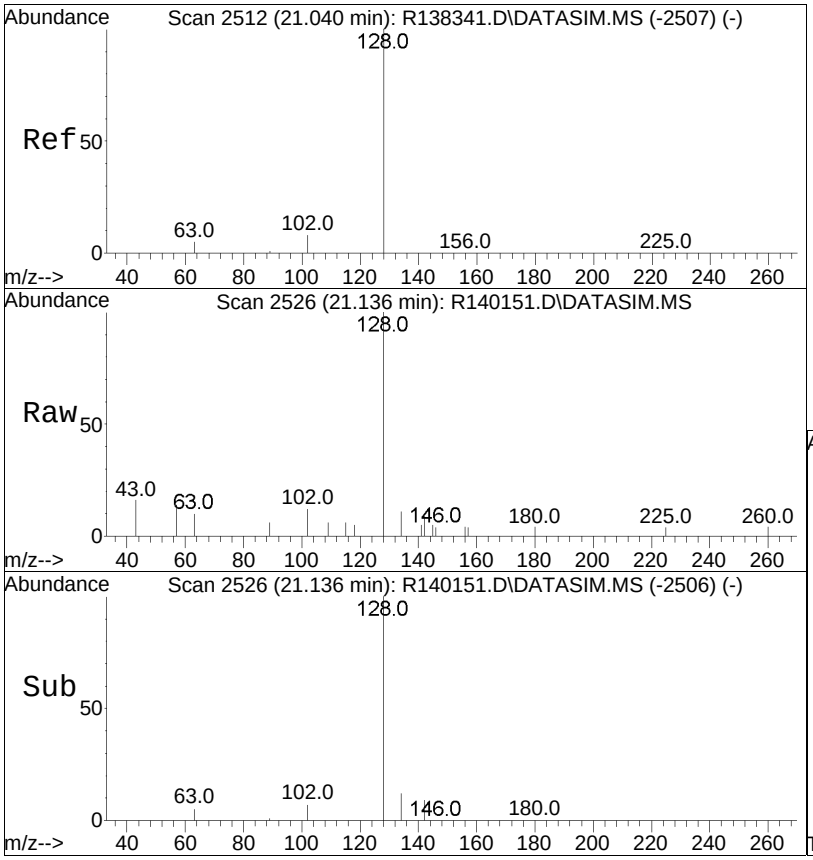



#69
1,2,4-trimethylbenzene
Concen: 3.07 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:105 Resp: 112076

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 191.7 | 184.1 | 276.1 |
| 91 | 10.7 | 57.4 | 86.2# |

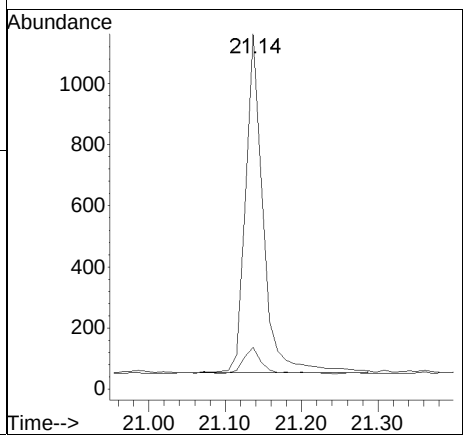





#78
naphthalene
Concen: 0.03 ppbV
RT: 21.14 min Scan# 2526
Delta R.T. 0.011 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:128 Resp: 1797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 11.8 | 6.9 | 10.3# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TSIM150102.M |
| Data File | : R140151.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 10:27 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-04,3,250,250 | Quant Date | : 3/12/2015 7:18 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140152.D
Acq On : 11 Mar 2015 10:59 pm
Operator : AIRPIANO1:RY
Sample : L1504425-05,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 10:34:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 100948 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 84.81% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 234765 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 88.12% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 53564 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 91.96% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 5055 | 0.400 | ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 3555 | 0.547 | ppbV | 98 |
| 5) Freon-114 | 4.25 | 85 | 267 | 0.015 | ppbV # | 92 |
| 6) vinyl chloride | 4.39 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | 54 | 160 | 0.030 | ppbV # | 37 |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 5.27 | 64 | 41 | 0.012 | ppbV # | 1 |
| 13) trichlorofluoromethane | 6.41 | 101 | 3796 | 0.222 | ppbV | 96 |
| 16) 1,1-dichloroethene | 7.31 | | 0 | N.D. | | |
| 17) methylene chloride | 7.48 | 49 | 7332 | 0.784 | ppbV | 100 |
| 20) Freon 113 | 7.85 | 101 | 1096 | 0.076 | ppbV | 94 |
| 22) trans-1,2-dichloroethene | 8.72 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 0.00 | | 0 | N.D. | d | |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 381 | 0.033 | ppbV # | 70 |
| 29) chloroform | 10.39 | 83 | 423 | 0.025 | ppbV # | 79 |
| 31) 1,2-dichloroethane | 11.27 | 62 | 201 | 0.019 | ppbV # | 32 |
| 35) 1,1,1-trichloroethane | 11.55 | | 0 | N.D. | | |
| 36) benzene | 12.09 | 78 | 5282 | 0.240 | ppbV | 98 |
| 37) carbon tetrachloride | 12.27 | 117 | 1018 | 0.065 | ppbV | 96 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.34 | 130 | 87 | 0.008 | ppbV # | 89 |
| 45) cis-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 47) trans-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 48) 1,1,2-trichloroethane | 15.06 | | 0 | N.D. | | |
| 50) toluene | 15.37 | 91 | 23368 | 0.830 | ppbV | 100 |
| 53) dibromochloromethane | 15.78 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140152.D
Acq On : 11 Mar 2015 10:59 pm
Operator : AIRPIANO1:RY
Sample : L1504425-05,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 10:34:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 16.00 | | 0 | N.D. | | |
| 55) tetrachloroethene | 16.43 | 166 | 355 | 0.025 | ppbV # | 83 |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | | 0 | N.D. | | |
| 57) chlorobenzene | 17.01 | | 0 | N.D. | | |
| 58) ethylbenzene | 17.30 | 91 | 4177 | 0.111 | ppbV | 96 |
| 59) m+p-xylene | 17.43 | 91 | 9737 | 0.333 | ppbV | 94 |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 17.73 | 104 | 765 | 0.035 | ppbV # | 85 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.80 | 91 | 5752 | 0.186 | ppbV | 99 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 38771 | 0.907 | ppbV | 100 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 127456 | 3.462 | ppbV # | 65 |
| 71) 1,3-dichlorobenzene | 19.22 | | 0 | N.D. | | |
| 72) 1,4-dichlorobenzene | 19.28 | | 0 | N.D. | | |
| 75) 1,2-dichlorobenzene | 19.54 | | 0 | N.D. | | |
| 77) 1,2,4-trichlorobenzene | 21.01 | | 0 | N.D. | | |
| 78) naphthalene | 21.14 | 128 | 1959 | 0.036 | ppbV # | 91 |
| 80) hexachlorobutadiene | 21.45 | | 0 | N.D. | | |

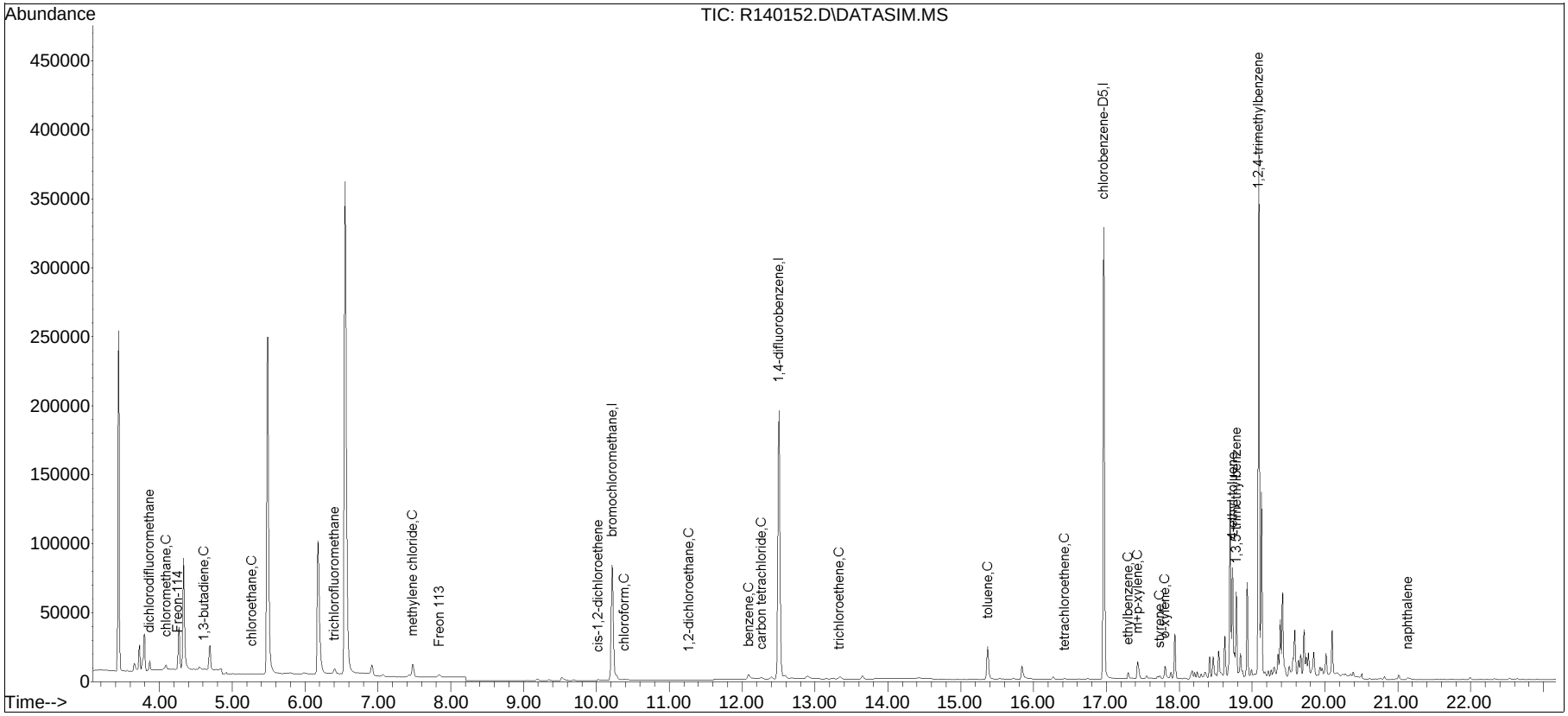
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

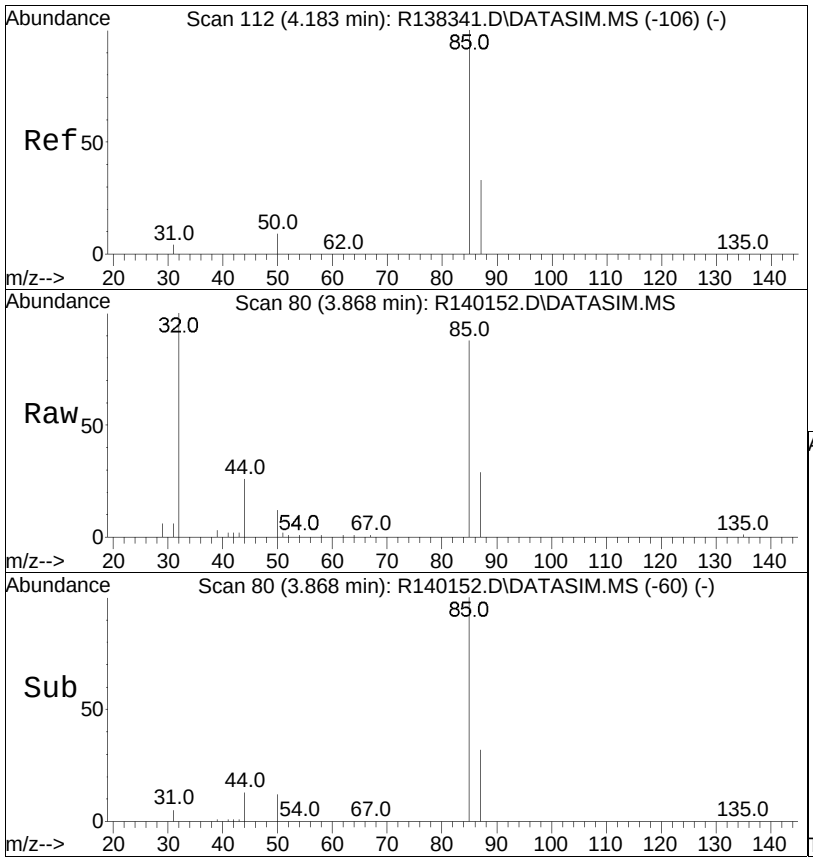
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140152.D
Acq On : 11 Mar 2015 10:59 pm
Operator : AIRPIANO1:RY
Sample : L1504425-05,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 10:34:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



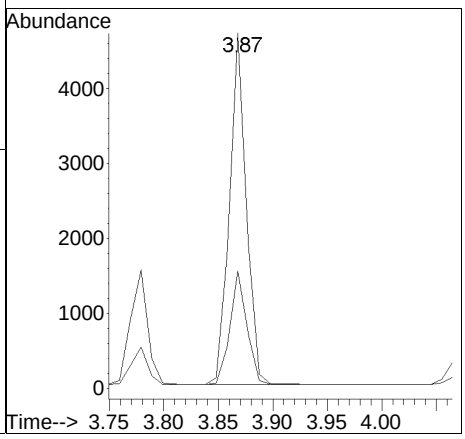

TSIM150102.M Wed Mar 25 12:04:01 2015

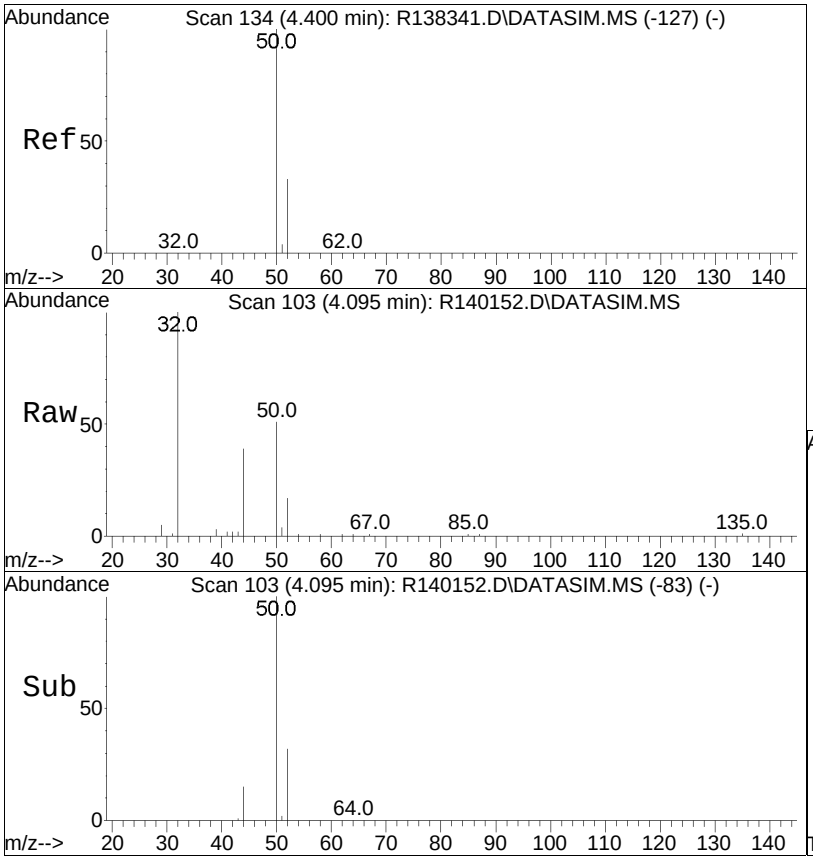



#3
dichlorodifluoromethane
Concen: 0.40 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 85 Resp: 5055

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.1 | 25.8 | 38.8 |

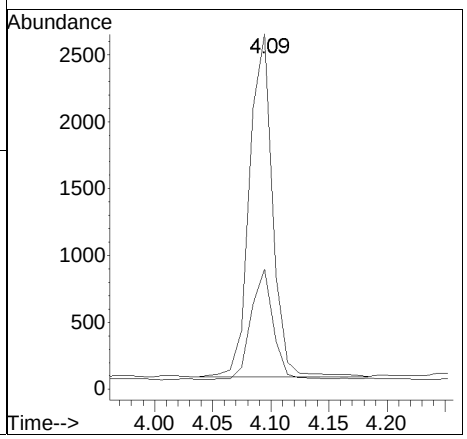


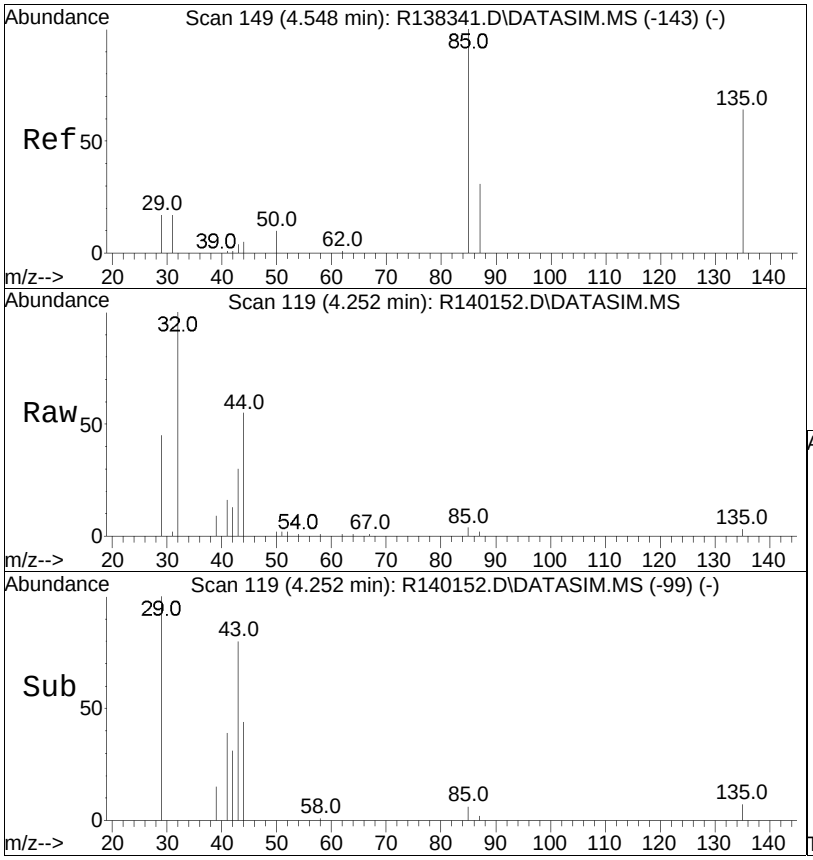



#4
chloromethane
Concen: 0.55 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 50 Resp: 3555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.9 | 26.4 | 39.6 |

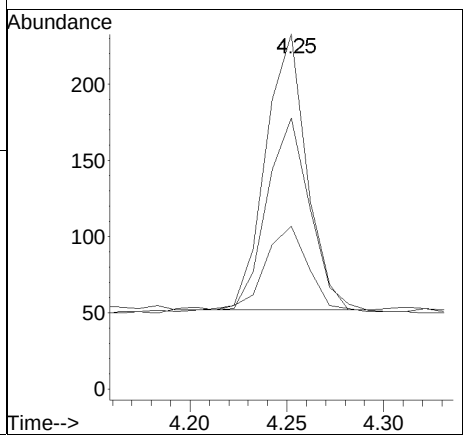


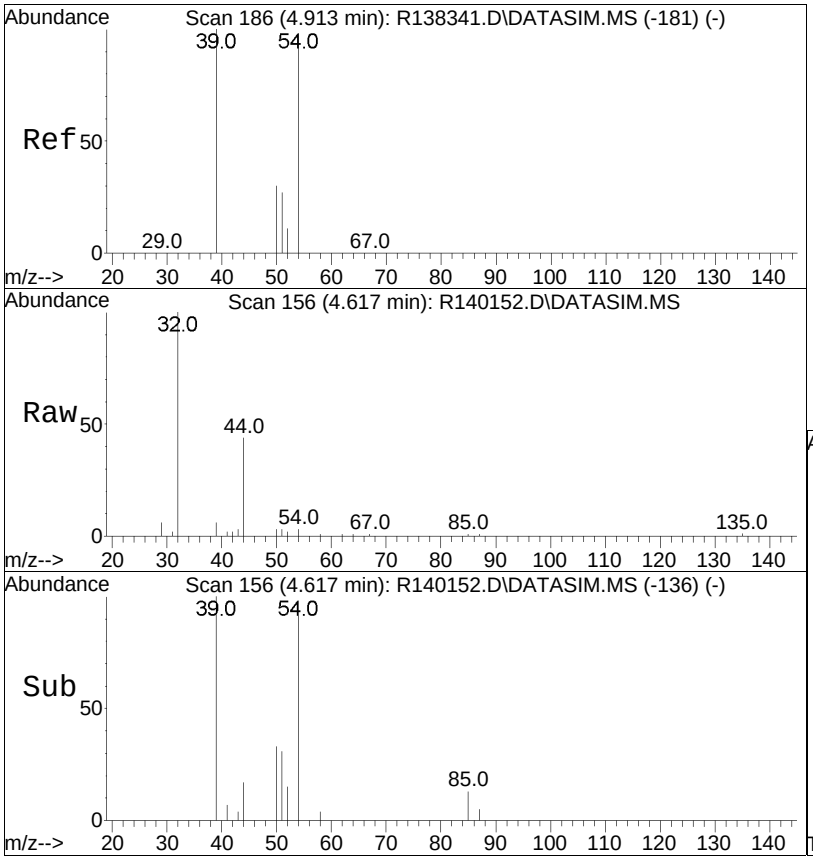



#5
Freon-114
Concen: 0.01 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 85 Resp: 267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 45.9 | 26.3 | 39.5# |
| 135 | 76.4 | 60.5 | 90.7 |

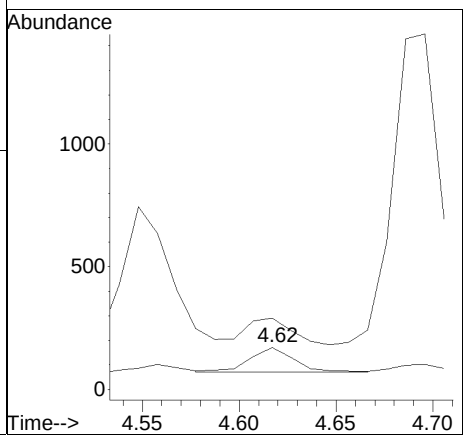


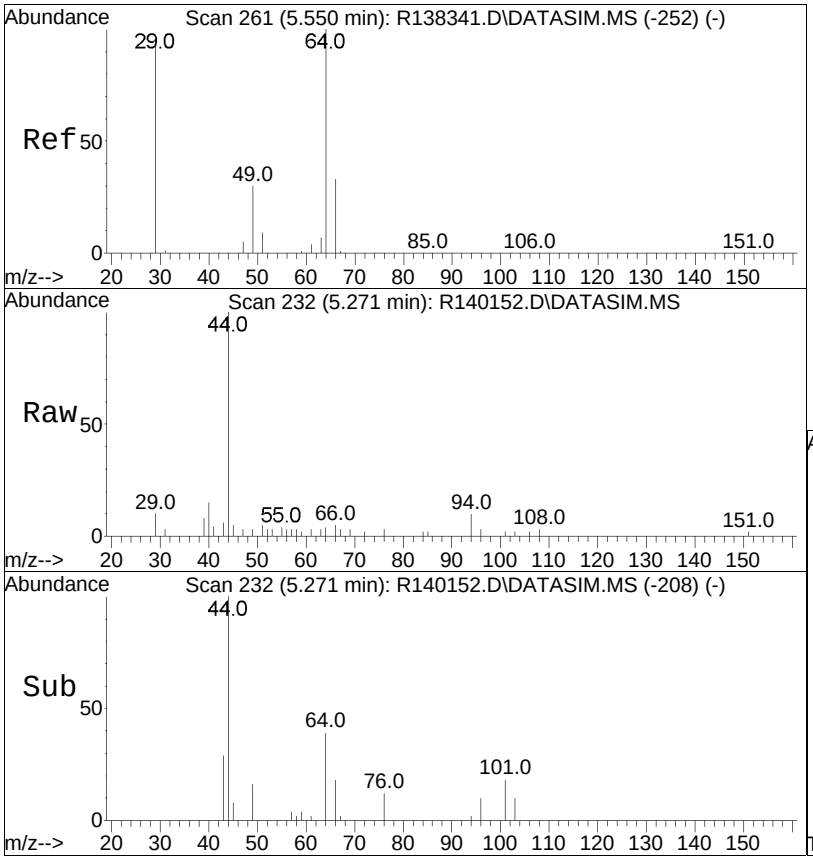



#7
1,3-butadiene
Concen: 0.03 ppbV
RT: 4.62 min Scan# 156
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 54 Resp: 160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 170.2 | 84.0 | 126.0# |

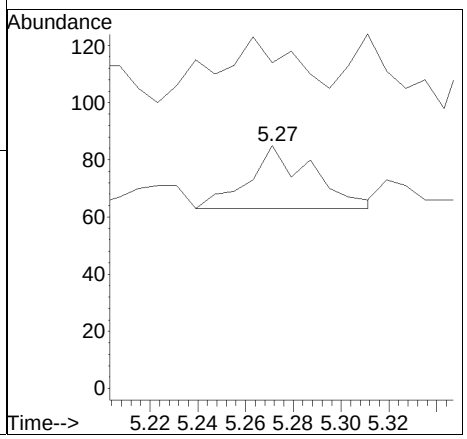


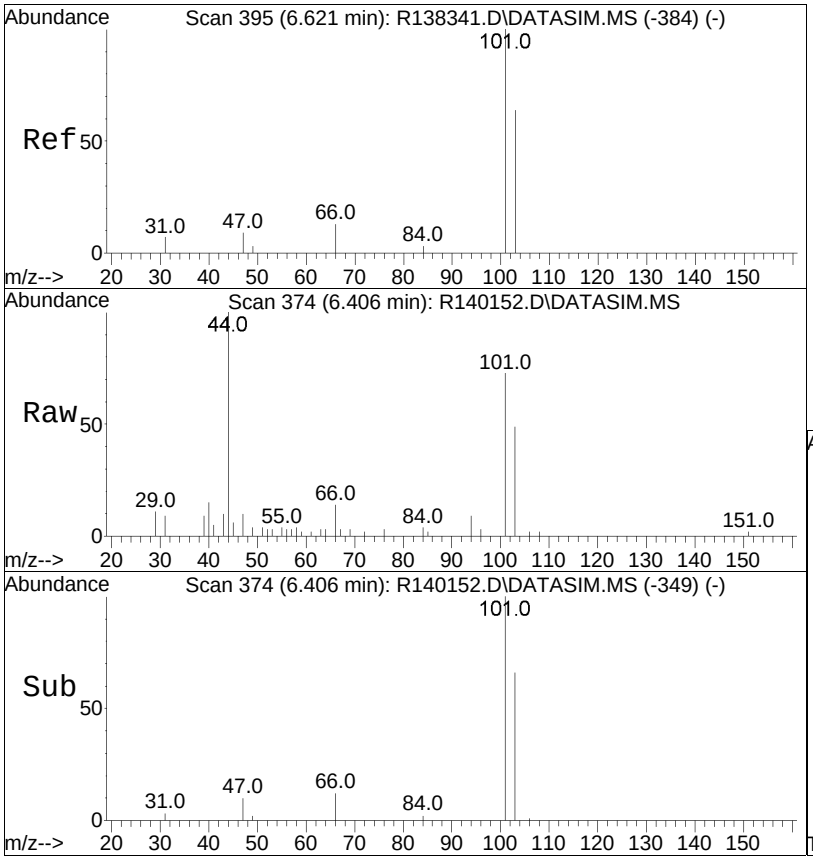



#9
chloroethane
Concen: 0.01 ppbV
RT: 5.27 min Scan# 232
Delta R.T. -0.008 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 64 Resp: 41

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 134.1 | 26.2 | 39.2# |

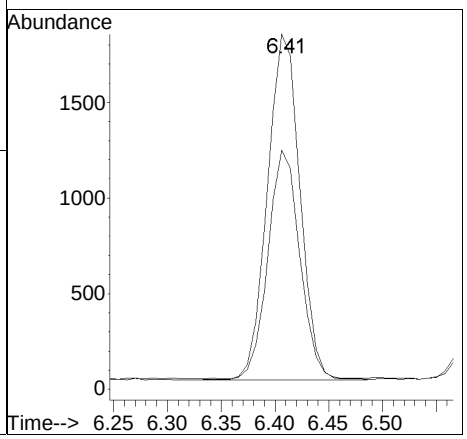


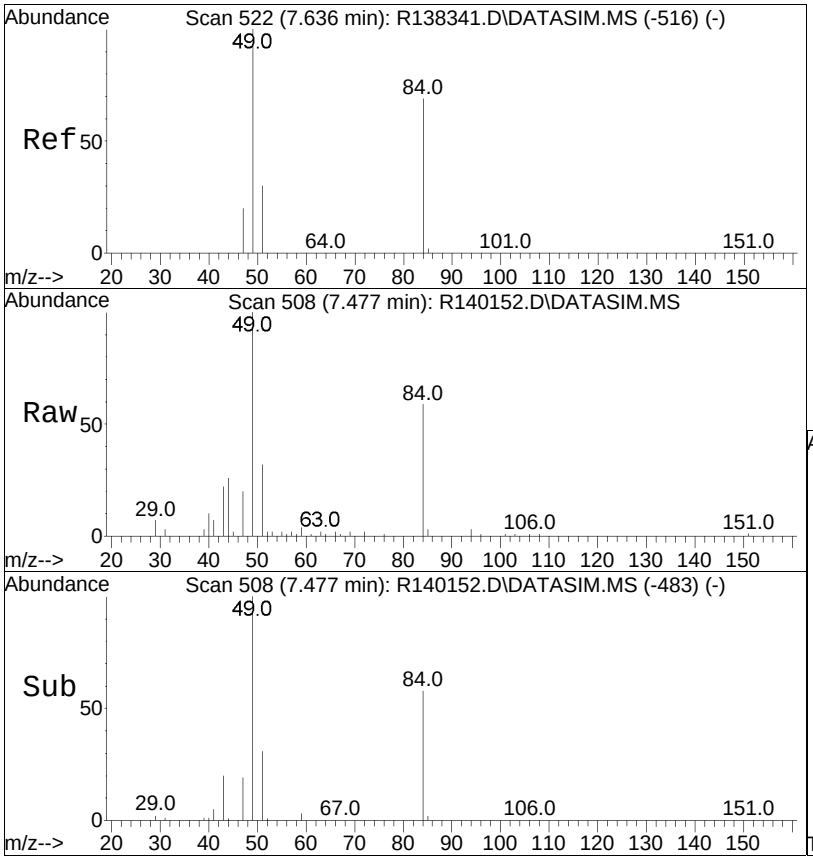



#13
trichlorofluoromethane
Concen: 0.22 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:101 Resp: 3796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.3 | 51.2 | 76.8 |

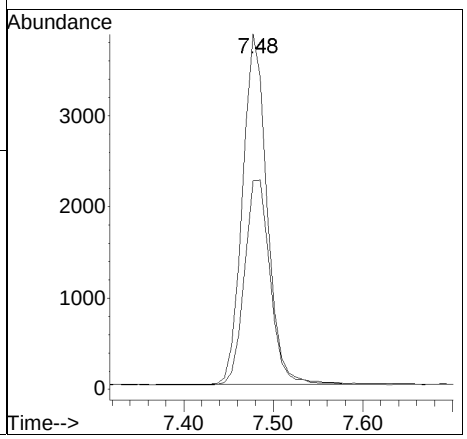


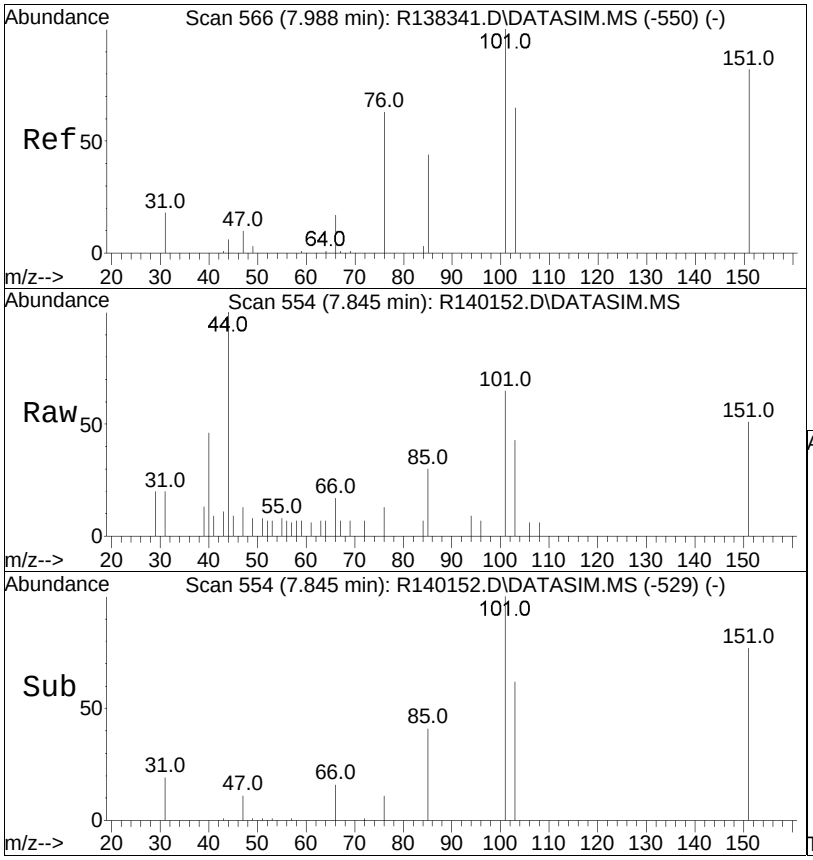



#17
methylene chloride
Concen: 0.78 ppbV
RT: 7.48 min Scan# 508
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 49 Resp: 7332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 58.7 | 46.7 | 70.1 |

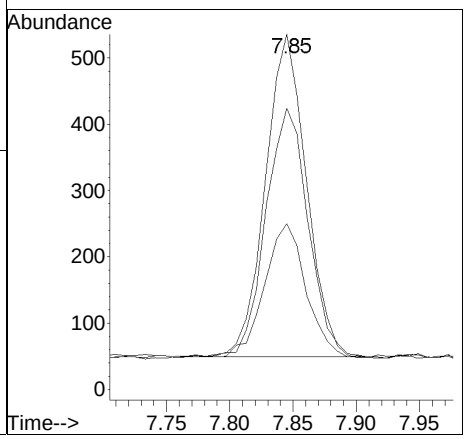


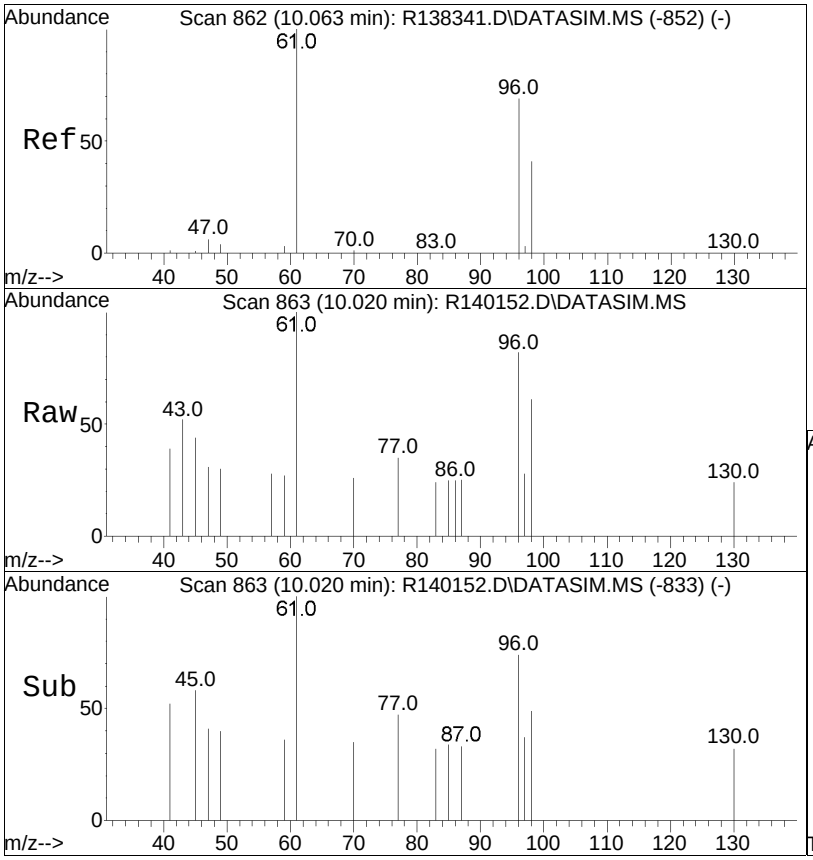



#20
Freon 113
Concen: 0.08 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:101 Resp: 1096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.6 | 34.5 | 51.7 |
| 151 | 79.1 | 67.4 | 101.2 |

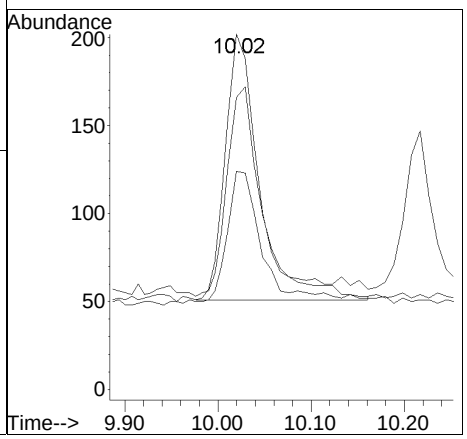


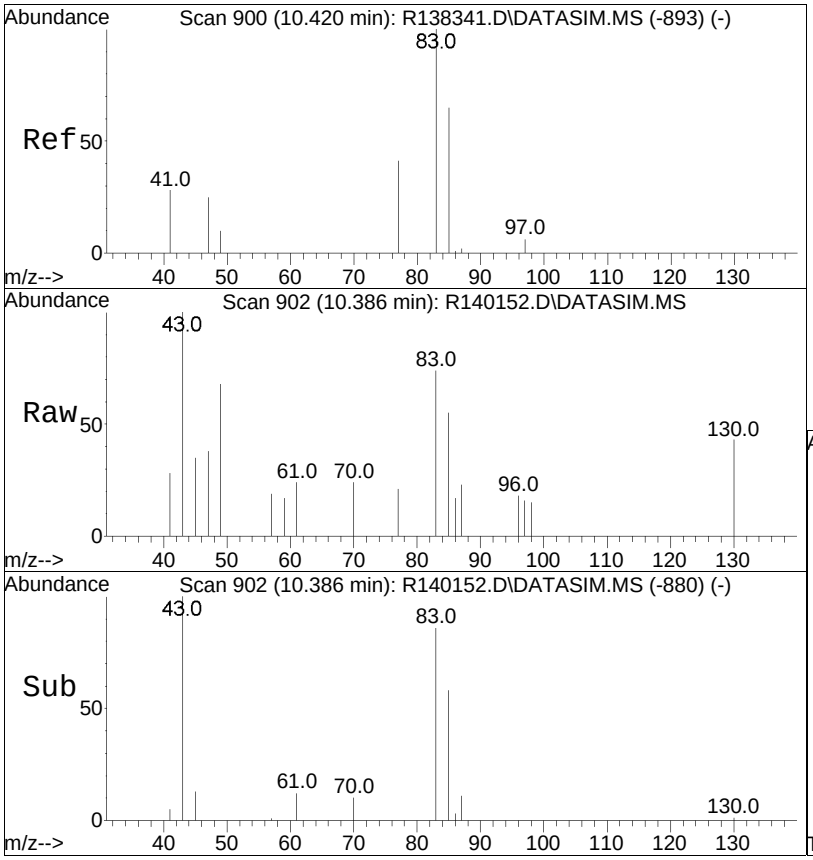



#27
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 10.02 min Scan# 863
Delta R.T. 0.009 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 61 Resp: 381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 82.2 | 50.6 | 76.0# |
| 98 | 61.4 | 30.6 | 45.8# |

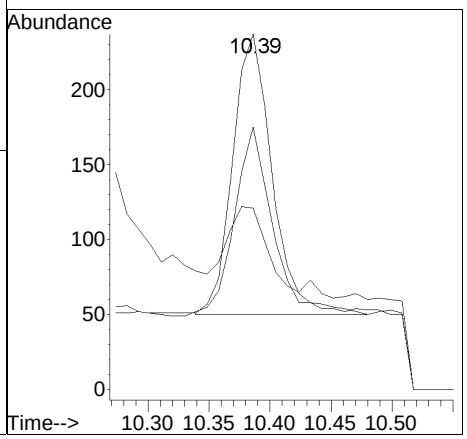


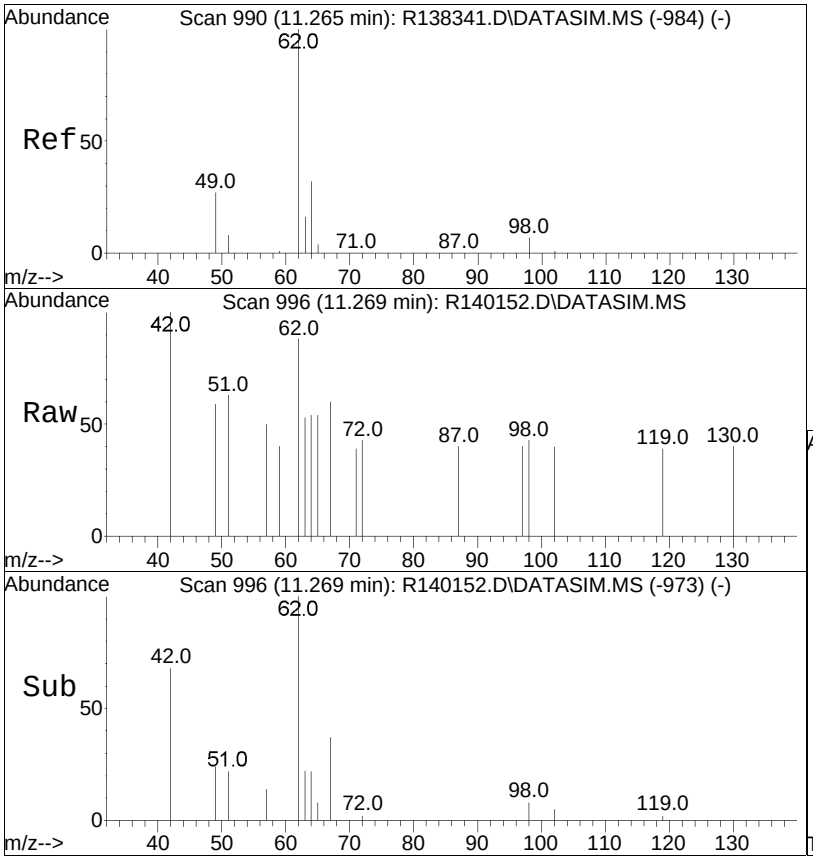



#29
chloroform
Concen: 0.02 ppbV
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 83 Resp: 423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 73.8 | 50.9 | 76.3 |
| 47 | 51.1 | 24.9 | 37.3# |

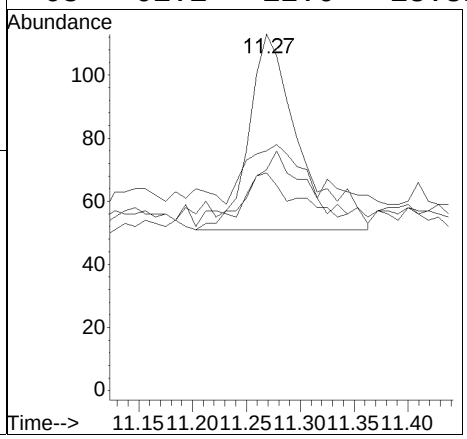


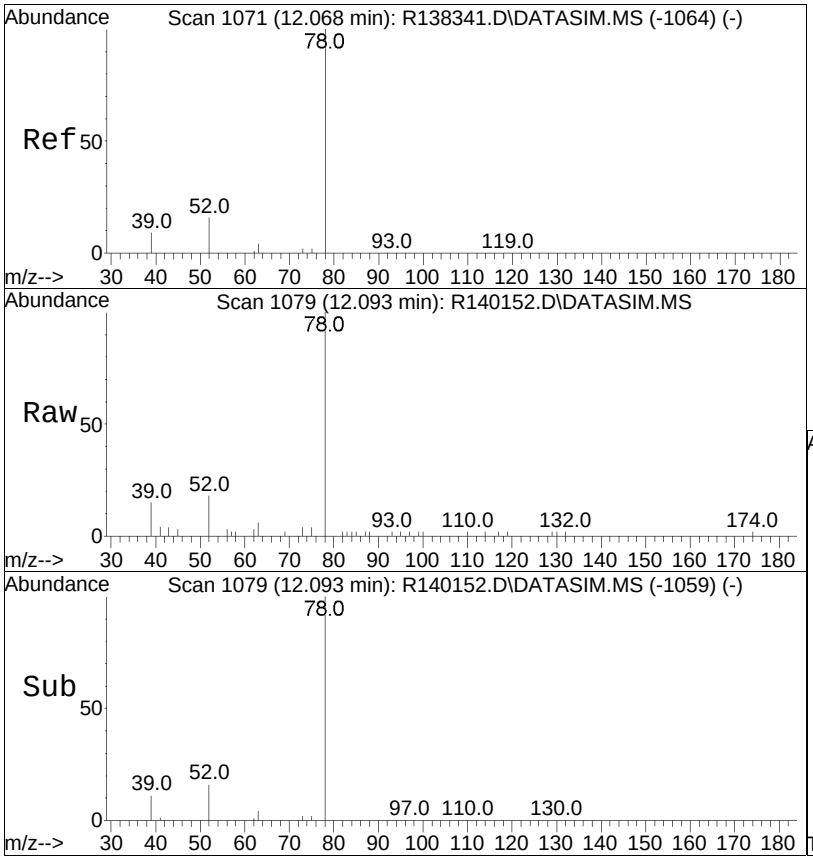



#31
1,2-dichloroethane
Concen: 0.02 ppbV
RT: 11.27 min Scan# 996
Delta R.T. 0.019 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 62 Resp: 201

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 61.9 | 24.4 | 36.6# |
| 49 | 67.3 | 26.7 | 40.1# |
| 63 | 61.1 | 12.6 | 18.8# |

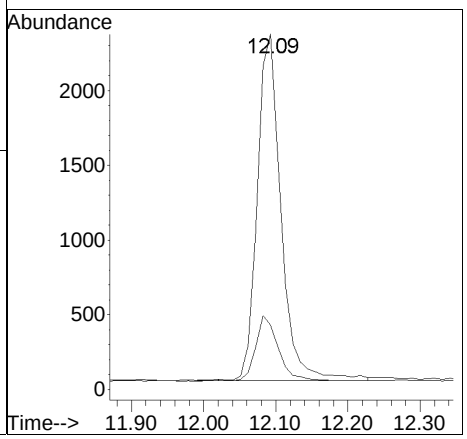


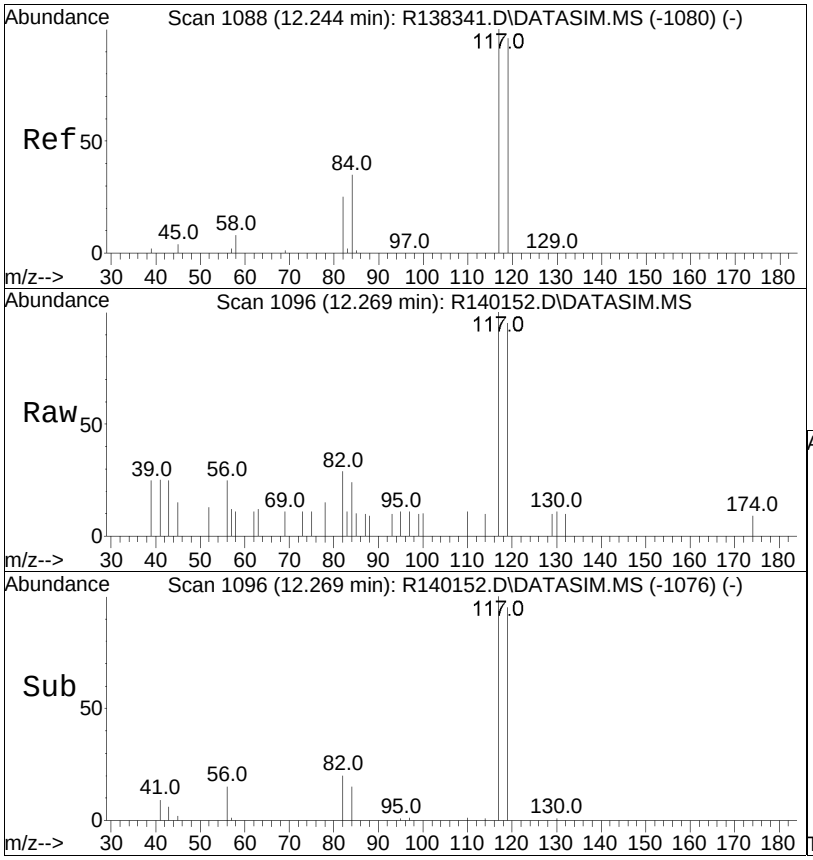



#36
benzene
Concen: 0.24 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 78 Resp: 5282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 18.1 | 15.4 | 23.0 |

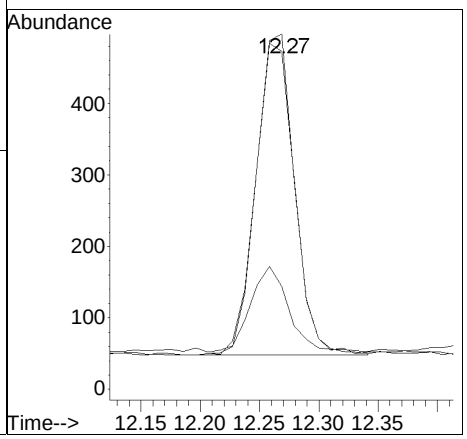


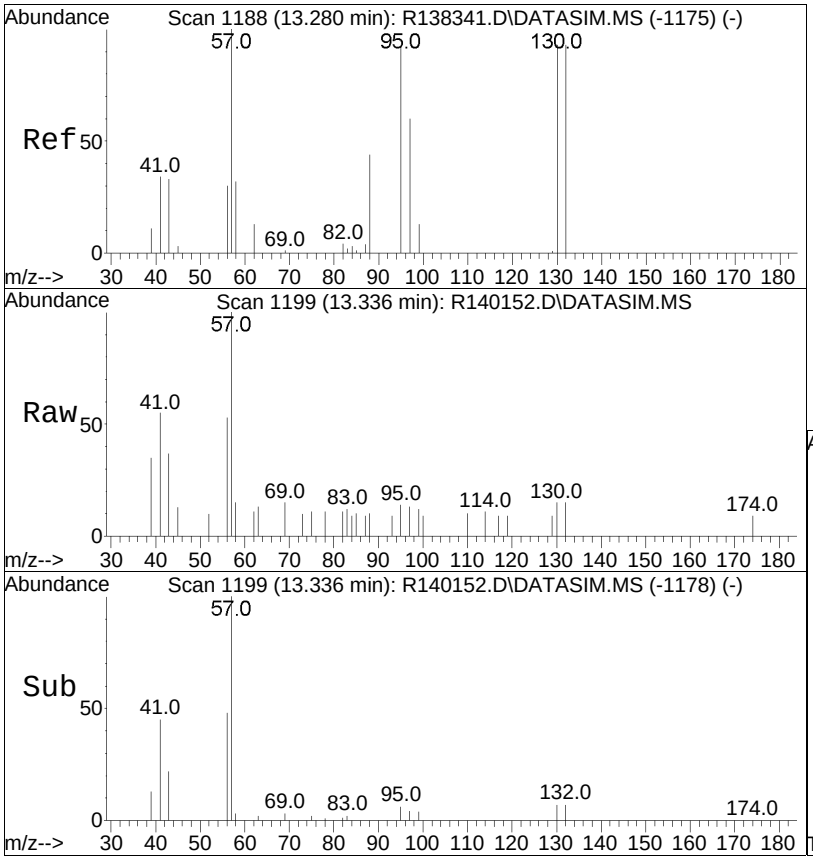



#37
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.27 min Scan# 1096
Delta R.T. 0.010 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:117 Resp: 1018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.2 | 78.5 | 117.7 |
| 82 | 29.0 | 19.8 | 29.8 |

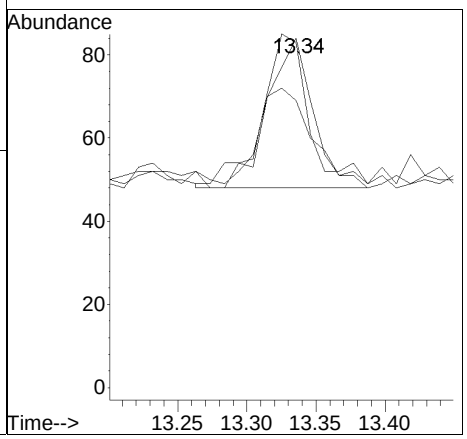


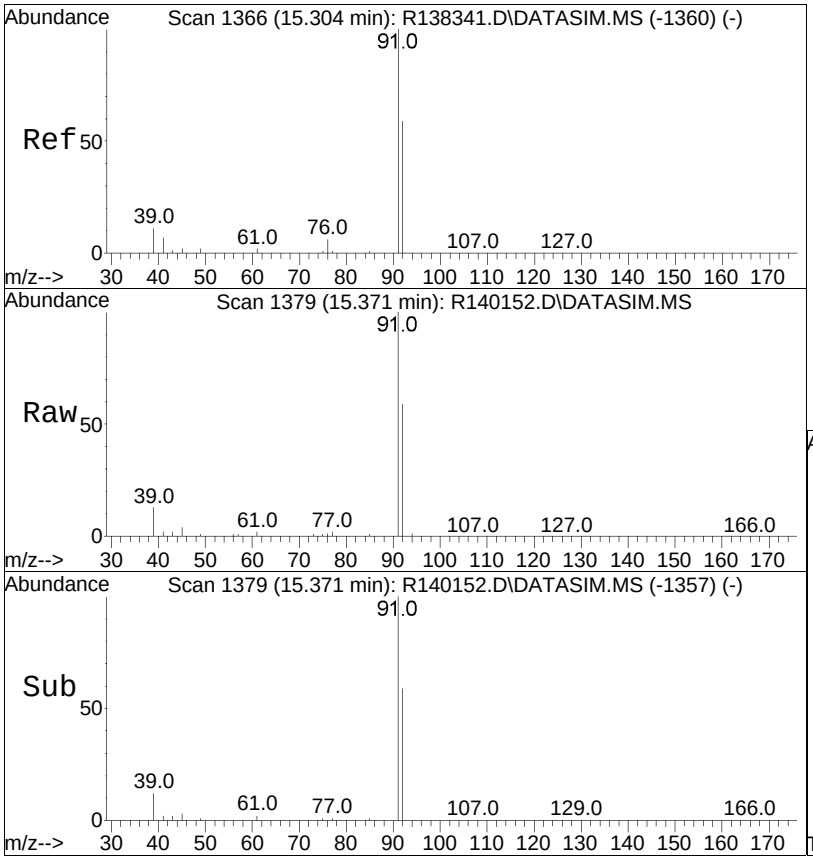



#42
trichloroethene
Concen: 0.01 ppbV
RT: 13.34 min Scan# 1199
Delta R.T. 0.021 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:130 Resp: 87

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 98.8 | 76.0 | 114.0 |
| 97 | 82.1 | 51.8 | 77.8# |

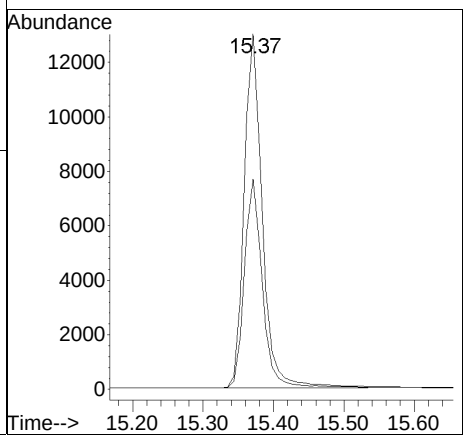


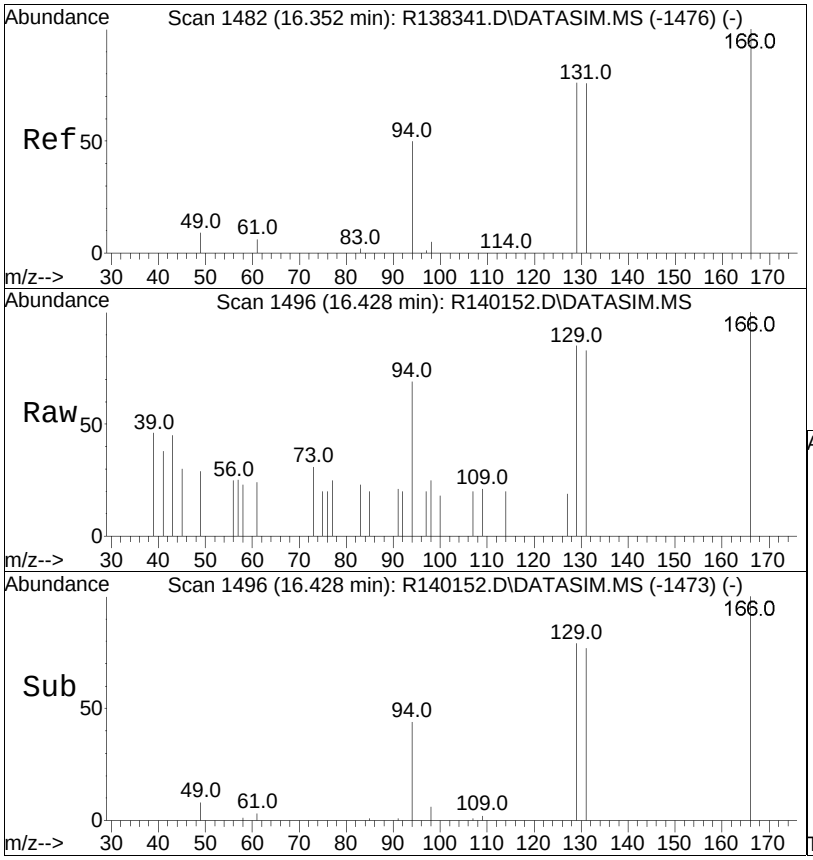



#50
toluene
Concen: 0.83 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 23368

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 59.2 | 47.2 | 70.8 |

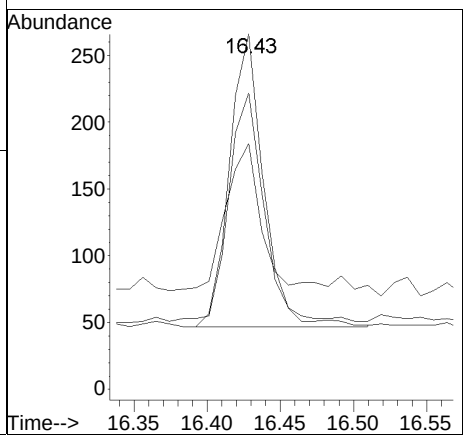


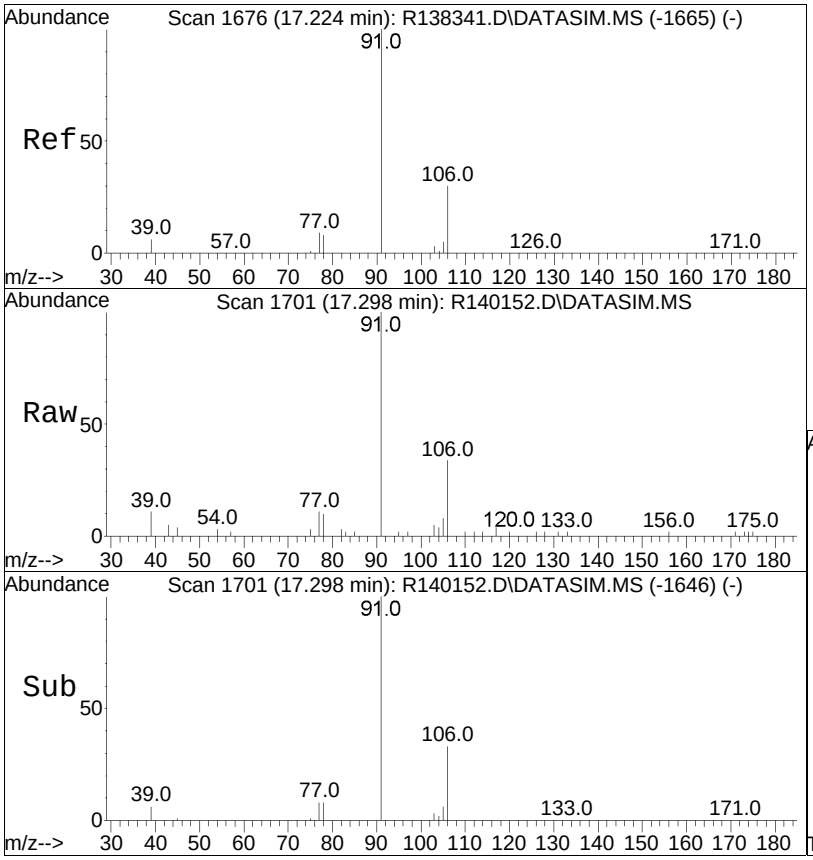



#55
tetrachloroethene
Concen: 0.02 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:166 Resp: 355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 83.5 | 61.7 | 92.5 |
| 94 | 69.2 | 38.0 | 57.0# |

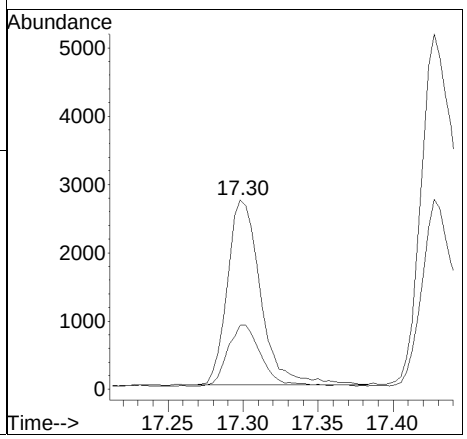


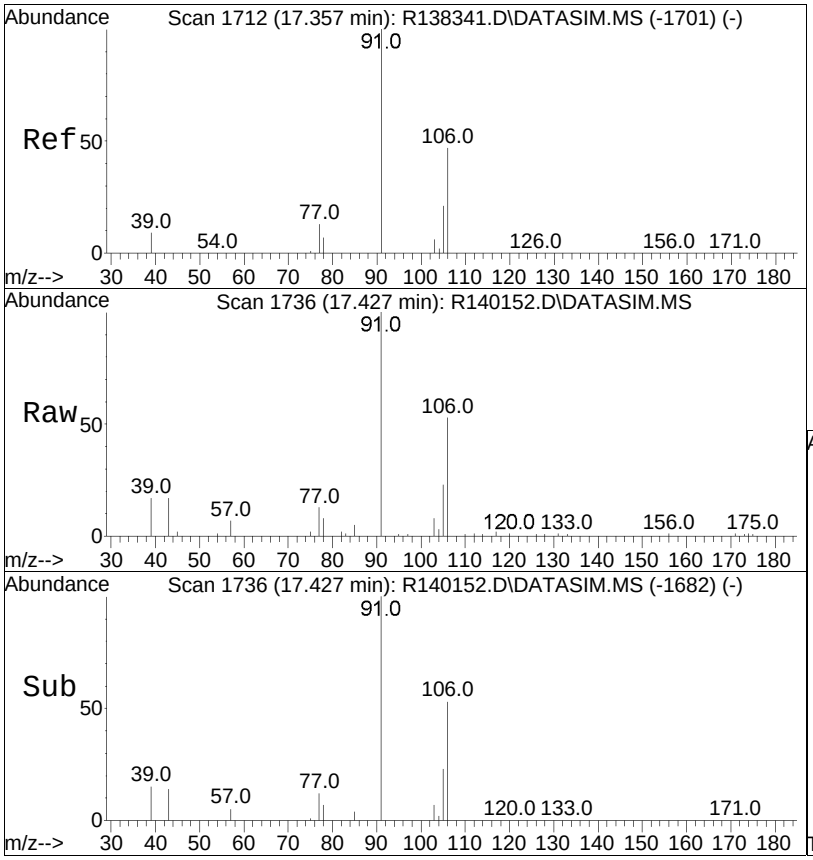



#58
ethylbenzene
Concen: 0.11 ppbV
RT: 17.30 min Scan# 1701
Delta R.T. 0.004 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 4177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 33.8 | 25.4 | 38.0 |

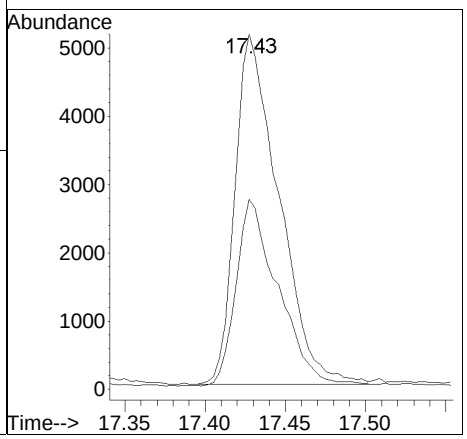


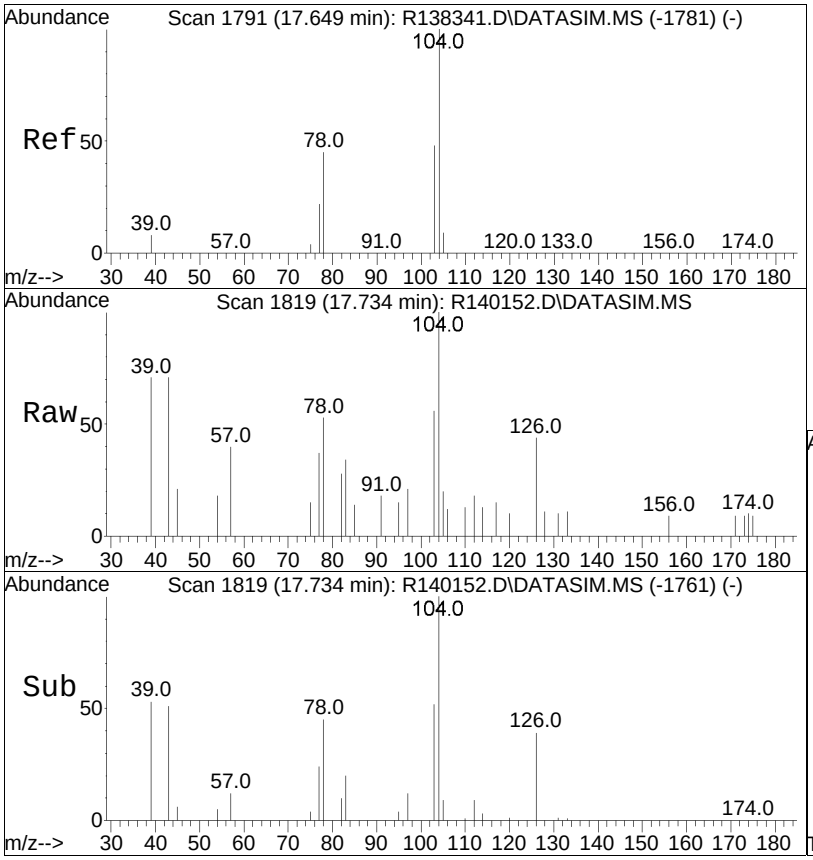



#59
m+p-xylene
Concen: 0.33 ppbV
RT: 17.43 min Scan# 1736
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 9737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 53.5 | 39.7 | 59.5 |

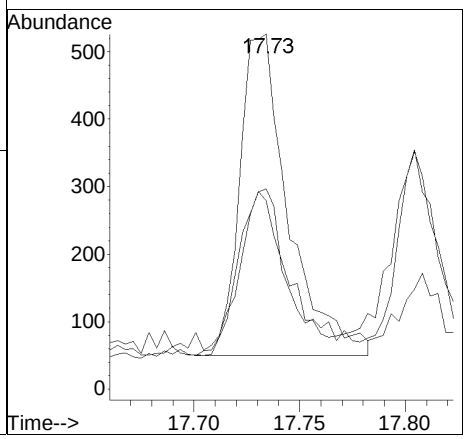


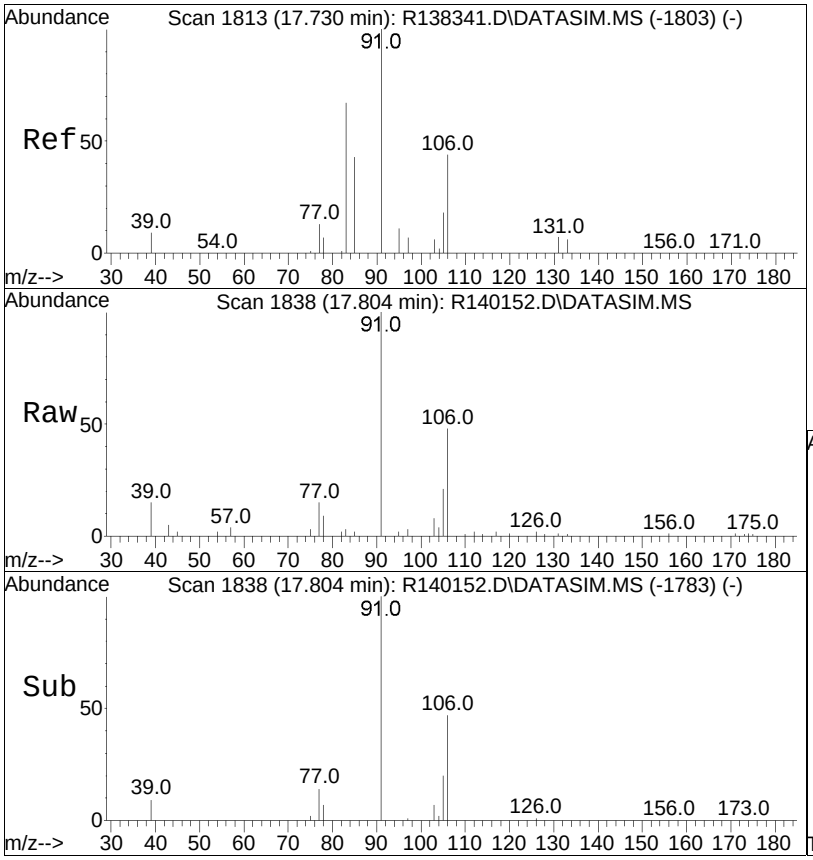



#61
styrene
Concen: 0.03 ppbV
RT: 17.73 min Scan# 1819
Delta R.T. 0.015 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:104 Resp: 765

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 56.5 | 38.5 | 57.7 |
| 78 | 53.0 | 33.7 | 50.5# |

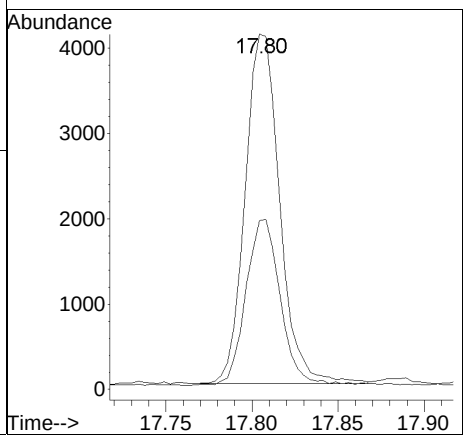


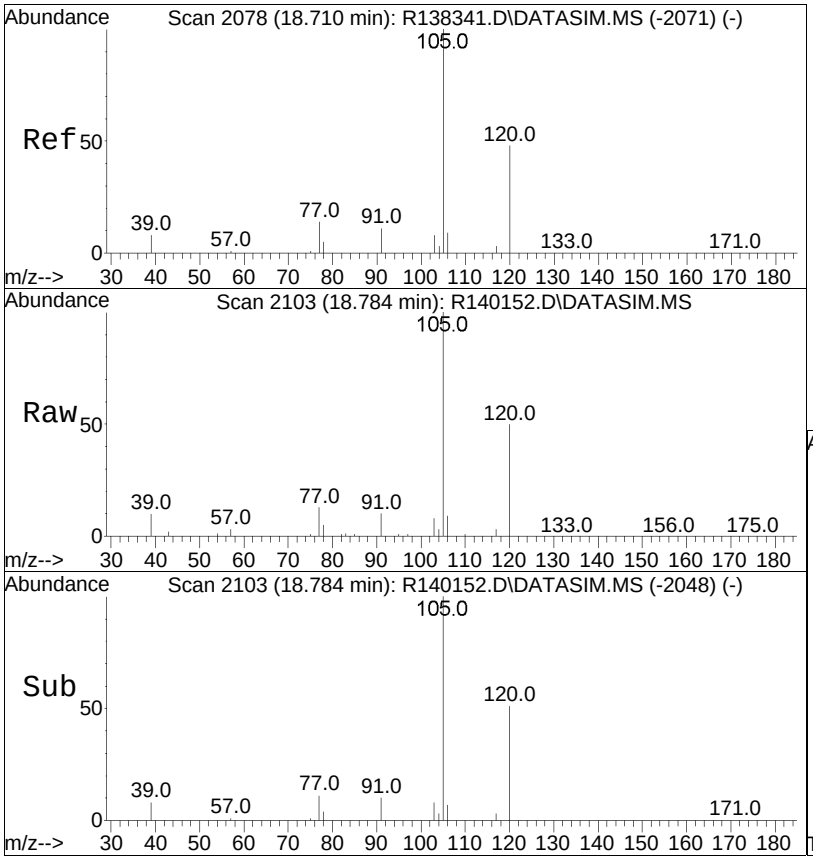



#63
o-xylene
Concen: 0.19 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.004 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 91 Resp: 5752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 47.5 | 37.6 | 56.4 |

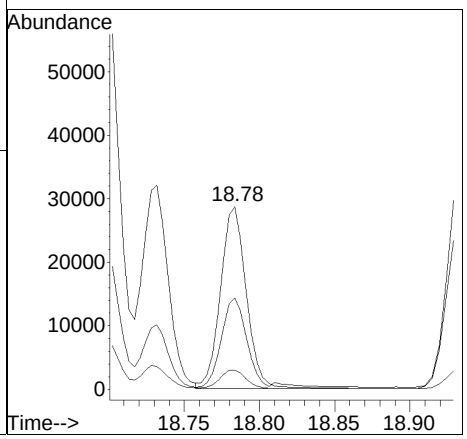


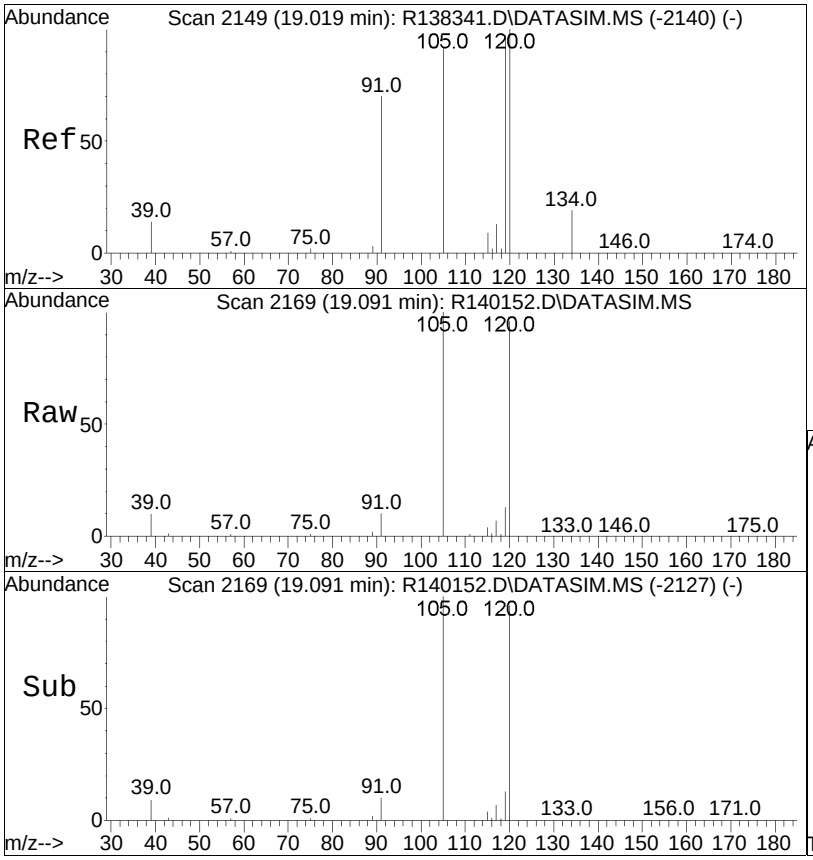



#67
1,3,5-trimethylbenzene
Concen: 0.91 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:105 Resp: 38771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.2 | 40.4 | 60.6 |
| 91 | 10.5 | 8.4 | 12.6 |

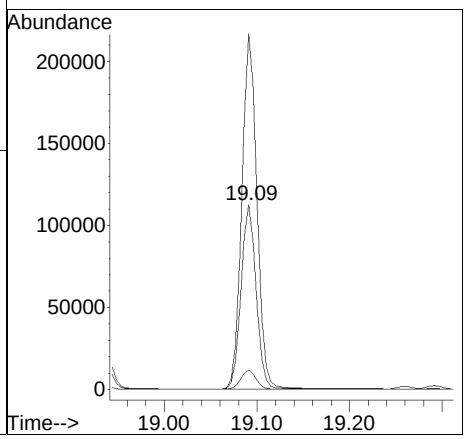


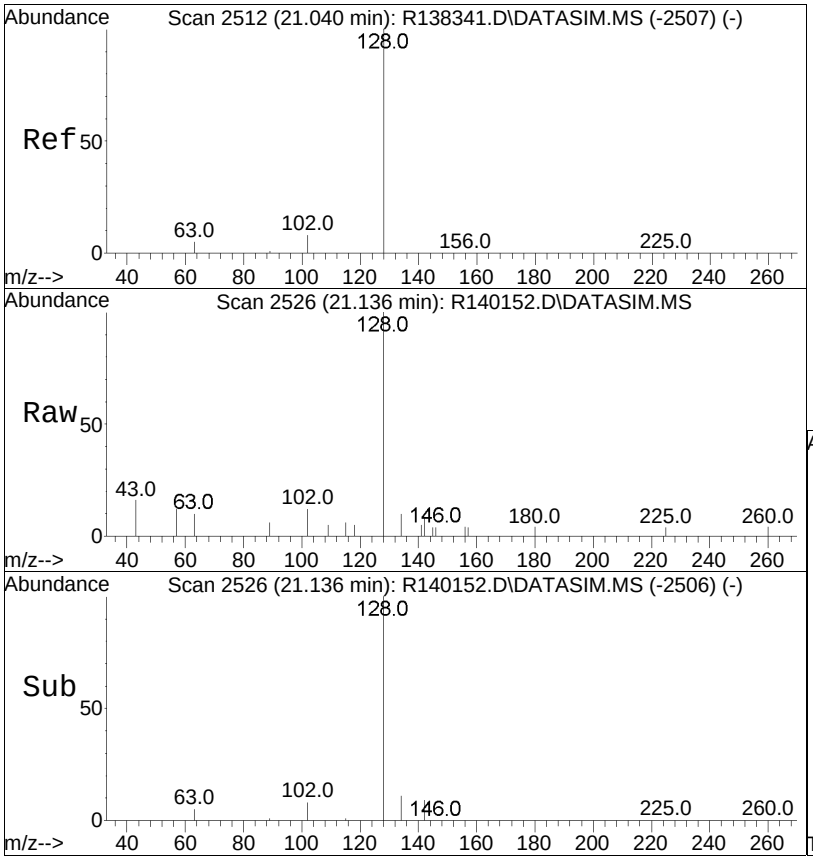



#69
1,2,4-trimethylbenzene
Concen: 3.46 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:105 Resp: 127456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 192.3 | 184.1 | 276.1 |
| 91 | 10.5 | 57.4 | 86.2# |

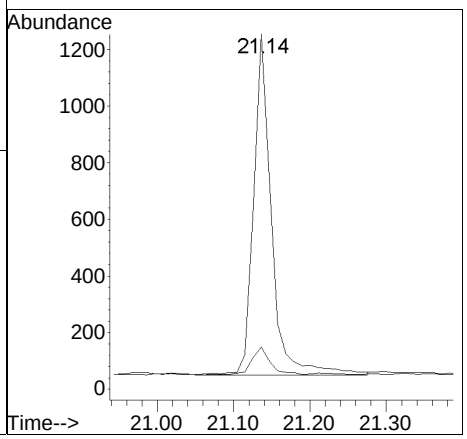





#78
naphthalene
Concen: 0.04 ppbV
RT: 21.14 min Scan# 2526
Delta R.T. 0.011 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:128 Resp: 1959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 11.9 | 6.9 | 10.3# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TSIM150102.M |
| Data File | : R140152.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 10:59 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-05,3,250,250 | Quant Date | : 3/12/2015 7:18 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140153.D
Acq On : 11 Mar 2015 11:31 pm
Operator : AIRPIANO1:RY
Sample : L1504425-07,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 10:37:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 103773 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 87.18% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 221061 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 82.98% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 53001 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 90.99% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4373 | 0.336 | ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 326 | 0.049 | ppbV # | 81 |
| 5) Freon-114 | 4.25 | 85 | 263 | 0.014 | ppbV # | 87 |
| 6) vinyl chloride | 4.41 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | | 0 | N.D. | | |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 0.00 | | 0 | N.D. | d | |
| 13) trichlorofluoromethane | 6.41 | 101 | 3796 | 0.216 | ppbV | 99 |
| 16) 1,1-dichloroethene | 7.30 | | 0 | N.D. | | |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 7.85 | 101 | 1016 | 0.068 | ppbV | 95 |
| 22) trans-1,2-dichloroethene | 8.71 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.97 | 63 | 96 | 0.007 | ppbV # | 12 |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.00 | | 0 | N.D. | | |
| 29) chloroform | 10.39 | 83 | 926M4 | 0.052 | ppbV | |
| 31) 1,2-dichloroethane | 11.26 | | 0 | N.D. | | |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 379 | 0.025 | ppbV # | 51 |
| 36) benzene | 12.09 | 78 | 717 | 0.035 | ppbV # | 79 |
| 37) carbon tetrachloride | 12.26 | 117 | 899 | 0.061 | ppbV # | 95 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 1285 | 0.126 | ppbV | 98 |
| 45) cis-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 47) trans-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 48) 1,1,2-trichloroethane | 0.00 | | 0 | N.D. | d | |
| 50) toluene | 15.37 | 91 | 5868 | 0.211 | ppbV | 99 |
| 53) dibromochloromethane | 0.00 | | 0 | N.D. | d | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140153.D
Acq On : 11 Mar 2015 11:31 pm
Operator : AIRPIANO1:RY
Sample : L1504425-07,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 10:37:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 16.03 | | 0 | N.D. | |
| 55) tetrachloroethene | 16.43 | 166 | 4398 | 0.307 ppbV | 95 |
| 56) 1,1,1,2-tetrachloroethane | 17.00 | | 0 | N.D. | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. d | |
| 58) ethylbenzene | 17.30 | 91 | 6145 | 0.165 ppbV | 97 |
| 59) m+p-xylene | 17.43 | 91 | 19015 | 0.658 ppbV | 98 |
| 60) bromoform | 17.52 | | 0 | N.D. | |
| 61) styrene | 17.73 | 104 | 198 | 0.009 ppbV # | 65 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. d | |
| 63) o-xylene | 17.80 | 91 | 10451 | 0.341 ppbV | 97 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 67895 | 1.605 ppbV | 99 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 130817 | 3.592 ppbV # | 65 |
| 71) 1,3-dichlorobenzene | 0.00 | | 0 | N.D. d | |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 1224 | 0.044 ppbV # | 46 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 839 | 0.032 ppbV # | 1 |
| 77) 1,2,4-trichlorobenzene | 20.96 | 180 | 291 | 0.014 ppbV # | 1 |
| 78) naphthalene | 21.13 | 128 | 256883 | 4.748 ppbV | 99 |
| 80) hexachlorobutadiene | 21.46 | | 0 | N.D. | |

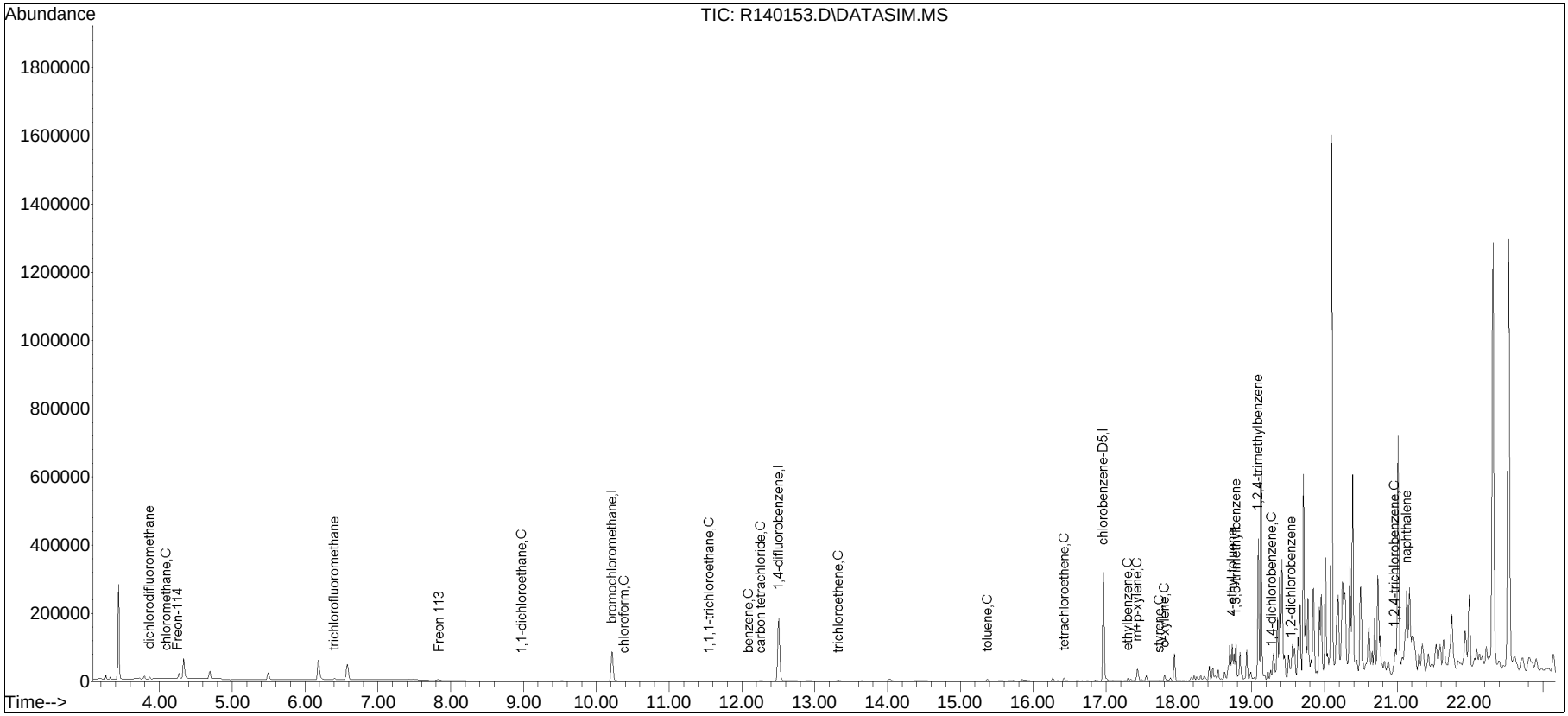
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

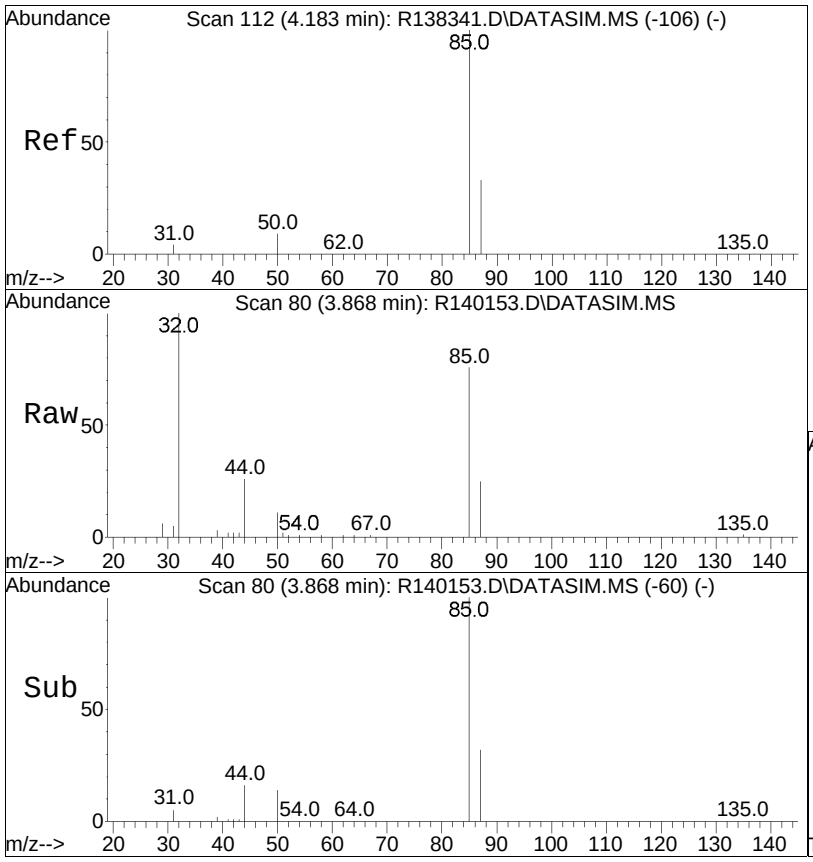
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140153.D
Acq On : 11 Mar 2015 11:31 pm
Operator : AIRPIANO1:RY
Sample : L1504425-07,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 10:37:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



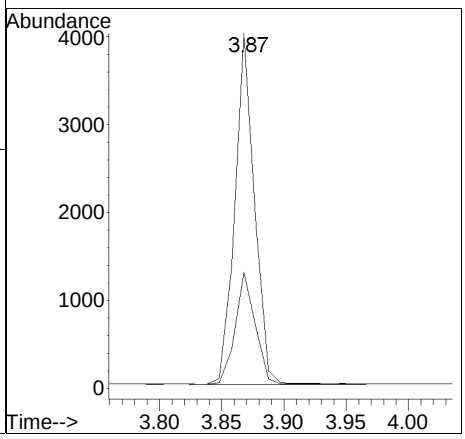

TSIM150102.M Wed Mar 25 12:04:18 2015

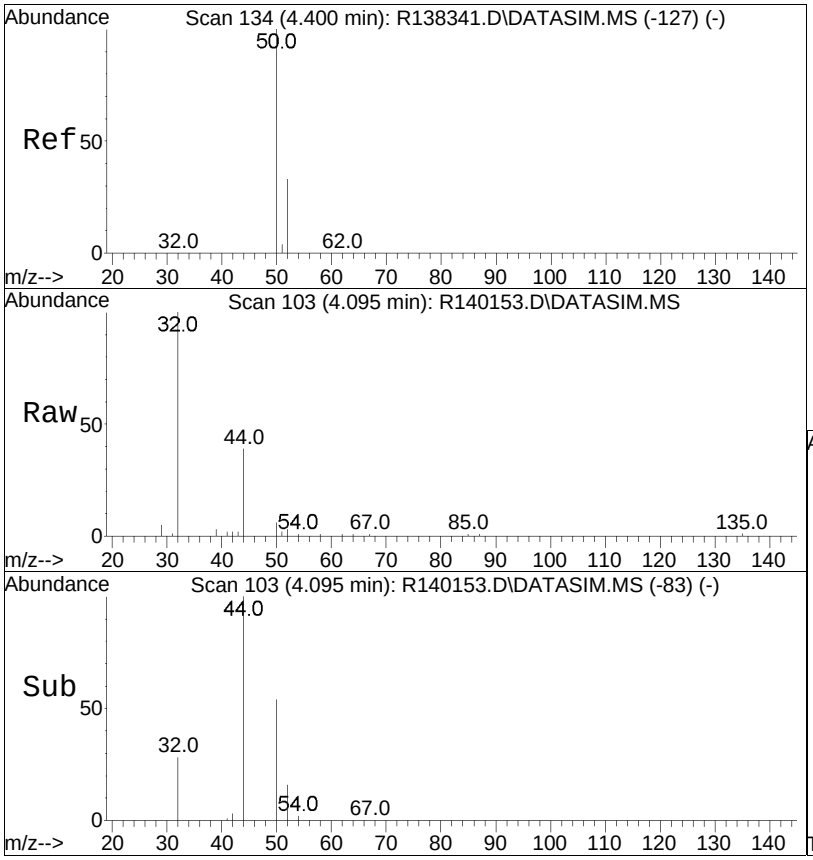



#3
dichlorodifluoromethane
Concen: 0.34 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 85 Resp: 4373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.7 | 25.8 | 38.8 |

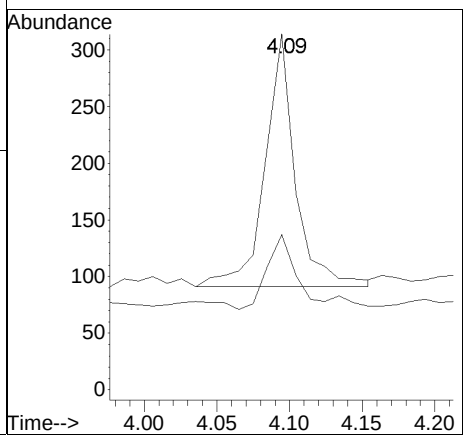


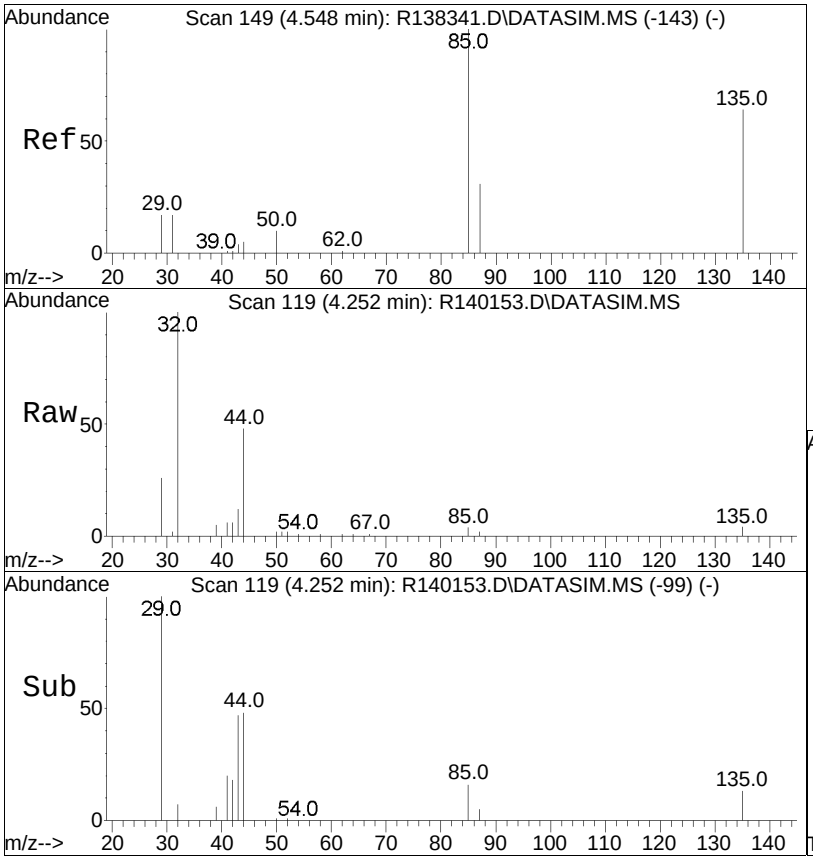



#4
chloromethane
Concen: 0.05 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 50 Resp: 326

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 43.6 | 26.4 | 39.6# |

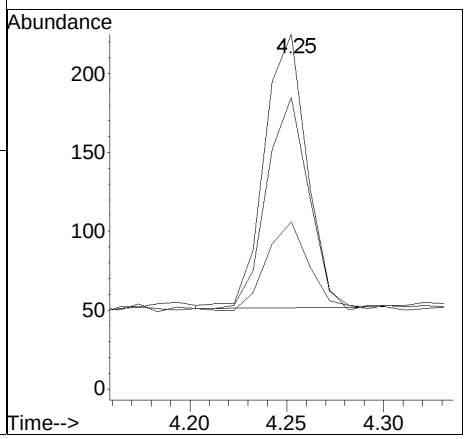


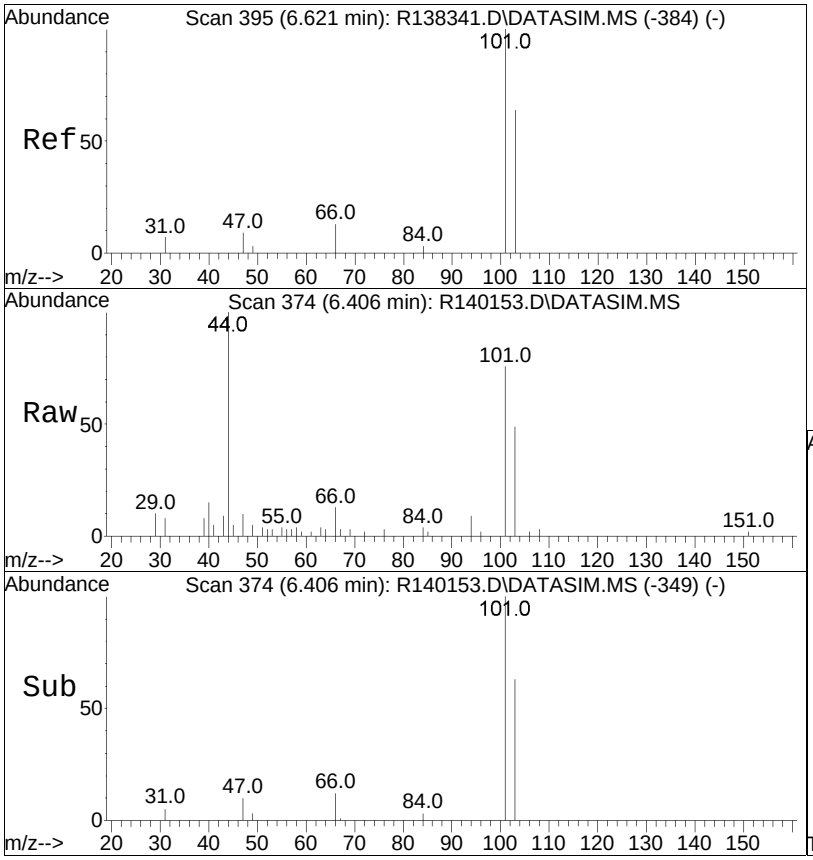



#5
Freon-114
Concen: 0.01 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 85 Resp: 263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 47.1 | 26.3 | 39.5# |
| 135 | 82.2 | 60.5 | 90.7 |

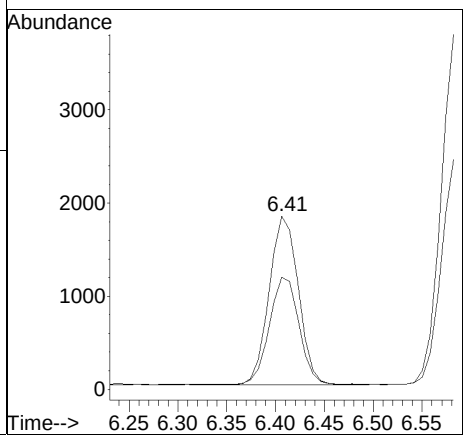


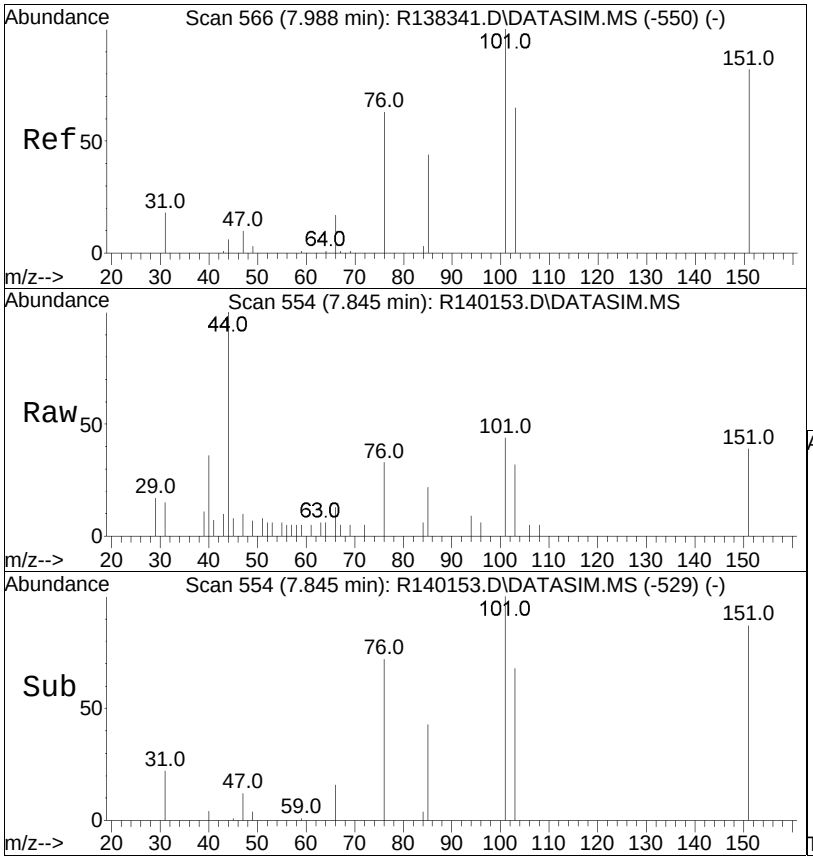



#13
trichlorofluoromethane
Concen: 0.22 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:101 Resp: 3796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.7 | 51.2 | 76.8 |

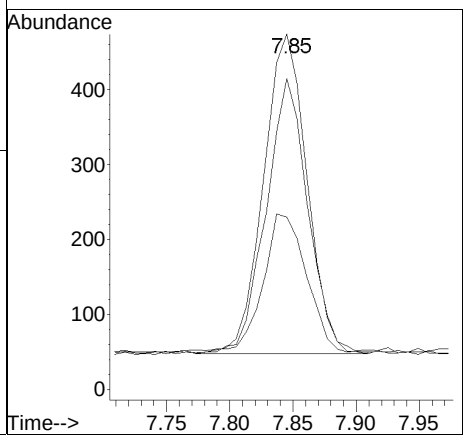


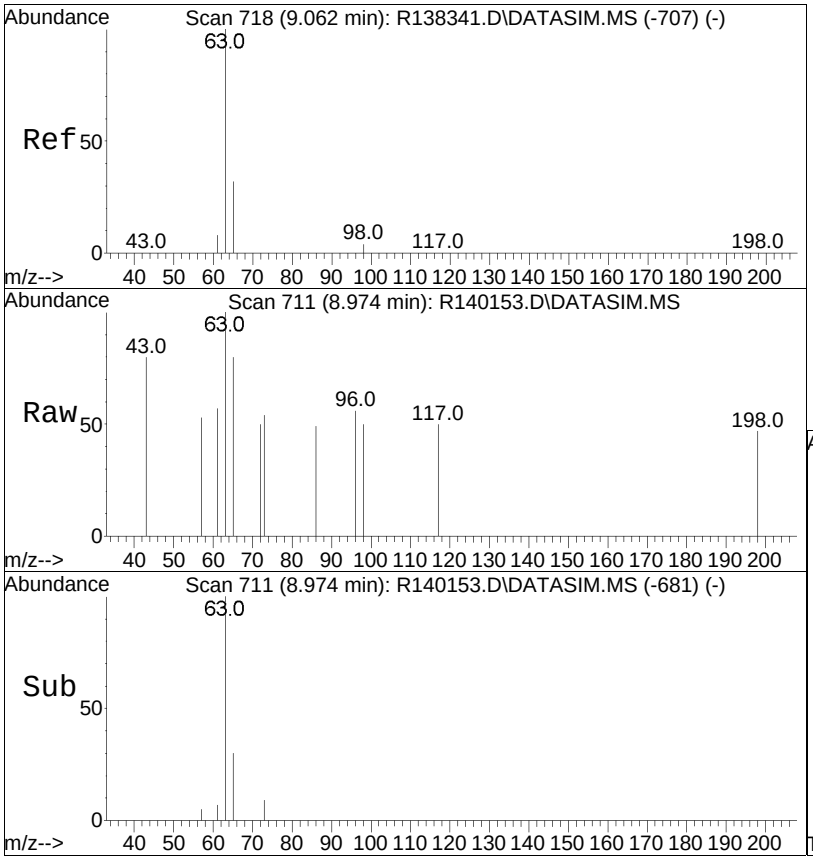



#20
Freon 113
Concen: 0.07 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:101 Resp: 1016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 48.5 | 34.5 | 51.7 |
| 151 | 87.6 | 67.4 | 101.2 |

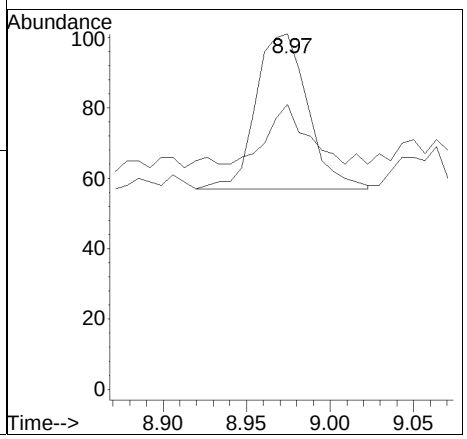


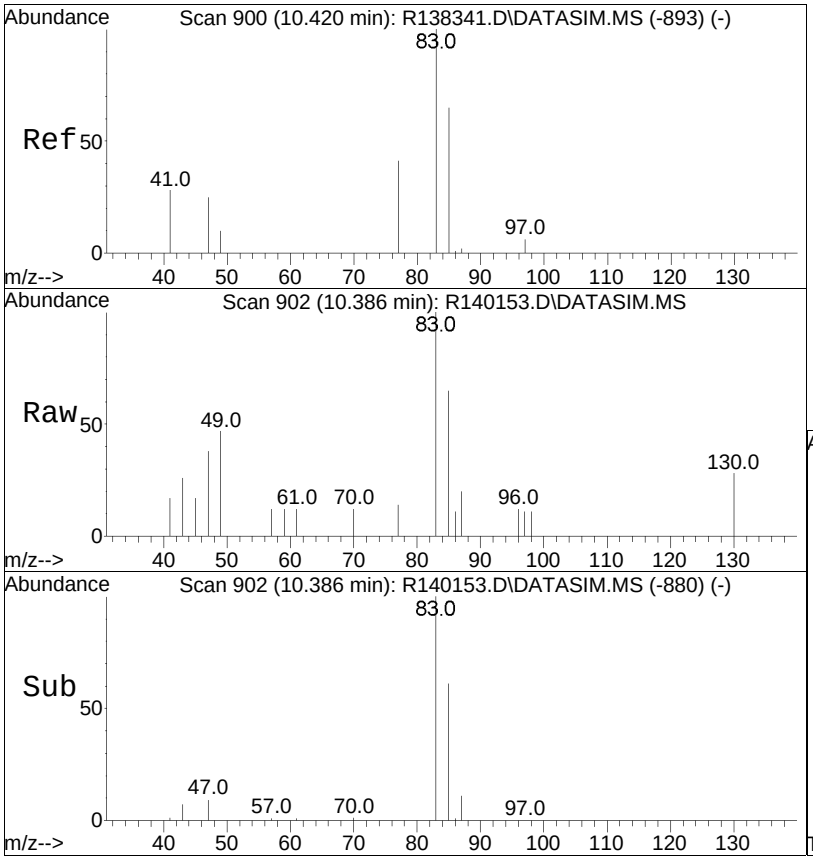



#23
1,1-dichloroethane
Concen: 0.01 ppbV
RT: 8.97 min Scan# 711
Delta R.T. 0.007 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 63 Resp: 96

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 80.2 | 25.2 | 37.8# |

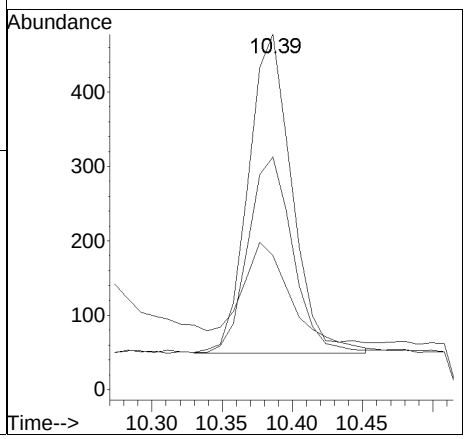


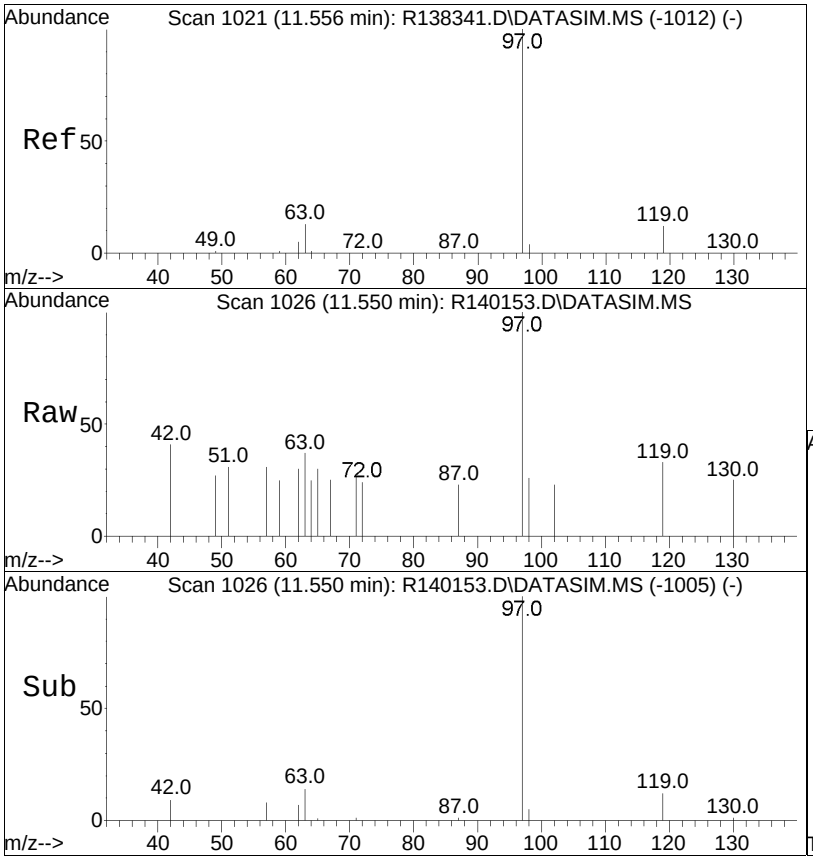



#29
chloroform
Concen: 0.05 ppbV m
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 83 Resp: 926

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.5 | 50.9 | 76.3 |
| 47 | 37.7 | 24.9 | 37.3# |

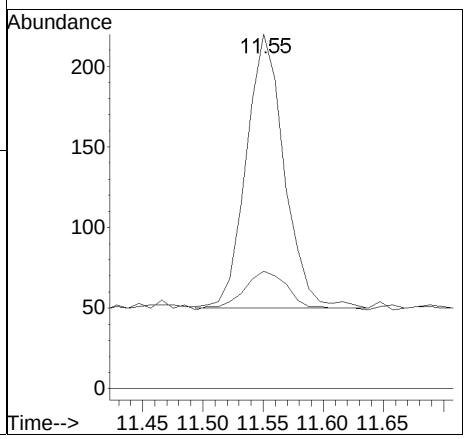


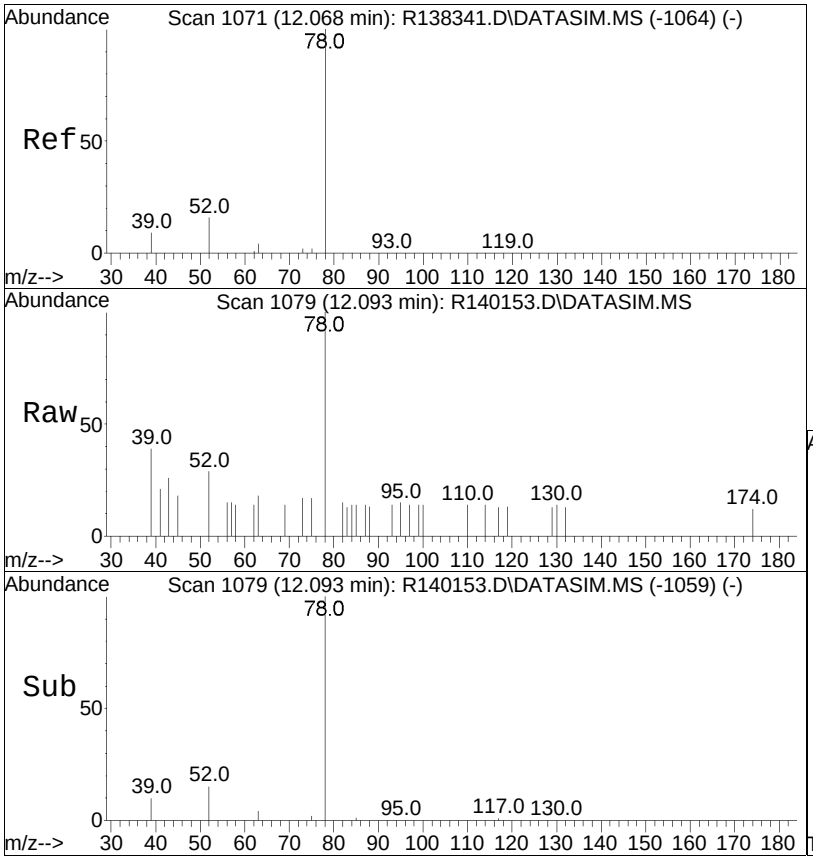



#35
1,1,1-trichloroethane
Concen: 0.03 ppbV
RT: 11.55 min Scan# 1026
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 97 Resp: 379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 61 | 0.0 | 0.0 | 0.0 |
| 119 | 33.2 | 10.7 | 16.1# |

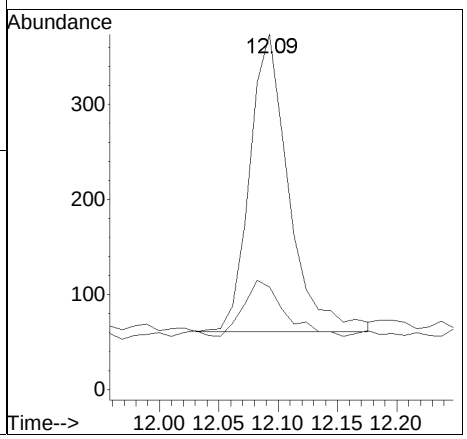


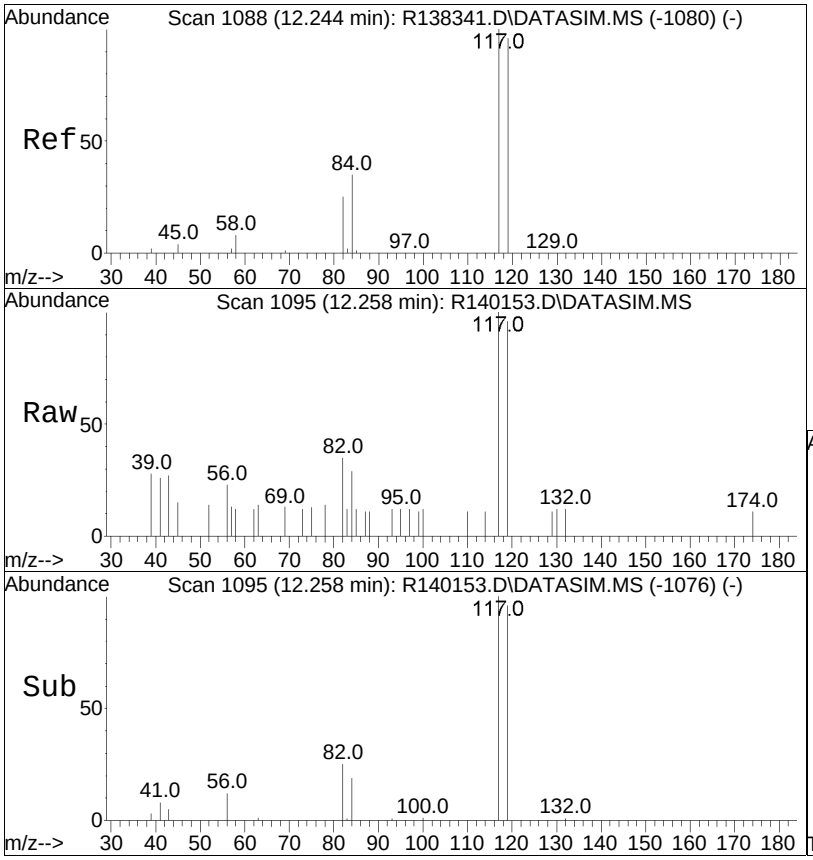



#36
benzene
Concen: 0.03 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 78 Resp: 717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 28.9 | 15.4 | 23.0# |

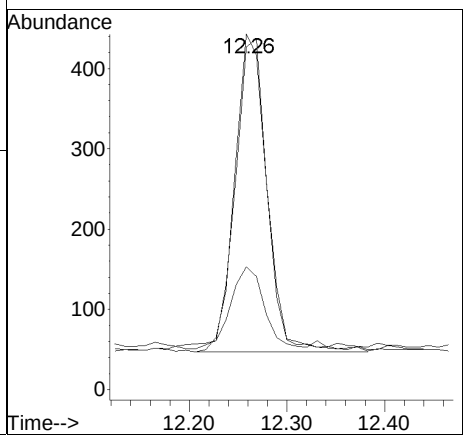


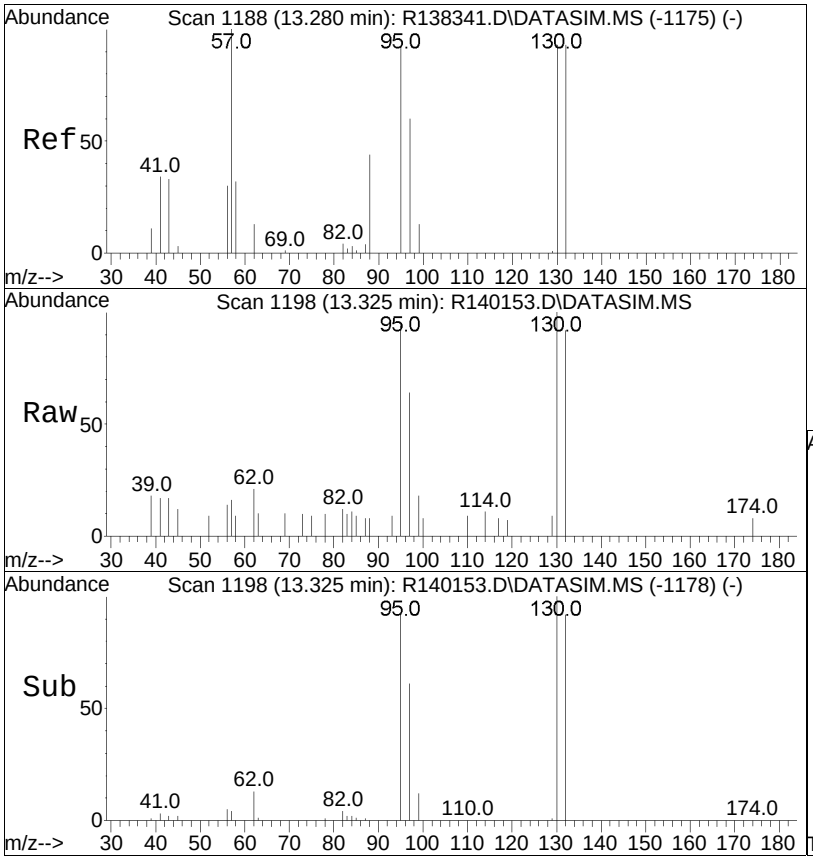



#37
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:117 Resp: 899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 96.4 | 78.5 | 117.7 |
| 82 | 34.5 | 19.8 | 29.8# |

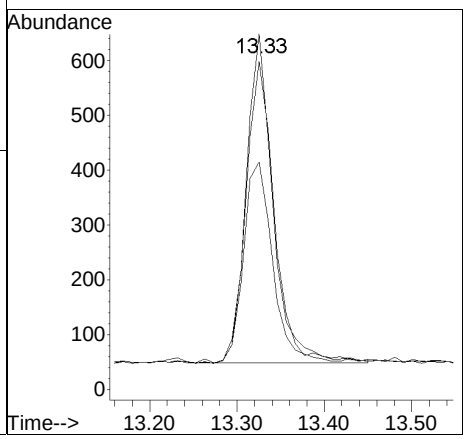


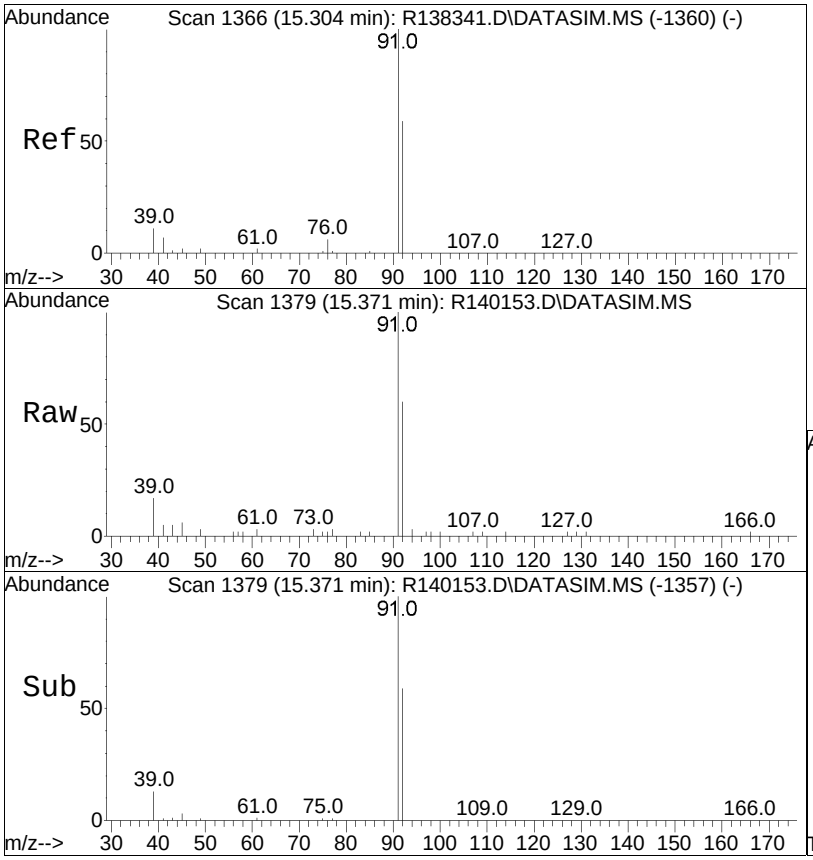



#42
trichloroethene
Concen: 0.13 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:130 Resp: 1285

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 92.3 | 76.0 | 114.0 |
| 97 | 64.0 | 51.8 | 77.8 |

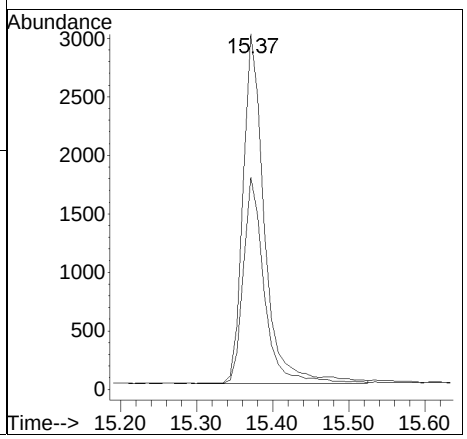


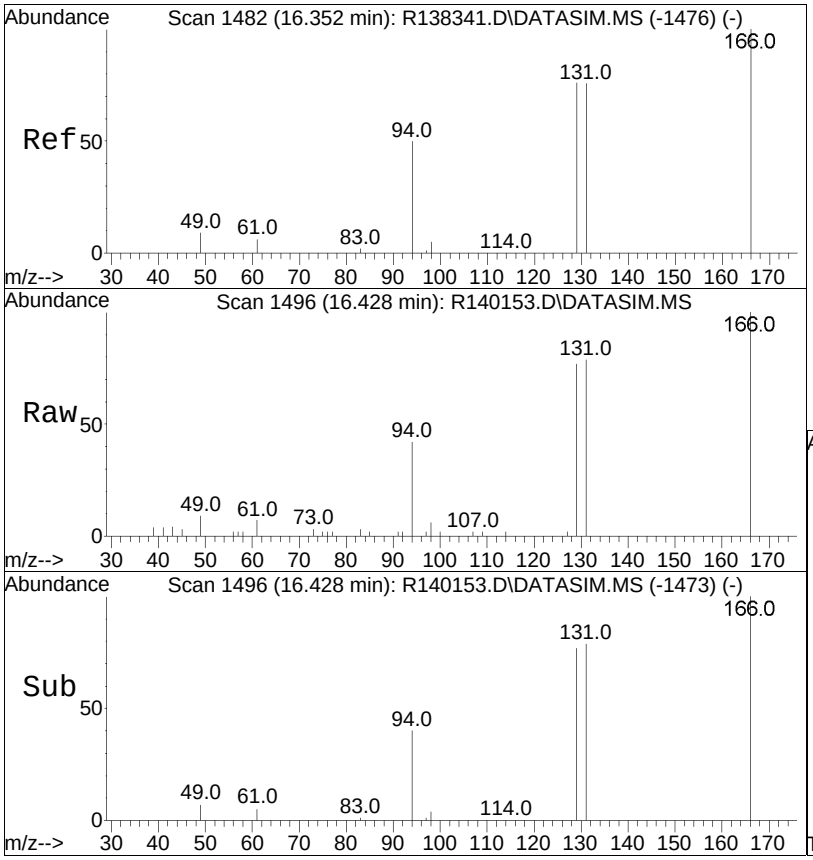



#50
toluene
Concen: 0.21 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 5868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 59.7 | 47.2 | 70.8 |

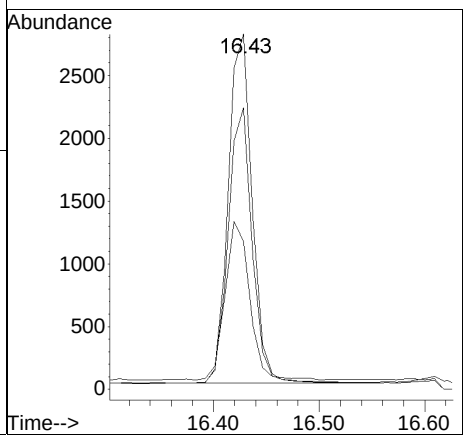


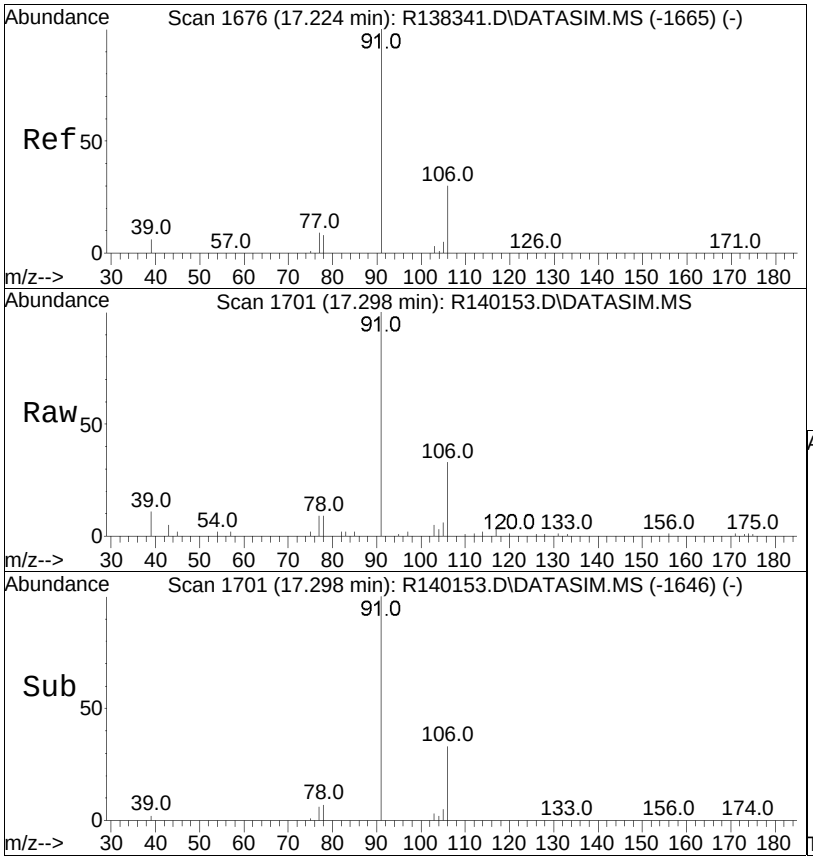



#55
tetrachloroethene
Concen: 0.31 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:166 Resp: 4398

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 79.3 | 61.7 | 92.5 |
| 94 | 41.6 | 38.0 | 57.0 |

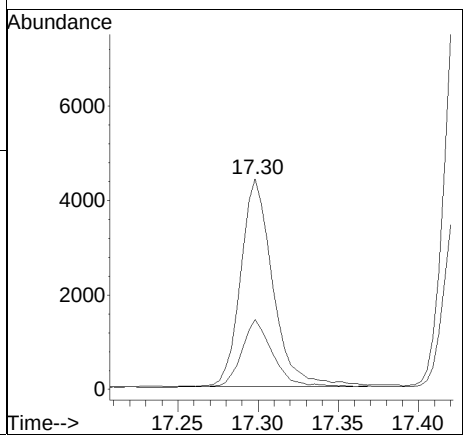


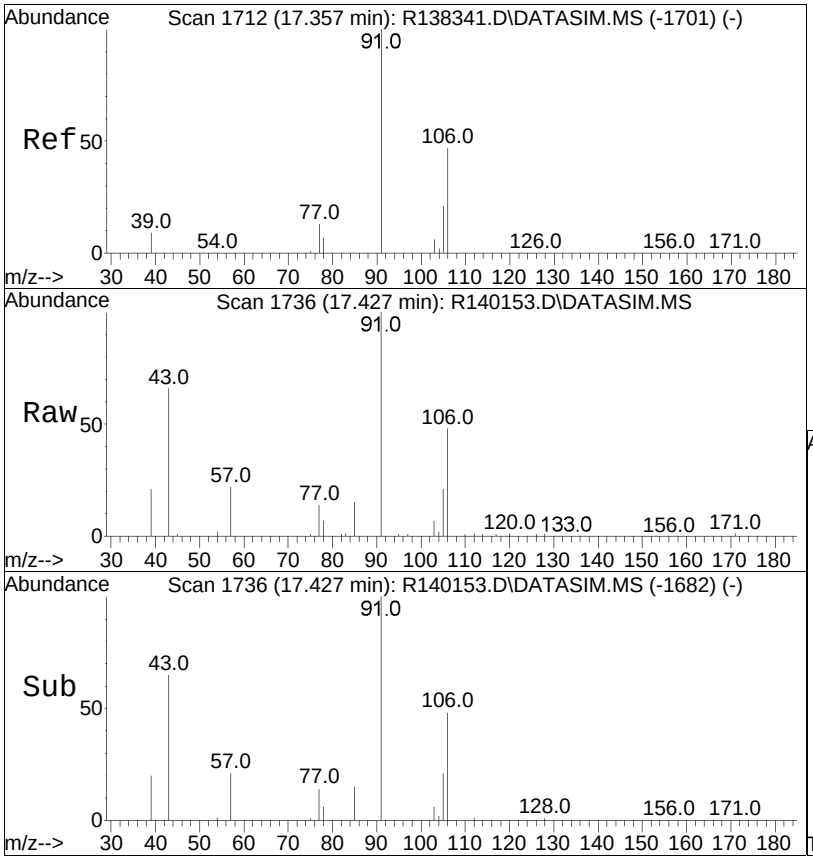



#58
ethylbenzene
Concen: 0.17 ppbV
RT: 17.30 min Scan# 1701
Delta R.T. 0.004 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 6145

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 33.2 | 25.4 | 38.0 |

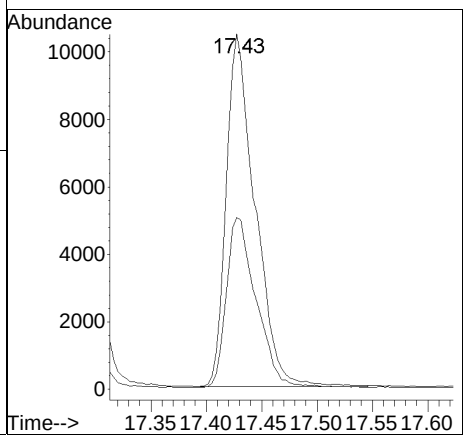


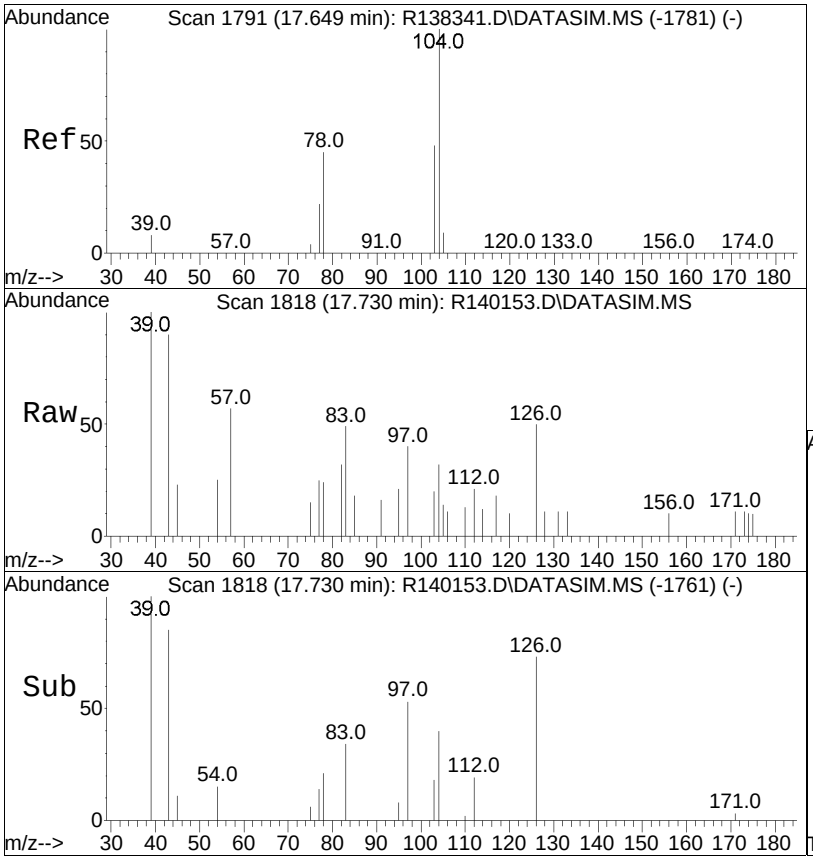



#59
m+p-xylene
Concen: 0.66 ppbV
RT: 17.43 min Scan# 1736
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 19015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 48.4 | 39.7 | 59.5 |

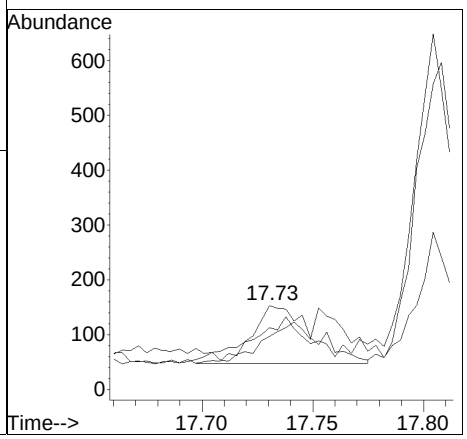


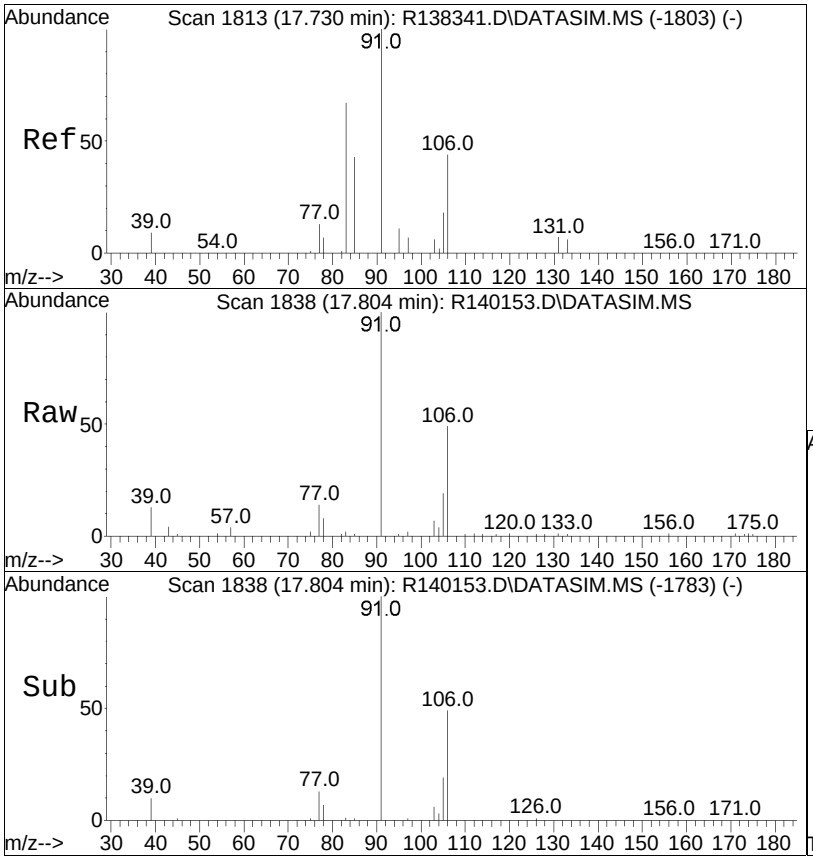



#61
styrene
Concen: 0.01 ppbV
RT: 17.73 min Scan# 1818
Delta R.T. 0.011 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:104 Resp: 198

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 63.4 | 38.5 | 57.7# |
| 78 | 73.9 | 33.7 | 50.5# |

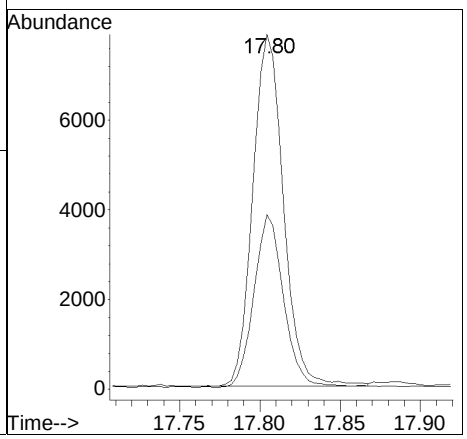


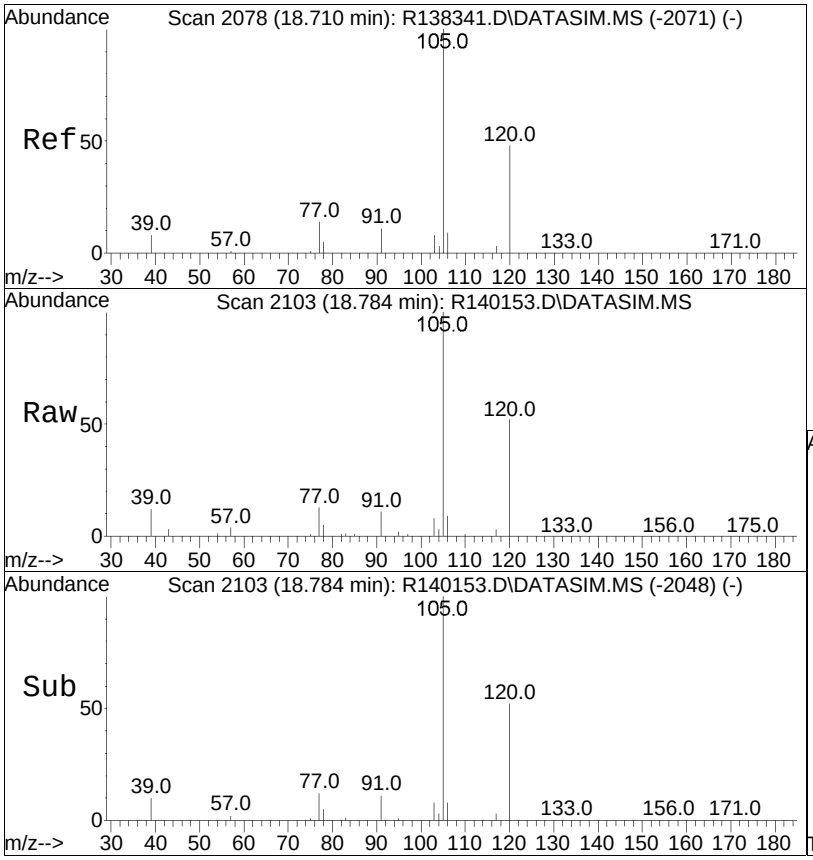



#63
o-xylene
Concen: 0.34 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.004 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 91 Resp: 10451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.2 | 37.6 | 56.4 |

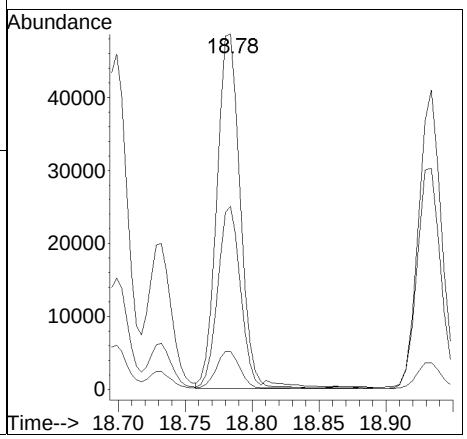


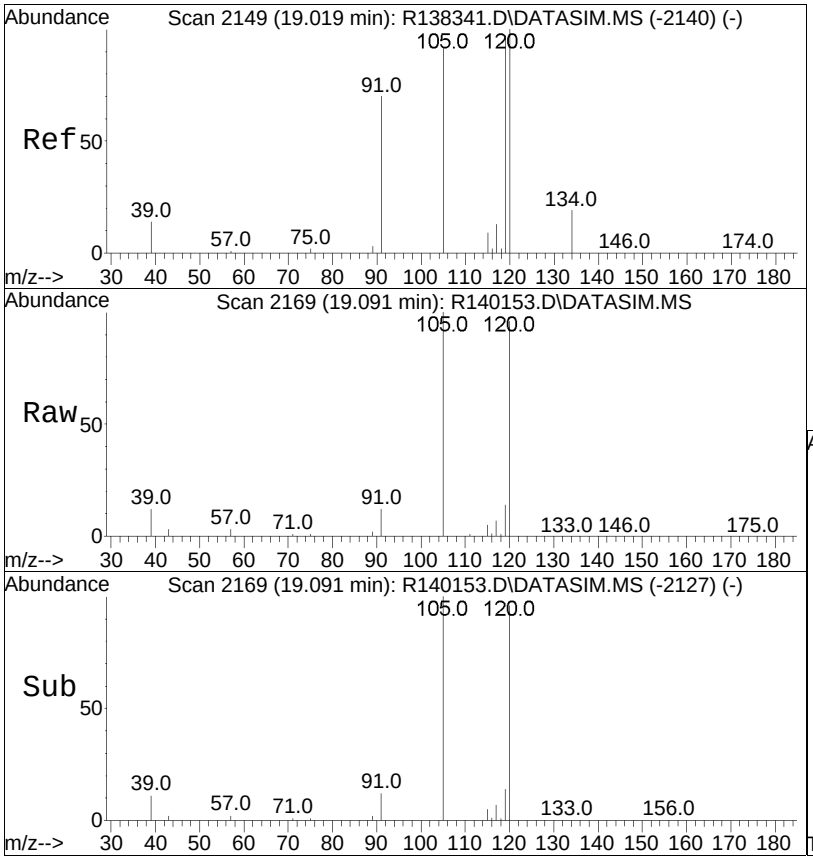



#67
1,3,5-trimethylbenzene
Concen: 1.61 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:105 Resp: 67895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 51.5 | 40.4 | 60.6 |
| 91 | 10.8 | 8.4 | 12.6 |

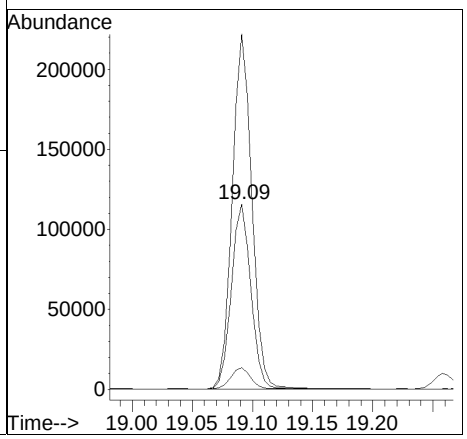


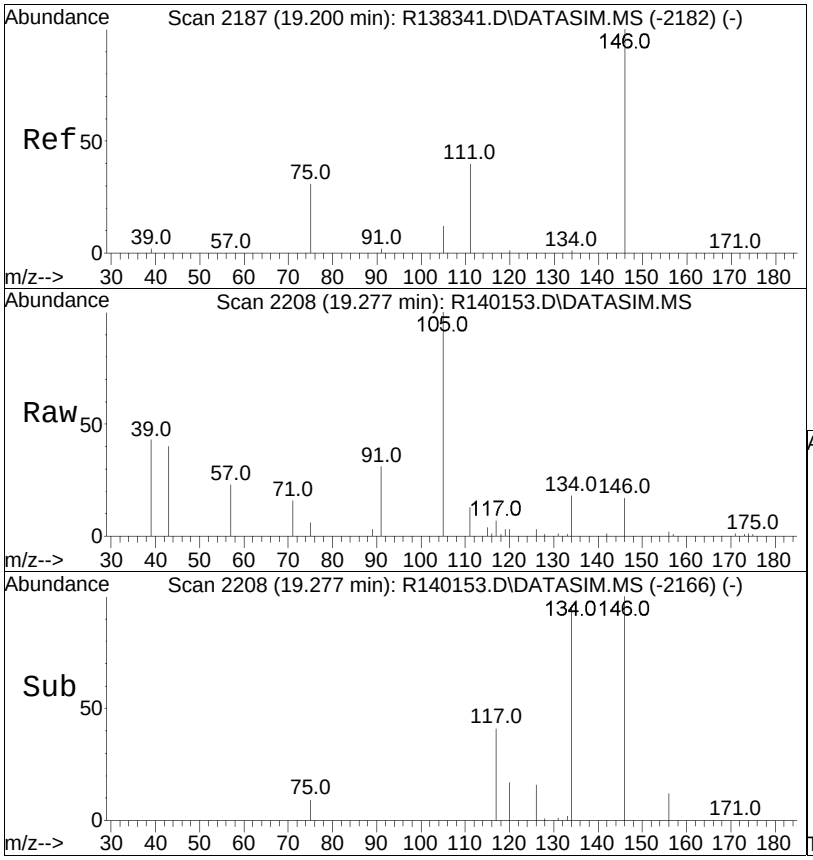



#69
1,2,4-trimethylbenzene
Concen: 3.59 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:105 Resp: 130817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 191.8 | 184.1 | 276.1 |
| 91 | 11.8 | 57.4 | 86.2# |

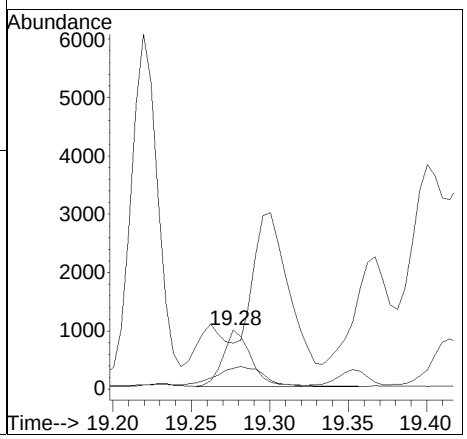


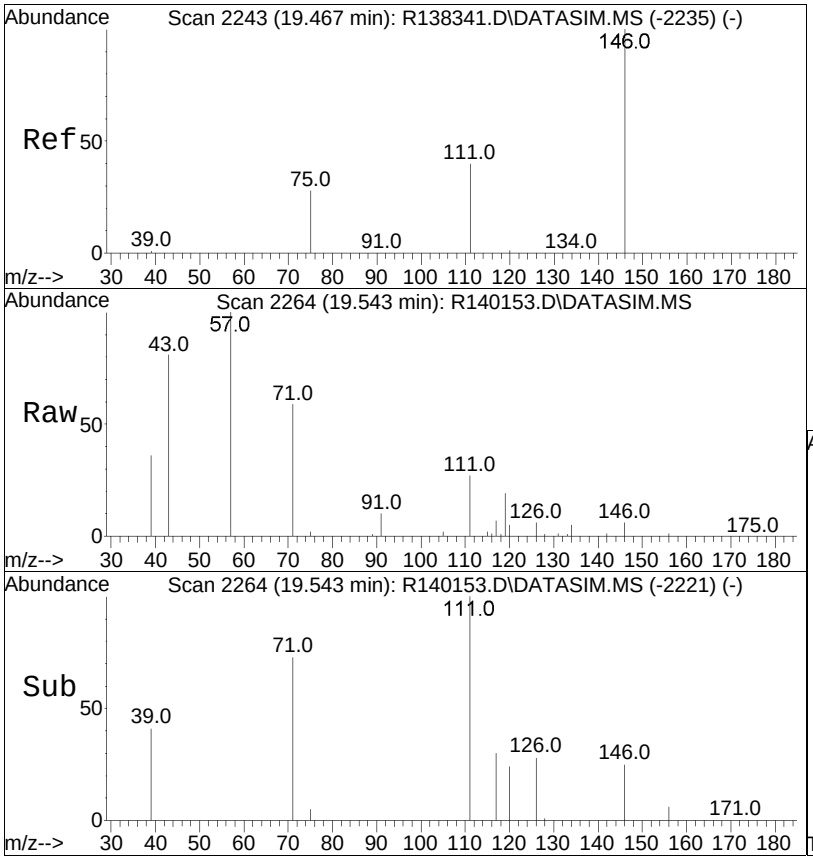



#72
1,4-dichlorobenzene
Concen: 0.04 ppbV
RT: 19.28 min Scan# 2208
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:146 Resp: 1224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 77.7 | 27.3 | 40.9# |
| 75 | 35.6 | 19.4 | 29.0# |

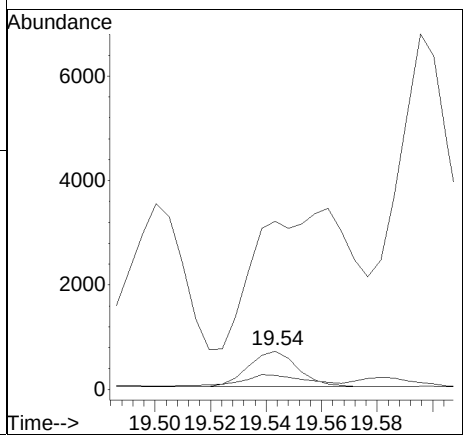


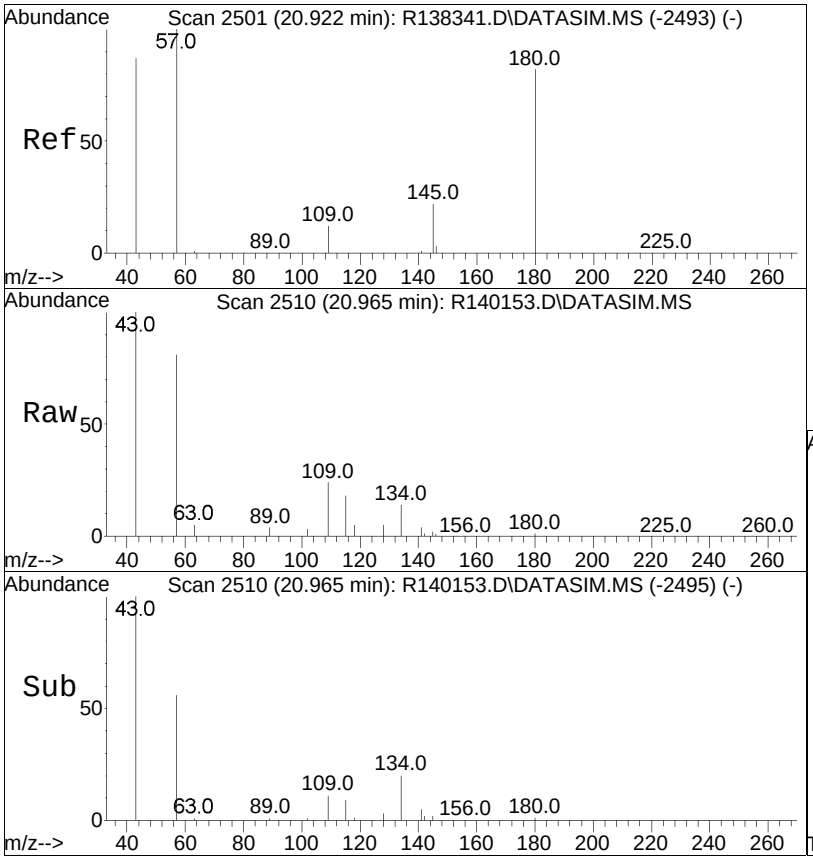



#75
1,2-dichlorobenzene
Concen: 0.03 ppbV
RT: 19.54 min Scan# 2264
Delta R.T. 0.005 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:146 Resp: 839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 439.3 | 32.5 | 48.7# |
| 75 | 36.6 | 21.8 | 32.8# |

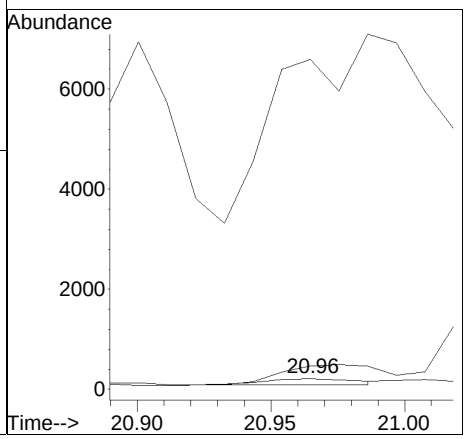


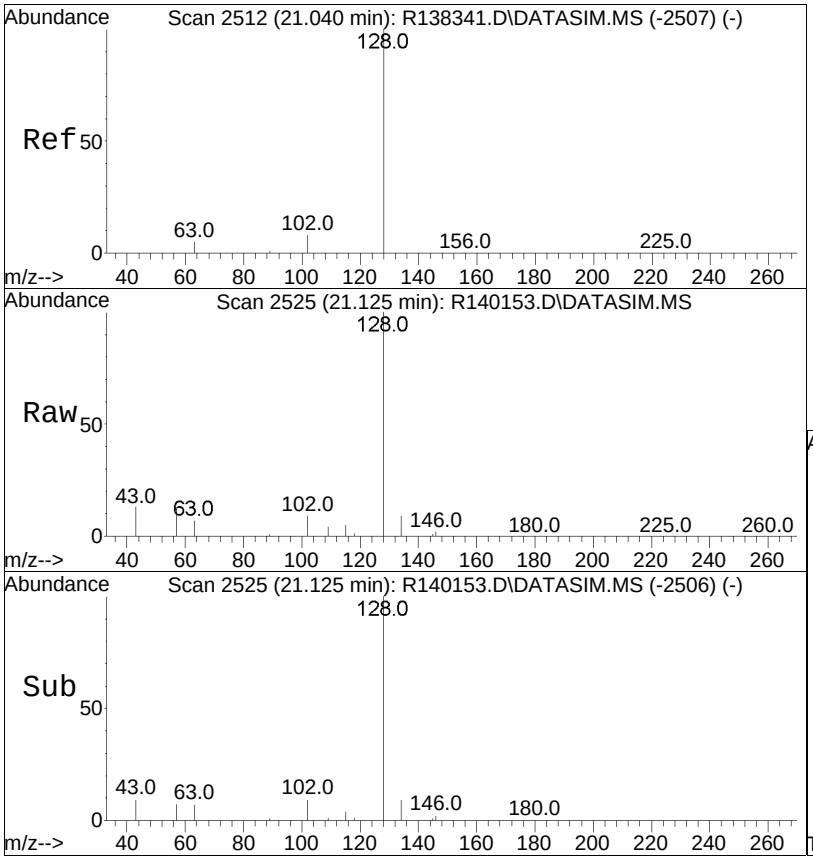



#77
1,2,4-trichlorobenzene
Concen: 0.01 ppbV
RT: 20.96 min Scan# 2510
Delta R.T. -0.043 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:180 Resp: 291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 221.7 | 24.9 | 37.3# |
| 109 | 3110.4 | 17.3 | 25.9# |

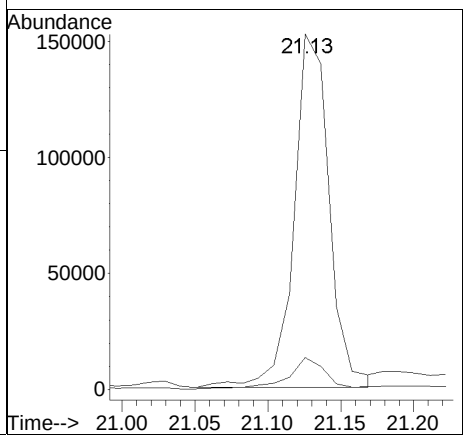





#78
naphthalene
Concen: 4.75 ppbV
RT: 21.13 min Scan# 2525
Delta R.T. -0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:128 Resp: 256883

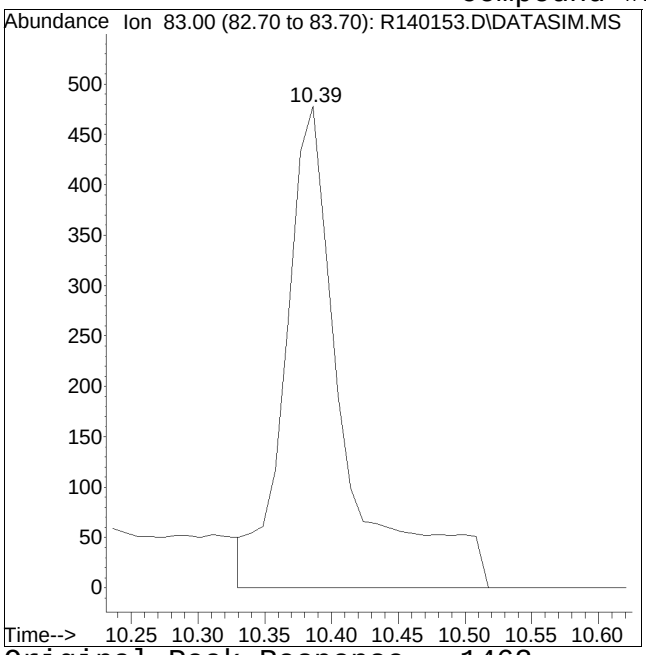
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 9.0 | 6.9 | 10.3 |



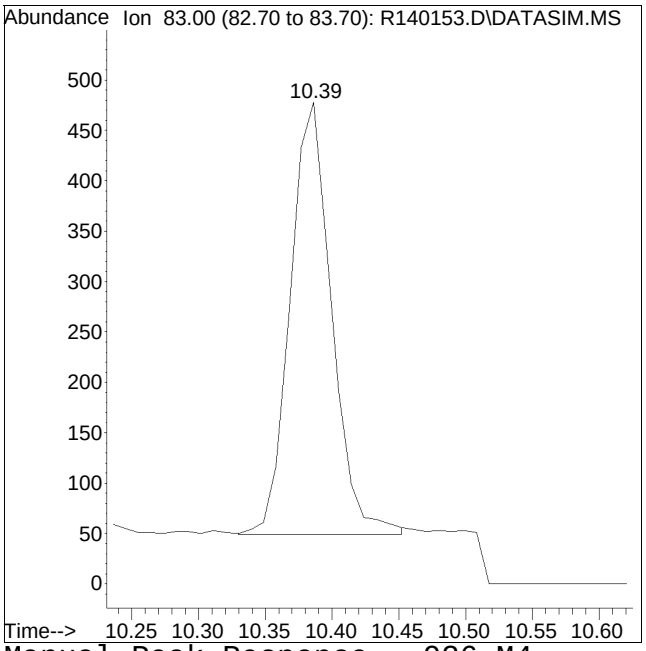
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140153.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 11:31 pm Instrument : Air Piano 1
Sample : L1504425-07,3,250,250 Quant Date : 3/12/2015 7:18 am

Compound #29: chloroform




Original Peak Response = 1462




Manual Peak Response = 926 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140156.D
Acq On : 12 Mar 2015 1:08 am
Operator : AIRPIANO1:RY
Sample : L1504425-09,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 12 10:38:56 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 108566 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 91.21% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 229775 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 86.25% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 56215 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 96.51% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 6499 | 0.478 | ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 545 | 0.078 | ppbV # | 83 |
| 5) Freon-114 | 4.25 | 85 | 304 | 0.016 | ppbV # | 87 |
| 6) vinyl chloride | 4.40 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | 54 | 41 | 0.007 | ppbV # | 1 |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 5.28 | 64 | 27 | 0.008 | ppbV # | 1 |
| 13) trichlorofluoromethane | 6.41 | 101 | 3931 | 0.213 | ppbV | 99 |
| 16) 1,1-dichloroethene | 0.00 | | 0 | N.D. | d | |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 7.85 | 101 | 1067 | 0.069 | ppbV # | 95 |
| 22) trans-1,2-dichloroethene | 8.71 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.97 | | 0 | N.D. | | |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | | 0 | N.D. | | |
| 29) chloroform | 10.39 | 83 | 1102M4 | 0.059 | ppbV | |
| 31) 1,2-dichloroethane | 11.28 | | 0 | N.D. | | |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 158 | 0.010 | ppbV # | 17 |
| 36) benzene | 12.09 | 78 | 1791 | 0.083 | ppbV # | 88 |
| 37) carbon tetrachloride | 12.26 | 117 | 1082 | 0.071 | ppbV # | 95 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 4242 | 0.400 | ppbV | 97 |
| 45) cis-1,3-dichloropropene | 14.34 | | 0 | N.D. | | |
| 47) trans-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 48) 1,1,2-trichloroethane | 0.00 | | 0 | N.D. | d | |
| 50) toluene | 15.37 | 91 | 11123 | 0.377 | ppbV | 99 |
| 53) dibromochloromethane | 0.00 | | 0 | N.D. | d | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140156.D
Acq On : 12 Mar 2015 1:08 am
Operator : AIRPIANO1:RY
Sample : L1504425-09,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 12 10:38:56 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 0.00 | | 0 | N.D. | d | |
| 55) tetrachloroethene | 16.43 | 166 | 7671 | 0.505 | ppbV | 96 |
| 56) 1,1,1,2-tetrachloroethane | 17.00 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 1369 | 0.035 | ppbV | 92 |
| 59) m+p-xylene | 17.43 | 91 | 4046 | 0.132 | ppbV | 100 |
| 60) bromoform | 17.51 | | 0 | N.D. | | |
| 61) styrene | 17.73 | 104 | 679 | 0.029 | ppbV # | 80 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.81 | 91 | 1271 | 0.039 | ppbV | 93 |
| 67) 1,3,5-trimethylbenzene | 18.79 | 105 | 861 | 0.019 | ppbV # | 91 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 2621 | 0.068 | ppbV # | 65 |
| 71) 1,3-dichlorobenzene | 0.00 | | 0 | N.D. | d | |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 1162 | 0.039 | ppbV # | 83 |
| 75) 1,2-dichlorobenzene | 19.55 | 146 | 1157 | 0.042 | ppbV # | 90 |
| 77) 1,2,4-trichlorobenzene | 21.02 | | 0 | N.D. | | |
| 78) naphthalene | 21.13 | 128 | 8983 | 0.157 | ppbV | 99 |
| 80) hexachlorobutadiene | 21.47 | | 0 | N.D. | | |

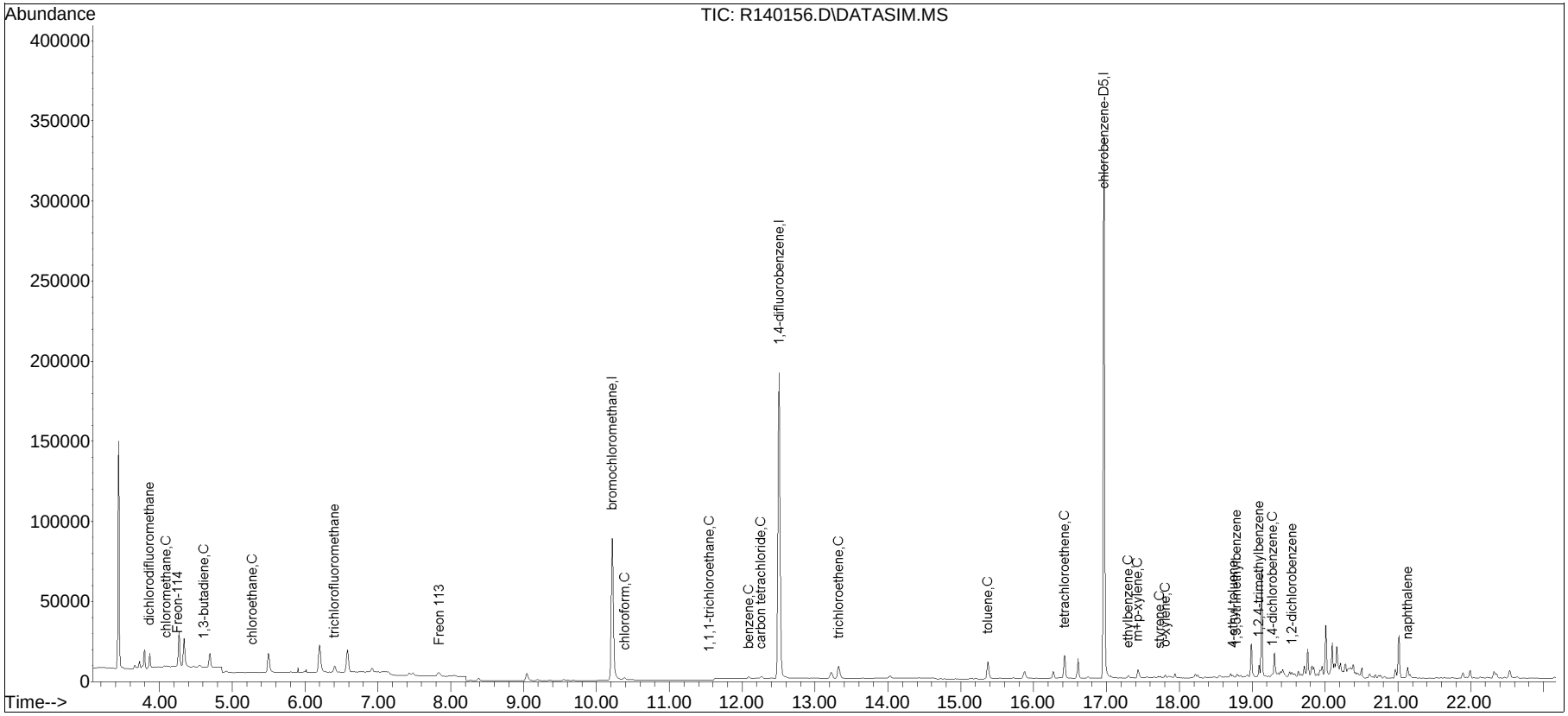
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

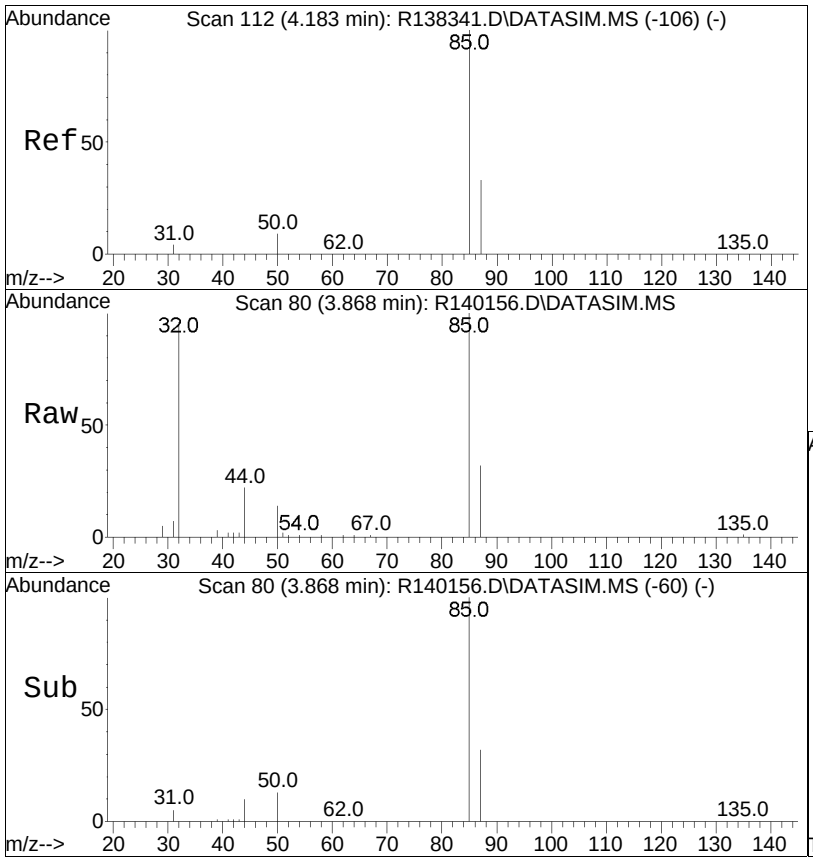
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140156.D
Acq On : 12 Mar 2015 1:08 am
Operator : AIRPIANO1:RY
Sample : L1504425-09,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 12 10:38:56 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



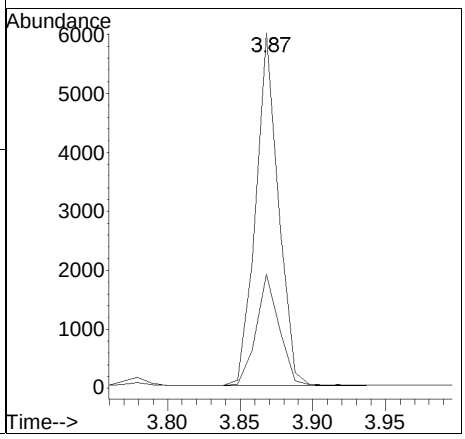

TSIM150102.M Wed Mar 25 12:04:38 2015

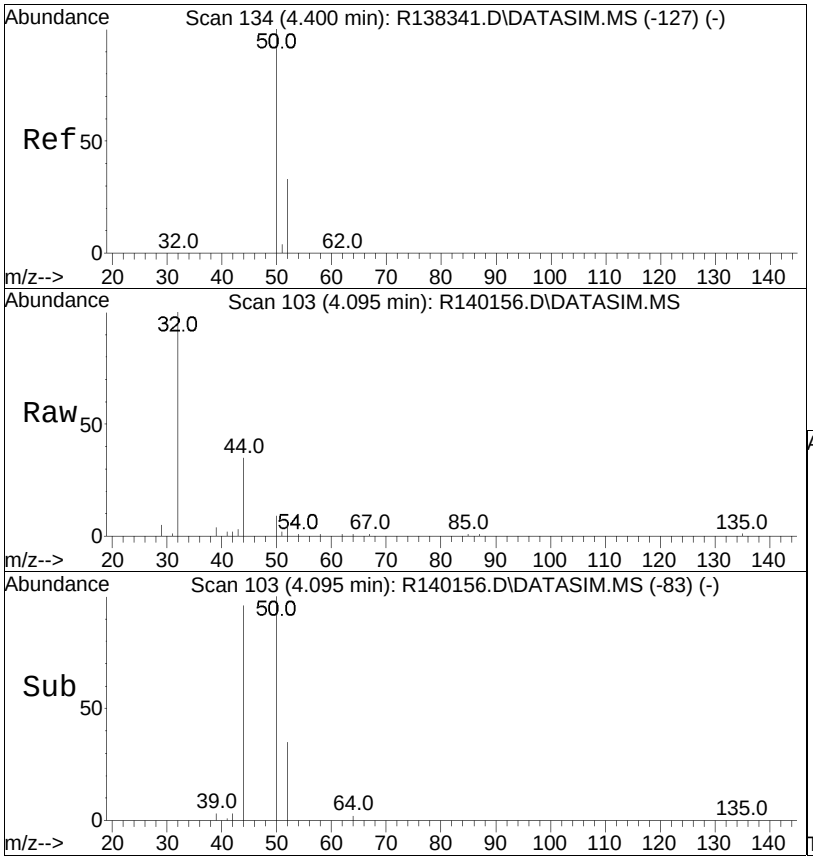



#3
dichlorodifluoromethane
Concen: 0.48 ppbV
RT: 3.87 min Scan# 80
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 85 Resp: 6499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.2 | 25.8 | 38.8 |

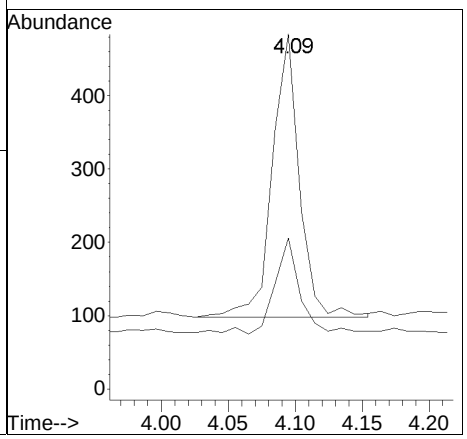


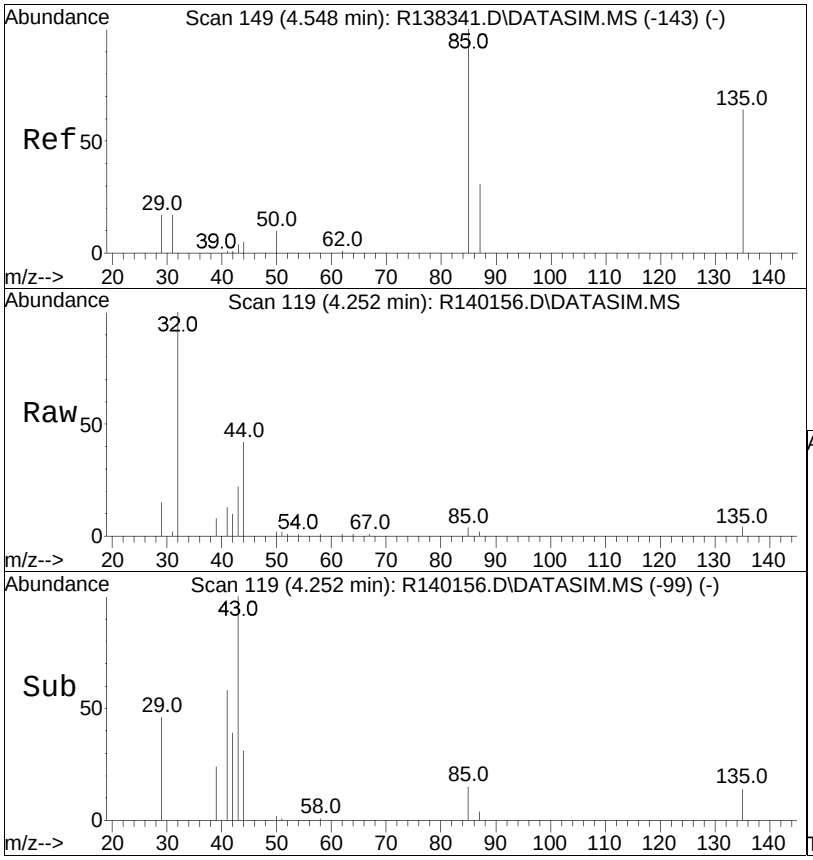



#4
chloromethane
Concen: 0.08 ppbV
RT: 4.09 min Scan# 103
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 50 Resp: 545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 42.6 | 26.4 | 39.6# |

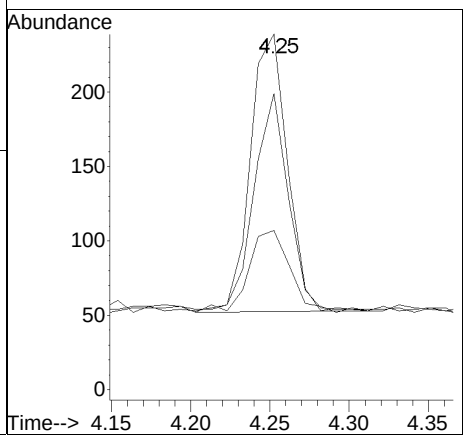


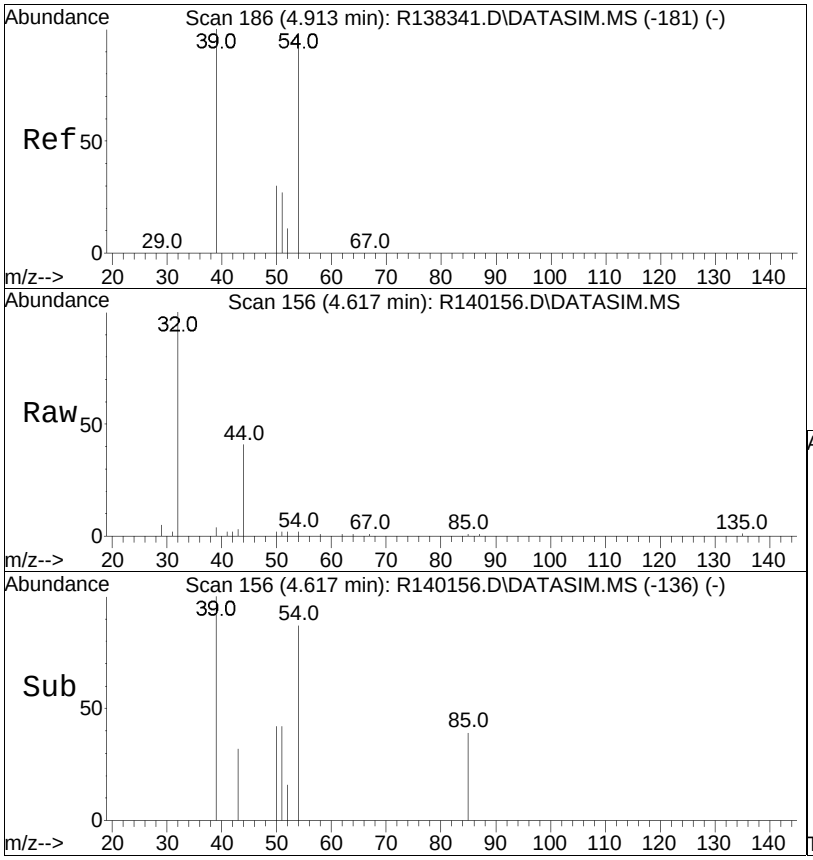



#5
Freon-114
Concen: 0.02 ppbV
RT: 4.25 min Scan# 119
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 85 Resp: 304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 44.8 | 26.3 | 39.5# |
| 135 | 83.3 | 60.5 | 90.7 |

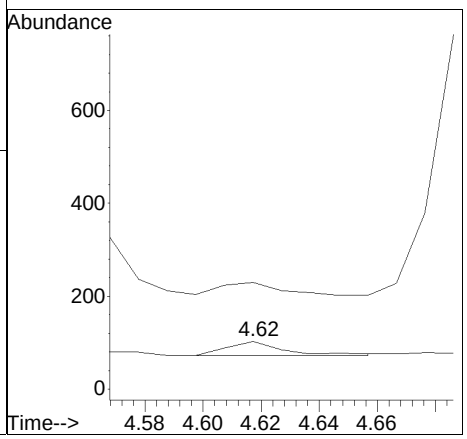


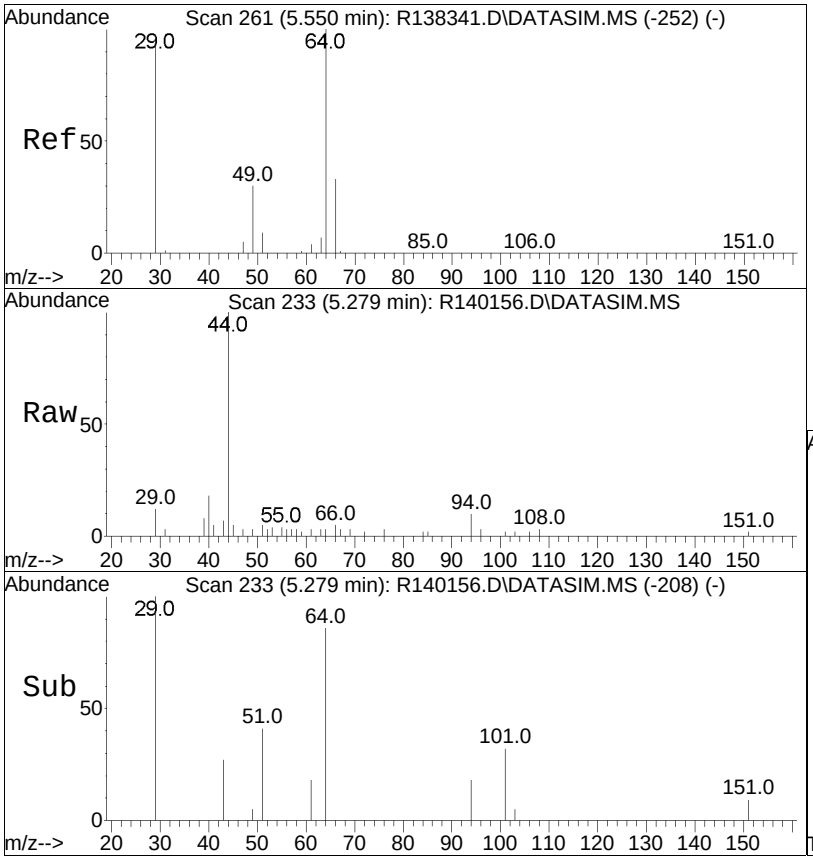



#7
1,3-butadiene
Concen: 0.01 ppbV
RT: 4.62 min Scan# 156
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 54 Resp: 41

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 223.3 | 84.0 | 126.0# |

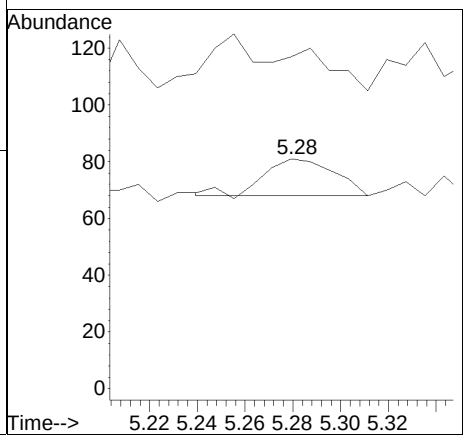


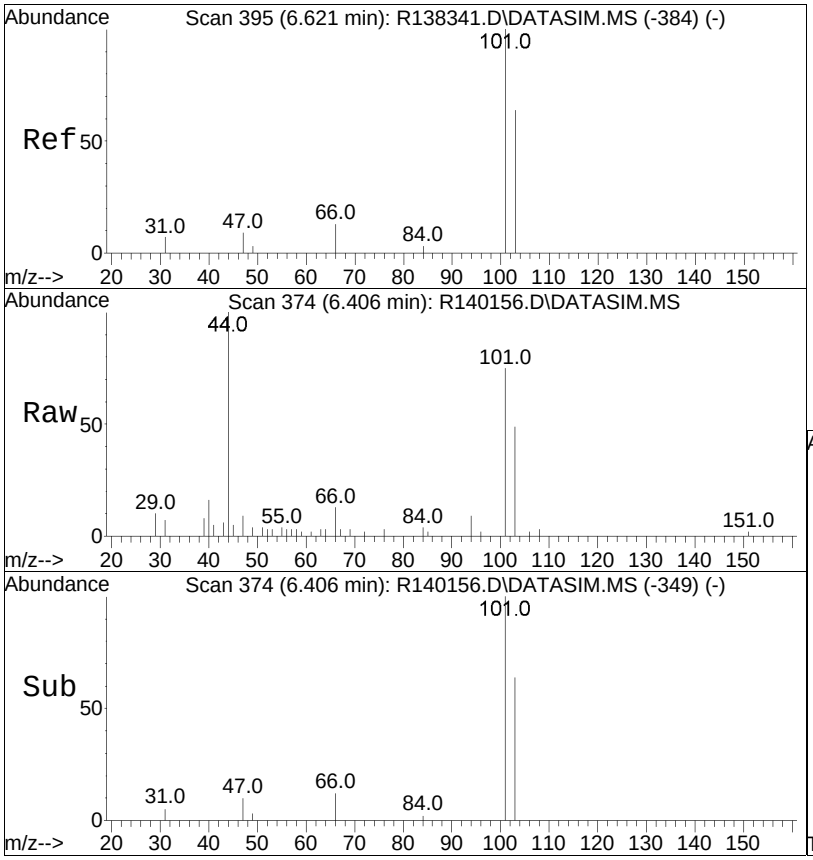



#9
chloroethane
Concen: 0.01 ppbV
RT: 5.28 min Scan# 233
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 64 Resp: 27

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 144.4 | 26.2 | 39.2# |

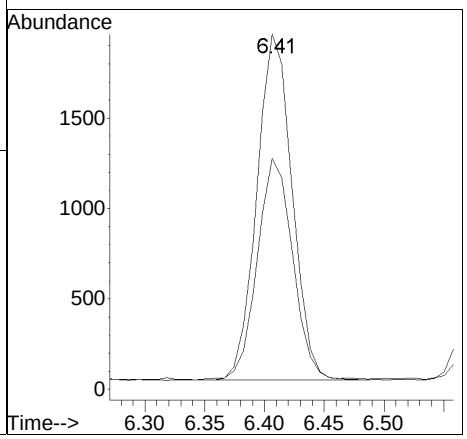


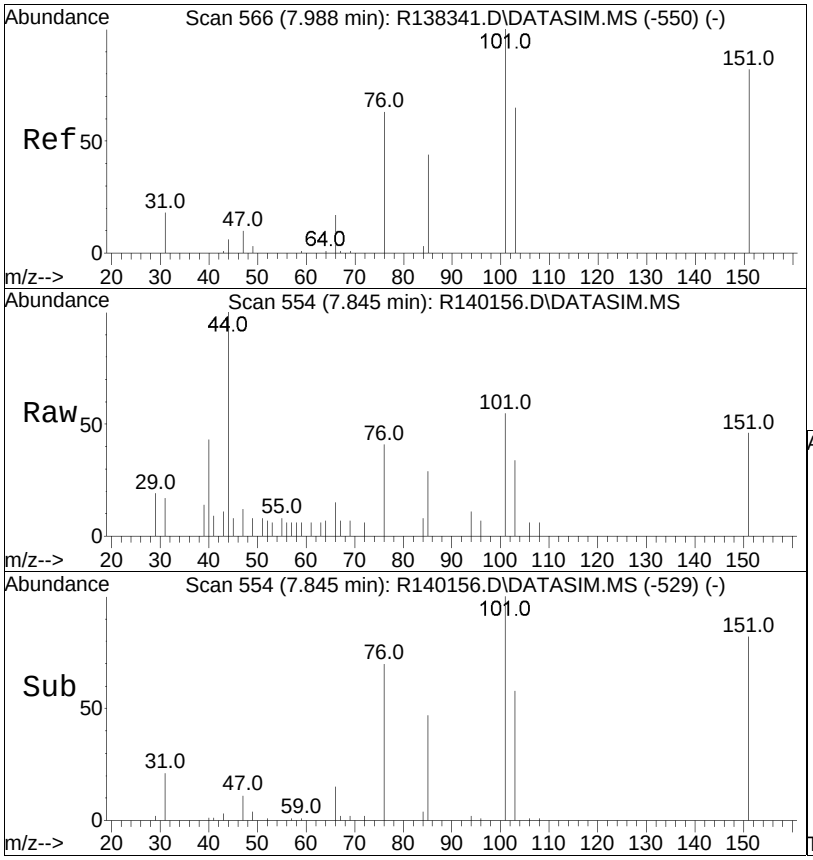



#13
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 6.41 min Scan# 374
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:101 Resp: 3931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.0 | 51.2 | 76.8 |

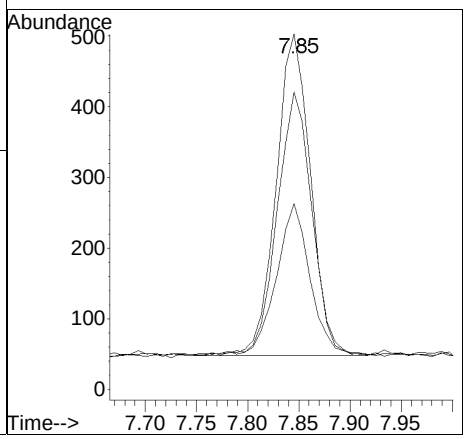


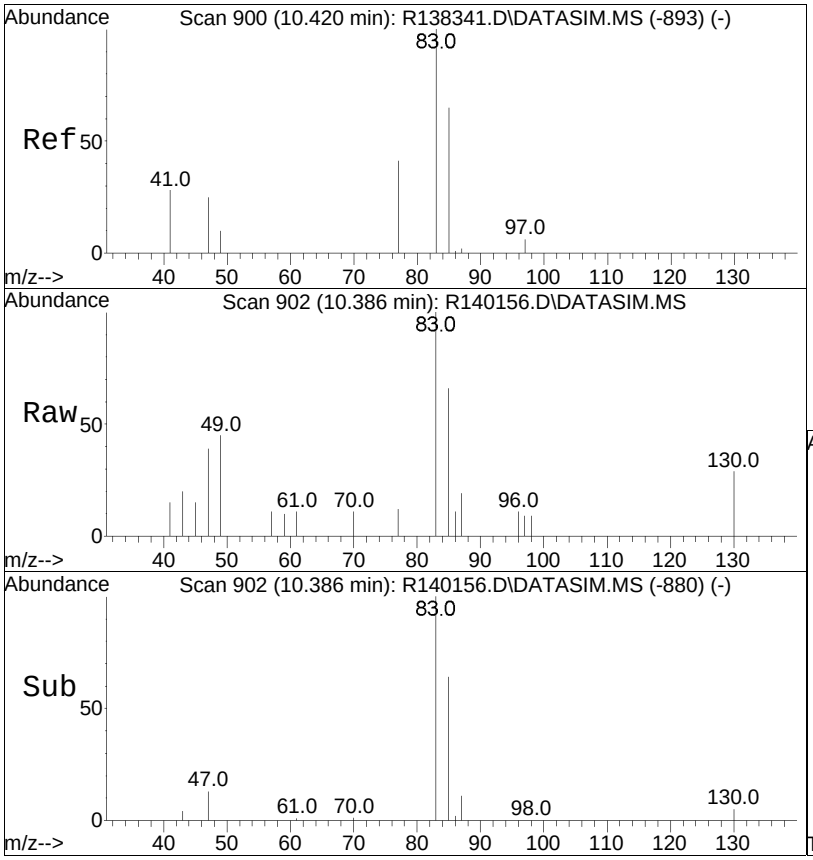



#20
Freon 113
Concen: 0.07 ppbV
RT: 7.85 min Scan# 554
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:101 Resp: 1067

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 52.3 | 34.5 | 51.7# |
| 151 | 83.7 | 67.4 | 101.2 |

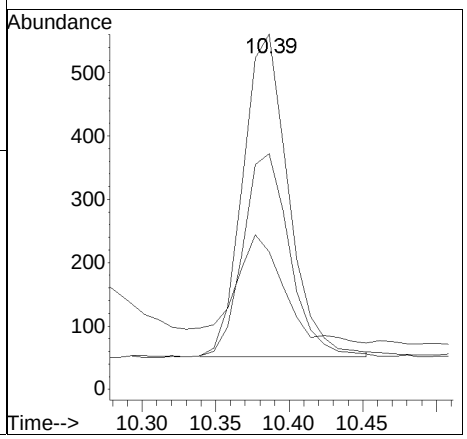


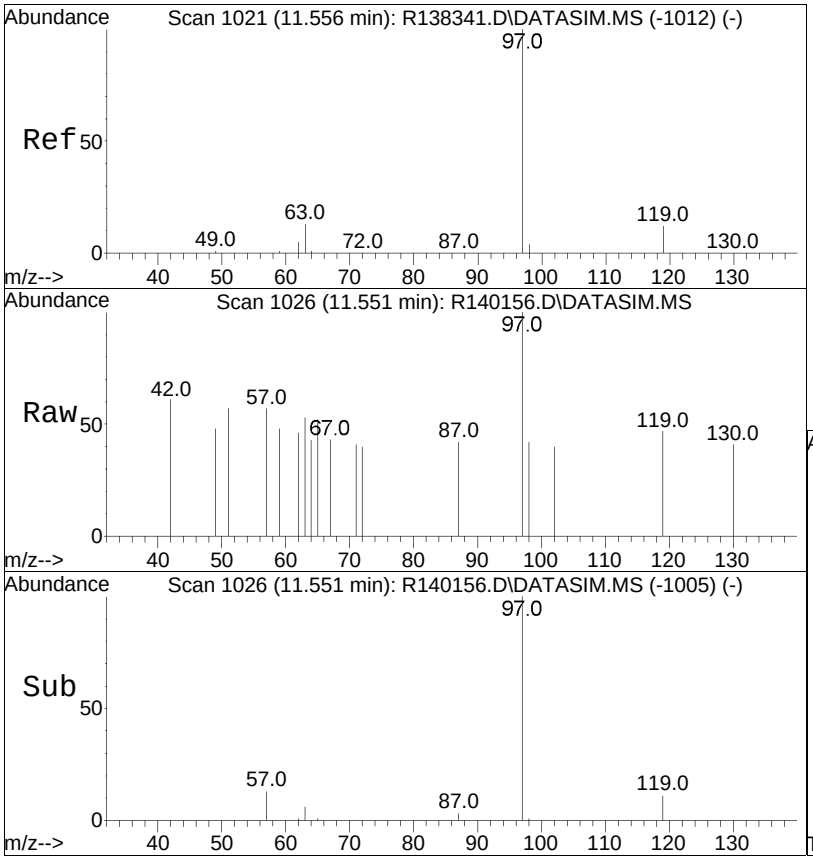



#29
chloroform
Concen: 0.06 ppbV m
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 83 Resp: 1102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.3 | 50.9 | 76.3 |
| 47 | 38.7 | 24.9 | 37.3# |

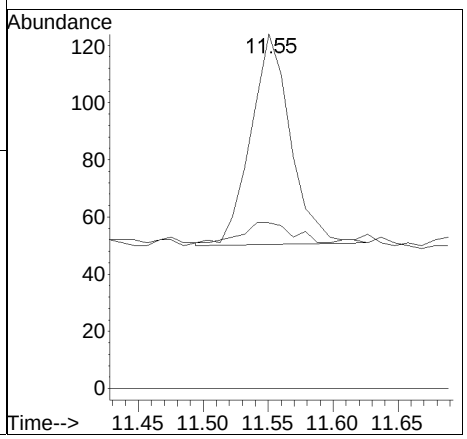


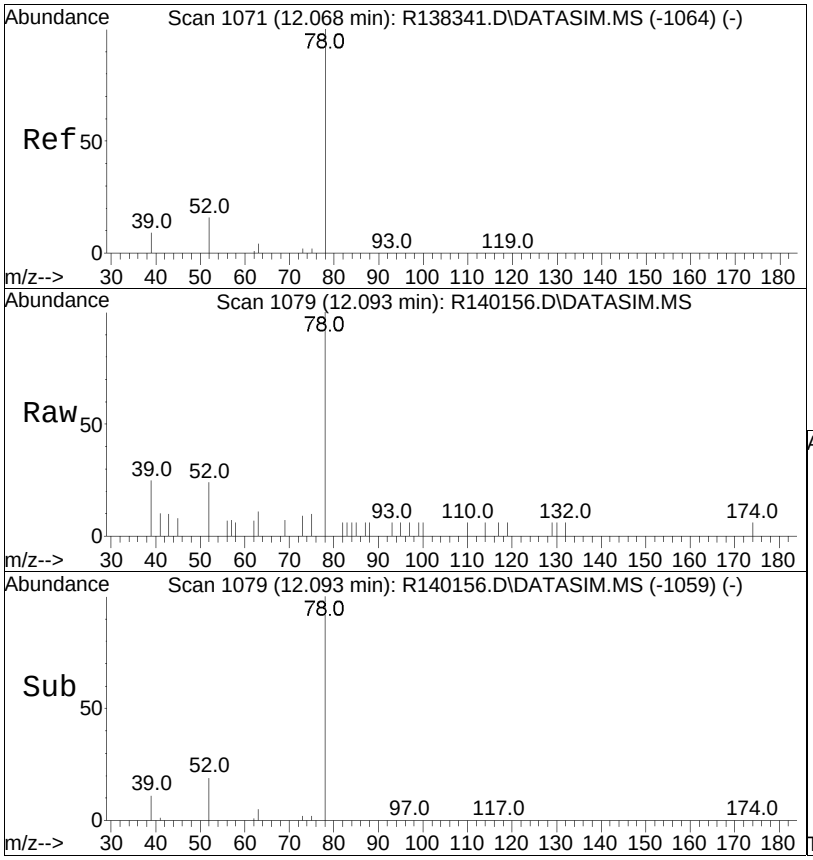



#35
1,1,1-trichloroethane
Concen: 0.01 ppbV
RT: 11.55 min Scan# 1026
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 97 Resp: 158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 61 | 0.0 | 0.0 | 0.0 |
| 119 | 46.8 | 10.7 | 16.1# |

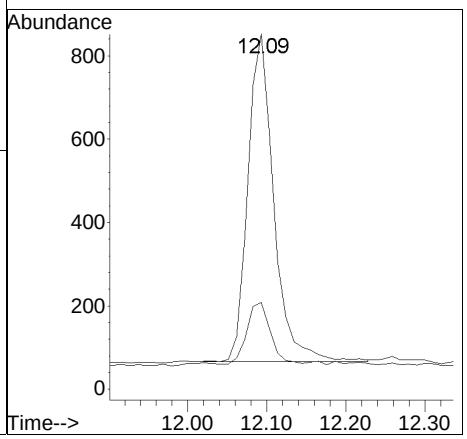


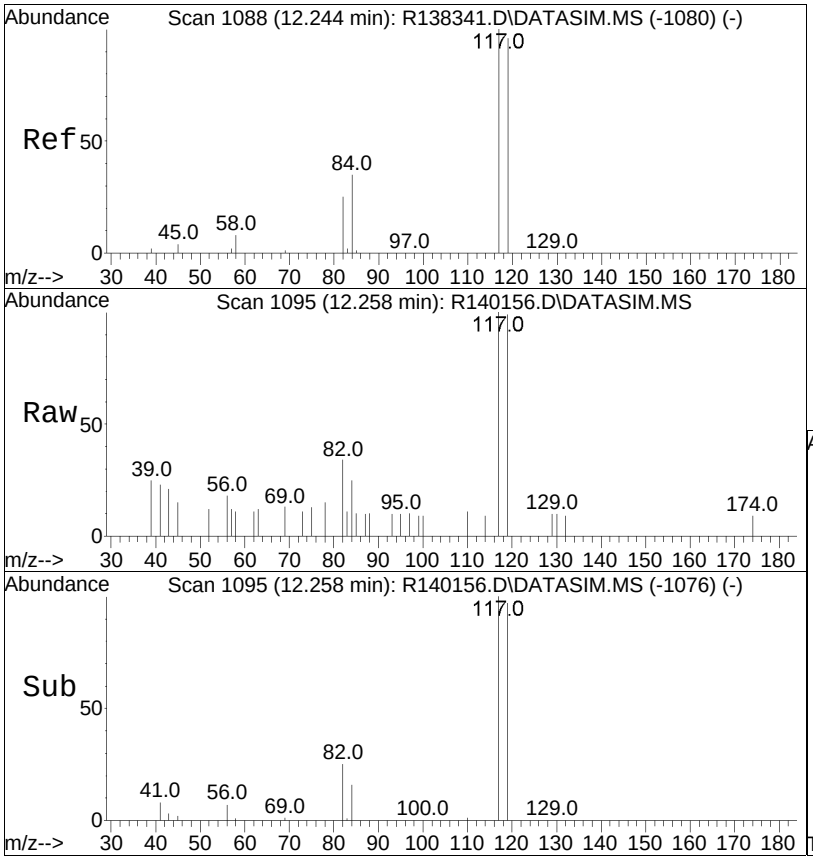



#36
benzene
Concen: 0.08 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 78 Resp: 1791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 24.4 | 15.4 | 23.0# |

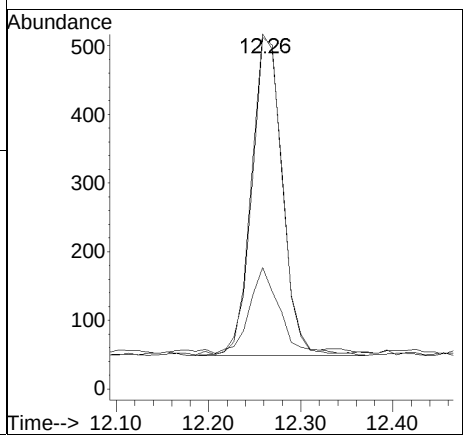


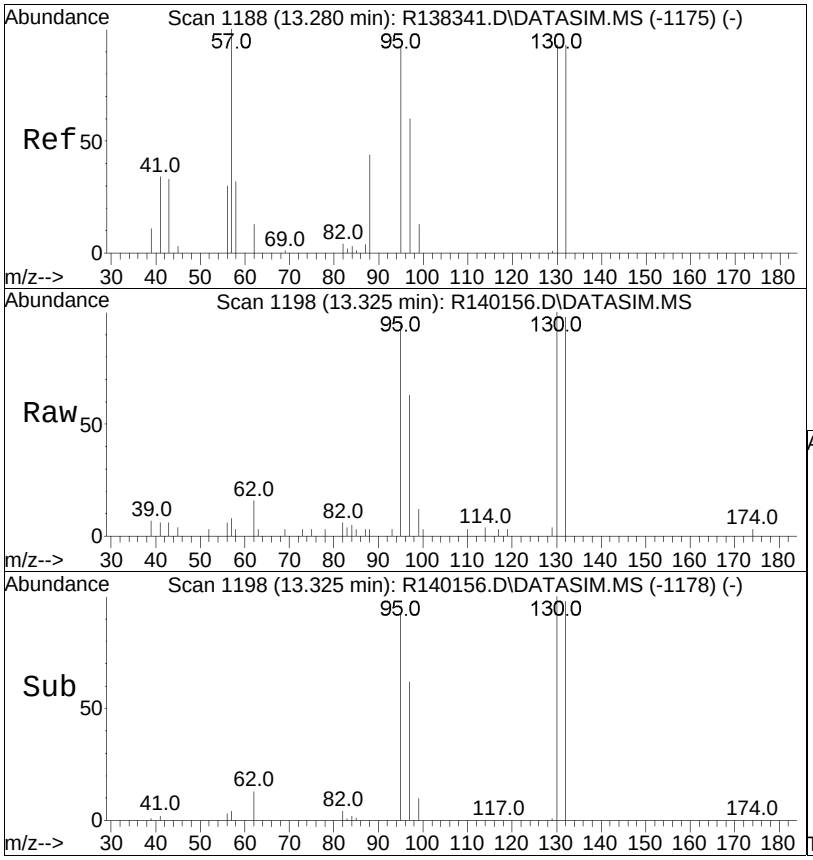



#37
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:117 Resp: 1082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 99.0 | 78.5 | 117.7 |
| 82 | 34.2 | 19.8 | 29.8# |

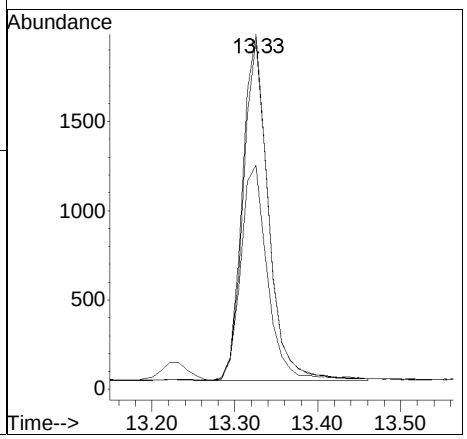


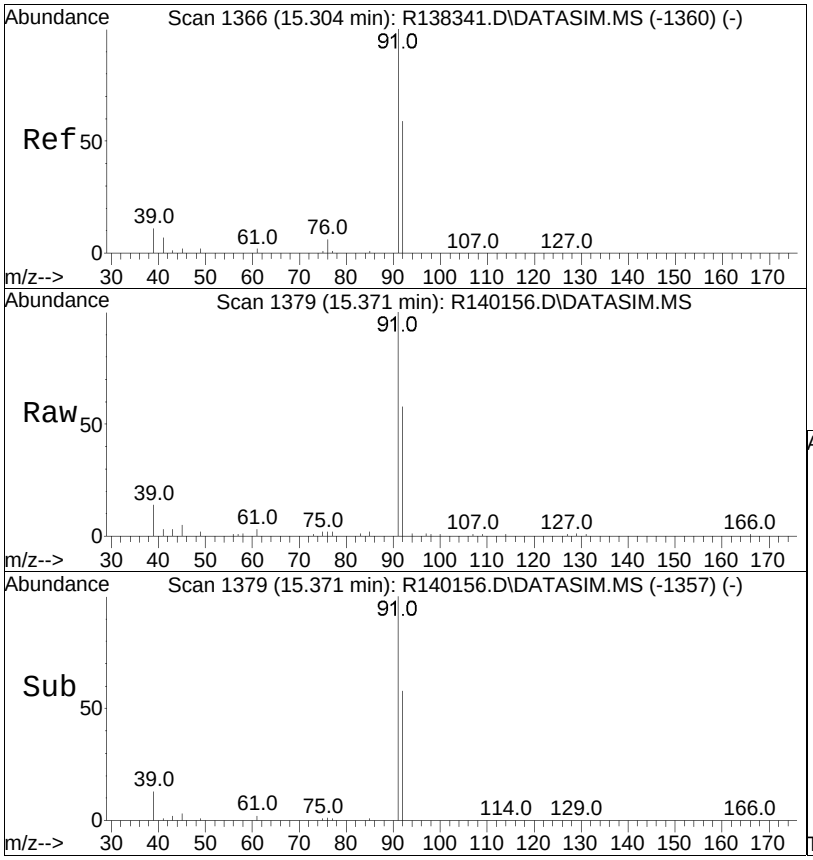



#42
trichloroethene
Concen: 0.40 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:130 Resp: 4242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 98.1 | 76.0 | 114.0 |
| 97 | 63.1 | 51.8 | 77.8 |

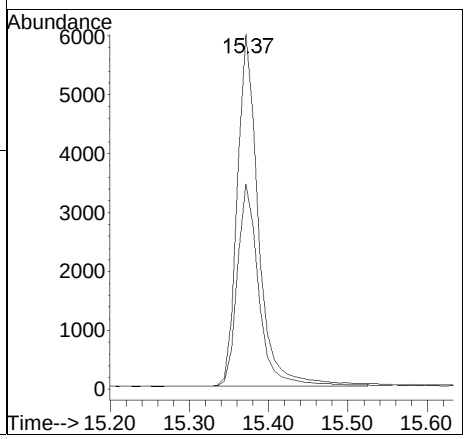


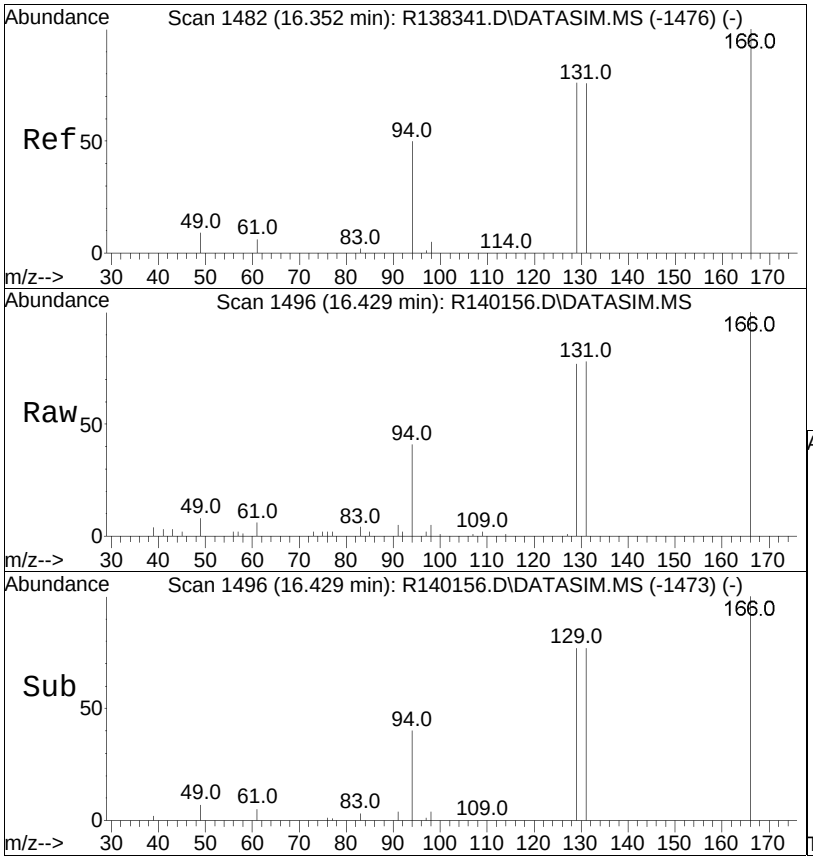



#50
toluene
Concen: 0.38 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 91 Resp: 11123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 57.9 | 47.2 | 70.8 |

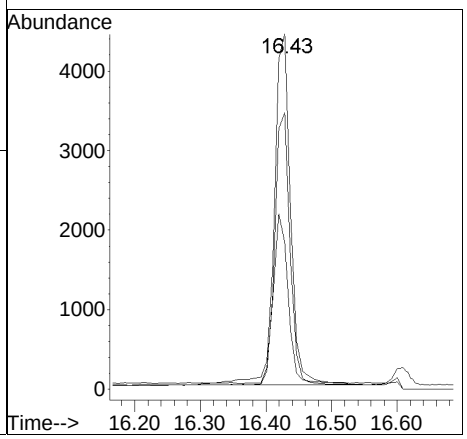


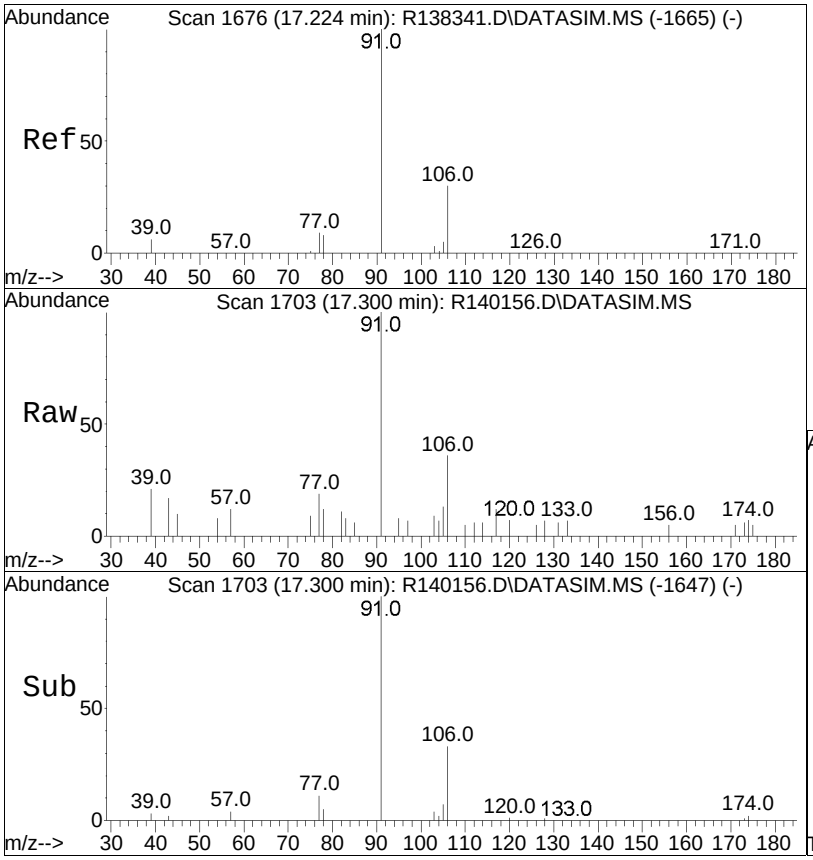



#55
tetrachloroethene
Concen: 0.51 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:166 Resp: 7671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 77.9 | 61.7 | 92.5 |
| 94 | 41.4 | 38.0 | 57.0 |

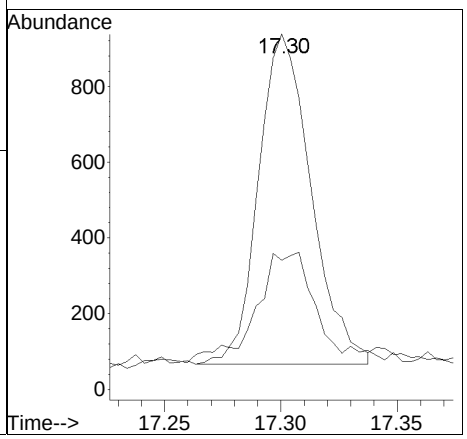


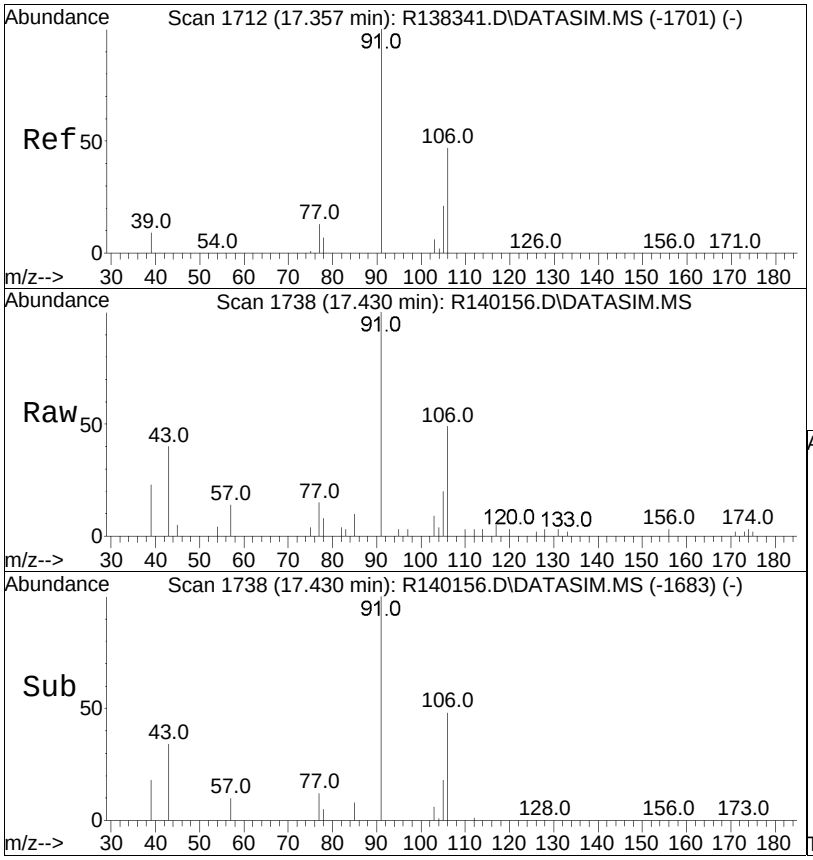



#58
ethylbenzene
Concen: 0.03 ppbV
RT: 17.30 min Scan# 1703
Delta R.T. 0.006 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 91 Resp: 1369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 36.4 | 25.4 | 38.0 |

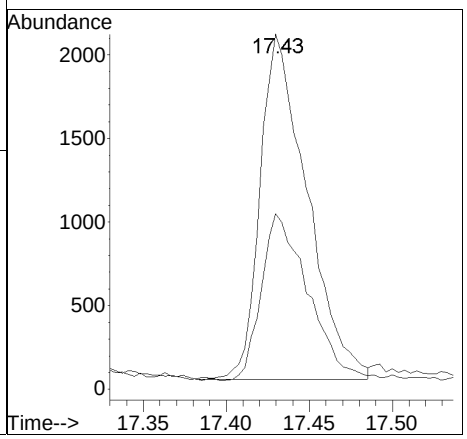


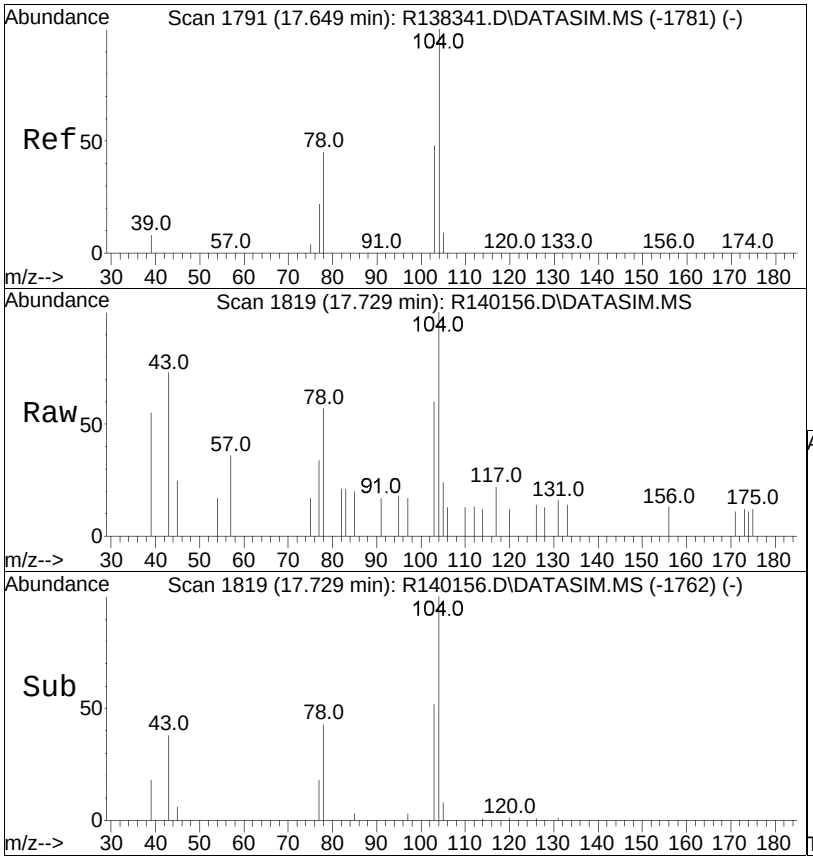



#59
m+p-xylene
Concen: 0.13 ppbV
RT: 17.43 min Scan# 1738
Delta R.T. 0.002 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 91 Resp: 4046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.4 | 39.7 | 59.5 |

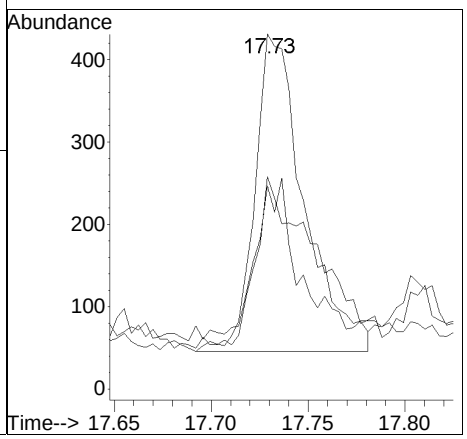


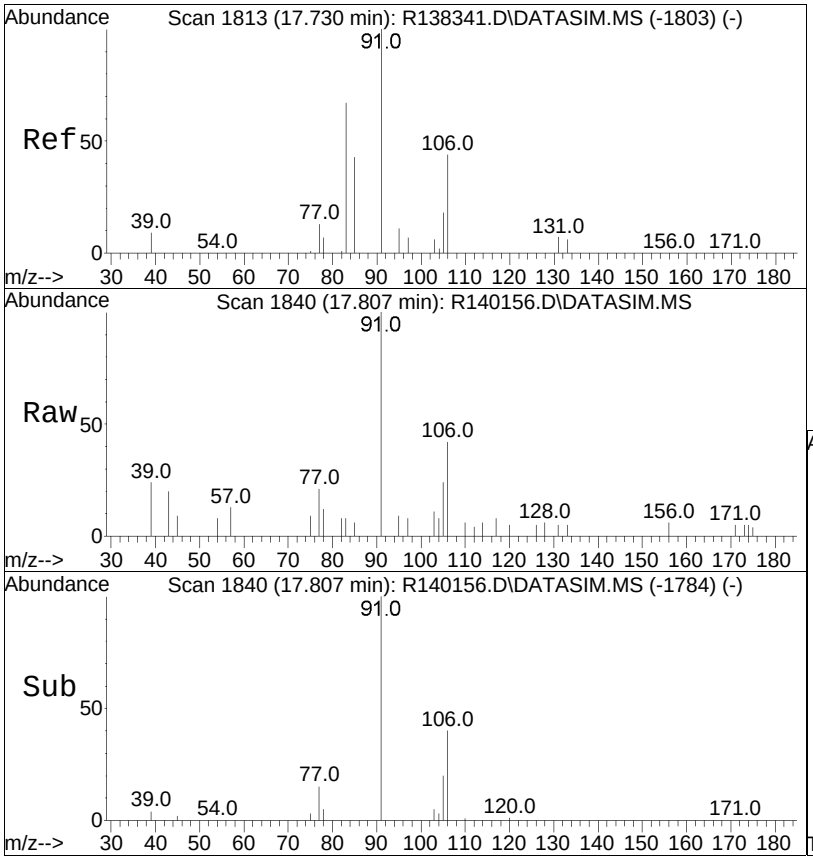



#61
styrene
Concen: 0.03 ppbV
RT: 17.73 min Scan# 1819
Delta R.T. 0.009 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:104 Resp: 679

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 59.9 | 38.5 | 57.7# |
| 78 | 57.3 | 33.7 | 50.5# |

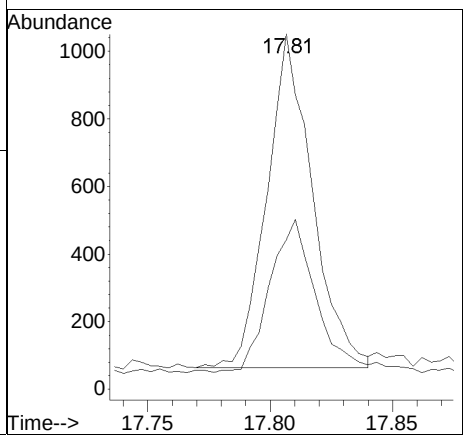


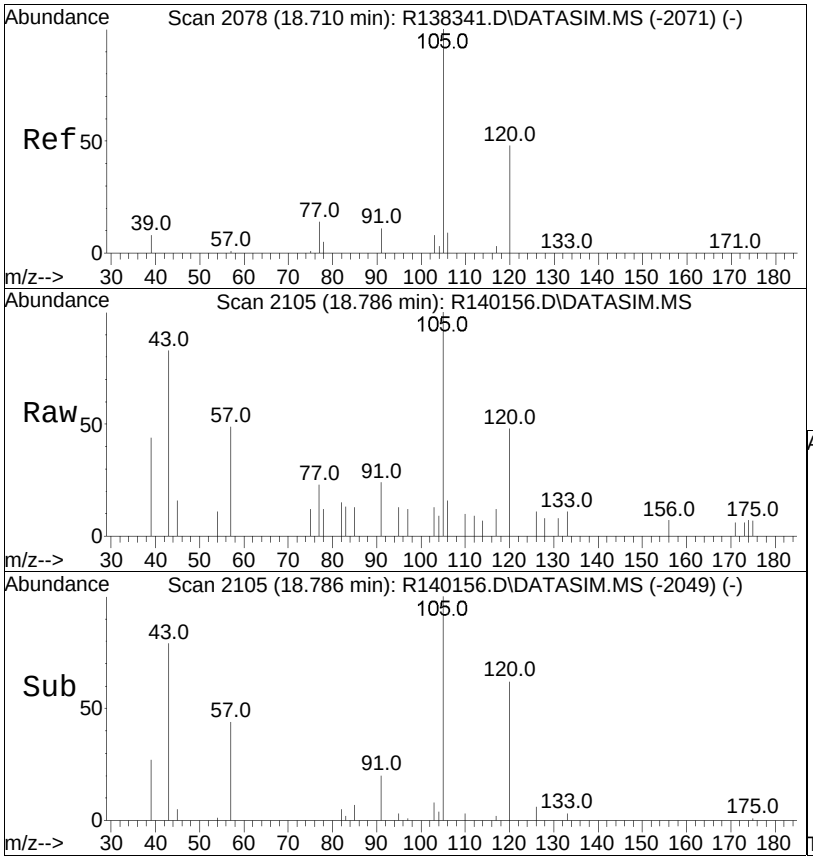



#63
o-xylene
Concen: 0.04 ppbV
RT: 17.81 min Scan# 1840
Delta R.T. 0.006 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 91 Resp: 1271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 42.1 | 37.6 | 56.4 |

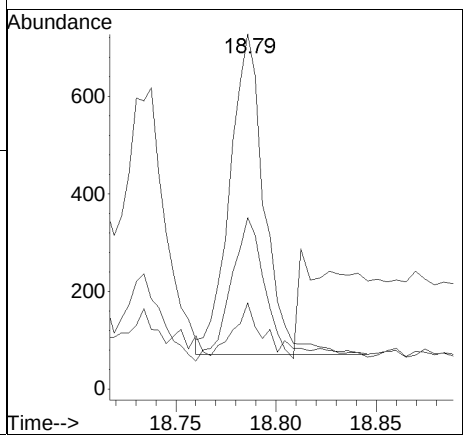


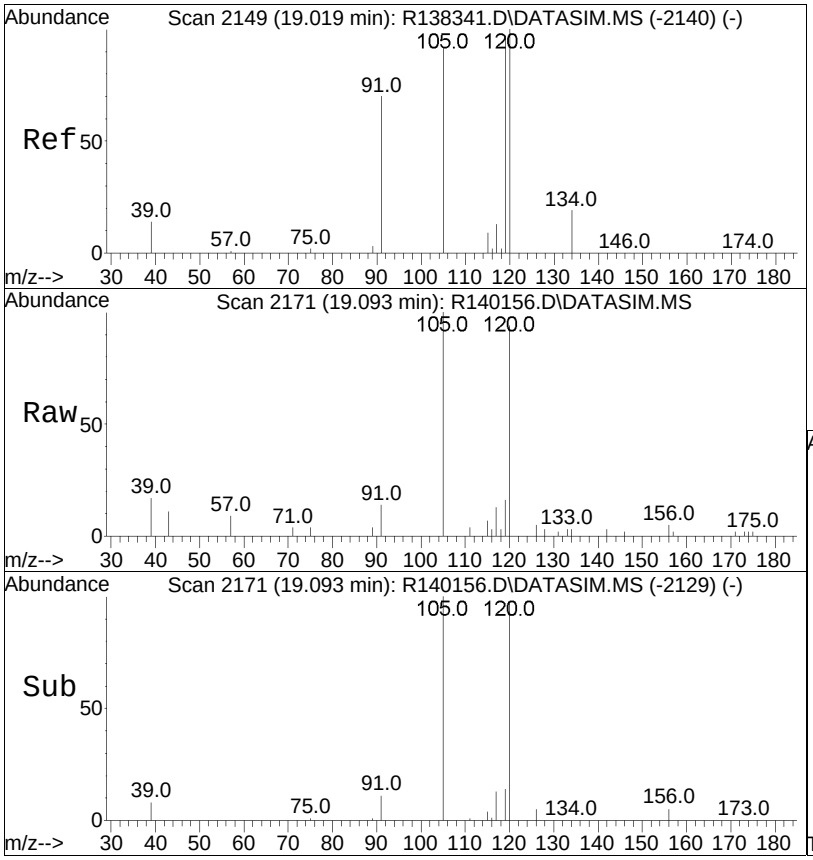



#67
1,3,5-trimethylbenzene
Concen: 0.02 ppbV
RT: 18.79 min Scan# 2105
Delta R.T. 0.006 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:105 Resp: 861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.4 | 40.4 | 60.6 |
| 91 | 24.3 | 8.4 | 12.6# |

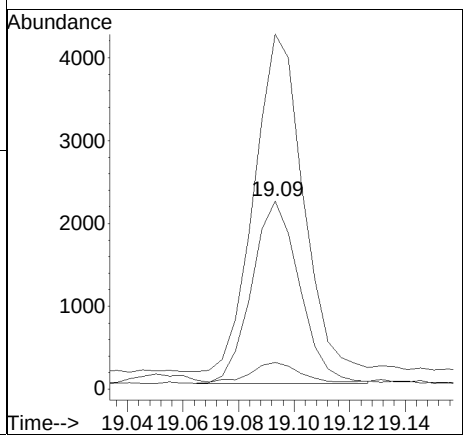


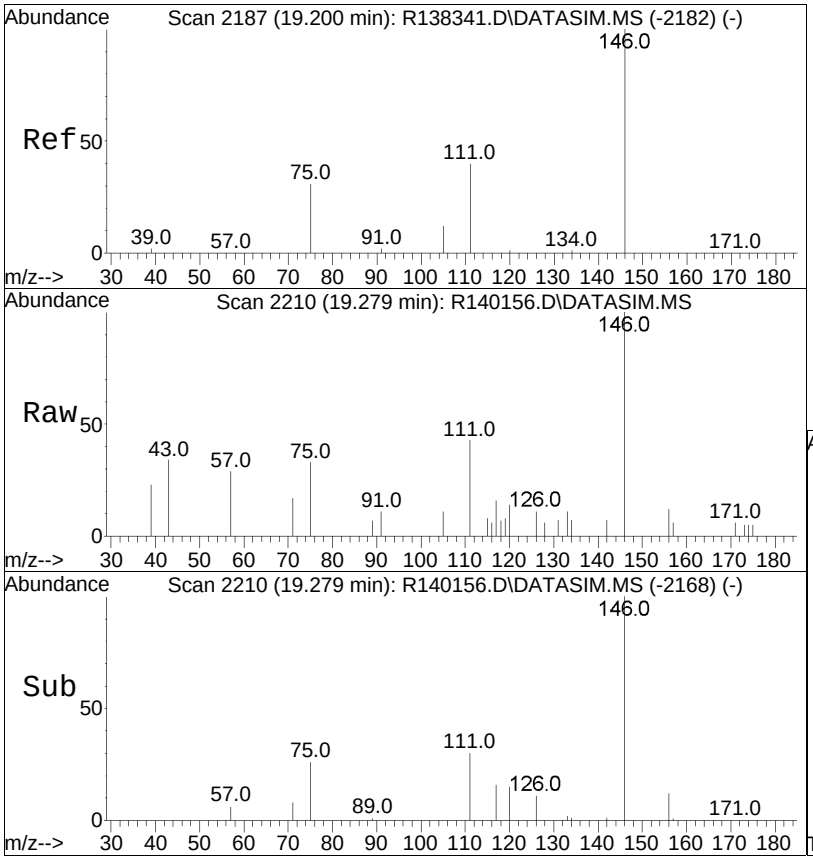



#69
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 19.09 min Scan# 2171
Delta R.T. 0.002 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:105 Resp: 2621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 188.8 | 184.1 | 276.1 |
| 91 | 14.3 | 57.4 | 86.2# |

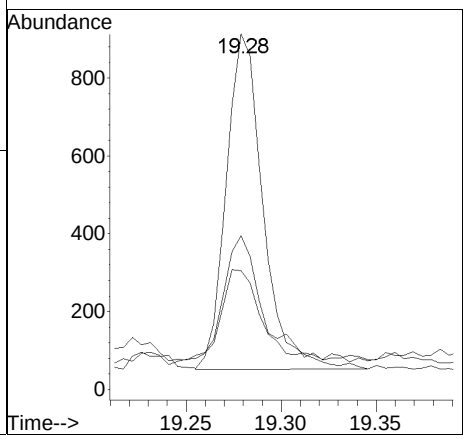


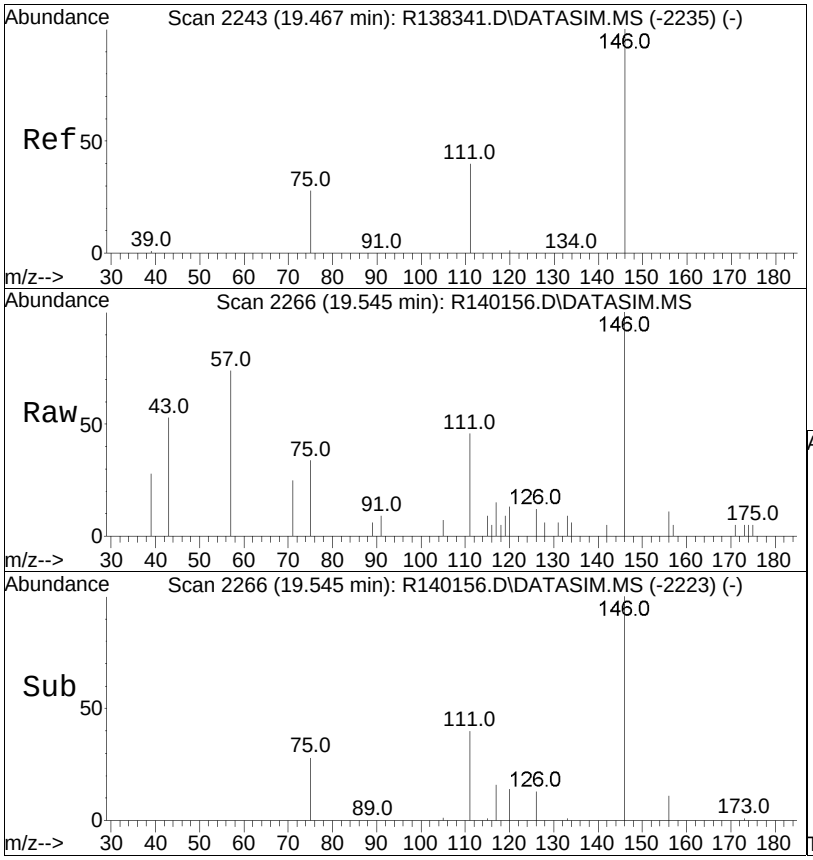



#72
1,4-dichlorobenzene
Concen: 0.04 ppbV
RT: 19.28 min Scan# 2210
Delta R.T. 0.002 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:146 Resp: 1162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.3 | 27.3 | 40.9# |
| 75 | 33.4 | 19.4 | 29.0# |

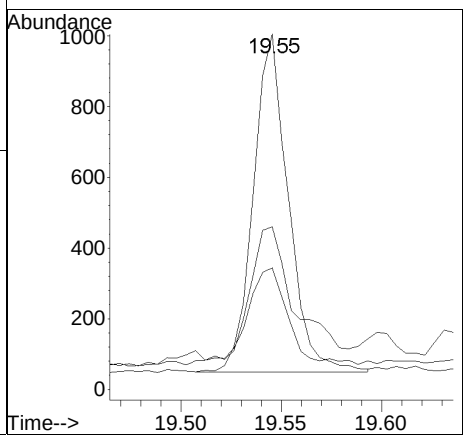


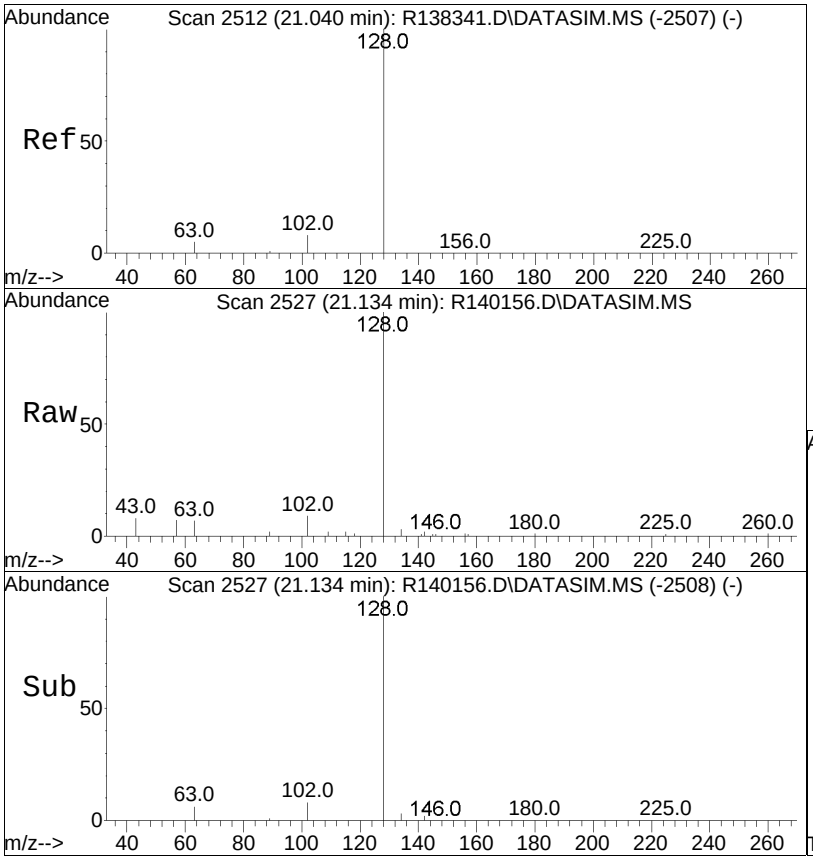



#75
1,2-dichlorobenzene
Concen: 0.04 ppbV
RT: 19.55 min Scan# 2266
Delta R.T. 0.007 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:146 Resp: 1157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.8 | 32.5 | 48.7 |
| 75 | 34.2 | 21.8 | 32.8# |

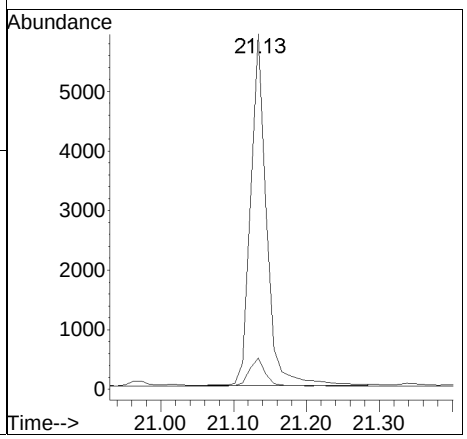





#78
naphthalene
Concen: 0.16 ppbV
RT: 21.13 min Scan# 2527
Delta R.T. 0.008 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion:128 Resp: 8983

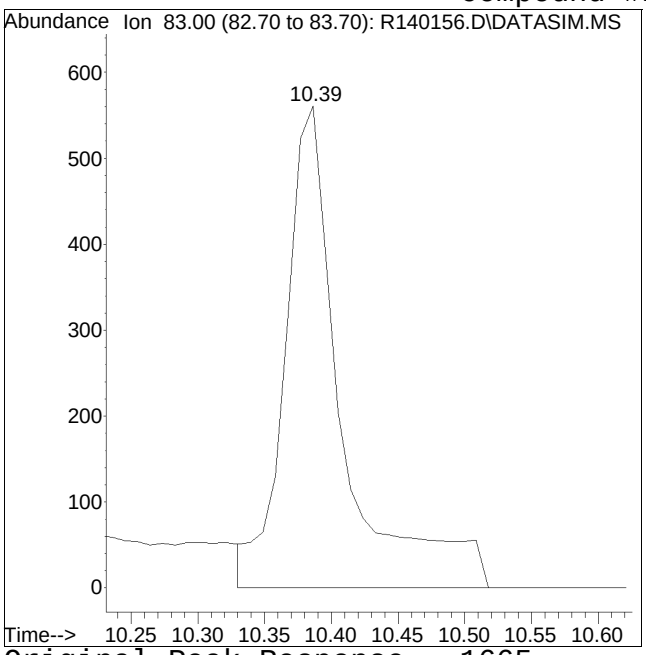
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 8.8 | 6.9 | 10.3 |



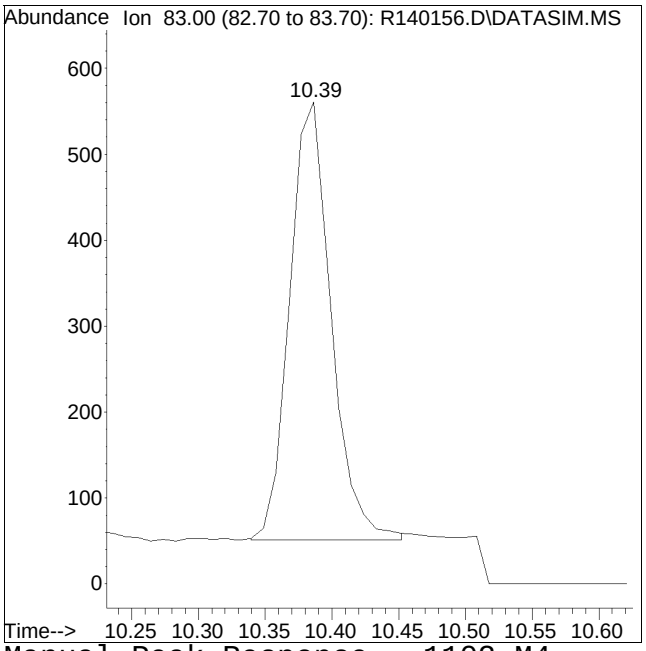
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140156.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:08 am Instrument : Air Piano 1
Sample : L1504425-09,3,250,250 Quant Date : 3/12/2015 7:19 am

Compound #29: chloroform




Original Peak Response = 1665




Manual Peak Response = 1102 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140157.D
Acq On : 12 Mar 2015 1:40 am
Operator : AIRPIANO1:RY
Sample : L1504425-10,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 16 10:52:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 109329 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = 91.85% | | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 232926 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = 87.43% | | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 59253 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = 101.73% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 737 | 0.054 | ppbV | 92 |
| 4) chloromethane | 4.09 | | 0 | N.D. | | |
| 5) Freon-114 | 4.25 | 85 | 315 | 0.016 | ppbV # | 90 |
| 6) vinyl chloride | 4.41 | 62 | 933 | 0.127 | ppbV # | 87 |
| 7) 1,3-butadiene | 0.00 | | 0 | N.D. | d | |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 5.28 | 64 | 94 | 0.026 | ppbV # | 1 |
| 13) trichlorofluoromethane | 6.41 | | 0 | N.D. | | |
| 16) 1,1-dichloroethene | 7.29 | 61 | 91 | 0.007 | ppbV # | 38 |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 0.00 | | 0 | N.D. | d | |
| 22) trans-1,2-dichloroethene | 8.72 | 61 | 314 | 0.026 | ppbV # | 80 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 1498 | 0.106 | ppbV # | 88 |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | 61 | 1519 | 0.120 | ppbV # | 87 |
| 29) chloroform | 10.39 | 83 | 145 | 0.008 | ppbV # | 59 |
| 31) 1,2-dichloroethane | 0.00 | | 0 | N.D. | d | |
| 35) 1,1,1-trichloroethane | 11.53 | | 0 | N.D. | | |
| 36) benzene | 12.09 | 78 | 20649 | 0.947 | ppbV | 96 |
| 37) carbon tetrachloride | 0.00 | | 0 | N.D. | d | |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 242 | 0.023 | ppbV # | 78 |
| 45) cis-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 47) trans-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 48) 1,1,2-trichloroethane | 0.00 | | 0 | N.D. | d | |
| 50) toluene | 15.37 | 91 | 8101 | 0.260 | ppbV | 100 |
| 53) dibromochloromethane | 0.00 | | 0 | N.D. | d | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140157.D
Acq On : 12 Mar 2015 1:40 am
Operator : AIRPIANO1:RY
Sample : L1504425-10,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 16 10:52:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 0.00 | | 0 | N.D. | d | |
| 55) tetrachloroethene | 16.43 | 166 | 282 | 0.018 | ppbV # | 75 |
| 56) 1,1,1,2-tetrachloroethane | 16.99 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 3834 | 0.092 | ppbV | 100 |
| 59) m+p-xylene | 17.43 | 91 | 10096 | 0.313 | ppbV | 95 |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 0.00 | | 0 | N.D. | d | |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.81 | 91 | 5455M4 | 0.159 | ppbV | |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 4470 | 0.095 | ppbV # | 50 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 6928 | 0.170 | ppbV | 82 |
| 71) 1,3-dichlorobenzene | 0.00 | | 0 | N.D. | d | |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 993 | 0.032 | ppbV # | 1 |
| 75) 1,2-dichlorobenzene | 19.55 | | 0 | N.D. | | |
| 77) 1,2,4-trichlorobenzene | 0.00 | | 0 | N.D. | d | |
| 78) naphthalene | 21.14 | 128 | 8474M4 | 0.140 | ppbV | |
| 80) hexachlorobutadiene | 21.46 | | 0 | N.D. | | |

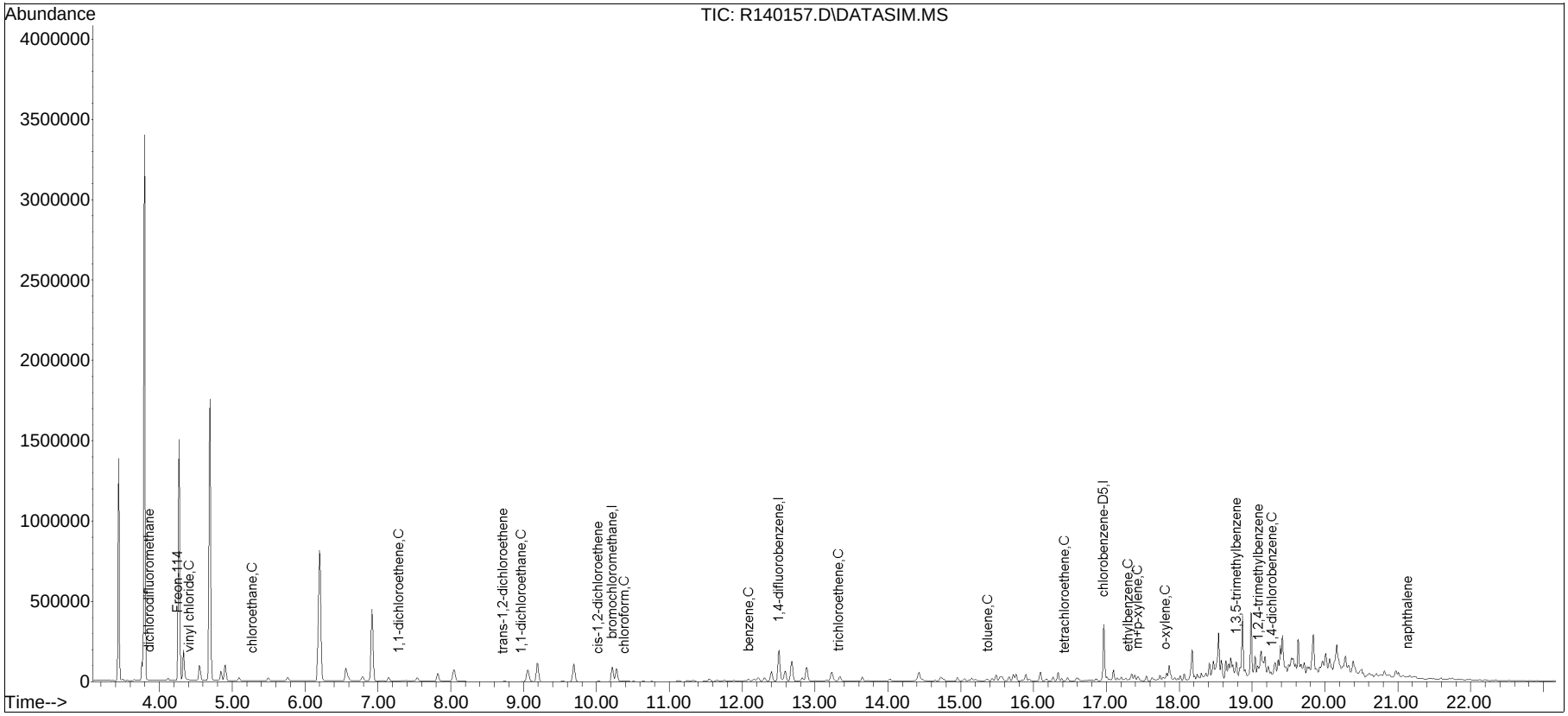
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140157.D
Acq On : 12 Mar 2015 1:40 am
Operator : AIRPIANO1:RY
Sample : L1504425-10,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 11 Sample Multiplier: 1

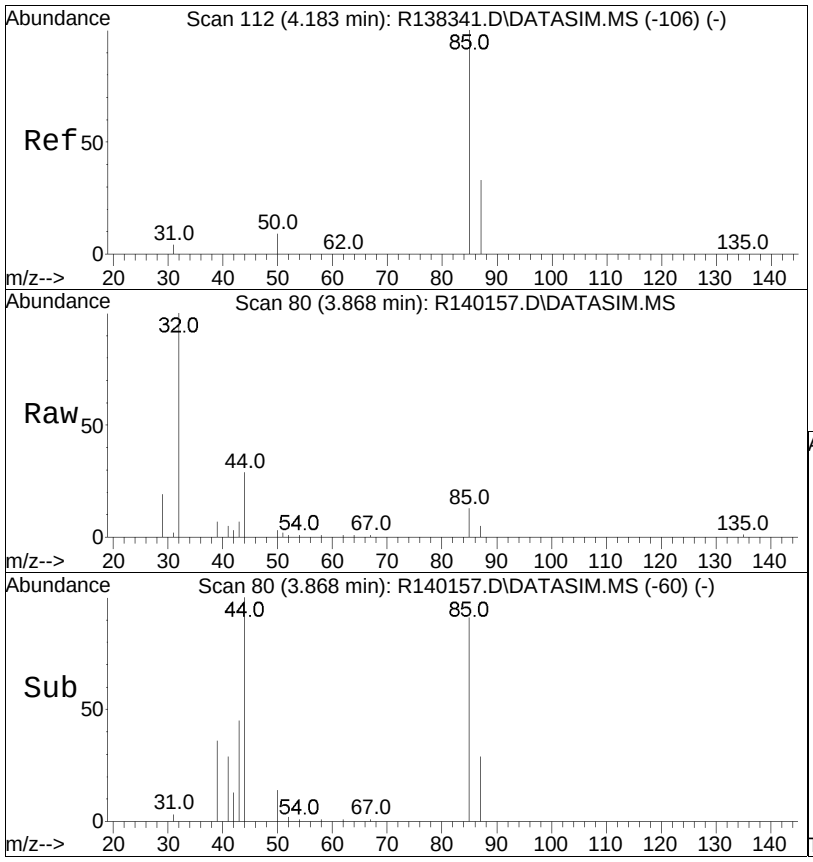
Quant Time: Mar 16 10:52:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D




TSIM150102.M Wed Mar 25 12:04:58 2015

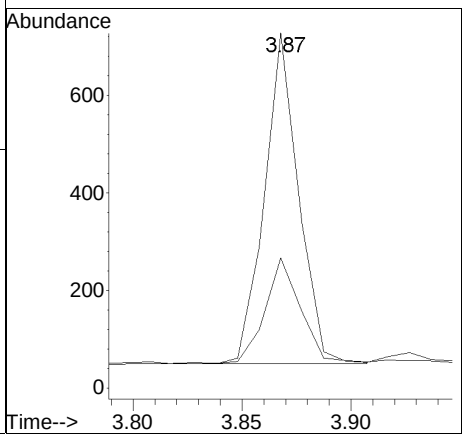
Page 3

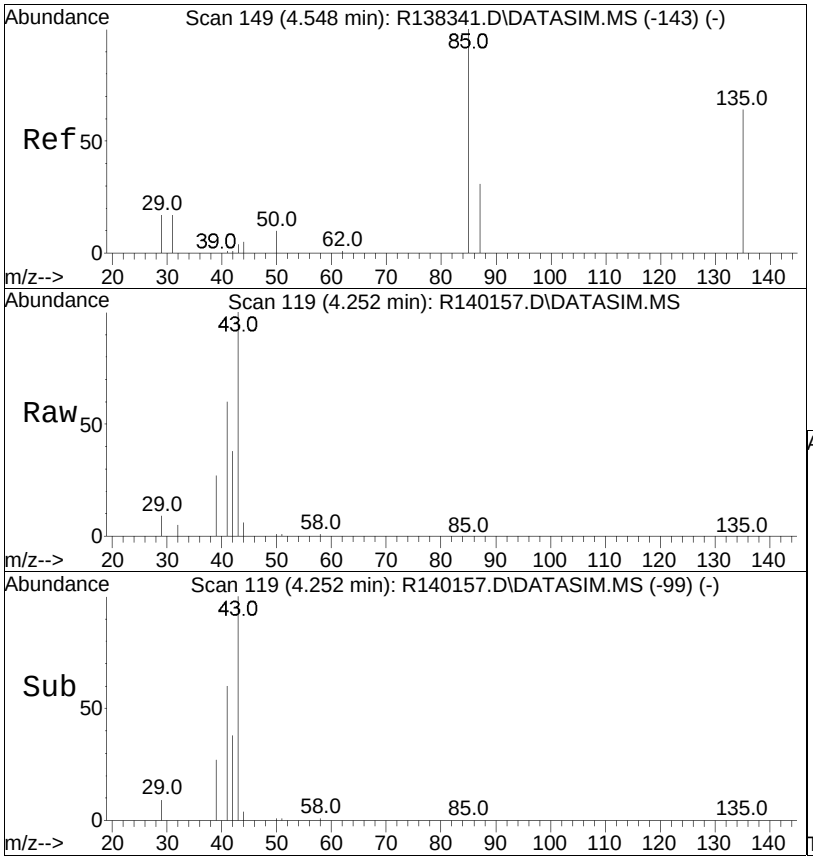



#3
dichlorodifluoromethane
Concen: 0.05 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 85 Resp: 737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 36.7 | 25.8 | 38.8 |

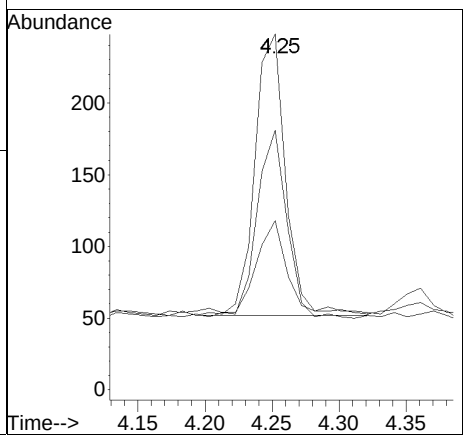


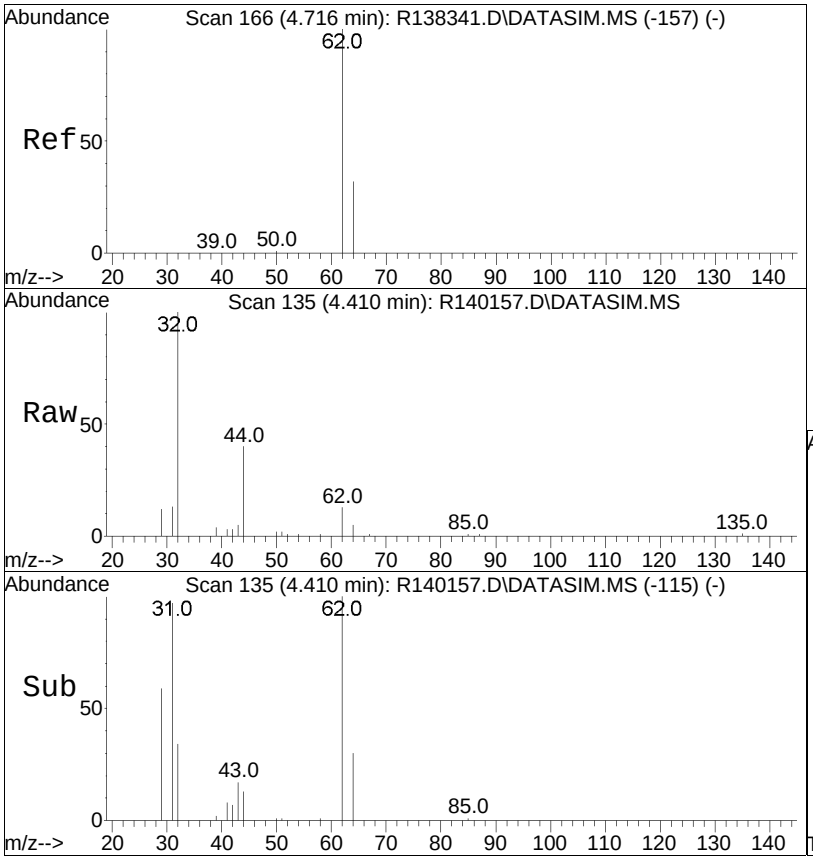



#5
Freon-114
Concen: 0.02 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 85 Resp: 315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 47.6 | 26.3 | 39.5# |
| 135 | 73.0 | 60.5 | 90.7 |

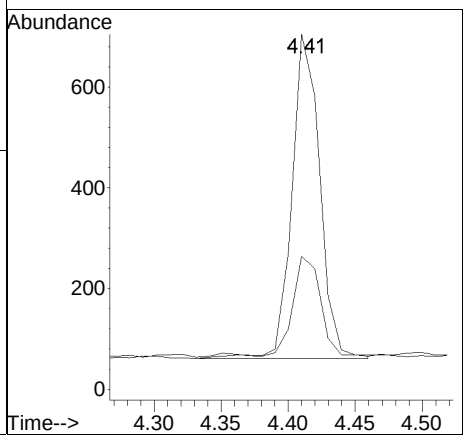


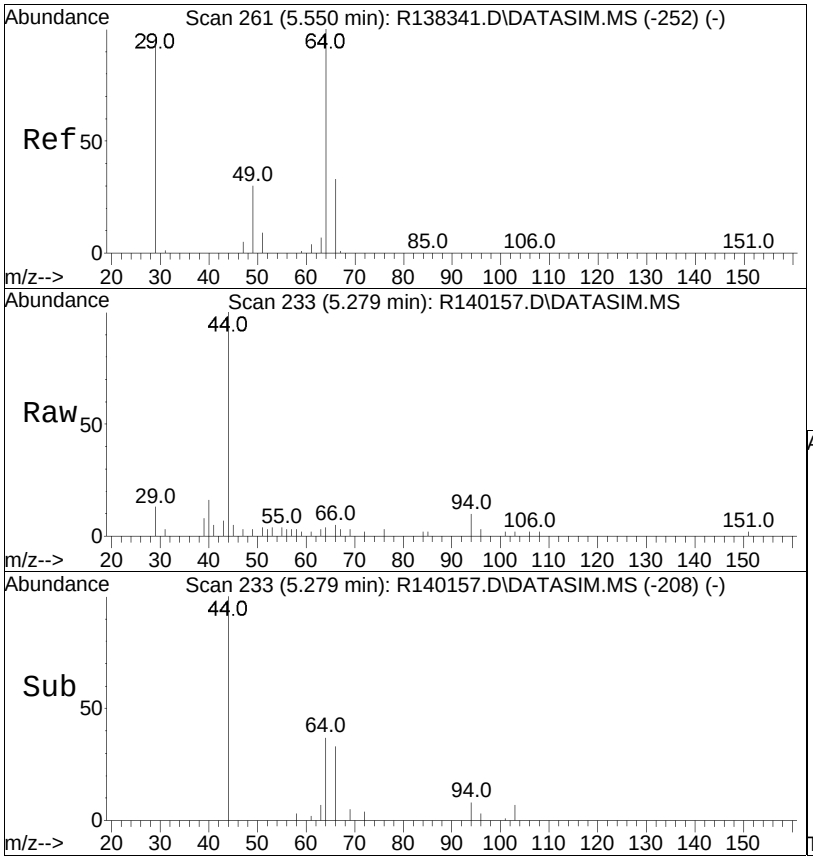



#6
vinyl chloride
Concen: 0.13 ppbV
RT: 4.41 min Scan# 135
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 62 Resp: 933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 37.4 | 24.2 | 36.4# |

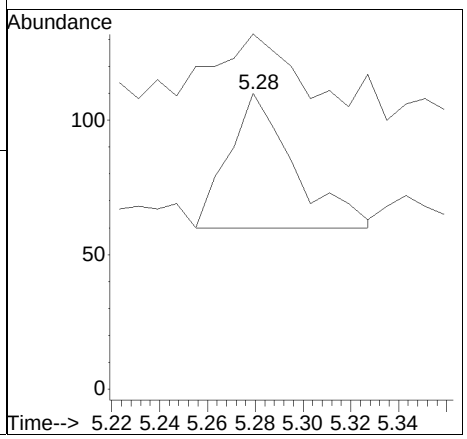


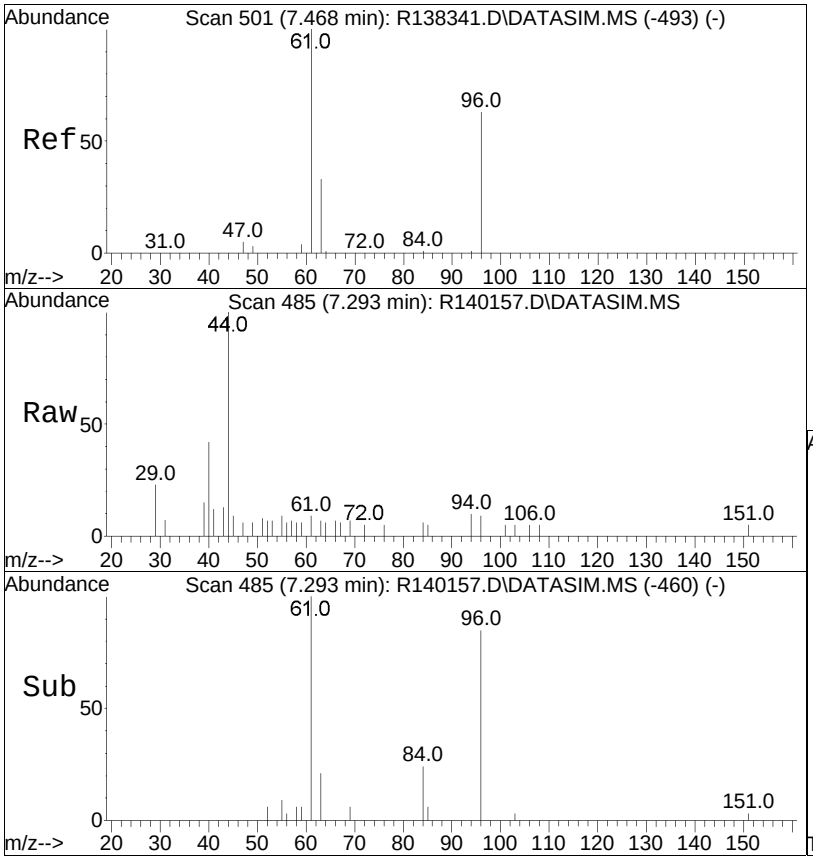



#9
chloroethane
Concen: 0.03 ppbV
RT: 5.28 min Scan# 233
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 64 Resp: 94

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 120.0 | 26.2 | 39.2# |

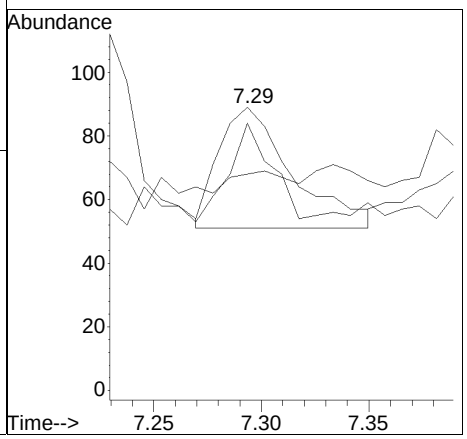


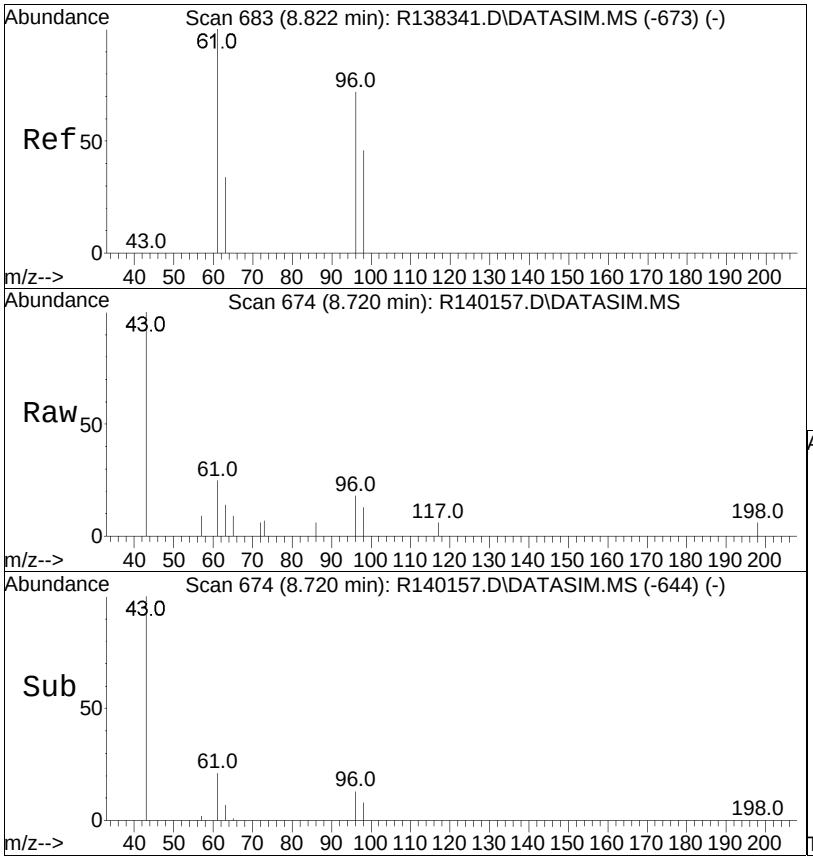



#16
1,1-dichloroethene
Concen: 0.01 ppbV
RT: 7.29 min Scan# 485
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 61 Resp: 91

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 94.4 | 45.5 | 68.3# |
| 63 | 76.4 | 25.0 | 37.4# |

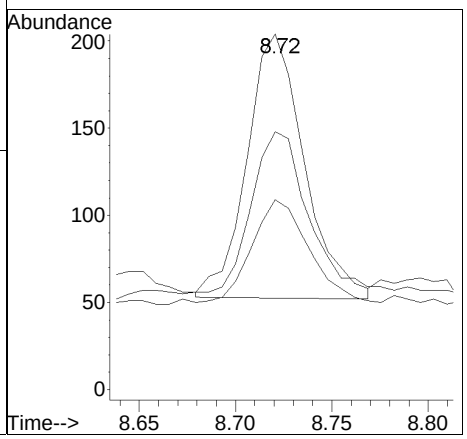


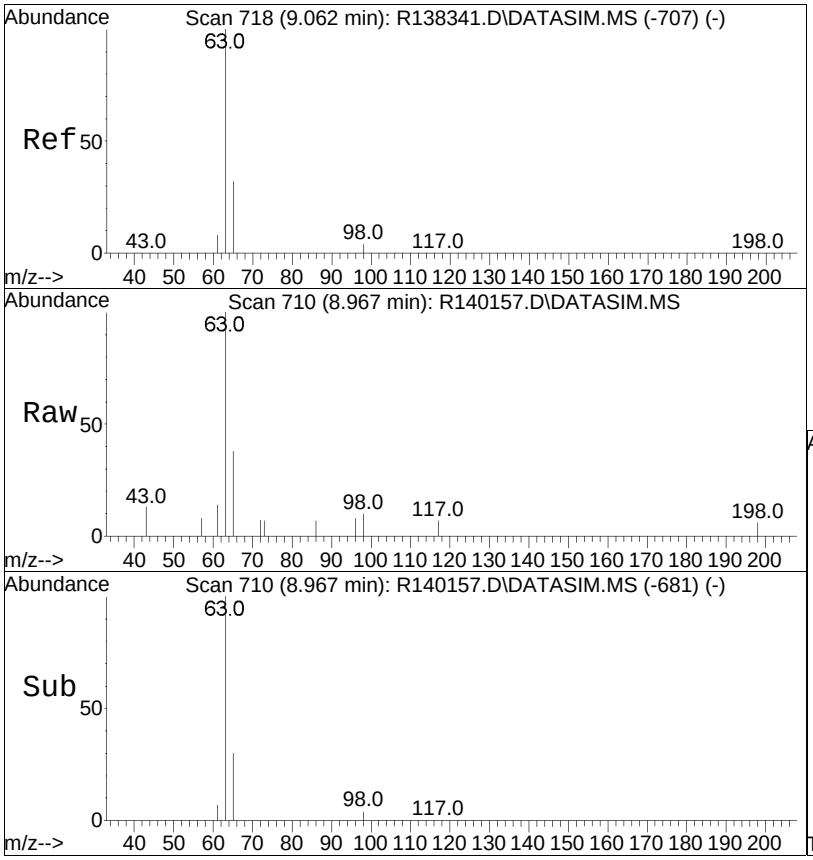



#22
trans-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 8.72 min Scan# 674
Delta R.T. 0.007 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 61 Resp: 314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 72.5 | 48.2 | 72.4# |
| 98 | 53.4 | 29.9 | 44.9# |

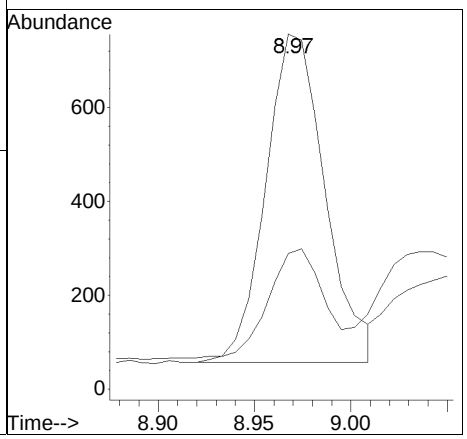


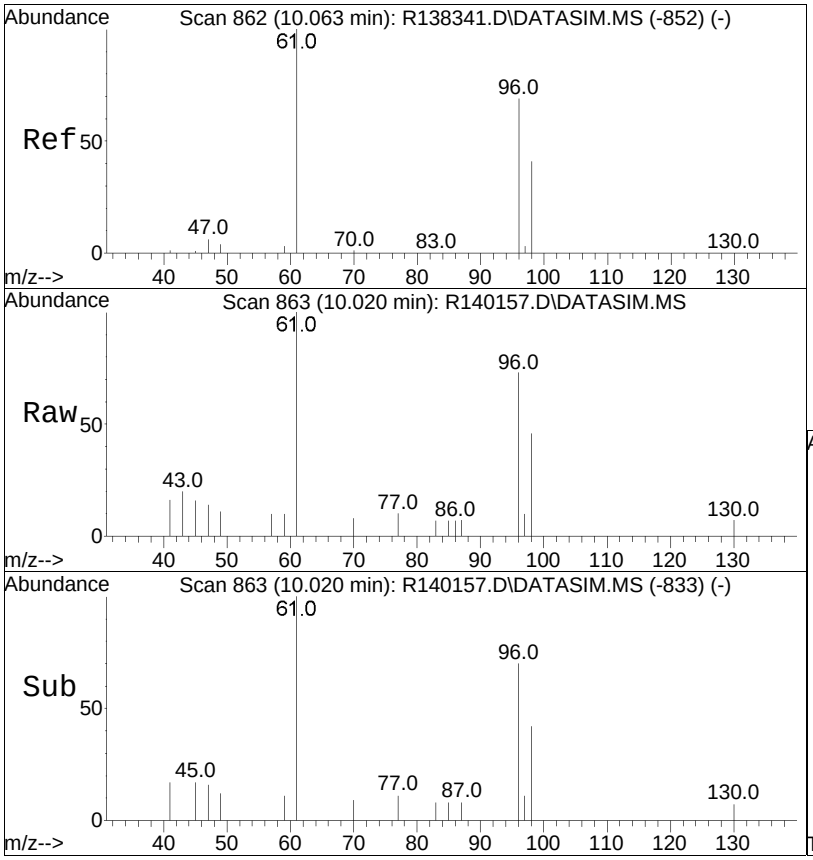



#23
1,1-dichloroethane
Concen: 0.11 ppbV
RT: 8.97 min Scan# 710
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 63 Resp: 1498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 38.2 | 25.2 | 37.8# |

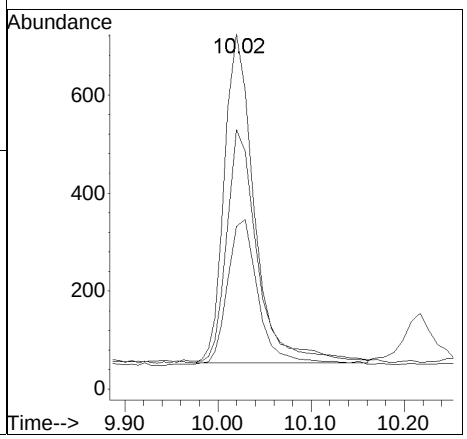


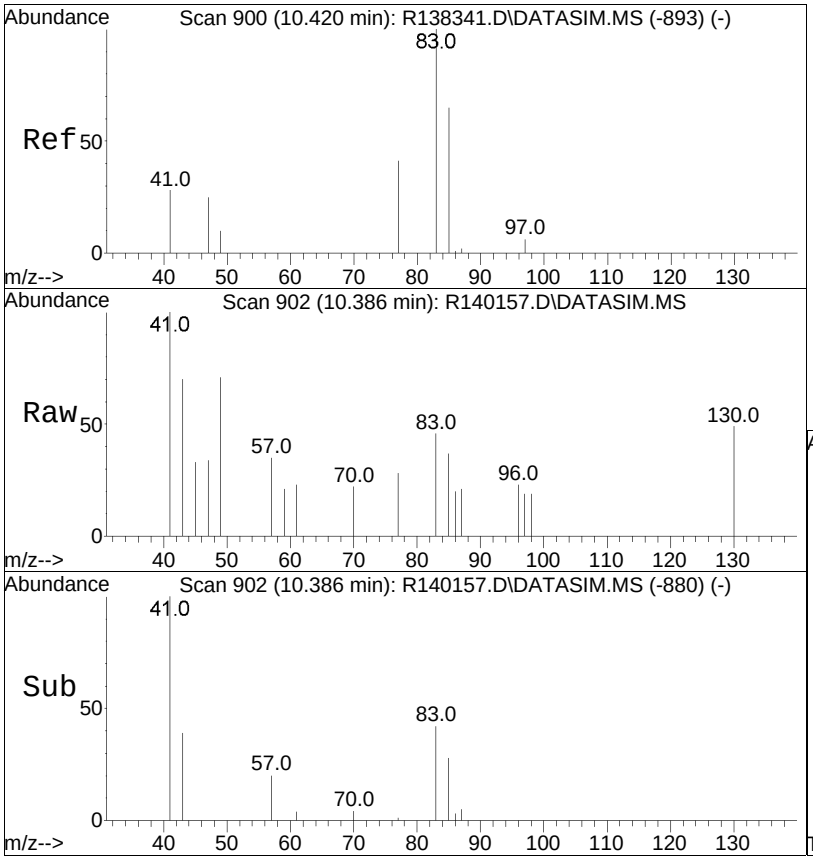



#27
cis-1,2-dichloroethene
Concen: 0.12 ppbV
RT: 10.02 min Scan# 863
Delta R.T. 0.009 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 61 Resp: 1519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 73.1 | 50.6 | 76.0 |
| 98 | 45.9 | 30.6 | 45.8# |

