# ANALYTICAL REPORT

Job Number: 680-87545-1

SDG Number: 68087545-1

Job Description: 35th Avenue Superfund Site

For:
Oneida Total Integrated Enterprises LLC
1220 Kennestone Circle
Suite 106
Marietta, GA 30060

Attention: Ms. Limari F Krebs

Approved for release.
Bernard Kirkland
Project Manager I
3/1/2013 8:47 AM

Designee for
Lisa Harvey
Project Manager II
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03/01/2013

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# Table of Contents


Cover Title Page . . . . . 1

Data Summaries . . . . . 4

Report Narrative . . . . . 4

Sample Summary . . . . . 5

Method Summary . . . . . 6

Method / Analyst Summary . . . . . 7

Data Qualifiers . . . . . 8

QC Association Summary . . . . . 9

Manual Integration Summary . . . . . 12

Organic Sample Data . . . . . 23

GC/MS Semi VOA . . . . . 23

Method 8270C Low Level . . . . . 23

Method 8270C Low Level QC Summary . . . . . 24

Method 8270C Low Level Sample Data . . . . . 40

Standards Data . . . . . 526

Method 8270C Low Level ICAL Data . . . . . 526

Method 8270C Low Level CCAL Data . . . . . 576

Raw QC Data . . . . . 587

Method 8270C Low Level Tune Data . . . . . 587

Method 8270C Low Level Blank Data . . . . . 597

Method 8270C Low Level LCS/LCSD Data . . . . . 603

Method 8270C Low Level MS/MSD Data . . . . . 613

Method 8270C Low Level Run Logs . . . . . 633

Method 8270C Low Level Prep Data . . . . . 636

Inorganic Sample Data . . . . . 640

General Chemistry Data . . . . . 640

# Table of Contents

Gen Chem Cover Page . . . . . 641
Gen Chem MDL . . . . . 642
Gen Chem Analysis Run Log . . . . . 644
Gen Chem Prep Data . . . . . 646
Shipping and Receiving Documents . . . . . 648
Client Chain of Custody . . . . . 649
Sample Receipt Checklist . . . . . 651

# CASE NARRATIVE

## Client: Oneida Total Integrated Enterprises LLC

## Project: 35th Avenue Superfund Site

## Report Number: 680-87545-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**RECEIPT**

The samples were received on 02/16/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.8º C and 3.4º C.

**SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL**

Samples CV0240A-CS (680-87545-1), CV0240B-CS (680-87545-2), FM0161E-CS (680-87545-3), FM0161F-CS (680-87545-4), FM0161G-CS (680-87545-5), FM0161H-CS (680-87545-6), FM0161H-CSD (680-87545-7), FM0161I-CS (680-87545-8), FM0161AD-GS (680-87545-9), FM0161AE-GS (680-87545-10), FM0161AF-GS (680-87545-11), FM0161AG-GS (680-87545-12), FM0161AH-GS (680-87545-13), FM0161AI-GS (680-87545-14), FM0161AJ-GS (680-87545-15), FM0161AK-GS (680-87545-16), FM0161AL-GS (680-87545-17), FM0161AM-GS (680-87545-18), FM0161J-CS (680-87545-19) and FM0161K-CS (680-87545-20) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/21/2013 and analyzed on 02/22/2013.

Samples CV0240A-CS (680-87545-1)[4X] and CV0240B-CS (680-87545-2)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Benzo[a]pyrene recovered outside the recovery criteria for the MS of sample 680-87496-61 in batch 660-134771.

Benzo[a]anthracene, Benzo[b]fluoranthene, Fluoranthene and Pyrene recovered outside the recovery criteria for the MS of sample CV0240A-CS (680-87545-1) in batch 660-134776.

No other difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All other quality control parameters were within the acceptance limits.

# SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
Sdg Number: 68087545-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time Sampled | Date/Time Received |
|---|---|---|---|---|
| 680-87545-1 | CV0240A-CS | Solid | 02/14/2013 0846 | 02/16/2013 0903 |
| 680-87545-1MS | CV0240A-CS | Solid | 02/14/2013 0846 | 02/16/2013 0903 |
| 680-87545-1MSD | CV0240A-CS | Solid | 02/14/2013 0846 | 02/16/2013 0903 |
| 680-87545-2 | CV0240B-CS | Solid | 02/14/2013 0858 | 02/16/2013 0903 |
| 680-87545-3 | FM0161E-CS | Solid | 02/14/2013 0839 | 02/16/2013 0903 |
| 680-87545-4 | FM0161F-CS | Solid | 02/14/2013 0847 | 02/16/2013 0903 |
| 680-87545-5 | FM0161G-CS | Solid | 02/14/2013 0858 | 02/16/2013 0903 |
| 680-87545-6 | FM0161H-CS | Solid | 02/14/2013 0905 | 02/16/2013 0903 |
| 680-87545-7 | FM0161H-CSD | Solid | 02/14/2013 0908 | 02/16/2013 0903 |
| 680-87545-8 | FM0161I-CS | Solid | 02/14/2013 0910 | 02/16/2013 0903 |
| 680-87545-9 | FM0161AD-GS | Solid | 02/14/2013 0849 | 02/16/2013 0903 |
| 680-87545-10 | FM0161AE-GS | Solid | 02/14/2013 0852 | 02/16/2013 0903 |
| 680-87545-11 | FM0161AF-GS | Solid | 02/14/2013 0858 | 02/16/2013 0903 |
| 680-87545-12 | FM0161AG-GS | Solid | 02/14/2013 0941 | 02/16/2013 0903 |
| 680-87545-13 | FM0161AH-GS | Solid | 02/14/2013 0943 | 02/16/2013 0903 |
| 680-87545-14 | FM0161AI-GS | Solid | 02/14/2013 0952 | 02/16/2013 0903 |
| 680-87545-15 | FM0161AJ-GS | Solid | 02/14/2013 1004 | 02/16/2013 0903 |
| 680-87545-16 | FM0161AK-GS | Solid | 02/14/2013 1037 | 02/16/2013 0903 |
| 680-87545-17 | FM0161AL-GS | Solid | 02/14/2013 1052 | 02/16/2013 0903 |
| 680-87545-18 | FM0161AM-GS | Solid | 02/14/2013 1053 | 02/16/2013 0903 |
| 680-87545-19 | FM0161J-CS | Solid | 02/14/2013 0931 | 02/16/2013 0903 |
| 680-87545-20 | FM0161K-CS | Solid | 02/14/2013 0937 | 02/16/2013 0903 |

# METHOD SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
Sdg Number: 68087545-1

| Description | Lab Location | Method | Preparation Method |
|---|---|---|---|
| **Matrix: Solid** | | | |
| Semivolatile Organic Compounds by GCMS - Low Levels | TAL TAM | SW846 8270C LL | |
| Microwave Extraction | TAL TAM | | SW846 3546 |
| Percent Moisture | TAL TAM | EPA Moisture | |

**Lab References:**

TAL TAM = TestAmerica Tampa

**Method References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
Sdg Number: 68087545-1

| Method | Analyst | Analyst ID |
|---|---|---|
| SW846 8270C LL | Cantin, Stephen C | SCC |
| EPA Moisture | Galio, Andrew | AG |

# DATA REPORTING QUALIFIERS

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
Sdg Number: 68087545-1

| Lab Section | Qualifier | Description |
|---|---|---|
| GC/MS Semi VOA | | |
| | U | Indicates the analyte was analyzed for but not detected. |
| | F | MS or MSD exceeds the control limits |
| | J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
Sdg Number: 68087545-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **GC/MS Semi VOA** | | | | | |
| **Prep Batch: 660-134699** | | | | | |
| LCS 660-134699/2-A | Lab Control Sample | T | Solid | 3546 | |
| MB 660-134699/1-A | Method Blank | T | Solid | 3546 | |
| 680-87496-A-61-B MS | Matrix Spike | T | Solid | 3546 | |
| 680-87496-A-61-C MSD | Matrix Spike Duplicate | T | Solid | 3546 | |
| 680-87545-2 | CV0240B-CS | T | Solid | 3546 | |
| 680-87545-3 | FM0161E-CS | T | Solid | 3546 | |
| 680-87545-4 | FM0161F-CS | T | Solid | 3546 | |
| 680-87545-5 | FM0161G-CS | T | Solid | 3546 | |
| 680-87545-6 | FM0161H-CS | T | Solid | 3546 | |
| 680-87545-7 | FM0161H-CSD | T | Solid | 3546 | |
| 680-87545-8 | FM0161I-CS | T | Solid | 3546 | |
| 680-87545-9 | FM0161AD-GS | T | Solid | 3546 | |
| **Prep Batch: 660-134712** | | | | | |
| LCS 660-134712/2-A | Lab Control Sample | T | Solid | 3546 | |
| MB 660-134712/1-A | Method Blank | T | Solid | 3546 | |
| 680-87545-1 | CV0240A-CS | T | Solid | 3546 | |
| 680-87545-1MS | Matrix Spike | T | Solid | 3546 | |
| 680-87545-1MSD | Matrix Spike Duplicate | T | Solid | 3546 | |
| 680-87545-10 | FM0161AE-GS | T | Solid | 3546 | |
| 680-87545-11 | FM0161AF-GS | T | Solid | 3546 | |
| 680-87545-12 | FM0161AG-GS | T | Solid | 3546 | |
| 680-87545-13 | FM0161AH-GS | T | Solid | 3546 | |
| 680-87545-14 | FM0161AI-GS | T | Solid | 3546 | |
| 680-87545-15 | FM0161AJ-GS | T | Solid | 3546 | |
| 680-87545-16 | FM0161AK-GS | T | Solid | 3546 | |
| 680-87545-17 | FM0161AL-GS | T | Solid | 3546 | |
| 680-87545-18 | FM0161AM-GS | T | Solid | 3546 | |
| 680-87545-19 | FM0161J-CS | T | Solid | 3546 | |
| 680-87545-20 | FM0161K-CS | T | Solid | 3546 | |
| **Analysis Batch:660-134771** | | | | | |
| LCS 660-134699/2-A | Lab Control Sample | T | Solid | 8270C LL | 660-134699 |
| MB 660-134699/1-A | Method Blank | T | Solid | 8270C LL | 660-134699 |
| 680-87496-A-61-B MS | Matrix Spike | T | Solid | 8270C LL | 660-134699 |
| 680-87496-A-61-C MSD | Matrix Spike Duplicate | T | Solid | 8270C LL | 660-134699 |
| 680-87545-2 | CV0240B-CS | T | Solid | 8270C LL | 660-134699 |
| 680-87545-3 | FM0161E-CS | T | Solid | 8270C LL | 660-134699 |
| 680-87545-4 | FM0161F-CS | T | Solid | 8270C LL | 660-134699 |
| 680-87545-5 | FM0161G-CS | T | Solid | 8270C LL | 660-134699 |
| 680-87545-6 | FM0161H-CS | T | Solid | 8270C LL | 660-134699 |
| 680-87545-7 | FM0161H-CSD | T | Solid | 8270C LL | 660-134699 |
| 680-87545-8 | FM0161I-CS | T | Solid | 8270C LL | 660-134699 |
| 680-87545-9 | FM0161AD-GS | T | Solid | 8270C LL | 660-134699 |

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
Sdg Number: 68087545-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **GC/MS Semi VOA** | | | | | |
| **Analysis Batch:660-134776** | | | | | |
| LCS 660-134712/2-A | Lab Control Sample | T | Solid | 8270C LL | 660-134712 |
| MB 660-134712/1-A | Method Blank | T | Solid | 8270C LL | 660-134712 |
| 680-87545-1 | CV0240A-CS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-1MS | Matrix Spike | T | Solid | 8270C LL | 660-134712 |
| 680-87545-1MSD | Matrix Spike Duplicate | T | Solid | 8270C LL | 660-134712 |
| 680-87545-10 | FM0161AE-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-11 | FM0161AF-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-12 | FM0161AG-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-13 | FM0161AH-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-14 | FM0161AI-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-15 | FM0161AJ-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-16 | FM0161AK-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-17 | FM0161AL-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-18 | FM0161AM-GS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-19 | FM0161J-CS | T | Solid | 8270C LL | 660-134712 |
| 680-87545-20 | FM0161K-CS | T | Solid | 8270C LL | 660-134712 |

**Report Basis**
T = Total

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
Sdg Number: 68087545-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **General Chemistry** | | | | | |
| **Analysis Batch:660-134638** | | | | | |
| MB 660-134638/1 | Method Blank | T | Solid | Moisture | |
| 680-87545-1 | CV0240A-CS | T | Solid | Moisture | |
| 680-87545-1MS | Matrix Spike | T | Solid | Moisture | |
| 680-87545-1MSD | Matrix Spike Duplicate | T | Solid | Moisture | |
| 680-87545-2 | CV0240B-CS | T | Solid | Moisture | |
| 680-87545-3 | FM0161E-CS | T | Solid | Moisture | |
| 680-87545-4 | FM0161F-CS | T | Solid | Moisture | |
| 680-87545-5 | FM0161G-CS | T | Solid | Moisture | |
| 680-87545-6 | FM0161H-CS | T | Solid | Moisture | |
| 680-87545-7 | FM0161H-CSD | T | Solid | Moisture | |
| 680-87545-8 | FM0161I-CS | T | Solid | Moisture | |
| 680-87545-9 | FM0161AD-GS | T | Solid | Moisture | |
| 680-87545-10 | FM0161AE-GS | T | Solid | Moisture | |
| 680-87545-11 | FM0161AF-GS | T | Solid | Moisture | |
| 680-87545-12 | FM0161AG-GS | T | Solid | Moisture | |
| 680-87545-13 | FM0161AH-GS | T | Solid | Moisture | |
| 680-87545-14 | FM0161AI-GS | T | Solid | Moisture | |
| 680-87545-15 | FM0161AJ-GS | T | Solid | Moisture | |
| 680-87545-16 | FM0161AK-GS | T | Solid | Moisture | |
| 680-87545-17 | FM0161AL-GS | T | Solid | Moisture | |
| 680-87545-18 | FM0161AM-GS | T | Solid | Moisture | |
| 680-87545-19 | FM0161J-CS | T | Solid | Moisture | |
| 680-87545-20 | FM0161K-CS | T | Solid | Moisture | |

**Report Basis**
T = Total

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMA5973 Analysis Batch Number: 134771

Lab Sample ID: IC 660-134771/3 Client Sample ID:

Date Analyzed: 02/22/13 11:01 Lab File ID: 1AB22003.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.18 | Split Peak | cantins | 02/22/13 12:53 |

Lab Sample ID: IC 660-134771/4 Client Sample ID:

Date Analyzed: 02/22/13 11:16 Lab File ID: 1AB22004.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.17 | Split Peak | cantins | 02/22/13 12:54 |

Lab Sample ID: IC 660-134771/5 Client Sample ID:

Date Analyzed: 02/22/13 11:31 Lab File ID: 1AB22005.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.17 | Split Peak | cantins | 02/22/13 12:54 |

Lab Sample ID: IC 660-134771/6 Client Sample ID:

Date Analyzed: 02/22/13 11:47 Lab File ID: 1AB22006.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.17 | Split Peak | cantins | 02/22/13 12:54 |

Lab Sample ID: ICIS 660-134771/7 Client Sample ID:

Date Analyzed: 02/22/13 12:02 Lab File ID: 1AB22007.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.18 | Split Peak | cantins | 02/22/13 12:51 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMA5973 Analysis Batch Number: 134771

Lab Sample ID: IC 660-134771/8 Client Sample ID:

Date Analyzed: 02/22/13 12:17 Lab File ID: 1AB22008.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.19 | Split Peak | cantins | 02/22/13 12:55 |

Lab Sample ID: IC 660-134771/9 Client Sample ID:

Date Analyzed: 02/22/13 12:32 Lab File ID: 1AB22009.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.20 | Split Peak | cantins | 02/22/13 12:56 |

Lab Sample ID: ICV 660-134771/10 Client Sample ID:

Date Analyzed: 02/22/13 12:48 Lab File ID: 1AB22010.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Carbazole | 4.55 | Baseline Event | cantins | 02/22/13 13:04 |
| Indeno[1,2,3-cd]pyrene | 8.19 | Split Peak | cantins | 02/22/13 13:02 |

Lab Sample ID: LCS 660-134699/2-A Client Sample ID:

Date Analyzed: 02/22/13 16:55 Lab File ID: 1AB22026.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.21 | Split Peak | cantins | 02/25/13 13:43 |

Lab Sample ID: 680-87496-A-61-B MS Client Sample ID:

Date Analyzed: 02/22/13 17:25 Lab File ID: 1AB22028.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.21 | Split Peak | cantins | 02/26/13 09:03 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMA5973 Analysis Batch Number: 134771

Lab Sample ID: 680-87496-A-61-C MSD Client Sample ID:

Date Analyzed: 02/22/13 17:40 Lab File ID: 1AB22029.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 8.21 | Split Peak | cantins | 02/26/13 09:04 |

Lab Sample ID: 680-87545-2 Client Sample ID: CV0240B-CS

Date Analyzed: 02/22/13 20:42 Lab File ID: 1AB22041.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.21 | Split Peak | cantins | 02/26/13 09:28 |
| Benzo[k]fluoranthene | 7.22 | Baseline Event | cantins | 02/26/13 09:28 |
| Indeno[1,2,3-cd]pyrene | 8.21 | Split Peak | cantins | 02/26/13 09:28 |

Lab Sample ID: 680-87545-3 Client Sample ID: FM0161E-CS

Date Analyzed: 02/22/13 20:57 Lab File ID: 1AB22042.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.20 | Split Peak | cantins | 02/26/13 09:30 |
| Benzo[k]fluoranthene | 7.21 | Baseline Event | cantins | 02/26/13 09:30 |
| Indeno[1,2,3-cd]pyrene | 8.22 | Split Peak | cantins | 02/26/13 09:31 |

Lab Sample ID: 680-87545-4 Client Sample ID: FM0161F-CS

Date Analyzed: 02/22/13 21:12 Lab File ID: 1AB22043.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.21 | Split Peak | cantins | 02/26/13 09:32 |
| Benzo[k]fluoranthene | 7.22 | Baseline Event | cantins | 02/26/13 09:32 |
| Indeno[1,2,3-cd]pyrene | 8.22 | Split Peak | cantins | 02/26/13 09:33 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMA5973 Analysis Batch Number: 134771

Lab Sample ID: 680-87545-5 Client Sample ID: FM0161G-CS

Date Analyzed: 02/22/13 21:27 Lab File ID: 1AB22044.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.21 | Split Peak | cantins | 02/26/13 09:34 |
| Benzo[k]fluoranthene | 7.22 | Baseline Event | cantins | 02/26/13 09:34 |
| Indeno[1,2,3-cd]pyrene | 8.22 | Split Peak | cantins | 02/26/13 09:34 |

Lab Sample ID: 680-87545-6 Client Sample ID: FM0161H-CS

Date Analyzed: 02/22/13 21:43 Lab File ID: 1AB22045.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.21 | Split Peak | cantins | 02/26/13 09:36 |
| Benzo[k]fluoranthene | 7.22 | Baseline Event | cantins | 02/26/13 09:36 |
| Indeno[1,2,3-cd]pyrene | 8.22 | Split Peak | cantins | 02/26/13 09:37 |

Lab Sample ID: 680-87545-7 Client Sample ID: FM0161H-CSD

Date Analyzed: 02/22/13 21:58 Lab File ID: 1AB22046.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.21 | Split Peak | cantins | 02/26/13 09:38 |
| Benzo[k]fluoranthene | 7.22 | Baseline Event | cantins | 02/26/13 09:38 |
| Indeno[1,2,3-cd]pyrene | 8.22 | Split Peak | cantins | 02/26/13 09:39 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMA5973 Analysis Batch Number: 134771

Lab Sample ID: 680-87545-8 Client Sample ID: FM0161I-CS

Date Analyzed: 02/22/13 22:13 Lab File ID: 1AB22047.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.21 | Split Peak | cantins | 02/26/13 09:40 |
| Benzo[k]fluoranthene | 7.22 | Baseline Event | cantins | 02/26/13 09:40 |
| Dibenz(a,h)anthracene | 8.22 | Baseline Event | cantins | 02/26/13 09:40 |
| Indeno[1,2,3-cd]pyrene | 8.22 | Split Peak | cantins | 02/26/13 09:41 |
| Benzo[g,h,i]perylene | 8.43 | Baseline Event | cantins | 02/26/13 09:41 |

Lab Sample ID: 680-87545-9 Client Sample ID: FM0161AD-GS

Date Analyzed: 02/22/13 22:28 Lab File ID: 1AB22048.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 7.21 | Split Peak | cantins | 02/26/13 09:42 |
| Benzo[k]fluoranthene | 7.22 | Baseline Event | cantins | 02/26/13 09:42 |
| Indeno[1,2,3-cd]pyrene | 8.22 | Split Peak | cantins | 02/26/13 09:43 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMC5973 Analysis Batch Number: 134776

Lab Sample ID: IC 660-134776/3 Client Sample ID:

Date Analyzed: 02/22/13 11:57 Lab File ID: 1CB22003.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/22/13 14:13 |

Lab Sample ID: IC 660-134776/4 Client Sample ID:

Date Analyzed: 02/22/13 12:16 Lab File ID: 1CB22004.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.22 | Split Peak | cantins | 02/22/13 14:14 |

Lab Sample ID: IC 660-134776/5 Client Sample ID:

Date Analyzed: 02/22/13 12:34 Lab File ID: 1CB22005.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/22/13 14:14 |

Lab Sample ID: IC 660-134776/6 Client Sample ID:

Date Analyzed: 02/22/13 12:53 Lab File ID: 1CB22006.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/22/13 14:14 |

Lab Sample ID: ICIS 660-134776/7 Client Sample ID:

Date Analyzed: 02/22/13 13:11 Lab File ID: 1CB22007.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/22/13 14:11 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMC5973 Analysis Batch Number: 134776

Lab Sample ID: IC 660-134776/8 Client Sample ID:

Date Analyzed: 02/22/13 13:29 Lab File ID: 1CB22008.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/22/13 14:15 |

Lab Sample ID: IC 660-134776/9 Client Sample ID:

Date Analyzed: 02/22/13 13:48 Lab File ID: 1CB22009.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.24 | Split Peak | cantins | 02/22/13 14:15 |

Lab Sample ID: ICV 660-134776/10 Client Sample ID:

Date Analyzed: 02/22/13 14:06 Lab File ID: 1CB22010.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/22/13 14:21 |

Lab Sample ID: LCS 660-134712/2-A Client Sample ID:

Date Analyzed: 02/22/13 14:45 Lab File ID: 1CB22012.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 10:50 |

Lab Sample ID: 680-87545-1 Client Sample ID: CV0240A-CS

Date Analyzed: 02/22/13 15:03 Lab File ID: 1CB22013.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.65 | Split Peak | cantins | 02/26/13 10:51 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 10:51 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 10:51 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMC5973 Analysis Batch Number: 134776

Lab Sample ID: 680-87545-1 MS Client Sample ID: CV0240A-CS MS

Date Analyzed: 02/22/13 15:21 Lab File ID: 1CB22014.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 10:52 |

Lab Sample ID: 680-87545-1 MSD Client Sample ID: CV0240A-CS MSD

Date Analyzed: 02/22/13 15:40 Lab File ID: 1CB22015.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 10:52 |

Lab Sample ID: 680-87545-10 Client Sample ID: FM0161AE-GS

Date Analyzed: 02/22/13 15:58 Lab File ID: 1CB22016.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.66 | Split Peak | cantins | 02/26/13 10:54 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 10:55 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 10:55 |

Lab Sample ID: 680-87545-11 Client Sample ID: FM0161AF-GS

Date Analyzed: 02/22/13 16:16 Lab File ID: 1CB22017.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.65 | Split Peak | cantins | 02/26/13 10:56 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 10:56 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 10:57 |
| Benzo[g,h,i]perylene | 10.59 | Baseline Event | cantins | 02/26/13 10:57 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMC5973 Analysis Batch Number: 134776

Lab Sample ID: 680-87545-12 Client Sample ID: FM0161AG-GS

Date Analyzed: 02/22/13 16:34 Lab File ID: 1CB22018.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.65 | Split Peak | cantins | 02/26/13 10:58 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 10:58 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 10:58 |
| Benzo[g,h,i]perylene | 10.60 | Baseline Event | cantins | 02/26/13 10:58 |

Lab Sample ID: 680-87545-13 Client Sample ID: FM0161AH-GS

Date Analyzed: 02/22/13 16:53 Lab File ID: 1CB22019.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.66 | Split Peak | cantins | 02/26/13 10:59 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 10:59 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 11:00 |
| Benzo[g,h,i]perylene | 10.60 | Baseline Event | cantins | 02/26/13 10:59 |

Lab Sample ID: 680-87545-14 Client Sample ID: FM0161AI-GS

Date Analyzed: 02/22/13 17:11 Lab File ID: 1CB22020.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.65 | Split Peak | cantins | 02/26/13 11:27 |
| Benzo[k]fluoranthene | 8.66 | Baseline Event | cantins | 02/26/13 11:27 |
| Benzo[g,h,i]perylene | 10.60 | Baseline Event | cantins | 02/26/13 11:28 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMC5973 Analysis Batch Number: 134776

Lab Sample ID: 680-87545-15 Client Sample ID: FM0161AJ-GS

Date Analyzed: 02/22/13 17:29 Lab File ID: 1CB22021.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Chrysene | 7.82 | Baseline Event | cantins | 02/26/13 11:29 |
| Benzo[b]fluoranthene | 8.66 | Split Peak | cantins | 02/26/13 11:29 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 11:30 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 11:31 |
| Dibenz(a,h)anthracene | 10.25 | Baseline Event | cantins | 02/26/13 11:31 |

Lab Sample ID: 680-87545-16 Client Sample ID: FM0161AK-GS

Date Analyzed: 02/22/13 17:48 Lab File ID: 1CB22022.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Dibenz(a,h)anthracene | 10.24 | Baseline Event | cantins | 02/26/13 11:32 |
| Indeno[1,2,3-cd]pyrene | 10.24 | Split Peak | cantins | 02/26/13 11:32 |
| Benzo[g,h,i]perylene | 10.60 | Baseline Event | cantins | 02/26/13 11:32 |

Lab Sample ID: 680-87545-17 Client Sample ID: FM0161AL-GS

Date Analyzed: 02/22/13 18:06 Lab File ID: 1CB22023.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[k]fluoranthene | 8.67 | Analyte Misidentified by the Data System | cantins | 02/26/13 11:33 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 11:34 |
| Dibenz(a,h)anthracene | 10.25 | Baseline Event | cantins | 02/26/13 11:33 |
| Benzo[g,h,i]perylene | 10.60 | Baseline Event | cantins | 02/26/13 11:34 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMC5973 Analysis Batch Number: 134776

Lab Sample ID: 680-87545-18 Client Sample ID: FM0161AM-GS

Date Analyzed: 02/22/13 18:24 Lab File ID: 1CB22024.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.66 | Split Peak | cantins | 02/26/13 11:35 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 11:35 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 11:36 |

Lab Sample ID: 680-87545-19 Client Sample ID: FM0161J-CS

Date Analyzed: 02/22/13 18:43 Lab File ID: 1CB22025.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.66 | Split Peak | cantins | 02/26/13 11:36 |
| Benzo[k]fluoranthene | 8.68 | Baseline Event | cantins | 02/26/13 11:36 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 11:37 |
| Dibenz(a,h)anthracene | 10.25 | Baseline Event | cantins | 02/26/13 11:37 |

Lab Sample ID: 680-87545-20 Client Sample ID: FM0161K-CS

Date Analyzed: 02/22/13 19:01 Lab File ID: 1CB22026.D GC Column: DB-5MS ID: 250(um)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 8.66 | Split Peak | cantins | 02/26/13 11:38 |
| Benzo[k]fluoranthene | 8.67 | Baseline Event | cantins | 02/26/13 11:38 |
| Indeno[1,2,3-cd]pyrene | 10.23 | Split Peak | cantins | 02/26/13 11:39 |
| Dibenz(a,h)anthracene | 10.25 | Baseline Event | cantins | 02/26/13 11:38 |
| Benzo[g,h,i]perylene | 10.60 | Baseline Event | cantins | 02/26/13 11:39 |

# Method 8270C Low Level

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## Semivolatile Organic Compounds (GC/MS) Low Level by Method 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Matrix: Solid Level: Low

GC Column (1): DB-5MS ID: 250 (um)

| Client Sample ID | Lab Sample ID | OTPH # |
|---|---|---|
| CV0240A-CS | 680-87545-1 | 82 |
| CV0240B-CS | 680-87545-2 | 44 |
| FM0161E-CS | 680-87545-3 | 68 |
| FM0161F-CS | 680-87545-4 | 58 |
| FM0161G-CS | 680-87545-5 | 51 |
| FM0161H-CS | 680-87545-6 | 40 |
| FM0161H-CSD | 680-87545-7 | 52 |
| FM0161I-CS | 680-87545-8 | 48 |
| FM0161AD-GS | 680-87545-9 | 66 |
| FM0161AE-GS | 680-87545-10 | 101 |
| FM0161AF-GS | 680-87545-11 | 89 |
| FM0161AG-GS | 680-87545-12 | 73 |
| FM0161AH-GS | 680-87545-13 | 85 |
| FM0161AI-GS | 680-87545-14 | 82 |
| FM0161AJ-GS | 680-87545-15 | 84 |
| FM0161AK-GS | 680-87545-16 | 83 |
| FM0161AL-GS | 680-87545-17 | 85 |
| FM0161AM-GS | 680-87545-18 | 81 |
| FM0161J-CS | 680-87545-19 | 85 |
| FM0161K-CS | 680-87545-20 | 85 |
| | MB 660-134699/1-A | 73 |
| | MB 660-134712/1-A | 88 |
| | LCS 660-134699/2-A | 81 |
| | LCS 660-134712/2-A | 83 |
| | 680-87496-A-61-B MS | 57 |
| CV0240A-CS MS | 680-87545-1 MS | 95 |
| | 680-87496-A-61-C MSD | 69 |
| CV0240A-CS MSD | 680-87545-1 MSD | 94 |

| | QC LIMITS |
|---|---|
| OTPH = o-Terphenyl | 30-130 |

# Column to be used to flag recovery values

FORM II 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Matrix: Solid Level: Low Lab File ID: 1AB22026.D

Lab ID: LCS 660-134699/2-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Acenaphthene | 652 | 448 | 69 | 39-130 | |
| Acenaphthylene | 652 | 498 | 76 | 38-130 | |
| Anthracene | 652 | 503 | 77 | 37-130 | |
| Benzo[a]anthracene | 652 | 538 | 82 | 40-130 | |
| Benzo[a]pyrene | 652 | 363 | 56 | 49-130 | |
| Benzo[b]fluoranthene | 652 | 364 | 56 | 37-130 | |
| Benzo[g,h,i]perylene | 652 | 490 | 75 | 32-130 | |
| Benzo[k]fluoranthene | 652 | 421 | 65 | 32-130 | |
| Chrysene | 652 | 449 | 69 | 41-130 | |
| Dibenz(a,h)anthracene | 652 | 504 | 77 | 27-130 | |
| Fluoranthene | 652 | 531 | 81 | 40-130 | |
| Fluorene | 652 | 491 | 75 | 40-130 | |
| Indeno[1,2,3-cd]pyrene | 652 | 484 | 74 | 30-130 | |
| 1-Methylnaphthalene | 652 | 580 | 89 | 31-130 | |
| 2-Methylnaphthalene | 652 | 561 | 86 | 33-130 | |
| Naphthalene | 652 | 497 | 76 | 36-130 | |
| Phenanthrene | 652 | 496 | 76 | 42-130 | |
| Pyrene | 652 | 623 | 96 | 44-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Matrix: Solid Level: Low Lab File ID: 1CB22012.D

Lab ID: LCS 660-134712/2-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Acenaphthene | 650 | 499 | 77 | 39-130 | |
| Acenaphthylene | 650 | 491 | 76 | 38-130 | |
| Anthracene | 650 | 491 | 76 | 37-130 | |
| Benzo[a]anthracene | 650 | 505 | 78 | 40-130 | |
| Benzo[a]pyrene | 650 | 466 | 72 | 49-130 | |
| Benzo[b]fluoranthene | 650 | 472 | 73 | 37-130 | |
| Benzo[g,h,i]perylene | 650 | 508 | 78 | 32-130 | |
| Benzo[k]fluoranthene | 650 | 544 | 84 | 32-130 | |
| Chrysene | 650 | 474 | 73 | 41-130 | |
| Dibenz(a,h)anthracene | 650 | 527 | 81 | 27-130 | |
| Fluoranthene | 650 | 515 | 79 | 40-130 | |
| Fluorene | 650 | 490 | 75 | 40-130 | |
| Indeno[1,2,3-cd]pyrene | 650 | 466 | 72 | 30-130 | |
| 1-Methylnaphthalene | 650 | 517 | 80 | 31-130 | |
| 2-Methylnaphthalene | 650 | 492 | 76 | 33-130 | |
| Naphthalene | 650 | 501 | 77 | 36-130 | |
| Phenanthrene | 650 | 486 | 75 | 42-130 | |
| Pyrene | 650 | 494 | 76 | 44-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Matrix: Solid Level: Low Lab File ID: 1AB22028.D

Lab ID: 680-87496-A-61-B MS Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | SAMPLE CONCENTRATION (ug/Kg) | MS CONCENTRATION (ug/Kg) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Acenaphthene | 685 | 100 U | 385 | 56 | 39-130 | |
| Acenaphthylene | 685 | 6.1 J | 401 | 58 | 38-130 | |
| Anthracene | 685 | 10 | 414 | 59 | 37-130 | |
| Benzo[a]anthracene | 685 | 45 | 434 | 57 | 40-130 | |
| Benzo[a]pyrene | 685 | 27 | 314 | 42 | 49-130 | F |
| Benzo[b]fluoranthene | 685 | 43 | 321 | 41 | 37-130 | |
| Benzo[g,h,i]perylene | 685 | 28 | 396 | 54 | 32-130 | |
| Benzo[k]fluoranthene | 685 | 11 | 335 | 47 | 32-130 | |
| Chrysene | 685 | 43 | 388 | 50 | 41-130 | |
| Dibenz(a,h)anthracene | 685 | 11 J | 413 | 59 | 27-130 | |
| Fluoranthene | 685 | 44 | 347 | 44 | 40-130 | |
| Fluorene | 685 | 21 U | 401 | 59 | 40-130 | |
| Indeno[1,2,3-cd]pyrene | 685 | 24 | 395 | 54 | 30-130 | |
| 1-Methylnaphthalene | 685 | 22 J | 492 | 69 | 31-130 | |
| 2-Methylnaphthalene | 685 | 24 J | 468 | 65 | 33-130 | |
| Naphthalene | 685 | 36 J | 457 | 62 | 36-130 | |
| Phenanthrene | 685 | 37 | 450 | 60 | 42-130 | |
| Pyrene | 685 | 49 | 417 | 54 | 44-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Matrix: Solid Level: Low Lab File ID: 1CB22014.D

Lab ID: 680-87545-1 MS Client ID: CV0240A-CS MS

| COMPOUND | SPIKE ADDED (ug/Kg) | SAMPLE CONCENTRATION (ug/Kg) | MS CONCENTRATION (ug/Kg) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Acenaphthene | 717 | 430 U | 619 | 86 | 39-130 | |
| Acenaphthylene | 717 | 90 J | 620 | 74 | 38-130 | |
| Anthracene | 717 | 140 | 793 | 91 | 37-130 | |
| Benzo[a]anthracene | 717 | 740 | 1740 | 140 | 40-130 | F |
| Benzo[a]pyrene | 717 | 740 | 1580 | 116 | 49-130 | |
| Benzo[b]fluoranthene | 717 | 1200 | 2340 | 156 | 37-130 | F |
| Benzo[g,h,i]perylene | 717 | 580 | 1250 | 93 | 32-130 | |
| Benzo[k]fluoranthene | 717 | 450 | 1230 | 110 | 32-130 | |
| Chrysene | 717 | 890 | 1760 | 121 | 41-130 | |
| Dibenz(a,h)anthracene | 717 | 150 | 769 | 86 | 27-130 | |
| Fluoranthene | 717 | 1600 | 2990 | 195 | 40-130 | F |
| Fluorene | 717 | 35 J | 629 | 83 | 40-130 | |
| Indeno[1,2,3-cd]pyrene | 717 | 490 | 1260 | 107 | 30-130 | |
| 1-Methylnaphthalene | 717 | 150 J | 853 | 98 | 31-130 | |
| 2-Methylnaphthalene | 717 | 160 J | 816 | 91 | 33-130 | |
| Naphthalene | 717 | 150 J | 743 | 83 | 36-130 | |
| Phenanthrene | 717 | 700 | 1490 | 110 | 42-130 | |
| Pyrene | 717 | 1300 | 2600 | 182 | 44-130 | F |

# Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Matrix: Solid Level: Low Lab File ID: 1AB22029.D

Lab ID: 680-87496-A-61-C MSD Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | MSD CONCENTRATION (ug/Kg) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 685 | 463 | 68 | 18 | 40 | 39-130 | |
| Acenaphthylene | 685 | 501 | 72 | 22 | 40 | 38-130 | |
| Anthracene | 685 | 512 | 73 | 21 | 40 | 37-130 | |
| Benzo[a]anthracene | 685 | 530 | 71 | 20 | 40 | 40-130 | |
| Benzo[a]pyrene | 685 | 402 | 55 | 24 | 40 | 49-130 | |
| Benzo[b]fluoranthene | 685 | 412 | 54 | 25 | 40 | 37-130 | |
| Benzo[g,h,i]perylene | 685 | 508 | 70 | 25 | 40 | 32-130 | |
| Benzo[k]fluoranthene | 685 | 425 | 60 | 24 | 40 | 32-130 | |
| Chrysene | 685 | 475 | 63 | 20 | 40 | 41-130 | |
| Dibenz(a,h)anthracene | 685 | 514 | 74 | 22 | 40 | 27-130 | |
| Fluoranthene | 685 | 413 | 54 | 17 | 40 | 40-130 | |
| Fluorene | 685 | 508 | 74 | 24 | 40 | 40-130 | |
| Indeno[1,2,3-cd]pyrene | 685 | 528 | 74 | 29 | 40 | 30-130 | |
| 1-Methylnaphthalene | 685 | 572 | 80 | 15 | 40 | 31-130 | |
| 2-Methylnaphthalene | 685 | 569 | 80 | 19 | 40 | 33-130 | |
| Naphthalene | 685 | 525 | 72 | 14 | 40 | 36-130 | |
| Phenanthrene | 685 | 537 | 73 | 18 | 40 | 42-130 | |
| Pyrene | 685 | 515 | 68 | 21 | 40 | 44-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Matrix: Solid Level: Low Lab File ID: 1CB22015.D

Lab ID: 680-87545-1 MSD Client ID: CV0240A-CS MSD

| COMPOUND | SPIKE ADDED (ug/Kg) | MSD CONCENTRATION (ug/Kg) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 717 | 585 | 82 | 6 | 40 | 39-130 | |
| Acenaphthylene | 717 | 662 | 80 | 7 | 40 | 38-130 | |
| Anthracene | 717 | 711 | 79 | 11 | 40 | 37-130 | |
| Benzo[a]anthracene | 717 | 1450 | 99 | 18 | 40 | 40-130 | |
| Benzo[a]pyrene | 717 | 1330 | 81 | 17 | 40 | 49-130 | |
| Benzo[b]fluoranthene | 717 | 1860 | 89 | 23 | 40 | 37-130 | |
| Benzo[g,h,i]perylene | 717 | 1110 | 73 | 12 | 40 | 32-130 | |
| Benzo[k]fluoranthene | 717 | 1110 | 92 | 11 | 40 | 32-130 | |
| Chrysene | 717 | 1490 | 84 | 17 | 40 | 41-130 | |
| Dibenz(a,h)anthracene | 717 | 711 | 78 | 8 | 40 | 27-130 | |
| Fluoranthene | 717 | 2230 | 89 | 29 | 40 | 40-130 | |
| Fluorene | 717 | 591 | 77 | 6 | 40 | 40-130 | |
| Indeno[1,2,3-cd]pyrene | 717 | 930 | 62 | 30 | 40 | 30-130 | |
| 1-Methylnaphthalene | 717 | 809 | 92 | 5 | 40 | 31-130 | |
| 2-Methylnaphthalene | 717 | 781 | 87 | 4 | 40 | 33-130 | |
| Naphthalene | 717 | 648 | 69 | 14 | 40 | 36-130 | |
| Phenanthrene | 717 | 1240 | 75 | 19 | 40 | 42-130 | |
| Pyrene | 717 | 1940 | 92 | 29 | 40 | 44-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8270C LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Lab File ID: 1AB22025.D Lab Sample ID: MB 660-134699/1-A

Matrix: Solid Date Extracted: 02/21/2013 09:55

Instrument ID: BSMA5973 Date Analyzed: 02/22/2013 16:39

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 660-134699/2-A | 1AB22026.D | 02/22/2013 16:55 |
| | 680-87496-A-61-B MS | 1AB22028.D | 02/22/2013 17:25 |
| | 680-87496-A-61-C MSD | 1AB22029.D | 02/22/2013 17:40 |
| CV0240B-CS | 680-87545-2 | 1AB22041.D | 02/22/2013 20:42 |
| FM0161E-CS | 680-87545-3 | 1AB22042.D | 02/22/2013 20:57 |
| FM0161F-CS | 680-87545-4 | 1AB22043.D | 02/22/2013 21:12 |
| FM0161G-CS | 680-87545-5 | 1AB22044.D | 02/22/2013 21:27 |
| FM0161H-CS | 680-87545-6 | 1AB22045.D | 02/22/2013 21:43 |
| FM0161H-CSD | 680-87545-7 | 1AB22046.D | 02/22/2013 21:58 |
| FM0161I-CS | 680-87545-8 | 1AB22047.D | 02/22/2013 22:13 |
| FM0161AD-GS | 680-87545-9 | 1AB22048.D | 02/22/2013 22:28 |

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Lab File ID: 1CB22011.D Lab Sample ID: MB 660-134712/1-A

Matrix: Solid Date Extracted: 02/21/2013 12:14

Instrument ID: BSMC5973 Date Analyzed: 02/22/2013 14:26

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 660-134712/2-A | 1CB22012.D | 02/22/2013 14:45 |
| CV0240A-CS | 680-87545-1 | 1CB22013.D | 02/22/2013 15:03 |
| CV0240A-CS MS | 680-87545-1 MS | 1CB22014.D | 02/22/2013 15:21 |
| CV0240A-CS MSD | 680-87545-1 MSD | 1CB22015.D | 02/22/2013 15:40 |
| FM0161AE-GS | 680-87545-10 | 1CB22016.D | 02/22/2013 15:58 |
| FM0161AF-GS | 680-87545-11 | 1CB22017.D | 02/22/2013 16:16 |
| FM0161AG-GS | 680-87545-12 | 1CB22018.D | 02/22/2013 16:34 |
| FM0161AH-GS | 680-87545-13 | 1CB22019.D | 02/22/2013 16:53 |
| FM0161AI-GS | 680-87545-14 | 1CB22020.D | 02/22/2013 17:11 |
| FM0161AJ-GS | 680-87545-15 | 1CB22021.D | 02/22/2013 17:29 |
| FM0161AK-GS | 680-87545-16 | 1CB22022.D | 02/22/2013 17:48 |
| FM0161AL-GS | 680-87545-17 | 1CB22023.D | 02/22/2013 18:06 |
| FM0161AM-GS | 680-87545-18 | 1CB22024.D | 02/22/2013 18:24 |
| FM0161J-CS | 680-87545-19 | 1CB22025.D | 02/22/2013 18:43 |
| FM0161K-CS | 680-87545-20 | 1CB22026.D | 02/22/2013 19:01 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Lab File ID: 1AB22002.D DFTPP Injection Date: 02/22/2013

Instrument ID: BSMA5973 DFTPP Injection Time: 10:42

Analysis Batch No.: 134771

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 10.0 - 80.0 % of mass 198 | 63.5 | |
| 68 | Less than 2.0 % of mass 69 | 0.9 | (1.7)1 |
| 69 | Mass 69 relative abundance | 53.6 | |
| 70 | Less than 2.0 % of mass 69 | 0.4 | (0.8)1 |
| 127 | 10.0 - 80.0 % of mass 198 | 44.3 | |
| 197 | Less than 2.0 % of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 - 9.0 % of mass 198 | 5.7 | |
| 275 | 10.0 - 60.0 % of mass 198 | 25.0 | |
| 365 | Greater than 1.0 % of mass 198 | 3.2 | |
| 441 | Present but less than mass 443 | 8.5 | |
| 442 | Greater than 50.0 % of mass 198 | 67.6 | |
| 443 | 15.0 - 24.0 % of mass 442 | 10.7 | (15.8)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | IC 660-134771/3 | 1AB22003.D | 02/22/2013 | 11:01 |
| | IC 660-134771/4 | 1AB22004.D | 02/22/2013 | 11:16 |
| | IC 660-134771/5 | 1AB22005.D | 02/22/2013 | 11:31 |
| | IC 660-134771/6 | 1AB22006.D | 02/22/2013 | 11:47 |
| | ICIS 660-134771/7 | 1AB22007.D | 02/22/2013 | 12:02 |
| | IC 660-134771/8 | 1AB22008.D | 02/22/2013 | 12:17 |
| | IC 660-134771/9 | 1AB22009.D | 02/22/2013 | 12:32 |
| | ICV 660-134771/10 | 1AB22010.D | 02/22/2013 | 12:48 |
| | MB 660-134699/1-A | 1AB22025.D | 02/22/2013 | 16:39 |
| | LCS 660-134699/2-A | 1AB22026.D | 02/22/2013 | 16:55 |
| | 680-87496-A-61-B MS | 1AB22028.D | 02/22/2013 | 17:25 |
| | 680-87496-A-61-C MSD | 1AB22029.D | 02/22/2013 | 17:40 |
| CV0240B-CS | 680-87545-2 | 1AB22041.D | 02/22/2013 | 20:42 |
| FM0161E-CS | 680-87545-3 | 1AB22042.D | 02/22/2013 | 20:57 |
| FM0161F-CS | 680-87545-4 | 1AB22043.D | 02/22/2013 | 21:12 |
| FM0161G-CS | 680-87545-5 | 1AB22044.D | 02/22/2013 | 21:27 |
| FM0161H-CS | 680-87545-6 | 1AB22045.D | 02/22/2013 | 21:43 |
| FM0161H-CSD | 680-87545-7 | 1AB22046.D | 02/22/2013 | 21:58 |
| FM0161I-CS | 680-87545-8 | 1AB22047.D | 02/22/2013 | 22:13 |
| FM0161AD-GS | 680-87545-9 | 1AB22048.D | 02/22/2013 | 22:28 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Lab File ID: 1CB22002.D DFTPP Injection Date: 02/22/2013

Instrument ID: BSMC5973 DFTPP Injection Time: 11:41

Analysis Batch No.: 134776

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 10.0 - 80.0 % of mass 198 | 42.3 |
| 68 | Less than 2.0 % of mass 69 | 0.6 (1.1)1 |
| 69 | Mass 69 relative abundance | 59.2 |
| 70 | Less than 2.0 % of mass 69 | 0.3 (0.4)1 |
| 127 | 10.0 - 80.0 % of mass 198 | 53.6 |
| 197 | Less than 2.0 % of mass 198 | 1.0 |
| 198 | Base Peak, 100% relative abundance | 100.0 |
| 199 | 5.0 - 9.0 % of mass 198 | 8.6 |
| 275 | 10.0 - 60.0 % of mass 198 | 19.2 |
| 365 | Greater than 1.0 % of mass 198 | 2.0 |
| 441 | Present but less than mass 443 | 7.5 |
| 442 | Greater than 50.0 % of mass 198 | 52.1 |
| 443 | 15.0 - 24.0 % of mass 442 | 8.7 (16.7)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | IC 660-134776/3 | 1CB22003.D | 02/22/2013 | 11:57 |
| | IC 660-134776/4 | 1CB22004.D | 02/22/2013 | 12:16 |
| | IC 660-134776/5 | 1CB22005.D | 02/22/2013 | 12:34 |
| | IC 660-134776/6 | 1CB22006.D | 02/22/2013 | 12:53 |
| | ICIS 660-134776/7 | 1CB22007.D | 02/22/2013 | 13:11 |
| | IC 660-134776/8 | 1CB22008.D | 02/22/2013 | 13:29 |
| | IC 660-134776/9 | 1CB22009.D | 02/22/2013 | 13:48 |
| | ICV 660-134776/10 | 1CB22010.D | 02/22/2013 | 14:06 |
| | MB 660-134712/1-A | 1CB22011.D | 02/22/2013 | 14:26 |
| | LCS 660-134712/2-A | 1CB22012.D | 02/22/2013 | 14:45 |
| CV0240A-CS | 680-87545-1 | 1CB22013.D | 02/22/2013 | 15:03 |
| CV0240A-CS MS | 680-87545-1 MS | 1CB22014.D | 02/22/2013 | 15:21 |
| CV0240A-CS MSD | 680-87545-1 MSD | 1CB22015.D | 02/22/2013 | 15:40 |
| FM0161AE-GS | 680-87545-10 | 1CB22016.D | 02/22/2013 | 15:58 |
| FM0161AF-GS | 680-87545-11 | 1CB22017.D | 02/22/2013 | 16:16 |
| FM0161AG-GS | 680-87545-12 | 1CB22018.D | 02/22/2013 | 16:34 |
| FM0161AH-GS | 680-87545-13 | 1CB22019.D | 02/22/2013 | 16:53 |
| FM0161AI-GS | 680-87545-14 | 1CB22020.D | 02/22/2013 | 17:11 |
| FM0161AJ-GS | 680-87545-15 | 1CB22021.D | 02/22/2013 | 17:29 |
| FM0161AK-GS | 680-87545-16 | 1CB22022.D | 02/22/2013 | 17:48 |
| FM0161AL-GS | 680-87545-17 | 1CB22023.D | 02/22/2013 | 18:06 |
| FM0161AM-GS | 680-87545-18 | 1CB22024.D | 02/22/2013 | 18:24 |
| FM0161J-CS | 680-87545-19 | 1CB22025.D | 02/22/2013 | 18:43 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Lab File ID: 1CB22002.D DFTPP Injection Date: 02/22/2013

Instrument ID: BSMC5973 DFTPP Injection Time: 11:41

Analysis Batch No.: 134776

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 10.0 - 80.0 % of mass 198 | 42.3 | |
| 68 | Less than 2.0 % of mass 69 | 0.6 | (1.1)1 |
| 69 | Mass 69 relative abundance | 59.2 | |
| 70 | Less than 2.0 % of mass 69 | 0.3 | (0.4)1 |
| 127 | 10.0 - 80.0 % of mass 198 | 53.6 | |
| 197 | Less than 2.0 % of mass 198 | 1.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 - 9.0 % of mass 198 | 8.6 | |
| 275 | 10.0 - 60.0 % of mass 198 | 19.2 | |
| 365 | Greater than 1.0 % of mass 198 | 2.0 | |
| 441 | Present but less than mass 443 | 7.5 | |
| 442 | Greater than 50.0 % of mass 198 | 52.1 | |
| 443 | 15.0 - 24.0 % of mass 442 | 8.7 | (16.7)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| FM0161K-CS | 680-87545-20 | 1CB22026.D | 02/22/2013 | 19:01 |

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Sample No.: ICIS 660-134771/7 Date Analyzed: 02/22/2013 12:02

Instrument ID: BSMA5973 GC Column: DB-5MS ID: 250(um)

Lab File ID (Standard): 1AB22007.D Heated Purge: (Y/N) N

Calibration ID: 2759

| | | NPT | | ANT | | PHN | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 991704 | 2.40 | 622858 | 3.42 | 968921 | 4.35 |
| UPPER LIMIT | | 1983408 | 2.90 | 1245716 | 3.92 | 1937842 | 4.85 |
| LOWER LIMIT | | 495852 | 1.90 | 311429 | 2.92 | 484461 | 3.85 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 660-134771/10 | | 1470215 | 2.40 | 948405 | 3.42 | 1446139 | 4.36 |
| MB 660-134699/1-A | | 1054254 | 2.40 | 839973 | 3.42 | 1221542 | 4.37 |
| LCS 660-134699/2-A | | 1080818 | 2.40 | 807413 | 3.43 | 1222937 | 4.37 |
| 680-87496-A-61-B MS | | 1128067 | 2.40 | 855211 | 3.43 | 1240491 | 4.36 |
| 680-87496-A-61-C MSD | | 1049303 | 2.40 | 784243 | 3.42 | 1180099 | 4.36 |
| 680-87545-2 | CV0240B-CS | 916835 | 2.40 | 783002 | 3.43 | 1090606 | 4.37 |
| 680-87545-3 | FM0161E-CS | 1017642 | 2.40 | 795545 | 3.43 | 1127293 | 4.37 |
| 680-87545-4 | FM0161F-CS | 1008886 | 2.40 | 773303 | 3.43 | 1149947 | 4.37 |
| 680-87545-5 | FM0161G-CS | 1058689 | 2.41 | 888652 | 3.43 | 1236247 | 4.37 |
| 680-87545-6 | FM0161H-CS | 925747 | 2.40 | 776358 | 3.43 | 1078019 | 4.37 |
| 680-87545-7 | FM0161H-CSD | 992605 | 2.41 | 818917 | 3.43 | 1155503 | 4.37 |
| 680-87545-8 | FM0161I-CS | 1034015 | 2.41 | 855759 | 3.43 | 1165765 | 4.37 |
| 680-87545-9 | FM0161AD-GS | 983567 | 2.41 | 792268 | 3.43 | 1126400 | 4.37 |

NPT = Naphthalene-d8
ANT = Acenaphthene-d10
PHN = Phenanthrene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Sample No.: ICIS 660-134771/7 Date Analyzed: 02/22/2013 12:02

Instrument ID: BSMA5973 GC Column: DB-5MS ID: 250(um)

Lab File ID (Standard): 1AB22007.D Heated Purge: (Y/N) N

Calibration ID: 2759

| | | CRY | | PRY | | | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 842371 | 6.37 | 860097 | 7.46 | | |
| UPPER LIMIT | | 1684742 | 6.87 | 1720194 | 7.96 | | |
| LOWER LIMIT | | 421186 | 5.87 | 430049 | 6.96 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 660-134771/10 | | 1373239 | 6.37 | 1363331 | 7.46 | | |
| MB 660-134699/1-A | | 764305 | 6.38 | 915808 | 7.48 | | |
| LCS 660-134699/2-A | | 893924 | 6.38 | 1000053 | 7.48 | | |
| 680-87496-A-61-B MS | | 801823 | 6.38 | 1085241 | 7.48 | | |
| 680-87496-A-61-C MSD | | 765601 | 6.38 | 1035149 | 7.48 | | |
| 680-87545-2 | CV0240B-CS | 801874 | 6.39 | 1139342 | 7.49 | | |
| 680-87545-3 | FM0161E-CS | 843366 | 6.39 | 1151693 | 7.50 | | |
| 680-87545-4 | FM0161F-CS | 859075 | 6.40 | 1199486 | 7.50 | | |
| 680-87545-5 | FM0161G-CS | 920725 | 6.40 | 1307084 | 7.50 | | |
| 680-87545-6 | FM0161H-CS | 802791 | 6.39 | 1155258 | 7.50 | | |
| 680-87545-7 | FM0161H-CSD | 901002 | 6.40 | 1240777 | 7.50 | | |
| 680-87545-8 | FM0161I-CS | 912112 | 6.40 | 1260591 | 7.50 | | |
| 680-87545-9 | FM0161AD-GS | 895082 | 6.40 | 1210876 | 7.50 | | |

CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Sample No.: ICIS 660-134776/7 Date Analyzed: 02/22/2013 13:11

Instrument ID: BSMC5973 GC Column: DB-5MS ID: 250(um)

Lab File ID (Standard): 1CB22007.D Heated Purge: (Y/N) N

Calibration ID: 2760

| | | NPT | | ANT | | PHN | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 1215005 | 3.80 | 932815 | 4.89 | 1859738 | 5.85 |
| UPPER LIMIT | | 2430010 | 4.30 | 1865630 | 5.39 | 3719476 | 6.35 |
| LOWER LIMIT | | 607503 | 3.30 | 466408 | 4.39 | 929869 | 5.35 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 660-134776/10 | | 1383069 | 3.80 | 1075067 | 4.89 | 2141313 | 5.85 |
| MB 660-134712/1-A | | 1406557 | 3.80 | 1068093 | 4.89 | 2055482 | 5.85 |
| LCS 660-134712/2-A | | 1346104 | 3.80 | 1065240 | 4.89 | 2030307 | 5.85 |
| 680-87545-1 | CV0240A-CS | 1458935 | 3.80 | 1129139 | 4.89 | 2157900 | 5.85 |
| 680-87545-1 MS | CV0240A-CS MS | 1521773 | 3.80 | 1223502 | 4.89 | 2332357 | 5.85 |
| 680-87545-1 MSD | CV0240A-CS MSD | 1546272 | 3.80 | 1227946 | 4.89 | 2308829 | 5.85 |
| 680-87545-10 | FM0161AE-GS | 1571367 | 3.80 | 1244957 | 4.89 | 2449677 | 5.85 |
| 680-87545-11 | FM0161AF-GS | 1620832 | 3.80 | 1320745 | 4.89 | 2516140 | 5.85 |
| 680-87545-12 | FM0161AG-GS | 1488556 | 3.80 | 1221669 | 4.89 | 2350702 | 5.85 |
| 680-87545-13 | FM0161AH-GS | 1650935 | 3.80 | 1297495 | 4.89 | 2418287 | 5.85 |
| 680-87545-14 | FM0161AI-GS | 1664803 | 3.80 | 1299912 | 4.89 | 2478501 | 5.85 |
| 680-87545-15 | FM0161AJ-GS | 1719762 | 3.80 | 1345891 | 4.89 | 2512627 | 5.85 |
| 680-87545-16 | FM0161AK-GS | 1726345 | 3.80 | 1370883 | 4.89 | 2536505 | 5.85 |
| 680-87545-17 | FM0161AL-GS | 1736231 | 3.80 | 1354682 | 4.89 | 2483517 | 5.85 |
| 680-87545-18 | FM0161AM-GS | 1654798 | 3.80 | 1302519 | 4.89 | 2417015 | 5.85 |
| 680-87545-19 | FM0161J-CS | 1629103 | 3.80 | 1294577 | 4.89 | 2455064 | 5.85 |
| 680-87545-20 | FM0161K-CS | 1650628 | 3.80 | 1319446 | 4.89 | 2579476 | 5.85 |

NPT = Naphthalene-d8
ANT = Acenaphthene-d10
PHN = Phenanthrene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Sample No.: ICIS 660-134776/7 Date Analyzed: 02/22/2013 13:11

Instrument ID: BSMC5973 GC Column: DB-5MS ID: 250(um)

Lab File ID (Standard): 1CB22007.D Heated Purge: (Y/N) N

Calibration ID: 2760

| | | CRY | | PRY | | | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 2424157 | 7.80 | 2664188 | 9.02 | | |
| UPPER LIMIT | | 4848314 | 8.30 | 5328376 | 9.52 | | |
| LOWER LIMIT | | 1212079 | 7.30 | 1332094 | 8.52 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 660-134776/10 | | 2766374 | 7.80 | 3034368 | 9.02 | | |
| MB 660-134712/1-A | | 2590099 | 7.80 | 2734541 | 9.02 | | |
| LCS 660-134712/2-A | | 2618435 | 7.80 | 2799637 | 9.02 | | |
| 680-87545-1 | CV0240A-CS | 2857532 | 7.80 | 2864527 | 9.02 | | |
| 680-87545-1 MS | CV0240A-CS MS | 2866063 | 7.80 | 2845732 | 9.02 | | |
| 680-87545-1 MSD | CV0240A-CS MSD | 2831067 | 7.80 | 2793829 | 9.02 | | |
| 680-87545-10 | FM0161AE-GS | 2914847 | 7.80 | 2815272 | 9.02 | | |
| 680-87545-11 | FM0161AF-GS | 2888917 | 7.80 | 2744516 | 9.02 | | |
| 680-87545-12 | FM0161AG-GS | 2779574 | 7.80 | 2661893 | 9.02 | | |
| 680-87545-13 | FM0161AH-GS | 2747108 | 7.80 | 2694972 | 9.02 | | |
| 680-87545-14 | FM0161AI-GS | 2836823 | 7.80 | 2753643 | 9.02 | | |
| 680-87545-15 | FM0161AJ-GS | 2767744 | 7.80 | 2661167 | 9.02 | | |
| 680-87545-16 | FM0161AK-GS | 2922178 | 7.80 | 2796089 | 9.02 | | |
| 680-87545-17 | FM0161AL-GS | 2847350 | 7.80 | 2662092 | 9.02 | | |
| 680-87545-18 | FM0161AM-GS | 2827269 | 7.80 | 2662233 | 9.02 | | |
| 680-87545-19 | FM0161J-CS | 2733953 | 7.80 | 2652554 | 9.02 | | |
| 680-87545-20 | FM0161K-CS | 2792879 | 7.80 | 2669645 | 9.02 | | |

CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270C LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: CV0240A-CS | Lab Sample ID: 680-87545-1

Matrix: Solid | Lab File ID: 1CB22013.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:46

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.42(g) | Date Analyzed: 02/22/2013 15:03

Con. Extract Vol.: 1(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 9.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 430 | U | 430 | 86 |
| 208-96-8 | Acenaphthylene | 90 | J | 170 | 21 |
| 120-12-7 | Anthracene | 140 | | 36 | 18 |
| 56-55-3 | Benzo[a]anthracene | 740 | F | 34 | 17 |
| 50-32-8 | Benzo[a]pyrene | 740 | | 45 | 22 |
| 205-99-2 | Benzo[b]fluoranthene | 1200 | F | 52 | 26 |
| 191-24-2 | Benzo[g,h,i]perylene | 580 | | 86 | 19 |
| 207-08-9 | Benzo[k]fluoranthene | 450 | | 34 | 15 |
| 218-01-9 | Chrysene | 890 | | 39 | 19 |
| 53-70-3 | Dibenz(a,h)anthracene | 150 | | 86 | 18 |
| 206-44-0 | Fluoranthene | 1600 | F | 86 | 17 |
| 86-73-7 | Fluorene | 35 | J | 86 | 18 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 490 | | 86 | 31 |
| 90-12-0 | 1-Methylnaphthalene | 150 | J | 170 | 19 |
| 91-57-6 | 2-Methylnaphthalene | 160 | J | 170 | 31 |
| 91-20-3 | Naphthalene | 150 | J | 170 | 19 |
| 85-01-8 | Phenanthrene | 700 | | 34 | 17 |
| 129-00-0 | Pyrene | 1300 | F | 86 | 16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 82 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22013.D
Lab Smp Id: 680-87545-A-1-A Client Smp ID: CV0240A-CS
Inj Date : 22-FEB-2013 15:03
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-1-a
Misc Info : 680-87545-A-1-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 13
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 4.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.420 | Weight Extracted |
| M | 9.502 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1458935 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1129139 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2157900 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 66496 | 2.04097 | 585.0246 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2857532 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2864527 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 20031 | 0.52739 | 151.1706 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 14222 | 0.56135 | 160.9055 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 12252 | 0.53098 | 152.1994 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 14263 | 0.31331 | 89.8079 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 4419 | 0.12349 | 35.3969 |
| 11 Phenanthrene | 178 | 5.862 | 5.863 | (1.003) | 152377 | 2.44206 | 699.9935 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 30161 | 0.49425 | 141.6720 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 16571 | 0.30548 | 87.5627 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 379405 | 5.55236 | 1591.5329 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 345310 | 4.49669 | 1288.9340 |
| 17 Benzo(a)anthracene | 228 | 7.786 | 7.792 | (0.998) | 212965 | 2.58221 | 740.1667 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 255144 | 3.09131 | 886.0957 |
| 20 Benzo(b)fluoranthene | 252 | 8.651 | 8.657 | (0.960) | 319899 | 4.27325 | 1224.8887(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 119636 | 1.55785 | 446.5437(QMH) |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 188473 | 2.59197 | 742.9630 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 116480 | 1.70284 | 488.1019(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.239 | 10.257 | (1.136) | 35541 | 0.53119 | 152.2605 |
| 26 Benzo(g,h,i)perylene | 276 | 10.597 | 10.610 | (1.175) | 145730 | 2.03659 | 583.7696 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1CB22013.D

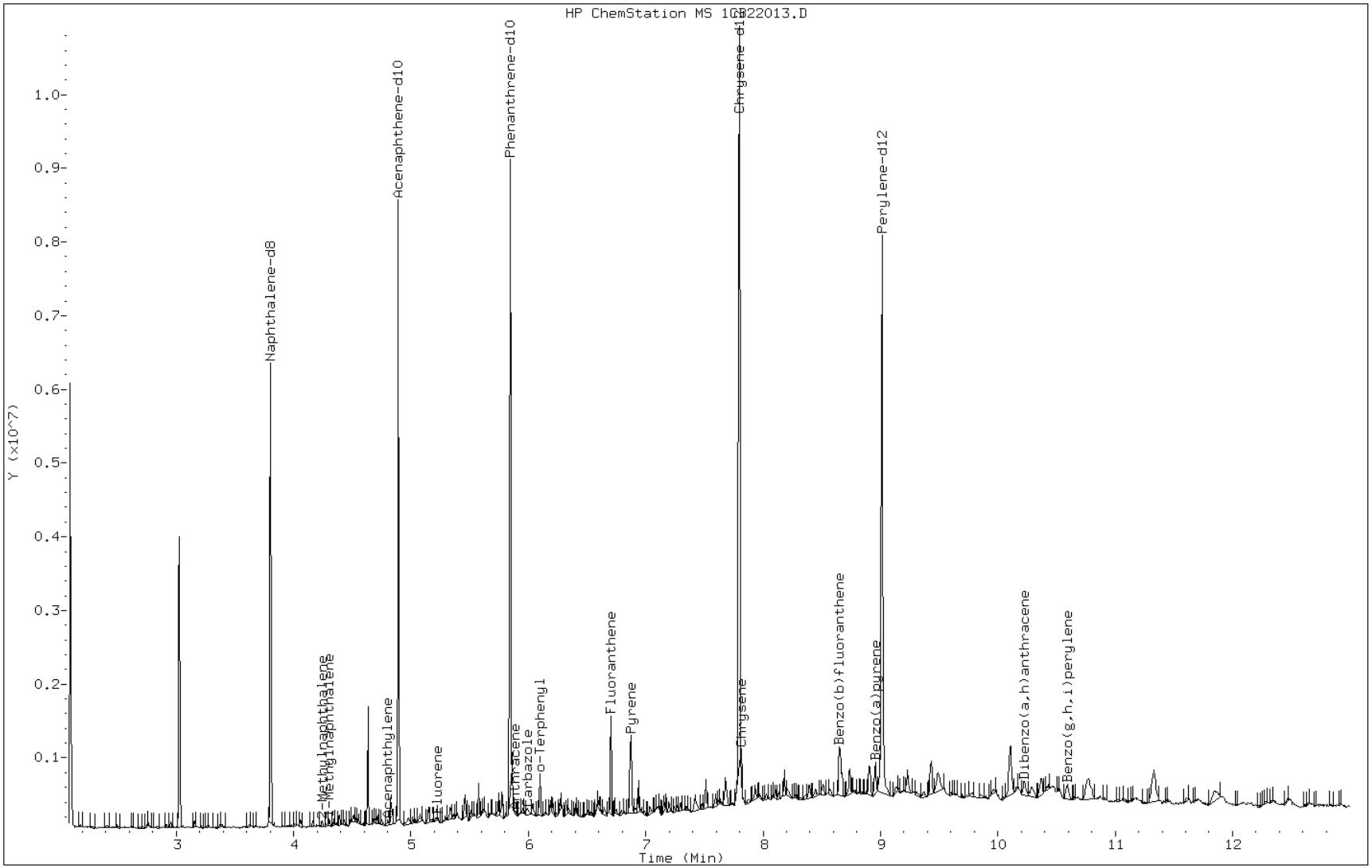
Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a

Operator: SCC



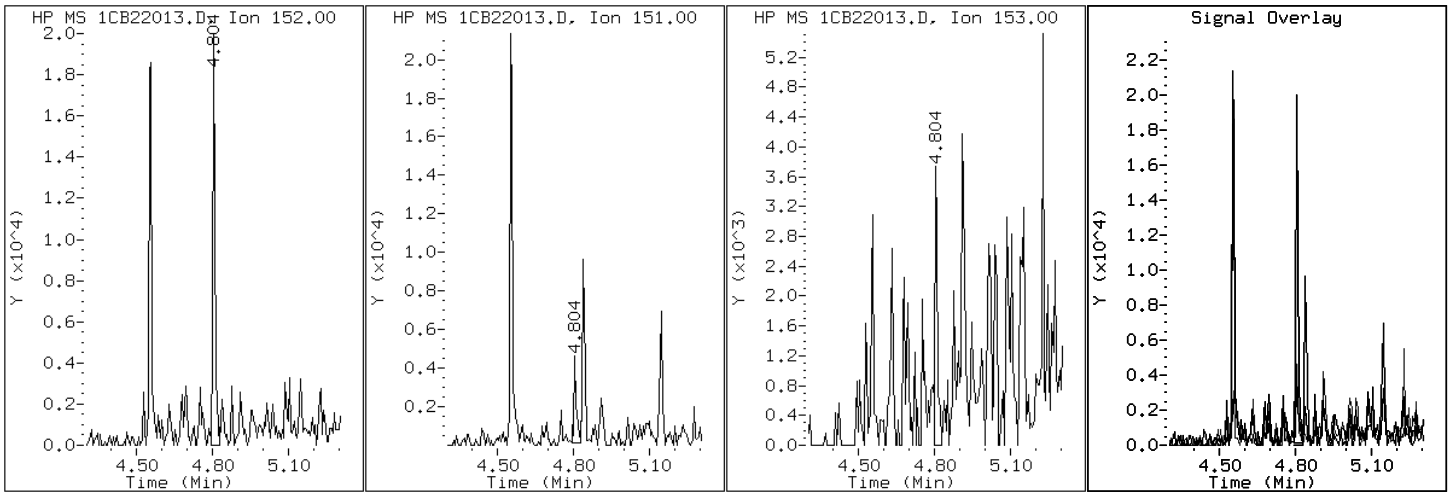
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

5 Acenaphthylene



Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

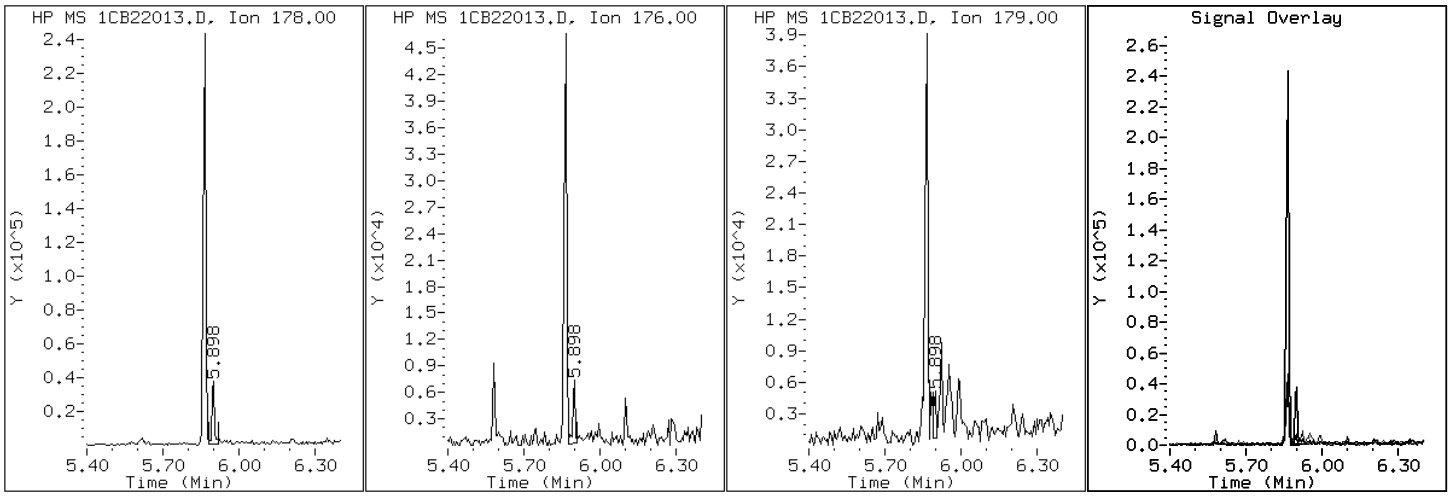
Client ID: CV0240A-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a

Operator: SCC

12 Anthracene



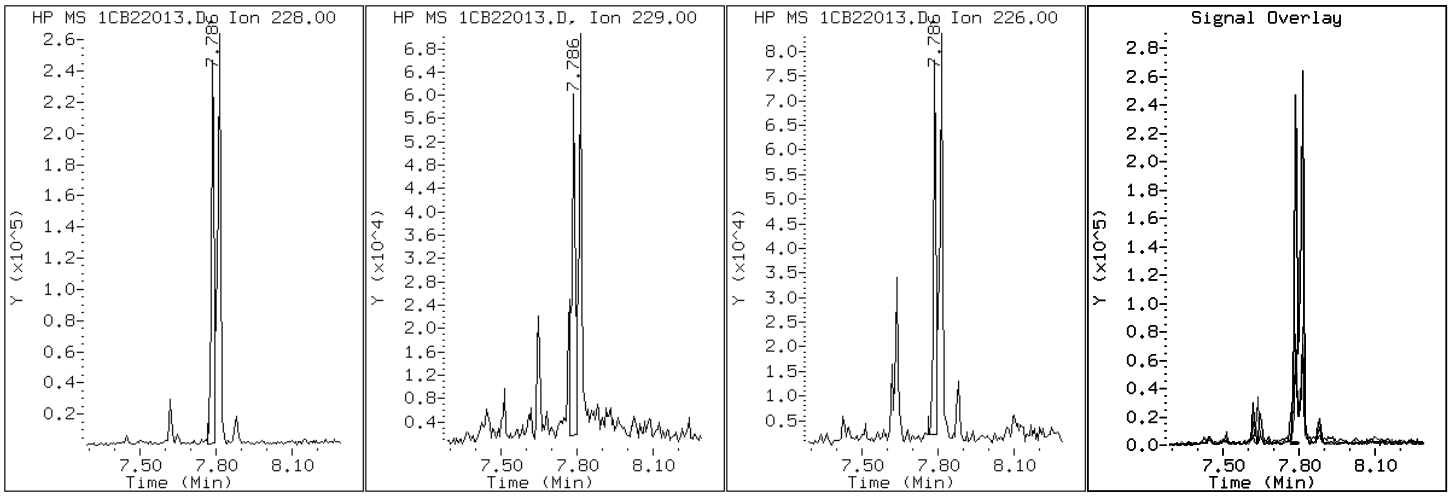
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

17 Benzo(a)anthracene



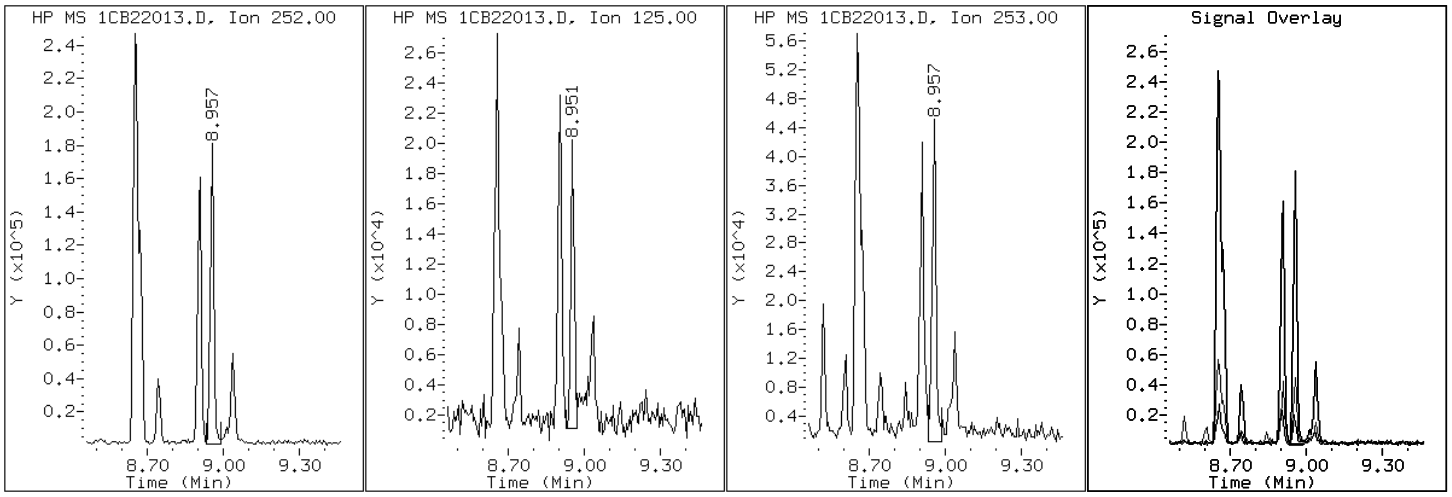
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

22 Benzo(a)pyrene



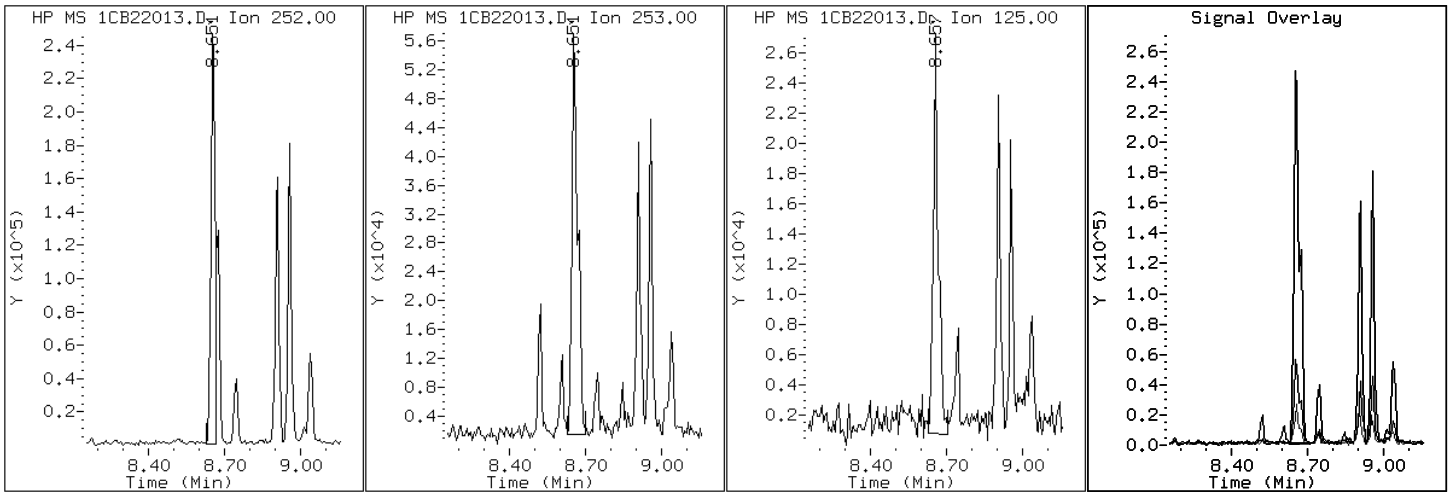
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

20 Benzo(b)fluoranthene



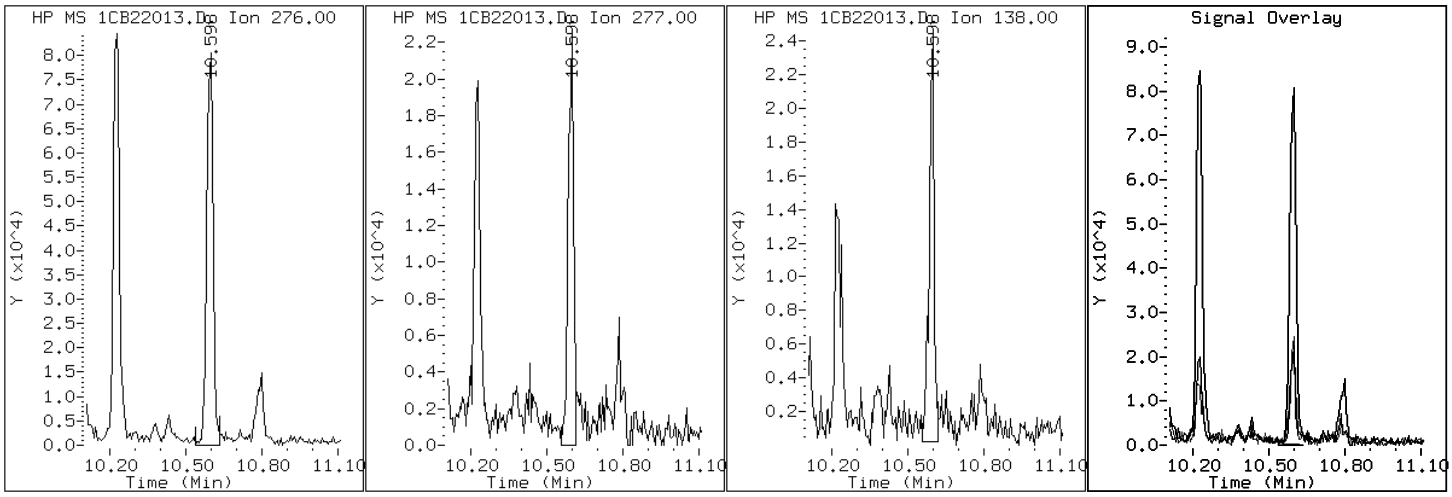
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

26 Benzo(g,h,i)perylene



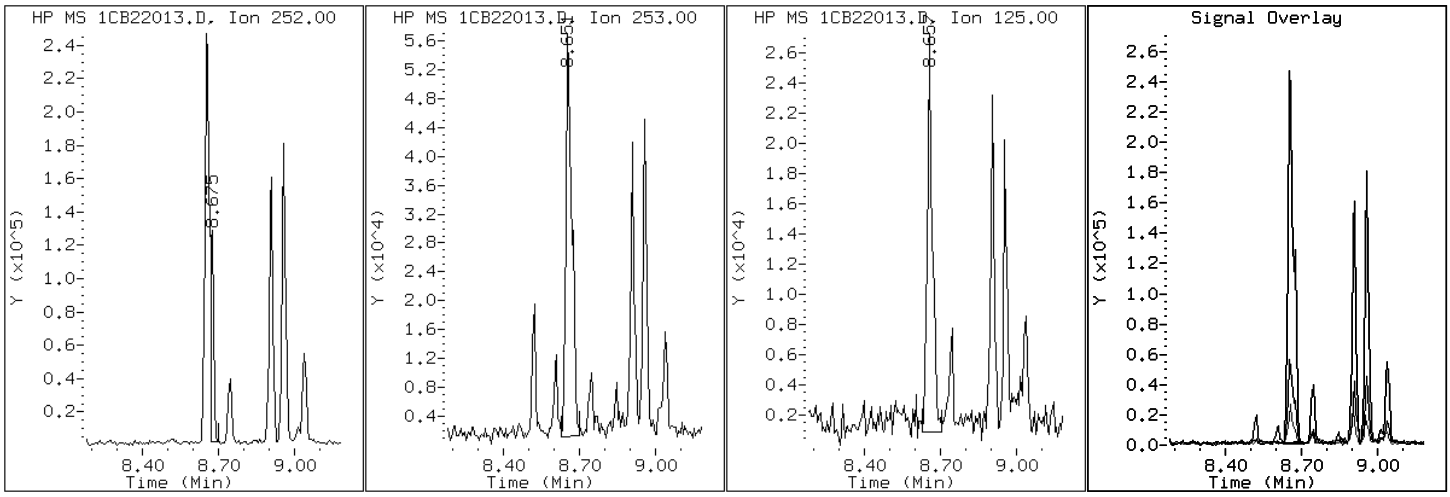
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

21 Benzo(k)fluoranthene



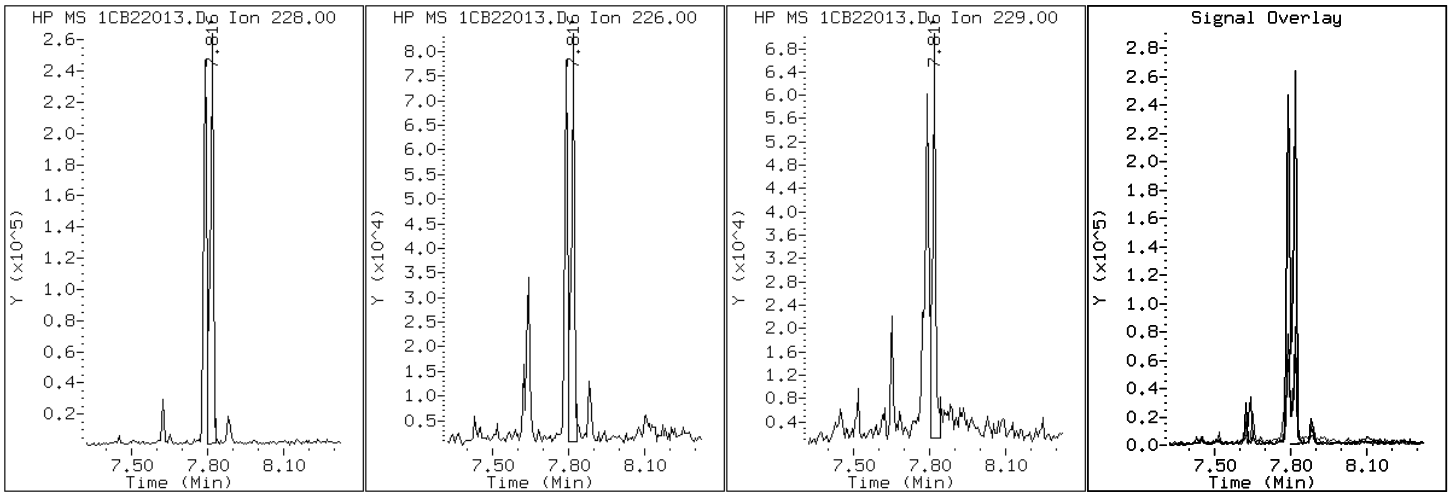
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

19 Chrysene



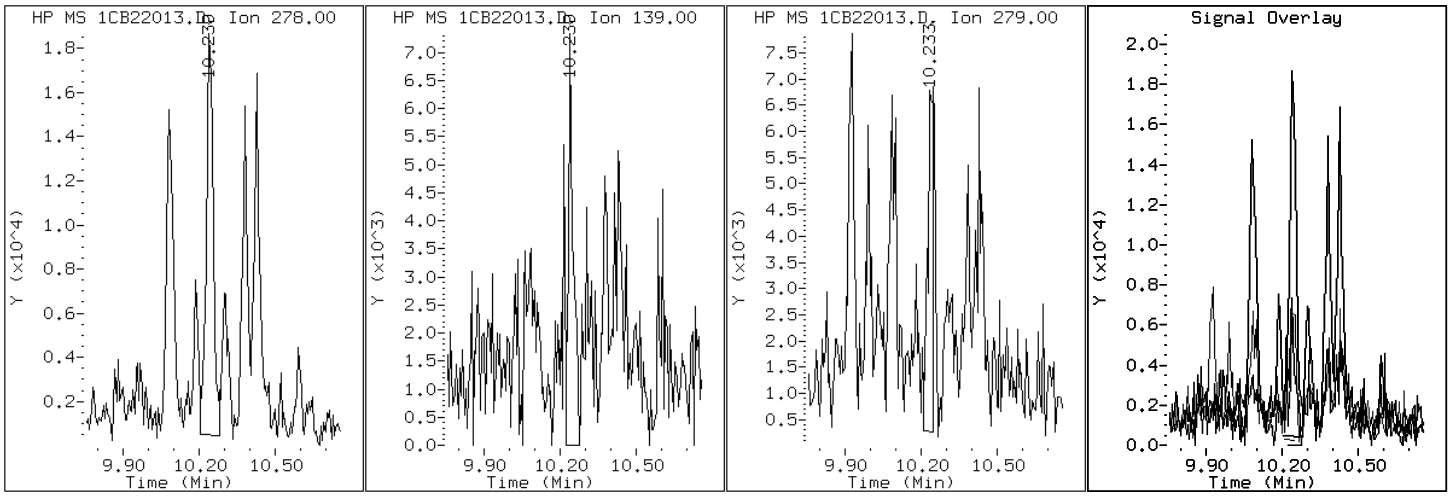
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

25 Dibenzo(a,h)anthracene



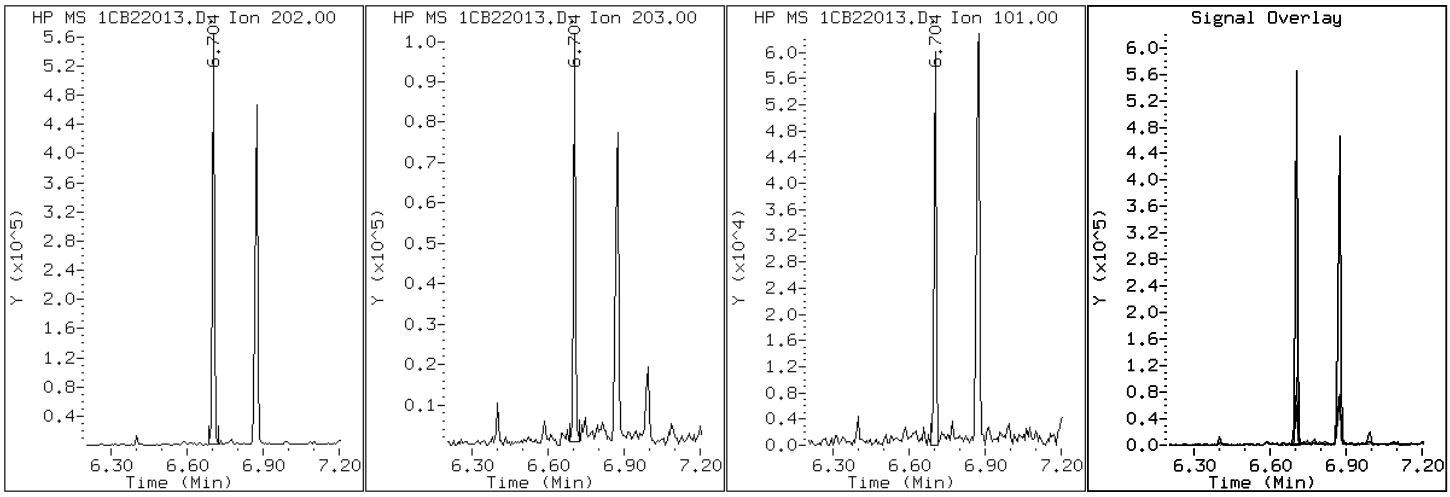
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

15 Fluoranthene



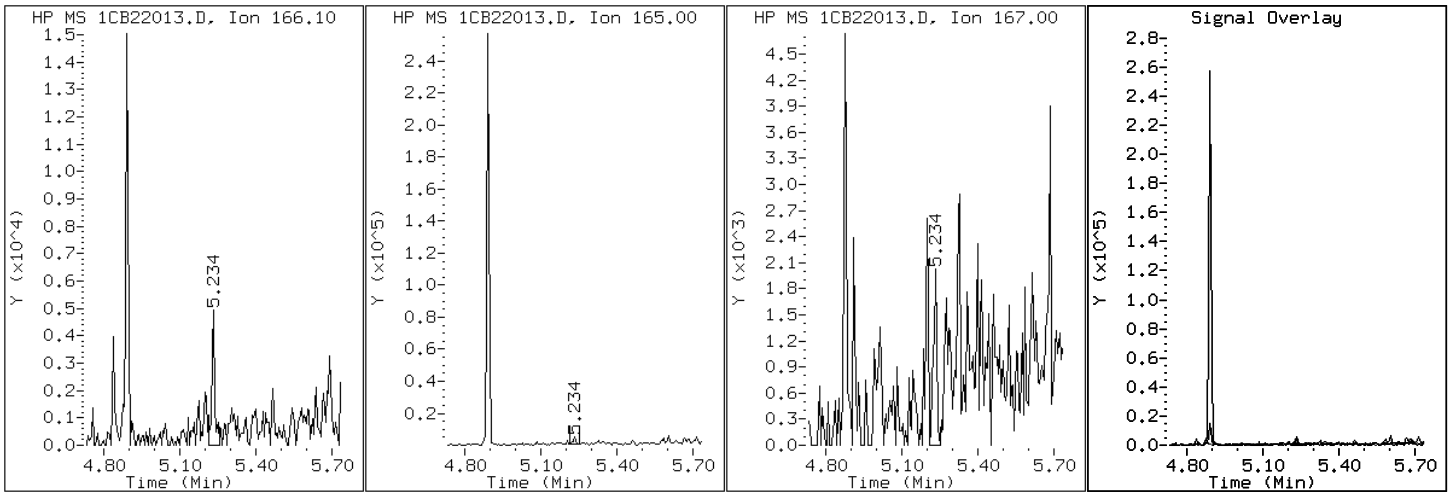
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

9 Fluorene



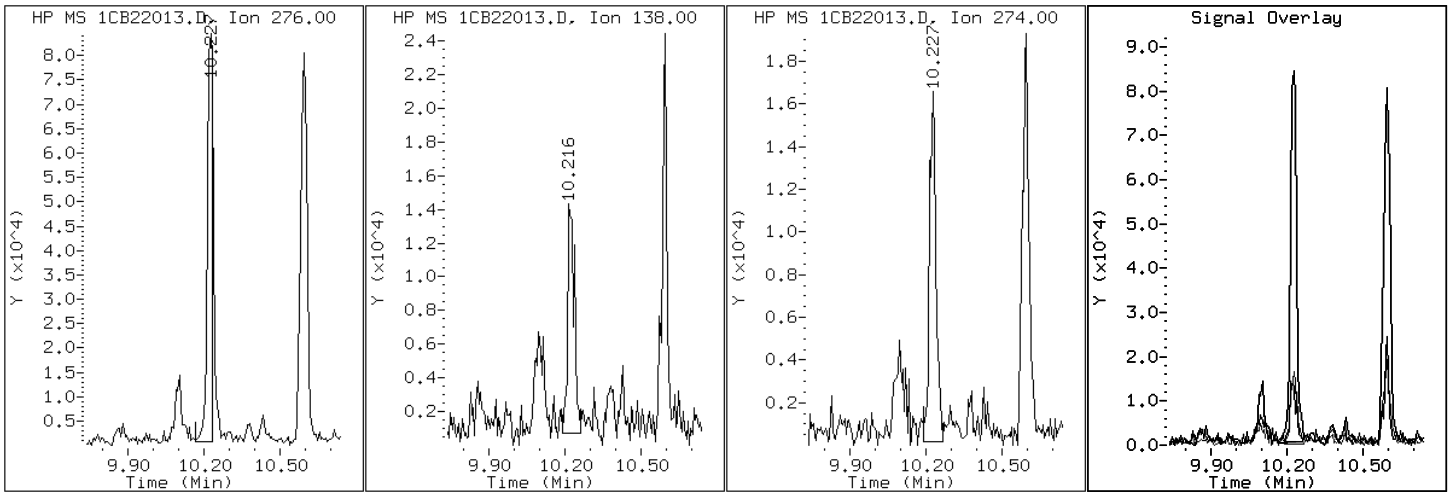
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

24 Indeno(1,2,3-cd)pyrene



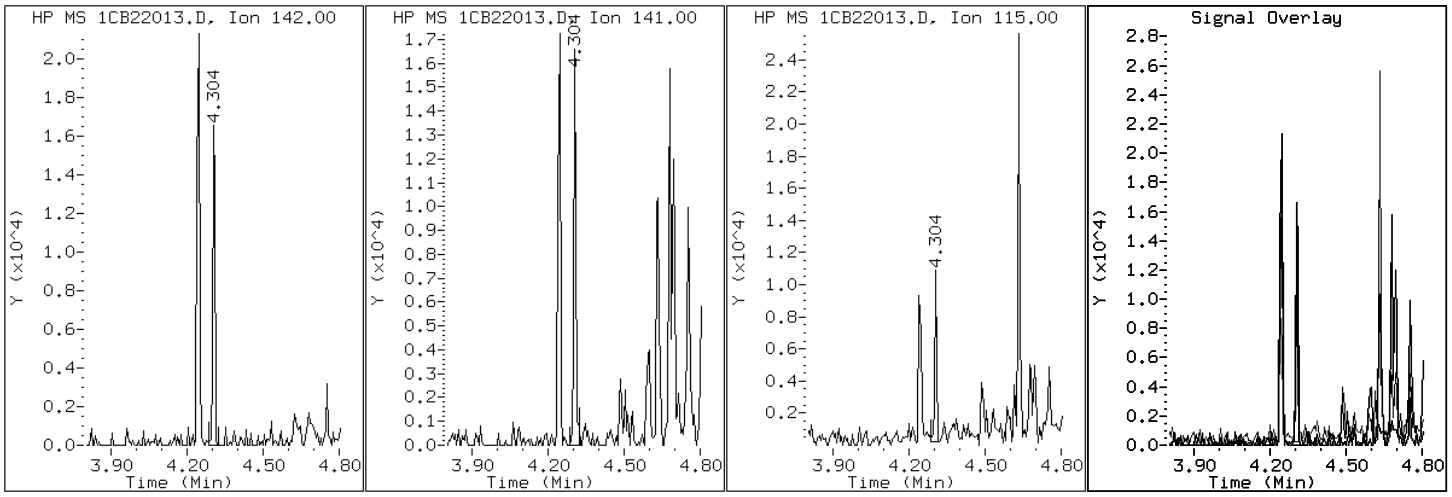
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

4 1-Methylnaphthalene



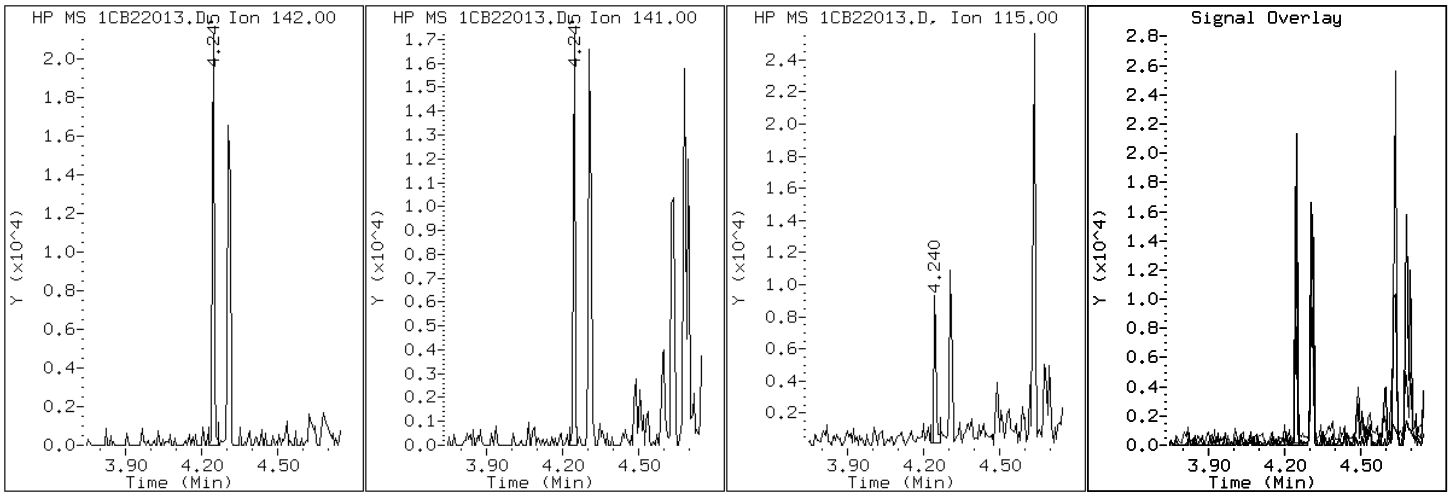
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

3 2-Methylnaphthalene



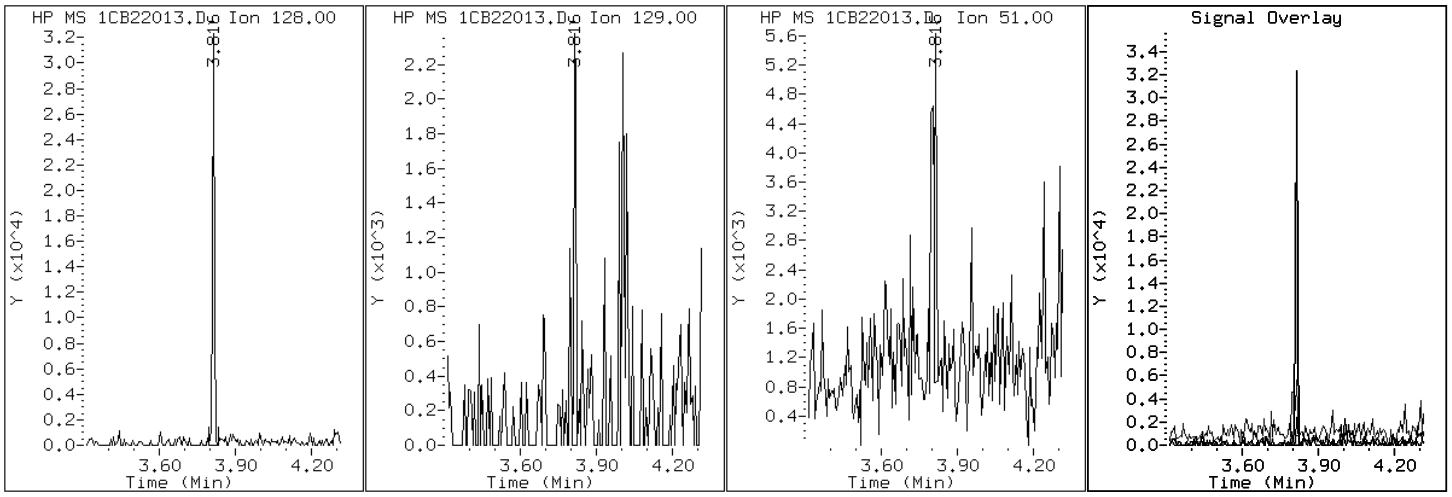
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

2 Naphthalene



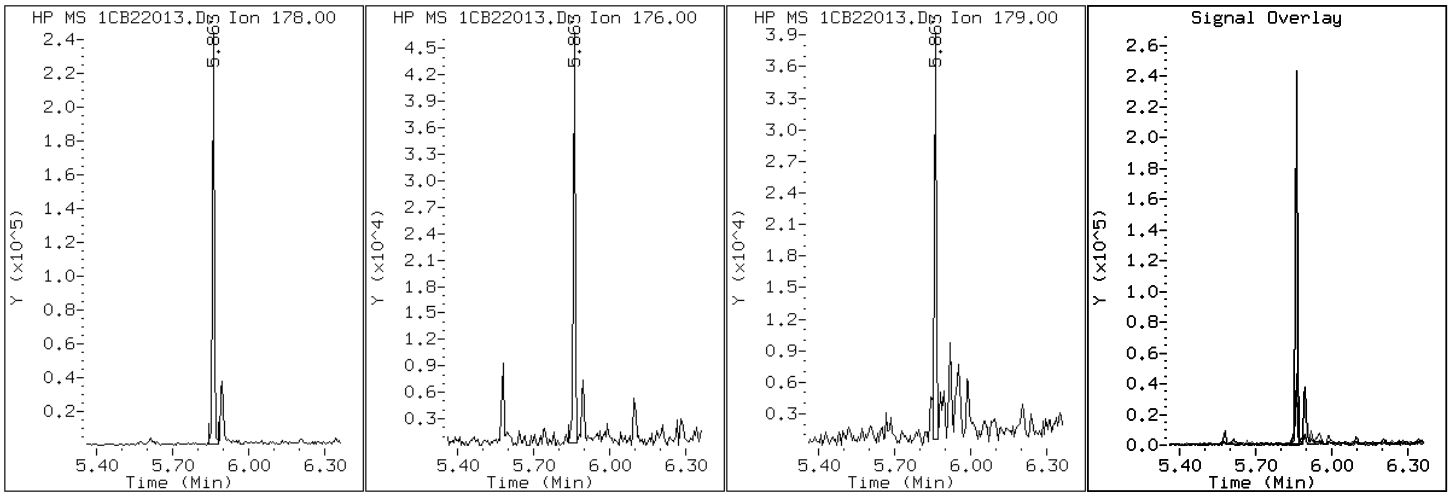
Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

Client ID: CV0240A-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a Operator: SCC

11 Phenanthrene



Data File: 1CB22013.D

Date: 22-FEB-2013 15:03

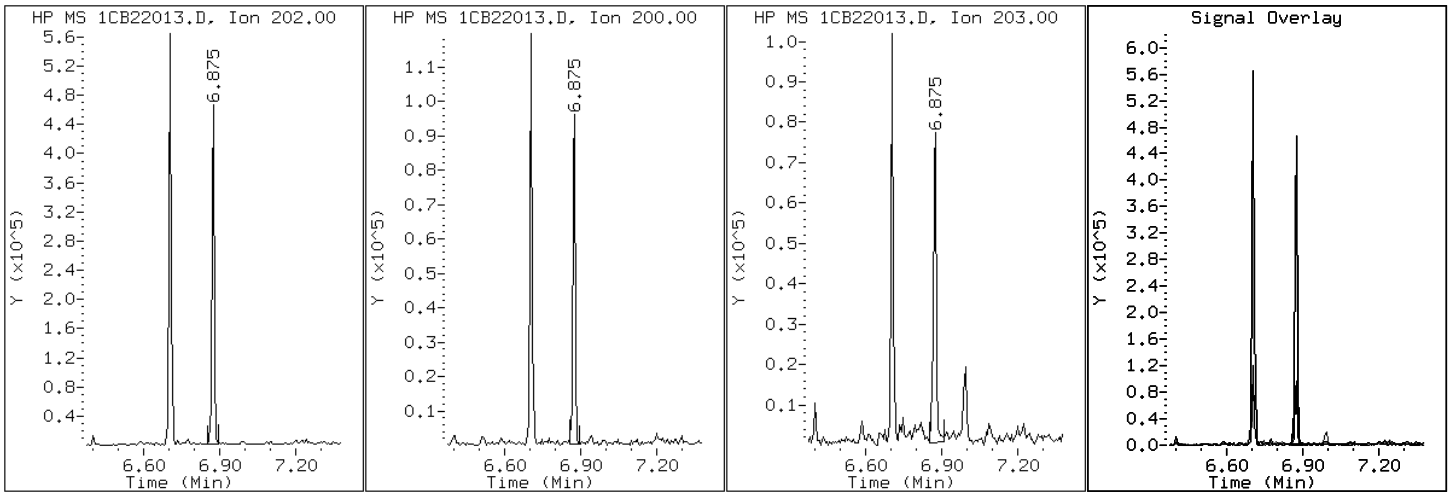
Client ID: CV0240A-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22013.D
Inj. Date and Time: 22-FEB-2013 15:03
Instrument ID: BSMC5973.i
Client ID: CV0240A-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

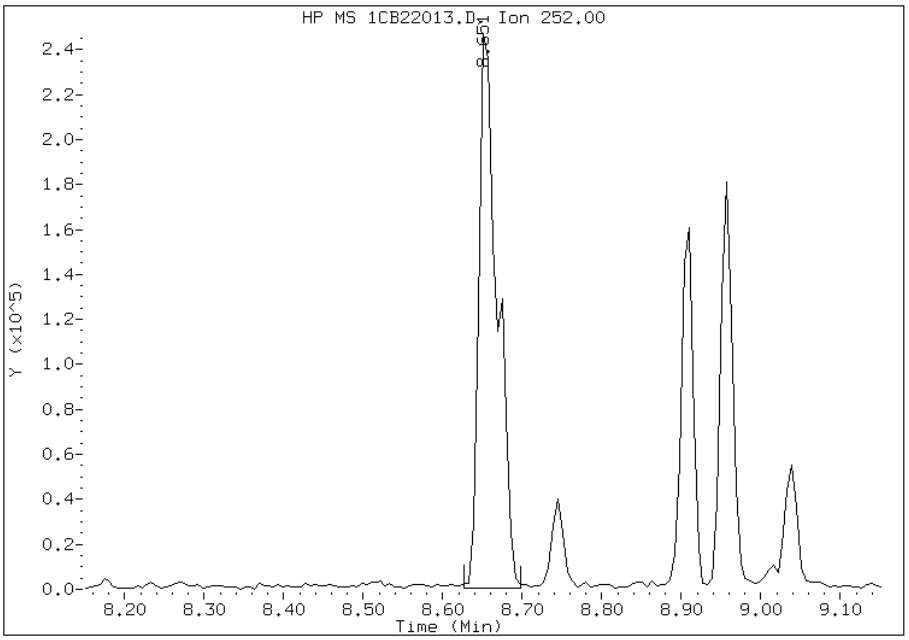
Processing Integration Results

RT: 8.65

Response: 403173

Amount: 5

Conc: 1544



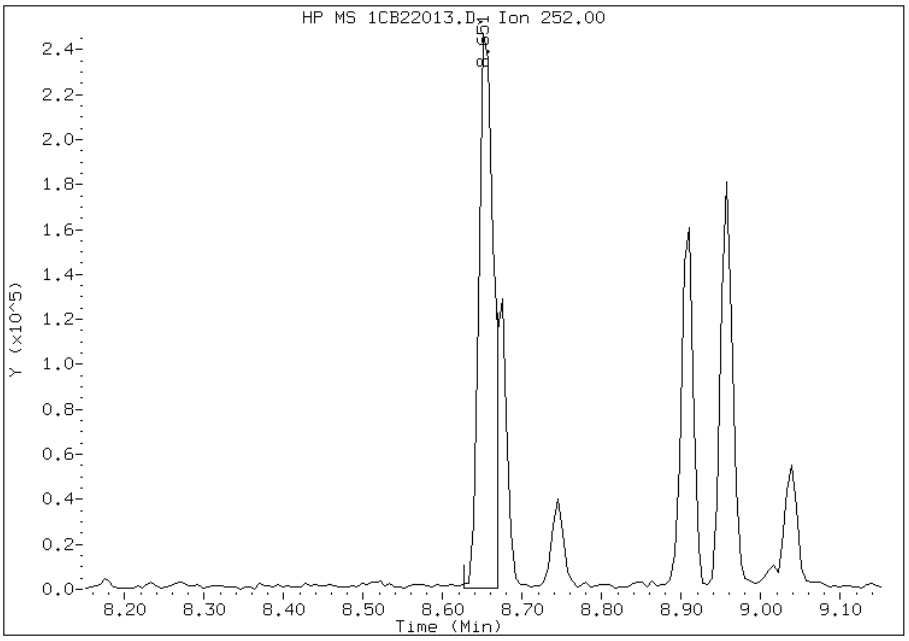

Manual Integration Results

RT: 8.65

Response: 319899

Amount: 4

Conc: 1225




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:51
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22013.D
Inj. Date and Time: 22-FEB-2013 15:03
Instrument ID: BSMC5973.i
Client ID: CV0240A-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

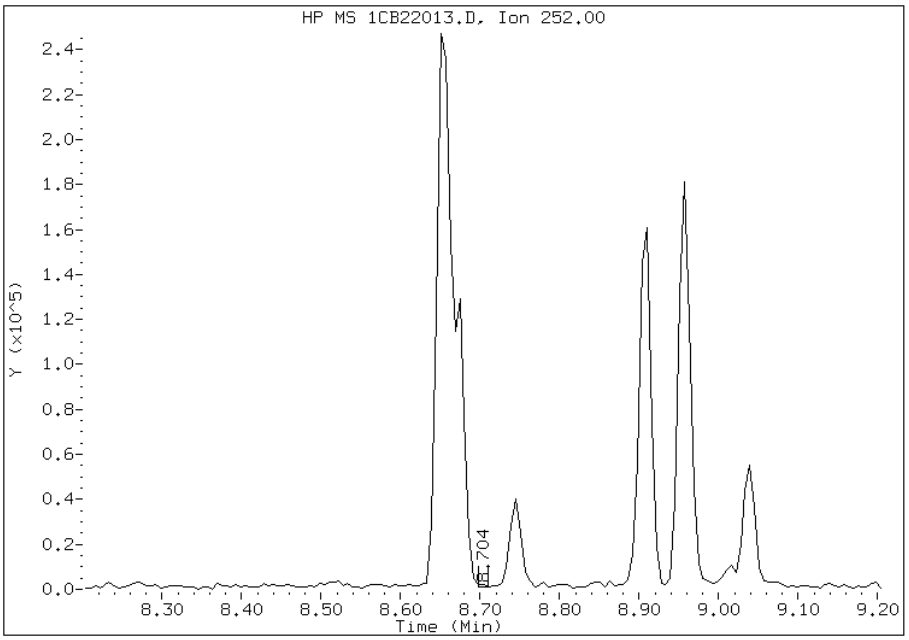
Processing Integration Results

RT: 8.70

Response: 965

Amount: 0

Conc: 4



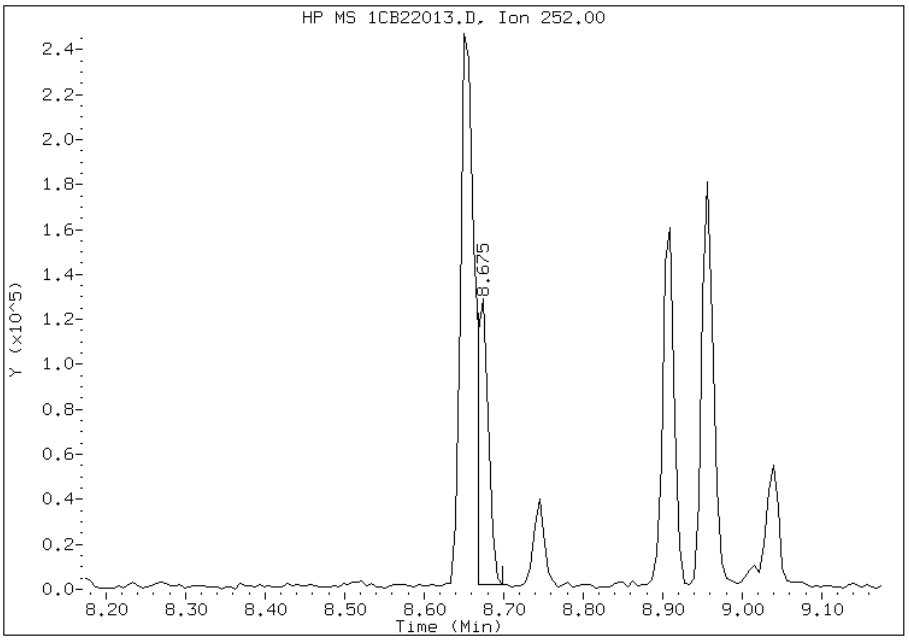

Manual Integration Results

RT: 8.67

Response: 119636

Amount: 2

Conc: 447




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:51
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22013.D
Inj. Date and Time: 22-FEB-2013 15:03
Instrument ID: BSMC5973.i
Client ID: CV0240A-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

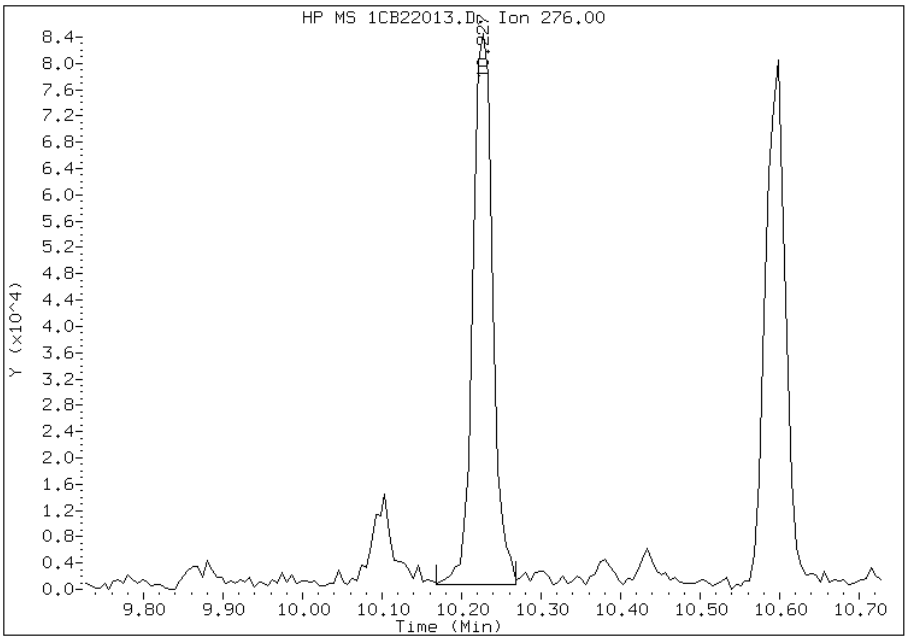
Processing Integration Results

RT: 10.23

Response: 144834

Amount: 2

Conc: 607



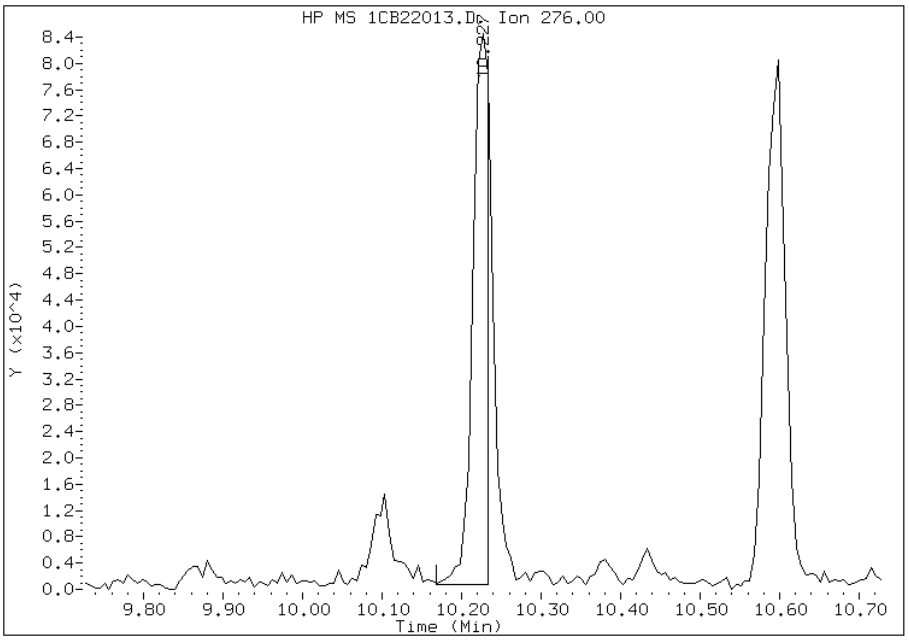

Manual Integration Results

RT: 10.23

Response: 116480

Amount: 2

Conc: 488




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:51
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: CV0240B-CS | Lab Sample ID: 680-87545-2

Matrix: Solid | Lab File ID: 1AB22041.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:58

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 15.01(g) | Date Analyzed: 02/22/2013 20:42

Con. Extract Vol.: 1(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 7.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 430 | U | 430 | 86 |
| 208-96-8 | Acenaphthylene | 57 | J | 170 | 22 |
| 120-12-7 | Anthracene | 130 | | 36 | 18 |
| 56-55-3 | Benzo[a]anthracene | 560 | | 34 | 17 |
| 50-32-8 | Benzo[a]pyrene | 380 | | 45 | 22 |
| 205-99-2 | Benzo[b]fluoranthene | 620 | | 53 | 26 |
| 191-24-2 | Benzo[g,h,i]perylene | 350 | | 86 | 19 |
| 207-08-9 | Benzo[k]fluoranthene | 210 | | 34 | 16 |
| 218-01-9 | Chrysene | 570 | | 39 | 19 |
| 53-70-3 | Dibenz(a,h)anthracene | 130 | | 86 | 18 |
| 206-44-0 | Fluoranthene | 820 | | 86 | 17 |
| 86-73-7 | Fluorene | 37 | J | 86 | 18 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 330 | | 86 | 31 |
| 90-12-0 | 1-Methylnaphthalene | 120 | J | 170 | 19 |
| 91-57-6 | 2-Methylnaphthalene | 120 | J | 170 | 31 |
| 91-20-3 | Naphthalene | 98 | J | 170 | 19 |
| 85-01-8 | Phenanthrene | 570 | | 34 | 17 |
| 129-00-0 | Pyrene | 770 | | 86 | 16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 44 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22041.D
Lab Smp Id: 680-87545-A-2-A Client Smp ID: CV0240B-CS
Inj Date : 22-FEB-2013 20:42
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-2-a
Misc Info : 680-87545-A-2-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 41
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 4.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.010 | Weight Extracted |
| M | 7.209 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.402 | 2.397 | (1.000) | 916835 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.428 | 3.417 | (1.000) | 783002 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.368 | 4.352 | (1.000) | 1090606 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.641 | 4.635 | (1.062) | 17609 | 1.10962 | 318.6745 |
| * 18 Chrysene-d12 | 240 | 6.393 | 6.366 | (1.000) | 801874 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.493 | 7.456 | (1.000) | 1139342 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.413 | 2.402 | (1.004) | 7576 | 0.34293 | 98.4858 |
| 3 2-Methylnaphthalene | 141 | 2.814 | 2.808 | (1.171) | 4796 | 0.42052 | 120.7713 |
| 4 1-Methylnaphthalene | 142 | 2.867 | 2.861 | (1.193) | 5511 | 0.43393 | 124.6233 |
| 5 Acenaphthylene | 152 | 3.337 | 3.332 | (0.974) | 5775 | 0.19753 | 56.7292 |
| 9 Fluorene | 166 | 3.754 | 3.743 | (1.095) | 2772 | 0.13001 | 37.3378 |
| 11 Phenanthrene | 178 | 4.379 | 4.368 | (1.002) | 53451 | 1.97172 | 566.2661 |
| 12 Anthracene | 178 | 4.416 | 4.400 | (1.011) | 12226 | 0.46430 | 133.3441 |
| 13 Carbazole | 167 | 4.571 | 4.555 | (1.046) | 7131 | 0.30678 | 88.1043 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 5.244 | 5.228 | (1.201) | 76925 | 2.83804 | 815.0678 |
| 16 Pyrene | 202 | 5.410 | 5.394 | (0.846) | 62731 | 2.66713 | 765.9813 |
| 17 Benzo(a)anthracene | 228 | 6.382 | 6.355 | (0.998) | 46689 | 1.94998 | 560.0215 |
| 19 Chrysene | 228 | 6.403 | 6.387 | (1.002) | 42300 | 1.97536 | 567.3110 |
| 20 Benzo(b)fluoranthene | 252 | 7.205 | 7.178 | (0.962) | 61884 | 2.14263 | 615.3499(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.215 | 7.199 | (0.963) | 21617 | 0.74394 | 213.6559(QMH) |
| 22 Benzo(a)pyrene | 252 | 7.434 | 7.408 | (0.992) | 35450 | 1.34026 | 384.9153(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.214 | 8.177 | (1.096) | 26047 | 1.14786 | 329.6580(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.225 | 8.193 | (1.098) | 11031 | 0.46649 | 133.9735(H) |
| 26 Benzo(g,h,i)perylene | 276 | 8.423 | 8.385 | (1.124) | 29315 | 1.21461 | 348.8292(H) |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22041.D

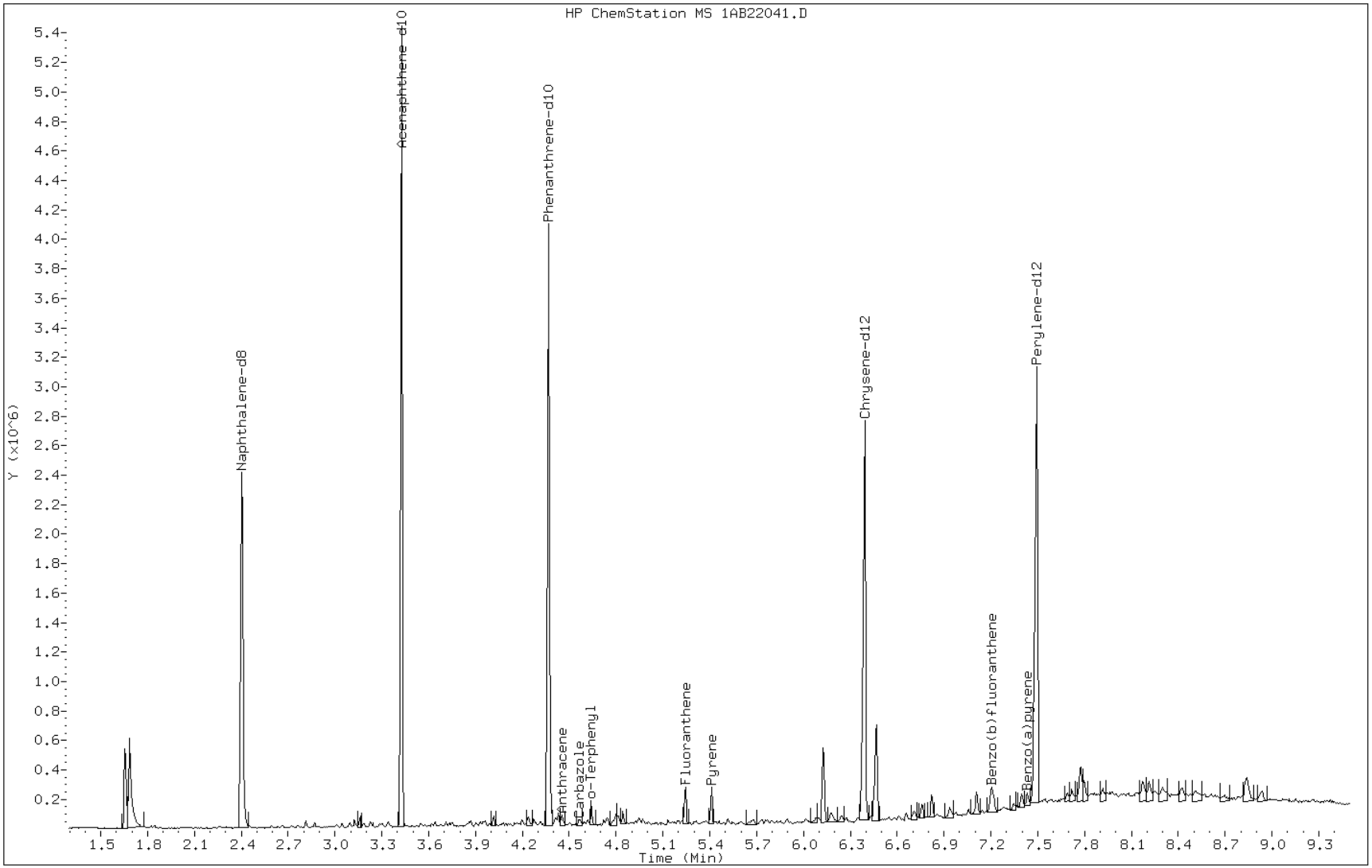
Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a

Operator: SCC



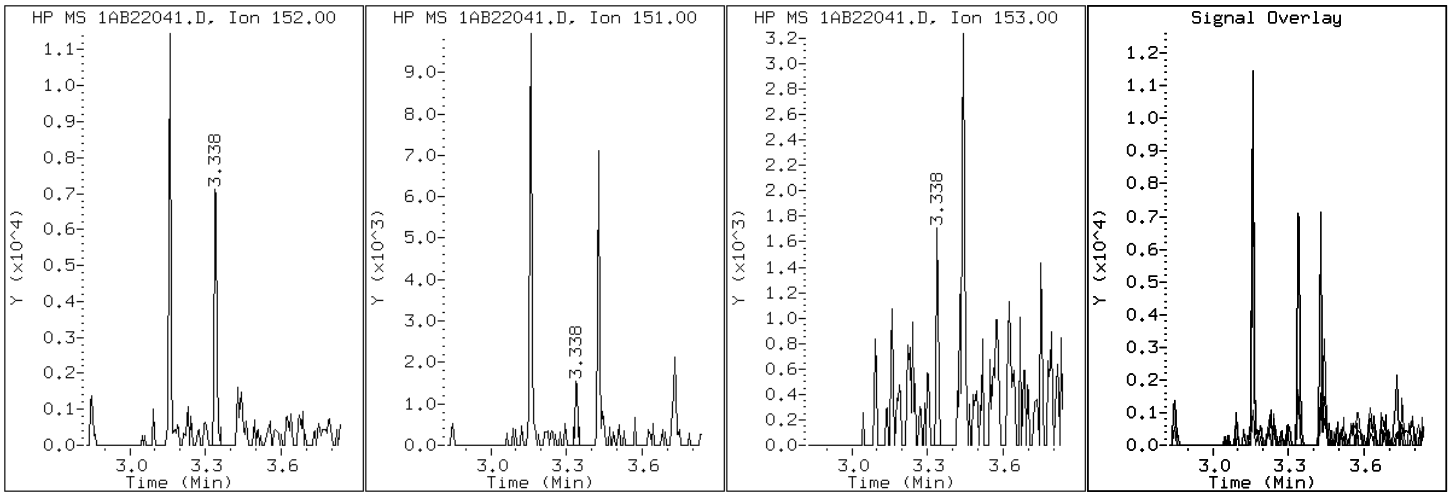
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

5 Acenaphthylene



Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

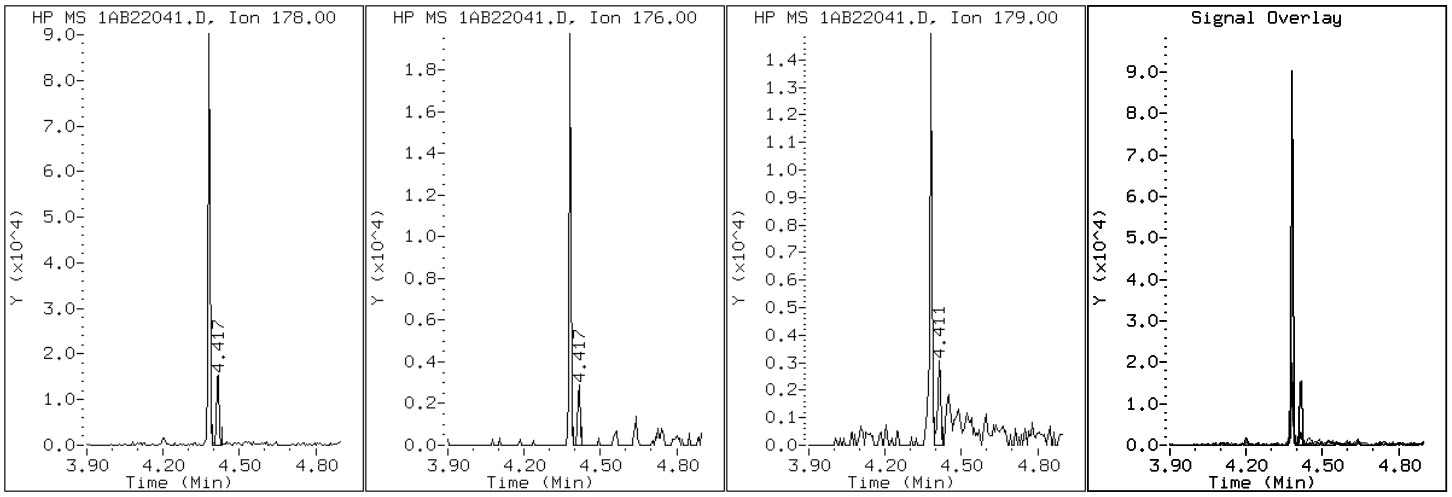
Client ID: CV0240B-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a

Operator: SCC

12 Anthracene



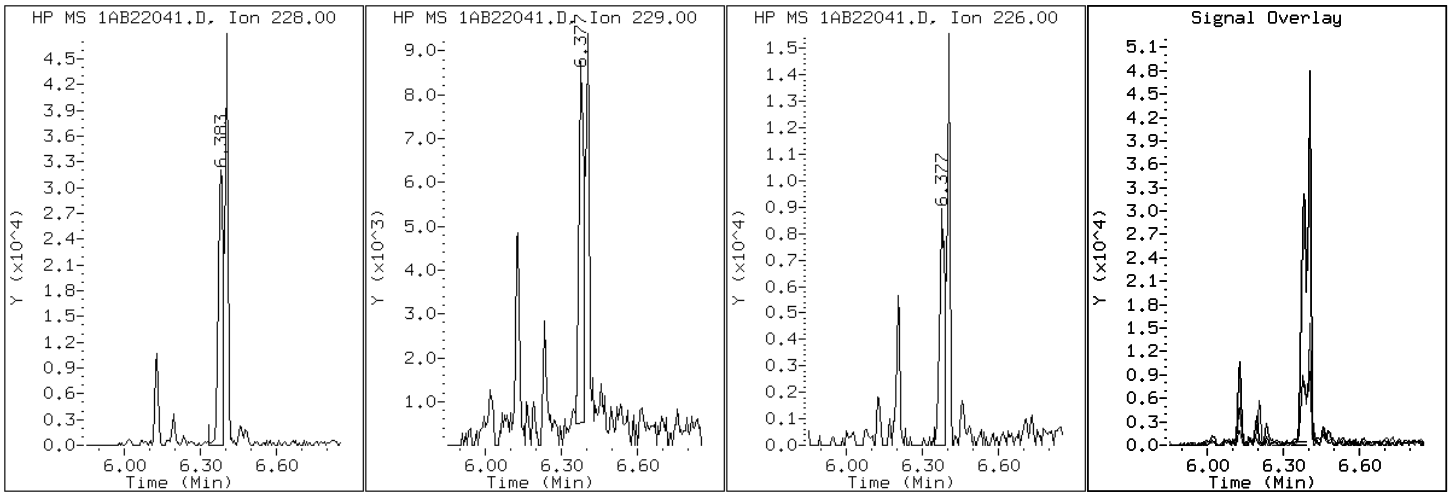
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

17 Benzo(a)anthracene



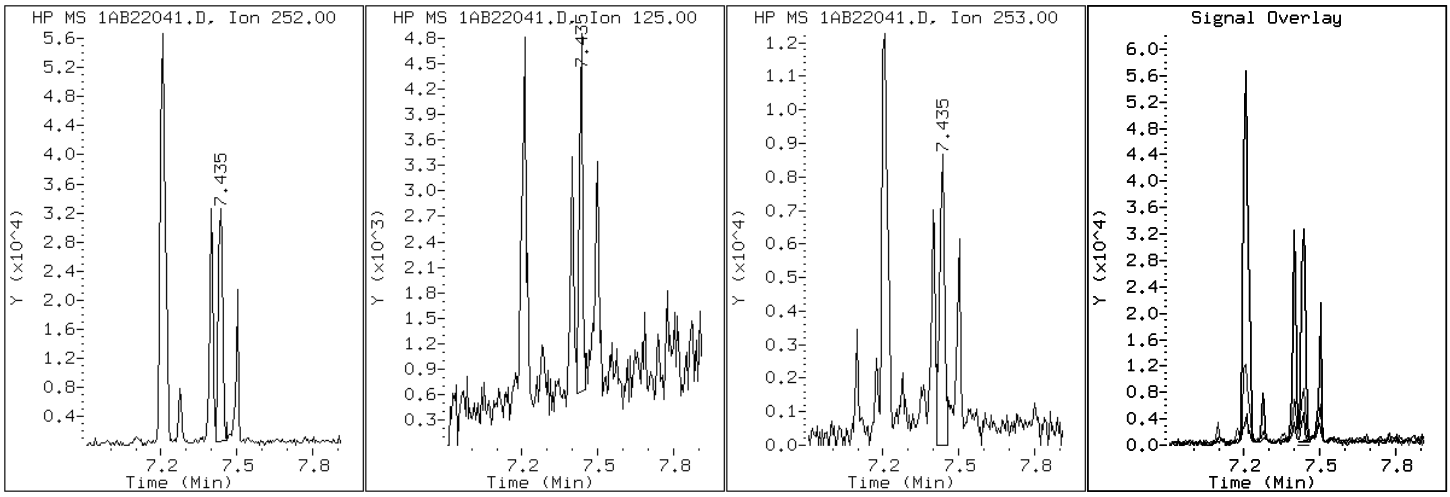
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

22 Benzo(a)pyrene



Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

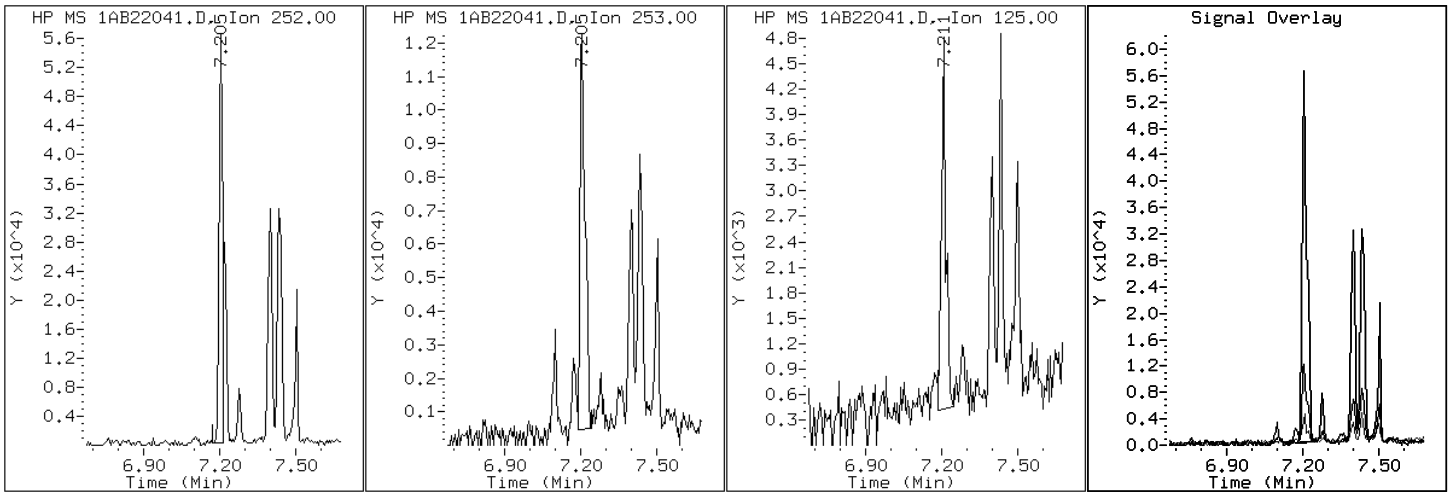
Client ID: CV0240B-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a

Operator: SCC

20 Benzo(b)fluoranthene



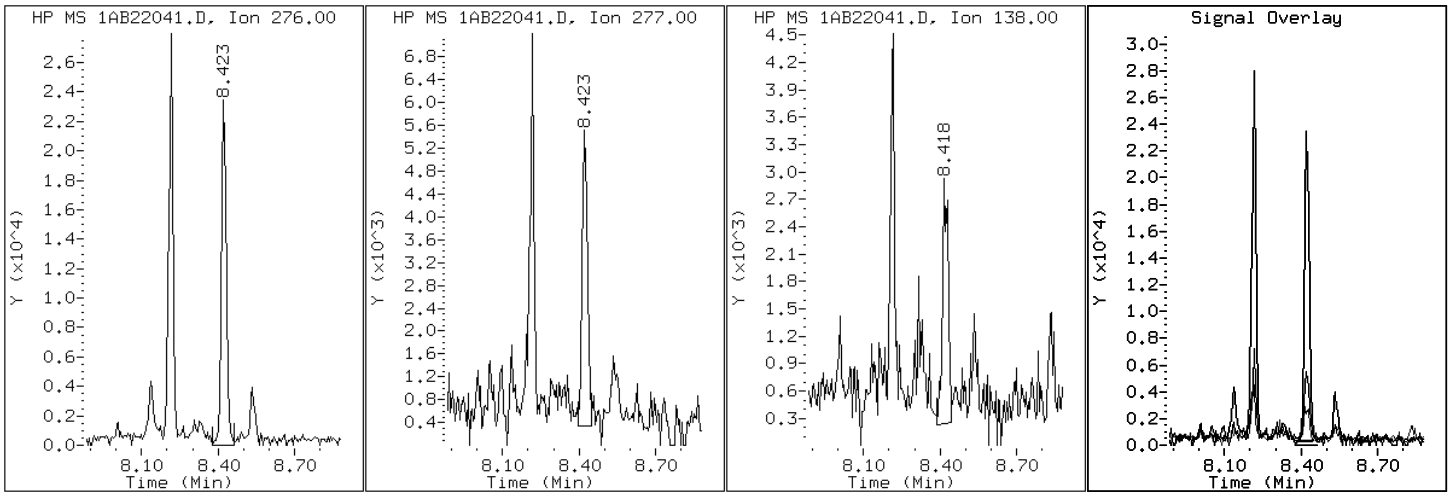
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

26 Benzo(g,h,i)perylene



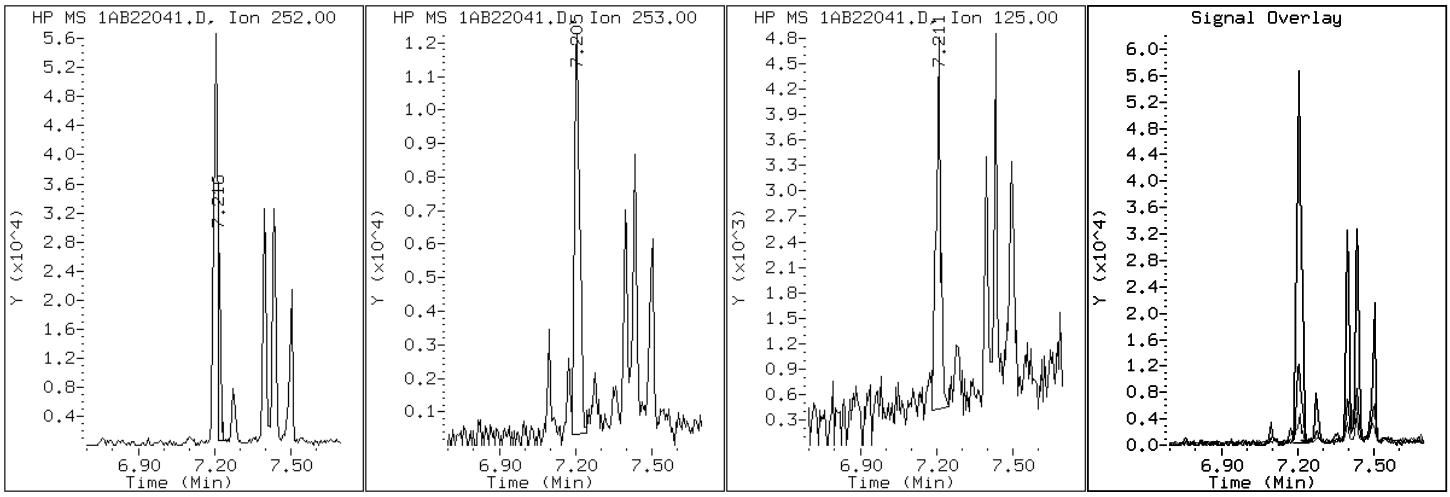
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

21 Benzo(k)fluoranthene



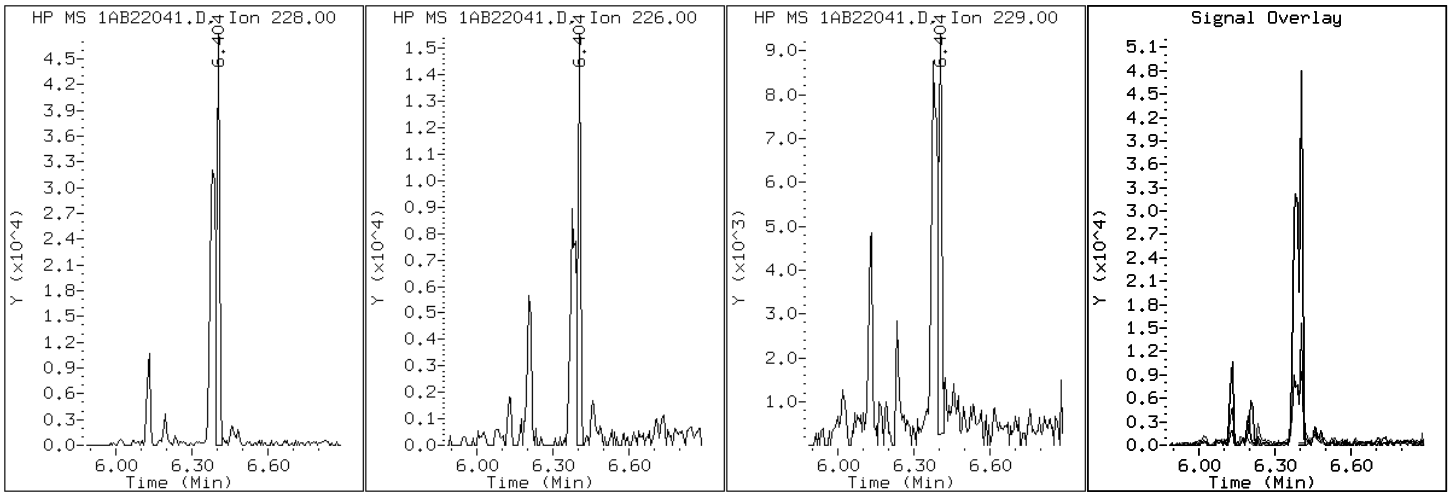
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

19 Chrysene



Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

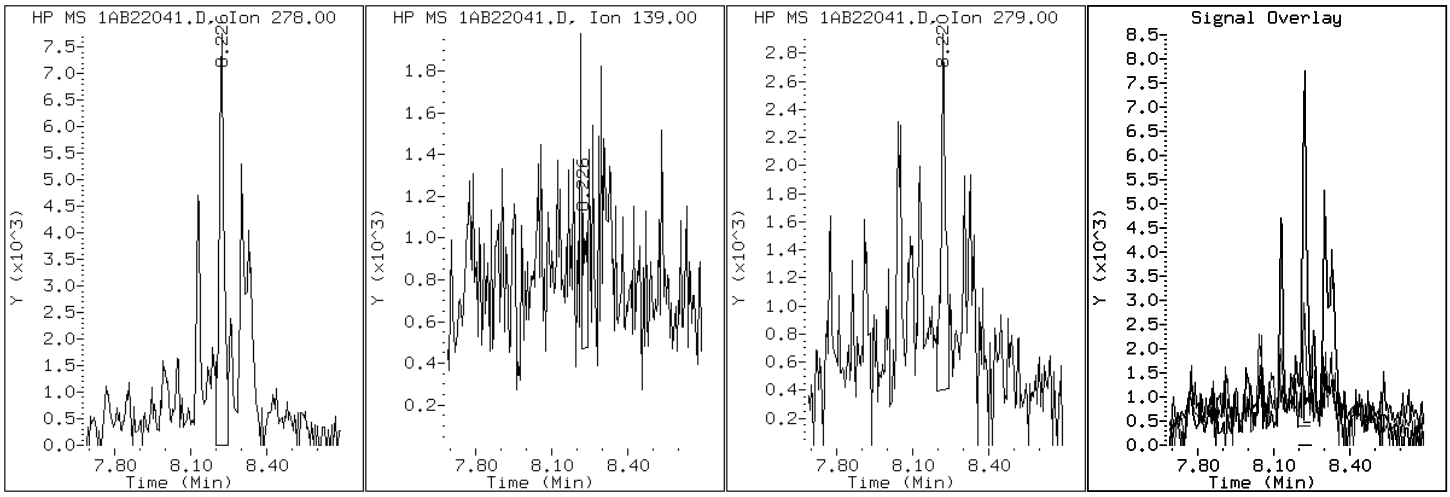
Client ID: CV0240B-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a

Operator: SCC

25 Dibenzo(a,h)anthracene



Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

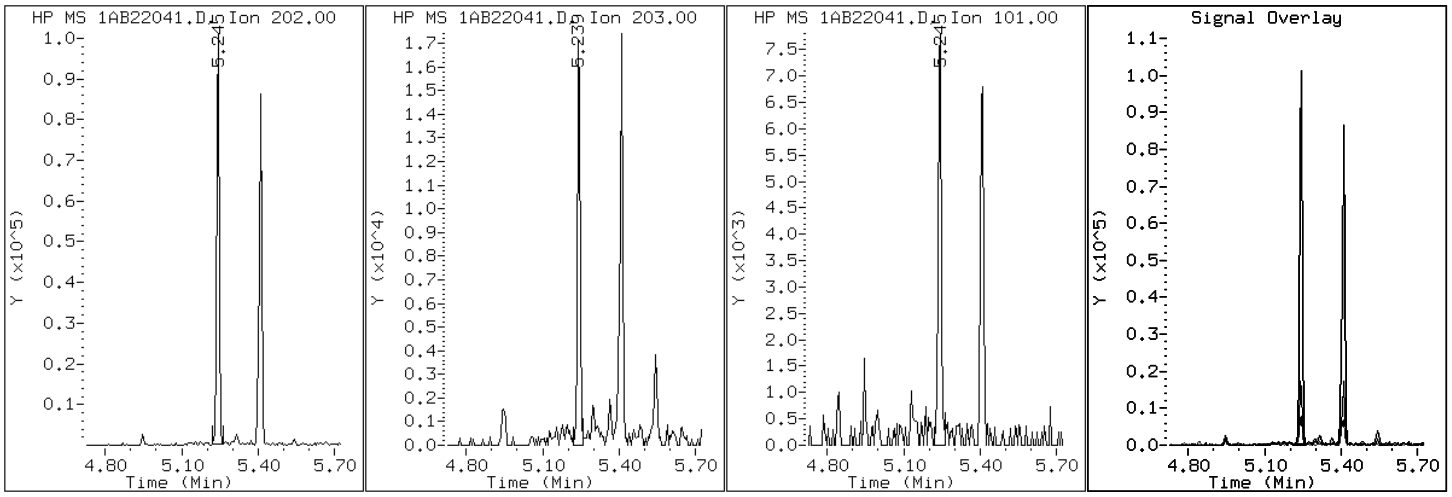
Client ID: CV0240B-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a

Operator: SCC

15 Fluoranthene



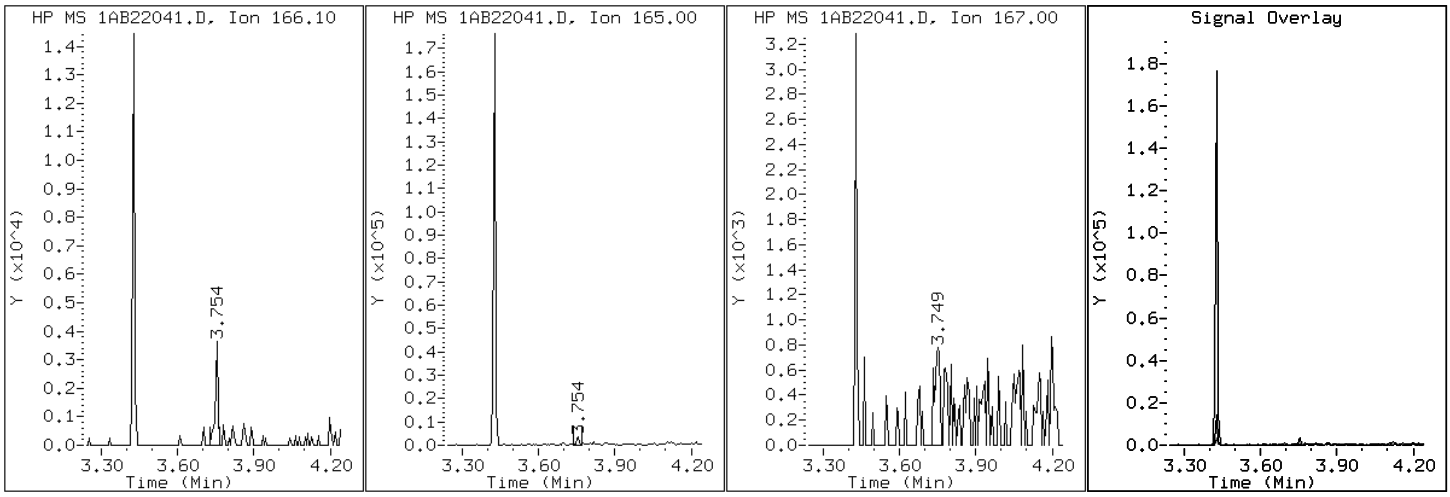
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

9 Fluorene



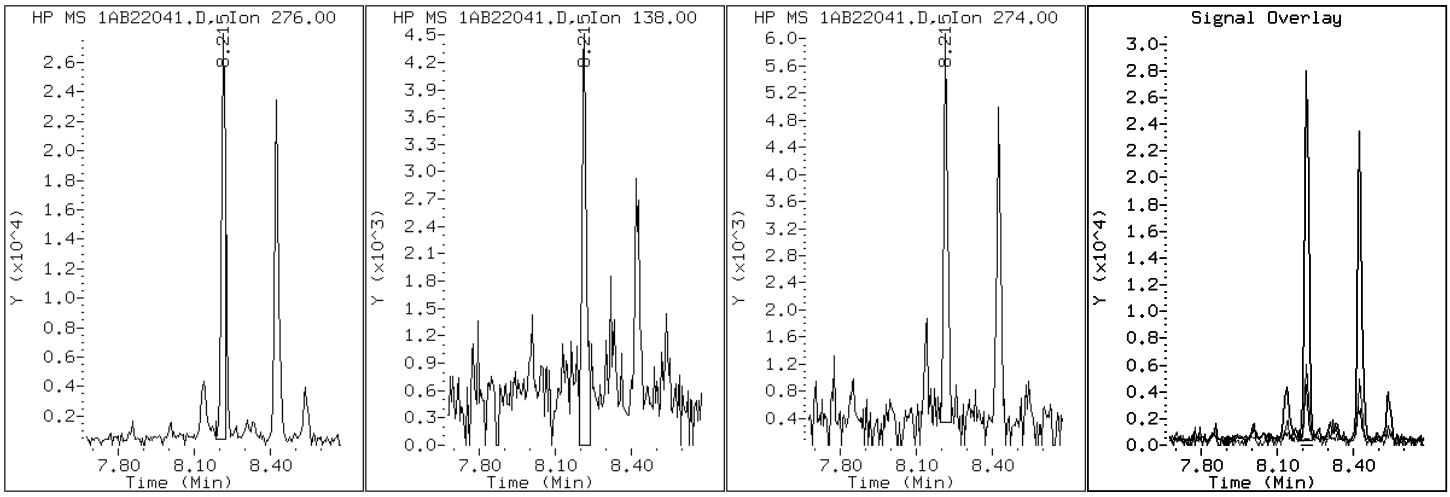
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

24 Indeno(1,2,3-cd)pyrene



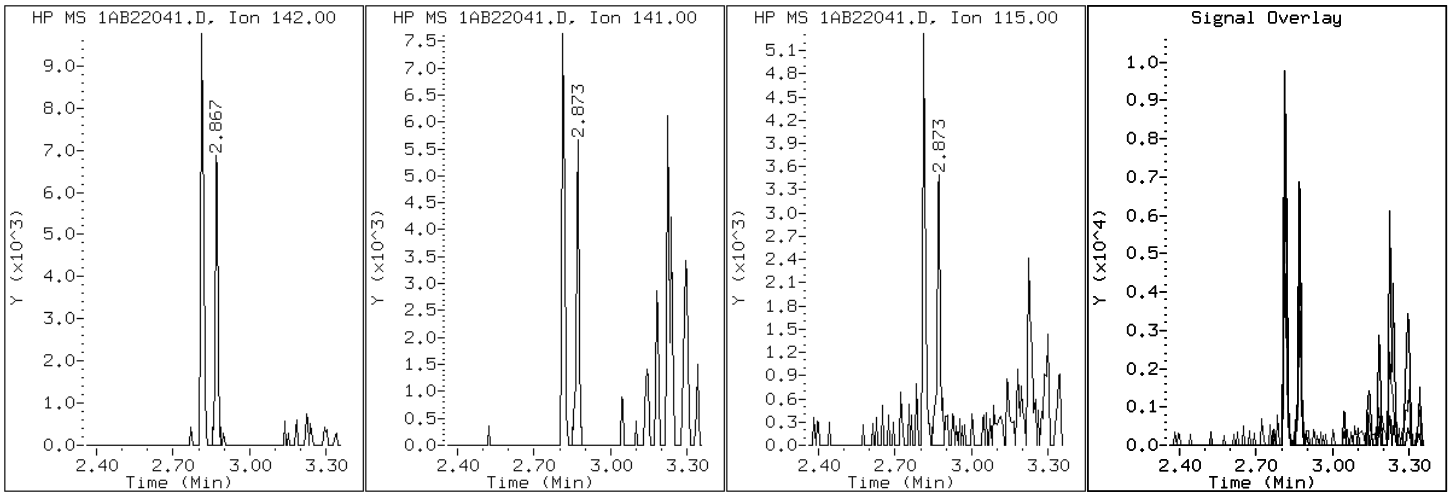
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

4 1-Methylnaphthalene



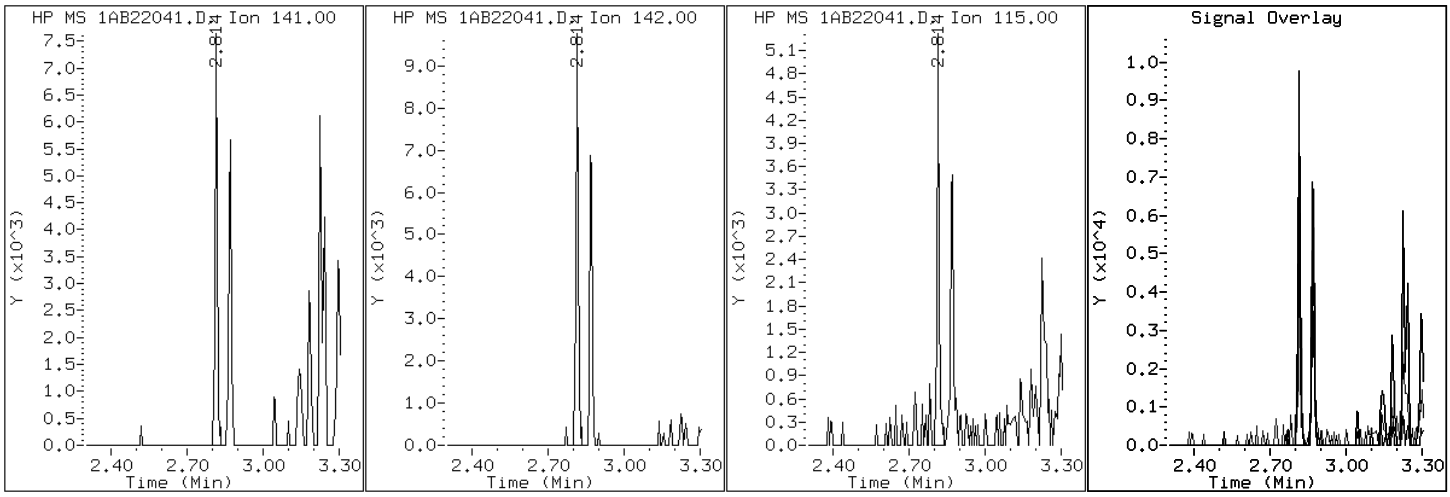
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

3 2-Methylnaphthalene



Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

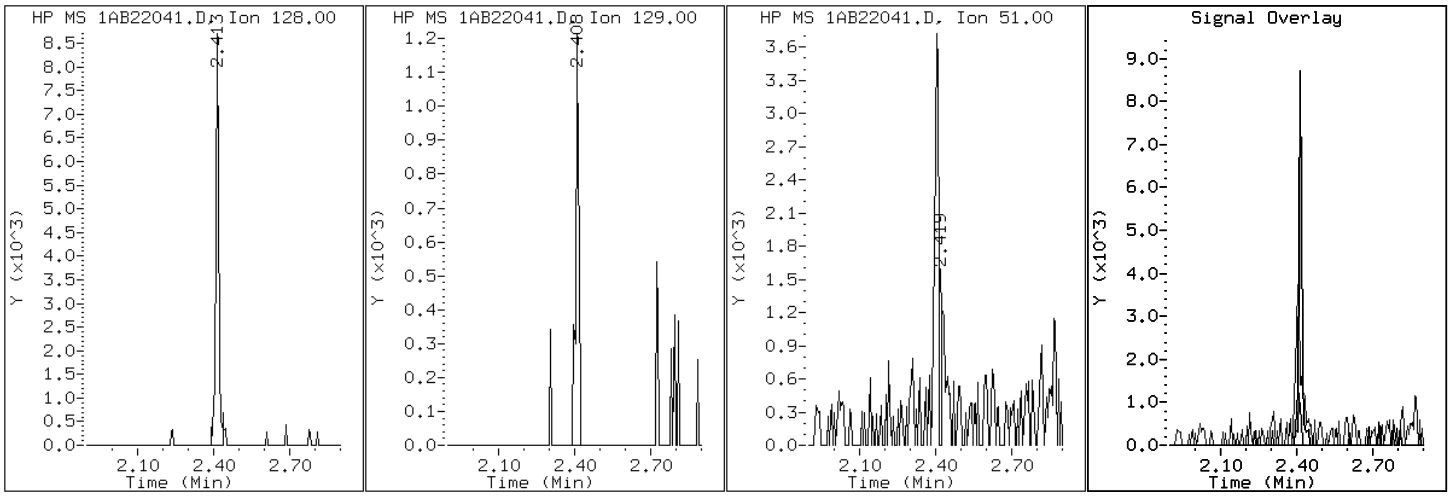
Client ID: CV0240B-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a

Operator: SCC

2 Naphthalene



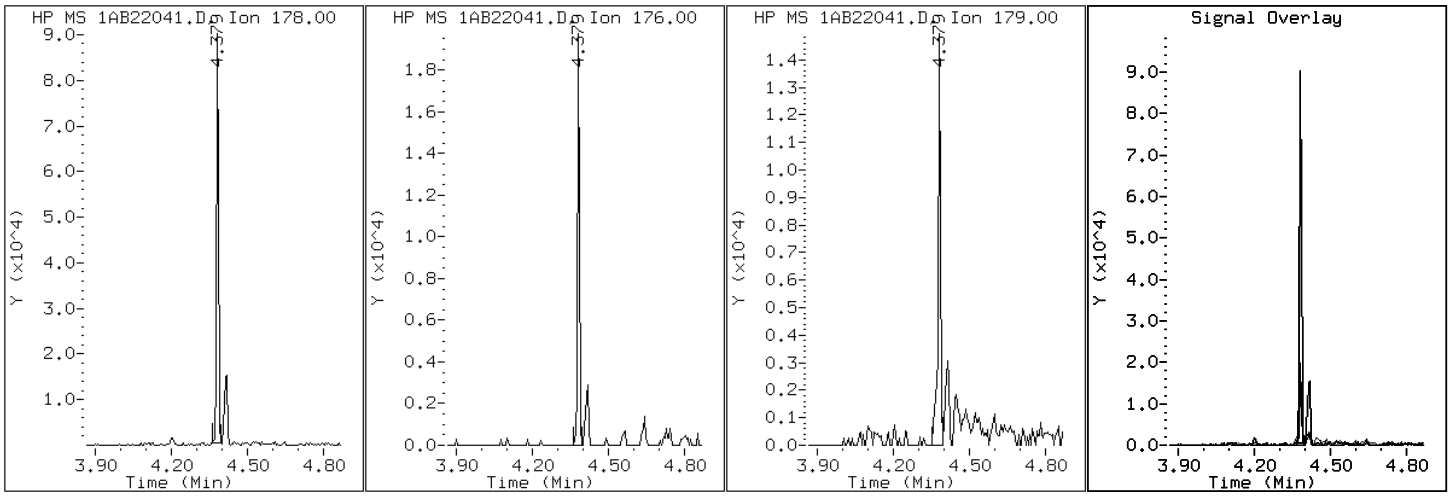
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

11 Phenanthrene



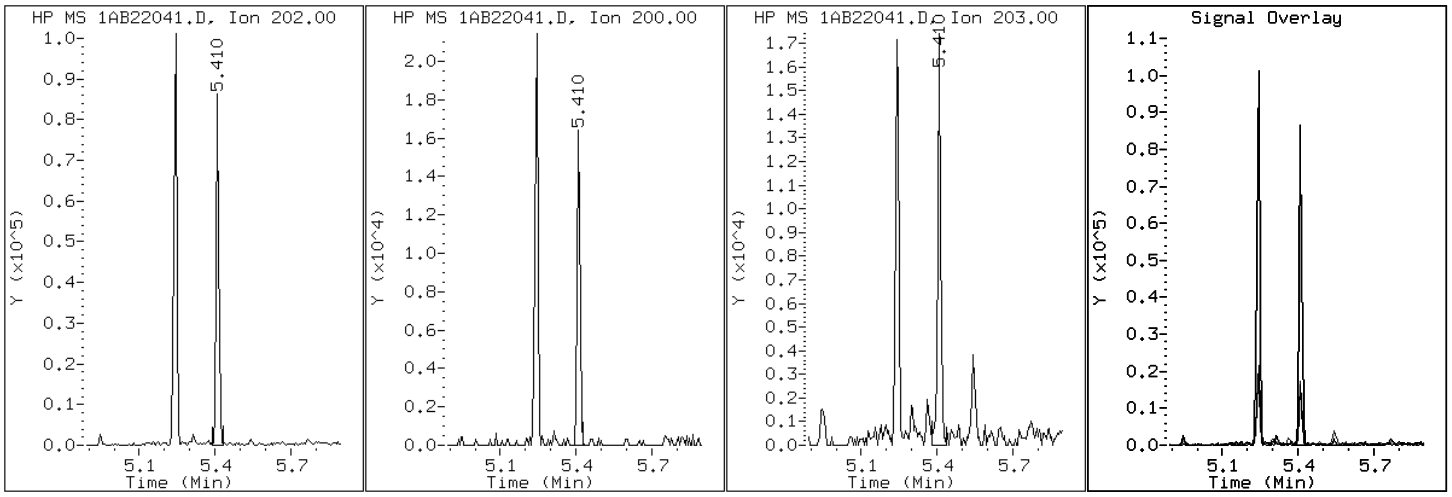
Data File: 1AB22041.D

Date: 22-FEB-2013 20:42

Client ID: CV0240B-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-2-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22041.D
Inj. Date and Time: 22-FEB-2013 20:42
Instrument ID: BSMA5973.i
Client ID: CV0240B-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

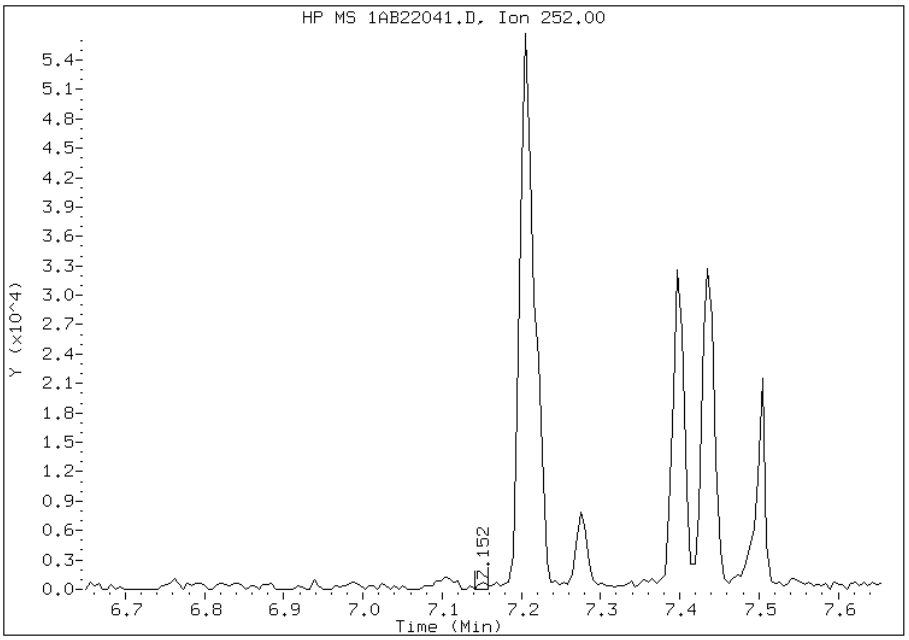
Processing Integration Results

RT: 7.15

Response: 496

Amount: 0

Conc: 5



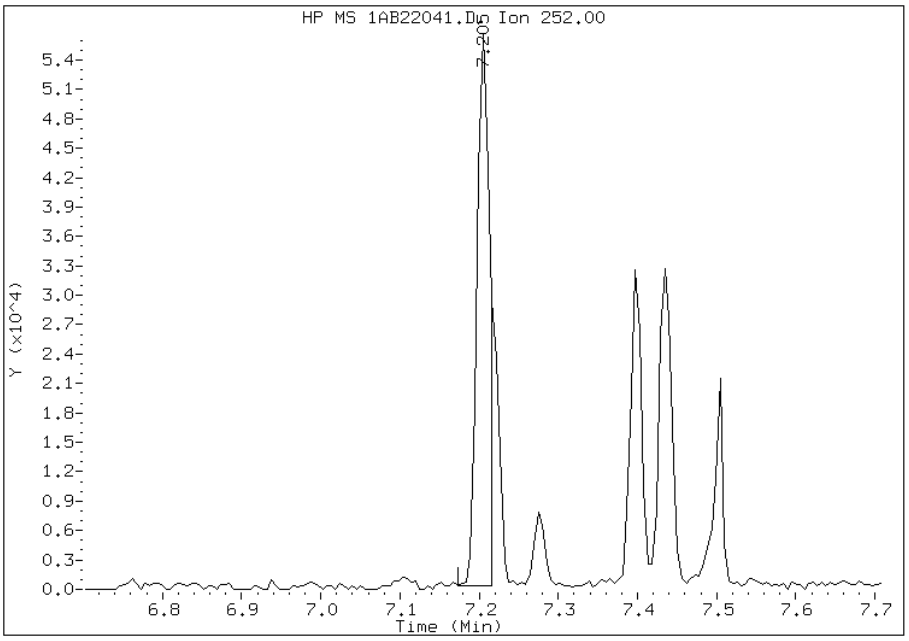

Manual Integration Results

RT: 7.21

Response: 61884

Amount: 2

Conc: 615




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:28
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22041.D
Inj. Date and Time: 22-FEB-2013 20:42
Instrument ID: BSMA5973.i
Client ID: CV0240B-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

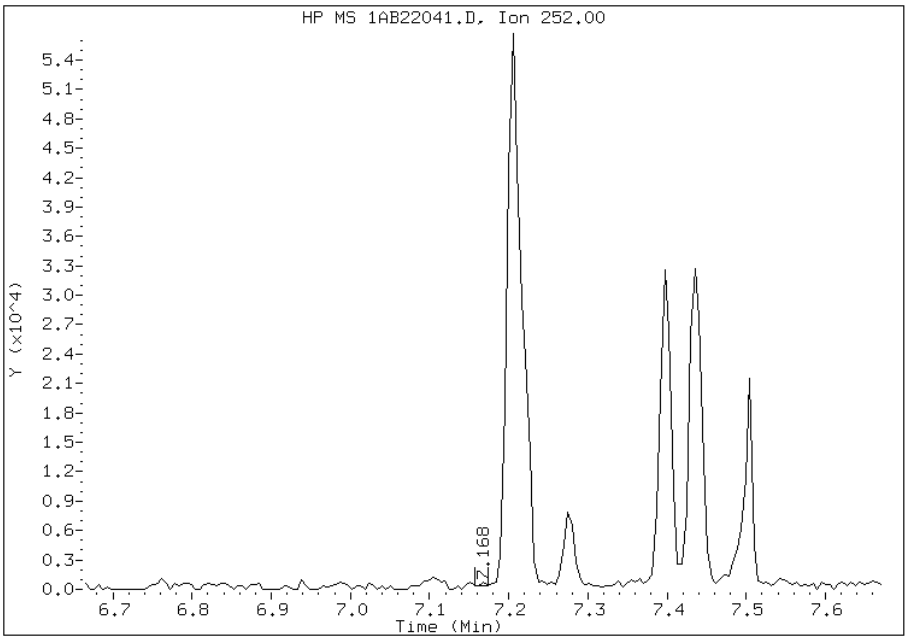
Processing Integration Results

RT: 7.17

Response: 141

Amount: 0

Conc: 1



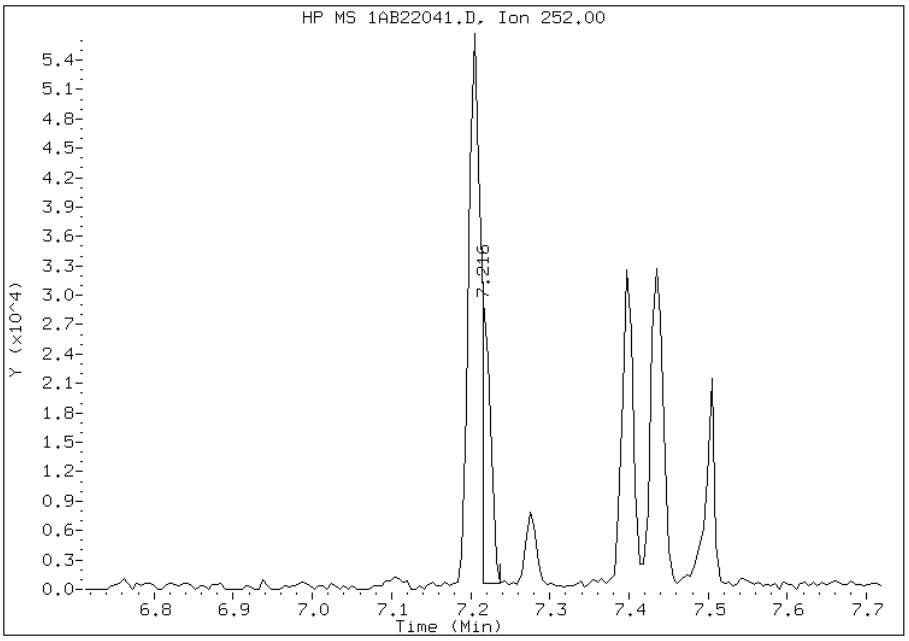

Manual Integration Results

RT: 7.22

Response: 21617

Amount: 1

Conc: 214




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:28
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22041.D
Inj. Date and Time: 22-FEB-2013 20:42
Instrument ID: BSMA5973.i
Client ID: CV0240B-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

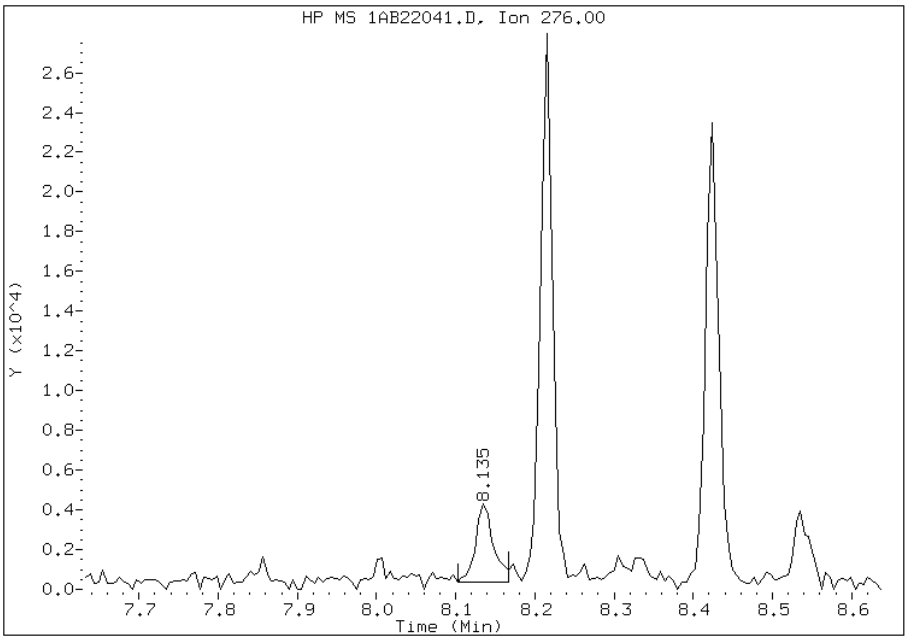
Processing Integration Results

RT: 8.13

Response: 6088

Amount: 0

Conc: 77



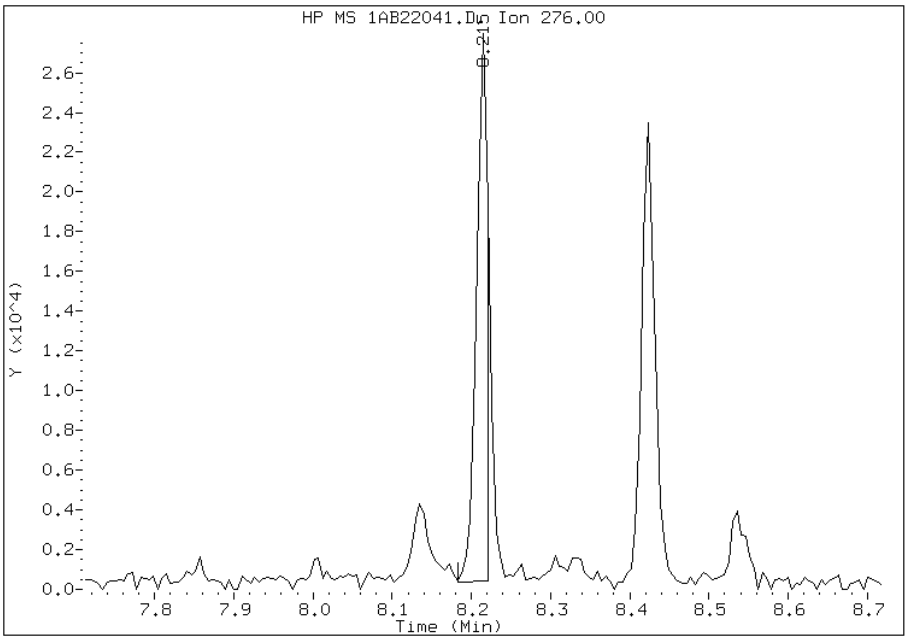

Manual Integration Results

RT: 8.21

Response: 26047

Amount: 1

Conc: 330




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:28
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161E-CS | Lab Sample ID: 680-87545-3

Matrix: Solid | Lab File ID: 1AB22042.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:39

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 15.08(g) | Date Analyzed: 02/22/2013 20:57

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 19.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 120 | U | 120 | 25 |
| 208-96-8 | Acenaphthylene | 19 | J | 49 | 6.2 |
| 120-12-7 | Anthracene | 32 | | 10 | 5.2 |
| 56-55-3 | Benzo[a]anthracene | 120 | | 9.9 | 4.8 |
| 50-32-8 | Benzo[a]pyrene | 96 | | 13 | 6.4 |
| 205-99-2 | Benzo[b]fluoranthene | 140 | | 15 | 7.5 |
| 191-24-2 | Benzo[g,h,i]perylene | 78 | | 25 | 5.4 |
| 207-08-9 | Benzo[k]fluoranthene | 63 | | 9.9 | 4.4 |
| 218-01-9 | Chrysene | 150 | | 11 | 5.5 |
| 53-70-3 | Dibenz(a,h)anthracene | 26 | | 25 | 5.0 |
| 206-44-0 | Fluoranthene | 150 | | 25 | 4.9 |
| 86-73-7 | Fluorene | 11 | J | 25 | 5.0 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 67 | | 25 | 8.7 |
| 90-12-0 | 1-Methylnaphthalene | 43 | J | 49 | 5.4 |
| 91-57-6 | 2-Methylnaphthalene | 56 | | 49 | 8.7 |
| 91-20-3 | Naphthalene | 46 | J | 49 | 5.4 |
| 85-01-8 | Phenanthrene | 120 | | 9.9 | 4.8 |
| 129-00-0 | Pyrene | 140 | | 25 | 4.6 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 68 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22042.D
Lab Smp Id: 680-87545-A-3-A Client Smp ID: FM0161E-CS
Inj Date : 22-FEB-2013 20:57
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-3-a
Misc Info : 680-87545-A-3-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 42
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.080 | Weight Extracted |
| M | 19.224 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.400 | 2.397 | (1.000) | 1017642 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.426 | 3.417 | (1.000) | 795545 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.372 | 4.352 | (1.000) | 1127293 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.644 | 4.635 | (1.062) | 111208 | 6.77961 | 556.5717 |
| * 18 Chrysene-d12 | 240 | 6.391 | 6.366 | (1.000) | 843366 | 40.0000 | (H) |
| * 23 Perylene-d12 | 264 | 7.497 | 7.456 | (1.000) | 1151693 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.411 | 2.402 | (1.004) | 13641 | 0.55629 | 45.6686 |
| 3 2-Methylnaphthalene | 141 | 2.812 | 2.808 | (1.171) | 8620 | 0.68095 | 55.9023 |
| 4 1-Methylnaphthalene | 142 | 2.870 | 2.861 | (1.196) | 7324 | 0.51956 | 42.6535 |
| 5 Acenaphthylene | 152 | 3.341 | 3.332 | (0.975) | 6701 | 0.22559 | 18.5196 |
| 9 Fluorene | 166 | 3.752 | 3.743 | (1.095) | 2969 | 0.13705 | 11.2513 |
| 11 Phenanthrene | 178 | 4.382 | 4.368 | (1.002) | 39603 | 1.41335 | 116.0286 |
| 12 Anthracene | 178 | 4.414 | 4.400 | (1.010) | 10727 | 0.39412 | 32.3549 |
| 13 Carbazole | 167 | 4.575 | 4.555 | (1.046) | 3975 | 0.16544 | 13.5817 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 5.242 | 5.228 | (1.199) | 51578 | 1.84097 | 151.1343 |
| 16 Pyrene | 202 | 5.413 | 5.394 | (0.847) | 42873 | 1.73315 | 142.2824(H) |
| 17 Benzo(a)anthracene | 228 | 6.386 | 6.355 | (0.999) | 35419 | 1.40651 | 115.4670(H) |
| 19 Chrysene | 228 | 6.407 | 6.387 | (1.002) | 41434 | 1.83973 | 151.0320(H) |
| 20 Benzo(b)fluoranthene | 252 | 7.203 | 7.178 | (0.961) | 48145 | 1.64906 | 135.3797(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.214 | 7.199 | (0.962) | 22383 | 0.76204 | 62.5599(QMH) |
| 22 Benzo(a)pyrene | 252 | 7.433 | 7.408 | (0.991) | 31364 | 1.17307 | 96.3028(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.218 | 8.177 | (1.096) | 18655 | 0.81329 | 66.7667(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.234 | 8.193 | (1.098) | 7622 | 0.31887 | 26.1777(H) |
| 26 Benzo(g,h,i)perylene | 276 | 8.432 | 8.385 | (1.125) | 23175 | 0.94992 | 77.9832(H) |

## QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22042.D

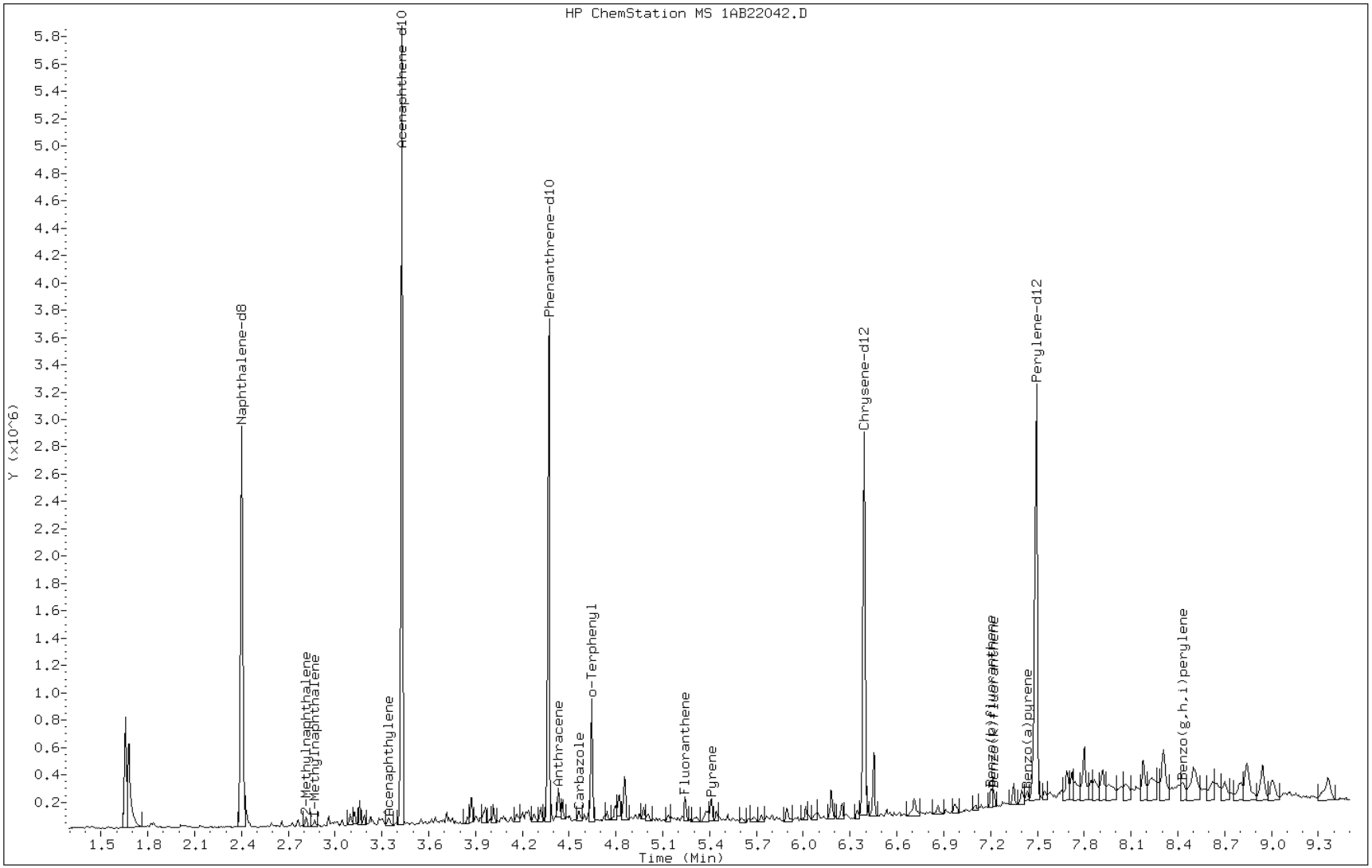
Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC



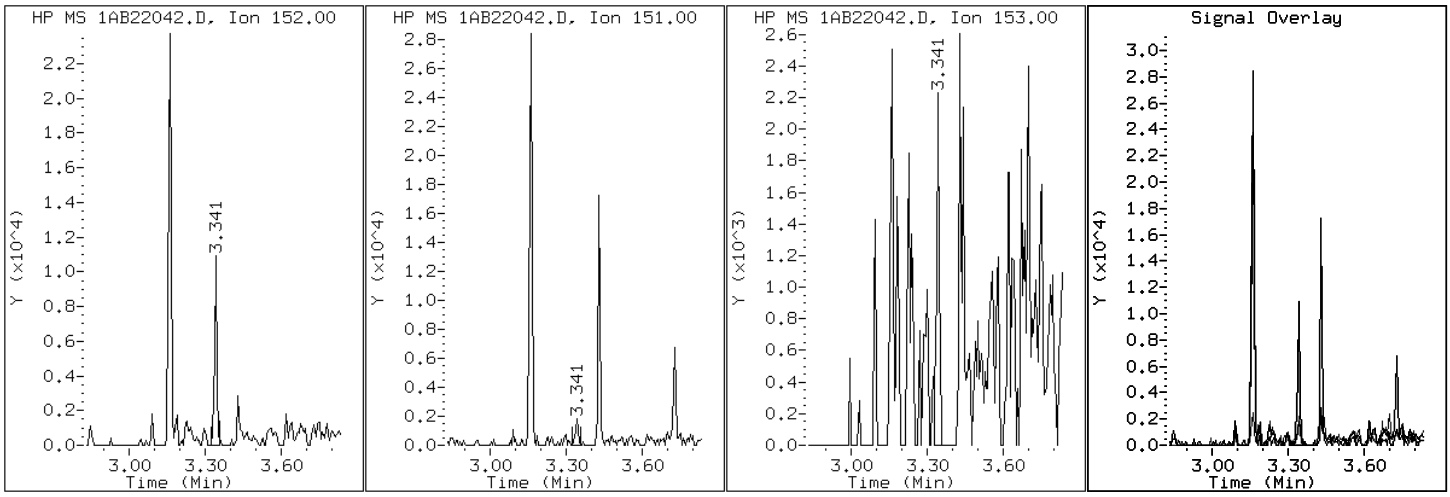
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

5 Acenaphthylene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

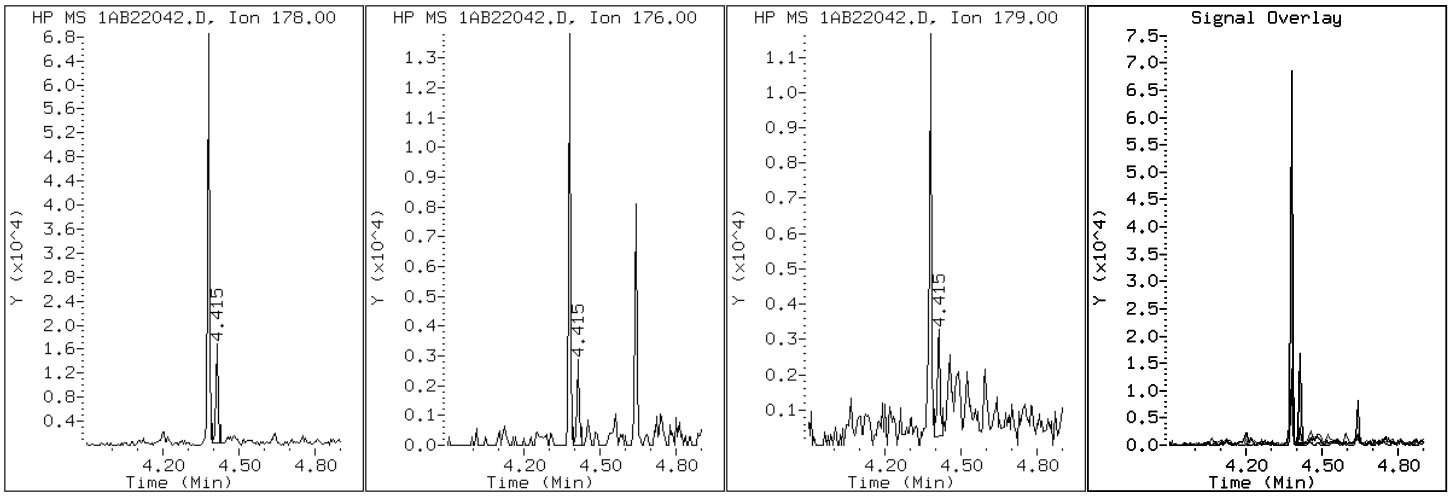
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

12 Anthracene



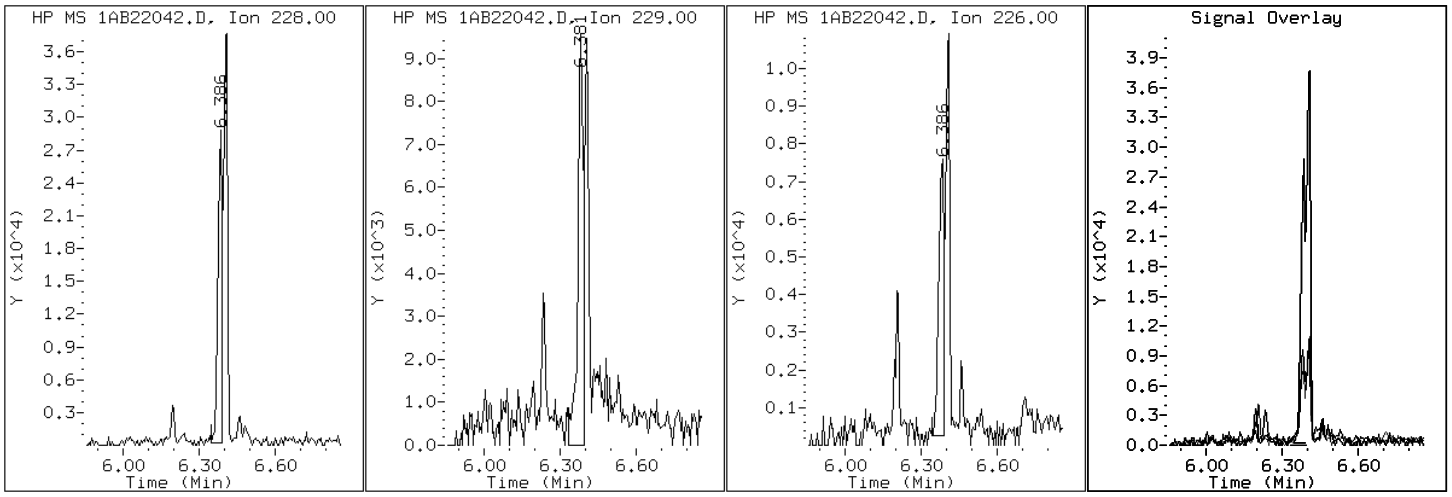
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

17 Benzo(a)anthracene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

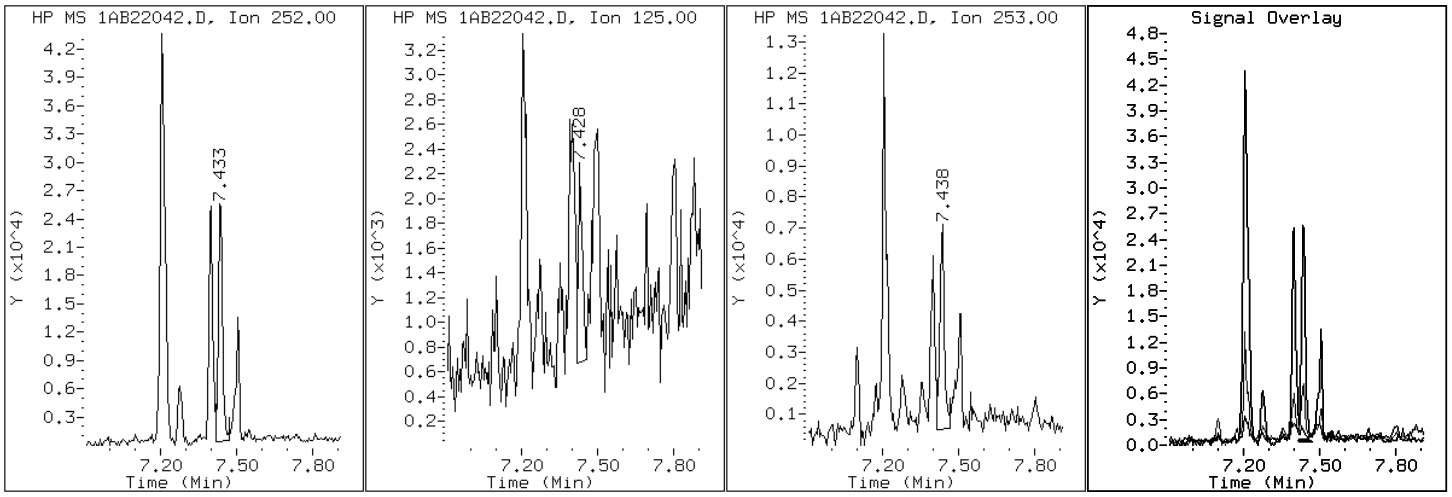
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

22 Benzo(a)pyrene



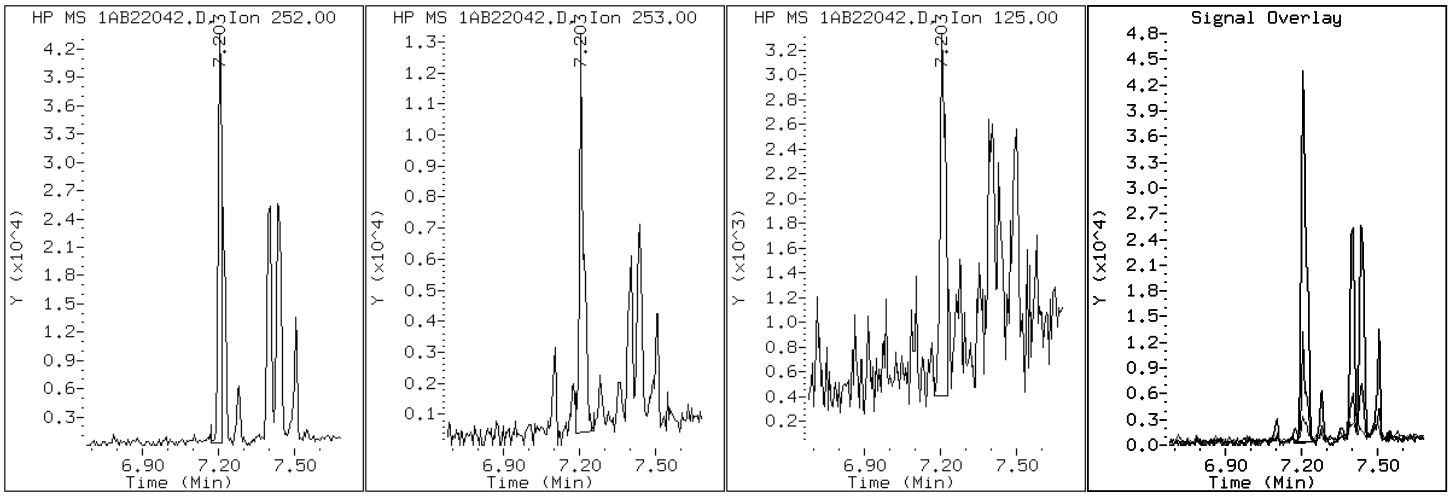
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

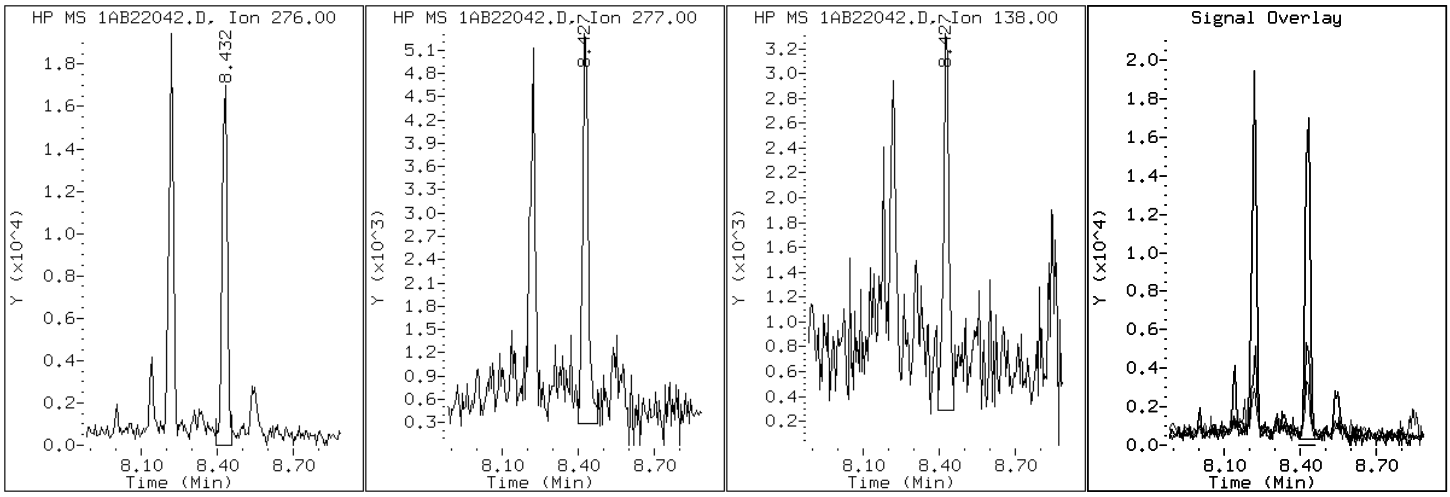
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

26 Benzo(g,h,i)perylene



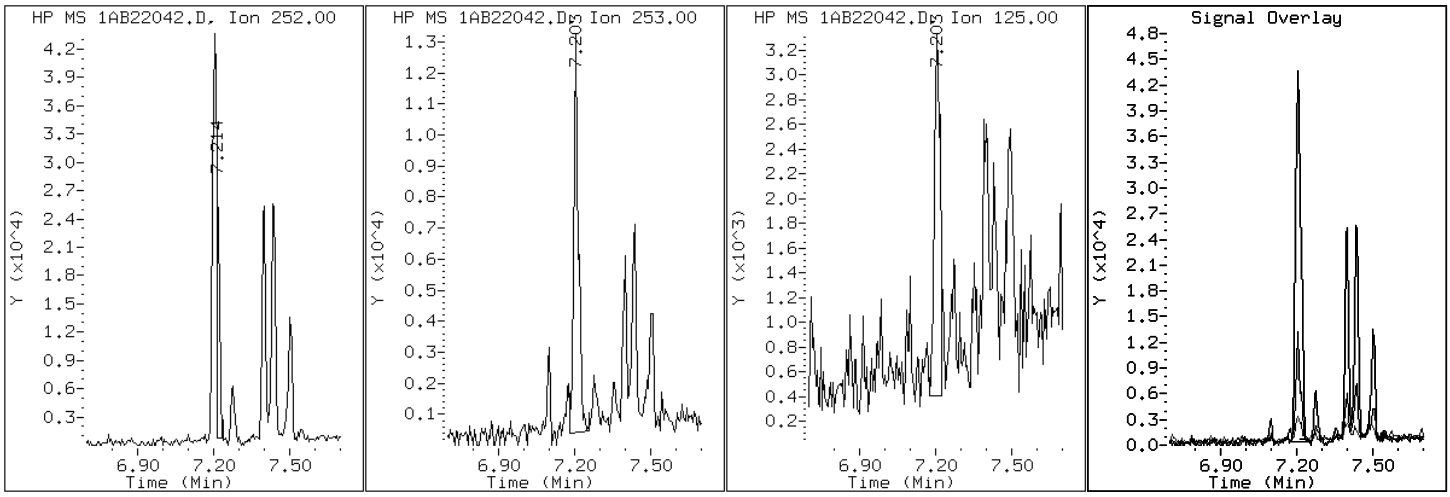
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

21 Benzo(k)fluoranthene



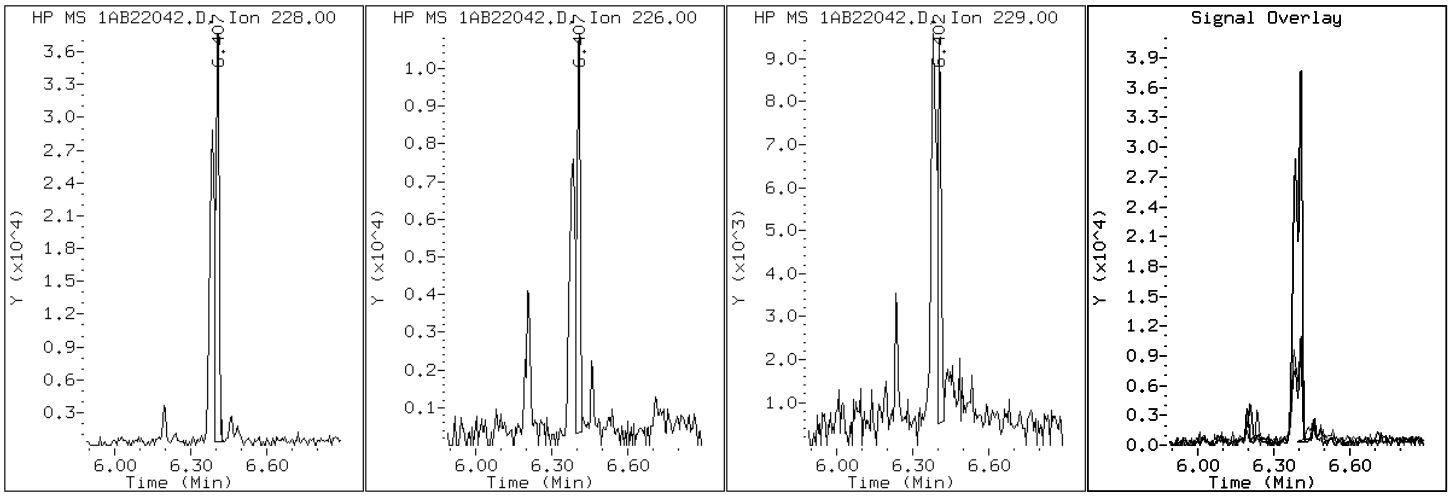
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

19 Chrysene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

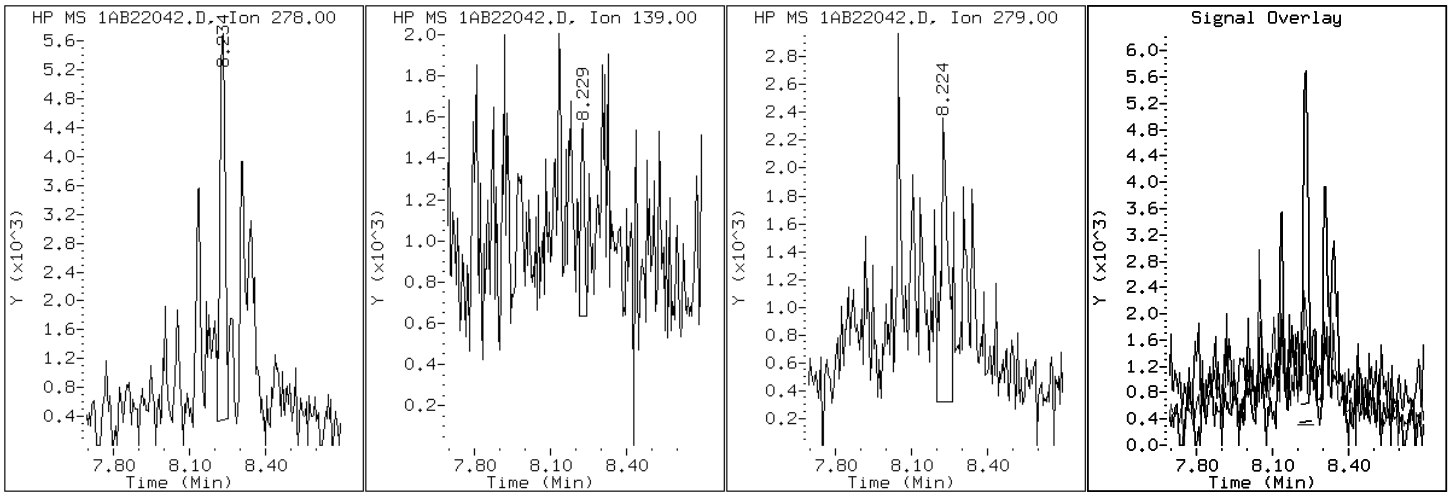
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

25 Dibenzo(a,h)anthracene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

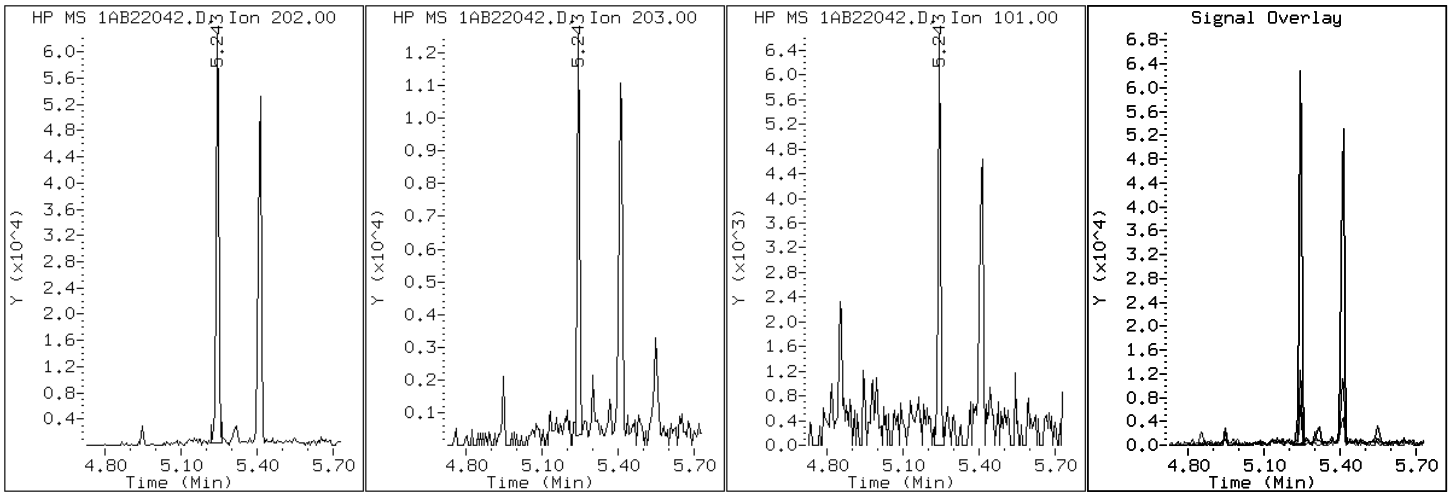
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

15 Fluoranthene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

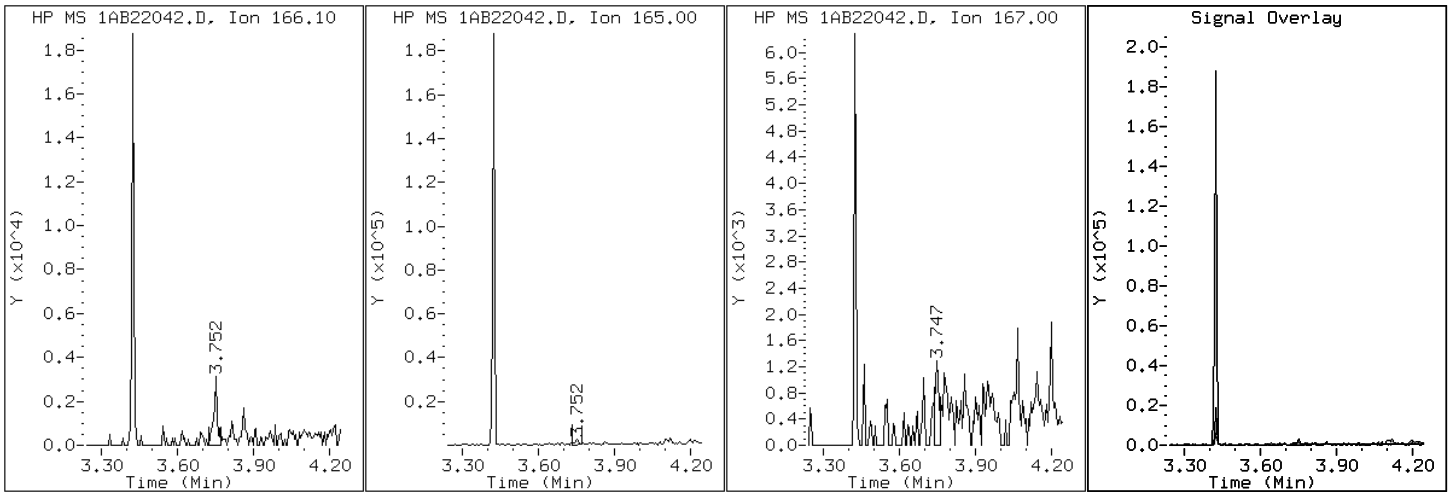
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

9 Fluorene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

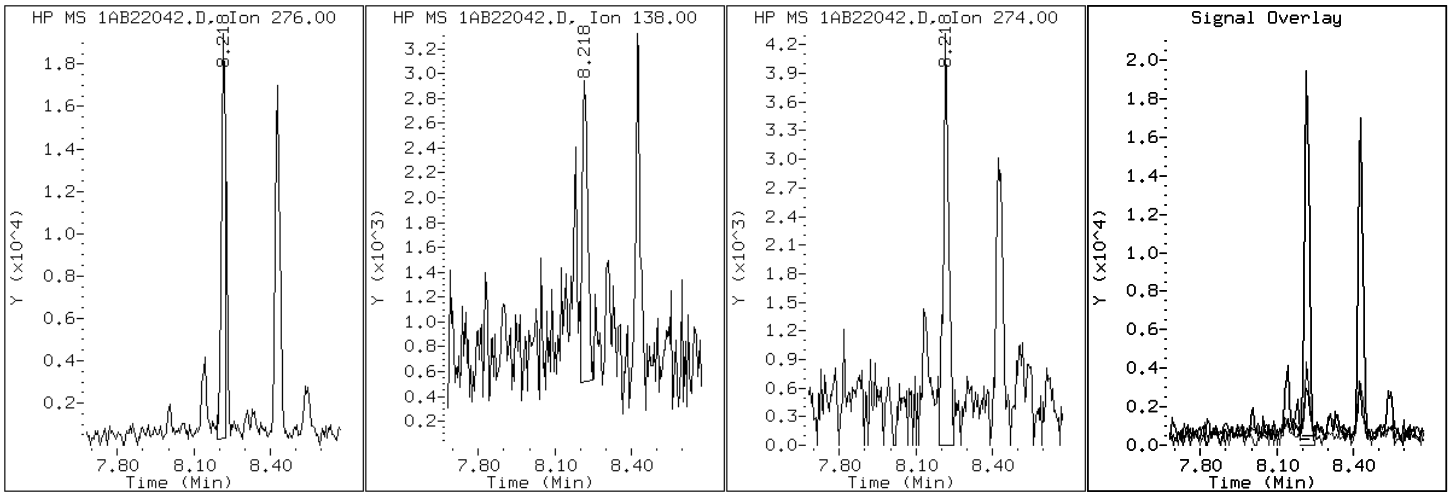
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



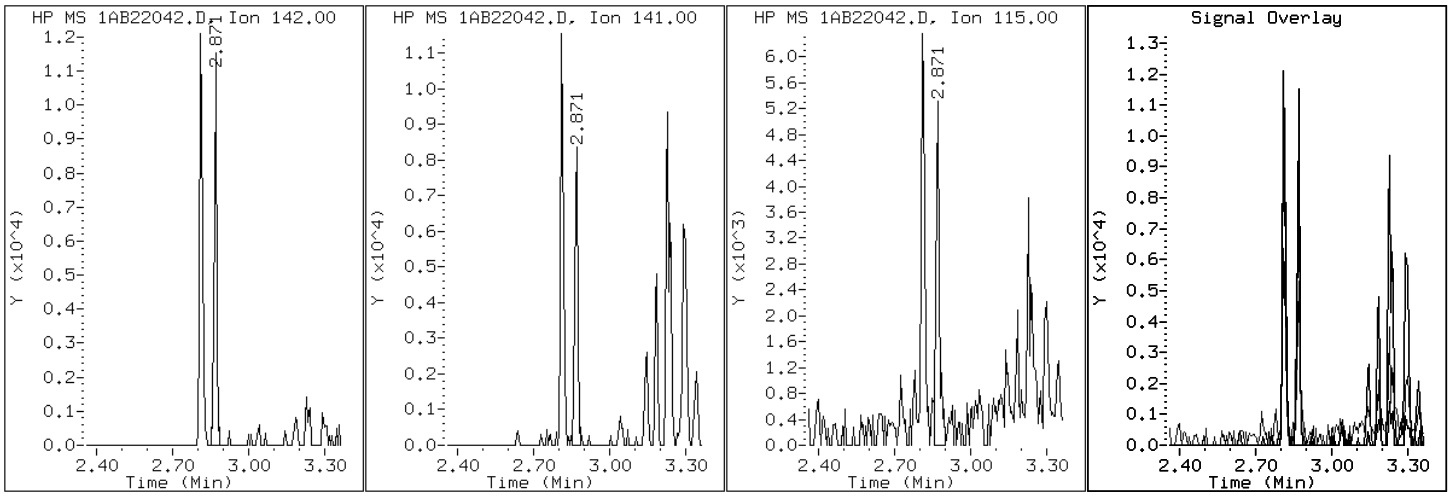
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

4 1-Methylnaphthalene



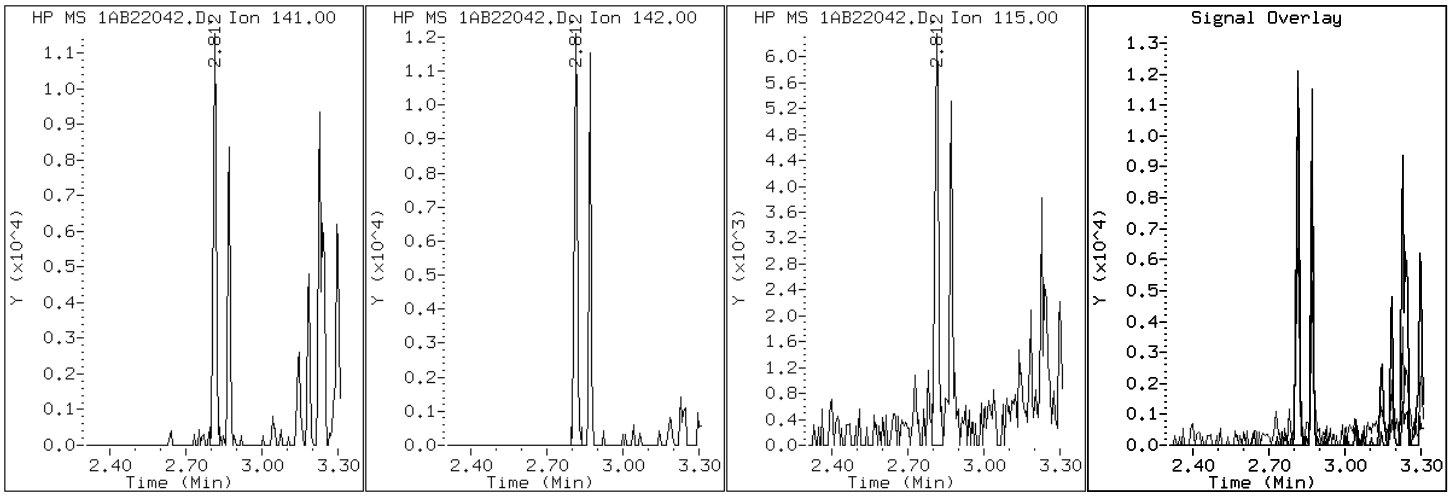
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

3 2-Methylnaphthalene



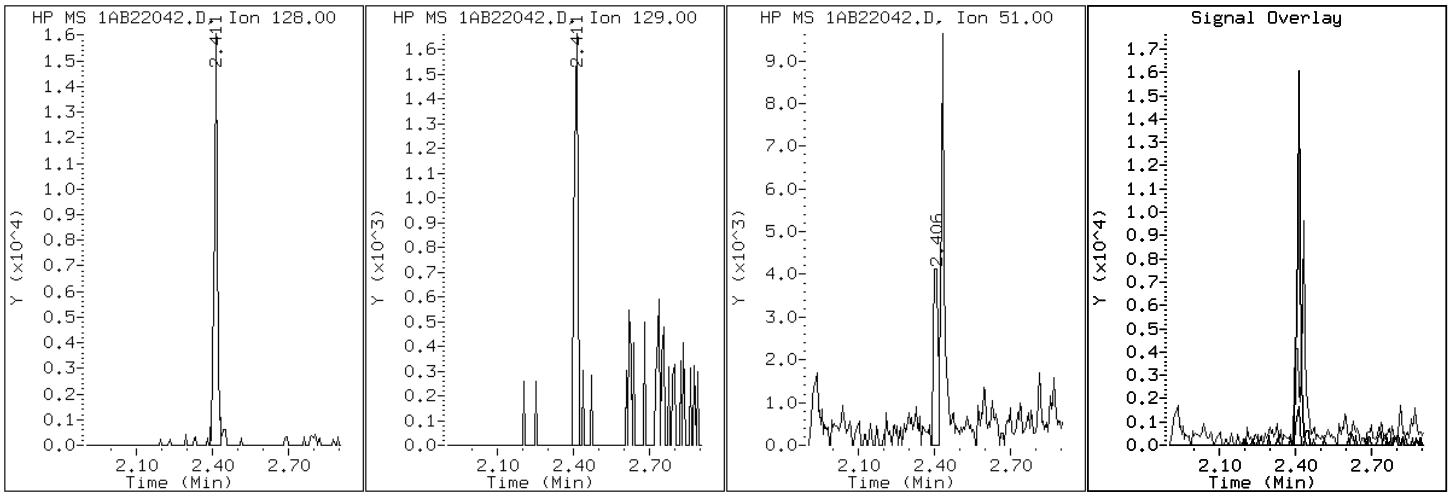
Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

Client ID: FM0161E-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a Operator: SCC

2 Naphthalene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

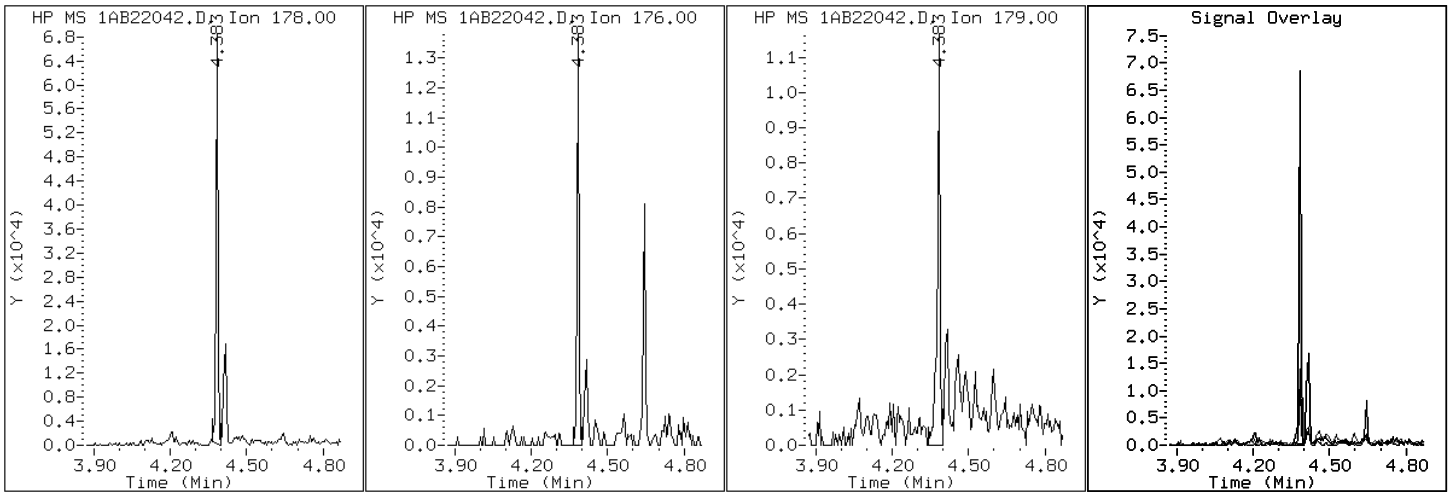
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

11 Phenanthrene



Data File: 1AB22042.D

Date: 22-FEB-2013 20:57

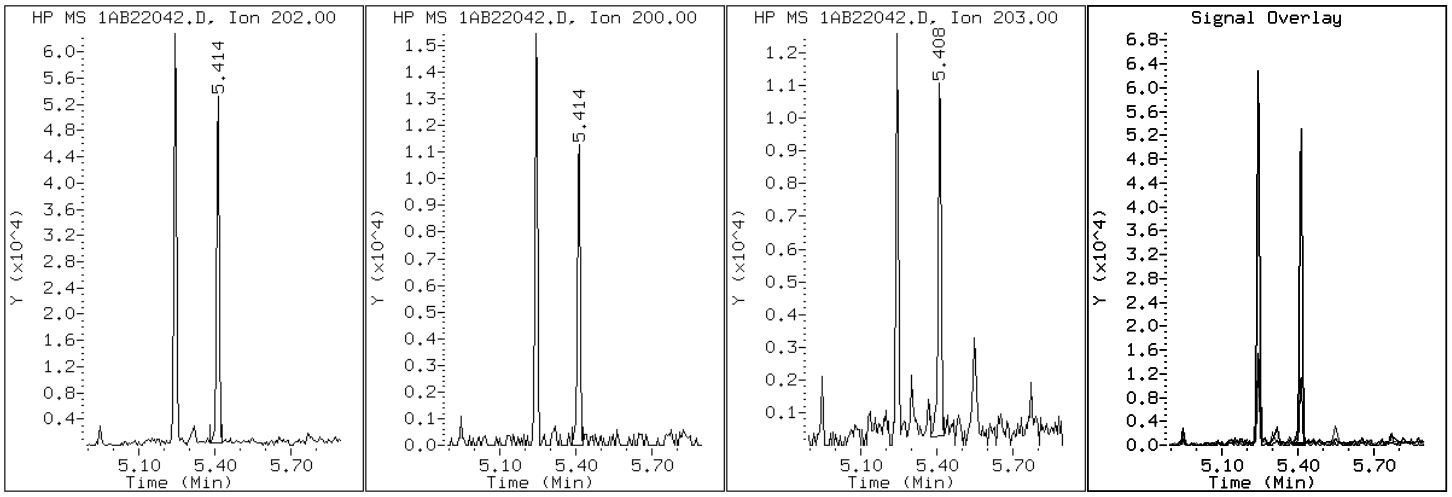
Client ID: FM0161E-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-3-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22042.D
Inj. Date and Time: 22-FEB-2013 20:57
Instrument ID: BSMA5973.i
Client ID: FM0161E-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

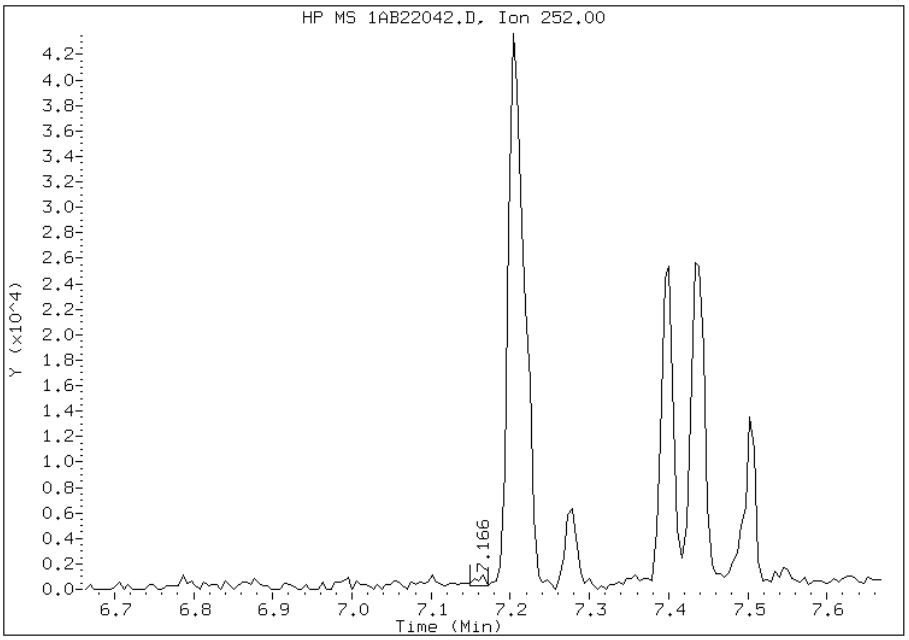
Processing Integration Results

RT: 7.17

Response: 618

Amount: 0

Conc: 2



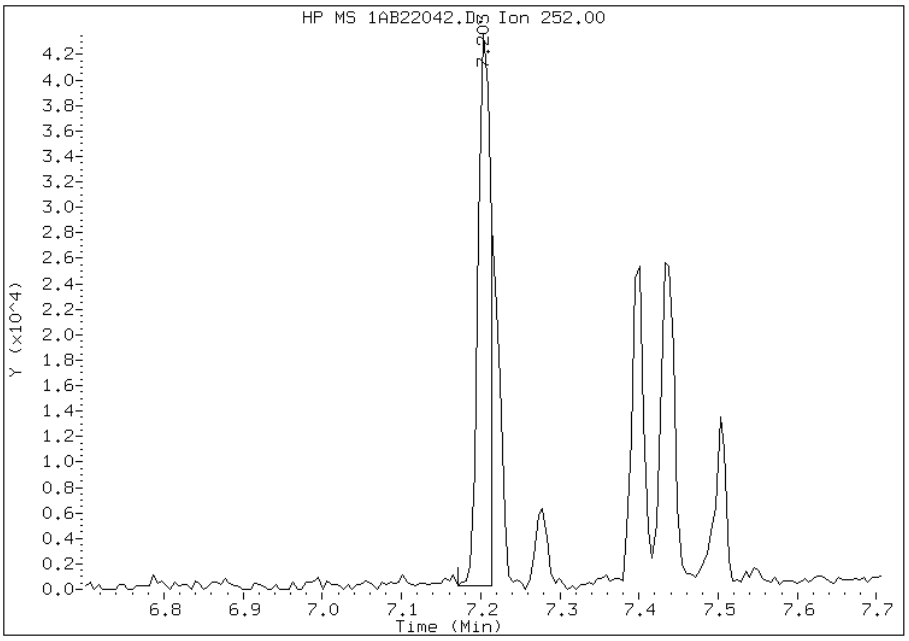

Manual Integration Results

RT: 7.20

Response: 48145

Amount: 2

Conc: 135




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:30
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22042.D
Inj. Date and Time: 22-FEB-2013 20:57
Instrument ID: BSMA5973.i
Client ID: FM0161E-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

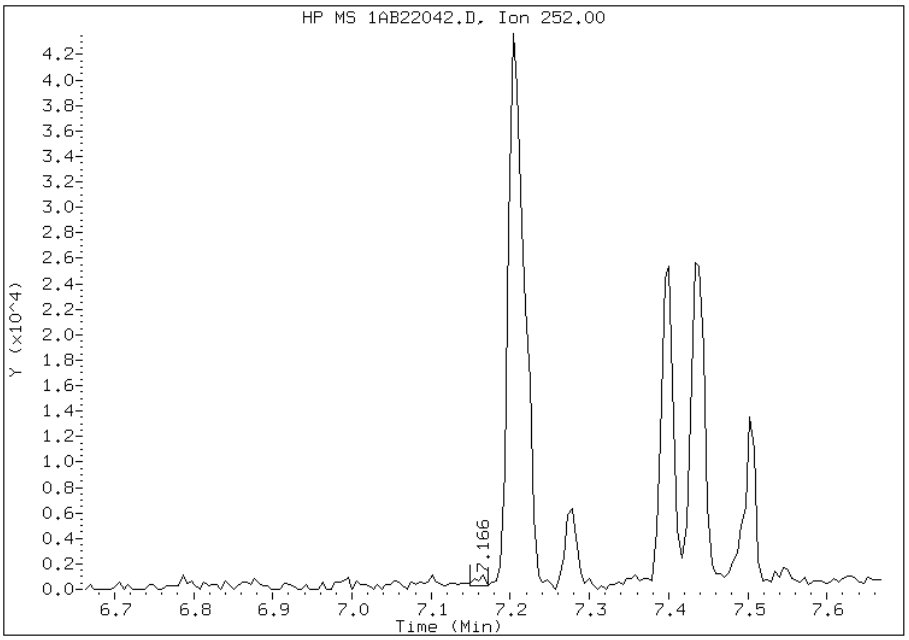
Processing Integration Results

RT: 7.17

Response: 618

Amount: 0

Conc: 2



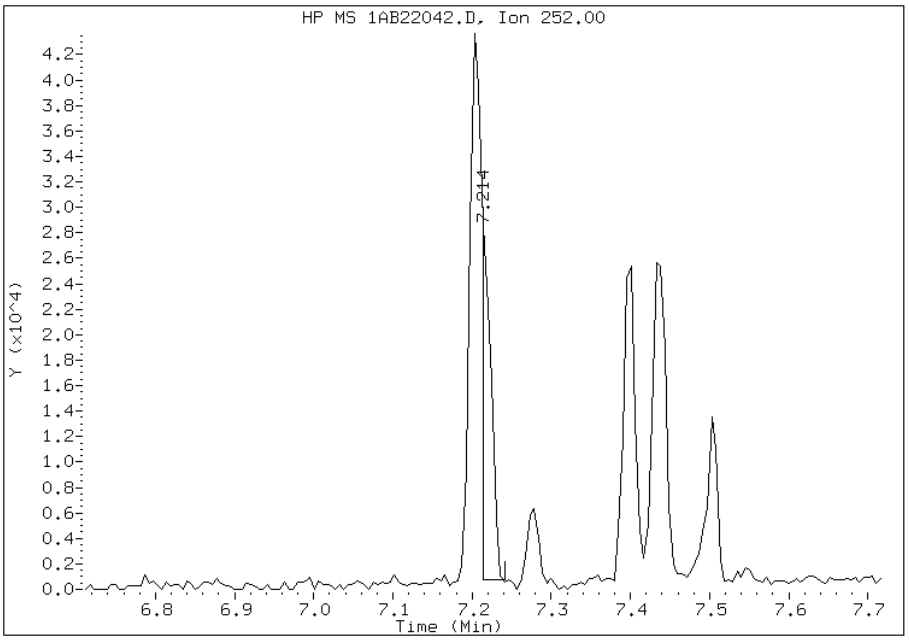

Manual Integration Results

RT: 7.21

Response: 22383

Amount: 1

Conc: 63




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:30
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22042.D
Inj. Date and Time: 22-FEB-2013 20:57
Instrument ID: BSMA5973.i
Client ID: FM0161E-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

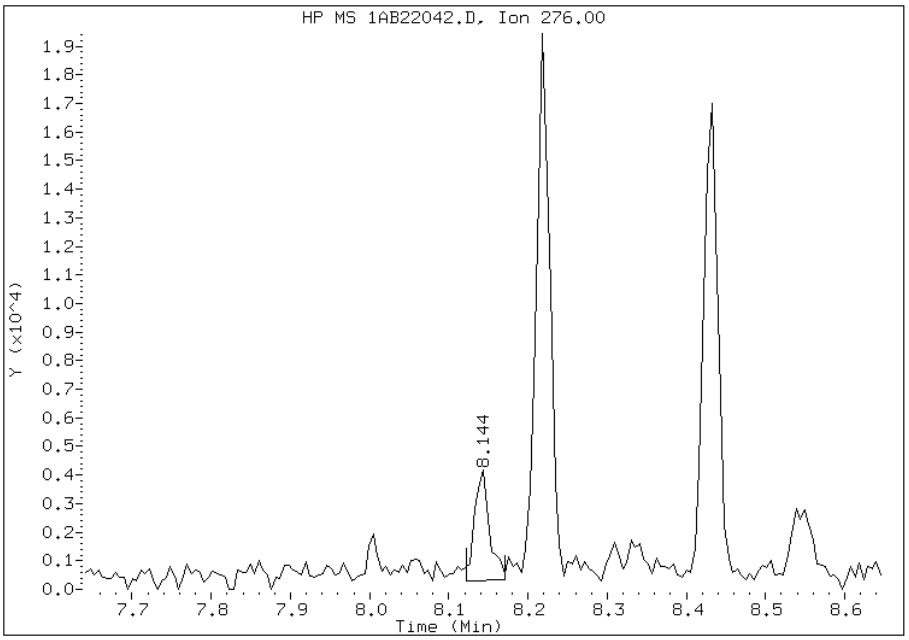
Processing Integration Results

RT: 8.14

Response: 4962

Amount: 0

Conc: 18



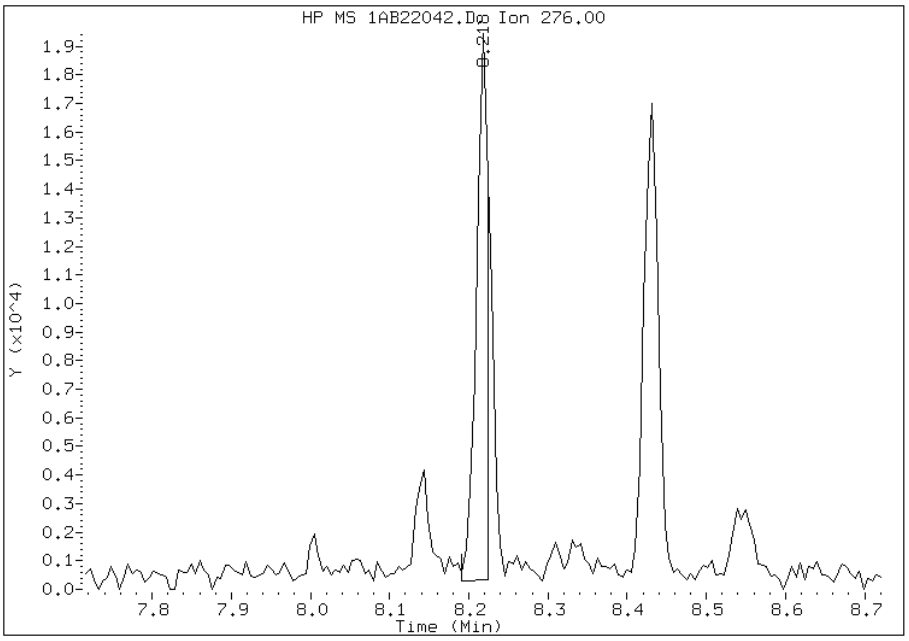

Manual Integration Results

RT: 8.22

Response: 18655

Amount: 1

Conc: 67




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:31
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161F-CS | Lab Sample ID: 680-87545-4

Matrix: Solid | Lab File ID: 1AB22043.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:47

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 15.19(g) | Date Analyzed: 02/22/2013 21:12

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 0.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 99 | U | 99 | 20 |
| 208-96-8 | Acenaphthylene | 17 | J | 40 | 5.0 |
| 120-12-7 | Anthracene | 45 | | 8.3 | 4.2 |
| 56-55-3 | Benzo[a]anthracene | 190 | | 7.9 | 3.9 |
| 50-32-8 | Benzo[a]pyrene | 130 | | 10 | 5.2 |
| 205-99-2 | Benzo[b]fluoranthene | 210 | | 12 | 6.1 |
| 191-24-2 | Benzo[g,h,i]perylene | 97 | | 20 | 4.4 |
| 207-08-9 | Benzo[k]fluoranthene | 66 | | 7.9 | 3.6 |
| 218-01-9 | Chrysene | 180 | | 8.9 | 4.5 |
| 53-70-3 | Dibenz(a,h)anthracene | 36 | | 20 | 4.1 |
| 206-44-0 | Fluoranthene | 300 | | 20 | 4.0 |
| 86-73-7 | Fluorene | 15 | J | 20 | 4.1 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 100 | | 20 | 7.1 |
| 90-12-0 | 1-Methylnaphthalene | 27 | J | 40 | 4.4 |
| 91-57-6 | 2-Methylnaphthalene | 36 | J | 40 | 7.1 |
| 91-20-3 | Naphthalene | 42 | | 40 | 4.4 |
| 85-01-8 | Phenanthrene | 200 | | 7.9 | 3.9 |
| 129-00-0 | Pyrene | 260 | | 20 | 3.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 58 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22043.D
Lab Smp Id: 680-87545-A-4-A Client Smp ID: FM0161F-CS
Inj Date : 22-FEB-2013 21:12
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-4-a
Misc Info : 680-87545-A-4-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.190 | Weight Extracted |
| M | 0.55351 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.401 | 2.397 | (1.000) | 1008886 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.426 | 3.417 | (1.000) | 773303 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.372 | 4.352 | (1.000) | 1149947 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.644 | 4.635 | (1.062) | 97114 | 5.80376 | 384.2045 |
| * 18 Chrysene-d12 | 240 | 6.397 | 6.366 | (1.000) | 859075 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.497 | 7.456 | (1.000) | 1199486 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.411 | 2.402 | (1.004) | 15431 | 0.63475 | 42.0199 |
| 3 2-Methylnaphthalene | 141 | 2.812 | 2.808 | (1.171) | 6769 | 0.53937 | 35.7056 |
| 4 1-Methylnaphthalene | 142 | 2.871 | 2.861 | (1.196) | 5722 | 0.40944 | 27.1046 |
| 5 Acenaphthylene | 152 | 3.341 | 3.332 | (0.975) | 7281 | 0.25216 | 16.6930 |
| 9 Fluorene | 166 | 3.752 | 3.743 | (1.095) | 4916 | 0.23346 | 15.4546 |
| 11 Phenanthrene | 178 | 4.383 | 4.368 | (1.002) | 86223 | 3.01650 | 199.6897 |
| 12 Anthracene | 178 | 4.415 | 4.400 | (1.010) | 18734 | 0.67474 | 44.6671 |
| 13 Carbazole | 167 | 4.575 | 4.555 | (1.046) | 10177 | 0.41522 | 27.4874 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 5.248 | 5.228 | (1.200) | 127607 | 4.46494 | 295.5756 |
| 16 Pyrene | 202 | 5.414 | 5.394 | (0.846) | 97157 | 3.85576 | 255.2484 |
| 17 Benzo(a)anthracene | 228 | 6.386 | 6.355 | (0.998) | 74759 | 2.91443 | 192.9330 |
| 19 Chrysene | 228 | 6.407 | 6.387 | (1.002) | 61902 | 2.69827 | 178.6234 |
| 20 Benzo(b)fluoranthene | 252 | 7.209 | 7.178 | (0.962) | 95538 | 3.14198 | 207.9968(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.219 | 7.199 | (0.963) | 30587 | 0.99986 | 66.1901(QMH) |
| 22 Benzo(a)pyrene | 252 | 7.438 | 7.408 | (0.992) | 56263 | 2.02049 | 133.7546(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.224 | 8.177 | (1.097) | 37521 | 1.57060 | 103.9721(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.229 | 8.193 | (1.098) | 13442 | 0.53995 | 35.7441(H) |
| 26 Benzo(g,h,i)perylene | 276 | 8.432 | 8.385 | (1.125) | 37215 | 1.46462 | 96.9567(H) |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22043.D

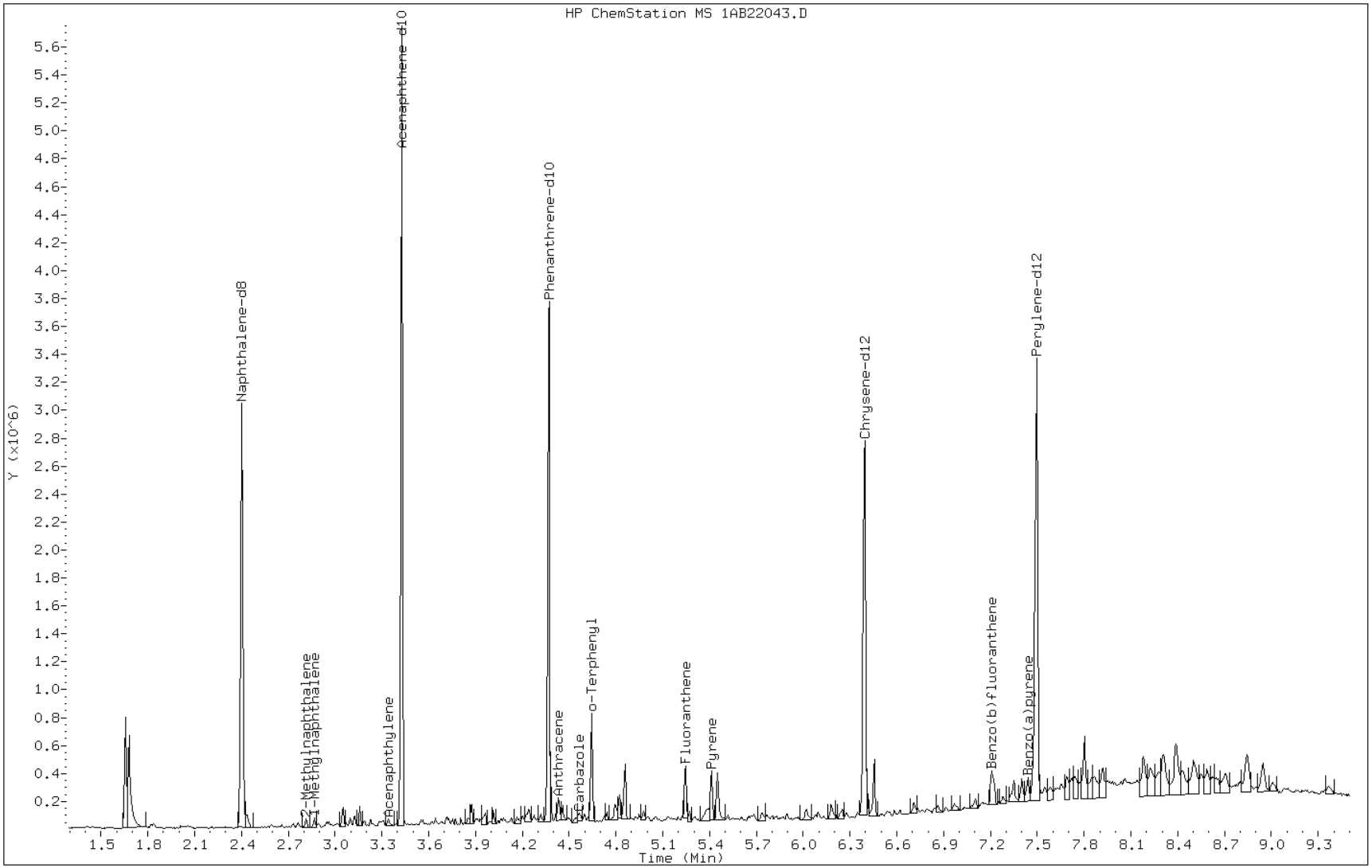
Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a

Operator: SCC



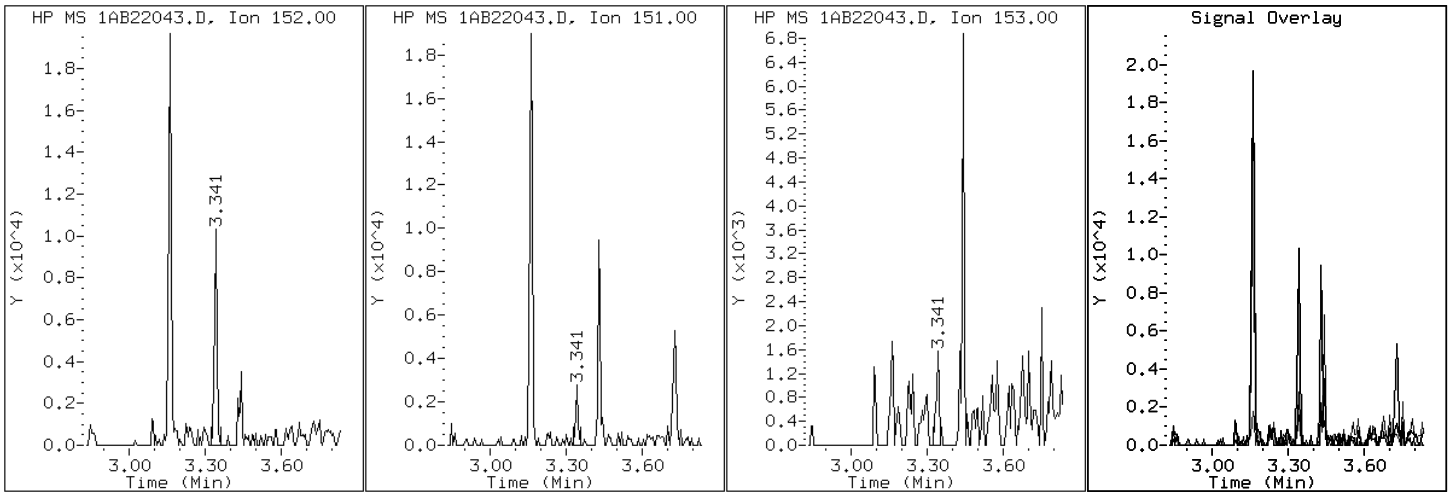
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

5 Acenaphthylene



Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

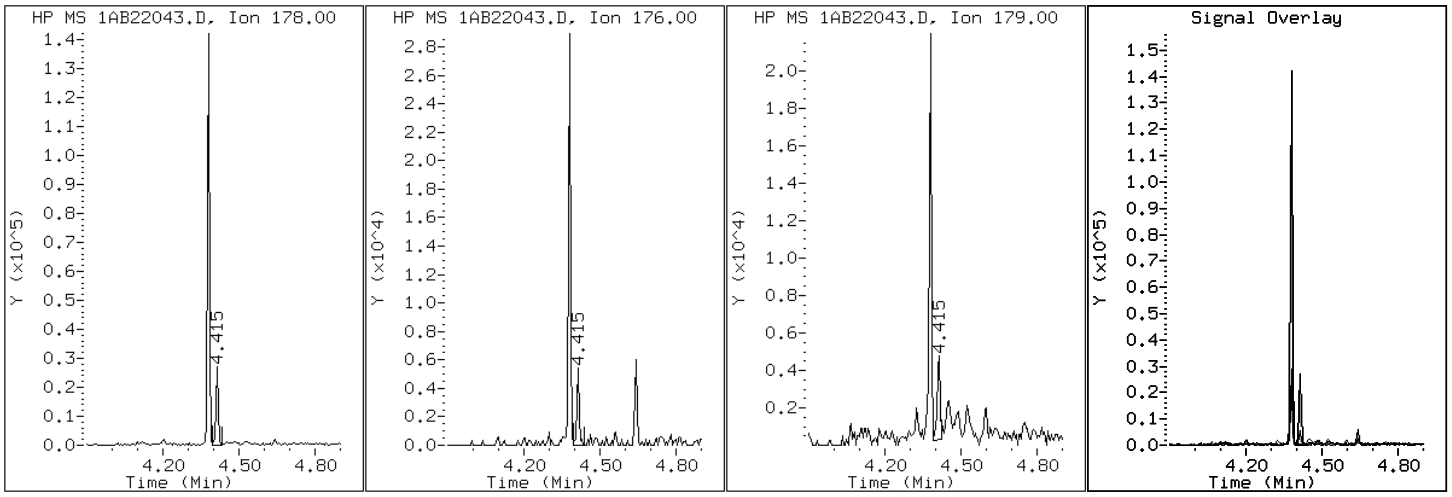
Client ID: FM0161F-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a

Operator: SCC

12 Anthracene



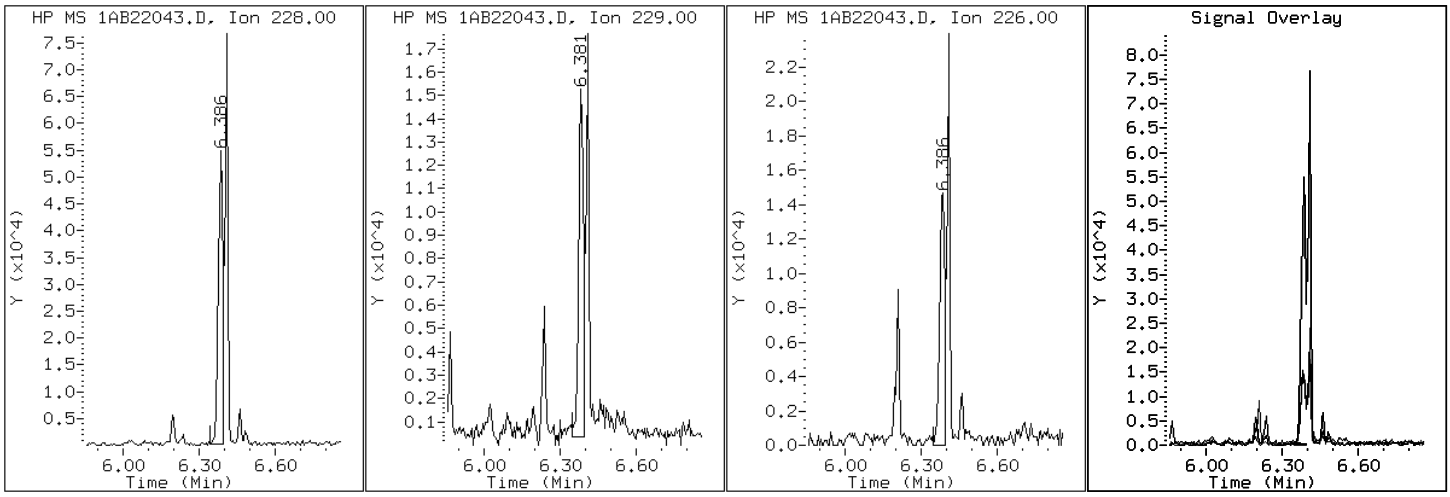
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

17 Benzo(a)anthracene



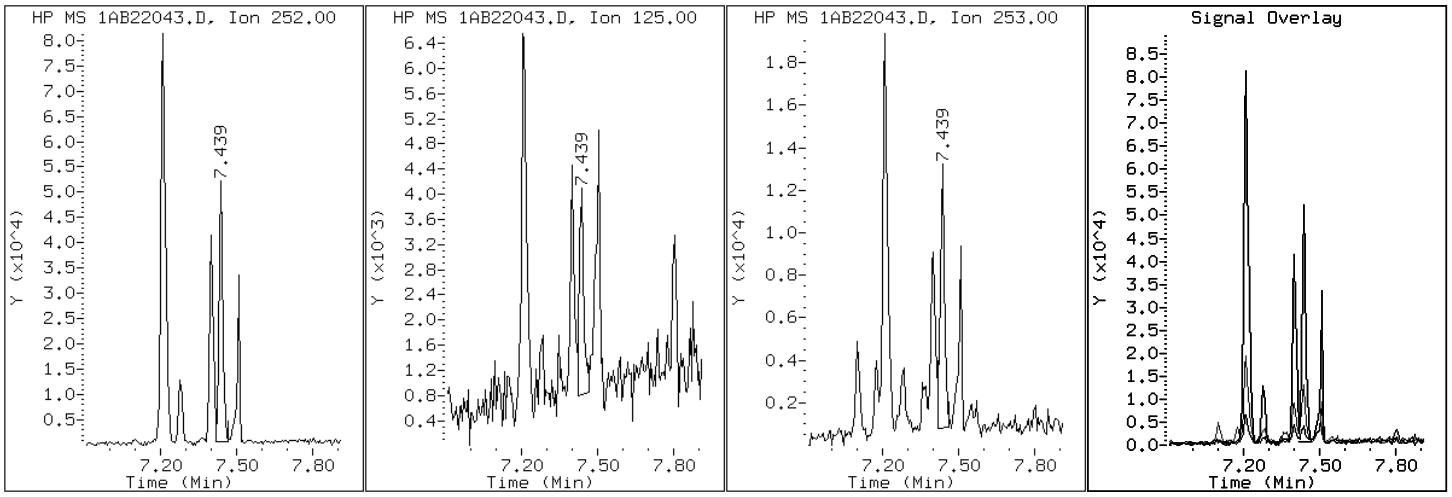
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

22 Benzo(a)pyrene



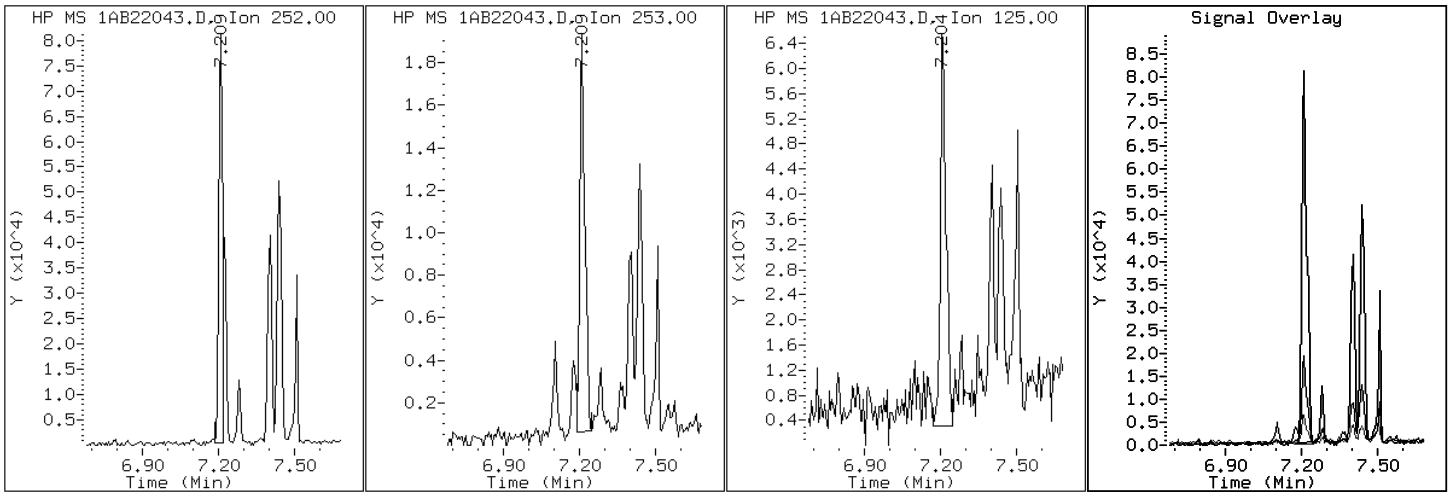
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

20 Benzo(b)fluoranthene



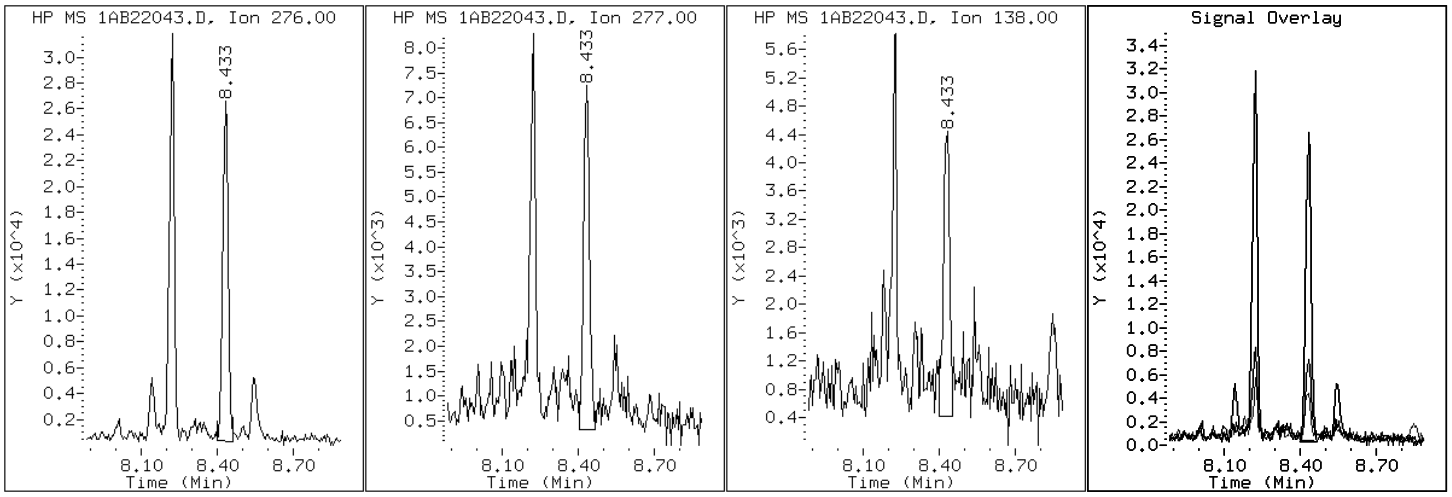
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

26 Benzo(g,h,i)perylene



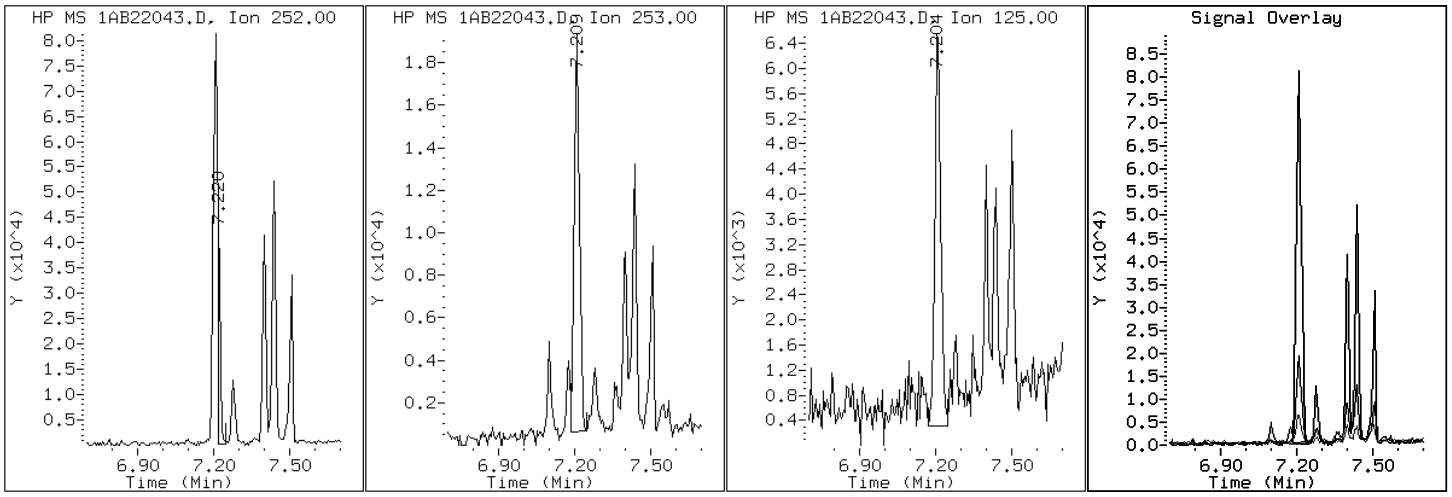
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

21 Benzo(k)fluoranthene



Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

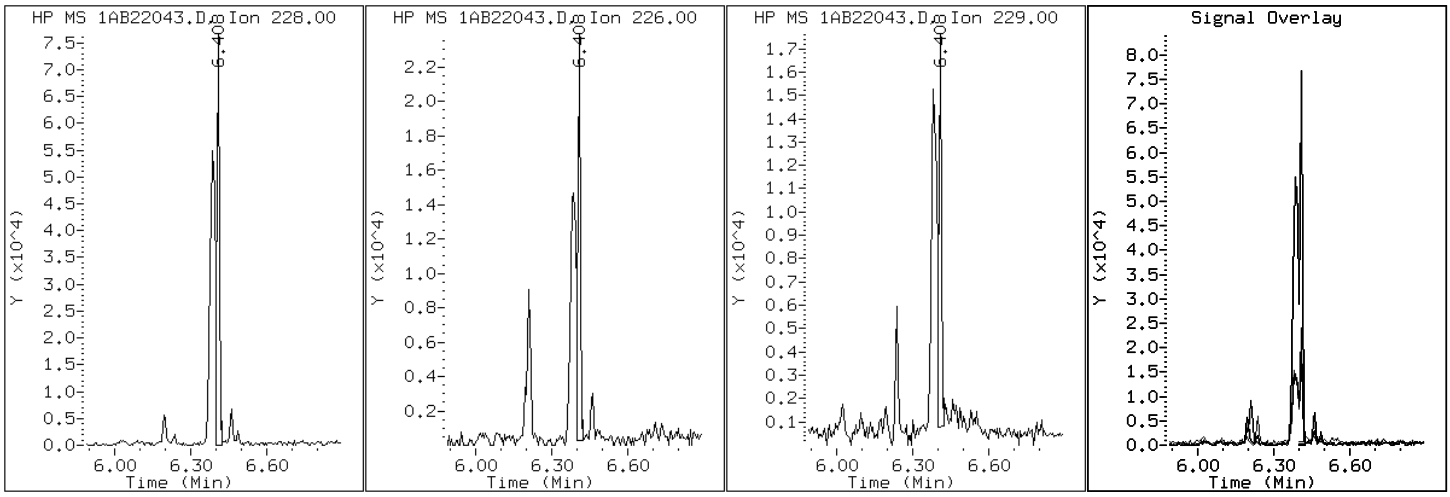
Client ID: FM0161F-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a

Operator: SCC

19 Chrysene



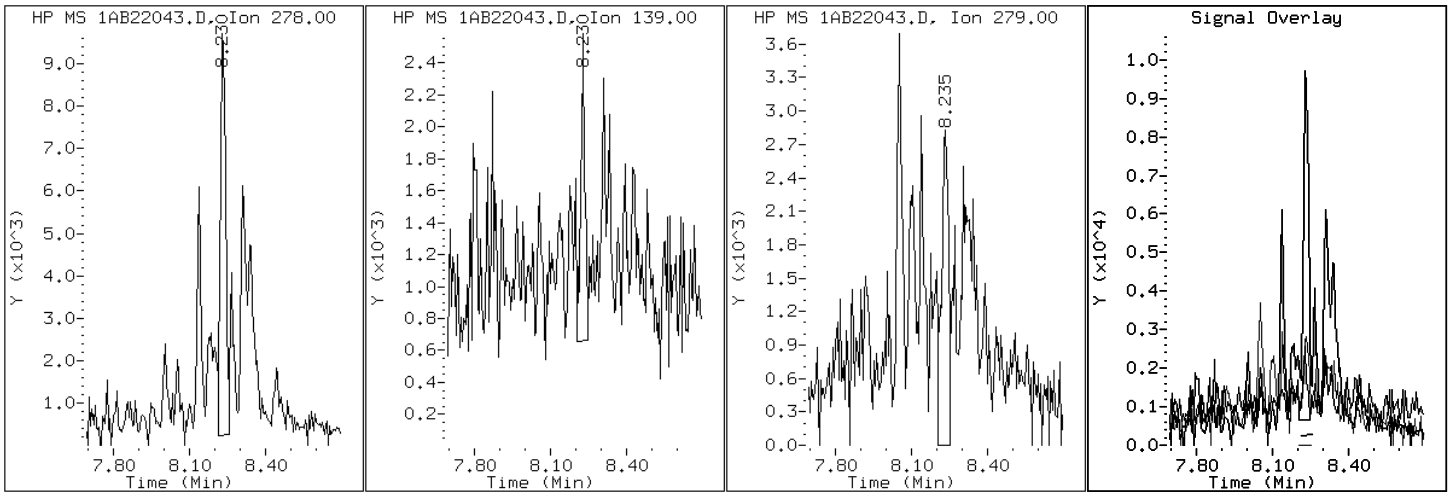
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

25 Dibenzo(a,h)anthracene



Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

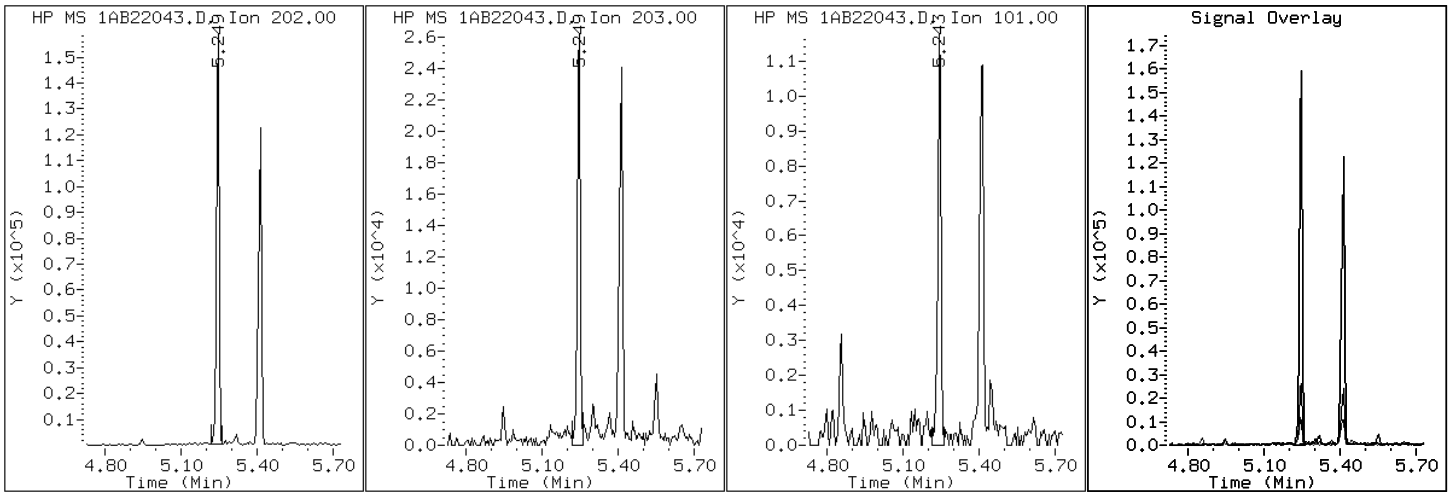
Client ID: FM0161F-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a

Operator: SCC

15 Fluoranthene



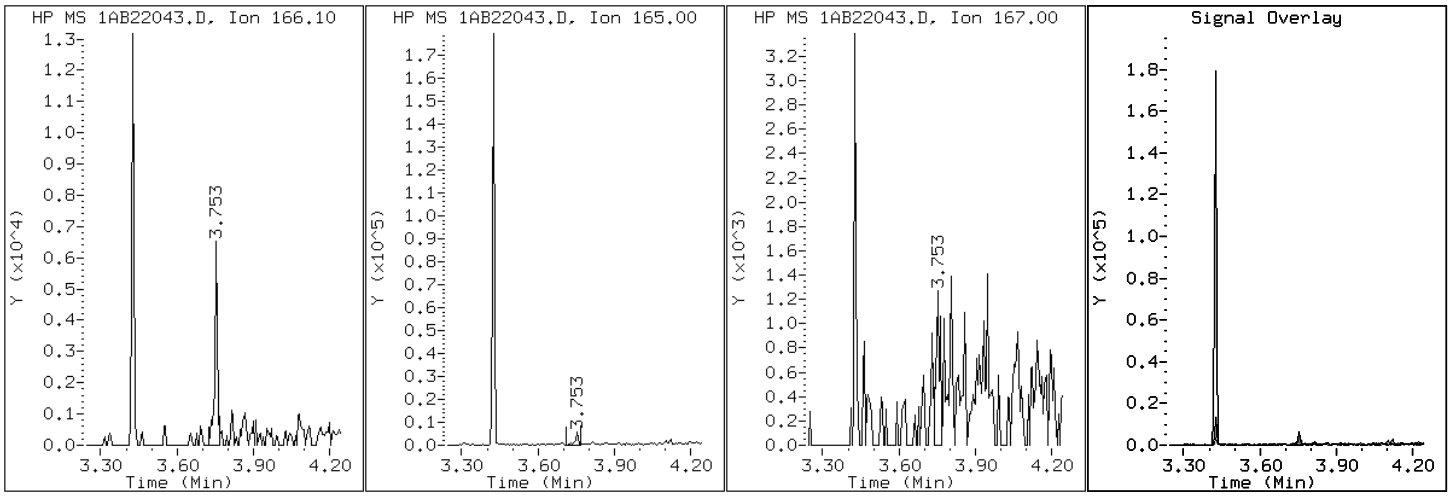
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

9 Fluorene



Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

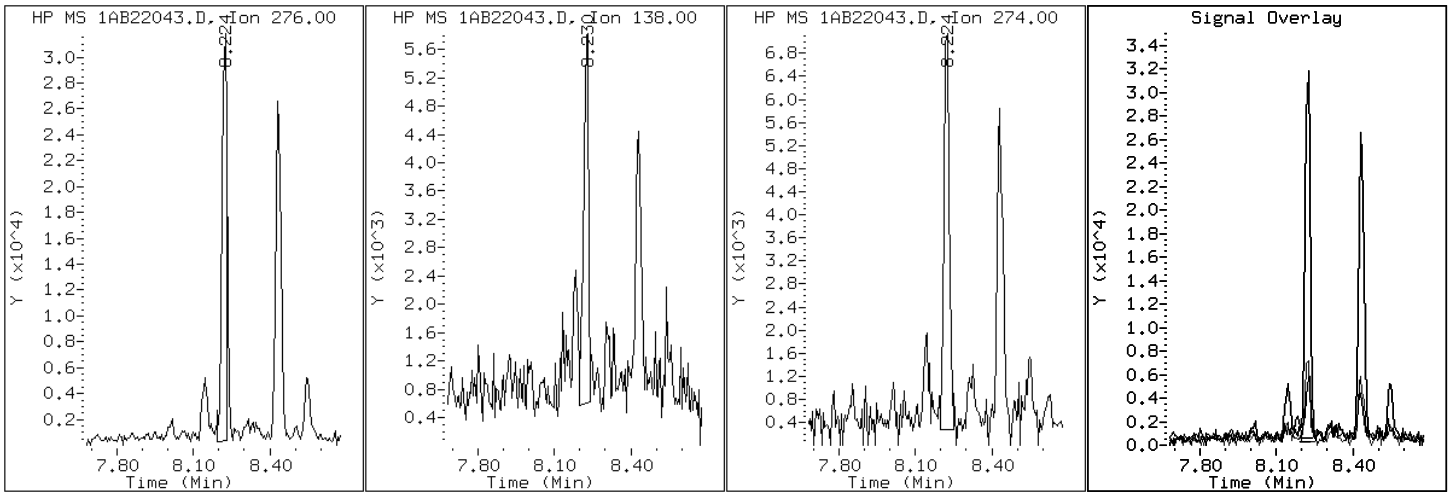
Client ID: FM0161F-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



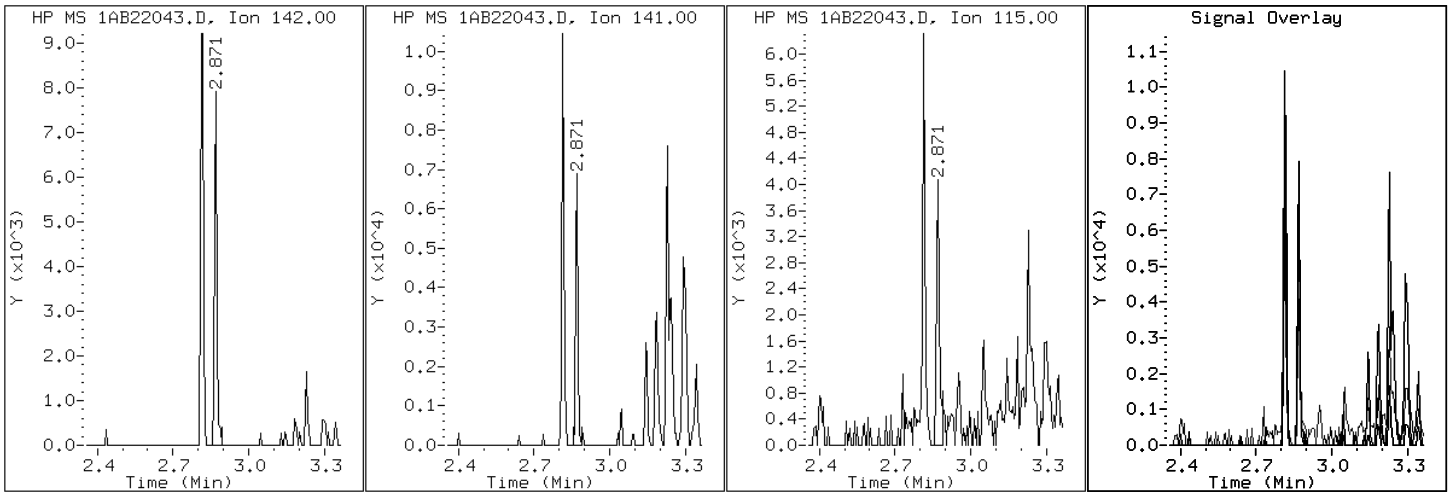
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

4 1-Methylnaphthalene



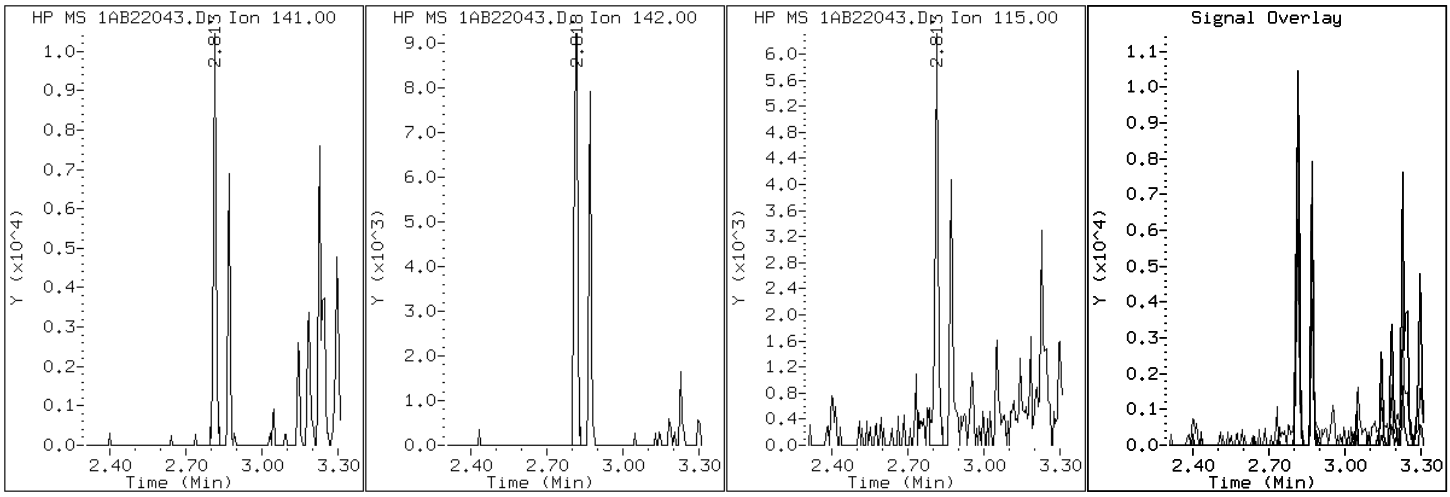
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

3 2-Methylnaphthalene



Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

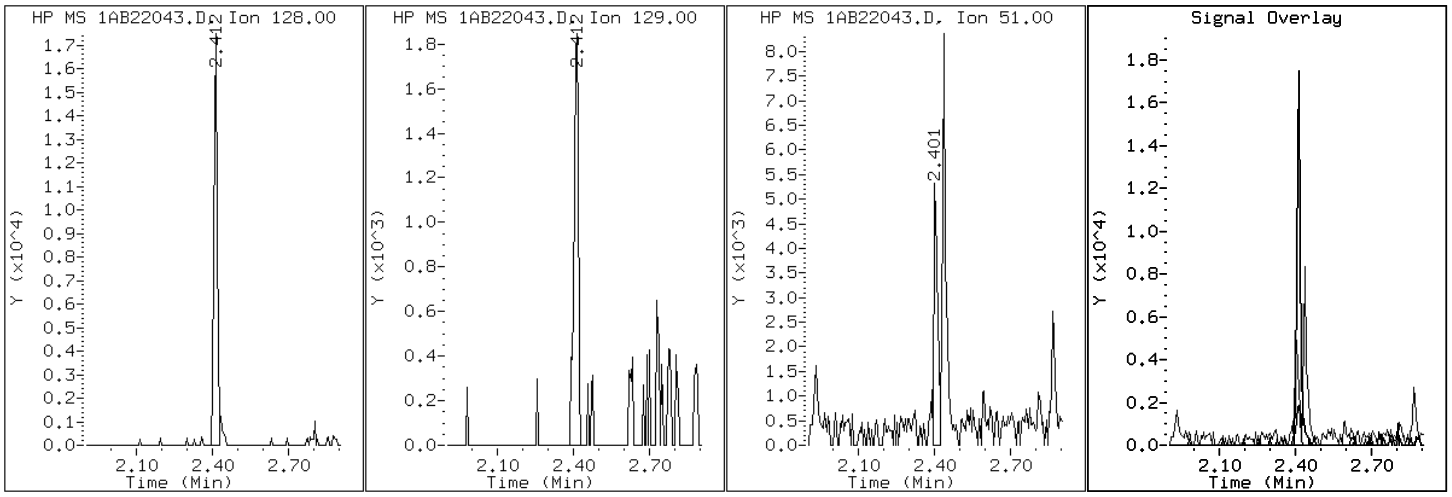
Client ID: FM0161F-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a

Operator: SCC

2 Naphthalene



Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

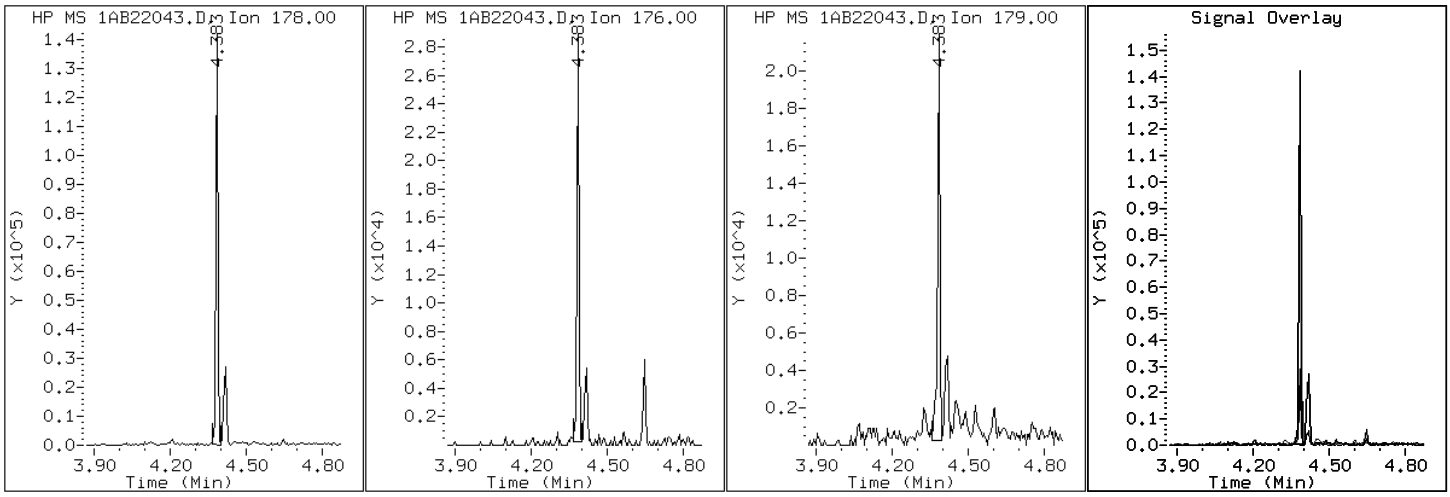
Client ID: FM0161F-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a

Operator: SCC

11 Phenanthrene



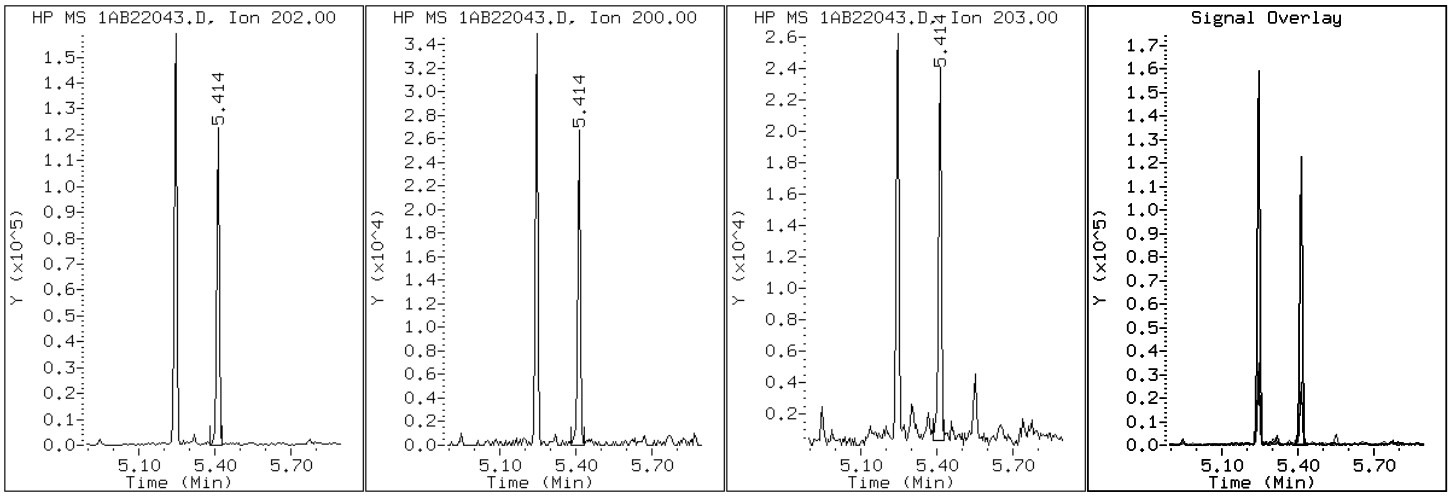
Data File: 1AB22043.D

Date: 22-FEB-2013 21:12

Client ID: FM0161F-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-4-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22043.D
Inj. Date and Time: 22-FEB-2013 21:12
Instrument ID: BSMA5973.i
Client ID: FM0161F-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

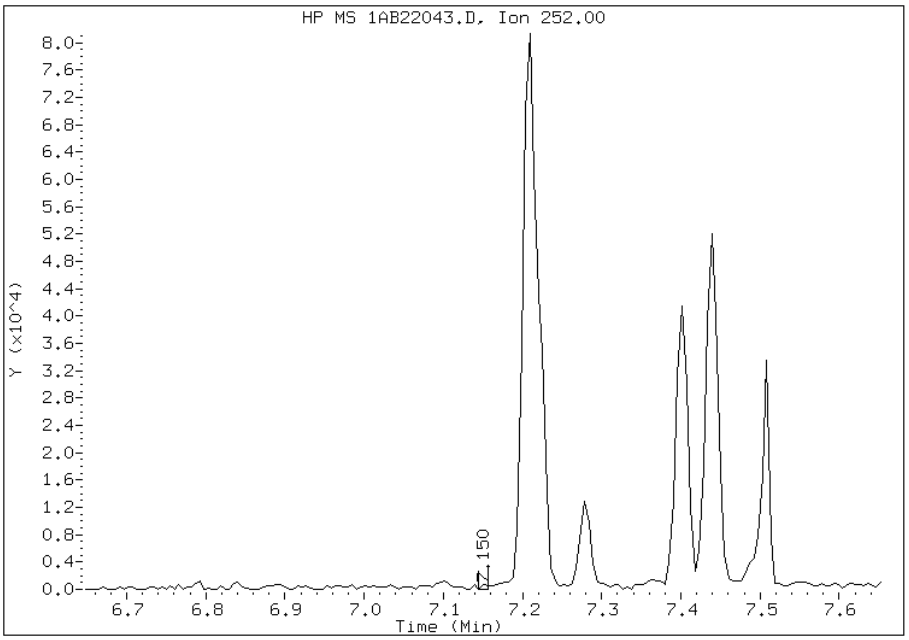
Processing Integration Results

RT: 7.15

Response: 402

Amount: 0

Conc: 1



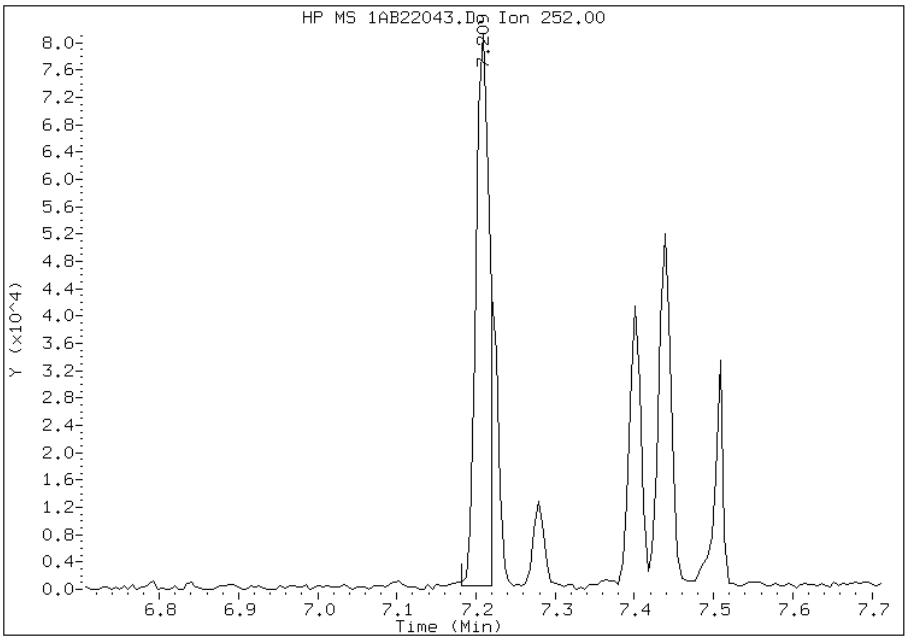

Manual Integration Results

RT: 7.21

Response: 95538

Amount: 3

Conc: 208




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:32
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22043.D
Inj. Date and Time: 22-FEB-2013 21:12
Instrument ID: BSMA5973.i
Client ID: FM0161F-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

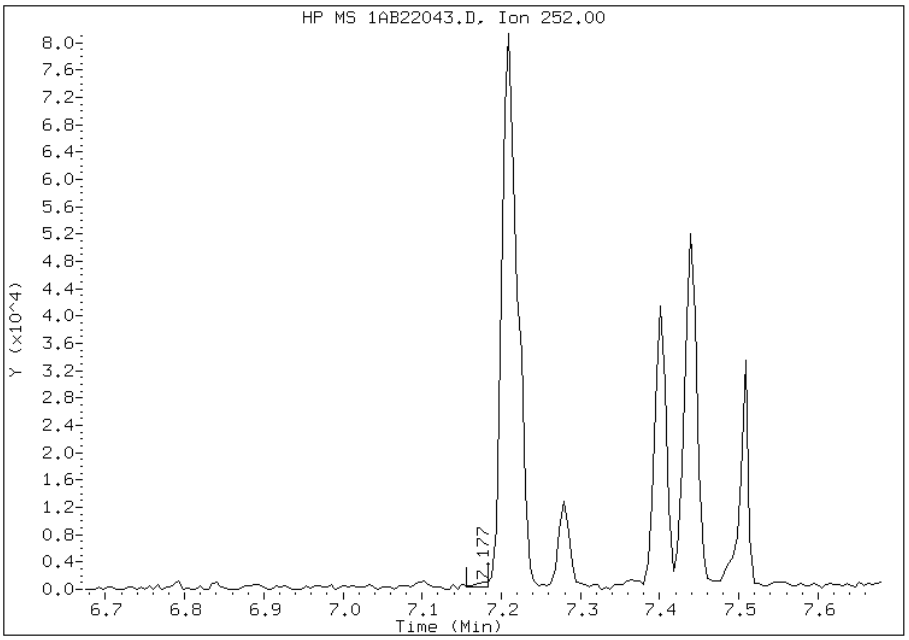
Processing Integration Results

RT: 7.18

Response: 688

Amount: 0

Conc: 1



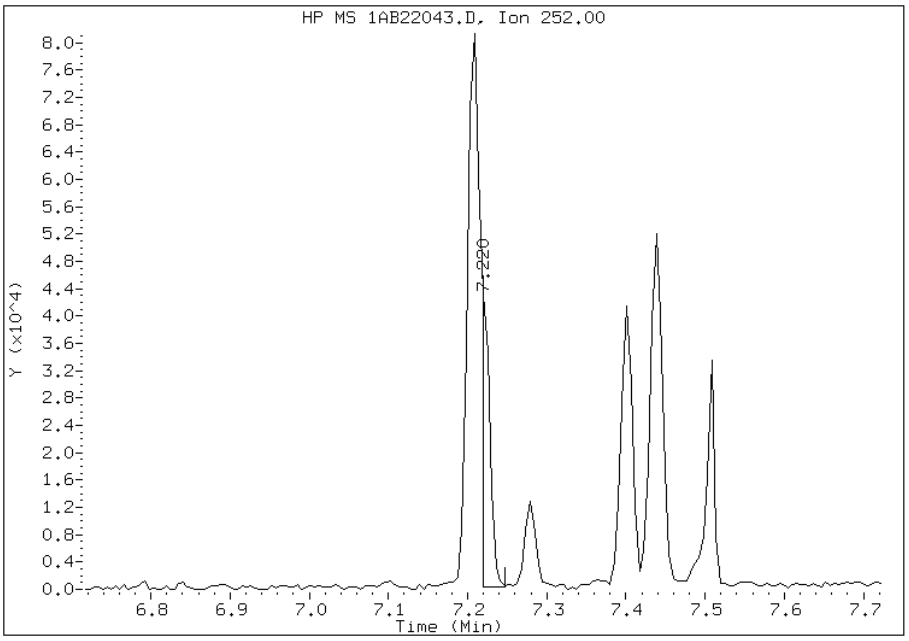

Manual Integration Results

RT: 7.22

Response: 30587

Amount: 1

Conc: 66




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:32
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22043.D
Inj. Date and Time: 22-FEB-2013 21:12
Instrument ID: BSMA5973.i
Client ID: FM0161F-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