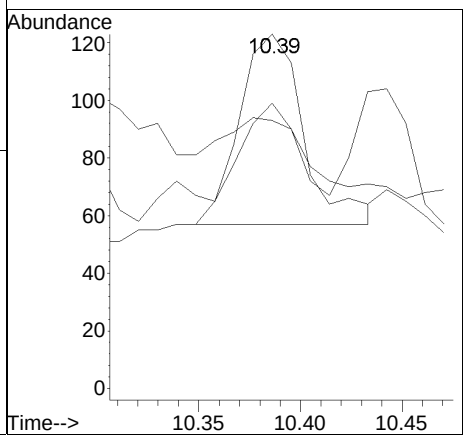


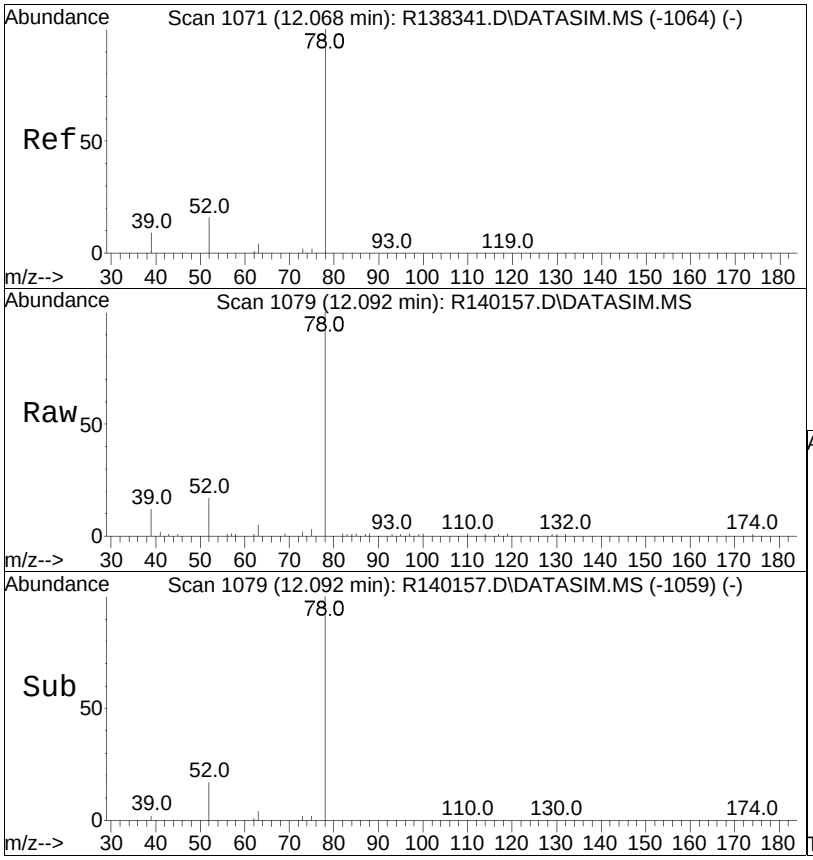



#29
chloroform
Concen: 0.01 ppbV
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 83 Resp: 145

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 80.5 | 50.9 | 76.3# |
| 47 | 75.6 | 24.9 | 37.3# |

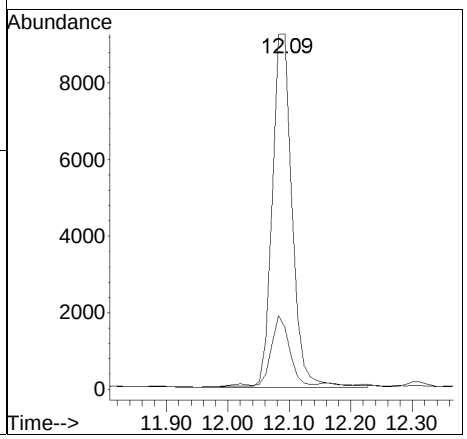


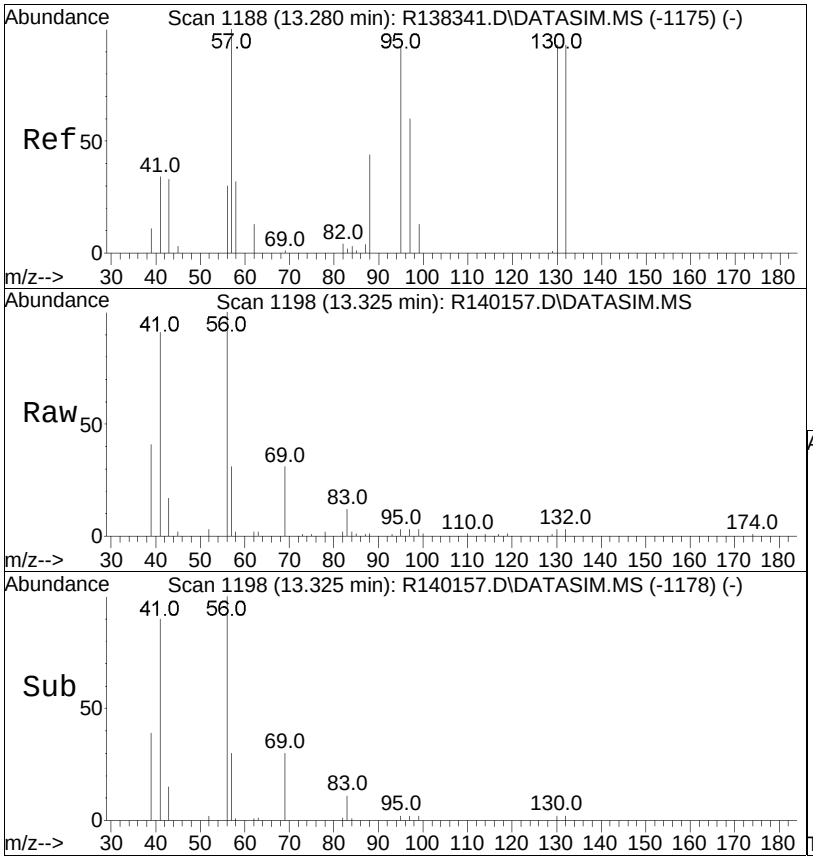



#36
benzene
Concen: 0.95 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 78 Resp: 20649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 17.4 | 15.4 | 23.0 |

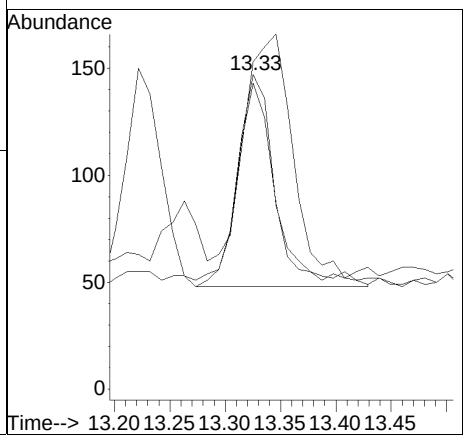


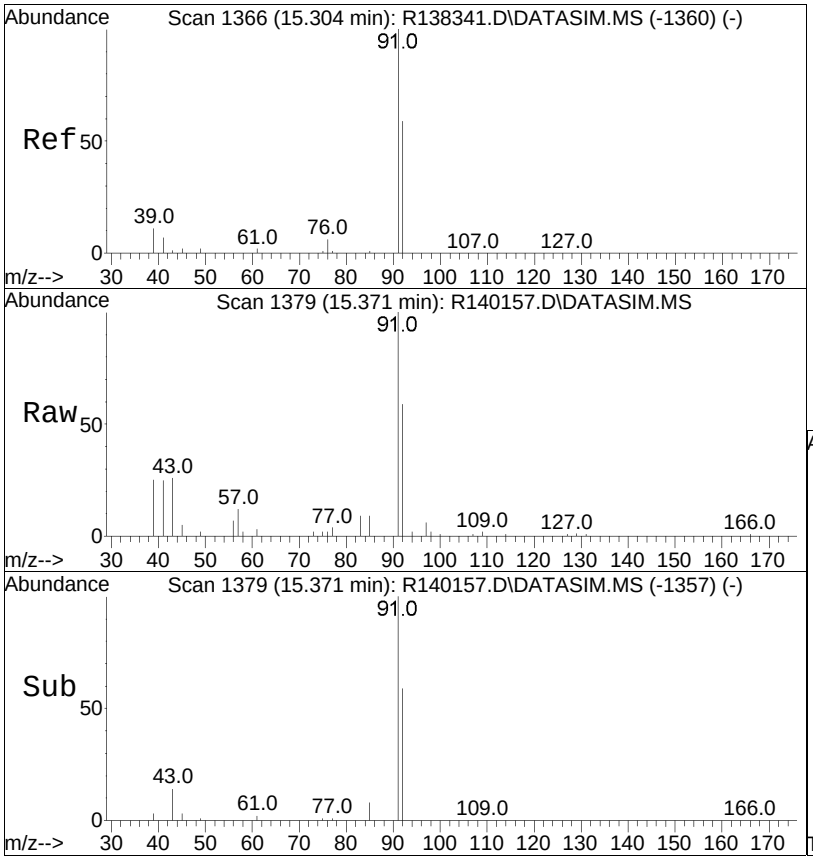



#42
trichloroethene
Concen: 0.02 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:130 Resp: 242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 97.3 | 76.0 | 114.0 |
| 97 | 104.1 | 51.8 | 77.8# |

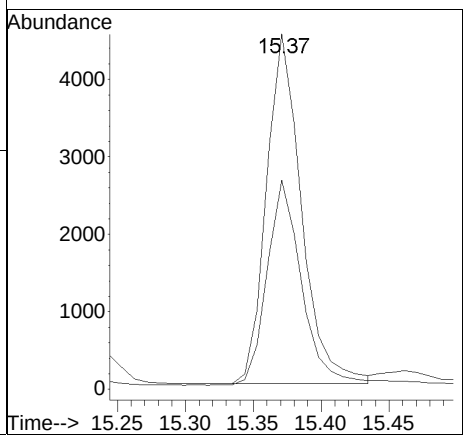


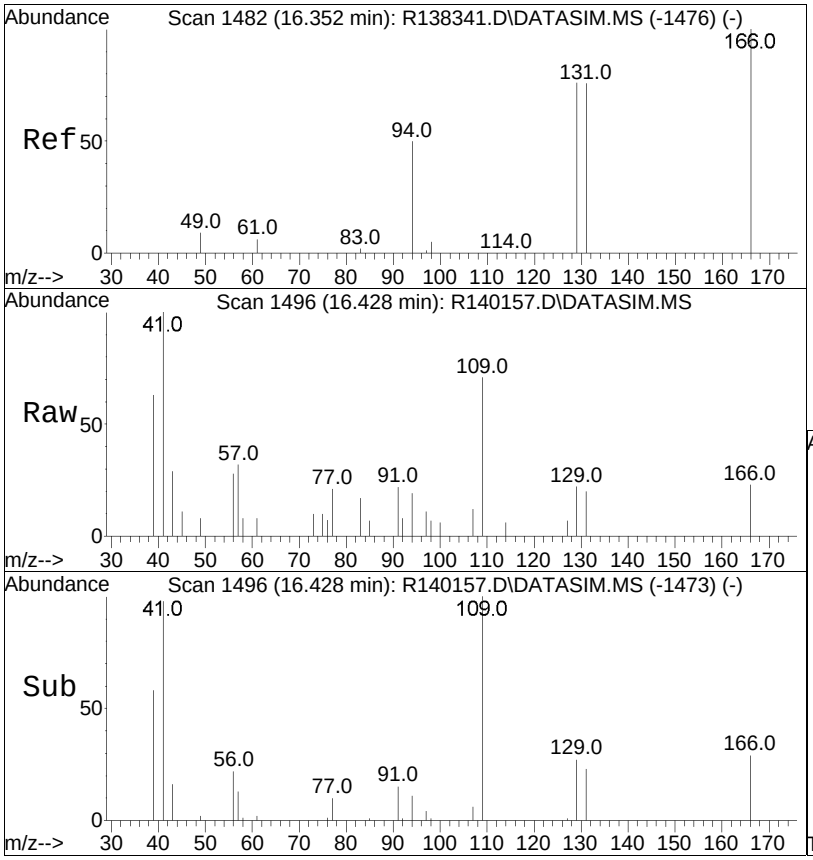



#50
toluene
Concen: 0.26 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 8101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 58.9 | 47.2 | 70.8 |

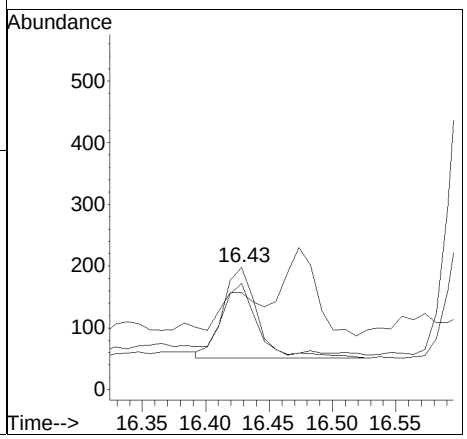


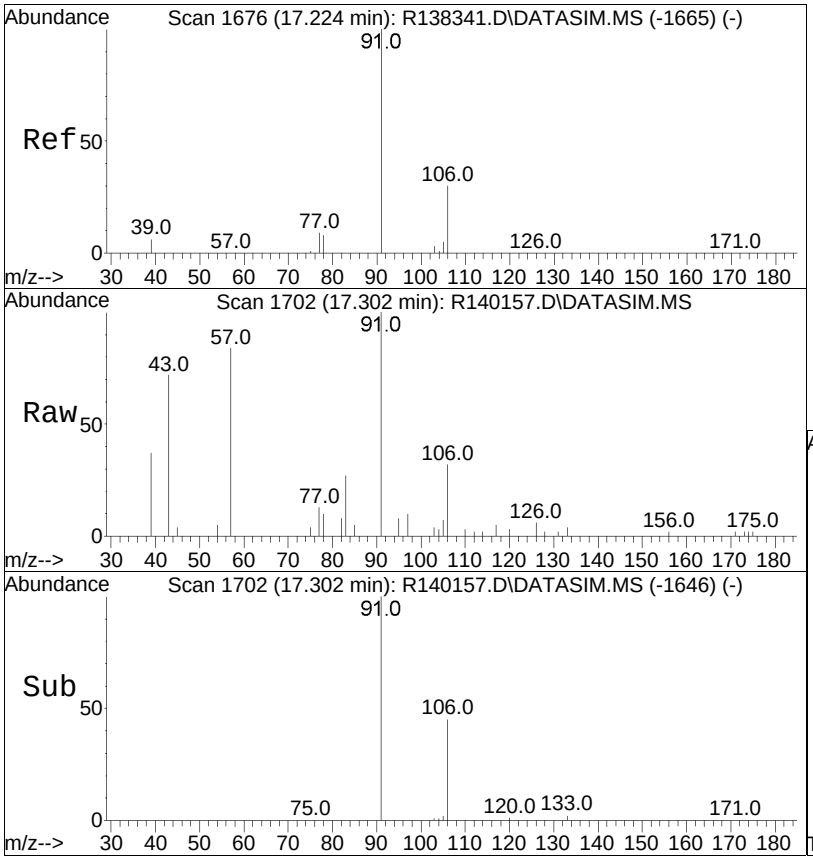



#55
tetrachloroethene
Concen: 0.02 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:166 Resp: 282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 86.9 | 61.7 | 92.5 |
| 94 | 79.3 | 38.0 | 57.0# |

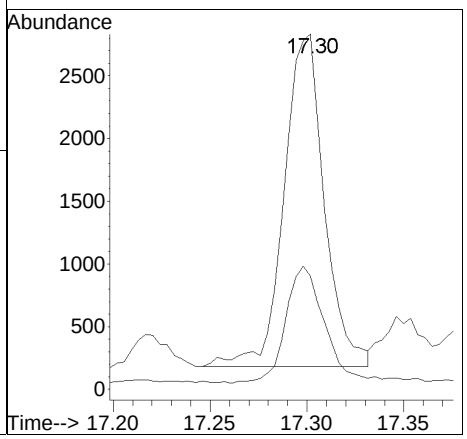


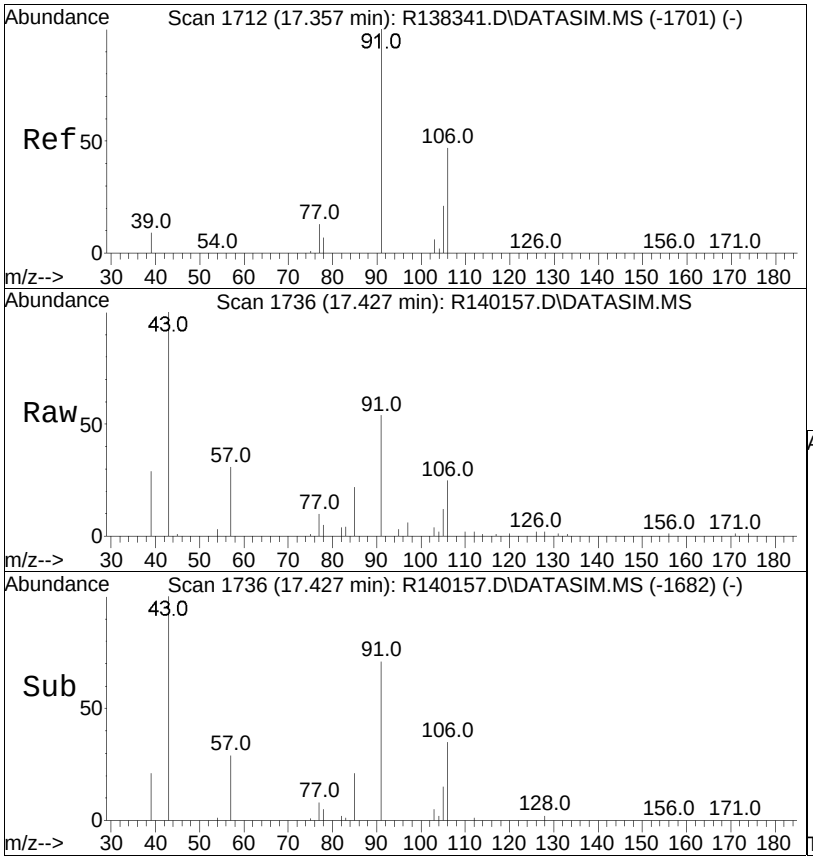



#58
ethylbenzene
Concen: 0.09 ppbV
RT: 17.30 min Scan# 1702
Delta R.T. 0.007 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 3834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.9 | 25.4 | 38.0 |

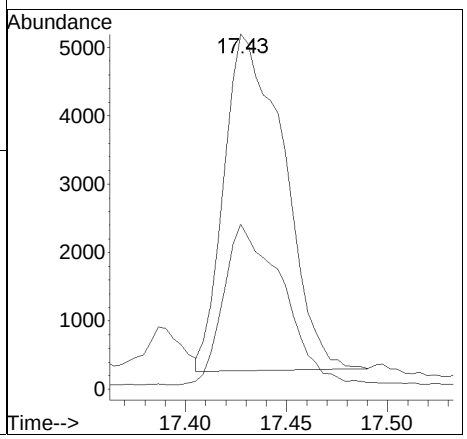


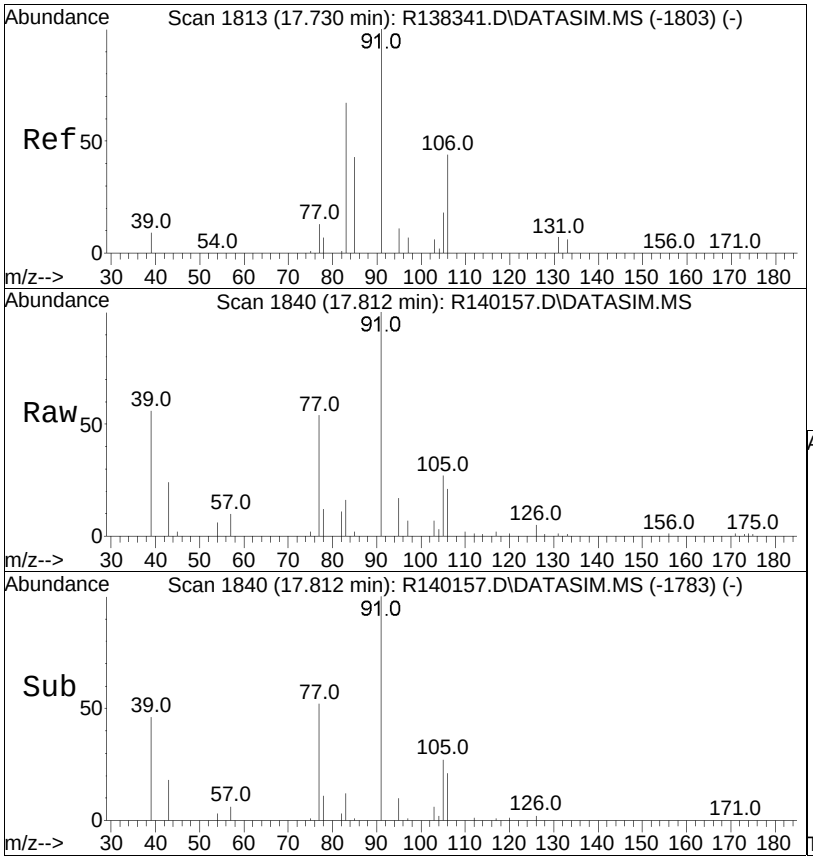



#59
m+p-xylene
Concen: 0.31 ppbV
RT: 17.43 min Scan# 1736
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 10096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 46.5 | 39.7 | 59.5 |

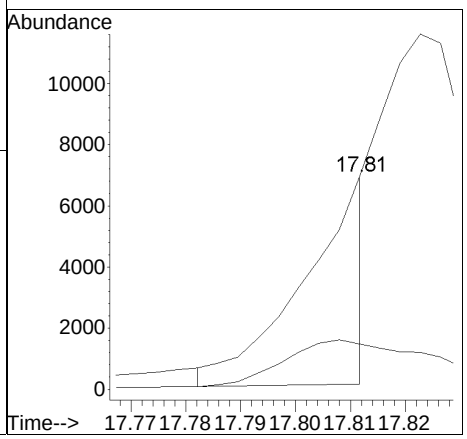


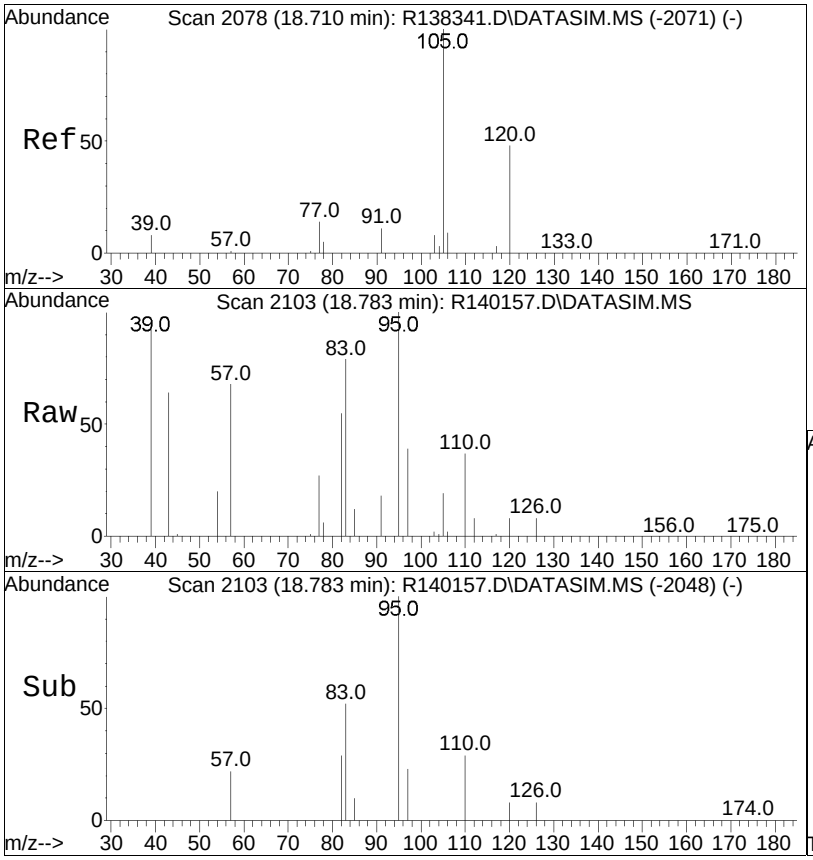



#63
o-xylene
Concen: 0.16 ppbV m
RT: 17.81 min Scan# 1840
Delta R.T. 0.011 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 91 Resp: 5455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 21.4 | 37.6 | 56.4# |

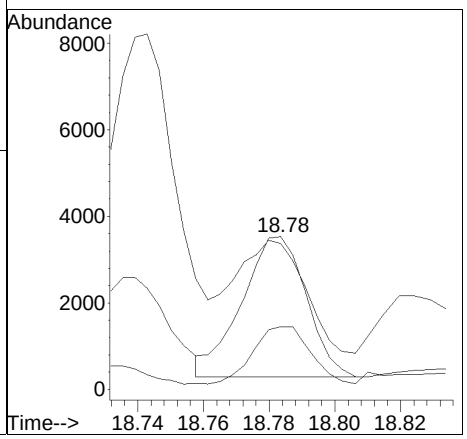


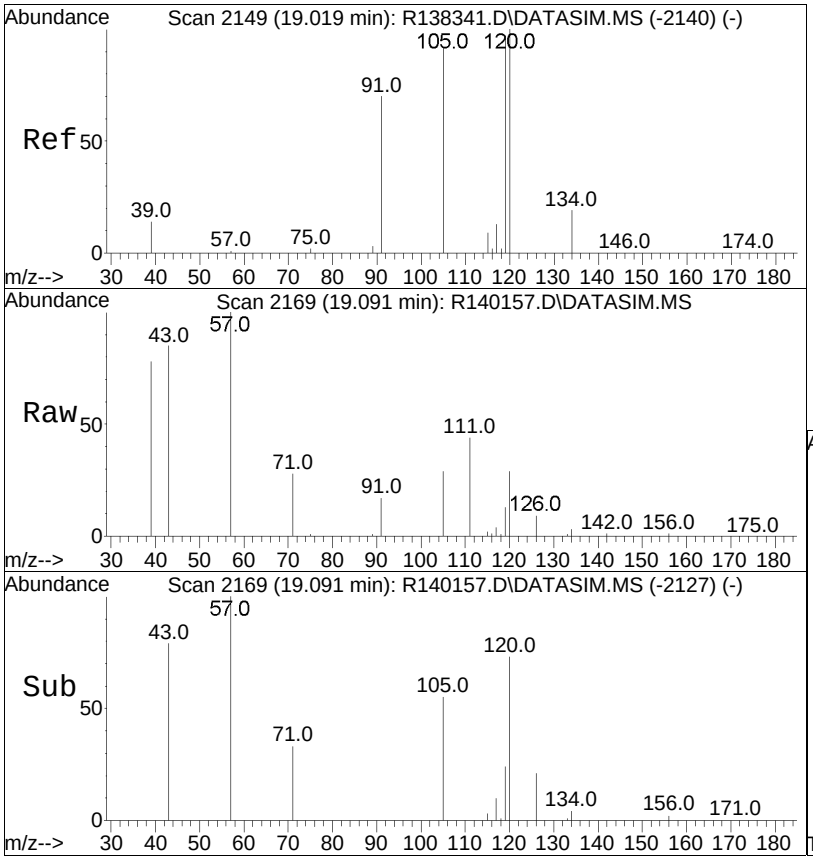



#67
1,3,5-trimethylbenzene
Concen: 0.09 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.003 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:105 Resp: 4470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 41.1 | 40.4 | 60.6 |
| 91 | 95.5 | 8.4 | 12.6# |

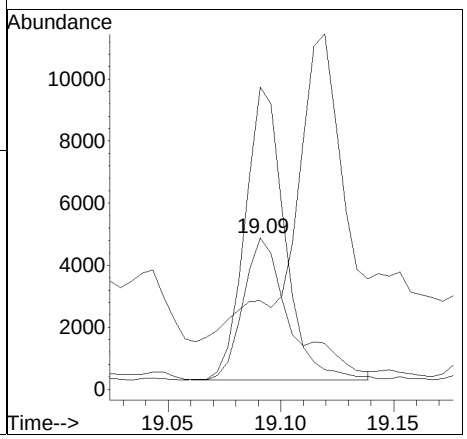


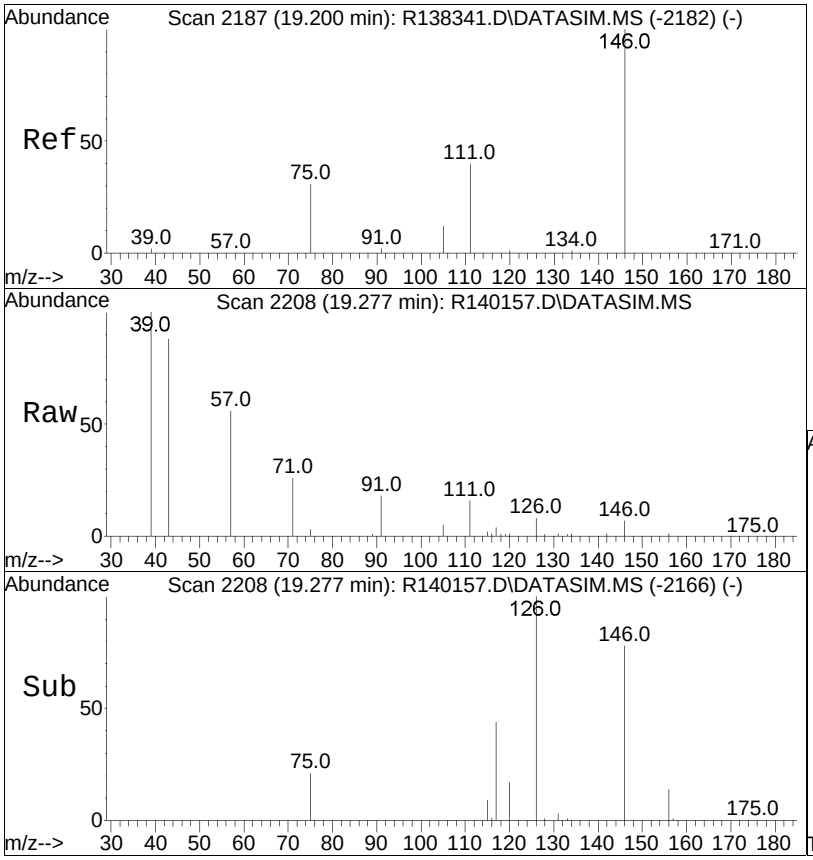



#69
1,2,4-trimethylbenzene
Concen: 0.17 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:105 Resp: 6928

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 199.5 | 184.1 | 276.1 |
| 91 | 58.5 | 57.4 | 86.2 |

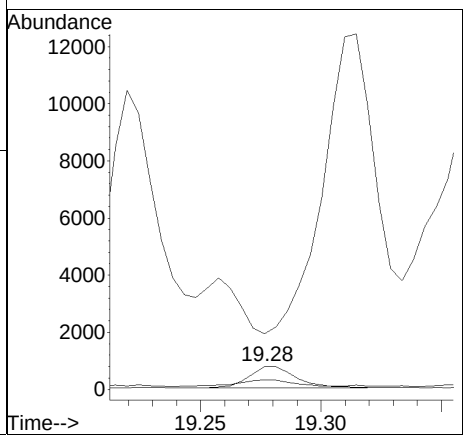


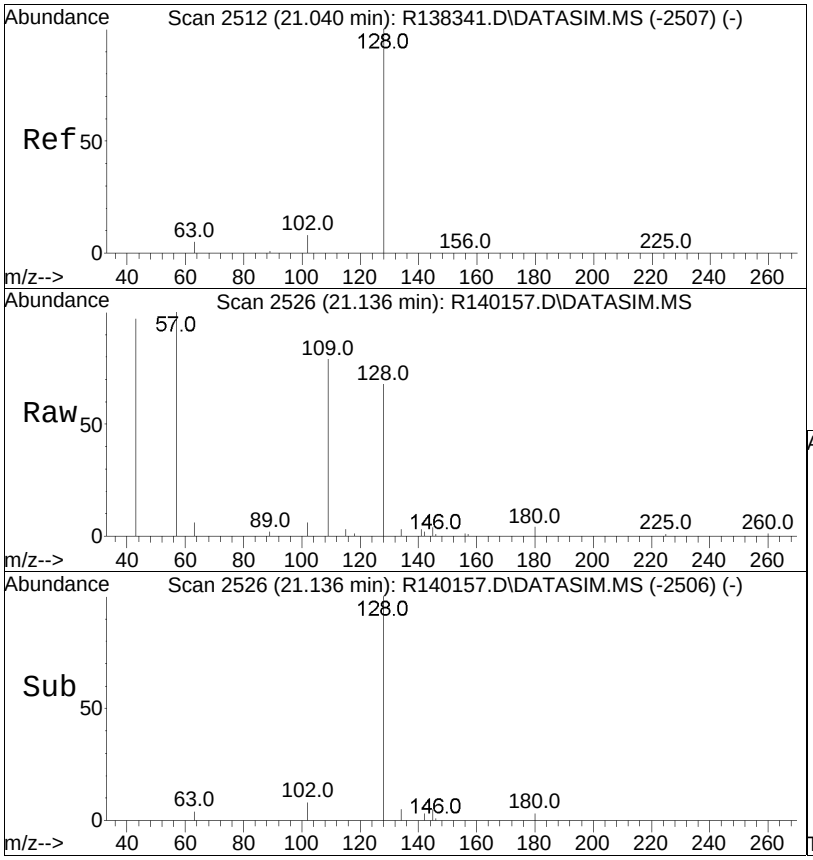



#72
1,4-dichlorobenzene
Concen: 0.03 ppbV
RT: 19.28 min Scan# 2208
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:146 Resp: 993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 243.2 | 27.3 | 40.9# |
| 75 | 41.8 | 19.4 | 29.0# |

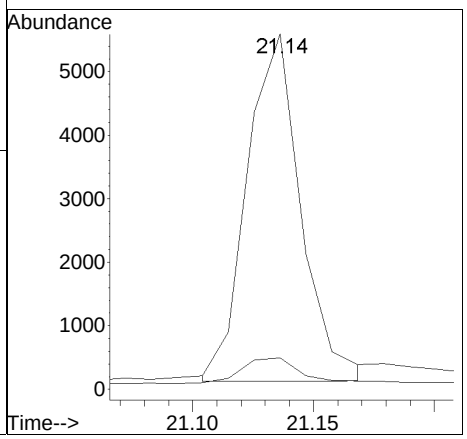





#78
naphthalene
Concen: 0.14 ppbV m
RT: 21.14 min Scan# 2526
Delta R.T. 0.011 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion:128 Resp: 8474

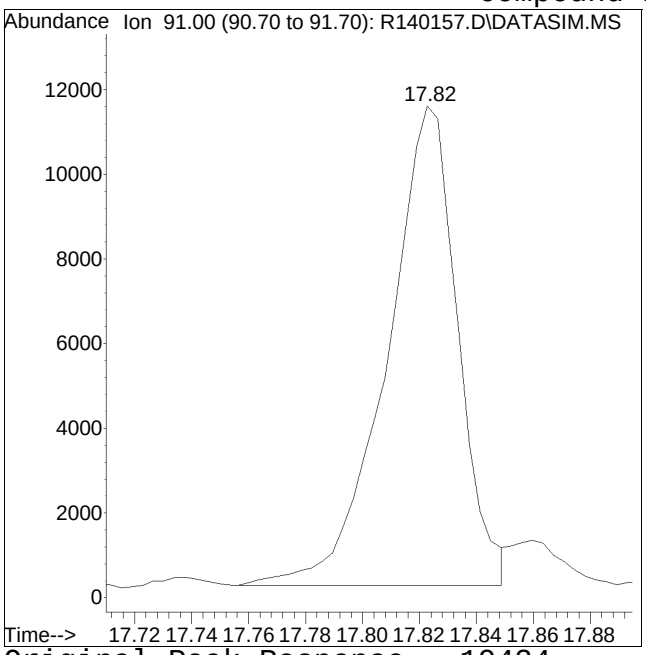
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 8.9 | 6.9 | 10.3 |



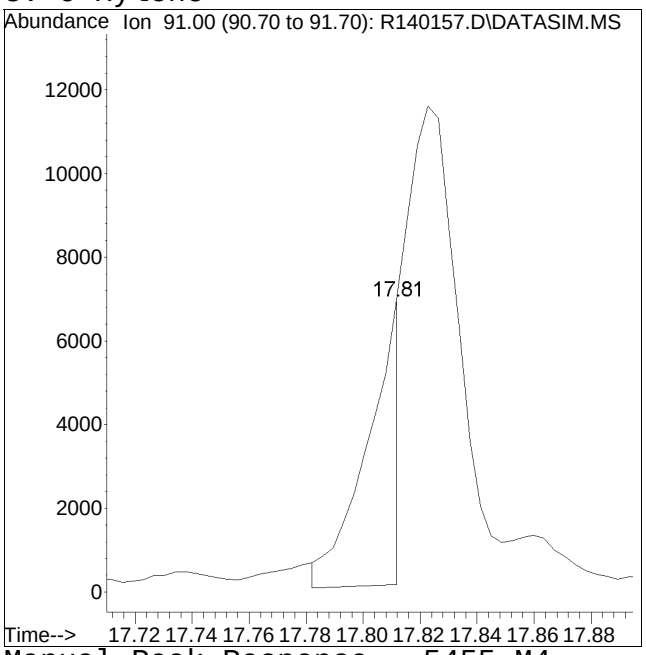
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\QM150311SIM\ : TSIM150102.M
Data File : R140157.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:40 am Instrument : Air Piano 1
Sample : L1504425-10,3,250,250 Quant Date : 3/12/2015 7:24 am

Compound #63: o-xylene




Original Peak Response = 19424



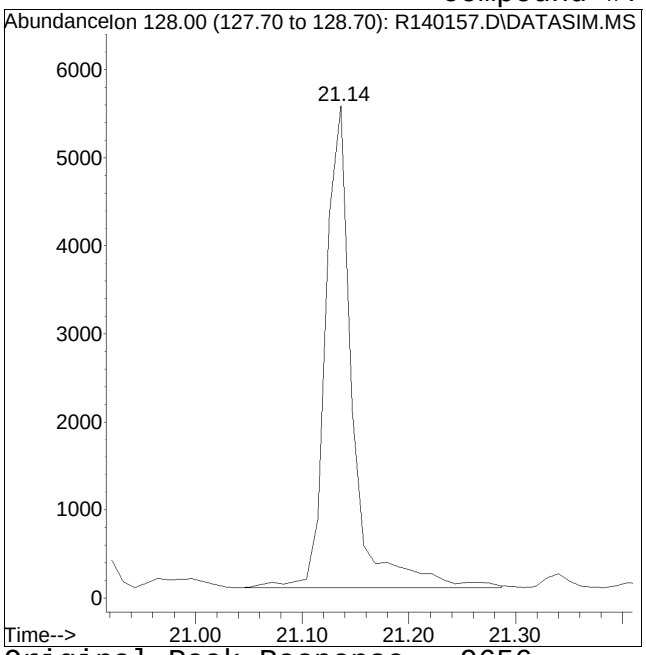

Manual Peak Response = 5455 M4

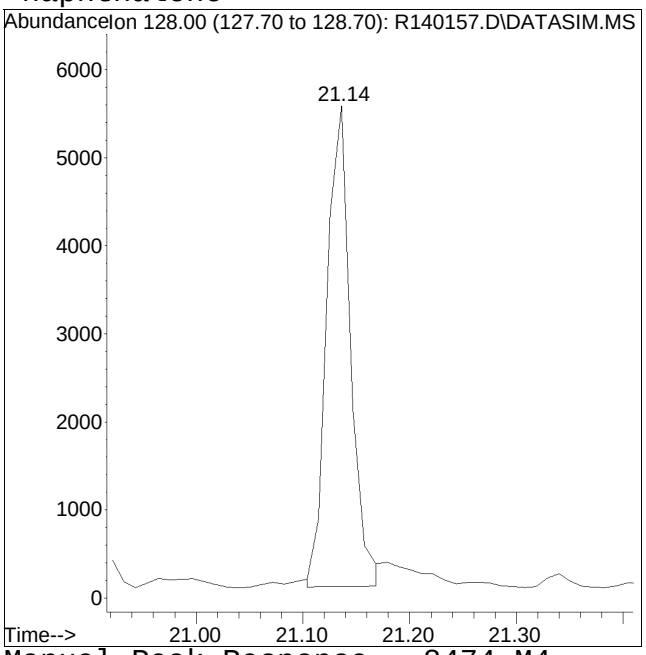
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140157.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 1:40 am Instrument : Air Piano 1
Sample : L1504425-10,3,250,250 Quant Date : 3/12/2015 7:24 am

Compound #78: naphthalene




Original Peak Response = 9656 Manual Peak Response = 8474 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140160.D
Acq On : 12 Mar 2015 8:45 am
Operator : AIRPIANO1:RY
Sample : L1504425-08,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 11:03:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 104320 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 87.64% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 229129 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 86.01% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 56493 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 96.99% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4948 | 0.379 | ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 670 | 0.100 | ppbV | 92 |
| 5) Freon-114 | 4.25 | 85 | 284 | 0.015 | ppbV # | 87 |
| 6) vinyl chloride | 4.42 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.62 | | 0 | N.D. | | |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 0.00 | | 0 | N.D. | d | |
| 13) trichlorofluoromethane | 6.41 | 101 | 3965 | 0.224 | ppbV | 97 |
| 16) 1,1-dichloroethene | 0.00 | | 0 | N.D. | d | |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 7.85 | 101 | 1061 | 0.071 | ppbV | 97 |
| 22) trans-1,2-dichloroethene | 8.71 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 0.00 | | 0 | N.D. | d | |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | | 0 | N.D. | | |
| 29) chloroform | 10.39 | 83 | 1431M4 | 0.080 | ppbV | |
| 31) 1,2-dichloroethane | 11.28 | | 0 | N.D. | | |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 123 | 0.008 | ppbV # | 1 |
| 36) benzene | 12.09 | 78 | 777 | 0.036 | ppbV # | 75 |
| 37) carbon tetrachloride | 12.26 | 117 | 1074 | 0.070 | ppbV # | 94 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 3576 | 0.338 | ppbV | 98 |
| 45) cis-1,3-dichloropropene | 14.34 | | 0 | N.D. | | |
| 47) trans-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 48) 1,1,2-trichloroethane | 15.08 | | 0 | N.D. | | |
| 50) toluene | 15.37 | 91 | 3973 | 0.134 | ppbV | 100 |
| 53) dibromochloromethane | 0.00 | | 0 | N.D. | d | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140160.D
Acq On : 12 Mar 2015 8:45 am
Operator : AIRPIANO1:RY
Sample : L1504425-08,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 11:03:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 54) 1,2-dibromoethane | 0.00 | | 0 | N.D. | d | |
| 55) tetrachloroethene | 16.43 | 166 | 7944 | 0.521 | ppbV | 96 |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 1480 | 0.037 | ppbV | 96 |
| 59) m+p-xylene | 17.43 | 91 | 4311 | 0.140 | ppbV | 100 |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 17.73 | 104 | 276 | 0.012 | ppbV # | 73 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.81 | 91 | 1800 | 0.055 | ppbV | 99 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 1495 | 0.033 | ppbV # | 95 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 5994 | 0.154 | ppbV # | 65 |
| 71) 1,3-dichlorobenzene | 19.23 | | 0 | N.D. | | |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 1749 | 0.059 | ppbV # | 83 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 6408 | 0.229 | ppbV | 98 |
| 77) 1,2,4-trichlorobenzene | 21.01 | | 0 | N.D. | | |
| 78) naphthalene | 21.13 | 128 | 11333 | 0.197 | ppbV | 99 |
| 80) hexachlorobutadiene | 21.45 | | 0 | N.D. | | |

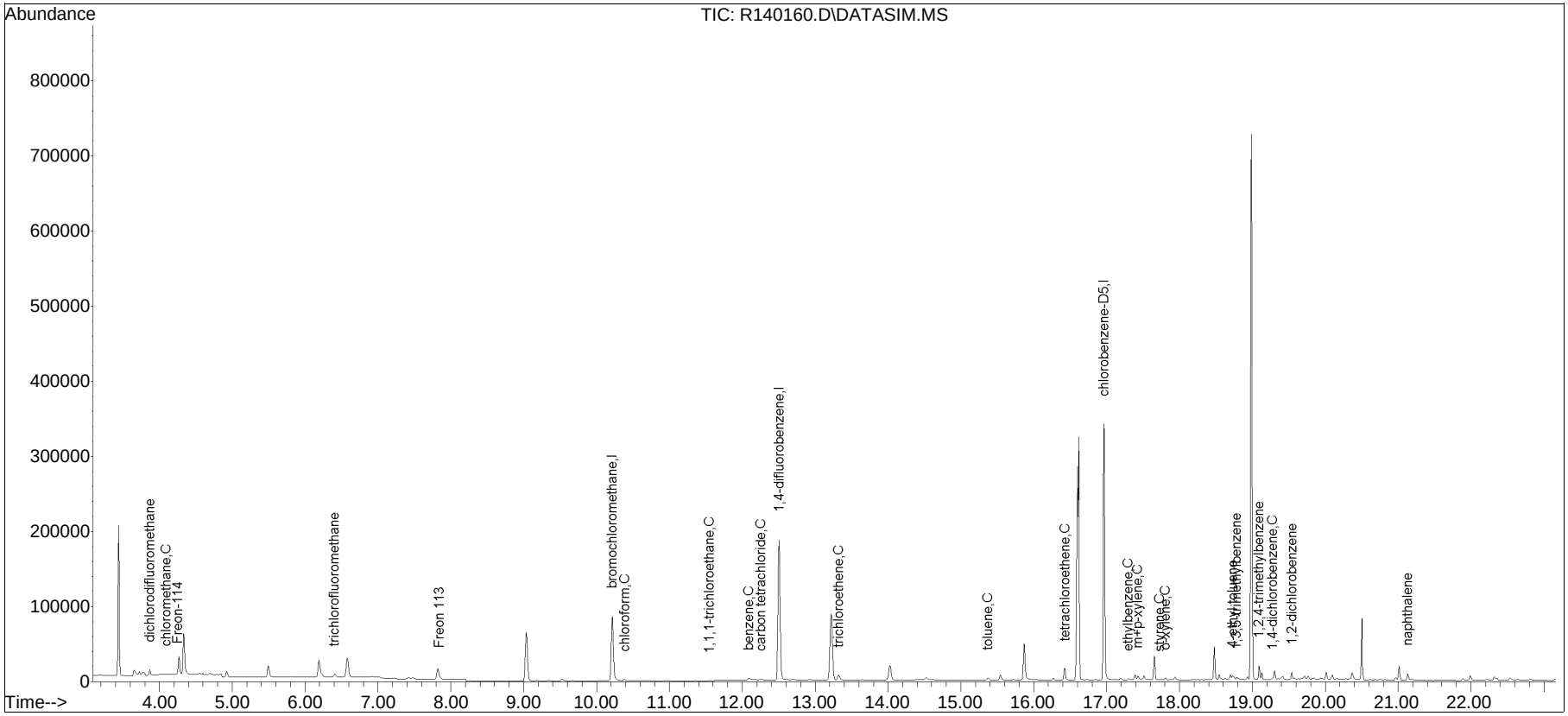
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

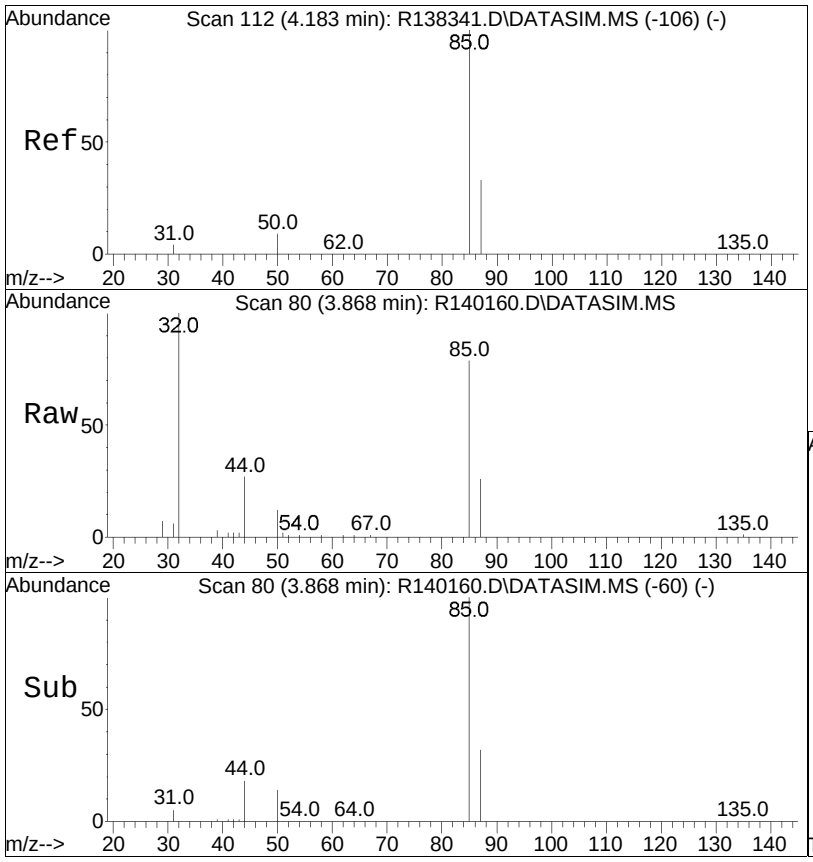
Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140160.D
Acq On : 12 Mar 2015 8:45 am
Operator : AIRPIANO1:RY
Sample : L1504425-08,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 11:03:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D



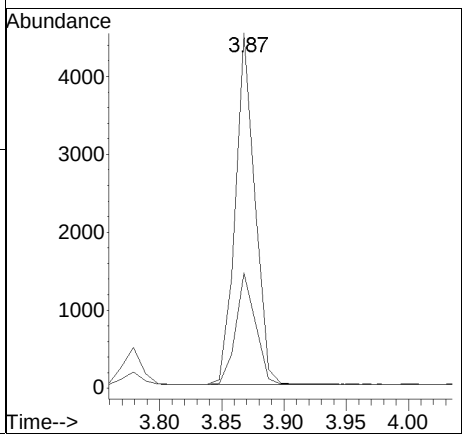

TSIM150102.M Wed Mar 25 12:05:18 2015

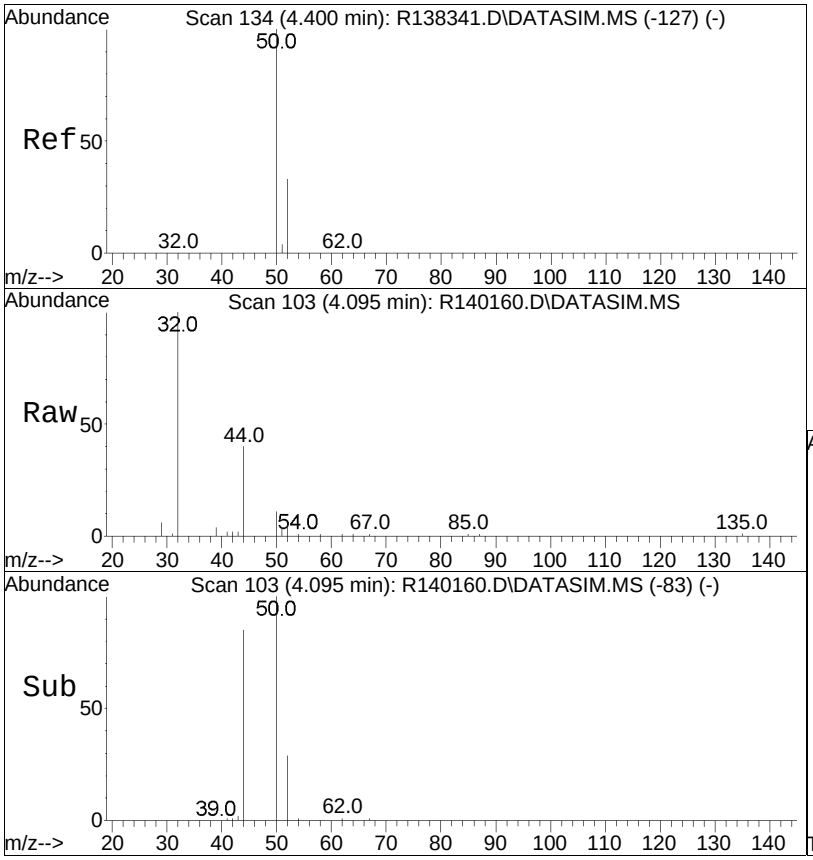



#3
dichlorodifluoromethane
Concen: 0.38 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 85 Resp: 4948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.5 | 25.8 | 38.8 |

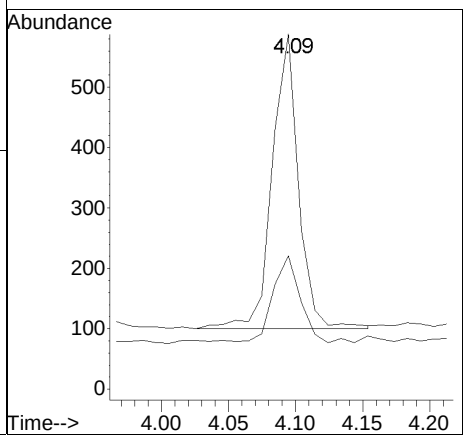


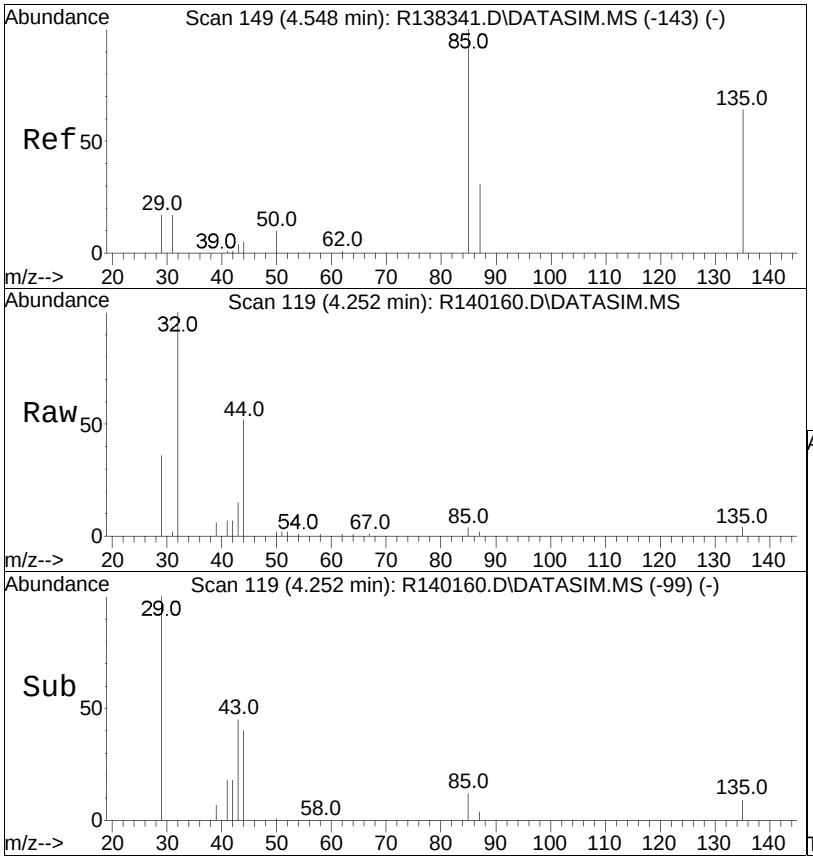



#4
chloromethane
Concen: 0.10 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 50 Resp: 670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 37.6 | 26.4 | 39.6 |

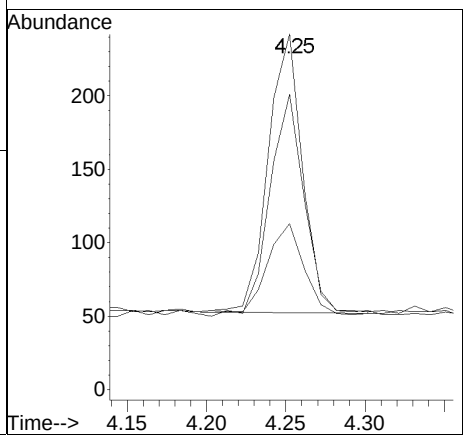


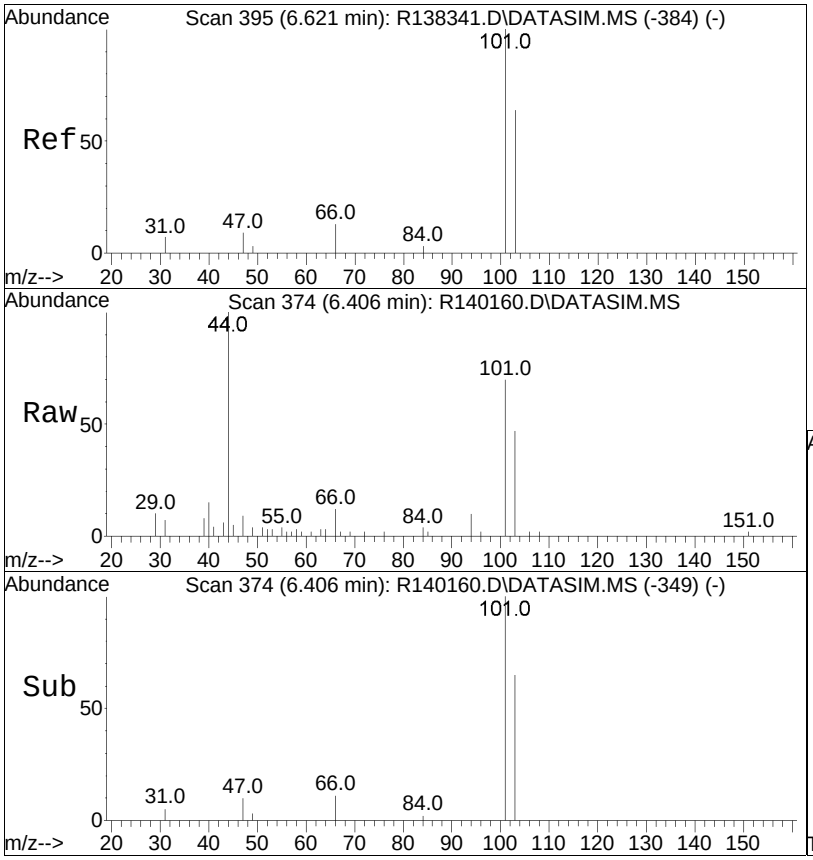



#5
Freon-114
Concen: 0.02 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 85 Resp: 284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 46.7 | 26.3 | 39.5# |
| 135 | 83.1 | 60.5 | 90.7 |

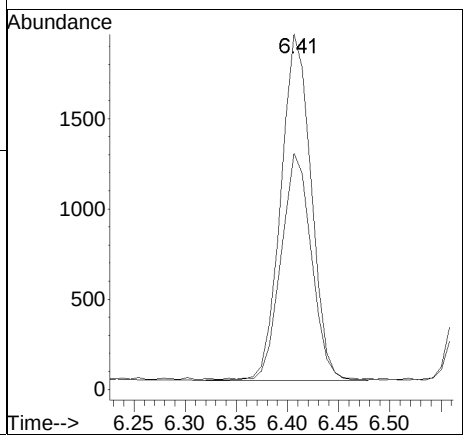


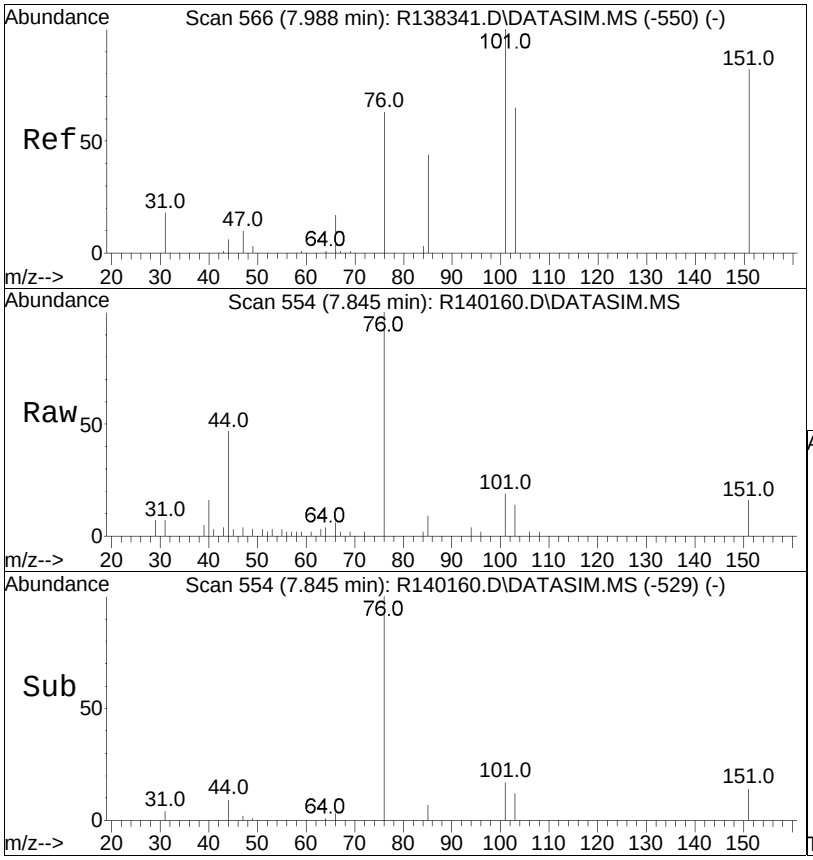



#13
trichlorofluoromethane
Concen: 0.22 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:101 Resp: 3965

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.5 | 51.2 | 76.8 |

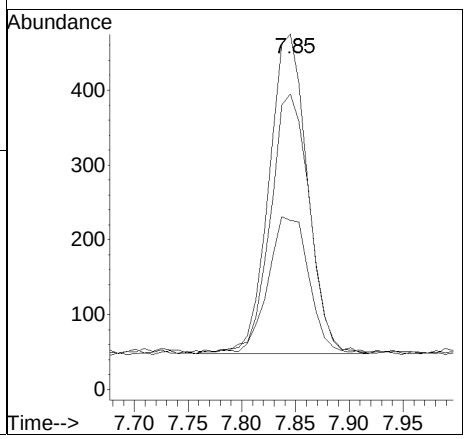


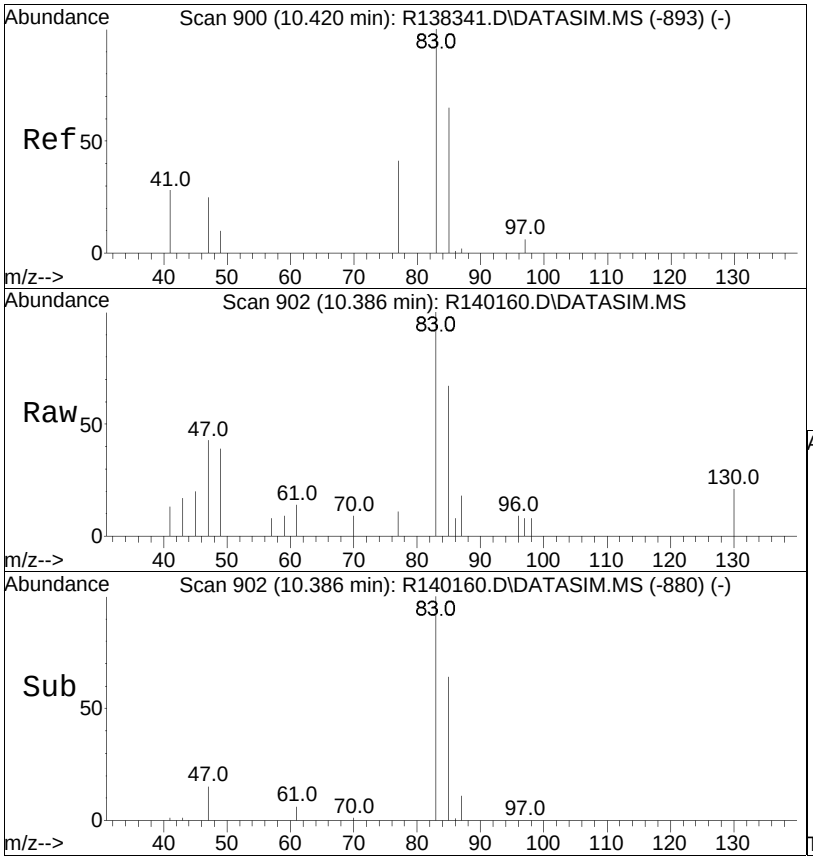



#20
Freon 113
Concen: 0.07 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:101 Resp: 1061

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.6 | 34.5 | 51.7 |
| 151 | 83.2 | 67.4 | 101.2 |

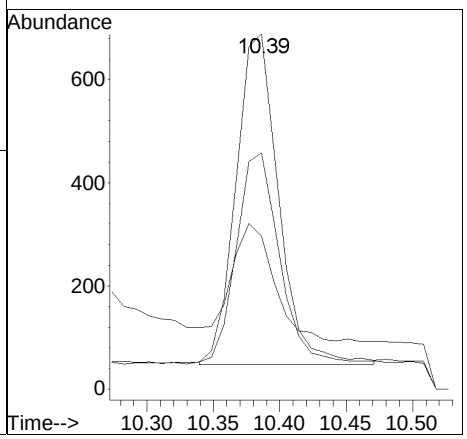


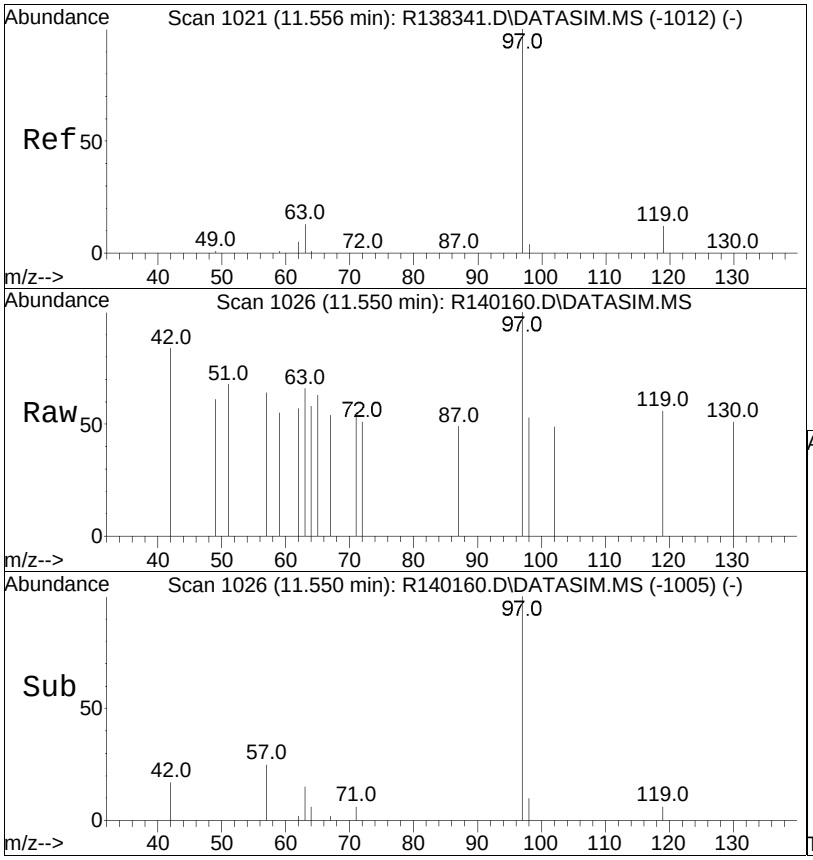



#29
chloroform
Concen: 0.08 ppbV m
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 83 Resp: 1431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.6 | 50.9 | 76.3 |
| 47 | 43.2 | 24.9 | 37.3# |

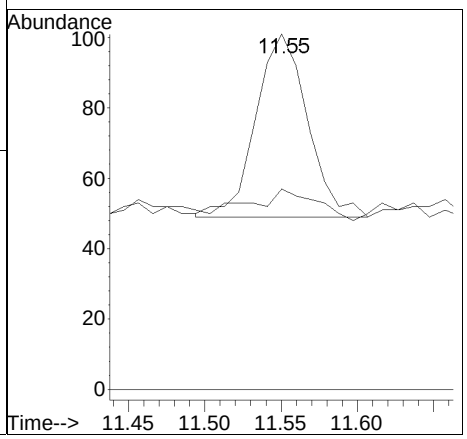


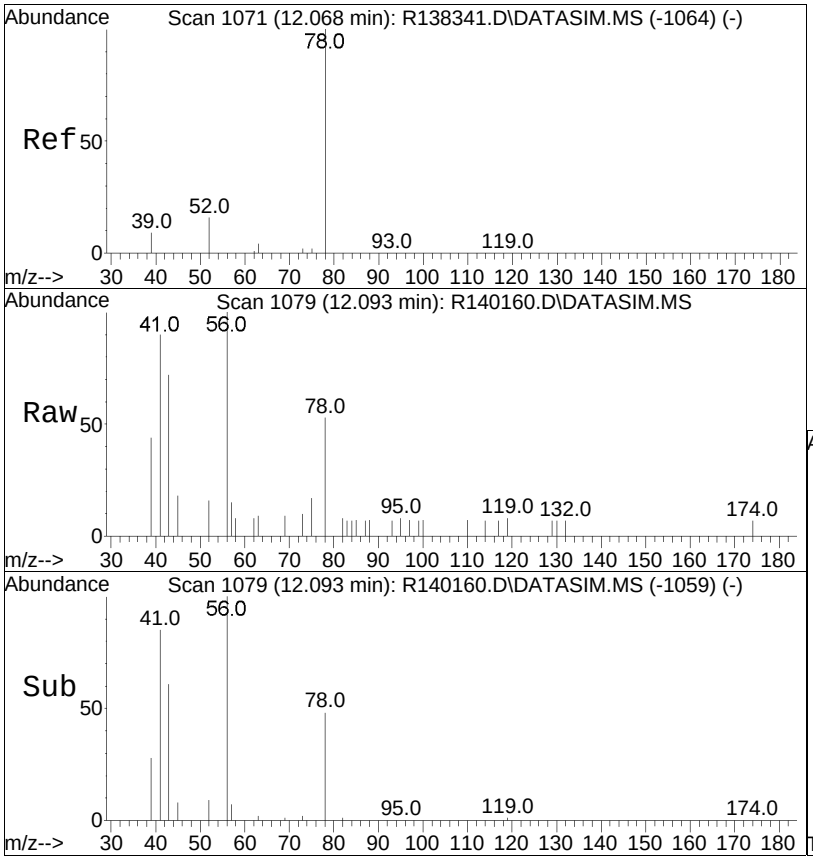



#35
1,1,1-trichloroethane
Concen: 0.01 ppbV
RT: 11.55 min Scan# 1026
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 97 Resp: 123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 61 | 0.0 | 0.0 | 0.0 |
| 119 | 56.4 | 10.7 | 16.1# |

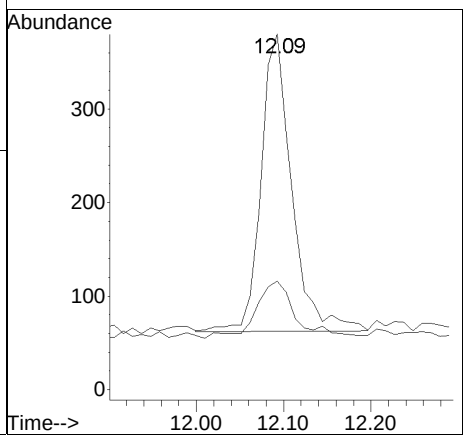


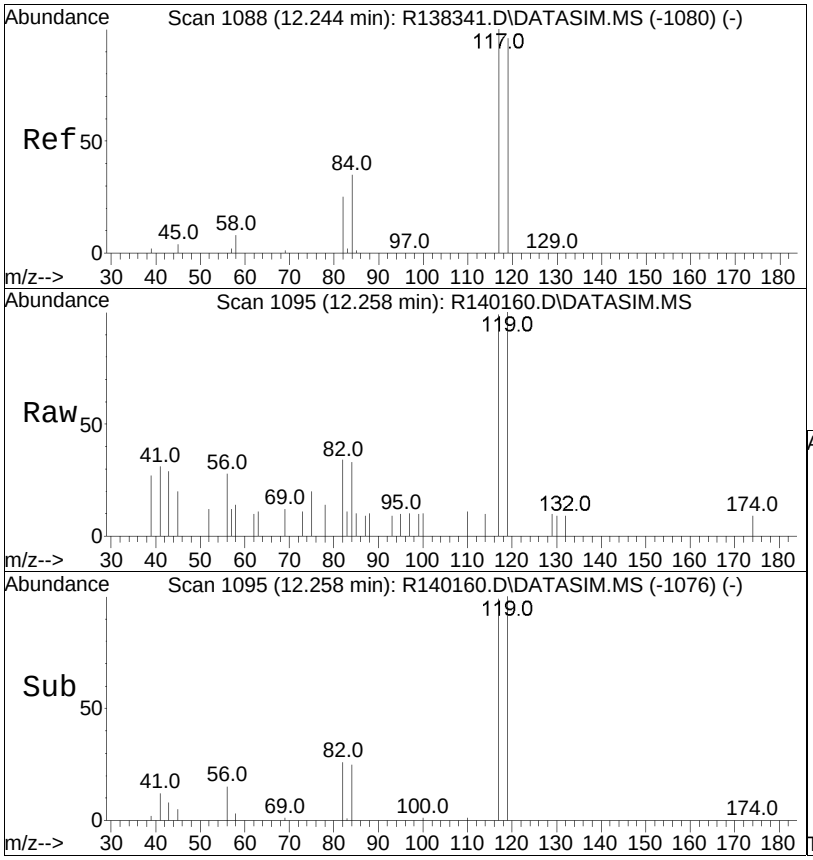



#36
benzene
Concen: 0.04 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 78 Resp: 777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 30.5 | 15.4 | 23.0# |

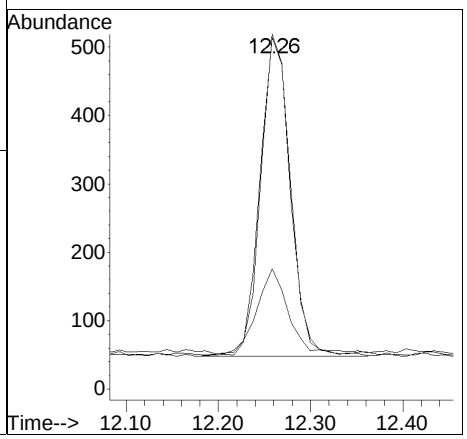


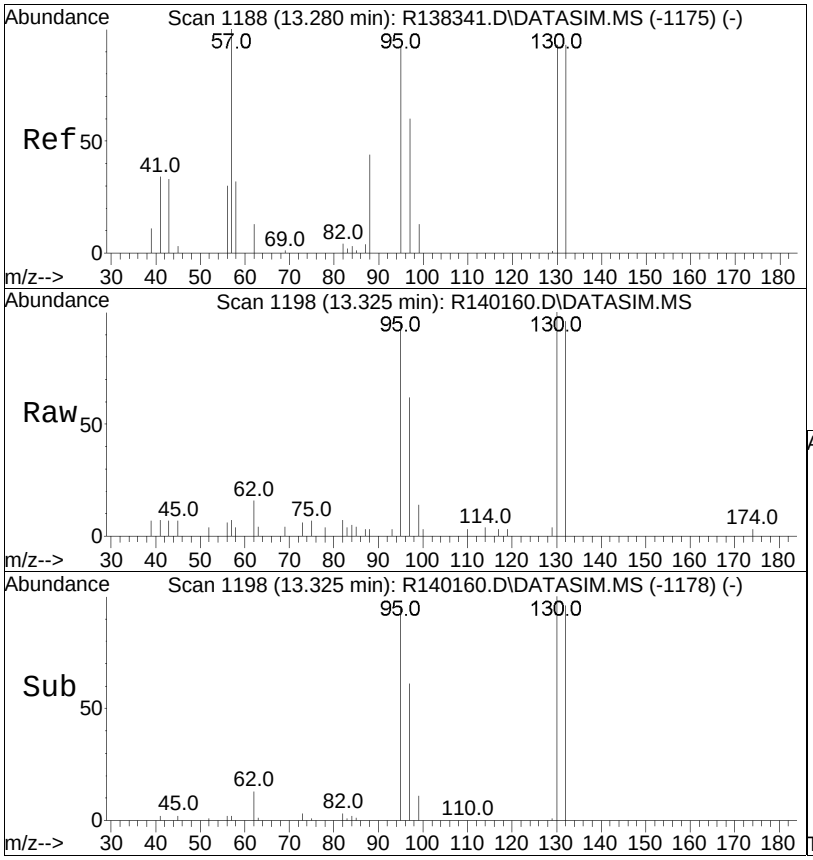



#37
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:117 Resp: 1074

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 101.0 | 78.5 | 117.7 |
| 82 | 34.2 | 19.8 | 29.8# |

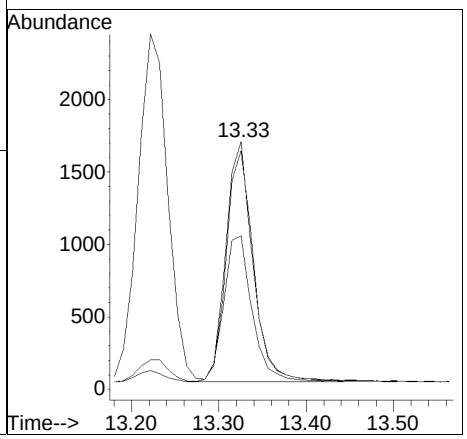


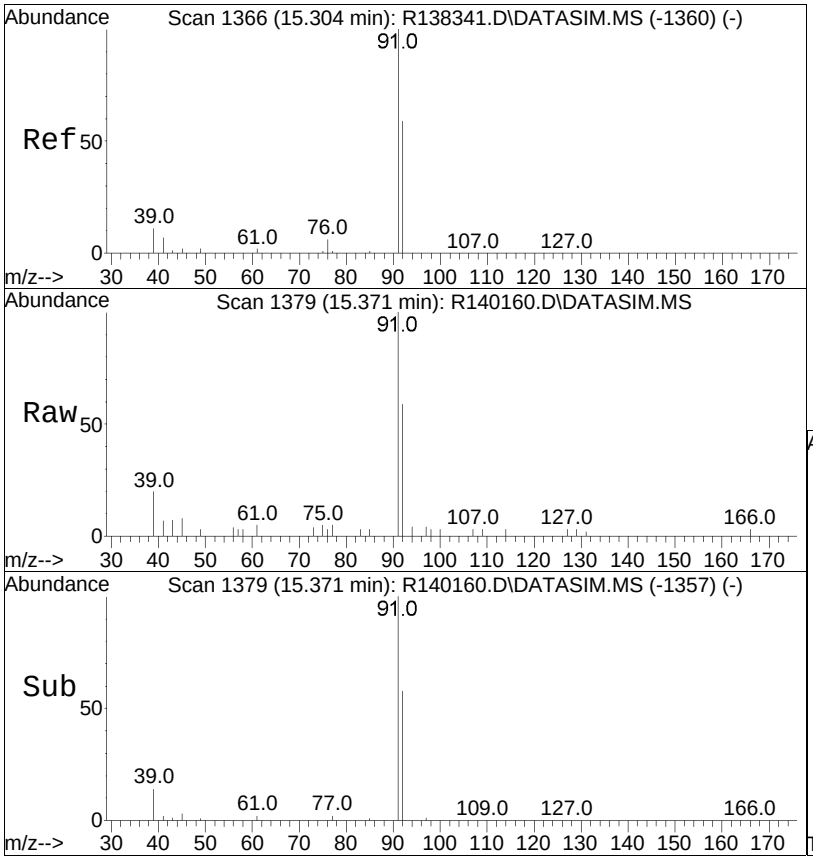



#42
trichloroethene
Concen: 0.34 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:130 Resp: 3576

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 96.3 | 76.0 | 114.0 |
| 97 | 62.0 | 51.8 | 77.8 |

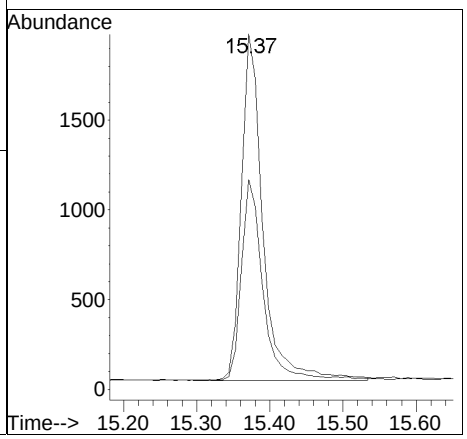


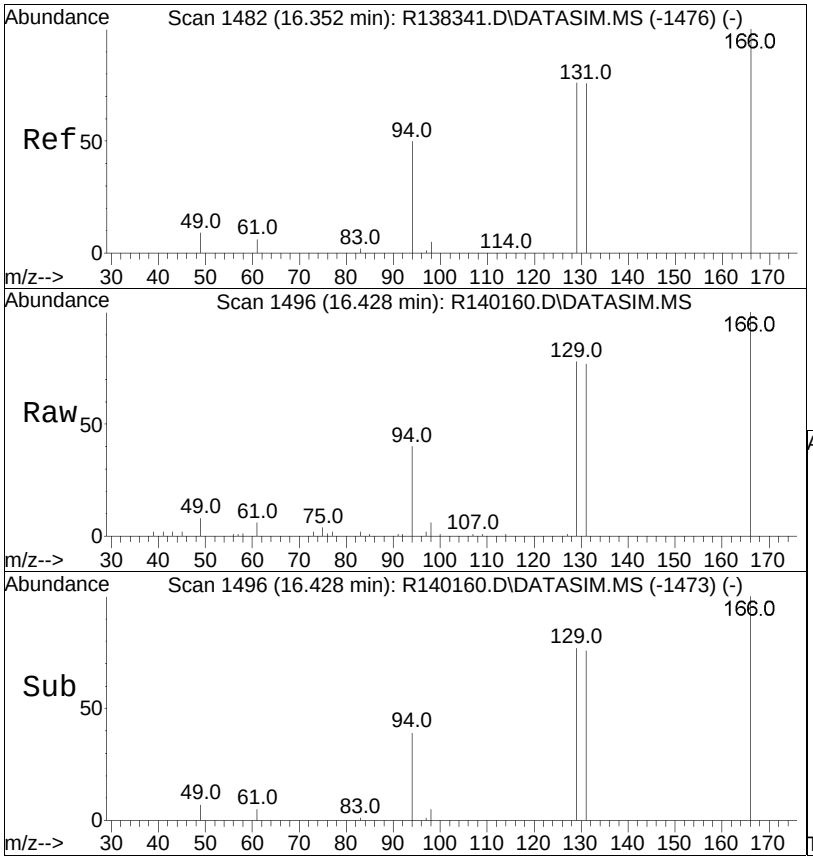



#50
toluene
Concen: 0.13 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 91 Resp: 3973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 59.1 | 47.2 | 70.8 |

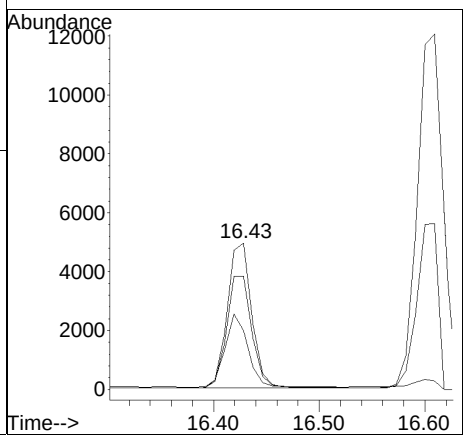


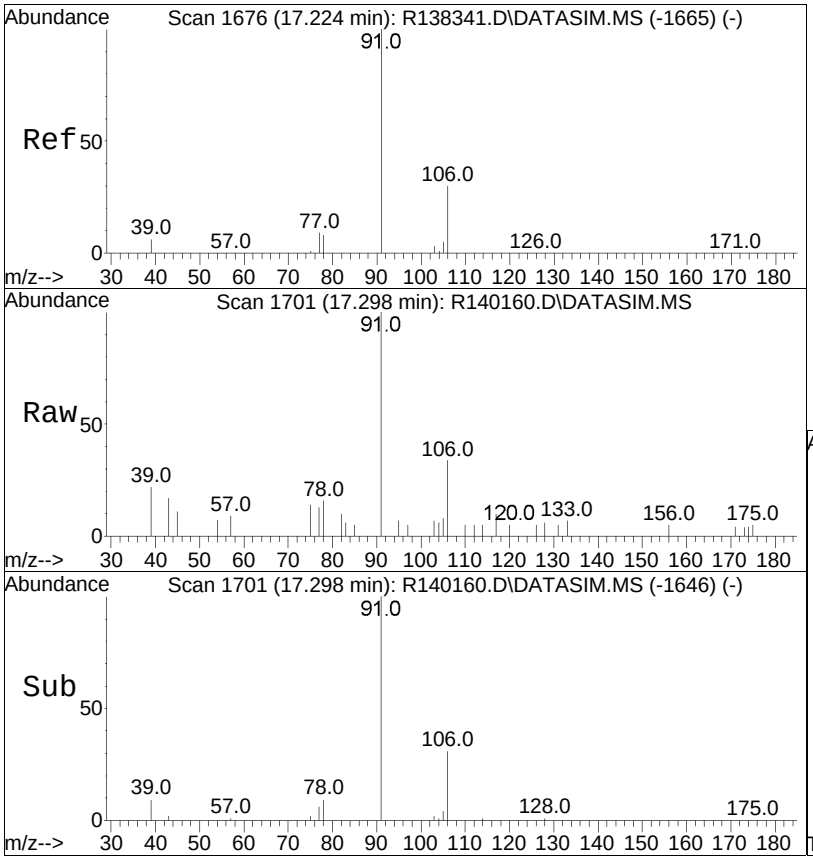



#55
tetrachloroethene
Concen: 0.52 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:166 Resp: 7944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 77.3 | 61.7 | 92.5 |
| 94 | 40.1 | 38.0 | 57.0 |

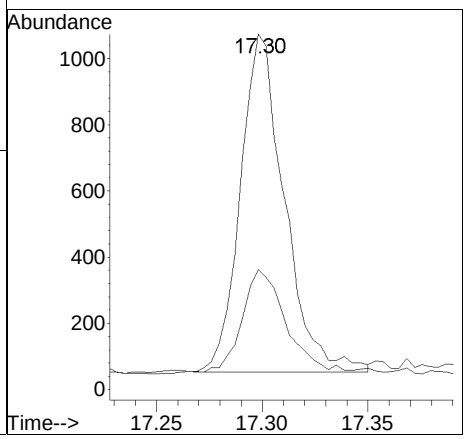


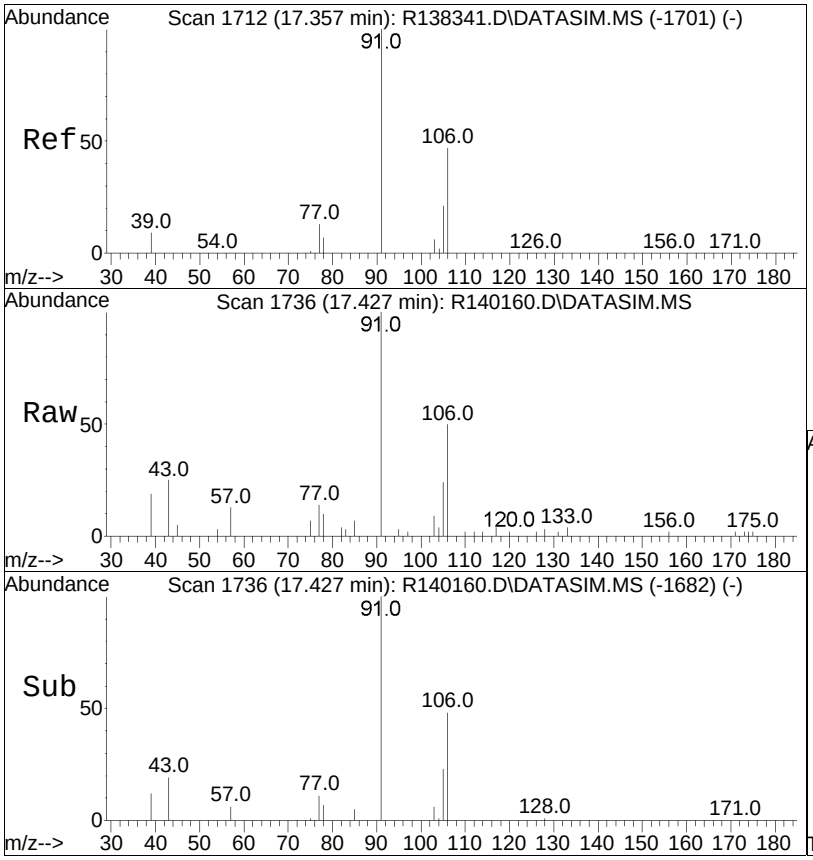



#58
ethylbenzene
Concen: 0.04 ppbV
RT: 17.30 min Scan# 1701
Delta R.T. 0.004 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 91 Resp: 1480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 33.7 | 25.4 | 38.0 |

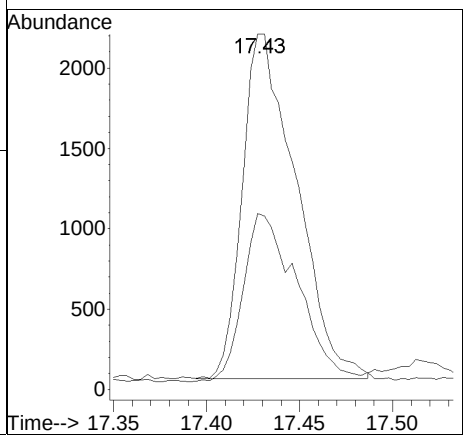


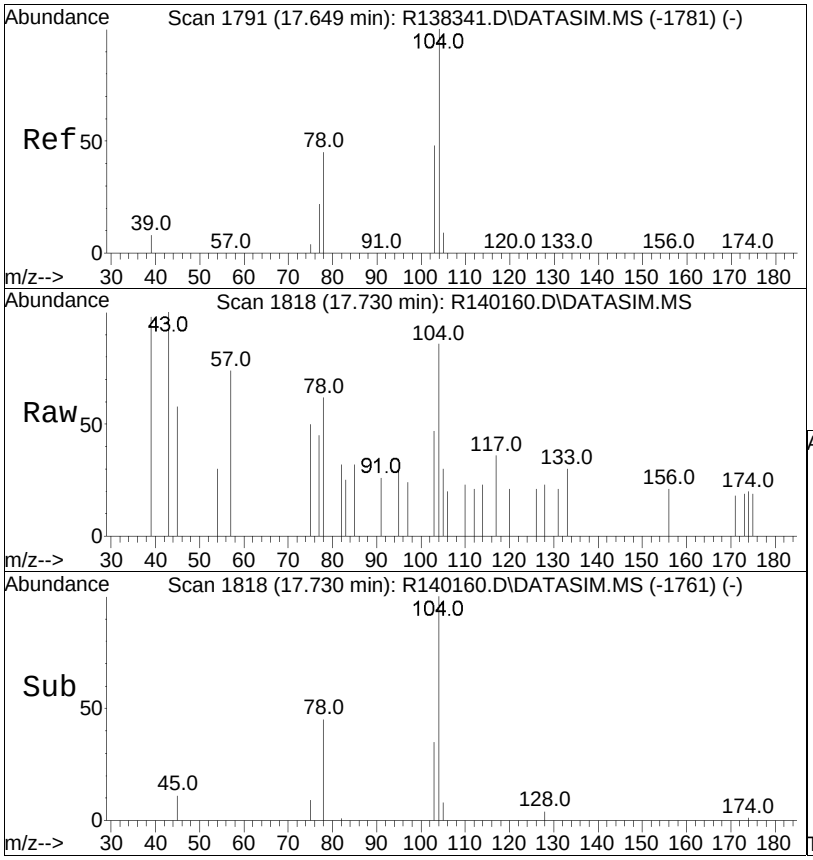



#59
m+p-xylene
Concen: 0.14 ppbV
RT: 17.43 min Scan# 1736
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 91 Resp: 4311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.5 | 39.7 | 59.5 |

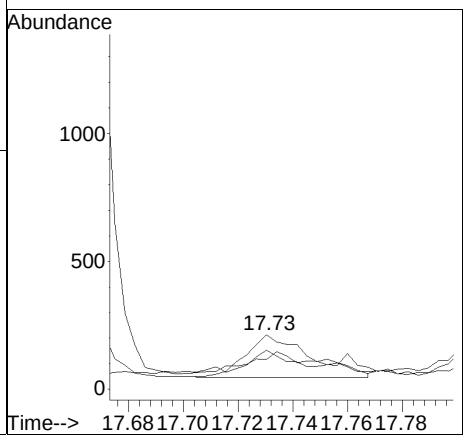


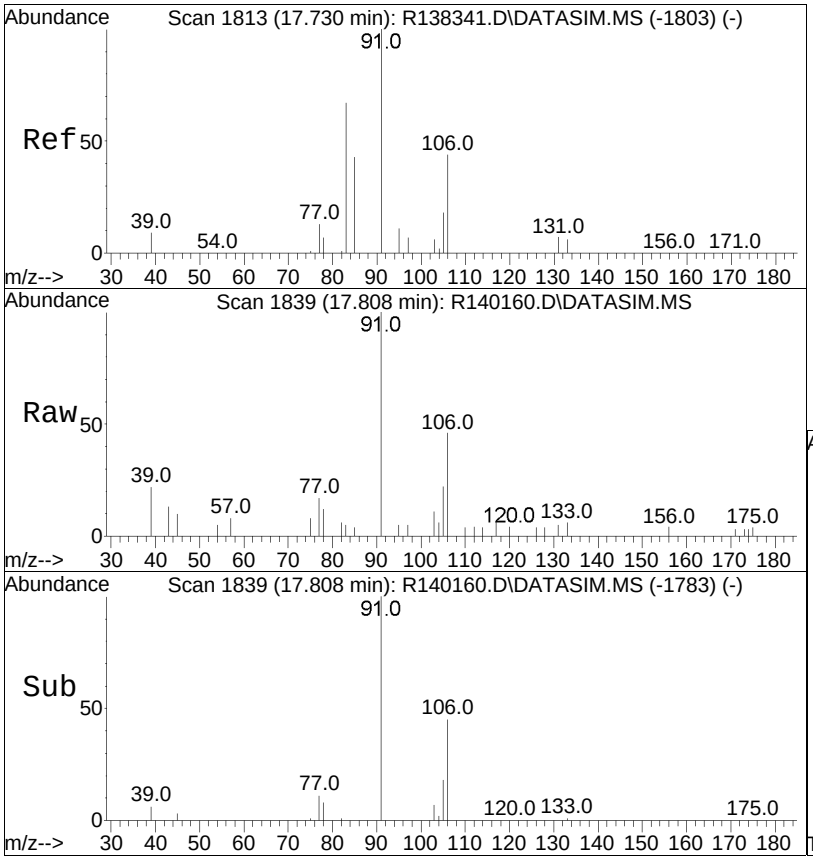



#61
styrene
Concen: 0.01 ppbV
RT: 17.73 min Scan# 1818
Delta R.T. 0.011 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:104 Resp: 276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 54.9 | 38.5 | 57.7 |
| 78 | 71.8 | 33.7 | 50.5# |

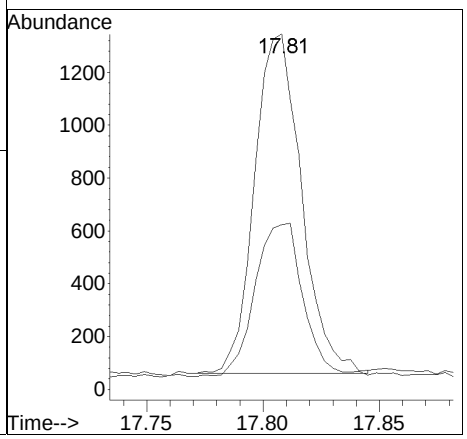


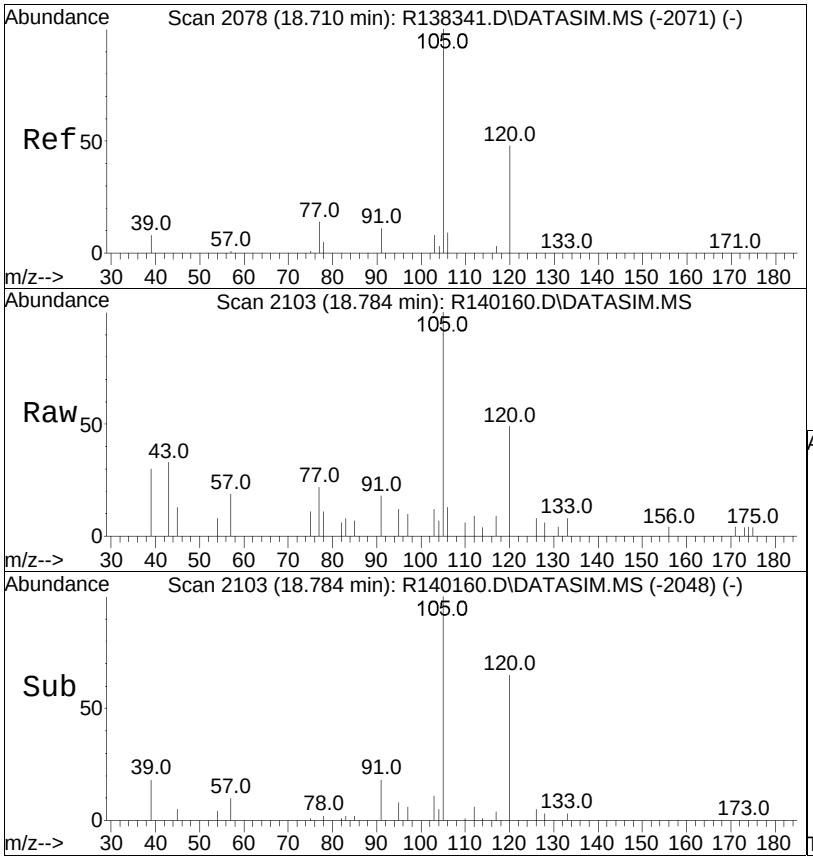



#63
o-xylene
Concen: 0.06 ppbV
RT: 17.81 min Scan# 1839
Delta R.T. 0.007 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 91 Resp: 1800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 46.4 | 37.6 | 56.4 |

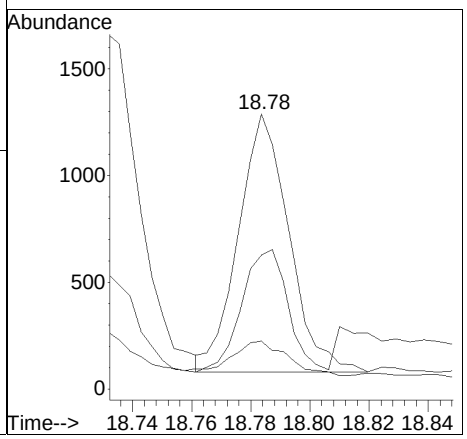


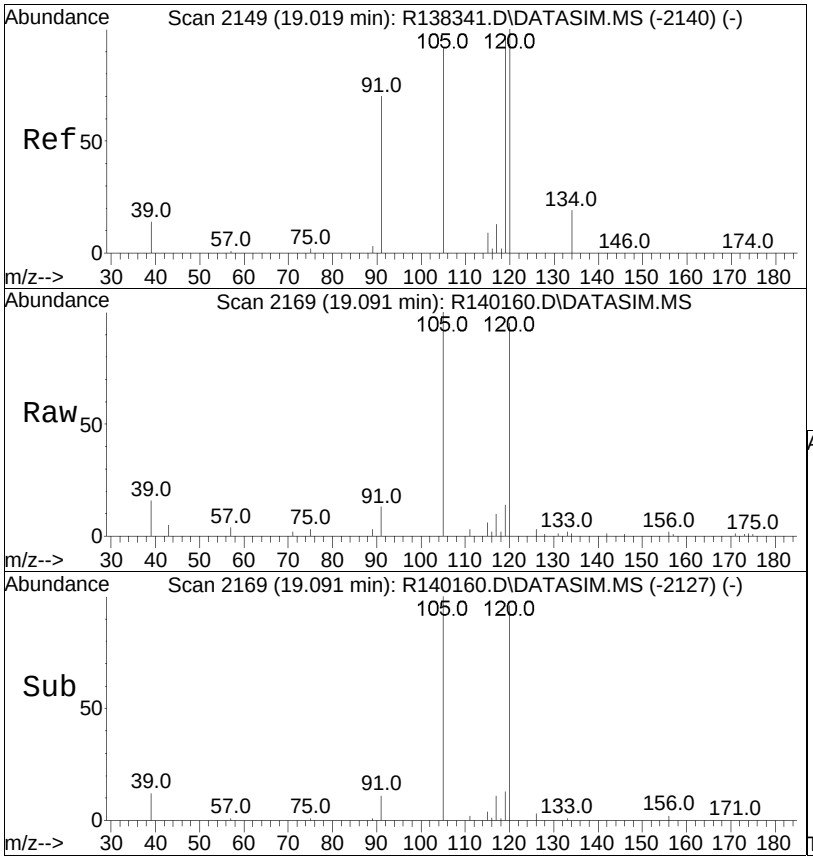



#67
1,3,5-trimethylbenzene
Concen: 0.03 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:105 Resp: 1495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.8 | 40.4 | 60.6 |
| 91 | 17.5 | 8.4 | 12.6# |

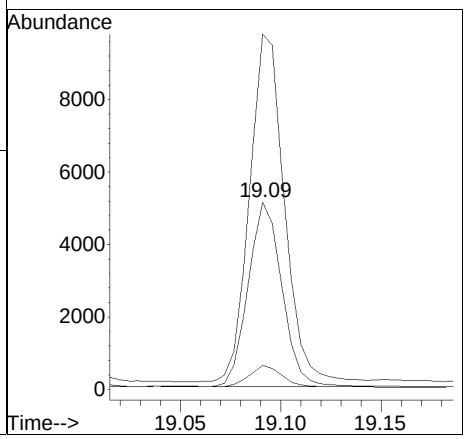


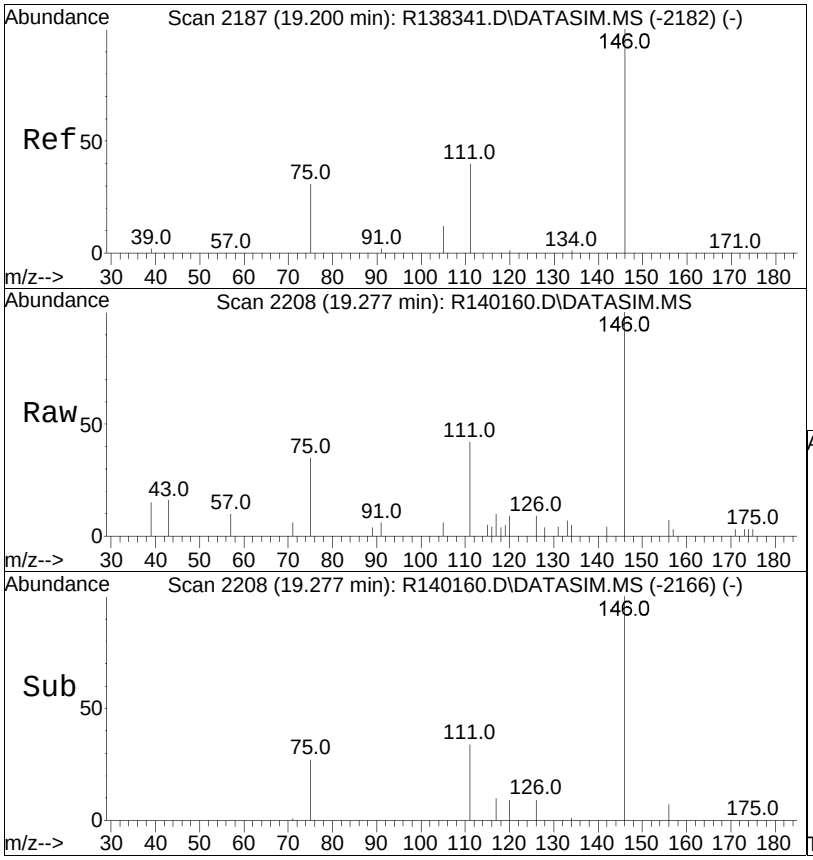



#69
1,2,4-trimethylbenzene
Concen: 0.15 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:105 Resp: 5994

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 189.9 | 184.1 | 276.1 |
| 91 | 12.8 | 57.4 | 86.2# |

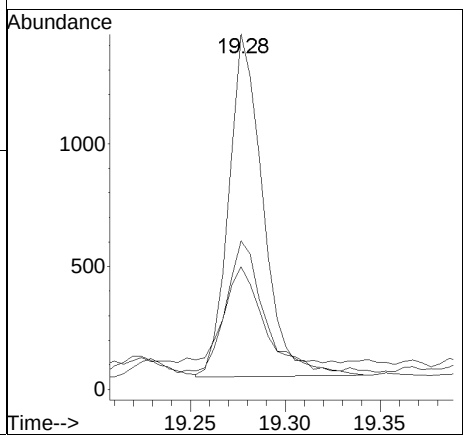


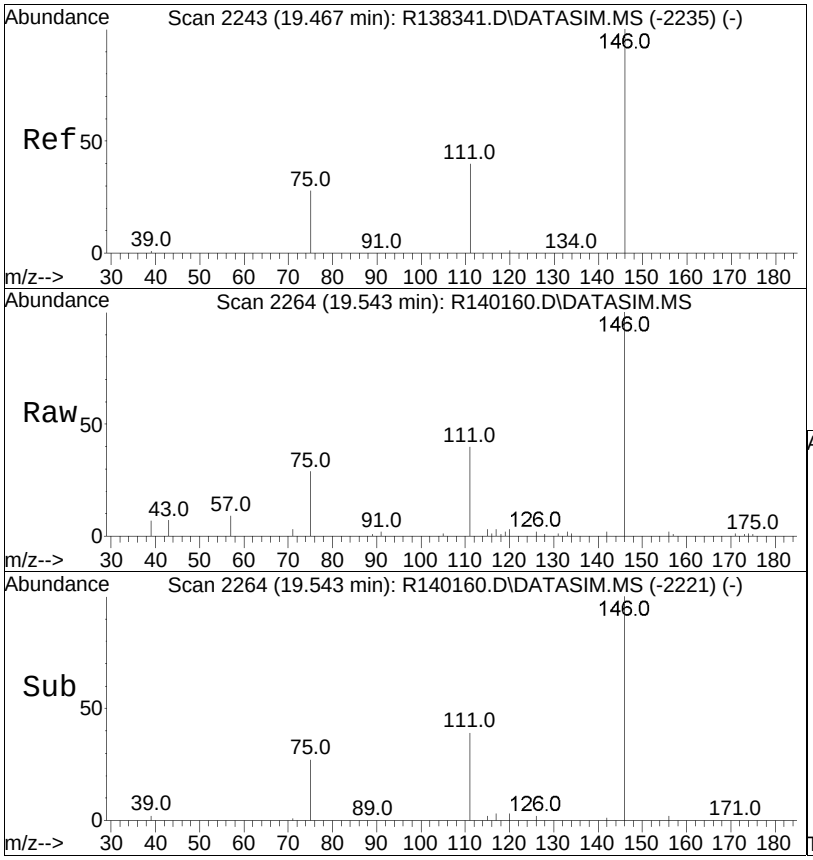



#72
1,4-dichlorobenzene
Concen: 0.06 ppbV
RT: 19.28 min Scan# 2208
Delta R.T. -0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:146 Resp: 1749

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.8 | 27.3 | 40.9# |
| 75 | 34.5 | 19.4 | 29.0# |

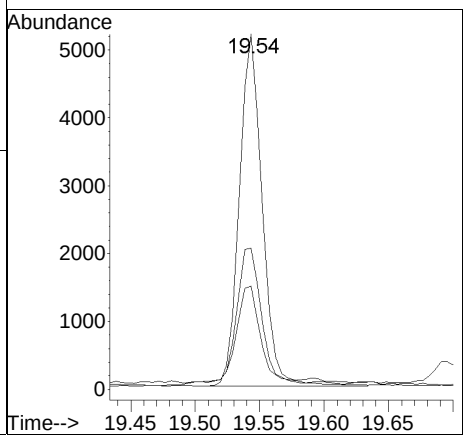


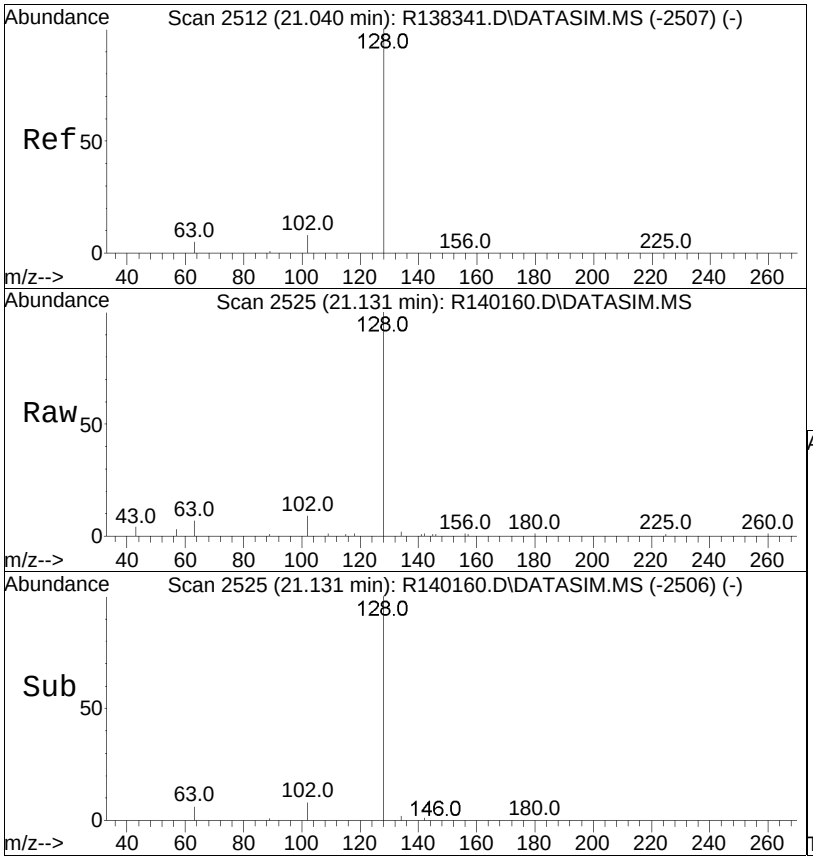



#75
1,2-dichlorobenzene
Concen: 0.23 ppbV
RT: 19.54 min Scan# 2264
Delta R.T. 0.005 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:146 Resp: 6408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.7 | 32.5 | 48.7 |
| 75 | 29.1 | 21.8 | 32.8 |

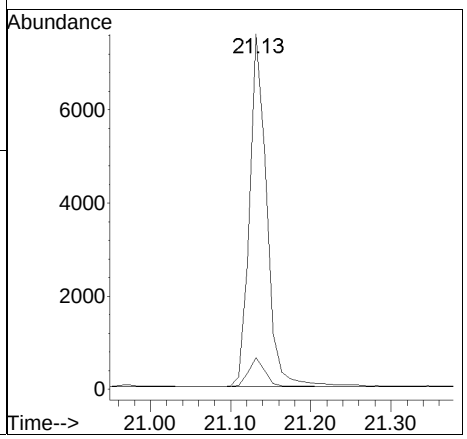





#78
naphthalene
Concen: 0.20 ppbV
RT: 21.13 min Scan# 2525
Delta R.T. 0.006 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion:128 Resp: 11333

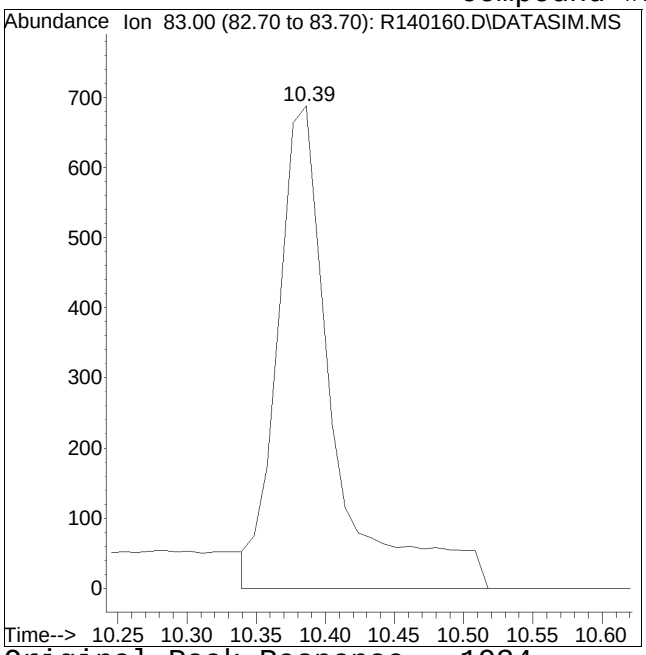
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 9.0 | 6.9 | 10.3 |



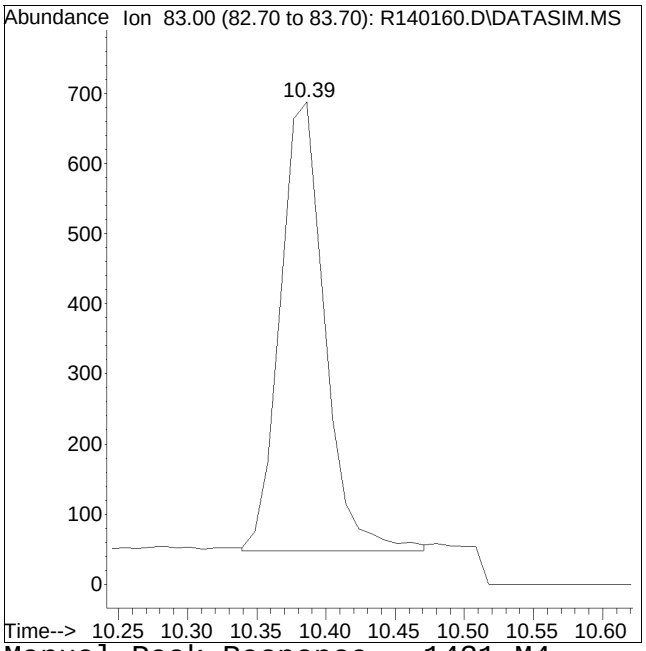
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140160.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 8:45 am Instrument : Air Piano 1
Sample : L1504425-08,3,250,250 Quant Date : 3/12/2015 10:06 am

Compound #29: chloroform




Original Peak Response = 1934




Manual Peak Response = 1431 M4

M4 = Poor automated baseline construction.

# Method Blank
# Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140139.D
Acq On : 11 Mar 2015 2:34 pm
Operator : AIRPIANO1:RY
Sample : WG767579-4,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:55:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 113956 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery | = | 95.74% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 247849 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery | = | 93.03% | |
| 49) chlorobenzene-D5 | 16.97 | 54 | 54385 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery | = | 93.37% | |
| System Monitoring Compounds | | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.12 | 65 | 12 | 0.002 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = | 0.02%# | |
| 51) toluene-D8 | 15.24 | 98 | 9 | 0.000 | ppbV | -0.02 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = | 0.00%# | |
| 64) bromofluorobenzene | 18.18 | 95 | 103 | 0.007 | ppbV | 0.02 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = | 0.07%# | |
| Target Compounds | | | | | | Qvalue |
| 2) propylene | 3.77 | | 0 | N.D. | | |
| 3) dichlorodifluoromethane | 3.89 | | 0 | N.D. | | |
| 4) chloromethane | 4.09 | 50 | 102 | 0.014 | ppbV # | 37 |
| 5) Freon-114 | 4.20 | | 0 | N.D. | | |
| 6) vinyl chloride | 4.40 | | 0 | N.D. | | |
| 7) 1,3-butadiene | 4.63 | | 0 | N.D. | | |
| 8) bromomethane | 0.00 | | 0 | N.D. d | | |
| 9) chloroethane | 5.31 | | 0 | N.D. | | |
| 10) ethanol | 5.51 | 31 | 783 | 0.126 | ppbV # | 73 |
| 11) vinyl bromide | 5.77 | | 0 | N.D. | | |
| 12) acetone | 6.21 | 43 | 593 | 0.048 | ppbV # | 88 |
| 13) trichlorofluoromethane | 6.40 | | 0 | N.D. | | |
| 14) isopropyl alcohol | 6.60 | 45 | 415 | 0.029 | ppbV # | 55 |
| 15) acrylonitrile | 6.86 | | 0 | N.D. | | |
| 16) 1,1-dichloroethene | 7.30 | | 0 | N.D. | | |
| 17) methylene chloride | 7.49 | 49 | 904 | 0.086 | ppbV | 88 |
| 18) 3-chloropropene | 7.65 | | 0 | N.D. | | |
| 19) carbon disulfide | 7.83 | 76 | 465 | 0.020 | ppbV # | 1 |
| 20) Freon 113 | 7.86 | | 0 | N.D. | | |
| 21) Halothane | 8.48 | | 0 | N.D. | | |
| 22) trans-1,2-dichloroethene | 8.71 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.98 | | 0 | N.D. | | |
| 24) MTBE | 9.08 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140139.D
Acq On : 11 Mar 2015 2:34 pm
Operator : AIRPIANO1:RY
Sample : WG767579-4,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:55:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) | vinyl acetate | 9.19 | | 0 | N.D. | | |
| 26) | 2-butanone | 9.48 | | 0 | N.D. | | |
| 27) | cis-1,2-dichloroethene | 10.02 | | 0 | N.D. | | |
| 28) | Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 29) | chloroform | 10.22 | | 0 | N.D. | | |
| 30) | Tetrahydrofuran | 10.91 | | 0 | N.D. | | |
| 31) | 1,2-dichloroethane | 11.25 | | 0 | N.D. | | |
| 33) | hexane | 10.28 | | 0 | N.D. | | |
| 35) | 1,1,1-trichloroethane | 11.54 | | 0 | N.D. | | |
| 36) | benzene | 12.09 | | 0 | N.D. | | |
| 37) | carbon tetrachloride | 12.27 | | 0 | N.D. | | |
| 38) | cyclohexane | 0.00 | | 0 | N.D. | d | |
| 39) | 1,2-dichloropropane | 13.04 | | 0 | N.D. | | |
| 40) | bromodichloromethane | 13.27 | | 0 | N.D. | | |
| 41) | 1,4-dioxane | 13.30 | | 0 | N.D. | | |
| 42) | trichloroethene | 13.34 | | 0 | N.D. | | |
| 43) | 2,2,4-trimethylpentane | 13.36 | | 0 | N.D. | | |
| 44) | heptane | 13.63 | | 0 | N.D. | | |
| 45) | cis-1,3-dichloropropene | 14.35 | | 0 | N.D. | | |
| 46) | 4-methyl-2-pentanone | 14.34 | | 0 | N.D. | | |
| 47) | trans-1,3-dichloropropene | 14.91 | | 0 | N.D. | | |
| 48) | 1,1,2-trichloroethane | 15.07 | | 0 | N.D. | | |
| 50) | toluene | 15.40 | | 0 | N.D. | | |
| 52) | 2-hexanone | 15.64 | | 0 | N.D. | | |
| 53) | dibromochloromethane | 15.78 | | 0 | N.D. | | |
| 54) | 1,2-dibromoethane | 16.02 | | 0 | N.D. | | |
| 55) | tetrachloroethene | 0.00 | | 0 | N.D. | | |
| 56) | 1,1,1,2-tetrachloroethane | 16.99 | | 0 | N.D. | | |
| 57) | chlorobenzene | 17.00 | | 0 | N.D. | | |
| 58) | ethylbenzene | 17.31 | | 0 | N.D. | | |
| 59) | m+p-xylene | 17.41 | | 0 | N.D. | | |
| 60) | bromoform | 17.52 | | 0 | N.D. | | |
| 61) | styrene | 17.73 | | 0 | N.D. | | |
| 62) | 1,1,2,2-tetrachloroethane | 17.83 | | 0 | N.D. | | |
| 63) | o-xylene | 17.79 | | 0 | N.D. | | |
| 65) | isopropylbenzene | 18.26 | | 0 | N.D. | | |
| 66) | 4-ethyl toluene | 18.74 | | 0 | N.D. | | |
| 67) | 1,3,5-trimethylbenzene | 18.80 | | 0 | N.D. | | |
| 68) | tert-butylbenzene | 19.09 | | 0 | N.D. | | |
| 69) | 1,2,4-trimethylbenzene | 19.11 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140139.D
Acq On : 11 Mar 2015 2:34 pm
Operator : AIRPIANO1:RY
Sample : WG767579-4,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:55:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.23 | | 0 | N.D. | | |
| 71) 1,3-dichlorobenzene | 19.24 | | 0 | N.D. | | |
| 72) 1,4-dichlorobenzene | 19.29 | | 0 | N.D. | | |
| 73) sec-butylbenzene | 19.30 | | 0 | N.D. | | |
| 74) p-isopropyltoluene | 19.41 | | 0 | N.D. | | |
| 75) 1,2-dichlorobenzene | 19.55 | | 0 | N.D. | | |
| 76) n-butylbenzene | 19.74 | | 0 | N.D. | | |
| 77) 1,2,4-trichlorobenzene | 21.03 | 180 | 230 | 0.011 | ppbV # | 60 |
| 78) naphthalene | 21.14 | 128 | 836 | 0.015 | ppbV # | 70 |
| 79) 1,2,3-trichlorobenzene | 21.41 | 180 | 248 | 0.012 | ppbV # | 62 |
| 80) hexachlorobutadiene | 21.47 | | 0 | N.D. | | |

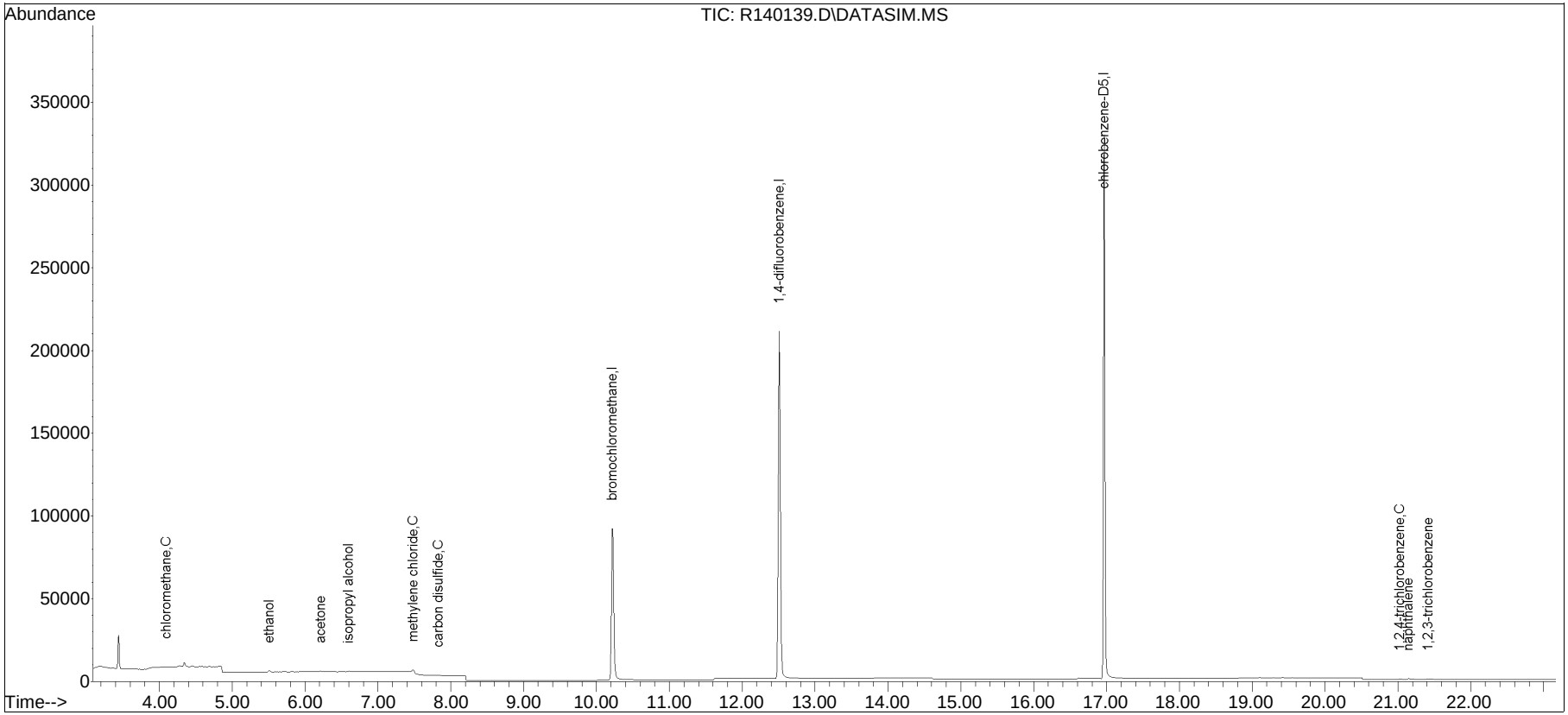
(#) = qualifier out of range (m) = manual integration (+) = signals summed

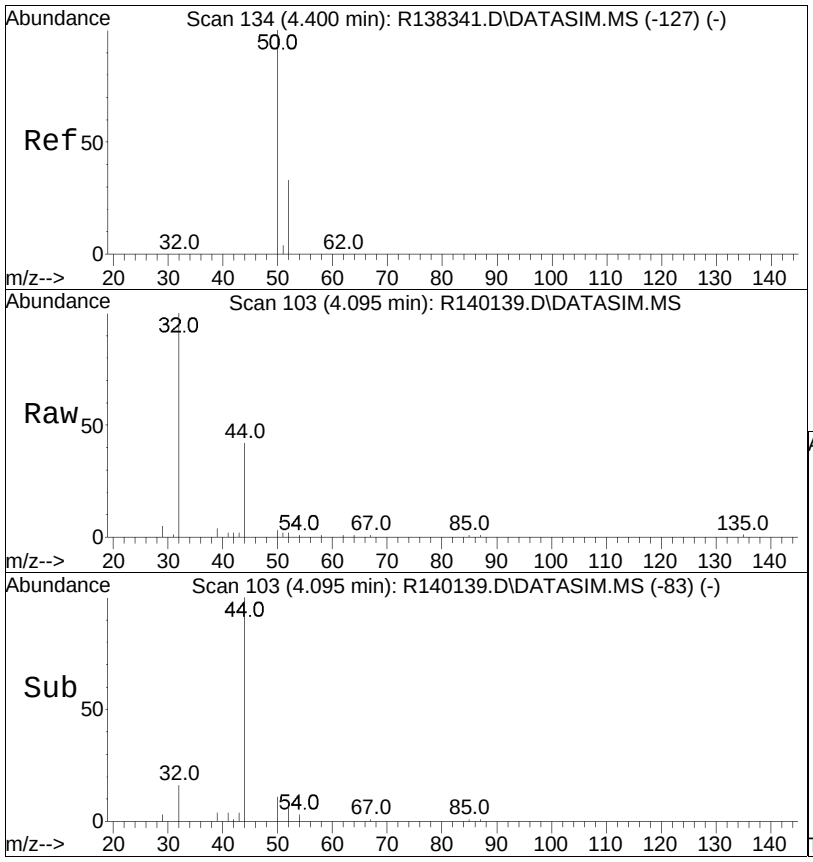
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140139.D
Acq On : 11 Mar 2015 2:34 pm
Operator : AIRPIANO1:RY
Sample : WG767579-4,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:55:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed0311SIM\R140137.D

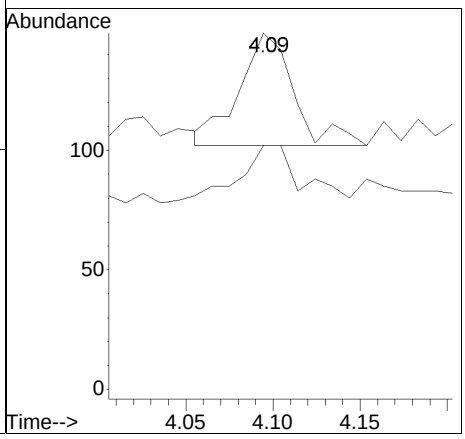


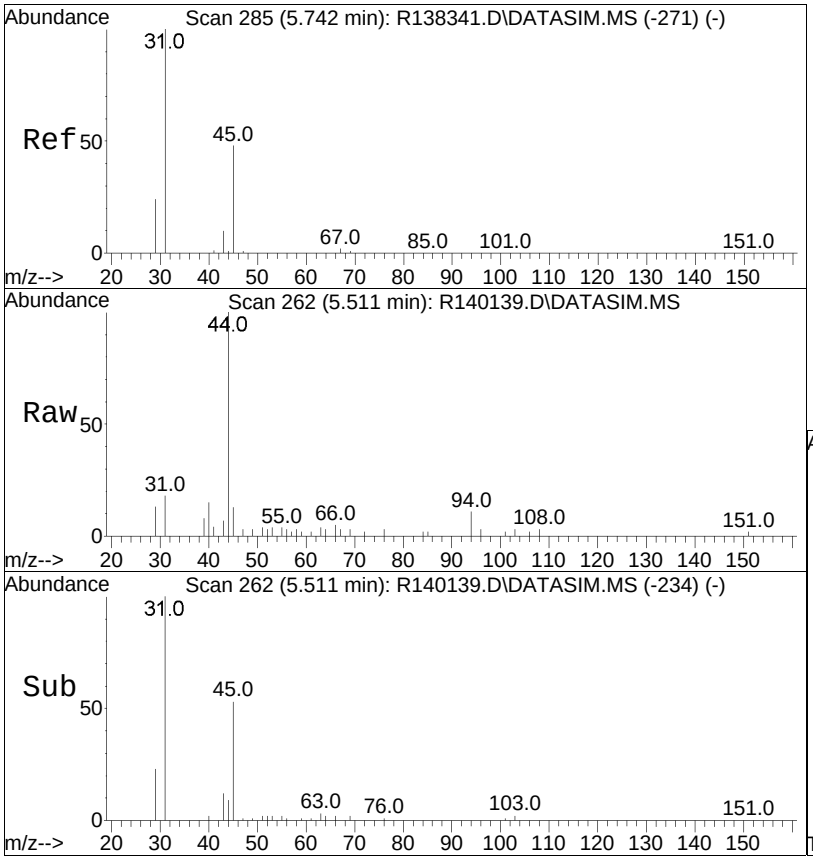



#4
chloromethane
Concen: 0.01 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion: 50 Resp: 102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 68.5 | 26.4 | 39.6# |

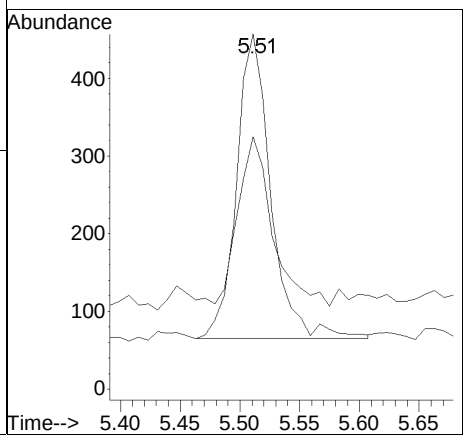


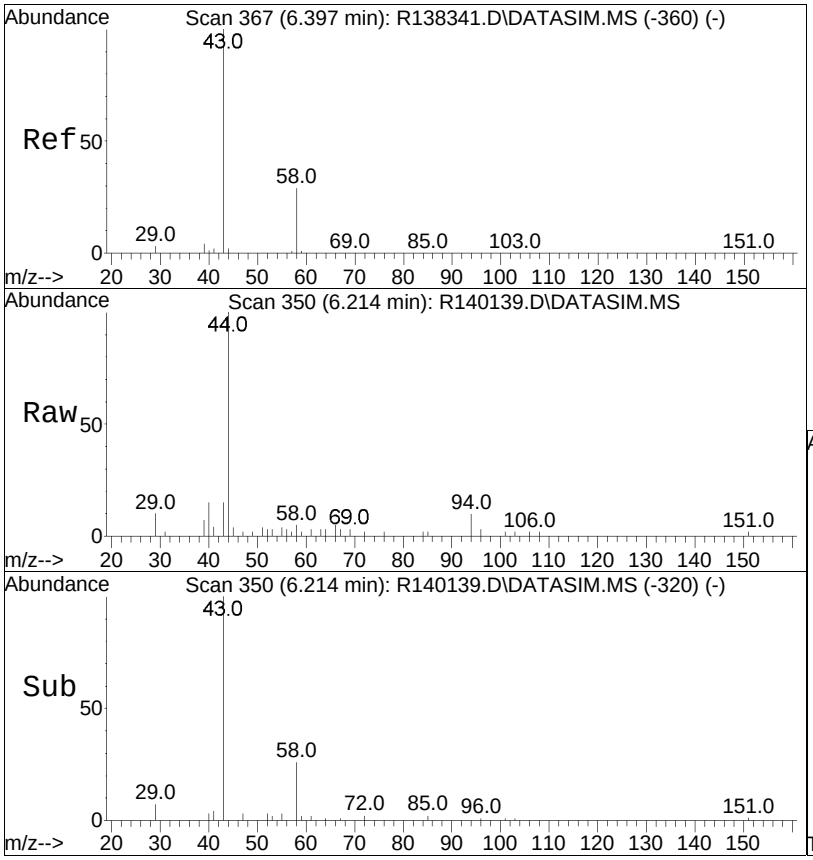



#10
ethanol
Concen: 0.13 ppbV
RT: 5.51 min Scan# 262
Delta R.T. 0.024 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion: 31 Resp: 783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 71.1 | 41.8 | 62.6# |

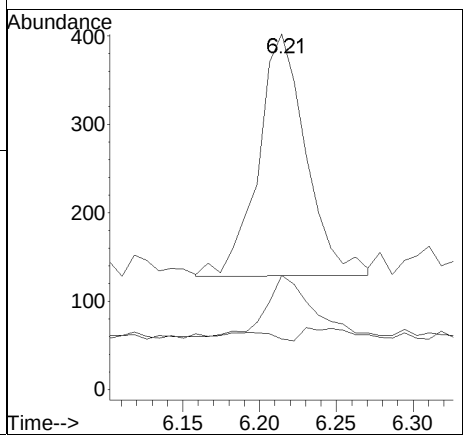


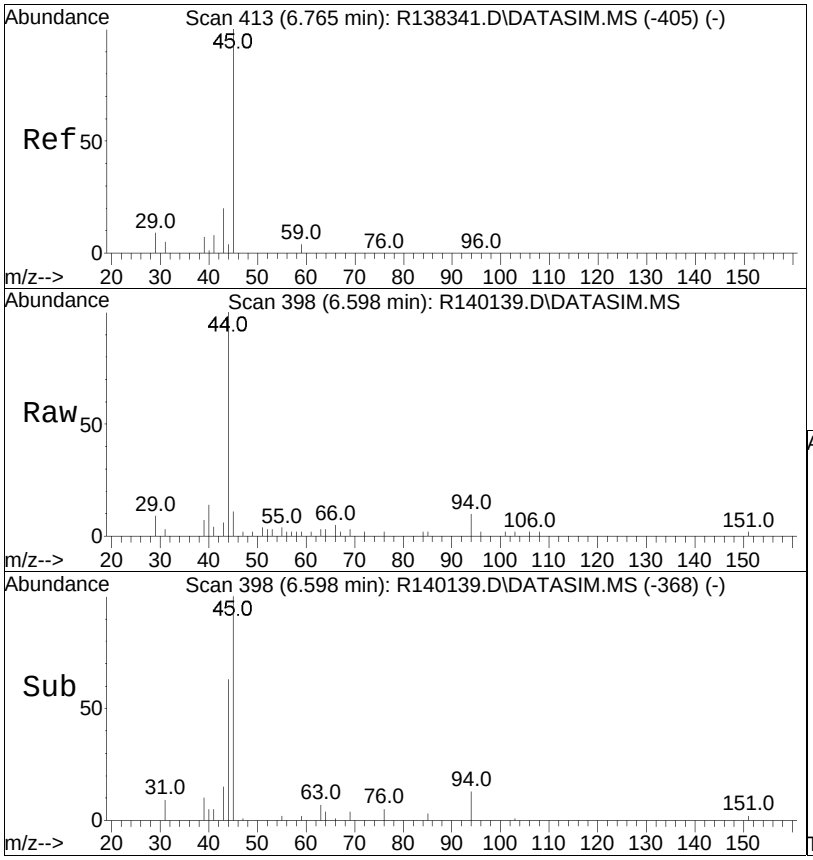



#12
acetone
Concen: 0.05 ppbV
RT: 6.21 min Scan# 350
Delta R.T. 0.040 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion: 43 Resp: 593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 32.1 | 20.8 | 31.2# |
| 57 | 14.2 | 0.6 | 1.0# |

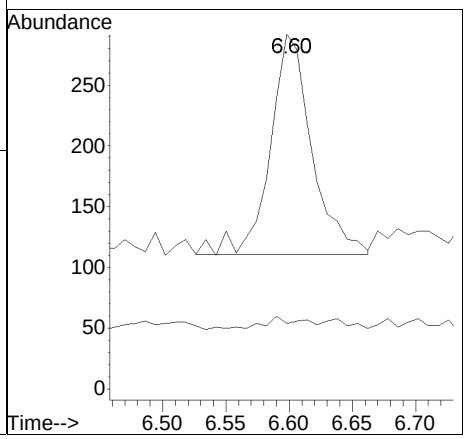


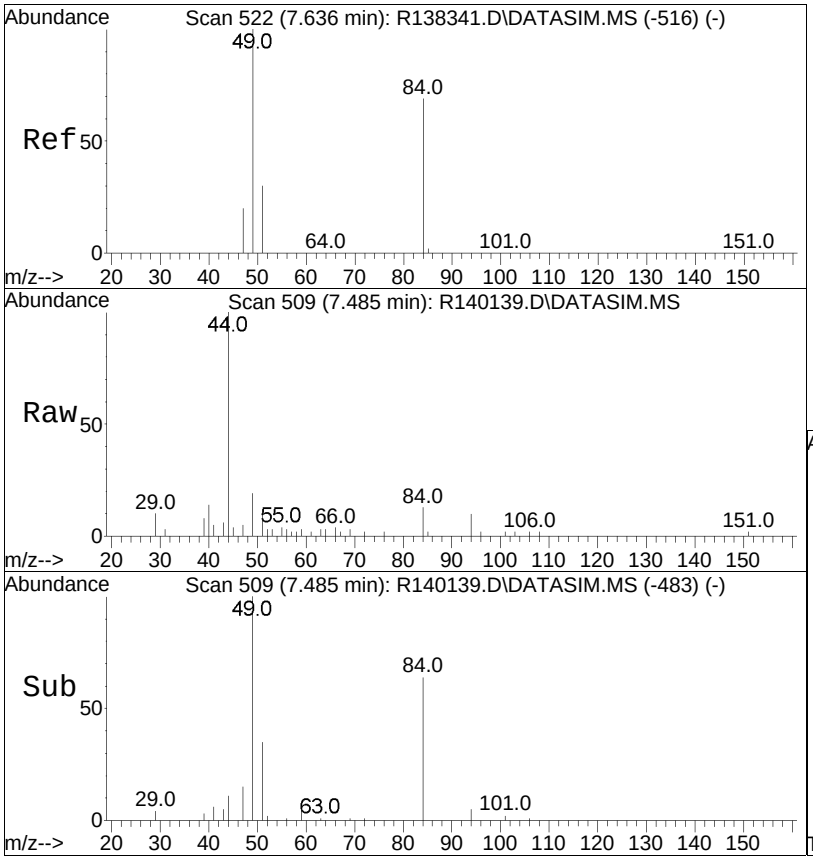



#14
isopropyl alcohol
Concen: 0.03 ppbV
RT: 6.60 min Scan# 398
Delta R.T. 0.040 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion: 45 Resp: 415

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 18.5 | 2.8 | 4.2# |

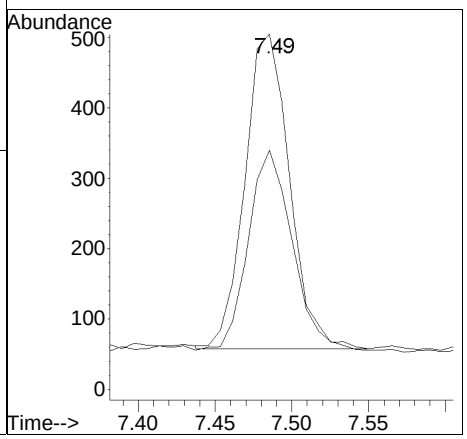


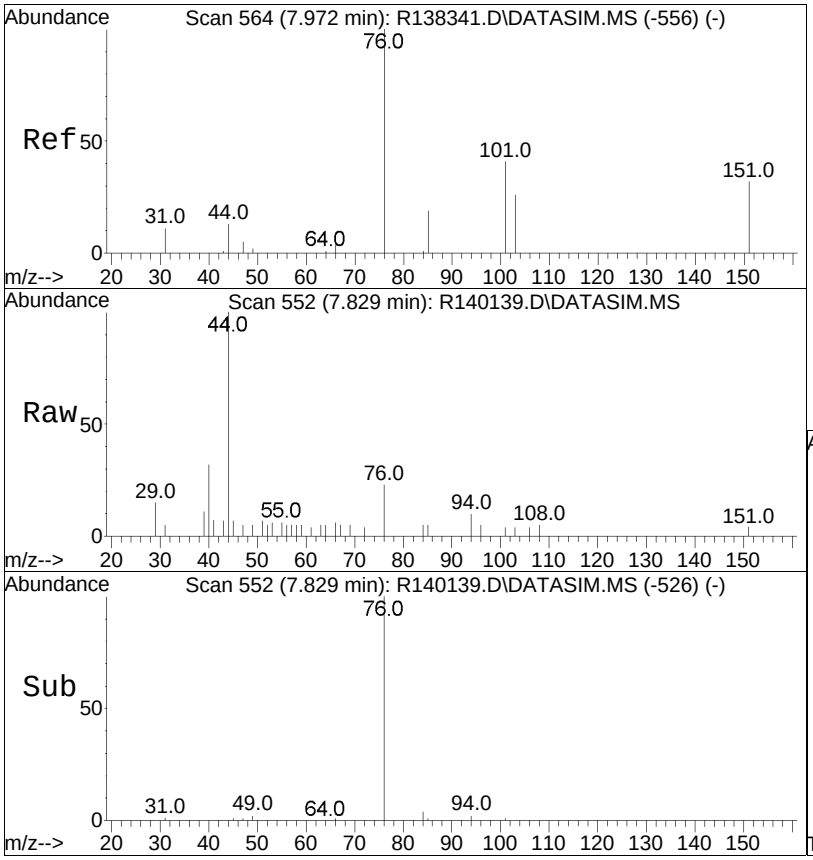



#17
methylene chloride
Concen: 0.09 ppbV
RT: 7.49 min Scan# 509
Delta R.T. 0.008 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion: 49 Resp: 904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 67.3 | 46.7 | 70.1 |

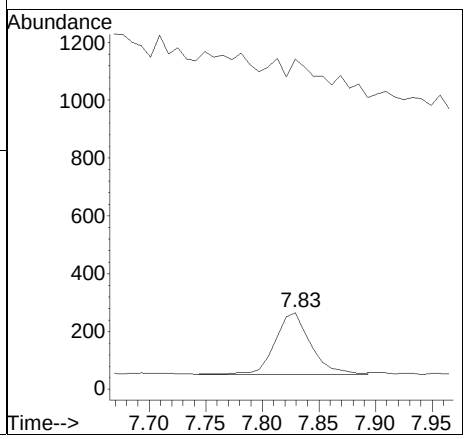


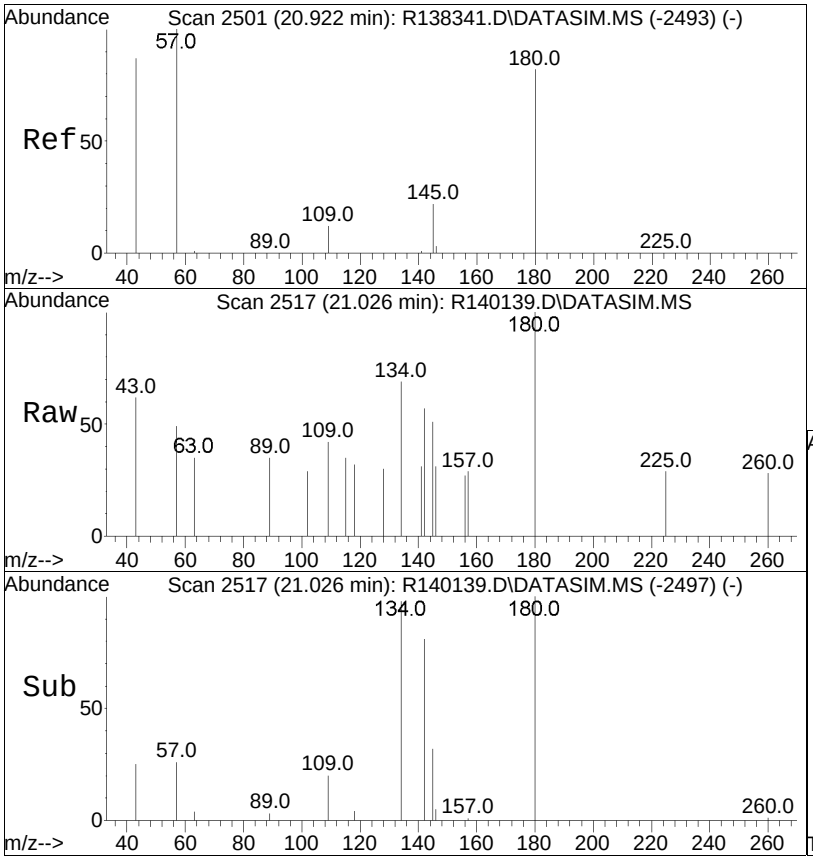



#19
carbon disulfide
Concen: 0.02 ppbV
RT: 7.83 min Scan# 552
Delta R.T. 0.008 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion: 76 Resp: 465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 430.9 | 14.7 | 22.1# |

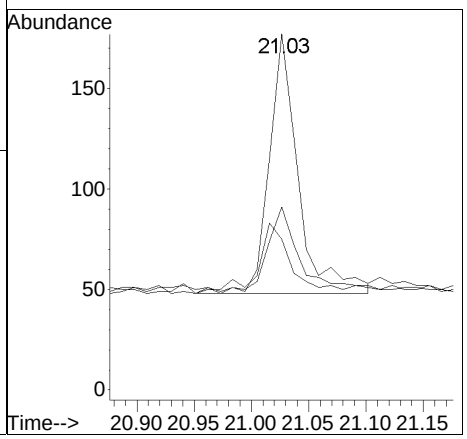


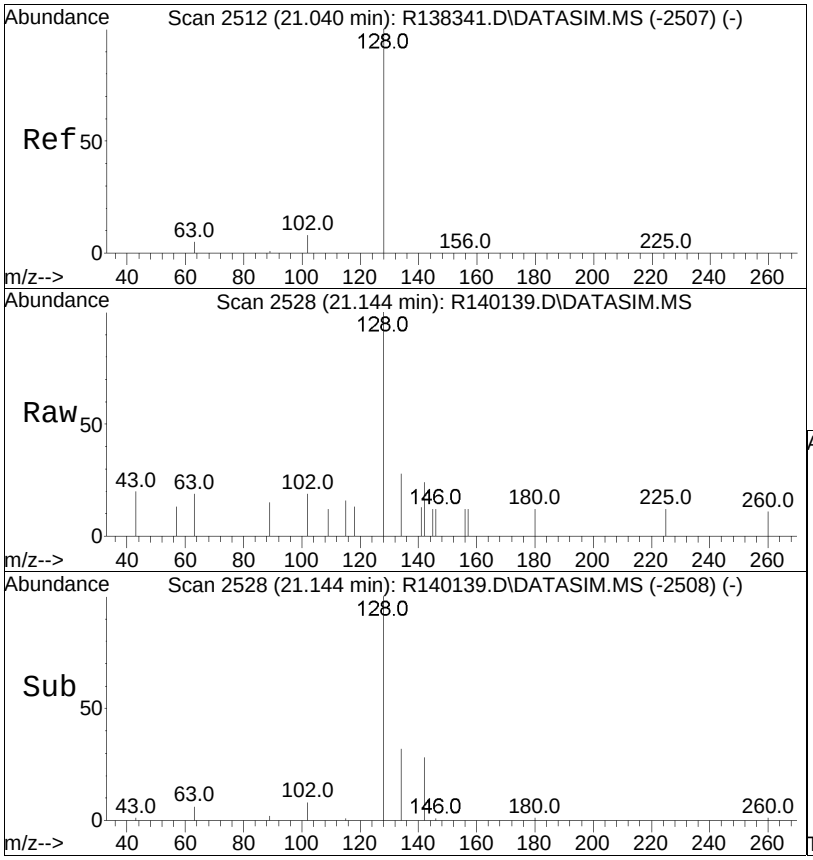



#77
1,2,4-trichlorobenzene
Concen: 0.01 ppbV
RT: 21.03 min Scan# 2517
Delta R.T. 0.019 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion:180 Resp: 230

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 51.4 | 24.9 | 37.3# |
| 109 | 42.4 | 17.3 | 25.9# |

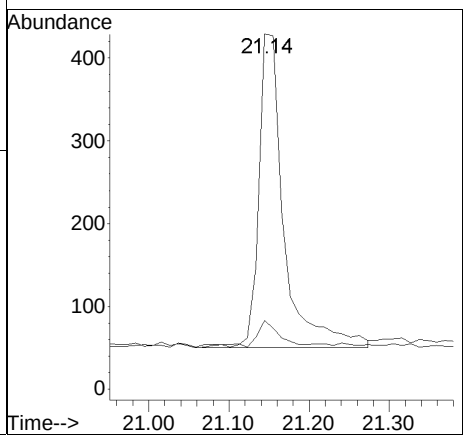


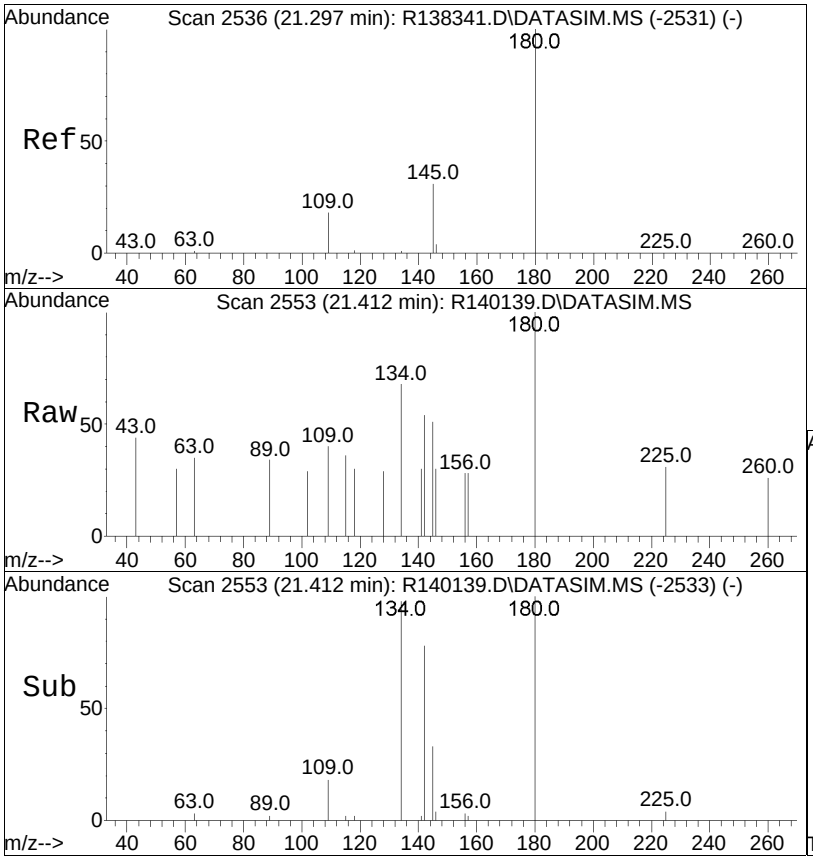



#78
naphthalene
Concen: 0.02 ppbV
RT: 21.14 min Scan# 2528
Delta R.T. 0.019 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion:128 Resp: 836

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 19.3 | 6.9 | 10.3# |

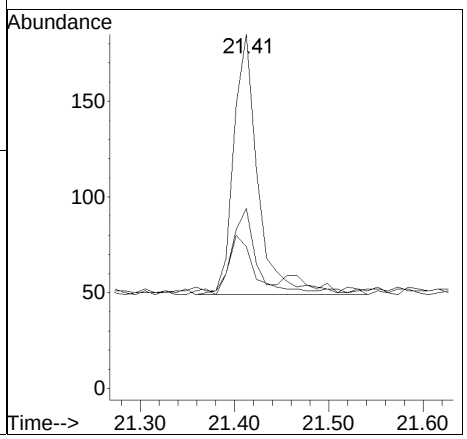





#79
1,2,3-trichlorobenzene
Concen: 0.01 ppbV
RT: 21.41 min Scan# 2553
Delta R.T. 0.019 min
Lab File: R140139.D
Acq: 11 Mar 2015 2:34 pm

Tgt Ion:180 Resp: 248

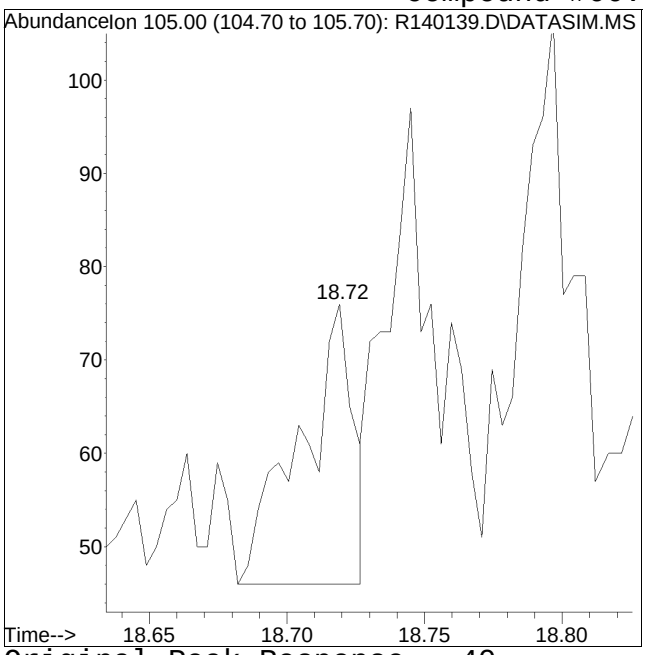
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 50.8 | 25.4 | 38.0# |
| 109 | 40.0 | 16.0 | 24.0# |

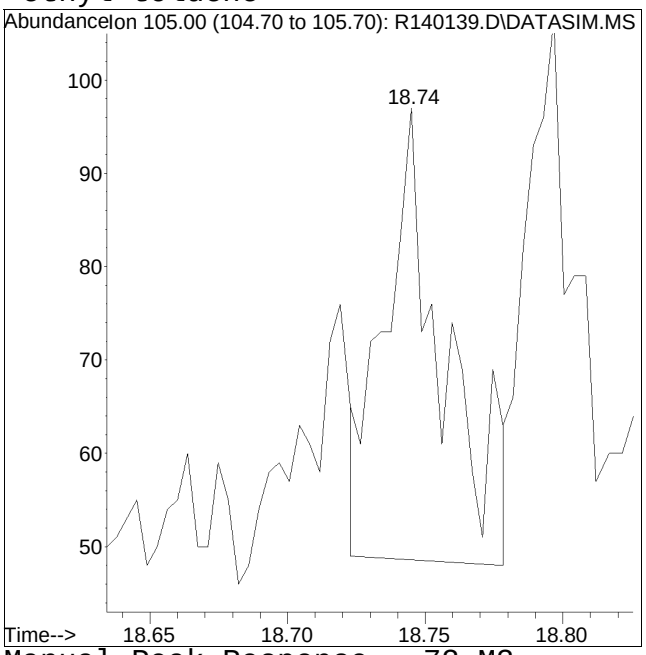


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140139.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 2:34 pm Instrument : Air Piano 1
Sample : WG767579-4,3,250,250 Quant Date : 3/11/2015 2:54 pm

Compound #66: 4-ethyl toluene




Original Peak Response = 40 Manual Peak Response = 72 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Batch Quality Control

# LCS Raw Data

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-3,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 10.000 | 10.000 | 0.0 | 80 | 0.00 |
| 2 | | propylene | 5.000 | 5.103 | -2.1 | 84 | 0.00 |
| 3 | | dichlorodifluoromethane | 5.000 | 4.365 | 12.7 | 68 | 0.00 |
| 4 | C | chloromethane | 5.000 | 4.557 | 8.9 | 78 | 0.00 |
| 5 | | Freon-114 | 5.000 | 4.638 | 7.2 | 77 | 0.00 |
| 6 | C | vinyl chloride | 5.000 | 4.476 | 10.5 | 76 | 0.00 |
| 7 | C | 1,3-butadiene | 5.000 | 4.465 | 10.7 | 78 | 0.00 |
| 8 | C | bromomethane | 5.000 | 4.588 | 8.2 | 78 | 0.00 |
| 9 | C | chloroethane | 5.000 | 4.262 | 14.8 | 77 | 0.00 |
| 10 | | ethanol | 25.000 | 21.400 | 14.4 | 70 | 0.00 |
| 11 | C | vinyl bromide | 5.000 | 4.417 | 11.7 | 75 | 0.00 |
| 12 | | acetone | 25.000 | 24.067 | 3.7 | 80 | 0.00 |
| 13 | | trichlorofluoromethane | 5.000 | 4.670 | 6.6 | 77 | 0.00 |
| 14 | | isopropyl alcohol | 5.000 | 4.829 | 3.4 | 76 | 0.00 |
| 15 | C | acrylonitrile | 5.000 | 3.845 | 23.1 | 71 | 0.00 |
| 16 | C | 1,1-dichloroethene | 5.000 | 4.496 | 10.1 | 80 | 0.00 |
| 17 | C | methylene chloride | 5.000 | 4.837 | 3.3 | 79 | 0.00 |
| 18 | C | 3-chloropropene | 5.000 | 4.593 | 8.1 | 78 | 0.00 |
| 19 | C | carbon disulfide | 5.000 | 4.365 | 12.7 | 73 | 0.00 |
| 20 | | Freon 113 | 5.000 | 4.688 | 6.2 | 78 | 0.00 |
| 21 | | Halothane | 5.000 | 4.222 | 15.6 | 71 | 0.00 |
| 22 | | trans-1,2-dichloroethene | 5.000 | 4.219 | 15.6 | 69 | 0.00 |
| 23 | C | 1,1-dichloroethane | 5.000 | 4.586 | 8.3 | 77 | 0.00 |
| 24 | C | MTBE | 5.000 | 4.377 | 12.5 | 73 | 0.00 |
| 25 | C | vinyl acetate | 5.000 | 5.587 | -11.7 | 83 | 0.00 |
| 26 | C | 2-butanone | 5.000 | 4.853 | 2.9 | 73 | 0.00 |
| 27 | | cis-1,2-dichloroethene | 5.000 | 5.020 | -0.4 | 81 | 0.00 |
| 28 | | Ethyl Acetate | 5.000 | 4.445 | 11.1 | 70 | 0.00 |
| 29 | C | chloroform | 5.000 | 4.527 | 9.5 | 77 | 0.00 |
| 30 | | Tetrahydrofuran | 5.000 | 4.366 | 12.7 | 71 | 0.00 |
| 31 | C | 1,2-dichloroethane | 5.000 | 4.540 | 9.2 | 76 | 0.00 |
| 32 | I | 1,4-difluorobenzene | 10.000 | 10.000 | 0.0 | 81 | 0.00 |
| 33 | C | hexane | 5.000 | 4.319 | 13.6 | 71 | 0.00 |
| 34 | s | 1,2-dichloroethane-D4 | 10.000 | 10.235 | -2.3 | 81 | 0.00 |
| 35 | C | 1,1,1-trichloroethane | 5.000 | 4.660 | 6.8 | 76 | 0.00 |
| 36 | C | benzene | 5.000 | 4.514 | 9.7 | 74 | 0.00 |
| 37 | C | carbon tetrachloride | 5.000 | 4.609 | 7.8 | 73 | 0.00 |
| 38 | | cyclohexane | 5.000 | 4.288 | 14.2 | 73 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-3,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 39 | C | 1,2-dichloropropane | 5.000 | 4.662 | 6.8 | 76 | 0.00 |
| 40 | | bromodichloromethane | 5.000 | 4.486 | 10.3 | 73 | 0.01 |
| 41 | C | 1,4-dioxane | 5.000 | 4.793 | 4.1 | 73 | 0.00 |
| 42 | C | trichloroethene | 5.000 | 4.574 | 8.5 | 74 | 0.00 |
| 43 | C | 2,2,4-trimethylpentane | 5.000 | 4.570 | 8.6 | 75 | 0.00 |
| 44 | | heptane | 5.000 | 4.398 | 12.0 | 75 | 0.00 |
| 45 | C | cis-1,3-dichloropropene | 5.000 | 4.884 | 2.3 | 75 | 0.00 |
| 46 | C | 4-methyl-2-pentanone | 5.000 | 5.068 | -1.4 | 74 | 0.00 |
| 47 | | trans-1,3-dichloropropene | 5.000 | 4.290 | 14.2 | 62 | 0.00 |
| 48 | C | 1,1,2-trichloroethane | 5.000 | 4.812 | 3.8 | 77 | 0.00 |
| 49 | I | chlorobenzene-D5 | 10.000 | 10.000 | 0.0 | 80 | 0.00 |
| 50 | C | toluene | 5.000 | 4.661 | 6.8 | 75 | 0.00 |
| 51 | s | toluene-D8 | 10.000 | 10.182 | -1.8 | 80 | 0.00 |
| 52 | | 2-hexanone | 5.000 | 5.437 | -8.7 | 74 | 0.00 |
| 53 | | dibromochloromethane | 5.000 | 4.410 | 11.8 | 71 | 0.00 |
| 54 | C | 1,2-dibromoethane | 5.000 | 4.834 | 3.3 | 75 | 0.00 |
| 55 | C | tetrachloroethene | 5.000 | 4.338 | 13.2 | 72 | 0.00 |
| 56 | | 1,1,1,2-tetrachloroethane | 5.000 | 4.175 | 16.5 | 69 | 0.00 |
| 57 | C | chlorobenzene | 5.000 | 4.681 | 6.4 | 75 | 0.00 |
| 58 | C | ethylbenzene | 5.000 | 4.600 | 8.0 | 73 | 0.00 |
| 59 | C | m+p-xylene | 10.000 | 9.394 | 6.1 | 74 | 0.01 |
| 60 | C | bromoform | 5.000 | 4.146 | 17.1 | 66 | 0.00 |
| 61 | C | styrene | 5.000 | 4.781 | 4.4 | 72 | 0.00 |
| 62 | C | 1,1,2,2-tetrachloroethane | 5.000 | 4.859 | 2.8 | 77 | 0.00 |
| 63 | C | o-xylene | 5.000 | 4.657 | 6.9 | 76 | 0.00 |
| 64 | s | bromofluorobenzene | 10.000 | 10.062 | -0.6 | 79 | 0.00 |
| 65 | C | isopropylbenzene | 5.000 | 4.562 | 8.8 | 73 | 0.00 |
| 66 | | 4-ethyl toluene | 5.000 | 4.505 | 9.9 | 70 | 0.00 |
| 67 | | 1,3,5-trimethylbenzene | 5.000 | 4.740 | 5.2 | 75 | 0.00 |
| 68 | | tert-butylbenzene | 5.000 | 4.393 | 12.1 | 70 | 0.00 |
| 69 | | 1,2,4-trimethylbenzene | 5.000 | 4.710 | 5.8 | 74 | 0.00 |
| 70 | C | Benzyl Chloride | 5.000 | 4.219 | 15.6 | 63 | 0.00 |
| 71 | | 1,3-dichlorobenzene | 5.000 | 4.797 | 4.1 | 74 | 0.00 |
| 72 | C | 1,4-dichlorobenzene | 5.000 | 4.703 | 5.9 | 73 | 0.00 |
| 73 | | sec-butylbenzene | 5.000 | 4.461 | 10.8 | 70 | 0.00 |
| 74 | | p-isopropyltoluene | 5.000 | 4.111 | 17.8 | 64 | 0.00 |
| 75 | | 1,2-dichlorobenzene | 5.000 | 4.709 | 5.8 | 73 | 0.00 |
| 76 | | n-butylbenzene | 5.000 | 4.732 | 5.4 | 71 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-3,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 77 C | 1,2,4-trichlorobenzene | 5.000 | 5.133 | -2.7 | 70 | 0.00 |
| 78 | naphthalene | 5.000 | 4.662 | 6.8 | 67 | 0.00 |
| 79 | 1,2,3-trichlorobenzene | 5.000 | 5.185 | -3.7 | 70 | 0.00 |
| 80 C | hexachlorobutadiene | 5.000 | 4.908 | 1.8 | 70 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-3,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 119028 | 10.000 ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = 100.00% | | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 266408 | 10.000 ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = 100.00% | | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 58247 | 10.000 ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = 100.00% | | |
| System Monitoring Compounds | | | | | |
| 34) 1,2-dichloroethane-D4 | 11.13 | 65 | 79626 | 10.235 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.35% | | |
| 51) toluene-D8 | 15.27 | 98 | 205960 | 10.182 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.82% | | |
| 64) bromofluorobenzene | 18.15 | 95 | 158765 | 10.062 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.62% | | |
| Target Compounds | | | | | Qvalue |
| 2) propylene | 3.76 | 41 | 34400M6 | 5.103 ppbV | |
| 3) dichlorodifluoromethane | 3.87 | 85 | 65065 | 4.365 ppbV | 100 |
| 4) chloromethane | 4.09 | 50 | 34946 | 4.557 ppbV | 100 |
| 5) Freon-114 | 4.25 | 85 | 99558 | 4.638 ppbV | 99 |
| 6) vinyl chloride | 4.41 | 62 | 35755 | 4.476 ppbV | 99 |
| 7) 1,3-butadiene | 4.62 | 54 | 28198 | 4.465 ppbV | 95 |
| 8) bromomethane | 5.01 | 94 | 35092 | 4.588 ppbV | 98 |
| 9) chloroethane | 5.28 | 64 | 16738 | 4.262 ppbV | 98 |
| 10) ethanol | 5.49 | 31 | 139030M6 | 21.400 ppbV | |
| 11) vinyl bromide | 5.79 | 106 | 35586 | 4.417 ppbV | 100 |
| 12) acetone | 6.17 | 43 | 311246 | 24.067 ppbV | 98 |
| 13) trichlorofluoromethane | 6.41 | 101 | 94339 | 4.670 ppbV | 100 |
| 14) isopropyl alcohol | 6.56 | 45 | 70985 | 4.829 ppbV | 100 |
| 15) acrylonitrile | 6.85 | 53 | 26482 | 3.845 ppbV | 98 |
| 16) 1,1-dichloroethene | 7.29 | 61 | 63421 | 4.496 ppbV | 99 |
| 17) methylene chloride | 7.48 | 49 | 53366 | 4.837 ppbV | 99 |
| 18) 3-chloropropene | 7.64 | 41 | 60292 | 4.593 ppbV | 100 |
| 19) carbon disulfide | 7.82 | 76 | 104235 | 4.365 ppbV | 98 |
| 20) Freon 113 | 7.85 | 101 | 79925 | 4.688 ppbV | 100 |
| 21) Halothane | 8.47 | 117 | 58786 | 4.222 ppbV | 99 |
| 22) trans-1,2-dichloroethene | 8.71 | 61 | 56412 | 4.219 ppbV | 99 |
| 23) 1,1-dichloroethane | 8.97 | 63 | 70637 | 4.586 ppbV | 100 |
| 24) MTBE | 9.06 | 73 | 100156 | 4.377 ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-3,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) | vinyl acetate | 9.19 | 43 | 114794 | 5.587 ppbV | 100 |
| 26) | 2-butanone | 9.49 | 43 | 91427 | 4.853 ppbV | 100 |
| 27) | cis-1,2-dichloroethene | 10.02 | 61 | 68905 | 5.020 ppbV # | 85 |
| 28) | Ethyl Acetate | 10.32 | 61 | 13957 | 4.445 ppbV | 99 |
| 29) | chloroform | 10.38 | 83 | 92142M4 | 4.527 ppbV | |
| 30) | Tetrahydrofuran | 10.86 | 42 | 51174M6 | 4.366 ppbV | |
| 31) | 1,2-dichloroethane | 11.25 | 62 | 55793 | 4.540 ppbV | 100 |
| 33) | hexane | 10.27 | 57 | 72095 | 4.319 ppbV | 99 |
| 35) | 1,1,1-trichloroethane | 11.55 | 97 | 85083 | 4.660 ppbV | 99 |
| 36) | benzene | 12.08 | 78 | 112625 | 4.514 ppbV | 100 |
| 37) | carbon tetrachloride | 12.26 | 117 | 81815 | 4.609 ppbV | 100 |
| 38) | cyclohexane | 12.40 | 56 | 64248 | 4.288 ppbV | 99 |
| 39) | 1,2-dichloropropane | 13.04 | 63 | 44940 | 4.662 ppbV | 99 |
| 40) | bromodichloromethane | 13.27 | 83 | 88921 | 4.486 ppbV # | 95 |
| 41) | 1,4-dioxane | 13.33 | 88 | 26793M4 | 4.793 ppbV | |
| 42) | trichloroethene | 13.31 | 130 | 56261 | 4.574 ppbV | 100 |
| 43) | 2,2,4-trimethylpentane | 13.35 | 57 | 204736 | 4.570 ppbV | 100 |
| 44) | heptane | 13.65 | 43 | 85636 | 4.398 ppbV | 99 |
| 45) | cis-1,3-dichloropropene | 14.30 | 75 | 252709 | 4.884 ppbV | 99 |
| 46) | 4-methyl-2-pentanone | 14.34 | 43 | 116233 | 5.068 ppbV | 99 |
| 47) | trans-1,3-dichloropropene | 14.90 | 75 | 52876 | 4.290 ppbV | 99 |
| 48) | 1,1,2-trichloroethane | 15.09 | 97 | 51737 | 4.812 ppbV | 90 |
| 50) | toluene | 15.37 | 91 | 142607 | 4.661 ppbV | 100 |
| 52) | 2-hexanone | 15.61 | 43 | 110658 | 5.437 ppbV # | 92 |
| 53) | dibromochloromethane | 15.79 | 129 | 93083 | 4.410 ppbV | 100 |
| 54) | 1,2-dibromoethane | 16.01 | 107 | 83331 | 4.834 ppbV | 100 |
| 55) | tetrachloroethene | 16.43 | 166 | 68225 | 4.338 ppbV | 95 |
| 56) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 63635 | 4.175 ppbV | 99 |
| 57) | chlorobenzene | 17.00 | 112 | 125361 | 4.681 ppbV | 98 |
| 58) | ethylbenzene | 17.29 | 91 | 187738 | 4.600 ppbV | 100 |
| 59) | m+p-xylene | 17.44 | 91 | 298272 | 9.394 ppbV | 99 |
| 60) | bromoform | 17.52 | 173 | 84007 | 4.146 ppbV | 99 |
| 61) | styrene | 17.72 | 104 | 114522 | 4.781 ppbV | 99 |
| 62) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 117689 | 4.859 ppbV | 100 |
| 63) | o-xylene | 17.80 | 91 | 156720 | 4.657 ppbV | 99 |
| 65) | isopropylbenzene | 18.24 | 105 | 209525 | 4.562 ppbV | 100 |
| 66) | 4-ethyl toluene | 18.73 | 105 | 224830M6 | 4.505 ppbV | |
| 67) | 1,3,5-trimethylbenzene | 18.78 | 105 | 220288 | 4.740 ppbV | 99 |
| 68) | tert-butylbenzene | 19.09 | 119 | 202137 | 4.393 ppbV | 100 |
| 69) | 1,2,4-trimethylbenzene | 19.09 | 105 | 188545 | 4.710 ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-3,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 70) Benzyl Chloride | 19.21 | 91 | 144766 | 4.219 | ppbV | 95 |
| 71) 1,3-dichlorobenzene | 19.22 | 146 | 142489 | 4.797 | ppbV | 99 |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 143556 | 4.703 | ppbV | 98 |
| 73) sec-butylbenzene | 19.29 | 105 | 263872 | 4.461 | ppbV | 99 |
| 74) p-isopropyltoluene | 19.41 | 119 | 228313 | 4.111 | ppbV | 97 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 135921 | 4.709 | ppbV | 95 |
| 76) n-butylbenzene | 19.73 | 91 | 220366 | 4.732 | ppbV | 98 |
| 77) 1,2,4-trichlorobenzene | 21.01 | 180 | 119320 | 5.133 | ppbV | 97 |
| 78) naphthalene | 21.13 | 128 | 277247 | 4.662 | ppbV | 99 |
| 79) 1,2,3-trichlorobenzene | 21.39 | 180 | 111460 | 5.185 | ppbV | 98 |
| 80) hexachlorobutadiene | 21.46 | 225 | 85943 | 4.908 | ppbV | 97 |

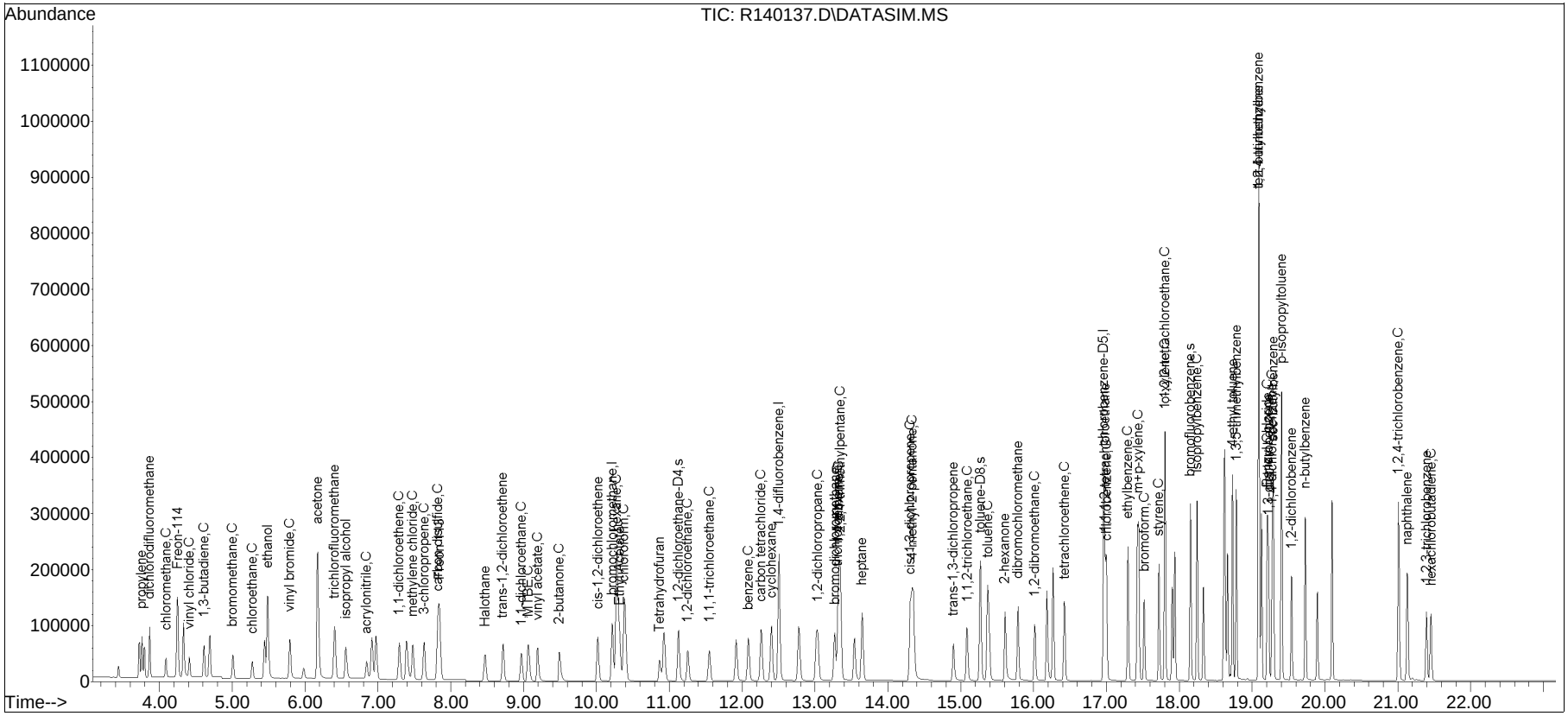
(#) = qualifier out of range (m) = manual integration (+) = signals summed

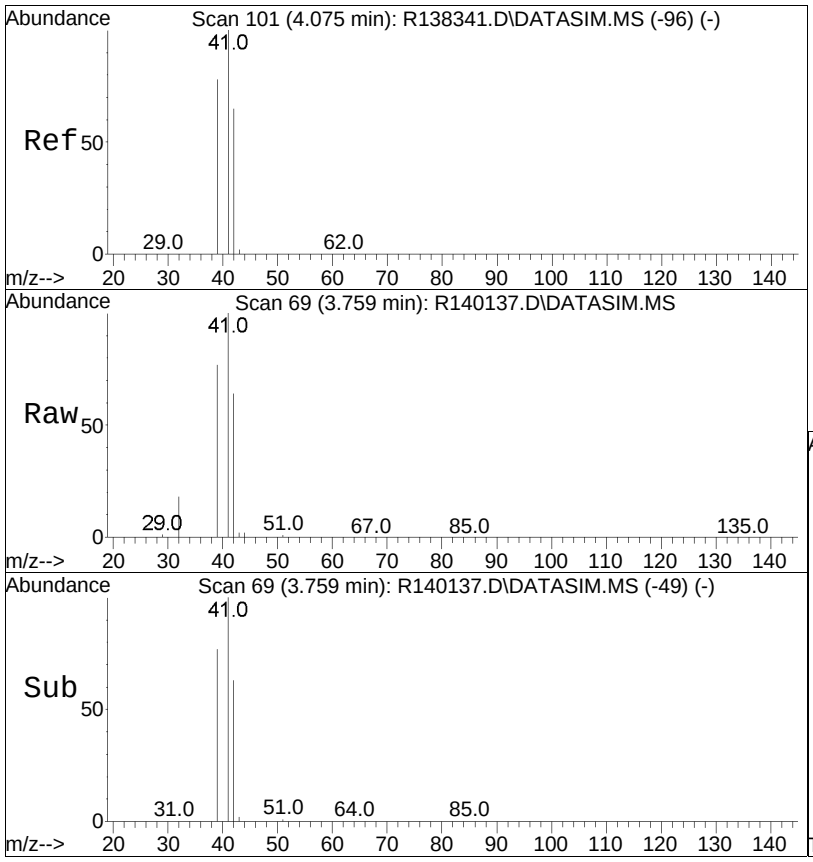
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-3,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed0311SIM\R140137.D

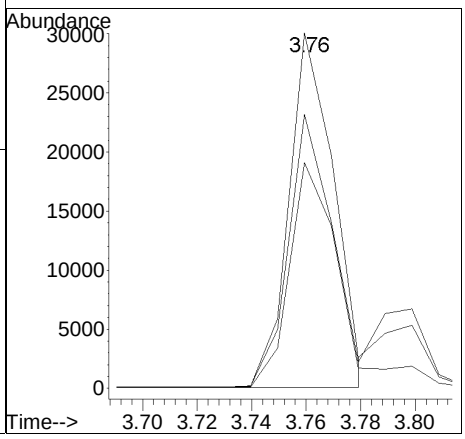


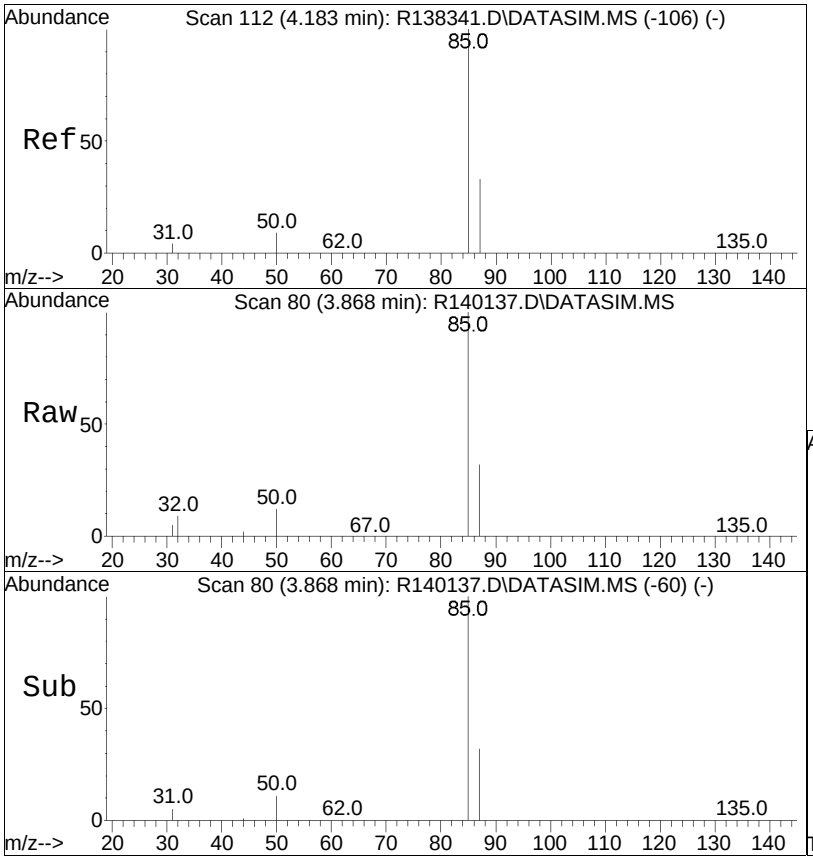



#2
propylene
Concen: 5.10 ppbV m
RT: 3.76 min Scan# 69
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 41 Resp: 34400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 63.5 | 50.8 | 76.2 |
| 39 | 77.1 | 62.7 | 94.1 |

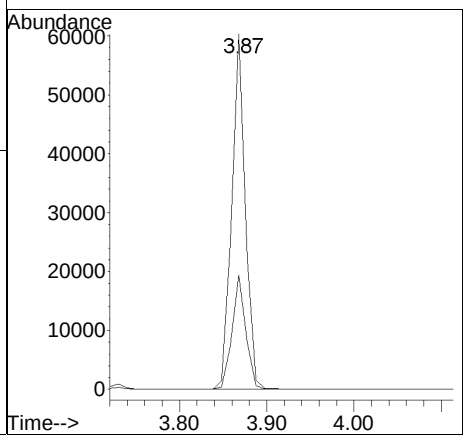


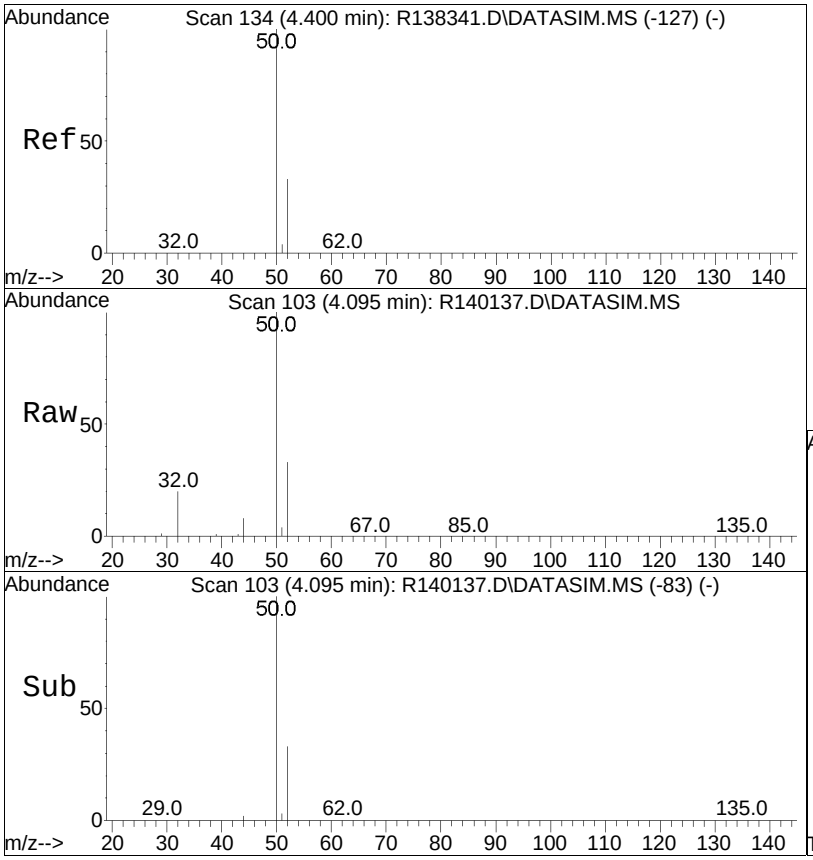



#3
dichlorodifluoromethane
Concen: 4.36 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 85 Resp: 65065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.3 | 25.8 | 38.8 |

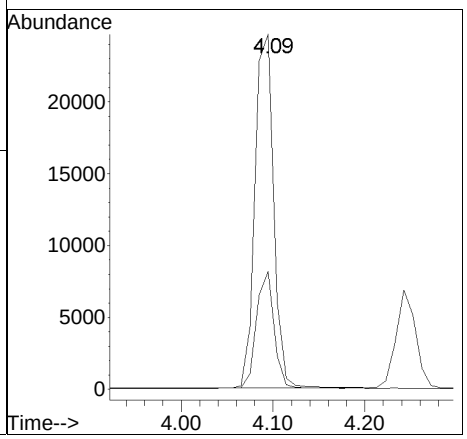


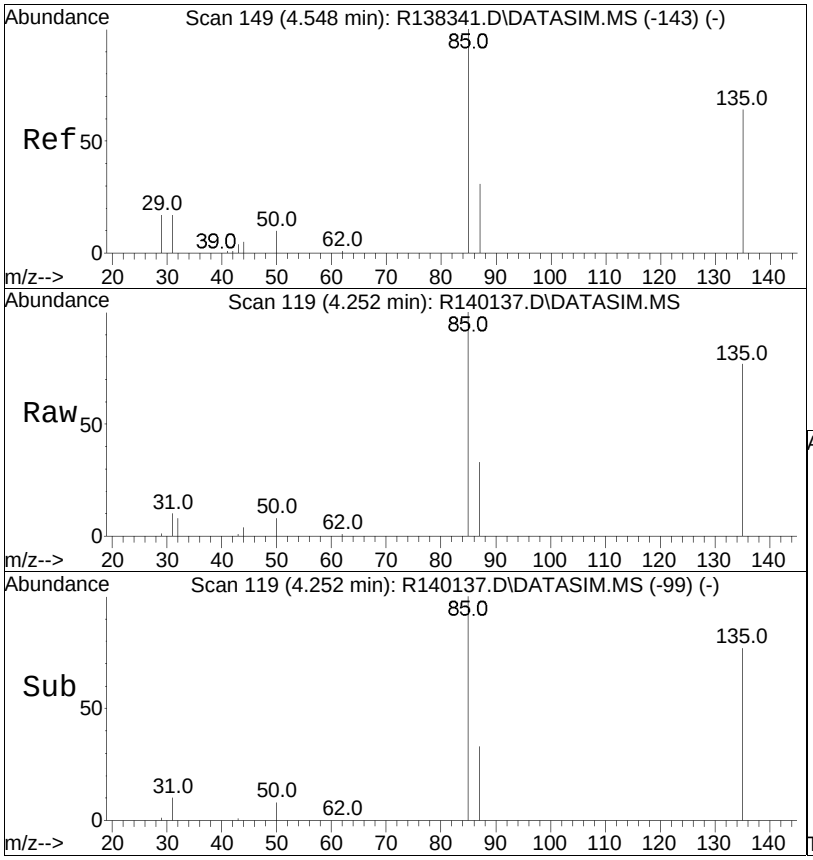



#4
chloromethane
Concen: 4.56 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 50 Resp: 34946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.2 | 26.4 | 39.6 |

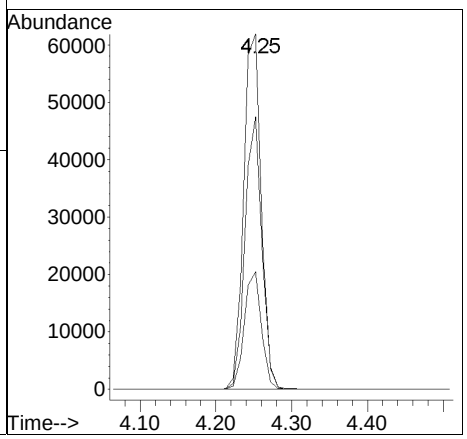


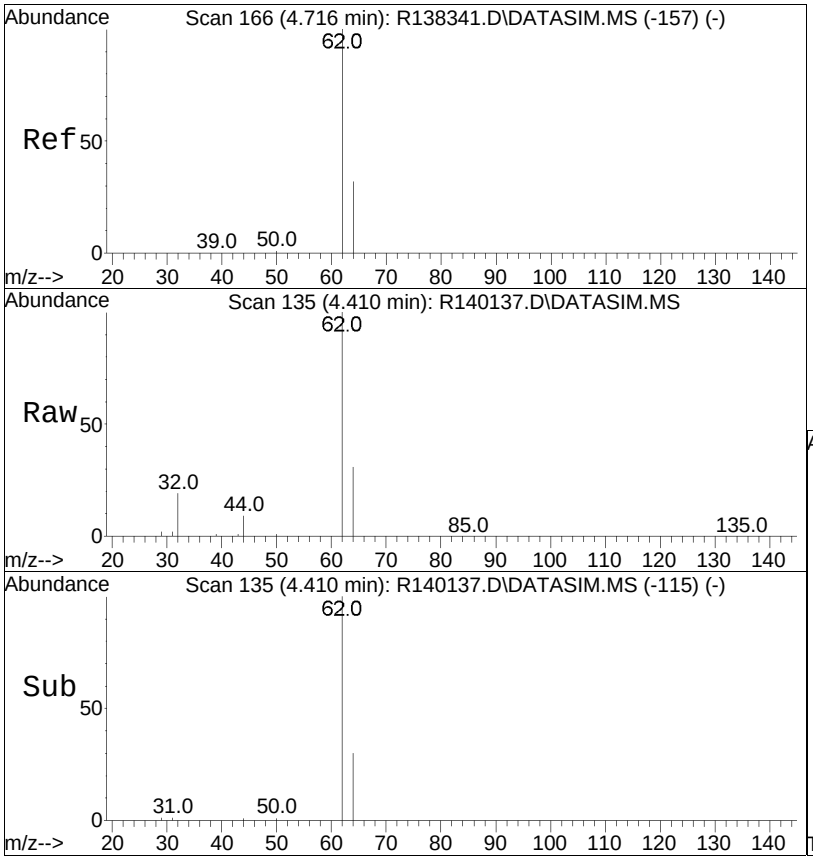



#5
Freon-114
Concen: 4.64 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 85 Resp: 99558

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.1 | 26.3 | 39.5 |
| 135 | 76.7 | 60.5 | 90.7 |

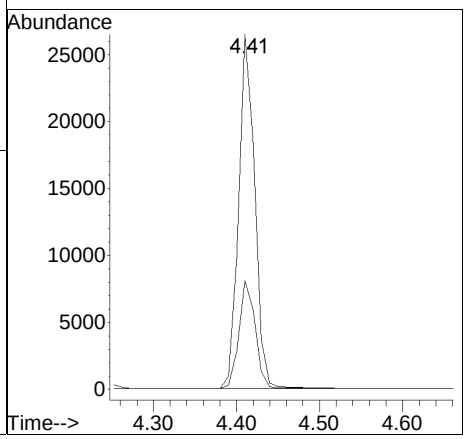


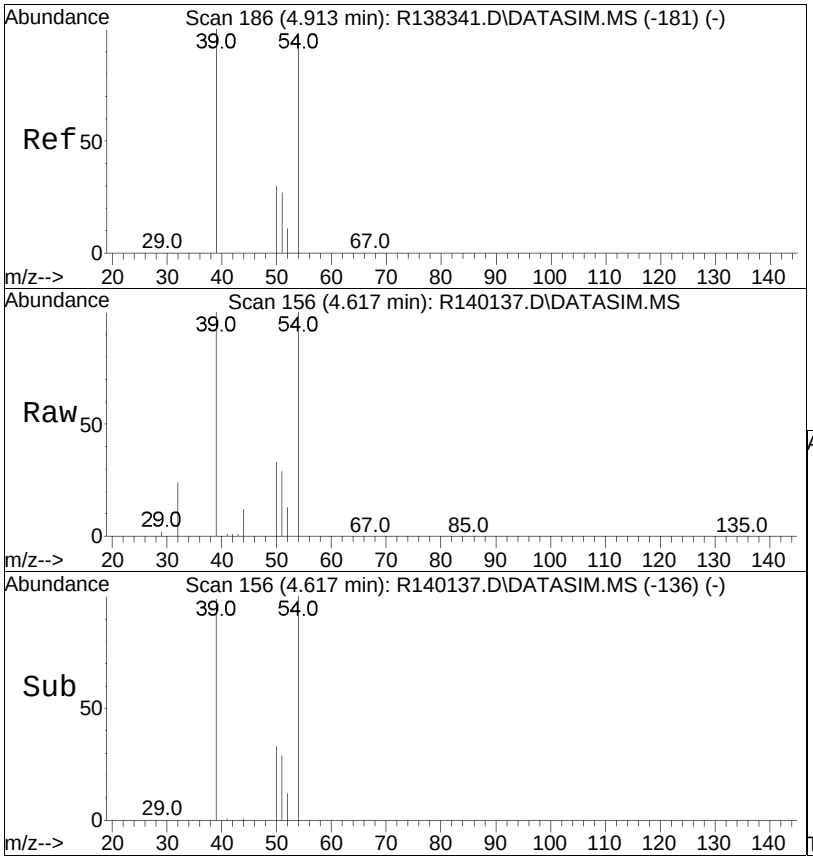



#6
vinyl chloride
Concen: 4.48 ppbV
RT: 4.41 min Scan# 135
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 62 Resp: 35755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.6 | 24.2 | 36.4 |

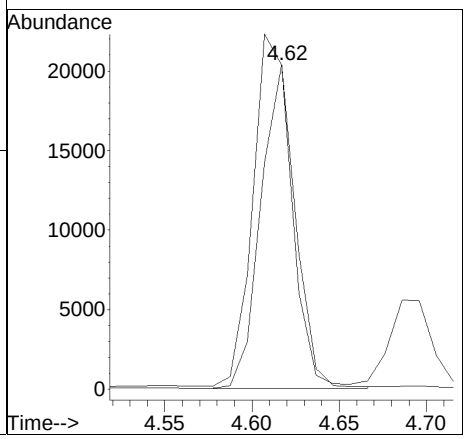


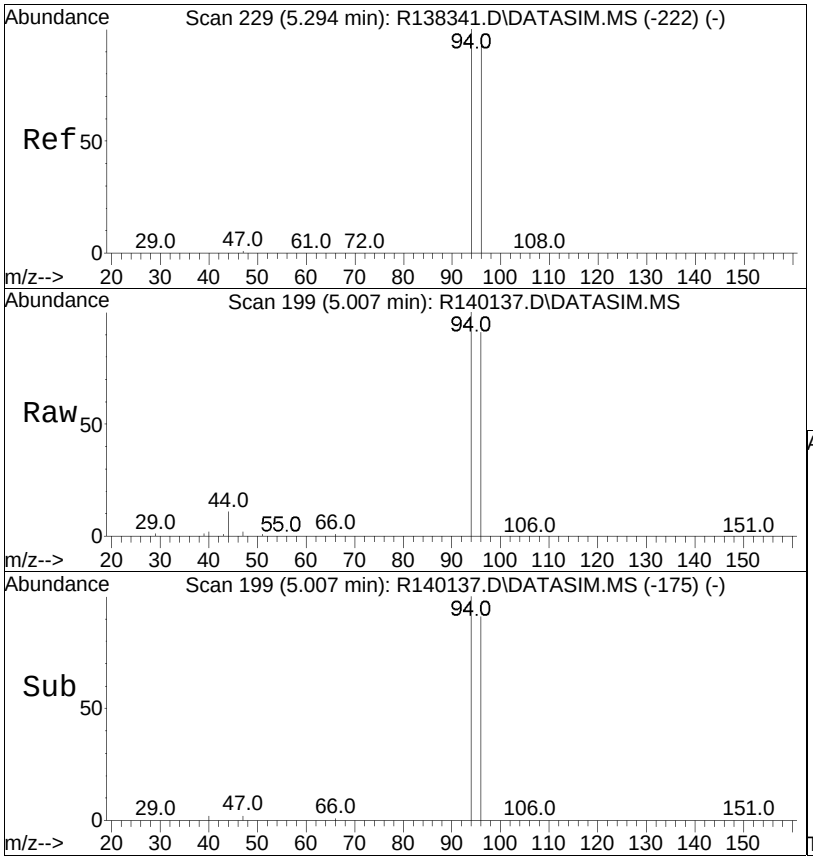



#7
1,3-butadiene
Concen: 4.47 ppbV
RT: 4.62 min Scan# 156
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 54 Resp: 28198

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 99.7 | 84.0 | 126.0 |

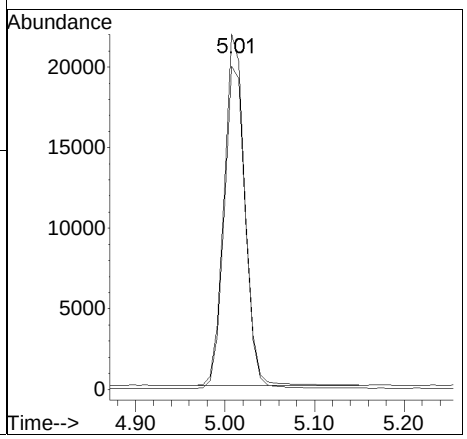


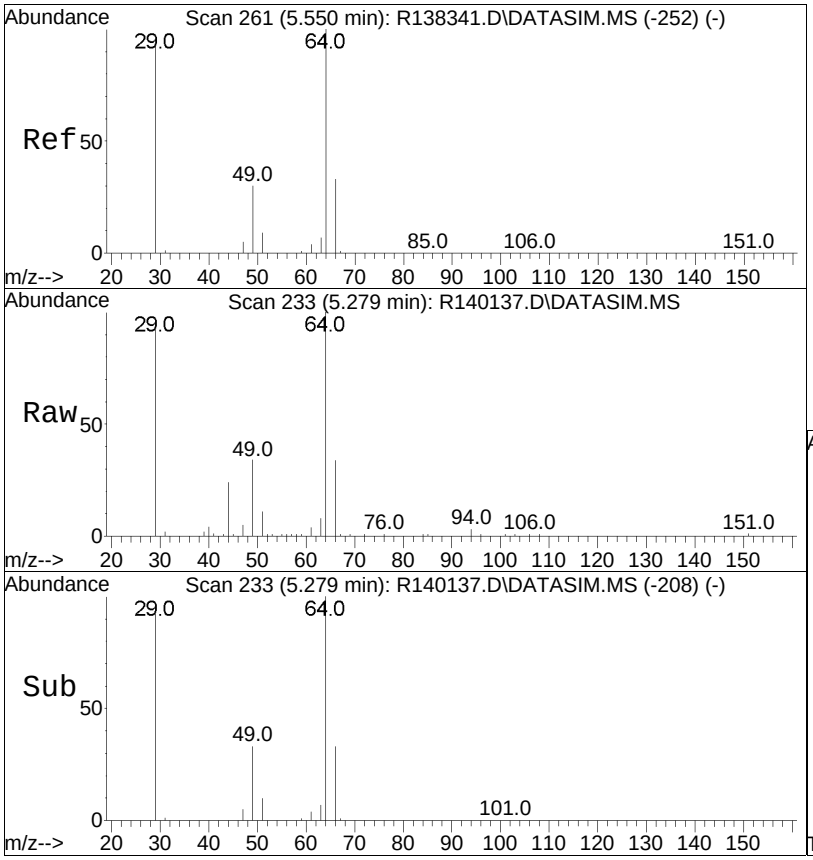



#8
bromomethane
Concen: 4.59 ppbV
RT: 5.01 min Scan# 199
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 94 Resp: 35092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 91.0 | 74.3 | 111.5 |

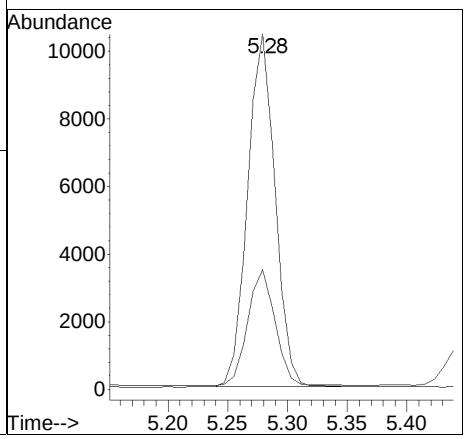


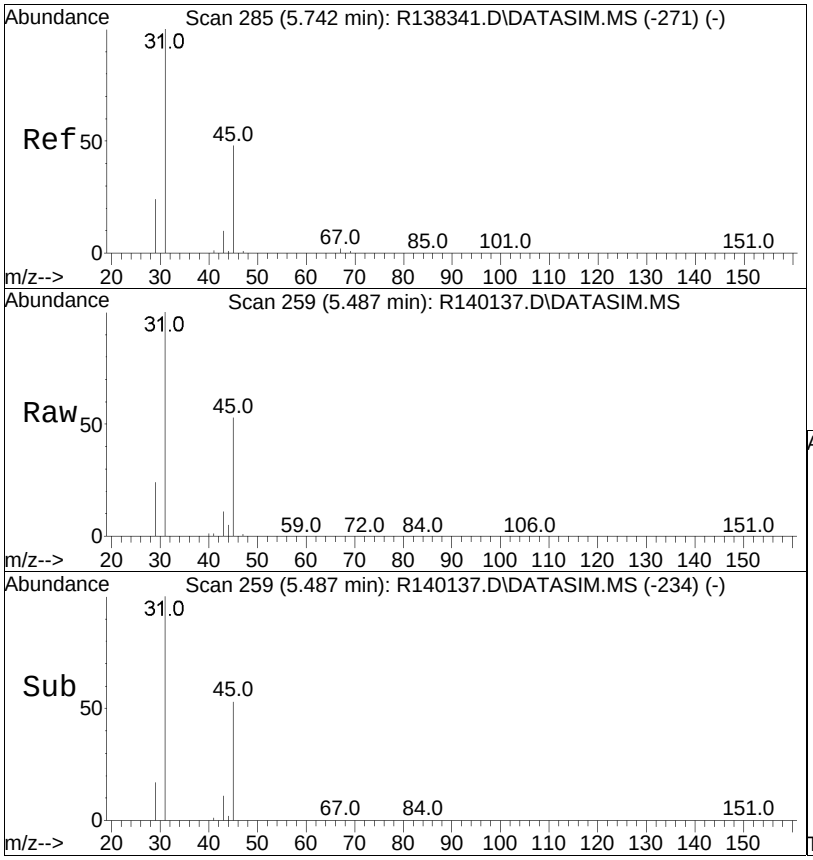



#9
chloroethane
Concen: 4.26 ppbV
RT: 5.28 min Scan# 233
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 64 Resp: 16738

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.7 | 26.2 | 39.2 |

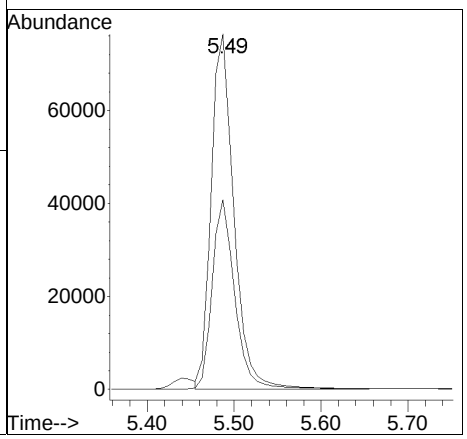


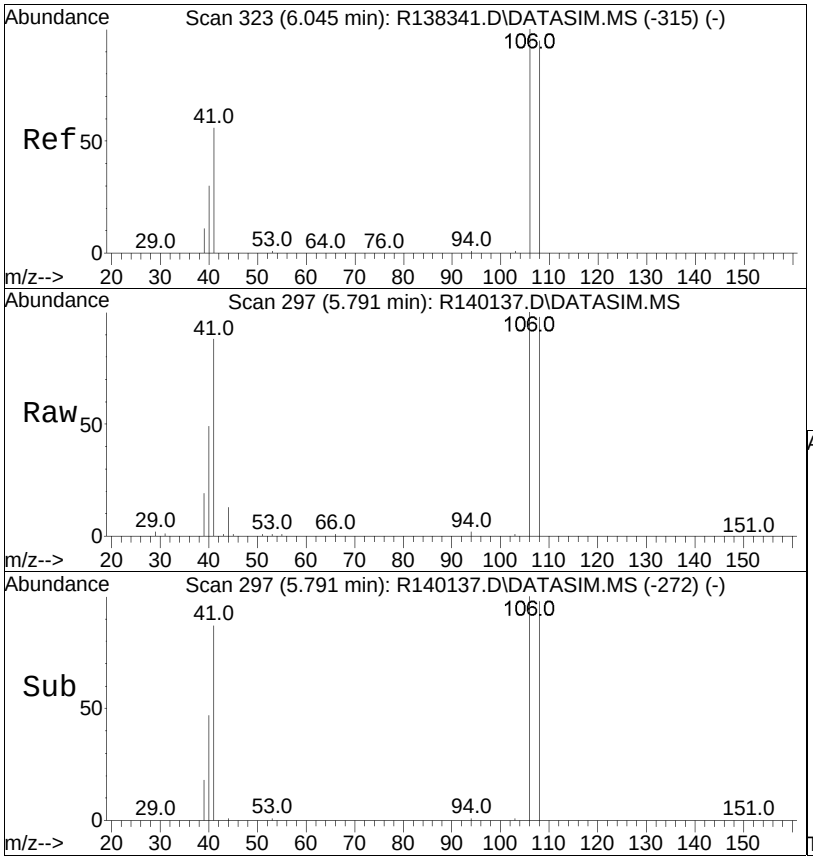



#10
ethanol
Concen: 21.40 ppbV m
RT: 5.49 min Scan# 259
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 31 Resp: 139030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 53.4 | 41.8 | 62.6 |

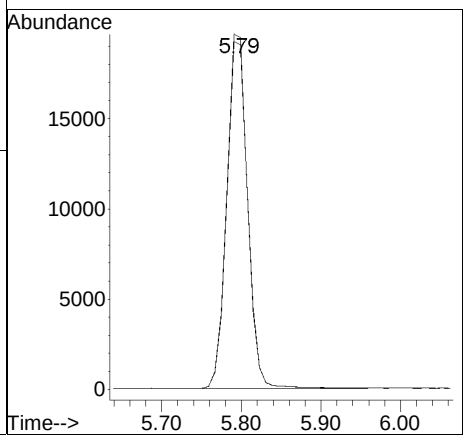


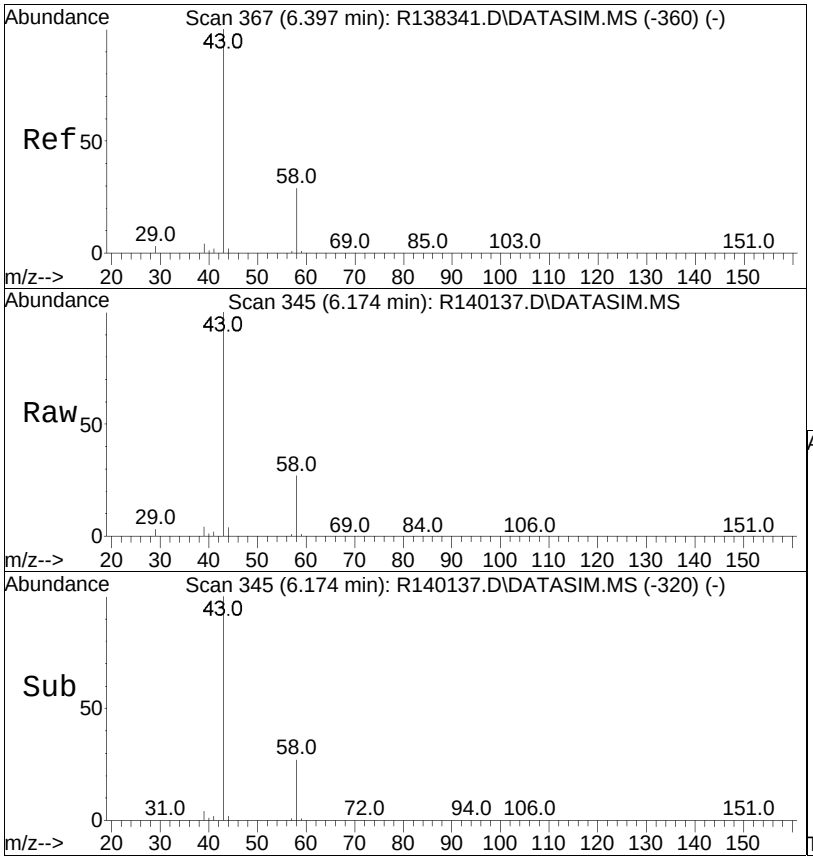



#11
vinyl bromide
Concen: 4.42 ppbV
RT: 5.79 min Scan# 297
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:106 Resp: 35586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 108 | 97.9 | 78.2 | 117.4 |

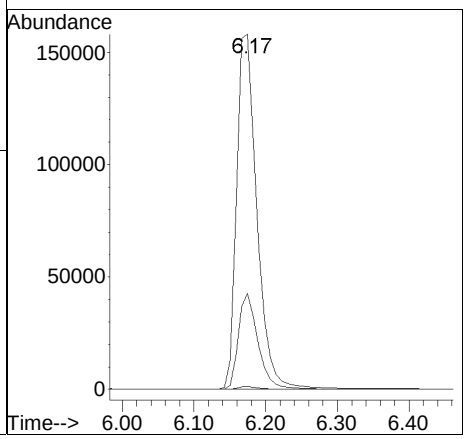


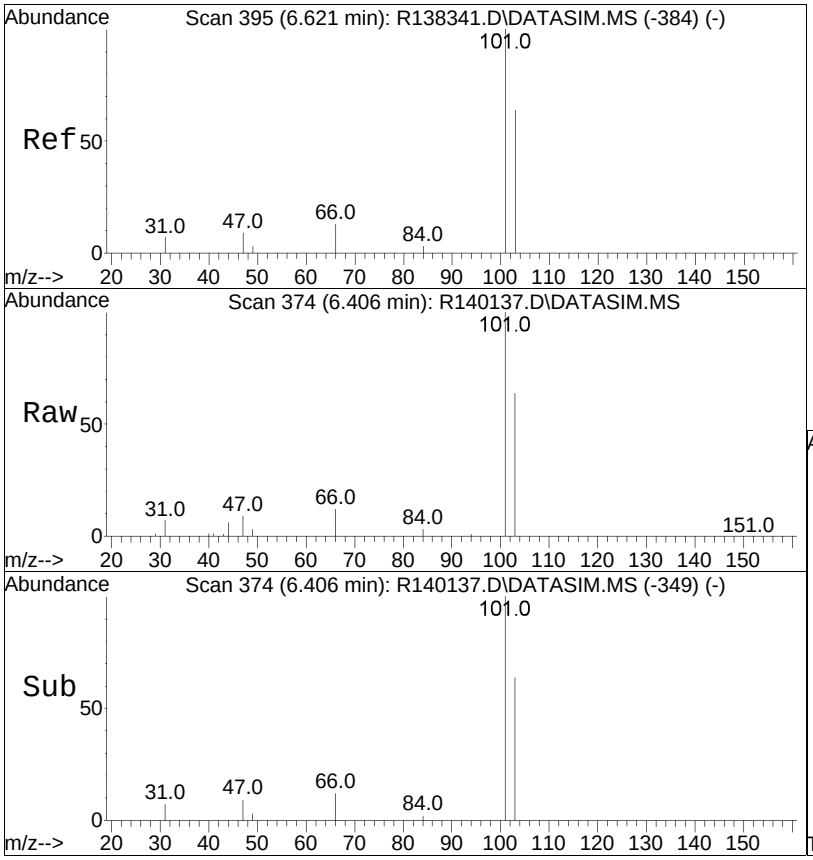



#12
acetone
Concen: 24.07 ppbV
RT: 6.17 min Scan# 345
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 43 Resp: 311246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.0 | 20.8 | 31.2 |
| 57 | 0.8 | 0.6 | 1.0 |

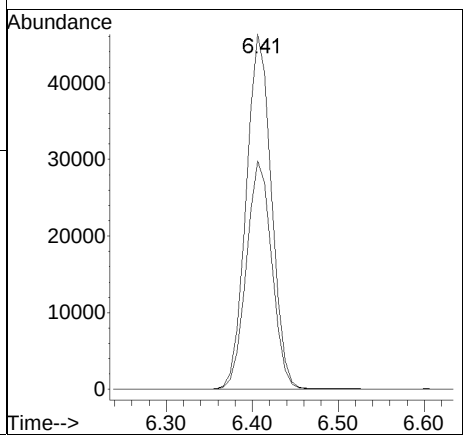


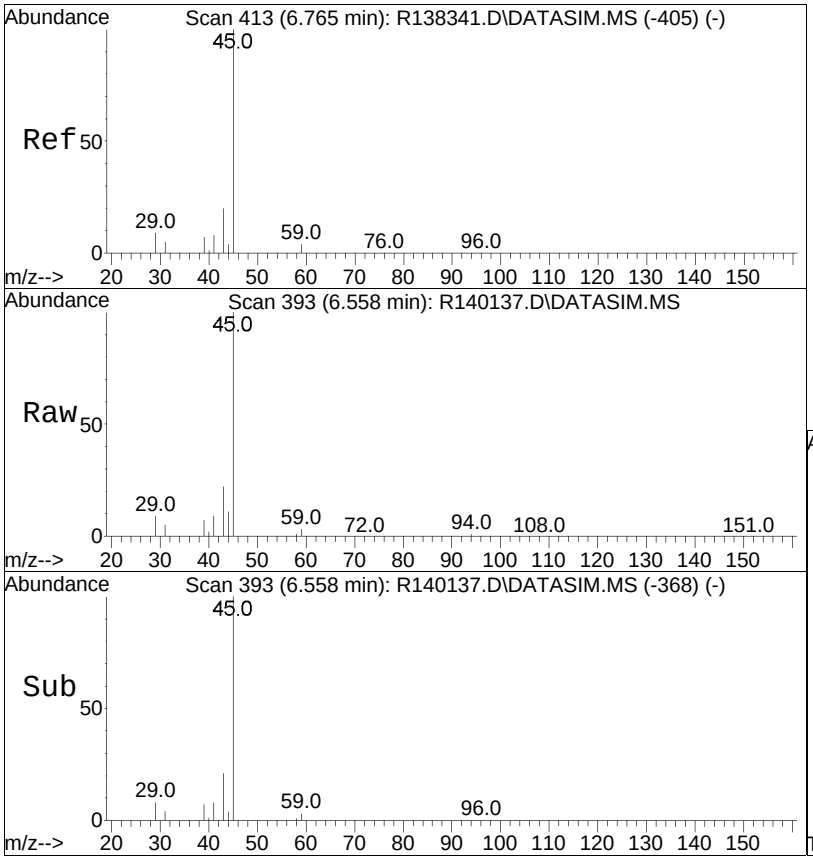



#13
trichlorofluoromethane
Concen: 4.67 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:101 Resp: 94339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.3 | 51.2 | 76.8 |

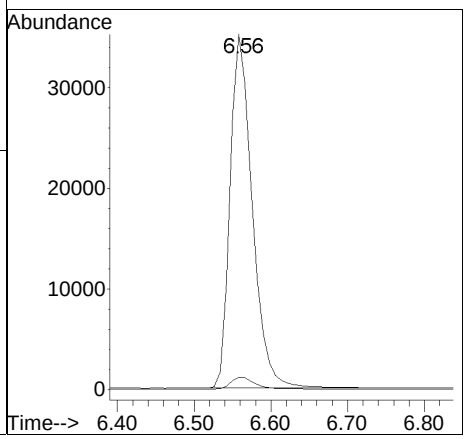


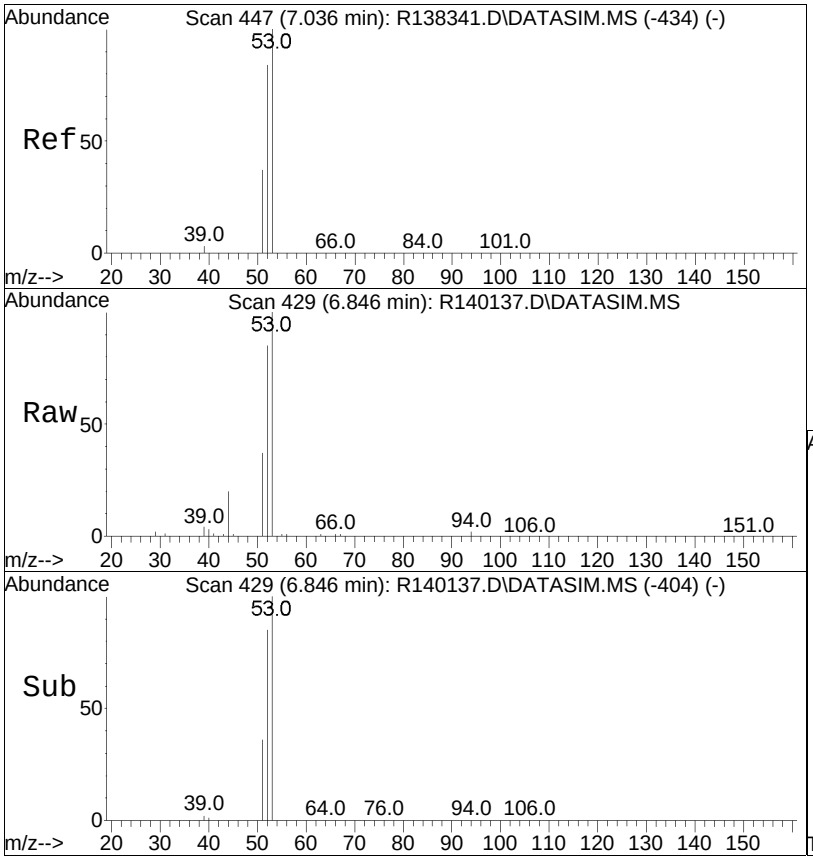



#14
isopropyl alcohol
Concen: 4.83 ppbV
RT: 6.56 min Scan# 393
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 45 Resp: 70985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 3.4 | 2.8 | 4.2 |

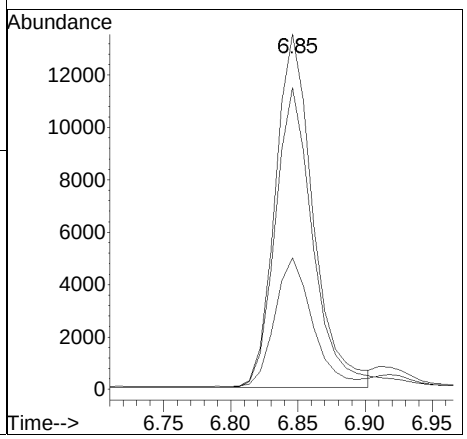


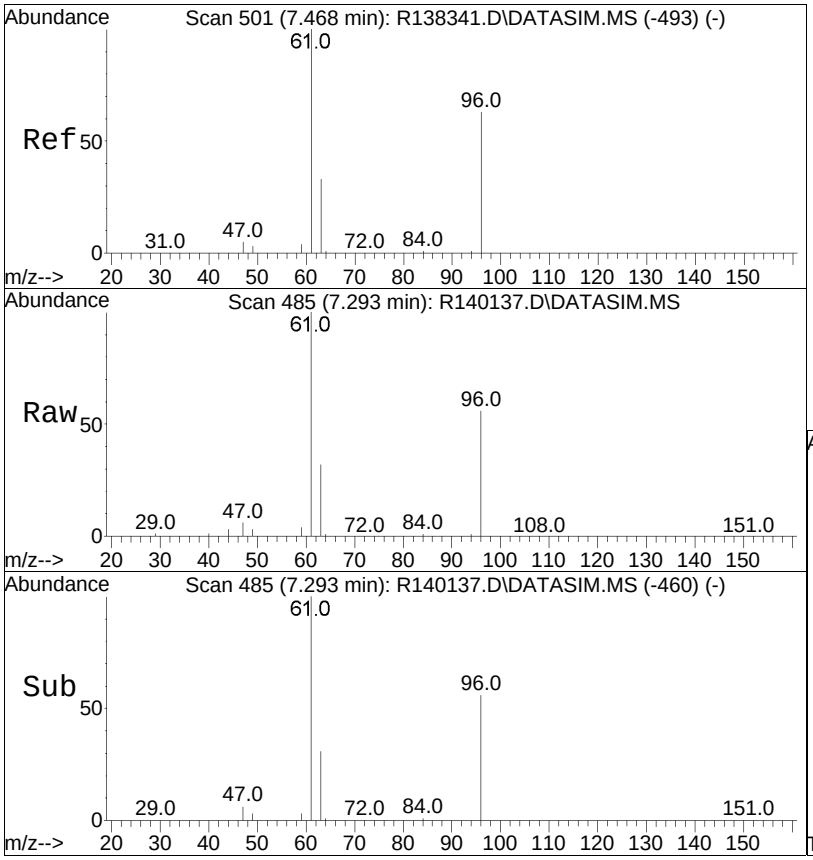



#15
acrylonitrile
Concen: 3.84 ppbV
RT: 6.85 min Scan# 429
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 53 Resp: 26482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 84.9 | 66.5 | 99.7 |
| 51 | 37.1 | 29.4 | 44.0 |

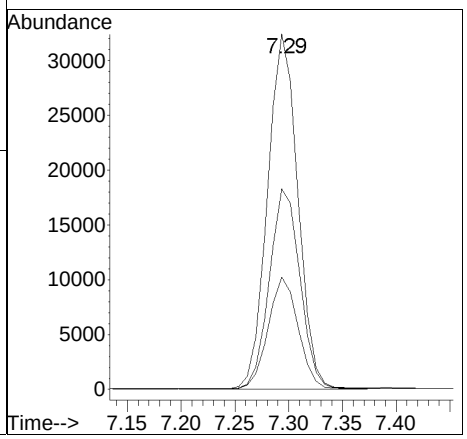


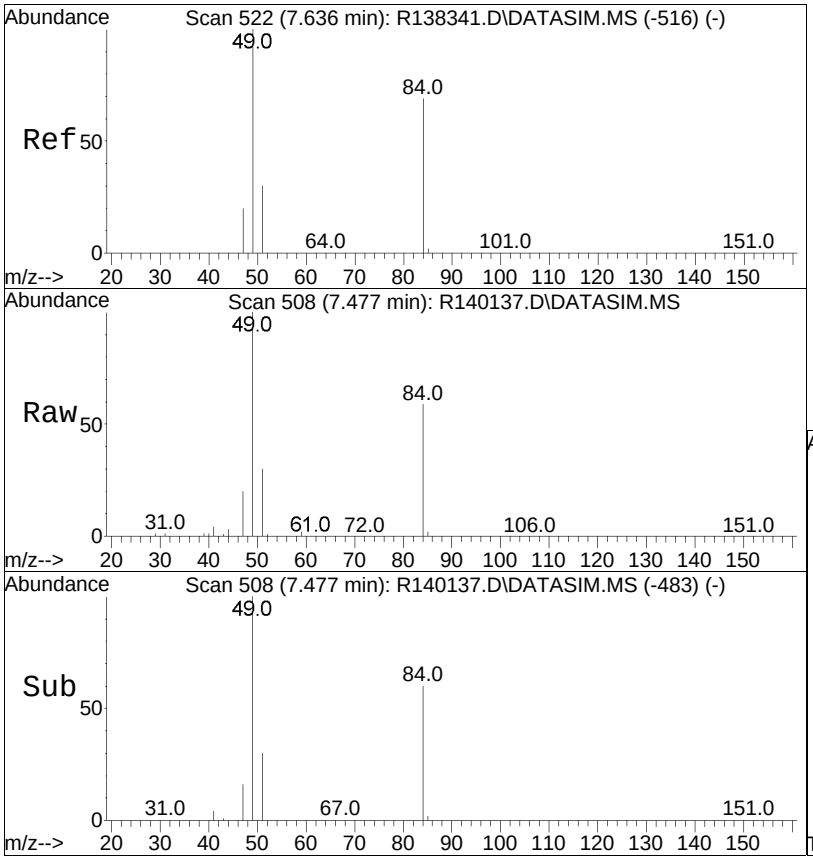



#16
1,1-dichloroethene
Concen: 4.50 ppbV
RT: 7.29 min Scan# 485
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 61 Resp: 63421

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 56.4 | 45.5 | 68.3 |
| 63 | 31.6 | 25.0 | 37.4 |

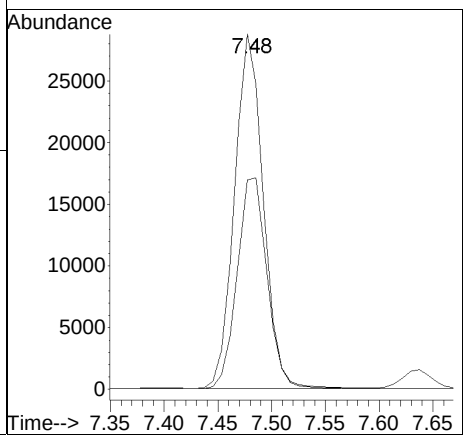


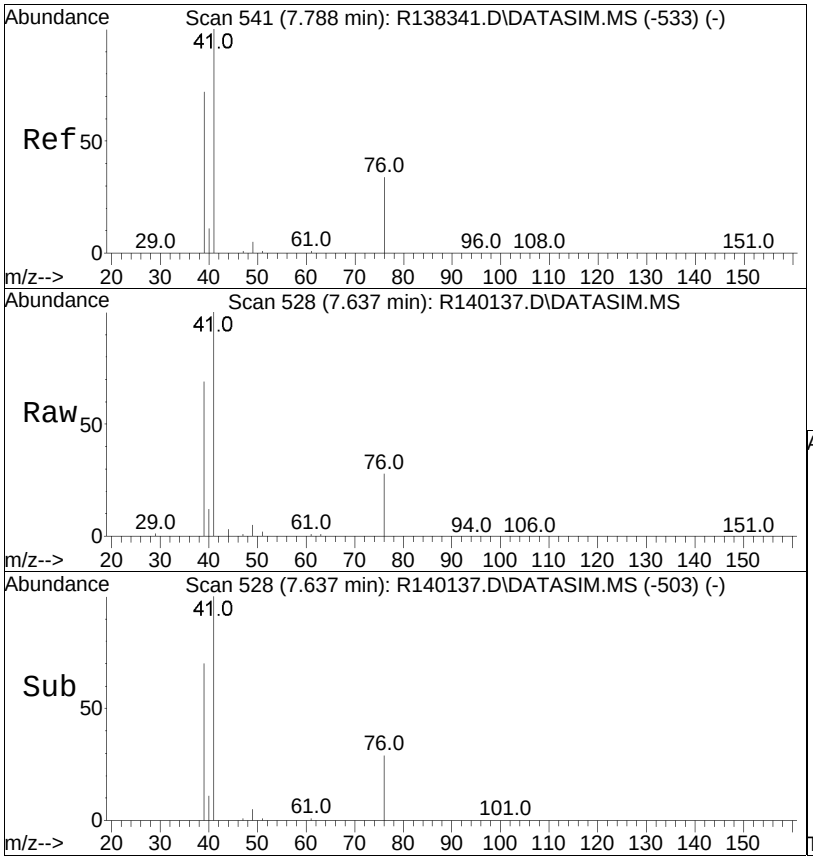



#17
methylene chloride
Concen: 4.84 ppbV
RT: 7.48 min Scan# 508
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 49 Resp: 53366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 58.9 | 46.7 | 70.1 |

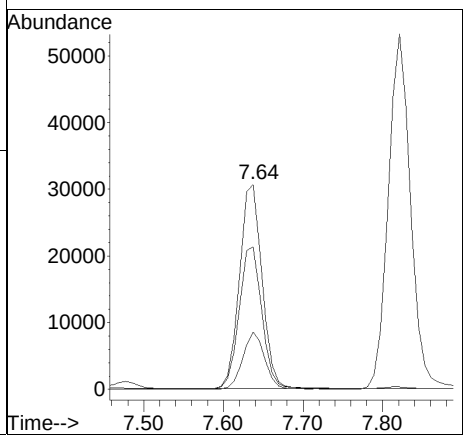


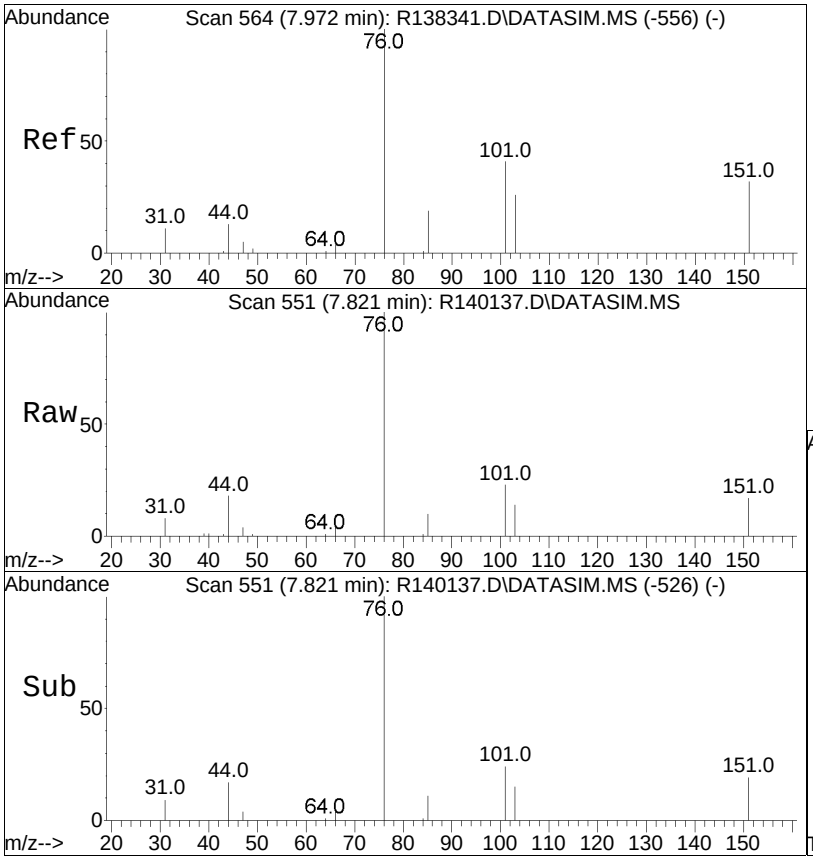



#18
3-chloropropene
Concen: 4.59 ppbV
RT: 7.64 min Scan# 528
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 41 Resp: 60292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 69.5 | 55.9 | 83.9 |
| 76 | 28.0 | 22.5 | 33.7 |

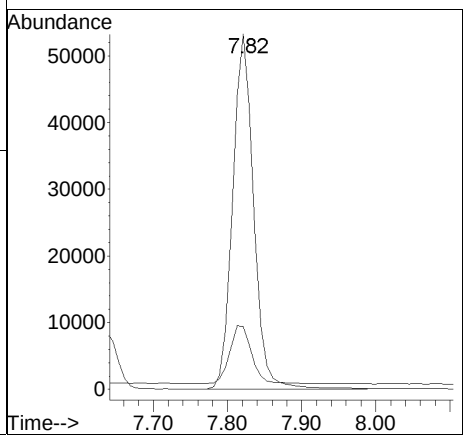


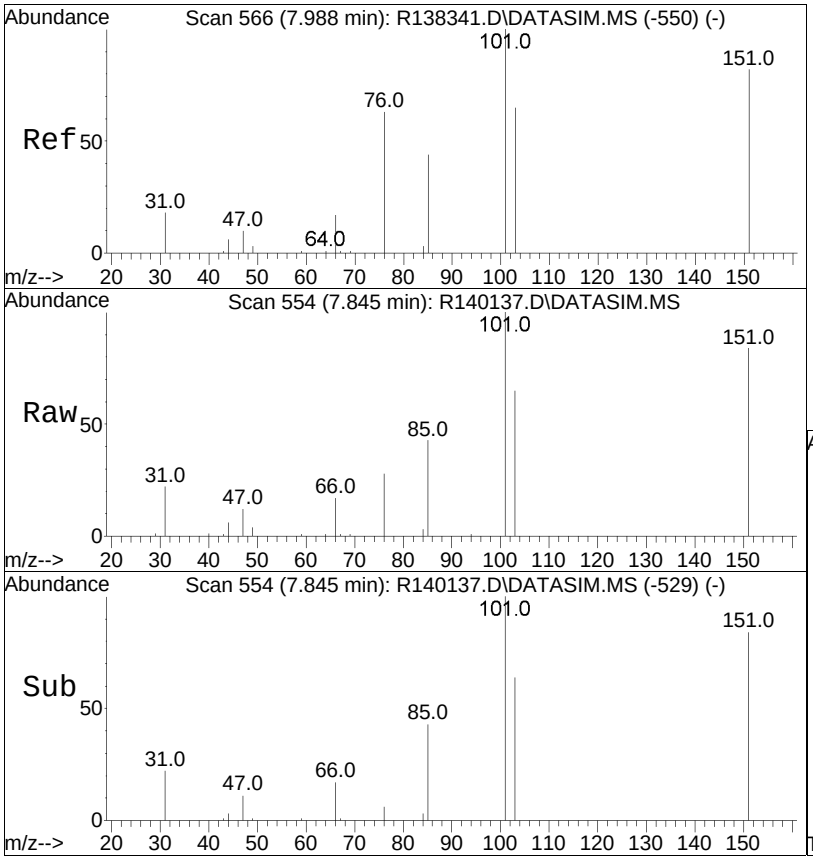



#19
carbon disulfide
Concen: 4.37 ppbV
RT: 7.82 min Scan# 551
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 76 Resp: 104235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 17.7 | 14.7 | 22.1 |

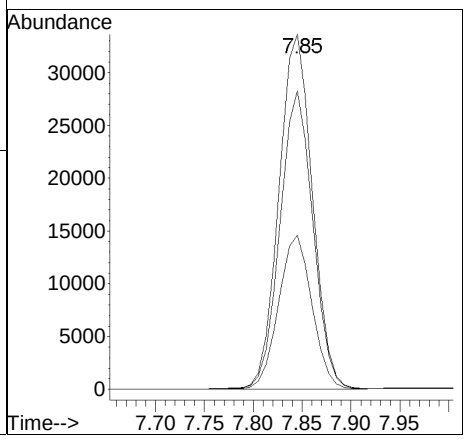


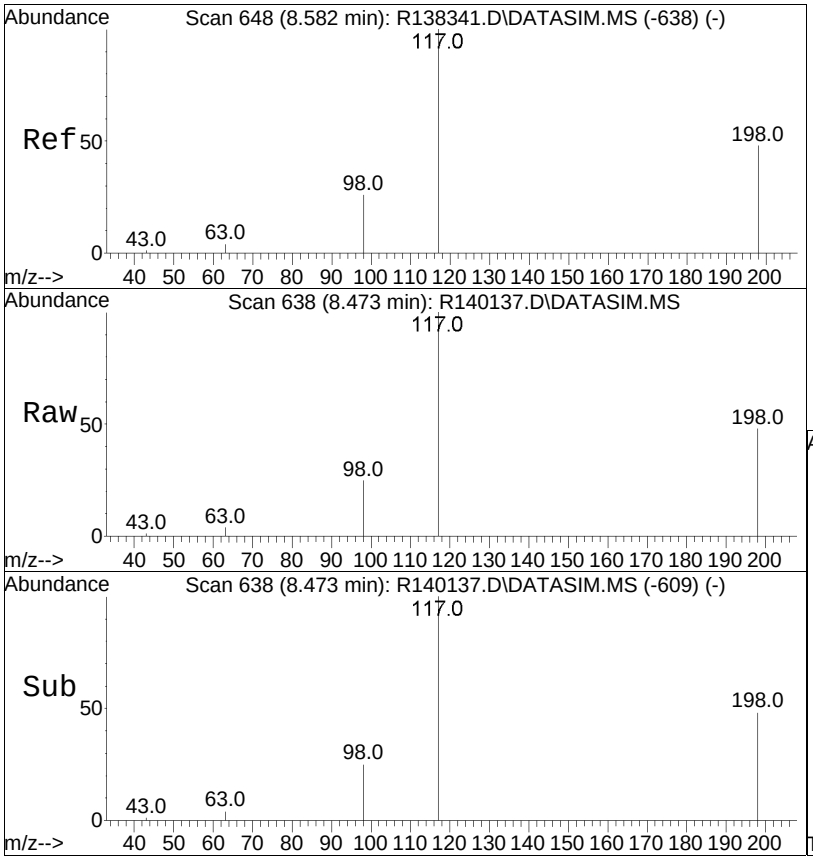



#20
Freon 113
Concen: 4.69 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:101 Resp: 79925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 43.4 | 34.5 | 51.7 |
| 151 | 84.0 | 67.4 | 101.2 |

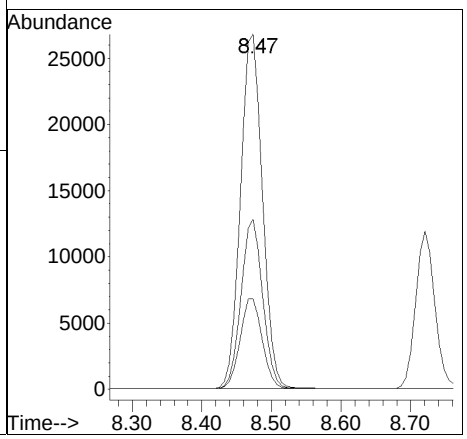


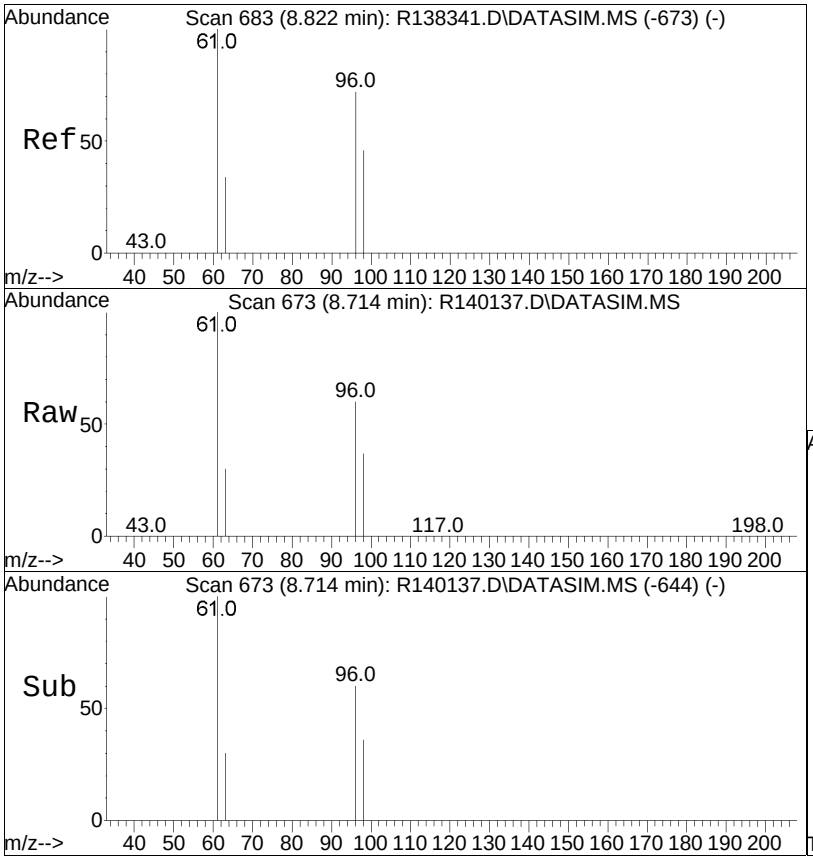



#21
Halothane
Concen: 4.22 ppbV
RT: 8.47 min Scan# 638
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:117 Resp: 58786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 198 | 47.9 | 39.0 | 58.6 |
| 98 | 25.5 | 19.8 | 29.8 |

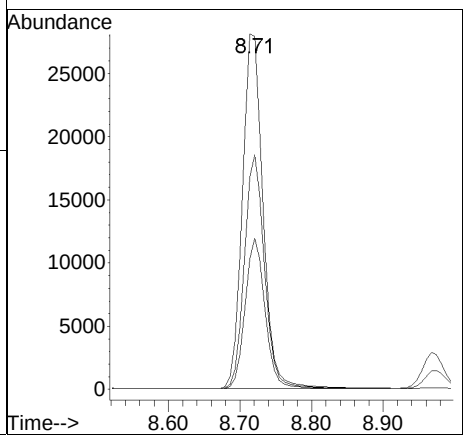


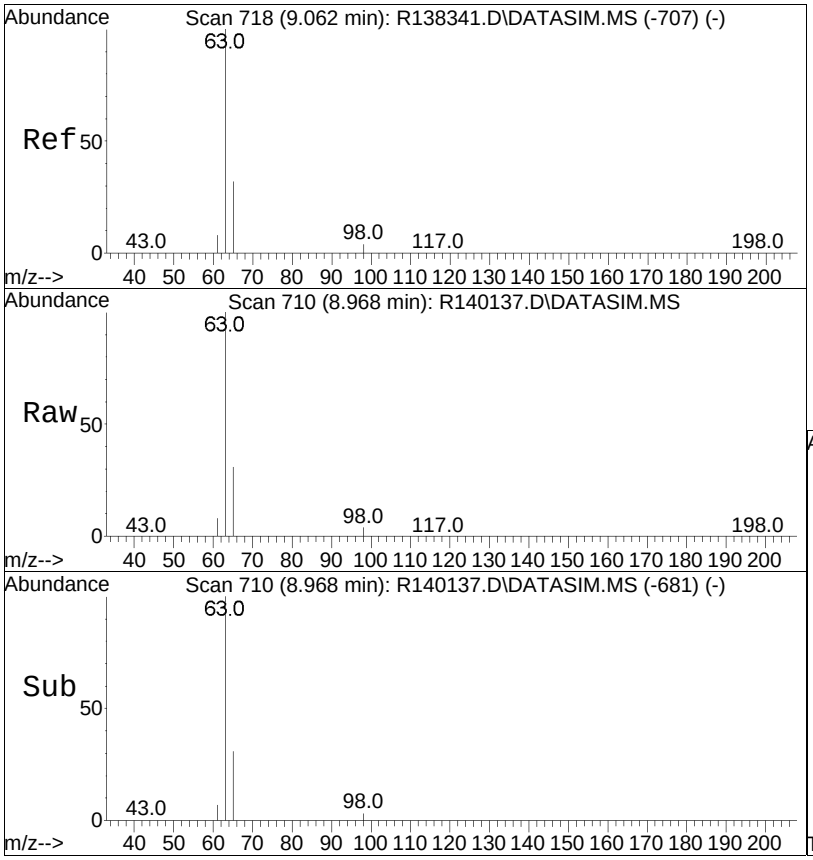



#22
trans-1,2-dichloroethene
Concen: 4.22 ppbV
RT: 8.71 min Scan# 673
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 61 Resp: 56412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 59.8 | 48.2 | 72.4 |
| 98 | 36.8 | 29.9 | 44.9 |

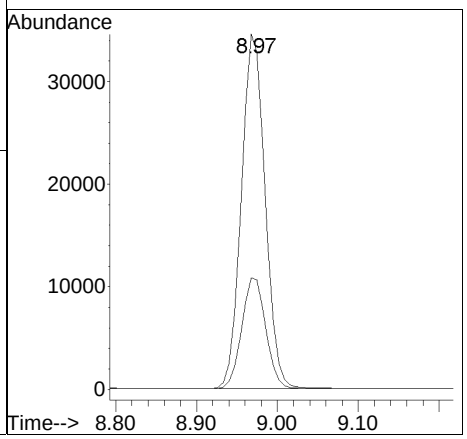


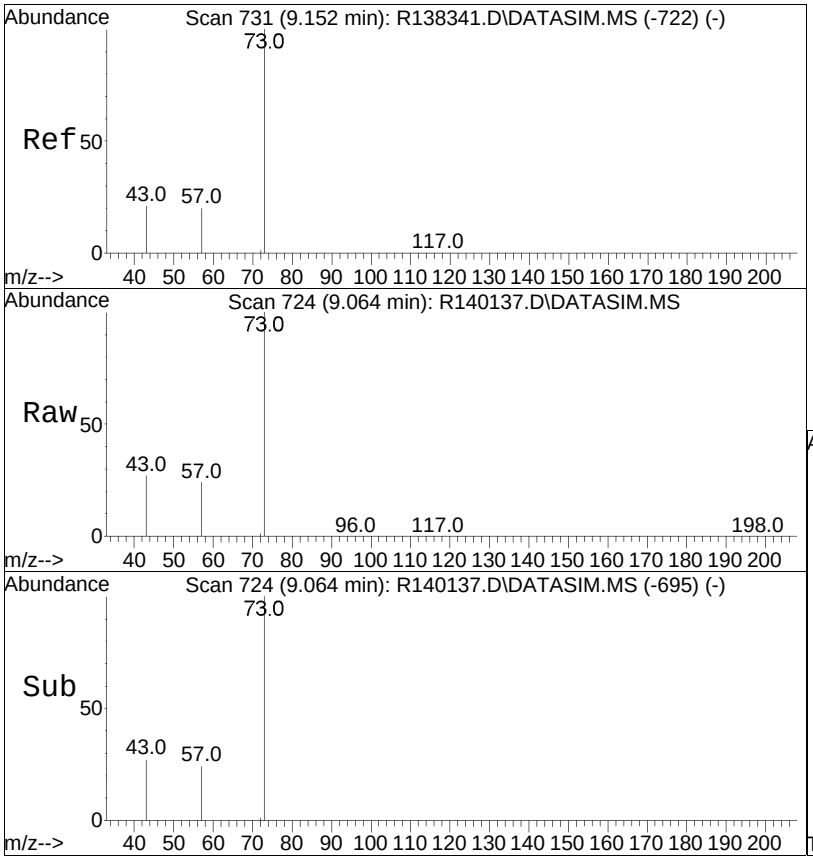



#23
1,1-dichloroethane
Concen: 4.59 ppbV
RT: 8.97 min Scan# 710
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 63 Resp: 70637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.4 | 25.2 | 37.8 |

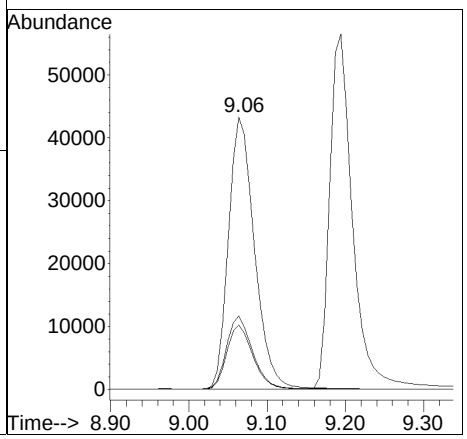


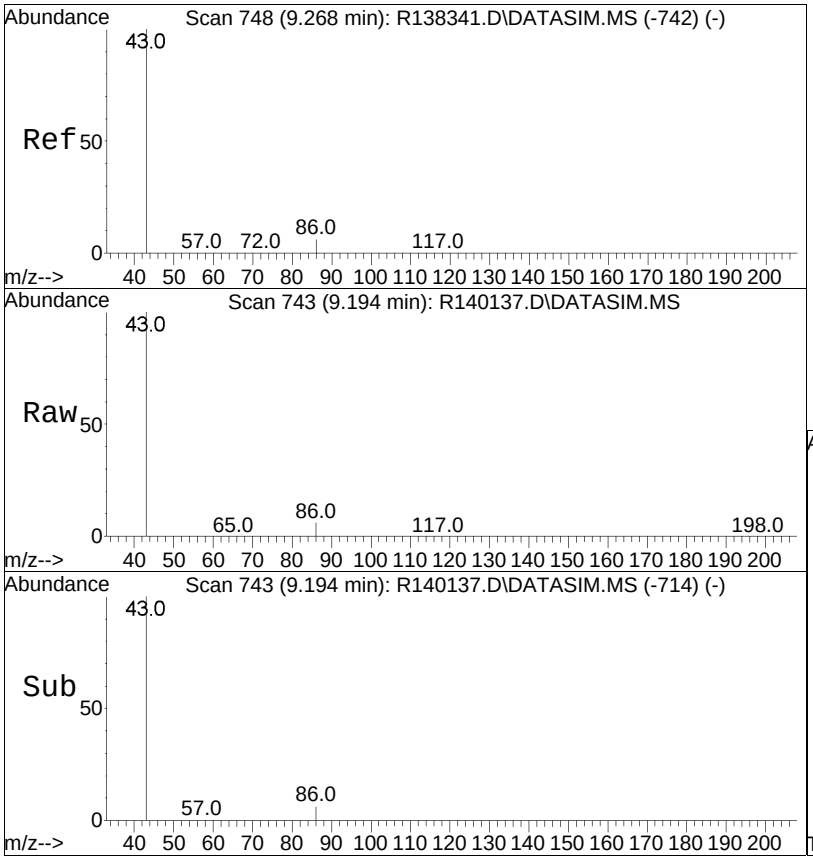



#24
MTBE
Concen: 4.38 ppbV
RT: 9.06 min Scan# 724
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 73 Resp: 100156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 23.7 | 19.4 | 29.0 |
| 43 | 26.9 | 22.4 | 33.6 |

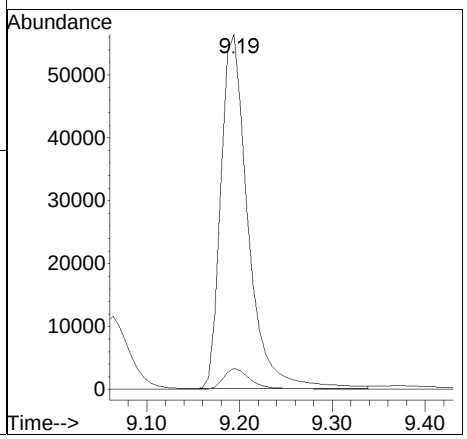


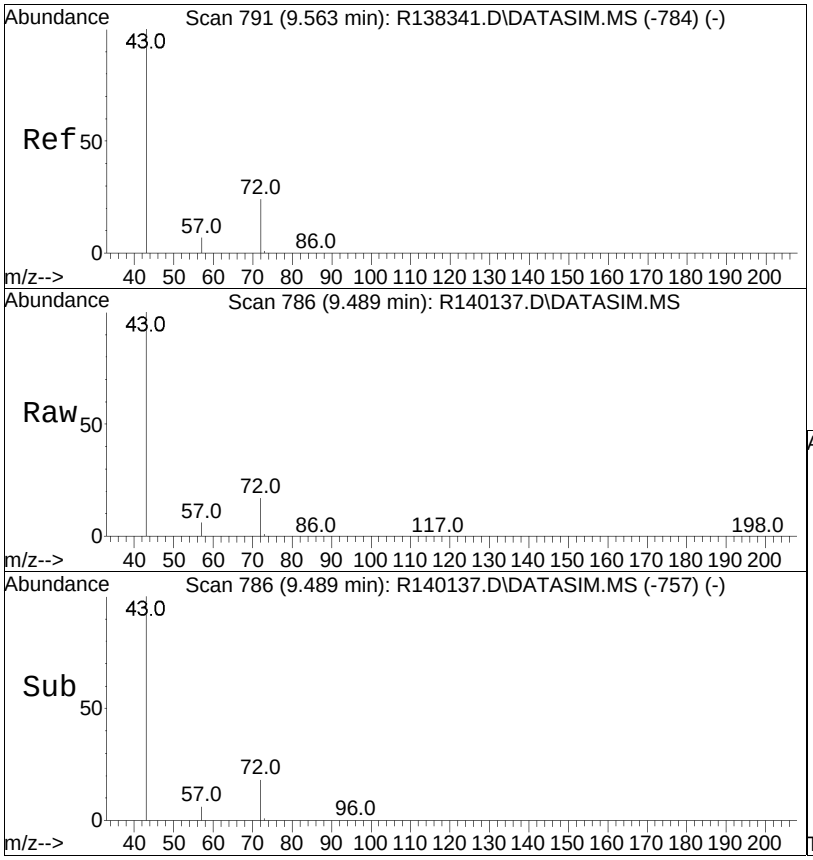



#25
vinyl acetate
Concen: 5.59 ppbV
RT: 9.19 min Scan# 743
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 43 Resp: 114794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 5.9 | 4.7 | 7.1 |

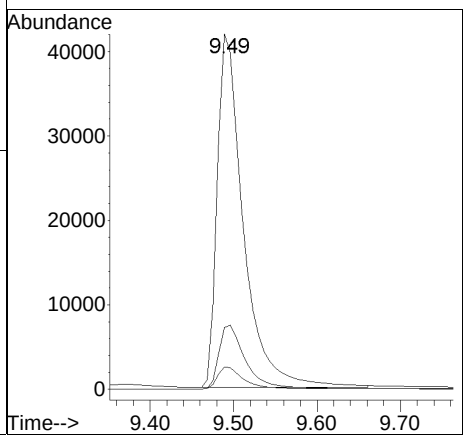


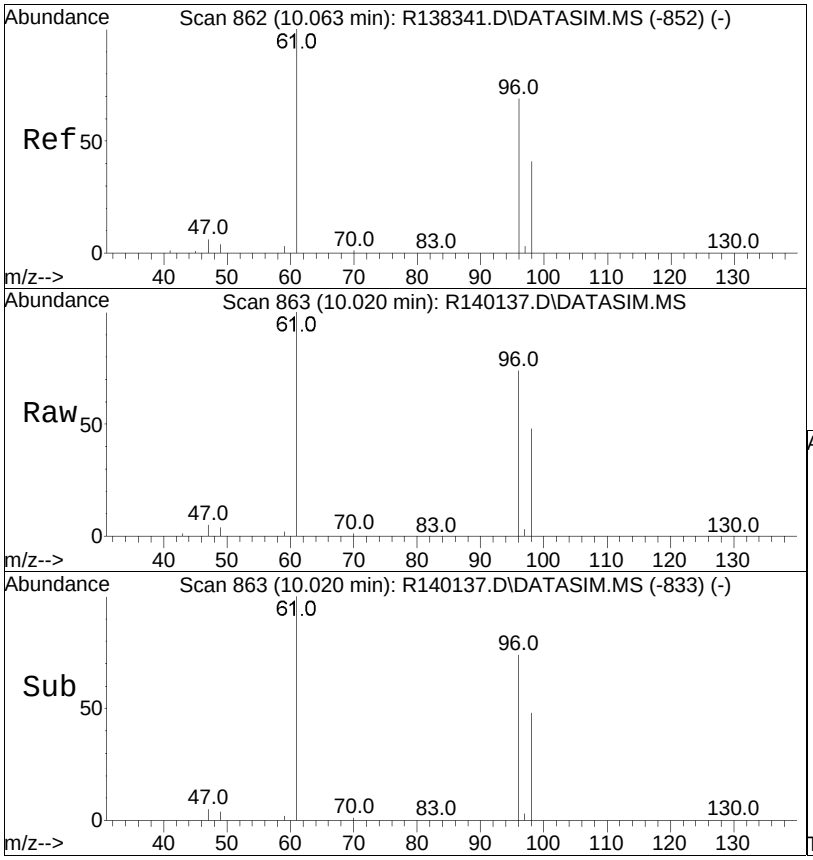



#26
2-butanone
Concen: 4.85 ppbV
RT: 9.49 min Scan# 786
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 43 Resp: 91427

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 17.4 | 13.8 | 20.6 |
| 57 | 6.3 | 5.2 | 7.8 |

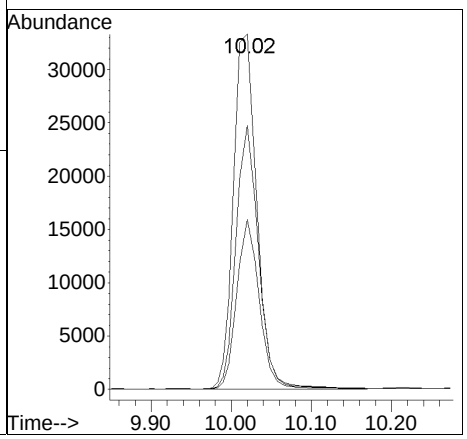


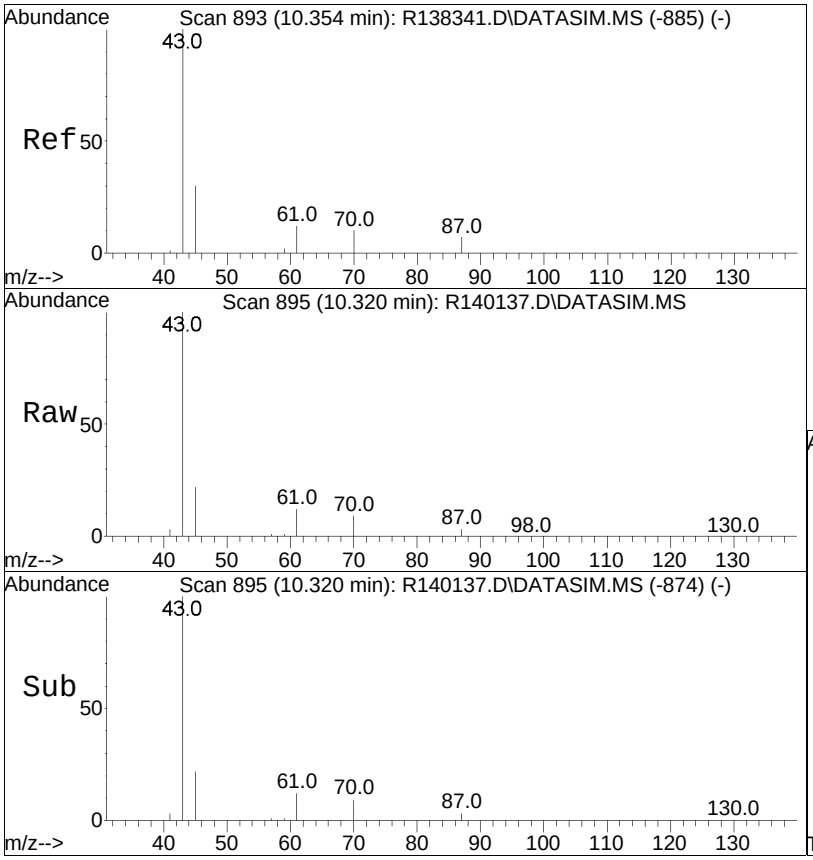



#27
cis-1,2-dichloroethene
Concen: 5.02 ppbV
RT: 10.02 min Scan# 863
Delta R.T. 0.009 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 61 Resp: 68905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 74.3 | 50.6 | 76.0 |
| 98 | 47.8 | 30.6 | 45.8# |

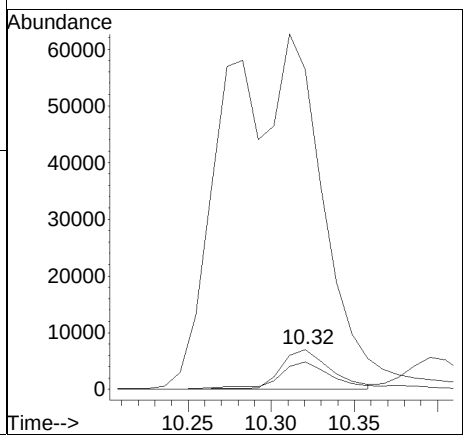


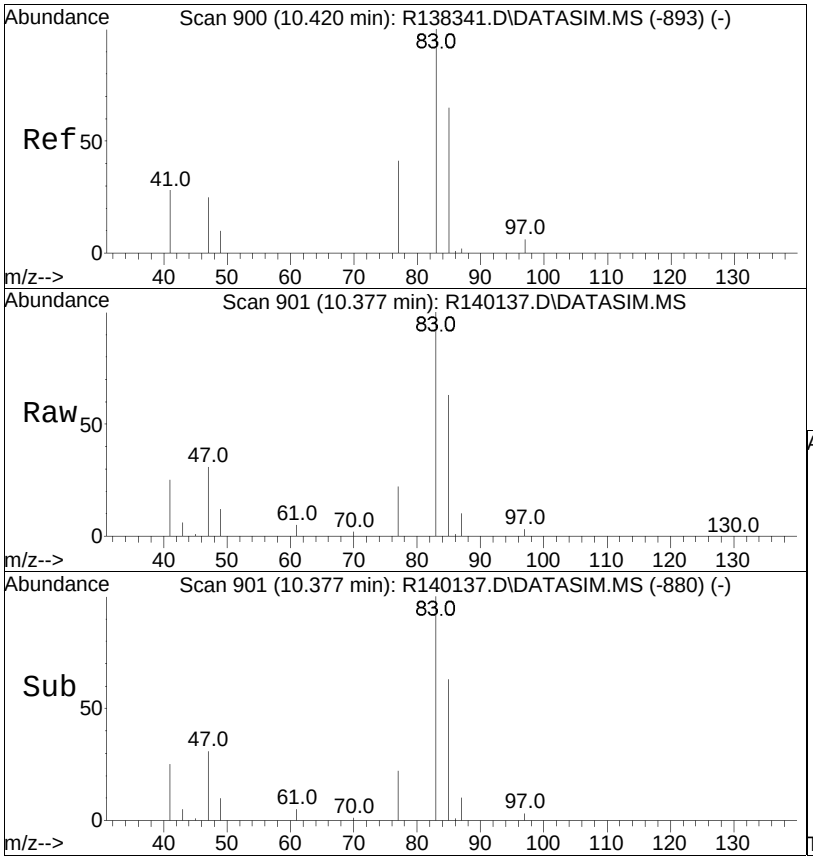



#28
Ethyl Acetate
Concen: 4.44 ppbV
RT: 10.32 min Scan# 895
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 61 Resp: 13957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 70 | 69.4 | 56.9 | 85.3 |
| 43 | 804.4 | 647.7 | 971.5 |

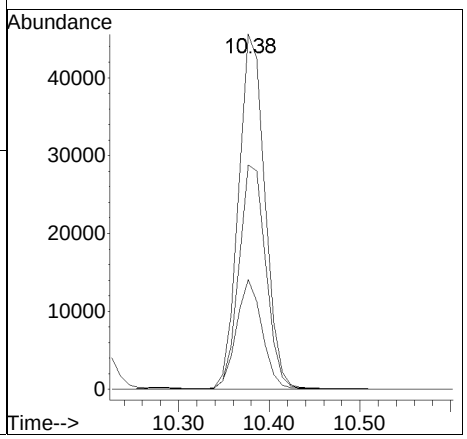


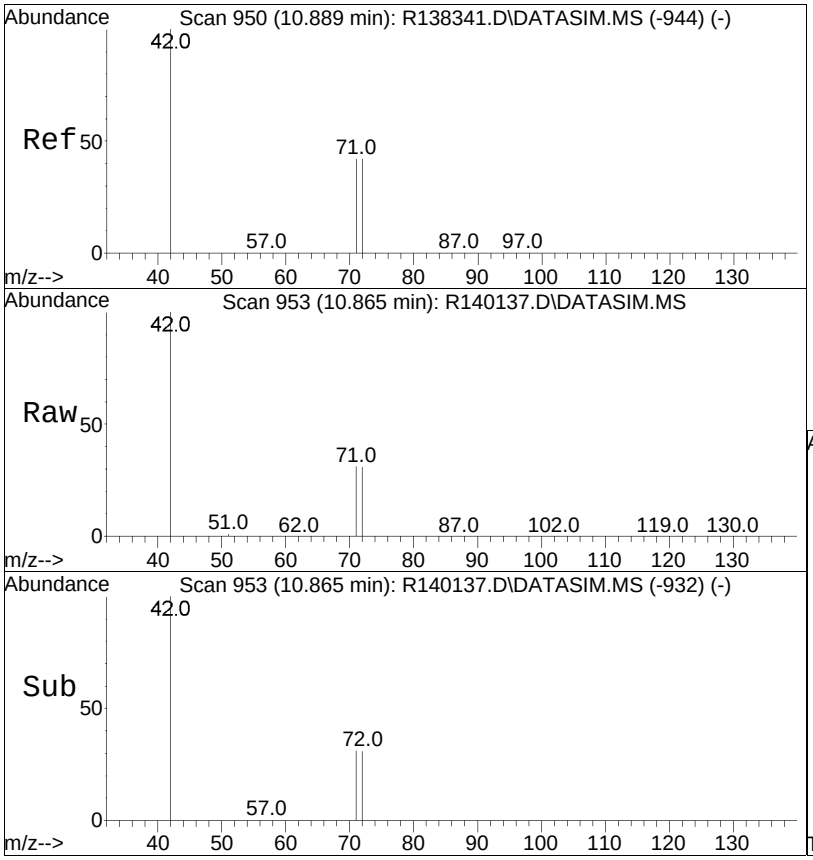



#29
chloroform
Concen: 4.53 ppbV m
RT: 10.38 min Scan# 901
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 83 Resp: 92142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.1 | 50.9 | 76.3 |
| 47 | 31.0 | 24.9 | 37.3 |

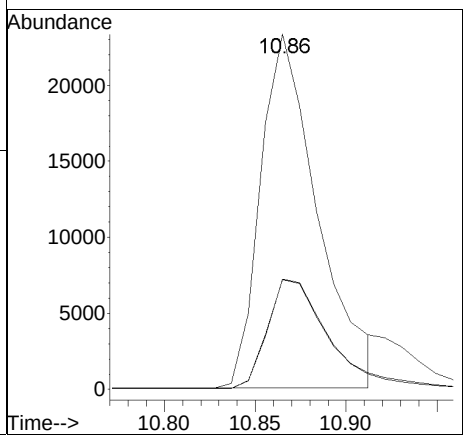


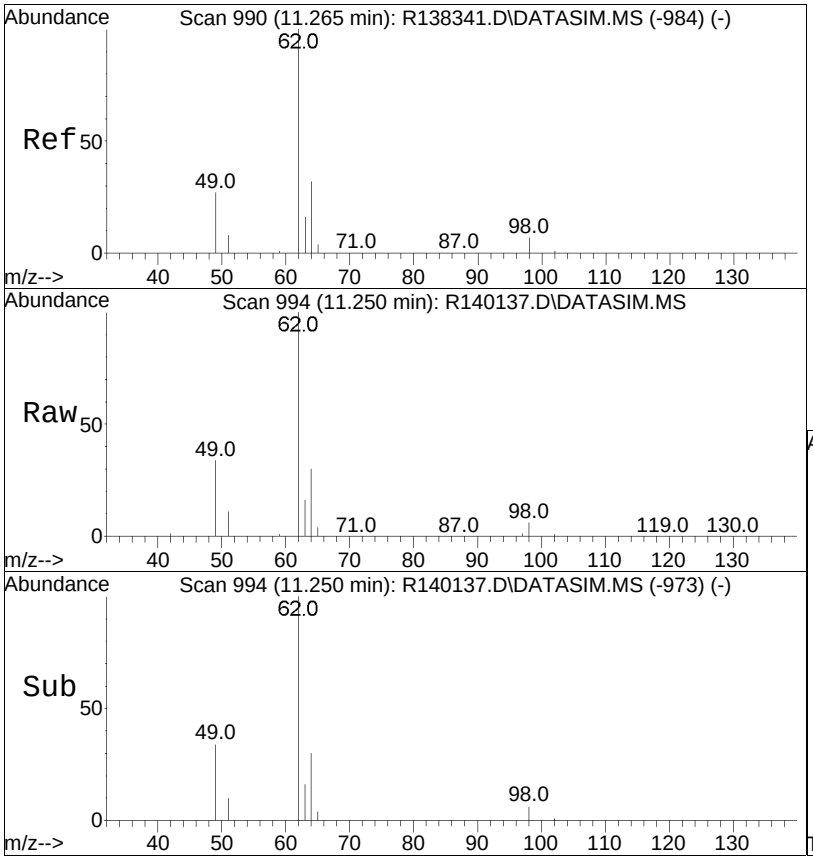



#30
Tetrahydrofuran
Concen: 4.37 ppbV m
RT: 10.86 min Scan# 953
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 42 Resp: 51174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 71 | 30.9 | 24.7 | 37.1 |
| 72 | 31.0 | 24.6 | 37.0 |

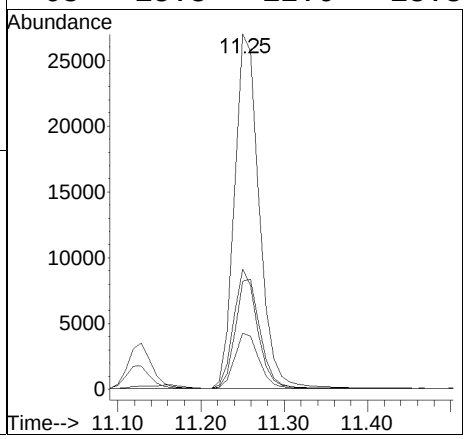


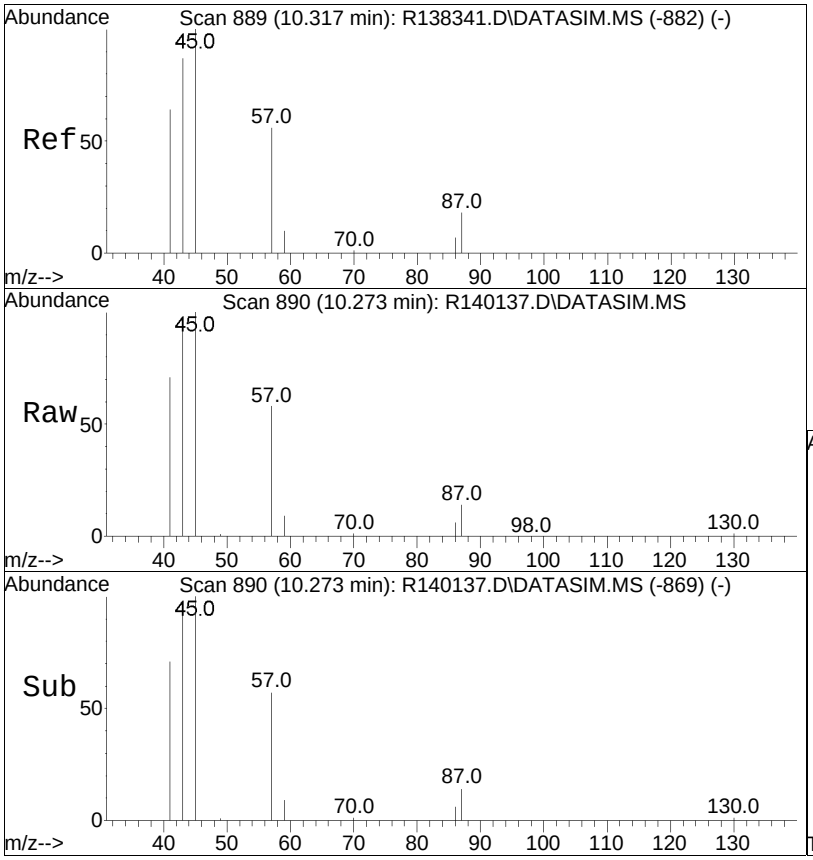



#31
1,2-dichloroethane
Concen: 4.54 ppbV
RT: 11.25 min Scan# 994
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 62 Resp: 55793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.4 | 24.4 | 36.6 |
| 49 | 33.8 | 26.7 | 40.1 |
| 63 | 15.8 | 12.6 | 18.8 |

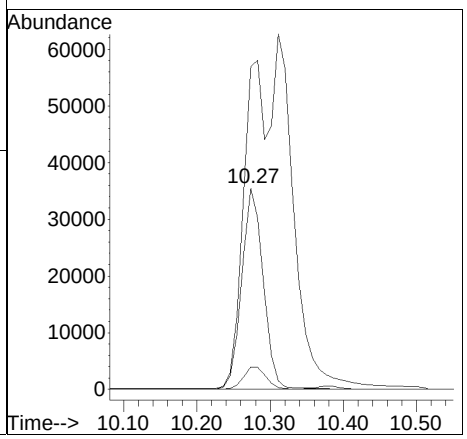


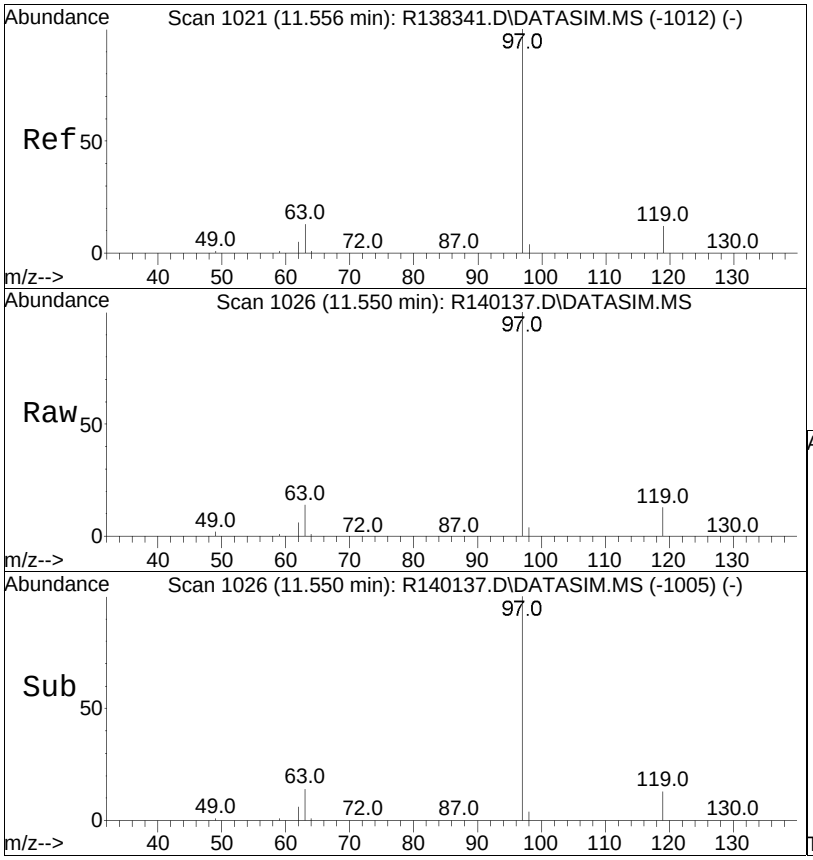



#33
hexane
Concen: 4.32 ppbV
RT: 10.27 min Scan# 890
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 57 Resp: 72095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 160.6 | 127.9 | 191.9 |
| 86 | 11.2 | 9.0 | 13.6 |