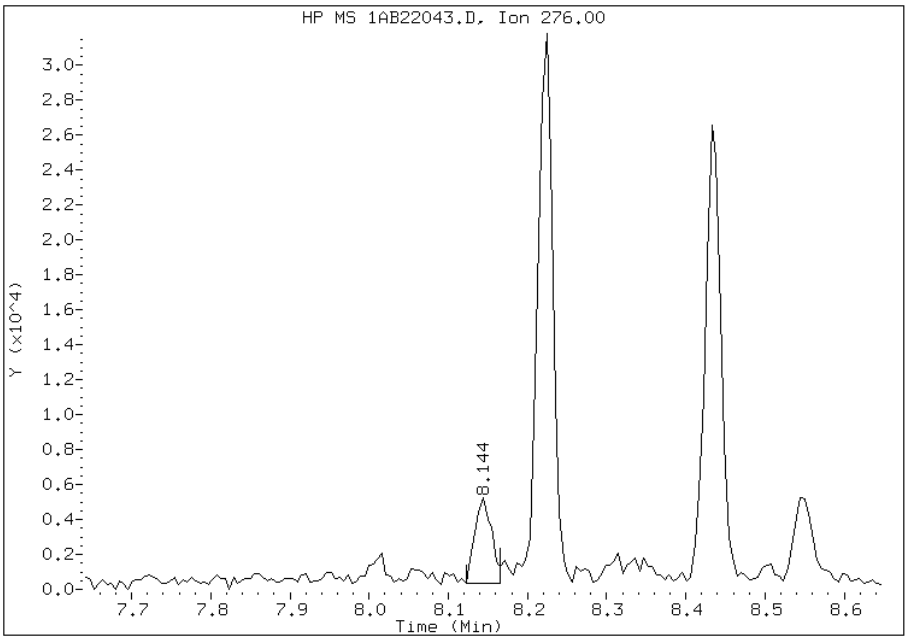
Processing Integration Results

RT: 8.14

Response: 7169

Amount: 0

Conc: 20



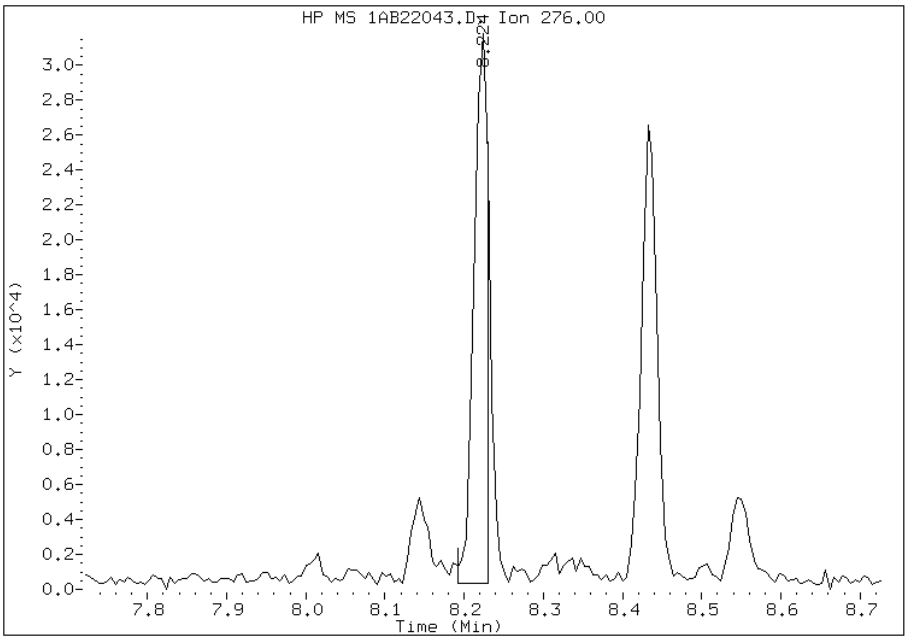

Manual Integration Results

RT: 8.22

Response: 37521

Amount: 2

Conc: 104




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:33
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161G-CS | Lab Sample ID: 680-87545-5

Matrix: Solid | Lab File ID: 1AB22044.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:58

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 15.46(g) | Date Analyzed: 02/22/2013 21:27

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 3.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 20 |
| 208-96-8 | Acenaphthylene | 15 | J | 40 | 5.0 |
| 120-12-7 | Anthracene | 24 | | 8.5 | 4.2 |
| 56-55-3 | Benzo[a]anthracene | 130 | | 8.1 | 3.9 |
| 50-32-8 | Benzo[a]pyrene | 94 | | 10 | 5.2 |
| 205-99-2 | Benzo[b]fluoranthene | 140 | | 12 | 6.2 |
| 191-24-2 | Benzo[g,h,i]perylene | 65 | | 20 | 4.4 |
| 207-08-9 | Benzo[k]fluoranthene | 54 | | 8.1 | 3.6 |
| 218-01-9 | Chrysene | 140 | | 9.1 | 4.5 |
| 53-70-3 | Dibenz(a,h)anthracene | 27 | | 20 | 4.1 |
| 206-44-0 | Fluoranthene | 150 | | 20 | 4.0 |
| 86-73-7 | Fluorene | 5.8 | J | 20 | 4.1 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 60 | | 20 | 7.2 |
| 90-12-0 | 1-Methylnaphthalene | 28 | J | 40 | 4.4 |
| 91-57-6 | 2-Methylnaphthalene | 37 | J | 40 | 7.2 |
| 91-20-3 | Naphthalene | 43 | | 40 | 4.4 |
| 85-01-8 | Phenanthrene | 69 | | 8.1 | 3.9 |
| 129-00-0 | Pyrene | 140 | | 20 | 3.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 51 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22044.D
Lab Smp Id: 680-87545-A-5-A Client Smp ID: FM0161G-CS
Inj Date : 22-FEB-2013 21:27
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-5-a
Misc Info : 680-87545-A-5-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.460 | Weight Extracted |
| M | 3.846 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.405 | 2.397 | (1.000) | 1058689 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.431 | 3.417 | (1.000) | 888652 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.371 | 4.352 | (1.000) | 1236247 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.643 | 4.635 | (1.062) | 91262 | 5.07330 | 341.2826 |
| * 18 Chrysene-d12 | 240 | 6.395 | 6.366 | (1.000) | 920725 | 40.0000 | (H) |
| * 23 Perylene-d12 | 264 | 7.496 | 7.456 | (1.000) | 1307084 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.410 | 2.402 | (1.002) | 16142 | 0.63276 | 42.5660 |
| 3 2-Methylnaphthalene | 141 | 2.816 | 2.808 | (1.171) | 7281 | 0.55287 | 37.1918 |
| 4 1-Methylnaphthalene | 142 | 2.870 | 2.861 | (1.193) | 6083 | 0.41480 | 27.9034 |
| 5 Acenaphthylene | 152 | 3.340 | 3.332 | (0.974) | 7455 | 0.22468 | 15.1141 |
| 9 Fluorene | 166 | 3.756 | 3.743 | (1.095) | 2102 | 0.08687 | 5.8434(Q) |
| 11 Phenanthrene | 178 | 4.381 | 4.368 | (1.002) | 31311 | 1.01894 | 68.5446 |
| 12 Anthracene | 178 | 4.413 | 4.400 | (1.010) | 10687 | 0.35804 | 24.0855 |
| 13 Carbazole | 167 | 4.579 | 4.555 | (1.048) | 4409 | 0.16733 | 11.2563 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 5.247 | 5.228 | (1.200) | 68246 | 2.22122 | 149.4221 |
| 16 Pyrene | 202 | 5.412 | 5.394 | (0.846) | 57141 | 2.11585 | 142.3341(H) |
| 17 Benzo(a)anthracene | 228 | 6.385 | 6.355 | (0.998) | 54992 | 2.00028 | 134.5596(H) |
| 19 Chrysene | 228 | 6.406 | 6.387 | (1.002) | 51733 | 2.10402 | 141.5382(H) |
| 20 Benzo(b)fluoranthene | 252 | 7.207 | 7.178 | (0.962) | 67398 | 2.03407 | 136.8328(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.218 | 7.199 | (0.963) | 26817 | 0.80446 | 54.1164(QMH) |
| 22 Benzo(a)pyrene | 252 | 7.437 | 7.408 | (0.992) | 42570 | 1.40291 | 94.3739(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.222 | 8.177 | (1.097) | 23355 | 0.89714 | 60.3511(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.233 | 8.193 | (1.098) | 10899 | 0.40176 | 27.0265(H) |
| 26 Benzo(g,h,i)perylene | 276 | 8.436 | 8.385 | (1.125) | 26654 | 0.96263 | 64.7567(H) |

## QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22044.D

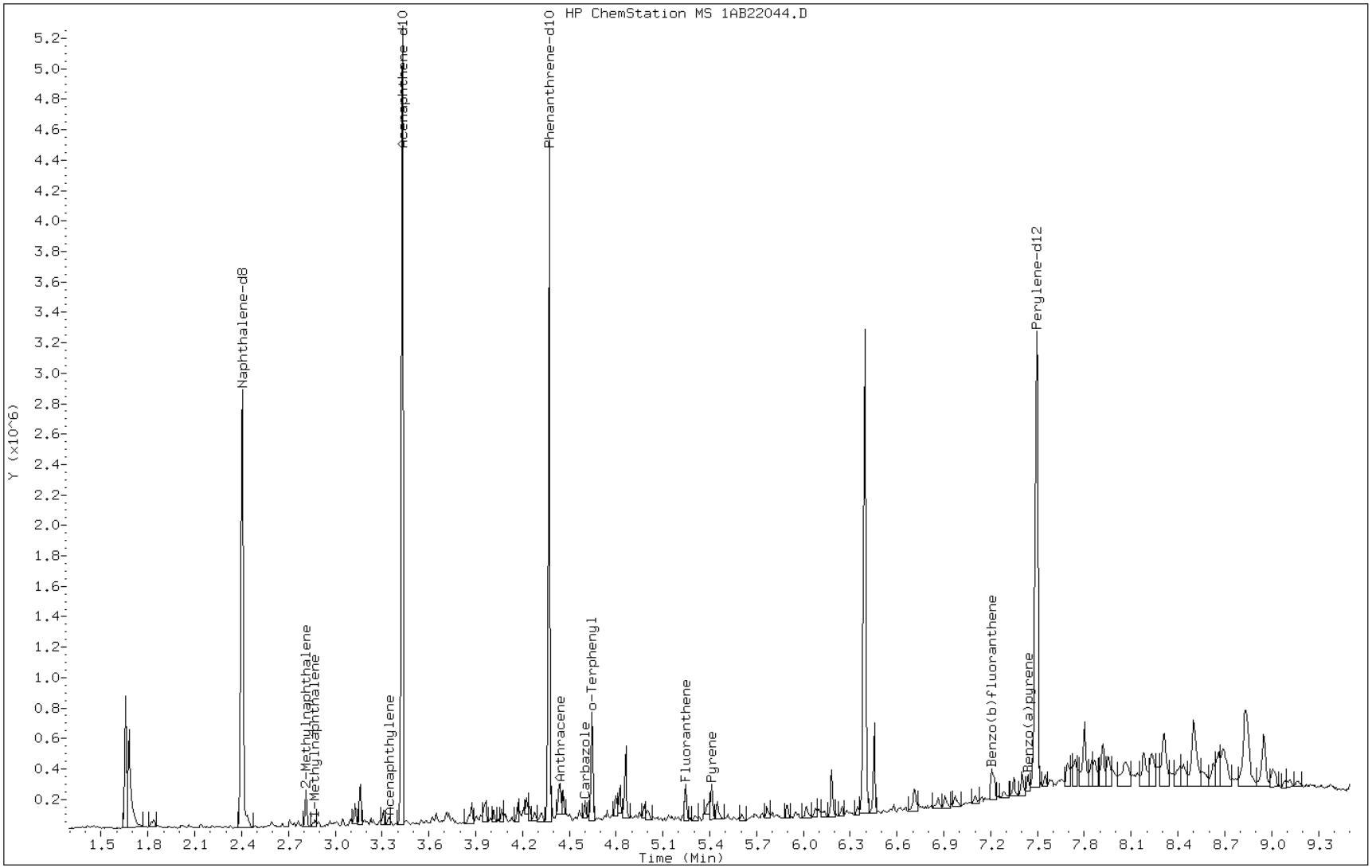
Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a

Operator: SCC



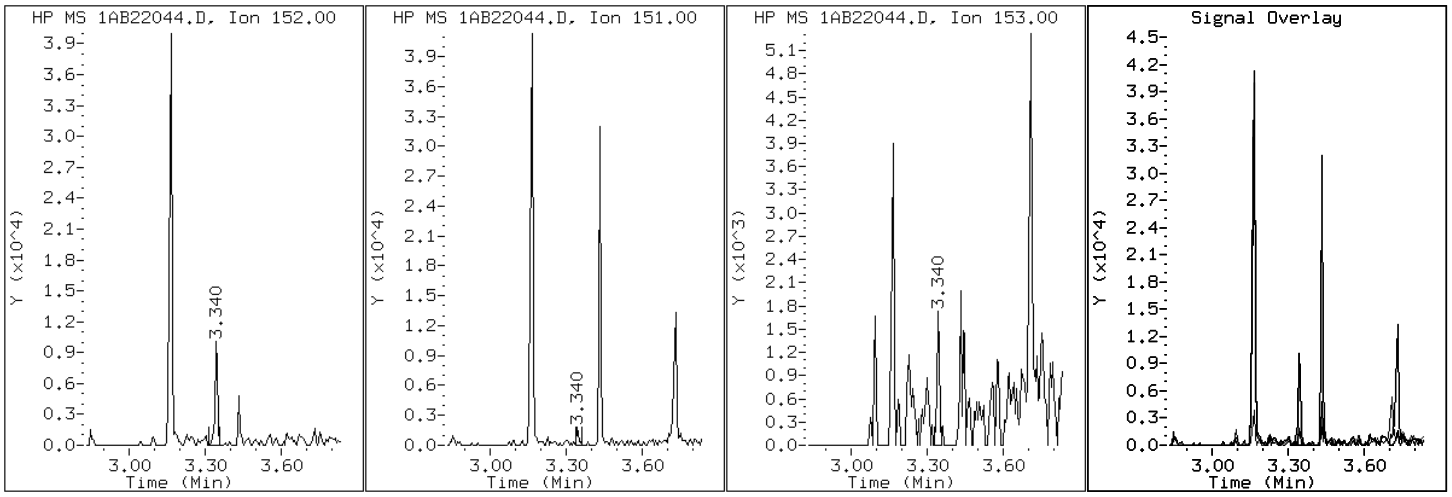
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

5 Acenaphthylene



Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

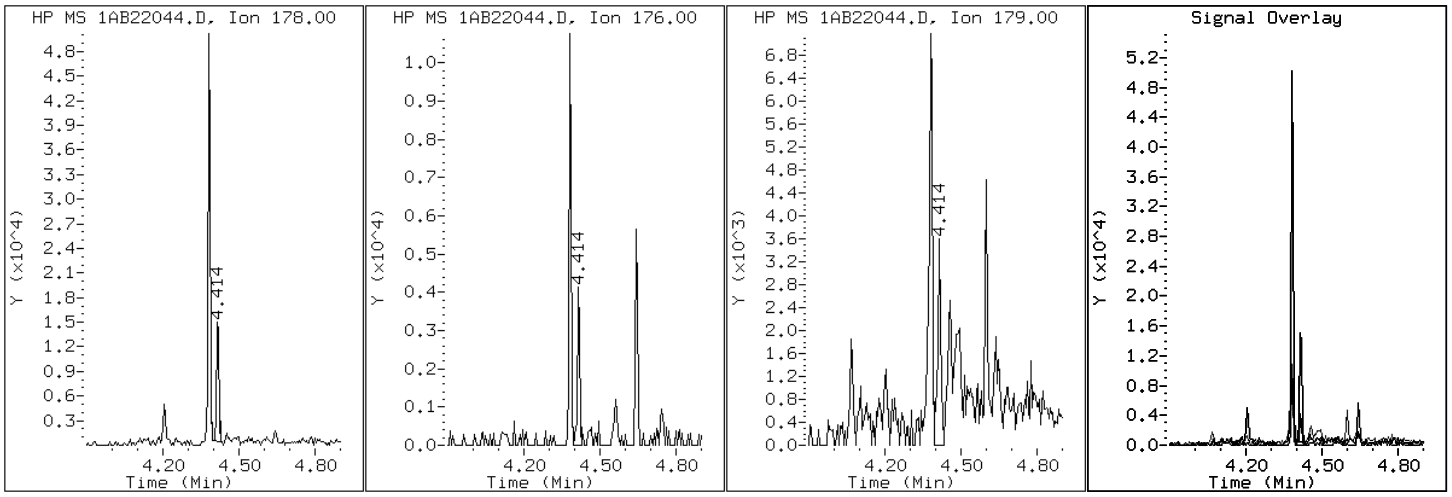
Client ID: FM0161G-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a

Operator: SCC

12 Anthracene



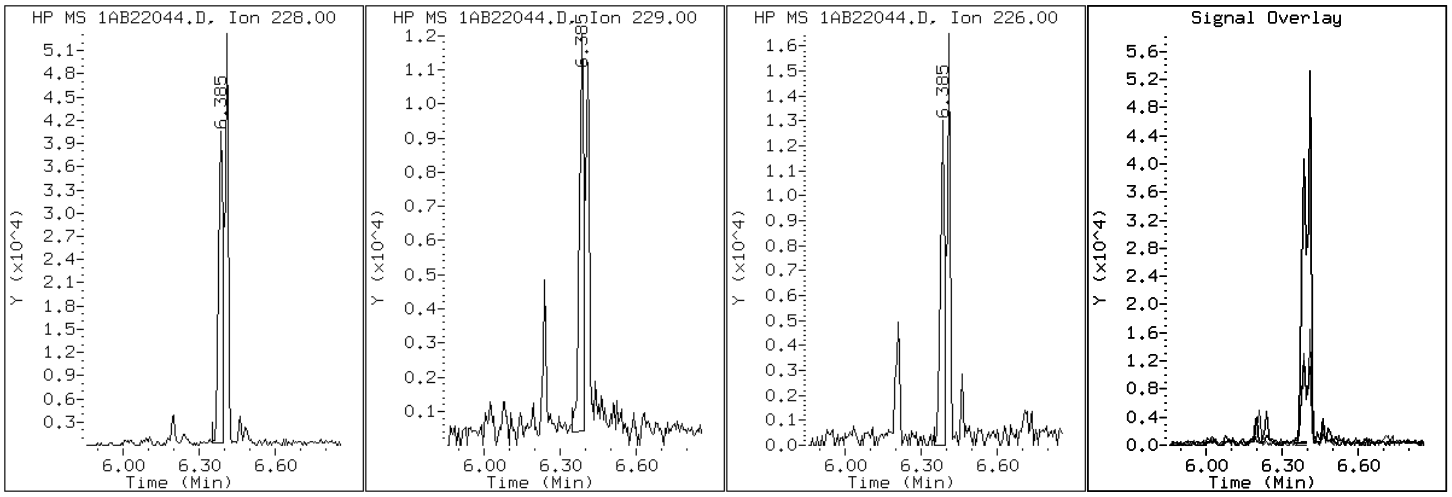
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

17 Benzo(a)anthracene



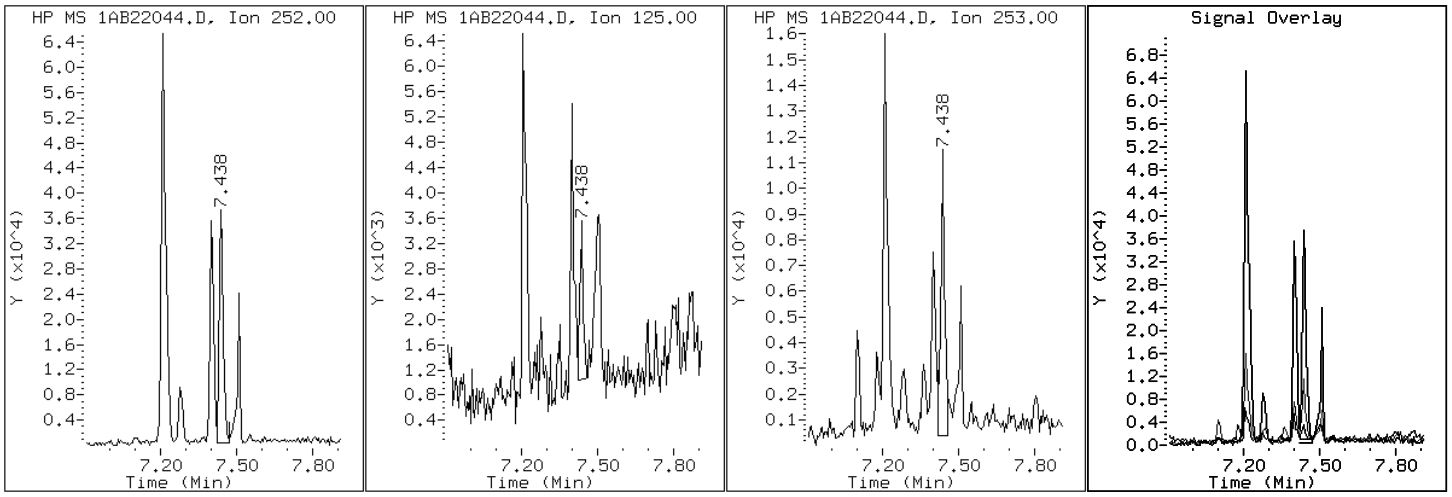
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

22 Benzo(a)pyrene



Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

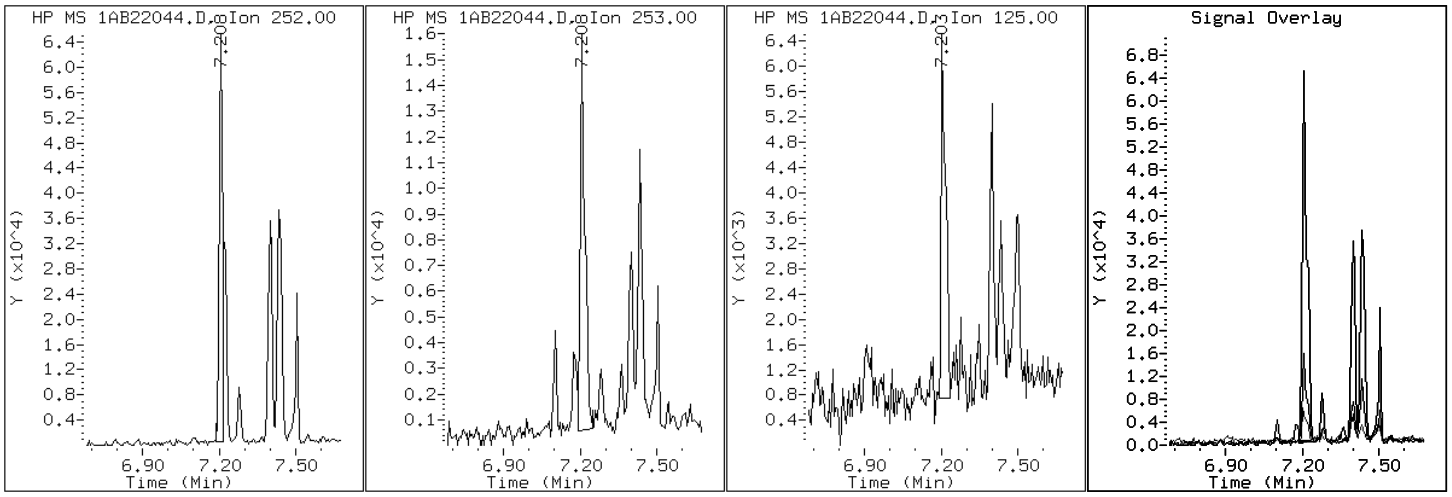
Client ID: FM0161G-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a

Operator: SCC

20 Benzo(b)fluoranthene



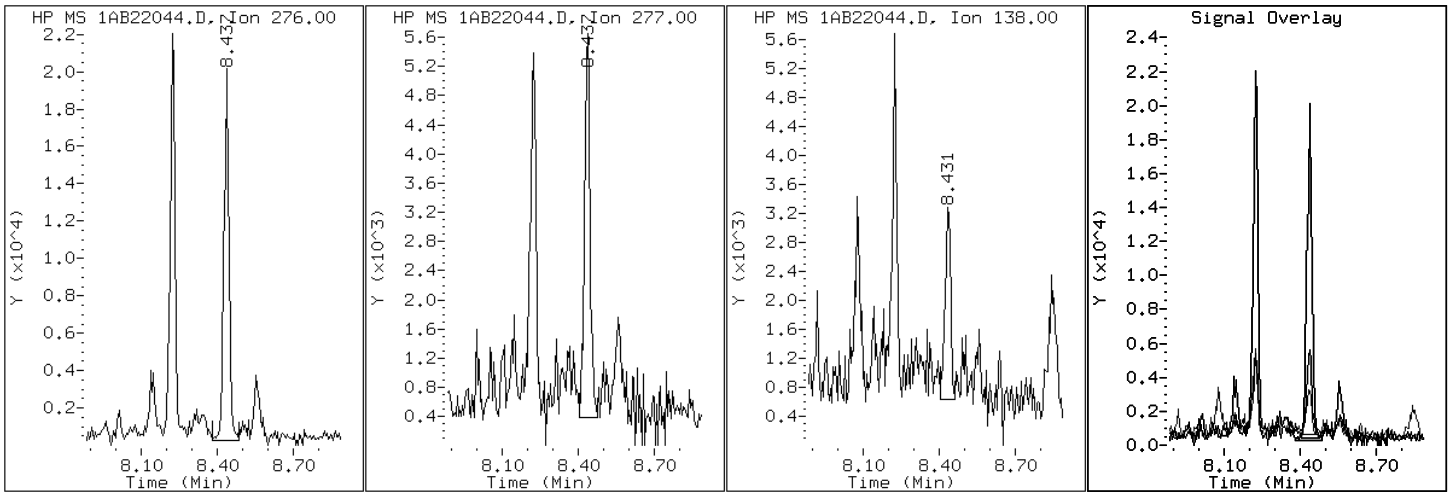
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

26 Benzo(g,h,i)perylene



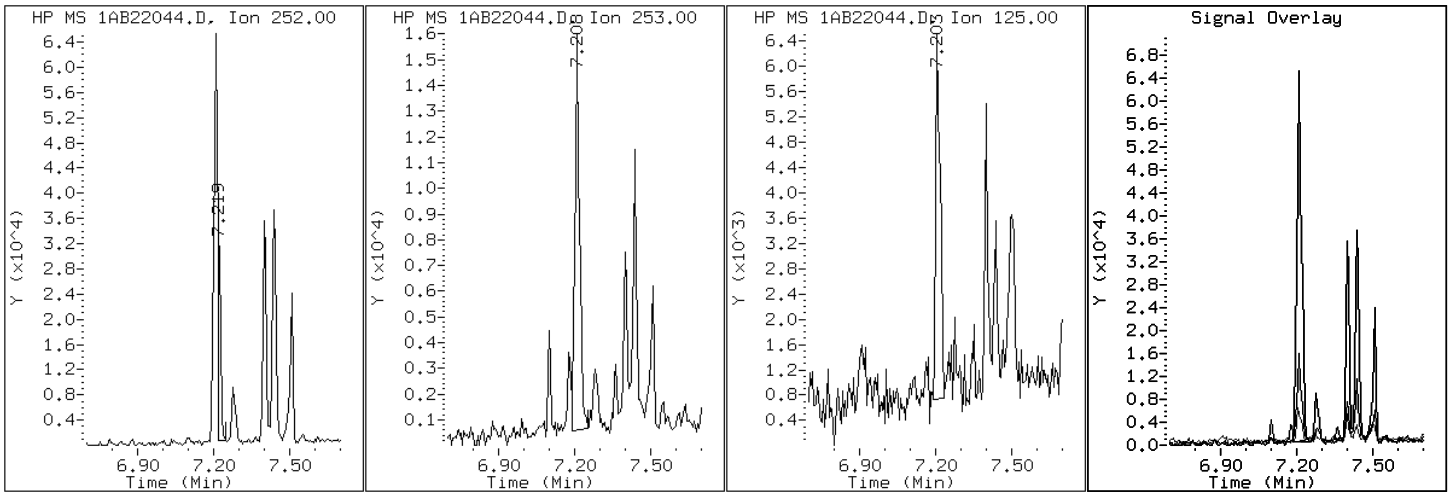
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS | Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a | Operator: SCC

21 Benzo(k)fluoranthene



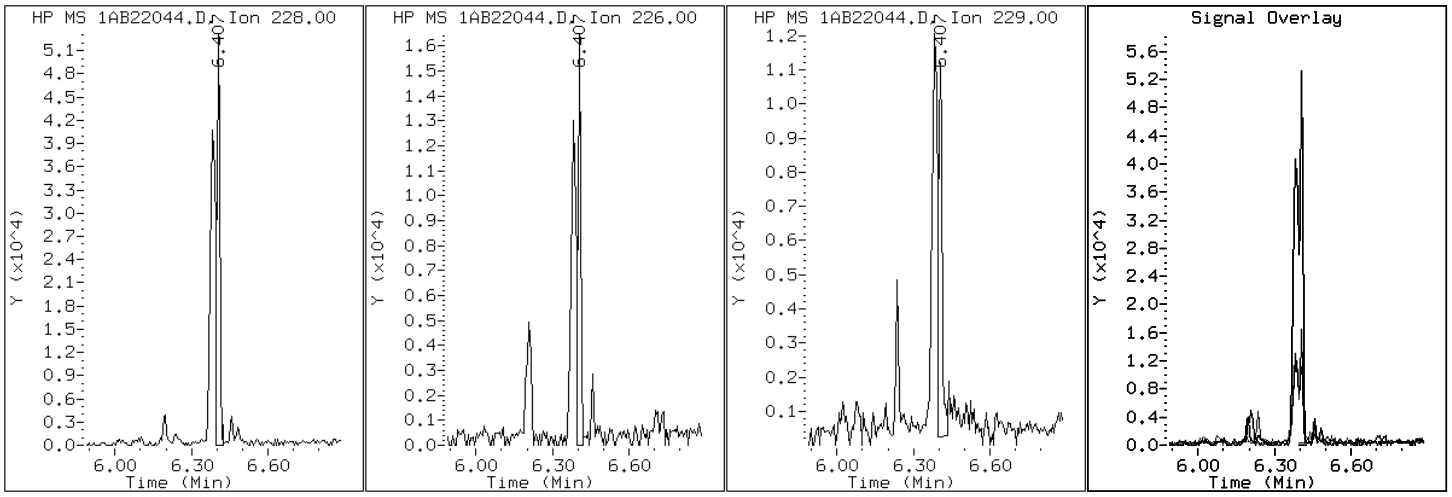
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

19 Chrysene



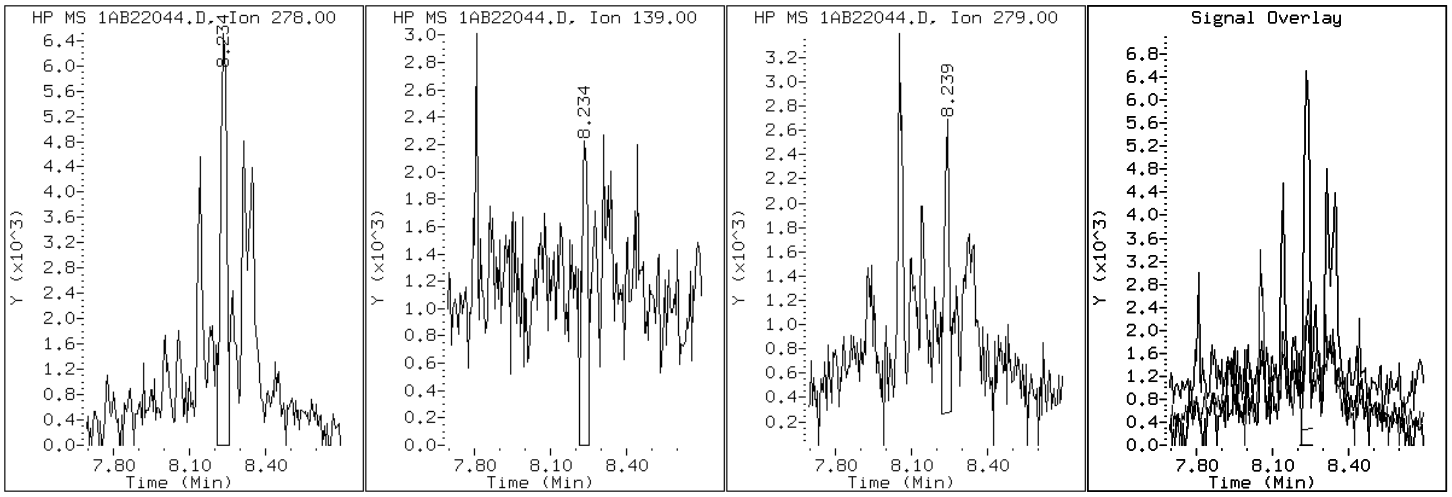
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

25 Dibenzo(a,h)anthracene



Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

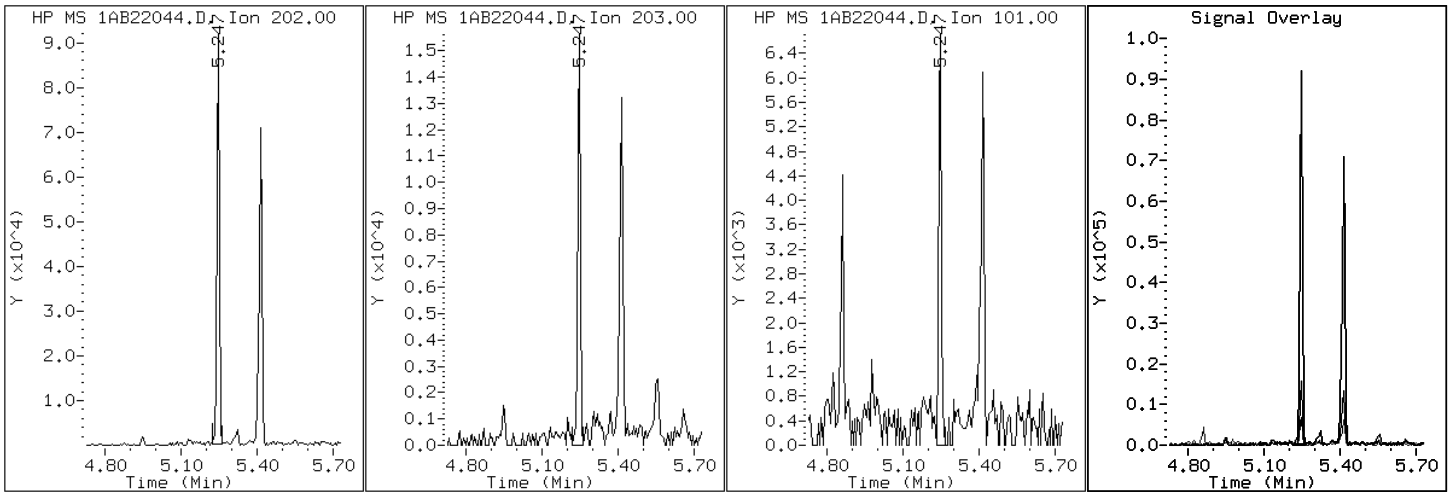
Client ID: FM0161G-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a

Operator: SCC

15 Fluoranthene



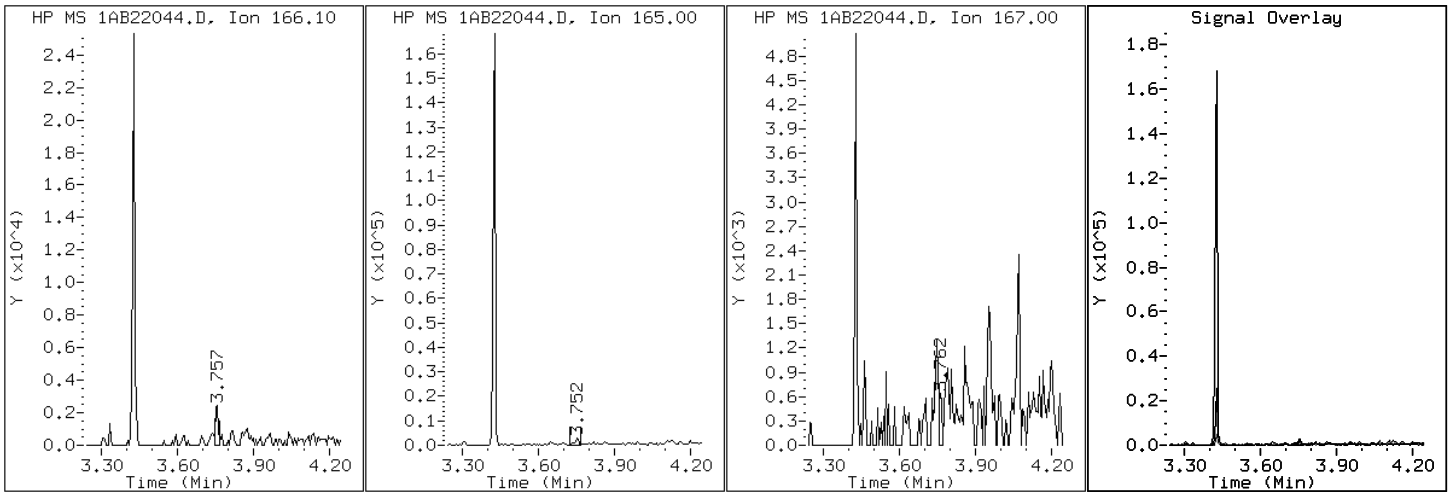
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

9 Fluorene



Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

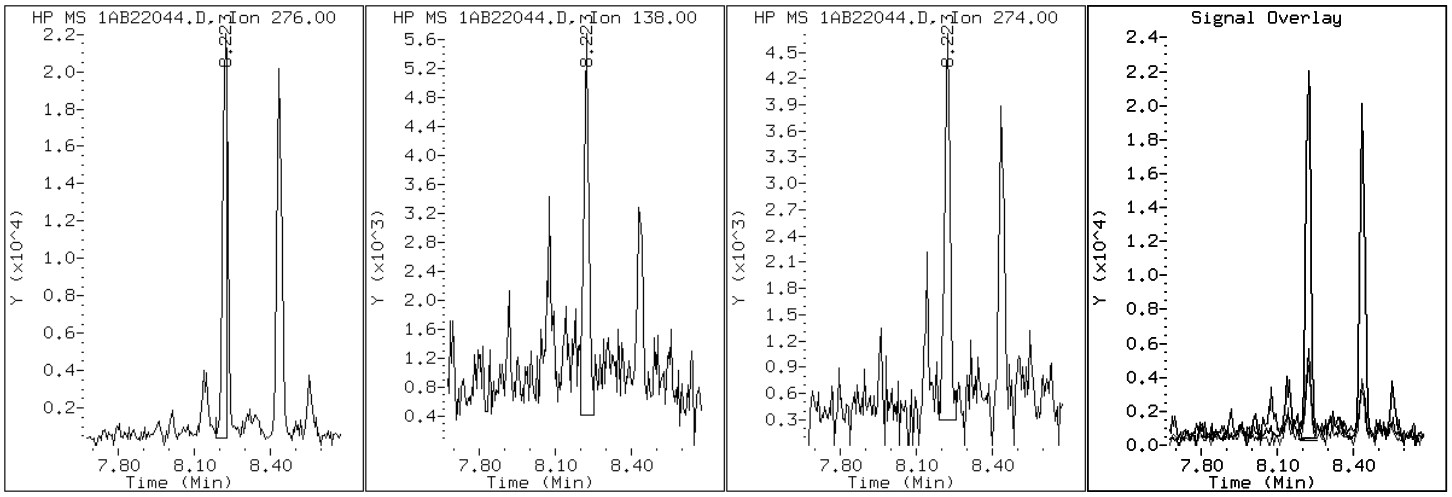
Client ID: FM0161G-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



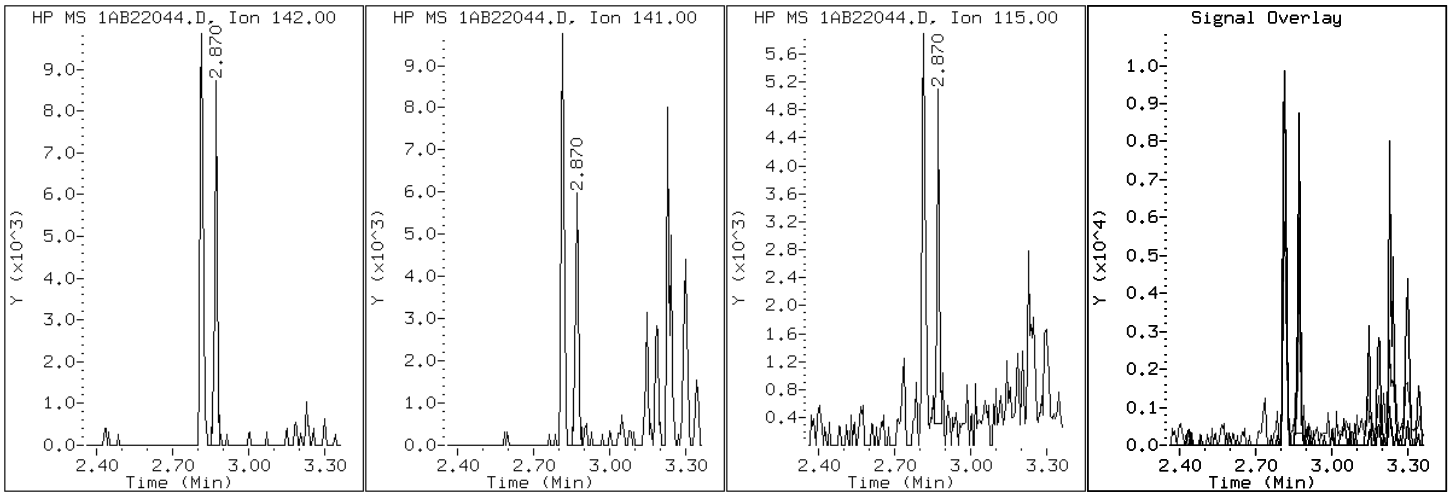
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

4 1-Methylnaphthalene



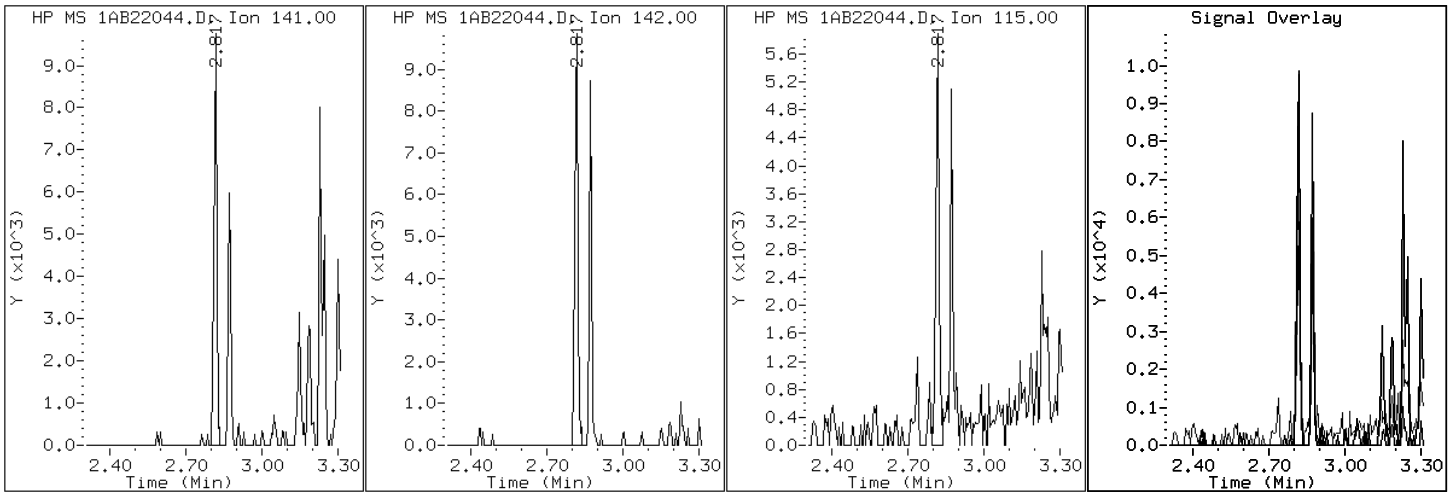
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

3 2-Methylnaphthalene



Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

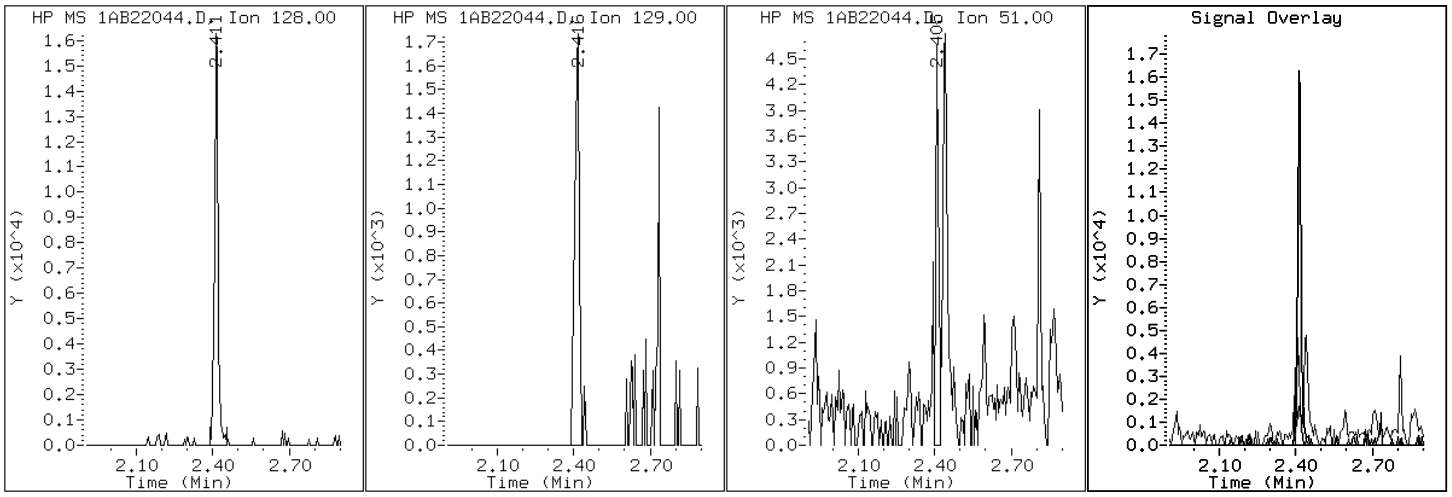
Client ID: FM0161G-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a

Operator: SCC

2 Naphthalene



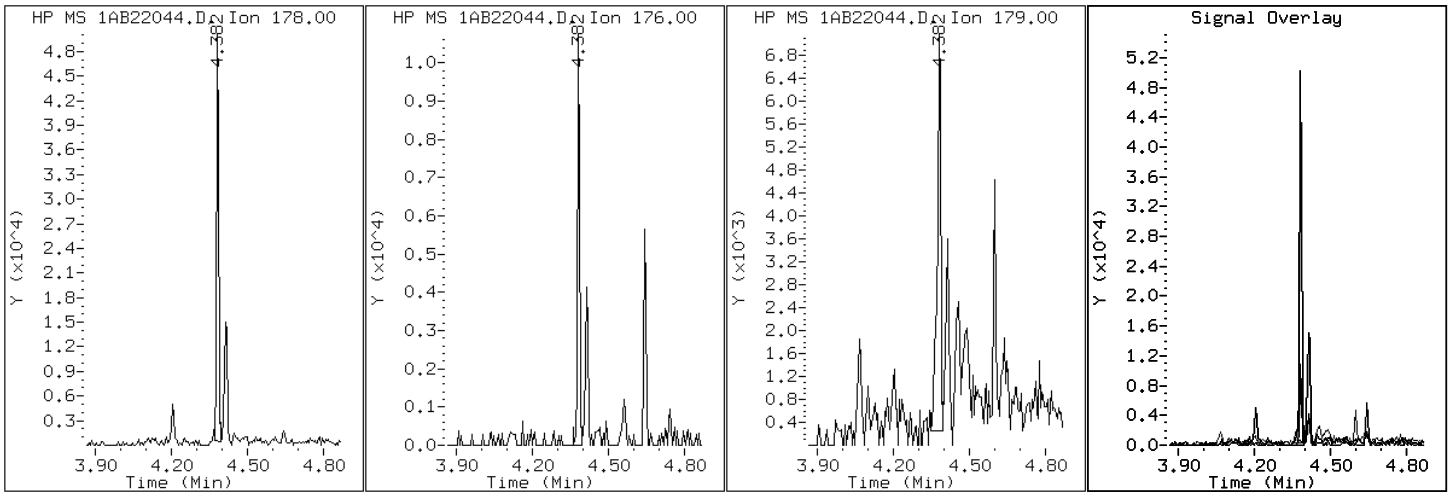
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

11 Phenanthrene



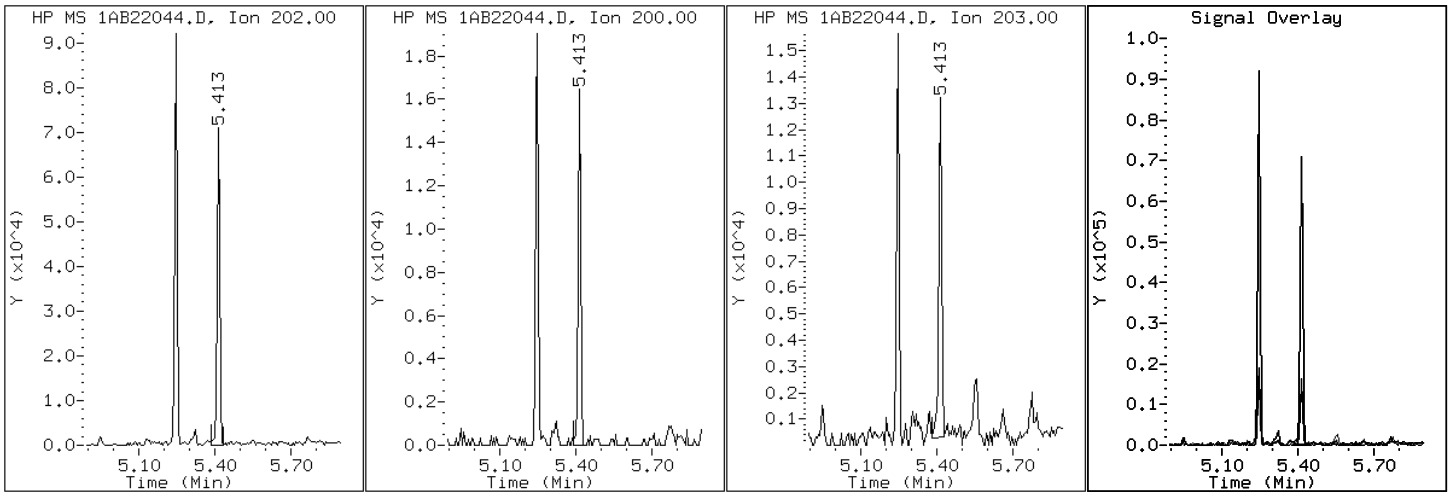
Data File: 1AB22044.D

Date: 22-FEB-2013 21:27

Client ID: FM0161G-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-5-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22044.D
Inj. Date and Time: 22-FEB-2013 21:27
Instrument ID: BSMA5973.i
Client ID: FM0161G-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

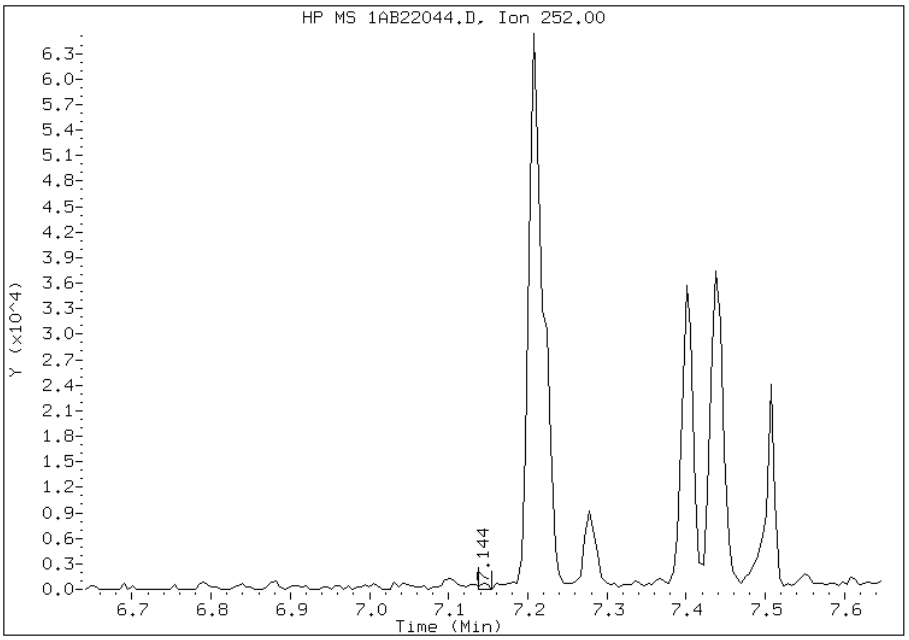
Processing Integration Results

RT: 7.14

Response: 559

Amount: 0

Conc: 1



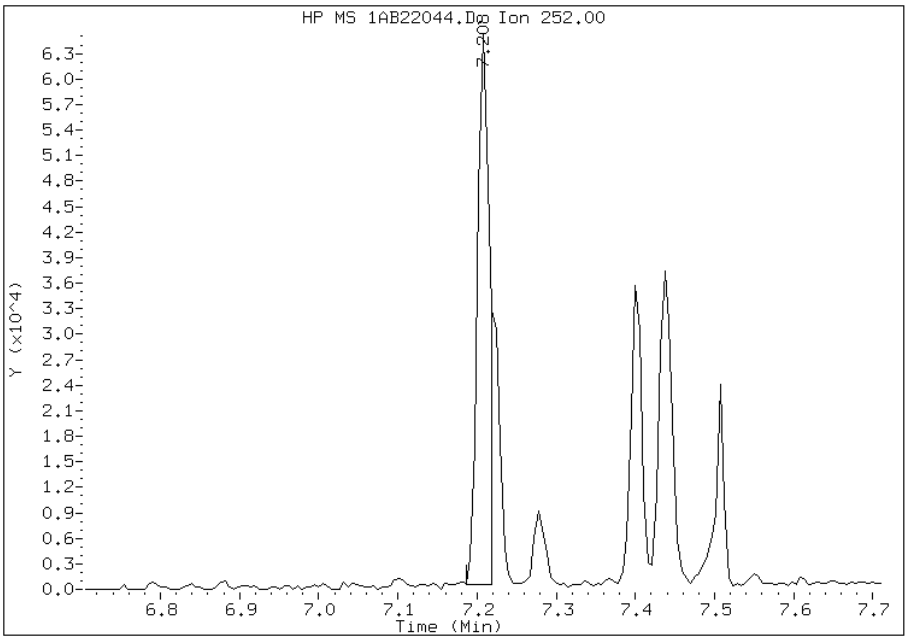

Manual Integration Results

RT: 7.21

Response: 67398

Amount: 2

Conc: 137




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:34
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22044.D
Inj. Date and Time: 22-FEB-2013 21:27
Instrument ID: BSMA5973.i
Client ID: FM0161G-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

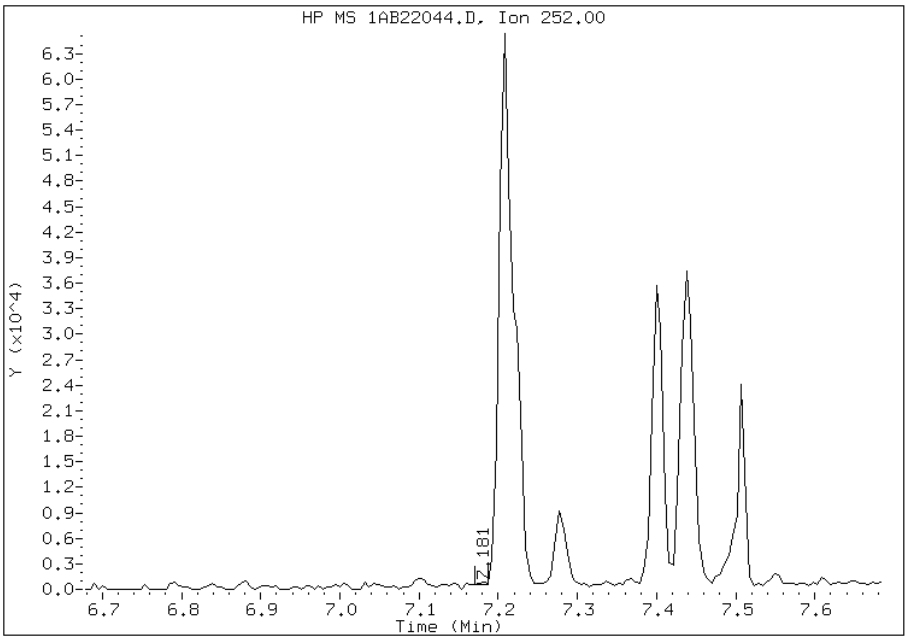
Processing Integration Results

RT: 7.18

Response: 130

Amount: 0

Conc: 0



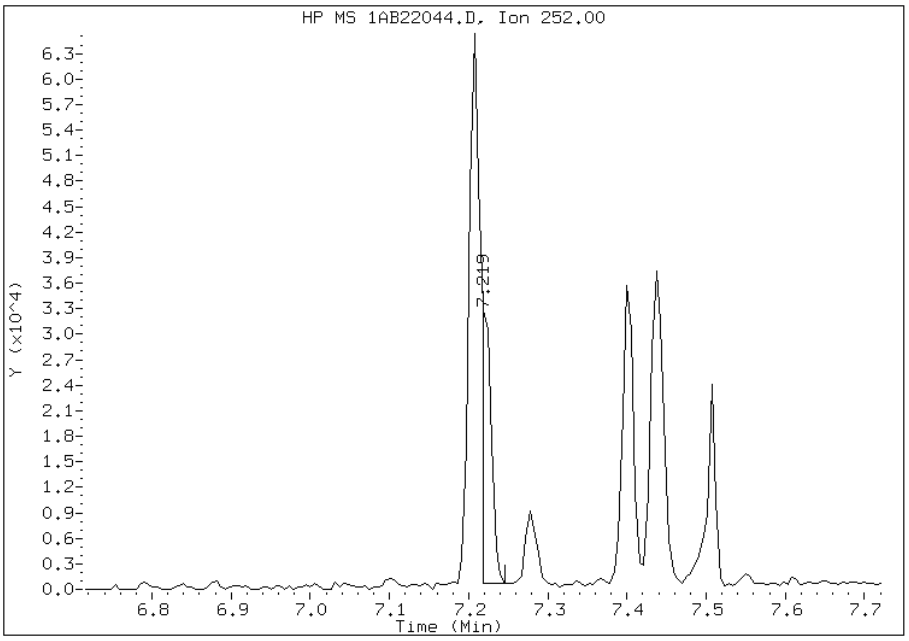

Manual Integration Results

RT: 7.22

Response: 26817

Amount: 1

Conc: 54




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:34
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22044.D
Inj. Date and Time: 22-FEB-2013 21:27
Instrument ID: BSMA5973.i
Client ID: FM0161G-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

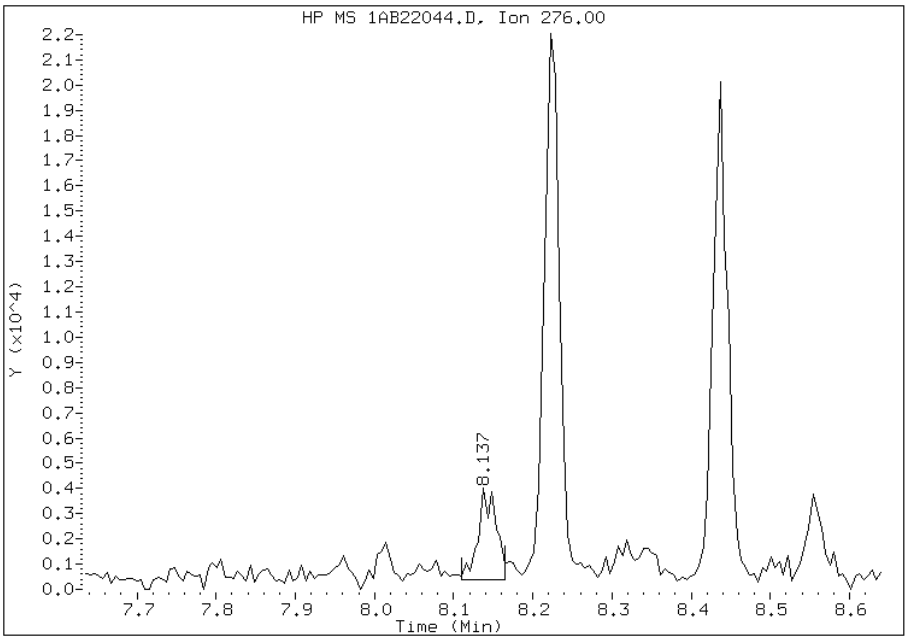
Processing Integration Results

RT: 8.14

Response: 5628

Amount: 0

Conc: 15



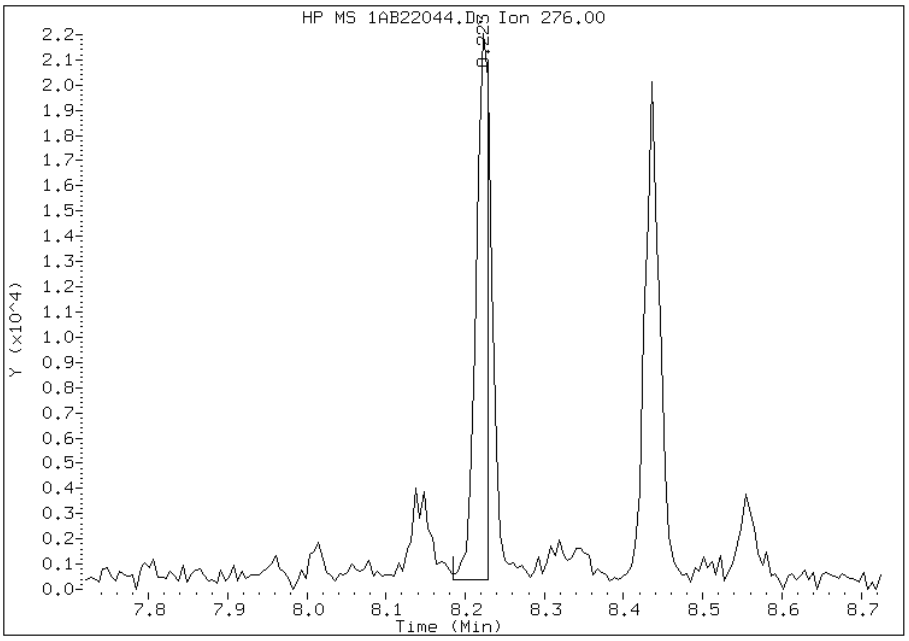

Manual Integration Results

RT: 8.22

Response: 23355

Amount: 1

Conc: 60




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:34
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161H-CS | Lab Sample ID: 680-87545-6

Matrix: Solid | Lab File ID: 1AB22045.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:05

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 14.93(g) | Date Analyzed: 02/22/2013 21:43

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 21 |
| 208-96-8 | Acenaphthylene | 10 | J | 41 | 5.2 |
| 120-12-7 | Anthracene | 18 | | 8.7 | 4.3 |
| 56-55-3 | Benzo[a]anthracene | 61 | | 8.3 | 4.0 |
| 50-32-8 | Benzo[a]pyrene | 40 | | 11 | 5.4 |
| 205-99-2 | Benzo[b]fluoranthene | 68 | | 13 | 6.3 |
| 191-24-2 | Benzo[g,h,i]perylene | 36 | | 21 | 4.5 |
| 207-08-9 | Benzo[k]fluoranthene | 23 | | 8.3 | 3.7 |
| 218-01-9 | Chrysene | 70 | | 9.3 | 4.7 |
| 53-70-3 | Dibenz(a,h)anthracene | 15 | J | 21 | 4.2 |
| 206-44-0 | Fluoranthene | 67 | | 21 | 4.1 |
| 86-73-7 | Fluorene | 21 | U | 21 | 4.2 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 29 | | 21 | 7.3 |
| 90-12-0 | 1-Methylnaphthalene | 15 | J | 41 | 4.5 |
| 91-57-6 | 2-Methylnaphthalene | 21 | J | 41 | 7.3 |
| 91-20-3 | Naphthalene | 23 | J | 41 | 4.5 |
| 85-01-8 | Phenanthrene | 45 | | 8.3 | 4.0 |
| 129-00-0 | Pyrene | 66 | | 21 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 40 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22045.D
Lab Smp Id: 680-87545-A-6-A Client Smp ID: FM0161H-CS
Inj Date : 22-FEB-2013 21:43
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-6-a
Misc Info : 680-87545-A-6-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 14.930 | Weight Extracted |
| M | 2.783 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.404 | 2.397 | (1.000) | 925747 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.429 | 3.417 | (1.000) | 776358 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.370 | 4.352 | (1.000) | 1078019 | 40.0000 | (H) |
| $ 14 o-Terphenyl | 230 | 4.642 | 4.635 | (1.062) | 62984 | 4.01522 | 276.6350 |
| * 18 Chrysene-d12 | 240 | 6.394 | 6.366 | (1.000) | 802791 | 40.0000 | (H) |
| * 23 Perylene-d12 | 264 | 7.495 | 7.456 | (1.000) | 1155258 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.414 | 2.402 | (1.004) | 7398 | 0.33164 | 22.8491 |
| 3 2-Methylnaphthalene | 141 | 2.815 | 2.808 | (1.171) | 3458 | 0.30029 | 20.6886 |
| 4 1-Methylnaphthalene | 142 | 2.869 | 2.861 | (1.193) | 2841 | 0.22155 | 15.2637 |
| 5 Acenaphthylene | 152 | 3.339 | 3.332 | (0.974) | 4262 | 0.14703 | 10.1295 |
| 11 Phenanthrene | 178 | 4.380 | 4.368 | (1.002) | 17528 | 0.65413 | 45.0672(H) |
| 12 Anthracene | 178 | 4.412 | 4.400 | (1.010) | 6796 | 0.26110 | 17.9890(H) |
| 13 Carbazole | 167 | 4.573 | 4.555 | (1.046) | 2812 | 0.12239 | 8.4319(H) |
| 15 Fluoranthene | 202 | 5.246 | 5.228 | (1.200) | 26036 | 0.97178 | 66.9521(H) |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 16 Pyrene | 202 | 5.411 | 5.394 | (0.846) | 22507 | 0.95583 | 65.8536(H) |
| 17 Benzo(a)anthracene | 228 | 6.389 | 6.355 | (0.999) | 21179 | 0.88354 | 60.8726(H) |
| 19 Chrysene | 228 | 6.405 | 6.387 | (1.002) | 21789 | 1.01636 | 70.0236(H) |
| 20 Benzo(b)fluoranthene | 252 | 7.206 | 7.178 | (0.962) | 29026 | 0.99113 | 68.2855(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.217 | 7.199 | (0.963) | 9727 | 0.33014 | 22.7455(QM) |
| 22 Benzo(a)pyrene | 252 | 7.436 | 7.408 | (0.992) | 15564 | 0.58032 | 39.9823(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.216 | 8.177 | (1.096) | 9851 | 0.42814 | 29.4974(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.227 | 8.193 | (1.098) | 5251 | 0.21900 | 15.0884(H) |
| 26 Benzo(g,h,i)perylene | 276 | 8.430 | 8.385 | (1.125) | 12782 | 0.52230 | 35.9848(H) |

## QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22045.D

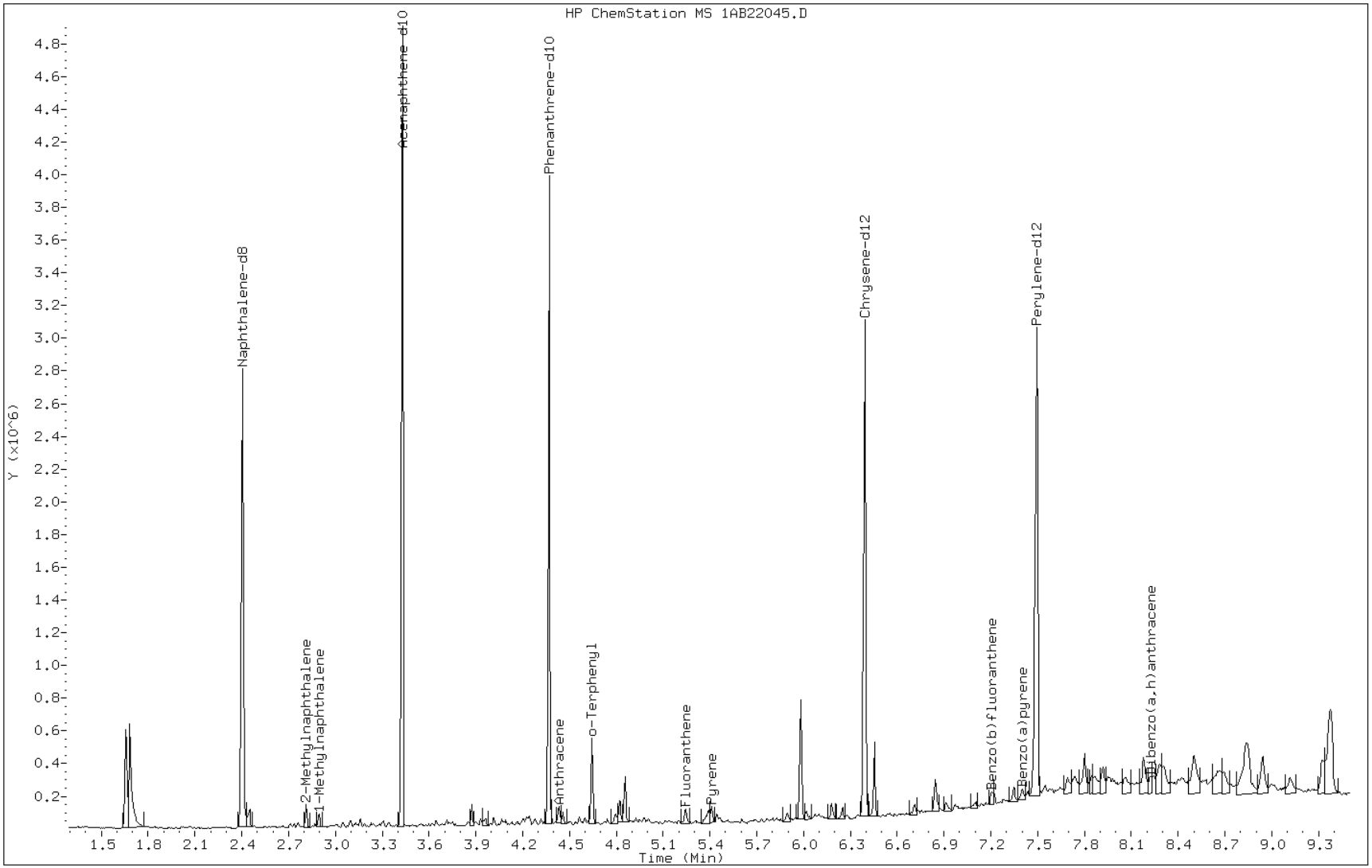
Date: 22-FEB-2013 21:43

Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

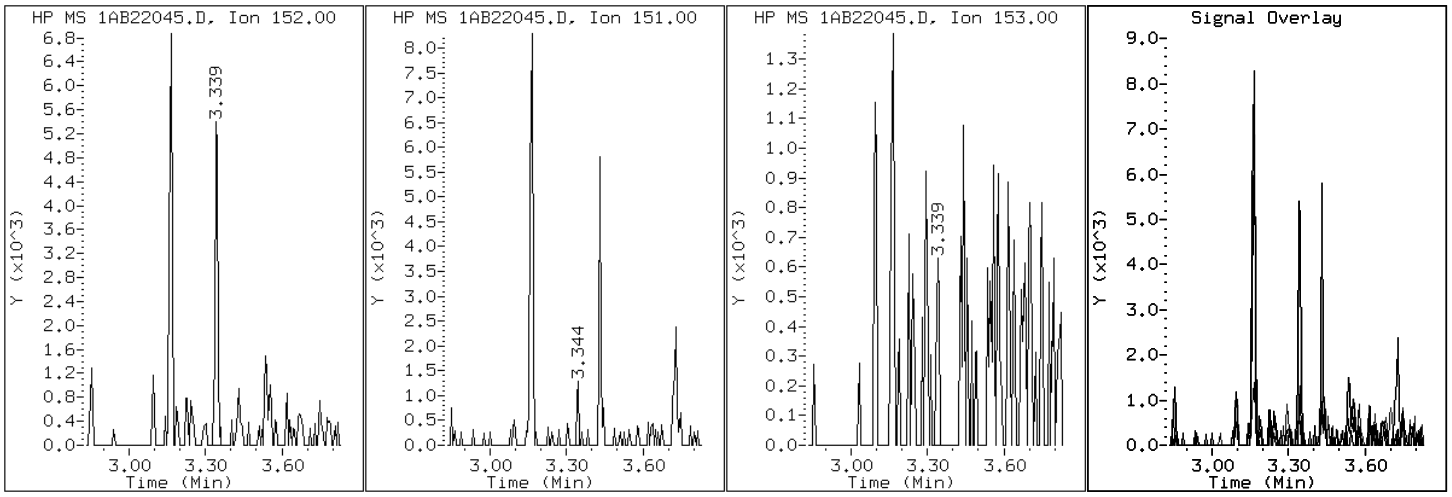
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

5 Acenaphthylene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

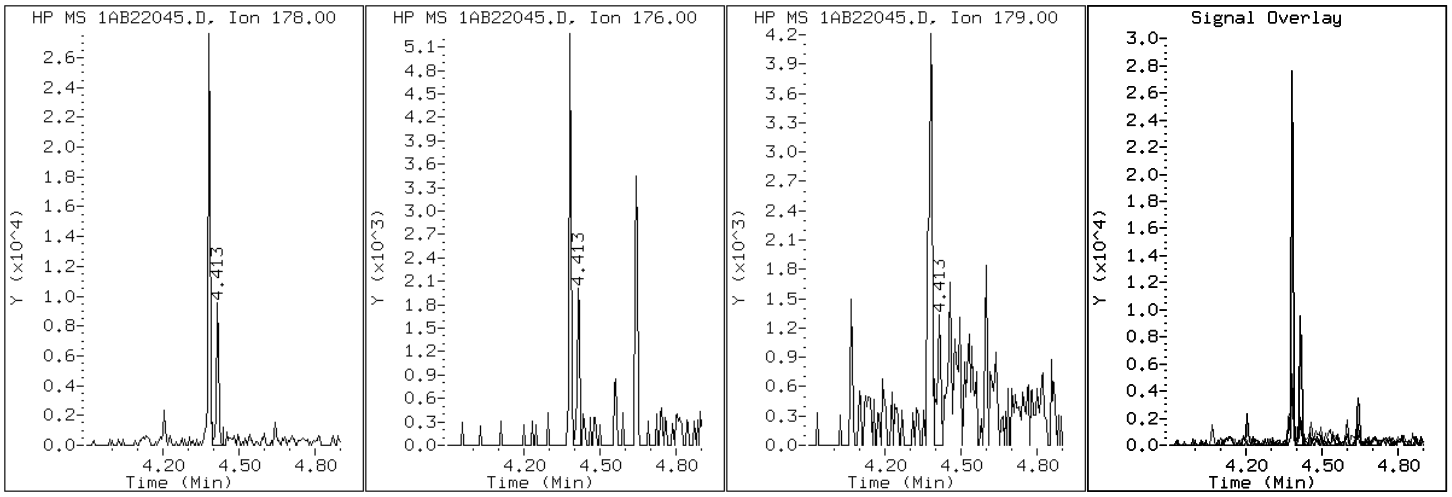
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

12 Anthracene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

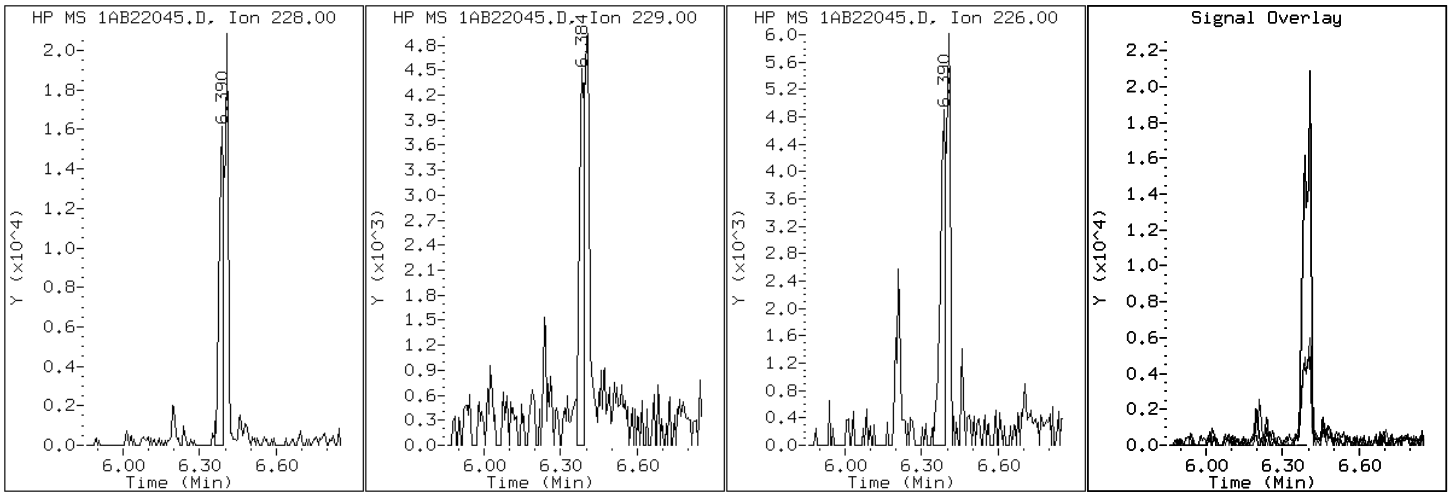
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

17 Benzo(a)anthracene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

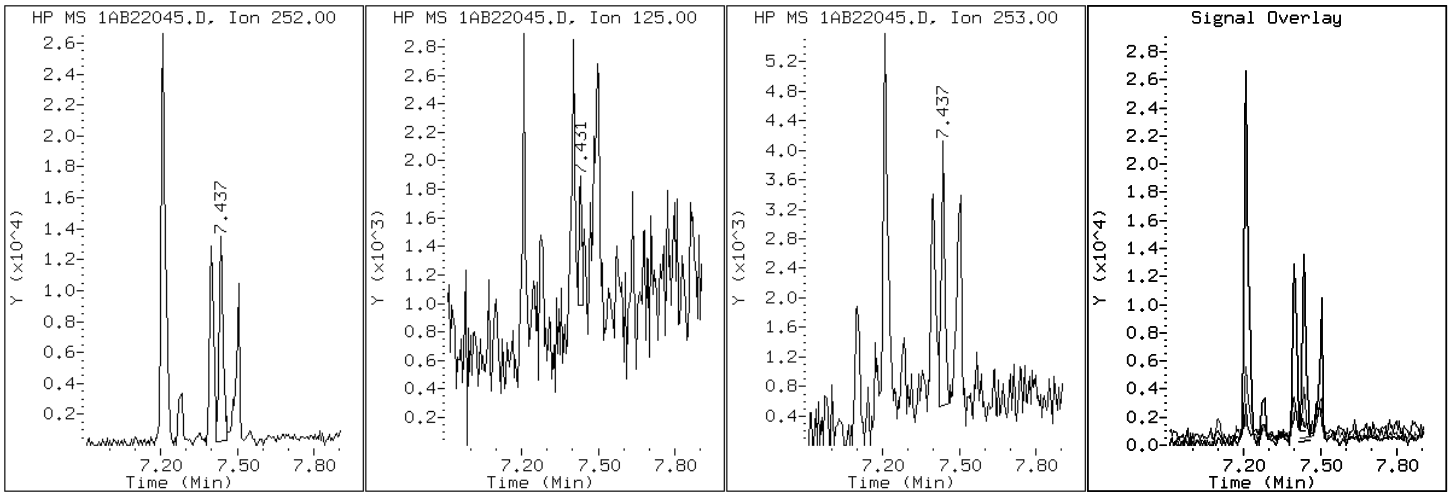
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

22 Benzo(a)pyrene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

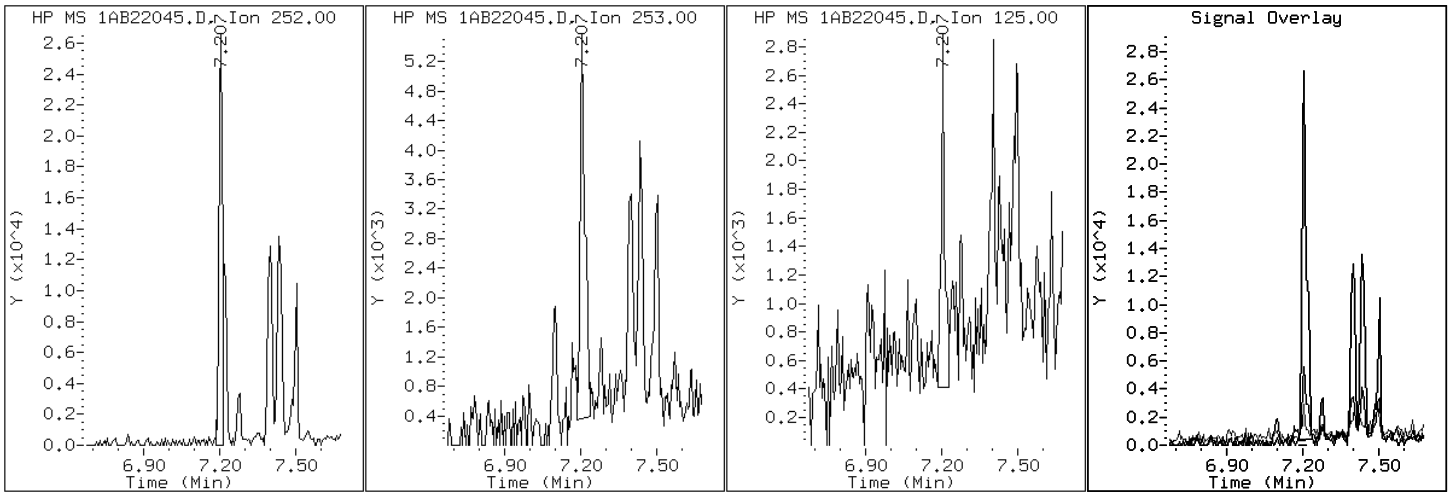
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

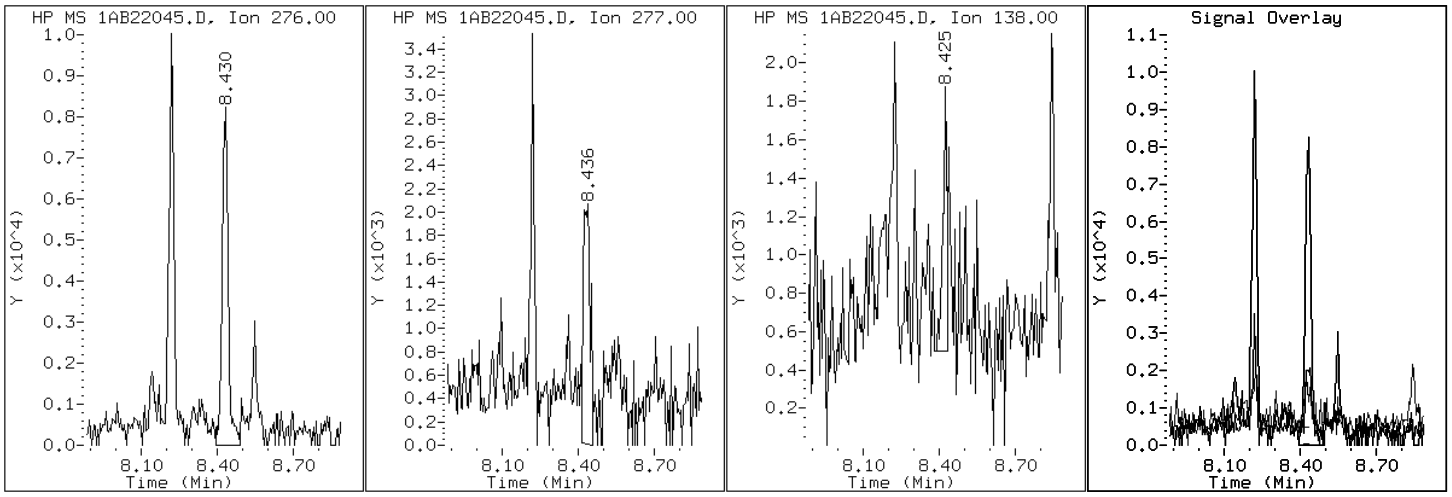
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

26 Benzo(g,h,i)perylene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

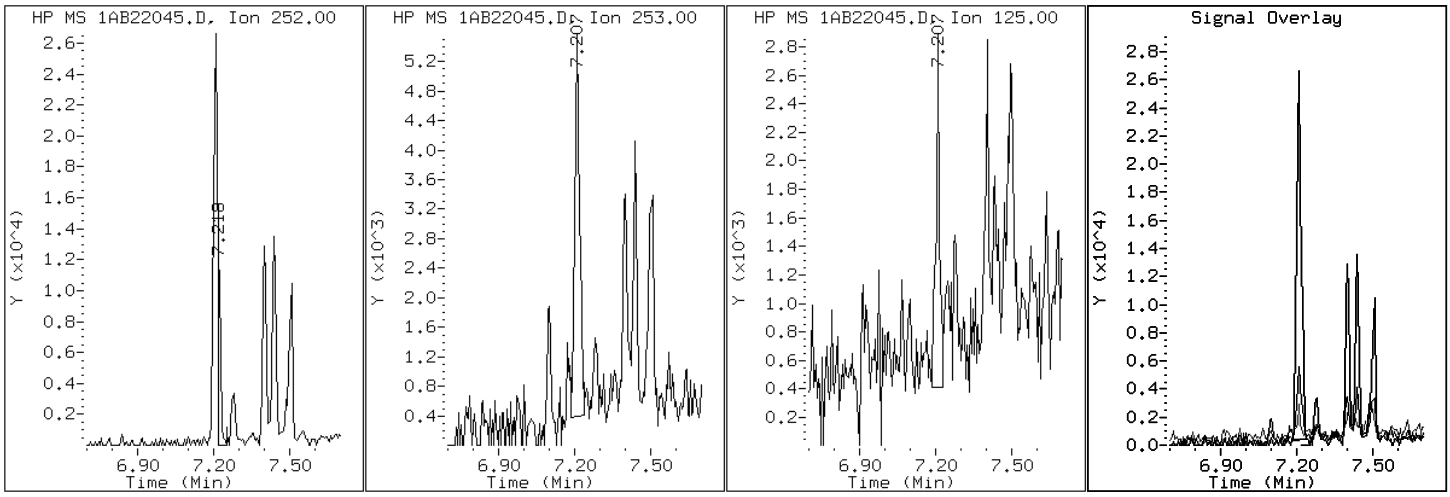
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

21 Benzo(k)fluoranthene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

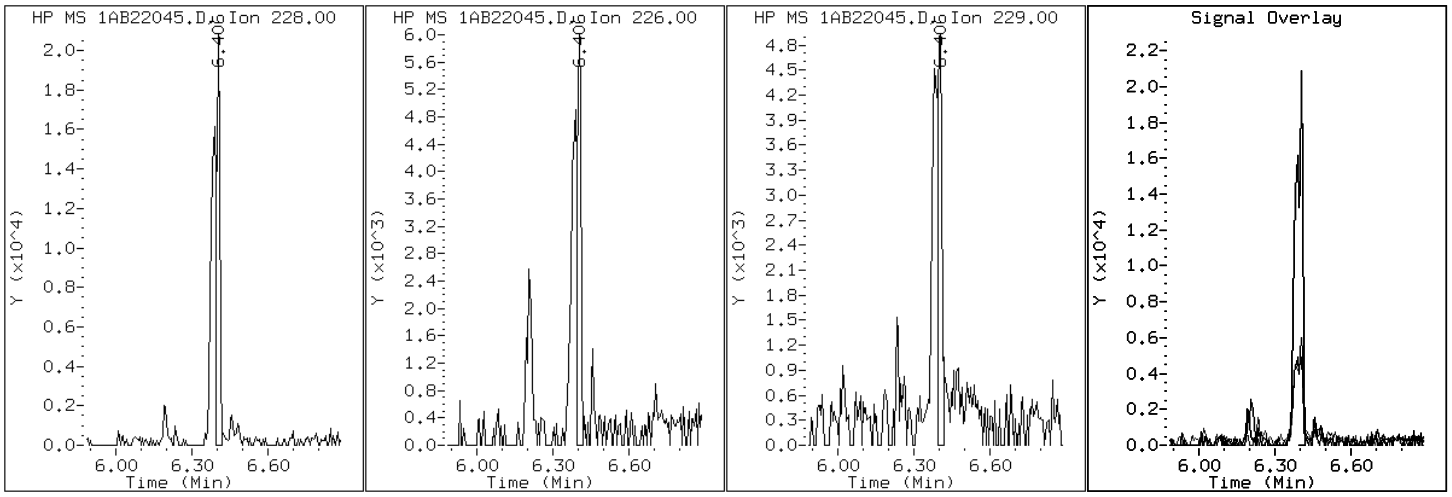
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

19 Chrysene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

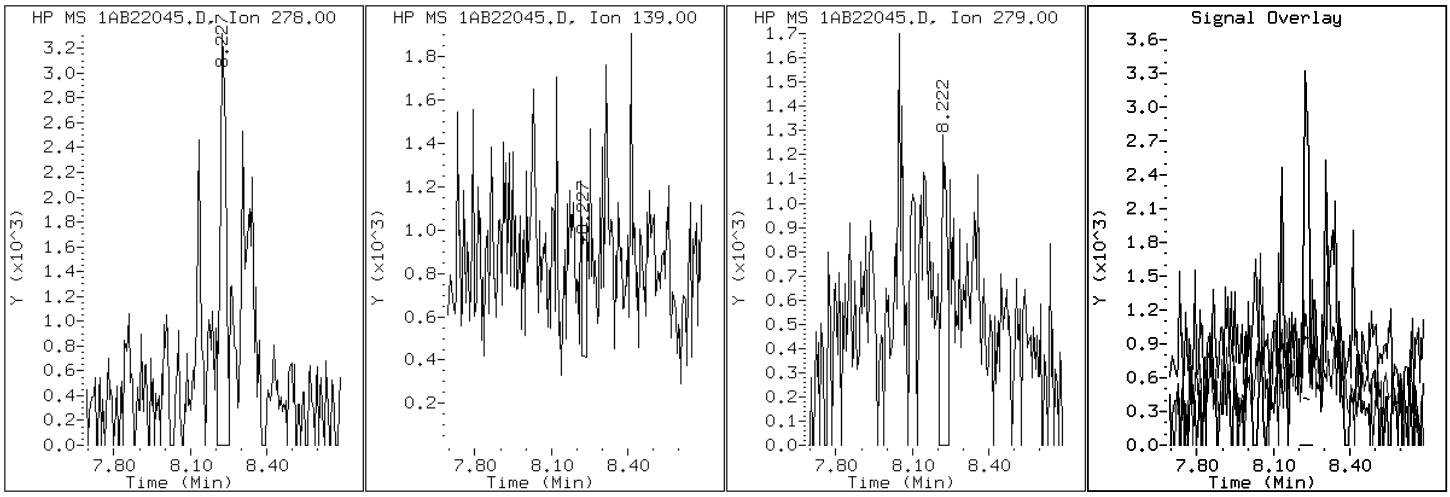
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

25 Dibenzo(a,h)anthracene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

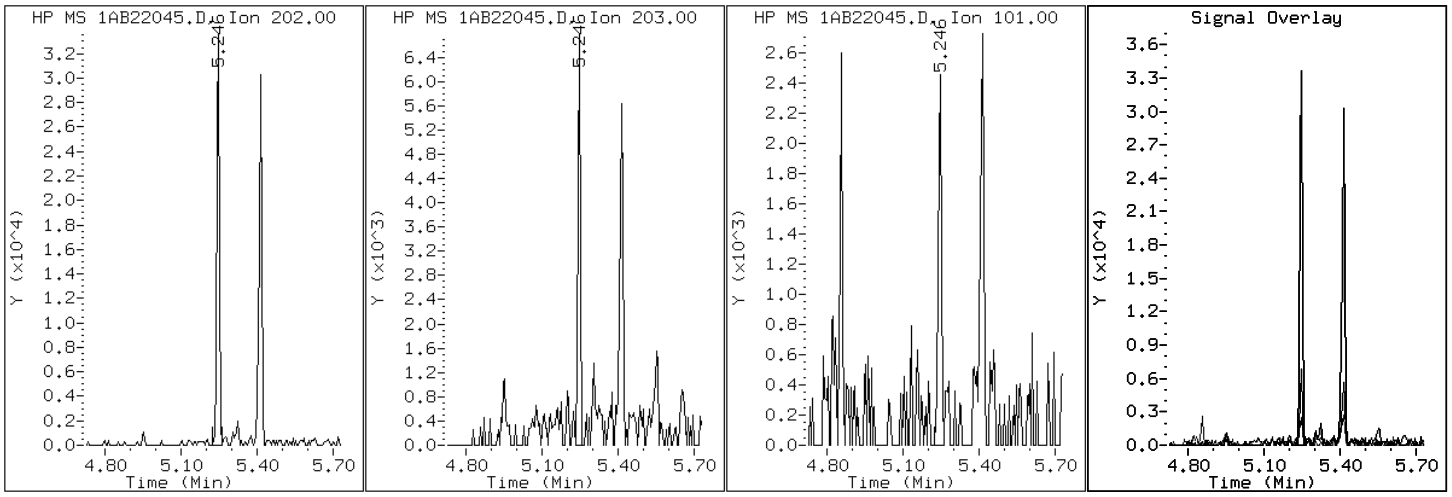
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

15 Fluoranthene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

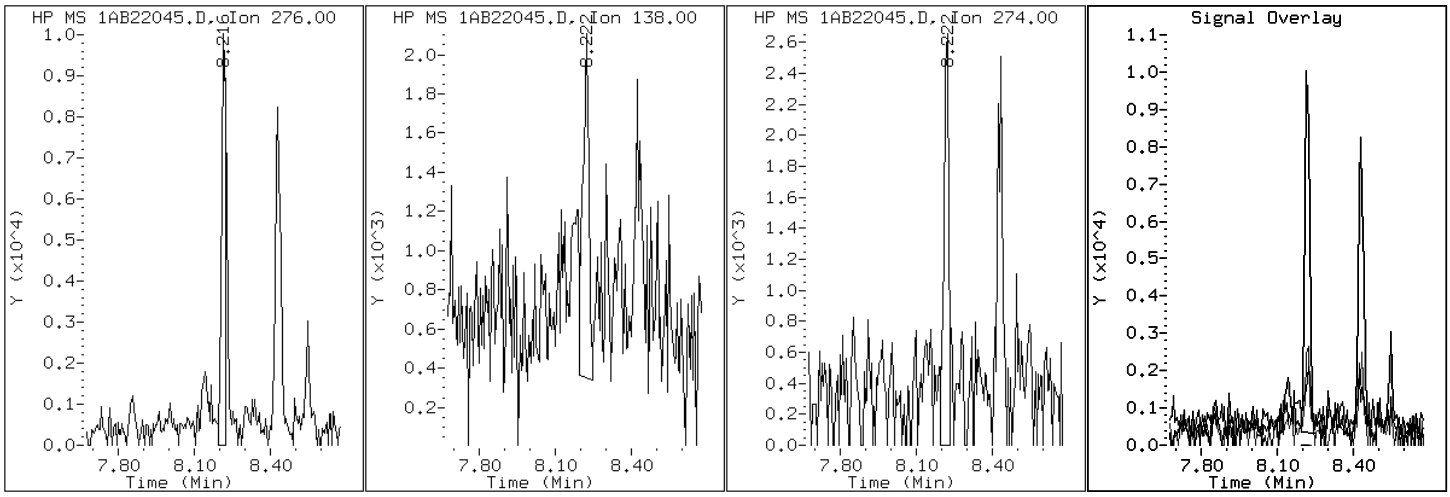
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



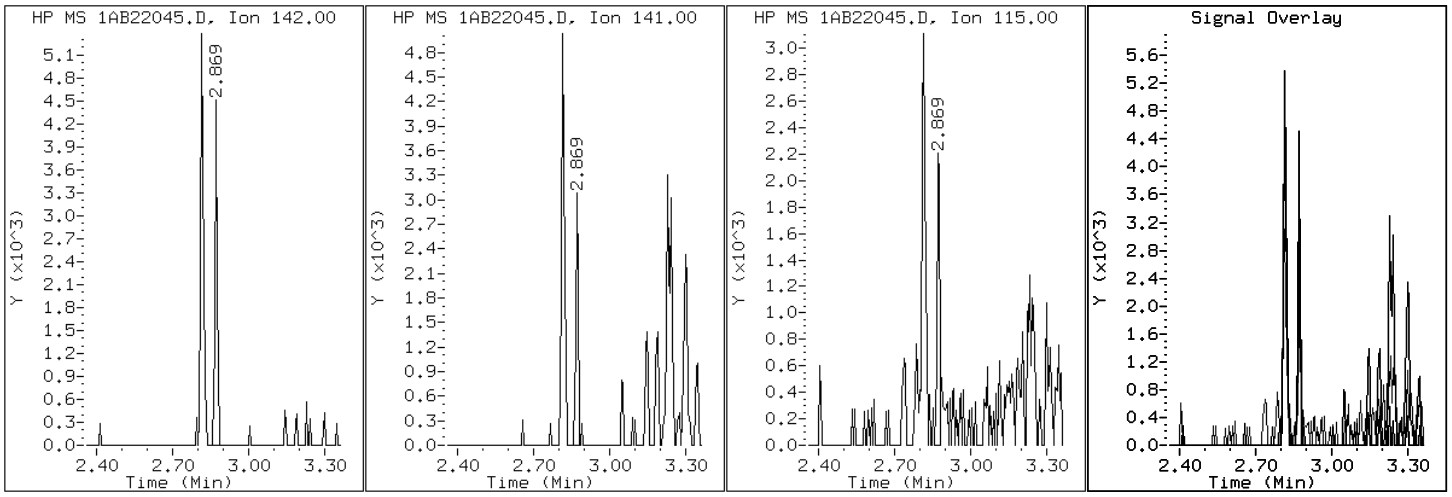
Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

Client ID: FM0161H-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a Operator: SCC

4 1-Methylnaphthalene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

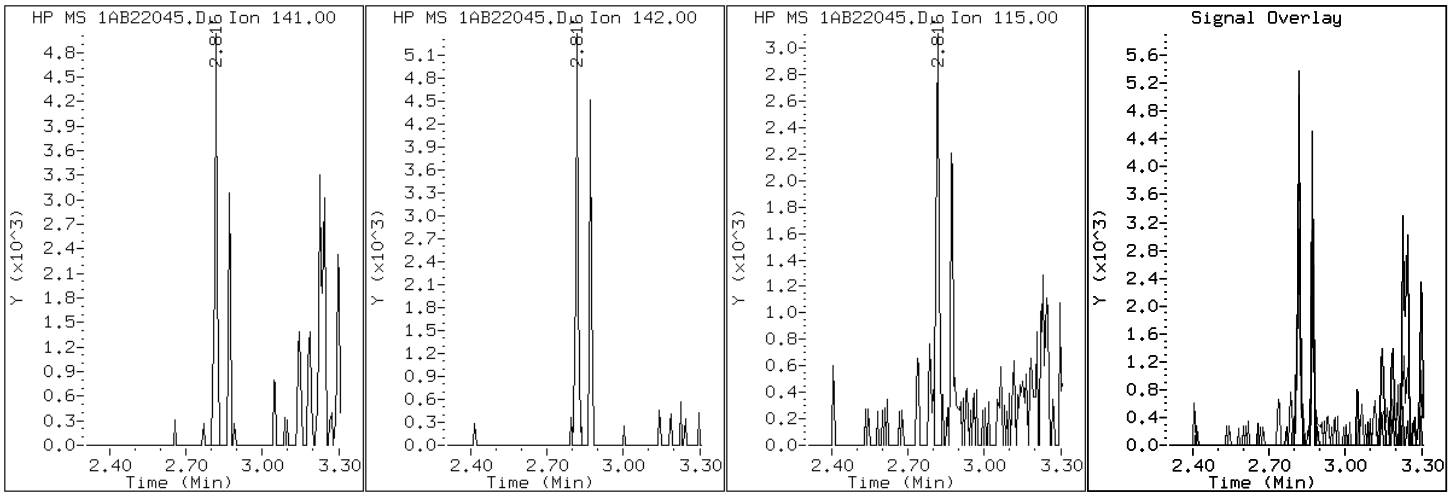
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

3 2-Methylnaphthalene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

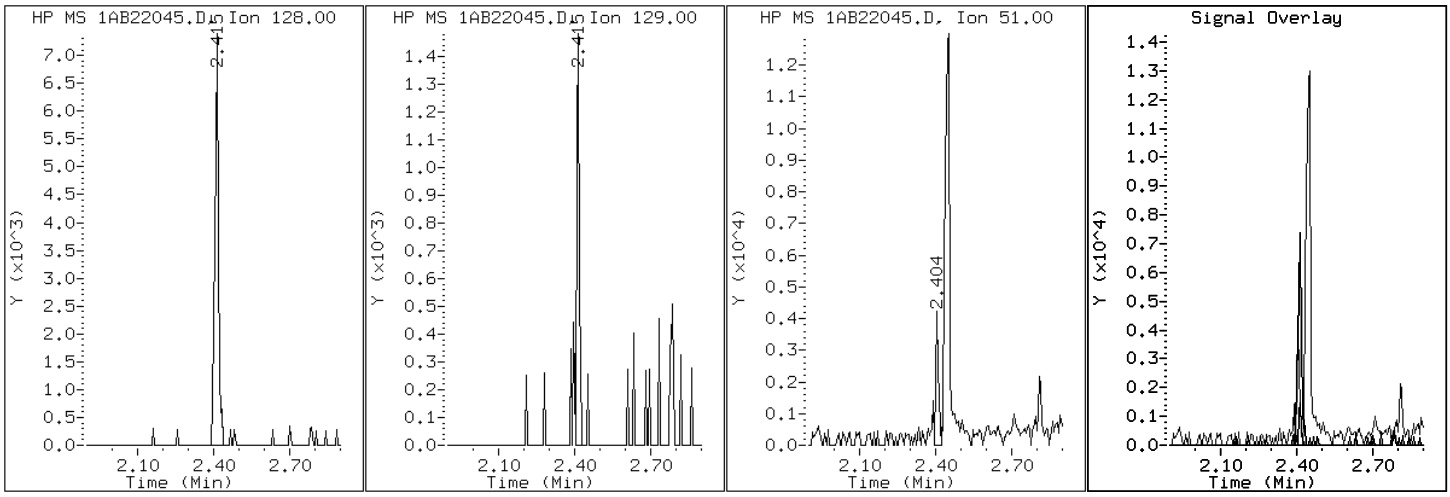
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

2 Naphthalene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

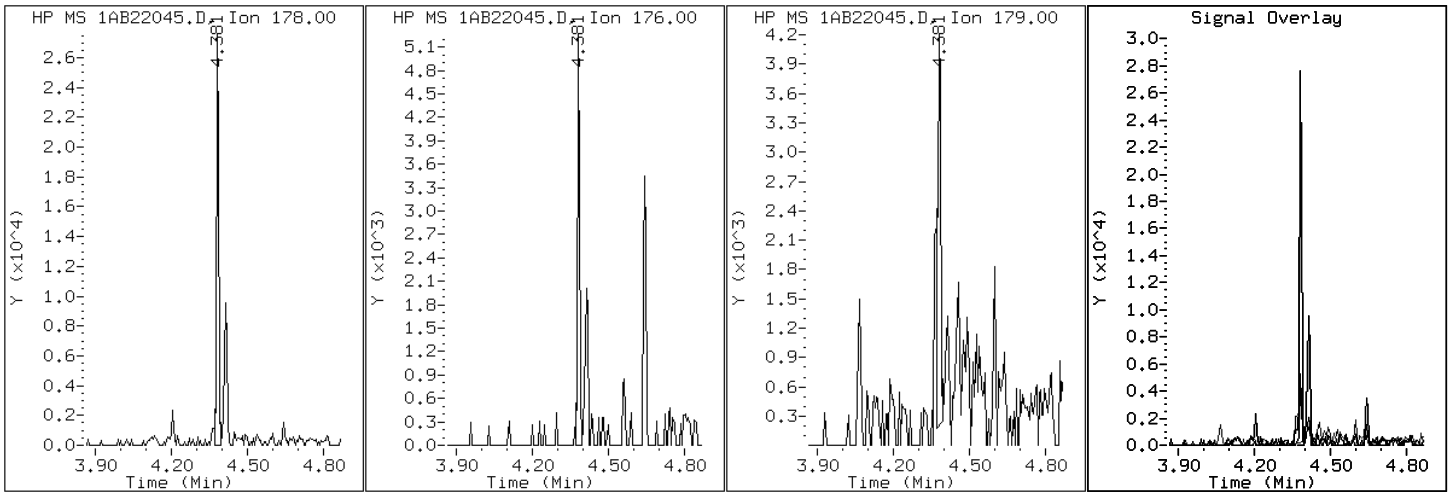
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

11 Phenanthrene



Data File: 1AB22045.D

Date: 22-FEB-2013 21:43

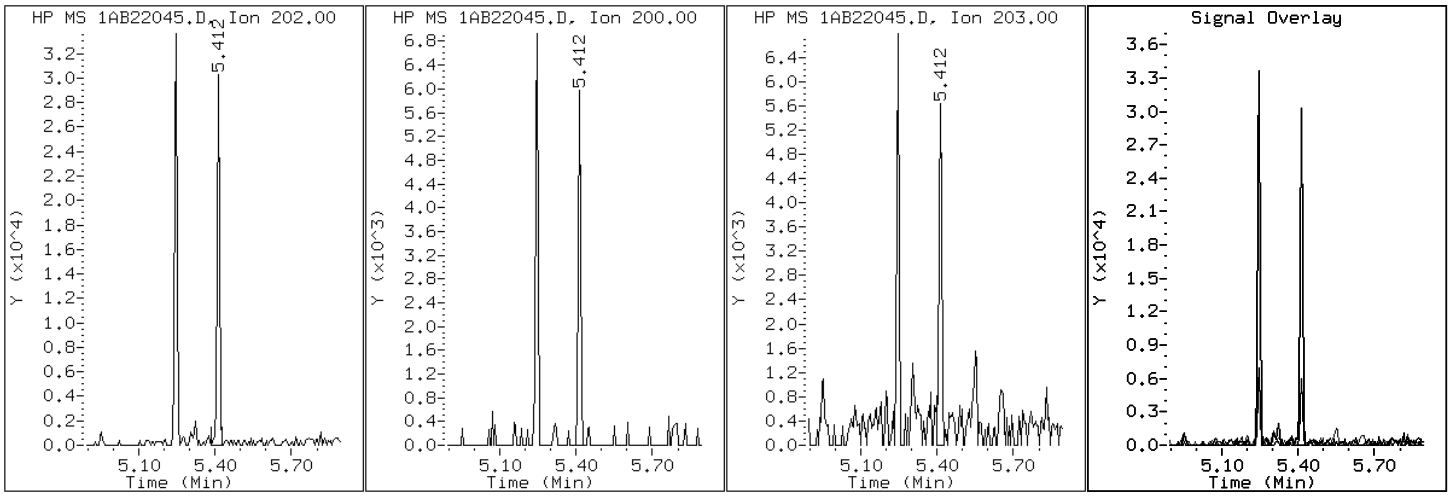
Client ID: FM0161H-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-6-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22045.D
Inj. Date and Time: 22-FEB-2013 21:43
Instrument ID: BSMA5973.i
Client ID: FM0161H-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

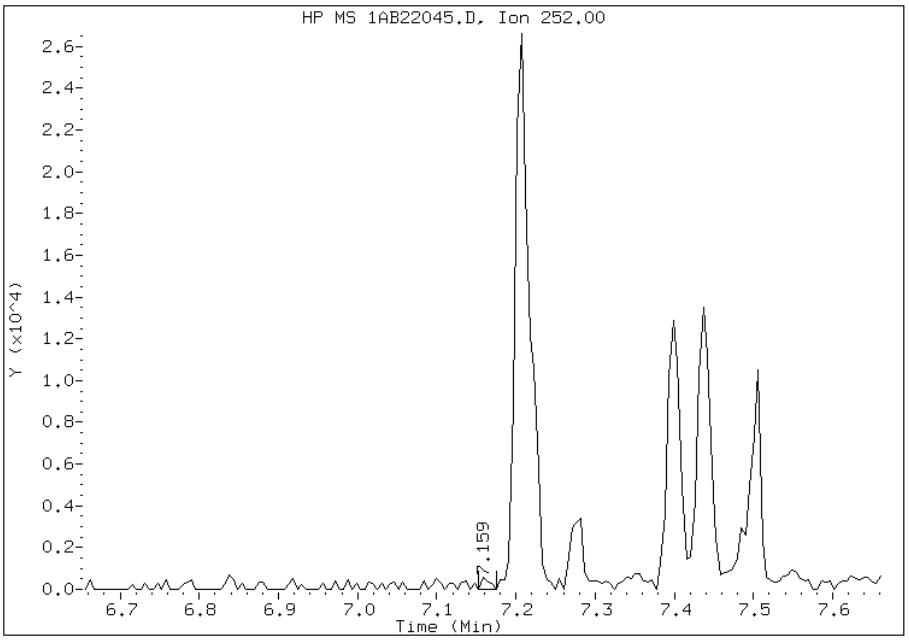
Processing Integration Results

RT: 7.16

Response: 384

Amount: 0

Conc: 1



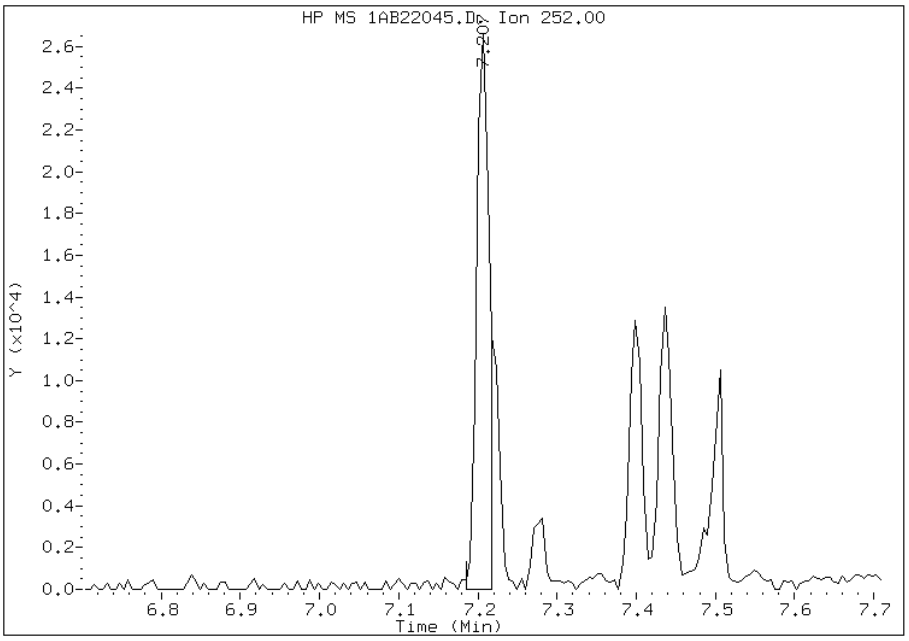

Manual Integration Results

RT: 7.21

Response: 29026

Amount: 1

Conc: 68




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:36
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22045.D
Inj. Date and Time: 22-FEB-2013 21:43
Instrument ID: BSMA5973.i
Client ID: FM0161H-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

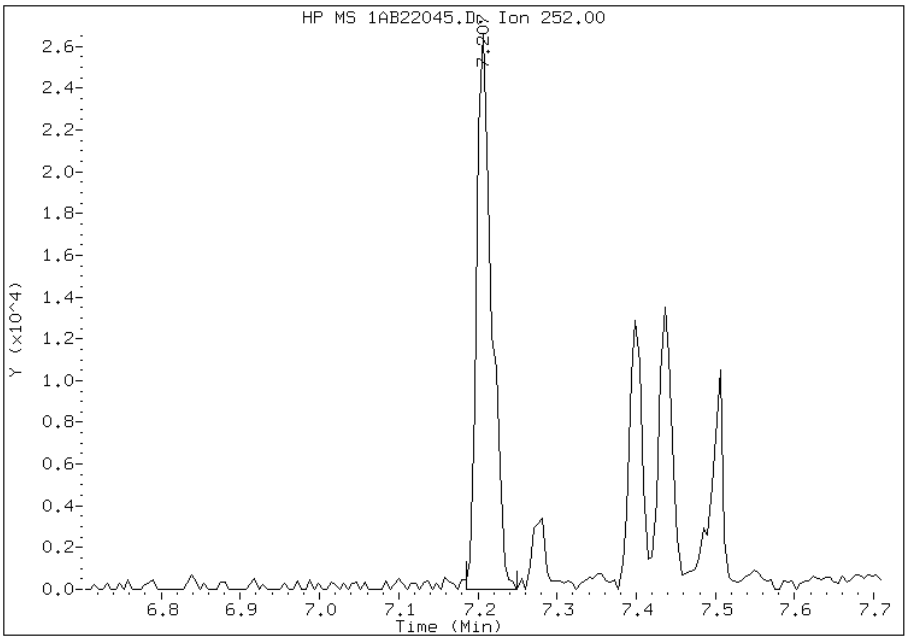
Processing Integration Results

RT: 7.21

Response: 34937

Amount: 1

Conc: 82



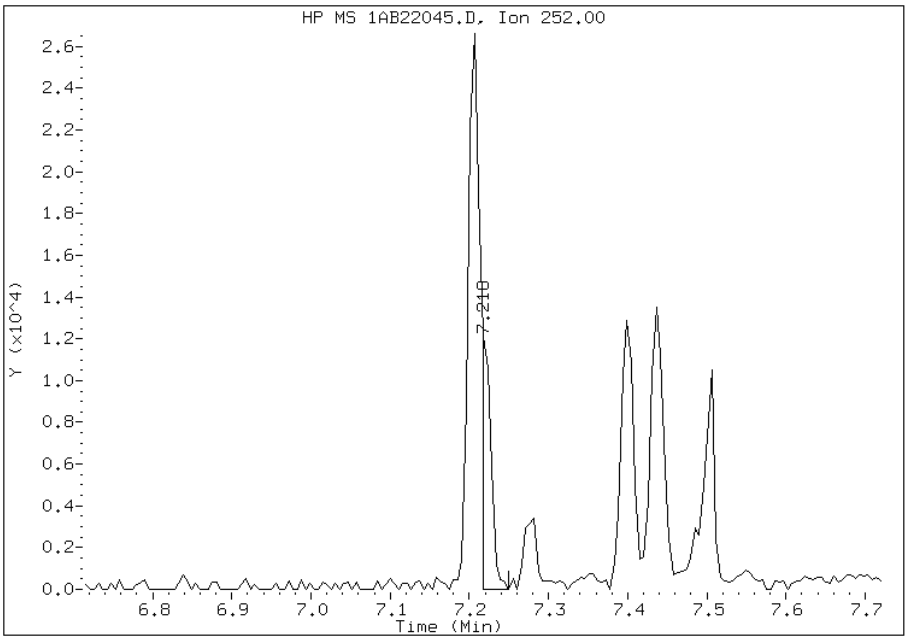

Manual Integration Results

RT: 7.22

Response: 9727

Amount: 0

Conc: 23




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:36
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22045.D
Inj. Date and Time: 22-FEB-2013 21:43
Instrument ID: BSMA5973.i
Client ID: FM0161H-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

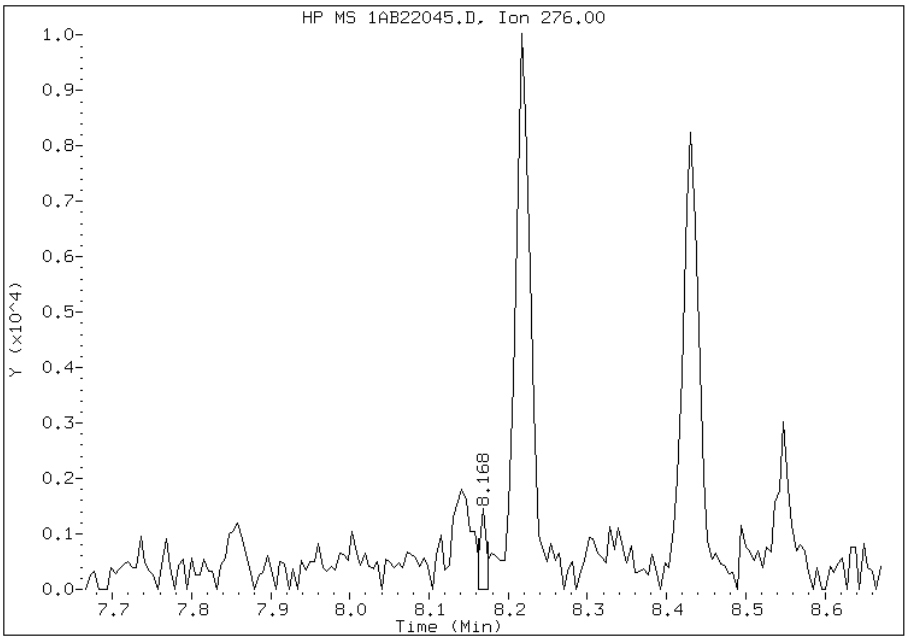
Processing Integration Results

RT: 8.17

Response: 823

Amount: 0

Conc: 2



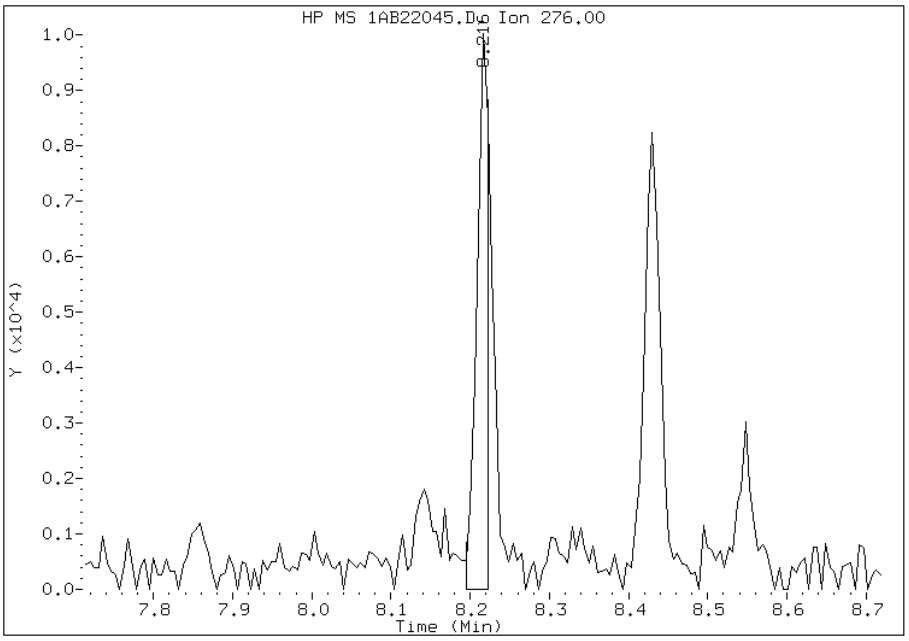

Manual Integration Results

RT: 8.22

Response: 9851

Amount: 0

Conc: 29




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:37
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161H-CSD | Lab Sample ID: 680-87545-7

Matrix: Solid | Lab File ID: 1AB22046.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:08

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 15.02(g) | Date Analyzed: 02/22/2013 21:58

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 28.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 140 | U | 140 | 28 |
| 208-96-8 | Acenaphthylene | 34 | J | 56 | 7.0 |
| 120-12-7 | Anthracene | 86 | | 12 | 5.9 |
| 56-55-3 | Benzo[a]anthracene | 220 | | 11 | 5.4 |
| 50-32-8 | Benzo[a]pyrene | 140 | | 14 | 7.2 |
| 205-99-2 | Benzo[b]fluoranthene | 210 | | 17 | 8.5 |
| 191-24-2 | Benzo[g,h,i]perylene | 94 | | 28 | 6.1 |
| 207-08-9 | Benzo[k]fluoranthene | 99 | | 11 | 5.0 |
| 218-01-9 | Chrysene | 230 | | 13 | 6.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 43 | | 28 | 5.7 |
| 206-44-0 | Fluoranthene | 340 | | 28 | 5.6 |
| 86-73-7 | Fluorene | 27 | J | 28 | 5.7 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 100 | | 28 | 9.9 |
| 90-12-0 | 1-Methylnaphthalene | 40 | J | 56 | 6.1 |
| 91-57-6 | 2-Methylnaphthalene | 55 | J | 56 | 9.9 |
| 91-20-3 | Naphthalene | 62 | | 56 | 6.1 |
| 85-01-8 | Phenanthrene | 310 | | 11 | 5.4 |
| 129-00-0 | Pyrene | 270 | | 28 | 5.2 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 52 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22046.D
Lab Smp Id: 680-87545-A-7-A Client Smp ID: FM0161H-CSD
Inj Date : 22-FEB-2013 21:58
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-7-a
Misc Info : 680-87545-A-7-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 46
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.020 | Weight Extracted |
| M | 28.317 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.406 | 2.397 | (1.000) | 992605 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.432 | 3.417 | (1.000) | 818917 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.372 | 4.352 | (1.000) | 1155503 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.644 | 4.635 | (1.062) | 87085 | 5.17938 | 481.0506 |
| * 18 Chrysene-d12 | 240 | 6.397 | 6.366 | (1.000) | 901002 | 40.0000 | (H) |
| * 23 Perylene-d12 | 264 | 7.497 | 7.456 | (1.000) | 1240777 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.411 | 2.402 | (1.002) | 15846 | 0.66251 | 61.5327 |
| 3 2-Methylnaphthalene | 141 | 2.812 | 2.808 | (1.169) | 7247 | 0.58693 | 54.5124 |
| 4 1-Methylnaphthalene | 142 | 2.871 | 2.861 | (1.193) | 5878 | 0.42750 | 39.7055 |
| 5 Acenaphthylene | 152 | 3.341 | 3.332 | (0.974) | 11199 | 0.36625 | 34.0169 |
| 9 Fluorene | 166 | 3.752 | 3.743 | (1.093) | 6484 | 0.29077 | 27.0059 |
| 11 Phenanthrene | 178 | 4.383 | 4.368 | (1.002) | 97407 | 3.39138 | 314.9849 |
| 12 Anthracene | 178 | 4.415 | 4.400 | (1.010) | 25936 | 0.92964 | 86.3430 |
| 13 Carbazole | 167 | 4.575 | 4.555 | (1.046) | 17684 | 0.71804 | 66.6902 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 5.248 | 5.228 | (1.200) | 105172 | 3.66225 | 340.1427 |
| 16 Pyrene | 202 | 5.414 | 5.394 | (0.846) | 76550 | 2.89659 | 269.0293(H) |
| 17 Benzo(a)anthracene | 228 | 6.391 | 6.355 | (0.999) | 63213 | 2.34964 | 218.2302(H) |
| 19 Chrysene | 228 | 6.407 | 6.387 | (1.002) | 59940 | 2.49117 | 231.3747(H) |
| 20 Benzo(b)fluoranthene | 252 | 7.214 | 7.178 | (0.962) | 72259 | 2.29732 | 213.3703(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.219 | 7.199 | (0.963) | 33700 | 1.06496 | 98.9117(MH) |
| 22 Benzo(a)pyrene | 252 | 7.438 | 7.408 | (0.992) | 43973 | 1.52658 | 141.7860(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.224 | 8.177 | (1.097) | 26860 | 1.08692 | 100.9509(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.240 | 8.193 | (1.099) | 11998 | 0.46591 | 43.2724(H) |
| 26 Benzo(g,h,i)perylene | 276 | 8.437 | 8.385 | (1.125) | 26546 | 1.00997 | 93.8038(H) |

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22046.D

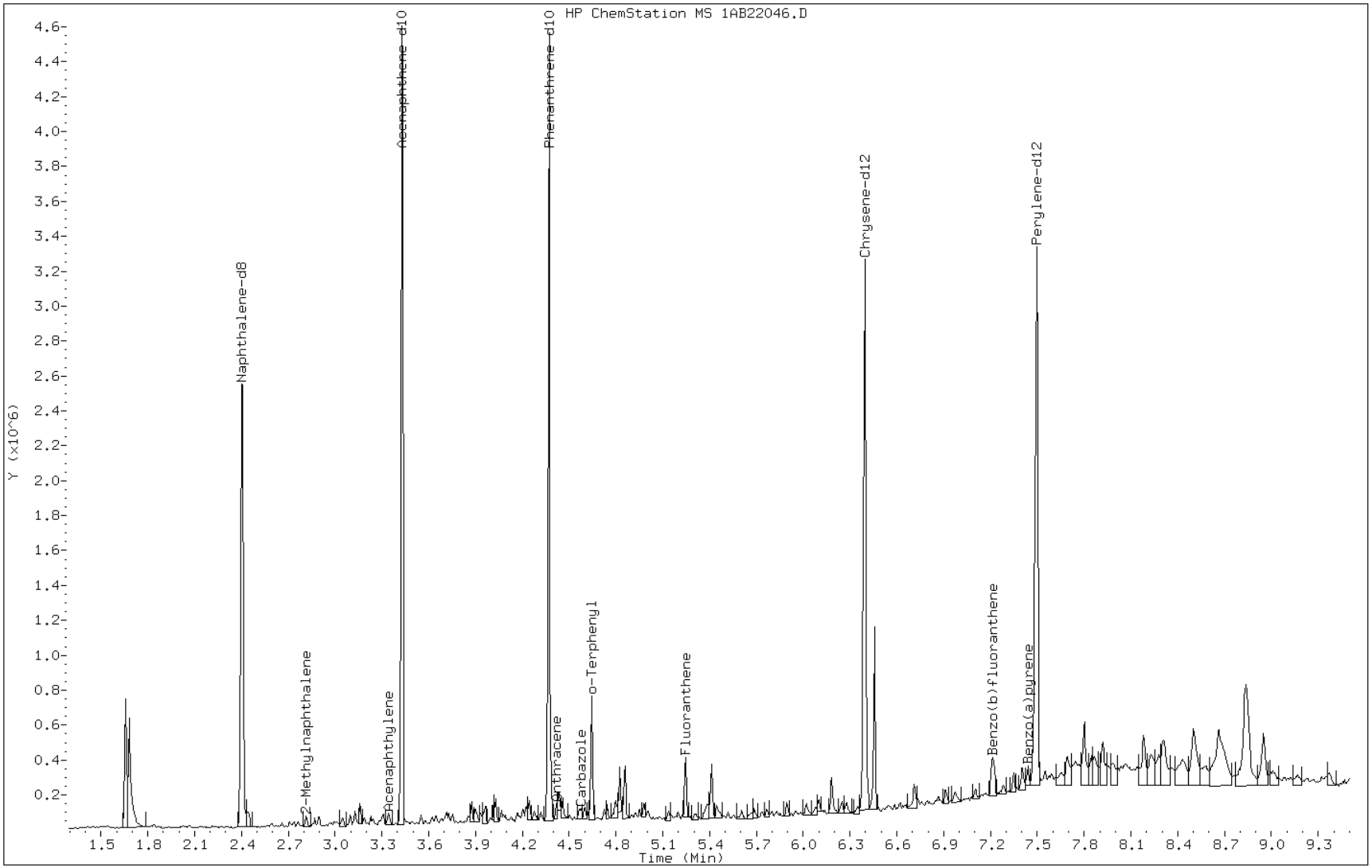
Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD

Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a

Operator: SCC



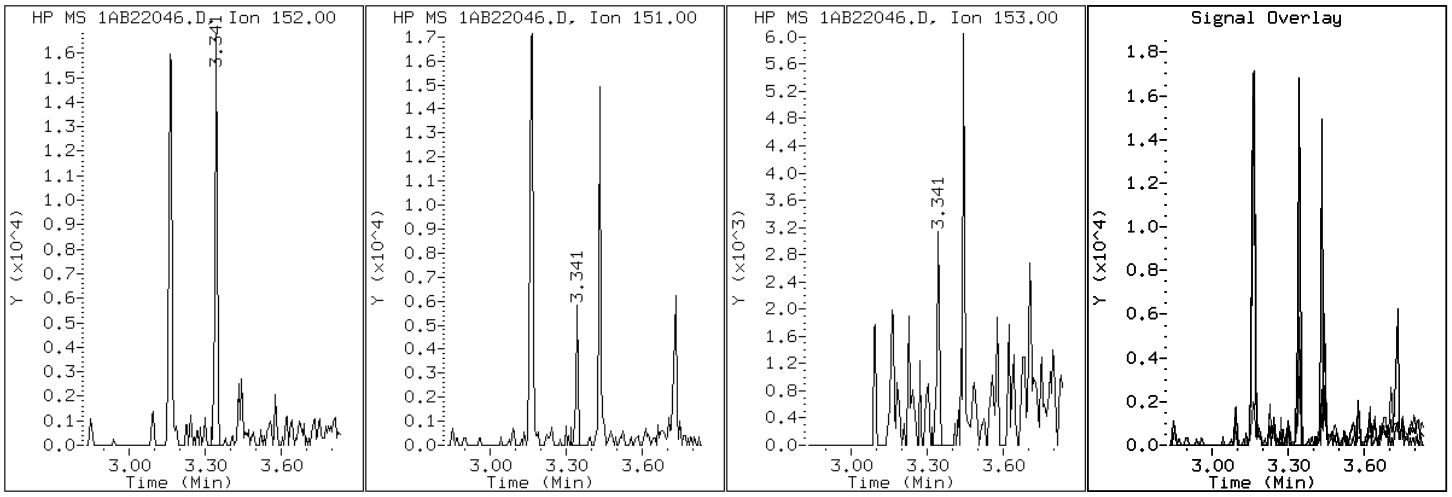
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

5 Acenaphthylene



Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

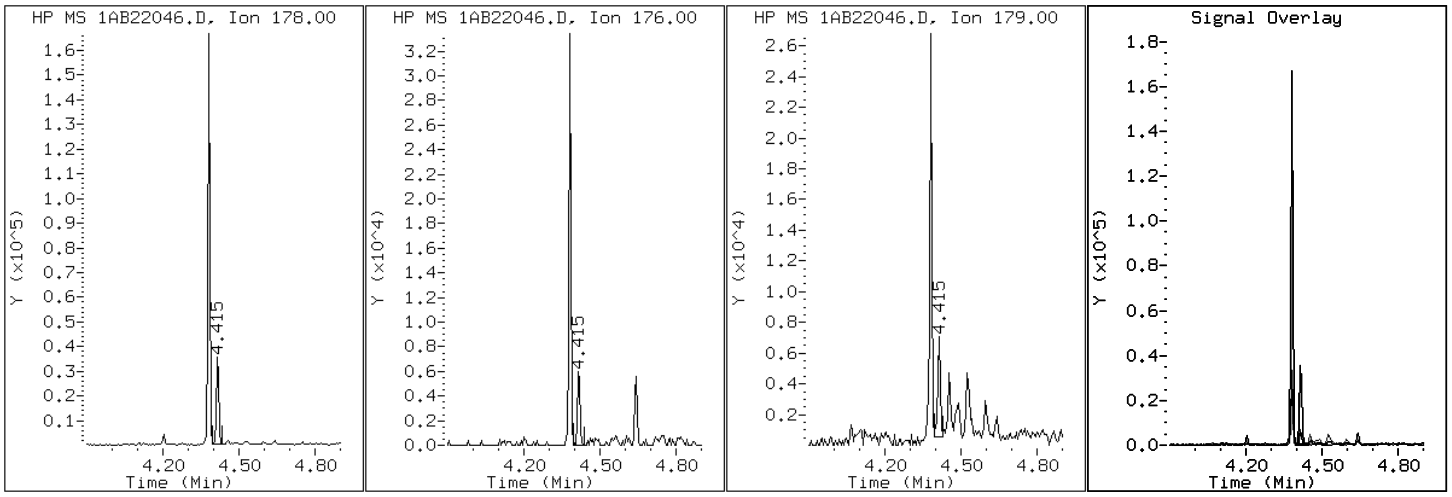
Client ID: FM0161H-CSD

Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a

Operator: SCC

12 Anthracene



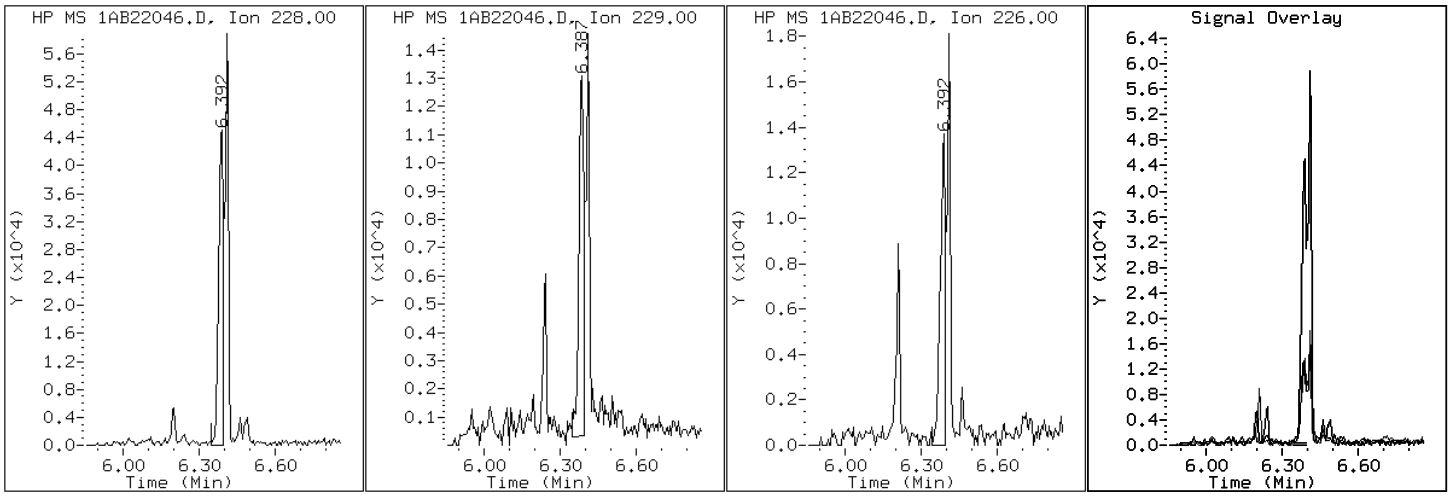
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

17 Benzo(a)anthracene



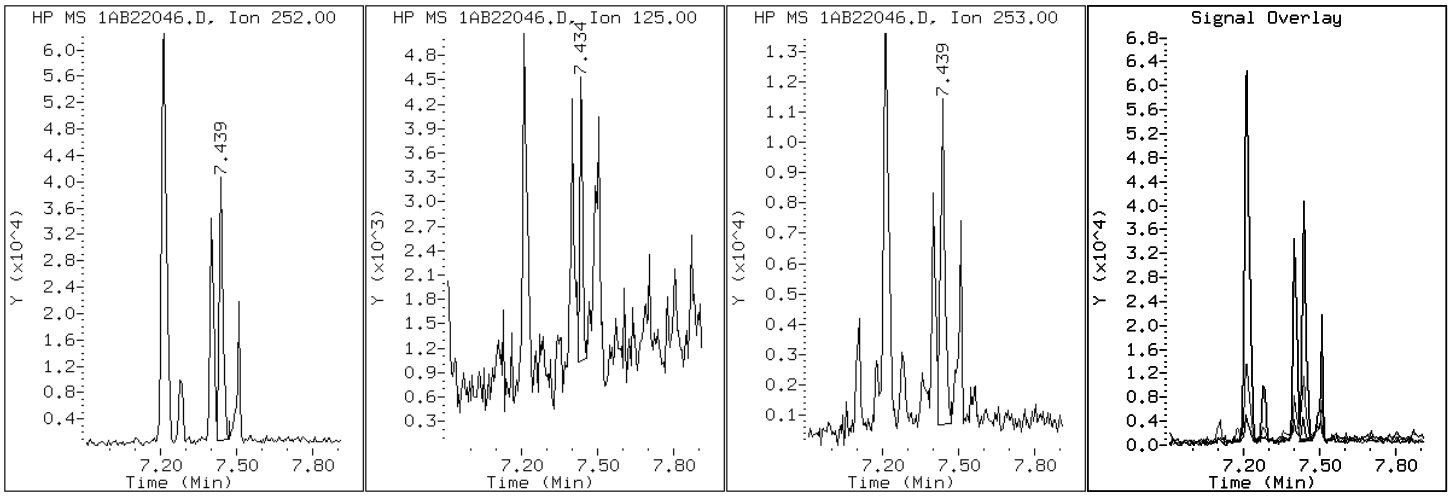
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

22 Benzo(a)pyrene



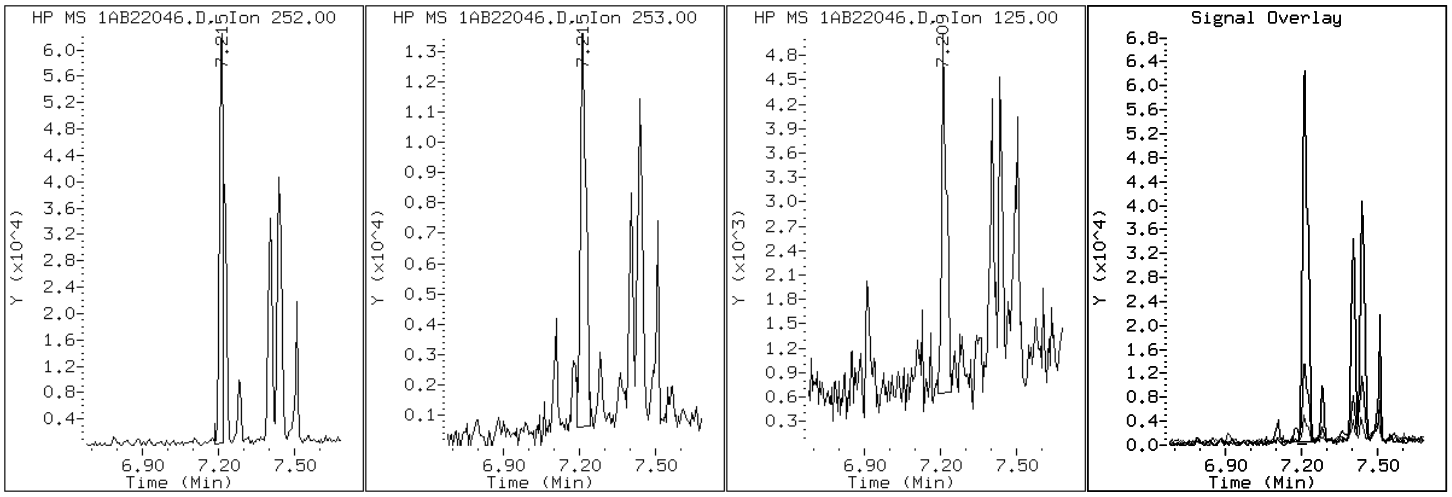
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

20 Benzo(b)fluoranthene



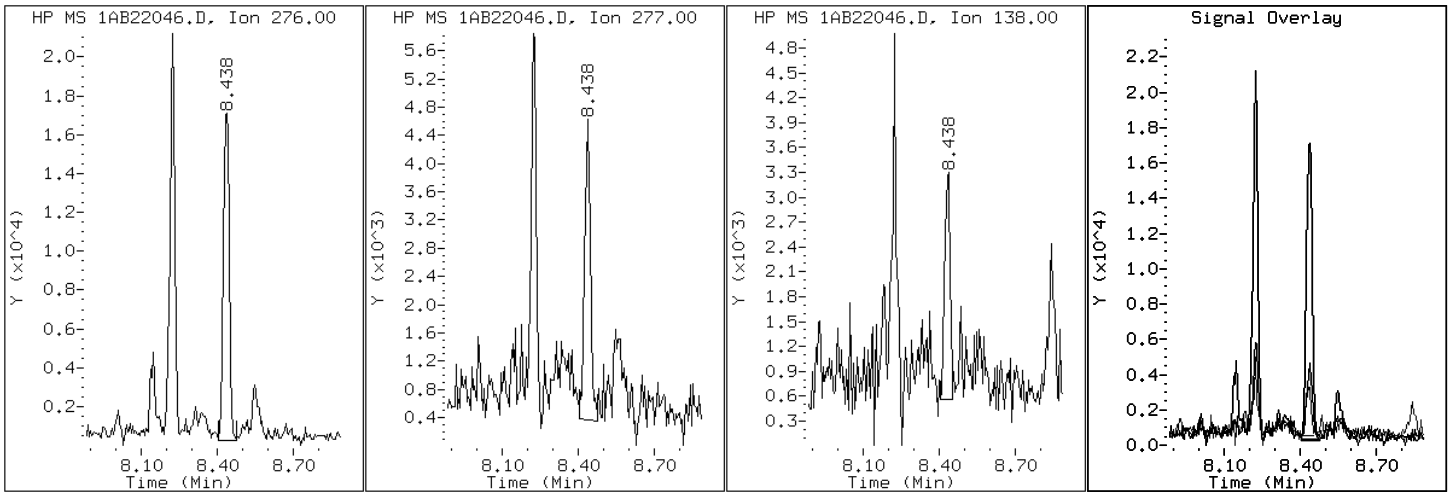
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

26 Benzo(g,h,i)perylene



Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

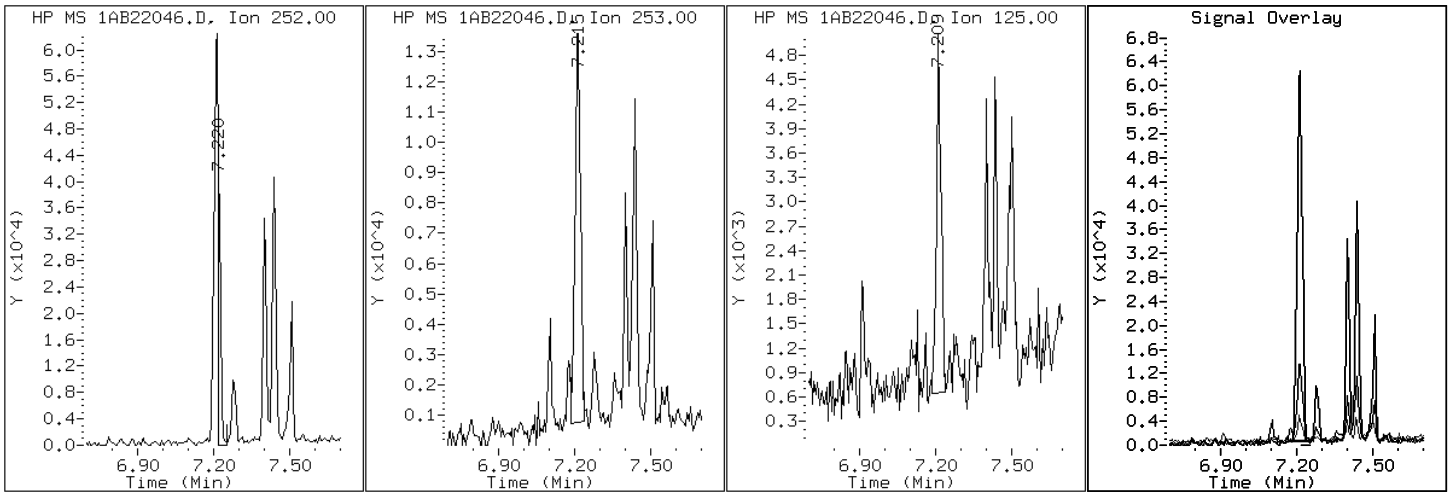
Client ID: FM0161H-CSD

Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a

Operator: SCC

21 Benzo(k)fluoranthene



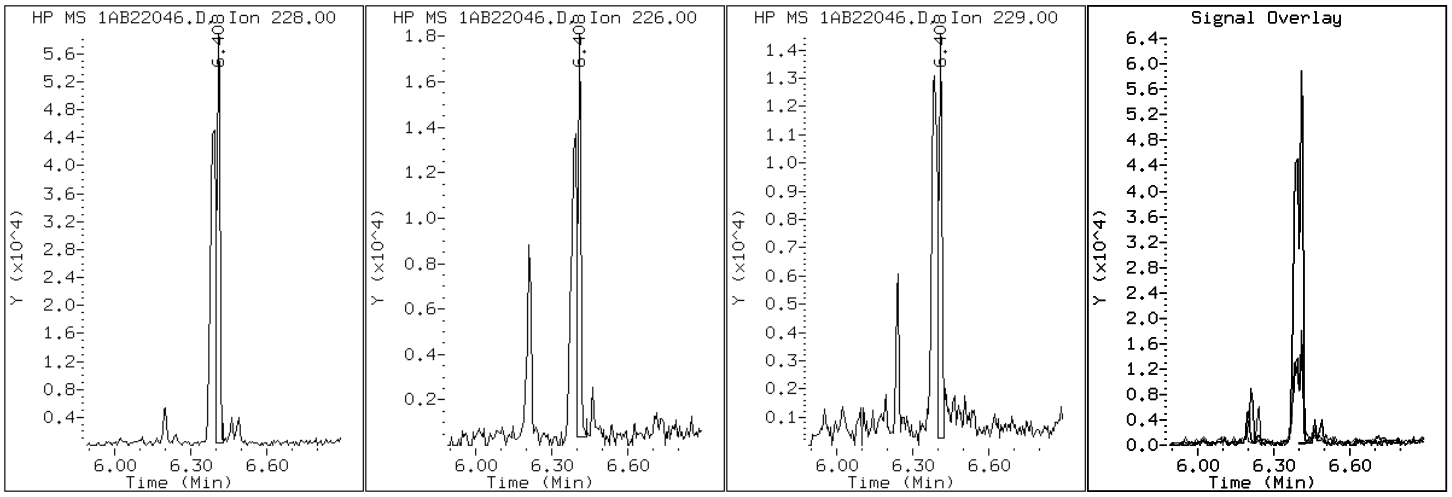
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

19 Chrysene



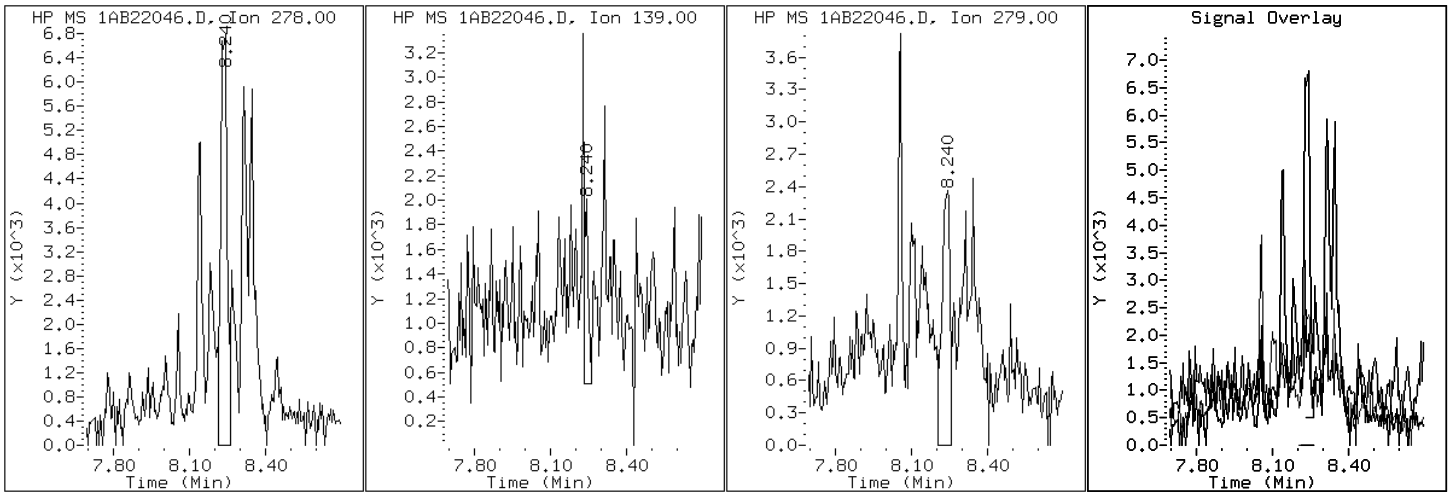
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

25 Dibenzo(a,h)anthracene



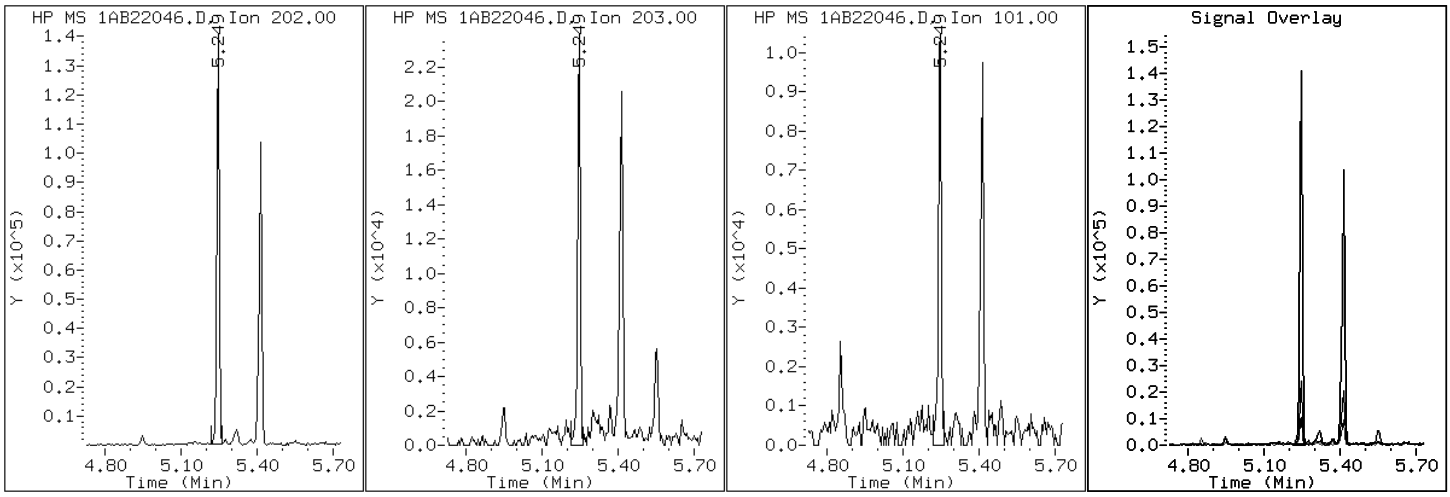
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

15 Fluoranthene



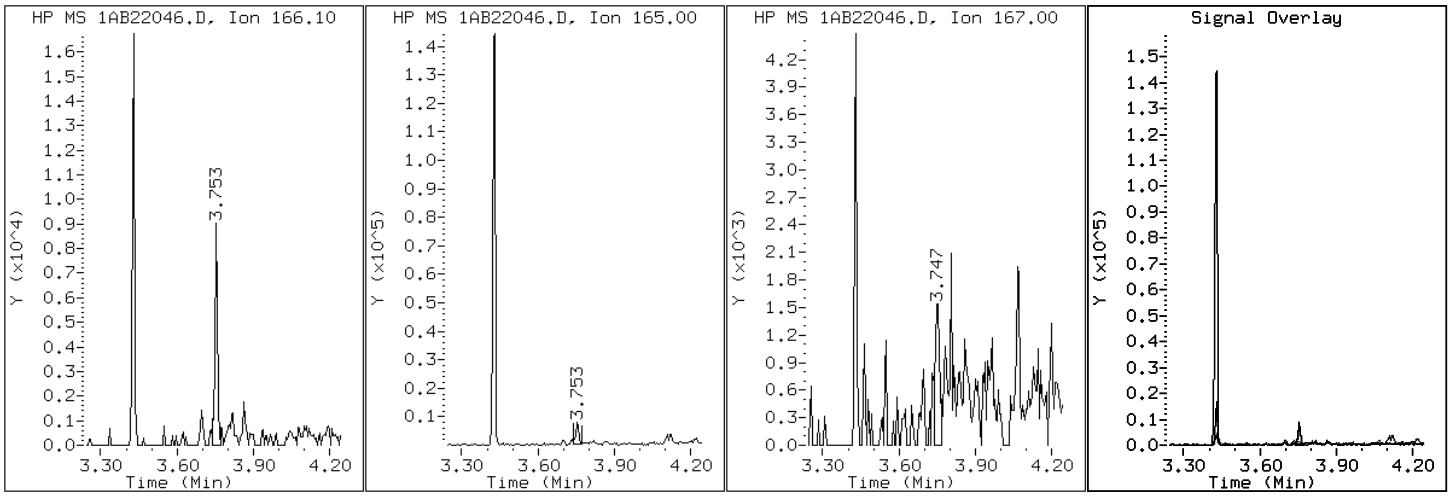
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

9 Fluorene



Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

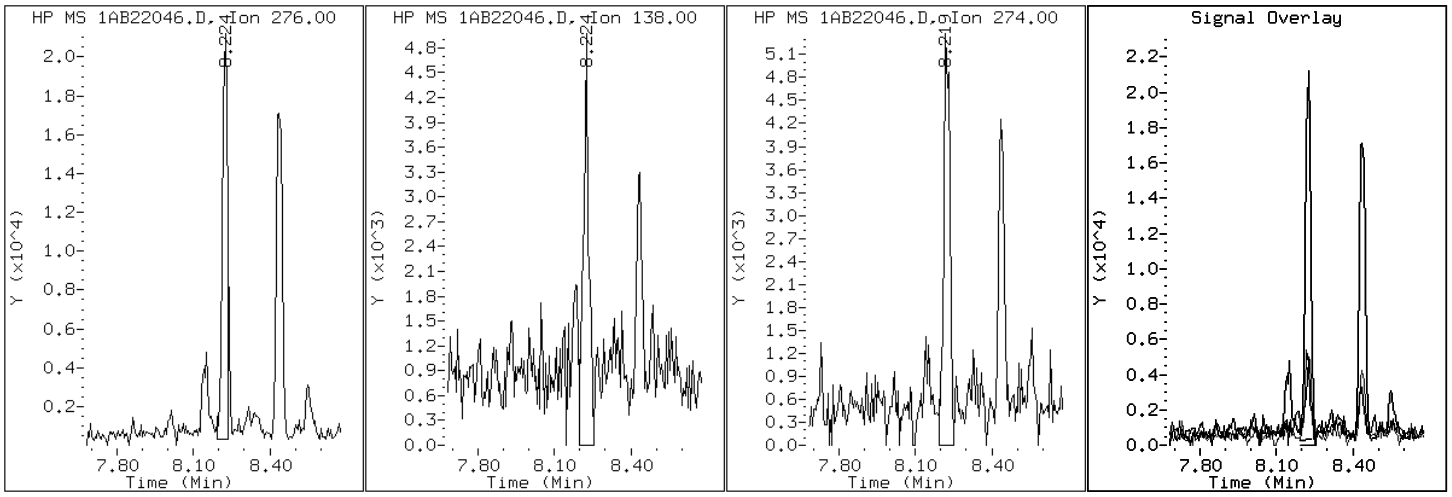
Client ID: FM0161H-CSD

Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



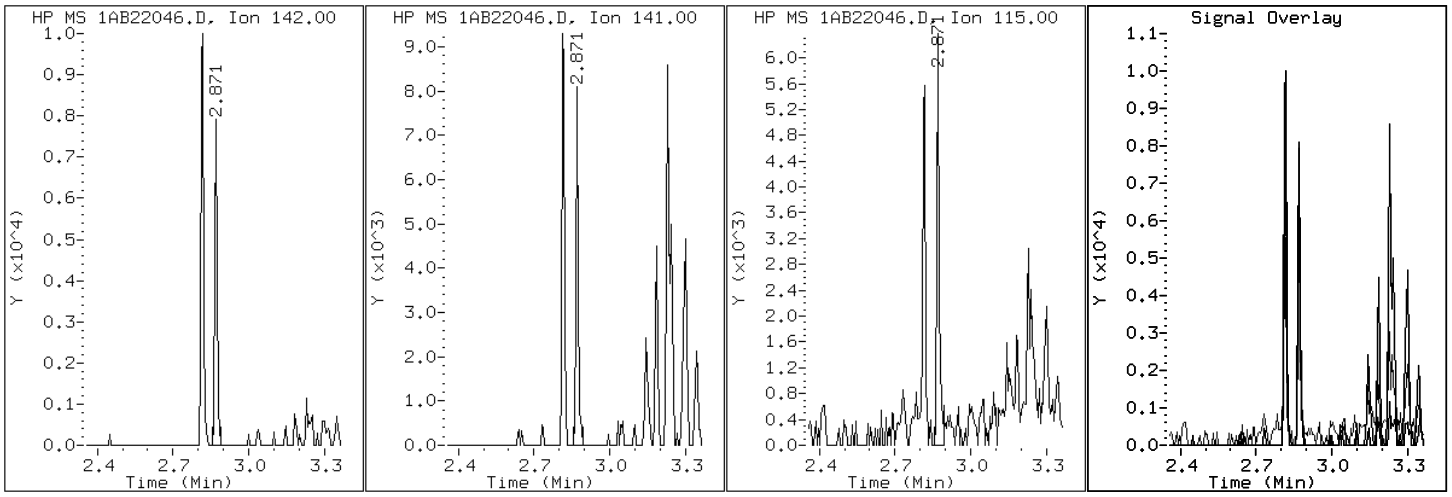
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

4 1-Methylnaphthalene



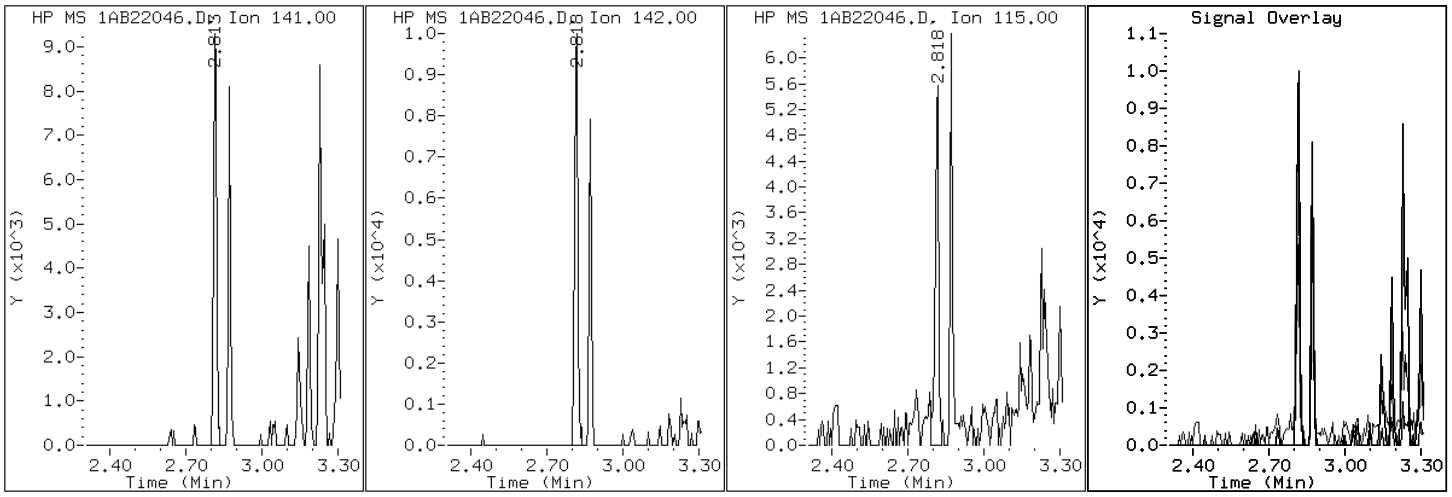
Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

Client ID: FM0161H-CSD Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a Operator: SCC

3 2-Methylnaphthalene



Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

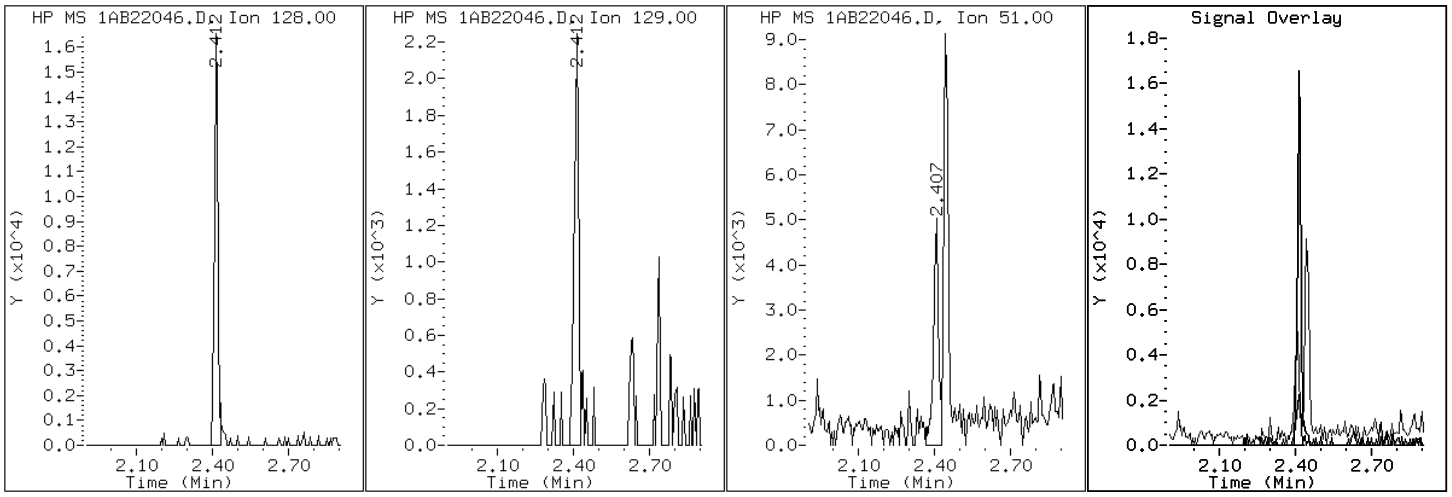
Client ID: FM0161H-CSD

Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a

Operator: SCC

2 Naphthalene



Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

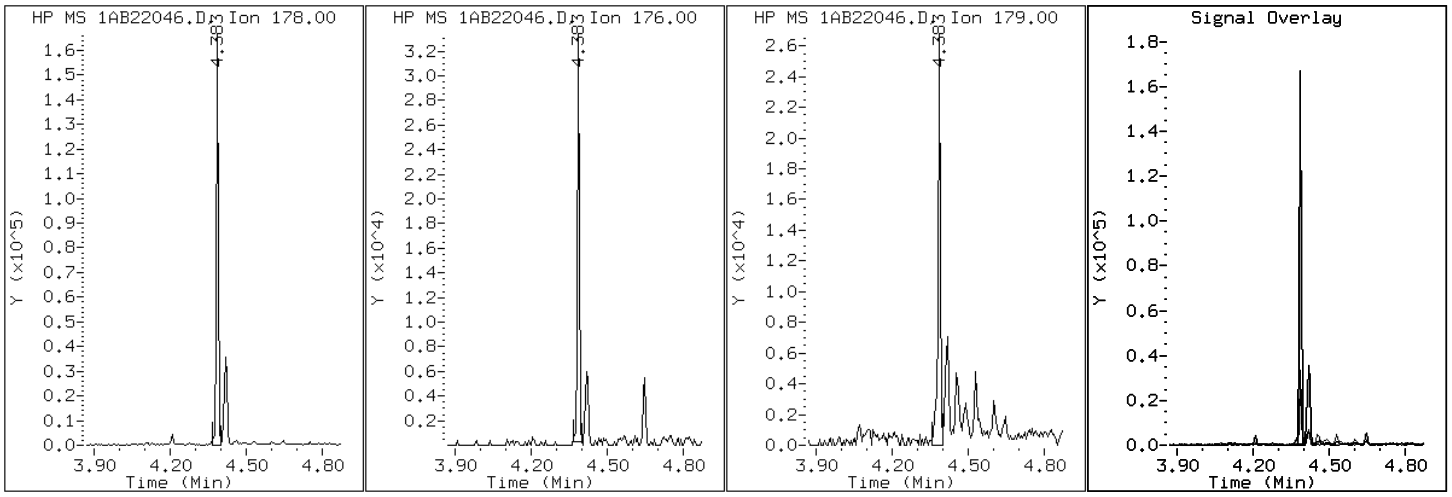
Client ID: FM0161H-CSD

Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a

Operator: SCC

11 Phenanthrene



Data File: 1AB22046.D

Date: 22-FEB-2013 21:58

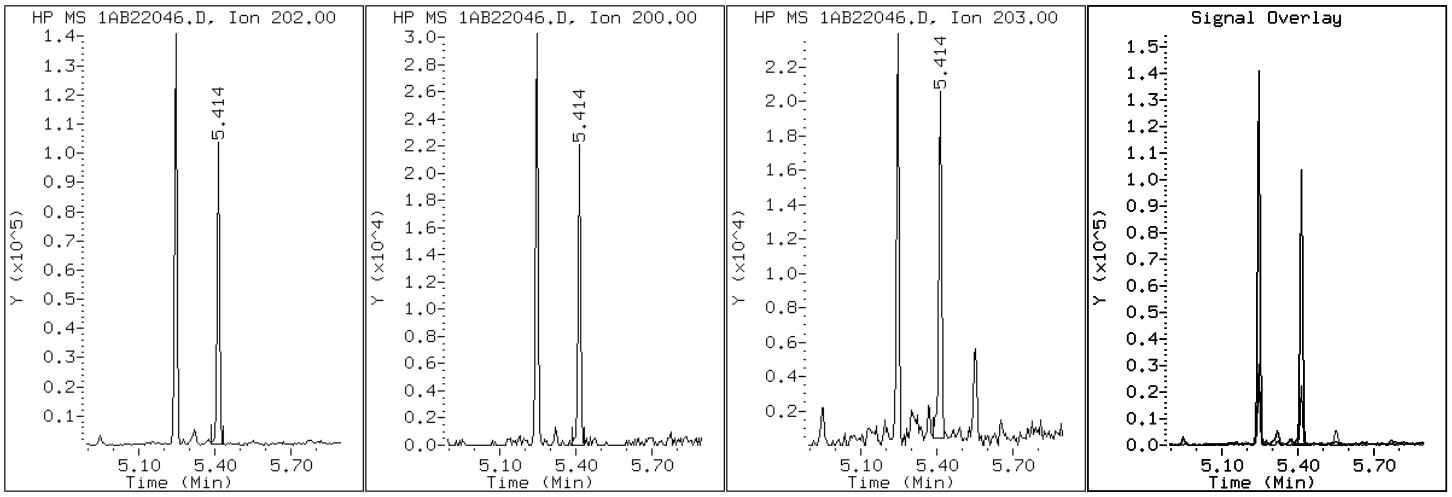
Client ID: FM0161H-CSD

Instrument: BSMA5973.i

Sample Info: 680-87545-a-7-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22046.D
Inj. Date and Time: 22-FEB-2013 21:58
Instrument ID: BSMA5973.i
Client ID: FM0161H-CSD
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

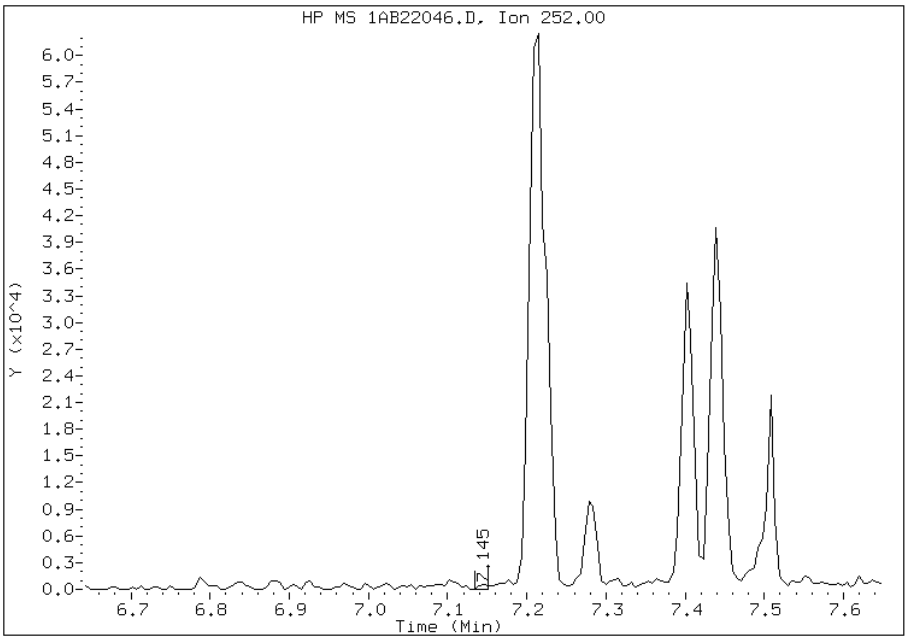
Processing Integration Results

RT: 7.15

Response: 391

Amount: 0

Conc: 1



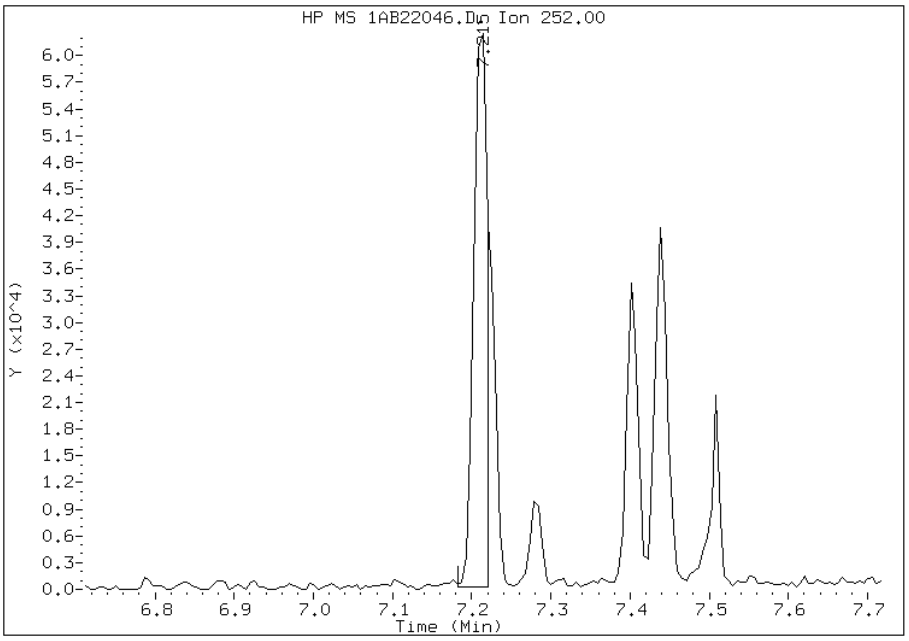

Manual Integration Results

RT: 7.21

Response: 72259

Amount: 2

Conc: 213




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:38
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22046.D
Inj. Date and Time: 22-FEB-2013 21:58
Instrument ID: BSMA5973.i
Client ID: FM0161H-CSD
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

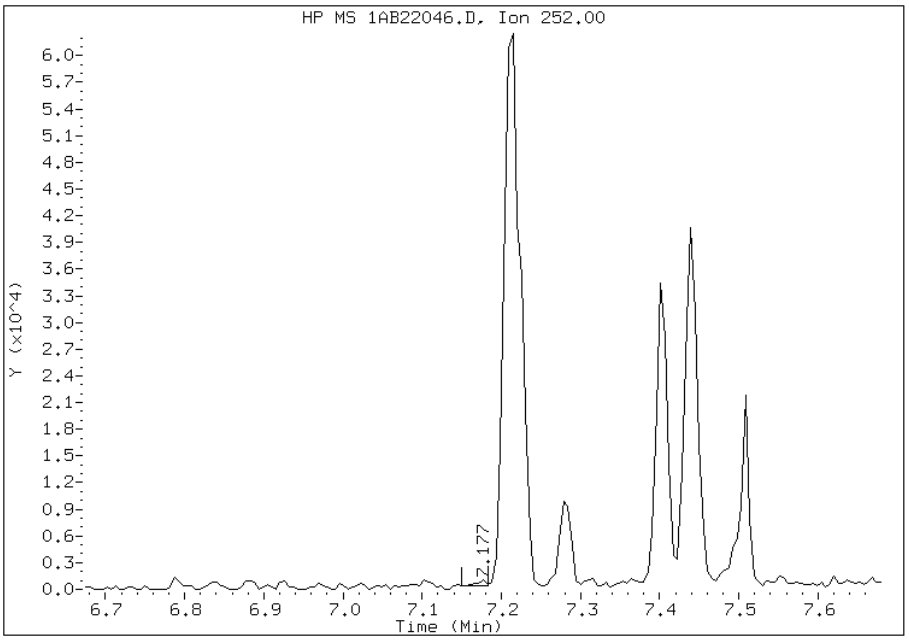
Processing Integration Results

RT: 7.18

Response: 598

Amount: 0

Conc: 2



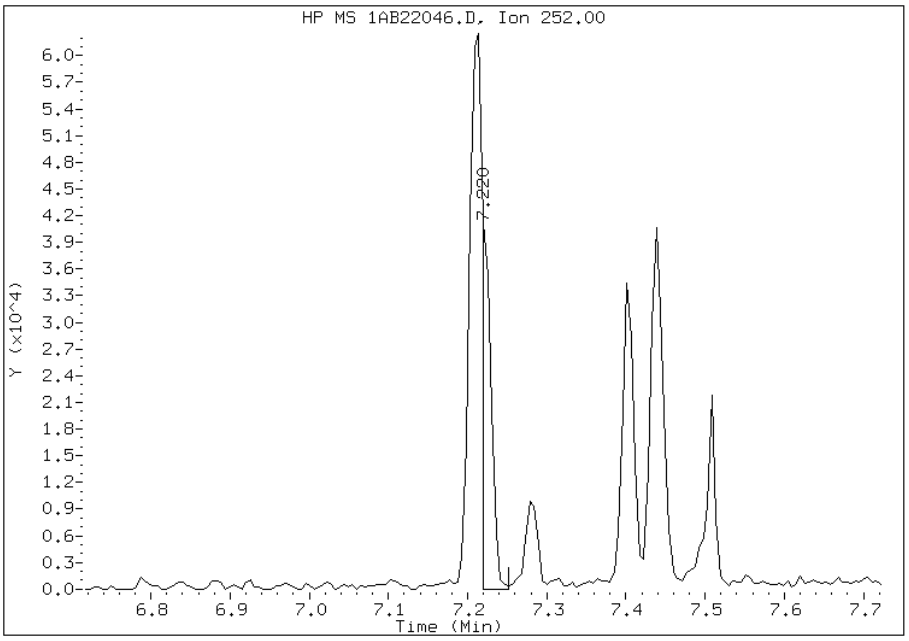

Manual Integration Results

RT: 7.22

Response: 33700

Amount: 1

Conc: 99




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:38
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22046.D
Inj. Date and Time: 22-FEB-2013 21:58
Instrument ID: BSMA5973.i
Client ID: FM0161H-CSD
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

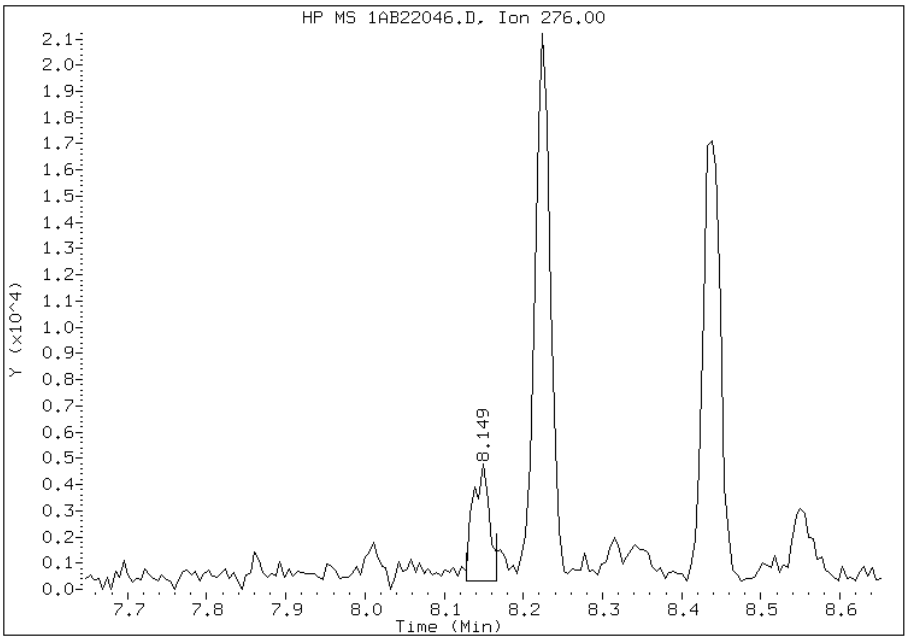
Processing Integration Results

RT: 8.15

Response: 6335

Amount: 0

Conc: 24



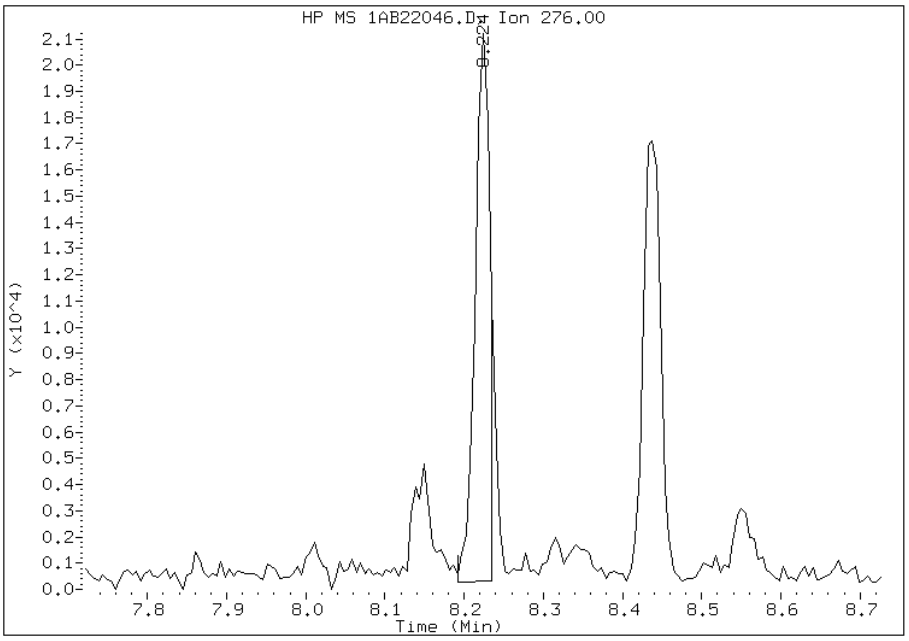

Manual Integration Results

RT: 8.22

Response: 26860

Amount: 1

Conc: 101




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:39
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161I-CS | Lab Sample ID: 680-87545-8

Matrix: Solid | Lab File ID: 1AB22047.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:10

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 14.94(g) | Date Analyzed: 02/22/2013 22:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 1.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 20 |
| 208-96-8 | Acenaphthylene | 7.4 | J | 41 | 5.1 |
| 120-12-7 | Anthracene | 12 | | 8.6 | 4.3 |
| 56-55-3 | Benzo[a]anthracene | 42 | | 8.2 | 4.0 |
| 50-32-8 | Benzo[a]pyrene | 32 | | 11 | 5.3 |
| 205-99-2 | Benzo[b]fluoranthene | 50 | | 12 | 6.2 |
| 191-24-2 | Benzo[g,h,i]perylene | 31 | | 20 | 4.5 |
| 207-08-9 | Benzo[k]fluoranthene | 19 | | 8.2 | 3.7 |
| 218-01-9 | Chrysene | 56 | | 9.2 | 4.6 |
| 53-70-3 | Dibenz(a,h)anthracene | 12 | J | 20 | 4.2 |
| 206-44-0 | Fluoranthene | 44 | | 20 | 4.1 |
| 86-73-7 | Fluorene | 5.0 | J | 20 | 4.2 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 28 | | 20 | 7.3 |
| 90-12-0 | 1-Methylnaphthalene | 19 | J | 41 | 4.5 |
| 91-57-6 | 2-Methylnaphthalene | 24 | J | 41 | 7.3 |
| 91-20-3 | Naphthalene | 27 | J | 41 | 4.5 |
| 85-01-8 | Phenanthrene | 42 | | 8.2 | 4.0 |
| 129-00-0 | Pyrene | 43 | | 20 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 48 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22047.D
Lab Smp Id: 680-87545-A-8-A Client Smp ID: FM0161I-CS
Inj Date : 22-FEB-2013 22:13
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-8-a
Misc Info : 680-87545-A-8-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 14.940 | Weight Extracted |
| M | 1.792 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.405 | 2.397 | (1.000) | 1034015 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.431 | 3.417 | (1.000) | 855759 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.371 | 4.352 | (1.000) | 1165765 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.643 | 4.635 | (1.062) | 81785 | 4.82135 | 328.6028 |
| * 18 Chrysene-d12 | 240 | 6.395 | 6.366 | (1.000) | 912112 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.501 | 7.456 | (1.000) | 1260591 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.416 | 2.402 | (1.004) | 9904 | 0.39750 | 27.0917 |
| 3 2-Methylnaphthalene | 141 | 2.816 | 2.808 | (1.171) | 4457 | 0.34651 | 23.6167 |
| 4 1-Methylnaphthalene | 142 | 2.870 | 2.861 | (1.193) | 4040 | 0.28206 | 19.2239 |
| 5 Acenaphthylene | 152 | 3.345 | 3.332 | (0.975) | 3458 | 0.10822 | 7.3759 |
| 9 Fluorene | 166 | 3.751 | 3.743 | (1.093) | 1719 | 0.07377 | 5.0277 |
| 11 Phenanthrene | 178 | 4.381 | 4.368 | (1.002) | 17775 | 0.61342 | 41.8080 |
| 12 Anthracene | 178 | 4.413 | 4.400 | (1.010) | 5088 | 0.18077 | 12.3203 |
| 13 Carbazole | 167 | 4.574 | 4.555 | (1.046) | 2126 | 0.08556 | 5.8317 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 5.247 | 5.228 | (1.200) | 18719 | 0.64609 | 44.0345 |
| 16 Pyrene | 202 | 5.412 | 5.394 | (0.846) | 16995 | 0.63524 | 43.2955 |
| 17 Benzo(a)anthracene | 228 | 6.390 | 6.355 | (0.999) | 16854 | 0.61884 | 42.1773 |
| 19 Chrysene | 228 | 6.406 | 6.387 | (1.002) | 20070 | 0.82397 | 56.1583 |
| 20 Benzo(b)fluoranthene | 252 | 7.207 | 7.178 | (0.961) | 23244 | 0.72738 | 49.5750(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.218 | 7.199 | (0.962) | 8877 | 0.27612 | 18.8188(QMH) |
| 22 Benzo(a)pyrene | 252 | 7.437 | 7.408 | (0.991) | 13596 | 0.46459 | 31.6641(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.222 | 8.177 | (1.096) | 10379 | 0.41340 | 28.1753(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.222 | 8.193 | (1.096) | 4482 | 0.17131 | 11.6757(MH) |
| 26 Benzo(g,h,i)perylene | 276 | 8.431 | 8.385 | (1.124) | 12339 | 0.46207 | 31.4927(MH) |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22047.D

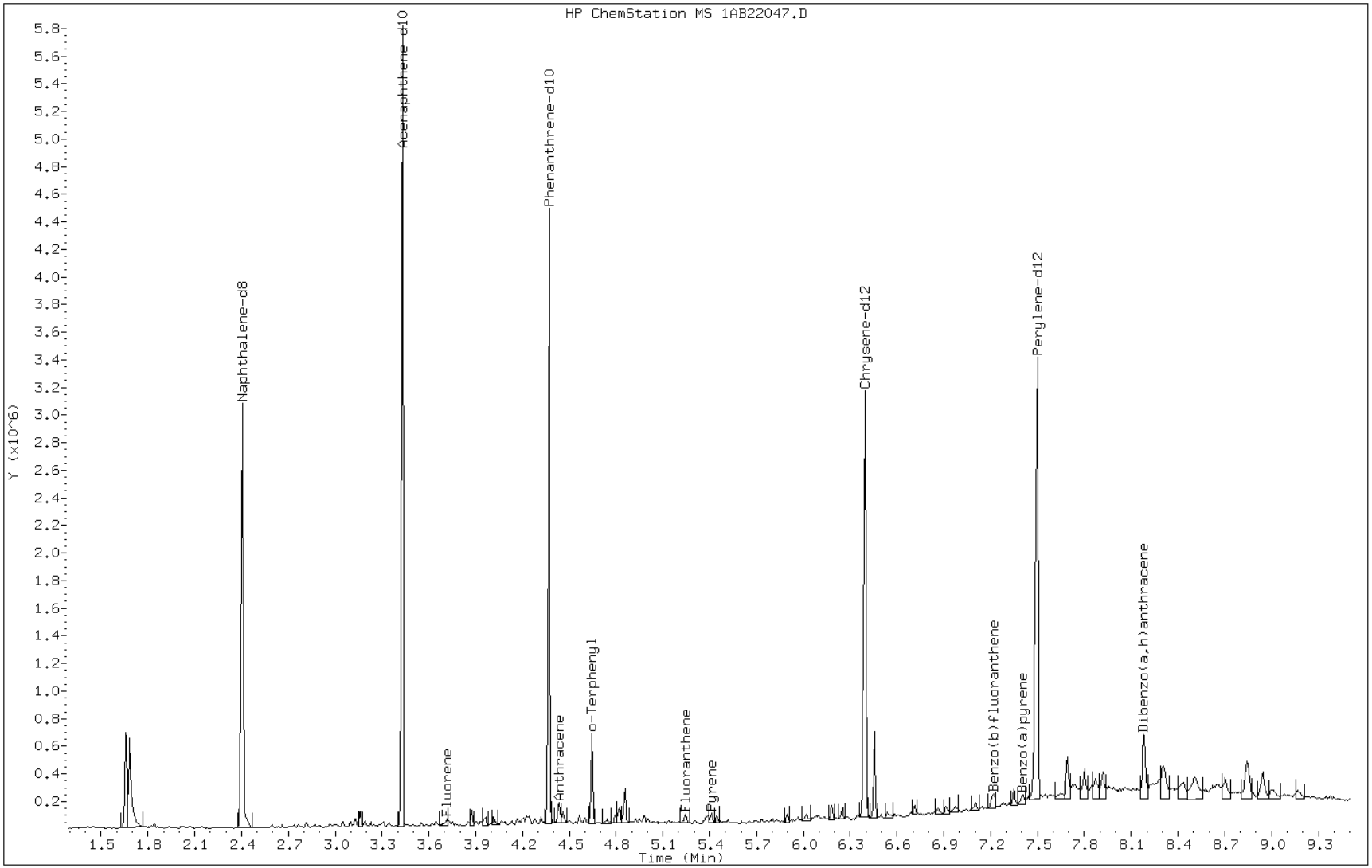
Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

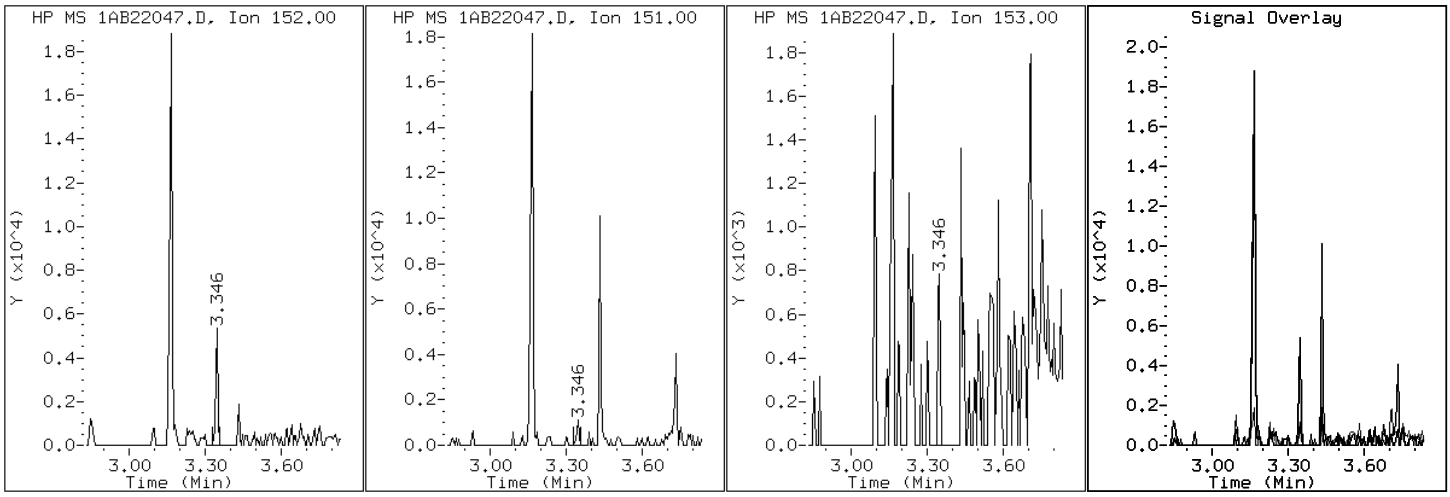
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

5 Acenaphthylene



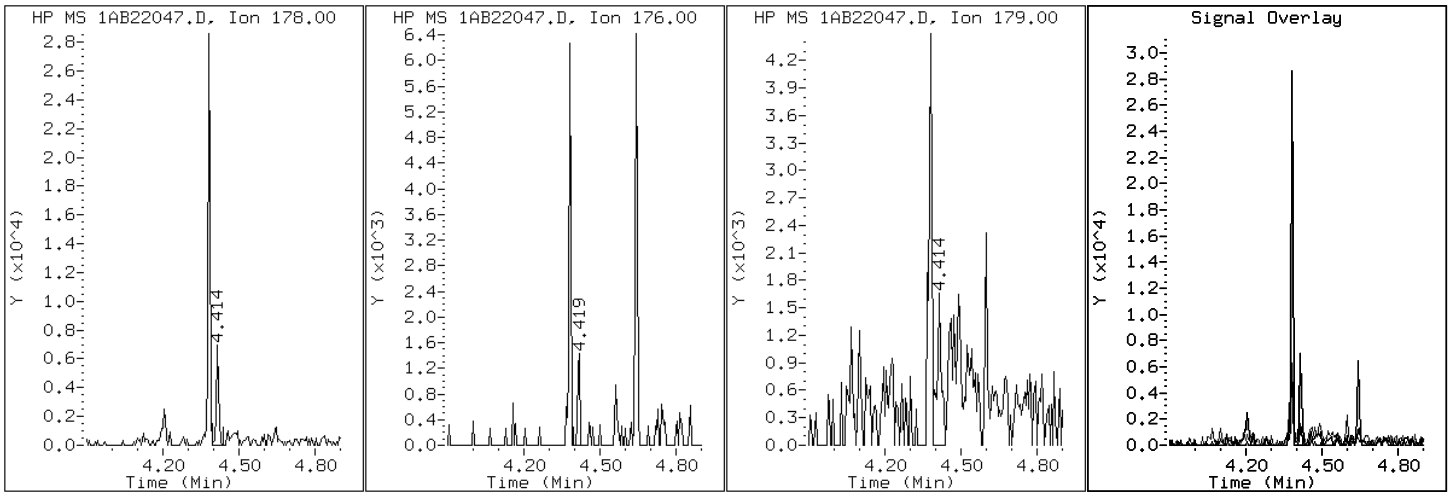
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

12 Anthracene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

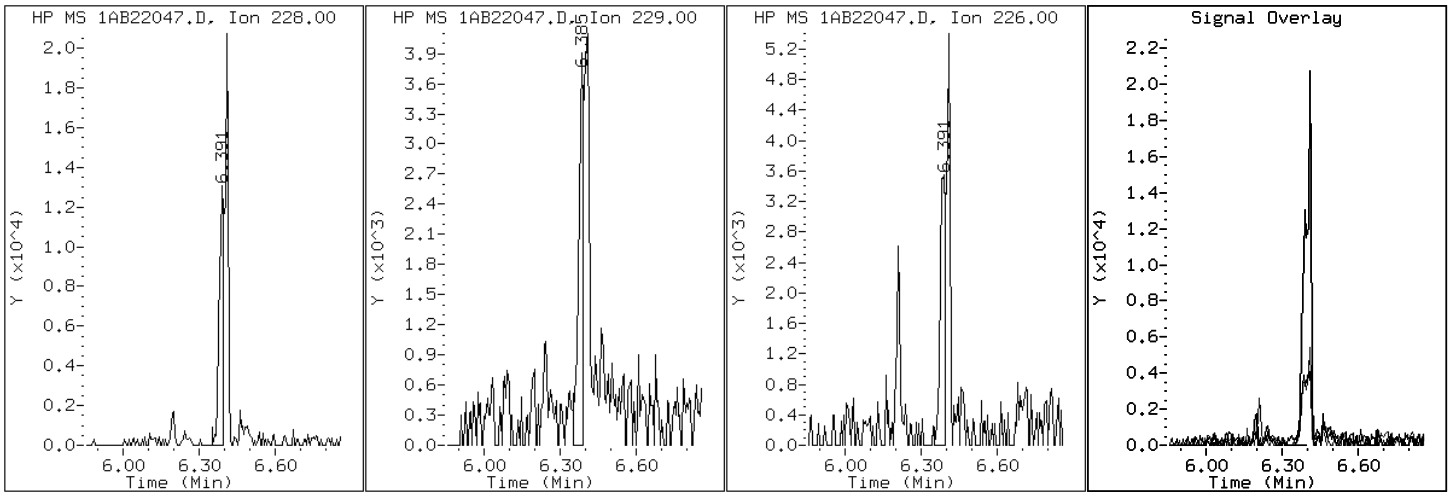
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

17 Benzo(a)anthracene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

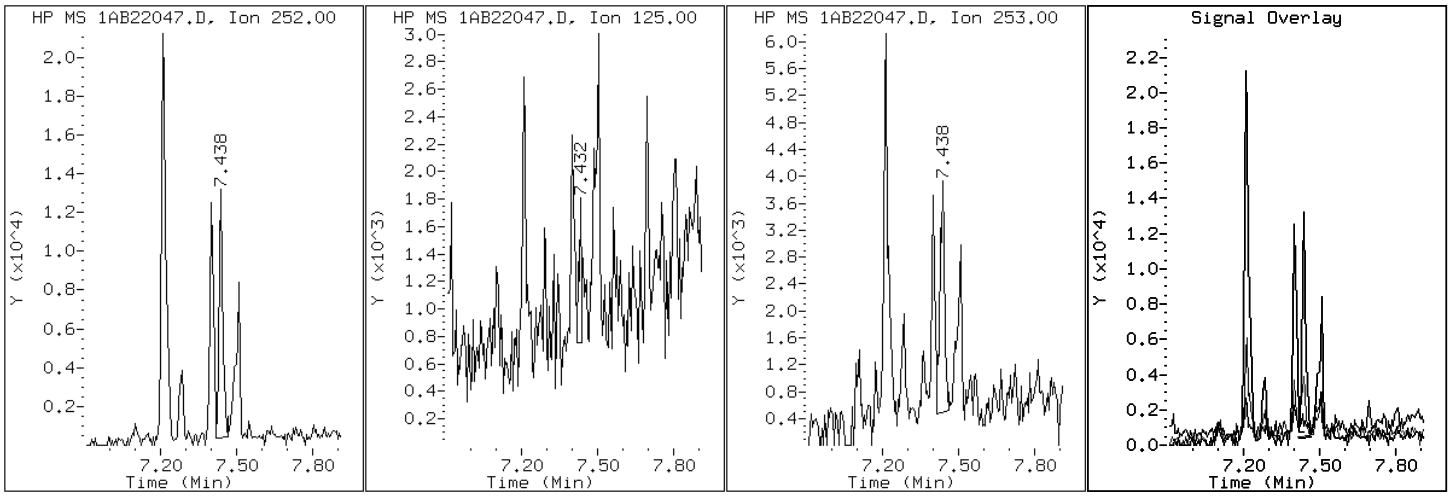
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

22 Benzo(a)pyrene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

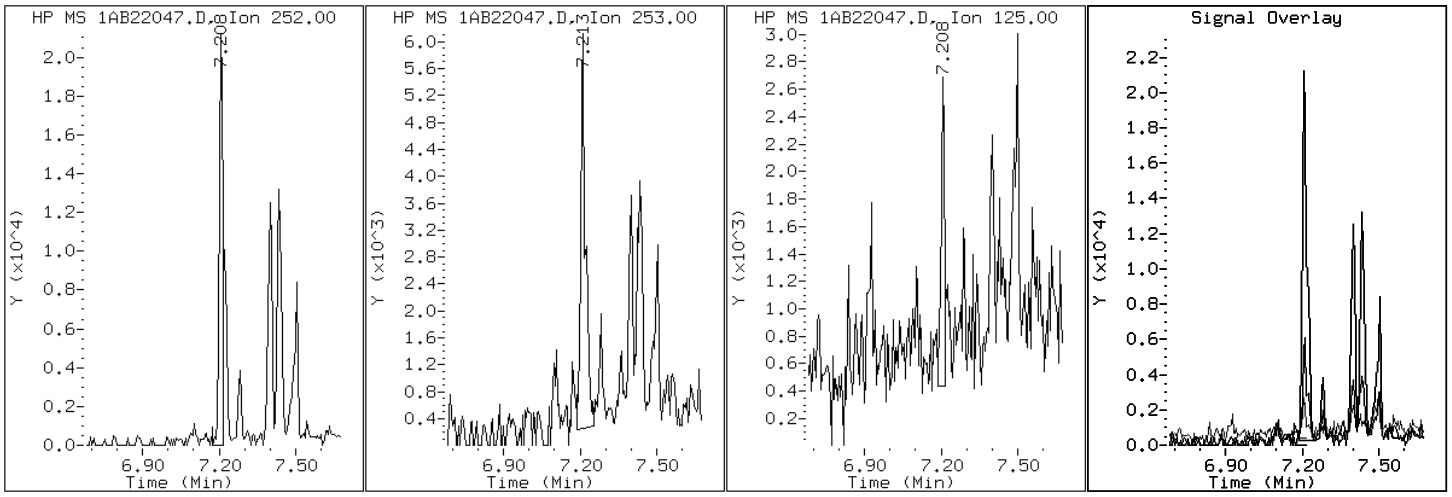
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

20 Benzo(b)fluoranthene



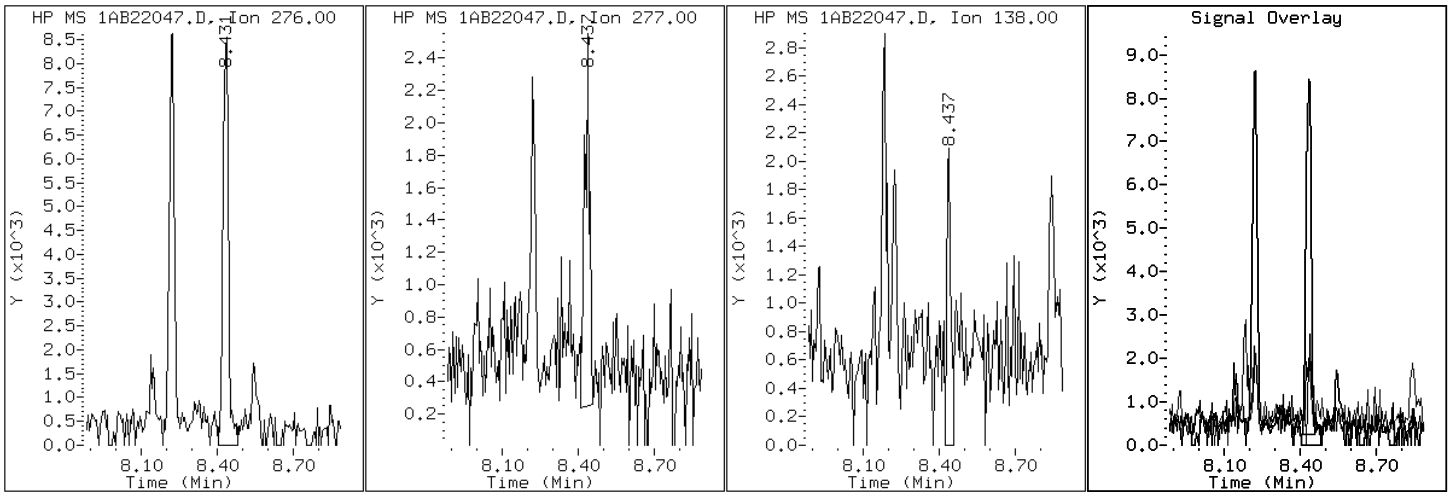
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

26 Benzo(g,h,i)perylene



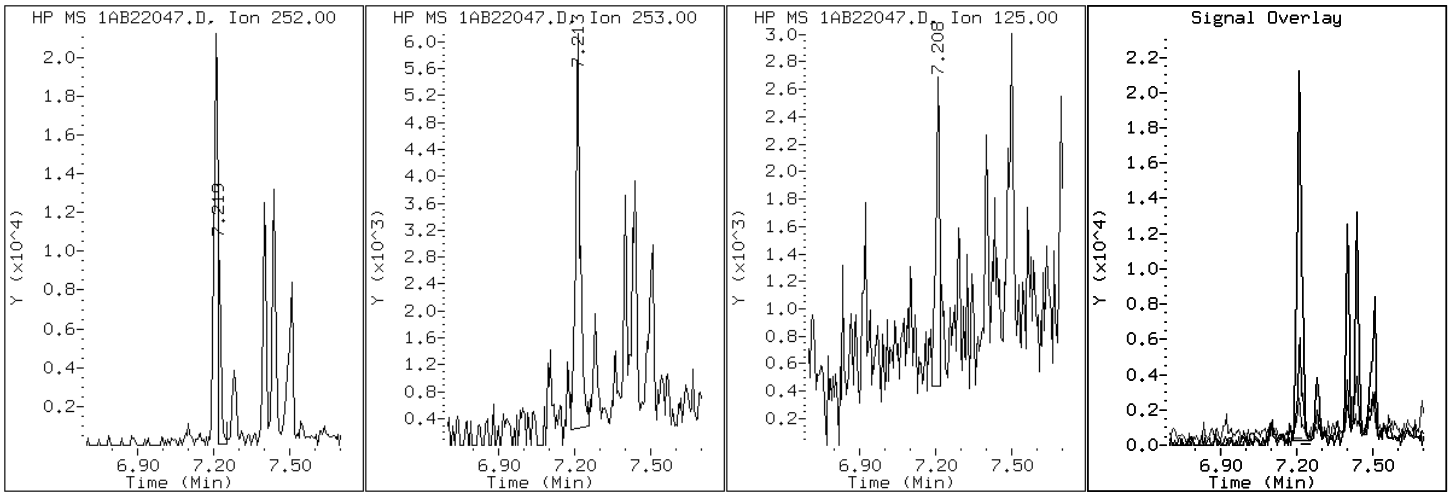
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

21 Benzo(k)fluoranthene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

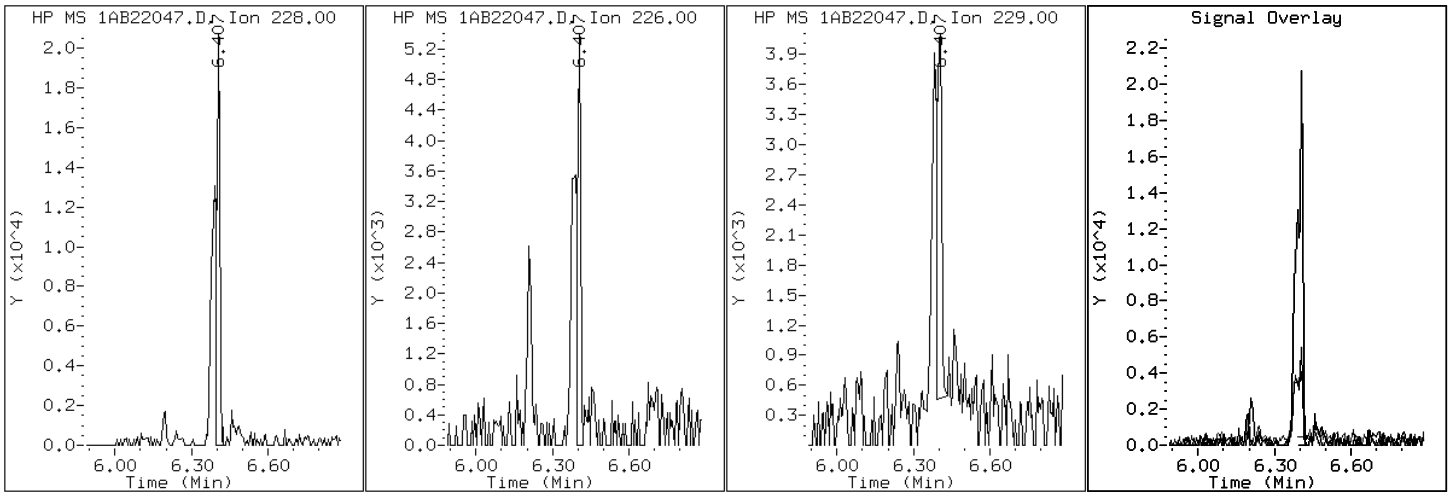
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

19 Chrysene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

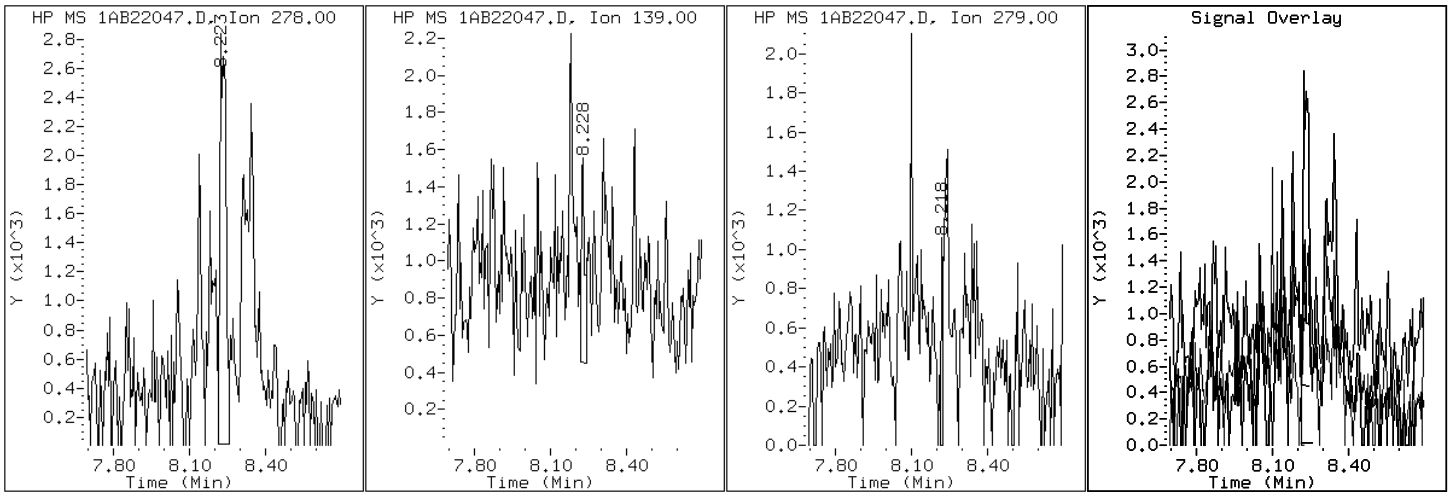
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

25 Dibenzo(a,h)anthracene



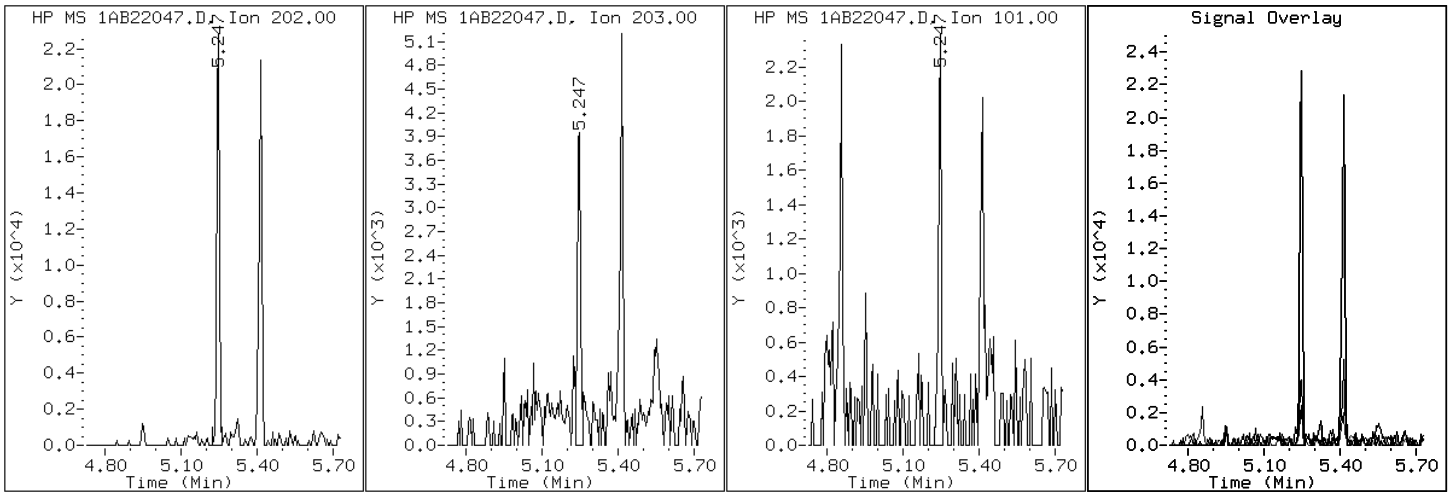
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

15 Fluoranthene



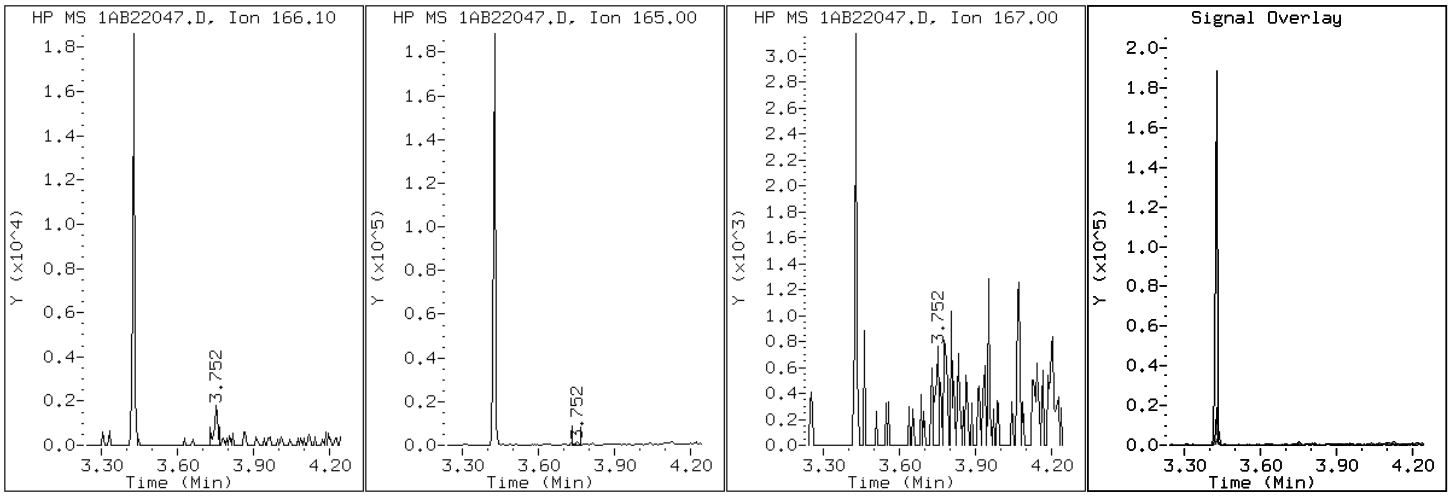
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

9 Fluorene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

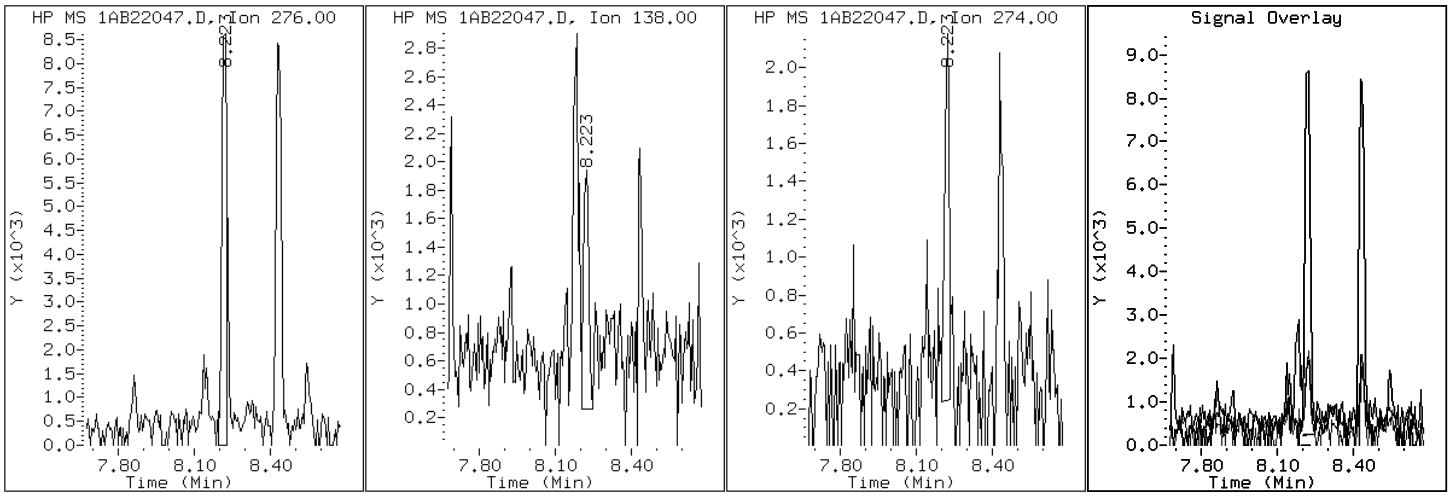
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



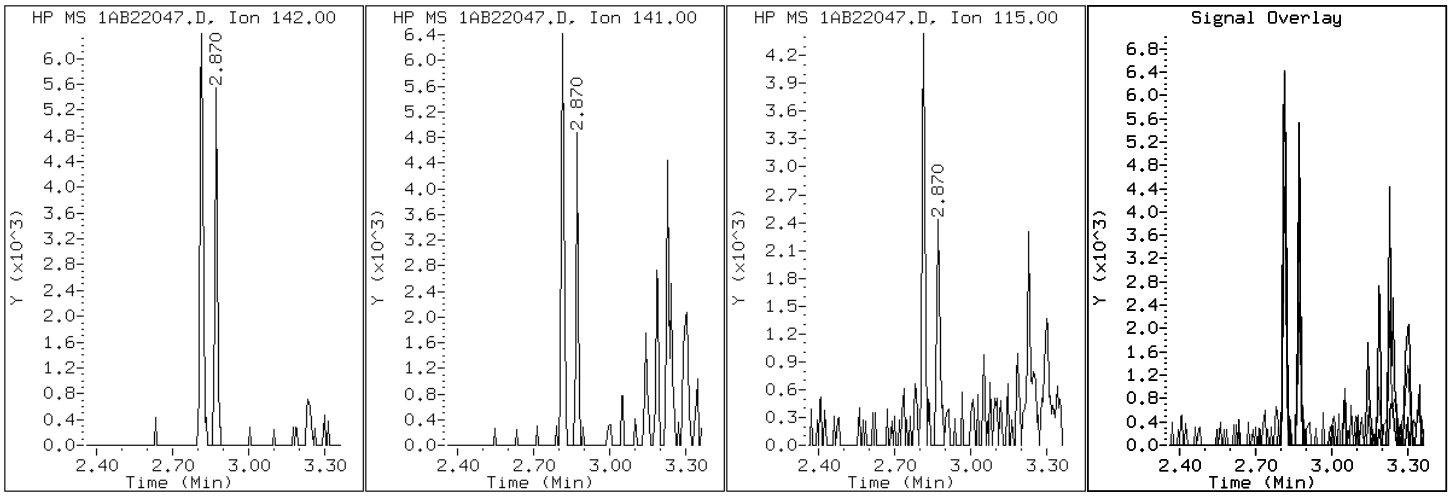
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

4 1-Methylnaphthalene



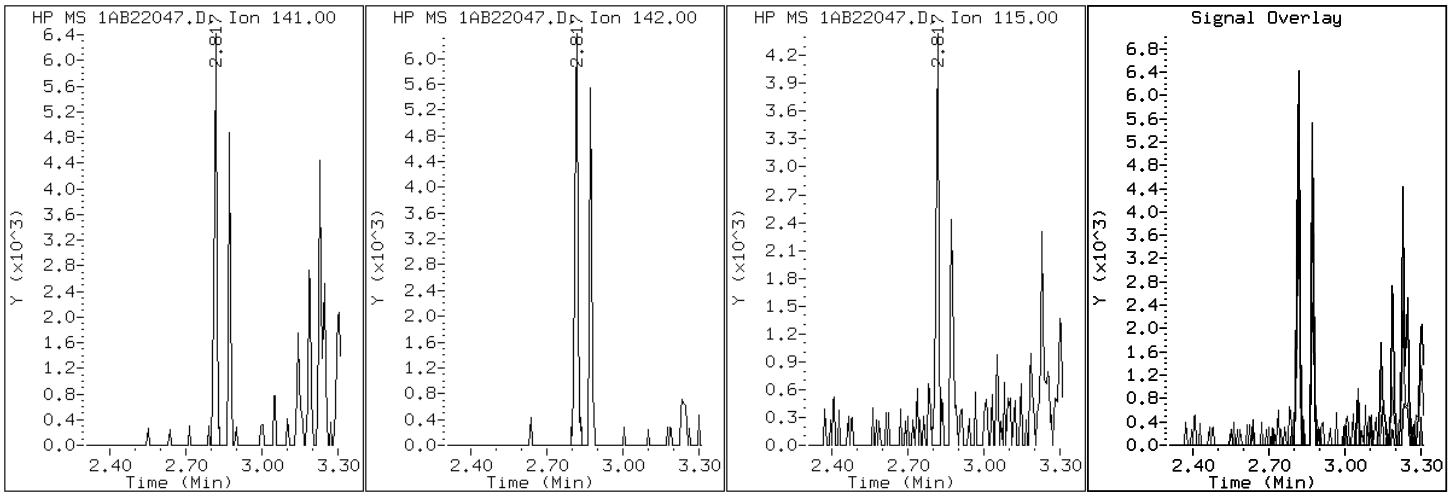
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

3 2-Methylnaphthalene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

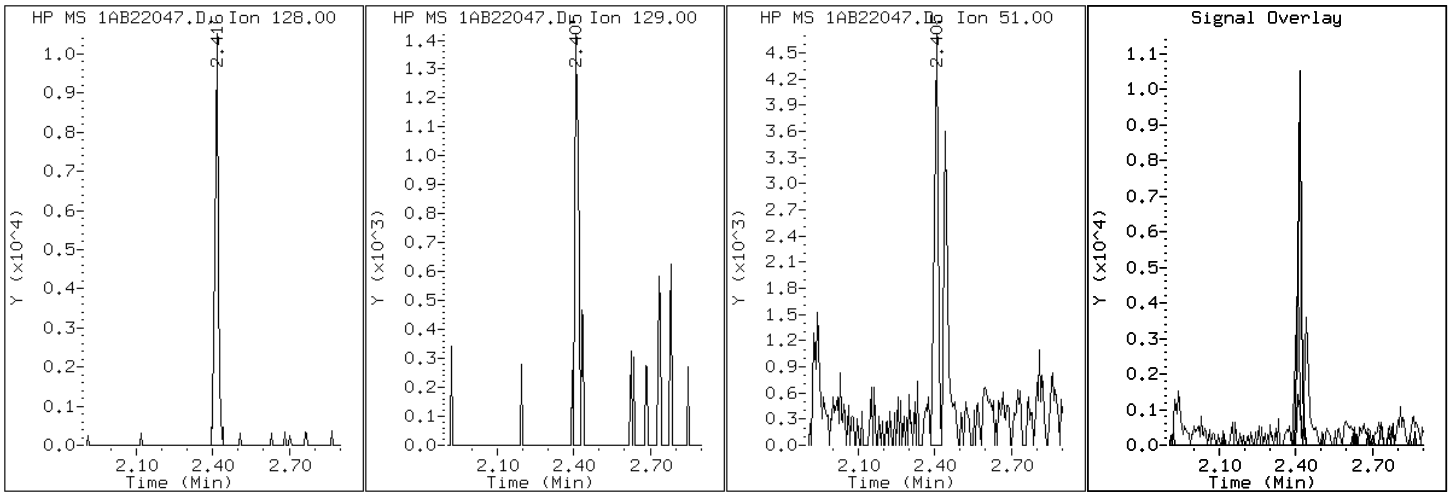
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

2 Naphthalene



Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

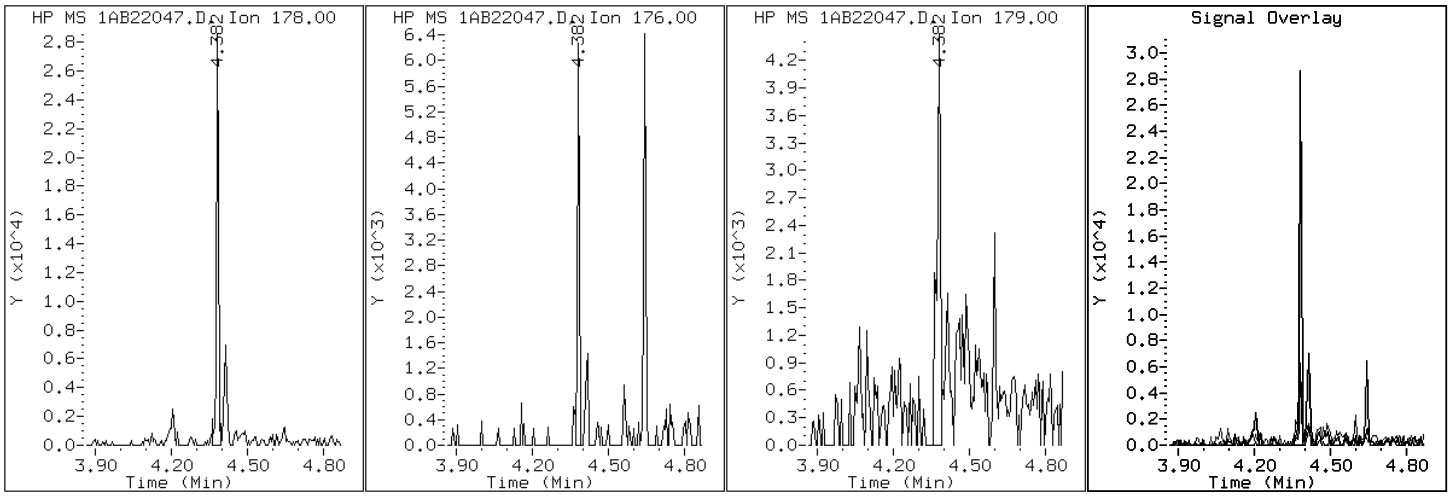
Client ID: FM0161I-CS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a

Operator: SCC

11 Phenanthrene



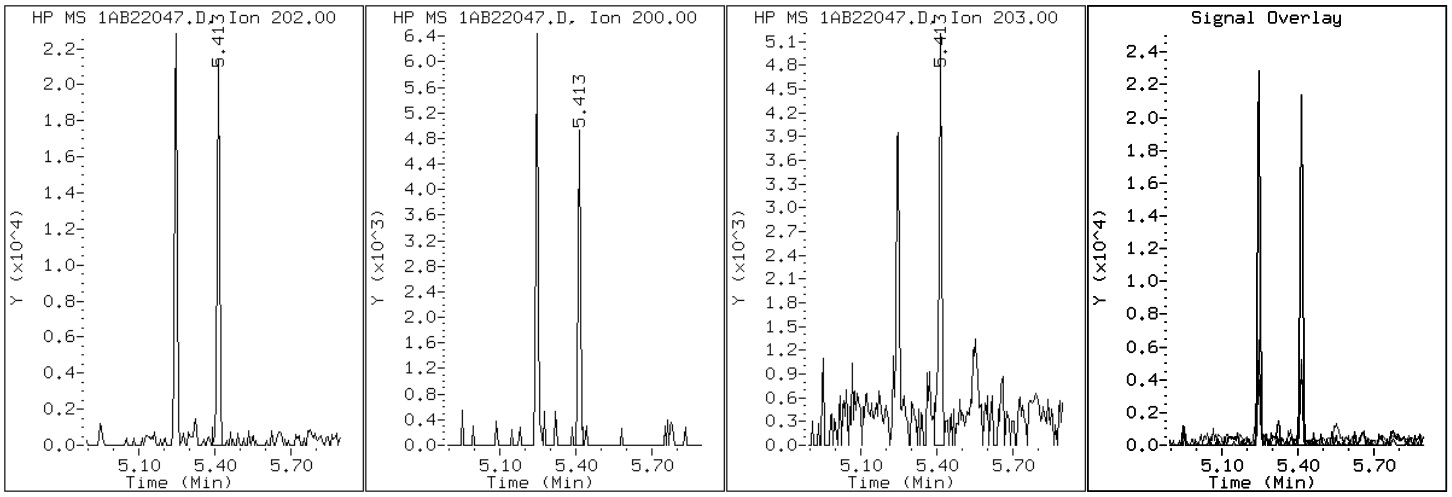
Data File: 1AB22047.D

Date: 22-FEB-2013 22:13

Client ID: FM0161I-CS Instrument: BSMA5973.i

Sample Info: 680-87545-a-8-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22047.D
Inj. Date and Time: 22-FEB-2013 22:13
Instrument ID: BSMA5973.i
Client ID: FM0161I-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

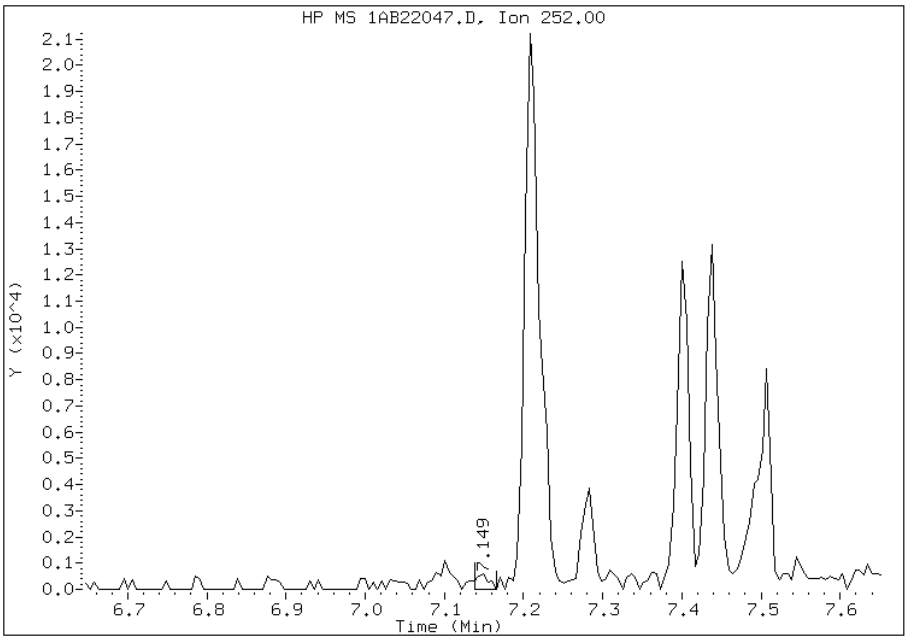
Processing Integration Results

RT: 7.15

Response: 631

Amount: 0

Conc: 1



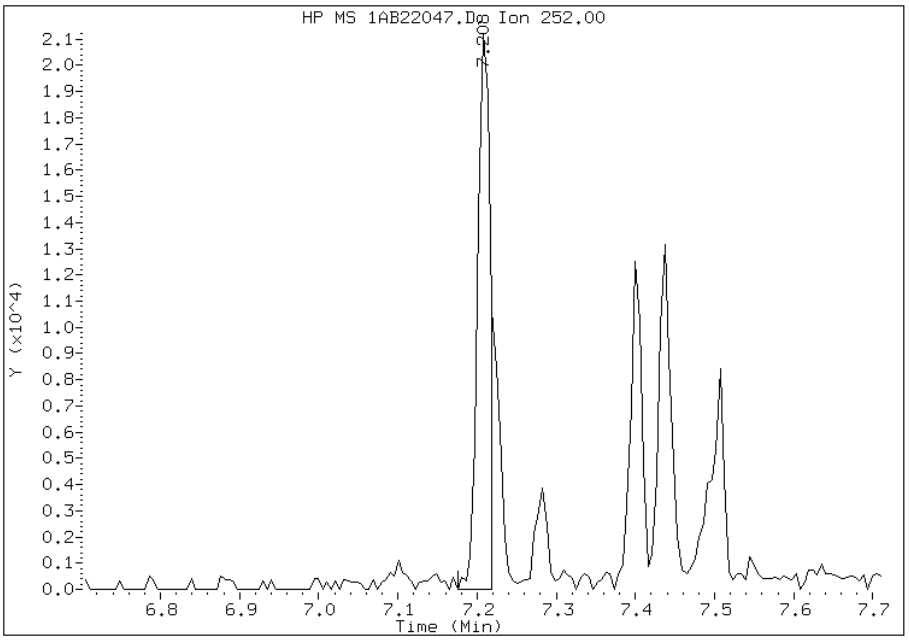

Manual Integration Results

RT: 7.21

Response: 23244

Amount: 1

Conc: 50




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:40
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22047.D
Inj. Date and Time: 22-FEB-2013 22:13
Instrument ID: BSMA5973.i
Client ID: FM0161I-CS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

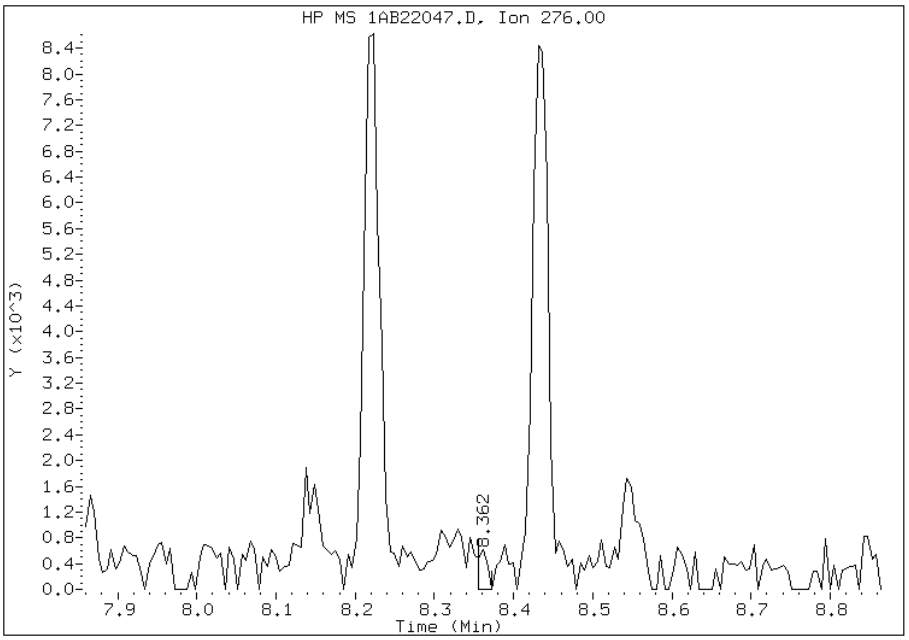
Processing Integration Results

RT: 8.36

Response: 463

Amount: 0

Conc: 1



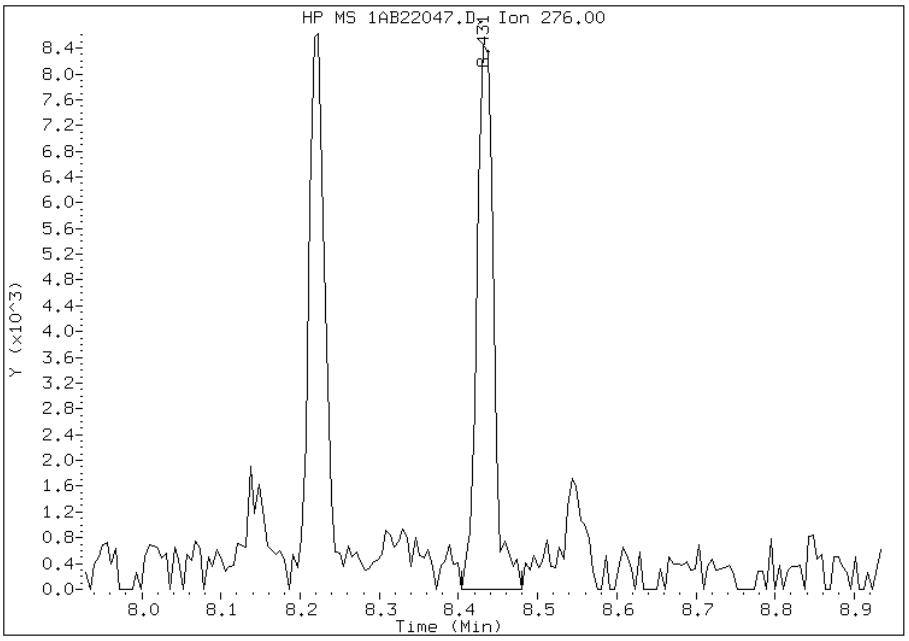

Manual Integration Results

RT: 8.43

Response: 12339

Amount: 0

Conc: 31




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:41
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22047.D
Inj. Date and Time: 22-FEB-2013 22:13
Instrument ID: BSMA5973.i
Client ID: FM0161I-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

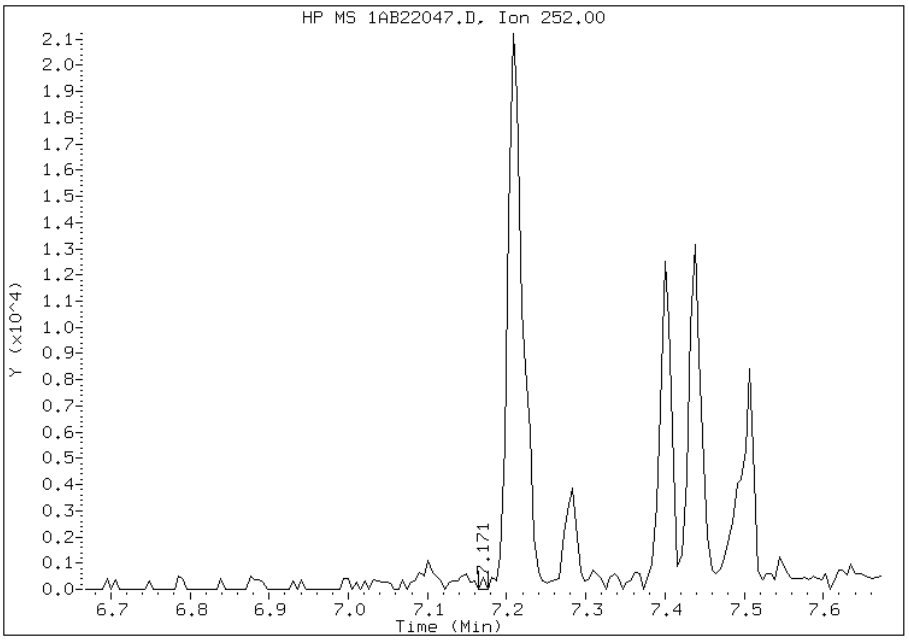
Processing Integration Results

RT: 7.17

Response: 142

Amount: 0

Conc: 0



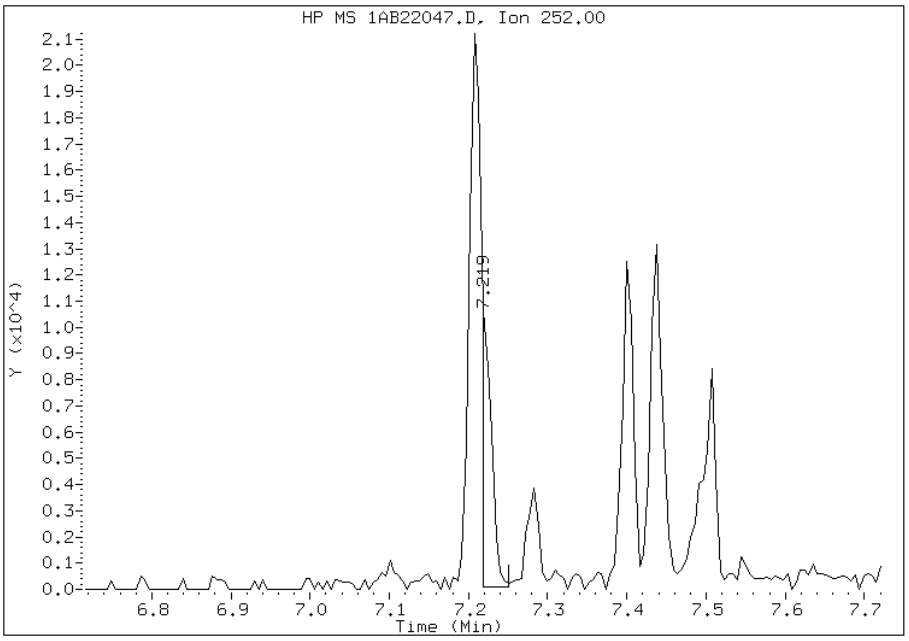

Manual Integration Results

RT: 7.22

Response: 8877

Amount: 0

Conc: 19




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:40
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22047.D
Inj. Date and Time: 22-FEB-2013 22:13
Instrument ID: BSMA5973.i
Client ID: FM0161I-CS
Compound: 25 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 02/26/2013

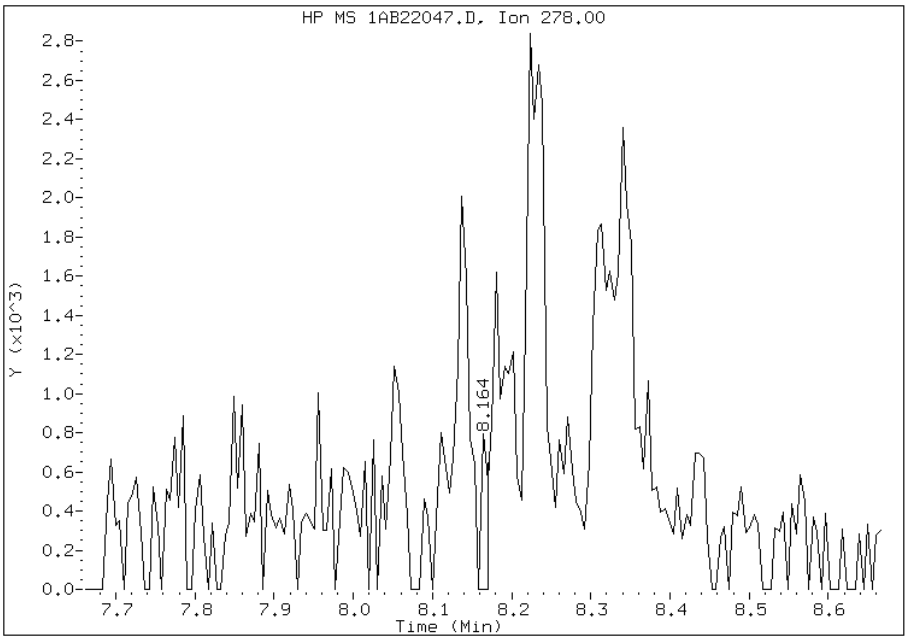
Processing Integration Results

RT: 8.16

Response: 431

Amount: 0

Conc: 1



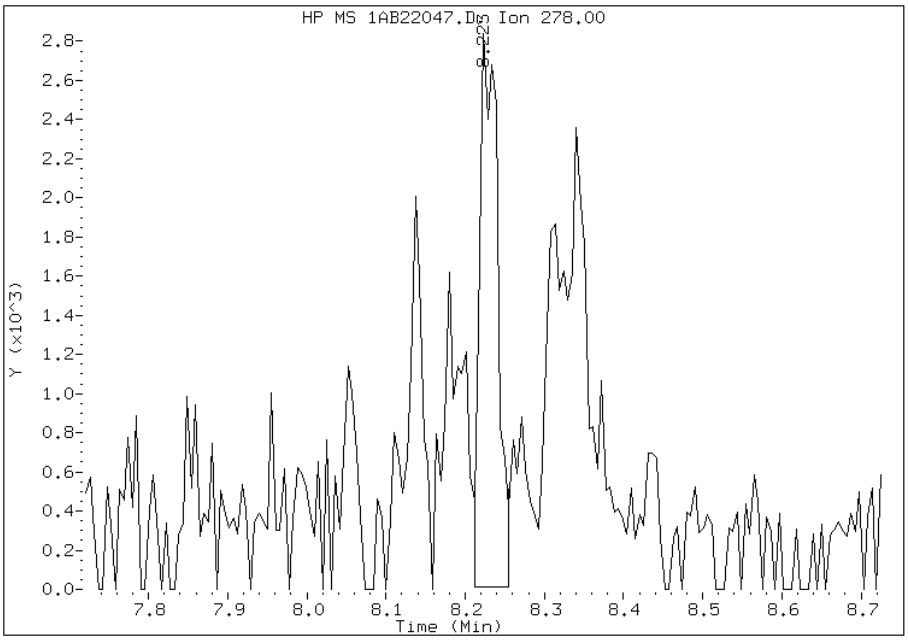

Manual Integration Results

RT: 8.22

Response: 4482

Amount: 0

Conc: 12




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:40
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22047.D
Inj. Date and Time: 22-FEB-2013 22:13
Instrument ID: BSMA5973.i
Client ID: FM0161I-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

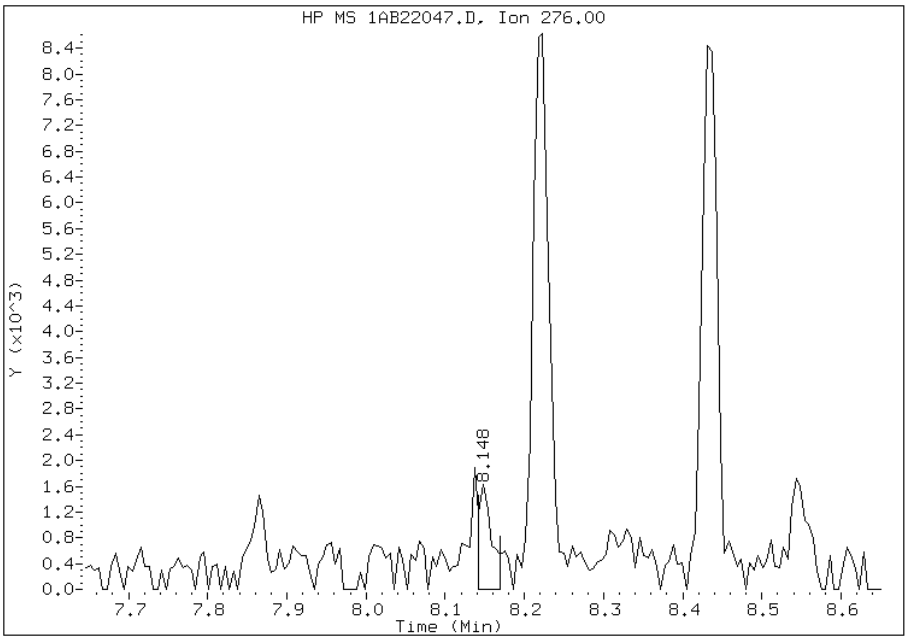
Processing Integration Results

RT: 8.15

Response: 1881

Amount: 0

Conc: 5



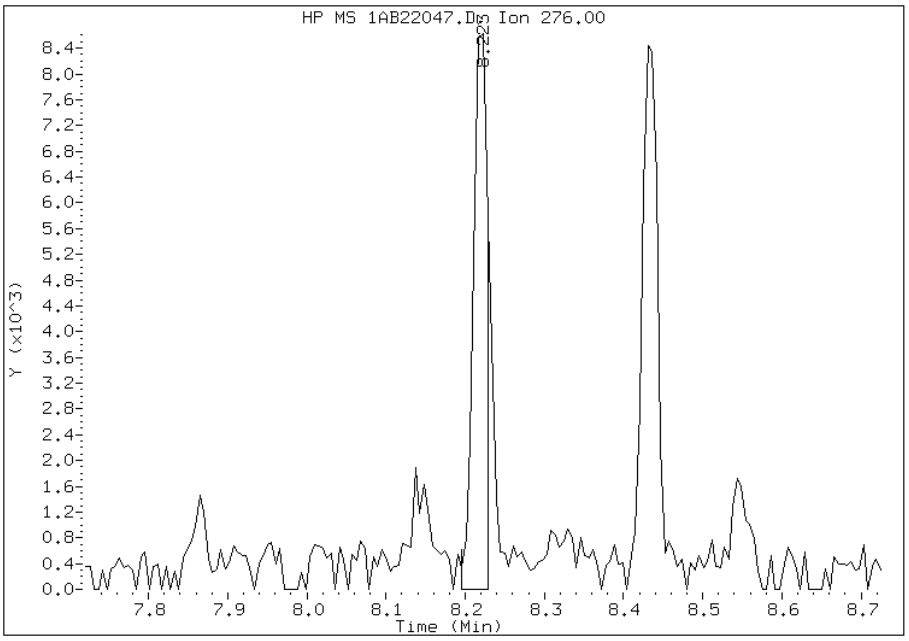

Manual Integration Results

RT: 8.22

Response: 10379

Amount: 0

Conc: 28




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:41
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AD-GS | Lab Sample ID: 680-87545-9

Matrix: Solid | Lab File ID: 1AB22048.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:49

Extract. Method: 3546 | Date Extracted: 02/21/2013 09:55

Sample wt/vol: 15.01(g) | Date Analyzed: 02/22/2013 22:28

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 6.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134771 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 110 | U | 110 | 21 |
| 208-96-8 | Acenaphthylene | 28 | J | 43 | 5.4 |
| 120-12-7 | Anthracene | 39 | | 9.0 | 4.5 |
| 56-55-3 | Benzo[a]anthracene | 100 | | 8.6 | 4.2 |
| 50-32-8 | Benzo[a]pyrene | 77 | | 11 | 5.6 |
| 205-99-2 | Benzo[b]fluoranthene | 120 | | 13 | 6.5 |
| 191-24-2 | Benzo[g,h,i]perylene | 50 | | 21 | 4.7 |
| 207-08-9 | Benzo[k]fluoranthene | 39 | | 8.6 | 3.9 |
| 218-01-9 | Chrysene | 110 | | 9.6 | 4.8 |
| 53-70-3 | Dibenz(a,h)anthracene | 23 | | 21 | 4.4 |
| 206-44-0 | Fluoranthene | 120 | | 21 | 4.3 |
| 86-73-7 | Fluorene | 5.7 | J | 21 | 4.4 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 55 | | 21 | 7.6 |
| 90-12-0 | 1-Methylnaphthalene | 25 | J | 43 | 4.7 |
| 91-57-6 | 2-Methylnaphthalene | 35 | J | 43 | 7.6 |
| 91-20-3 | Naphthalene | 39 | J | 43 | 4.7 |
| 85-01-8 | Phenanthrene | 64 | | 8.6 | 4.2 |
| 129-00-0 | Pyrene | 110 | | 21 | 4.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 66 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22048.D
Lab Smp Id: 680-87545-A-9-A Client Smp ID: FM0161AD-GS
Inj Date : 22-FEB-2013 22:28
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87545-a-9-a
Misc Info : 680-87545-A-9-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.010 | Weight Extracted |
| M | 6.744 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.407 | 2.397 | (1.000) | 983567 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.427 | 3.417 | (1.000) | 792268 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.373 | 4.352 | (1.000) | 1126400 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.645 | 4.635 | (1.062) | 107739 | 6.57334 | 469.5991 |
| * 18 Chrysene-d12 | 240 | 6.397 | 6.366 | (1.000) | 895082 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.498 | 7.456 | (1.000) | 1210876 | 40.0000 | (H) |
| 2 Naphthalene | 128 | 2.412 | 2.402 | (1.002) | 12825 | 0.54113 | 38.6585 |
| 3 2-Methylnaphthalene | 141 | 2.813 | 2.808 | (1.169) | 6077 | 0.49669 | 35.4836 |
| 4 1-Methylnaphthalene | 142 | 2.871 | 2.861 | (1.193) | 4750 | 0.34864 | 24.9067 |
| 5 Acenaphthylene | 152 | 3.342 | 3.332 | (0.975) | 11467 | 0.38763 | 27.6924 |
| 9 Fluorene | 166 | 3.753 | 3.743 | (1.095) | 1732 | 0.08028 | 5.7353(Q) |
| 11 Phenanthrene | 178 | 4.383 | 4.368 | (1.002) | 25125 | 0.89737 | 64.1080 |
| 12 Anthracene | 178 | 4.415 | 4.400 | (1.010) | 14909 | 0.54820 | 39.1633 |
| 13 Carbazole | 167 | 4.576 | 4.555 | (1.046) | 2906 | 0.12104 | 8.6473 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 5.249 | 5.228 | (1.200) | 47036 | 1.68018 | 120.0323 |
| 16 Pyrene | 202 | 5.414 | 5.394 | (0.846) | 41248 | 1.57111 | 112.2402 |
| 17 Benzo(a)anthracene | 228 | 6.392 | 6.355 | (0.999) | 39252 | 1.46866 | 104.9208 |
| 19 Chrysene | 228 | 6.408 | 6.387 | (1.002) | 35508 | 1.48551 | 106.1247 |
| 20 Benzo(b)fluoranthene | 252 | 7.209 | 7.178 | (0.962) | 52465 | 1.70920 | 122.1052(MH) |
| 21 Benzo(k)fluoranthene | 252 | 7.220 | 7.199 | (0.963) | 16988 | 0.55010 | 39.2991(QMH) |
| 22 Benzo(a)pyrene | 252 | 7.439 | 7.408 | (0.992) | 30374 | 1.08051 | 77.1919(H) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.224 | 8.177 | (1.097) | 18555 | 0.76939 | 54.9651(MH) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.230 | 8.193 | (1.098) | 7995 | 0.31813 | 22.7270(H) |
| 26 Benzo(g,h,i)perylene | 276 | 8.433 | 8.385 | (1.125) | 17786 | 0.69340 | 49.5361(H) |

## QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1AB22048.D

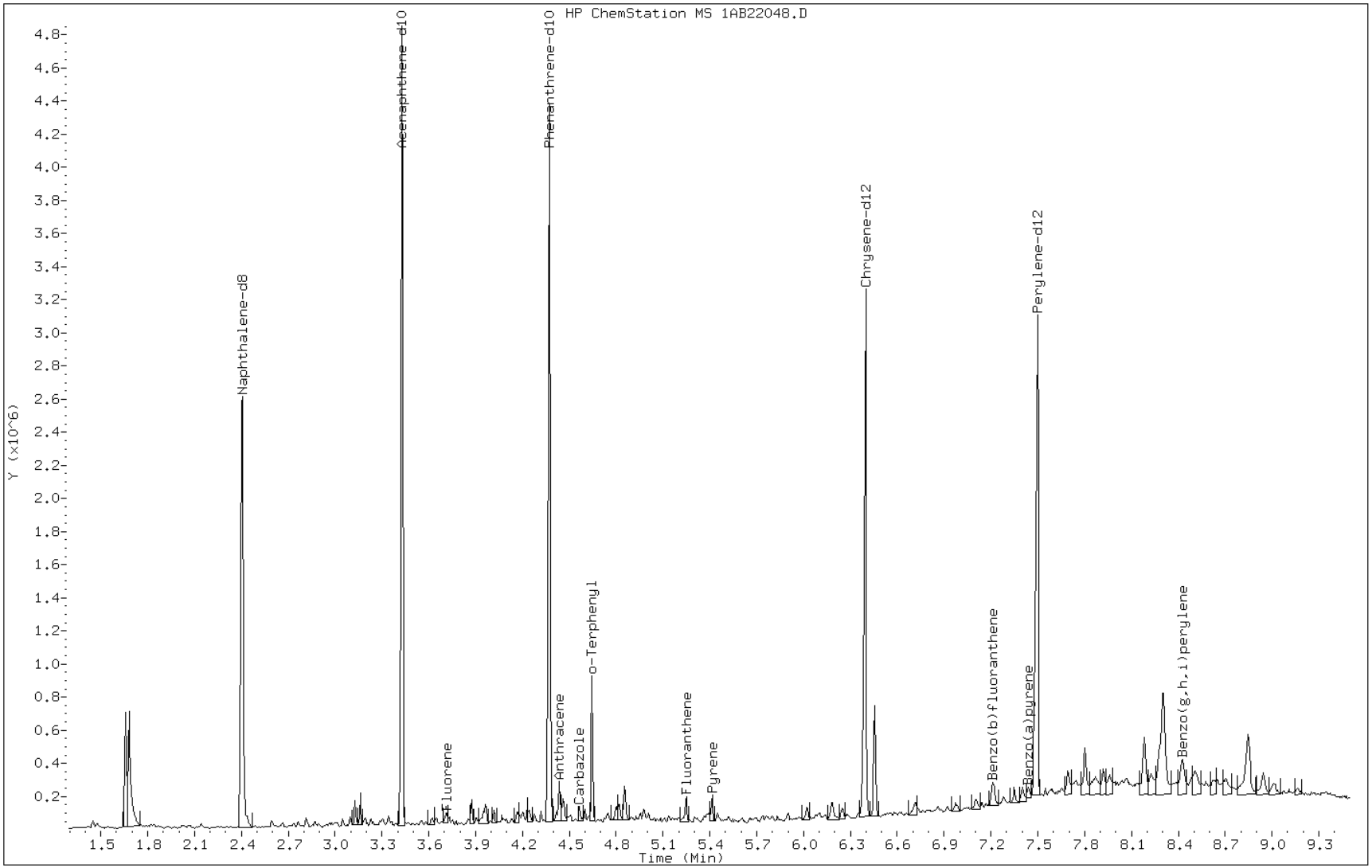
Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC



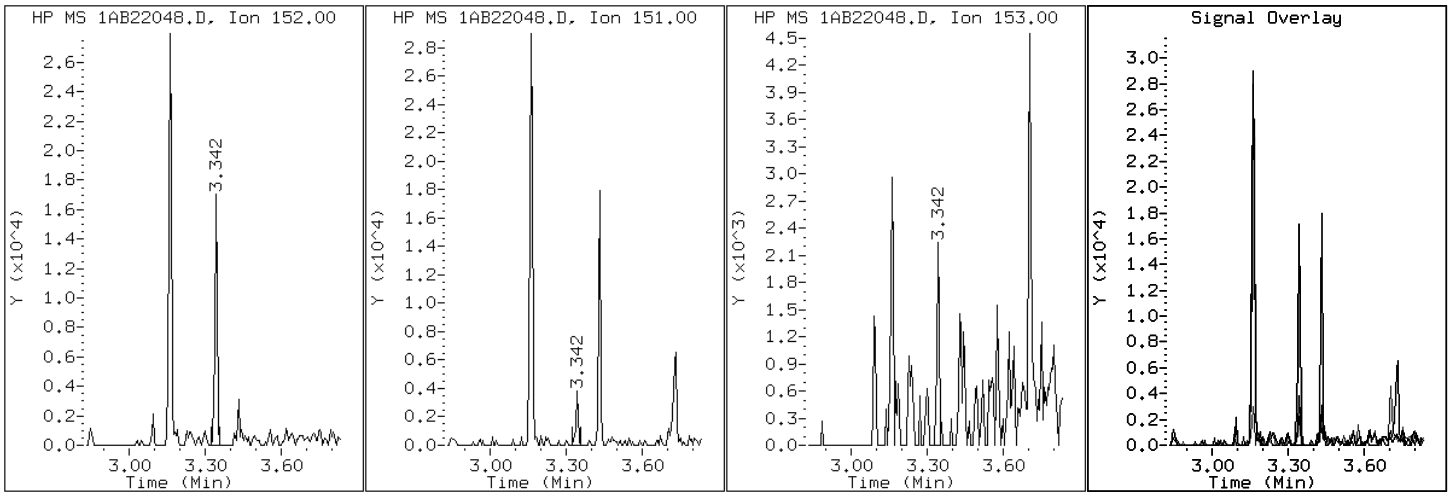
Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS  Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a  Operator: SCC

5 Acenaphthylene



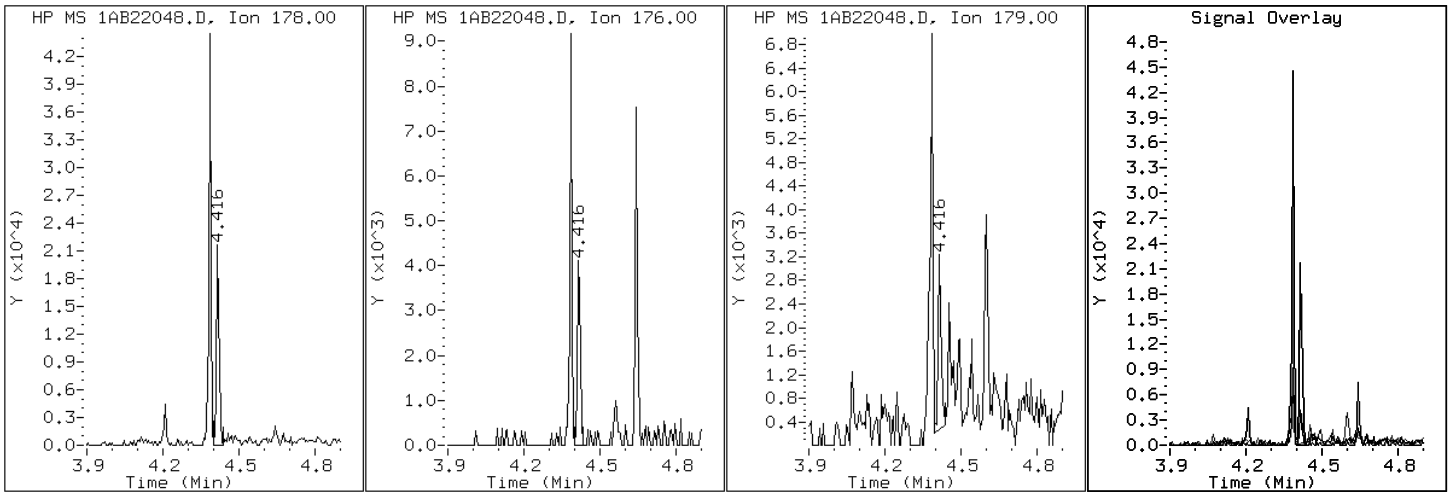
Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS  Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a  Operator: SCC

12 Anthracene



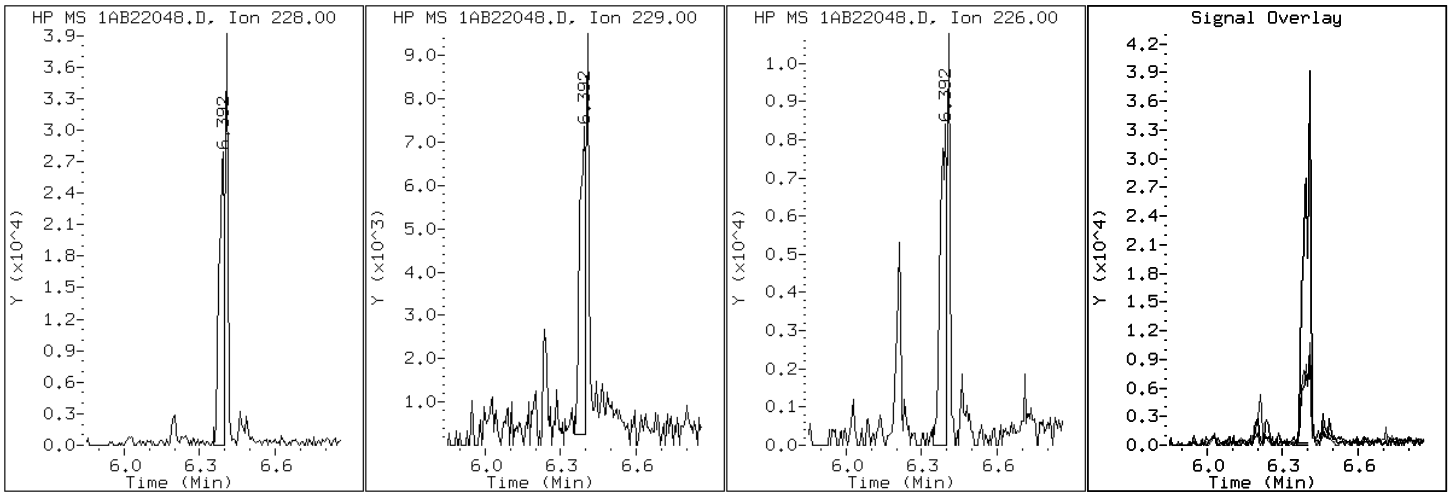
Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a Operator: SCC

17 Benzo(a)anthracene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

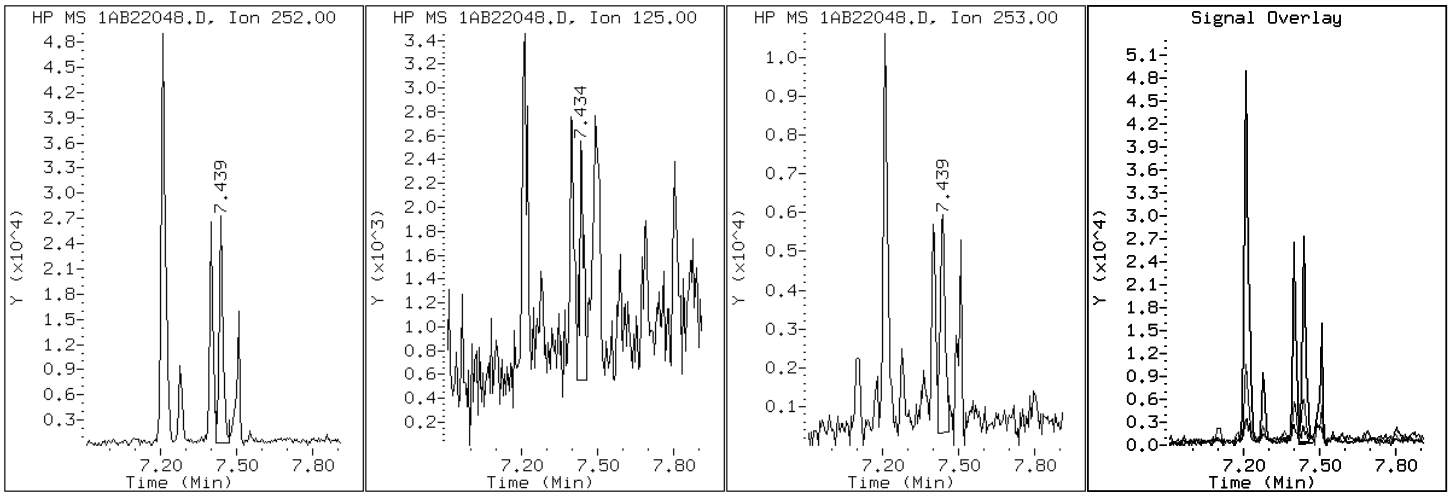
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

22 Benzo(a)pyrene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

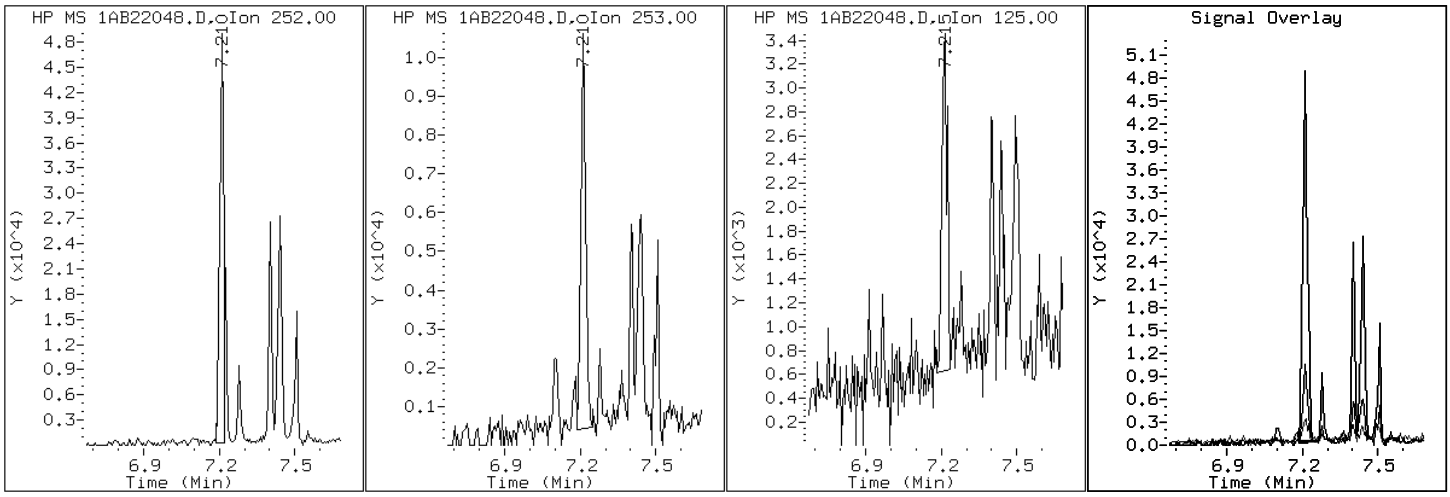
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

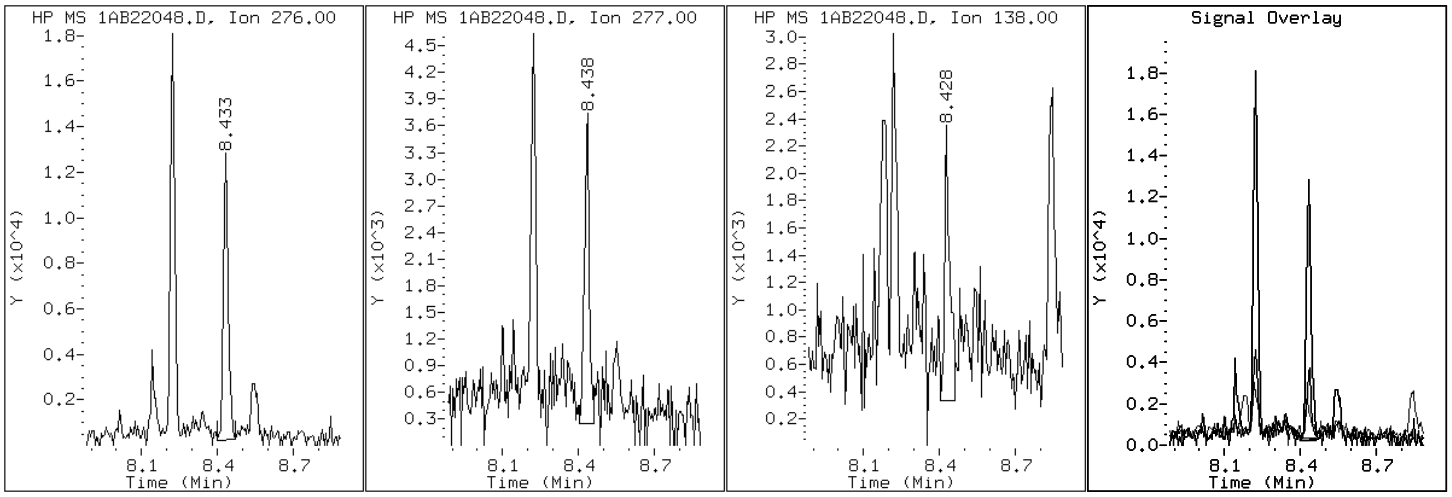
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

26 Benzo(g,h,i)perylene



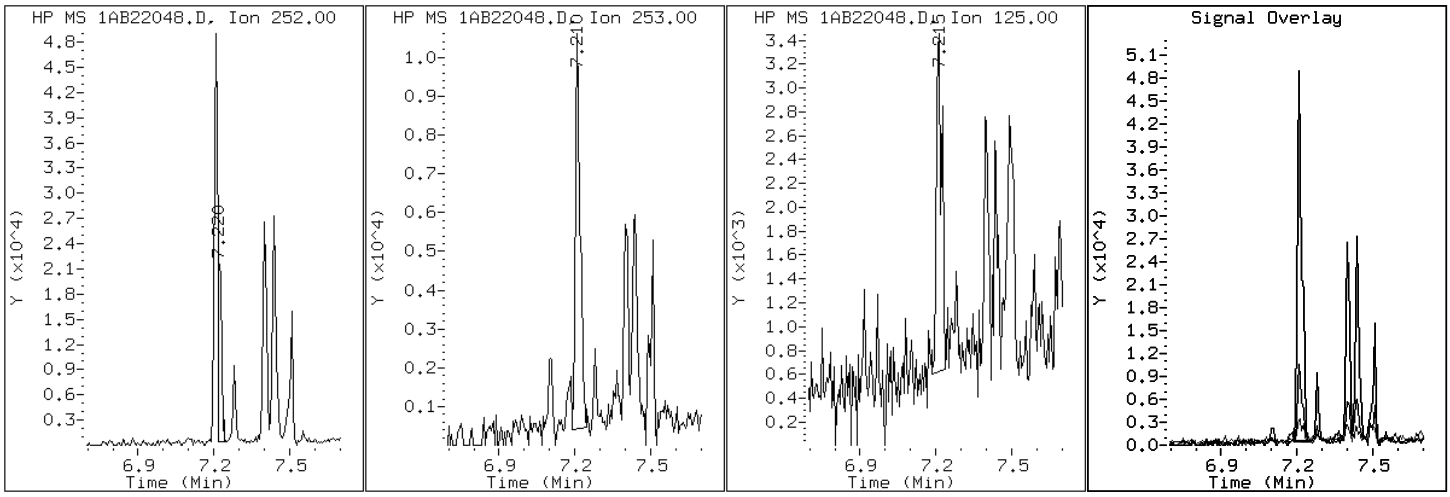
Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a Operator: SCC

21 Benzo(k)fluoranthene



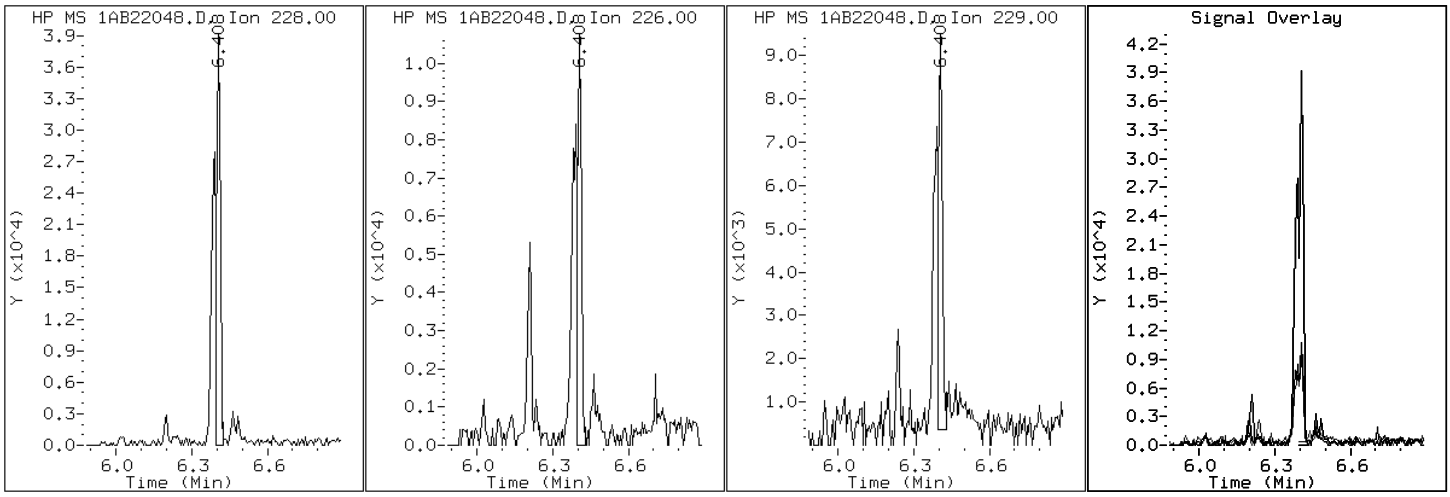
Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a Operator: SCC

19 Chrysene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

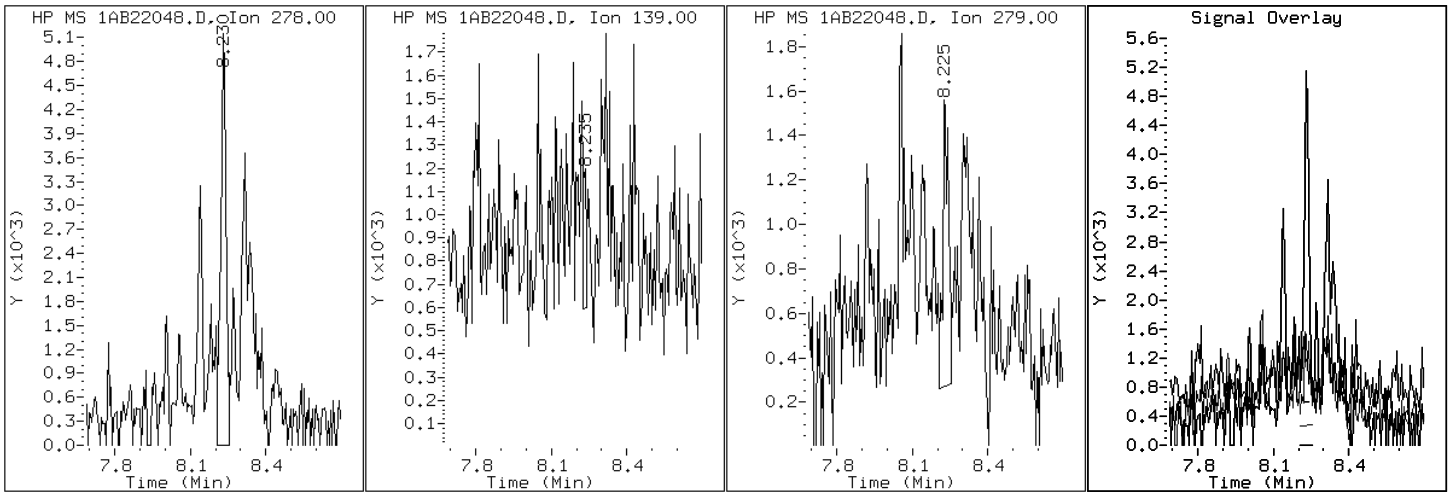
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

25 Dibenzo(a,h)anthracene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

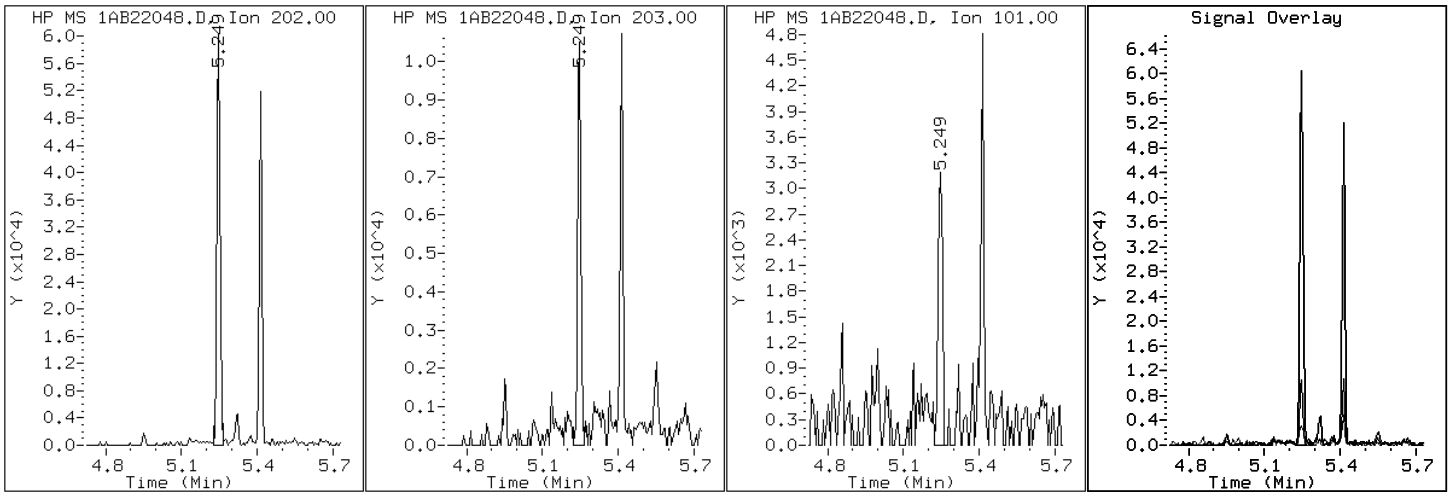
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

15 Fluoranthene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

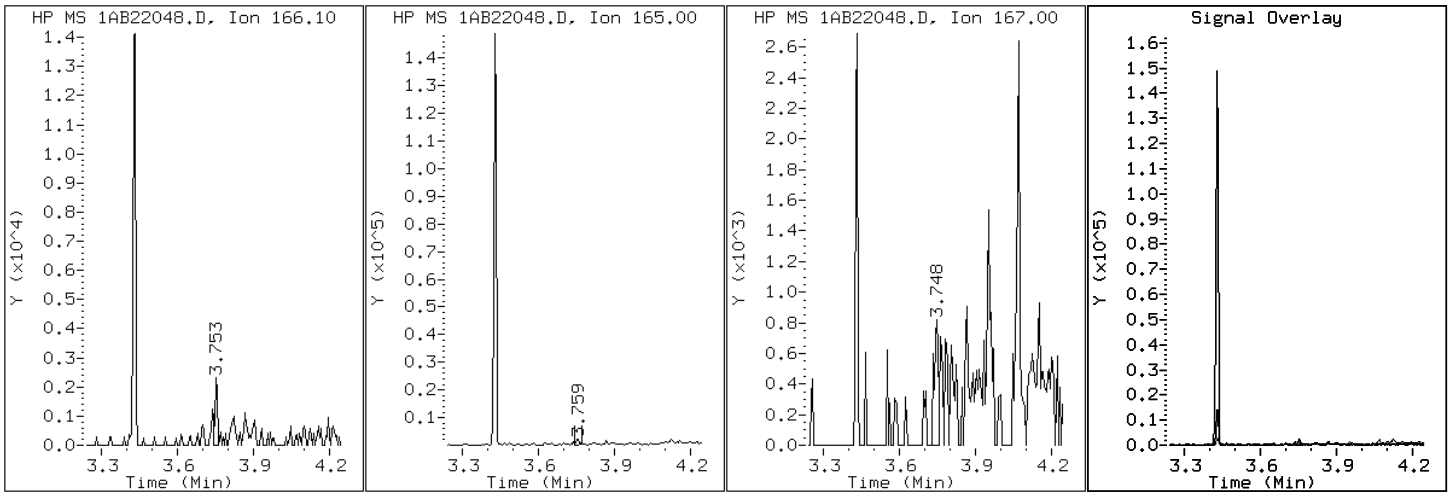
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

9 Fluorene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

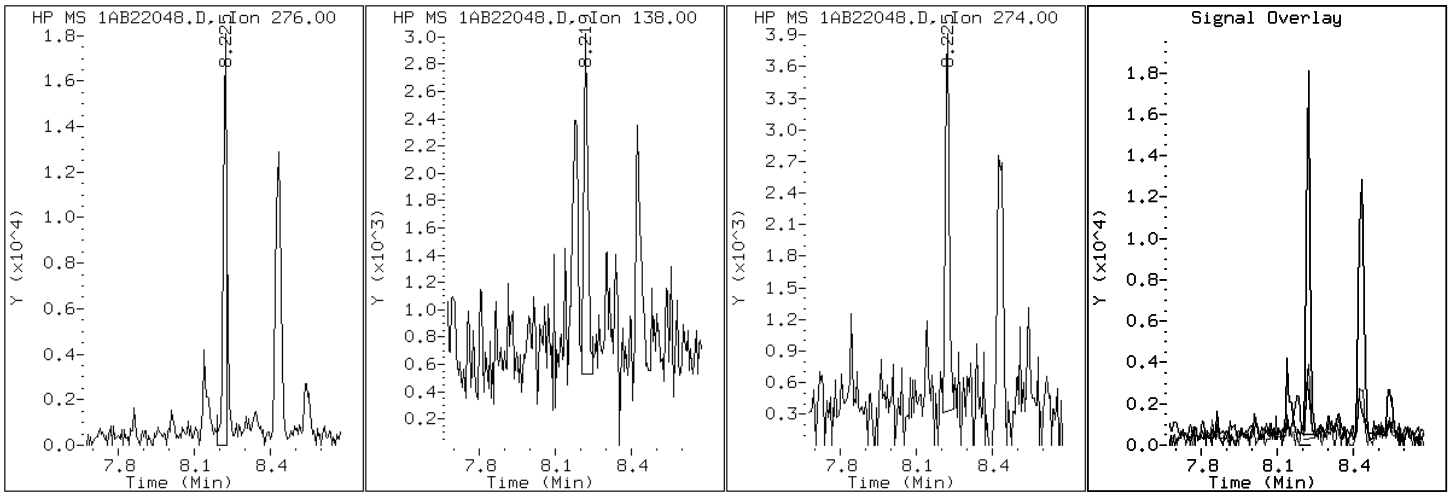
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



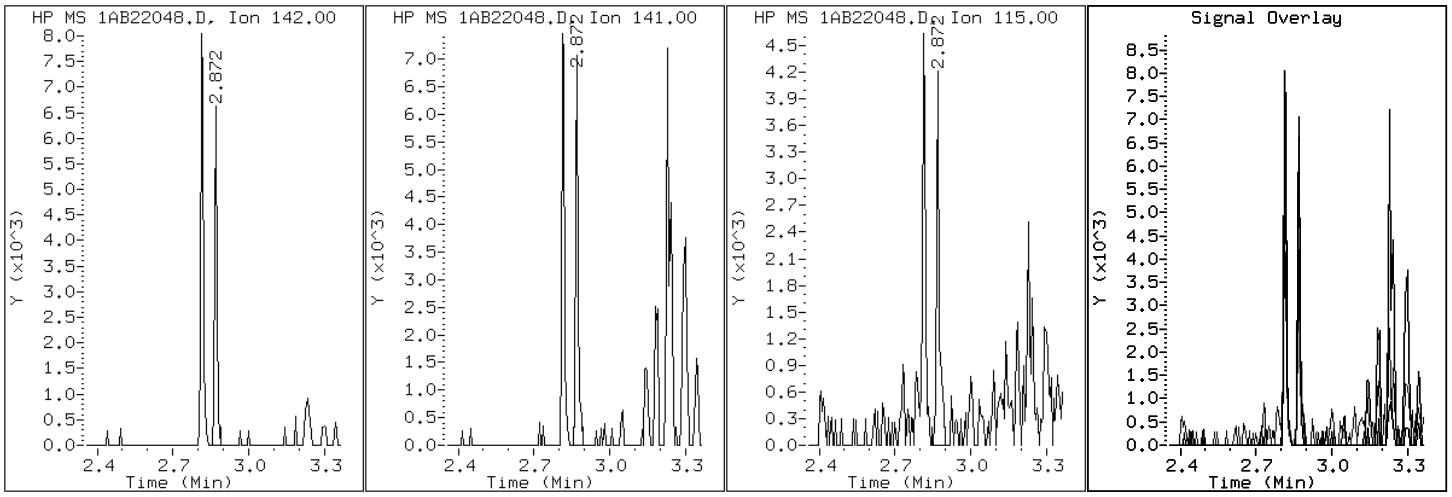
Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS  Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a  Operator: SCC

4 1-Methylnaphthalene



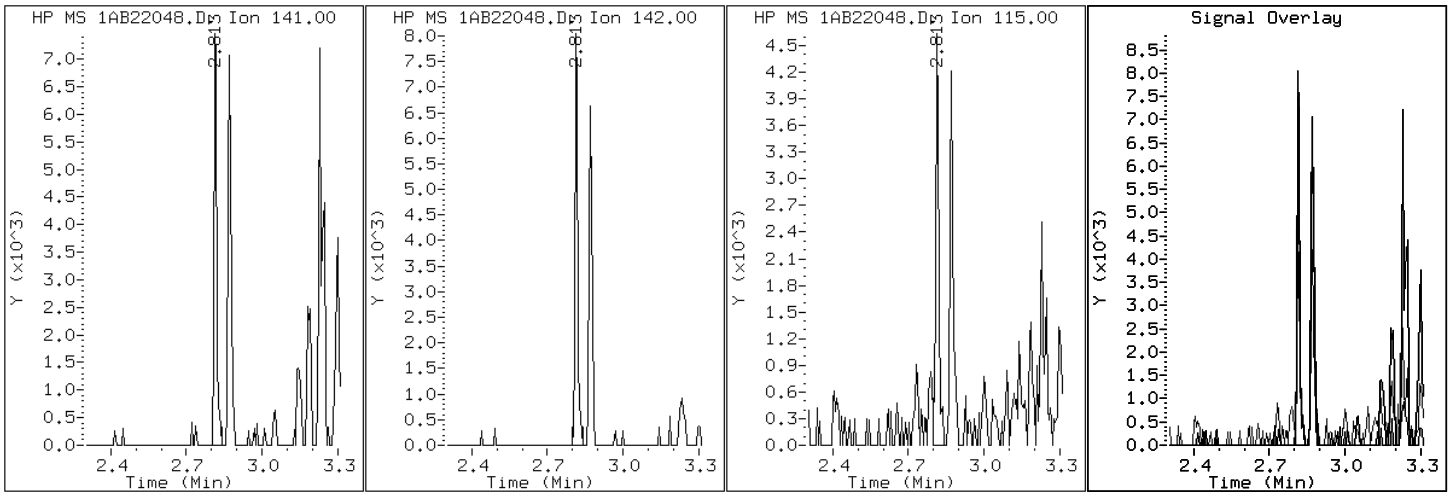
Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

Client ID: FM0161AD-GS Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a Operator: SCC

3 2-Methylnaphthalene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

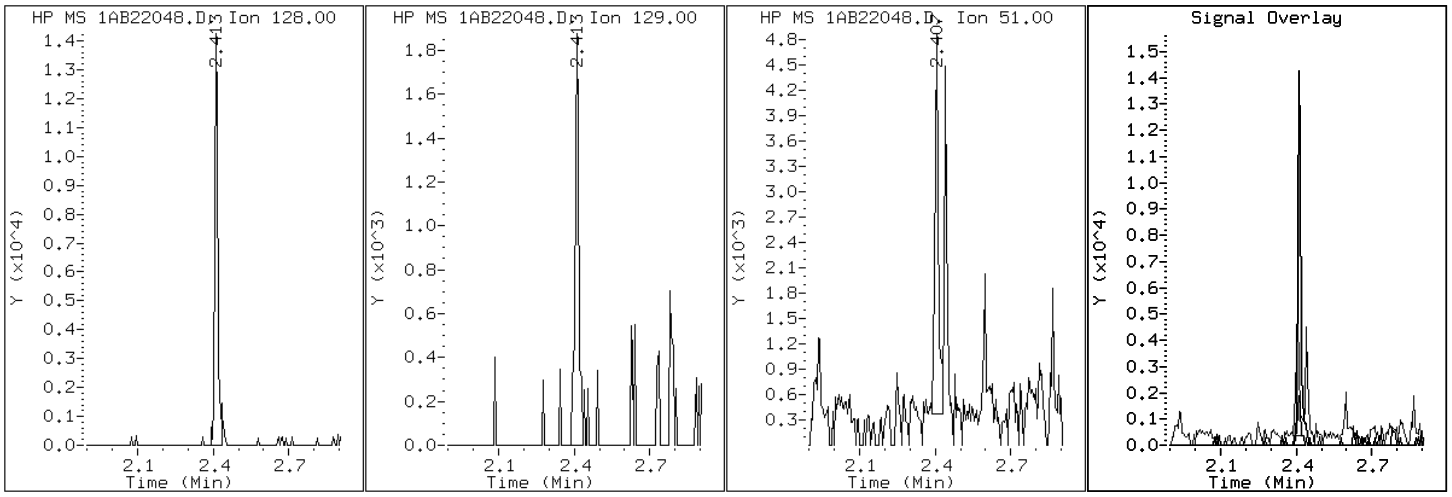
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

2 Naphthalene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

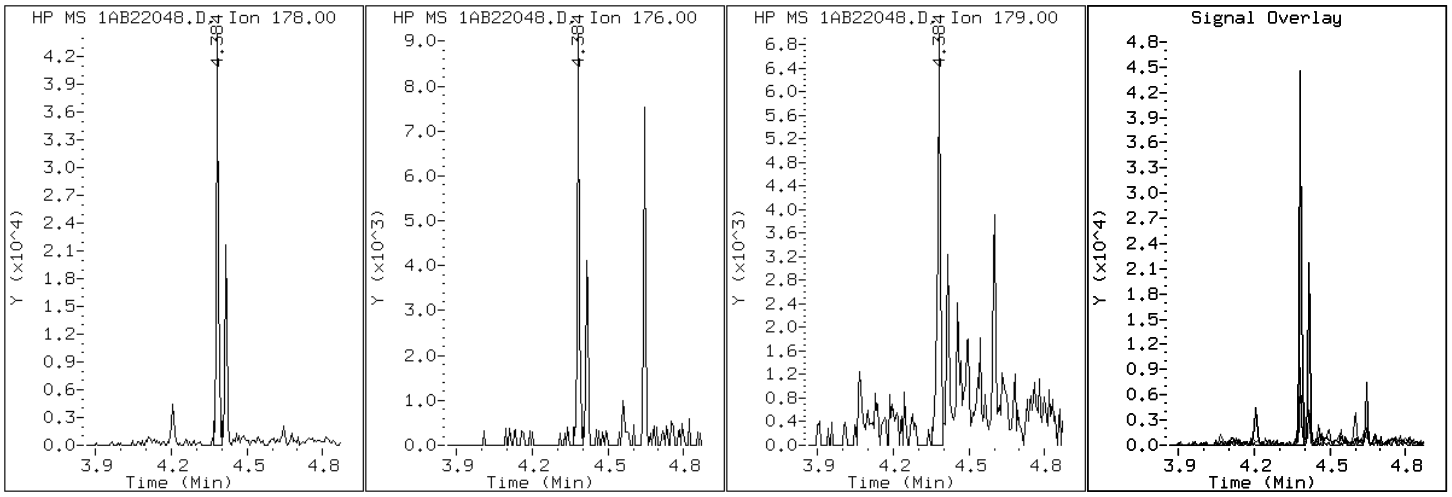
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