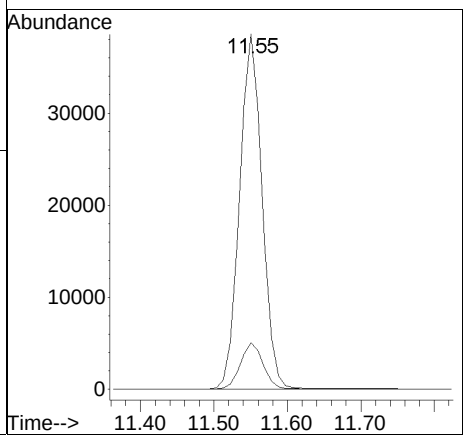


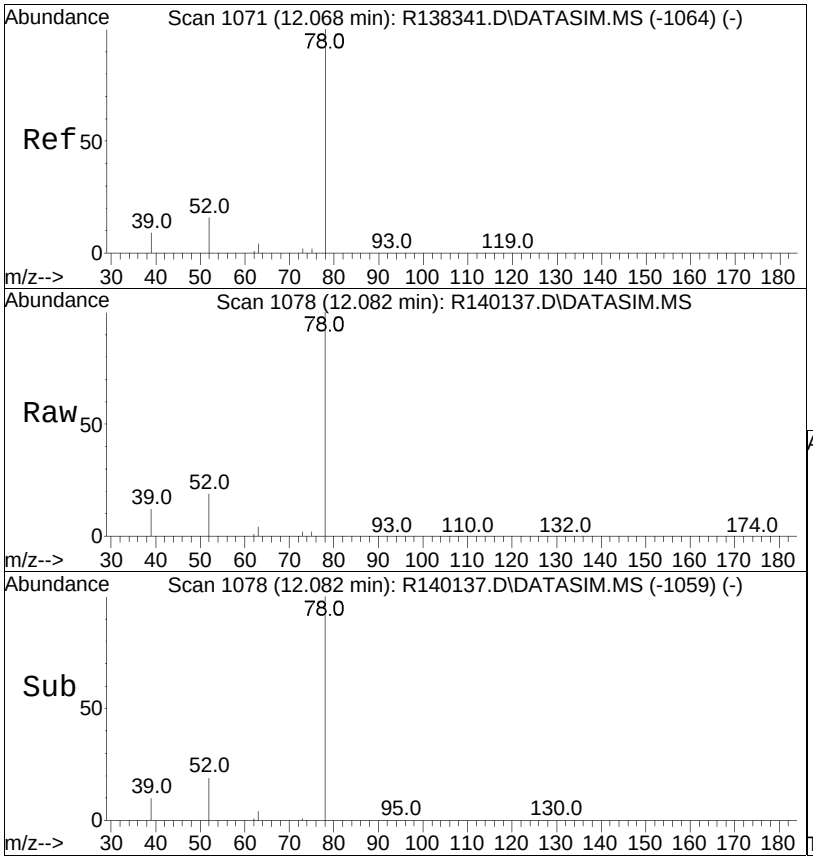



#35
1,1,1-trichloroethane
Concen: 4.66 ppbV
RT: 11.55 min Scan# 1026
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 97 Resp: 85083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 61 | 0.0 | 0.0 | 0.0 |
| 119 | 13.1 | 10.7 | 16.1 |

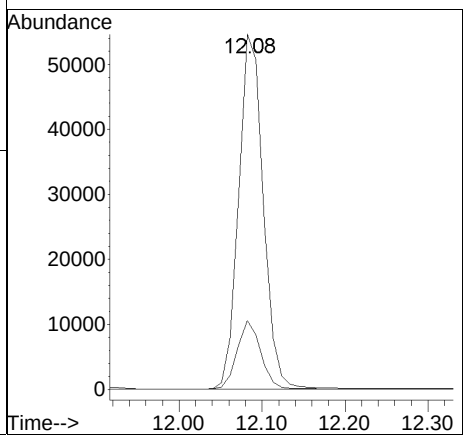


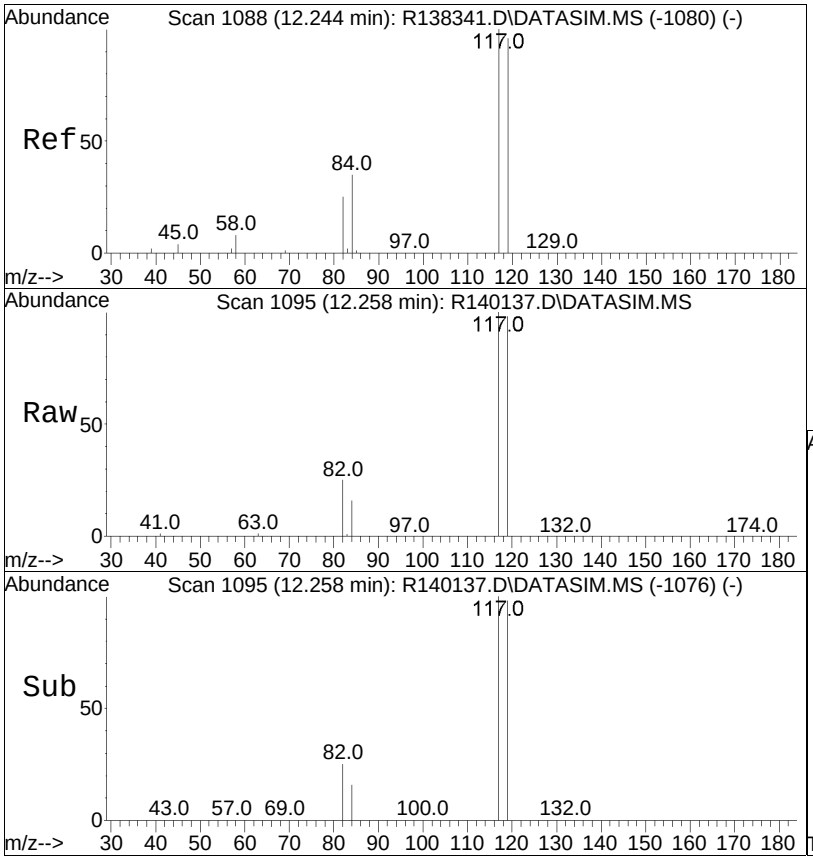



#36
benzene
Concen: 4.51 ppbV
RT: 12.08 min Scan# 1078
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 78 Resp: 112625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 19.4 | 15.4 | 23.0 |

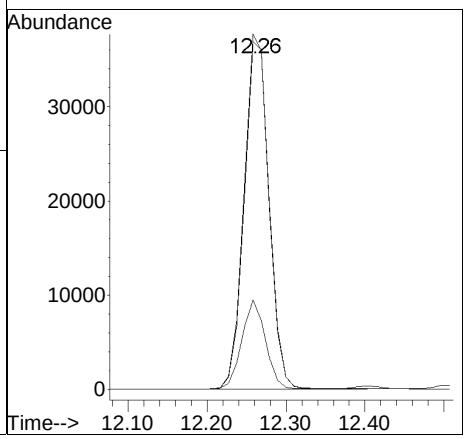


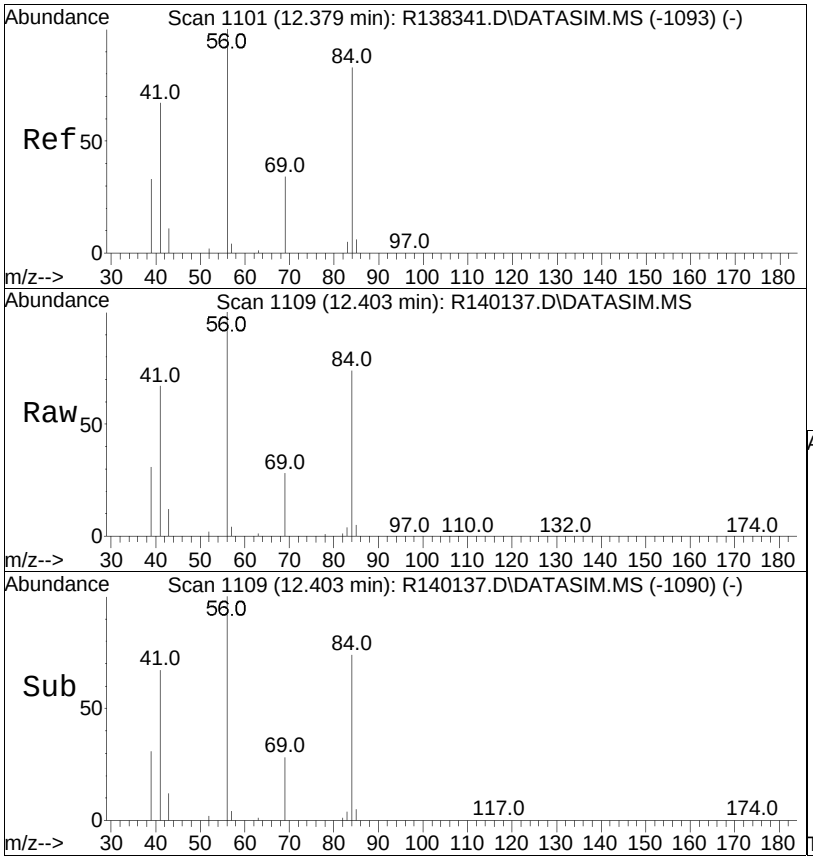



#37
carbon tetrachloride
Concen: 4.61 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:117 Resp: 81815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.9 | 78.5 | 117.7 |
| 82 | 25.2 | 19.8 | 29.8 |

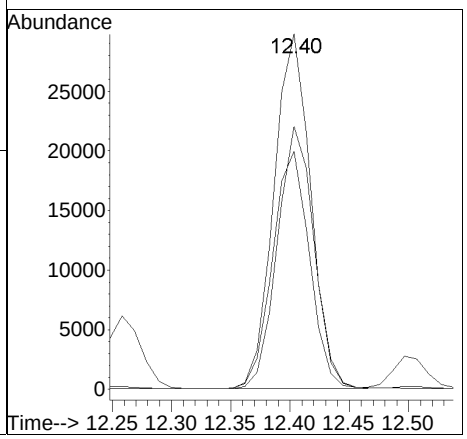


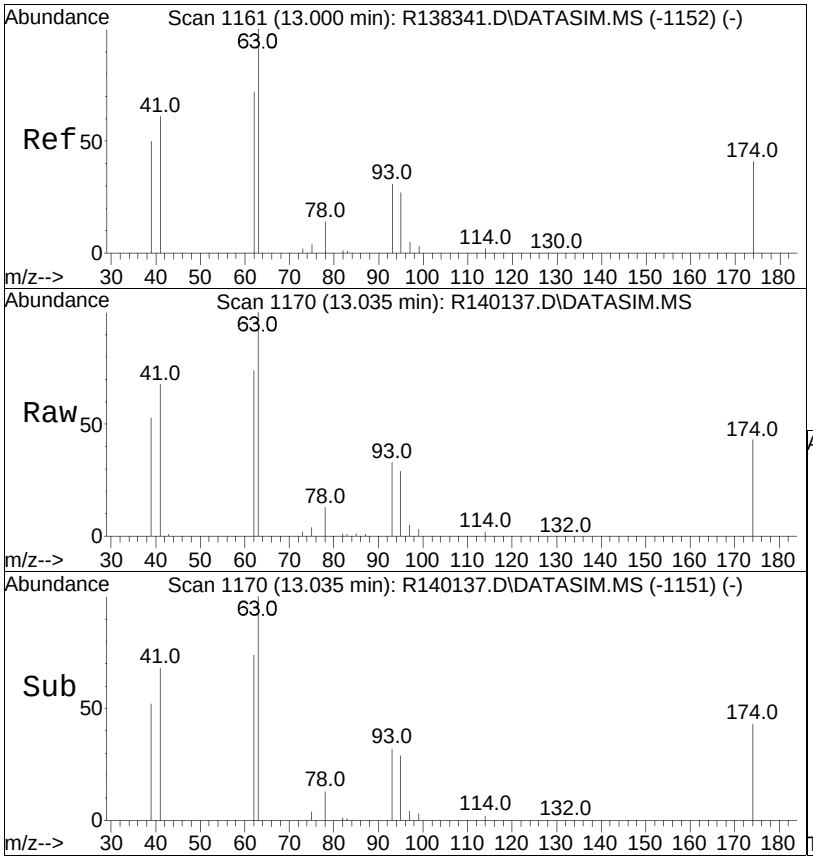



#38
cyclohexane
Concen: 4.29 ppbV
RT: 12.40 min Scan# 1109
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 56 Resp: 64248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 74.0 | 60.0 | 90.0 |
| 41 | 67.0 | 53.1 | 79.7 |

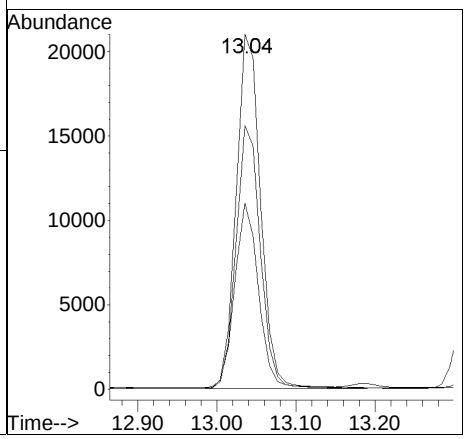


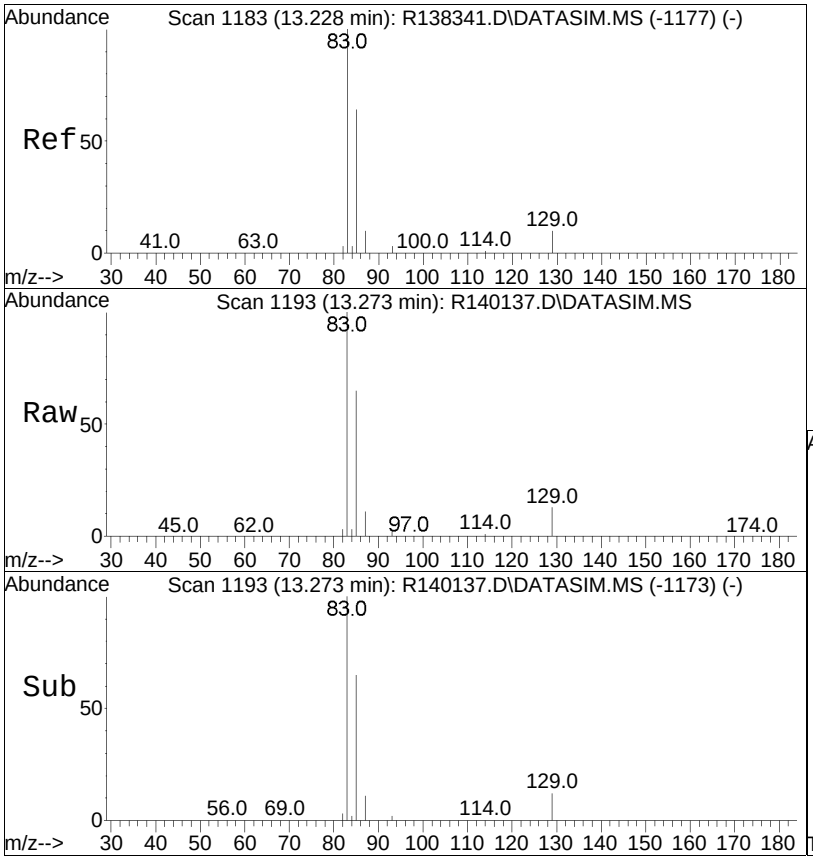



#39
1,2-dichloropropane
Concen: 4.66 ppbV
RT: 13.04 min Scan# 1170
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 63 Resp: 44940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 74.3 | 59.8 | 89.6 |
| 39 | 52.5 | 41.5 | 62.3 |

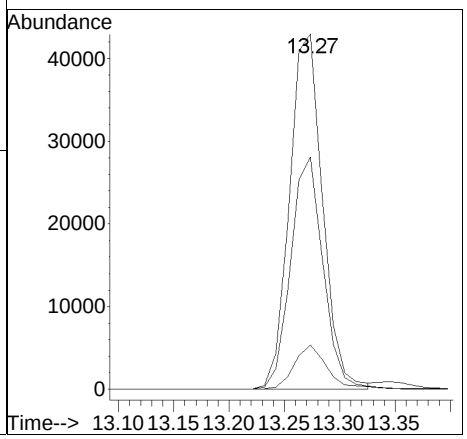


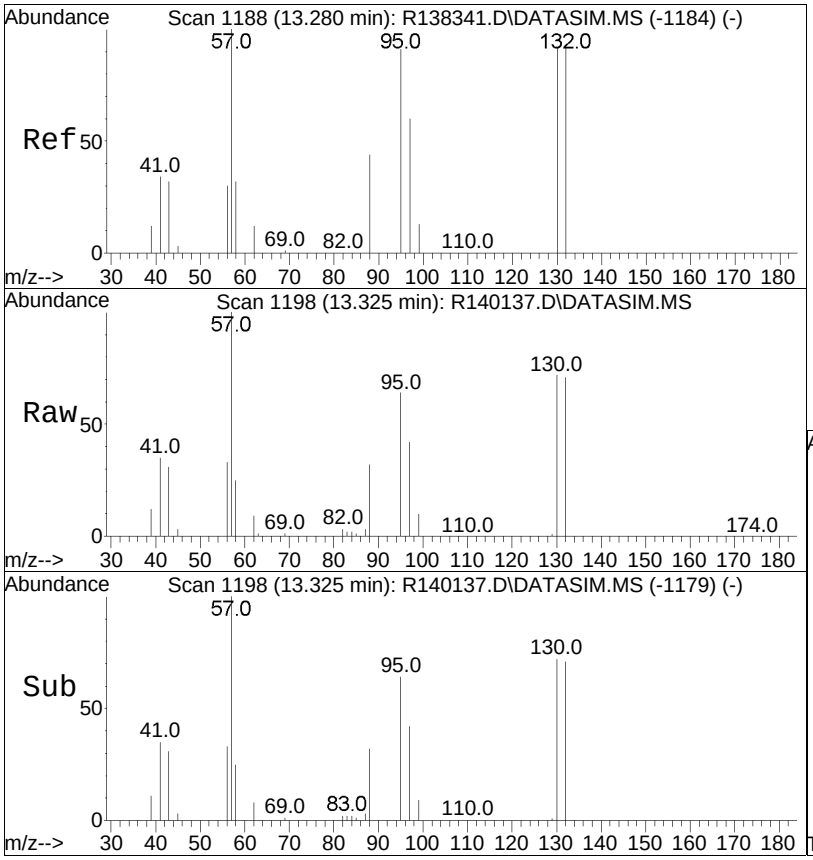



#40
bromodichloromethane
Concen: 4.49 ppbV
RT: 13.27 min Scan# 1193
Delta R.T. 0.010 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 83 Resp: 88921

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.4 | 49.5 | 74.3 |
| 129 | 12.5 | 8.0 | 12.0# |

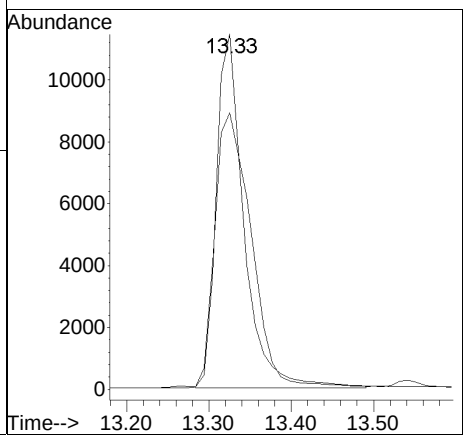


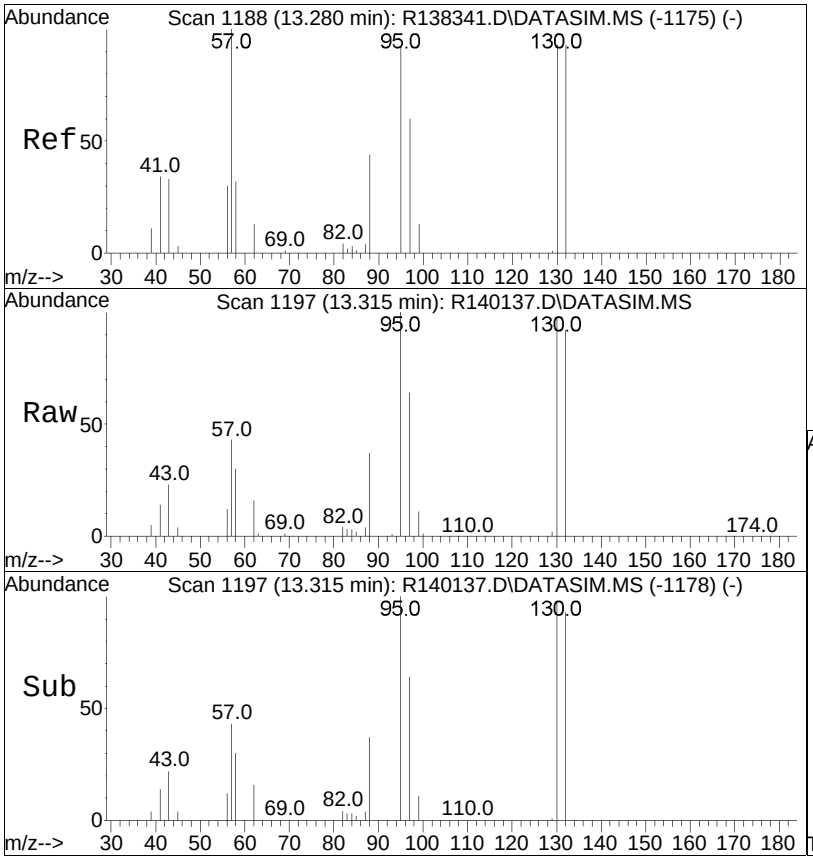



#41
1,4-dioxane
Concen: 4.79 ppbV m
RT: 13.33 min Scan# 1198
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 88 Resp: 26793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 58 | 77.9 | 61.8 | 92.6 |

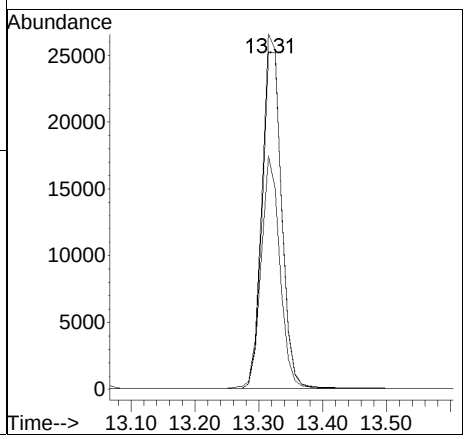


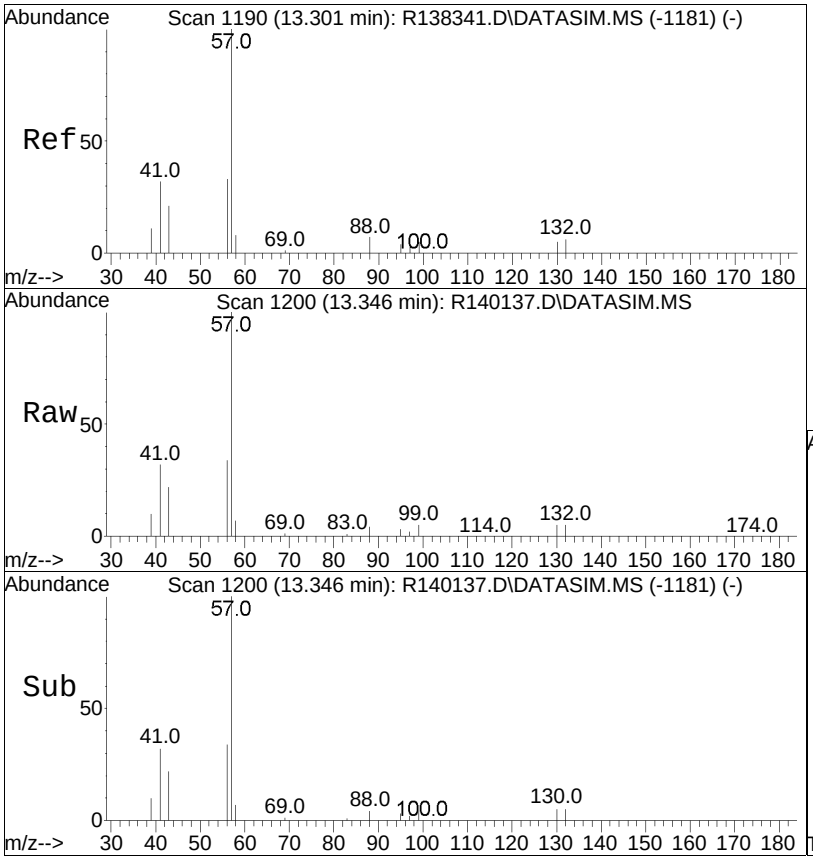



#42
trichloroethene
Concen: 4.57 ppbV
RT: 13.31 min Scan# 1197
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:130 Resp: 56261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 94.9 | 76.0 | 114.0 |
| 97 | 65.7 | 51.8 | 77.8 |

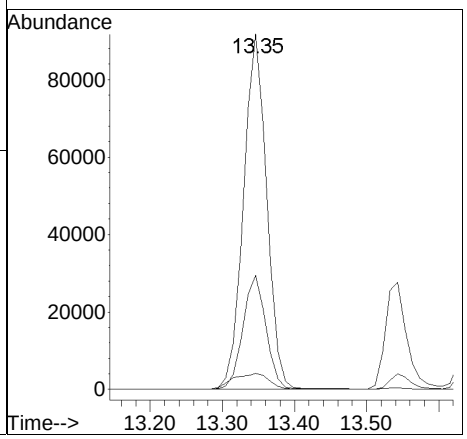


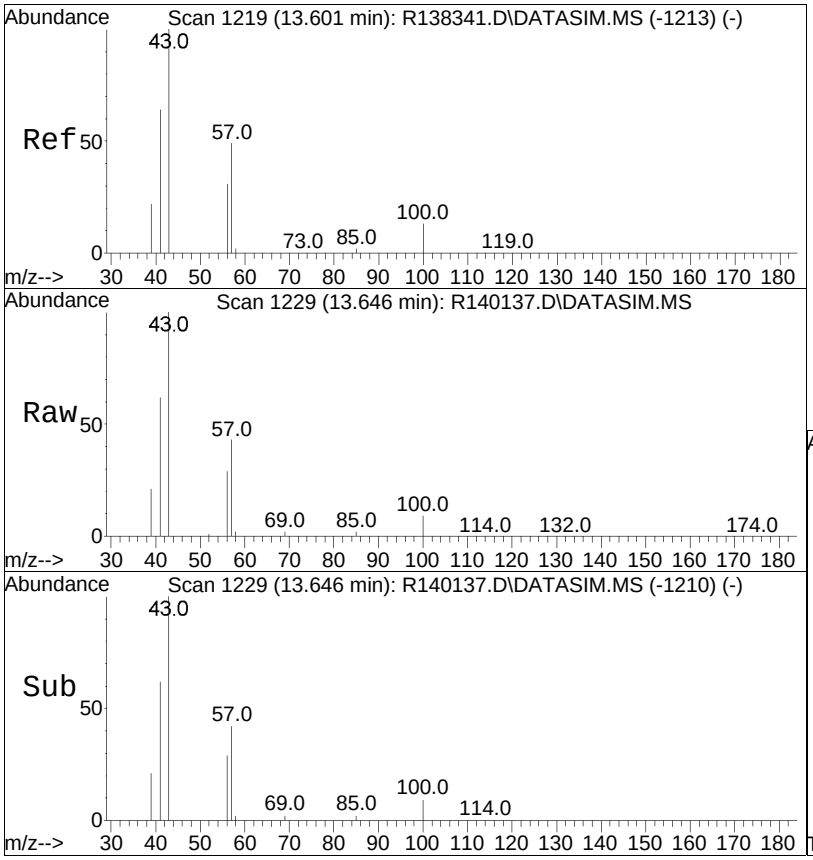



#43
2,2,4-trimethylpentane
Concen: 4.57 ppbV
RT: 13.35 min Scan# 1200
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 57 Resp: 204736

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 99 | 4.5 | 3.6 | 5.4 |
| 41 | 32.1 | 25.7 | 38.5 |

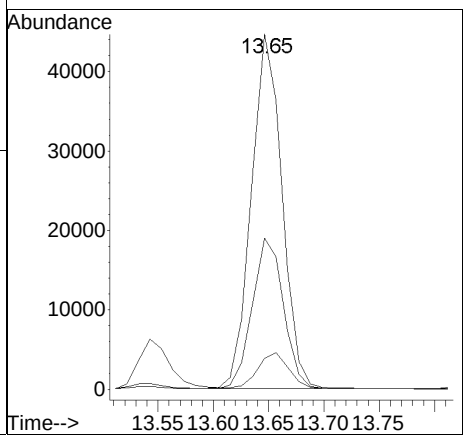


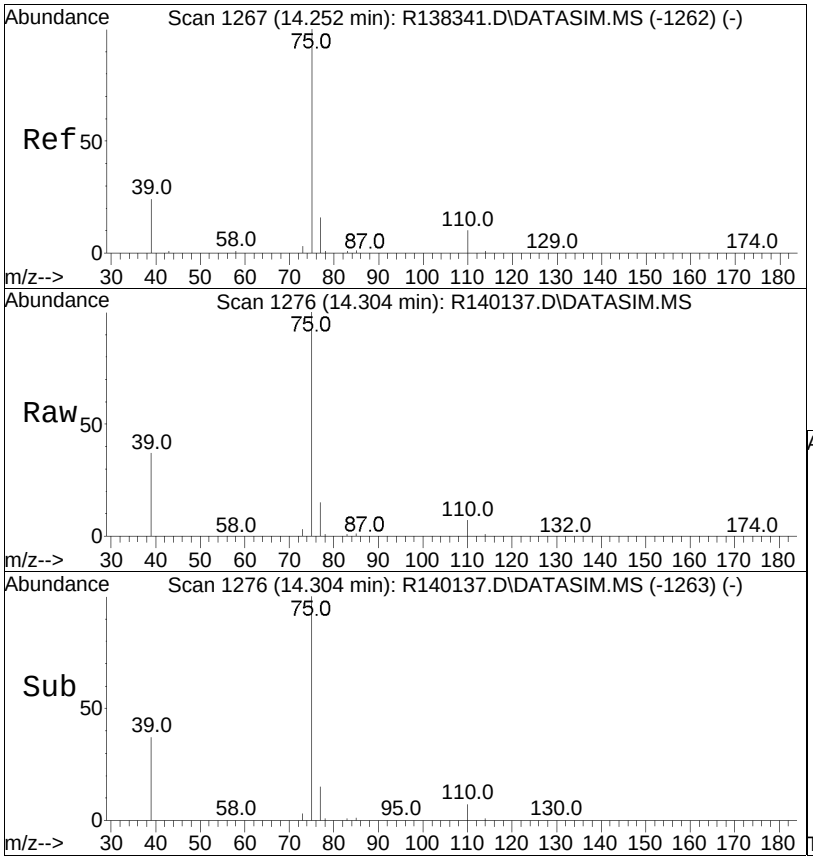



#44
heptane
Concen: 4.40 ppbV
RT: 13.65 min Scan# 1229
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 43 Resp: 85636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 42.6 | 34.7 | 52.1 |
| 100 | 8.7 | 7.4 | 11.0 |

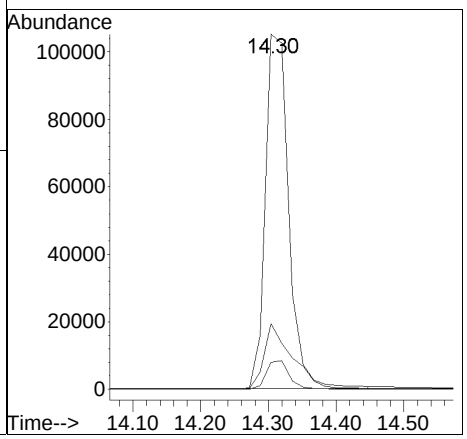


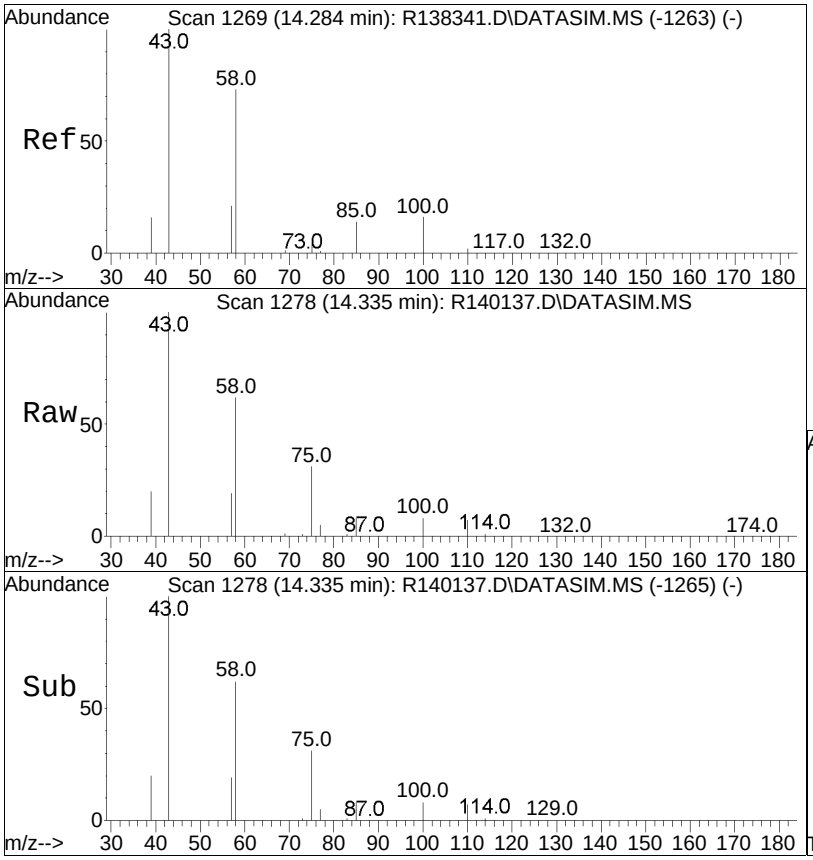



#45
cis-1,3-dichloropropene
Concen: 4.88 ppbV
RT: 14.30 min Scan# 1276
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 75 Resp: 252709

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 39 | 18.5 | 14.5 | 21.7 |
| 77 | 7.6 | 6.2 | 9.2 |

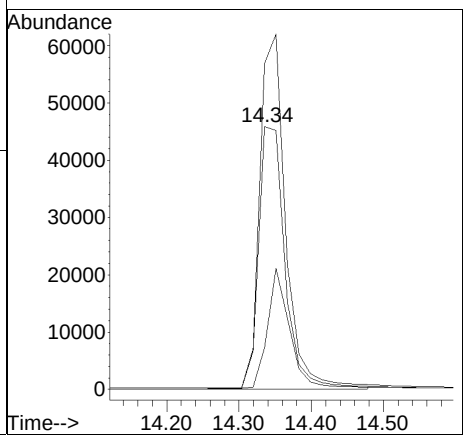


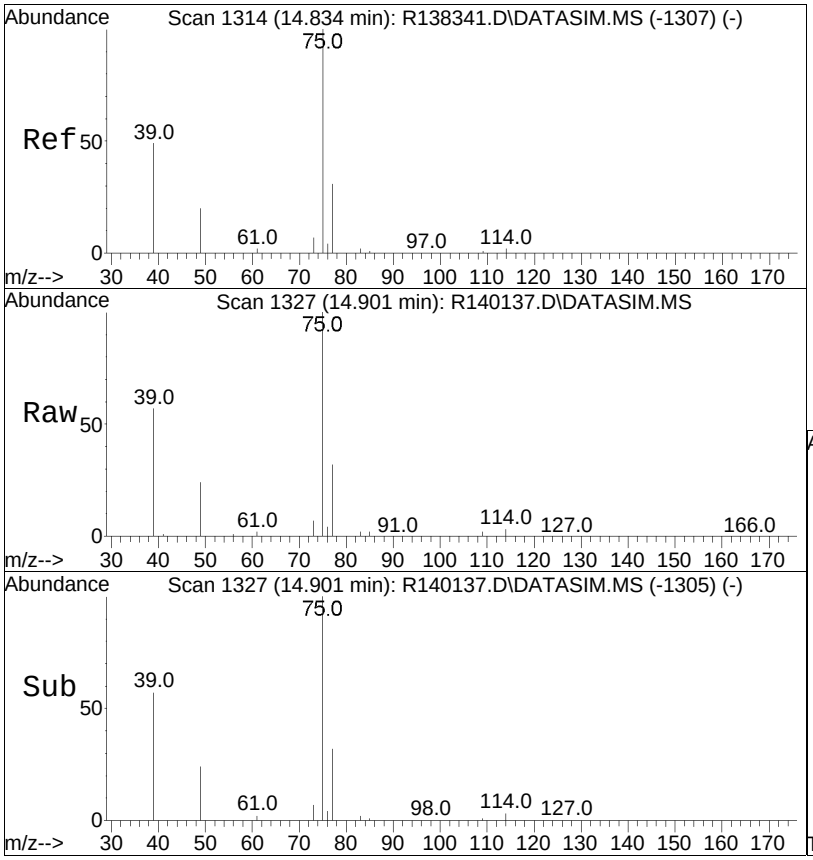



#46
4-methyl-2-pentanone
Concen: 5.07 ppbV
RT: 14.34 min Scan# 1278
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 43 Resp: 116233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 124.1 | 100.4 | 150.6 |
| 100 | 15.8 | 13.6 | 20.4 |

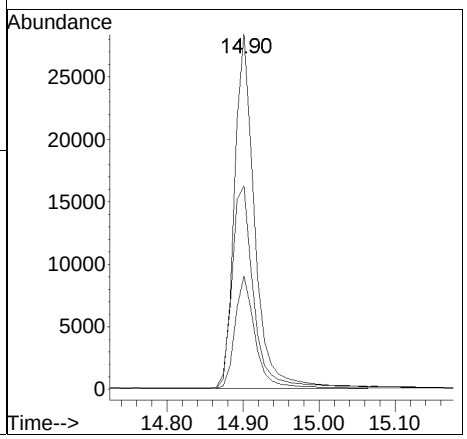


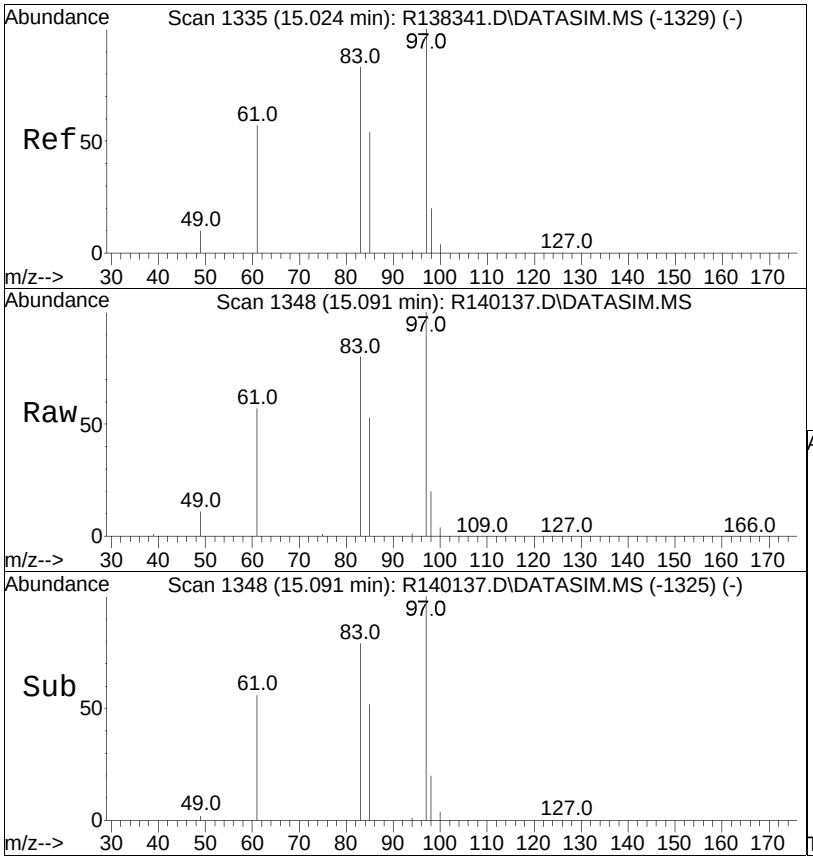



#47
trans-1,3-dichloropropene
Concen: 4.29 ppbV
RT: 14.90 min Scan# 1327
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 75 Resp: 52876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 26.1 | 39.1 |
| 39 | 57.3 | 45.3 | 67.9 |

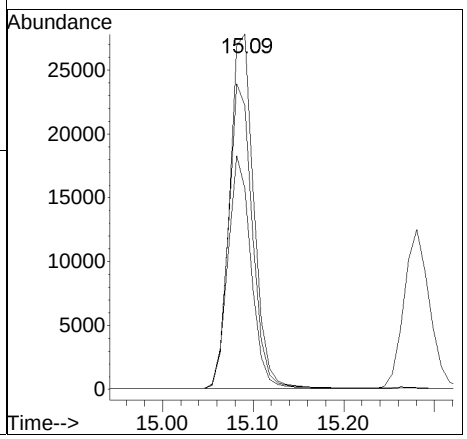


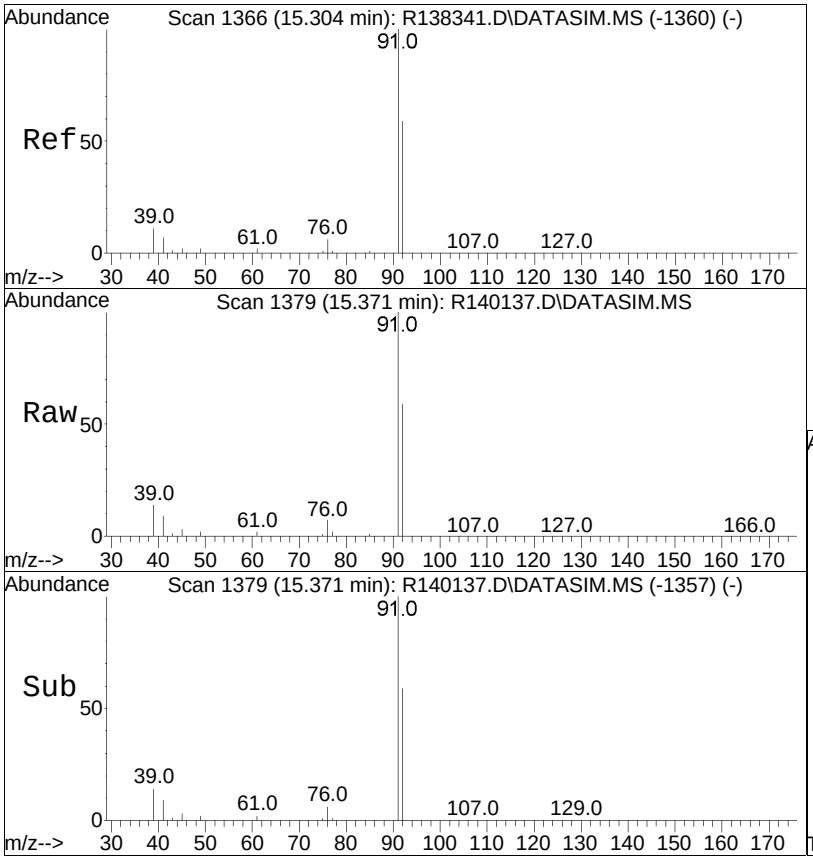



#48
1,1,2-trichloroethane
Concen: 4.81 ppbV
RT: 15.09 min Scan# 1348
Delta R.T. 0.009 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 97 Resp: 51737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 79.8 | 69.8 | 104.6 |
| 61 | 56.6 | 53.0 | 79.6 |

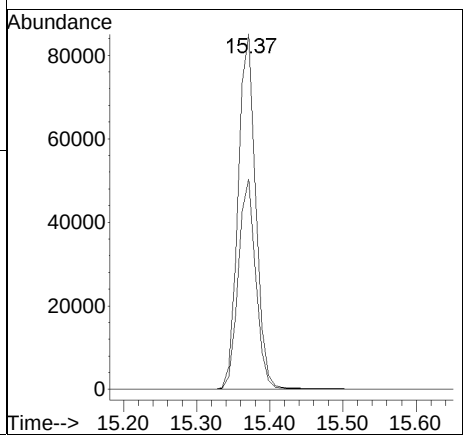


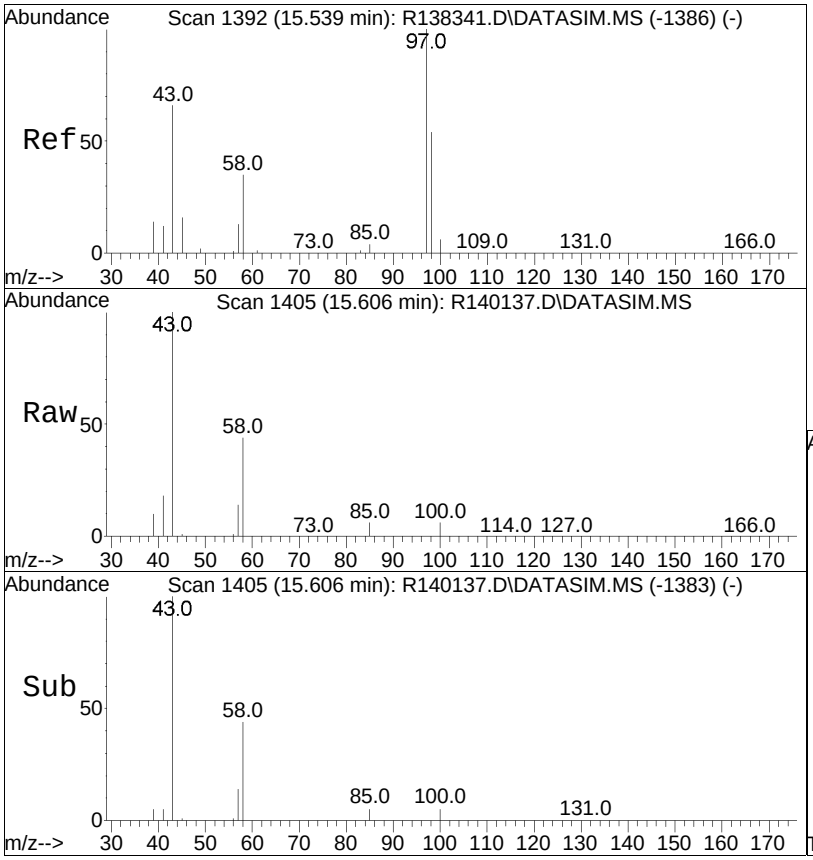



#50
toluene
Concen: 4.66 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 91 Resp: 142607

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 59.3 | 47.2 | 70.8 |

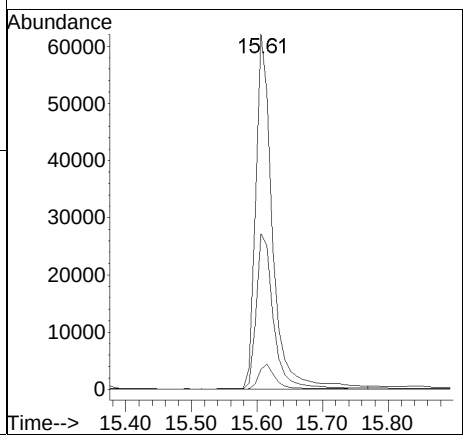


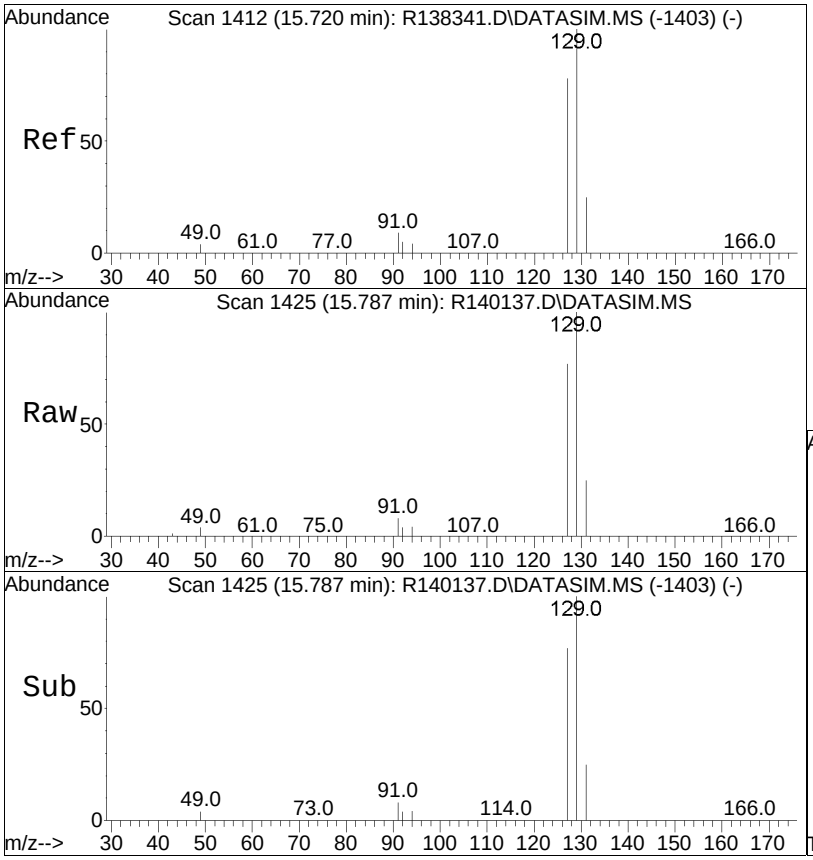



#52
2-hexanone
Concen: 5.44 ppbV
RT: 15.61 min Scan# 1405
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 43 Resp: 110658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 43.8 | 39.3 | 58.9 |
| 100 | 5.7 | 7.1 | 10.7# |

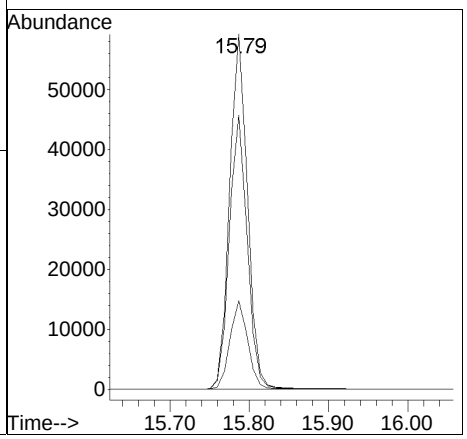


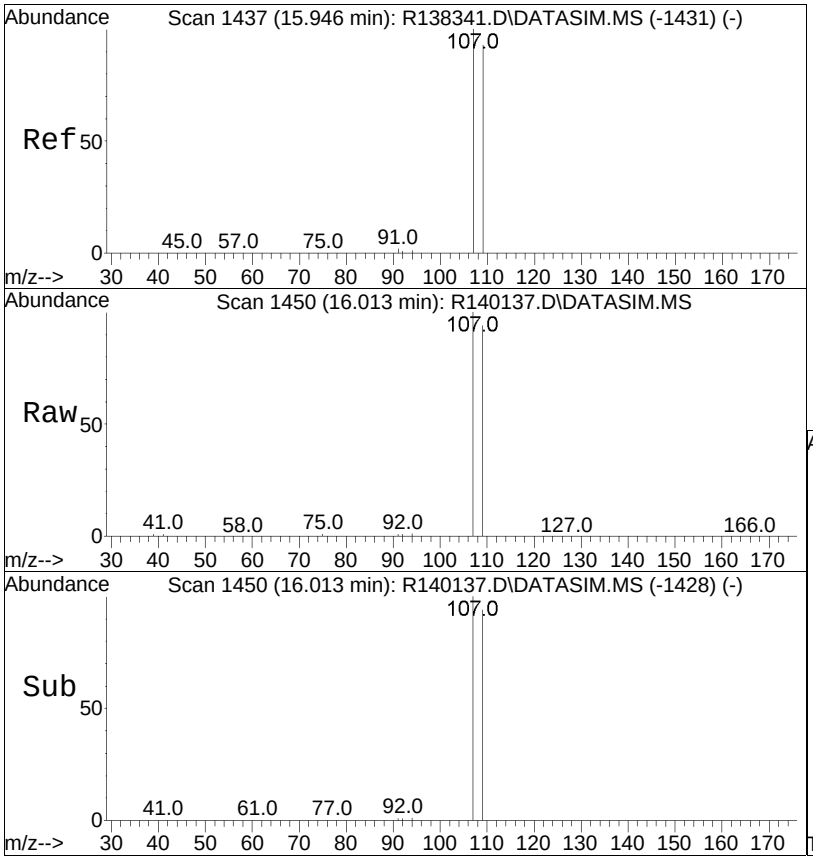



#53
dibromochloromethane
Concen: 4.41 ppbV
RT: 15.79 min Scan# 1425
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:129 Resp: 93083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.2 | 61.6 | 92.4 |
| 131 | 24.9 | 20.0 | 30.0 |

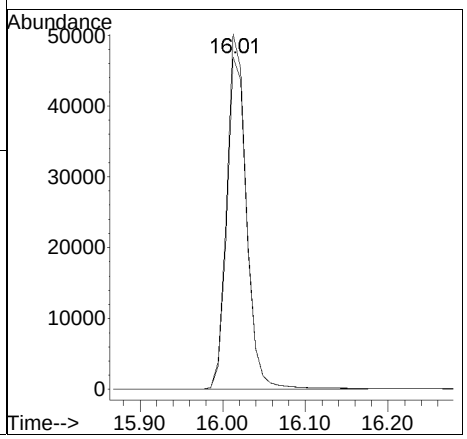


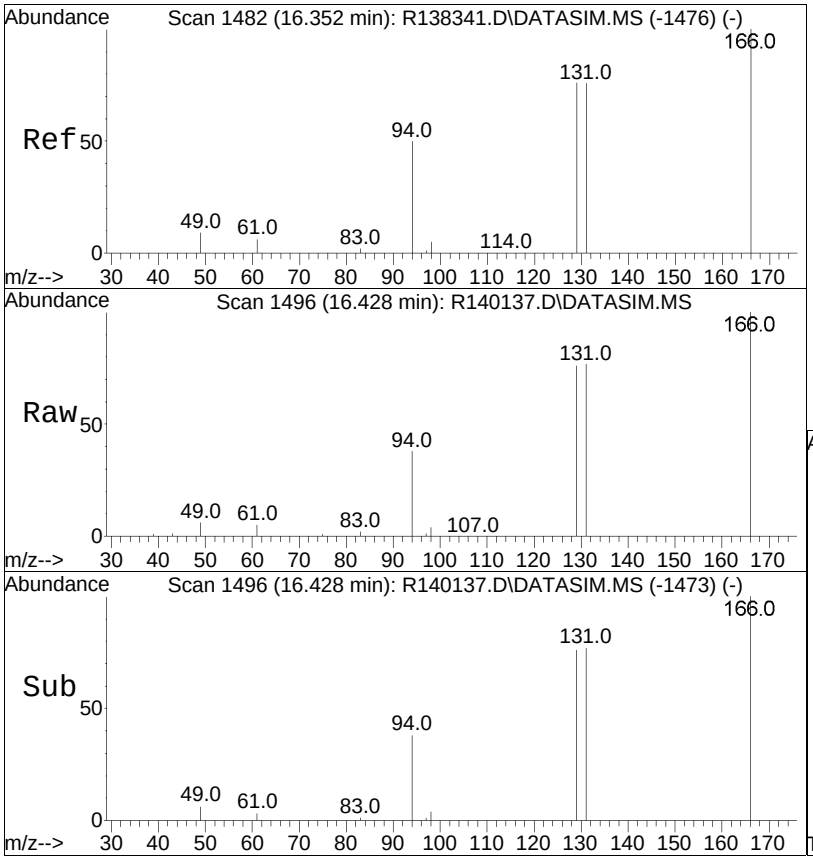



#54
1,2-dibromoethane
Concen: 4.83 ppbV
RT: 16.01 min Scan# 1450
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:107 Resp: 83331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.5 | 75.0 | 112.6 |

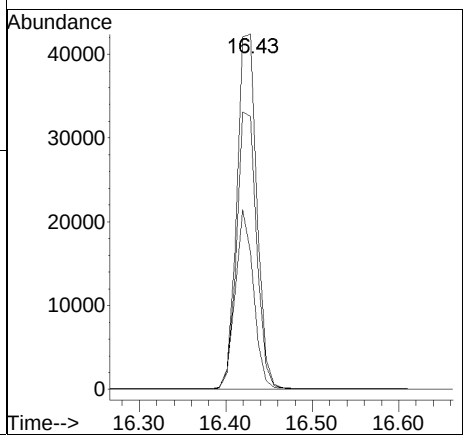


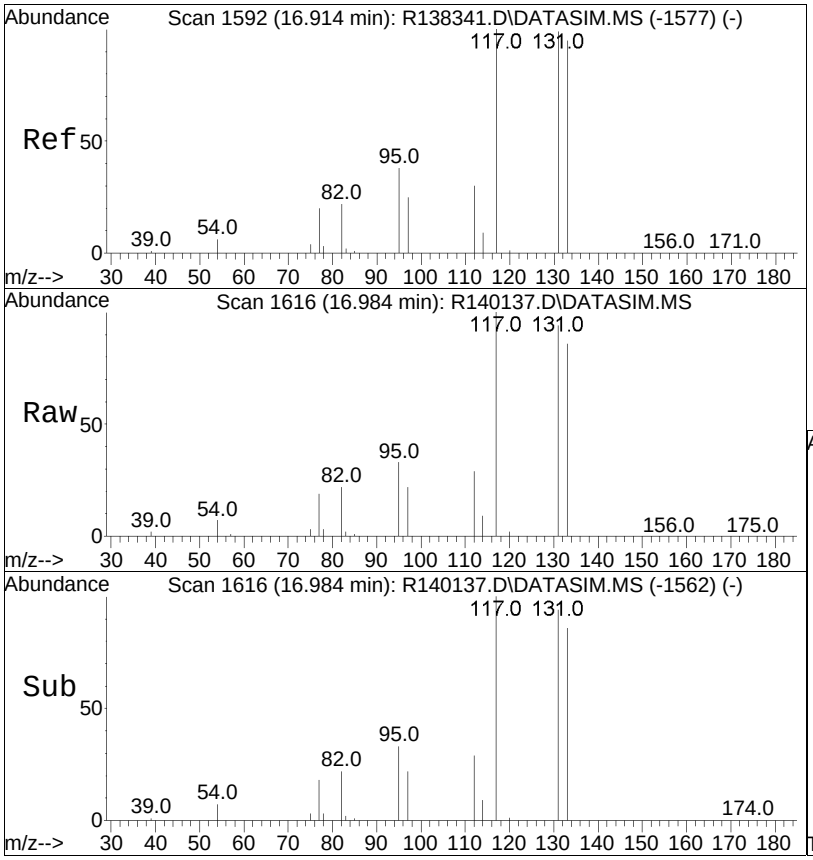



#55
tetrachloroethene
Concen: 4.34 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:166 Resp: 68225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 76.9 | 61.7 | 92.5 |
| 94 | 38.5 | 38.0 | 57.0 |

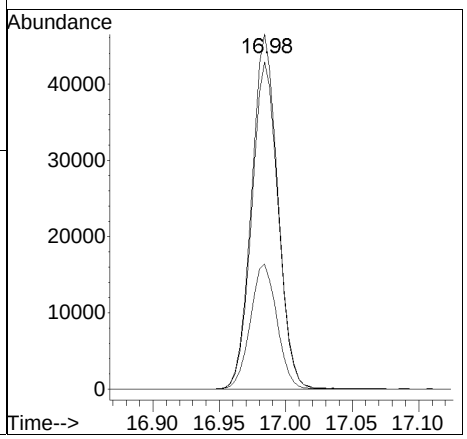


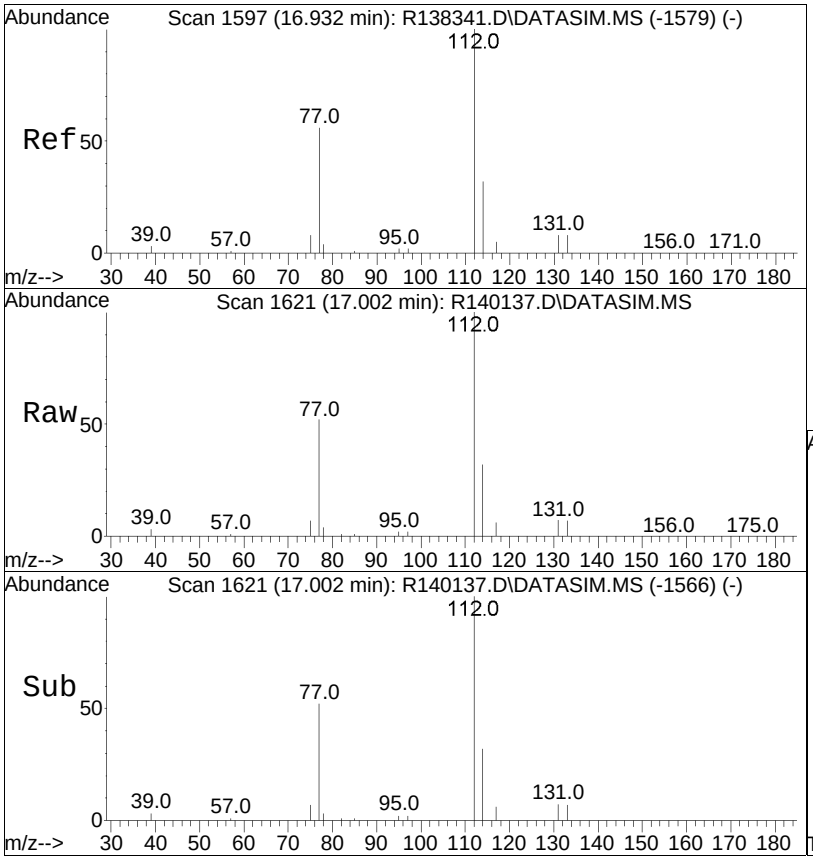



#56
1,1,1,2-tetrachloroethane
Concen: 4.17 ppbV
RT: 16.98 min Scan# 1616
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:131 Resp: 63635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 92.2 | 74.5 | 111.7 |
| 95 | 35.2 | 27.8 | 41.8 |

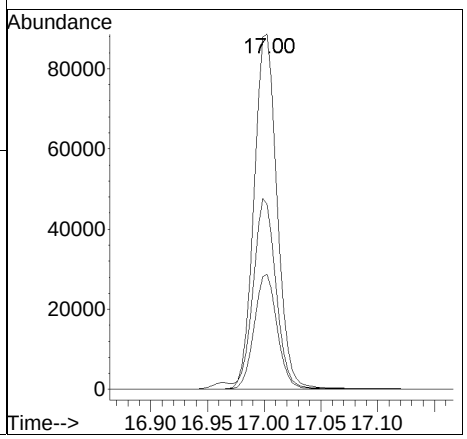


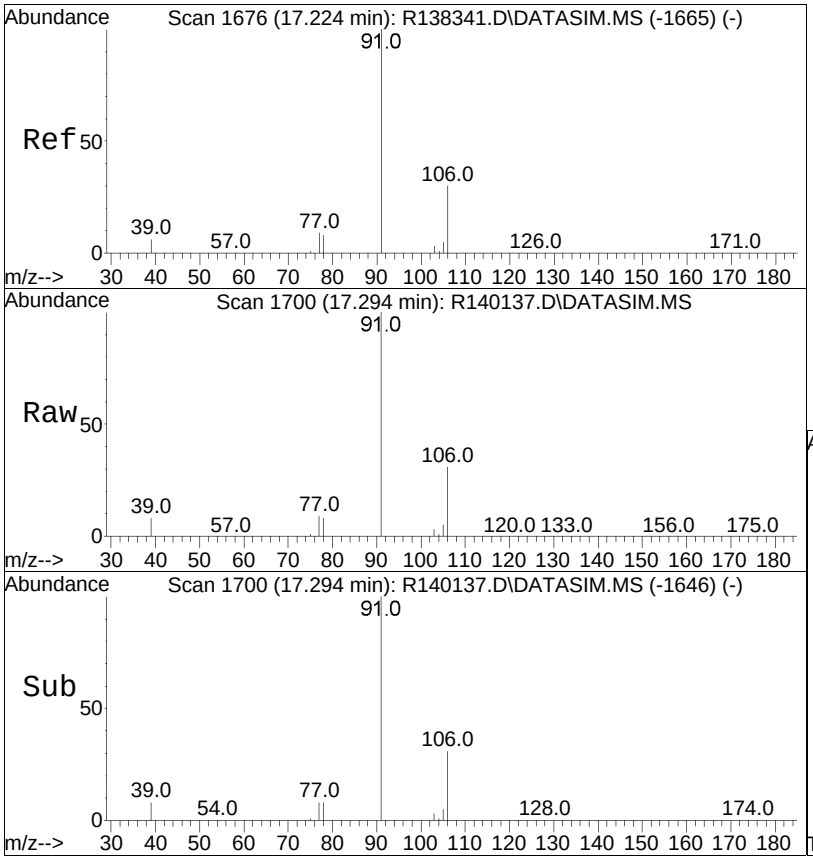



#57
chlorobenzene
Concen: 4.68 ppbV
RT: 17.00 min Scan# 1621
Delta R.T. 0.004 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:112 Resp: 125361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.4 | 25.4 | 38.2 |
| 77 | 52.1 | 43.1 | 64.7 |

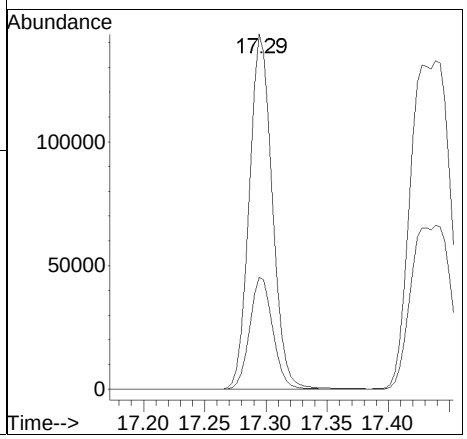


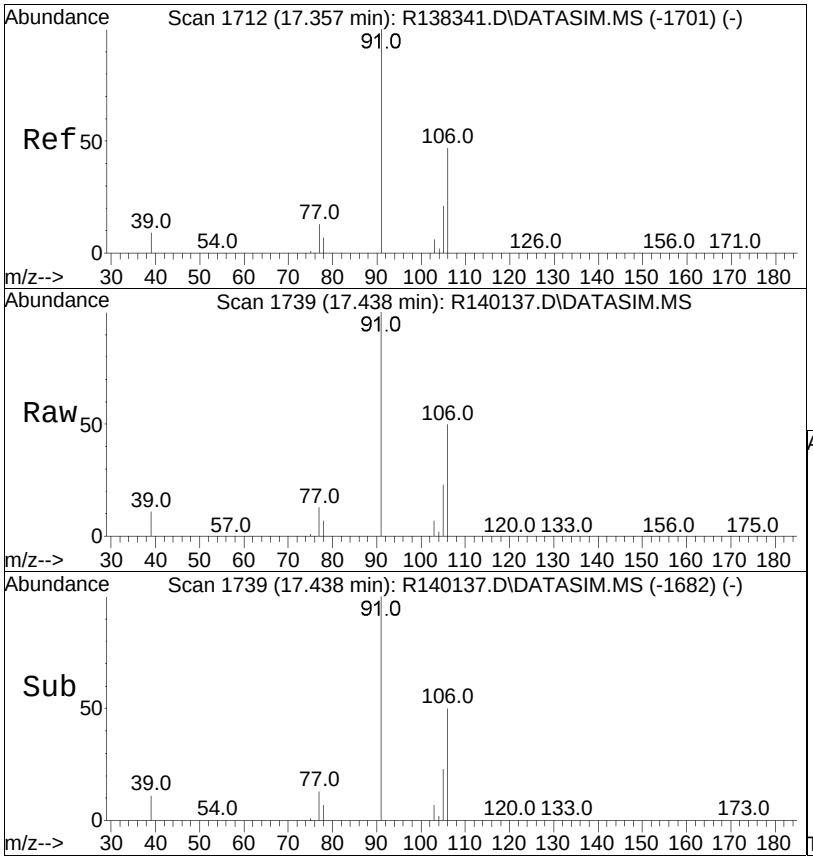



#58
ethylbenzene
Concen: 4.60 ppbV
RT: 17.29 min Scan# 1700
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 91 Resp: 187738

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.5 | 25.4 | 38.0 |

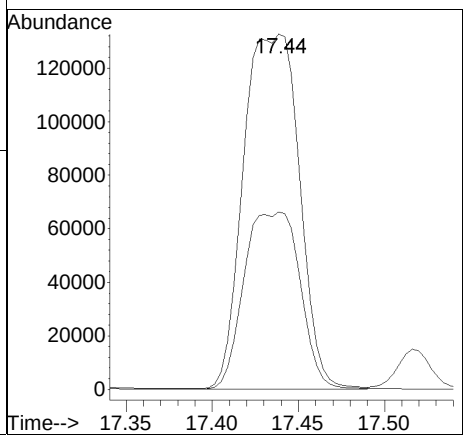


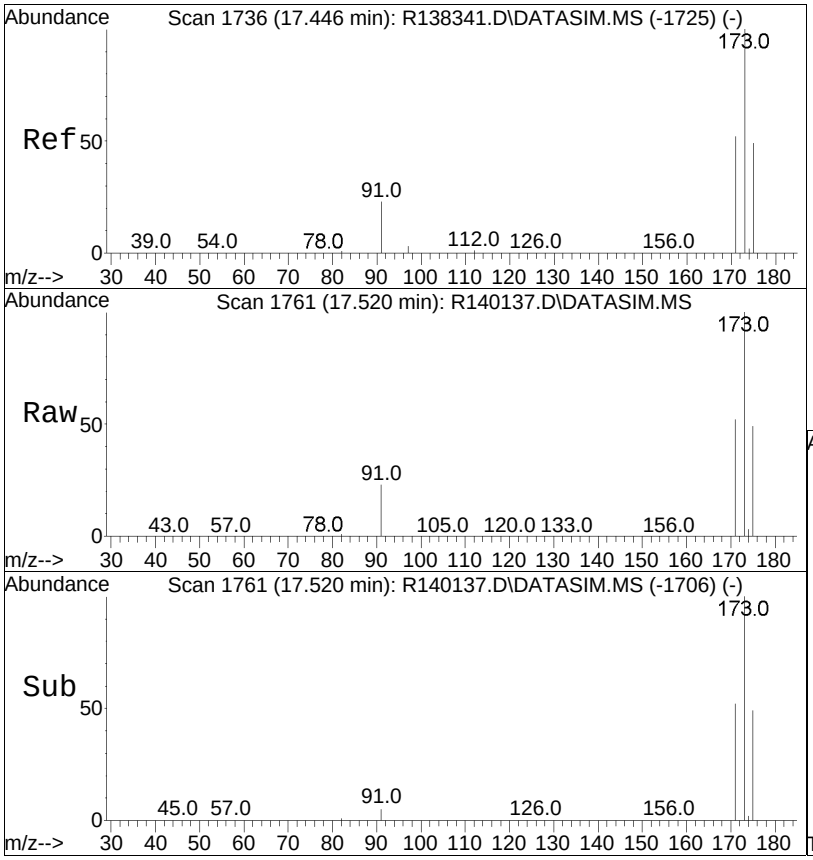



#59
m+p-xylene
Concen: 9.39 ppbV
RT: 17.44 min Scan# 1739
Delta R.T. 0.011 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 91 Resp: 298272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 50.0 | 39.7 | 59.5 |

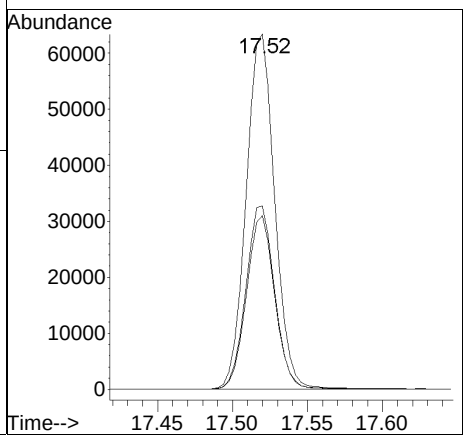


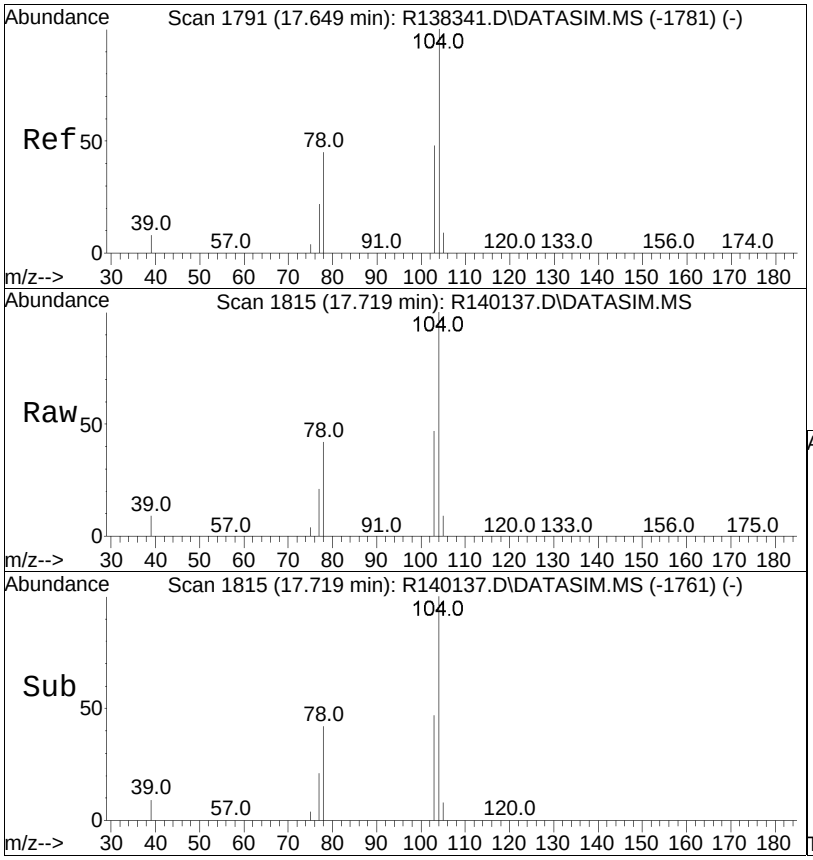



#60
bromoform
Concen: 4.15 ppbV
RT: 17.52 min Scan# 1761
Delta R.T. 0.004 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:173 Resp: 84007

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.9 | 38.3 | 57.5 |
| 171 | 51.6 | 41.5 | 62.3 |

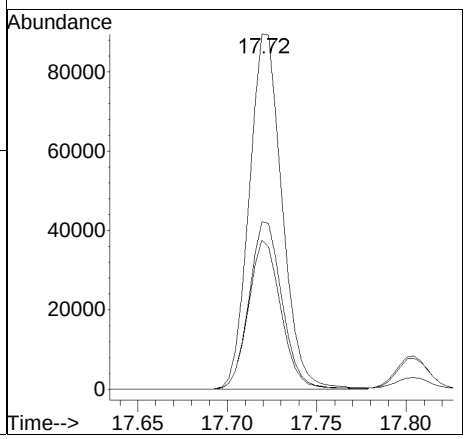


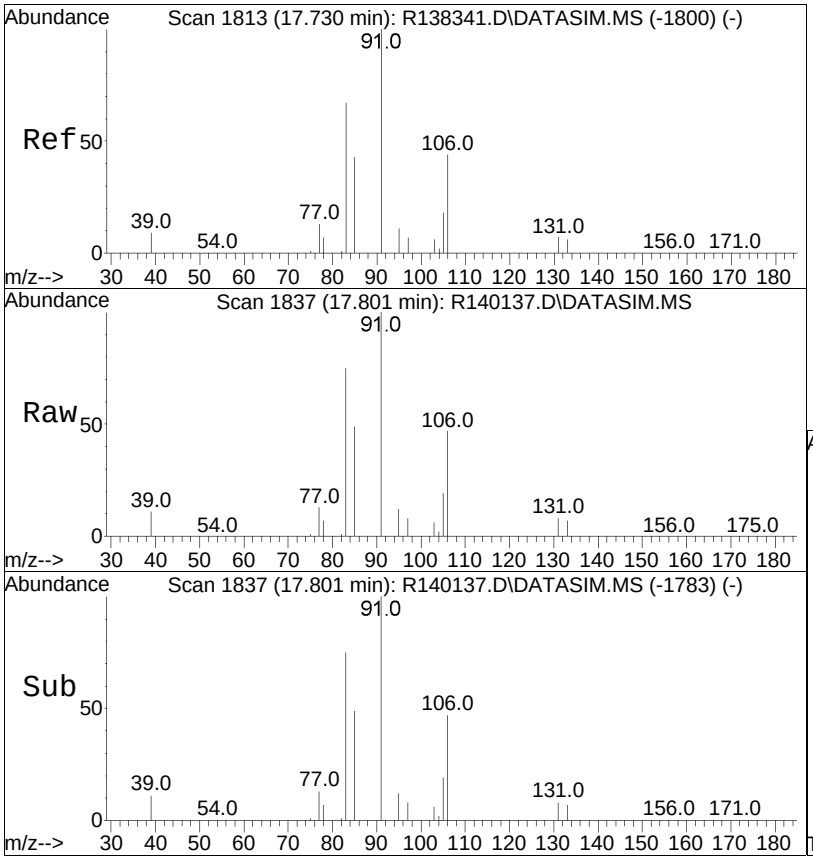



#61
styrene
Concen: 4.78 ppbV
RT: 17.72 min Scan# 1815
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:104 Resp: 114522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 47.1 | 38.5 | 57.7 |
| 78 | 42.0 | 33.7 | 50.5 |

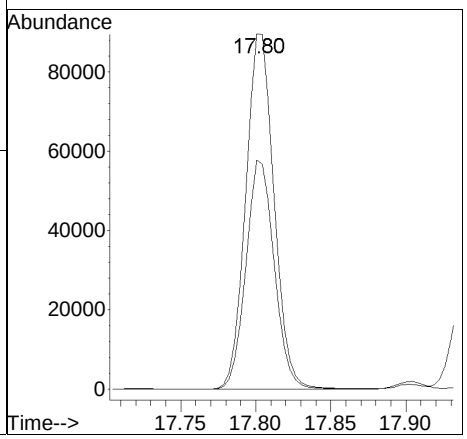


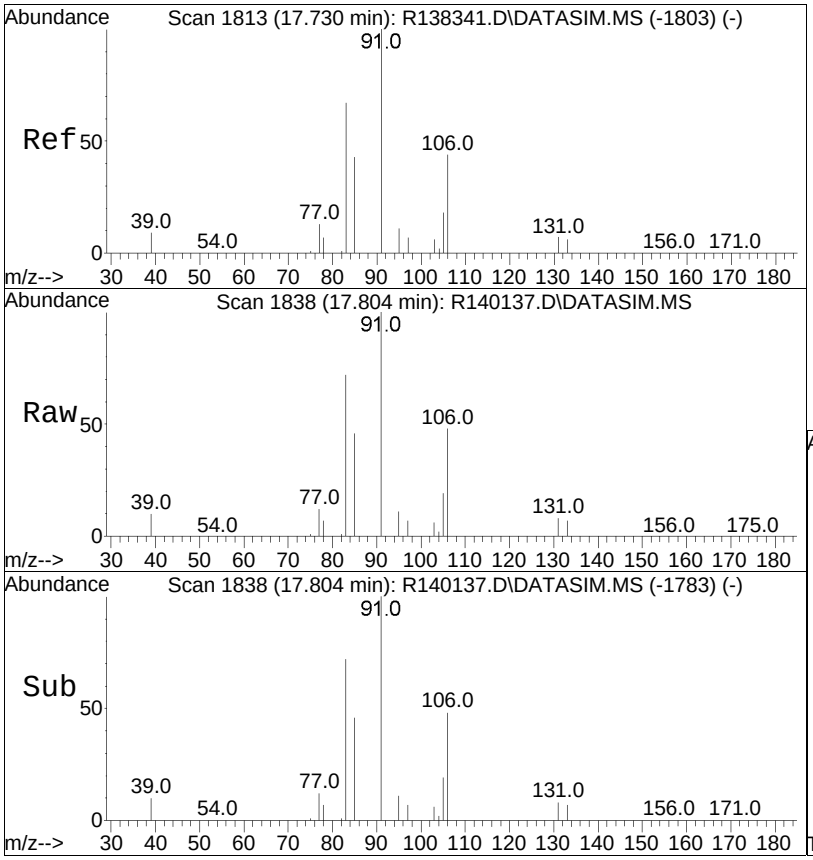



#62
1,1,2,2-tetrachloroethane
Concen: 4.86 ppbV
RT: 17.80 min Scan# 1837
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 83 Resp: 117689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.5 | 51.8 | 77.6 |

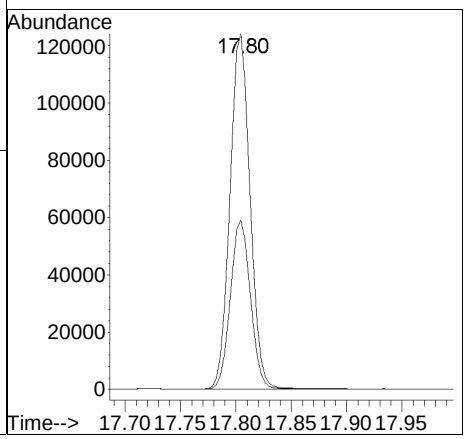


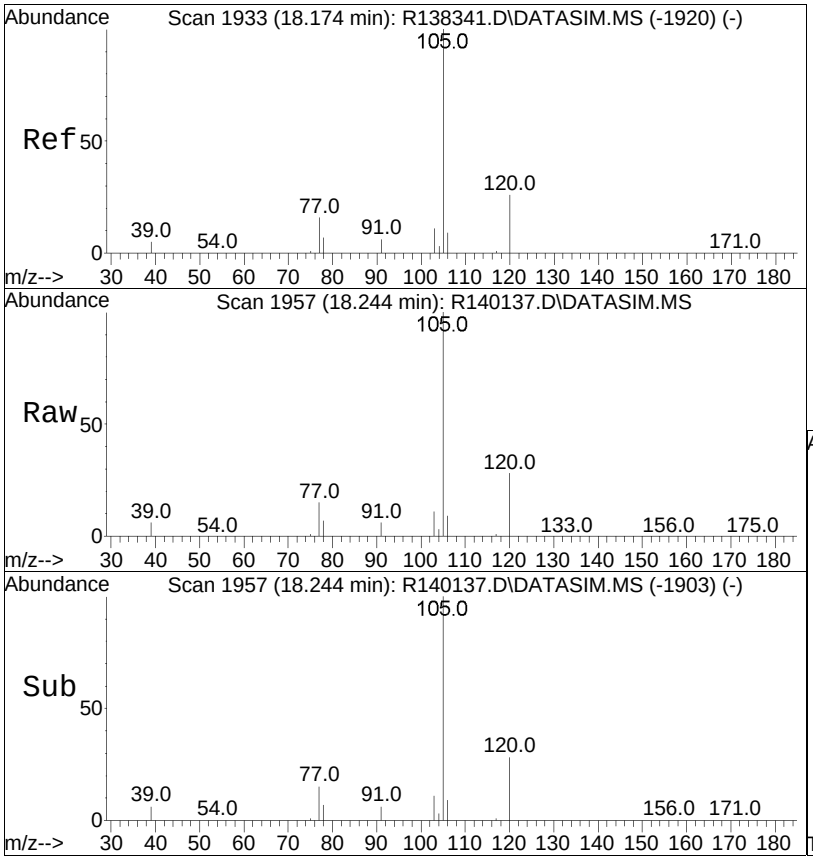



#63
o-xylene
Concen: 4.66 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.004 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 91 Resp: 156720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 47.6 | 37.6 | 56.4 |

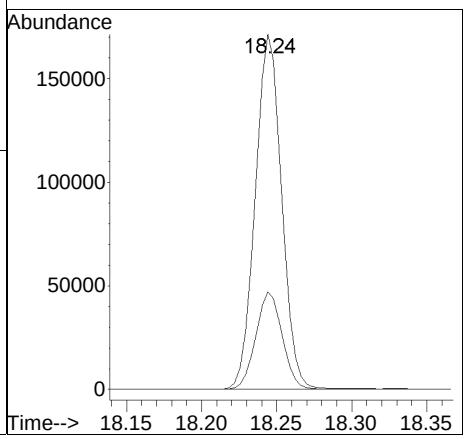


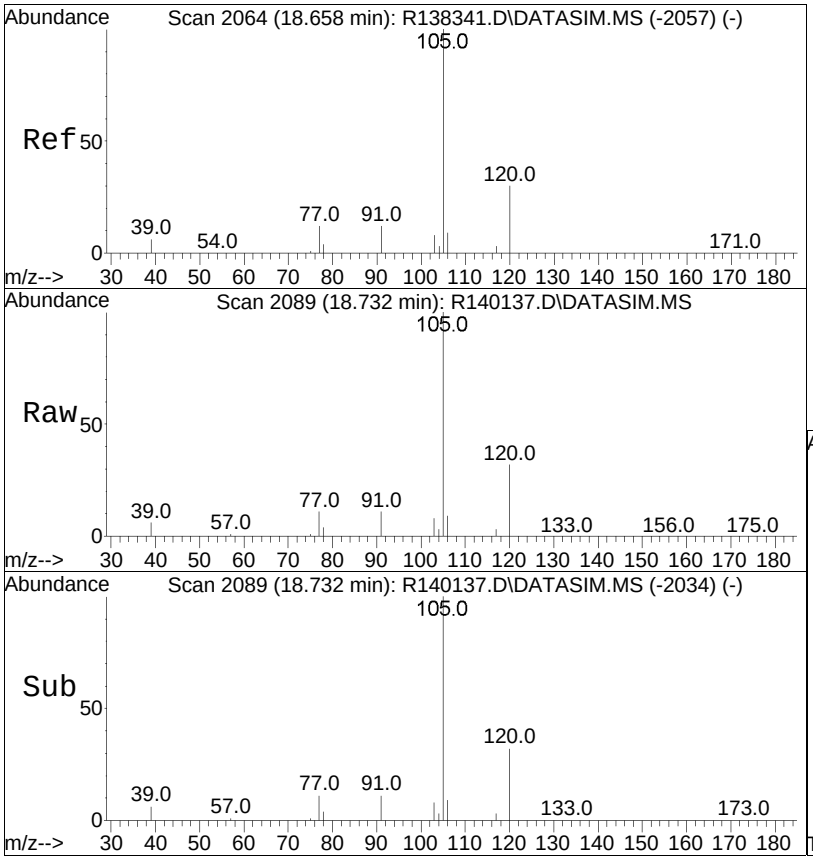



#65
isopropylbenzene
Concen: 4.56 ppbV
RT: 18.24 min Scan# 1957
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:105 Resp: 209525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.5 | 21.9 | 32.9 |

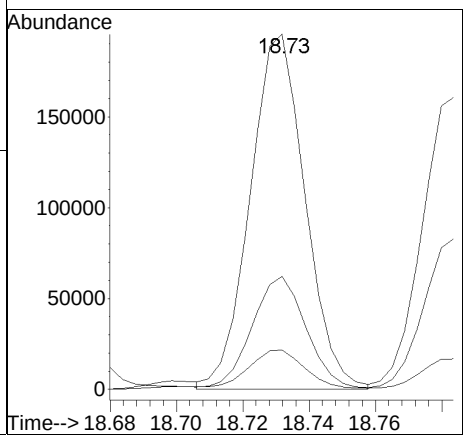


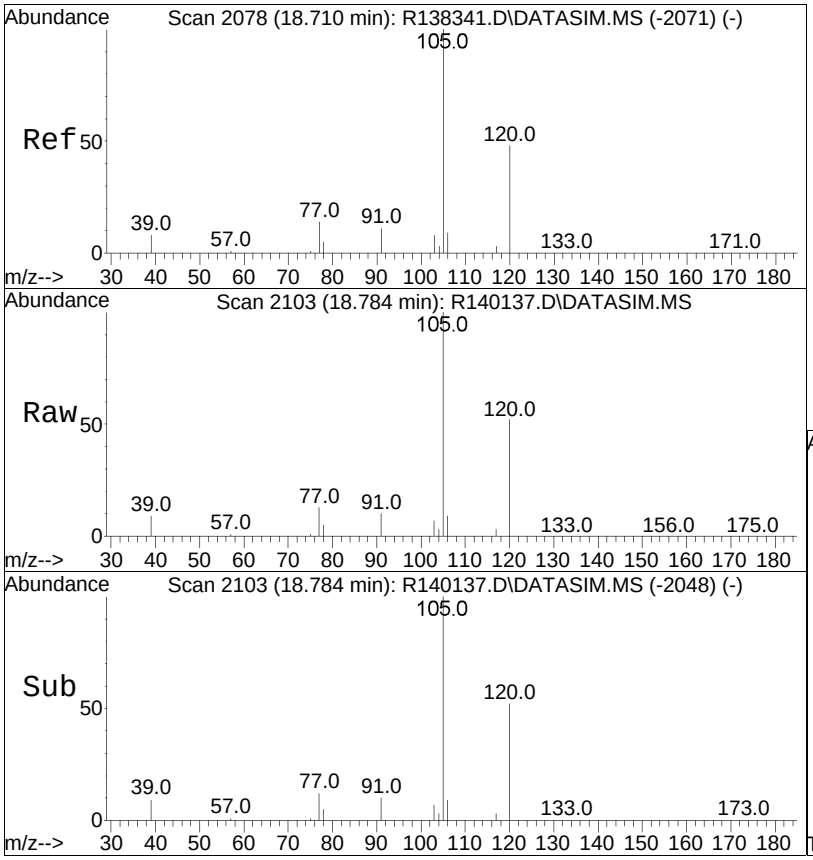



#66
4-ethyl toluene
Concen: 4.50 ppbV m
RT: 18.73 min Scan# 2089
Delta R.T. 0.004 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:105 Resp: 224830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 31.8 | 25.0 | 37.4 |
| 91 | 11.1 | 9.0 | 13.6 |

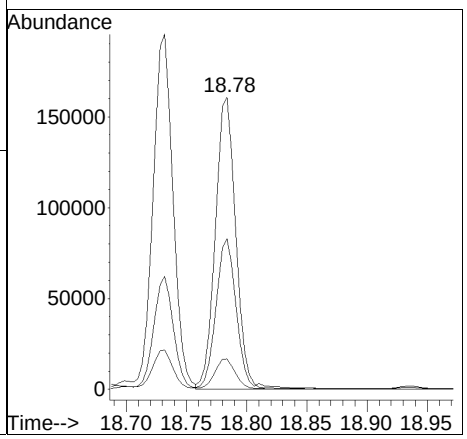


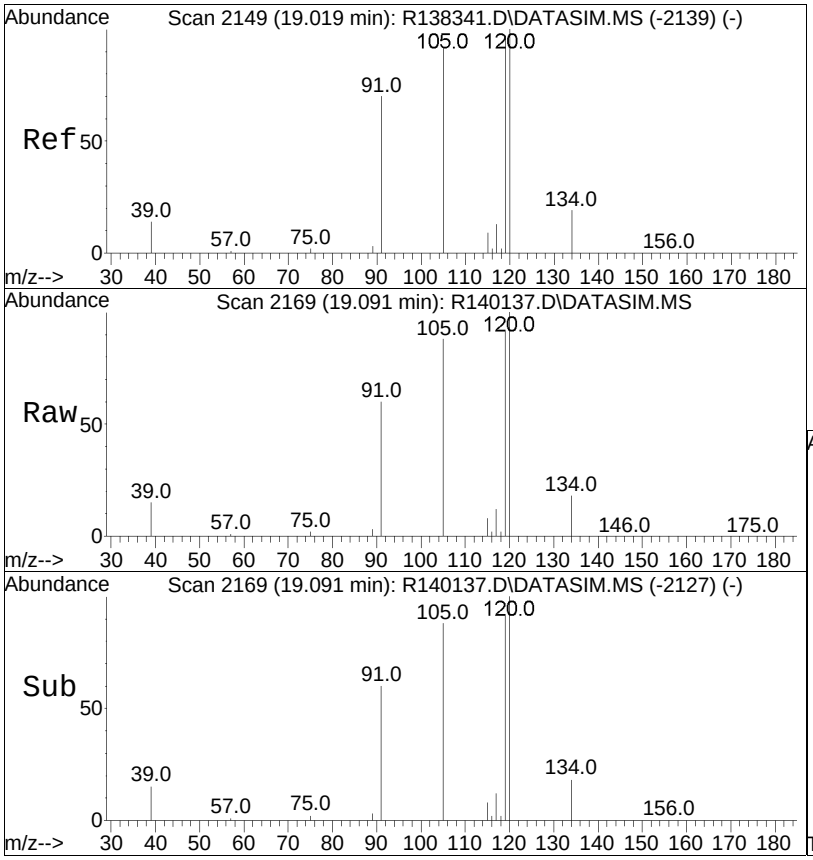



#67
1,3,5-trimethylbenzene
Concen: 4.74 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.004 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:105 Resp: 220288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 51.6 | 40.4 | 60.6 |
| 91 | 10.5 | 8.4 | 12.6 |

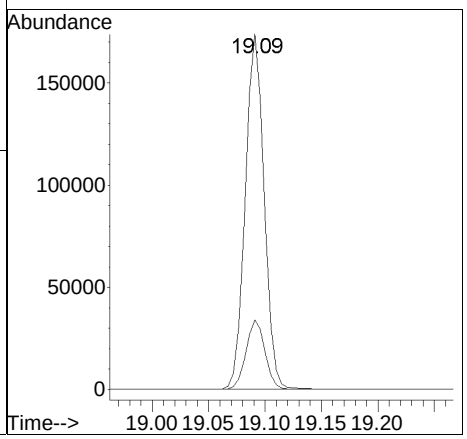


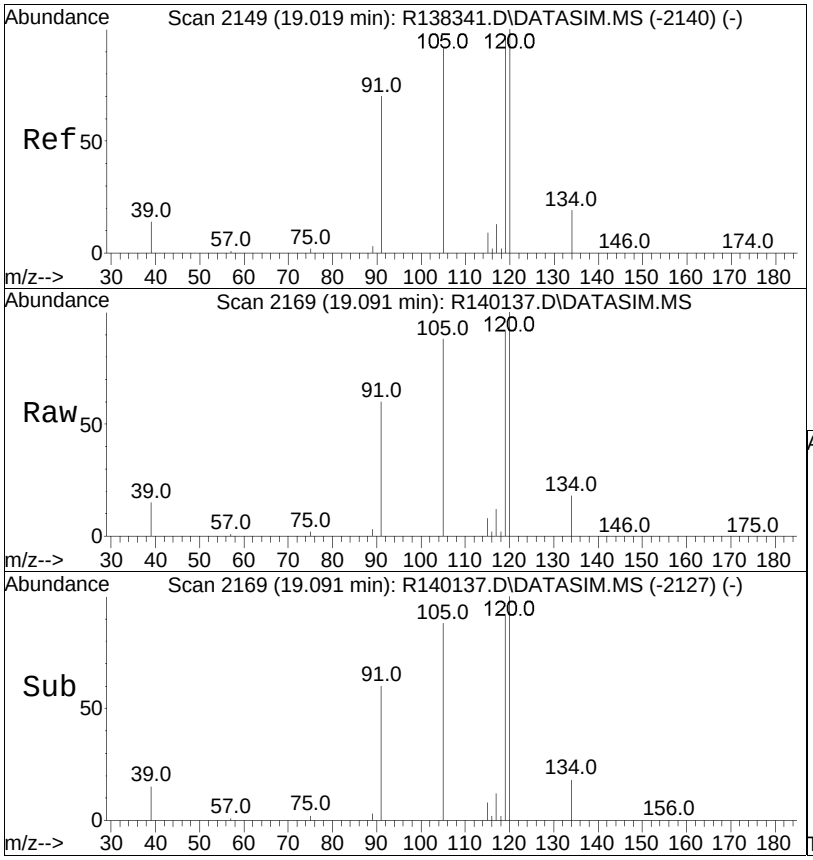



#68
tert-butylbenzene
Concen: 4.39 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:119 Resp: 202137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 19.6 | 15.8 | 23.6 |

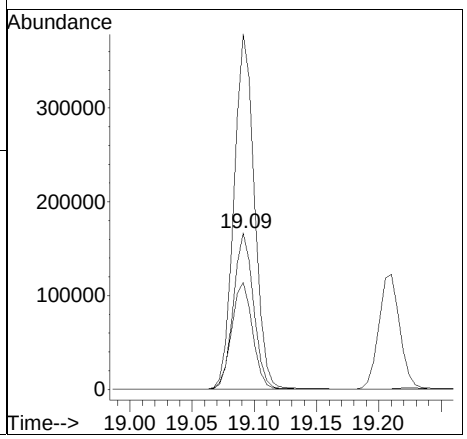


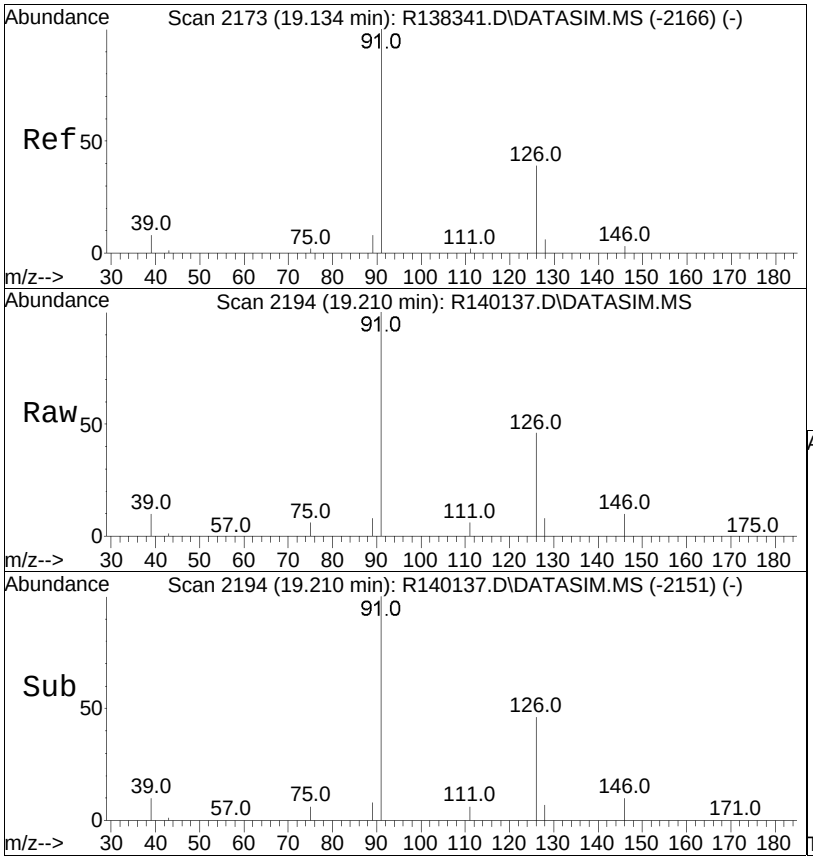



#69
1,2,4-trimethylbenzene
Concen: 4.71 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:105 Resp: 188545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 227.2 | 184.1 | 276.1 |
| 91 | 68.5 | 57.4 | 86.2 |

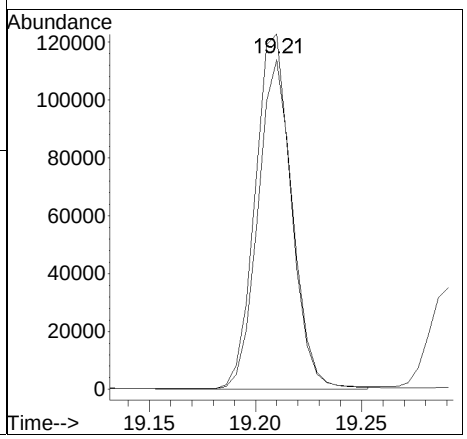


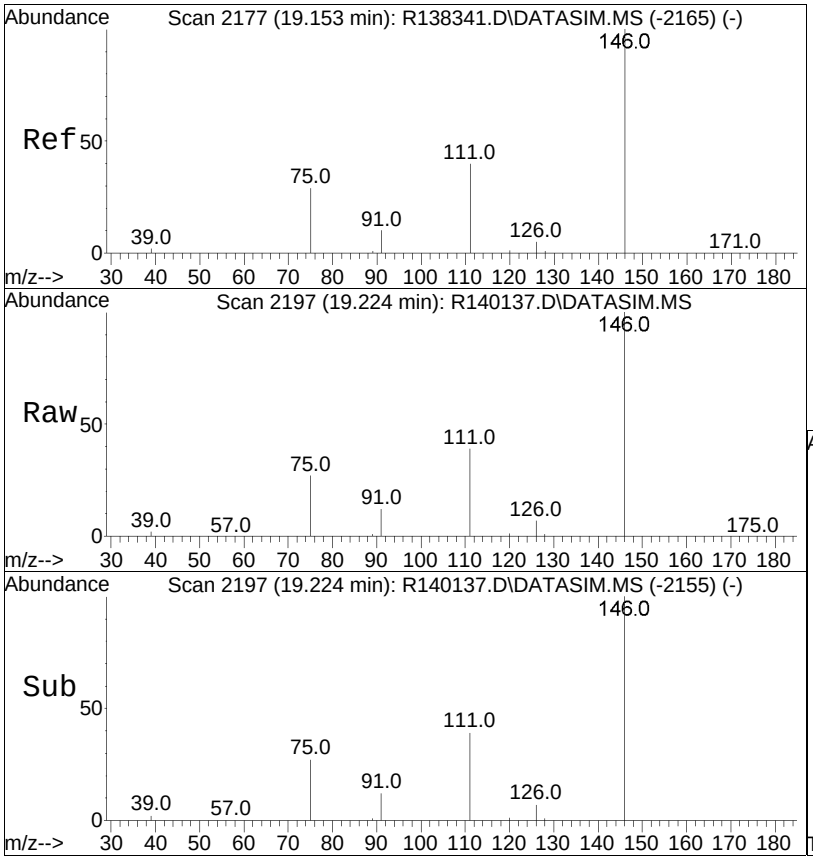



#70
Benzyl Chloride
Concen: 4.22 ppbV
RT: 19.21 min Scan# 2194
Delta R.T. 0.005 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 91 Resp: 144766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 92.7 | 70.2 | 105.4 |

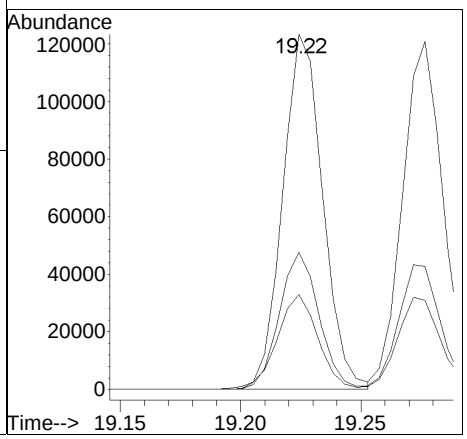


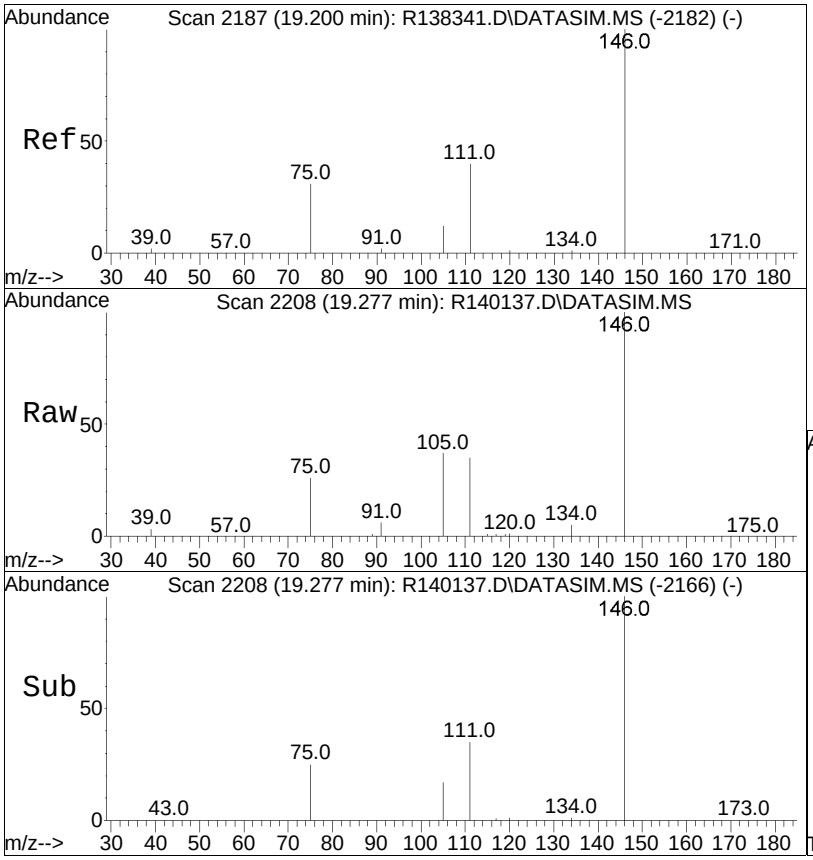



#71
1,3-dichlorobenzene
Concen: 4.80 ppbV
RT: 19.22 min Scan# 2197
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:146 Resp: 142489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 38.6 | 30.6 | 46.0 |
| 75 | 26.7 | 20.7 | 31.1 |

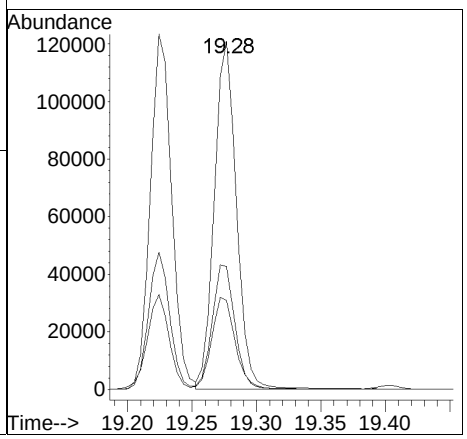


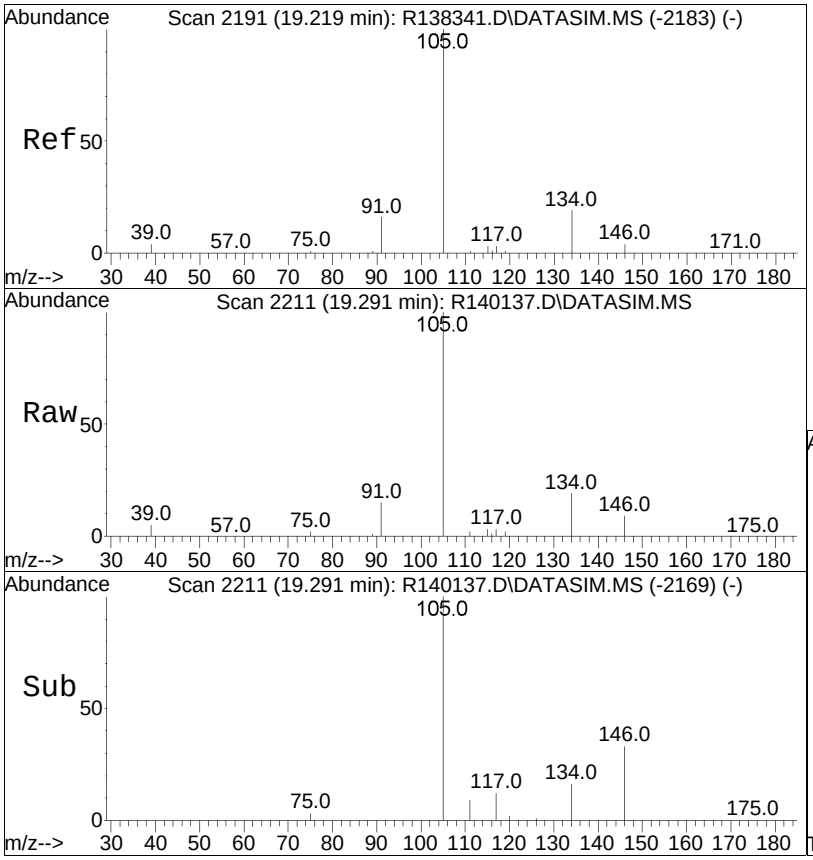



#72
1,4-dichlorobenzene
Concen: 4.70 ppbV
RT: 19.28 min Scan# 2208
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:146 Resp: 143556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 35.3 | 27.3 | 40.9 |
| 75 | 25.6 | 19.4 | 29.0 |

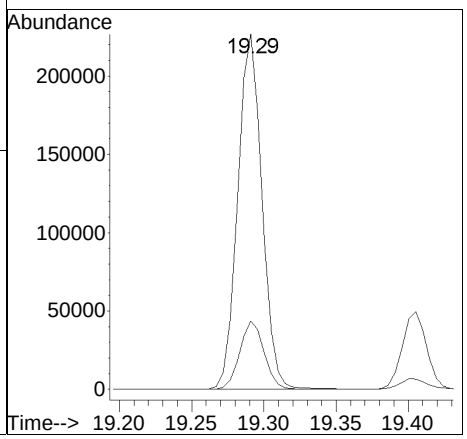


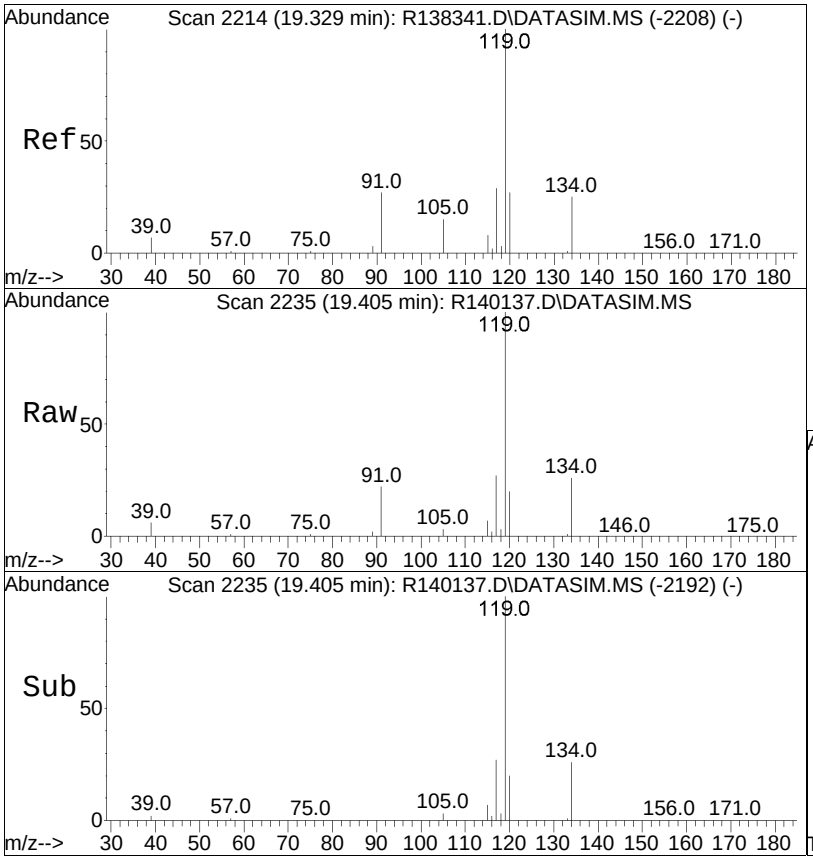



#73
sec-butylbenzene
Concen: 4.46 ppbV
RT: 19.29 min Scan# 2211
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:105 Resp: 263872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 15.6 | 23.4 |

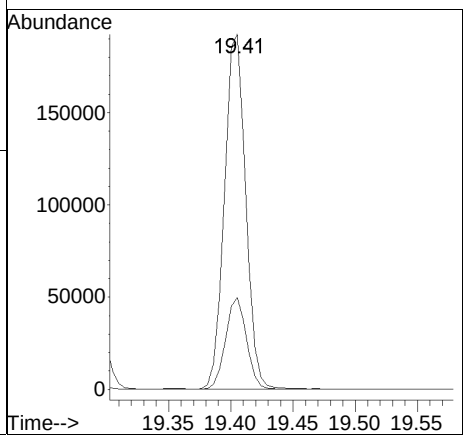


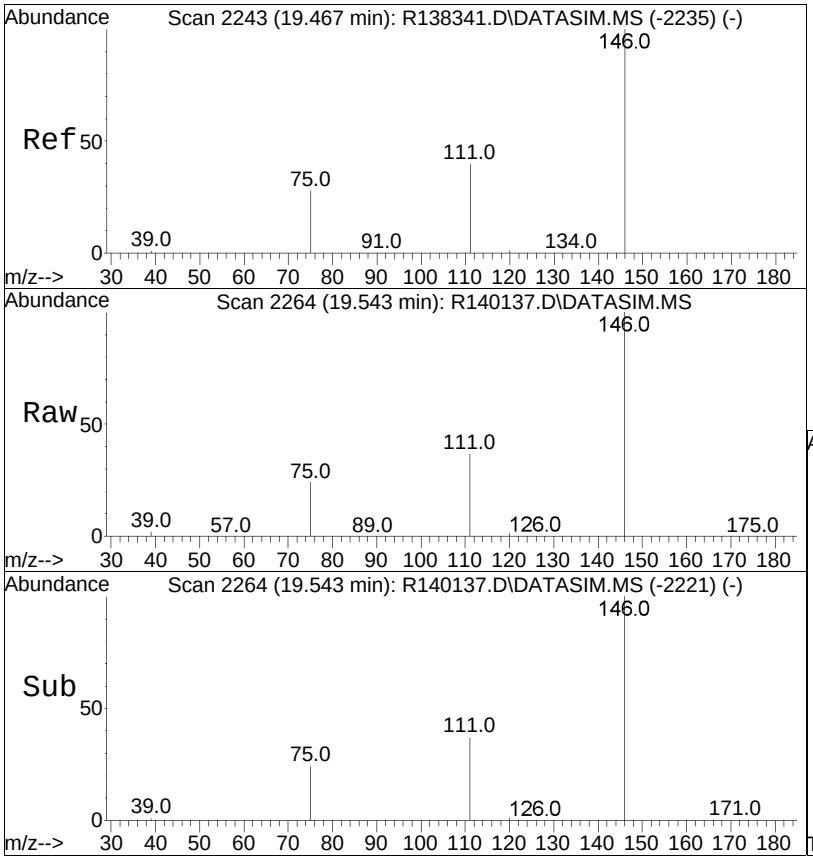



#74
p-isopropyltoluene
Concen: 4.11 ppbV
RT: 19.41 min Scan# 2235
Delta R.T. 0.005 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:119 Resp: 228313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.8 | 19.5 | 29.3 |

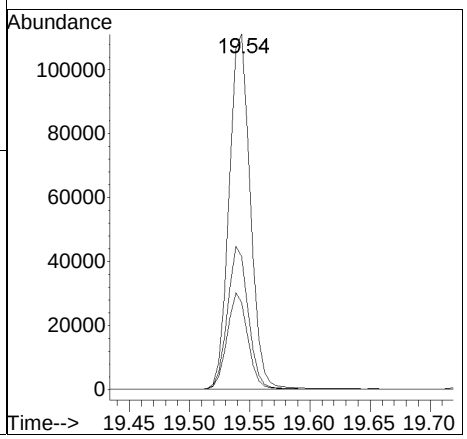


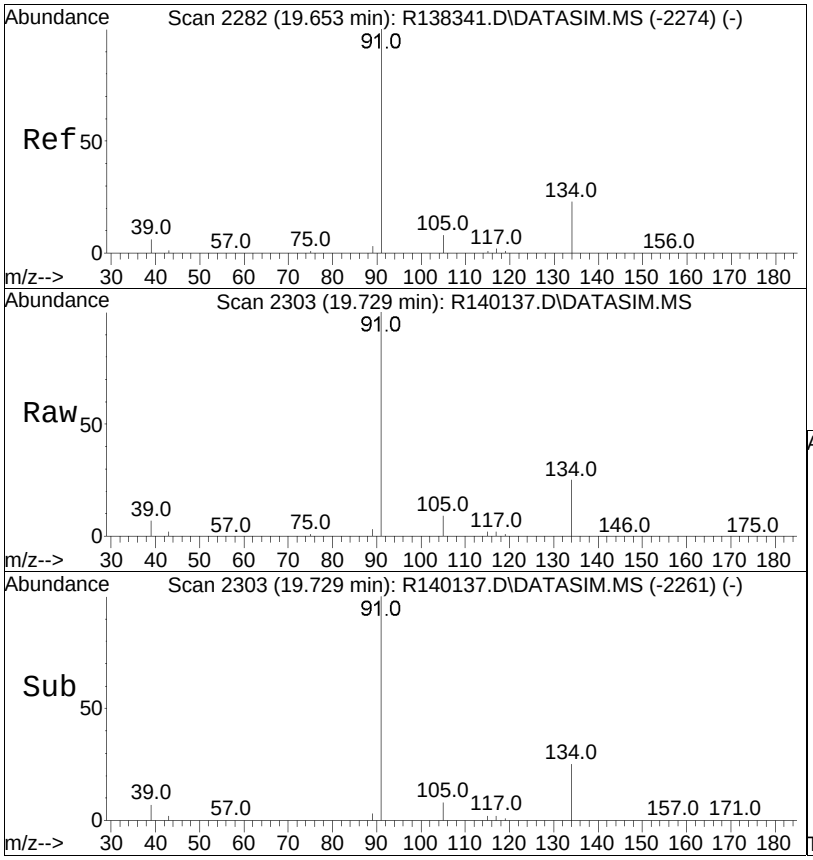



#75
1,2-dichlorobenzene
Concen: 4.71 ppbV
RT: 19.54 min Scan# 2264
Delta R.T. 0.005 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:146 Resp: 135921

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.3 | 32.5 | 48.7 |
| 75 | 24.4 | 21.8 | 32.8 |

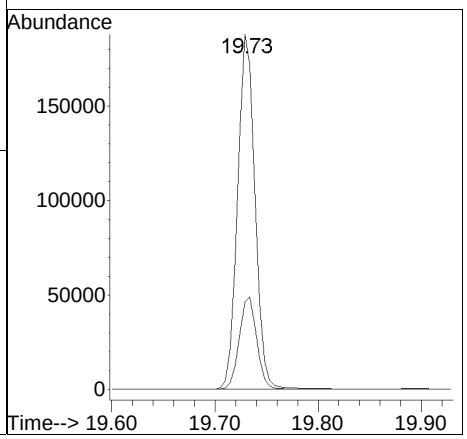


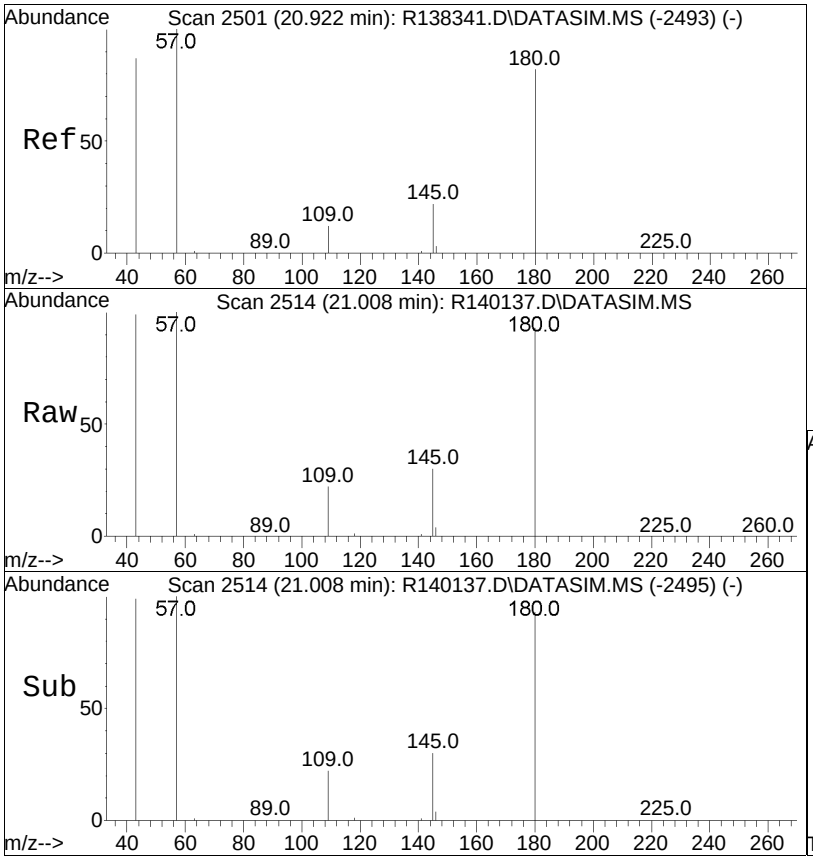



#76
n-butylbenzene
Concen: 4.73 ppbV
RT: 19.73 min Scan# 2303
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion: 91 Resp: 220366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 134 | 24.7 | 20.5 | 30.7 |

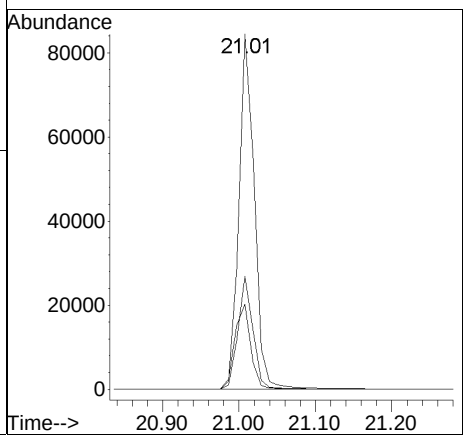


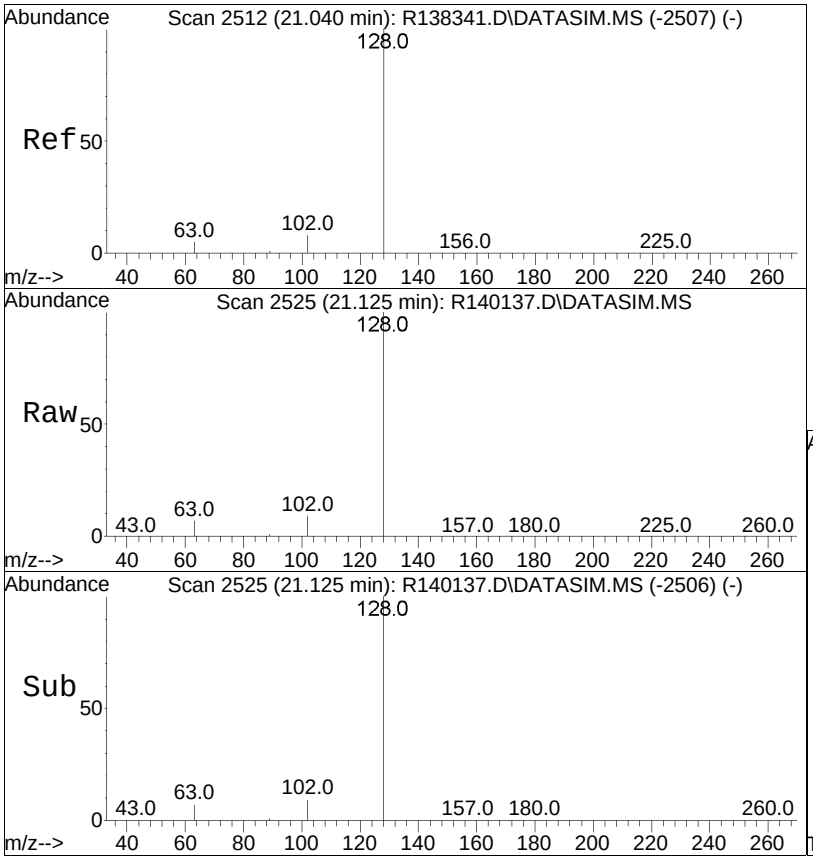



#77
1,2,4-trichlorobenzene
Concen: 5.13 ppbV
RT: 21.01 min Scan# 2514
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:180 Resp: 119320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 31.9 | 24.9 | 37.3 |
| 109 | 24.0 | 17.3 | 25.9 |

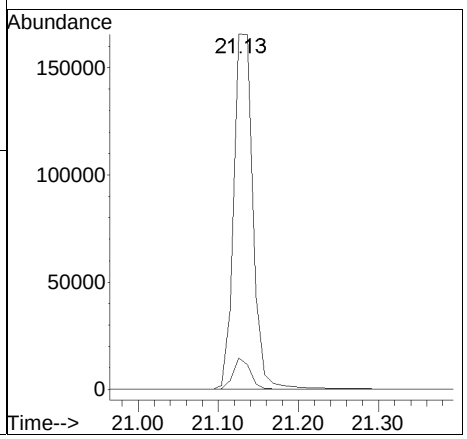


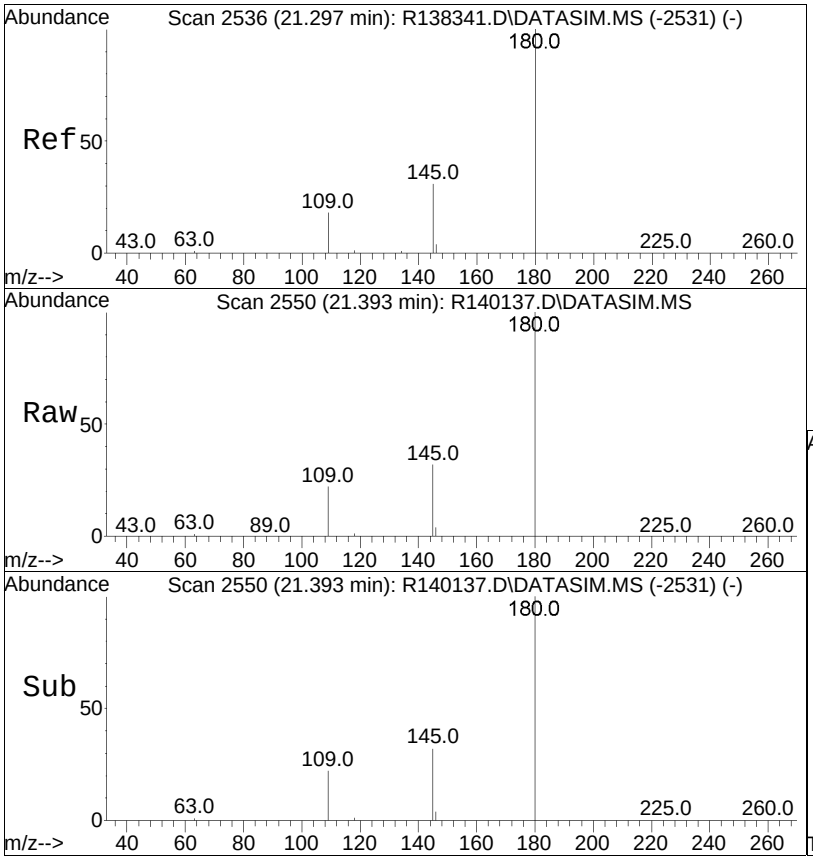



#78
naphthalene
Concen: 4.66 ppbV
RT: 21.13 min Scan# 2525
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:128 Resp: 277247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 8.9 | 6.9 | 10.3 |

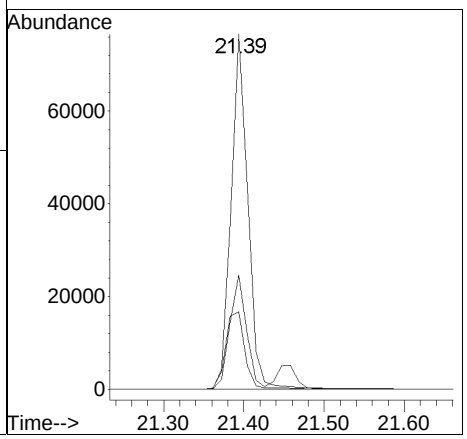


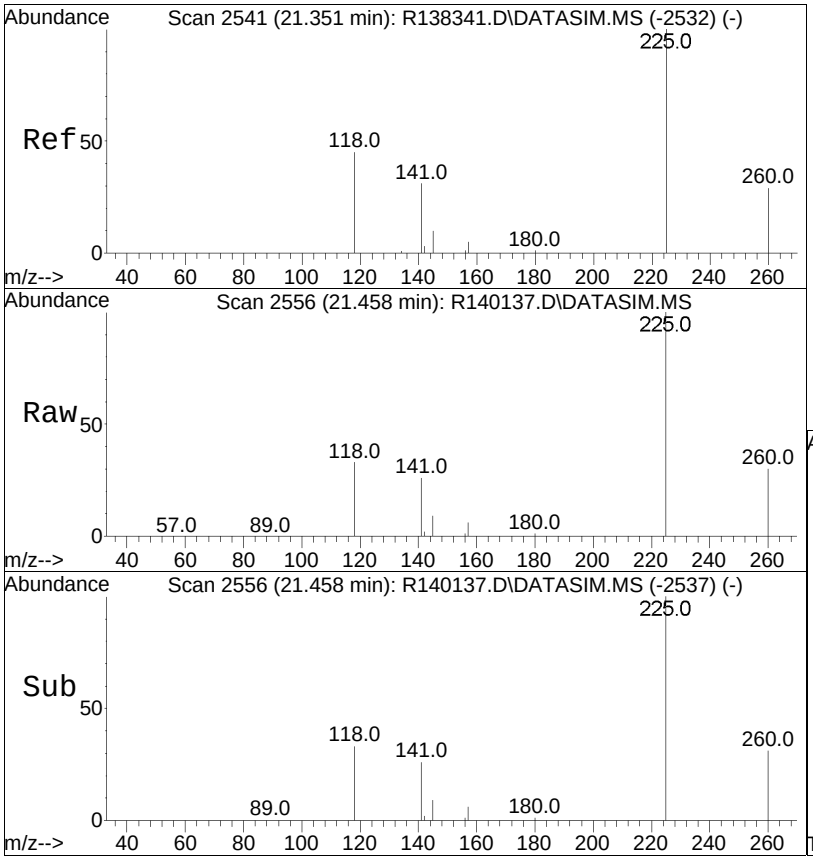



#79
1,2,3-trichlorobenzene
Concen: 5.18 ppbV
RT: 21.39 min Scan# 2550
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:180 Resp: 111460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 32.2 | 25.4 | 38.0 |
| 109 | 21.9 | 16.0 | 24.0 |

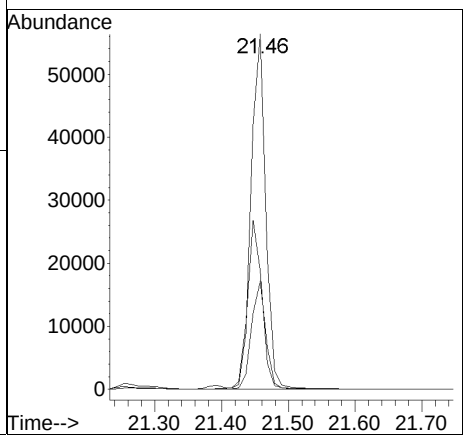





#80
hexachlorobutadiene
Concen: 4.91 ppbV
RT: 21.46 min Scan# 2556
Delta R.T. -0.000 min
Lab File: R140137.D
Acq: 11 Mar 2015 12:50 pm

Tgt Ion:225 Resp: 85943

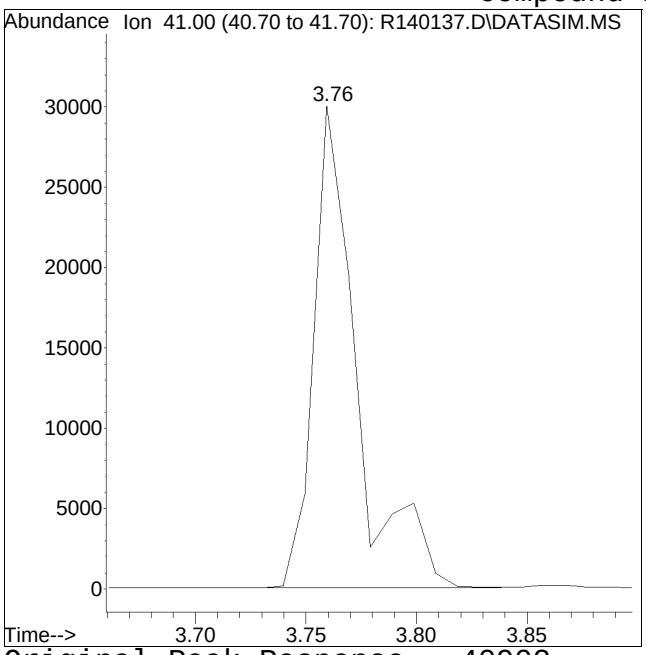
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 260 | 30.5 | 24.7 | 37.1 |
| 118 | 33.3 | 24.3 | 36.5 |



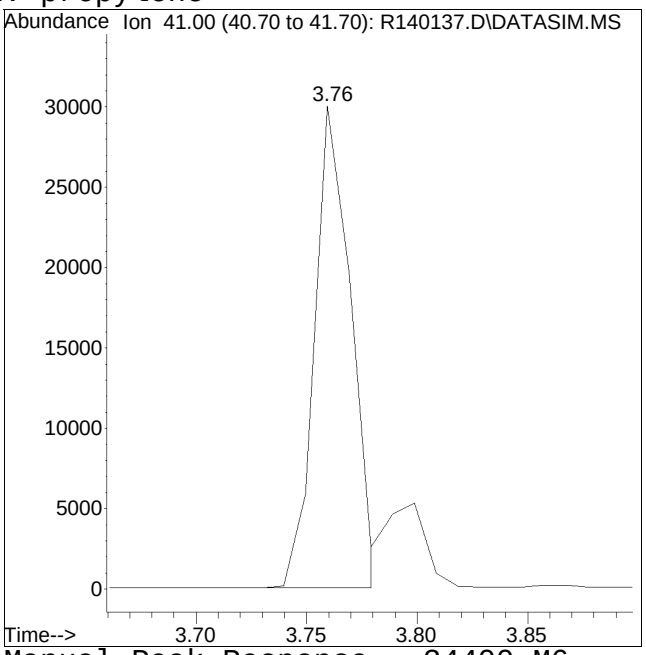
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-3,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #2: propylene




Original Peak Response = 40902



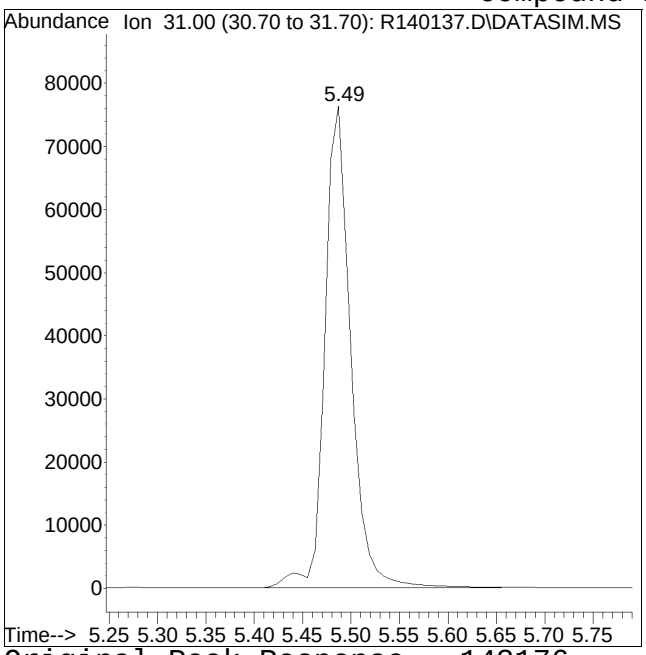

Manual Peak Response = 34400 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

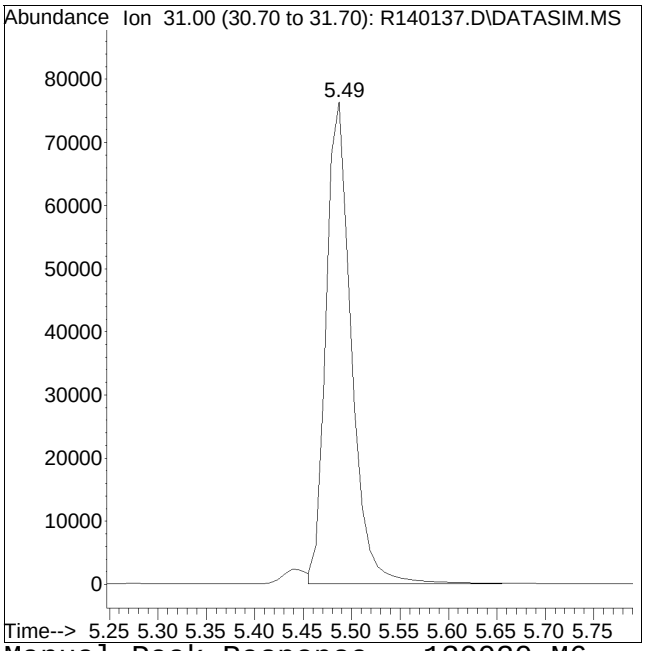
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-3,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #10: ethanol




Original Peak Response = 143176



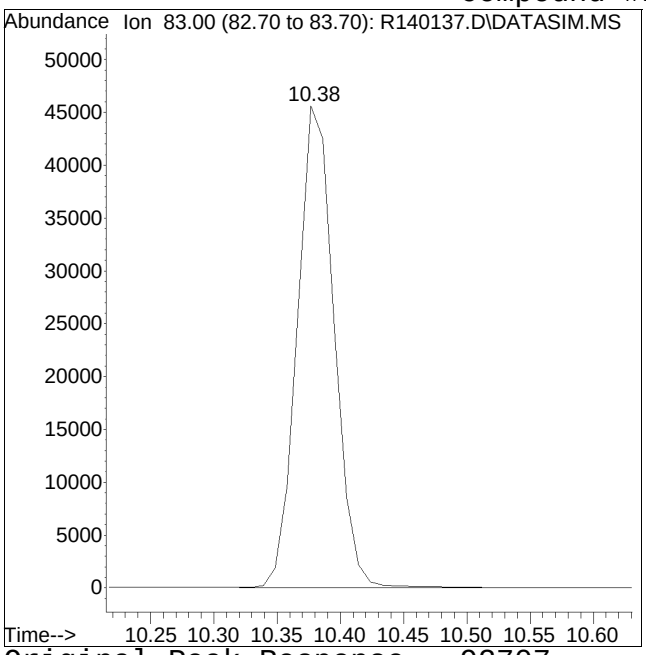

Manual Peak Response = 139030 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

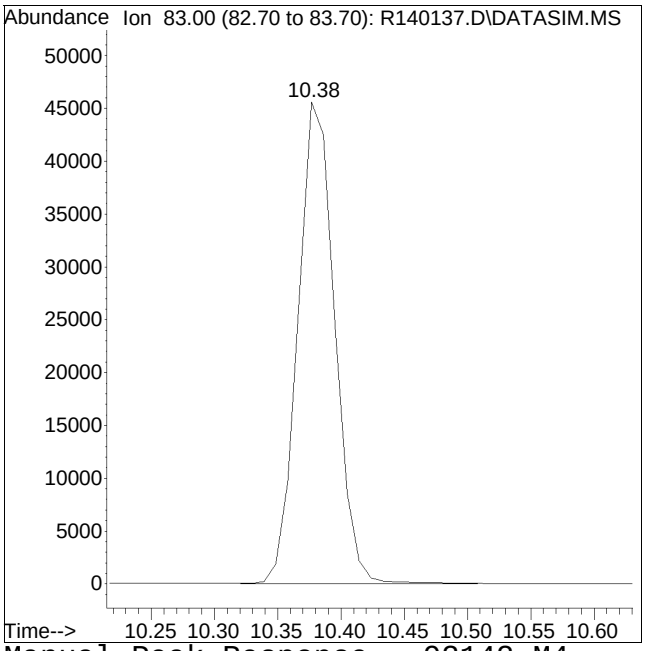
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-3,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #29: chloroform




Original Peak Response = 92707



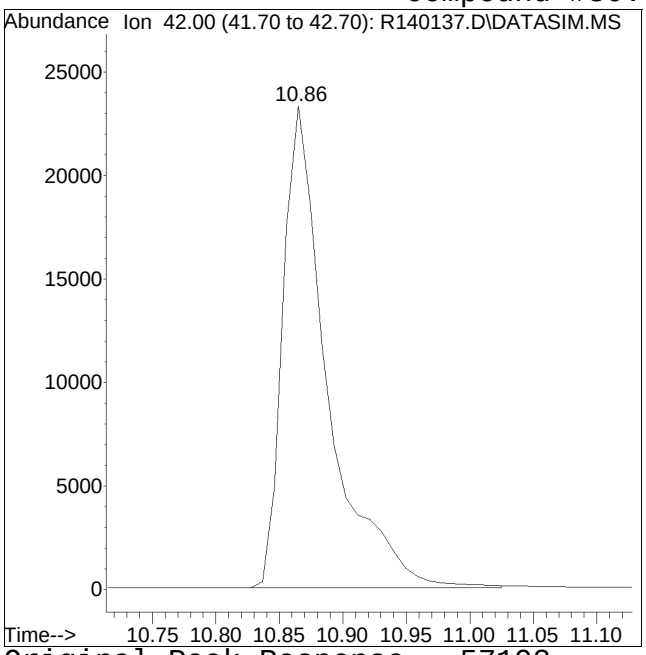

Manual Peak Response = 92142 M4

M4 = Poor automated baseline construction.

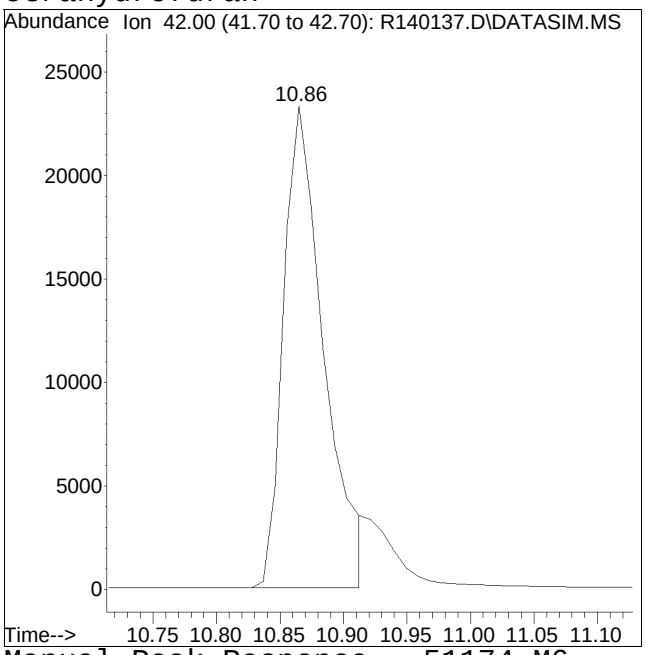
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-3,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #30: Tetrahydrofuran




Original Peak Response = 57192



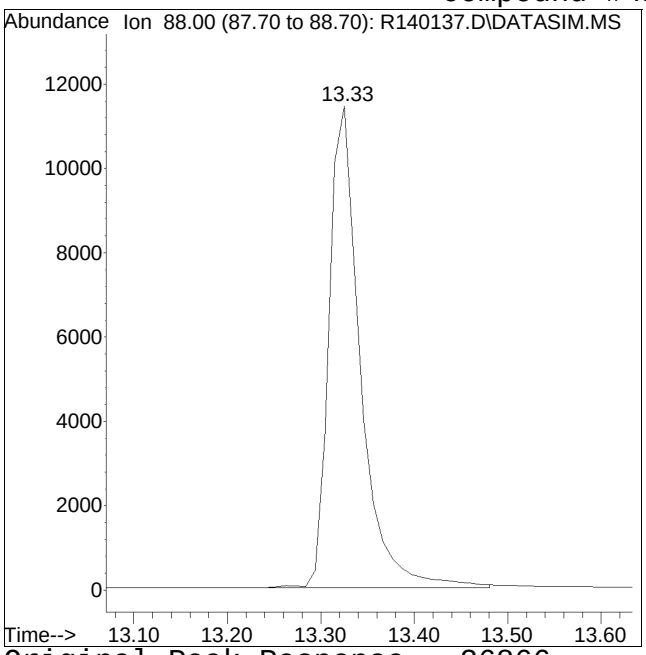

Manual Peak Response = 51174 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

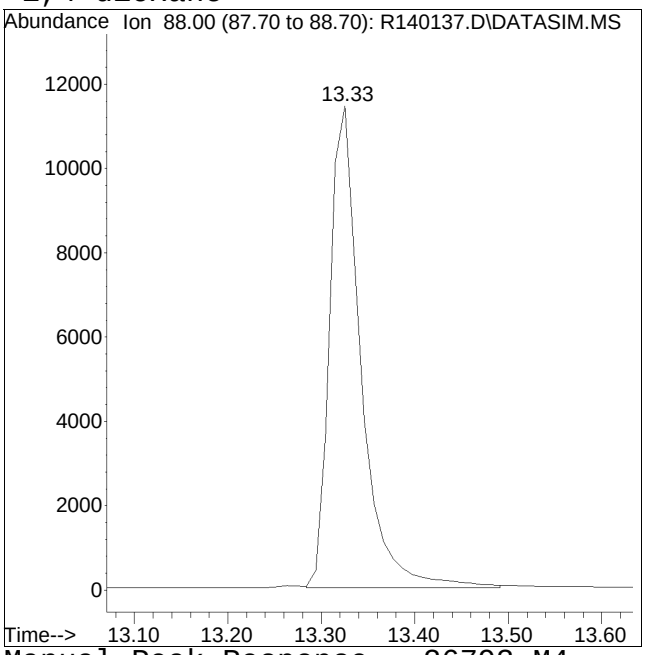
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-3,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #41: 1,4-dioxane




Original Peak Response = 26866



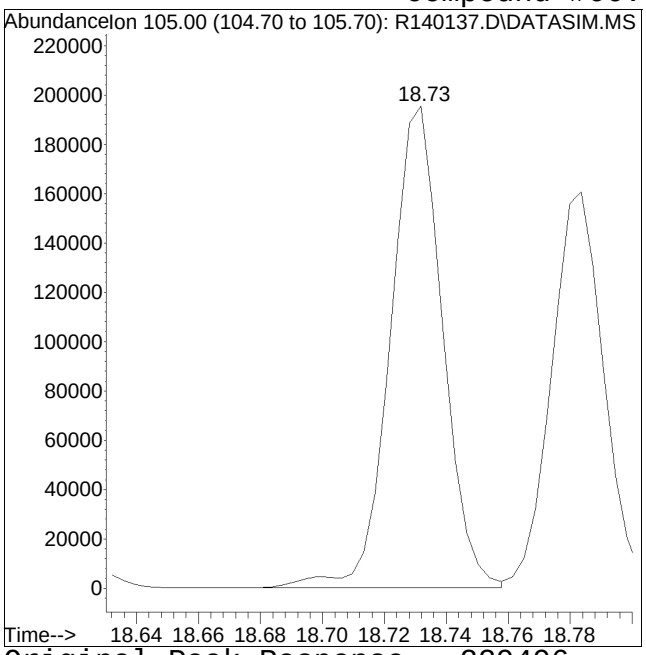

Manual Peak Response = 26793 M4

M4 = Poor automated baseline construction.

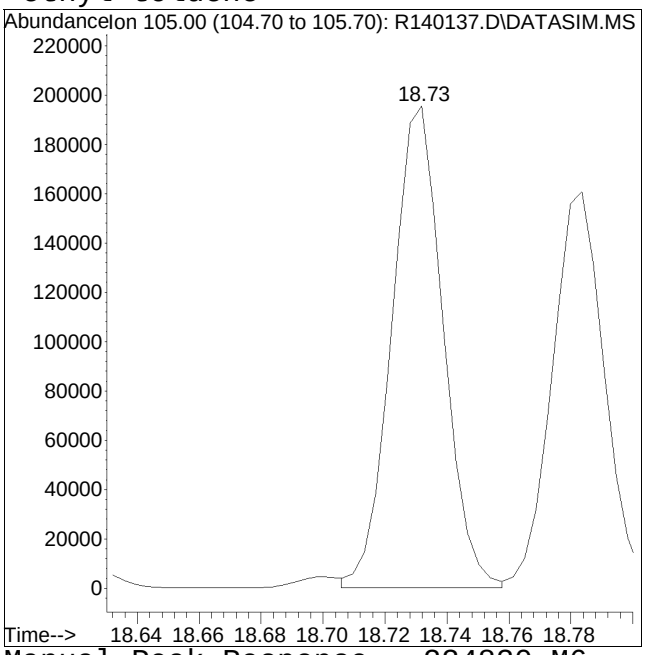
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TSIM150102.M
Data File : R140137.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:50 pm Instrument : Air Piano 1
Sample : WG767579-3,3,250,250 Quant Date : 3/11/2015 1:11 pm

Compound #66: 4-ethyl toluene




Original Peak Response = 229496




Manual Peak Response = 224830 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Duplicate Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140161.D
Acq On : 12 Mar 2015 9:18 am
Operator : AIRPIANO1:RY
Sample : WG767579-5,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 10:45:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 107833 | 10.000 | ppbV | 0.00 |
| Standard Area = 119028 | | | Recovery = | | 90.59% | |
| 32) 1,4-difluorobenzene | 12.51 | 114 | 224459 | 10.000 | ppbV | 0.00 |
| Standard Area = 266408 | | | Recovery = | | 84.25% | |
| 49) chlorobenzene-D5 | 16.96 | 54 | 55214 | 10.000 | ppbV | 0.00 |
| Standard Area = 58247 | | | Recovery = | | 94.79% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) dichlorodifluoromethane | 3.87 | 85 | 4561 | 0.338 | ppbV | 99 |
| 4) chloromethane | 4.09 | 50 | 351 | 0.051 | ppbV # | 82 |
| 5) Freon-114 | 4.25 | 85 | 289 | 0.015 | ppbV # | 88 |
| 6) vinyl chloride | 0.00 | | 0 | N.D. | d | |
| 7) 1,3-butadiene | 4.62 | | 0 | N.D. | | |
| 8) bromomethane | 0.00 | | 0 | N.D. | d | |
| 9) chloroethane | 5.28 | 64 | 61 | 0.017 | ppbV # | 1 |
| 13) trichlorofluoromethane | 6.41 | 101 | 3813 | 0.208 | ppbV | 100 |
| 16) 1,1-dichloroethene | 7.30 | | 0 | N.D. | | |
| 17) methylene chloride | 7.48 | | 0 | N.D. | | |
| 20) Freon 113 | 7.85 | 101 | 1027 | 0.066 | ppbV | 96 |
| 22) trans-1,2-dichloroethene | 8.72 | | 0 | N.D. | | |
| 23) 1,1-dichloroethane | 8.97 | | 0 | N.D. | | |
| 24) MTBE | 0.00 | | 0 | N.D. | d | |
| 27) cis-1,2-dichloroethene | 10.02 | | 0 | N.D. | | |
| 29) chloroform | 10.39 | 83 | 974 | 0.053 | ppbV # | 88 |
| 31) 1,2-dichloroethane | 0.00 | | 0 | N.D. | d | |
| 35) 1,1,1-trichloroethane | 11.55 | 97 | 423 | 0.027 | ppbV # | 61 |
| 36) benzene | 12.09 | 78 | 829 | 0.039 | ppbV # | 74 |
| 37) carbon tetrachloride | 12.26 | 117 | 953 | 0.064 | ppbV # | 96 |
| 39) 1,2-dichloropropane | 0.00 | | 0 | N.D. | d | |
| 40) bromodichloromethane | 0.00 | | 0 | N.D. | d | |
| 42) trichloroethene | 13.33 | 130 | 1324 | 0.128 | ppbV | 98 |
| 45) cis-1,3-dichloropropene | 0.00 | | 0 | N.D. | d | |
| 47) trans-1,3-dichloropropene | 14.90 | 75 | 183 | 0.018 | ppbV # | 32 |
| 48) 1,1,2-trichloroethane | 15.05 | | 0 | N.D. | | |
| 50) toluene | 15.37 | 91 | 6290 | 0.217 | ppbV | 100 |
| 53) dibromochloromethane | 0.00 | | 0 | N.D. | d | |
| 54) 1,2-dibromoethane | 16.04 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140161.D
Acq On : 12 Mar 2015 9:18 am
Operator : AIRPIANO1:RY
Sample : WG767579-5,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 10:45:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311SIM\R140137.D
Sub List : TO15_SIM+Naph - All Compounds reported

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 55) tetrachloroethene | 16.43 | 166 | 5168 | 0.347 | ppbV | 94 |
| 56) 1,1,1,2-tetrachloroethane | 16.98 | | 0 | N.D. | | |
| 57) chlorobenzene | 0.00 | | 0 | N.D. | d | |
| 58) ethylbenzene | 17.30 | 91 | 6448 | 0.167 | ppbV | 96 |
| 59) m+p-xylene | 17.43 | 91 | 19904 | 0.661 | ppbV | 96 |
| 60) bromoform | 17.52 | | 0 | N.D. | | |
| 61) styrene | 17.73 | 104 | 205 | 0.009 | ppbV # | 60 |
| 62) 1,1,2,2-tetrachloroethane | 0.00 | | 0 | N.D. | d | |
| 63) o-xylene | 17.80 | 91 | 11005 | 0.345 | ppbV | 98 |
| 66) 4-ethyl toluene | 18.73 | 105 | 22963 | 0.485 | ppbV | 98 |
| 67) 1,3,5-trimethylbenzene | 18.78 | 105 | 68831 | 1.562 | ppbV | 100 |
| 69) 1,2,4-trimethylbenzene | 19.09 | 105 | 134897 | 3.555 | ppbV # | 66 |
| 71) 1,3-dichlorobenzene | 0.00 | | 0 | N.D. | d | |
| 72) 1,4-dichlorobenzene | 19.28 | 146 | 1251 | 0.043 | ppbV # | 45 |
| 75) 1,2-dichlorobenzene | 19.54 | 146 | 913 | 0.033 | ppbV # | 1 |
| 77) 1,2,4-trichlorobenzene | 20.96 | 180 | 362 | 0.016 | ppbV # | 1 |
| 78) naphthalene | 21.13 | 128 | 318743 | 5.655 | ppbV | 100 |
| 80) hexachlorobutadiene | 21.46 | | 0 | N.D. | | |

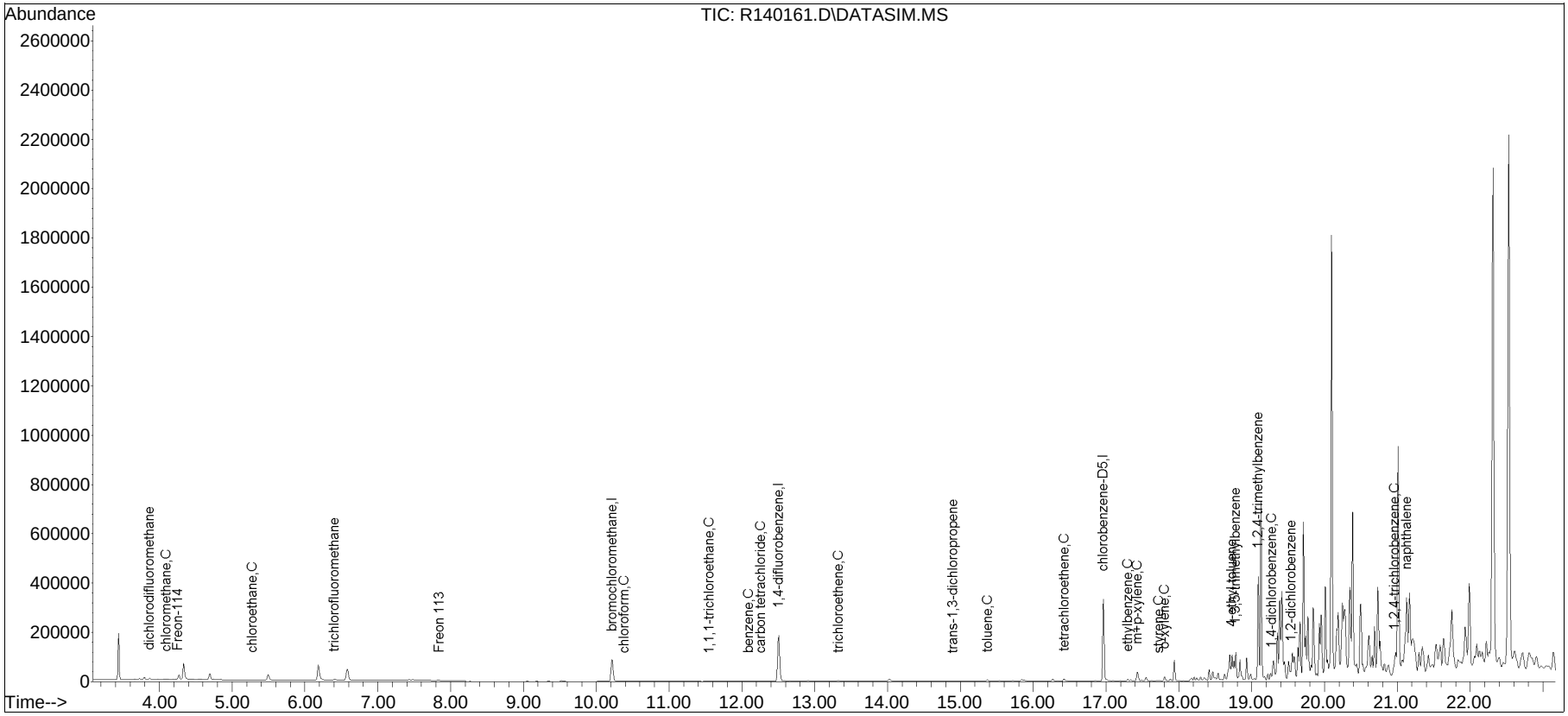
(#) = qualifier out of range (m) = manual integration (+) = signals summed

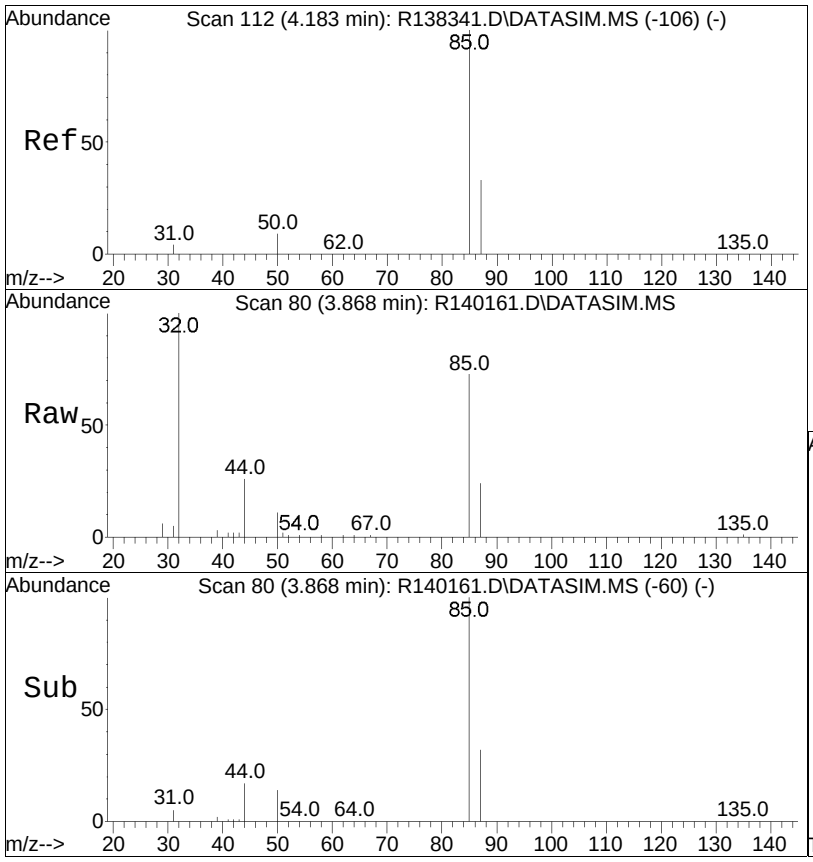
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140161.D
Acq On : 12 Mar 2015 9:18 am
Operator : AIRPIANO1:RY
Sample : WG767579-5,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 10:45:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015
Response via : Initial Calibration

Sub List : TO15_SIM+Naph - All Compounds reportedR140137.D

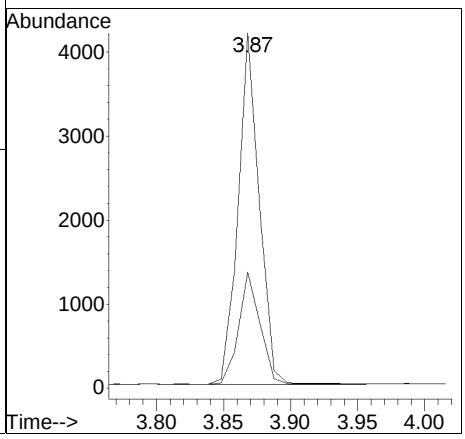


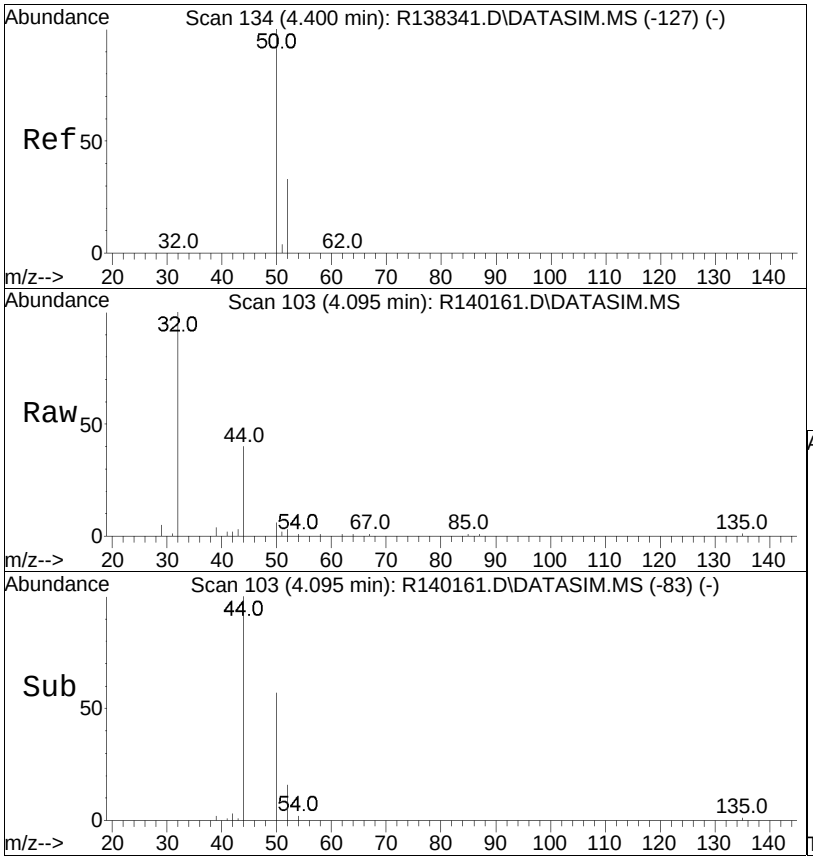



#3
dichlorodifluoromethane
Concen: 0.34 ppbV
RT: 3.87 min Scan# 80
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 85 Resp: 4561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.7 | 25.8 | 38.8 |

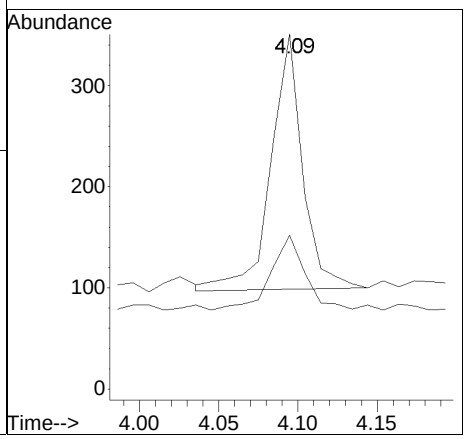


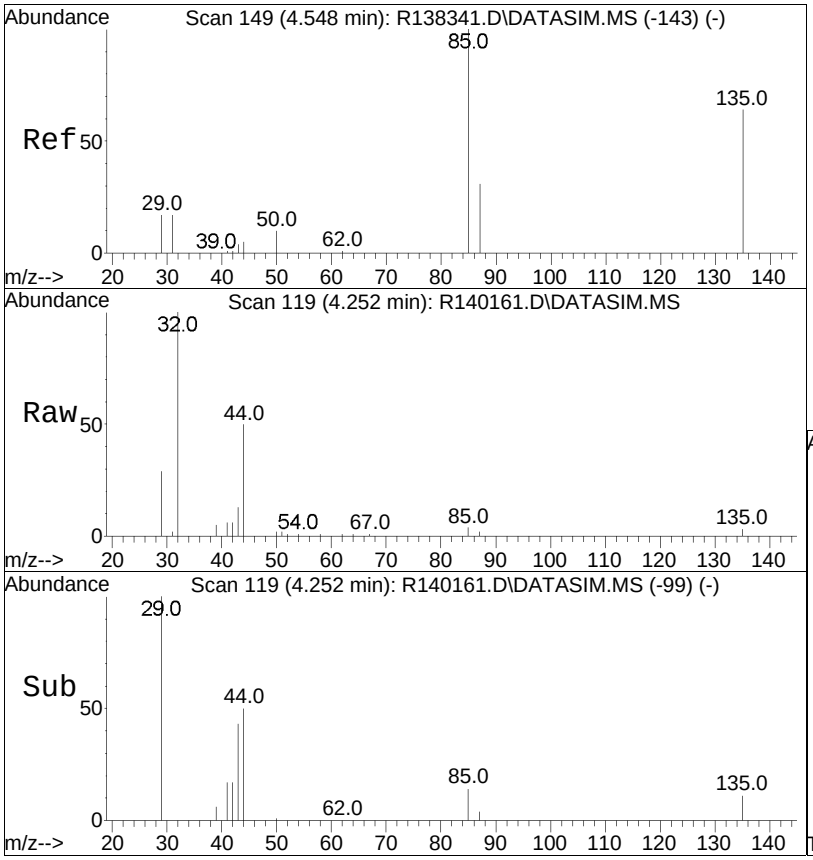



#4
chloromethane
Concen: 0.05 ppbV
RT: 4.09 min Scan# 103
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 50 Resp: 351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 43.3 | 26.4 | 39.6# |

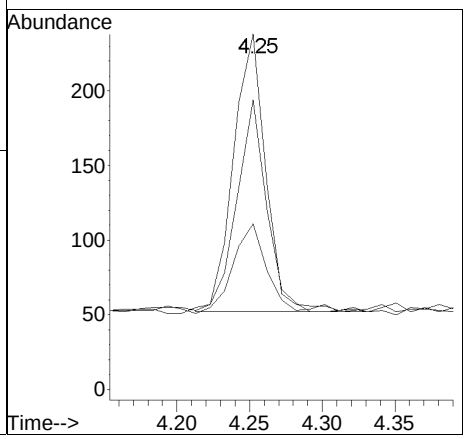


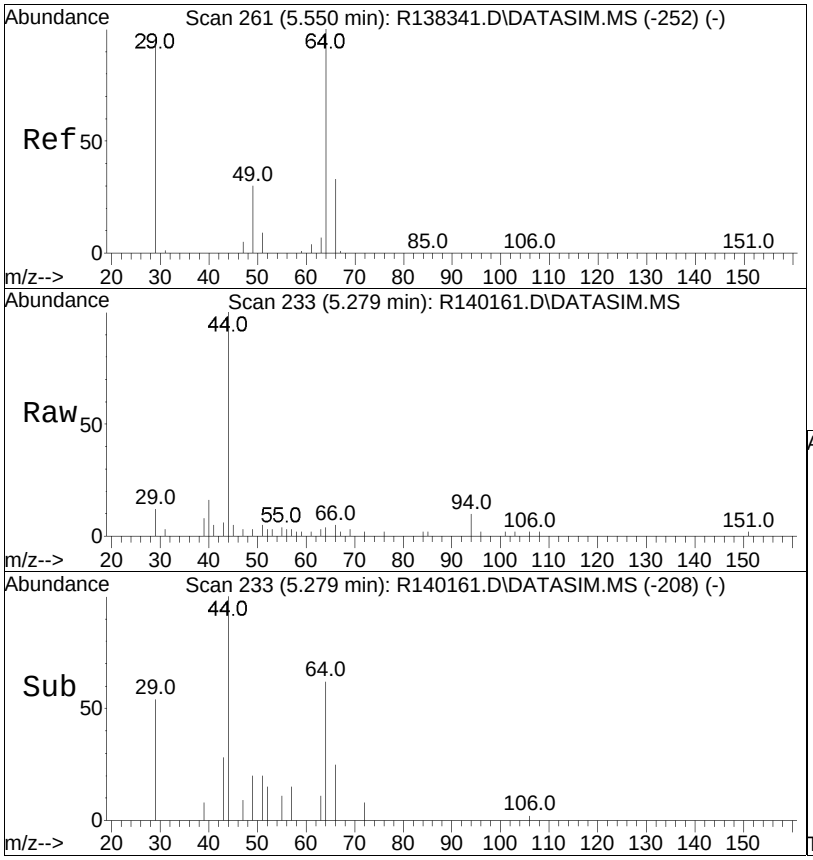



#5
Freon-114
Concen: 0.01 ppbV
RT: 4.25 min Scan# 119
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 85 Resp: 289

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 46.6 | 26.3 | 39.5# |
| 135 | 81.5 | 60.5 | 90.7 |

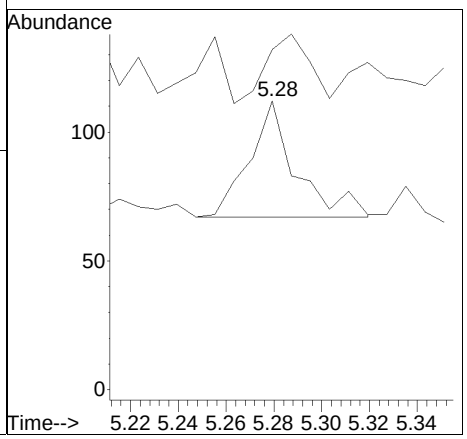


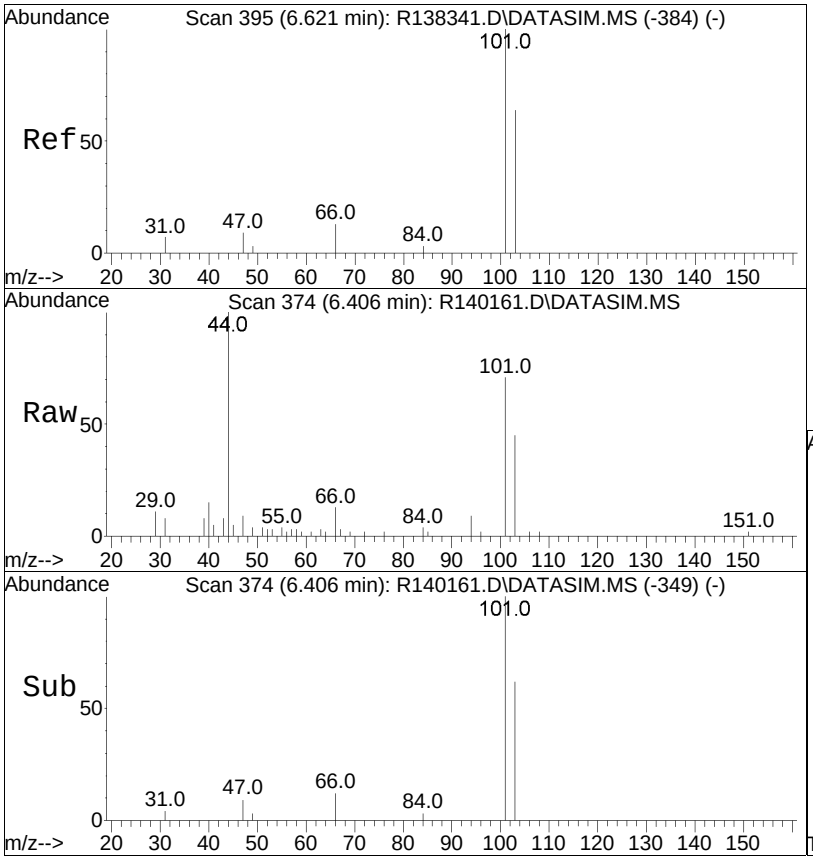



#9
chloroethane
Concen: 0.02 ppbV
RT: 5.28 min Scan# 233
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 64 Resp: 61

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 117.9 | 26.2 | 39.2# |

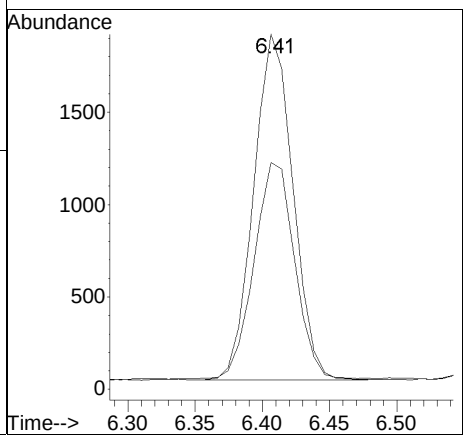


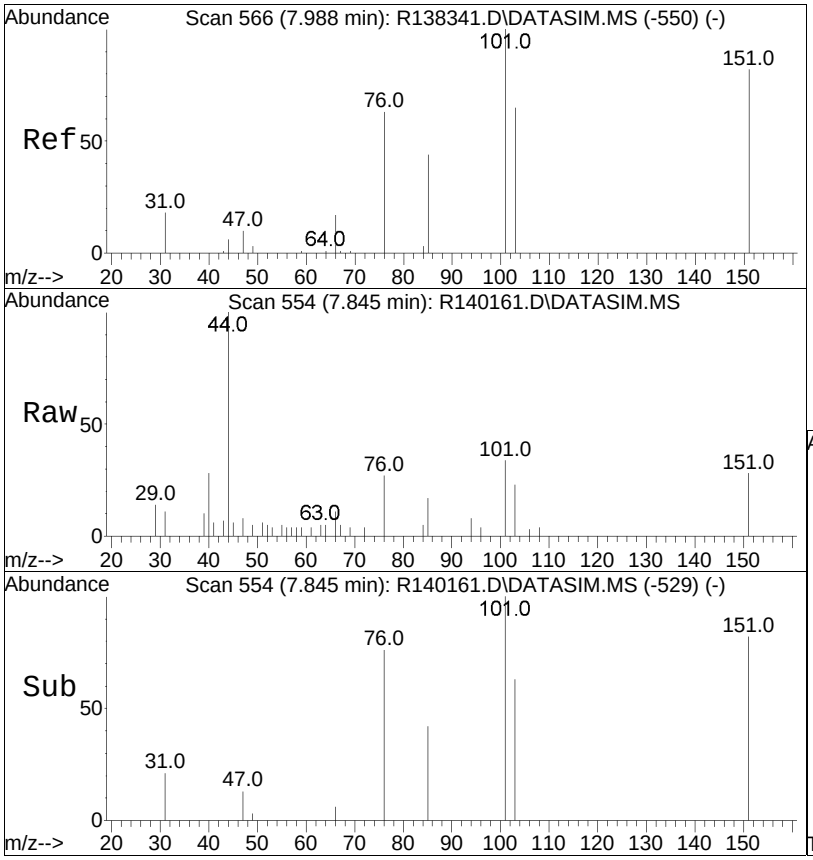



#13
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 6.41 min Scan# 374
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:101 Resp: 3813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 63.9 | 51.2 | 76.8 |

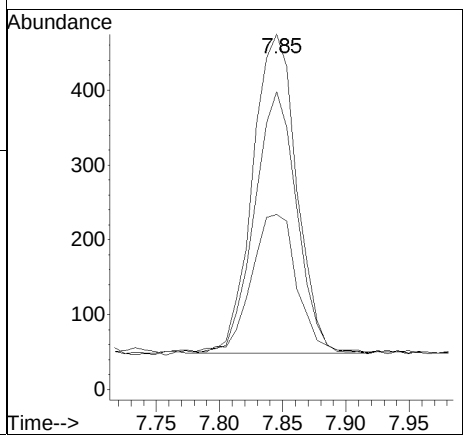


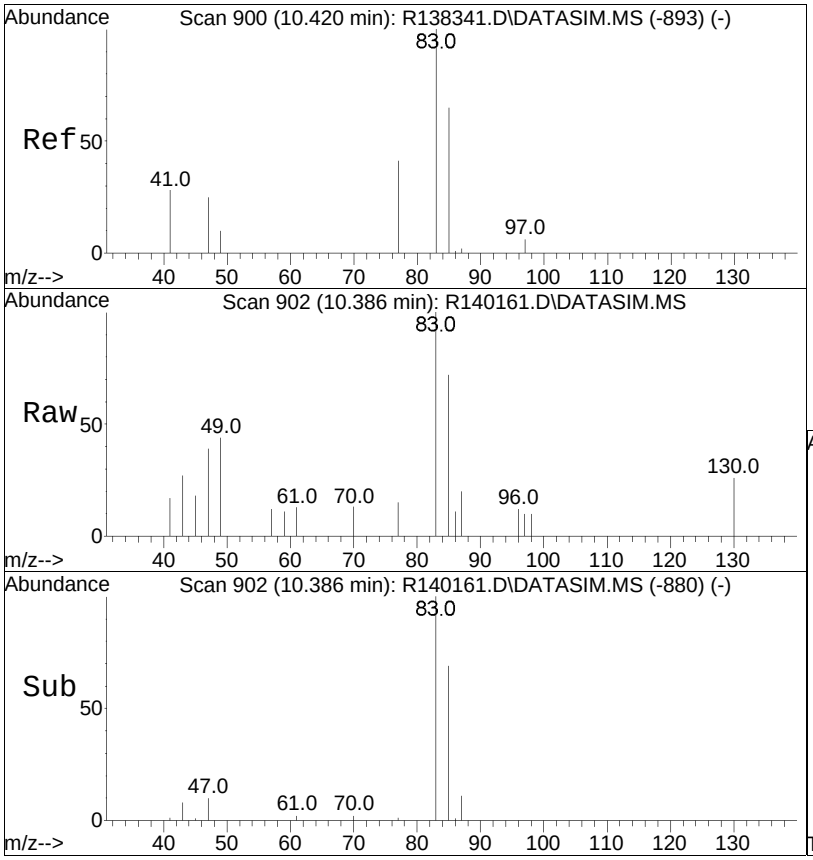



#20
Freon 113
Concen: 0.07 ppbV
RT: 7.85 min Scan# 554
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:101 Resp: 1027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 49.3 | 34.5 | 51.7 |
| 151 | 83.8 | 67.4 | 101.2 |

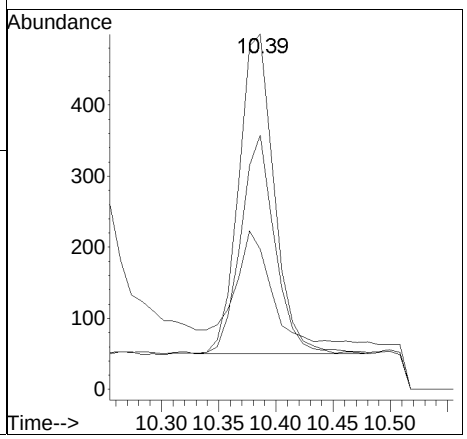


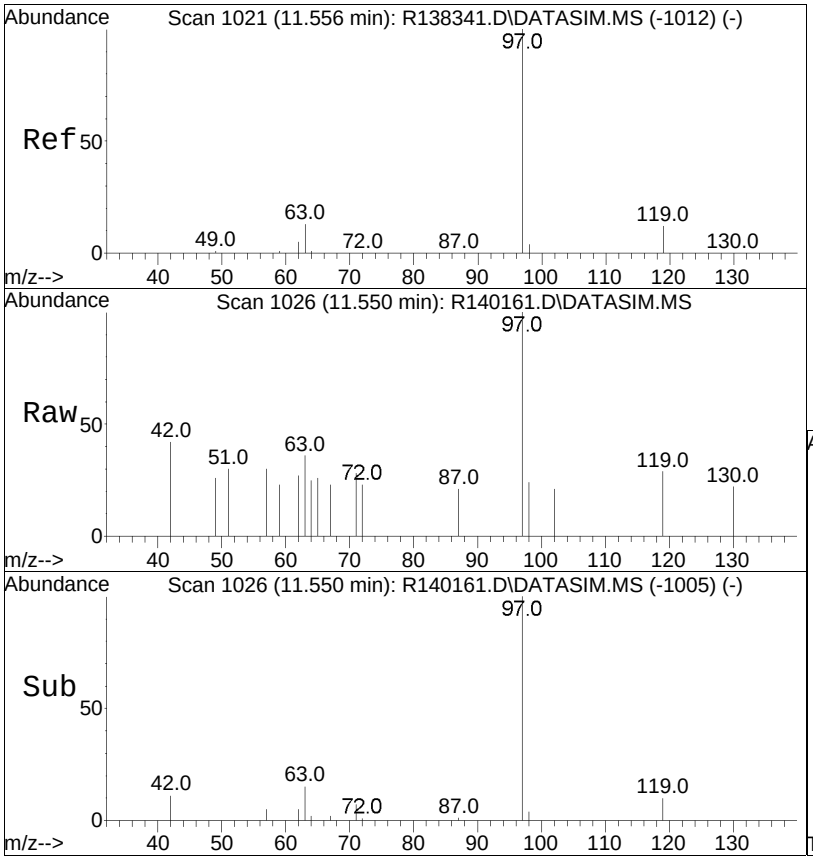



#29
chloroform
Concen: 0.05 ppbV
RT: 10.39 min Scan# 902
Delta R.T. 0.009 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 83 Resp: 974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 71.6 | 50.9 | 76.3 |
| 47 | 39.4 | 24.9 | 37.3# |

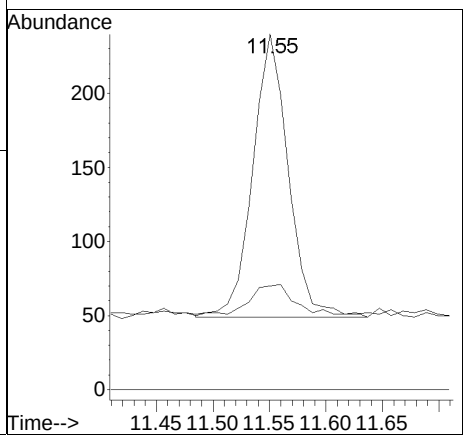


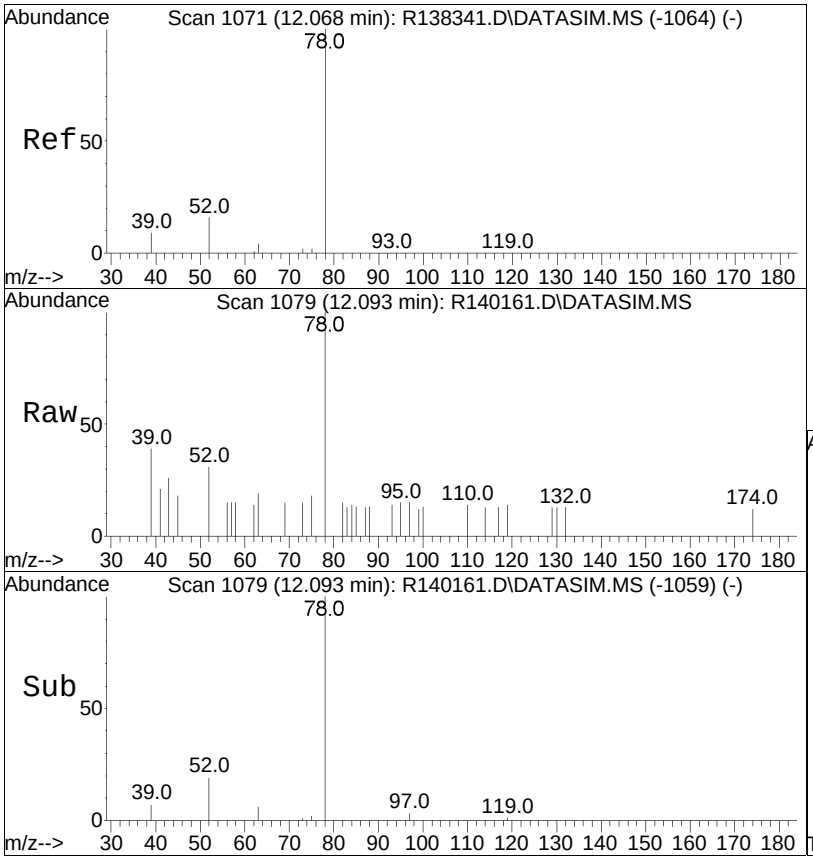



#35
1,1,1-trichloroethane
Concen: 0.03 ppbV
RT: 11.55 min Scan# 1026
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 97 Resp: 423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 61 | 0.0 | 0.0 | 0.0 |
| 119 | 29.2 | 10.7 | 16.1# |

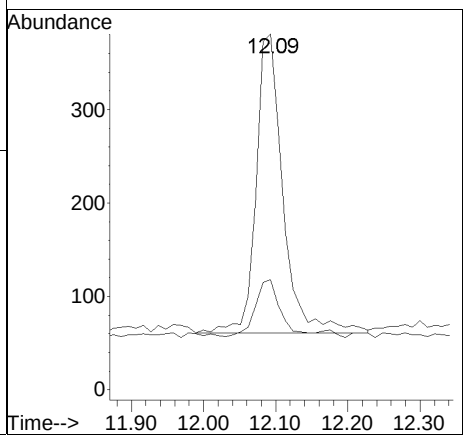


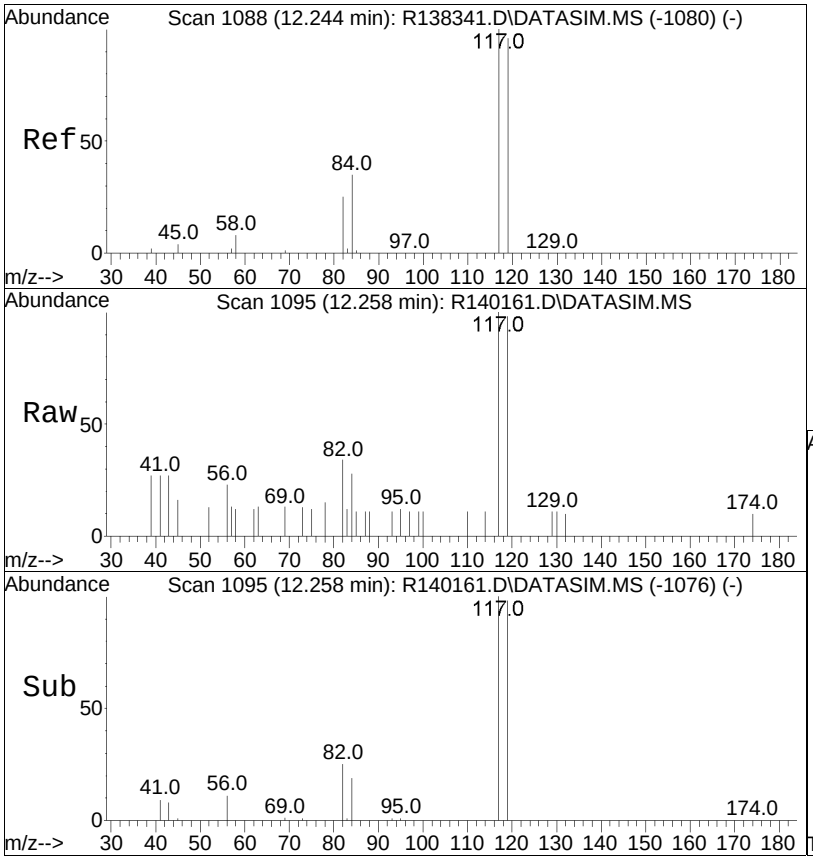



#36
benzene
Concen: 0.04 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.010 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 78 Resp: 829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 31.0 | 15.4 | 23.0# |

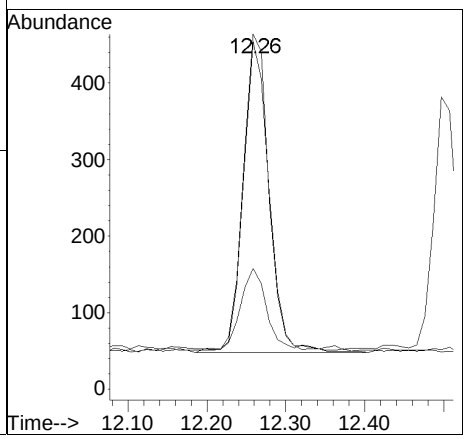


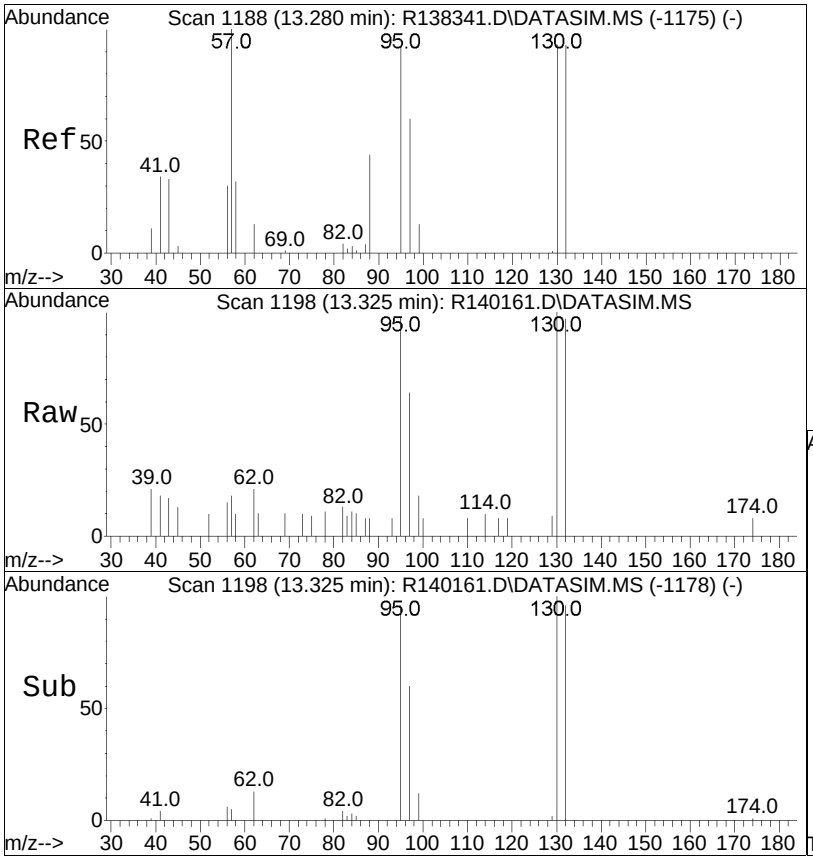



#37
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.26 min Scan# 1095
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:117 Resp: 953

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.8 | 78.5 | 117.7 |
| 82 | 34.1 | 19.8 | 29.8# |

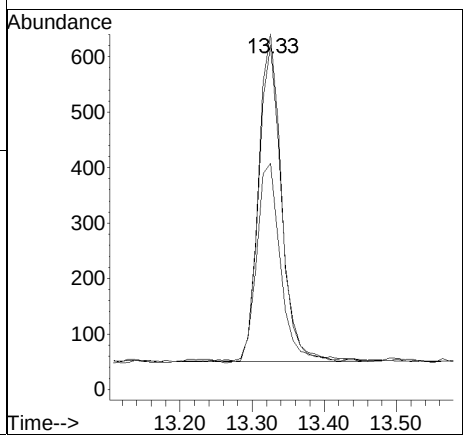


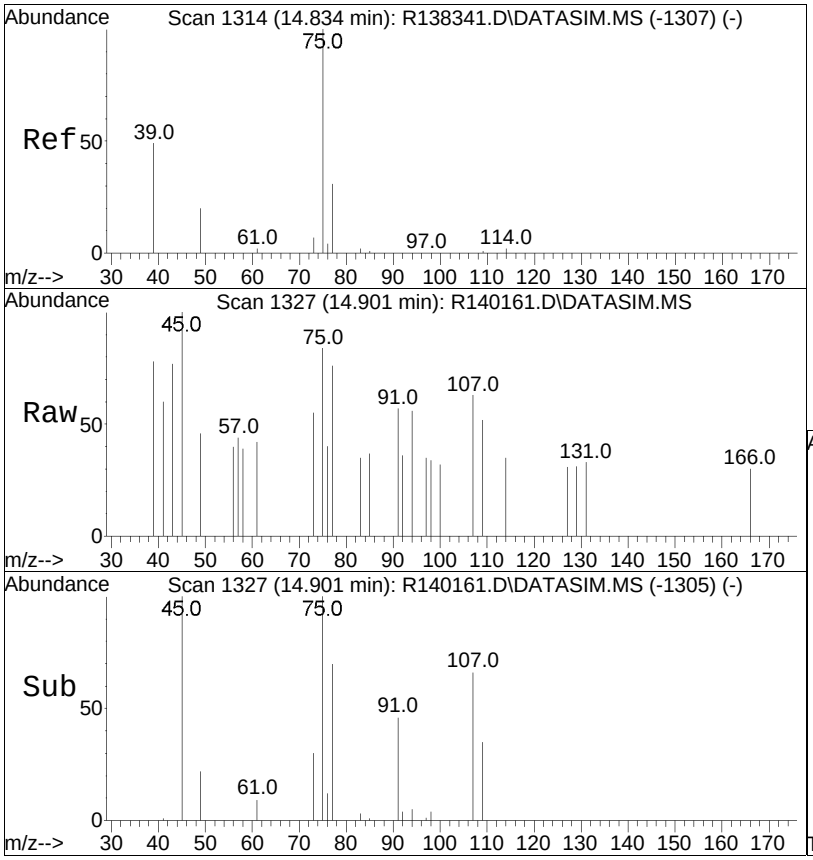



#42
trichloroethene
Concen: 0.13 ppbV
RT: 13.33 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:130 Resp: 1324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 96.9 | 76.0 | 114.0 |
| 97 | 63.7 | 51.8 | 77.8 |

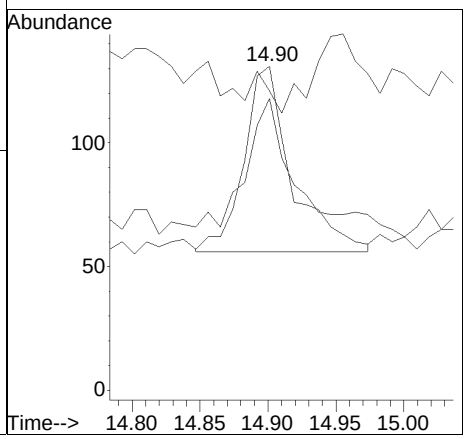


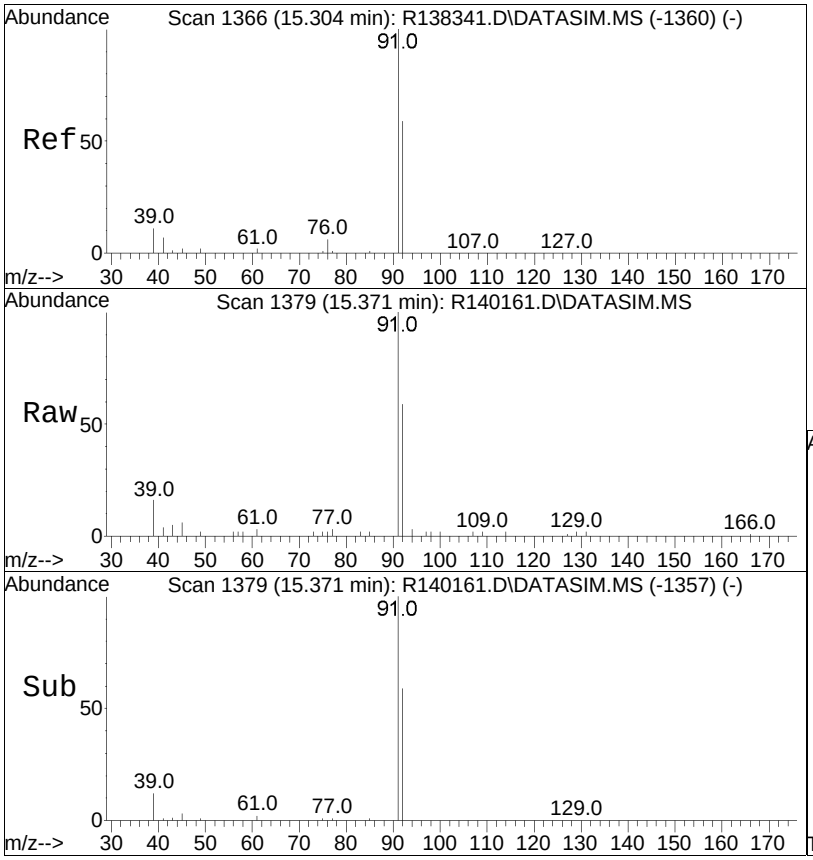



#47
trans-1,3-dichloropropene
Concen: 0.02 ppbV
RT: 14.90 min Scan# 1327
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 75 Resp: 183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 90.1 | 26.1 | 39.1# |
| 39 | 92.4 | 45.3 | 67.9# |

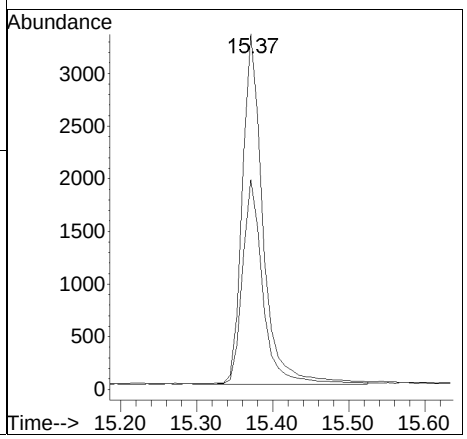


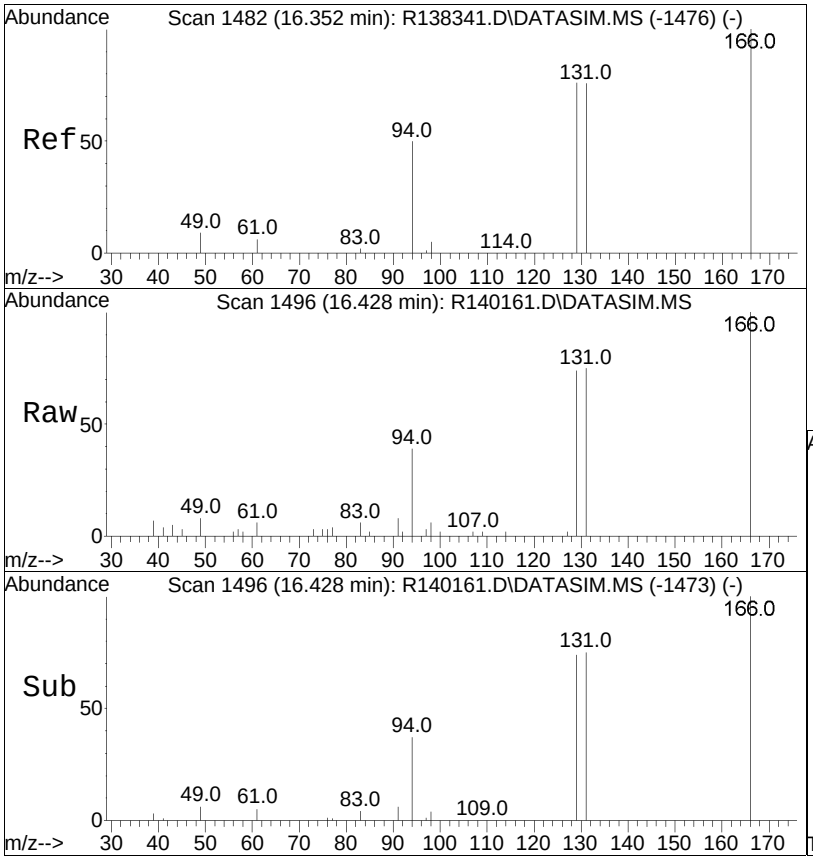



#50
toluene
Concen: 0.22 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 6290

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 59.1 | 47.2 | 70.8 |

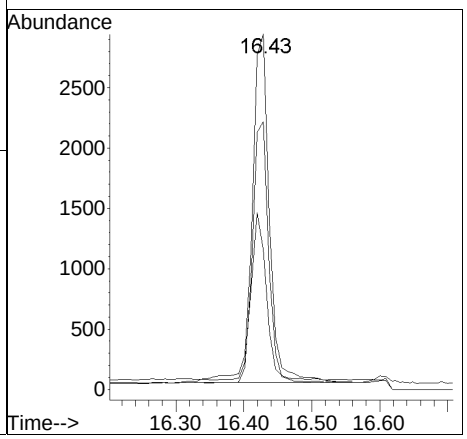


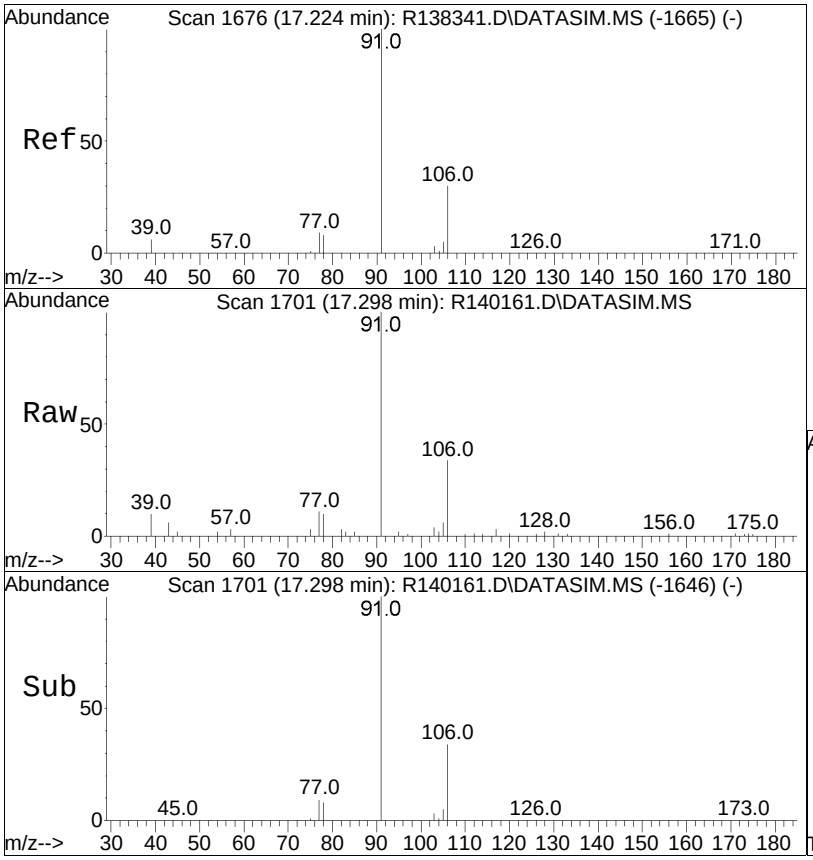



#55
tetrachloroethene
Concen: 0.35 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.009 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:166 Resp: 5168

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 75.4 | 61.7 | 92.5 |
| 94 | 39.2 | 38.0 | 57.0 |

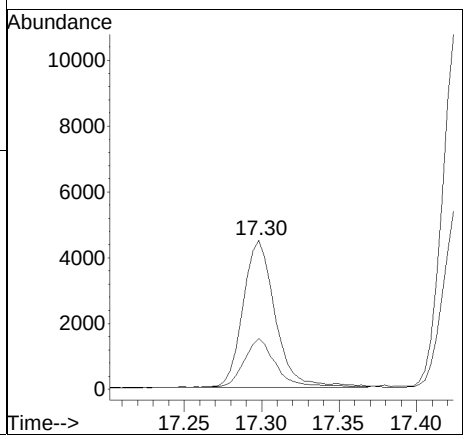


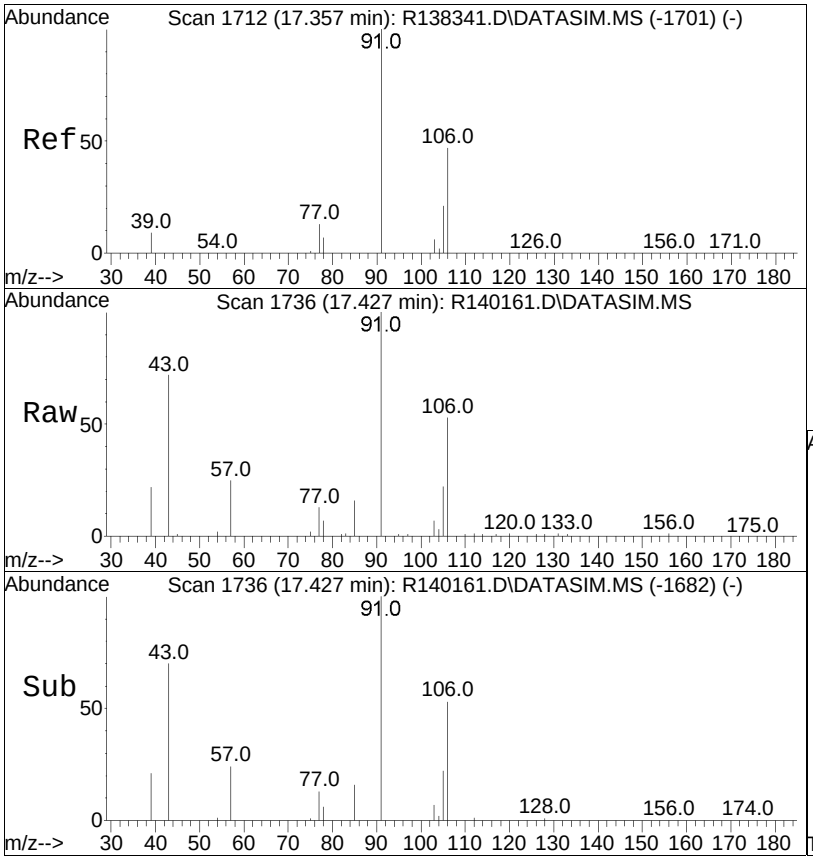



#58
ethylbenzene
Concen: 0.17 ppbV
RT: 17.30 min Scan# 1701
Delta R.T. 0.004 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 6448

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 34.1 | 25.4 | 38.0 |

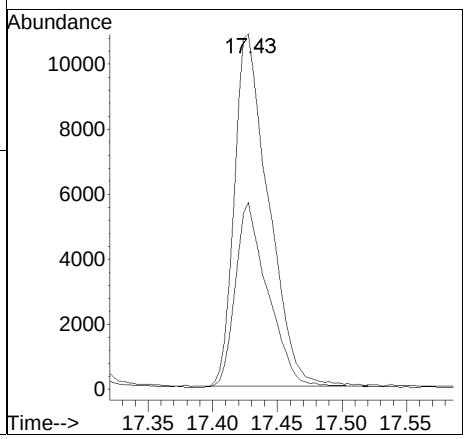


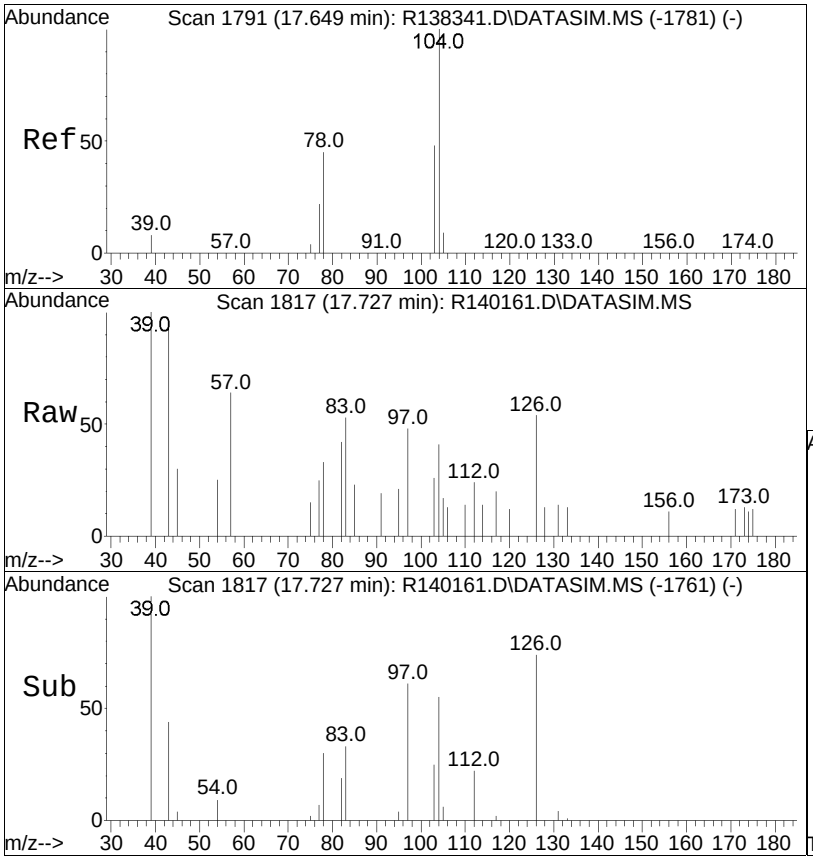



#59
m+p-xylene
Concen: 0.66 ppbV
RT: 17.43 min Scan# 1736
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 19904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 52.6 | 39.7 | 59.5 |

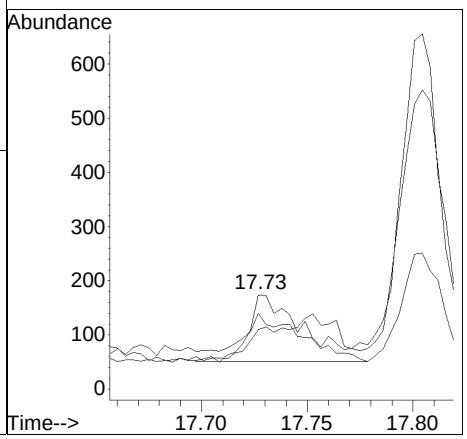


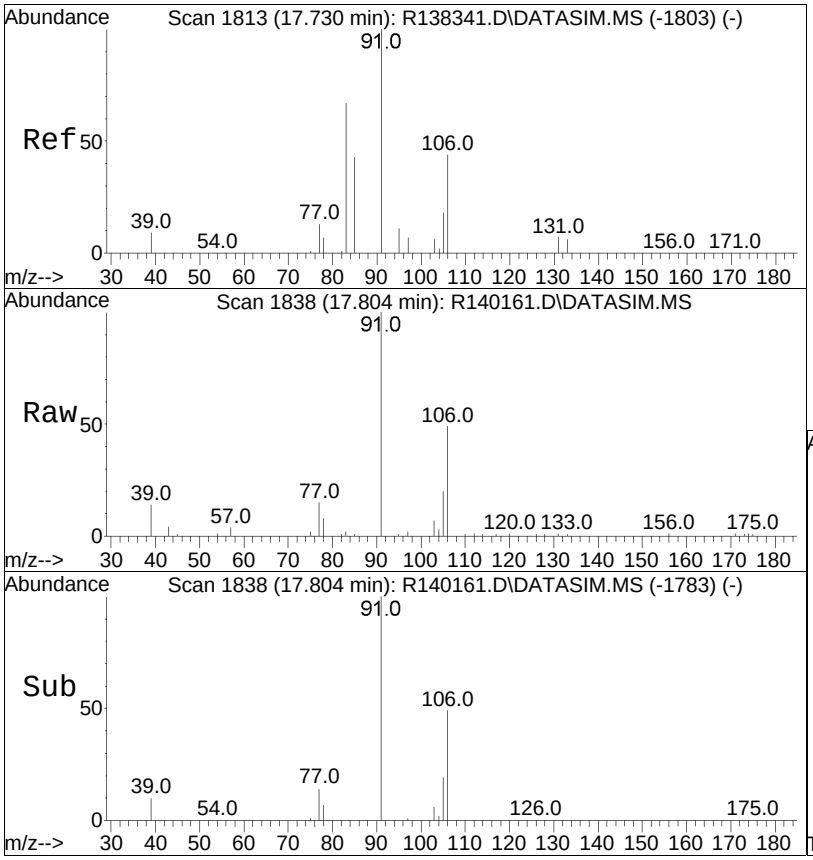



#61
styrene
Concen: 0.01 ppbV
RT: 17.73 min Scan# 1817
Delta R.T. 0.007 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:104 Resp: 205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 63.2 | 38.5 | 57.7# |
| 78 | 80.5 | 33.7 | 50.5# |

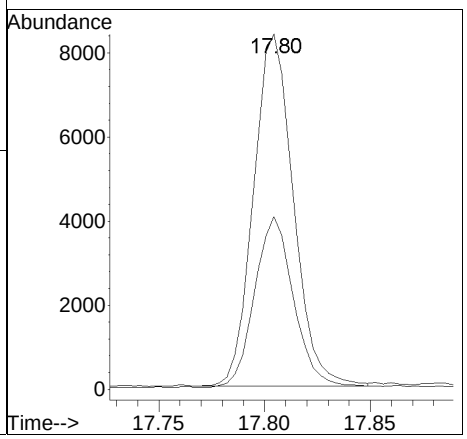


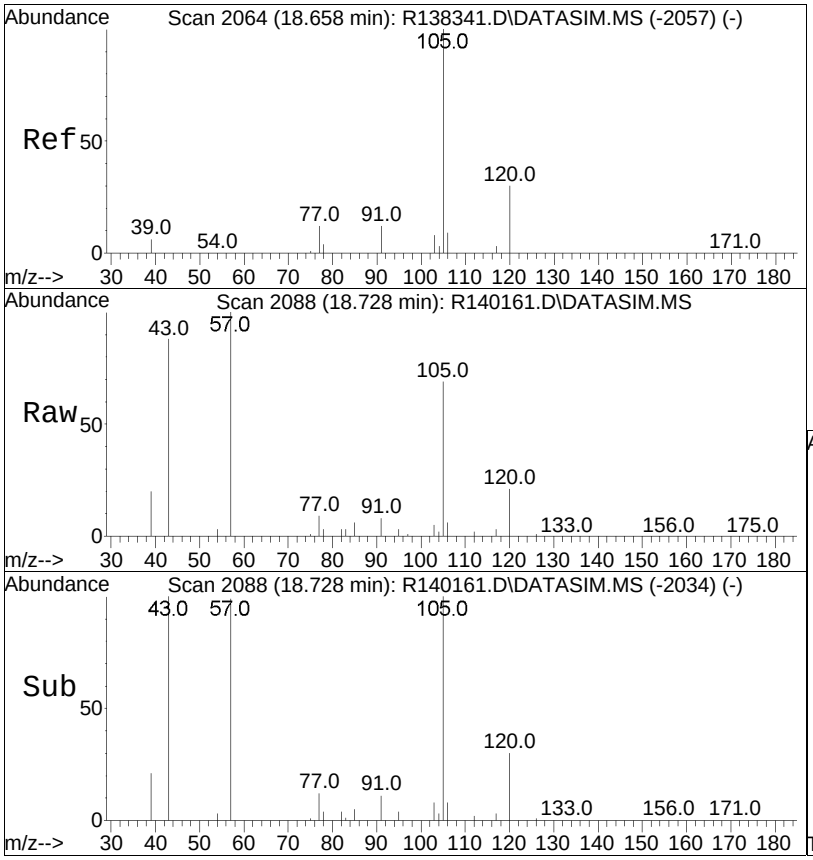



#63
o-xylene
Concen: 0.34 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.004 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 91 Resp: 11005

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 48.7 | 37.6 | 56.4 |

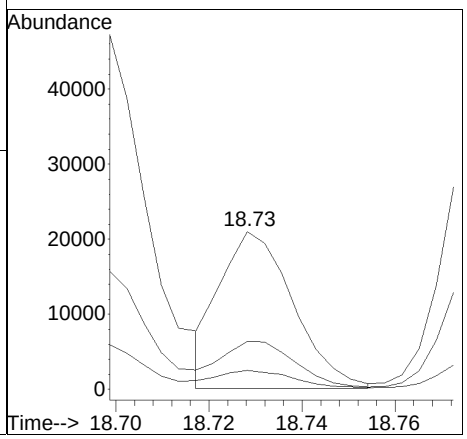


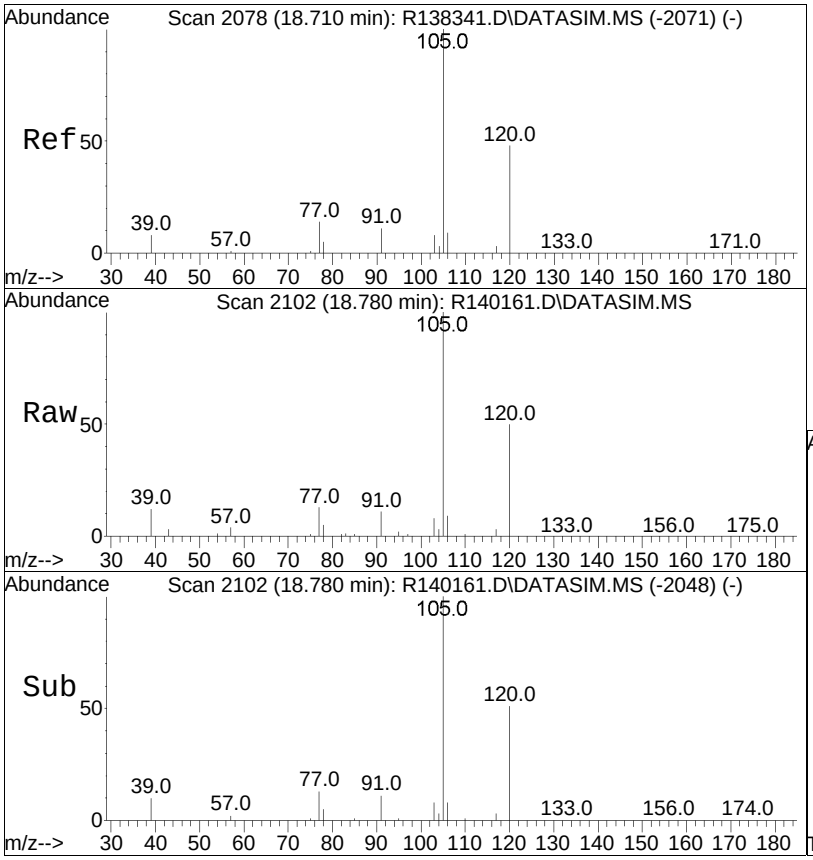



#66
4-ethyl toluene
Concen: 0.49 ppbV
RT: 18.73 min Scan# 2088
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:105 Resp: 22963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 30.4 | 25.0 | 37.4 |
| 91 | 12.1 | 9.0 | 13.6 |

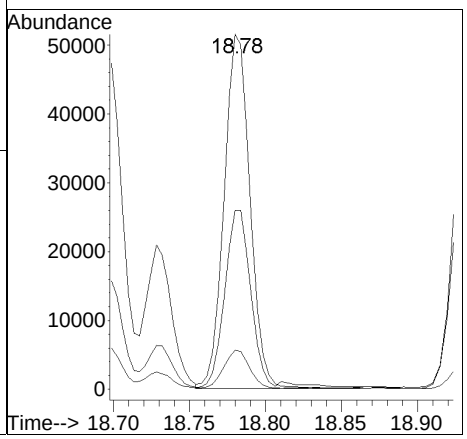


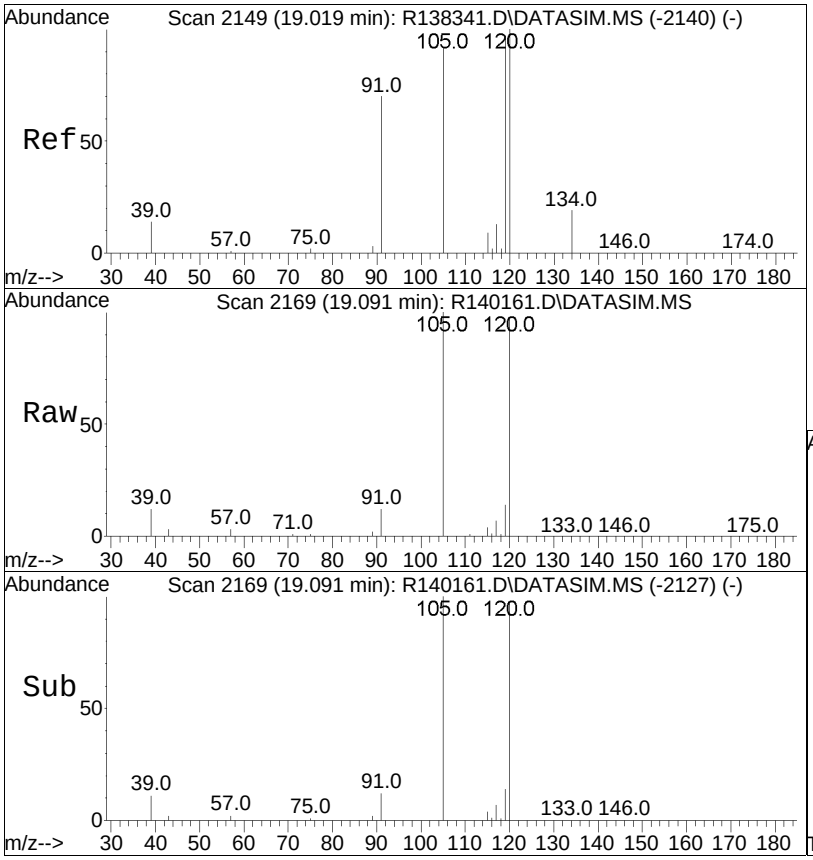



#67
1,3,5-trimethylbenzene
Concen: 1.56 ppbV
RT: 18.78 min Scan# 2102
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:105 Resp: 68831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.4 | 40.4 | 60.6 |
| 91 | 11.0 | 8.4 | 12.6 |

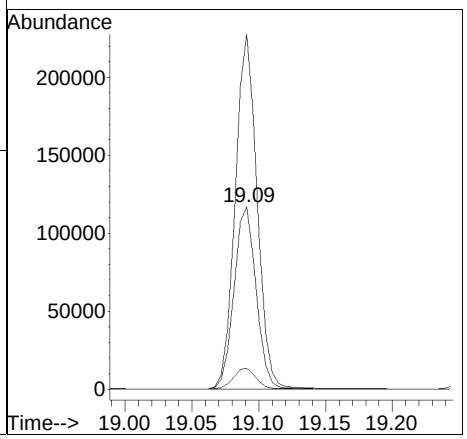


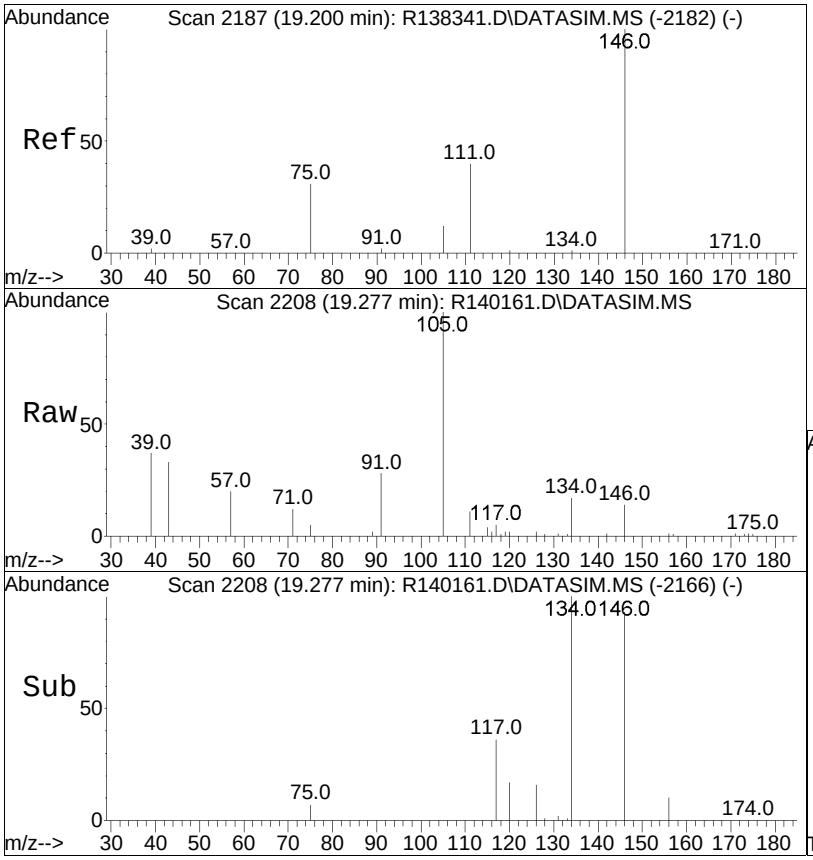



#69
1,2,4-trimethylbenzene
Concen: 3.56 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:105 Resp: 134897

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 194.5 | 184.1 | 276.1 |
| 91 | 11.7 | 57.4 | 86.2# |

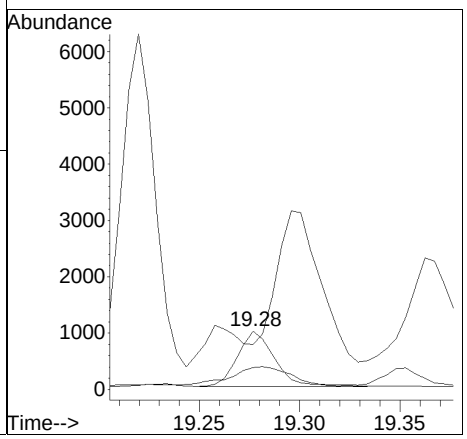


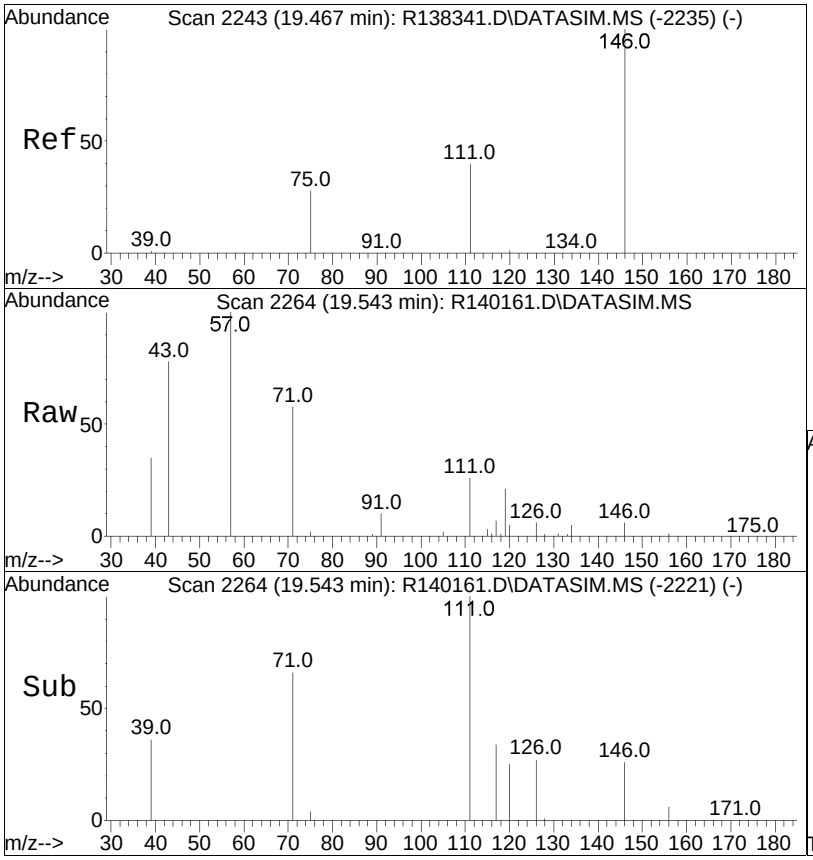



#72
1,4-dichlorobenzene
Concen: 0.04 ppbV
RT: 19.28 min Scan# 2208
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:146 Resp: 1251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 77.1 | 27.3 | 40.9# |
| 75 | 37.5 | 19.4 | 29.0# |

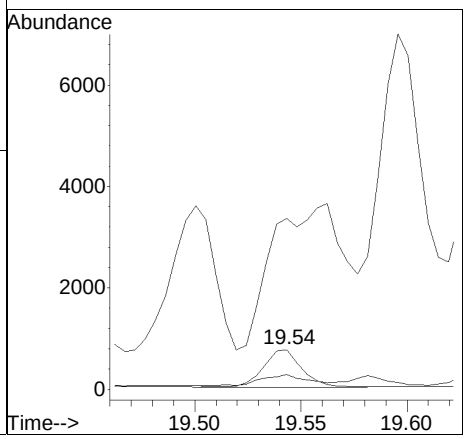


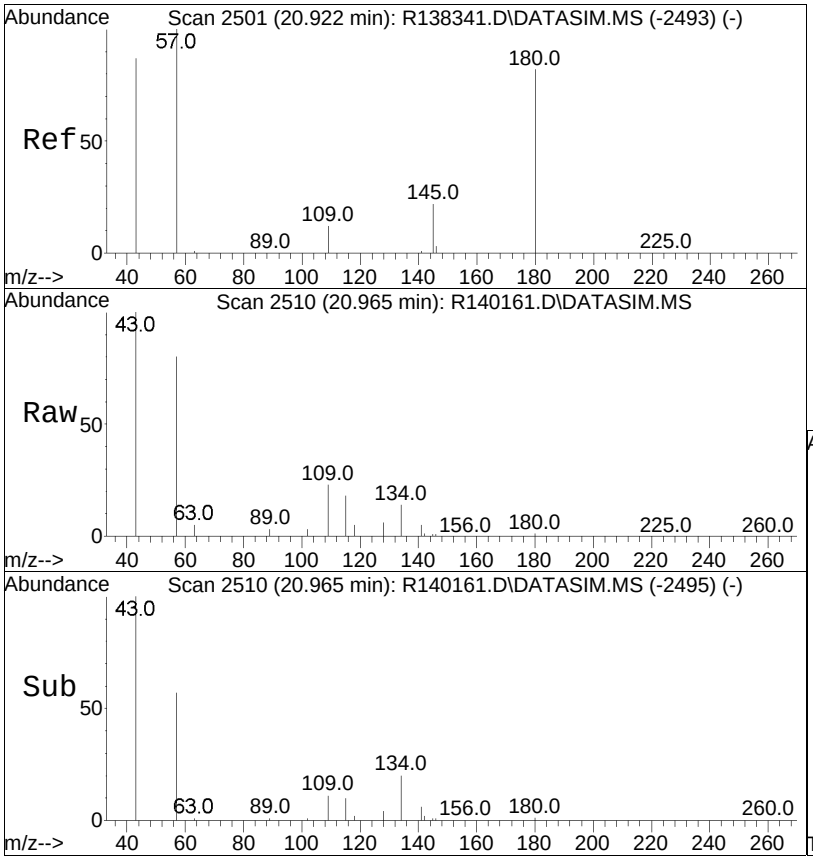



#75
1,2-dichlorobenzene
Concen: 0.03 ppbV
RT: 19.54 min Scan# 2264
Delta R.T. 0.005 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:146 Resp: 913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 430.7 | 32.5 | 48.7# |
| 75 | 37.5 | 21.8 | 32.8# |

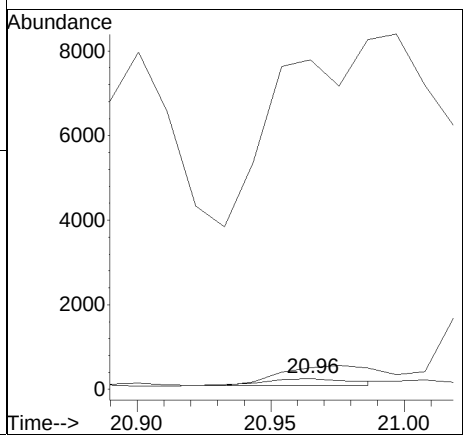


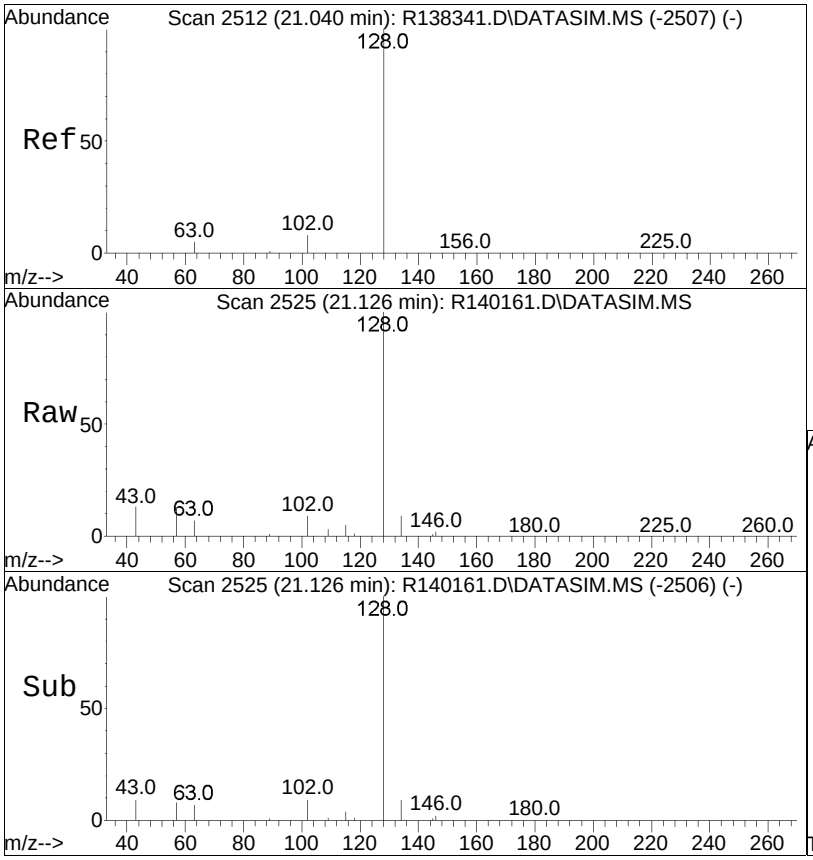



#77
1,2,4-trichlorobenzene
Concen: 0.02 ppbV
RT: 20.96 min Scan# 2510
Delta R.T. -0.043 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:180 Resp: 362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 201.2 | 24.9 | 37.3# |
| 109 | 3067.3 | 17.3 | 25.9# |

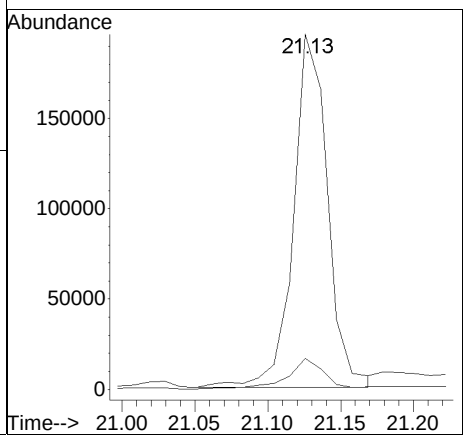





#78
naphthalene
Concen: 5.65 ppbV
RT: 21.13 min Scan# 2525
Delta R.T. -0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:128 Resp: 318743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 8.7 | 6.9 | 10.3 |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TSIM150102.M |
| Data File | : R140161.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/12/2015 9:18 am | Instrument | : Air Piano 1 |
| Sample | : WG767579-5,3,250,250 | Quant Date | : 3/12/2015 10:06 am |

There are no manual integrations or false positives in this file.

# Volatile Organics in Air
# TO-15 Low Level

# Initial Calibration

# Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Method File : TALL150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 12:56:18 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D 5.0 =R138816.D 10 =R138817.D 20 =R138818.D
50 =R138819.D 100 =R138820.D

| | | Compound | 0.2 | 0.5 | 1.0 | 5.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | bromochloromethane | ----------ISTD---------- | | | | | | | | | |
| 2) | | chlorodifluoromethane | 1.293 | 1.124 | 1.101 | 1.066 | 1.028 | 1.045 | 0.935 | 0.861 | 1.0566 | 12.21 |
| 3) | | propylene | | 0.563 | 0.594 | 0.563 | 0.529 | 0.526 | 0.452 | 0.420 | 0.5210 | 12.13 |
| 4) | | propane | | 0.803 | 0.758 | 0.654 | 0.594 | 0.634 | 0.551 | 0.474 | 0.6383 | 17.88 |
| 5) | | dichlorodifluoromethane | 1.507 | 1.292 | 1.300 | 1.184 | 0.849 | 1.189 | 0.850 | 0.681 | 1.1066 | 25.53 |
| 6) | C | chloromethane | 0.838 | 0.682 | 0.599 | 0.566 | 0.555 | 0.552 | 0.490 | 0.457 | 0.5924 | 20.24 |
| 7) | | Freon-114 | 1.926 | 1.782 | 1.772 | 1.685 | 1.583 | 1.612 | 1.368 | 1.139 | 1.6085 | 15.64 |
| 8) | C | methanol | | | 0.276 | 0.243 | 0.235 | 0.224 | 0.195 | 0.176 | 0.2248 | 15.85 |
| 9) | C | vinyl chloride | 0.730 | 0.573 | 0.599 | 0.602 | 0.600 | 0.600 | 0.536 | 0.487 | 0.5908 | 11.74 |
| 10) | C | 1,3-butadiene | 0.571 | 0.583 | 0.503 | 0.449 | 0.466 | 0.452 | 0.410 | 0.365 | 0.4748 | 15.79 |
| 11) | | butane | 1.172 | 1.236 | 1.149 | 1.014 | 1.002 | 0.973 | 0.903 | 0.798 | 1.0309 | 14.23 |
| 12) | C | acetaldehyde | 0.540 | 0.438 | 0.415 | 0.390 | 0.383 | 0.370 | 0.329 | 0.285 | 0.3938 | 19.33 |
| 13) | C | bromomethane | 0.921 | 0.773 | 0.729 | 0.595 | 0.582 | 0.602 | 0.530 | 0.489 | 0.6526 | 22.05 |
| 14) | C | chloroethane | 0.439 | 0.309 | 0.263 | 0.270 | 0.287 | 0.280 | 0.255 | 0.229 | 0.2915 | 21.93 |
| 15) | | ethanol | | 0.605 | 0.556 | 0.516 | 0.491 | 0.502 | 0.438 | 0.371 | 0.4971 | 15.36 |
| 16) | | dichlorofluoromethane | 1.526 | 1.404 | 1.314 | 1.294 | 1.281 | 1.284 | 1.151 | 1.053 | 1.2884 | 11.16 |
| 17) | C | vinyl bromide | 0.744 | 0.652 | 0.665 | 0.630 | 0.622 | 0.644 | 0.571 | 0.523 | 0.6312 | 10.34 |
| 18) | C | acrolein | 0.435 | 0.368 | 0.302 | 0.282 | 0.256 | 0.262 | 0.239 | 0.216 | 0.2949 | 24.68 |
| 19) | | acetone | 1.355 | 1.157 | 0.998 | 0.986 | 0.987 | 0.971 | 0.858 | 0.761 | 1.0091 | 17.90 |
| 20) | C | acetonitrile | 0.794 | 0.808 | 0.763 | 0.605 | 0.594 | 0.581 | 0.528 | 0.472 | 0.6432 | 19.91 |
| 21) | | trichlorofluoromethane | 1.797 | 1.713 | 1.646 | 1.612 | 1.573 | 1.531 | 1.384 | 1.299 | 1.5694 | 10.46 |
| 22) | | isopropyl alcohol | | 1.534 | 1.334 | 1.185 | 1.194 | 1.149 | 1.028 | 0.925 | 1.1926 | 16.66 |
| 23) | C | acrylonitrile | 0.644 | 0.626 | 0.537 | 0.490 | 0.456 | 0.495 | 0.421 | 0.388 | 0.5071 | 18.05 |
| 24) | | pentane | 1.580 | 1.321 | 1.244 | 1.207 | 1.160 | 1.210 | 1.038 | 0.947 | 1.2135 | 15.62 |
| 25) | | ethyl ether | 1.331 | 1.235 | 0.961 | 0.963 | 0.903 | 0.992 | 0.885 | 0.713 | 0.9978 | 19.78 |
| 26) | C | 1,1-dichloroethene | 1.186 | 1.119 | 1.090 | 1.027 | 1.019 | 1.046 | 0.944 | 0.869 | 1.0374 | 9.59 |
| 27) | | tertiary butyl alcohol | | 1.341 | 1.361 | 1.365 | 1.328 | 1.334 | 1.210 | 1.108 | 1.2926 | 7.49 |
| 28) | C | methylene chloride | | 1.021 | 0.943 | 0.878 | 0.850 | 0.821 | 0.752 | 0.695 | 0.8513 | 12.98 |
| 29) | C | 3-chloropropene | 1.698 | 1.314 | 1.130 | 0.956 | 0.941 | 0.972 | 0.860 | 0.788 | 1.0825 | 27.48 |
| 30) | C | carbon disulfide | 1.984 | 1.880 | 1.840 | 1.791 | 1.735 | 1.790 | 1.596 | 1.504 | 1.7648 | 8.72 |
| 31) | | Freon 113 | 1.457 | 1.417 | 1.326 | 1.309 | 1.268 | 1.297 | 1.183 | 1.104 | 1.2953 | 8.85 |

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Method File : TALL150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 12:56:18 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D 5.0 =R138816.D 10 =R138817.D 20 =R138818.D
50 =R138819.D 100 =R138820.D

| | | Compound | 0.2 | 0.5 | 1.0 | 5.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32) | | trans-1,2-dichloroethene | 1.043 | 0.980 | 1.037 | 1.012 | 1.001 | 0.999 | 0.910 | 0.836 | 0.9773 | 7.19 |
| 33) | C | 1,1-dichloroethane | 1.447 | 1.211 | 1.136 | 1.154 | 1.121 | 1.144 | 1.014 | 0.949 | 1.1470 | 12.85 |
| 34) | C | MTBE | 1.971 | 1.907 | 1.837 | 1.727 | 1.695 | 1.700 | 1.542 | 1.438 | 1.7271 | 10.35 |
| 35) | C | vinyl acetate | 1.076 | 1.577 | 1.590 | 1.724 | 1.741 | 1.775 | 1.639 | 1.510 | 1.5789 | 14.11 |
| 36) | C | 2-butanone | 1.451 | 1.553 | 1.508 | 1.514 | 1.582 | 1.561 | 1.434 | 1.285 | 1.4860 | 6.49 |
| 37) | | cis-1,2-dichloroethene | 1.236 | 1.129 | 1.035 | 1.067 | 1.049 | 1.034 | 0.972 | 0.900 | 1.0528 | 9.50 |
| 38) | | Ethyl Acetate | 0.281 | 0.281 | 0.257 | 0.267 | 0.270 | 0.270 | 0.251 | 0.230 | 0.2634 | 6.41 |
| 39) | C | chloroform | 1.910 | 1.690 | 1.676 | 1.642 | 1.567 | 1.607 | 1.441 | 1.343 | 1.6096 | 10.59 |
| 40) | | Tetrahydrofuran | 1.640 | 1.083 | 1.033 | 0.968 | 0.900 | 0.913 | 0.818 | 0.752 | 1.0133 | 27.13 |
| 41) | | 2,2-dichloropropane | 1.699 | 1.511 | 1.467 | 1.446 | 1.400 | 1.399 | 1.266 | 1.177 | 1.4207 | 11.05 |
| 42) | C | 1,2-dichloroethane | 0.878 | 0.897 | 0.906 | 0.902 | 0.923 | 0.925 | 0.822 | 0.754 | 0.8759 | 6.74 |
| 43) | I | 1,4-difluorobenzene | ----------ISTD---------- | | | | | | | | | |
| 44) | C | hexane | 0.823 | 0.753 | 0.666 | 0.624 | 0.631 | 0.622 | 0.564 | 0.561 | 0.6555 | 13.85 |
| 45) | | diisopropyl ether | 0.361 | 0.293 | 0.315 | 0.289 | 0.301 | 0.299 | 0.278 | 0.277 | 0.3015 | 8.94 |
| 46) | | tert-butyl ethyl ether | 1.204 | 0.981 | 1.021 | 1.010 | 1.028 | 1.012 | 0.929 | 0.911 | 1.0121 | 8.79 |
| 47) | s | 1,2-dichloroethane-D4 | 0.304 | 0.288 | 0.296 | 0.298 | 0.305 | 0.290 | 0.297 | 0.293 | 0.2963 | 2.07 |
| 48) | C | 1,1,1-trichloroethane | 0.745 | 0.663 | 0.658 | 0.666 | 0.667 | 0.667 | 0.609 | 0.618 | 0.6616 | 6.18 |
| 49) | | 1,1-dichloropropene | 0.523 | 0.517 | 0.452 | 0.488 | 0.473 | 0.481 | 0.438 | 0.432 | 0.4755 | 7.06 |
| 50) | C | benzene | 1.030 | 0.910 | 0.842 | 0.921 | 0.907 | 0.909 | 0.834 | 0.821 | 0.8969 | 7.48 |
| 51) | | thiophene | 0.774 | 0.704 | 0.645 | 0.605 | 0.614 | 0.625 | 0.576 | 0.566 | 0.6385 | 10.89 |
| 52) | C | carbon tetrachloride | 0.801 | 0.731 | 0.696 | 0.691 | 0.700 | 0.707 | 0.645 | 0.649 | 0.7027 | 7.00 |
| 53) | | cyclohexane | 0.679 | 0.570 | 0.566 | 0.538 | 0.538 | 0.517 | 0.476 | 0.474 | 0.5447 | 11.99 |
| 54) | | tert-amyl methyl ether | 1.034 | 0.871 | 0.924 | 0.901 | 0.896 | 0.909 | 0.832 | 0.820 | 0.8982 | 7.35 |
| 55) | | dibromomethane | 0.393 | 0.374 | 0.370 | 0.372 | 0.380 | 0.381 | 0.359 | 0.352 | 0.3727 | 3.43 |
| 56) | C | 1,2-dichloropropane | 0.363 | 0.356 | 0.361 | 0.350 | 0.356 | 0.357 | 0.329 | 0.322 | 0.3492 | 4.36 |
| 57) | | bromodichloromethane | 0.778 | 0.760 | 0.765 | 0.722 | 0.756 | 0.743 | 0.685 | 0.679 | 0.7359 | 5.05 |
| 58) | C | 1,4-dioxane | 0.142 | 0.208 | 0.206 | 0.231 | 0.220 | 0.229 | 0.214 | 0.209 | 0.2072 | 13.57 |
| 59) | C | trichloroethene | 0.513 | 0.440 | 0.455 | 0.455 | 0.473 | 0.471 | 0.439 | 0.435 | 0.4602 | 5.60 |
| 60) | C | 2,2,4-trimethylpentane | 1.968 | 1.699 | 1.759 | 1.685 | 1.681 | 1.677 | 1.546 | 1.497 | 1.6890 | 8.39 |
| 61) | | methyl methacrylate | 0.527 | 0.484 | 0.458 | 0.511 | 0.522 | 0.540 | 0.503 | 0.483 | 0.5035 | 5.42 |
| 62) | | heptane | 1.133 | 0.954 | 0.826 | 0.705 | 0.705 | 0.716 | 0.645 | 0.618 | 0.7877 | 22.31 |

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Method File : TALL150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 12:56:18 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D 5.0 =R138816.D 10 =R138817.D 20 =R138818.D
50 =R138819.D 100 =R138820.D

| | | Compound | 0.2 | 0.5 | 1.0 | 5.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 63) | C | cis-1,3-dichloropropene | 0.505 | 0.473 | 0.455 | 0.512 | 0.519 | 0.518 | 0.487 | 0.474 | 0.4930 | 4.91 |
| 64) | C | 4-methyl-2-pentanone | 1.237 | 0.885 | 0.989 | 0.990 | 0.959 | 0.965 | 0.870 | 0.849 | 0.9681 | 12.61 |
| 65) | | trans-1,3-dichloropropene | 0.367 | 0.444 | 0.499 | 0.517 | 0.520 | 0.525 | 0.501 | 0.497 | 0.4838 | 11.07 |
| 66) | C | 1,1,2-trichloroethane | 0.455 | 0.436 | 0.439 | 0.395 | 0.406 | 0.410 | 0.367 | 0.366 | 0.4093 | 7.95 |
| 67) | I | chlorobenzene-D5 | ----------ISTD---------- | | | | | | | | | |
| 68) | C | toluene | 6.110 | 5.507 | 5.224 | 5.073 | 4.972 | 5.091 | 4.784 | 4.641 | 5.1753 | 8.90 |
| 69) | s | toluene-D8 | 3.586 | 3.588 | 3.620 | 3.633 | 3.527 | 3.481 | 3.570 | 3.563 | 3.5708 | 1.37 |
| 70) | | 2-methylthiophene | 5.086 | 4.776 | 5.011 | 4.860 | 4.603 | 4.818 | 4.505 | 4.402 | 4.7576 | 5.02 |
| 71) | | 1,3-dichloropropane | 2.358 | 2.529 | 2.275 | 2.261 | 2.218 | 2.350 | 2.186 | 2.119 | 2.2870 | 5.52 |
| 72) | | 2-hexanone | 3.448 | 3.261 | 4.046 | 4.168 | 3.925 | 4.141 | 3.772 | 3.596 | 3.7946 | 8.82 |
| 73) | | 3-methylthiophene | 4.841 | 4.833 | 4.423 | 4.535 | 4.241 | 4.650 | 4.272 | 4.134 | 4.4911 | 6.01 |
| 74) | | dibromochloromethane | 3.928 | 3.637 | 3.608 | 3.810 | 3.621 | 3.885 | 3.648 | 3.640 | 3.7220 | 3.50 |
| 75) | C | 1,2-dibromoethane | 3.208 | 2.879 | 3.049 | 3.076 | 2.956 | 3.117 | 2.918 | 2.873 | 3.0096 | 4.05 |
| 76) | | butyl acetate | 0.540 | 0.506 | 0.500 | 0.569 | 0.538 | 0.568 | 0.500 | 0.504 | 0.5282 | 5.65 |
| 77) | | octane | 1.844 | 1.730 | 1.574 | 1.560 | 1.464 | 1.530 | 1.414 | 1.386 | 1.5627 | 10.02 |
| 78) | C | tetrachloroethene | 3.315 | 2.829 | 2.785 | 2.730 | 2.525 | 2.659 | 2.515 | 2.528 | 2.7358 | 9.66 |
| 79) | | 1,1,1,2-tetrachloroethane | 2.731 | 2.482 | 2.508 | 2.499 | 2.448 | 2.586 | 2.429 | 2.411 | 2.5118 | 4.14 |
| 80) | C | chlorobenzene | 4.804 | 4.219 | 4.332 | 4.484 | 4.342 | 4.544 | 4.248 | 4.180 | 4.3942 | 4.73 |
| 81) | C | ethylbenzene | 7.421 | 6.860 | 6.678 | 6.913 | 6.596 | 6.859 | 6.354 | 6.226 | 6.7383 | 5.50 |
| 82) | | 2-ethylthiophene | 6.156 | 5.438 | 5.371 | 5.387 | 5.123 | 5.528 | 5.071 | 5.023 | 5.3872 | 6.72 |
| 83) | C | m+p-xylene | 5.980 | 5.328 | 5.314 | 5.469 | 5.144 | 5.403 | 4.999 | 4.856 | 5.3116 | 6.42 |
| 84) | C | bromoform | 3.556 | 3.564 | 3.509 | 3.747 | 3.615 | 3.878 | 3.692 | 3.666 | 3.6534 | 3.28 |
| 85) | C | styrene | 4.217 | 3.966 | 4.214 | 4.287 | 4.143 | 4.359 | 4.085 | 4.048 | 4.1646 | 3.11 |
| 86) | C | 1,1,2,2-tetrachloroethane | 4.574 | 4.174 | 4.106 | 4.207 | 3.963 | 4.193 | 3.923 | 3.796 | 4.1169 | 5.74 |
| 87) | C | o-xylene | 6.183 | 5.532 | 5.454 | 5.633 | 5.363 | 5.566 | 5.202 | 5.017 | 5.4939 | 6.28 |
| 88) | | 1,2,3-trichloropropane | 3.230 | 3.296 | 3.118 | 3.236 | 3.062 | 3.170 | 2.977 | 2.930 | 3.1275 | 4.16 |
| 89) | | nonane | 6.384 | 5.375 | 4.888 | 4.935 | 4.619 | 4.816 | 4.373 | 4.106 | 4.9369 | 14.14 |
| 90) | s | bromofluorobenzene | 2.647 | 2.652 | 2.666 | 2.711 | 2.644 | 2.686 | 2.666 | 2.687 | 2.6699 | 0.87 |
| 91) | C | isopropylbenzene | 7.983 | 7.506 | 7.579 | 7.657 | 7.429 | 7.768 | 7.257 | 7.196 | 7.5468 | 3.45 |
| 92) | | bromobenzene | 4.390 | 3.904 | 3.895 | 3.982 | 3.773 | 3.887 | 3.659 | 3.606 | 3.8869 | 6.20 |
| 93) | | 2-chlorotoluene | 2.577 | 2.200 | 2.269 | 2.319 | 2.204 | 2.289 | 2.163 | 2.147 | 2.2710 | 6.07 |

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Method File : TALL150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 12:56:18 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D 5.0 =R138816.D 10 =R138817.D 20 =R138818.D
50 =R138819.D 100 =R138820.D

| | | Compound | 0.2 | 0.5 | 1.0 | 5.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 94) | | n-propylbenzene | 2.512 | 2.303 | 2.391 | 2.442 | 2.311 | 2.395 | 2.325 | 2.308 | 2.3734 | 3.19 |
| 95) | | 4-chlorotoluene | 6.250 | 6.152 | 5.891 | 5.926 | 5.674 | 5.922 | 5.546 | 5.397 | 5.8450 | 4.98 |
| 96) | | 4-ethyl toluene | 8.656 | 7.940 | 8.420 | 8.781 | 8.341 | 8.608 | 8.179 | 8.093 | 8.3770 | 3.52 |
| 97) | | 1,3,5-trimethylbenzene | 7.925 | 7.114 | 7.217 | 7.680 | 6.973 | 7.460 | 7.238 | 6.961 | 7.3209 | 4.69 |
| 98) | | tert-butylbenzene | 8.521 | 7.641 | 7.775 | 7.971 | 7.642 | 7.876 | 7.505 | 7.162 | 7.7617 | 5.08 |
| 99) | | 1,2,4-trimethylbenzene | 7.056 | 6.585 | 6.493 | 6.831 | 6.564 | 6.806 | 6.450 | 6.199 | 6.6232 | 4.02 |
| 100) | | decane | 5.530 | 4.630 | 4.658 | 4.864 | 4.549 | 4.619 | 4.328 | 4.122 | 4.6623 | 8.93 |
| 101) | C | Benzyl Chloride | 5.722 | 5.607 | 5.706 | 6.278 | 6.101 | 6.364 | 6.225 | 6.292 | 6.0371 | 5.10 |
| 102) | | 1,3-dichlorobenzene | 5.428 | 4.903 | 4.937 | 5.268 | 5.009 | 5.150 | 4.974 | 4.850 | 5.0649 | 3.95 |
| 103) | C | 1,4-dichlorobenzene | 5.265 | 5.101 | 4.989 | 5.347 | 5.086 | 5.256 | 5.012 | 4.876 | 5.1166 | 3.14 |
| 104) | | sec-butylbenzene | 1.061 | 1.009 | 0.980 | 1.029 | 0.961 | 1.002 | 0.958 | 0.896 | 0.9870 | 5.10 |
| 105) | | 1,2,3-trimethylbenzene | 6.616 | 5.906 | 6.077 | 5.948 | 5.645 | 5.805 | 5.631 | 5.535 | 5.8955 | 5.83 |
| 106) | | p-isopropyltoluene | 1.023 | 0.963 | 0.941 | 0.992 | 0.943 | 0.964 | 0.923 | 0.897 | 0.9556 | 4.12 |
| 107) | | 1,2-dichlorobenzene | 5.022 | 4.790 | 4.725 | 5.018 | 4.808 | 4.816 | 4.661 | 4.666 | 4.8133 | 2.92 |
| 108) | | n-butylbenzene | 8.016 | 7.701 | 7.888 | 8.495 | 7.930 | 7.877 | 7.585 | 7.481 | 7.8715 | 3.95 |
| 109) | | indan | 7.201 | 6.439 | 6.573 | 6.705 | 6.372 | 6.578 | 6.415 | 6.359 | 6.5804 | 4.22 |
| 110) | | indene | 4.811 | 4.877 | 4.669 | 4.583 | 4.357 | 4.705 | 4.549 | 4.509 | 4.6324 | 3.64 |
| 111) | C | 1,2-dibromo-3-chloropropane | 2.109 | 2.125 | 2.086 | 2.235 | 2.161 | 2.072 | 2.090 | 2.061 | 2.1172 | 2.71 |
| 112) | | undecane | 5.525 | 5.473 | 5.280 | 5.866 | 5.474 | 4.863 | 4.862 | 4.761 | 5.2630 | 7.51 |
| 113) | | 1,2,4,5-tetramethylbenzene | 1.204 | 1.198 | 1.189 | 1.389 | 1.370 | 1.154 | 1.190 | 1.190 | 1.2355 | 7.30 |
| 114) | | dodecane | 6.083 | 4.669 | 5.061 | 6.271 | 6.218 | 4.505 | 4.478 | 4.349 | 5.2040 | 16.23 |
| 115) | C | 1,2,4-trichlorobenzene | 3.682 | 4.040 | 3.737 | 4.583 | 4.680 | 3.649 | 3.921 | 4.145 | 4.0546 | 9.78 |
| 116) | | naphthalene | 1.373 | 0.962 | 0.946 | 1.131 | 1.064 | 0.824 | 0.873 | 0.947 | 1.0150 | 17.18 |
| 117) | | 1,2,3-trichlorobenzene | 3.769 | 3.455 | 3.946 | 4.533 | 4.337 | 3.192 | 3.438 | 3.828 | 3.8122 | 12.01 |
| 118) | | benzothiophene | 7.684 | 7.577 | 8.222 | 9.370 | 9.011 | 7.270 | 7.875 | 8.606 | 8.2017 | 9.00 |
| 119) | C | hexachlorobutadiene | 2.892 | 2.853 | 3.098 | 3.459 | 3.451 | 2.727 | 2.926 | 3.146 | 3.0689 | 8.88 |
| 120) | | 2-methylnaphthalene | | | 2.424 | 3.786 | 4.041 | 2.437 | 2.634 | 3.037 | 3.0600 | 22.94 |
| 121) | | 1-methylnaphthalene | | 2.358 | 2.650 | 3.532 | 3.694 | 2.490 | 2.599 | 2.980 | 2.9003 | 18.09 |

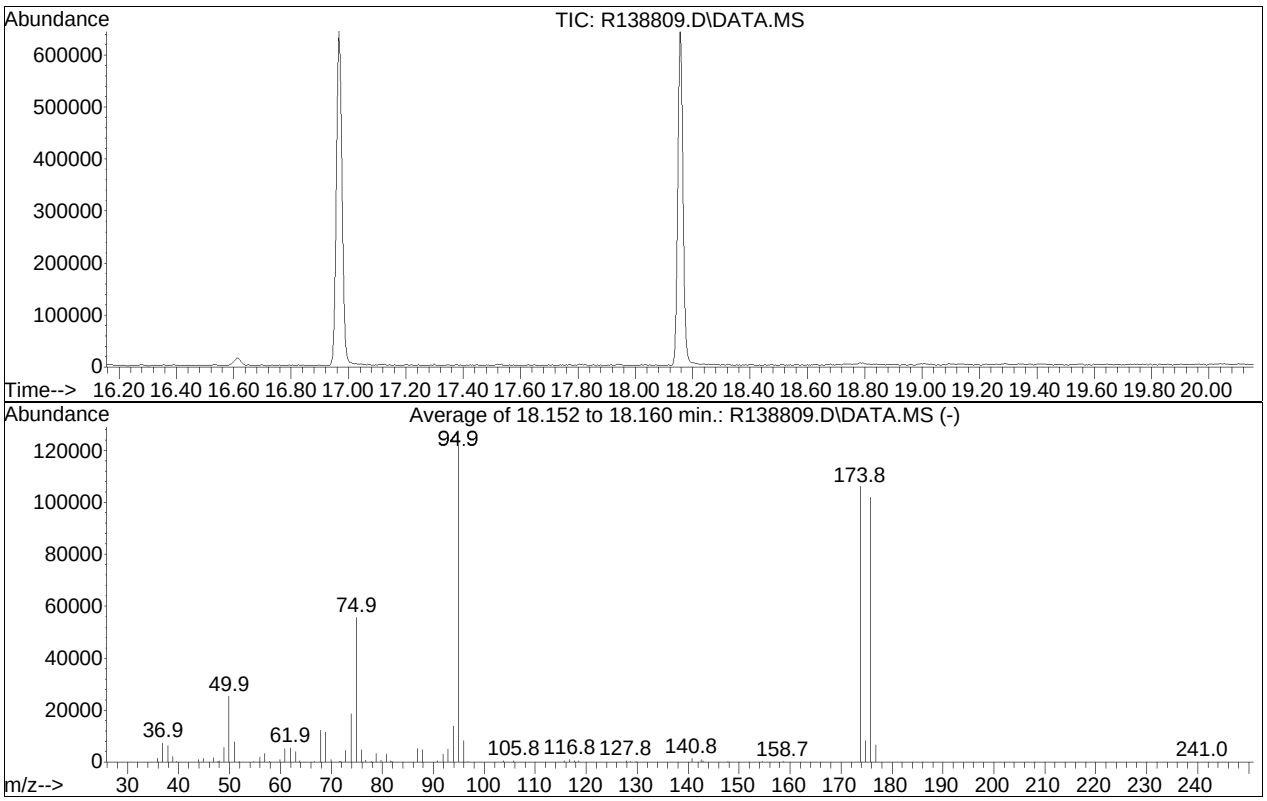
(#) = Out of Range

BFB

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138809.D
Acq On : 2 Jan 2015 6:33 pm
Operator : AIRPIANO1:RY
Sample : WG753093-1,3,250,250
Misc : WG753093
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 12:56:18 2015




AutoFind: Scans 1934, 1935, 1936; Background Corrected with Scan 1925

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 20.6 | 25389 | PASS |
| 75 | 95 | 30 | 66 | 45.4 | 55800 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 122997 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 8228 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 86.3 | 106125 | PASS |
| 175 | 174 | 4 | 9 | 7.8 | 8323 | PASS |
| 176 | 174 | 93 | 101 | 96.1 | 102003 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 6646 | PASS |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.2
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:56:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 140923 | 10.000 ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery | = 103.29% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 292479 | 10.000 ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery | = 104.81% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 64899 | 10.000 ppbV | 0.00 |
| Standard Area = 65032 | | | Recovery | = 99.80% | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.13 | 65 | 88910 | 9.965 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 99.65% | |
| 69) toluene-D8 | 15.27 | 98 | 232721 | 10.168 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 101.68% | |
| 90) bromofluorobenzene | 18.15 | 95 | 171763 | 10.008 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 100.08% | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 3643 | 0.251 ppbV | 99 |
| 3) propylene | 3.77 | 41 | 1836M4 | 0.246 ppbV | |
| 4) propane | 3.80 | 29 | 3827 | 0.457 ppbV # | 76 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 4248 | 0.355 ppbV # | 82 |
| 6) chloromethane | 4.09 | 50 | 2361 | 0.302 ppbV # | 84 |
| 7) Freon-114 | 4.25 | 85 | 5429 | 0.243 ppbV # | 75 |
| 8) methanol | 4.35 | 31 | 5613 | 1.697 ppbV # | 25 |
| 9) vinyl chloride | 4.42 | 62 | 2057 | 0.243 ppbV | 97 |
| 10) 1,3-butadiene | 4.62 | 54 | 1610 | 0.245 ppbV # | 63 |
| 11) butane | 4.69 | 43 | 3303 | 0.234 ppbV # | 71 |
| 12) acetaldehyde | 4.28 | 29 | 7605 | 1.409 ppbV # | 77 |
| 13) bromomethane | 5.01 | 94 | 2596 | 0.317 ppbV | 82 |
| 14) chloroethane | 5.28 | 64 | 1236 | 0.305 ppbV # | 59 |
| 15) ethanol | 5.50 | 31 | 10443 | 1.508 ppbV | 100 |
| 16) dichlorofluoromethane | 5.45 | 67 | 4302 | 0.238 ppbV | 98 |
| 17) vinyl bromide | 5.79 | 106 | 2096 | 0.239 ppbV # | 54 |
| 18) acrolein | 6.00 | 56 | 1225 | 0.340 ppbV # | 45 |
| 19) acetone | 6.21 | 43 | 19091M3 | 1.373 ppbV | |
| 20) acetonitrile | 5.80 | 41 | 2238M6 | 0.267 ppbV | |
| 21) trichlorofluoromethane | 6.40 | 101 | 5065 | 0.228 ppbV | 92 |
| 22) isopropyl alcohol | 6.59 | 45 | 4741M4 | 0.282 ppbV | |
| 23) acrylonitrile | 6.86 | 53 | 1816M6 | 0.283 ppbV | |
| 24) pentane | 6.92 | 43 | 4454 | 0.272 ppbV | 96 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.2
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:56:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) ethyl ether | 7.00 | 31 | 3751 | 0.295 ppbV | 98 |
| 26) 1,1-dichloroethene | 7.29 | 61 | 3343 | 0.233 ppbV # | 92 |
| 27) tertiary butyl alcohol | 7.44 | 59 | 4676 | 0.250 ppbV # | 82 |
| 28) methylene chloride | 7.48 | 49 | 3437 | 0.287 ppbV # | 79 |
| 29) 3-chloropropene | 7.63 | 41 | 4786 | 0.361 ppbV # | 76 |
| 30) carbon disulfide | 7.82 | 76 | 5592 | 0.229 ppbV # | 1 |
| 31) Freon 113 | 7.84 | 101 | 4106 | 0.230 ppbV | 92 |
| 32) trans-1,2-dichloroethene | 8.73 | 61 | 2940 | 0.208 ppbV # | 75 |
| 33) 1,1-dichloroethane | 8.98 | 63 | 4079 | 0.258 ppbV # | 80 |
| 34) MTBE | 9.11 | 73 | 5555 | 0.233 ppbV # | 91 |
| 35) vinyl acetate | 9.21 | 43 | 3032M4 | 0.124 ppbV | |
| 36) 2-butanone | 9.54 | 43 | 4090M3 | 0.183 ppbV | |
| 37) cis-1,2-dichloroethene | 10.03 | 61 | 3484 | 0.236 ppbV | 93 |
| 38) Ethyl Acetate | 10.39 | 61 | 791M6 | 0.208 ppbV | |
| 39) chloroform | 10.38 | 83 | 5383 | 0.244 ppbV | 95 |
| 40) Tetrahydrofuran | 10.93 | 42 | 4621M4 | 0.364 ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 4789 | 0.243 ppbV # | 80 |
| 42) 1,2-dichloroethane | 11.27 | 62 | 2476 | 0.190 ppbV # | 71 |
| 44) hexane | 10.27 | 57 | 4816 | 0.261 ppbV # | 37 |
| 45) diisopropyl ether | 10.31 | 87 | 2110 | 0.240 ppbV # | 63 |
| 46) tert-butyl ethyl ether | 10.96 | 59 | 7045 | 0.234 ppbV # | 90 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 4359 | 0.224 ppbV | 93 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 3057 | 0.221 ppbV | 93 |
| 50) benzene | 12.09 | 78 | 6026 | 0.227 ppbV | 98 |
| 51) thiophene | 12.25 | 84 | 4527 | 0.252 ppbV # | 90 |
| 52) carbon tetrachloride | 12.27 | 117 | 4686 | 0.229 ppbV # | 75 |
| 53) cyclohexane | 12.40 | 56 | 3974 | 0.253 ppbV # | 73 |
| 54) tert-amyl methyl ether | 12.81 | 73 | 6047 | 0.231 ppbV # | 86 |
| 55) dibromomethane | 13.02 | 93 | 2301 | 0.207 ppbV # | 68 |
| 56) 1,2-dichloropropane | 13.05 | 63 | 2124 | 0.204 ppbV # | 87 |
| 57) bromodichloromethane | 13.27 | 83 | 4550 | 0.206 ppbV | 95 |
| 58) 1,4-dioxane | 13.38 | 88 | 829 | 0.129 ppbV # | 58 |
| 59) trichloroethene | 13.32 | 130 | 3001 | 0.217 ppbV | 92 |
| 60) 2,2,4-trimethylpentane | 13.35 | 57 | 11514 | 0.234 ppbV # | 84 |
| 61) methyl methacrylate | 13.58 | 41 | 3084 | 0.202 ppbV # | 80 |
| 62) heptane | 13.67 | 43 | 6627 | 0.321 ppbV # | 63 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 2955 | 0.195 ppbV # | 86 |
| 64) 4-methyl-2-pentanone | 14.40 | 43 | 7238 | 0.258 ppbV | 95 |
| 65) trans-1,3-dichloropropene | 14.92 | 75 | 2145 | 0.141 ppbV # | 86 |
| 66) 1,1,2-trichloroethane | 15.10 | 97 | 2659 | 0.224 ppbV | 87 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.2
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:56:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 7931 | 0.246 | ppbV | | 85 |
| 70) | 2-methylthiophene | 15.44 | 97 | 6601 | 0.221 | ppbV | | 94 |
| 71) | 1,3-dichloropropane | 15.41 | 76 | 3060 | 0.213 | ppbV | # | 69 |
| 72) | 2-hexanone | 15.67 | 43 | 4475M3 | 0.176 | ppbV | | |
| 73) | 3-methylthiophene | 15.61 | 97 | 6283 | 0.228 | ppbV | | 94 |
| 74) | dibromochloromethane | 15.79 | 129 | 5098 | 0.217 | ppbV | # | 84 |
| 75) | 1,2-dibromoethane | 16.03 | 107 | 4164 | 0.217 | ppbV | # | 71 |
| 76) | butyl acetate | 16.21 | 73 | 701 | 0.201 | ppbV | # | 1 |
| 77) | octane | 16.27 | 85 | 2394 | 0.252 | ppbV | # | 68 |
| 78) | tetrachloroethene | 16.43 | 166 | 4303 | 0.263 | ppbV | | 90 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 3545 | 0.223 | ppbV | | 97 |
| 80) | chlorobenzene | 17.00 | 112 | 6236 | 0.221 | ppbV | # | 90 |
| 81) | ethylbenzene | 17.30 | 91 | 9632 | 0.225 | ppbV | | 91 |
| 82) | 2-ethylthiophene | 17.34 | 97 | 7991 | 0.240 | ppbV | | 98 |
| 83) | m+p-xylene | 17.44 | 91 | 15524 | 0.465 | ppbV | | 94 |
| 84) | bromoform | 17.52 | 173 | 4616 | 0.197 | ppbV | | 92 |
| 85) | styrene | 17.72 | 104 | 5473 | 0.204 | ppbV | | 91 |
| 86) | 1,1,2,2-tetrachloroethane | 17.81 | 83 | 5937 | 0.231 | ppbV | | 87 |
| 87) | o-xylene | 17.81 | 91 | 8026 | 0.231 | ppbV | | 95 |
| 88) | 1,2,3-trichloropropane | 17.91 | 75 | 4193 | 0.211 | ppbV | # | 82 |
| 89) | nonane | 17.94 | 43 | 8286M4 | 0.276 | ppbV | | |
| 91) | isopropylbenzene | 18.24 | 105 | 10362 | 0.215 | ppbV | # | 79 |
| 92) | bromobenzene | 18.33 | 77 | 5698 | 0.233 | ppbV | | 85 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 3345 | 0.234 | ppbV | | 98 |
| 94) | n-propylbenzene | 18.63 | 120 | 3261 | 0.217 | ppbV | | 97 |
| 95) | 4-chlorotoluene | 18.67 | 91 | 8113M4 | 0.220 | ppbV | | |
| 96) | 4-ethyl toluene | 18.73 | 105 | 11235 | 0.208 | ppbV | | 99 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 10286 | 0.227 | ppbV | # | 89 |
| 98) | tert-butylbenzene | 19.09 | 119 | 11060 | 0.223 | ppbV | | 92 |
| 99) | 1,2,4-trimethylbenzene | 19.10 | 105 | 9159 | 0.215 | ppbV | | 91 |
| 100) | decane | 19.13 | 57 | 7178 | 0.243 | ppbV | # | 88 |
| 101) | Benzyl Chloride | 19.22 | 91 | 7427 | 0.188 | ppbV | | 99 |
| 102) | 1,3-dichlorobenzene | 19.23 | 146 | 7046 | 0.217 | ppbV | | 98 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 6834M3 | 0.207 | ppbV | | |
| 104) | sec-butylbenzene | 19.30 | 105 | 13772 | 0.221 | ppbV | # | 88 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 8588 | 0.234 | ppbV | | 98 |
| 106) | p-isopropyltoluene | 19.41 | 119 | 13274 | 0.217 | ppbV | | 94 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 6518 | 0.209 | ppbV | | 98 |
| 108) | n-butylbenzene | 19.73 | 91 | 10404 | 0.202 | ppbV | | 93 |
| 109) | indan | 19.58 | 117 | 9347 | 0.226 | ppbV | # | 92 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.2
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:56:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 6244 | 0.221 ppbV # | 73 |
| 111) 1,2-dibromo-3-chloropr... | 19.90 | 75 | 2737 | 0.195 ppbV # | 49 |
| 112) undecane | 20.10 | 57 | 7171 | 0.202 ppbV # | 96 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 15628 | 0.176 ppbV | 98 |
| 114) dodecane | 21.03 | 57 | 7895 | 0.196 ppbV | 99 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 4779 | 0.157 ppbV | 93 |
| 116) naphthalene | 21.14 | 128 | 17824 | 0.258 ppbV # | 95 |
| 117) 1,2,3-trichlorobenzene | 21.40 | 180 | 4892 | 0.174 ppbV | 96 |
| 118) benzothiophene | 21.21 | 134 | 9974 | 0.171 ppbV # | 94 |
| 119) hexachlorobutadiene | 21.45 | 225 | 3754 | 0.168 ppbV # | 89 |
| 120) 2-methylnaphthalene | 22.32 | 142 | 1634 | 0.062 ppbV # | 77 |
| 121) 1-methylnaphthalene | 22.54 | 142 | 2322 | 0.097 ppbV # | 87 |

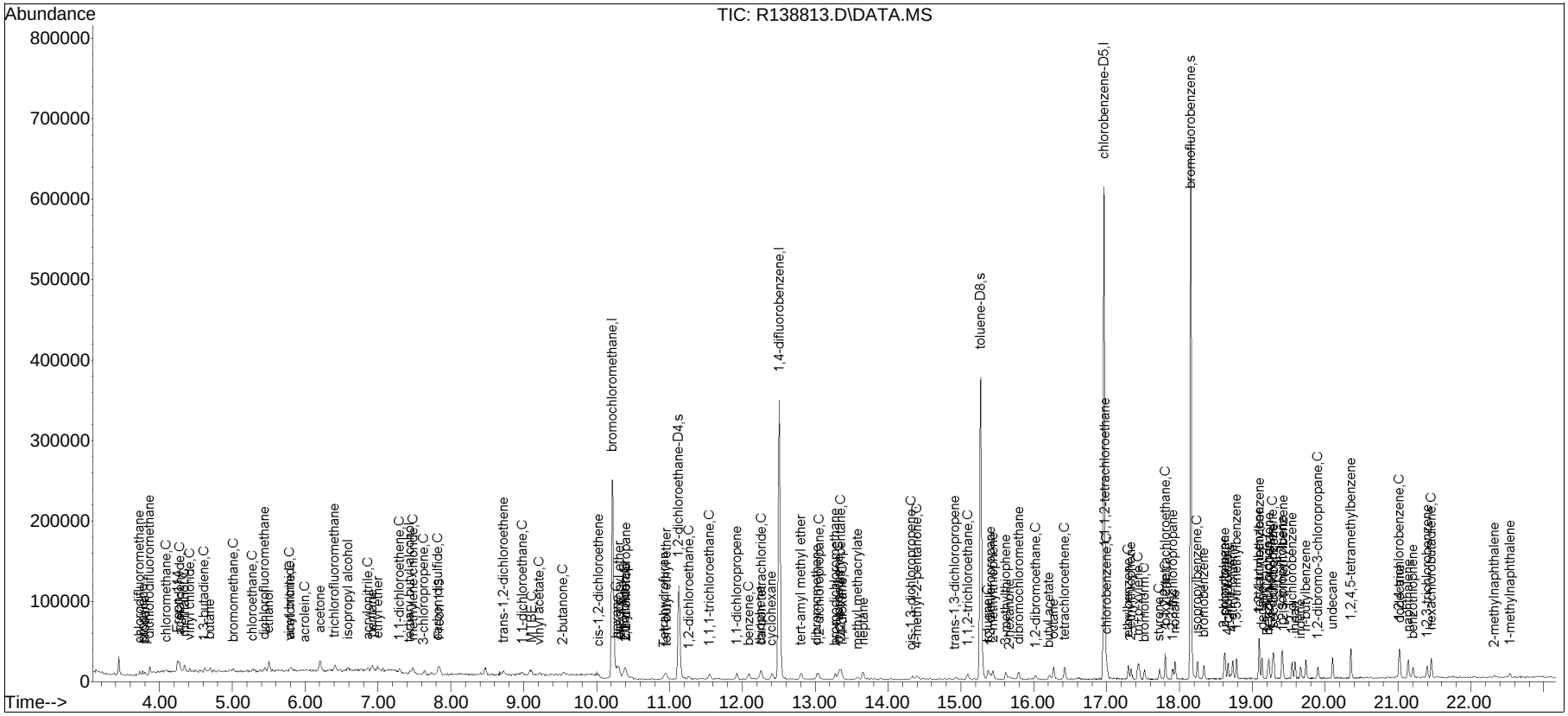
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138813.D
Acq On : 2 Jan 2015 8:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.2
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:56:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

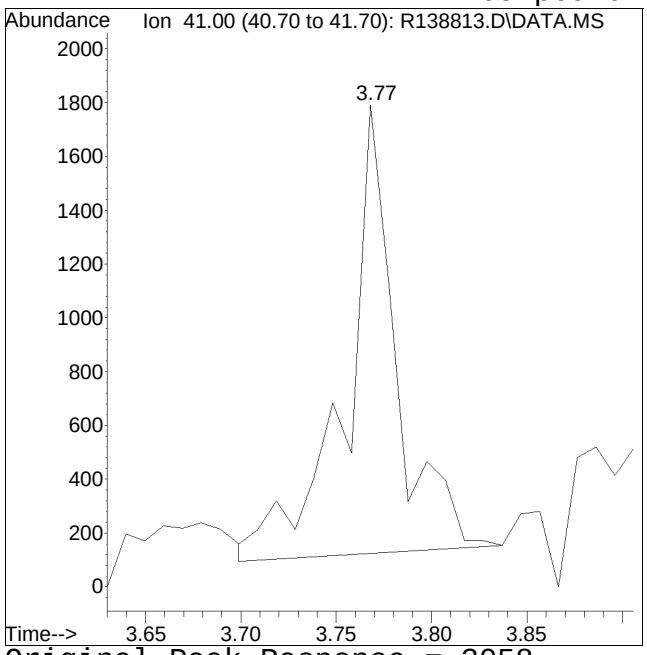
Sub List : Default - All compounds listed0102T_ICAL\R138817.D



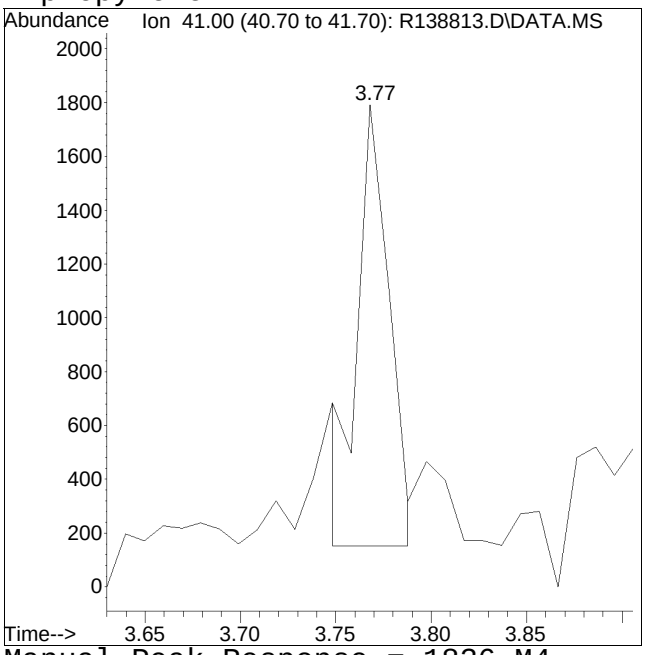
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.2 Quant Date : 1/3/2015 12:42 pm

Compound #3: propylene




Original Peak Response = 3058



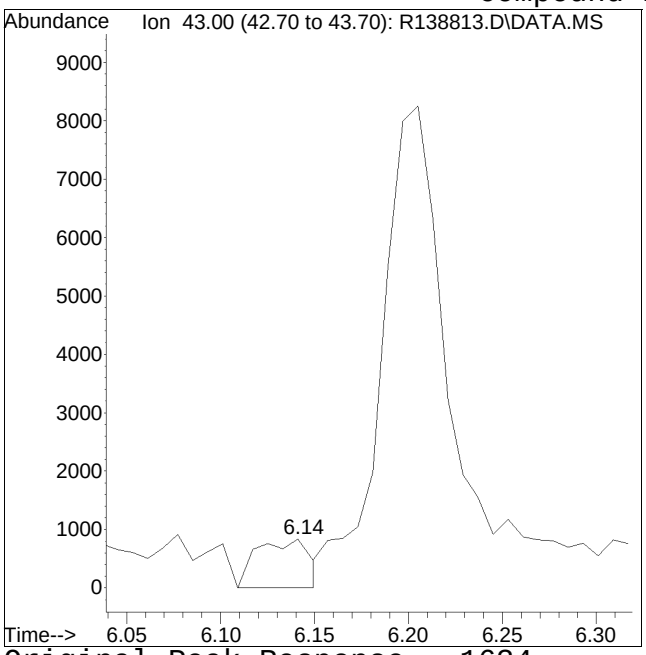

Manual Peak Response = 1836 M4

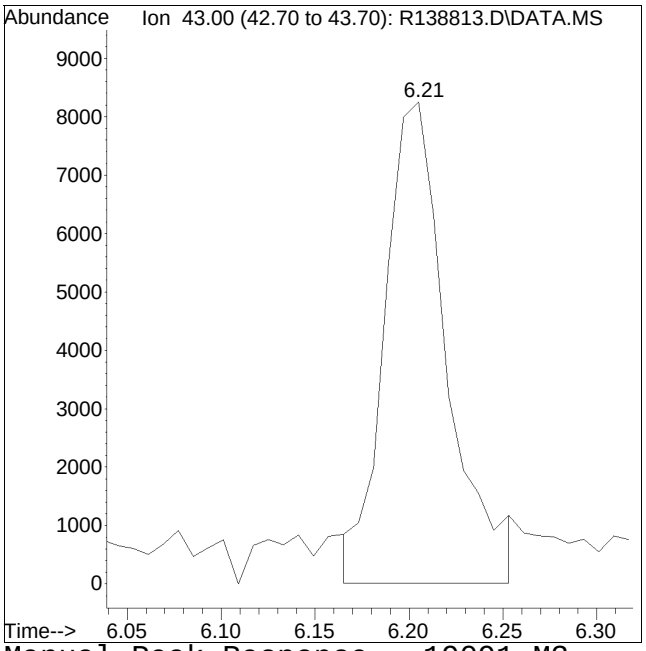
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D
Date Inj'd : 1/2/2015 8:57 pm
Sample : ITO15-LLSTD0.2
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #19: acetone



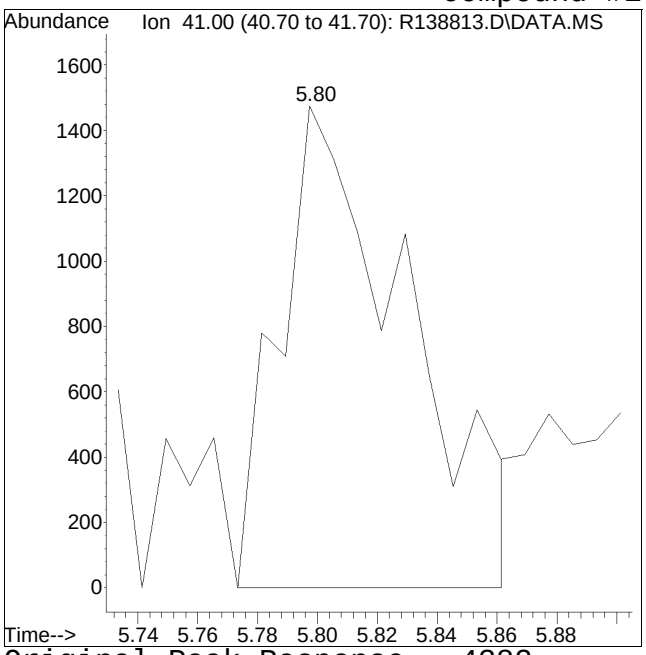

Original Peak Response = 1634 Manual Peak Response = 19091 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

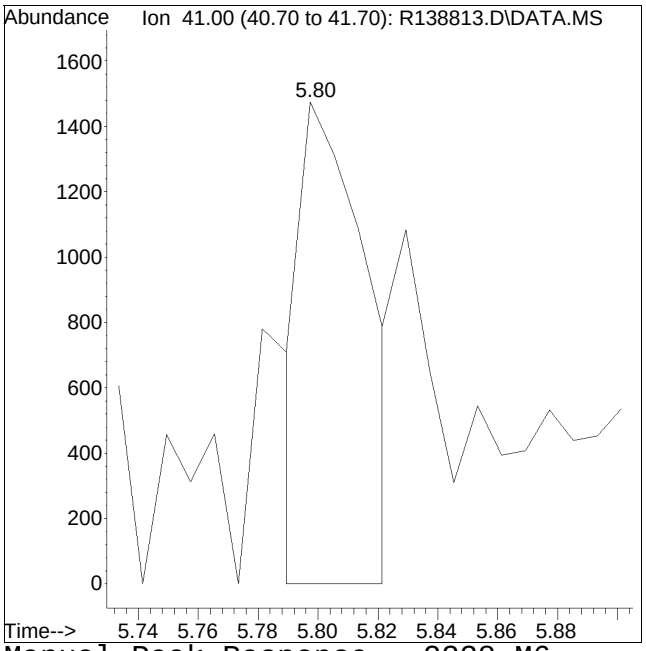
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.2 Quant Date : 1/3/2015 12:42 pm

Compound #20: acetonitrile




Original Peak Response = 4382




Manual Peak Response = 2238 M6

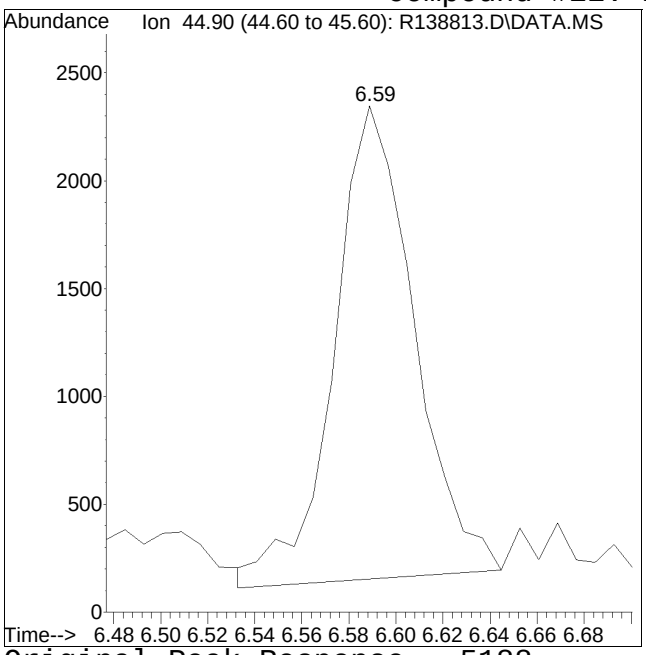
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

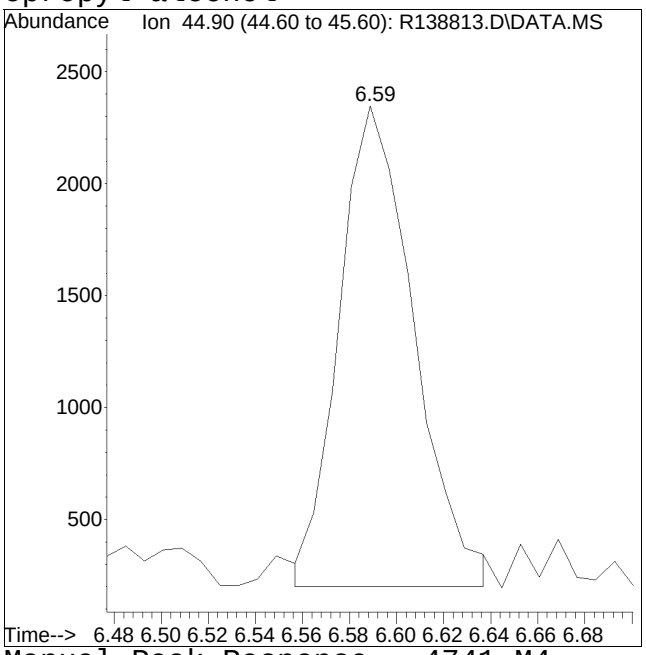
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138813.D
Date Inj'd : 1/2/2015 8:57 pm
Sample : ITO15-LLSTD0.2

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #22: isopropyl alcohol




Original Peak Response = 5188



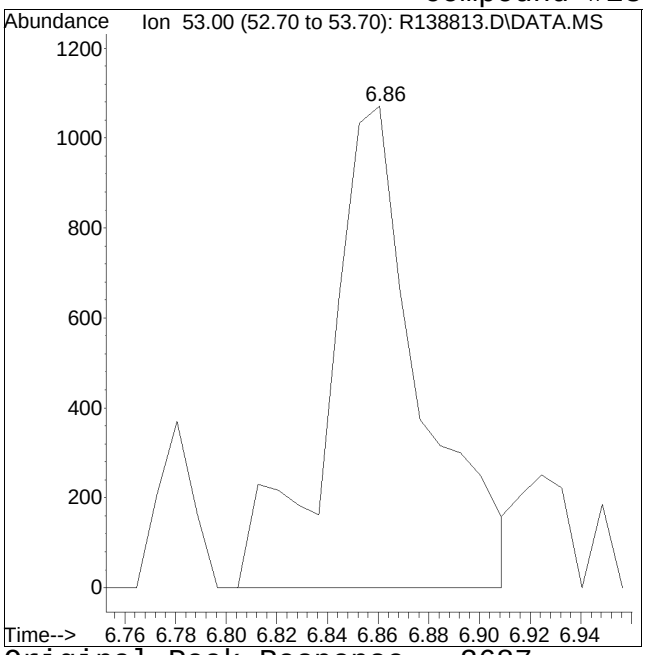

Manual Peak Response = 4741 M4

M4 = Poor automated baseline construction.

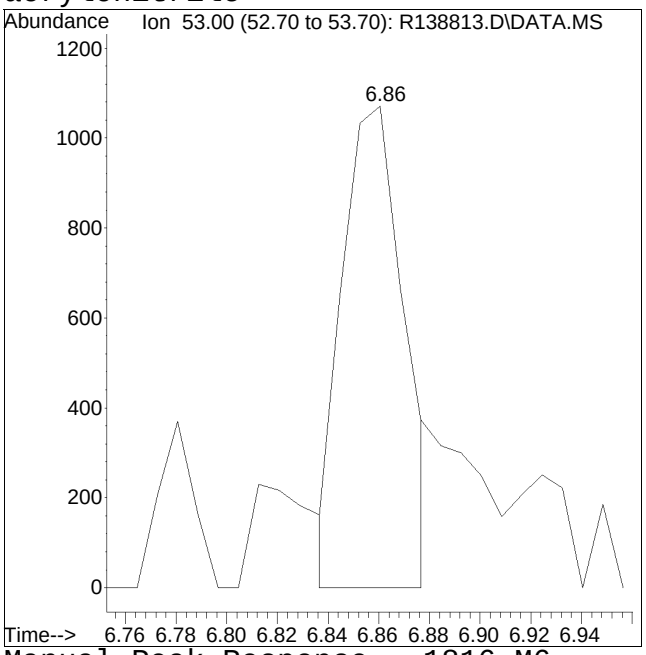
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TALL150102.M
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.2 Quant Date : 1/3/2015 12:42 pm

Compound #23: acrylonitrile




Original Peak Response = 2687



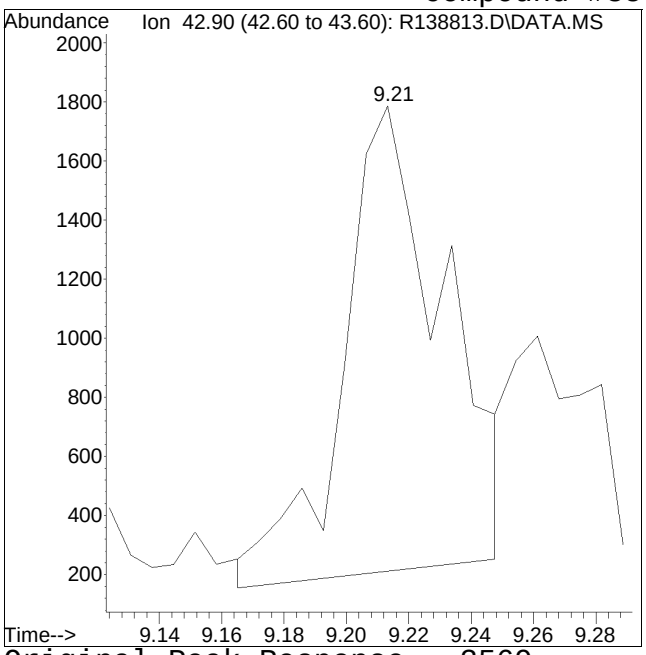

Manual Peak Response = 1816 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

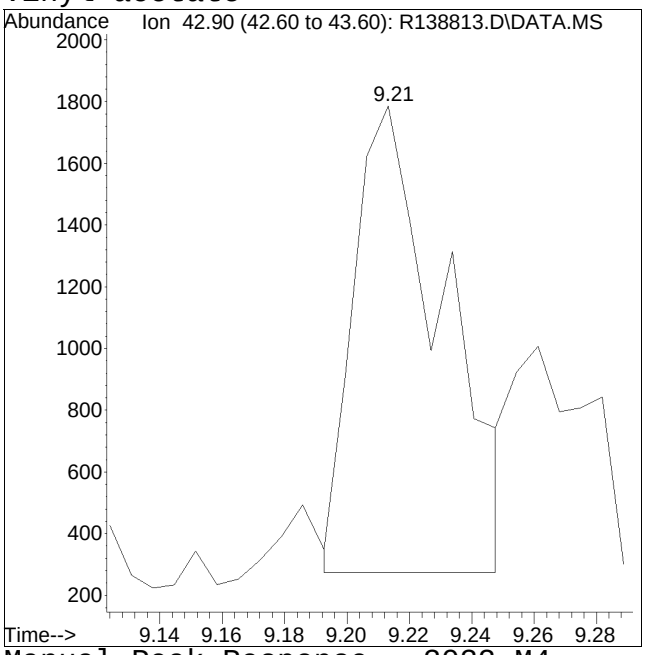
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D
Date Inj'd : 1/2/2015 8:57 pm
Sample : ITO15-LLSTD0.2
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #35: vinyl acetate




Original Peak Response = 3569



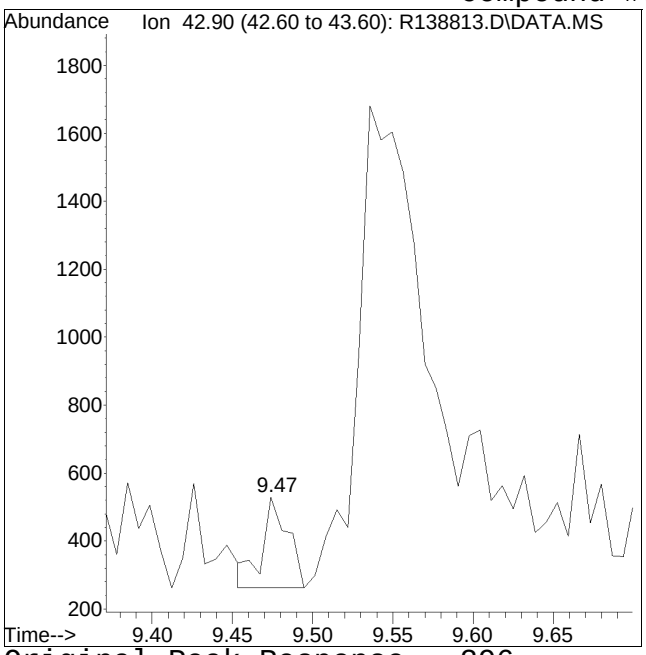

Manual Peak Response = 3032 M4

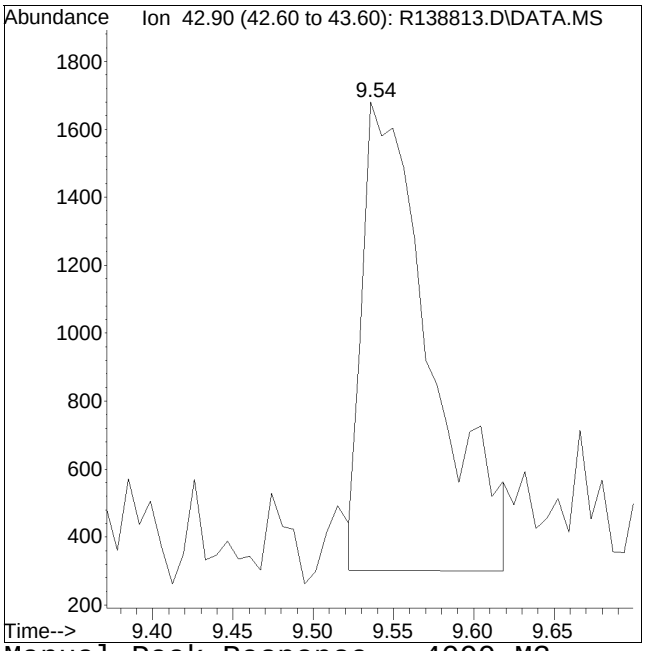
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D
Date Inj'd : 1/2/2015 8:57 pm
Sample : ITO15-LLSTD0.2
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #36: 2-butanone



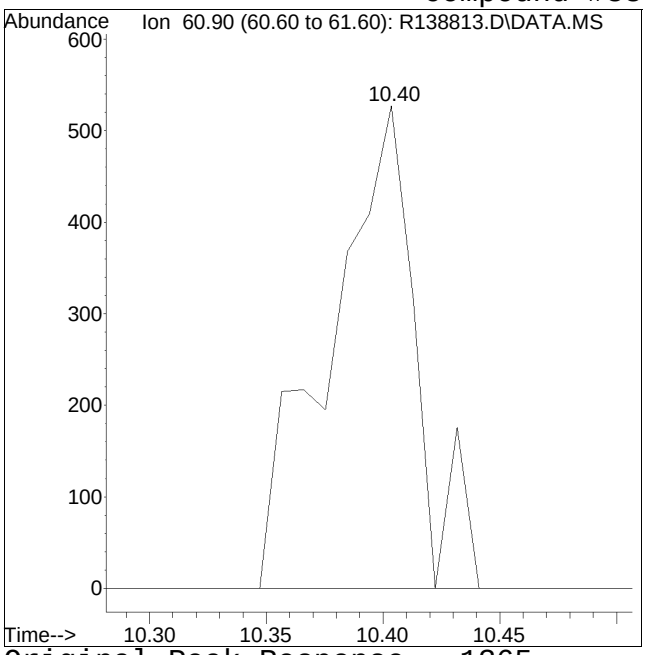

Original Peak Response = 296 Manual Peak Response = 4090 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

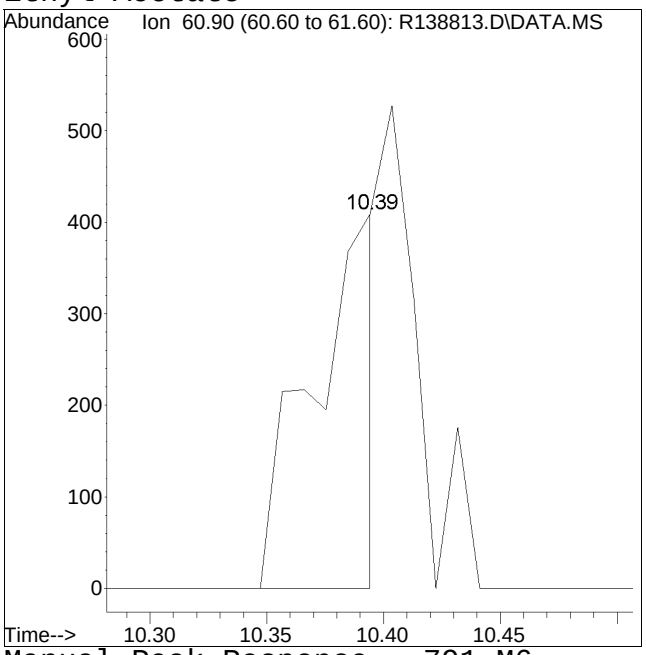
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : QM150102T_ICAL\TALL150102.M
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.2 Quant Date : 1/3/2015 12:42 pm

Compound #38: Ethyl Acetate




Original Peak Response = 1365



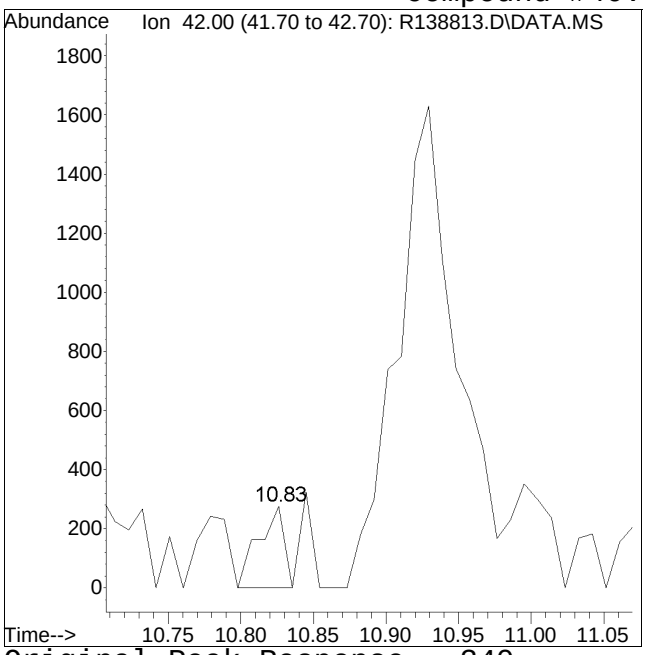

Manual Peak Response = 791 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

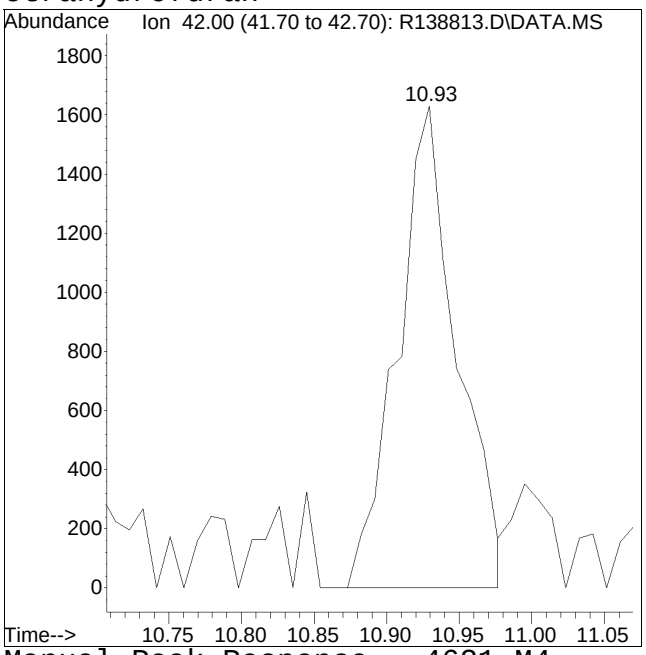
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D
Date Inj'd : 1/2/2015 8:57 pm
Sample : ITO15-LLSTD0.2
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 340



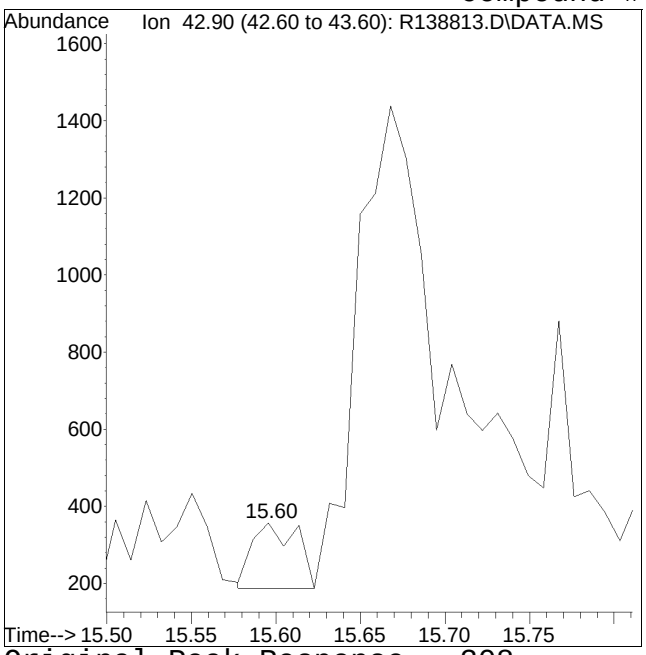

Manual Peak Response = 4621 M4

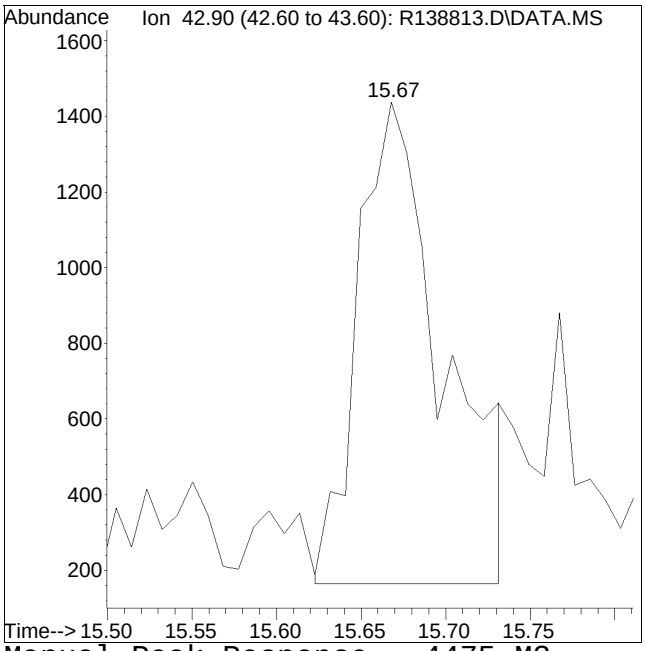
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.2 Quant Date : 1/3/2015 12:42 pm

Compound #72: 2-hexanone



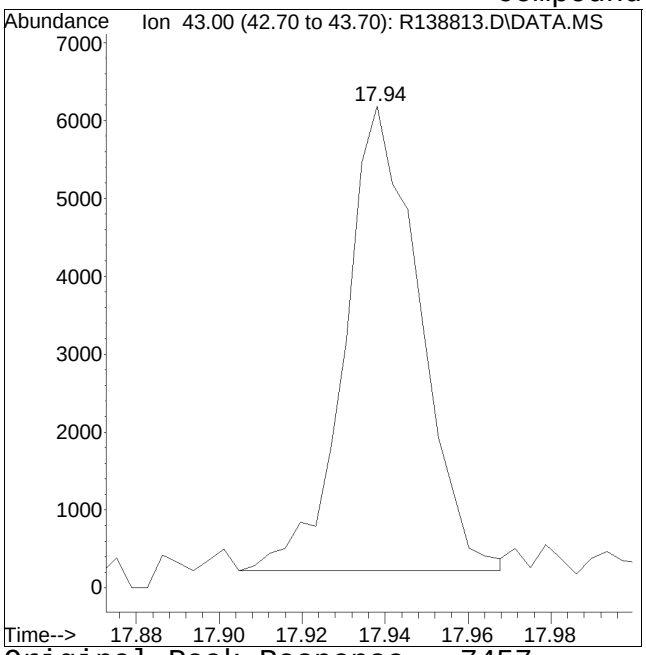

Original Peak Response = 308 Manual Peak Response = 4475 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

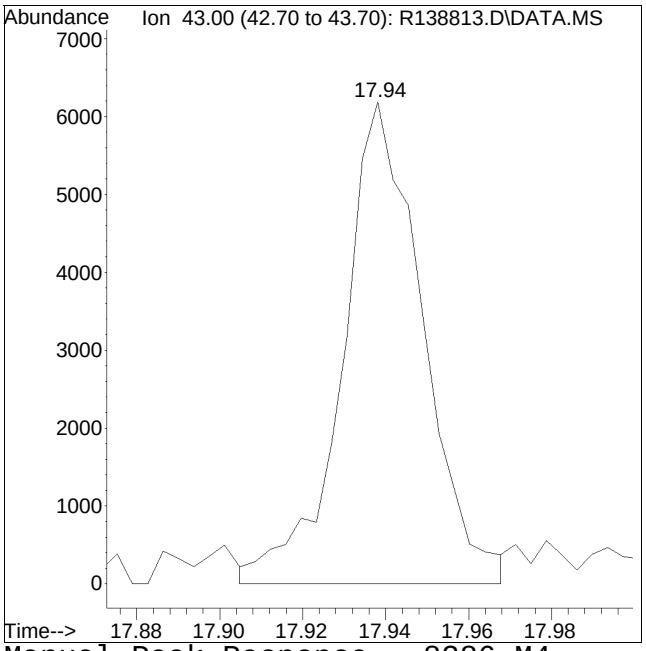
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D
Date Inj'd : 1/2/2015 8:57 pm
Sample : ITO15-LLSTD0.2
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #89: nonane




Original Peak Response = 7457



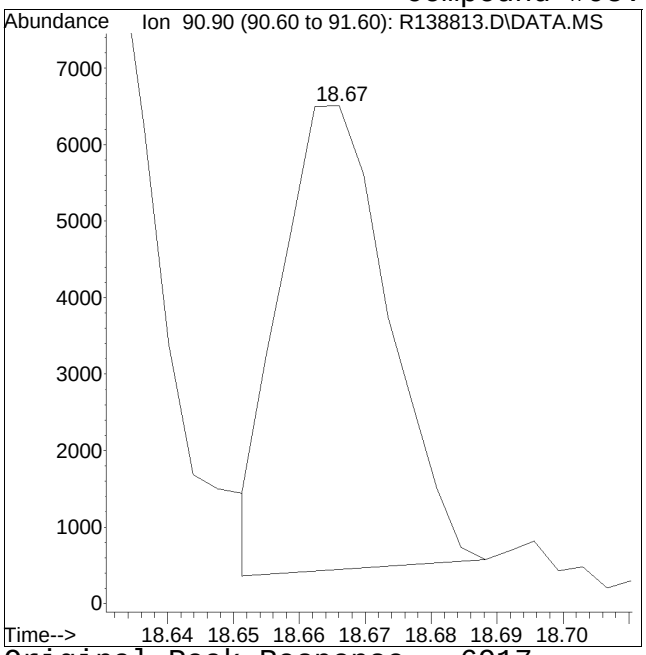

Manual Peak Response = 8286 M4

M4 = Poor automated baseline construction.

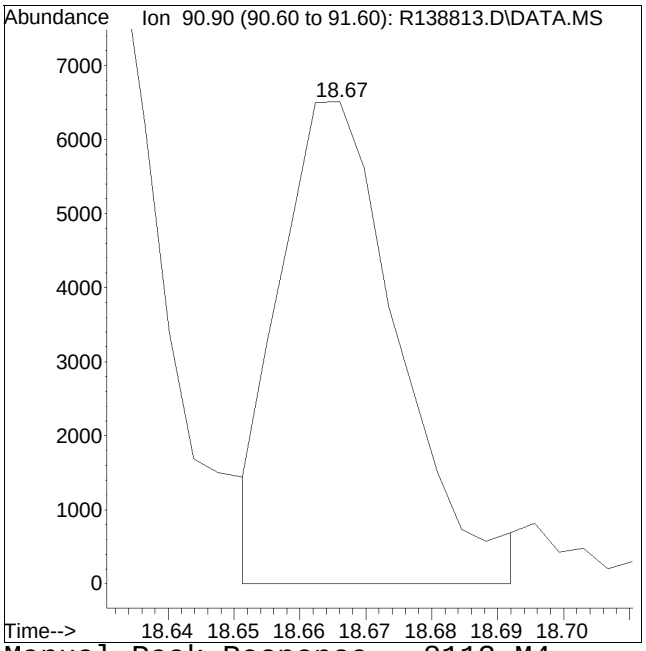
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.2 Quant Date : 1/3/2015 12:42 pm

Compound #95: 4-chlorotoluene




Original Peak Response = 6917



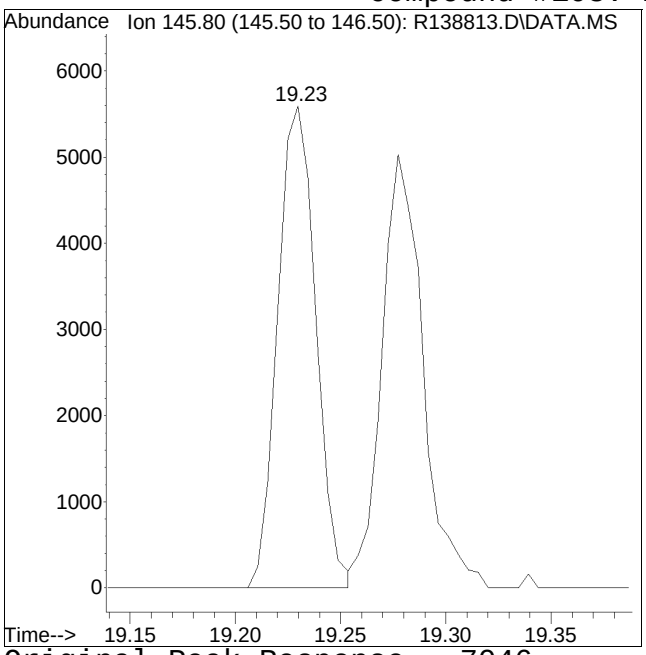

Manual Peak Response = 8113 M4

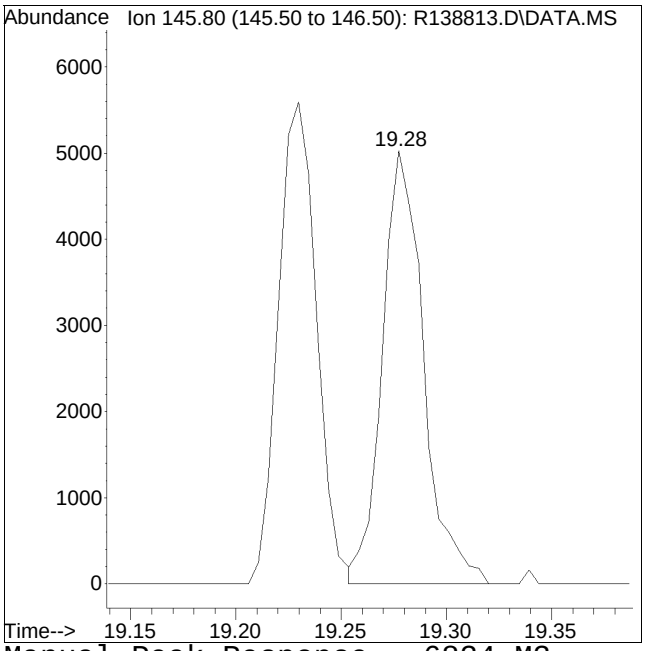
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138813.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 8:57 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.2 Quant Date : 1/3/2015 12:42 pm

Compound #103: 1,4-dichlorobenzene




Original Peak Response = 7046 Manual Peak Response = 6834 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.5
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:47:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 140077 | 10.000 ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery | = 102.67% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 293202 | 10.000 ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery | = 105.07% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 65242 | 10.000 ppbV | 0.00 |
| Standard Area = 65032 | | | Recovery | = 100.32% | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.13 | 65 | 84381 | 9.434 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 94.34% | |
| 69) toluene-D8 | 15.27 | 98 | 234057 | 10.173 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 101.73% | |
| 90) bromofluorobenzene | 18.15 | 95 | 173015 | 10.028 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 100.28% | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 7874 | 0.547 ppbV | 93 |
| 3) propylene | 3.77 | 41 | 3941M6 | 0.532 ppbV | |
| 4) propane | 3.80 | 29 | 5621M3 | 0.676 ppbV | |
| 5) dichlorodifluoromethane | 3.87 | 85 | 9050 | 0.761 ppbV | 93 |
| 6) chloromethane | 4.09 | 50 | 4776 | 0.614 ppbV # | 87 |
| 7) Freon-114 | 4.25 | 85 | 12482 | 0.563 ppbV | 96 |
| 8) methanol | 4.35 | 31 | 10431 | 3.172 ppbV # | 50 |
| 9) vinyl chloride | 4.42 | 62 | 4011 | 0.477 ppbV # | 82 |
| 10) 1,3-butadiene | 4.62 | 54 | 4082 | 0.625 ppbV | 98 |
| 11) butane | 4.69 | 43 | 8654 | 0.617 ppbV | 94 |
| 12) acetaldehyde | 4.27 | 29 | 15350 | 2.861 ppbV # | 76 |
| 13) bromomethane | 5.01 | 94 | 5412 | 0.664 ppbV | 94 |
| 14) chloroethane | 5.28 | 64 | 2162 | 0.537 ppbV | 98 |
| 15) ethanol | 5.50 | 31 | 21202 | 3.080 ppbV | 97 |
| 16) dichlorofluoromethane | 5.45 | 67 | 9834 | 0.548 ppbV # | 93 |
| 17) vinyl bromide | 5.79 | 106 | 4567 | 0.524 ppbV | 98 |
| 18) acrolein | 6.00 | 56 | 2577 | 0.719 ppbV # | 56 |
| 19) acetone | 6.20 | 43 | 40530 | 2.933 ppbV # | 99 |
| 20) acetonitrile | 5.81 | 41 | 5662 | 0.680 ppbV | 92 |
| 21) trichlorofluoromethane | 6.41 | 101 | 11996 | 0.544 ppbV | 100 |
| 22) isopropyl alcohol | 6.58 | 45 | 10742 | 0.642 ppbV # | 91 |
| 23) acrylonitrile | 6.86 | 53 | 4385 | 0.686 ppbV | 92 |
| 24) pentane | 6.92 | 43 | 9252 | 0.569 ppbV # | 92 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.5
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:47:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) ethyl ether | 6.99 | 31 | 8651 | 0.684 ppbV # | 83 |
| 26) 1,1-dichloroethene | 7.30 | 61 | 7835 | 0.549 ppbV # | 91 |
| 27) tertiary butyl alcohol | 7.43 | 59 | 9394 | 0.505 ppbV # | 78 |
| 28) methylene chloride | 7.48 | 49 | 7150 | 0.601 ppbV | 100 |
| 29) 3-chloropropene | 7.64 | 41 | 9203 | 0.698 ppbV # | 96 |
| 30) carbon disulfide | 7.82 | 76 | 13166 | 0.542 ppbV # | 66 |
| 31) Freon 113 | 7.84 | 101 | 9926 | 0.559 ppbV | 94 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 6861 | 0.489 ppbV | 93 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 8484 | 0.540 ppbV | 99 |
| 34) MTBE | 9.09 | 73 | 13353 | 0.562 ppbV # | 92 |
| 35) vinyl acetate | 9.21 | 43 | 11042 | 0.453 ppbV | 100 |
| 36) 2-butanone | 9.53 | 43 | 10877 | 0.491 ppbV # | 88 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 7907 | 0.538 ppbV # | 87 |
| 38) Ethyl Acetate | 10.34 | 61 | 1966 | 0.520 ppbV # | 43 |
| 39) chloroform | 10.38 | 83 | 11839 | 0.539 ppbV | 98 |
| 40) Tetrahydrofuran | 10.90 | 42 | 7586M3 | 0.602 ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 10584 | 0.540 ppbV # | 97 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 6279 | 0.486 ppbV # | 75 |
| 44) hexane | 10.28 | 57 | 11033 | 0.597 ppbV # | 62 |
| 45) diisopropyl ether | 10.31 | 87 | 4299 | 0.488 ppbV # | 59 |
| 46) tert-butyl ethyl ether | 10.94 | 59 | 14382 | 0.477 ppbV # | 85 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 9720 | 0.497 ppbV # | 84 |
| 49) 1,1-dichloropropene | 11.92 | 75 | 7574 | 0.546 ppbV # | 88 |
| 50) benzene | 12.09 | 78 | 13347 | 0.502 ppbV # | 87 |
| 51) thiophene | 12.25 | 84 | 10320 | 0.574 ppbV | 95 |
| 52) carbon tetrachloride | 12.27 | 117 | 10723 | 0.522 ppbV # | 92 |
| 53) cyclohexane | 12.41 | 56 | 8349 | 0.529 ppbV # | 79 |
| 54) tert-amyl methyl ether | 12.80 | 73 | 12762 | 0.486 ppbV # | 87 |
| 55) dibromomethane | 13.01 | 93 | 5486 | 0.493 ppbV # | 81 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 5217 | 0.500 ppbV # | 90 |
| 57) bromodichloromethane | 13.27 | 83 | 11137 | 0.502 ppbV # | 84 |
| 58) 1,4-dioxane | 13.37 | 88 | 3047 | 0.473 ppbV # | 61 |
| 59) trichloroethene | 13.31 | 130 | 6449 | 0.465 ppbV | 96 |
| 60) 2,2,4-trimethylpentane | 13.34 | 57 | 24902 | 0.505 ppbV | 98 |
| 61) methyl methacrylate | 13.56 | 41 | 7092M4 | 0.463 ppbV | |
| 62) heptane | 13.66 | 43 | 13980 | 0.676 ppbV | 89 |
| 63) cis-1,3-dichloropropene | 14.33 | 75 | 6934 | 0.455 ppbV | 89 |
| 64) 4-methyl-2-pentanone | 14.38 | 43 | 12978 | 0.462 ppbV # | 97 |
| 65) trans-1,3-dichloropropene | 14.92 | 75 | 6512 | 0.427 ppbV | 97 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 6387 | 0.536 ppbV # | 90 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.5
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:47:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 17965 | 0.554 | ppbV | | 99 |
| 70) | 2-methylthiophene | 15.44 | 97 | 15579 | 0.519 | ppbV | | 97 |
| 71) | 1,3-dichloropropane | 15.40 | 76 | 8251 | 0.570 | ppbV | # | 95 |
| 72) | 2-hexanone | 15.64 | 43 | 10639M4 | 0.415 | ppbV | | |
| 73) | 3-methylthiophene | 15.61 | 97 | 15767 | 0.570 | ppbV | | 89 |
| 74) | dibromochloromethane | 15.79 | 129 | 11864 | 0.502 | ppbV | | 88 |
| 75) | 1,2-dibromoethane | 16.02 | 107 | 9391 | 0.487 | ppbV | | 87 |
| 76) | butyl acetate | 16.20 | 73 | 1651 | 0.470 | ppbV | # | 73 |
| 77) | octane | 16.27 | 85 | 5642 | 0.591 | ppbV | | 90 |
| 78) | tetrachloroethene | 16.43 | 166 | 9229 | 0.560 | ppbV | # | 88 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 8096 | 0.507 | ppbV | | 96 |
| 80) | chlorobenzene | 17.00 | 112 | 13763 | 0.486 | ppbV | # | 94 |
| 81) | ethylbenzene | 17.30 | 91 | 22377 | 0.520 | ppbV | | 89 |
| 82) | 2-ethylthiophene | 17.33 | 97 | 17738 | 0.531 | ppbV | | 96 |
| 83) | m+p-xylene | 17.43 | 91 | 34761M1 | 1.036 | ppbV | | |
| 84) | bromoform | 17.52 | 173 | 11627 | 0.493 | ppbV | | 94 |
| 85) | styrene | 17.72 | 104 | 12936 | 0.479 | ppbV | | 92 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 13615 | 0.527 | ppbV | | 96 |
| 87) | o-xylene | 17.81 | 91 | 18045 | 0.516 | ppbV | | 92 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 10752 | 0.538 | ppbV | # | 90 |
| 89) | nonane | 17.94 | 43 | 17535M4 | 0.582 | ppbV | | |
| 91) | isopropylbenzene | 18.24 | 105 | 24484 | 0.505 | ppbV | | 97 |
| 92) | bromobenzene | 18.33 | 77 | 12734 | 0.517 | ppbV | | 91 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 7178 | 0.499 | ppbV | | 84 |
| 94) | n-propylbenzene | 18.63 | 120 | 7513 | 0.498 | ppbV | | 82 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 20070 | 0.542 | ppbV | | 88 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 25902 | 0.476 | ppbV | # | 96 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 23205 | 0.510 | ppbV | | 95 |
| 98) | tert-butylbenzene | 19.09 | 119 | 24927 | 0.500 | ppbV | | 98 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 21482 | 0.502 | ppbV | | 96 |
| 100) | decane | 19.13 | 57 | 15102 | 0.509 | ppbV | | 90 |
| 101) | Benzyl Chloride | 19.21 | 91 | 18292 | 0.460 | ppbV | | 97 |
| 102) | 1,3-dichlorobenzene | 19.23 | 146 | 15993M3 | 0.489 | ppbV | | |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 16639 | 0.501 | ppbV | | 96 |
| 104) | sec-butylbenzene | 19.29 | 105 | 32903 | 0.525 | ppbV | | 99 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 19265 | 0.523 | ppbV | | 90 |
| 106) | p-isopropyltoluene | 19.41 | 119 | 31409 | 0.510 | ppbV | | 97 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 15627 | 0.498 | ppbV | | 91 |
| 108) | n-butylbenzene | 19.73 | 91 | 25120 | 0.486 | ppbV | | 98 |
| 109) | indan | 19.58 | 117 | 21004 | 0.505 | ppbV | | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.5
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:47:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 15908 | 0.560 | ppbV | 86 |
| 111) 1,2-dibromo-3-chloropr... | 19.90 | 75 | 6932 | 0.492 | ppbV | 88 |
| 112) undecane | 20.10 | 57 | 17855 | 0.500 | ppbV | 97 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 39079 | 0.437 | ppbV | 97 |
| 114) dodecane | 21.03 | 57 | 15230 | 0.375 | ppbV | 93 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 13179 | 0.432 | ppbV # | 92 |
| 116) naphthalene | 21.13 | 128 | 31396 | 0.452 | ppbV | 97 |
| 117) 1,2,3-trichlorobenzene | 21.39 | 180 | 11270 | 0.398 | ppbV # | 79 |
| 118) benzothiophene | 21.21 | 134 | 24717 | 0.420 | ppbV | 99 |
| 119) hexachlorobutadiene | 21.45 | 225 | 9307 | 0.413 | ppbV | 98 |
| 120) 2-methylnaphthalene | 22.32 | 142 | 5135 | 0.195 | ppbV | 97 |
| 121) 1-methylnaphthalene | 22.54 | 142 | 7691 | 0.319 | ppbV | 93 |

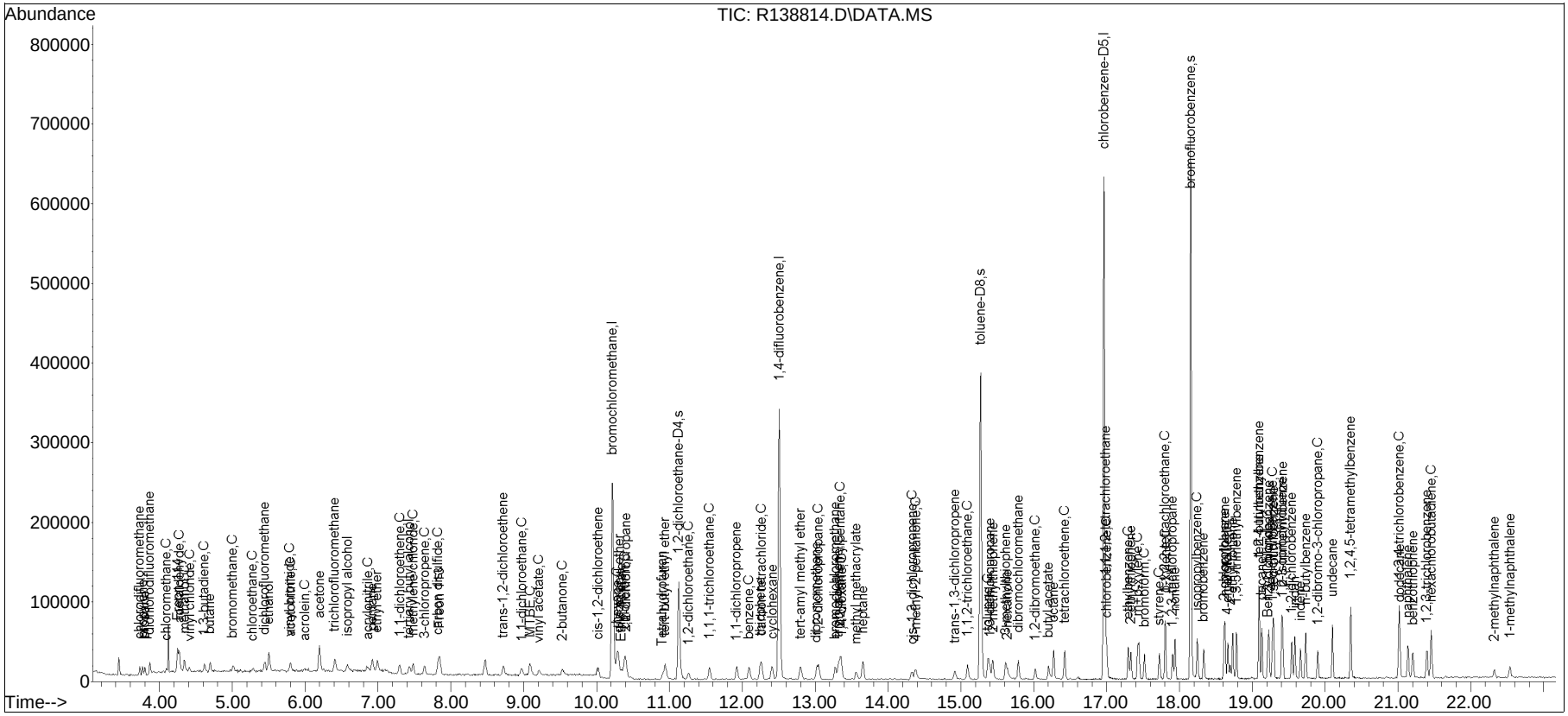
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138814.D
Acq On : 2 Jan 2015 9:29 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD0.5
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:47:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

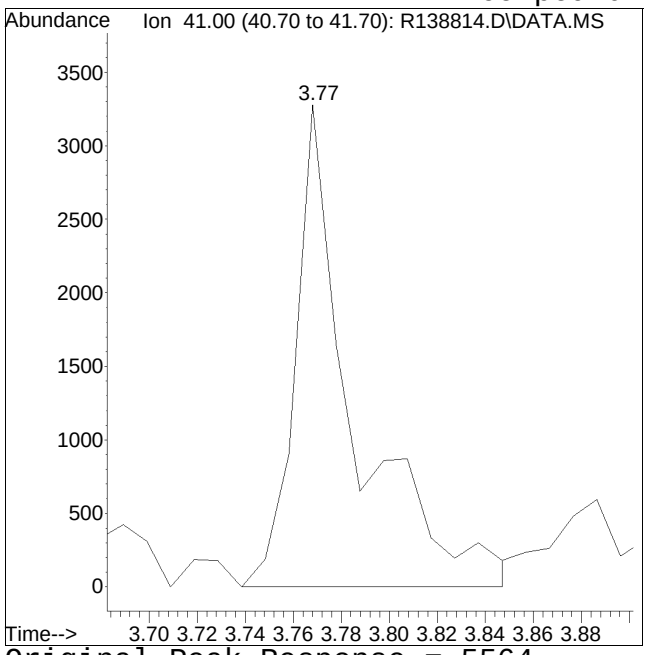
Sub List : Default - All compounds listed0102T_ICAL\R138817.D



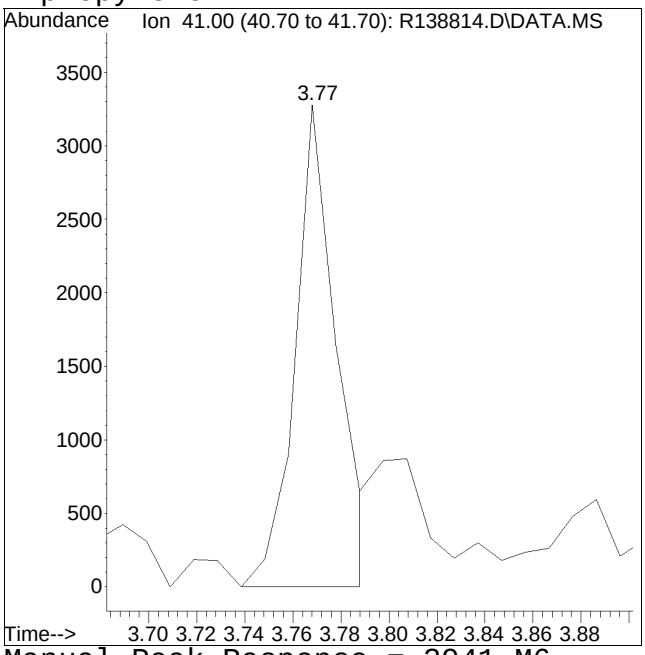
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138814.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 9:29 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.5 Quant Date : 1/3/2015 12:42 pm

Compound #3: propylene




Original Peak Response = 5564



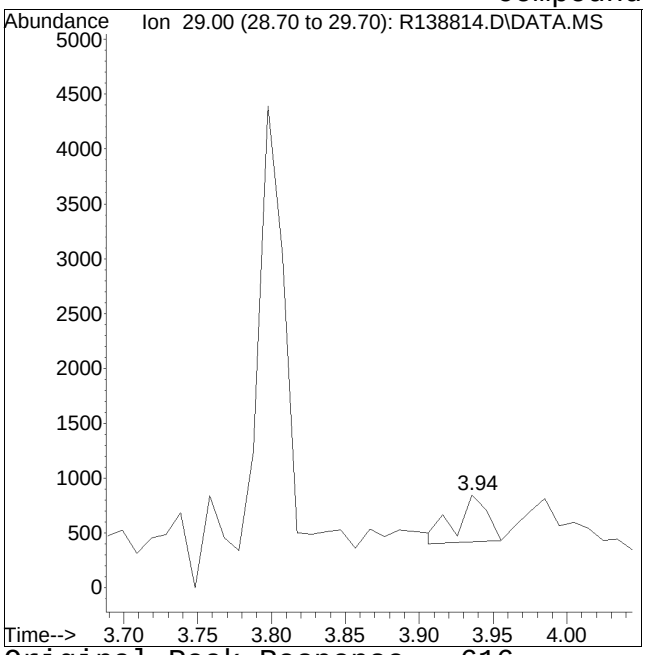

Manual Peak Response = 3941 M6

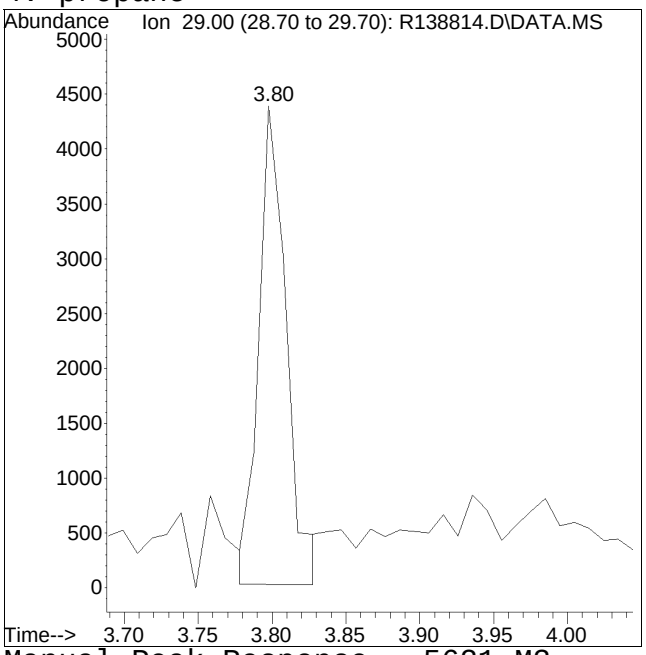
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138814.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 9:29 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.5 Quant Date : 1/3/2015 12:42 pm

Compound #4: propane



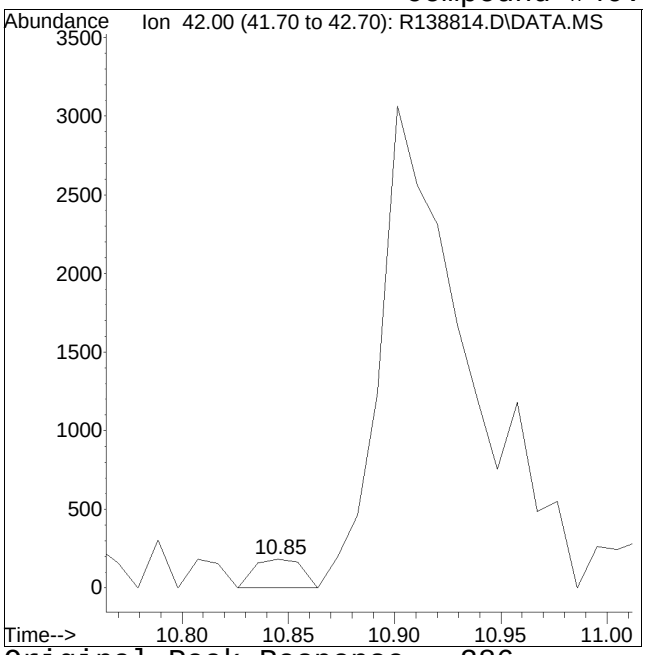

Original Peak Response = 616 Manual Peak Response = 5621 M3

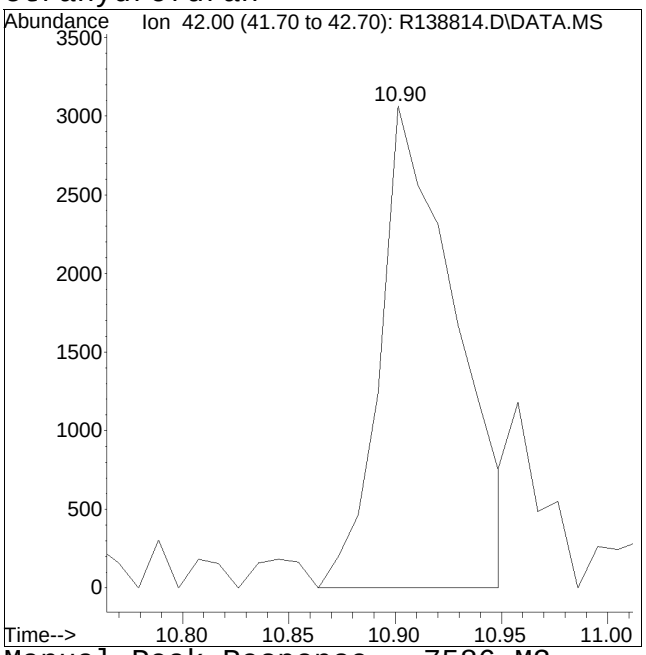
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138814.D
Date Inj'd : 1/2/2015 9:29 pm
Sample : ITO15-LLSTD0.5
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #40: Tetrahydrofuran



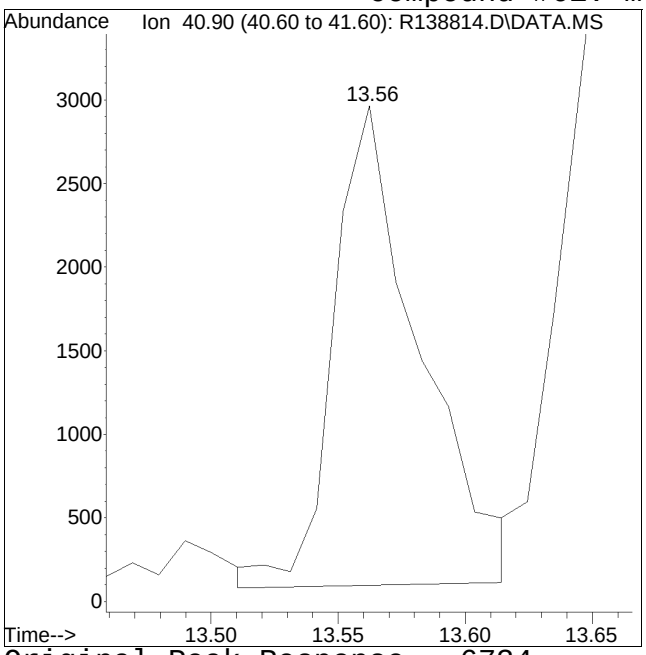

Original Peak Response = 286 Manual Peak Response = 7586 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

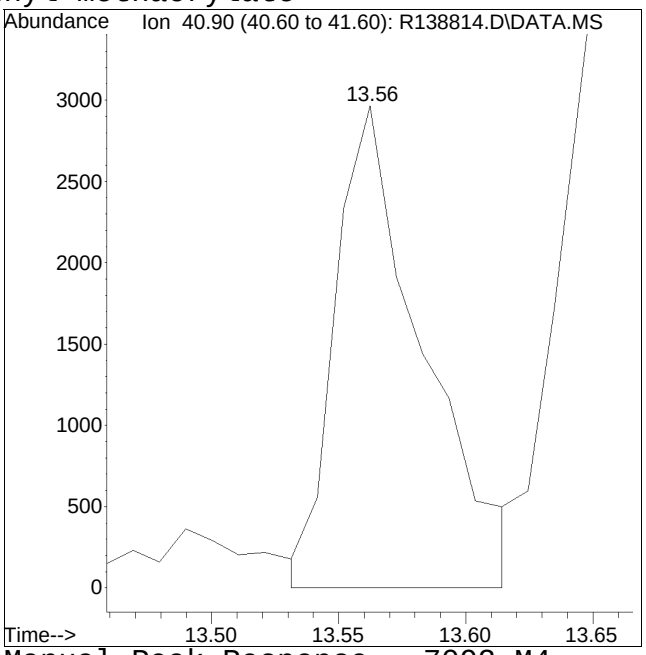
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138814.D
Date Inj'd : 1/2/2015 9:29 pm
Sample : ITO15-LLSTD0.5
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #61: methyl methacrylate




Original Peak Response = 6734




Manual Peak Response = 7092 M4

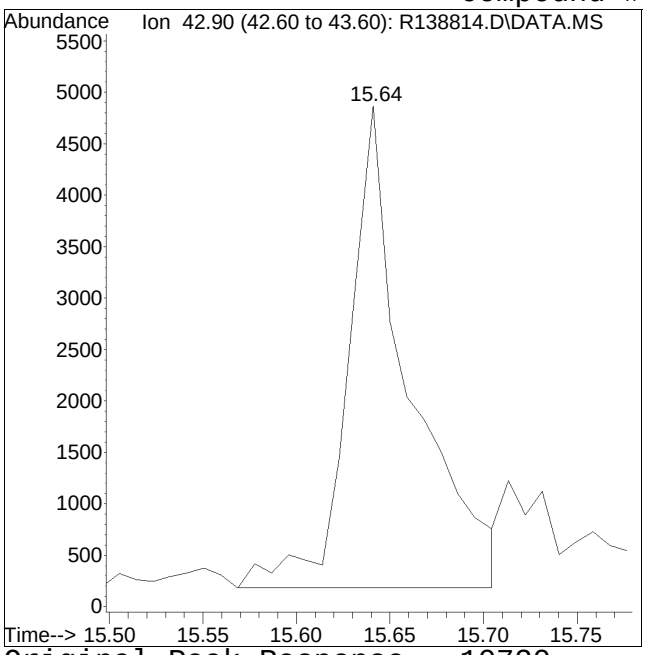
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

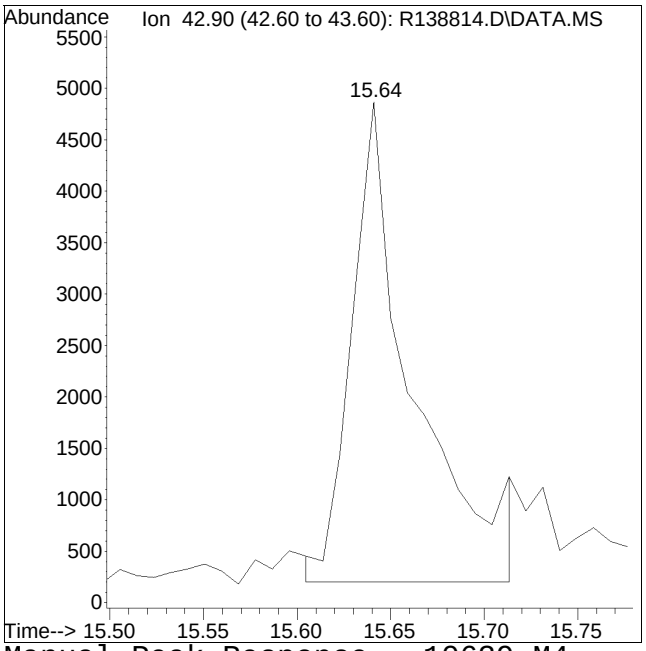
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138814.D
Date Inj'd : 1/2/2015 9:29 pm
Sample : ITO15-LLSTD0.5

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #72: 2-hexanone




Original Peak Response = 10720



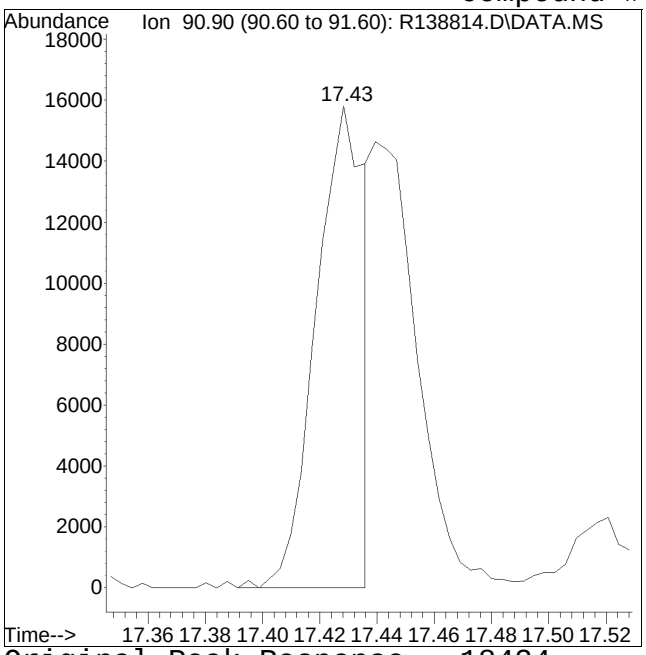

Manual Peak Response = 10639 M4

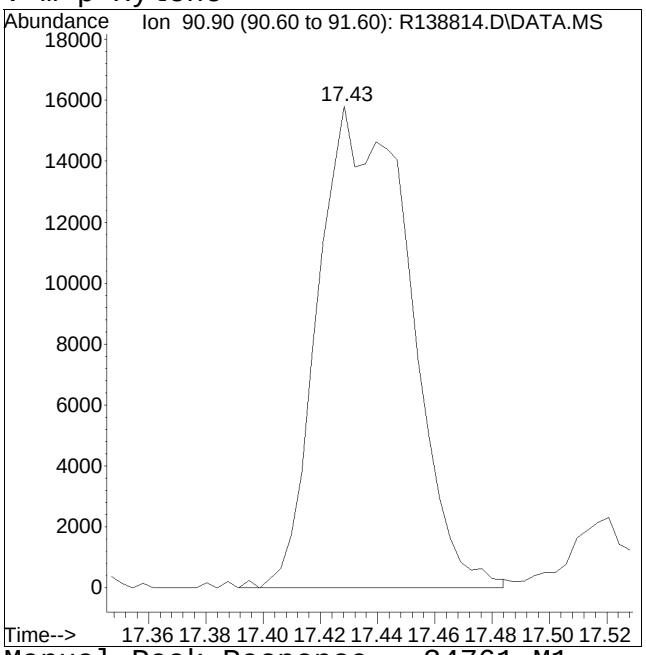
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TALL150102.M
Data File : R138814.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 9:29 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD0.5 Quant Date : 1/3/2015 12:42 pm

Compound #83: m+p-xylene



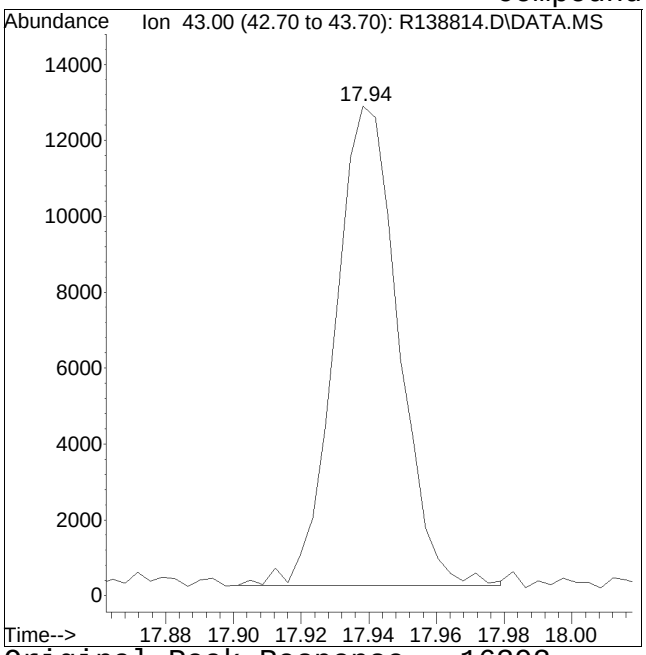

Original Peak Response = 18424 Manual Peak Response = 34761 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

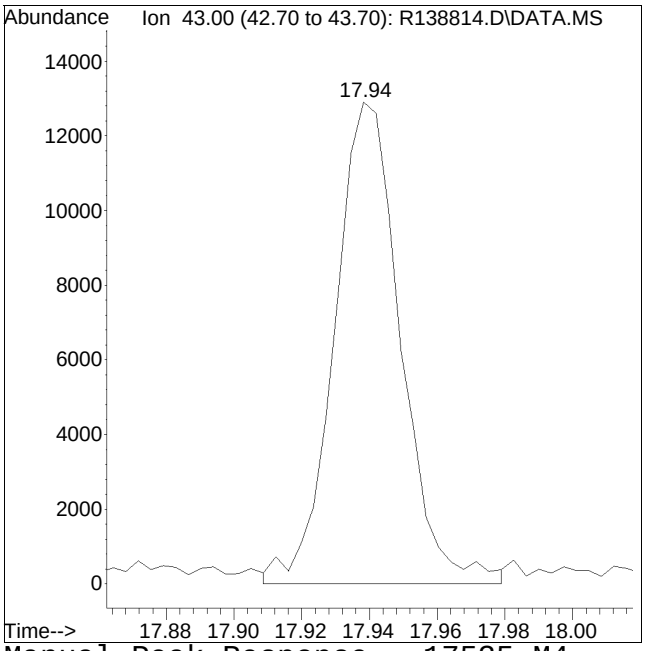
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138814.D
Date Inj'd : 1/2/2015 9:29 pm
Sample : ITO15-LLSTD0.5

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #89: nonane




Original Peak Response = 16392



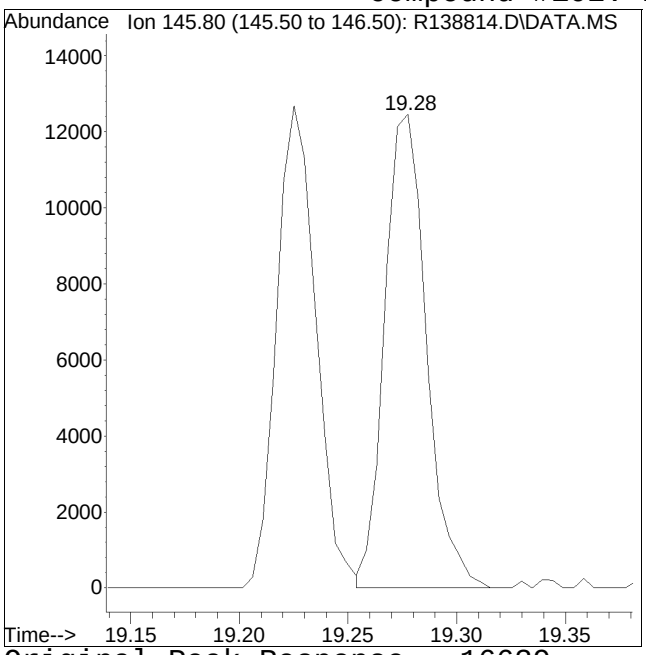

Manual Peak Response = 17535 M4

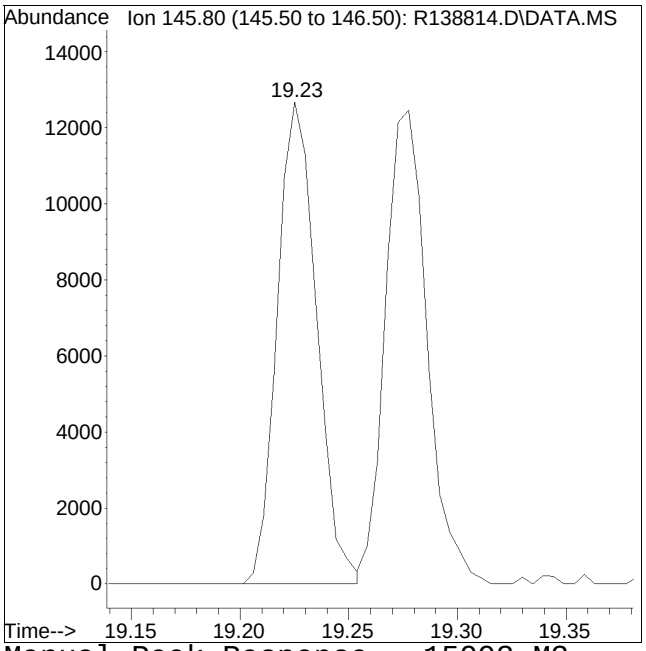
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ICAL\TALL150102.M
Data File : R138814.D
Date Inj'd : 1/2/2015 9:29 pm
Sample : ITO15-LLSTD0.5
Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #102: 1,3-dichlorobenzene




Original Peak Response = 16639 Manual Peak Response = 15993 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD1.0
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:48:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 139684 | 10.000 ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery | = 102.38% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 293258 | 10.000 ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery | = 105.09% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 63528 | 10.000 ppbV | 0.00 |
| Standard Area = 65032 | | | Recovery | = 97.69% | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.13 | 65 | 86795 | 9.702 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 97.02% | |
| 69) toluene-D8 | 15.27 | 98 | 229962 | 10.265 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 102.65% | |
| 90) bromofluorobenzene | 18.15 | 95 | 169383 | 10.083 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery | = 100.83% | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 15386 | 1.071 ppbV # | 91 |
| 3) propylene | 3.77 | 41 | 8300M6 | 1.123 ppbV | |
| 4) propane | 3.80 | 29 | 10586 | 1.276 ppbV | 94 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 18160 | 1.532 ppbV # | 88 |
| 6) chloromethane | 4.09 | 50 | 8365 | 1.079 ppbV | 90 |
| 7) Freon-114 | 4.25 | 85 | 24756 | 1.120 ppbV | 94 |
| 8) methanol | 4.34 | 31 | 19285 | 5.881 ppbV # | 75 |
| 9) vinyl chloride | 4.42 | 62 | 8371 | 0.999 ppbV # | 86 |
| 10) 1,3-butadiene | 4.62 | 54 | 7020 | 1.078 ppbV | 94 |
| 11) butane | 4.69 | 43 | 16048 | 1.147 ppbV # | 96 |
| 12) acetaldehyde | 4.27 | 29 | 29009 | 5.422 ppbV | 93 |
| 13) bromomethane | 5.01 | 94 | 10185 | 1.253 ppbV | 95 |
| 14) chloroethane | 5.29 | 64 | 3677 | 0.916 ppbV # | 67 |
| 15) ethanol | 5.50 | 31 | 38804 | 5.653 ppbV | 96 |
| 16) dichlorofluoromethane | 5.45 | 67 | 18349 | 1.026 ppbV | 96 |
| 17) vinyl bromide | 5.80 | 106 | 9289 | 1.069 ppbV | 92 |
| 18) acrolein | 5.99 | 56 | 4214 | 1.179 ppbV # | 84 |
| 19) acetone | 6.19 | 43 | 69673 | 5.056 ppbV # | 98 |
| 20) acetonitrile | 5.81 | 41 | 10660 | 1.284 ppbV | 89 |
| 21) trichlorofluoromethane | 6.41 | 101 | 22988 | 1.046 ppbV | 98 |
| 22) isopropyl alcohol | 6.58 | 45 | 18628 | 1.117 ppbV # | 96 |
| 23) acrylonitrile | 6.85 | 53 | 7502 | 1.178 ppbV # | 80 |
| 24) pentane | 6.92 | 43 | 17382 | 1.072 ppbV # | 90 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD1.0
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:48:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 25) ethyl ether | 6.99 | 31 | 13418 | 1.064 ppbV | 96 |
| 26) 1,1-dichloroethene | 7.29 | 61 | 15225 | 1.070 ppbV | 98 |
| 27) tertiary butyl alcohol | 7.42 | 59 | 19015 | 1.025 ppbV # | 92 |
| 28) methylene chloride | 7.48 | 49 | 13174 | 1.110 ppbV | 95 |
| 29) 3-chloropropene | 7.64 | 41 | 15789 | 1.201 ppbV | 92 |
| 30) carbon disulfide | 7.82 | 76 | 25699 | 1.061 ppbV # | 77 |
| 31) Freon 113 | 7.84 | 101 | 18528 | 1.046 ppbV | 94 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 14490 | 1.036 ppbV | 98 |
| 33) 1,1-dichloroethane | 8.98 | 63 | 15872 | 1.014 ppbV # | 89 |
| 34) MTBE | 9.08 | 73 | 25666 | 1.084 ppbV # | 91 |
| 35) vinyl acetate | 9.21 | 43 | 22209 | 0.913 ppbV | 98 |
| 36) 2-butanone | 9.52 | 43 | 21065 | 0.953 ppbV # | 96 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 14454 | 0.987 ppbV # | 82 |
| 38) Ethyl Acetate | 10.34 | 61 | 3585 | 0.950 ppbV | 92 |
| 39) chloroform | 10.38 | 83 | 23410 | 1.069 ppbV | 95 |
| 40) Tetrahydrofuran | 10.89 | 42 | 14432M6 | 1.148 ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 20495 | 1.048 ppbV | 98 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 12650 | 0.981 ppbV | 93 |
| 44) hexane | 10.28 | 57 | 19531 | 1.056 ppbV # | 64 |
| 45) diisopropyl ether | 10.30 | 87 | 9223 | 1.046 ppbV | 81 |
| 46) tert-butyl ethyl ether | 10.94 | 59 | 29943 | 0.993 ppbV | 95 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 19305 | 0.987 ppbV | 99 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 13256 | 0.955 ppbV | 87 |
| 50) benzene | 12.09 | 78 | 24688 | 0.928 ppbV # | 86 |
| 51) thiophene | 12.25 | 84 | 18910 | 1.051 ppbV | 95 |
| 52) carbon tetrachloride | 12.26 | 117 | 20410 | 0.994 ppbV | 93 |
| 53) cyclohexane | 12.40 | 56 | 16606 | 1.053 ppbV | 97 |
| 54) tert-amyl methyl ether | 12.80 | 73 | 27105 | 1.032 ppbV # | 93 |
| 55) dibromomethane | 13.02 | 93 | 10841 | 0.974 ppbV | 93 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 10583 | 1.015 ppbV | 92 |
| 57) bromodichloromethane | 13.27 | 83 | 22432 | 1.012 ppbV | 94 |
| 58) 1,4-dioxane | 13.35 | 88 | 6034 | 0.936 ppbV # | 57 |
| 59) trichloroethene | 13.32 | 130 | 13337 | 0.962 ppbV | 90 |
| 60) 2,2,4-trimethylpentane | 13.35 | 57 | 51576 | 1.046 ppbV # | 93 |
| 61) methyl methacrylate | 13.55 | 41 | 13423 | 0.877 ppbV | 91 |
| 62) heptane | 13.66 | 43 | 24220 | 1.171 ppbV # | 85 |
| 63) cis-1,3-dichloropropene | 14.33 | 75 | 13333 | 0.876 ppbV # | 84 |
| 64) 4-methyl-2-pentanone | 14.37 | 43 | 29008M4 | 1.031 ppbV | |
| 65) trans-1,3-dichloropropene | 14.91 | 75 | 14645 | 0.961 ppbV # | 84 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 12864 | 1.080 ppbV # | 88 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD1.0
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:48:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 33184 | 1.051 | ppbV | | 91 |
| 70) | 2-methylthiophene | 15.43 | 97 | 31834 | 1.089 | ppbV | | 95 |
| 71) | 1,3-dichloropropane | 15.40 | 76 | 14454 | 1.026 | ppbV | | 99 |
| 72) | 2-hexanone | 15.63 | 43 | 25701M4 | 1.031 | ppbV | | |
| 73) | 3-methylthiophene | 15.61 | 97 | 28100 | 1.043 | ppbV | | 99 |
| 74) | dibromochloromethane | 15.79 | 129 | 22919 | 0.996 | ppbV | | 89 |
| 75) | 1,2-dibromoethane | 16.02 | 107 | 19372 | 1.032 | ppbV | | 81 |
| 76) | butyl acetate | 16.20 | 73 | 3174 | 0.928 | ppbV | | 94 |
| 77) | octane | 16.27 | 85 | 10002 | 1.076 | ppbV | # | 83 |
| 78) | tetrachloroethene | 16.43 | 166 | 17693 | 1.103 | ppbV | | 94 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 15932 | 1.025 | ppbV | | 97 |
| 80) | chlorobenzene | 17.00 | 112 | 27523 | 0.998 | ppbV | | 94 |
| 81) | ethylbenzene | 17.30 | 91 | 42424 | 1.012 | ppbV | | 93 |
| 82) | 2-ethylthiophene | 17.33 | 97 | 34121 | 1.048 | ppbV | # | 95 |
| 83) | m+p-xylene | 17.43 | 91 | 67516M1 | 2.066 | ppbV | | |
| 84) | bromoform | 17.52 | 173 | 22291 | 0.971 | ppbV | | 96 |
| 85) | styrene | 17.72 | 104 | 26770 | 1.017 | ppbV | | 96 |
| 86) | 1,1,2,2-tetrachloroethane | 17.81 | 83 | 26084 | 1.036 | ppbV | | 91 |
| 87) | o-xylene | 17.81 | 91 | 34651 | 1.017 | ppbV | | 94 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 19811 | 1.018 | ppbV | | 97 |
| 89) | nonane | 17.94 | 43 | 31055 | 1.058 | ppbV | # | 96 |
| 91) | isopropylbenzene | 18.24 | 105 | 48147 | 1.020 | ppbV | | 99 |
| 92) | bromobenzene | 18.33 | 77 | 24747 | 1.032 | ppbV | | 98 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 14416 | 1.030 | ppbV | | 77 |
| 94) | n-propylbenzene | 18.63 | 120 | 15191 | 1.035 | ppbV | | 98 |
| 95) | 4-chlorotoluene | 18.67 | 91 | 37425 | 1.038 | ppbV | | 94 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 53490 | 1.009 | ppbV | | 99 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 45846 | 1.035 | ppbV | | 96 |
| 98) | tert-butylbenzene | 19.09 | 119 | 49392 | 1.017 | ppbV | | 99 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 41249 | 0.989 | ppbV | | 90 |
| 100) | decane | 19.13 | 57 | 29589 | 1.024 | ppbV | | 98 |
| 101) | Benzyl Chloride | 19.21 | 91 | 36252 | 0.935 | ppbV | | 94 |
| 102) | 1,3-dichlorobenzene | 19.22 | 146 | 31365 | 0.986 | ppbV | | 96 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 31697 | 0.981 | ppbV | | 96 |
| 104) | sec-butylbenzene | 19.29 | 105 | 62230 | 1.019 | ppbV | | 100 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 38605 | 1.076 | ppbV | | 95 |
| 106) | p-isopropyltoluene | 19.41 | 119 | 59751 | 0.997 | ppbV | | 99 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 30018 | 0.983 | ppbV | | 95 |
| 108) | n-butylbenzene | 19.73 | 91 | 50113 | 0.995 | ppbV | | 99 |
| 109) | indan | 19.59 | 117 | 41755 | 1.031 | ppbV | | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD1.0
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:48:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 29660 | 1.072 | ppbV | 92 |
| 111) 1,2-dibromo-3-chloropr... | 19.90 | 75 | 13249 | 0.965 | ppbV | 91 |
| 112) undecane | 20.10 | 57 | 33542 | 0.965 | ppbV # | 95 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 75516 | 0.868 | ppbV | 98 |
| 114) dodecane | 21.03 | 57 | 32150 | 0.814 | ppbV | 87 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 23740 | 0.799 | ppbV | 95 |
| 116) naphthalene | 21.13 | 128 | 60119 | 0.890 | ppbV | 98 |
| 117) 1,2,3-trichlorobenzene | 21.40 | 180 | 25065 | 0.910 | ppbV # | 91 |
| 118) benzothiophene | 21.21 | 134 | 52230 | 0.912 | ppbV | 99 |
| 119) hexachlorobutadiene | 21.45 | 225 | 19680 | 0.898 | ppbV | 98 |
| 120) 2-methylnaphthalene | 22.32 | 142 | 15402 | 0.600 | ppbV | 98 |
| 121) 1-methylnaphthalene | 22.54 | 142 | 16835 | 0.717 | ppbV | 96 |

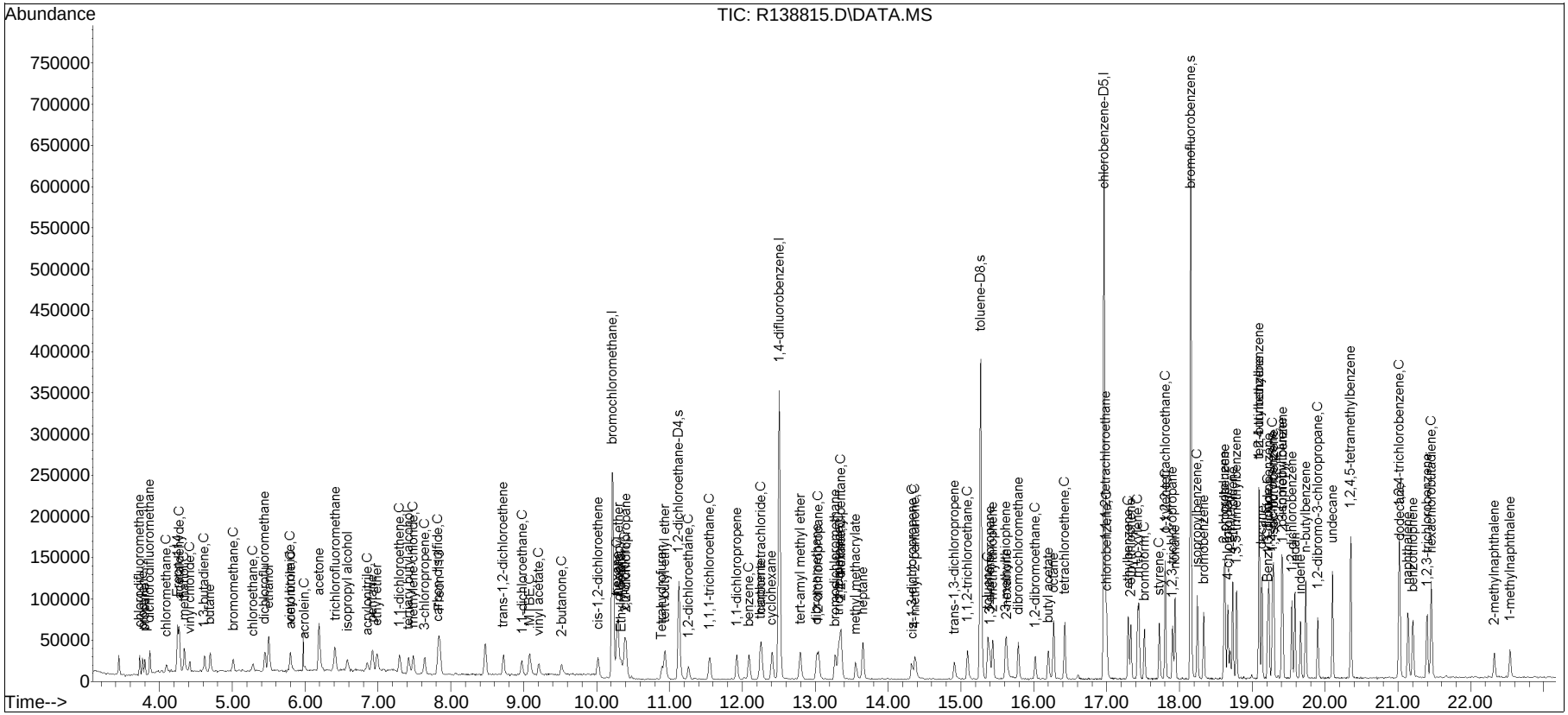
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138815.D
Acq On : 2 Jan 2015 10:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD1.0
Misc : WG753093
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 12:48:42 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

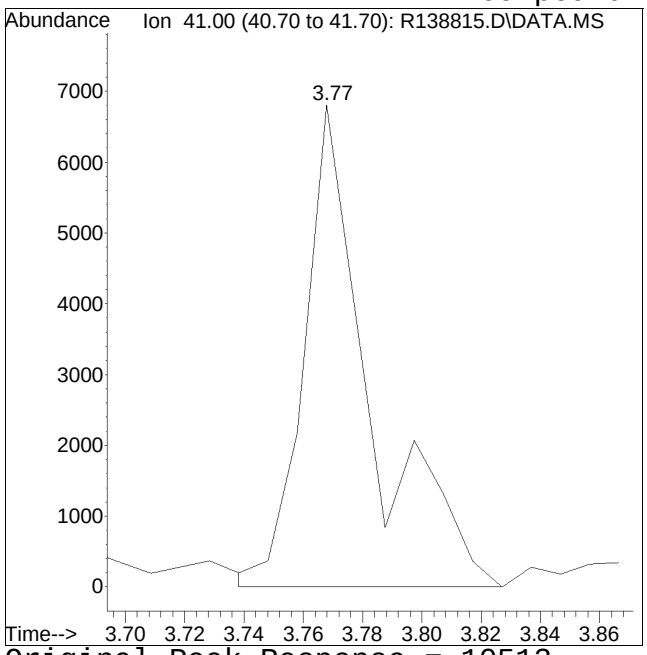
Sub List : Default - All compounds listed0102T_ICAL\R138817.D



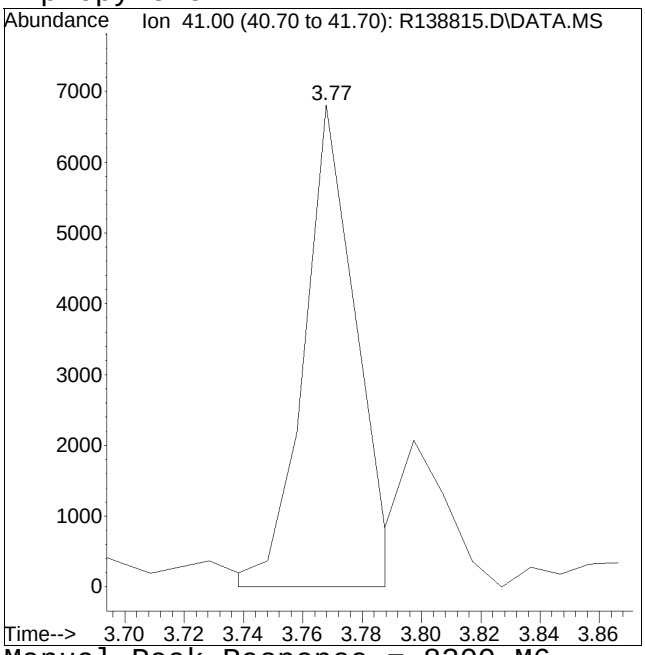
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138815.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:02 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD1.0 Quant Date : 1/3/2015 12:42 pm

Compound #3: propylene




Original Peak Response = 10513



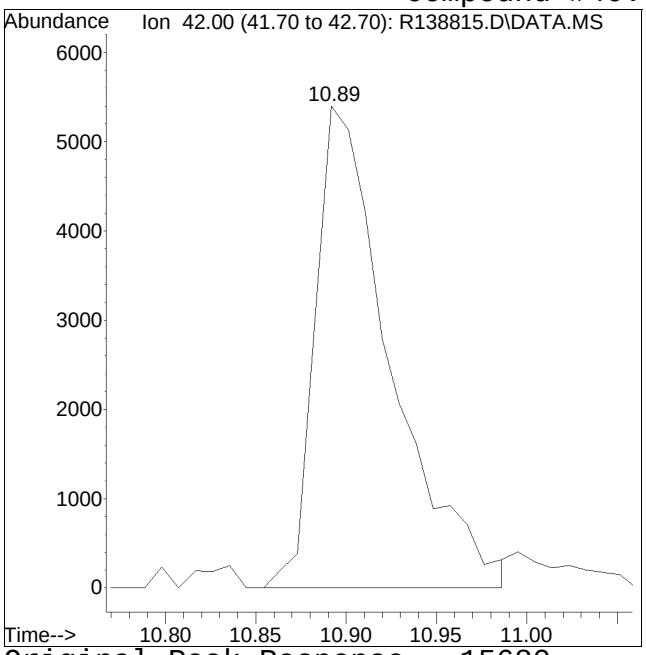

Manual Peak Response = 8300 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

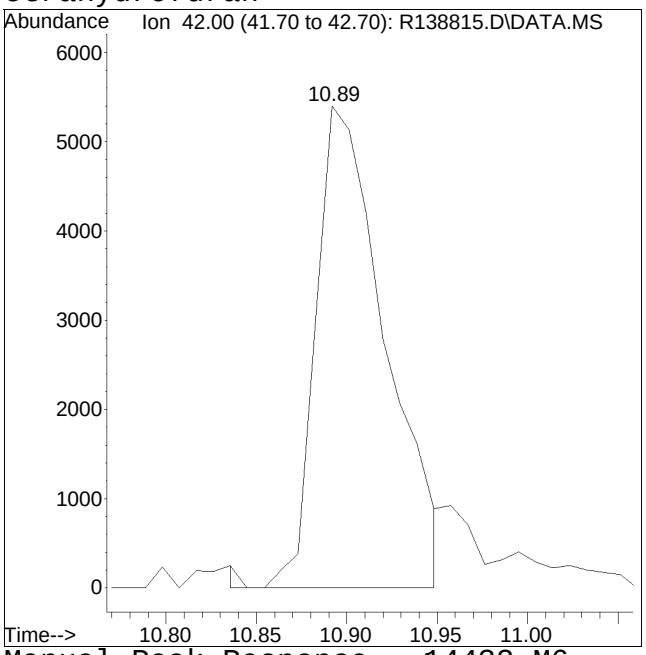
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138815.D
Date Inj'd : 1/2/2015 10:02 pm
Sample : ITO15-LLSTD1.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 15680




Manual Peak Response = 14432 M6

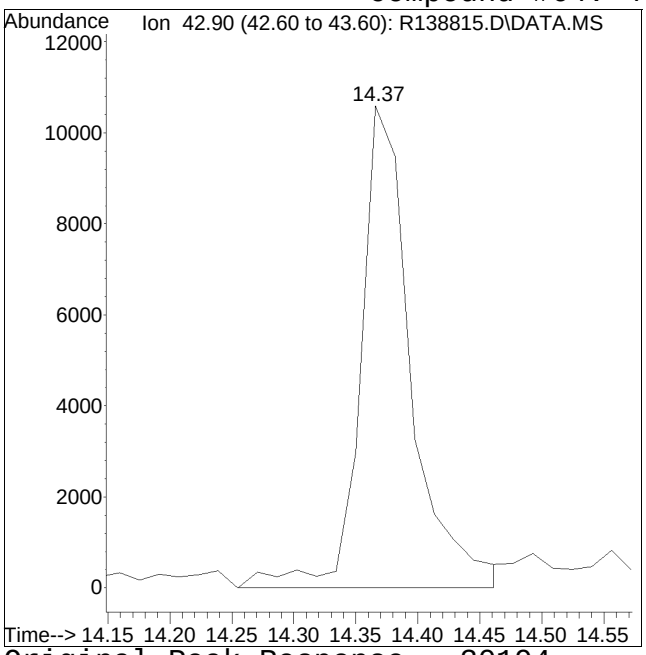
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

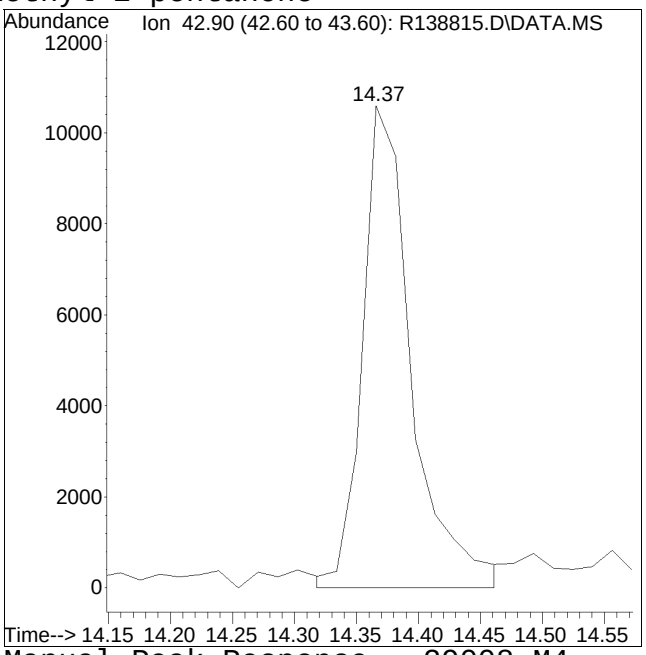
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138815.D
Date Inj'd : 1/2/2015 10:02 pm
Sample : ITO15-LLSTD1.0

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #64: 4-methyl-2-pentanone




Original Peak Response = 30194



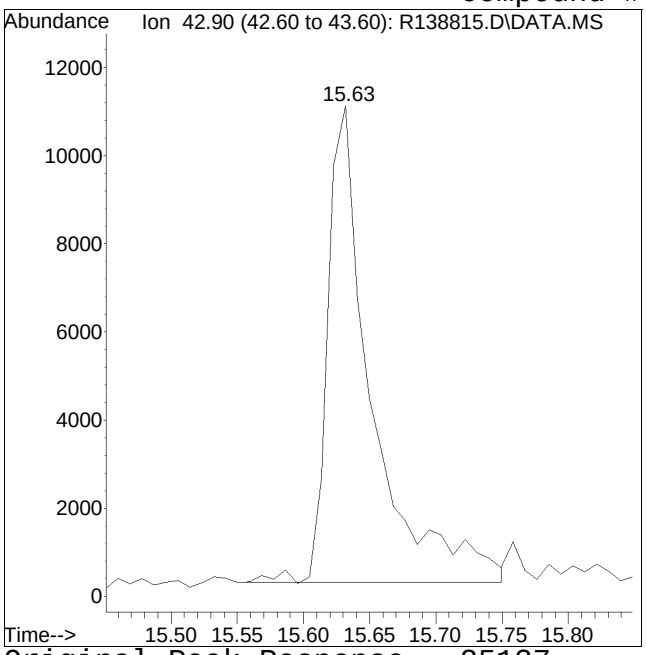

Manual Peak Response = 29008 M4

M4 = Poor automated baseline construction.

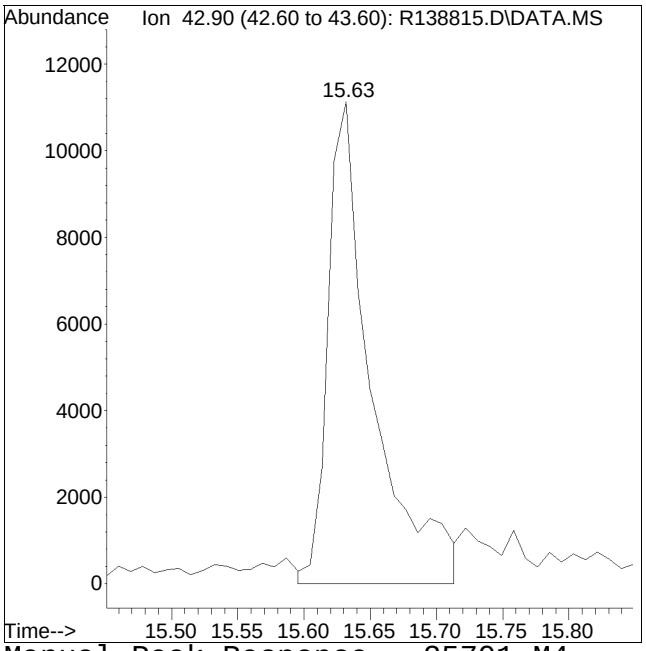
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138815.D
Date Inj'd : 1/2/2015 10:02 pm
Sample : ITO15-LLSTD1.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #72: 2-hexanone




Original Peak Response = 25137



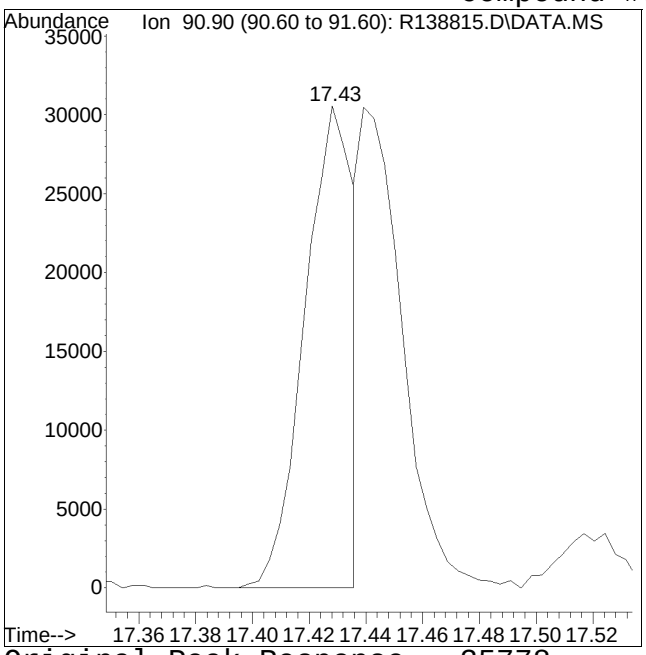

Manual Peak Response = 25701 M4

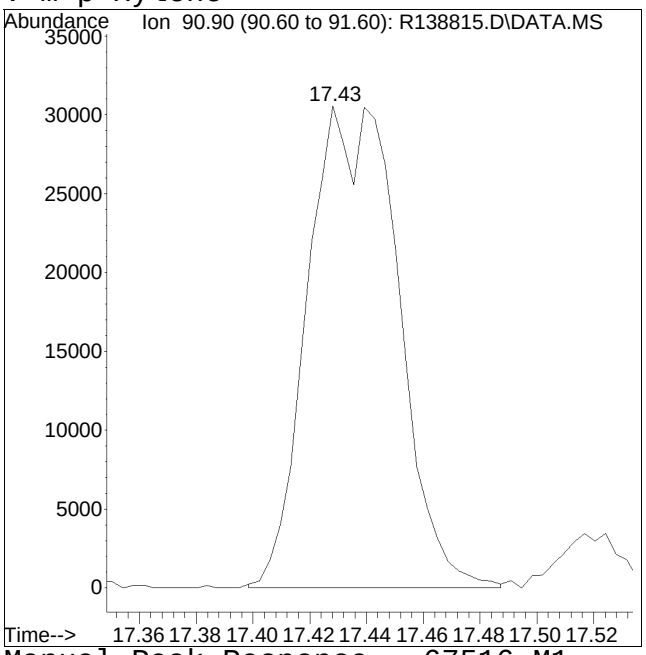
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\QM150102T_ICAL\TALL150102.M
Data File : R138815.D
Date Inj'd : 1/2/2015 10:02 pm
Sample : ITO15-LLSTD1.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #83: m+p-xylene




Original Peak Response = 35778 Manual Peak Response = 67516 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD5.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:49:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 139559 | 10.000 ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery = 102.29% | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 289490 | 10.000 ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery = 103.74% | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 63538 | 10.000 ppbV | 0.00 |
| Standard Area = 65032 | | | Recovery = 97.70% | | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.13 | 65 | 86234 | 9.765 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.65% | | |
| 69) toluene-D8 | 15.27 | 98 | 230808 | 10.301 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 103.01% | | |
| 90) bromofluorobenzene | 18.15 | 95 | 172259 | 10.252 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 102.52% | | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 74384 | 5.184 ppbV | 100 |
| 3) propylene | 3.77 | 41 | 39288M6 | 5.319 ppbV | |
| 4) propane | 3.80 | 29 | 45656 | 5.509 ppbV | 92 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 82632 | 6.978 ppbV | 96 |
| 6) chloromethane | 4.09 | 50 | 39499 | 5.098 ppbV | 99 |
| 7) Freon-114 | 4.25 | 85 | 117602 | 5.323 ppbV | 99 |
| 8) methanol | 4.34 | 31 | 84849 | 25.899 ppbV | 99 |
| 9) vinyl chloride | 4.42 | 62 | 41999 | 5.018 ppbV | 97 |
| 10) 1,3-butadiene | 4.62 | 54 | 31363 | 4.823 ppbV | 90 |
| 11) butane | 4.69 | 43 | 70770 | 5.062 ppbV # | 96 |
| 12) acetaldehyde | 4.27 | 29 | 136093 | 25.458 ppbV | 97 |
| 13) bromomethane | 5.01 | 94 | 41508 | 5.113 ppbV | 100 |
| 14) chloroethane | 5.28 | 64 | 18809 | 4.688 ppbV | 96 |
| 15) ethanol | 5.49 | 31 | 180028 | 26.249 ppbV | 97 |
| 16) dichlorofluoromethane | 5.45 | 67 | 90309 | 5.053 ppbV | 96 |
| 17) vinyl bromide | 5.80 | 106 | 43945 | 5.063 ppbV | 90 |
| 18) acrolein | 5.98 | 56 | 19681 | 5.514 ppbV | 94 |
| 19) acetone | 6.17 | 43 | 344166 | 24.997 ppbV # | 99 |
| 20) acetonitrile | 5.80 | 41 | 42203 | 5.088 ppbV | 98 |
| 21) trichlorofluoromethane | 6.41 | 101 | 112452 | 5.121 ppbV | 96 |
| 22) isopropyl alcohol | 6.56 | 45 | 82682 | 4.962 ppbV | 99 |
| 23) acrylonitrile | 6.85 | 53 | 34174 | 5.370 ppbV | 92 |
| 24) pentane | 6.92 | 43 | 84207 | 5.200 ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD5.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:49:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) ethyl ether | 6.98 | 31 | 67197 | 5.332 | ppbV | 98 |
| 26) 1,1-dichloroethene | 7.29 | 61 | 71669 | 5.041 | ppbV | 98 |
| 27) tertiary butyl alcohol | 7.40 | 59 | 95271 | 5.141 | ppbV | 96 |
| 28) methylene chloride | 7.48 | 49 | 61261 | 5.165 | ppbV | 100 |
| 29) 3-chloropropene | 7.64 | 41 | 66710 | 5.078 | ppbV | 99 |
| 30) carbon disulfide | 7.82 | 76 | 124953 | 5.161 | ppbV | 93 |
| 31) Freon 113 | 7.84 | 101 | 91323 | 5.160 | ppbV | 97 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 70608 | 5.054 | ppbV | 96 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 80497 | 5.145 | ppbV | 97 |
| 34) MTBE | 9.07 | 73 | 120483 | 5.093 | ppbV | 98 |
| 35) vinyl acetate | 9.19 | 43 | 120285 | 4.950 | ppbV | 99 |
| 36) 2-butanone | 9.49 | 43 | 105612 | 4.783 | ppbV | 97 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 74463 | 5.088 | ppbV | 97 |
| 38) Ethyl Acetate | 10.32 | 61 | 18658 | 4.949 | ppbV | 80 |
| 39) chloroform | 10.38 | 83 | 114562 | 5.237 | ppbV | 99 |
| 40) Tetrahydrofuran | 10.87 | 42 | 67579M6 | 5.381 | ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 100927 | 5.166 | ppbV | 99 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 62967 | 4.888 | ppbV | 98 |
| 44) hexane | 10.28 | 57 | 90389 | 4.951 | ppbV | 96 |
| 45) diisopropyl ether | 10.29 | 87 | 41838 | 4.807 | ppbV | 97 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 146127 | 4.910 | ppbV | 94 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 96368 | 4.993 | ppbV | 98 |
| 49) 1,1-dichloropropene | 11.92 | 75 | 70571 | 5.148 | ppbV | 95 |
| 50) benzene | 12.09 | 78 | 133337 | 5.079 | ppbV | 99 |
| 51) thiophene | 12.25 | 84 | 87582 | 4.930 | ppbV | 95 |
| 52) carbon tetrachloride | 12.26 | 117 | 100050 | 4.934 | ppbV | 95 |
| 53) cyclohexane | 12.41 | 56 | 77897 | 5.002 | ppbV | 96 |
| 54) tert-amyl methyl ether | 12.79 | 73 | 130431 | 5.031 | ppbV | 99 |
| 55) dibromomethane | 13.01 | 93 | 53824 | 4.897 | ppbV | 88 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 50663 | 4.922 | ppbV | 96 |
| 57) bromodichloromethane | 13.27 | 83 | 104490 | 4.775 | ppbV | 97 |
| 58) 1,4-dioxane | 13.32 | 88 | 33391 | 5.246 | ppbV | 100 |
| 59) trichloroethene | 13.31 | 130 | 65922 | 4.814 | ppbV | 96 |
| 60) 2,2,4-trimethylpentane | 13.36 | 57 | 243928 | 5.013 | ppbV | 100 |
| 61) methyl methacrylate | 13.54 | 41 | 73989 | 4.897 | ppbV | 99 |
| 62) heptane | 13.66 | 43 | 102026 | 4.997 | ppbV | 99 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 74156 | 4.933 | ppbV | 95 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 143341 | 5.163 | ppbV | 98 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 74874 | 4.975 | ppbV | 99 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 57202 | 4.866 | ppbV | 92 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD5.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:49:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 161179 | 5.102 | ppbV | 97 |
| 70) | 2-methylthiophene | 15.43 | 97 | 154393 | 5.279 | ppbV | 98 |
| 71) | 1,3-dichloropropane | 15.40 | 76 | 71828 | 5.096 | ppbV | 97 |
| 72) | 2-hexanone | 15.61 | 43 | 132407 | 5.309 | ppbV | 99 |
| 73) | 3-methylthiophene | 15.61 | 97 | 144062 | 5.346 | ppbV | 98 |
| 74) | dibromochloromethane | 15.79 | 129 | 121025 | 5.260 | ppbV | 96 |
| 75) | 1,2-dibromoethane | 16.02 | 107 | 97722 | 5.204 | ppbV | 98 |
| 76) | butyl acetate | 16.18 | 73 | 18092 | 5.291 | ppbV | 91 |
| 77) | octane | 16.27 | 85 | 49547 | 5.327 | ppbV | 98 |
| 78) | tetrachloroethene | 16.43 | 166 | 86743 | 5.407 | ppbV | 96 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 79399 | 5.105 | ppbV | 97 |
| 80) | chlorobenzene | 17.00 | 112 | 142437 | 5.163 | ppbV | 99 |
| 81) | ethylbenzene | 17.29 | 91 | 219632 | 5.241 | ppbV | 100 |
| 82) | 2-ethylthiophene | 17.33 | 97 | 171124 | 5.257 | ppbV | 98 |
| 83) | m+p-xylene | 17.44 | 91 | 347509 | 10.633 | ppbV | 98 |
| 84) | bromoform | 17.52 | 173 | 119047 | 5.184 | ppbV | 98 |
| 85) | styrene | 17.72 | 104 | 136182 | 5.174 | ppbV | 98 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 133640 | 5.307 | ppbV | 93 |
| 87) | o-xylene | 17.80 | 91 | 178965 | 5.252 | ppbV | 95 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 102798 | 5.284 | ppbV | 99 |
| 89) | nonane | 17.94 | 43 | 156769 | 5.342 | ppbV | 100 |
| 91) | isopropylbenzene | 18.24 | 105 | 243254 | 5.153 | ppbV | 99 |
| 92) | bromobenzene | 18.33 | 77 | 126496 | 5.276 | ppbV | 100 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 73660 | 5.260 | ppbV | 84 |
| 94) | n-propylbenzene | 18.62 | 120 | 77571 | 5.282 | ppbV | 96 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 188263 | 5.222 | ppbV | 96 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 278954 | 5.264 | ppbV | 97 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 243997 | 5.507 | ppbV | 96 |
| 98) | tert-butylbenzene | 19.09 | 119 | 253232 | 5.215 | ppbV | 99 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 217019 | 5.203 | ppbV | 98 |
| 100) | decane | 19.13 | 57 | 154524 | 5.346 | ppbV | 99 |
| 101) | Benzyl Chloride | 19.21 | 91 | 199453 | 5.145 | ppbV | 97 |
| 102) | 1,3-dichlorobenzene | 19.22 | 146 | 167352 | 5.258 | ppbV | 99 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 169879 | 5.257 | ppbV | 99 |
| 104) | sec-butylbenzene | 19.29 | 105 | 326878 | 5.351 | ppbV | 98 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 188957 | 5.268 | ppbV | 98 |
| 106) | p-isopropyltoluene | 19.40 | 119 | 315190 | 5.260 | ppbV | 100 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 159422 | 5.219 | ppbV | 96 |
| 108) | n-butylbenzene | 19.73 | 91 | 269876 | 5.356 | ppbV | 98 |
| 109) | indan | 19.58 | 117 | 213016 | 5.261 | ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD5.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:49:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 145611 | 5.260 | ppbV | 99 |
| 111) 1,2-dibromo-3-chloropr... | 19.89 | 75 | 71017 | 5.173 | ppbV | 95 |
| 112) undecane | 20.10 | 57 | 186356 | 5.358 | ppbV | 99 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 441324 | 5.071 | ppbV | 98 |
| 114) dodecane | 21.02 | 57 | 199214 | 5.043 | ppbV | 99 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 145594 | 4.897 | ppbV | 97 |
| 116) naphthalene | 21.14 | 128 | 359158 | 5.314 | ppbV | 98 |
| 117) 1,2,3-trichlorobenzene | 21.39 | 180 | 144009 | 5.226 | ppbV | 97 |
| 118) benzothiophene | 21.20 | 134 | 297664 | 5.199 | ppbV | 99 |
| 119) hexachlorobutadiene | 21.46 | 225 | 109889 | 5.012 | ppbV | 100 |
| 120) 2-methylnaphthalene | 22.31 | 142 | 120285 | 4.685 | ppbV | 99 |
| 121) 1-methylnaphthalene | 22.53 | 142 | 112222 | 4.782 | ppbV | 98 |

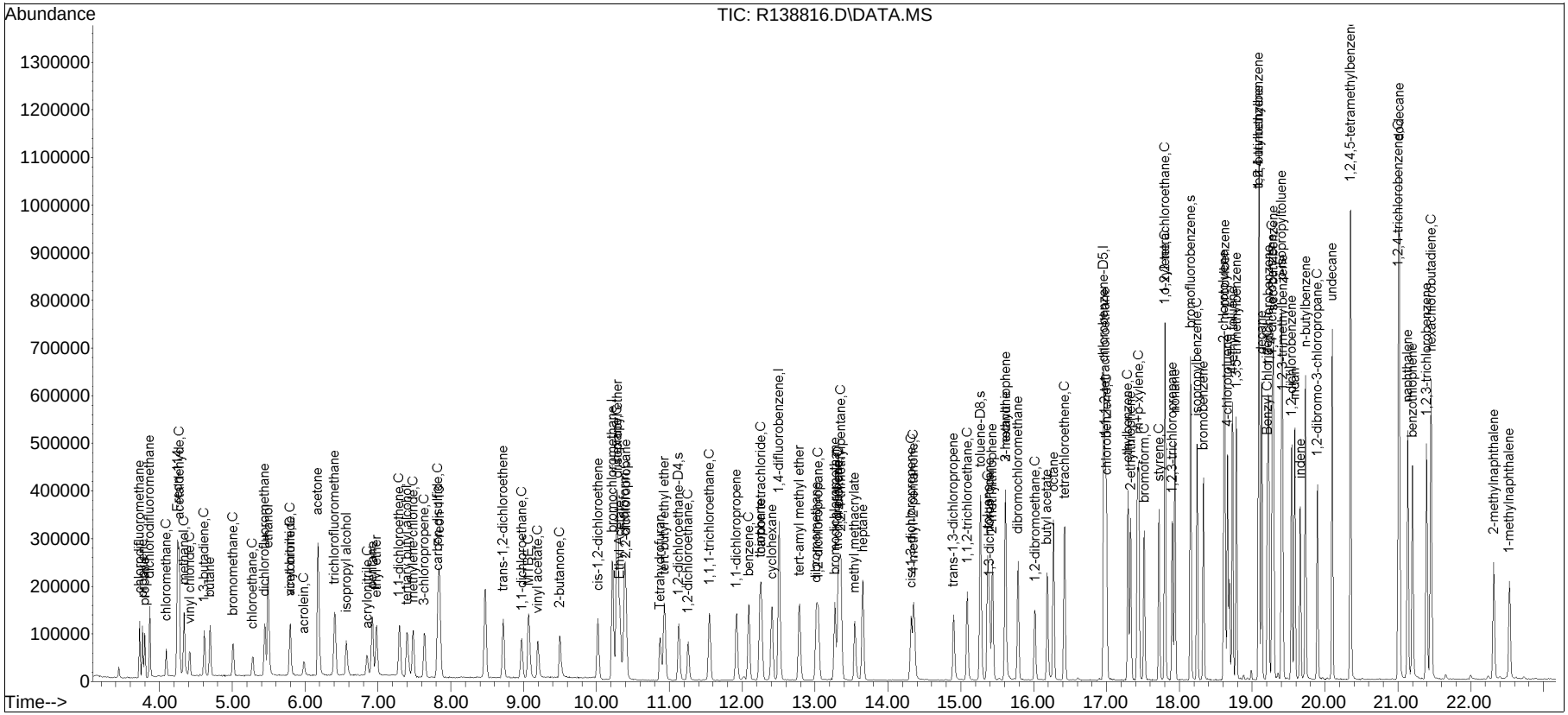
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138816.D
Acq On : 2 Jan 2015 10:34 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD5.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:49:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

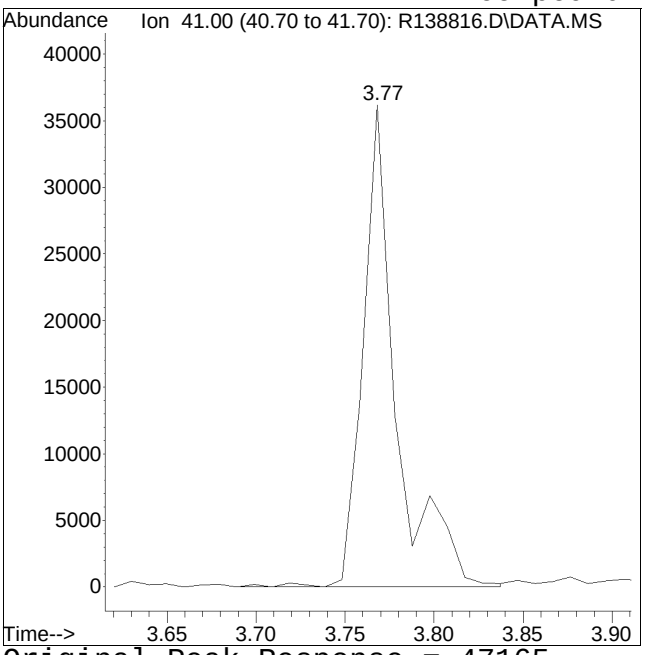
Sub List : Default - All compounds listed0102T_ICAL\R138817.D



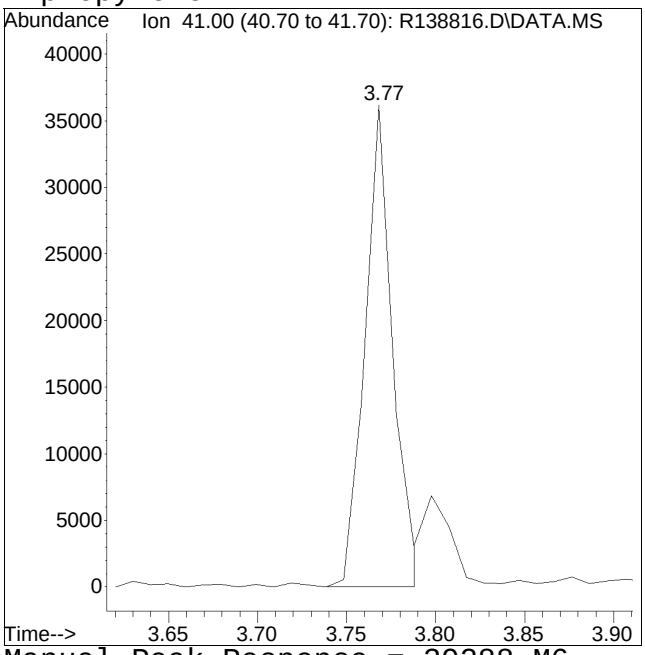
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ICAL\TALL150102.M
Data File : R138816.D
Date Inj'd : 1/2/2015 10:34 pm
Sample : ITO15-LLSTD5.0
Method : TO15_LL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #3: propylene




Original Peak Response = 47165



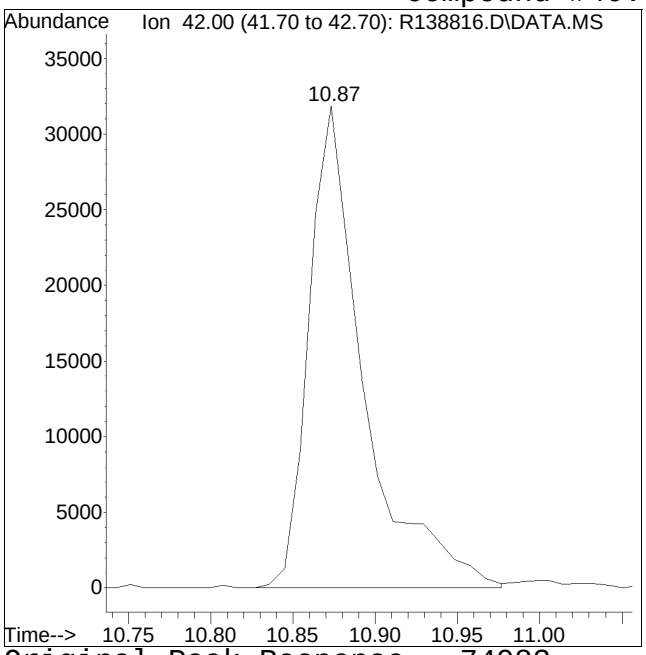

Manual Peak Response = 39288 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

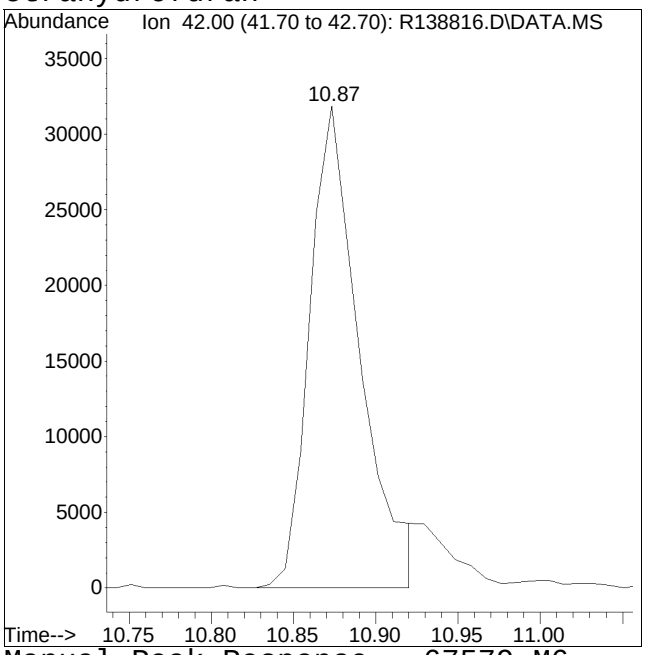
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\QM150102T_ICAL\TALL150102.M
Data File : R138816.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 10:34 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD5.0 Quant Date : 1/3/2015 12:42 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 74083




Manual Peak Response = 67579 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD10.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:41:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 11:14:22 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 136438 | 10.000 ppbV | -0.05 |
| Standard Area = 136438 | | | Recovery = 100.00% | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 279055 | 10.000 ppbV | 0.02 |
| Standard Area = 279055 | | | Recovery = 100.00% | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 65032 | 10.000 ppbV | 0.07 |
| Standard Area = 65032 | | | Recovery = 100.00% | | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.13 | 65 | 85126 | 10.612 ppbV | -0.01 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 106.12% | | |
| 69) toluene-D8 | 15.27 | 98 | 229337 | 8.979 ppbV | 0.07 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 89.79% | | |
| 90) bromofluorobenzene | 18.15 | 95 | 171973 | 9.410 ppbV | 0.07 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 94.10% | | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 140283M2 | 9.258 ppbV | |
| 3) propylene | 3.77 | 41 | 72210M2 | 9.501 ppbV | |
| 4) propane | 3.80 | 29 | 81021M2 | 9.447 ppbV | |
| 5) dichlorodifluoromethane | 3.87 | 85 | 115768M3 | 8.247 ppbV | |
| 6) chloromethane | 4.09 | 50 | 75746M3 | 9.011 ppbV | |
| 7) Freon-114 | 4.25 | 85 | 215977M3 | 7.792 ppbV | |
| 8) methanol | 4.34 | 31 | 160142M3 | 45.084 ppbV | |
| 9) vinyl chloride | 4.42 | 62 | 81818M3 | 8.300 ppbV | |
| 10) 1,3-butadiene | 4.62 | 54 | 63579M3 | 9.061 ppbV | |
| 11) butane | 4.69 | 43 | 136692M3 | 8.878 ppbV | |
| 12) acetaldehyde | 4.27 | 29 | 261313M3 | 46.730 ppbV | |
| 13) bromomethane | 5.01 | 94 | 79370M3 | 7.457 ppbV | |
| 14) chloroethane | 5.28 | 64 | 39224M3 | 8.308 ppbV | |
| 15) ethanol | 5.49 | 31 | 335249M2 | 45.949 ppbV | |
| 16) dichlorofluoromethane | 5.45 | 67 | 174732M3 | 7.587 ppbV | |
| 17) vinyl bromide | 5.80 | 106 | 84857M3 | 7.897 ppbV | |
| 18) acrolein | 5.98 | 56 | 34897M2 | 9.156 ppbV | |
| 19) acetone | 6.17 | 43 | 673011M2 | 44.530 ppbV | |
| 20) acetonitrile | 5.80 | 41 | 81095M2 | 9.076 ppbV | |
| 21) trichlorofluoromethane | 6.41 | 101 | 214668M2 | 7.597 ppbV | |
| 22) isopropyl alcohol | 6.56 | 45 | 162891M4 | 9.600 ppbV | |
| 23) acrylonitrile | 6.85 | 53 | 62221M4 | 9.054 ppbV | |
| 24) pentane | 6.92 | 43 | 158311M4 | 8.716 ppbV | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD10.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:41:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 11:14:22 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 25) ethyl ether | 6.97 | 31 | 123200 | 8.802 | ppbV | | 97 |
| 26) 1,1-dichloroethene | 7.30 | 61 | 138992 | 8.398 | ppbV | | 96 |
| 27) tertiary butyl alcohol | 7.40 | 59 | 181157 | 8.943 | ppbV | | 99 |
| 28) methylene chloride | 7.48 | 49 | 115956 | 9.883 | ppbV | | 91 |
| 29) 3-chloropropene | 7.64 | 41 | 128433 | 8.780 | ppbV | # | 91 |
| 30) carbon disulfide | 7.82 | 76 | 236684 | 7.357 | ppbV | | 94 |
| 31) Freon 113 | 7.84 | 101 | 173033 | 7.819 | ppbV | | 94 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 136580 | 8.681 | ppbV | | 96 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 152945 | 7.893 | ppbV | | 99 |
| 34) MTBE | 9.06 | 73 | 231295 | 7.522 | ppbV | # | 90 |
| 35) vinyl acetate | 9.19 | 43 | 237574 | 9.472 | ppbV | | 96 |
| 36) 2-butanone | 9.49 | 43 | 215882 | 9.270 | ppbV | | 95 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 143083 | 8.453 | ppbV | | 89 |
| 38) Ethyl Acetate | 10.32 | 61 | 36859 | 8.732 | ppbV | | 75 |
| 39) chloroform | 10.38 | 83 | 213857 | 7.706 | ppbV | # | 93 |
| 40) Tetrahydrofuran | 10.86 | 42 | 122771M6 | 9.736 | ppbV | | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 190987 | 7.511 | ppbV | # | 87 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 125944 | 8.112 | ppbV | # | 94 |
| 44) hexane | 10.28 | 57 | 175994 | 11.648 | ppbV | # | 67 |
| 45) diisopropyl ether | 10.29 | 87 | 83907 | 10.114 | ppbV | # | 54 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 286862 | 11.209 | ppbV | | 91 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 186049 | 9.782 | ppbV | | 98 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 132132 | 9.464 | ppbV | | 88 |
| 50) benzene | 12.09 | 78 | 253075 | 9.664 | ppbV | # | 91 |
| 51) thiophene | 12.25 | 84 | 171241 | 10.170 | ppbV | # | 84 |
| 52) carbon tetrachloride | 12.27 | 117 | 195461 | 10.065 | ppbV | | 93 |
| 53) cyclohexane | 12.41 | 56 | 150123 | 12.030 | ppbV | | 94 |
| 54) tert-amyl methyl ether | 12.79 | 73 | 249895 | 9.727 | ppbV | # | 90 |
| 55) dibromomethane | 13.01 | 93 | 105949 | 9.295 | ppbV | | 94 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 99225 | 10.460 | ppbV | | 93 |
| 57) bromodichloromethane | 13.27 | 83 | 210957 | 10.068 | ppbV | | 94 |
| 58) 1,4-dioxane | 13.32 | 88 | 61354 | 10.359 | ppbV | | 92 |
| 59) trichloroethene | 13.31 | 130 | 131990 | 10.905 | ppbV | | 91 |
| 60) 2,2,4-trimethylpentane | 13.35 | 57 | 469020 | 11.418 | ppbV | | 97 |
| 61) methyl methacrylate | 13.54 | 41 | 145657 | 12.174 | ppbV | # | 84 |
| 62) heptane | 13.66 | 43 | 196833 | 11.812 | ppbV | | 96 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 144906 | 10.155 | ppbV | | 94 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 267628 | 12.006 | ppbV | | 97 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 145080 | 9.946 | ppbV | # | 86 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 113307 | 10.514 | ppbV | | 95 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD10.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:41:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 11:14:22 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 323349 | 8.511 | ppbV | | 99 |
| 70) | 2-methylthiophene | 15.43 | 97 | 299364 | 9.196 | ppbV | # | 96 |
| 71) | 1,3-dichloropropane | 15.40 | 76 | 144258 | 8.470 | ppbV | # | 81 |
| 72) | 2-hexanone | 15.61 | 43 | 255242 | 11.339 | ppbV | | 93 |
| 73) | 3-methylthiophene | 15.61 | 97 | 275819 | 8.454 | ppbV | | 96 |
| 74) | dibromochloromethane | 15.79 | 129 | 235485 | 9.562 | ppbV | | 98 |
| 75) | 1,2-dibromoethane | 16.02 | 107 | 192212 | 9.582 | ppbV | | 97 |
| 76) | butyl acetate | 16.18 | 73 | 35001 | 9.994 | ppbV | # | 47 |
| 77) | octane | 16.27 | 85 | 95195 | 9.179 | ppbV | # | 75 |
| 78) | tetrachloroethene | 16.43 | 166 | 164192 | 9.042 | ppbV | | 96 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 159191 | 9.435 | ppbV | | 96 |
| 80) | chlorobenzene | 17.00 | 112 | 282375 | 9.506 | ppbV | | 96 |
| 81) | ethylbenzene | 17.30 | 91 | 428946 | 8.692 | ppbV | | 92 |
| 82) | 2-ethylthiophene | 17.33 | 97 | 333172 | 8.767 | ppbV | | 97 |
| 83) | m+p-xylene | 17.44 | 91 | 668990 | 17.155 | ppbV | | 93 |
| 84) | bromoform | 17.52 | 173 | 235062 | 9.652 | ppbV | | 97 |
| 85) | styrene | 17.72 | 104 | 269405 | 9.464 | ppbV | | 97 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 257751 | 9.204 | ppbV | | 97 |
| 87) | o-xylene | 17.80 | 91 | 348778 | 8.755 | ppbV | | 95 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 199129 | 8.692 | ppbV | # | 93 |
| 89) | nonane | 17.94 | 43 | 300370 | 11.122 | ppbV | | 93 |
| 91) | isopropylbenzene | 18.24 | 105 | 483134 | 9.121 | ppbV | | 97 |
| 92) | bromobenzene | 18.33 | 77 | 245389 | 8.710 | ppbV | | 92 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 143342 | 9.910 | ppbV | | 87 |
| 94) | n-propylbenzene | 18.62 | 120 | 150302 | 9.633 | ppbV | | 96 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 369022 | 8.597 | ppbV | | 91 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 542416 | 9.303 | ppbV | | 97 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 453471 | 9.771 | ppbV | | 95 |
| 98) | tert-butylbenzene | 19.09 | 119 | 496979 | 9.961 | ppbV | | 98 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 426872 | 9.301 | ppbV | | 97 |
| 100) | decane | 19.13 | 57 | 295823 | 10.905 | ppbV | | 93 |
| 101) | Benzyl Chloride | 19.21 | 91 | 396777M3 | 9.851 | ppbV | | |
| 102) | 1,3-dichlorobenzene | 19.22 | 146 | 325746 | 10.025 | ppbV | | 96 |
| 103) | 1,4-dichlorobenzene | 19.27 | 146 | 330748M3 | 9.960 | ppbV | | |
| 104) | sec-butylbenzene | 19.29 | 105 | 625225 | 9.357 | ppbV | | 98 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 367127 | 8.736 | ppbV | | 93 |
| 106) | p-isopropyltoluene | 19.41 | 119 | 613311 | 9.909 | ppbV | | 97 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 312654 | 10.090 | ppbV | | 98 |
| 108) | n-butylbenzene | 19.73 | 91 | 515701 | 9.052 | ppbV | | 95 |
| 109) | indan | 19.58 | 117 | 414398 | 9.083 | ppbV | | 97 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD10.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:41:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 11:14:22 2014
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 283334 | 8.782 | ppbV | 98 |
| 111) 1,2-dibromo-3-chloropr... | 19.90 | 75 | 140509 | 9.525 | ppbV # | 80 |
| 112) undecane | 20.10 | 57 | 355972 | 11.928 | ppbV | 94 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 890734 | 9.204 | ppbV | 98 |
| 114) dodecane | 21.01 | 57 | 404347 | 14.884 | ppbV | 90 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 304334 | 12.485 | ppbV | 98 |
| 116) naphthalene | 21.13 | 128 | 691786 | 11.296 | ppbV | 98 |
| 117) 1,2,3-trichlorobenzene | 21.39 | 180 | 282033 | 12.086 | ppbV | 99 |
| 118) benzothiophene | 21.20 | 134 | 585990 | 6.284 | ppbV | 99 |
| 119) hexachlorobutadiene | 21.45 | 225 | 224429 | 10.191 | ppbV | 97 |
| 120) 2-methylnaphthalene | 22.31 | 142 | 262806 | 13.031 | ppbV | 97 |
| 121) 1-methylnaphthalene | 22.54 | 142 | 240215M3 | 14.206 | ppbV | |

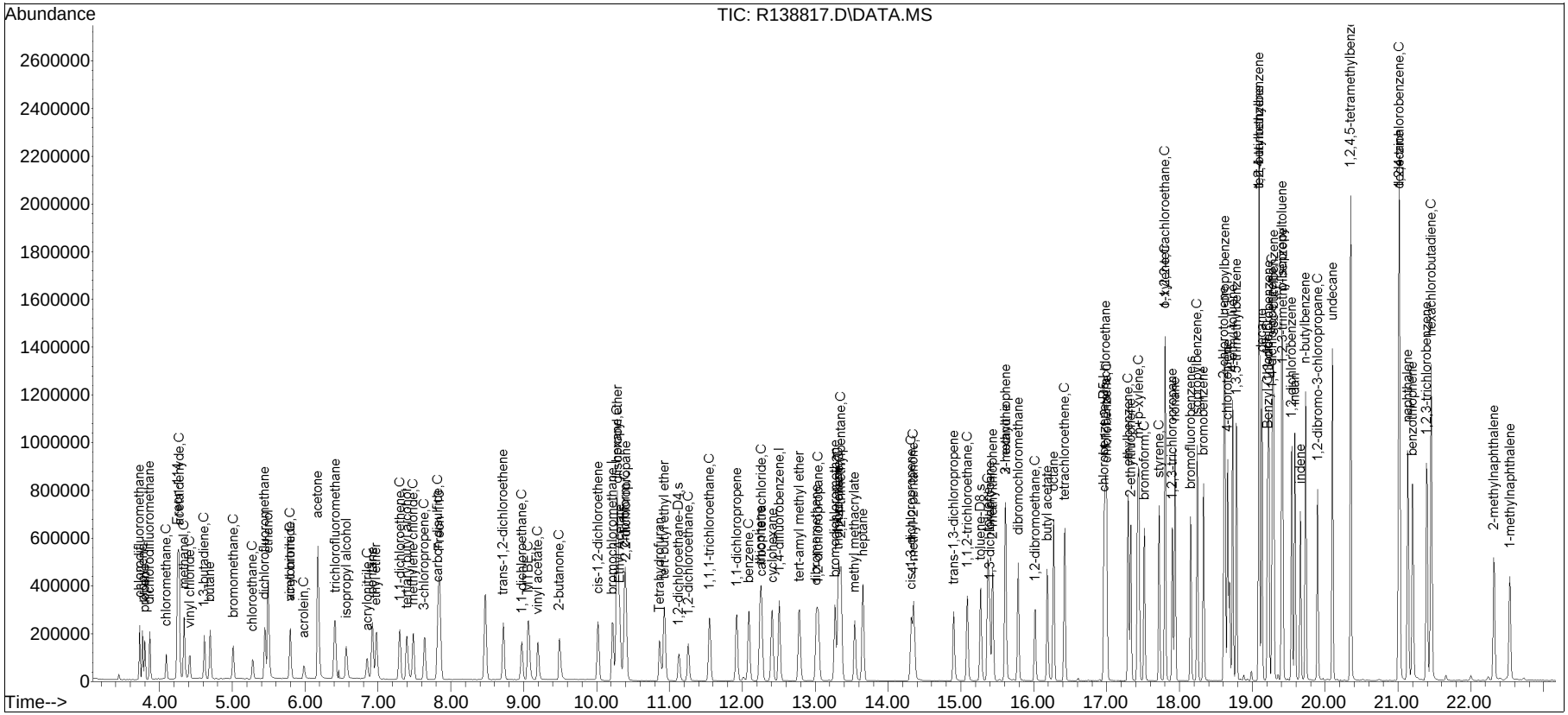
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138817.D
Acq On : 2 Jan 2015 11:08 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD10.0
Misc : WG753093
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 12:41:34 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 10 11:14:22 2014
Response via : Initial Calibration

Sub List : Default - All compounds listed0102T_ICAL\R138817.D

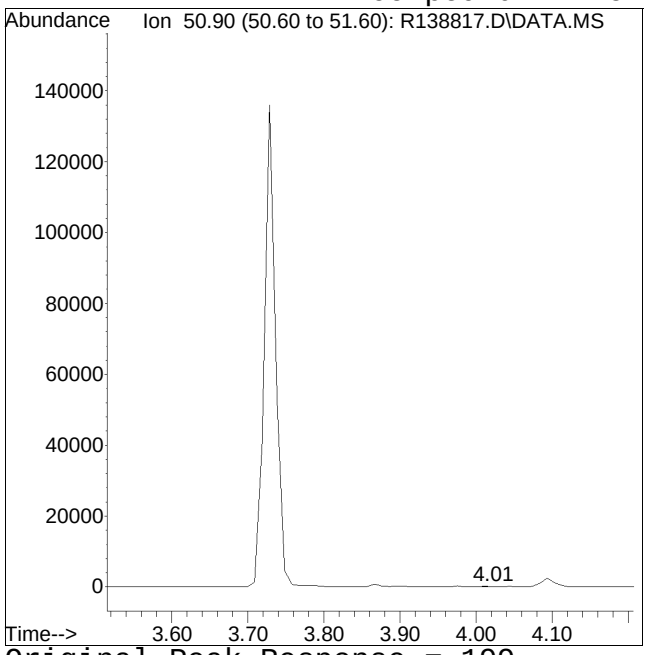


Manual Integration/Negative Proof Report

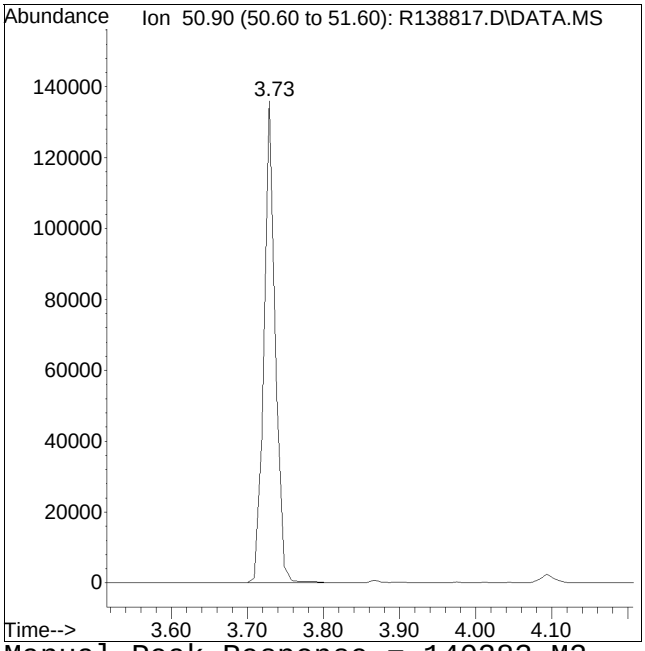
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #2: chlorodifluoromethane




Original Peak Response = 199




Manual Peak Response = 140283 M2

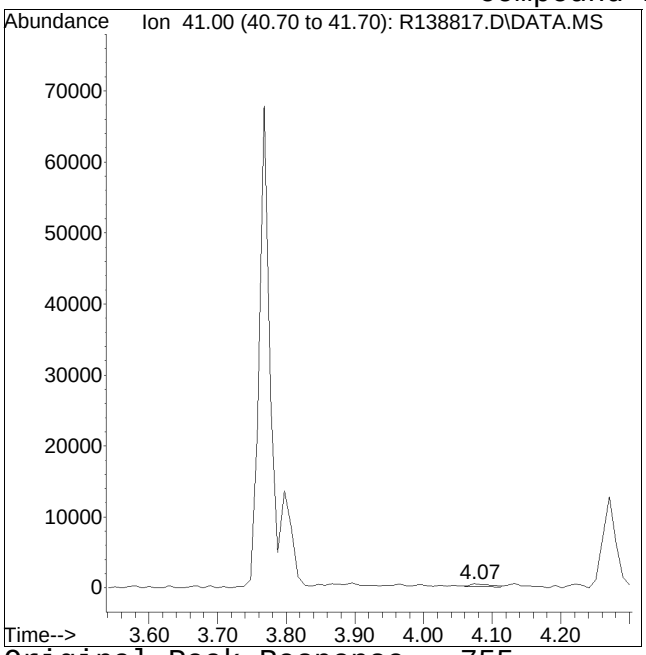
M2 = Peak not found by automatic integration algorithm.

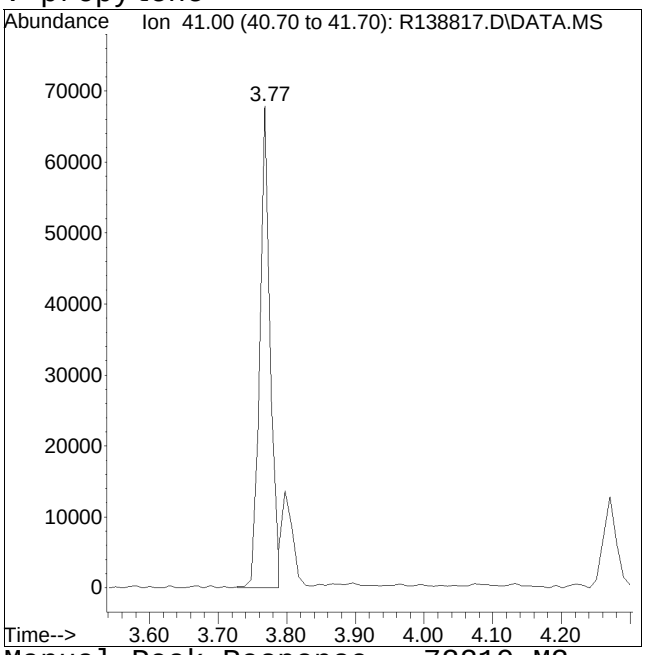
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #3: propylene



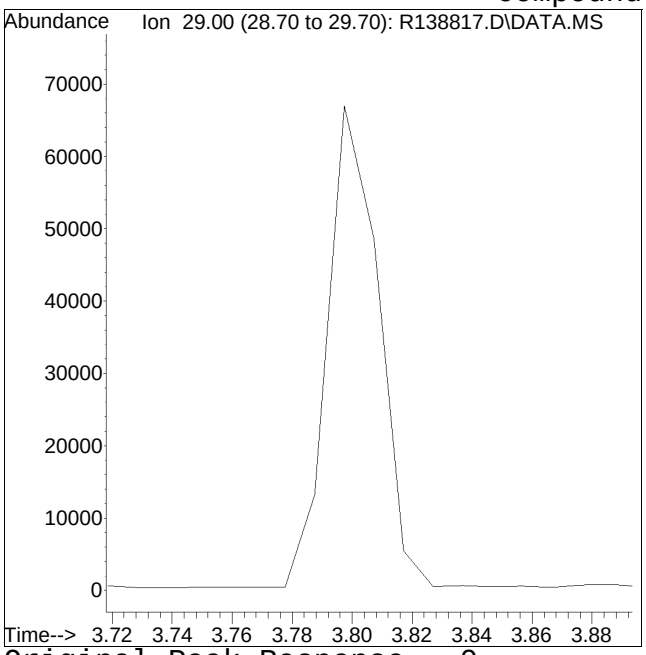



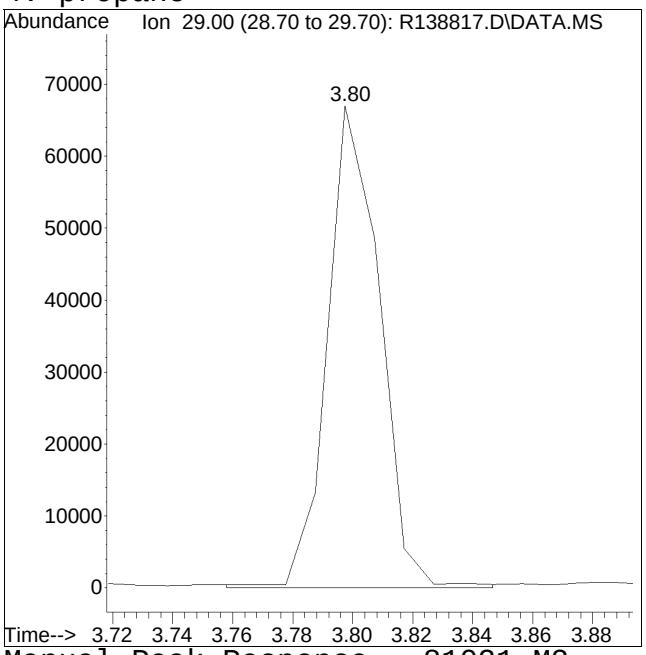

Original Peak Response = 755 Manual Peak Response = 72210 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #4: propane



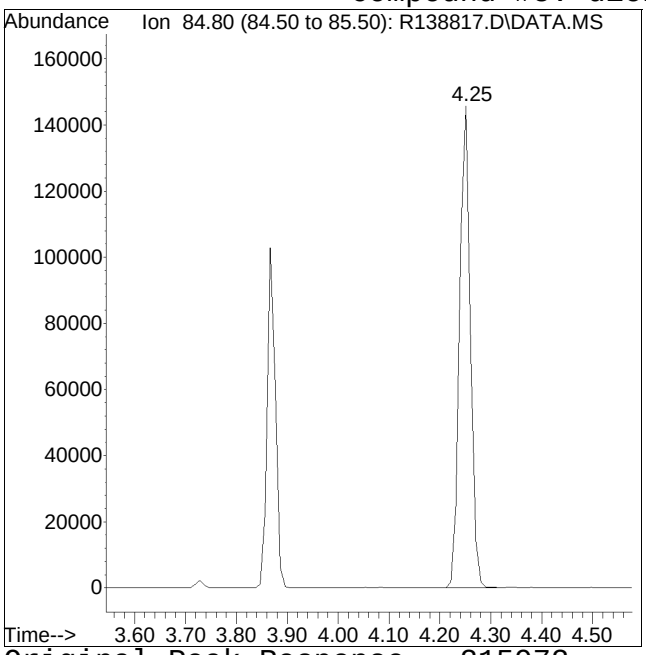



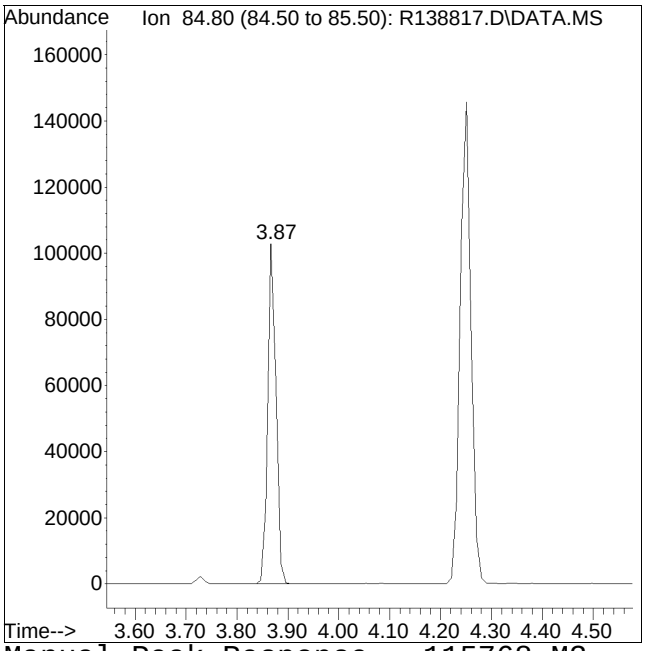

Original Peak Response = 0 Manual Peak Response = 81021 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ICAL\TALL150102.M
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0
Method : TO15_LL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #5: dichlorodifluoromethane



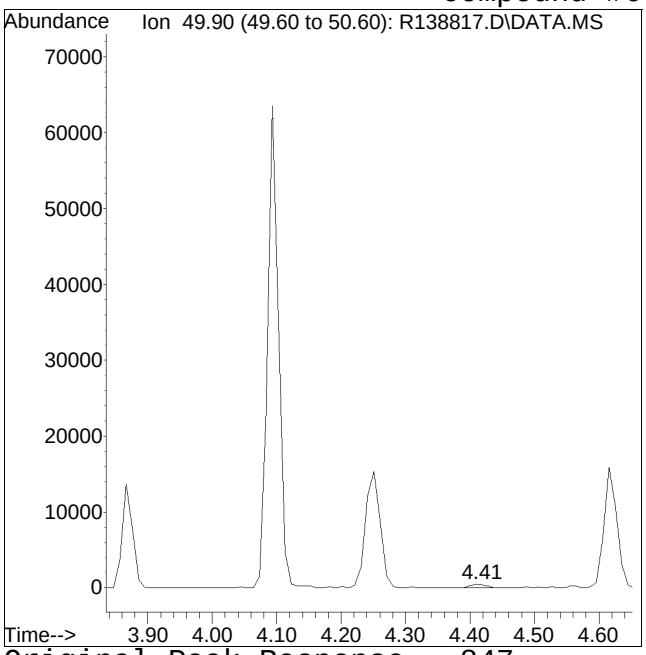

Original Peak Response = 215972 Manual Peak Response = 115768 M3

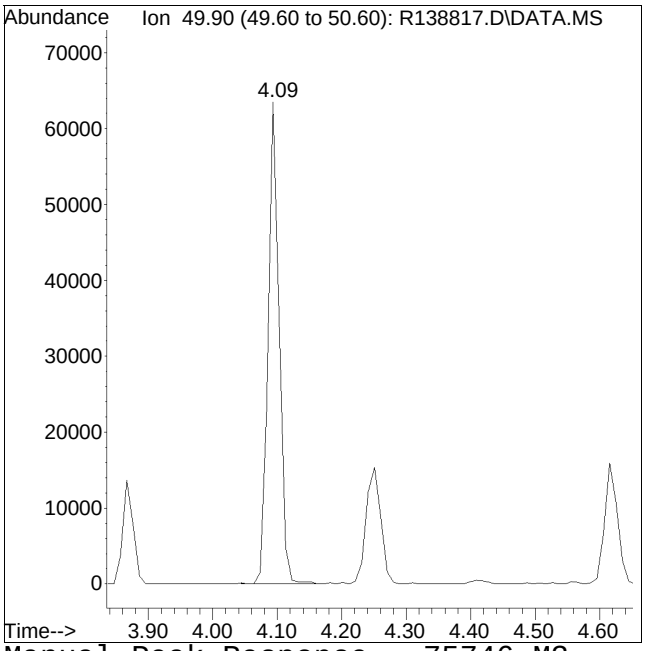
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #6: chloromethane



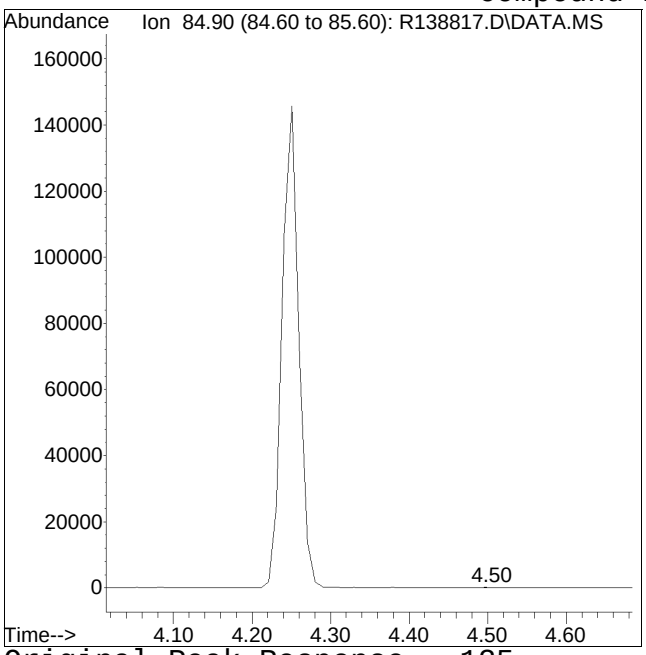

Original Peak Response = 847 Manual Peak Response = 75746 M3

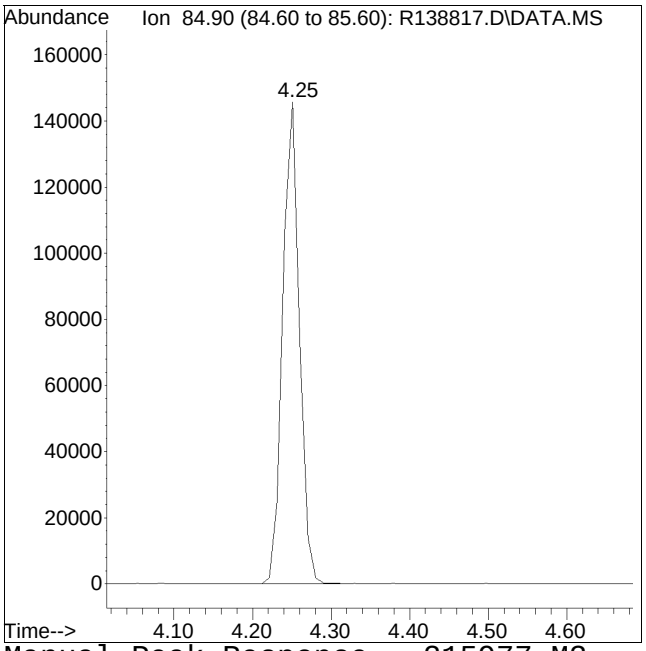
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #7: Freon-114



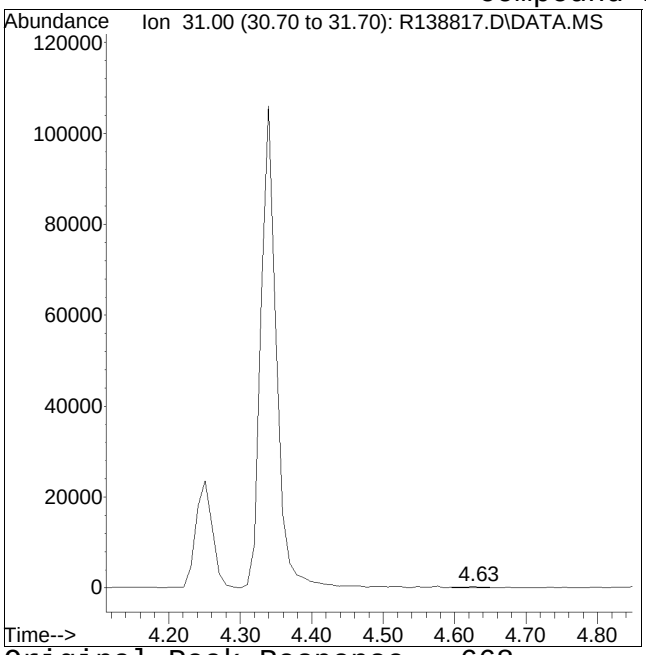

Original Peak Response = 125 Manual Peak Response = 215977 M3

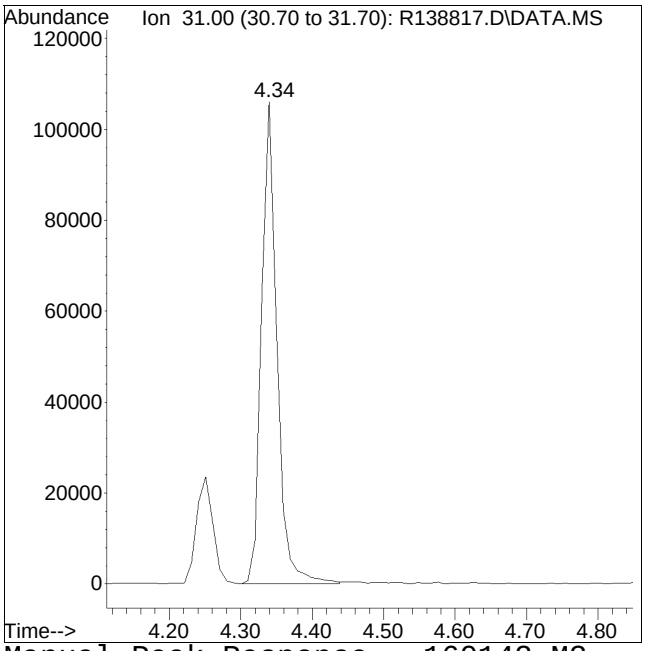
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #8: methanol



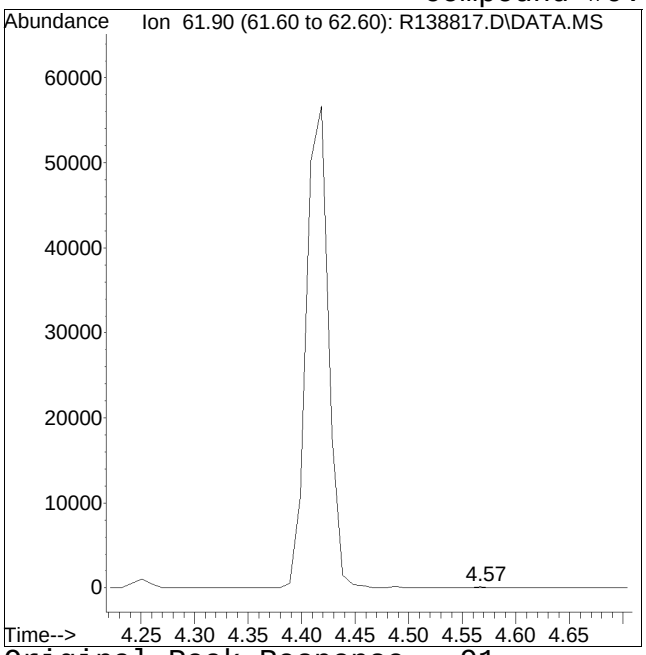

Original Peak Response = 668 Manual Peak Response = 160142 M3

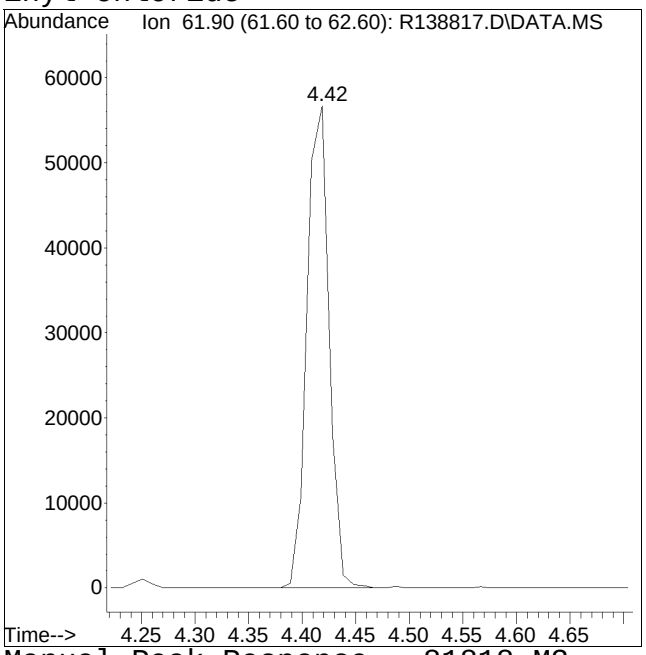
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #9: vinyl chloride



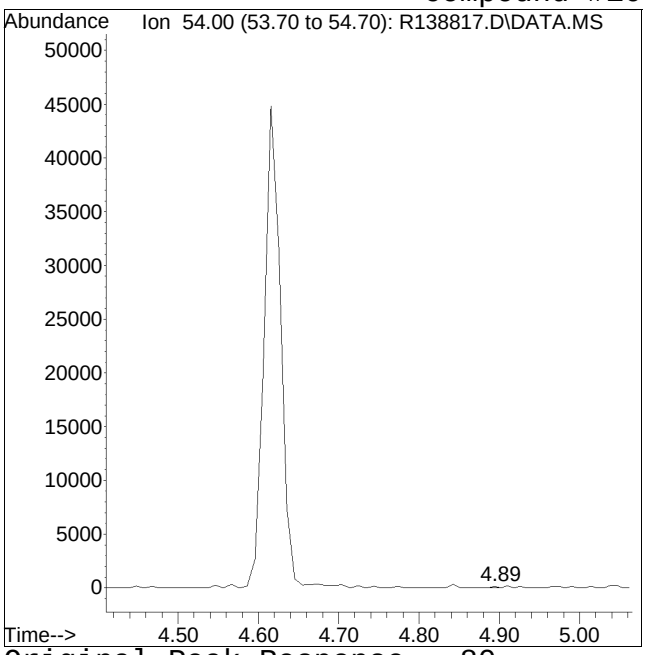

Original Peak Response = 91 Manual Peak Response = 81818 M3

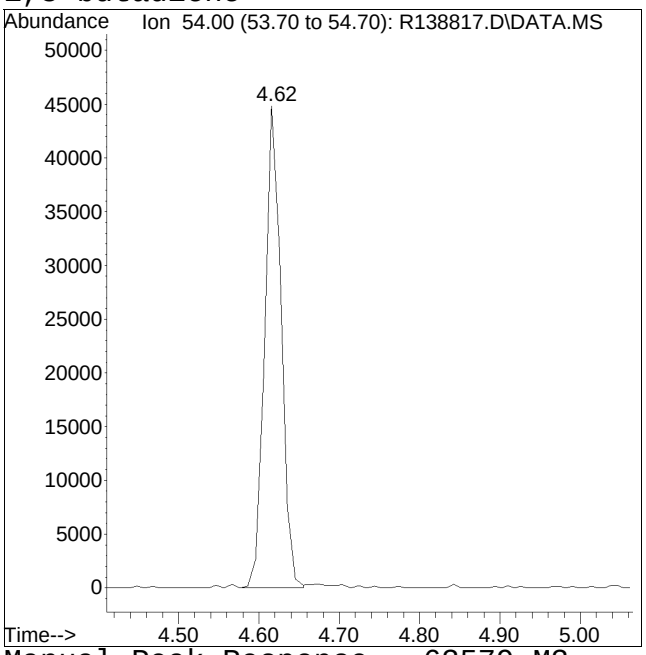
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ICAL\TALL150102.M
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0
Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #10: 1,3-butadiene



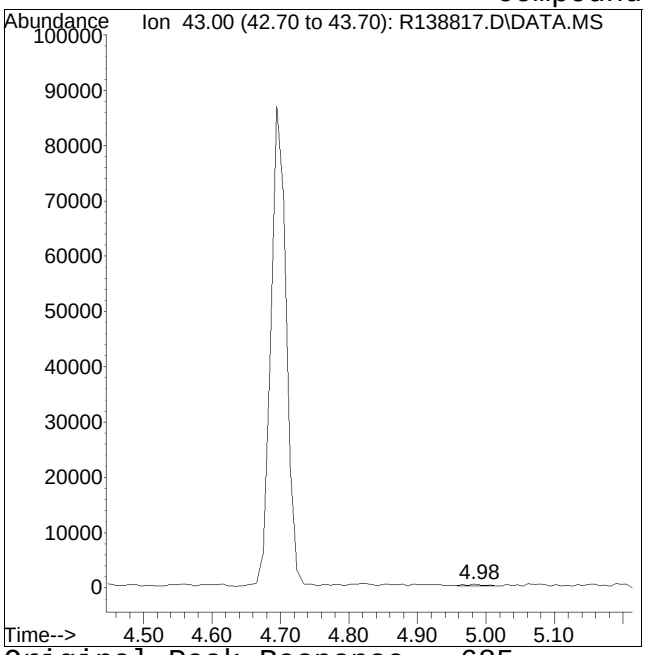

Original Peak Response = 80 Manual Peak Response = 63579 M3

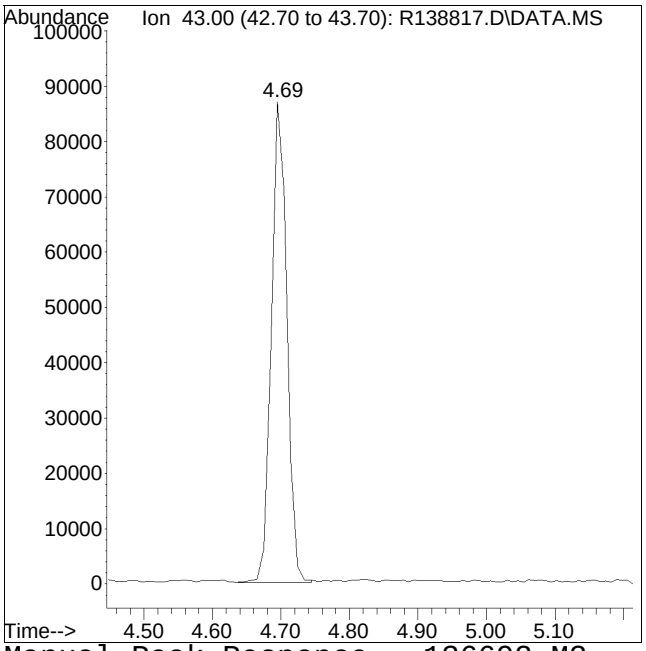
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #11: butane



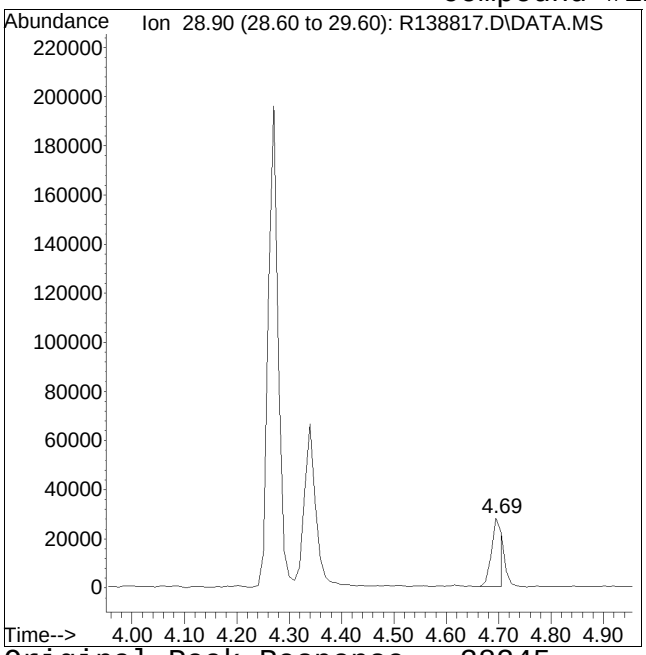

Original Peak Response = 685 Manual Peak Response = 136692 M3

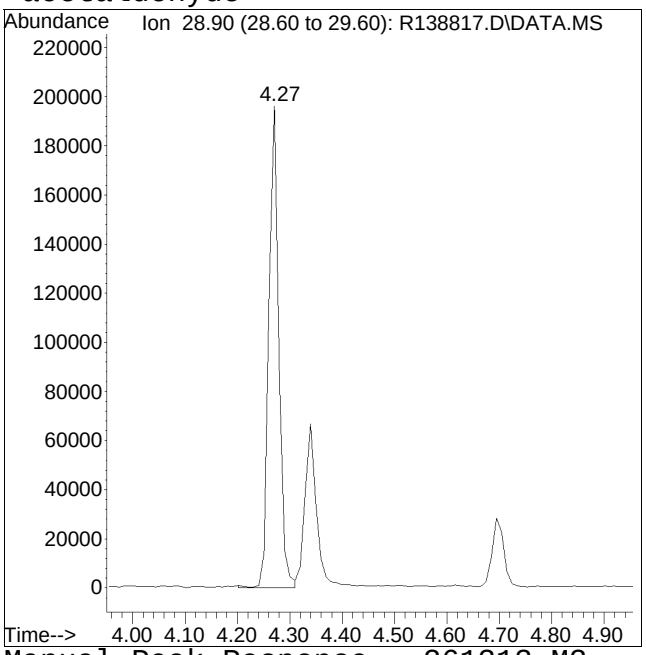
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ICAL\TALL150102.M
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0
Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #12: acetaldehyde



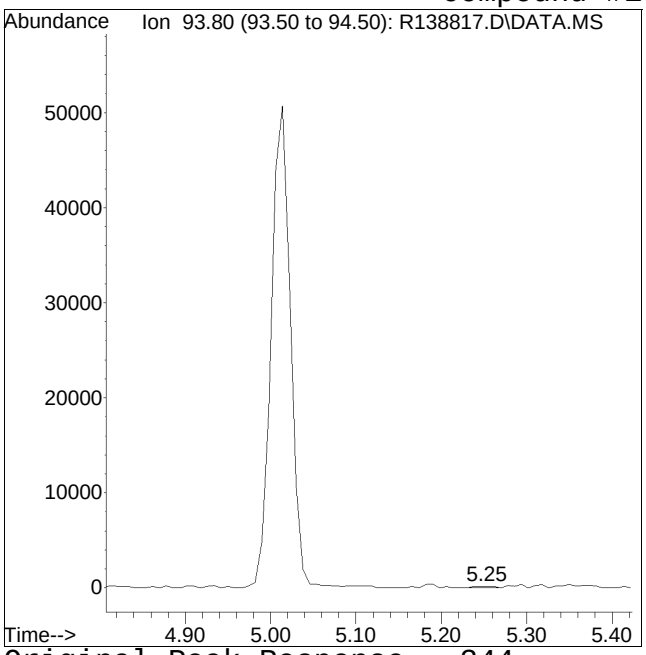

Original Peak Response = 38245 Manual Peak Response = 261313 M3

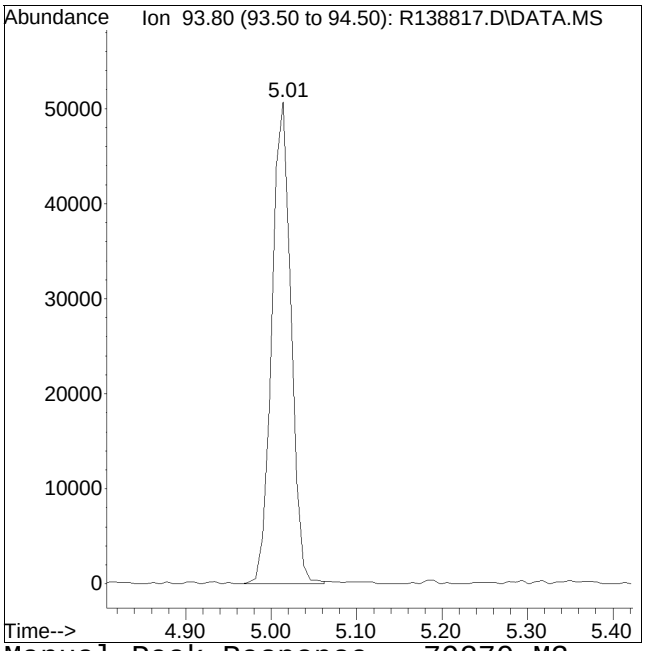
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #13: bromomethane



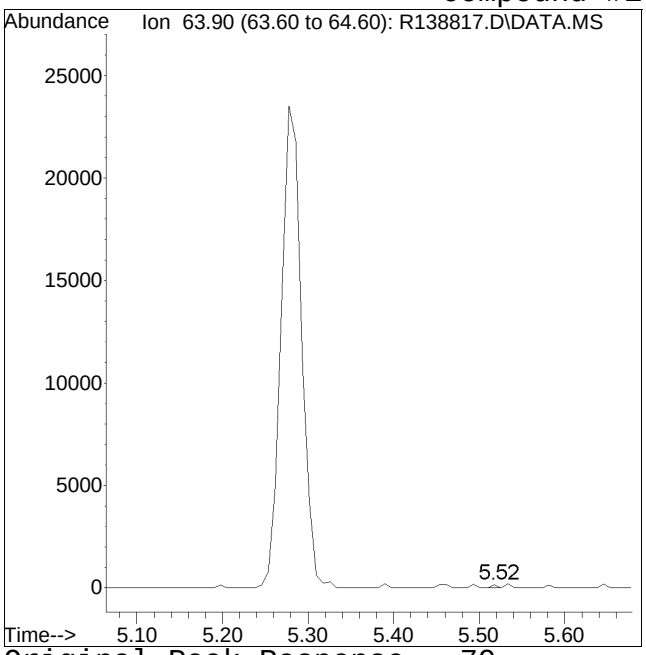

Original Peak Response = 344 Manual Peak Response = 79370 M3

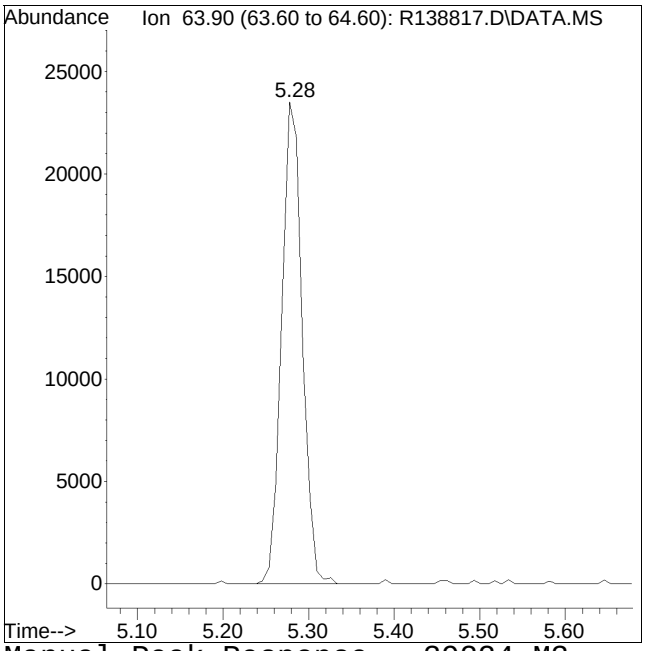
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #14: chloroethane



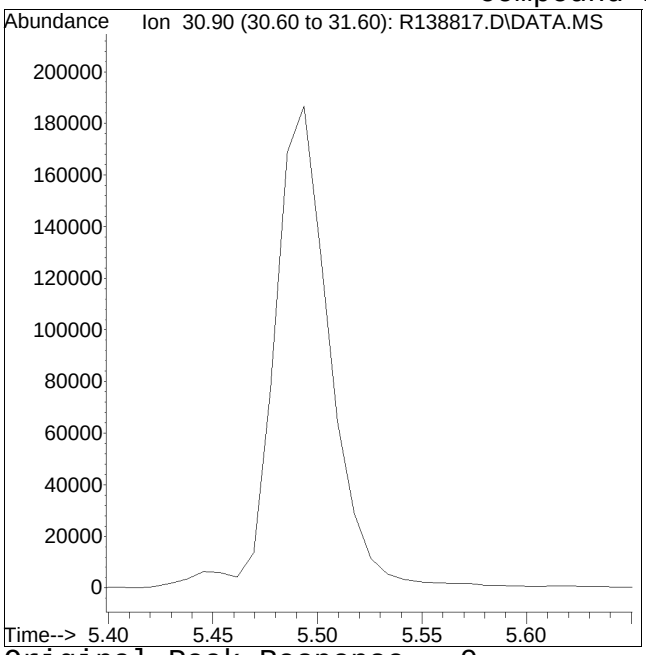

Original Peak Response = 79 Manual Peak Response = 39224 M3

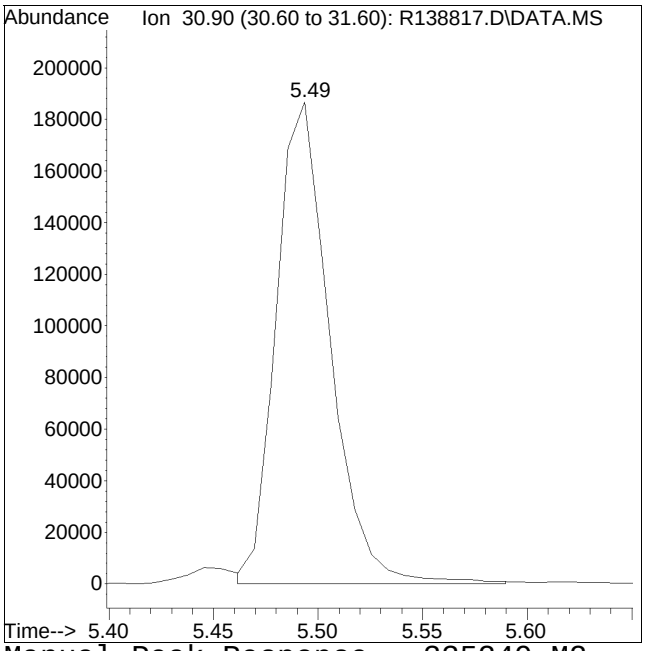
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #15: ethanol



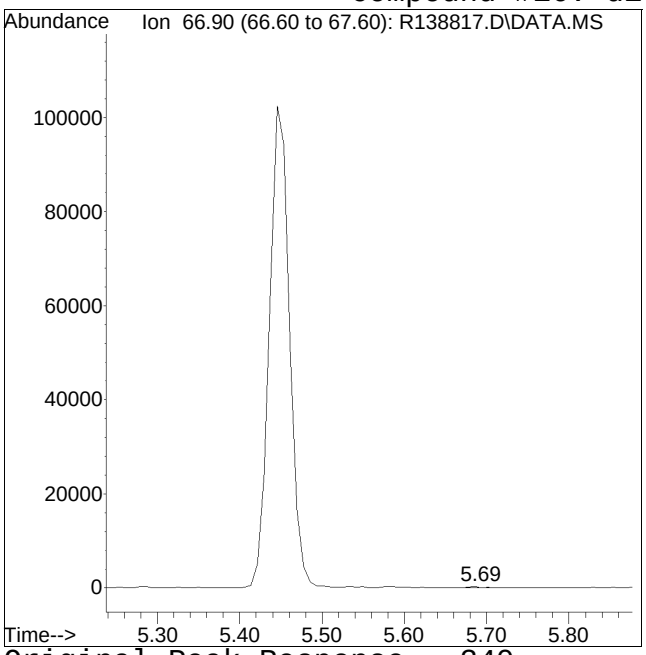



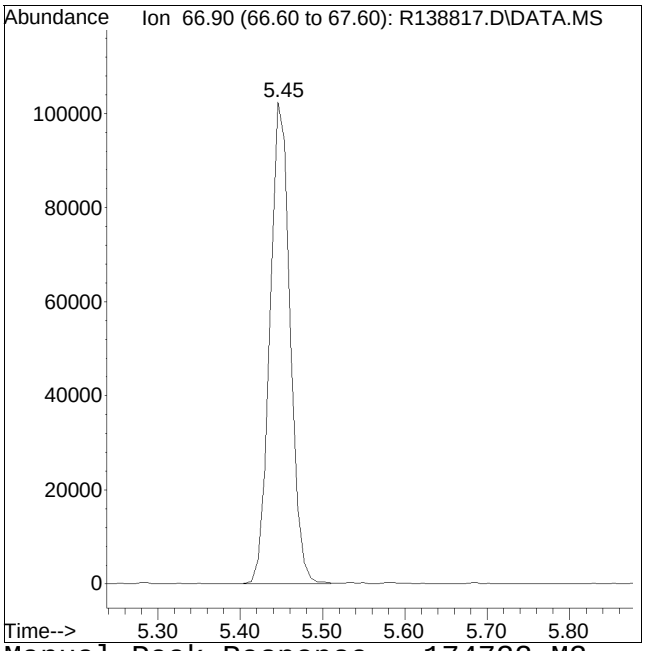

Original Peak Response = 0 Manual Peak Response = 335249 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #16: dichlorofluoromethane



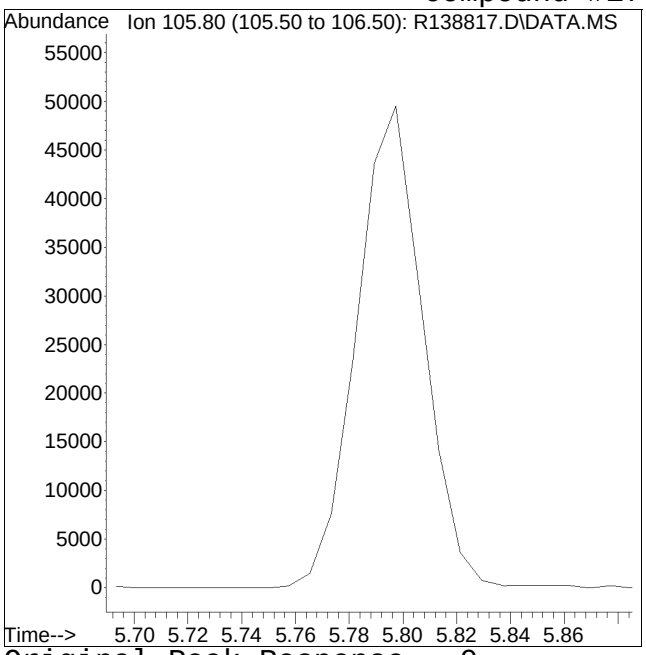

Original Peak Response = 340 Manual Peak Response = 174732 M3

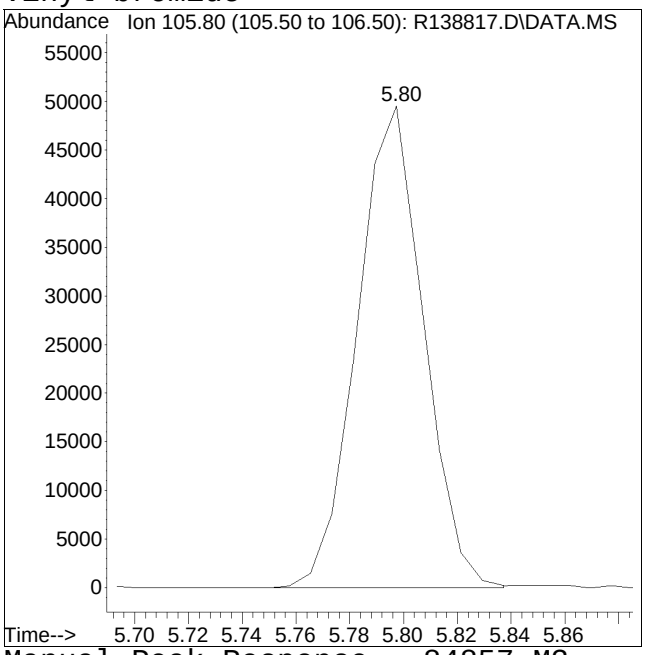
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #17: vinyl bromide



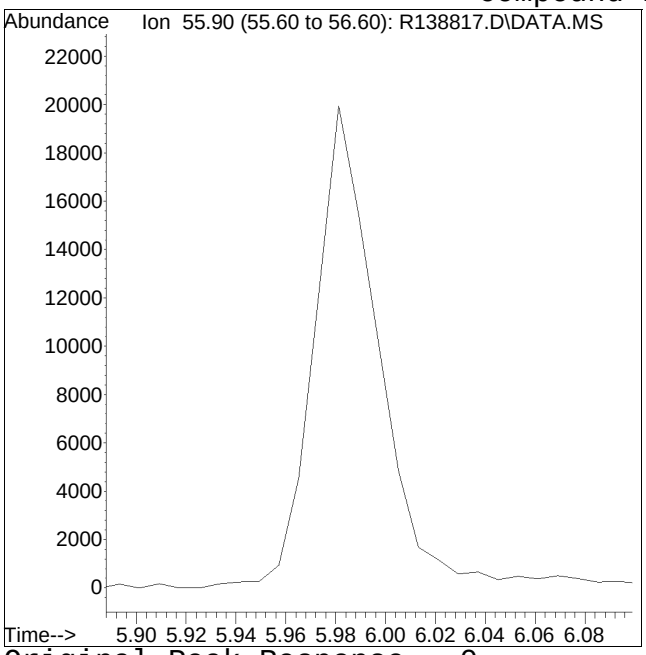

Original Peak Response = 0 Manual Peak Response = 84857 M3

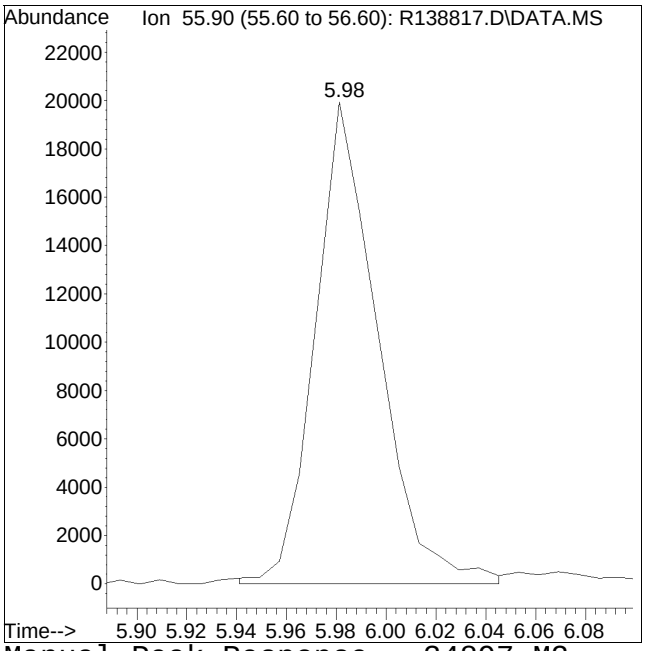
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : QM150102T_ICAL\TALL150102.M
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #18: acrolein



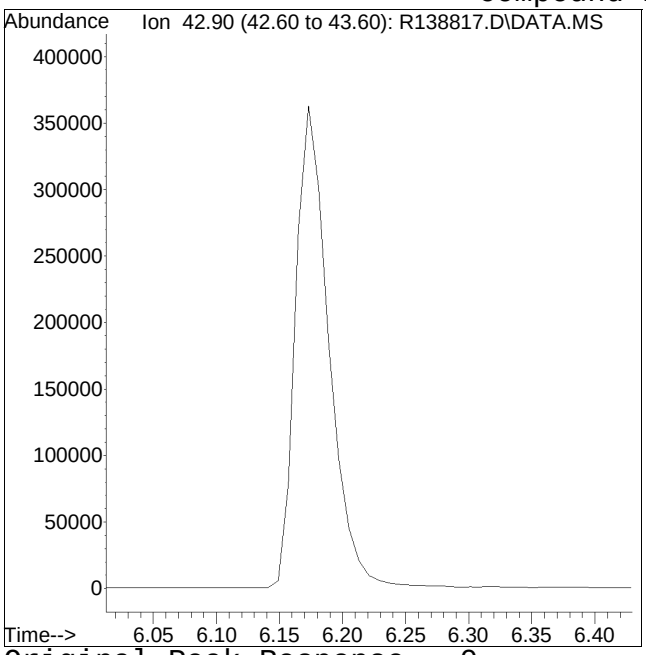



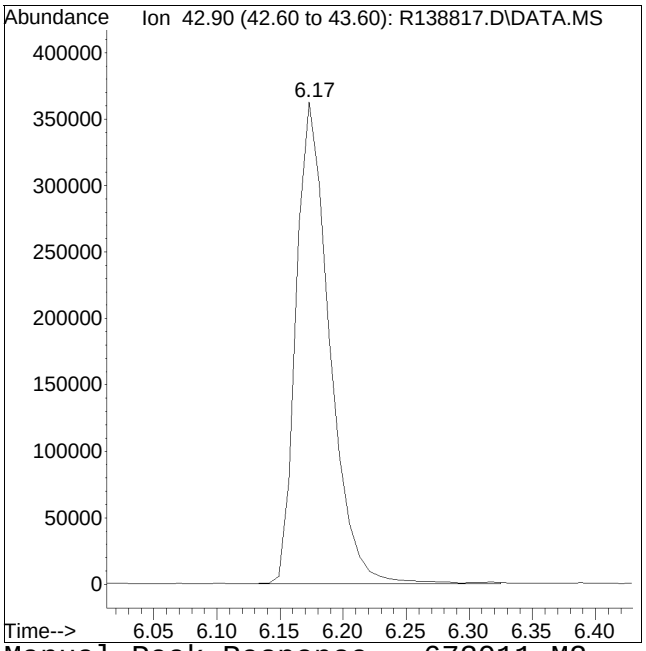

Original Peak Response = 0 Manual Peak Response = 34897 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TALL150102.M
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #19: acetone



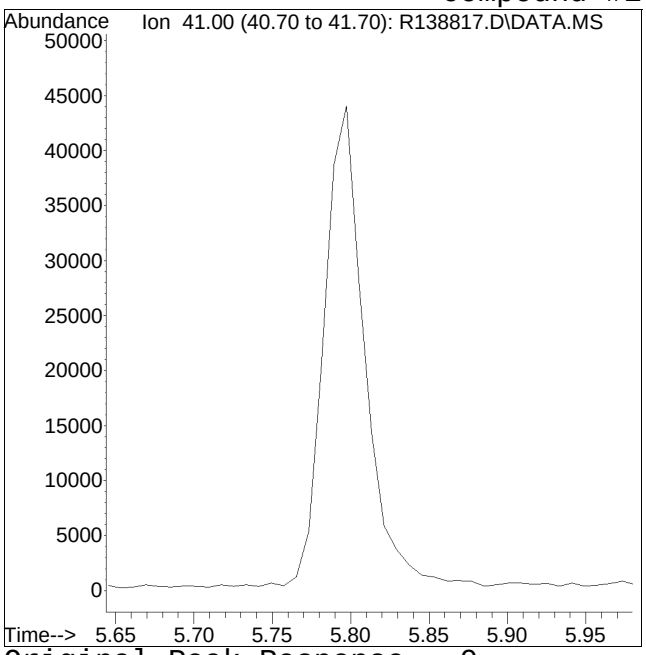



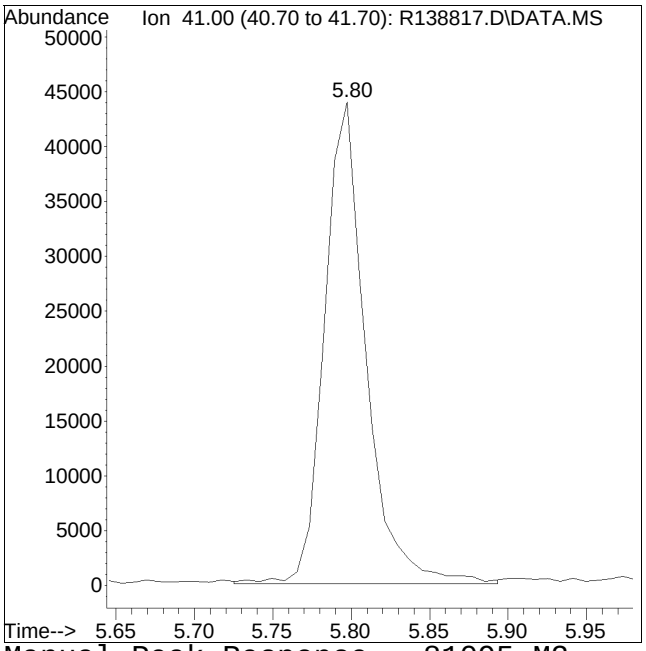

Original Peak Response = 0 Manual Peak Response = 673011 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\QM150102T_ICAL\TALL150102.M
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #20: acetonitrile



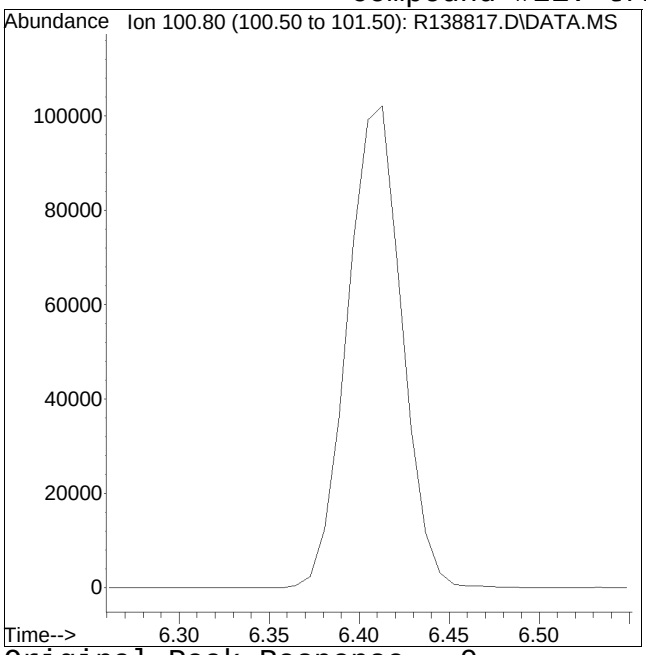



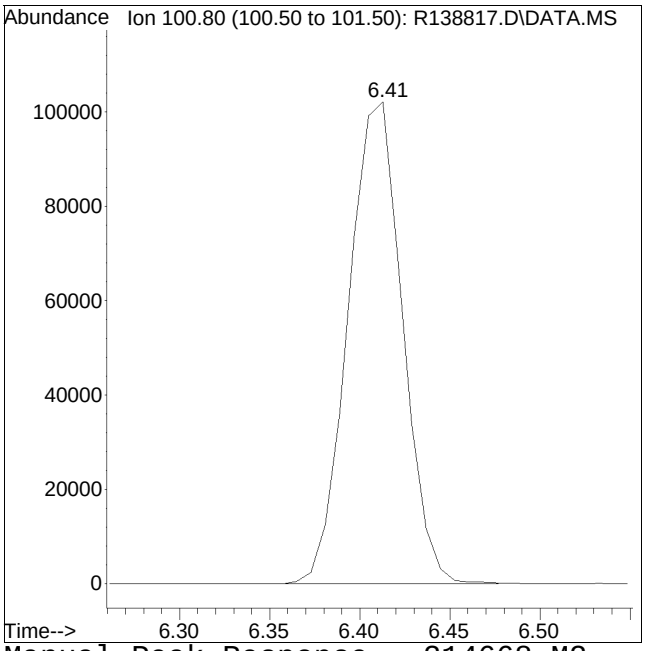

Original Peak Response = 0 Manual Peak Response = 81095 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #21: trichlorofluoromethane



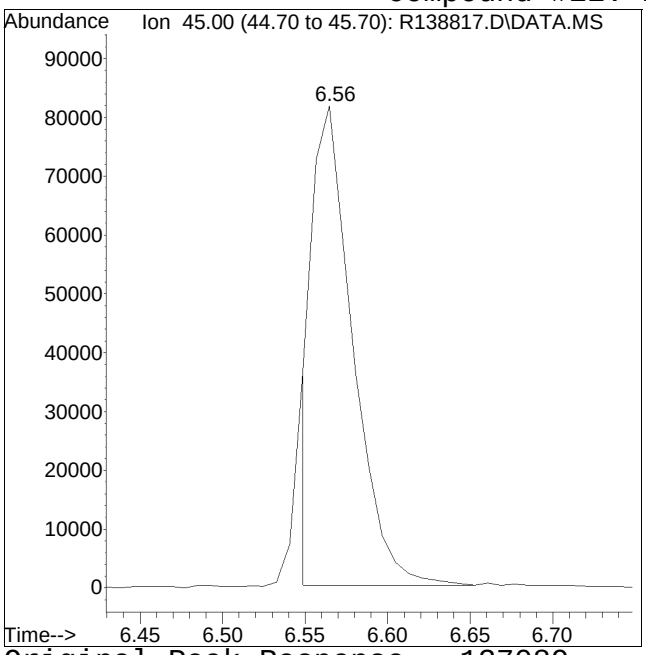



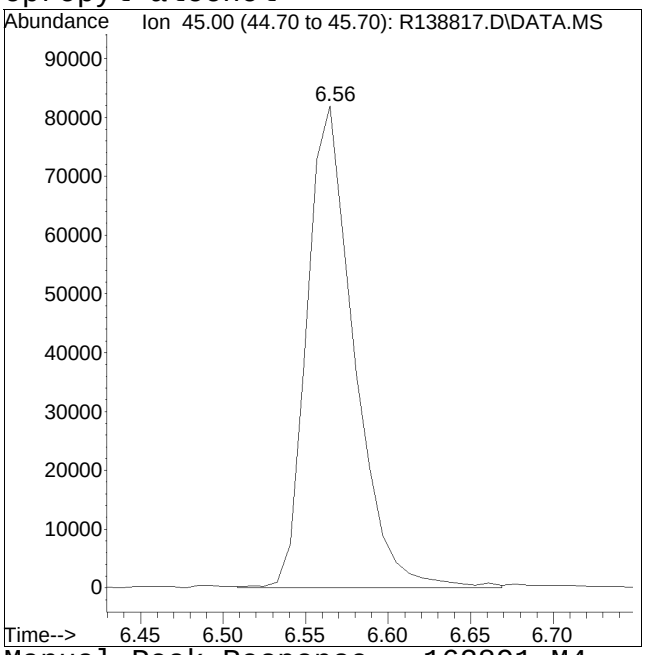

Original Peak Response = 0 Manual Peak Response = 214668 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #22: isopropyl alcohol



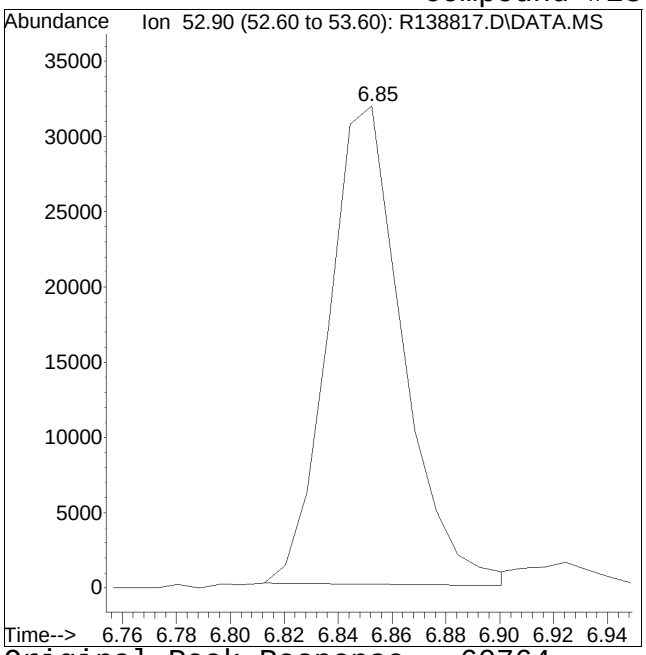




Original Peak Response = 137089 Manual Peak Response = 162891 M4
M4 = Poor automated baseline construction.

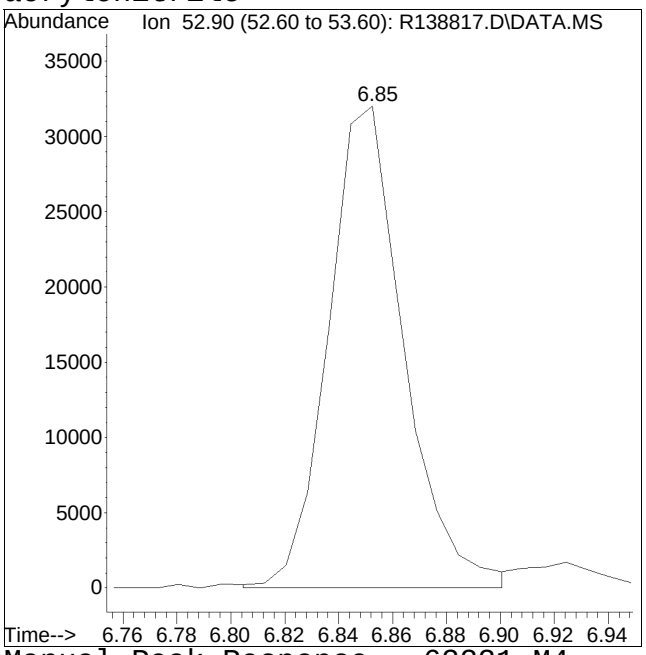
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TALL150102.M
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #23: acrylonitrile




Original Peak Response = 60764



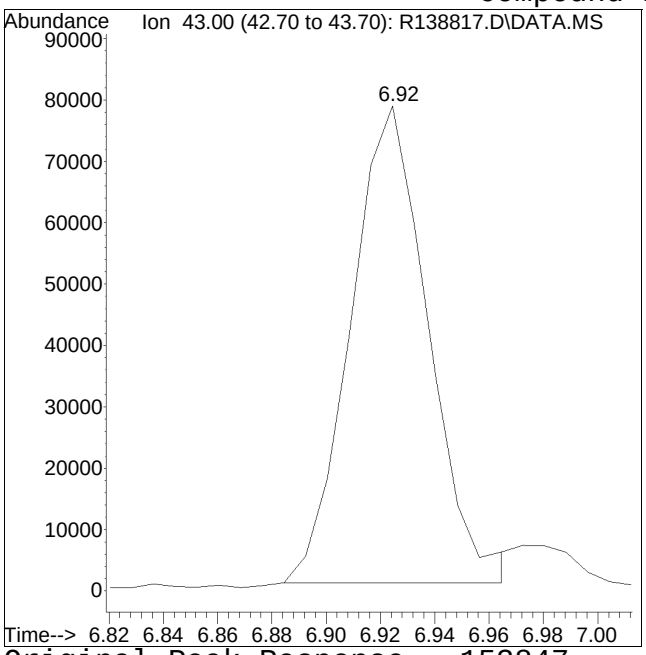

Manual Peak Response = 62221 M4

M4 = Poor automated baseline construction.

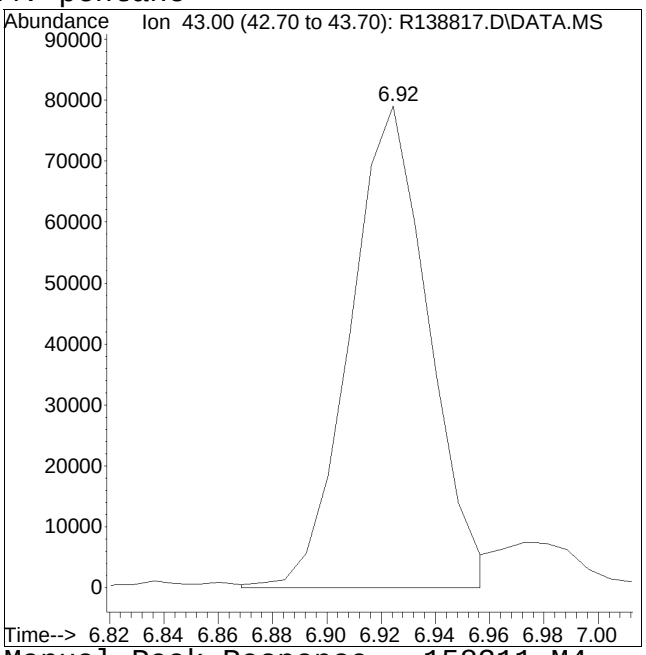
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #24: pentane




Original Peak Response = 153847



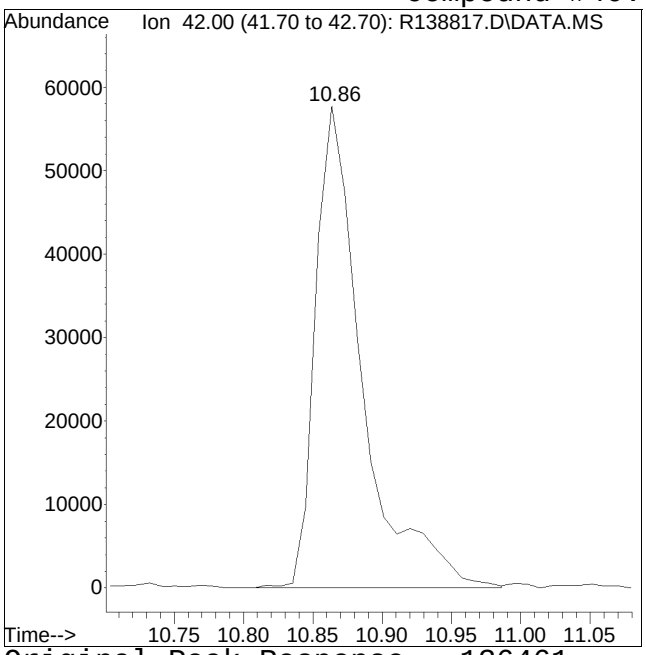

Manual Peak Response = 158311 M4

M4 = Poor automated baseline construction.

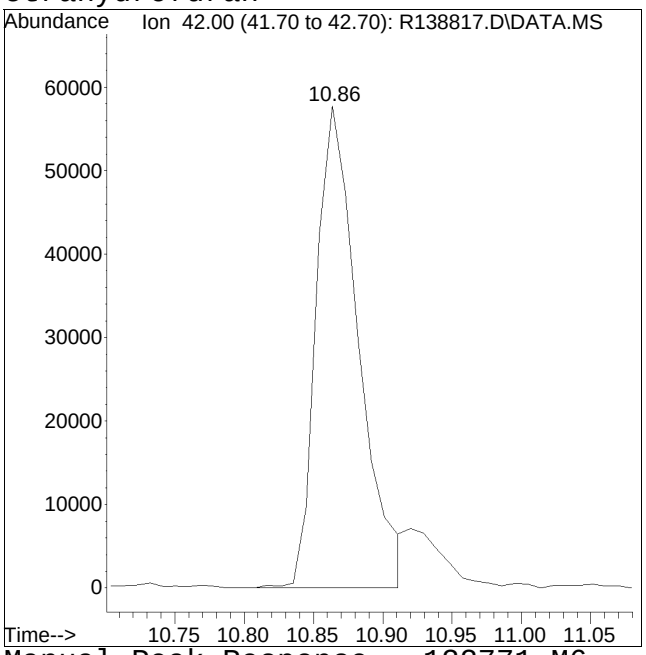
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 136461



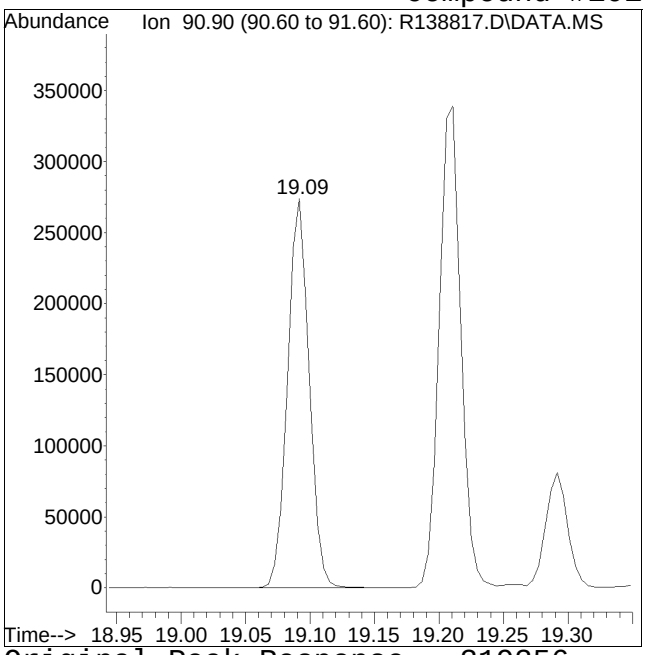

Manual Peak Response = 122771 M6

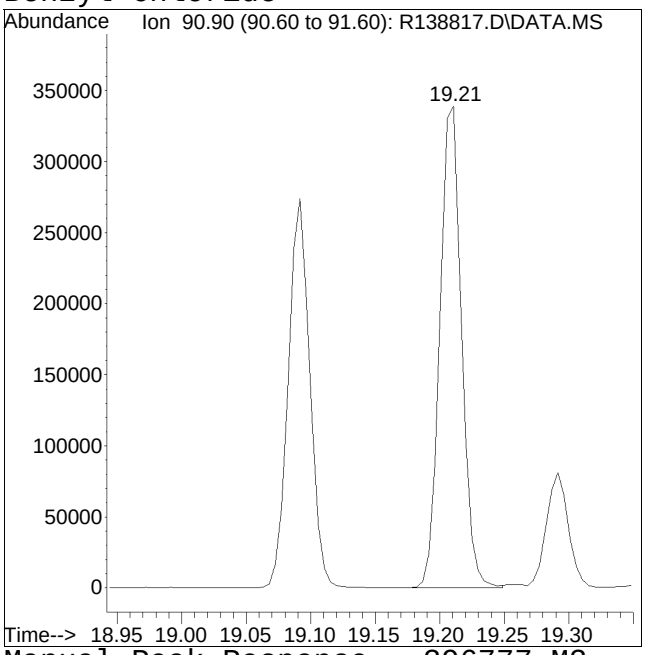
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R138817.D
Date Inj'd : 1/2/2015 11:08 pm
Sample : ITO15-LLSTD10.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:37 pm

Compound #101: Benzyl Chloride



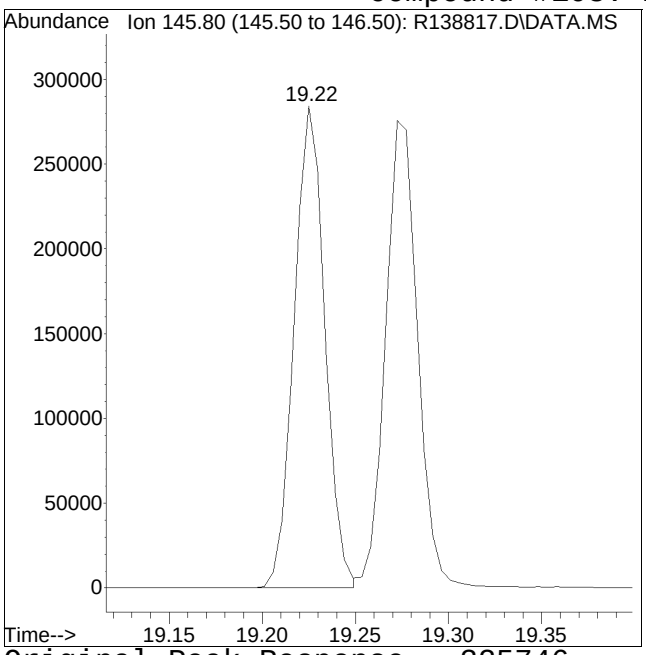

Original Peak Response = 319356 Manual Peak Response = 396777 M3

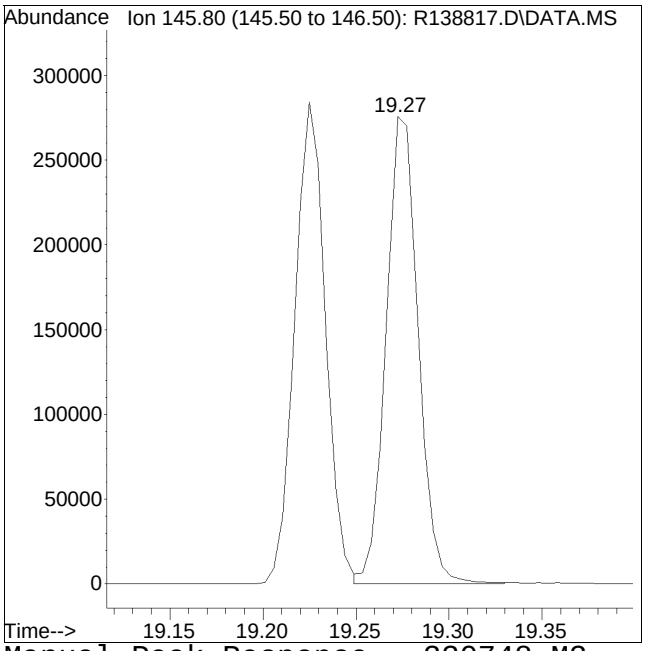
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #103: 1,4-dichlorobenzene



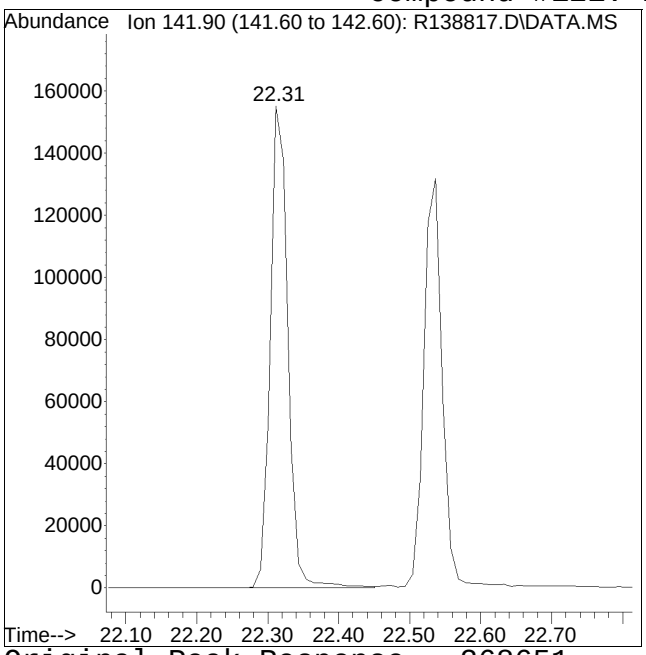

Original Peak Response = 325746 Manual Peak Response = 330748 M3

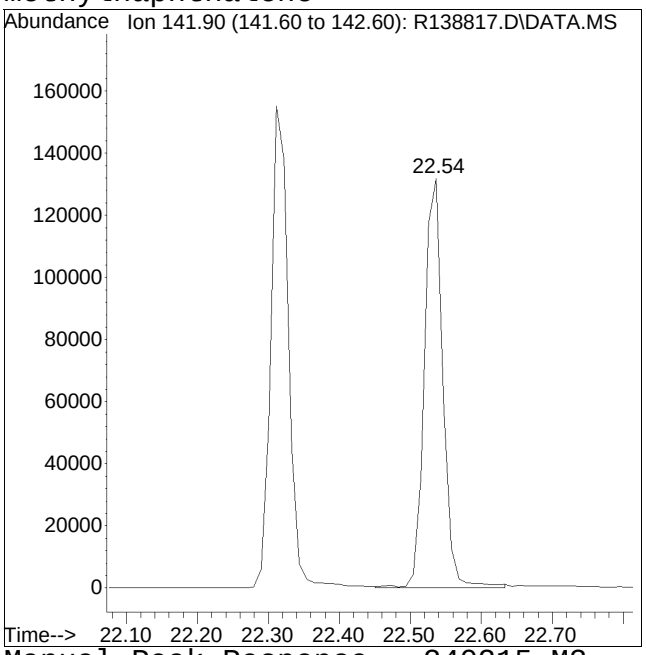
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138817.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:08 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD10.0 Quant Date : 1/3/2015 12:37 pm

Compound #121: 1-methylnaphthalene




Original Peak Response = 268651 Manual Peak Response = 240215 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD20.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:51:11 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 138613 | 10.000 ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery = 101.59% | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 283751 | 10.000 ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery = 101.68% | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 63370 | 10.000 ppbV | 0.00 |
| Standard Area = 65032 | | | Recovery = 97.44% | | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.13 | 65 | 82326 | 9.511 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 95.11% | | |
| 69) toluene-D8 | 15.27 | 98 | 220612 | 9.872 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 98.72% | | |
| 90) bromofluorobenzene | 18.15 | 95 | 170225 | 10.158 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.58% | | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 289647 | 20.323 ppbV | 99 |
| 3) propylene | 3.77 | 41 | 145747M6 | 19.867 ppbV | |
| 4) propane | 3.80 | 29 | 175812 | 21.359 ppbV | 96 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 329672 | 28.030 ppbV | 98 |
| 6) chloromethane | 4.09 | 50 | 152914 | 19.871 ppbV | 97 |
| 7) Freon-114 | 4.25 | 85 | 447008 | 20.372 ppbV | 96 |
| 8) methanol | 4.34 | 31 | 310414 | 95.398 ppbV | 98 |
| 9) vinyl chloride | 4.42 | 62 | 166220 | 19.997 ppbV | 98 |
| 10) 1,3-butadiene | 4.62 | 54 | 125346 | 19.406 ppbV | 96 |
| 11) butane | 4.69 | 43 | 269823 | 19.430 ppbV | 100 |
| 12) acetaldehyde | 4.27 | 29 | 513080 | 96.633 ppbV | 98 |
| 13) bromomethane | 5.01 | 94 | 166827 | 20.689 ppbV | 100 |
| 14) chloroethane | 5.28 | 64 | 77635 | 19.482 ppbV | 97 |
| 15) ethanol | 5.49 | 31 | 695598 | 102.116 ppbV | 100 |
| 16) dichlorofluoromethane | 5.45 | 67 | 355905 | 20.049 ppbV | 99 |
| 17) vinyl bromide | 5.80 | 106 | 178446 | 20.699 ppbV | 98 |
| 18) acrolein | 5.98 | 56 | 72747 | 20.519 ppbV | 99 |
| 19) acetone | 6.17 | 43 | 1345778 | 98.413 ppbV | 99 |
| 20) acetonitrile | 5.80 | 41 | 161010 | 19.543 ppbV | 99 |
| 21) trichlorofluoromethane | 6.41 | 101 | 424559 | 19.467 ppbV | 94 |
| 22) isopropyl alcohol | 6.56 | 45 | 318512 | 19.247 ppbV | 99 |
| 23) acrylonitrile | 6.84 | 53 | 137217 | 21.707 ppbV | 97 |
| 24) pentane | 6.92 | 43 | 335510 | 20.861 ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD20.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:51:11 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) ethyl ether | 6.97 | 31 | 274972 | 21.969 | ppbV | 97 |
| 26) 1,1-dichloroethene | 7.30 | 61 | 289958 | 20.534 | ppbV | 99 |
| 27) tertiary butyl alcohol | 7.39 | 59 | 369897 | 20.098 | ppbV | 97 |
| 28) methylene chloride | 7.48 | 49 | 227598 | 19.320 | ppbV | 99 |
| 29) 3-chloropropene | 7.64 | 41 | 269554 | 20.659 | ppbV | 98 |
| 30) carbon disulfide | 7.82 | 76 | 496131 | 20.633 | ppbV | 99 |
| 31) Freon 113 | 7.84 | 101 | 359650 | 20.459 | ppbV | 97 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 276955 | 19.960 | ppbV | 99 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 317012 | 20.402 | ppbV | 95 |
| 34) MTBE | 9.06 | 73 | 471407 | 20.061 | ppbV | 98 |
| 35) vinyl acetate | 9.19 | 43 | 492039 | 20.386 | ppbV | 99 |
| 36) 2-butanone | 9.48 | 43 | 432729 | 19.730 | ppbV | 96 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 286655 | 19.720 | ppbV | 98 |
| 38) Ethyl Acetate | 10.31 | 61 | 74941 | 20.013 | ppbV | 85 |
| 39) chloroform | 10.38 | 83 | 445432 | 20.502 | ppbV | 95 |
| 40) Tetrahydrofuran | 10.85 | 42 | 252975M6 | 20.282 | ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 387795 | 19.986 | ppbV | 100 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 256418 | 20.040 | ppbV | 96 |
| 44) hexane | 10.28 | 57 | 352725 | 19.710 | ppbV | 97 |
| 45) diisopropyl ether | 10.28 | 87 | 169702 | 19.890 | ppbV | 97 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 574558 | 19.698 | ppbV | 98 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 378403 | 20.002 | ppbV | 98 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 273122 | 20.328 | ppbV | 99 |
| 50) benzene | 12.09 | 78 | 515943 | 20.050 | ppbV | 98 |
| 51) thiophene | 12.25 | 84 | 354619 | 20.366 | ppbV | 94 |
| 52) carbon tetrachloride | 12.27 | 117 | 401413 | 20.197 | ppbV | 98 |
| 53) cyclohexane | 12.40 | 56 | 293242 | 19.210 | ppbV | 96 |
| 54) tert-amyl methyl ether | 12.78 | 73 | 515747 | 20.297 | ppbV | 99 |
| 55) dibromomethane | 13.01 | 93 | 216262 | 20.074 | ppbV | 95 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 202566 | 20.077 | ppbV | 97 |
| 57) bromodichloromethane | 13.27 | 83 | 421736 | 19.661 | ppbV | 99 |
| 58) 1,4-dioxane | 13.31 | 88 | 130136 | 20.860 | ppbV | 93 |
| 59) trichloroethene | 13.31 | 130 | 267525 | 19.933 | ppbV | 95 |
| 60) 2,2,4-trimethylpentane | 13.36 | 57 | 951932 | 19.960 | ppbV | 98 |
| 61) methyl methacrylate | 13.54 | 41 | 306576 | 20.699 | ppbV | 99 |
| 62) heptane | 13.66 | 43 | 406370 | 20.304 | ppbV | 96 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 294044 | 19.956 | ppbV | 96 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 547384 | 20.115 | ppbV | 99 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 297751 | 20.184 | ppbV | 99 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 232866 | 20.212 | ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD20.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:51:11 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 645207 | 20.477 ppbV | 98 |
| 70) | 2-methylthiophene | 15.43 | 97 | 610575 | 20.931 ppbV | 97 |
| 71) | 1,3-dichloropropane | 15.39 | 76 | 297777 | 21.183 ppbV | 98 |
| 72) | 2-hexanone | 15.60 | 43 | 524846 | 21.102 ppbV | 98 |
| 73) | 3-methylthiophene | 15.61 | 97 | 589384 | 21.929 ppbV | 96 |
| 74) | dibromochloromethane | 15.79 | 129 | 492340 | 21.456 ppbV | 98 |
| 75) | 1,2-dibromoethane | 16.01 | 107 | 395038 | 21.091 ppbV | 97 |
| 76) | butyl acetate | 16.18 | 73 | 71988 | 21.107 ppbV | 94 |
| 77) | octane | 16.27 | 85 | 193875 | 20.900 ppbV | 96 |
| 78) | tetrachloroethene | 16.43 | 166 | 337037 | 21.065 ppbV | 97 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 327709 | 21.126 ppbV | 98 |
| 80) | chlorobenzene | 17.00 | 112 | 575879 | 20.929 ppbV | 100 |
| 81) | ethylbenzene | 17.29 | 91 | 869337 | 20.798 ppbV | 98 |
| 82) | 2-ethylthiophene | 17.33 | 97 | 700667 | 21.582 ppbV | 99 |
| 83) | m+p-xylene | 17.44 | 91 | 1369444M1 | 42.014 ppbV | |
| 84) | bromoform | 17.52 | 173 | 491460 | 21.456 ppbV | 96 |
| 85) | styrene | 17.72 | 104 | 552433 | 21.043 ppbV | 97 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 531402 | 21.158 ppbV | 95 |
| 87) | o-xylene | 17.80 | 91 | 705377 | 20.755 ppbV | 98 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 401739 | 20.704 ppbV | 97 |
| 89) | nonane | 17.94 | 43 | 610331 | 20.852 ppbV | 97 |
| 91) | isopropylbenzene | 18.24 | 105 | 984548 | 20.913 ppbV | 98 |
| 92) | bromobenzene | 18.33 | 77 | 492582 | 20.600 ppbV | 99 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 290108 | 20.770 ppbV | 74 |
| 94) | n-propylbenzene | 18.62 | 120 | 303521 | 20.724 ppbV | 93 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 750602 | 20.874 ppbV | 98 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 1090918 | 20.640 ppbV | 99 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 945500 | 21.397 ppbV | 100 |
| 98) | tert-butylbenzene | 19.09 | 119 | 998182 | 20.612 ppbV | 99 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 862580 | 20.737 ppbV | 98 |
| 100) | decane | 19.13 | 57 | 585392 | 20.308 ppbV | 100 |
| 101) | Benzyl Chloride | 19.21 | 91 | 806570 | 20.861 ppbV | 97 |
| 102) | 1,3-dichlorobenzene | 19.22 | 146 | 652669 | 20.562 ppbV | 98 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 666197 | 20.670 ppbV | 98 |
| 104) | sec-butylbenzene | 19.29 | 105 | 1270422 | 20.852 ppbV | 98 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 735781 | 20.567 ppbV | 98 |
| 106) | p-isopropyltoluene | 19.40 | 119 | 1222102 | 20.449 ppbV | 98 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 610385 | 20.035 ppbV | 99 |
| 108) | n-butylbenzene | 19.73 | 91 | 998348 | 19.867 ppbV | 98 |
| 109) | indan | 19.58 | 117 | 833757 | 20.647 ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD20.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:51:11 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 596348 | 21.600 | ppbV | 99 |
| 111) 1,2-dibromo-3-chloropr... | 19.89 | 75 | 262575 | 19.178 | ppbV | 97 |
| 112) undecane | 20.10 | 57 | 616349 | 17.769 | ppbV | 99 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 1463170 | 16.857 | ppbV | 99 |
| 114) dodecane | 21.02 | 57 | 570922 | 14.490 | ppbV | 96 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 462489 | 15.595 | ppbV | 98 |
| 116) naphthalene | 21.14 | 128 | 1044144 | 15.489 | ppbV | 100 |
| 117) 1,2,3-trichlorobenzene | 21.39 | 180 | 404560 | 14.721 | ppbV | 99 |
| 118) benzothiophene | 21.20 | 134 | 921457 | 16.137 | ppbV | 99 |
| 119) hexachlorobutadiene | 21.46 | 225 | 345638 | 15.805 | ppbV | 97 |
| 120) 2-methylnaphthalene | 22.31 | 142 | 308925 | 12.063 | ppbV | 98 |
| 121) 1-methylnaphthalene | 22.53 | 142 | 315527 | 13.480 | ppbV | 98 |

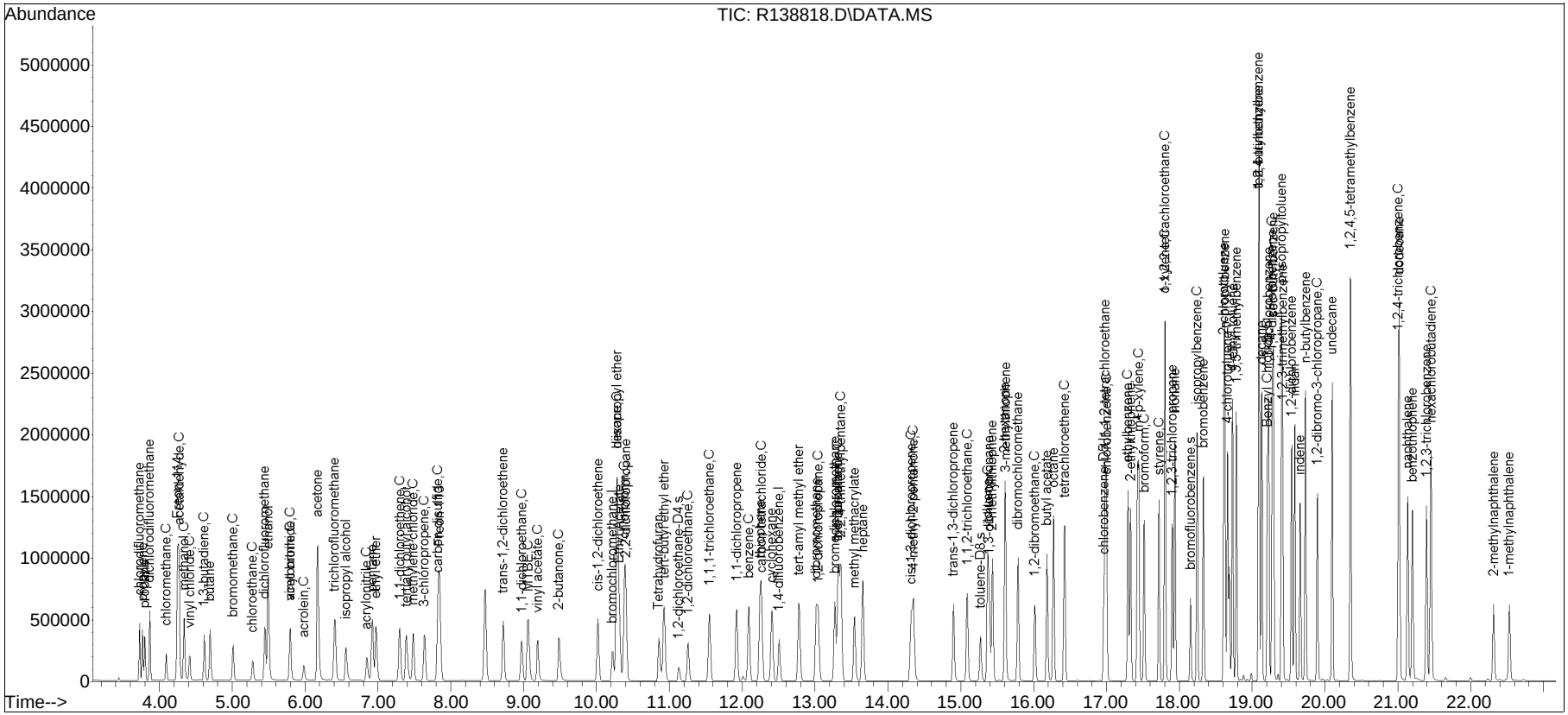
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138818.D
Acq On : 2 Jan 2015 11:39 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD20.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:51:11 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

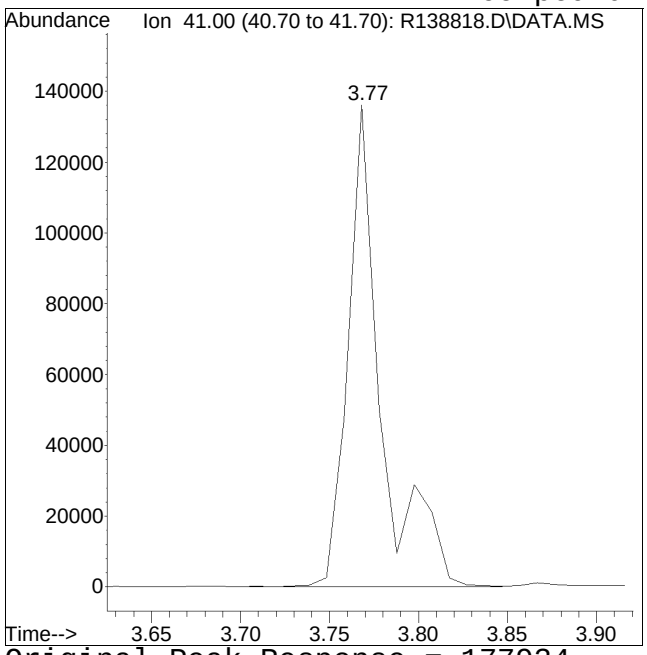
Sub List : Default - All compounds listed0102T_ICAL\R138817.D



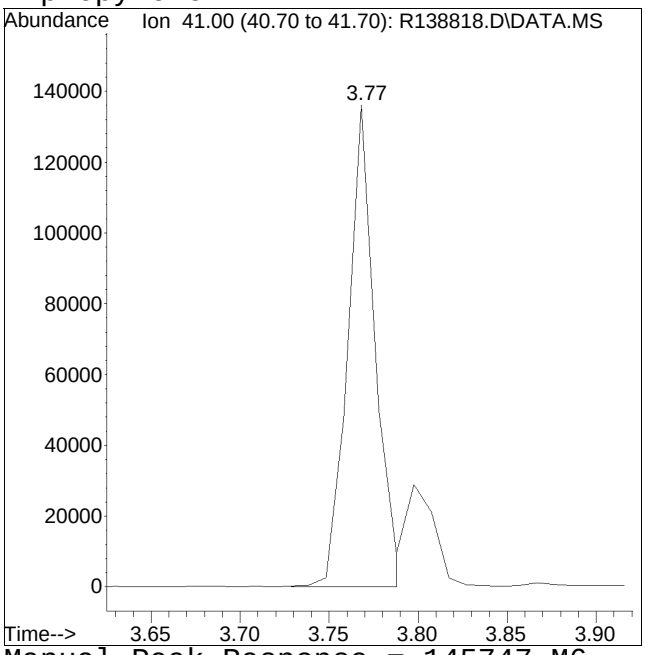
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138818.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:39 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD20.0 Quant Date : 1/3/2015 12:42 pm

Compound #3: propylene




Original Peak Response = 177934



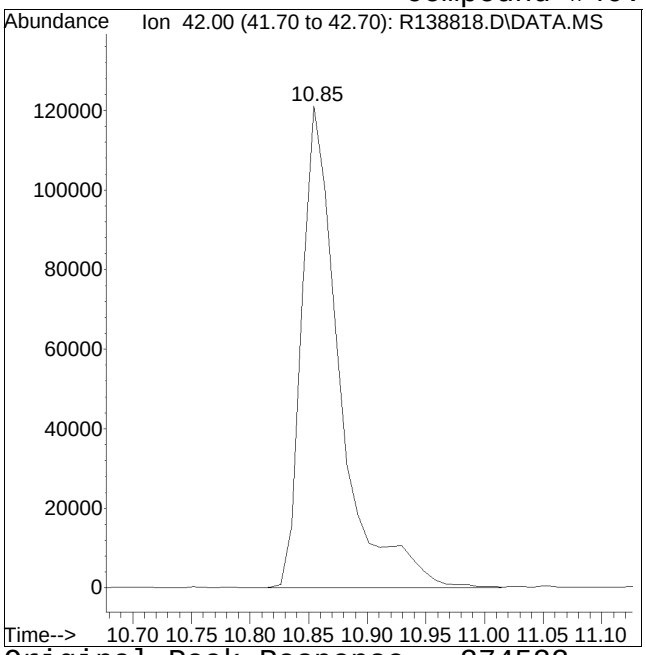

Manual Peak Response = 145747 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

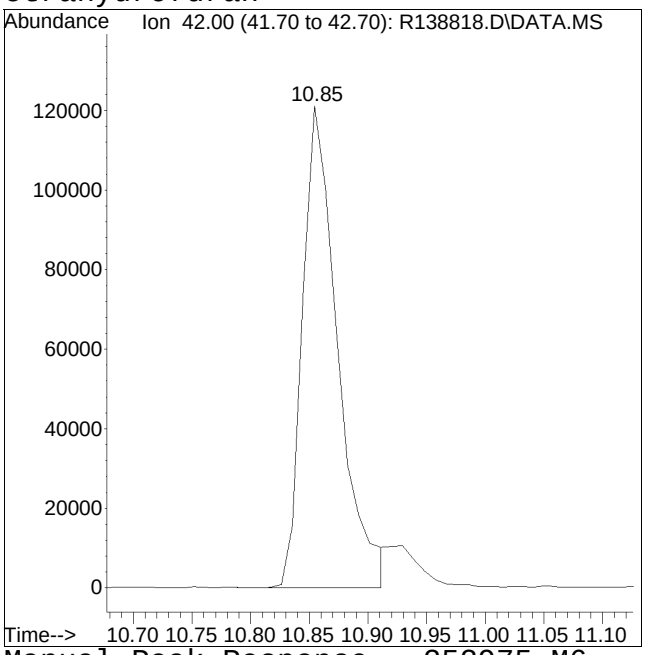
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138818.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:39 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD20.0 Quant Date : 1/3/2015 12:42 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 274522



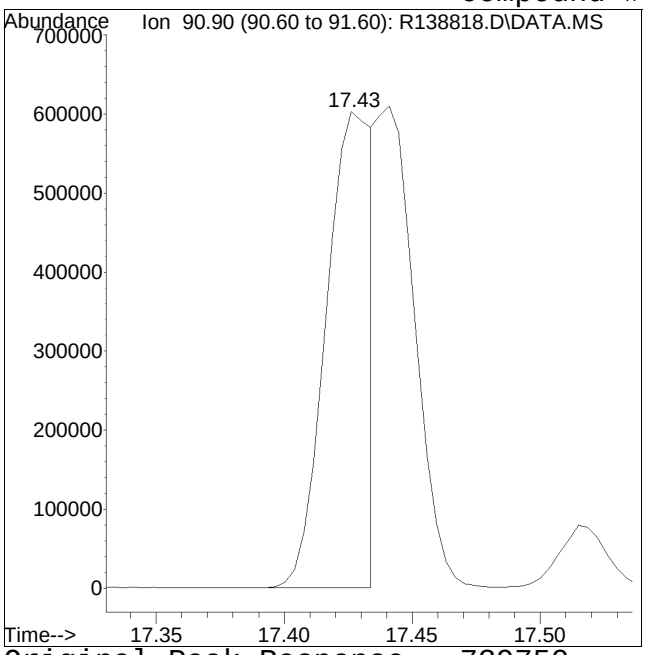

Manual Peak Response = 252975 M6

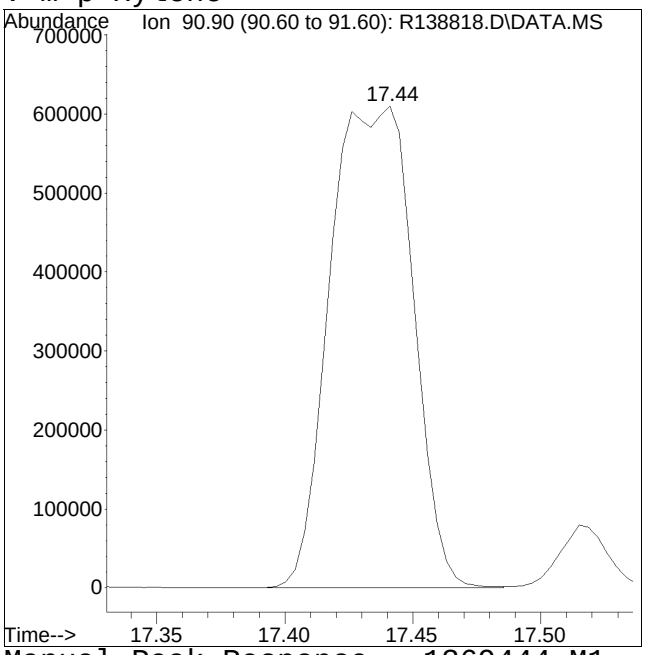
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : TALL150102.M
Data File : R138818.D Operator : AIRPIANO1:RY
Date Inj'd : 1/2/2015 11:39 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD20.0 Quant Date : 1/3/2015 12:42 pm

Compound #83: m+p-xylene




Original Peak Response = 739750 Manual Peak Response = 1369444 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD50.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:52:05 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.23 | 49 | 141200 | 10.000 ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery = 103.49% | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 285682 | 10.000 ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery = 102.37% | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 63058 | 10.000 ppbV | 0.00 |
| Standard Area = 65032 | | | Recovery = 96.96% | | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.14 | 65 | 84824 | 9.733 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.33% | | |
| 69) toluene-D8 | 15.27 | 98 | 225098 | 10.122 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.22% | | |
| 90) bromofluorobenzene | 18.15 | 95 | 168111 | 10.081 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 100.81% | | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 660338 | 45.484 ppbV | 99 |
| 3) propylene | 3.77 | 41 | 318894M6 | 42.673 ppbV | |
| 4) propane | 3.80 | 29 | 389326 | 46.432 ppbV | 95 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 599937 | 50.075 ppbV | 98 |
| 6) chloromethane | 4.09 | 50 | 346141 | 44.156 ppbV | 98 |
| 7) Freon-114 | 4.25 | 85 | 965466 | 43.195 ppbV | 97 |
| 8) methanol | 4.34 | 31 | 686750 | 207.188 ppbV | 98 |
| 9) vinyl chloride | 4.42 | 62 | 378495 | 44.700 ppbV | 98 |
| 10) 1,3-butadiene | 4.62 | 54 | 289258 | 43.961 ppbV | 96 |
| 11) butane | 4.69 | 43 | 637749 | 45.082 ppbV | 95 |
| 12) acetaldehyde | 4.27 | 29 | 1160942 | 214.645 ppbV | 99 |
| 13) bromomethane | 5.01 | 94 | 374516 | 45.595 ppbV | 98 |
| 14) chloroethane | 5.28 | 64 | 180317 | 44.421 ppbV | 99 |
| 15) ethanol | 5.50 | 31 | 1547767 | 223.053 ppbV | 99 |
| 16) dichlorofluoromethane | 5.45 | 67 | 812806 | 44.948 ppbV | 97 |
| 17) vinyl bromide | 5.80 | 106 | 402884 | 45.877 ppbV | 100 |
| 18) acrolein | 5.98 | 56 | 168580 | 46.679 ppbV | 98 |
| 19) acetone | 6.17 | 43 | 3029561 | 217.484 ppbV # | 98 |
| 20) acetonitrile | 5.80 | 41 | 372639 | 44.401 ppbV | 97 |
| 21) trichlorofluoromethane | 6.41 | 101 | 977168 | 43.985 ppbV | 97 |
| 22) isopropyl alcohol | 6.56 | 45 | 725681 | 43.048 ppbV | 99 |
| 23) acrylonitrile | 6.85 | 53 | 297198 | 46.154 ppbV | 97 |
| 24) pentane | 6.92 | 43 | 732900M6 | 44.734 ppbV | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD50.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:52:05 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) ethyl ether | 6.97 | 31 | 624490 | 48.980 | ppbV | 98 |
| 26) 1,1-dichloroethene | 7.30 | 61 | 666292 | 46.321 | ppbV | 98 |
| 27) tertiary butyl alcohol | 7.39 | 59 | 854376 | 45.572 | ppbV | 96 |
| 28) methylene chloride | 7.48 | 49 | 530674 | 44.222 | ppbV | 100 |
| 29) 3-chloropropene | 7.64 | 41 | 607199 | 45.683 | ppbV | 99 |
| 30) carbon disulfide | 7.82 | 76 | 1126825 | 46.003 | ppbV | 97 |
| 31) Freon 113 | 7.84 | 101 | 835465 | 46.655 | ppbV | 99 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 642438 | 45.451 | ppbV | 99 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 715818 | 45.224 | ppbV | 99 |
| 34) MTBE | 9.06 | 73 | 1088535 | 45.475 | ppbV | 98 |
| 35) vinyl acetate | 9.19 | 43 | 1157136 | 47.064 | ppbV | 99 |
| 36) 2-butanone | 9.48 | 43 | 1012381 | 45.314 | ppbV | 97 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 686542 | 46.364 | ppbV | 97 |
| 38) Ethyl Acetate | 10.31 | 61 | 177304 | 46.481 | ppbV | 83 |
| 39) chloroform | 10.38 | 83 | 1017633 | 45.980 | ppbV | 97 |
| 40) Tetrahydrofuran | 10.85 | 42 | 577556 | 45.457 | ppbV | 99 |
| 41) 2,2-dichloropropane | 10.40 | 77 | 893619 | 45.212 | ppbV | 97 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 580587 | 44.544 | ppbV | 98 |
| 44) hexane | 10.28 | 57 | 806334 | 44.753 | ppbV | 96 |
| 45) diisopropyl ether | 10.28 | 87 | 396838 | 46.198 | ppbV | 97 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 1327676 | 45.209 | ppbV | 96 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 870453 | 45.701 | ppbV | 97 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 626152 | 46.289 | ppbV | 98 |
| 50) benzene | 12.09 | 78 | 1191683 | 45.996 | ppbV | 100 |
| 51) thiophene | 12.25 | 84 | 822202 | 46.901 | ppbV | 93 |
| 52) carbon tetrachloride | 12.27 | 117 | 921461 | 46.049 | ppbV | 99 |
| 53) cyclohexane | 12.41 | 56 | 680099 | 44.252 | ppbV | 98 |
| 54) tert-amyl methyl ether | 12.77 | 73 | 1187814 | 46.430 | ppbV | 99 |
| 55) dibromomethane | 13.01 | 93 | 513476 | 47.340 | ppbV | 93 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 470429 | 46.311 | ppbV | 97 |
| 57) bromodichloromethane | 13.27 | 83 | 978021 | 45.286 | ppbV | 96 |
| 58) 1,4-dioxane | 13.30 | 88 | 305414 | 48.624 | ppbV | 94 |
| 59) trichloroethene | 13.32 | 130 | 627291 | 46.423 | ppbV | 97 |
| 60) 2,2,4-trimethylpentane | 13.36 | 57 | 2208555 | 45.996 | ppbV | 100 |
| 61) methyl methacrylate | 13.54 | 41 | 717972 | 48.149 | ppbV | 99 |
| 62) heptane | 13.66 | 43 | 921707 | 45.741 | ppbV | 96 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 696264 | 46.935 | ppbV | 97 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 1242942 | 45.366 | ppbV | 99 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 715245 | 48.156 | ppbV | 96 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 524916 | 45.252 | ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD50.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:52:05 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 1508500 | 48.113 | ppbV | | 98 |
| 70) | 2-methylthiophene | 15.43 | 97 | 1420468 | 48.935 | ppbV | | 97 |
| 71) | 1,3-dichloropropane | 15.40 | 76 | 689314 | 49.279 | ppbV | | 96 |
| 72) | 2-hexanone | 15.60 | 43 | 1189358 | 48.056 | ppbV | | 98 |
| 73) | 3-methylthiophene | 15.61 | 97 | 1346858 | 50.360 | ppbV | | 99 |
| 74) | dibromochloromethane | 15.79 | 129 | 1150283 | 50.377 | ppbV | | 98 |
| 75) | 1,2-dibromoethane | 16.02 | 107 | 920056 | 49.365 | ppbV | | 99 |
| 76) | butyl acetate | 16.18 | 73 | 157491 | 46.405 | ppbV | | 85 |
| 77) | octane | 16.27 | 85 | 445849 | 48.301 | ppbV | | 96 |
| 78) | tetrachloroethene | 16.43 | 166 | 792831 | 49.798 | ppbV | | 98 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 765919 | 49.619 | ppbV | | 99 |
| 80) | chlorobenzene | 17.00 | 112 | 1339475 | 48.921 | ppbV | | 99 |
| 81) | ethylbenzene | 17.30 | 91 | 2003228 | 48.163 | ppbV | | 99 |
| 82) | 2-ethylthiophene | 17.33 | 97 | 1598944 | 49.494 | ppbV | | 99 |
| 83) | m+p-xylene | 17.44 | 91 | 3152355 | 97.192 | ppbV | | 99 |
| 84) | bromoform | 17.52 | 173 | 1163951 | 51.067 | ppbV | | 98 |
| 85) | styrene | 17.72 | 104 | 1287820 | 49.299 | ppbV | | 97 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 1236908 | 49.491 | ppbV | | 98 |
| 87) | o-xylene | 17.81 | 91 | 1640275 | 48.501 | ppbV | | 97 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 938748 | 48.618 | ppbV | | 97 |
| 89) | nonane | 17.94 | 43 | 1378671 | 47.336 | ppbV | | 97 |
| 91) | isopropylbenzene | 18.24 | 105 | 2288101 | 48.842 | ppbV | | 98 |
| 92) | bromobenzene | 18.33 | 77 | 1153502 | 48.479 | ppbV | | 99 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 681867 | 49.058 | ppbV | | 91 |
| 94) | n-propylbenzene | 18.63 | 120 | 732911 | 50.289 | ppbV | | 79 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 1748469 | 48.864 | ppbV | | 98 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 2578718 | 49.030 | ppbV | | 100 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 2282046 | 51.899 | ppbV | | 99 |
| 98) | tert-butylbenzene | 19.09 | 119 | 2366361 | 49.105 | ppbV | | 98 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 2033746 | 49.134 | ppbV | | 98 |
| 100) | decane | 19.13 | 57 | 1364487 | 47.569 | ppbV | # | 95 |
| 101) | Benzyl Chloride | 19.21 | 91 | 1962769 | 51.016 | ppbV | | 98 |
| 102) | 1,3-dichlorobenzene | 19.23 | 146 | 1568249 | 49.650 | ppbV | | 99 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 1580257 | 49.274 | ppbV | | 98 |
| 104) | sec-butylbenzene | 19.29 | 105 | 3020925 | 49.830 | ppbV | | 100 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 1775323 | 49.871 | ppbV | | 98 |
| 106) | p-isopropyltoluene | 19.41 | 119 | 2908624 | 48.910 | ppbV | | 98 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 1469635 | 48.477 | ppbV | | 97 |
| 108) | n-butylbenzene | 19.73 | 91 | 2391601 | 47.827 | ppbV | | 97 |
| 109) | indan | 19.59 | 117 | 2022693 | 50.338 | ppbV | | 100 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD50.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:52:05 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 1434254 | 52.205 | ppbV | 98 |
| 111) 1,2-dibromo-3-chloropr... | 19.90 | 75 | 659031 | 48.371 | ppbV | 96 |
| 112) undecane | 20.10 | 57 | 1532953 | 44.412 | ppbV | 98 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 3752365 | 43.445 | ppbV | 100 |
| 114) dodecane | 21.01 | 57 | 1411940 | 36.012 | ppbV | 93 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 1236267 | 41.894 | ppbV | 99 |
| 116) naphthalene | 21.13 | 128 | 2752478 | 41.034 | ppbV | 100 |
| 117) 1,2,3-trichlorobenzene | 21.39 | 180 | 1083988 | 39.638 | ppbV | 99 |
| 118) benzothiophene | 21.20 | 134 | 2482759 | 43.695 | ppbV | 100 |
| 119) hexachlorobutadiene | 21.45 | 225 | 922396 | 42.386 | ppbV | 97 |
| 120) 2-methylnaphthalene | 22.31 | 142 | 830399 | 32.587 | ppbV | 99 |
| 121) 1-methylnaphthalene | 22.53 | 142 | 819309 | 35.175 | ppbV | 96 |

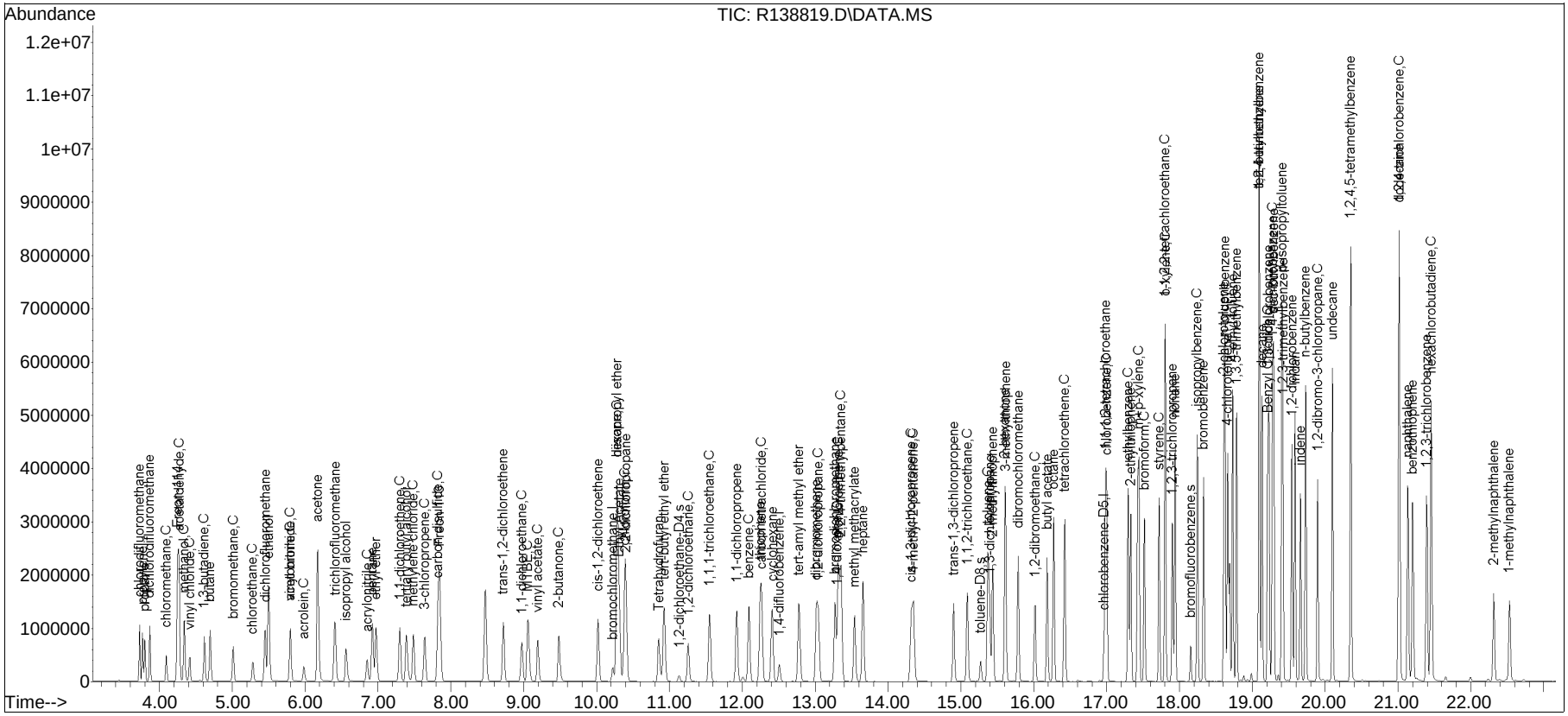
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138819.D
Acq On : 3 Jan 2015 12:11 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD50.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:52:05 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

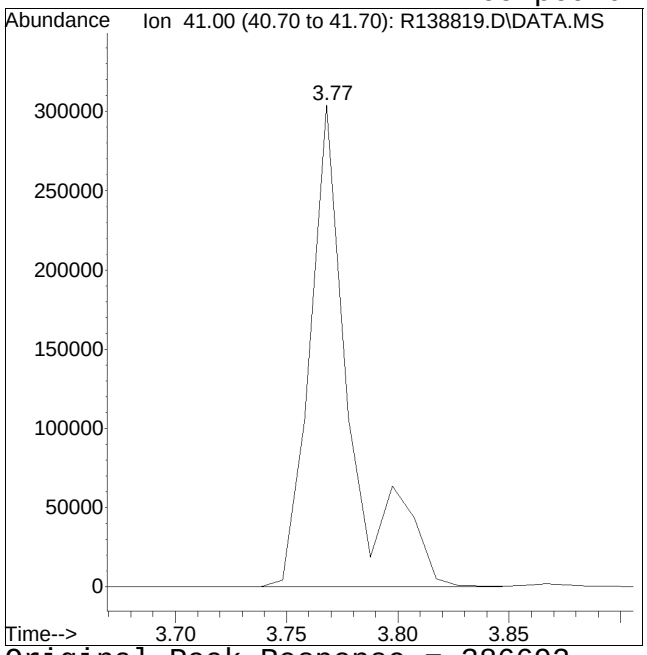
Sub List : Default - All compounds listed0102T_ICAL\R138817.D



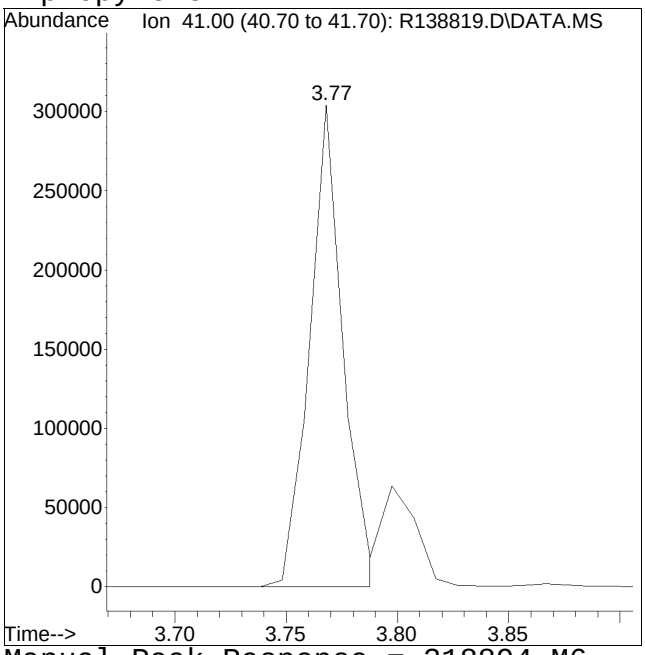
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138819.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 12:11 am Instrument : Air Piano 1
Sample : ITO15-LLSTD50.0 Quant Date : 1/3/2015 12:42 pm

Compound #3: propylene




Original Peak Response = 386692



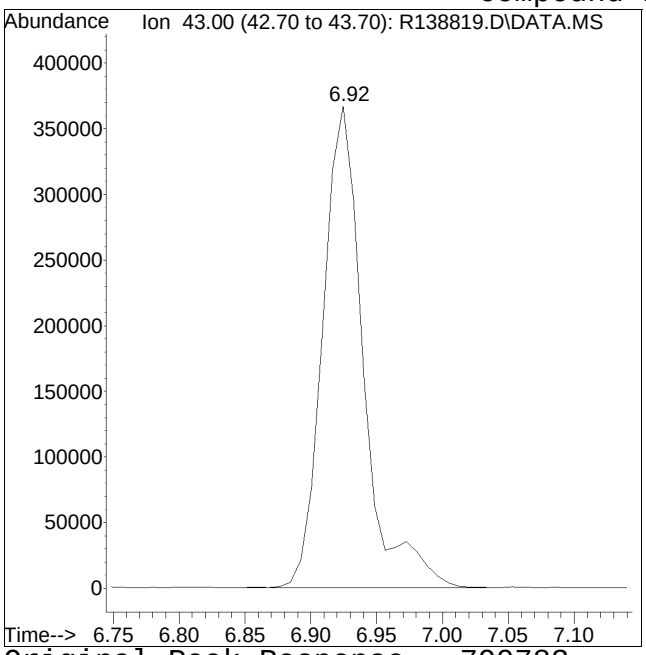

Manual Peak Response = 318894 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

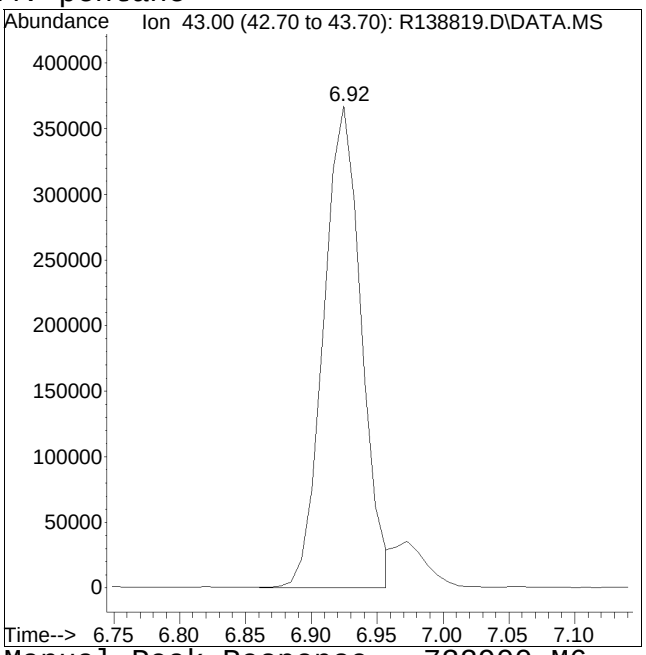
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138819.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 12:11 am Instrument : Air Piano 1
Sample : ITO15-LLSTD50.0 Quant Date : 1/3/2015 12:42 pm

Compound #24: pentane




Original Peak Response = 790783




Manual Peak Response = 732900 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138820.D
Acq On : 3 Jan 2015 12:45 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:53:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.23 | 49 | 146831 | 10.000 ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery = 107.62% | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 278127 | 10.000 ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery = 99.67% | | |
| 67) chlorobenzene-D5 | 16.97 | 54 | 61786 | 10.000 ppbV | # 0.00 |
| Standard Area = 65032 | | | Recovery = 95.01% | | |
| System Monitoring Compounds | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.14 | 65 | 81397 | 9.594 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 95.94% | | |
| 69) toluene-D8 | 15.27 | 98 | 220141 | 10.103 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.03% | | |
| 90) bromofluorobenzene | 18.15 | 95 | 166010 | 10.160 ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 101.60% | | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 1263498 | 83.693 ppbV | 100 |
| 3) propylene | 3.77 | 41 | 616786M6 | 79.370 ppbV | |
| 4) propane | 3.80 | 29 | 695437 | 79.759 ppbV | 96 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 1000614 | 80.315 ppbV | 98 |
| 6) chloromethane | 4.09 | 50 | 671741 | 82.406 ppbV | 99 |
| 7) Freon-114 | 4.25 | 85 | 1672754 | 71.968 ppbV | 97 |
| 8) methanol | 4.35 | 31 | 1293540 | 375.286 ppbV | 97 |
| 9) vinyl chloride | 4.42 | 62 | 715681 | 81.281 ppbV | 98 |
| 10) 1,3-butadiene | 4.62 | 54 | 535529 | 78.268 ppbV | 98 |
| 11) butane | 4.69 | 43 | 1171722 | 79.652 ppbV | 97 |
| 12) acetaldehyde | 4.27 | 29 | 2088966 | 371.414 ppbV | 97 |
| 13) bromomethane | 5.01 | 94 | 718282 | 84.092 ppbV | 98 |
| 14) chloroethane | 5.29 | 64 | 335836 | 79.560 ppbV | 97 |
| 15) ethanol | 5.51 | 31 | 2721490 | 377.161 ppbV | 97 |
| 16) dichlorofluoromethane | 5.45 | 67 | 1546613 | 82.248 ppbV | 98 |
| 17) vinyl bromide | 5.80 | 106 | 768214 | 84.122 ppbV | 99 |
| 18) acrolein | 5.98 | 56 | 316725 | 84.336 ppbV | 97 |
| 19) acetone | 6.17 | 43 | 5585256 | 385.575 ppbV | 98 |
| 20) acetonitrile | 5.80 | 41 | 693053 | 79.413 ppbV | 97 |
| 21) trichlorofluoromethane | 6.41 | 101 | 1907672 | 82.576 ppbV | 95 |
| 22) isopropyl alcohol | 6.56 | 45 | 1358734 | 77.510 ppbV | 99 |
| 23) acrylonitrile | 6.85 | 53 | 569228 | 85.009 ppbV | 95 |
| 24) pentane | 6.92 | 43 | 1390840M6 | 81.636 ppbV | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138820.D
Acq On : 3 Jan 2015 12:45 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:53:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 25) ethyl ether | 6.97 | 31 | 1047195 | 78.983 | ppbV | 93 |
| 26) 1,1-dichloroethene | 7.30 | 61 | 1275492 | 85.272 | ppbV | 98 |
| 27) tertiary butyl alcohol | 7.40 | 59 | 1627026 | 83.456 | ppbV | 97 |
| 28) methylene chloride | 7.48 | 49 | 1019895 | 81.730 | ppbV | 99 |
| 29) 3-chloropropene | 7.64 | 41 | 1156505 | 83.674 | ppbV | 98 |
| 30) carbon disulfide | 7.83 | 76 | 2208336 | 86.699 | ppbV | 96 |
| 31) Freon 113 | 7.84 | 101 | 1621167 | 87.060 | ppbV | 97 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 1228044 | 83.550 | ppbV | 99 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 1393700 | 84.674 | ppbV | 99 |
| 34) MTBE | 9.06 | 73 | 2110987 | 84.808 | ppbV | 97 |
| 35) vinyl acetate | 9.19 | 43 | 2217647 | 86.738 | ppbV | 99 |
| 36) 2-butanone | 9.48 | 43 | 1886394 | 81.196 | ppbV | 99 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 1321612 | 85.829 | ppbV | 97 |
| 38) Ethyl Acetate | 10.32 | 61 | 338181 | 85.256 | ppbV | 99 |
| 39) chloroform | 10.39 | 83 | 1971803 | 85.676 | ppbV | 95 |
| 40) Tetrahydrofuran | 10.85 | 42 | 1103601 | 83.528 | ppbV | 100 |
| 41) 2,2-dichloropropane | 10.40 | 77 | 1728814 | 84.113 | ppbV | 95 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 1106831 | 81.662 | ppbV | 97 |
| 44) hexane | 10.28 | 57 | 1560069 | 88.939 | ppbV | 92 |
| 45) diisopropyl ether | 10.29 | 87 | 769489 | 92.013 | ppbV | 90 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 2532540 | 88.579 | ppbV | 97 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 1718238 | 92.662 | ppbV | 99 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 1202682 | 91.325 | ppbV | 99 |
| 50) benzene | 12.09 | 78 | 2283201 | 90.519 | ppbV | 98 |
| 51) thiophene | 12.25 | 84 | 1573768 | 92.210 | ppbV | 96 |
| 52) carbon tetrachloride | 12.27 | 117 | 1804912 | 92.649 | ppbV | 99 |
| 53) cyclohexane | 12.41 | 56 | 1317235 | 88.036 | ppbV | 98 |
| 54) tert-amyl methyl ether | 12.78 | 73 | 2280113 | 91.547 | ppbV | 96 |
| 55) dibromomethane | 13.02 | 93 | 980352 | 92.839 | ppbV | 93 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 894976 | 90.498 | ppbV | 97 |
| 57) bromodichloromethane | 13.27 | 83 | 1888384 | 89.814 | ppbV | 95 |
| 58) 1,4-dioxane | 13.31 | 88 | 580414 | 94.916 | ppbV | 91 |
| 59) trichloroethene | 13.32 | 130 | 1208589 | 91.872 | ppbV | 98 |
| 60) 2,2,4-trimethylpentane | 13.36 | 57 | 4162474 | 89.044 | ppbV | 100 |
| 61) methyl methacrylate | 13.54 | 41 | 1343927 | 92.574 | ppbV | 97 |
| 62) heptane | 13.66 | 43 | 1717575 | 87.552 | ppbV | 100 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 1319084 | 91.334 | ppbV | 99 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 2360222 | 88.485 | ppbV | 98 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 1383014 | 95.646 | ppbV | 95 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 1018821 | 90.217 | ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138820.D
Acq On : 3 Jan 2015 12:45 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:53:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 68) | toluene | 15.37 | 91 | 2867297 | 93.334 | ppbV | 98 |
| 70) | 2-methylthiophene | 15.44 | 97 | 2720099 | 95.636 | ppbV | 96 |
| 71) | 1,3-dichloropropane | 15.40 | 76 | 1309199 | 95.522 | ppbV | 95 |
| 72) | 2-hexanone | 15.60 | 43 | 2221975 | 91.627 | ppbV | 98 |
| 73) | 3-methylthiophene | 15.61 | 97 | 2553985 | 97.461 | ppbV | 98 |
| 74) | dibromochloromethane | 15.79 | 129 | 2249045 | 100.525 | ppbV | 98 |
| 75) | 1,2-dibromoethane | 16.02 | 107 | 1775412 | 97.220 | ppbV | 98 |
| 76) | butyl acetate | 16.18 | 73 | 311558 | 93.690 | ppbV | 89 |
| 77) | octane | 16.27 | 85 | 856304 | 94.678 | ppbV | 95 |
| 78) | tetrachloroethene | 16.43 | 166 | 1562068 | 100.135 | ppbV | 97 |
| 79) | 1,1,1,2-tetrachloroethane | 16.99 | 131 | 1489932 | 98.511 | ppbV | 98 |
| 80) | chlorobenzene | 17.00 | 112 | 2582826 | 96.273 | ppbV | 98 |
| 81) | ethylbenzene | 17.30 | 91 | 3846885 | 94.394 | ppbV | 100 |
| 82) | 2-ethylthiophene | 17.33 | 97 | 3103787 | 98.053 | ppbV | 99 |
| 83) | m+p-xylene | 17.44 | 91 | 6001045 | 188.831 | ppbV | 100 |
| 84) | bromoform | 17.52 | 173 | 2265223 | 101.430 | ppbV | 98 |
| 85) | styrene | 17.72 | 104 | 2501283 | 97.722 | ppbV | 97 |
| 86) | 1,1,2,2-tetrachloroethane | 17.81 | 83 | 2345359 | 95.774 | ppbV | 95 |
| 87) | o-xylene | 17.81 | 91 | 3099651 | 93.541 | ppbV | 97 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 1810558 | 95.701 | ppbV | 95 |
| 89) | nonane | 17.94 | 43 | 2536884 | 88.896 | ppbV | 94 |
| 91) | isopropylbenzene | 18.25 | 105 | 4445870 | 96.856 | ppbV | 97 |
| 92) | bromobenzene | 18.33 | 77 | 2227844 | 95.558 | ppbV | 93 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 1326268 | 97.386 | ppbV | 95 |
| 94) | n-propylbenzene | 18.63 | 120 | 1426218 | 99.875 | ppbV | 69 |
| 95) | 4-chlorotoluene | 18.67 | 91 | 3334670 | 95.113 | ppbV | 99 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 5000036 | 97.024 | ppbV | 99 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 4301030 | 99.830 | ppbV | 99 |
| 98) | tert-butylbenzene | 19.10 | 119 | 4425326 | 93.723 | ppbV | 99 |
| 99) | 1,2,4-trimethylbenzene | 19.10 | 105 | 3830282 | 94.443 | ppbV | 96 |
| 100) | decane | 19.13 | 57 | 2546566 | 90.607 | ppbV | 93 |
| 101) | Benzyl Chloride | 19.22 | 91 | 3887591 | 103.127 | ppbV | 100 |
| 102) | 1,3-dichlorobenzene | 19.23 | 146 | 2996685 | 96.828 | ppbV | 98 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 3012581 | 95.869 | ppbV | 98 |
| 104) | sec-butylbenzene | 19.30 | 105 | 5535972 | 93.195 | ppbV | 100 |
| 105) | 1,2,3-trimethylbenzene | 19.42 | 105 | 3420162 | 98.054 | ppbV | 100 |
| 106) | p-isopropyltoluene | 19.41 | 119 | 5542092 | 95.111 | ppbV | 98 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 2883048 | 97.057 | ppbV | 97 |
| 108) | n-butylbenzene | 19.73 | 91 | 4621919 | 94.333 | ppbV | 96 |
| 109) | indan | 19.59 | 117 | 3929114 | 99.796 | ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138820.D
Acq On : 3 Jan 2015 12:45 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:53:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 110) indene | 19.66 | 115 | 2785899 | 103.491 | ppbV | 100 |
| 111) 1,2-dibromo-3-chloropr... | 19.90 | 75 | 1273117 | 95.368 | ppbV | 95 |
| 112) undecane | 20.10 | 57 | 2941544 | 86.975 | ppbV | 97 |
| 113) 1,2,4,5-tetramethylben... | 20.35 | 119 | 7351618 | 86.870 | ppbV | 99 |
| 114) dodecane | 21.03 | 57 | 2687001 | 69.944 | ppbV | 89 |
| 115) 1,2,4-trichlorobenzene | 21.01 | 180 | 2561074 | 88.574 | ppbV | 99 |
| 116) naphthalene | 21.14 | 128 | 5852763 | 89.048 | ppbV | 99 |
| 117) 1,2,3-trichlorobenzene | 21.40 | 180 | 2365293 | 88.272 | ppbV | 99 |
| 118) benzothiophene | 21.21 | 134 | 5317082 | 95.504 | ppbV | 99 |
| 119) hexachlorobutadiene | 21.45 | 225 | 1943531 | 91.149 | ppbV | 97 |
| 120) 2-methylnaphthalene | 22.31 | 142 | 1876409 | 75.150 | ppbV | 98 |
| 121) 1-methylnaphthalene | 22.54 | 142 | 1841278 | 80.678 | ppbV | 97 |