11 Phenanthrene



Data File: 1AB22048.D

Date: 22-FEB-2013 22:28

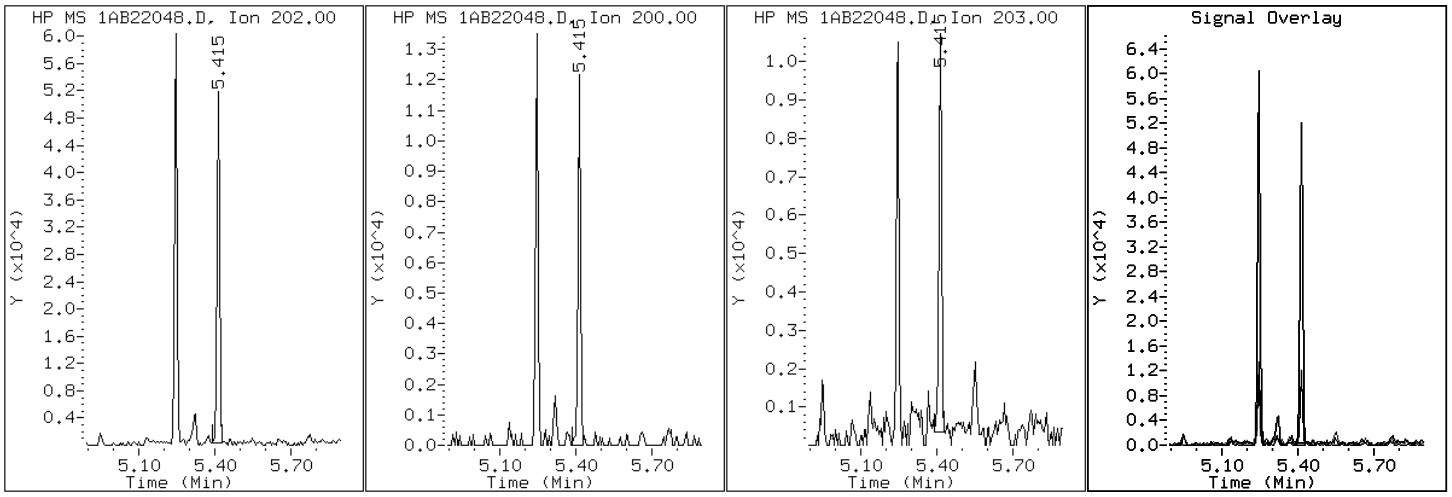
Client ID: FM0161AD-GS

Instrument: BSMA5973.i

Sample Info: 680-87545-a-9-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1AB22048.D
Inj. Date and Time: 22-FEB-2013 22:28
Instrument ID: BSMA5973.i
Client ID: FM0161AD-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

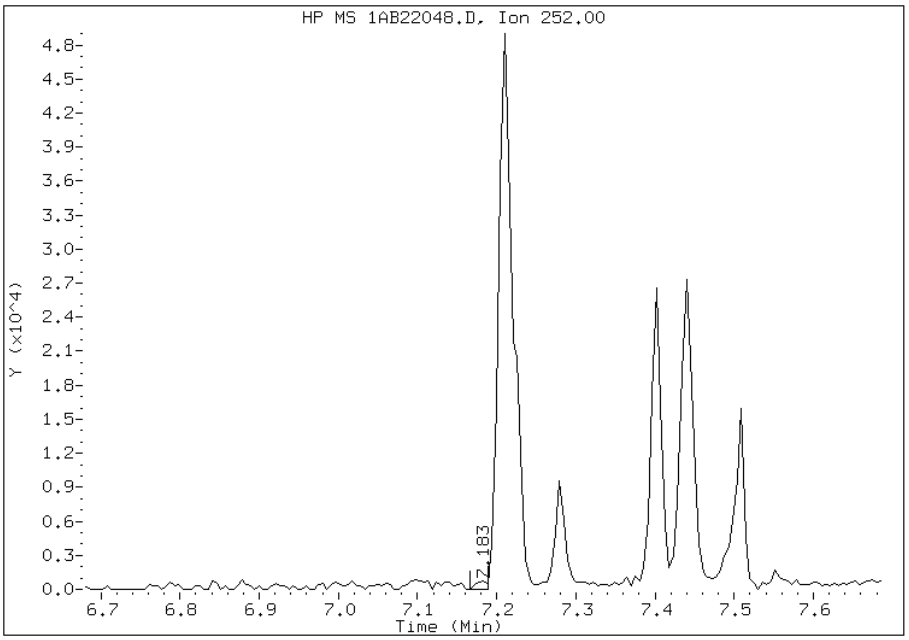
Processing Integration Results

RT: 7.18

Response: 727

Amount: 0

Conc: 2



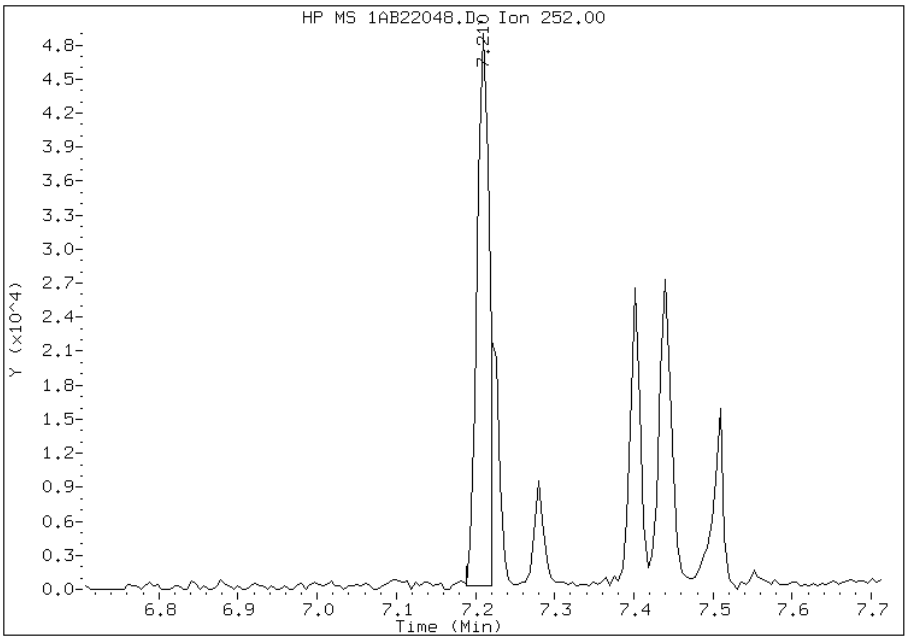

Manual Integration Results

RT: 7.21

Response: 52465

Amount: 2

Conc: 122




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:42
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1AB22048.D
Inj. Date and Time: 22-FEB-2013 22:28
Instrument ID: BSMA5973.i
Client ID: FM0161AD-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

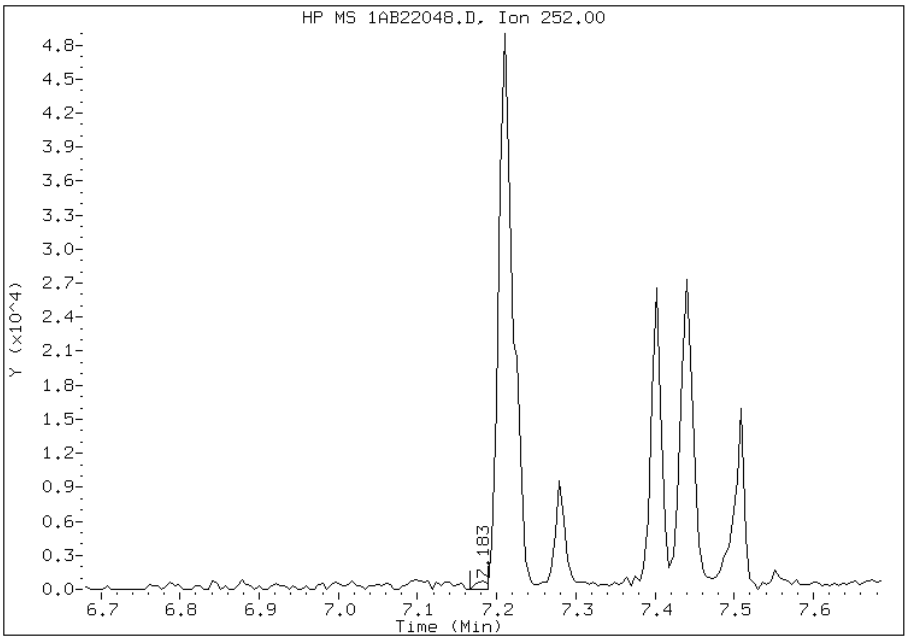
Processing Integration Results

RT: 7.18

Response: 727

Amount: 0

Conc: 2



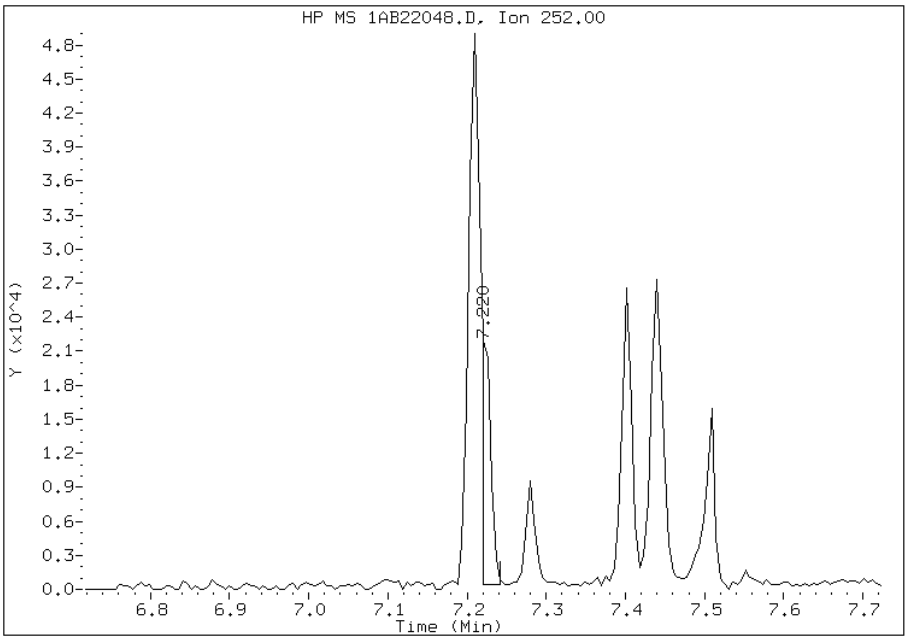

Manual Integration Results

RT: 7.22

Response: 16988

Amount: 1

Conc: 39




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:42
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22048.D
Inj. Date and Time: 22-FEB-2013 22:28
Instrument ID: BSMA5973.i
Client ID: FM0161AD-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

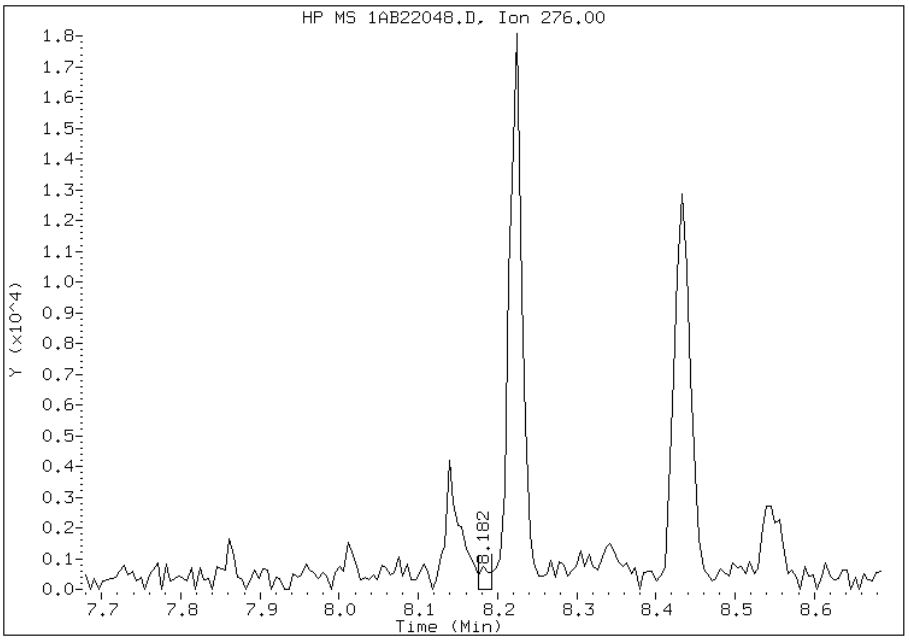
Processing Integration Results

RT: 8.18

Response: 740

Amount: 0

Conc: 2



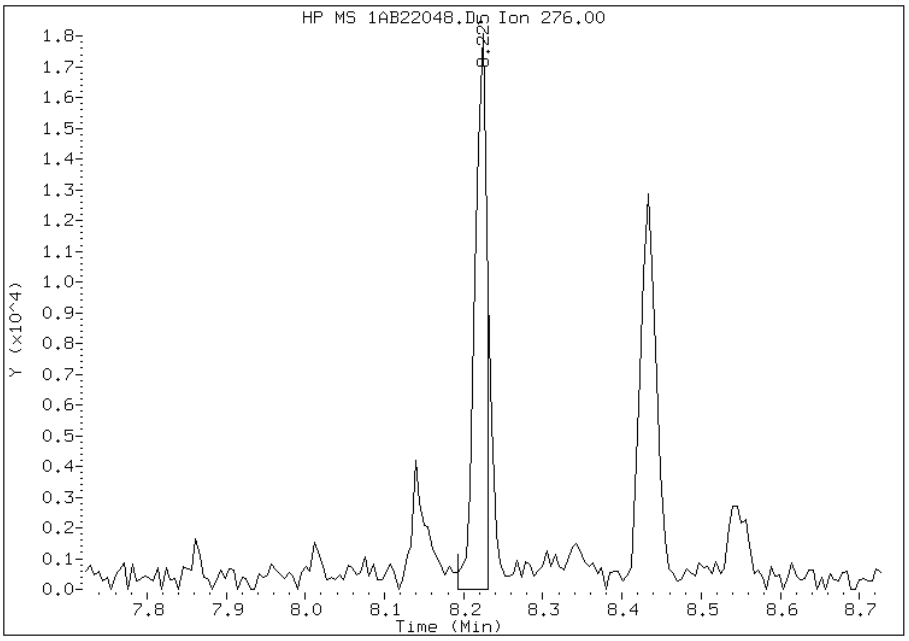

Manual Integration Results

RT: 8.22

Response: 18555

Amount: 1

Conc: 55




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:43
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AE-GS | Lab Sample ID: 680-87545-10

Matrix: Solid | Lab File ID: 1CB22016.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:52

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 14.98(g) | Date Analyzed: 02/22/2013 15:58

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 8.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 110 | U | 110 | 22 |
| 208-96-8 | Acenaphthylene | 10 | J | 44 | 5.5 |
| 120-12-7 | Anthracene | 17 | | 9.2 | 4.6 |
| 56-55-3 | Benzo[a]anthracene | 130 | | 8.7 | 4.3 |
| 50-32-8 | Benzo[a]pyrene | 110 | | 11 | 5.7 |
| 205-99-2 | Benzo[b]fluoranthene | 170 | | 13 | 6.7 |
| 191-24-2 | Benzo[g,h,i]perylene | 65 | | 22 | 4.8 |
| 207-08-9 | Benzo[k]fluoranthene | 83 | | 8.7 | 3.9 |
| 218-01-9 | Chrysene | 140 | | 9.8 | 4.9 |
| 53-70-3 | Dibenz(a,h)anthracene | 23 | | 22 | 4.5 |
| 206-44-0 | Fluoranthene | 250 | | 22 | 4.4 |
| 86-73-7 | Fluorene | 6.7 | J | 22 | 4.5 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 67 | | 22 | 7.8 |
| 90-12-0 | 1-Methylnaphthalene | 31 | J | 44 | 4.8 |
| 91-57-6 | 2-Methylnaphthalene | 42 | J | 44 | 7.8 |
| 91-20-3 | Naphthalene | 39 | J | 44 | 4.8 |
| 85-01-8 | Phenanthrene | 120 | | 8.7 | 4.3 |
| 129-00-0 | Pyrene | 200 | | 22 | 4.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 101 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22016.D
Lab Smp Id: 680-87545-A-10-A Client Smp ID: FM0161AE-GS
Inj Date : 22-FEB-2013 15:58
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-10-a
Misc Info : 680-87545-A-10-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 14.980 | Weight Extracted |
| M | 8.415 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1571367 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1244957 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2449677 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 371946 | 10.0564 | 733.0040 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2914847 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.021 | 9.016 | (1.000) | 2815272 | 40.0000 | |
| 2 Naphthalene | 128 | 3.815 | 3.816 | (1.003) | 21647 | 0.52915 | 38.5696 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 15568 | 0.57051 | 41.5840 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 10429 | 0.41963 | 30.5866 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 7132 | 0.14209 | 10.3569 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 3618 | 0.09170 | 6.6838(Q) |
| 11 Phenanthrene | 178 | 5.862 | 5.863 | (1.003) | 117886 | 1.66426 | 121.3066 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 15734 | 0.22712 | 16.5548 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 15784 | 0.25631 | 18.6825 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 265428 | 3.42172 | 249.4061 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 216782 | 2.76747 | 201.7183 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 149233 | 1.77388 | 129.2965 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 165235 | 1.96261 | 143.0533 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.657 | (0.960) | 170656 | 2.31953 | 169.0687(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 85500 | 1.13283 | 82.5707(MH) |
| 22 Benzo(a)pyrene | 252 | 8.962 | 8.963 | (0.993) | 103371 | 1.44648 | 105.4325 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 62042 | 0.92287 | 67.2671(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.257 | (1.136) | 20818 | 0.31659 | 23.0756 |
| 26 Benzo(g,h,i)perylene | 276 | 10.597 | 10.610 | (1.175) | 62824 | 0.89333 | 65.1142 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1CB22016.D

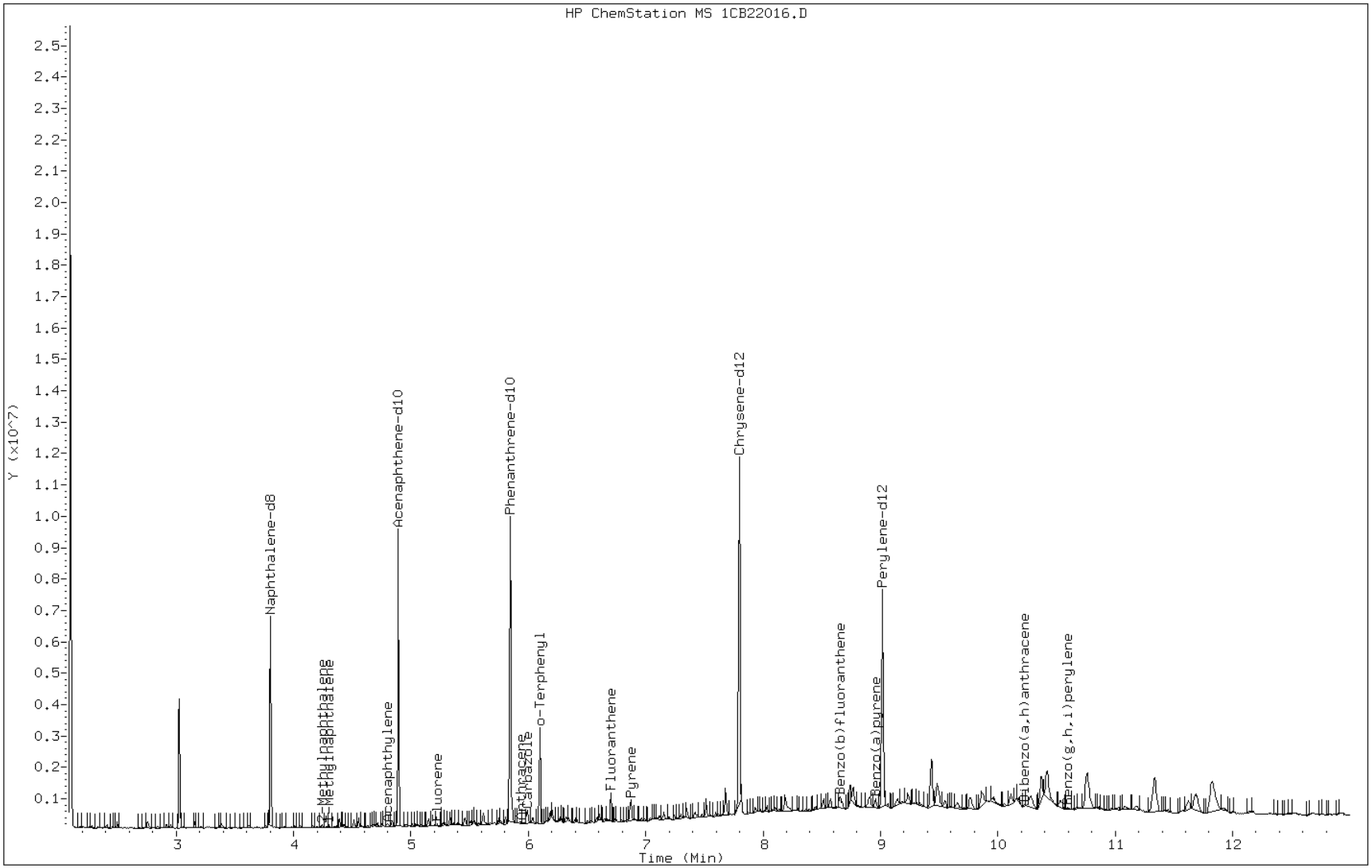
Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a

Operator: SCC



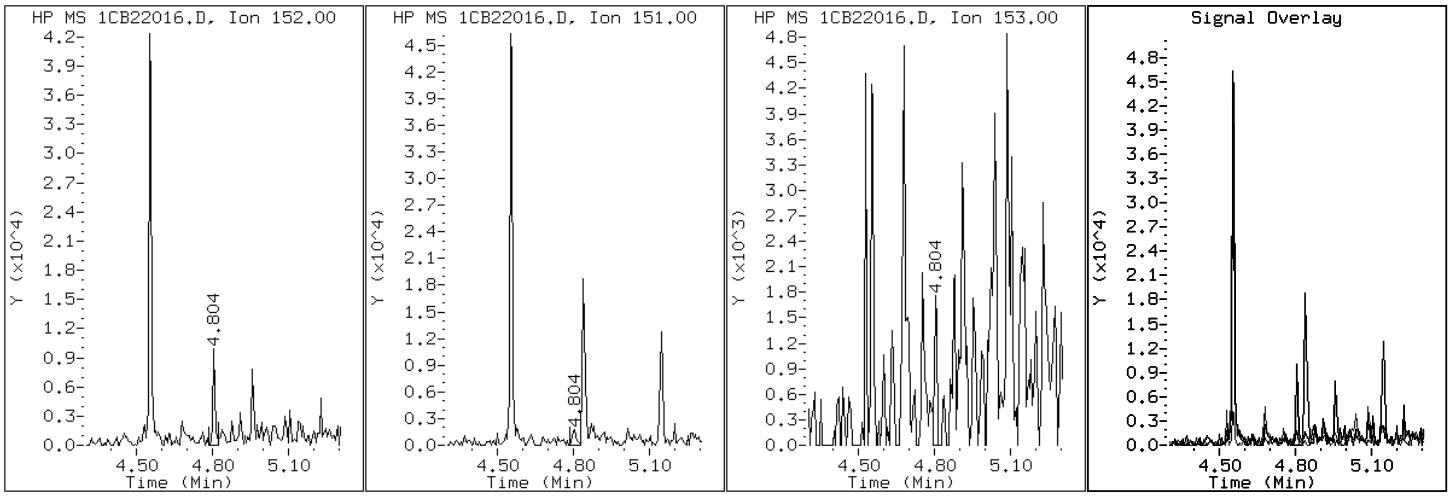
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

5 Acenaphthylene



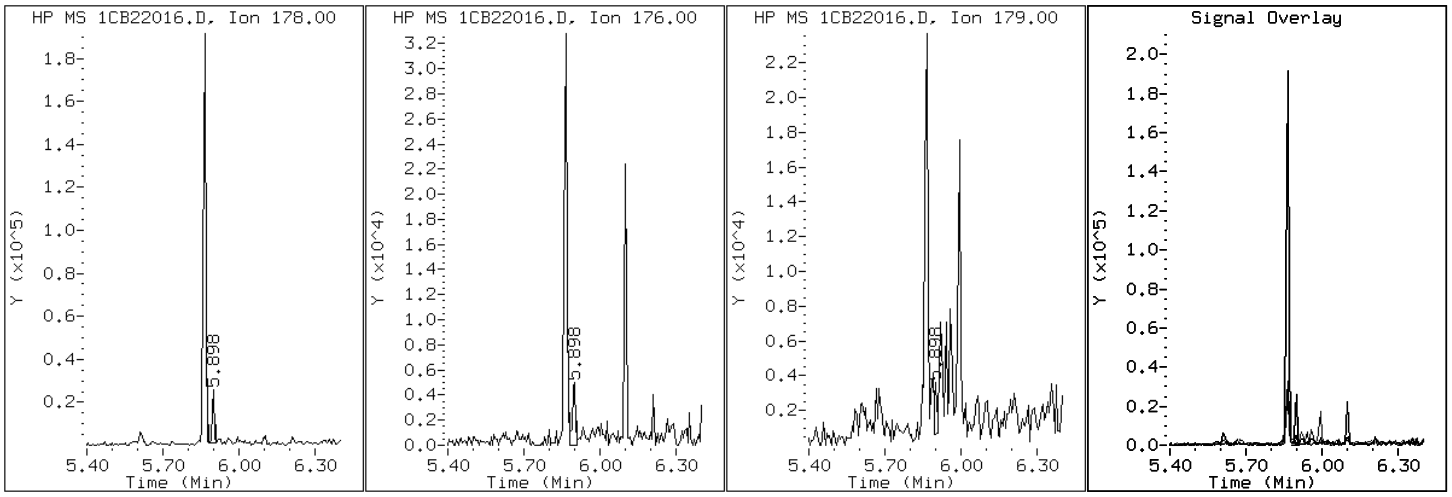
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

12 Anthracene



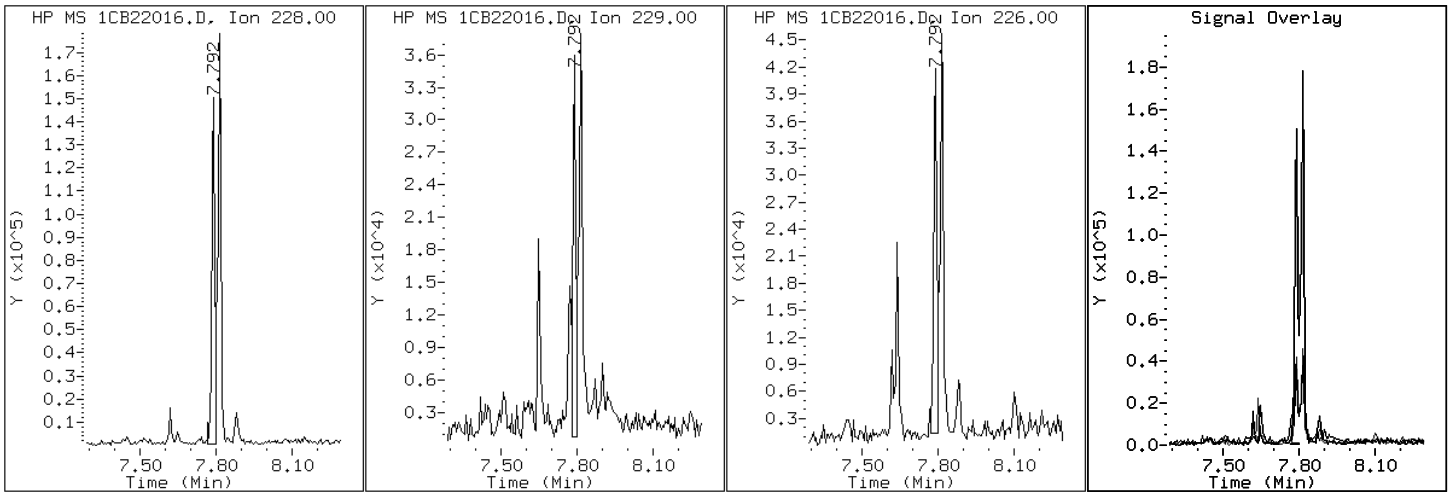
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

17 Benzo(a)anthracene



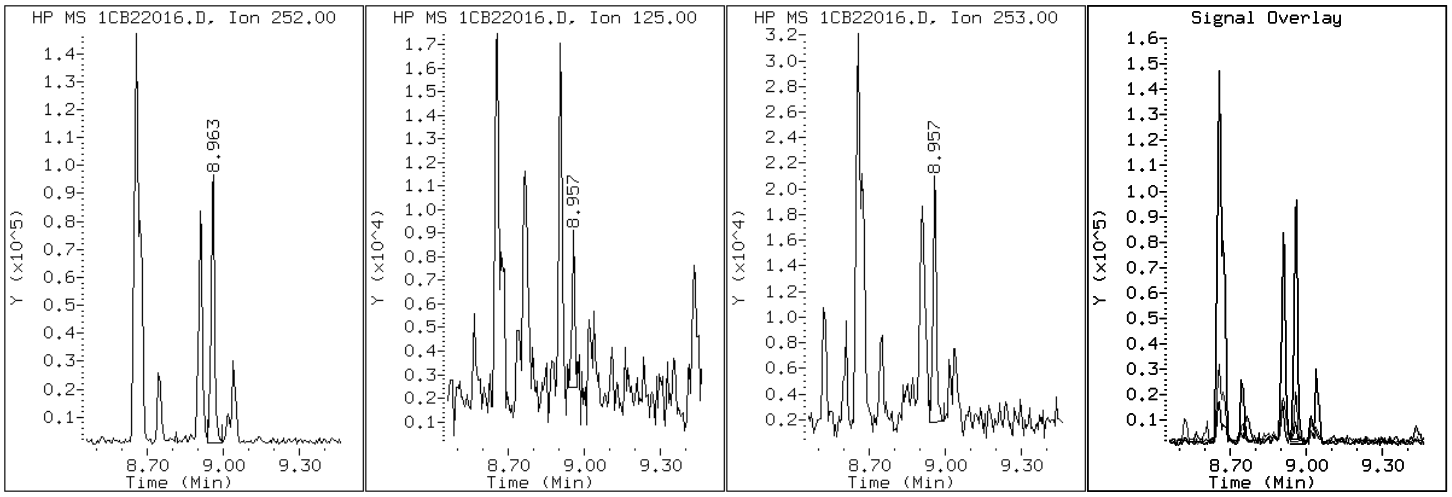
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

22 Benzo(a)pyrene



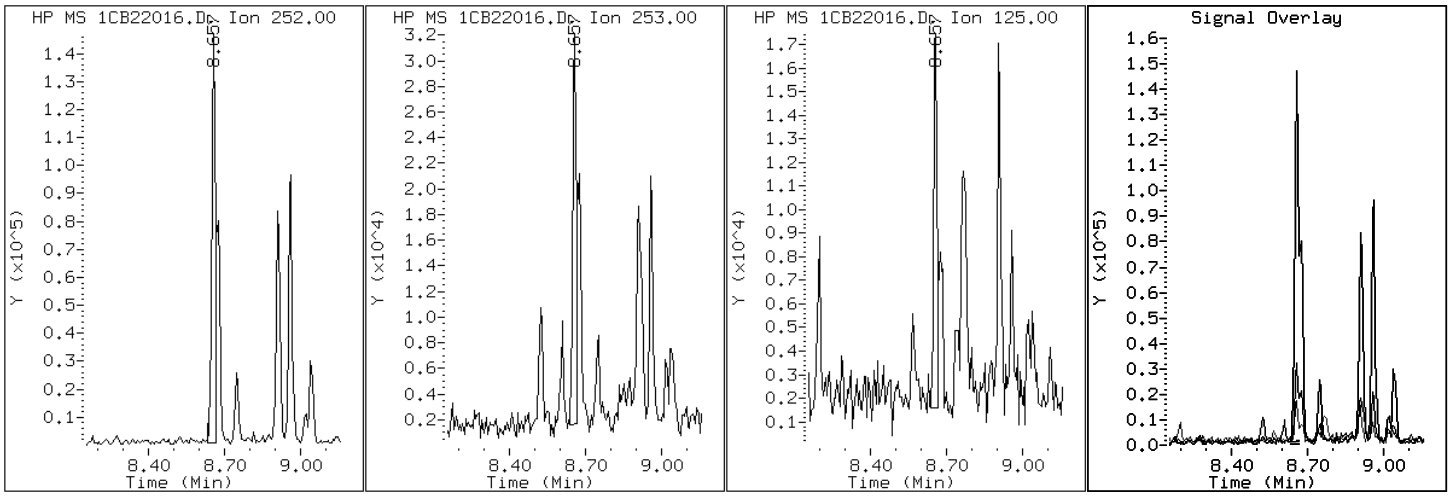
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

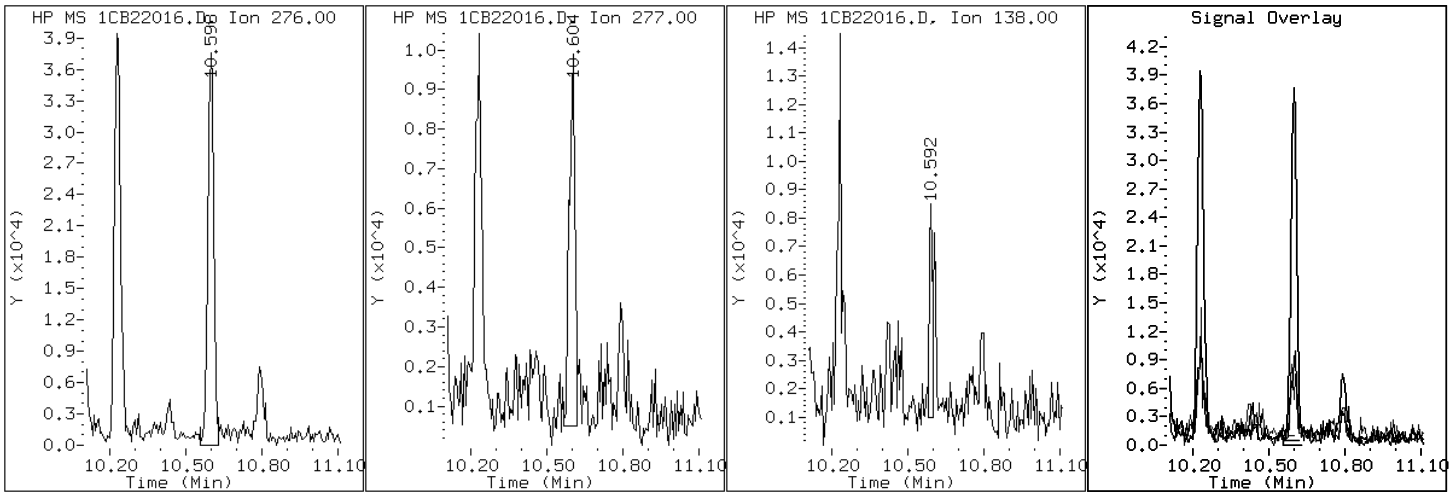
Client ID: FM0161AE-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a

Operator: SCC

26 Benzo(g,h,i)perylene



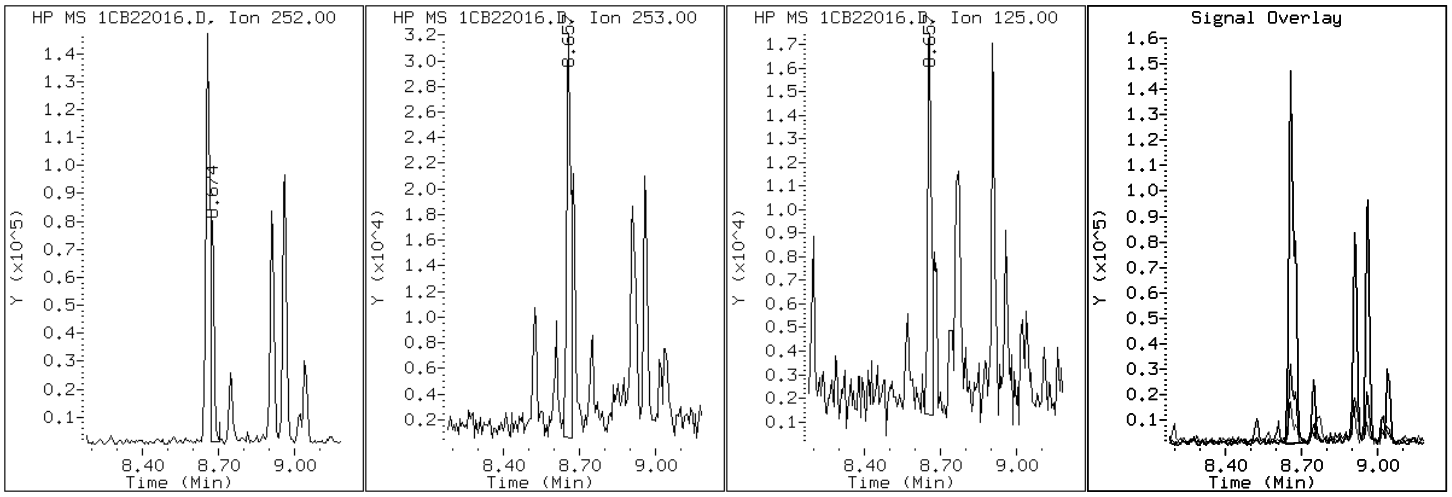
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

21 Benzo(k)fluoranthene



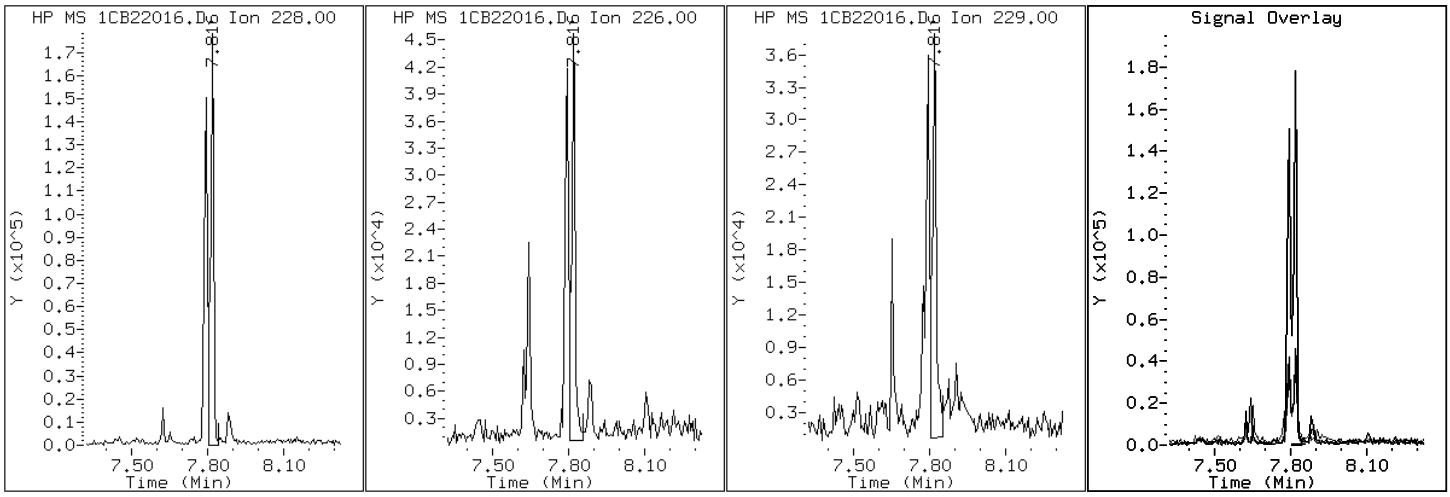
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

19 Chrysene



Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

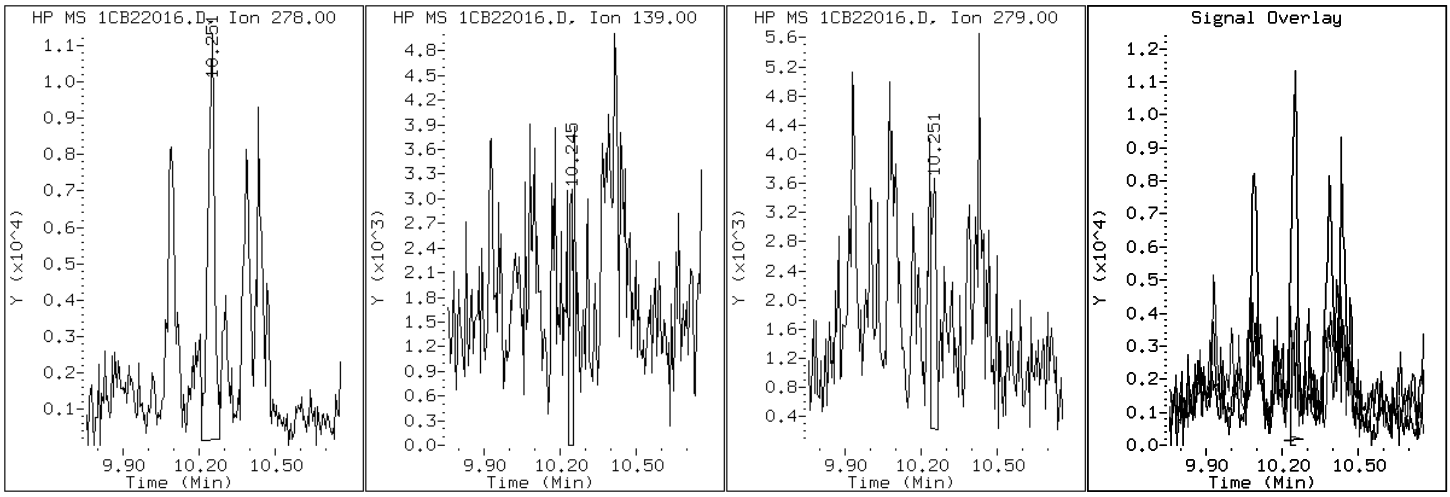
Client ID: FM0161AE-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a

Operator: SCC

25 Dibenzo(a,h)anthracene



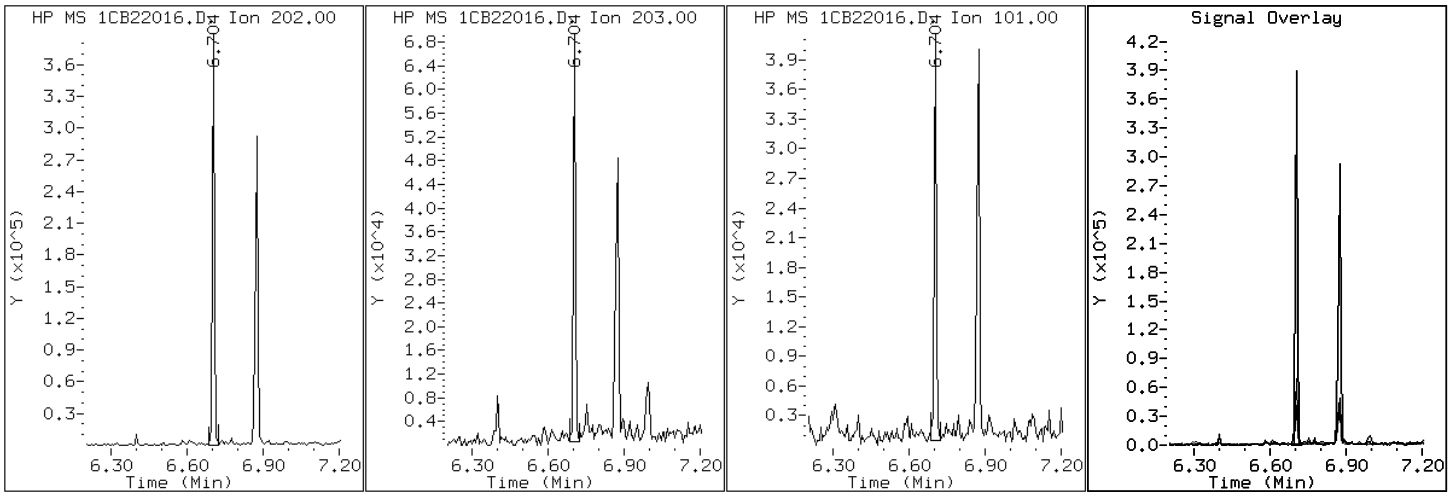
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

15 Fluoranthene



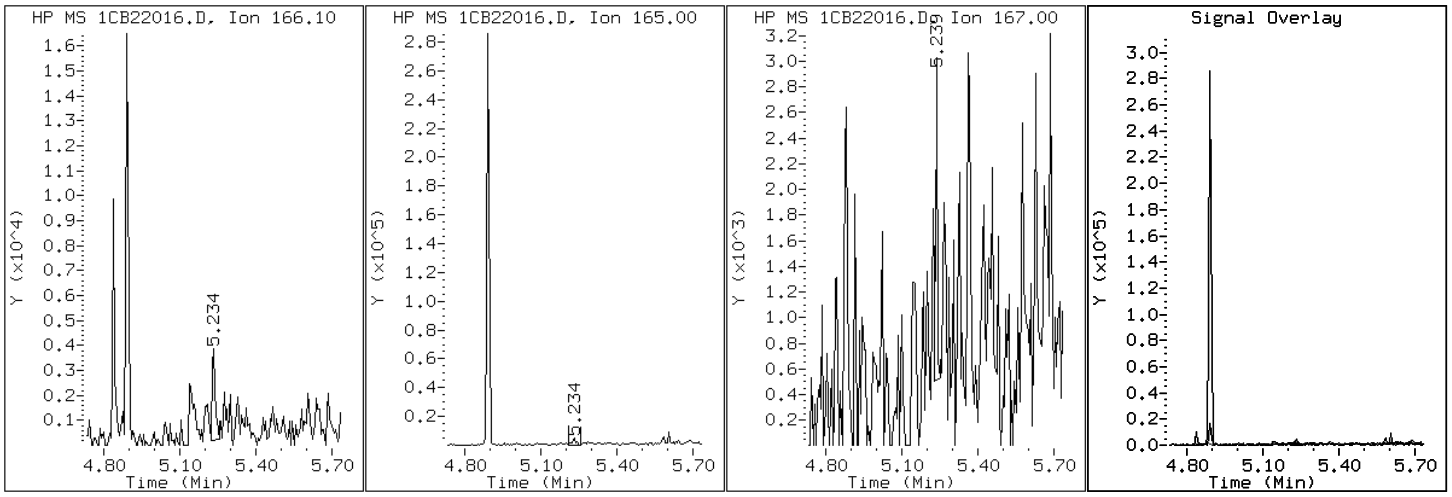
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a  Operator: SCC

9 Fluorene



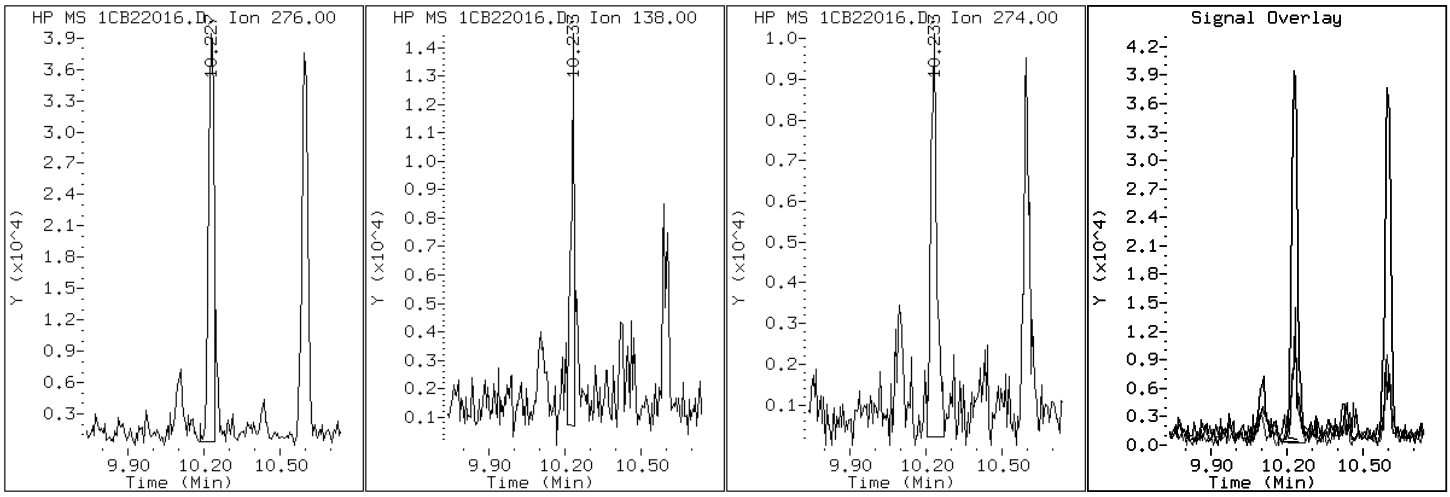
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS | Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a | Operator: SCC

24 Indeno(1,2,3-cd)pyrene



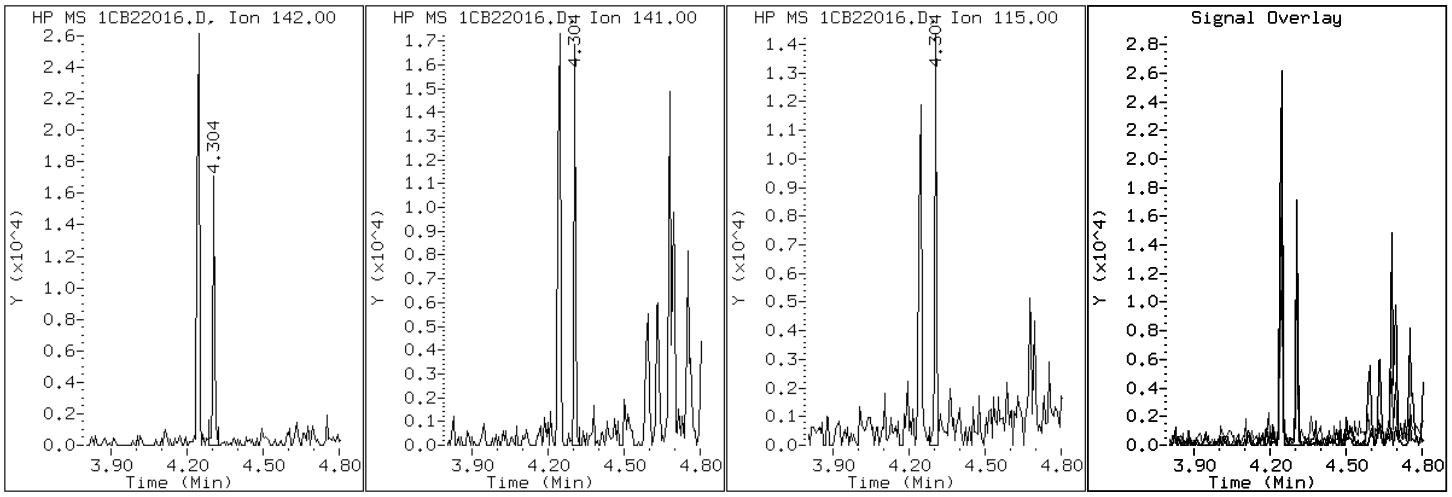
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a  Operator: SCC

4 1-Methylnaphthalene



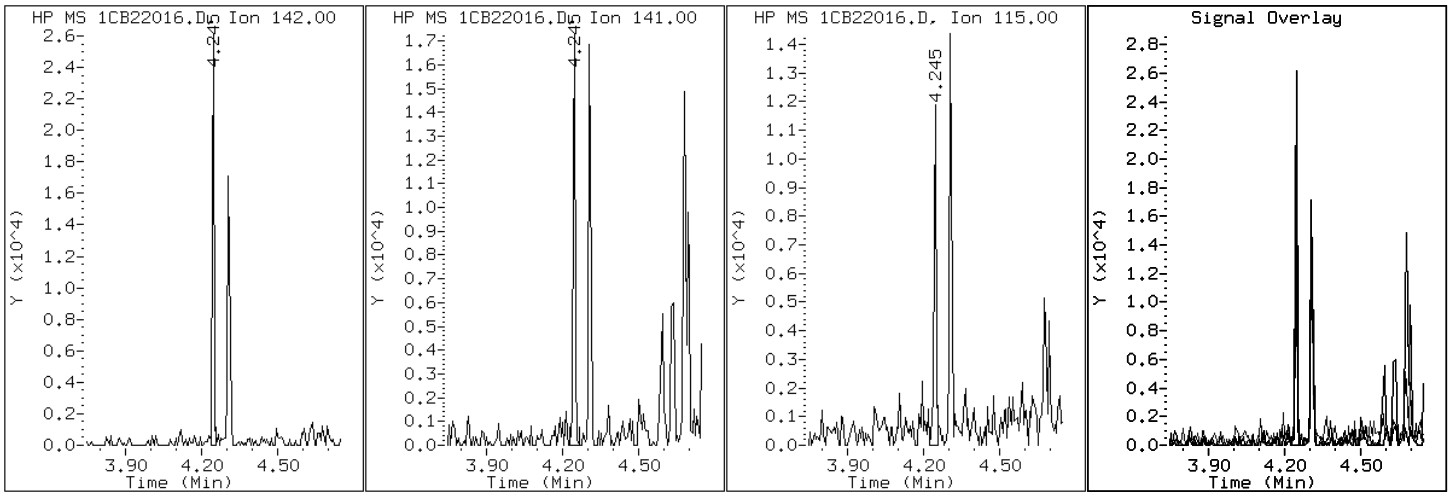
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

3 2-Methylnaphthalene



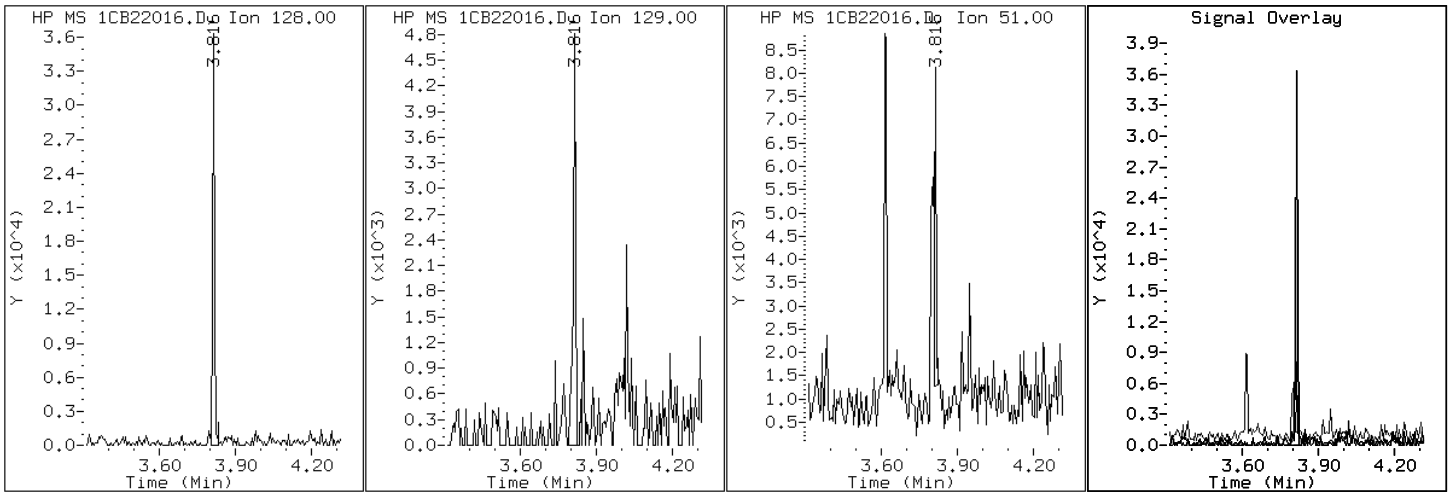
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a  Operator: SCC

2 Naphthalene



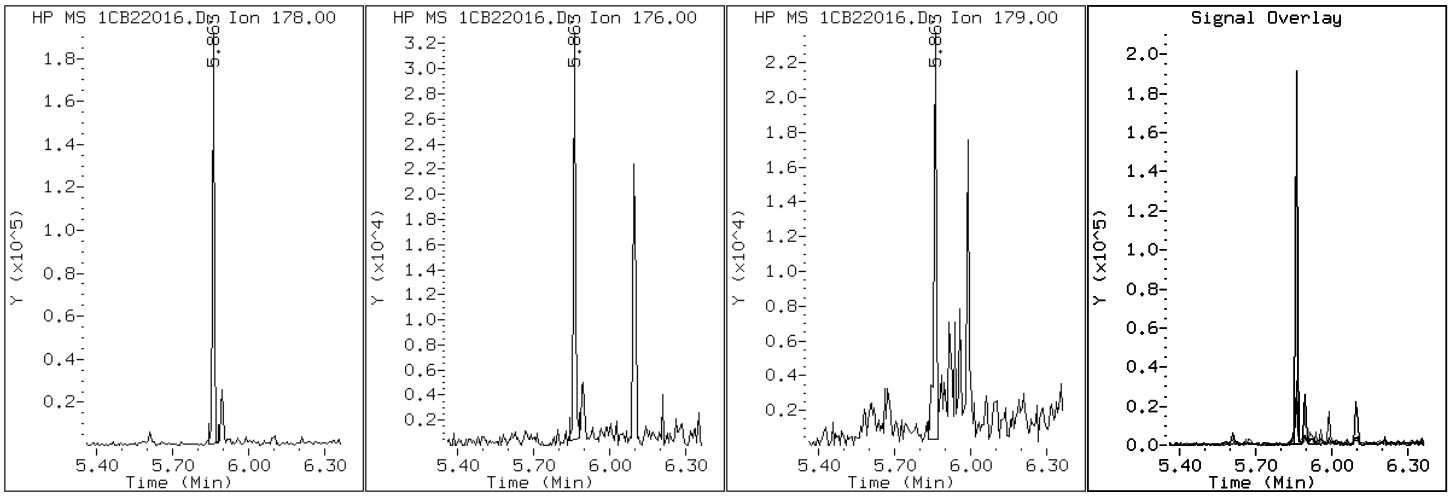
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

11 Phenanthrene



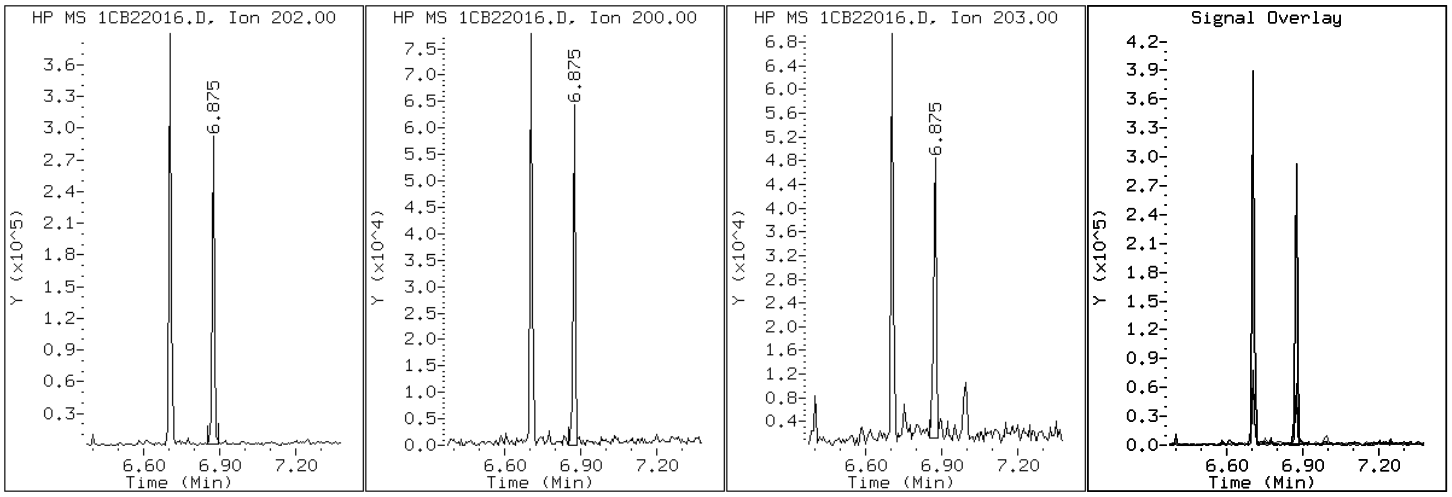
Data File: 1CB22016.D

Date: 22-FEB-2013 15:58

Client ID: FM0161AE-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-10-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22016.D
Inj. Date and Time: 22-FEB-2013 15:58
Instrument ID: BSMC5973.i
Client ID: FM0161AE-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

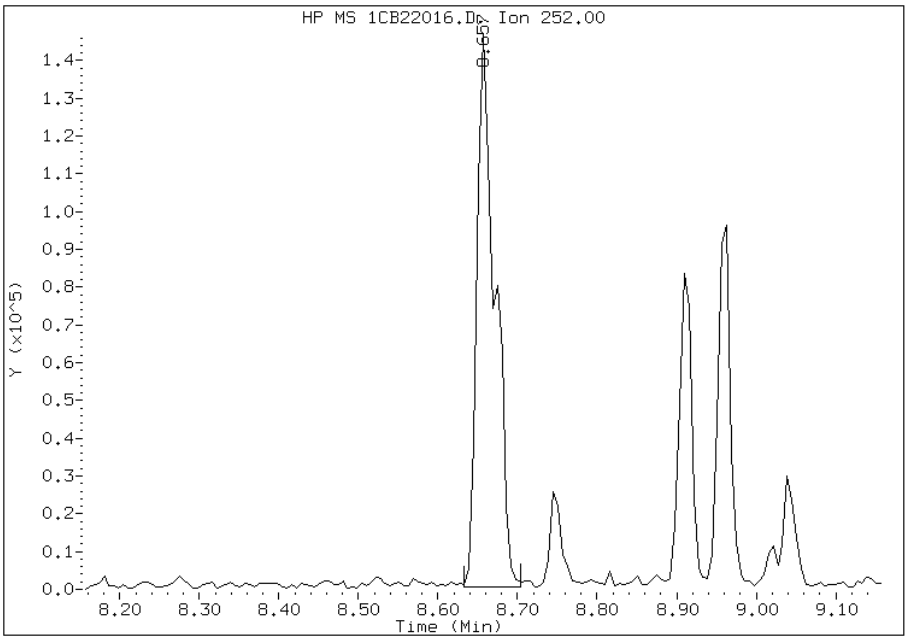
Processing Integration Results

RT: 8.66

Response: 231158

Amount: 3

Conc: 229



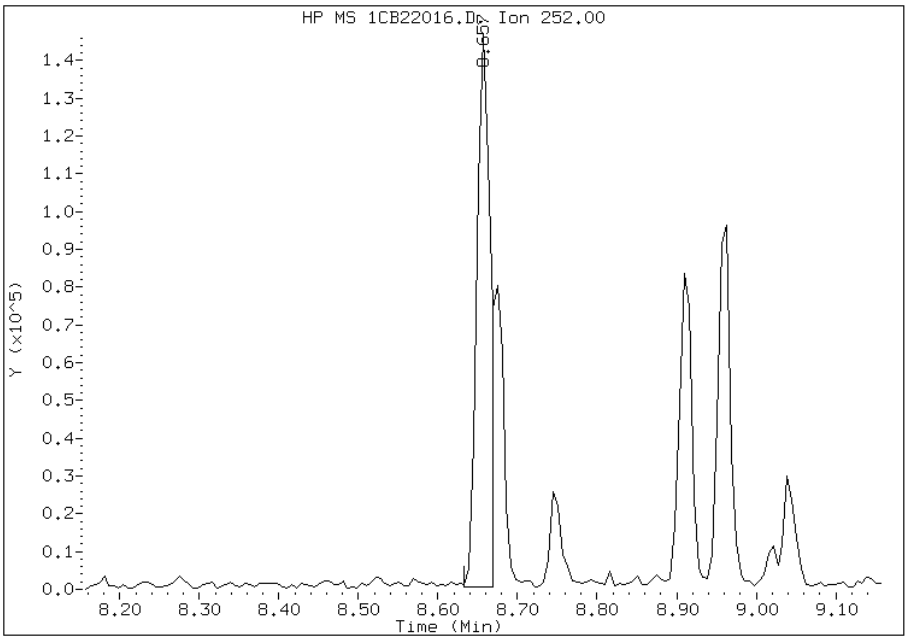

Manual Integration Results

RT: 8.66

Response: 170656

Amount: 2

Conc: 169




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:54
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22016.D
Inj. Date and Time: 22-FEB-2013 15:58
Instrument ID: BSMC5973.i
Client ID: FM0161AE-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

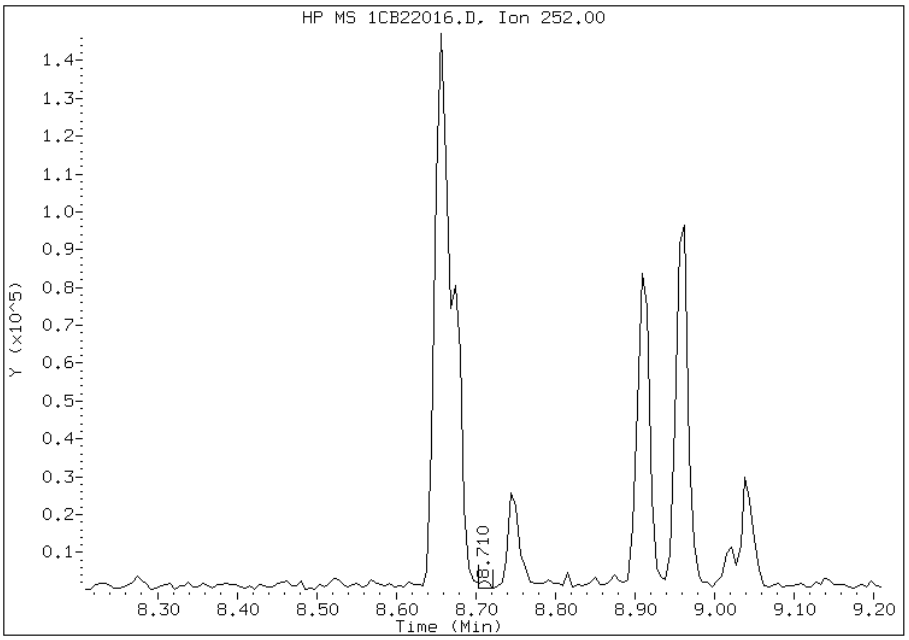
Processing Integration Results

RT: 8.71

Response: 1587

Amount: 0

Conc: 2



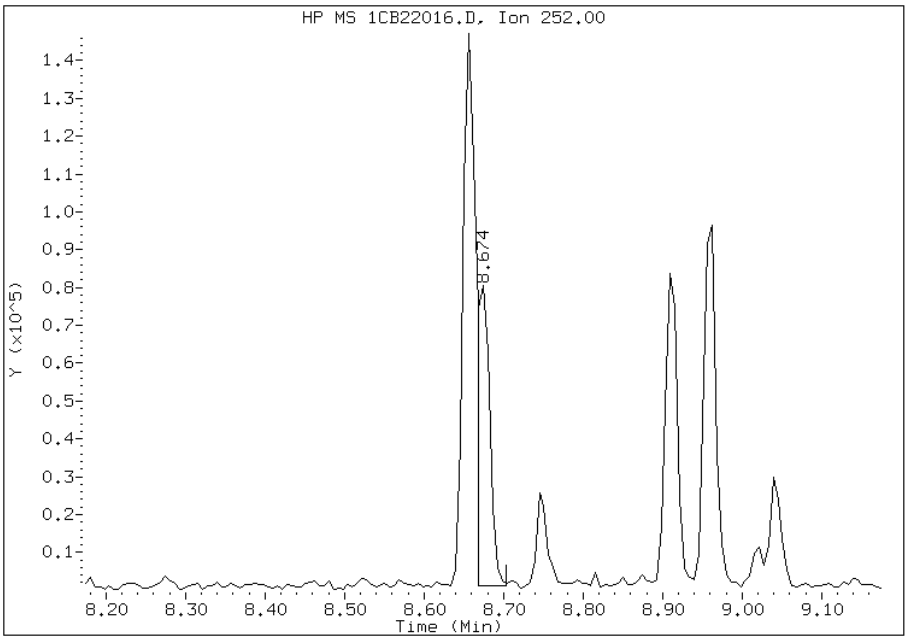

Manual Integration Results

RT: 8.67

Response: 85500

Amount: 1

Conc: 83




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:55
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22016.D
Inj. Date and Time: 22-FEB-2013 15:58
Instrument ID: BSMC5973.i
Client ID: FM0161AE-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

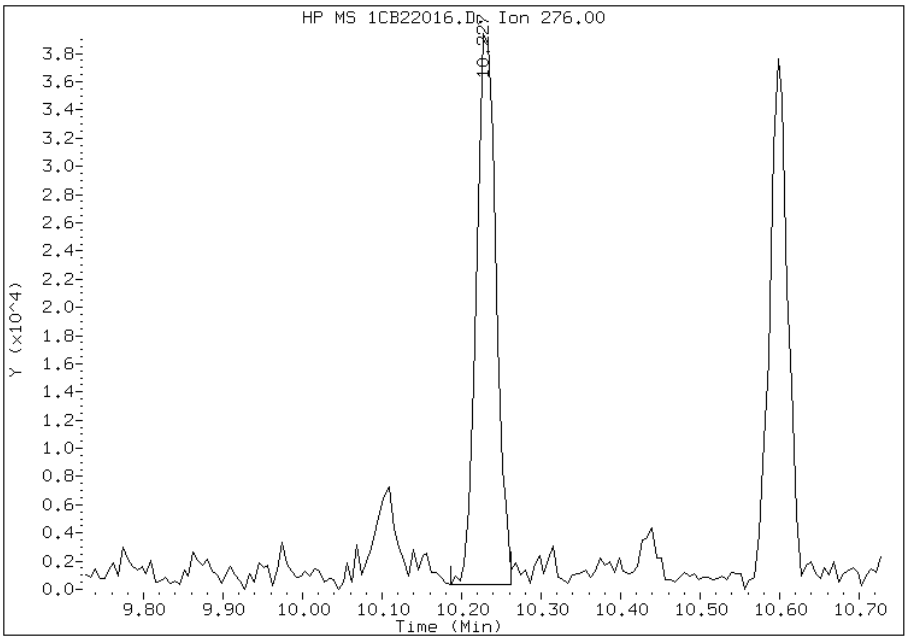
Processing Integration Results

RT: 10.23

Response: 67268

Amount: 1

Conc: 73



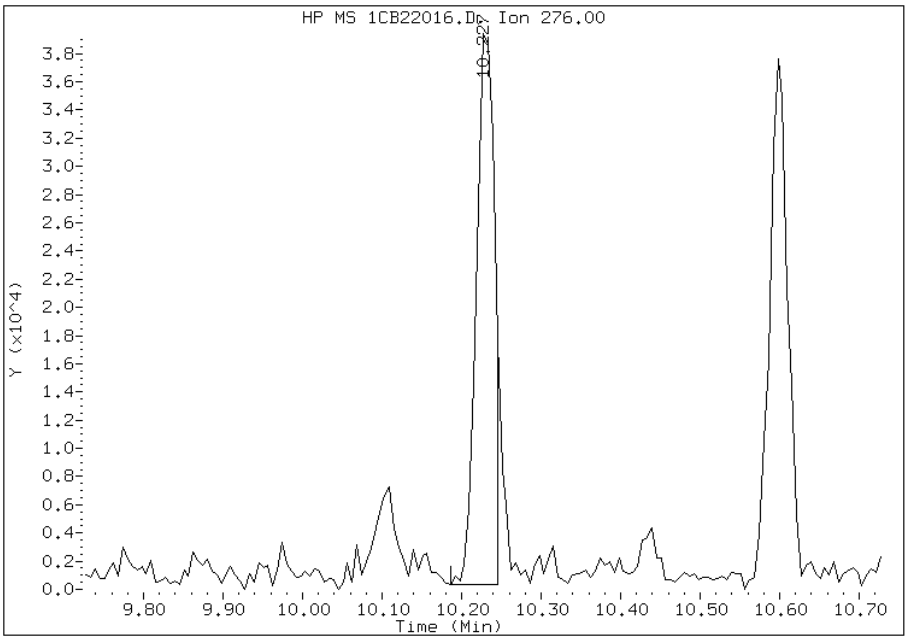

Manual Integration Results

RT: 10.23

Response: 62042

Amount: 1

Conc: 67




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:55
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AF-GS | Lab Sample ID: 680-87545-11

Matrix: Solid | Lab File ID: 1CB22017.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:58

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 14.96(g) | Date Analyzed: 02/22/2013 16:16

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 4.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 21 |
| 208-96-8 | Acenaphthylene | 7.7 | J | 42 | 5.2 |
| 120-12-7 | Anthracene | 9.3 | | 8.8 | 4.4 |
| 56-55-3 | Benzo[a]anthracene | 69 | | 8.4 | 4.1 |
| 50-32-8 | Benzo[a]pyrene | 59 | | 11 | 5.5 |
| 205-99-2 | Benzo[b]fluoranthene | 100 | | 13 | 6.4 |
| 191-24-2 | Benzo[g,h,i]perylene | 46 | | 21 | 4.6 |
| 207-08-9 | Benzo[k]fluoranthene | 41 | | 8.4 | 3.8 |
| 218-01-9 | Chrysene | 70 | | 9.4 | 4.7 |
| 53-70-3 | Dibenz(a,h)anthracene | 14 | J | 21 | 4.3 |
| 206-44-0 | Fluoranthene | 94 | | 21 | 4.2 |
| 86-73-7 | Fluorene | 5.9 | J | 21 | 4.3 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 39 | | 21 | 7.5 |
| 90-12-0 | 1-Methylnaphthalene | 19 | J | 42 | 4.6 |
| 91-57-6 | 2-Methylnaphthalene | 20 | J | 42 | 7.5 |
| 91-20-3 | Naphthalene | 29 | J | 42 | 4.6 |
| 85-01-8 | Phenanthrene | 54 | | 8.4 | 4.1 |
| 129-00-0 | Pyrene | 81 | | 21 | 3.9 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 89 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22017.D
Lab Smp Id: 680-87545-A-11-A Client Smp ID: FM0161AF-GS
Inj Date : 22-FEB-2013 16:16
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-11-a
Misc Info : 680-87545-A-11-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 14.960 | Weight Extracted |
| M | 4.462 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1620832 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1320745 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2516140 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 337415 | 8.88181 | 621.4354 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2888917 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2744516 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 17268 | 0.40923 | 28.6326(Q) |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 8140 | 0.28920 | 20.2343 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 6986 | 0.27252 | 19.0672 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 5835 | 0.10958 | 7.6670 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 3556 | 0.08496 | 5.9441(Q) |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 56055 | 0.77046 | 53.9066 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 9476 | 0.13317 | 9.3178 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 5854 | 0.09255 | 6.4755(Q) |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 107423 | 1.34824 | 94.3328 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 89983 | 1.15904 | 81.0950 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 82057 | 0.98414 | 68.8572 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 83737 | 1.00353 | 70.2142 |
| 20 Benzo(b)fluoranthene | 252 | 8.651 | 8.657 | (0.960) | 107385 | 1.49719 | 104.7541(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.668 | 8.680 | (0.962) | 43026 | 0.58477 | 40.9144(M) |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 58536 | 0.84021 | 58.7874 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 36446 | 0.55611 | 38.9092(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.257 | (1.136) | 12597 | 0.19651 | 13.7489 |
| 26 Benzo(g,h,i)perylene | 276 | 10.592 | 10.610 | (1.175) | 44612 | 0.65072 | 45.5289(M) |

QC Flag Legend

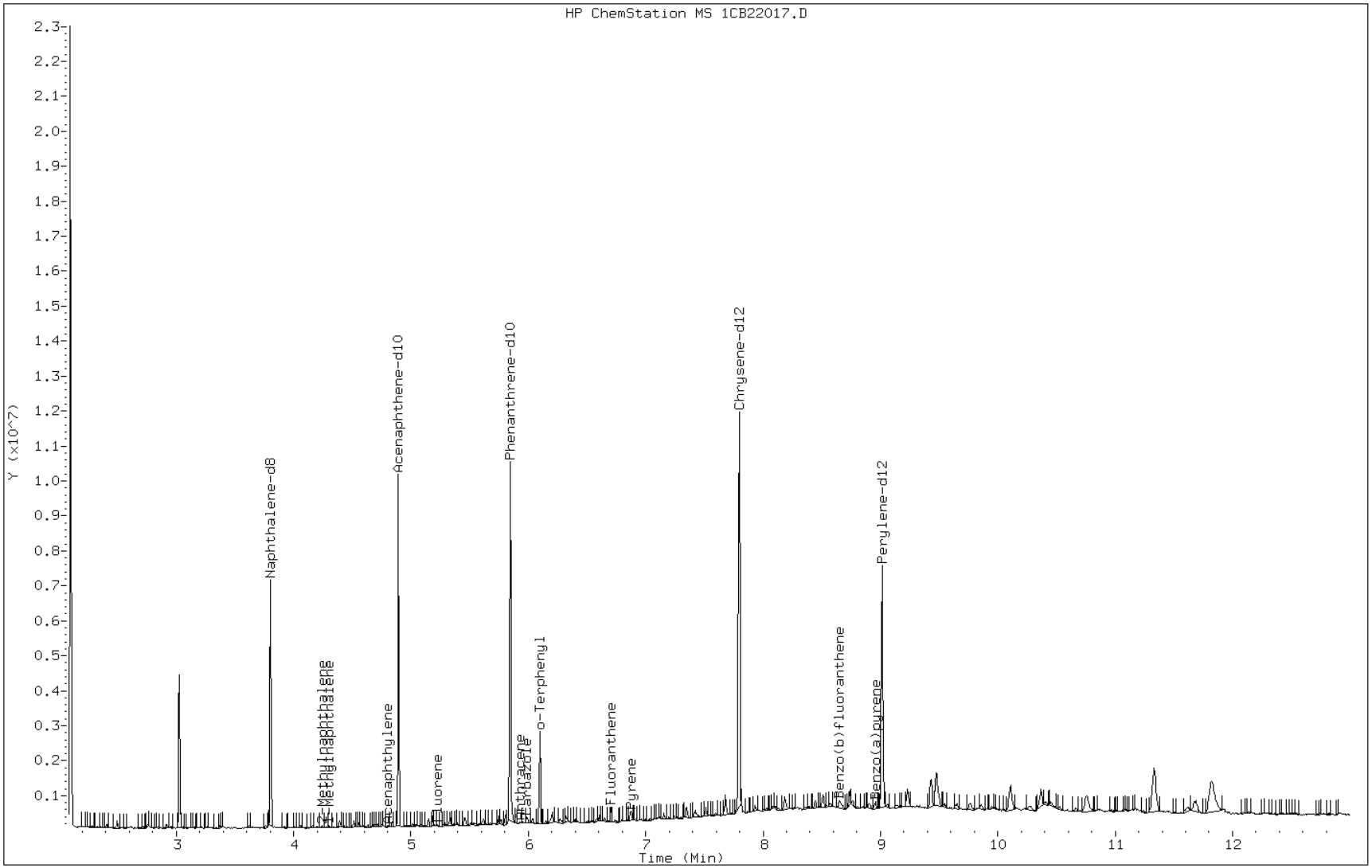
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a  Operator: SCC



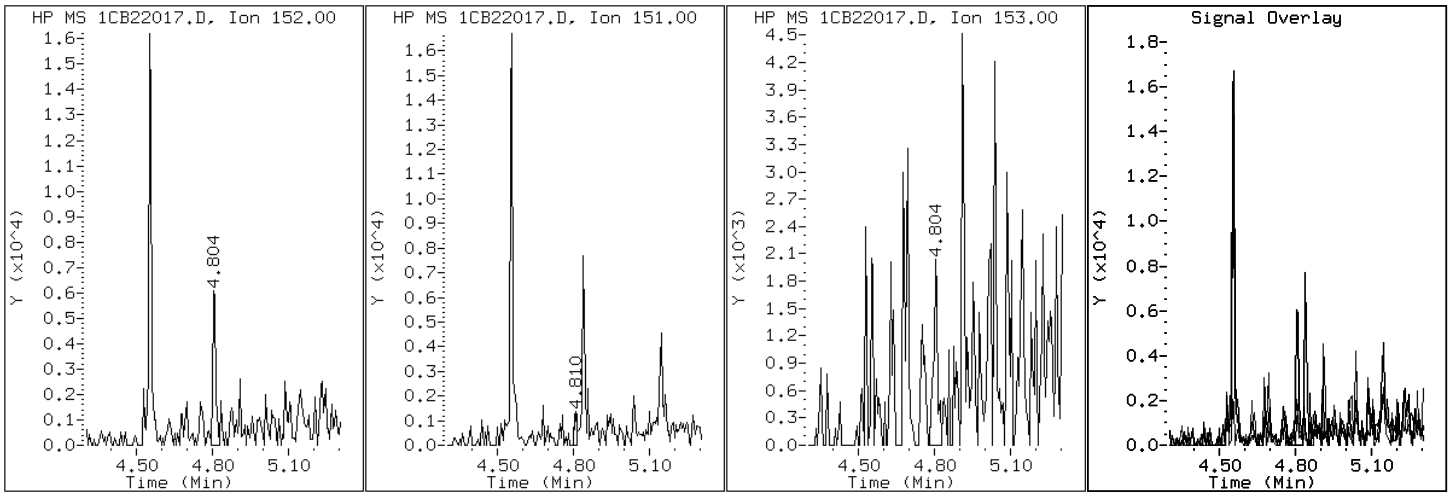
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a  Operator: SCC

5 Acenaphthylene



Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

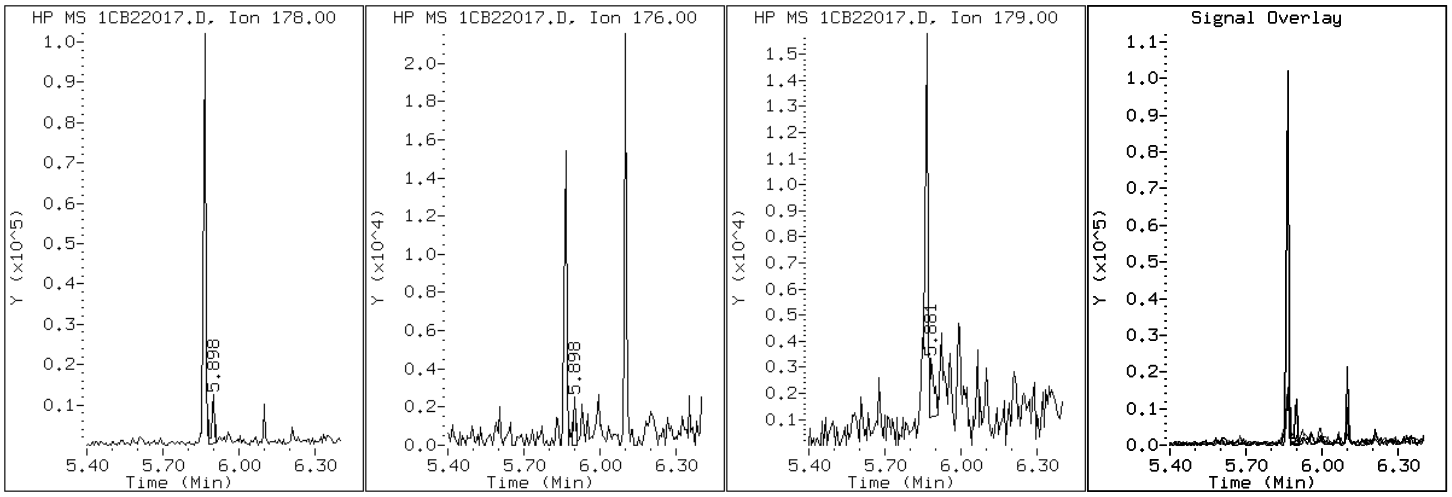
Client ID: FM0161AF-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a

Operator: SCC

12 Anthracene



Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

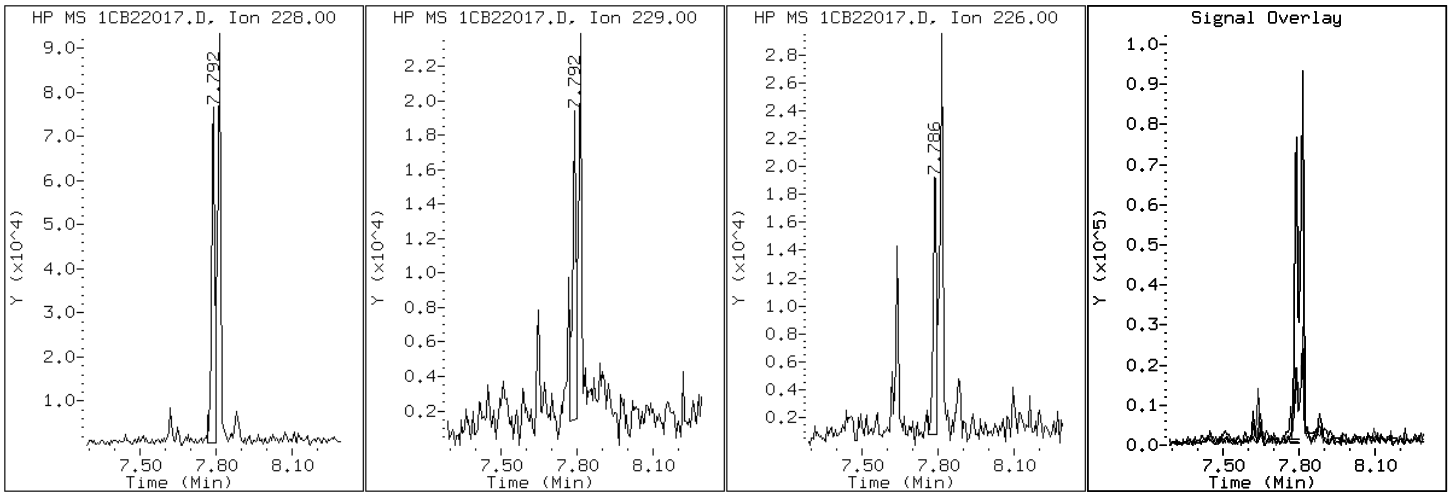
Client ID: FM0161AF-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a

Operator: SCC

17 Benzo(a)anthracene



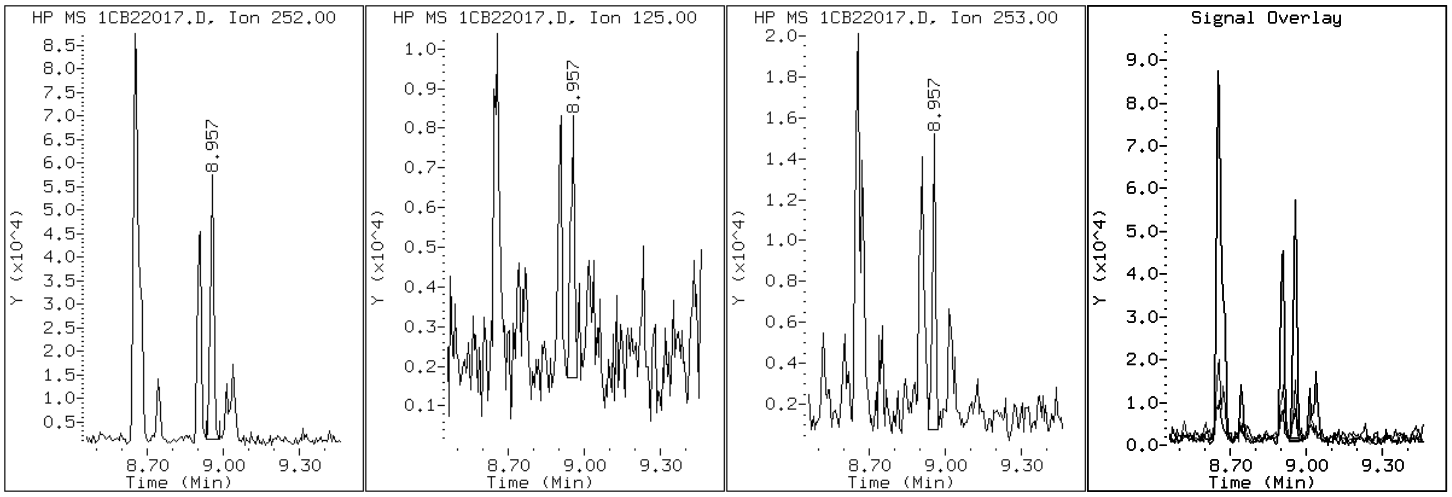
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a Operator: SCC

22 Benzo(a)pyrene



Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

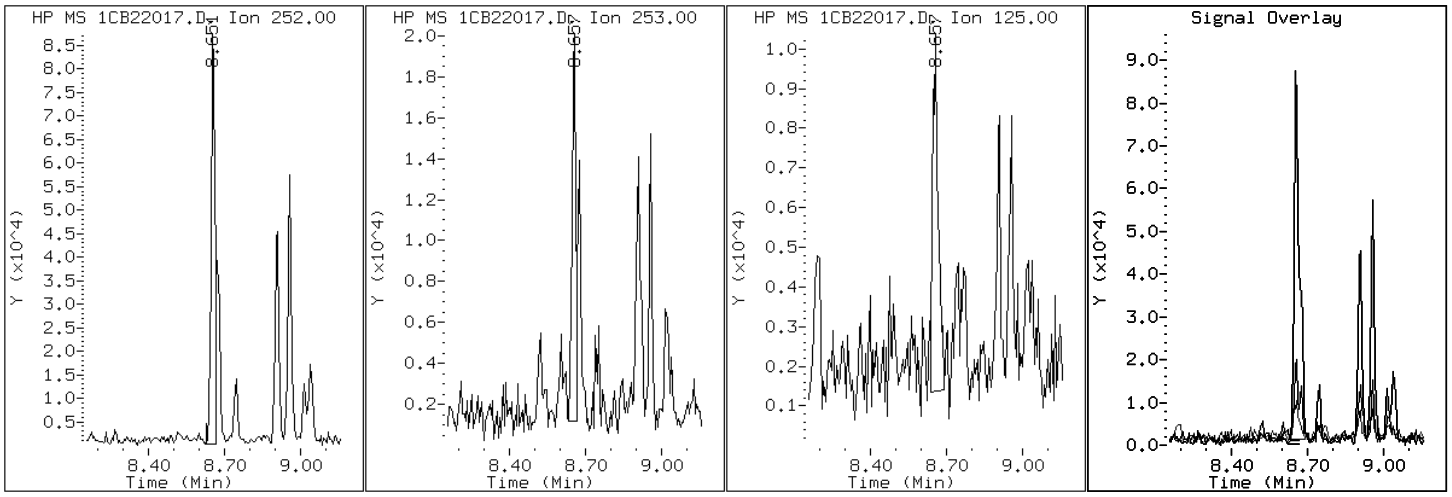
Client ID: FM0161AF-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a

Operator: SCC

20 Benzo(b)fluoranthene



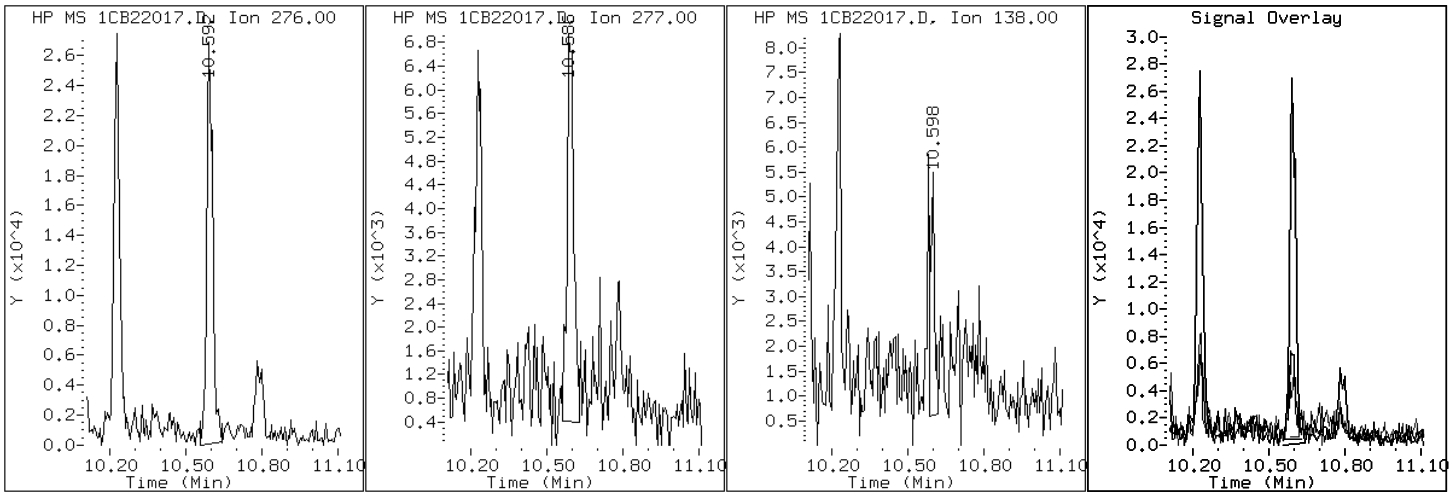
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS | Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a | Operator: SCC

26 Benzo(g,h,i)perylene



Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

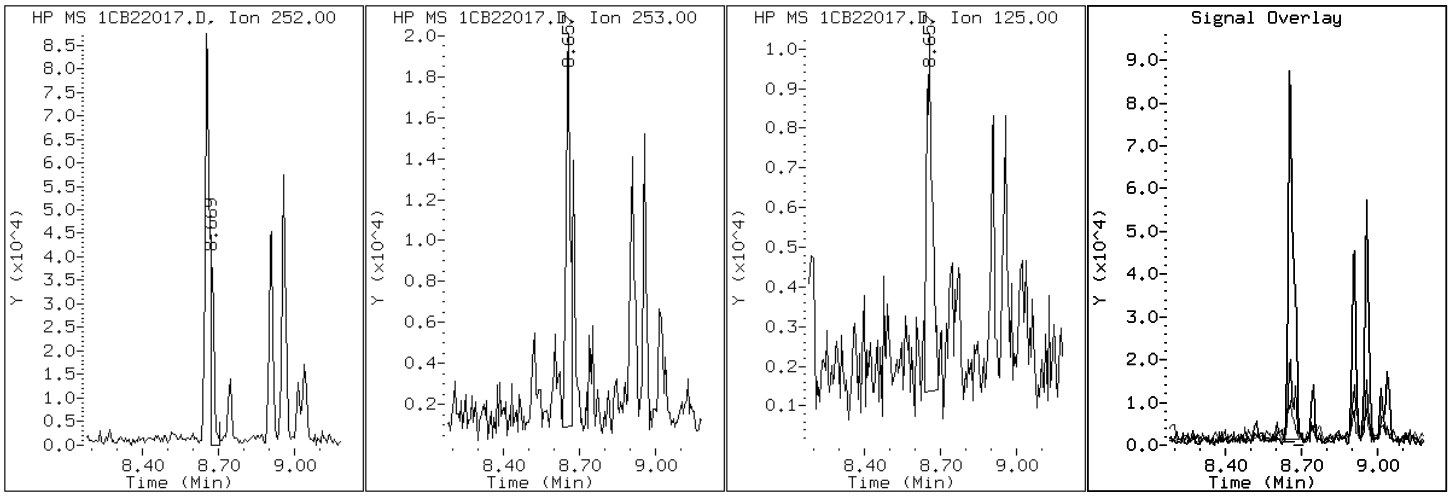
Client ID: FM0161AF-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a

Operator: SCC

21 Benzo(k)fluoranthene



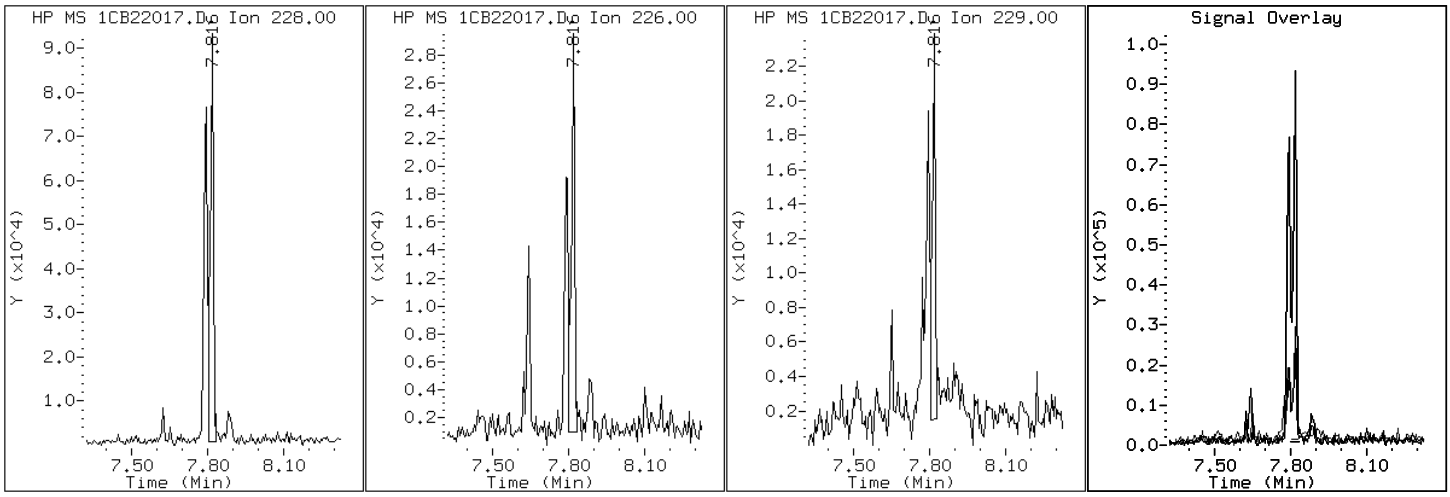
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a  Operator: SCC

19 Chrysene



Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

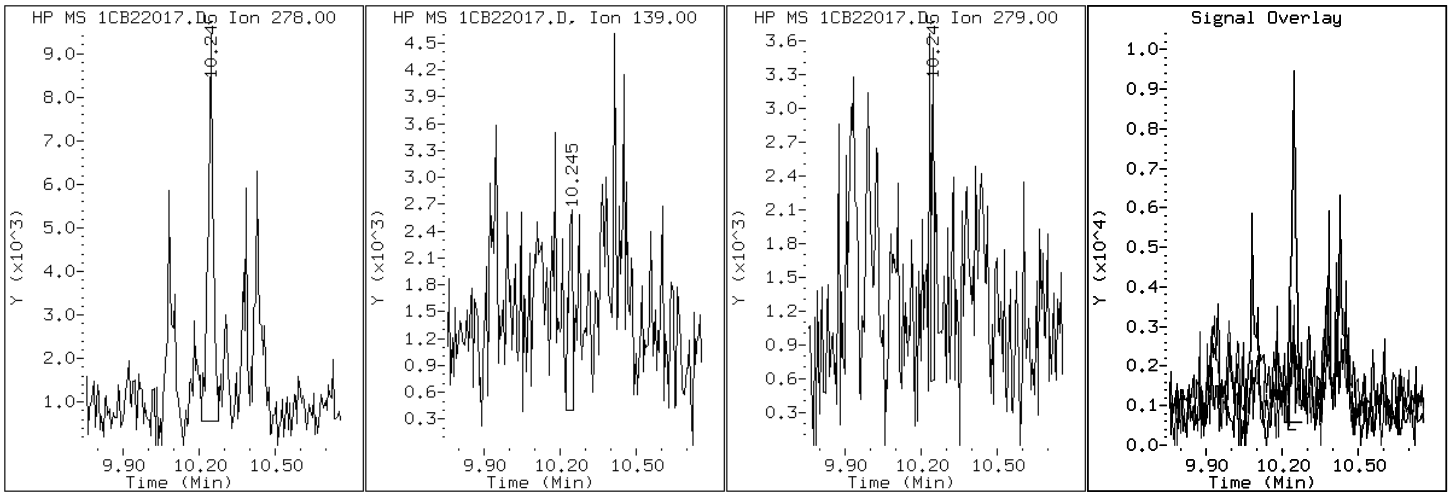
Client ID: FM0161AF-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a

Operator: SCC

25 Dibenzo(a,h)anthracene



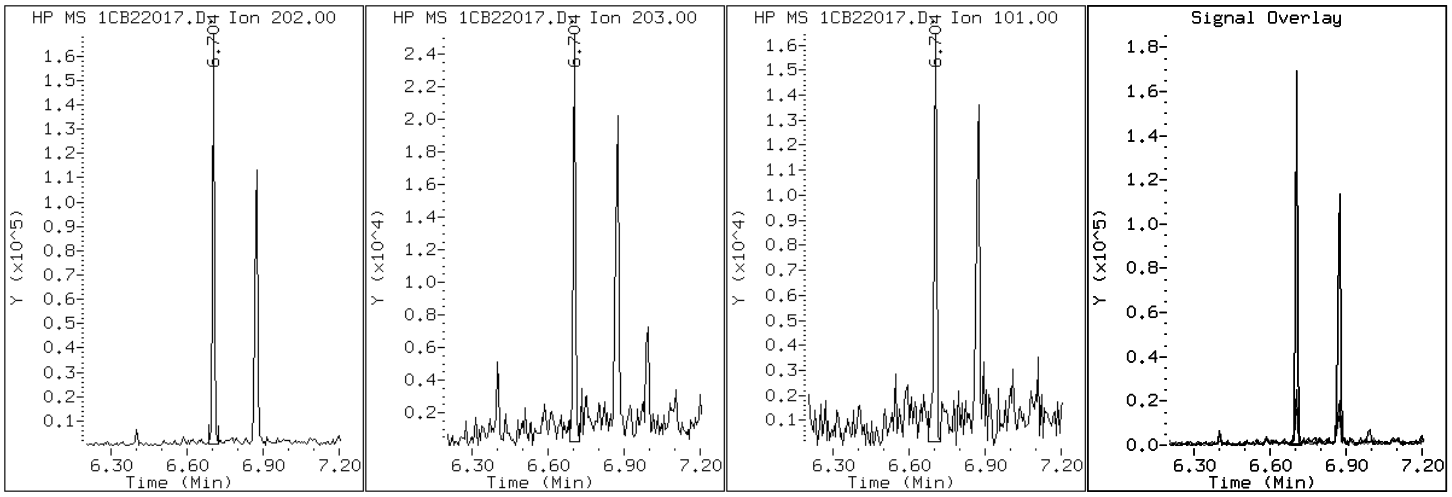
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a  Operator: SCC

15 Fluoranthene



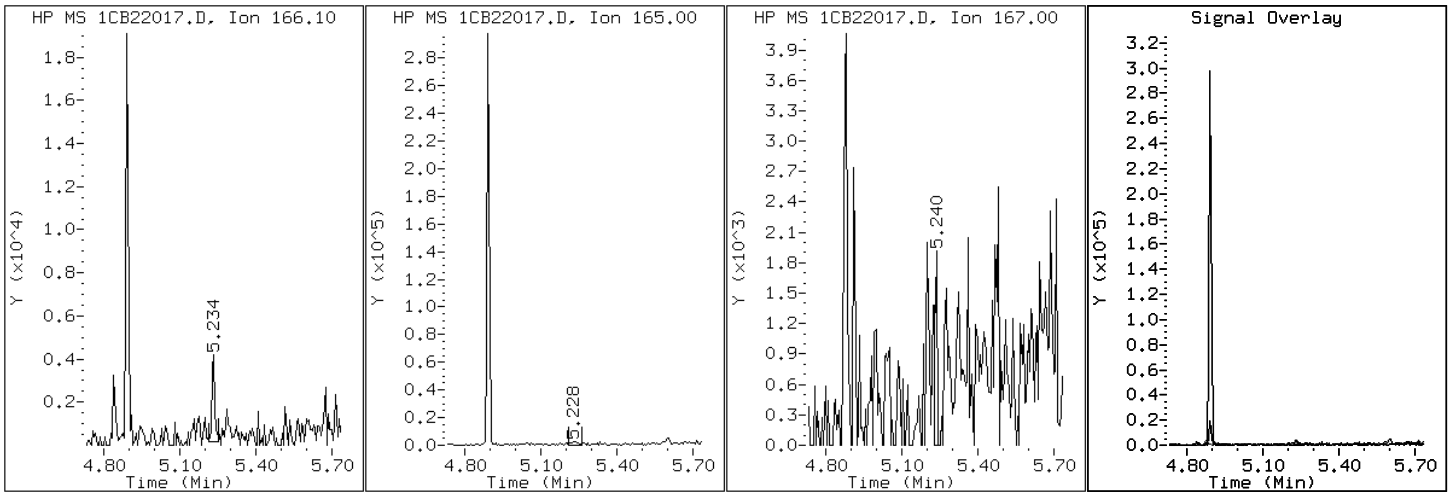
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a  Operator: SCC

9 Fluorene



Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

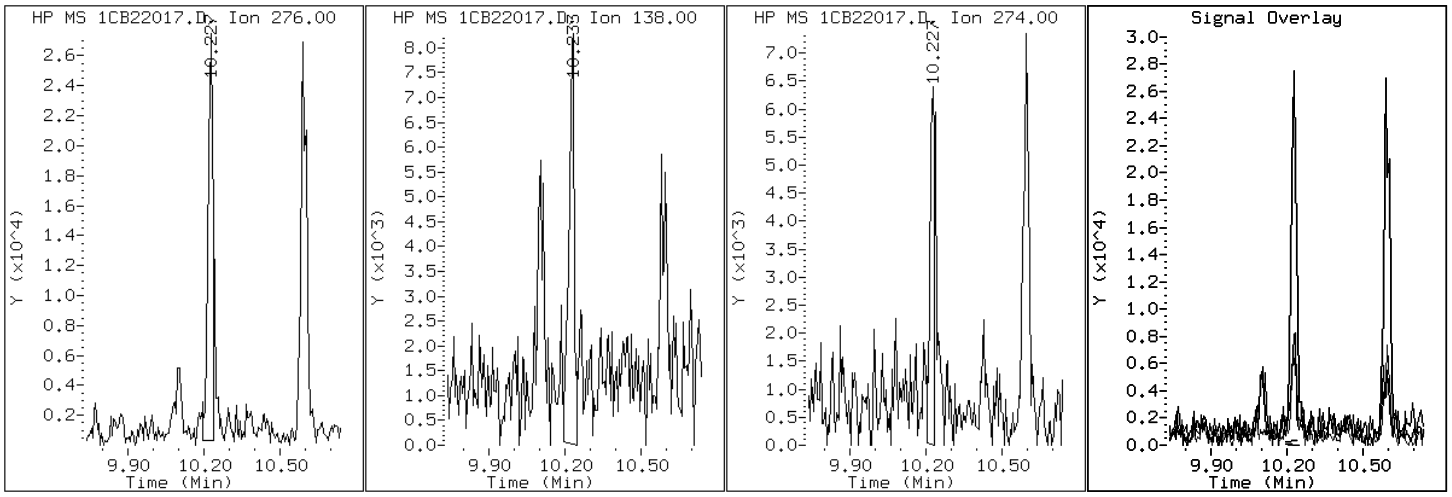
Client ID: FM0161AF-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



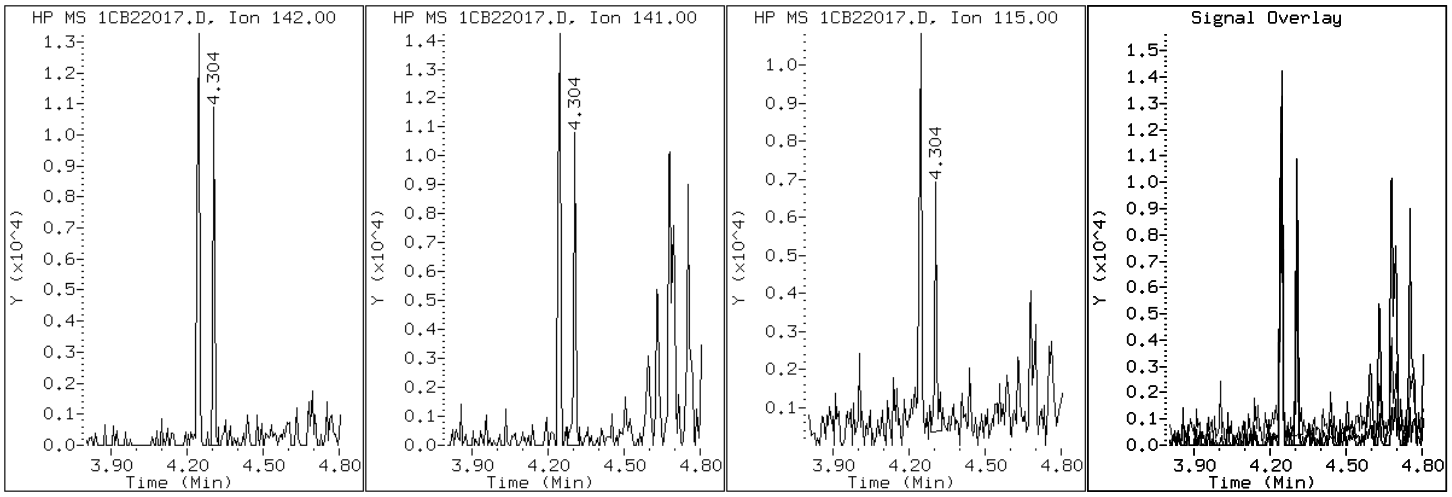
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a Operator: SCC

4 1-Methylnaphthalene



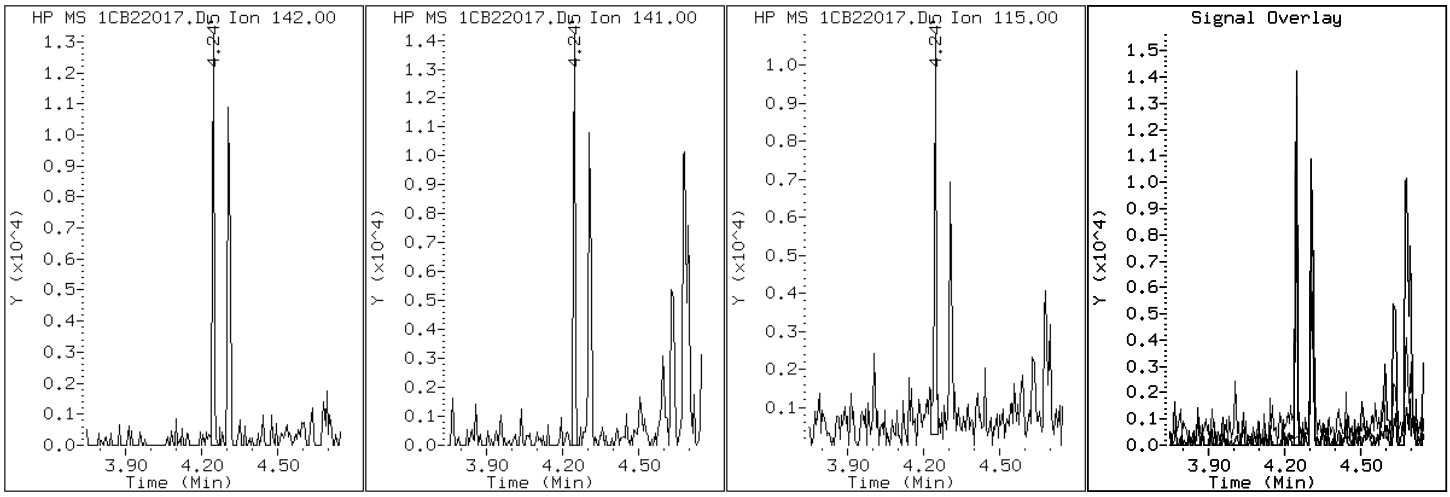
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a  Operator: SCC

3 2-Methylnaphthalene



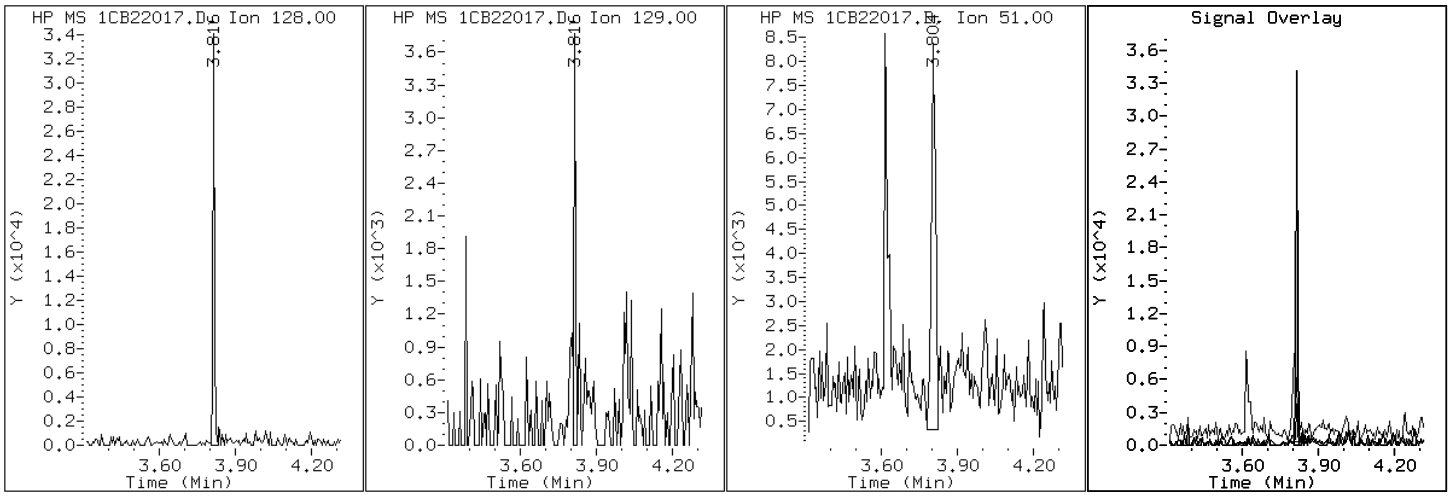
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a  Operator: SCC

2 Naphthalene



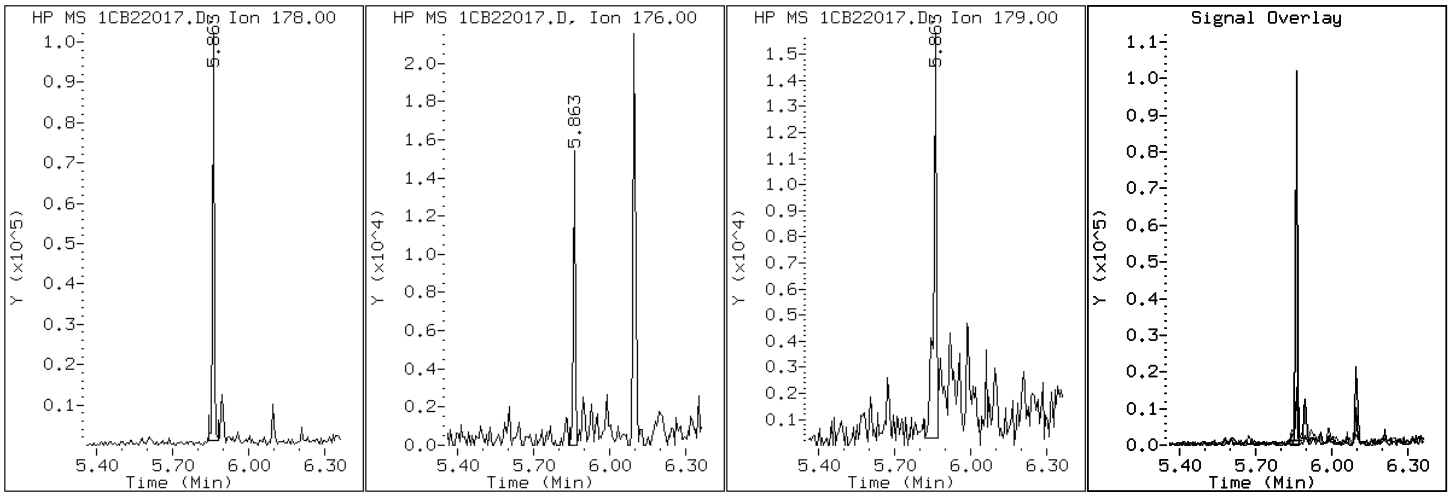
Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

Client ID: FM0161AF-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a Operator: SCC

11 Phenanthrene



Data File: 1CB22017.D

Date: 22-FEB-2013 16:16

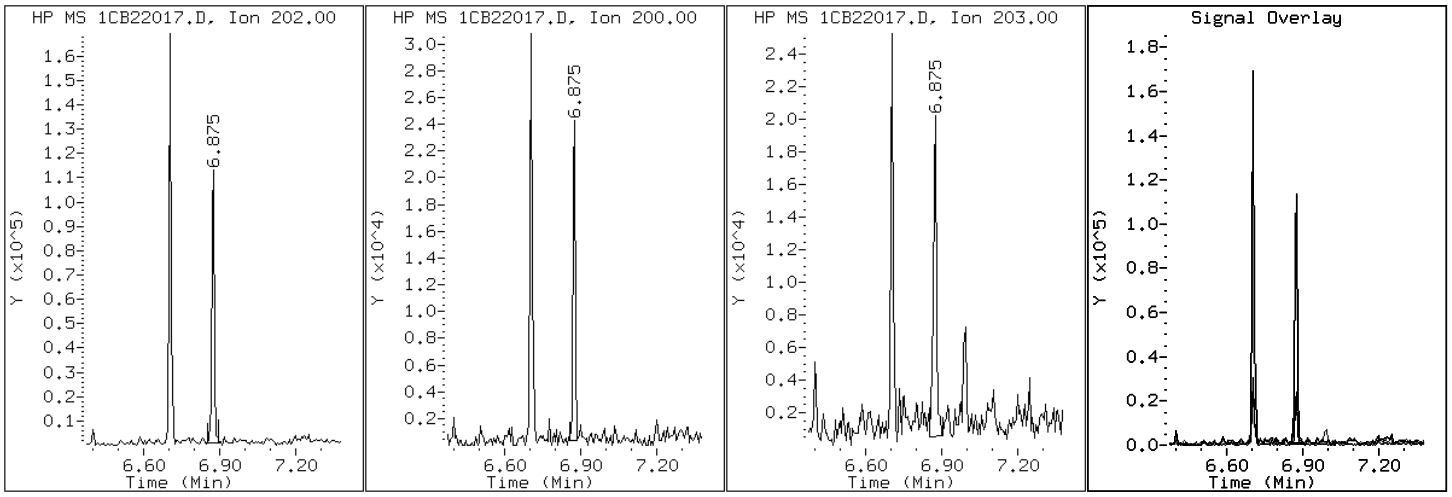
Client ID: FM0161AF-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-11-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22017.D
Inj. Date and Time: 22-FEB-2013 16:16
Instrument ID: BSMC5973.i
Client ID: FM0161AF-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

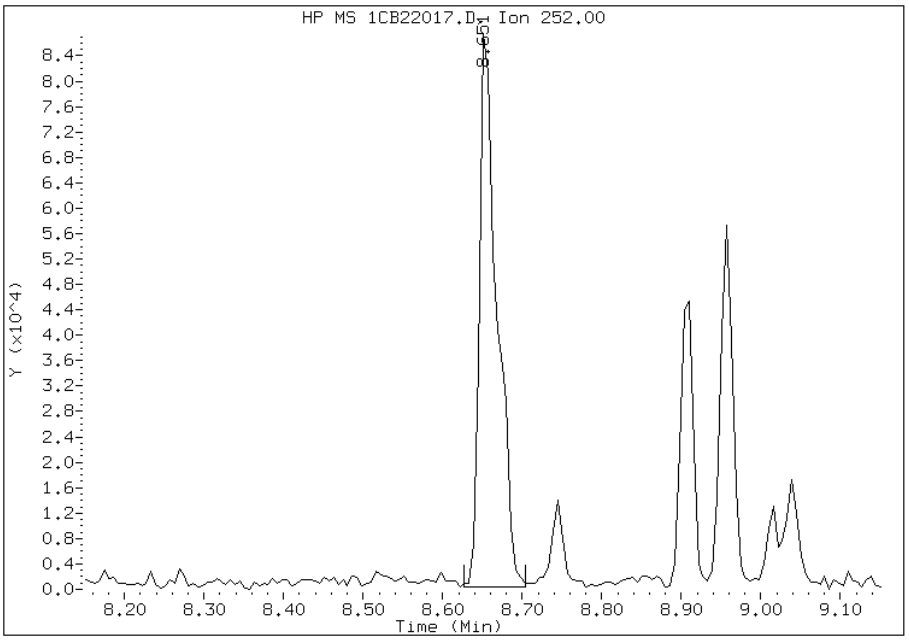
Processing Integration Results

RT: 8.65

Response: 135130

Amount: 2

Conc: 132



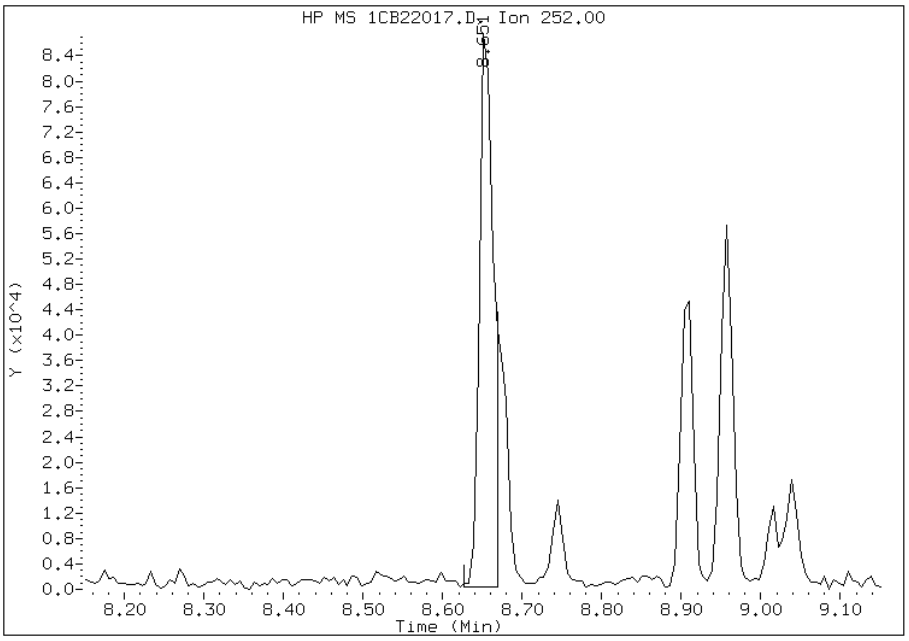

Manual Integration Results

RT: 8.65

Response: 107385

Amount: 1

Conc: 105




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:56
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22017.D
Inj. Date and Time: 22-FEB-2013 16:16
Instrument ID: BSMC5973.i
Client ID: FM0161AF-GS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

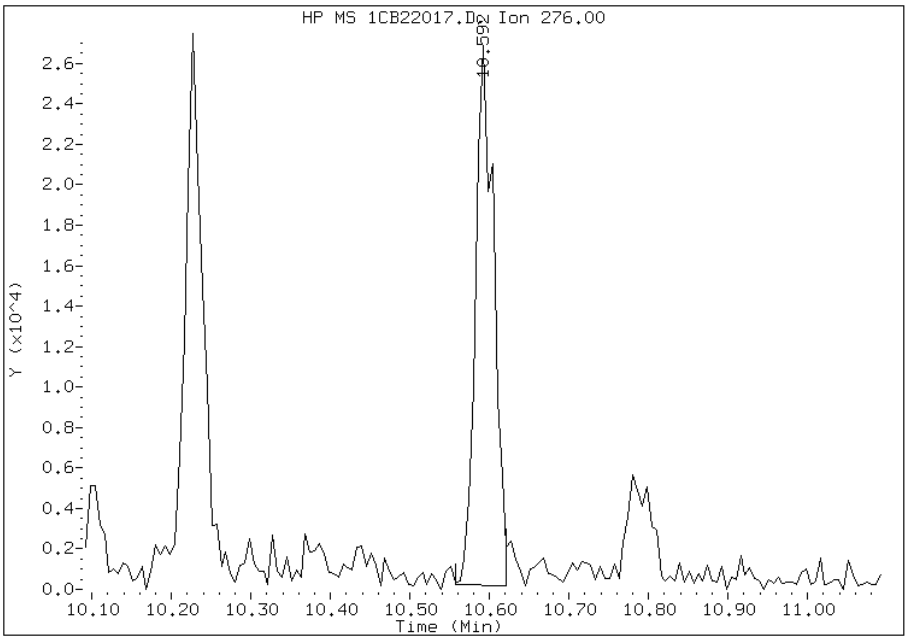
Processing Integration Results

RT: 10.59

Response: 42496

Amount: 1

Conc: 43



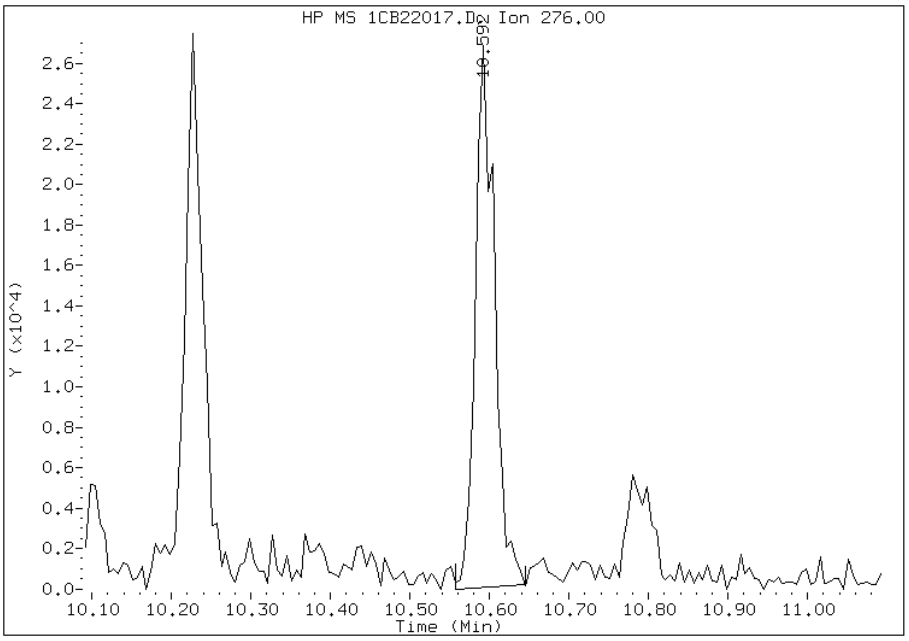

Manual Integration Results

RT: 10.59

Response: 44612

Amount: 1

Conc: 46




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:57
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22017.D
Inj. Date and Time: 22-FEB-2013 16:16
Instrument ID: BSMC5973.i
Client ID: FM0161AF-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

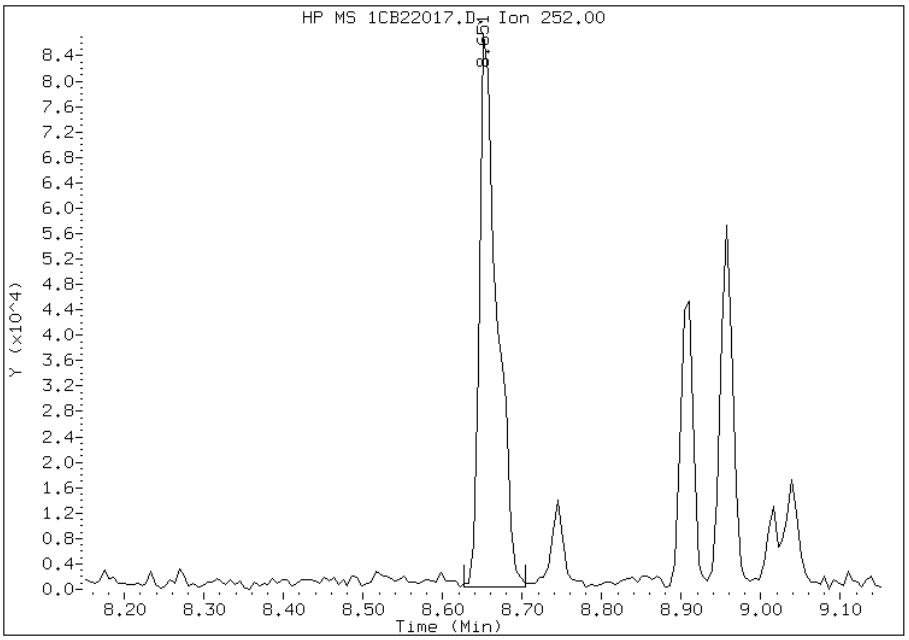
Processing Integration Results

RT: 8.65

Response: 135016

Amount: 2

Conc: 128



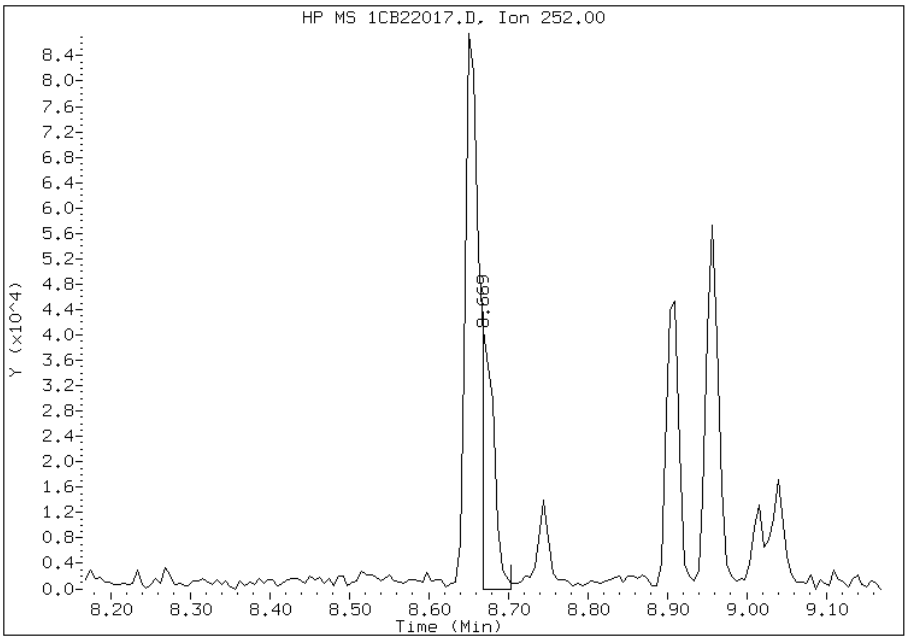

Manual Integration Results

RT: 8.67

Response: 43026

Amount: 1

Conc: 41




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:56
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22017.D
Inj. Date and Time: 22-FEB-2013 16:16
Instrument ID: BSMC5973.i
Client ID: FM0161AF-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

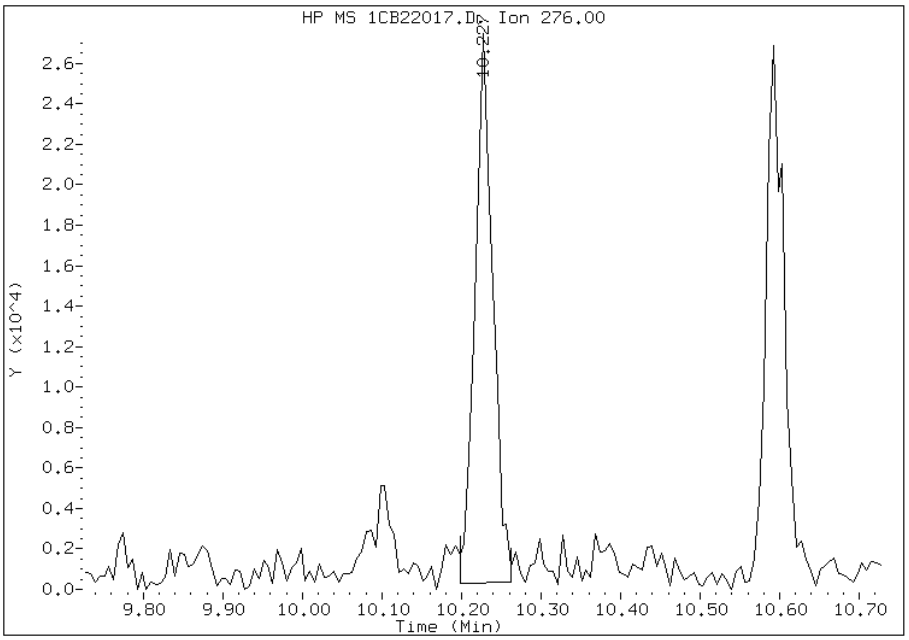
Processing Integration Results

RT: 10.23

Response: 42159

Amount: 1

Conc: 45



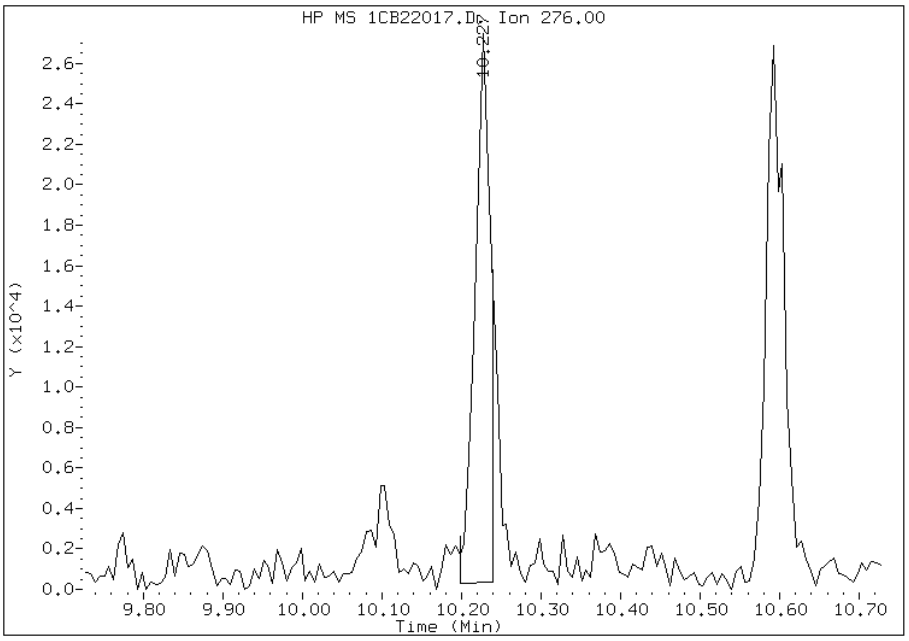

Manual Integration Results

RT: 10.23

Response: 36446

Amount: 1

Conc: 39




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:57
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AG-GS | Lab Sample ID: 680-87545-12

Matrix: Solid | Lab File ID: 1CB22018.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:41

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 14.91(g) | Date Analyzed: 02/22/2013 16:34

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 1.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 23 | J | 100 | 20 |
| 208-96-8 | Acenaphthylene | 7.0 | J | 41 | 5.1 |
| 120-12-7 | Anthracene | 19 | | 8.5 | 4.3 |
| 56-55-3 | Benzo[a]anthracene | 140 | | 8.1 | 4.0 |
| 50-32-8 | Benzo[a]pyrene | 110 | | 11 | 5.3 |
| 205-99-2 | Benzo[b]fluoranthene | 200 | | 12 | 6.2 |
| 191-24-2 | Benzo[g,h,i]perylene | 77 | | 20 | 4.5 |
| 207-08-9 | Benzo[k]fluoranthene | 74 | | 8.1 | 3.7 |
| 218-01-9 | Chrysene | 140 | | 9.1 | 4.6 |
| 53-70-3 | Dibenz(a,h)anthracene | 28 | | 20 | 4.2 |
| 206-44-0 | Fluoranthene | 330 | | 20 | 4.1 |
| 86-73-7 | Fluorene | 19 | J | 20 | 4.2 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 74 | | 20 | 7.2 |
| 90-12-0 | 1-Methylnaphthalene | 42 | | 41 | 4.5 |
| 91-57-6 | 2-Methylnaphthalene | 52 | | 41 | 7.2 |
| 91-20-3 | Naphthalene | 57 | | 41 | 4.5 |
| 85-01-8 | Phenanthrene | 250 | | 8.1 | 4.0 |
| 129-00-0 | Pyrene | 240 | | 20 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 73 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22018.D
Lab Smp Id: 680-87545-A-12-A Client Smp ID: FM0161AG-GS
Inj Date : 22-FEB-2013 16:34
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-12-a
Misc Info : 680-87545-A-12-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 14.910 | Weight Extracted |
| M | 1.037 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1488556 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1221669 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2350702 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 260612 | 7.34292 | 497.6452 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2779574 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2661893 | 40.0000 | |
| 2 Naphthalene | 128 | 3.815 | 3.816 | (1.003) | 32325 | 0.83413 | 56.5310 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 19838 | 0.76743 | 52.0106 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 14577 | 0.61917 | 41.9621 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 5089 | 0.10332 | 7.0023 |
| 7 Acenaphthene | 154 | 4.909 | 4.910 | (1.004) | 10419 | 0.34033 | 23.0651 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 10740 | 0.27740 | 18.7998 |
| 11 Phenanthrene | 178 | 5.862 | 5.863 | (1.003) | 254210 | 3.73993 | 253.4627 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 18600 | 0.27980 | 18.9626 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 31167 | 0.52743 | 35.7447 |
| 15 Fluoranthene | 202 | 6.703 | 6.704 | (1.147) | 359360 | 4.82768 | 327.1818 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 262216 | 3.51039 | 237.9067 |
| 17 Benzo(a)anthracene | 228 | 7.786 | 7.792 | (0.998) | 159820 | 1.99217 | 135.0138 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 169085 | 2.10608 | 142.7336 |
| 20 Benzo(b)fluoranthene | 252 | 8.650 | 8.657 | (0.960) | 207957 | 2.98938 | 202.5968(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 77546 | 1.08664 | 73.6439(M) |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 111620 | 1.65190 | 111.9529 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 69423 | 1.09216 | 74.0181(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.244 | 10.257 | (1.136) | 26140 | 0.42042 | 28.4930 |
| 26 Benzo(g,h,i)perylene | 276 | 10.597 | 10.610 | (1.176) | 75116 | 1.12966 | 76.5597(M) |

QC Flag Legend

M - Compound response manually integrated.