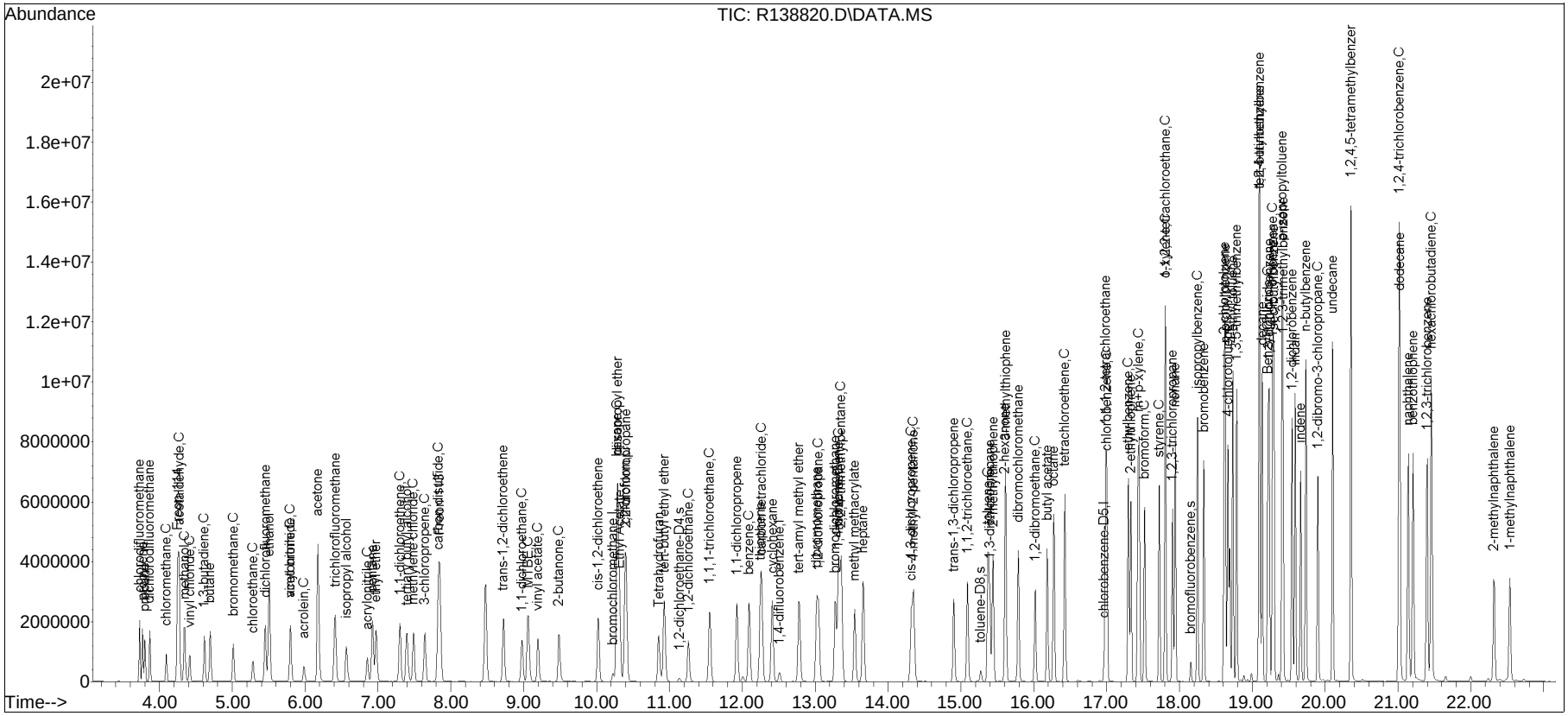
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138820.D
Acq On : 3 Jan 2015 12:45 am
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG753093
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 12:53:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:41:51 2015
Response via : Initial Calibration

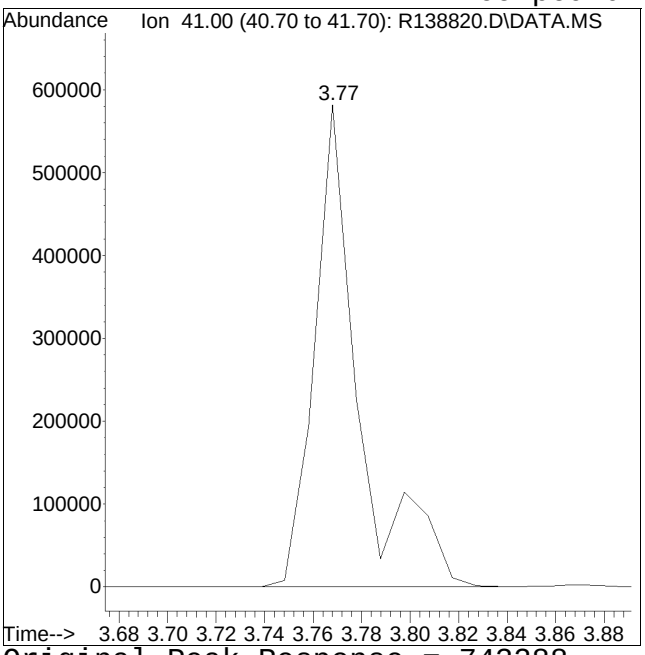
Sub List : Default - All compounds listed0102T_ICAL\R138817.D



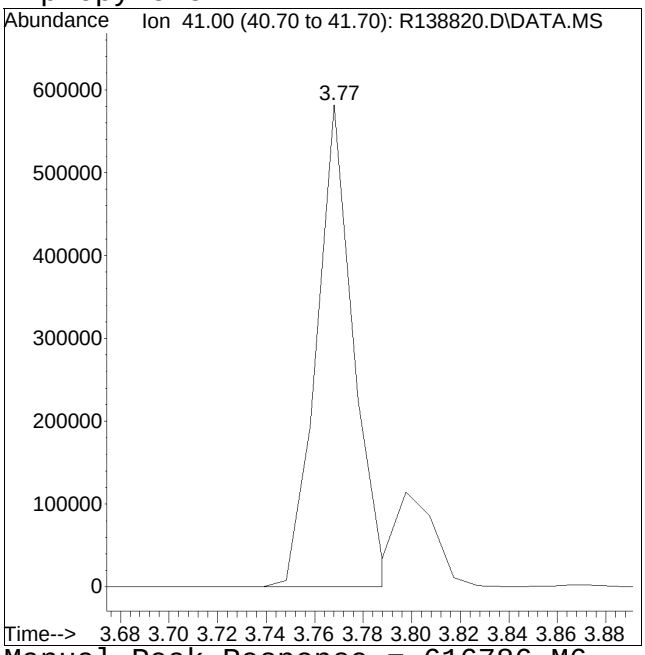
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138820.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 12:45 am Instrument : Air Piano 1
Sample : ITO15-LLSTD100.0 Quant Date : 1/3/2015 12:42 pm

Compound #3: propylene




Original Peak Response = 743288




Manual Peak Response = 616786 M6

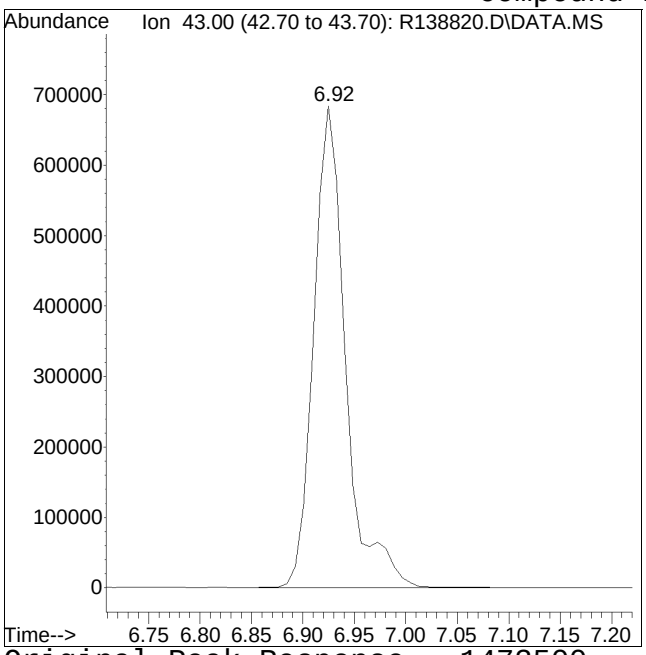
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

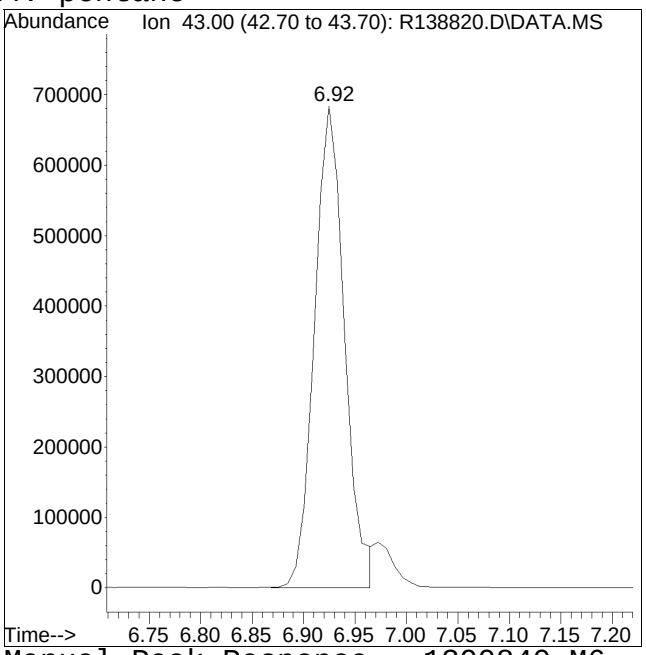
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R138820.D
Date Inj'd : 1/3/2015 12:45 am
Sample : ITO15-LLSTD100.0

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 1/3/2015 12:42 pm

Compound #24: pentane




Original Peak Response = 1473500




Manual Peak Response = 1390840 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Initial Calibration Verification

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 2 | | chlorodifluoromethane | 1.057 | 0.913 | 13.6 | 88 | 0.00 |
| 3 | | propylene | 0.521 | 0.527 | -1.2 | 98 | 0.00 |
| 4 | | propane | 0.638 | 0.512 | 19.7 | 85 | 0.00 |
| 5 | | dichlorodifluoromethane | 1.107 | 0.916 | 17.3 | 107 | 0.00 |
| 6 | C | chloromethane | 0.592 | 0.535 | 9.6 | 95 | 0.00 |
| 7 | | Freon-114 | 1.609 | 1.535 | 4.6 | 96 | 0.00 |
| 8 | C | methanol | 0.225 | 0.210 | 6.7 | 88 | 0.00 |
| 9 | C | vinyl chloride | 0.591 | 0.555 | 6.1 | 91 | 0.00 |
| 10 | C | 1,3-butadiene | 0.475 | 0.465 | 2.1 | 98 | 0.00 |
| 11 | | butane | 1.031 | 0.912 | 11.5 | 90 | 0.00 |
| 13 | C | bromomethane | 0.653 | 0.560 | 14.2 | 95 | 0.00 |
| 14 | C | chloroethane | 0.291 | 0.258 | 11.3 | 88 | 0.00 |
| 15 | | ethanol | 0.497 | 0.462 | 7.0 | 93 | 0.00 |
| 16 | | dichlorofluoromethane | 1.288 | 1.115 | 13.4 | 86 | 0.00 |
| 17 | C | vinyl bromide | 0.631 | 0.588 | 6.8 | 93 | 0.00 |
| 18 | C | acrolein | 0.295 | 0.228 | 22.7 | 88 | 0.00 |
| 19 | | acetone | 1.009 | 0.989 | 2.0 | 99 | 0.00 |
| 20 | C | acetonitrile | 0.643 | 0.567 | 11.8 | 94 | 0.00 |
| 21 | | trichlorofluoromethane | 1.569 | 1.510 | 3.8 | 95 | 0.00 |
| 22 | | isopropyl alcohol | 1.193 | 1.172 | 1.8 | 97 | 0.00 |
| 23 | C | acrylonitrile | 0.507 | 0.446 | 12.0 | 97 | 0.00 |
| 24 | | pentane | 1.214 | 1.020 | 16.0 | 87 | 0.00 |
| 25 | | ethyl ether | 0.998 | 0.799 | 19.9 | 87 | 0.00 |
| 26 | C | 1,1-dichloroethene | 1.037 | 0.982 | 5.3 | 95 | 0.00 |
| 27 | | tertiary butyl alcohol | 1.293 | 1.254 | 3.0 | 93 | 0.00 |
| 28 | C | methylene chloride | 0.851 | 0.807 | 5.2 | 94 | 0.00 |
| 29 | C | 3-chloropropene | 1.082 | 1.000 | 7.6 | 105 | 0.00 |
| 30 | C | carbon disulfide | 1.765 | 1.669 | 5.4 | 95 | 0.00 |
| 31 | | Freon 113 | 1.295 | 1.231 | 4.9 | 96 | 0.00 |
| 32 | | trans-1,2-dichloroethene | 0.977 | 0.884 | 9.5 | 87 | 0.00 |
| 33 | C | 1,1-dichloroethane | 1.147 | 1.072 | 6.5 | 94 | 0.00 |
| 34 | C | MTBE | 1.727 | 1.652 | 4.3 | 96 | 0.00 |
| 35 | C | vinyl acetate | 1.579 | 1.911 | -21.0 | 108 | 0.00 |
| 36 | C | 2-butanone | 1.486 | 1.471 | 1.0 | 92 | 0.00 |
| 37 | | cis-1,2-dichloroethene | 1.053 | 1.145 | -8.7 | 108 | 0.00 |
| 38 | | Ethyl Acetate | 0.263 | 0.261 | 0.8 | 95 | 0.00 |
| 39 | C | chloroform | 1.610 | 1.536 | 4.6 | 97 | 0.00 |
| 40 | | Tetrahydrofuran | 1.013 | 0.821 | 19.0 | 90 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 41 | | 2,2-dichloropropane | 1.421 | 1.273 | 10.4 | 90 | 0.00 |
| 42 | C | 1,2-dichloroethane | 0.876 | 0.851 | 2.9 | 91 | 0.00 |
| 43 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 101 | 0.00 |
| 44 | C | hexane | 0.656 | 0.585 | 10.8 | 94 | 0.00 |
| 45 | | diisopropyl ether | 0.301 | 0.270 | 10.3 | 91 | 0.00 |
| 46 | | tert-butyl ethyl ether | 1.012 | 0.877 | 13.3 | 86 | 0.00 |
| 47 | s | 1,2-dichloroethane-D4 | 0.296 | 0.289 | 2.4 | 96 | 0.00 |
| 48 | C | 1,1,1-trichloroethane | 0.662 | 0.621 | 6.2 | 94 | 0.00 |
| 49 | | 1,1-dichloropropene | 0.476 | 0.433 | 9.0 | 93 | 0.00 |
| 50 | C | benzene | 0.897 | 0.827 | 7.8 | 92 | 0.00 |
| 52 | C | carbon tetrachloride | 0.703 | 0.646 | 8.1 | 94 | 0.00 |
| 53 | | cyclohexane | 0.545 | 0.491 | 9.9 | 92 | -0.01 |
| 54 | | tert-amyl methyl ether | 0.898 | 0.808 | 10.0 | 91 | 0.00 |
| 55 | | dibromomethane | 0.373 | 0.332 | 11.0 | 89 | 0.00 |
| 56 | C | 1,2-dichloropropane | 0.349 | 0.335 | 4.0 | 95 | 0.00 |
| 57 | | bromodichloromethane | 0.736 | 0.695 | 5.6 | 93 | 0.00 |
| 58 | C | 1,4-dioxane | 0.207 | 0.206 | 0.5 | 95 | 0.00 |
| 59 | C | trichloroethene | 0.460 | 0.430 | 6.5 | 92 | 0.00 |
| 60 | C | 2,2,4-trimethylpentane | 1.689 | 1.589 | 5.9 | 96 | 0.00 |
| 61 | | methyl methacrylate | 0.503 | 0.470 | 6.6 | 91 | 0.00 |
| 62 | | heptane | 0.788 | 0.661 | 16.1 | 95 | 0.00 |
| 63 | C | cis-1,3-dichloropropene | 0.493 | 0.521 | -5.7 | 102 | 0.00 |
| 64 | C | 4-methyl-2-pentanone | 0.968 | 0.890 | 8.1 | 94 | 0.00 |
| 65 | | trans-1,3-dichloropropene | 0.484 | 0.443 | 8.5 | 86 | 0.00 |
| 66 | C | 1,1,2-trichloroethane | 0.409 | 0.394 | 3.7 | 98 | 0.00 |
| 67 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 68 | C | toluene | 5.175 | 4.909 | 5.1 | 95 | 0.00 |
| 69 | s | toluene-D8 | 3.571 | 3.567 | 0.1 | 97 | 0.00 |
| 71 | | 1,3-dichloropropane | 2.287 | 2.129 | 6.9 | 92 | 0.00 |
| 72 | | 2-hexanone | 3.795 | 3.868 | -1.9 | 95 | 0.00 |
| 74 | | dibromochloromethane | 3.722 | 3.491 | 6.2 | 93 | 0.00 |
| 75 | C | 1,2-dibromoethane | 3.010 | 2.910 | 3.3 | 95 | 0.00 |
| 76 | | butyl acetate | 0.528 | 0.475 | 10.0 | 85 | 0.00 |
| 77 | | octane | 1.563 | 1.379 | 11.8 | 91 | 0.00 |
| 78 | C | tetrachloroethene | 2.736 | 2.521 | 7.9 | 96 | 0.00 |
| 79 | | 1,1,1,2-tetrachloroethane | 2.512 | 2.279 | 9.3 | 90 | 0.00 |
| 80 | C | chlorobenzene | 4.394 | 4.233 | 3.7 | 94 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 81 | C | ethylbenzene | 6.738 | 6.469 | 4.0 | 94 | 0.00 |
| 83 | C | m+p-xylene | 5.312 | 5.112 | 3.8 | 96 | 0.00 |
| 84 | C | bromoform | 3.653 | 3.524 | 3.5 | 94 | 0.00 |
| 85 | C | styrene | 4.165 | 4.068 | 2.3 | 95 | 0.00 |
| 86 | C | 1,1,2,2-tetrachloroethane | 4.117 | 4.016 | 2.5 | 98 | 0.00 |
| 87 | C | o-xylene | 5.494 | 5.356 | 2.5 | 96 | 0.00 |
| 88 | | 1,2,3-trichloropropane | 3.128 | 2.865 | 8.4 | 90 | 0.00 |
| 89 | | nonane | 4.937 | 4.286 | 13.2 | 89 | 0.00 |
| 90 | s | bromofluorobenzene | 2.670 | 2.666 | 0.1 | 97 | 0.00 |
| 91 | C | isopropylbenzene | 7.547 | 7.052 | 6.6 | 91 | 0.00 |
| 92 | | bromobenzene | 3.887 | 3.563 | 8.3 | 91 | 0.00 |
| 93 | | 2-chlorotoluene | 2.271 | 2.029 | 10.7 | 89 | 0.00 |
| 94 | | n-propylbenzene | 2.373 | 2.195 | 7.5 | 91 | 0.00 |
| 95 | | 4-chlorotoluene | 5.845 | 5.284 | 9.6 | 90 | 0.00 |
| 96 | | 4-ethyl toluene | 8.377 | 7.816 | 6.7 | 90 | 0.00 |
| 97 | | 1,3,5-trimethylbenzene | 7.321 | 7.170 | 2.1 | 99 | 0.00 |
| 98 | | tert-butylbenzene | 7.762 | 7.085 | 8.7 | 89 | 0.00 |
| 99 | | 1,2,4-trimethylbenzene | 6.623 | 6.594 | 0.4 | 97 | 0.00 |
| 100 | | decane | 4.662 | 4.252 | 8.8 | 90 | 0.00 |
| 101 | C | Benzyl Chloride | 6.037 | 6.034 | 0.0 | 95 | 0.00 |
| 102 | | 1,3-dichlorobenzene | 5.065 | 4.976 | 1.8 | 96 | 0.00 |
| 103 | C | 1,4-dichlorobenzene | 5.117 | 5.038 | 1.5 | 95 | 0.00 |
| 104 | | sec-butylbenzene | 9.870 | 9.122 | 7.6 | 91 | 0.00 |
| 106 | | p-isopropyltoluene | 9.556 | 8.133 | 14.9 | 83 | 0.00 |
| 107 | | 1,2-dichlorobenzene | 4.813 | 4.742 | 1.5 | 95 | 0.00 |
| 108 | | n-butylbenzene | 7.872 | 7.593 | 3.5 | 92 | 0.00 |
| 111 | C | 1,2-dibromo-3-chloropropane | 2.117 | 2.007 | 5.2 | 89 | 0.00 |
| 112 | | undecane | 5.263 | 4.926 | 6.4 | 87 | 0.00 |
| 114 | | dodecane | 5.204 | 5.441 | -4.6 | 84 | 0.01 |
| 115 | C | 1,2,4-trichlorobenzene | 4.055 | 4.484 | -10.6 | 92 | 0.00 |
| 116 | | naphthalene | 10.150 | 9.937 | 2.1 | 90 | 0.00 |
| 117 | | 1,2,3-trichlorobenzene | 3.812 | 4.073 | -6.8 | 90 | 0.00 |
| 119 | C | hexachlorobutadiene | 3.069 | 3.222 | -5.0 | 90 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default-ICV-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 134700 | 10.000 | ppbV | 0.00 |
| Standard Area = 136438 | | | Recovery = 98.73% | | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 282734 | 10.000 | ppbV | 0.00 |
| Standard Area = 279055 | | | Recovery = 101.32% | | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 62636 | 10.000 | ppbV | 0.00 |
| Standard Area = 65032 | | | Recovery = 96.32% | | | |
| System Monitoring Compounds | | | | | | |
| 47) 1,2-dichloroethane-D4 | 11.13 | 65 | 81626 | 9.744 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 97.44% | | | |
| 69) toluene-D8 | 15.27 | 98 | 223420 | 9.989 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.89% | | | |
| 90) bromofluorobenzene | 18.15 | 95 | 166967 | 9.984 | ppbV | 0.00 |
| Spiked Amount 10.000 | Range 70 - 130 | | Recovery = 99.84% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 122989 | 8.641 | ppbV | 99 |
| 3) propylene | 3.77 | 41 | 71045M6 | 10.124 | ppbV | |
| 4) propane | 3.80 | 29 | 68987 | 8.024 | ppbV | 93 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 123377 | 8.277 | ppbV | 98 |
| 6) chloromethane | 4.09 | 50 | 72074 | 9.033 | ppbV | 98 |
| 7) Freon-114 | 4.25 | 85 | 206730 | 9.541 | ppbV | 94 |
| 8) methanol | 4.34 | 31 | 141187 | 46.628 | ppbV | 97 |
| 9) vinyl chloride | 4.42 | 62 | 74715 | 9.388 | ppbV | 94 |
| 10) 1,3-butadiene | 4.62 | 54 | 62622 | 9.791 | ppbV | 99 |
| 11) butane | 4.69 | 43 | 122834 | 8.846 | ppbV | 93 |
| 13) bromomethane | 5.01 | 94 | 75411 | 8.578 | ppbV | 99 |
| 14) chloroethane | 5.28 | 64 | 34696 | 8.838 | ppbV | 97 |
| 15) ethanol | 5.49 | 31 | 311300 | 46.494 | ppbV | 99 |
| 16) dichlorofluoromethane | 5.45 | 67 | 150160 | 8.652 | ppbV | 99 |
| 17) vinyl bromide | 5.80 | 106 | 79261 | 9.322 | ppbV | 94 |
| 18) acrolein | 5.99 | 56 | 30648 | 7.716 | ppbV | 95 |
| 19) acetone | 6.17 | 43 | 665923 | 48.993 | ppbV | 99 |
| 20) acetonitrile | 5.80 | 41 | 76407 | 8.819 | ppbV | 95 |
| 21) trichlorofluoromethane | 6.41 | 101 | 203354 | 9.619 | ppbV | 96 |
| 22) isopropyl alcohol | 6.56 | 45 | 157807 | 9.823 | ppbV | 99 |
| 23) acrylonitrile | 6.85 | 53 | 60054 | 8.792 | ppbV | 95 |
| 24) pentane | 6.92 | 43 | 137395 | 8.405 | ppbV | 99 |
| 25) ethyl ether | 6.98 | 31 | 107666 | 8.011 | ppbV | 92 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default-ICV-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 26) 1,1-dichloroethene | 7.30 | 61 | 132296 | 9.468 | ppbV | 95 |
| 27) tertiary butyl alcohol | 7.40 | 59 | 168933 | 9.703 | ppbV | 98 |
| 28) methylene chloride | 7.48 | 49 | 108721 | 9.481 | ppbV | 97 |
| 29) 3-chloropropene | 7.64 | 41 | 134734 | 9.240 | ppbV | 97 |
| 30) carbon disulfide | 7.82 | 76 | 224765 | 9.455 | ppbV | 98 |
| 31) Freon 113 | 7.84 | 101 | 165772 | 9.501 | ppbV | 99 |
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 119111 | 9.048 | ppbV | 97 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 144391 | 9.346 | ppbV | 99 |
| 34) MTBE | 9.06 | 73 | 222541 | 9.566 | ppbV | 97 |
| 35) vinyl acetate | 9.19 | 43 | 257360 | 12.101 | ppbV | 99 |
| 36) 2-butanone | 9.49 | 43 | 198095 | 9.897 | ppbV | 98 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 154291 | 10.880 | ppbV | 97 |
| 38) Ethyl Acetate | 10.32 | 61 | 35094 | 9.891 | ppbV | 91 |
| 39) chloroform | 10.38 | 83 | 206961 | 9.546 | ppbV | 97 |
| 40) Tetrahydrofuran | 10.86 | 42 | 110646M6 | 8.106 | ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 171457 | 8.959 | ppbV | 96 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 114633 | 9.716 | ppbV | 99 |
| 44) hexane | 10.28 | 57 | 165400 | 8.925 | ppbV | 94 |
| 45) diisopropyl ether | 10.29 | 87 | 76257 | 8.947 | ppbV | 100 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 247997 | 8.667 | ppbV | 95 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 175465 | 9.380 | ppbV | 98 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 122367 | 9.101 | ppbV | 96 |
| 50) benzene | 12.09 | 78 | 233746 | 9.218 | ppbV | 95 |
| 52) carbon tetrachloride | 12.27 | 117 | 182764 | 9.199 | ppbV | 94 |
| 53) cyclohexane | 12.40 | 56 | 138690 | 9.005 | ppbV | 96 |
| 54) tert-amyl methyl ether | 12.79 | 73 | 228464 | 8.997 | ppbV | 97 |
| 55) dibromomethane | 13.01 | 93 | 93911 | 8.911 | ppbV | 93 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 94729 | 9.595 | ppbV | 99 |
| 57) bromodichloromethane | 13.27 | 83 | 196360 | 9.438 | ppbV | 98 |
| 58) 1,4-dioxane | 13.32 | 88 | 58358 | 9.961 | ppbV | 98 |
| 59) trichloroethene | 13.31 | 130 | 121643 | 9.350 | ppbV | 97 |
| 60) 2,2,4-trimethylpentane | 13.35 | 57 | 449187 | 9.406 | ppbV | 100 |
| 61) methyl methacrylate | 13.54 | 41 | 132989 | 9.342 | ppbV | 99 |
| 62) heptane | 13.66 | 43 | 186807 | 8.388 | ppbV | 98 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 147398 | 10.574 | ppbV | 95 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 251689 | 9.196 | ppbV | 99 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 125215 | 9.155 | ppbV | 96 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 111268 | 9.615 | ppbV | 96 |
| 68) toluene | 15.37 | 91 | 307460 | 9.485 | ppbV | 96 |
| 71) 1,3-dichloropropane | 15.40 | 76 | 133381 | 9.311 | ppbV | 95 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default-ICV-AP2 - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 72) | 2-hexanone | 15.61 | 43 | 242304 | 10.195 | ppbV # | 97 |
| 74) | dibromochloromethane | 15.79 | 129 | 218646 | 9.379 | ppbV | 97 |
| 75) | 1,2-dibromoethane | 16.01 | 107 | 182277 | 9.670 | ppbV | 99 |
| 76) | butyl acetate | 16.18 | 73 | 29781 | 9.002 | ppbV | 86 |
| 77) | octane | 16.27 | 85 | 86383 | 8.825 | ppbV | 99 |
| 78) | tetrachloroethene | 16.43 | 166 | 157877 | 9.213 | ppbV | 97 |
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 142772 | 9.075 | ppbV | 98 |
| 80) | chlorobenzene | 17.00 | 112 | 265111 | 9.632 | ppbV | 97 |
| 81) | ethylbenzene | 17.30 | 91 | 405168 | 9.600 | ppbV | 100 |
| 83) | m+p-xylene | 17.44 | 91 | 640350 | 19.247 | ppbV | 99 |
| 84) | bromoform | 17.52 | 173 | 220736 | 9.646 | ppbV | 97 |
| 85) | styrene | 17.72 | 104 | 254802 | 9.768 | ppbV | 95 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 251570 | 9.756 | ppbV | 96 |
| 87) | o-xylene | 17.80 | 91 | 335505 | 9.750 | ppbV | 98 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 179426 | 9.159 | ppbV | 97 |
| 89) | nonane | 17.94 | 43 | 268436 | 8.681 | ppbV | 100 |
| 91) | isopropylbenzene | 18.24 | 105 | 441702 | 9.344 | ppbV | 97 |
| 92) | bromobenzene | 18.33 | 77 | 223188 | 9.167 | ppbV | 97 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 127076 | 8.934 | ppbV | 99 |
| 94) | n-propylbenzene | 18.63 | 120 | 137516 | 9.250 | ppbV | 77 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 330974 | 9.040 | ppbV | 99 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 489562 | 9.330 | ppbV | 98 |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 449078 | 9.793 | ppbV | 99 |
| 98) | tert-butylbenzene | 19.09 | 119 | 443792 | 9.128 | ppbV | 98 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 413016 | 9.956 | ppbV | 97 |
| 100) | decane | 19.13 | 57 | 266341 | 9.120 | ppbV | 99 |
| 101) | Benzyl Chloride | 19.21 | 91 | 377963 | 9.995 | ppbV | 96 |
| 102) | 1,3-dichlorobenzene | 19.22 | 146 | 311693 | 9.825 | ppbV | 98 |
| 103) | 1,4-dichlorobenzene | 19.27 | 146 | 315559 | 9.846 | ppbV | 99 |
| 104) | sec-butylbenzene | 19.29 | 105 | 571354 | 9.242 | ppbV | 98 |
| 106) | p-isopropyltoluene | 19.40 | 119 | 509426 | 8.511 | ppbV | 96 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 296993 | 9.851 | ppbV | 99 |
| 108) | n-butylbenzene | 19.73 | 91 | 475597 | 9.646 | ppbV | 100 |
| 111) | 1,2-dibromo-3-chloropr... | 19.90 | 75 | 125689 | 9.478 | ppbV | 97 |
| 112) | undecane | 20.10 | 57 | 308564 | 9.360 | ppbV | 98 |
| 114) | dodecane | 21.03 | 57 | 340793 | 10.455 | ppbV | 96 |
| 115) | 1,2,4-trichlorobenzene | 21.01 | 180 | 280849 | 11.059 | ppbV | 99 |
| 116) | naphthalene | 21.13 | 128 | 622424 | 9.790 | ppbV | 99 |
| 117) | 1,2,3-trichlorobenzene | 21.39 | 180 | 255091 | 10.683 | ppbV | 99 |
| 119) | hexachlorobutadiene | 21.45 | 225 | 201798 | 10.498 | ppbV | 98 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150102T_ICAL\R138817.D
Sub List : Default-ICV-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

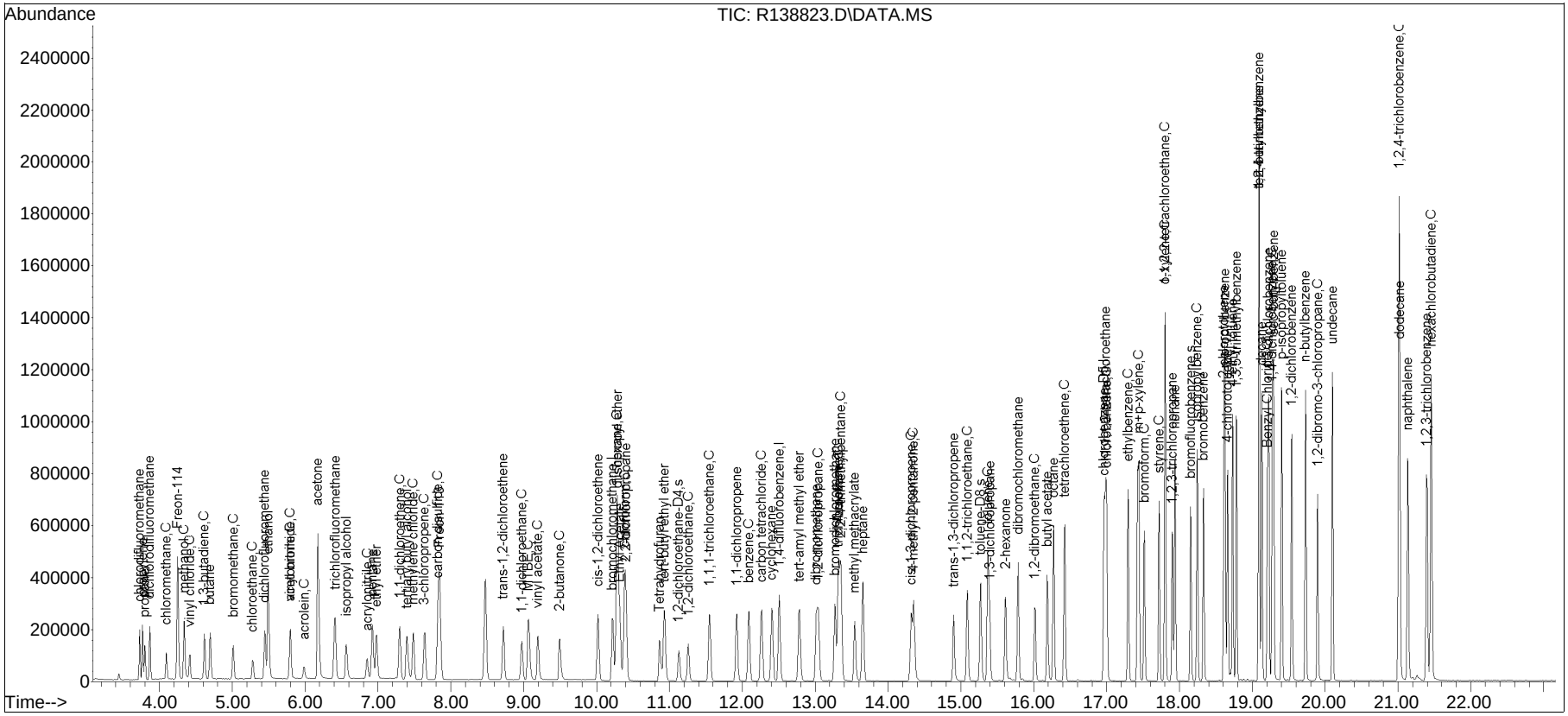
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150102T_ICAL\
Data File : R138823.D
Acq On : 3 Jan 2015 9:14 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG753093
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 12:59:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150102T_ICAL\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

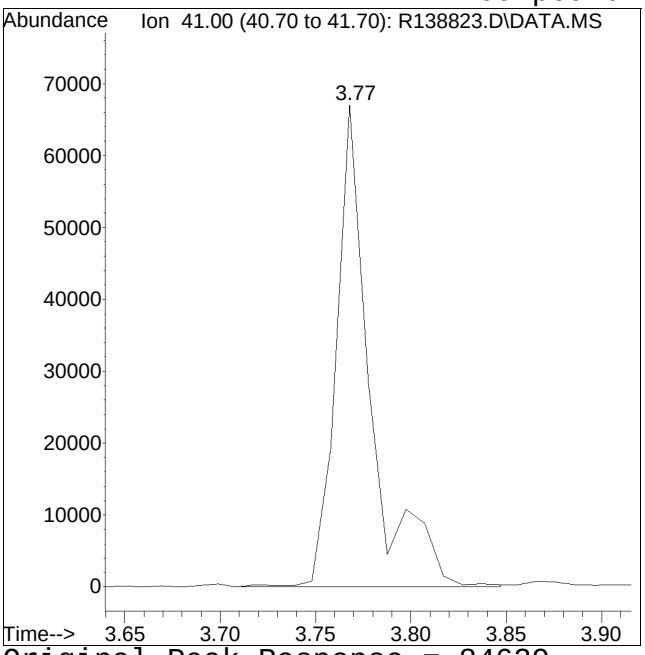
Sub List : Default-ICV-AP2 - All compounds listedAL\R138817.D



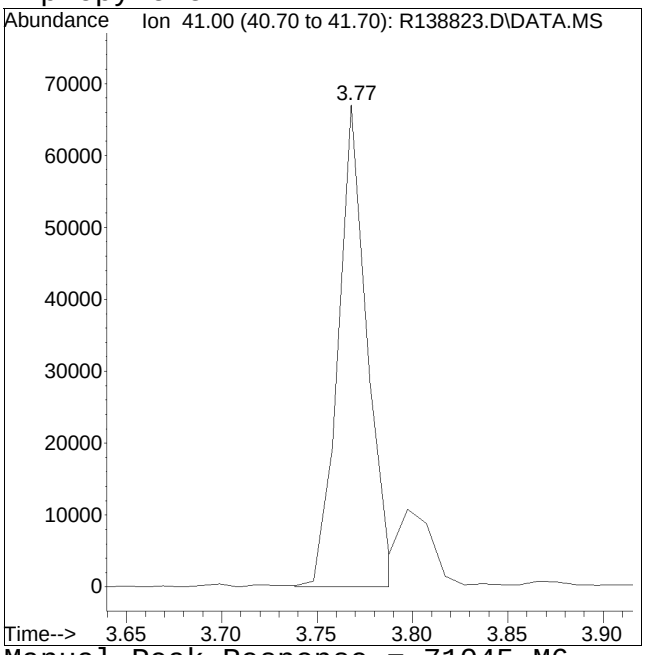
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R138823.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 9:14 am Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 1/3/2015 12:57 pm

Compound #3: propylene




Original Peak Response = 84629



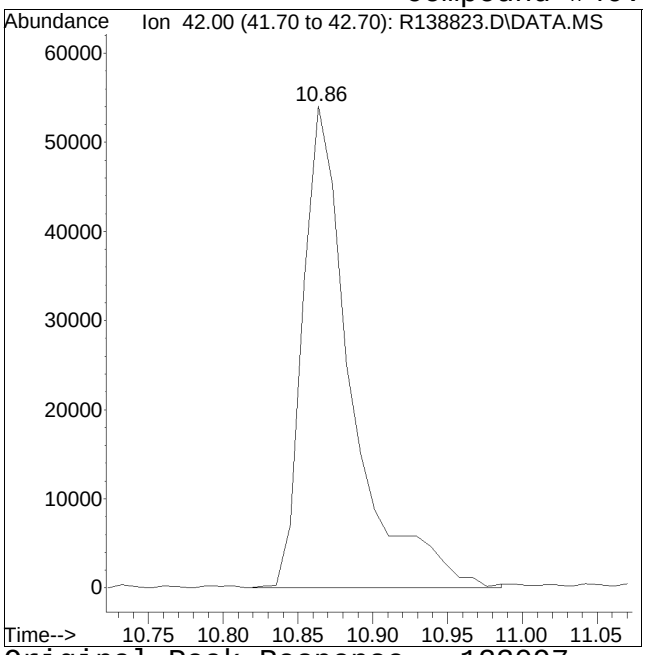

Manual Peak Response = 71045 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

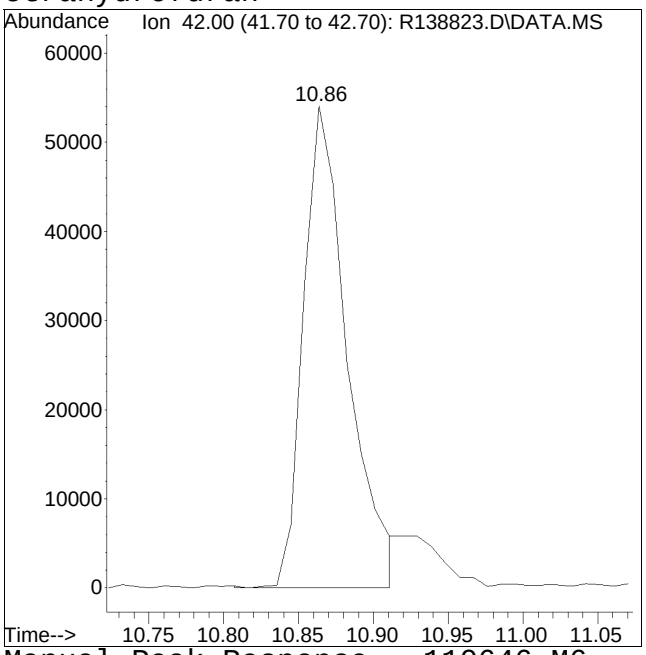
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150102\ Method : O:\Forensics\Data\AIR1\2015\150102\TALL150102.M
Data File : R138823.D Operator : AIRPIANO1:RY
Date Inj'd : 1/3/2015 9:14 am Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 1/3/2015 12:57 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 123097




Manual Peak Response = 110646 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jul 16 2015, 02:20 pm

Work Group: WG767577 for Department: 3 GC/MS

Created: 11-MAR-15 Due: Operator: ry

| Sample | Client ID | C | Product | Matrix | Stat | UA | HOLD | DUE | PR | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| L1504425-01 | OUTDOOR CONTROL | S | TO15-LL | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-02 | S-157-J.1 | S | TO15-LL | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-03 | S-157-J.2 | S | TO15-LL | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-04 | S-157-J | S | TO15-LL | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-05 | DUPLICATE | S | TO15-LL | AIR | DONE | U | 0407 | 0317 | S0 | Can-6 |
| L1504425-06 | BLANK | S | TO15-LL | AIR | DONE | U | 0405 | 0317 | S0 | Can-6 |
| L1504425-07 | SG-1 | S | TO15-LL | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-08 | SG-2 | S | TO15-LL | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-09 | SG-3 | S | TO15-LL | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-10 | SG-4 | S | TO15-LL | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504425-11 | SG BLANK | S | TO15-LL | SOIL_VAPOR | DONE | U | 0405 | 0317 | S0 | Can-2.7 |
| L1504467-01 | CAN 931 SHELF 41 | S | TO15-LL | AIR | DONE | I | 0409 | 0318 | NC | Can-6 |
| L1504467-02 | CAN 1894 SHELF 42 | S | TO15-LL | AIR | DONE | I | 0409 | 0318 | NC | Can-6 |
| L1504546-01 | CAN 1824 SHELF 56 | S | TO15-LL | AIR | DONE | I | 0410 | 0318 | NC | Can-6 |
| L1504546-02 | CAN 1641 SHELF 57 | S | TO15-LL | AIR | DONE | I | 0410 | 0318 | NC | Can-6 |
| L1504569-01 | CAN 151B SHELF 7 | S | TO15-LL | AIR | DONE | I | 0409 | 0318 | NC | Can-2.7 |
| WG767577-1 | MS BFB Tune Standard | S | TO15-LL | AIR | DONE | U | | | | |
| WG767577-1 | MS BFB Tune Standard | S | TO15-LL | SOIL_VAPOR | DONE | U | | | | |
| WG767577-2 | Continuing Calibrati | S | TO15-LL | AIR | DONE | U | | | | |
| WG767577-2 | Continuing Calibrati | S | TO15-LL | SOIL_VAPOR | DONE | U | | | | |
| WG767577-3 | Laboratory Control S | S | TO15-LL | AIR | DONE | U | | | | |
| WG767577-3 | Laboratory Control S | S | TO15-LL | SOIL_VAPOR | DONE | U | | | | |
| WG767577-4 | Laboratory Method Bl | S | TO15-LL | AIR | DONE | U | | | | |
| WG767577-4 | Laboratory Method Bl | S | TO15-LL | SOIL_VAPOR | DONE | U | | | | |
| WG767577-5 | Duplicate Sample | S | TO15-LL | AIR | DONE | U | | | | |
| WG767577-5 | Duplicate Sample | S | TO15-LL | SOIL_VAPOR | DONE | U | | | | |

Comments:

WG767577-5 L1504425-07

# Sequence Logs

# Alpha Analytical Air Lab
# Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS13-005 / CSS12-019

Date: 01/02/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: AR

Sequence File Name: 150102.S

SIM ICAL# Full Scan ICAL# APH ICAL#

| AS Position # | Sample ID | Acquisition Method | Data File ID | Standard ID or Batch ID #, ICAL Ref # | Comment (s) | Product/ sublist | Leak Check Pass ? Y/N |
|---|---|---|---|---|---|---|---|
| 1 | TA1010201 | TO15_SFS | R138809 | 250ml | TUNE | | NA |
| | | Pause | | | | | NA |
| 5 | ITO15-SIMSTD0.02 | TO15_SFS | R138810 | SS14-040D 50ML 0.02 | SIM ONLY | | NA |
| 5 | ITO15-SIMSTD0.04 | TO15_SFS | R138811 | SS14-040D 100ML 0.04 | SIM ONLY | | NA |
| 5 | ITO15-SIMSTD0.1 | TO15_SFS | R138812 | SS14-040D 250ML 0.1 | SIM ONLY | | NA |
| 6 | ITO15-SIMSTD0.2 | TO15_SFS | R138813 | SS14-040C 50ML 0.2 | | | NA |
| 6 | ITO15-SIMSTD0.5 | TO15_SFS | R138814 | SS14-040C 125ML 0.5 | | | NA |
| 6 | ITO15-SIMSTD1.0 | TO15_SFS | R138815 | SS14-040C 250ML 1.0 | | | NA |
| 7 | ITO15-SIMSTD5.0 | TO15_SFS | R138816 | SS14-040B1 125ML 5.0 | | | NA |
| 7 | ITO15-SIMSTD10.0 | TO15_SFS | R138817 | SS14-040B1 250ML 10.0 | | | NA |
| 8 | ITO15-SIMSTD20.0 | TO15_SFS | R138818 | SS14-040A 50ML 20.0 | | | NA |
| 8 | ITO15-SIMSTD50.0 | TO15_SFS | R138819 | SS14-040A 125ML 50.0 | | | NA |
| 8 | ITO15-LLSTD100.0 | TO15_SFS | R138820 | SS14-040A 250ML 100.0 | NOT USED FOR SIM | | NA |
| 1 | BA1010201 | TO15_SFS | R138821 | 250ml | | | NA |
| | | Pause | | | | | NA |
| 1 | BA1010202 | TO15_SFS | R138822 | 250ml | | | NA |
| 2 | CTO15-LLSTD10.0 | TO15_SFS | R138823 | SS14-038A 250ML 10.0 | FULL SCAN ICV | | NA |
| 2 | CTO15-SIMSTD5.0 | TO15_SFS | R138824 | SS14-038A 125ML 5.0 | SIM ICV | | NA |
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# Alpha Analytical Air Lab
# Instrument Run Log

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**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,2{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

# Alpha Analytical Air Lab
# Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS13-005 / CSS14-015

Date: 03/11/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: MB/RY

Sequence File Name: 150311.S

SIM ICAL# 10565 Full Scan ICAL# 10564 APH ICAL# 10563

| AS Position # | Sample ID | Acquisition Method | Data File ID | Standard ID or Batch ID #, ICAL Ref # | Comment (s) | Product/sublist | Leak Check Pass ? Y/N |
|---|---|---|---|---|---|---|---|
| 1 | TA1031101 | TO15_SFS | R140134 | 250ml | TUNE | | NA |
| 2 | CAPH-STD10 | TO15_SFS | R140135 | 125ml SS14-39B2 10.0 | APH CC | | NA |
| 3 | CTO15-LLSTD10 | TO15_SFS | R140136 | 250ml SS15-003C 10.0 | LL/ APH LCS | | NA |
| 3 | CTO15-SIMSTD5.0 | TO15_SFS | R140137 | 125ml SS15-003C 5.0 | SIM LCS | | NA |
| 1 | BA1031101 | TO15_SFS | R140138 | 250ml | LL BLANK, SIM FAILED | | NA |
| 1 | BA1031102 | TO15_SFS | R140139 | 250ml | SIM BLANK | | NA |
| 2 | L1504467-01,3,250,250 | TO15_SFS | R140140 | 250ml | | A, LL, SIM | NA |
| 3 | L1504467-02,3,250,250 | TO15_SFS | R140141 | 250ml | | A, LL, SIM | NA |
| 13 | L1504546-01,3,250,250 | TO15_SFS | R140142 | 250ml | RR CAN CLOSED | A, LL, SIM | NA |
| 14 | L1504546-02,3,250,250 | TO15_SFS | R140143 | 250ml | | A, LL, SIM | NA |
| | | Pause | | | | | NA |
| 13 | L1504546-01,3,250,250 | TO15_SFS | R140144 | WG767580,ICAL10563 | | A, LL, SIM | NA |
| 15 | L1504569-01,3,250,250 | TO15_SFS | R140145 | WG767580,ICAL10563 | | A, LL, SIM | NA |
| 1 | L1504425-06,3,250,250 | TO15_SFS | R140146 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 2 | L1504425-11,3,250,250 | TO15_SFS | R140147 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 3 | L1504425-01,3,250,250 | TO15_SFS | R140148 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 4 | L1504425-02,3,250,250 | TO15_SFS | R140149 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 5 | L1504425-03,3,250,250 | TO15_SFS | R140150 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 6 | L1504425-04,3,250,250 | TO15_SFS | R140151 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 7 | L1504425-05,3,250,250 | TO15_SFS | R140152 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07,3,250,250 | TO15_SFS | R140153 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07DUP,3,250,250 | TO15_SFS | R140154 | WG767580,ICAL10563 | DOES NOT MATCH, RR | A, LL, SIM | Y |
| 9 | L1504425-08,3,250,250 | TO15_SFS | R140155 | WG767580,ICAL10563 | RR, CARRYOVER | A, LL, SIM | Y |

# Alpha Analytical Air Lab
# Instrument Run Log

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10 | L1504425-09,3,250,250 | TO15_SFS | R140156 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 11 | L1504425-10,3,250,250 | TO15_SFS | R140157 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 12 | L1504264-03D,3,25,250 | TO15_SFS | R140158 | WG767580,ICAL10563 | | APH | Y |
| 16 | BA1031103 | TO15_SFS | R140159 | 250ml | | | NA |
| 9 | L1504425-08,3,250,250 | TO15_SFS | R140160 | WG767580,ICAL10563 | | A, LL, SIM | Y |
| 8 | L1504425-07DUP,3,250,250 | TO15_SFS | R140161 | WG767580,ICAL10563 | APH/ TO15-LL/ TO15-SIM DUP | A, LL, SIM | Y |
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**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

# Analytical Event

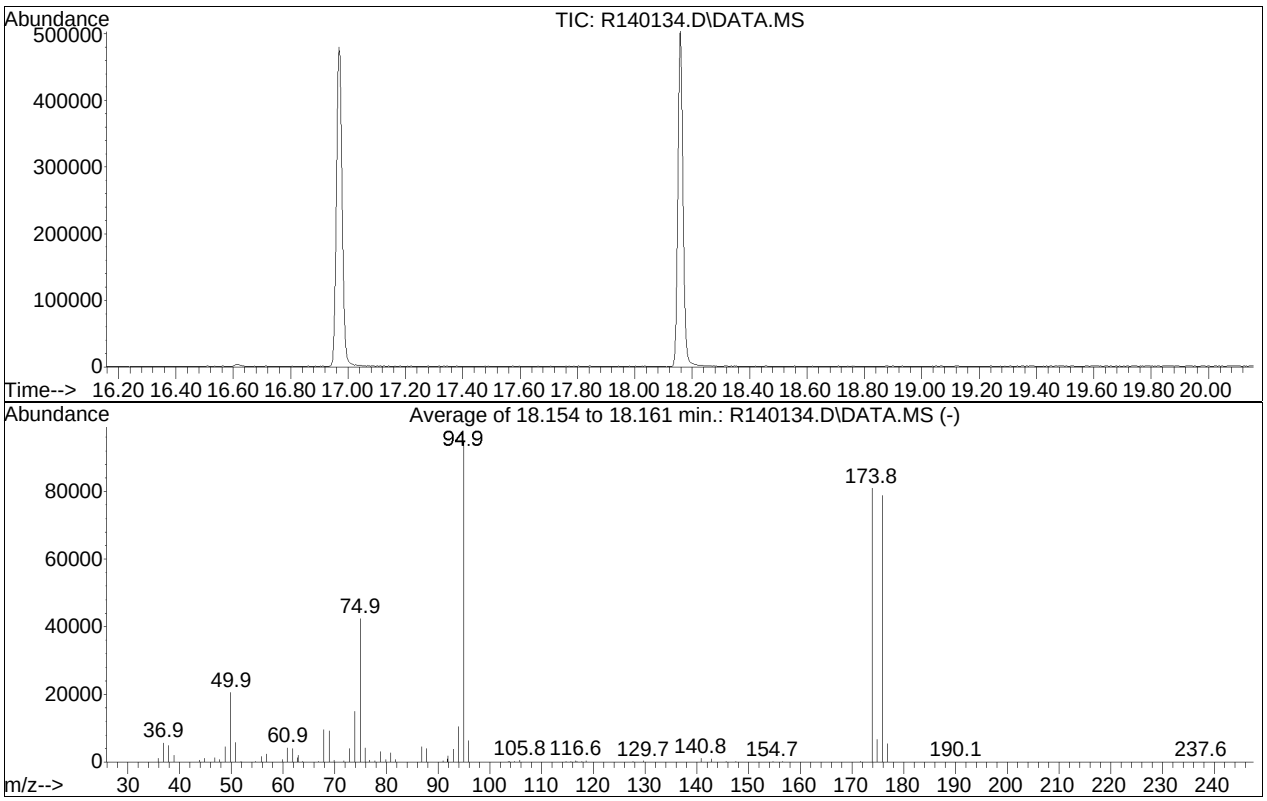
# Continuing Calibration
# BFB Tune

BFB

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140134.D
Acq On : 11 Mar 2015 11:12 am
Operator : AIRPIANO1:RY
Sample : WG767577-1,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jan 03 12:56:18 2015




AutoFind: Scans 1933, 1934, 1935; Background Corrected with Scan 1923

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 8 | 40 | 21.8 | 20592 | PASS |
| 75 | 95 | 30 | 66 | 44.9 | 42424 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 94421 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 6309 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 85.7 | 80941 | PASS |
| 175 | 174 | 4 | 9 | 8.2 | 6655 | PASS |
| 176 | 174 | 93 | 101 | 97.3 | 78752 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 5447 | PASS |

# Continuing Calibration

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 82 | 0.00 |
| 2 | | chlorodifluoromethane | 1.057 | 0.914 | 13.5 | 73 | 0.00 |
| 3 | | propylene | 0.521 | 0.530 | -1.7 | 82 | 0.00 |
| 4 | | propane | 0.638 | 0.505 | 20.8 | 69 | 0.00 |
| 5 | | dichlorodifluoromethane | 1.107 | 0.794 | 28.3 | 76 | 0.00 |
| 6 | C | chloromethane | 0.592 | 0.519 | 12.3 | 76 | 0.00 |
| 7 | | Freon-114 | 1.609 | 1.507 | 6.3 | 78 | 0.00 |
| 8 | C | methanol | 0.225 | 0.191 | 15.1 | 66 | 0.00 |
| 9 | C | vinyl chloride | 0.591 | 0.557 | 5.8 | 76 | 0.00 |
| 10 | C | 1,3-butadiene | 0.475 | 0.459 | 3.4 | 80 | 0.00 |
| 11 | | butane | 1.031 | 0.871 | 15.5 | 71 | 0.00 |
| 13 | C | bromomethane | 0.653 | 0.564 | 13.6 | 79 | 0.00 |
| 14 | C | chloroethane | 0.291 | 0.260 | 10.7 | 74 | 0.00 |
| 15 | | ethanol | 0.497 | 0.424 | 14.7 | 70 | 0.00 |
| 16 | | dichlorofluoromethane | 1.288 | 1.104 | 14.3 | 70 | 0.00 |
| 17 | C | vinyl bromide | 0.631 | 0.587 | 7.0 | 77 | 0.00 |
| 18 | C | acrolein | 0.295 | 0.214 | 27.5 | 68 | 0.00 |
| 19 | | acetone | 1.009 | 0.962 | 4.7 | 80 | 0.00 |
| 20 | C | acetonitrile | 0.643 | 0.538 | 16.3 | 74 | 0.00 |
| 21 | | trichlorofluoromethane | 1.569 | 1.493 | 4.8 | 77 | 0.00 |
| 22 | | isopropyl alcohol | 1.193 | 1.088 | 8.8 | 74 | 0.00 |
| 23 | C | acrylonitrile | 0.507 | 0.402 | 20.7 | 72 | 0.00 |
| 24 | | pentane | 1.214 | 0.965 | 20.5 | 68 | 0.00 |
| 25 | | ethyl ether | 0.998 | 0.747 | 25.2 | 67 | 0.00 |
| 26 | C | 1,1-dichloroethene | 1.037 | 0.951 | 8.3 | 76 | 0.00 |
| 27 | | tertiary butyl alcohol | 1.293 | 1.114 | 13.8 | 68 | 0.00 |
| 28 | C | methylene chloride | 0.851 | 0.803 | 5.6 | 77 | 0.00 |
| 29 | C | 3-chloropropene | 1.082 | 0.915 | 15.4 | 79 | 0.00 |
| 30 | C | carbon disulfide | 1.765 | 1.605 | 9.1 | 75 | 0.00 |
| 31 | | Freon 113 | 1.295 | 1.212 | 6.4 | 78 | 0.00 |
| 32 | | trans-1,2-dichloroethene | 0.977 | 0.845 | 13.5 | 69 | 0.00 |
| 33 | C | 1,1-dichloroethane | 1.147 | 1.057 | 7.8 | 77 | 0.00 |
| 34 | C | MTBE | 1.727 | 1.508 | 12.7 | 73 | 0.00 |
| 35 | C | vinyl acetate | 1.579 | 1.813 | -14.8 | 85 | 0.00 |
| 36 | C | 2-butanone | 1.486 | 1.445 | 2.8 | 74 | 0.00 |
| 37 | | cis-1,2-dichloroethene | 1.053 | 1.061 | -0.8 | 83 | 0.00 |
| 38 | | Ethyl Acetate | 0.263 | 0.238 | 9.5 | 72 | 0.00 |
| 39 | C | chloroform | 1.610 | 1.491 | 7.4 | 78 | 0.00 |
| 40 | | Tetrahydrofuran | 1.013 | 0.779 | 23.1 | 71 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 41 | | 2,2-dichloropropane | 1.421 | 1.162 | 18.2 | 68 | 0.00 |
| 42 | C | 1,2-dichloroethane | 0.876 | 0.834 | 4.8 | 74 | 0.00 |
| 43 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 79 | 0.00 |
| 44 | C | hexane | 0.656 | 0.587 | 10.5 | 74 | 0.00 |
| 45 | | diisopropyl ether | 0.301 | 0.259 | 14.0 | 68 | 0.00 |
| 46 | | tert-butyl ethyl ether | 1.012 | 0.860 | 15.0 | 66 | 0.00 |
| 48 | C | 1,1,1-trichloroethane | 0.662 | 0.624 | 5.7 | 74 | 0.00 |
| 49 | | 1,1-dichloropropene | 0.476 | 0.434 | 8.8 | 73 | 0.00 |
| 50 | C | benzene | 0.897 | 0.861 | 4.0 | 75 | 0.00 |
| 52 | C | carbon tetrachloride | 0.703 | 0.637 | 9.4 | 72 | 0.00 |
| 53 | | cyclohexane | 0.545 | 0.498 | 8.6 | 73 | 0.00 |
| 54 | | tert-amyl methyl ether | 0.898 | 0.770 | 14.3 | 68 | 0.00 |
| 55 | | dibromomethane | 0.373 | 0.344 | 7.8 | 72 | 0.00 |
| 56 | C | 1,2-dichloropropane | 0.349 | 0.336 | 3.7 | 75 | 0.00 |
| 57 | | bromodichloromethane | 0.736 | 0.708 | 3.8 | 74 | 0.00 |
| 58 | C | 1,4-dioxane | 0.207 | 0.202 | 2.4 | 73 | 0.00 |
| 59 | C | trichloroethene | 0.460 | 0.434 | 5.7 | 73 | 0.01 |
| 60 | C | 2,2,4-trimethylpentane | 1.689 | 1.568 | 7.2 | 74 | 0.00 |
| 61 | | methyl methacrylate | 0.503 | 0.434 | 13.7 | 66 | 0.00 |
| 62 | | heptane | 0.788 | 0.682 | 13.5 | 77 | 0.00 |
| 63 | C | cis-1,3-dichloropropene | 0.493 | 0.486 | 1.4 | 74 | 0.00 |
| 64 | C | 4-methyl-2-pentanone | 0.968 | 0.898 | 7.2 | 74 | 0.00 |
| 65 | | trans-1,3-dichloropropene | 0.484 | 0.408 | 15.7 | 62 | 0.00 |
| 66 | C | 1,1,2-trichloroethane | 0.409 | 0.395 | 3.4 | 77 | 0.00 |
| 67 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 77 | 0.00 |
| 68 | C | toluene | 5.175 | 4.815 | 7.0 | 75 | 0.00 |
| 71 | | 1,3-dichloropropane | 2.287 | 2.038 | 10.9 | 71 | 0.00 |
| 72 | | 2-hexanone | 3.795 | 3.639 | 4.1 | 71 | 0.00 |
| 74 | | dibromochloromethane | 3.722 | 3.322 | 10.7 | 71 | 0.00 |
| 75 | C | 1,2-dibromoethane | 3.010 | 2.836 | 5.8 | 74 | 0.00 |
| 76 | | butyl acetate | 0.528 | 0.434 | 17.8 | 62 | 0.00 |
| 77 | | octane | 1.563 | 1.299 | 16.9 | 68 | 0.00 |
| 78 | C | tetrachloroethene | 2.736 | 2.451 | 10.4 | 75 | 0.00 |
| 79 | | 1,1,1,2-tetrachloroethane | 2.512 | 2.147 | 14.5 | 68 | 0.00 |
| 80 | C | chlorobenzene | 4.394 | 4.061 | 7.6 | 72 | 0.00 |
| 81 | C | ethylbenzene | 6.738 | 6.208 | 7.9 | 73 | 0.00 |
| 83 | C | m+p-xylene | 5.312 | 4.915 | 7.5 | 74 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 84 C | bromoform | 3.653 | 3.209 | 12.2 | 68 | 0.00 |
| 85 C | styrene | 4.165 | 3.804 | 8.7 | 71 | 0.00 |
| 86 C | 1,1,2,2-tetrachloroethane | 4.117 | 4.012 | 2.6 | 78 | 0.00 |
| 87 C | o-xylene | 5.494 | 5.214 | 5.1 | 75 | 0.00 |
| 88 | 1,2,3-trichloropropane | 3.128 | 2.828 | 9.6 | 71 | 0.00 |
| 89 | nonane | 4.937 | 4.119 | 16.6 | 69 | 0.00 |
| 91 C | isopropylbenzene | 7.547 | 6.876 | 8.9 | 71 | 0.00 |
| 92 | bromobenzene | 3.887 | 3.464 | 10.9 | 71 | 0.00 |
| 93 | 2-chlorotoluene | 2.271 | 1.910 | 15.9 | 67 | 0.00 |
| 94 | n-propylbenzene | 2.373 | 2.113 | 11.0 | 70 | 0.00 |
| 95 | 4-chlorotoluene | 5.845 | 5.175 | 11.5 | 70 | 0.00 |
| 96 | 4-ethyl toluene | 8.377 | 7.375 | 12.0 | 68 | 0.00 |
| 97 | 1,3,5-trimethylbenzene | 7.321 | 6.803 | 7.1 | 75 | 0.00 |
| 98 | tert-butylbenzene | 7.762 | 6.829 | 12.0 | 69 | 0.00 |
| 99 | 1,2,4-trimethylbenzene | 6.623 | 6.356 | 4.0 | 75 | 0.00 |
| 100 | decane | 4.662 | 4.034 | 13.5 | 68 | 0.00 |
| 101 C | Benzyl Chloride | 6.037 | 5.238 | 13.2 | 66 | 0.00 |
| 102 | 1,3-dichlorobenzene | 5.065 | 4.765 | 5.9 | 73 | 0.00 |
| 103 C | 1,4-dichlorobenzene | 5.117 | 4.858 | 5.1 | 74 | 0.00 |
| 104 | sec-butylbenzene | 9.870 | 8.774 | 11.1 | 70 | 0.00 |
| 106 | p-isopropyltoluene | 9.556 | 7.782 | 18.6 | 64 | 0.00 |
| 107 | 1,2-dichlorobenzene | 4.813 | 4.531 | 5.9 | 73 | 0.00 |
| 108 | n-butylbenzene | 7.872 | 7.389 | 6.1 | 72 | 0.00 |
| 111 C | 1,2-dibromo-3-chloropropane | 2.117 | 1.841 | 13.0 | 66 | 0.00 |
| 112 | undecane | 5.263 | 4.825 | 8.3 | 68 | 0.00 |
| 114 | dodecane | 5.204 | 4.994 | 4.0 | 62 | 0.00 |
| 115 C | 1,2,4-trichlorobenzene | 4.055 | 4.024 | 0.8 | 66 | 0.00 |
| 116 | naphthalene | 10.150 | 9.394 | 7.4 | 68 | 0.00 |
| 117 | 1,2,3-trichlorobenzene | 3.812 | 3.712 | 2.6 | 66 | 0.00 |
| 119 C | hexachlorobutadiene | 3.069 | 3.167 | -3.2 | 71 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.23 | 49 | 111245 | 10.000 ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = 100.00% | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 220800 | 10.000 ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = 100.00% | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 50129 | 10.000 ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = 100.00% | | |
| System Monitoring Compounds | | | | | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 101726 | 8.654 ppbV | 99 |
| 3) propylene | 3.77 | 41 | 59015M6 | 10.183 ppbV | |
| 4) propane | 3.80 | 29 | 56143 | 7.907 ppbV | 92 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 88288 | 7.172 ppbV | 99 |
| 6) chloromethane | 4.09 | 50 | 57687 | 8.754 ppbV | 99 |
| 7) Freon-114 | 4.25 | 85 | 167616 | 9.367 ppbV | 99 |
| 8) methanol | 4.34 | 31 | 106339 | 42.524 ppbV | 95 |
| 9) vinyl chloride | 4.42 | 62 | 62000 | 9.433 ppbV | 98 |
| 10) 1,3-butadiene | 4.62 | 54 | 51108 | 9.675 ppbV | 97 |
| 11) butane | 4.69 | 43 | 96856 | 8.446 ppbV | 96 |
| 13) bromomethane | 5.01 | 94 | 62771 | 8.646 ppbV | 100 |
| 14) chloroethane | 5.28 | 64 | 28877 | 8.906 ppbV | 100 |
| 15) ethanol | 5.49 | 31 | 236000M6 | 42.680 ppbV | |
| 16) dichlorofluoromethane | 5.45 | 67 | 122793 | 8.567 ppbV | 99 |
| 17) vinyl bromide | 5.80 | 106 | 65333 | 9.304 ppbV | 99 |
| 18) acrolein | 5.98 | 56 | 23788 | 7.252 ppbV | 93 |
| 19) acetone | 6.17 | 43 | 535089 | 47.668 ppbV | 99 |
| 20) acetonitrile | 5.80 | 41 | 59877 | 8.369 ppbV | 98 |
| 21) trichlorofluoromethane | 6.40 | 101 | 166091 | 9.513 ppbV | 93 |
| 22) isopropyl alcohol | 6.56 | 45 | 121000 | 9.120 ppbV # | 97 |
| 23) acrylonitrile | 6.84 | 53 | 44758 | 7.934 ppbV | 99 |
| 24) pentane | 6.92 | 43 | 107323M4 | 7.950 ppbV | |
| 25) ethyl ether | 6.97 | 31 | 83086 | 7.485 ppbV | 92 |
| 26) 1,1-dichloroethene | 7.30 | 61 | 105818 | 9.170 ppbV | 97 |
| 27) tertiary butyl alcohol | 7.40 | 59 | 123968 | 8.621 ppbV # | 92 |
| 28) methylene chloride | 7.48 | 49 | 89315 | 9.431 ppbV | 97 |
| 29) 3-chloropropene | 7.64 | 41 | 101739 | 8.449 ppbV | 93 |
| 30) carbon disulfide | 7.82 | 76 | 178591 | 9.096 ppbV | 98 |
| 31) Freon 113 | 7.84 | 101 | 134861 | 9.359 ppbV | 93 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 94039 | 8.650 | ppbV | 97 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 117560 | 9.213 | ppbV | 100 |
| 34) MTBE | 9.06 | 73 | 167723 | 8.730 | ppbV | 97 |
| 35) vinyl acetate | 9.19 | 43 | 201641 | 11.480 | ppbV | 100 |
| 36) 2-butanone | 9.49 | 43 | 160722 | 9.723 | ppbV | 95 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 118064 | 10.081 | ppbV | 96 |
| 38) Ethyl Acetate | 10.32 | 61 | 26490 | 9.040 | ppbV | 75 |
| 39) chloroform | 10.38 | 83 | 165886 | 9.265 | ppbV | 99 |
| 40) Tetrahydrofuran | 10.86 | 42 | 86680M6 | 7.690 | ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 129224 | 8.176 | ppbV | 95 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 92805 | 9.524 | ppbV | 97 |
| 44) hexane | 10.28 | 57 | 129630 | 8.956 | ppbV | 97 |
| 45) diisopropyl ether | 10.29 | 87 | 57257 | 8.602 | ppbV | 96 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 189926 | 8.499 | ppbV | 95 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 137678 | 9.424 | ppbV | 99 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 95901 | 9.133 | ppbV | 93 |
| 50) benzene | 12.09 | 78 | 190173 | 9.603 | ppbV | 98 |
| 52) carbon tetrachloride | 12.27 | 117 | 140749 | 9.072 | ppbV | 96 |
| 53) cyclohexane | 12.41 | 56 | 109946 | 9.141 | ppbV | 94 |
| 54) tert-amyl methyl ether | 12.79 | 73 | 170010 | 8.573 | ppbV | 99 |
| 55) dibromomethane | 13.01 | 93 | 76044 | 9.240 | ppbV | 98 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 74235 | 9.628 | ppbV | 98 |
| 57) bromodichloromethane | 13.27 | 83 | 156416 | 9.627 | ppbV | 97 |
| 58) 1,4-dioxane | 13.32 | 88 | 44583 | 9.744 | ppbV | 99 |
| 59) trichloroethene | 13.32 | 130 | 95877 | 9.436 | ppbV | 95 |
| 60) 2,2,4-trimethylpentane | 13.35 | 57 | 346261 | 9.285 | ppbV | 99 |
| 61) methyl methacrylate | 13.54 | 41 | 95818 | 8.619 | ppbV | 96 |
| 62) heptane | 13.66 | 43 | 150622 | 8.660 | ppbV | 95 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 107341 | 9.860 | ppbV | 95 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 198320 | 9.278 | ppbV | 99 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 89987 | 8.425 | ppbV | 98 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 87124 | 9.641 | ppbV | 96 |
| 68) toluene | 15.37 | 91 | 241362 | 9.303 | ppbV | 100 |
| 71) 1,3-dichloropropane | 15.40 | 76 | 102144 | 8.910 | ppbV | 99 |
| 72) 2-hexanone | 15.61 | 43 | 182434 | 9.591 | ppbV # | 96 |
| 74) dibromochloromethane | 15.79 | 129 | 166546 | 8.926 | ppbV | 98 |
| 75) 1,2-dibromoethane | 16.02 | 107 | 142166 | 9.423 | ppbV | 98 |
| 76) butyl acetate | 16.18 | 73 | 21759 | 8.218 | ppbV | 95 |
| 77) octane | 16.27 | 85 | 65135 | 8.315 | ppbV | 91 |
| 78) tetrachloroethene | 16.43 | 166 | 122842 | 8.957 | ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 107621 | 8.547 | ppbV | | 96 |
| 80) | chlorobenzene | 17.00 | 112 | 203591 | 9.242 | ppbV | | 98 |
| 81) | ethylbenzene | 17.30 | 91 | 311195 | 9.213 | ppbV | | 98 |
| 83) | m+p-xylene | 17.44 | 91 | 492757M4 | 18.506 | ppbV | | |
| 84) | bromoform | 17.52 | 173 | 160840 | 8.782 | ppbV | | 97 |
| 85) | styrene | 17.72 | 104 | 190708 | 9.135 | ppbV | | 96 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 201125 | 9.745 | ppbV | | 99 |
| 87) | o-xylene | 17.80 | 91 | 261372 | 9.491 | ppbV | | 99 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 141756 | 9.042 | ppbV | | 98 |
| 89) | nonane | 17.94 | 43 | 206478 | 8.343 | ppbV | # | 98 |
| 91) | isopropylbenzene | 18.25 | 105 | 344681 | 9.111 | ppbV | | 97 |
| 92) | bromobenzene | 18.33 | 77 | 173638 | 8.912 | ppbV | | 94 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 95761 | 8.412 | ppbV | | 88 |
| 94) | n-propylbenzene | 18.63 | 120 | 105908 | 8.902 | ppbV | | 85 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 259440 | 8.855 | ppbV | | 97 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 369699M4 | 8.804 | ppbV | | |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 341022 | 9.292 | ppbV | | 98 |
| 98) | tert-butylbenzene | 19.09 | 119 | 342342 | 8.799 | ppbV | | 98 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 318620 | 9.597 | ppbV | | 96 |
| 100) | decane | 19.13 | 57 | 202233 | 8.653 | ppbV | | 98 |
| 101) | Benzyl Chloride | 19.21 | 91 | 262573 | 8.676 | ppbV | | 97 |
| 102) | 1,3-dichlorobenzene | 19.23 | 146 | 238858 | 9.408 | ppbV | | 97 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 243506 | 9.494 | ppbV | | 98 |
| 104) | sec-butylbenzene | 19.29 | 105 | 439838 | 8.890 | ppbV | | 99 |
| 106) | p-isopropyltoluene | 19.40 | 119 | 390107 | 8.143 | ppbV | | 97 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 227132 | 9.413 | ppbV | | 98 |
| 108) | n-butylbenzene | 19.73 | 91 | 370411 | 9.387 | ppbV | | 97 |
| 111) | 1,2-dibromo-3-chloropr... | 19.89 | 75 | 92268 | 8.694 | ppbV | | 94 |
| 112) | undecane | 20.10 | 57 | 241894 | 9.169 | ppbV | | 99 |
| 114) | dodecane | 21.02 | 57 | 250335 | 9.596 | ppbV | | 98 |
| 115) | 1,2,4-trichlorobenzene | 21.02 | 180 | 201737 | 9.925 | ppbV | | 99 |
| 116) | naphthalene | 21.13 | 128 | 470896 | 9.254 | ppbV | | 98 |
| 117) | 1,2,3-trichlorobenzene | 21.39 | 180 | 186100 | 9.738 | ppbV | | 97 |
| 119) | hexachlorobutadiene | 21.46 | 225 | 158760 | 10.320 | ppbV | | 99 |

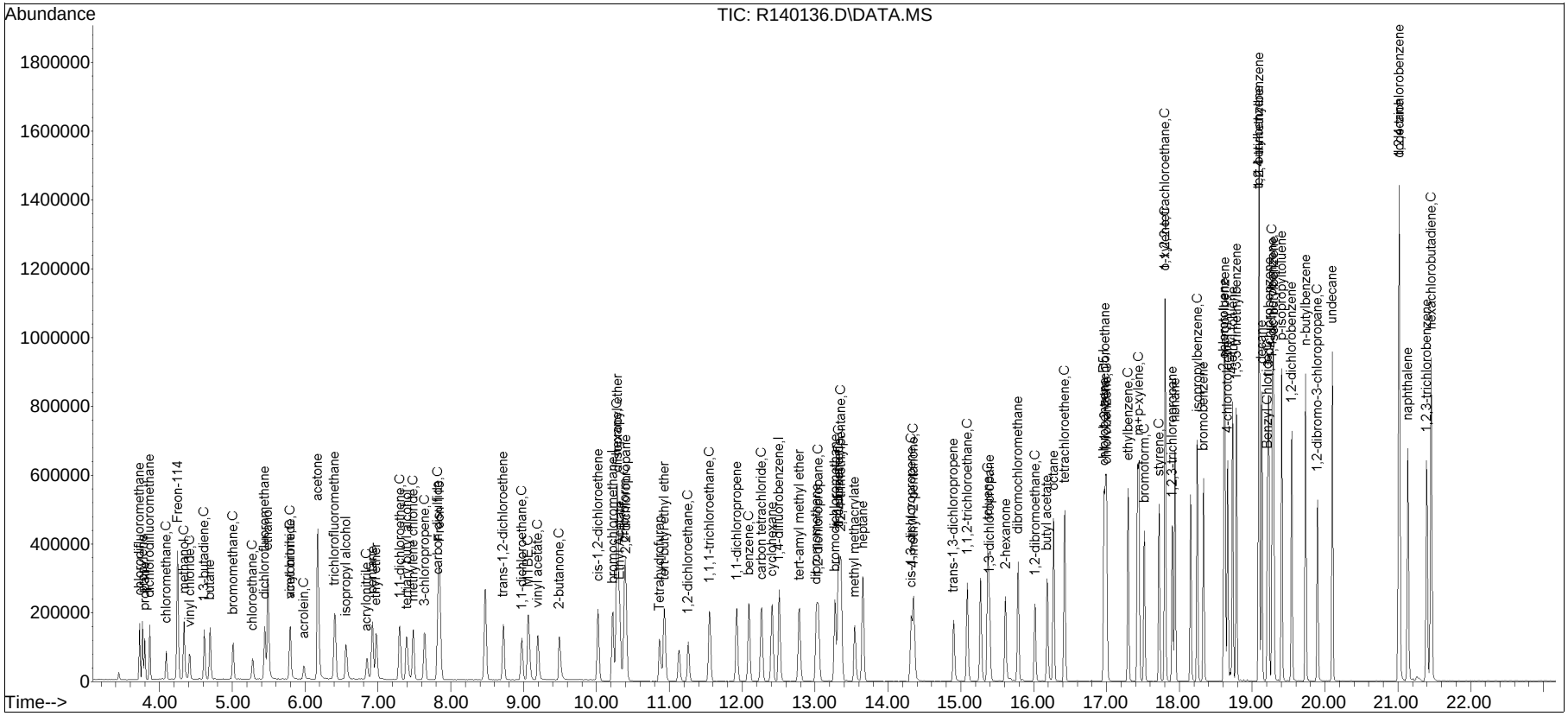
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed40136.D

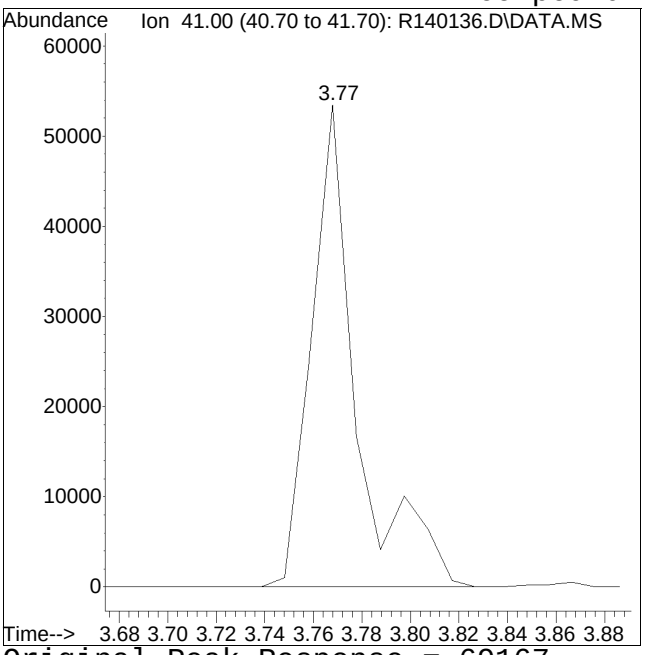


Manual Integration/Negative Proof Report

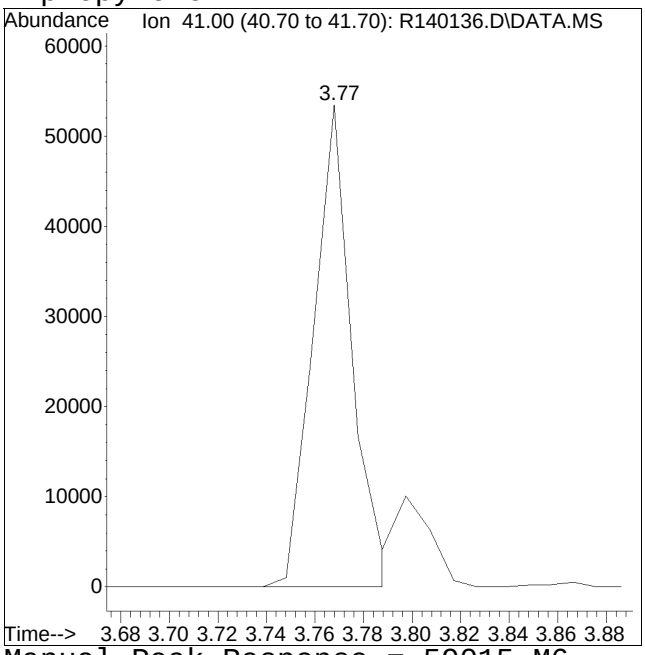
Data Path : O:\Forensics\Data\AIR1\2015\MS0311\
Data File : R140136.D
Date Inj'd : 3/11/2015 12:18 pm
Sample : WG767577-2,3,250,250

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/11/2015 12:41 pm

Compound #3: propylene




Original Peak Response = 69167



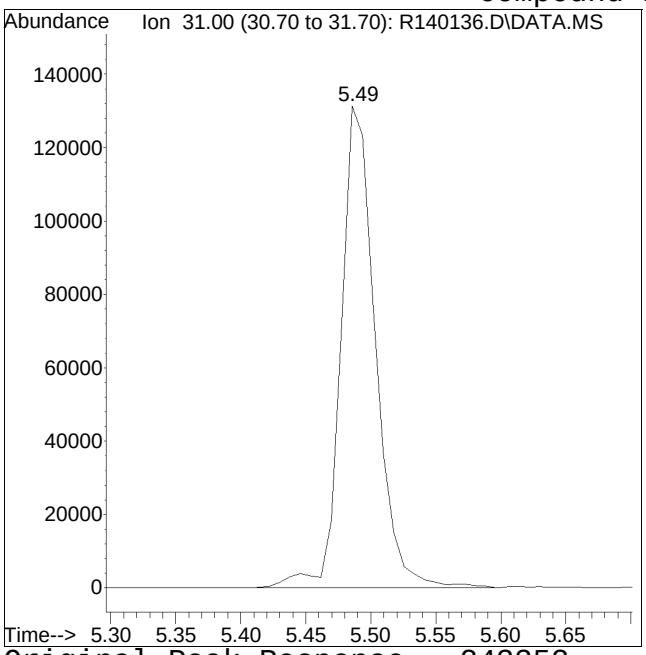

Manual Peak Response = 59015 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

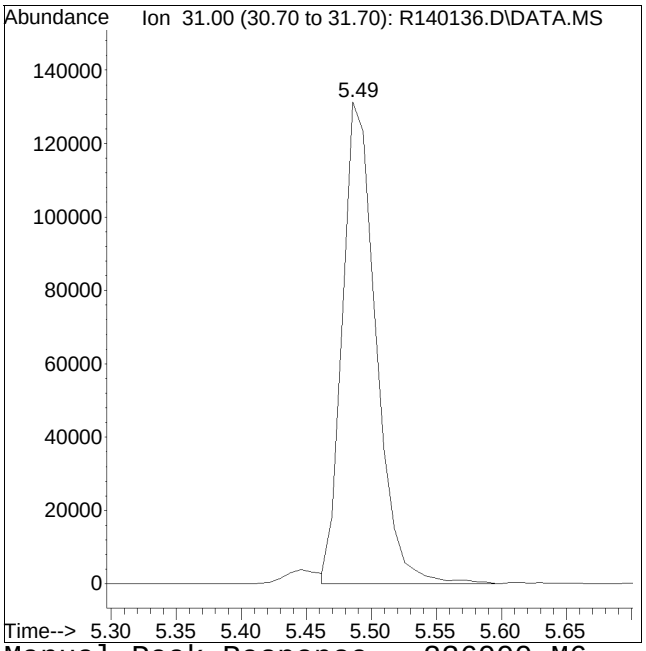
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-2,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #15: ethanol




Original Peak Response = 243352



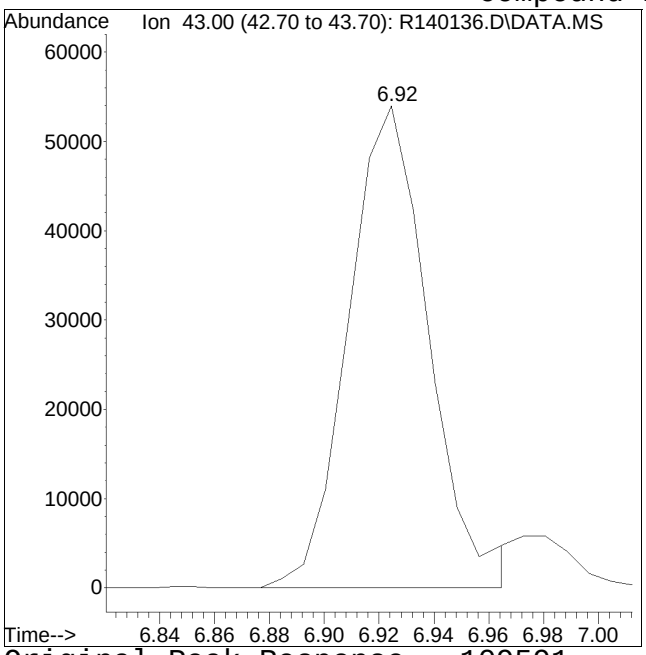

Manual Peak Response = 236000 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

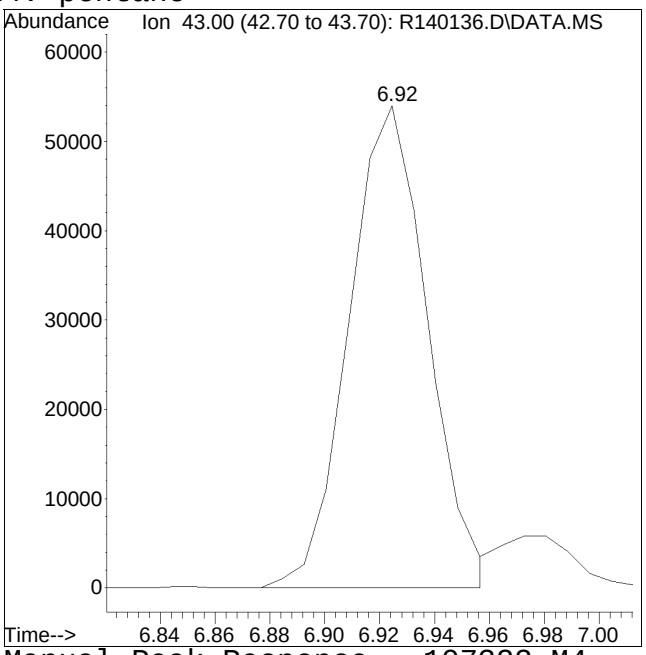
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-2,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #24: pentane




Original Peak Response = 109591



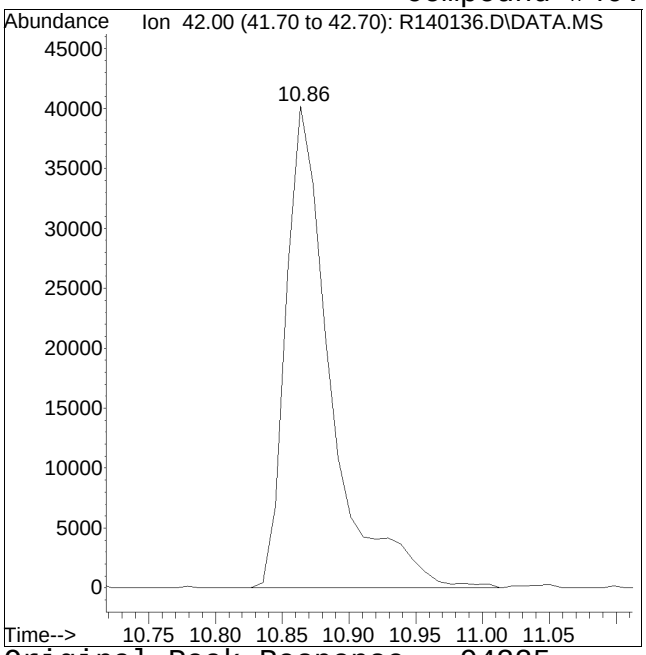

Manual Peak Response = 107323 M4

M4 = Poor automated baseline construction.

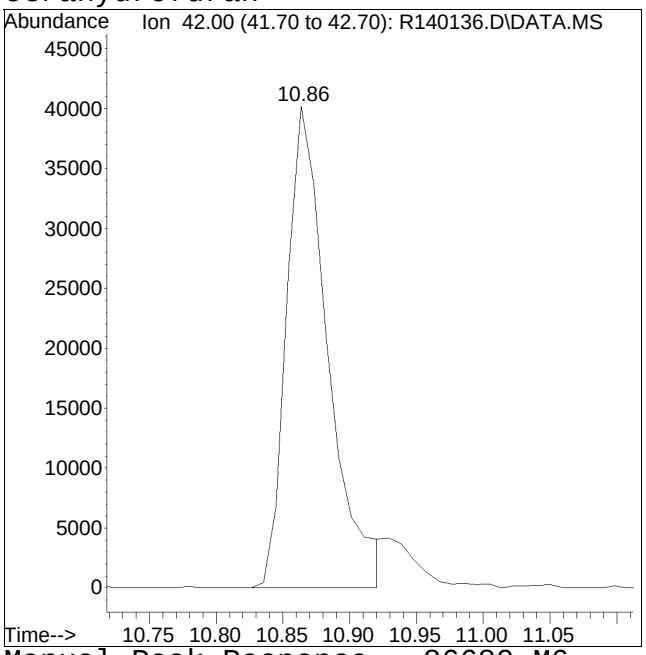
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R140136.D
Date Inj'd : 3/11/2015 12:18 pm
Sample : WG767577-2,3,250,250
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/11/2015 12:41 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 94225



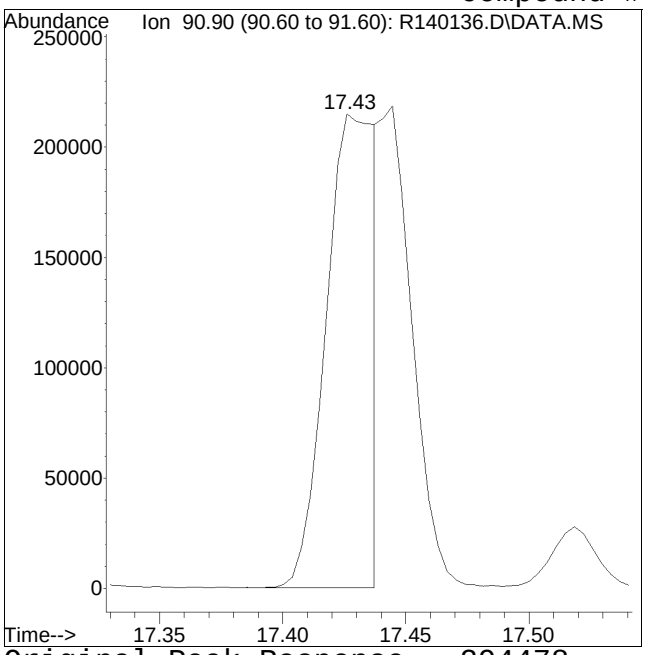

Manual Peak Response = 86680 M6

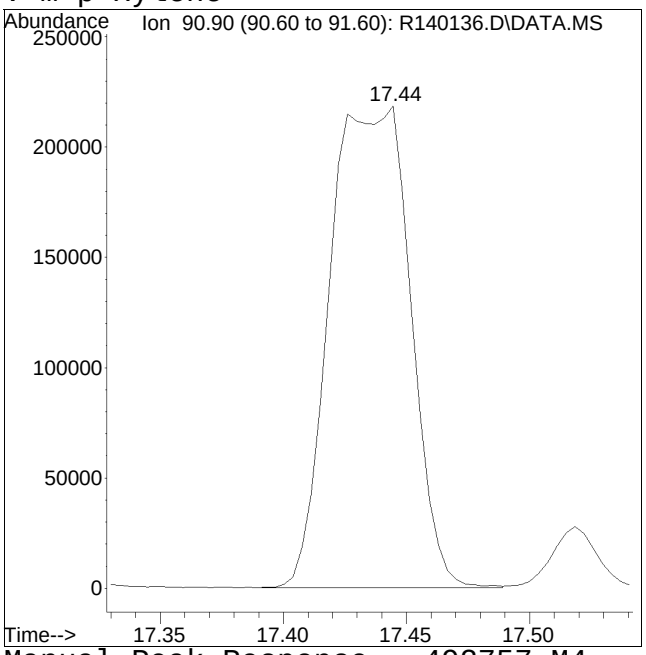
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-2,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #83: m+p-xylene



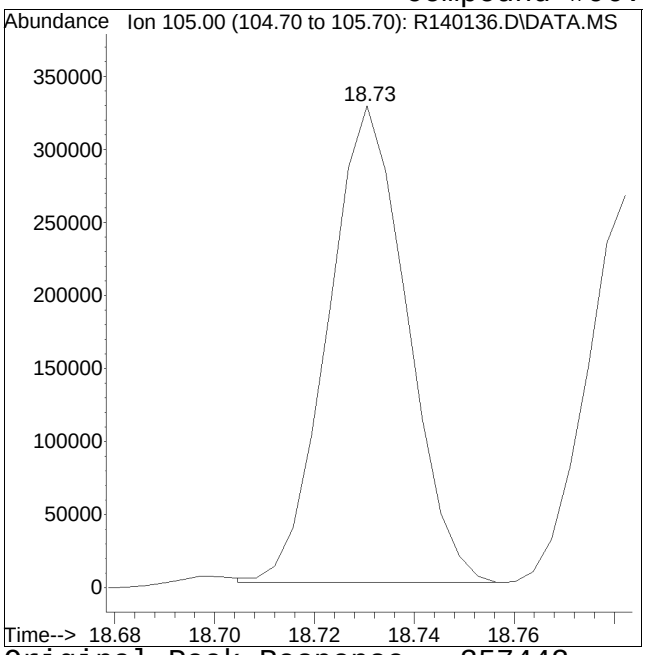




Original Peak Response = 294478 Manual Peak Response = 492757 M4
M4 = Poor automated baseline construction.

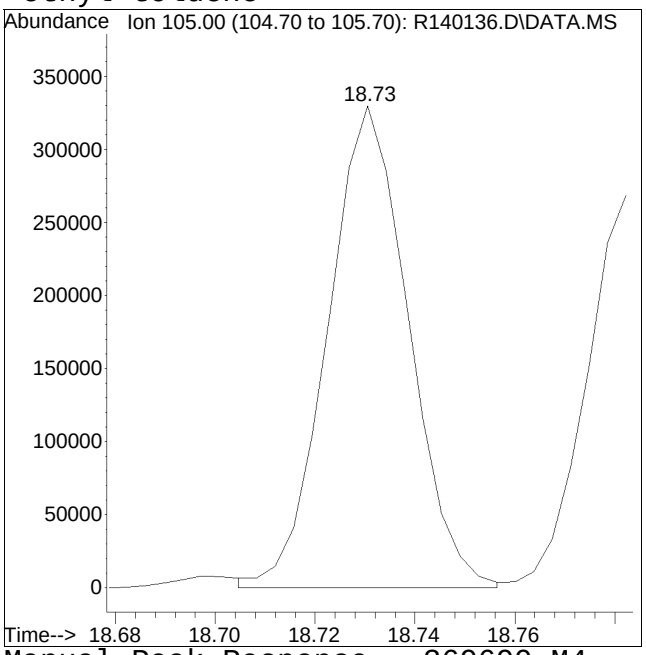
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-2,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #96: 4-ethyl toluene




Original Peak Response = 357442




Manual Peak Response = 369699 M4

M4 = Poor automated baseline construction.

# Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140146.D
Acq On : 11 Mar 2015 7:46 pm
Operator : AIRPIANO1:RY
Sample : L1504425-06,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 09:47:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 99962 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = 89.86% | | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 189549 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = 85.85% | | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 45106 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = 89.98% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 0.00 | | 0 | N.D. | | |
| 15) ethanol | 5.51 | 31 | 514 | 0.103 | ppbV | 87 |
| 17) vinyl bromide | 5.69 | | 0 | N.D. | | |
| 19) acetone | 6.21 | 43 | 1789 | 0.177 | ppbV # | 88 |
| 22) isopropyl alcohol | 6.60 | | 0 | N.D. | | |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.82 | | 0 | N.D. | | |
| 35) vinyl acetate | 9.21 | | 0 | N.D. | | |
| 36) 2-butanone | 9.60 | | 0 | N.D. | | |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | | |
| 44) hexane | 0.00 | | 0 | N.D. | | |
| 53) cyclohexane | 0.00 | | 0 | N.D. d | | |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 0.00 | | 0 | N.D. | | |
| 62) heptane | 13.70 | | 0 | N.D. | | |
| 64) 4-methyl-2-pentanone | 0.00 | | 0 | N.D. | | |
| 72) 2-hexanone | 15.59 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.73 | | 0 | N.D. | | |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | | |

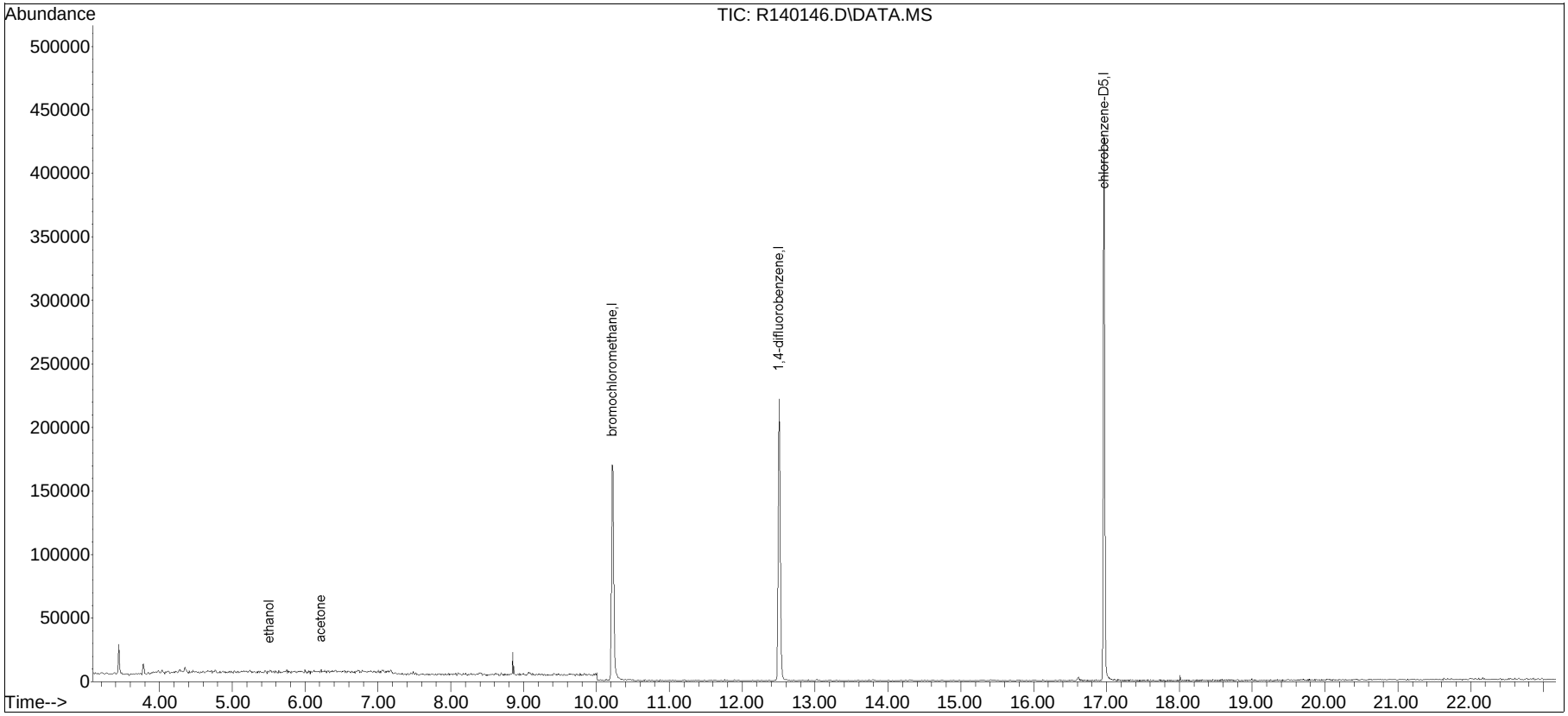
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

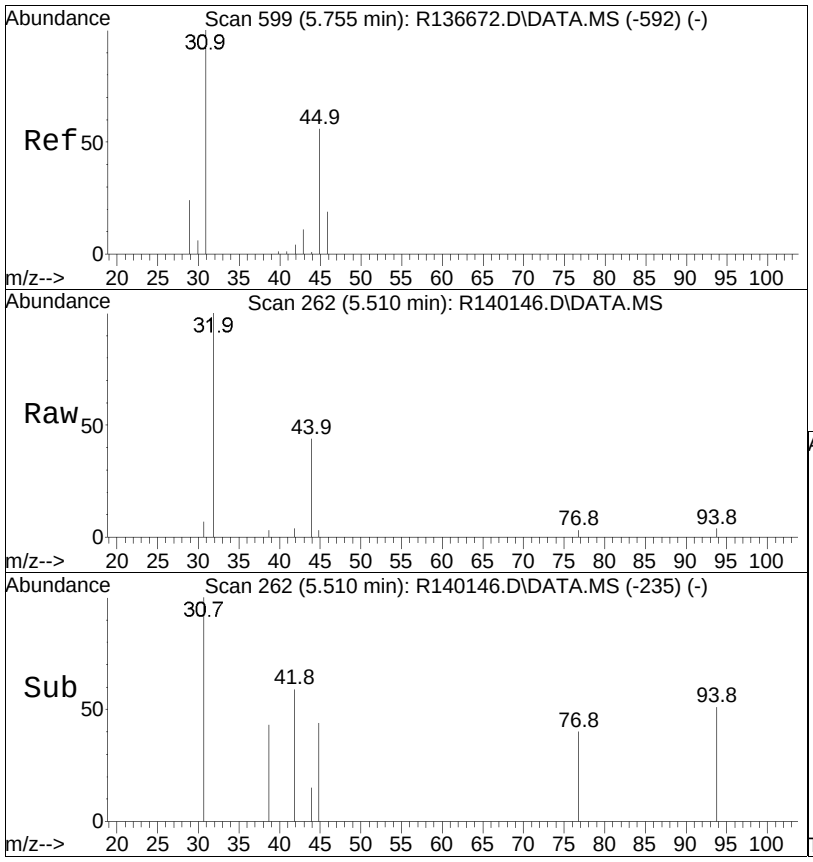
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140146.D
Acq On : 11 Mar 2015 7:46 pm
Operator : AIRPIANO1:RY
Sample : L1504425-06,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 09:47:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



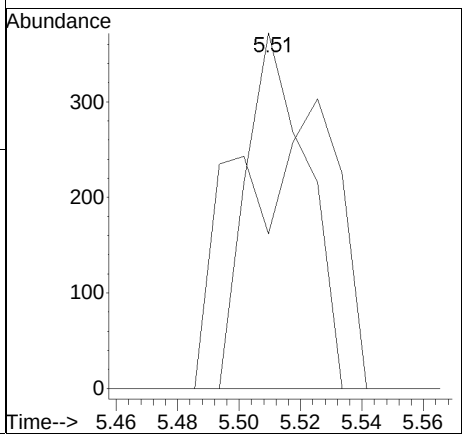

TALL150102.M Thu Mar 12 09:47:21 2015

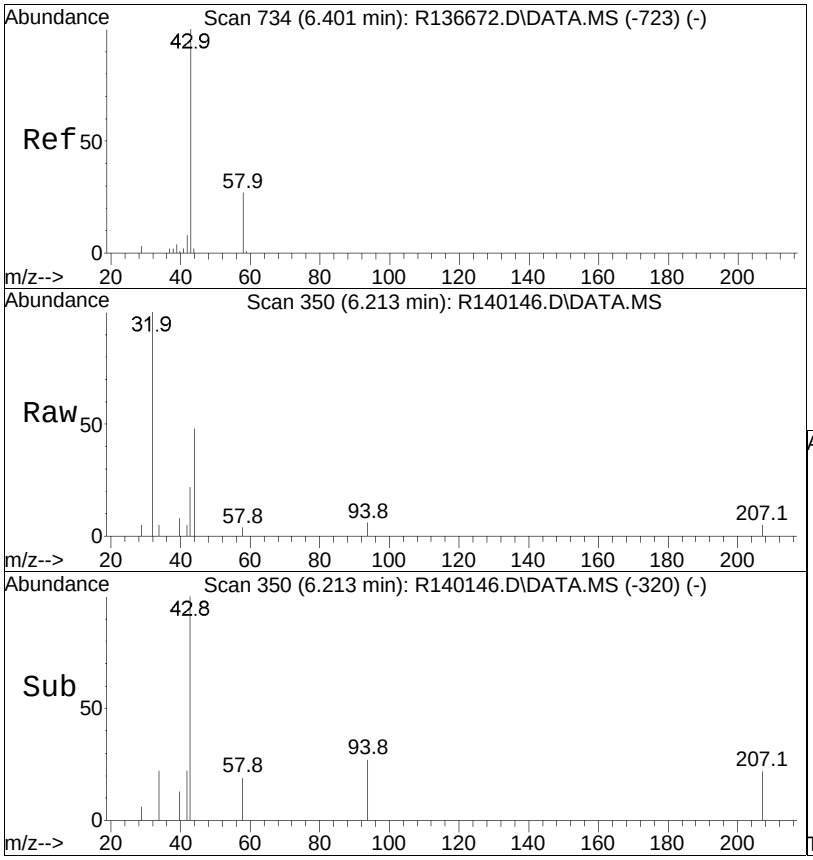



#15
ethanol
Concen: 0.10 ppbV
RT: 5.51 min Scan# 262
Delta R.T. 0.016 min
Lab File: R140146.D
Acq: 11 Mar 2015 7:46 pm

Tgt Ion: 31 Resp: 514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 43.5 | 42.0 | 63.0 |

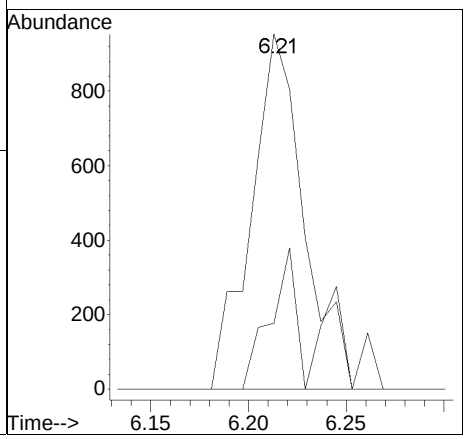





#19
acetone
Concen: 0.18 ppbV
RT: 6.21 min Scan# 350
Delta R.T. 0.040 min
Lab File: R140146.D
Acq: 11 Mar 2015 7:46 pm

Tgt Ion: 43 Resp: 1789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 18.6 | 19.9 | 29.9# |
| 57 | 0.0 | 0.6 | 0.8# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TALL150102.M |
| Data File | : R140146.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 7:46 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-06,3,250,250 | Quant Date | : 3/12/2015 7:56 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140147.D
Acq On : 11 Mar 2015 8:19 pm
Operator : AIRPIANO1:RY
Sample : L1504425-11,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:48:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.23 | 49 | 102690 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 92.31% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 209493 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 94.88% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 47556 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 94.87% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.89 | | 0 | N.D. | | |
| 15) ethanol | 5.51 | 31 | 3481 | 0.682 | ppbV # | 77 |
| 17) vinyl bromide | 5.83 | | 0 | N.D. | | |
| 19) acetone | 6.21 | 43 | 2822 | 0.272 | ppbV # | 98 |
| 22) isopropyl alcohol | 0.00 | | 0 | N.D. | d | |
| 29) 3-chloropropene | 7.55 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.82 | | 0 | N.D. | | |
| 35) vinyl acetate | 9.20 | | 0 | N.D. | | |
| 36) 2-butanone | 9.56 | 43 | 1406 | 0.092 | ppbV # | 63 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | | |
| 44) hexane | 10.15 | | 0 | N.D. | | |
| 53) cyclohexane | 0.00 | | 0 | N.D. | d | |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 0.00 | | 0 | N.D. | | |
| 62) heptane | 0.00 | | 0 | N.D. | | |
| 64) 4-methyl-2-pentanone | 14.35 | | 0 | N.D. | | |
| 72) 2-hexanone | 15.61 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.74 | | 0 | N.D. | | |
| 101) Benzyl Chloride | 19.10 | | 0 | N.D. | | |

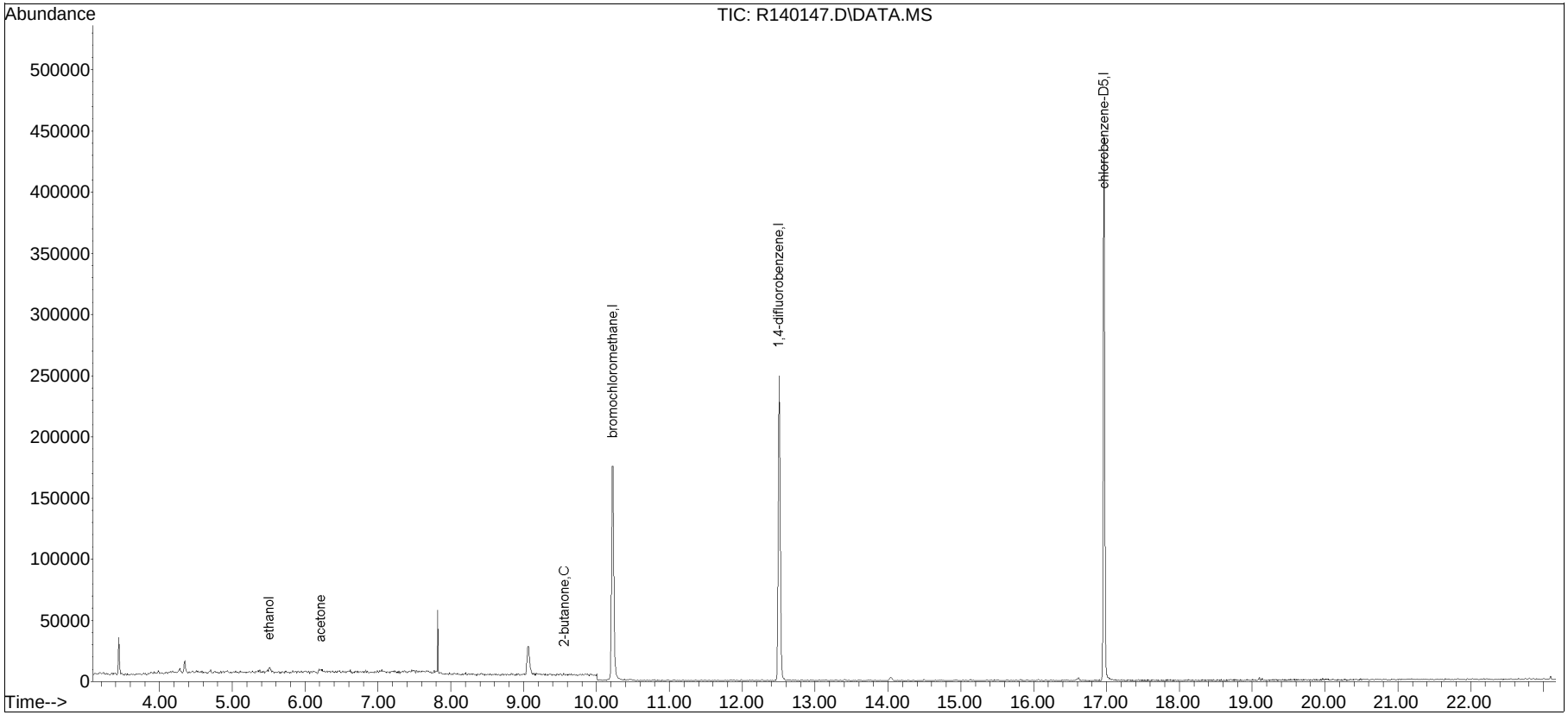
(#) = qualifier out of range (m) = manual integration (+) = signals summed

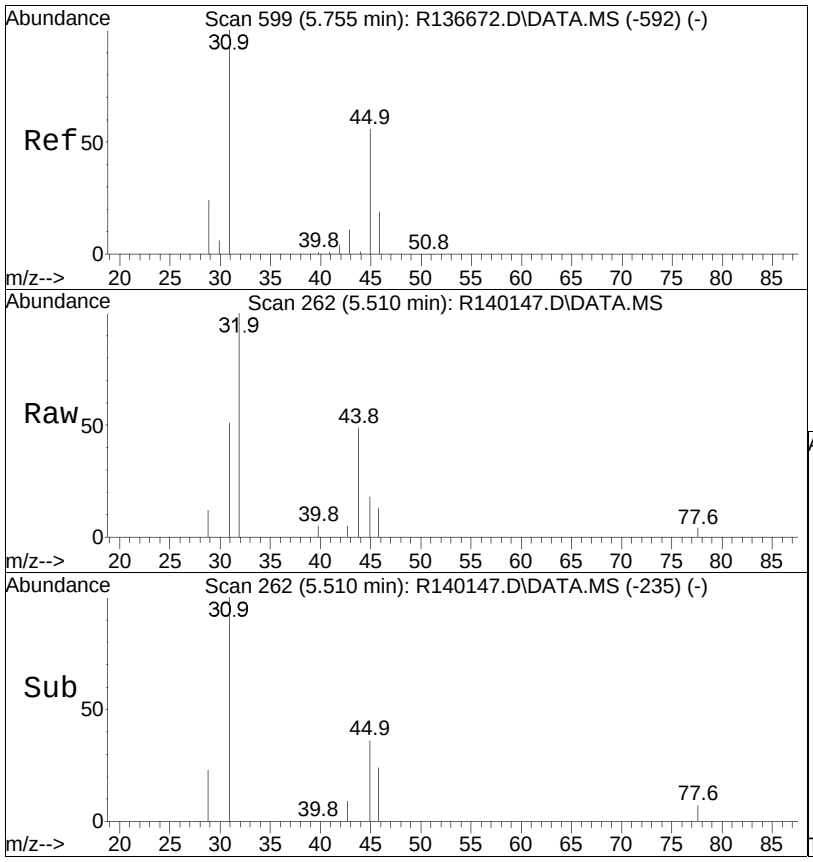
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140147.D
Acq On : 11 Mar 2015 8:19 pm
Operator : AIRPIANO1:RY
Sample : L1504425-11,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:48:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D

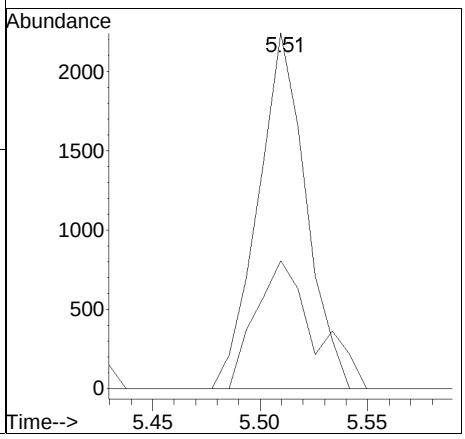


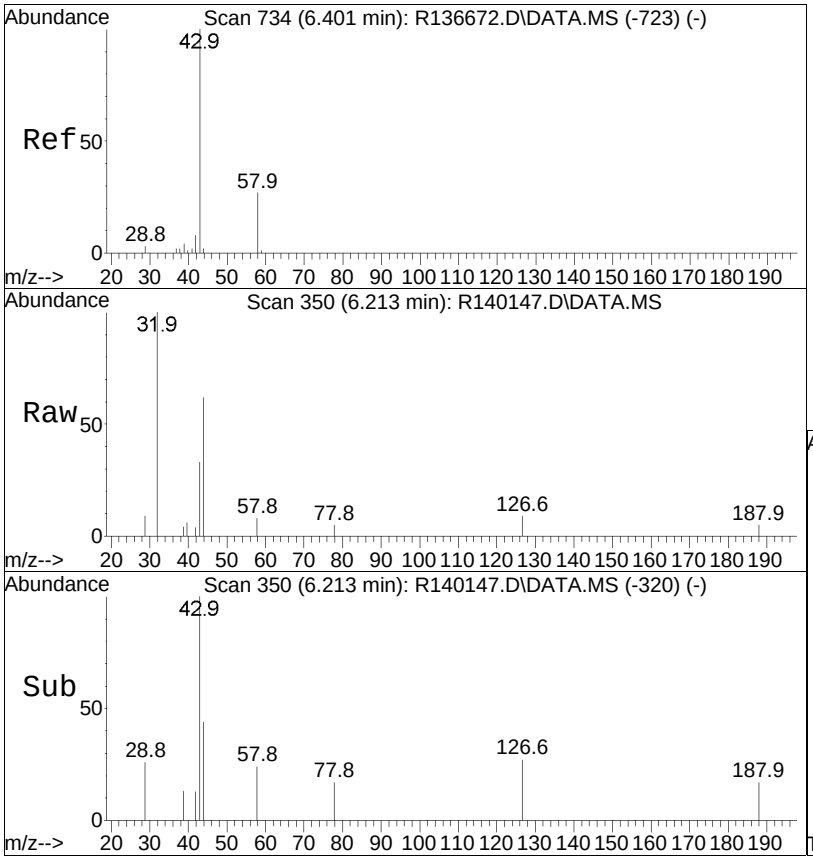



#15
ethanol
Concen: 0.68 ppbV
RT: 5.51 min Scan# 262
Delta R.T. 0.016 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion: 31 Resp: 3481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 36.0 | 42.0 | 63.0# |

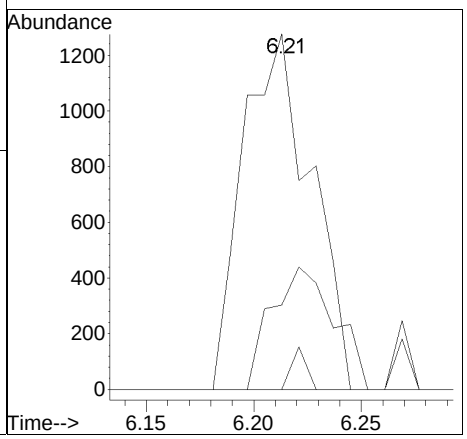


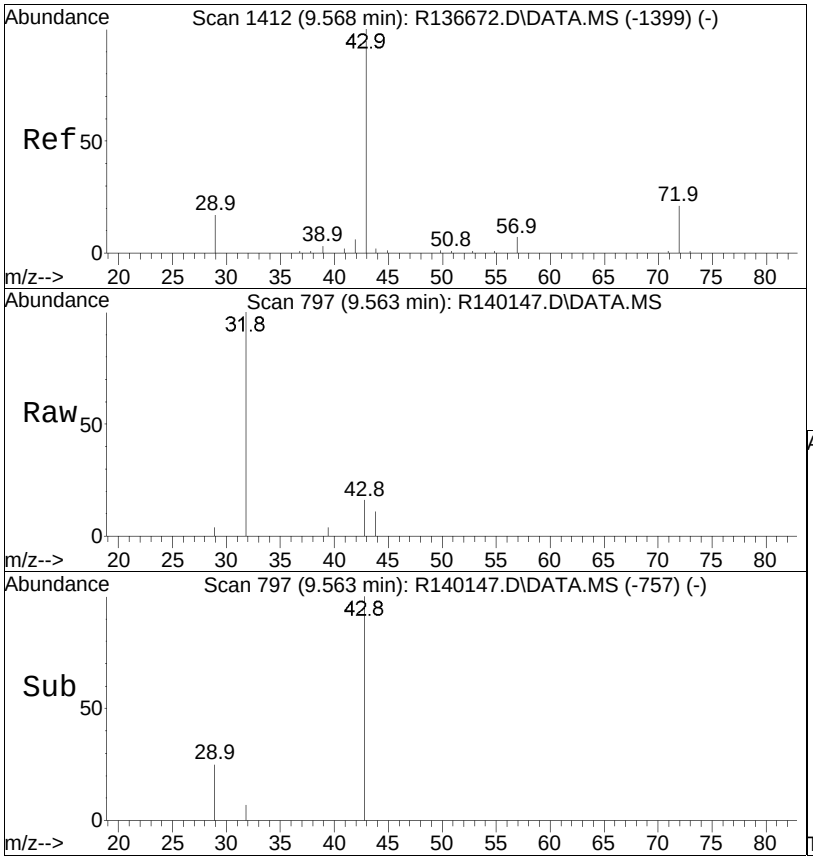



#19
acetone
Concen: 0.27 ppbV
RT: 6.21 min Scan# 350
Delta R.T. 0.040 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion: 43 Resp: 2822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 23.7 | 19.9 | 29.9 |
| 57 | 0.0 | 0.6 | 0.8# |

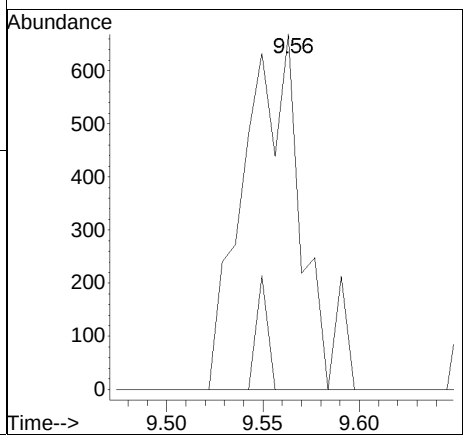





#36
2-butanone
Concen: 0.09 ppbV
RT: 9.56 min Scan# 797
Delta R.T. 0.075 min
Lab File: R140147.D
Acq: 11 Mar 2015 8:19 pm

Tgt Ion: 43 Resp: 1406

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 0.0 | 15.6 | 23.4# |
| 57 | 0.0 | 4.6 | 7.0# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TALL150102.M |
| Data File | : R140147.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 8:19 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-11,3,250,250 | Quant Date | : 3/12/2015 7:56 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140148.D
Acq On : 11 Mar 2015 8:51 pm
Operator : AIRPIANO1:RY
Sample : L1504425-01,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 09:49:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 93068 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 83.66% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 183438 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 83.08% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 42567 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 84.91% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 1389 | 0.286 | ppbV # | 50 |
| 15) ethanol | 5.50 | 31 | 13671 | 2.955 | ppbV # | 85 |
| 17) vinyl bromide | 5.84 | | 0 | N.D. | | |
| 19) acetone | 6.20 | 43 | 21970 | 2.339 | ppbV # | 97 |
| 22) isopropyl alcohol | 0.00 | | 0 | N.D. | d | |
| 29) 3-chloropropene | 7.56 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.82 | | 0 | N.D. | | |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.56 | 43 | 2036 | 0.147 | ppbV # | 63 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | | |
| 44) hexane | 10.28 | 57 | 854 | 0.071 | ppbV # | 20 |
| 53) cyclohexane | 12.41 | | 0 | N.D. | | |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 13.34 | | 0 | N.D. | | |
| 62) heptane | 13.68 | | 0 | N.D. | | |
| 64) 4-methyl-2-pentanone | 14.38 | | 0 | N.D. | | |
| 72) 2-hexanone | 15.55 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.74 | | 0 | N.D. | | |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | | |

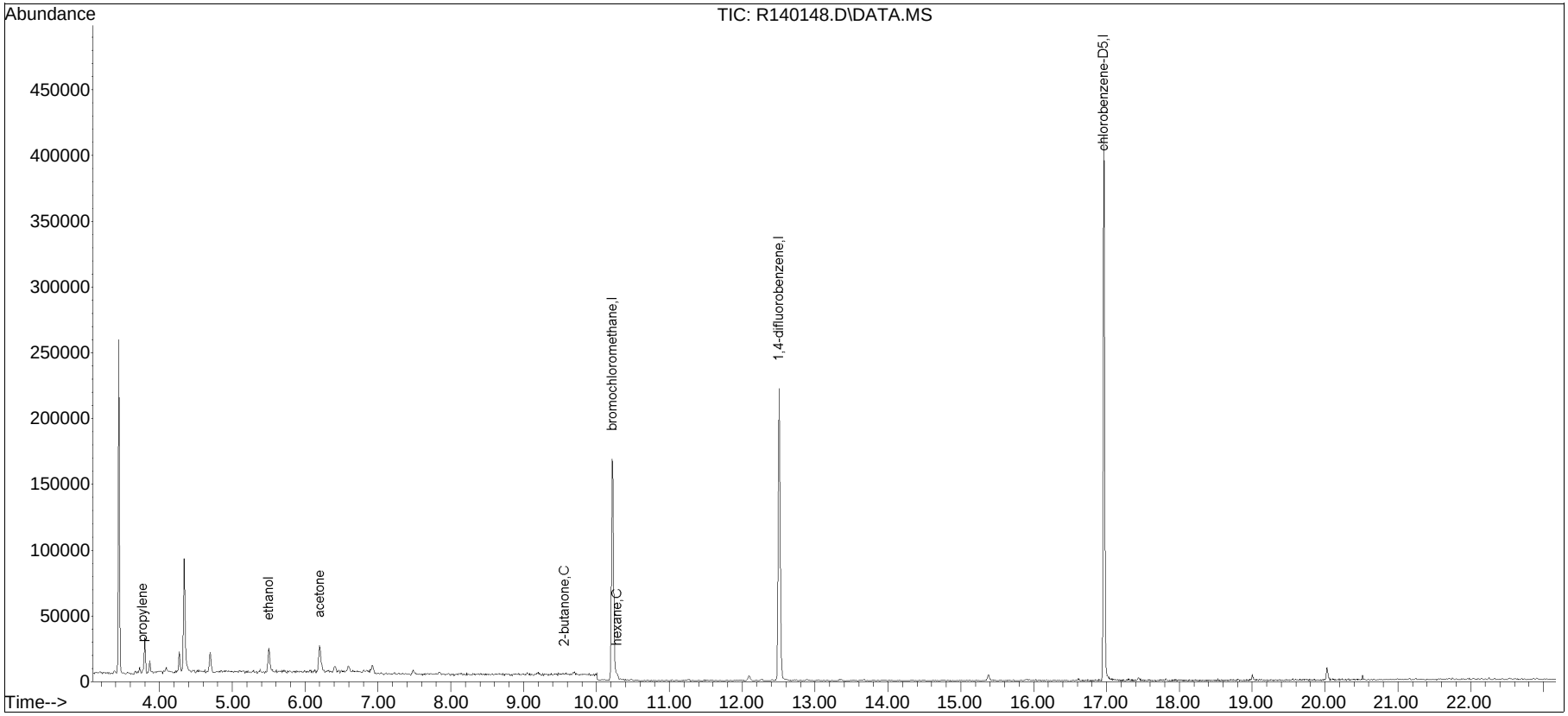
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

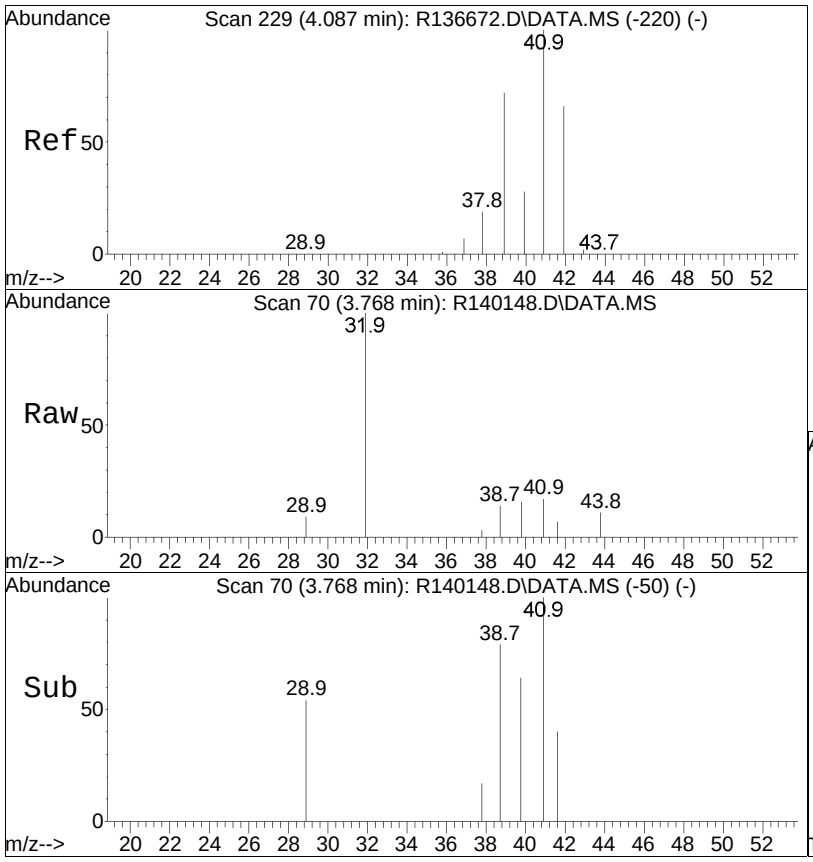
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140148.D
Acq On : 11 Mar 2015 8:51 pm
Operator : AIRPIANO1:RY
Sample : L1504425-01,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 09:49:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



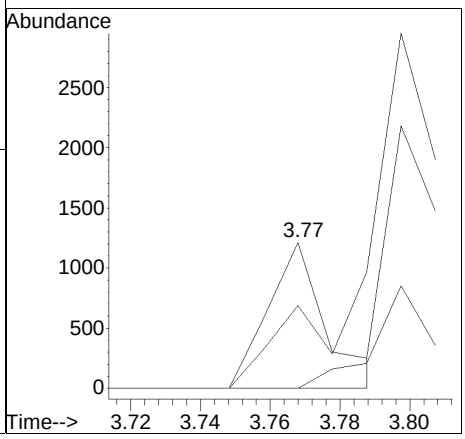

TALL150102.M Thu Mar 12 09:49:19 2015

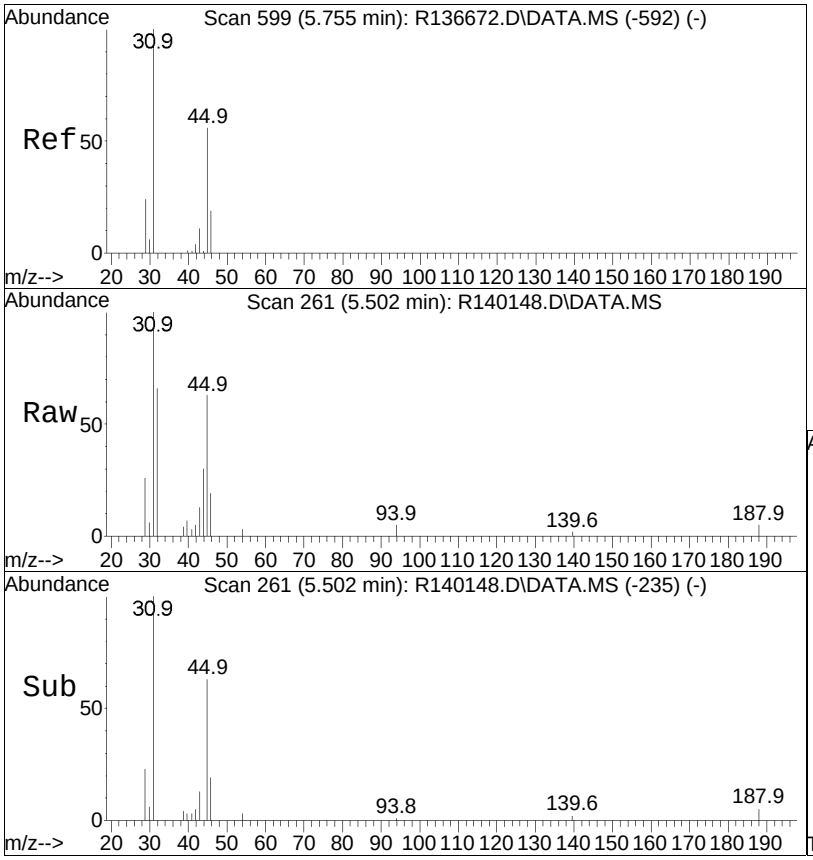



#3
propylene
Concen: 0.29 ppbV
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 41 Resp: 1389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 0.0 | 52.7 | 79.1# |
| 39 | 56.8 | 59.6 | 89.4# |

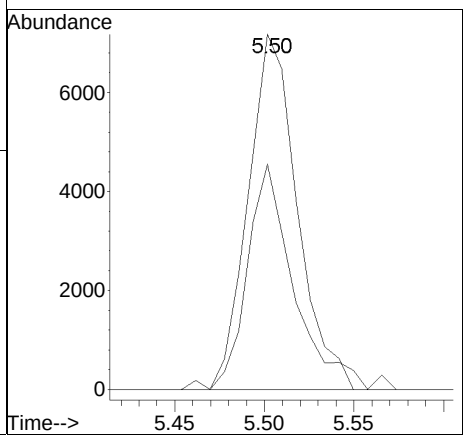


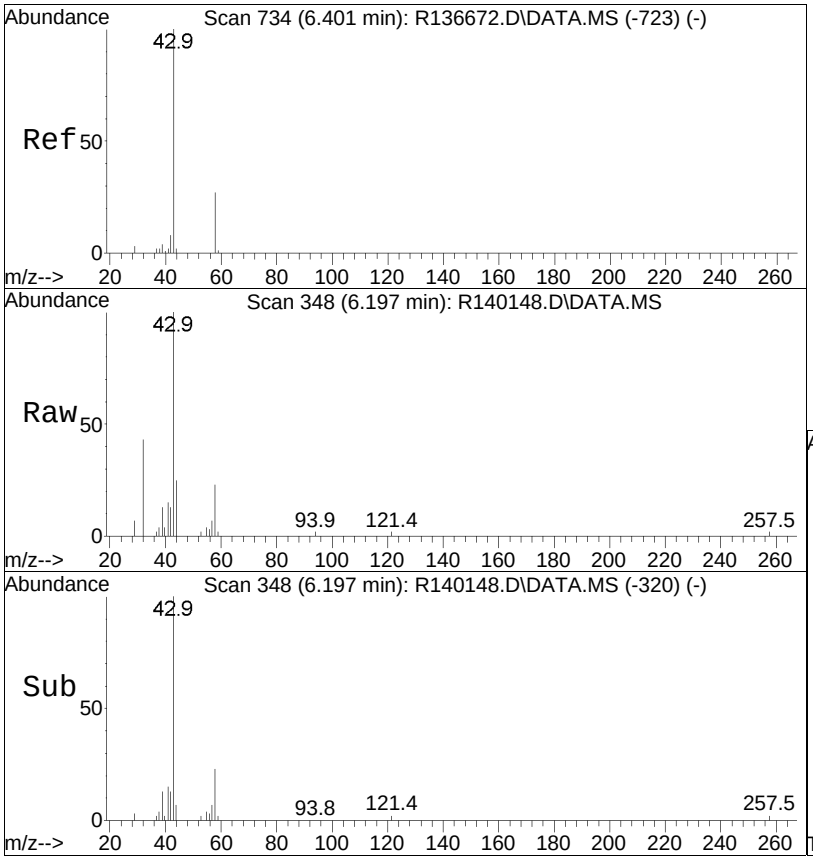



#15
ethanol
Concen: 2.96 ppbV
RT: 5.50 min Scan# 261
Delta R.T. 0.008 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 31 Resp: 13671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 63.4 | 42.0 | 63.0# |

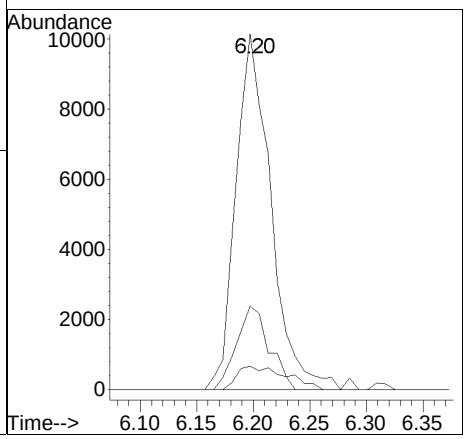


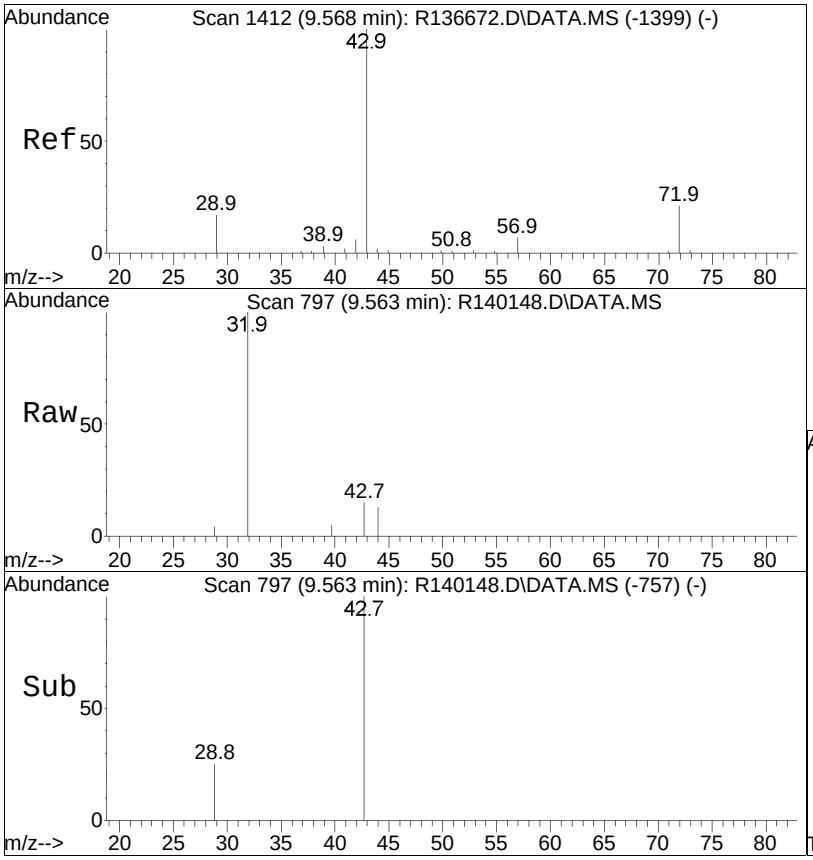



#19
acetone
Concen: 2.34 ppbV
RT: 6.20 min Scan# 348
Delta R.T. 0.024 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 43 Resp: 21970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 23.4 | 19.9 | 29.9 |
| 57 | 6.5 | 0.6 | 0.8# |

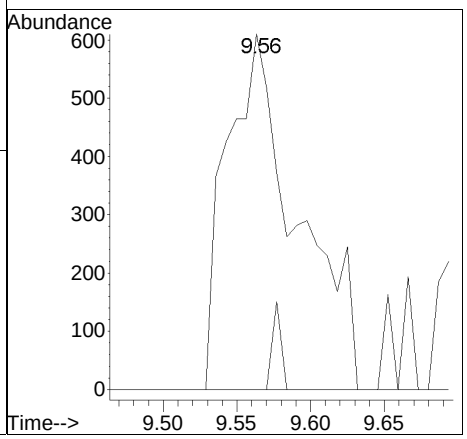


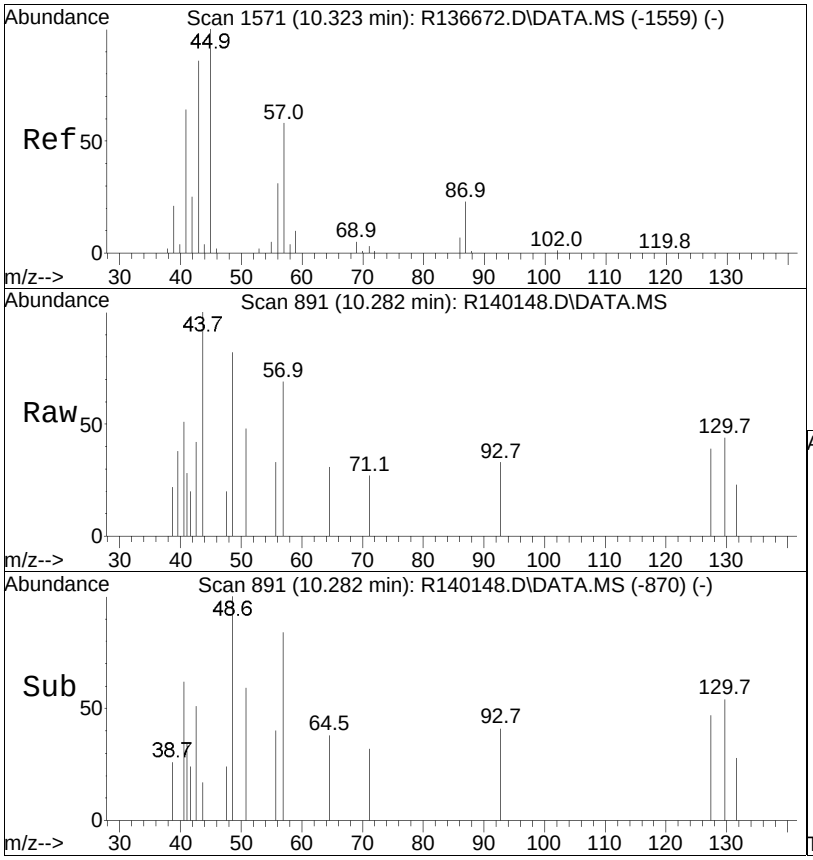



#36
2-butanone
Concen: 0.15 ppbV
RT: 9.56 min Scan# 797
Delta R.T. 0.076 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 43 Resp: 2036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 0.0 | 15.6 | 23.4# |
| 57 | 0.0 | 4.6 | 7.0# |

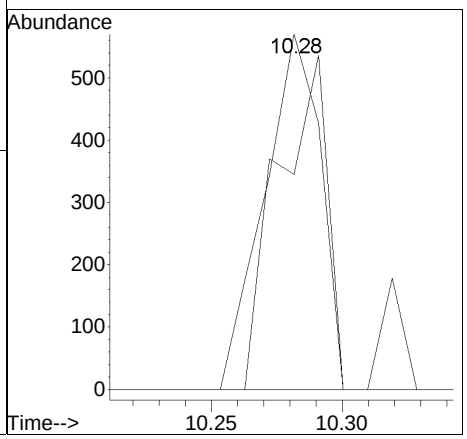





#44
hexane
Concen: 0.07 ppbV
RT: 10.28 min Scan# 891
Delta R.T. 0.000 min
Lab File: R140148.D
Acq: 11 Mar 2015 8:51 pm

Tgt Ion: 57 Resp: 854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 60.5 | 141.8 | 212.8# |
| 86 | 0.0 | 10.0 | 15.0# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TALL150102.M |
| Data File | : R140148.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 8:51 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-01,3,250,250 | Quant Date | : 3/12/2015 7:56 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140149.D
Acq On : 11 Mar 2015 9:23 pm
Operator : AIRPIANO1:RY
Sample : L1504425-02,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 09:50:02 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 98605 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 88.64% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 188189 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 85.23% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 44984 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 89.74% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 1195M6 | 0.233 | ppbV | |
| 15) ethanol | 5.49 | 31 | 182497 | 37.234 | ppbV | 97 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.18 | 43 | 105584 | 10.612 | ppbV | 96 |
| 22) isopropyl alcohol | 6.56 | 45 | 360262 | 30.635 | ppbV | 98 |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | d | |
| 30) carbon disulfide | 7.83 | | 0 | N.D. | | |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.52 | 43 | 5563 | 0.380 | ppbV # | 93 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 10.77 | | 0 | N.D. | | |
| 44) hexane | 10.28 | 57 | 1598 | 0.130 | ppbV # | 35 |
| 53) cyclohexane | 12.41 | 56 | 2459 | 0.240 | ppbV # | 83 |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 13.36 | | 0 | N.D. | | |
| 62) heptane | 13.66 | 43 | 1635 | 0.110 | ppbV # | 63 |
| 64) 4-methyl-2-pentanone | 14.41 | | 0 | N.D. | | |
| 72) 2-hexanone | 0.00 | | 0 | N.D. | d | |
| 96) 4-ethyl toluene | 18.73 | 105 | 28749 | 0.763 | ppbV # | 95 |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | d | |

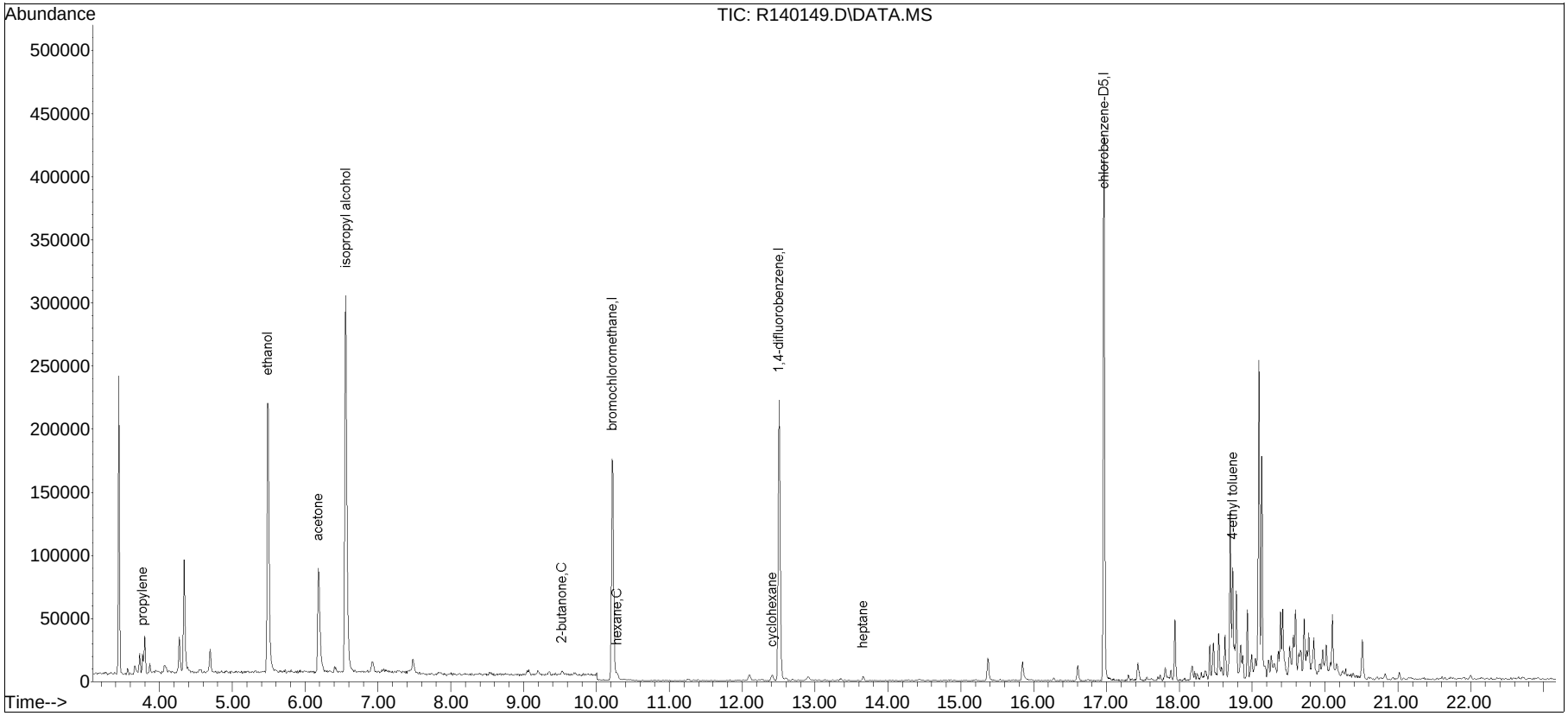
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

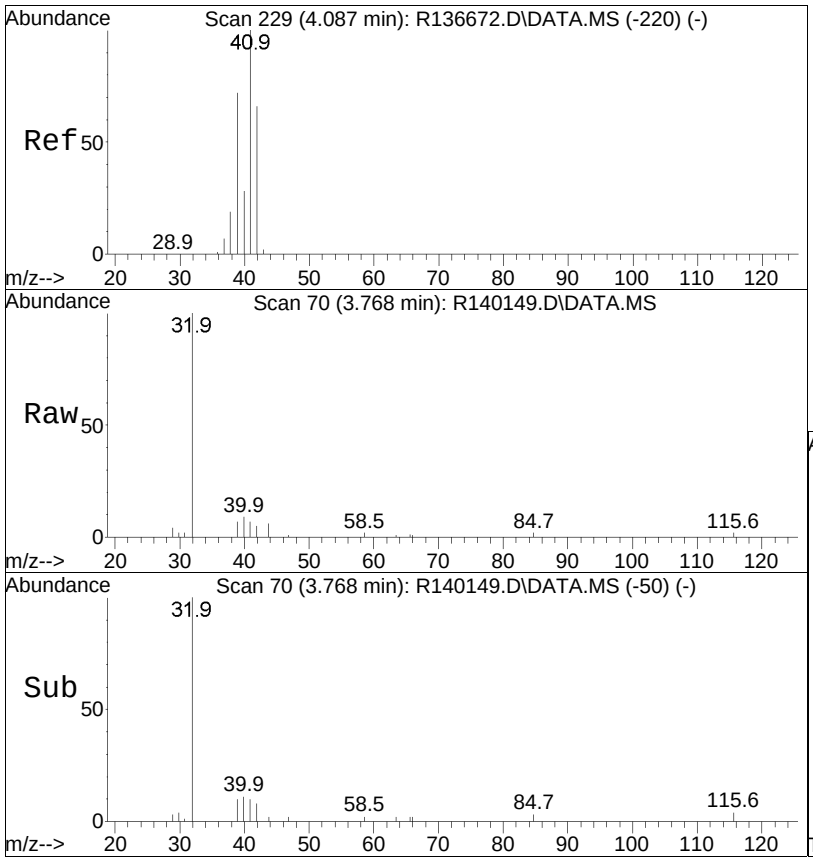
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140149.D
Acq On : 11 Mar 2015 9:23 pm
Operator : AIRPIANO1:RY
Sample : L1504425-02,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 09:50:02 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



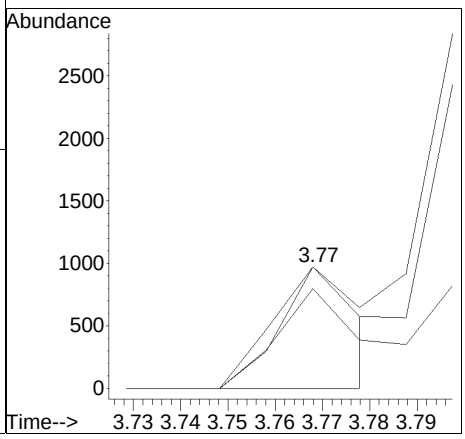

TALL150102.M Thu Mar 12 09:50:08 2015

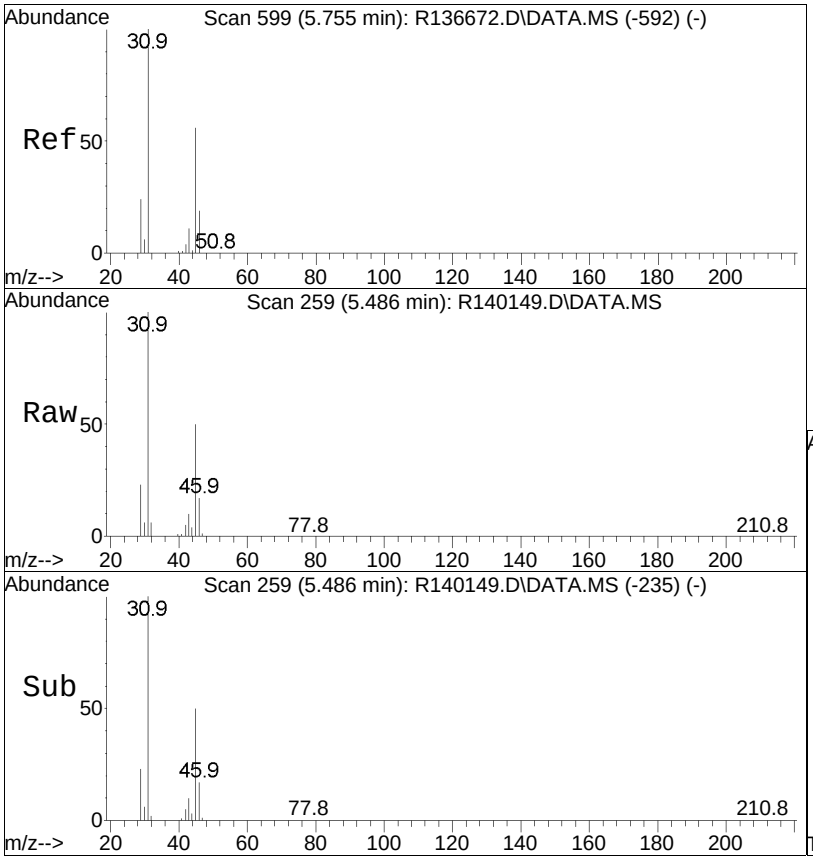



#3
propylene
Concen: 0.23 ppbV m
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 41 Resp: 1195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 82.1 | 52.7 | 79.1# |
| 39 | 99.9 | 59.6 | 89.4# |

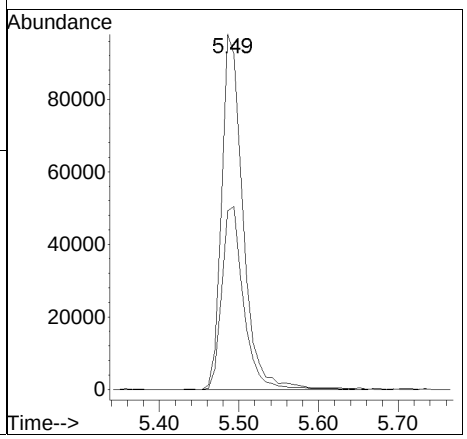


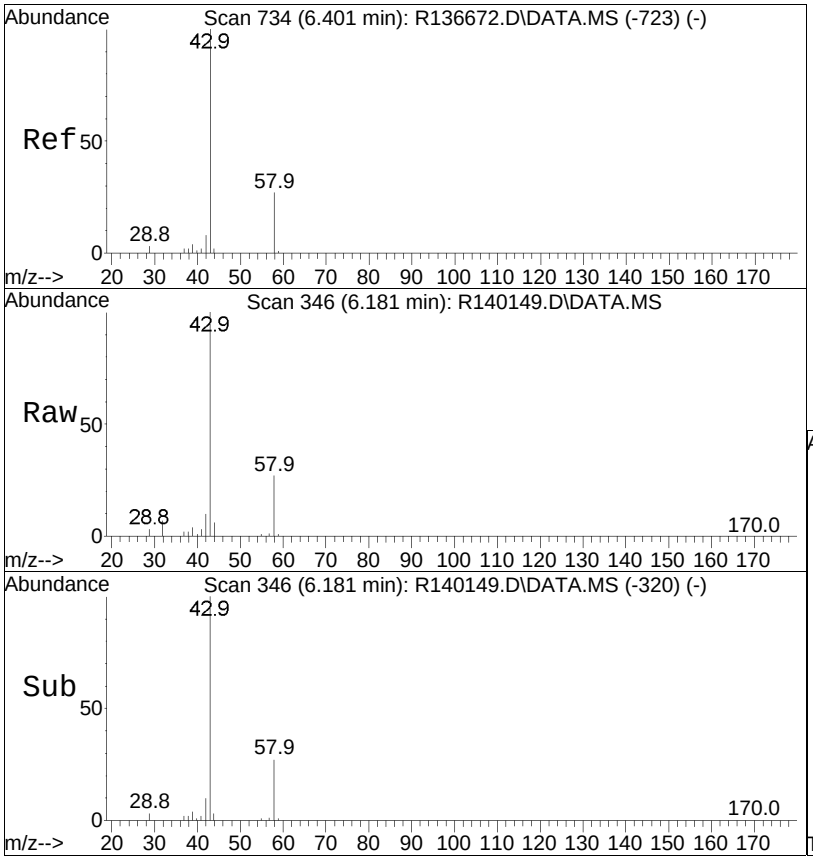



#15
ethanol
Concen: 37.23 ppbV
RT: 5.49 min Scan# 259
Delta R.T. -0.008 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 31 Resp: 182497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 50.3 | 42.0 | 63.0 |

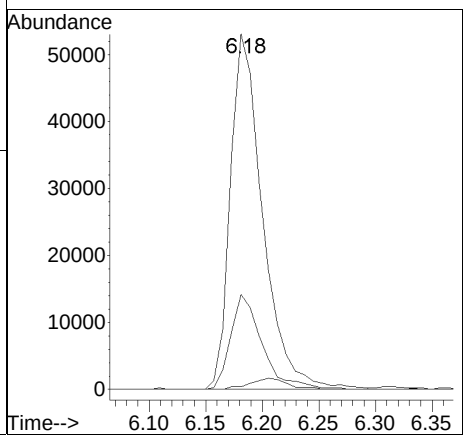


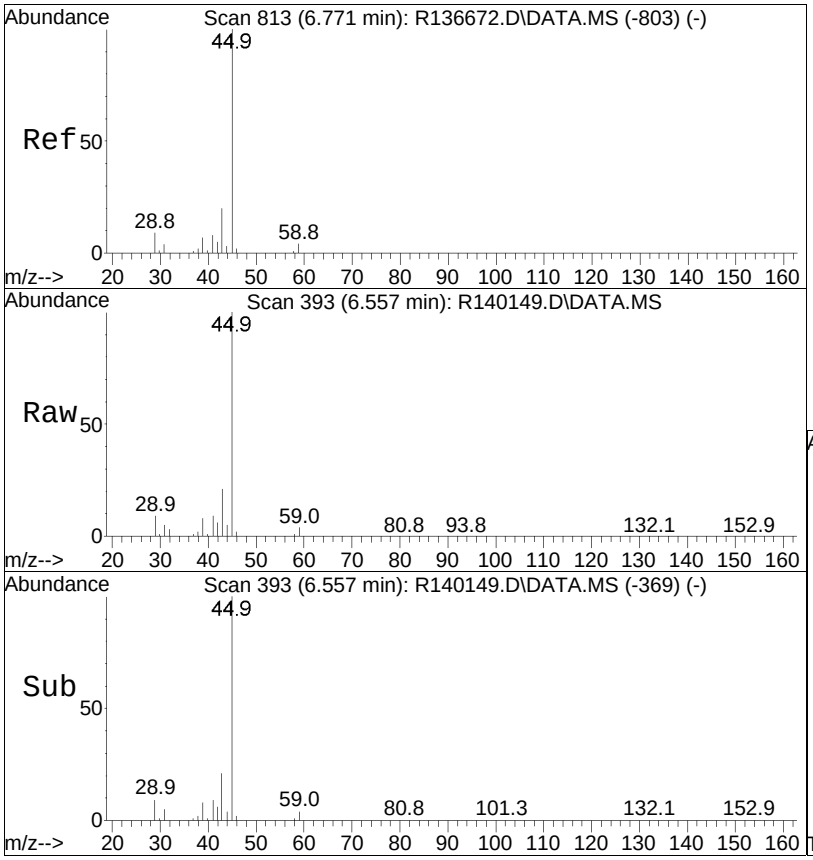



#19
acetone
Concen: 10.61 ppbV
RT: 6.18 min Scan# 346
Delta R.T. 0.008 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 43 Resp: 105584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.7 | 19.9 | 29.9 |
| 57 | 0.7 | 0.6 | 0.8 |

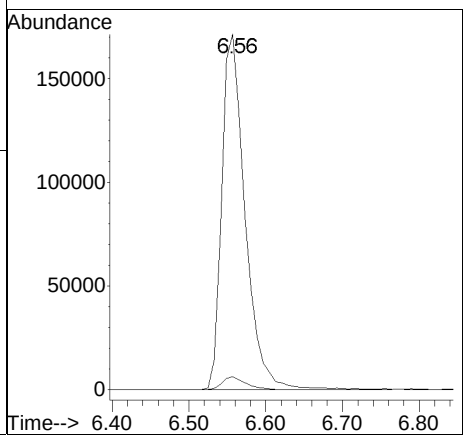


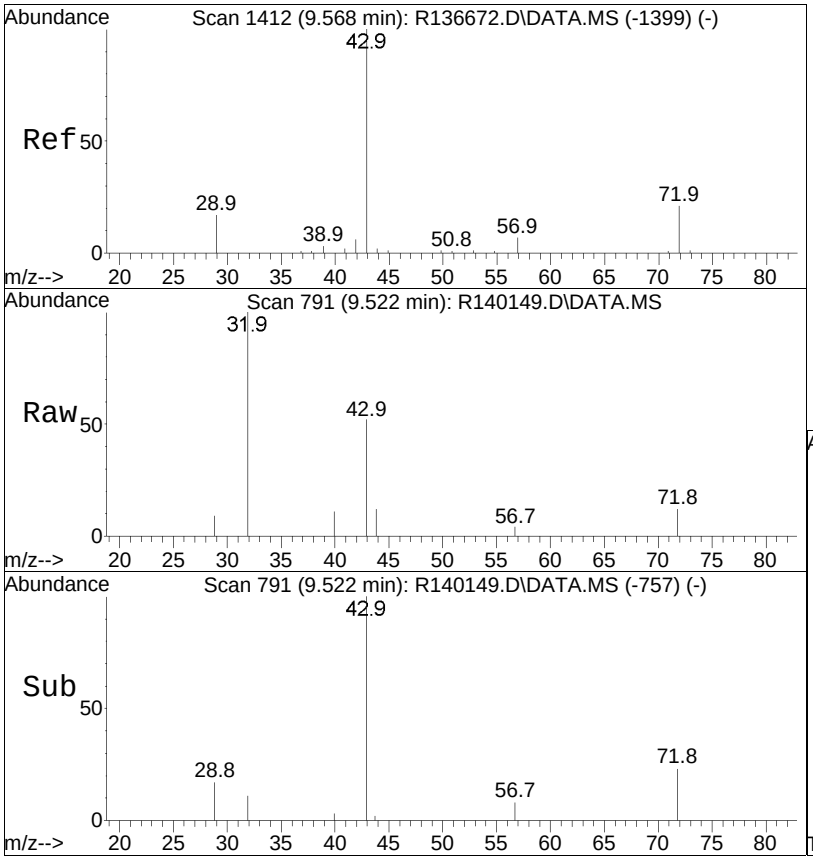



#22
isopropyl alcohol
Concen: 30.64 ppbV
RT: 6.56 min Scan# 393
Delta R.T. -0.008 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 45 Resp: 360262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 3.6 | 2.5 | 3.7 |

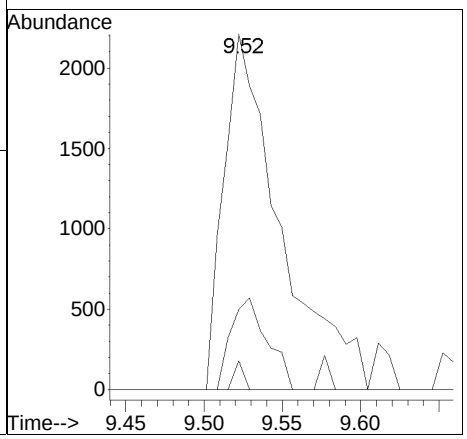


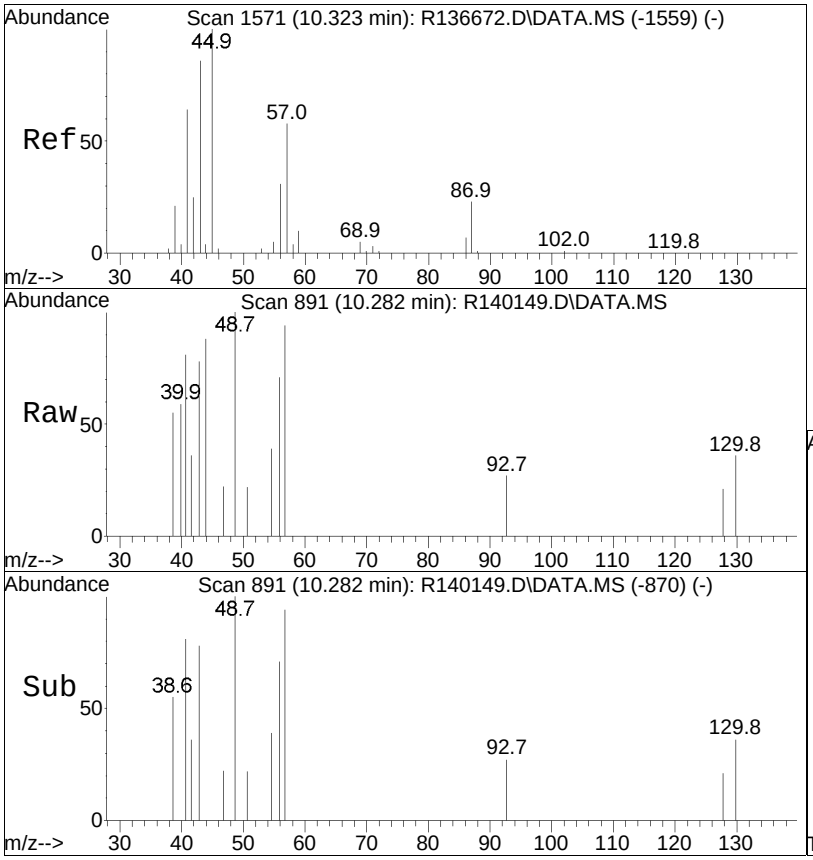



#36
2-butanone
Concen: 0.38 ppbV
RT: 9.52 min Scan# 791
Delta R.T. 0.034 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 43 Resp: 5563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 22.5 | 15.6 | 23.4 |
| 57 | 8.1 | 4.6 | 7.0# |

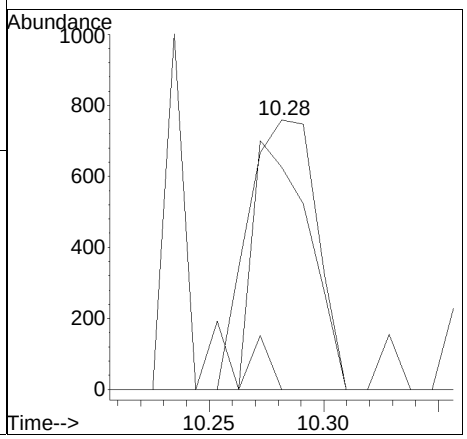


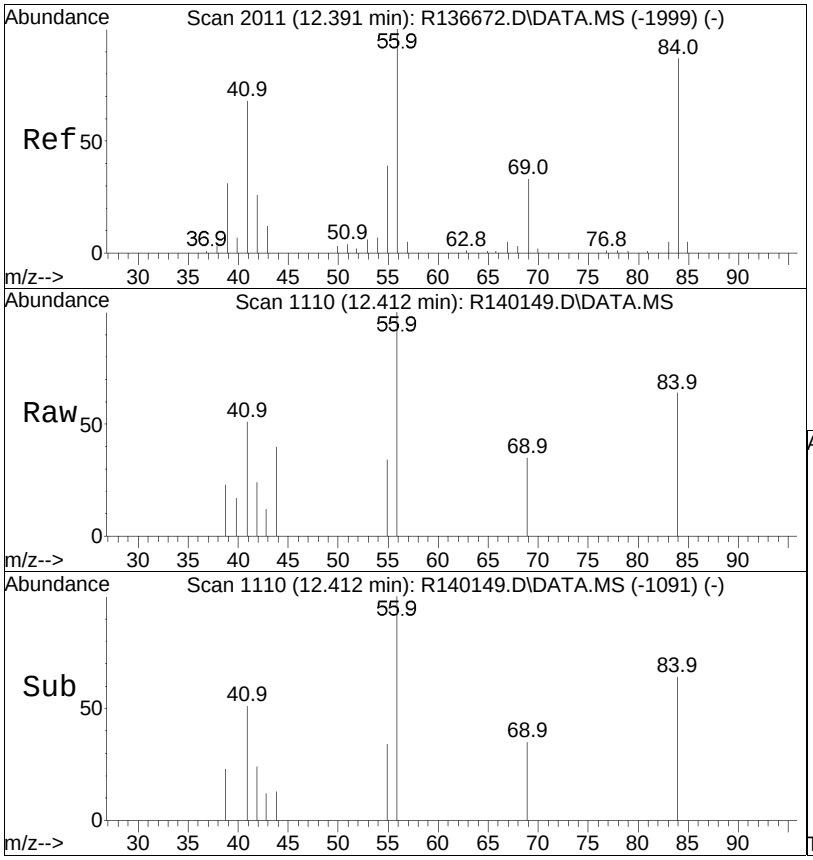



#44
hexane
Concen: 0.13 ppbV
RT: 10.28 min Scan# 891
Delta R.T. 0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 57 Resp: 1598

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 82.5 | 141.8 | 212.8# |
| 86 | 0.0 | 10.0 | 15.0# |

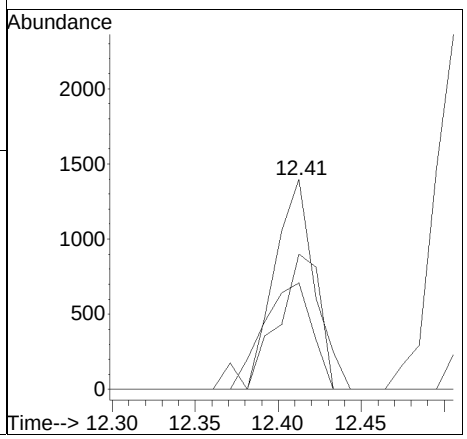


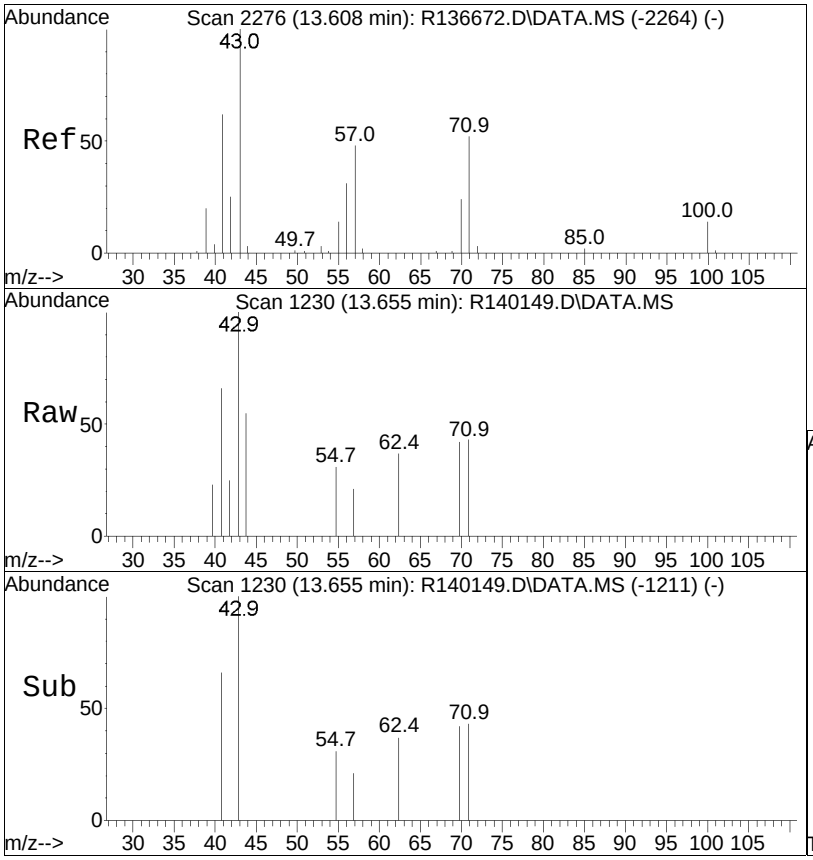



#53
cyclohexane
Concen: 0.24 ppbV
RT: 12.41 min Scan# 1110
Delta R.T. 0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 56 Resp: 2459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 64.4 | 62.6 | 94.0 |
| 41 | 50.7 | 51.4 | 77.0# |

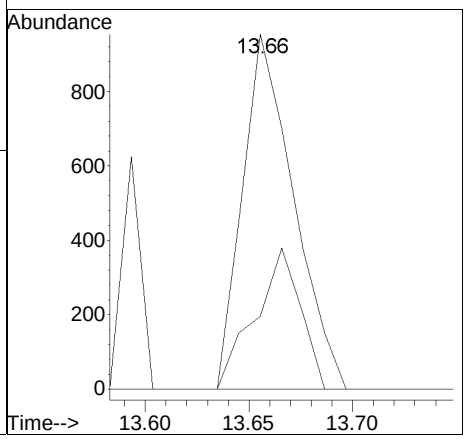


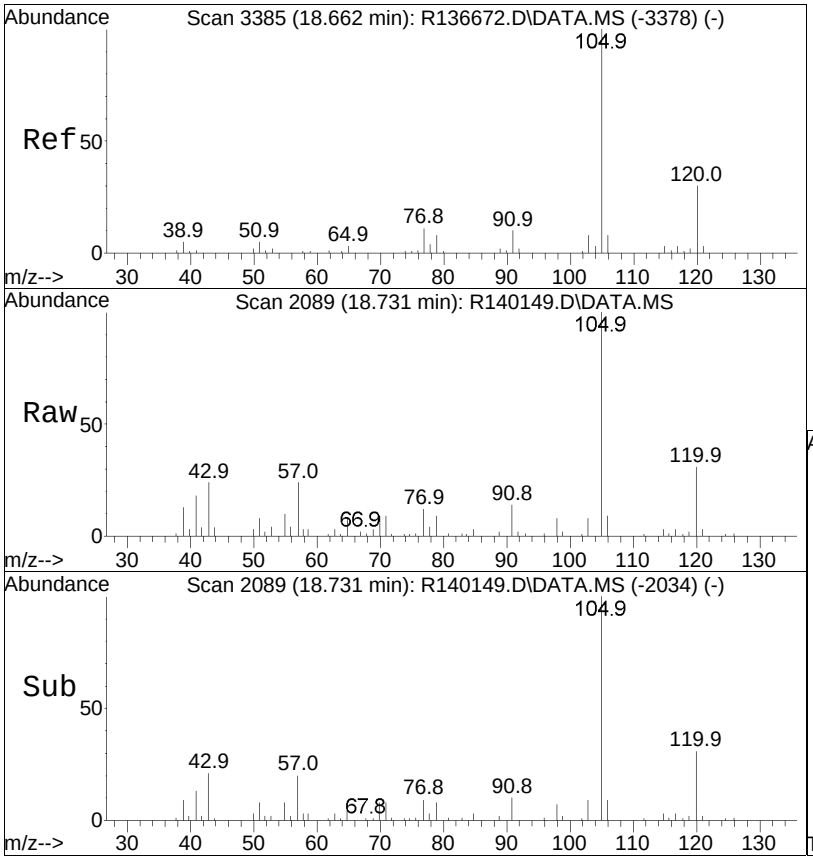



#62
heptane
Concen: 0.11 ppbV
RT: 13.66 min Scan# 1230
Delta R.T. 0.000 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion: 43 Resp: 1635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 20.5 | 36.7 | 55.1# |
| 100 | 0.0 | 9.0 | 13.6# |

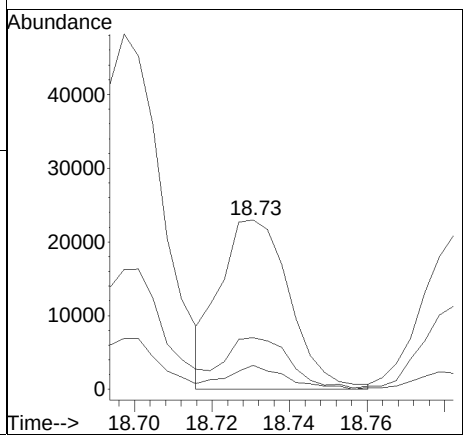





#96
4-ethyl toluene
Concen: 0.76 ppbV
RT: 18.73 min Scan# 2089
Delta R.T. 0.002 min
Lab File: R140149.D
Acq: 11 Mar 2015 9:23 pm

Tgt Ion:105 Resp: 28749

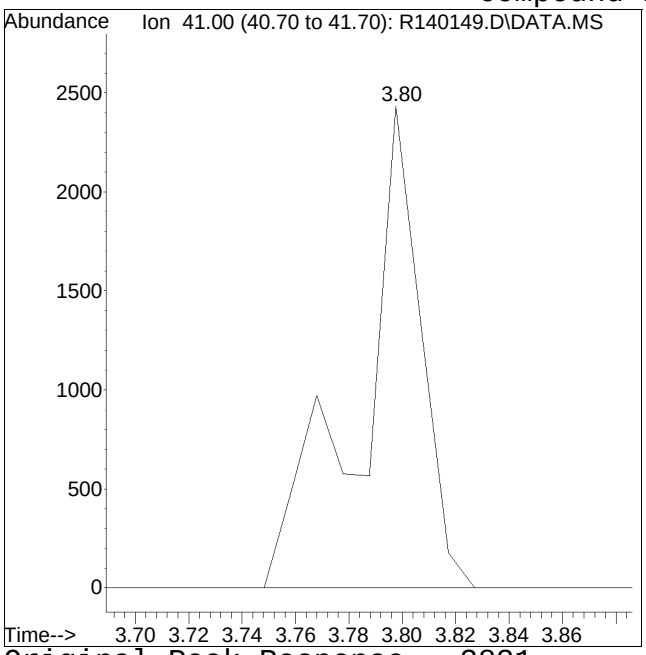
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 30.5 | 25.8 | 38.8 |
| 91 | 14.2 | 8.6 | 13.0# |



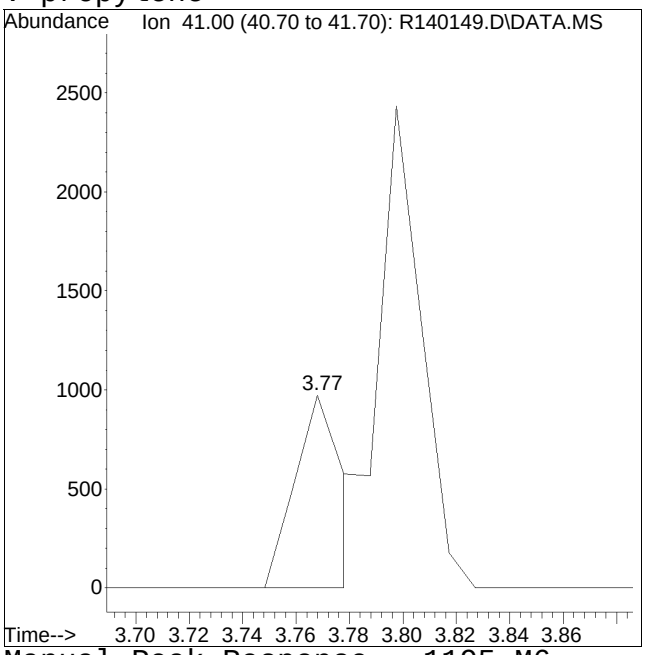
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140149.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:23 pm Instrument : Air Piano 1
Sample : L1504425-02,3,250,250 Quant Date : 3/12/2015 7:56 am

Compound #3: propylene




Original Peak Response = 3831




Manual Peak Response = 1195 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140150.D
Acq On : 11 Mar 2015 9:55 pm
Operator : AIRPIANO1:RY
Sample : L1504425-03,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 09:50:53 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 94362 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 84.82% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 181106 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 82.02% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 46982 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 93.72% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 1523M6 | 0.310 | ppbV | |
| 15) ethanol | 5.49 | 31 | 181732 | 38.746 | ppbV | 98 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.18 | 43 | 112573 | 11.823 | ppbV # | 94 |
| 22) isopropyl alcohol | 6.56 | 45 | 376459 | 33.452 | ppbV | 99 |
| 29) 3-chloropropene | 7.54 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.84 | | 0 | N.D. | | |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.53 | 43 | 5877 | 0.419 | ppbV # | 83 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | | |
| 44) hexane | 10.28 | 57 | 1623 | 0.137 | ppbV # | 62 |
| 53) cyclohexane | 12.40 | 56 | 1088 | 0.110 | ppbV # | 58 |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 13.34 | | 0 | N.D. | | |
| 62) heptane | 13.67 | 43 | 2091 | 0.147 | ppbV # | 77 |
| 64) 4-methyl-2-pentanone | 14.32 | | 0 | N.D. | | |
| 72) 2-hexanone | 15.65 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.73 | 105 | 27889 | 0.709 | ppbV | 96 |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | d | |

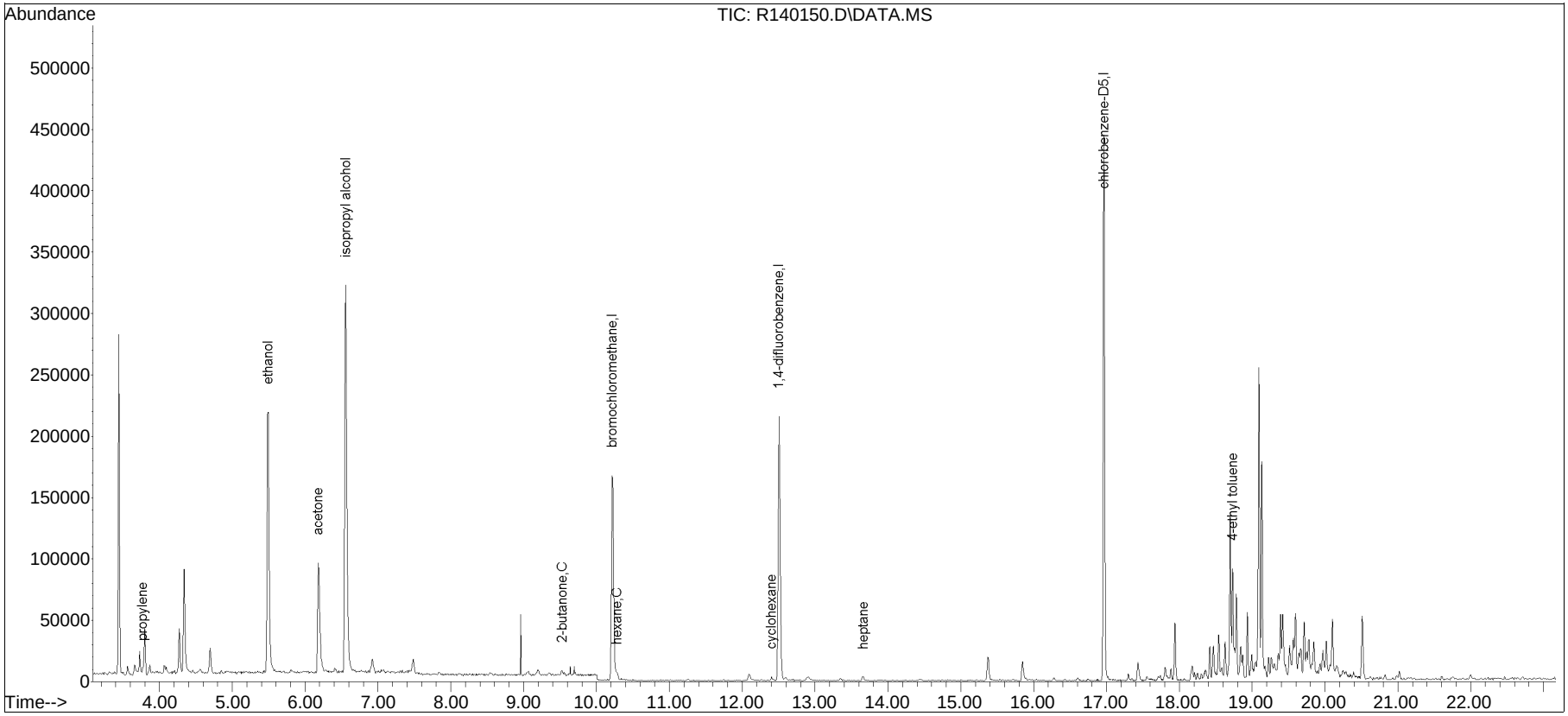
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

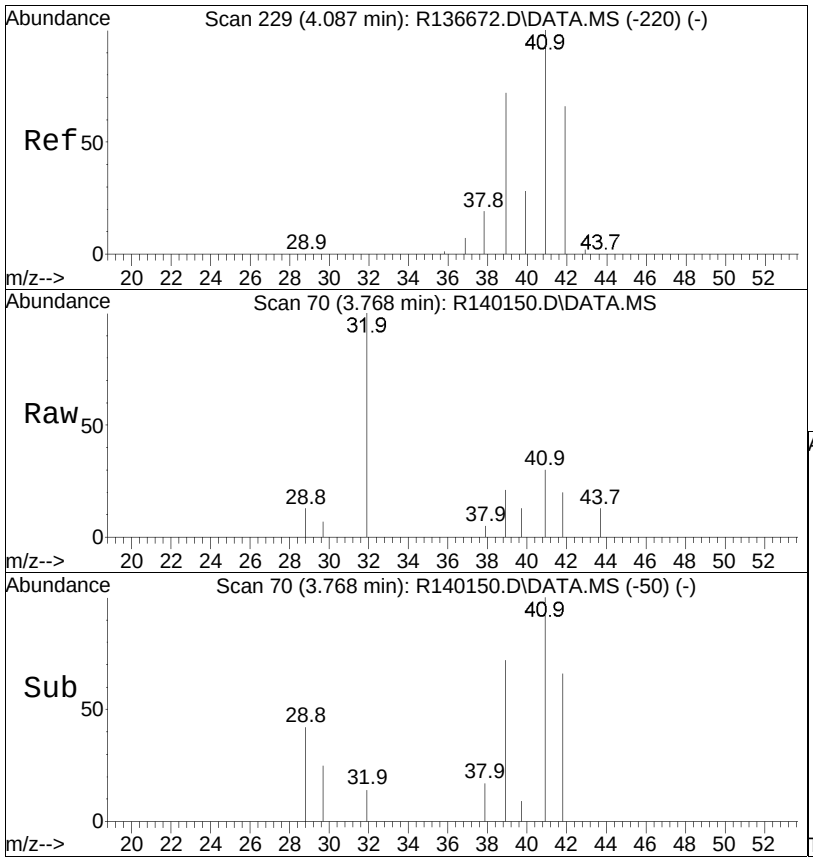
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140150.D
Acq On : 11 Mar 2015 9:55 pm
Operator : AIRPIANO1:RY
Sample : L1504425-03,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 09:50:53 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



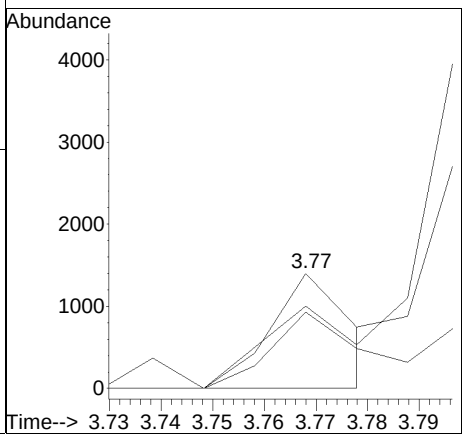

TALL150102.M Thu Mar 12 09:51:00 2015

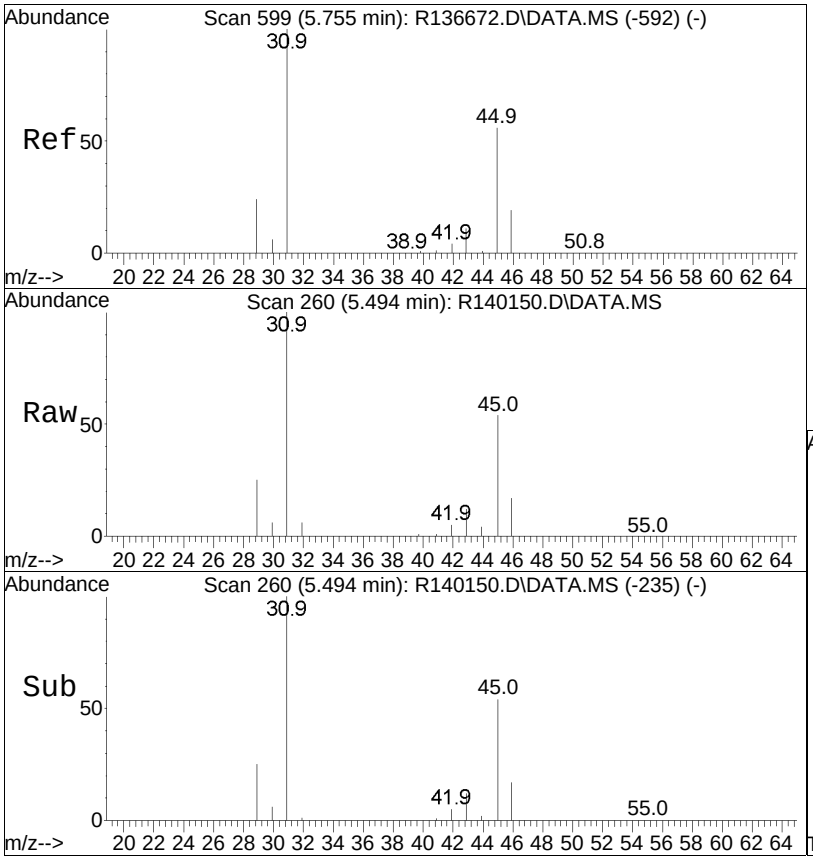



#3
propylene
Concen: 0.31 ppbV m
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 41 Resp: 1523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 66.4 | 52.7 | 79.1 |
| 39 | 71.6 | 59.6 | 89.4 |

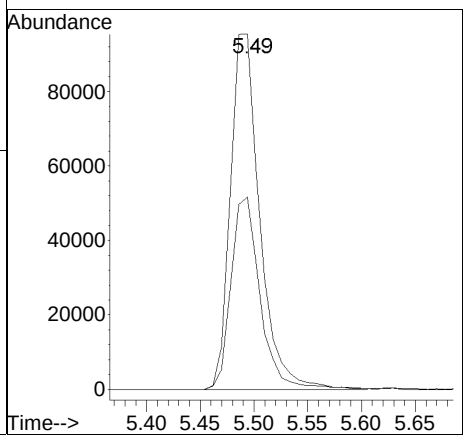


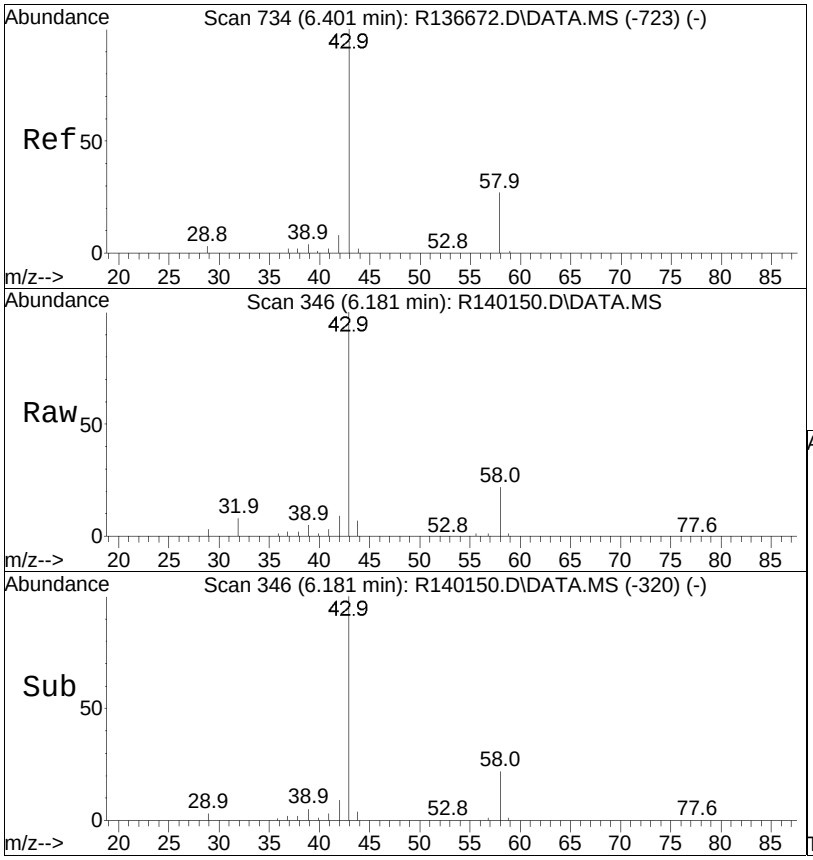



#15
ethanol
Concen: 38.75 ppbV
RT: 5.49 min Scan# 260
Delta R.T. 0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 31 Resp: 181732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 54.1 | 42.0 | 63.0 |

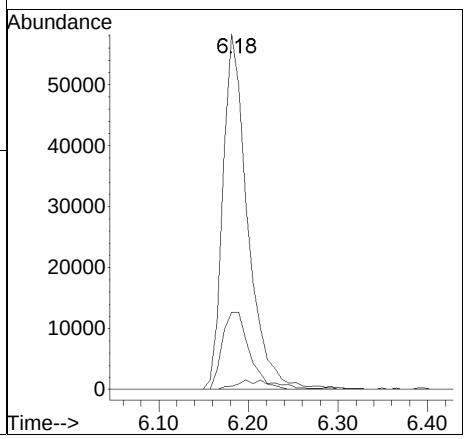


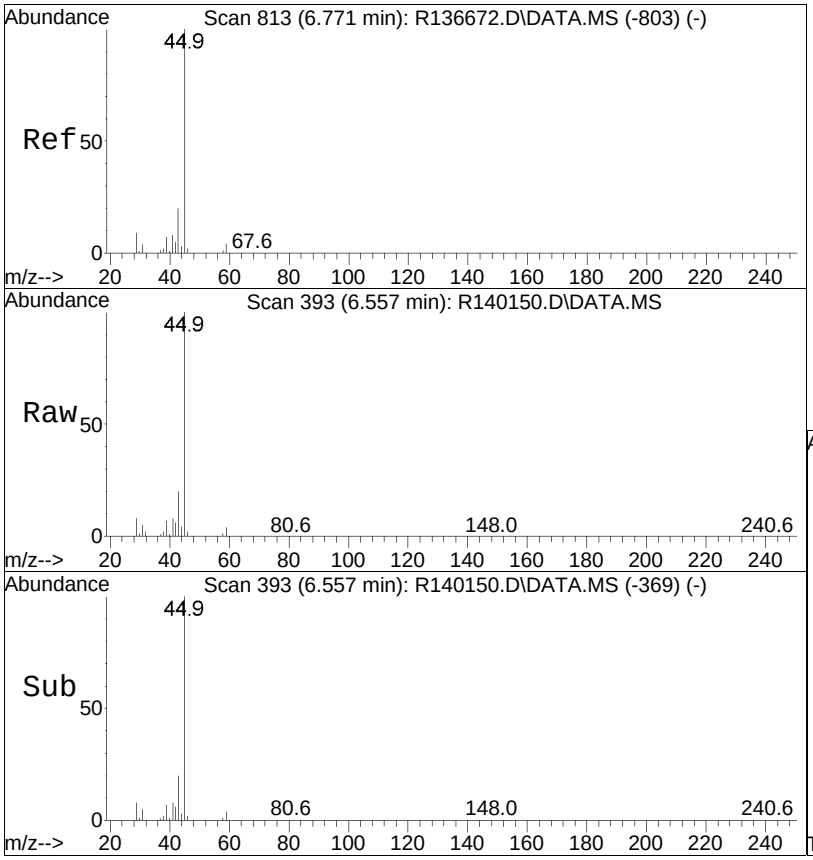



#19
acetone
Concen: 11.82 ppbV
RT: 6.18 min Scan# 346
Delta R.T. 0.008 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 43 Resp: 112573

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 21.7 | 19.9 | 29.9 |
| 57 | 0.9 | 0.6 | 0.8# |

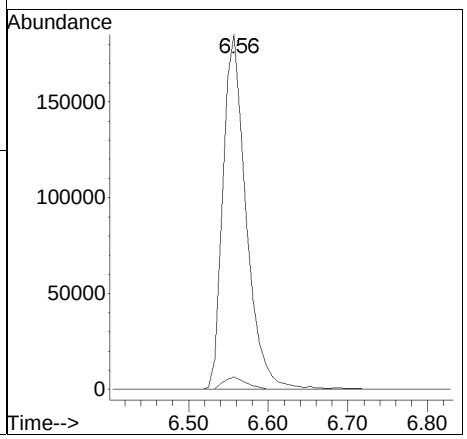


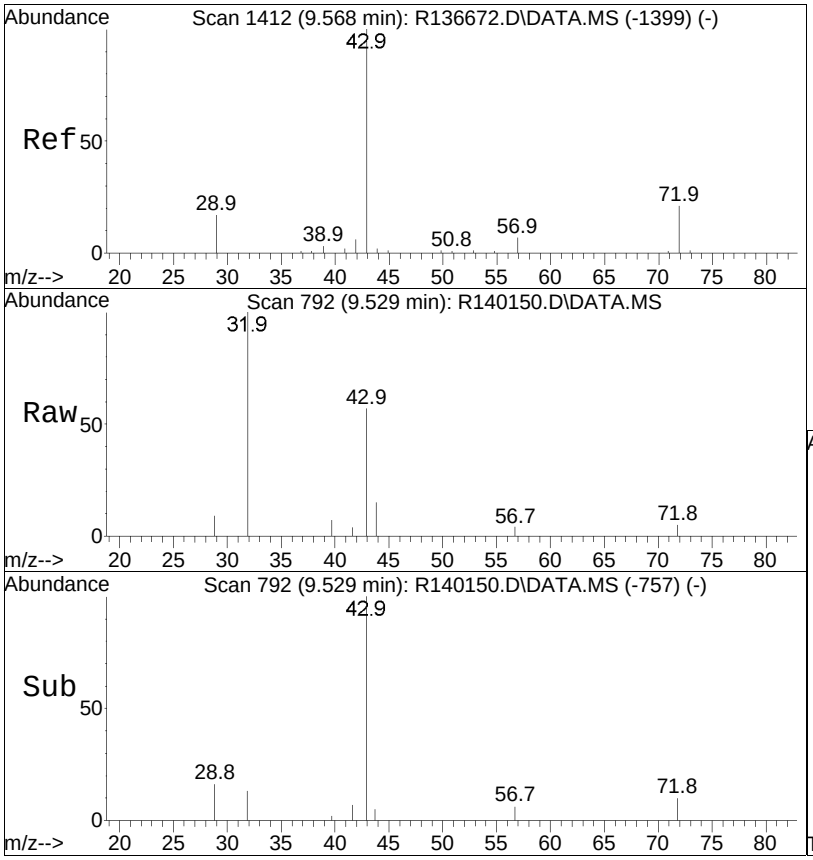



#22
isopropyl alcohol
Concen: 33.45 ppbV
RT: 6.56 min Scan# 393
Delta R.T. -0.008 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 45 Resp: 376459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 3.5 | 2.5 | 3.7 |

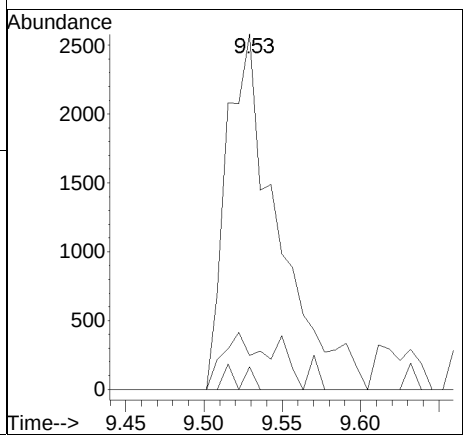


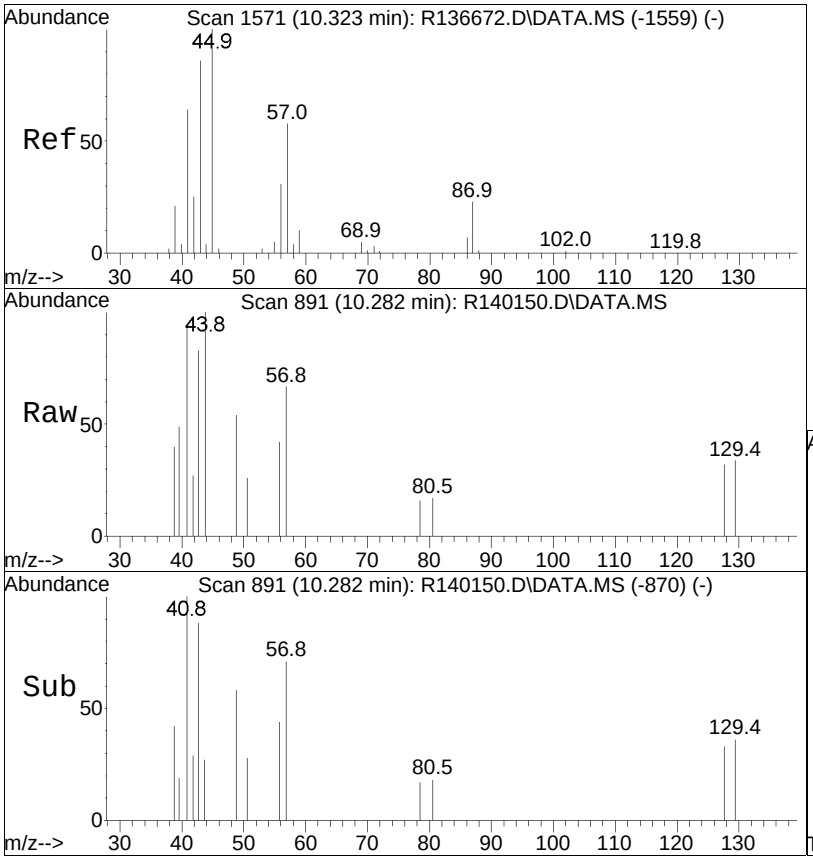



#36
2-butanone
Concen: 0.42 ppbV
RT: 9.53 min Scan# 792
Delta R.T. 0.041 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 43 Resp: 5877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 9.6 | 15.6 | 23.4# |
| 57 | 6.4 | 4.6 | 7.0 |

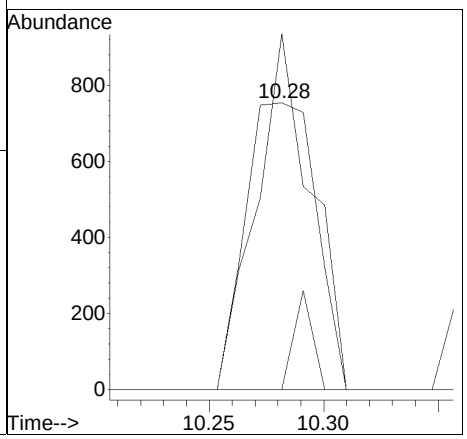


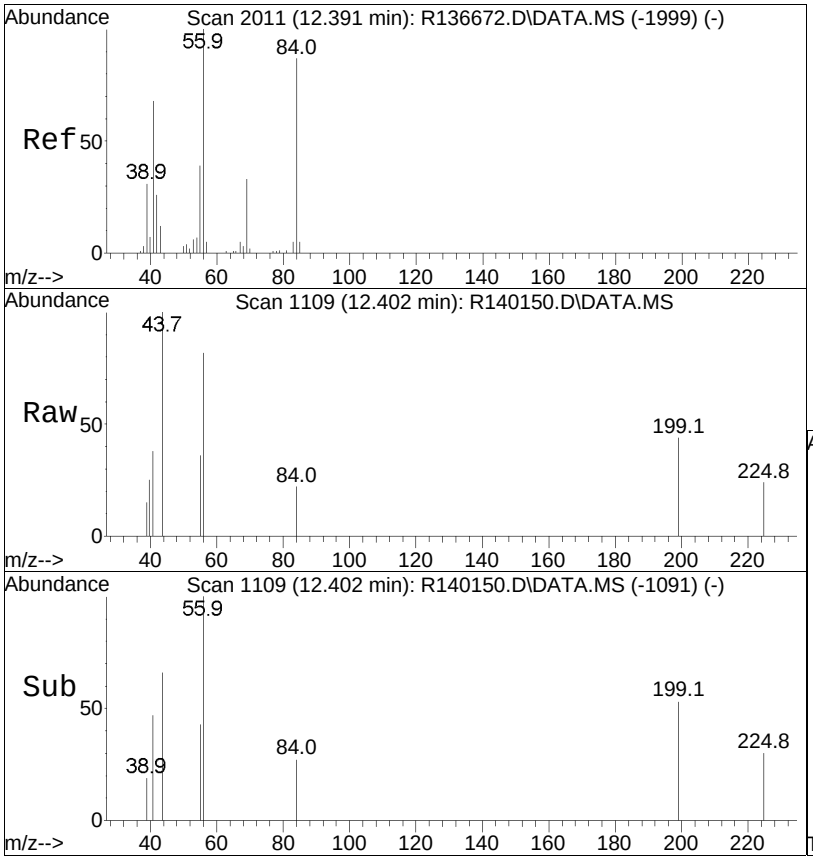



#44
hexane
Concen: 0.14 ppbV
RT: 10.28 min Scan# 891
Delta R.T. 0.000 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 57 Resp: 1623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 124.0 | 141.8 | 212.8# |
| 86 | 0.0 | 10.0 | 15.0# |

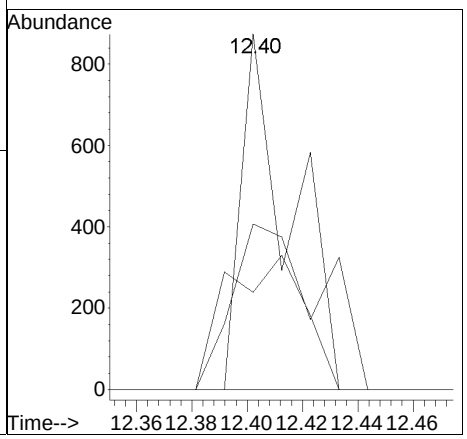


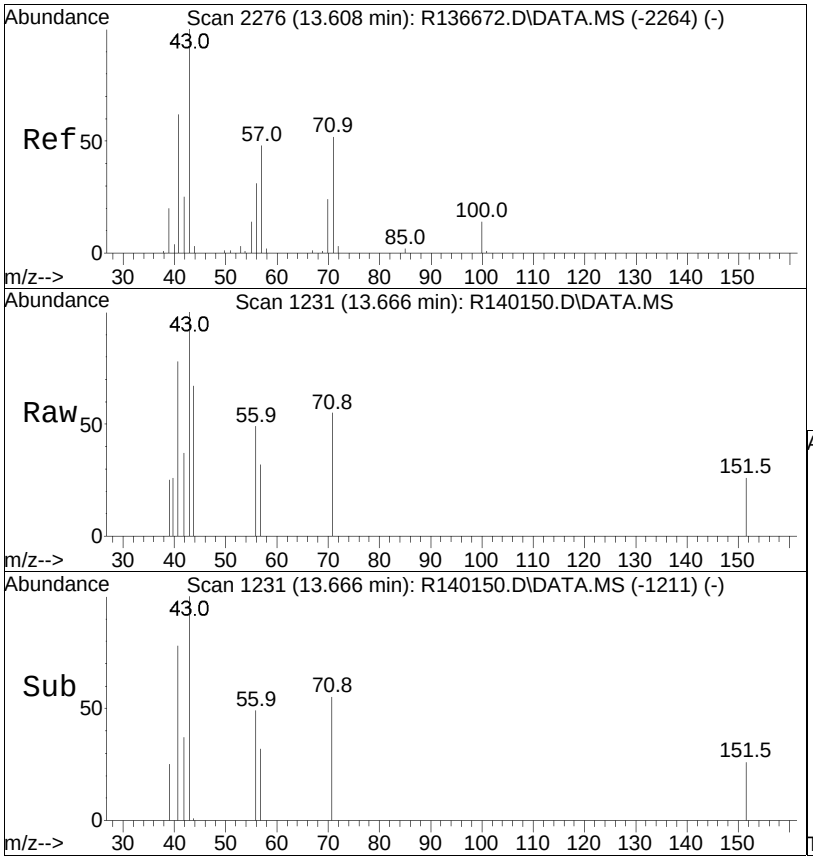



#53
cyclohexane
Concen: 0.11 ppbV
RT: 12.40 min Scan# 1109
Delta R.T. -0.010 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 56 Resp: 1088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 27.3 | 62.6 | 94.0# |
| 41 | 46.6 | 51.4 | 77.0# |

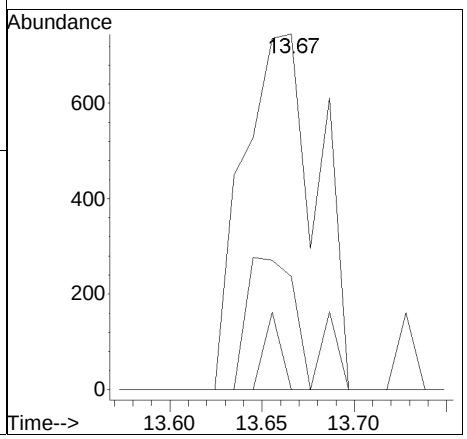


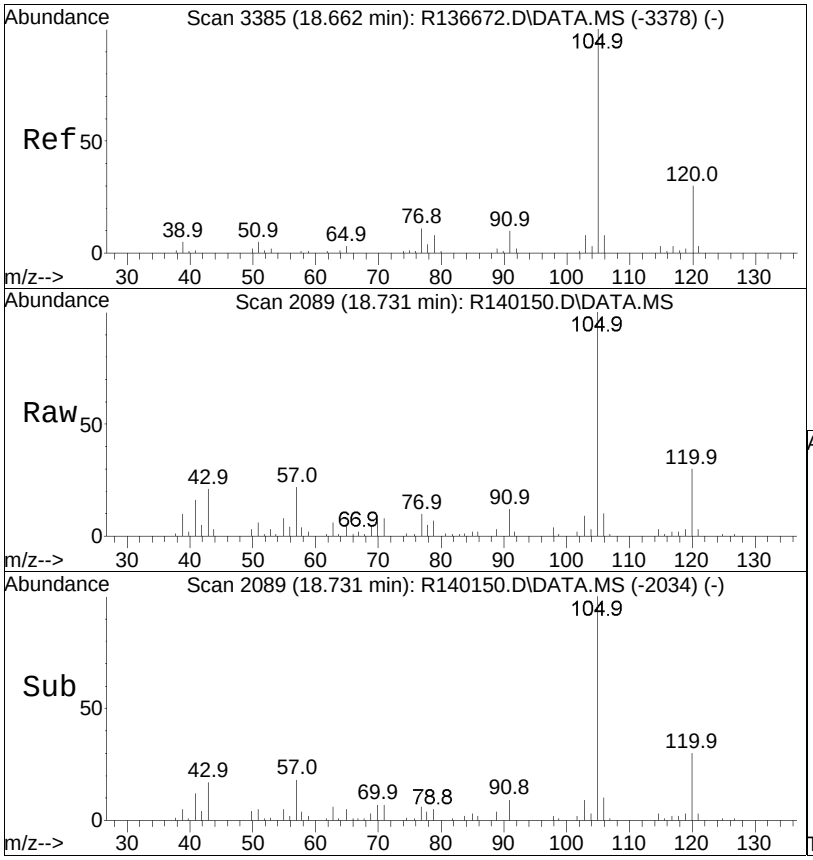



#62
heptane
Concen: 0.15 ppbV
RT: 13.67 min Scan# 1231
Delta R.T. 0.011 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion: 43 Resp: 2091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 31.8 | 36.7 | 55.1# |
| 100 | 0.0 | 9.0 | 13.6# |

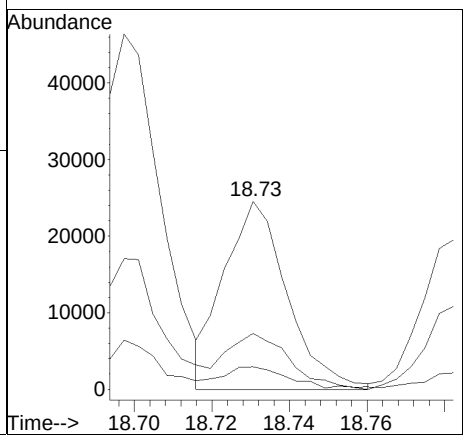





#96
4-ethyl toluene
Concen: 0.71 ppbV
RT: 18.73 min Scan# 2089
Delta R.T. 0.002 min
Lab File: R140150.D
Acq: 11 Mar 2015 9:55 pm

Tgt Ion:105 Resp: 27889

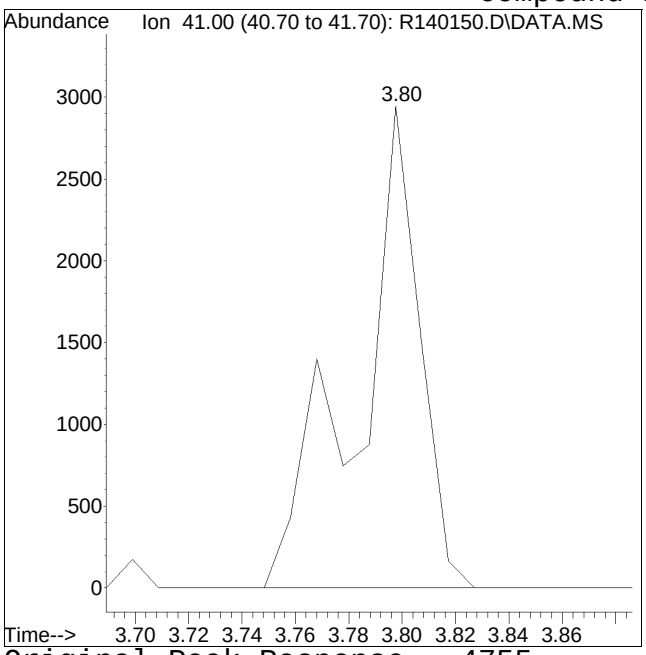
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 29.8 | 25.8 | 38.8 |
| 91 | 12.1 | 8.6 | 13.0 |



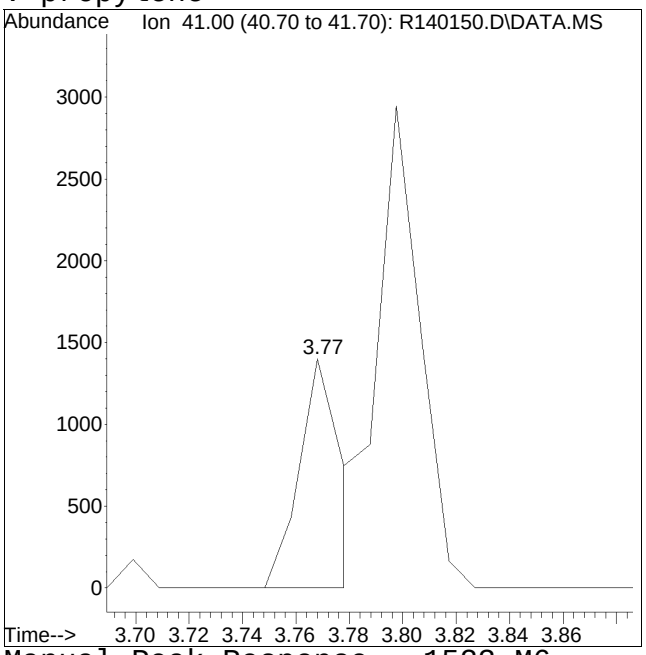
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140150.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 9:55 pm Instrument : Air Piano 1
Sample : L1504425-03,3,250,250 Quant Date : 3/12/2015 7:56 am

Compound #3: propylene




Original Peak Response = 4755




Manual Peak Response = 1523 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140151.D
Acq On : 11 Mar 2015 10:27 pm
Operator : AIRPIANO1:RY
Sample : L1504425-04,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 09:51:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 97651 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 87.78% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 186665 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 84.54% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 44642 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 89.05% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 1487M6 | 0.292 | ppbV | |
| 15) ethanol | 5.49 | 31 | 262126 | 54.003 | ppbV | 99 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.18 | 43 | 136871 | 13.890 | ppbV # | 97 |
| 22) isopropyl alcohol | 6.56 | 45 | 371433 | 31.894 | ppbV | 98 |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | d | |
| 30) carbon disulfide | 7.84 | | 0 | N.D. | | |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.52 | 43 | 7714 | 0.532 | ppbV # | 83 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 10.85 | | 0 | N.D. | | |
| 44) hexane | 10.28 | 57 | 2978 | 0.243 | ppbV # | 29 |
| 53) cyclohexane | 12.40 | 56 | 73803 | 7.258 | ppbV | 96 |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 13.37 | | 0 | N.D. | | |
| 62) heptane | 13.66 | 43 | 1640 | 0.112 | ppbV # | 79 |
| 64) 4-methyl-2-pentanone | 0.00 | | 0 | N.D. | d | |
| 72) 2-hexanone | 15.53 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.73 | 105 | 27851 | 0.745 | ppbV # | 89 |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | d | |

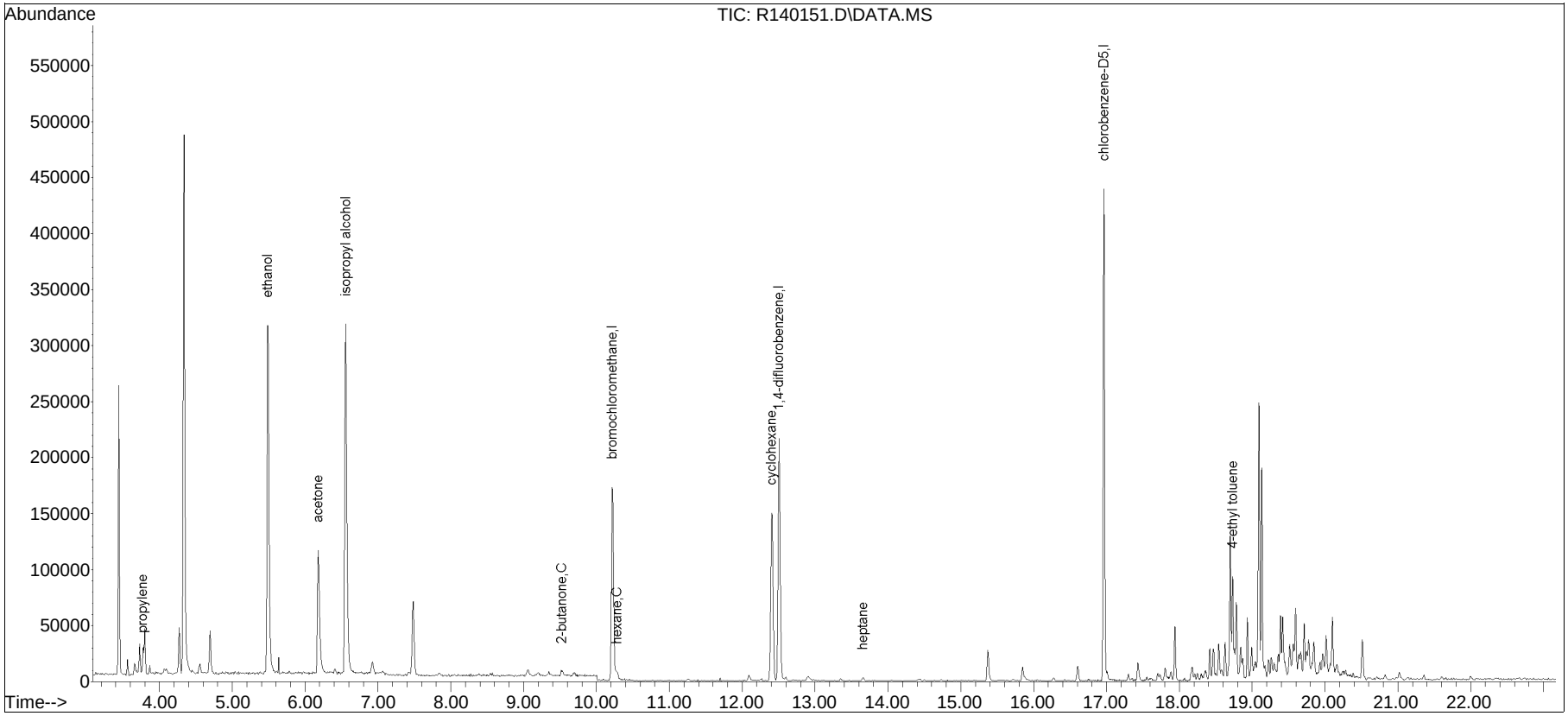
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

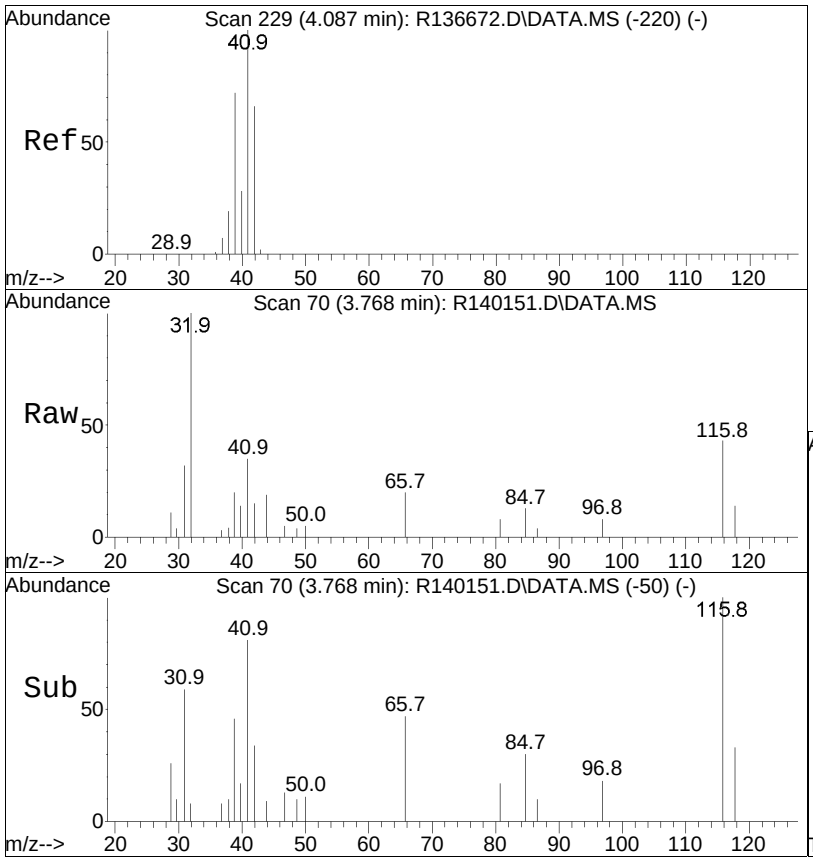
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140151.D
Acq On : 11 Mar 2015 10:27 pm
Operator : AIRPIANO1:RY
Sample : L1504425-04,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 09:51:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



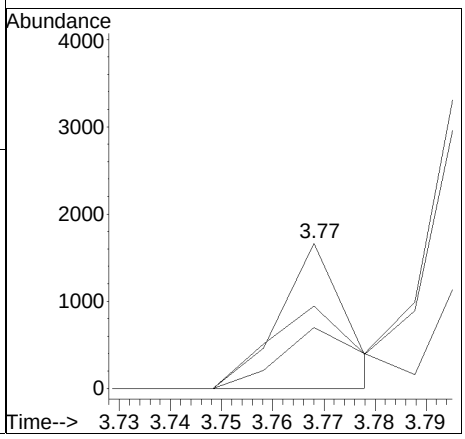

TALL150102.M Thu Mar 12 09:51:54 2015

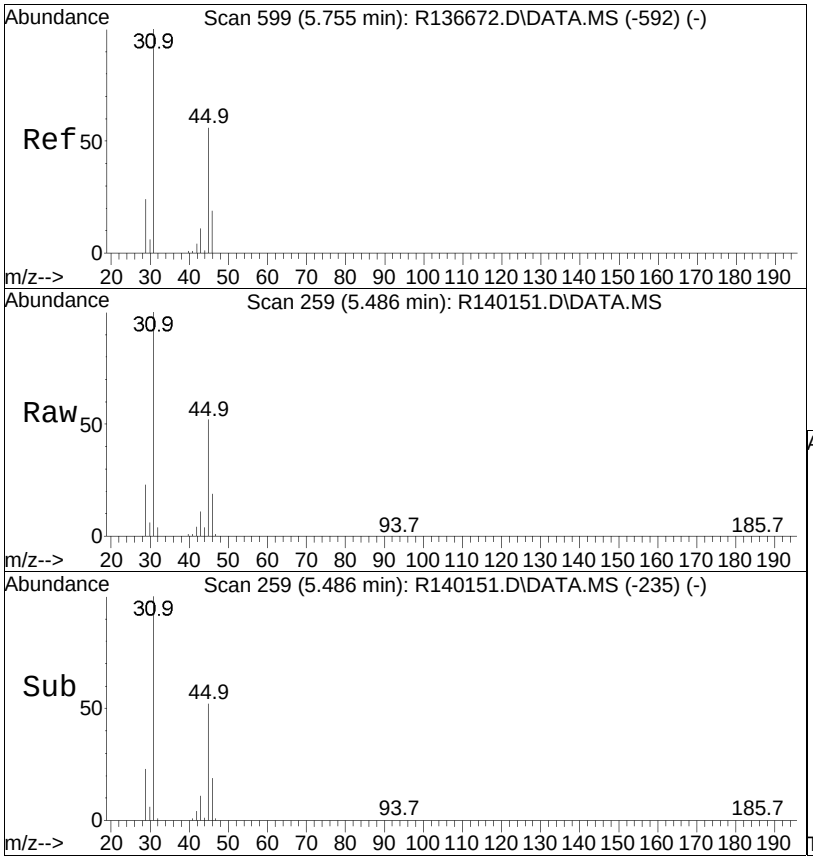



#3
propylene
Concen: 0.29 ppbV m
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 41 Resp: 1487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 42.0 | 52.7 | 79.1# |
| 39 | 56.7 | 59.6 | 89.4# |

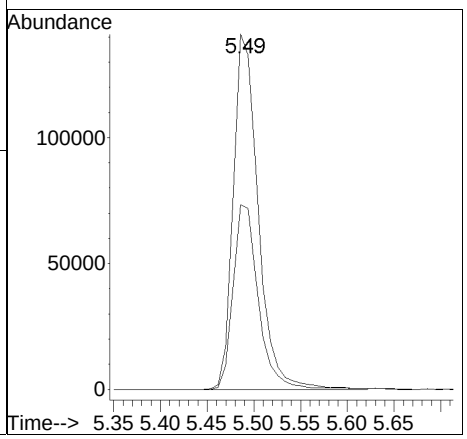


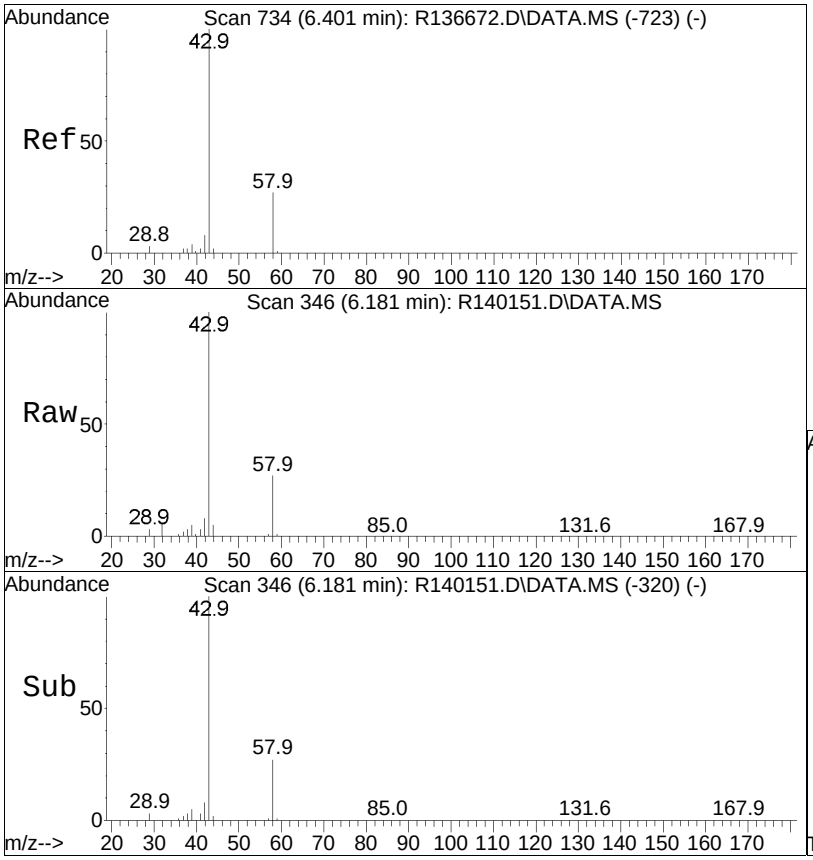



#15
ethanol
Concen: 54.00 ppbV
RT: 5.49 min Scan# 259
Delta R.T. -0.008 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 31 Resp: 262126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 52.0 | 42.0 | 63.0 |

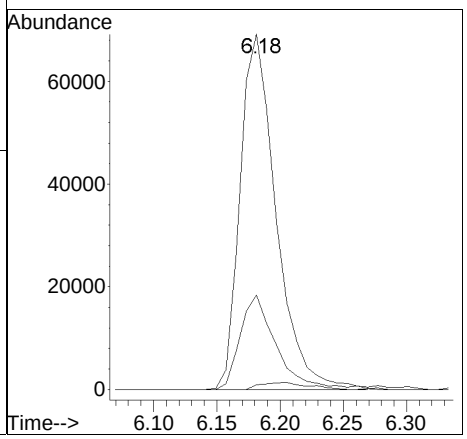


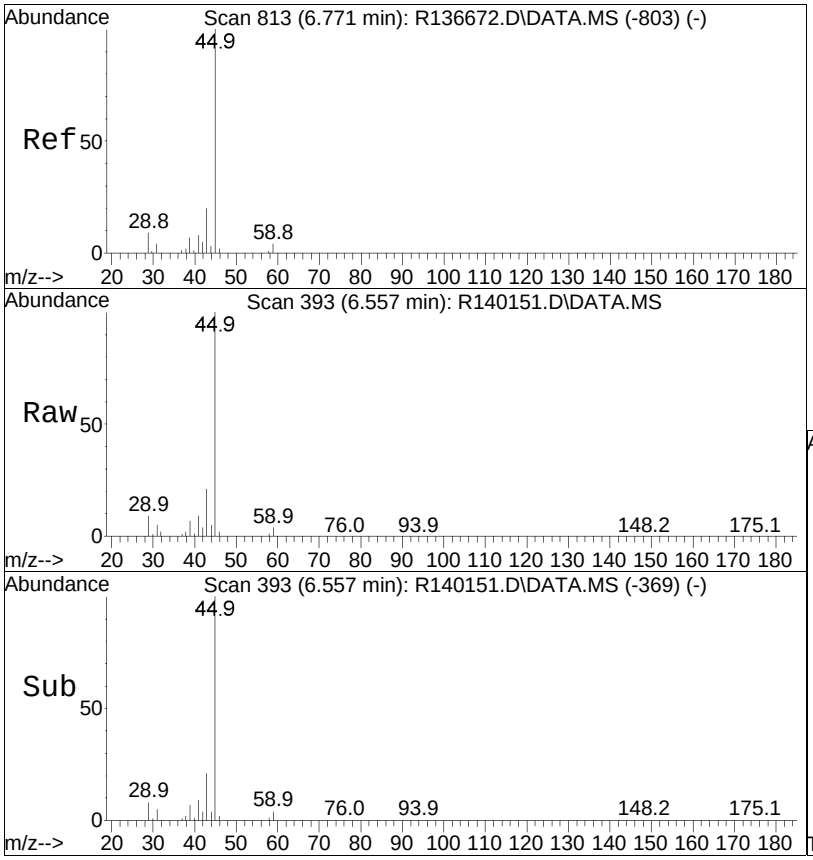



#19
acetone
Concen: 13.89 ppbV
RT: 6.18 min Scan# 346
Delta R.T. 0.008 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 43 Resp: 136871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.6 | 19.9 | 29.9 |
| 57 | 1.3 | 0.6 | 0.8# |

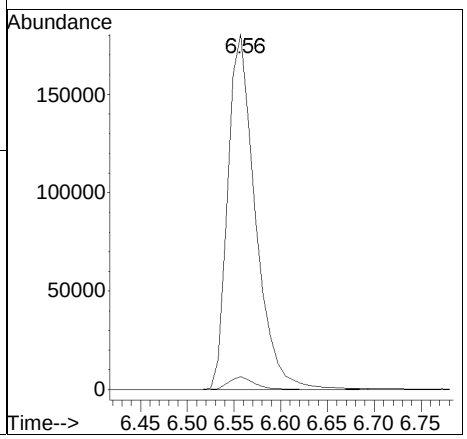


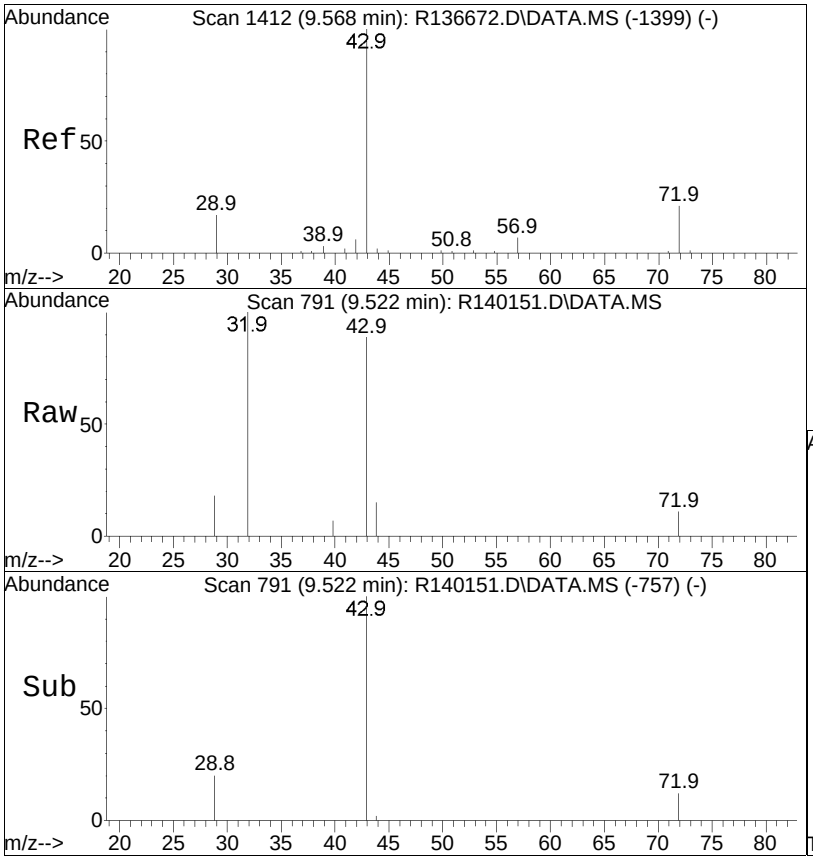



#22
isopropyl alcohol
Concen: 31.89 ppbV
RT: 6.56 min Scan# 393
Delta R.T. -0.008 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 45 Resp: 371433

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 3.6 | 2.5 | 3.7 |

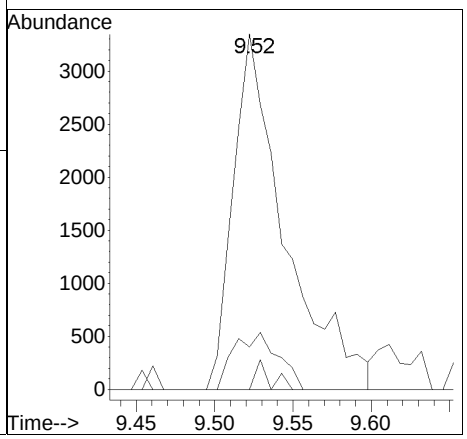


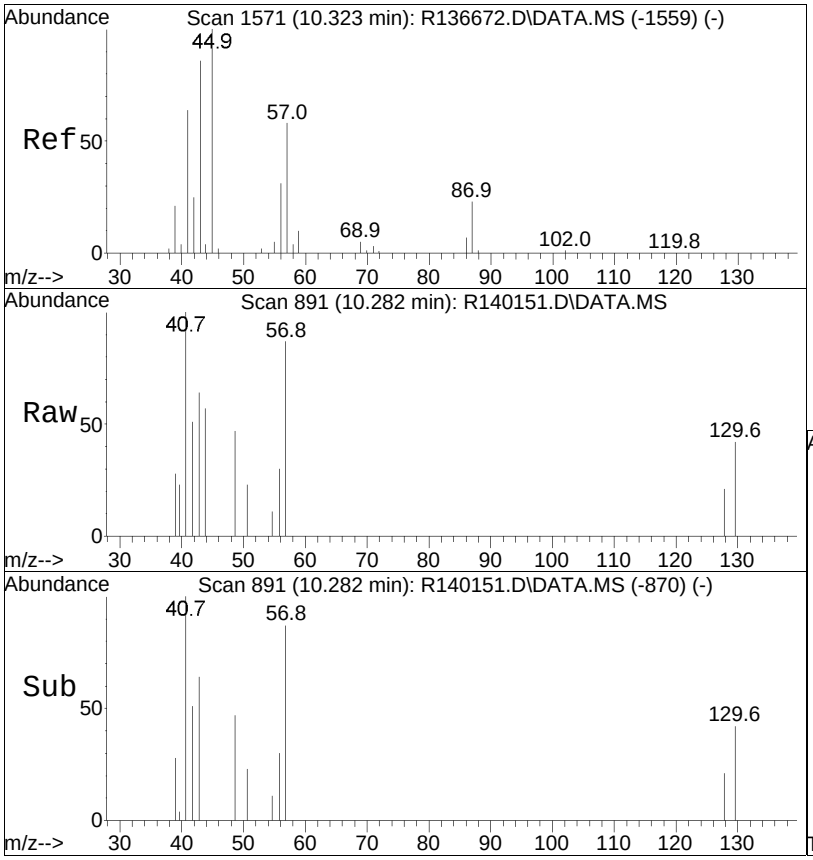



#36
2-butanone
Concen: 0.53 ppbV
RT: 9.52 min Scan# 791
Delta R.T. 0.035 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 43 Resp: 7714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 11.9 | 15.6 | 23.4# |
| 57 | 0.0 | 4.6 | 7.0# |

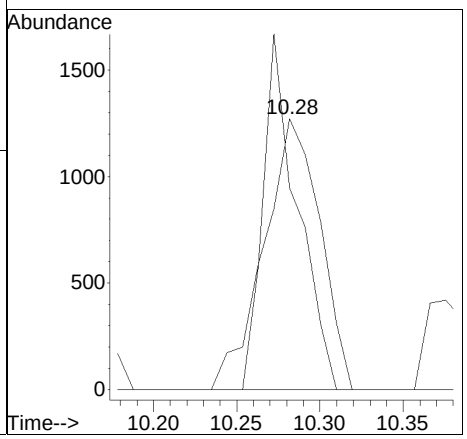


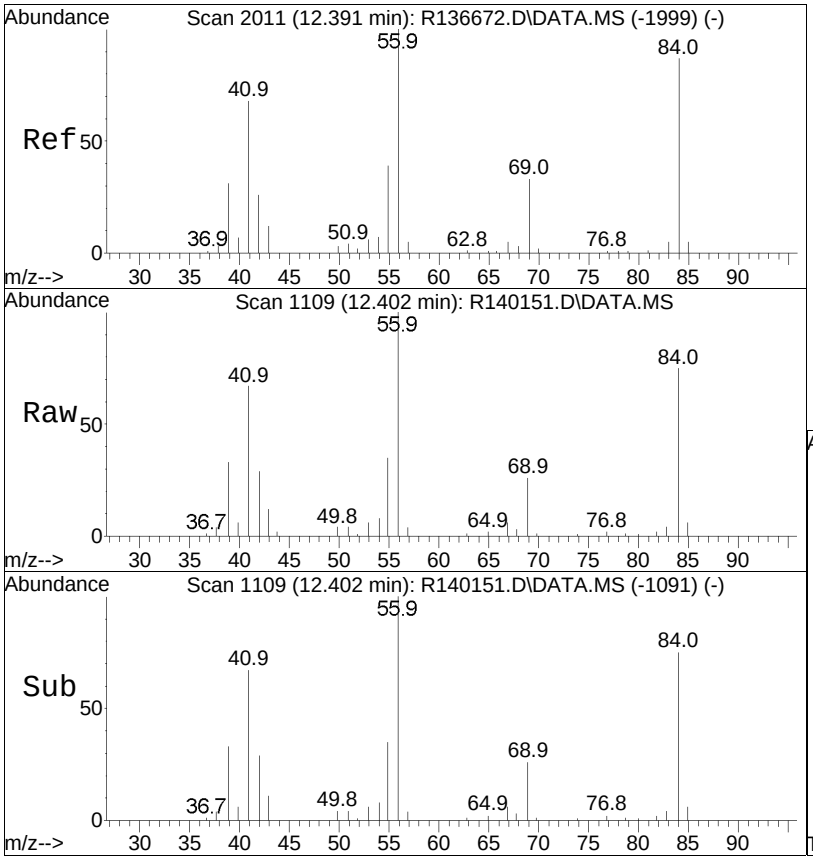



#44
hexane
Concen: 0.24 ppbV
RT: 10.28 min Scan# 891
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 57 Resp: 2978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 74.4 | 141.8 | 212.8# |
| 86 | 0.0 | 10.0 | 15.0# |

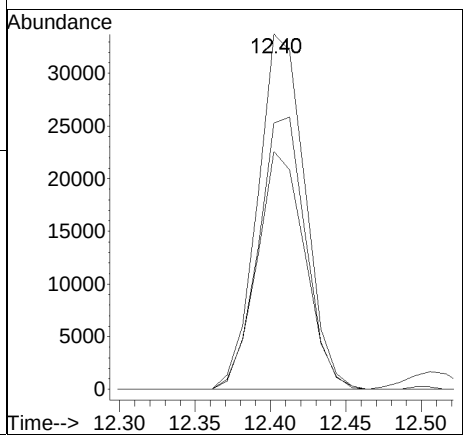


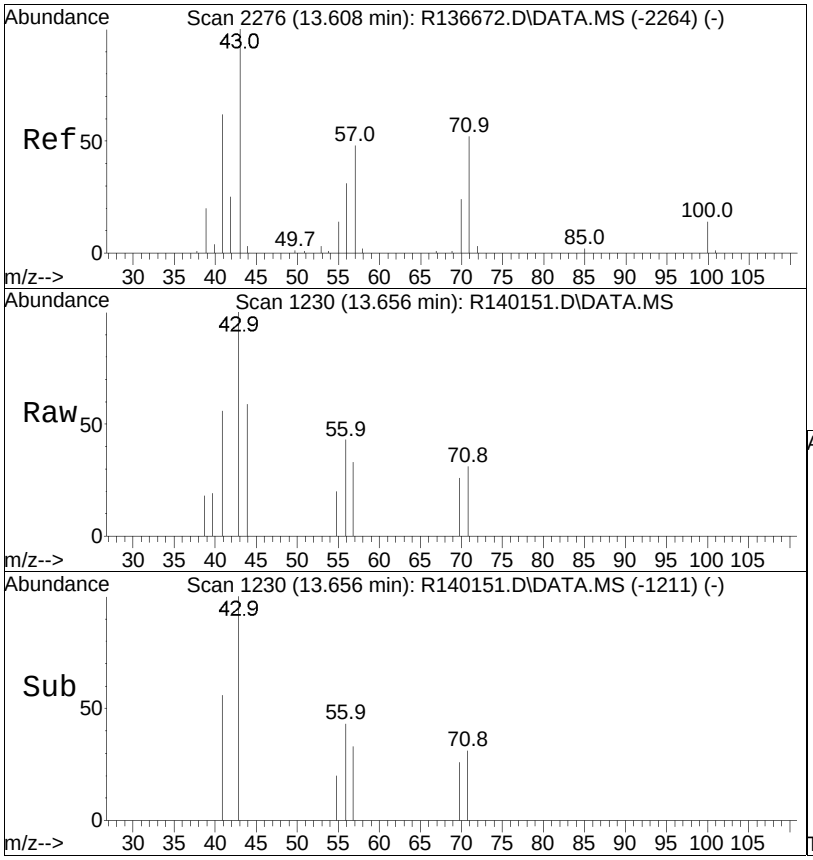



#53
cyclohexane
Concen: 7.26 ppbV
RT: 12.40 min Scan# 1109
Delta R.T. -0.010 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 56 Resp: 73803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 75.0 | 62.6 | 94.0 |
| 41 | 67.0 | 51.4 | 77.0 |

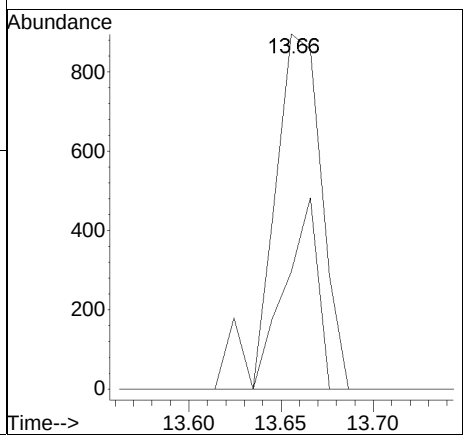


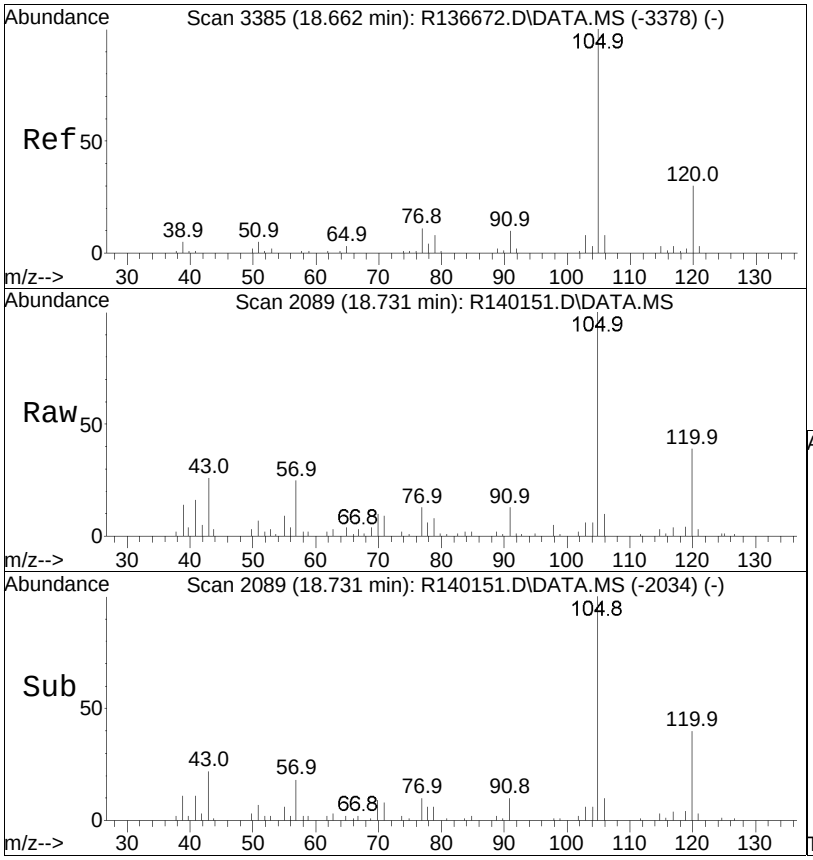



#62
heptane
Concen: 0.11 ppbV
RT: 13.66 min Scan# 1230
Delta R.T. 0.000 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion: 43 Resp: 1640

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 33.1 | 36.7 | 55.1# |
| 100 | 0.0 | 9.0 | 13.6# |

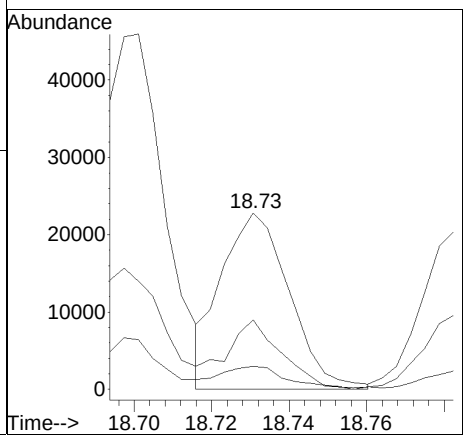





#96
4-ethyl toluene
Concen: 0.74 ppbV
RT: 18.73 min Scan# 2089
Delta R.T. 0.002 min
Lab File: R140151.D
Acq: 11 Mar 2015 10:27 pm

Tgt Ion:105 Resp: 27851

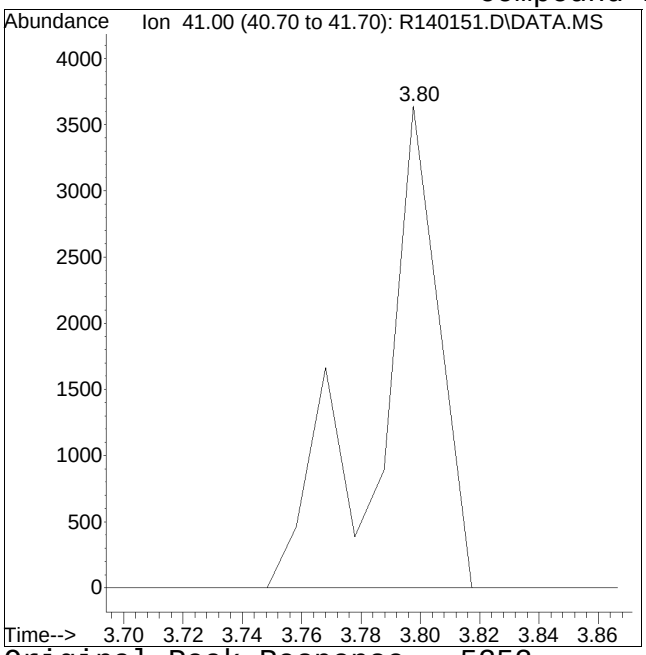
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 39.4 | 25.8 | 38.8# |
| 91 | 13.1 | 8.6 | 13.0# |

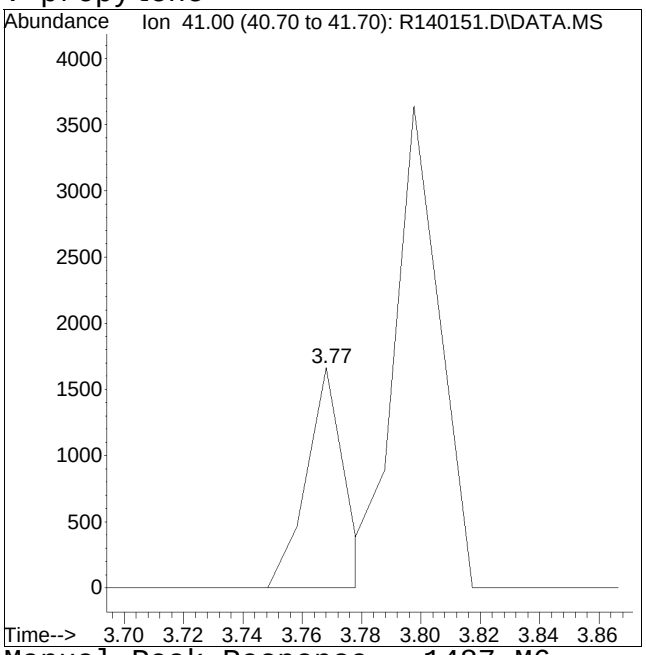


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140151.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:27 pm Instrument : Air Piano 1
Sample : L1504425-04,3,250,250 Quant Date : 3/12/2015 7:56 am

Compound #3: propylene




Original Peak Response = 5252 Manual Peak Response = 1487 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140152.D
Acq On : 11 Mar 2015 10:59 pm
Operator : AIRPIANO1:RY
Sample : L1504425-05,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 09:52:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 92828 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 83.44% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 199906 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 90.54% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 46278 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 92.32% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 1461M6 | 0.302 | ppbV | |
| 15) ethanol | 5.49 | 31 | 206978 | 44.857 | ppbV | 98 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.18 | 43 | 123338 | 13.167 | ppbV # | 97 |
| 22) isopropyl alcohol | 6.55 | 45 | 412601 | 37.269 | ppbV | 98 |
| 29) 3-chloropropene | 7.55 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.83 | | 0 | N.D. | | |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.53 | 43 | 5523 | 0.400 | ppbV # | 62 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 10.95 | | 0 | N.D. | | |
| 44) hexane | 10.29 | 57 | 1169 | 0.089 | ppbV # | 34 |
| 53) cyclohexane | 12.40 | 56 | 1058 | 0.097 | ppbV # | 61 |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 13.34 | | 0 | N.D. | | |
| 62) heptane | 13.67 | 43 | 1537 | 0.098 | ppbV # | 81 |
| 64) 4-methyl-2-pentanone | 0.00 | | 0 | N.D. | d | |
| 72) 2-hexanone | 15.60 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.73 | 105 | 31157 | 0.804 | ppbV | 99 |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | d | |

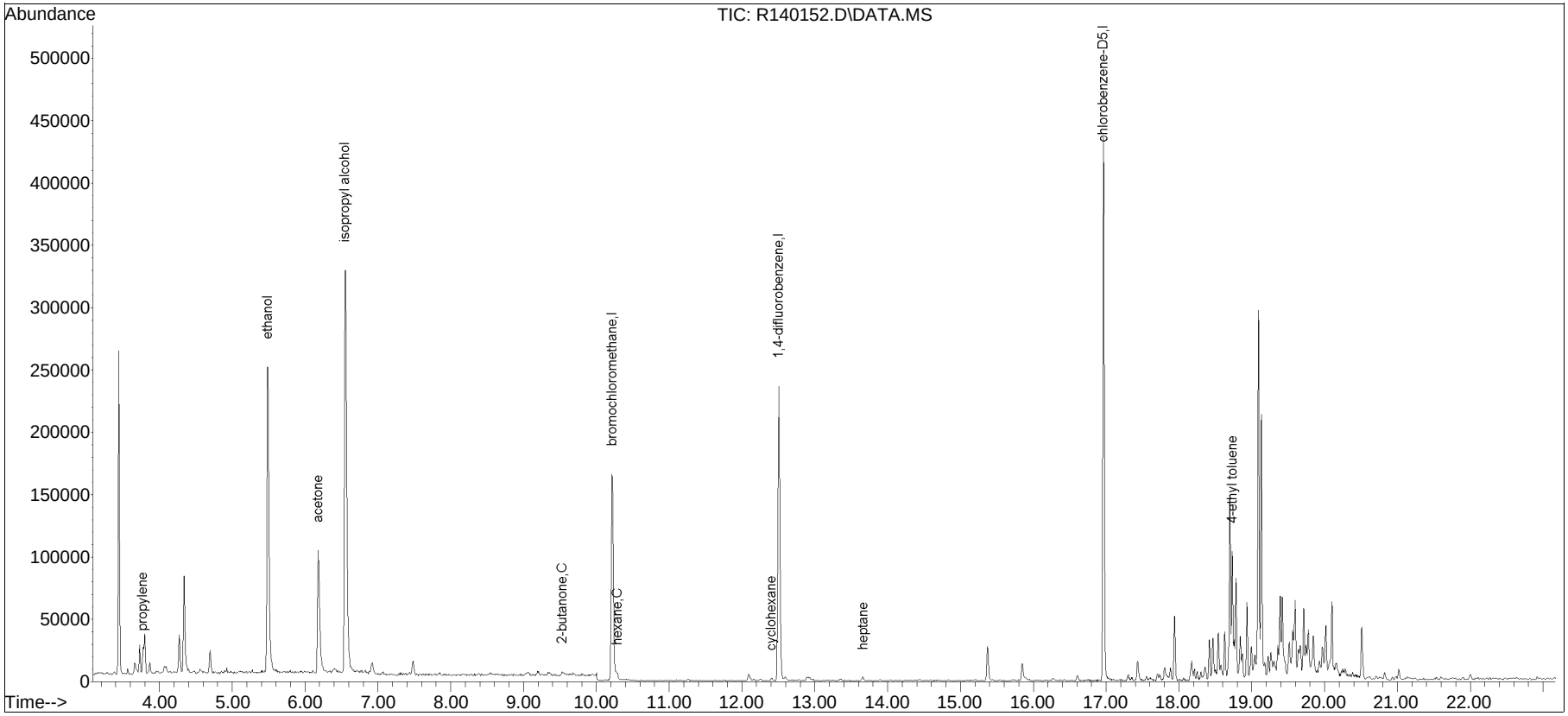
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

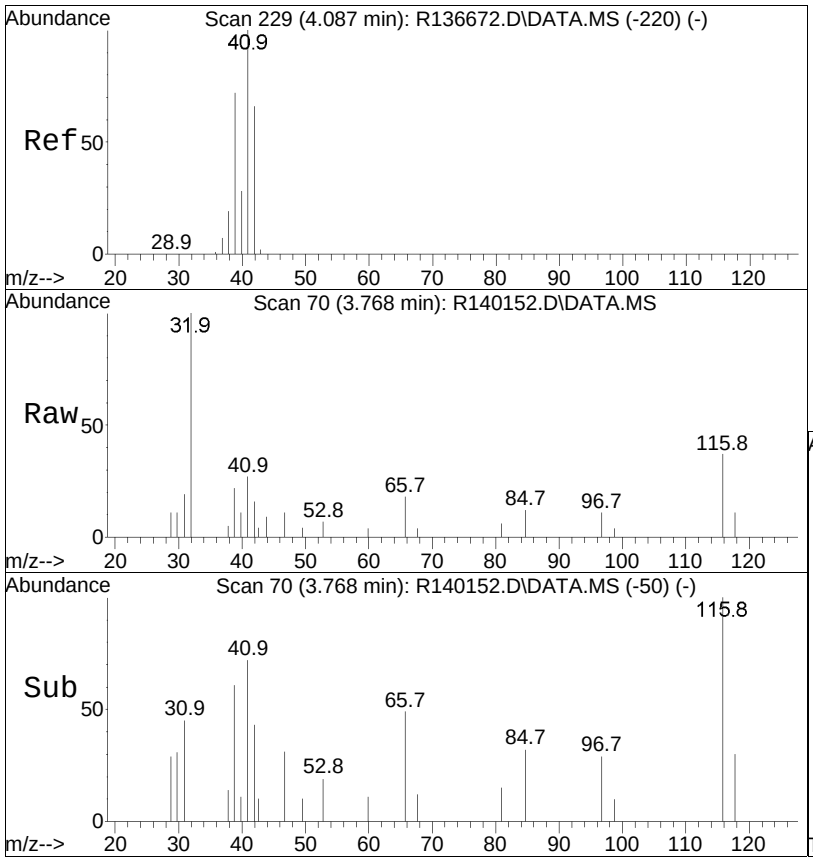
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140152.D
Acq On : 11 Mar 2015 10:59 pm
Operator : AIRPIANO1:RY
Sample : L1504425-05,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 09:52:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



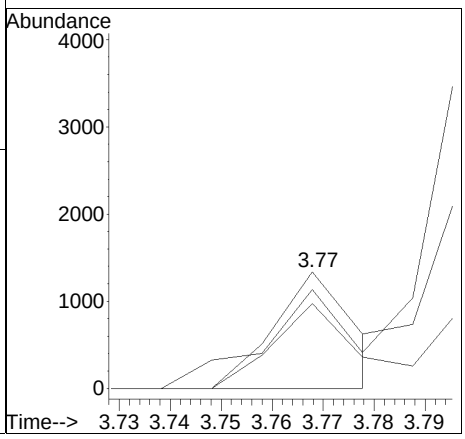

TALL150102.M Thu Mar 12 09:52:30 2015

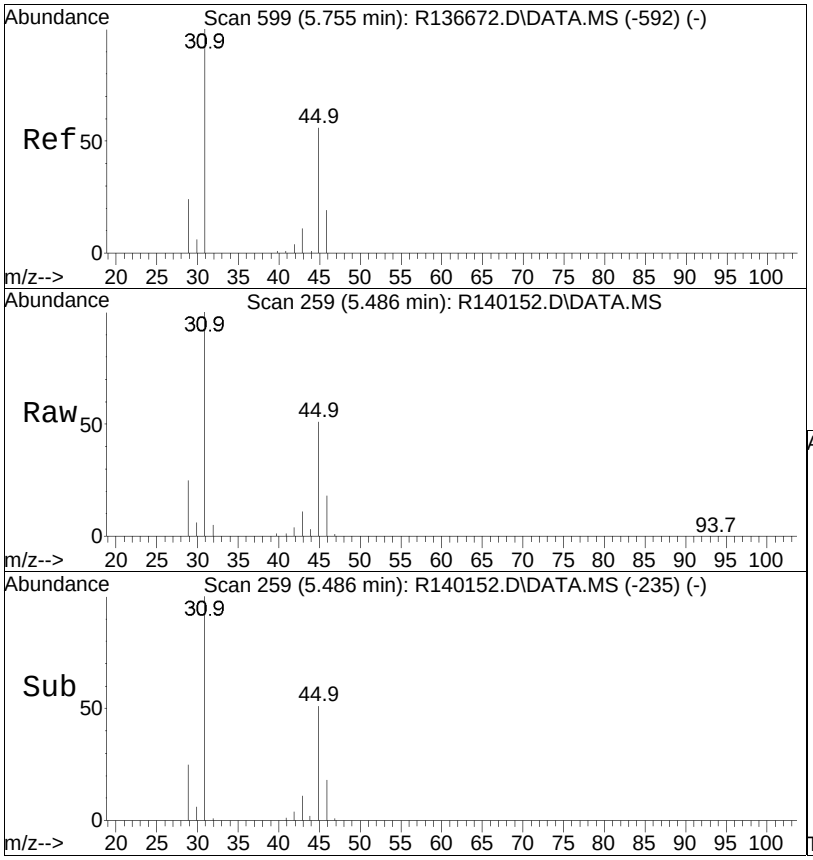



#3
propylene
Concen: 0.30 ppbV m
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 41 Resp: 1461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 59.2 | 52.7 | 79.1 |
| 39 | 84.8 | 59.6 | 89.4 |

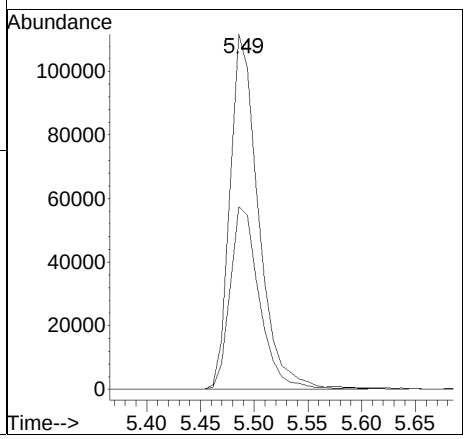


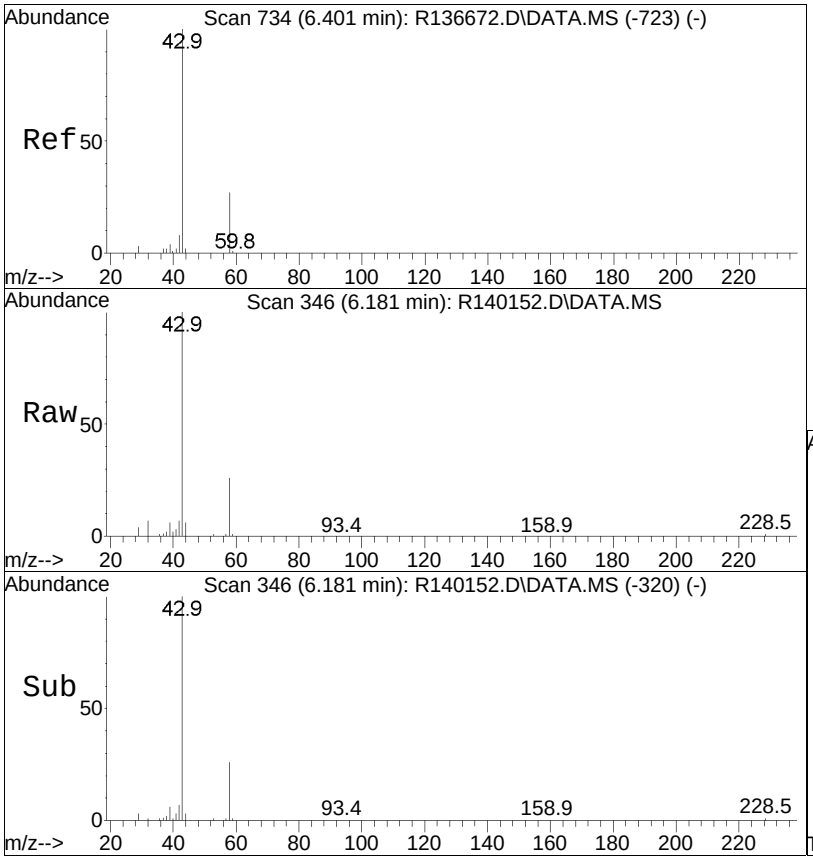



#15
ethanol
Concen: 44.86 ppbV
RT: 5.49 min Scan# 259
Delta R.T. -0.008 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 31 Resp: 206978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 51.4 | 42.0 | 63.0 |

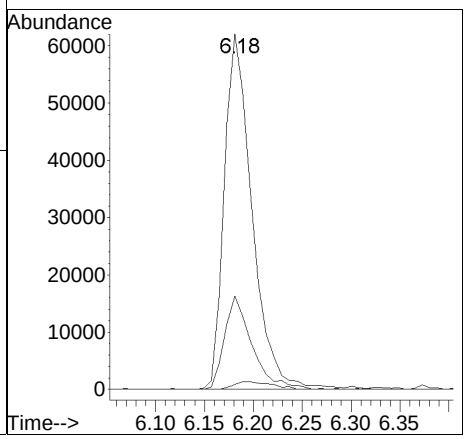


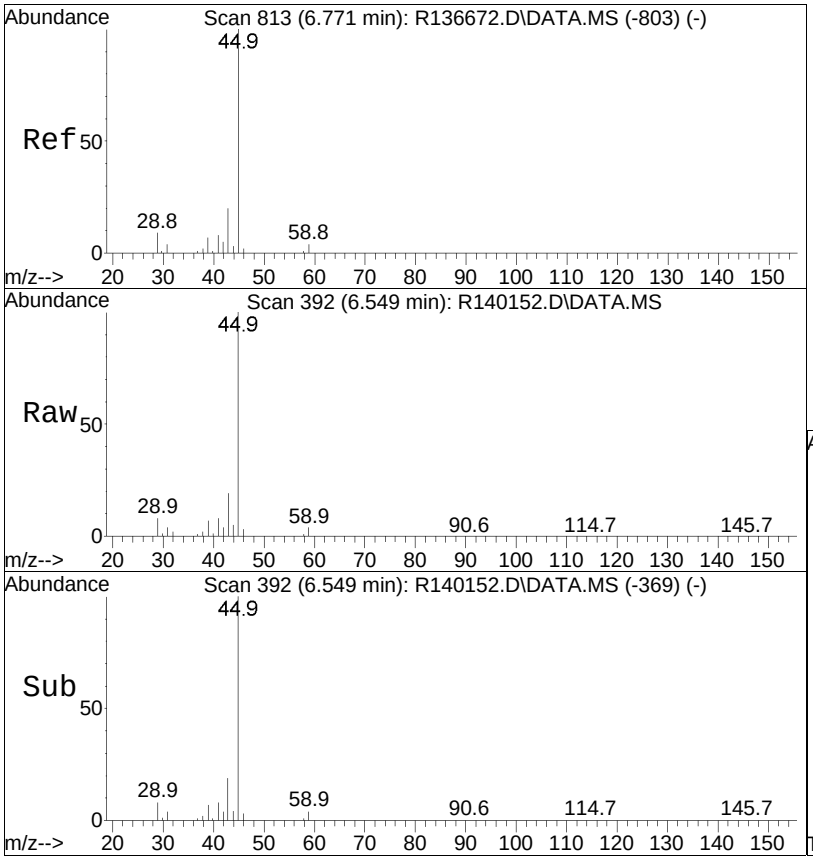



#19
acetone
Concen: 13.17 ppbV
RT: 6.18 min Scan# 346
Delta R.T. 0.008 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 43 Resp: 123338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.2 | 19.9 | 29.9 |
| 57 | 1.4 | 0.6 | 0.8# |

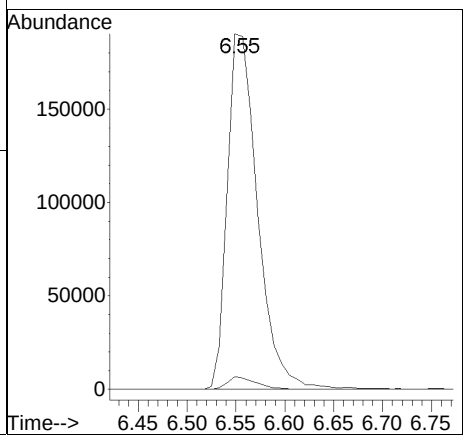


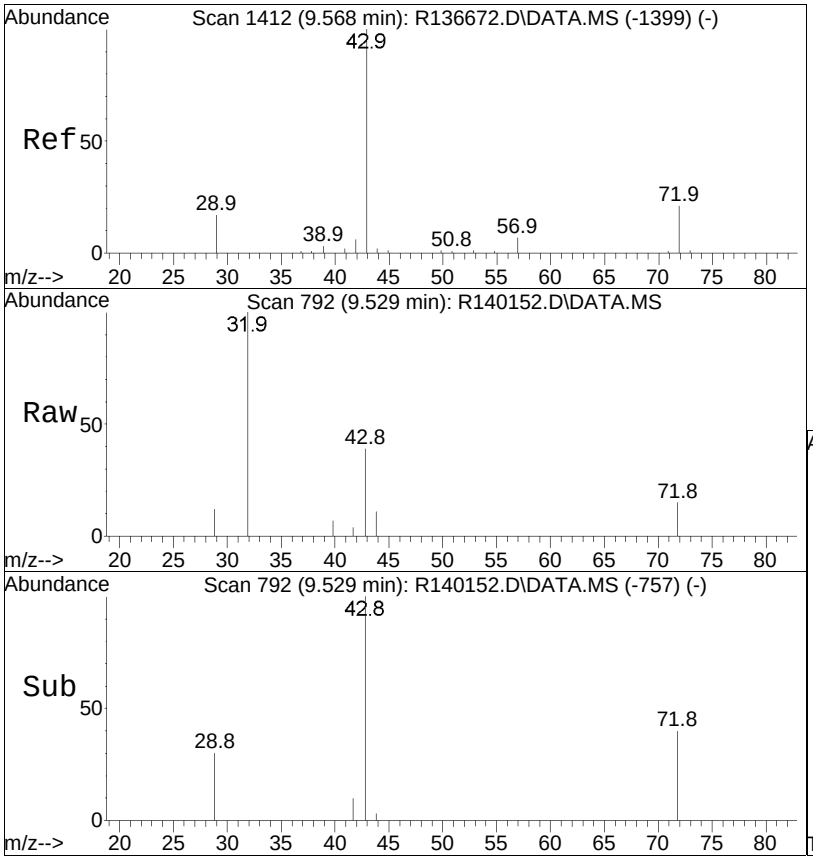



#22
isopropyl alcohol
Concen: 37.27 ppbV
RT: 6.55 min Scan# 392
Delta R.T. -0.016 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 45 Resp: 412601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 3.6 | 2.5 | 3.7 |