Data File: 1CB22018.D

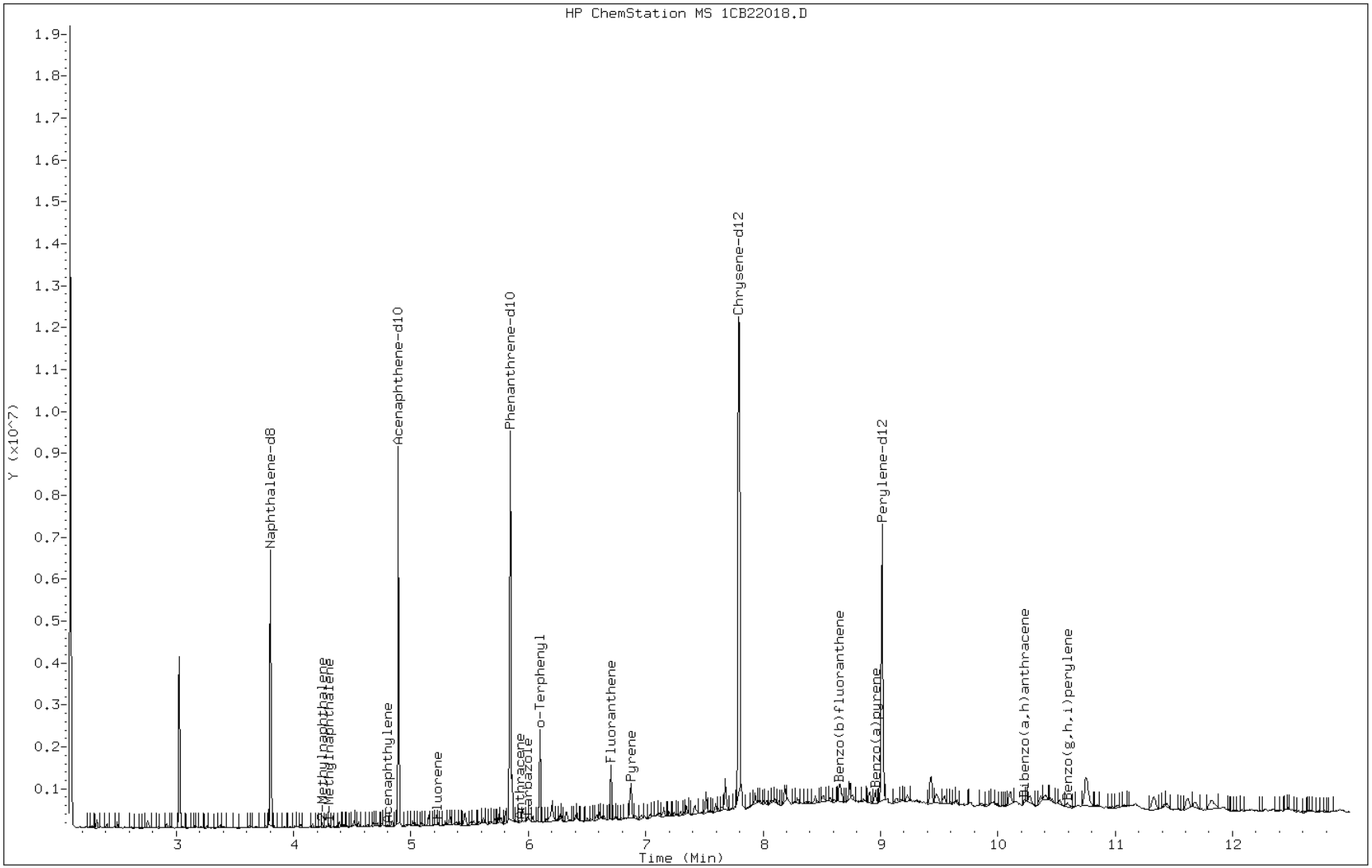
Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a

Operator: SCC



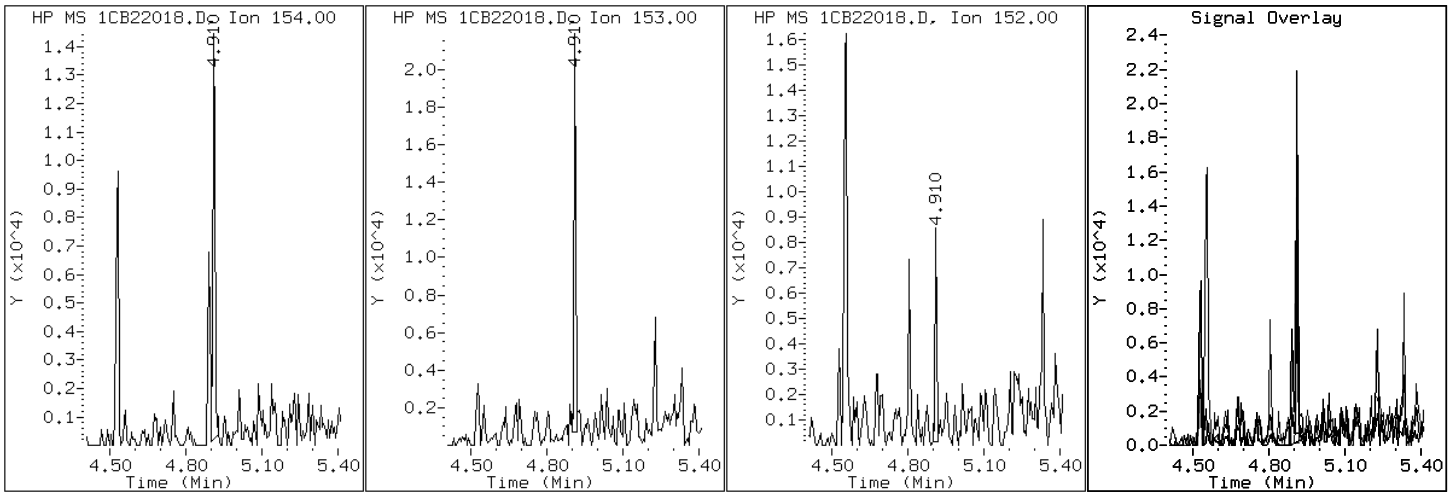
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a  Operator: SCC

7 Acenaphthene



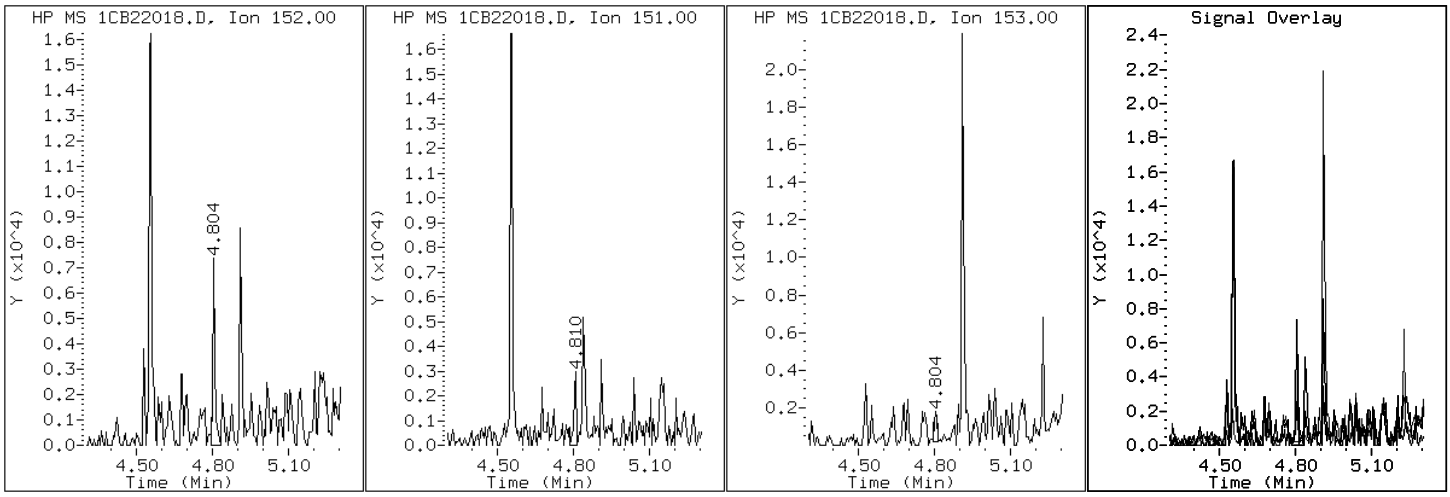
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a  Operator: SCC

5 Acenaphthylene



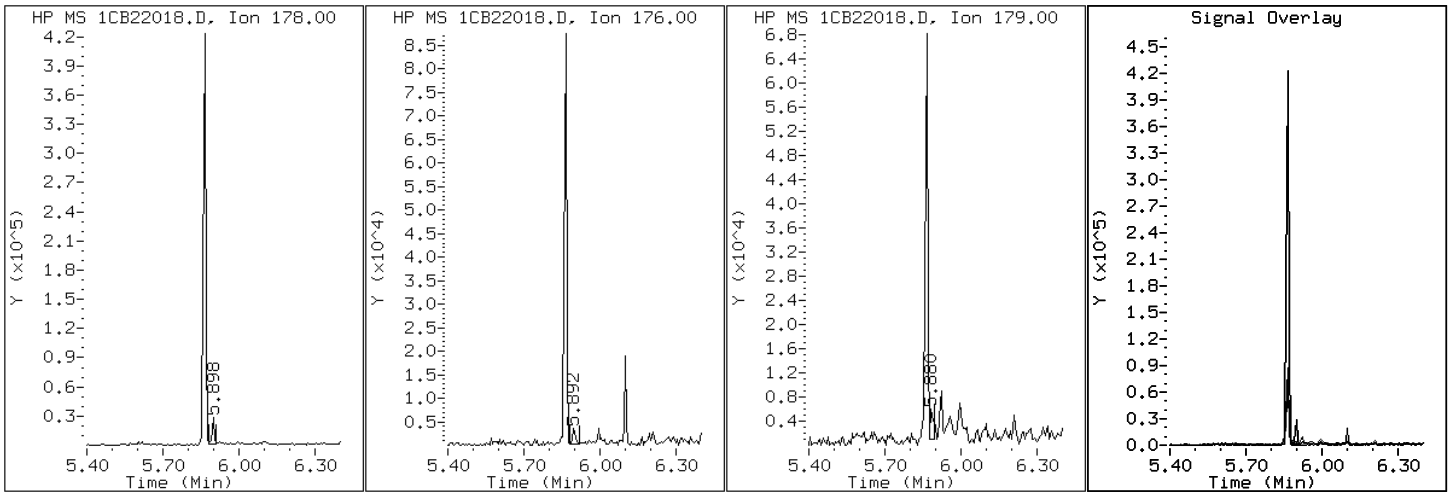
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

12 Anthracene



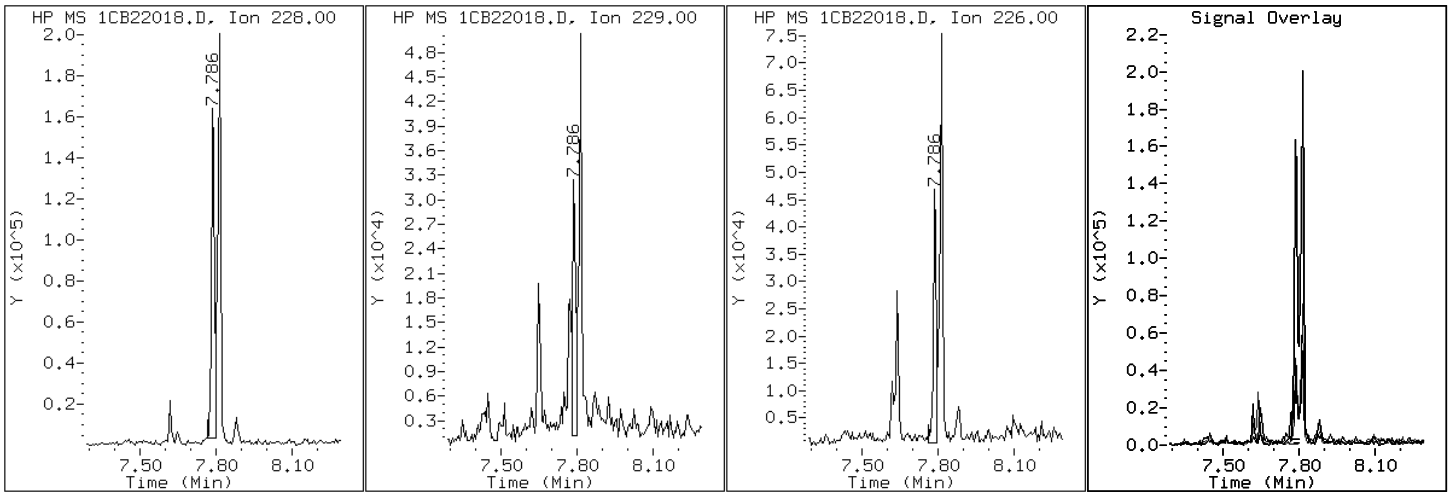
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

17 Benzo(a)anthracene



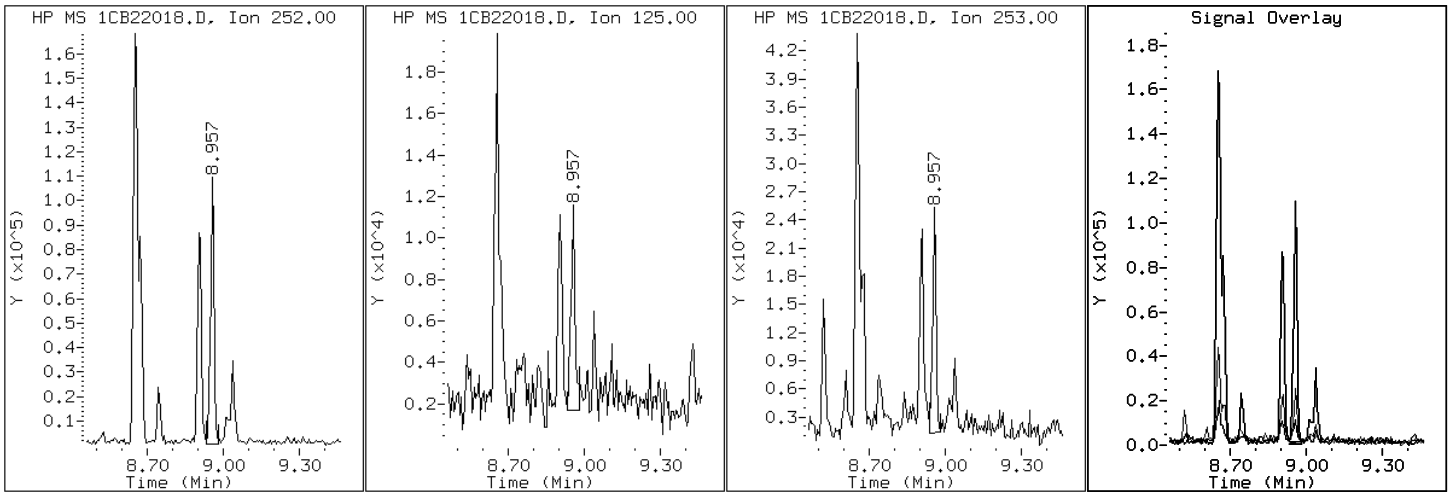
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a  Operator: SCC

22 Benzo(a)pyrene



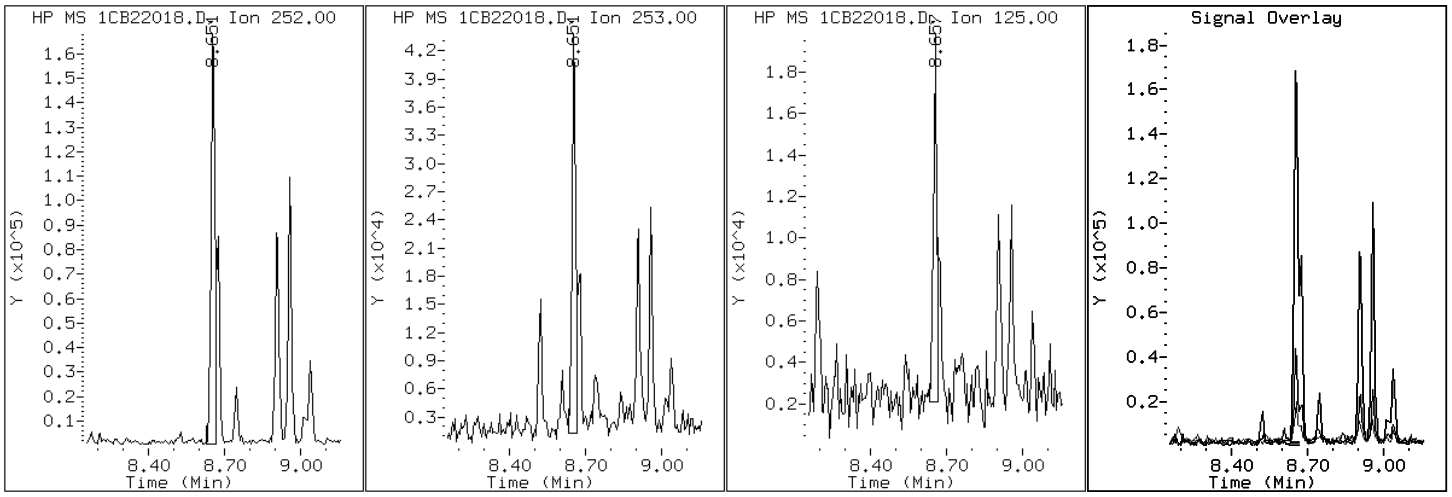
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

20 Benzo(b)fluoranthene



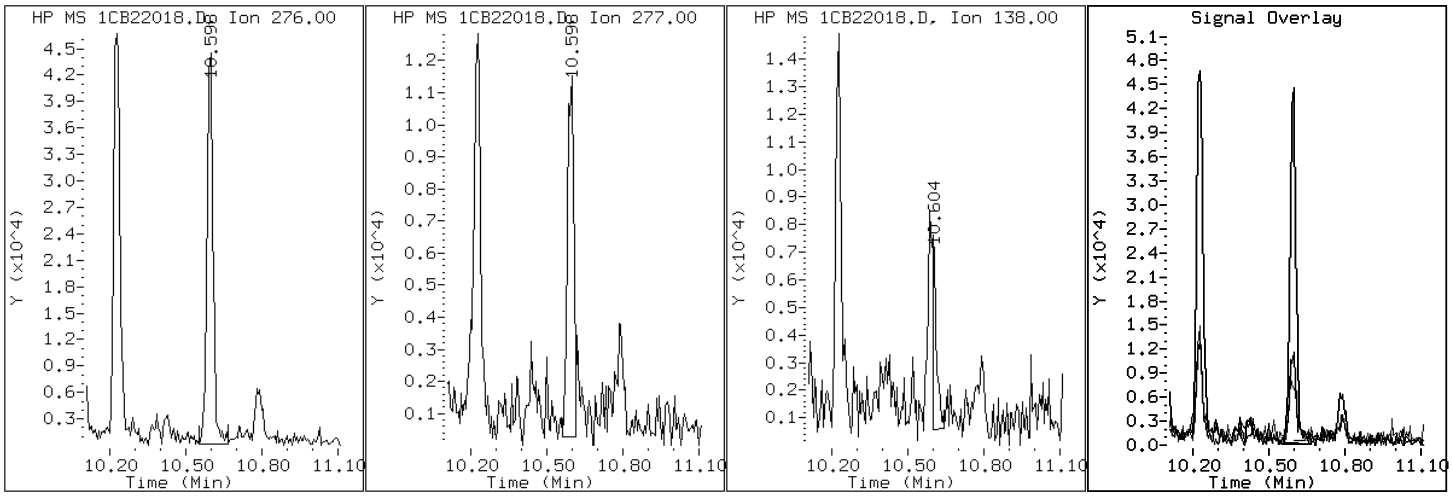
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a  Operator: SCC

26 Benzo(g,h,i)perylene



Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

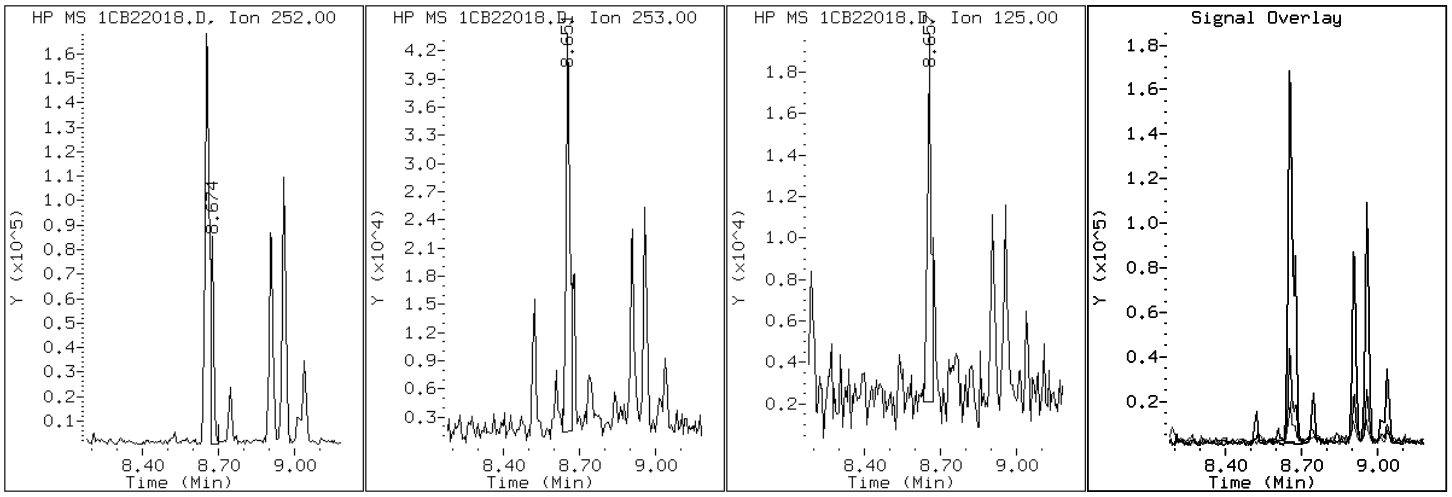
Client ID: FM0161AG-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a

Operator: SCC

21 Benzo(k)fluoranthene



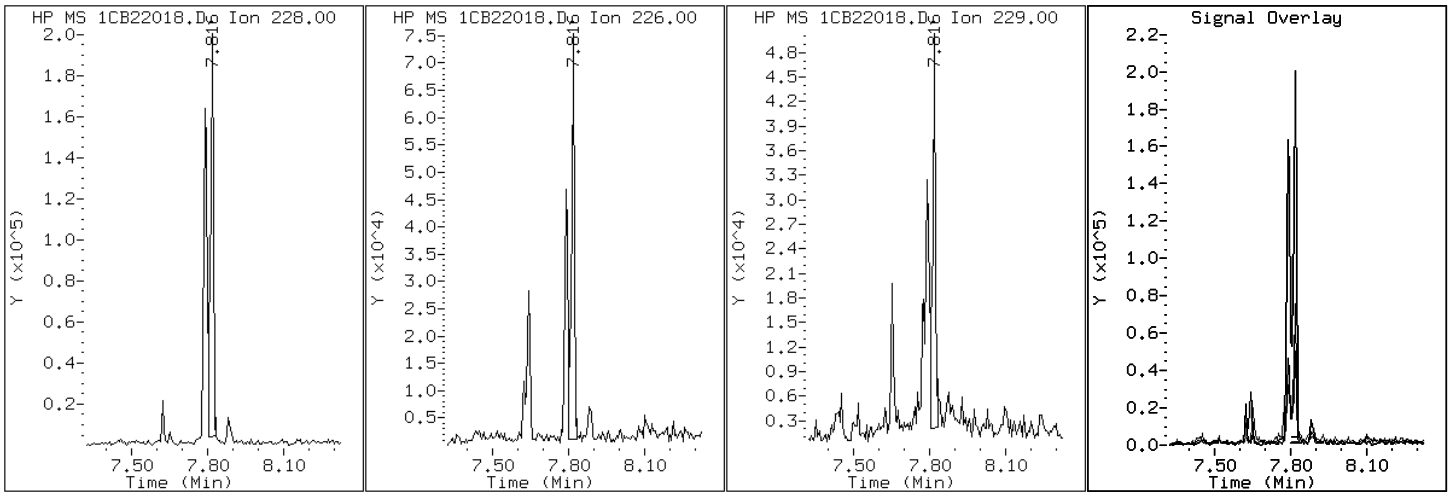
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

19 Chrysene



Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

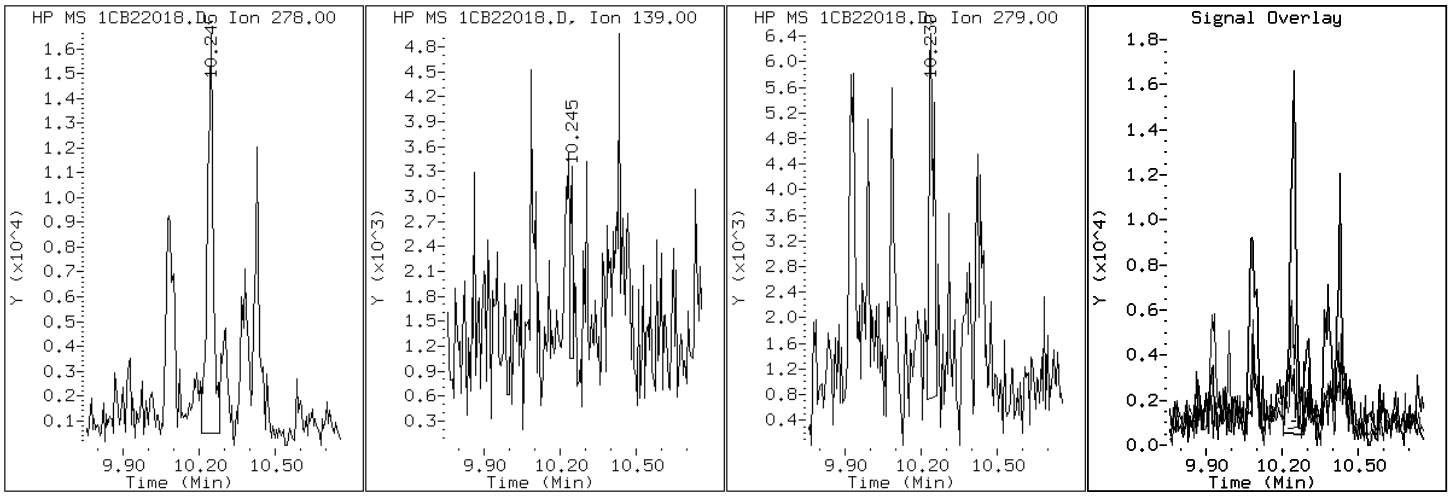
Client ID: FM0161AG-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a

Operator: SCC

25 Dibenzo(a,h)anthracene



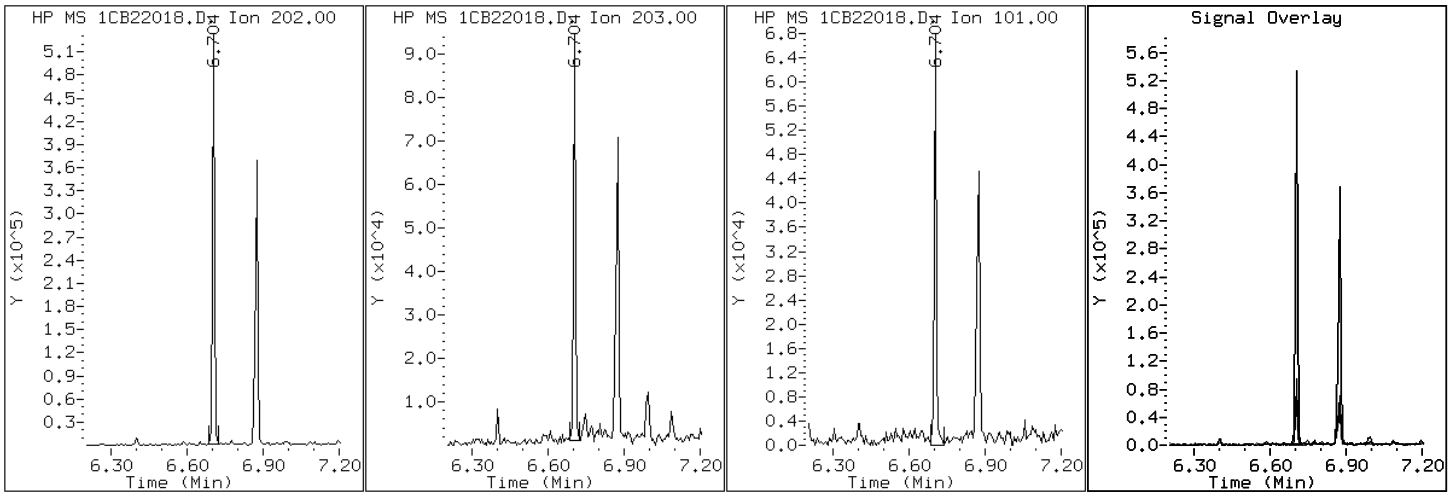
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

15 Fluoranthene



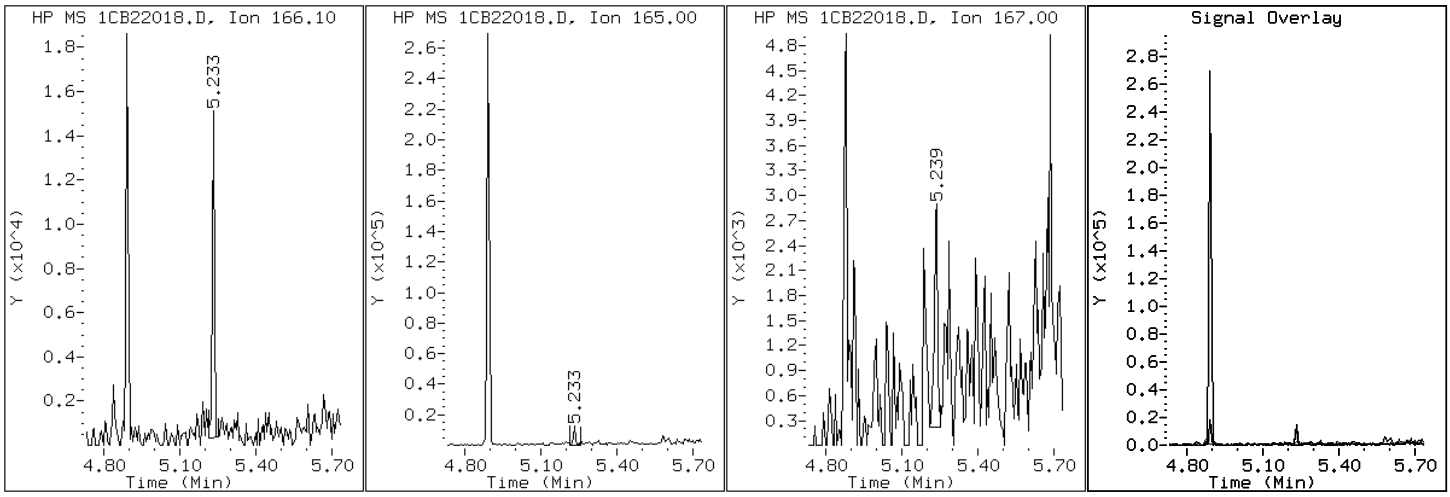
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

9 Fluorene



Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

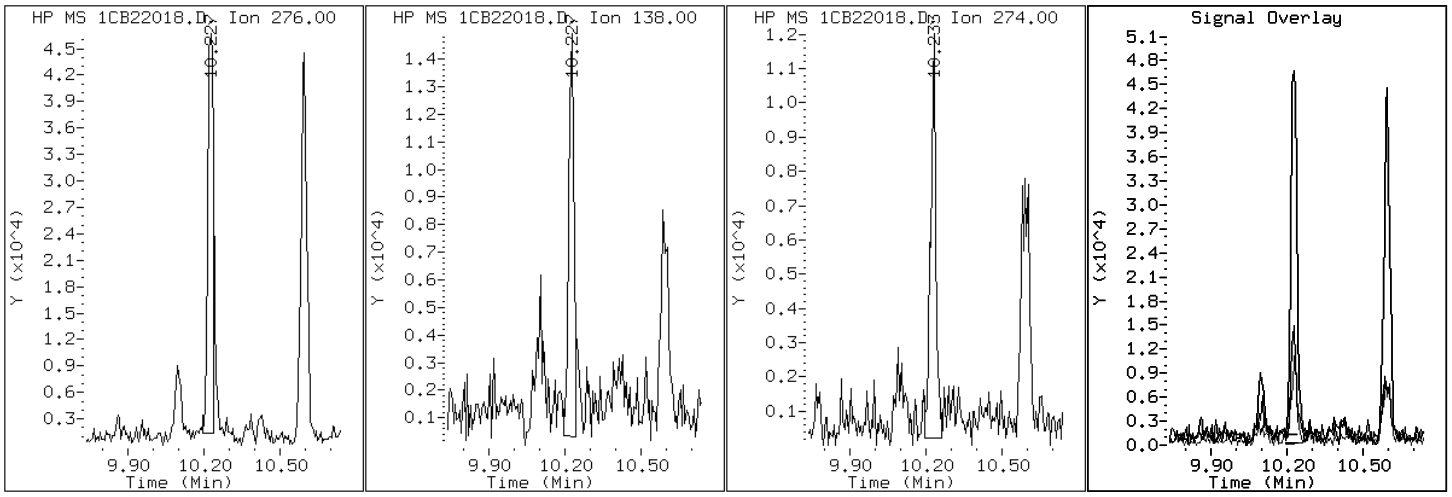
Client ID: FM0161AG-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



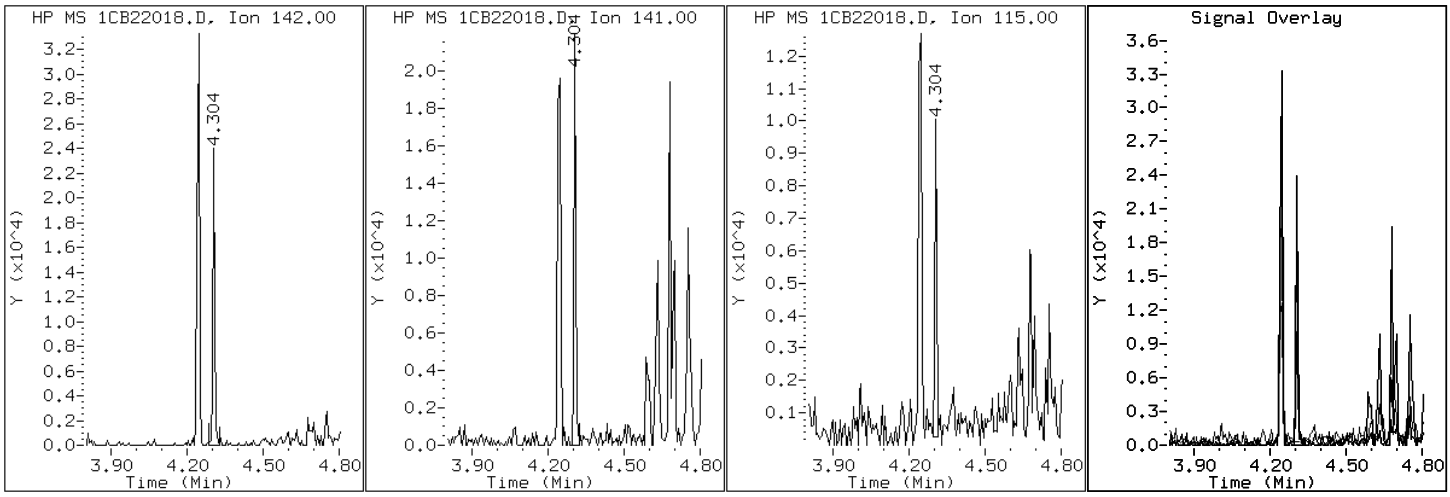
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a  Operator: SCC

4 1-Methylnaphthalene



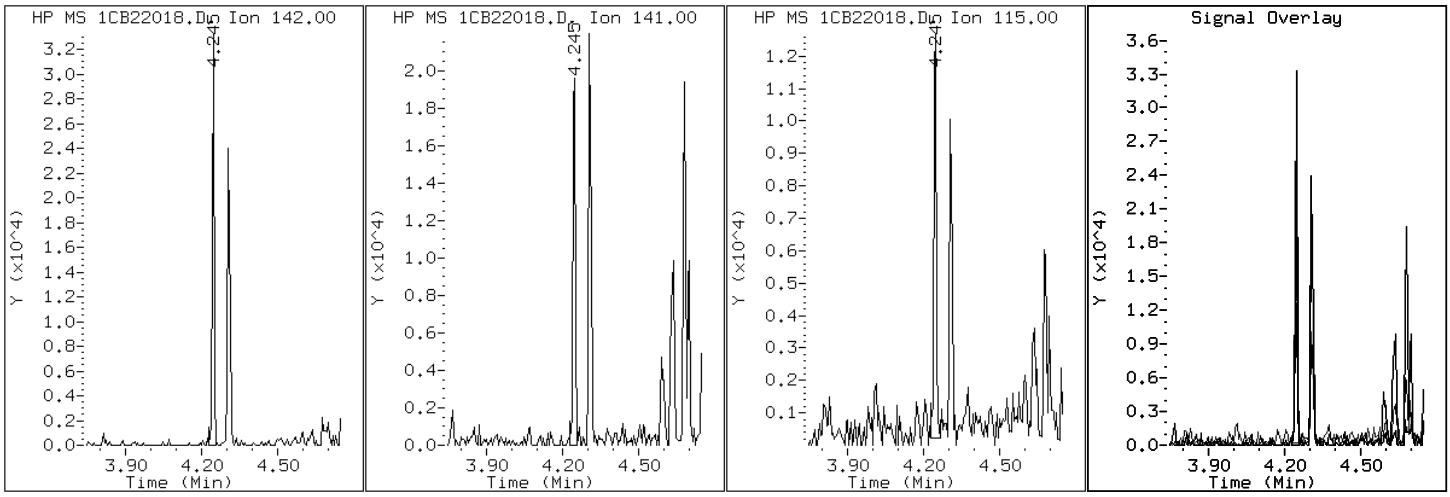
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a  Operator: SCC

3 2-Methylnaphthalene



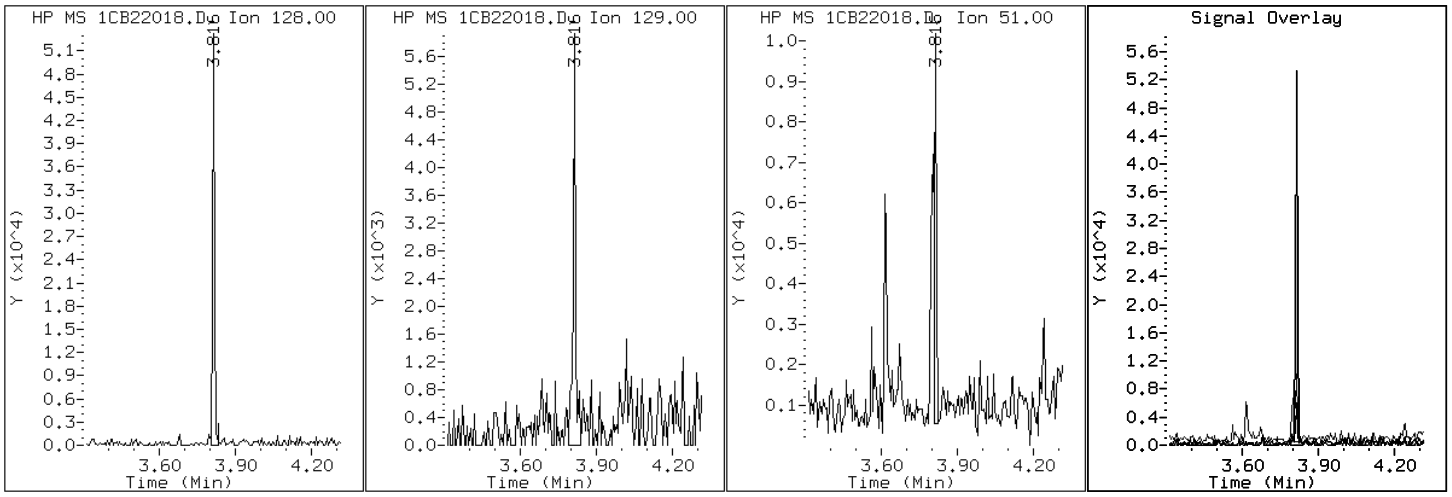
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a  Operator: SCC

2 Naphthalene



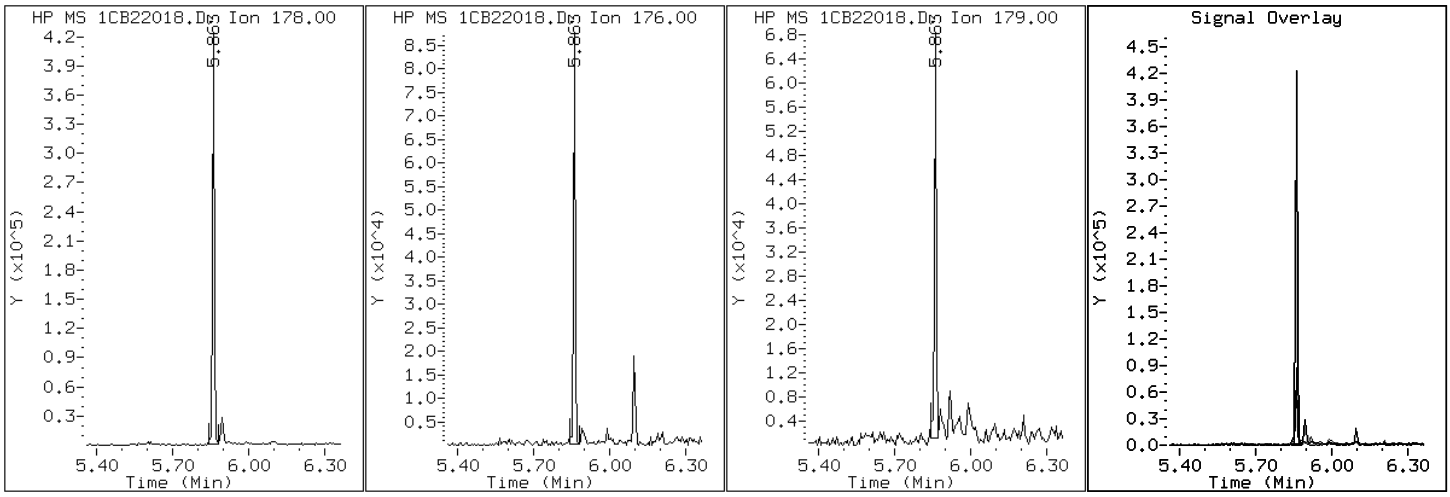
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

11 Phenanthrene



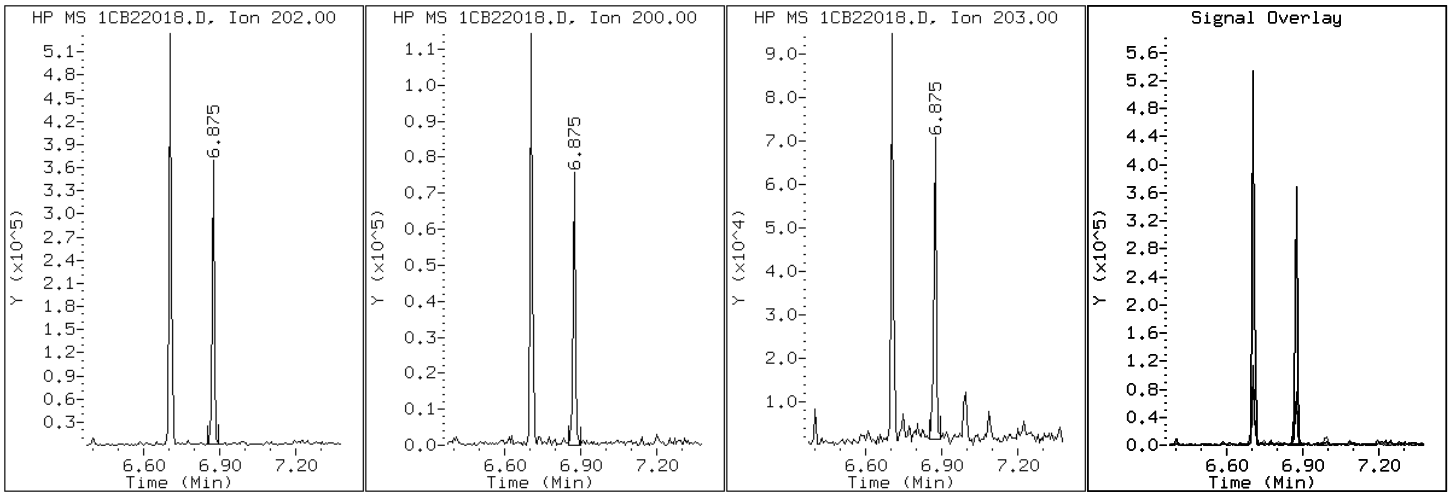
Data File: 1CB22018.D

Date: 22-FEB-2013 16:34

Client ID: FM0161AG-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-12-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22018.D
Inj. Date and Time: 22-FEB-2013 16:34
Instrument ID: BSMC5973.i
Client ID: FM0161AG-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

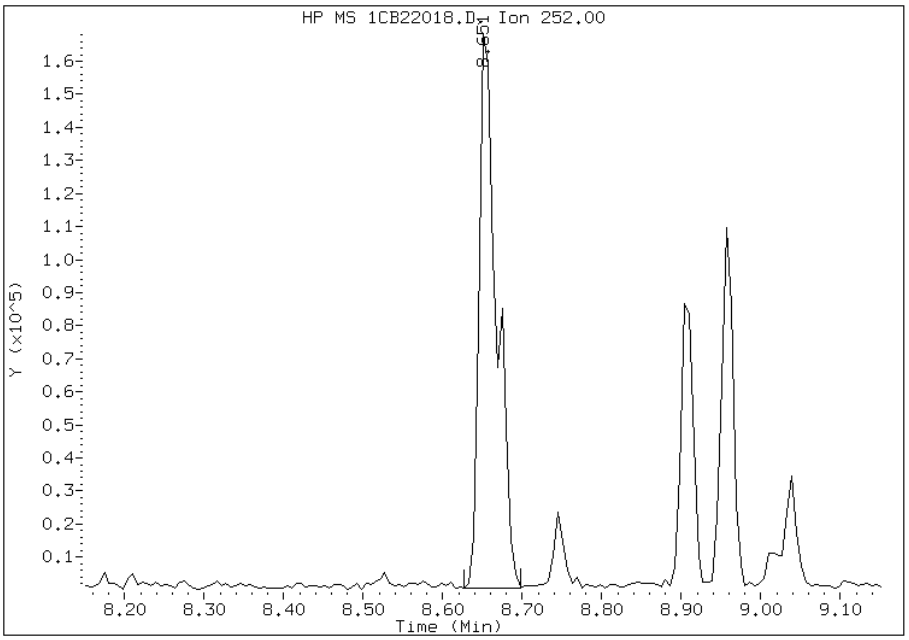
Processing Integration Results

RT: 8.65

Response: 262069

Amount: 4

Conc: 255



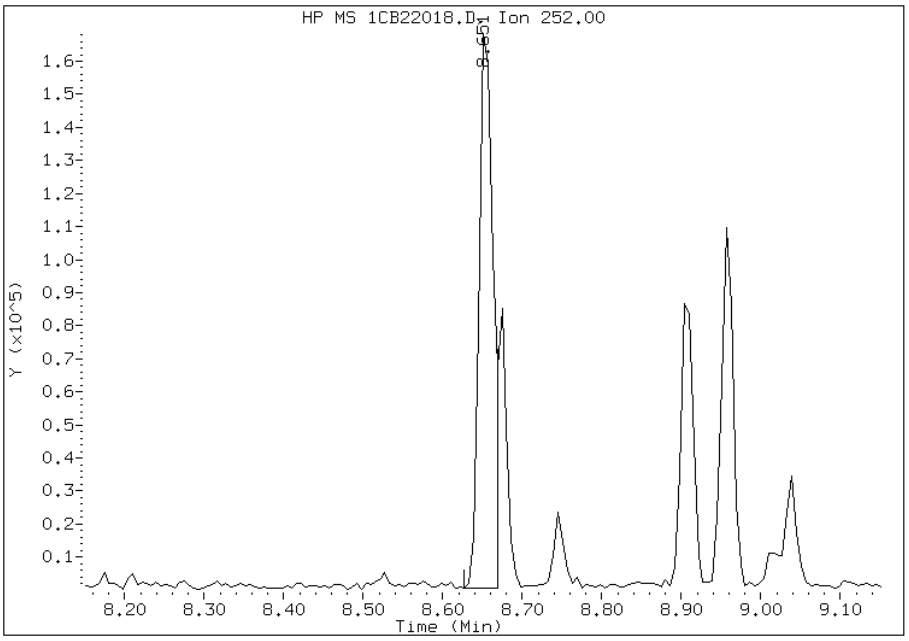

Manual Integration Results

RT: 8.65

Response: 207957

Amount: 3

Conc: 203




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:58
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22018.D
Inj. Date and Time: 22-FEB-2013 16:34
Instrument ID: BSMC5973.i
Client ID: FM0161AG-GS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

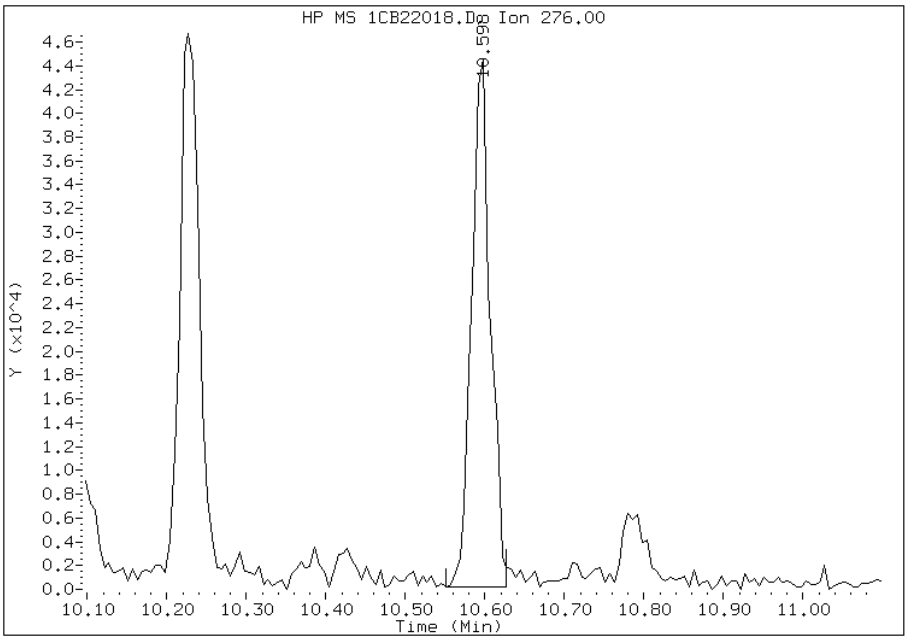
Processing Integration Results

RT: 10.60

Response: 72523

Amount: 1

Conc: 74



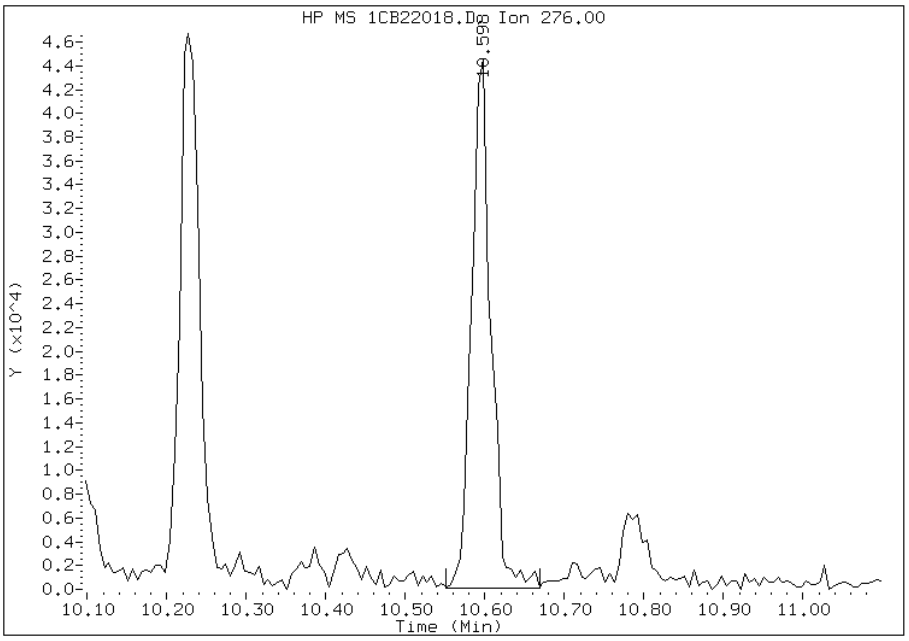

Manual Integration Results

RT: 10.60

Response: 75116

Amount: 1

Conc: 77




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:58
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22018.D
Inj. Date and Time: 22-FEB-2013 16:34
Instrument ID: BSMC5973.i
Client ID: FM0161AG-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

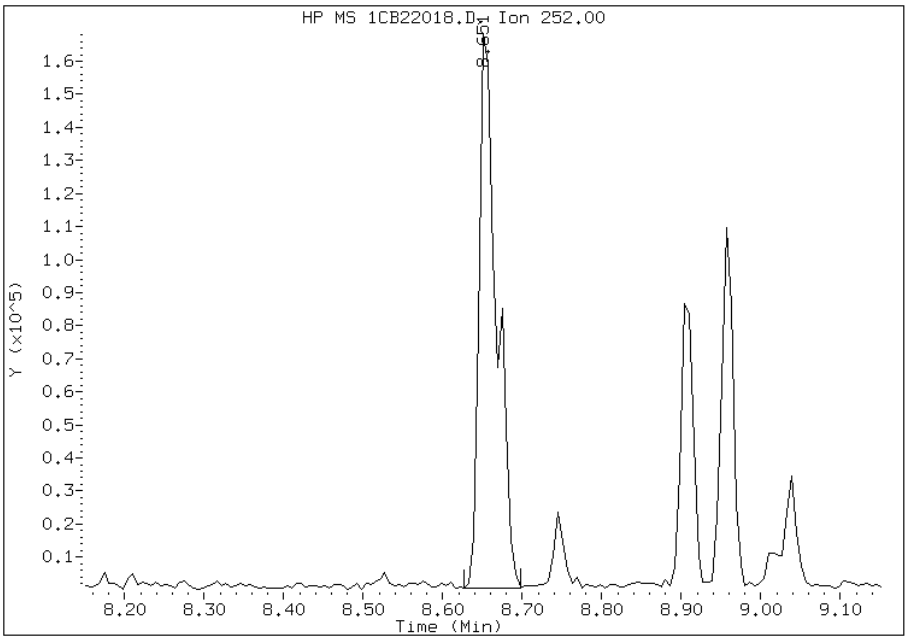
Processing Integration Results

RT: 8.65

Response: 262069

Amount: 4

Conc: 249



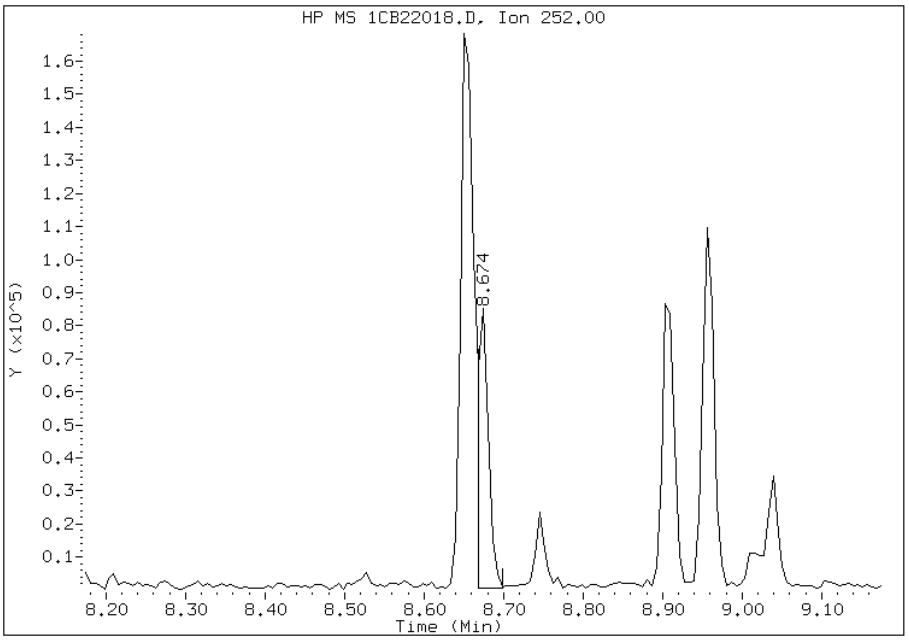

Manual Integration Results

RT: 8.67

Response: 77546

Amount: 1

Conc: 74




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:58
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22018.D
Inj. Date and Time: 22-FEB-2013 16:34
Instrument ID: BSMC5973.i
Client ID: FM0161AG-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

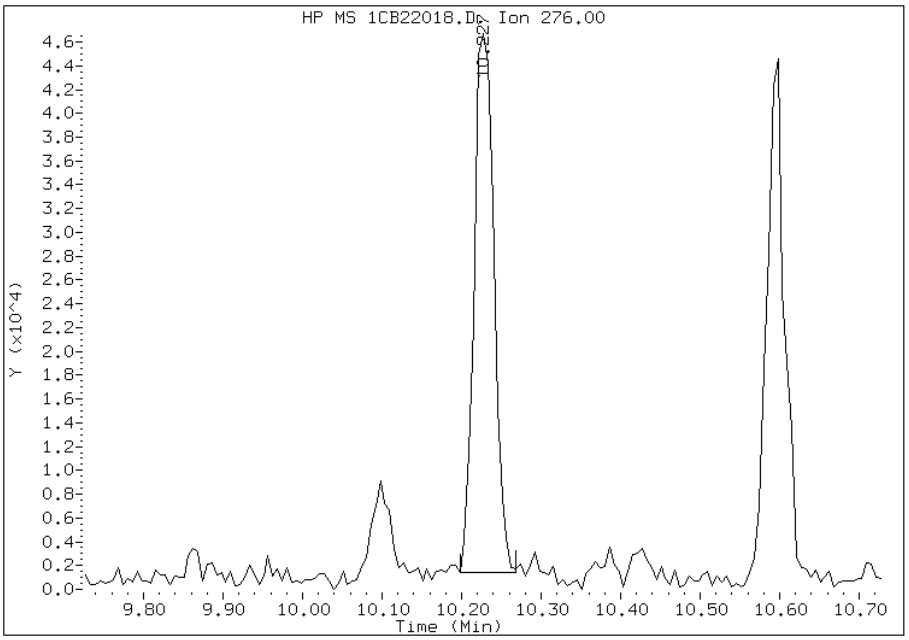
Processing Integration Results

RT: 10.23

Response: 77883

Amount: 1

Conc: 83



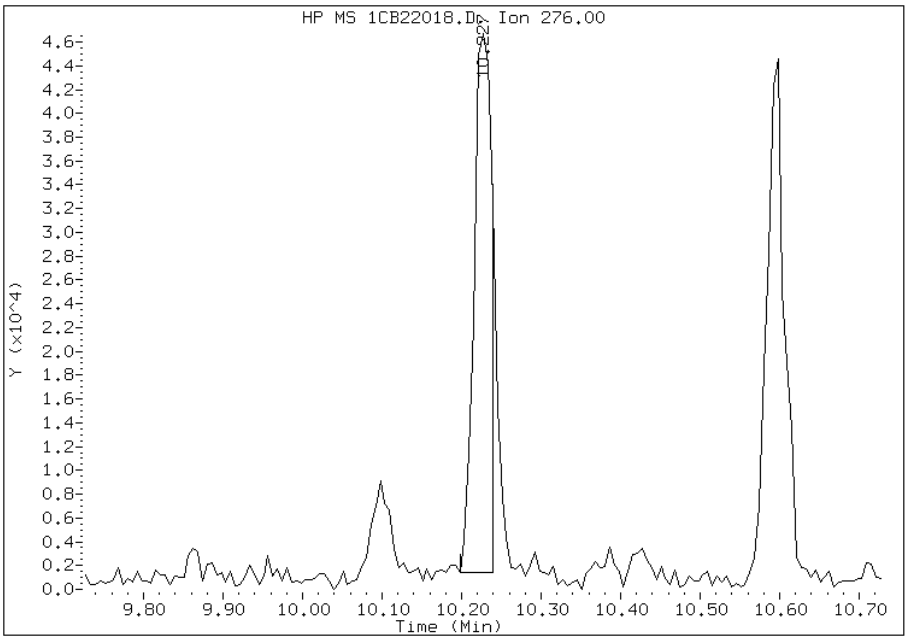

Manual Integration Results

RT: 10.23

Response: 69423

Amount: 1

Conc: 74




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:58
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AH-GS | Lab Sample ID: 680-87545-13

Matrix: Solid | Lab File ID: 1CB22019.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:43

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.08(g) | Date Analyzed: 02/22/2013 16:53

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 5.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 21 |
| 208-96-8 | Acenaphthylene | 20 | J | 42 | 5.2 |
| 120-12-7 | Anthracene | 17 | | 8.8 | 4.4 |
| 56-55-3 | Benzo[a]anthracene | 92 | | 8.4 | 4.1 |
| 50-32-8 | Benzo[a]pyrene | 98 | | 11 | 5.5 |
| 205-99-2 | Benzo[b]fluoranthene | 180 | | 13 | 6.4 |
| 191-24-2 | Benzo[g,h,i]perylene | 65 | | 21 | 4.6 |
| 207-08-9 | Benzo[k]fluoranthene | 75 | | 8.4 | 3.8 |
| 218-01-9 | Chrysene | 130 | | 9.4 | 4.7 |
| 53-70-3 | Dibenz(a,h)anthracene | 21 | | 21 | 4.3 |
| 206-44-0 | Fluoranthene | 110 | | 21 | 4.2 |
| 86-73-7 | Fluorene | 9.4 | J | 21 | 4.3 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 68 | | 21 | 7.5 |
| 90-12-0 | 1-Methylnaphthalene | 42 | | 42 | 4.6 |
| 91-57-6 | 2-Methylnaphthalene | 46 | | 42 | 7.5 |
| 91-20-3 | Naphthalene | 57 | | 42 | 4.6 |
| 85-01-8 | Phenanthrene | 69 | | 8.4 | 4.1 |
| 129-00-0 | Pyrene | 110 | | 21 | 3.9 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 85 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22019.D
Lab Smp Id: 680-87545-A-13-A Client Smp ID: FM0161AH-GS
Inj Date : 22-FEB-2013 16:53
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-13-a
Misc Info : 680-87545-A-13-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.080 | Weight Extracted |
| M | 5.229 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1650935 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1297495 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2418287 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 312086 | 8.54749 | 598.0818 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2747108 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2694972 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 35251 | 0.82017 | 57.3886 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 18835 | 0.65697 | 45.9691 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 15836 | 0.60648 | 42.4367 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 15192 | 0.29042 | 20.3209 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 5515 | 0.13412 | 9.3845 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 68672 | 0.98206 | 68.7166 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 17102 | 0.25008 | 17.4981 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 9931 | 0.16336 | 11.4306 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 119083 | 1.55506 | 108.8103 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 119898 | 1.62409 | 113.6404 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 103879 | 1.31017 | 91.6745 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 150800 | 1.90053 | 132.9830 |
| 20 Benzo(b)fluoranthene | 252 | 8.657 | 8.657 | (0.960) | 179624 | 2.55040 | 178.4559(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 77710 | 1.07557 | 75.2595(M) |
| 22 Benzo(a)pyrene | 252 | 8.957 | 8.963 | (0.993) | 95748 | 1.39961 | 97.9333 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 62209 | 0.96666 | 67.6386(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.257 | (1.136) | 18970 | 0.30136 | 21.0866 |
| 26 Benzo(g,h,i)perylene | 276 | 10.598 | 10.610 | (1.175) | 62624 | 0.93024 | 65.0902(M) |

QC Flag Legend

M - Compound response manually integrated.

Data File: 1CB22019.D

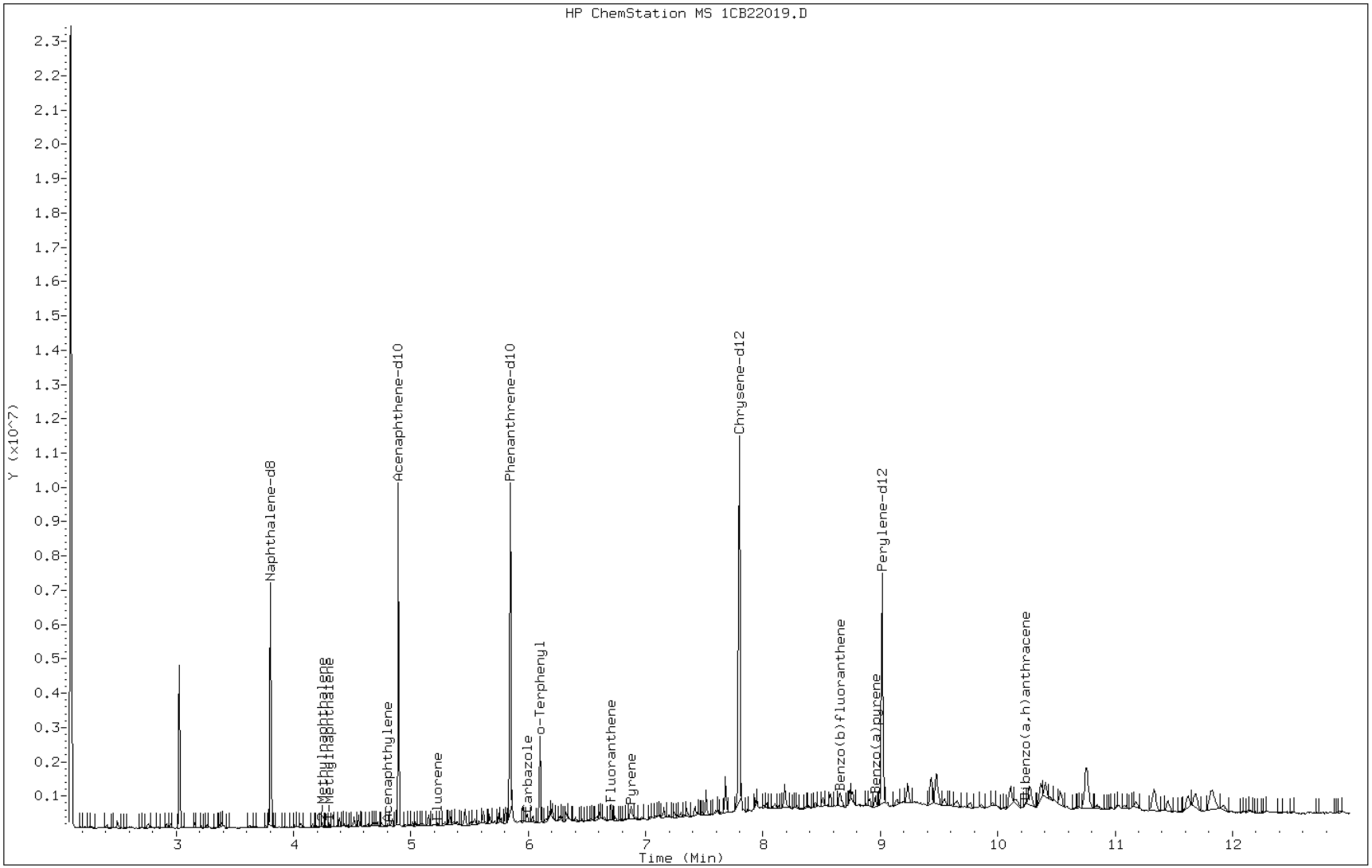
Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC



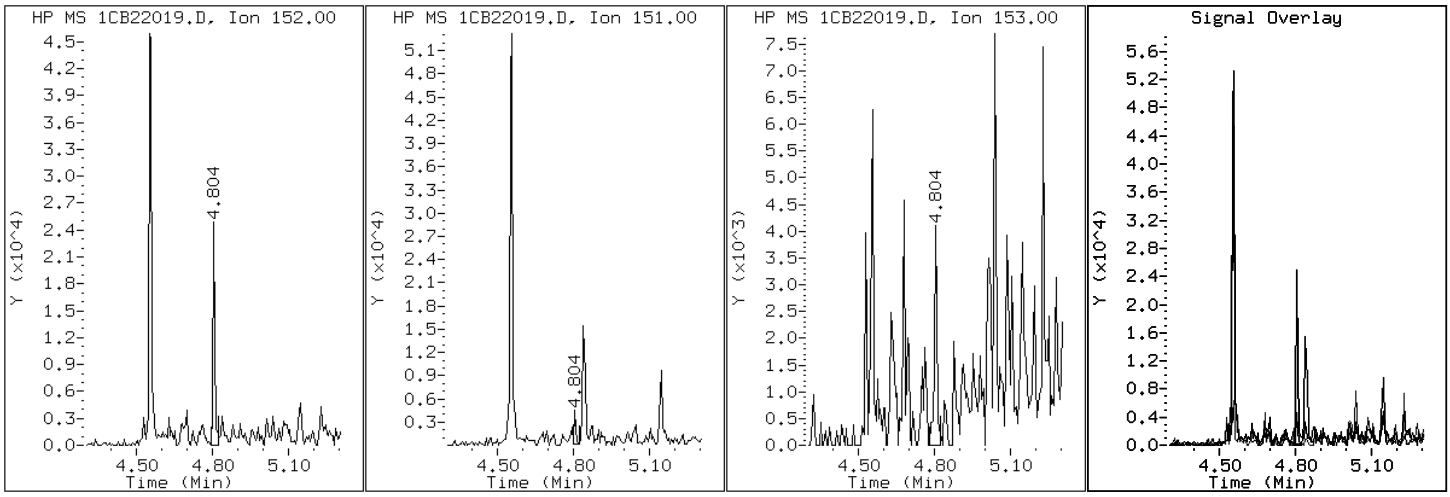
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a  Operator: SCC

5 Acenaphthylene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

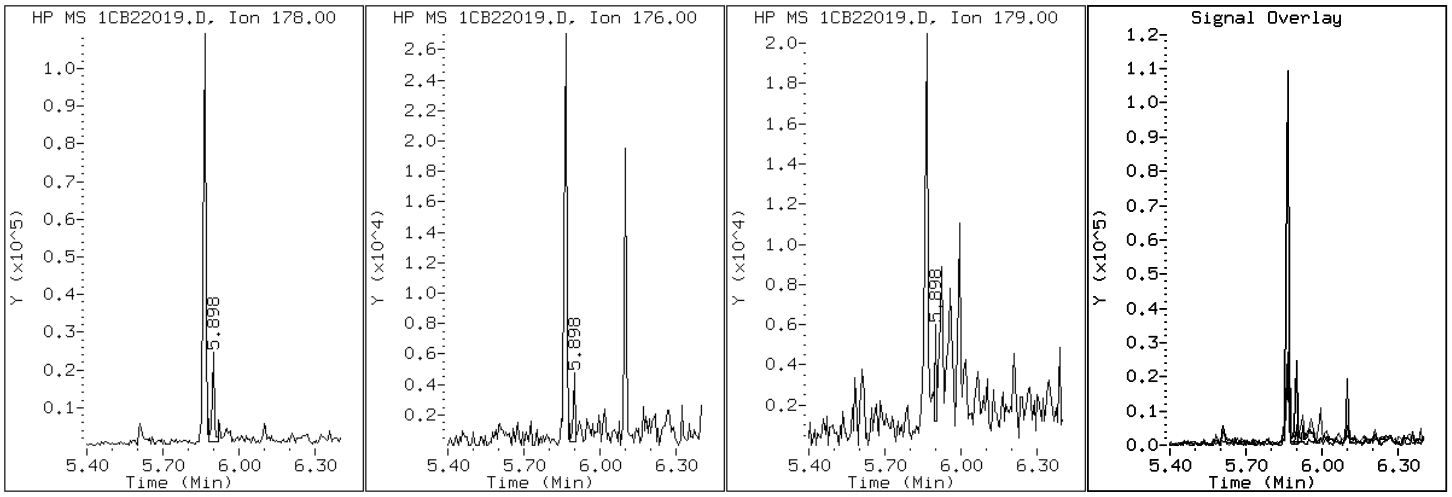
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

12 Anthracene



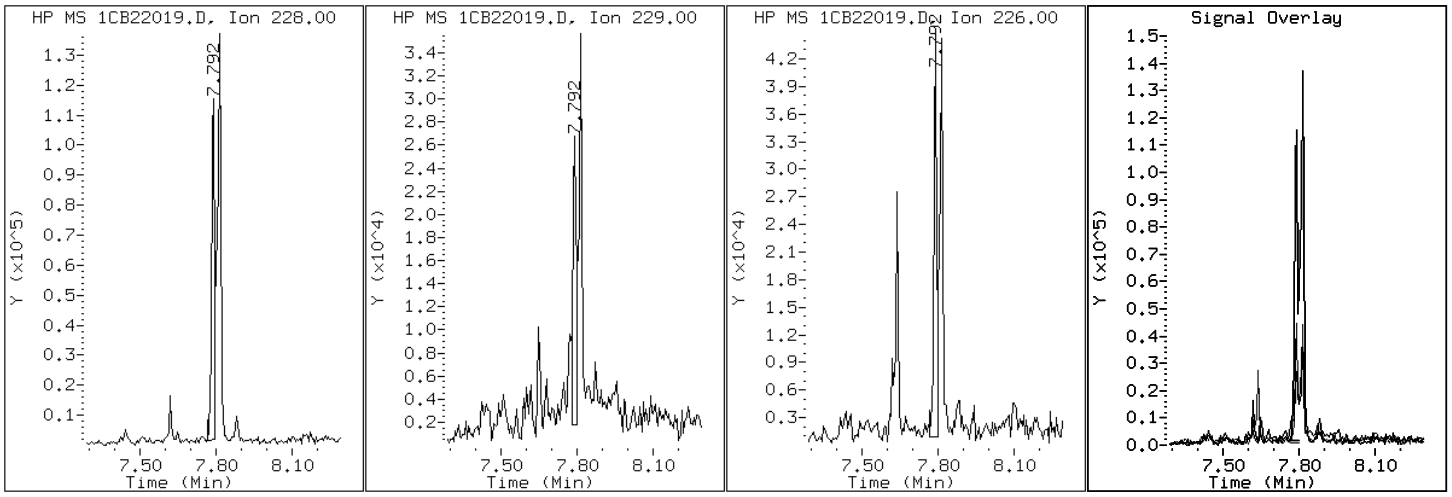
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a Operator: SCC

17 Benzo(a)anthracene



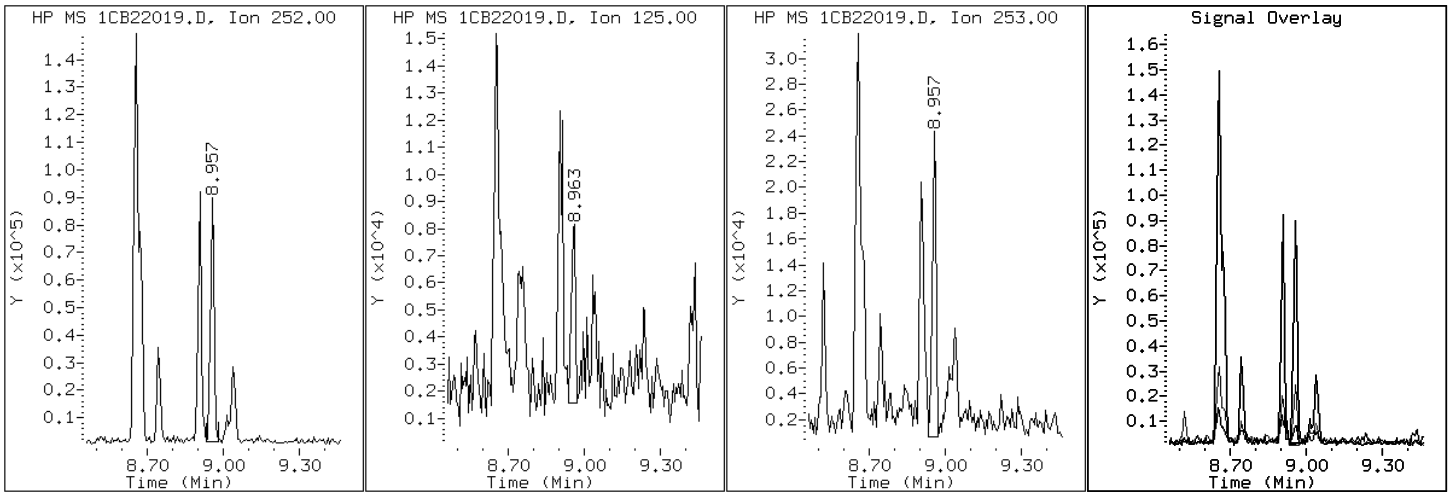
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a  Operator: SCC

22 Benzo(a)pyrene



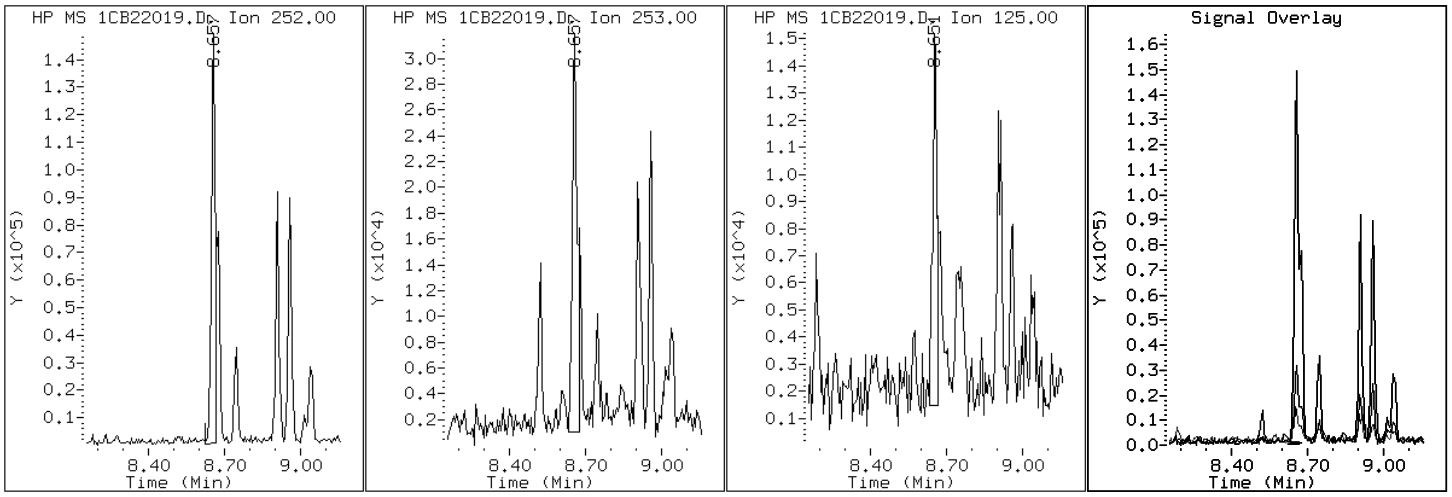
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a  Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

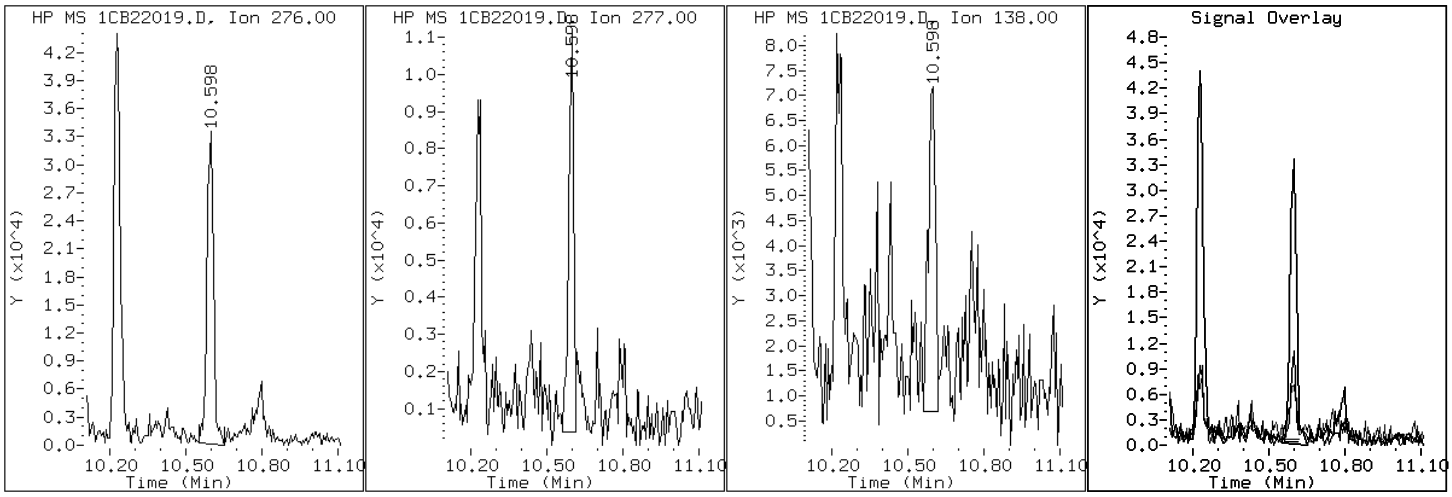
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

26 Benzo(g,h,i)perylene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

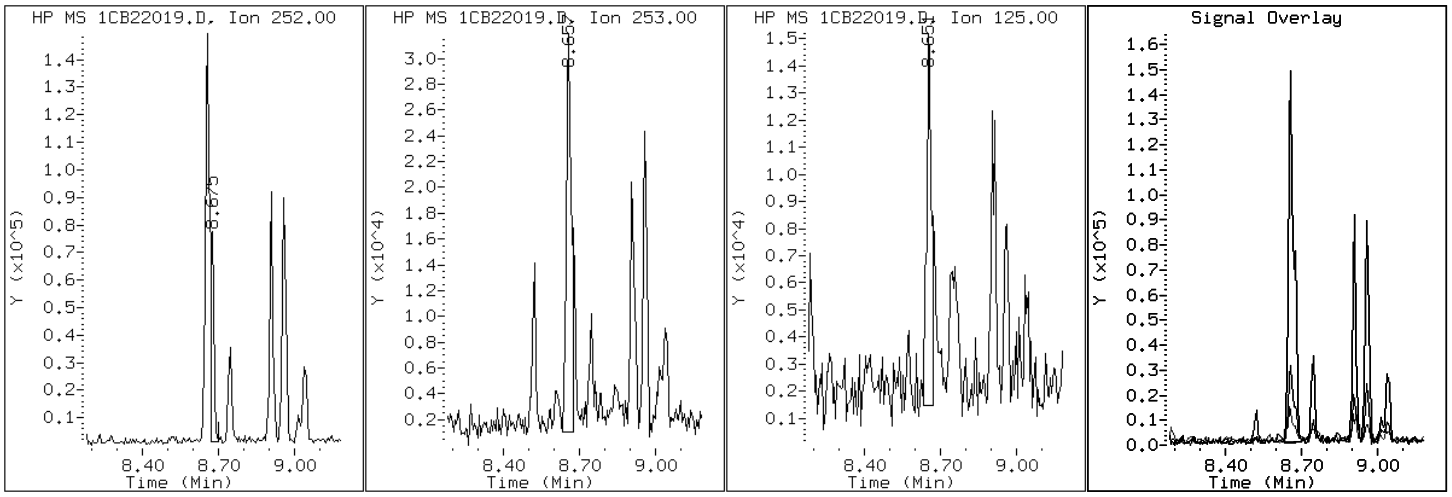
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

21 Benzo(k)fluoranthene



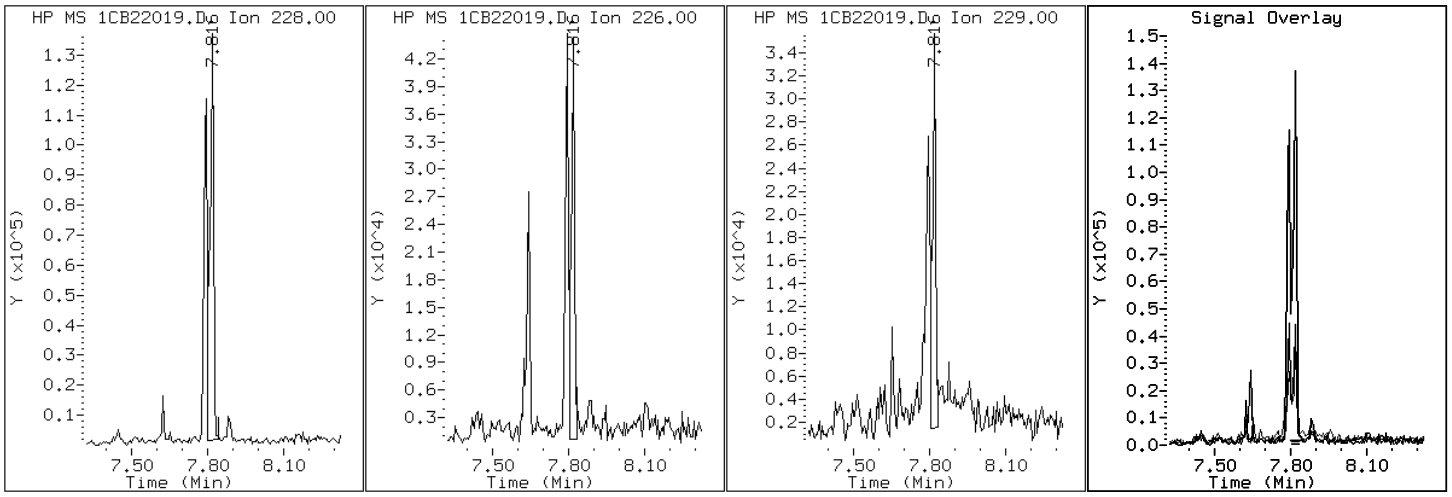
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a Operator: SCC

19 Chrysene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

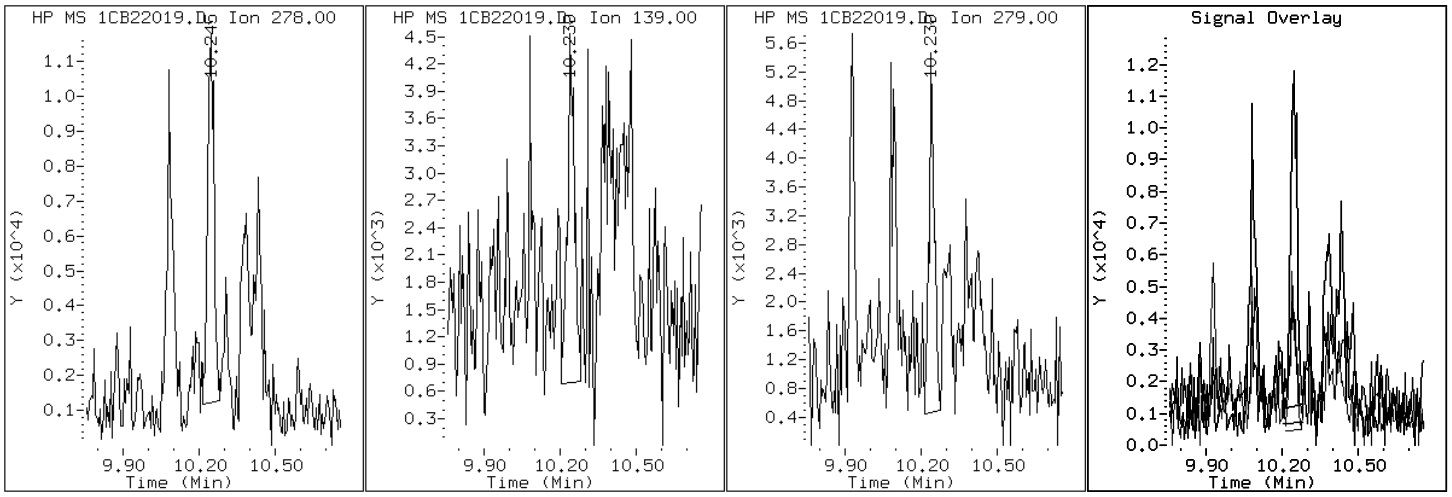
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

25 Dibenzo(a,h)anthracene



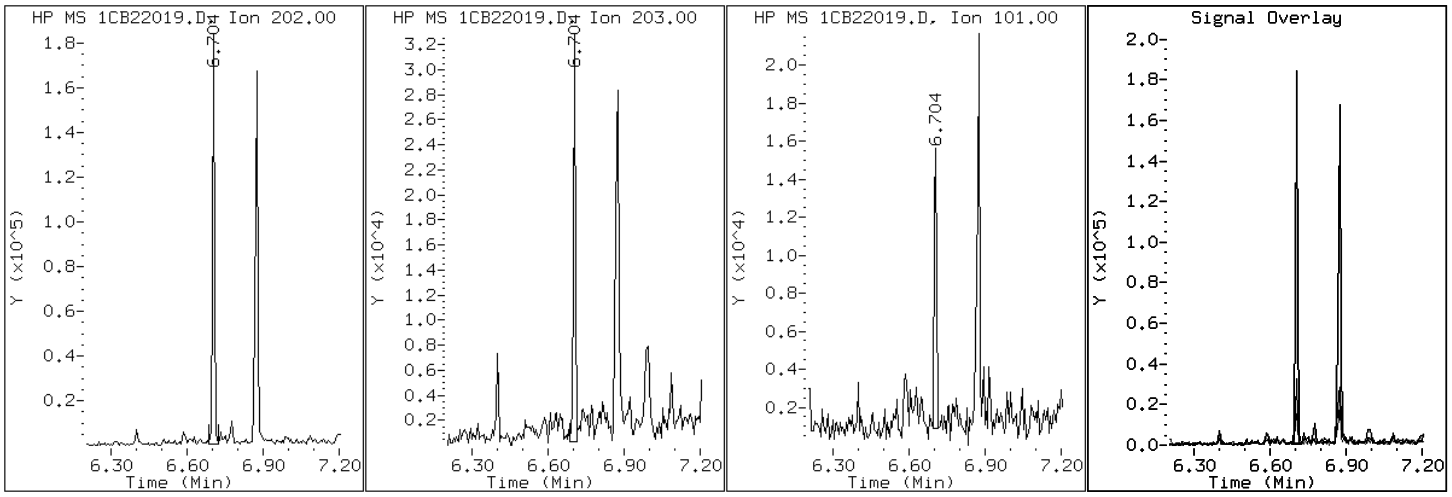
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a Operator: SCC

15 Fluoranthene



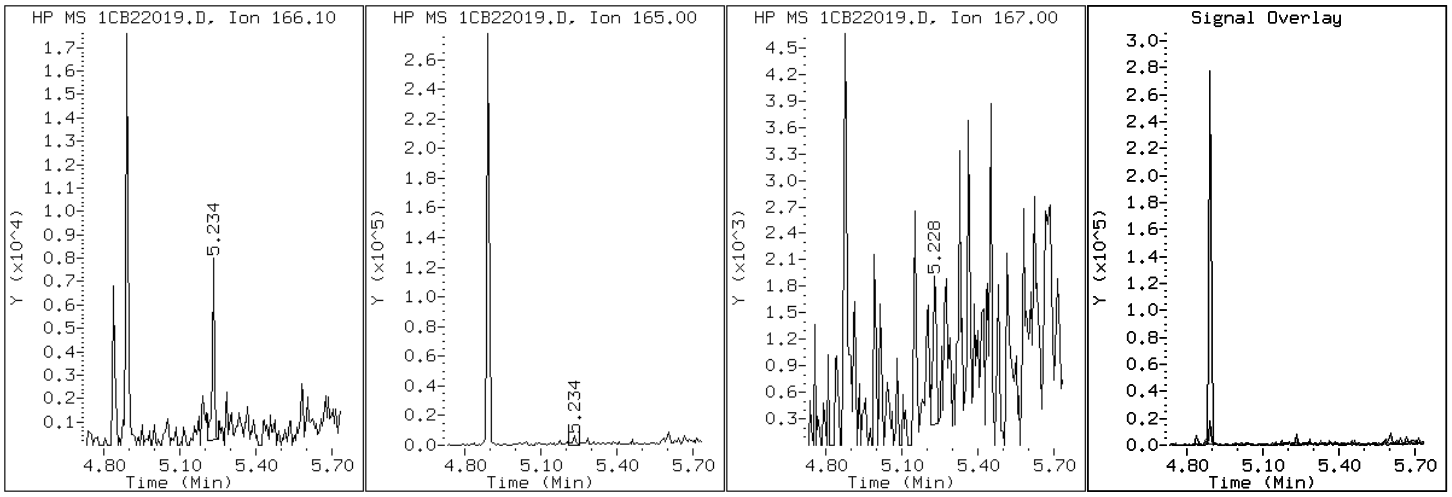
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a  Operator: SCC

9 Fluorene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

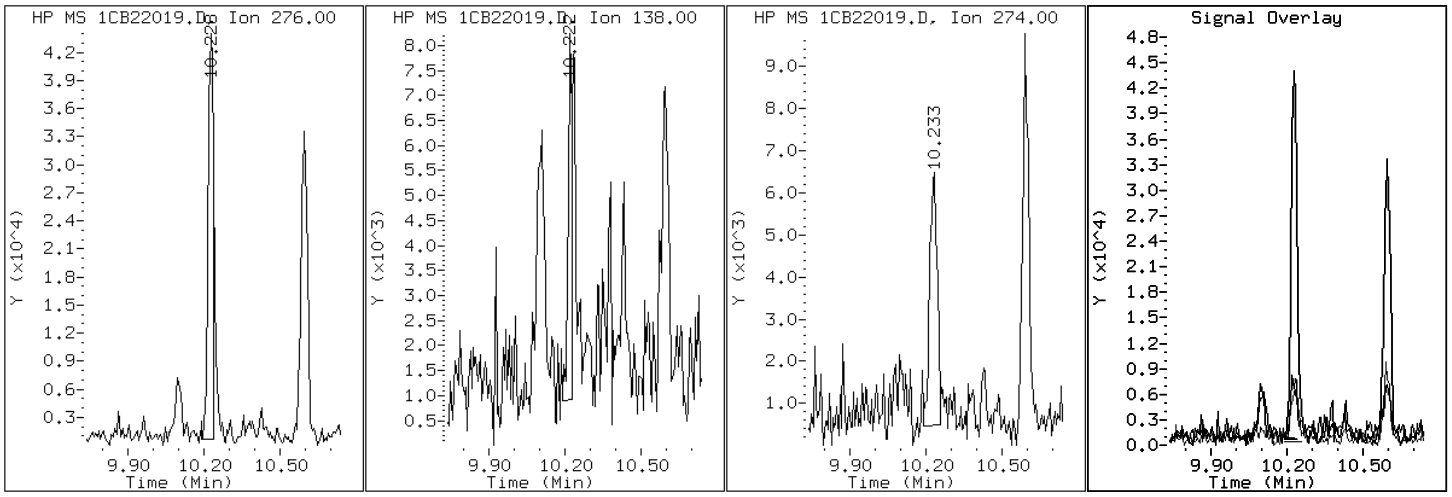
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



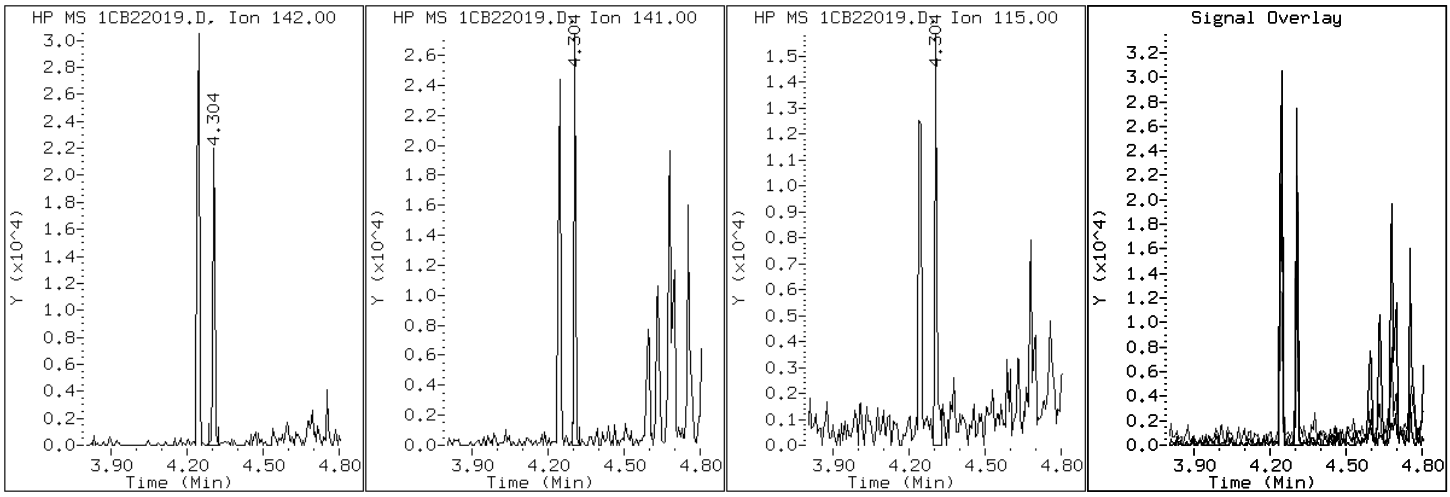
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a  Operator: SCC

4 1-Methylnaphthalene



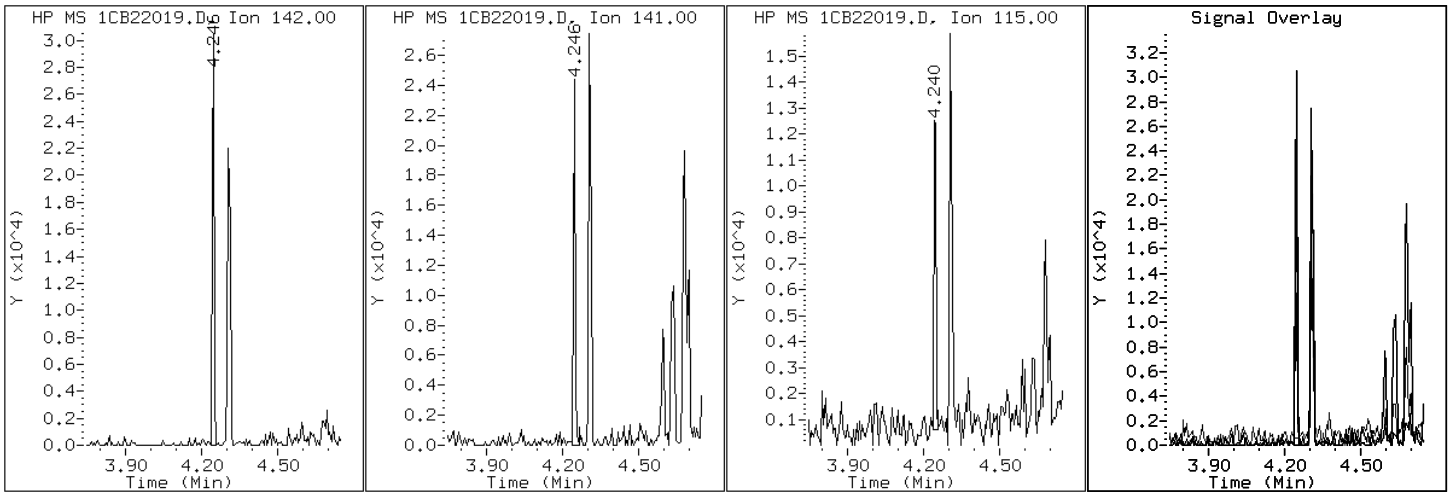
Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

Client ID: FM0161AH-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a  Operator: SCC

3 2-Methylnaphthalene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

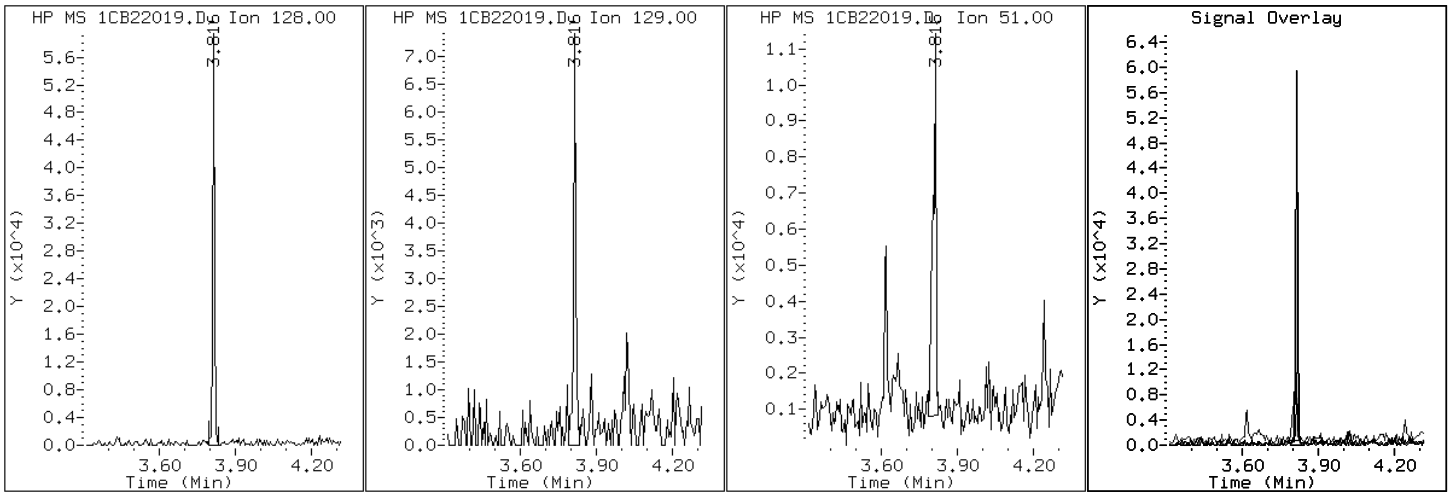
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

2 Naphthalene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

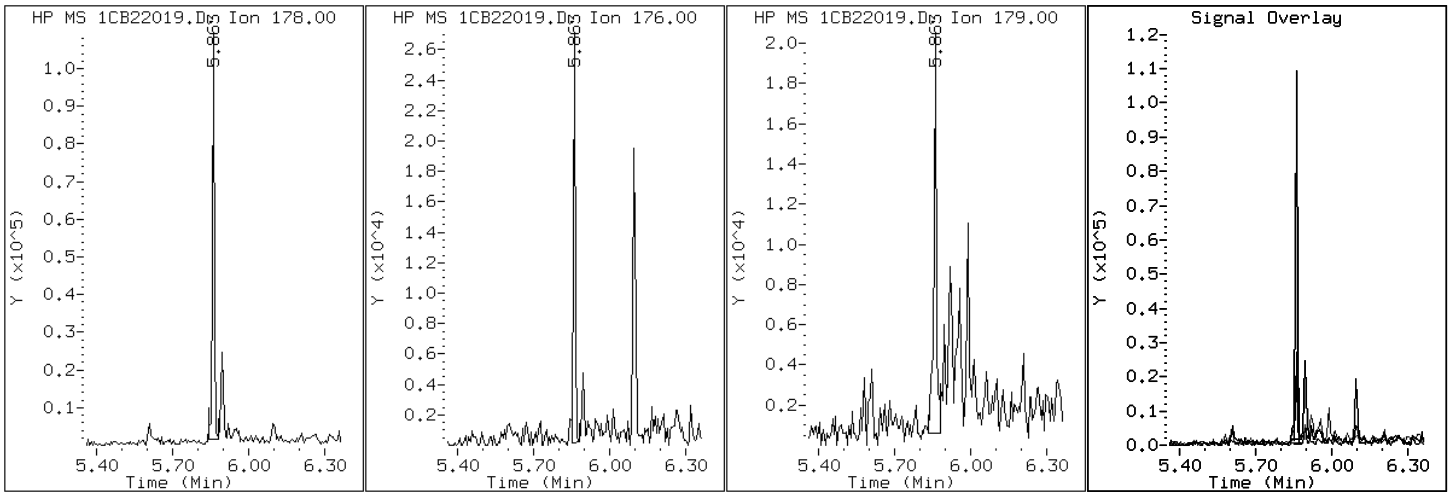
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

11 Phenanthrene



Data File: 1CB22019.D

Date: 22-FEB-2013 16:53

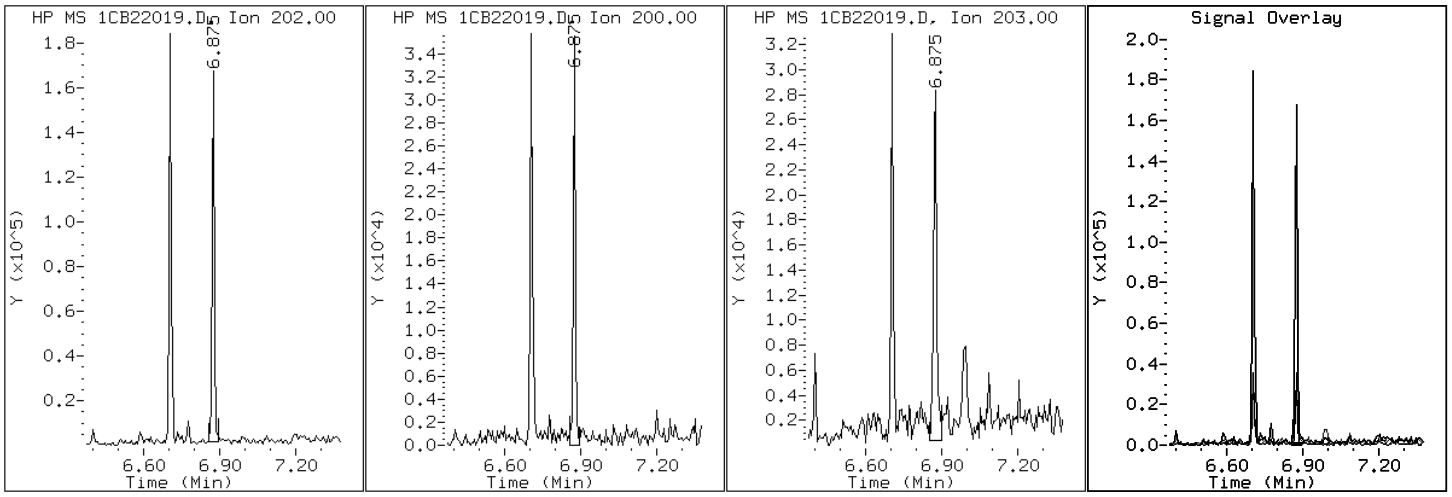
Client ID: FM0161AH-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-13-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22019.D
Inj. Date and Time: 22-FEB-2013 16:53
Instrument ID: BSMC5973.i
Client ID: FM0161AH-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

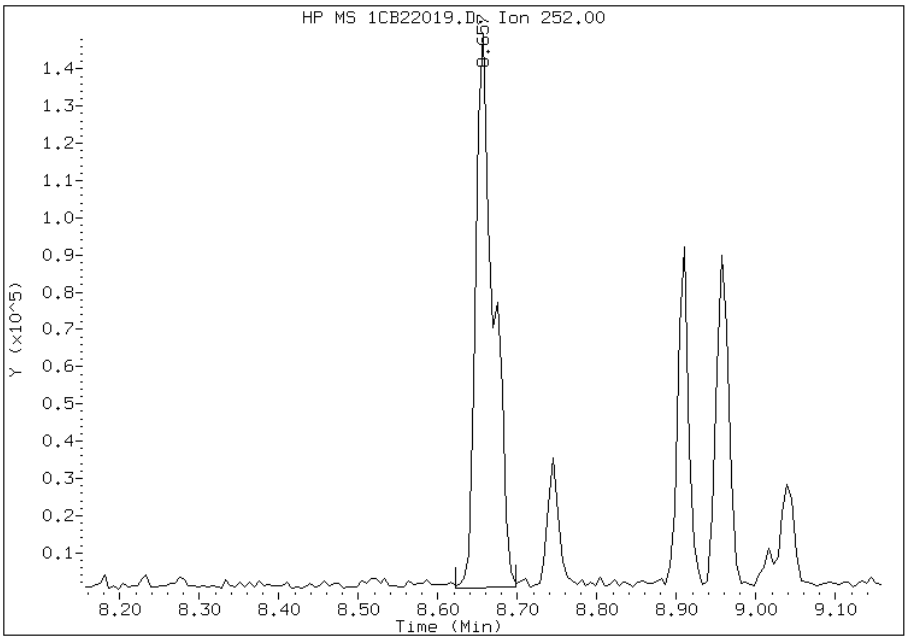
Processing Integration Results

RT: 8.66

Response: 233978

Amount: 3

Conc: 232



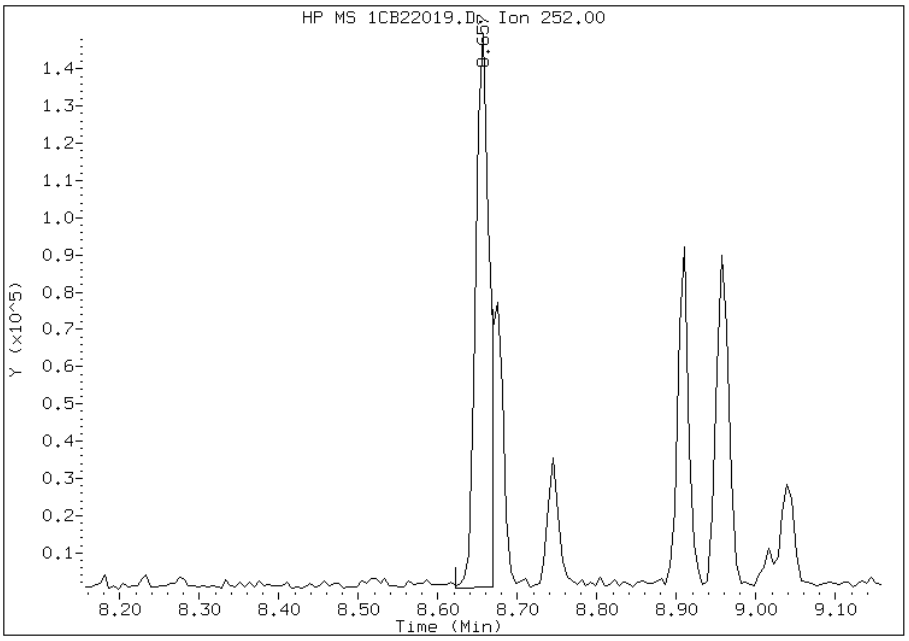

Manual Integration Results

RT: 8.66

Response: 179624

Amount: 3

Conc: 178




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:59
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22019.D
Inj. Date and Time: 22-FEB-2013 16:53
Instrument ID: BSMC5973.i
Client ID: FM0161AH-GS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

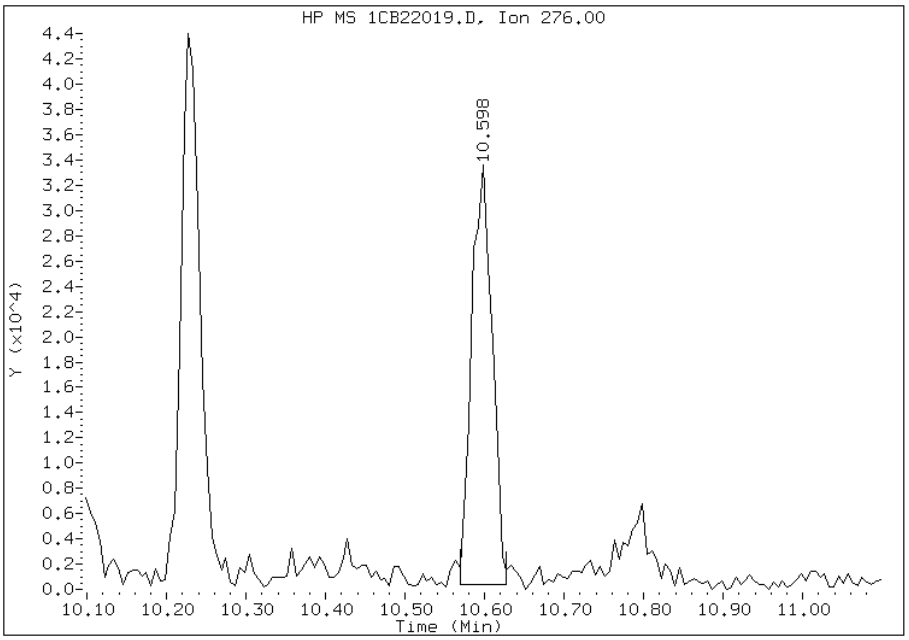
Processing Integration Results

RT: 10.60

Response: 59078

Amount: 1

Conc: 61



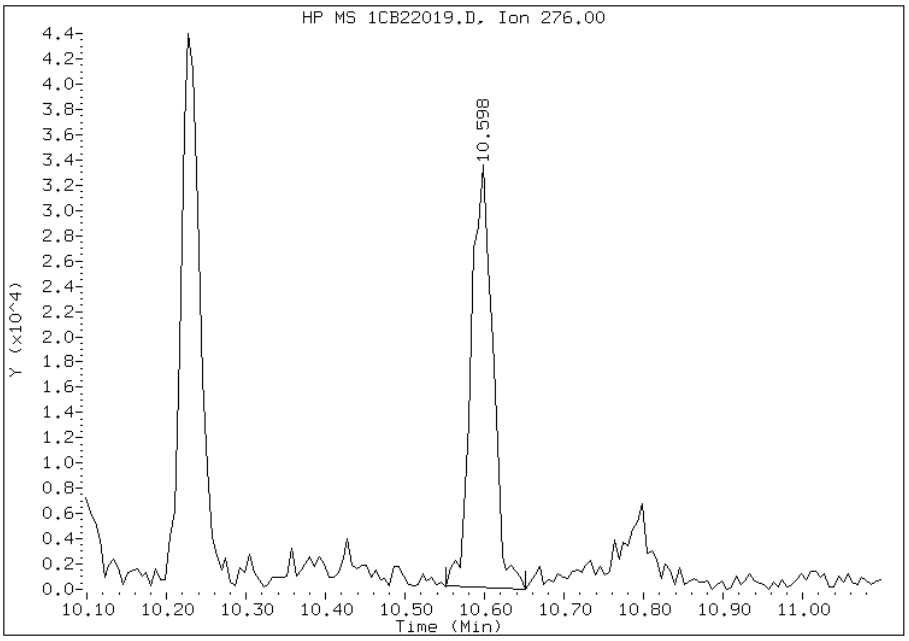

Manual Integration Results

RT: 10.60

Response: 62624

Amount: 1

Conc: 65




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:59
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22019.D
Inj. Date and Time: 22-FEB-2013 16:53
Instrument ID: BSMC5973.i
Client ID: FM0161AH-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

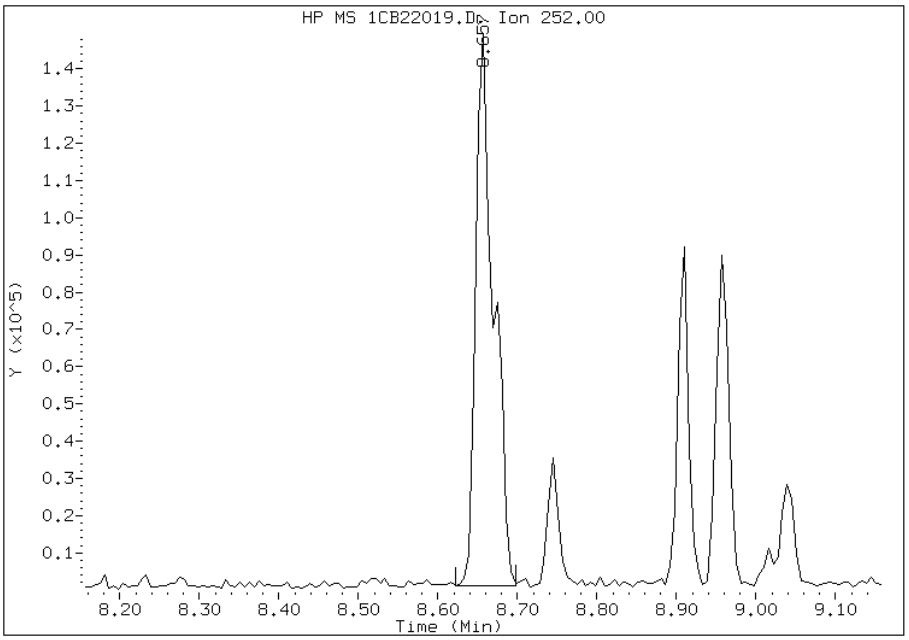
Processing Integration Results

RT: 8.66

Response: 231228

Amount: 3

Conc: 224



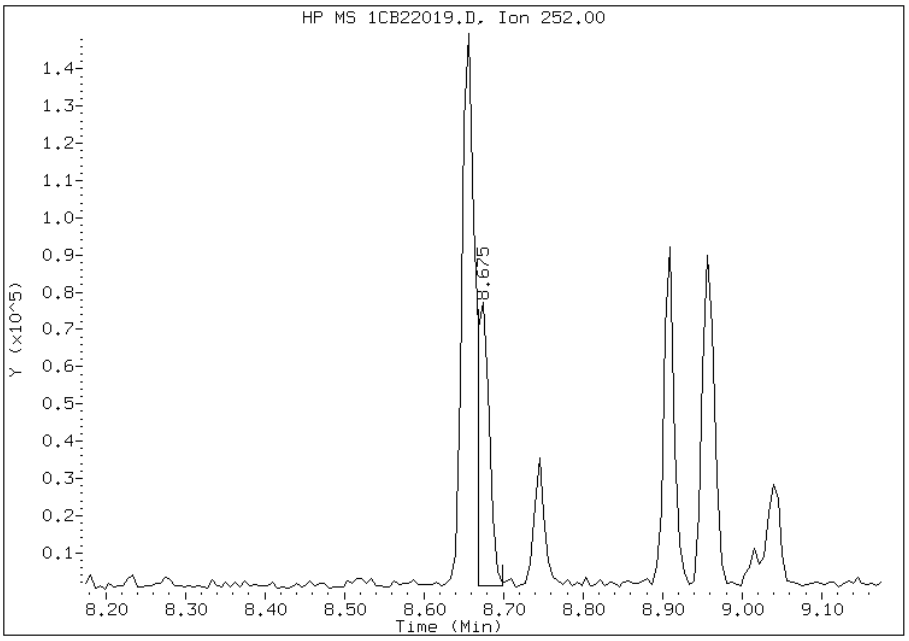

Manual Integration Results

RT: 8.67

Response: 77710

Amount: 1

Conc: 75




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:59
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22019.D
Inj. Date and Time: 22-FEB-2013 16:53
Instrument ID: BSMC5973.i
Client ID: FM0161AH-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

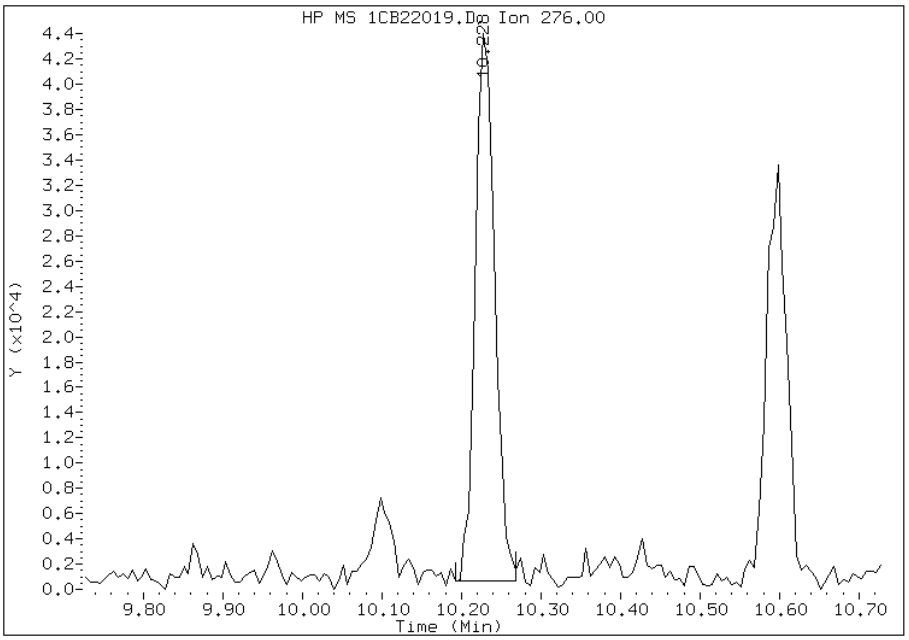
Processing Integration Results

RT: 10.23

Response: 73221

Amount: 1

Conc: 80



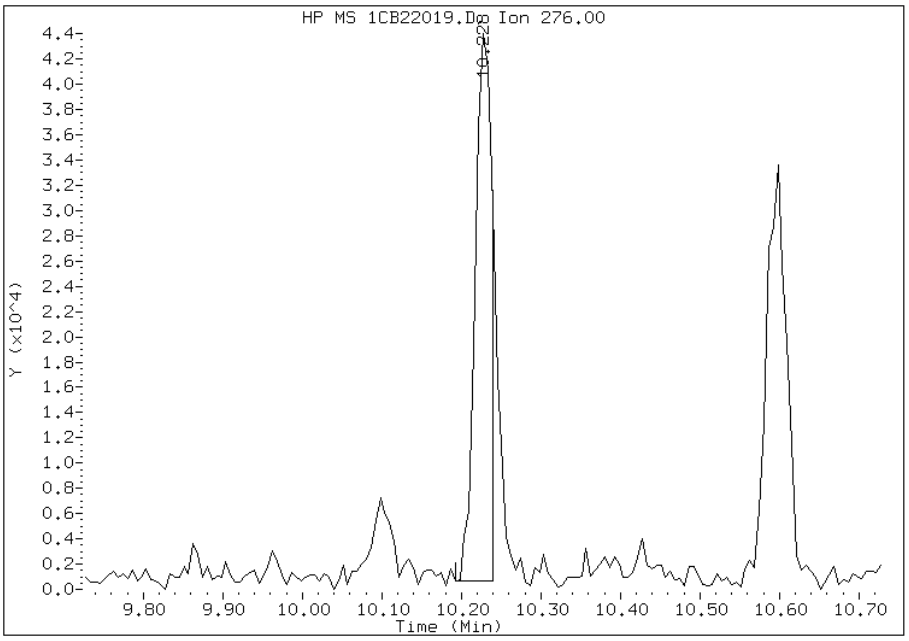

Manual Integration Results

RT: 10.23

Response: 62209

Amount: 1

Conc: 68




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:00
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AI-GS | Lab Sample ID: 680-87545-14

Matrix: Solid | Lab File ID: 1CB22020.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:52

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.26(g) | Date Analyzed: 02/22/2013 17:11

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 54.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 220 | U | 220 | 44 |
| 208-96-8 | Acenaphthylene | 87 | U | 87 | 11 |
| 120-12-7 | Anthracene | 18 | U | 18 | 9.2 |
| 56-55-3 | Benzo[a]anthracene | 47 | | 17 | 8.5 |
| 50-32-8 | Benzo[a]pyrene | 23 | | 23 | 11 |
| 205-99-2 | Benzo[b]fluoranthene | 32 | | 27 | 13 |
| 191-24-2 | Benzo[g,h,i]perylene | 18 | J | 44 | 9.6 |
| 207-08-9 | Benzo[k]fluoranthene | 18 | | 17 | 7.8 |
| 218-01-9 | Chrysene | 26 | | 20 | 9.8 |
| 53-70-3 | Dibenz(a,h)anthracene | 44 | U | 44 | 8.9 |
| 206-44-0 | Fluoranthene | 65 | | 44 | 8.7 |
| 86-73-7 | Fluorene | 18 | J | 44 | 8.9 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 44 | U | 44 | 15 |
| 90-12-0 | 1-Methylnaphthalene | 50 | J | 87 | 9.6 |
| 91-57-6 | 2-Methylnaphthalene | 59 | J | 87 | 15 |
| 91-20-3 | Naphthalene | 92 | | 87 | 9.6 |
| 85-01-8 | Phenanthrene | 68 | | 17 | 8.5 |
| 129-00-0 | Pyrene | 39 | J | 44 | 8.1 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 82 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22020.D
Lab Smp Id: 680-87545-A-14-A Client Smp ID: FM0161AI-GS
Inj Date : 22-FEB-2013 17:11
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-14-a
Misc Info : 680-87545-A-14-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.260 | Weight Extracted |
| M | 54.921 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1664803 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1299912 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2478501 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 305293 | 8.15830 | 1185.9694 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2836823 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2753643 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 27465 | 0.63369 | 92.1198 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 11821 | 0.40888 | 59.4392 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 8995 | 0.34162 | 49.6610 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 5078 | 0.12326 | 17.9186 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 33457 | 0.46684 | 67.8640 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 5611 | 0.09006 | 13.0914(Q) |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 35006 | 0.44603 | 64.8385 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 20287 | 0.26611 | 38.6842 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 26345 | 0.32177 | 46.7750 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 14436 | 0.17618 | 25.6116 |
| 20 Benzo(b)fluoranthene | 252 | 8.651 | 8.657 | (0.960) | 15828 | 0.21995 | 31.9735(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.662 | 8.680 | (0.961) | 9161 | 0.12409 | 18.0395(MH) |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 10865 | 0.15544 | 22.5958 |
| 26 Benzo(g,h,i)perylene | 276 | 10.603 | 10.610 | (1.176) | 8554 | 0.12436 | 18.0776(M) |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1CB22020.D

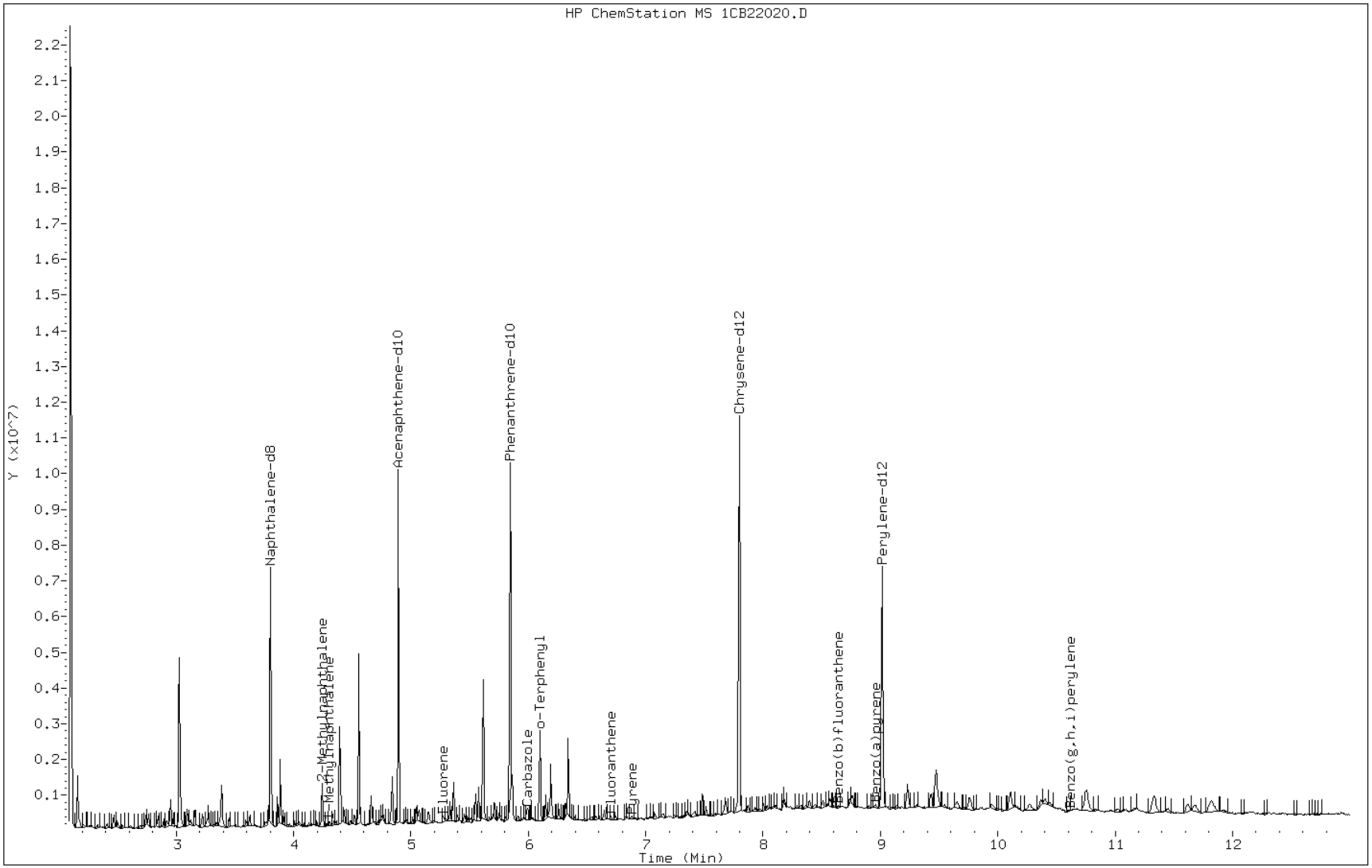
Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a

Operator: SCC



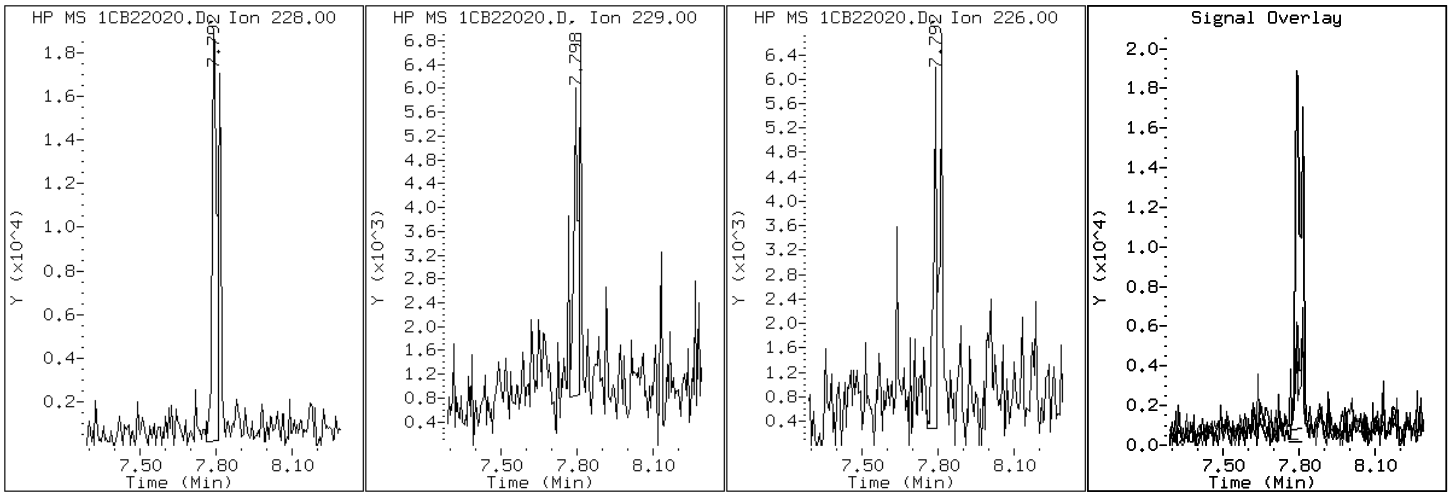
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a  Operator: SCC

17 Benzo(a)anthracene



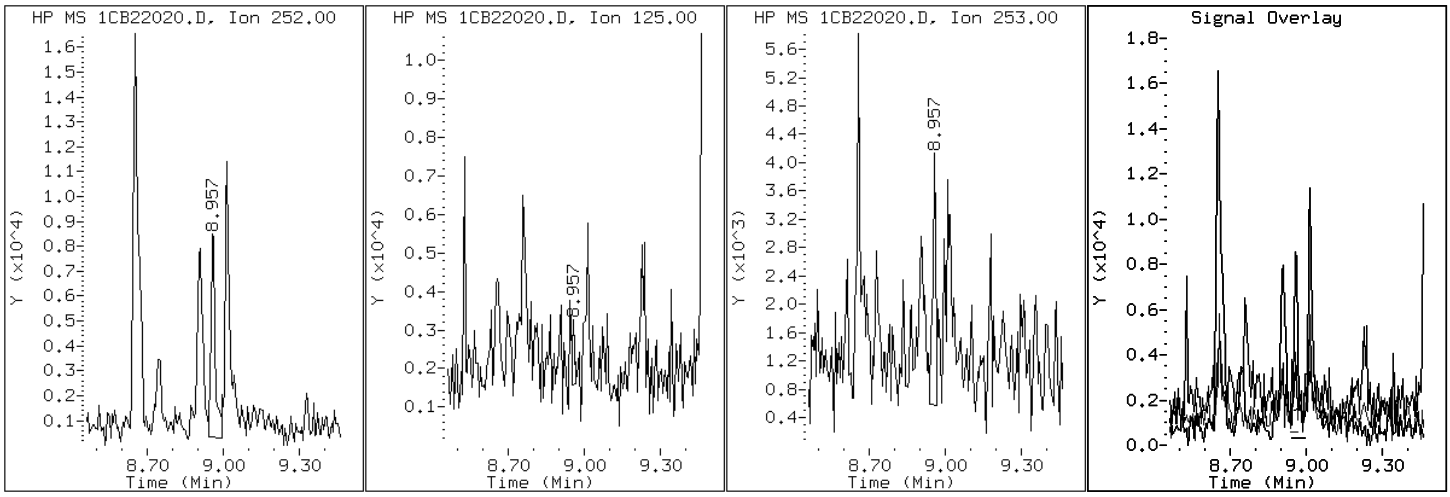
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a Operator: SCC

22 Benzo(a)pyrene



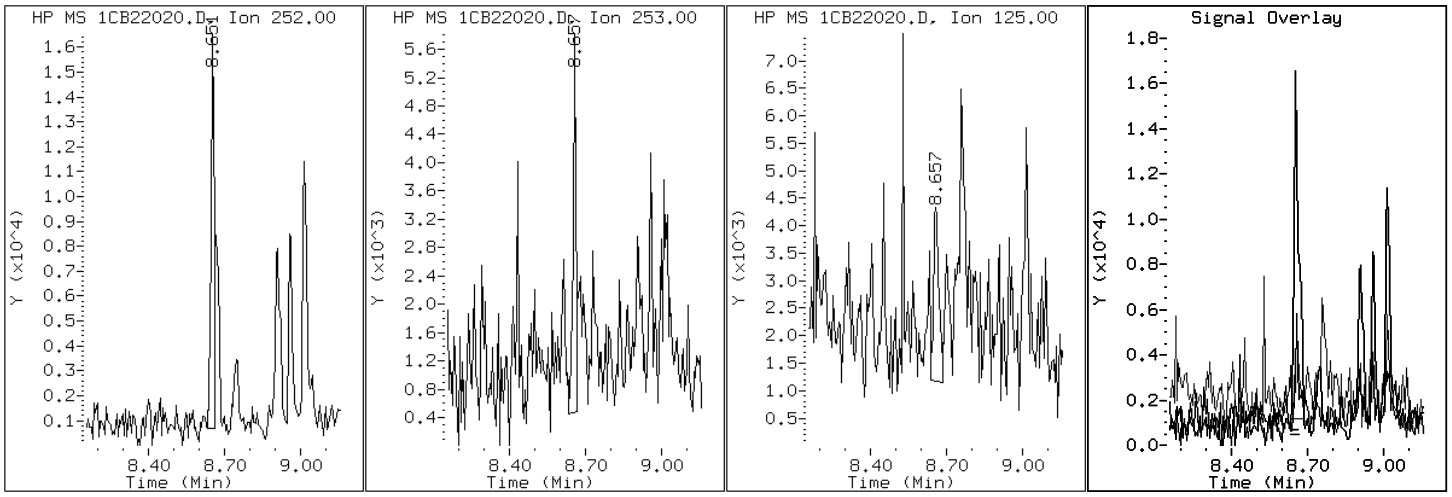
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a  Operator: SCC

20 Benzo(b)fluoranthene



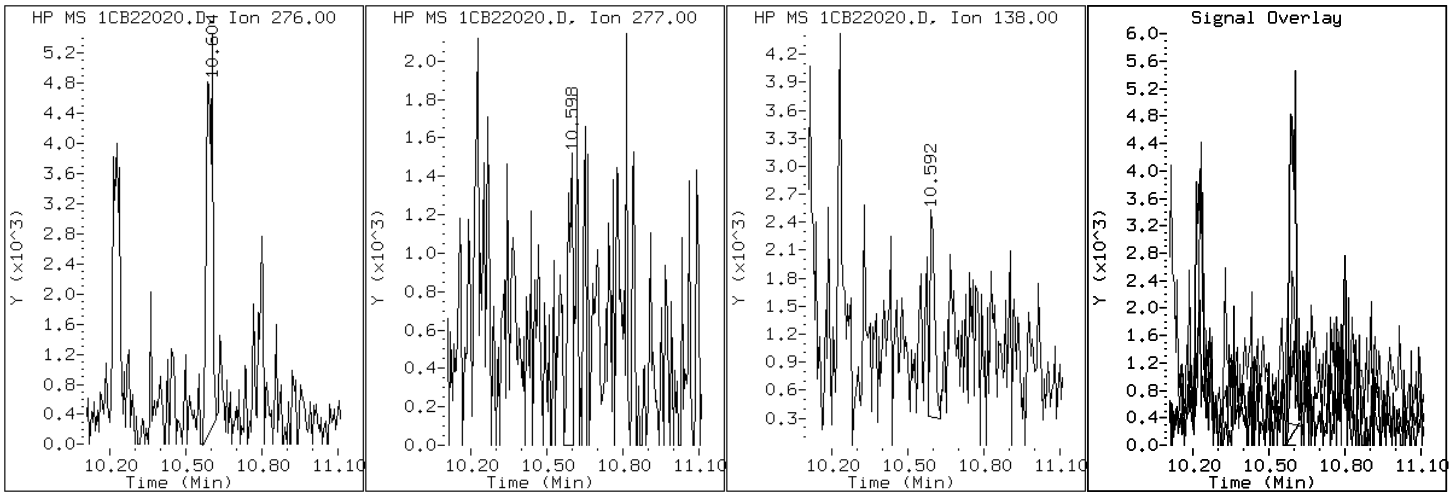
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS | Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a | Operator: SCC

26 Benzo(g,h,i)perylene



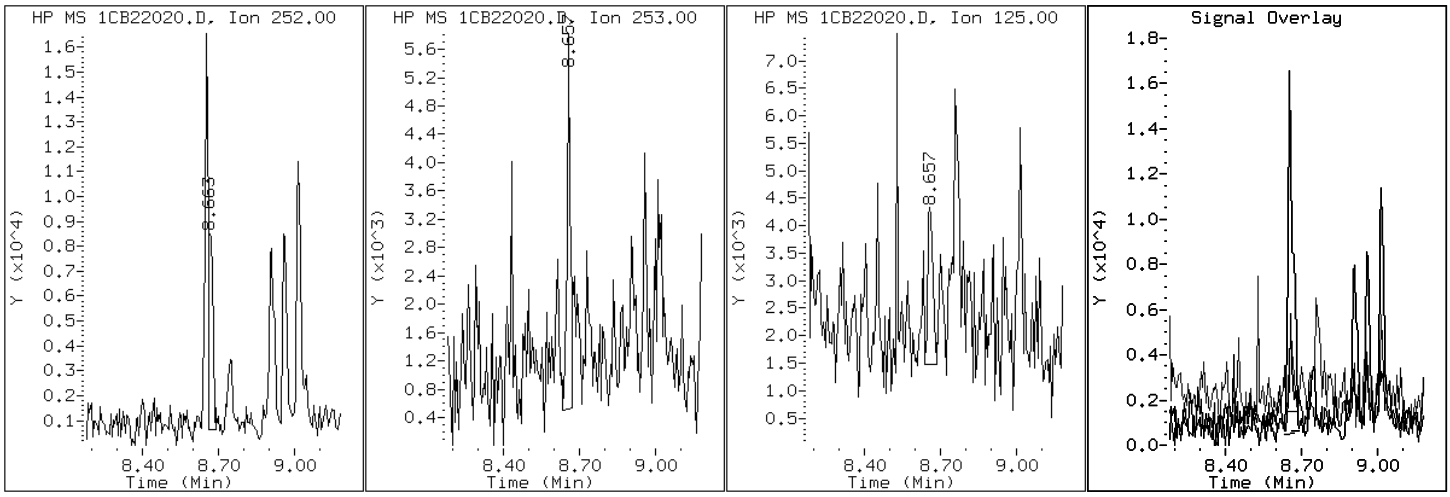
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a Operator: SCC

21 Benzo(k)fluoranthene



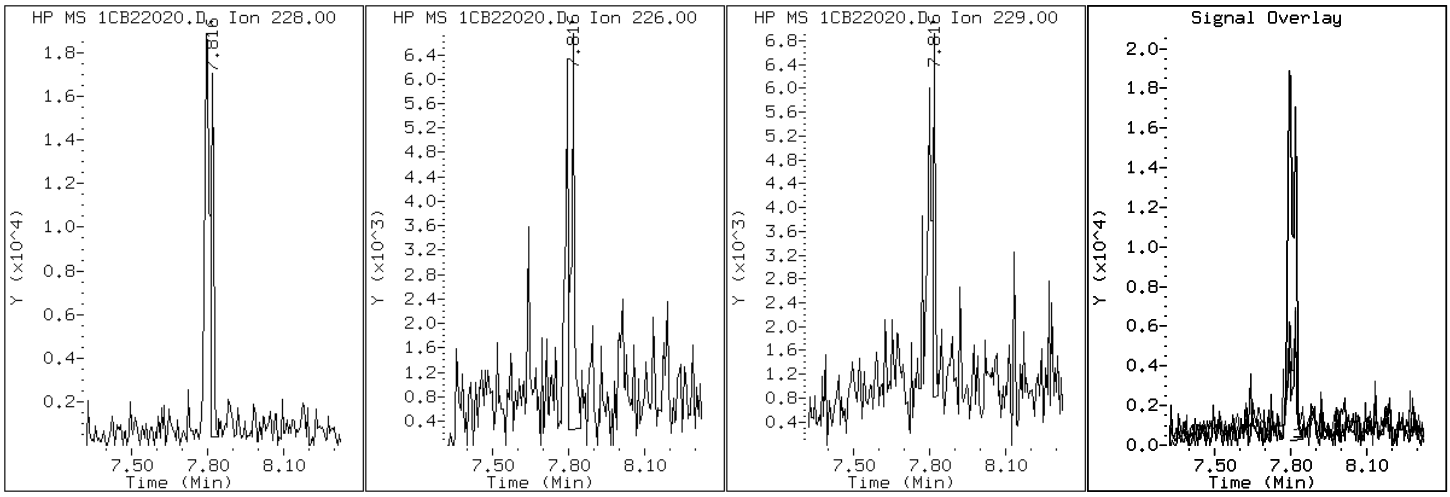
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a  Operator: SCC

19 Chrysene



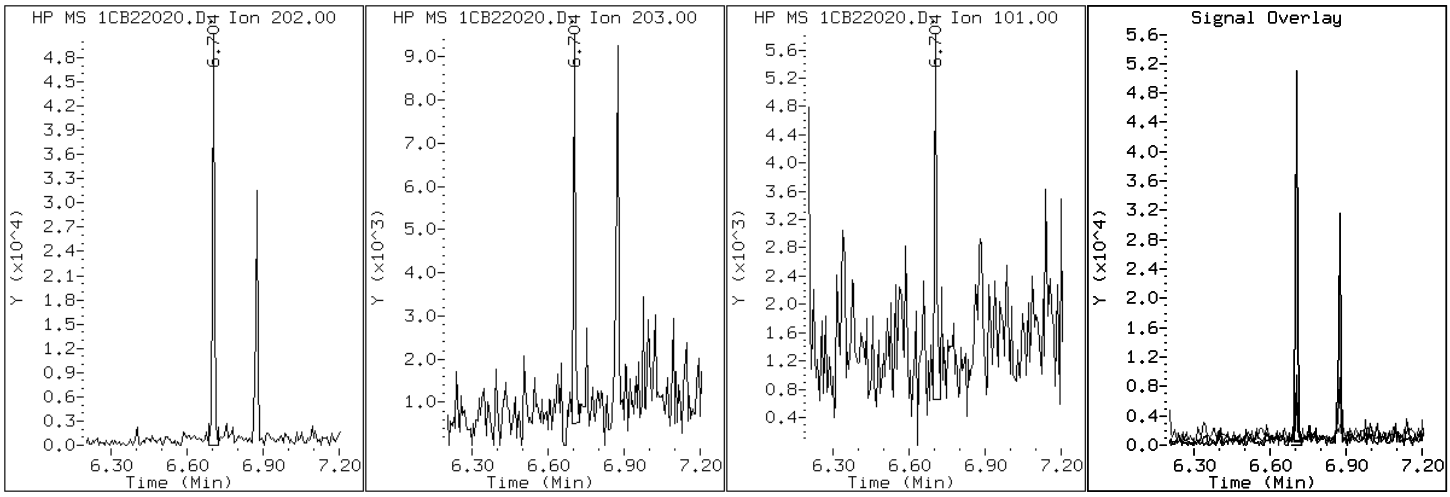
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a Operator: SCC

15 Fluoranthene



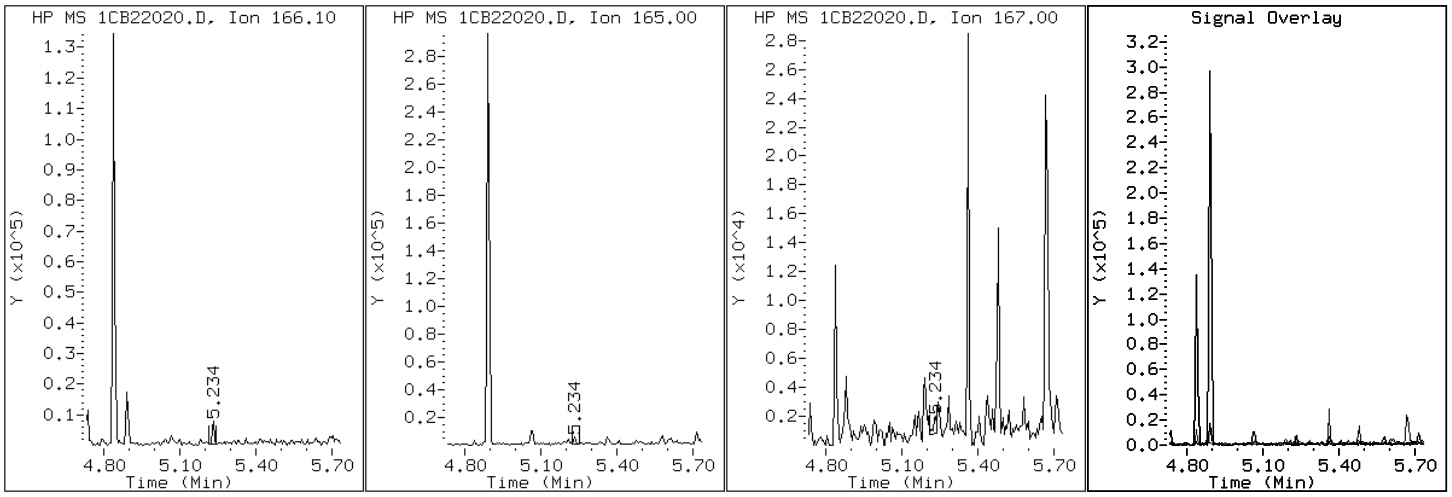
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a Operator: SCC

9 Fluorene



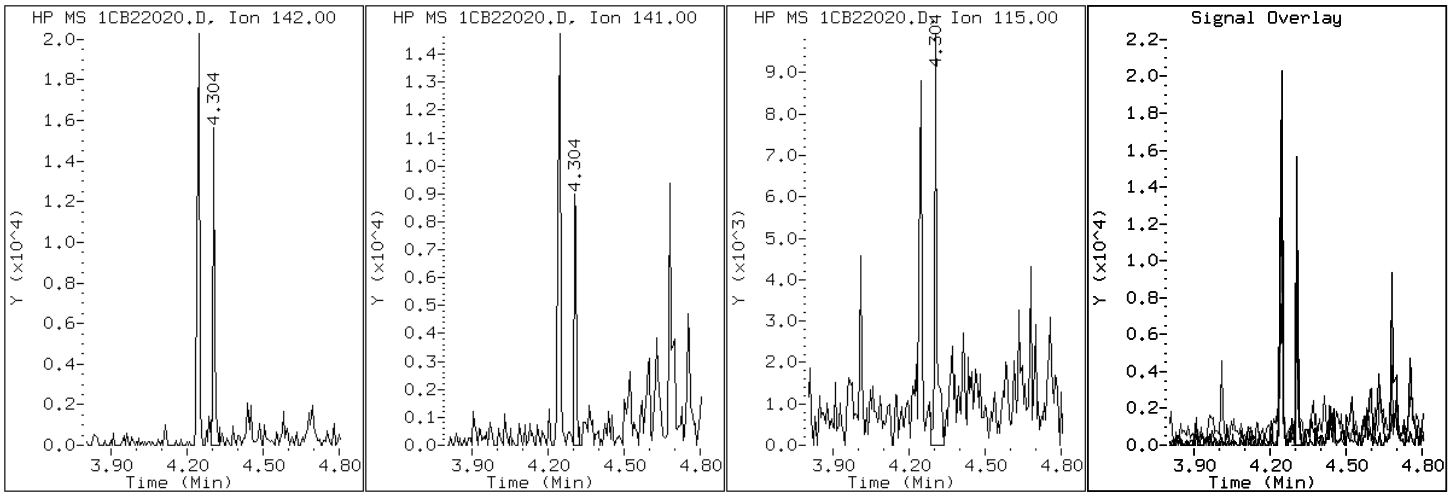
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a  Operator: SCC

4 1-Methylnaphthalene



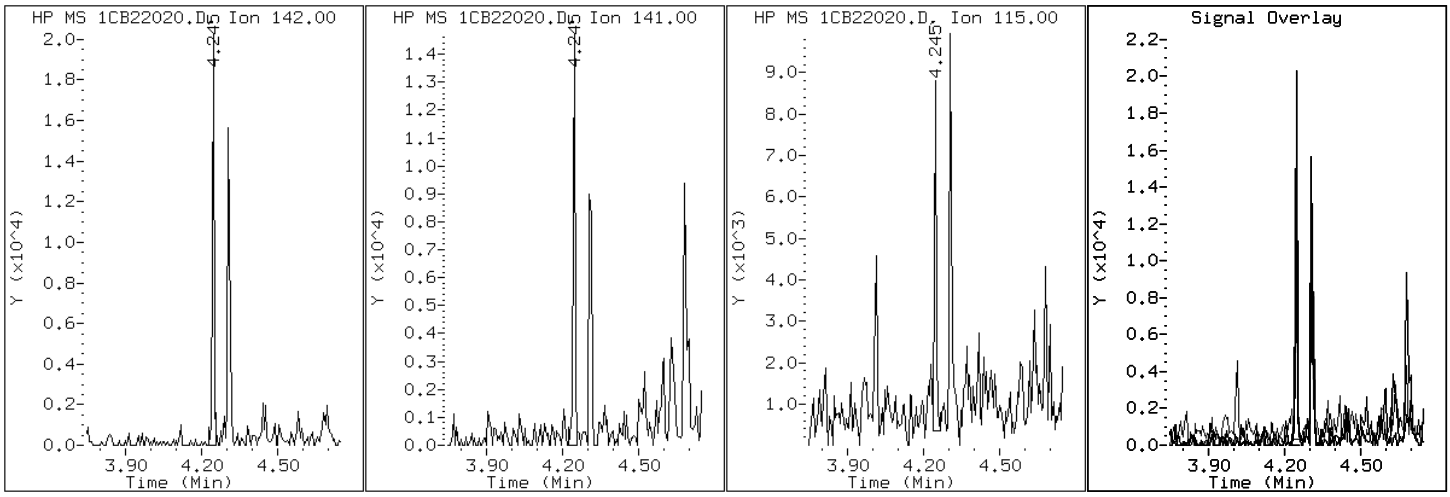
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a  Operator: SCC

3 2-Methylnaphthalene



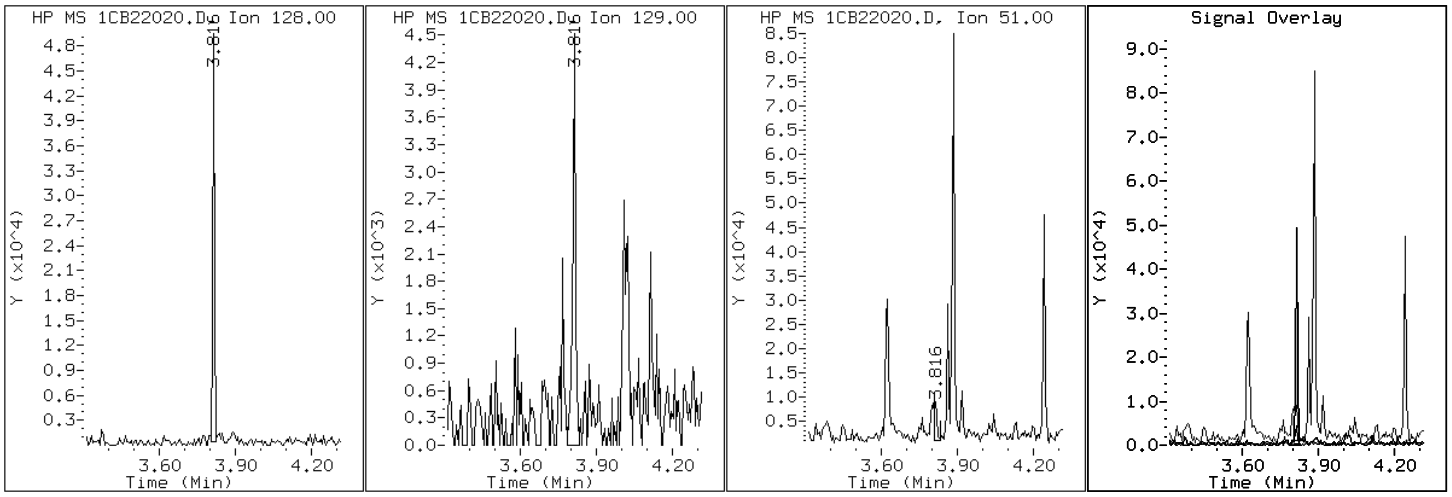
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a Operator: SCC

2 Naphthalene



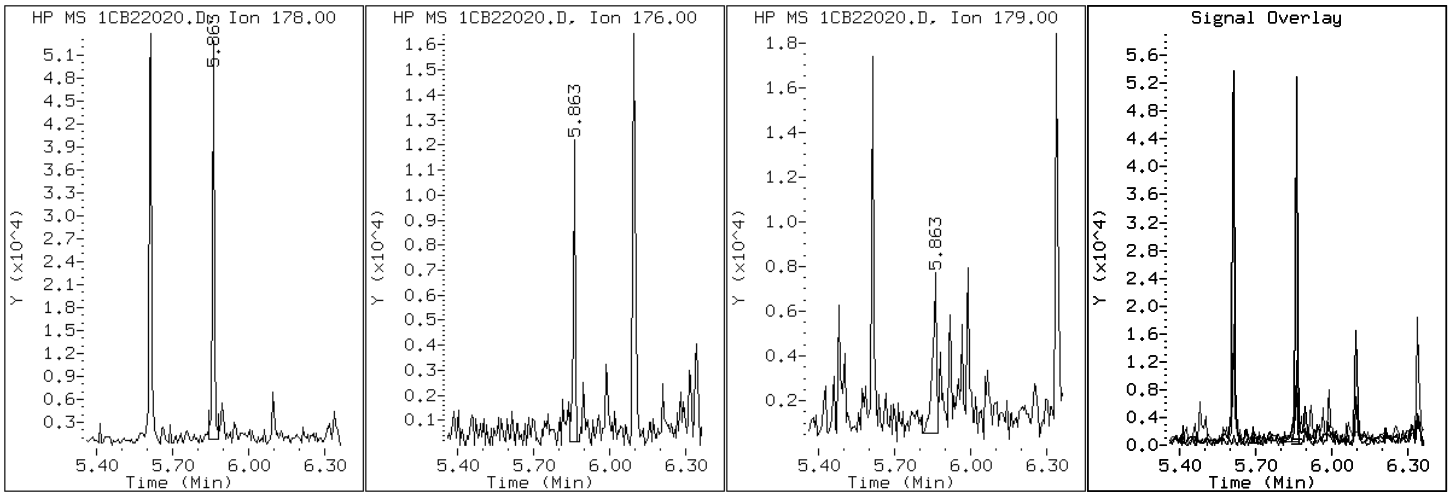
Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

Client ID: FM0161AI-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a Operator: SCC

11 Phenanthrene



Data File: 1CB22020.D

Date: 22-FEB-2013 17:11

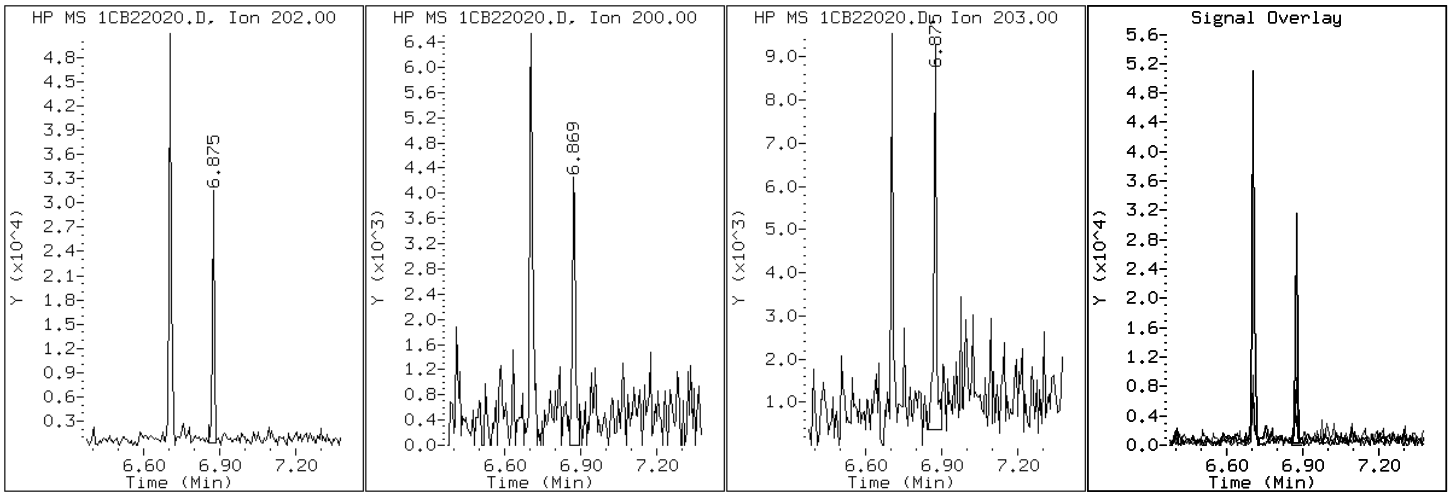
Client ID: FM0161AI-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-14-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22020.D
Inj. Date and Time: 22-FEB-2013 17:11
Instrument ID: BSMC5973.i
Client ID: FM0161AI-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

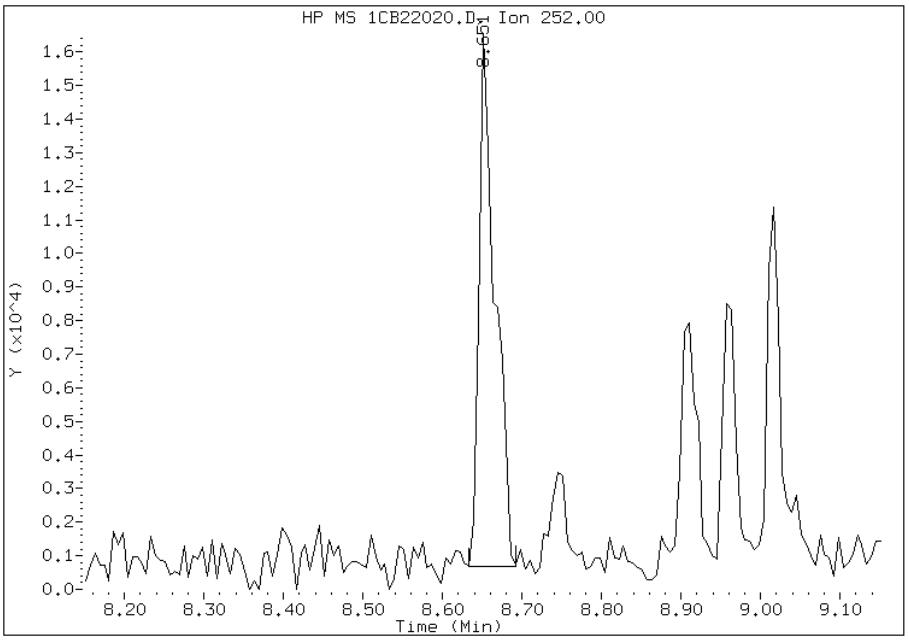
Processing Integration Results

RT: 8.65

Response: 22174

Amount: 0

Conc: 45



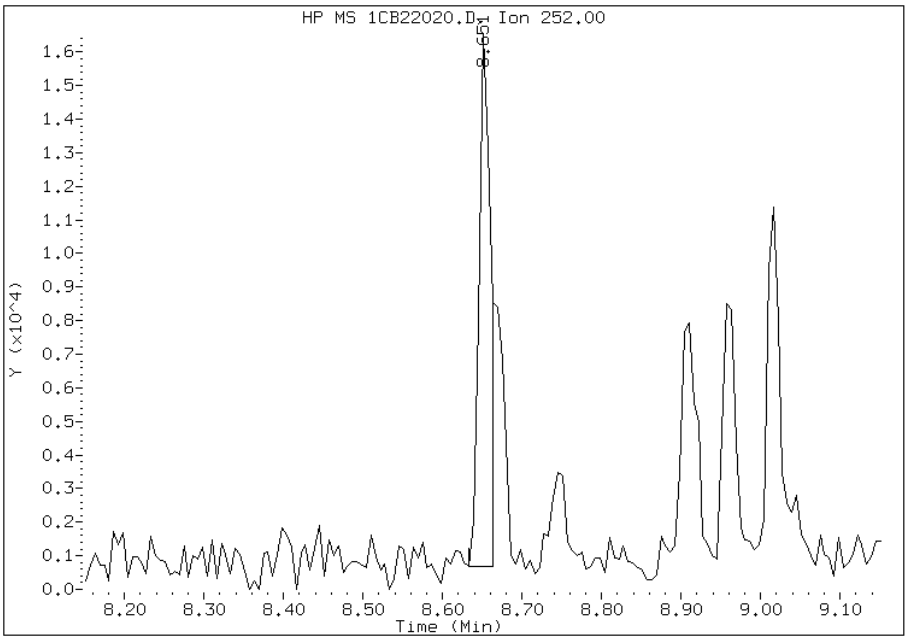

Manual Integration Results

RT: 8.65

Response: 15828

Amount: 0

Conc: 32




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:27
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22020.D
Inj. Date and Time: 22-FEB-2013 17:11
Instrument ID: BSMC5973.i
Client ID: FM0161AI-GS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

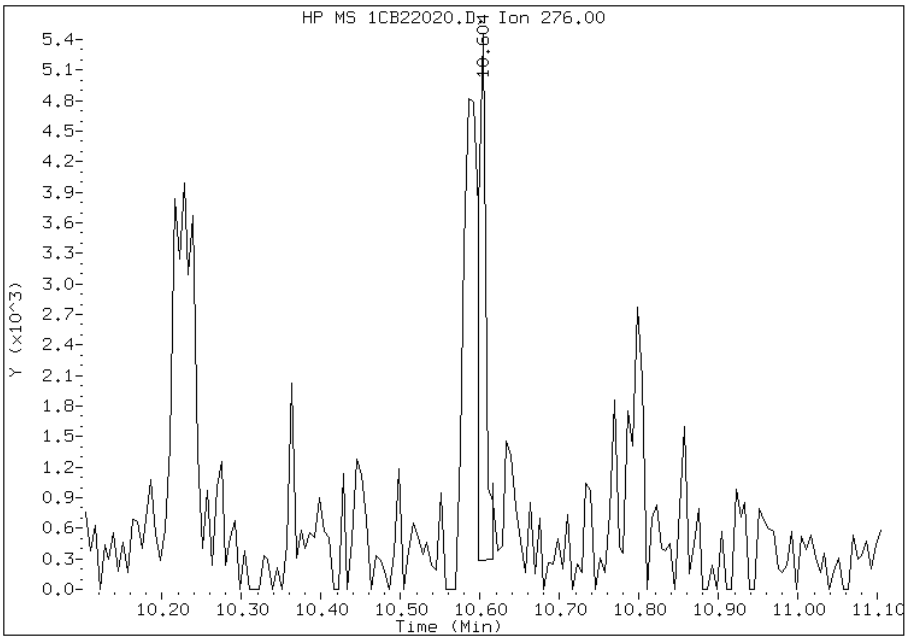
Processing Integration Results

RT: 10.60

Response: 3496

Amount: 0

Conc: 7



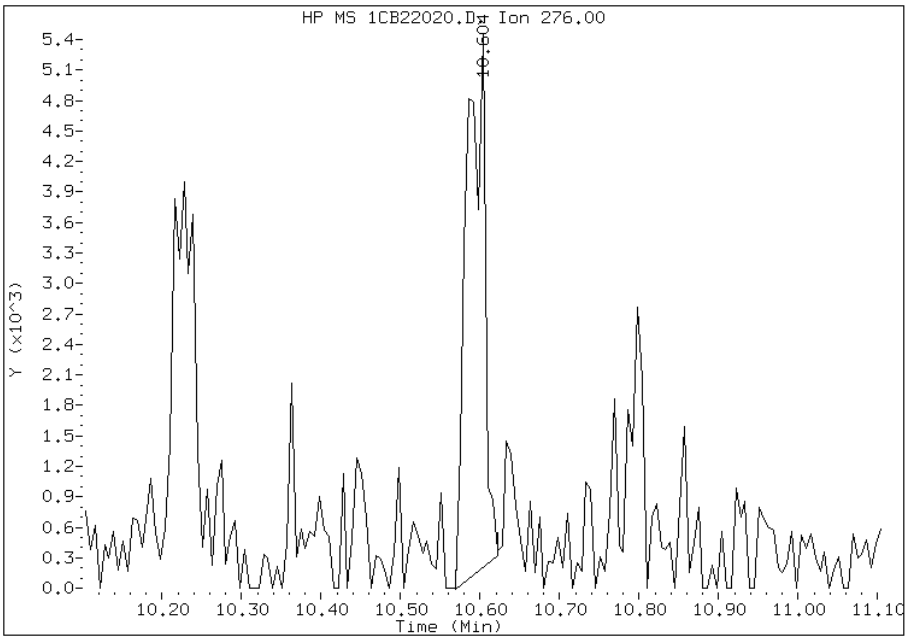

Manual Integration Results

RT: 10.60

Response: 8554

Amount: 0

Conc: 18




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:28
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22020.D
Inj. Date and Time: 22-FEB-2013 17:11
Instrument ID: BSMC5973.i
Client ID: FM0161AI-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

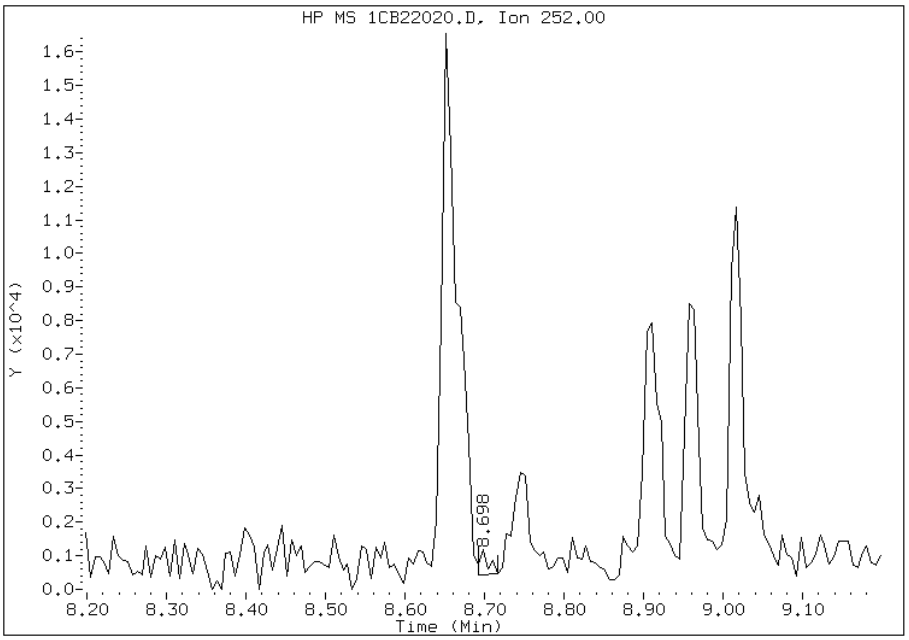
Processing Integration Results

RT: 8.70

Response: 566

Amount: 0

Conc: 1



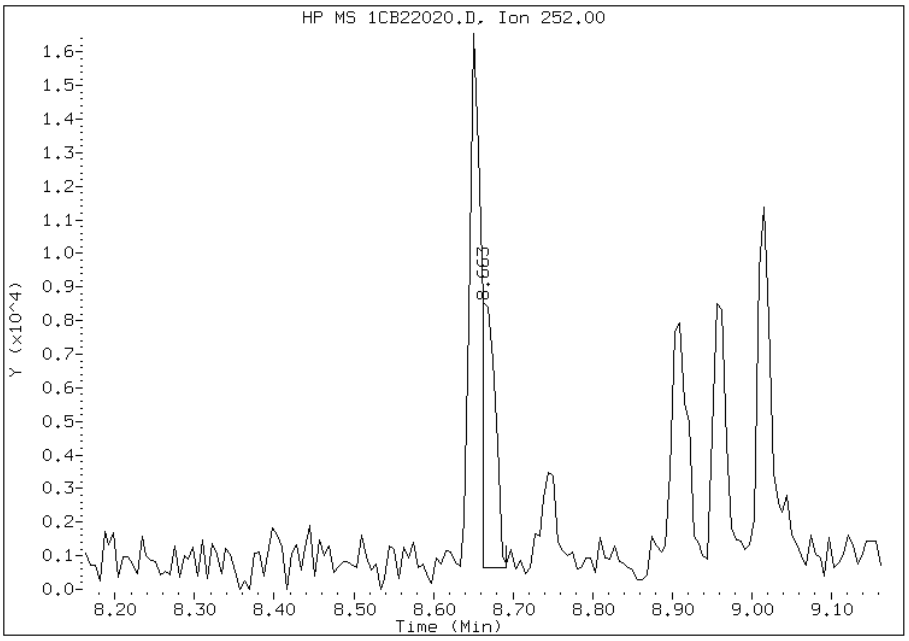

Manual Integration Results

RT: 8.66

Response: 9161

Amount: 0

Conc: 18




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:27
Manual Integration Reason: Baseline Event

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AJ-GS | Lab Sample ID: 680-87545-15

Matrix: Solid | Lab File ID: 1CB22021.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 10:04

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.41(g) | Date Analyzed: 02/22/2013 17:29

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 1.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 99 | U | 99 | 20 |
| 208-96-8 | Acenaphthylene | 7.0 | J | 40 | 4.9 |
| 120-12-7 | Anthracene | 18 | | 8.3 | 4.2 |
| 56-55-3 | Benzo[a]anthracene | 94 | | 7.9 | 3.9 |
| 50-32-8 | Benzo[a]pyrene | 76 | | 10 | 5.1 |
| 205-99-2 | Benzo[b]fluoranthene | 130 | | 12 | 6.0 |
| 191-24-2 | Benzo[g,h,i]perylene | 53 | | 20 | 4.4 |
| 207-08-9 | Benzo[k]fluoranthene | 53 | | 7.9 | 3.6 |
| 218-01-9 | Chrysene | 110 | | 8.9 | 4.5 |
| 53-70-3 | Dibenz(a,h)anthracene | 17 | J | 20 | 4.1 |
| 206-44-0 | Fluoranthene | 160 | | 20 | 4.0 |
| 86-73-7 | Fluorene | 9.9 | J | 20 | 4.1 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 54 | | 20 | 7.0 |
| 90-12-0 | 1-Methylnaphthalene | 47 | | 40 | 4.4 |
| 91-57-6 | 2-Methylnaphthalene | 63 | | 40 | 7.0 |
| 91-20-3 | Naphthalene | 70 | | 40 | 4.4 |
| 85-01-8 | Phenanthrene | 110 | | 7.9 | 3.9 |
| 129-00-0 | Pyrene | 150 | | 20 | 3.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 84 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22021.D
Lab Smp Id: 680-87545-A-15-A Client Smp ID: FM0161AJ-GS
Inj Date : 22-FEB-2013 17:29
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-15-a
Misc Info : 680-87545-A-15-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.410 | Weight Extracted |
| M | 1.632 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1719762 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1345891 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2512627 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 319651 | 8.42597 | 555.8560 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2767744 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2661167 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 47506 | 1.06107 | 69.9979 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 28345 | 0.94911 | 62.6121 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 19245 | 0.70754 | 46.6762 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 5730 | 0.10560 | 6.9662 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 6393 | 0.14988 | 9.8875(Q) |
| 11 Phenanthrene | 178 | 5.862 | 5.863 | (1.003) | 120011 | 1.65181 | 108.9690 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 19735 | 0.27774 | 18.3224 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 14014 | 0.22187 | 14.6366(Q) |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 194517 | 2.44476 | 161.2789 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 169463 | 2.27837 | 150.3024 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 113237 | 1.41755 | 93.5145 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 128640 | 1.60916 | 106.1550(M) |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.657 | (0.960) | 134221 | 1.92995 | 127.3178(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.668 | 8.680 | (0.962) | 57166 | 0.80128 | 52.8597(QM) |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 77608 | 1.14886 | 75.7896 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.239 | (1.135) | 52040 | 0.81892 | 54.0233(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.257 | (1.137) | 16012 | 0.25760 | 16.9937(M) |
| 26 Benzo(g,h,i)perylene | 276 | 10.603 | 10.610 | (1.176) | 53207 | 0.80039 | 52.8015 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22021.D

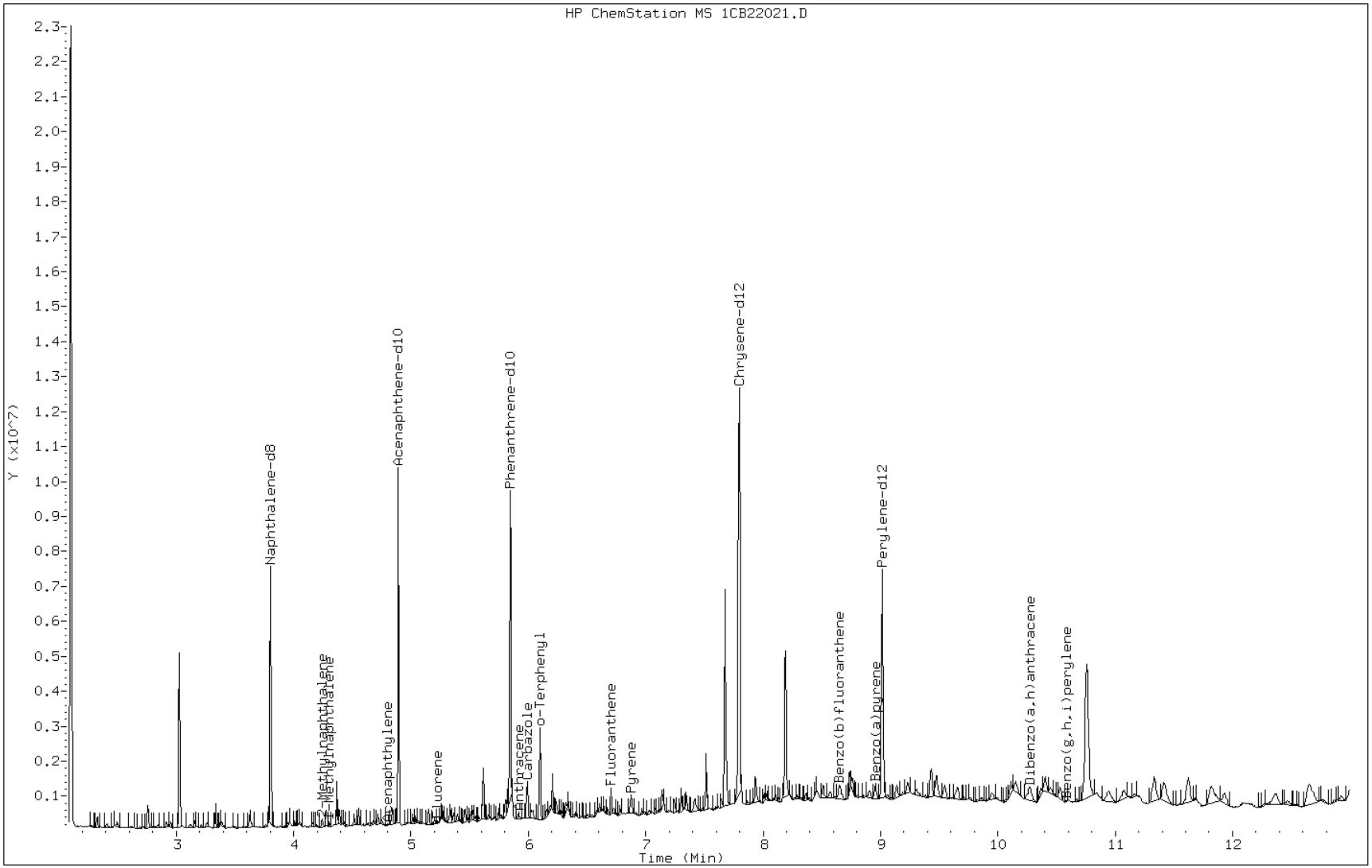
Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a

Operator: SCC



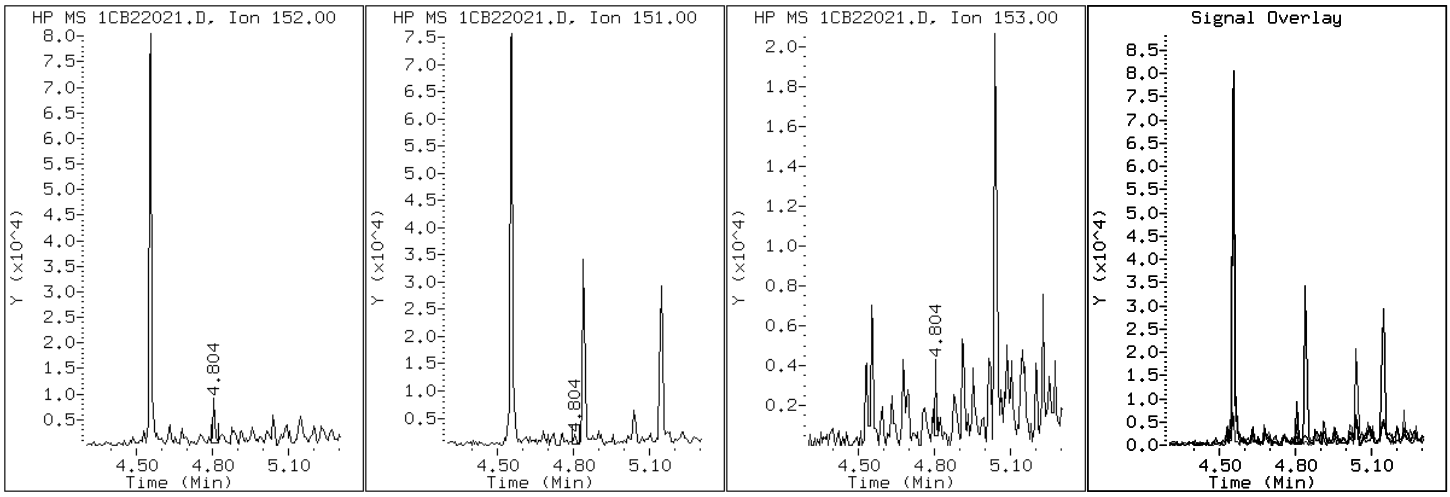
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

5 Acenaphthylene



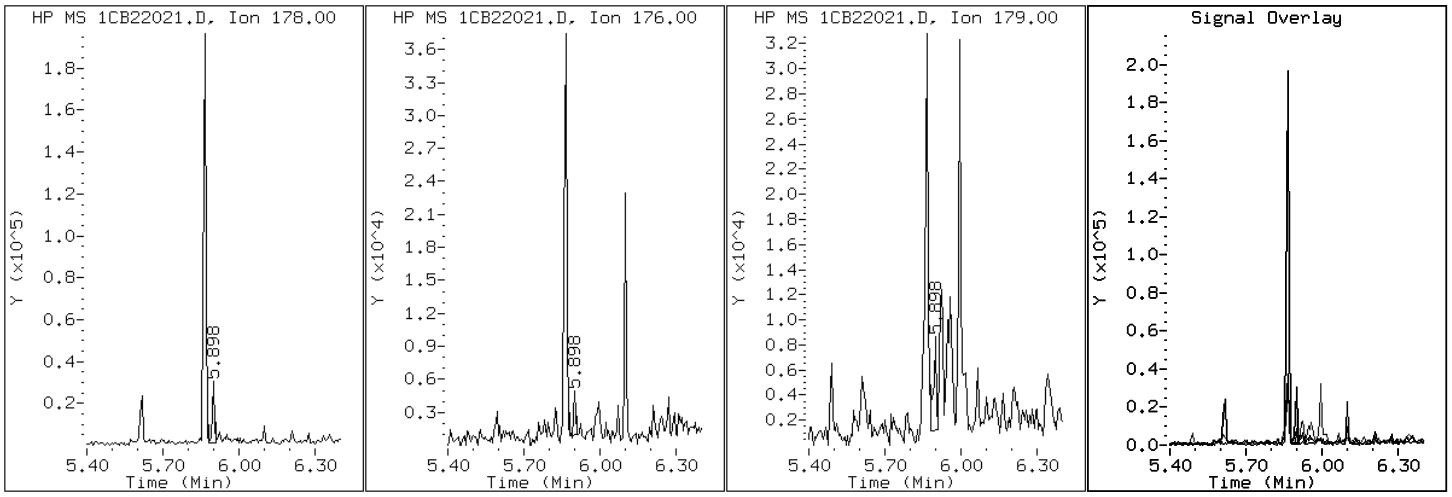
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

12 Anthracene



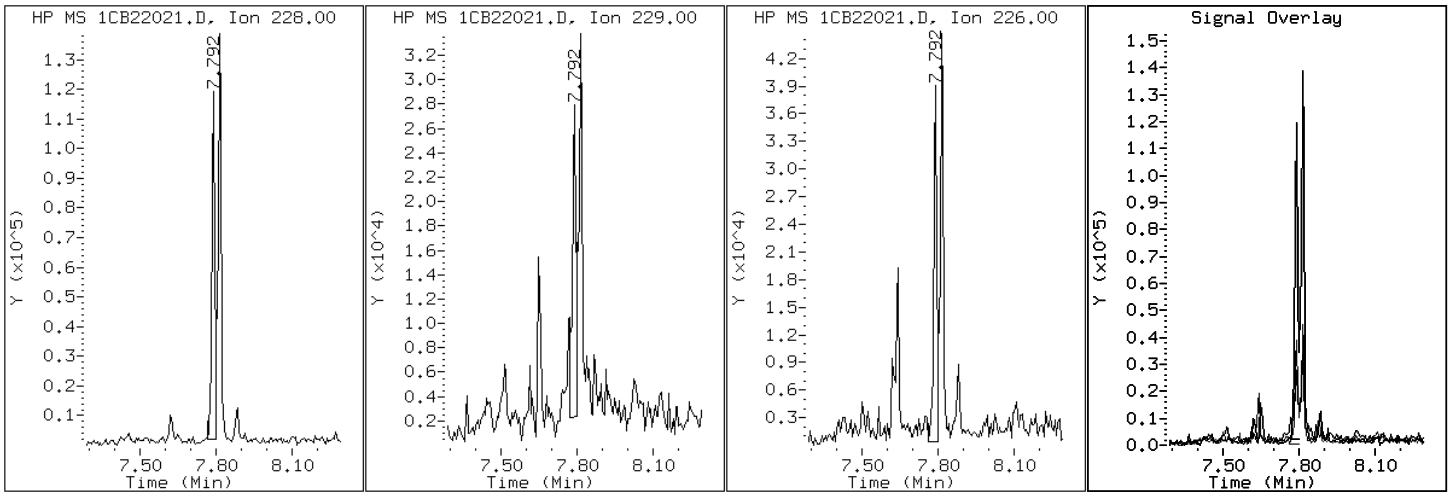
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

17 Benzo(a)anthracene



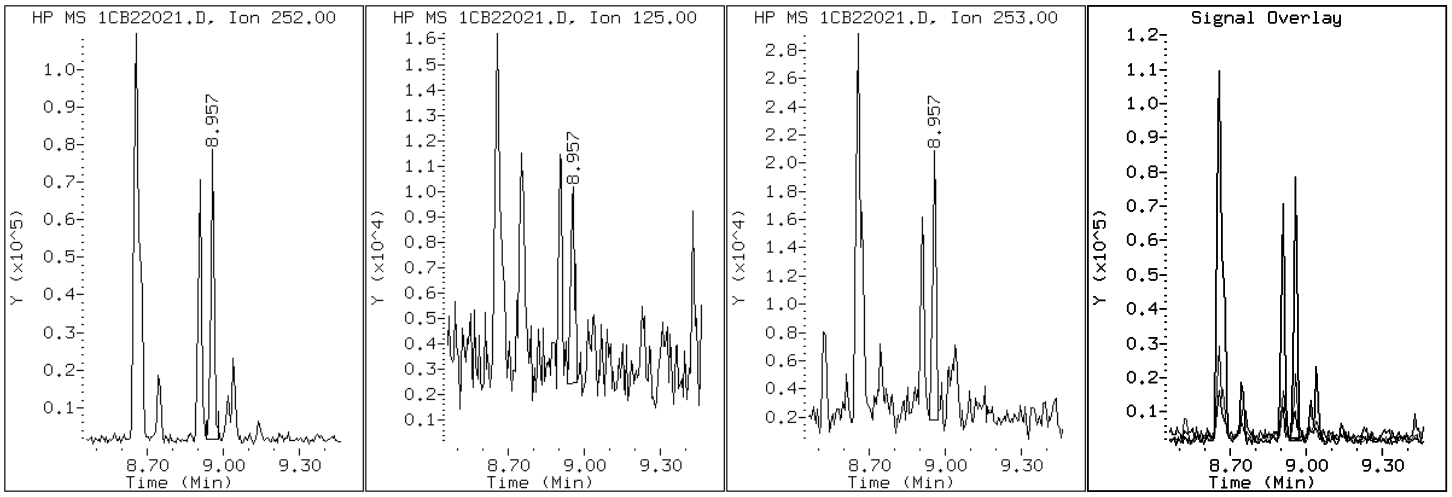
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

22 Benzo(a)pyrene



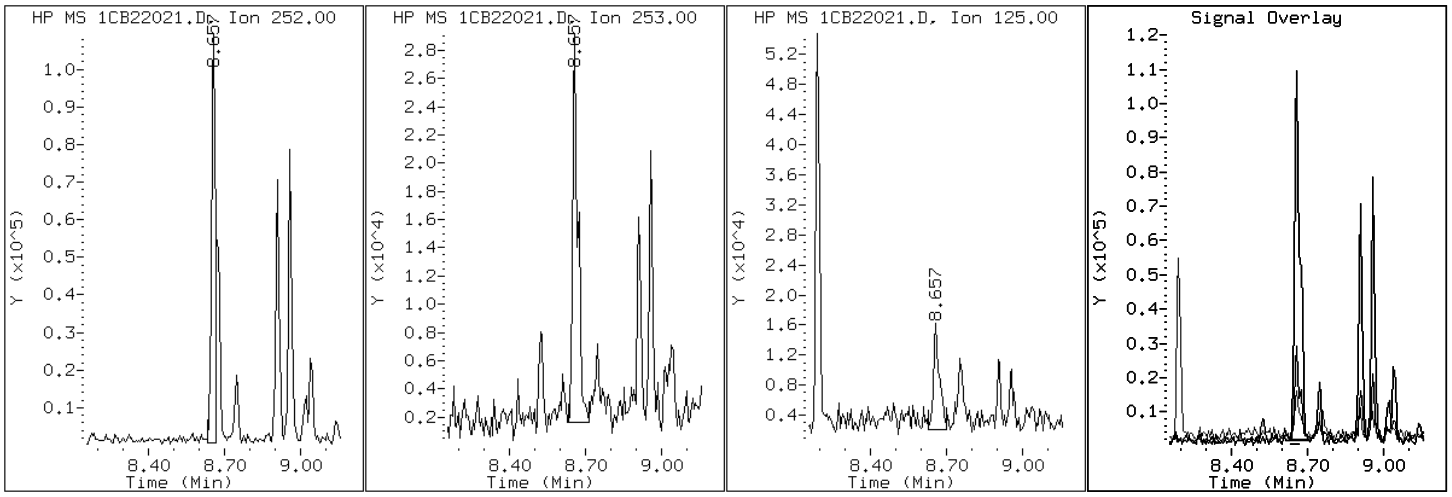
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

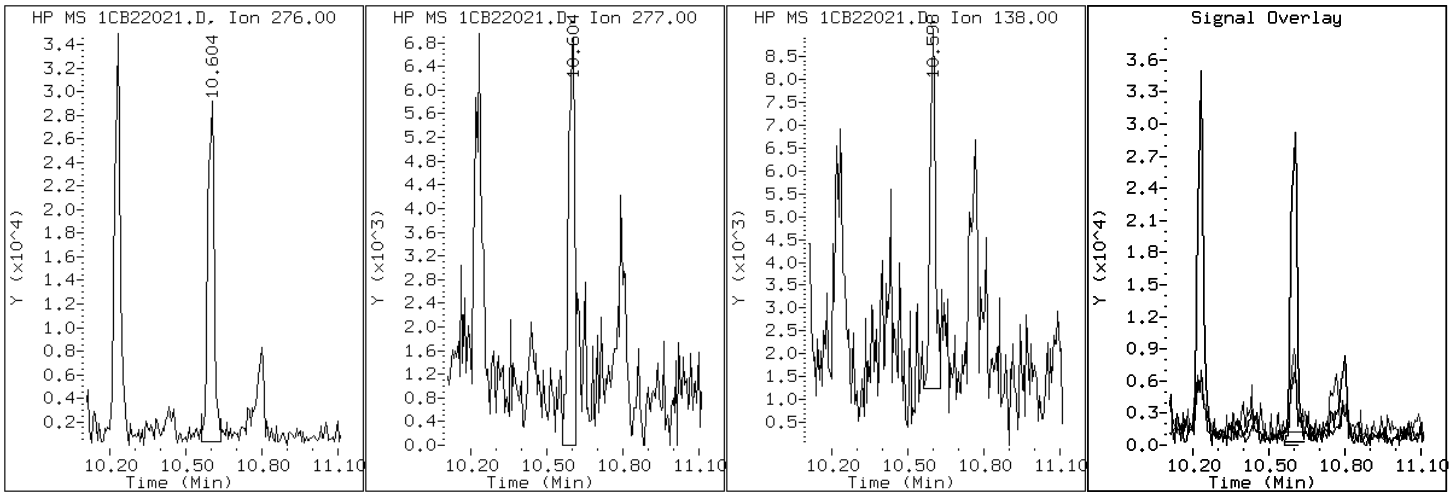
Client ID: FM0161AJ-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a

Operator: SCC

26 Benzo(g,h,i)perylene



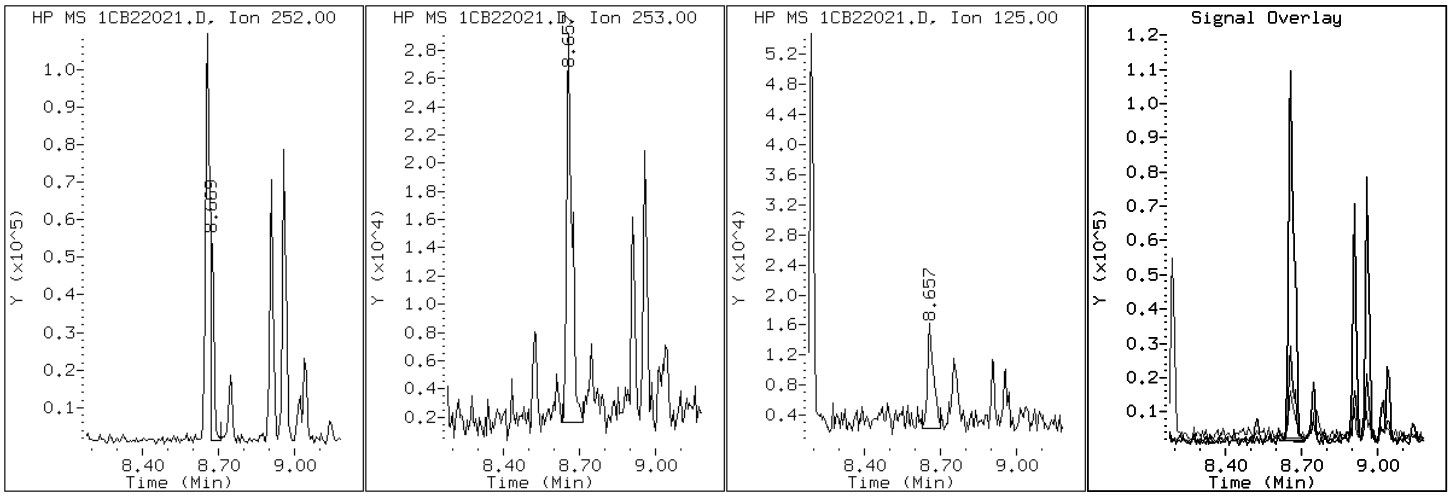
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

21 Benzo(k)fluoranthene



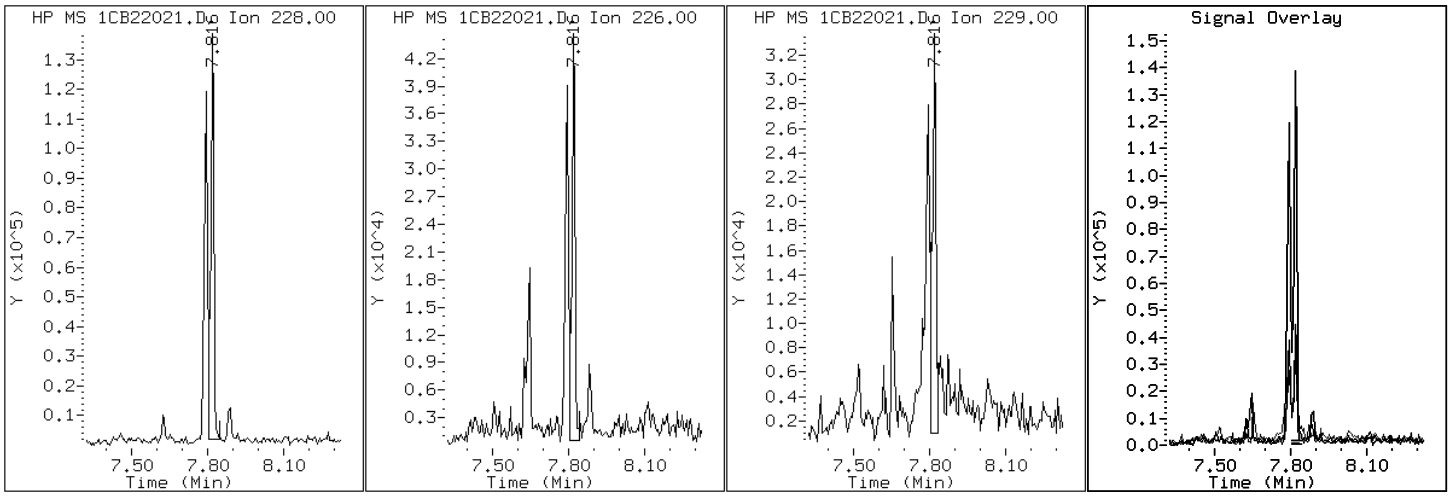
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a  Operator: SCC

19 Chrysene



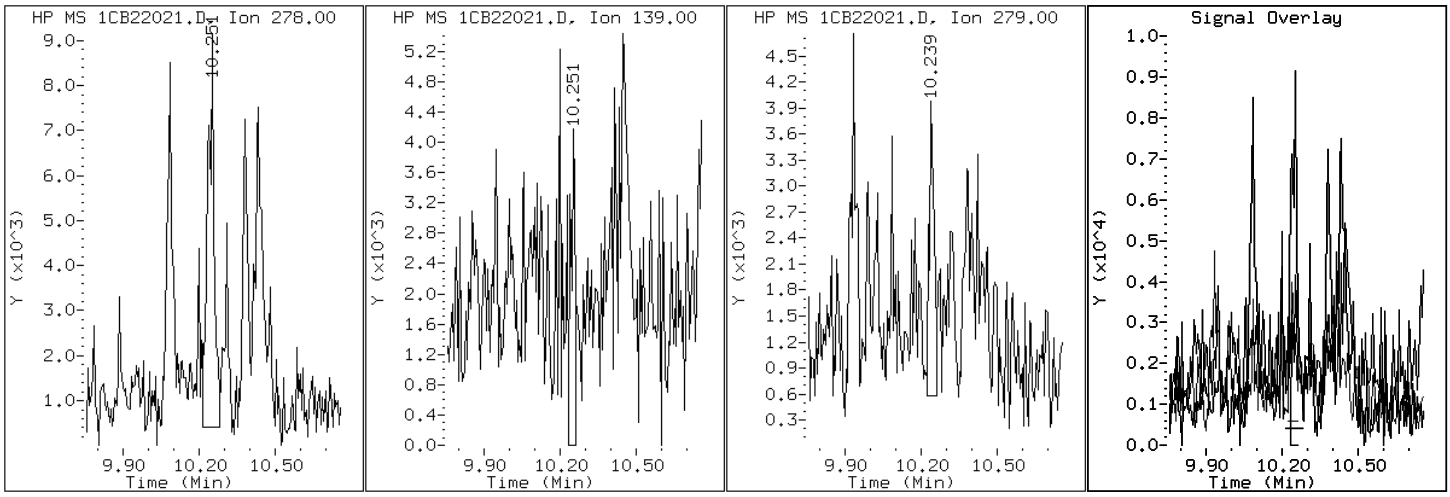
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a  Operator: SCC

25 Dibenzo(a,h)anthracene



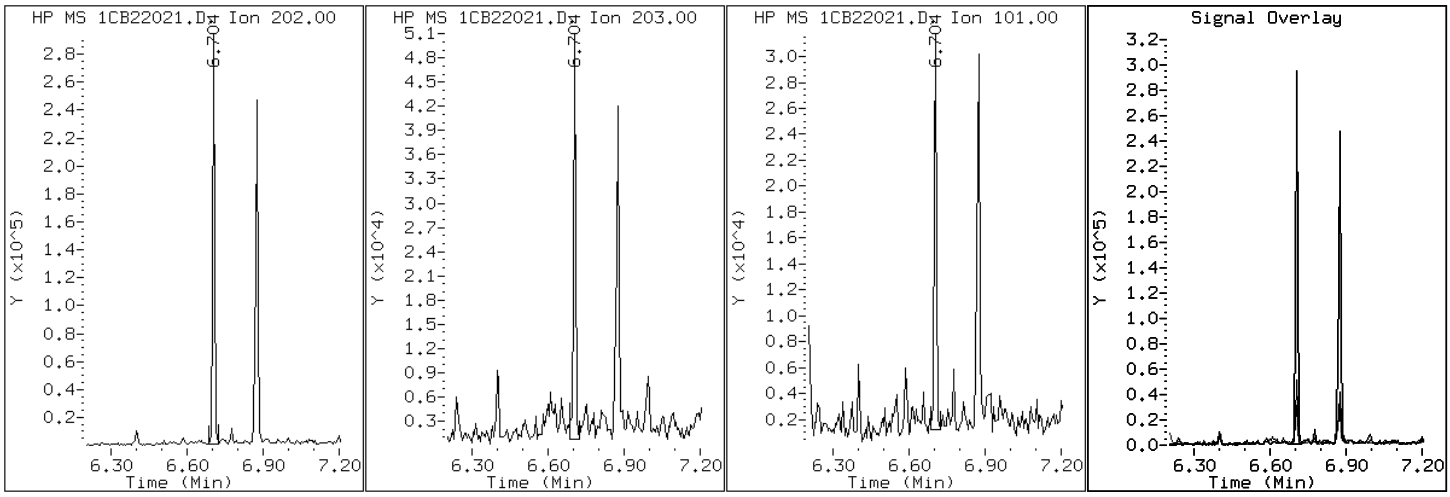
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

15 Fluoranthene



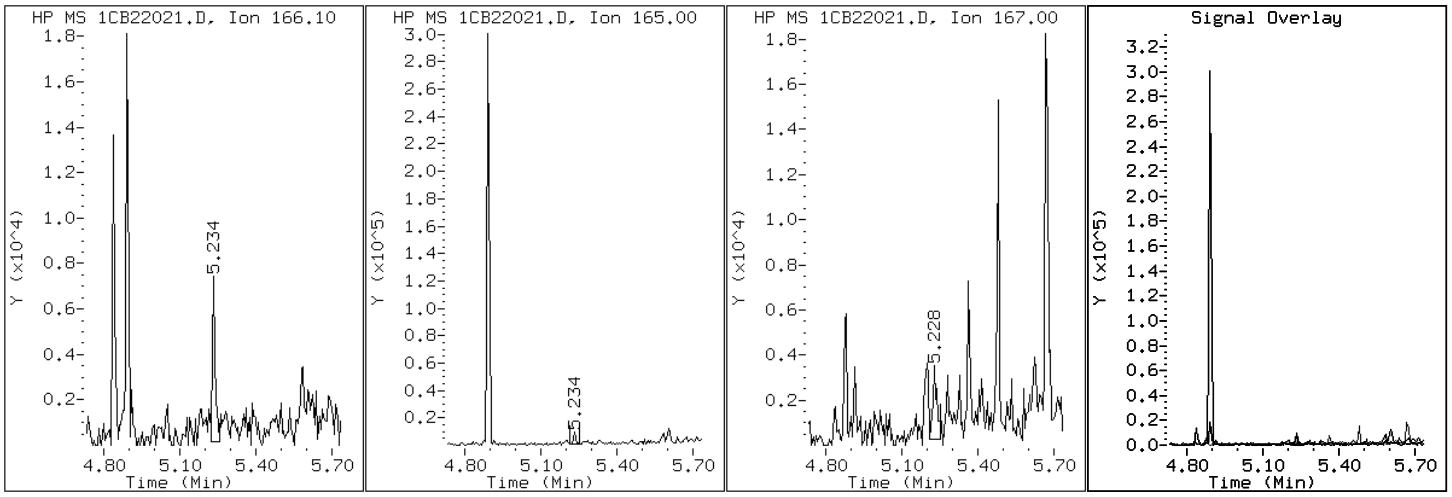
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

9 Fluorene



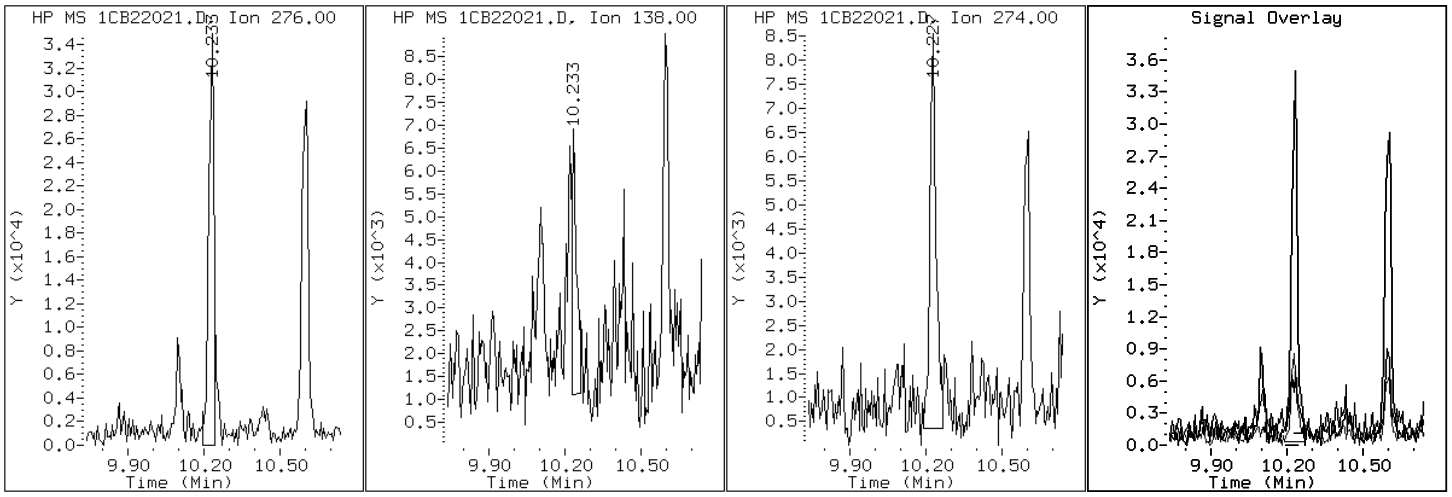
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a  Operator: SCC

24 Indeno(1,2,3-cd)pyrene



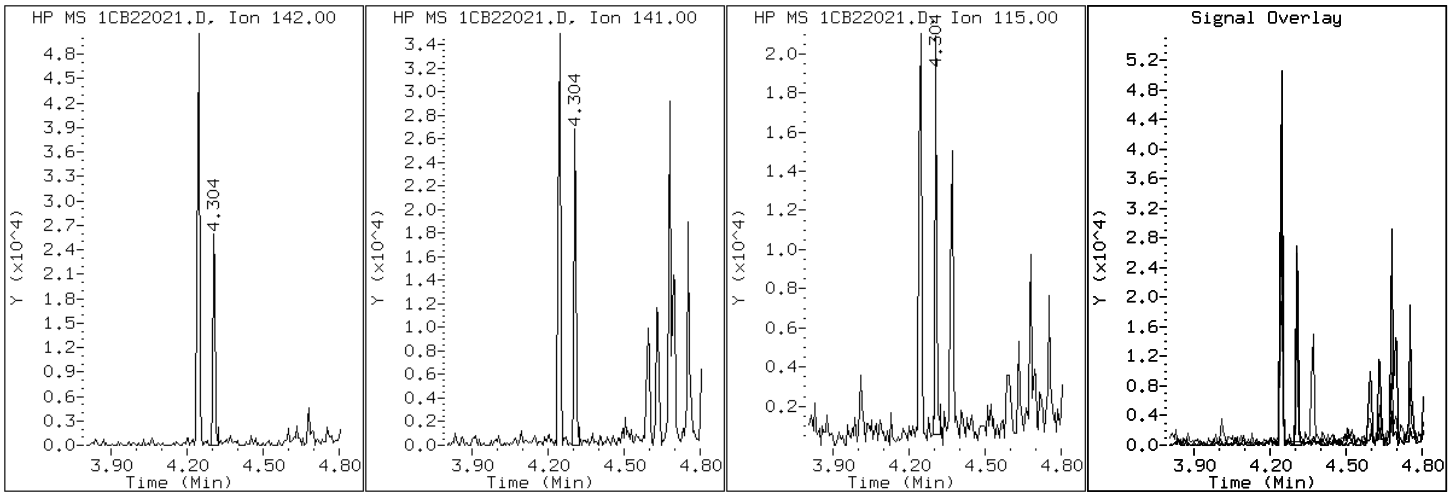
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a  Operator: SCC

4 1-Methylnaphthalene



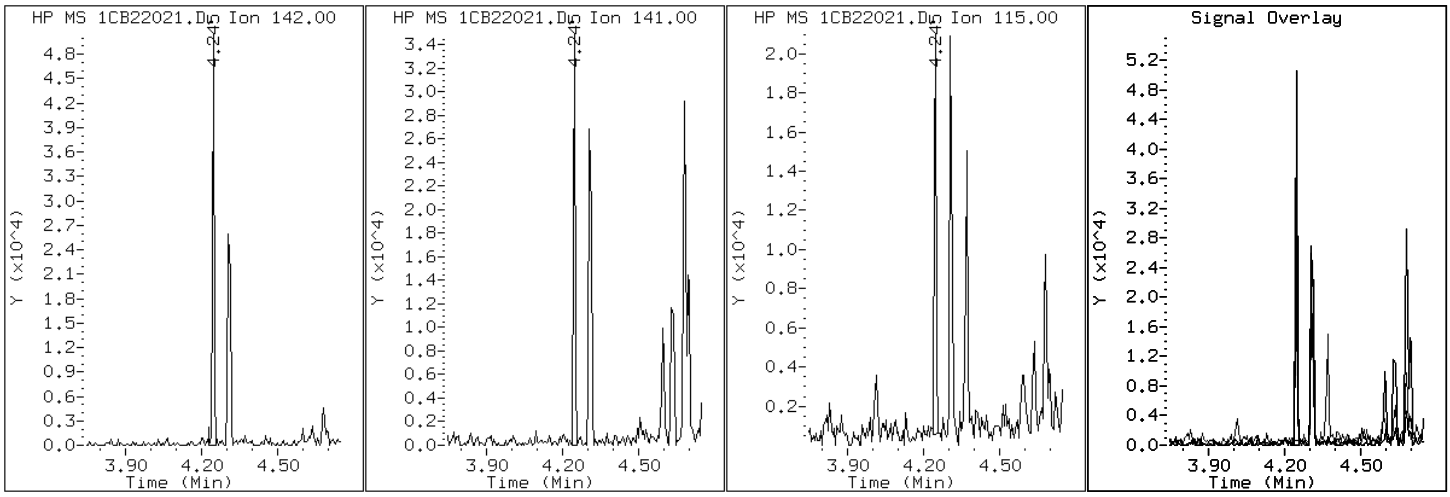
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a  Operator: SCC

3 2-Methylnaphthalene



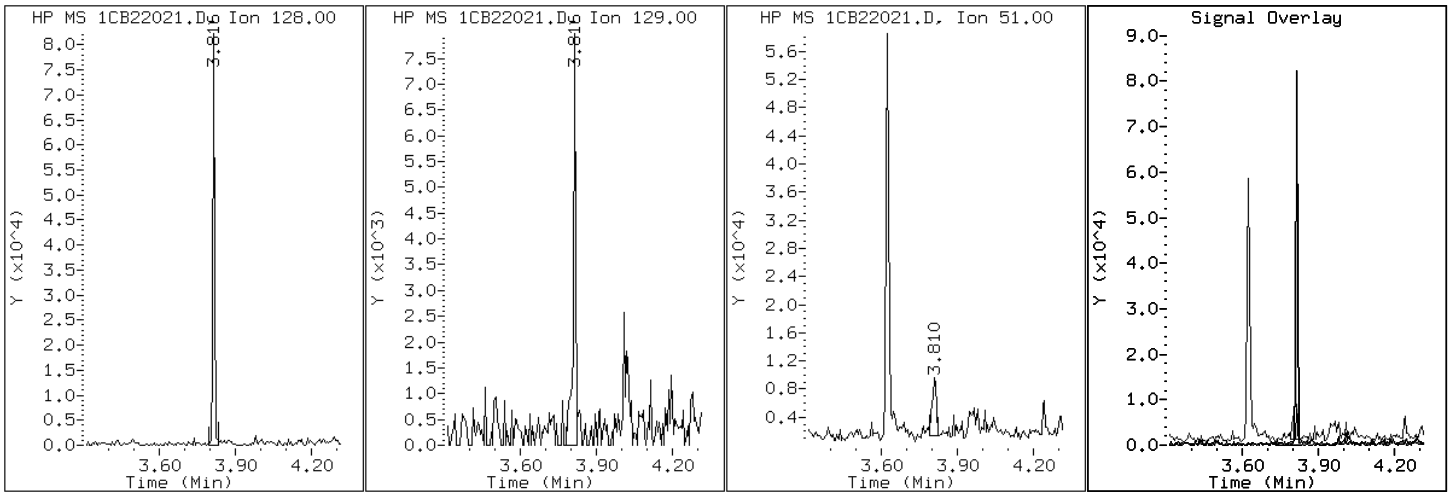
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a  Operator: SCC

2 Naphthalene



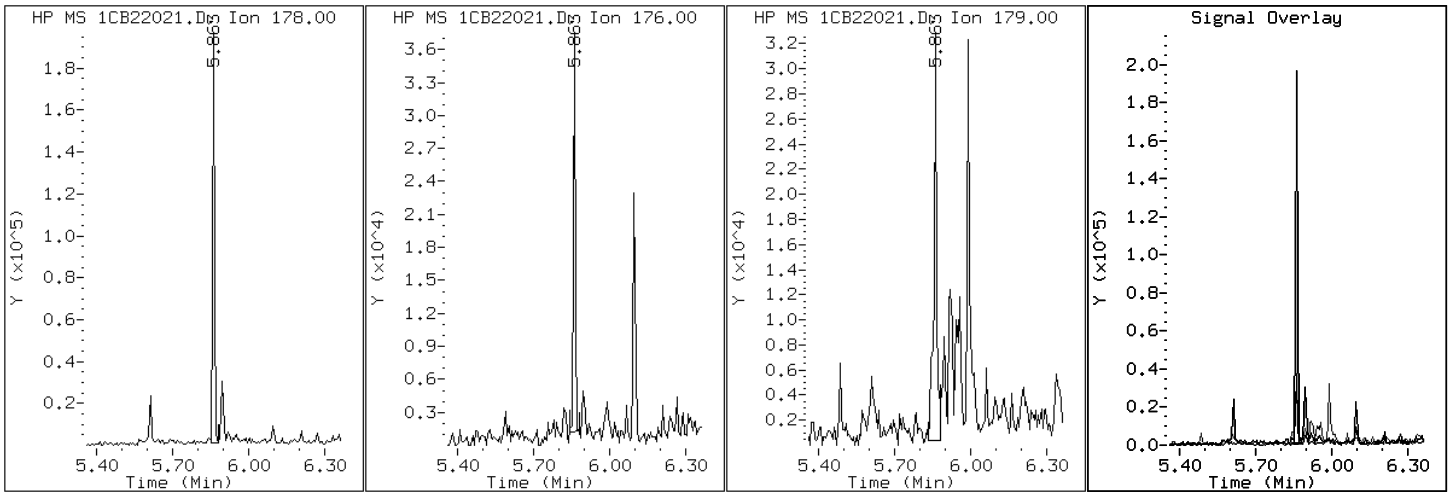
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

11 Phenanthrene



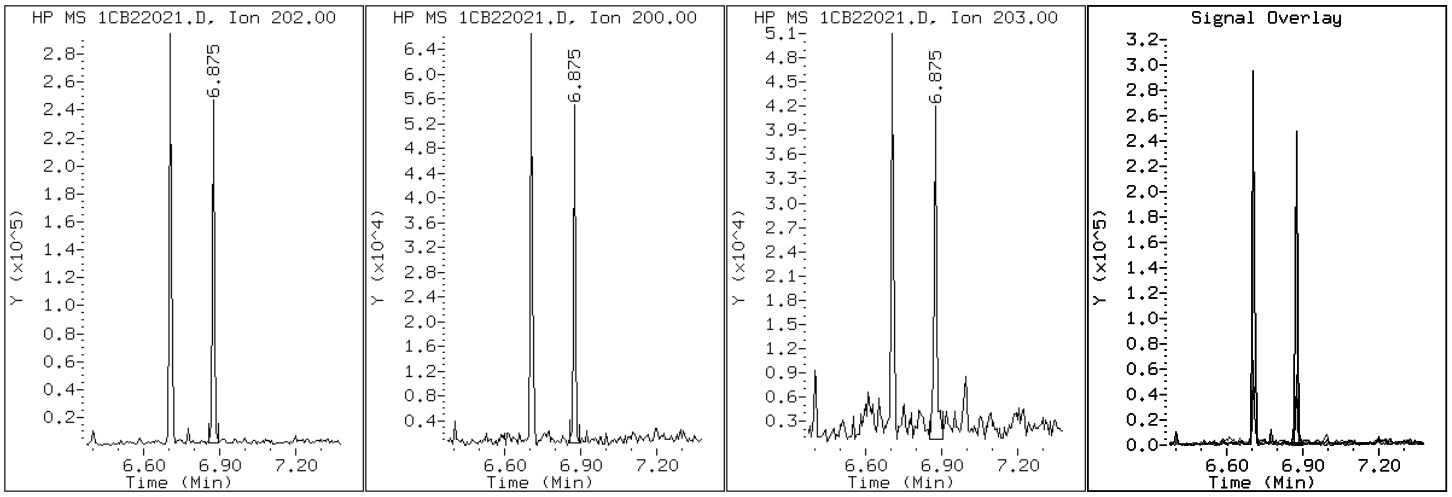
Data File: 1CB22021.D

Date: 22-FEB-2013 17:29

Client ID: FM0161AJ-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-15-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22021.D
Inj. Date and Time: 22-FEB-2013 17:29
Instrument ID: BSMC5973.i
Client ID: FM0161AJ-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

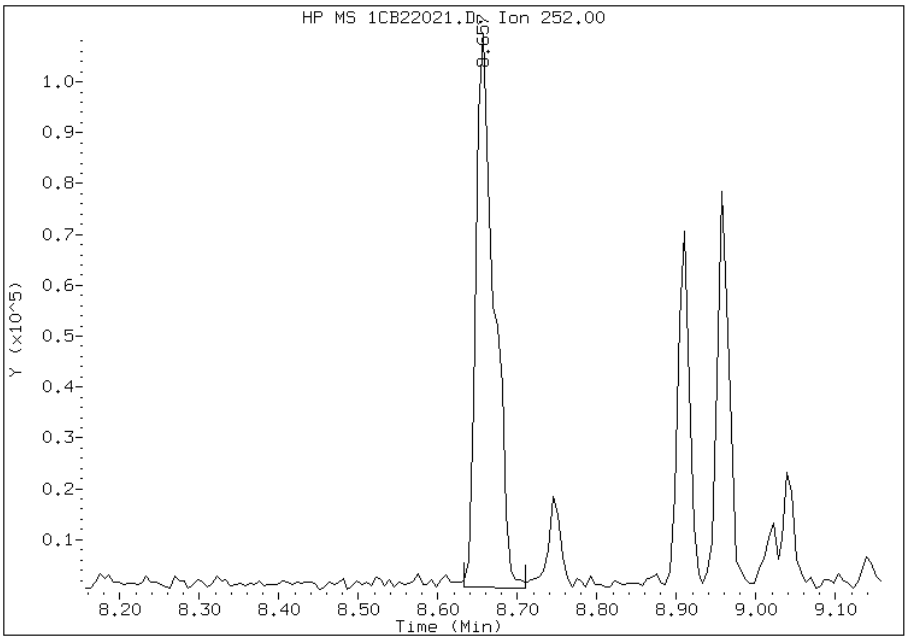
Processing Integration Results

RT: 8.66

Response: 174294

Amount: 3

Conc: 165



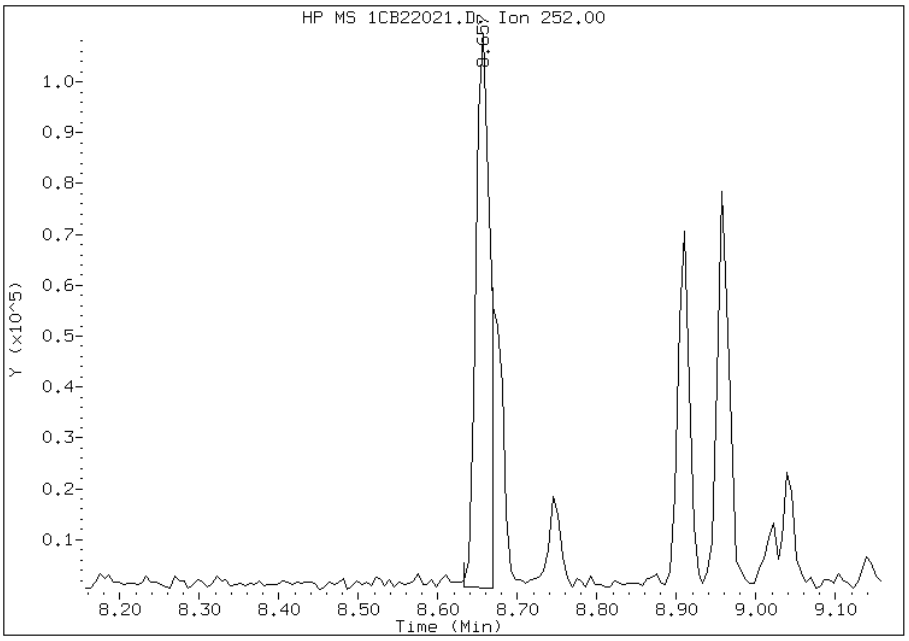

Manual Integration Results

RT: 8.66

Response: 134221

Amount: 2

Conc: 127




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:29
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22021.D
Inj. Date and Time: 22-FEB-2013 17:29
Instrument ID: BSMC5973.i
Client ID: FM0161AJ-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

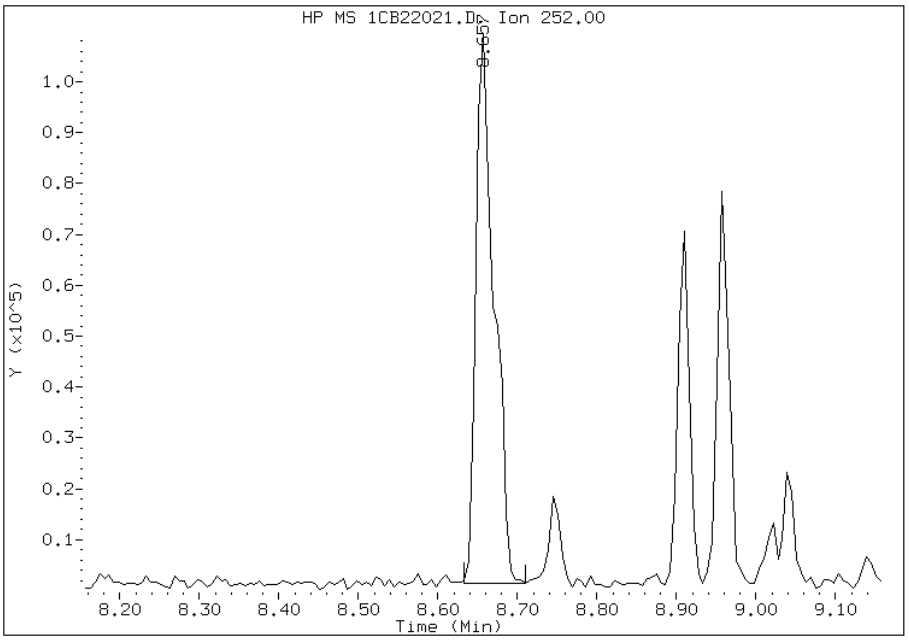
Processing Integration Results

RT: 8.66

Response: 169946

Amount: 2

Conc: 157



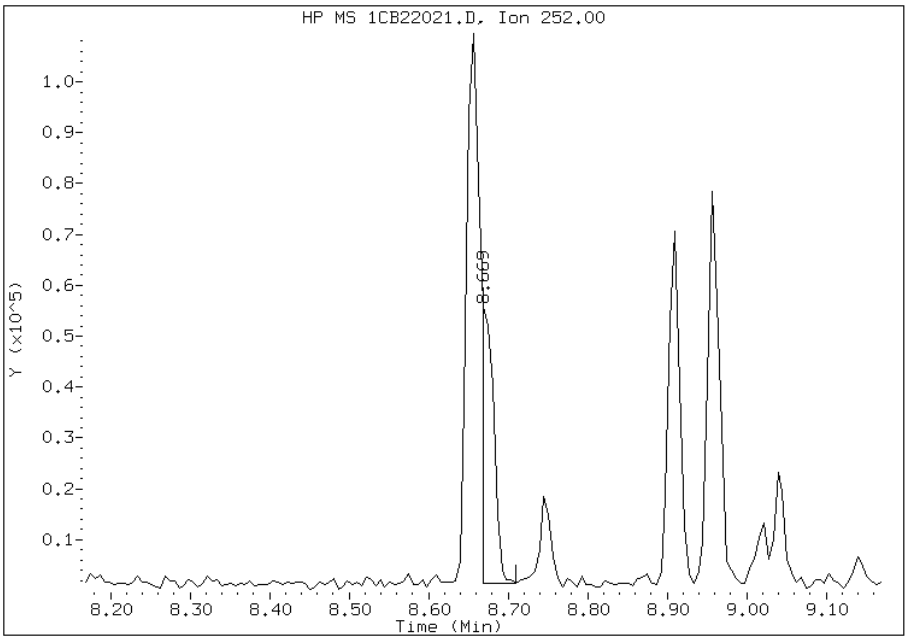

Manual Integration Results

RT: 8.67

Response: 57166

Amount: 1

Conc: 53




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:30
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22021.D
Inj. Date and Time: 22-FEB-2013 17:29
Instrument ID: BSMC5973.i
Client ID: FM0161AJ-GS
Compound: 19 Chrysene
CAS #: 218-01-9
Report Date: 02/26/2013

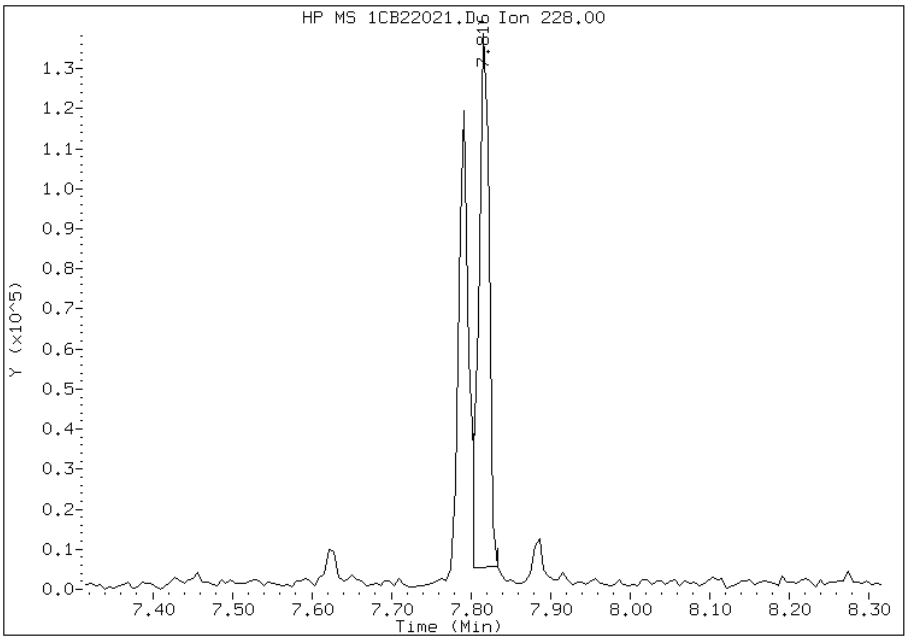
Processing Integration Results

RT: 7.82

Response: 120437

Amount: 2

Conc: 99



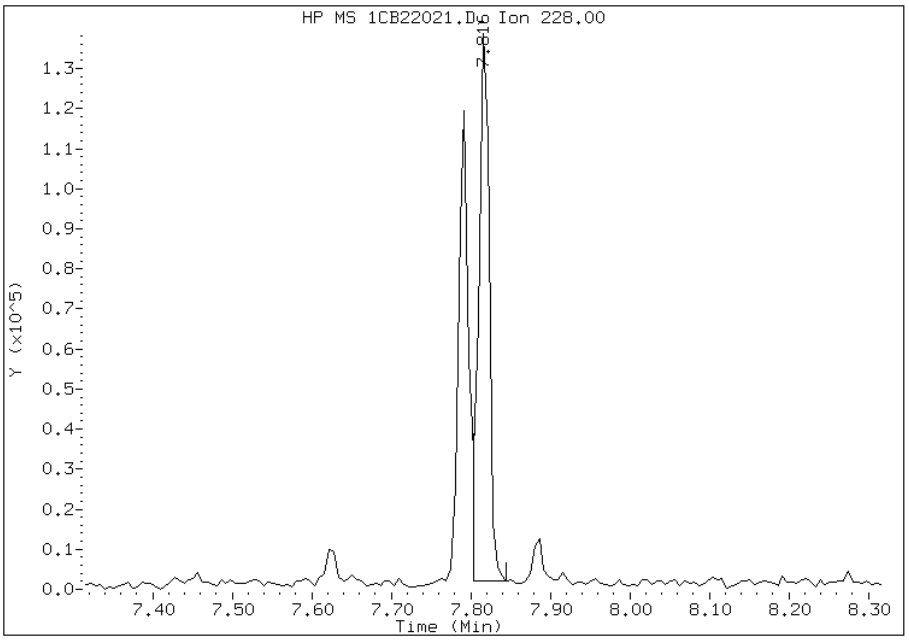

Manual Integration Results

RT: 7.82

Response: 128640

Amount: 2

Conc: 106




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:29
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22021.D
Inj. Date and Time: 22-FEB-2013 17:29
Instrument ID: BSMC5973.i
Client ID: FM0161AJ-GS
Compound: 25 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 02/26/2013

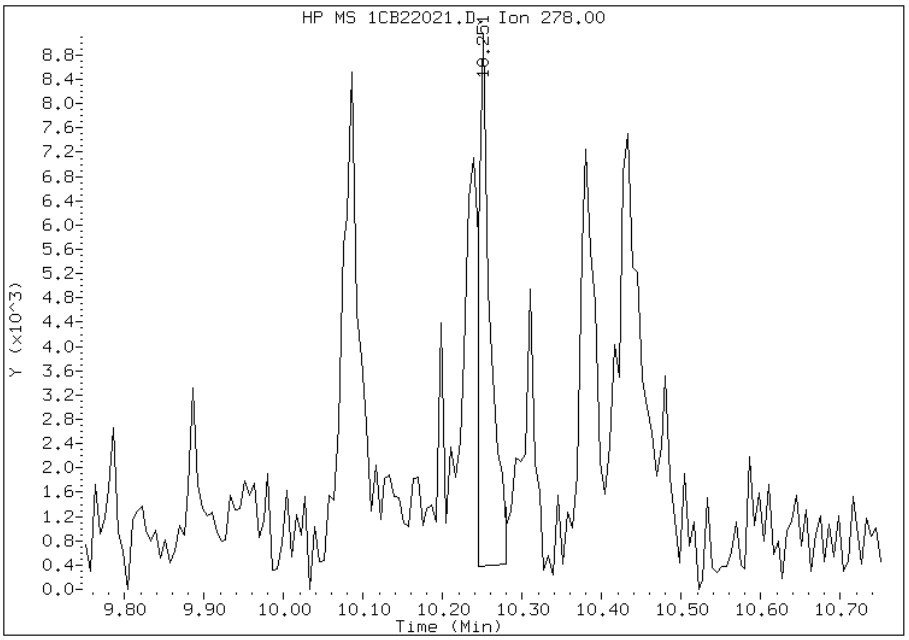
Processing Integration Results

RT: 10.25

Response: 9111

Amount: 0

Conc: 10



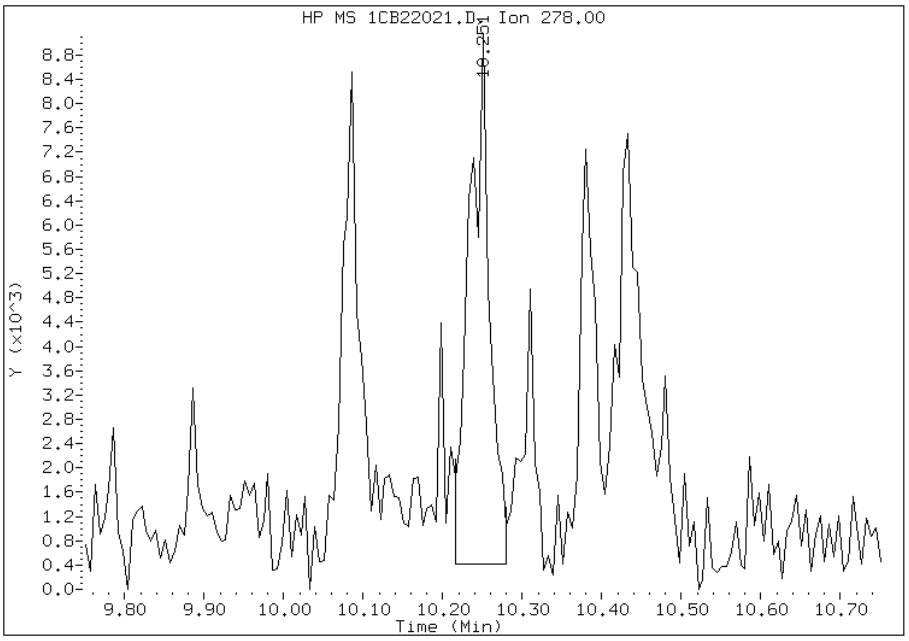

Manual Integration Results

RT: 10.25

Response: 16012

Amount: 0

Conc: 17




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:31
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22021.D
Inj. Date and Time: 22-FEB-2013 17:29
Instrument ID: BSMC5973.i
Client ID: FM0161AJ-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

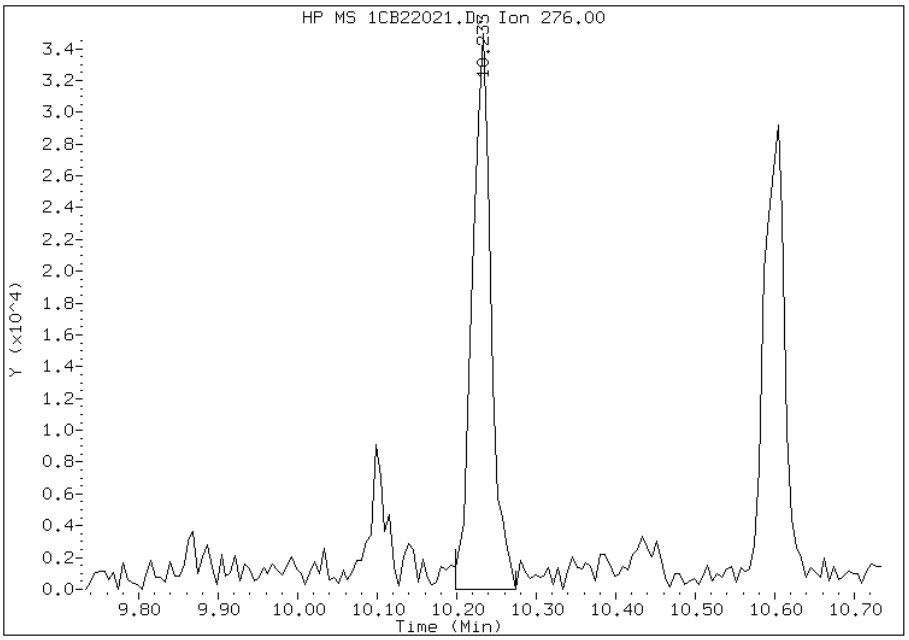
Processing Integration Results

RT: 10.23

Response: 57239

Amount: 1

Conc: 59



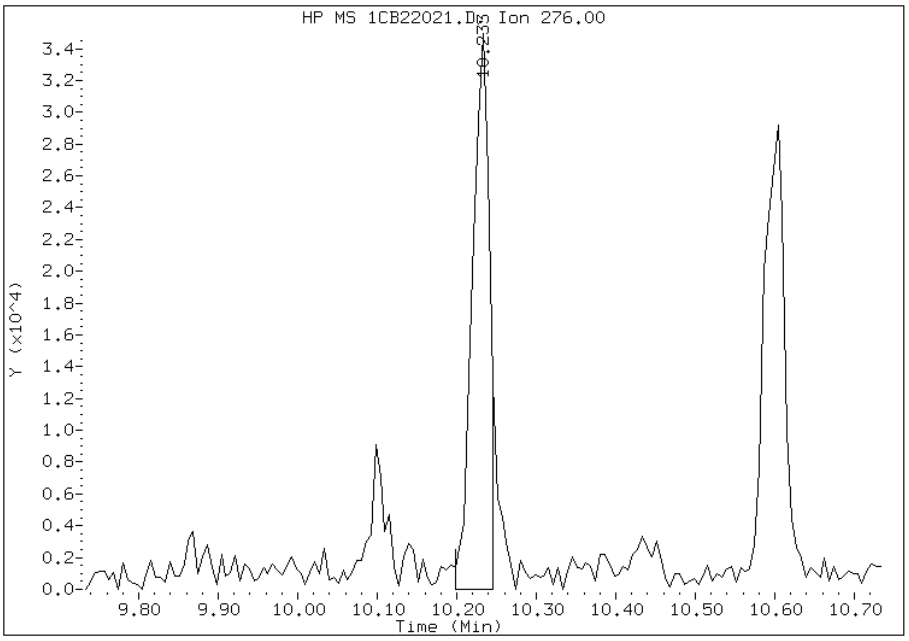

Manual Integration Results

RT: 10.23

Response: 52040

Amount: 1

Conc: 54




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:31
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AK-GS | Lab Sample ID: 680-87545-16

Matrix: Solid | Lab File ID: 1CB22022.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 10:37

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.14(g) | Date Analyzed: 02/22/2013 17:48

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 0.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 20 |
| 208-96-8 | Acenaphthylene | 6.1 | J | 40 | 5.0 |
| 120-12-7 | Anthracene | 7.9 | J | 8.4 | 4.2 |
| 56-55-3 | Benzo[a]anthracene | 47 | | 8.0 | 3.9 |
| 50-32-8 | Benzo[a]pyrene | 43 | | 10 | 5.2 |
| 205-99-2 | Benzo[b]fluoranthene | 61 | | 12 | 6.1 |
| 191-24-2 | Benzo[g,h,i]perylene | 32 | | 20 | 4.4 |
| 207-08-9 | Benzo[k]fluoranthene | 30 | | 8.0 | 3.6 |
| 218-01-9 | Chrysene | 61 | | 9.0 | 4.5 |
| 53-70-3 | Dibenz(a,h)anthracene | 8.8 | J | 20 | 4.1 |
| 206-44-0 | Fluoranthene | 77 | | 20 | 4.0 |
| 86-73-7 | Fluorene | 8.4 | J | 20 | 4.1 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 28 | | 20 | 7.1 |
| 90-12-0 | 1-Methylnaphthalene | 53 | | 40 | 4.4 |
| 91-57-6 | 2-Methylnaphthalene | 59 | | 40 | 7.1 |
| 91-20-3 | Naphthalene | 76 | | 40 | 4.4 |
| 85-01-8 | Phenanthrene | 69 | | 8.0 | 3.9 |
| 129-00-0 | Pyrene | 62 | | 20 | 3.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 83 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22022.D
Lab Smp Id: 680-87545-A-16-A Client Smp ID: FM0161AK-GS
Inj Date : 22-FEB-2013 17:48
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-16-a
Misc Info : 680-87545-A-16-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.140 | Weight Extracted |
| M | 0.67114 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1726345 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1370883 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2536505 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 316890 | 8.27456 | 550.2291 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2922178 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.021 | 9.016 | (1.000) | 2796089 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 51689 | 1.15009 | 76.4771 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 26432 | 0.88168 | 58.6285 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 21603 | 0.79121 | 52.6125 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 5090 | 0.09209 | 6.1239 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 5501 | 0.12662 | 8.4196(Q) |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 75826 | 1.03383 | 68.7462 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 8468 | 0.11805 | 7.8501 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 6556 | 0.10282 | 6.8370(Q) |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 92503 | 1.15166 | 76.5816 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 72979 | 0.92932 | 61.7966 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 59925 | 0.71052 | 47.2470 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 77122 | 0.91373 | 60.7601 |
| 20 Benzo(b)fluoranthene | 252 | 8.657 | 8.657 | (0.960) | 66964 | 0.91641 | 60.9379 |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 34034 | 0.45402 | 30.1910 |
| 22 Benzo(a)pyrene | 252 | 8.957 | 8.963 | (0.993) | 45896 | 0.64663 | 42.9987 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.239 | 10.239 | (1.135) | 27948 | 0.41858 | 27.8338(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.239 | 10.257 | (1.135) | 8667 | 0.13271 | 8.8244(M) |
| 26 Benzo(g,h,i)perylene | 276 | 10.598 | 10.610 | (1.175) | 33871 | 0.48494 | 32.2465(MH) |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: 1CB22022.D

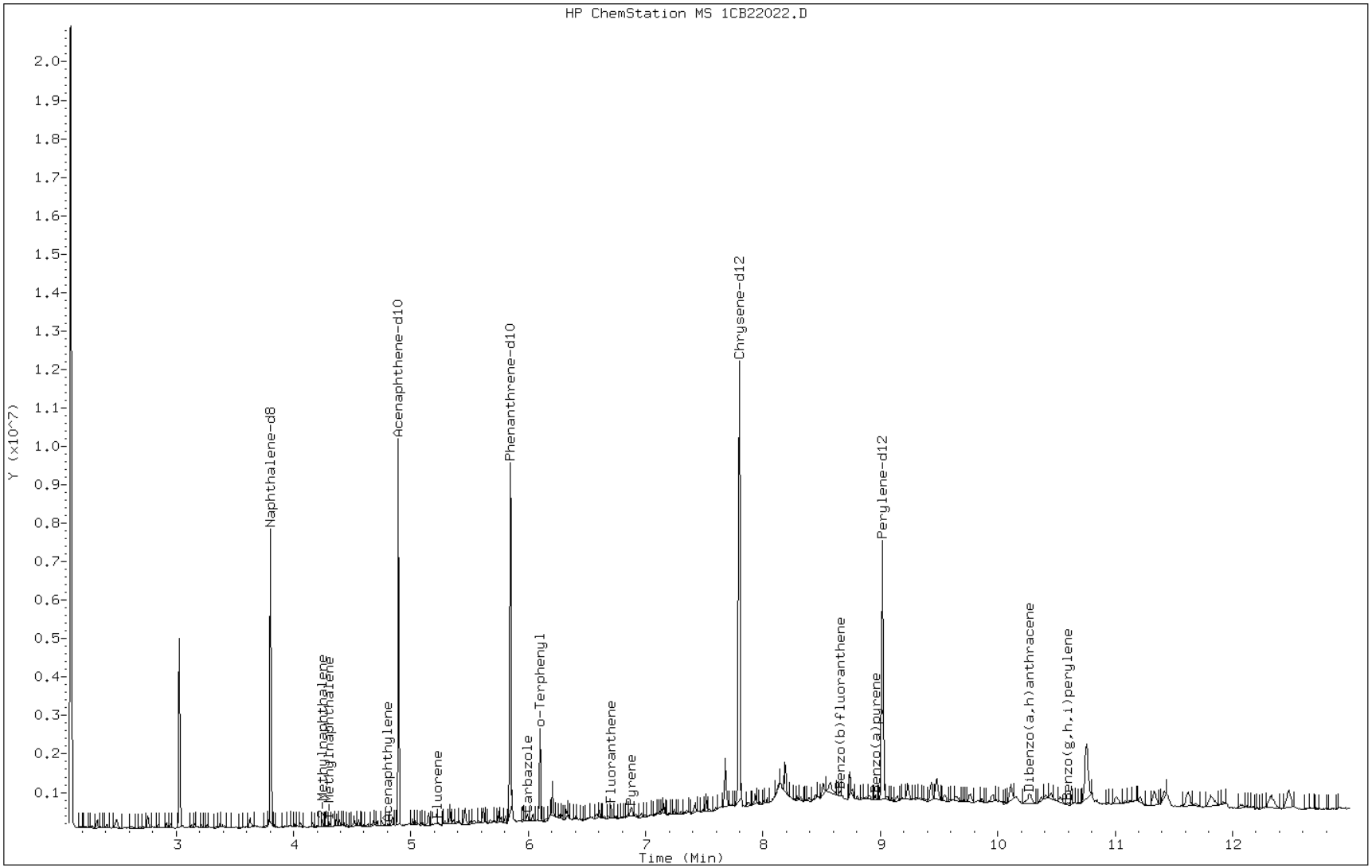
Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a

Operator: SCC



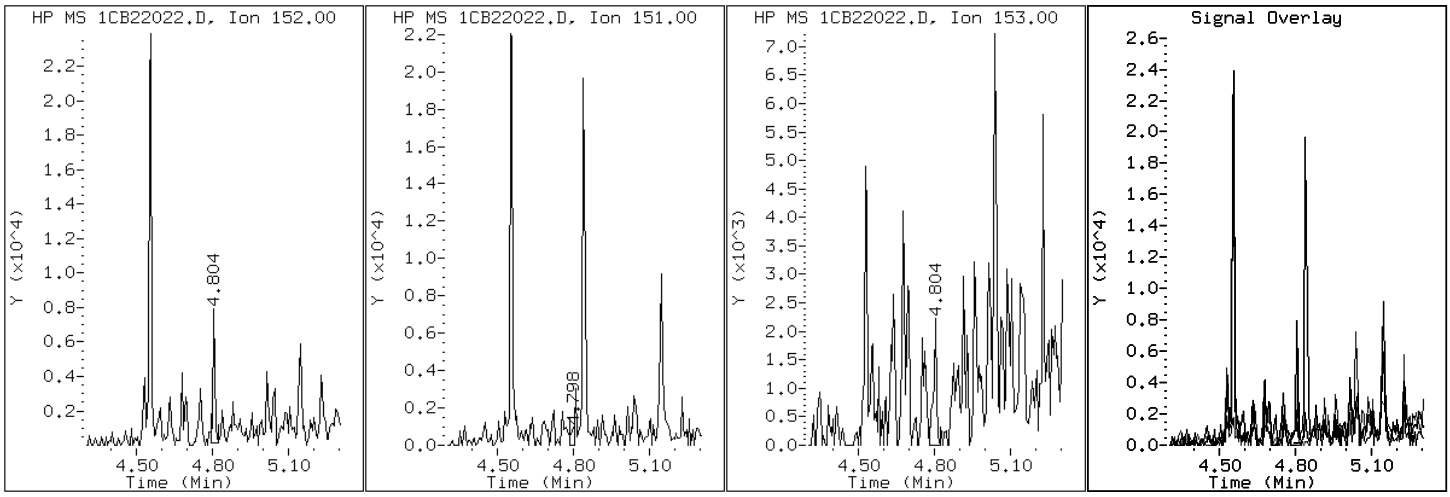
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

5 Acenaphthylene



Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

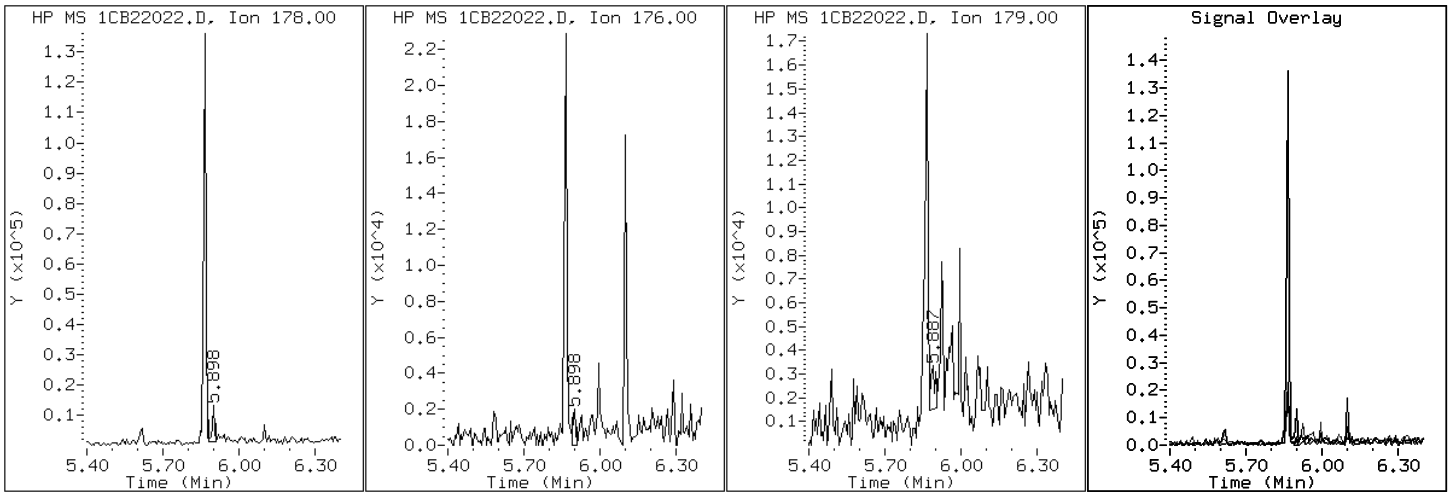
Client ID: FM0161AK-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a

Operator: SCC

12 Anthracene



Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

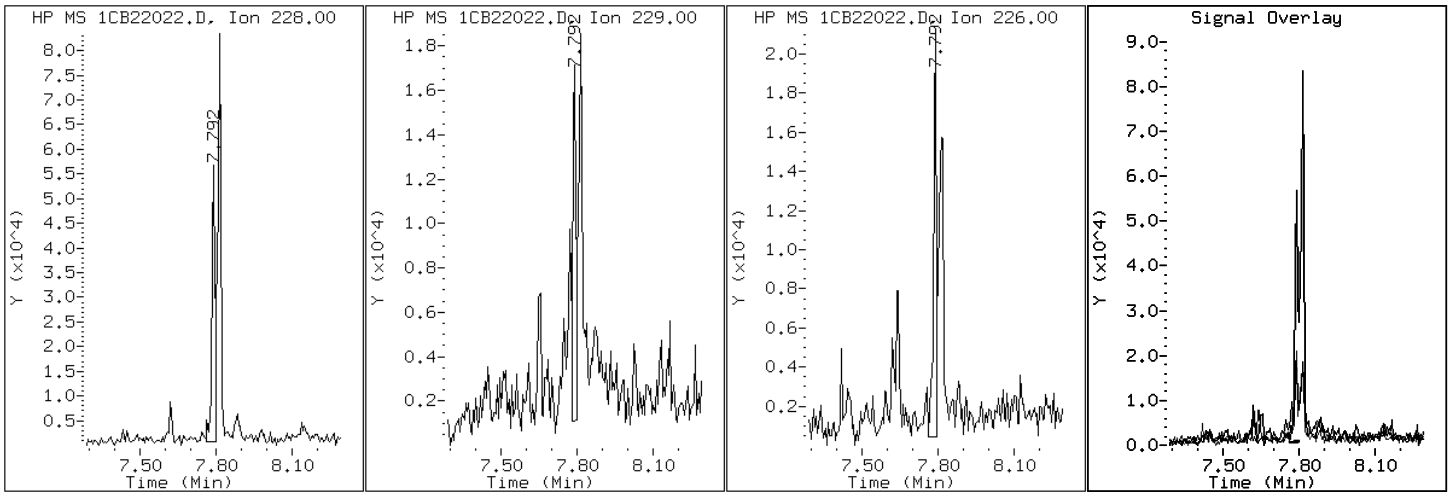
Client ID: FM0161AK-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a

Operator: SCC

17 Benzo(a)anthracene



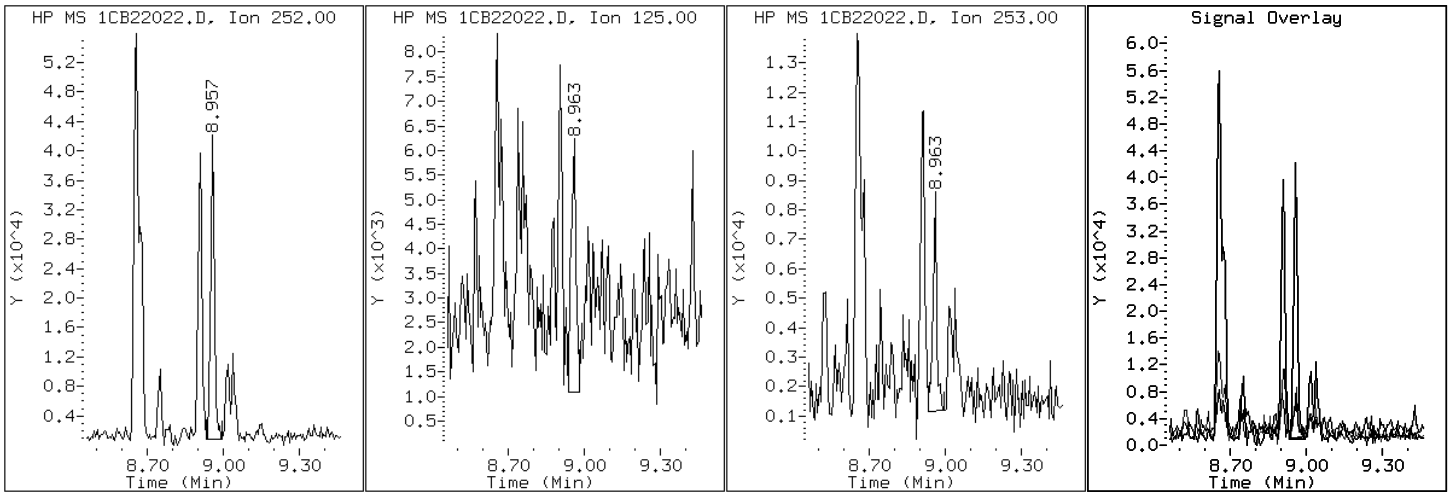
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

22 Benzo(a)pyrene



Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

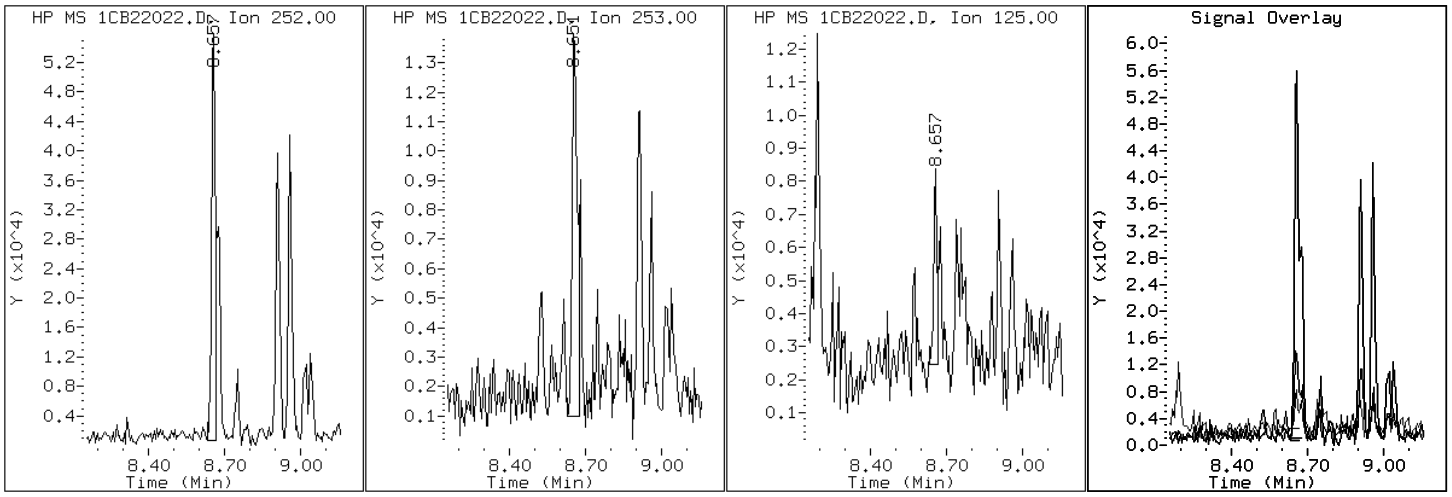
Client ID: FM0161AK-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a

Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

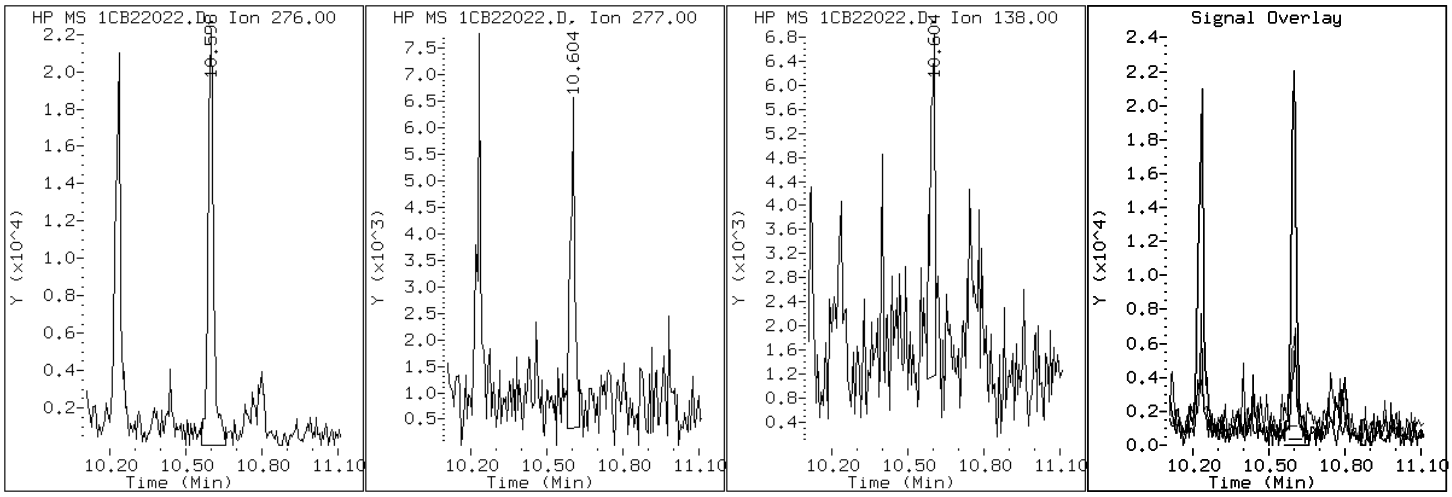
Client ID: FM0161AK-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a

Operator: SCC

26 Benzo(g,h,i)perylene



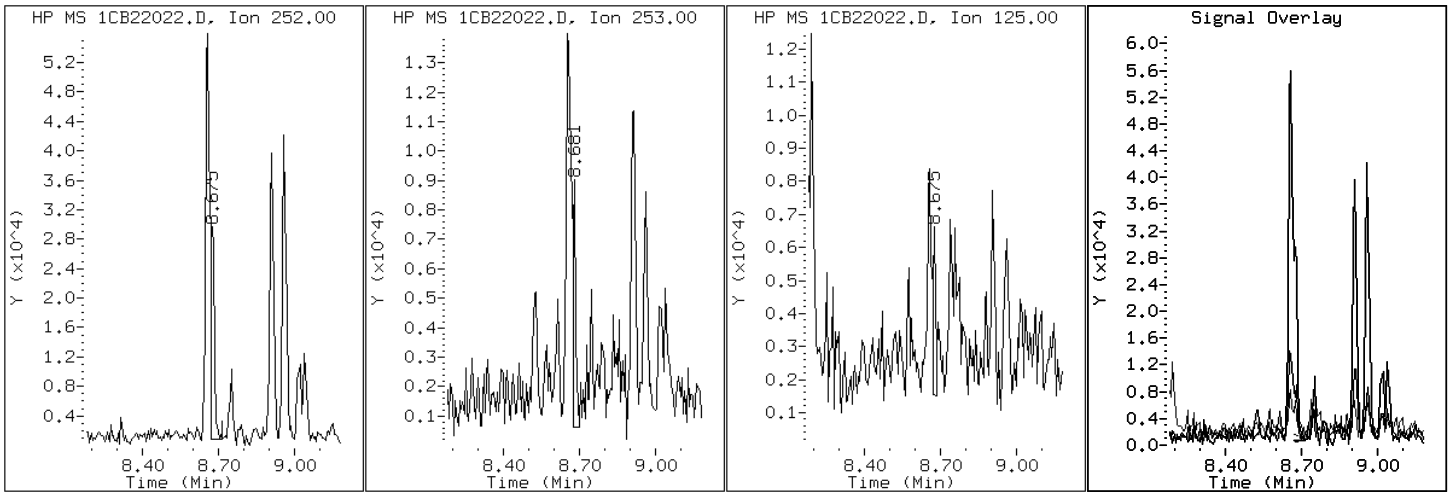
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

21 Benzo(k)fluoranthene



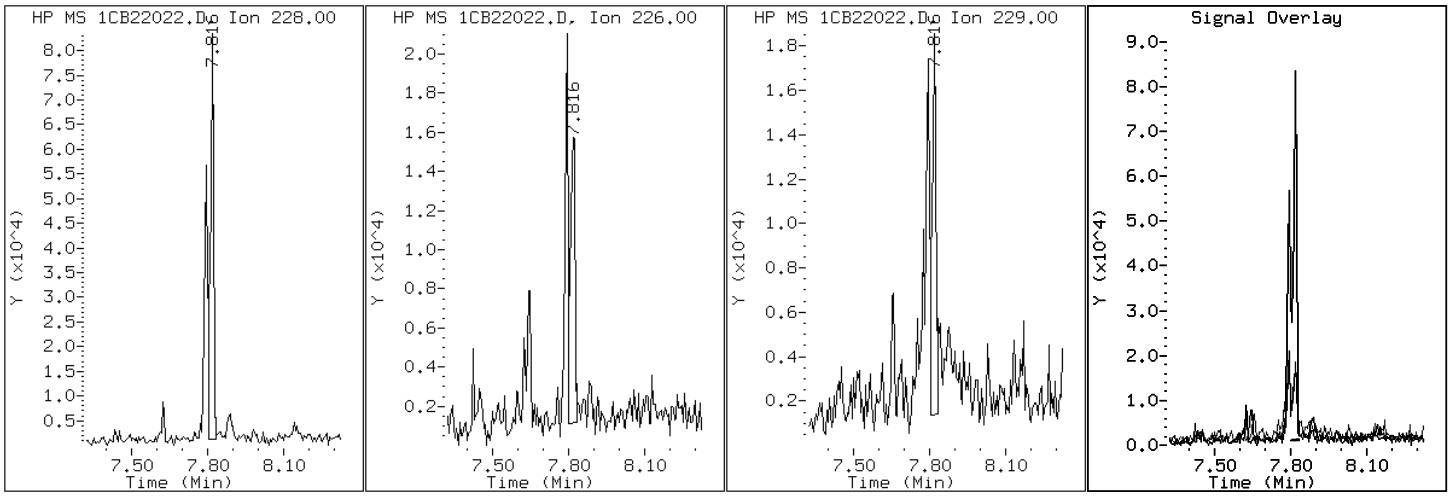
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

19 Chrysene



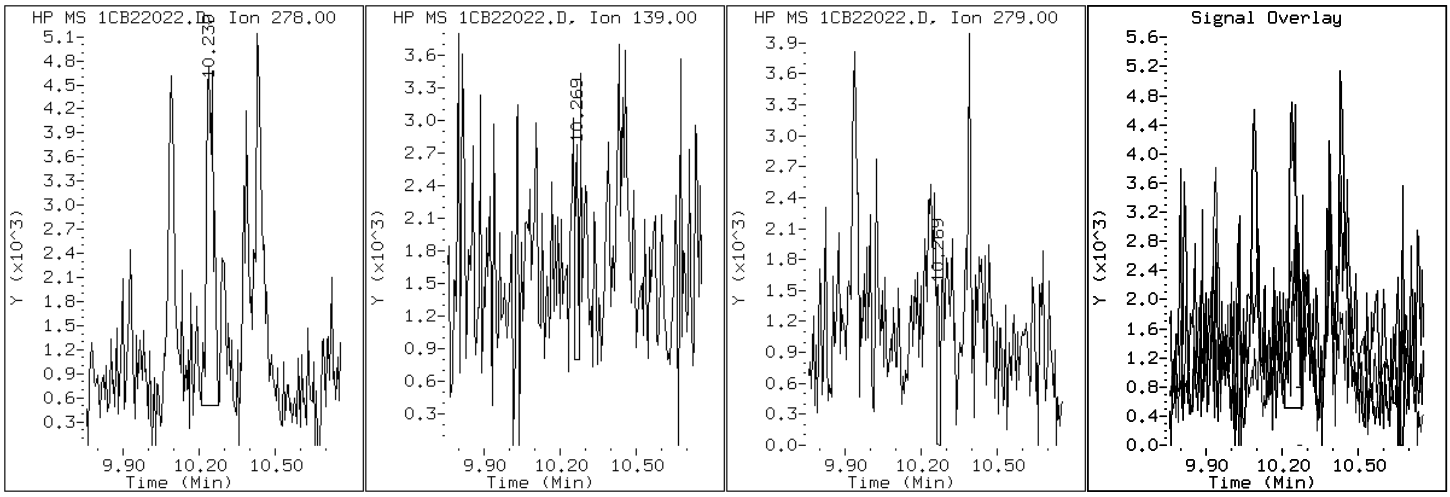
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a  Operator: SCC

25 Dibenzo(a,h)anthracene



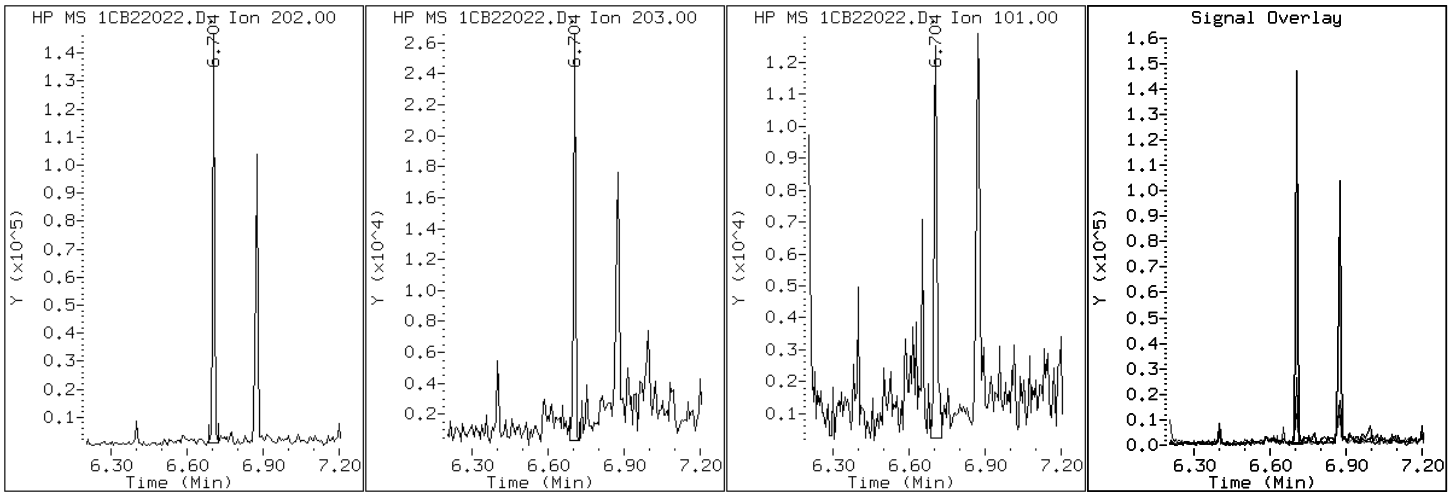
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

15 Fluoranthene



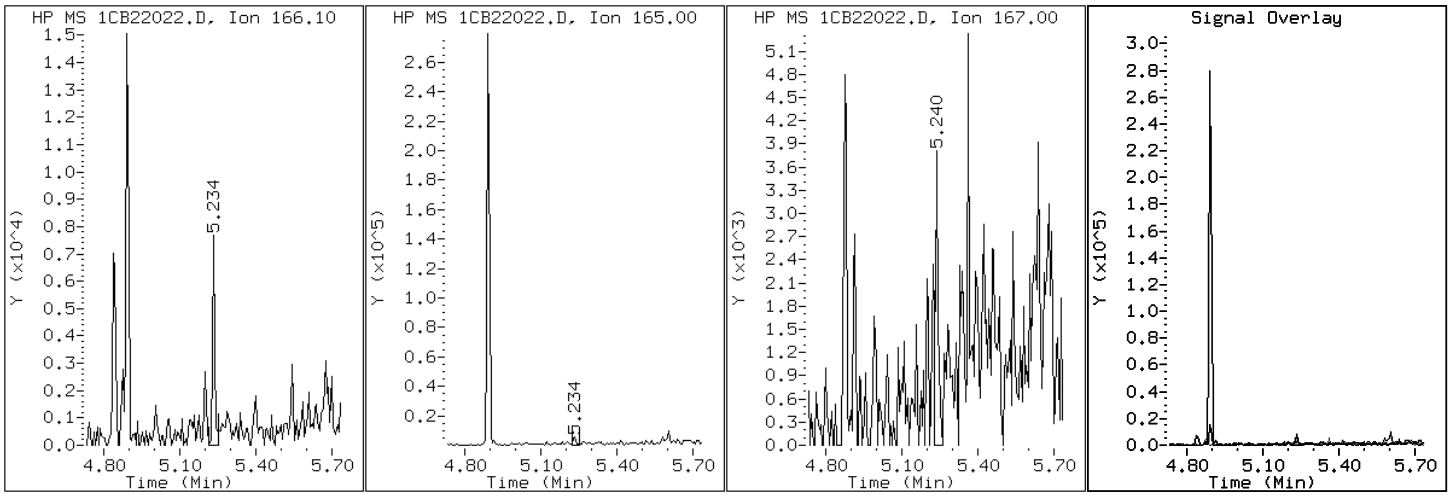
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

9 Fluorene



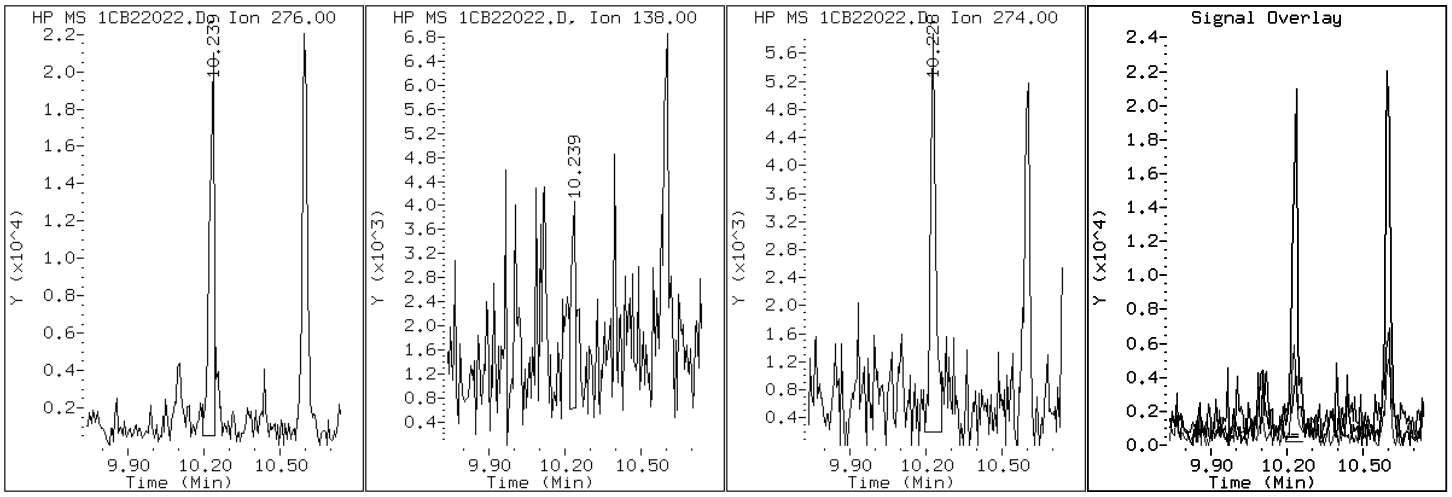
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

24 Indeno(1,2,3-cd)pyrene



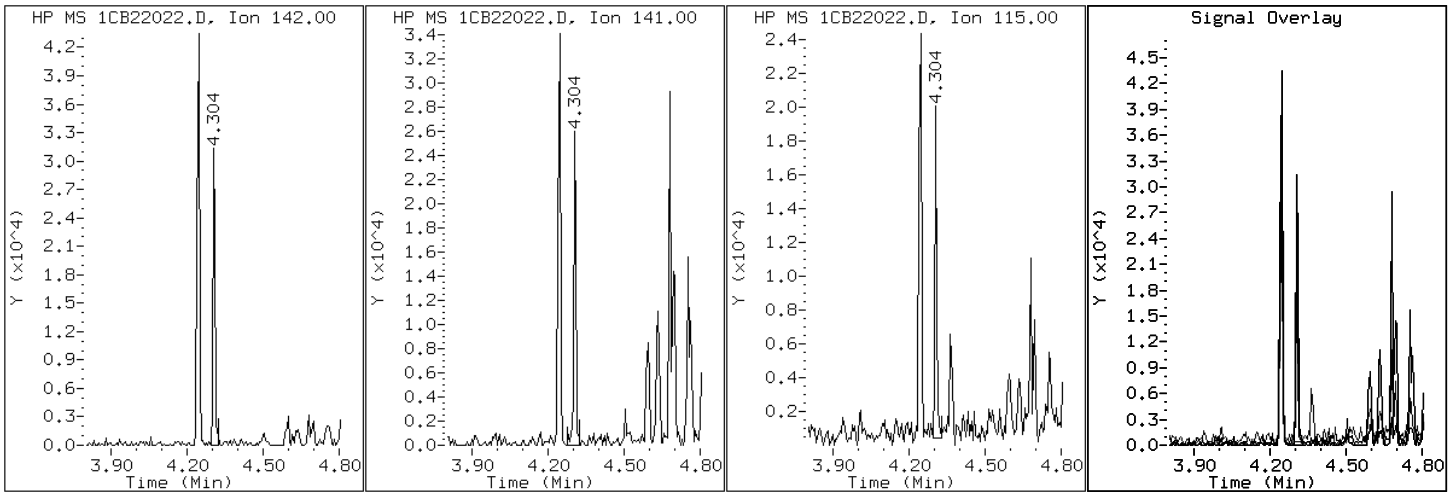
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

4 1-Methylnaphthalene



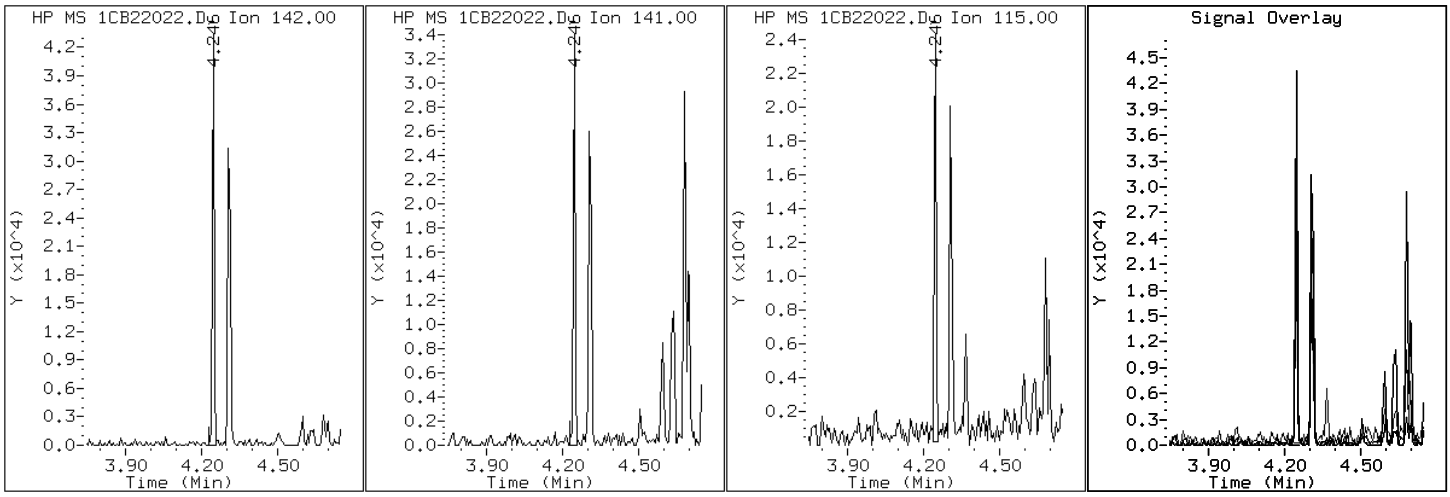
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a  Operator: SCC

3 2-Methylnaphthalene



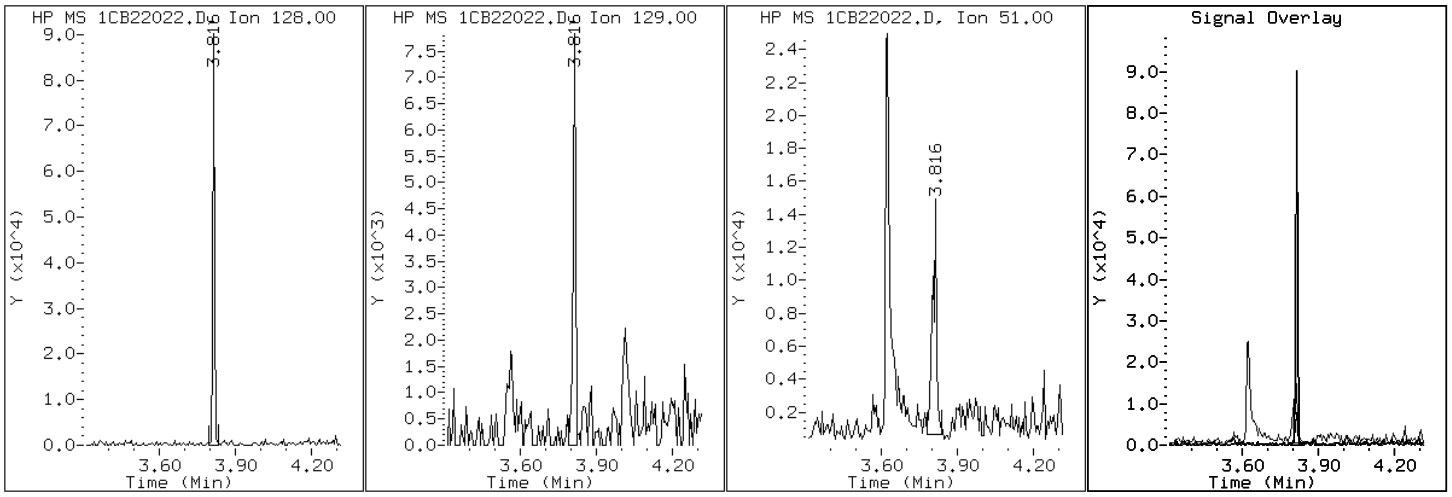
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

2 Naphthalene



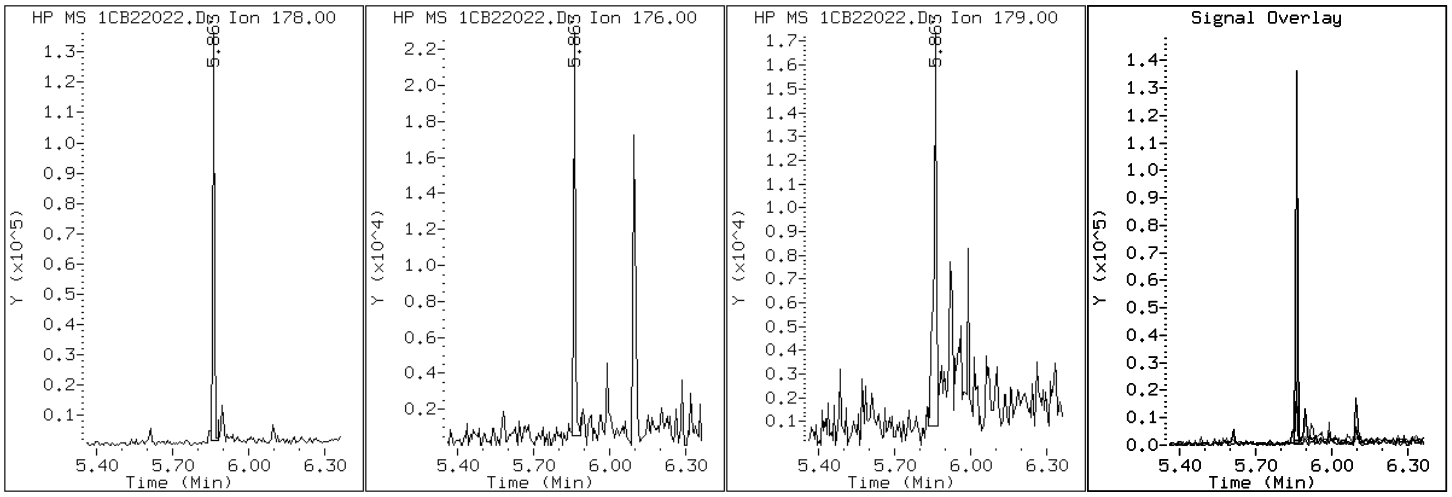
Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

Client ID: FM0161AK-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a Operator: SCC

11 Phenanthrene



Data File: 1CB22022.D

Date: 22-FEB-2013 17:48

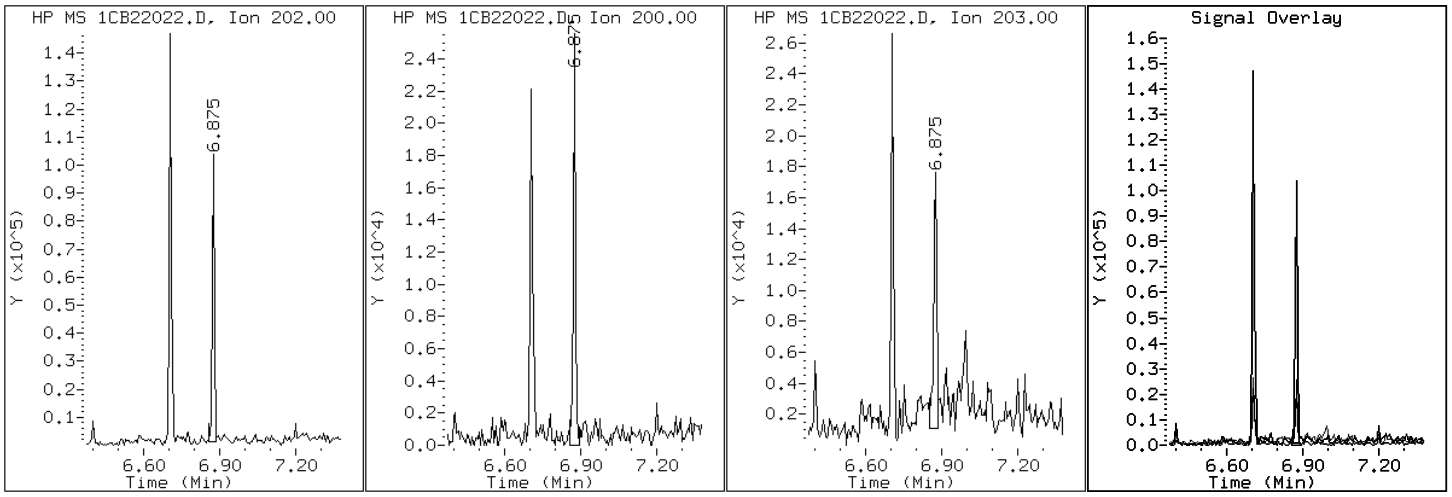
Client ID: FM0161AK-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-16-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22022.D
Inj. Date and Time: 22-FEB-2013 17:48
Instrument ID: BSMC5973.i
Client ID: FM0161AK-GS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

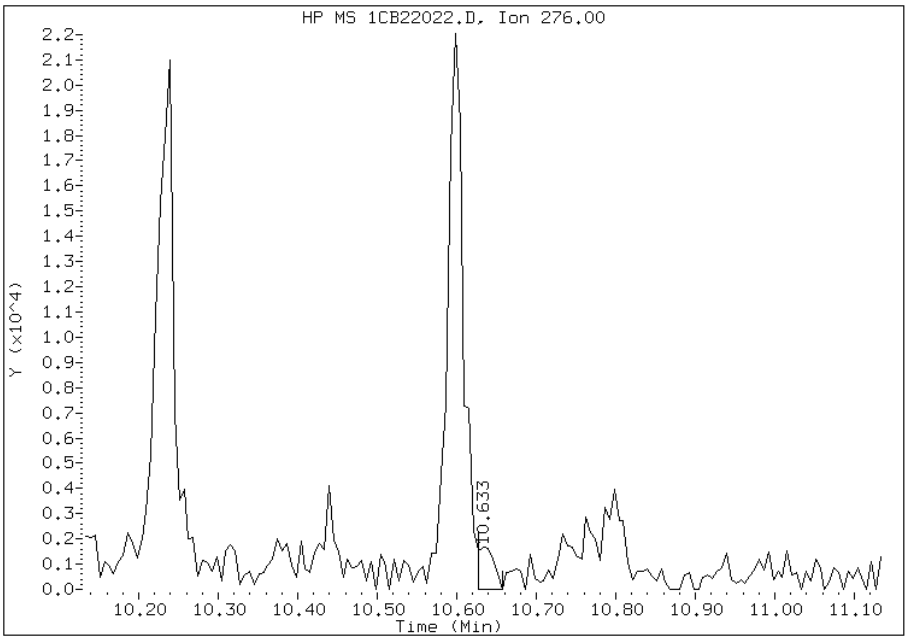
Processing Integration Results

RT: 10.63

Response: 2338

Amount: 0

Conc: 2



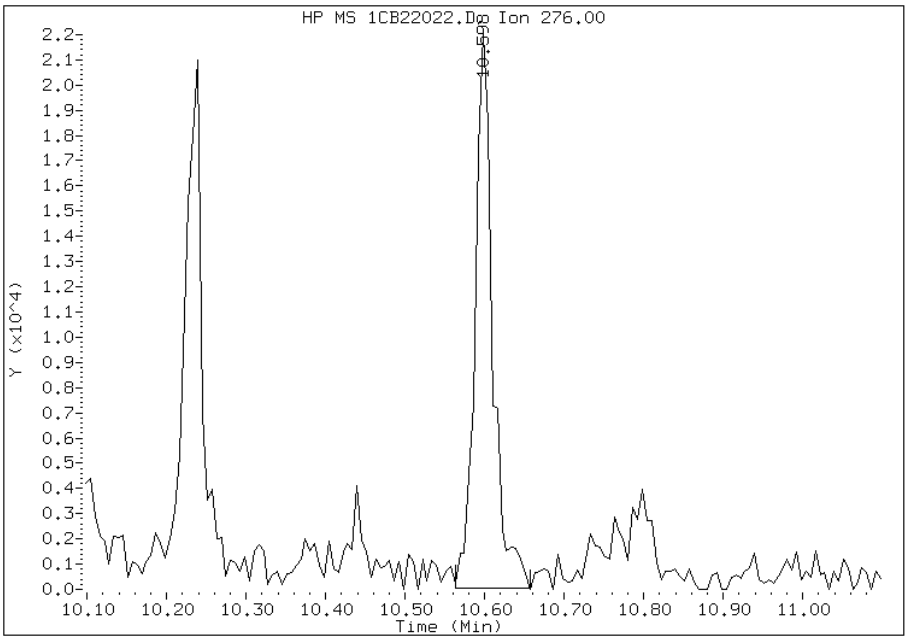

Manual Integration Results

RT: 10.60

Response: 33871

Amount: 0

Conc: 32




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:32
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22022.D
Inj. Date and Time: 22-FEB-2013 17:48
Instrument ID: BSMC5973.i
Client ID: FM0161AK-GS
Compound: 25 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 02/26/2013

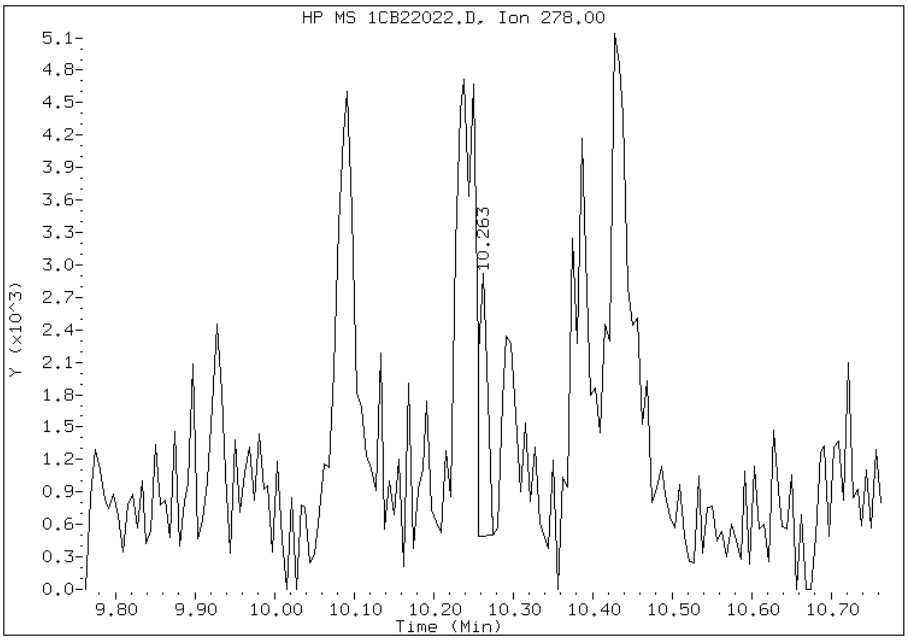
Processing Integration Results

RT: 10.26

Response: 1901

Amount: 0

Conc: 2



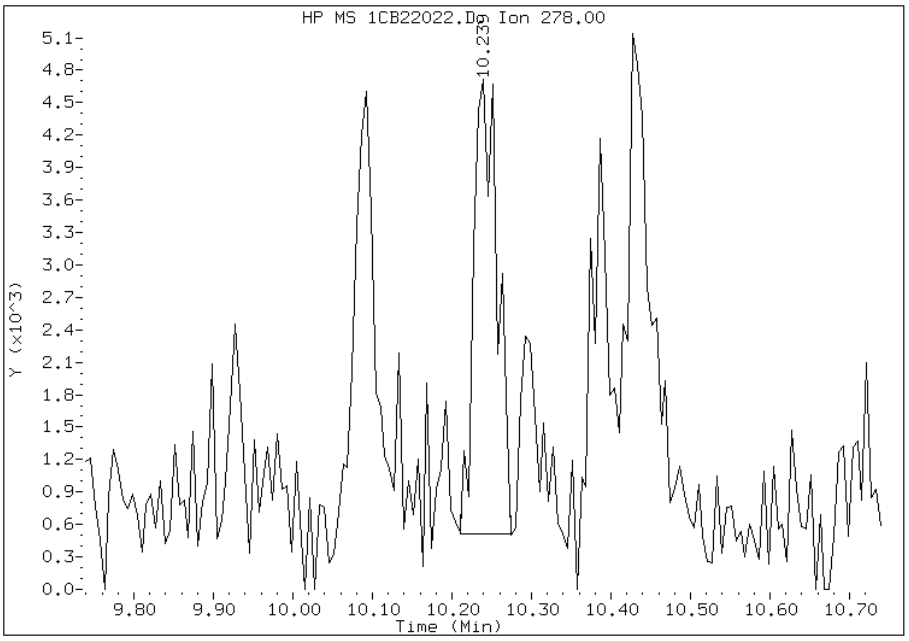

Manual Integration Results

RT: 10.24

Response: 8667

Amount: 0

Conc: 9




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:32
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22022.D
Inj. Date and Time: 22-FEB-2013 17:48
Instrument ID: BSMC5973.i
Client ID: FM0161AK-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

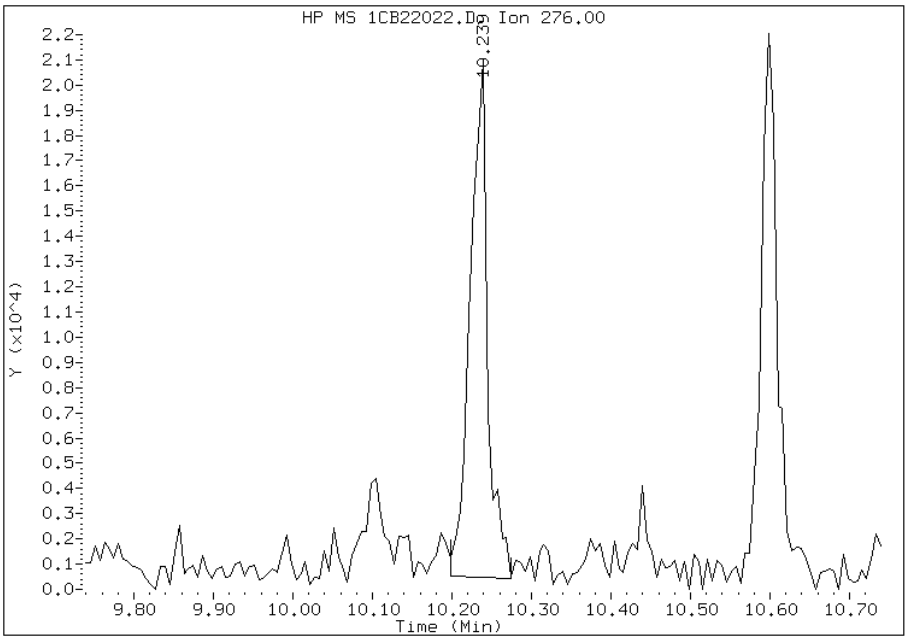
Processing Integration Results

RT: 10.24

Response: 31437

Amount: 0

Conc: 31



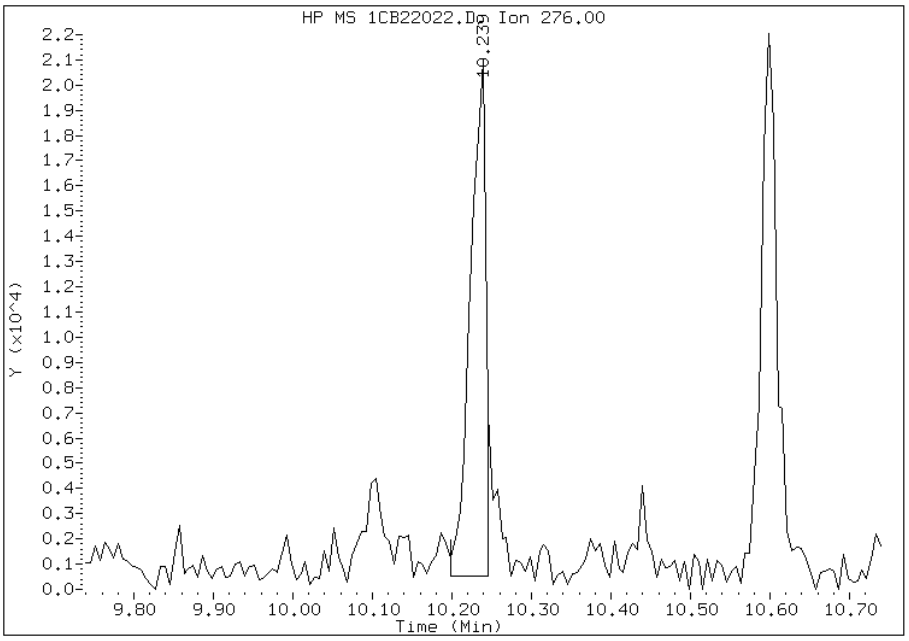

Manual Integration Results

RT: 10.24

Response: 27948

Amount: 0

Conc: 28




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:32
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AL-GS | Lab Sample ID: 680-87545-17

Matrix: Solid | Lab File ID: 1CB22023.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 10:52

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 14.96(g) | Date Analyzed: 02/22/2013 18:06

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 110 | U | 110 | 23 |
| 208-96-8 | Acenaphthylene | 18 | J | 45 | 5.6 |
| 120-12-7 | Anthracene | 27 | | 9.5 | 4.7 |
| 56-55-3 | Benzo[a]anthracene | 99 | | 9.0 | 4.4 |
| 50-32-8 | Benzo[a]pyrene | 86 | | 12 | 5.9 |
| 205-99-2 | Benzo[b]fluoranthene | 220 | | 14 | 6.9 |
| 191-24-2 | Benzo[g,h,i]perylene | 62 | | 23 | 5.0 |
| 207-08-9 | Benzo[k]fluoranthene | 66 | | 9.0 | 4.1 |
| 218-01-9 | Chrysene | 190 | | 10 | 5.1 |
| 53-70-3 | Dibenz(a,h)anthracene | 18 | J | 23 | 4.6 |
| 206-44-0 | Fluoranthene | 170 | | 23 | 4.5 |
| 86-73-7 | Fluorene | 20 | J | 23 | 4.6 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 45 | | 23 | 8.0 |
| 90-12-0 | 1-Methylnaphthalene | 79 | | 45 | 5.0 |
| 91-57-6 | 2-Methylnaphthalene | 110 | | 45 | 8.0 |
| 91-20-3 | Naphthalene | 140 | | 45 | 5.0 |
| 85-01-8 | Phenanthrene | 150 | | 9.0 | 4.4 |
| 129-00-0 | Pyrene | 170 | | 23 | 4.2 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 85 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22023.D
Lab Smp Id: 680-87545-A-17-A Client Smp ID: FM0161AL-GS
Inj Date : 22-FEB-2013 18:06
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-17-a
Misc Info : 680-87545-A-17-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 14.960 | Weight Extracted |
| M | 10.965 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1736231 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1354682 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2483517 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 319139 | 8.51108 | 638.9869 |
| * 18 Chrysene-d12 | 240 | 7.803 | 7.798 | (1.000) | 2847350 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.021 | 9.016 | (1.000) | 2662092 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 81684 | 1.80714 | 135.6748 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 42843 | 1.42096 | 106.6812 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 29056 | 1.05811 | 79.4400 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 13444 | 0.24615 | 18.4804 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 11160 | 0.25994 | 19.5157(Q) |
| 11 Phenanthrene | 178 | 5.862 | 5.863 | (1.003) | 144487 | 2.01201 | 151.0556 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 25099 | 0.35737 | 26.8304 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 28429 | 0.45536 | 34.1873 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 179194 | 2.27857 | 171.0683 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.881) | 171119 | 2.23631 | 167.8956 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.998) | 108874 | 1.32482 | 99.4638 |
| 19 Chrysene | 228 | 7.821 | 7.822 | (1.002) | 205312 | 2.49644 | 187.4257 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.657 | (0.960) | 206427 | 2.96717 | 222.7662 |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 62608 | 0.87725 | 65.8614(QM) |
| 22 Benzo(a)pyrene | 252 | 8.962 | 8.963 | (0.993) | 77158 | 1.14180 | 85.7231 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.239 | (1.134) | 38057 | 0.59867 | 44.9461(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.257 | (1.136) | 15063 | 0.24225 | 18.1873(M) |
| 26 Benzo(g,h,i)perylene | 276 | 10.603 | 10.610 | (1.175) | 55302 | 0.83162 | 62.4356(M) |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22023.D

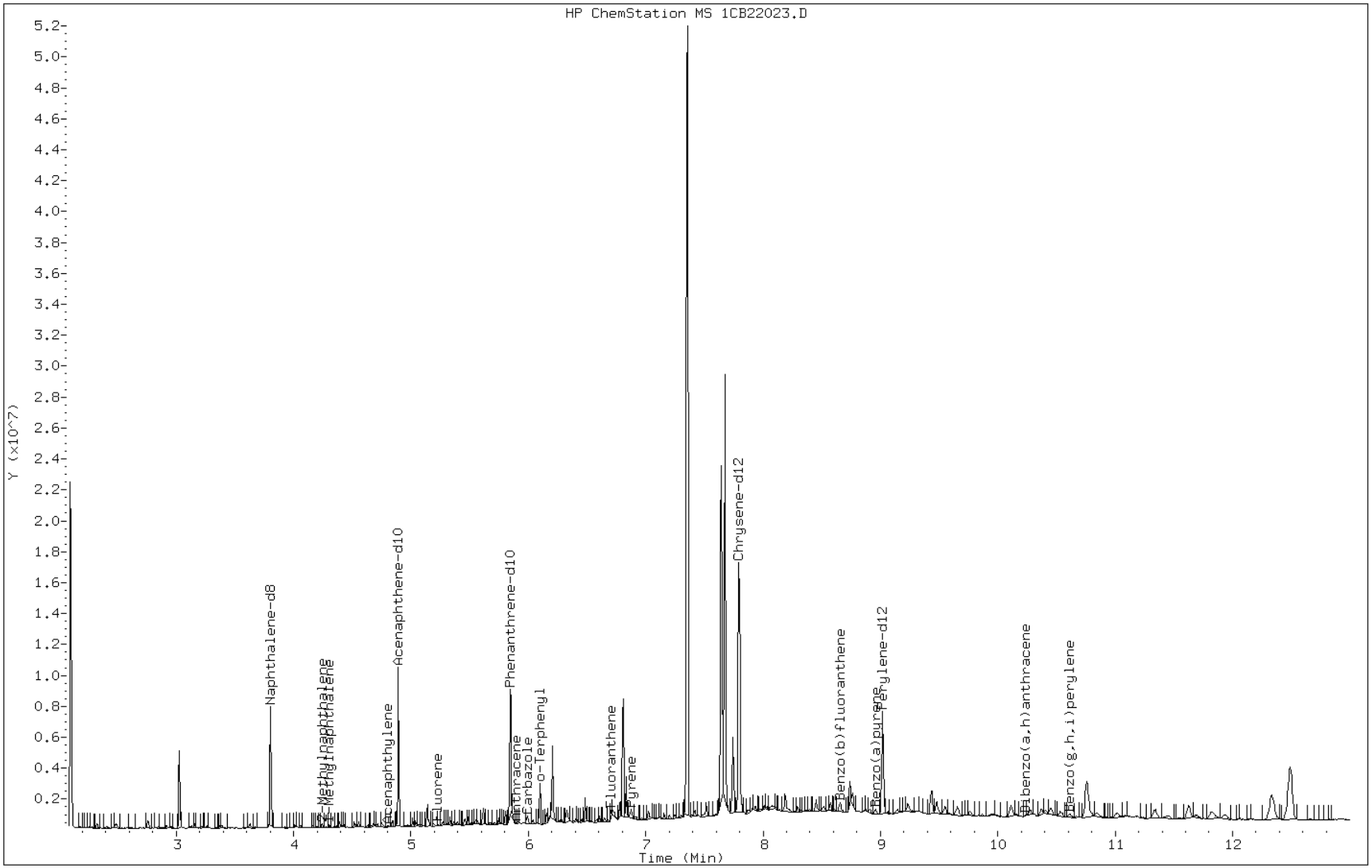
Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a