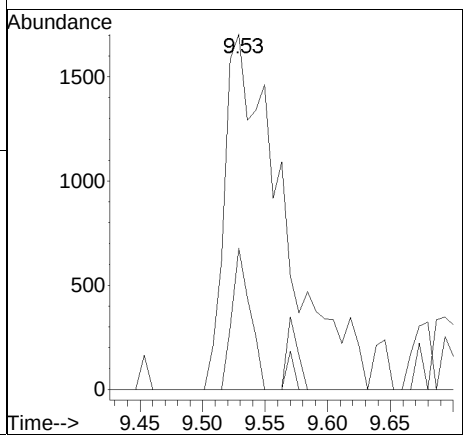


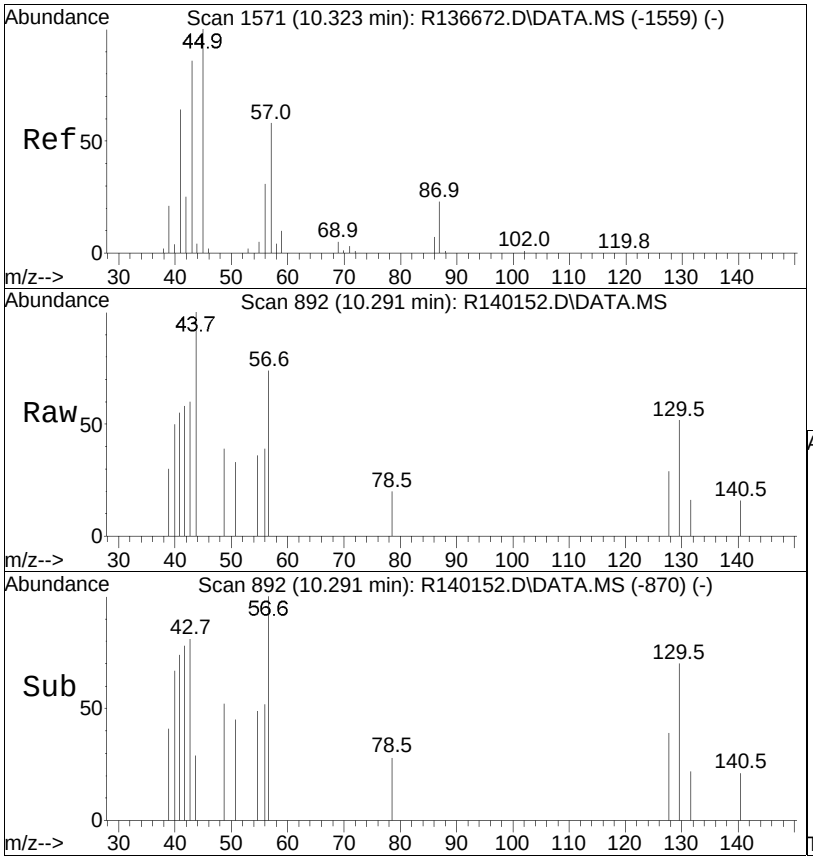



#36
2-butanone
Concen: 0.40 ppbV
RT: 9.53 min Scan# 792
Delta R.T. 0.041 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 43 Resp: 5523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 39.8 | 15.6 | 23.4# |
| 57 | 0.0 | 4.6 | 7.0# |

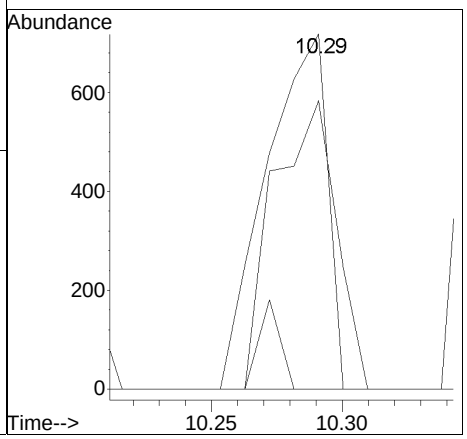


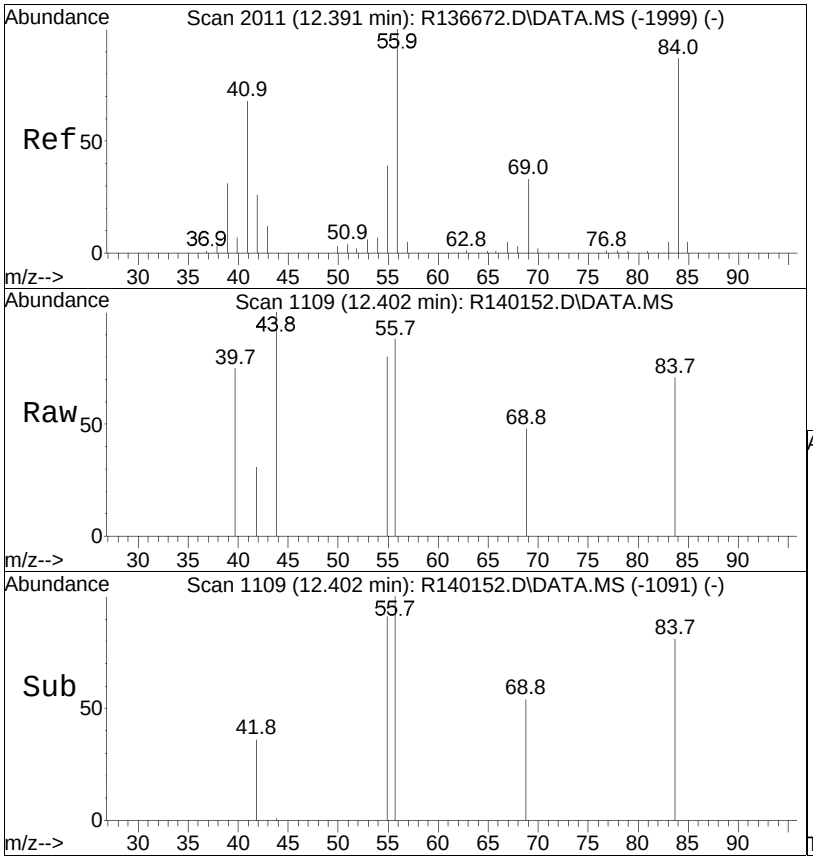



#44
hexane
Concen: 0.09 ppbV
RT: 10.29 min Scan# 892
Delta R.T. 0.009 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 57 Resp: 1169

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 81.2 | 141.8 | 212.8# |
| 86 | 0.0 | 10.0 | 15.0# |

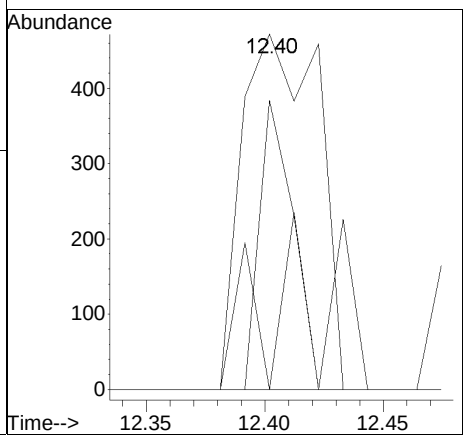


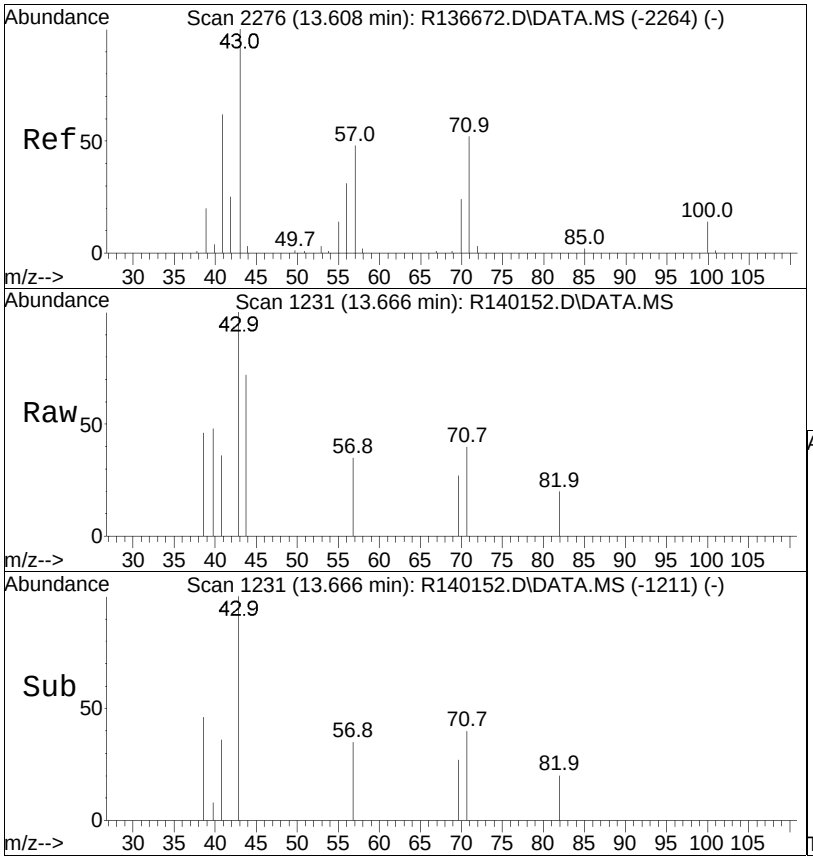



#53
cyclohexane
Concen: 0.10 ppbV
RT: 12.40 min Scan# 1109
Delta R.T. -0.010 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 56 Resp: 1058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 81.4 | 62.6 | 94.0 |
| 41 | 0.0 | 51.4 | 77.0# |

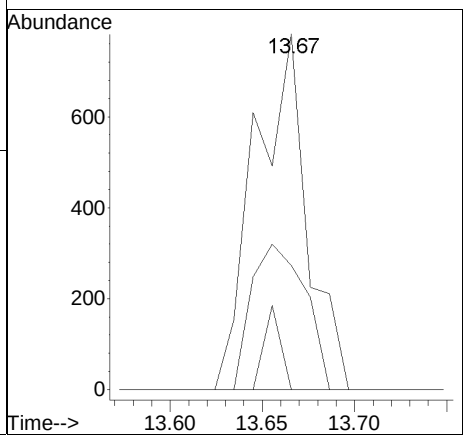


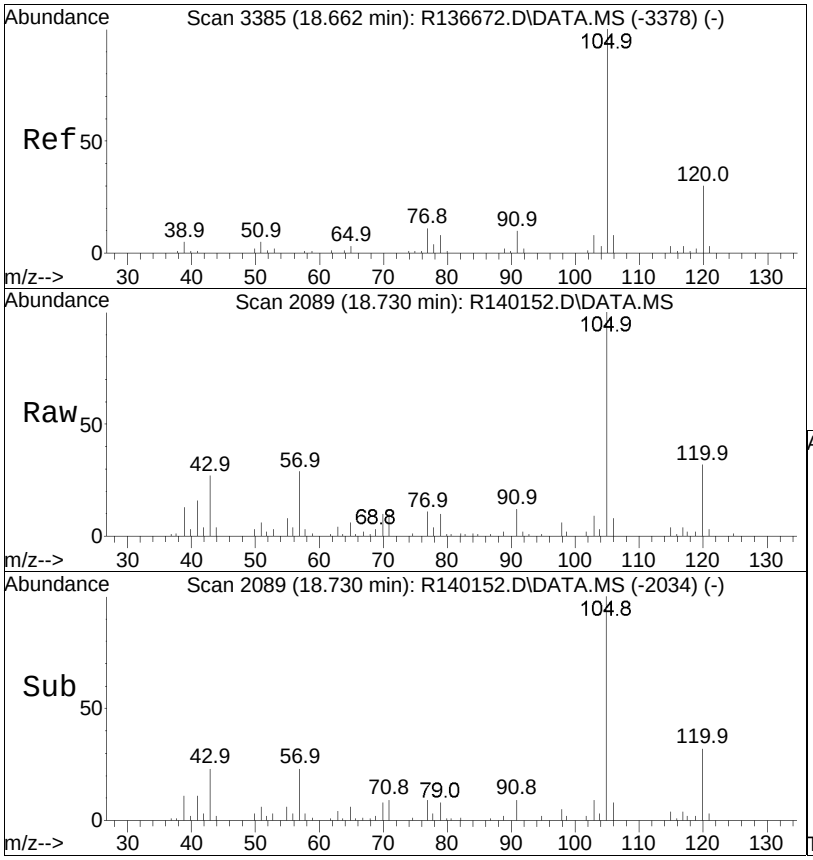



#62
heptane
Concen: 0.10 ppbV
RT: 13.67 min Scan# 1231
Delta R.T. 0.010 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion: 43 Resp: 1537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 34.9 | 36.7 | 55.1# |
| 100 | 0.0 | 9.0 | 13.6# |

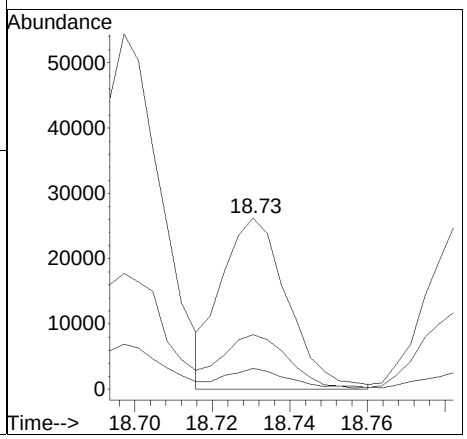





#96
4-ethyl toluene
Concen: 0.80 ppbV
RT: 18.73 min Scan# 2089
Delta R.T. 0.002 min
Lab File: R140152.D
Acq: 11 Mar 2015 10:59 pm

Tgt Ion:105 Resp: 31157

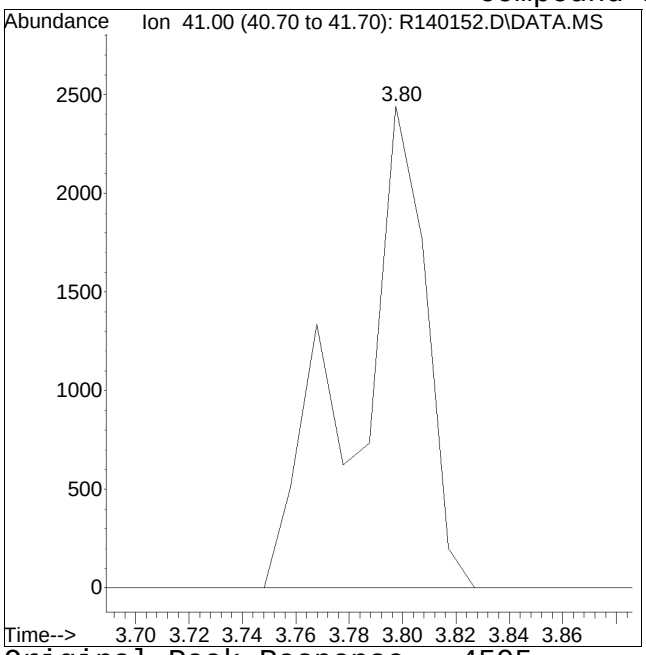
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 32.0 | 25.8 | 38.8 |
| 91 | 12.3 | 8.6 | 13.0 |



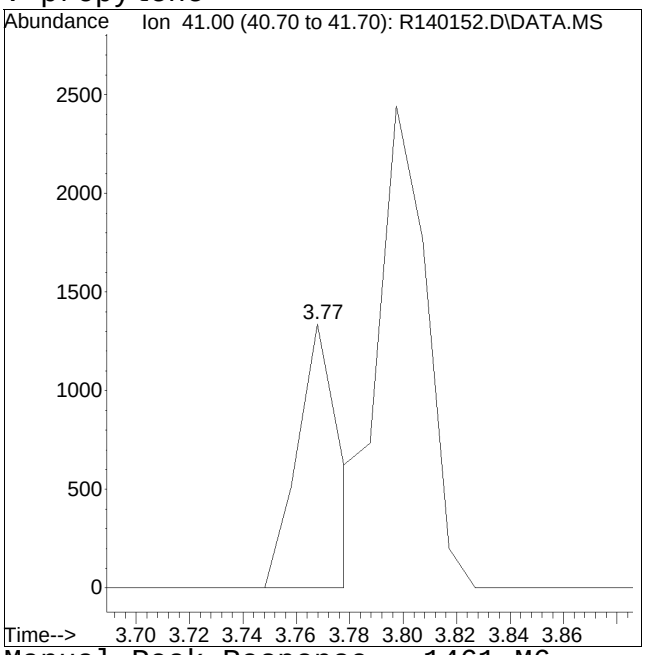
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140152.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 10:59 pm Instrument : Air Piano 1
Sample : L1504425-05,3,250,250 Quant Date : 3/12/2015 7:56 am

Compound #3: propylene




Original Peak Response = 4505




Manual Peak Response = 1461 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140153.D
Acq On : 11 Mar 2015 11:31 pm
Operator : AIRPIANO1:RY
Sample : L1504425-07,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 09:53:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 96692 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 86.92% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 180466 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 81.73% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 45372 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 90.51% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 787 | 0.156 | ppbV # | 38 |
| 15) ethanol | 5.50 | 31 | 18412 | 3.831 | ppbV | 99 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.19 | 43 | 70726 | 7.249 | ppbV # | 92 |
| 22) isopropyl alcohol | 0.00 | | 0 | N.D. | d | |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | d | |
| 30) carbon disulfide | 7.82 | 76 | 2056 | 0.120 | ppbV # | 1 |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.53 | 43 | 5302 | 0.369 | ppbV # | 89 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | d | |
| 44) hexane | 10.27 | | 0 | N.D. | | |
| 53) cyclohexane | 0.00 | | 0 | N.D. | d | |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 13.35 | | 0 | N.D. | | |
| 62) heptane | 13.66 | | 0 | N.D. | | |
| 64) 4-methyl-2-pentanone | 14.41 | | 0 | N.D. | | |
| 72) 2-hexanone | 15.66 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.73 | 105 | 19637 | 0.517 | ppbV | 98 |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | d | |

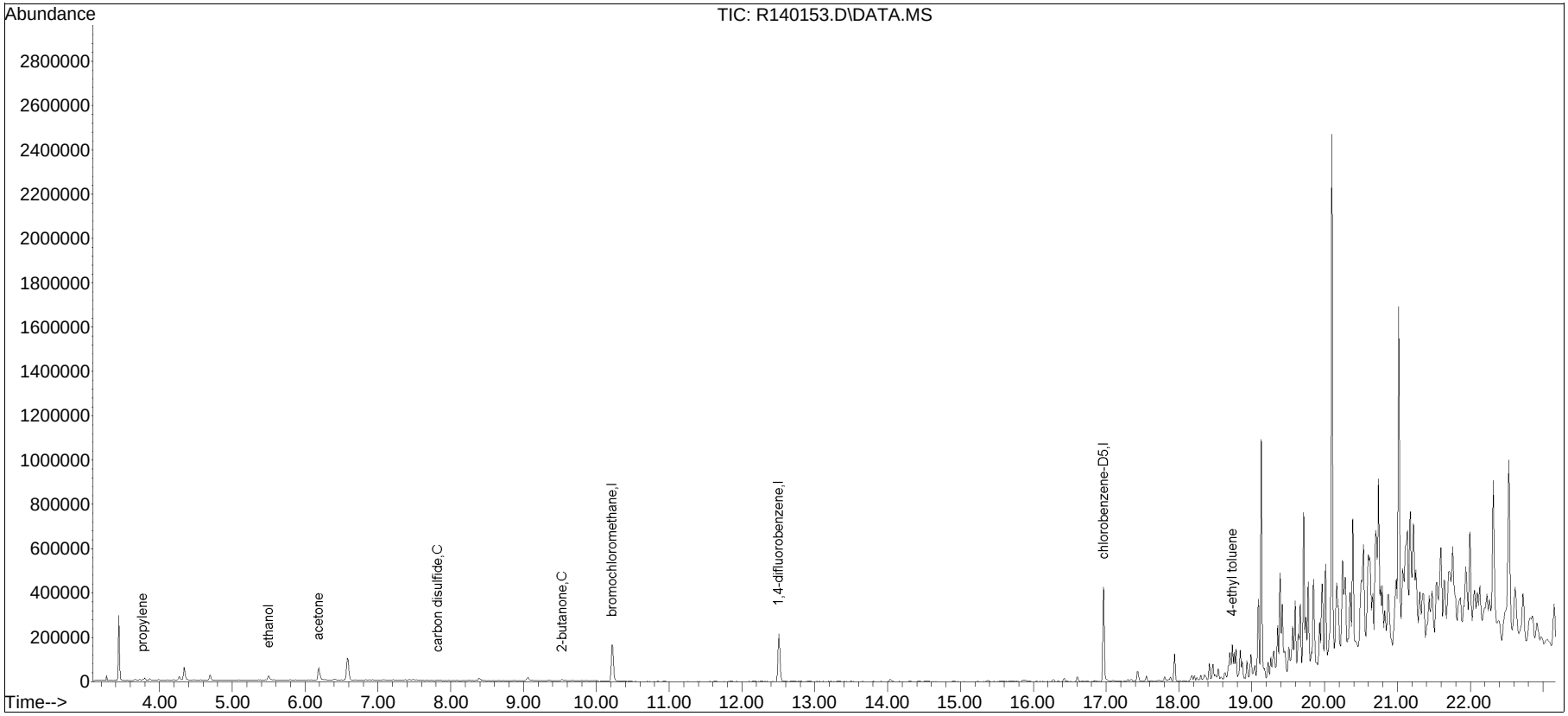
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

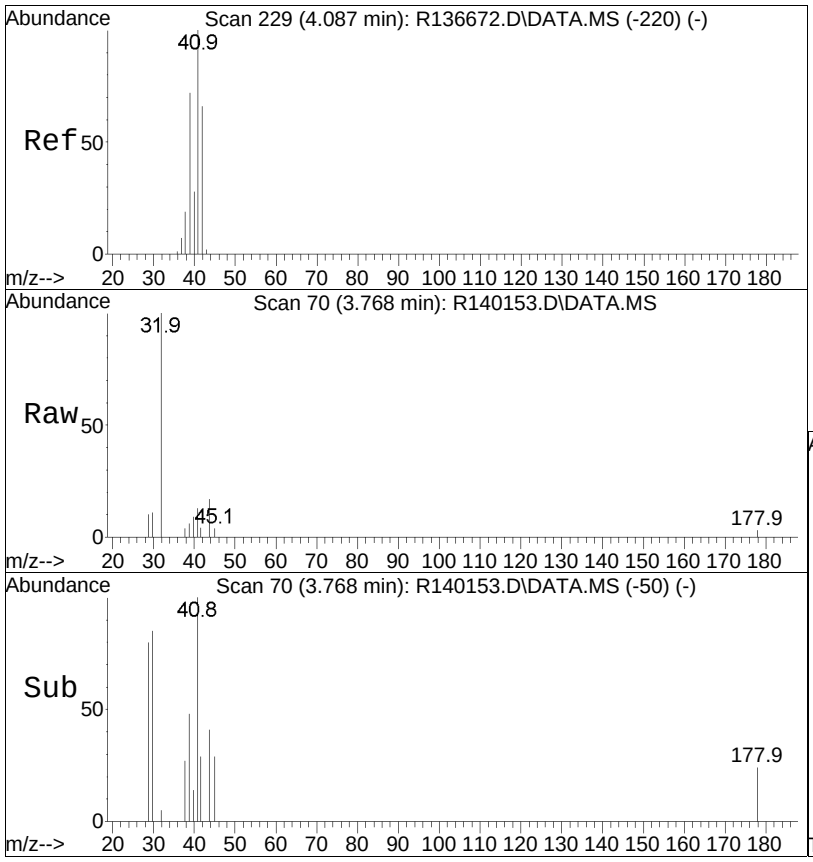
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140153.D
Acq On : 11 Mar 2015 11:31 pm
Operator : AIRPIANO1:RY
Sample : L1504425-07,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 09:53:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



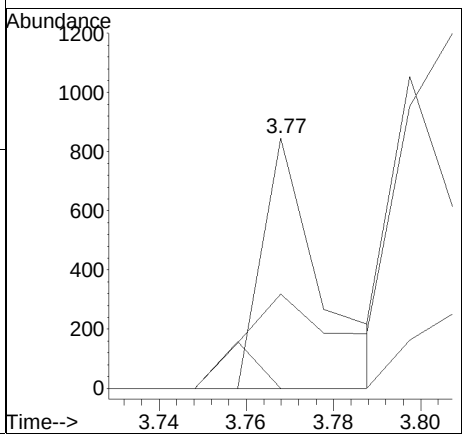

TALL150102.M Thu Mar 12 09:53:14 2015

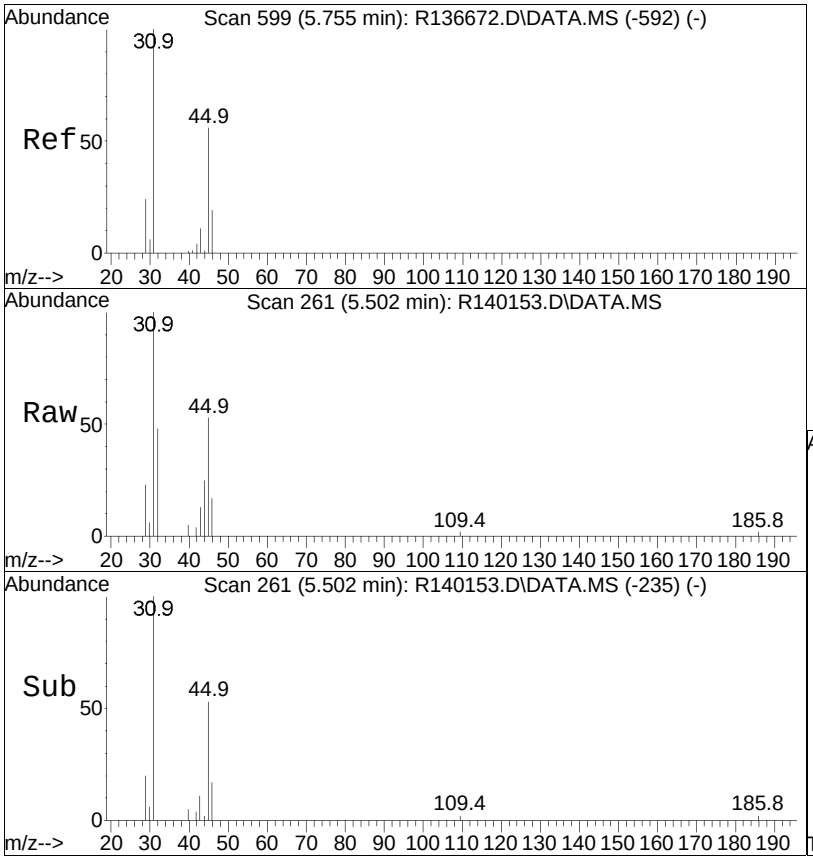



#3
propylene
Concen: 0.16 ppbV
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 41 Resp: 787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 0.0 | 52.7 | 79.1# |
| 39 | 37.7 | 59.6 | 89.4# |

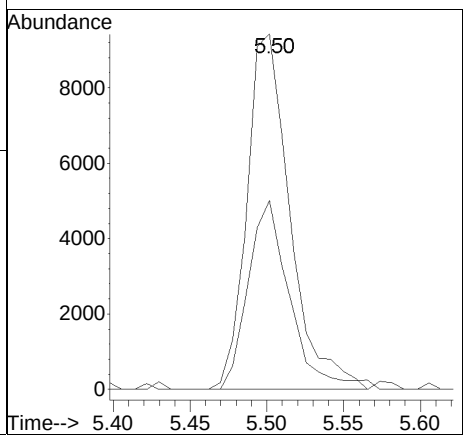


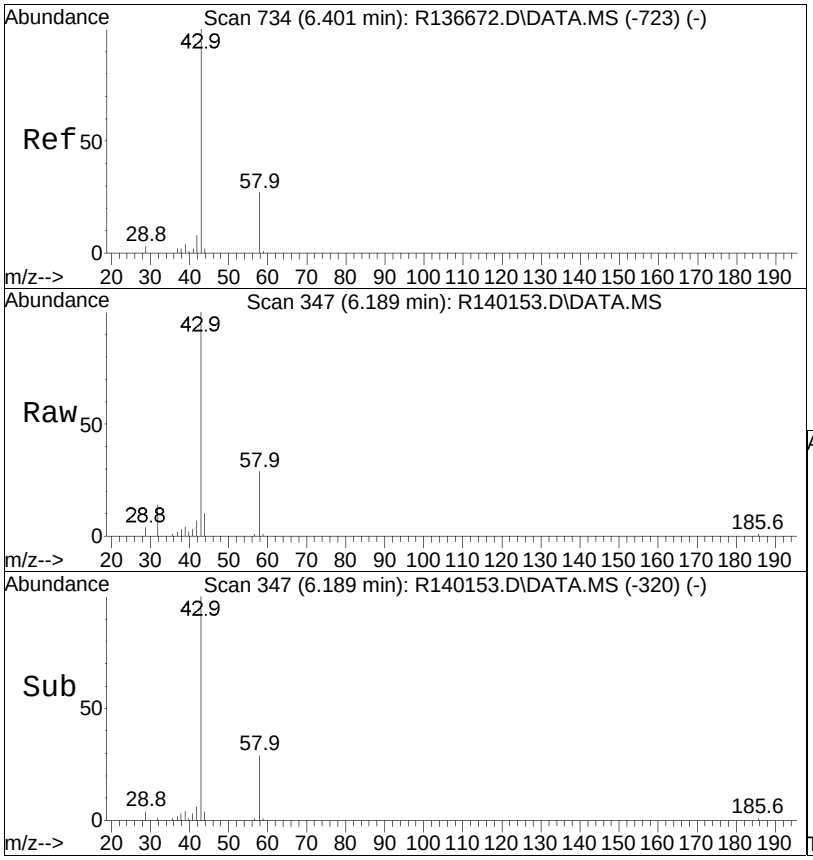



#15
ethanol
Concen: 3.83 ppbV
RT: 5.50 min Scan# 261
Delta R.T. 0.008 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 31 Resp: 18412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 53.2 | 42.0 | 63.0 |

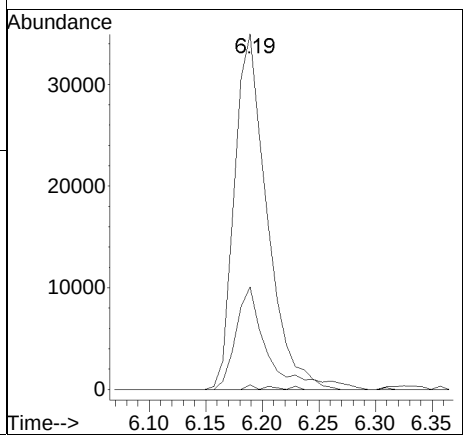


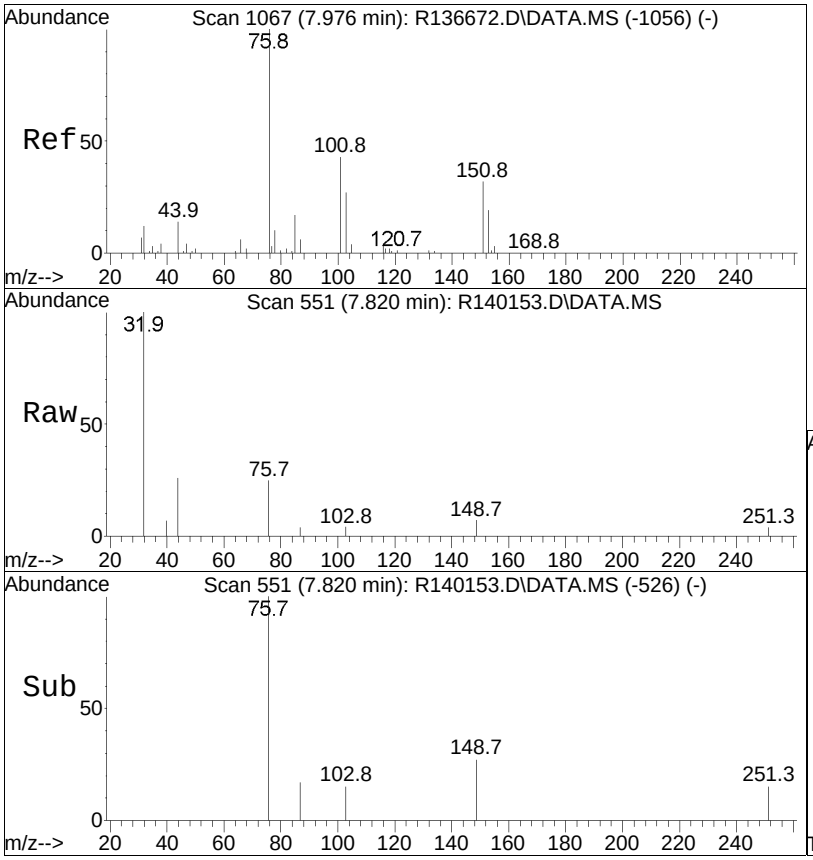



#19
acetone
Concen: 7.25 ppbV
RT: 6.19 min Scan# 347
Delta R.T. 0.016 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 43 Resp: 70726

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.8 | 19.9 | 29.9 |
| 57 | 1.3 | 0.6 | 0.8# |

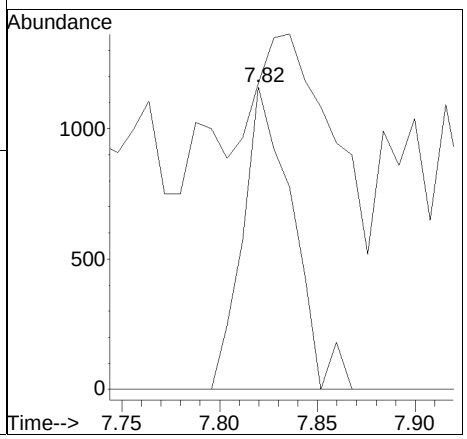


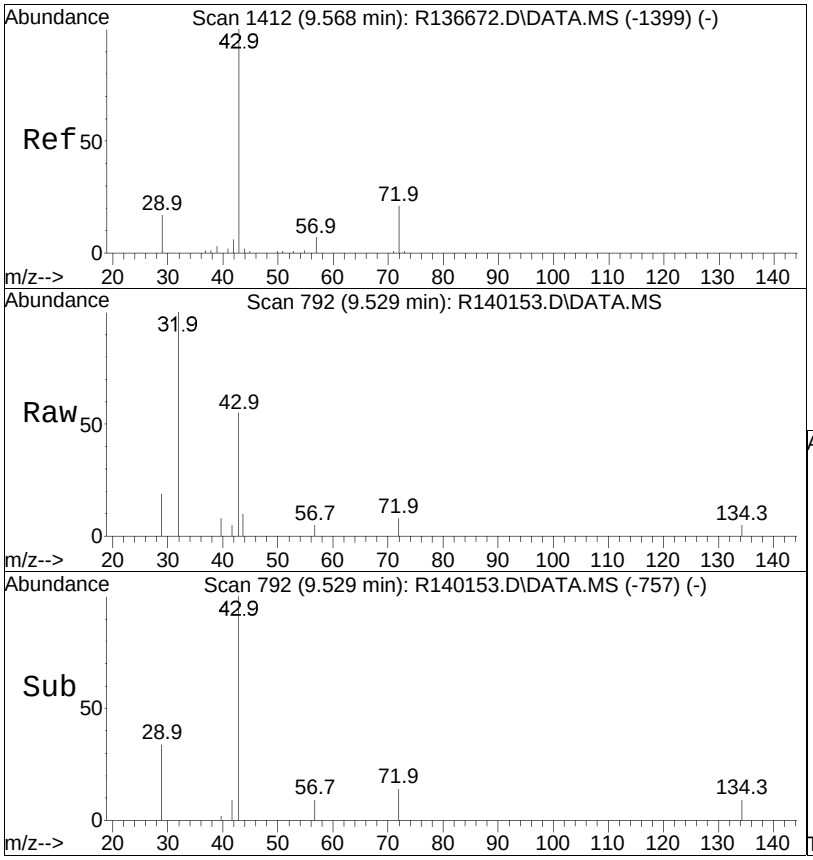



#30
carbon disulfide
Concen: 0.12 ppbV
RT: 7.82 min Scan# 551
Delta R.T. 0.000 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 76 Resp: 2056

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 101.2 | 14.3 | 21.5# |

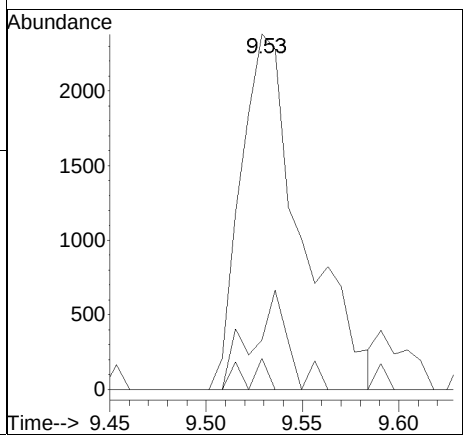


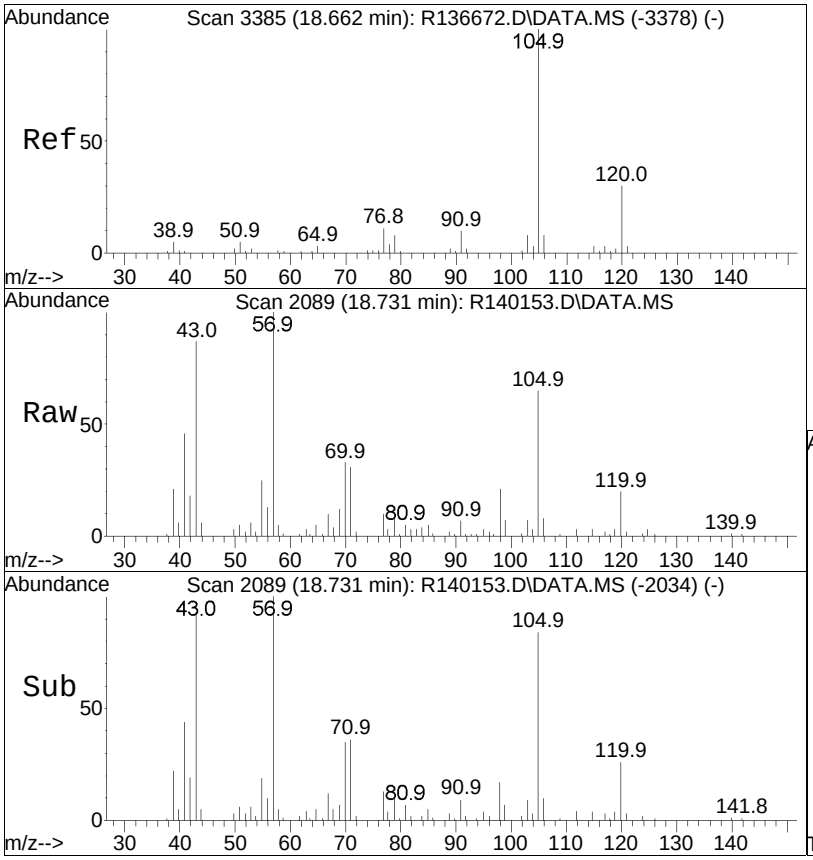



#36
2-butanone
Concen: 0.37 ppbV
RT: 9.53 min Scan# 792
Delta R.T. 0.041 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion: 43 Resp: 5302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 13.9 | 15.6 | 23.4# |
| 57 | 8.8 | 4.6 | 7.0# |

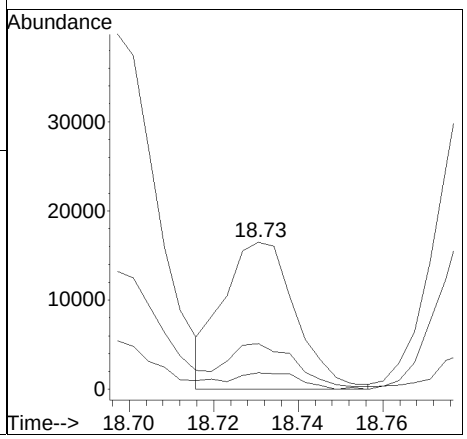





#96
4-ethyl toluene
Concen: 0.52 ppbV
RT: 18.73 min Scan# 2089
Delta R.T. 0.002 min
Lab File: R140153.D
Acq: 11 Mar 2015 11:31 pm

Tgt Ion:105 Resp: 19637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 31.1 | 25.8 | 38.8 |
| 91 | 11.3 | 8.6 | 13.0 |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM Method | : TALL150102.M |
| Data File | : R140153.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 11:31 pm | Instrument | : Air Piano 1 |
| Sample | : L1504425-07,3,250,250 | Quant Date | : 3/12/2015 7:56 am |

There are no manual integrations or false positives in this file.

R140153.D TALL150102.M Thu Mar 12 09:53:16 2015 Report VerPage 1.0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140156.D
Acq On : 12 Mar 2015 1:08 am
Operator : AIRPIANO1:RY
Sample : L1504425-09,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 12 09:53:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 99548 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = | | 89.49% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 189838 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = | | 85.98% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 48037 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = | | 95.83% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 716 | 0.138 | ppbV # | 60 |
| 15) ethanol | 5.50 | 31 | 11284 | 2.280 | ppbV | 94 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.20 | 43 | 17776 | 1.770 | ppbV # | 95 |
| 22) isopropyl alcohol | 0.00 | | 0 | N.D. | d | |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | d | |
| 30) carbon disulfide | 7.83 | 76 | 1775 | 0.101 | ppbV # | 1 |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.56 | 43 | 1463 | 0.099 | ppbV # | 63 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | | |
| 44) hexane | 10.29 | | 0 | N.D. | | |
| 53) cyclohexane | 0.00 | | 0 | N.D. | d | |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 13.34 | | 0 | N.D. | | |
| 62) heptane | 13.66 | | 0 | N.D. | | |
| 64) 4-methyl-2-pentanone | 0.00 | | 0 | N.D. | | |
| 72) 2-hexanone | 15.66 | | 0 | N.D. | | |
| 96) 4-ethyl toluene | 18.73 | | 0 | N.D. | | |
| 101) Benzyl Chloride | 19.27 | | 0 | N.D. | | |

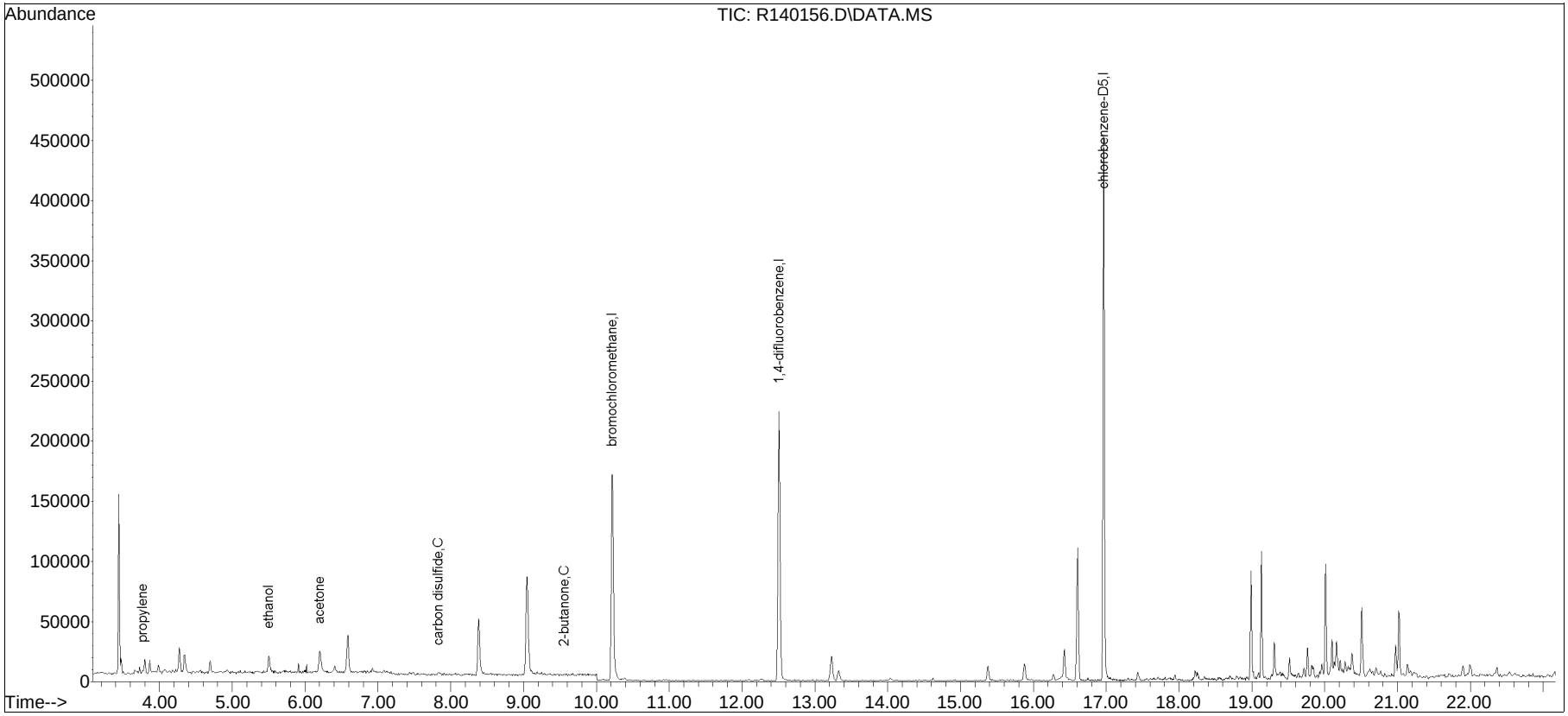
(#) = qualifier out of range (m) = manual integration (+) = signals summed

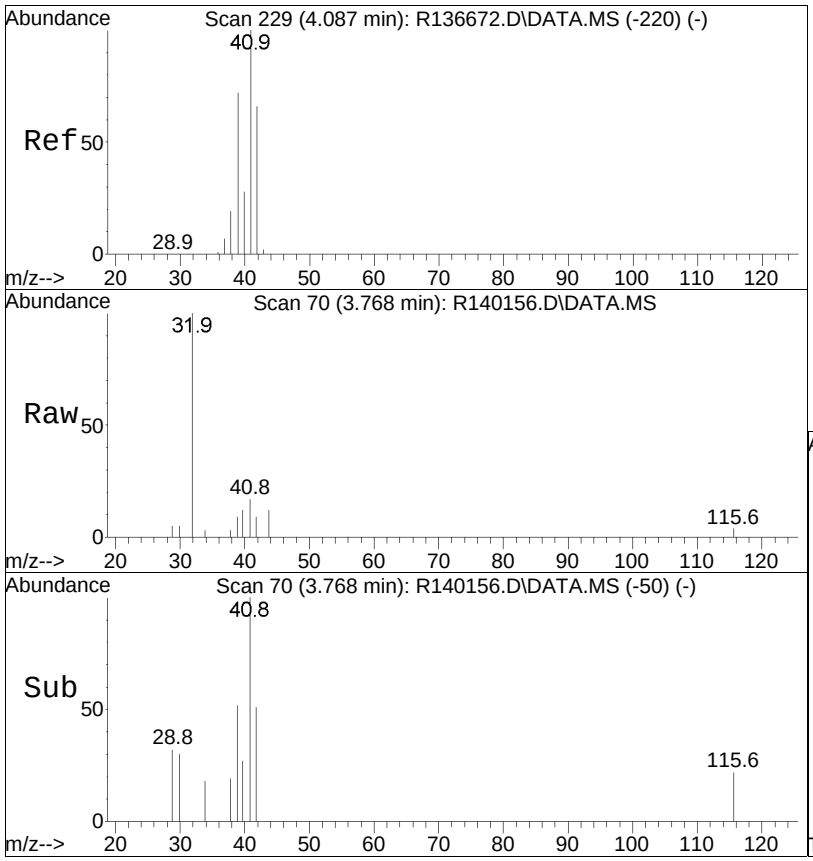
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140156.D
Acq On : 12 Mar 2015 1:08 am
Operator : AIRPIANO1:RY
Sample : L1504425-09,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 12 09:53:50 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D

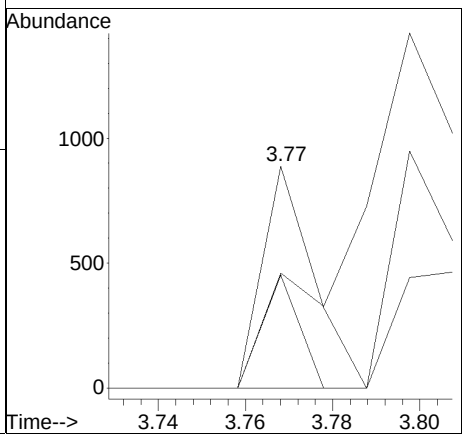


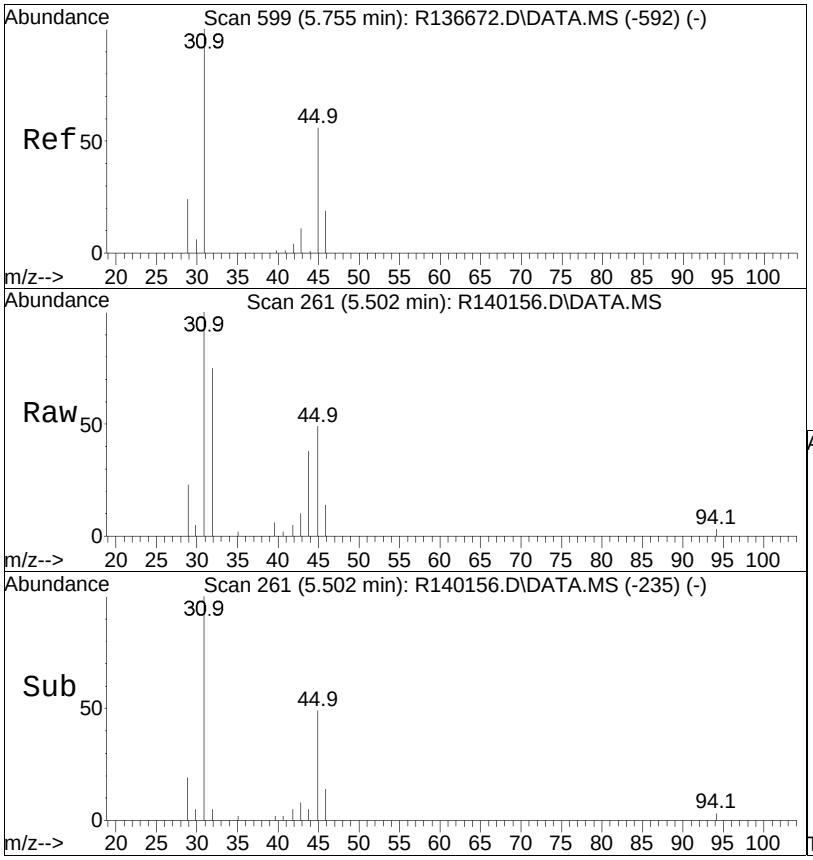



#3
propylene
Concen: 0.14 ppbV
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 41 Resp: 716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 51.0 | 52.7 | 79.1# |
| 39 | 124.2 | 59.6 | 89.4# |

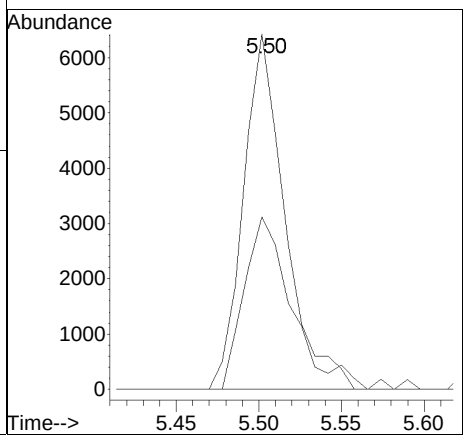


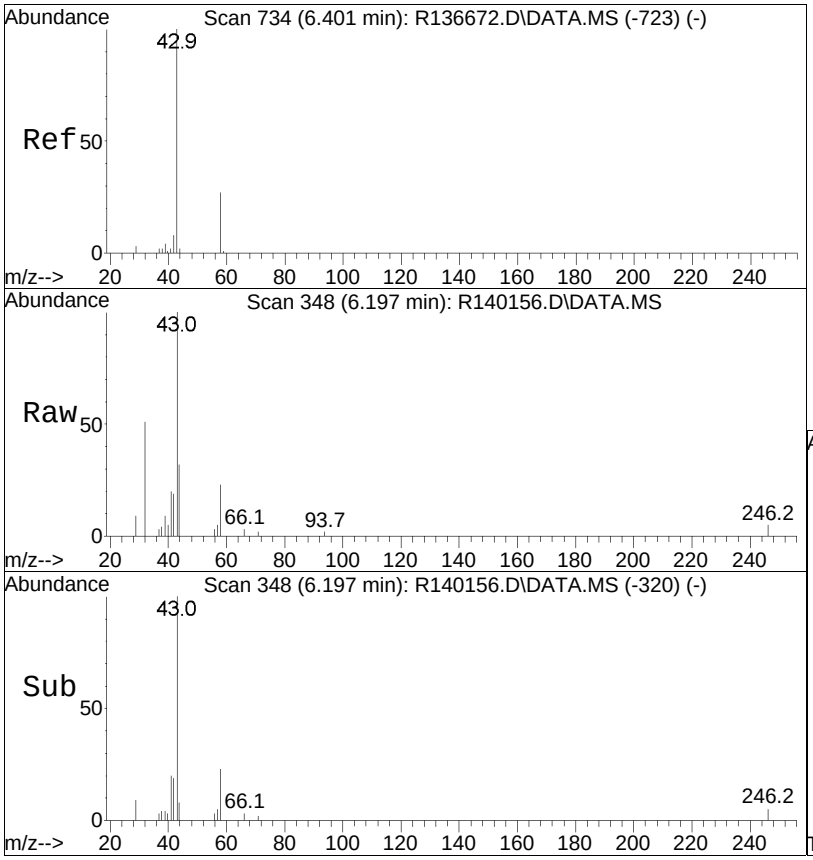



#15
ethanol
Concen: 2.28 ppbV
RT: 5.50 min Scan# 261
Delta R.T. 0.008 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 31 Resp: 11284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 48.6 | 42.0 | 63.0 |

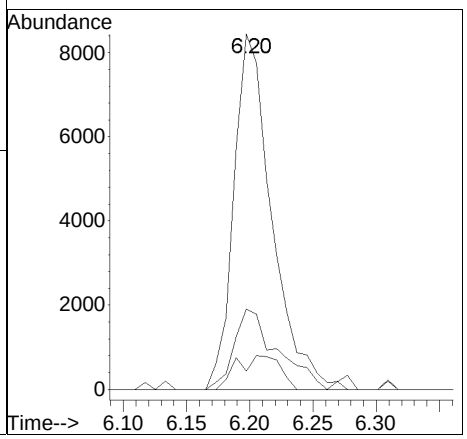


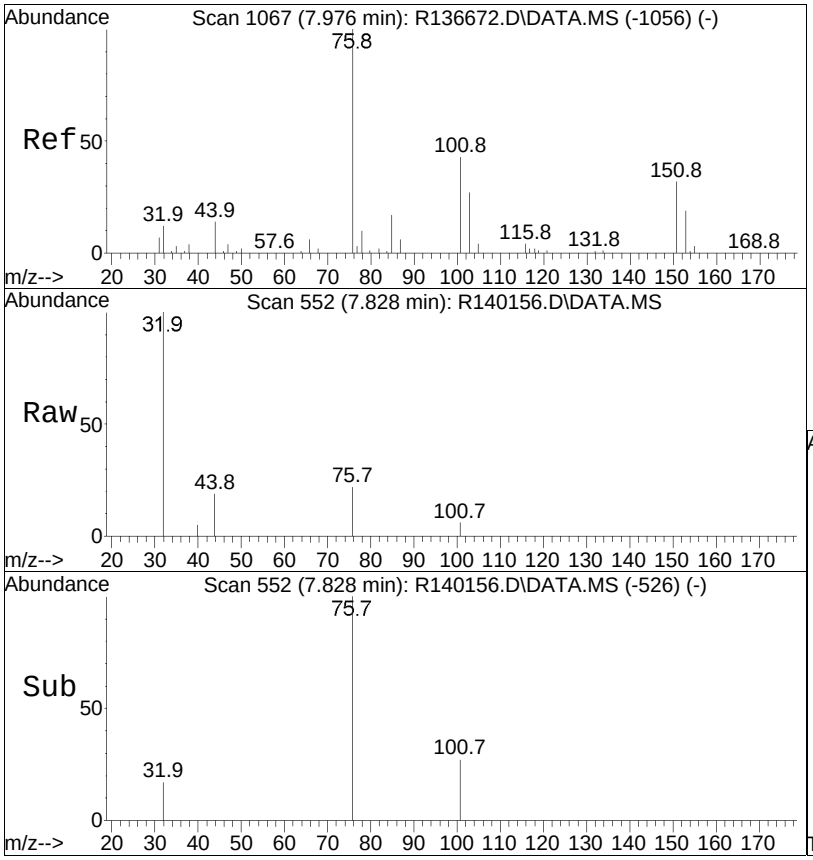



#19
acetone
Concen: 1.77 ppbV
RT: 6.20 min Scan# 348
Delta R.T. 0.024 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 43 Resp: 17776

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 22.6 | 19.9 | 29.9 |
| 57 | 5.1 | 0.6 | 0.8# |

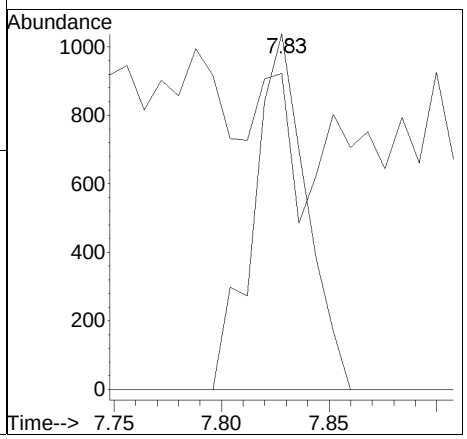


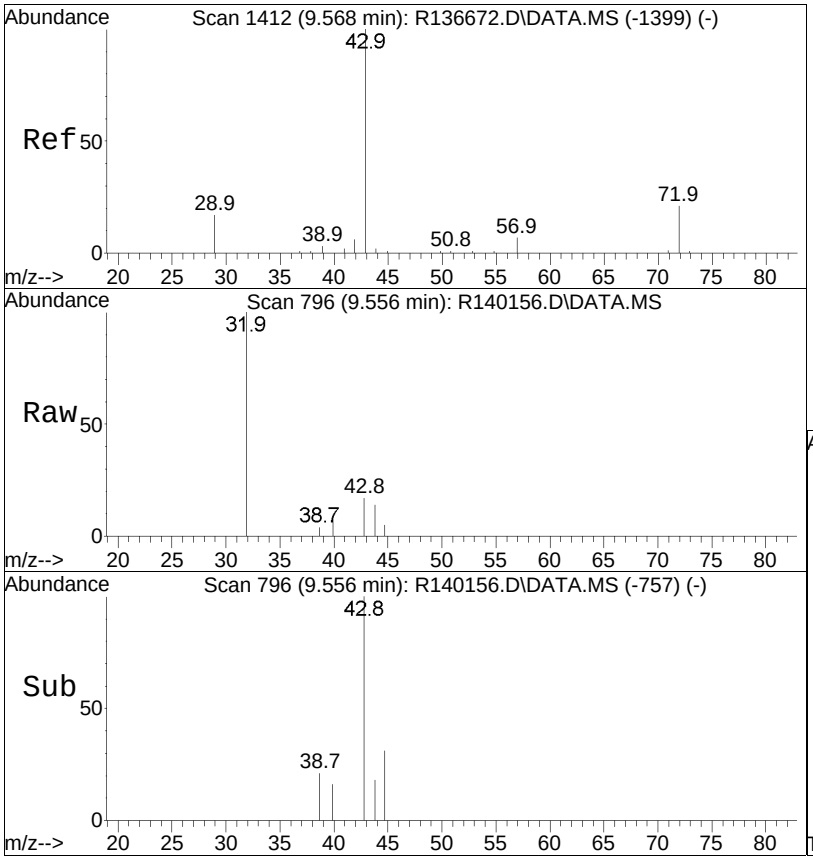



#30
carbon disulfide
Concen: 0.10 ppbV
RT: 7.83 min Scan# 552
Delta R.T. 0.008 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 76 Resp: 1775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 88.9 | 14.3 | 21.5# |

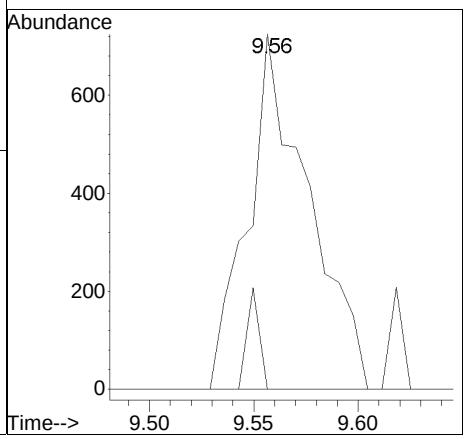





#36
2-butanone
Concen: 0.10 ppbV
RT: 9.56 min Scan# 796
Delta R.T. 0.069 min
Lab File: R140156.D
Acq: 12 Mar 2015 1:08 am

Tgt Ion: 43 Resp: 1463

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 0.0 | 15.6 | 23.4# |
| 57 | 0.0 | 4.6 | 7.0# |



Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | Method | : TALL150102.M |
| Data File | : R140156.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/12/2015 1:08 am | Instrument | : Air Piano 1 |
| Sample | : L1504425-09,3,250,250 | Quant Date | : 3/12/2015 7:57 am |

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140157.D
Acq On : 12 Mar 2015 1:40 am
Operator : AIRPIANO1:RY
Sample : L1504425-10,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 12 09:54:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 99632 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = 89.56% | | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 191319 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = 86.65% | | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 50623 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = 100.99% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 46810M6 | 9.019 | ppbV | |
| 15) ethanol | 5.50 | 31 | 17200 | 3.473 | ppbV | 97 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.18 | 43 | 111392M6 | 11.080 | ppbV | |
| 22) isopropyl alcohol | 6.56 | 45 | 91363 | 7.689 | ppbV | 100 |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | d | |
| 30) carbon disulfide | 7.82 | 76 | 72107 | 4.101 | ppbV | 94 |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.54 | 43 | 5762 | 0.389 | ppbV # | 91 |
| 38) Ethyl Acetate | 10.42 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 10.78 | | 0 | N.D. | | |
| 44) hexane | 10.28 | 57 | 50020 | 3.989 | ppbV # | 33 |
| 53) cyclohexane | 12.41 | 56 | 31671 | 3.039 | ppbV | 95 |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 0.00 | | 0 | N.D. | d | |
| 62) heptane | 13.66 | 43 | 18258 | 1.212 | ppbV | 99 |
| 64) 4-methyl-2-pentanone | 0.00 | | 0 | N.D. | d | |
| 72) 2-hexanone | 0.00 | | 0 | N.D. | d | |
| 96) 4-ethyl toluene | 0.00 | | 0 | N.D. | d | |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | d | |

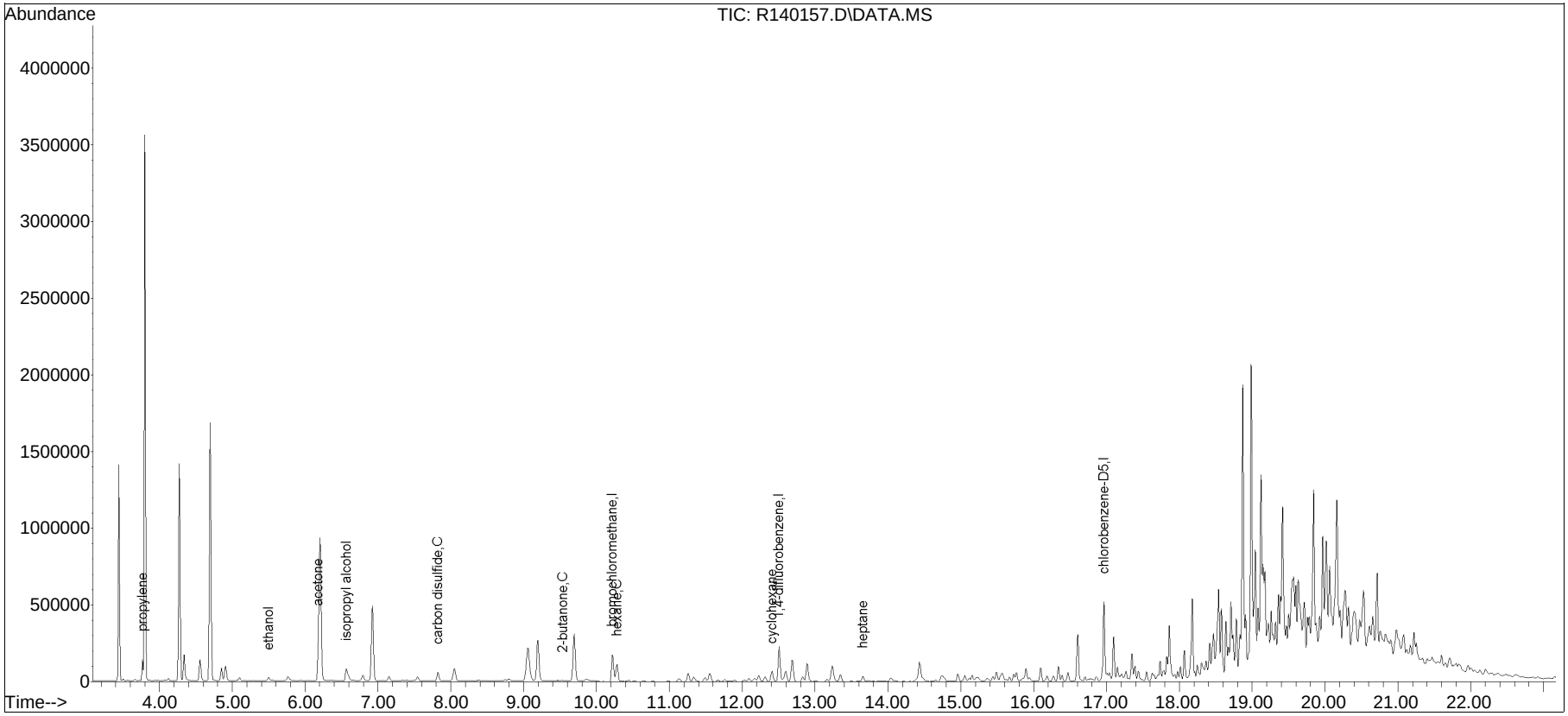
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140157.D
Acq On : 12 Mar 2015 1:40 am
Operator : AIRPIANO1:RY
Sample : L1504425-10,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 11 Sample Multiplier: 1

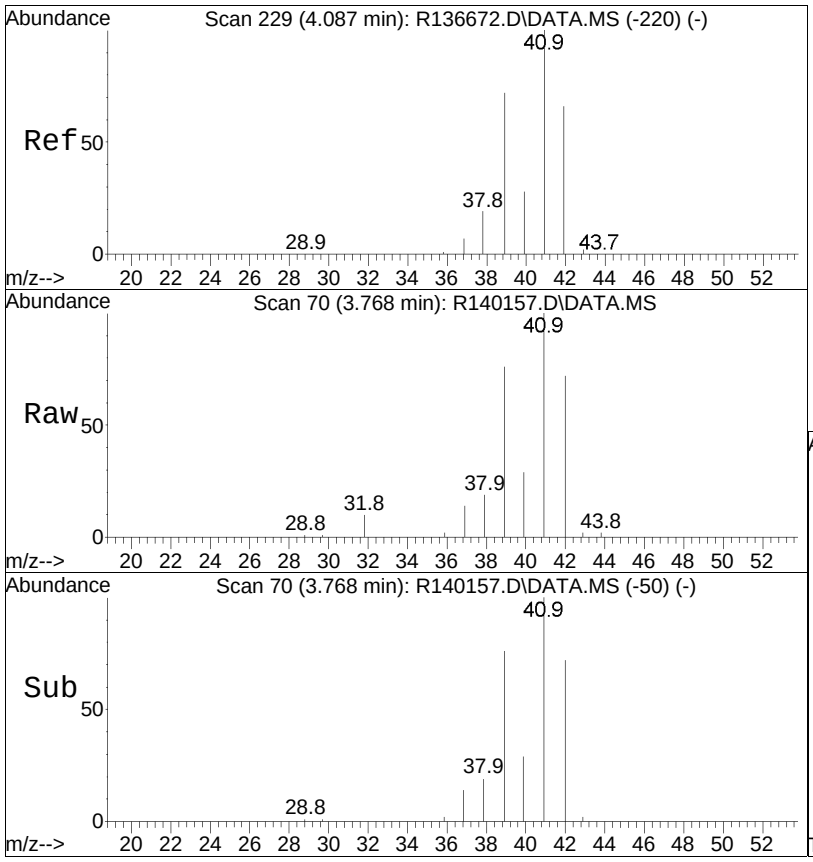
Quant Time: Mar 12 09:54:47 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:18 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D




TALL150102.M Thu Mar 12 09:54:55 2015

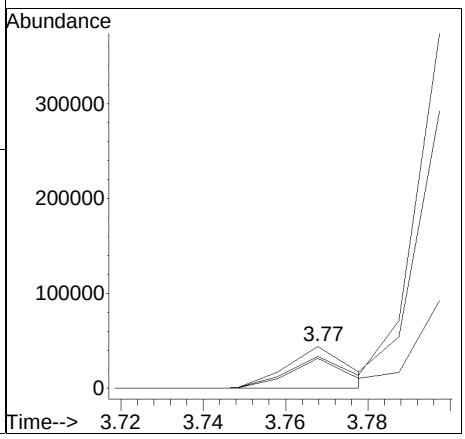
Page 2

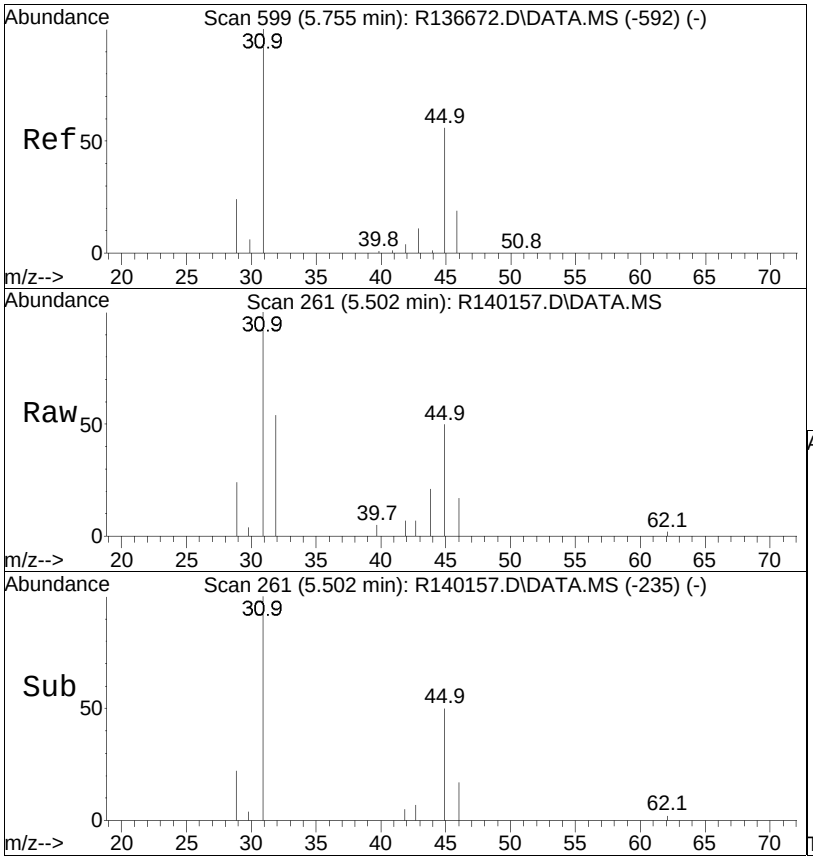



#3
propylene
Concen: 9.02 ppbV m
RT: 3.77 min Scan# 70
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 41 Resp: 46810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 71.8 | 52.7 | 79.1 |
| 39 | 76.3 | 59.6 | 89.4 |

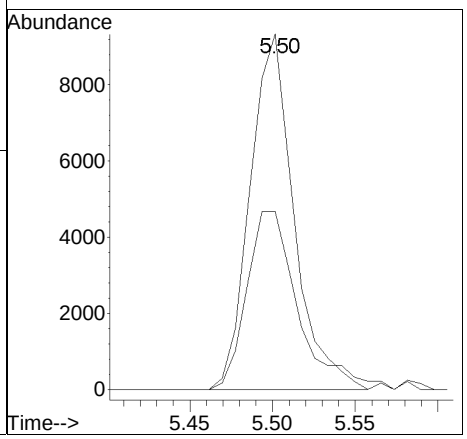


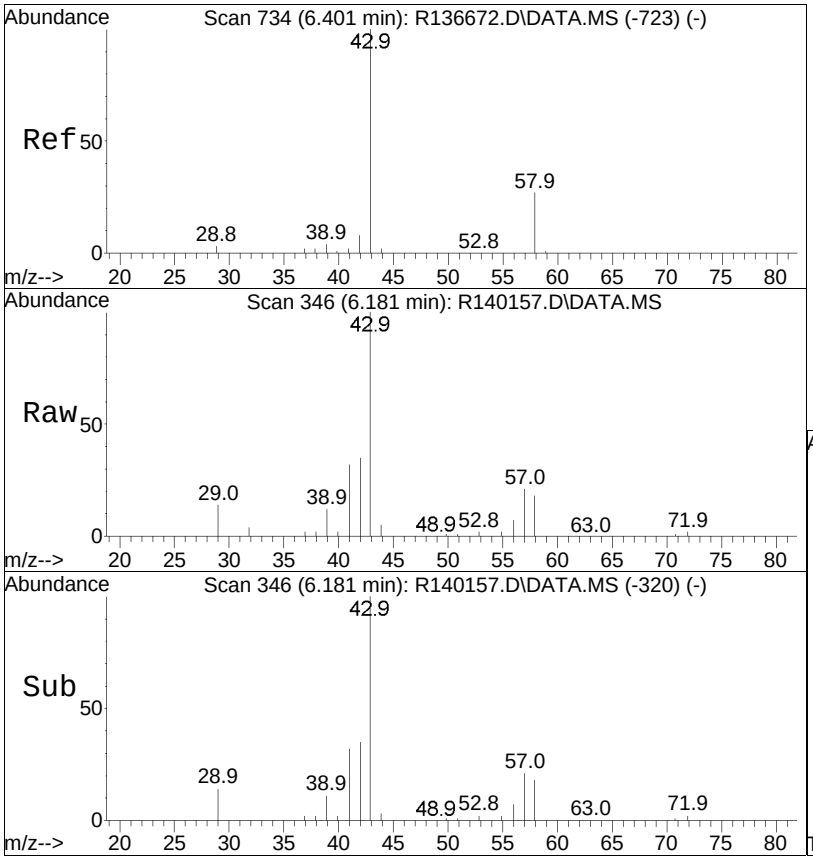



#15
ethanol
Concen: 3.47 ppbV
RT: 5.50 min Scan# 261
Delta R.T. 0.008 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 31 Resp: 17200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 50.1 | 42.0 | 63.0 |

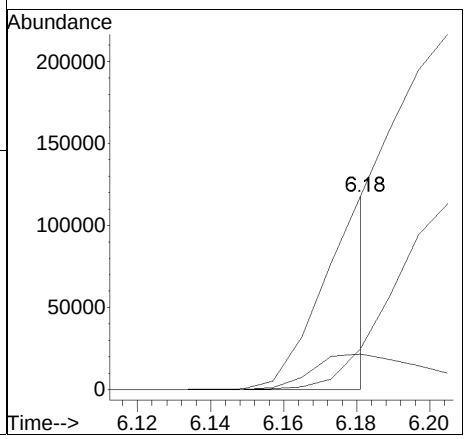


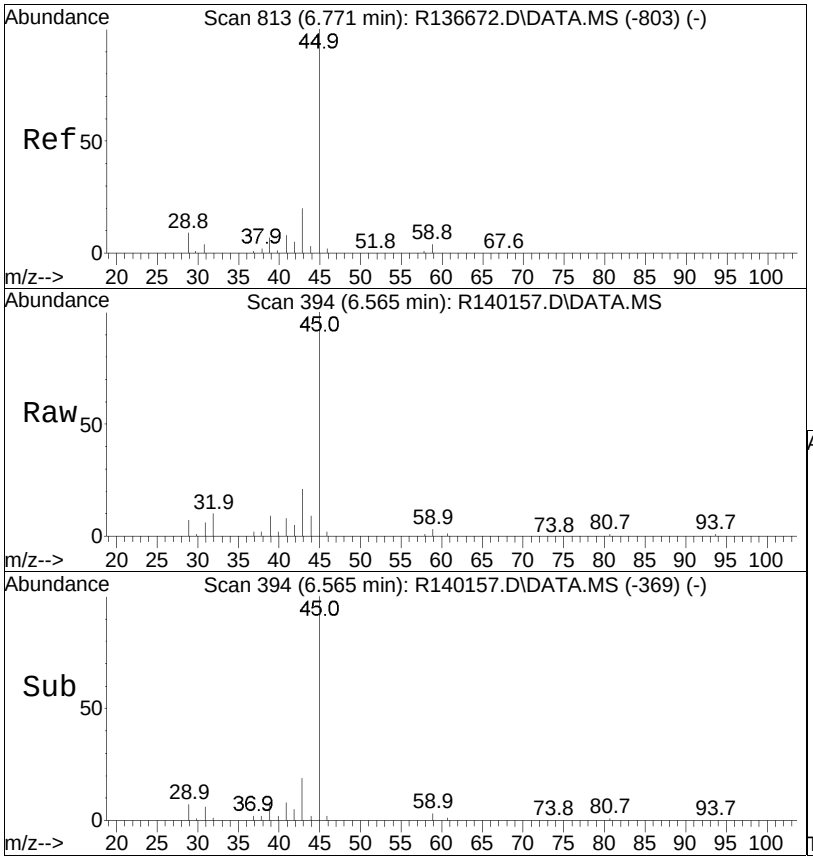



#19
acetone
Concen: 11.08 ppbV m
RT: 6.18 min Scan# 346
Delta R.T. 0.008 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 43 Resp: 111392

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 18.4 | 19.9 | 29.9# |
| 57 | 21.0 | 0.6 | 0.8# |

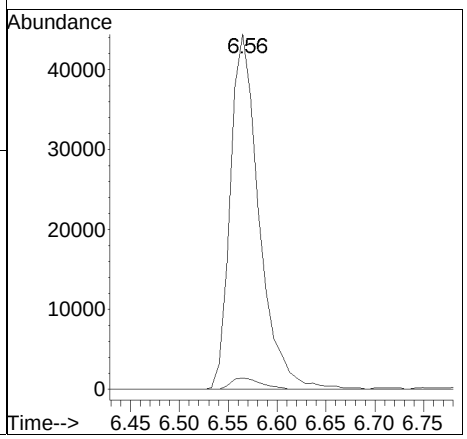


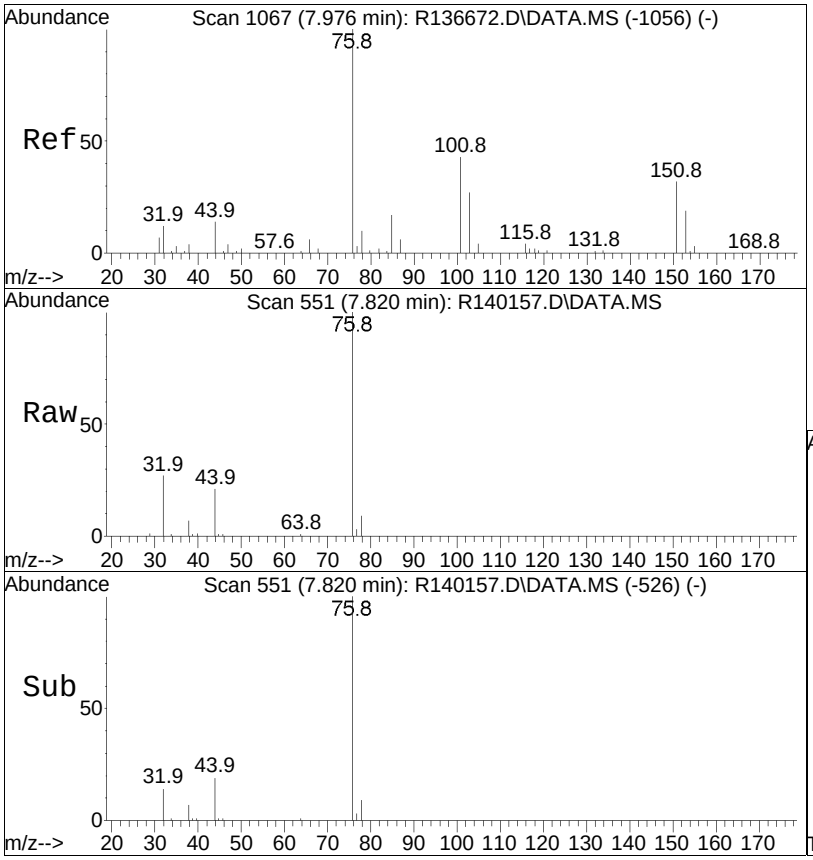



#22
isopropyl alcohol
Concen: 7.69 ppbV
RT: 6.56 min Scan# 394
Delta R.T. 0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 45 Resp: 91363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 3.2 | 2.5 | 3.7 |

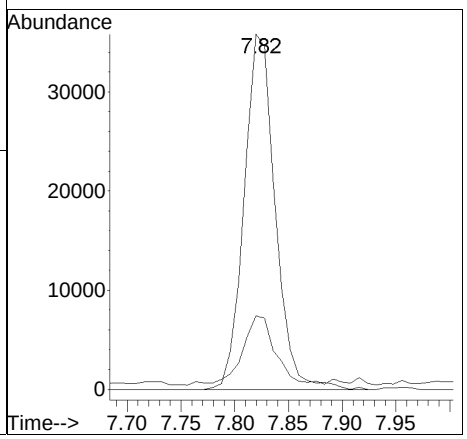


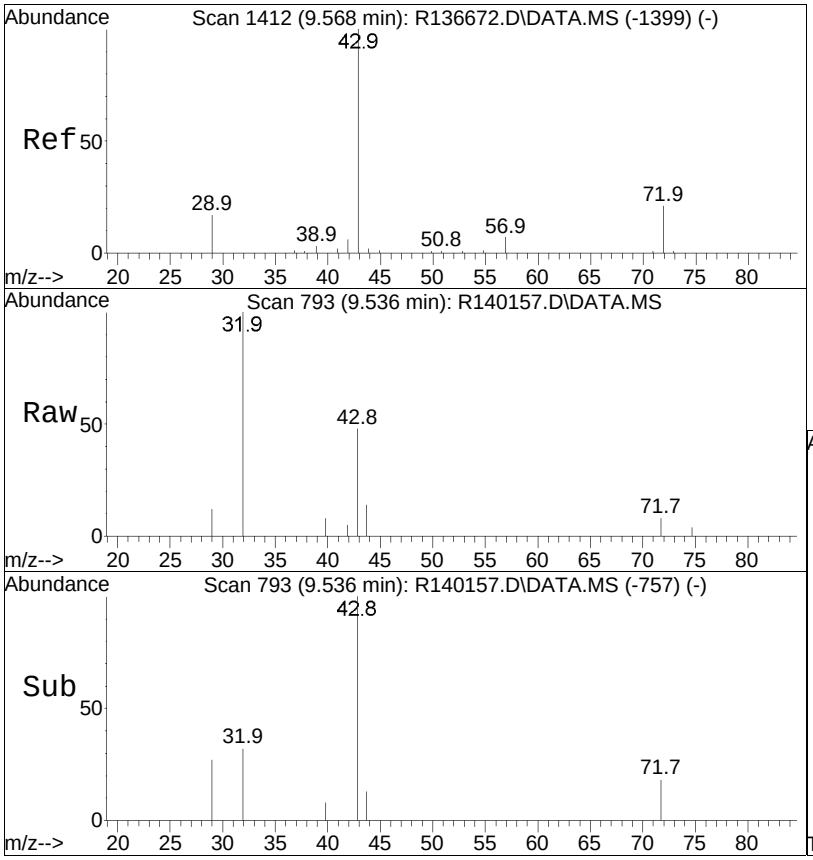



#30
carbon disulfide
Concen: 4.10 ppbV
RT: 7.82 min Scan# 551
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 76 Resp: 72107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 20.7 | 14.3 | 21.5 |

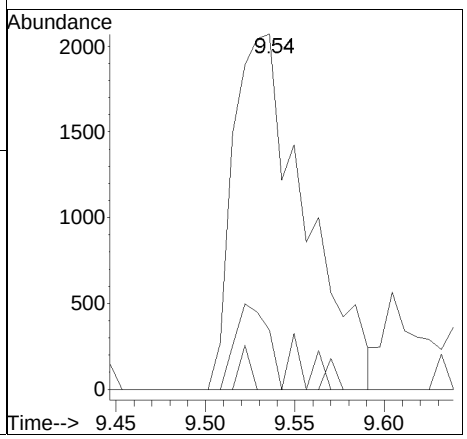


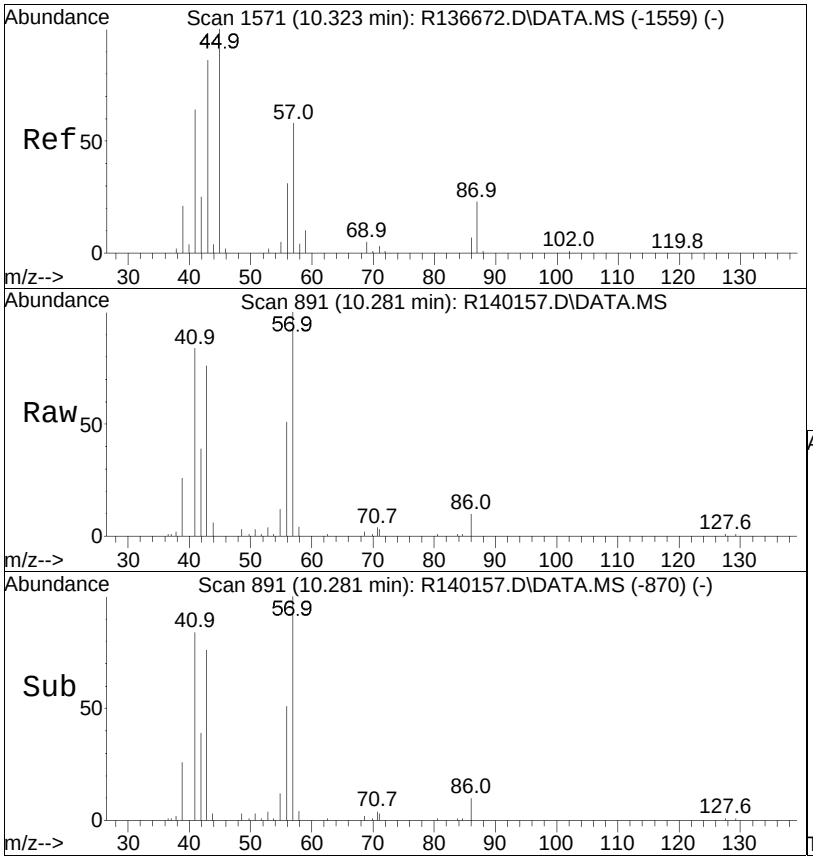



#36
2-butanone
Concen: 0.39 ppbV
RT: 9.54 min Scan# 793
Delta R.T. 0.048 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 43 Resp: 5762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 16.7 | 15.6 | 23.4 |
| 57 | 0.0 | 4.6 | 7.0# |

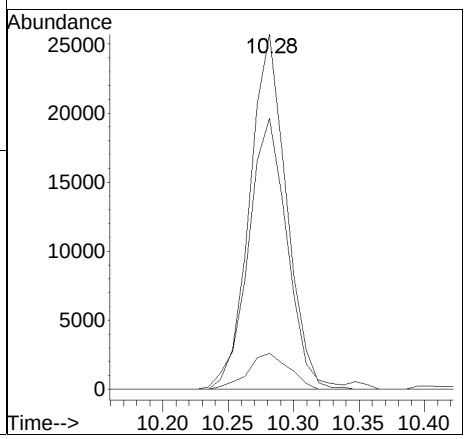


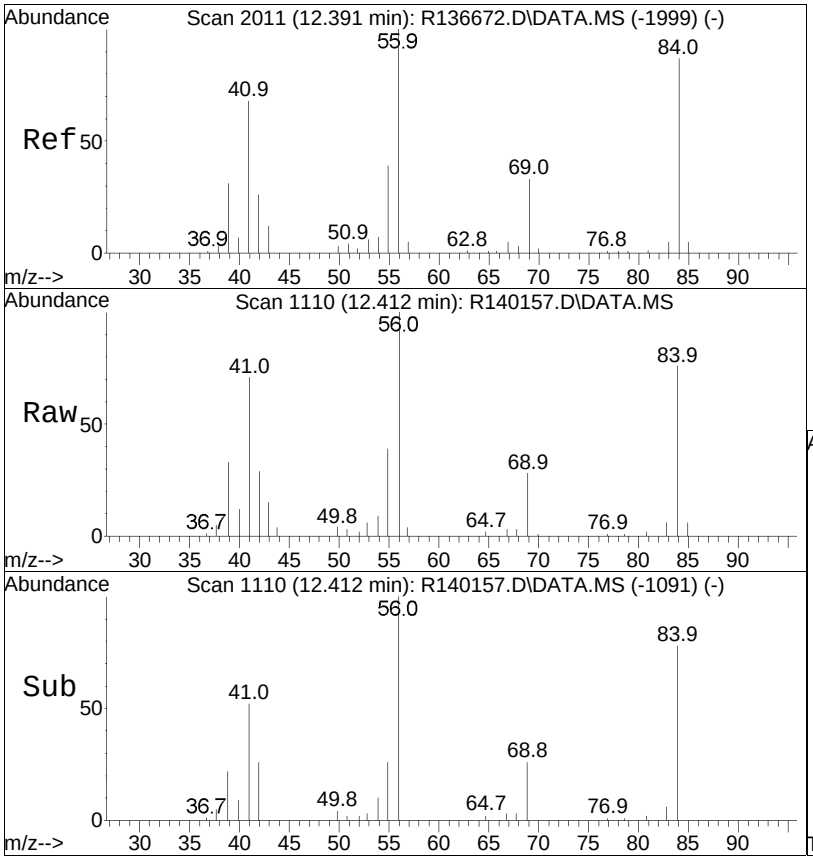



#44
hexane
Concen: 3.99 ppbV
RT: 10.28 min Scan# 891
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 57 Resp: 50020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 76.3 | 141.8 | 212.8# |
| 86 | 10.2 | 10.0 | 15.0 |

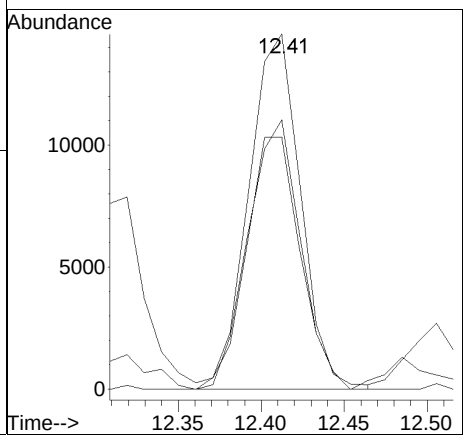


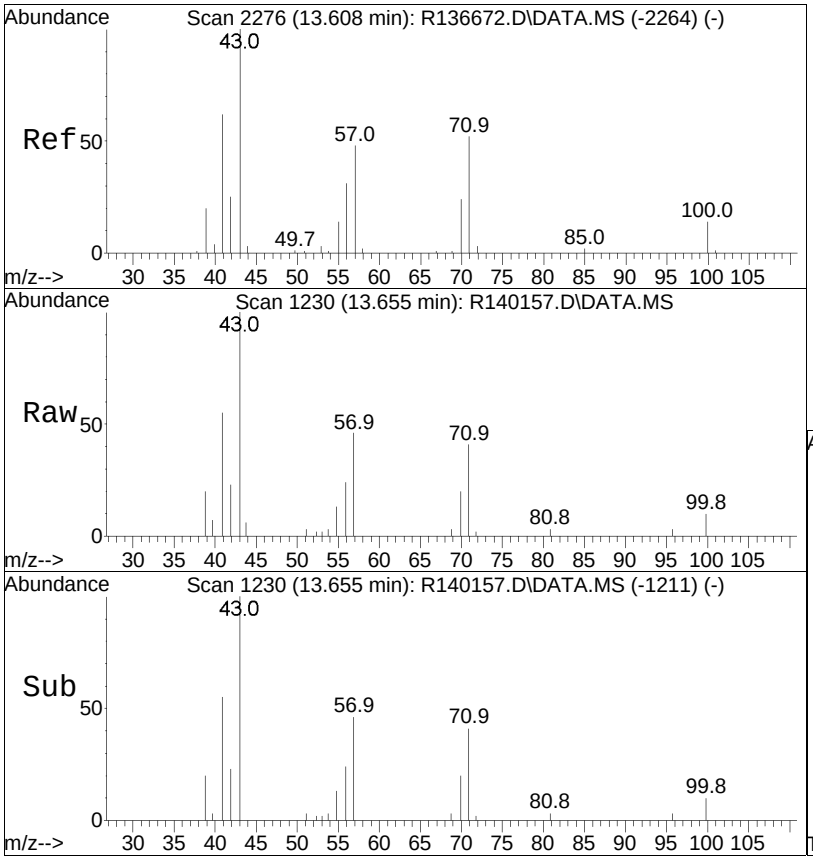



#53
cyclohexane
Concen: 3.04 ppbV
RT: 12.41 min Scan# 1110
Delta R.T. -0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 56 Resp: 31671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 75.8 | 62.6 | 94.0 |
| 41 | 71.0 | 51.4 | 77.0 |

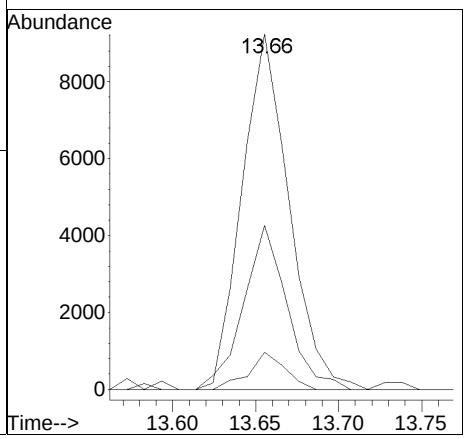





#62
heptane
Concen: 1.21 ppbV
RT: 13.66 min Scan# 1230
Delta R.T. 0.000 min
Lab File: R140157.D
Acq: 12 Mar 2015 1:40 am

Tgt Ion: 43 Resp: 18258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 46.2 | 36.7 | 55.1 |
| 100 | 10.5 | 9.0 | 13.6 |

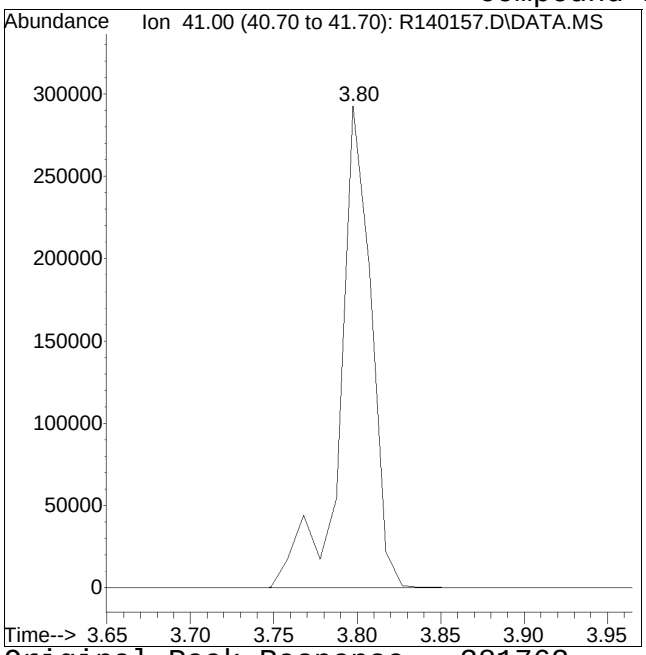


Manual Integration/Negative Proof Report

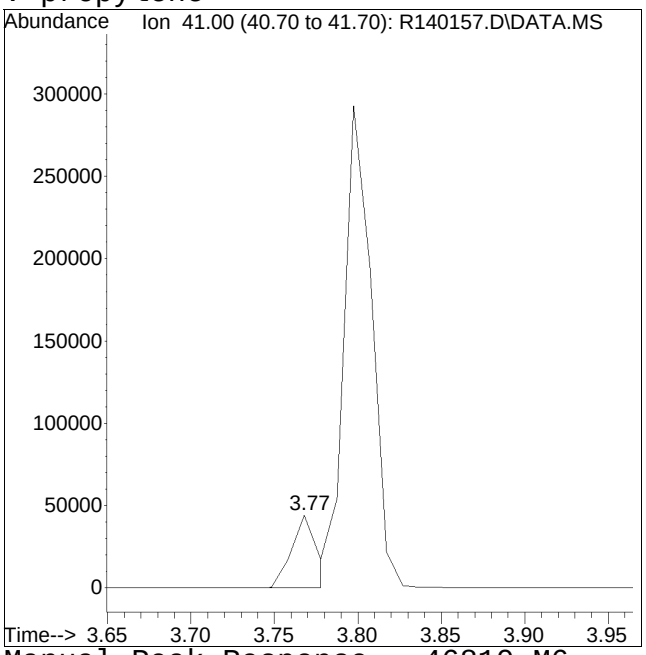
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R140157.D
Date Inj'd : 3/12/2015 1:40 am
Sample : L1504425-10,3,250,250

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/12/2015 7:57 am

Compound #3: propylene




Original Peak Response = 381762




Manual Peak Response = 46810 M6

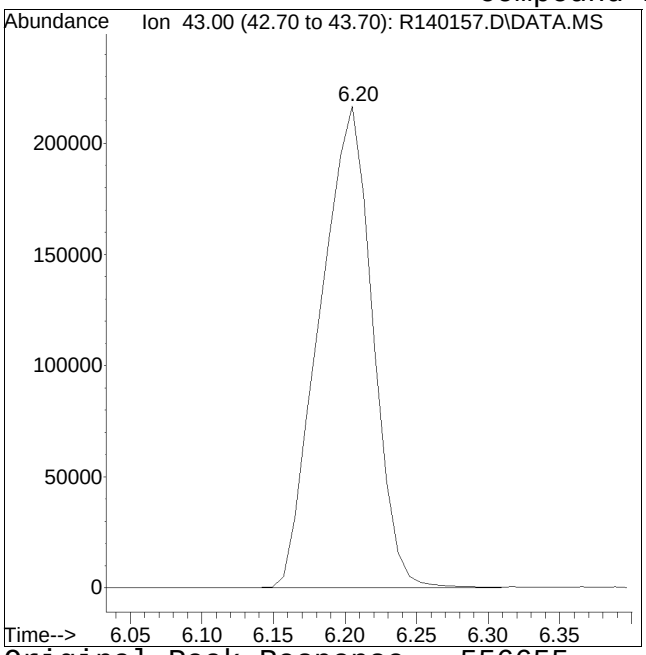
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

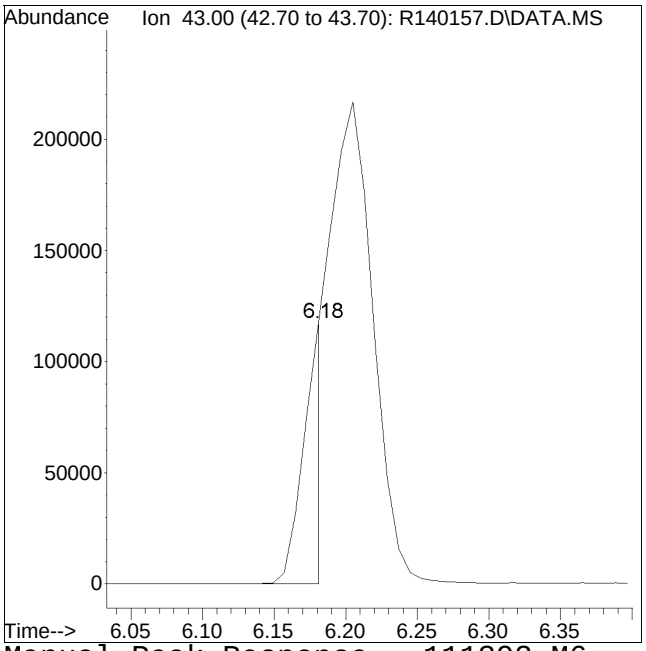
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R140157.D
Date Inj'd : 3/12/2015 1:40 am
Sample : L1504425-10,3,250,250

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/12/2015 7:57 am

Compound #19: acetone




Original Peak Response = 556655




Manual Peak Response = 111392 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140160.D
Acq On : 12 Mar 2015 8:45 am
Operator : AIRPIANO1:RY
Sample : L1504425-08,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 12 09:58:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 96160 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery | = | 86.44% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 184429 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery | = | 83.53% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 46784 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery | = | 93.33% | |

System Monitoring Compounds

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 3) propylene | 3.78 | 41 | 709M6 | 0.142 | ppbV | |
| 15) ethanol | 5.50 | 31 | 13004 | 2.721 | ppbV | 99 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.19 | 43 | 28729 | 2.961 | ppbV # | 96 |
| 22) isopropyl alcohol | 0.00 | | 0 | N.D. | d | |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.82 | 76 | 19525 | 1.151 | ppbV # | 86 |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.52 | 43 | 5634 | 0.394 | ppbV | 98 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | | |
| 44) hexane | 10.28 | | 0 | N.D. | | |
| 53) cyclohexane | 0.00 | | 0 | N.D. | d | |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | d | |
| 60) 2,2,4-trimethylpentane | 13.34 | | 0 | N.D. | | |
| 62) heptane | 13.66 | | 0 | N.D. | | |
| 64) 4-methyl-2-pentanone | 0.00 | | 0 | N.D. | d | |
| 72) 2-hexanone | 0.00 | | 0 | N.D. | d | |
| 96) 4-ethyl toluene | 18.73 | | 0 | N.D. | | |
| 101) Benzyl Chloride | 19.25 | | 0 | N.D. | | |

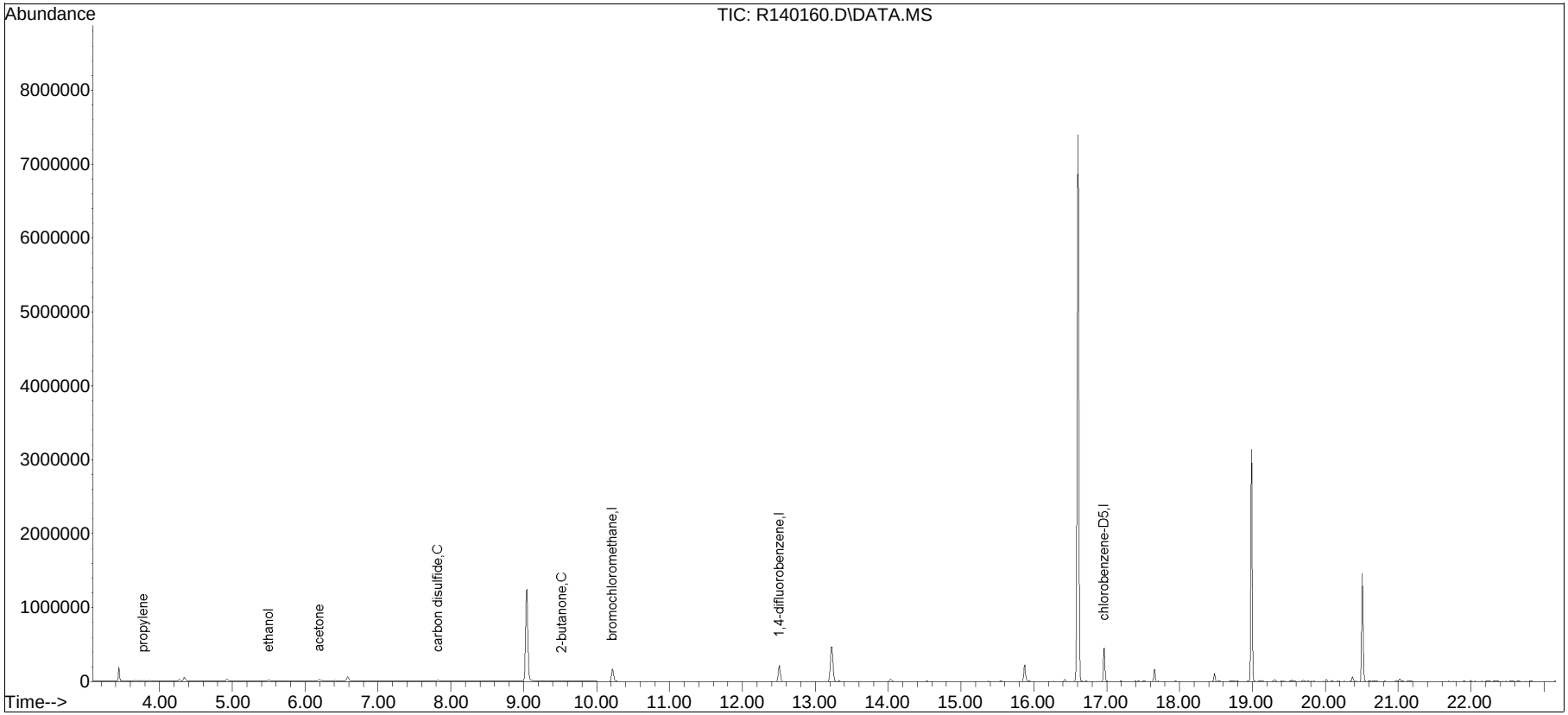
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

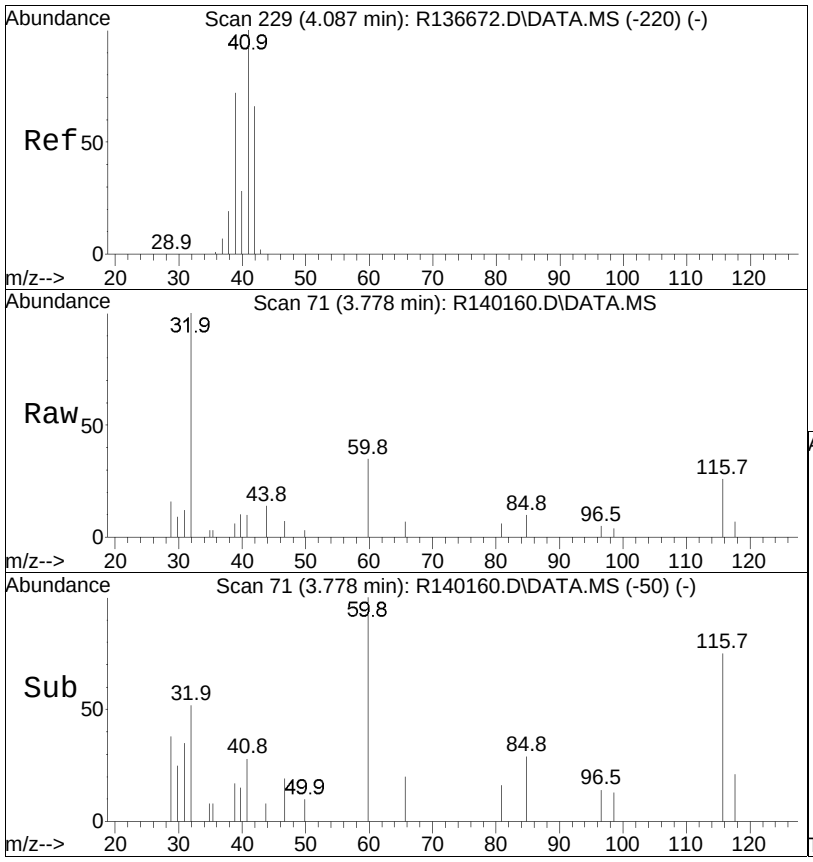
Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140160.D
Acq On : 12 Mar 2015 8:45 am
Operator : AIRPIANO1:RY
Sample : L1504425-08,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 12 09:58:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D



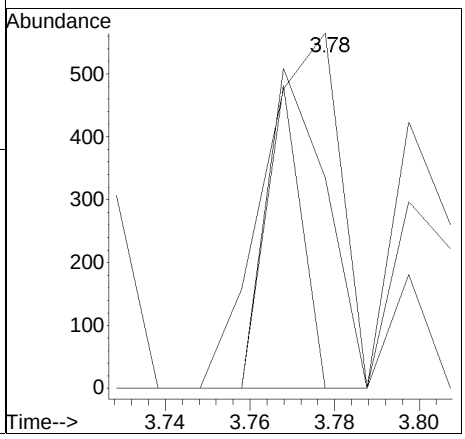

TALL150102.M Thu Mar 12 09:59:25 2015

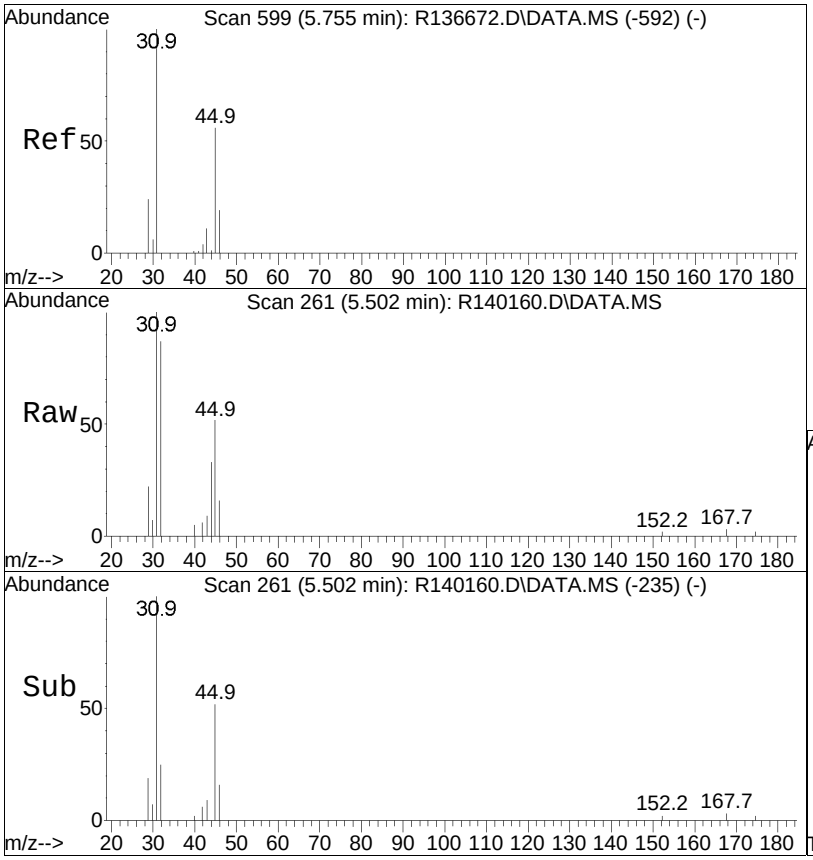



#3
propylene
Concen: 0.14 ppbV m
RT: 3.78 min Scan# 71
Delta R.T. 0.010 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 41 Resp: 709

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 0.0 | 52.7 | 79.1# |
| 39 | 105.1 | 59.6 | 89.4# |

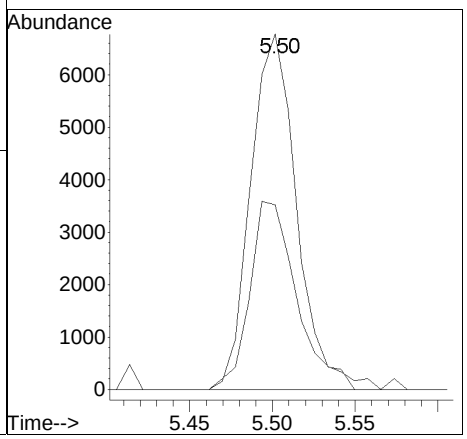


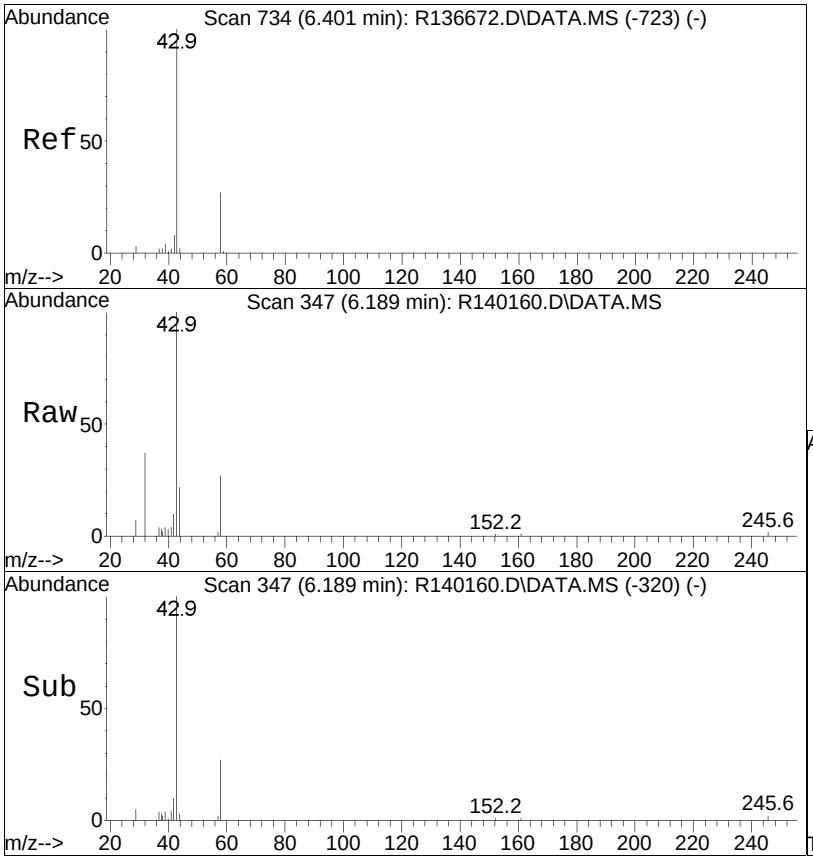



#15
ethanol
Concen: 2.72 ppbV
RT: 5.50 min Scan# 261
Delta R.T. 0.008 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 31 Resp: 13004

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 51.9 | 42.0 | 63.0 |

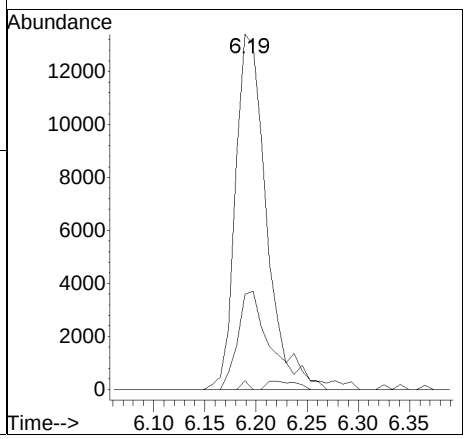


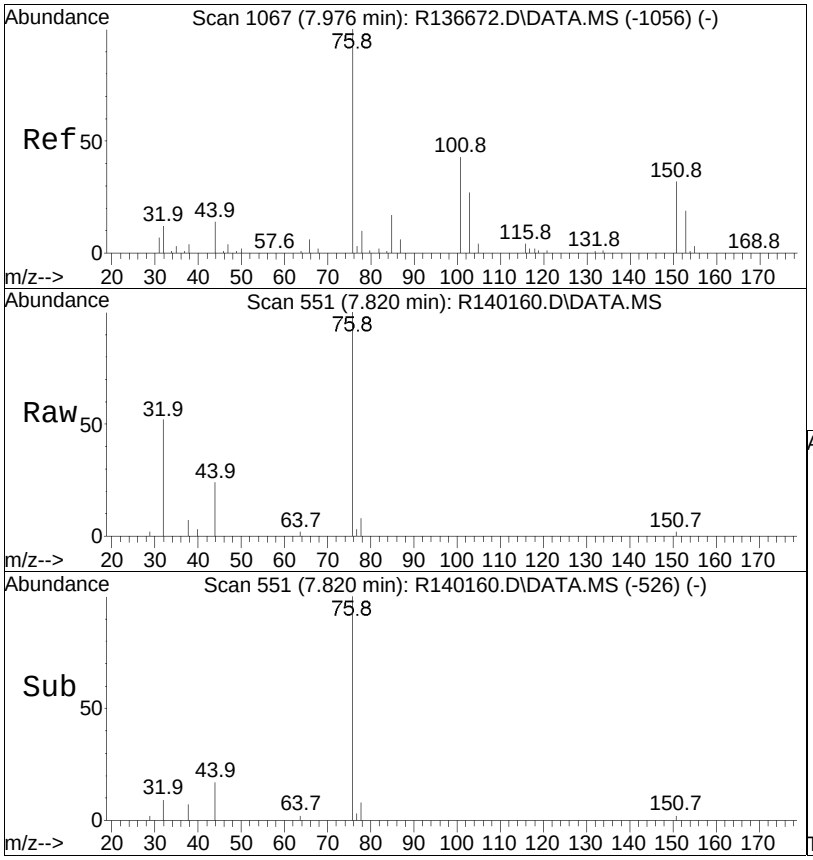



#19
acetone
Concen: 2.96 ppbV
RT: 6.19 min Scan# 347
Delta R.T. 0.016 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 43 Resp: 28729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.7 | 19.9 | 29.9 |
| 57 | 2.4 | 0.6 | 0.8# |

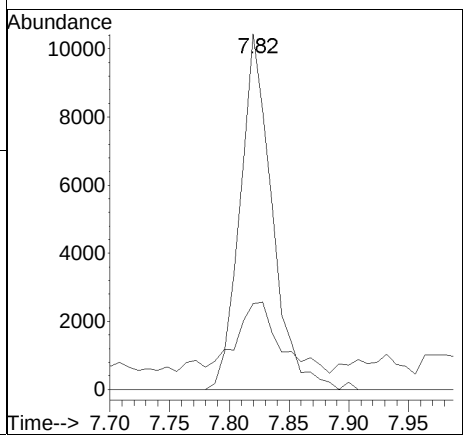


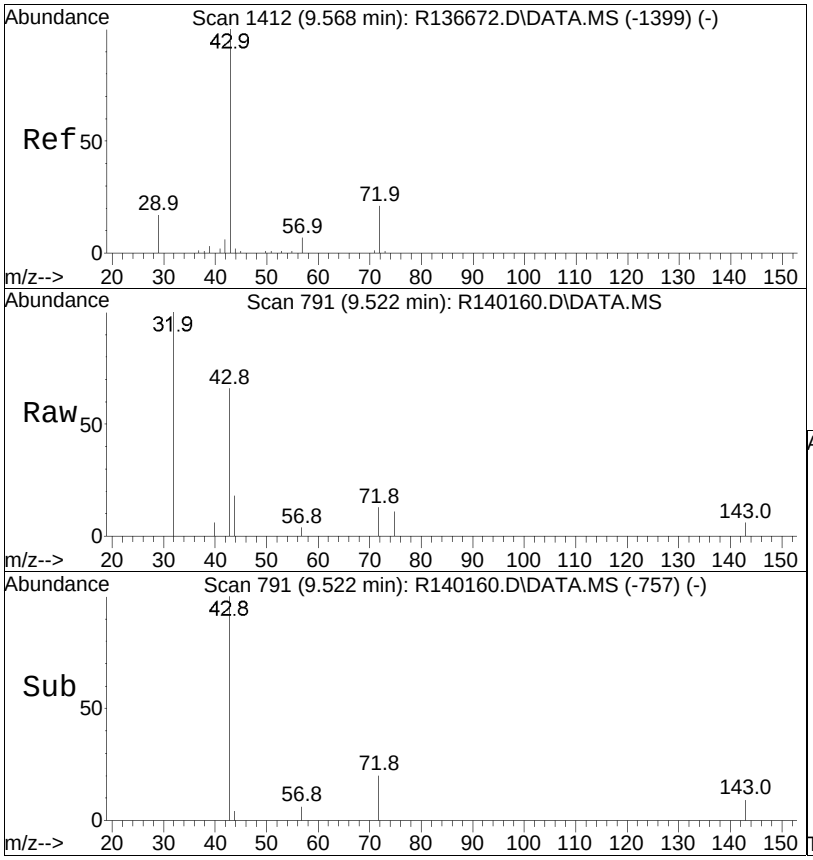



#30
carbon disulfide
Concen: 1.15 ppbV
RT: 7.82 min Scan# 551
Delta R.T. 0.000 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 76 Resp: 19525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 24.1 | 14.3 | 21.5# |

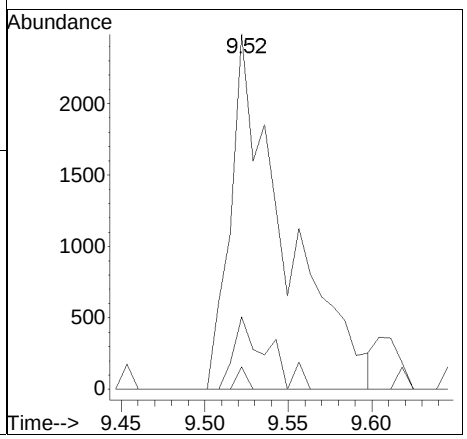





#36
2-butanone
Concen: 0.39 ppbV
RT: 9.52 min Scan# 791
Delta R.T. 0.034 min
Lab File: R140160.D
Acq: 12 Mar 2015 8:45 am

Tgt Ion: 43 Resp: 5634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 20.4 | 15.6 | 23.4 |
| 57 | 6.3 | 4.6 | 7.0 |

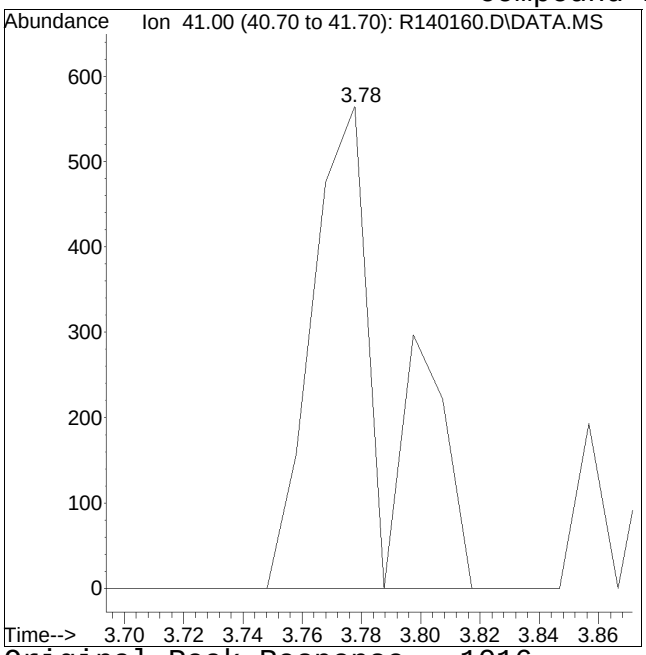


Manual Integration/Negative Proof Report

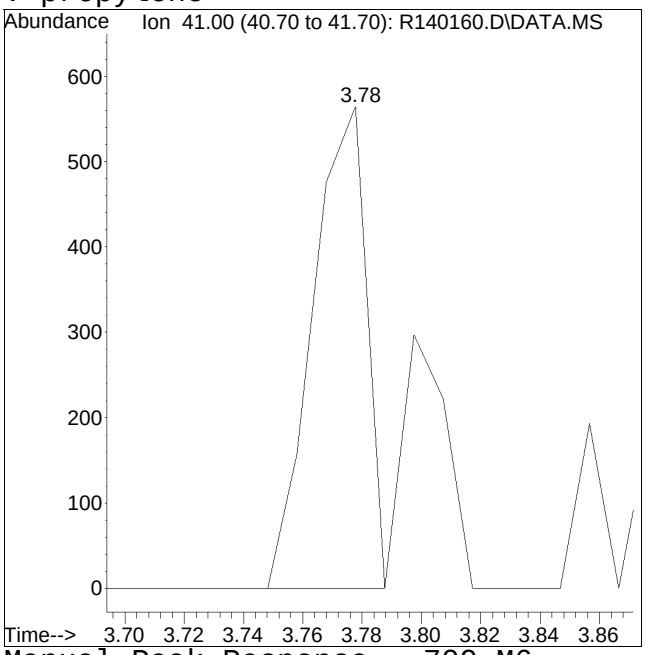
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R140160.D
Date Inj'd : 3/12/2015 8:45 am
Sample : L1504425-08,3,250,250

Method : TALL150102.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/12/2015 9:56 am

Compound #3: propylene




Original Peak Response = 1016




Manual Peak Response = 709 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

# Method Blank
# Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140138.D
Acq On : 11 Mar 2015 1:49 pm
Operator : AIRPIANO1:RY
Sample : WG767577-4,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:15:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.23 | 49 | 105527 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = 94.86% | | | |
| 43) 1,4-difluorobenzene | 12.52 | 114 | 208064 | 10.000 | ppbV | 0.01 |
| Standard Area = 220800 | | | Recovery = 94.23% | | | |
| 67) chlorobenzene-D5 | 16.97 | 54 | 45620 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = 91.01% | | | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.58 | | 0 | N.D. | | |
| 3) propylene | 0.00 | | 0 | N.D. | | |
| 4) propane | 3.81 | | 0 | N.D. | | |
| 5) dichlorodifluoromethane | 0.00 | | 0 | N.D. | | |
| 6) chloromethane | 4.10 | | 0 | N.D. | | |
| 7) Freon-114 | 0.00 | | 0 | N.D. | | |
| 8) methanol | 4.35 | 31 | 1863 | 0.785 | ppbV # | 1 |
| 9) vinyl chloride | 4.39 | | 0 | N.D. | | |
| 10) 1,3-butadiene | 0.00 | | 0 | N.D. | | |
| 11) butane | 4.83 | | 0 | N.D. | | |
| 13) bromomethane | 5.03 | | 0 | N.D. | | |
| 14) chloroethane | 0.00 | | 0 | N.D. | | |
| 15) ethanol | 5.52 | 31 | 526 | 0.100 | ppbV # | 75 |
| 16) dichlorofluoromethane | 0.00 | | 0 | N.D. | | |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 18) acrolein | 5.85 | | 0 | N.D. | | |
| 19) acetone | 6.22 | 43 | 1403 | 0.132 | ppbV # | 52 |
| 20) acetonitrile | 5.85 | | 0 | N.D. | | |
| 21) trichlorofluoromethane | 0.00 | | 0 | N.D. | | |
| 22) isopropyl alcohol | 6.60 | | 0 | N.D. | | |
| 23) acrylonitrile | 6.96 | | 0 | N.D. | | |
| 24) pentane | 6.94 | | 0 | N.D. | | |
| 25) ethyl ether | 6.89 | | 0 | N.D. | | |
| 26) 1,1-dichloroethene | 0.00 | | 0 | N.D. | | |
| 27) tertiary butyl alcohol | 7.45 | | 0 | N.D. | | |
| 28) methylene chloride | 7.48 | 49 | 791 | 0.088 | ppbV # | 80 |
| 29) 3-chloropropene | 0.00 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.83 | | 0 | N.D. | | |
| 31) Freon 113 | 0.00 | | 0 | N.D. | | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140138.D
Acq On : 11 Mar 2015 1:49 pm
Operator : AIRPIANO1:RY
Sample : WG767577-4,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:15:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 32) trans-1,2-dichloroethene | 0.00 | | 0 | | N.D. | |
| 33) 1,1-dichloroethane | 0.00 | | 0 | | N.D. | |
| 34) MTBE | 0.00 | | 0 | | N.D. | |
| 35) vinyl acetate | 0.00 | | 0 | | N.D. | |
| 36) 2-butanone | 9.65 | | 0 | | N.D. | |
| 37) cis-1,2-dichloroethene | 0.00 | | 0 | | N.D. | |
| 38) Ethyl Acetate | 0.00 | | 0 | | N.D. | |
| 39) chloroform | 0.00 | | 0 | | N.D. | |
| 40) Tetrahydrofuran | 0.00 | | 0 | | N.D. | |
| 41) 2,2-dichloropropane | 10.41 | | 0 | | N.D. | |
| 42) 1,2-dichloroethane | 0.00 | | 0 | | N.D. | |
| 44) hexane | 0.00 | | 0 | | N.D. | |
| 45) diisopropyl ether | 0.00 | | 0 | | N.D. | |
| 46) tert-butyl ethyl ether | 0.00 | | 0 | | N.D. | |
| 48) 1,1,1-trichloroethane | 0.00 | | 0 | | N.D. | |
| 49) 1,1-dichloropropene | 0.00 | | 0 | | N.D. | |
| 50) benzene | 0.00 | | 0 | | N.D. | |
| 52) carbon tetrachloride | 0.00 | | 0 | | N.D. | |
| 53) cyclohexane | 0.00 | | 0 | | N.D. | d |
| 54) tert-amyl methyl ether | 0.00 | | 0 | | N.D. | |
| 55) dibromomethane | 0.00 | | 0 | | N.D. | |
| 56) 1,2-dichloropropane | 0.00 | | 0 | | N.D. | |
| 57) bromodichloromethane | 13.42 | | 0 | | N.D. | |
| 58) 1,4-dioxane | 0.00 | | 0 | | N.D. | |
| 59) trichloroethene | 0.00 | | 0 | | N.D. | |
| 60) 2,2,4-trimethylpentane | 0.00 | | 0 | | N.D. | |
| 61) methyl methacrylate | 0.00 | | 0 | | N.D. | |
| 62) heptane | 13.65 | | 0 | | N.D. | |
| 63) cis-1,3-dichloropropene | 0.00 | | 0 | | N.D. | |
| 64) 4-methyl-2-pentanone | 0.00 | | 0 | | N.D. | |
| 65) trans-1,3-dichloropropene | 0.00 | | 0 | | N.D. | |
| 66) 1,1,2-trichloroethane | 0.00 | | 0 | | N.D. | |
| 68) toluene | 0.00 | | 0 | | N.D. | |
| 71) 1,3-dichloropropane | 0.00 | | 0 | | N.D. | |
| 72) 2-hexanone | 0.00 | | 0 | | N.D. | |
| 74) dibromochloromethane | 15.81 | | 0 | | N.D. | |
| 75) 1,2-dibromoethane | 0.00 | | 0 | | N.D. | |
| 76) butyl acetate | 16.03 | | 0 | | N.D. | |
| 77) octane | 0.00 | | 0 | | N.D. | |
| 78) tetrachloroethene | 0.00 | | 0 | | N.D. | |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140138.D
Acq On : 11 Mar 2015 1:49 pm
Operator : AIRPIANO1:RY
Sample : WG767577-4,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:15:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 79) | 1,1,1,2-tetrachloroethane | 0.00 | | 0 | | N.D. | |
| 80) | chlorobenzene | 16.97 | | 0 | | N.D. | |
| 81) | ethylbenzene | 0.00 | | 0 | | N.D. | |
| 83) | m+p-xylene | 17.46 | | 0 | | N.D. | |
| 84) | bromoform | 17.53 | | 0 | | N.D. | |
| 85) | styrene | 17.63 | | 0 | | N.D. | |
| 86) | 1,1,2,2-tetrachloroethane | 0.00 | | 0 | | N.D. | |
| 87) | o-xylene | 17.64 | | 0 | | N.D. | |
| 88) | 1,2,3-trichloropropane | 0.00 | | 0 | | N.D. | |
| 89) | nonane | 17.95 | | 0 | | N.D. | |
| 91) | isopropylbenzene | 18.26 | | 0 | | N.D. | |
| 92) | bromobenzene | 18.34 | | 0 | | N.D. | |
| 93) | 2-chlorotoluene | 0.00 | | 0 | | N.D. | |
| 94) | n-propylbenzene | 18.63 | | 0 | | N.D. | |
| 95) | 4-chlorotoluene | 18.68 | | 0 | | N.D. | |
| 96) | 4-ethyl toluene | 18.75 | | 0 | | N.D. | |
| 97) | 1,3,5-trimethylbenzene | 18.75 | | 0 | | N.D. | |
| 98) | tert-butylbenzene | 19.10 | | 0 | | N.D. | |
| 99) | 1,2,4-trimethylbenzene | 19.10 | | 0 | | N.D. | |
| 100) | decane | 18.99 | | 0 | | N.D. | |
| 101) | Benzyl Chloride | 19.22 | | 0 | | N.D. | |
| 102) | 1,3-dichlorobenzene | 19.23 | | 0 | | N.D. | |
| 103) | 1,4-dichlorobenzene | 19.28 | | 0 | | N.D. | |
| 104) | sec-butylbenzene | 19.29 | | 0 | | N.D. | |
| 106) | p-isopropyltoluene | 19.42 | | 0 | | N.D. | |
| 107) | 1,2-dichlorobenzene | 19.56 | | 0 | | N.D. | |
| 108) | n-butylbenzene | 19.76 | | 0 | | N.D. | |
| 111) | 1,2-dibromo-3-chloropr... | 0.00 | | 0 | | N.D. | |
| 112) | undecane | 20.13 | | 0 | | N.D. | |
| 114) | dodecane | 21.04 | | 0 | | N.D. | |
| 115) | 1,2,4-trichlorobenzene | 21.02 | | 0 | | N.D. | |
| 116) | naphthalene | 21.16 | | 0 | | N.D. | |
| 117) | 1,2,3-trichlorobenzene | 21.41 | | 0 | | N.D. | |
| 119) | hexachlorobutadiene | 21.48 | | 0 | | N.D. | |

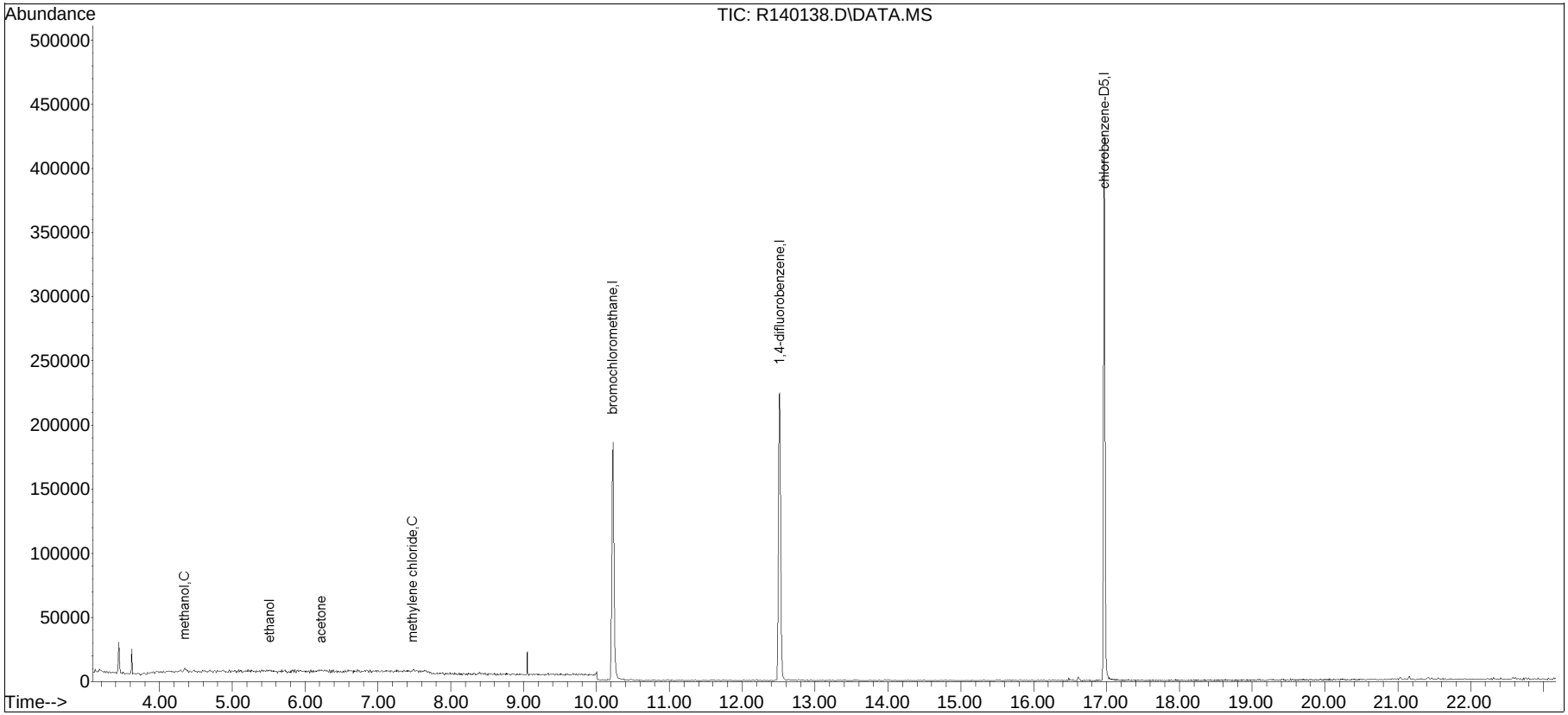
(#) = qualifier out of range (m) = manual integration (+) = signals summed

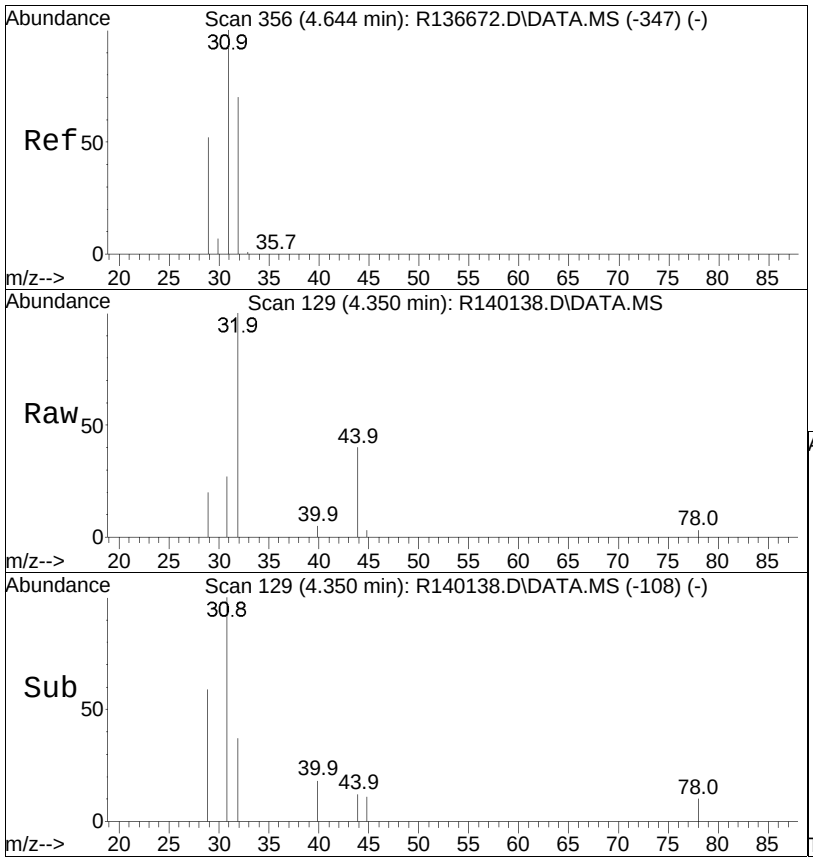
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140138.D
Acq On : 11 Mar 2015 1:49 pm
Operator : AIRPIANO1:RY
Sample : WG767577-4,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 11 14:15:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed40136.D

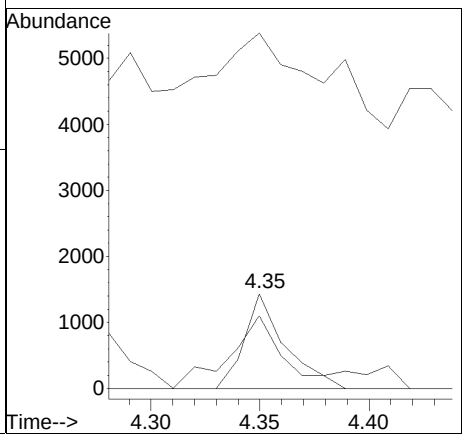


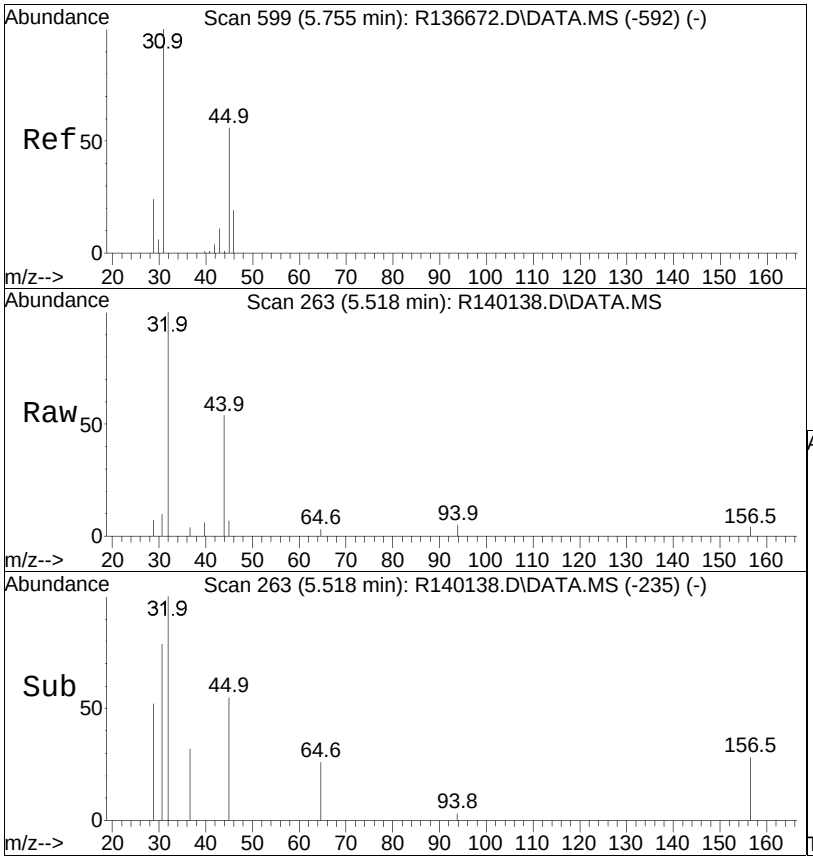



#8
methanol
Concen: 0.79 ppbV
RT: 4.35 min Scan# 129
Delta R.T. 0.010 min
Lab File: R140138.D
Acq: 11 Mar 2015 1:49 pm

Tgt Ion: 31 Resp: 1863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 32 | 375.6 | 59.9 | 89.9# |
| 29 | 76.8 | 50.3 | 75.5# |

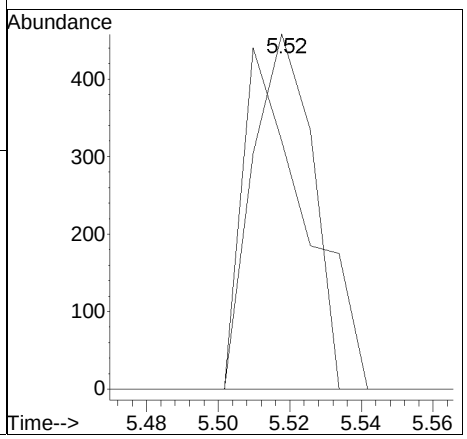


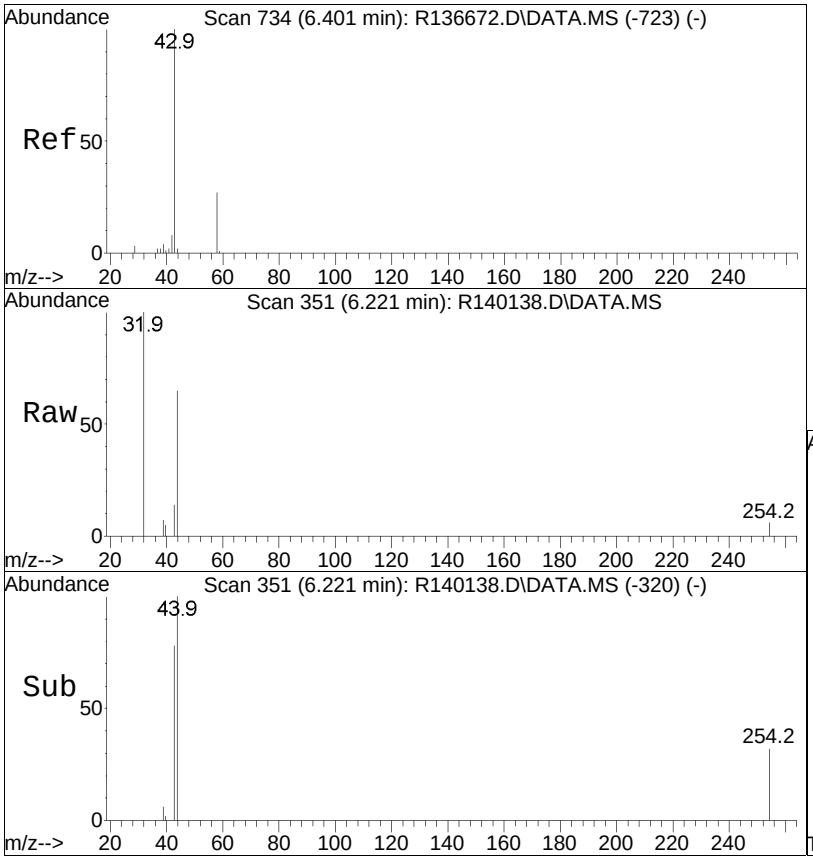



#15
ethanol
Concen: 0.10 ppbV
RT: 5.52 min Scan# 263
Delta R.T. 0.024 min
Lab File: R140138.D
Acq: 11 Mar 2015 1:49 pm

Tgt Ion: 31 Resp: 526

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 69.9 | 42.0 | 63.0# |

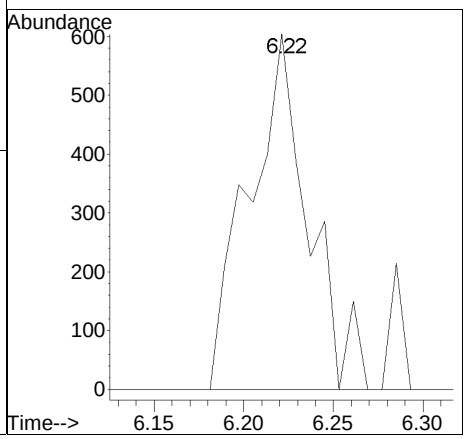


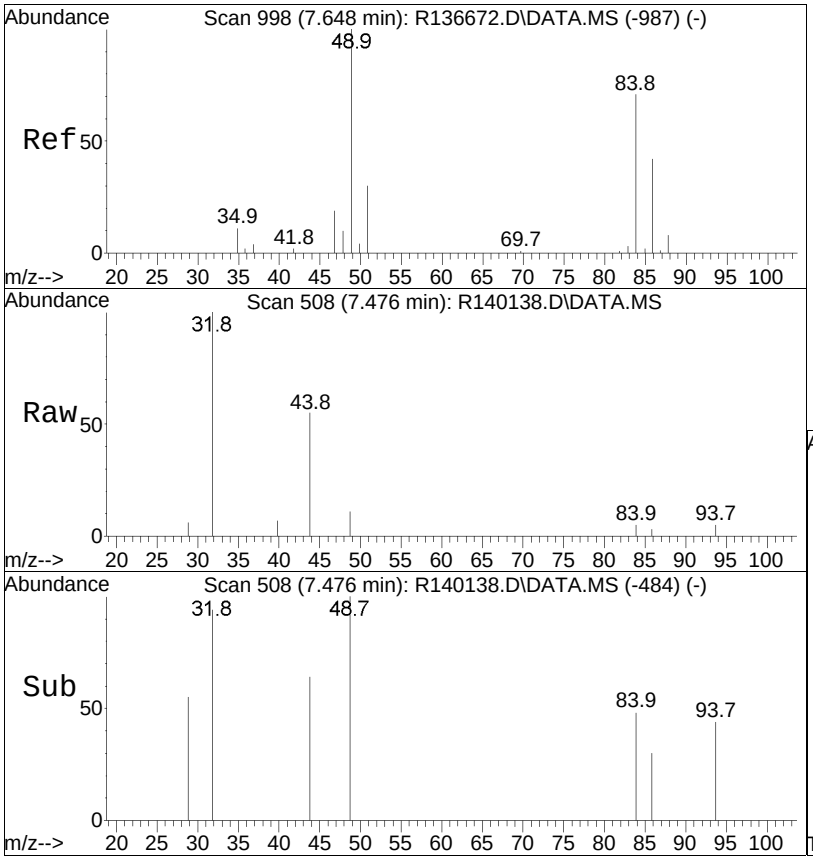



#19
acetone
Concen: 0.13 ppbV
RT: 6.22 min Scan# 351
Delta R.T. 0.048 min
Lab File: R140138.D
Acq: 11 Mar 2015 1:49 pm

Tgt Ion: 43 Resp: 1403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 0.0 | 19.9 | 29.9# |
| 57 | 0.0 | 0.6 | 0.8# |

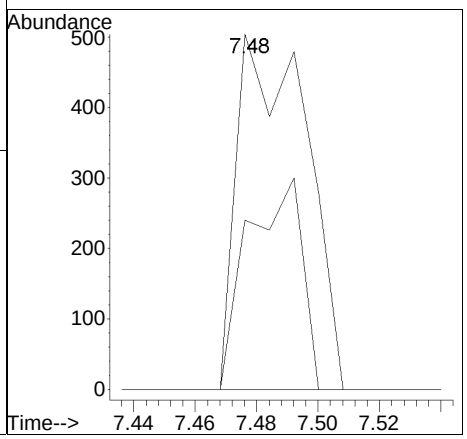





#28
methylene chloride
Concen: 0.09 ppbV
RT: 7.48 min Scan# 508
Delta R.T. -0.008 min
Lab File: R140138.D
Acq: 11 Mar 2015 1:49 pm

Tgt Ion: 49 Resp: 791

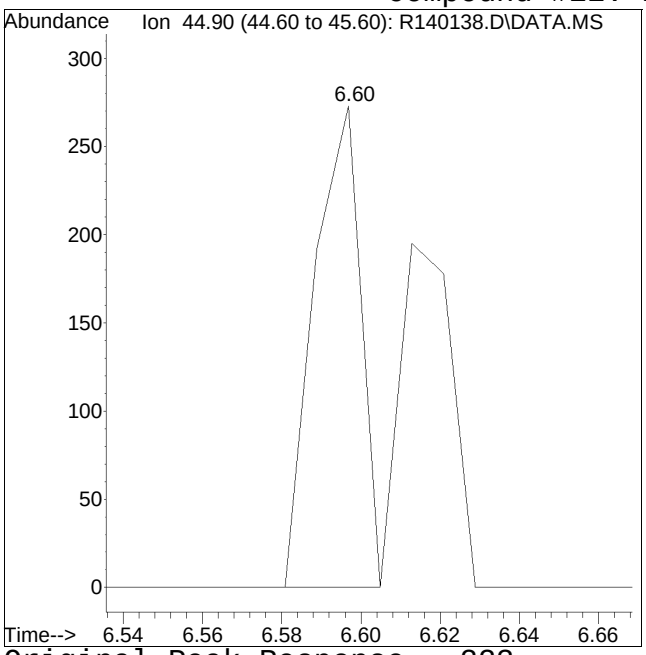
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 47.6 | 50.8 | 76.2# |

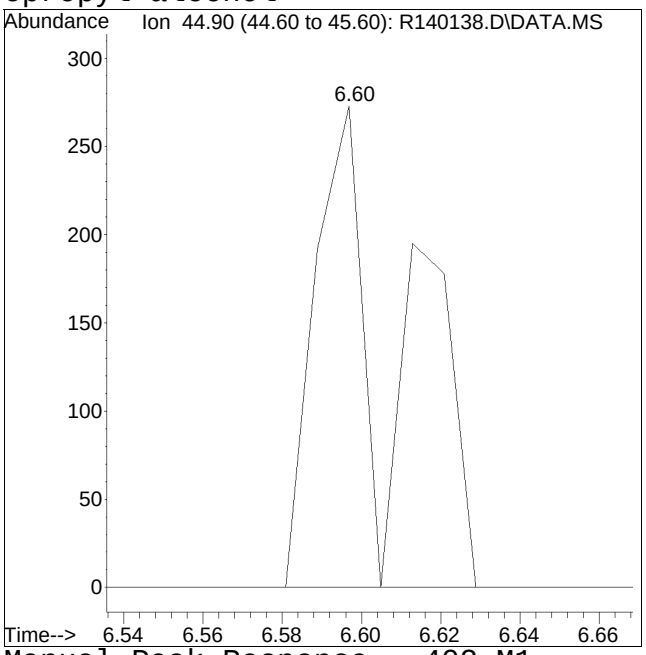


# Manual Integration/Negative Proof Report

| | | | |
|---|---|---|---|
| Data Path | : O:\Forensics\Data\AIR1\2015\150311\ | QM Method | : TALL150102.M |
| Data File | : R140138.D | Operator | : AIRPIANO1:RY |
| Date Inj'd | : 3/11/2015 1:49 pm | Instrument | : Air Piano 1 |
| Sample | : WG767577-4,3,250,250 | Quant Date | : 3/11/2015 2:14 pm |

Compound #22: isopropyl alcohol




Original Peak Response = 223 Manual Peak Response = 402 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

# Batch Quality Control

# LCS Raw Data

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-3,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 10.000 | 10.000 | 0.0 | 82 | 0.00 |
| 2 | | chlorodifluoromethane | 10.000 | 8.654 | 13.5 | 73 | 0.00 |
| 3 | | propylene | 10.000 | 10.183 | -1.8 | 82 | 0.00 |
| 4 | | propane | 10.000 | 7.907 | 20.9 | 69 | 0.00 |
| 5 | | dichlorodifluoromethane | 10.000 | 7.172 | 28.3 | 76 | 0.00 |
| 6 | C | chloromethane | 10.000 | 8.754 | 12.5 | 76 | 0.00 |
| 7 | | Freon-114 | 10.000 | 9.367 | 6.3 | 78 | 0.00 |
| 8 | C | methanol | 50.000 | 42.524 | 15.0 | 66 | 0.00 |
| 9 | C | vinyl chloride | 10.000 | 9.433 | 5.7 | 76 | 0.00 |
| 10 | C | 1,3-butadiene | 10.000 | 9.675 | 3.2 | 80 | 0.00 |
| 11 | | butane | 10.000 | 8.446 | 15.5 | 71 | 0.00 |
| 13 | C | bromomethane | 10.000 | 8.646 | 13.5 | 79 | 0.00 |
| 14 | C | chloroethane | 10.000 | 8.906 | 10.9 | 74 | 0.00 |
| 15 | | ethanol | 50.000 | 42.680 | 14.6 | 70 | 0.00 |
| 16 | | dichlorofluoromethane | 10.000 | 8.567 | 14.3 | 70 | 0.00 |
| 17 | C | vinyl bromide | 10.000 | 9.304 | 7.0 | 77 | 0.00 |
| 18 | C | acrolein | 10.000 | 7.252 | 27.5 | 68 | 0.00 |
| 19 | | acetone | 50.000 | 47.668 | 4.7 | 80 | 0.00 |
| 20 | C | acetonitrile | 10.000 | 8.369 | 16.3 | 74 | 0.00 |
| 21 | | trichlorofluoromethane | 10.000 | 9.513 | 4.9 | 77 | 0.00 |
| 22 | | isopropyl alcohol | 10.000 | 9.120 | 8.8 | 74 | 0.00 |
| 23 | C | acrylonitrile | 10.000 | 7.934 | 20.7 | 72 | 0.00 |
| 24 | | pentane | 10.000 | 7.950 | 20.5 | 68 | 0.00 |
| 25 | | ethyl ether | 10.000 | 7.485 | 25.1 | 67 | 0.00 |
| 26 | C | 1,1-dichloroethene | 10.000 | 9.170 | 8.3 | 76 | 0.00 |
| 27 | | tertiary butyl alcohol | 10.000 | 8.621 | 13.8 | 68 | 0.00 |
| 28 | C | methylene chloride | 10.000 | 9.431 | 5.7 | 77 | 0.00 |
| 29 | C | 3-chloropropene | 10.000 | 8.449 | 15.5 | 79 | 0.00 |
| 30 | C | carbon disulfide | 10.000 | 9.096 | 9.0 | 75 | 0.00 |
| 31 | | Freon 113 | 10.000 | 9.359 | 6.4 | 78 | 0.00 |
| 32 | | trans-1,2-dichloroethene | 10.000 | 8.650 | 13.5 | 69 | 0.00 |
| 33 | C | 1,1-dichloroethane | 10.000 | 9.213 | 7.9 | 77 | 0.00 |
| 34 | C | MTBE | 10.000 | 8.730 | 12.7 | 73 | 0.00 |
| 35 | C | vinyl acetate | 10.000 | 11.480 | -14.8 | 85 | 0.00 |
| 36 | C | 2-butanone | 10.000 | 9.723 | 2.8 | 74 | 0.00 |
| 37 | | cis-1,2-dichloroethene | 10.000 | 10.081 | -0.8 | 83 | 0.00 |
| 38 | | Ethyl Acetate | 10.000 | 9.040 | 9.6 | 72 | 0.00 |
| 39 | C | chloroform | 10.000 | 9.265 | 7.3 | 78 | 0.00 |
| 40 | | Tetrahydrofuran | 10.000 | 7.690 | 23.1 | 71 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-3,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 41 | | 2,2-dichloropropane | 10.000 | 8.176 | 18.2 | 68 | 0.00 |
| 42 | C | 1,2-dichloroethane | 10.000 | 9.524 | 4.8 | 74 | 0.00 |
| 43 | I | 1,4-difluorobenzene | 10.000 | 10.000 | 0.0 | 79 | 0.00 |
| 44 | C | hexane | 10.000 | 8.956 | 10.4 | 74 | 0.00 |
| 45 | | diisopropyl ether | 10.000 | 8.602 | 14.0 | 68 | 0.00 |
| 46 | | tert-butyl ethyl ether | 10.000 | 8.499 | 15.0 | 66 | 0.00 |
| 48 | C | 1,1,1-trichloroethane | 10.000 | 9.424 | 5.8 | 74 | 0.00 |
| 49 | | 1,1-dichloropropene | 10.000 | 9.133 | 8.7 | 73 | 0.00 |
| 50 | C | benzene | 10.000 | 9.603 | 4.0 | 75 | 0.00 |
| 52 | C | carbon tetrachloride | 10.000 | 9.072 | 9.3 | 72 | 0.00 |
| 53 | | cyclohexane | 10.000 | 9.141 | 8.6 | 73 | 0.00 |
| 54 | | tert-amyl methyl ether | 10.000 | 8.573 | 14.3 | 68 | 0.00 |
| 55 | | dibromomethane | 10.000 | 9.240 | 7.6 | 72 | 0.00 |
| 56 | C | 1,2-dichloropropane | 10.000 | 9.628 | 3.7 | 75 | 0.00 |
| 57 | | bromodichloromethane | 10.000 | 9.627 | 3.7 | 74 | 0.00 |
| 58 | C | 1,4-dioxane | 10.000 | 9.744 | 2.6 | 73 | 0.00 |
| 59 | C | trichloroethene | 10.000 | 9.436 | 5.6 | 73 | 0.01 |
| 60 | C | 2,2,4-trimethylpentane | 10.000 | 9.285 | 7.1 | 74 | 0.00 |
| 61 | | methyl methacrylate | 10.000 | 8.619 | 13.8 | 66 | 0.00 |
| 62 | | heptane | 10.000 | 8.660 | 13.4 | 77 | 0.00 |
| 63 | C | cis-1,3-dichloropropene | 10.000 | 9.860 | 1.4 | 74 | 0.00 |
| 64 | C | 4-methyl-2-pentanone | 10.000 | 9.278 | 7.2 | 74 | 0.00 |
| 65 | | trans-1,3-dichloropropene | 10.000 | 8.425 | 15.7 | 62 | 0.00 |
| 66 | C | 1,1,2-trichloroethane | 10.000 | 9.641 | 3.6 | 77 | 0.00 |
| 67 | I | chlorobenzene-D5 | 10.000 | 10.000 | 0.0 | 77 | 0.00 |
| 68 | C | toluene | 10.000 | 9.303 | 7.0 | 75 | 0.00 |
| 71 | | 1,3-dichloropropane | 10.000 | 8.910 | 10.9 | 71 | 0.00 |
| 72 | | 2-hexanone | 10.000 | 9.591 | 4.1 | 71 | 0.00 |
| 74 | | dibromochloromethane | 10.000 | 8.926 | 10.7 | 71 | 0.00 |
| 75 | C | 1,2-dibromoethane | 10.000 | 9.423 | 5.8 | 74 | 0.00 |
| 76 | | butyl acetate | 10.000 | 8.218 | 17.8 | 62 | 0.00 |
| 77 | | octane | 10.000 | 8.315 | 16.9 | 68 | 0.00 |
| 78 | C | tetrachloroethene | 10.000 | 8.957 | 10.4 | 75 | 0.00 |
| 79 | | 1,1,1,2-tetrachloroethane | 10.000 | 8.547 | 14.5 | 68 | 0.00 |
| 80 | C | chlorobenzene | 10.000 | 9.242 | 7.6 | 72 | 0.00 |
| 81 | C | ethylbenzene | 10.000 | 9.213 | 7.9 | 73 | 0.00 |
| 83 | C | m+p-xylene | 20.000 | 18.506 | 7.5 | 74 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-3,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 84 C | bromoform | 10.000 | 8.782 | 12.2 | 68 | 0.00 |
| 85 C | styrene | 10.000 | 9.135 | 8.7 | 71 | 0.00 |
| 86 C | 1,1,2,2-tetrachloroethane | 10.000 | 9.745 | 2.6 | 78 | 0.00 |
| 87 C | o-xylene | 10.000 | 9.491 | 5.1 | 75 | 0.00 |
| 88 | 1,2,3-trichloropropane | 10.000 | 9.042 | 9.6 | 71 | 0.00 |
| 89 | nonane | 10.000 | 8.343 | 16.6 | 69 | 0.00 |
| 91 C | isopropylbenzene | 10.000 | 9.111 | 8.9 | 71 | 0.00 |
| 92 | bromobenzene | 10.000 | 8.912 | 10.9 | 71 | 0.00 |
| 93 | 2-chlorotoluene | 10.000 | 8.412 | 15.9 | 67 | 0.00 |
| 94 | n-propylbenzene | 10.000 | 8.902 | 11.0 | 70 | 0.00 |
| 95 | 4-chlorotoluene | 10.000 | 8.855 | 11.4 | 70 | 0.00 |
| 96 | 4-ethyl toluene | 10.000 | 8.804 | 12.0 | 68 | 0.00 |
| 97 | 1,3,5-trimethylbenzene | 10.000 | 9.292 | 7.1 | 75 | 0.00 |
| 98 | tert-butylbenzene | 10.000 | 8.799 | 12.0 | 69 | 0.00 |
| 99 | 1,2,4-trimethylbenzene | 10.000 | 9.597 | 4.0 | 75 | 0.00 |
| 100 | decane | 10.000 | 8.653 | 13.5 | 68 | 0.00 |
| 101 C | Benzyl Chloride | 10.000 | 8.676 | 13.2 | 66 | 0.00 |
| 102 | 1,3-dichlorobenzene | 10.000 | 9.408 | 5.9 | 73 | 0.00 |
| 103 C | 1,4-dichlorobenzene | 10.000 | 9.494 | 5.1 | 74 | 0.00 |
| 104 | sec-butylbenzene | 10.000 | 8.890 | 11.1 | 70 | 0.00 |
| 106 | p-isopropyltoluene | 10.000 | 8.143 | 18.6 | 64 | 0.00 |
| 107 | 1,2-dichlorobenzene | 10.000 | 9.413 | 5.9 | 73 | 0.00 |
| 108 | n-butylbenzene | 10.000 | 9.387 | 6.1 | 72 | 0.00 |
| 111 C | 1,2-dibromo-3-chloropropane | 10.000 | 8.694 | 13.1 | 66 | 0.00 |
| 112 | undecane | 10.000 | 9.169 | 8.3 | 68 | 0.00 |
| 114 | dodecane | 10.000 | 9.596 | 4.0 | 62 | 0.00 |
| 115 C | 1,2,4-trichlorobenzene | 10.000 | 9.925 | 0.7 | 66 | 0.00 |
| 116 | naphthalene | 10.000 | 9.254 | 7.5 | 68 | 0.00 |
| 117 | 1,2,3-trichlorobenzene | 10.000 | 9.738 | 2.6 | 66 | 0.00 |
| 119 C | hexachlorobutadiene | 10.000 | 10.320 | -3.2 | 71 | 0.00 |

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-3,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| Internal Standards | | | | | |
| 1) bromochloromethane | 10.23 | 49 | 111245 | 10.000 ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery = 100.00% | | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 220800 | 10.000 ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery = 100.00% | | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 50129 | 10.000 ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery = 100.00% | | |
| System Monitoring Compounds | | | | | |
| Target Compounds | | | | | Qvalue |
| 2) chlorodifluoromethane | 3.73 | 51 | 101726 | 8.654 ppbV | 99 |
| 3) propylene | 3.77 | 41 | 59015M6 | 10.183 ppbV | |
| 4) propane | 3.80 | 29 | 56143 | 7.907 ppbV | 92 |
| 5) dichlorodifluoromethane | 3.87 | 85 | 88288 | 7.172 ppbV | 99 |
| 6) chloromethane | 4.09 | 50 | 57687 | 8.754 ppbV | 99 |
| 7) Freon-114 | 4.25 | 85 | 167616 | 9.367 ppbV | 99 |
| 8) methanol | 4.34 | 31 | 106339 | 42.524 ppbV | 95 |
| 9) vinyl chloride | 4.42 | 62 | 62000 | 9.433 ppbV | 98 |
| 10) 1,3-butadiene | 4.62 | 54 | 51108 | 9.675 ppbV | 97 |
| 11) butane | 4.69 | 43 | 96856 | 8.446 ppbV | 96 |
| 13) bromomethane | 5.01 | 94 | 62771 | 8.646 ppbV | 100 |
| 14) chloroethane | 5.28 | 64 | 28877 | 8.906 ppbV | 100 |
| 15) ethanol | 5.49 | 31 | 236000M6 | 42.680 ppbV | |
| 16) dichlorofluoromethane | 5.45 | 67 | 122793 | 8.567 ppbV | 99 |
| 17) vinyl bromide | 5.80 | 106 | 65333 | 9.304 ppbV | 99 |
| 18) acrolein | 5.98 | 56 | 23788 | 7.252 ppbV | 93 |
| 19) acetone | 6.17 | 43 | 535089 | 47.668 ppbV | 99 |
| 20) acetonitrile | 5.80 | 41 | 59877 | 8.369 ppbV | 98 |
| 21) trichlorofluoromethane | 6.40 | 101 | 166091 | 9.513 ppbV | 93 |
| 22) isopropyl alcohol | 6.56 | 45 | 121000 | 9.120 ppbV # | 97 |
| 23) acrylonitrile | 6.84 | 53 | 44758 | 7.934 ppbV | 99 |
| 24) pentane | 6.92 | 43 | 107323M4 | 7.950 ppbV | |
| 25) ethyl ether | 6.97 | 31 | 83086 | 7.485 ppbV | 92 |
| 26) 1,1-dichloroethene | 7.30 | 61 | 105818 | 9.170 ppbV | 97 |
| 27) tertiary butyl alcohol | 7.40 | 59 | 123968 | 8.621 ppbV # | 92 |
| 28) methylene chloride | 7.48 | 49 | 89315 | 9.431 ppbV | 97 |
| 29) 3-chloropropene | 7.64 | 41 | 101739 | 8.449 ppbV | 93 |
| 30) carbon disulfide | 7.82 | 76 | 178591 | 9.096 ppbV | 98 |
| 31) Freon 113 | 7.84 | 101 | 134861 | 9.359 ppbV | 93 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-3,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 32) trans-1,2-dichloroethene | 8.72 | 61 | 94039 | 8.650 | ppbV | 97 |
| 33) 1,1-dichloroethane | 8.97 | 63 | 117560 | 9.213 | ppbV | 100 |
| 34) MTBE | 9.06 | 73 | 167723 | 8.730 | ppbV | 97 |
| 35) vinyl acetate | 9.19 | 43 | 201641 | 11.480 | ppbV | 100 |
| 36) 2-butanone | 9.49 | 43 | 160722 | 9.723 | ppbV | 95 |
| 37) cis-1,2-dichloroethene | 10.02 | 61 | 118064 | 10.081 | ppbV | 96 |
| 38) Ethyl Acetate | 10.32 | 61 | 26490 | 9.040 | ppbV | 75 |
| 39) chloroform | 10.38 | 83 | 165886 | 9.265 | ppbV | 99 |
| 40) Tetrahydrofuran | 10.86 | 42 | 86680M6 | 7.690 | ppbV | |
| 41) 2,2-dichloropropane | 10.40 | 77 | 129224 | 8.176 | ppbV | 95 |
| 42) 1,2-dichloroethane | 11.26 | 62 | 92805 | 9.524 | ppbV | 97 |
| 44) hexane | 10.28 | 57 | 129630 | 8.956 | ppbV | 97 |
| 45) diisopropyl ether | 10.29 | 87 | 57257 | 8.602 | ppbV | 96 |
| 46) tert-butyl ethyl ether | 10.93 | 59 | 189926 | 8.499 | ppbV | 95 |
| 48) 1,1,1-trichloroethane | 11.55 | 97 | 137678 | 9.424 | ppbV | 99 |
| 49) 1,1-dichloropropene | 11.93 | 75 | 95901 | 9.133 | ppbV | 93 |
| 50) benzene | 12.09 | 78 | 190173 | 9.603 | ppbV | 98 |
| 52) carbon tetrachloride | 12.27 | 117 | 140749 | 9.072 | ppbV | 96 |
| 53) cyclohexane | 12.41 | 56 | 109946 | 9.141 | ppbV | 94 |
| 54) tert-amyl methyl ether | 12.79 | 73 | 170010 | 8.573 | ppbV | 99 |
| 55) dibromomethane | 13.01 | 93 | 76044 | 9.240 | ppbV | 98 |
| 56) 1,2-dichloropropane | 13.04 | 63 | 74235 | 9.628 | ppbV | 98 |
| 57) bromodichloromethane | 13.27 | 83 | 156416 | 9.627 | ppbV | 97 |
| 58) 1,4-dioxane | 13.32 | 88 | 44583 | 9.744 | ppbV | 99 |
| 59) trichloroethene | 13.32 | 130 | 95877 | 9.436 | ppbV | 95 |
| 60) 2,2,4-trimethylpentane | 13.35 | 57 | 346261 | 9.285 | ppbV | 99 |
| 61) methyl methacrylate | 13.54 | 41 | 95818 | 8.619 | ppbV | 96 |
| 62) heptane | 13.66 | 43 | 150622 | 8.660 | ppbV | 95 |
| 63) cis-1,3-dichloropropene | 14.32 | 75 | 107341 | 9.860 | ppbV | 95 |
| 64) 4-methyl-2-pentanone | 14.35 | 43 | 198320 | 9.278 | ppbV | 99 |
| 65) trans-1,3-dichloropropene | 14.90 | 75 | 89987 | 8.425 | ppbV | 98 |
| 66) 1,1,2-trichloroethane | 15.09 | 97 | 87124 | 9.641 | ppbV | 96 |
| 68) toluene | 15.37 | 91 | 241362 | 9.303 | ppbV | 100 |
| 71) 1,3-dichloropropane | 15.40 | 76 | 102144 | 8.910 | ppbV | 99 |
| 72) 2-hexanone | 15.61 | 43 | 182434 | 9.591 | ppbV # | 96 |
| 74) dibromochloromethane | 15.79 | 129 | 166546 | 8.926 | ppbV | 98 |
| 75) 1,2-dibromoethane | 16.02 | 107 | 142166 | 9.423 | ppbV | 98 |
| 76) butyl acetate | 16.18 | 73 | 21759 | 8.218 | ppbV | 95 |
| 77) octane | 16.27 | 85 | 65135 | 8.315 | ppbV | 91 |
| 78) tetrachloroethene | 16.43 | 166 | 122842 | 8.957 | ppbV | 99 |

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-3,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Default-LCS-AP2 - All compounds listed

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 79) | 1,1,1,2-tetrachloroethane | 16.98 | 131 | 107621 | 8.547 | ppbV | | 96 |
| 80) | chlorobenzene | 17.00 | 112 | 203591 | 9.242 | ppbV | | 98 |
| 81) | ethylbenzene | 17.30 | 91 | 311195 | 9.213 | ppbV | | 98 |
| 83) | m+p-xylene | 17.44 | 91 | 492757M4 | 18.506 | ppbV | | |
| 84) | bromoform | 17.52 | 173 | 160840 | 8.782 | ppbV | | 97 |
| 85) | styrene | 17.72 | 104 | 190708 | 9.135 | ppbV | | 96 |
| 86) | 1,1,2,2-tetrachloroethane | 17.80 | 83 | 201125 | 9.745 | ppbV | | 99 |
| 87) | o-xylene | 17.80 | 91 | 261372 | 9.491 | ppbV | | 99 |
| 88) | 1,2,3-trichloropropane | 17.90 | 75 | 141756 | 9.042 | ppbV | | 98 |
| 89) | nonane | 17.94 | 43 | 206478 | 8.343 | ppbV | # | 98 |
| 91) | isopropylbenzene | 18.25 | 105 | 344681 | 9.111 | ppbV | | 97 |
| 92) | bromobenzene | 18.33 | 77 | 173638 | 8.912 | ppbV | | 94 |
| 93) | 2-chlorotoluene | 18.61 | 126 | 95761 | 8.412 | ppbV | | 88 |
| 94) | n-propylbenzene | 18.63 | 120 | 105908 | 8.902 | ppbV | | 85 |
| 95) | 4-chlorotoluene | 18.66 | 91 | 259440 | 8.855 | ppbV | | 97 |
| 96) | 4-ethyl toluene | 18.73 | 105 | 369699M4 | 8.804 | ppbV | | |
| 97) | 1,3,5-trimethylbenzene | 18.78 | 105 | 341022 | 9.292 | ppbV | | 98 |
| 98) | tert-butylbenzene | 19.09 | 119 | 342342 | 8.799 | ppbV | | 98 |
| 99) | 1,2,4-trimethylbenzene | 19.09 | 105 | 318620 | 9.597 | ppbV | | 96 |
| 100) | decane | 19.13 | 57 | 202233 | 8.653 | ppbV | | 98 |
| 101) | Benzyl Chloride | 19.21 | 91 | 262573 | 8.676 | ppbV | | 97 |
| 102) | 1,3-dichlorobenzene | 19.23 | 146 | 238858 | 9.408 | ppbV | | 97 |
| 103) | 1,4-dichlorobenzene | 19.28 | 146 | 243506 | 9.494 | ppbV | | 98 |
| 104) | sec-butylbenzene | 19.29 | 105 | 439838 | 8.890 | ppbV | | 99 |
| 106) | p-isopropyltoluene | 19.40 | 119 | 390107 | 8.143 | ppbV | | 97 |
| 107) | 1,2-dichlorobenzene | 19.54 | 146 | 227132 | 9.413 | ppbV | | 98 |
| 108) | n-butylbenzene | 19.73 | 91 | 370411 | 9.387 | ppbV | | 97 |
| 111) | 1,2-dibromo-3-chloropr... | 19.89 | 75 | 92268 | 8.694 | ppbV | | 94 |
| 112) | undecane | 20.10 | 57 | 241894 | 9.169 | ppbV | | 99 |
| 114) | dodecane | 21.02 | 57 | 250335 | 9.596 | ppbV | | 98 |
| 115) | 1,2,4-trichlorobenzene | 21.02 | 180 | 201737 | 9.925 | ppbV | | 99 |
| 116) | naphthalene | 21.13 | 128 | 470896 | 9.254 | ppbV | | 98 |
| 117) | 1,2,3-trichlorobenzene | 21.39 | 180 | 186100 | 9.738 | ppbV | | 97 |
| 119) | hexachlorobutadiene | 21.46 | 225 | 158760 | 10.320 | ppbV | | 99 |

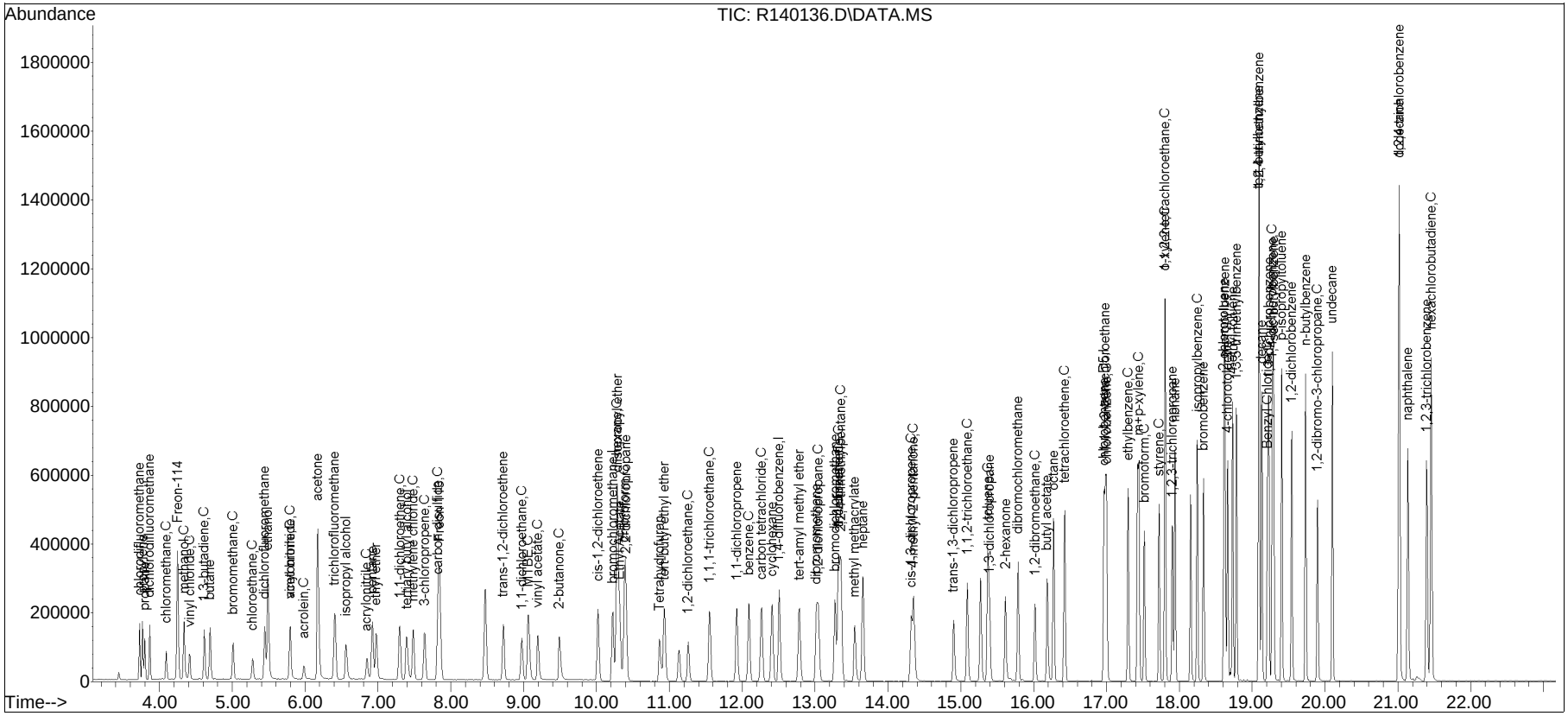
(#) = qualifier out of range (m) = manual integration (+) = signals summed

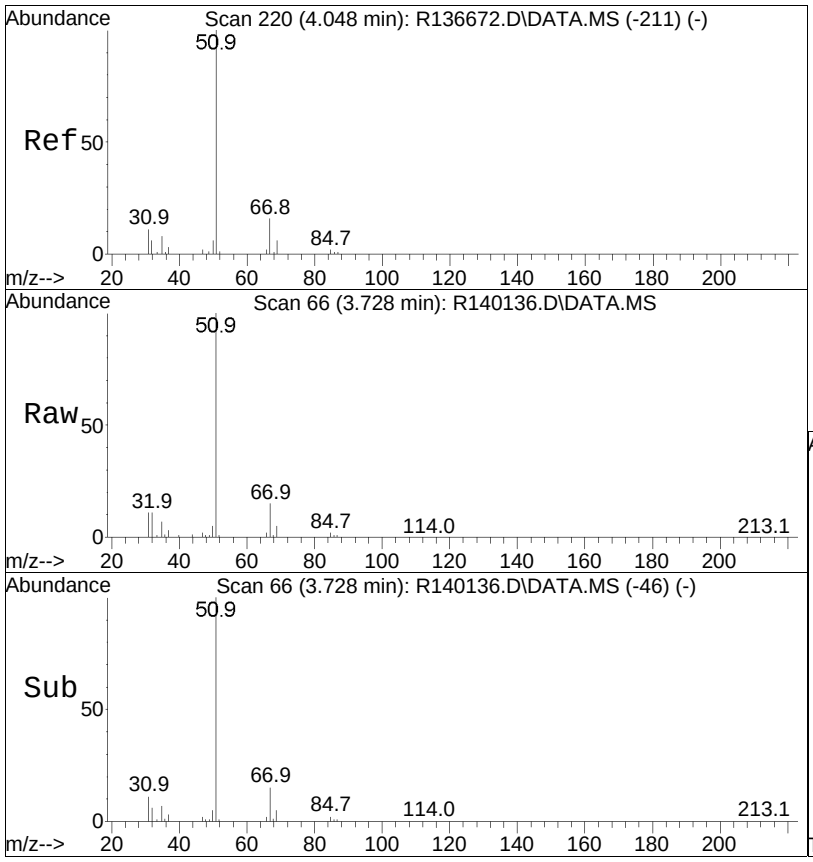
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-3,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed40136.D

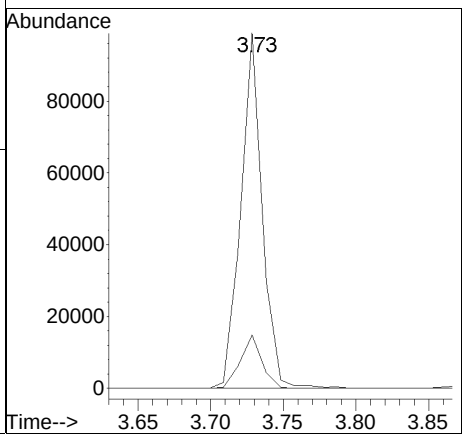


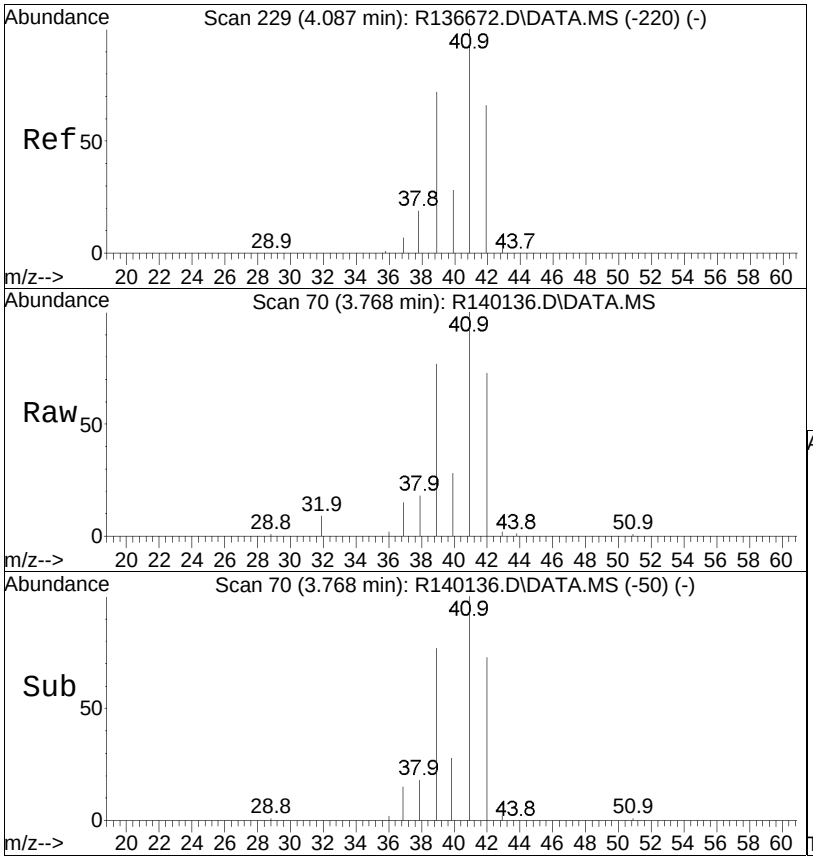



#2
chlorodifluoromethane
Concen: 8.65 ppbV
RT: 3.73 min Scan# 66
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 51 Resp: 101726

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 51 | 100 | | |
| 67 | 15.0 | 12.2 | 18.4 |

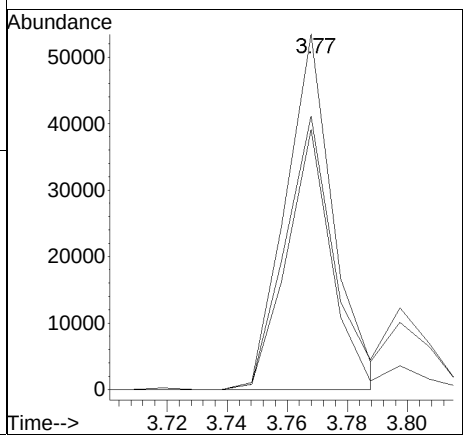


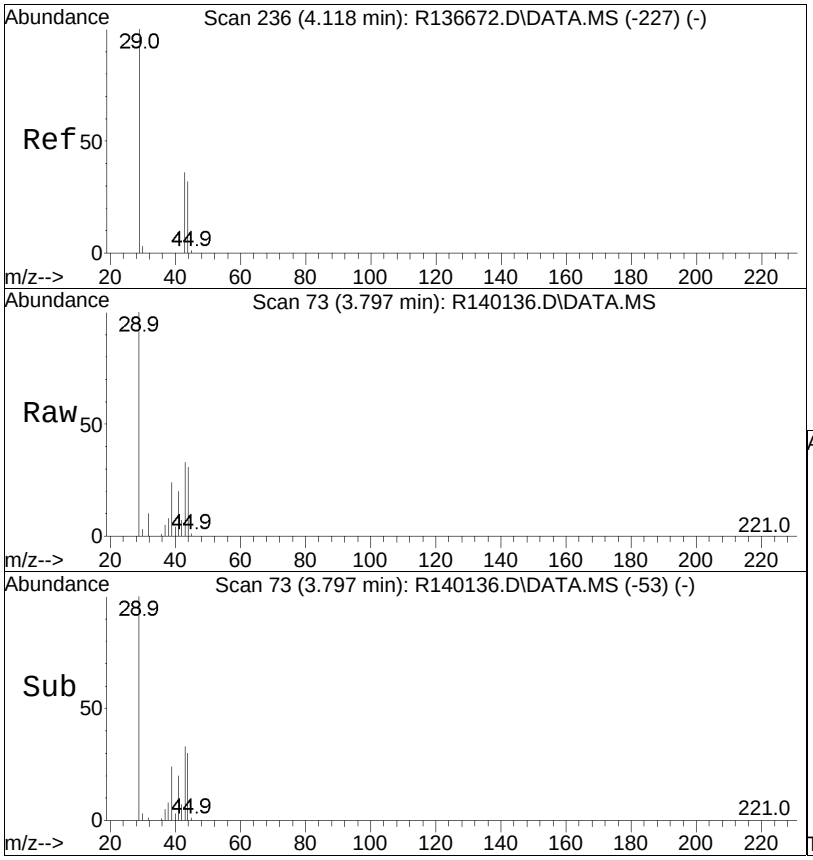



#3
propylene
Concen: 10.18 ppbV m
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 41 Resp: 59015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 73.1 | 52.7 | 79.1 |
| 39 | 77.0 | 59.6 | 89.4 |

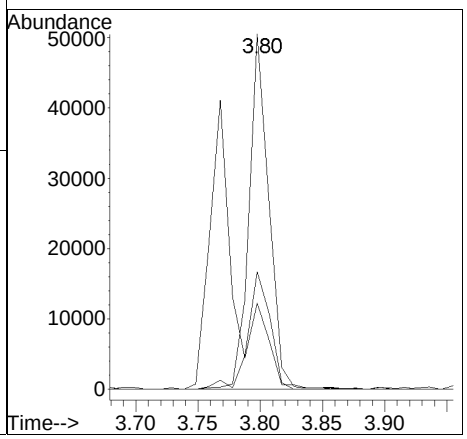


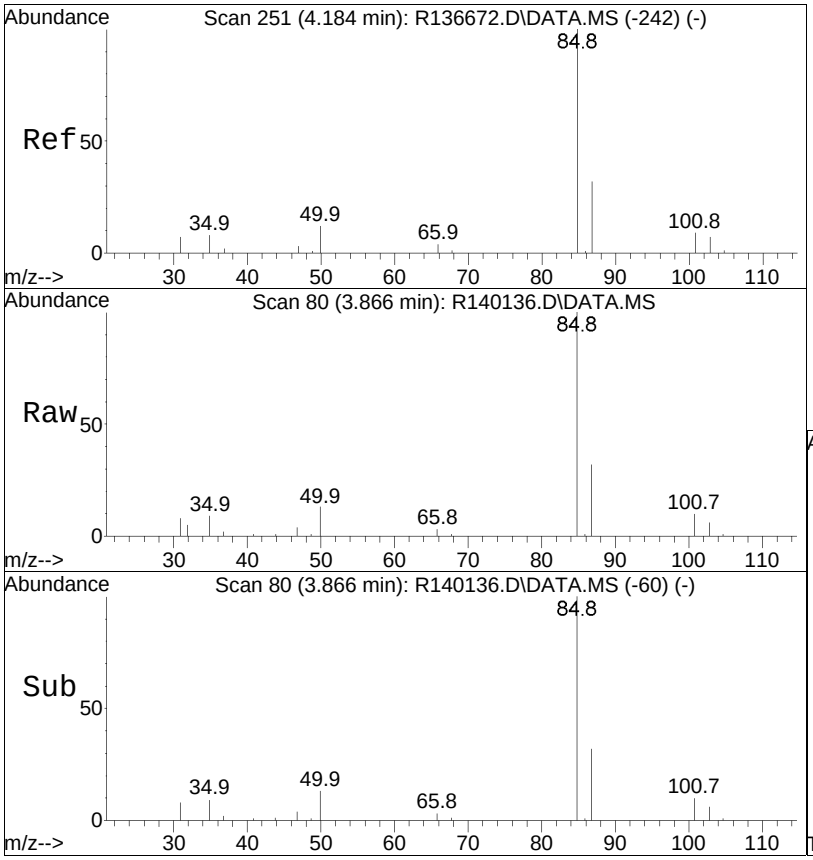



#4
propane
Concen: 7.91 ppbV
RT: 3.80 min Scan# 73
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 29 Resp: 56143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 29 | 100 | | |
| 43 | 33.1 | 30.6 | 45.8 |
| 39 | 24.3 | 22.9 | 34.3 |

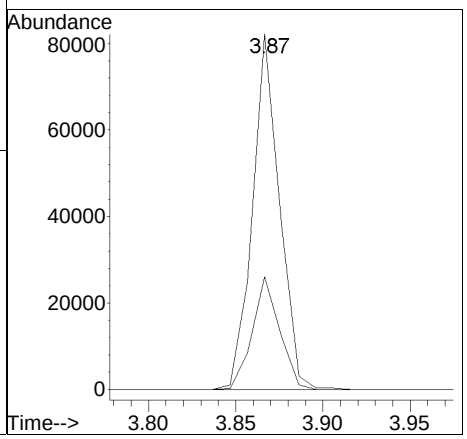


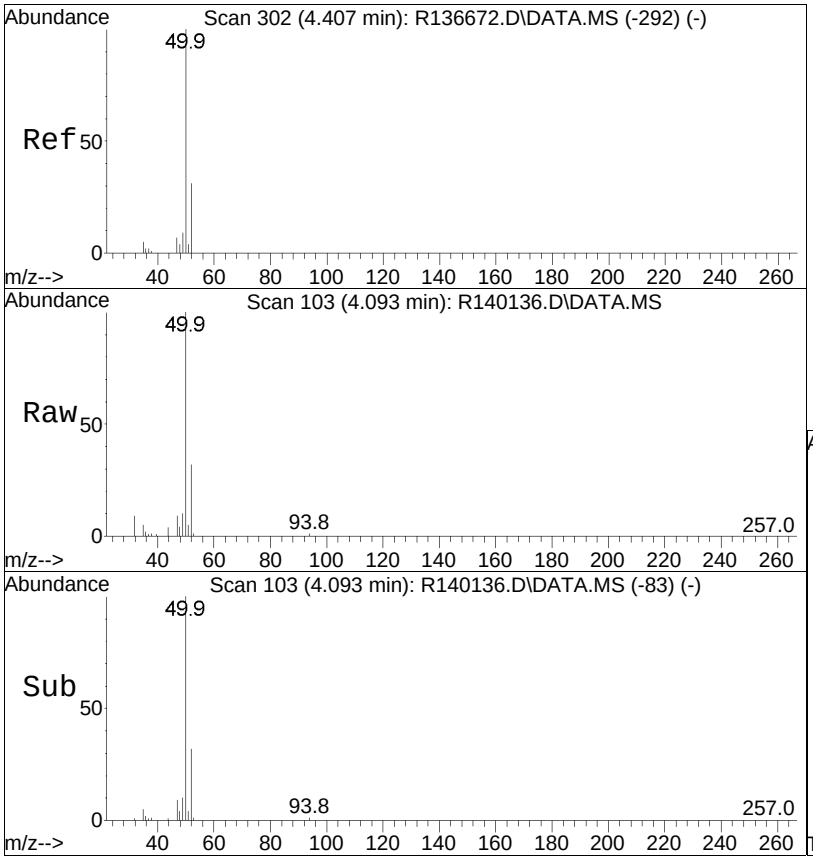



#5
dichlorodifluoromethane
Concen: 7.17 ppbV
RT: 3.87 min Scan# 80
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 85 Resp: 88288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.7 | 24.9 | 37.3 |

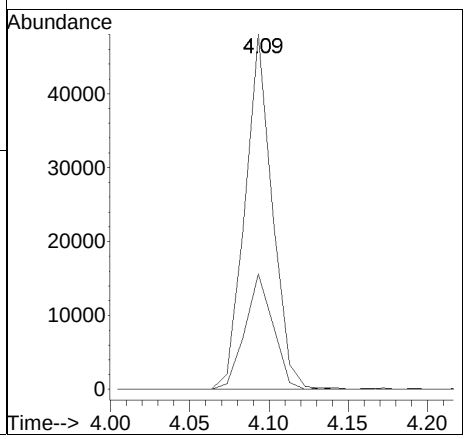


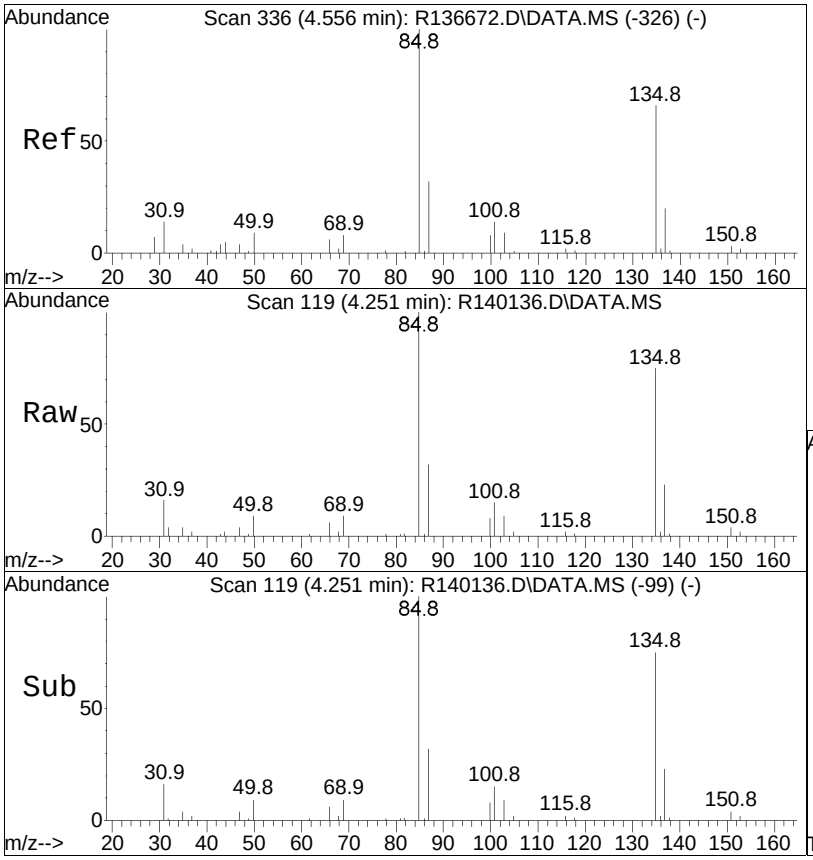



#6
chloromethane
Concen: 8.75 ppbV
RT: 4.09 min Scan# 103
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 50 Resp: 57687

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.5 | 25.4 | 38.2 |

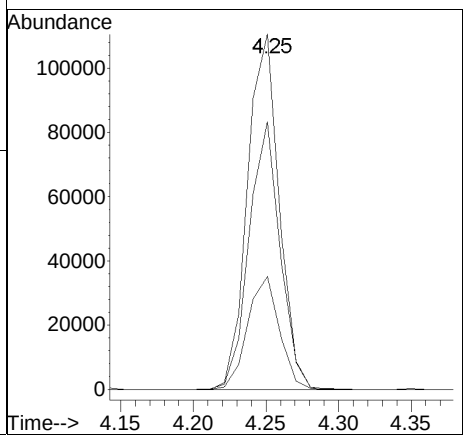


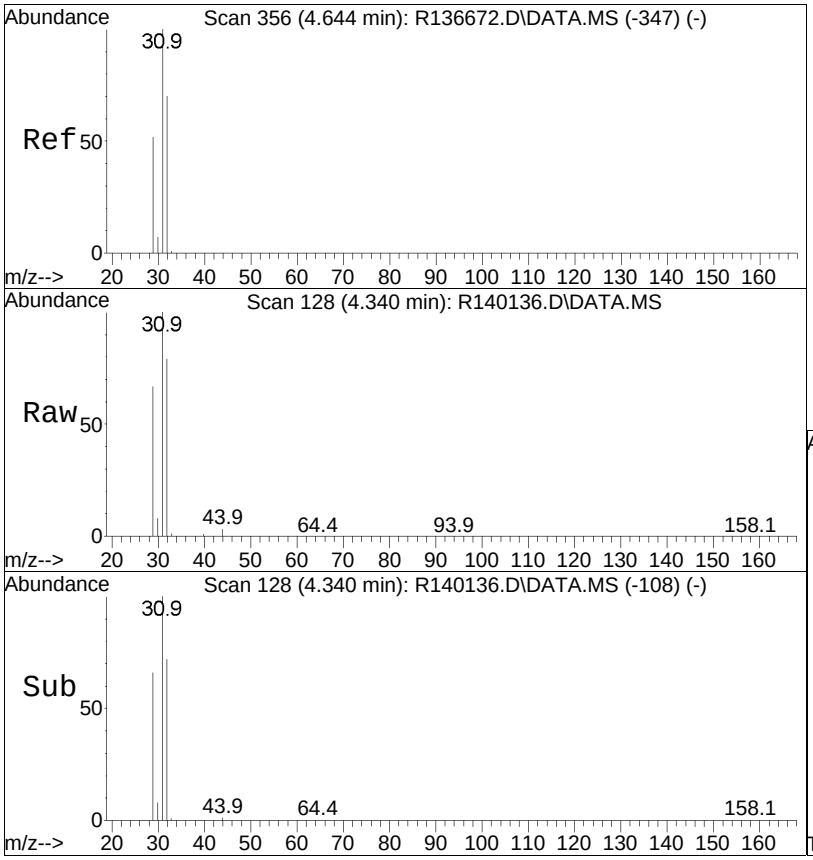



#7
Freon-114
Concen: 9.37 ppbV
RT: 4.25 min Scan# 119
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 85 Resp: 167616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.8 | 25.8 | 38.8 |
| 135 | 75.4 | 60.7 | 91.1 |

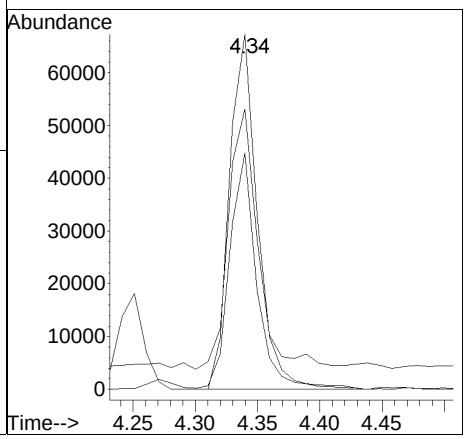


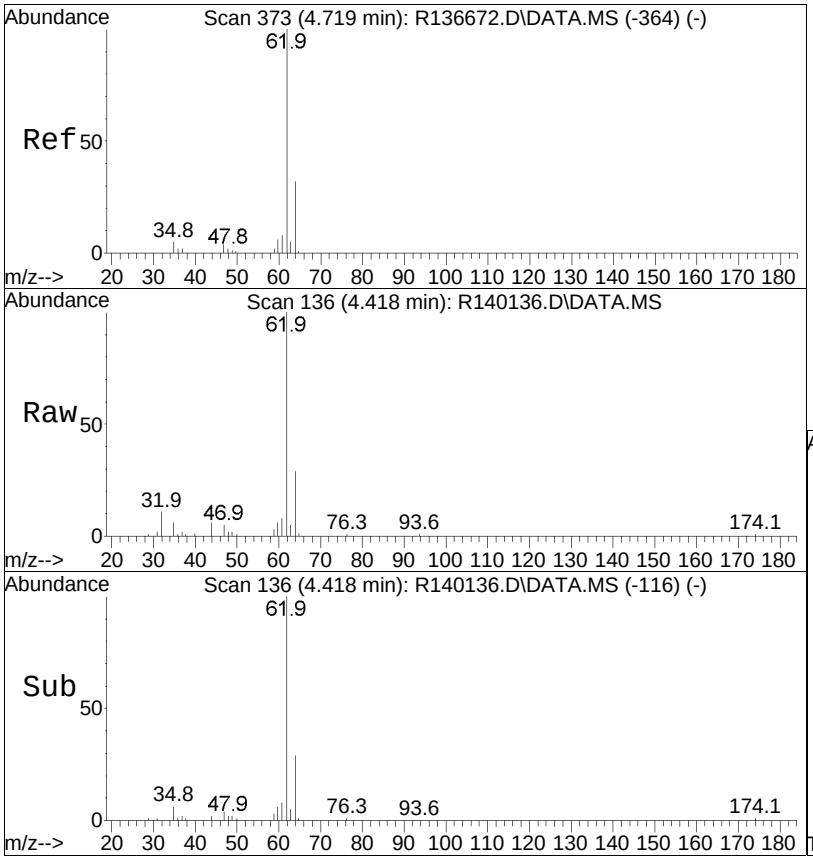



#8
methanol
Concen: 42.52 ppbV
RT: 4.34 min Scan# 128
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 31 Resp: 106339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 32 | 79.0 | 59.9 | 89.9 |
| 29 | 66.6 | 50.3 | 75.5 |

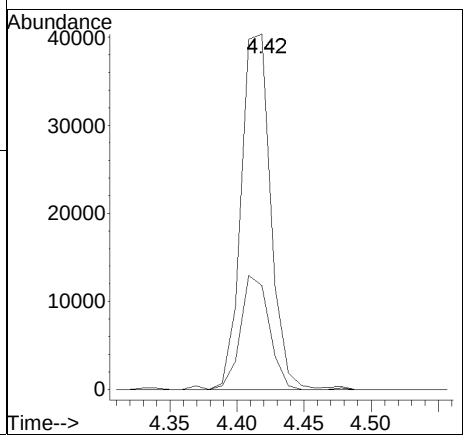


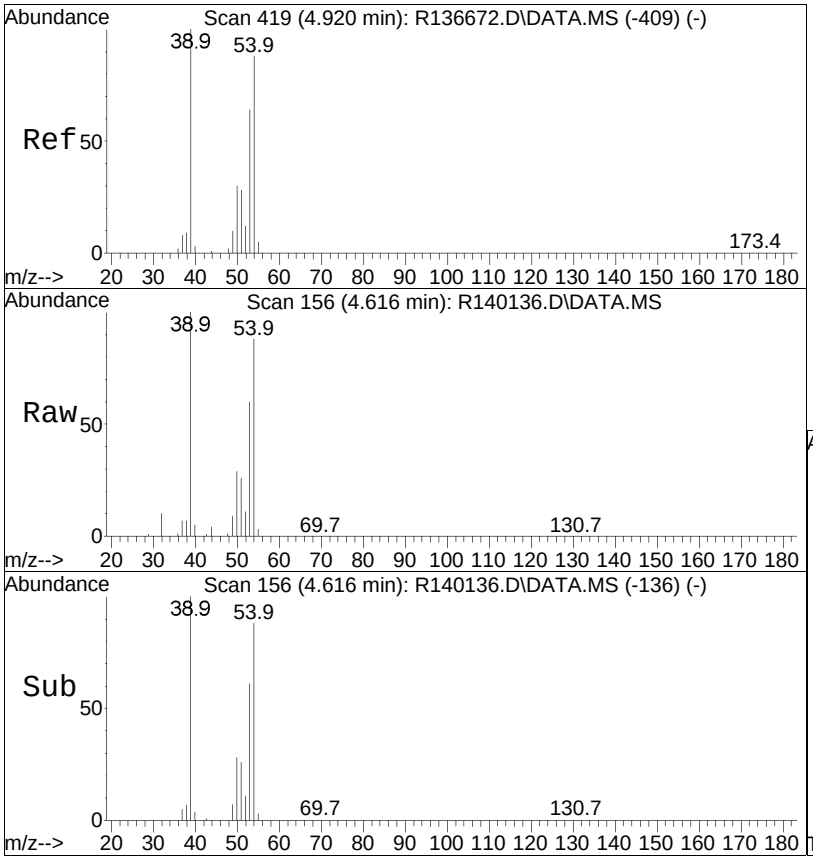



#9
vinyl chloride
Concen: 9.43 ppbV
RT: 4.42 min Scan# 136
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 62 Resp: 62000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.2 | 24.2 | 36.2 |

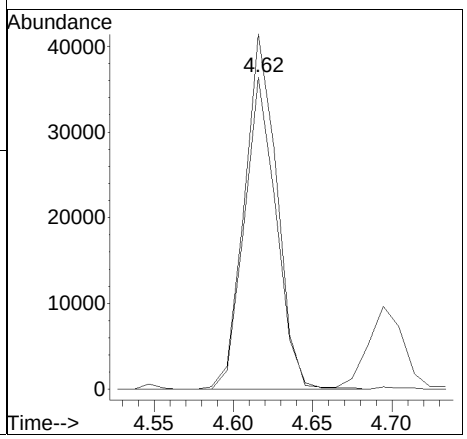


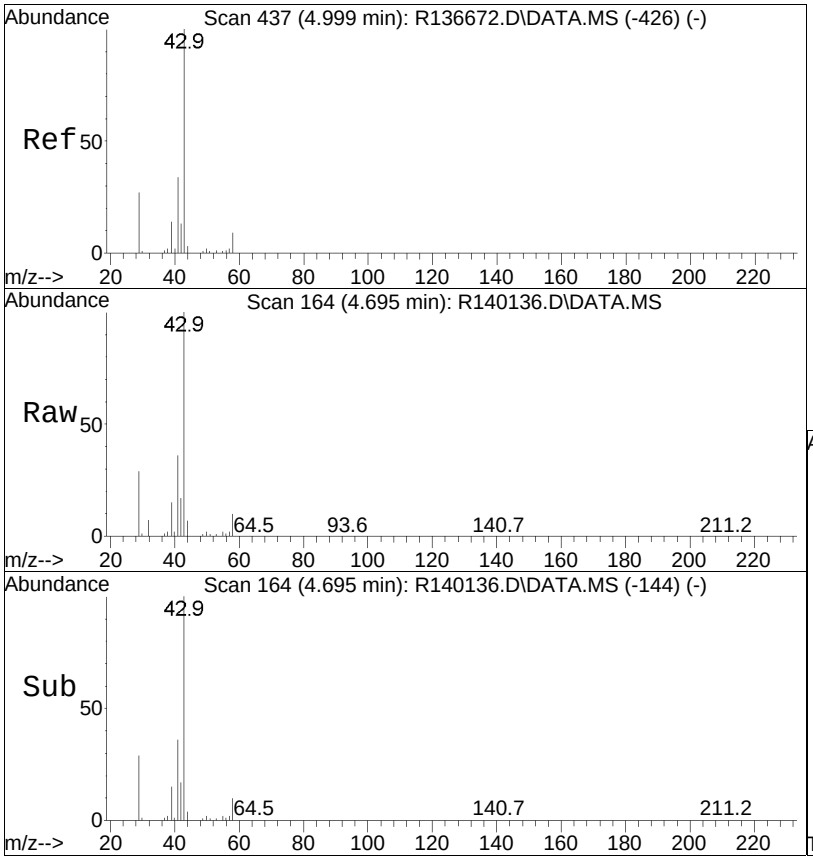



#10
1,3-butadiene
Concen: 9.68 ppbV
RT: 4.62 min Scan# 156
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 54 Resp: 51108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 54 | 100 | | |
| 39 | 113.9 | 93.4 | 140.0 |

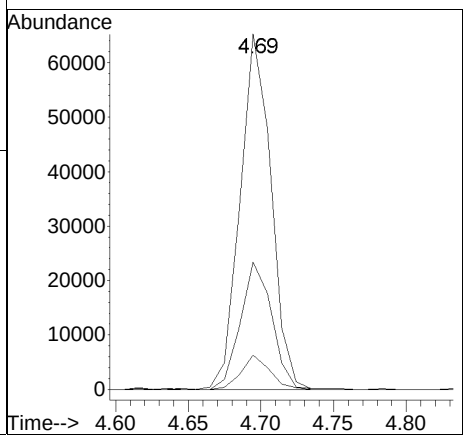


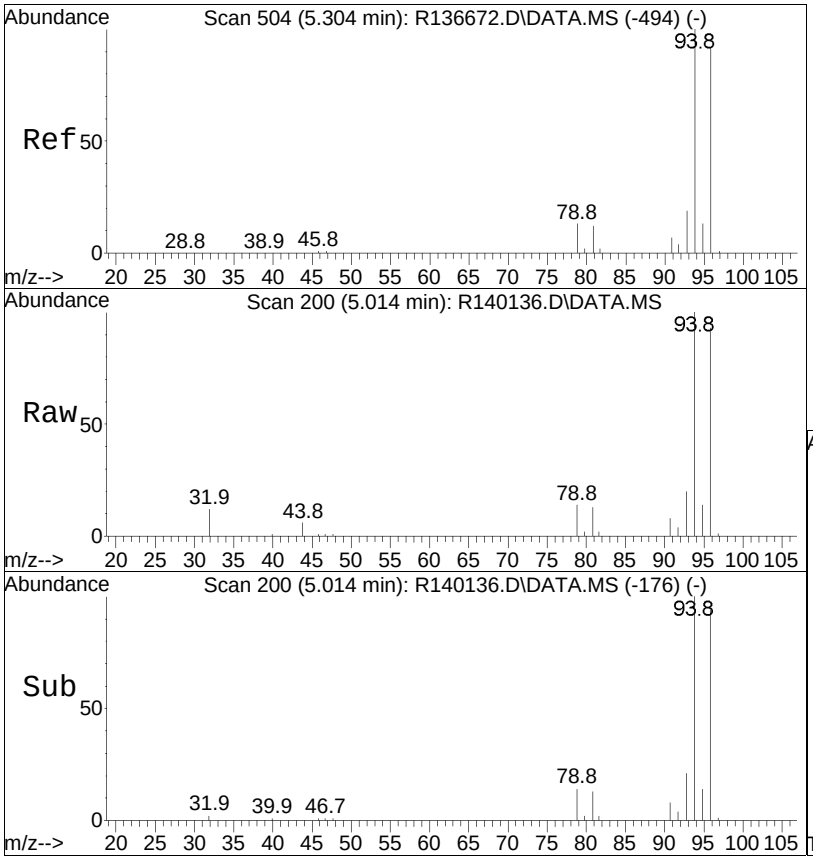



#11
butane
Concen: 8.45 ppbV
RT: 4.69 min Scan# 164
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 96856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 9.7 | 7.7 | 11.5 |
| 41 | 35.8 | 30.9 | 46.3 |

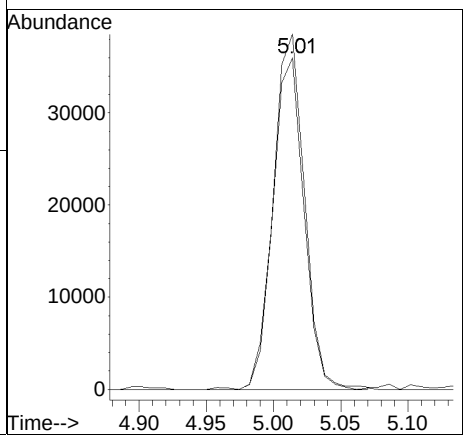


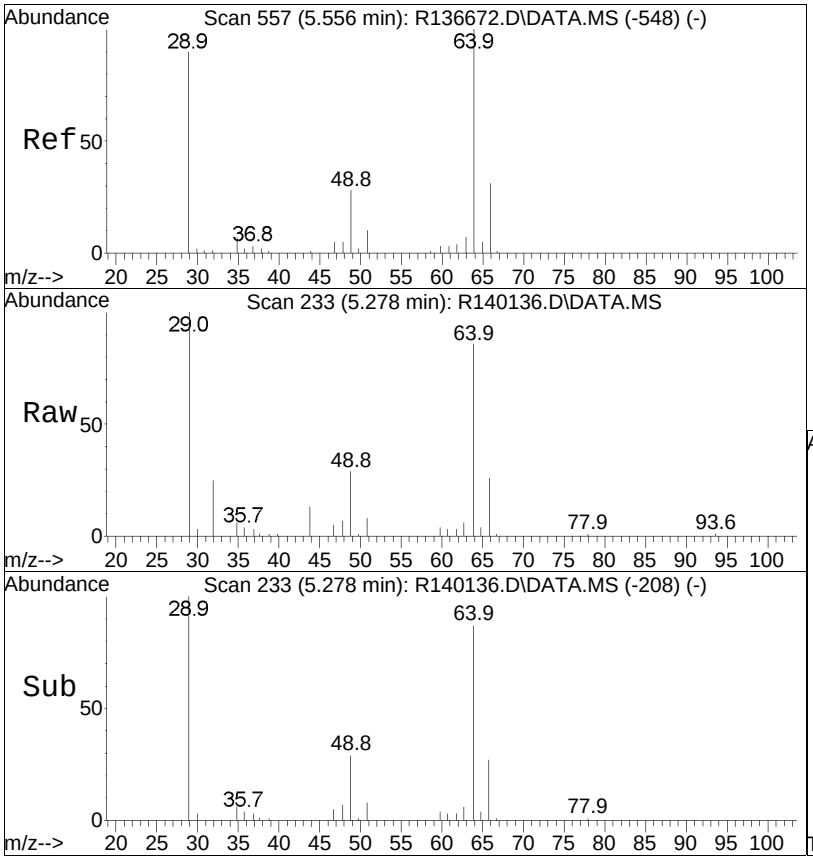



#13
bromomethane
Concen: 8.65 ppbV
RT: 5.01 min Scan# 200
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 94 Resp: 62771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.3 | 74.3 | 111.5 |

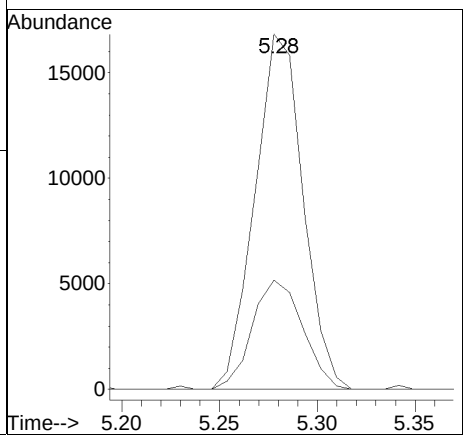


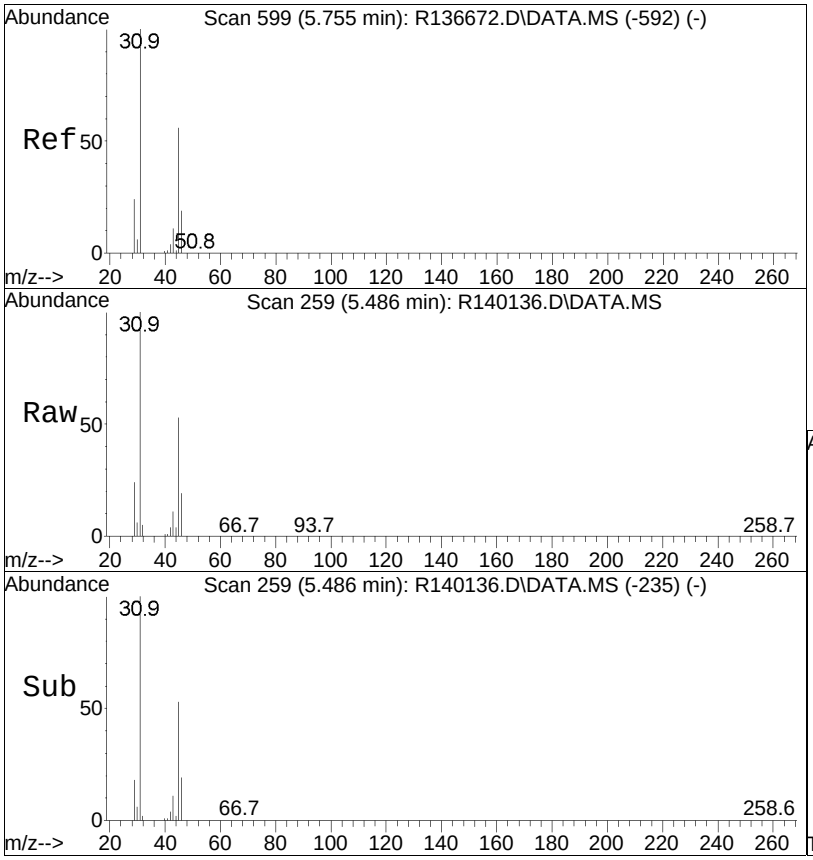



#14
chloroethane
Concen: 8.91 ppbV
RT: 5.28 min Scan# 233
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 64 Resp: 28877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.8 | 24.6 | 36.8 |

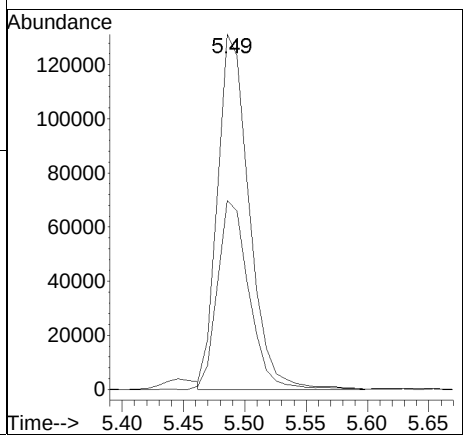


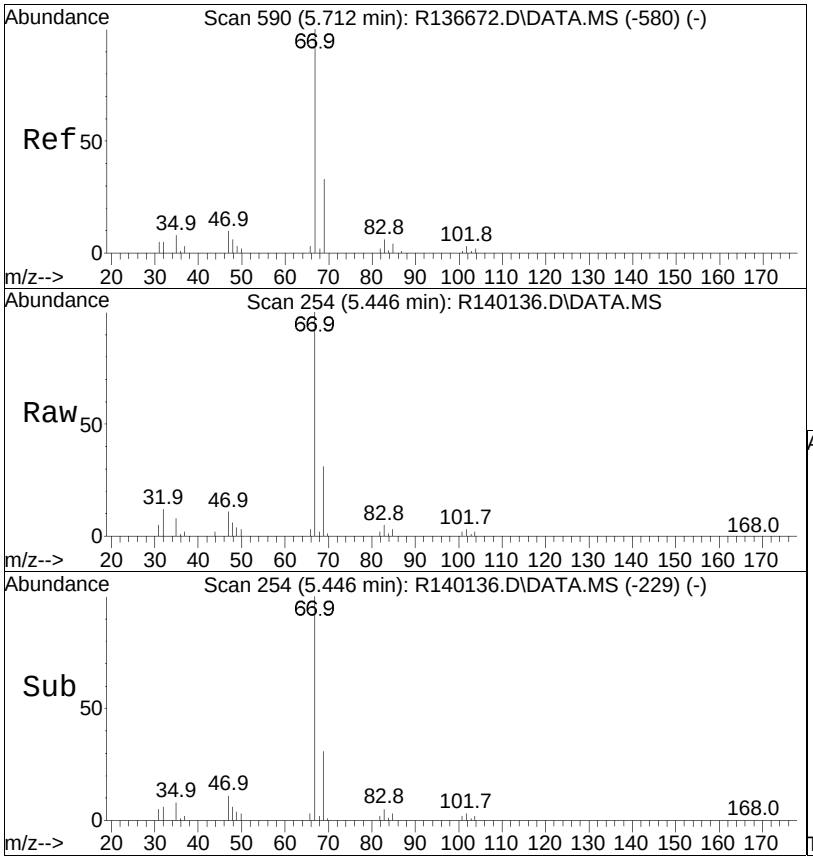



#15
ethanol
Concen: 42.68 ppbV m
RT: 5.49 min Scan# 259
Delta R.T. -0.008 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 31 Resp: 236000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 53.2 | 42.0 | 63.0 |

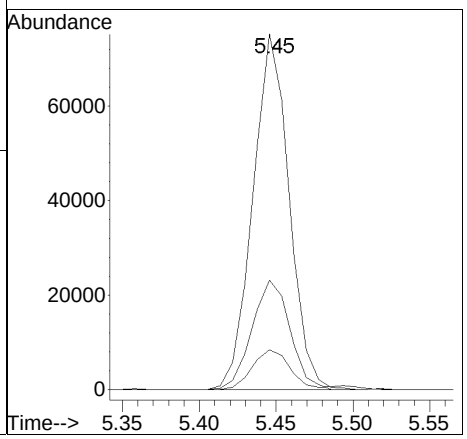


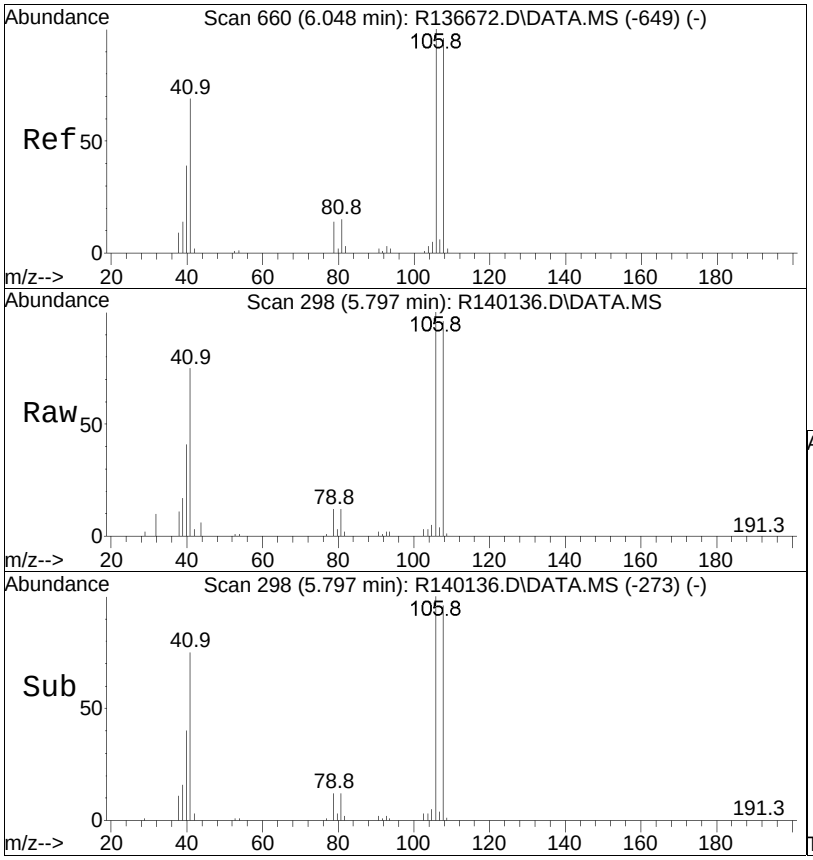



#16
dichlorofluoromethane
Concen: 8.57 ppbV
RT: 5.45 min Scan# 254
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 67 Resp: 122793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 67 | 100 | | |
| 69 | 30.8 | 24.9 | 37.3 |
| 47 | 11.2 | 9.3 | 13.9 |

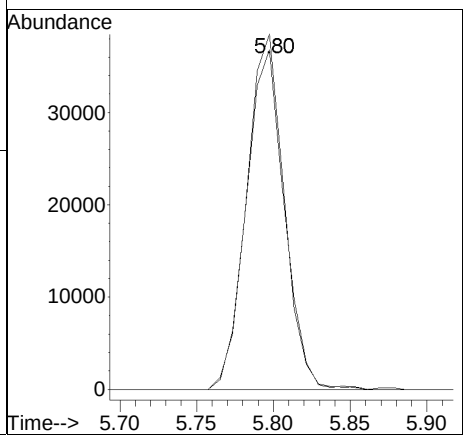


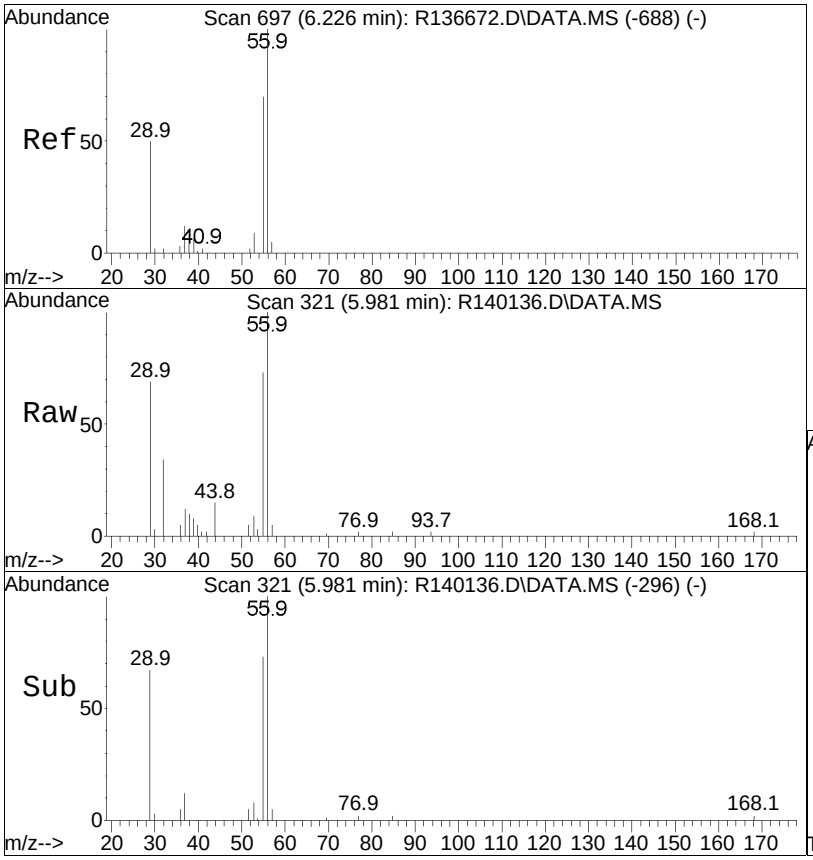



#17
vinyl bromide
Concen: 9.30 ppbV
RT: 5.80 min Scan# 298
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:106 Resp: 65333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 108 | 95.6 | 77.6 | 116.4 |

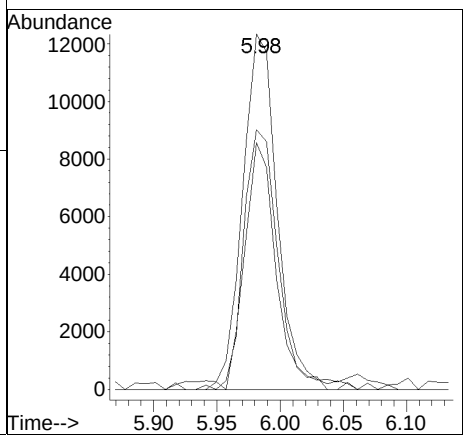


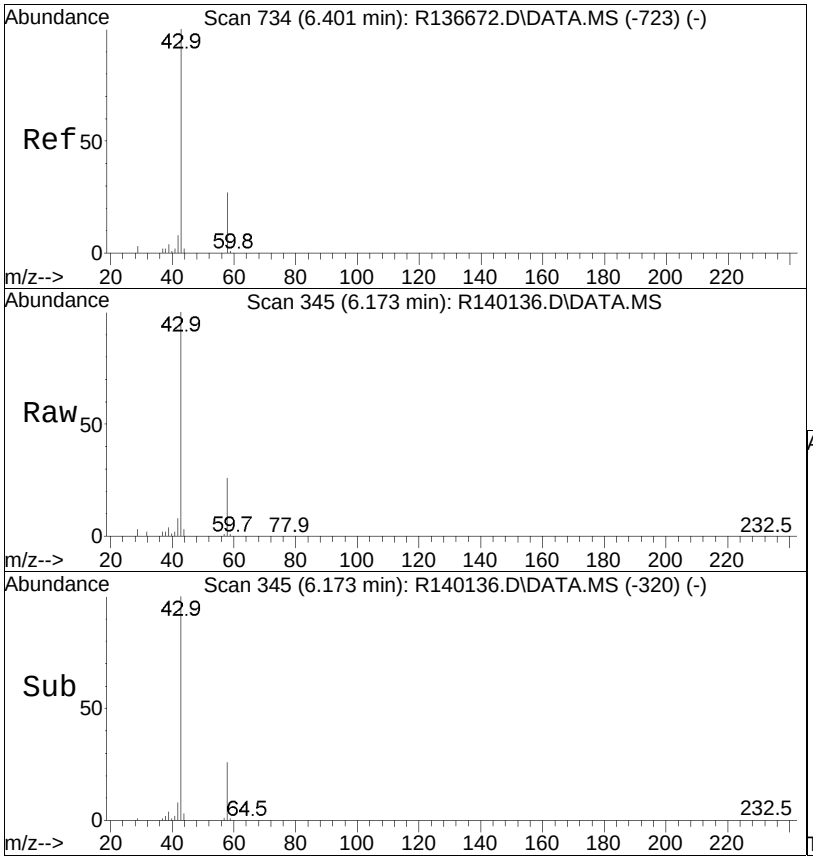



#18
acrolein
Concen: 7.25 ppbV
RT: 5.98 min Scan# 321
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 56 Resp: 23788

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 73.1 | 59.8 | 89.8 |
| 29 | 69.4 | 47.3 | 70.9 |

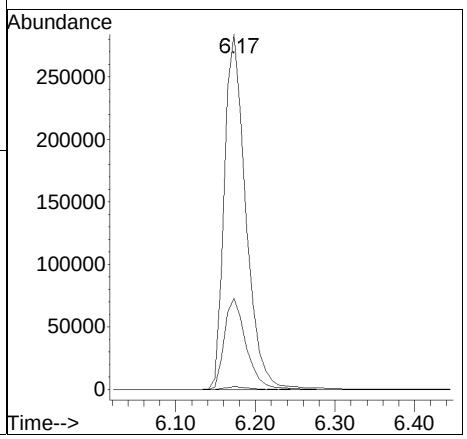


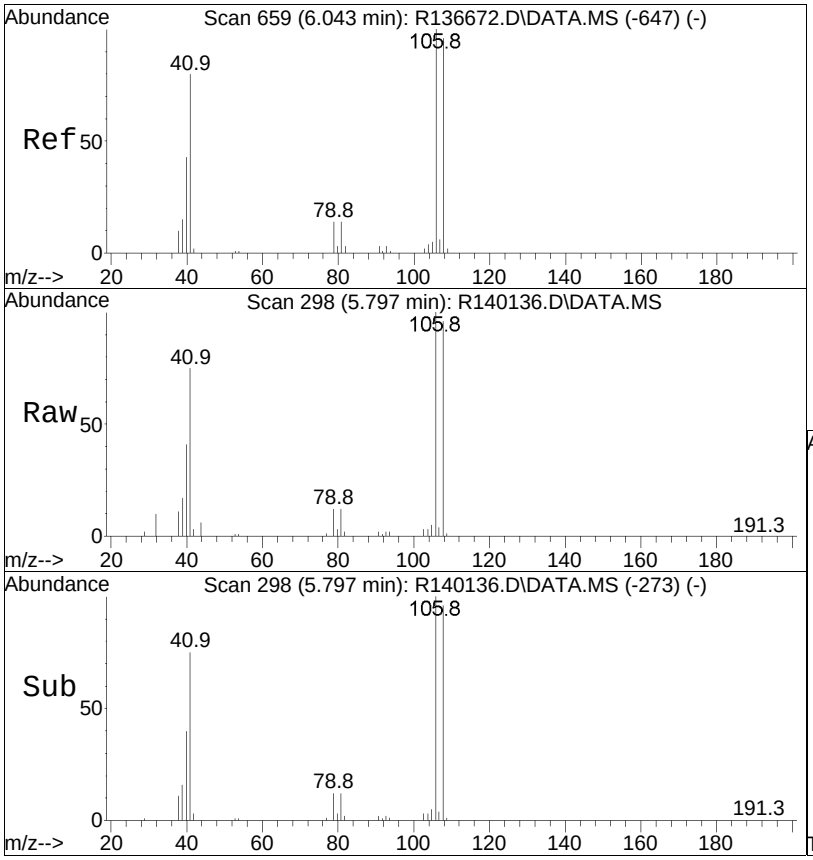



#19
acetone
Concen: 47.67 ppbV
RT: 6.17 min Scan# 345
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 535089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 25.7 | 19.9 | 29.9 |
| 57 | 0.8 | 0.6 | 0.8 |

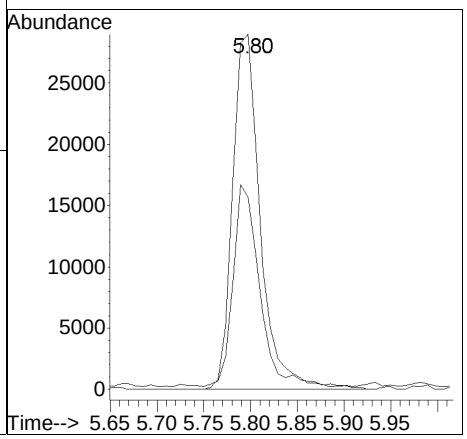


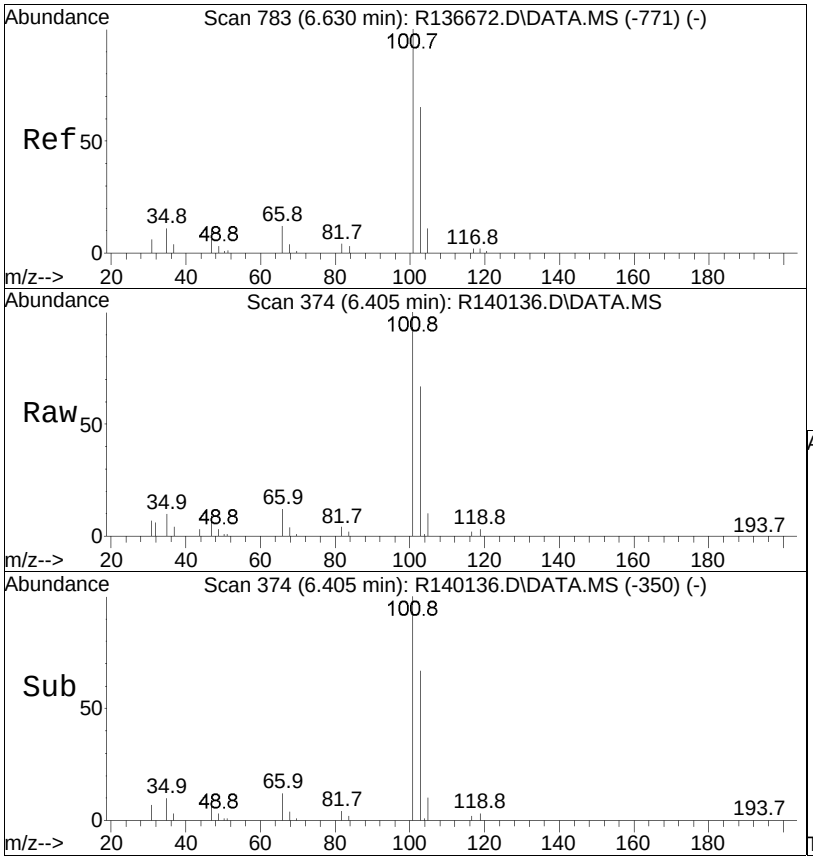



#20
acetonitrile
Concen: 8.37 ppbV
RT: 5.80 min Scan# 298
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 41 Resp: 59877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 40 | 54.1 | 42.2 | 63.4 |

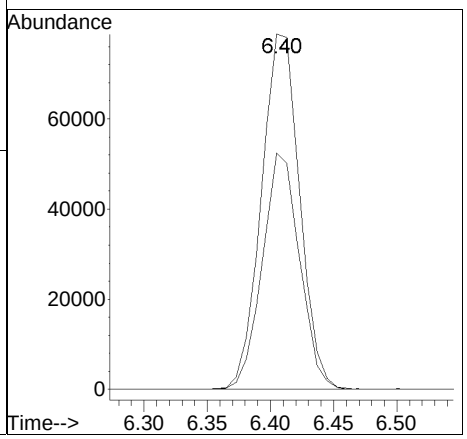


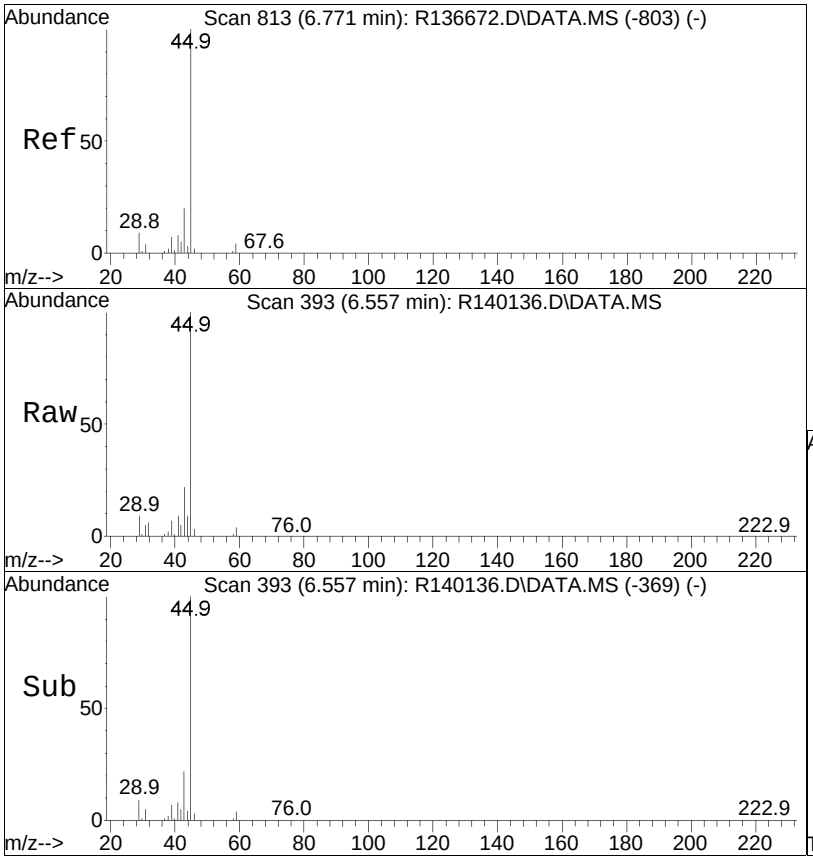



#21
trichlorofluoromethane
Concen: 9.51 ppbV
RT: 6.40 min Scan# 374
Delta R.T. -0.008 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:101 Resp: 166091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.5 | 48.7 | 73.1 |

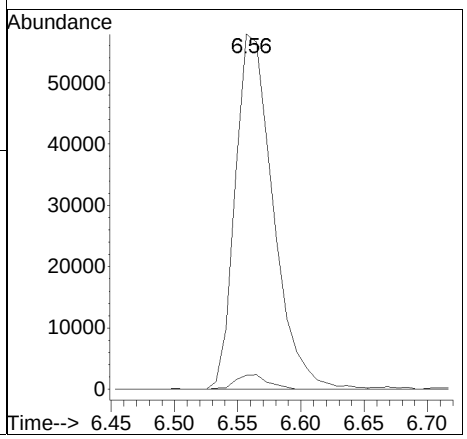


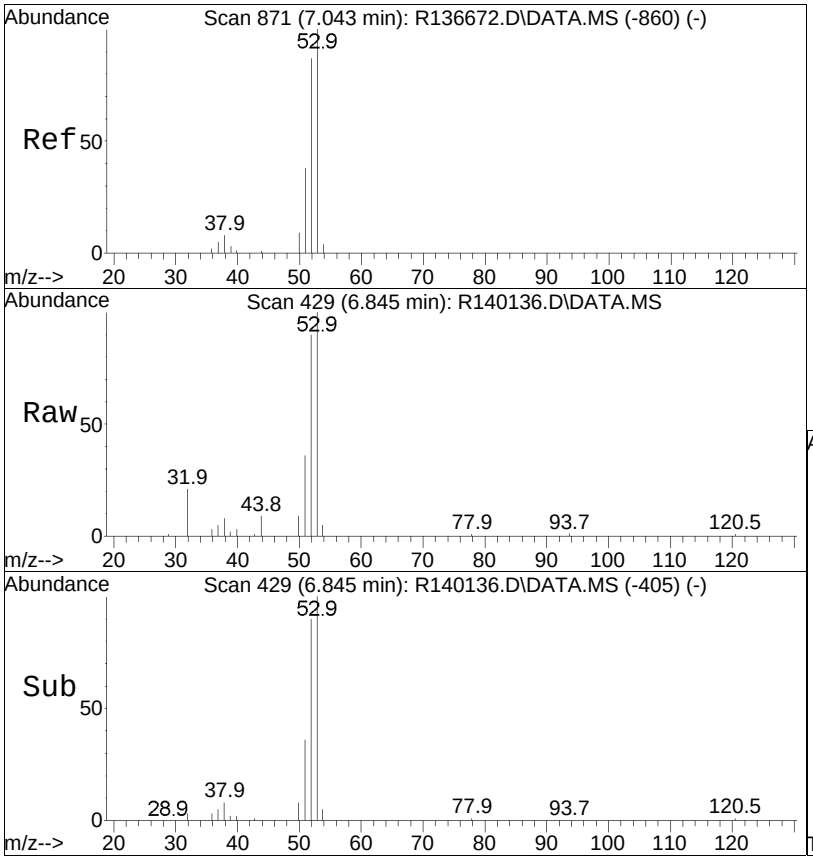



#22
isopropyl alcohol
Concen: 9.12 ppbV
RT: 6.56 min Scan# 393
Delta R.T. -0.008 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 45 Resp: 121000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 59 | 4.0 | 2.5 | 3.7# |

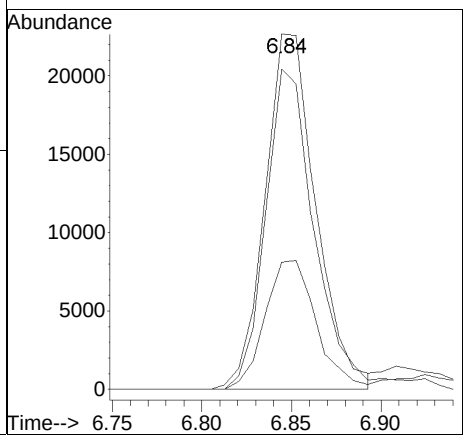


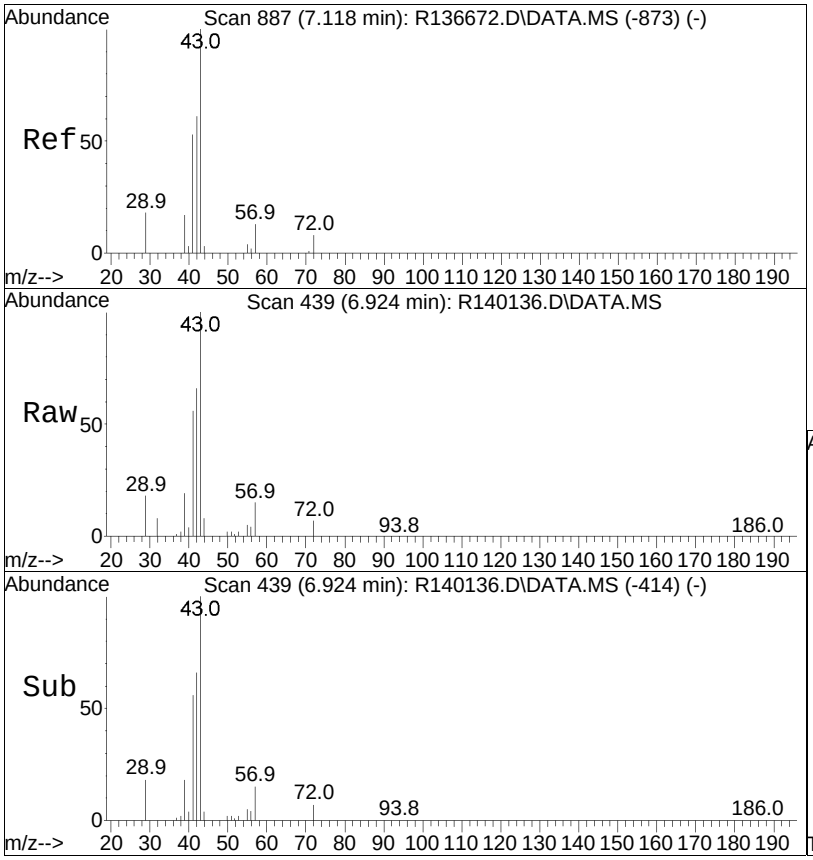



#23
acrylonitrile
Concen: 7.93 ppbV
RT: 6.84 min Scan# 429
Delta R.T. -0.008 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 53 Resp: 44758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 90.1 | 70.8 | 106.2 |
| 51 | 35.8 | 29.1 | 43.7 |

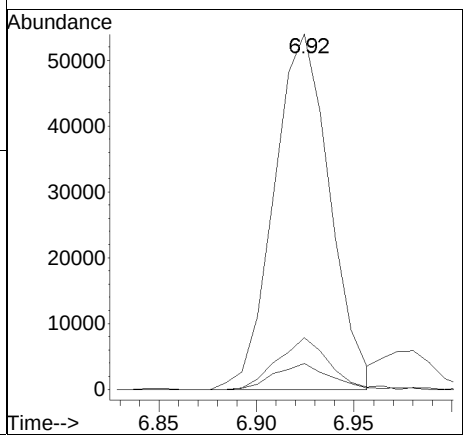


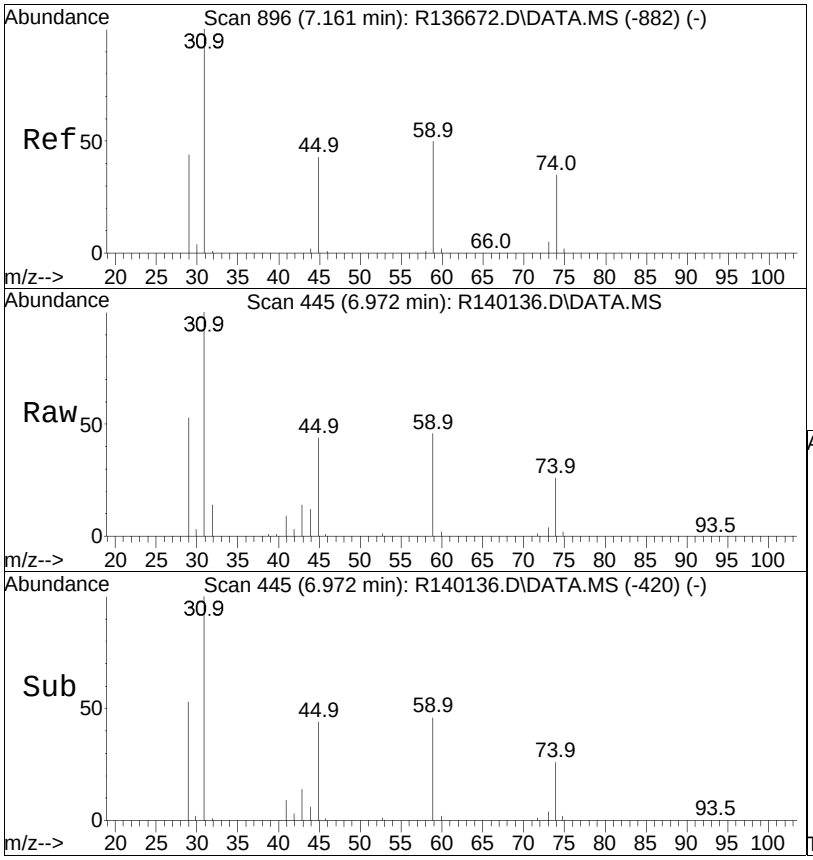



#24
pentane
Concen: 7.95 ppbV m
RT: 6.92 min Scan# 439
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 107323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 14.5 | 10.8 | 16.2 |
| 72 | 7.3 | 5.4 | 8.0 |

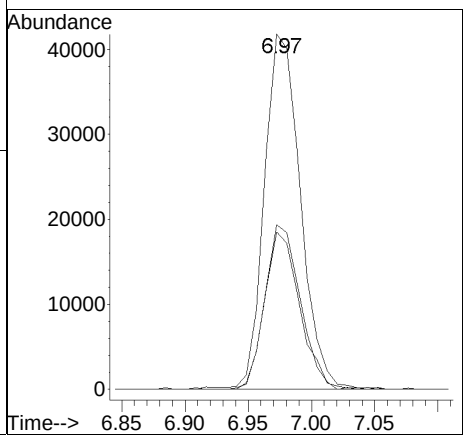


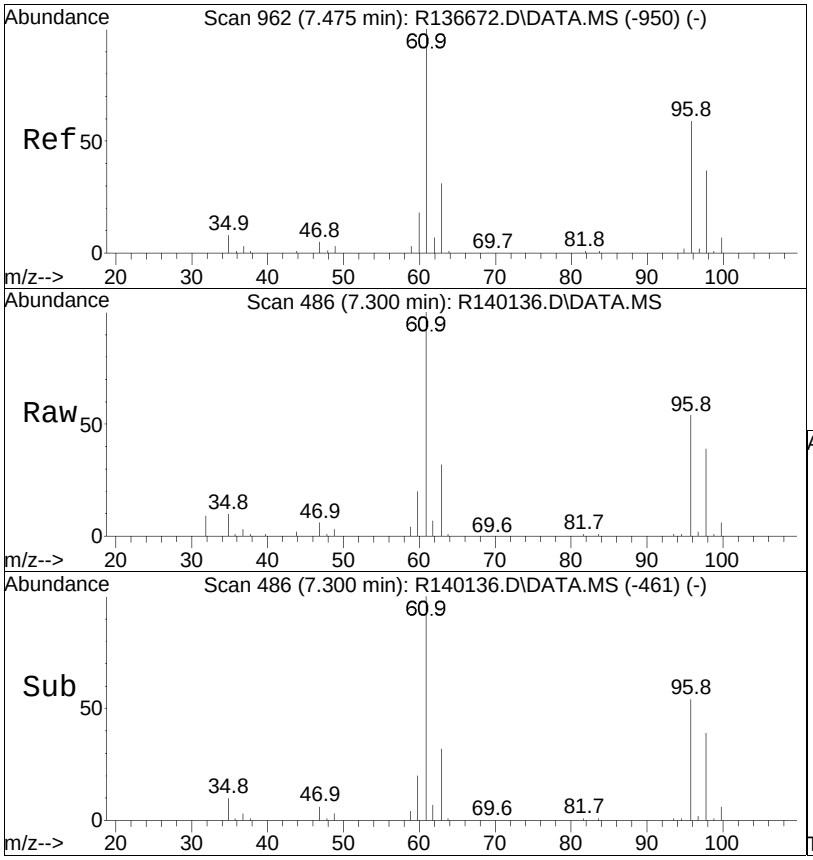



#25
ethyl ether
Concen: 7.49 ppbV
RT: 6.97 min Scan# 445
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 31 Resp: 83086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 59 | 46.3 | 33.7 | 50.5 |
| 45 | 44.3 | 30.6 | 45.8 |

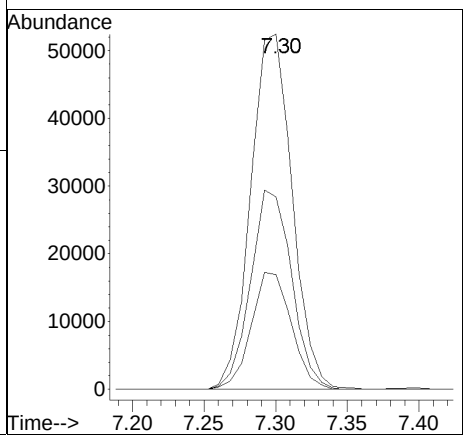


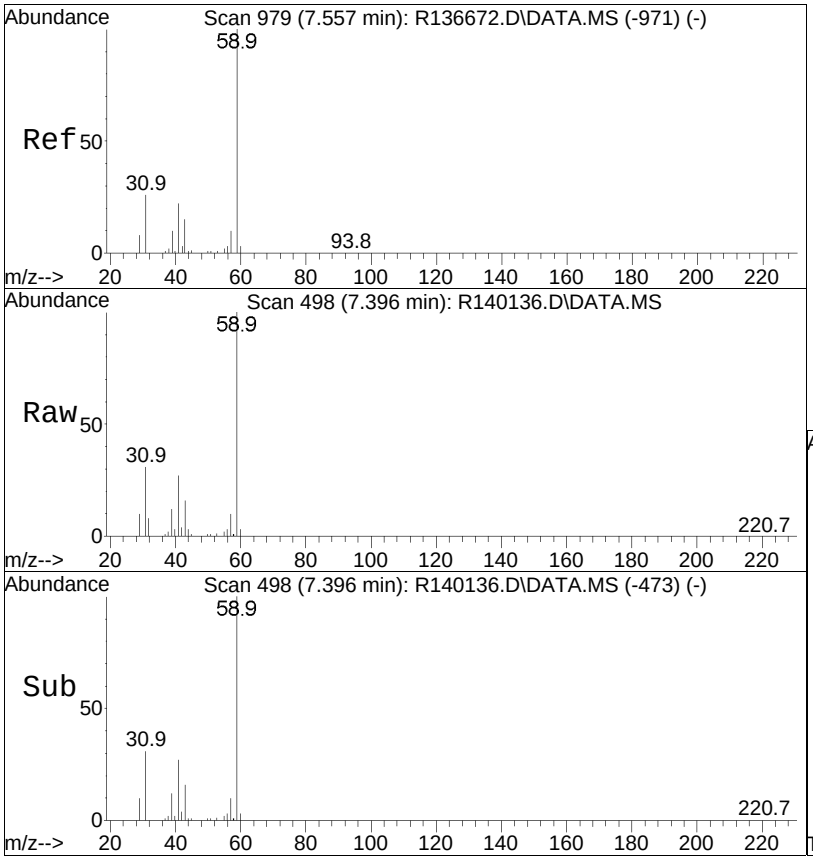



#26
1,1-dichloroethene
Concen: 9.17 ppbV
RT: 7.30 min Scan# 486
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 61 Resp: 105818

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 54.2 | 45.4 | 68.2 |
| 63 | 32.3 | 25.3 | 37.9 |

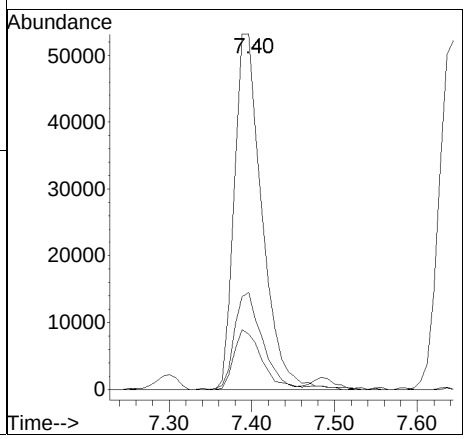


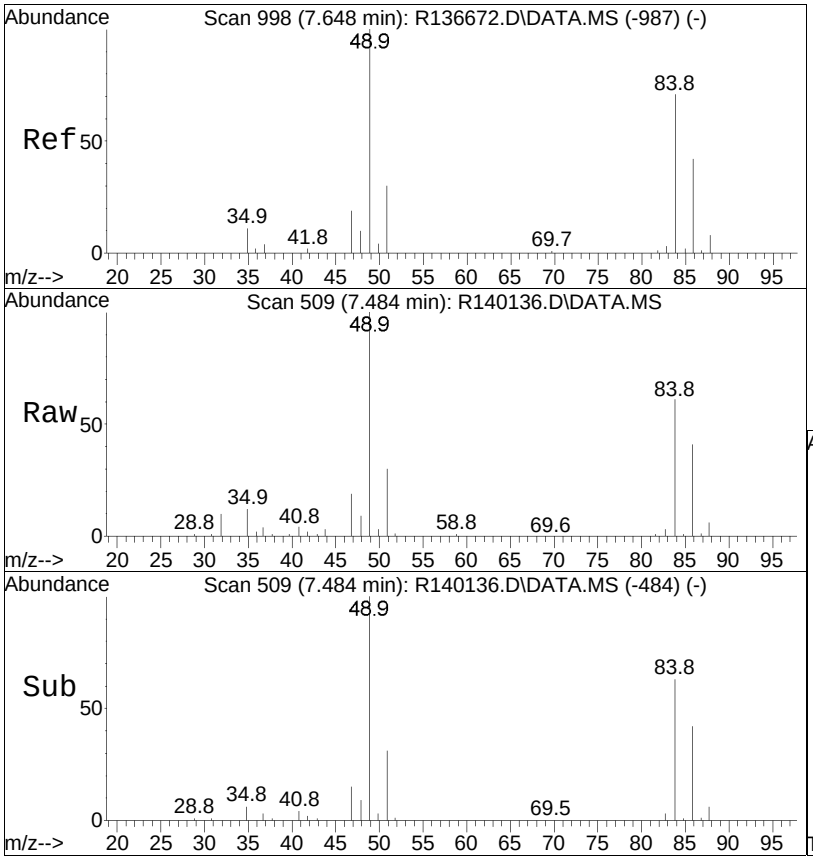



#27
tertiary butyl alcohol
Concen: 8.62 ppbV
RT: 7.40 min Scan# 498
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 59 Resp: 123968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 41 | 27.3 | 17.8 | 26.6# |
| 43 | 15.6 | 14.2 | 21.2 |

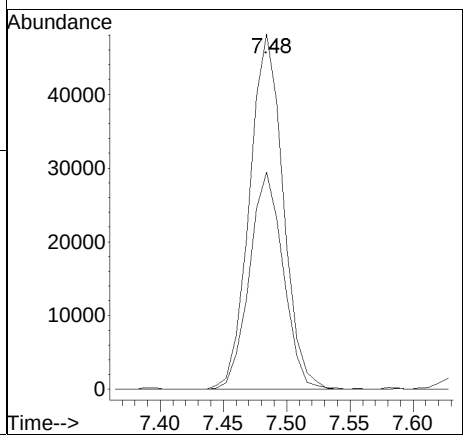


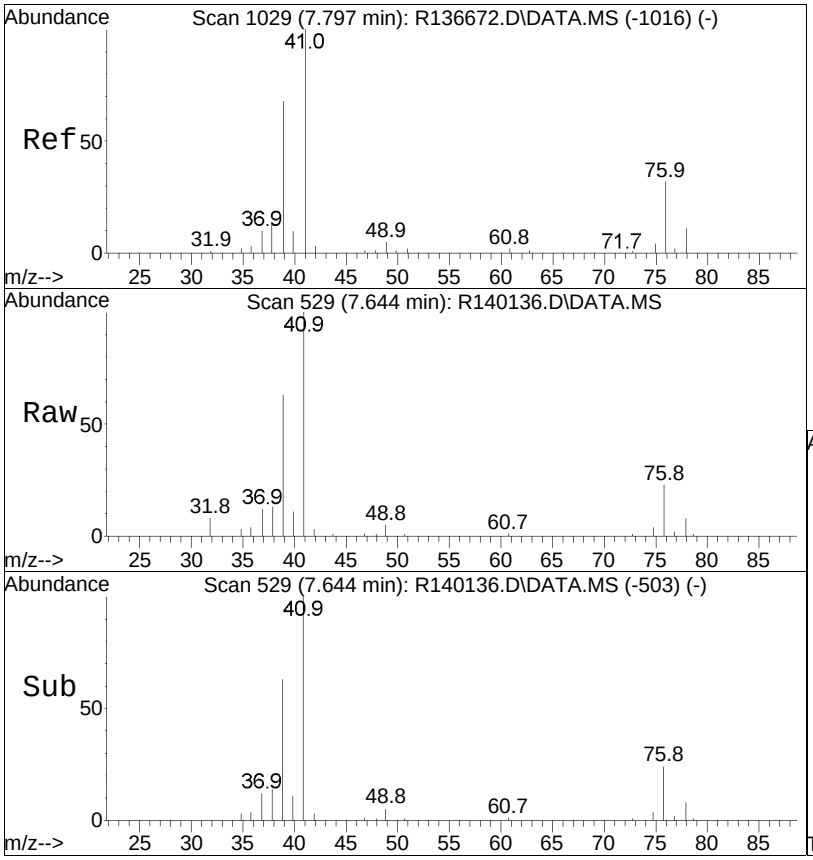



#28
methylene chloride
Concen: 9.43 ppbV
RT: 7.48 min Scan# 509
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 49 Resp: 89315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 84 | 61.1 | 50.8 | 76.2 |

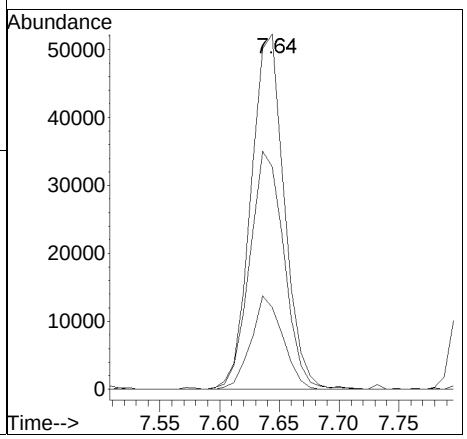


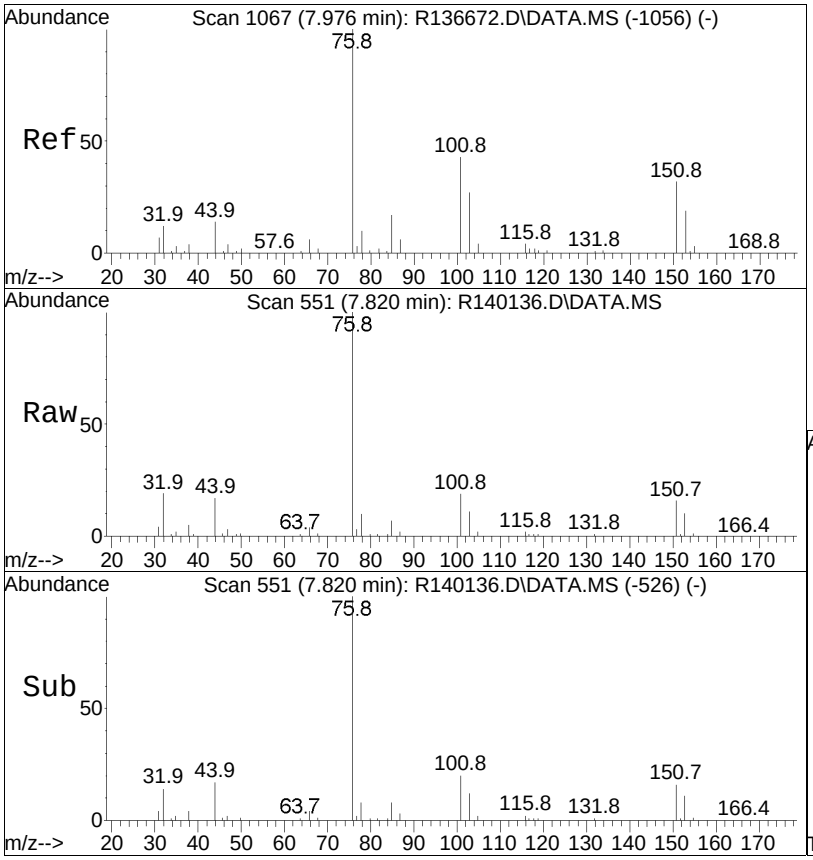



#29
3-chloropropene
Concen: 8.45 ppbV
RT: 7.64 min Scan# 529
Delta R.T. 0.008 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 41 Resp: 101739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.7 | 54.2 | 81.2 |
| 76 | 23.1 | 21.6 | 32.4 |

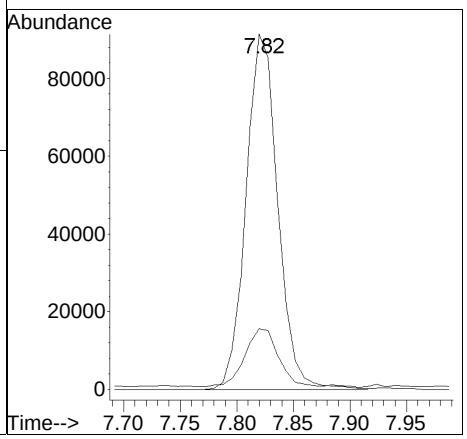


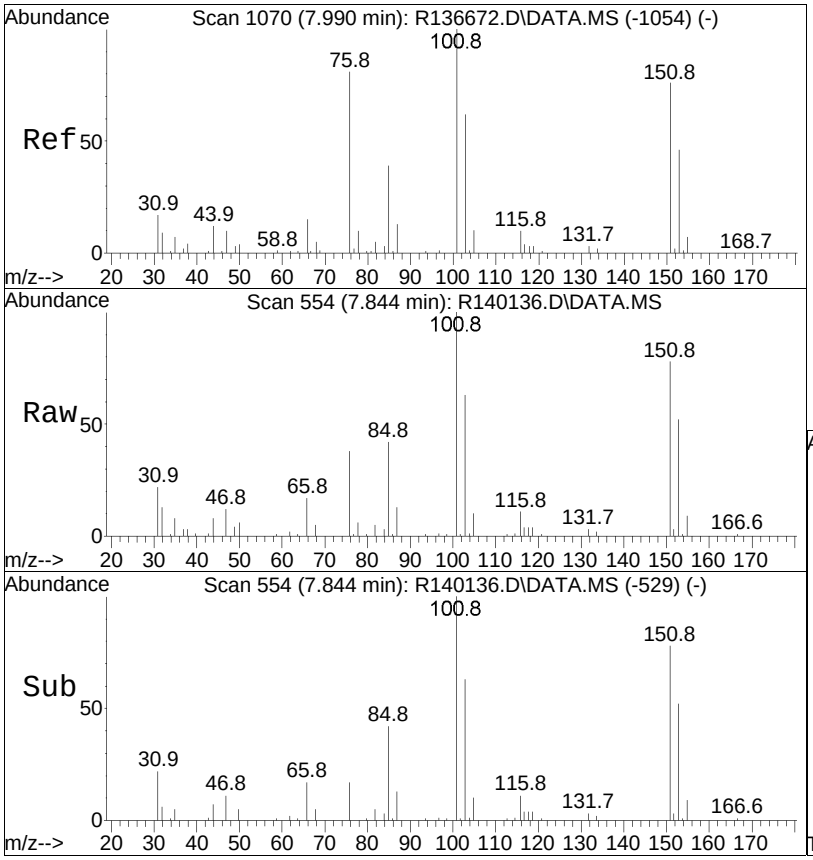



#30
carbon disulfide
Concen: 9.10 ppbV
RT: 7.82 min Scan# 551
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 76 Resp: 178591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 17.1 | 14.3 | 21.5 |

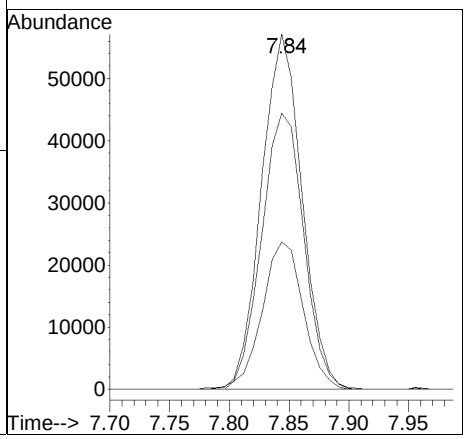


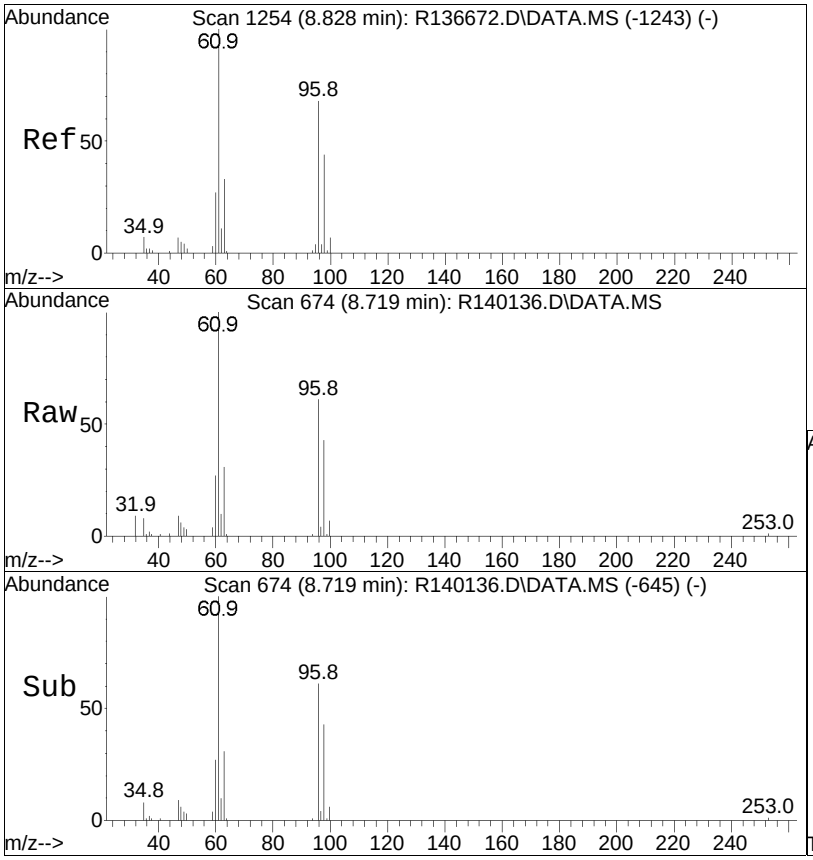



#31
Freon 113
Concen: 9.36 ppbV
RT: 7.84 min Scan# 554
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:101 Resp: 134861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.6 | 35.2 | 52.8 |
| 151 | 77.7 | 68.6 | 103.0 |

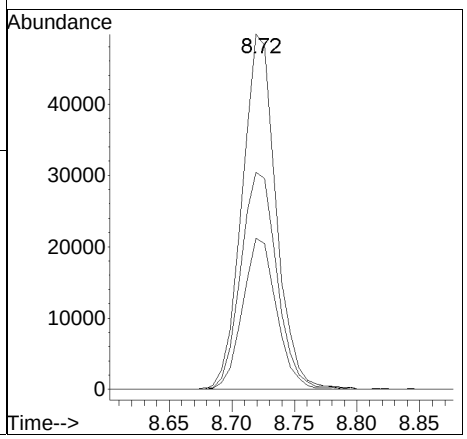


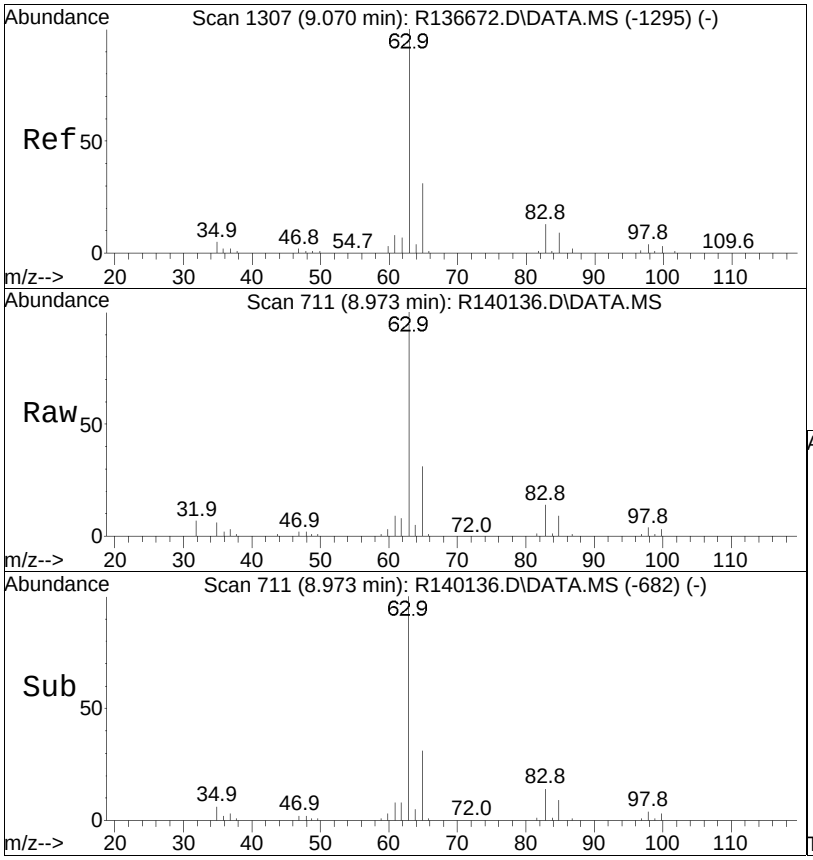



#32
trans-1,2-dichloroethene
Concen: 8.65 ppbV
RT: 8.72 min Scan# 674
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 61 Resp: 94039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 61.1 | 51.5 | 77.3 |
| 98 | 42.6 | 33.0 | 49.4 |

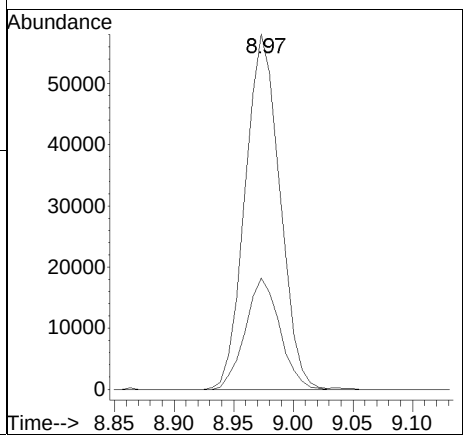


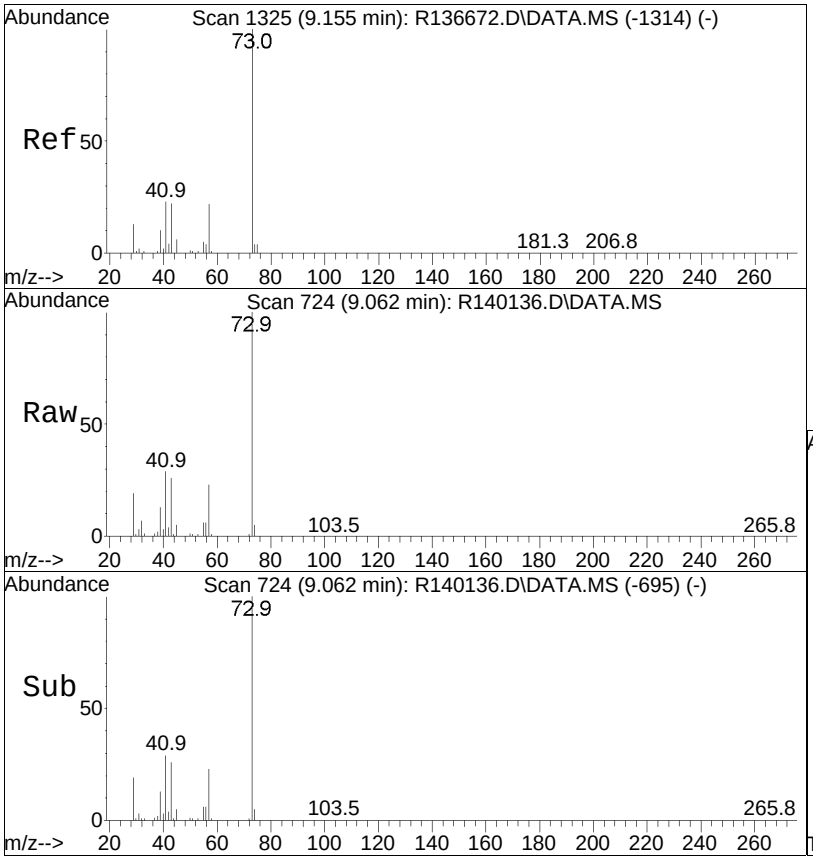



#33
1,1-dichloroethane
Concen: 9.21 ppbV
RT: 8.97 min Scan# 711
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 63 Resp: 117560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.3 | 25.1 | 37.7 |

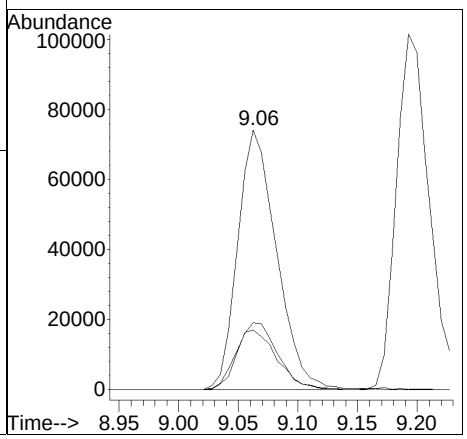


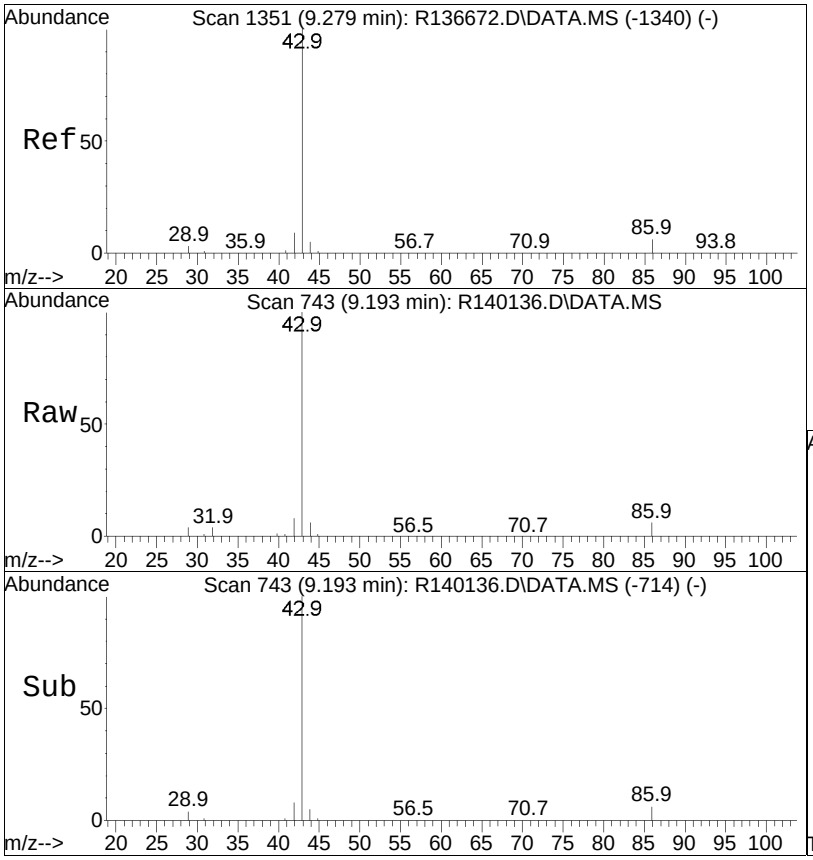



#34
MTBE
Concen: 8.73 ppbV
RT: 9.06 min Scan# 724
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 73 Resp: 167723

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.9 | 19.6 | 29.4 |
| 43 | 25.7 | 21.8 | 32.6 |

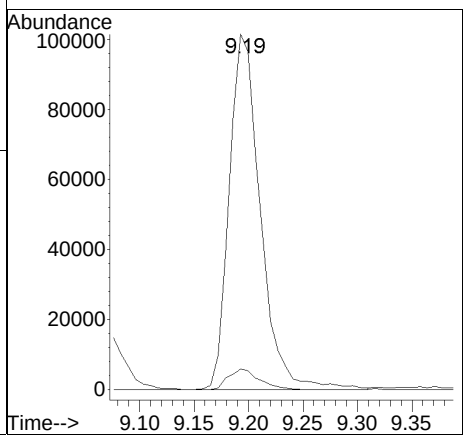


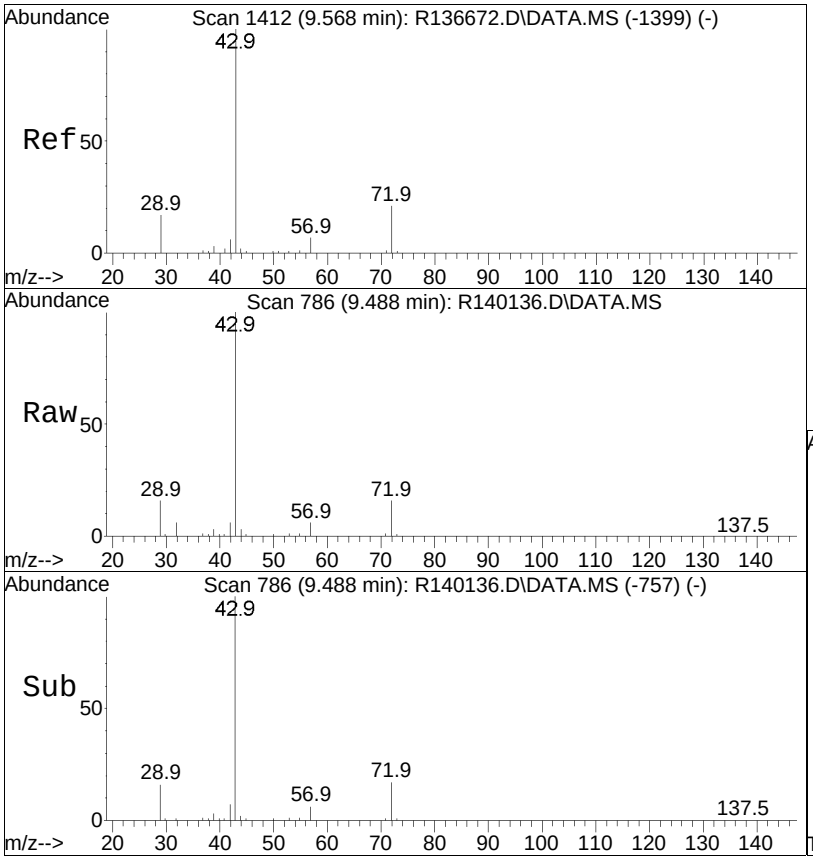



#35
vinyl acetate
Concen: 11.48 ppbV
RT: 9.19 min Scan# 743
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 201641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 5.7 | 4.5 | 6.7 |

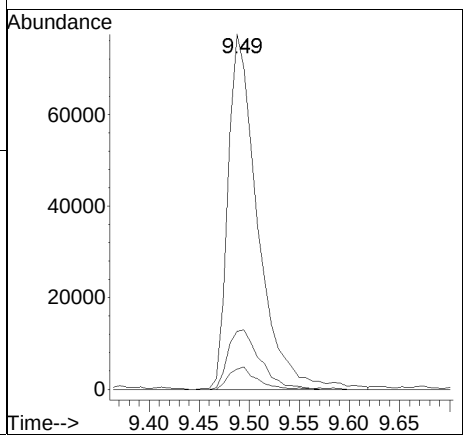


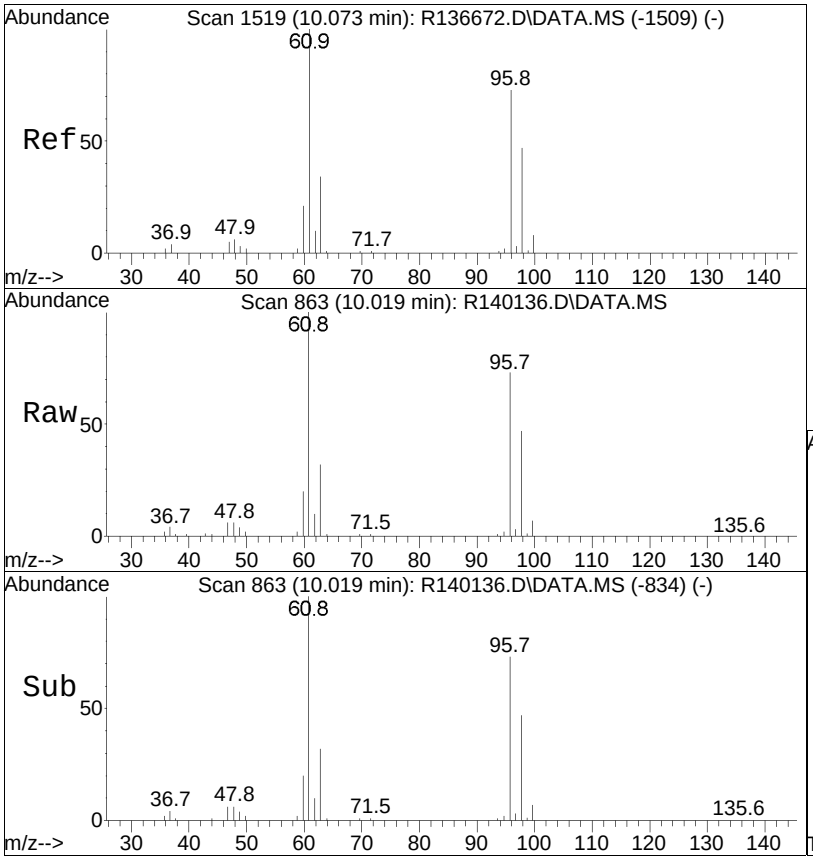



#36
2-butanone
Concen: 9.72 ppbV
RT: 9.49 min Scan# 786
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 160722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 16.4 | 15.6 | 23.4 |
| 57 | 5.7 | 4.6 | 7.0 |

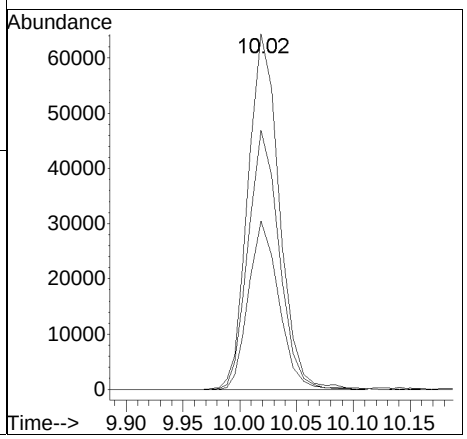


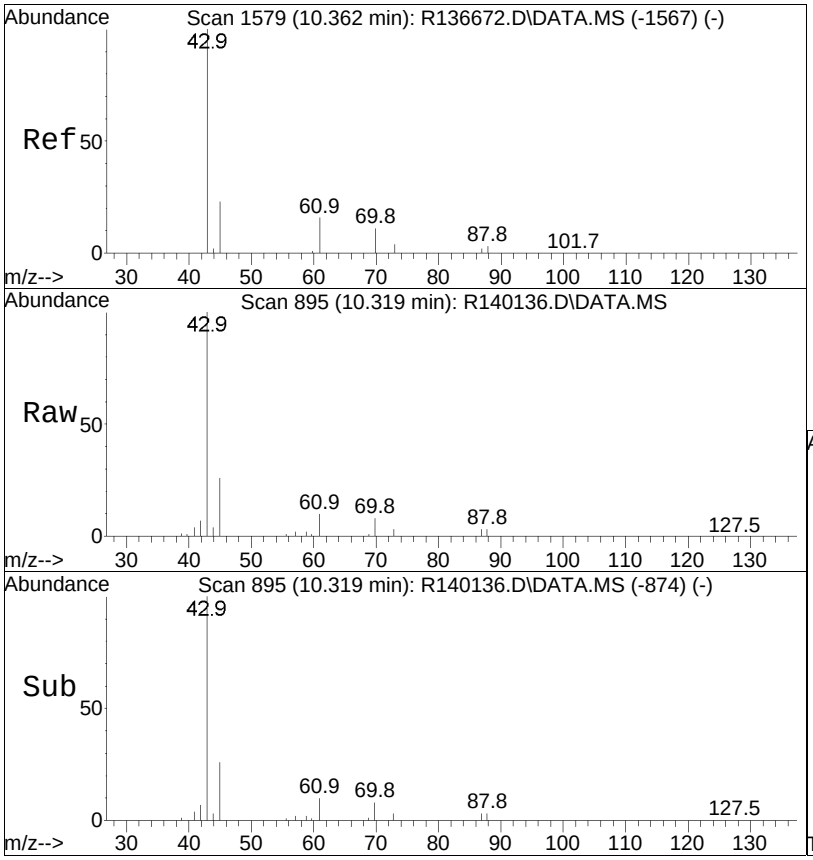



#37
cis-1,2-dichloroethene
Concen: 10.08 ppbV
RT: 10.02 min Scan# 863
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 61 Resp: 118064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 72.9 | 54.9 | 82.3 |
| 98 | 47.4 | 37.0 | 55.6 |

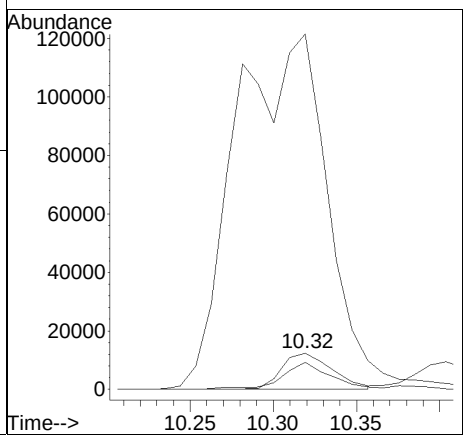


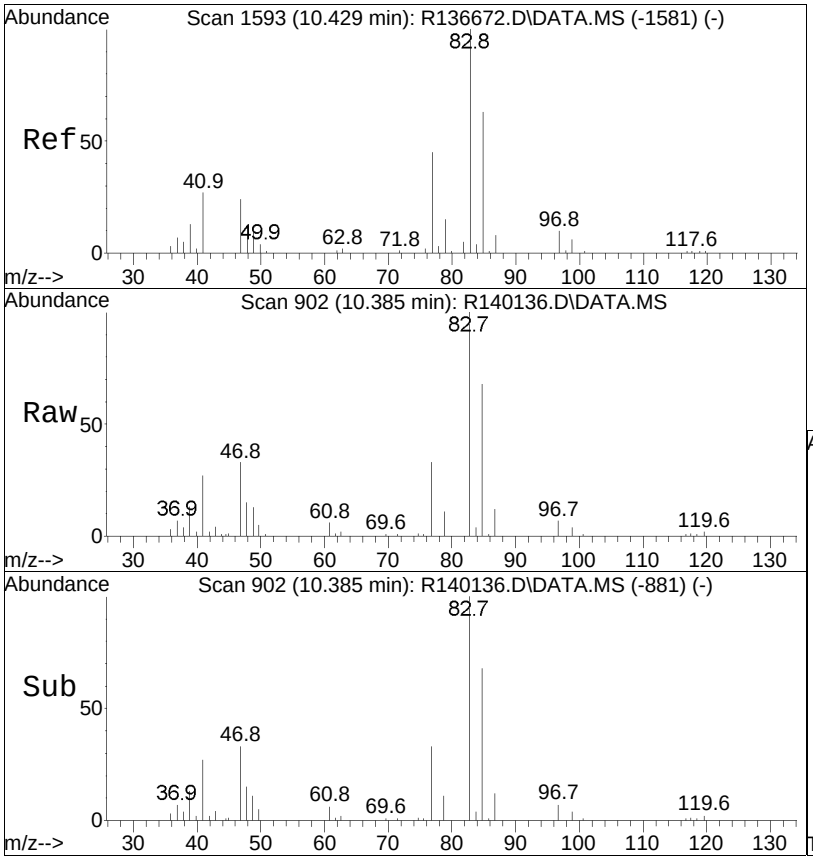



#38
Ethyl Acetate
Concen: 9.04 ppbV
RT: 10.32 min Scan# 895
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 61 Resp: 26490

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 70 | 75.1 | 54.3 | 81.5 |
| 43 | 982.5 | 700.4 | 1050.6 |

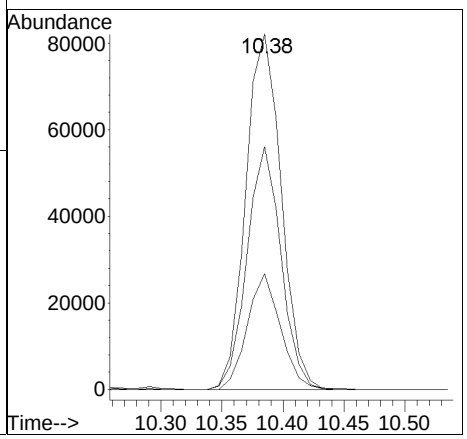


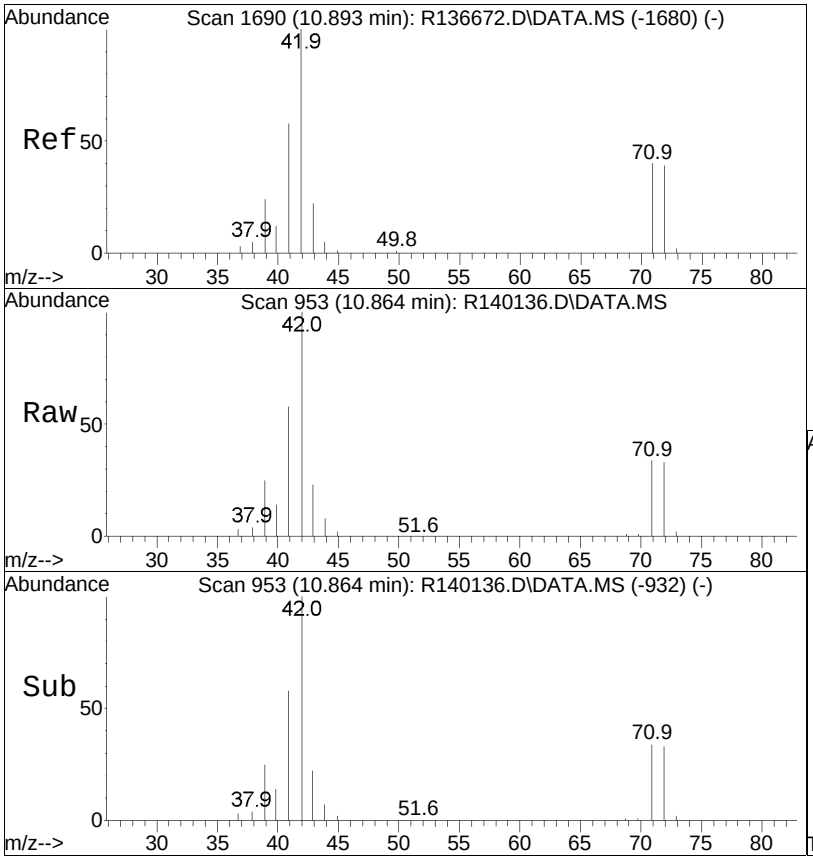



#39
chloroform
Concen: 9.26 ppbV
RT: 10.38 min Scan# 902
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 83 Resp: 165886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 68.3 | 54.8 | 82.2 |
| 47 | 32.6 | 24.6 | 37.0 |

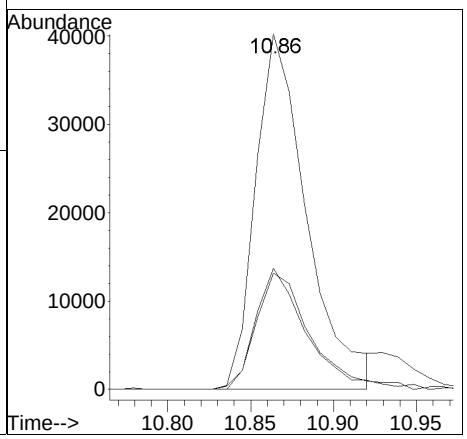


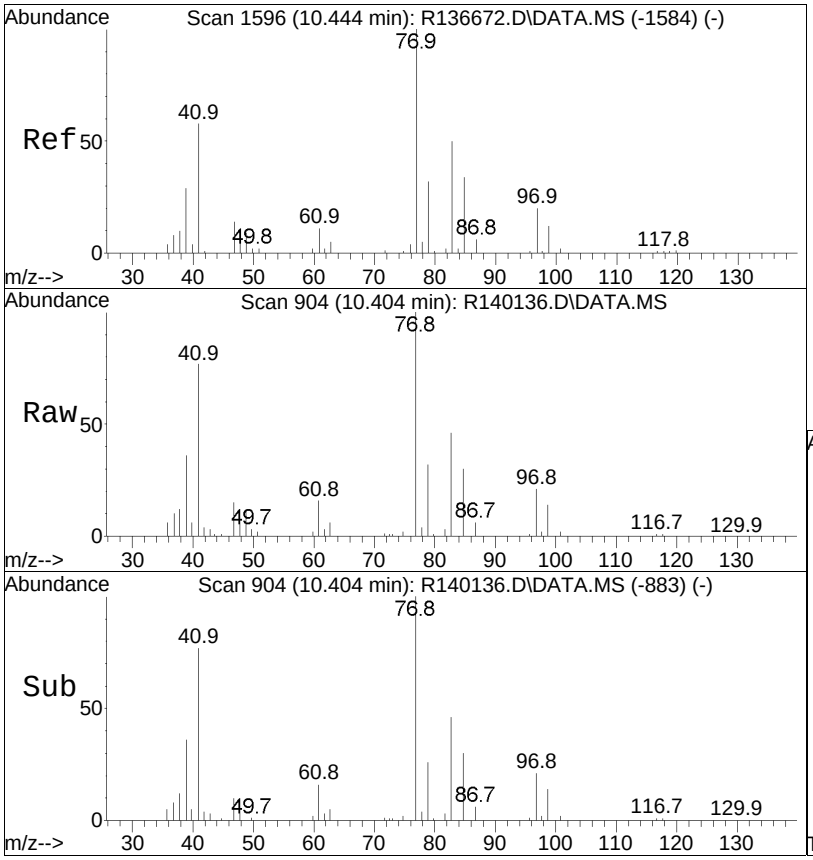



#40
Tetrahydrofuran
Concen: 7.69 ppbV m
RT: 10.86 min Scan# 953
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 42 Resp: 86680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 71 | 34.1 | 26.4 | 39.6 |
| 72 | 32.7 | 25.9 | 38.9 |

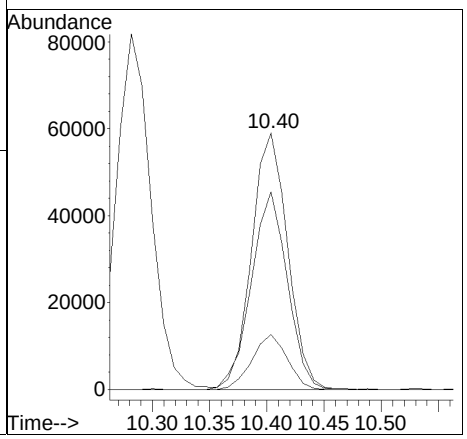


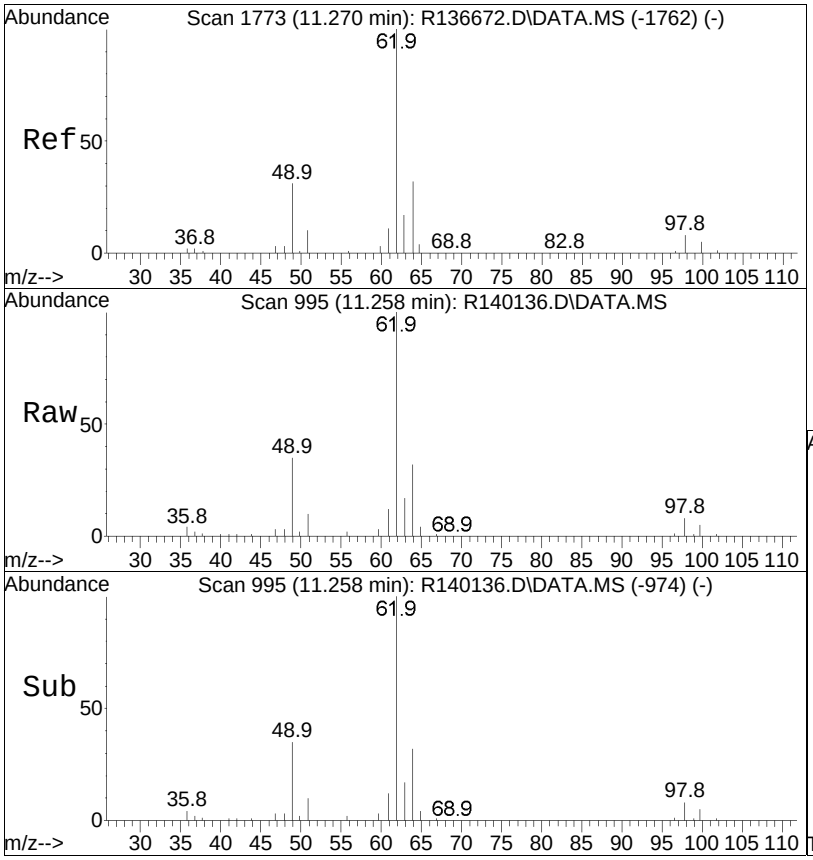



#41
2,2-dichloropropane
Concen: 8.18 ppbV
RT: 10.40 min Scan# 904
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 77 Resp: 129224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 41 | 77.1 | 57.7 | 86.5 |
| 97 | 21.4 | 16.5 | 24.7 |

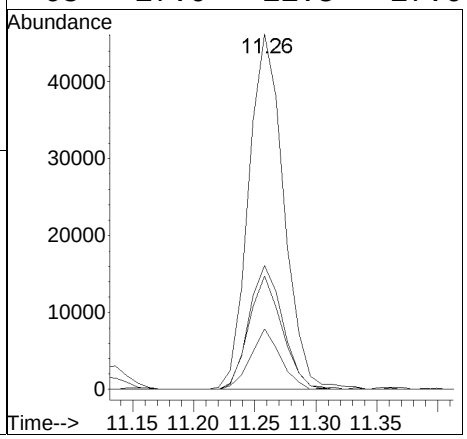


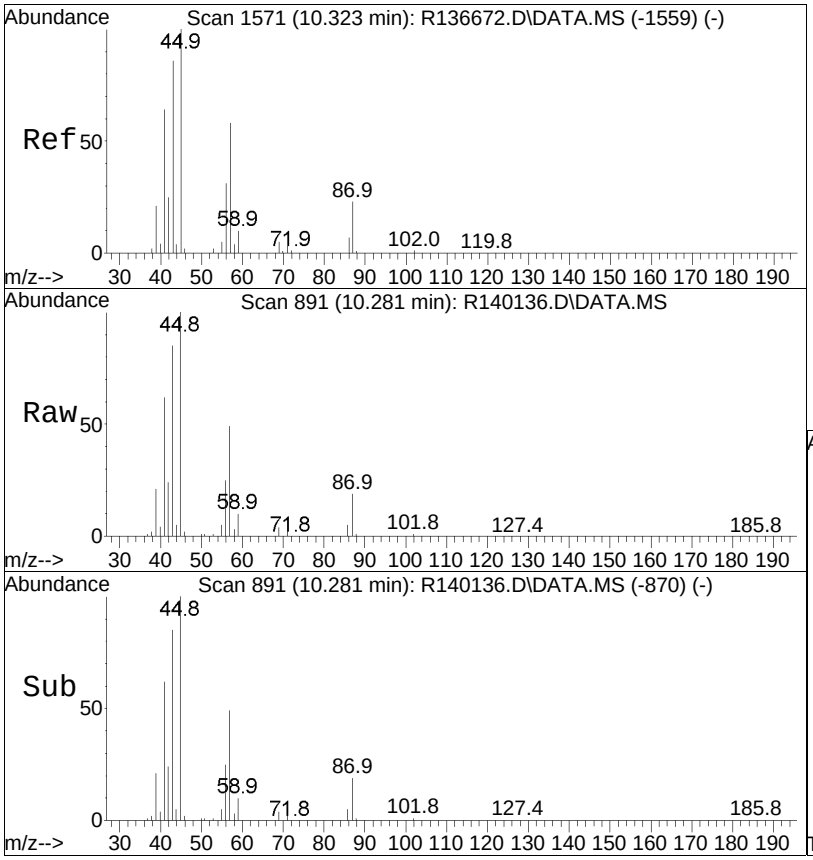



#42
1,2-dichloroethane
Concen: 9.52 ppbV
RT: 11.26 min Scan# 995
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 62 Resp: 92805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.0 | 26.4 | 39.6 |
| 49 | 34.9 | 27.0 | 40.4 |
| 63 | 17.0 | 11.8 | 17.6 |

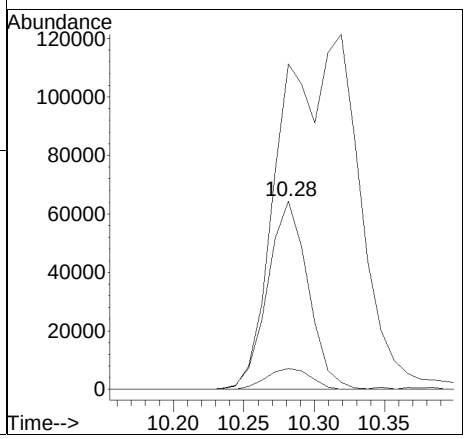


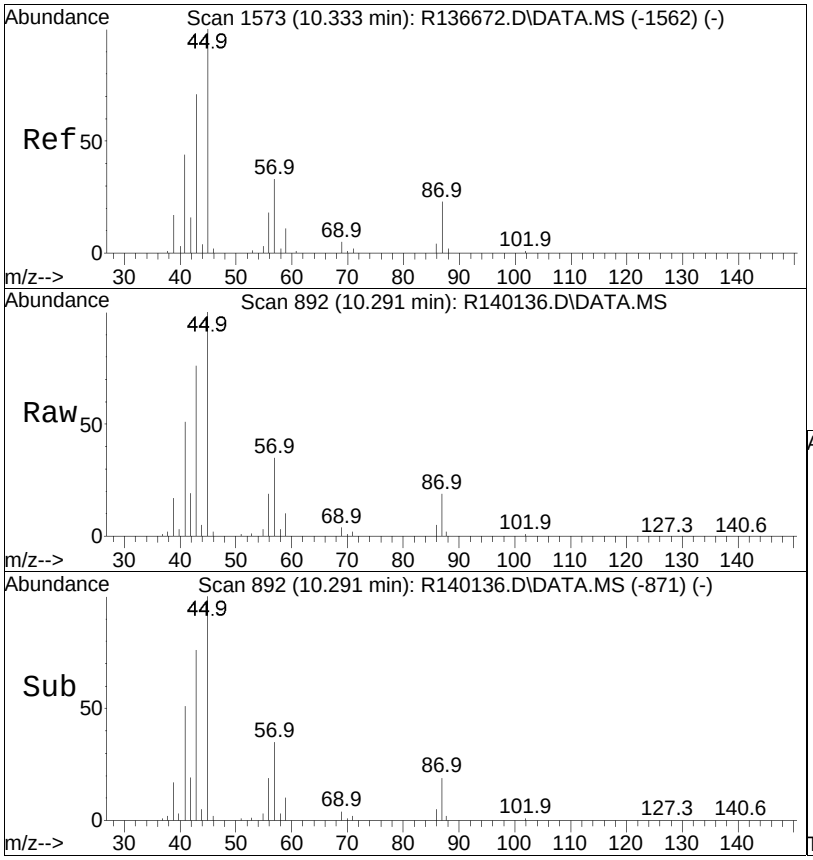



#44
hexane
Concen: 8.96 ppbV
RT: 10.28 min Scan# 891
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 57 Resp: 129630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 173.0 | 141.8 | 212.8 |
| 86 | 11.1 | 10.0 | 15.0 |

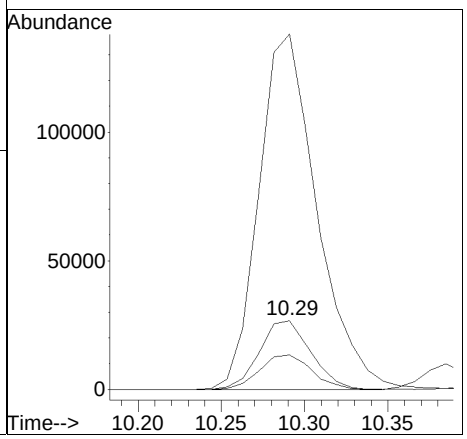


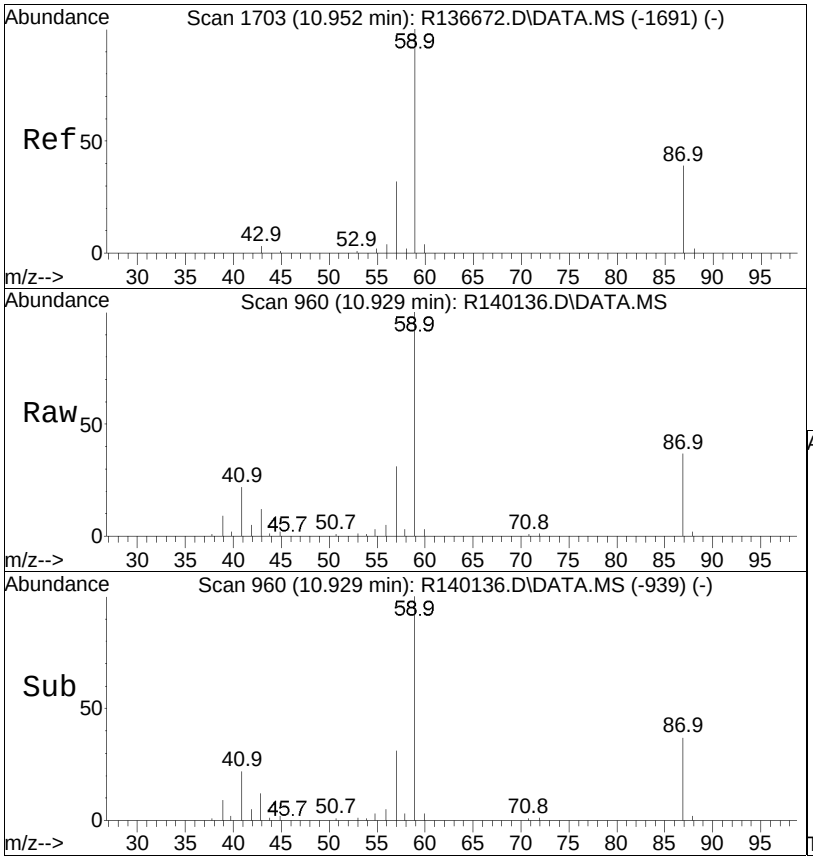



#45
diisopropyl ether
Concen: 8.60 ppbV
RT: 10.29 min Scan# 892
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 87 Resp: 57257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 87 | 100 | | |
| 59 | 50.2 | 41.3 | 61.9 |
| 45 | 517.3 | 422.7 | 634.1 |

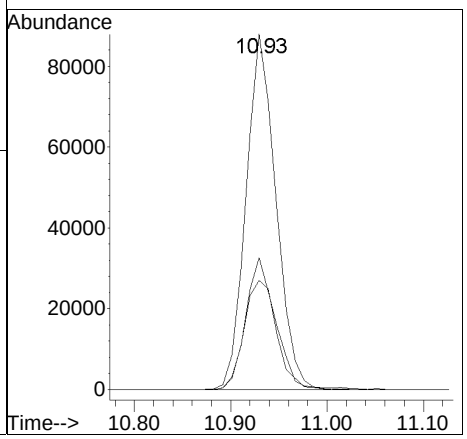


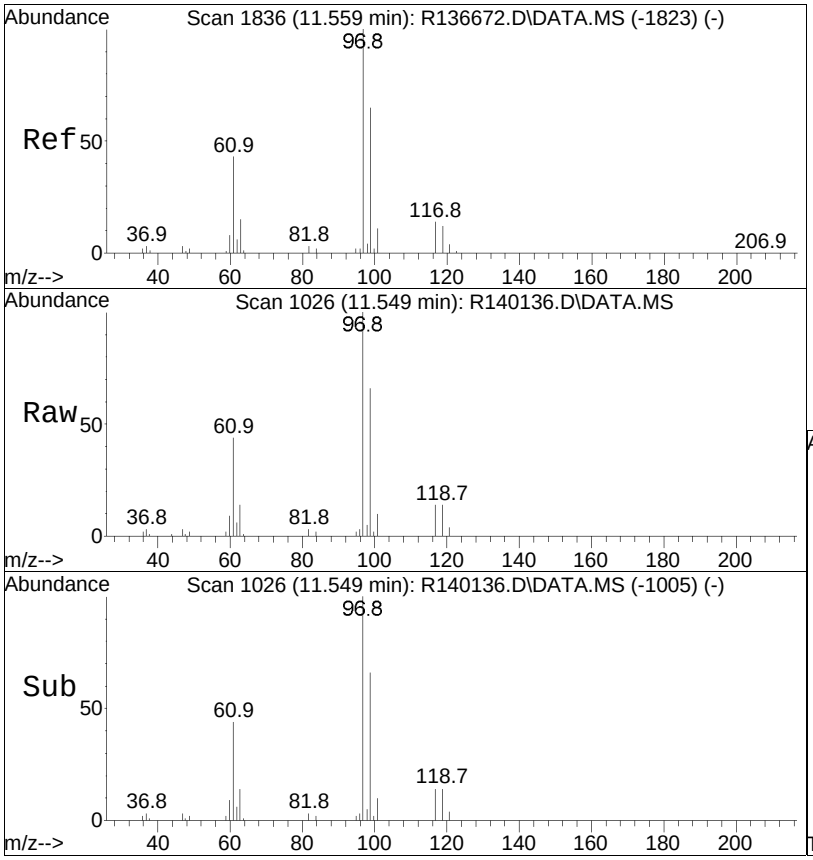



#46
tert-butyl ethyl ether
Concen: 8.50 ppbV
RT: 10.93 min Scan# 960
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 59 Resp: 189926

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 87 | 37.1 | 27.4 | 41.0 |
| 57 | 30.7 | 26.6 | 39.8 |

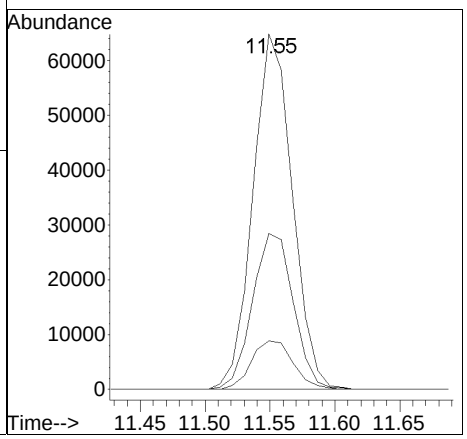


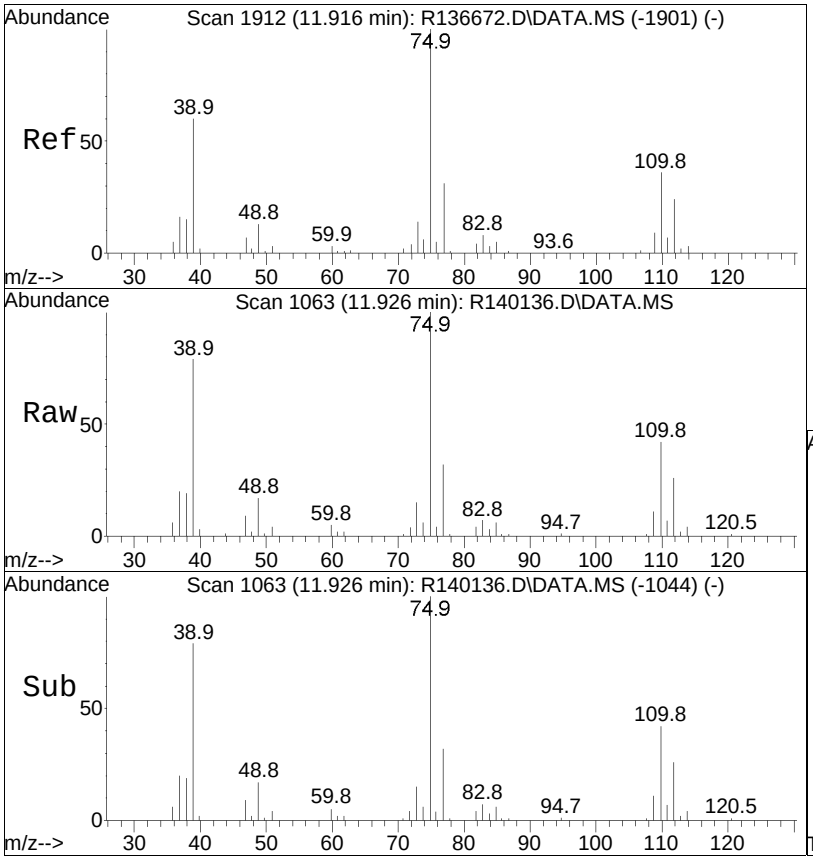



#48
1,1,1-trichloroethane
Concen: 9.42 ppbV
RT: 11.55 min Scan# 1026
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 97 Resp: 137678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 61 | 43.9 | 34.6 | 52.0 |
| 119 | 13.7 | 10.9 | 16.3 |

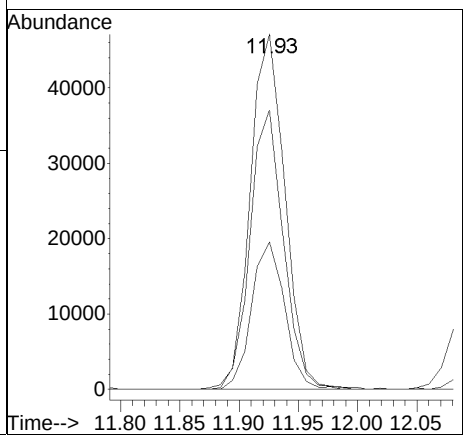


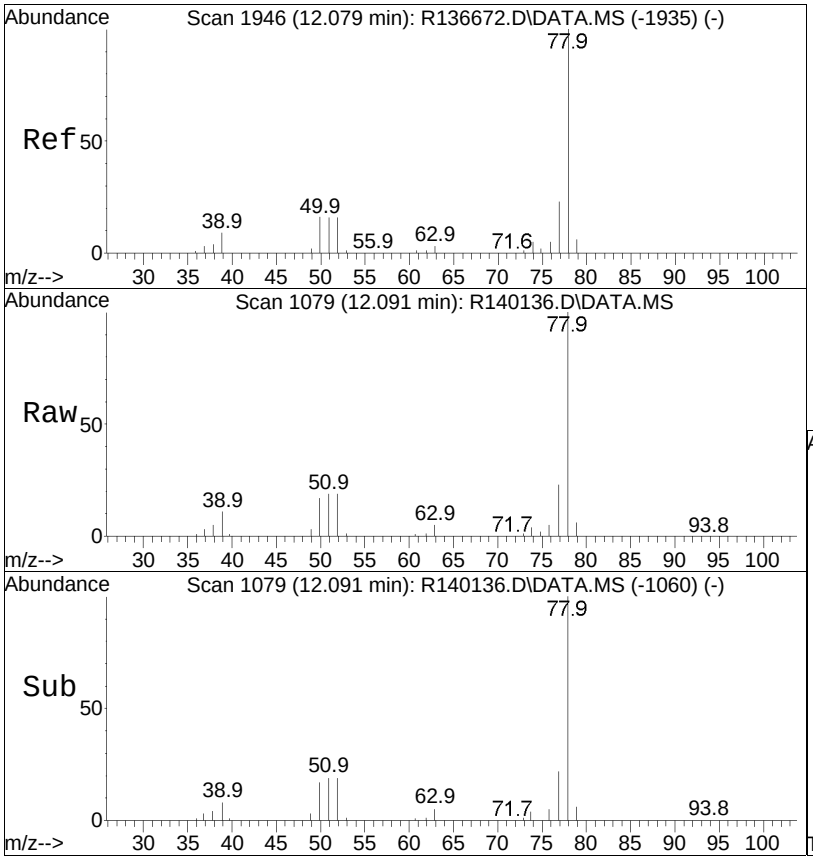



#49
1,1-dichloropropene
Concen: 9.13 ppbV
RT: 11.93 min Scan# 1063
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 75 Resp: 95901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 41.5 | 30.0 | 45.0 |
| 39 | 78.7 | 57.7 | 86.5 |

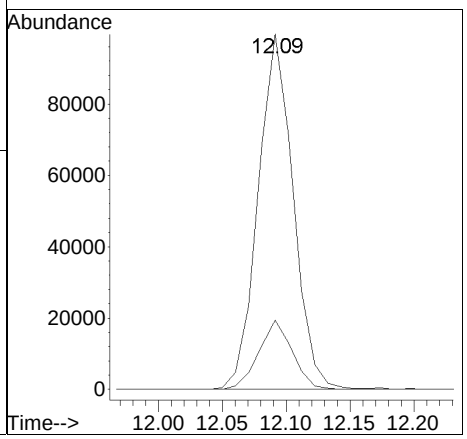


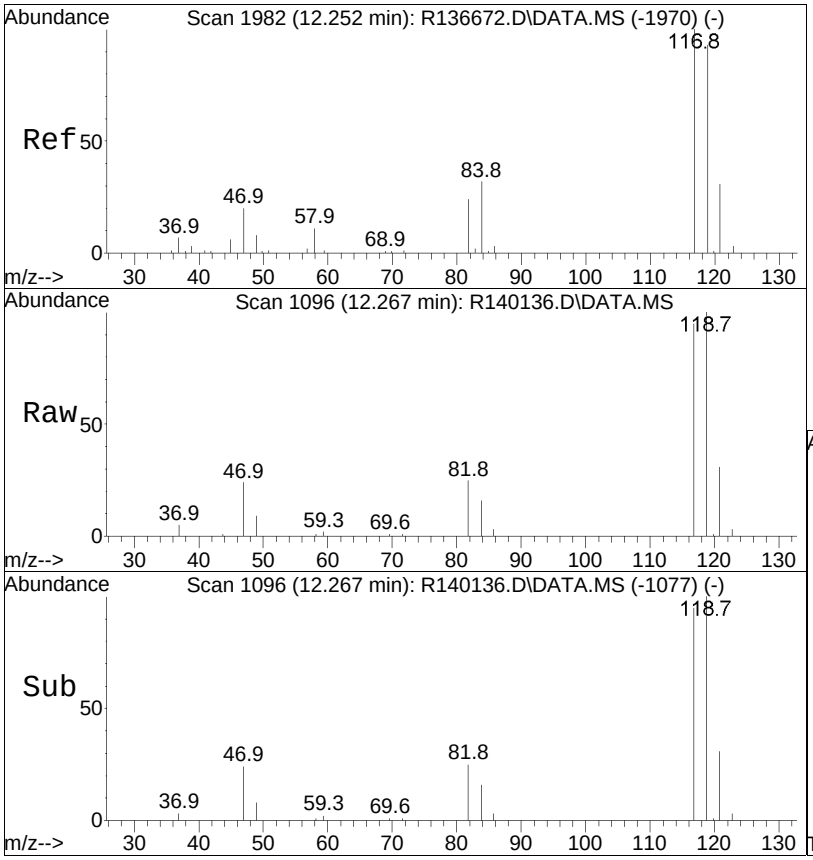



#50
benzene
Concen: 9.60 ppbV
RT: 12.09 min Scan# 1079
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 78 Resp: 190173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 52 | 19.5 | 15.0 | 22.4 |

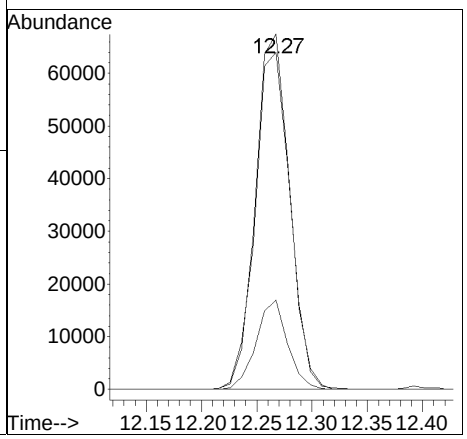


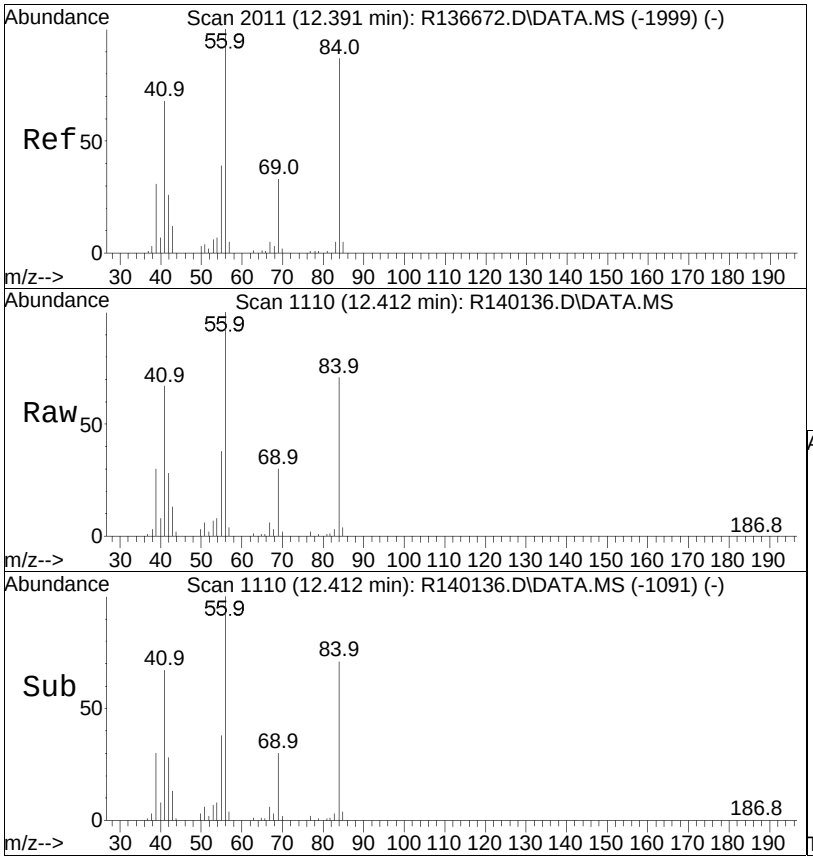



#52
carbon tetrachloride
Concen: 9.07 ppbV
RT: 12.27 min Scan# 1096
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:117 Resp: 140749

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 105.4 | 81.6 | 122.4 |
| 82 | 26.4 | 18.3 | 27.5 |

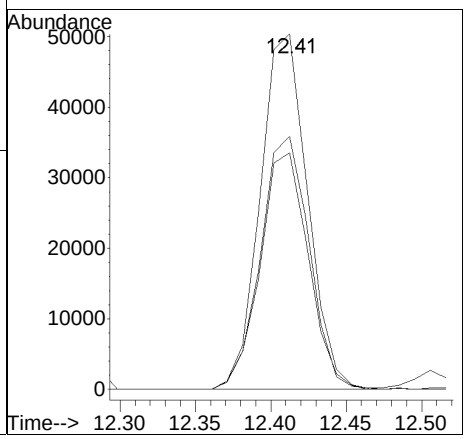


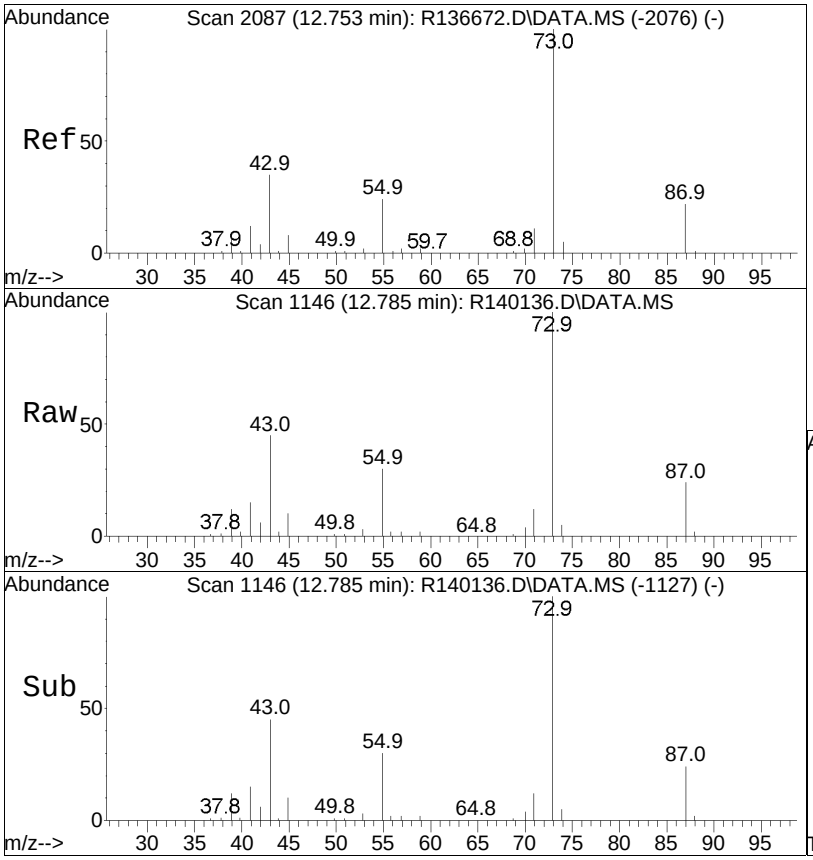



#53
cyclohexane
Concen: 9.14 ppbV
RT: 12.41 min Scan# 1110
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 56 Resp: 109946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 71.2 | 62.6 | 94.0 |
| 41 | 66.6 | 51.4 | 77.0 |

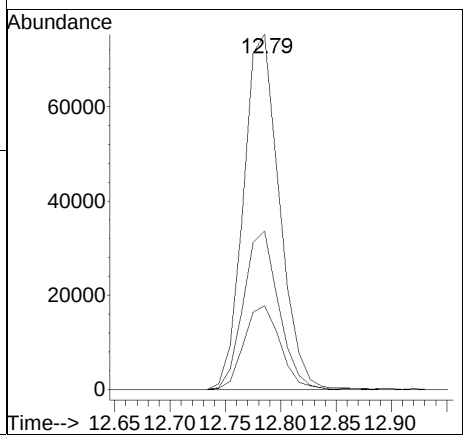


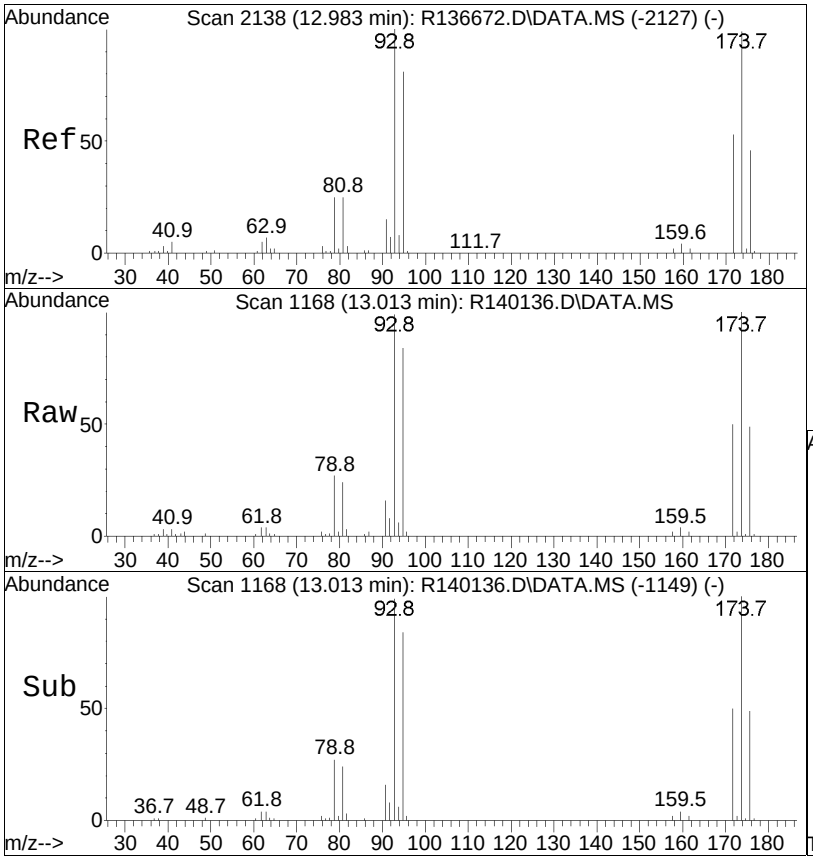



#54
tert-amyl methyl ether
Concen: 8.57 ppbV
RT: 12.79 min Scan# 1146
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 73 Resp: 170010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 43 | 44.6 | 35.4 | 53.0 |
| 87 | 23.6 | 18.2 | 27.2 |

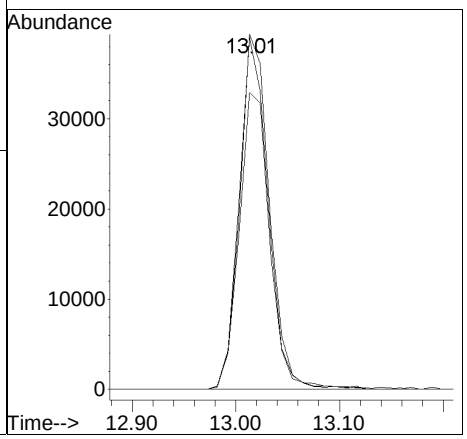


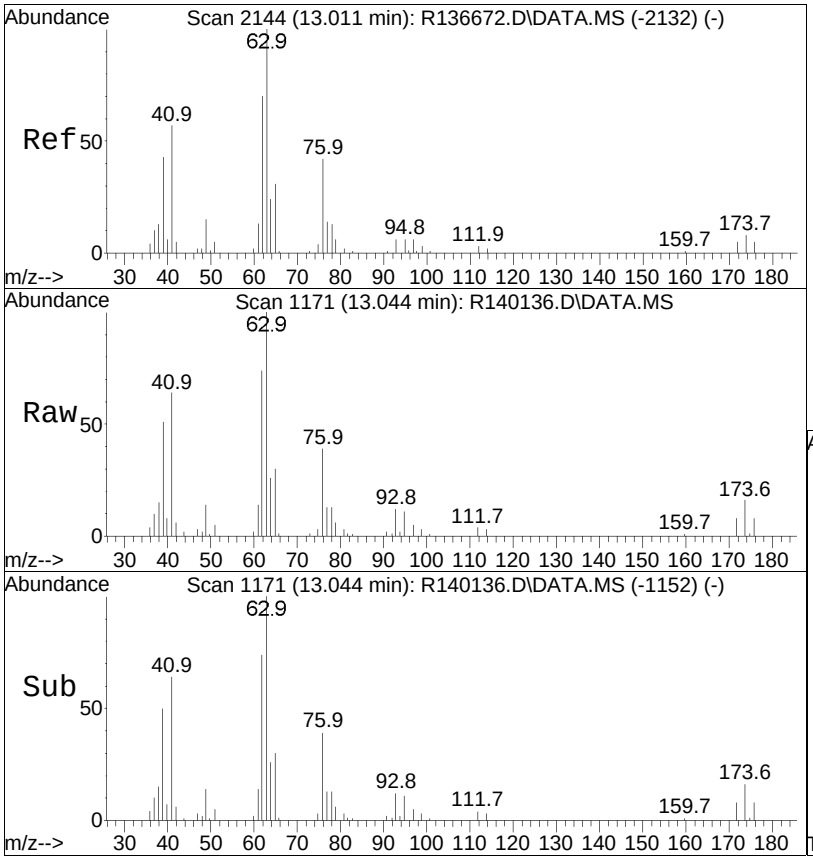



#55
dibromomethane
Concen: 9.24 ppbV
RT: 13.01 min Scan# 1168
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 93 Resp: 76044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 174 | 100.9 | 78.1 | 117.1 |
| 95 | 84.3 | 67.0 | 100.4 |

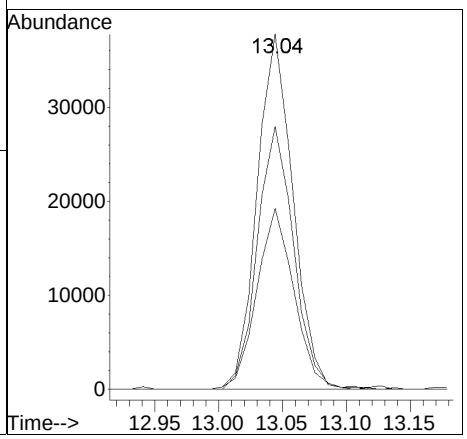


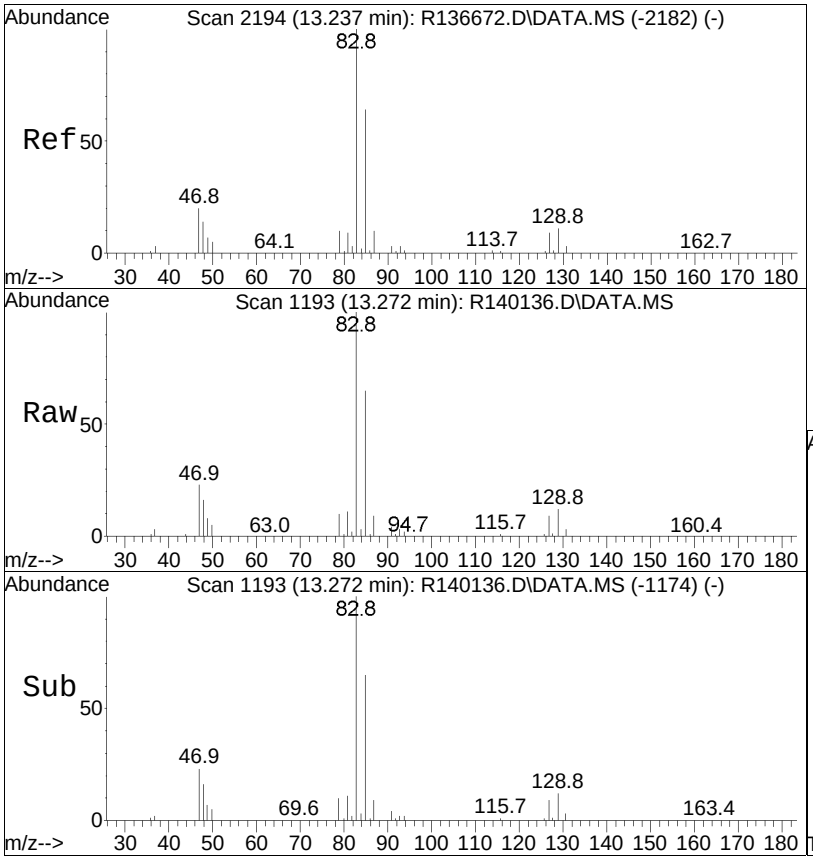



#56
1,2-dichloropropane
Concen: 9.63 ppbV
RT: 13.04 min Scan# 1171
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 63 Resp: 74235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 62 | 74.0 | 61.4 | 92.2 |
| 39 | 50.9 | 40.1 | 60.1 |

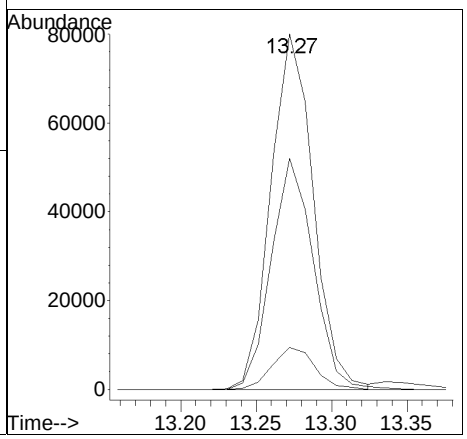


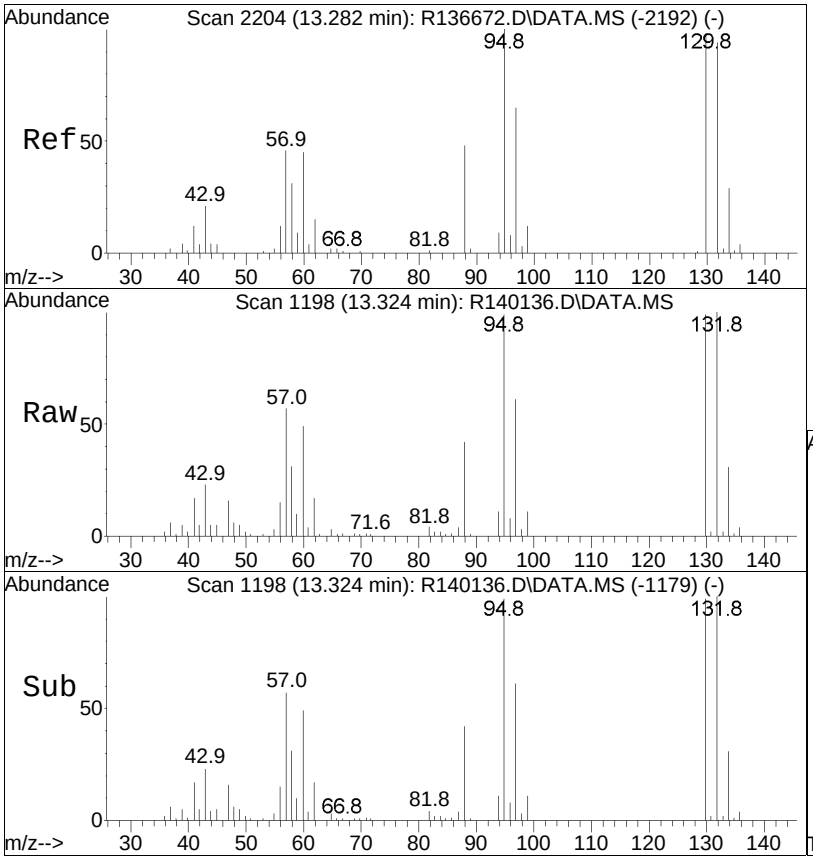



#57
bromodichloromethane
Concen: 9.63 ppbV
RT: 13.27 min Scan# 1193
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 83 Resp: 156416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.0 | 53.9 | 80.9 |
| 129 | 11.8 | 10.4 | 15.6 |

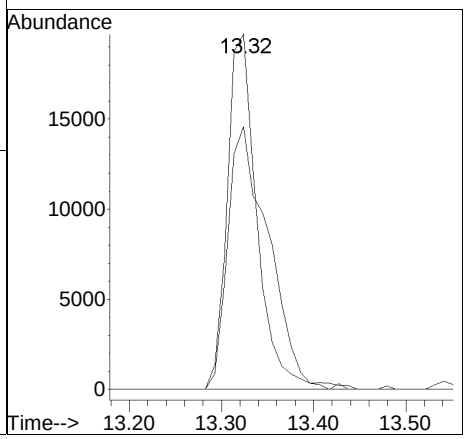


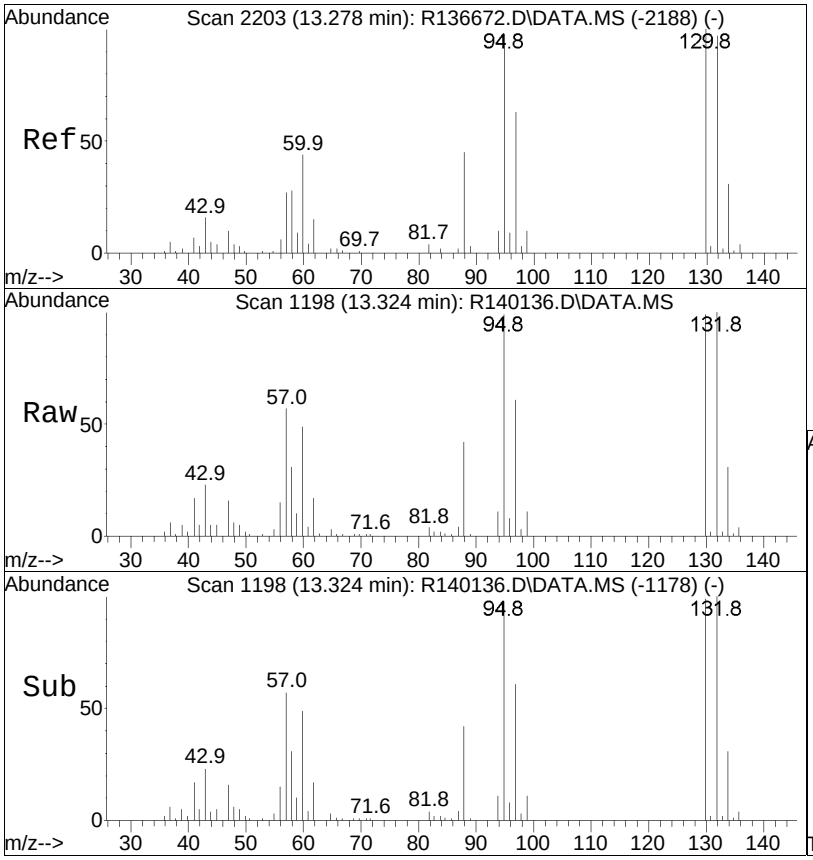



#58
1,4-dioxane
Concen: 9.74 ppbV
RT: 13.32 min Scan# 1198
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 88 Resp: 44583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 58 | 74.0 | 58.8 | 88.2 |

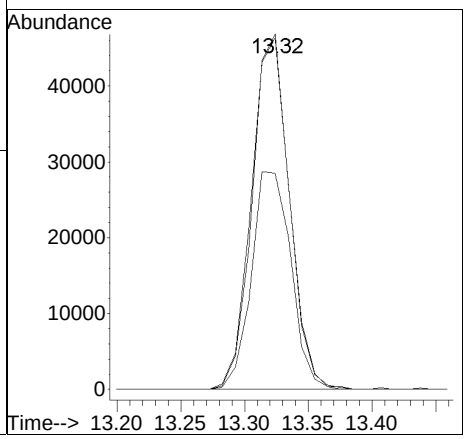


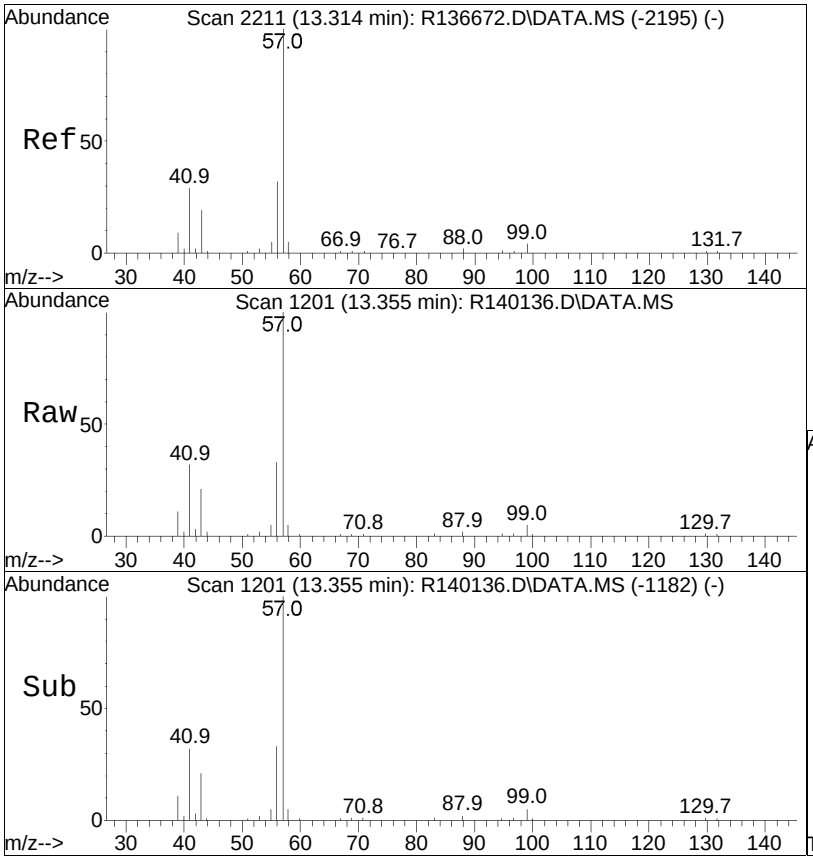



#59
trichloroethene
Concen: 9.44 ppbV
RT: 13.32 min Scan# 1198
Delta R.T. 0.010 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:130 Resp: 95877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 101.0 | 76.7 | 115.1 |
| 97 | 61.5 | 47.0 | 70.4 |

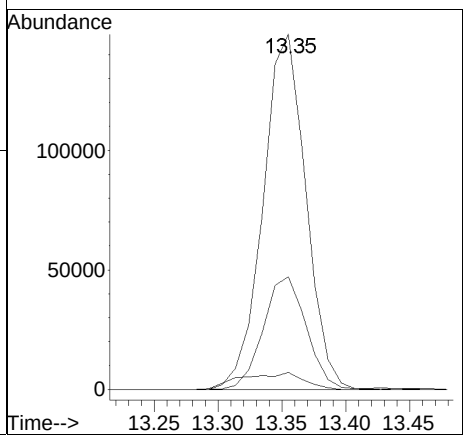


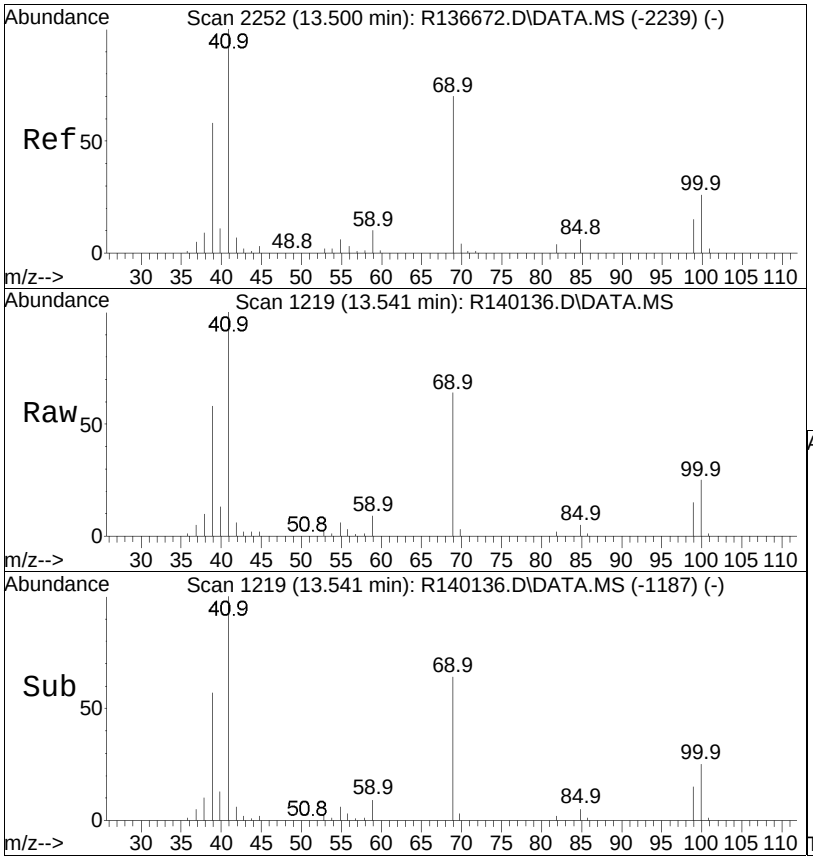



#60
2,2,4-trimethylpentane
Concen: 9.28 ppbV
RT: 13.35 min Scan# 1201
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 57 Resp: 346261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 99 | 4.8 | 3.5 | 5.3 |
| 41 | 31.7 | 25.1 | 37.7 |

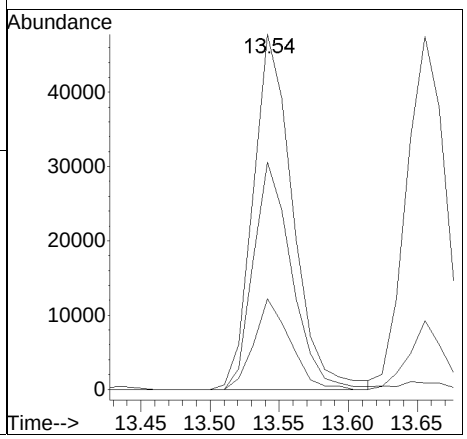


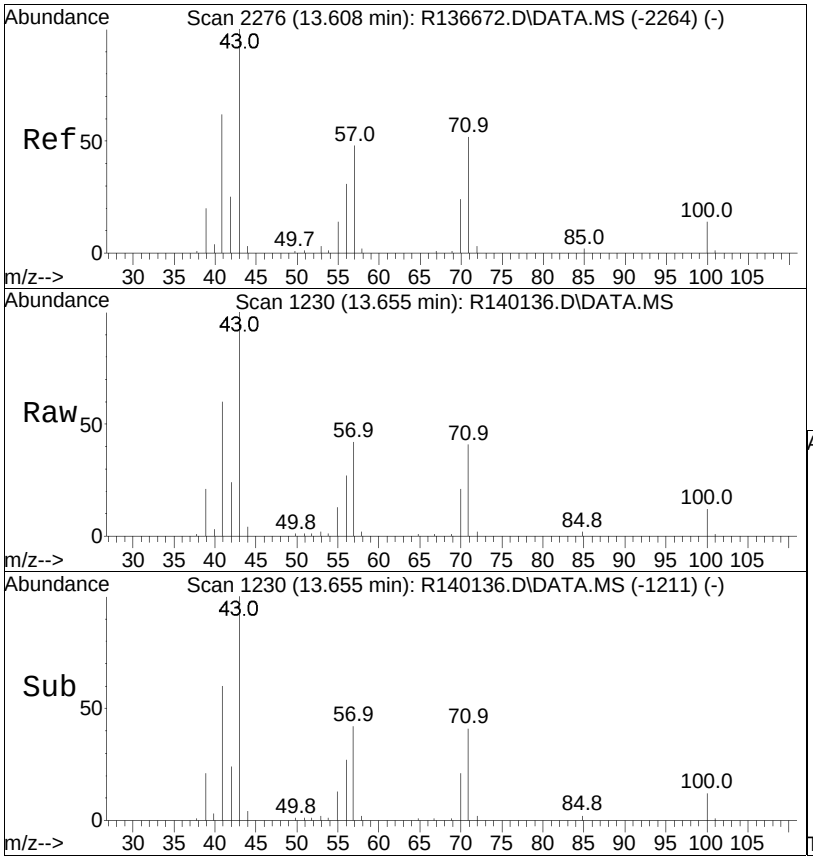



#61
methyl methacrylate
Concen: 8.62 ppbV
RT: 13.54 min Scan# 1219
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 41 Resp: 95818

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 61.7 | 46.6 | 70.0 |
| 100 | 23.2 | 18.0 | 27.0 |

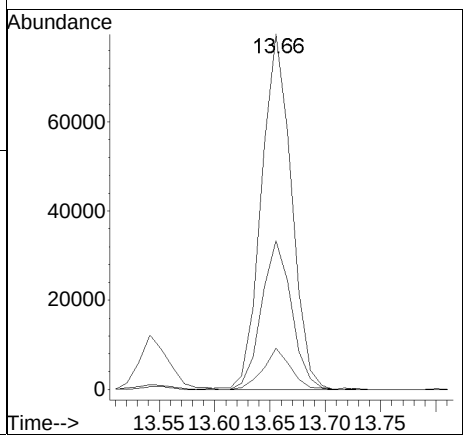


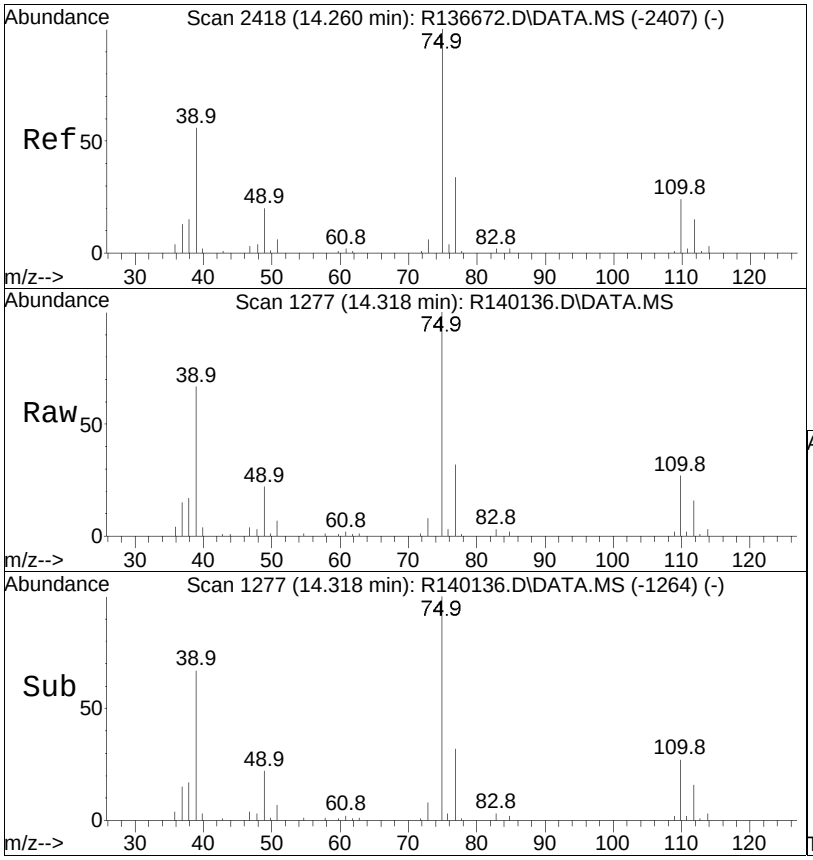



#62
heptane
Concen: 8.66 ppbV
RT: 13.66 min Scan# 1230
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 150622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 41.9 | 36.7 | 55.1 |
| 100 | 11.6 | 9.0 | 13.6 |

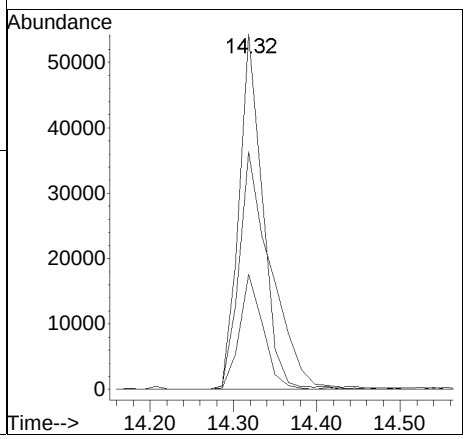


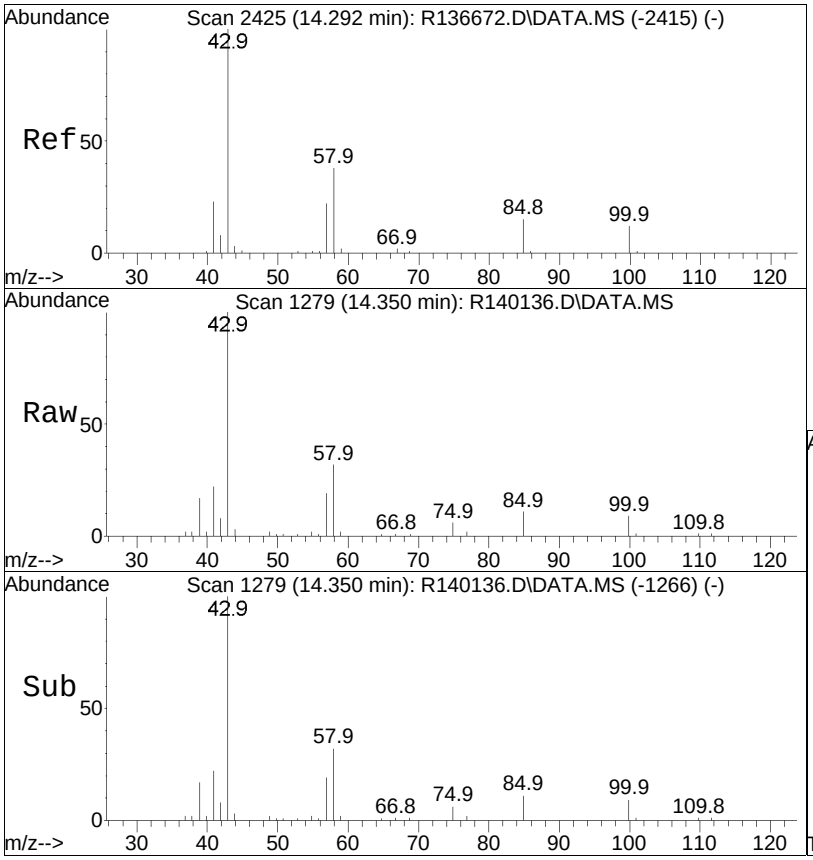



#63
cis-1,3-dichloropropene
Concen: 9.86 ppbV
RT: 14.32 min Scan# 1277
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 75 Resp: 107341

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 39 | 66.9 | 48.6 | 72.8 |
| 77 | 32.4 | 25.8 | 38.8 |

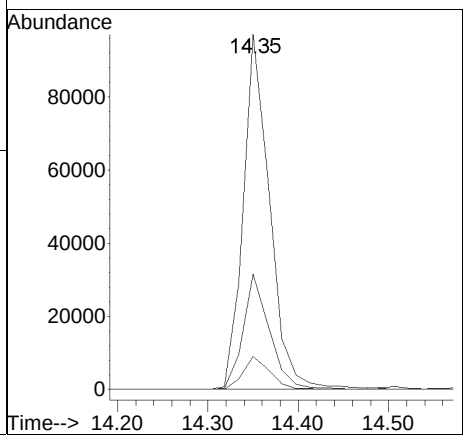


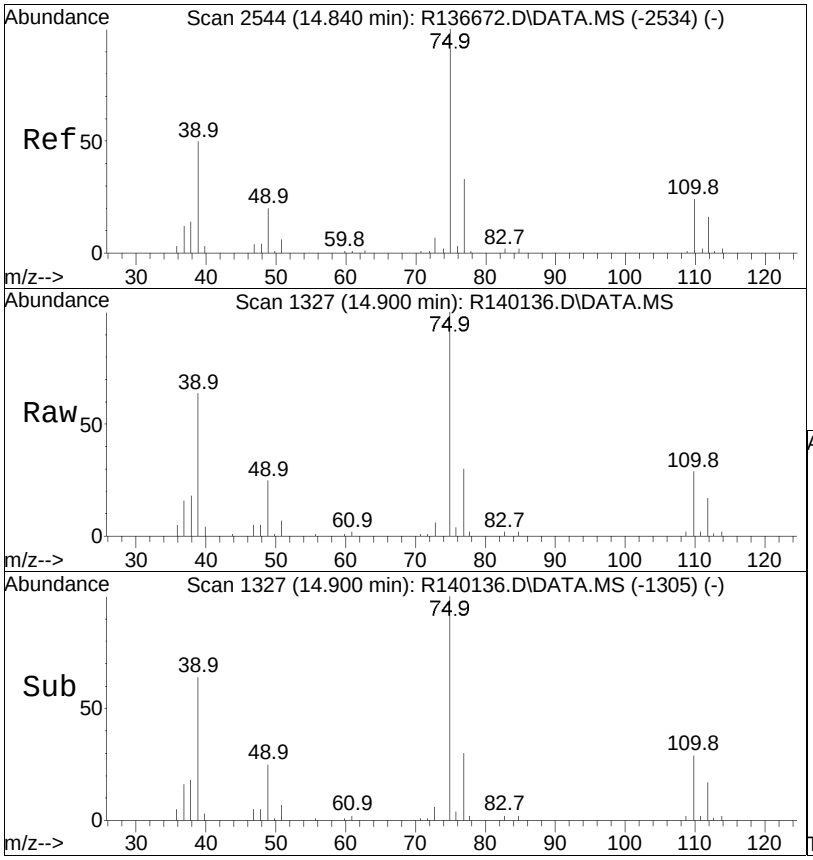



#64
4-methyl-2-pentanone
Concen: 9.28 ppbV
RT: 14.35 min Scan# 1279
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 198320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 32.5 | 26.5 | 39.7 |
| 100 | 9.3 | 7.9 | 11.9 |

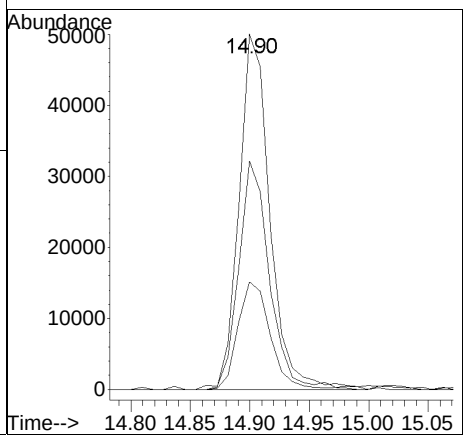


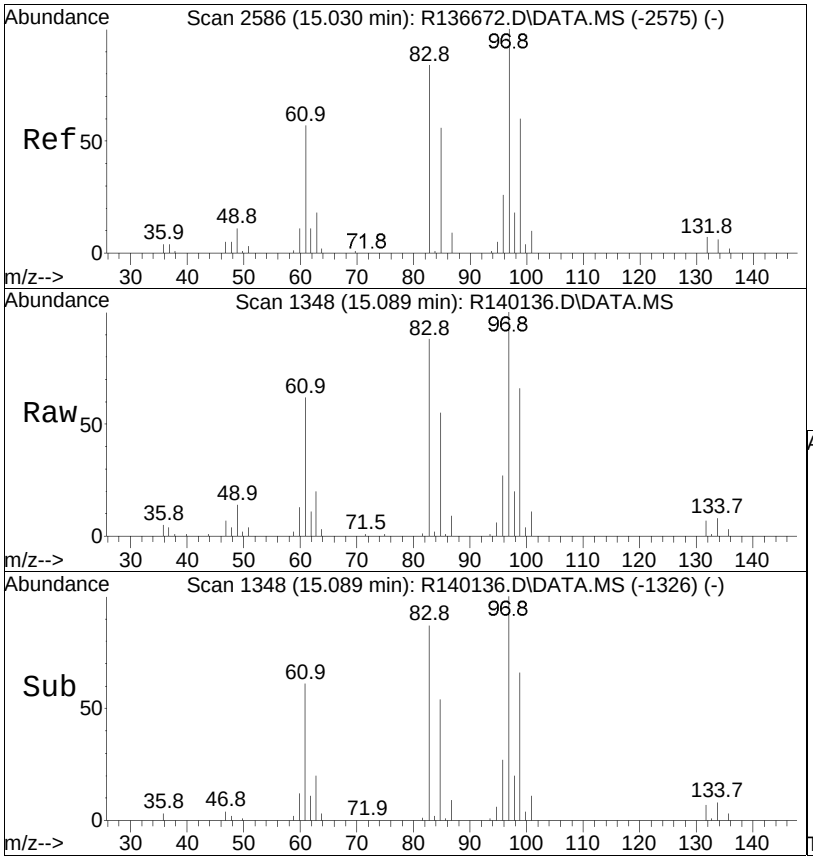



#65
trans-1,3-dichloropropene
Concen: 8.42 ppbV
RT: 14.90 min Scan# 1327
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 75 Resp: 89987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.3 | 25.7 | 38.5 |
| 39 | 64.3 | 50.6 | 75.8 |

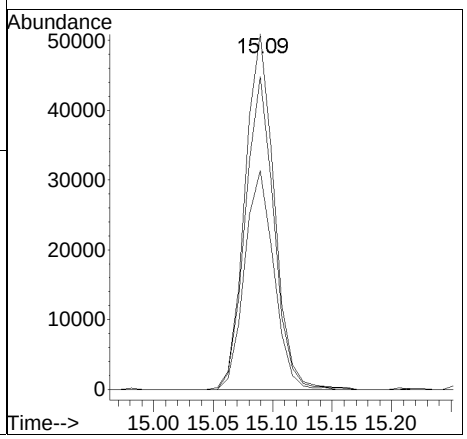


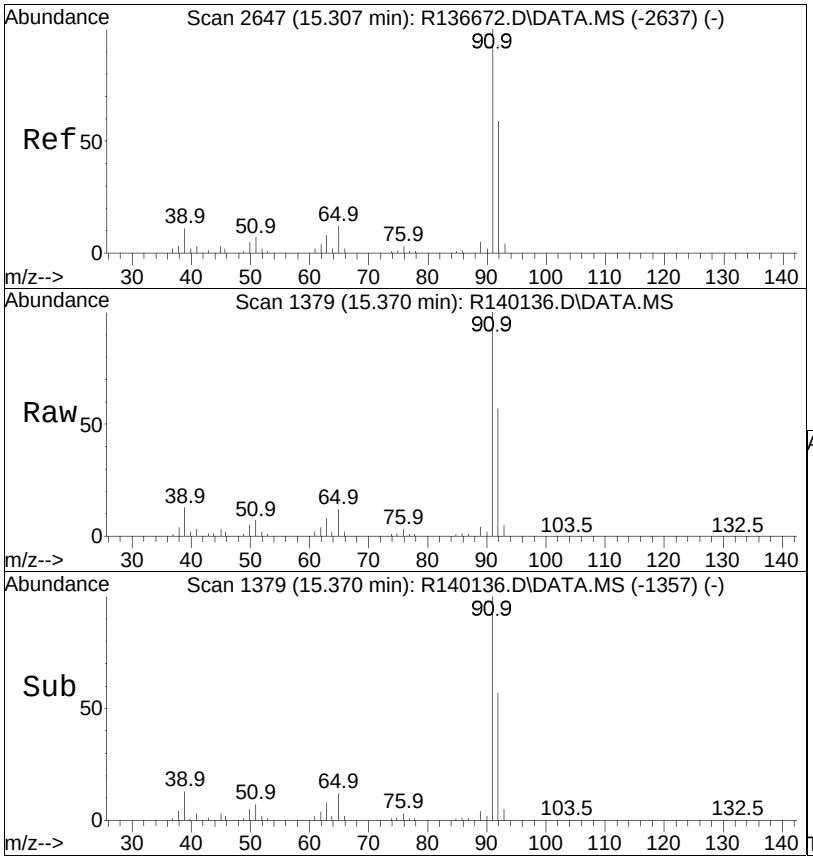



#66
1,1,2-trichloroethane
Concen: 9.64 ppbV
RT: 15.09 min Scan# 1348
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 97 Resp: 87124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.1 | 66.2 | 99.4 |
| 61 | 61.6 | 48.5 | 72.7 |

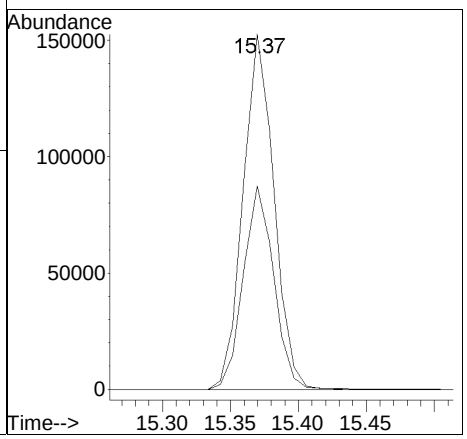


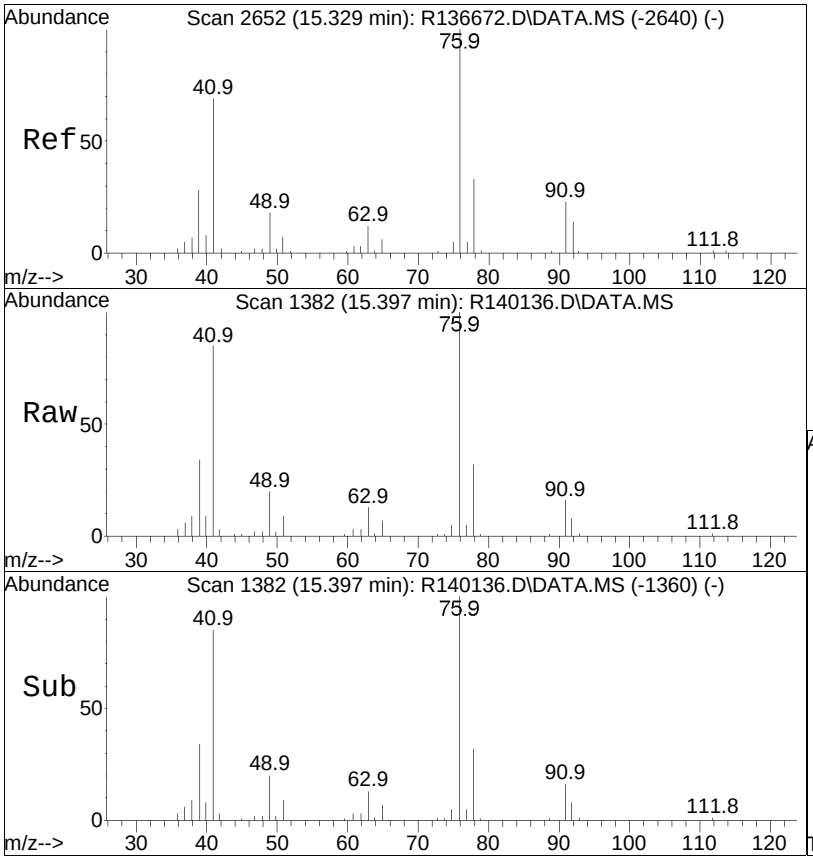



#68
toluene
Concen: 9.30 ppbV
RT: 15.37 min Scan# 1379
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 241362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 57.3 | 46.0 | 69.0 |

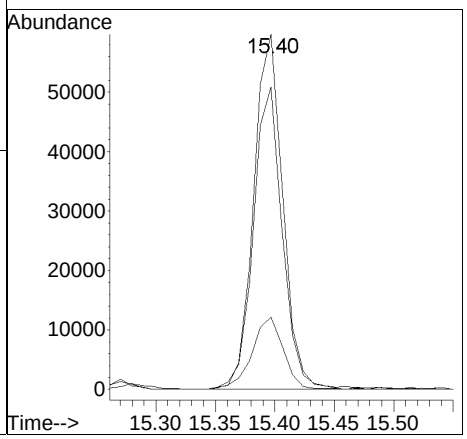


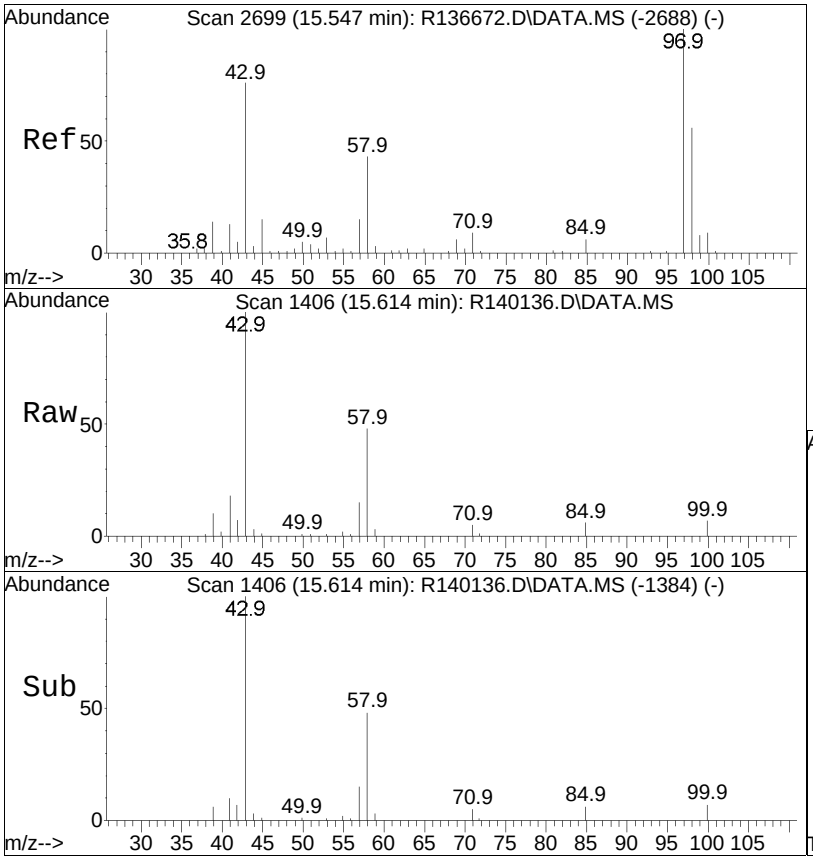



#71
1,3-dichloropropane
Concen: 8.91 ppbV
RT: 15.40 min Scan# 1382
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 76 Resp: 102144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 41 | 85.1 | 68.4 | 102.6 |
| 49 | 20.4 | 16.7 | 25.1 |

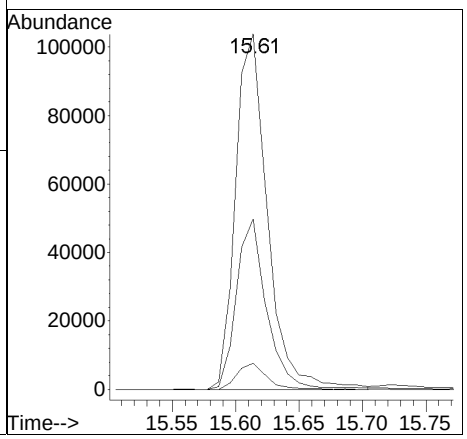


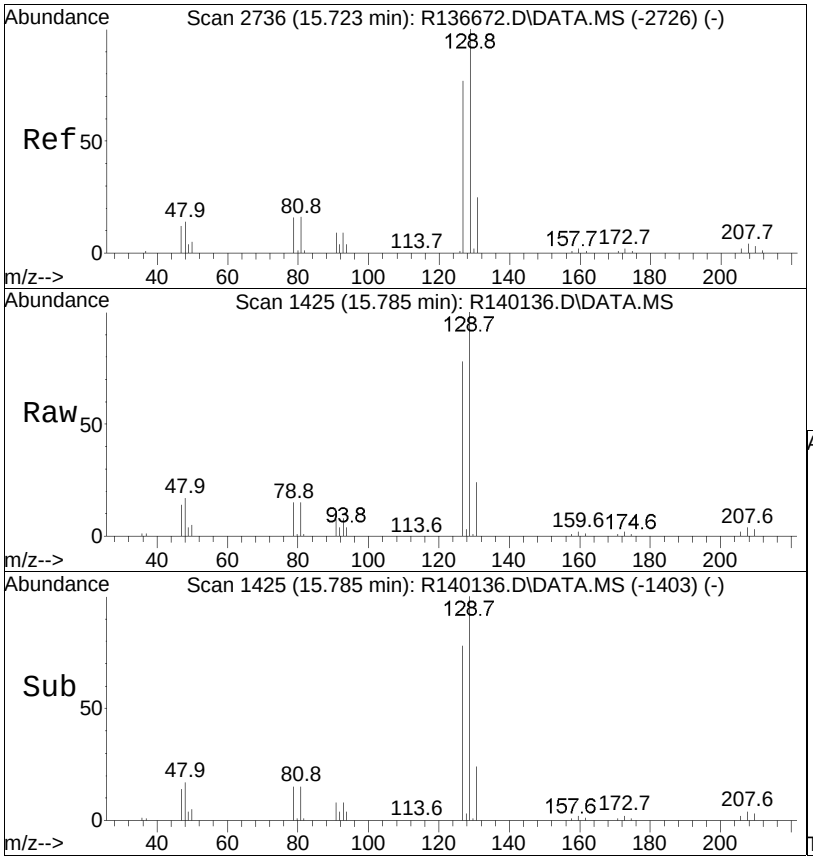



#72
2-hexanone
Concen: 9.59 ppbV
RT: 15.61 min Scan# 1406
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 182434

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 48.0 | 39.9 | 59.9 |
| 100 | 7.3 | 8.4 | 12.6# |

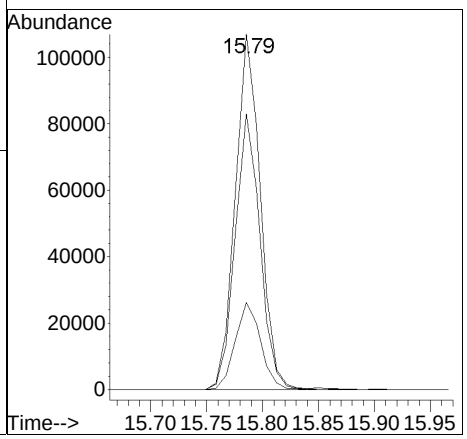


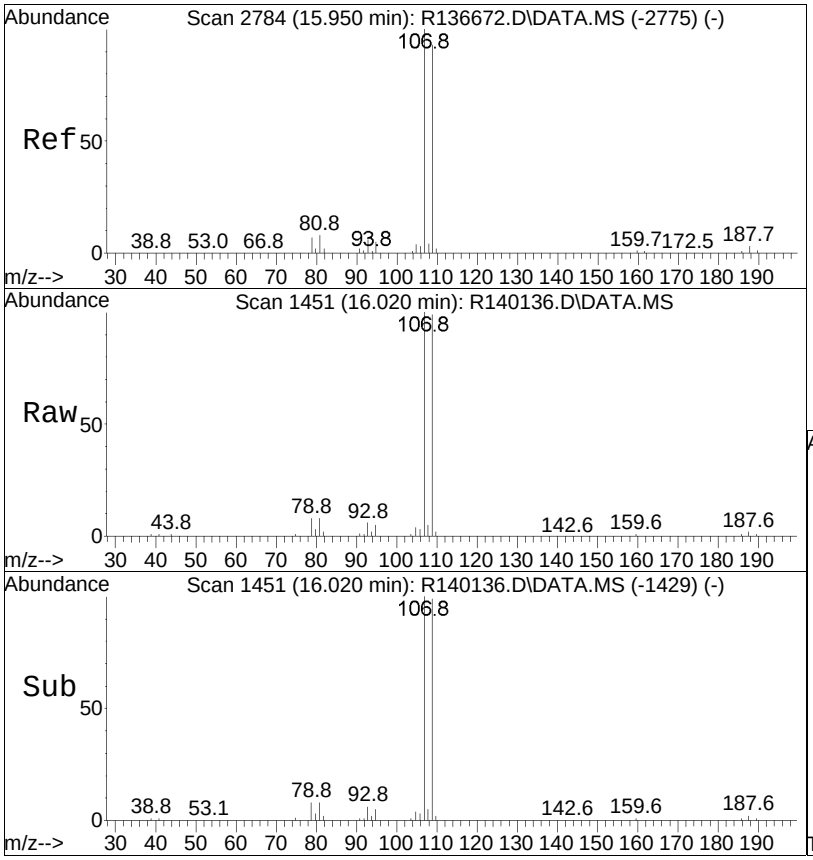



#74
dibromochloromethane
Concen: 8.93 ppbV
RT: 15.79 min Scan# 1425
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:129 Resp: 166546

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.6 | 60.6 | 91.0 |
| 131 | 24.5 | 20.0 | 30.0 |

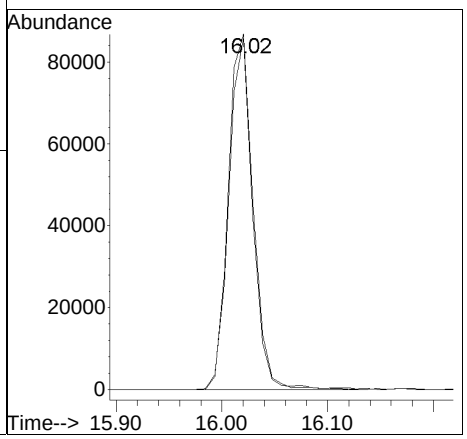


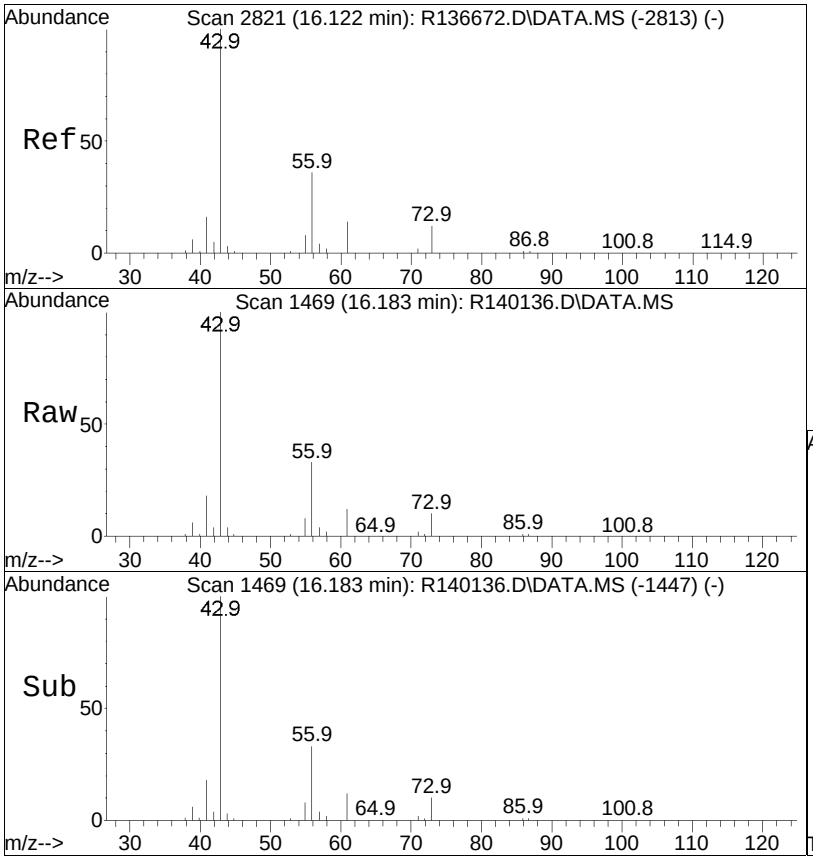



#75
1,2-dibromoethane
Concen: 9.42 ppbV
RT: 16.02 min Scan# 1451
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:107 Resp: 142166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 98.9 | 77.3 | 115.9 |

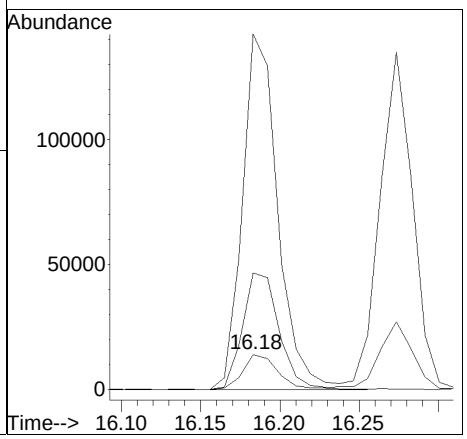


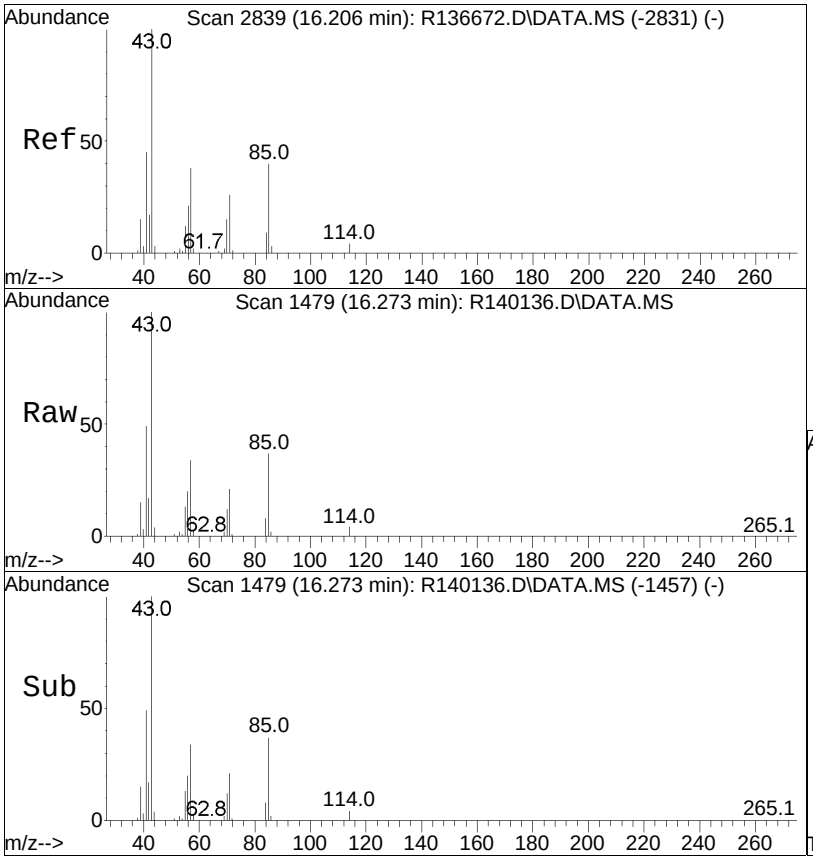



#76
butyl acetate
Concen: 8.22 ppbV
RT: 16.18 min Scan# 1469
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 73 Resp: 21759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 56 | 336.2 | 289.0 | 433.4 |
| 43 | 1025.1 | 812.3 | 1218.5 |

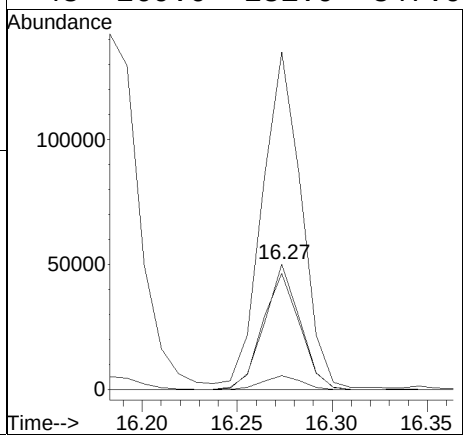


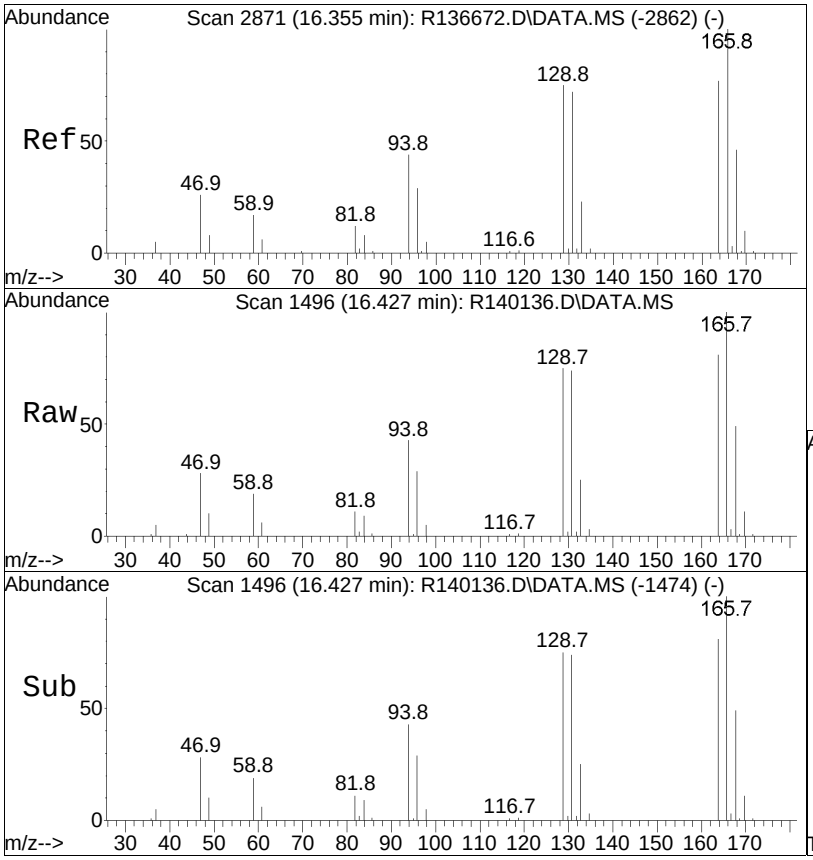



#77
octane
Concen: 8.31 ppbV
RT: 16.27 min Scan# 1479
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 85 Resp: 65135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 57 | 92.5 | 79.0 | 118.6 |
| 114 | 11.0 | 8.7 | 13.1 |
| 43 | 269.0 | 231.9 | 347.9 |

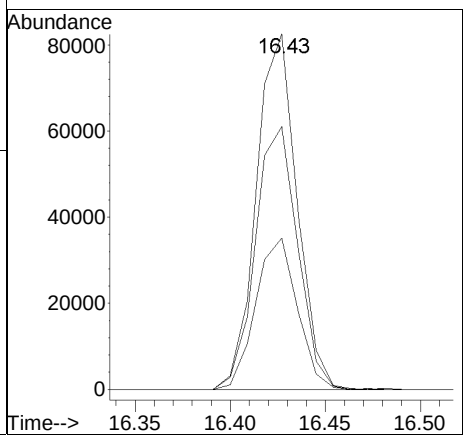


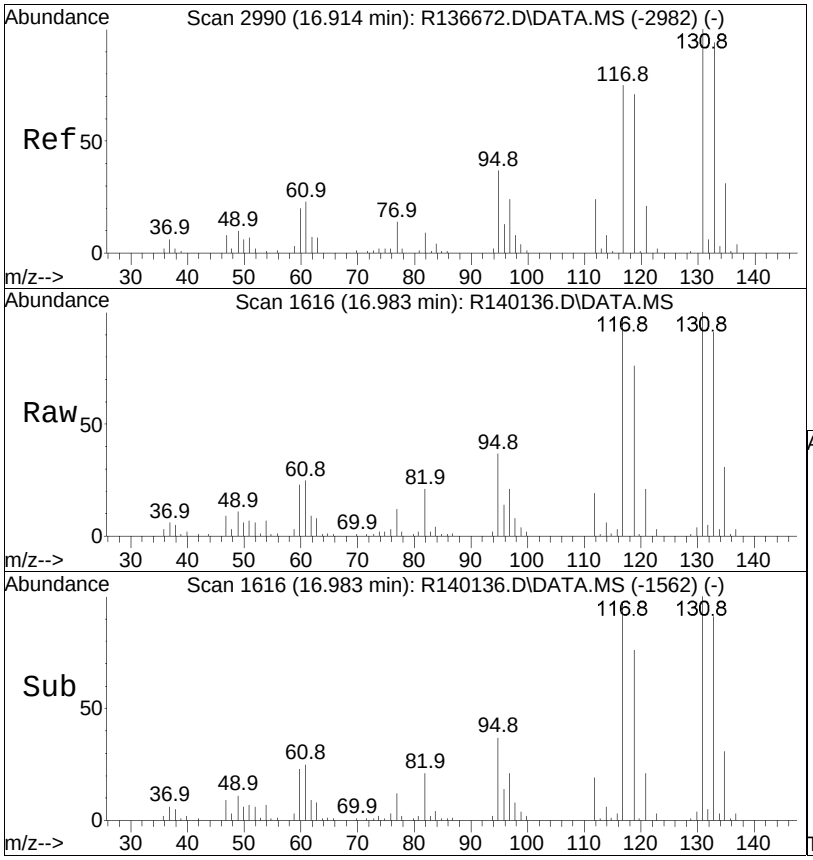



#78
tetrachloroethene
Concen: 8.96 ppbV
RT: 16.43 min Scan# 1496
Delta R.T. 0.000 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:166 Resp: 122842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 131 | 74.0 | 60.3 | 90.5 |
| 94 | 42.6 | 34.5 | 51.7 |

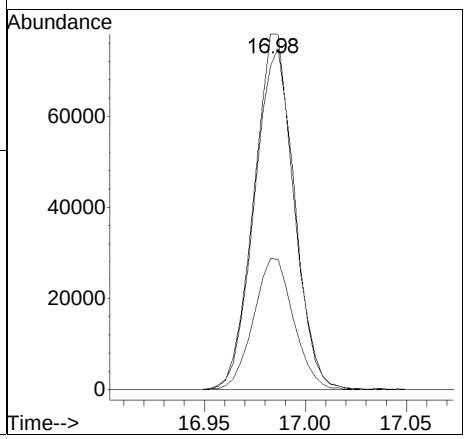


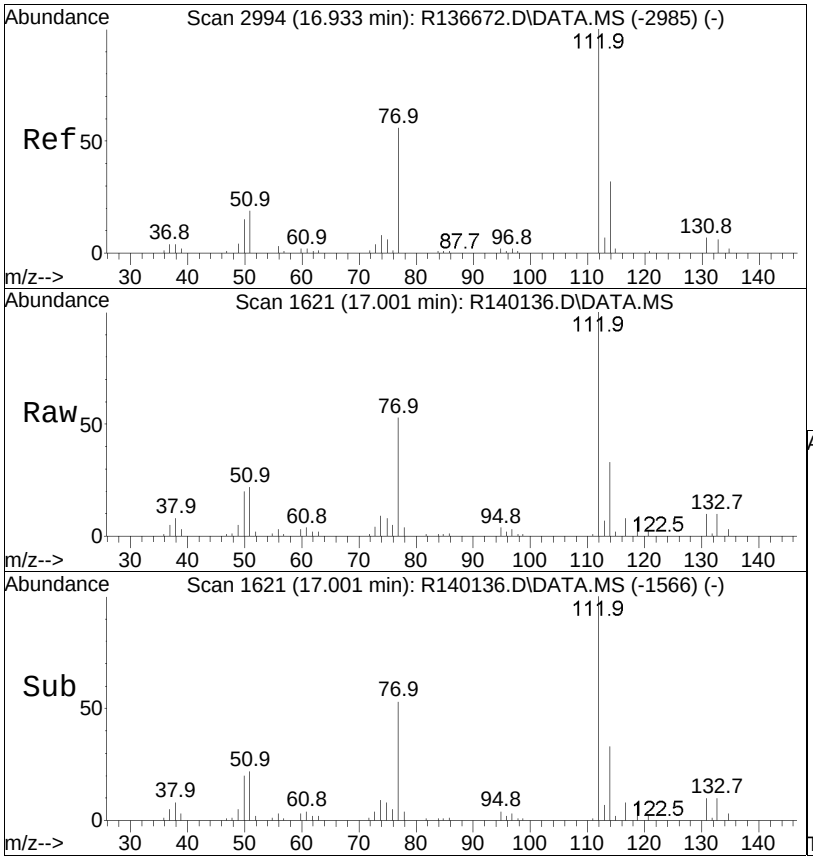



#79
1,1,1,2-tetrachloroethane
Concen: 8.55 ppbV
RT: 16.98 min Scan# 1616
Delta R.T. -0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:131 Resp: 107621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 91.0 | 76.8 | 115.2 |
| 95 | 36.8 | 28.2 | 42.4 |

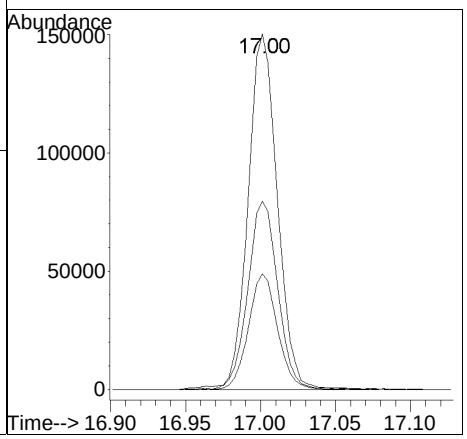


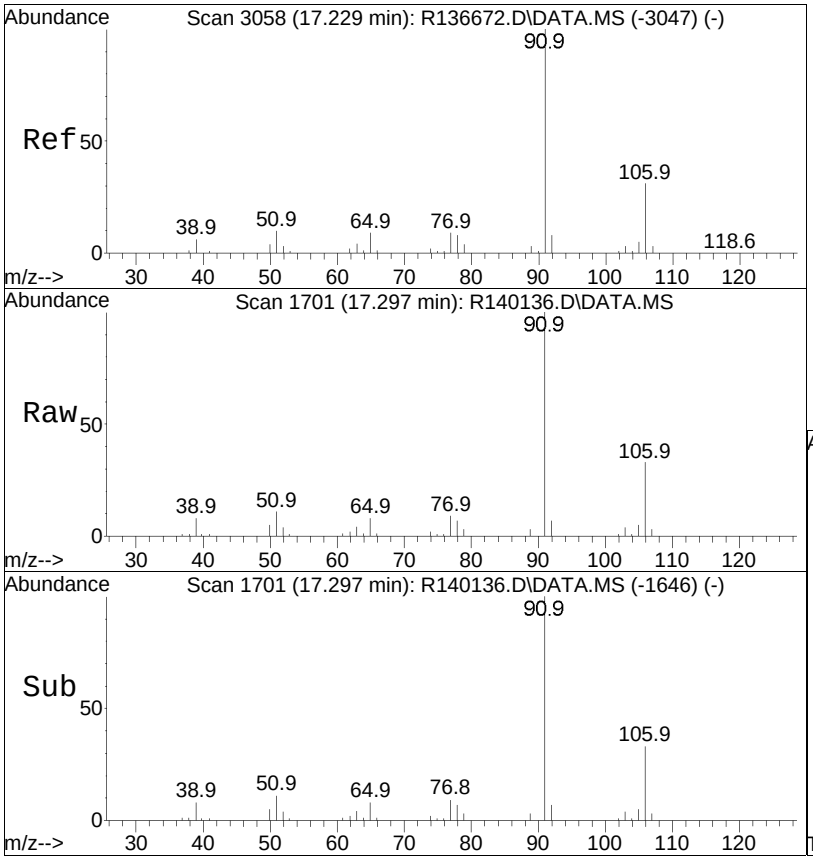



#80
chlorobenzene
Concen: 9.24 ppbV
RT: 17.00 min Scan# 1621
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:112 Resp: 203591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.5 | 25.0 | 37.6 |
| 77 | 53.0 | 41.3 | 61.9 |

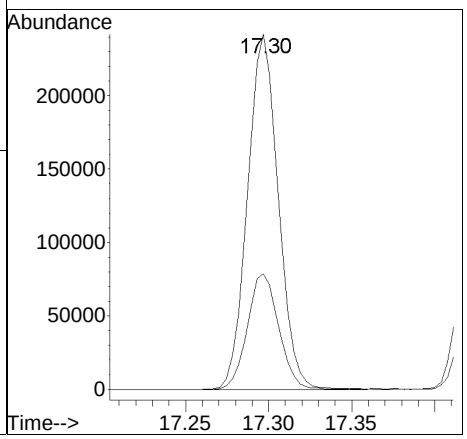


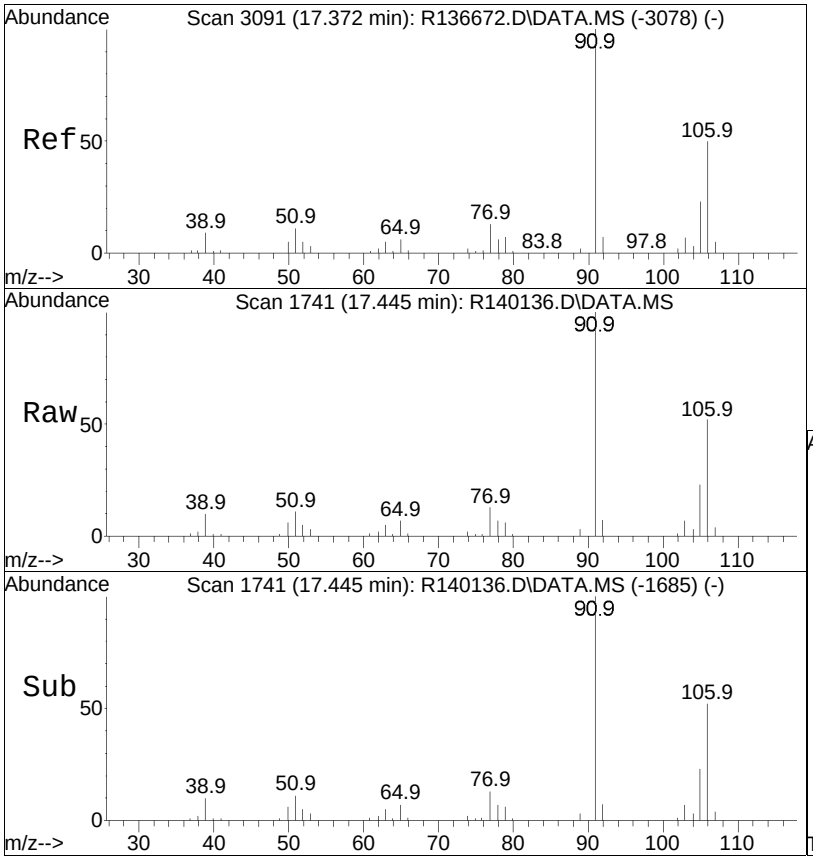



#81
ethylbenzene
Concen: 9.21 ppbV
RT: 17.30 min Scan# 1701
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 311195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.5 | 26.9 | 40.3 |

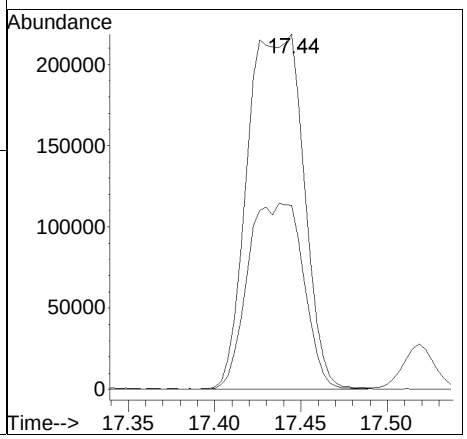


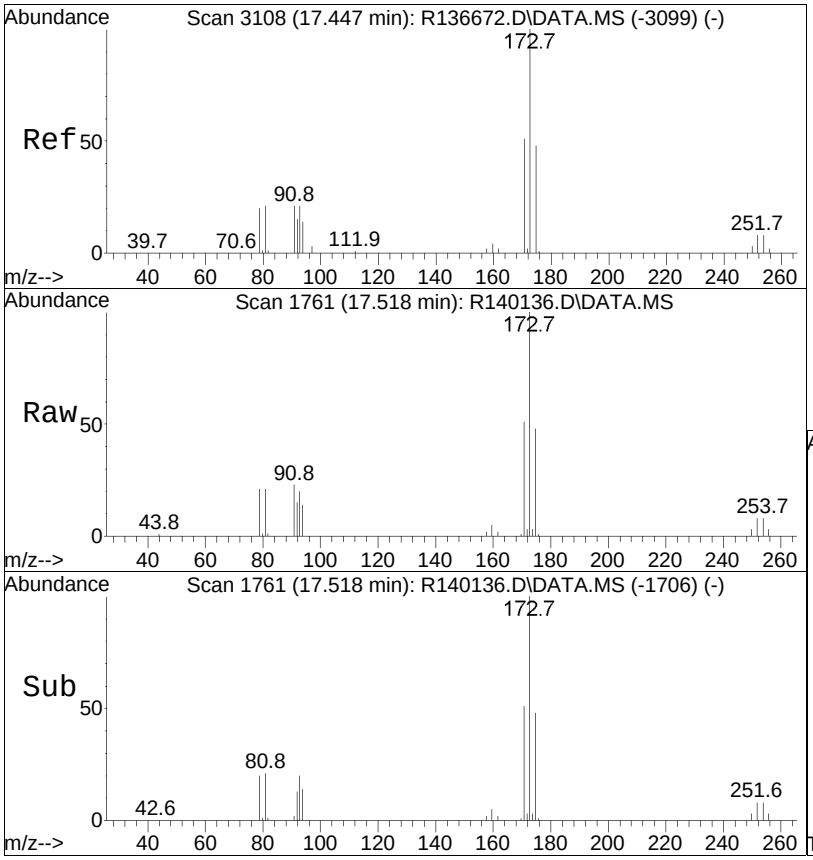



#83
m+p-xylene
Concen: 18.51 ppbV m
RT: 17.44 min Scan# 1741
Delta R.T. 0.005 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 492757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 51.8 | 42.0 | 63.0 |

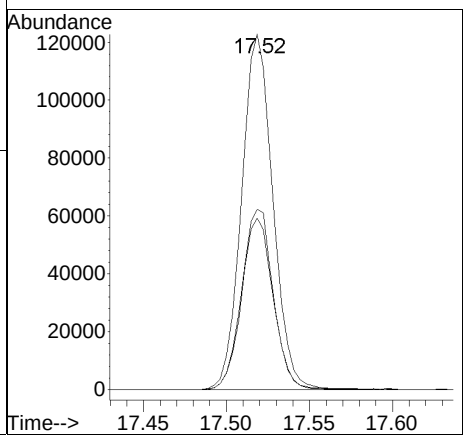


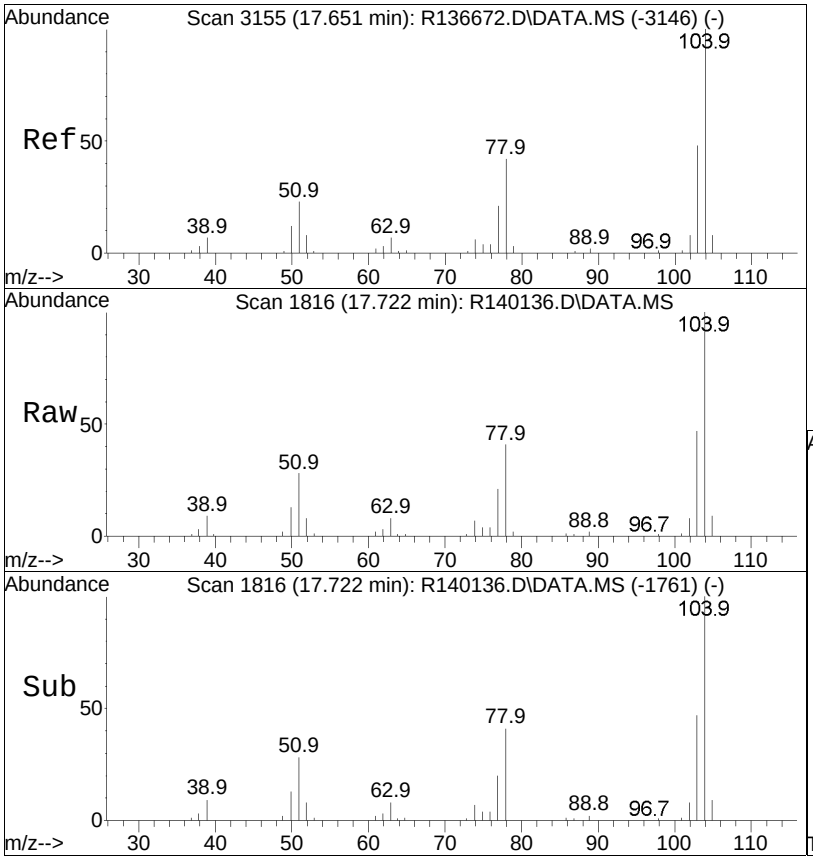



#84
bromoform
Concen: 8.78 ppbV
RT: 17.52 min Scan# 1761
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:173 Resp: 160840

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.2 | 41.0 | 61.4 |
| 171 | 50.7 | 41.1 | 61.7 |

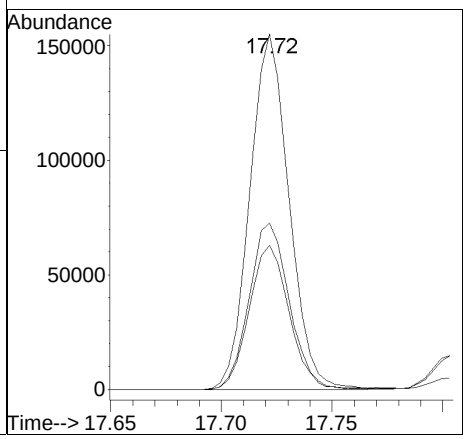


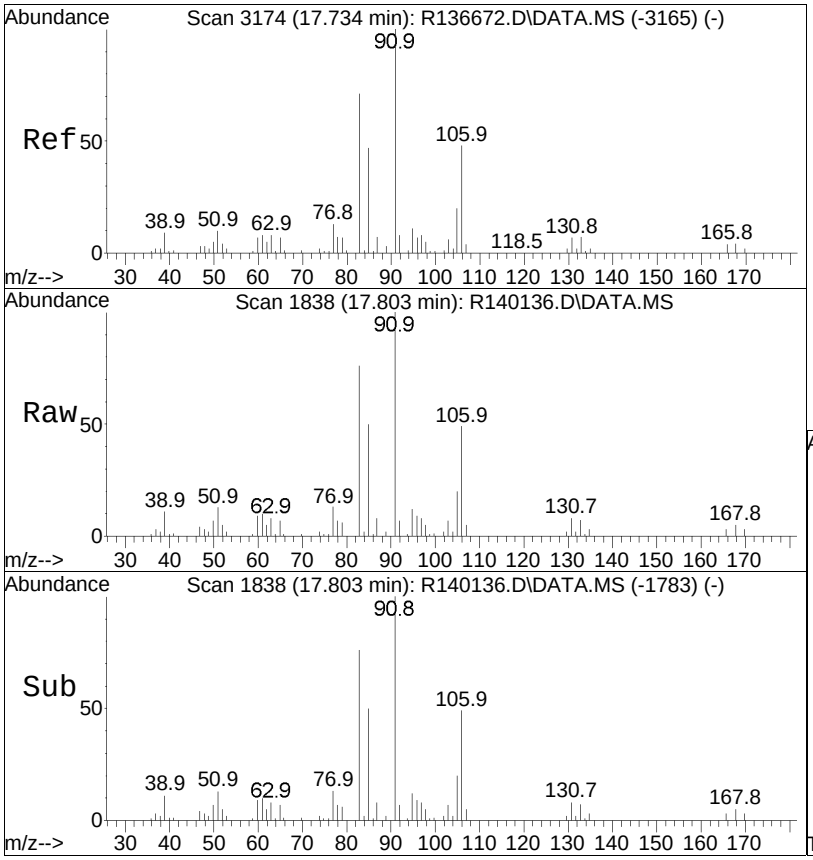



#85
styrene
Concen: 9.13 ppbV
RT: 17.72 min Scan# 1816
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:104 Resp: 190708

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 103 | 46.8 | 39.7 | 59.5 |
| 78 | 40.6 | 34.1 | 51.1 |

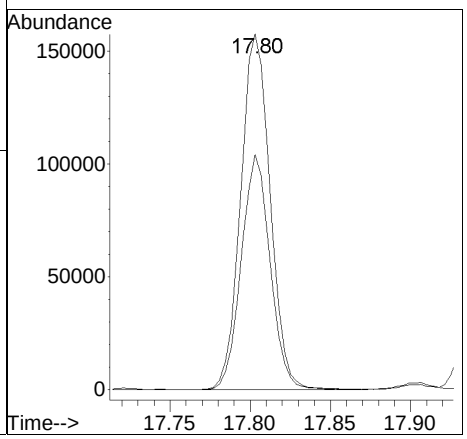


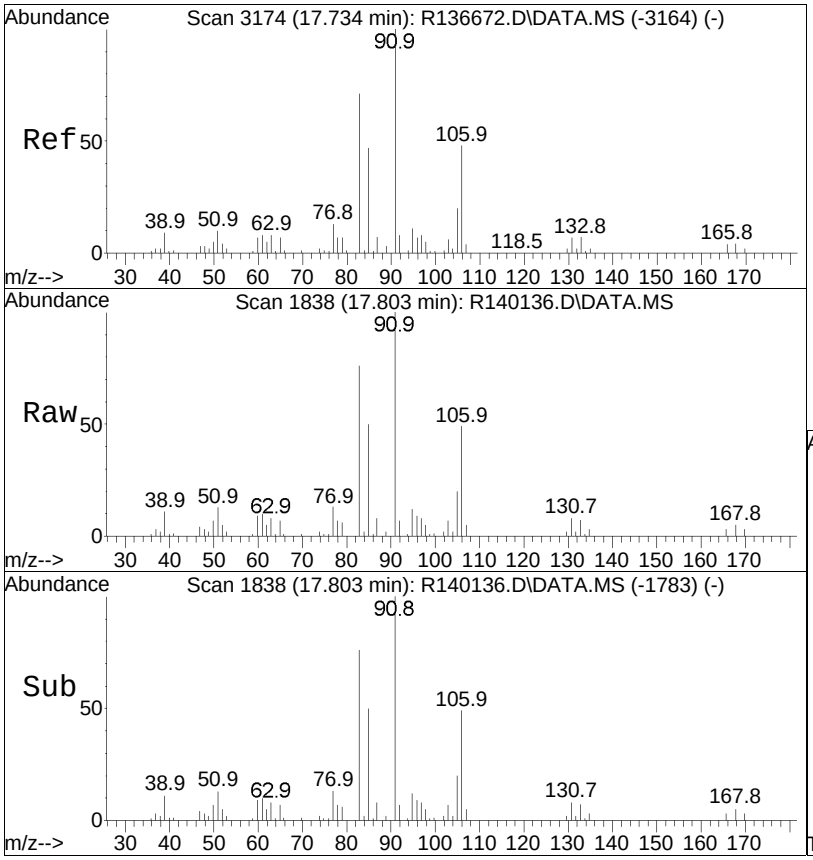



#86
1,1,2,2-tetrachloroethane
Concen: 9.75 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 83 Resp: 201125

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.1 | 53.4 | 80.2 |

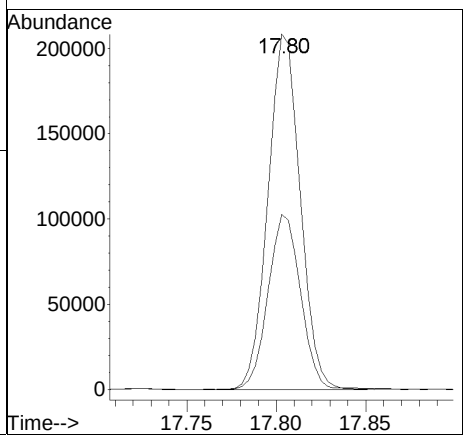


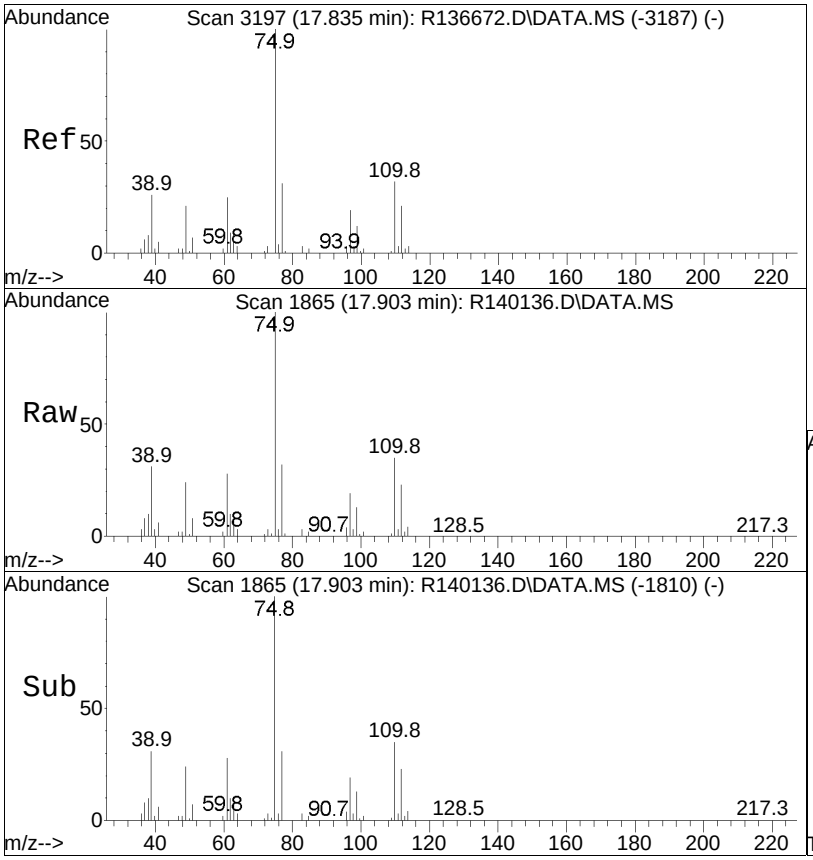



#87
o-xylene
Concen: 9.49 ppbV
RT: 17.80 min Scan# 1838
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 261372

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 49.2 | 38.9 | 58.3 |

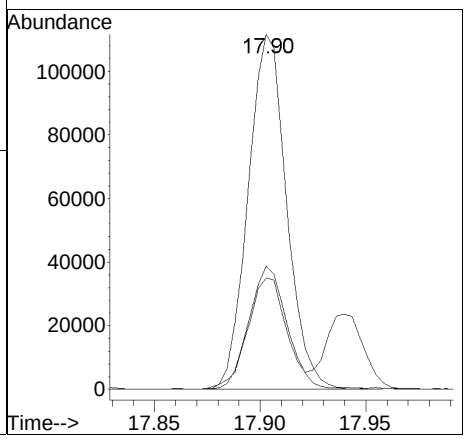


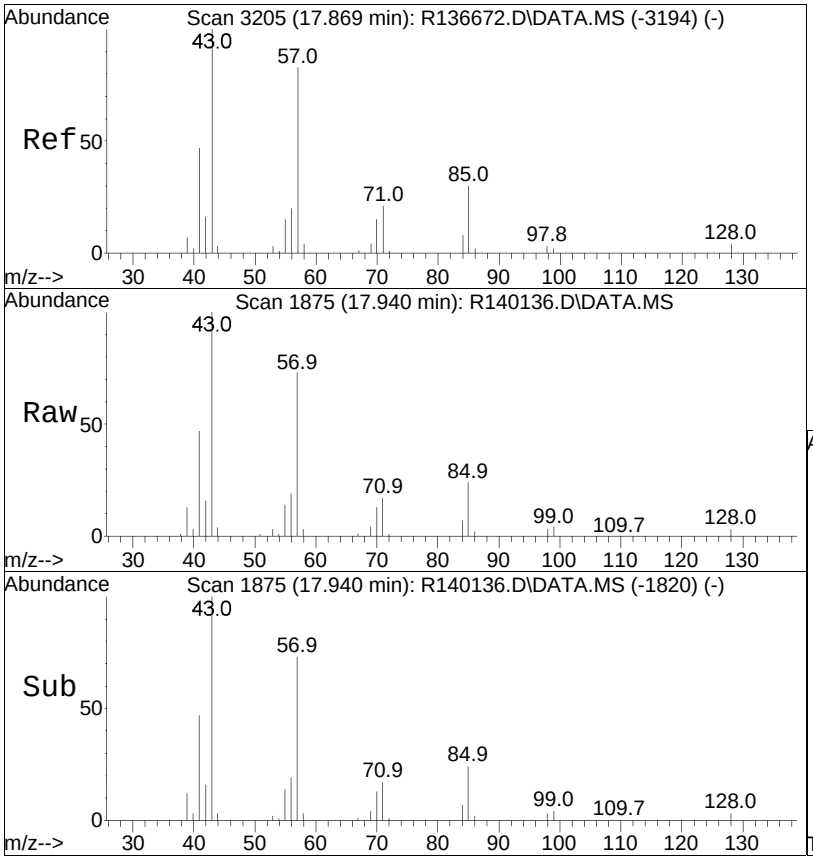



#88
1,2,3-trichloropropane
Concen: 9.04 ppbV
RT: 17.90 min Scan# 1865
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 75 Resp: 141756

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.7 | 27.1 | 40.7 |
| 39 | 31.4 | 25.9 | 38.9 |

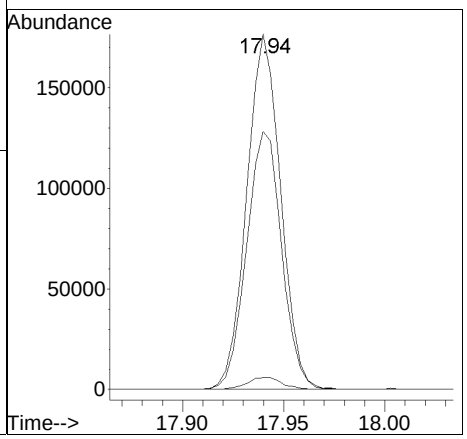


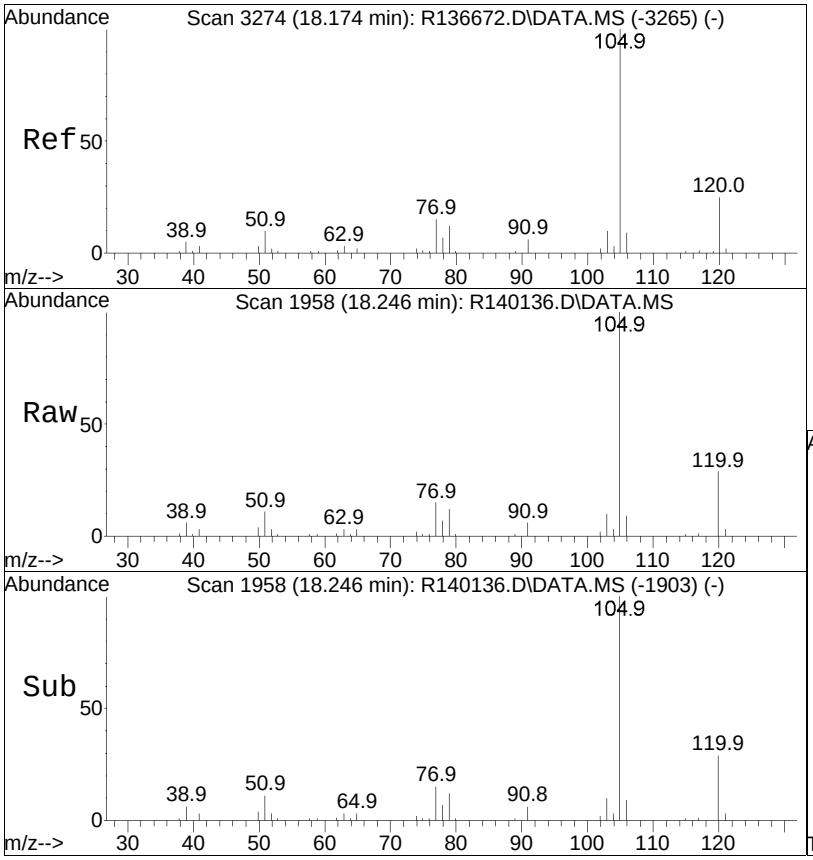



#89
nonane
Concen: 8.34 ppbV
RT: 17.94 min Scan# 1875
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 43 Resp: 206478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 72.6 | 59.2 | 88.8 |
| 128 | 3.3 | 3.4 | 5.0# |

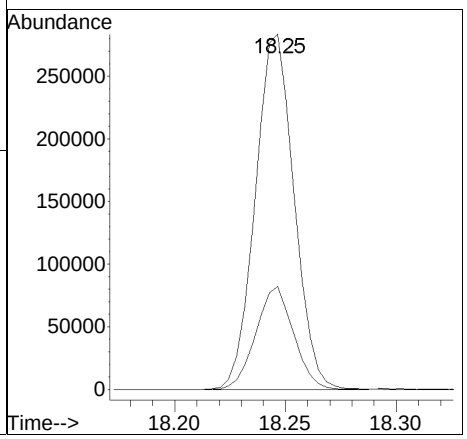


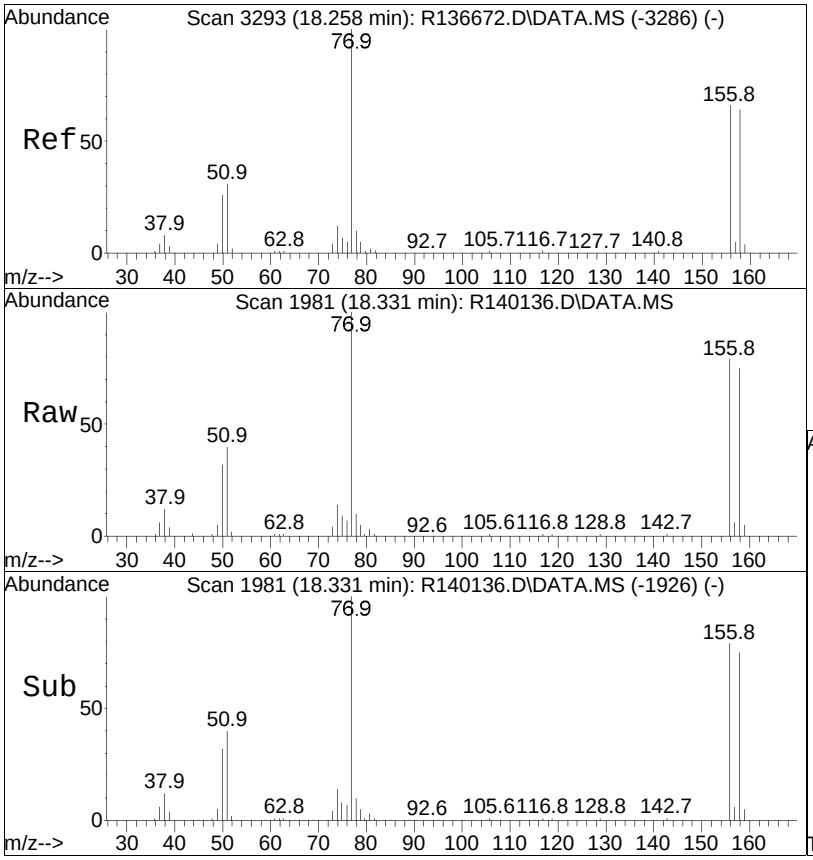



#91
isopropylbenzene
Concen: 9.11 ppbV
RT: 18.25 min Scan# 1958
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:105 Resp: 344681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 29.0 | 22.1 | 33.1 |

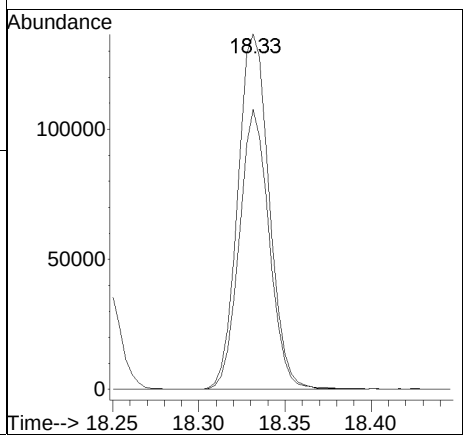


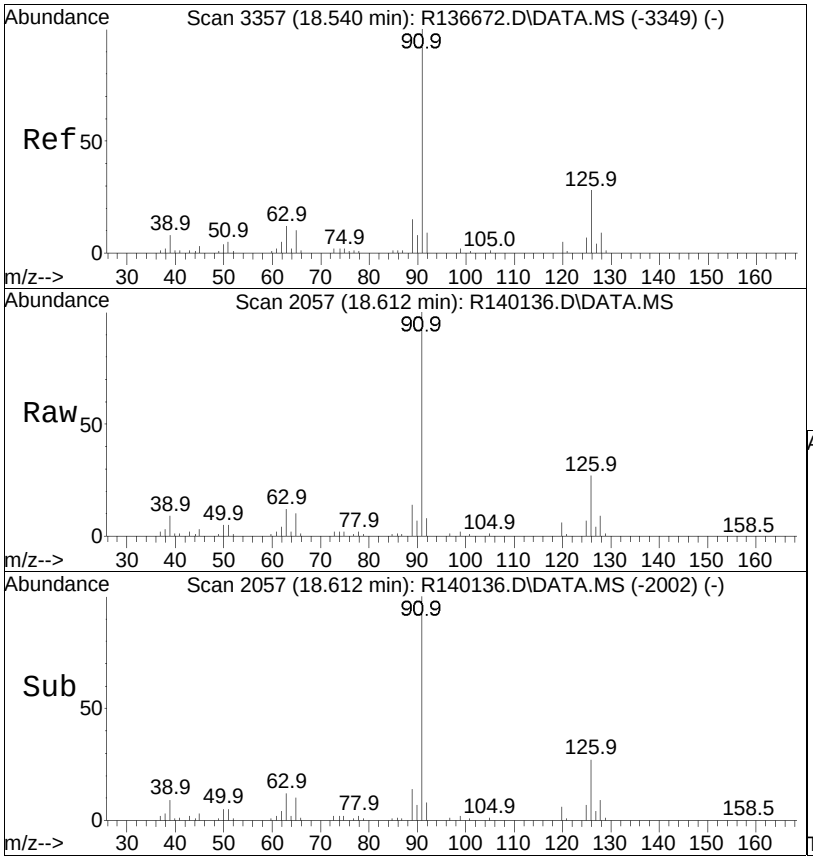



#92
bromobenzene
Concen: 8.91 ppbV
RT: 18.33 min Scan# 1981
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 77 Resp: 173638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 156 | 78.8 | 59.2 | 88.8 |

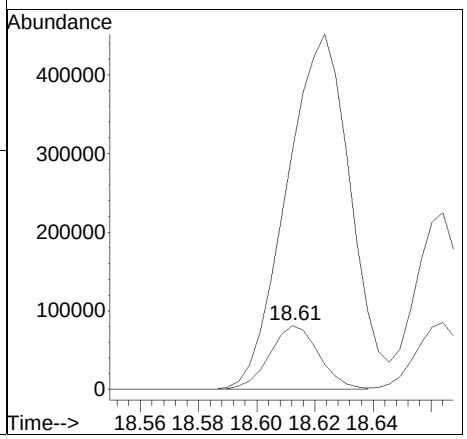


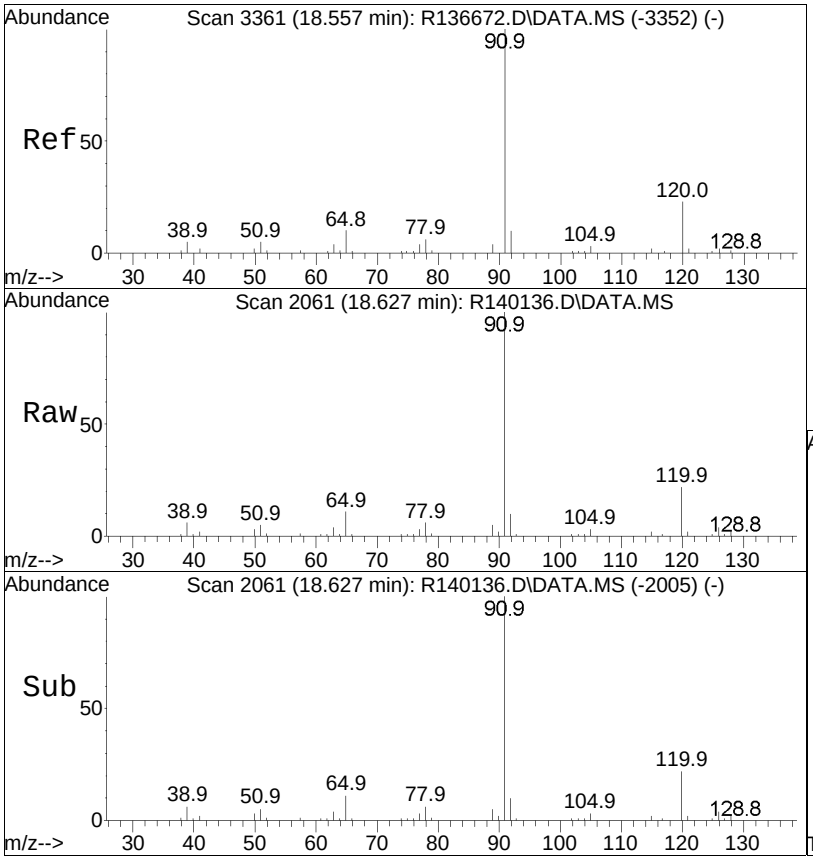



#93
2-chlorotoluene
Concen: 8.41 ppbV
RT: 18.61 min Scan# 2057
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:126 Resp: 95761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 126 | 100 | | |
| 91 | 374.8 | 279.1 | 418.7 |

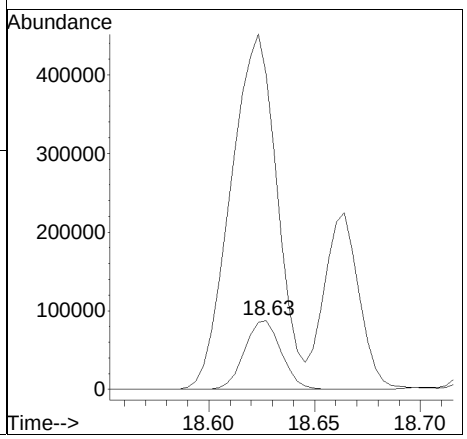


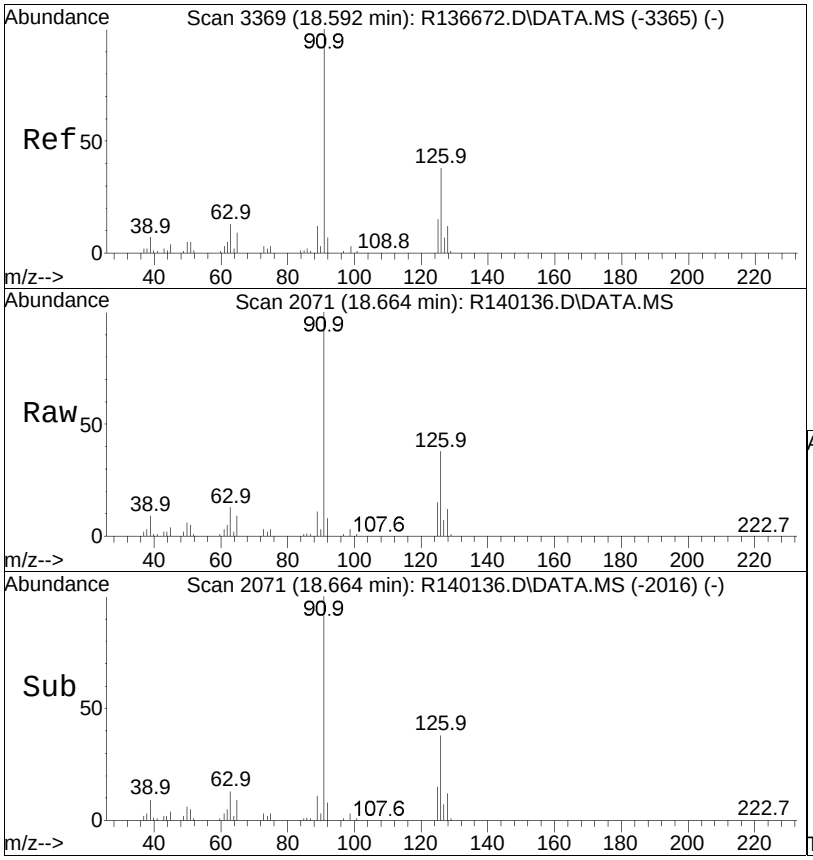



#94
n-propylbenzene
Concen: 8.90 ppbV
RT: 18.63 min Scan# 2061
Delta R.T. 0.005 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:120 Resp: 105908

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 120 | 100 | | |
| 91 | 457.2 | 398.2 | 597.2 |

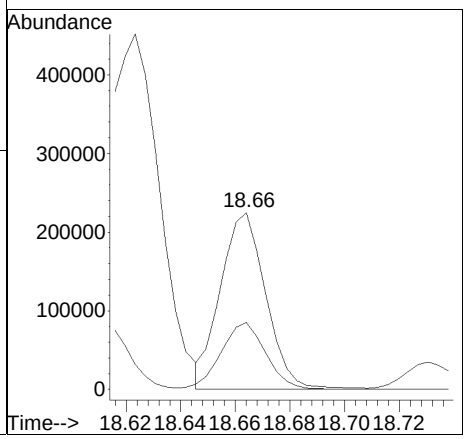


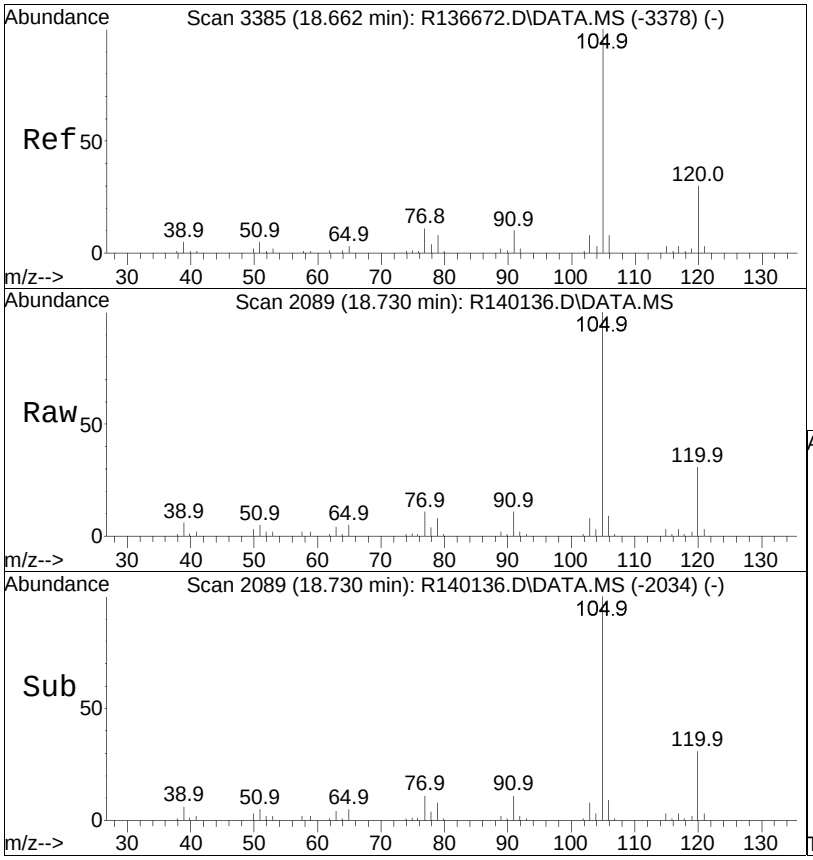



#95
4-chlorotoluene
Concen: 8.85 ppbV
RT: 18.66 min Scan# 2071
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 259440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 37.8 | 31.5 | 47.3 |

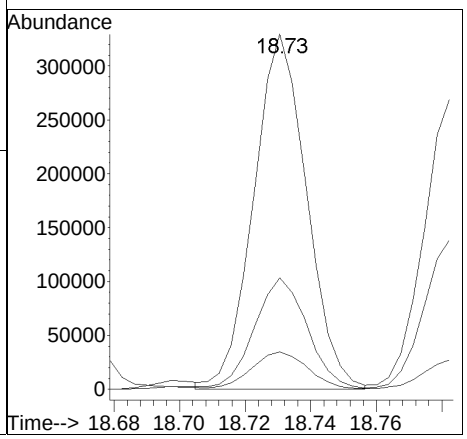


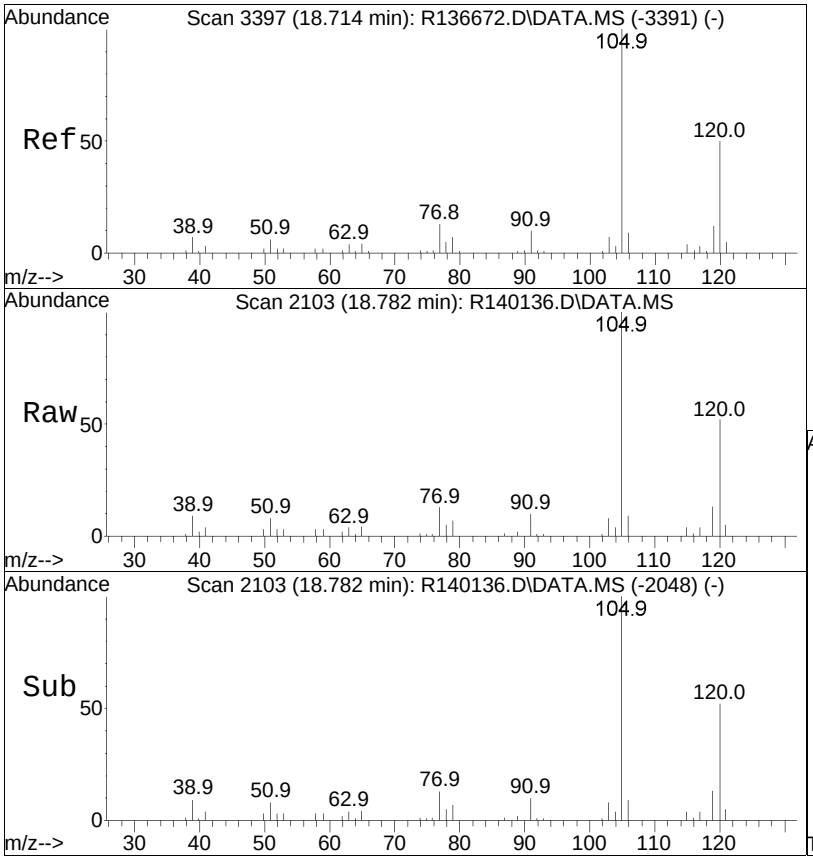



#96
4-ethyl toluene
Concen: 8.80 ppbV m
RT: 18.73 min Scan# 2089
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:105 Resp: 369699

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 31.4 | 25.8 | 38.8 |
| 91 | 10.6 | 8.6 | 13.0 |

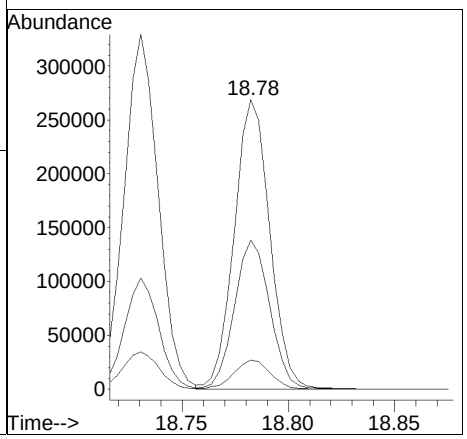


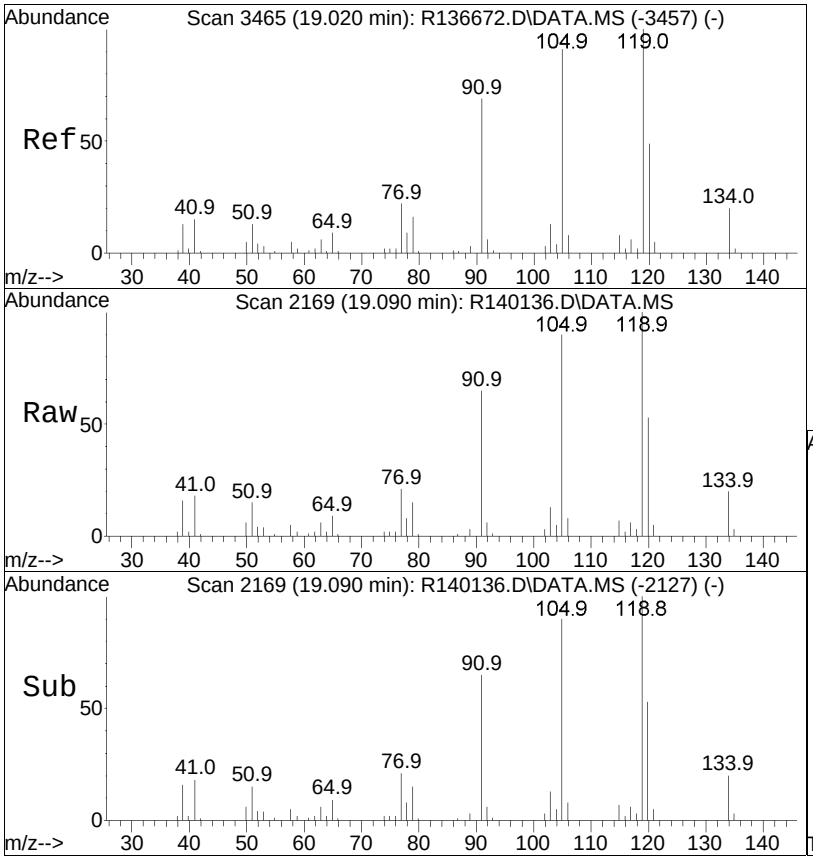



#97
1,3,5-trimethylbenzene
Concen: 9.29 ppbV
RT: 18.78 min Scan# 2103
Delta R.T. 0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:105 Resp: 341022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 51.5 | 42.8 | 64.2 |
| 91 | 10.2 | 8.3 | 12.5 |

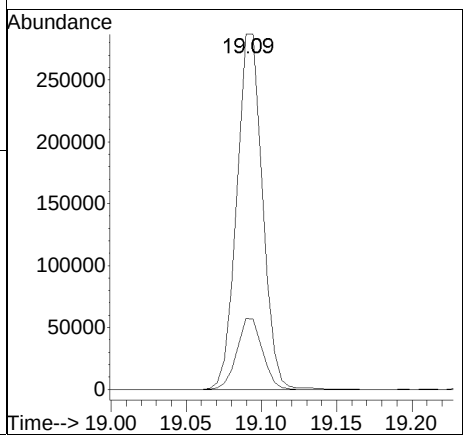


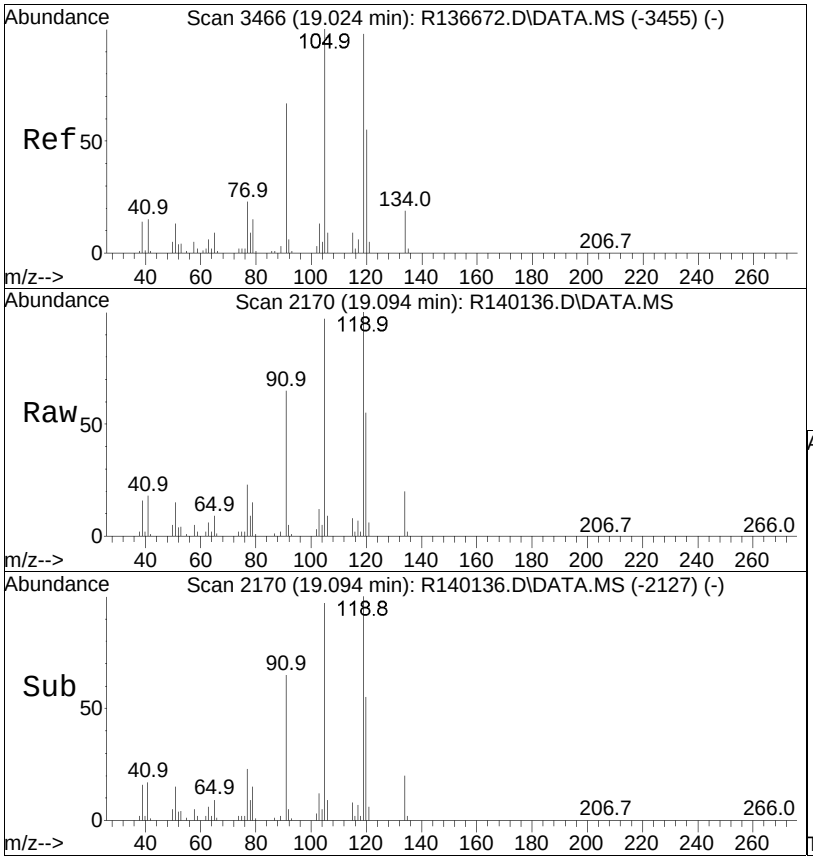



#98
tert-butylbenzene
Concen: 8.80 ppbV
RT: 19.09 min Scan# 2169
Delta R.T. -0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:119 Resp: 342342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 20.0 | 15.4 | 23.2 |

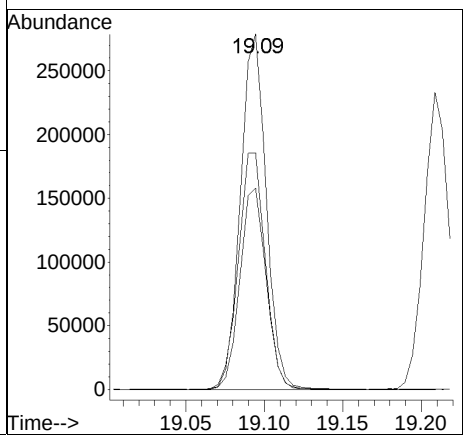


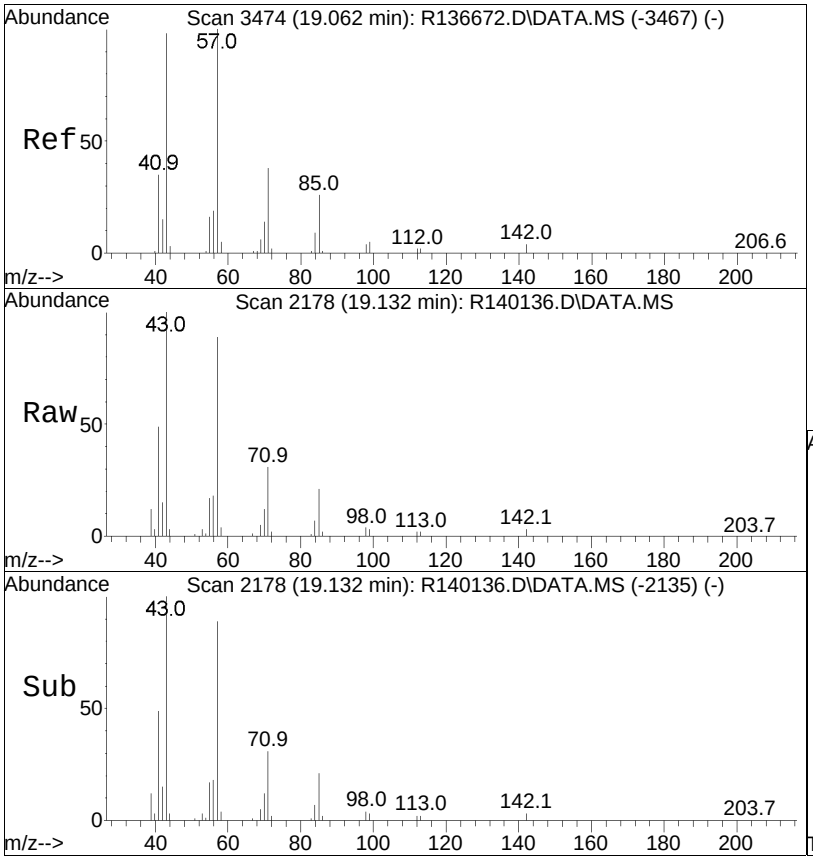



#99
1,2,4-trimethylbenzene
Concen: 9.60 ppbV
RT: 19.09 min Scan# 2170
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:105 Resp: 318620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 56.7 | 46.1 | 69.1 |
| 91 | 66.6 | 57.4 | 86.0 |

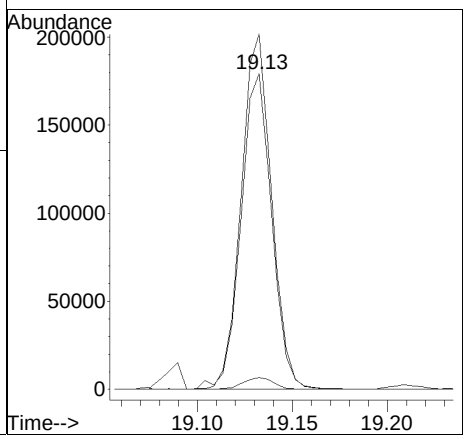


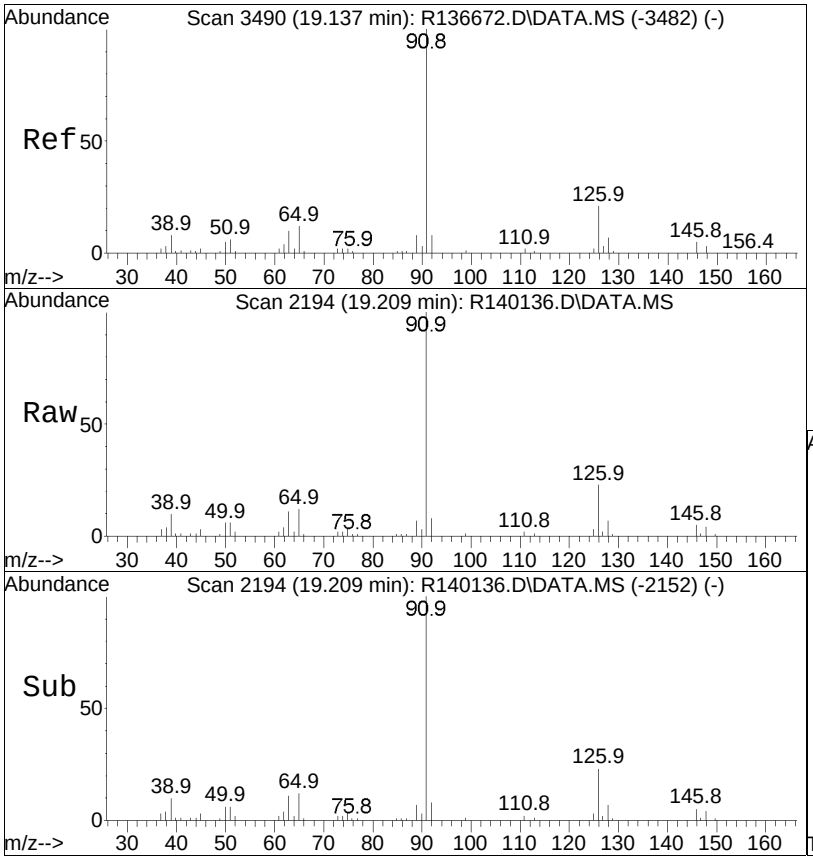



#100
decane
Concen: 8.65 ppbV
RT: 19.13 min Scan# 2178
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 57 Resp: 202233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 112.5 | 88.1 | 132.1 |
| 142 | 3.8 | 2.9 | 4.3 |

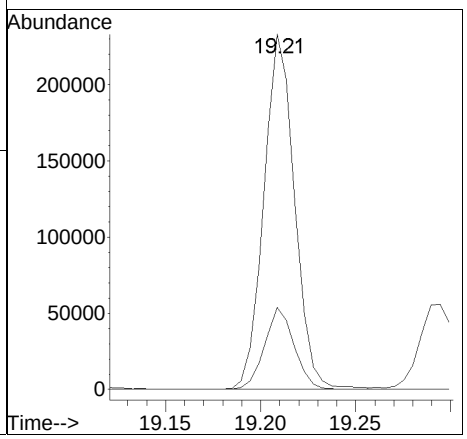


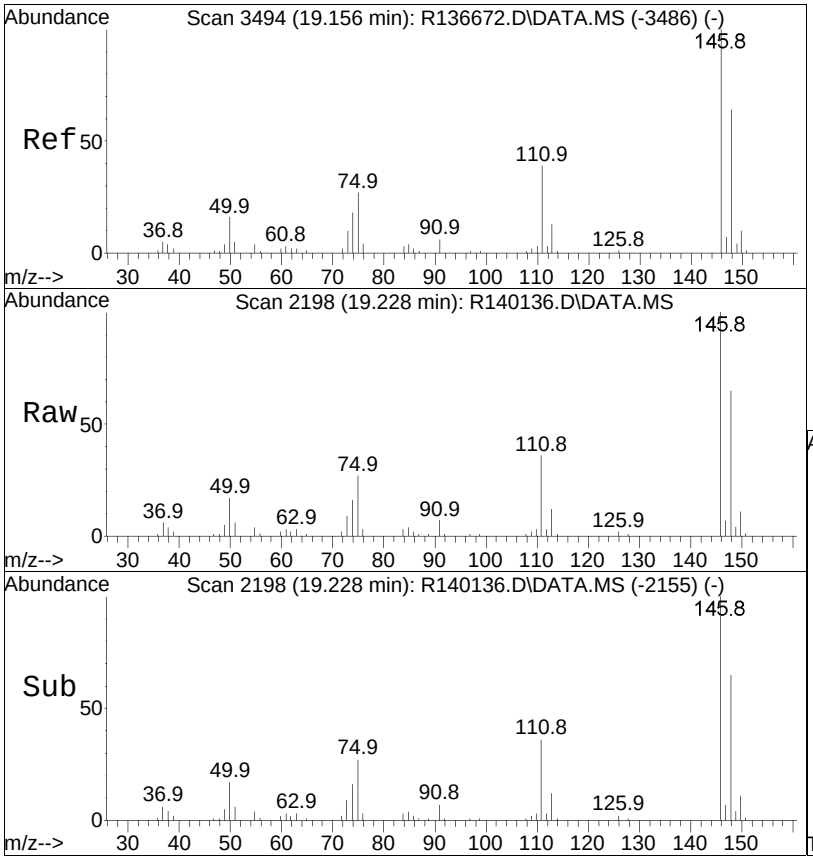



#101
Benzyl Chloride
Concen: 8.68 ppbV
RT: 19.21 min Scan# 2194
Delta R.T. -0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 262573

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 23.0 | 19.6 | 29.4 |

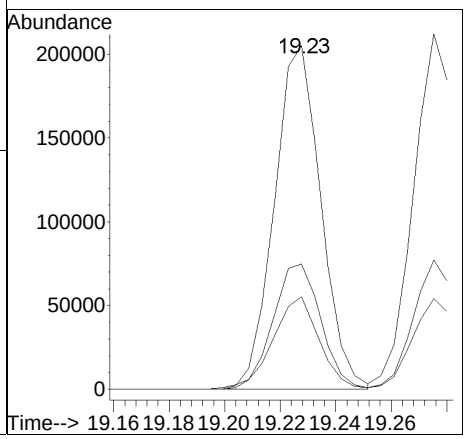


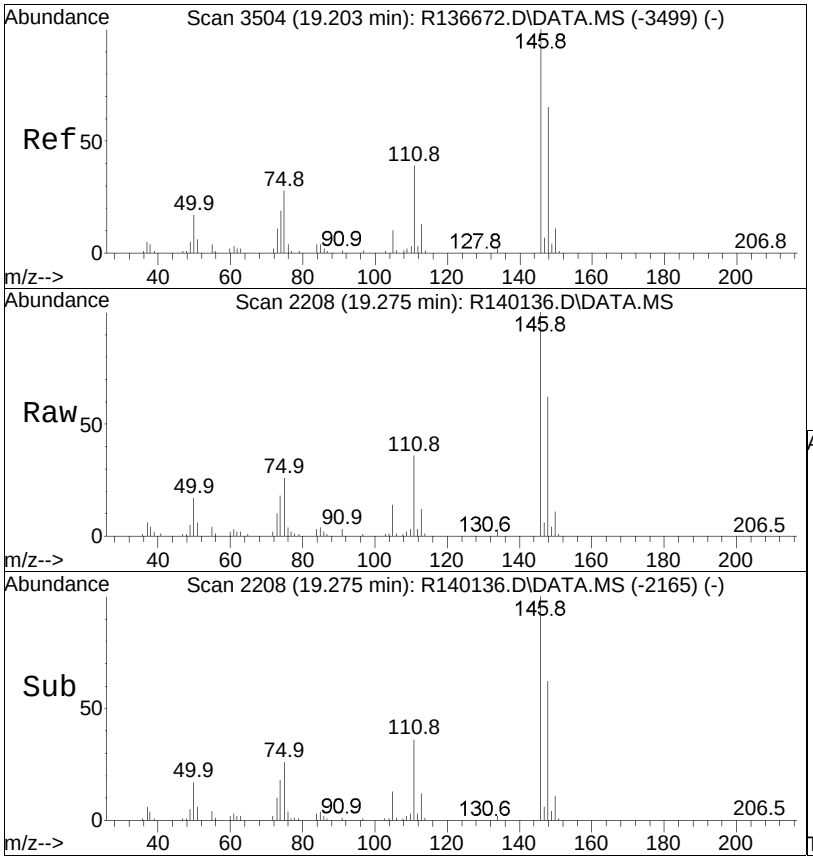



#102
1,3-dichlorobenzene
Concen: 9.41 ppbV
RT: 19.23 min Scan# 2198
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:146 Resp: 238858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.5 | 30.3 | 45.5 |
| 75 | 27.0 | 20.2 | 30.2 |

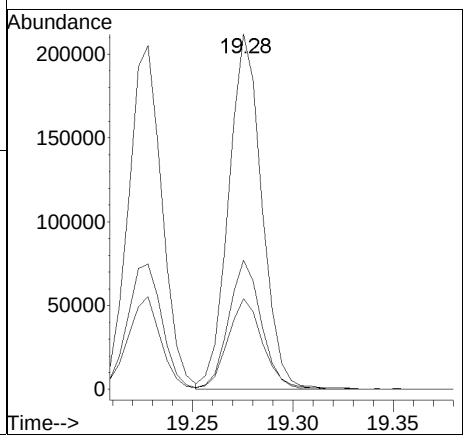


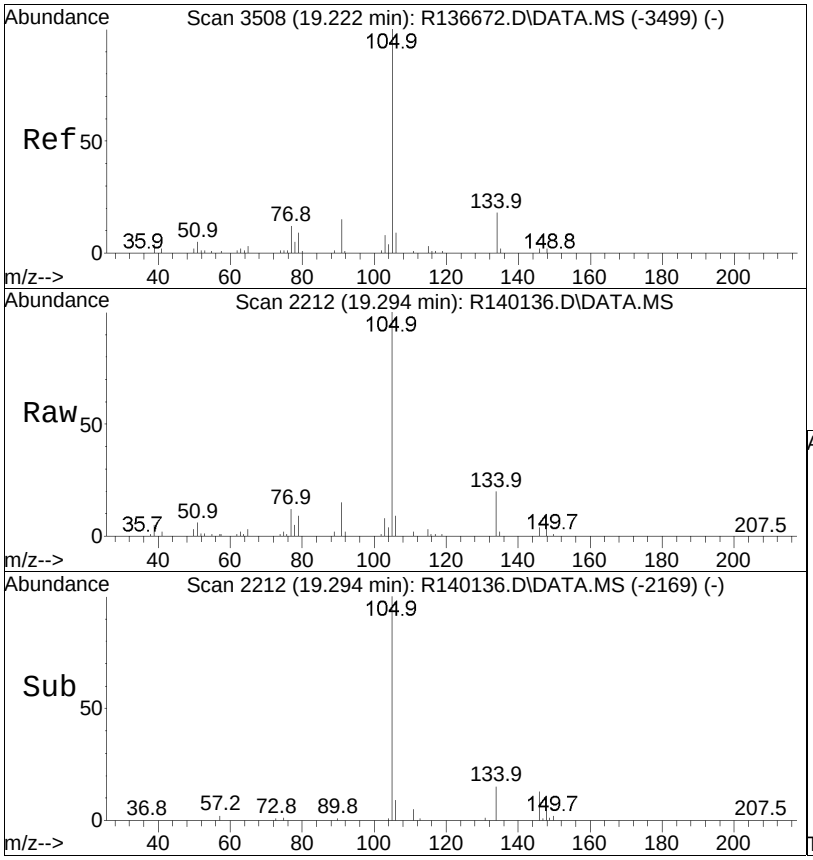



#103
1,4-dichlorobenzene
Concen: 9.49 ppbV
RT: 19.28 min Scan# 2208
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:146 Resp: 243506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.4 | 29.2 | 43.8 |
| 75 | 25.5 | 22.1 | 33.1 |

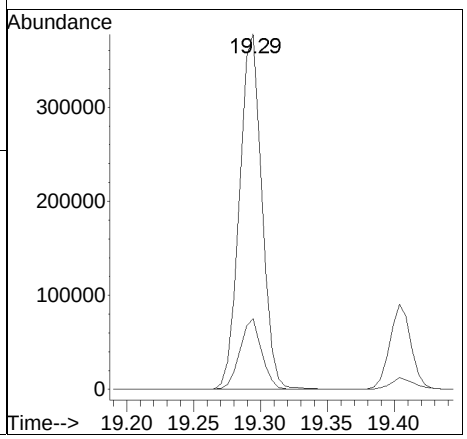


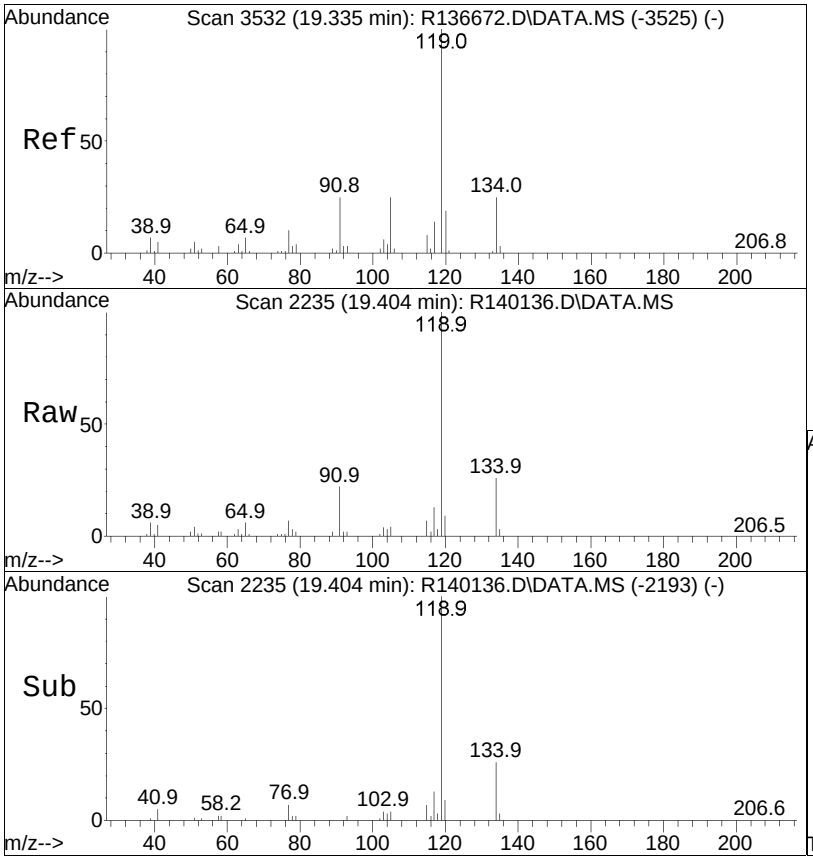



#104
sec-butylbenzene
Concen: 8.89 ppbV
RT: 19.29 min Scan# 2212
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:105 Resp: 439838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.9 | 16.3 | 24.5 |

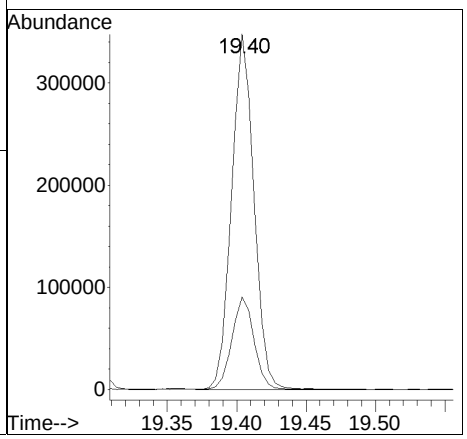


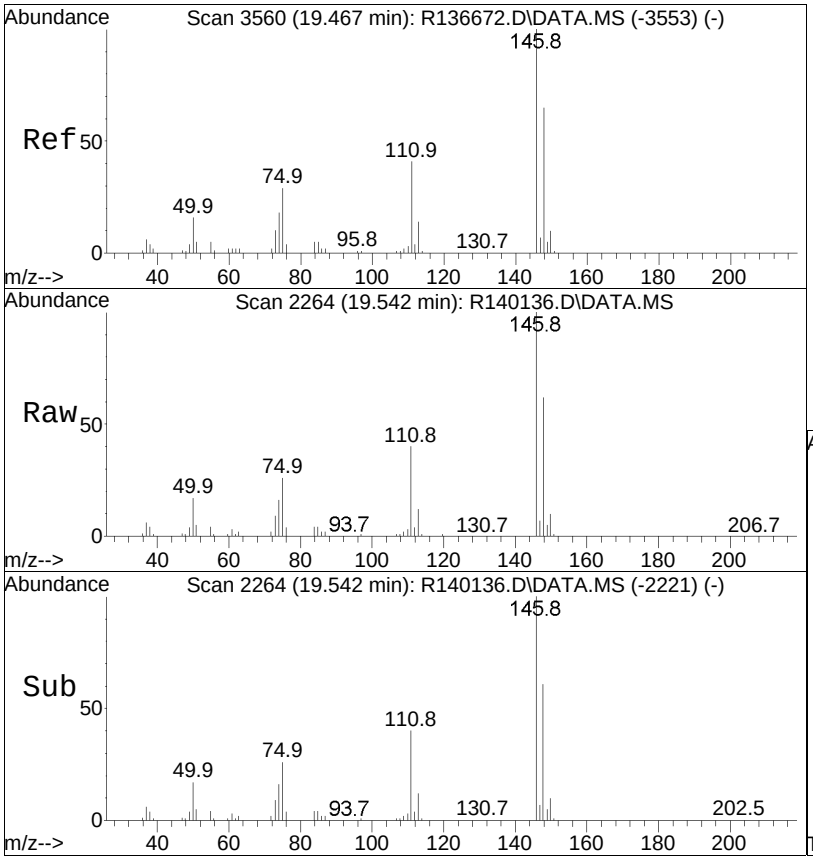



#106
p-isopropyltoluene
Concen: 8.14 ppbV
RT: 19.40 min Scan# 2235
Delta R.T. -0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:119 Resp: 390107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.0 | 19.5 | 29.3 |

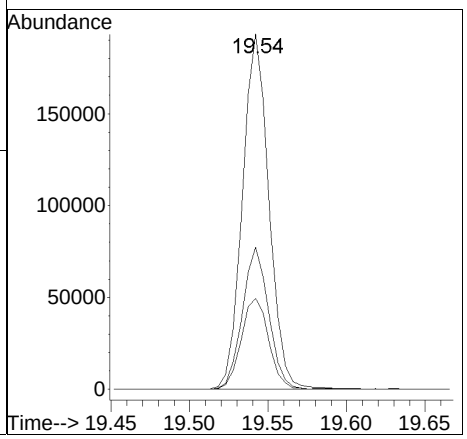


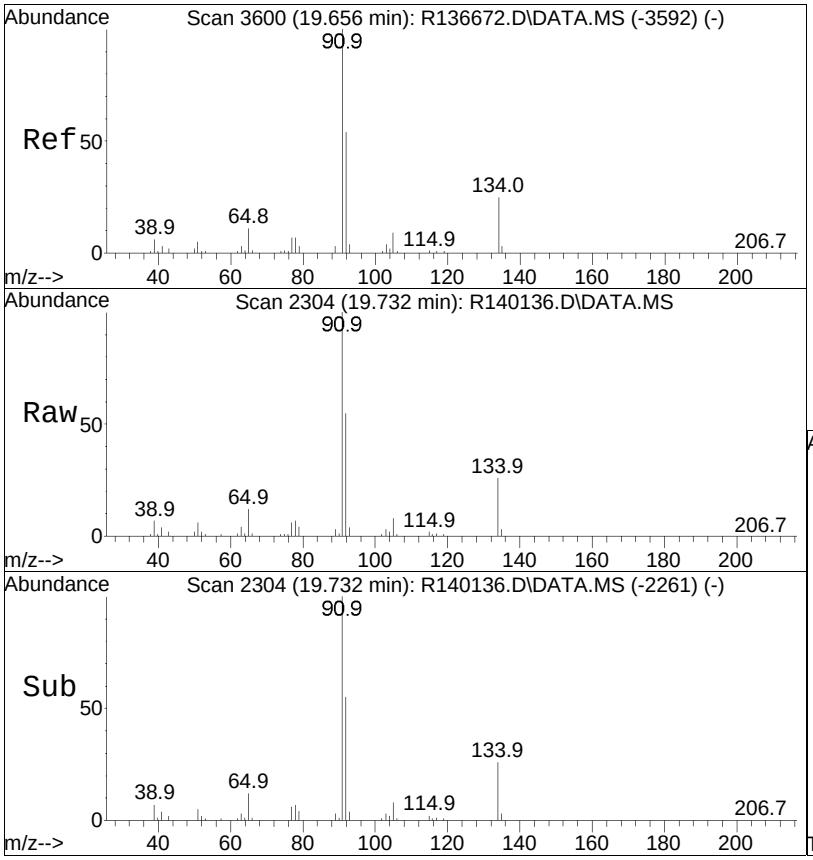



#107
1,2-dichlorobenzene
Concen: 9.41 ppbV
RT: 19.54 min Scan# 2264
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:146 Resp: 227132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.0 | 32.4 | 48.6 |
| 75 | 25.6 | 21.8 | 32.6 |

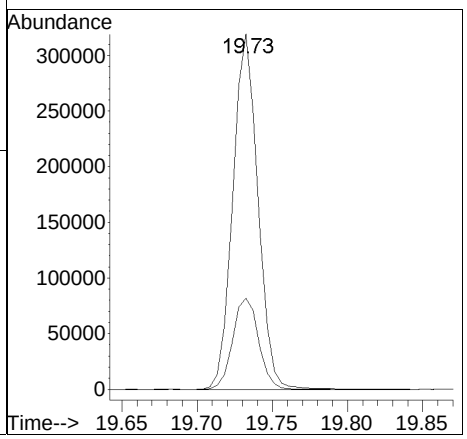


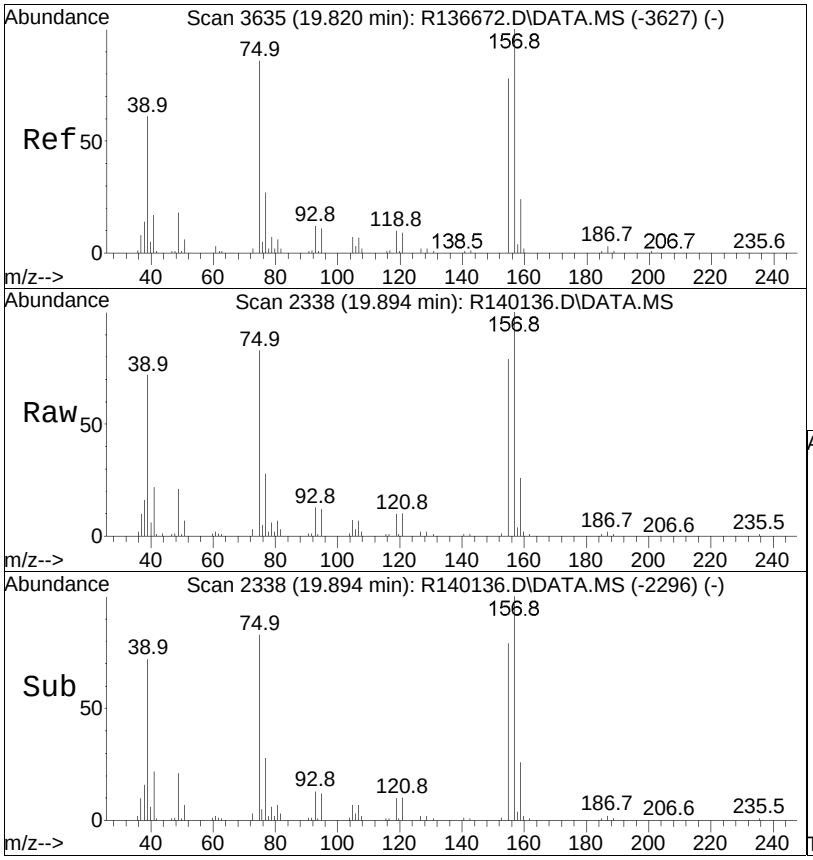



#108
n-butylbenzene
Concen: 9.39 ppbV
RT: 19.73 min Scan# 2304
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 91 Resp: 370411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 134 | 25.7 | 21.6 | 32.4 |

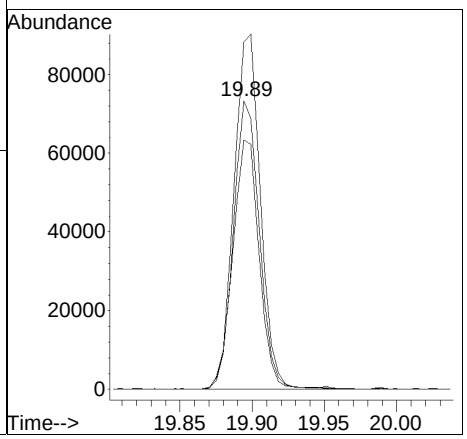


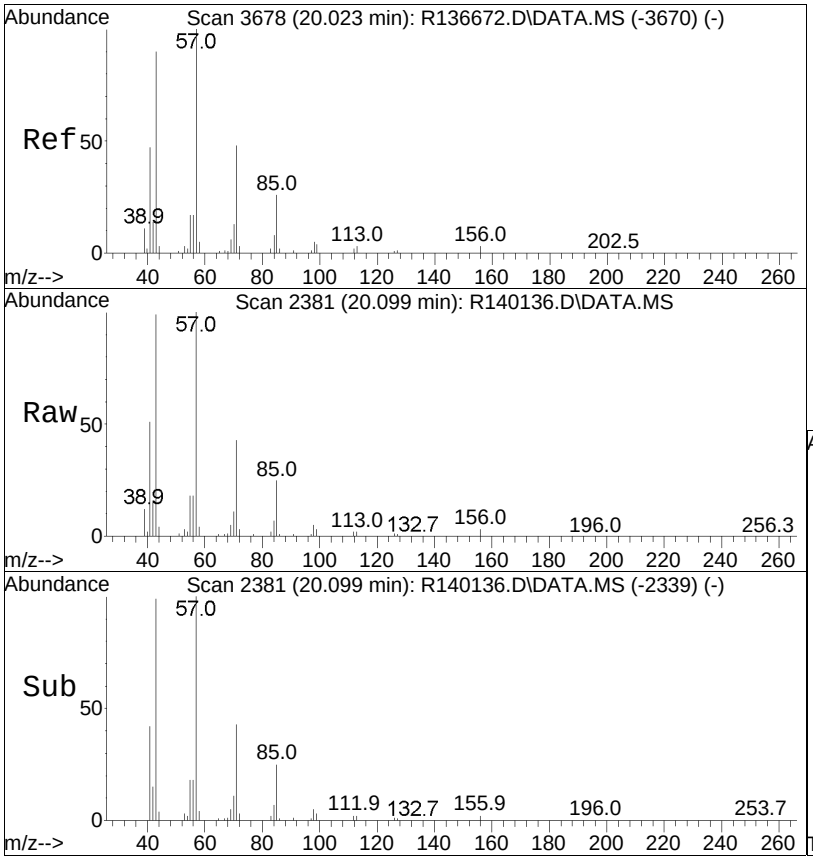



#111
1,2-dibromo-3-chloropropane
Concen: 8.69 ppbV
RT: 19.89 min Scan# 2338
Delta R.T. -0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 75 Resp: 92268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 157 | 120.4 | 103.8 | 155.6 |
| 39 | 86.5 | 67.6 | 101.4 |

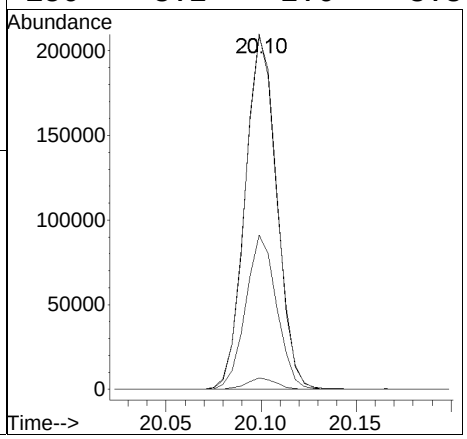


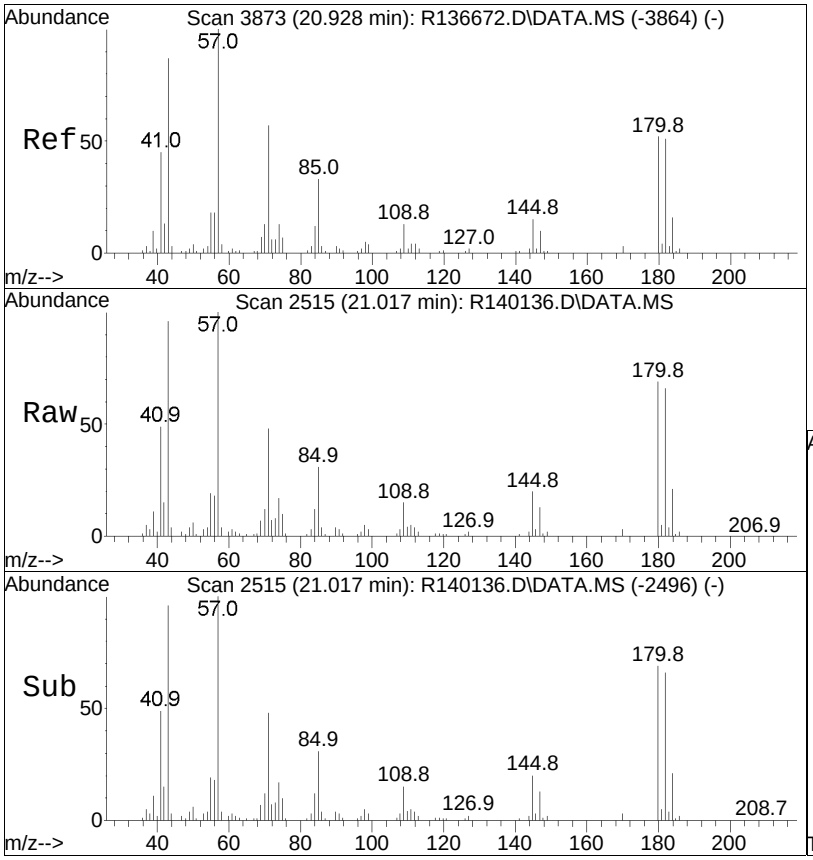



#112
undecane
Concen: 9.17 ppbV
RT: 20.10 min Scan# 2381
Delta R.T. -0.002 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 57 Resp: 241894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 99.5 | 79.0 | 118.6 |
| 71 | 43.4 | 36.1 | 54.1 |
| 156 | 3.2 | 2.6 | 3.8 |

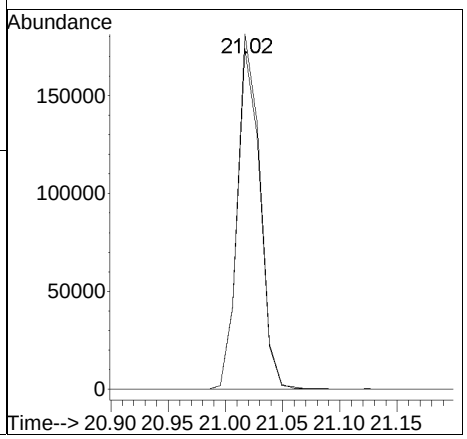


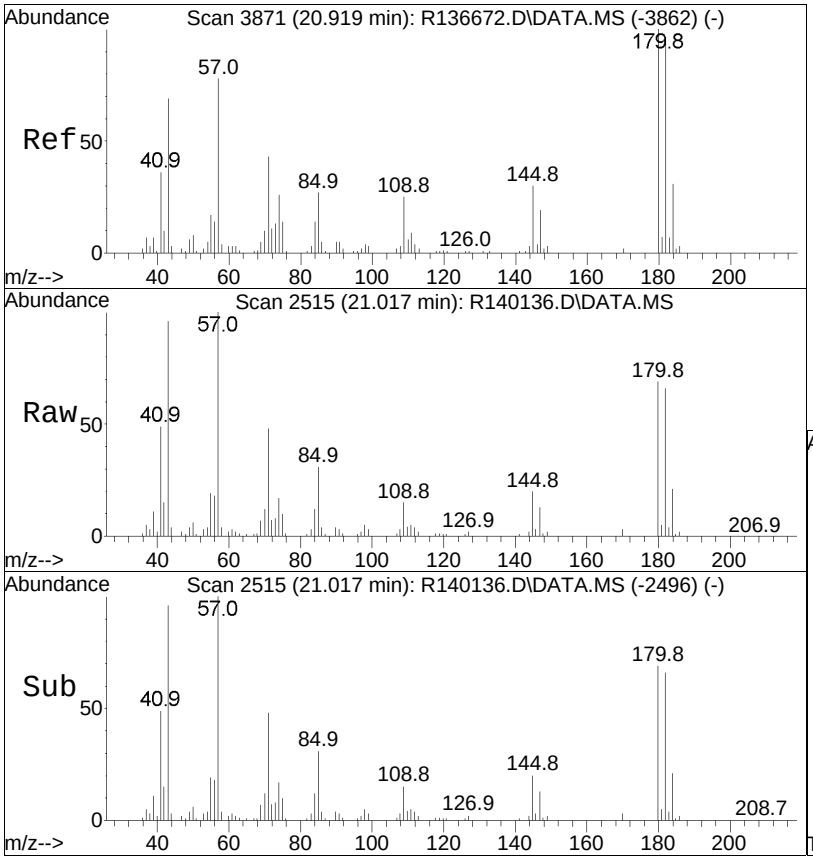



#114
dodecane
Concen: 9.60 ppbV
RT: 21.02 min Scan# 2515
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion: 57 Resp: 250335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 43 | 95.8 | 78.1 | 117.1 |

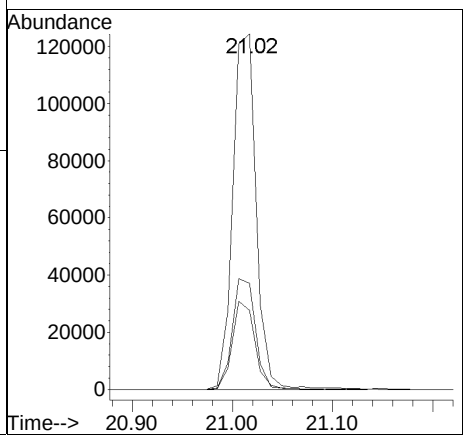


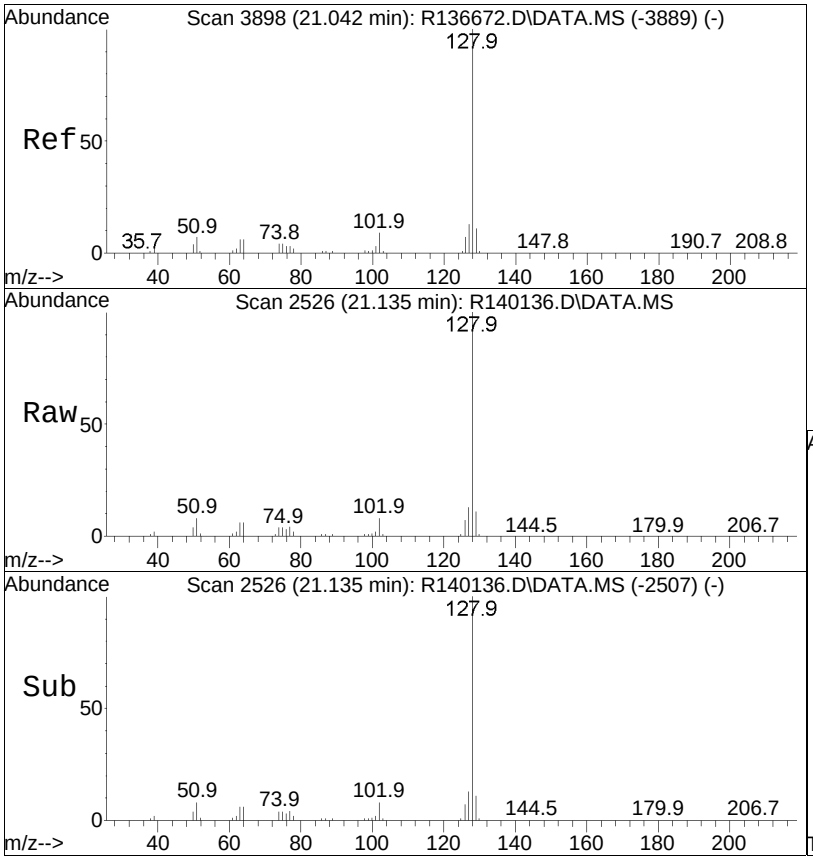



#115
1,2,4-trichlorobenzene
Concen: 9.93 ppbV
RT: 21.02 min Scan# 2515
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:180 Resp: 201737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 29.9 | 23.7 | 35.5 |
| 109 | 22.3 | 18.3 | 27.5 |

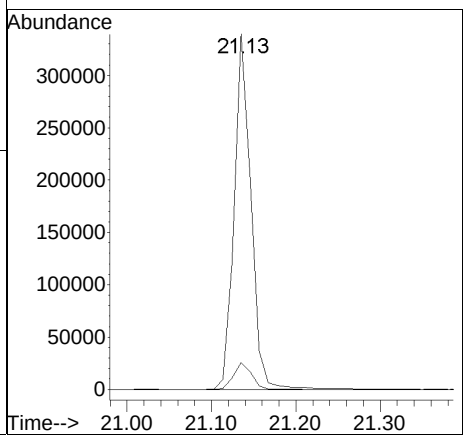


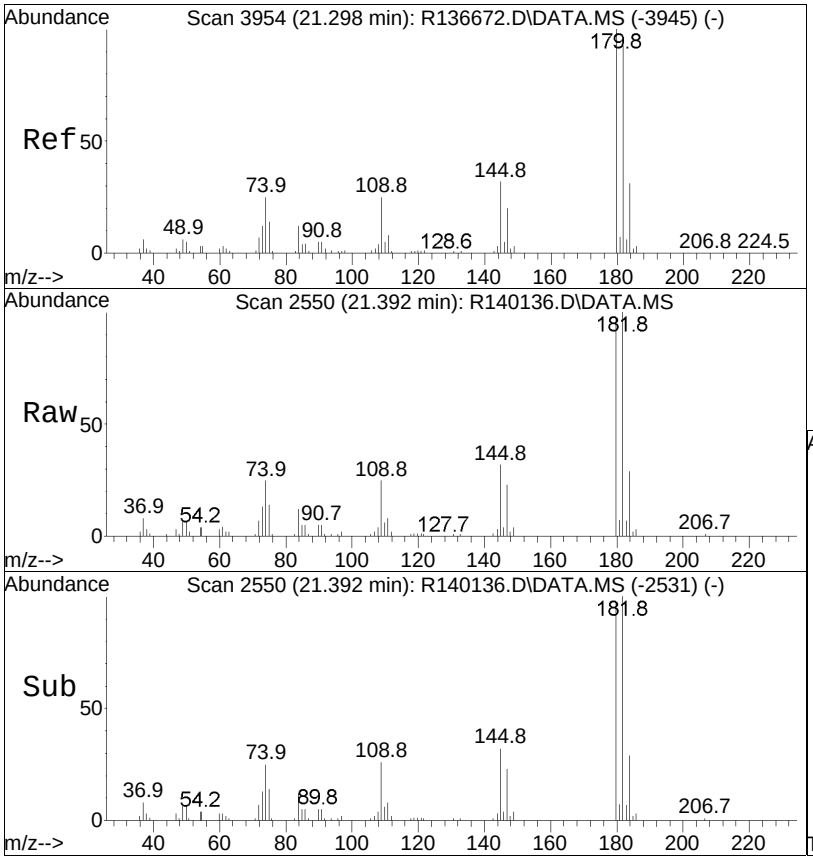



#116
naphthalene
Concen: 9.25 ppbV
RT: 21.13 min Scan# 2526
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:128 Resp: 470896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 102 | 7.6 | 6.5 | 9.7 |

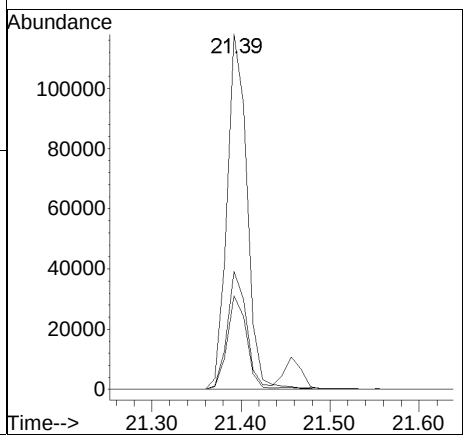


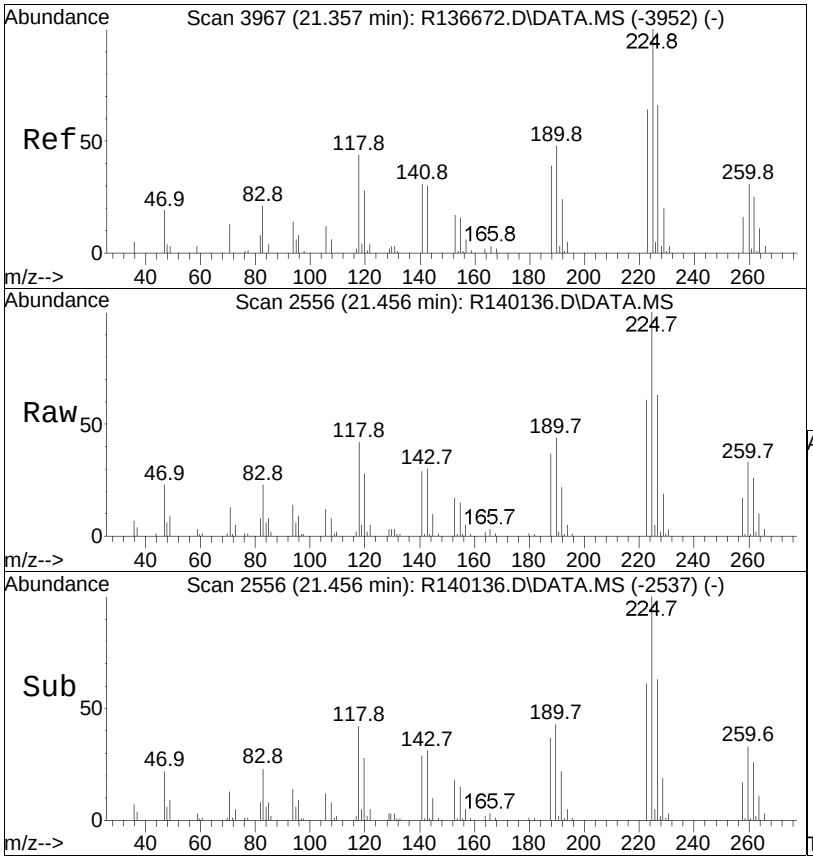



#117
1,2,3-trichlorobenzene
Concen: 9.74 ppbV
RT: 21.39 min Scan# 2550
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:180 Resp: 186100

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 145 | 33.2 | 26.2 | 39.2 |
| 109 | 26.4 | 19.0 | 28.4 |

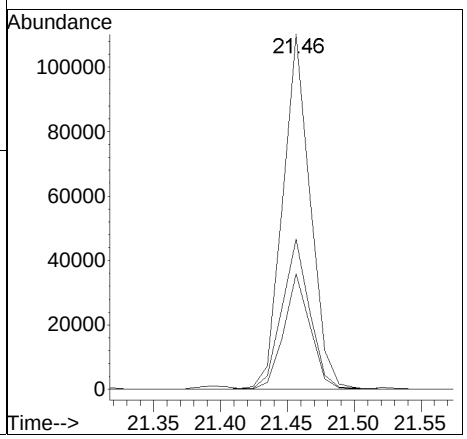





#119
hexachlorobutadiene
Concen: 10.32 ppbV
RT: 21.46 min Scan# 2556
Delta R.T. 0.003 min
Lab File: R140136.D
Acq: 11 Mar 2015 12:18 pm

Tgt Ion:225 Resp: 158760

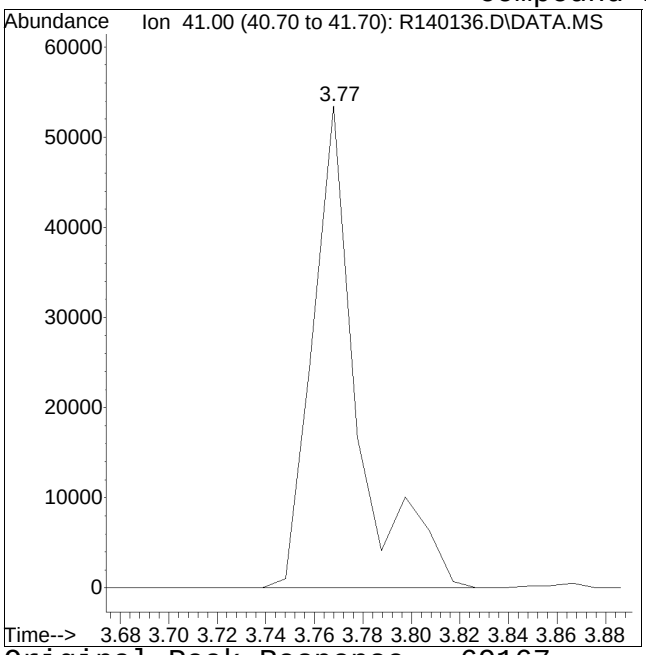
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 260 | 32.6 | 25.2 | 37.8 |
| 118 | 42.4 | 34.1 | 51.1 |



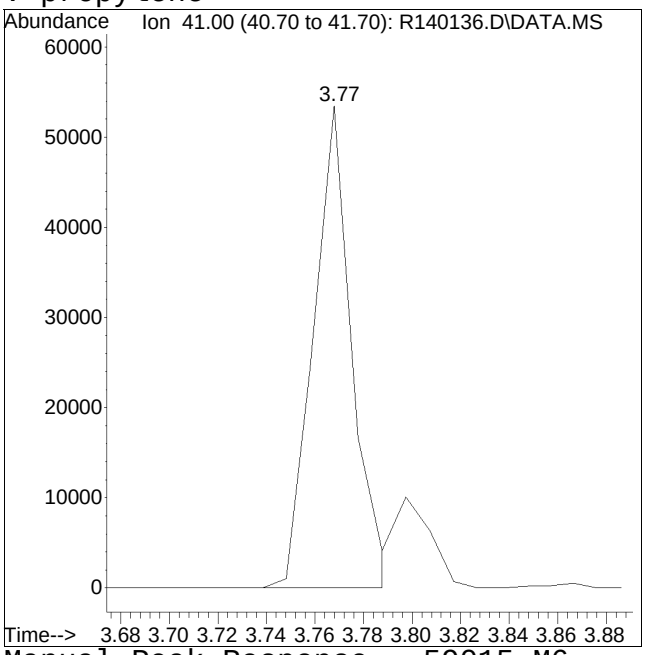
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-3,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #3: propylene




Original Peak Response = 69167



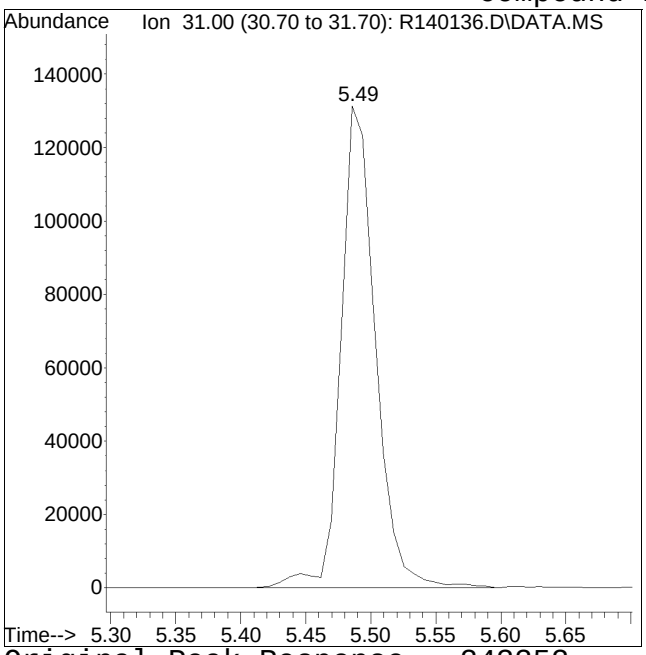

Manual Peak Response = 59015 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

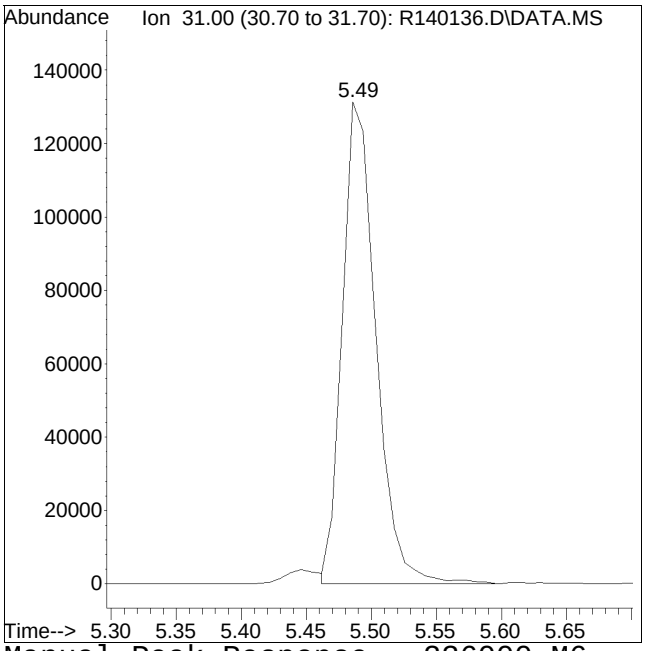
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-3,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #15: ethanol




Original Peak Response = 243352



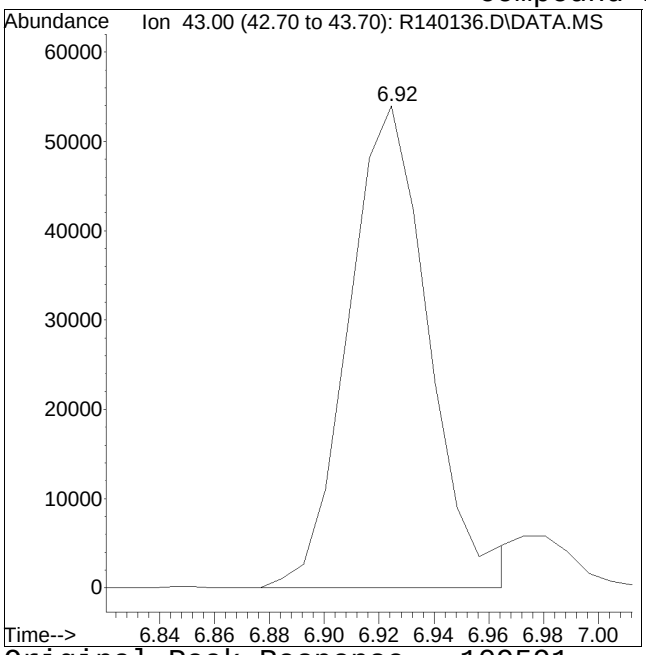

Manual Peak Response = 236000 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

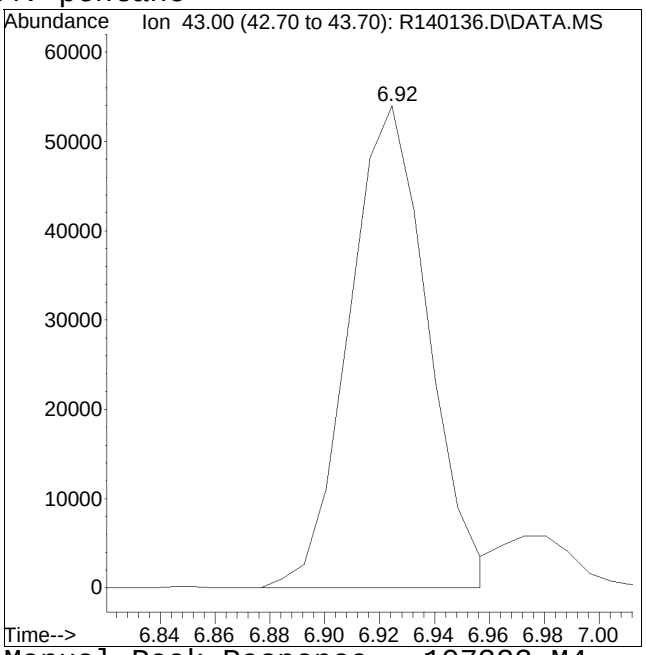
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-3,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #24: pentane




Original Peak Response = 109591



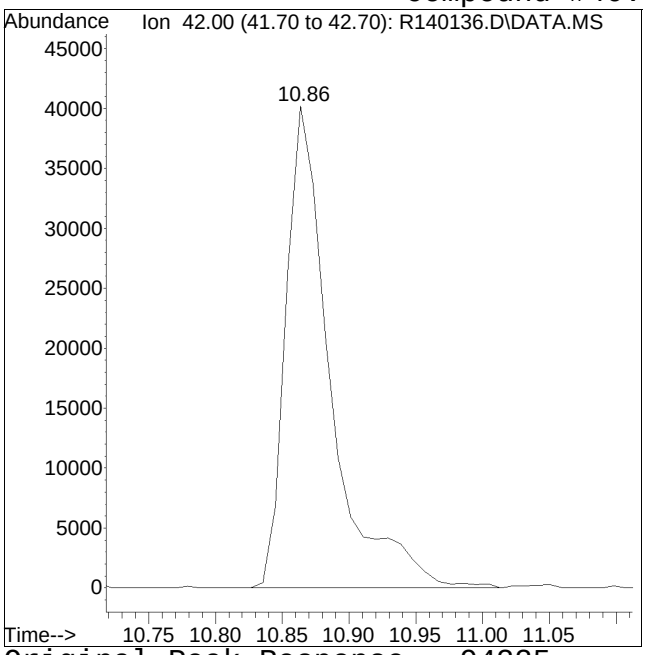

Manual Peak Response = 107323 M4

M4 = Poor automated baseline construction.

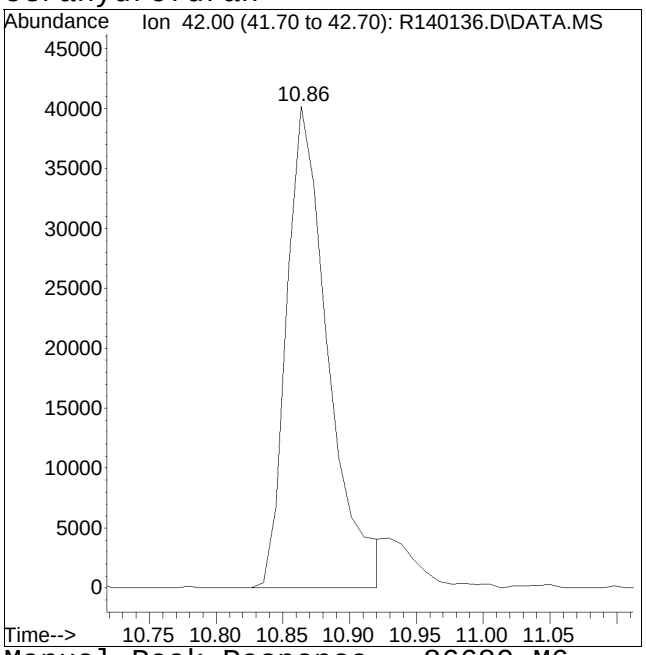
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R140136.D
Date Inj'd : 3/11/2015 12:18 pm
Sample : WG767577-3,3,250,250
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 3/11/2015 12:41 pm

Compound #40: Tetrahydrofuran




Original Peak Response = 94225



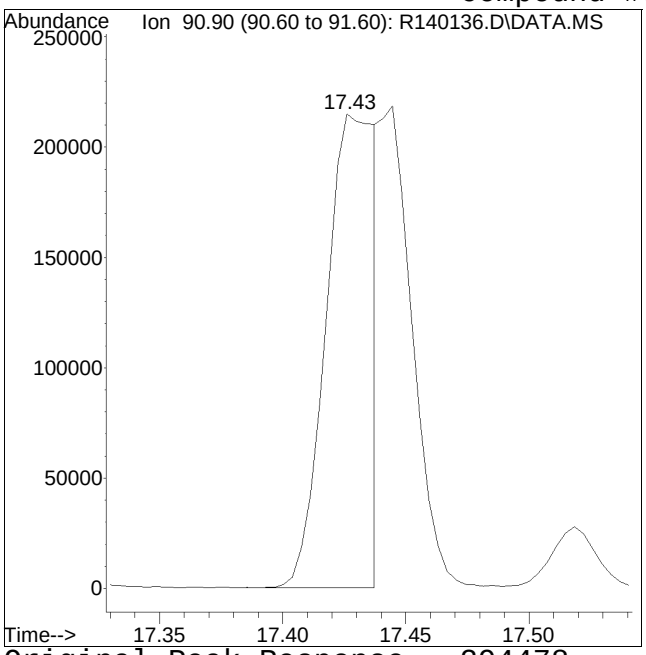

Manual Peak Response = 86680 M6

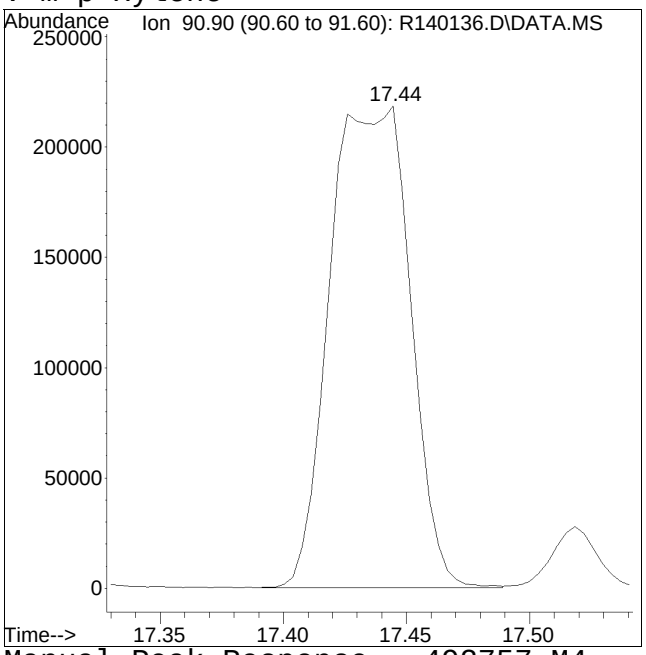
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-3,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #83: m+p-xylene



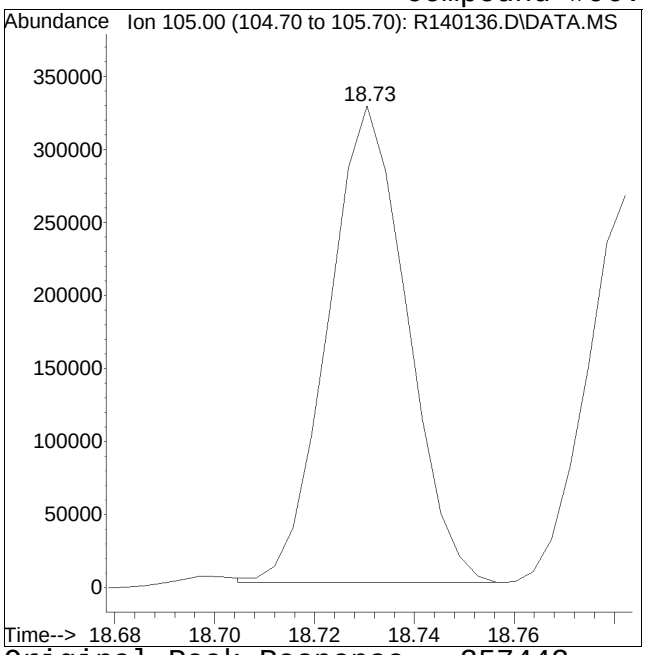




Original Peak Response = 294478 Manual Peak Response = 492757 M4
M4 = Poor automated baseline construction.

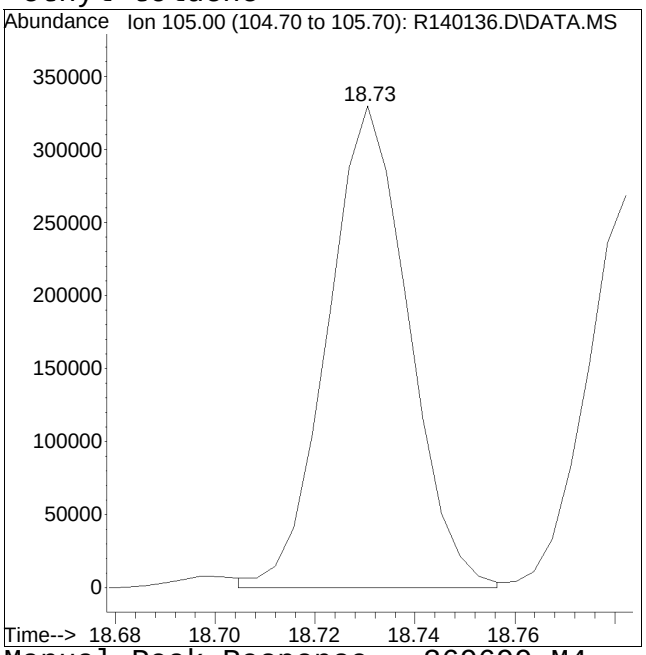
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140136.D Operator : AIRPIANO1:RY
Date Inj'd : 3/11/2015 12:18 pm Instrument : Air Piano 1
Sample : WG767577-3,3,250,250 Quant Date : 3/11/2015 12:41 pm

Compound #96: 4-ethyl toluene




Original Peak Response = 357442




Manual Peak Response = 369699 M4

M4 = Poor automated baseline construction.

# Duplicate Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140161.D
Acq On : 12 Mar 2015 9:18 am
Operator : AIRPIANO1:RY
Sample : WG767577-5,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 10:00:10 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150311T\R140136.D
Sub List : Geo_MCP2 - .

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) bromochloromethane | 10.22 | 49 | 97499 | 10.000 | ppbV | 0.00 |
| Standard Area = 111245 | | | Recovery | = | 87.64% | |
| 43) 1,4-difluorobenzene | 12.51 | 114 | 186312 | 10.000 | ppbV | 0.00 |
| Standard Area = 220800 | | | Recovery | = | 84.38% | |
| 67) chlorobenzene-D5 | 16.96 | 54 | 45991 | 10.000 | ppbV | 0.00 |
| Standard Area = 50129 | | | Recovery | = | 91.75% | |
| System Monitoring Compounds | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 3) propylene | 3.77 | 41 | 560 | 0.110 | ppbV # | 48 |
| 15) ethanol | 5.50 | 31 | 19865 | 4.099 | ppbV | 98 |
| 17) vinyl bromide | 0.00 | | 0 | N.D. | | |
| 19) acetone | 6.19 | 43 | 77424 | 7.870 | ppbV # | 98 |
| 22) isopropyl alcohol | 0.00 | | 0 | N.D. | d | |
| 29) 3-chloropropene | 7.69 | | 0 | N.D. | | |
| 30) carbon disulfide | 7.82 | 76 | 1769 | 0.103 | ppbV # | 1 |
| 35) vinyl acetate | 0.00 | | 0 | N.D. | d | |
| 36) 2-butanone | 9.52 | 43 | 6449 | 0.445 | ppbV # | 84 |
| 38) Ethyl Acetate | 0.00 | | 0 | N.D. | | |
| 40) Tetrahydrofuran | 0.00 | | 0 | N.D. | d | |
| 44) hexane | 10.31 | | 0 | N.D. | | |
| 53) cyclohexane | 0.00 | | 0 | N.D. | d | |
| 58) 1,4-dioxane | 0.00 | | 0 | N.D. | | |
| 60) 2,2,4-trimethylpentane | 0.00 | | 0 | N.D. | | |
| 62) heptane | 13.66 | | 0 | N.D. | | |
| 64) 4-methyl-2-pentanone | 14.40 | | 0 | N.D. | | |
| 72) 2-hexanone | 0.00 | | 0 | N.D. | d | |
| 96) 4-ethyl toluene | 18.73 | 105 | 20483M3 | 0.532 | ppbV | |
| 101) Benzyl Chloride | 0.00 | | 0 | N.D. | d | |

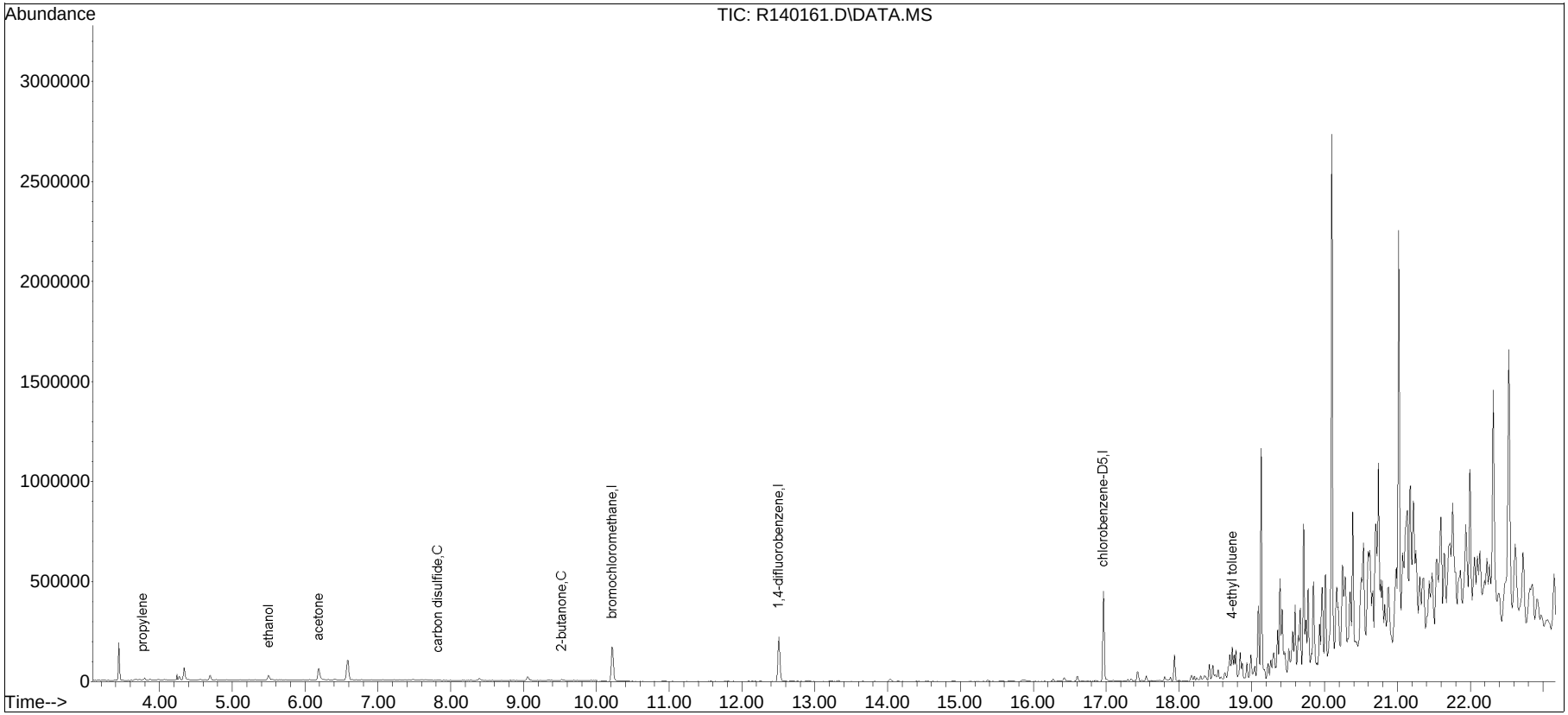
(#) = qualifier out of range (m) = manual integration (+) = signals summed

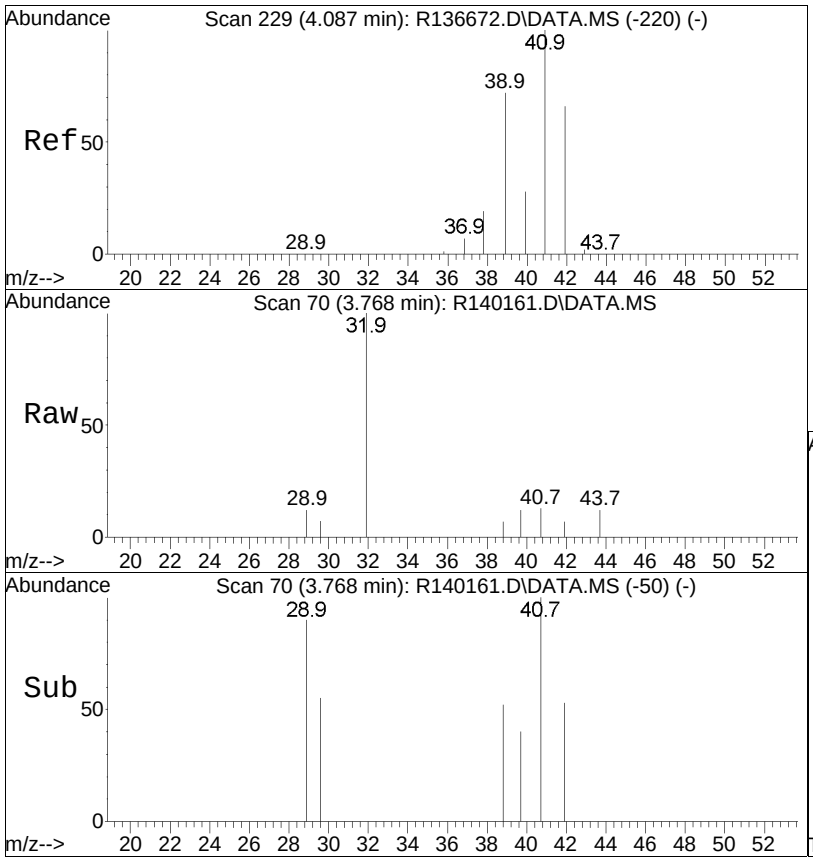
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140161.D
Acq On : 12 Mar 2015 9:18 am
Operator : AIRPIANO1:RY
Sample : WG767577-5,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 10:00:10 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015
Response via : Initial Calibration

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150311T\R140136.D

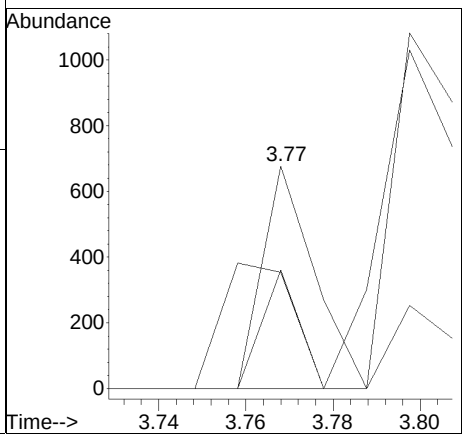


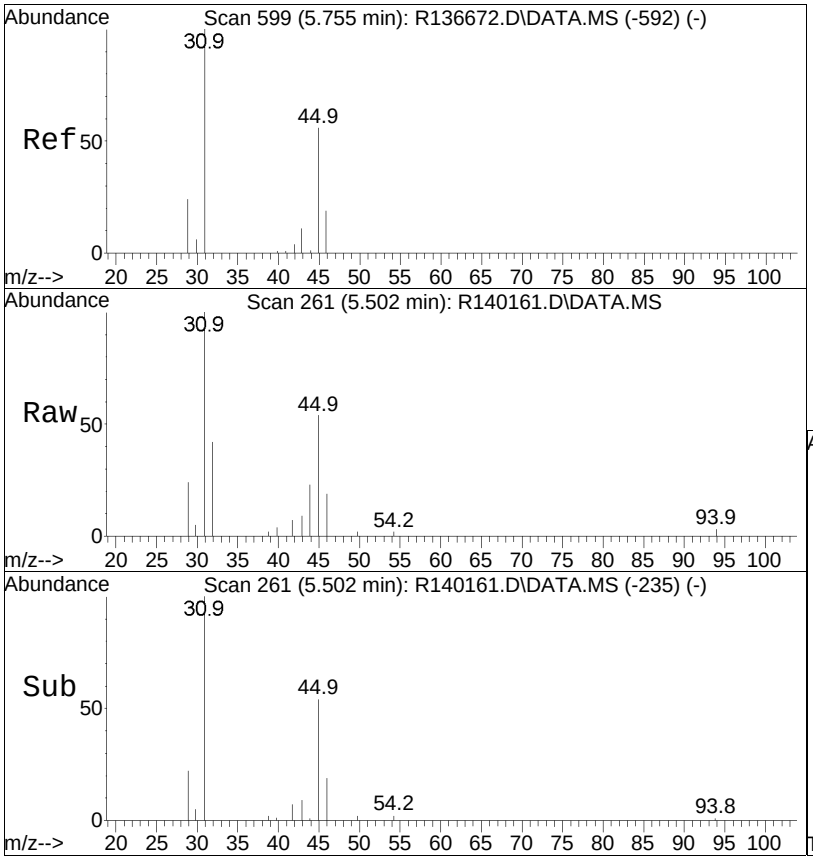



#3
propylene
Concen: 0.11 ppbV
RT: 3.77 min Scan# 70
Delta R.T. 0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 41 Resp: 560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 53.3 | 52.7 | 79.1 |
| 39 | 146.1 | 59.6 | 89.4# |

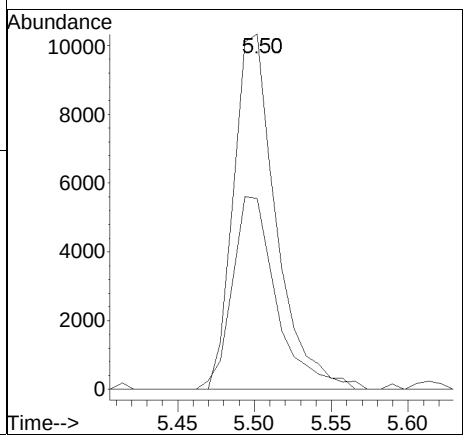


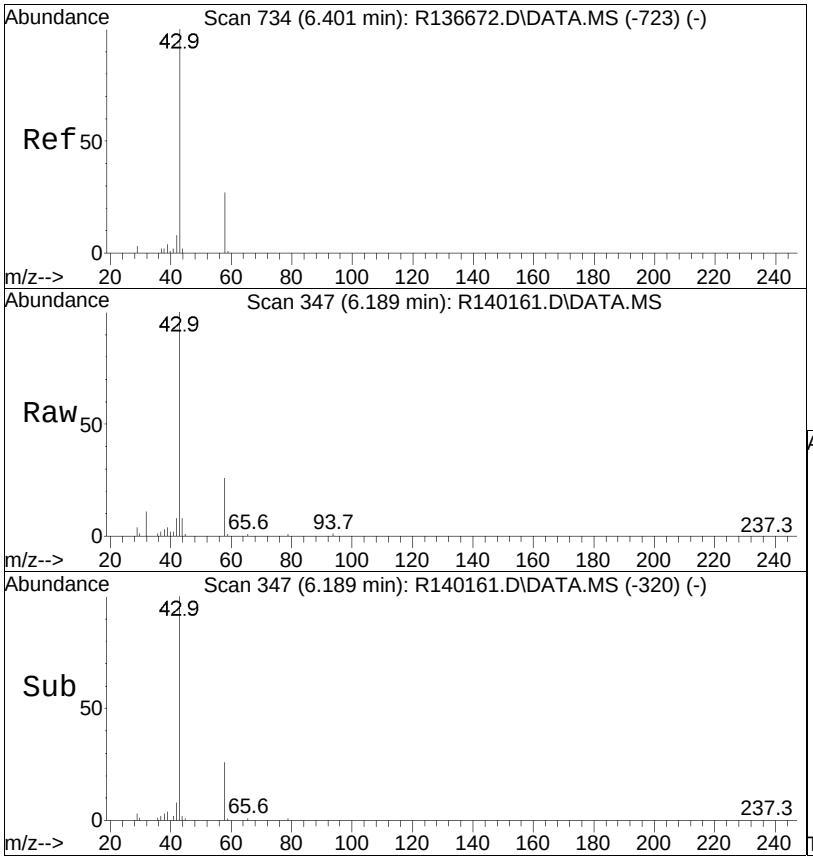



#15
ethanol
Concen: 4.10 ppbV
RT: 5.50 min Scan# 261
Delta R.T. 0.008 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 31 Resp: 19865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 31 | 100 | | |
| 45 | 53.7 | 42.0 | 63.0 |

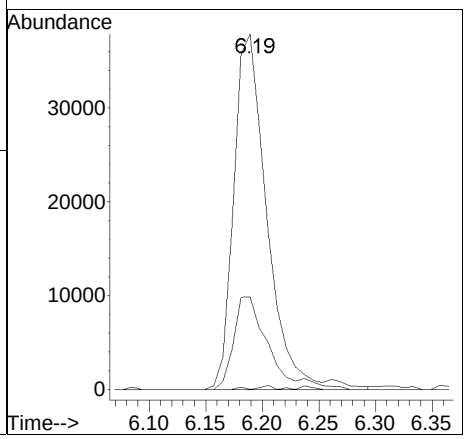


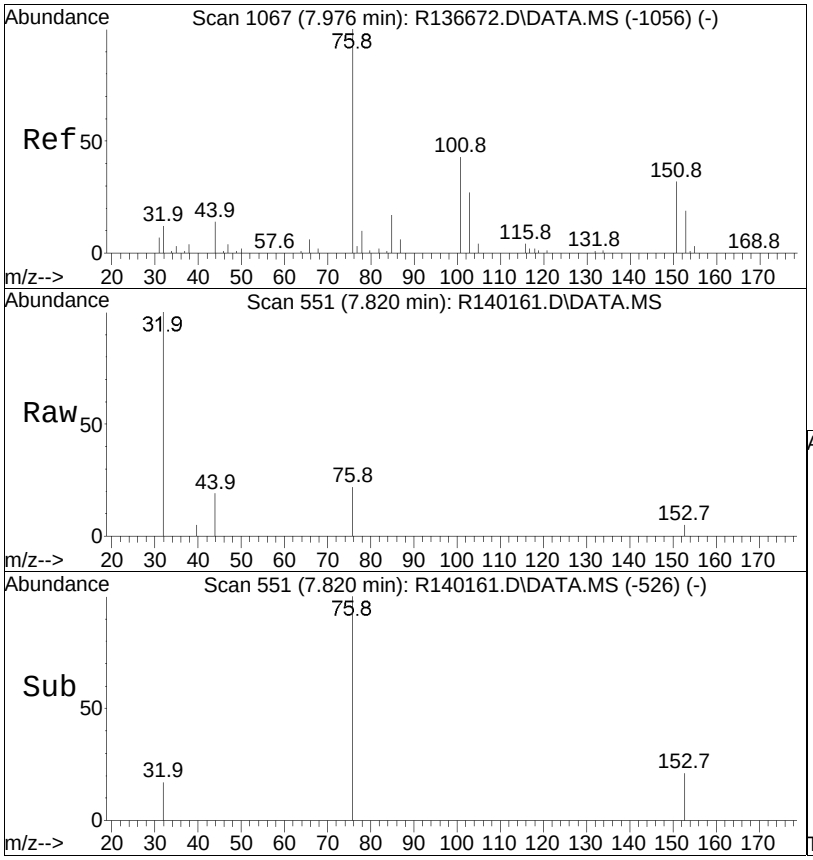



#19
acetone
Concen: 7.87 ppbV
RT: 6.19 min Scan# 347
Delta R.T. 0.016 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 43 Resp: 77424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.1 | 19.9 | 29.9 |
| 57 | 0.0 | 0.6 | 0.8# |

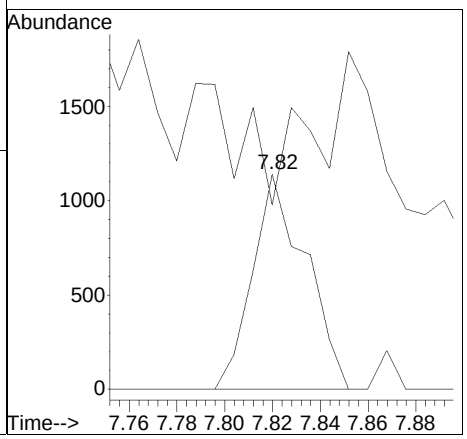


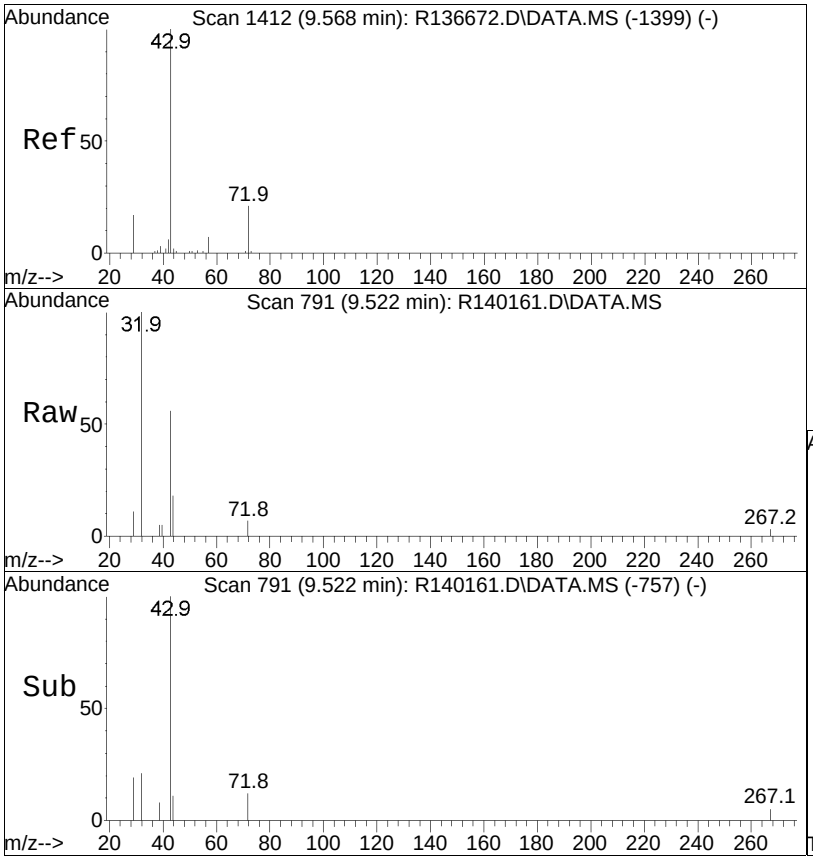



#30
carbon disulfide
Concen: 0.10 ppbV
RT: 7.82 min Scan# 551
Delta R.T. 0.000 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 76 Resp: 1769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 85.9 | 14.3 | 21.5# |

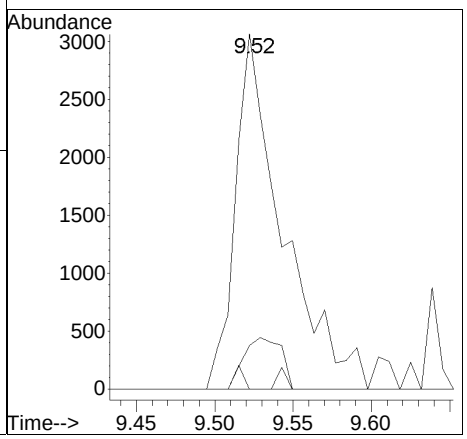


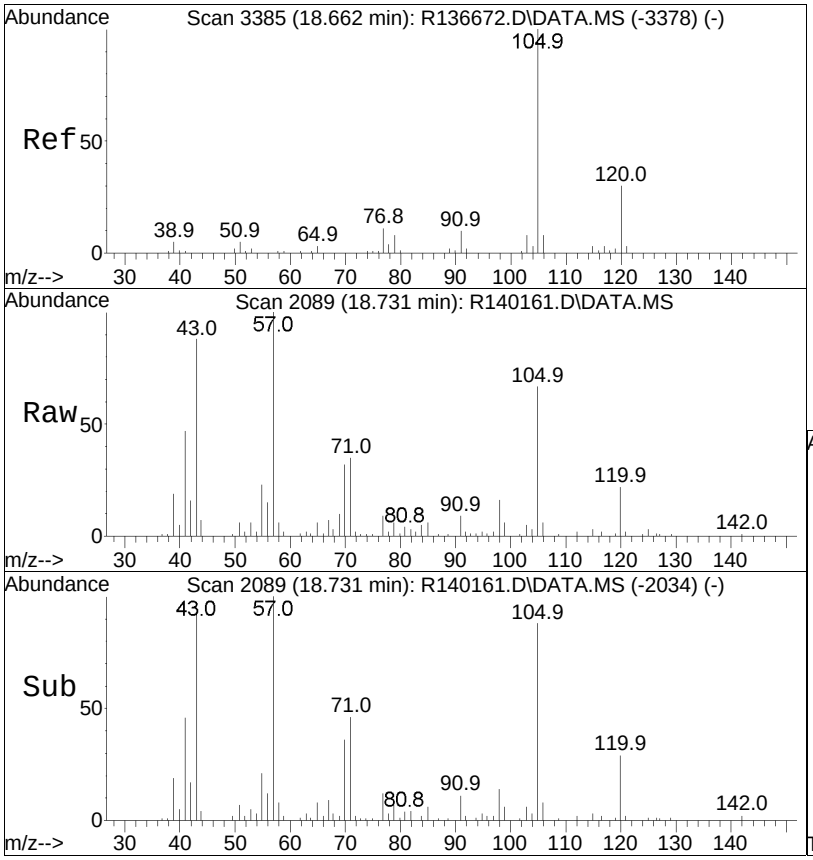



#36
2-butanone
Concen: 0.45 ppbV
RT: 9.52 min Scan# 791
Delta R.T. 0.034 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion: 43 Resp: 6449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 12.3 | 15.6 | 23.4# |
| 57 | 0.0 | 4.6 | 7.0# |

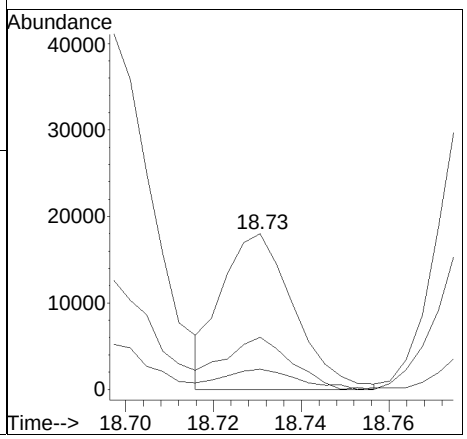





#96
4-ethyl toluene
Concen: 0.53 ppbV m
RT: 18.73 min Scan# 2089
Delta R.T. 0.002 min
Lab File: R140161.D
Acq: 12 Mar 2015 9:18 am

Tgt Ion:105 Resp: 20483

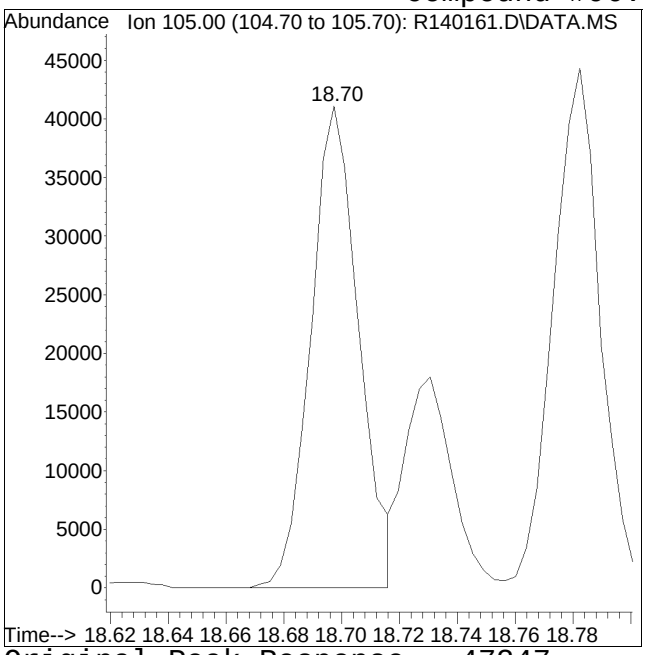
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 33.5 | 25.8 | 38.8 |
| 91 | 13.0 | 8.6 | 13.0# |

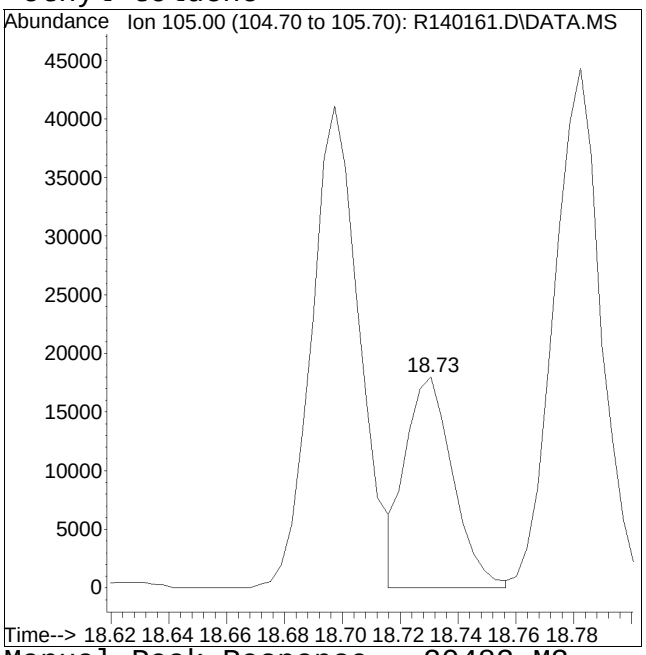


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150311\ Method : TALL150102.M
Data File : R140161.D Operator : AIRPIANO1:RY
Date Inj'd : 3/12/2015 9:18 am Instrument : Air Piano 1
Sample : WG767577-5,3,250,250 Quant Date : 3/12/2015 9:56 am

Compound #96: 4-ethyl toluene




Original Peak Response = 47247 Manual Peak Response = 20483 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

# Alpha Report

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1504425 |
| Client: | FSL Associates<br>358 Chesnut Hill Ave.<br>Brighton, MA 02135 |
| ATTN: | Bruce Hoskins |
| Phone: | (617) 232-0001 |
| Project Name: | CUMMINGS BEVERLY |
| Project Number: | CUMMINGS BEVERLY |
| Report Date: | 03/25/15 |

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Alpha Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L1504425-01 | OUTDOOR CONTROL | AIR | 181 ELLIOT STREET | 03/08/15 13:31 | 03/10/15 |
| L1504425-02 | S-157-J.1 | AIR | 181 ELLIOT STREET | 03/08/15 13:23 | 03/10/15 |
| L1504425-03 | S-157-J.2 | AIR | 181 ELLIOT STREET | 03/08/15 13:22 | 03/10/15 |
| L1504425-04 | S-157-J | AIR | 181 ELLIOT STREET | 03/08/15 13:24 | 03/10/15 |
| L1504425-05 | DUPLICATE | AIR | 181 ELLIOT STREET | 03/08/15 13:24 | 03/10/15 |
| L1504425-06 | BLANK | AIR | 181 ELLIOT STREET | 03/06/15 00:00 | 03/10/15 |
| L1504425-07 | SG-1 | SOIL_VAPOR | 181 ELLIOT STREET | 03/06/15 19:43 | 03/10/15 |
| L1504425-08 | SG-2 | SOIL_VAPOR | 181 ELLIOT STREET | 03/06/15 18:51 | 03/10/15 |
| L1504425-09 | SG-3 | SOIL_VAPOR | 181 ELLIOT STREET | 03/06/15 19:31 | 03/10/15 |
| L1504425-10 | SG-4 | SOIL_VAPOR | 181 ELLIOT STREET | 03/06/15 20:02 | 03/10/15 |
| L1504425-11 | SG BLANK | SOIL_VAPOR | 181 ELLIOT STREET | 03/06/15 00:00 | 03/10/15 |

**Project Name:** CUMMINGS BEVERLY **Lab Number:** L1504425

**Project Number:** CUMMINGS BEVERLY **Report Date:** 03/25/15

## MADEP MCP Response Action Analytical Report Certification

**This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.**

| **An affirmative response to questions A through F is required for "Presumptive Certainty" status** | | |
|---|---|---|
| A | Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? | YES |
| B | Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? | YES |
| C | Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? | YES |
| D | Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?" | YES |
| E a. | VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). | YES |
| E b. | APH and TO-15 Methods only: Was the complete analyte list reported for each method? | YES |
| F | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? | YES |

| **A response to questions G, H and I is required for "Presumptive Certainty" status** | | |
|---|---|---|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | NO |
| H | Were all QC performance standards specified in the CAM protocol(s) achieved? | YES |
| I | Were results reported for the complete analyte list specified in the selected CAM protocol(s)? | YES |

**For any questions answered "No", please refer to the case narrative section on the following page(s).**

**Please note that sample matrix information is located in the Sample Results section of this report.**

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

| | | | |
|---|---|---|---|
| **Project Name:** | CUMMINGS BEVERLY | **Lab Number:** | L1504425 |
| **Project Number:** | CUMMINGS BEVERLY | **Report Date:** | 03/25/15 |

**Case Narrative (continued)**

REISSUE

Report Submission

This report replaces the report previously issued on March 17, 2015. This report has been reissued to report 1,1,1,2-Tetrachloroethane.

Volatile Organics in Air

Canisters were released from the laboratory on February 24, 2015. The canister certification results are provided as an addendum.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Samples L1504425-07 through -09 and Laboratory WG767577-5 Duplicate: The presence of Isopropyl Alcohol could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

Sample L1504425-10 results for Acetone should be considered estimated due to co-elution with a non-target peak.

MCP Related Narratives

Petroleum Hydrocarbons in Air

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

Samples L1504425-01 through -11: All significant concentrations of non-petroleum VOCs detected in the TO-15 analysis were subtracted from the corresponding hydrocarbon ranges.

| | | | |
|---|---|---|---|
| **Project Name:** | CUMMINGS BEVERLY | **Lab Number:** | L1504425 |
| **Project Number:** | CUMMINGS BEVERLY | **Report Date:** | 03/25/15 |

**Case Narrative (continued)**

SamplesL1504425-02, -03, -04, -05, -08, -09, and -10: Unknown siloxanes are present in the C5-C8 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C5-C8 range result since they are not petroleum hydrocarbons.

Samples L1504425-02, -03, -04, -05, -08, -09, and -10: Unknown siloxanes are present in the C9-C12 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C9-C12 range result since they are not petroleum hydrocarbons.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 03/25/15

# AIR

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-01
Client ID: OUTDOOR CONTROL
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 20:51
Analyst: RY

Date Collected: 03/08/15 13:31
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.286 | 0.500 | 0.093 | 0.492 | 0.861 | 0.160 | J | 1 |
| Ethanol | 2.96 | 2.50 | 0.542 | 5.58 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 2.34 | 1.00 | 0.269 | 5.56 | 2.38 | 0.639 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.147 | 0.500 | 0.052 | 0.434 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | 0.071 | 0.200 | 0.052 | 0.250 | 0.705 | 0.183 | J | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-01 | Date Collected: | 03/08/15 13:31 |
| Client ID: | OUTDOOR CONTROL | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 83 | | 60-140 |
| Bromochloromethane | 84 | | 60-140 |
| chlorobenzene-d5 | 85 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-01
Client ID: OUTDOOR CONTROL
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 20:51
Analyst: RY

Date Collected: 03/08/15 13:31
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.384 | 0.200 | 0.006 | 1.90 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.530 | 0.200 | 0.048 | 1.09 | 0.413 | 0.099 | | 1 |
| Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | 0.017 | 0.020 | 0.006 | 0.038 | 0.044 | 0.013 | J | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | 0.211 | 0.050 | 0.008 | 1.19 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.069 | 0.050 | 0.006 | 0.529 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | 0.015 | 0.020 | 0.006 | 0.073 | 0.098 | 0.029 | J | 1 |
| 1,2-Dichloroethane | 0.015 | 0.020 | 0.008 | 0.061 | 0.081 | 0.032 | J | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | 0.220 | 0.100 | 0.021 | 0.703 | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | 0.069 | 0.020 | 0.008 | 0.434 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-01
Client ID: OUTDOOR CONTROL
Sample Location: 181 ELLIOT STREET

Date Collected: 03/08/15 13:31
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.181 | 0.050 | 0.025 | 0.682 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.012 | 0.020 | 0.008 | 0.081 | 0.136 | 0.054 | J | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.028 | 0.020 | 0.007 | 0.122 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.072 | 0.040 | 0.009 | 0.313 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.027 | 0.020 | 0.008 | 0.117 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.005 | 0.020 | 0.005 | 0.025 | 0.098 | 0.025 | J | 1 |
| 1,2,4-Trimethylbenzene | 0.017 | 0.020 | 0.007 | 0.084 | 0.098 | 0.034 | J | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 84 | | 60-140 |
| bromochloromethane | 85 | | 60-140 |
| chlorobenzene-d5 | 89 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-02
Client ID: S-157-J.1
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 21:23
Analyst: RY

Date Collected: 03/08/15 13:23
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.233 | 0.500 | 0.093 | 0.401 | 0.861 | 0.160 | J | 1 |
| Ethanol | 37.2 | 2.50 | 0.542 | 70.1 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 10.6 | 1.00 | 0.269 | 25.2 | 2.38 | 0.639 | | 1 |
| Isopropanol | 30.6 | 0.500 | 0.114 | 75.2 | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.380 | 0.500 | 0.052 | 1.12 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | 0.130 | 0.200 | 0.052 | 0.458 | 0.705 | 0.183 | J | 1 |
| Cyclohexane | 0.240 | 0.200 | 0.066 | 0.826 | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | 0.110 | 0.200 | 0.055 | 0.451 | 0.820 | 0.227 | J | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | 0.763 | 0.200 | 0.078 | 3.75 | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-02 | Date Collected: | 03/08/15 13:23 |
| Client ID: | S-157-J.1 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 85 | | 60-140 |
| Bromochloromethane | 89 | | 60-140 |
| chlorobenzene-d5 | 90 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-02
Client ID: S-157-J.1
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 21:23
Analyst: RY

Date Collected: 03/08/15 13:23
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.327 | 0.200 | 0.006 | 1.62 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.517 | 0.200 | 0.048 | 1.07 | 0.413 | 0.099 | | 1 |
| Freon-114 | 0.013 | 0.050 | 0.005 | 0.091 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | 0.029 | 0.020 | 0.006 | 0.064 | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | 0.206 | 0.050 | 0.008 | 1.16 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | 0.598 | 0.500 | 0.250 | 2.08 | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.066 | 0.050 | 0.006 | 0.506 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | 0.026 | 0.020 | 0.007 | 0.103 | 0.079 | 0.026 | | 1 |
| Chloroform | 0.021 | 0.020 | 0.006 | 0.103 | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | 0.016 | 0.020 | 0.008 | 0.065 | 0.081 | 0.032 | J | 1 |
| 1,1,1-Trichloroethane | 0.007 | 0.020 | 0.007 | 0.038 | 0.109 | 0.038 | J | 1 |
| Benzene | 0.255 | 0.100 | 0.021 | 0.815 | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | 0.069 | 0.020 | 0.008 | 0.434 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | 0.009 | 0.020 | 0.006 | 0.042 | 0.092 | 0.028 | J | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.013 | 0.020 | 0.007 | 0.070 | 0.107 | 0.038 | J | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-02
Client ID: S-157-J.1
Sample Location: 181 ELLIOT STREET

Date Collected: 03/08/15 13:23
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.597 | 0.050 | 0.025 | 2.25 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.020 | 0.020 | 0.008 | 0.136 | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.105 | 0.020 | 0.007 | 0.456 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.316 | 0.040 | 0.009 | 1.37 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | 0.031 | 0.020 | 0.008 | 0.132 | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.173 | 0.020 | 0.008 | 0.751 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.761 | 0.020 | 0.005 | 3.74 | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | 3.07 | 0.020 | 0.007 | 15.1 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | 0.035 | 0.050 | 0.012 | 0.184 | 0.262 | 0.063 | J | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 84 | | 60-140 |
| bromochloromethane | 89 | | 60-140 |
| chlorobenzene-d5 | 92 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-03
Client ID: S-157-J.2
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 21:55
Analyst: RY

Date Collected: 03/08/15 13:22
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.310 | 0.500 | 0.093 | 0.534 | 0.861 | 0.160 | J | 1 |
| Ethanol | 38.7 | 2.50 | 0.542 | 72.9 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 11.8 | 1.00 | 0.269 | 28.0 | 2.38 | 0.639 | | 1 |
| Isopropanol | 33.4 | 0.500 | 0.114 | 82.1 | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.419 | 0.500 | 0.052 | 1.24 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | 0.137 | 0.200 | 0.052 | 0.483 | 0.705 | 0.183 | J | 1 |
| Cyclohexane | 0.110 | 0.200 | 0.066 | 0.379 | 0.688 | 0.226 | J | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | 0.147 | 0.200 | 0.055 | 0.602 | 0.820 | 0.227 | J | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | 0.709 | 0.200 | 0.078 | 3.49 | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-03 | Date Collected: | 03/08/15 13:22 |
| Client ID: | S-157-J.2 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 82 | | 60-140 |
| Bromochloromethane | 85 | | 60-140 |
| chlorobenzene-d5 | 94 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-03
Client ID: S-157-J.2
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 21:55
Analyst: RY

Date Collected: 03/08/15 13:22
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.372 | 0.200 | 0.006 | 1.84 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.543 | 0.200 | 0.048 | 1.12 | 0.413 | 0.099 | | 1 |
| Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | 0.032 | 0.020 | 0.006 | 0.071 | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | 0.213 | 0.050 | 0.008 | 1.20 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | 0.622 | 0.500 | 0.250 | 2.16 | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.069 | 0.050 | 0.006 | 0.529 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | 0.006 | 0.020 | 0.006 | 0.024 | 0.079 | 0.024 | J | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | 0.027 | 0.020 | 0.007 | 0.107 | 0.079 | 0.026 | | 1 |
| Chloroform | 0.022 | 0.020 | 0.006 | 0.107 | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | 0.019 | 0.020 | 0.008 | 0.077 | 0.081 | 0.032 | J | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | 0.281 | 0.100 | 0.021 | 0.898 | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | 0.070 | 0.020 | 0.008 | 0.440 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.020 | 0.020 | 0.007 | 0.107 | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-03
Client ID: S-157-J.2
Sample Location: 181 ELLIOT STREET

Date Collected: 03/08/15 13:22
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.607 | 0.050 | 0.025 | 2.29 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.023 | 0.020 | 0.008 | 0.156 | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.101 | 0.020 | 0.007 | 0.439 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.308 | 0.040 | 0.009 | 1.34 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | 0.030 | 0.020 | 0.008 | 0.128 | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.166 | 0.020 | 0.008 | 0.721 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.804 | 0.020 | 0.005 | 3.95 | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | 2.97 | 0.020 | 0.007 | 14.6 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | 0.034 | 0.050 | 0.012 | 0.178 | 0.262 | 0.063 | J | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 83 | | 60-140 |
| bromochloromethane | 87 | | 60-140 |
| chlorobenzene-d5 | 93 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-04
Client ID: S-157-J
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 22:27
Analyst: RY

Date Collected: 03/08/15 13:24
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.292 | 0.500 | 0.093 | 0.503 | 0.861 | 0.160 | J | 1 |
| Ethanol | 54.0 | 2.50 | 0.542 | 102 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 13.9 | 1.00 | 0.269 | 33.0 | 2.38 | 0.639 | | 1 |
| Isopropanol | 31.9 | 0.500 | 0.114 | 78.4 | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.532 | 0.500 | 0.052 | 1.57 | 1.47 | 0.154 | | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | 0.243 | 0.200 | 0.052 | 0.856 | 0.705 | 0.183 | | 1 |
| Cyclohexane | 7.26 | 0.200 | 0.066 | 25.0 | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | 0.112 | 0.200 | 0.055 | 0.459 | 0.820 | 0.227 | J | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | 0.745 | 0.200 | 0.078 | 3.66 | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-04 | Date Collected: | 03/08/15 13:24 |
| Client ID: | S-157-J | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 85 | | 60-140 |
| Bromochloromethane | 88 | | 60-140 |
| chlorobenzene-d5 | 89 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-04
Client ID: S-157-J
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 22:27
Analyst: RY

Date Collected: 03/08/15 13:24
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.354 | 0.200 | 0.006 | 1.75 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.531 | 0.200 | 0.048 | 1.10 | 0.413 | 0.099 | | 1 |
| Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | 0.026 | 0.020 | 0.006 | 0.058 | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | 0.214 | 0.050 | 0.008 | 1.20 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | 4.67 | 0.500 | 0.250 | 16.2 | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.081 | 0.050 | 0.006 | 0.621 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | 0.027 | 0.020 | 0.007 | 0.107 | 0.079 | 0.026 | | 1 |
| Chloroform | 0.024 | 0.020 | 0.006 | 0.117 | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | 0.019 | 0.020 | 0.008 | 0.077 | 0.081 | 0.032 | J | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | 0.259 | 0.100 | 0.021 | 0.827 | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | 0.069 | 0.020 | 0.008 | 0.434 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.008 | 0.020 | 0.007 | 0.043 | 0.107 | 0.038 | J | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-04
Client ID: S-157-J
Sample Location: 181 ELLIOT STREET
Date Collected: 03/08/15 13:24
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.845 | 0.050 | 0.025 | 3.18 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.028 | 0.020 | 0.008 | 0.190 | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.114 | 0.020 | 0.007 | 0.495 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.353 | 0.040 | 0.009 | 1.53 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | 0.040 | 0.020 | 0.008 | 0.170 | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.181 | 0.020 | 0.008 | 0.786 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.821 | 0.020 | 0.005 | 4.04 | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | 3.07 | 0.020 | 0.007 | 15.1 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | 0.033 | 0.050 | 0.012 | 0.173 | 0.262 | 0.063 | J | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 85 | | 60-140 |
| bromochloromethane | 89 | | 60-140 |
| chlorobenzene-d5 | 91 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-05
Client ID: DUPLICATE
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 22:59
Analyst: RY

Date Collected: 03/08/15 13:24
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.302 | 0.500 | 0.093 | 0.520 | 0.861 | 0.160 | J | 1 |
| Ethanol | 44.8 | 2.50 | 0.542 | 84.4 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 13.2 | 1.00 | 0.269 | 31.4 | 2.38 | 0.639 | | 1 |
| Isopropanol | 37.3 | 0.500 | 0.114 | 91.7 | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.400 | 0.500 | 0.052 | 1.18 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | 0.089 | 0.200 | 0.052 | 0.314 | 0.705 | 0.183 | J | 1 |
| Cyclohexane | 0.097 | 0.200 | 0.066 | 0.334 | 0.688 | 0.226 | J | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | 0.098 | 0.200 | 0.055 | 0.402 | 0.820 | 0.227 | J | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | 0.804 | 0.200 | 0.078 | 3.95 | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-05 | Date Collected: | 03/08/15 13:24 |
| Client ID: | DUPLICATE | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 91 | | 60-140 |
| Bromochloromethane | 83 | | 60-140 |
| chlorobenzene-d5 | 92 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-05
Client ID: DUPLICATE
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 22:59
Analyst: RY

Date Collected: 03/08/15 13:24
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.400 | 0.200 | 0.006 | 1.98 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.547 | 0.200 | 0.048 | 1.13 | 0.413 | 0.099 | | 1 |
| Freon-114 | 0.015 | 0.050 | 0.005 | 0.105 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | 0.030 | 0.020 | 0.006 | 0.066 | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | 0.012 | 0.020 | 0.007 | 0.032 | 0.053 | 0.019 | J | 1 |
| Trichlorofluoromethane | 0.222 | 0.050 | 0.008 | 1.25 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | 0.784 | 0.500 | 0.250 | 2.72 | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.076 | 0.050 | 0.006 | 0.583 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | 0.033 | 0.020 | 0.007 | 0.131 | 0.079 | 0.026 | | 1 |
| Chloroform | 0.025 | 0.020 | 0.006 | 0.122 | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | 0.019 | 0.020 | 0.008 | 0.077 | 0.081 | 0.032 | J | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | 0.240 | 0.100 | 0.021 | 0.767 | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | 0.065 | 0.020 | 0.008 | 0.409 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.008 | 0.020 | 0.007 | 0.043 | 0.107 | 0.038 | J | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-05
Client ID: DUPLICATE
Sample Location: 181 ELLIOT STREET
Date Collected: 03/08/15 13:24
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.830 | 0.050 | 0.025 | 3.13 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.025 | 0.020 | 0.008 | 0.170 | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.111 | 0.020 | 0.007 | 0.482 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.333 | 0.040 | 0.009 | 1.45 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | 0.035 | 0.020 | 0.008 | 0.149 | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.186 | 0.020 | 0.008 | 0.808 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.907 | 0.020 | 0.005 | 4.46 | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | 3.46 | 0.020 | 0.007 | 17.0 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | 0.036 | 0.050 | 0.012 | 0.189 | 0.262 | 0.063 | J | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 88 | | 60-140 |
| bromochloromethane | 85 | | 60-140 |
| chlorobenzene-d5 | 92 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-06
Client ID: BLANK
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 19:46
Analyst: RY

Date Collected: 03/06/15 00:00
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | | 1 |
| Ethanol | ND | 2.50 | 0.542 | ND | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | ND | 1.00 | 0.269 | ND | 2.38 | 0.639 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | ND | 0.500 | 0.052 | ND | 1.47 | 0.154 | | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-06 | Date Collected: | 03/06/15 00:00 |
| Client ID: | BLANK | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 86 | | 60-140 |
| Bromochloromethane | 90 | | 60-140 |
| chlorobenzene-d5 | 90 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-06
Client ID: BLANK
Sample Location: 181 ELLIOT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 19:46
Analyst: RY

Date Collected: 03/06/15 00:00
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | 0.006 | ND | 0.989 | 0.030 | | 1 |
| Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | | 1 |
| Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.007 | 0.050 | 0.006 | 0.054 | 0.383 | 0.046 | J | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-06
Client ID: BLANK
Sample Location: 181 ELLIOT STREET
Date Collected: 03/06/15 00:00
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | | 1 |
| p/m-Xylene | ND | 0.040 | 0.009 | ND | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | 0.005 | ND | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | 0.007 | ND | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 86 | | 60-140 |
| bromochloromethane | 91 | | 60-140 |
| chlorobenzene-d5 | 92 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-07
Client ID: SG-1
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 23:31
Analyst: RY

Date Collected: 03/06/15 19:43
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.156 | 0.500 | 0.093 | 0.268 | 0.861 | 0.160 | J | 1 |
| Ethanol | 3.83 | 2.50 | 0.542 | 7.22 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 7.25 | 1.00 | 0.269 | 17.2 | 2.38 | 0.639 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | 0.120 | 0.200 | 0.035 | 0.374 | 0.623 | 0.107 | J | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.369 | 0.500 | 0.052 | 1.09 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | 0.517 | 0.200 | 0.078 | 2.54 | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-07 | Date Collected: | 03/06/15 19:43 |
| Client ID: | SG-1 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 82 | | 60-140 |
| Bromochloromethane | 87 | | 60-140 |
| chlorobenzene-d5 | 91 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-07
Client ID: SG-1
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 23:31
Analyst: RY

Date Collected: 03/06/15 19:43
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.336 | 0.200 | 0.006 | 1.66 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.049 | 0.200 | 0.048 | 0.101 | 0.413 | 0.099 | J | 1 |
| Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | 0.216 | 0.050 | 0.008 | 1.21 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.068 | 0.050 | 0.006 | 0.521 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | 0.007 | 0.020 | 0.007 | 0.028 | 0.081 | 0.028 | J | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | 0.052 | 0.020 | 0.006 | 0.254 | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | 0.025 | 0.020 | 0.007 | 0.136 | 0.109 | 0.038 | | 1 |
| Benzene | 0.035 | 0.100 | 0.021 | 0.112 | 0.319 | 0.067 | J | 1 |
| Carbon tetrachloride | 0.061 | 0.020 | 0.008 | 0.384 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.126 | 0.020 | 0.007 | 0.677 | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-07
Client ID: SG-1
Sample Location: 181 ELLIOT STREET

Date Collected: 03/06/15 19:43
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.211 | 0.050 | 0.025 | 0.795 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.307 | 0.020 | 0.008 | 2.08 | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.165 | 0.020 | 0.007 | 0.717 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.658 | 0.040 | 0.009 | 2.86 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | 0.009 | 0.020 | 0.008 | 0.038 | 0.085 | 0.034 | J | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.341 | 0.020 | 0.008 | 1.48 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 1.60 | 0.020 | 0.005 | 7.87 | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | 3.59 | 0.020 | 0.007 | 17.6 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | 0.044 | 0.020 | 0.008 | 0.265 | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | 0.032 | 0.020 | 0.007 | 0.192 | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | 0.014 | 0.050 | 0.010 | 0.104 | 0.371 | 0.074 | J | 1 |
| Naphthalene | 4.75 | 0.050 | 0.012 | 24.9 | 0.262 | 0.063 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 83 | | 60-140 |
| bromochloromethane | 87 | | 60-140 |
| chlorobenzene-d5 | 91 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-08
Client ID: SG-2
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/12/15 08:45
Analyst: RY

Date Collected: 03/06/15 18:51
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.142 | 0.500 | 0.093 | 0.244 | 0.861 | 0.160 | J | 1 |
| Ethanol | 2.72 | 2.50 | 0.542 | 5.13 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 2.96 | 1.00 | 0.269 | 7.03 | 2.38 | 0.639 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | 1.15 | 0.200 | 0.035 | 3.58 | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.394 | 0.500 | 0.052 | 1.16 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-08 | Date Collected: | 03/06/15 18:51 |
| Client ID: | SG-2 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 84 | | 60-140 |
| Bromochloromethane | 86 | | 60-140 |
| chlorobenzene-d5 | 93 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-08
Client ID: SG-2
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/12/15 08:45
Analyst: RY

Date Collected: 03/06/15 18:51
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.379 | 0.200 | 0.006 | 1.87 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.100 | 0.200 | 0.048 | 0.207 | 0.413 | 0.099 | J | 1 |
| Freon-114 | 0.015 | 0.050 | 0.005 | 0.105 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | 0.224 | 0.050 | 0.008 | 1.26 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.071 | 0.050 | 0.006 | 0.544 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | 0.080 | 0.020 | 0.006 | 0.391 | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | 0.008 | 0.020 | 0.007 | 0.044 | 0.109 | 0.038 | J | 1 |
| Benzene | 0.036 | 0.100 | 0.021 | 0.115 | 0.319 | 0.067 | J | 1 |
| Carbon tetrachloride | 0.070 | 0.020 | 0.008 | 0.440 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.338 | 0.020 | 0.007 | 1.82 | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-08
Client ID: SG-2
Sample Location: 181 ELLIOT STREET

Date Collected: 03/06/15 18:51
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.134 | 0.050 | 0.025 | 0.505 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.521 | 0.020 | 0.008 | 3.53 | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.037 | 0.020 | 0.007 | 0.161 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.140 | 0.040 | 0.009 | 0.608 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | 0.012 | 0.020 | 0.008 | 0.051 | 0.085 | 0.034 | J | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.055 | 0.020 | 0.008 | 0.239 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.033 | 0.020 | 0.005 | 0.162 | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | 0.154 | 0.020 | 0.007 | 0.757 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | 0.059 | 0.020 | 0.008 | 0.355 | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | 0.229 | 0.020 | 0.007 | 1.38 | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | 0.197 | 0.050 | 0.012 | 1.03 | 0.262 | 0.063 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 86 | | 60-140 |
| bromochloromethane | 88 | | 60-140 |
| chlorobenzene-d5 | 97 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-09
Client ID: SG-3
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/12/15 01:08
Analyst: RY

Date Collected: 03/06/15 19:31
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 0.138 | 0.500 | 0.093 | 0.238 | 0.861 | 0.160 | J | 1 |
| Ethanol | 2.28 | 2.50 | 0.542 | 4.30 | 4.71 | 1.02 | J | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 1.77 | 1.00 | 0.269 | 4.20 | 2.38 | 0.639 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | 0.101 | 0.200 | 0.035 | 0.315 | 0.623 | 0.107 | J | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.099 | 0.500 | 0.052 | 0.292 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-09 | Date Collected: | 03/06/15 19:31 |
| Client ID: | SG-3 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 86 | | 60-140 |
| Bromochloromethane | 89 | | 60-140 |
| chlorobenzene-d5 | 96 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-09
Client ID: SG-3
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/12/15 01:08
Analyst: RY

Date Collected: 03/06/15 19:31
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.478 | 0.200 | 0.006 | 2.36 | 0.989 | 0.030 | | 1 |
| Chloromethane | 0.078 | 0.200 | 0.048 | 0.161 | 0.413 | 0.099 | J | 1 |
| Freon-114 | 0.016 | 0.050 | 0.005 | 0.112 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | 0.007 | 0.020 | 0.006 | 0.016 | 0.044 | 0.013 | J | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | 0.008 | 0.020 | 0.007 | 0.021 | 0.053 | 0.019 | J | 1 |
| Trichlorofluoromethane | 0.213 | 0.050 | 0.008 | 1.20 | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | 0.069 | 0.050 | 0.006 | 0.529 | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | 0.059 | 0.020 | 0.006 | 0.288 | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | 0.010 | 0.020 | 0.007 | 0.055 | 0.109 | 0.038 | J | 1 |
| Benzene | 0.083 | 0.100 | 0.021 | 0.265 | 0.319 | 0.067 | J | 1 |
| Carbon tetrachloride | 0.071 | 0.020 | 0.008 | 0.447 | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.400 | 0.020 | 0.007 | 2.15 | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-09
Client ID: SG-3
Sample Location: 181 ELLIOT STREET

Date Collected: 03/06/15 19:31
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.377 | 0.050 | 0.025 | 1.42 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.505 | 0.020 | 0.008 | 3.42 | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.035 | 0.020 | 0.007 | 0.152 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.132 | 0.040 | 0.009 | 0.573 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | 0.029 | 0.020 | 0.008 | 0.123 | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.039 | 0.020 | 0.008 | 0.169 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.019 | 0.020 | 0.005 | 0.093 | 0.098 | 0.025 | J | 1 |
| 1,2,4-Trimethylbenzene | 0.068 | 0.020 | 0.007 | 0.334 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | 0.039 | 0.020 | 0.008 | 0.234 | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | 0.042 | 0.020 | 0.007 | 0.253 | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | 0.157 | 0.050 | 0.012 | 0.823 | 0.262 | 0.063 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 86 | | 60-140 |
| bromochloromethane | 91 | | 60-140 |
| chlorobenzene-d5 | 97 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-10
Client ID: SG-4
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/12/15 01:40
Analyst: RY

Date Collected: 03/06/15 20:02
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | 9.02 | 0.500 | 0.093 | 15.5 | 0.861 | 0.160 | | 1 |
| Ethanol | 3.47 | 2.50 | 0.542 | 6.54 | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 11.1 | 1.00 | 0.269 | 26.4 | 2.38 | 0.639 | | 1 |
| Isopropanol | 7.69 | 0.500 | 0.114 | 18.9 | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | 4.10 | 0.200 | 0.035 | 12.8 | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.389 | 0.500 | 0.052 | 1.15 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | 3.99 | 0.200 | 0.052 | 14.1 | 0.705 | 0.183 | | 1 |
| Cyclohexane | 3.04 | 0.200 | 0.066 | 10.5 | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | 1.21 | 0.200 | 0.055 | 4.96 | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-10 | Date Collected: | 03/06/15 20:02 |
| Client ID: | SG-4 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 87 | | 60-140 |
| Bromochloromethane | 90 | | 60-140 |
| chlorobenzene-d5 | 101 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-10
Client ID: SG-4
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/12/15 01:40
Analyst: RY

Date Collected: 03/06/15 20:02
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.054 | 0.200 | 0.006 | 0.267 | 0.989 | 0.030 | J | 1 |
| Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | | 1 |
| Freon-114 | 0.016 | 0.050 | 0.005 | 0.112 | 0.349 | 0.035 | J | 1 |
| Vinyl chloride | 0.127 | 0.020 | 0.007 | 0.325 | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | 0.026 | 0.020 | 0.007 | 0.069 | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | 0.007 | 0.020 | 0.007 | 0.028 | 0.079 | 0.028 | J | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | 0.026 | 0.020 | 0.006 | 0.103 | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | 0.106 | 0.020 | 0.007 | 0.429 | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | 0.120 | 0.020 | 0.007 | 0.476 | 0.079 | 0.026 | | 1 |
| Chloroform | 0.008 | 0.020 | 0.006 | 0.039 | 0.098 | 0.029 | J | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | 0.947 | 0.100 | 0.021 | 3.03 | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | 0.023 | 0.020 | 0.007 | 0.124 | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-10
Client ID: SG-4
Sample Location: 181 ELLIOT STREET

Date Collected: 03/06/15 20:02
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | 0.260 | 0.050 | 0.025 | 0.980 | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | 0.018 | 0.020 | 0.008 | 0.122 | 0.136 | 0.054 | J | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | 0.092 | 0.020 | 0.007 | 0.400 | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.313 | 0.040 | 0.009 | 1.36 | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | 0.159 | 0.020 | 0.008 | 0.691 | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.095 | 0.020 | 0.005 | 0.467 | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | 0.170 | 0.020 | 0.007 | 0.836 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | 0.032 | 0.020 | 0.008 | 0.192 | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | 0.140 | 0.050 | 0.012 | 0.734 | 0.262 | 0.063 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 87 | | 60-140 |
| bromochloromethane | 92 | | 60-140 |
| chlorobenzene-d5 | 102 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-11
Client ID: SG BLANK
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/11/15 20:19
Analyst: RY

Date Collected: 03/06/15 00:00
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | | 1 |
| Ethanol | 0.682 | 2.50 | 0.542 | 1.29 | 4.71 | 1.02 | J | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | 0.272 | 1.00 | 0.269 | 0.646 | 2.38 | 0.639 | J | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | 0.092 | 0.500 | 0.052 | 0.271 | 1.47 | 0.154 | J | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | | | |
|---|---|---|---|
| ***Project Name:*** | CUMMINGS BEVERLY | ***Lab Number:*** | L1504425 |
| ***Project Number:*** | CUMMINGS BEVERLY | ***Report Date:*** | 03/25/15 |

## *SAMPLE RESULTS*

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-11 | Date Collected: | 03/06/15 00:00 |
| Client ID: | SG BLANK | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 95 | | 60-140 |
| Bromochloromethane | 92 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-11
Client ID: SG BLANK
Sample Location: 181 ELLIOT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 20:19
Analyst: RY

Date Collected: 03/06/15 00:00
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.007 | 0.200 | 0.006 | 0.035 | 0.989 | 0.030 | J | 1 |
| Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | | 1 |
| Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

Lab ID: L1504425-11
Client ID: SG BLANK
Sample Location: 181 ELLIOT STREET
Date Collected: 03/06/15 00:00
Date Received: 03/10/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air by SIM - Mansfield Lab** | | | | | | | | |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | | 1 |
| p/m-Xylene | 0.018 | 0.040 | 0.009 | 0.078 | 0.174 | 0.039 | J | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | 0.007 | 0.020 | 0.005 | 0.034 | 0.098 | 0.025 | J | 1 |
| 1,2,4-Trimethylbenzene | 0.035 | 0.020 | 0.007 | 0.172 | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 93 | | 60-140 |
| bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/11/15 13:49

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG767577-4 | | | | | | | | |
| Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | | 1 |
| Ethanol | ND | 2.50 | 0.542 | ND | 4.71 | 1.02 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acetone | ND | 1.00 | 0.269 | ND | 2.38 | 0.639 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | ND | 0.500 | 0.052 | ND | 1.47 | 0.154 | | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |

| | Results | Qualifier | Units | RDL | Dilution Factor |
|---|---|---|---|---|---|
| Tentatively Identified Compounds | | | | | |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/11/15 13:49

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG767577-4 | | | | | | | | |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 14:34

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-11 Batch: WG767579-4 | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | 0.006 | ND | 0.989 | 0.030 | | 1 |
| Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | | 1 |
| Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/11/15 14:34

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-11 Batch: WG767579-4 | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | | 1 |
| p/m-Xylene | ND | 0.040 | 0.009 | ND | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | 0.005 | ND | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | 0.007 | ND | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,2,4-Trichlorobenzene | 0.011 | 0.050 | 0.010 | 0.082 | 0.371 | 0.074 | J | 1 |
| Naphthalene | 0.015 | 0.050 | 0.012 | 0.079 | 0.262 | 0.063 | J | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG767577-3 | | | | | | | | |
| Chlorodifluoromethane | 86 | | - | | 70-130 | - | | |
| Propylene | 102 | | - | | 70-130 | - | | |
| Propane | 79 | | - | | 70-130 | - | | |
| Dichlorodifluoromethane | 72 | | - | | 70-130 | - | | |
| Chloromethane | 88 | | - | | 70-130 | - | | |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | 94 | | - | | 70-130 | - | | |
| Methanol | 85 | | - | | 70-130 | - | | |
| Vinyl chloride | 94 | | - | | 70-130 | - | | |
| 1,3-Butadiene | 97 | | - | | 70-130 | - | | |
| Butane | 84 | | - | | 70-130 | - | | |
| Bromomethane | 86 | | - | | 70-130 | - | | |
| Chloroethane | 89 | | - | | 70-130 | - | | |
| Ethyl Alcohol | 85 | | - | | 70-130 | - | | |
| Dichlorofluoromethane | 86 | | - | | 70-130 | - | | |
| Vinyl bromide | 93 | | - | | 70-130 | - | | |
| Acrolein | 72 | | - | | 70-130 | - | | |
| Acetone | 95 | | - | | 70-130 | - | | |
| Acetonitrile | 84 | | - | | 70-130 | - | | |
| Trichlorofluoromethane | 95 | | - | | 70-130 | - | | |
| iso-Propyl Alcohol | 91 | | - | | 70-130 | - | | |
| Acrylonitrile | 79 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG767577-3 | | | | | | | | |
| Pentane | 80 | | - | | 70-130 | - | | |
| Ethyl ether | 75 | | - | | 70-130 | - | | |
| 1,1-Dichloroethene | 92 | | - | | 70-130 | - | | |
| tert-Butyl Alcohol | 86 | | - | | 70-130 | - | | |
| Methylene chloride | 94 | | - | | 70-130 | - | | |
| 3-Chloropropene | 84 | | - | | 70-130 | - | | |
| Carbon disulfide | 91 | | - | | 70-130 | - | | |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | 94 | | - | | 70-130 | - | | |
| trans-1,2-Dichloroethene | 86 | | - | | 70-130 | - | | |
| 1,1-Dichloroethane | 92 | | - | | 70-130 | - | | |
| Methyl tert butyl ether | 87 | | - | | 70-130 | - | | |
| Vinyl acetate | 115 | | - | | 70-130 | - | | |
| 2-Butanone | 97 | | - | | 70-130 | - | | |
| cis-1,2-Dichloroethene | 101 | | - | | 70-130 | - | | |
| Ethyl Acetate | 90 | | - | | 70-130 | - | | |
| Chloroform | 93 | | - | | 70-130 | - | | |
| Tetrahydrofuran | 77 | | - | | 70-130 | - | | |
| 2,2-Dichloropropane | 82 | | - | | 70-130 | - | | |
| 1,2-Dichloroethane | 95 | | - | | 70-130 | - | | |
| n-Hexane | 90 | | - | | 70-130 | - | | |
| Isopropyl Ether | 86 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG767577-3 | | | | | | | | |
| Ethyl-Tert-Butyl-Ether | 85 | | - | | 70-130 | - | | |
| 1,1,1-Trichloroethane | 94 | | - | | 70-130 | - | | |
| 1,1-Dichloropropene | 91 | | - | | 70-130 | - | | |
| Benzene | 96 | | - | | 70-130 | - | | |
| Carbon tetrachloride | 91 | | - | | 70-130 | - | | |
| Cyclohexane | 91 | | - | | 70-130 | - | | |
| Tertiary-Amyl Methyl Ether | 86 | | - | | 70-130 | - | | |
| Dibromomethane | 92 | | - | | 70-130 | - | | |
| 1,2-Dichloropropane | 96 | | - | | 70-130 | - | | |
| Bromodichloromethane | 96 | | - | | 70-130 | - | | |
| 1,4-Dioxane | 97 | | - | | 70-130 | - | | |
| Trichloroethene | 94 | | - | | 70-130 | - | | |
| 2,2,4-Trimethylpentane | 93 | | - | | 70-130 | - | | |
| Methyl Methacrylate | 86 | | - | | 70-130 | - | | |
| Heptane | 87 | | - | | 70-130 | - | | |
| cis-1,3-Dichloropropene | 99 | | - | | 70-130 | - | | |
| 4-Methyl-2-pentanone | 93 | | - | | 70-130 | - | | |
| trans-1,3-Dichloropropene | 84 | | - | | 70-130 | - | | |
| 1,1,2-Trichloroethane | 96 | | - | | 70-130 | - | | |
| Toluene | 93 | | - | | 70-130 | - | | |
| 1,3-Dichloropropane | 89 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG767577-3 | | | | | | | | |
| 2-Hexanone | 96 | | - | | 70-130 | - | | |
| Dibromochloromethane | 89 | | - | | 70-130 | - | | |
| 1,2-Dibromoethane | 94 | | - | | 70-130 | - | | |
| Butyl Acetate | 82 | | - | | 70-130 | - | | |
| Octane | 83 | | - | | 70-130 | - | | |
| Tetrachloroethene | 90 | | - | | 70-130 | - | | |
| 1,1,1,2-Tetrachloroethane | 86 | | - | | 70-130 | - | | |
| Chlorobenzene | 92 | | - | | 70-130 | - | | |
| Ethylbenzene | 92 | | - | | 70-130 | - | | |
| p/m-Xylene | 92 | | - | | 70-130 | - | | |
| Bromoform | 88 | | - | | 70-130 | - | | |
| Styrene | 91 | | - | | 70-130 | - | | |
| 1,1,2,2-Tetrachloroethane | 97 | | - | | 70-130 | - | | |
| o-Xylene | 95 | | - | | 70-130 | - | | |
| 1,2,3-Trichloropropane | 90 | | - | | 70-130 | - | | |
| Nonane (C9) | 83 | | - | | 70-130 | - | | |
| Isopropylbenzene | 91 | | - | | 70-130 | - | | |
| Bromobenzene | 89 | | - | | 70-130 | - | | |
| o-Chlorotoluene | 84 | | - | | 70-130 | - | | |
| n-Propylbenzene | 89 | | - | | 70-130 | - | | |
| p-Chlorotoluene | 89 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG767577-3 | | | | | | | | |
| 4-Ethyltoluene | 88 | | - | | 70-130 | - | | |
| 1,3,5-Trimethylbenzene | 93 | | - | | 70-130 | - | | |
| tert-Butylbenzene | 88 | | - | | 70-130 | - | | |
| 1,2,4-Trimethylbenzene | 96 | | - | | 70-130 | - | | |
| Decane (C10) | 86 | | - | | 70-130 | - | | |
| Benzyl chloride | 87 | | - | | 70-130 | - | | |
| 1,3-Dichlorobenzene | 94 | | - | | 70-130 | - | | |
| 1,4-Dichlorobenzene | 95 | | - | | 70-130 | - | | |
| sec-Butylbenzene | 89 | | - | | 70-130 | - | | |
| p-Isopropyltoluene | 81 | | - | | 70-130 | - | | |
| 1,2-Dichlorobenzene | 94 | | - | | 70-130 | - | | |
| n-Butylbenzene | 94 | | - | | 70-130 | - | | |
| 1,2-Dibromo-3-chloropropane | 87 | | - | | 70-130 | - | | |
| Undecane | 92 | | - | | 70-130 | - | | |
| Dodecane (C12) | 96 | | - | | 70-130 | - | | |
| 1,2,4-Trichlorobenzene | 99 | | - | | 70-130 | - | | |
| Naphthalene | 92 | | - | | 70-130 | - | | |
| 1,2,3-Trichlorobenzene | 97 | | - | | 70-130 | - | | |
| Hexachlorobutadiene | 103 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-11 Batch: WG767579-3 | | | | | | | | |
| Propylene | 102 | | - | | 70-130 | - | | 25 |
| Dichlorodifluoromethane | 87 | | - | | 70-130 | - | | 25 |
| Chloromethane | 91 | | - | | 70-130 | - | | 25 |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | 93 | | - | | 70-130 | - | | 25 |
| Vinyl chloride | 90 | | - | | 70-130 | - | | 25 |
| 1,3-Butadiene | 89 | | - | | 70-130 | - | | 25 |
| Bromomethane | 92 | | - | | 70-130 | - | | 25 |
| Chloroethane | 85 | | - | | 70-130 | - | | 25 |
| Ethyl Alcohol | 86 | | - | | 70-130 | - | | 25 |
| Vinyl bromide | 88 | | - | | 70-130 | - | | 25 |
| Acetone | 96 | | - | | 70-130 | - | | 25 |
| Trichlorofluoromethane | 93 | | - | | 70-130 | - | | 25 |
| iso-Propyl Alcohol | 97 | | - | | 70-130 | - | | 25 |
| Acrylonitrile | 77 | | - | | 70-130 | - | | 25 |
| 1,1-Dichloroethene | 90 | | - | | 70-130 | - | | 25 |
| Methylene chloride | 97 | | - | | 70-130 | - | | 25 |
| 3-Chloropropene | 92 | | - | | 70-130 | - | | 25 |
| Carbon disulfide | 87 | | - | | 70-130 | - | | 25 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | 94 | | - | | 70-130 | - | | 25 |
| Halothane | 84 | | - | | 70-130 | - | | 25 |
| trans-1,2-Dichloroethene | 84 | | - | | 70-130 | - | | 25 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-11 Batch: WG767579-3 | | | | | | | | |
| 1,1-Dichloroethane | 92 | | - | | 70-130 | - | | 25 |
| Methyl tert butyl ether | 88 | | - | | 70-130 | - | | 25 |
| Vinyl acetate | 112 | | - | | 70-130 | - | | 25 |
| 2-Butanone | 97 | | - | | 70-130 | - | | 25 |
| cis-1,2-Dichloroethene | 100 | | - | | 70-130 | - | | 25 |
| Ethyl Acetate | 89 | | - | | 70-130 | - | | 25 |
| Chloroform | 91 | | - | | 70-130 | - | | 25 |
| Tetrahydrofuran | 87 | | - | | 70-130 | - | | 25 |
| 1,2-Dichloroethane | 91 | | - | | 70-130 | - | | 25 |
| n-Hexane | 86 | | - | | 70-130 | - | | 25 |
| 1,1,1-Trichloroethane | 93 | | - | | 70-130 | - | | 25 |
| Benzene | 90 | | - | | 70-130 | - | | 25 |
| Carbon tetrachloride | 92 | | - | | 70-130 | - | | 25 |
| Cyclohexane | 86 | | - | | 70-130 | - | | 25 |
| 1,2-Dichloropropane | 93 | | - | | 70-130 | - | | 25 |
| Bromodichloromethane | 90 | | - | | 70-130 | - | | 25 |
| 1,4-Dioxane | 96 | | - | | 70-130 | - | | 25 |
| Trichloroethene | 91 | | - | | 70-130 | - | | 25 |
| 2,2,4-Trimethylpentane | 91 | | - | | 70-130 | - | | 25 |
| cis-1,3-Dichloropropene | 98 | | - | | 70-130 | - | | 25 |
| 4-Methyl-2-pentanone | 101 | | - | | 70-130 | - | | 25 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-11 Batch: WG767579-3 | | | | | | | | |
| trans-1,3-Dichloropropene | 86 | | - | | 70-130 | - | | 25 |
| 1,1,2-Trichloroethane | 96 | | - | | 70-130 | - | | 25 |
| Toluene | 93 | | - | | 70-130 | - | | 25 |
| 2-Hexanone | 109 | | - | | 70-130 | - | | 25 |
| Dibromochloromethane | 88 | | - | | 70-130 | - | | 25 |
| 1,2-Dibromoethane | 97 | | - | | 70-130 | - | | 25 |
| Tetrachloroethene | 87 | | - | | 70-130 | - | | 25 |
| 1,1,1,2-Tetrachloroethane | 84 | | - | | 70-130 | - | | 25 |
| Chlorobenzene | 94 | | - | | 70-130 | - | | 25 |
| Ethylbenzene | 92 | | - | | 70-130 | - | | 25 |
| p/m-Xylene | 94 | | - | | 70-130 | - | | 25 |
| Bromoform | 83 | | - | | 70-130 | - | | 25 |
| Styrene | 96 | | - | | 70-130 | - | | 25 |
| 1,1,2,2-Tetrachloroethane | 97 | | - | | 70-130 | - | | 25 |
| o-Xylene | 93 | | - | | 70-130 | - | | 25 |
| Isopropylbenzene | 91 | | - | | 70-130 | - | | 25 |
| 4-Ethyltoluene | 90 | | - | | 70-130 | - | | 25 |
| 1,3,5-Trimethylbenzene | 95 | | - | | 70-130 | - | | 25 |
| 1,2,4-Trimethylbenzene | 94 | | - | | 70-130 | - | | 25 |
| Benzyl chloride | 84 | | - | | 70-130 | - | | 25 |
| 1,3-Dichlorobenzene | 96 | | - | | 70-130 | - | | 25 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-11 Batch: WG767579-3 | | | | | | | | |
| 1,4-Dichlorobenzene | 94 | | - | | 70-130 | - | | 25 |
| sec-Butylbenzene | 89 | | - | | 70-130 | - | | 25 |
| p-Isopropyltoluene | 82 | | - | | 70-130 | - | | 25 |
| 1,2-Dichlorobenzene | 94 | | - | | 70-130 | - | | 25 |
| n-Butylbenzene | 95 | | - | | 70-130 | - | | 25 |
| 1,2,4-Trichlorobenzene | 103 | | - | | 70-130 | - | | 25 |
| Naphthalene | 93 | | - | | 70-130 | - | | 25 |
| 1,2,3-Trichlorobenzene | 104 | | - | | 70-130 | - | | 25 |
| Hexachlorobutadiene | 98 | | - | | 70-130 | - | | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVER

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG767577-5 QC Sample: L1504425-07 Client ID: SG-1 | | | | | | |
| Propylene | 0.156J | 0.110J | ppbV | NC | | 25 |
| Ethanol | 3.83 | 4.10 | ppbV | 7 | | 25 |
| Vinyl bromide | ND | ND | ppbV | NC | | 25 |
| Acetone | 7.25 | 7.87 | ppbV | 8 | | 25 |
| Isopropanol | ND | ND | ppbV | NC | | 25 |
| 3-Chloropropene | ND | ND | ppbV | NC | | 25 |
| Carbon disulfide | 0.120J | 0.103J | ppbV | NC | | 25 |
| Vinyl acetate | ND | ND | ppbV | NC | | 25 |
| 2-Butanone | 0.369J | 0.445J | ppbV | NC | | 25 |
| Ethyl Acetate | ND | ND | ppbV | NC | | 25 |
| Tetrahydrofuran | ND | ND | ppbV | NC | | 25 |
| n-Hexane | ND | ND | ppbV | NC | | 25 |
| Cyclohexane | ND | ND | ppbV | NC | | 25 |
| 1,4-Dioxane | ND | ND | ppbV | NC | | 25 |
| 2,2,4-Trimethylpentane | ND | ND | ppbV | NC | | 25 |
| Heptane | ND | ND | ppbV | NC | | 25 |
| 4-Methyl-2-pentanone | ND | ND | ppbV | NC | | 25 |
| 2-Hexanone | ND | ND | ppbV | NC | | 25 |
| 4-Ethyltoluene | 0.517 | 0.532 | ppbV | 3 | | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVER

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | Native Sample | Duplicate Sample | Units | RPD | RPD Limits |
|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG767577-5 QC Sample: L1504425-07 Client ID: SG-1 | | | | | |
| Benzyl chloride | ND | ND | ppbV | NC | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVER

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | Native Sample | Duplicate Sample | Units | RPD | RPD Limits |
|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG767579-5 QC Sample: L1504425-07 Client ID: SG-1 | | | | | |
| Dichlorodifluoromethane | 0.336 | 0.338 | ppbV | 1 | 25 |
| Chloromethane | 0.049J | 0.051J | ppbV | NC | 25 |
| Freon-114 | 0.014J | 0.015J | ppbV | NC | 25 |
| Vinyl chloride | ND | ND | ppbV | NC | 25 |
| 1,3-Butadiene | ND | ND | ppbV | NC | 25 |
| Bromomethane | ND | ND | ppbV | NC | 25 |
| Chloroethane | ND | 0.017J | ppbV | NC | 25 |
| Trichlorofluoromethane | 0.216 | 0.208 | ppbV | 4 | 25 |
| 1,1-Dichloroethene | ND | ND | ppbV | NC | 25 |
| Methylene chloride | ND | ND | ppbV | NC | 25 |
| Freon-113 | 0.068 | 0.066 | ppbV | 3 | 25 |
| trans-1,2-Dichloroethene | ND | ND | ppbV | NC | 25 |
| 1,1-Dichloroethane | 0.007J | ND | ppbV | NC | 25 |
| Methyl tert butyl ether | ND | ND | ppbV | NC | 25 |
| cis-1,2-Dichloroethene | ND | ND | ppbV | NC | 25 |
| Chloroform | 0.052 | 0.053 | ppbV | 2 | 25 |
| 1,2-Dichloroethane | ND | ND | ppbV | NC | 25 |
| 1,1,1-Trichloroethane | 0.025 | 0.027 | ppbV | 8 | 25 |
| Benzene | 0.035J | 0.039J | ppbV | NC | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVER

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | Native Sample | Duplicate Sample | Units | RPD | RPD Limits |
|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG767579-5 QC Sample: L1504425-07 Client ID: SG-1 | | | | | |
| Carbon tetrachloride | 0.061 | 0.064 | ppbV | 5 | 25 |
| 1,2-Dichloropropane | ND | ND | ppbV | NC | 25 |
| Bromodichloromethane | ND | ND | ppbV | NC | 25 |
| Trichloroethene | 0.126 | 0.128 | ppbV | 2 | 25 |
| cis-1,3-Dichloropropene | ND | ND | ppbV | NC | 25 |
| trans-1,3-Dichloropropene | ND | 0.018J | ppbV | NC | 25 |
| 1,1,2-Trichloroethane | ND | ND | ppbV | NC | 25 |
| Toluene | 0.211 | 0.217 | ppbV | 3 | 25 |
| Dibromochloromethane | ND | ND | ppbV | NC | 25 |
| 1,2-Dibromoethane | ND | ND | ppbV | NC | 25 |
| Tetrachloroethene | 0.307 | 0.347 | ppbV | 12 | 25 |
| 1,1,1,2-Tetrachloroethane | ND | ND | ppbV | NC | 25 |
| Chlorobenzene | ND | ND | ppbV | NC | 25 |
| Ethylbenzene | 0.165 | 0.167 | ppbV | 1 | 25 |
| p/m-Xylene | 0.658 | 0.661 | ppbV | 0 | 25 |
| Bromoform | ND | ND | ppbV | NC | 25 |
| Styrene | 0.009J | 0.009J | ppbV | NC | 25 |
| 1,1,2,2-Tetrachloroethane | ND | ND | ppbV | NC | 25 |
| o-Xylene | 0.341 | 0.345 | ppbV | 1 | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVER

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | Native Sample | Duplicate Sample | Units | RPD | RPD Limits |
|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG767579-5 QC Sample: L1504425-07 Client ID: SG-1 | | | | | |
| 1,3,5-Trimethybenzene | 1.60 | 1.56 | ppbV | 3 | 25 |
| 1,2,4-Trimethylbenzene | 3.59 | 3.56 | ppbV | 1 | 25 |
| 1,3-Dichlorobenzene | ND | ND | ppbV | NC | 25 |
| 1,4-Dichlorobenzene | 0.044 | 0.043 | ppbV | 2 | 25 |
| 1,2-Dichlorobenzene | 0.032 | 0.033 | ppbV | 3 | 25 |
| 1,2,4-Trichlorobenzene | 0.014J | 0.016J | ppbV | NC | 25 |
| Naphthalene | 4.75 | 5.66 | ppbV | 17 | 25 |
| Hexachlorobutadiene | ND | ND | ppbV | NC | 25 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-01 | Date Collected: | 03/08/15 13:31 |
| Client ID: | OUTDOOR CONTROL | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 20:51 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister -6 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | ND | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 83 | | 50-200 |
| Bromochloromethane | 87 | | 50-200 |
| Chlorobenzene-d5 | 88 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-02 | Date Collected: | 03/08/15 13:23 |
| Client ID: | S-157-J.1 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 21:23 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 6 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | 2.2 | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 120 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | 46 | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 86 | | 50-200 |
| Bromochloromethane | 91 | | 50-200 |
| Chlorobenzene-d5 | 92 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-03 | Date Collected: | 03/08/15 13:22 |
| Client ID: | S-157-J.2 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 21:55 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 6 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | 14 | | ug/m3 | 12 | 12. | 1 |
| Toluene | 2.5 | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 110 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | 43 | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 83 | | 50-200 |
| Bromochloromethane | 87 | | 50-200 |
| Chlorobenzene-d5 | 96 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-04 | Date Collected: | 03/08/15 13:24 |
| Client ID: | S-157-J | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 22:27 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 6 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | 38 | | ug/m3 | 12 | 12. | 1 |
| Toluene | 3.2 | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 130 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | 45 | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 84 | | 50-200 |
| Bromochloromethane | 93 | | 50-200 |
| Chlorobenzene-d5 | 92 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-05 | Date Collected: | 03/08/15 13:24 |
| Client ID: | DUPLICATE | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 22:59 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 6 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | 3.3 | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 140 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | 51 | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 91 | | 50-200 |
| Bromochloromethane | 85 | | 50-200 |
| Chlorobenzene-d5 | 93 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-06 | Date Collected: | 03/06/15 00:00 |
| Client ID: | BLANK | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 19:46 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 6 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | ND | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 86 | | 50-200 |
| Bromochloromethane | 90 | | 50-200 |
| Chlorobenzene-d5 | 92 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-07 | Date Collected: | 03/06/15 19:43 |
| Client ID: | SG-1 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Soil_Vapor | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 23:31 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 2.7 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | 50 | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | 28 | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 1900 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | 340 | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 82 | | 50-200 |
| Bromochloromethane | 84 | | 50-200 |
| Chlorobenzene-d5 | 93 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-08 | Date Collected: | 03/06/15 18:51 |
| Client ID: | SG-2 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Soil_Vapor | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/12/15 08:45 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 2.7 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | 48 | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 30 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 84 | | 50-200 |
| Bromochloromethane | 88 | | 50-200 |
| Chlorobenzene-d5 | 95 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-09 | Date Collected: | 03/06/15 19:31 |
| Client ID: | SG-3 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Soil_Vapor | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/12/15 01:08 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 2.7 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | 15 | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 54 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 86 | | 50-200 |
| Bromochloromethane | 92 | | 50-200 |
| Chlorobenzene-d5 | 97 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-10 | Date Collected: | 03/06/15 20:02 |
| Client ID: | SG-4 | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Soil_Vapor | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/12/15 01:40 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 2.7 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | 3.1 | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | 1100 | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | 2.8 | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | 3700 | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | 11 | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 87 | | 50-200 |
| Bromochloromethane | 92 | | 50-200 |
| Chlorobenzene-d5 | 100 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY
**Lab Number:** L1504425
**Report Date:** 03/25/15

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1504425-11 | Date Collected: | 03/06/15 00:00 |
| Client ID: | SG BLANK | Date Received: | 03/10/15 |
| Sample Location: | 181 ELLIOT STREET | Field Prep: | Not Specified |
| Matrix: | Soil_Vapor | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 03/11/15 20:19 | | |
| Analyst: | MB | | |

### Quality Control Information

| | |
|---|---|
| Sample Type: | Composite |
| Sample Container Type: | Canister - 2.7 Liter |
| Sampling Flow Controller: | Mechanical |
| Sampling Zone: | Unknown |
| Sampling Flow Meter RPD of pre & post-sampling calibration check: | <=20% |
| Were all QA/QC procedures REQUIRED by the method followed? | Yes |
| Were all performance/acceptance standards for the required procedures achieved? | Yes |
| Were significant modifications made to the method as specified in Sect 11.1.2? | No |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | ND | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 95 | | 50-200 |
| Bromochloromethane | 95 | | 50-200 |
| Chlorobenzene-d5 | 97 | | 50-200 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 96,APH
Analytical Date: 03/11/15 13:49
Analyst: MB

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Petroleum Hydrocarbons in Air - Mansfield Lab for sample(s): 01-11 Batch: WG767580-4 | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 |
| C9-C12 Aliphatics, Adjusted | ND | | ug/m3 | 14 | 14. |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG767580-3 | | | | | | | | |
| 1,3-Butadiene | 98 | | - | | 70-130 | - | | |
| Methyl tert butyl ether | 90 | | - | | 70-130 | - | | |
| Benzene | 99 | | - | | 70-130 | - | | |
| C5-C8 Aliphatics, Adjusted | 94 | | - | | 70-130 | - | | |
| Toluene | 95 | | - | | 70-130 | - | | |
| Ethylbenzene | 93 | | - | | 70-130 | - | | |
| p/m-Xylene | 94 | | - | | 70-130 | - | | |
| o-Xylene | 97 | | - | | 70-130 | - | | |
| Naphthalene | 106 | | - | | 50-150 | - | | |
| C9-C12 Aliphatics, Adjusted | 93 | | - | | 70-130 | - | | |
| C9-C10 Aromatics Total | 81 | | - | | 70-130 | - | | |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVER

**Lab Number:** L1504425
**Report Date:** 03/25/15

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG767580-5 QC Sample: L1504425-07 Client ID: SG-1 | | | | | | |
| 1,3-Butadiene | ND | ND | ug/m3 | NC | | 30 |
| Methyl tert butyl ether | ND | ND | ug/m3 | NC | | 30 |
| Benzene | ND | ND | ug/m3 | NC | | 30 |
| C5-C8 Aliphatics, Adjusted | 50 | 50 | ug/m3 | 0 | | 30 |
| Toluene | ND | ND | ug/m3 | NC | | 30 |
| Ethylbenzene | ND | ND | ug/m3 | NC | | 30 |
| p/m-Xylene | ND | ND | ug/m3 | NC | | 30 |
| o-Xylene | ND | ND | ug/m3 | NC | | 30 |
| Naphthalene | 28 | 35 | ug/m3 | 22 | | 30 |
| C9-C12 Aliphatics, Adjusted | 1900 | 2100 | ug/m3 | 10 | | 30 |
| C9-C10 Aromatics Total | 340 | 380 | ug/m3 | 11 | | 30 |

**Project Name:** CUMMINGS BEVERLY

**Lab Number:** L1504425

**Project Number:** CUMMINGS BEVERLY

**Report Date:** 03/25/15

## Canister and Flow Controller Information

| Samplenum | Client ID | Media ID | Media Type | Date Prepared | Bottle Order | Cleaning Batch ID | Can Leak Check | Initial Pressure (in. Hg) | Pressure on Receipt (in. Hg) | Flow Controler Leak Chk | Flow Out mL/min | Flow In mL/min | % RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L1504425-01 | OUTDOOR CONTROL | 0102 | #16 SV | 02/24/15 | 200169 | | - | - | - | Pass | 3.0 | 3.0 | 0 |
| L1504425-01 | OUTDOOR CONTROL | 1889 | 6.0L Can | 02/24/15 | 200169 | L1503156-01 | Pass | -28.0 | 2.5 | - | - | - | - |
| L1504425-02 | S-157-J.1 | 0114 | #16 AMB | 02/24/15 | 200169 | | - | - | - | Pass | 3.2 | 3.1 | 3 |
| L1504425-02 | S-157-J.1 | 1662 | 6.0L Can | 02/24/15 | 200169 | L1503156-02 | Pass | -29.9 | 1.0 | - | - | - | - |
| L1504425-03 | S-157-J.2 | 0285 | #16 AMB | 02/24/15 | 200169 | | - | - | - | Pass | 3.0 | 2.7 | 11 |
| L1504425-03 | S-157-J.2 | 985 | 6.0L Can | 02/24/15 | 200169 | L1503156-02 | Pass | -29.7 | 0.9 | - | - | - | - |
| L1504425-04 | S-157-J | 0354 | #16 AMB | 02/24/15 | 200169 | | - | - | - | Pass | 3.2 | 3.0 | 6 |
| L1504425-04 | S-157-J | 1598 | 6.0L Can | 02/24/15 | 200169 | L1503156-02 | Pass | -28.8 | 1.0 | - | - | - | - |
| L1504425-05 | DUPLICATE | 0243 | #16 AMB | 02/24/15 | 200169 | | - | - | - | Pass | 3.0 | 3.2 | 6 |
| L1504425-05 | DUPLICATE | 1794 | 6.0L Can | 02/24/15 | 200169 | L1503156-02 | Pass | -29.7 | 1.1 | - | - | - | - |
| L1504425-06 | BLANK | 0551 | #16 AMB | 02/24/15 | 200169 | | - | - | - | Pass | 3.1 | 3.0 | 3 |
| L1504425-06 | BLANK | 1050 | 6.0L Can | 02/24/15 | 200169 | L1503156-01 | Pass | -28.0 | -29.5 | - | - | - | - |
| L1504425-07 | SG-1 | 0309 | #90 SV | 02/24/15 | 200169 | | - | - | - | Pass | 70 | 79 | 12 |
| L1504425-07 | SG-1 | 259 | 2.7L Can | 02/24/15 | 200169 | L1502909-01 | Pass | -28.0 | 1.1 | - | - | - | - |
| L1504425-08 | SG-2 | 0342 | #90 SV | 02/24/15 | 200169 | | - | - | - | Pass | 72 | 87 | 19 |

**Project Name:** CUMMINGS BEVERLY

**Lab Number:** L1504425

**Project Number:** CUMMINGS BEVERLY

**Report Date:** 03/25/15

## Canister and Flow Controller Information

| Samplenum | Client ID | Media ID | Media Type | Date Prepared | Bottle Order | Cleaning Batch ID | Can Leak Check | Initial Pressure (in. Hg) | Pressure on Receipt (in. Hg) | Flow Controler Leak Chk | Flow Out mL/min | Flow In mL/min | % RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L1504425-08 | SG-2 | 1748 | 2.7L Can | 02/24/15 | 200169 | L1502909-01 | Pass | -28.0 | 0.9 | - | - | - | - |
| L1504425-09 | SG-3 | 0389 | #90 SV | 02/24/15 | 200169 | | - | - | - | Pass | 70 | 79 | 12 |
| L1504425-09 | SG-3 | 383 | 2.7L Can | 02/24/15 | 200169 | L1502909-01 | Pass | -28.0 | 1.3 | - | - | - | - |
| L1504425-10 | SG-4 | 0259 | #90 SV | 02/24/15 | 200169 | | - | - | - | Pass | 72 | 73 | 1 |
| L1504425-10 | SG-4 | 2015 | 2.7L Can | 02/24/15 | 200169 | L1502909-01 | Pass | -29.9 | 0.6 | - | - | - | - |
| L1504425-11 | SG BLANK | 0182 | #90 SV | 02/24/15 | 200169 | | - | - | - | Pass | 67 | 77 | 14 |
| L1504425-11 | SG BLANK | 1744 | 2.7L Can | 02/24/15 | 200169 | L1502909-01 | Pass | -28.0 | -28.8 | - | - | - | - |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

| | | | |
|---|---|---|---|
| Lab ID: | L1502909-01 | Date Collected: | 02/13/15 17:30 |
| Client ID: | CAN 125 SHELF 15 | Date Received: | 02/14/15 |
| Sample Location: | | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Anaytical Method: | 48,TO-15 | | |
| Analytical Date: | 02/14/15 15:31 | | |
| Analyst: | RY | | |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Chlorodifluoromethane | ND | 0.200 | 0.063 | ND | 0.707 | 0.221 | | 1 |
| Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | | 1 |
| Propane | ND | 0.500 | 0.114 | ND | 0.902 | 0.206 | | 1 |
| Dichlorodifluoromethane | ND | 0.200 | 0.047 | ND | 0.989 | 0.230 | | 1 |
| Chloromethane | ND | 0.200 | 0.096 | ND | 0.413 | 0.198 | | 1 |
| Freon-114 | ND | 0.200 | 0.042 | ND | 1.40 | 0.293 | | 1 |
| Methanol | ND | 5.00 | 0.736 | ND | 6.55 | 0.964 | | 1 |
| Vinyl chloride | ND | 0.200 | 0.053 | ND | 0.511 | 0.136 | | 1 |
| 1,3-Butadiene | ND | 0.200 | 0.080 | ND | 0.442 | 0.177 | | 1 |
| Butane | ND | 0.200 | 0.044 | ND | 0.475 | 0.105 | | 1 |
| Bromomethane | ND | 0.200 | 0.070 | ND | 0.777 | 0.270 | | 1 |
| Chloroethane | ND | 0.200 | 0.077 | ND | 0.528 | 0.202 | | 1 |
| Ethanol | ND | 2.50 | 0.542 | ND | 4.71 | 1.02 | | 1 |
| Dichlorofluoromethane | ND | 0.200 | 0.057 | ND | 0.842 | 0.241 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acrolein | ND | 0.500 | 0.114 | ND | 1.15 | 0.261 | | 1 |
| Acetone | ND | 1.00 | 0.269 | ND | 2.38 | 0.639 | | 1 |
| Acetonitrile | ND | 0.200 | 0.076 | ND | 0.336 | 0.128 | | 1 |
| Trichlorofluoromethane | ND | 0.200 | 0.042 | ND | 1.12 | 0.234 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| Acrylonitrile | ND | 0.500 | 0.079 | ND | 1.09 | 0.171 | | 1 |
| Pentane | ND | 0.200 | 0.048 | ND | 0.590 | 0.140 | | 1 |
| Ethyl ether | ND | 0.200 | 0.059 | ND | 0.606 | 0.179 | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | 0.057 | ND | 0.793 | 0.224 | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | 0.060 | ND | 1.52 | 0.182 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1502909-01 Date Collected: 02/13/15 17:30

Client ID: CAN 125 SHELF 15 Date Received: 02/14/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Methylene chloride | ND | 0.500 | 0.188 | ND | 1.74 | 0.653 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Freon-113 | ND | 0.200 | 0.051 | ND | 1.53 | 0.392 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | 0.074 | ND | 0.793 | 0.293 | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | 0.077 | ND | 0.809 | 0.312 | | 1 |
| Methyl tert butyl ether | ND | 0.200 | 0.045 | ND | 0.721 | 0.163 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | ND | 0.500 | 0.052 | ND | 1.47 | 0.154 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | 0.059 | ND | 0.793 | 0.233 | | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Chloroform | ND | 0.200 | 0.045 | ND | 0.977 | 0.221 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| 2,2-Dichloropropane | ND | 0.200 | 0.058 | ND | 0.924 | 0.269 | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | 0.055 | ND | 0.809 | 0.223 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Diisopropyl ether | ND | 0.200 | 0.066 | ND | 0.836 | 0.274 | | 1 |
| tert-Butyl Ethyl Ether | ND | 0.200 | 0.052 | ND | 0.836 | 0.215 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | 0.057 | ND | 1.09 | 0.311 | | 1 |
| 1,1-Dichloropropene | ND | 0.200 | 0.072 | ND | 0.908 | 0.325 | | 1 |
| Benzene | ND | 0.200 | 0.054 | ND | 0.639 | 0.172 | | 1 |
| Carbon tetrachloride | ND | 0.200 | 0.047 | ND | 1.26 | 0.296 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| tert-Amyl Methyl Ether | ND | 0.200 | 0.080 | ND | 0.836 | 0.332 | | 1 |
| Dibromomethane | ND | 0.200 | 0.048 | ND | 1.42 | 0.338 | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | 0.070 | ND | 0.924 | 0.322 | | 1 |
| Bromodichloromethane | ND | 0.200 | 0.066 | ND | 1.34 | 0.439 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1502909-01 Date Collected: 02/13/15 17:30

Client ID: CAN 125 SHELF 15 Date Received: 02/14/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Trichloroethene | ND | 0.200 | 0.071 | ND | 1.07 | 0.382 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Methyl Methacrylate | ND | 0.500 | 0.148 | ND | 2.05 | 0.606 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | 0.075 | ND | 0.908 | 0.338 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | 0.069 | ND | 0.908 | 0.315 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | 0.067 | ND | 1.09 | 0.364 | | 1 |
| Toluene | ND | 0.200 | 0.063 | ND | 0.754 | 0.237 | | 1 |
| 1,3-Dichloropropane | ND | 0.200 | 0.078 | ND | 0.924 | 0.359 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| Dibromochloromethane | ND | 0.200 | 0.075 | ND | 1.70 | 0.636 | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | 0.078 | ND | 1.54 | 0.599 | | 1 |
| Butyl acetate | ND | 0.500 | 0.114 | ND | 2.38 | 0.542 | | 1 |
| Octane | ND | 0.200 | 0.042 | ND | 0.934 | 0.197 | | 1 |
| Tetrachloroethene | ND | 0.200 | 0.076 | ND | 1.36 | 0.514 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.200 | 0.055 | ND | 1.37 | 0.376 | | 1 |
| Chlorobenzene | ND | 0.200 | 0.079 | ND | 0.921 | 0.363 | | 1 |
| Ethylbenzene | ND | 0.200 | 0.056 | ND | 0.869 | 0.241 | | 1 |
| p/m-Xylene | ND | 0.400 | 0.139 | ND | 1.74 | 0.604 | | 1 |
| Bromoform | ND | 0.200 | 0.052 | ND | 2.07 | 0.541 | | 1 |
| Styrene | ND | 0.200 | 0.080 | ND | 0.852 | 0.340 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | 0.055 | ND | 1.37 | 0.376 | | 1 |
| o-Xylene | ND | 0.200 | 0.063 | ND | 0.869 | 0.274 | | 1 |
| 1,2,3-Trichloropropane | ND | 0.200 | 0.077 | ND | 1.21 | 0.462 | | 1 |
| Nonane | ND | 0.200 | 0.064 | ND | 1.05 | 0.338 | | 1 |
| Isopropylbenzene | ND | 0.200 | 0.043 | ND | 0.983 | 0.211 | | 1 |
| Bromobenzene | ND | 0.200 | 0.079 | ND | 0.793 | 0.313 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L1502909
**Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1502909-01
Client ID: CAN 125 SHELF 15
Sample Location:

Date Collected: 02/13/15 17:30
Date Received: 02/14/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| 2-Chlorotoluene | ND | 0.200 | 0.049 | ND | 1.04 | 0.252 | | 1 |
| n-Propylbenzene | ND | 0.200 | 0.056 | ND | 0.983 | 0.275 | | 1 |
| 4-Chlorotoluene | ND | 0.200 | 0.076 | ND | 1.04 | 0.396 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | 0.058 | ND | 0.983 | 0.287 | | 1 |
| tert-Butylbenzene | ND | 0.200 | 0.040 | ND | 1.10 | 0.221 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | 0.069 | ND | 0.983 | 0.341 | | 1 |
| Decane | ND | 0.200 | 0.048 | ND | 1.16 | 0.282 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | 0.064 | ND | 1.20 | 0.383 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | 0.042 | ND | 1.20 | 0.251 | | 1 |
| sec-Butylbenzene | ND | 0.200 | 0.073 | ND | 1.10 | 0.401 | | 1 |
| p-Isopropyltoluene | ND | 0.200 | 0.061 | ND | 1.10 | 0.334 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | 0.061 | ND | 1.20 | 0.369 | | 1 |
| n-Butylbenzene | ND | 0.200 | 0.064 | ND | 1.10 | 0.351 | | 1 |
| 1,2-Dibromo-3-chloropropane | ND | 0.200 | 0.074 | ND | 1.93 | 0.719 | | 1 |
| Undecane | ND | 0.200 | 0.053 | ND | 1.28 | 0.338 | | 1 |
| Dodecane | ND | 0.200 | 0.056 | ND | 1.39 | 0.393 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | 0.061 | ND | 1.48 | 0.454 | | 1 |
| Naphthalene | ND | 0.200 | 0.043 | ND | 1.05 | 0.227 | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.200 | 0.044 | ND | 1.48 | 0.324 | | 1 |
| Hexachlorobutadiene | ND | 0.200 | 0.073 | ND | 2.13 | 0.781 | | 1 |

| | Results | Qualifier | Units | RDL | Dilution Factor |
|---|---|---|---|---|---|
| Tentatively Identified Compounds | | | | | |
| No Tentatively Identified Compounds | | | | | |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1502909-01 Date Collected: 02/13/15 17:30

Client ID: CAN 125 SHELF 15 Date Received: 02/14/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 107 | | 60-140 |
| Bromochloromethane | 101 | | 60-140 |
| chlorobenzene-d5 | 100 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

| | | | |
|---|---|---|---|
| Lab ID: | L1502909-01 | Date Collected: | 02/13/15 17:30 |
| Client ID: | CAN 125 SHELF 15 | Date Received: | 02/14/15 |
| Sample Location: | | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Anaytical Method: | 48,TO-15-SIM | | |
| Analytical Date: | 02/14/15 15:31 | | |
| Analyst: | RY | | |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.050 | 0.006 | ND | 0.247 | 0.030 | | 1 |
| Chloromethane | ND | 0.500 | 0.048 | ND | 1.03 | 0.099 | | 1 |
| Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Acetone | ND | 2.00 | 0.739 | ND | 4.75 | 1.76 | | 1 |
| Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | | 1 |
| Acrylonitrile | ND | 0.500 | 0.015 | ND | 1.09 | 0.033 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 1.00 | 0.250 | ND | 3.47 | 0.869 | | 1 |
| Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | | 1 |
| Halothane | ND | 0.050 | 0.008 | ND | 0.404 | 0.065 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| 2-Butanone | ND | 0.500 | 0.025 | ND | 1.47 | 0.073 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1502909-01 Date Collected: 02/13/15 17:30

Client ID: CAN 125 SHELF 15 Date Received: 02/14/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| 1,4-Dioxane | ND | 0.100 | 0.050 | ND | 0.360 | 0.180 | | 1 |
| Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.042 | ND | 2.05 | 0.172 | | 1 |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | | 1 |
| p/m-Xylene | ND | 0.040 | 0.009 | ND | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | | 1 |
| Isopropylbenzene | ND | 0.500 | 0.046 | ND | 2.46 | 0.226 | | 1 |
| 4-Ethyltoluene | ND | 0.020 | 0.010 | ND | 0.098 | 0.048 | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | 0.005 | ND | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | 0.007 | ND | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| sec-Butylbenzene | ND | 0.500 | 0.047 | ND | 2.74 | 0.258 | | 1 |
| p-Isopropyltoluene | ND | 0.500 | 0.048 | ND | 2.74 | 0.263 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1502909-01 Date Collected: 02/13/15 17:30

Client ID: CAN 125 SHELF 15 Date Received: 02/14/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| n-Butylbenzene | ND | 0.500 | 0.045 | ND | 2.74 | 0.247 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.050 | 0.019 | ND | 0.371 | 0.141 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 106 | | 60-140 |
| bromochloromethane | 100 | | 60-140 |
| chlorobenzene-d5 | 98 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

| | | | |
|---|---|---|---|
| Lab ID: | L1503156-01 | Date Collected: | 02/19/15 09:00 |
| Client ID: | CAN 771 SHELF 56 | Date Received: | 02/19/15 |
| Sample Location: | | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Anaytical Method: | 48,TO-15 | | |
| Analytical Date: | 02/19/15 17:31 | | |
| Analyst: | RY | | |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Chlorodifluoromethane | ND | 0.200 | 0.063 | ND | 0.707 | 0.221 | | 1 |
| Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | | 1 |
| Propane | ND | 0.500 | 0.114 | ND | 0.902 | 0.206 | | 1 |
| Dichlorodifluoromethane | ND | 0.200 | 0.047 | ND | 0.989 | 0.230 | | 1 |
| Chloromethane | ND | 0.200 | 0.096 | ND | 0.413 | 0.198 | | 1 |
| Freon-114 | ND | 0.200 | 0.042 | ND | 1.40 | 0.293 | | 1 |
| Methanol | ND | 5.00 | 0.736 | ND | 6.55 | 0.964 | | 1 |
| Vinyl chloride | ND | 0.200 | 0.053 | ND | 0.511 | 0.136 | | 1 |
| 1,3-Butadiene | ND | 0.200 | 0.080 | ND | 0.442 | 0.177 | | 1 |
| Butane | ND | 0.200 | 0.044 | ND | 0.475 | 0.105 | | 1 |
| Bromomethane | ND | 0.200 | 0.070 | ND | 0.777 | 0.270 | | 1 |
| Chloroethane | ND | 0.200 | 0.077 | ND | 0.528 | 0.202 | | 1 |
| Ethanol | ND | 2.50 | 0.542 | ND | 4.71 | 1.02 | | 1 |
| Dichlorofluoromethane | ND | 0.200 | 0.057 | ND | 0.842 | 0.241 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acrolein | ND | 0.500 | 0.114 | ND | 1.15 | 0.261 | | 1 |
| Acetone | ND | 1.00 | 0.269 | ND | 2.38 | 0.639 | | 1 |
| Acetonitrile | ND | 0.200 | 0.076 | ND | 0.336 | 0.128 | | 1 |
| Trichlorofluoromethane | ND | 0.200 | 0.042 | ND | 1.12 | 0.234 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| Acrylonitrile | ND | 0.500 | 0.079 | ND | 1.09 | 0.171 | | 1 |
| Pentane | ND | 0.200 | 0.048 | ND | 0.590 | 0.140 | | 1 |
| Ethyl ether | ND | 0.200 | 0.059 | ND | 0.606 | 0.179 | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | 0.057 | ND | 0.793 | 0.224 | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | 0.060 | ND | 1.52 | 0.182 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-01 Date Collected: 02/19/15 09:00

Client ID: CAN 771 SHELF 56 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Methylene chloride | ND | 0.500 | 0.188 | ND | 1.74 | 0.653 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Freon-113 | ND | 0.200 | 0.051 | ND | 1.53 | 0.392 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | 0.074 | ND | 0.793 | 0.293 | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | 0.077 | ND | 0.809 | 0.312 | | 1 |
| Methyl tert butyl ether | ND | 0.200 | 0.045 | ND | 0.721 | 0.163 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | ND | 0.500 | 0.052 | ND | 1.47 | 0.154 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | 0.059 | ND | 0.793 | 0.233 | | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Chloroform | ND | 0.200 | 0.045 | ND | 0.977 | 0.221 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| 2,2-Dichloropropane | ND | 0.200 | 0.058 | ND | 0.924 | 0.269 | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | 0.055 | ND | 0.809 | 0.223 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Diisopropyl ether | ND | 0.200 | 0.066 | ND | 0.836 | 0.274 | | 1 |
| tert-Butyl Ethyl Ether | ND | 0.200 | 0.052 | ND | 0.836 | 0.215 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | 0.057 | ND | 1.09 | 0.311 | | 1 |
| 1,1-Dichloropropene | ND | 0.200 | 0.072 | ND | 0.908 | 0.325 | | 1 |
| Benzene | ND | 0.200 | 0.054 | ND | 0.639 | 0.172 | | 1 |
| Carbon tetrachloride | ND | 0.200 | 0.047 | ND | 1.26 | 0.296 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| tert-Amyl Methyl Ether | ND | 0.200 | 0.080 | ND | 0.836 | 0.332 | | 1 |
| Dibromomethane | ND | 0.200 | 0.048 | ND | 1.42 | 0.338 | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | 0.070 | ND | 0.924 | 0.322 | | 1 |
| Bromodichloromethane | ND | 0.200 | 0.066 | ND | 1.34 | 0.439 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-01 Date Collected: 02/19/15 09:00

Client ID: CAN 771 SHELF 56 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Trichloroethene | ND | 0.200 | 0.071 | ND | 1.07 | 0.382 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Methyl Methacrylate | ND | 0.500 | 0.148 | ND | 2.05 | 0.606 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | 0.075 | ND | 0.908 | 0.338 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | 0.069 | ND | 0.908 | 0.315 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | 0.067 | ND | 1.09 | 0.364 | | 1 |
| Toluene | ND | 0.200 | 0.063 | ND | 0.754 | 0.237 | | 1 |
| 1,3-Dichloropropane | ND | 0.200 | 0.078 | ND | 0.924 | 0.359 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| Dibromochloromethane | ND | 0.200 | 0.075 | ND | 1.70 | 0.636 | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | 0.078 | ND | 1.54 | 0.599 | | 1 |
| Butyl acetate | ND | 0.500 | 0.114 | ND | 2.38 | 0.542 | | 1 |
| Octane | ND | 0.200 | 0.042 | ND | 0.934 | 0.197 | | 1 |
| Tetrachloroethene | ND | 0.200 | 0.076 | ND | 1.36 | 0.514 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.200 | 0.055 | ND | 1.37 | 0.376 | | 1 |
| Chlorobenzene | ND | 0.200 | 0.079 | ND | 0.921 | 0.363 | | 1 |
| Ethylbenzene | ND | 0.200 | 0.056 | ND | 0.869 | 0.241 | | 1 |
| p/m-Xylene | ND | 0.400 | 0.139 | ND | 1.74 | 0.604 | | 1 |
| Bromoform | ND | 0.200 | 0.052 | ND | 2.07 | 0.541 | | 1 |
| Styrene | ND | 0.200 | 0.080 | ND | 0.852 | 0.340 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | 0.055 | ND | 1.37 | 0.376 | | 1 |
| o-Xylene | ND | 0.200 | 0.063 | ND | 0.869 | 0.274 | | 1 |
| 1,2,3-Trichloropropane | ND | 0.200 | 0.077 | ND | 1.21 | 0.462 | | 1 |
| Nonane | ND | 0.200 | 0.064 | ND | 1.05 | 0.338 | | 1 |
| Isopropylbenzene | ND | 0.200 | 0.043 | ND | 0.983 | 0.211 | | 1 |
| Bromobenzene | ND | 0.200 | 0.079 | ND | 0.793 | 0.313 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-01 Date Collected: 02/19/15 09:00

Client ID: CAN 771 SHELF 56 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| 2-Chlorotoluene | ND | 0.200 | 0.049 | ND | 1.04 | 0.252 | | 1 |
| n-Propylbenzene | ND | 0.200 | 0.056 | ND | 0.983 | 0.275 | | 1 |
| 4-Chlorotoluene | ND | 0.200 | 0.076 | ND | 1.04 | 0.396 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | 0.058 | ND | 0.983 | 0.287 | | 1 |
| tert-Butylbenzene | ND | 0.200 | 0.040 | ND | 1.10 | 0.221 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | 0.069 | ND | 0.983 | 0.341 | | 1 |
| Decane | ND | 0.200 | 0.048 | ND | 1.16 | 0.282 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | 0.064 | ND | 1.20 | 0.383 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | 0.042 | ND | 1.20 | 0.251 | | 1 |
| sec-Butylbenzene | ND | 0.200 | 0.073 | ND | 1.10 | 0.401 | | 1 |
| p-Isopropyltoluene | ND | 0.200 | 0.061 | ND | 1.10 | 0.334 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | 0.061 | ND | 1.20 | 0.369 | | 1 |
| n-Butylbenzene | ND | 0.200 | 0.064 | ND | 1.10 | 0.351 | | 1 |
| 1,2-Dibromo-3-chloropropane | ND | 0.200 | 0.074 | ND | 1.93 | 0.719 | | 1 |
| Undecane | ND | 0.200 | 0.053 | ND | 1.28 | 0.338 | | 1 |
| Dodecane | ND | 0.200 | 0.056 | ND | 1.39 | 0.393 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | 0.061 | ND | 1.48 | 0.454 | | 1 |
| Naphthalene | ND | 0.200 | 0.043 | ND | 1.05 | 0.227 | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.200 | 0.044 | ND | 1.48 | 0.324 | | 1 |
| Hexachlorobutadiene | ND | 0.200 | 0.073 | ND | 2.13 | 0.781 | | 1 |

| | Results | Qualifier | Units | RDL | Dilution Factor |
|---|---|---|---|---|---|
| Tentatively Identified Compounds | | | | | |
| No Tentatively Identified Compounds | | | | | |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-01 Date Collected: 02/19/15 09:00

Client ID: CAN 771 SHELF 56 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 122 | | 60-140 |
| Bromochloromethane | 117 | | 60-140 |
| chlorobenzene-d5 | 114 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

| | | | |
|---|---|---|---|
| Lab ID: | L1503156-01 | Date Collected: | 02/19/15 09:00 |
| Client ID: | CAN 771 SHELF 56 | Date Received: | 02/19/15 |
| Sample Location: | | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Anaytical Method: | 48,TO-15-SIM | | |
| Analytical Date: | 02/19/15 17:31 | | |
| Analyst: | RY | | |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | 0.006 | ND | 0.989 | 0.030 | | 1 |
| Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | | 1 |
| Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Acetone | ND | 1.00 | 0.133 | ND | 2.38 | 0.316 | | 1 |
| Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | | 1 |
| Acrylonitrile | ND | 0.500 | 0.015 | ND | 1.09 | 0.033 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | | 1 |
| Halothane | ND | 0.050 | 0.008 | ND | 0.404 | 0.065 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| 2-Butanone | ND | 0.500 | 0.025 | ND | 1.47 | 0.073 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT

**Lab Number:** L1503156
**Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-01
Client ID: CAN 771 SHELF 56
Sample Location:

Date Collected: 02/19/15 09:00
Date Received: 02/19/15
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| 1,4-Dioxane | ND | 0.100 | 0.050 | ND | 0.360 | 0.180 | | 1 |
| Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.042 | ND | 2.05 | 0.172 | | 1 |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | | 1 |
| p/m-Xylene | ND | 0.040 | 0.009 | ND | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | | 1 |
| Isopropylbenzene | ND | 0.200 | 0.046 | ND | 0.983 | 0.226 | | 1 |
| 4-Ethyltoluene | ND | 0.020 | 0.010 | ND | 0.098 | 0.048 | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | 0.005 | ND | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | 0.007 | ND | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| sec-Butylbenzene | ND | 0.200 | 0.047 | ND | 1.10 | 0.258 | | 1 |
| p-Isopropyltoluene | ND | 0.200 | 0.048 | ND | 1.10 | 0.263 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-01 Date Collected: 02/19/15 09:00

Client ID: CAN 771 SHELF 56 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| n-Butylbenzene | ND | 0.200 | 0.045 | ND | 1.10 | 0.247 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.050 | 0.019 | ND | 0.371 | 0.141 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 118 | | 60-140 |
| bromochloromethane | 112 | | 60-140 |
| chlorobenzene-d5 | 111 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT

**Lab Number:** L1503156
**Report Date:** 03/25/15

# Air Canister Certification Results

| | | | |
|---|---|---|---|
| Lab ID: | L1503156-02 | Date Collected: | 02/19/15 09:00 |
| Client ID: | CAN 1567 SHELF 57 | Date Received: | 02/19/15 |
| Sample Location: | | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Anaytical Method: | 48,TO-15 | | |
| Analytical Date: | 02/19/15 18:08 | | |
| Analyst: | RY | | |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Chlorodifluoromethane | ND | 0.200 | 0.063 | ND | 0.707 | 0.221 | | 1 |
| Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | | 1 |
| Propane | ND | 0.500 | 0.114 | ND | 0.902 | 0.206 | | 1 |
| Dichlorodifluoromethane | ND | 0.200 | 0.047 | ND | 0.989 | 0.230 | | 1 |
| Chloromethane | ND | 0.200 | 0.096 | ND | 0.413 | 0.198 | | 1 |
| Freon-114 | ND | 0.200 | 0.042 | ND | 1.40 | 0.293 | | 1 |
| Methanol | ND | 5.00 | 0.736 | ND | 6.55 | 0.964 | | 1 |
| Vinyl chloride | ND | 0.200 | 0.053 | ND | 0.511 | 0.136 | | 1 |
| 1,3-Butadiene | ND | 0.200 | 0.080 | ND | 0.442 | 0.177 | | 1 |
| Butane | ND | 0.200 | 0.044 | ND | 0.475 | 0.105 | | 1 |
| Bromomethane | ND | 0.200 | 0.070 | ND | 0.777 | 0.270 | | 1 |
| Chloroethane | ND | 0.200 | 0.077 | ND | 0.528 | 0.202 | | 1 |
| Ethanol | ND | 2.50 | 0.542 | ND | 4.71 | 1.02 | | 1 |
| Dichlorofluoromethane | ND | 0.200 | 0.057 | ND | 0.842 | 0.241 | | 1 |
| Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | | 1 |
| Acrolein | ND | 0.500 | 0.114 | ND | 1.15 | 0.261 | | 1 |
| Acetone | ND | 1.00 | 0.269 | ND | 2.38 | 0.639 | | 1 |
| Acetonitrile | ND | 0.200 | 0.076 | ND | 0.336 | 0.128 | | 1 |
| Trichlorofluoromethane | ND | 0.200 | 0.042 | ND | 1.12 | 0.234 | | 1 |
| Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | | 1 |
| Acrylonitrile | ND | 0.500 | 0.079 | ND | 1.09 | 0.171 | | 1 |
| Pentane | ND | 0.200 | 0.048 | ND | 0.590 | 0.140 | | 1 |
| Ethyl ether | ND | 0.200 | 0.059 | ND | 0.606 | 0.179 | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | 0.057 | ND | 0.793 | 0.224 | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | 0.060 | ND | 1.52 | 0.182 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-02 Date Collected: 02/19/15 09:00

Client ID: CAN 1567 SHELF 57 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Methylene chloride | ND | 0.500 | 0.188 | ND | 1.74 | 0.653 | | 1 |
| 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | | 1 |
| Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | | 1 |
| Freon-113 | ND | 0.200 | 0.051 | ND | 1.53 | 0.392 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | 0.074 | ND | 0.793 | 0.293 | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | 0.077 | ND | 0.809 | 0.312 | | 1 |
| Methyl tert butyl ether | ND | 0.200 | 0.045 | ND | 0.721 | 0.163 | | 1 |
| Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | | 1 |
| 2-Butanone | ND | 0.500 | 0.052 | ND | 1.47 | 0.154 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | 0.059 | ND | 0.793 | 0.233 | | 1 |
| Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | | 1 |
| Chloroform | ND | 0.200 | 0.045 | ND | 0.977 | 0.221 | | 1 |
| Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | | 1 |
| 2,2-Dichloropropane | ND | 0.200 | 0.058 | ND | 0.924 | 0.269 | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | 0.055 | ND | 0.809 | 0.223 | | 1 |
| n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | | 1 |
| Diisopropyl ether | ND | 0.200 | 0.066 | ND | 0.836 | 0.274 | | 1 |
| tert-Butyl Ethyl Ether | ND | 0.200 | 0.052 | ND | 0.836 | 0.215 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | 0.057 | ND | 1.09 | 0.311 | | 1 |
| 1,1-Dichloropropene | ND | 0.200 | 0.072 | ND | 0.908 | 0.325 | | 1 |
| Benzene | ND | 0.200 | 0.054 | ND | 0.639 | 0.172 | | 1 |
| Carbon tetrachloride | ND | 0.200 | 0.047 | ND | 1.26 | 0.296 | | 1 |
| Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | | 1 |
| tert-Amyl Methyl Ether | ND | 0.200 | 0.080 | ND | 0.836 | 0.332 | | 1 |
| Dibromomethane | ND | 0.200 | 0.048 | ND | 1.42 | 0.338 | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | 0.070 | ND | 0.924 | 0.322 | | 1 |
| Bromodichloromethane | ND | 0.200 | 0.066 | ND | 1.34 | 0.439 | | 1 |
| 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-02 Date Collected: 02/19/15 09:00

Client ID: CAN 1567 SHELF 57 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Trichloroethene | ND | 0.200 | 0.071 | ND | 1.07 | 0.382 | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | | 1 |
| Methyl Methacrylate | ND | 0.500 | 0.148 | ND | 2.05 | 0.606 | | 1 |
| Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | 0.075 | ND | 0.908 | 0.338 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | 0.069 | ND | 0.908 | 0.315 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | 0.067 | ND | 1.09 | 0.364 | | 1 |
| Toluene | ND | 0.200 | 0.063 | ND | 0.754 | 0.237 | | 1 |
| 1,3-Dichloropropane | ND | 0.200 | 0.078 | ND | 0.924 | 0.359 | | 1 |
| 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | | 1 |
| Dibromochloromethane | ND | 0.200 | 0.075 | ND | 1.70 | 0.636 | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | 0.078 | ND | 1.54 | 0.599 | | 1 |
| Butyl acetate | ND | 0.500 | 0.114 | ND | 2.38 | 0.542 | | 1 |
| Octane | ND | 0.200 | 0.042 | ND | 0.934 | 0.197 | | 1 |
| Tetrachloroethene | ND | 0.200 | 0.076 | ND | 1.36 | 0.514 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.200 | 0.055 | ND | 1.37 | 0.376 | | 1 |
| Chlorobenzene | ND | 0.200 | 0.079 | ND | 0.921 | 0.363 | | 1 |
| Ethylbenzene | ND | 0.200 | 0.056 | ND | 0.869 | 0.241 | | 1 |
| p/m-Xylene | ND | 0.400 | 0.139 | ND | 1.74 | 0.604 | | 1 |
| Bromoform | ND | 0.200 | 0.052 | ND | 2.07 | 0.541 | | 1 |
| Styrene | ND | 0.200 | 0.080 | ND | 0.852 | 0.340 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | 0.055 | ND | 1.37 | 0.376 | | 1 |
| o-Xylene | ND | 0.200 | 0.063 | ND | 0.869 | 0.274 | | 1 |
| 1,2,3-Trichloropropane | ND | 0.200 | 0.077 | ND | 1.21 | 0.462 | | 1 |
| Nonane | ND | 0.200 | 0.064 | ND | 1.05 | 0.338 | | 1 |
| Isopropylbenzene | ND | 0.200 | 0.043 | ND | 0.983 | 0.211 | | 1 |
| Bromobenzene | ND | 0.200 | 0.079 | ND | 0.793 | 0.313 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-02 Date Collected: 02/19/15 09:00

Client ID: CAN 1567 SHELF 57 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| 2-Chlorotoluene | ND | 0.200 | 0.049 | ND | 1.04 | 0.252 | | 1 |
| n-Propylbenzene | ND | 0.200 | 0.056 | ND | 0.983 | 0.275 | | 1 |
| 4-Chlorotoluene | ND | 0.200 | 0.076 | ND | 1.04 | 0.396 | | 1 |
| 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | 0.058 | ND | 0.983 | 0.287 | | 1 |
| tert-Butylbenzene | ND | 0.200 | 0.040 | ND | 1.10 | 0.221 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | 0.069 | ND | 0.983 | 0.341 | | 1 |
| Decane | ND | 0.200 | 0.048 | ND | 1.16 | 0.282 | | 1 |
| Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | 0.064 | ND | 1.20 | 0.383 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | 0.042 | ND | 1.20 | 0.251 | | 1 |
| sec-Butylbenzene | ND | 0.200 | 0.073 | ND | 1.10 | 0.401 | | 1 |
| p-Isopropyltoluene | ND | 0.200 | 0.061 | ND | 1.10 | 0.334 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | 0.061 | ND | 1.20 | 0.369 | | 1 |
| n-Butylbenzene | ND | 0.200 | 0.064 | ND | 1.10 | 0.351 | | 1 |
| 1,2-Dibromo-3-chloropropane | ND | 0.200 | 0.074 | ND | 1.93 | 0.719 | | 1 |
| Undecane | ND | 0.200 | 0.053 | ND | 1.28 | 0.338 | | 1 |
| Dodecane | ND | 0.200 | 0.056 | ND | 1.39 | 0.393 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | 0.061 | ND | 1.48 | 0.454 | | 1 |
| Naphthalene | ND | 0.200 | 0.043 | ND | 1.05 | 0.227 | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.200 | 0.044 | ND | 1.48 | 0.324 | | 1 |
| Hexachlorobutadiene | ND | 0.200 | 0.073 | ND | 2.13 | 0.781 | | 1 |

| | **Results** | **Qualifier** | **Units** | **RDL** | **Dilution Factor** |
|---|---|---|---|---|---|
| Tentatively Identified Compounds | | | | | |
| No Tentatively Identified Compounds | | | | | |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-02 Date Collected: 02/19/15 09:00

Client ID: CAN 1567 SHELF 57 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 111 | | 60-140 |
| Bromochloromethane | 107 | | 60-140 |
| chlorobenzene-d5 | 101 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

| | | | |
|---|---|---|---|
| Lab ID: | L1503156-02 | Date Collected: | 02/19/15 09:00 |
| Client ID: | CAN 1567 SHELF 57 | Date Received: | 02/19/15 |
| Sample Location: | | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Anaytical Method: | 48,TO-15-SIM | | |
| Analytical Date: | 02/19/15 18:08 | | |
| Analyst: | RY | | |

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | 0.006 | ND | 0.989 | 0.030 | | 1 |
| Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | | 1 |
| Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | | 1 |
| Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | | 1 |
| 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | | 1 |
| Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | | 1 |
| Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | | 1 |
| Acetone | ND | 1.00 | 0.133 | ND | 2.38 | 0.316 | | 1 |
| Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | | 1 |
| Acrylonitrile | ND | 0.500 | 0.015 | ND | 1.09 | 0.033 | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | | 1 |
| Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | | 1 |
| Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | | 1 |
| Halothane | ND | 0.050 | 0.008 | ND | 0.404 | 0.065 | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | | 1 |
| Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | | 1 |
| 2-Butanone | ND | 0.500 | 0.025 | ND | 1.47 | 0.073 | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | | 1 |
| Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | | 1 |
| Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | | 1 |
| Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | | 1 |
| 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-02 Date Collected: 02/19/15 09:00

Client ID: CAN 1567 SHELF 57 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | | 1 |
| 1,4-Dioxane | ND | 0.100 | 0.050 | ND | 0.360 | 0.180 | | 1 |
| Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | 0.042 | ND | 2.05 | 0.172 | | 1 |
| trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | | 1 |
| Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | | 1 |
| Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | | 1 |
| Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | | 1 |
| Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | | 1 |
| Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | | 1 |
| p/m-Xylene | ND | 0.040 | 0.009 | ND | 0.174 | 0.039 | | 1 |
| Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | | 1 |
| Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | | 1 |
| o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | | 1 |
| Isopropylbenzene | ND | 0.200 | 0.046 | ND | 0.983 | 0.226 | | 1 |
| 4-Ethyltoluene | ND | 0.020 | 0.010 | ND | 0.098 | 0.048 | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | 0.005 | ND | 0.098 | 0.025 | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | 0.007 | ND | 0.098 | 0.034 | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | | 1 |
| sec-Butylbenzene | ND | 0.200 | 0.047 | ND | 1.10 | 0.258 | | 1 |
| p-Isopropyltoluene | ND | 0.200 | 0.048 | ND | 1.10 | 0.263 | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

# Air Canister Certification Results

Lab ID: L1503156-02 Date Collected: 02/19/15 09:00

Client ID: CAN 1567 SHELF 57 Date Received: 02/19/15

Sample Location: Field Prep: Not Specified

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| n-Butylbenzene | ND | 0.200 | 0.045 | ND | 1.10 | 0.247 | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | | 1 |
| Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.050 | 0.019 | ND | 0.371 | 0.141 | | 1 |
| Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | | 1 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-difluorobenzene | 109 | | 60-140 |
| bromochloromethane | 101 | | 60-140 |
| chlorobenzene-d5 | 100 | | 60-140 |

# AIR Petro Can Certification

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1502909

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

## AIR CAN CERTIFICATION RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1502909-01 | Date Collected: | 02/13/15 17:30 |
| Client ID: | CAN 125 SHELF 15 | Date Received: | 02/14/15 |
| Sample Location: | Not Specified | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 02/14/15 15:31 | | |
| Analyst: | RY | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | ND | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

## AIR CAN CERTIFICATION RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1503156-01 | Date Collected: | 02/19/15 09:00 |
| Client ID: | CAN 771 SHELF 56 | Date Received: | 02/19/15 |
| Sample Location: | Not Specified | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 02/19/15 17:31 | | |
| Analyst: | RY | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | ND | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L1503156

**Project Number:** CANISTER QC BAT **Report Date:** 03/25/15

## AIR CAN CERTIFICATION RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1503156-02 | Date Collected: | 02/19/15 09:00 |
| Client ID: | CAN 1567 SHELF 57 | Date Received: | 02/19/15 |
| Sample Location: | Not Specified | Field Prep: | Not Specified |
| Matrix: | Air | | |
| Analytical Method: | 96,APH | | |
| Analytical Date: | 02/19/15 18:08 | | |
| Analyst: | RY | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Petroleum Hydrocarbons in Air - Mansfield Lab** | | | | | | |
| 1,3-Butadiene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Methyl tert butyl ether | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Benzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C5-C8 Aliphatics, Adjusted | ND | | ug/m3 | 12 | 12. | 1 |
| Toluene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Ethylbenzene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| p/m-Xylene | ND | | ug/m3 | 4.0 | 4.0 | 1 |
| o-Xylene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| Naphthalene | ND | | ug/m3 | 2.0 | 2.0 | 1 |
| C9-C12 Aliphatics, Adjusted | ND | | ug/m3 | 14 | 14. | 1 |
| C9-C10 Aromatics Total | ND | | ug/m3 | 10 | 10. | 1 |

**Project Name:** CUMMINGS BEVERLY
**Project Number:** CUMMINGS BEVERLY

**Lab Number:** L1504425
**Report Date:** 03/25/15

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

**Cooler Information** **Custody Seal**

| Cooler | |
|---|---|
| N/A | Absent |

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1504425-01A | Canister - 6 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-02A | Canister - 6 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-03A | Canister - 6 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-04A | Canister - 6 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-05A | Canister - 6 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-06A | Canister - 6 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-07A | Canister - 2.7 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-08A | Canister - 2.7 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-09A | Canister - 2.7 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-10A | Canister - 2.7 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |
| L1504425-11A | Canister - 2.7 Liter | N/A | NA | | Y | Absent | APH-10(30),TO15-LL(30),TO15-SIM(30) |

*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | CUMMINGS BEVERLY | **Lab Number:** | L1504425 |
| **Project Number:** | CUMMINGS BEVERLY | **Report Date:** | 03/25/15 |

# GLOSSARY

### *Acronyms*

| | |
|---|---|
| EDL | - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME). |
| EPA | - Environmental Protection Agency. |
| LCS | - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes. |
| LCSD | - Laboratory Control Sample Duplicate: Refer to LCS. |
| LFB | - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes. |
| MDL | - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. |
| MS | - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. |
| MSD | - Matrix Spike Sample Duplicate: Refer to MS. |
| NA | - Not Applicable. |
| NC | - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit. |
| NI | - Not Ignitable. |
| RL | - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable. |
| RPD | - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report. |
| SRM | - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples. |

### *Footnotes*

| | |
|---|---|
| 1 | - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method. |

### *Terms*

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### *Data Qualifiers*

| | |
|---|---|
| **A** | - Spectra identified as "Aldol Condensation Product". |
| **B** | - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone). |
| **C** | - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses. |
| **D** | - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte. |
| **E** | - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument. |

*Report Format:* DU Report with 'J' Qualifiers

| | | | |
|---|---|---|---|
| **Project Name:** | CUMMINGS BEVERLY | **Lab Number:** | L1504425 |
| **Project Number:** | CUMMINGS BEVERLY | **Report Date:** | 03/25/15 |

***Data Qualifiers***

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The lower value for the two columns has been reported due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

**J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

*Report Format:* DU Report with 'J' Qualifiers

**Project Name:** CUMMINGS BEVERLY **Lab Number:** L1504425
**Project Number:** CUMMINGS BEVERLY **Report Date:** 03/25/15

## REFERENCES


48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

96 Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), MassDEP, December 2009, Revision 1 with QC Requirements & Performance Standards for the Analysis of APH by GC/MS under the Massachusetts Contingency Plan, WSC-CAM-IXA, July 2010.


## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

# Certification Information

Last revised December 16, 2014

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**The following analytes are not included in our NELAP Scope of Accreditation:**

**Westborough Facility**
**EPA 524.2:** Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
**EPA 8260C:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
**EPA 8270D:** 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
**EPA 625:** 4-Chloroaniline, 4-Methylphenol.
**SM4500**: Soil: Total Phosphorus, TKN, NO2, NO3.
**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

**Mansfield Facility**
**EPA 8270D:** Biphenyl.
**EPA 2540D:** TSS
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:**

***Drinking Water***
**EPA 200.8**: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
**EPA 300.0**: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
**EPA 332**: Perchlorate.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

***Non-Potable Water***
**EPA 200.8**: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
**EPA 200.7**: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
**EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH**, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
**EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
**EPA 624**: Volatile Halocarbons & Aromatics,
**EPA 608**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
**EPA 625**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

# AIR ANALYSIS

PAGE 1 OF 2

**CHAIN OF CUSTODY**

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/10/15

ALPHA Job #: L1504425

**Client Information**

Client: FSL Associates, Inc.
Address: 358 Chestnut Hill Ave
Boston, MA 02135
Phone: (617) 232-0001
Fax: (617) 232-2800
Email: bhoskins@fslassociates.com

☐ These samples have been previously analyzed by Alpha

**Project Information**

Project Name: Cummings Beverly
Project Location: 181 Eliot Street
Project #:
Project Manager: Bruce Hoskins
ALPHA Quote #:

**Turn-Around Time**

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 3/17/15 Time:

**Report Information - Data Deliverables**

☐ FAX
☐ ADEx
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
Other Formats: _____
☑ EMAIL (standard pdf report)
☑ Additional Deliverables: 1 hard copy in mail
Report to: (if different than Project Manager)

**Billing Information**

☐ Same as Client info PO #:

**Regulatory Requirements/Report Limits**

| State/Fed | Program | Criteria |
|---|---|---|
| | | |
| | | |

Other Project Specific Requirements/Comments:
SIM analysis for TO-15; where SIM not possible for analytes, use regular TO-15.
Possibility of Presence of VOCs and Petroleum Hydrocarbons

**All Columns Below Must Be Filled Out**

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Start Time | End Time | Initial Vacuum | Final Vacuum | Sample Matrix* | Sampler's Initials | Can Size | I D Can | I D - Flow Controller | TO-14A by TO-15 | TO-15 | TO-15 SIM | APH | FIXED GASES | TO-13A | TO-4 / TO-10 | Sample Comments (i.e. PID) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04425.01 | Outdoor Control | 3/6-3/8/14 | 18:40 3/6 | 13:31 3/8 | -30.32 | -0.52 | AA | JC | 6L | 1889 | 0102 | | X | X | X | | | | |
| 02 | S-157-2.1 | 3/6-3/8/14 | 18:34 3/6 | 13:29 3/8 | -30.35 | 0.00 | AA | JC | 6L | 1662 | 0114 | | X | X | X | | | | |
| 03 | S-157-2.2 | 3/6-3/8/14 | 18:26 3/6 | 13:22 3/8 | -30.70 | 0.00 | AA | JC | 6L | 985 | 0285 | | X | X | X | | | | |
| 04 | S-157-2 | 3/6-3/8/14 | 18:34 3/6 | 13:24 3/8 | -26.05 | 0.00 | AA | JC | 6L | 1598 | 0354 | | X | X | X | | | | |
| 05 | Duplicate | 3/6-3/8/14 | 18:33 3/6 | 13:24 3/8 | -30.37 | 0.00 | AA | JC | 6L | 1794 | 0243 | | X | X | X | | | | |
| 06 | Blank | 3/6/14 | N/A | N/A | N/A | N/A | AA | JC | 6L | 1050 | 0551 | | X | X | X | | | | |
| 07 | SG-1 | 3/6/14 | 19:12 | 19:43 | -29.94 | 0.00 | SV | JC | 2.7L | 259 | 0309 | | X | X | X | | | | |
| 08 | SG-2 | 3/6/14 | 18:21 | 18:51 | -30.01 | -0.44 | SV | JC | 2.7L | 1748 | 0342 | | X | X | X | | | | |
| 09 | SG-3 | 3/6/14 | 19:01 | 19:31 | -28.96 | 0.00 | SV | JC | 2.7L | 383 | 0389 | | X | X | X | | | | |
| 10 | SG-4 | 3/6/14 | 19:32 | 20:02 | -30.25 | -1.40 | SV | JC | 2.7L | 2015 | 0259 | | X | X | X | | | | |

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

| Relinquished By: | Date/Time | Received By: | Date/Time: |
|---|---|---|---|
| [signature] | 3/10/15 11:05 | [signature] | 3/10/15 11:05 |
| [signature] | 3/10/15 12:00 | [signature] | 3/10/15 12:30 |
| [signature] | 3/11/15 03:00 | Monofield Co | 3/11/15 03:00 |

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

# AIR ANALYSIS

PAGE 2 OF 2

**CHAIN OF CUSTODY**

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/10/15

ALPHA Job #: L1504475

## Client Information

Client: FSL Associates, Inc
Address: 358 Chestnut Hill Ave
Boston, MA 02135
Phone: 617-232-0001
Fax: 617-232-7800
Email: bhoskins@fslassociates.com

☐ These samples have been previously analyzed by Alpha

## Project Information

Project Name: Cummings Beverly
Project Location: 181 Eliott Street, Beverly
Project #:
Project Manager: Bruce Hoskins
ALPHA Quote #:

## Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 3/17/15 Time:

## Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
Other Formats: _____
☑ EMAIL (standard pdf report)
☑ Additional Deliverables: Hard copy in mail
Report to: (if different than Project Manager)

## Billing Information

☐ Same as Client info PO #:

## Regulatory Requirements/Report Limits

| State/Fed | Program | Criteria |
|---|---|---|
| | | |
| | | |
| | | |

Other Project Specific Requirements/Comments:

## All Columns Below Must Be Filled Out

ANALYSIS

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Start Time | End Time | Initial Vacuum | Final Vacuum | Sample Matrix* | Sampler's Initials | Can Size | I D Can | I D - Flow Controller | TO-14A by TO-15 | TO-15 | TO-15 SIM | APH | FIXED GASES | TO-13A | TO-4 / TO-10 | Sample Comments (i.e. PID) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04425.11 | SG Blank | 3/6/14 | N/A | N/A | N/A | N/A | SV | JC | 2.7L | 1744 | 0182 | | X | X | X | | | | |

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

| Relinquished By: | Date/Time | Received By: | Date/Time: |
|---|---|---|---|
| [illegible] | 3/10/15 11:05 | [illegible] | 3-10-15 1105 |
| [illegible] | 3-10-15 12:30 | [illegible] | 3/10/15 12:30 |
| [illegible] | 3/11/15 0800 | [illegible] | 3/11/15 0800 |

# Alpha
# Summary Forms

# Organic Summary Forms

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-01 | Date Collected : | 03/08/15 13:31 |
| Client ID | : OUTDOOR CONTROL | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:51 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140148 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | ND | 12 | 12. | ND | 12. | 12. | U |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | ND | 14 | 14. | ND | 14. | 14. | U |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | ND | 10 | 10. | ND | 10. | 10. | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-02 | Date Collected : | 03/08/15 13:23 |
| Client ID | : S-157-J.1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:23 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140149 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | ND | 12 | 12. | ND | 12. | 12. | U |
| 108-88-3 | Toluene | 2.2 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 120 | 14 | 14. | 120 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | 46 | 10 | 10. | 46 | 10 | 10. | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-03 | Date Collected : | 03/08/15 13:22 |
| Client ID | : S-157-J.2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:55 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140150 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | 14 | 12 | 12. | 14 | 12 | 12. | |
| 108-88-3 | Toluene | 2.5 | 2.0 | 2.0 | 2.5 | 2.0 | 2.0 | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 110 | 14 | 14. | 110 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | 43 | 10 | 10. | 43 | 10 | 10. | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-04 | Date Collected : | 03/08/15 13:24 |
| Client ID | : S-157-J | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:27 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140151 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | 38 | 12 | 12. | 38 | 12 | 12. | |
| 108-88-3 | Toluene | 3.2 | 2.0 | 2.0 | 3.2 | 2.0 | 2.0 | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 130 | 14 | 14. | 130 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | 45 | 10 | 10. | 45 | 10 | 10. | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-05 | Date Collected : | 03/08/15 13:24 |
| Client ID | : DUPLICATE | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:59 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140152 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | ND | 12 | 12. | ND | 12. | 12. | U |
| 108-88-3 | Toluene | 3.3 | 2.0 | 2.0 | 3.3 | 2.0 | 2.0 | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 140 | 14 | 14. | 140 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | 51 | 10 | 10. | 51 | 10 | 10. | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-06 | Date Collected : | 03/06/15 00:00 |
| Client ID | : BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 19:46 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140146 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | ND | 12 | 12. | ND | 12. | 12. | U |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | ND | 14 | 14. | ND | 14. | 14. | U |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | ND | 10 | 10. | ND | 10. | 10. | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-07 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 23:31 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140153 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | 50 | 12 | 12. | 50 | 12 | 12. | |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | 28 | 2.0 | 2.0 | 28 | 2.0 | 2.0 | |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 1900 | 14 | 14. | 1900 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | 340 | 10 | 10. | 340 | 10 | 10. | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-08 | Date Collected : | 03/06/15 18:51 |
| Client ID | : SG-2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 08:45 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140160 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | 48 | 12 | 12. | 48 | 12 | 12. | |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 30 | 14 | 14. | 30 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | ND | 10 | 10. | ND | 10. | 10. | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-09 | Date Collected : | 03/06/15 19:31 |
| Client ID | : SG-3 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:08 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140156 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | 15 | 12 | 12. | 15 | 12 | 12. | |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 54 | 14 | 14. | 54 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | ND | 10 | 10. | ND | 10. | 10. | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-10 | Date Collected : | 03/06/15 20:02 |
| Client ID | : SG-4 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:40 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140157 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | 3.1 | 2.0 | 2.0 | 3.1 | 2.0 | 2.0 | |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | 1100 | 12 | 12. | 1100 | 12 | 12. | |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | 2.8 | 2.0 | 2.0 | 2.8 | 2.0 | 2.0 | |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 3700 | 14 | 14. | 3700 | 14 | 14. | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | 11 | 10 | 10. | 11 | 10 | 10. | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-11 | Date Collected : | 03/06/15 00:00 |
| Client ID | : SG BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:19 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140147 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | ND | 12 | 12. | ND | 12. | 12. | U |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | ND | 14 | 14. | ND | 14. | 14. | U |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | ND | 10 | 10. | ND | 10. | 10. | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767580-4 | Date Collected : | NA |
| Client ID | : WG767580-4BLANK | Date Received : | NA |
| Sample Location | : | Date Analyzed : | 03/11/15 13:49 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140138 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | ND | 12 | 12. | ND | 12. | 12. | U |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4.0 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| 91-20-3 | Naphthalene | ND | 2.0 | 2.0 | ND | 2.0 | 2.0 | U |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | ND | 14 | 14. | ND | 14. | 14. | U |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | ND | 10 | 10. | ND | 10. | 10. | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767580-5 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1DUP | Date Received : | 03/10/15 |
| Sample Location | : | Date Analyzed : | 03/12/15 09:18 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 96,APH | Analyst | : MB |
| Lab File ID | : R140161 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-99-0 | 1,3-Butadiene | ND | 2.0 | 2.0 | ND | 2.0 | 2 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.0 | 2.0 | ND | 2.0 | 2 | U |
| 71-43-2 | Benzene | ND | 2.0 | 2.0 | ND | 2.0 | 2 | U |
| C5-C8-ALPHA-J | C5-C8 Aliphatics, Adjusted | 50. | 12 | 12. | 50. | 12. | 12 | |
| 108-88-3 | Toluene | ND | 2.0 | 2.0 | ND | 2.0 | 2 | U |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 2.0 | ND | 2.0 | 2 | U |
| 179601-23-1 | p/m-Xylene | ND | 4.0 | 4.0 | ND | 4.0 | 4 | U |
| 95-47-6 | o-Xylene | ND | 2.0 | 2.0 | ND | 2.0 | 2 | U |
| 91-20-3 | Naphthalene | 35. | 2.0 | 2.0 | 35. | 2.0 | 2 | |
| C9-C12-ALPHA-J | C9-C12 Aliphatics, Adjusted | 2100 | 14 | 14. | 2100 | 14. | 14 | |
| C9-C10-ALPHA-UJ | C9-C10 Aromatics Total | 380 | 10 | 10. | 380 | 10. | 10 | |

3B
LAB DUPLICATE
SOIL VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1504425 Matrix: Soil
Lab Sample ID : WG767580-5 Injected: 03/12/15 09:18 Lab File ID: R140161
Client Sample ID : SG-1

| COMPOUND | SAMPLE CONCENTRATION (ug/m3) | DUP CONCENTRATION (ug/m3) | DUP % RPD | DUP RPD LIMIT |
|---|---|---|---|---|
| 1,3-Butadiene | ND | ND | NC | 30 |
| Methyl tert butyl ether | ND | ND | NC | 30 |
| Benzene | ND | ND | NC | 30 |
| C5-C8 Aliphatics, Adjust | 50 | 50 | 0 | 30 |
| Toluene | ND | ND | NC | 30 |
| Ethylbenzene | ND | ND | NC | 30 |
| p/m-Xylene | ND | ND | NC | 30 |
| o-Xylene | ND | ND | NC | 30 |
| Naphthalene | 28 | 35 | 22 | 30 |
| C9-C12 Aliphatics, Adjus | 1900 | 2100 | 10 | 30 |
| C9-C10 Aromatics Total | 340 | 380 | 11 | 30 |

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III APH-10

3B
LAB CONTROL SAMPLE RECOVERY
SOIL VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1504425 Matrix: Soil
Lab Control Sample: WG767580-3LCS Injected: 03/11/15 12:18 Lab File ID: R140136

| COMPOUND | SPIKE ADDED ug/m3 | SAMPLE CONC ug/m3 | LCS CONC ug/m3 | LCS % REC | LCSD CONC ug/m3 | LCSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Butadiene | 22.1 | NA | 22 | 98 | - | - | - | | 70-130 |
| Methyl tert butyl ether | 36 | NA | 33 | 90 | - | - | - | | 70-130 |
| Benzene | 32 | NA | 32 | 99 | - | - | - | | 70-130 |
| C5-C8 Aliphatics, Adjust | 122 | NA | 110 | 94 | - | - | - | | 70-130 |
| Toluene | 37.8 | NA | 36 | 95 | - | - | - | | 70-130 |
| Ethylbenzene | 43.5 | NA | 41 | 93 | - | - | - | | 70-130 |
| m/p-xylenes | 87 | NA | 82 | 94 | - | - | - | | 70-130 |
| o-Xylene | 43.5 | NA | 42 | 97 | - | - | - | | 70-130 |
| Naphthalene | 52.2 | NA | 55 | 106 | - | - | - | | 50-150 |
| C9-C12 Aliphatics, Adjus | 174 | NA | 160 | 93 | - | - | - | | 70-130 |
| C9-C10 Aromatics Total | 465 | NA | 380 | 81 | - | - | - | | 70-130 |

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III APH-10

4A

VOLATILE ORGANICS METHOD BLANK SUMMARY

SAMPLE NO.

WG767580-4BLANK

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R140138 Lab Sample ID: WG767580-4

Date Analyzed: 03/11/15 Time Analyzed: 13:49

Instrument ID: AIRPIANO1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|---|
| 01 | WG767580-3LCS | WG767580-3 | R140136 | 03/11/15 12:18 |
| 02 | BLANK | L1504425-06 | R140146 | 03/11/15 19:46 |
| 03 | SG BLANK | L1504425-11 | R140147 | 03/11/15 20:19 |
| 04 | OUTDOOR CONTROL | L1504425-01 | R140148 | 03/11/15 20:51 |
| 05 | S-157-J.1 | L1504425-02 | R140149 | 03/11/15 21:23 |
| 06 | S-157-J.2 | L1504425-03 | R140150 | 03/11/15 21:55 |
| 07 | S-157-J | L1504425-04 | R140151 | 03/11/15 22:27 |
| 08 | DUPLICATE | L1504425-05 | R140152 | 03/11/15 22:59 |
| 09 | SG-1 | L1504425-07 | R140153 | 03/11/15 23:31 |
| 10 | SG-3 | L1504425-09 | R140156 | 03/12/15 01:08 |
| 11 | SG-4 | L1504425-10 | R140157 | 03/12/15 01:40 |
| 12 | SG-2 | L1504425-08 | R140160 | 03/12/15 08:45 |
| 13 | SG-1DUP | WG767580-5 | R140161 | 03/12/15 09:18 |

COMMENTS: _____

page 1 of 1

FORM IV APH-10 LOW

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R138797_tune  BFB Injection Date: 01/01/15

Instrument ID: AIRPIANO1  BFB Injection Time: 18:23

| m/e | ION ABUNDANCE CRITERIA | % Relative Abundance |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 21.3 |
| 75 | 30.0 - 60.0% of mass 95 | 47.2 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7.2 |
| 173 | Less than 2.0% of mass 174 | 0 (0 )1 |
| 174 | Greater than 50.0 of mass 95 | 91.3 |
| 175 | 5.0 - 9.0% of mass 174 | 7.1 (7.8 )1 |
| 176 | 95.0 - 101% of mass 174 | 87.7 (96 )1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.5 (6.2 )2 |

1-Value is % of mass 174  2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | 0.4 | 0.4 | R138798 | 01/01/15 | 20:43 |
| 02 | 0.8 | 0.8 | R138799 | 01/01/15 | 21:16 |
| 03 | 2.0 | 2.0 | R138800 | 01/01/15 | 21:48 |
| 04 | 10 | 10 | R138801 | 01/01/15 | 22:19 |
| 05 | 20 | 20 | R138802 | 01/01/15 | 22:52 |
| 06 | 50 | 50 | R138803 | 01/01/15 | 23:24 |
| 07 | 100.0 | 100.0 | R138804 | 01/01/15 | 23:57 |
| 08 | ICV QUANT REPORT | ICV QUANT REPO | R138807 | 01/02/15 | 09:08 |

page 1 of 1

FORM V APH-10

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R140134_tune  BFB Injection Date: 03/11/15

Instrument ID: AIRPIANO1  BFB Injection Time: 11:12

| m/e | ION ABUNDANCE CRITERIA | % Relative Abundance |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 21 |
| 75 | 30.0 - 60.0% of mass 95 | 46.3 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.2 |
| 173 | Less than 2.0% of mass 174 | 0 (0 )1 |
| 174 | Greater than 50.0 of mass 95 | 87.6 |
| 175 | 5.0 - 9.0% of mass 174 | 7.1 (8.1 )1 |
| 176 | 95.0 - 101% of mass 174 | 85.9 (98 )1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.9 (6.9 )2 |

1-Value is % of mass 174  2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | CCAL | WG767580-2 | R140135 | 03/11/15 | 11:44 |
| 02 | WG767580-3LCS | WG767580-3 | R140136 | 03/11/15 | 12:18 |
| 03 | WG767580-4BLANK | WG767580-4 | R140138 | 03/11/15 | 13:49 |
| 04 | BLANK | L1504425-06 | R140146 | 03/11/15 | 19:46 |
| 05 | SG BLANK | L1504425-11 | R140147 | 03/11/15 | 20:19 |
| 06 | OUTDOOR CONTROL | L1504425-01 | R140148 | 03/11/15 | 20:51 |
| 07 | S-157-J.1 | L1504425-02 | R140149 | 03/11/15 | 21:23 |
| 08 | S-157-J.2 | L1504425-03 | R140150 | 03/11/15 | 21:55 |
| 09 | S-157-J | L1504425-04 | R140151 | 03/11/15 | 22:27 |
| 10 | DUPLICATE | L1504425-05 | R140152 | 03/11/15 | 22:59 |
| 11 | SG-1 | L1504425-07 | R140153 | 03/11/15 | 23:31 |
| 12 | SG-3 | L1504425-09 | R140156 | 03/12/15 | 01:08 |
| 13 | SG-4 | L1504425-10 | R140157 | 03/12/15 | 01:40 |
| 14 | SG-2 | L1504425-08 | R140160 | 03/12/15 | 08:45 |
| 15 | SG-1DUP | WG767580-5 | R140161 | 03/12/15 | 09:18 |



FORM V APH-10

6A

# VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date(s): 01/01/15 01/01/15

Calibration Times: 20:43 23:57

Calibration Files
0.4 =R138798.D 0.8 =R138799.D 2.0 =R138800.D 10 =R138801.D 20 =R138802.D 50 =R138803.D
100 =R138804.D

| | | Compound | 0.4 | 0.8 | 2.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | bromochloromethane | ----------ISTD---------- | | | | | | | | |
| 2) | T | 1,3-butadiene | 0.477 | 0.463 | 0.487 | 0.393 | 0.390 | 0.408 | 0.390 | 0.4298 | 10.23 |
| 3) | | isopentane | 3.718 | 3.546 | 3.254 | 2.481 | 2.482 | 2.587 | 2.451 | 2.9312 | 18.97 |
| 4) | T | methyl tert butyl ether | 1.015 | 0.969 | 1.067 | 0.891 | 0.846 | 0.906 | 0.870 | 0.9379 | 8.68 |
| 5) | | hexane | 4.622 | 3.720 | 3.730 | 2.890 | 2.820 | 3.042 | 2.902 | 3.3894 | 19.71 |
| 6) | | cyclohexane | 2.904 | 2.881 | 3.102 | 2.635 | 2.467 | 2.669 | 2.547 | 2.7437 | 8.23 |
| 7) | I | 1,4-difluorobenzene | ----------ISTD---------- | | | | | | | | |
| 8) | | 2,3-dimethylpentane | 0.763 | 0.714 | 0.758 | 0.650 | 0.583 | 0.633 | 0.628 | 0.6755 | 10.34 |
| 9) | T | benzene | 0.284 | 0.282 | 0.326 | 0.256 | 0.247 | 0.267 | 0.260 | 0.2748 | 9.57 |
| 10) | | heptane | 0.658 | 0.664 | 0.783 | 0.628 | 0.587 | 0.629 | 0.606 | 0.6506 | 9.85 |
| 11) | H | C5-C8 Aliphatics Total | 0.787 | 0.735 | 0.815 | 0.653 | 0.608 | 0.653 | 0.632 | 0.6976 | 11.64 |
| 12) | I | chlorobenzene-D5 | ----------ISTD---------- | | | | | | | | |
| 13) | | toluene | 1.495 | 1.368 | 1.502 | 1.232 | 1.191 | 1.279 | 1.257 | 1.3321 | 9.44 |
| 14) | | n-octane | 3.497 | 3.281 | 3.669 | 2.971 | 2.900 | 3.080 | 2.931 | 3.1899 | 9.43 |
| 15) | | 2,3-dimethylheptane | 3.926 | 3.754 | 4.091 | 3.253 | 3.255 | 3.435 | 3.228 | 3.5632 | 10.03 |
| 16) | T | ethyl benzene | 1.599 | 1.527 | 1.707 | 1.426 | 1.413 | 1.527 | 1.470 | 1.5240 | 6.77 |
| 17) | T | m+p-xylene | 1.314 | 1.233 | 1.328 | 1.122 | 1.076 | 1.189 | 1.145 | 1.2010 | 7.97 |
| 18) | | n-nonane | 3.751 | 3.484 | 3.797 | 3.171 | 3.132 | 3.318 | 3.122 | 3.3964 | 8.46 |
| 19) | T | o-xylene | 1.281 | 1.262 | 1.393 | 1.130 | 1.130 | 1.223 | 1.176 | 1.2279 | 7.66 |
| 20) | | decane | 3.729 | 3.658 | 4.128 | 3.293 | 3.367 | 3.546 | 3.325 | 3.5780 | 8.25 |
| 21) | | butylcyclohexane | 4.220 | 4.233 | 4.479 | 3.642 | 3.639 | 4.110 | 3.650 | 3.9962 | 8.70 |
| 22) | | n-undecane | 3.527 | 3.318 | 4.118 | 3.528 | 3.534 | 3.657 | 3.477 | 3.5941 | 7.00 |
| 23) | T | naphthalene | 1.564 | 1.604 | 1.770 | 1.569 | 1.647 | 1.869 | 1.808 | 1.6901 | 7.33 |
| 24) | | n-dodecane | 2.957 | 2.775 | 3.414 | 3.302 | 3.485 | 3.818 | 3.571 | 3.3316 | 10.80 |
| 25) | H | C9-C12 Aliphatics Total | 3.653 | 3.505 | 3.988 | 3.370 | 3.413 | 3.656 | 3.409 | 3.5705 | 6.09 |
| 27) | | C9-C10 Aromatics Total | 0.599 | 0.555 | 0.631 | 0.527 | 0.520 | 0.572 | 0.555 | 0.5655 | 6.90 |
| 28) | s | bromochloromethane (TIC) | 7.878 | 6.772 | 7.291 | 7.118 | 7.151 | 6.887 | 6.747 | 7.1206 | 5.50 |
| 29) | s | 1,4-difluorobenzene (TIC) | 1.062 | 1.041 | 0.988 | 0.980 | 1.027 | 1.013 | 0.998 | 1.0156 | 2.92 |
| 30) | s | chlorobenzene-D5 (TIC) | 1.331 | 1.329 | 1.319 | 1.298 | 1.324 | 1.325 | 1.341 | 1.3240 | 1.01 |
| 31) | s | 1,2-dichloroethane-D4 (TIC) | 3.696 | 3.855 | 3.858 | 3.440 | 3.612 | 3.642 | 3.705 | 3.6867 | 3.94 |
| 32) | s | toluene-D8 (TIC) | 1.016 | 1.071 | 1.075 | 1.115 | 1.133 | 1.237 | 1.229 | 1.1252 | 7.33 |
| 33) | s | bromofluorobenzene (TIC) | 1.280 | 1.312 | 1.265 | 1.269 | 1.291 | 1.300 | 1.287 | 1.2865 | 1.31 |

FORM VI-APH-10

7A

Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date: 03/11/2015 Time: 11:44

Lab File ID: R140135 Init. Calib. Date(s): 01/01/15 01/01/15

Sample No: WG767580-2,3,25 Init. Calib. Times : 20:43 23:57

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 77 | 0.00 |
| 2 | T | 1,3-butadiene | 0.430 | 0.362 | 15.8 | 71 | 0.00 |
| 3 | | isopentane | 2.931 | 2.444 | 16.6 | 76 | 0.00 |
| 4 | T | methyl tert butyl ether | 0.938 | 0.798 | 14.9 | 69 | 0.00 |
| 5 | | hexane | 3.389 | 2.793 | 17.6 | 75 | 0.00 |
| 6 | | cyclohexane | 2.744 | 2.454 | 10.6 | 72 | 0.00 |
| 7 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 76 | 0.00 |
| 8 | | 2,3-dimethylpentane | 0.675 | 0.620 | 8.1 | 72 | 0.00 |
| 9 | T | benzene | 0.275 | 0.244 | 11.3 | 72 | 0.00 |
| 10 | | heptane | 0.651 | 0.598 | 8.1 | 72 | 0.00 |
| 11 | H | C5-C8 Aliphatics Total | 0.698 | 0.624 | 10.6 | 72 | 0.00 |
| 12 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 72 | 0.00 |
| 13 | | toluene | 1.332 | 1.211 | 9.1 | 71 | 0.00 |
| 14 | | n-octane | 3.190 | 2.871 | 10.0 | 70 | 0.00 |
| 15 | | 2,3-dimethylheptane | 3.563 | 3.204 | 10.1 | 71 | 0.00 |
| 16 | T | ethyl benzene | 1.524 | 1.360 | 10.8 | 69 | 0.00 |
| 17 | T | m+p-xylene | 1.201 | 1.066 | 11.2 | 68 | 0.00 |
| 18 | | n-nonane | 3.396 | 3.106 | 8.5 | 71 | 0.00 |
| 19 | T | o-xylene | 1.228 | 1.113 | 9.4 | 71 | 0.00 |
| 20 | | decane | 3.578 | 3.272 | 8.6 | 72 | 0.00 |
| 21 | | butylcyclohexane | 3.996 | 3.570 | 10.7 | 71 | 0.00 |
| 22 | | n-undecane | 3.594 | 3.328 | 7.4 | 68 | 0.00 |
| 23 | T | naphthalene | 1.690 | 1.591 | 5.9 | 73 | 0.00 |
| 24 | | n-dodecane | 3.332 | 3.312 | 0.6 | 72 | 0.00 |
| 25 | H | C9-C12 Aliphatics Total | 3.570 | 3.325 | 6.9 | 71 | 0.00 |
| 27 | | C9-C10 Aromatics Total | 0.565 | 0.504 | 10.8 | 69 | -0.60# |
| 28 | s | bromochloromethane (TIC) | 7.121 | 7.628 | -7.1 | 77 | 0.00 |
| 29 | s | 1,4-difluorobenzene (TIC) | 10.156 | 10.269 | -1.1 | 75 | 0.00 |
| 30 | s | chlorobenzene-D5 (TIC) | 13.240 | 13.274 | -0.3 | 74 | 0.00 |
| 31 | s | 1,2-dichloroethane-D4 (TIC) | 3.687 | 3.662 | 0.7 | 77 | 0.00 |
| 32 | s | toluene-D8 (TIC) | 11.252 | 11.114 | 1.2 | 72 | 0.00 |
| 33 | s | bromofluorobenzene (TIC) | 12.865 | 12.436 | 3.3 | 71 | 0.00 |

* Evaluation of CC level amount vs concentration.

FORM VII APH-10

8A

VOLATILE ORGANICS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID (Standard): R140135 Date Analyzed: 03/11/15

Instrument ID : AIRPIANO1 Time Analyzed: 11:44

| | | IS1(BRO) AREA | RT | IS2(1,4) AREA | RT | IS3(CBZ) AREA | RT |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 536672 | 10.22 | 2192438 | 12.51 | 489846 | 16.97 |
| | UPPER LIMIT | 1073344 | 10.72 | 4384876 | 13.01 | 979692 | 17.47 |
| | LOWER LIMIT | 268336 | 9.72 | 1096219 | 12.01 | 244923 | 16.47 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | WG767580-3LCS | 550034 | 10.23 | 2196599 | 12.51 | 501206 | 16.97 |
| 02 | WG767580-4BLANK | 507372 | 10.23 | 2074530 | 12.52 | 450676 | 16.97 |
| 03 | BLANK | 484859 | 10.22 | 1893445 | 12.51 | 450021 | 16.97 |
| 04 | SG BLANK | 509765 | 10.22 | 2090842 | 12.51 | 476588 | 16.97 |
| 05 | OUTDOOR CONTROL | 466430 | 10.22 | 1813232 | 12.51 | 430008 | 16.96 |
| 06 | S-157-J.1 | 490092 | 10.22 | 1874925 | 12.51 | 450015 | 16.97 |
| 07 | S-157-J.2 | 466401 | 10.22 | 1811050 | 12.51 | 470901 | 16.97 |
| 08 | S-157-J | 498020 | 10.22 | 1847484 | 12.51 | 451392 | 16.97 |
| 09 | DUPLICATE | 457071 | 10.22 | 1986275 | 12.51 | 457062 | 16.96 |
| 10 | SG-1 | 453122 | 10.22 | 1804576 | 12.51 | 453895 | 16.97 |
| 11 | SG-3 | 495512 | 10.22 | 1885121 | 12.51 | 475505 | 16.96 |
| 12 | SG-4 | 492890 | 10.22 | 1913268 | 12.51 | 488751 | 16.97 |
| 13 | SG-2 | 472948 | 10.22 | 1844274 | 12.51 | 467688 | 16.96 |
| 14 | WG767580-5DUP | 500103 | 10.22 | 1840635 | 12.51 | 453666 | 16.96 |

IS1(BRO) = BROMOCHLOROMETHANE
IS2(1,4) = 1,4-DIFLUOROBENZENE
IS3(CBZ) = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50 % of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

* Values outside of QC limits.

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-01 | Date Collected : | 03/08/15 13:31 |
| Client ID | : OUTDOOR CONTROL | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:51 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140148 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.384 | 0.200 | 0.006 | 1.90 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.530 | 0.200 | 0.048 | 1.09 | 0.413 | 0.099 | |
| 76-14-2 | Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | 0.017 | 0.020 | 0.006 | 0.038 | 0.044 | 0.013 | J |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | 0.211 | 0.050 | 0.008 | 1.19 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | 0.069 | 0.050 | 0.006 | 0.529 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | U |
| 67-66-3 | Chloroform | 0.015 | 0.020 | 0.006 | 0.073 | 0.098 | 0.029 | J |
| 107-06-2 | 1,2-Dichloroethane | 0.015 | 0.020 | 0.008 | 0.061 | 0.081 | 0.032 | J |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | 0.220 | 0.100 | 0.021 | 0.703 | 0.319 | 0.067 | |
| 56-23-5 | Carbon tetrachloride | 0.069 | 0.020 | 0.008 | 0.434 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.181 | 0.050 | 0.025 | 0.682 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-01 | Date Collected : | 03/08/15 13:31 |
| Client ID | : OUTDOOR CONTROL | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:51 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140148 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.012 | 0.020 | 0.008 | 0.081 | 0.136 | 0.054 | J |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.028 | 0.020 | 0.007 | 0.122 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.072 | 0.040 | 0.009 | 0.313 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.027 | 0.020 | 0.008 | 0.117 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.005 | 0.020 | 0.005 | 0.025 | 0.098 | 0.025 | J |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.017 | 0.020 | 0.007 | 0.084 | 0.098 | 0.034 | J |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-02 | Date Collected : | 03/08/15 13:23 |
| Client ID | : S-157-J.1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:23 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140149 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.327 | 0.200 | 0.006 | 1.62 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.517 | 0.200 | 0.048 | 1.07 | 0.413 | 0.099 | |
| 76-14-2 | Freon-114 | 0.013 | 0.050 | 0.005 | 0.091 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | 0.029 | 0.020 | 0.006 | 0.064 | 0.044 | 0.013 | |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | 0.206 | 0.050 | 0.008 | 1.16 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | 0.598 | 0.500 | 0.250 | 2.08 | 1.74 | 0.869 | |
| 76-13-1 | Freon-113 | 0.066 | 0.050 | 0.006 | 0.506 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.026 | 0.020 | 0.007 | 0.103 | 0.079 | 0.026 | |
| 67-66-3 | Chloroform | 0.021 | 0.020 | 0.006 | 0.103 | 0.098 | 0.029 | |
| 107-06-2 | 1,2-Dichloroethane | 0.016 | 0.020 | 0.008 | 0.065 | 0.081 | 0.032 | J |
| 71-55-6 | 1,1,1-Trichloroethane | 0.007 | 0.020 | 0.007 | 0.038 | 0.109 | 0.038 | J |
| 71-43-2 | Benzene | 0.255 | 0.100 | 0.021 | 0.815 | 0.319 | 0.067 | |
| 56-23-5 | Carbon tetrachloride | 0.069 | 0.020 | 0.008 | 0.434 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | 0.009 | 0.020 | 0.006 | 0.042 | 0.092 | 0.028 | J |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.013 | 0.020 | 0.007 | 0.070 | 0.107 | 0.038 | J |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.597 | 0.050 | 0.025 | 2.25 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-02 | Date Collected : | 03/08/15 13:23 |
| Client ID | : S-157-J.1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:23 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140149 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.020 | 0.020 | 0.008 | 0.136 | 0.136 | 0.054 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.105 | 0.020 | 0.007 | 0.456 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.316 | 0.040 | 0.009 | 1.37 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | 0.031 | 0.020 | 0.008 | 0.132 | 0.085 | 0.034 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.173 | 0.020 | 0.008 | 0.751 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.761 | 0.020 | 0.005 | 3.74 | 0.098 | 0.025 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 3.07 | 0.020 | 0.007 | 15.1 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | 0.035 | 0.050 | 0.012 | 0.184 | 0.262 | 0.063 | J |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-03 | Date Collected : | 03/08/15 13:22 |
| Client ID | : S-157-J.2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:55 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140150 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.372 | 0.200 | 0.006 | 1.84 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.543 | 0.200 | 0.048 | 1.12 | 0.413 | 0.099 | |
| 76-14-2 | Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | 0.032 | 0.020 | 0.006 | 0.071 | 0.044 | 0.013 | |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | 0.213 | 0.050 | 0.008 | 1.20 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | 0.622 | 0.500 | 0.250 | 2.16 | 1.74 | 0.869 | |
| 76-13-1 | Freon-113 | 0.069 | 0.050 | 0.006 | 0.529 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | 0.006 | 0.020 | 0.006 | 0.024 | 0.079 | 0.024 | J |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.027 | 0.020 | 0.007 | 0.107 | 0.079 | 0.026 | |
| 67-66-3 | Chloroform | 0.022 | 0.020 | 0.006 | 0.107 | 0.098 | 0.029 | |
| 107-06-2 | 1,2-Dichloroethane | 0.019 | 0.020 | 0.008 | 0.077 | 0.081 | 0.032 | J |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | 0.281 | 0.100 | 0.021 | 0.898 | 0.319 | 0.067 | |
| 56-23-5 | Carbon tetrachloride | 0.070 | 0.020 | 0.008 | 0.440 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.020 | 0.020 | 0.007 | 0.107 | 0.107 | 0.038 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.607 | 0.050 | 0.025 | 2.29 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-03 | Date Collected : | 03/08/15 13:22 |
| Client ID | : S-157-J.2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:55 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140150 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.023 | 0.020 | 0.008 | 0.156 | 0.136 | 0.054 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.101 | 0.020 | 0.007 | 0.439 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.308 | 0.040 | 0.009 | 1.34 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | 0.030 | 0.020 | 0.008 | 0.128 | 0.085 | 0.034 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.166 | 0.020 | 0.008 | 0.721 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.804 | 0.020 | 0.005 | 3.95 | 0.098 | 0.025 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 2.97 | 0.020 | 0.007 | 14.6 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | 0.034 | 0.050 | 0.012 | 0.178 | 0.262 | 0.063 | J |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-04 | Date Collected : | 03/08/15 13:24 |
| Client ID | : S-157-J | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:27 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140151 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.354 | 0.200 | 0.006 | 1.75 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.531 | 0.200 | 0.048 | 1.10 | 0.413 | 0.099 | |
| 76-14-2 | Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | 0.026 | 0.020 | 0.006 | 0.058 | 0.044 | 0.013 | |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | 0.214 | 0.050 | 0.008 | 1.20 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | 4.67 | 0.500 | 0.250 | 16.2 | 1.74 | 0.869 | |
| 76-13-1 | Freon-113 | 0.081 | 0.050 | 0.006 | 0.621 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.027 | 0.020 | 0.007 | 0.107 | 0.079 | 0.026 | |
| 67-66-3 | Chloroform | 0.024 | 0.020 | 0.006 | 0.117 | 0.098 | 0.029 | |
| 107-06-2 | 1,2-Dichloroethane | 0.019 | 0.020 | 0.008 | 0.077 | 0.081 | 0.032 | J |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | 0.259 | 0.100 | 0.021 | 0.827 | 0.319 | 0.067 | |
| 56-23-5 | Carbon tetrachloride | 0.069 | 0.020 | 0.008 | 0.434 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.008 | 0.020 | 0.007 | 0.043 | 0.107 | 0.038 | J |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.845 | 0.050 | 0.025 | 3.18 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-04 | Date Collected : | 03/08/15 13:24 |
| Client ID | : S-157-J | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:27 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140151 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.028 | 0.020 | 0.008 | 0.190 | 0.136 | 0.054 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.114 | 0.020 | 0.007 | 0.495 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.353 | 0.040 | 0.009 | 1.53 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | 0.040 | 0.020 | 0.008 | 0.170 | 0.085 | 0.034 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.181 | 0.020 | 0.008 | 0.786 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.821 | 0.020 | 0.005 | 4.04 | 0.098 | 0.025 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 3.07 | 0.020 | 0.007 | 15.1 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | 0.033 | 0.050 | 0.012 | 0.173 | 0.262 | 0.063 | J |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-05 | Date Collected : | 03/08/15 13:24 |
| Client ID | : DUPLICATE | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:59 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140152 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.400 | 0.200 | 0.006 | 1.98 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.547 | 0.200 | 0.048 | 1.13 | 0.413 | 0.099 | |
| 76-14-2 | Freon-114 | 0.015 | 0.050 | 0.005 | 0.105 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | 0.030 | 0.020 | 0.006 | 0.066 | 0.044 | 0.013 | |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | 0.012 | 0.020 | 0.007 | 0.032 | 0.053 | 0.019 | J |
| 75-69-4 | Trichlorofluoromethane | 0.222 | 0.050 | 0.008 | 1.25 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | 0.784 | 0.500 | 0.250 | 2.72 | 1.74 | 0.869 | |
| 76-13-1 | Freon-113 | 0.076 | 0.050 | 0.006 | 0.583 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.033 | 0.020 | 0.007 | 0.131 | 0.079 | 0.026 | |
| 67-66-3 | Chloroform | 0.025 | 0.020 | 0.006 | 0.122 | 0.098 | 0.029 | |
| 107-06-2 | 1,2-Dichloroethane | 0.019 | 0.020 | 0.008 | 0.077 | 0.081 | 0.032 | J |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | 0.240 | 0.100 | 0.021 | 0.767 | 0.319 | 0.067 | |
| 56-23-5 | Carbon tetrachloride | 0.065 | 0.020 | 0.008 | 0.409 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.008 | 0.020 | 0.007 | 0.043 | 0.107 | 0.038 | J |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.830 | 0.050 | 0.025 | 3.13 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-05 | Date Collected : | 03/08/15 13:24 |
| Client ID | : DUPLICATE | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:59 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140152 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.025 | 0.020 | 0.008 | 0.170 | 0.136 | 0.054 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.111 | 0.020 | 0.007 | 0.482 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.333 | 0.040 | 0.009 | 1.45 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | 0.035 | 0.020 | 0.008 | 0.149 | 0.085 | 0.034 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.186 | 0.020 | 0.008 | 0.808 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.907 | 0.020 | 0.005 | 4.46 | 0.098 | 0.025 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 3.46 | 0.020 | 0.007 | 17.0 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | 0.036 | 0.050 | 0.012 | 0.189 | 0.262 | 0.063 | J |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-06 | Date Collected : | 03/06/15 00:00 |
| Client ID | : BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 19:46 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140146 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | ND | 0.200 | 0.006 | ND | 0.989 | 0.030 | U |
| 74-87-3 | Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | U |
| 76-14-2 | Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | U |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | U |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | 0.007 | 0.050 | 0.006 | 0.054 | 0.383 | 0.046 | J |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | U |
| 67-66-3 | Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-06 | Date Collected : | 03/06/15 00:00 |
| Client ID | : BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 19:46 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140146 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | U |
| 179601-23-1 | p/m-Xylene | ND | 0.040 | 0.009 | ND | 0.174 | 0.039 | U |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | U |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 0.020 | 0.005 | ND | 0.098 | 0.025 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 0.020 | 0.007 | ND | 0.098 | 0.034 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-07 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 23:31 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140153 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.336 | 0.200 | 0.006 | 1.66 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.049 | 0.200 | 0.048 | 0.101 | 0.413 | 0.099 | J |
| 76-14-2 | Freon-114 | 0.014 | 0.050 | 0.005 | 0.098 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | U |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | 0.216 | 0.050 | 0.008 | 1.21 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | 0.068 | 0.050 | 0.006 | 0.521 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.007 | 0.020 | 0.007 | 0.028 | 0.081 | 0.028 | J |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | U |
| 67-66-3 | Chloroform | 0.052 | 0.020 | 0.006 | 0.254 | 0.098 | 0.029 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.025 | 0.020 | 0.007 | 0.136 | 0.109 | 0.038 | |
| 71-43-2 | Benzene | 0.035 | 0.100 | 0.021 | 0.112 | 0.319 | 0.067 | J |
| 56-23-5 | Carbon tetrachloride | 0.061 | 0.020 | 0.008 | 0.384 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.126 | 0.020 | 0.007 | 0.677 | 0.107 | 0.038 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.211 | 0.050 | 0.025 | 0.795 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-07 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 23:31 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140153 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.307 | 0.020 | 0.008 | 2.08 | 0.136 | 0.054 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.165 | 0.020 | 0.007 | 0.717 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.658 | 0.040 | 0.009 | 2.86 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | 0.009 | 0.020 | 0.008 | 0.038 | 0.085 | 0.034 | J |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.341 | 0.020 | 0.008 | 1.48 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 1.60 | 0.020 | 0.005 | 7.87 | 0.098 | 0.025 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 3.59 | 0.020 | 0.007 | 17.6 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.044 | 0.020 | 0.008 | 0.265 | 0.120 | 0.048 | |
| 95-50-1 | 1,2-Dichlorobenzene | 0.032 | 0.020 | 0.007 | 0.192 | 0.120 | 0.042 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.014 | 0.050 | 0.010 | 0.104 | 0.371 | 0.074 | J |
| 91-20-3 | Naphthalene | 4.75 | 0.050 | 0.012 | 24.9 | 0.262 | 0.063 | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-08 | Date Collected : | 03/06/15 18:51 |
| Client ID | : SG-2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 08:45 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140160 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.379 | 0.200 | 0.006 | 1.87 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.100 | 0.200 | 0.048 | 0.207 | 0.413 | 0.099 | J |
| 76-14-2 | Freon-114 | 0.015 | 0.050 | 0.005 | 0.105 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | U |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | 0.224 | 0.050 | 0.008 | 1.26 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | 0.071 | 0.050 | 0.006 | 0.544 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | U |
| 67-66-3 | Chloroform | 0.080 | 0.020 | 0.006 | 0.391 | 0.098 | 0.029 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.008 | 0.020 | 0.007 | 0.044 | 0.109 | 0.038 | J |
| 71-43-2 | Benzene | 0.036 | 0.100 | 0.021 | 0.115 | 0.319 | 0.067 | J |
| 56-23-5 | Carbon tetrachloride | 0.070 | 0.020 | 0.008 | 0.440 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.338 | 0.020 | 0.007 | 1.82 | 0.107 | 0.038 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.134 | 0.050 | 0.025 | 0.505 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-08 | Date Collected : | 03/06/15 18:51 |
| Client ID | : SG-2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 08:45 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140160 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.521 | 0.020 | 0.008 | 3.53 | 0.136 | 0.054 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.037 | 0.020 | 0.007 | 0.161 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.140 | 0.040 | 0.009 | 0.608 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | 0.012 | 0.020 | 0.008 | 0.051 | 0.085 | 0.034 | J |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.055 | 0.020 | 0.008 | 0.239 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.033 | 0.020 | 0.005 | 0.162 | 0.098 | 0.025 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.154 | 0.020 | 0.007 | 0.757 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.059 | 0.020 | 0.008 | 0.355 | 0.120 | 0.048 | |
| 95-50-1 | 1,2-Dichlorobenzene | 0.229 | 0.020 | 0.007 | 1.38 | 0.120 | 0.042 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | 0.197 | 0.050 | 0.012 | 1.03 | 0.262 | 0.063 | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-09 | Date Collected : | 03/06/15 19:31 |
| Client ID | : SG-3 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:08 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140156 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.478 | 0.200 | 0.006 | 2.36 | 0.989 | 0.030 | |
| 74-87-3 | Chloromethane | 0.078 | 0.200 | 0.048 | 0.161 | 0.413 | 0.099 | J |
| 76-14-2 | Freon-114 | 0.016 | 0.050 | 0.005 | 0.112 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | 0.007 | 0.020 | 0.006 | 0.016 | 0.044 | 0.013 | J |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | 0.008 | 0.020 | 0.007 | 0.021 | 0.053 | 0.019 | J |
| 75-69-4 | Trichlorofluoromethane | 0.213 | 0.050 | 0.008 | 1.20 | 0.281 | 0.045 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | 0.069 | 0.050 | 0.006 | 0.529 | 0.383 | 0.046 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | U |
| 67-66-3 | Chloroform | 0.059 | 0.020 | 0.006 | 0.288 | 0.098 | 0.029 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.010 | 0.020 | 0.007 | 0.055 | 0.109 | 0.038 | J |
| 71-43-2 | Benzene | 0.083 | 0.100 | 0.021 | 0.265 | 0.319 | 0.067 | J |
| 56-23-5 | Carbon tetrachloride | 0.071 | 0.020 | 0.008 | 0.447 | 0.126 | 0.050 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.400 | 0.020 | 0.007 | 2.15 | 0.107 | 0.038 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.377 | 0.050 | 0.025 | 1.42 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-09 | Date Collected : | 03/06/15 19:31 |
| Client ID | : SG-3 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:08 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140156 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.505 | 0.020 | 0.008 | 3.42 | 0.136 | 0.054 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.035 | 0.020 | 0.007 | 0.152 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.132 | 0.040 | 0.009 | 0.573 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | 0.029 | 0.020 | 0.008 | 0.123 | 0.085 | 0.034 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.039 | 0.020 | 0.008 | 0.169 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.019 | 0.020 | 0.005 | 0.093 | 0.098 | 0.025 | J |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.068 | 0.020 | 0.007 | 0.334 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.039 | 0.020 | 0.008 | 0.234 | 0.120 | 0.048 | |
| 95-50-1 | 1,2-Dichlorobenzene | 0.042 | 0.020 | 0.007 | 0.253 | 0.120 | 0.042 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | 0.157 | 0.050 | 0.012 | 0.823 | 0.262 | 0.063 | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-10 | Date Collected : | 03/06/15 20:02 |
| Client ID | : SG-4 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:40 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140157 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.054 | 0.200 | 0.006 | 0.267 | 0.989 | 0.030 | J |
| 74-87-3 | Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | U |
| 76-14-2 | Freon-114 | 0.016 | 0.050 | 0.005 | 0.112 | 0.349 | 0.035 | J |
| 75-01-4 | Vinyl chloride | 0.127 | 0.020 | 0.007 | 0.325 | 0.051 | 0.018 | |
| 106-99-0 | 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | U |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | 0.026 | 0.020 | 0.007 | 0.069 | 0.053 | 0.019 | |
| 75-69-4 | Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.007 | 0.020 | 0.007 | 0.028 | 0.079 | 0.028 | J |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.026 | 0.020 | 0.006 | 0.103 | 0.079 | 0.024 | |
| 75-34-3 | 1,1-Dichloroethane | 0.106 | 0.020 | 0.007 | 0.429 | 0.081 | 0.028 | |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.120 | 0.020 | 0.007 | 0.476 | 0.079 | 0.026 | |
| 67-66-3 | Chloroform | 0.008 | 0.020 | 0.006 | 0.039 | 0.098 | 0.029 | J |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | 0.947 | 0.100 | 0.021 | 3.03 | 0.319 | 0.067 | |
| 56-23-5 | Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | 0.023 | 0.020 | 0.007 | 0.124 | 0.107 | 0.038 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | 0.260 | 0.050 | 0.025 | 0.980 | 0.188 | 0.094 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-10 | Date Collected : | 03/06/15 20:02 |
| Client ID | : SG-4 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:40 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140157 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | 0.018 | 0.020 | 0.008 | 0.122 | 0.136 | 0.054 | J |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | 0.092 | 0.020 | 0.007 | 0.400 | 0.087 | 0.030 | |
| 179601-23-1 | p/m-Xylene | 0.313 | 0.040 | 0.009 | 1.36 | 0.174 | 0.039 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | 0.159 | 0.020 | 0.008 | 0.691 | 0.087 | 0.035 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.095 | 0.020 | 0.005 | 0.467 | 0.098 | 0.025 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.170 | 0.020 | 0.007 | 0.836 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.032 | 0.020 | 0.008 | 0.192 | 0.120 | 0.048 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | 0.140 | 0.050 | 0.012 | 0.734 | 0.262 | 0.063 | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-11 | Date Collected : | 03/06/15 00:00 |
| Client ID | : SG BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:19 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140147 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.007 | 0.200 | 0.006 | 0.035 | 0.989 | 0.030 | J |
| 74-87-3 | Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | U |
| 76-14-2 | Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | U |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | U |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | U |
| 67-66-3 | Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-11 | Date Collected : | 03/06/15 00:00 |
| Client ID | : SG BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:19 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140147 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | U |
| 179601-23-1 | p/m-Xylene | 0.018 | 0.040 | 0.009 | 0.078 | 0.174 | 0.039 | J |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | U |
| 108-67-8 | 1,3,5-Trimethybenzene | 0.007 | 0.020 | 0.005 | 0.034 | 0.098 | 0.025 | J |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.035 | 0.020 | 0.007 | 0.172 | 0.098 | 0.034 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.050 | 0.010 | ND | 0.371 | 0.074 | U |
| 91-20-3 | Naphthalene | ND | 0.050 | 0.012 | ND | 0.262 | 0.063 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767579-4 | Date Collected : | NA |
| Client ID | : WG767579-4BLANK | Date Received : | NA |
| Sample Location | : | Date Analyzed : | 03/11/15 14:34 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140139 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | ND | 0.200 | 0.006 | ND | 0.989 | 0.030 | U |
| 74-87-3 | Chloromethane | ND | 0.200 | 0.048 | ND | 0.413 | 0.099 | U |
| 76-14-2 | Freon-114 | ND | 0.050 | 0.005 | ND | 0.349 | 0.035 | U |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | 0.018 | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | 0.013 | U |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | 0.031 | U |
| 75-00-3 | Chloroethane | ND | 0.020 | 0.007 | ND | 0.053 | 0.019 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 0.050 | 0.008 | ND | 0.281 | 0.045 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.028 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | 0.869 | U |
| 76-13-1 | Freon-113 | ND | 0.050 | 0.006 | ND | 0.383 | 0.046 | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | 0.024 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | 0.028 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | 0.014 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | 0.026 | U |
| 67-66-3 | Chloroform | ND | 0.020 | 0.006 | ND | 0.098 | 0.029 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | 0.032 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.020 | 0.007 | ND | 0.109 | 0.038 | U |
| 71-43-2 | Benzene | ND | 0.100 | 0.021 | ND | 0.319 | 0.067 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.020 | 0.008 | ND | 0.126 | 0.050 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | 0.028 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | 0.054 | U |
| 79-01-6 | Trichloroethene | ND | 0.020 | 0.007 | ND | 0.107 | 0.038 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | 0.036 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | 0.049 | U |
| 108-88-3 | Toluene | ND | 0.050 | 0.025 | ND | 0.188 | 0.094 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | 0.068 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767579-4 | Date Collected : | NA |
| Client ID | : WG767579-4BLANK | Date Received : | NA |
| Sample Location | : | Date Analyzed : | 03/11/15 14:34 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140139 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | 0.062 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.020 | 0.008 | ND | 0.136 | 0.054 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | 0.028 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | 0.037 | U |
| 100-41-4 | Ethylbenzene | ND | 0.020 | 0.007 | ND | 0.087 | 0.030 | U |
| 179601-23-1 | p/m-Xylene | ND | 0.040 | 0.009 | ND | 0.174 | 0.039 | U |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | 0.155 | U |
| 100-42-5 | Styrene | ND | 0.020 | 0.008 | ND | 0.085 | 0.034 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | 0.048 | U |
| 95-47-6 | o-Xylene | ND | 0.020 | 0.008 | ND | 0.087 | 0.035 | U |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 0.020 | 0.005 | ND | 0.098 | 0.025 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 0.020 | 0.007 | ND | 0.098 | 0.034 | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.020 | 0.008 | ND | 0.120 | 0.048 | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | 0.042 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.011 | 0.050 | 0.010 | 0.082 | 0.371 | 0.074 | J |
| 91-20-3 | Naphthalene | 0.015 | 0.050 | 0.012 | 0.079 | 0.262 | 0.063 | J |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | 0.117 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767579-5 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1DUP | Date Received : | 03/10/15 |
| Sample Location | : | Date Analyzed : | 03/12/15 09:18 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140161 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 75-71-8 | Dichlorodifluoromethane | 0.338 | 0.200 | 0.006 | 1.67 | 0.989 | .2 | |
| 74-87-3 | Chloromethane | 0.051 | 0.200 | 0.048 | 0.105 | 0.413 | .2 | J |
| 76-14-2 | Freon-114 | 0.015 | 0.050 | 0.005 | 0.105 | 0.349 | .05 | J |
| 75-01-4 | Vinyl chloride | ND | 0.020 | 0.007 | ND | 0.051 | .02 | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.020 | 0.006 | ND | 0.044 | .02 | U |
| 74-83-9 | Bromomethane | ND | 0.020 | 0.008 | ND | 0.078 | .02 | U |
| 75-00-3 | Chloroethane | 0.017 | 0.020 | 0.007 | 0.045 | 0.053 | .02 | J |
| 75-69-4 | Trichlorofluoromethane | 0.208 | 0.050 | 0.008 | 1.17 | 0.281 | .05 | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | .02 | U |
| 75-09-2 | Methylene chloride | ND | 0.500 | 0.250 | ND | 1.74 | .5 | U |
| 76-13-1 | Freon-113 | 0.066 | 0.050 | 0.006 | 0.506 | 0.383 | .05 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.020 | 0.006 | ND | 0.079 | .02 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.020 | 0.007 | ND | 0.081 | .02 | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.020 | 0.004 | ND | 0.072 | .02 | U |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.020 | 0.007 | ND | 0.079 | .02 | U |
| 67-66-3 | Chloroform | 0.053 | 0.020 | 0.006 | 0.259 | 0.098 | .02 | |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.020 | 0.008 | ND | 0.081 | .02 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.027 | 0.020 | 0.007 | 0.147 | 0.109 | .02 | |
| 71-43-2 | Benzene | 0.039 | 0.100 | 0.021 | 0.125 | 0.319 | .1 | J |
| 56-23-5 | Carbon tetrachloride | 0.064 | 0.020 | 0.008 | 0.403 | 0.126 | .02 | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.020 | 0.006 | ND | 0.092 | .02 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.020 | 0.008 | ND | 0.134 | .02 | U |
| 79-01-6 | Trichloroethene | 0.128 | 0.020 | 0.007 | 0.688 | 0.107 | .02 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.020 | 0.008 | ND | 0.091 | .02 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.018 | 0.020 | 0.008 | 0.082 | 0.091 | .02 | J |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.020 | 0.009 | ND | 0.109 | .02 | U |
| 108-88-3 | Toluene | 0.217 | 0.050 | 0.025 | 0.818 | 0.188 | .05 | |
| 124-48-1 | Dibromochloromethane | ND | 0.020 | 0.008 | ND | 0.170 | .02 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767579-5 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1DUP | Date Received : | 03/10/15 |
| Sample Location | : | Date Analyzed : | 03/12/15 09:18 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15-SIM | Analyst | : RY |
| Lab File ID | : R140161 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | 0.008 | ND | 0.154 | .02 | U |
| 127-18-4 | Tetrachloroethene | 0.347 | 0.020 | 0.008 | 2.35 | 0.136 | .02 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.020 | 0.004 | ND | 0.137 | .02 | U |
| 108-90-7 | Chlorobenzene | ND | 0.020 | 0.008 | ND | 0.092 | .02 | U |
| 100-41-4 | Ethylbenzene | 0.167 | 0.020 | 0.007 | 0.725 | 0.087 | .02 | |
| 179601-23-1 | p/m-Xylene | 0.661 | 0.040 | 0.009 | 2.87 | 0.174 | .04 | |
| 75-25-2 | Bromoform | ND | 0.020 | 0.015 | ND | 0.207 | .02 | U |
| 100-42-5 | Styrene | 0.009 | 0.020 | 0.008 | 0.038 | 0.085 | .02 | J |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.020 | 0.007 | ND | 0.137 | .02 | U |
| 95-47-6 | o-Xylene | 0.345 | 0.020 | 0.008 | 1.50 | 0.087 | .02 | |
| 108-67-8 | 1,3,5-Trimethybenzene | 1.56 | 0.020 | 0.005 | 7.67 | 0.098 | .02 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 3.56 | 0.020 | 0.007 | 17.5 | 0.098 | .02 | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.020 | 0.007 | ND | 0.120 | .02 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.043 | 0.020 | 0.008 | 0.259 | 0.120 | .02 | |
| 95-50-1 | 1,2-Dichlorobenzene | 0.033 | 0.020 | 0.007 | 0.198 | 0.120 | .02 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.016 | 0.050 | 0.010 | 0.119 | 0.371 | .05 | J |
| 91-20-3 | Naphthalene | 5.66 | 0.050 | 0.012 | 29.7 | 0.262 | .05 | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.050 | 0.011 | ND | 0.533 | .05 | U |

3

LAB DUPLICATE

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1504425 Matrix: Air
Lab Sample ID : WG767579-5 Injected: 03/12/15 09:18 Lab File ID: R140161
Client Sample ID : SG-1

| COMPOUND | SAMPLE CONCENTRATION (ppbV ) | DUP CONCENTRATION (ppbV ) | DUP % RPD | DUP RPD LIMIT |
|---|---|---|---|---|
| Dichlorodifluoromethane | 0.336 | 0.338 | 1 | 25 |
| Chloromethane | 0.049J | 0.051J | NC | 25 |
| Freon-114 | 0.014J | 0.015J | NC | 25 |
| Vinyl chloride | ND | ND | NC | 25 |
| 1,3-Butadiene | ND | ND | NC | 25 |
| Bromomethane | ND | ND | NC | 25 |
| Chloroethane | ND | 0.017J | NC | 25 |
| Trichlorofluoromethane | 0.216 | 0.208 | 4 | 25 |
| 1,1-Dichloroethene | ND | ND | NC | 25 |
| Methylene chloride | ND | ND | NC | 25 |
| Freon-113 | 0.068 | 0.066 | 3 | 25 |
| trans-1,2-Dichloroethene | ND | ND | NC | 25 |
| 1,1-Dichloroethane | 0.007J | ND | NC | 25 |
| Methyl tert butyl ether | ND | ND | NC | 25 |
| cis-1,2-Dichloroethene | ND | ND | NC | 25 |
| Chloroform | 0.052 | 0.053 | 2 | 25 |
| 1,2-Dichloroethane | ND | ND | NC | 25 |
| 1,1,1-Trichloroethane | 0.025 | 0.027 | 8 | 25 |
| Benzene | 0.035J | 0.039J | NC | 25 |
| Carbon tetrachloride | 0.061 | 0.064 | 5 | 25 |
| 1,2-Dichloropropane | ND | ND | NC | 25 |
| Bromodichloromethane | ND | ND | NC | 25 |
| Trichloroethene | 0.126 | 0.128 | 2 | 25 |
| cis-1,3-Dichloropropene | ND | ND | NC | 25 |
| trans-1,3-Dichloropropen | ND | 0.018J | NC | 25 |
| 1,1,2-Trichloroethane | ND | ND | NC | 25 |
| Toluene | 0.211 | 0.217 | 3 | 25 |
| Dibromochloromethane | ND | ND | NC | 25 |
| 1,2-Dibromoethane | ND | ND | NC | 25 |
| Tetrachloroethene | 0.307 | 0.347 | 12 | 25 |
| 1,1,1,2-Tetrachloroethan | ND | ND | NC | 25 |
| Chlorobenzene | ND | ND | NC | 25 |
| Ethylbenzene | 0.165 | 0.167 | 1 | 25 |
| p/m-Xylene | 0.658 | 0.661 | 0 | 25 |
| Bromoform | ND | ND | NC | 25 |
| Styrene | 0.009J | 0.009J | NC | 25 |
| 1,1,2,2-Tetrachloroethan | ND | ND | NC | 25 |
| o-Xylene | 0.341 | 0.345 | 1 | 25 |
| 1,3,5-Trimethybenzene | 1.60 | 1.56 | 3 | 25 |
| 1,2,4-Trimethylbenzene | 3.59 | 3.56 | 1 | 25 |

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-SIM

3
LAB DUPLICATE
AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1504425 Matrix: Air
Lab Sample ID : WG767579-5 Injected: 03/12/15 09:18 Lab File ID: R140161
Client Sample ID : SG-1

| COMPOUND | SAMPLE CONCENTRATION (ppbV ) | DUP CONCENTRATION (ppbV ) | DUP % RPD | DUP RPD LIMIT |
|---|---|---|---|---|
| 1,3-Dichlorobenzene | ND | ND | NC | 25 |
| 1,4-Dichlorobenzene | 0.044 | 0.043 | 2 | 25 |
| 1,2-Dichlorobenzene | 0.032 | 0.033 | 3 | 25 |
| 1,2,4-Trichlorobenzene | 0.014J | 0.016J | NC | 25 |
| Naphthalene | 4.75 | 5.66 | 17 | 25 |
| Hexachlorobutadiene | ND | ND | NC | 25 |

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-SIM

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1504425 Matrix: Air

Lab Control Sample: WG767579-3LCS Injected: 03/11/15 12:50 Lab File ID: R140137

| COMPOUND | SPIKE ADDED ppbV | SAMPLE CONC ppbV | LCS CONC ppbV | LCS % REC | LCSD CONC ppbV | LCSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|---|---|
| Propylene | 5 | NA | 5.10 | 102 | - | - | - | 25 | 70-130 |
| Dichlorodifluoromethane | 5 | NA | 4.36 | 87 | - | - | - | 25 | 70-130 |
| Chloromethane | 5 | NA | 4.56 | 91 | - | - | - | 25 | 70-130 |
| Freon-114 | 5 | NA | 4.64 | 93 | - | - | - | 25 | 70-130 |
| Vinyl chloride | 5 | NA | 4.48 | 90 | - | - | - | 25 | 70-130 |
| 1,3-Butadiene | 5 | NA | 4.46 | 89 | - | - | - | 25 | 70-130 |
| Bromomethane | 5 | NA | 4.59 | 92 | - | - | - | 25 | 70-130 |
| Chloroethane | 5 | NA | 4.26 | 85 | - | - | - | 25 | 70-130 |
| Ethanol | 25 | NA | 21.4 | 86 | - | - | - | 25 | 70-130 |
| Vinyl bromide | 5 | NA | 4.42 | 88 | - | - | - | 25 | 70-130 |
| Acetone | 25 | NA | 24.1 | 96 | - | - | - | 25 | 70-130 |
| Trichlorofluoromethane | 5 | NA | 4.67 | 93 | - | - | - | 25 | 70-130 |
| Isopropanol | 5 | NA | 4.83 | 97 | - | - | - | 25 | 70-130 |
| Acrylonitrile | 5 | NA | 3.84 | 77 | - | - | - | 25 | 70-130 |
| 1,1-Dichloroethene | 5 | NA | 4.50 | 90 | - | - | - | 25 | 70-130 |
| Methylene chloride | 5 | NA | 4.84 | 97 | - | - | - | 25 | 70-130 |
| 3-Chloropropene | 5 | NA | 4.59 | 92 | - | - | - | 25 | 70-130 |
| Carbon disulfide | 5 | NA | 4.36 | 87 | - | - | - | 25 | 70-130 |
| Freon-113 | 5 | NA | 4.69 | 94 | - | - | - | 25 | 70-130 |
| Halothane | 5 | NA | 4.22 | 84 | - | - | - | 25 | 70-130 |
| trans-1,2-Dichloroethene | 5 | NA | 4.22 | 84 | - | - | - | 25 | 70-130 |
| 1,1-Dichloroethane | 5 | NA | 4.59 | 92 | - | - | - | 25 | 70-130 |
| Methyl tert butyl ether | 5 | NA | 4.38 | 88 | - | - | - | 25 | 70-130 |
| Vinyl acetate | 5 | NA | 5.59 | 112 | - | - | - | 25 | 70-130 |
| 2-Butanone | 5 | NA | 4.85 | 97 | - | - | - | 25 | 70-130 |
| cis-1,2-Dichloroethene | 5 | NA | 5.02 | 100 | - | - | - | 25 | 70-130 |
| Ethyl Acetate | 5 | NA | 4.44 | 89 | - | - | - | 25 | 70-130 |
| Chloroform | 5 | NA | 4.53 | 91 | - | - | - | 25 | 70-130 |
| Tetrahydrofuran | 5 | NA | 4.37 | 87 | - | - | - | 25 | 70-130 |
| 1,2-Dichloroethane | 5 | NA | 4.54 | 91 | - | - | - | 25 | 70-130 |
| n-Hexane | 5 | NA | 4.32 | 86 | - | - | - | 25 | 70-130 |
| 1,1,1-Trichloroethane | 5 | NA | 4.66 | 93 | - | - | - | 25 | 70-130 |
| Benzene | 5 | NA | 4.51 | 90 | - | - | - | 25 | 70-130 |
| Carbon tetrachloride | 5 | NA | 4.61 | 92 | - | - | - | 25 | 70-130 |
| Cyclohexane | 5 | NA | 4.29 | 86 | - | - | - | 25 | 70-130 |
| 1,2-Dichloropropane | 5 | NA | 4.66 | 93 | - | - | - | 25 | 70-130 |
| Bromodichloromethane | 5 | NA | 4.49 | 90 | - | - | - | 25 | 70-130 |
| 1,4-Dioxane | 5 | NA | 4.79 | 96 | - | - | - | 25 | 70-130 |
| Trichloroethene | 5 | NA | 4.57 | 91 | - | - | - | 25 | 70-130 |
| 2,2,4-Trimethylpentane | 5 | NA | 4.57 | 91 | - | - | - | 25 | 70-130 |

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-SIM

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1504425 Matrix: Air

Lab Control Sample: WG767579-3LCS Injected: 03/11/15 12:50 Lab File ID: R140137

| COMPOUND | SPIKE ADDED ppbV | SAMPLE CONC ppbV | LCS CONC ppbV | LCS % REC | LCSD CONC ppbV | LCSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | 5 | NA | 4.88 | 98 | - | - | - | 25 | 70-130 |
| 4-Methyl-2-pentanone | 5 | NA | 5.07 | 101 | - | - | - | 25 | 70-130 |
| trans-1,3-Dichloropropen | 5 | NA | 4.29 | 86 | - | - | - | 25 | 70-130 |
| 1,1,2-Trichloroethane | 5 | NA | 4.81 | 96 | - | - | - | 25 | 70-130 |
| Toluene | 5 | NA | 4.66 | 93 | - | - | - | 25 | 70-130 |
| 2-Hexanone | 5 | NA | 5.44 | 109 | - | - | - | 25 | 70-130 |
| Dibromochloromethane | 5 | NA | 4.41 | 88 | - | - | - | 25 | 70-130 |
| 1,2-Dibromoethane | 5 | NA | 4.83 | 97 | - | - | - | 25 | 70-130 |
| Tetrachloroethene | 5 | NA | 4.34 | 87 | - | - | - | 25 | 70-130 |
| 1,1,1,2-Tetrachloroethan | 5 | NA | 4.18 | 84 | - | - | - | 25 | 70-130 |
| Chlorobenzene | 5 | NA | 4.68 | 94 | - | - | - | 25 | 70-130 |
| Ethylbenzene | 5 | NA | 4.60 | 92 | - | - | - | 25 | 70-130 |
| p/m-Xylene | 10 | NA | 9.39 | 94 | - | - | - | 25 | 70-130 |
| Bromoform | 5 | NA | 4.15 | 83 | - | - | - | 25 | 70-130 |
| Styrene | 5 | NA | 4.78 | 96 | - | - | - | 25 | 70-130 |
| 1,1,2,2-Tetrachloroethan | 5 | NA | 4.86 | 97 | - | - | - | 25 | 70-130 |
| o-Xylene | 5 | NA | 4.66 | 93 | - | - | - | 25 | 70-130 |
| Isopropylbenzene | 5 | NA | 4.56 | 91 | - | - | - | 25 | 70-130 |
| 4-Ethyltoluene | 5 | NA | 4.50 | 90 | - | - | - | 25 | 70-130 |
| 1,3,5-Trimethybenzene | 5 | NA | 4.74 | 95 | - | - | - | 25 | 70-130 |
| 1,2,4-Trimethylbenzene | 5 | NA | 4.71 | 94 | - | - | - | 25 | 70-130 |
| Benzyl chloride | 5 | NA | 4.22 | 84 | - | - | - | 25 | 70-130 |
| 1,3-Dichlorobenzene | 5 | NA | 4.80 | 96 | - | - | - | 25 | 70-130 |
| 1,4-Dichlorobenzene | 5 | NA | 4.70 | 94 | - | - | - | 25 | 70-130 |
| sec-Butylbenzene | 5 | NA | 4.46 | 89 | - | - | - | 25 | 70-130 |
| p-Isopropyltoluene | 5 | NA | 4.11 | 82 | - | - | - | 25 | 70-130 |
| 1,2-Dichlorobenzene | 5 | NA | 4.71 | 94 | - | - | - | 25 | 70-130 |
| n-Butylbenzene | 5 | NA | 4.73 | 95 | - | - | - | 25 | 70-130 |
| 1,2,4-Trichlorobenzene | 5 | NA | 5.13 | 103 | - | - | - | 25 | 70-130 |
| Naphthalene | 5 | NA | 4.66 | 93 | - | - | - | 25 | 70-130 |
| 1,2,3-Trichlorobenzene | 5 | NA | 5.18 | 104 | - | - | - | 25 | 70-130 |
| Hexachlorobutadiene | 5 | NA | 4.91 | 98 | - | - | - | 25 | 70-130 |

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III TO15-SIM

4A

VOLATILE ORGANICS METHOD BLANK SUMMARY

SAMPLE NO.

WG767579-4BLANK

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R140139 Lab Sample ID: WG767579-4

Date Analyzed: 03/11/15 Time Analyzed: 14:34

Instrument ID: AIRPIANO1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|---|
| 01 | WG767579-3LCS | WG767579-3 | R140137 | 03/11/15 12:50 |
| 02 | BLANK | L1504425-06 | R140146 | 03/11/15 19:46 |
| 03 | SG BLANK | L1504425-11 | R140147 | 03/11/15 20:19 |
| 04 | OUTDOOR CONTROL | L1504425-01 | R140148 | 03/11/15 20:51 |
| 05 | S-157-J.1 | L1504425-02 | R140149 | 03/11/15 21:23 |
| 06 | S-157-J.2 | L1504425-03 | R140150 | 03/11/15 21:55 |
| 07 | S-157-J | L1504425-04 | R140151 | 03/11/15 22:27 |
| 08 | DUPLICATE | L1504425-05 | R140152 | 03/11/15 22:59 |
| 09 | SG-1 | L1504425-07 | R140153 | 03/11/15 23:31 |
| 10 | SG-3 | L1504425-09 | R140156 | 03/12/15 01:08 |
| 11 | SG-4 | L1504425-10 | R140157 | 03/12/15 01:40 |
| 12 | SG-2 | L1504425-08 | R140160 | 03/12/15 08:45 |
| 13 | SG-1DUP | WG767579-5 | R140161 | 03/12/15 09:18 |

COMMENTS: _____

page 1 of 1

FORM IV TO15-SIM LOW

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R138809_tune BFB Injection Date: 01/02/15

Instrument ID: AIRPIANO1 BFB Injection Time: 18:33

| m/e | ION ABUNDANCE CRITERIA | % Relative Abundance |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 20.6 |
| 75 | 30.0 - 66.0% of mass 95 | 45.4 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 |
| 173 | Less than 2.0% of mass 174 | 0 (0 )1 |
| 174 | 50.0 - 120.0% of mass 95 | 86.3 |
| 175 | 4.0 - 9.0% of mass 174 | 6.8 (7.8 )1 |
| 176 | 93.0 - 101% of mass 174 | 82.9 (96.1)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.4 (6.5 )2 |

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | 0.02 | 0.02 | R138810 | 01/02/15 | 19:20 |
| 02 | 0.04 | 0.04 | R138811 | 01/02/15 | 19:52 |
| 03 | 0.1 | 0.1 | R138812 | 01/02/15 | 20:25 |
| 04 | 0.2 | 0.2 | R138813 | 01/02/15 | 20:57 |
| 05 | 0.5 | 0.5 | R138814 | 01/02/15 | 21:29 |
| 06 | 1.0 | 1.0 | R138815 | 01/02/15 | 22:02 |
| 07 | 5.0 | 5.0 | R138816 | 01/02/15 | 22:34 |
| 08 | 10.0 | 10.0 | R138817 | 01/02/15 | 23:08 |
| 09 | 20.0 | 20.0 | R138818 | 01/02/15 | 23:39 |
| 10 | 50.0 | 50.0 | R138819 | 01/03/15 | 00:11 |
| 11 | ICV Quant Report | ICV Quant Repo | R138824 | 01/03/15 | 09:46 |

page 1 of 1

FORM V TO15-SIM

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R140134_tune  BFB Injection Date: 03/11/15

Instrument ID: AIRPIANO1  BFB Injection Time: 11:12

| m/e | ION ABUNDANCE CRITERIA | % Relative Abundance |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 21.8 |
| 75 | 30.0 - 66.0% of mass 95 | 44.9 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 |
| 173 | Less than 2.0% of mass 174 | 0 (0 )1 |
| 174 | 50.0 - 120.0% of mass 95 | 85.7 |
| 175 | 4.0 - 9.0% of mass 174 | 7 (8.2 )1 |
| 176 | 93.0 - 101% of mass 174 | 83.4 (97.3)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.8 (6.9 )2 |

1-Value is % of mass 174  2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | CCAL | WG767579-2 | R140137 | 03/11/15 | 12:50 |
| 02 | WG767579-3LCS | WG767579-3 | R140137 | 03/11/15 | 12:50 |
| 03 | WG767579-4BLANK | WG767579-4 | R140139 | 03/11/15 | 14:34 |
| 04 | BLANK | L1504425-06 | R140146 | 03/11/15 | 19:46 |
| 05 | SG BLANK | L1504425-11 | R140147 | 03/11/15 | 20:19 |
| 06 | OUTDOOR CONTROL | L1504425-01 | R140148 | 03/11/15 | 20:51 |
| 07 | S-157-J.1 | L1504425-02 | R140149 | 03/11/15 | 21:23 |
| 08 | S-157-J.2 | L1504425-03 | R140150 | 03/11/15 | 21:55 |
| 09 | S-157-J | L1504425-04 | R140151 | 03/11/15 | 22:27 |
| 10 | DUPLICATE | L1504425-05 | R140152 | 03/11/15 | 22:59 |
| 11 | SG-1 | L1504425-07 | R140153 | 03/11/15 | 23:31 |
| 12 | SG-3 | L1504425-09 | R140156 | 03/12/15 | 01:08 |
| 13 | SG-4 | L1504425-10 | R140157 | 03/12/15 | 01:40 |
| 14 | SG-2 | L1504425-08 | R140160 | 03/12/15 | 08:45 |
| 15 | SG-1DUP | WG767579-5 | R140161 | 03/12/15 | 09:18 |



FORM V TO15-SIM

6A

# VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date(s): 01/02/15 01/03/15

Calibration Times: 19:20 00:11

Calibration Files
0.02=R138810.D 0.04=R138811.D 0.1 =R138812.D 0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D
5.0 =R138816.D 10.0=R138817.D 20.0=R138818.D 50.0=R138819.D

| | | Compound | 0.02 | 0.04 | 0.1 | 0.2 | 0.5 | 1.0 | 5.0 | 10.0 | 20.0 | 50.0 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | bromochloromethane | ----------ISTD---------- | | | | | | | | | | | |
| 2) | | propylene | | | 0.616 | 0.661 | 0.579 | 0.565 | 0.550 | 0.531 | 0.553 | 0.474 | 0.5663 | 9.88 |
| 3) | | dichlorodifluoromethane | 1.914 | 1.216 | 1.103 | 1.508 | 1.264 | 1.203 | 1.289 | 0.880 | 1.256 | 0.890 | 1.2524 | 23.82 |
| 4) | C | chloromethane | | 0.848 | 0.654 | 0.726 | 0.638 | 0.617 | 0.600 | 0.584 | 0.597 | 0.534 | 0.6442 | 14.41 |
| 5) | | Freon-114 | 2.326 | 1.884 | 1.795 | 1.977 | 1.818 | 1.748 | 1.740 | 1.642 | 1.681 | 1.425 | 1.8035 | 13.09 |
| 6) | C | vinyl chloride | 0.800 | 0.733 | 0.699 | 0.756 | 0.661 | 0.641 | 0.631 | 0.607 | 0.626 | 0.559 | 0.6712 | 11.07 |
| 7) | C | 1,3-butadiene | 0.786 | 0.578 | 0.525 | 0.558 | 0.507 | 0.485 | 0.486 | 0.471 | 0.478 | 0.430 | 0.5306 | 18.78 |
| 8) | C | bromomethane | 0.829 | 0.651 | 0.653 | 0.698 | 0.630 | 0.620 | 0.607 | 0.586 | 0.606 | 0.544 | 0.6426 | 12.09 |
| 9) | C | chloroethane | 0.518 | 0.370 | 0.340 | 0.340 | 0.310 | 0.297 | 0.290 | 0.284 | 0.289 | 0.263 | 0.3300 | 22.20 |
| 10) | | ethanol | | | 0.587 | 0.623 | 0.566 | 0.529 | 0.531 | 0.528 | 0.535 | 0.467 | 0.5458 | 8.55 |
| 11) | C | vinyl bromide | 0.899 | 0.710 | 0.669 | 0.728 | 0.654 | 0.645 | 0.635 | 0.617 | 0.638 | 0.573 | 0.6769 | 13.22 |
| 12) | | acetone | | | 1.230 | 1.260 | 1.125 | 1.075 | 1.041 | 1.020 | 1.033 | 0.908 | 1.0865 | 10.62 |
| 13) | | trichlorofluoromethane | 2.113 | 1.774 | 1.662 | 1.855 | 1.681 | 1.659 | 1.632 | 1.582 | 1.590 | 1.424 | 1.6972 | 10.95 |
| 14) | | isopropyl alcohol | | | | | 1.371 | 1.275 | 1.256 | 1.203 | 1.211 | 1.093 | 1.2349 | 7.43 |
| 15) | C | acrylonitrile | 0.879 | 0.670 | 0.670 | 0.627 | 0.493 | 0.490 | 0.498 | 0.478 | 0.532 | 0.450 | 0.5787 | 23.03 |
| 16) | C | 1,1-dichloroethene | 1.533 | 1.248 | 1.152 | 1.302 | 1.170 | 1.148 | 1.068 | 1.092 | 1.128 | 1.010 | 1.1851 | 12.50 |
| 17) | C | methylene chloride | | | | | 1.088 | 0.985 | 0.911 | 0.882 | 0.894 | 0.801 | 0.9268 | 10.61 |
| 18) | C | 3-chloropropene | 1.228 | 1.383 | 1.122 | 1.176 | 1.087 | 1.050 | 1.036 | 0.999 | 1.028 | 0.920 | 1.1029 | 11.98 |
| 19) | C | carbon disulfide | | | 2.388 | 2.310 | 2.006 | 1.933 | 1.923 | 1.863 | 1.919 | 1.708 | 2.0062 | 11.42 |
| 20) | | Freon 113 | 1.828 | 1.448 | 1.390 | 1.570 | 1.399 | 1.370 | 1.374 | 1.331 | 1.372 | 1.240 | 1.4322 | 11.32 |
| 21) | | Halothane | 1.490 | 1.191 | 1.119 | 1.262 | 1.144 | 1.122 | 1.108 | 1.087 | 1.137 | 1.036 | 1.1697 | 10.91 |
| 22) | | trans-1,2-dichloroethene | 1.364 | 1.140 | 1.082 | 1.208 | 1.114 | 1.095 | 1.103 | 1.065 | 1.087 | 0.977 | 1.1235 | 9.10 |
| 23) | C | 1,1-dichloroethane | 1.593 | 1.356 | 1.283 | 1.418 | 1.259 | 1.253 | 1.236 | 1.206 | 1.234 | 1.101 | 1.2939 | 10.41 |
| 24) | C | MTBE | 2.568 | 1.884 | 1.813 | 2.099 | 1.903 | 1.828 | 1.849 | 1.793 | 1.834 | 1.650 | 1.9223 | 13.14 |
| 25) | C | vinyl acetate | | | 1.283 | 1.745 | 1.647 | 1.698 | 1.856 | 1.868 | 1.932 | 1.781 | 1.7262 | 11.71 |
| 26) | C | 2-butanone | 1.894 | 1.611 | 1.175 | 1.491 | 1.503 | 1.569 | 1.682 | 1.658 | 1.699 | 1.546 | 1.5829 | 11.71 |
| 27) | | cis-1,2-dichloroethene | 1.334 | 1.210 | 1.111 | 1.229 | 1.157 | 1.137 | 1.138 | 1.091 | 1.123 | 1.003 | 1.1532 | 7.70 |
| 28) | | Ethyl Acetate | | | 0.418 | 0.193 | 0.197 | 0.224 | 0.267 | 0.270 | 0.282 | 0.260 | 0.2638 | 26.88 |
| 29) | C | chloroform | 2.293 | 1.793 | 1.702 | 1.836 | 1.668 | 1.624 | 1.603 | 1.563 | 1.595 | 1.422 | 1.7099 | 13.79 |
| 30) | | Tetrahydrofuran | | | 0.989 | 1.120 | 1.049 | 0.947 | 0.966 | 0.950 | 0.971 | 0.886 | 0.9846 | 7.21 |
| 31) | C | 1,2-dichloroethane | 1.287 | 1.090 | 0.997 | 1.106 | 1.017 | 0.996 | 0.986 | 0.968 | 0.989 | 0.890 | 1.0325 | 10.46 |
| 32) | I | 1,4-difluorobenzene | ----------ISTD---------- | | | | | | | | | | | |
| 33) | C | hexane | 0.795 | 0.661 | 0.589 | 0.675 | 0.603 | 0.600 | 0.611 | 0.590 | 0.591 | 0.551 | 0.6266 | 11.07 |
| 34) | s | 1,2-dichloroethane-D4 | 0.286 | 0.293 | 0.291 | 0.292 | 0.291 | 0.291 | 0.297 | 0.298 | 0.290 | 0.291 | 0.2920 | 1.15 |
| 35) | C | 1,1,1-trichloroethane | 0.834 | 0.700 | 0.636 | 0.716 | 0.671 | 0.655 | 0.680 | 0.661 | 0.673 | 0.627 | 0.6854 | 8.57 |
| 36) | C | benzene | | 1.086 | 0.935 | 0.999 | 0.931 | 0.900 | 0.926 | 0.899 | 0.907 | 0.846 | 0.9365 | 7.38 |
| 37) | C | carbon tetrachloride | 0.768 | 0.661 | 0.615 | 0.698 | 0.646 | 0.642 | 0.678 | 0.659 | 0.672 | 0.623 | 0.6663 | 6.53 |
| 38) | | cyclohexane | 0.802 | 0.615 | 0.533 | 0.582 | 0.536 | 0.518 | 0.532 | 0.515 | 0.509 | 0.482 | 0.5625 | 16.43 |
| 39) | C | 1,2-dichloropropane | 0.411 | 0.399 | 0.348 | 0.378 | 0.347 | 0.348 | 0.360 | 0.349 | 0.349 | 0.329 | 0.3618 | 7.15 |
| 40) | | bromodichloromethane | 0.893 | 0.763 | 0.683 | 0.803 | 0.723 | 0.714 | 0.735 | 0.718 | 0.725 | 0.682 | 0.7441 | 8.51 |
| 41) | C | 1,4-dioxane | | 0.194 | 0.184 | 0.213 | 0.206 | 0.207 | 0.224 | 0.221 | 0.226 | 0.214 | 0.2098 | 6.66 |
| 42) | C | trichloroethene | 0.546 | 0.453 | 0.442 | 0.494 | 0.453 | 0.445 | 0.461 | 0.449 | 0.451 | 0.424 | 0.4617 | 7.45 |
| 43) | C | 2,2,4-trimethylpentane | 1.971 | 1.732 | 1.603 | 1.816 | 1.668 | 1.627 | 1.658 | 1.604 | 1.627 | 1.510 | 1.6816 | 7.75 |

6A

# VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date(s): 01/02/15 01/03/15

Calibration Times: 19:20 00:11

| | | Compound | 0.02 | 0.04 | 0.1 | 0.2 | 0.5 | 1.0 | 5.0 | 10.0 | 20.0 | 50.0 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 44) | | heptane | 1.072 | 0.689 | 0.698 | 0.771 | 0.703 | 0.688 | 0.694 | 0.680 | 0.686 | 0.628 | 0.7310 | 17.05 |
| 45) | C | cis-1,3-dichloropropene | 2.138 | 1.757 | 1.655 | 1.993 | 1.862 | 1.875 | 2.048 | 2.046 | 2.089 | 1.958 | 1.9421 | 7.91 |
| 46) | C | 4-methyl-2-pentanone | 0.765 | 0.662 | 0.844 | 0.853 | 0.870 | 0.888 | 0.957 | 0.940 | 0.958 | 0.871 | 0.8608 | 10.60 |
| 47) | | trans-1,3-dichloropropene | 0.458 | 0.368 | 0.360 | 0.457 | 0.453 | 0.458 | 0.513 | 0.521 | 0.533 | 0.505 | 0.4626 | 12.99 |
| 48) | C | 1,1,2-trichloroethane | 0.461 | 0.398 | 0.384 | 0.437 | 0.392 | 0.385 | 0.405 | 0.399 | 0.400 | 0.375 | 0.4036 | 6.47 |
| 49) | I | chlorobenzene-D5 | ----------ISTD---------- | | | | | | | | | | | |
| 50) | C | toluene | | 5.688 | 5.188 | 5.715 | 5.275 | 5.097 | 5.271 | 5.021 | 5.180 | 4.843 | 5.2531 | 5.46 |
| 51) | s | toluene-D8 | 3.405 | 3.525 | 3.396 | 3.454 | 3.508 | 3.465 | 3.530 | 3.496 | 3.427 | 3.523 | 3.4729 | 1.47 |
| 52) | | 2-hexanone | | | 2.164 | 2.712 | 3.299 | 3.645 | 4.147 | 3.976 | 4.166 | 3.846 | 3.4944 | 20.74 |
| 53) | | dibromochloromethane | 4.328 | 3.452 | 3.394 | 3.764 | 3.531 | 3.412 | 3.616 | 3.515 | 3.693 | 3.535 | 3.6239 | 7.56 |
| 54) | C | 1,2-dibromoethane | 3.100 | 2.831 | 2.694 | 3.064 | 2.945 | 2.898 | 3.052 | 2.978 | 3.098 | 2.938 | 2.9598 | 4.36 |
| 55) | C | tetrachloroethene | 3.527 | 2.706 | 2.560 | 2.854 | 2.615 | 2.558 | 2.625 | 2.519 | 2.575 | 2.465 | 2.7003 | 11.47 |
| 56) | | 1,1,1,2-tetrachloroethane | 3.225 | 2.689 | 2.443 | 2.687 | 2.529 | 2.476 | 2.556 | 2.504 | 2.602 | 2.459 | 2.6169 | 8.81 |
| 57) | C | chlorobenzene | 5.044 | 4.881 | 4.382 | 4.783 | 4.491 | 4.442 | 4.587 | 4.439 | 4.595 | 4.330 | 4.5973 | 5.09 |
| 58) | C | ethylbenzene | 8.386 | 7.080 | 6.441 | 7.454 | 6.732 | 6.668 | 7.054 | 6.774 | 6.936 | 6.539 | 7.0063 | 8.10 |
| 59) | C | m+p-xylene | 6.416 | 5.279 | 5.070 | 5.745 | 5.244 | 5.319 | 5.537 | 5.290 | 5.485 | 5.127 | 5.4512 | 7.22 |
| 60) | C | bromoform | 4.223 | 3.344 | 3.109 | 3.577 | 3.270 | 3.223 | 3.507 | 3.421 | 3.629 | 3.488 | 3.4790 | 8.85 |
| 61) | C | styrene | 4.394 | 3.742 | 3.678 | 4.162 | 3.958 | 4.030 | 4.359 | 4.226 | 4.388 | 4.184 | 4.1123 | 6.24 |
| 62) | C | 1,1,2,2-tetrachloroethane | 4.853 | 4.205 | 3.850 | 4.389 | 4.060 | 4.004 | 4.195 | 4.013 | 4.118 | 3.897 | 4.1586 | 6.98 |
| 63) | C | o-xylene | 7.408 | 5.897 | 5.299 | 6.047 | 5.613 | 5.413 | 5.704 | 5.461 | 5.628 | 5.311 | 5.7782 | 10.76 |
| 64) | s | bromofluorobenzene | 2.607 | 2.725 | 2.690 | 2.698 | 2.703 | 2.668 | 2.783 | 2.730 | 2.722 | 2.762 | 2.7088 | 1.81 |
| 65) | C | isopropylbenzene | 9.398 | 7.890 | 7.201 | 8.208 | 7.786 | 7.584 | 7.947 | 7.575 | 7.862 | 7.402 | 7.8853 | 7.67 |
| 66) | | 4-ethyl toluene | 9.877 | 8.269 | 7.341 | 9.015 | 8.443 | 8.377 | 8.832 | 8.518 | 8.705 | 8.314 | 8.5690 | 7.50 |
| 67) | | 1,3,5-trimethylbenzene | 9.483 | 8.198 | 7.057 | 8.589 | 7.695 | 7.366 | 8.113 | 7.815 | 7.931 | 7.543 | 7.9791 | 8.59 |
| 68) | | tert-butylbenzene | 9.621 | 7.755 | 7.407 | 8.340 | 7.724 | 7.579 | 7.921 | 7.630 | 7.749 | 7.268 | 7.8994 | 8.49 |
| 69) | | 1,2,4-trimethylbenzene | 8.222 | 6.766 | 6.264 | 7.184 | 6.712 | 6.586 | 6.985 | 6.727 | 6.815 | 6.462 | 6.8723 | 7.84 |
| 70) | C | Benzyl Chloride | 6.988 | 5.016 | 4.752 | 5.697 | 5.493 | 5.556 | 6.306 | 6.245 | 6.482 | 6.376 | 5.8909 | 11.95 |
| 71) | | 1,3-dichlorobenzene | 5.766 | 4.817 | 4.598 | 5.266 | 5.003 | 4.930 | 5.308 | 5.111 | 5.201 | 4.991 | 5.0992 | 6.22 |
| 72) | C | 1,4-dichlorobenzene | 6.147 | 4.867 | 4.631 | 5.476 | 5.054 | 5.100 | 5.415 | 5.270 | 5.329 | 5.120 | 5.2410 | 7.78 |
| 73) | | sec-butylbenzene | 1.213 | 0.962 | 0.928 | 1.064 | 0.999 | 0.988 | 1.043 | 0.982 | 1.013 | 0.963 | 1.0155 | 7.87 |
| 74) | | p-isopropyltoluene | 1.137 | 0.924 | 0.870 | 0.969 | 0.928 | 0.922 | 0.990 | 0.945 | 0.946 | 0.905 | 0.9534 | 7.59 |
| 75) | | 1,2-dichlorobenzene | 5.943 | 4.796 | 4.514 | 5.105 | 4.759 | 4.728 | 5.127 | 4.928 | 4.898 | 4.757 | 4.9555 | 7.91 |
| 76) | | n-butylbenzene | 8.866 | 7.755 | 7.138 | 8.027 | 7.861 | 7.912 | 8.557 | 8.126 | 7.981 | 7.721 | 7.9945 | 5.87 |
| 77) | C | 1,2,4-trichlorobenzene | | 3.715 | 3.532 | 3.834 | 3.910 | 4.011 | 4.696 | 4.629 | 3.662 | 3.926 | 3.9906 | 10.24 |
| 78) | | naphthalene | | 1.055 | 0.868 | 1.313 | 1.014 | 0.967 | 1.146 | 1.104 | 0.832 | 0.889 | 1.0209 | 15.05 |
| 79) | | 1,2,3-trichlorobenzene | | 3.614 | 3.340 | 3.554 | 3.573 | 3.678 | 4.391 | 4.410 | 3.196 | 3.460 | 3.6906 | 11.61 |
| 80) | C | hexachlorobutadiene | | 3.097 | 2.901 | 3.010 | 2.960 | 3.008 | 3.374 | 3.347 | 2.578 | 2.779 | 3.0060 | 8.38 |

FORM VI-TO15-SIM

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date: 03/11/2015 Time: 12:50

Lab File ID: R140137 Init. Calib. Date(s): 01/02/15 01/03/15

Sample No: WG767579-2,3,25 Init. Calib. Times : 19:20 00:11

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 80 | 0.00 |
| 2 | | propylene | 0.566 | 0.578 | -2.1 | 84 | 0.00 |
| 3 | | dichlorodifluoromethane | 1.252 | 1.093 | 12.7 | 68 | 0.00 |
| 4 | C | chloromethane | 0.644 | 0.587 | 8.9 | 78 | 0.00 |
| 5 | | Freon-114 | 1.804 | 1.673 | 7.3 | 77 | 0.00 |
| 6 | C | vinyl chloride | 0.671 | 0.601 | 10.4 | 76 | 0.00 |
| 7 | C | 1,3-butadiene | 0.531 | 0.474 | 10.7 | 78 | 0.00 |
| 8 | C | bromomethane | 0.643 | 0.590 | 8.2 | 78 | 0.00 |
| 9 | C | chloroethane | 0.330 | 0.281 | 14.8 | 77 | 0.00 |
| 10 | | ethanol | 0.546 | 0.467 | 14.5 | 70 | 0.00 |
| 11 | C | vinyl bromide | 0.677 | 0.598 | 11.7 | 75 | 0.00 |
| 12 | | acetone | 1.087 | 1.046 | 3.8 | 80 | 0.00 |
| 13 | | trichlorofluoromethane | 1.697 | 1.585 | 6.6 | 77 | 0.00 |
| 14 | | isopropyl alcohol | 1.235 | 1.193 | 3.4 | 76 | 0.00 |
| 15 | C | acrylonitrile | 0.579 | 0.445 | 23.1 | 71 | 0.00 |
| 16 | C | 1,1-dichloroethene | 1.185 | 1.066 | 10.0 | 80 | 0.00 |
| 17 | C | methylene chloride | 0.927 | 0.897 | 3.2 | 79 | 0.00 |
| 18 | C | 3-chloropropene | 1.103 | 1.013 | 8.2 | 78 | 0.00 |
| 19 | C | carbon disulfide | 2.006 | 1.751 | 12.7 | 73 | 0.00 |
| 20 | | Freon 113 | 1.432 | 1.343 | 6.2 | 78 | 0.00 |
| 21 | | Halothane | 1.170 | 0.988 | 15.6 | 71 | 0.00 |
| 22 | | trans-1,2-dichloroethene | 1.123 | 0.948 | 15.6 | 69 | 0.00 |
| 23 | C | 1,1-dichloroethane | 1.294 | 1.187 | 8.3 | 77 | 0.00 |
| 24 | C | MTBE | 1.922 | 1.683 | 12.4 | 73 | 0.00 |
| 25 | C | vinyl acetate | 1.726 | 1.929 | -11.8 | 83 | 0.00 |
| 26 | C | 2-butanone | 1.583 | 1.536 | 3.0 | 73 | 0.00 |
| 27 | | cis-1,2-dichloroethene | 1.153 | 1.158 | -0.4 | 81 | 0.00 |
| 28 | | Ethyl Acetate | 0.264 | 0.235 | 11.0 | 70 | 0.00 |
| 29 | C | chloroform | 1.710 | 1.548 | 9.5 | 77 | 0.00 |
| 30 | | Tetrahydrofuran | 0.985 | 0.860 | 12.7 | 71 | 0.00 |
| 31 | C | 1,2-dichloroethane | 1.032 | 0.937 | 9.2 | 76 | 0.00 |
| 32 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 81 | 0.00 |
| 33 | C | hexane | 0.627 | 0.541 | 13.7 | 71 | 0.00 |
| 34 | s | 1,2-dichloroethane-D4 | 0.292 | 0.299 | -2.4 | 81 | 0.00 |
| 35 | C | 1,1,1-trichloroethane | 0.685 | 0.639 | 6.7 | 76 | 0.00 |
| 36 | C | benzene | 0.937 | 0.846 | 9.7 | 74 | 0.00 |
| 37 | C | carbon tetrachloride | 0.666 | 0.614 | 7.8 | 73 | 0.00 |
| 38 | | cyclohexane | 0.562 | 0.482 | 14.2 | 73 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 39 | C | 1,2-dichloropropane | 0.362 | 0.337 | 6.9 | 76 | 0.00 |
| 40 | | bromodichloromethane | 0.744 | 0.668 | 10.2 | 73 | 0.01 |
| 41 | C | 1,4-dioxane | 0.210 | 0.201 | 4.3 | 73 | 0.00 |
| 42 | C | trichloroethene | 0.462 | 0.422 | 8.7 | 74 | 0.00 |
| 43 | C | 2,2,4-trimethylpentane | 1.682 | 1.537 | 8.6 | 75 | 0.00 |
| 44 | | heptane | 0.731 | 0.643 | 12.0 | 75 | 0.00 |
| 45 | C | cis-1,3-dichloropropene | 1.942 | 1.897 | 2.3 | 75 | 0.00 |
| 46 | C | 4-methyl-2-pentanone | 0.861 | 0.873 | -1.4 | 74 | 0.00 |
| 47 | | trans-1,3-dichloropropene | 0.463 | 0.397 | 14.3 | 62 | 0.00 |
| 48 | C | 1,1,2-trichloroethane | 0.404 | 0.388 | 4.0 | 77 | 0.00 |
| 49 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 80 | 0.00 |
| 50 | C | toluene | 5.253 | 4.897 | 6.8 | 75 | 0.00 |
| 51 | s | toluene-D8 | 3.473 | 3.536 | -1.8 | 80 | 0.00 |
| 52 | | 2-hexanone | 3.494 | 3.800 | -8.8 | 74 | 0.00 |
| 53 | | dibromochloromethane | 3.624 | 3.196 | 11.8 | 71 | 0.00 |
| 54 | C | 1,2-dibromoethane | 2.960 | 2.861 | 3.3 | 75 | 0.00 |
| 55 | C | tetrachloroethene | 2.700 | 2.343 | 13.2 | 72 | 0.00 |
| 56 | | 1,1,1,2-tetrachloroethane | 2.617 | 2.185 | 16.5 | 69 | 0.00 |
| 57 | C | chlorobenzene | 4.597 | 4.304 | 6.4 | 75 | 0.00 |
| 58 | C | ethylbenzene | 7.006 | 6.446 | 8.0 | 73 | 0.00 |
| 59 | C | m+p-xylene | 5.451 | 5.121 | 6.1 | 74 | 0.01 |
| 60 | C | bromoform | 3.479 | 2.885 | 17.1 | 66 | 0.00 |
| 61 | C | styrene | 4.112 | 3.932 | 4.4 | 72 | 0.00 |
| 62 | C | 1,1,2,2-tetrachloroethane | 4.159 | 4.041 | 2.8 | 77 | 0.00 |
| 63 | C | o-xylene | 5.778 | 5.381 | 6.9 | 76 | 0.00 |
| 64 | s | bromofluorobenzene | 2.709 | 2.726 | -0.6 | 79 | 0.00 |
| 65 | C | isopropylbenzene | 7.885 | 7.194 | 8.8 | 73 | 0.00 |
| 66 | | 4-ethyl toluene | 8.569 | 7.720 | 9.9 | 70 | 0.00 |
| 67 | | 1,3,5-trimethylbenzene | 7.979 | 7.564 | 5.2 | 75 | 0.00 |
| 68 | | tert-butylbenzene | 7.899 | 6.941 | 12.1 | 70 | 0.00 |
| 69 | | 1,2,4-trimethylbenzene | 6.872 | 6.474 | 5.8 | 74 | 0.00 |
| 70 | C | Benzyl Chloride | 5.891 | 4.971 | 15.6 | 63 | 0.00 |
| 71 | | 1,3-dichlorobenzene | 5.099 | 4.893 | 4.0 | 74 | 0.00 |
| 72 | C | 1,4-dichlorobenzene | 5.241 | 4.929 | 6.0 | 73 | 0.00 |
| 73 | | sec-butylbenzene | 10.155 | 9.060 | 10.8 | 70 | 0.00 |
| 74 | | p-isopropyltoluene | 9.534 | 7.839 | 17.8 | 64 | 0.00 |
| 75 | | 1,2-dichlorobenzene | 4.956 | 4.667 | 5.8 | 73 | 0.00 |
| 76 | | n-butylbenzene | 7.994 | 7.567 | 5.3 | 71 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311SIM\
Data File : R140137.D
Acq On : 11 Mar 2015 12:50 pm
Operator : AIRPIANO1:RY
Sample : WG767579-2,3,250,250
Misc : WG767579,ICAL10565
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 13:13:08 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311SIM\TSIM150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 13:54:27 2015

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 77 C | 1,2,4-trichlorobenzene | 3.991 | 4.097 | -2.7 | 70 | 0.00 |
| 78 | naphthalene | 10.209 | 9.520 | 6.7 | 67 | 0.00 |
| 79 | 1,2,3-trichlorobenzene | 3.691 | 3.827 | -3.7 | 70 | 0.00 |
| 80 C | hexachlorobutadiene | 3.006 | 2.951 | 1.8 | 70 | 0.00 |

* Evaluation of CC level amount vs concentration.

FORM VII TO15-SIM

8A

VOLATILE ORGANICS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID (Standard): R140137 Date Analyzed: 03/11/15

Instrument ID : AIRPIANO1 Time Analyzed: 12:50

| | | IS1 AREA | RT | IS2 AREA | RT | IS3 AREA | RT |
|---|---|---|---|---|---|---|---|
| | 24 HOUR STD | 119028 | 10.22 | 266408 | 12.51 | 58247 | 16.96 |
| | UPPER LIMIT | 166639 | 10.55 | 372971 | 12.84 | 81546 | 17.29 |
| | LOWER LIMIT | 71417 | 9.89 | 159845 | 12.18 | 34948 | 16.63 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | WG767579-3LCS | 119028 | 10.22 | 266408 | 12.51 | 58247 | 16.96 |
| 02 | WG767579-4BLANK | 113956 | 10.22 | 247849 | 12.51 | 54385 | 16.97 |
| 03 | BLANK | 108241 | 10.22 | 229717 | 12.51 | 53423 | 16.97 |
| 04 | SG BLANK | 112817 | 10.22 | 248625 | 12.51 | 55162 | 16.96 |
| 05 | OUTDOOR CONTROL | 100826 | 10.22 | 222593 | 12.51 | 51639 | 16.97 |
| 06 | S-157-J.1 | 106001 | 10.22 | 225038 | 12.51 | 53521 | 16.96 |
| 07 | S-157-J.2 | 103716 | 10.22 | 220030 | 12.51 | 54389 | 16.96 |
| 08 | S-157-J | 106095 | 10.22 | 225913 | 12.51 | 53169 | 16.96 |
| 09 | DUPLICATE | 100948 | 10.22 | 234765 | 12.51 | 53564 | 16.96 |
| 10 | SG-1 | 103773 | 10.22 | 221061 | 12.51 | 53001 | 16.96 |
| 11 | SG-3 | 108566 | 10.22 | 229775 | 12.51 | 56215 | 16.96 |
| 12 | SG-4 | 109329 | 10.22 | 232926 | 12.51 | 59253 | 16.96 |
| 13 | SG-2 | 104320 | 10.22 | 229129 | 12.51 | 56493 | 16.96 |
| 14 | WG767579-5DUP | 107833 | 10.22 | 224459 | 12.51 | 55214 | 16.96 |

IS1 = BROMOCHLOROMETHANE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40 % of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

* Values outside of QC limits.

page 1 of 1 FORM VIII - TO15-SIM

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-01 | Date Collected : | 03/08/15 13:31 |
| Client ID | : OUTDOOR CONTROL | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:51 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140148 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.286 | 0.500 | 0.093 | 0.492 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 2.96 | 2.50 | 0.542 | 5.58 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 2.34 | 1.00 | 0.269 | 5.56 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.147 | 0.500 | 0.052 | 0.434 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | 0.071 | 0.200 | 0.052 | 0.250 | 0.705 | 0.183 | J |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | U |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-02 | Date Collected : | 03/08/15 13:23 |
| Client ID | : S-157-J.1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:23 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140149 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.233 | 0.500 | 0.093 | 0.401 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 37.2 | 2.50 | 0.542 | 70.1 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 10.6 | 1.00 | 0.269 | 25.2 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | 30.6 | 0.500 | 0.114 | 75.2 | 1.23 | 0.280 | |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.380 | 0.500 | 0.052 | 1.12 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | 0.130 | 0.200 | 0.052 | 0.458 | 0.705 | 0.183 | J |
| 110-82-7 | Cyclohexane | 0.240 | 0.200 | 0.066 | 0.826 | 0.688 | 0.226 | |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | 0.110 | 0.200 | 0.055 | 0.451 | 0.820 | 0.227 | J |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | 0.763 | 0.200 | 0.078 | 3.75 | 0.983 | 0.381 | |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-03 | Date Collected : | 03/08/15 13:22 |
| Client ID | : S-157-J.2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 21:55 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140150 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.310 | 0.500 | 0.093 | 0.534 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 38.7 | 2.50 | 0.542 | 72.9 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 11.8 | 1.00 | 0.269 | 28.0 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | 33.4 | 0.500 | 0.114 | 82.1 | 1.23 | 0.280 | |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.419 | 0.500 | 0.052 | 1.24 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | 0.137 | 0.200 | 0.052 | 0.483 | 0.705 | 0.183 | J |
| 110-82-7 | Cyclohexane | 0.110 | 0.200 | 0.066 | 0.379 | 0.688 | 0.226 | J |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | 0.147 | 0.200 | 0.055 | 0.602 | 0.820 | 0.227 | J |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | 0.709 | 0.200 | 0.078 | 3.49 | 0.983 | 0.381 | |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-04 | Date Collected : | 03/08/15 13:24 |
| Client ID | : S-157-J | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:27 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140151 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.292 | 0.500 | 0.093 | 0.503 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 54.0 | 2.50 | 0.542 | 102 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 13.9 | 1.00 | 0.269 | 33.0 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | 31.9 | 0.500 | 0.114 | 78.4 | 1.23 | 0.280 | |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.532 | 0.500 | 0.052 | 1.57 | 1.47 | 0.154 | |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | 0.243 | 0.200 | 0.052 | 0.856 | 0.705 | 0.183 | |
| 110-82-7 | Cyclohexane | 7.26 | 0.200 | 0.066 | 25.0 | 0.688 | 0.226 | |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | 0.112 | 0.200 | 0.055 | 0.459 | 0.820 | 0.227 | J |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | 0.745 | 0.200 | 0.078 | 3.66 | 0.983 | 0.381 | |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-05 | Date Collected : | 03/08/15 13:24 |
| Client ID | : DUPLICATE | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 22:59 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140152 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.302 | 0.500 | 0.093 | 0.520 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 44.8 | 2.50 | 0.542 | 84.4 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 13.2 | 1.00 | 0.269 | 31.4 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | 37.3 | 0.500 | 0.114 | 91.7 | 1.23 | 0.280 | |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.400 | 0.500 | 0.052 | 1.18 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | 0.089 | 0.200 | 0.052 | 0.314 | 0.705 | 0.183 | J |
| 110-82-7 | Cyclohexane | 0.097 | 0.200 | 0.066 | 0.334 | 0.688 | 0.226 | J |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | 0.098 | 0.200 | 0.055 | 0.402 | 0.820 | 0.227 | J |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | 0.804 | 0.200 | 0.078 | 3.95 | 0.983 | 0.381 | |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-06 | Date Collected : | 03/06/15 00:00 |
| Client ID | : BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 19:46 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140146 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | U |
| 64-17-5 | Ethanol | ND | 2.50 | 0.542 | ND | 4.71 | 1.02 | U |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | ND | 1.00 | 0.269 | ND | 2.38 | 0.639 | U |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | ND | 0.500 | 0.052 | ND | 1.47 | 0.154 | U |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | U |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-07 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 23:31 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140153 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.156 | 0.500 | 0.093 | 0.268 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 3.83 | 2.50 | 0.542 | 7.22 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 7.25 | 1.00 | 0.269 | 17.2 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | 0.120 | 0.200 | 0.035 | 0.374 | 0.623 | 0.107 | J |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.369 | 0.500 | 0.052 | 1.09 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | 0.517 | 0.200 | 0.078 | 2.54 | 0.983 | 0.381 | |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-08 | Date Collected : | 03/06/15 18:51 |
| Client ID | : SG-2 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 08:45 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140160 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.142 | 0.500 | 0.093 | 0.244 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 2.72 | 2.50 | 0.542 | 5.13 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 2.96 | 1.00 | 0.269 | 7.03 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | 1.15 | 0.200 | 0.035 | 3.58 | 0.623 | 0.107 | |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.394 | 0.500 | 0.052 | 1.16 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | U |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-09 | Date Collected : | 03/06/15 19:31 |
| Client ID | : SG-3 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:08 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140156 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.138 | 0.500 | 0.093 | 0.238 | 0.861 | 0.160 | J |
| 64-17-5 | Ethanol | 2.28 | 2.50 | 0.542 | 4.30 | 4.71 | 1.02 | J |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 1.77 | 1.00 | 0.269 | 4.20 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | 0.101 | 0.200 | 0.035 | 0.315 | 0.623 | 0.107 | J |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.099 | 0.500 | 0.052 | 0.292 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | U |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-10 | Date Collected : | 03/06/15 20:02 |
| Client ID | : SG-4 | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/12/15 01:40 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140157 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 9.02 | 0.500 | 0.093 | 15.5 | 0.861 | 0.160 | |
| 64-17-5 | Ethanol | 3.47 | 2.50 | 0.542 | 6.54 | 4.71 | 1.02 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 11.1 | 1.00 | 0.269 | 26.4 | 2.38 | 0.639 | |
| 67-63-0 | Isopropanol | 7.69 | 0.500 | 0.114 | 18.9 | 1.23 | 0.280 | |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | 4.10 | 0.200 | 0.035 | 12.8 | 0.623 | 0.107 | |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.389 | 0.500 | 0.052 | 1.15 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | 3.99 | 0.200 | 0.052 | 14.1 | 0.705 | 0.183 | |
| 110-82-7 | Cyclohexane | 3.04 | 0.200 | 0.066 | 10.5 | 0.688 | 0.226 | |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | 1.21 | 0.200 | 0.055 | 4.96 | 0.820 | 0.227 | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | U |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : L1504425-11 | Date Collected : | 03/06/15 00:00 |
| Client ID | : SG BLANK | Date Received : | 03/10/15 |
| Sample Location | : 181 ELLIOT STREET | Date Analyzed : | 03/11/15 20:19 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140147 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | U |
| 64-17-5 | Ethanol | 0.682 | 2.50 | 0.542 | 1.29 | 4.71 | 1.02 | J |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | 0.272 | 1.00 | 0.269 | 0.646 | 2.38 | 0.639 | J |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | 0.092 | 0.500 | 0.052 | 0.271 | 1.47 | 0.154 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | U |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767577-4 | Date Collected : | NA |
| Client ID | : WG767577-4BLANK | Date Received : | NA |
| Sample Location | : | Date Analyzed : | 03/11/15 13:49 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140138 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | ND | 0.500 | 0.093 | ND | 0.861 | 0.160 | U |
| 64-17-5 | Ethanol | ND | 2.50 | 0.542 | ND | 4.71 | 1.02 | U |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | 0.306 | U |
| 67-64-1 | Acetone | ND | 1.00 | 0.269 | ND | 2.38 | 0.639 | U |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | 0.280 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | 0.254 | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | 0.035 | ND | 0.623 | 0.107 | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | 0.200 | U |
| 78-93-3 | 2-Butanone | ND | 0.500 | 0.052 | ND | 1.47 | 0.154 | U |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | 0.472 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | 0.183 | U |
| 110-54-3 | n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | 0.183 | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | 0.226 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | 0.281 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | 0.308 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | 0.227 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | 0.249 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | 0.248 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | 0.078 | ND | 0.983 | 0.381 | U |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | 0.334 | U |

# Tentatively Identified Compounds
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767577-4 | Date Collected : | NA |
| Client ID | : WG767577-4BLANK | Date Received : | NA |
| Sample Location | : | Date Analyzed : | 03/11/15 13:49 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140138 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

Number TICS found: 0

Concentration Units:

| CAS Number | Compound Name | RT | EST. CONC. | Qualifier |
|---|---|---|---|---|
| | NO TENTATIVELY IDENTIFIED COMPOUNDS | | | J |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : FSL Associates | Lab Number | : L1504425 |
| Project Name | : CUMMINGS BEVERLY | Project Number: | CUMMINGS BEVERLY |
| Lab ID | : WG767577-5 | Date Collected : | 03/06/15 19:43 |
| Client ID | : SG-1DUP | Date Received : | 03/10/15 |
| Sample Location | : | Date Analyzed : | 03/12/15 09:18 |
| Sample Matrix | : AIR | Dilution Factor : | 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R140161 | Instrument ID | : AIRPIANO1 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.110 | 0.500 | 0.093 | 0.189 | 0.861 | .5 | J |
| 64-17-5 | Ethanol | 4.10 | 2.50 | 0.542 | 7.73 | 4.71 | 2.5 | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | 0.070 | ND | 0.874 | .2 | U |
| 67-64-1 | Acetone | 7.87 | 1.00 | 0.269 | 18.7 | 2.38 | 1 | |
| 67-63-0 | Isopropanol | ND | 0.500 | 0.114 | ND | 1.23 | .5 | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | 0.081 | ND | 0.626 | .2 | U |
| 75-15-0 | Carbon disulfide | 0.103 | 0.200 | 0.035 | 0.321 | 0.623 | .2 | J |
| 108-05-4 | Vinyl acetate | ND | 0.200 | 0.057 | ND | 0.704 | .2 | U |
| 78-93-3 | 2-Butanone | 0.445 | 0.500 | 0.052 | 1.31 | 1.47 | .5 | J |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | 0.131 | ND | 1.80 | .5 | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | 0.062 | ND | 1.47 | .5 | U |
| 110-54-3 | n-Hexane | ND | 0.200 | 0.052 | ND | 0.705 | .2 | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | 0.066 | ND | 0.688 | .2 | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | 0.078 | ND | 0.721 | .2 | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | 0.066 | ND | 0.934 | .2 | U |
| 142-82-5 | Heptane | ND | 0.200 | 0.055 | ND | 0.820 | .2 | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | 0.061 | ND | 2.05 | .5 | U |
| 591-78-6 | 2-Hexanone | ND | 0.200 | 0.060 | ND | 0.820 | .2 | U |
| 622-96-8 | 4-Ethyltoluene | 0.532 | 0.200 | 0.078 | 2.62 | 0.983 | .2 | |
| 100-44-7 | Benzyl chloride | ND | 0.200 | 0.065 | ND | 1.04 | .2 | U |

3

LAB DUPLICATE

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1504425 Matrix: Air

Lab Sample ID : WG767577-5 Injected: 03/12/15 09:18 Lab File ID: R140161

Client Sample ID : SG-1

| COMPOUND | SAMPLE CONCENTRATION (ppbV ) | DUP CONCENTRATION (ppbV ) | DUP % RPD | DUP RPD LIMIT |
|---|---|---|---|---|
| Propylene | 0.156J | 0.110J | NC | 25 |
| Ethanol | 3.83 | 4.10 | 7 | 25 |
| Vinyl bromide | ND | ND | NC | 25 |
| Acetone | 7.25 | 7.87 | 8 | 25 |
| Isopropanol | ND | ND | NC | 25 |
| 3-Chloropropene | ND | ND | NC | 25 |
| Carbon disulfide | 0.120J | 0.103J | NC | 25 |
| Vinyl acetate | ND | ND | NC | 25 |
| 2-Butanone | 0.369J | 0.445J | NC | 25 |
| Ethyl Acetate | ND | ND | NC | 25 |
| Tetrahydrofuran | ND | ND | NC | 25 |
| n-Hexane | ND | ND | NC | 25 |
| Cyclohexane | ND | ND | NC | 25 |
| 1,4-Dioxane | ND | ND | NC | 25 |
| 2,2,4-Trimethylpentane | ND | ND | NC | 25 |
| Heptane | ND | ND | NC | 25 |
| 4-Methyl-2-pentanone | ND | ND | NC | 25 |
| 2-Hexanone | ND | ND | NC | 25 |
| 4-Ethyltoluene | 0.517 | 0.532 | 3 | 25 |
| Benzyl chloride | ND | ND | NC | 25 |

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1504425 Matrix: Air

Lab Control Sample: WG767577-3LCS Injected: 03/11/15 12:18 Lab File ID: R140136

| COMPOUND | SPIKE ADDED ppbV | SAMPLE CONC ppbV | LCS CONC ppbV | LCS % REC | LCSD CONC ppbV | LCSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|---|---|
| Chlorodifluoromethane | 10 | NA | 8.65 | 86 | - | - | - | | 70-130 |
| Propylene | 10 | NA | 10.2 | 102 | - | - | - | | 70-130 |
| Propane | 10 | NA | 7.91 | 79 | - | - | - | | 70-130 |
| Dichlorodifluoromethane | 10 | NA | 7.17 | 72 | - | - | - | | 70-130 |
| Chloromethane | 10 | NA | 8.75 | 88 | - | - | - | | 70-130 |
| Freon-114 | 10 | NA | 9.37 | 94 | - | - | - | | 70-130 |
| Methanol | 50 | NA | 42.5 | 85 | - | - | - | | 70-130 |
| Vinyl chloride | 10 | NA | 9.43 | 94 | - | - | - | | 70-130 |
| 1,3-Butadiene | 10 | NA | 9.68 | 97 | - | - | - | | 70-130 |
| Butane | 10 | NA | 8.45 | 84 | - | - | - | | 70-130 |
| Bromomethane | 10 | NA | 8.65 | 86 | - | - | - | | 70-130 |
| Chloroethane | 10 | NA | 8.91 | 89 | - | - | - | | 70-130 |
| Ethanol | 50 | NA | 42.7 | 85 | - | - | - | | 70-130 |
| Dichlorofluoromethane | 10 | NA | 8.57 | 86 | - | - | - | | 70-130 |
| Vinyl bromide | 10 | NA | 9.30 | 93 | - | - | - | | 70-130 |
| Acrolein | 10 | NA | 7.25 | 72 | - | - | - | | 70-130 |
| Acetone | 50 | NA | 47.7 | 95 | - | - | - | | 70-130 |
| Acetonitrile | 10 | NA | 8.37 | 84 | - | - | - | | 70-130 |
| Trichlorofluoromethane | 10 | NA | 9.51 | 95 | - | - | - | | 70-130 |
| Isopropanol | 10 | NA | 9.12 | 91 | - | - | - | | 70-130 |
| Acrylonitrile | 10 | NA | 7.93 | 79 | - | - | - | | 70-130 |
| Pentane | 10 | NA | 7.95 | 80 | - | - | - | | 70-130 |
| Ethyl ether | 10 | NA | 7.48 | 75 | - | - | - | | 70-130 |
| 1,1-Dichloroethene | 10 | NA | 9.17 | 92 | - | - | - | | 70-130 |
| Tertiary butyl Alcohol | 10 | NA | 8.62 | 86 | - | - | - | | 70-130 |
| Methylene chloride | 10 | NA | 9.43 | 94 | - | - | - | | 70-130 |
| 3-Chloropropene | 10 | NA | 8.45 | 84 | - | - | - | | 70-130 |
| Carbon disulfide | 10 | NA | 9.10 | 91 | - | - | - | | 70-130 |
| Freon-113 | 10 | NA | 9.36 | 94 | - | - | - | | 70-130 |
| trans-1,2-Dichloroethene | 10 | NA | 8.65 | 86 | - | - | - | | 70-130 |
| 1,1-Dichloroethane | 10 | NA | 9.21 | 92 | - | - | - | | 70-130 |
| Methyl tert butyl ether | 10 | NA | 8.73 | 87 | - | - | - | | 70-130 |
| Vinyl acetate | 10 | NA | 11.5 | 115 | - | - | - | | 70-130 |
| 2-Butanone | 10 | NA | 9.72 | 97 | - | - | - | | 70-130 |
| cis-1,2-Dichloroethene | 10 | NA | 10.1 | 101 | - | - | - | | 70-130 |
| Ethyl Acetate | 10 | NA | 9.04 | 90 | - | - | - | | 70-130 |
| Chloroform | 10 | NA | 9.26 | 93 | - | - | - | | 70-130 |
| Tetrahydrofuran | 10 | NA | 7.69 | 77 | - | - | - | | 70-130 |
| 2,2-Dichloropropane | 10 | NA | 8.18 | 82 | - | - | - | | 70-130 |
| 1,2-Dichloroethane | 10 | NA | 9.52 | 95 | - | - | - | | 70-130 |

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1504425 Matrix: Air

Lab Control Sample: WG767577-3LCS Injected: 03/11/15 12:18 Lab File ID: R140136

| COMPOUND | SPIKE ADDED ppbV | SAMPLE CONC ppbV | LCS CONC ppbV | LCS % REC | LCSD CONC ppbV | LCSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|---|---|
| n-Hexane | 10 | NA | 8.96 | 90 | - | - | - | | 70-130 |
| Diisopropyl Ether | 10 | NA | 8.60 | 86 | - | - | - | | 70-130 |
| tert-Butyl ethyl ether | 10 | NA | 8.50 | 85 | - | - | - | | 70-130 |
| 1,1,1-Trichloroethane | 10 | NA | 9.42 | 94 | - | - | - | | 70-130 |
| 1,1-Dichloropropene | 10 | NA | 9.13 | 91 | - | - | - | | 70-130 |
| Benzene | 10 | NA | 9.60 | 96 | - | - | - | | 70-130 |
| Carbon tetrachloride | 10 | NA | 9.07 | 91 | - | - | - | | 70-130 |
| Cyclohexane | 10 | NA | 9.14 | 91 | - | - | - | | 70-130 |
| tert-amyl methyl ether | 10 | NA | 8.57 | 86 | - | - | - | | 70-130 |
| Dibromomethane | 10 | NA | 9.24 | 92 | - | - | - | | 70-130 |
| 1,2-Dichloropropane | 10 | NA | 9.63 | 96 | - | - | - | | 70-130 |
| Bromodichloromethane | 10 | NA | 9.63 | 96 | - | - | - | | 70-130 |
| 1,4-Dioxane | 10 | NA | 9.74 | 97 | - | - | - | | 70-130 |
| Trichloroethene | 10 | NA | 9.44 | 94 | - | - | - | | 70-130 |
| 2,2,4-Trimethylpentane | 10 | NA | 9.28 | 93 | - | - | - | | 70-130 |
| Methyl Methacrylate | 10 | NA | 8.62 | 86 | - | - | - | | 70-130 |
| Heptane | 10 | NA | 8.66 | 87 | - | - | - | | 70-130 |
| cis-1,3-Dichloropropene | 10 | NA | 9.86 | 99 | - | - | - | | 70-130 |
| 4-Methyl-2-pentanone | 10 | NA | 9.28 | 93 | - | - | - | | 70-130 |
| trans-1,3-Dichloropropen | 10 | NA | 8.42 | 84 | - | - | - | | 70-130 |
| 1,1,2-Trichloroethane | 10 | NA | 9.64 | 96 | - | - | - | | 70-130 |
| Toluene | 10 | NA | 9.30 | 93 | - | - | - | | 70-130 |
| 1,3-Dichloropropane | 10 | NA | 8.91 | 89 | - | - | - | | 70-130 |
| 2-Hexanone | 10 | NA | 9.59 | 96 | - | - | - | | 70-130 |
| Dibromochloromethane | 10 | NA | 8.93 | 89 | - | - | - | | 70-130 |
| 1,2-Dibromoethane | 10 | NA | 9.42 | 94 | - | - | - | | 70-130 |
| Butyl Acetate | 10 | NA | 8.22 | 82 | - | - | - | | 70-130 |
| Octane | 10 | NA | 8.32 | 83 | - | - | - | | 70-130 |
| Tetrachloroethene | 10 | NA | 8.96 | 90 | - | - | - | | 70-130 |
| 1,1,1,2-Tetrachloroethan | 10 | NA | 8.55 | 86 | - | - | - | | 70-130 |
| Chlorobenzene | 10 | NA | 9.24 | 92 | - | - | - | | 70-130 |
| Ethylbenzene | 10 | NA | 9.21 | 92 | - | - | - | | 70-130 |
| p/m-Xylene | 20 | NA | 18.5 | 92 | - | - | - | | 70-130 |
| Bromoform | 10 | NA | 8.78 | 88 | - | - | - | | 70-130 |
| Styrene | 10 | NA | 9.14 | 91 | - | - | - | | 70-130 |
| 1,1,2,2-Tetrachloroethan | 10 | NA | 9.74 | 97 | - | - | - | | 70-130 |
| o-Xylene | 10 | NA | 9.49 | 95 | - | - | - | | 70-130 |
| 1,2,3-Trichloropropane | 10 | NA | 9.04 | 90 | - | - | - | | 70-130 |
| Nonane | 10 | NA | 8.34 | 83 | - | - | - | | 70-130 |
| Isopropylbenzene | 10 | NA | 9.11 | 91 | - | - | - | | 70-130 |

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1504425 Matrix: Air

Lab Control Sample: WG767577-3LCS Injected: 03/11/15 12:18 Lab File ID: R140136

| COMPOUND | SPIKE ADDED ppbV | SAMPLE CONC ppbV | LCS CONC ppbV | LCS % REC | LCSD CONC ppbV | LCSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|---|---|
| Bromobenzene | 10 | NA | 8.91 | 89 | - | - | - | | 70-130 |
| 2-Chlorotoluene | 10 | NA | 8.41 | 84 | - | - | - | | 70-130 |
| n-Propylbenzene | 10 | NA | 8.90 | 89 | - | - | - | | 70-130 |
| 4-Chlorotoluene | 10 | NA | 8.86 | 89 | - | - | - | | 70-130 |
| 4-Ethyltoluene | 10 | NA | 8.80 | 88 | - | - | - | | 70-130 |
| 1,3,5-Trimethylbenzene | 10 | NA | 9.29 | 93 | - | - | - | | 70-130 |
| tert-Butylbenzene | 10 | NA | 8.80 | 88 | - | - | - | | 70-130 |
| 1,2,4-Trimethylbenzene | 10 | NA | 9.60 | 96 | - | - | - | | 70-130 |
| Decane | 10 | NA | 8.65 | 86 | - | - | - | | 70-130 |
| Benzyl chloride | 10 | NA | 8.68 | 87 | - | - | - | | 70-130 |
| 1,3-Dichlorobenzene | 10 | NA | 9.41 | 94 | - | - | - | | 70-130 |
| 1,4-Dichlorobenzene | 10 | NA | 9.49 | 95 | - | - | - | | 70-130 |
| sec-Butylbenzene | 10 | NA | 8.89 | 89 | - | - | - | | 70-130 |
| p-Isopropyltoluene | 10 | NA | 8.14 | 81 | - | - | - | | 70-130 |
| 1,2-Dichlorobenzene | 10 | NA | 9.41 | 94 | - | - | - | | 70-130 |
| n-Butylbenzene | 10 | NA | 9.39 | 94 | - | - | - | | 70-130 |
| 1,2-Dibromo-3-chloroprop | 10 | NA | 8.69 | 87 | - | - | - | | 70-130 |
| Undecane | 10 | NA | 9.17 | 92 | - | - | - | | 70-130 |
| Dodecane | 10 | NA | 9.60 | 96 | - | - | - | | 70-130 |
| 1,2,4-Trichlorobenzene | 10 | NA | 9.92 | 99 | - | - | - | | 70-130 |
| Naphthalene | 10 | NA | 9.25 | 92 | - | - | - | | 70-130 |
| 1,2,3-Trichlorobenzene | 10 | NA | 9.74 | 97 | - | - | - | | 70-130 |
| Hexachlorobutadiene | 10 | NA | 10.3 | 103 | - | - | - | | 70-130 |

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

4A

VOLATILE ORGANICS METHOD BLANK SUMMARY

SAMPLE NO.

WG767577-4BLANK

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R140138 Lab Sample ID: WG767577-4

Date Analyzed: 03/11/15 Time Analyzed: 13:49

Instrument ID: AIRPIANO1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|---|
| 01 | WG767577-3LCS | WG767577-3 | R140136 | 03/11/15 12:18 |
| 02 | BLANK | L1504425-06 | R140146 | 03/11/15 19:46 |
| 03 | SG BLANK | L1504425-11 | R140147 | 03/11/15 20:19 |
| 04 | OUTDOOR CONTROL | L1504425-01 | R140148 | 03/11/15 20:51 |
| 05 | S-157-J.1 | L1504425-02 | R140149 | 03/11/15 21:23 |
| 06 | S-157-J.2 | L1504425-03 | R140150 | 03/11/15 21:55 |
| 07 | S-157-J | L1504425-04 | R140151 | 03/11/15 22:27 |
| 08 | DUPLICATE | L1504425-05 | R140152 | 03/11/15 22:59 |
| 09 | SG-1 | L1504425-07 | R140153 | 03/11/15 23:31 |
| 10 | SG-3 | L1504425-09 | R140156 | 03/12/15 01:08 |
| 11 | SG-4 | L1504425-10 | R140157 | 03/12/15 01:40 |
| 12 | SG-2 | L1504425-08 | R140160 | 03/12/15 08:45 |
| 13 | SG-1DUP | WG767577-5 | R140161 | 03/12/15 09:18 |

COMMENTS: _____

page 1 of 1

FORM IV TO15-LL LOW

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R138809_tune  BFB Injection Date: 01/02/15

Instrument ID: AIRPIANO1  BFB Injection Time: 18:33

| m/e | ION ABUNDANCE CRITERIA | % Relative Abundance |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 20.6 |
| 75 | 30.0 - 66.0% of mass 95 | 45.4 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 |
| 173 | Less than 2.0% of mass 174 | 0 (0 )1 |
| 174 | 50.0 - 120.0% of mass 95 | 86.3 |
| 175 | 4.0 - 9.0% of mass 174 | 6.8 (7.8 )1 |
| 176 | 93.0 - 101% of mass 174 | 82.9 (96.1)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.4 (6.5 )2 |

1-Value is % of mass 174  2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | 0.2 | 0.2 | R138813 | 01/02/15 | 20:57 |
| 02 | 0.5 | 0.5 | R138814 | 01/02/15 | 21:29 |
| 03 | 1.0 | 1.0 | R138815 | 01/02/15 | 22:02 |
| 04 | 5.0 | 5.0 | R138816 | 01/02/15 | 22:34 |
| 05 | 10 | 10 | R138817 | 01/02/15 | 23:08 |
| 06 | 20 | 20 | R138818 | 01/02/15 | 23:39 |
| 07 | 50.0 | 50.0 | R138819 | 01/03/15 | 00:11 |
| 08 | 100.0 | 100.0 | R138820 | 01/03/15 | 00:45 |
| 09 | ICV QUANT REPORT | ICV QUANT REPO | R138823 | 01/03/15 | 09:14 |

page 1 of 1

FORM V TO15-LL

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID: R140134_tune  BFB Injection Date: 03/11/15

Instrument ID: AIRPIANO1  BFB Injection Time: 11:12

| m/e | ION ABUNDANCE CRITERIA | % Relative Abundance |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 21.8 |
| 75 | 30.0 - 66.0% of mass 95 | 44.9 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 |
| 173 | Less than 2.0% of mass 174 | 0 (0 )1 |
| 174 | 50.0 - 120.0% of mass 95 | 85.7 |
| 175 | 4.0 - 9.0% of mass 174 | 7 (8.2 )1 |
| 176 | 93.0 - 101% of mass 174 | 83.4 (97.3)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.8 (6.9 )2 |

1-Value is % of mass 174  2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | CLIENT SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | CCAL | WG767577-2 | R140136 | 03/11/15 | 12:18 |
| 02 | WG767577-3LCS | WG767577-3 | R140136 | 03/11/15 | 12:18 |
| 03 | WG767577-4BLANK | WG767577-4 | R140138 | 03/11/15 | 13:49 |
| 04 | BLANK | L1504425-06 | R140146 | 03/11/15 | 19:46 |
| 05 | SG BLANK | L1504425-11 | R140147 | 03/11/15 | 20:19 |
| 06 | OUTDOOR CONTROL | L1504425-01 | R140148 | 03/11/15 | 20:51 |
| 07 | S-157-J.1 | L1504425-02 | R140149 | 03/11/15 | 21:23 |
| 08 | S-157-J.2 | L1504425-03 | R140150 | 03/11/15 | 21:55 |
| 09 | S-157-J | L1504425-04 | R140151 | 03/11/15 | 22:27 |
| 10 | DUPLICATE | L1504425-05 | R140152 | 03/11/15 | 22:59 |
| 11 | SG-1 | L1504425-07 | R140153 | 03/11/15 | 23:31 |
| 12 | SG-3 | L1504425-09 | R140156 | 03/12/15 | 01:08 |
| 13 | SG-4 | L1504425-10 | R140157 | 03/12/15 | 01:40 |
| 14 | SG-2 | L1504425-08 | R140160 | 03/12/15 | 08:45 |
| 15 | SG-1DUP | WG767577-5 | R140161 | 03/12/15 | 09:18 |



FORM V TO15-LL

6A

# VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date(s): 01/02/15 01/03/15

Calibration Times: 20:57 00:45

Calibration Files
0.2 =R138813.D 0.5 =R138814.D 1.0 =R138815.D 5.0 =R138816.D 10 =R138817.D 20 =R138818.D
50 =R138819.D 100 =R138820.D

| | | Compound | 0.2 | 0.5 | 1.0 | 5.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | bromochloromethane | ----------ISTD---------- | | | | | | | | | |
| 2) | | chlorodifluoromethane | 1.293 | 1.124 | 1.101 | 1.066 | 1.028 | 1.045 | 0.935 | 0.861 | 1.0566 | 12.21 |
| 3) | | propylene | | 0.563 | 0.594 | 0.563 | 0.529 | 0.526 | 0.452 | 0.420 | 0.5210 | 12.13 |
| 4) | | propane | | 0.803 | 0.758 | 0.654 | 0.594 | 0.634 | 0.551 | 0.474 | 0.6383 | 17.88 |
| 5) | | dichlorodifluoromethane | 1.507 | 1.292 | 1.300 | 1.184 | 0.849 | 1.189 | 0.850 | 0.681 | 1.1066 | 25.53 |
| 6) | C | chloromethane | 0.838 | 0.682 | 0.599 | 0.566 | 0.555 | 0.552 | 0.490 | 0.457 | 0.5924 | 20.24 |
| 7) | | Freon-114 | 1.926 | 1.782 | 1.772 | 1.685 | 1.583 | 1.612 | 1.368 | 1.139 | 1.6085 | 15.64 |
| 8) | C | methanol | | | 0.276 | 0.243 | 0.235 | 0.224 | 0.195 | 0.176 | 0.2248 | 15.85 |
| 9) | C | vinyl chloride | 0.730 | 0.573 | 0.599 | 0.602 | 0.600 | 0.600 | 0.536 | 0.487 | 0.5908 | 11.74 |
| 10) | C | 1,3-butadiene | 0.571 | 0.583 | 0.503 | 0.449 | 0.466 | 0.452 | 0.410 | 0.365 | 0.4748 | 15.79 |
| 11) | | butane | 1.172 | 1.236 | 1.149 | 1.014 | 1.002 | 0.973 | 0.903 | 0.798 | 1.0309 | 14.23 |
| 12) | C | acetaldehyde | 0.540 | 0.438 | 0.415 | 0.390 | 0.383 | 0.370 | 0.329 | 0.285 | 0.3938 | 19.33 |
| 13) | C | bromomethane | 0.921 | 0.773 | 0.729 | 0.595 | 0.582 | 0.602 | 0.530 | 0.489 | 0.6526 | 22.05 |
| 14) | C | chloroethane | 0.439 | 0.309 | 0.263 | 0.270 | 0.287 | 0.280 | 0.255 | 0.229 | 0.2915 | 21.93 |
| 15) | | ethanol | | 0.605 | 0.556 | 0.516 | 0.491 | 0.502 | 0.438 | 0.371 | 0.4971 | 15.36 |
| 16) | | dichlorofluoromethane | 1.526 | 1.404 | 1.314 | 1.294 | 1.281 | 1.284 | 1.151 | 1.053 | 1.2884 | 11.16 |
| 17) | C | vinyl bromide | 0.744 | 0.652 | 0.665 | 0.630 | 0.622 | 0.644 | 0.571 | 0.523 | 0.6312 | 10.34 |
| 18) | C | acrolein | 0.435 | 0.368 | 0.302 | 0.282 | 0.256 | 0.262 | 0.239 | 0.216 | 0.2949 | 24.68 |
| 19) | | acetone | 1.355 | 1.157 | 0.998 | 0.986 | 0.987 | 0.971 | 0.858 | 0.761 | 1.0091 | 17.90 |
| 20) | C | acetonitrile | 0.794 | 0.808 | 0.763 | 0.605 | 0.594 | 0.581 | 0.528 | 0.472 | 0.6432 | 19.91 |
| 21) | | trichlorofluoromethane | 1.797 | 1.713 | 1.646 | 1.612 | 1.573 | 1.531 | 1.384 | 1.299 | 1.5694 | 10.46 |
| 22) | | isopropyl alcohol | | 1.534 | 1.334 | 1.185 | 1.194 | 1.149 | 1.028 | 0.925 | 1.1926 | 16.66 |
| 23) | C | acrylonitrile | 0.644 | 0.626 | 0.537 | 0.490 | 0.456 | 0.495 | 0.421 | 0.388 | 0.5071 | 18.05 |
| 24) | | pentane | 1.580 | 1.321 | 1.244 | 1.207 | 1.160 | 1.210 | 1.038 | 0.947 | 1.2135 | 15.62 |
| 25) | | ethyl ether | 1.331 | 1.235 | 0.961 | 0.963 | 0.903 | 0.992 | 0.885 | 0.713 | 0.9978 | 19.78 |
| 26) | C | 1,1-dichloroethene | 1.186 | 1.119 | 1.090 | 1.027 | 1.019 | 1.046 | 0.944 | 0.869 | 1.0374 | 9.59 |
| 27) | | tertiary butyl alcohol | | 1.341 | 1.361 | 1.365 | 1.328 | 1.334 | 1.210 | 1.108 | 1.2926 | 7.49 |
| 28) | C | methylene chloride | | 1.021 | 0.943 | 0.878 | 0.850 | 0.821 | 0.752 | 0.695 | 0.8513 | 12.98 |
| 29) | C | 3-chloropropene | 1.698 | 1.314 | 1.130 | 0.956 | 0.941 | 0.972 | 0.860 | 0.788 | 1.0825 | 27.48 |
| 30) | C | carbon disulfide | 1.984 | 1.880 | 1.840 | 1.791 | 1.735 | 1.790 | 1.596 | 1.504 | 1.7648 | 8.72 |
| 31) | | Freon 113 | 1.457 | 1.417 | 1.326 | 1.309 | 1.268 | 1.297 | 1.183 | 1.104 | 1.2953 | 8.85 |
| 32) | | trans-1,2-dichloroethene | 1.043 | 0.980 | 1.037 | 1.012 | 1.001 | 0.999 | 0.910 | 0.836 | 0.9773 | 7.19 |
| 33) | C | 1,1-dichloroethane | 1.447 | 1.211 | 1.136 | 1.154 | 1.121 | 1.144 | 1.014 | 0.949 | 1.1470 | 12.85 |
| 34) | C | MTBE | 1.971 | 1.907 | 1.837 | 1.727 | 1.695 | 1.700 | 1.542 | 1.438 | 1.7271 | 10.35 |
| 35) | C | vinyl acetate | 1.076 | 1.577 | 1.590 | 1.724 | 1.741 | 1.775 | 1.639 | 1.510 | 1.5789 | 14.11 |
| 36) | C | 2-butanone | 1.451 | 1.553 | 1.508 | 1.514 | 1.582 | 1.561 | 1.434 | 1.285 | 1.4860 | 6.49 |
| 37) | | cis-1,2-dichloroethene | 1.236 | 1.129 | 1.035 | 1.067 | 1.049 | 1.034 | 0.972 | 0.900 | 1.0528 | 9.50 |
| 38) | | Ethyl Acetate | 0.281 | 0.281 | 0.257 | 0.267 | 0.270 | 0.270 | 0.251 | 0.230 | 0.2634 | 6.41 |
| 39) | C | chloroform | 1.910 | 1.690 | 1.676 | 1.642 | 1.567 | 1.607 | 1.441 | 1.343 | 1.6096 | 10.59 |
| 40) | | Tetrahydrofuran | 1.640 | 1.083 | 1.033 | 0.968 | 0.900 | 0.913 | 0.818 | 0.752 | 1.0133 | 27.13 |
| 41) | | 2,2-dichloropropane | 1.699 | 1.511 | 1.467 | 1.446 | 1.400 | 1.399 | 1.266 | 1.177 | 1.4207 | 11.05 |
| 42) | C | 1,2-dichloroethane | 0.878 | 0.897 | 0.906 | 0.902 | 0.923 | 0.925 | 0.822 | 0.754 | 0.8759 | 6.74 |
| 43) | I | 1,4-difluorobenzene | ----------ISTD---------- | | | | | | | | | |

6A

# VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date(s): 01/02/15 01/03/15

Calibration Times: 20:57 00:45

| | | Compound | 0.2 | 0.5 | 1.0 | 5.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 44) | C | hexane | 0.823 | 0.753 | 0.666 | 0.624 | 0.631 | 0.622 | 0.564 | 0.561 | 0.6555 | 13.85 |
| 45) | | diisopropyl ether | 0.361 | 0.293 | 0.315 | 0.289 | 0.301 | 0.299 | 0.278 | 0.277 | 0.3015 | 8.94 |
| 46) | | tert-butyl ethyl ether | 1.204 | 0.981 | 1.021 | 1.010 | 1.028 | 1.012 | 0.929 | 0.911 | 1.0121 | 8.79 |
| 47) | s | 1,2-dichloroethane-D4 | 0.304 | 0.288 | 0.296 | 0.298 | 0.305 | 0.290 | 0.297 | 0.293 | 0.2963 | 2.07 |
| 48) | C | 1,1,1-trichloroethane | 0.745 | 0.663 | 0.658 | 0.666 | 0.667 | 0.667 | 0.609 | 0.618 | 0.6616 | 6.18 |
| 49) | | 1,1-dichloropropene | 0.523 | 0.517 | 0.452 | 0.488 | 0.473 | 0.481 | 0.438 | 0.432 | 0.4755 | 7.06 |
| 50) | C | benzene | 1.030 | 0.910 | 0.842 | 0.921 | 0.907 | 0.909 | 0.834 | 0.821 | 0.8969 | 7.48 |
| 51) | | thiophene | 0.774 | 0.704 | 0.645 | 0.605 | 0.614 | 0.625 | 0.576 | 0.566 | 0.6385 | 10.89 |
| 52) | C | carbon tetrachloride | 0.801 | 0.731 | 0.696 | 0.691 | 0.700 | 0.707 | 0.645 | 0.649 | 0.7027 | 7.00 |
| 53) | | cyclohexane | 0.679 | 0.570 | 0.566 | 0.538 | 0.538 | 0.517 | 0.476 | 0.474 | 0.5447 | 11.99 |
| 54) | | tert-amyl methyl ether | 1.034 | 0.871 | 0.924 | 0.901 | 0.896 | 0.909 | 0.832 | 0.820 | 0.8982 | 7.35 |
| 55) | | dibromomethane | 0.393 | 0.374 | 0.370 | 0.372 | 0.380 | 0.381 | 0.359 | 0.352 | 0.3727 | 3.43 |
| 56) | C | 1,2-dichloropropane | 0.363 | 0.356 | 0.361 | 0.350 | 0.356 | 0.357 | 0.329 | 0.322 | 0.3492 | 4.36 |
| 57) | | bromodichloromethane | 0.778 | 0.760 | 0.765 | 0.722 | 0.756 | 0.743 | 0.685 | 0.679 | 0.7359 | 5.05 |
| 58) | C | 1,4-dioxane | 0.142 | 0.208 | 0.206 | 0.231 | 0.220 | 0.229 | 0.214 | 0.209 | 0.2072 | 13.57 |
| 59) | C | trichloroethene | 0.513 | 0.440 | 0.455 | 0.455 | 0.473 | 0.471 | 0.439 | 0.435 | 0.4602 | 5.60 |
| 60) | C | 2,2,4-trimethylpentane | 1.968 | 1.699 | 1.759 | 1.685 | 1.681 | 1.677 | 1.546 | 1.497 | 1.6890 | 8.39 |
| 61) | | methyl methacrylate | 0.527 | 0.484 | 0.458 | 0.511 | 0.522 | 0.540 | 0.503 | 0.483 | 0.5035 | 5.42 |
| 62) | | heptane | 1.133 | 0.954 | 0.826 | 0.705 | 0.705 | 0.716 | 0.645 | 0.618 | 0.7877 | 22.31 |
| 63) | C | cis-1,3-dichloropropene | 0.505 | 0.473 | 0.455 | 0.512 | 0.519 | 0.518 | 0.487 | 0.474 | 0.4930 | 4.91 |
| 64) | C | 4-methyl-2-pentanone | 1.237 | 0.885 | 0.989 | 0.990 | 0.959 | 0.965 | 0.870 | 0.849 | 0.9681 | 12.61 |
| 65) | | trans-1,3-dichloropropene | 0.367 | 0.444 | 0.499 | 0.517 | 0.520 | 0.525 | 0.501 | 0.497 | 0.4838 | 11.07 |
| 66) | C | 1,1,2-trichloroethane | 0.455 | 0.436 | 0.439 | 0.395 | 0.406 | 0.410 | 0.367 | 0.366 | 0.4093 | 7.95 |
| 67) | I | chlorobenzene-D5 | ----------ISTD---------- | | | | | | | | | |
| 68) | C | toluene | 6.110 | 5.507 | 5.224 | 5.073 | 4.972 | 5.091 | 4.784 | 4.641 | 5.1753 | 8.90 |
| 69) | s | toluene-D8 | 3.586 | 3.588 | 3.620 | 3.633 | 3.527 | 3.481 | 3.570 | 3.563 | 3.5708 | 1.37 |
| 70) | | 2-methylthiophene | 5.086 | 4.776 | 5.011 | 4.860 | 4.603 | 4.818 | 4.505 | 4.402 | 4.7576 | 5.02 |
| 71) | | 1,3-dichloropropane | 2.358 | 2.529 | 2.275 | 2.261 | 2.218 | 2.350 | 2.186 | 2.119 | 2.2870 | 5.52 |
| 72) | | 2-hexanone | 3.448 | 3.261 | 4.046 | 4.168 | 3.925 | 4.141 | 3.772 | 3.596 | 3.7946 | 8.82 |
| 73) | | 3-methylthiophene | 4.841 | 4.833 | 4.423 | 4.535 | 4.241 | 4.650 | 4.272 | 4.134 | 4.4911 | 6.01 |
| 74) | | dibromochloromethane | 3.928 | 3.637 | 3.608 | 3.810 | 3.621 | 3.885 | 3.648 | 3.640 | 3.7220 | 3.50 |
| 75) | C | 1,2-dibromoethane | 3.208 | 2.879 | 3.049 | 3.076 | 2.956 | 3.117 | 2.918 | 2.873 | 3.0096 | 4.05 |
| 76) | | butyl acetate | 0.540 | 0.506 | 0.500 | 0.569 | 0.538 | 0.568 | 0.500 | 0.504 | 0.5282 | 5.65 |
| 77) | | octane | 1.844 | 1.730 | 1.574 | 1.560 | 1.464 | 1.530 | 1.414 | 1.386 | 1.5627 | 10.02 |
| 78) | C | tetrachloroethene | 3.315 | 2.829 | 2.785 | 2.730 | 2.525 | 2.659 | 2.515 | 2.528 | 2.7358 | 9.66 |
| 79) | | 1,1,1,2-tetrachloroethane | 2.731 | 2.482 | 2.508 | 2.499 | 2.448 | 2.586 | 2.429 | 2.411 | 2.5118 | 4.14 |
| 80) | C | chlorobenzene | 4.804 | 4.219 | 4.332 | 4.484 | 4.342 | 4.544 | 4.248 | 4.180 | 4.3942 | 4.73 |
| 81) | C | ethylbenzene | 7.421 | 6.860 | 6.678 | 6.913 | 6.596 | 6.859 | 6.354 | 6.226 | 6.7383 | 5.50 |
| 82) | | 2-ethylthiophene | 6.156 | 5.438 | 5.371 | 5.387 | 5.123 | 5.528 | 5.071 | 5.023 | 5.3872 | 6.72 |
| 83) | C | m+p-xylene | 5.980 | 5.328 | 5.314 | 5.469 | 5.144 | 5.403 | 4.999 | 4.856 | 5.3116 | 6.42 |
| 84) | C | bromoform | 3.556 | 3.564 | 3.509 | 3.747 | 3.615 | 3.878 | 3.692 | 3.666 | 3.6534 | 3.28 |
| 85) | C | styrene | 4.217 | 3.966 | 4.214 | 4.287 | 4.143 | 4.359 | 4.085 | 4.048 | 4.1646 | 3.11 |
| 86) | C | 1,1,2,2-tetrachloroethane | 4.574 | 4.174 | 4.106 | 4.207 | 3.963 | 4.193 | 3.923 | 3.796 | 4.1169 | 5.74 |
| 87) | C | o-xylene | 6.183 | 5.532 | 5.454 | 5.633 | 5.363 | 5.566 | 5.202 | 5.017 | 5.4939 | 6.28 |
| 88) | | 1,2,3-trichloropropane | 3.230 | 3.296 | 3.118 | 3.236 | 3.062 | 3.170 | 2.977 | 2.930 | 3.1275 | 4.16 |
| 89) | | nonane | 6.384 | 5.375 | 4.888 | 4.935 | 4.619 | 4.816 | 4.373 | 4.106 | 4.9369 | 14.14 |
| 90) | s | bromofluorobenzene | 2.647 | 2.652 | 2.666 | 2.711 | 2.644 | 2.686 | 2.666 | 2.687 | 2.6699 | 0.87 |

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date(s): 01/02/15 01/03/15

Calibration Times: 20:57 00:45

| | Compound | 0.2 | 0.5 | 1.0 | 5.0 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 91) C | isopropylbenzene | 7.983 | 7.506 | 7.579 | 7.657 | 7.429 | 7.768 | 7.257 | 7.196 | 7.5468 | 3.45 |
| 92) | bromobenzene | 4.390 | 3.904 | 3.895 | 3.982 | 3.773 | 3.887 | 3.659 | 3.606 | 3.8869 | 6.20 |
| 93) | 2-chlorotoluene | 2.577 | 2.200 | 2.269 | 2.319 | 2.204 | 2.289 | 2.163 | 2.147 | 2.2710 | 6.07 |
| 94) | n-propylbenzene | 2.512 | 2.303 | 2.391 | 2.442 | 2.311 | 2.395 | 2.325 | 2.308 | 2.3734 | 3.19 |
| 95) | 4-chlorotoluene | 6.250 | 6.152 | 5.891 | 5.926 | 5.674 | 5.922 | 5.546 | 5.397 | 5.8450 | 4.98 |
| 96) | 4-ethyl toluene | 8.656 | 7.940 | 8.420 | 8.781 | 8.341 | 8.608 | 8.179 | 8.093 | 8.3770 | 3.52 |
| 97) | 1,3,5-trimethylbenzene | 7.925 | 7.114 | 7.217 | 7.680 | 6.973 | 7.460 | 7.238 | 6.961 | 7.3209 | 4.69 |
| 98) | tert-butylbenzene | 8.521 | 7.641 | 7.775 | 7.971 | 7.642 | 7.876 | 7.505 | 7.162 | 7.7617 | 5.08 |
| 99) | 1,2,4-trimethylbenzene | 7.056 | 6.585 | 6.493 | 6.831 | 6.564 | 6.806 | 6.450 | 6.199 | 6.6232 | 4.02 |
| 100) | decane | 5.530 | 4.630 | 4.658 | 4.864 | 4.549 | 4.619 | 4.328 | 4.122 | 4.6623 | 8.93 |
| 101) C | Benzyl Chloride | 5.722 | 5.607 | 5.706 | 6.278 | 6.101 | 6.364 | 6.225 | 6.292 | 6.0371 | 5.10 |
| 102) | 1,3-dichlorobenzene | 5.428 | 4.903 | 4.937 | 5.268 | 5.009 | 5.150 | 4.974 | 4.850 | 5.0649 | 3.95 |
| 103) C | 1,4-dichlorobenzene | 5.265 | 5.101 | 4.989 | 5.347 | 5.086 | 5.256 | 5.012 | 4.876 | 5.1166 | 3.14 |
| 104) | sec-butylbenzene | 1.061 | 1.009 | 0.980 | 1.029 | 0.961 | 1.002 | 0.958 | 0.896 | 0.9870 | 5.10 |
| 105) | 1,2,3-trimethylbenzene | 6.616 | 5.906 | 6.077 | 5.948 | 5.645 | 5.805 | 5.631 | 5.535 | 5.8955 | 5.83 |
| 106) | p-isopropyltoluene | 1.023 | 0.963 | 0.941 | 0.992 | 0.943 | 0.964 | 0.923 | 0.897 | 0.9556 | 4.12 |
| 107) | 1,2-dichlorobenzene | 5.022 | 4.790 | 4.725 | 5.018 | 4.808 | 4.816 | 4.661 | 4.666 | 4.8133 | 2.92 |
| 108) | n-butylbenzene | 8.016 | 7.701 | 7.888 | 8.495 | 7.930 | 7.877 | 7.585 | 7.481 | 7.8715 | 3.95 |
| 109) | indan | 7.201 | 6.439 | 6.573 | 6.705 | 6.372 | 6.578 | 6.415 | 6.359 | 6.5804 | 4.22 |
| 110) | indene | 4.811 | 4.877 | 4.669 | 4.583 | 4.357 | 4.705 | 4.549 | 4.509 | 4.6324 | 3.64 |
| 111) C | 1,2-dibromo-3-chloropropane | 2.109 | 2.125 | 2.086 | 2.235 | 2.161 | 2.072 | 2.090 | 2.061 | 2.1172 | 2.71 |
| 112) | undecane | 5.525 | 5.473 | 5.280 | 5.866 | 5.474 | 4.863 | 4.862 | 4.761 | 5.2630 | 7.51 |
| 113) | 1,2,4,5-tetramethylbenzene | 1.204 | 1.198 | 1.189 | 1.389 | 1.370 | 1.154 | 1.190 | 1.190 | 1.2355 | 7.30 |
| 114) | dodecane | 6.083 | 4.669 | 5.061 | 6.271 | 6.218 | 4.505 | 4.478 | 4.349 | 5.2040 | 16.23 |
| 115) C | 1,2,4-trichlorobenzene | 3.682 | 4.040 | 3.737 | 4.583 | 4.680 | 3.649 | 3.921 | 4.145 | 4.0546 | 9.78 |
| 116) | naphthalene | 1.373 | 0.962 | 0.946 | 1.131 | 1.064 | 0.824 | 0.873 | 0.947 | 1.0150 | 17.18 |
| 117) | 1,2,3-trichlorobenzene | 3.769 | 3.455 | 3.946 | 4.533 | 4.337 | 3.192 | 3.438 | 3.828 | 3.8122 | 12.01 |
| 118) | benzothiophene | 7.684 | 7.577 | 8.222 | 9.370 | 9.011 | 7.270 | 7.875 | 8.606 | 8.2017 | 9.00 |
| 119) C | hexachlorobutadiene | 2.892 | 2.853 | 3.098 | 3.459 | 3.451 | 2.727 | 2.926 | 3.146 | 3.0689 | 8.88 |
| 120) | 2-methylnaphthalene | | | 2.424 | 3.786 | 4.041 | 2.437 | 2.634 | 3.037 | 3.0600 | 22.94 |
| 121) | 1-methylnaphthalene | | 2.358 | 2.650 | 3.532 | 3.694 | 2.490 | 2.599 | 2.980 | 2.9003 | 18.09 |

FORM VI-TO15-LL

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Instrument ID: AIRPIANO1 Calibration Date: 03/11/2015 Time: 12:18

Lab File ID: R140136 Init. Calib. Date(s): 01/02/15 01/03/15

Sample No: WG767577-2,3,25 Init. Calib. Times : 20:57 00:45

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | bromochloromethane | 1.000 | 1.000 | 0.0 | 82 | 0.00 |
| 2 | | chlorodifluoromethane | 1.057 | 0.914 | 13.5 | 73 | 0.00 |
| 3 | | propylene | 0.521 | 0.530 | -1.7 | 82 | 0.00 |
| 4 | | propane | 0.638 | 0.505 | 20.8 | 69 | 0.00 |
| 5 | | dichlorodifluoromethane | 1.107 | 0.794 | 28.3 | 76 | 0.00 |
| 6 | C | chloromethane | 0.592 | 0.519 | 12.3 | 76 | 0.00 |
| 7 | | Freon-114 | 1.609 | 1.507 | 6.3 | 78 | 0.00 |
| 8 | C | methanol | 0.225 | 0.191 | 15.1 | 66 | 0.00 |
| 9 | C | vinyl chloride | 0.591 | 0.557 | 5.8 | 76 | 0.00 |
| 10 | C | 1,3-butadiene | 0.475 | 0.459 | 3.4 | 80 | 0.00 |
| 11 | | butane | 1.031 | 0.871 | 15.5 | 71 | 0.00 |
| 13 | C | bromomethane | 0.653 | 0.564 | 13.6 | 79 | 0.00 |
| 14 | C | chloroethane | 0.291 | 0.260 | 10.7 | 74 | 0.00 |
| 15 | | ethanol | 0.497 | 0.424 | 14.7 | 70 | 0.00 |
| 16 | | dichlorofluoromethane | 1.288 | 1.104 | 14.3 | 70 | 0.00 |
| 17 | C | vinyl bromide | 0.631 | 0.587 | 7.0 | 77 | 0.00 |
| 18 | C | acrolein | 0.295 | 0.214 | 27.5 | 68 | 0.00 |
| 19 | | acetone | 1.009 | 0.962 | 4.7 | 80 | 0.00 |
| 20 | C | acetonitrile | 0.643 | 0.538 | 16.3 | 74 | 0.00 |
| 21 | | trichlorofluoromethane | 1.569 | 1.493 | 4.8 | 77 | 0.00 |
| 22 | | isopropyl alcohol | 1.193 | 1.088 | 8.8 | 74 | 0.00 |
| 23 | C | acrylonitrile | 0.507 | 0.402 | 20.7 | 72 | 0.00 |
| 24 | | pentane | 1.214 | 0.965 | 20.5 | 68 | 0.00 |
| 25 | | ethyl ether | 0.998 | 0.747 | 25.2 | 67 | 0.00 |
| 26 | C | 1,1-dichloroethene | 1.037 | 0.951 | 8.3 | 76 | 0.00 |
| 27 | | tertiary butyl alcohol | 1.293 | 1.114 | 13.8 | 68 | 0.00 |
| 28 | C | methylene chloride | 0.851 | 0.803 | 5.6 | 77 | 0.00 |
| 29 | C | 3-chloropropene | 1.082 | 0.915 | 15.4 | 79 | 0.00 |
| 30 | C | carbon disulfide | 1.765 | 1.605 | 9.1 | 75 | 0.00 |
| 31 | | Freon 113 | 1.295 | 1.212 | 6.4 | 78 | 0.00 |
| 32 | | trans-1,2-dichloroethene | 0.977 | 0.845 | 13.5 | 69 | 0.00 |
| 33 | C | 1,1-dichloroethane | 1.147 | 1.057 | 7.8 | 77 | 0.00 |
| 34 | C | MTBE | 1.727 | 1.508 | 12.7 | 73 | 0.00 |
| 35 | C | vinyl acetate | 1.579 | 1.813 | -14.8 | 85 | 0.00 |
| 36 | C | 2-butanone | 1.486 | 1.445 | 2.8 | 74 | 0.00 |
| 37 | | cis-1,2-dichloroethene | 1.053 | 1.061 | -0.8 | 83 | 0.00 |
| 38 | | Ethyl Acetate | 0.263 | 0.238 | 9.5 | 72 | 0.00 |
| 39 | C | chloroform | 1.610 | 1.491 | 7.4 | 78 | 0.00 |
| 40 | | Tetrahydrofuran | 1.013 | 0.779 | 23.1 | 71 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 41 | | 2,2-dichloropropane | 1.421 | 1.162 | 18.2 | 68 | 0.00 |
| 42 | C | 1,2-dichloroethane | 0.876 | 0.834 | 4.8 | 74 | 0.00 |
| 43 | I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 79 | 0.00 |
| 44 | C | hexane | 0.656 | 0.587 | 10.5 | 74 | 0.00 |
| 45 | | diisopropyl ether | 0.301 | 0.259 | 14.0 | 68 | 0.00 |
| 46 | | tert-butyl ethyl ether | 1.012 | 0.860 | 15.0 | 66 | 0.00 |
| 48 | C | 1,1,1-trichloroethane | 0.662 | 0.624 | 5.7 | 74 | 0.00 |
| 49 | | 1,1-dichloropropene | 0.476 | 0.434 | 8.8 | 73 | 0.00 |
| 50 | C | benzene | 0.897 | 0.861 | 4.0 | 75 | 0.00 |
| 52 | C | carbon tetrachloride | 0.703 | 0.637 | 9.4 | 72 | 0.00 |
| 53 | | cyclohexane | 0.545 | 0.498 | 8.6 | 73 | 0.00 |
| 54 | | tert-amyl methyl ether | 0.898 | 0.770 | 14.3 | 68 | 0.00 |
| 55 | | dibromomethane | 0.373 | 0.344 | 7.8 | 72 | 0.00 |
| 56 | C | 1,2-dichloropropane | 0.349 | 0.336 | 3.7 | 75 | 0.00 |
| 57 | | bromodichloromethane | 0.736 | 0.708 | 3.8 | 74 | 0.00 |
| 58 | C | 1,4-dioxane | 0.207 | 0.202 | 2.4 | 73 | 0.00 |
| 59 | C | trichloroethene | 0.460 | 0.434 | 5.7 | 73 | 0.01 |
| 60 | C | 2,2,4-trimethylpentane | 1.689 | 1.568 | 7.2 | 74 | 0.00 |
| 61 | | methyl methacrylate | 0.503 | 0.434 | 13.7 | 66 | 0.00 |
| 62 | | heptane | 0.788 | 0.682 | 13.5 | 77 | 0.00 |
| 63 | C | cis-1,3-dichloropropene | 0.493 | 0.486 | 1.4 | 74 | 0.00 |
| 64 | C | 4-methyl-2-pentanone | 0.968 | 0.898 | 7.2 | 74 | 0.00 |
| 65 | | trans-1,3-dichloropropene | 0.484 | 0.408 | 15.7 | 62 | 0.00 |
| 66 | C | 1,1,2-trichloroethane | 0.409 | 0.395 | 3.4 | 77 | 0.00 |
| 67 | I | chlorobenzene-D5 | 1.000 | 1.000 | 0.0 | 77 | 0.00 |
| 68 | C | toluene | 5.175 | 4.815 | 7.0 | 75 | 0.00 |
| 71 | | 1,3-dichloropropane | 2.287 | 2.038 | 10.9 | 71 | 0.00 |
| 72 | | 2-hexanone | 3.795 | 3.639 | 4.1 | 71 | 0.00 |
| 74 | | dibromochloromethane | 3.722 | 3.322 | 10.7 | 71 | 0.00 |
| 75 | C | 1,2-dibromoethane | 3.010 | 2.836 | 5.8 | 74 | 0.00 |
| 76 | | butyl acetate | 0.528 | 0.434 | 17.8 | 62 | 0.00 |
| 77 | | octane | 1.563 | 1.299 | 16.9 | 68 | 0.00 |
| 78 | C | tetrachloroethene | 2.736 | 2.451 | 10.4 | 75 | 0.00 |
| 79 | | 1,1,1,2-tetrachloroethane | 2.512 | 2.147 | 14.5 | 68 | 0.00 |
| 80 | C | chlorobenzene | 4.394 | 4.061 | 7.6 | 72 | 0.00 |
| 81 | C | ethylbenzene | 6.738 | 6.208 | 7.9 | 73 | 0.00 |
| 83 | C | m+p-xylene | 5.312 | 4.915 | 7.5 | 74 | 0.00 |

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150311T\
Data File : R140136.D
Acq On : 11 Mar 2015 12:18 pm
Operator : AIRPIANO1:RY
Sample : WG767577-2,3,250,250
Misc : WG767577,ICAL10564
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 11 12:43:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150311T\TALL150102.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jan 03 12:56:19 2015

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 84 | C | bromoform | 3.653 | 3.209 | 12.2 | 68 | 0.00 |
| 85 | C | styrene | 4.165 | 3.804 | 8.7 | 71 | 0.00 |
| 86 | C | 1,1,2,2-tetrachloroethane | 4.117 | 4.012 | 2.6 | 78 | 0.00 |
| 87 | C | o-xylene | 5.494 | 5.214 | 5.1 | 75 | 0.00 |
| 88 | | 1,2,3-trichloropropane | 3.128 | 2.828 | 9.6 | 71 | 0.00 |
| 89 | | nonane | 4.937 | 4.119 | 16.6 | 69 | 0.00 |
| 91 | C | isopropylbenzene | 7.547 | 6.876 | 8.9 | 71 | 0.00 |
| 92 | | bromobenzene | 3.887 | 3.464 | 10.9 | 71 | 0.00 |
| 93 | | 2-chlorotoluene | 2.271 | 1.910 | 15.9 | 67 | 0.00 |
| 94 | | n-propylbenzene | 2.373 | 2.113 | 11.0 | 70 | 0.00 |
| 95 | | 4-chlorotoluene | 5.845 | 5.175 | 11.5 | 70 | 0.00 |
| 96 | | 4-ethyl toluene | 8.377 | 7.375 | 12.0 | 68 | 0.00 |
| 97 | | 1,3,5-trimethylbenzene | 7.321 | 6.803 | 7.1 | 75 | 0.00 |
| 98 | | tert-butylbenzene | 7.762 | 6.829 | 12.0 | 69 | 0.00 |
| 99 | | 1,2,4-trimethylbenzene | 6.623 | 6.356 | 4.0 | 75 | 0.00 |
| 100 | | decane | 4.662 | 4.034 | 13.5 | 68 | 0.00 |
| 101 | C | Benzyl Chloride | 6.037 | 5.238 | 13.2 | 66 | 0.00 |
| 102 | | 1,3-dichlorobenzene | 5.065 | 4.765 | 5.9 | 73 | 0.00 |
| 103 | C | 1,4-dichlorobenzene | 5.117 | 4.858 | 5.1 | 74 | 0.00 |
| 104 | | sec-butylbenzene | 9.870 | 8.774 | 11.1 | 70 | 0.00 |
| 106 | | p-isopropyltoluene | 9.556 | 7.782 | 18.6 | 64 | 0.00 |
| 107 | | 1,2-dichlorobenzene | 4.813 | 4.531 | 5.9 | 73 | 0.00 |
| 108 | | n-butylbenzene | 7.872 | 7.389 | 6.1 | 72 | 0.00 |
| 111 | C | 1,2-dibromo-3-chloropropane | 2.117 | 1.841 | 13.0 | 66 | 0.00 |
| 112 | | undecane | 5.263 | 4.825 | 8.3 | 68 | 0.00 |
| 114 | | dodecane | 5.204 | 4.994 | 4.0 | 62 | 0.00 |
| 115 | C | 1,2,4-trichlorobenzene | 4.055 | 4.024 | 0.8 | 66 | 0.00 |
| 116 | | naphthalene | 10.150 | 9.394 | 7.4 | 68 | 0.00 |
| 117 | | 1,2,3-trichlorobenzene | 3.812 | 3.712 | 2.6 | 66 | 0.00 |
| 119 | C | hexachlorobutadiene | 3.069 | 3.167 | -3.2 | 71 | 0.00 |

* Evaluation of CC level amount vs concentration.

FORM VII TO15-LL

8A

VOLATILE ORGANICS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alpha Analytical Labs

SDG No.: L1504425

Lab File ID (Standard): R140136 Date Analyzed: 03/11/15

Instrument ID : AIRPIANO1 Time Analyzed: 12:18

| | | IS1 AREA | RT | IS2 AREA | RT | IS3 AREA | RT |
|---|---|---|---|---|---|---|---|
| | 24 HOUR STD | 111245 | 10.23 | 220800 | 12.51 | 50129 | 16.96 |
| | UPPER LIMIT | 155743 | 10.56 | 309120 | 12.84 | 70181 | 17.29 |
| | LOWER LIMIT | 66747 | 9.90 | 132480 | 12.18 | 30077 | 16.63 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | WG767577-3LCS | 111245 | 10.23 | 220800 | 12.51 | 50129 | 16.96 |
| 02 | WG767577-4BLANK | 105527 | 10.23 | 208064 | 12.52 | 45620 | 16.97 |
| 03 | BLANK | 99962 | 10.22 | 189549 | 12.51 | 45106 | 16.96 |
| 04 | SG BLANK | 102690 | 10.23 | 209493 | 12.51 | 47556 | 16.96 |
| 05 | OUTDOOR CONTROL | 93068 | 10.22 | 183438 | 12.51 | 42567 | 16.96 |
| 06 | S-157-J.1 | 98605 | 10.22 | 188189 | 12.51 | 44984 | 16.96 |
| 07 | S-157-J.2 | 94362 | 10.22 | 181106 | 12.51 | 46982 | 16.96 |
| 08 | S-157-J | 97651 | 10.22 | 186665 | 12.51 | 44642 | 16.96 |
| 09 | DUPLICATE | 92828 | 10.22 | 199906 | 12.51 | 46278 | 16.96 |
| 10 | SG-1 | 96692 | 10.22 | 180466 | 12.51 | 45372 | 16.96 |
| 11 | SG-3 | 99548 | 10.22 | 189838 | 12.51 | 48037 | 16.96 |
| 12 | SG-4 | 99632 | 10.22 | 191319 | 12.51 | 50623 | 16.96 |
| 13 | SG-2 | 96160 | 10.22 | 184429 | 12.51 | 46784 | 16.96 |
| 14 | WG767577-5DUP | 97499 | 10.22 | 186312 | 12.51 | 45991 | 16.96 |

IS1 = BROMOCHLOROMETHANE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40 % of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

* Values outside of QC limits.