Operator: SCC



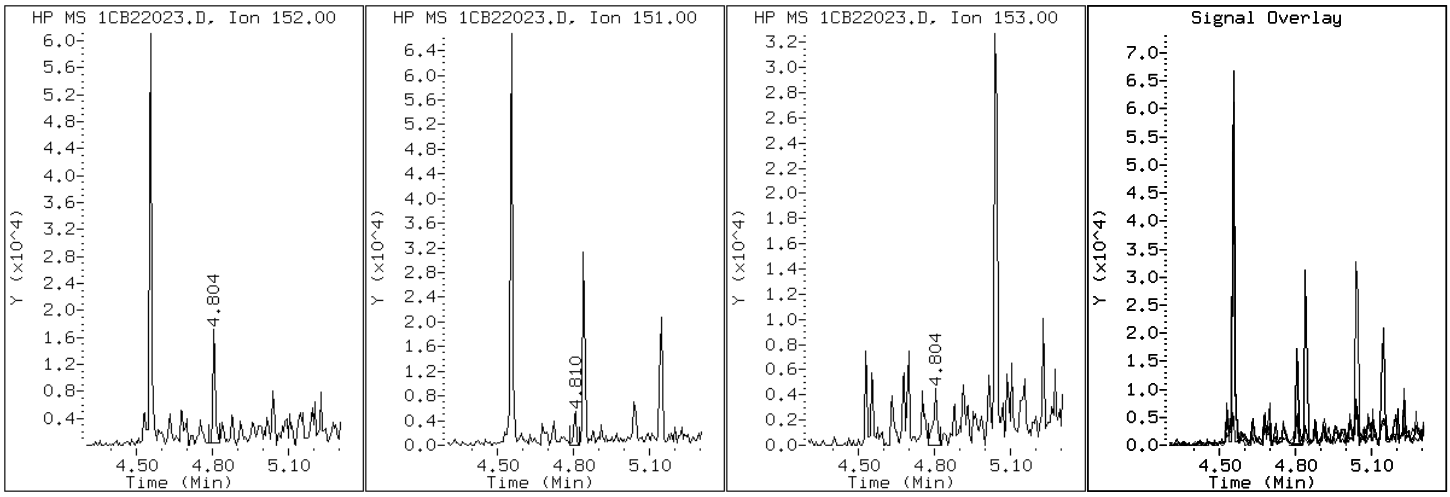
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a  Operator: SCC

5 Acenaphthylene



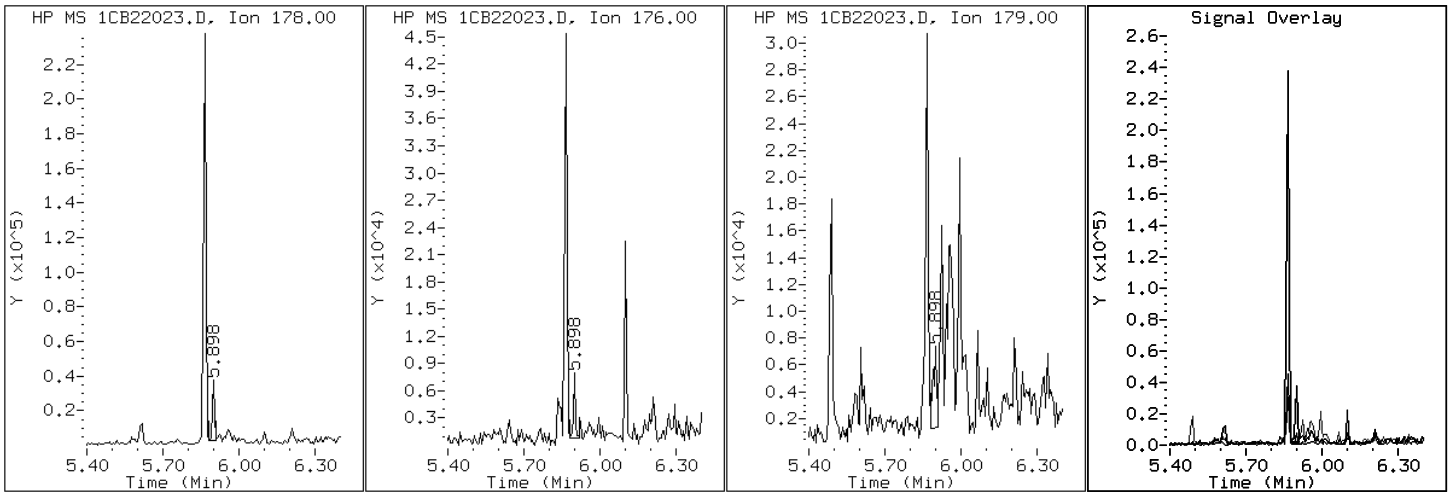
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

12 Anthracene



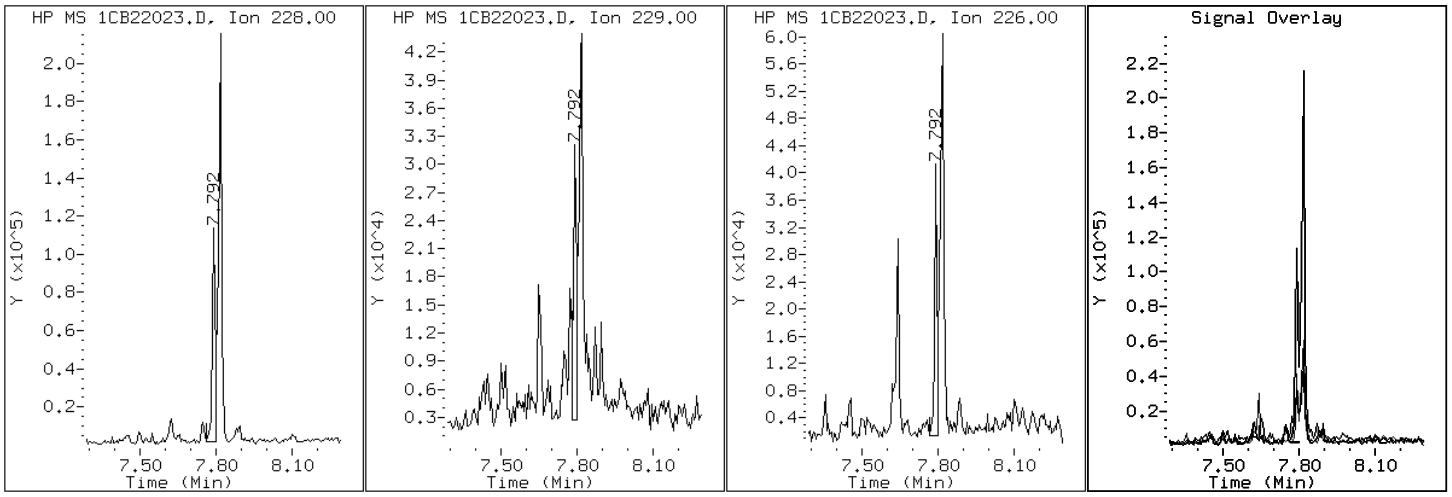
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

17 Benzo(a)anthracene



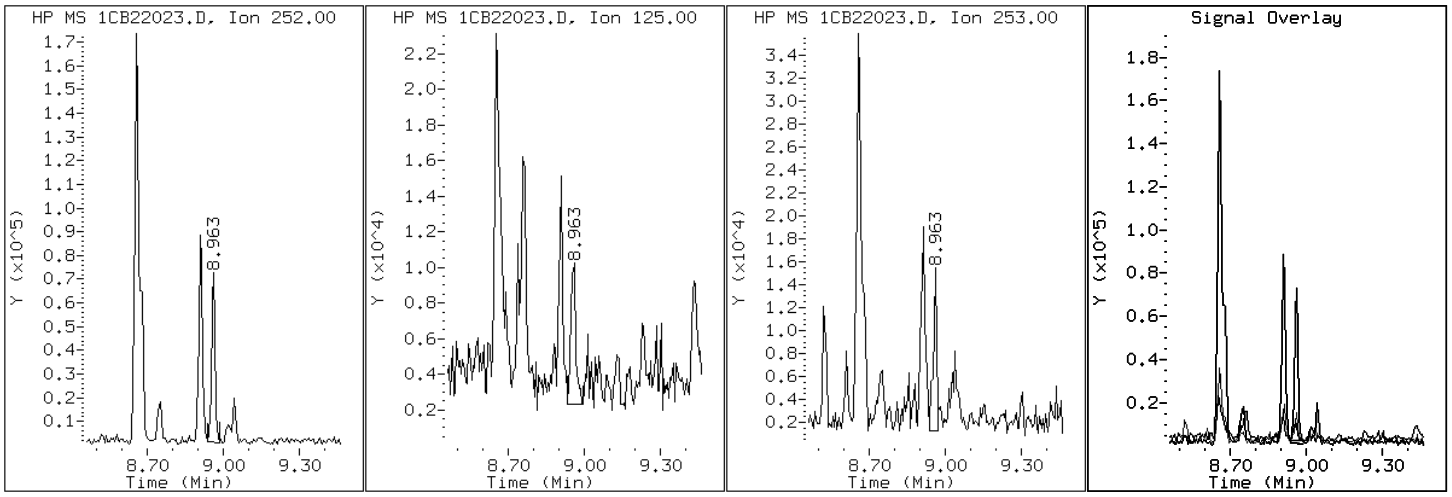
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a  Operator: SCC

22 Benzo(a)pyrene



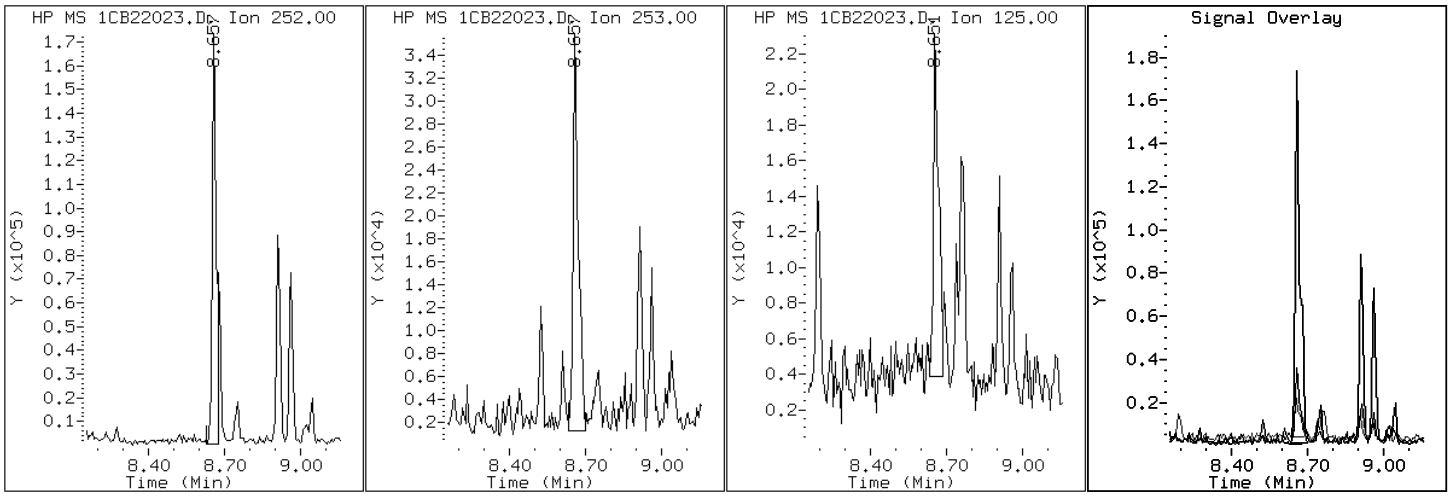
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

20 Benzo(b)fluoranthene



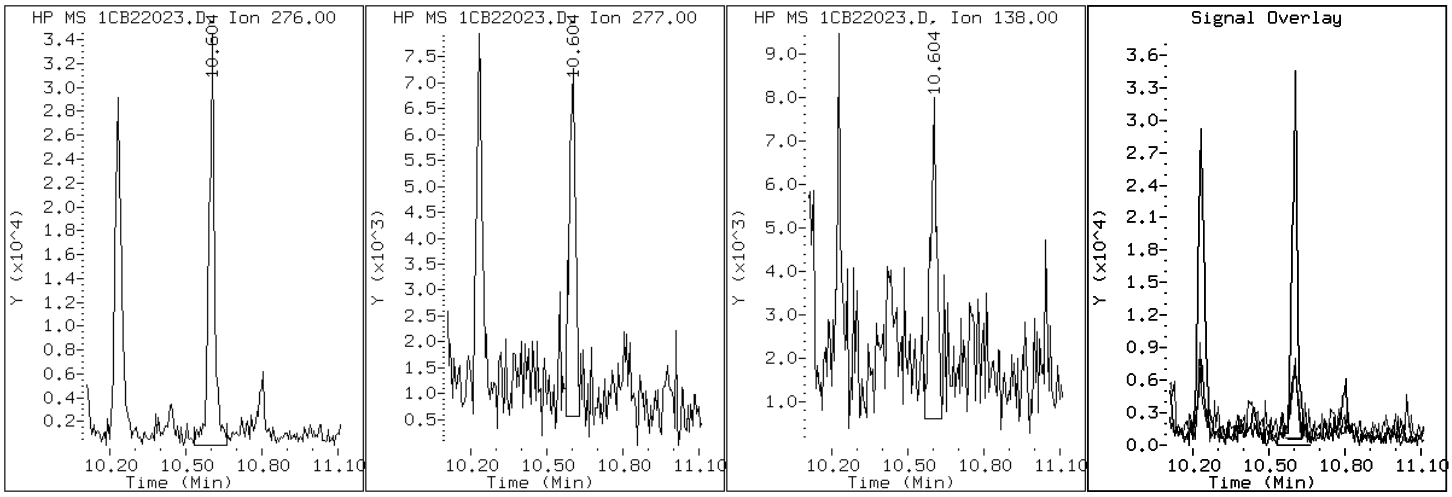
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a  Operator: SCC

26 Benzo(g,h,i)perylene



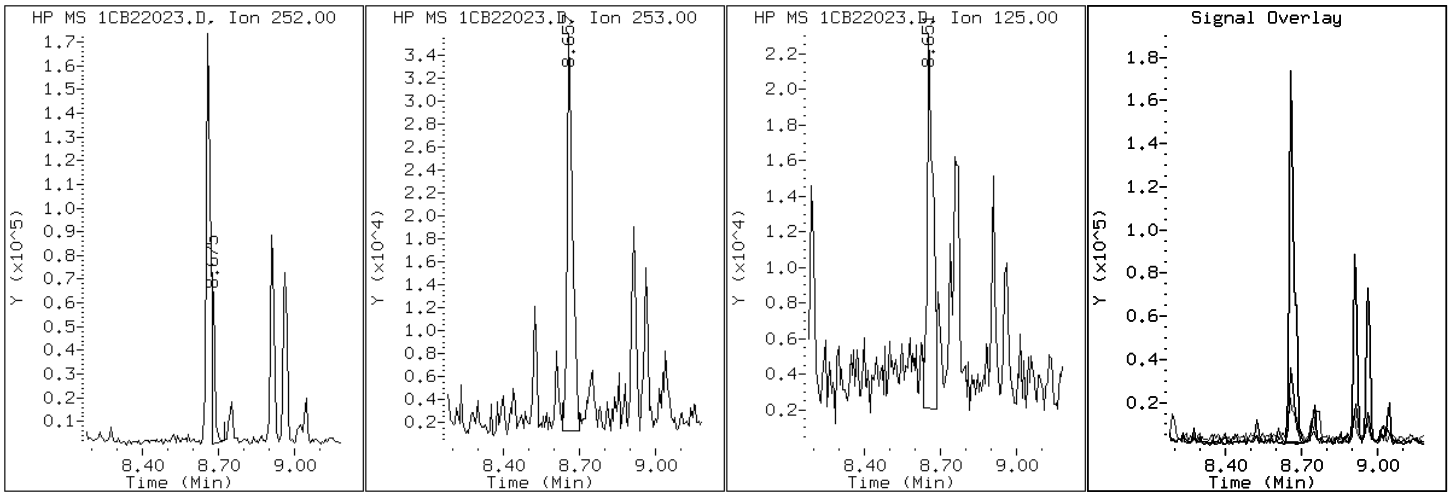
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

21 Benzo(k)fluoranthene



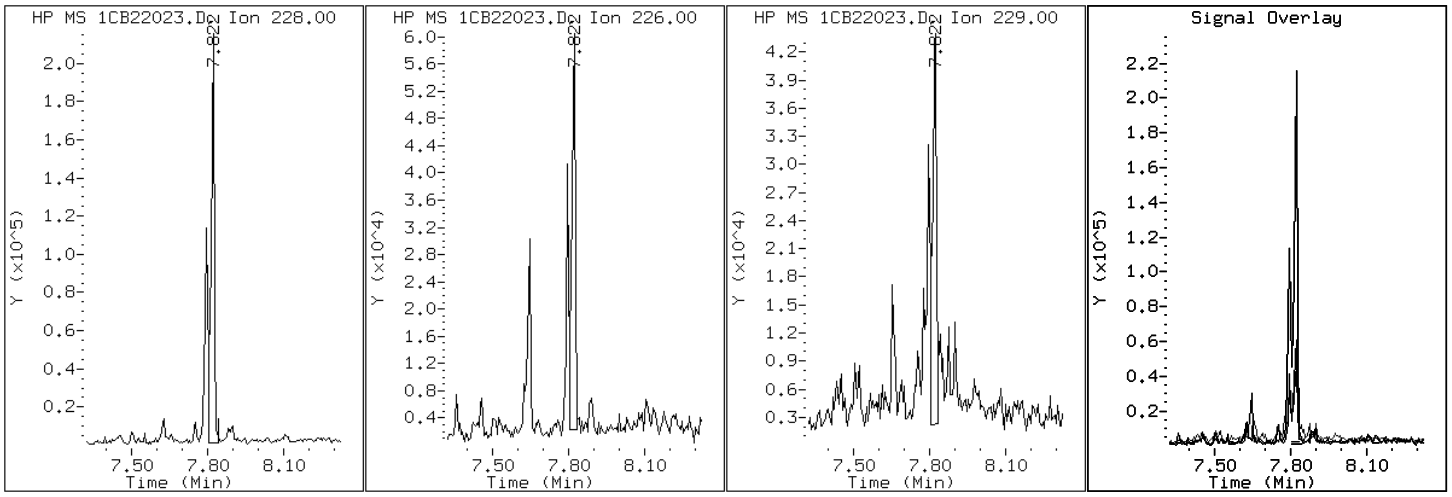
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

19 Chrysene



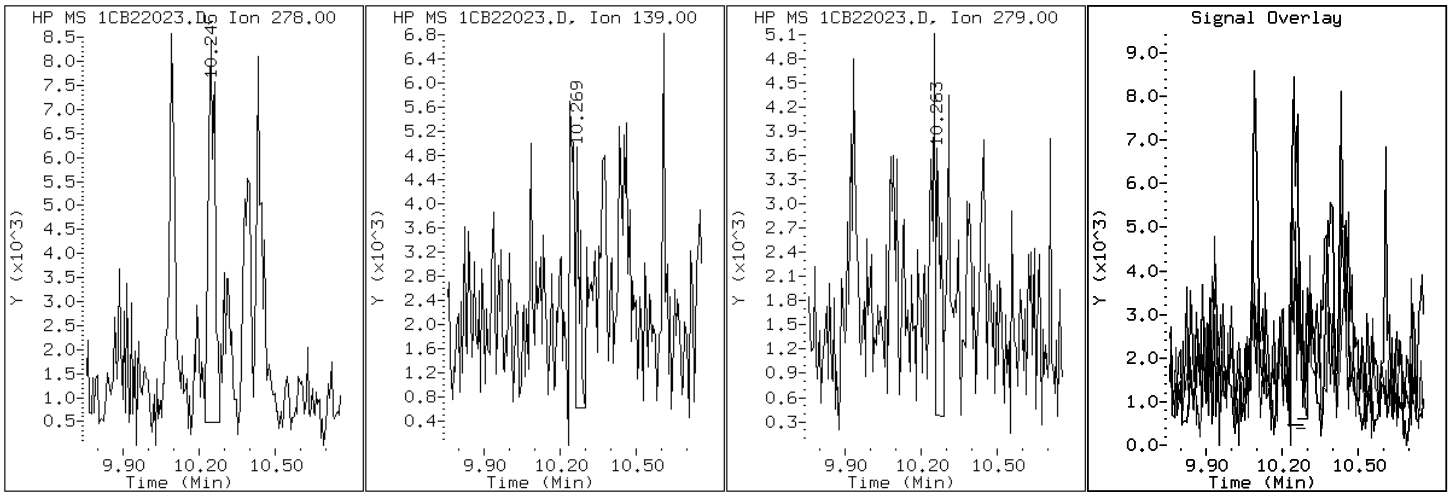
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a  Operator: SCC

25 Dibenzo(a,h)anthracene



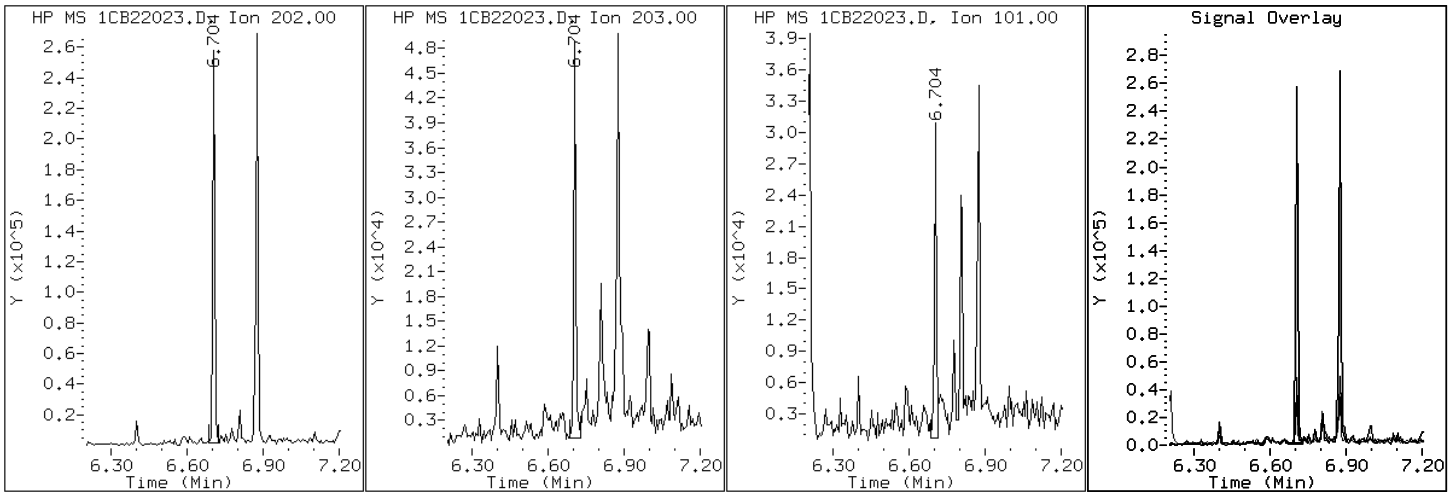
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a  Operator: SCC

15 Fluoranthene



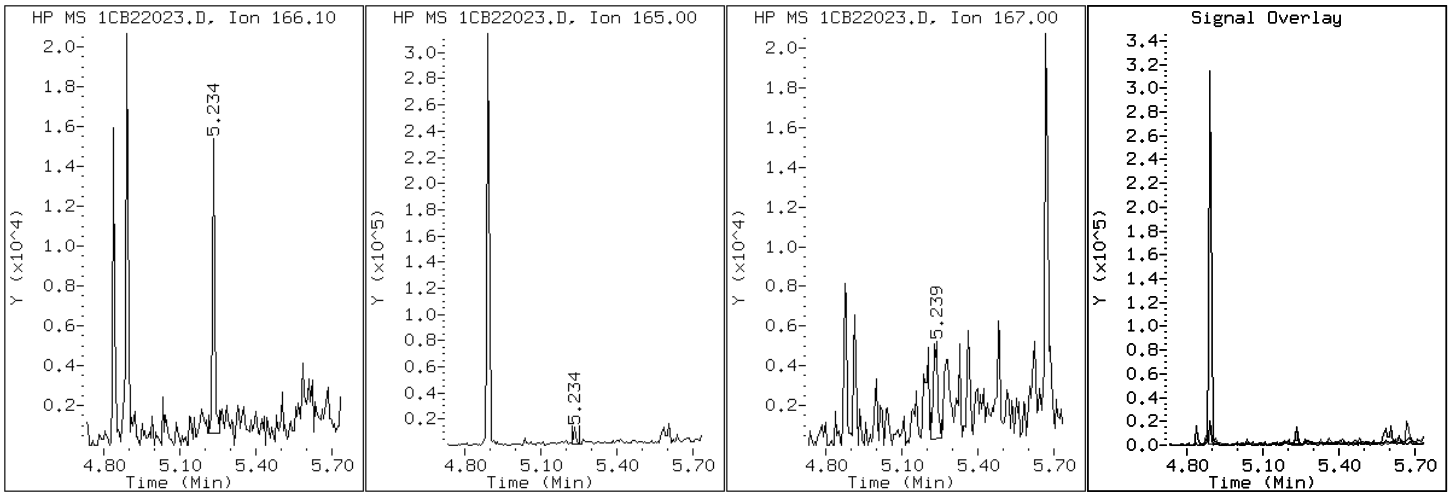
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

9 Fluorene



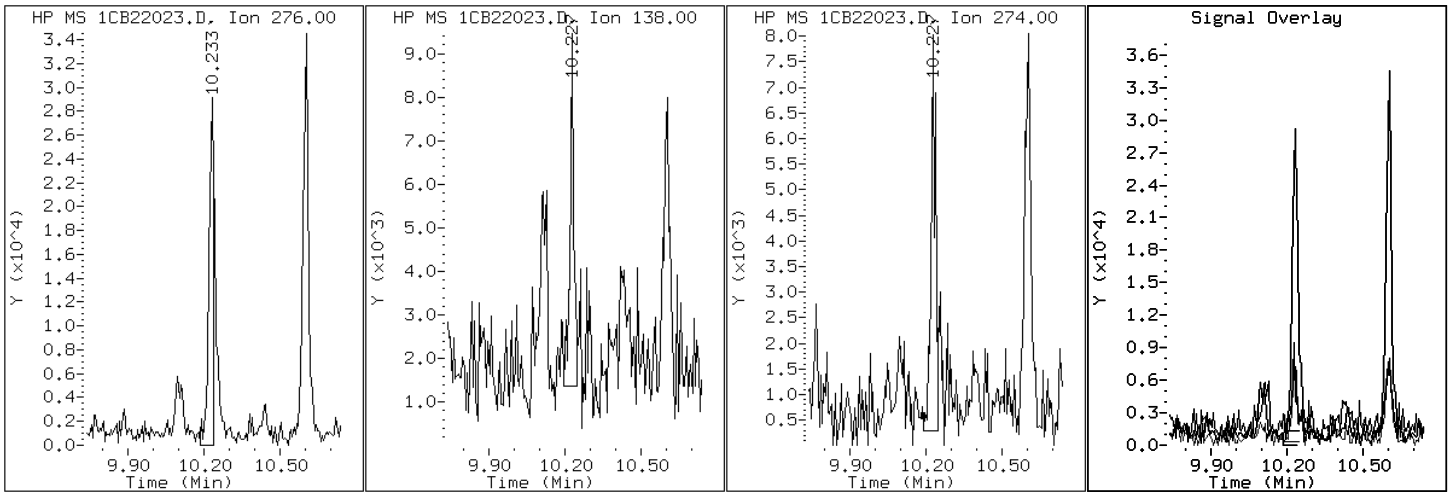
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

24 Indeno(1,2,3-cd)pyrene



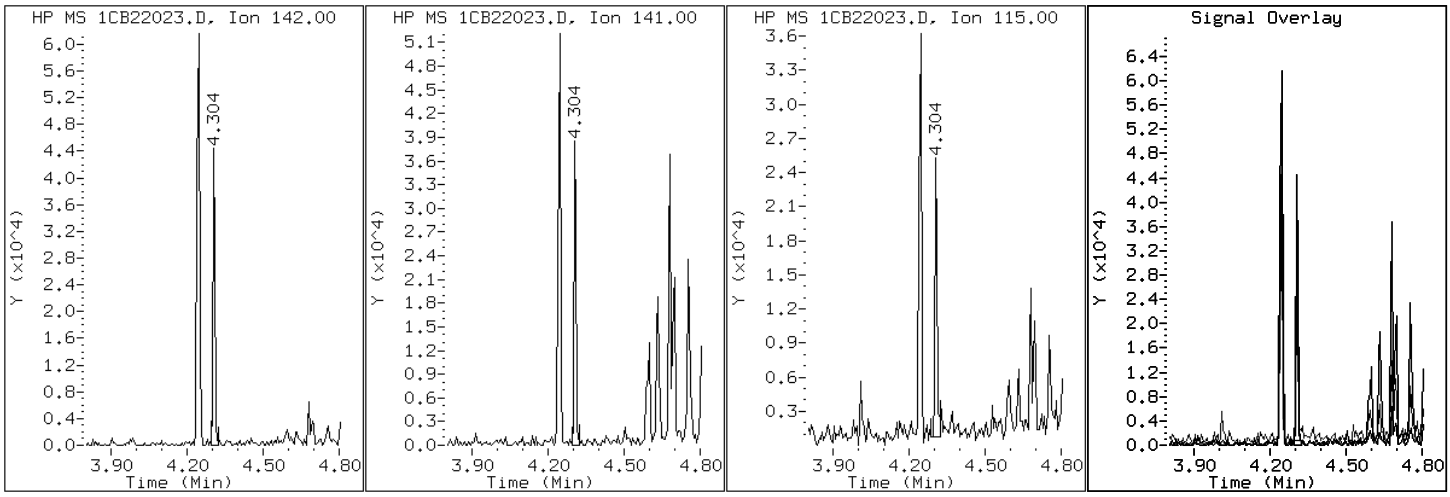
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

4 1-Methylnaphthalene



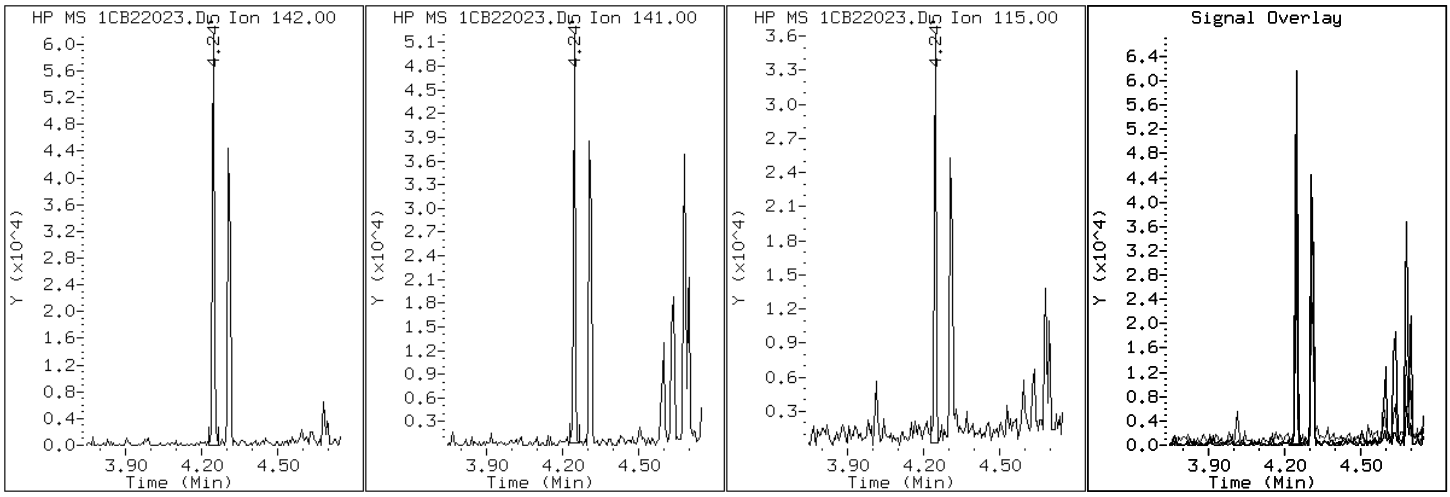
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a  Operator: SCC

3 2-Methylnaphthalene



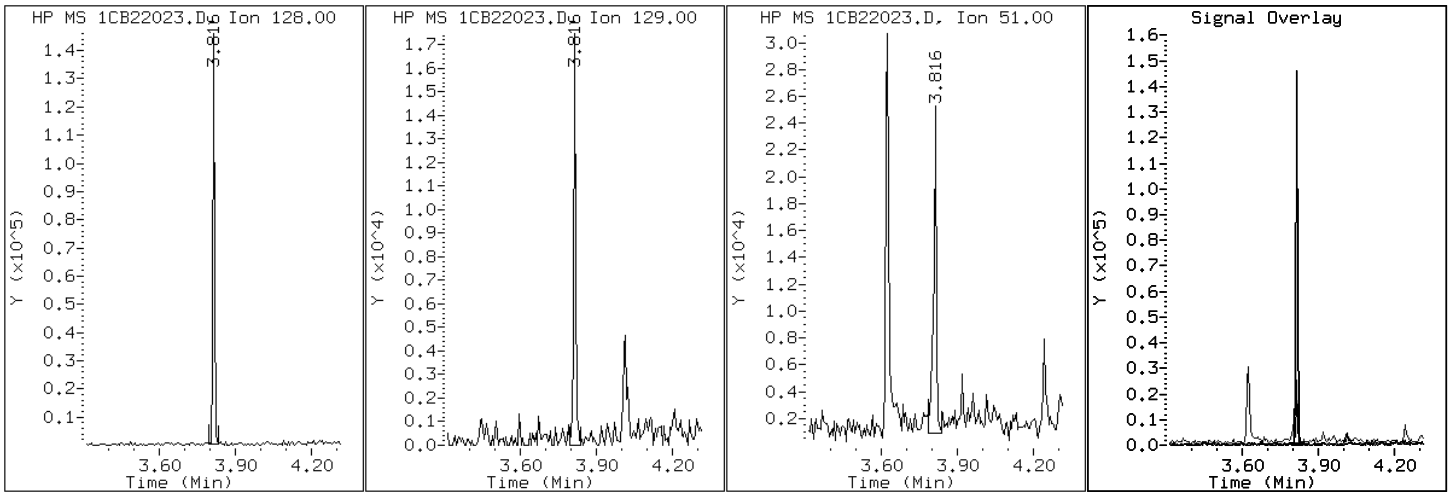
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

2 Naphthalene



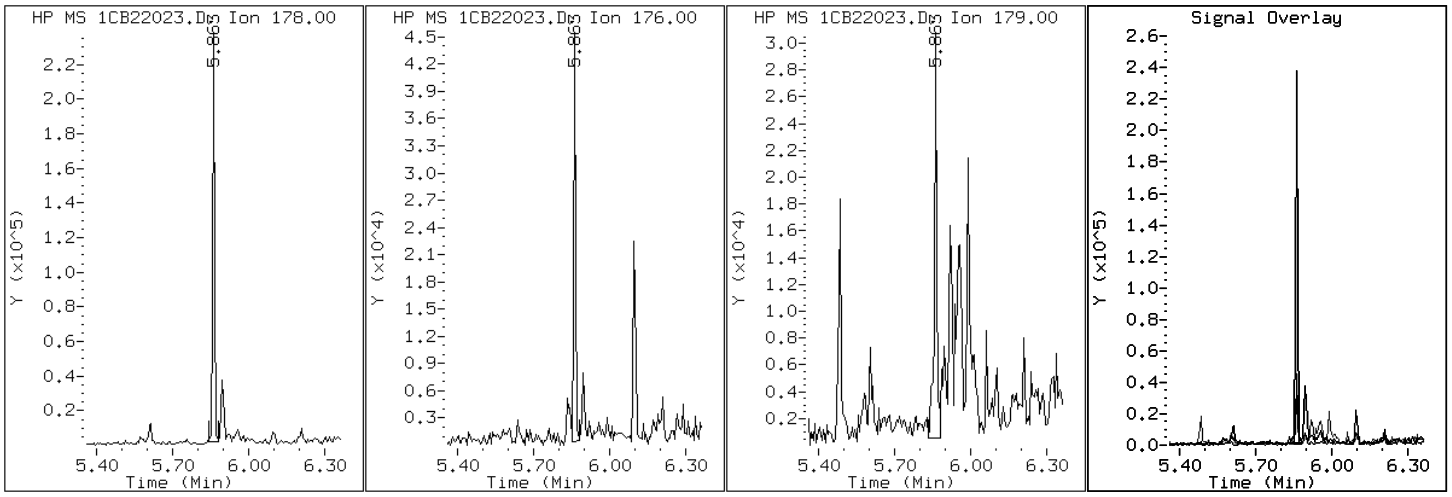
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a  Operator: SCC

11 Phenanthrene



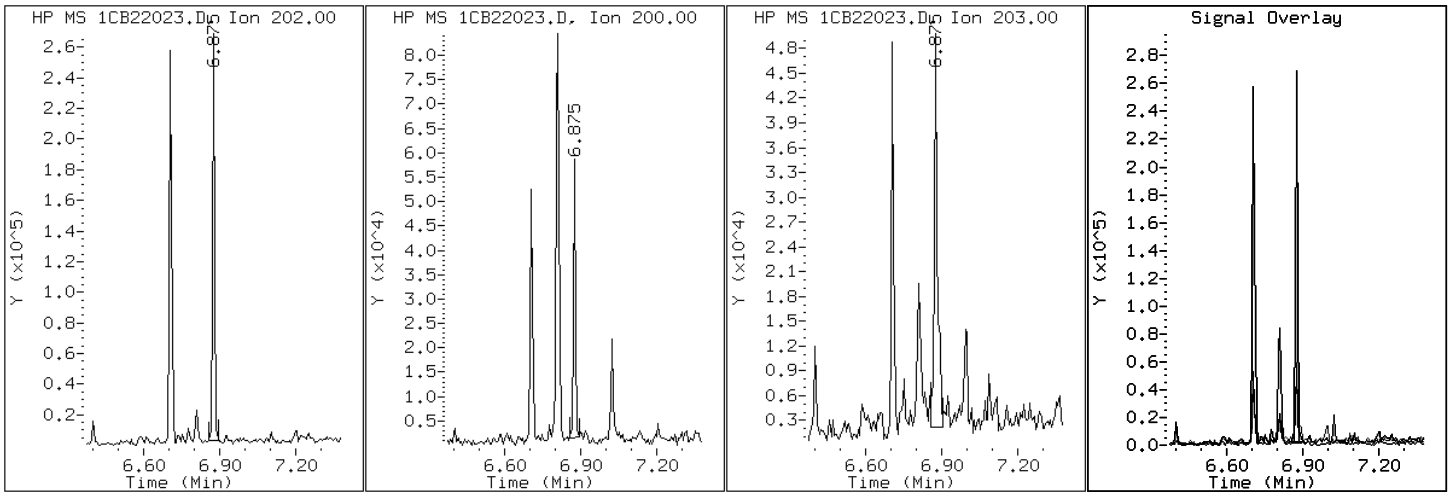
Data File: 1CB22023.D

Date: 22-FEB-2013 18:06

Client ID: FM0161AL-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-17-a Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22023.D
Inj. Date and Time: 22-FEB-2013 18:06
Instrument ID: BSMC5973.i
Client ID: FM0161AL-GS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

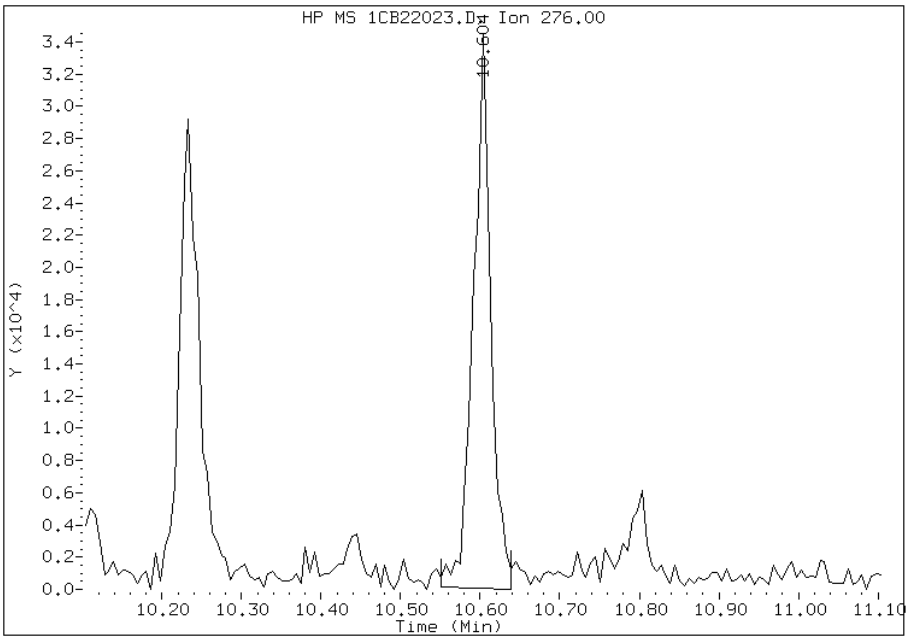
Processing Integration Results

RT: 10.60

Response: 52810

Amount: 1

Conc: 60



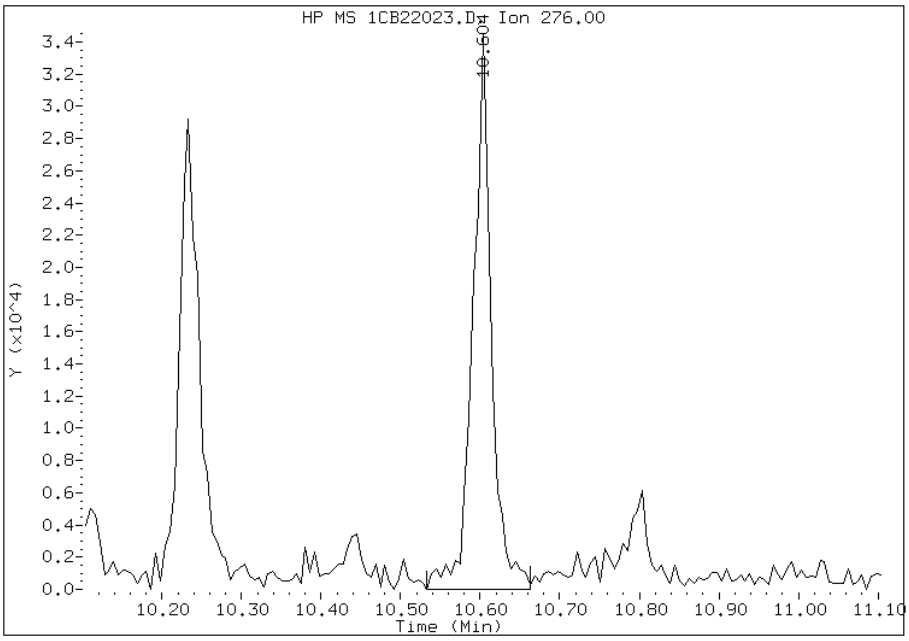

Manual Integration Results

RT: 10.60

Response: 55302

Amount: 1

Conc: 62




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:34
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22023.D
Inj. Date and Time: 22-FEB-2013 18:06
Instrument ID: BSMC5973.i
Client ID: FM0161AL-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

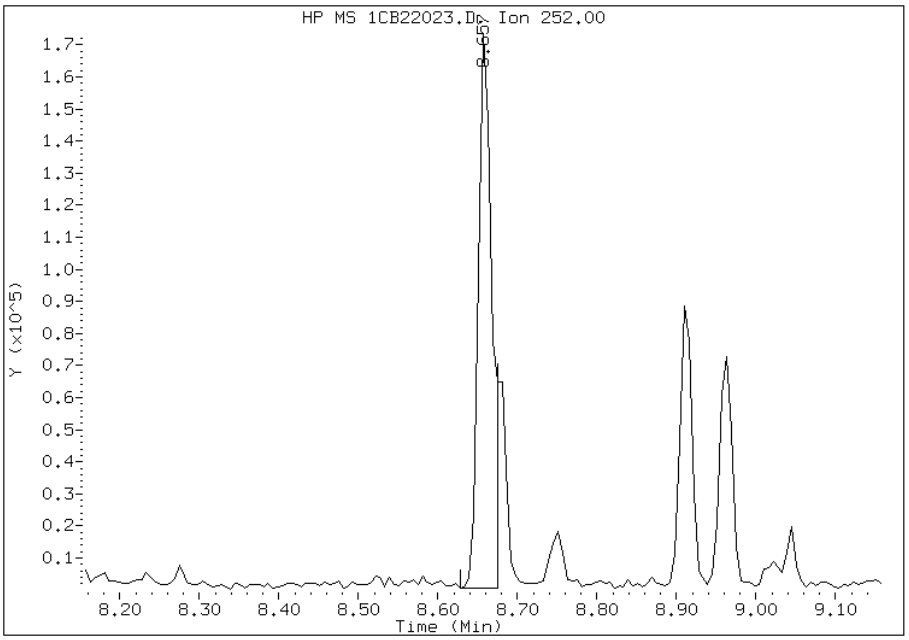
Processing Integration Results

RT: 8.66

Response: 206427

Amount: 3

Conc: 217



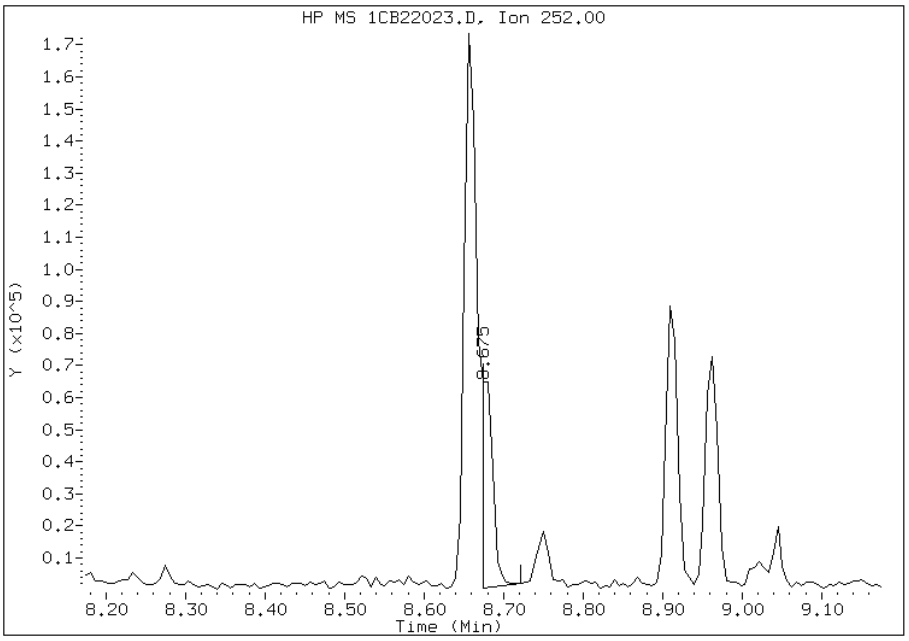

Manual Integration Results

RT: 8.67

Response: 62608

Amount: 1

Conc: 66




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:33
Manual Integration Reason: Analyte Misidentified by the Data System

Manual Integration Report

Data File: 1CB22023.D
Inj. Date and Time: 22-FEB-2013 18:06
Instrument ID: BSMC5973.i
Client ID: FM0161AL-GS
Compound: 25 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 02/26/2013

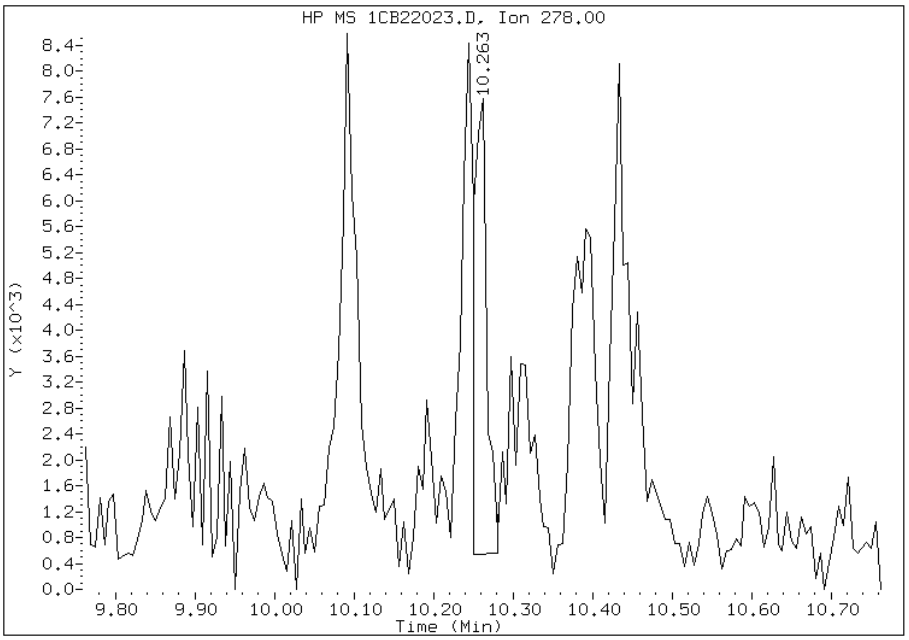
Processing Integration Results

RT: 10.26

Response: 8012

Amount: 0

Conc: 10



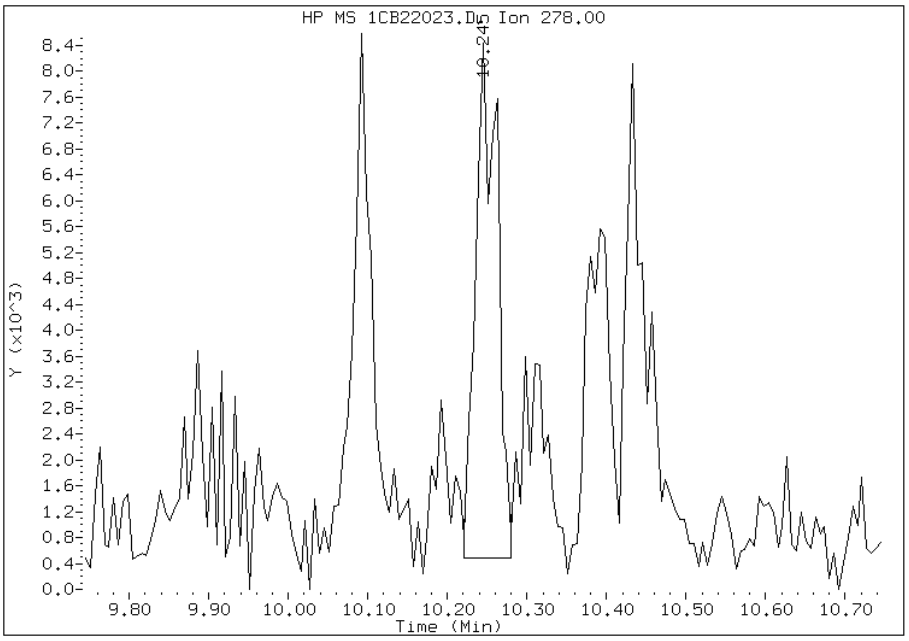

Manual Integration Results

RT: 10.25

Response: 15063

Amount: 0

Conc: 18




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:33
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22023.D
Inj. Date and Time: 22-FEB-2013 18:06
Instrument ID: BSMC5973.i
Client ID: FM0161AL-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

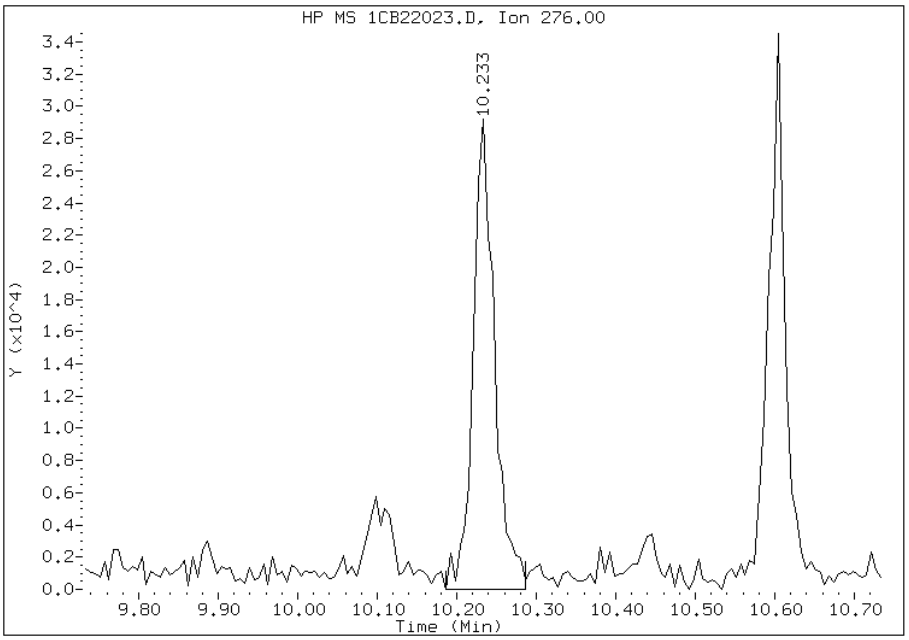
Processing Integration Results

RT: 10.23

Response: 54528

Amount: 1

Conc: 64



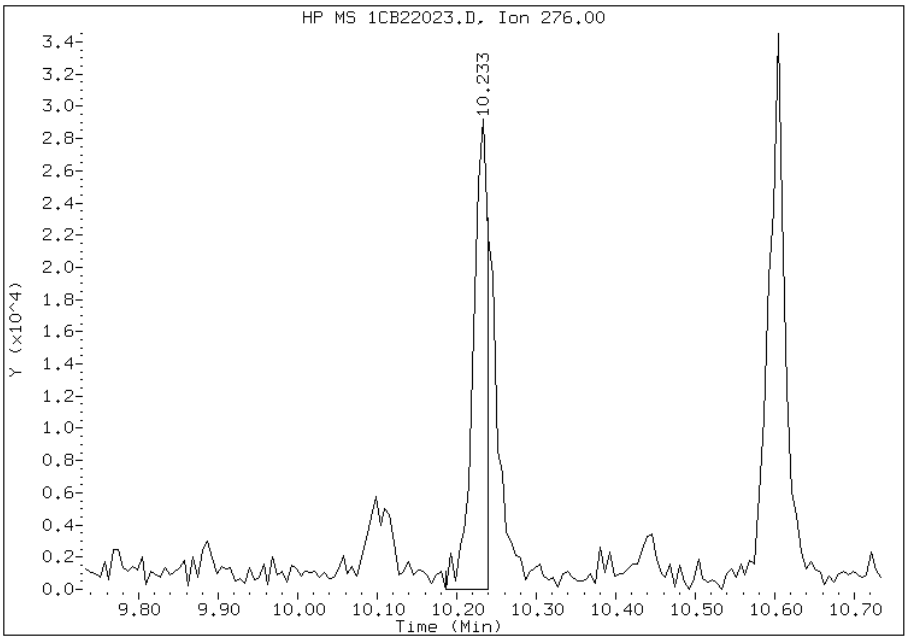

Manual Integration Results

RT: 10.23

Response: 38057

Amount: 1

Conc: 45




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:34
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161AM-GS | Lab Sample ID: 680-87545-18

Matrix: Solid | Lab File ID: 1CB22024.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 10:53

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.44(g) | Date Analyzed: 02/22/2013 18:24

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 120 | U | 120 | 24 |
| 208-96-8 | Acenaphthylene | 47 | U | 47 | 5.9 |
| 120-12-7 | Anthracene | 9.1 | J | 9.9 | 5.0 |
| 56-55-3 | Benzo[a]anthracene | 27 | | 9.5 | 4.6 |
| 50-32-8 | Benzo[a]pyrene | 16 | | 12 | 6.1 |
| 205-99-2 | Benzo[b]fluoranthene | 33 | | 14 | 7.2 |
| 191-24-2 | Benzo[g,h,i]perylene | 13 | J | 24 | 5.2 |
| 207-08-9 | Benzo[k]fluoranthene | 8.4 | J | 9.5 | 4.3 |
| 218-01-9 | Chrysene | 28 | | 11 | 5.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 5.6 | J | 24 | 4.8 |
| 206-44-0 | Fluoranthene | 38 | | 24 | 4.7 |
| 86-73-7 | Fluorene | 7.0 | J | 24 | 4.8 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 14 | J | 24 | 8.4 |
| 90-12-0 | 1-Methylnaphthalene | 25 | J | 47 | 5.2 |
| 91-57-6 | 2-Methylnaphthalene | 26 | J | 47 | 8.4 |
| 91-20-3 | Naphthalene | 34 | J | 47 | 5.2 |
| 85-01-8 | Phenanthrene | 47 | | 9.5 | 4.6 |
| 129-00-0 | Pyrene | 34 | | 24 | 4.4 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 81 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22024.D
Lab Smp Id: 680-87545-A-18-A Client Smp ID: FM0161AM-GS
Inj Date : 22-FEB-2013 18:24
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-18-a
Misc Info : 680-87545-A-18-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.440 | Weight Extracted |
| M | 17.822 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1654798 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1302519 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2417015 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 296620 | 8.12818 | 640.6032 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2827269 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2662233 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 18635 | 0.43256 | 34.0912 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 9596 | 0.33393 | 26.3178 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 8217 | 0.31396 | 24.7439 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 3663 | 0.08874 | 6.9935(Q) |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 42036 | 0.60146 | 47.4030 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 7930 | 0.11602 | 9.1436 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 5518 | 0.09082 | 7.1575(Q) |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 36979 | 0.48315 | 38.0783 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 32491 | 0.42763 | 33.7028 |
| 17 Benzo(a)anthracene | 228 | 7.786 | 7.792 | (0.998) | 28368 | 0.34765 | 27.3988 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 29346 | 0.35936 | 28.3221 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.657 | (0.960) | 29459 | 0.42342 | 33.3708(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 7617 | 0.10672 | 8.4110(QM) |
| 22 Benzo(a)pyrene | 252 | 8.962 | 8.963 | (0.994) | 14031 | 0.20762 | 16.3633 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 11555 | 0.18176 | 14.3249(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.257 | (1.137) | 4455 | 0.07164 | 5.6463(Q) |
| 26 Benzo(g,h,i)perylene | 276 | 10.603 | 10.610 | (1.176) | 11218 | 0.16869 | 13.2945 |

QC Flag Legend

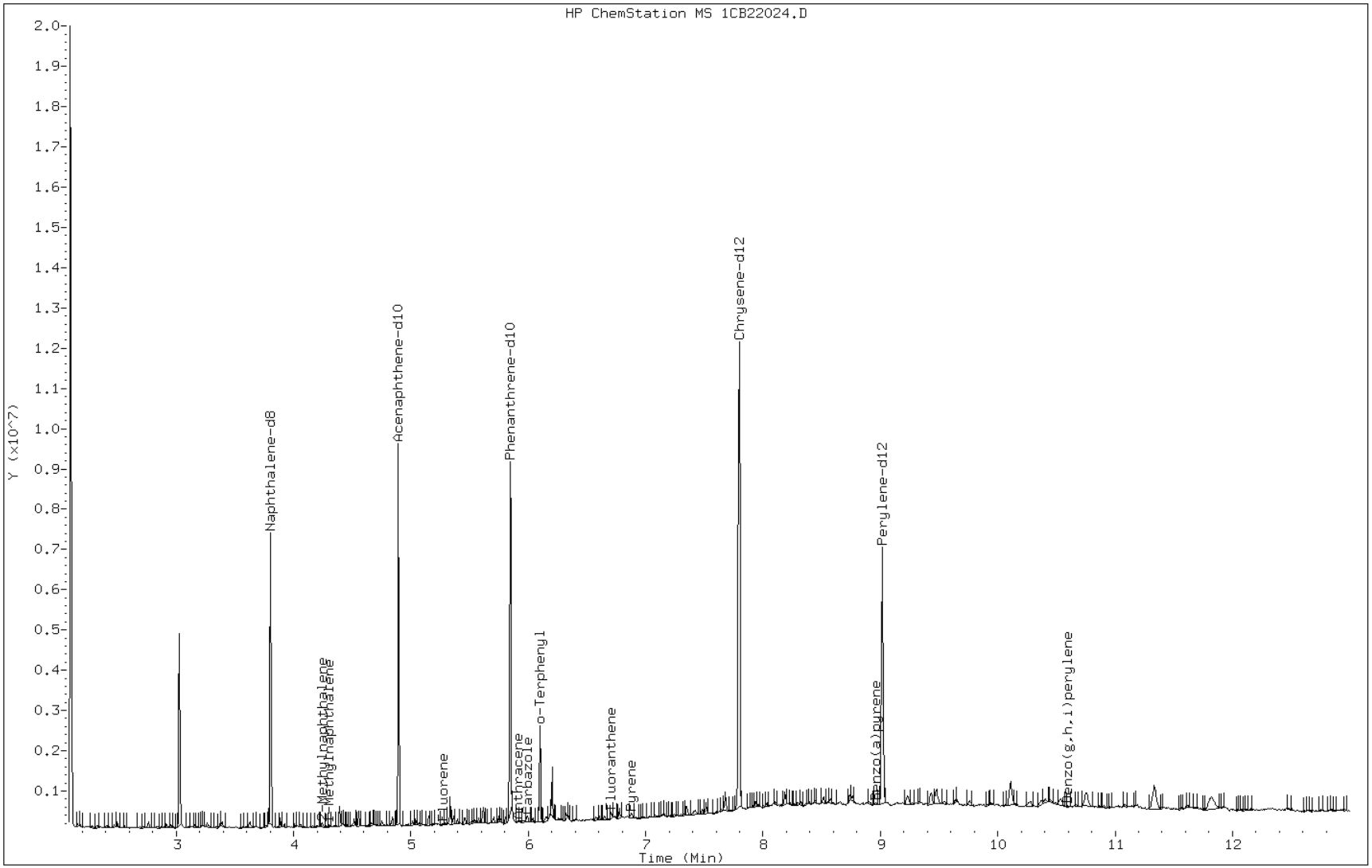
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC



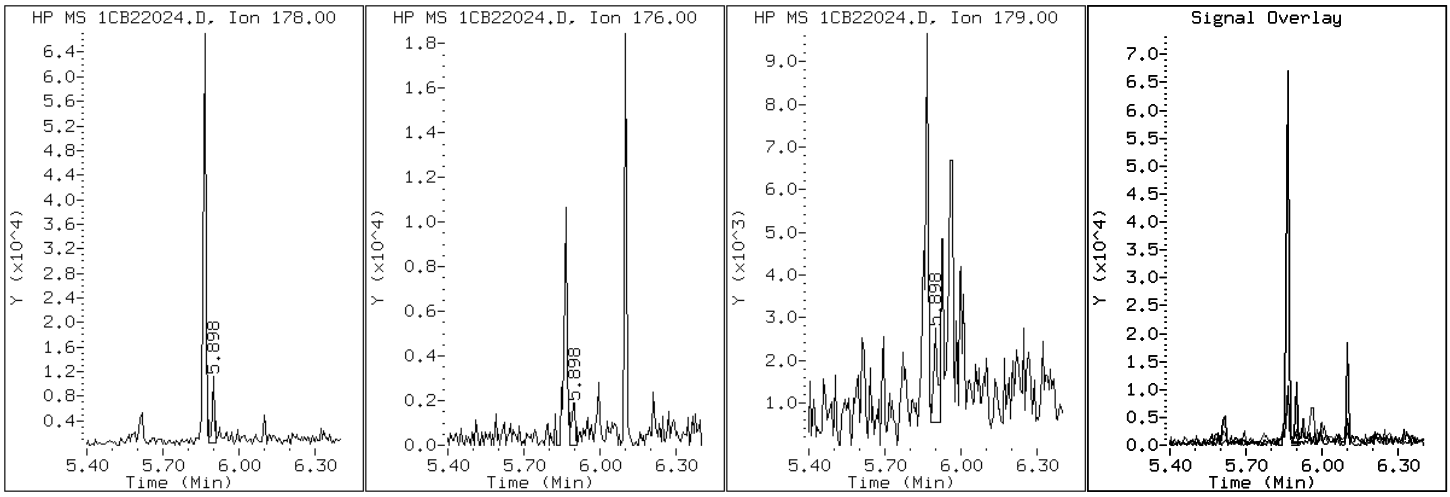
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a Operator: SCC

12 Anthracene



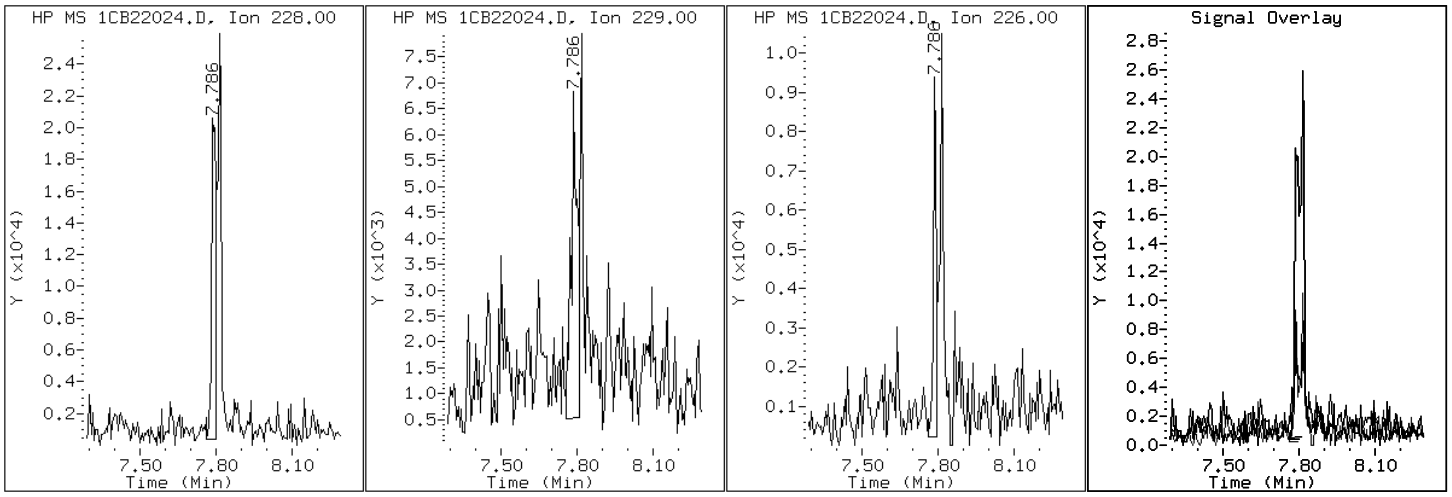
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a Operator: SCC

17 Benzo(a)anthracene



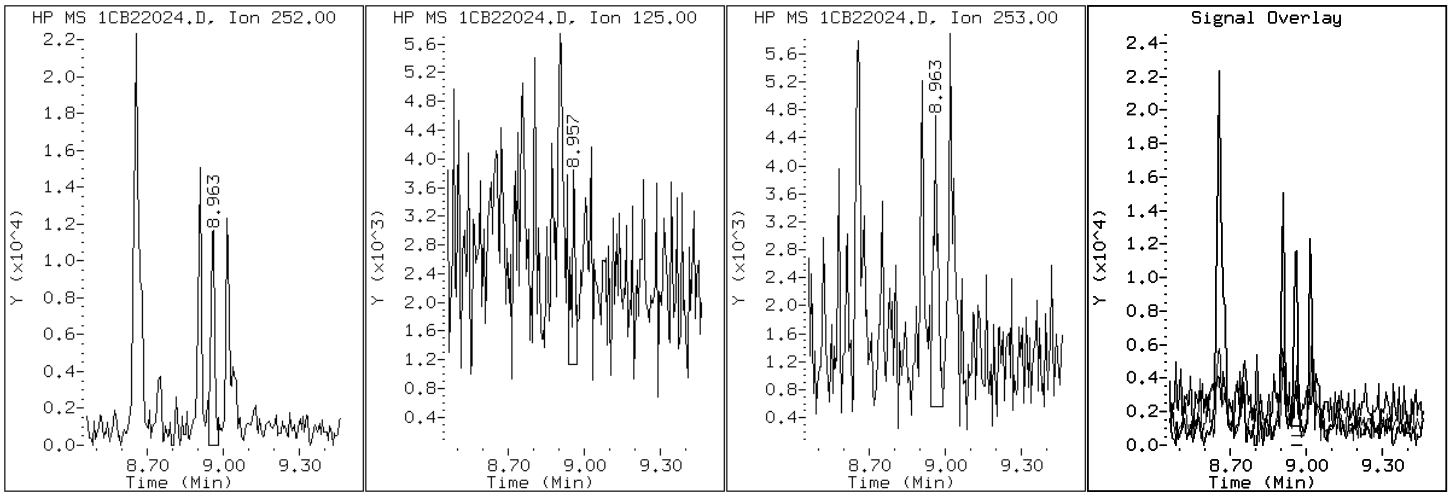
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

22 Benzo(a)pyrene



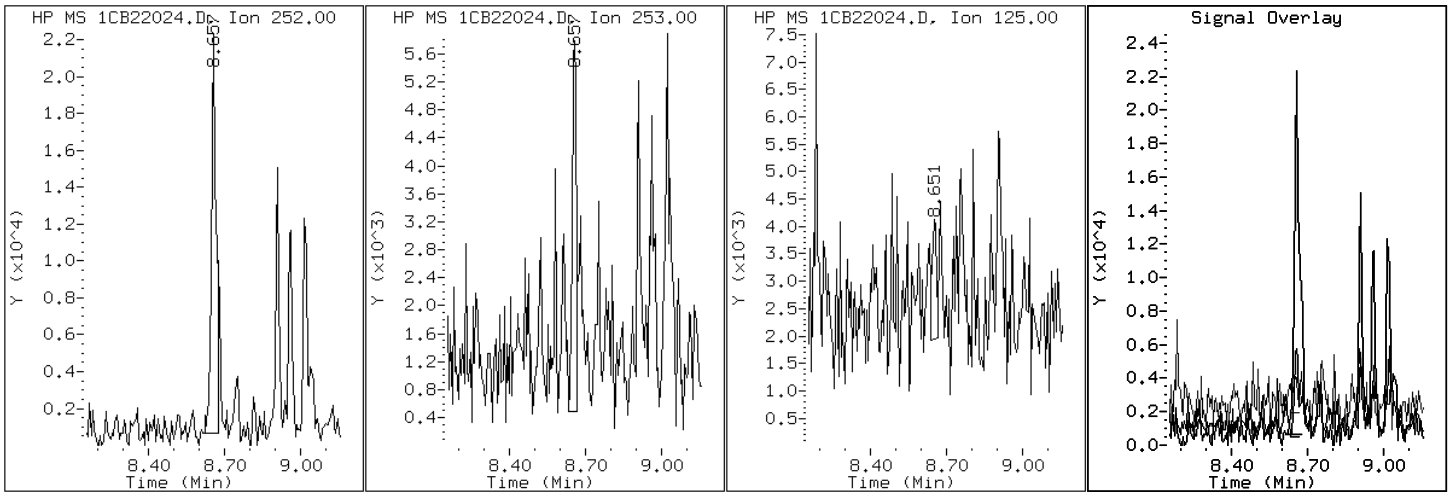
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

20 Benzo(b)fluoranthene



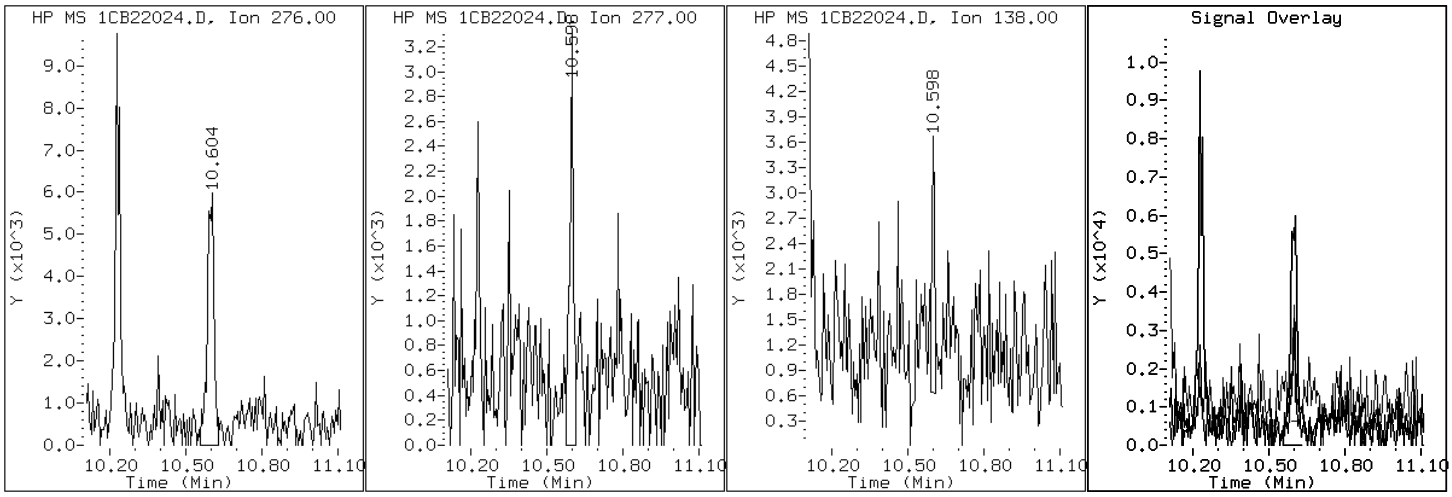
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

26 Benzo(g,h,i)perylene



Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

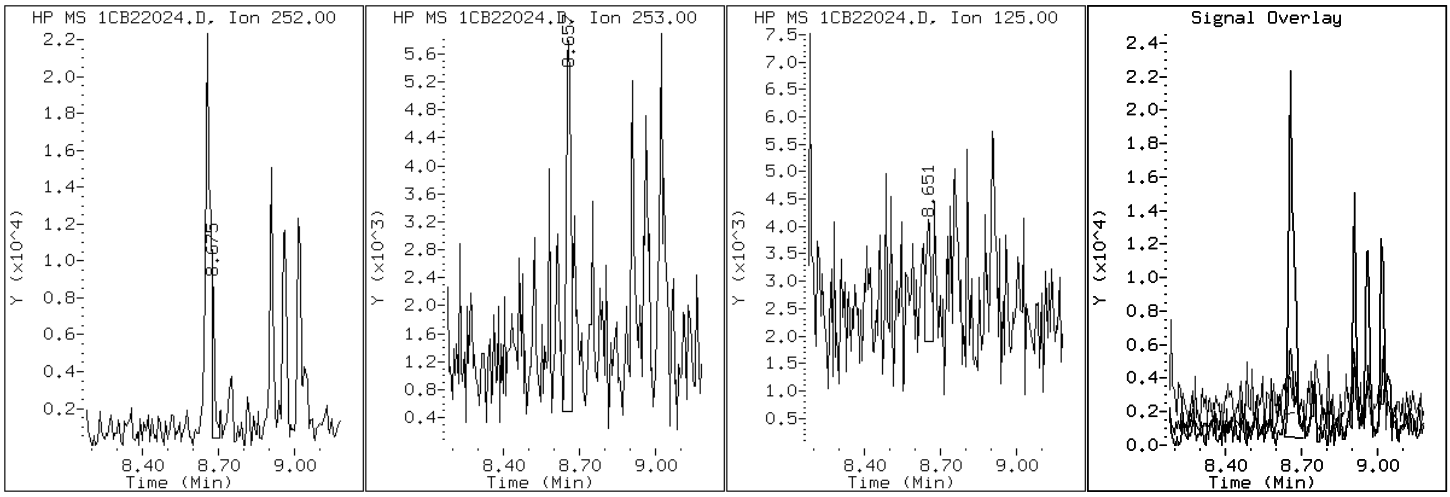
Client ID: FM0161AM-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a

Operator: SCC

21 Benzo(k)fluoranthene



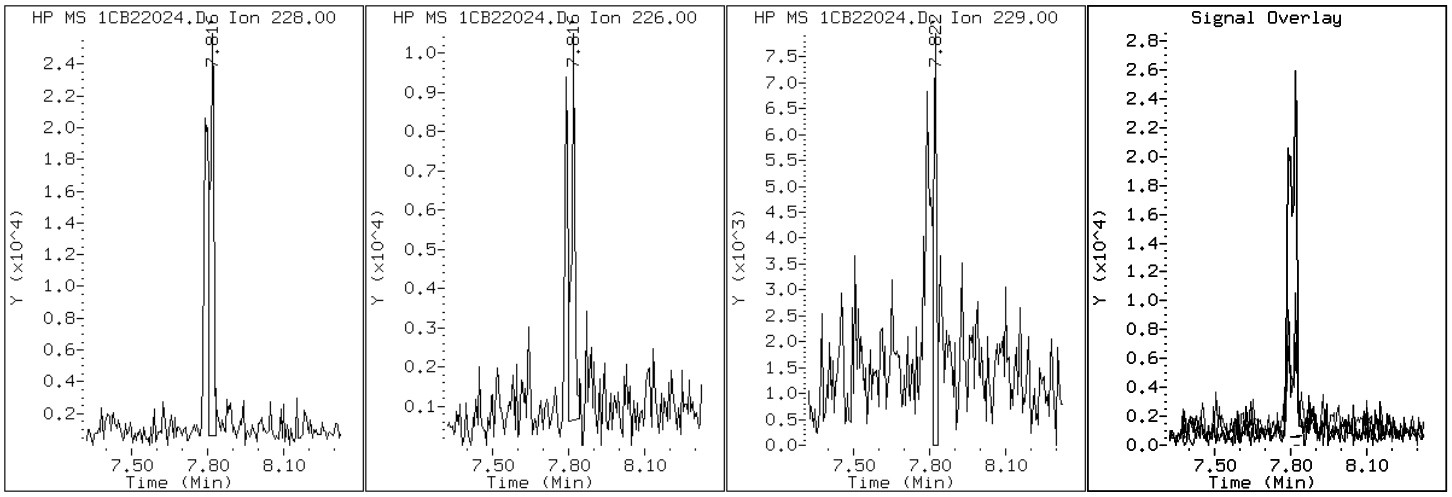
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a Operator: SCC

19 Chrysene



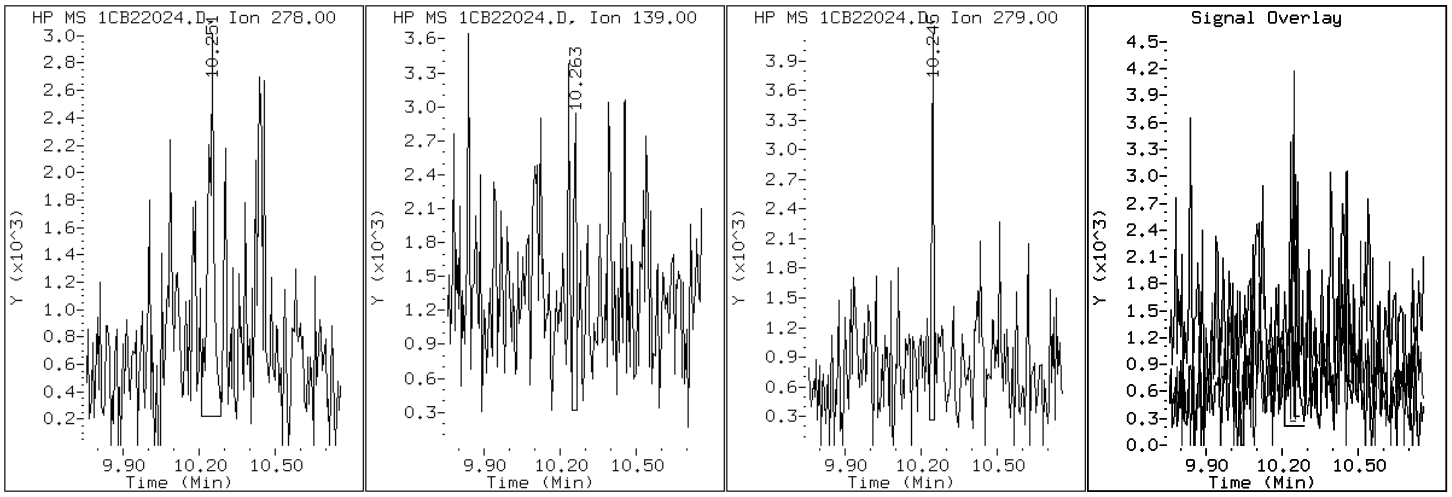
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

25 Dibenzo(a,h)anthracene



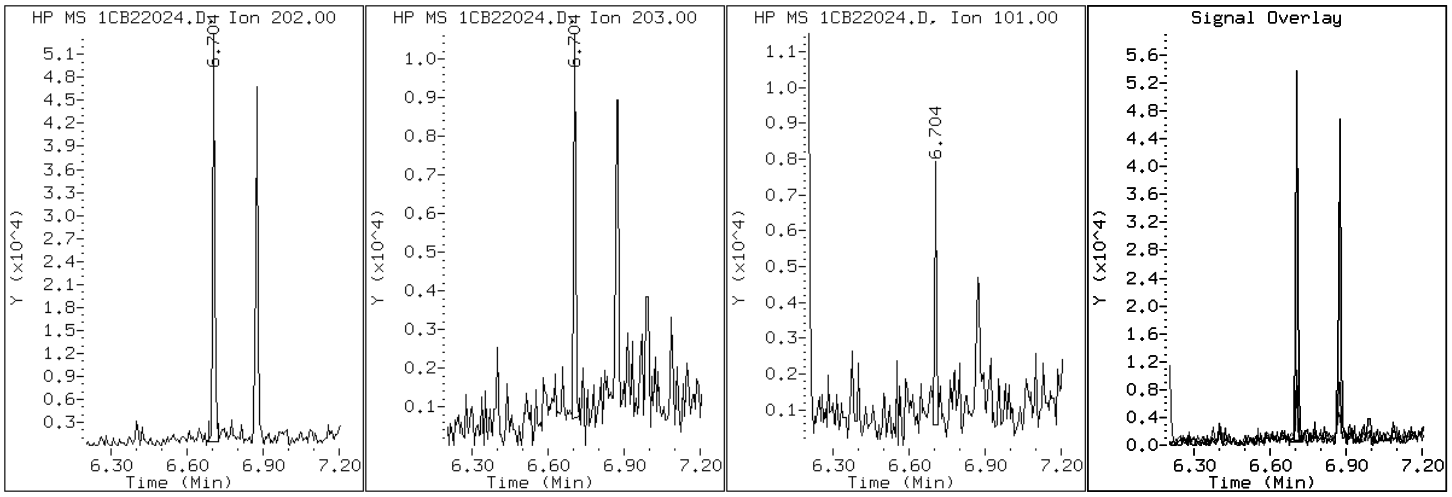
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

15 Fluoranthene



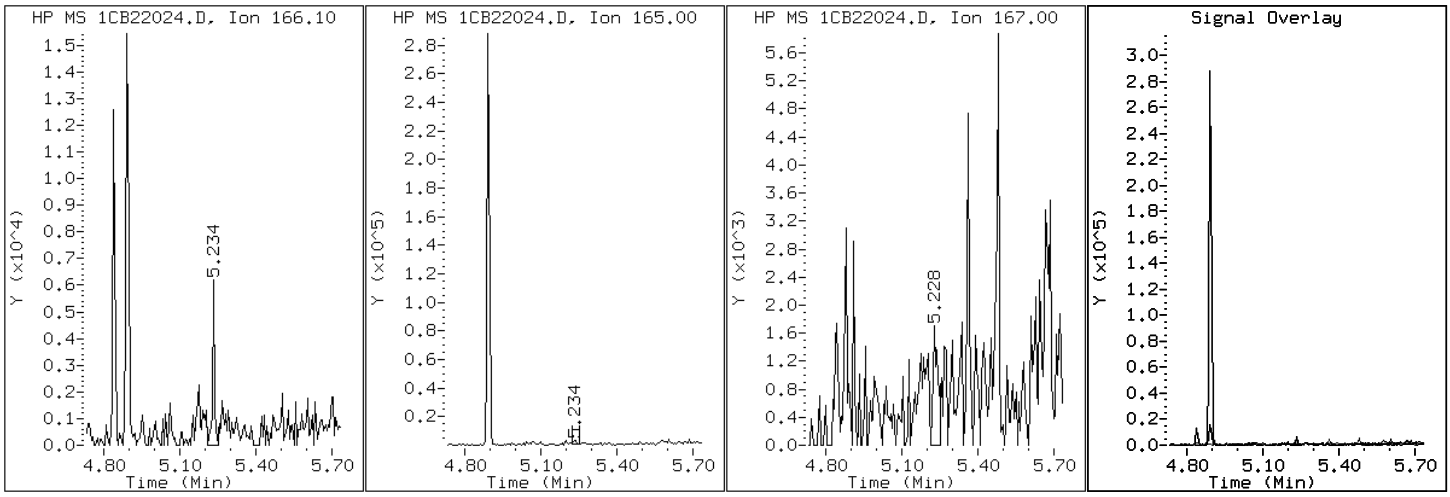
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

9 Fluorene



Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

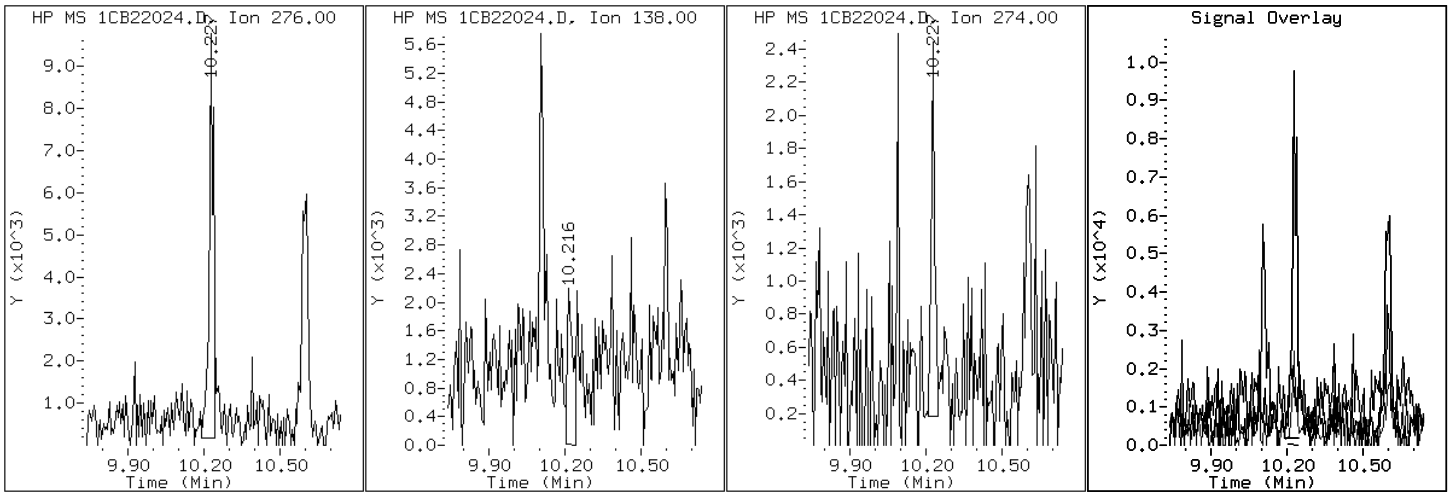
Client ID: FM0161AM-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



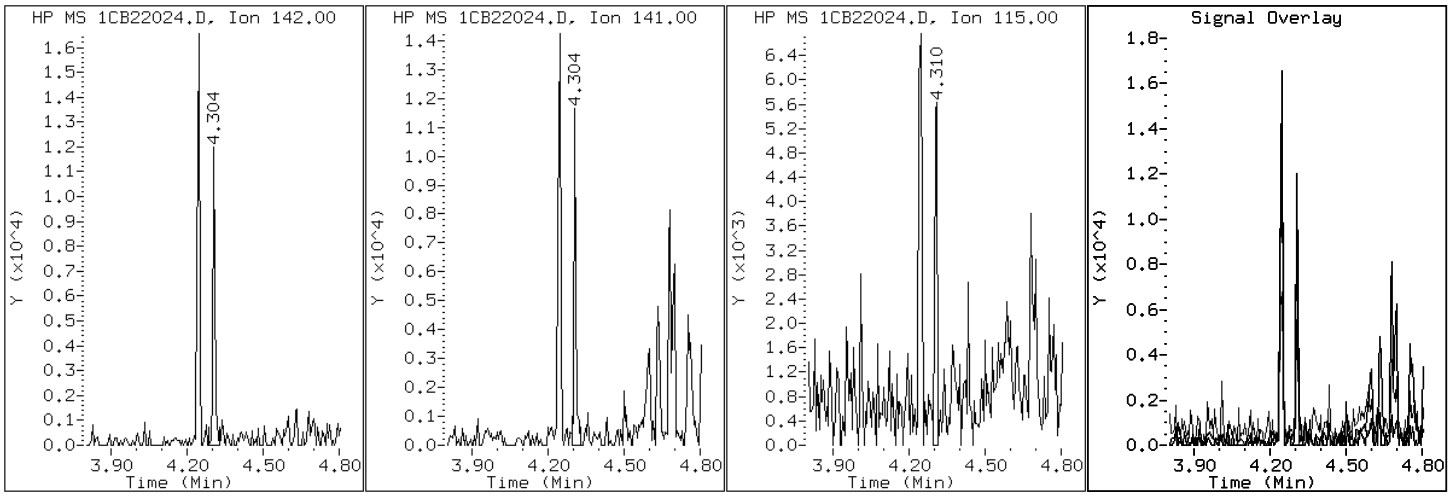
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

4 1-Methylnaphthalene



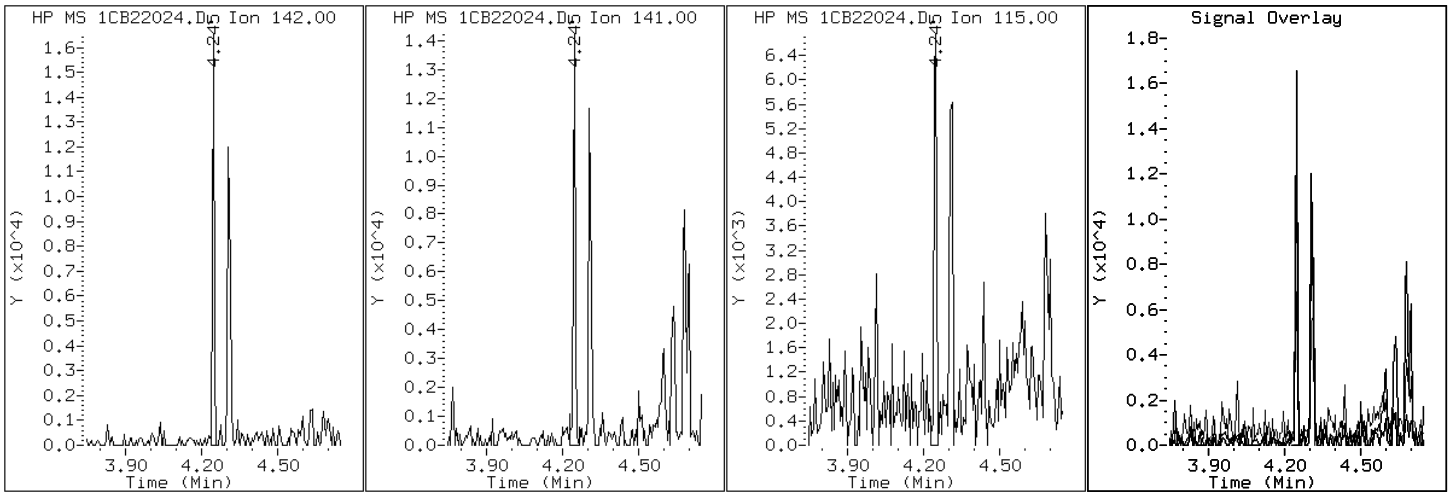
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

3 2-Methylnaphthalene



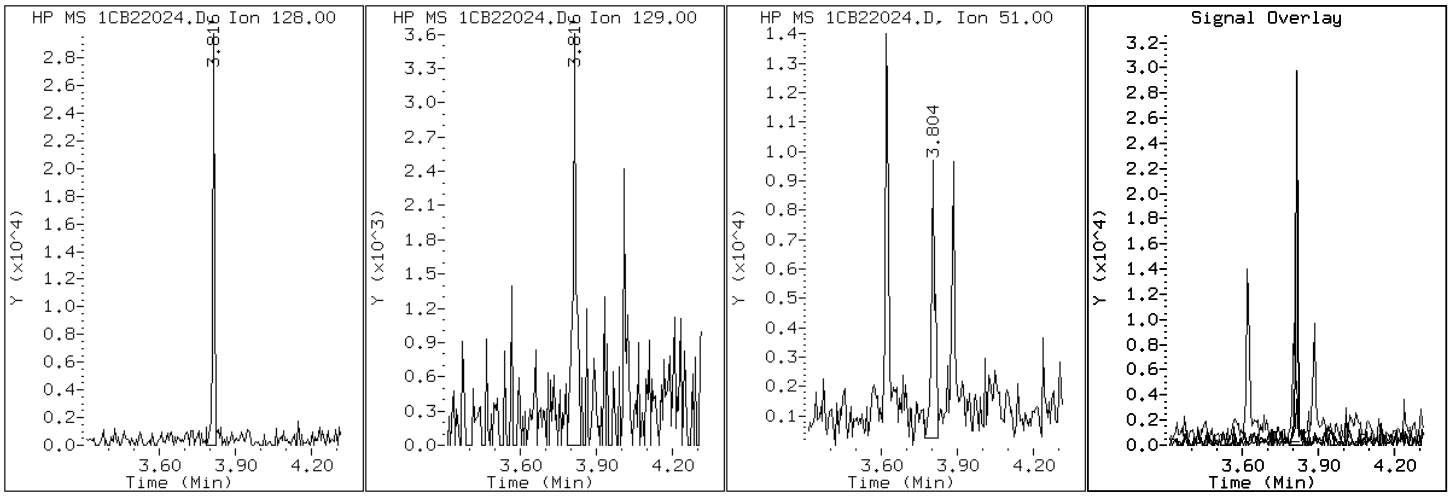
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS  Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a  Operator: SCC

2 Naphthalene



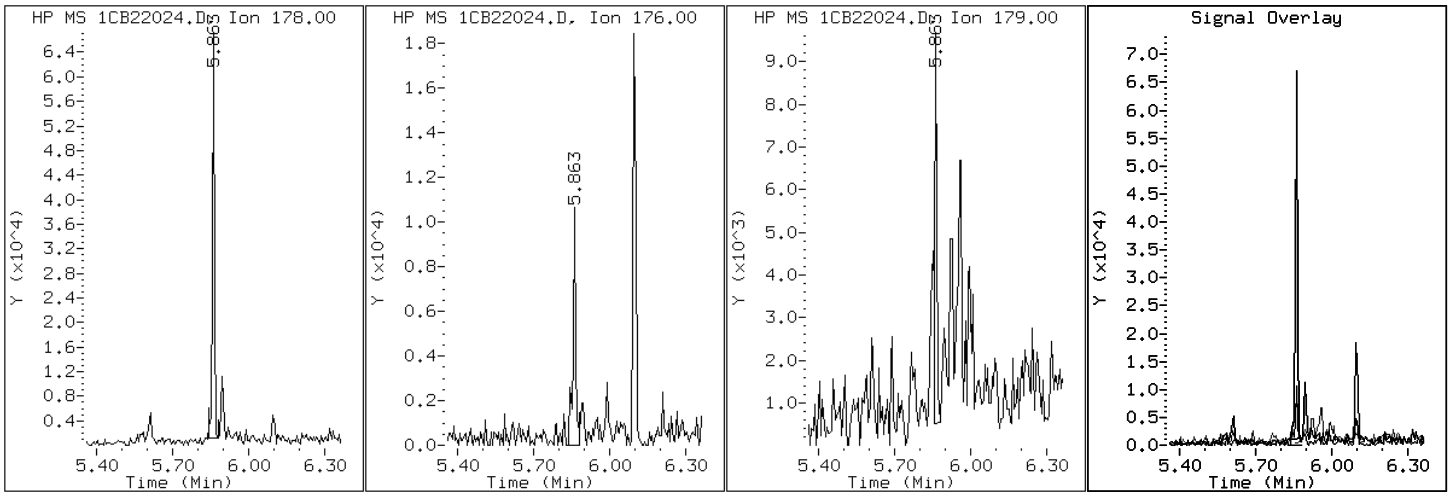
Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

Client ID: FM0161AM-GS Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a Operator: SCC

11 Phenanthrene



Data File: 1CB22024.D

Date: 22-FEB-2013 18:24

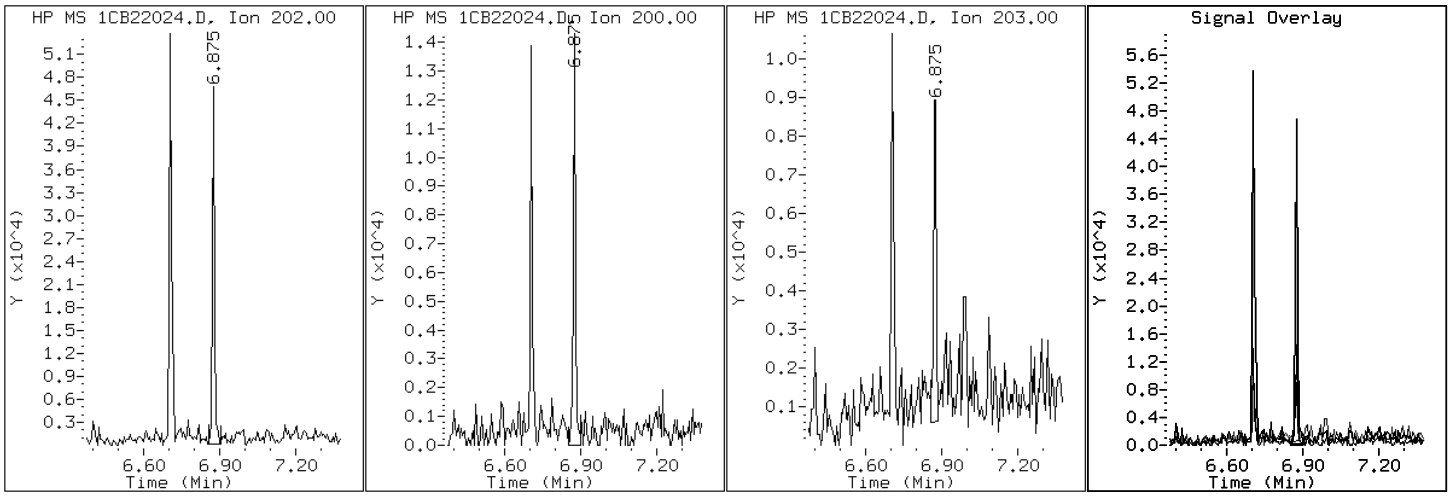
Client ID: FM0161AM-GS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-18-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22024.D
Inj. Date and Time: 22-FEB-2013 18:24
Instrument ID: BSMC5973.i
Client ID: FM0161AM-GS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

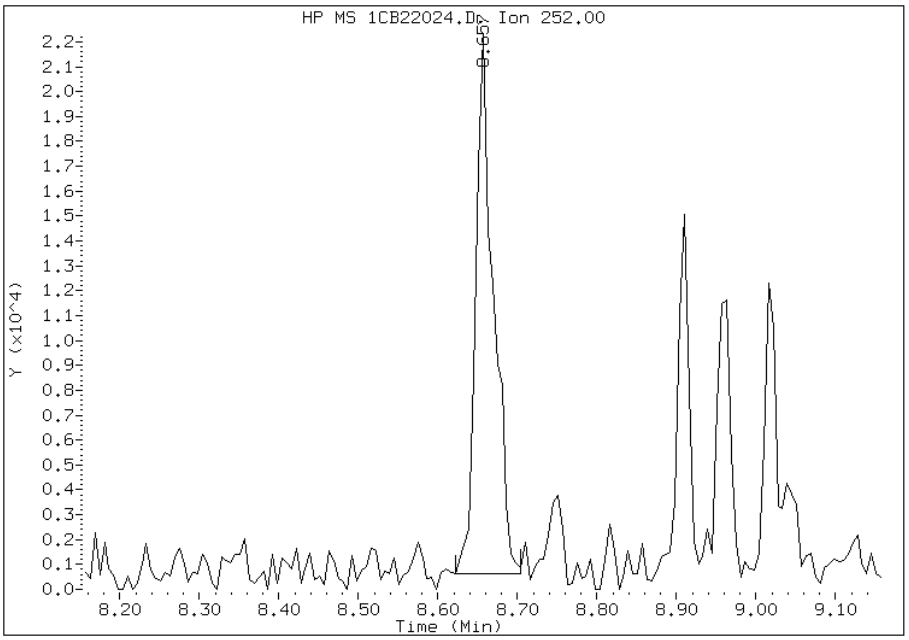
Processing Integration Results

RT: 8.66

Response: 33645

Amount: 0

Conc: 38



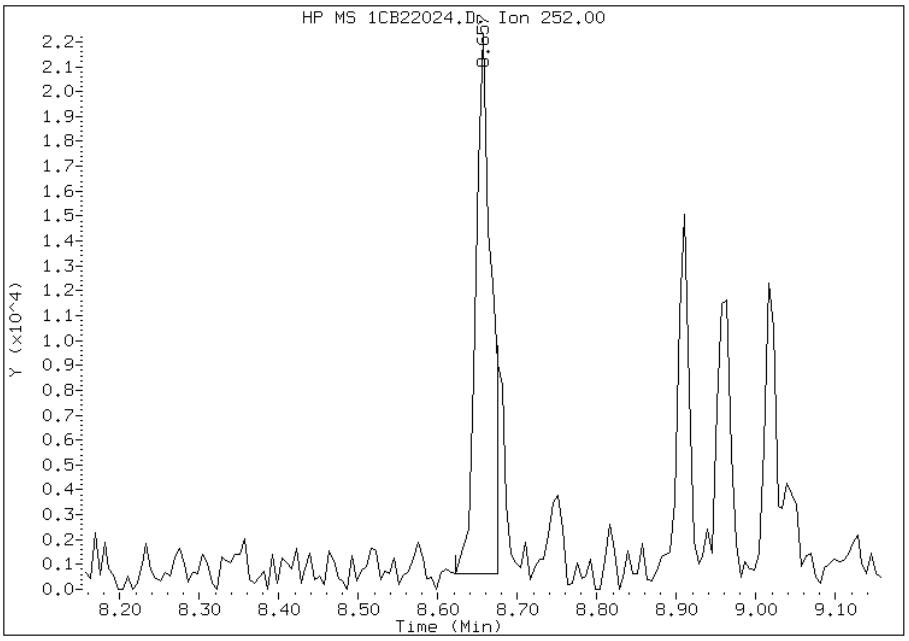

Manual Integration Results

RT: 8.66

Response: 29459

Amount: 0

Conc: 33




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:35
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22024.D
Inj. Date and Time: 22-FEB-2013 18:24
Instrument ID: BSMC5973.i
Client ID: FM0161AM-GS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

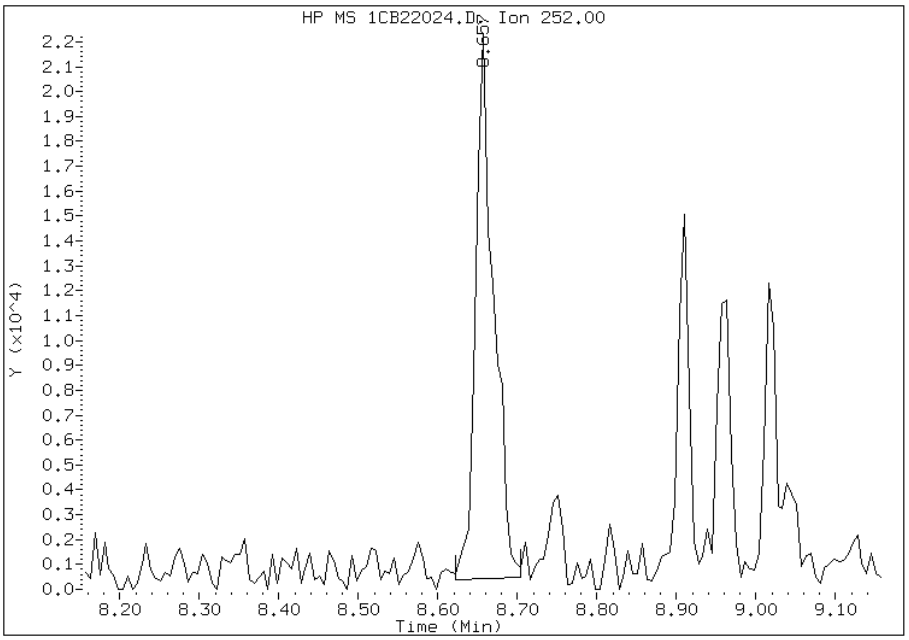
Processing Integration Results

RT: 8.66

Response: 34749

Amount: 0

Conc: 38



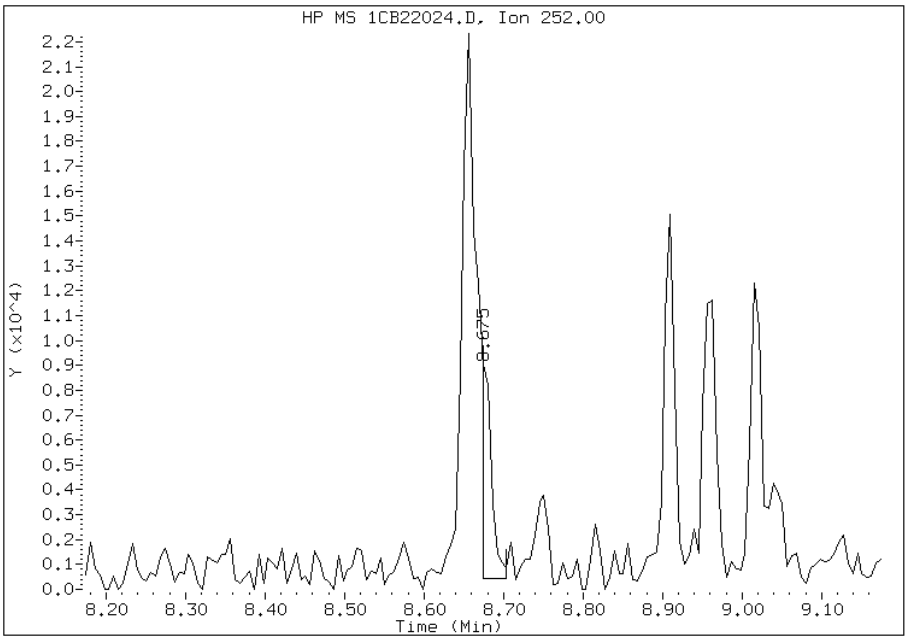

Manual Integration Results

RT: 8.67

Response: 7617

Amount: 0

Conc: 8




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:35
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22024.D
Inj. Date and Time: 22-FEB-2013 18:24
Instrument ID: BSMC5973.i
Client ID: FM0161AM-GS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

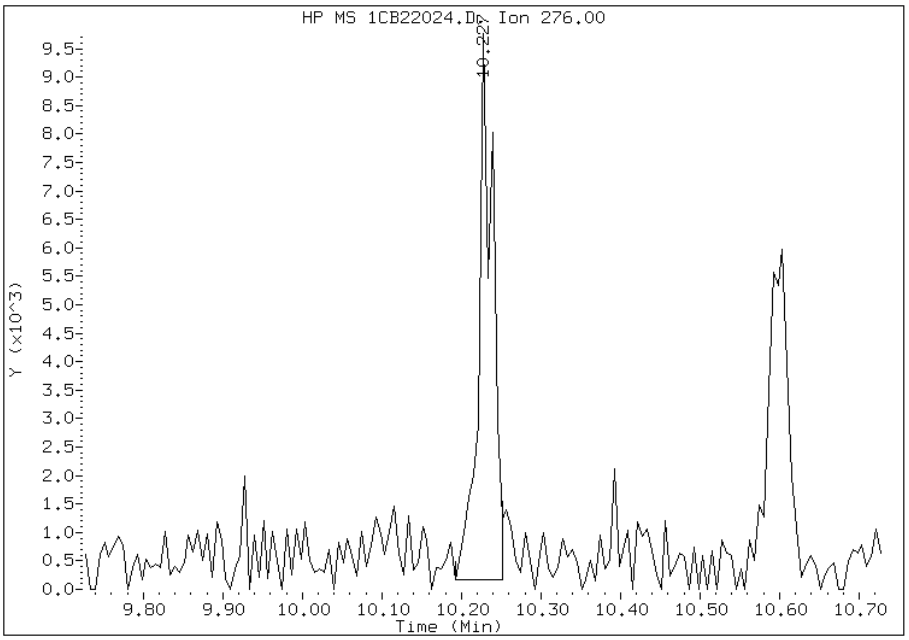
Processing Integration Results

RT: 10.23

Response: 11926

Amount: 0

Conc: 15



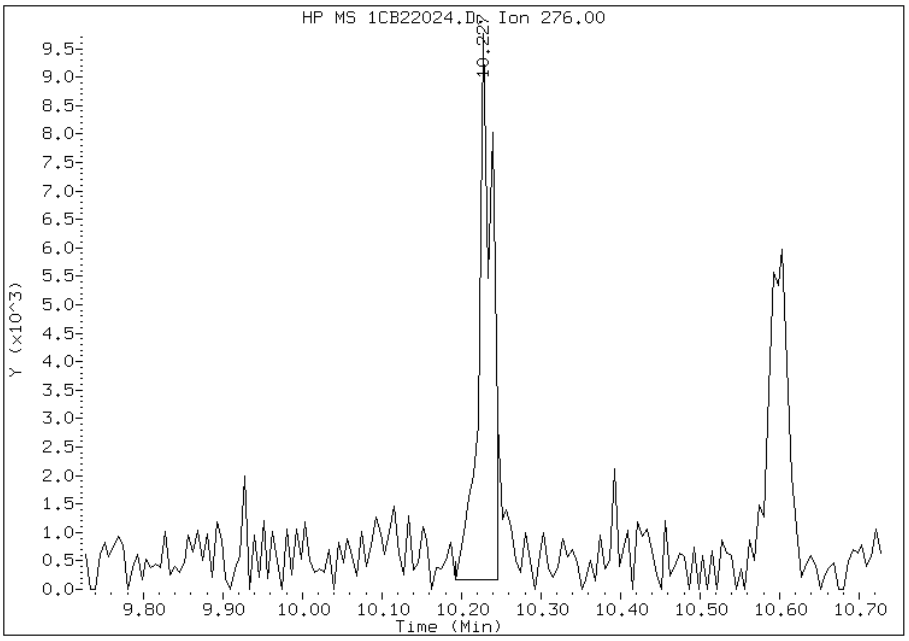

Manual Integration Results

RT: 10.23

Response: 11555

Amount: 0

Conc: 14




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:36
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161J-CS | Lab Sample ID: 680-87545-19

Matrix: Solid | Lab File ID: 1CB22025.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:31

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.24(g) | Date Analyzed: 02/22/2013 18:43

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 3.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 20 |
| 208-96-8 | Acenaphthylene | 7.1 | J | 41 | 5.1 |
| 120-12-7 | Anthracene | 10 | | 8.5 | 4.3 |
| 56-55-3 | Benzo[a]anthracene | 55 | | 8.1 | 4.0 |
| 50-32-8 | Benzo[a]pyrene | 46 | | 11 | 5.3 |
| 205-99-2 | Benzo[b]fluoranthene | 87 | | 12 | 6.2 |
| 191-24-2 | Benzo[g,h,i]perylene | 33 | | 20 | 4.5 |
| 207-08-9 | Benzo[k]fluoranthene | 26 | | 8.1 | 3.7 |
| 218-01-9 | Chrysene | 66 | | 9.1 | 4.6 |
| 53-70-3 | Dibenz(a,h)anthracene | 11 | J | 20 | 4.2 |
| 206-44-0 | Fluoranthene | 83 | | 20 | 4.1 |
| 86-73-7 | Fluorene | 9.1 | J | 20 | 4.2 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 29 | | 20 | 7.2 |
| 90-12-0 | 1-Methylnaphthalene | 37 | J | 41 | 4.5 |
| 91-57-6 | 2-Methylnaphthalene | 47 | | 41 | 7.2 |
| 91-20-3 | Naphthalene | 77 | | 41 | 4.5 |
| 85-01-8 | Phenanthrene | 71 | | 8.1 | 4.0 |
| 129-00-0 | Pyrene | 70 | | 20 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 85 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22025.D
Lab Smp Id: 680-87545-A-19-A Client Smp ID: FM0161J-CS
Inj Date : 22-FEB-2013 18:43
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-19-a
Misc Info : 680-87545-A-19-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.240 | Weight Extracted |
| M | 3.125 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1629103 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1294577 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2455064 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 314255 | 8.47796 | 574.2417 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2733953 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.021 | 9.016 | (1.000) | 2652554 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 47988 | 1.13148 | 76.6390 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 19828 | 0.70087 | 47.4724 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 13917 | 0.54013 | 36.5851 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 5496 | 0.10530 | 7.1323 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 5504 | 0.13415 | 9.0866(Q) |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 74100 | 1.04381 | 70.7011 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 10506 | 0.15132 | 10.2496 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 10352 | 0.16774 | 11.3613 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 95357 | 1.22658 | 83.0804 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 76157 | 1.03656 | 70.2096 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 63594 | 0.80593 | 54.5887 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 77054 | 0.97578 | 66.0930 |
| 20 Benzo(b)fluoranthene | 252 | 8.657 | 8.657 | (0.960) | 89156 | 1.28613 | 87.1141(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.680 | 8.680 | (0.962) | 27005 | 0.37975 | 25.7217(QM) |
| 22 Benzo(a)pyrene | 252 | 8.957 | 8.963 | (0.993) | 45929 | 0.68211 | 46.2018 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.239 | (1.134) | 27487 | 0.43395 | 29.3927(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.251 | 10.257 | (1.136) | 9607 | 0.15506 | 10.5026(M) |
| 26 Benzo(g,h,i)perylene | 276 | 10.604 | 10.610 | (1.175) | 31879 | 0.48111 | 32.5875 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22025.D

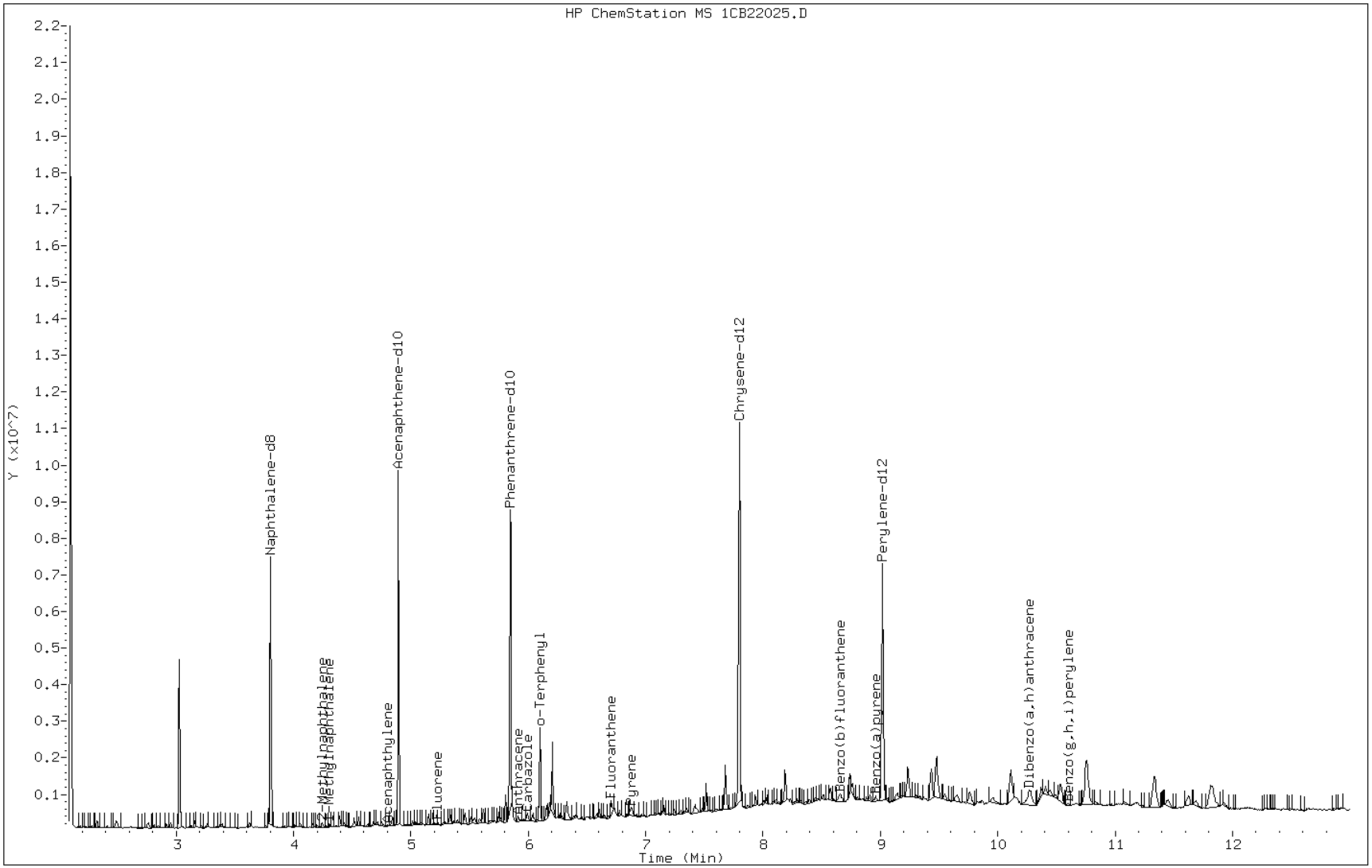
Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a

Operator: SCC



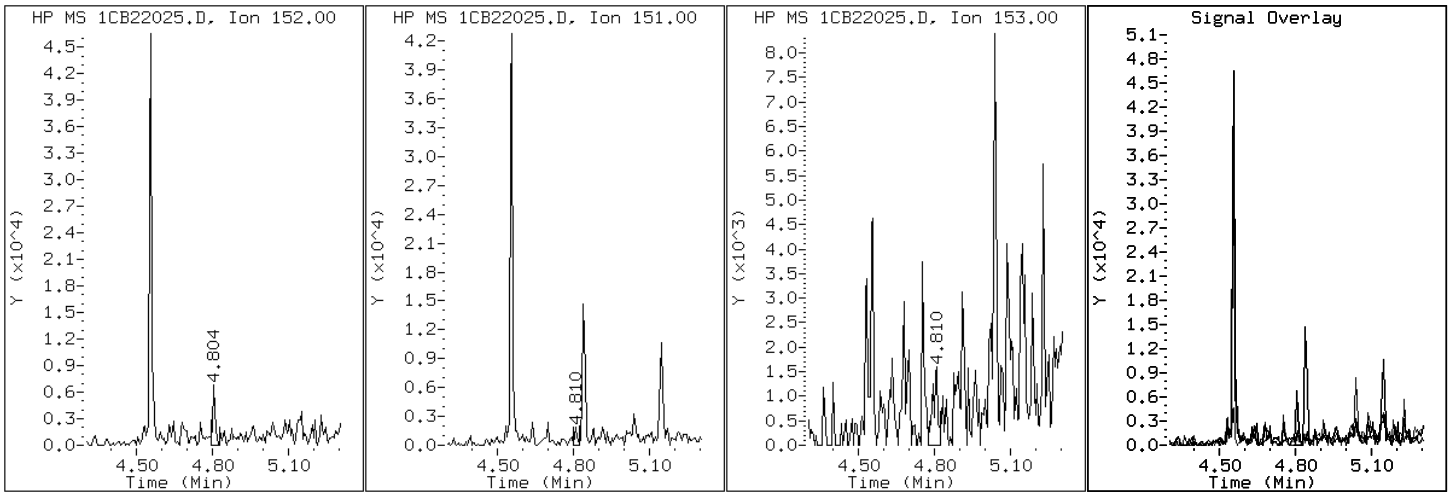
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

5 Acenaphthylene



Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

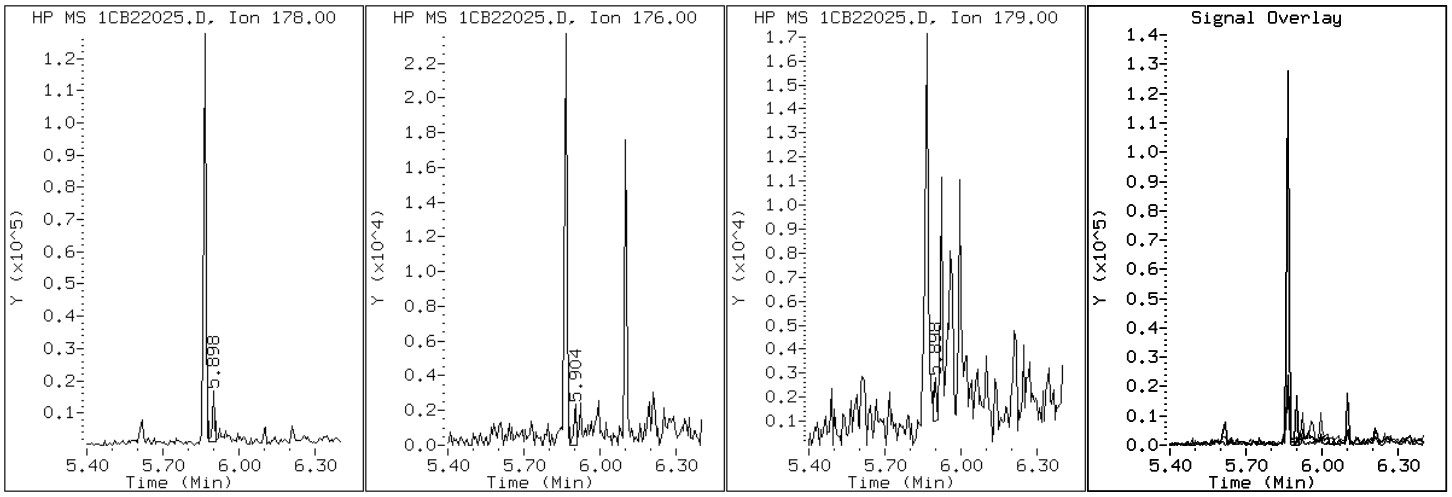
Client ID: FM0161J-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a

Operator: SCC

12 Anthracene



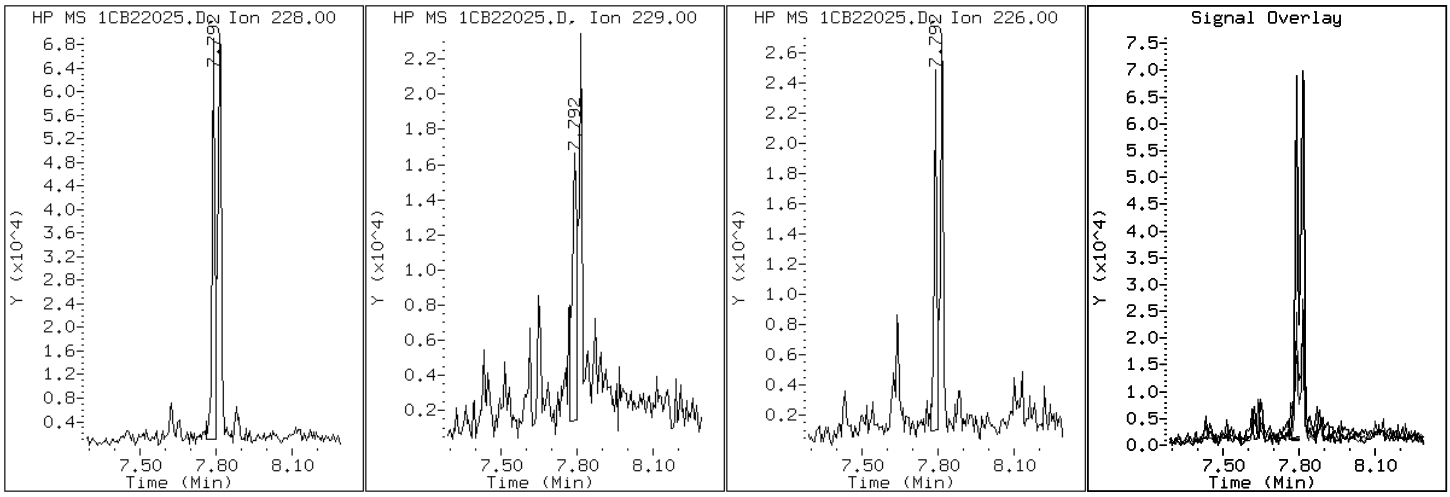
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

17 Benzo(a)anthracene



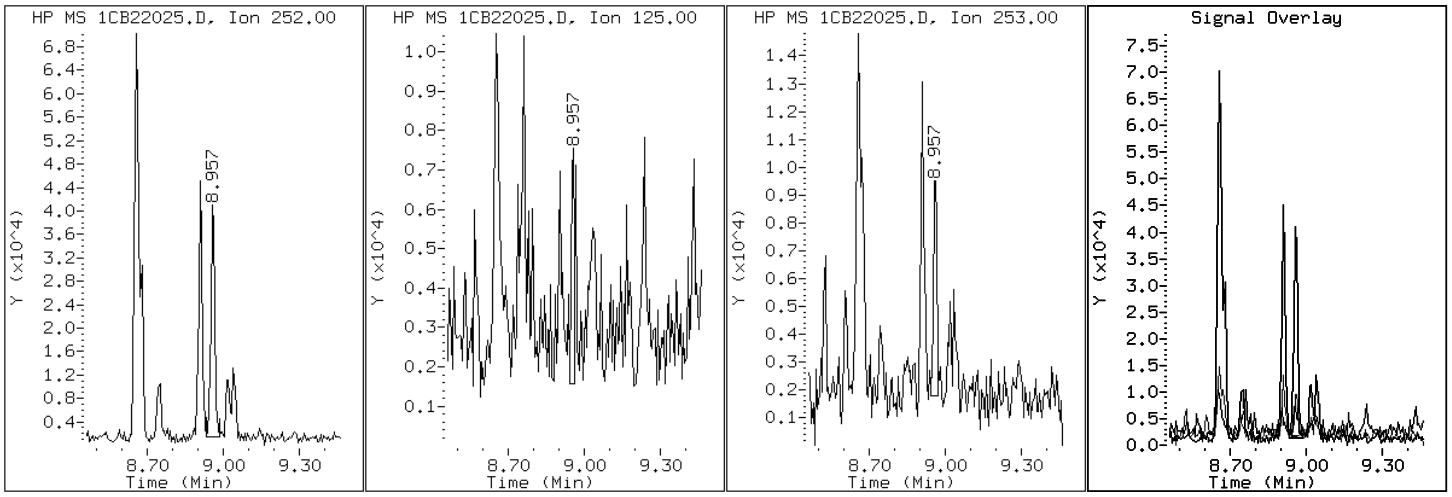
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

22 Benzo(a)pyrene



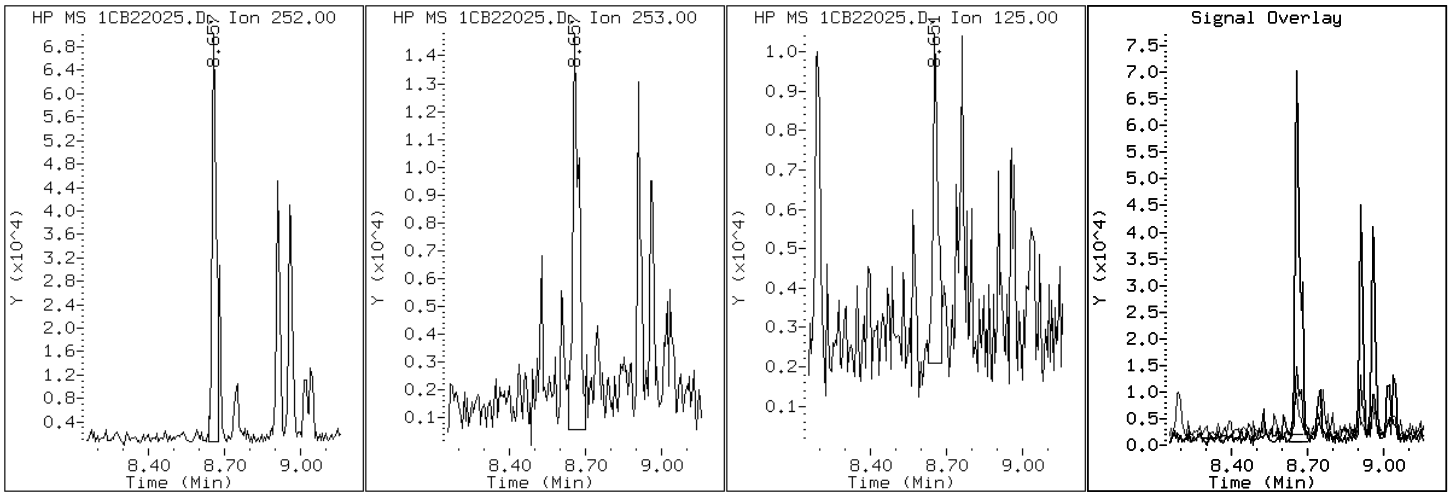
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

20 Benzo(b)fluoranthene



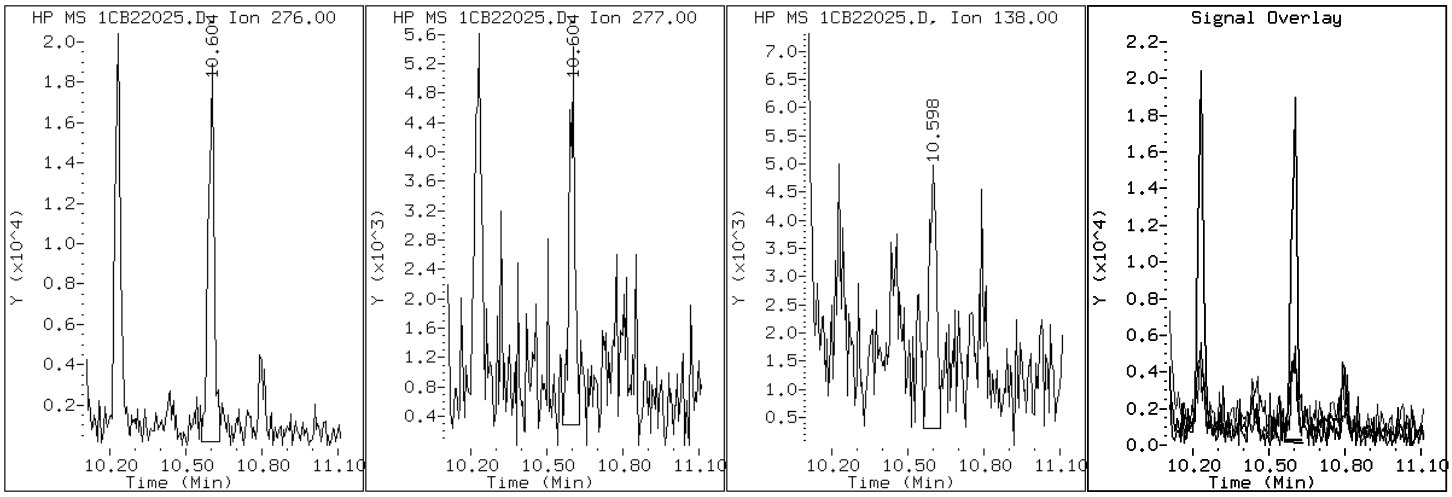
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

26 Benzo(g,h,i)perylene



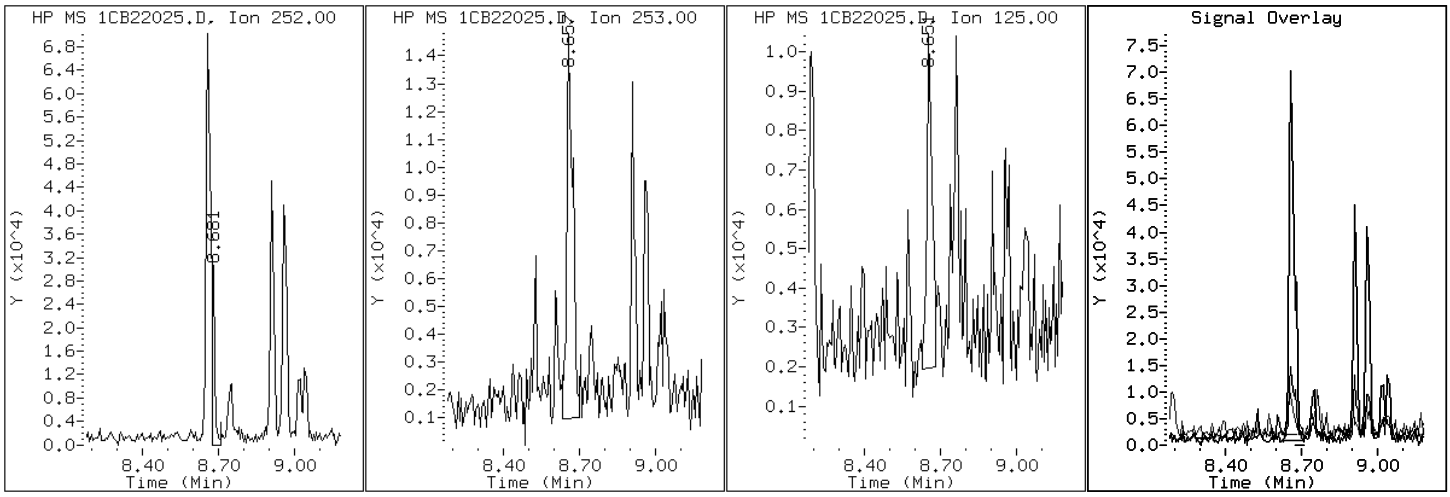
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

21 Benzo(k)fluoranthene



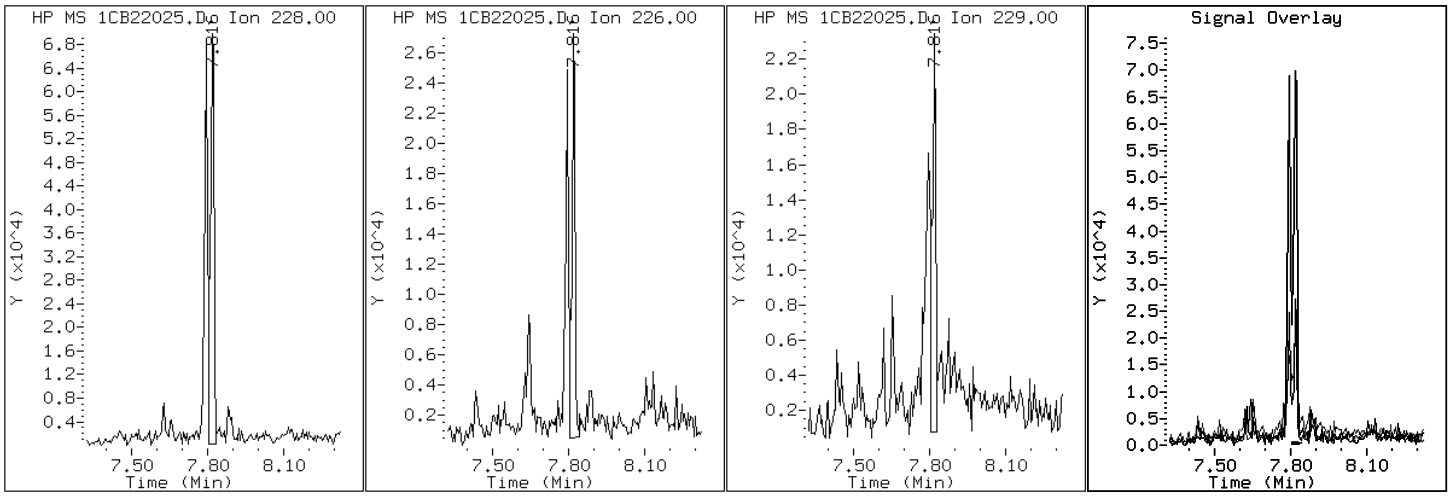
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

19 Chrysene



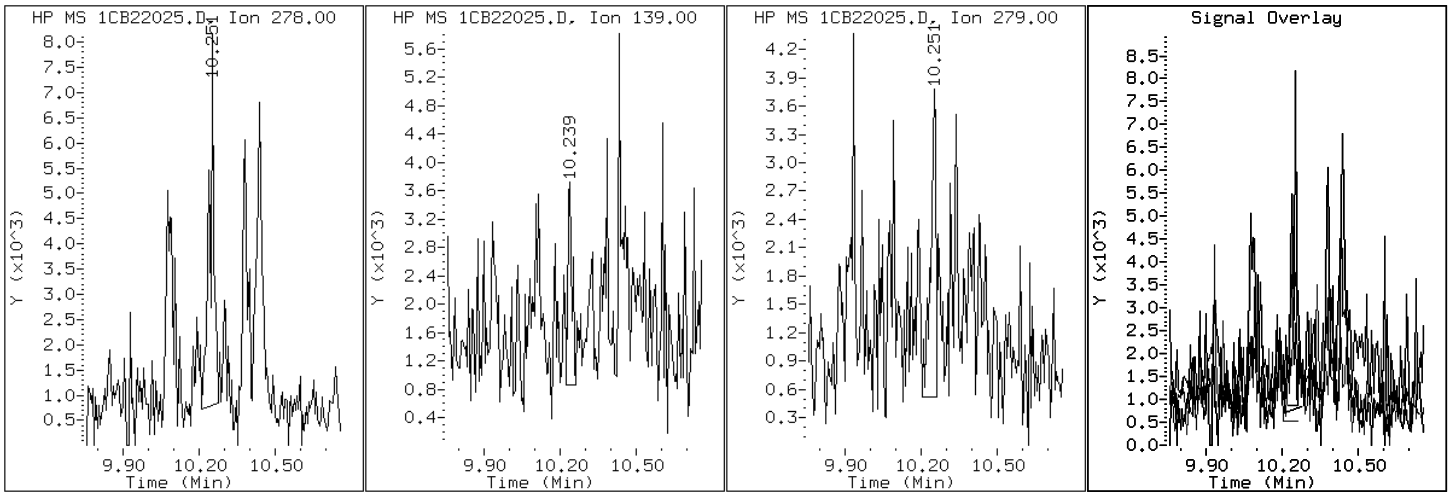
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

25 Dibenzo(a,h)anthracene



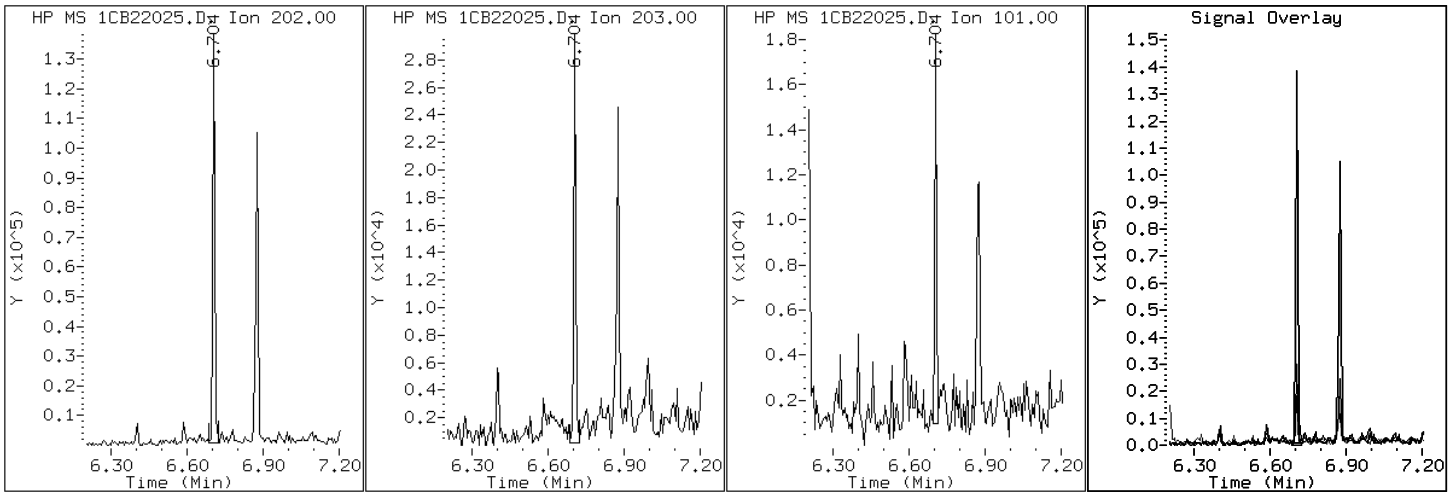
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

15 Fluoranthene



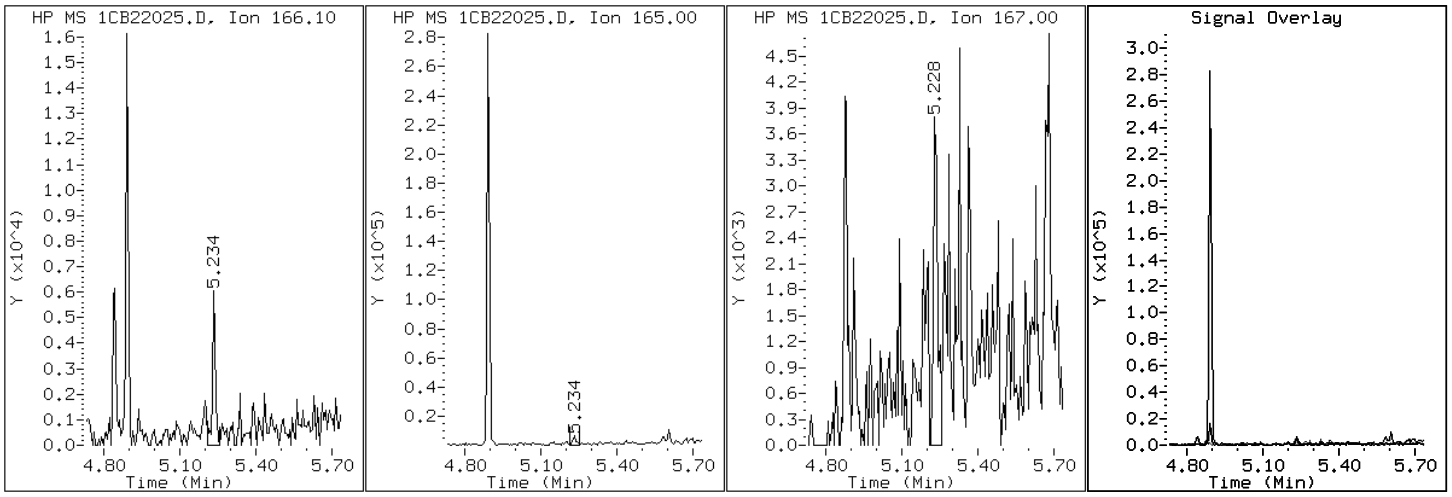
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

9 Fluorene



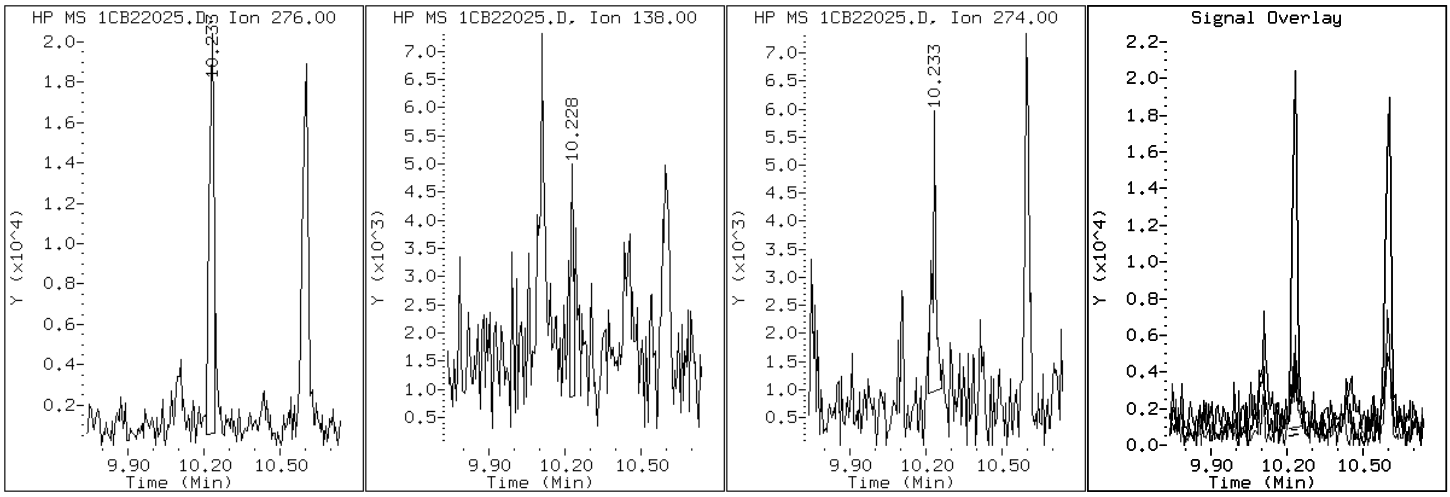
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

24 Indeno(1,2,3-cd)pyrene



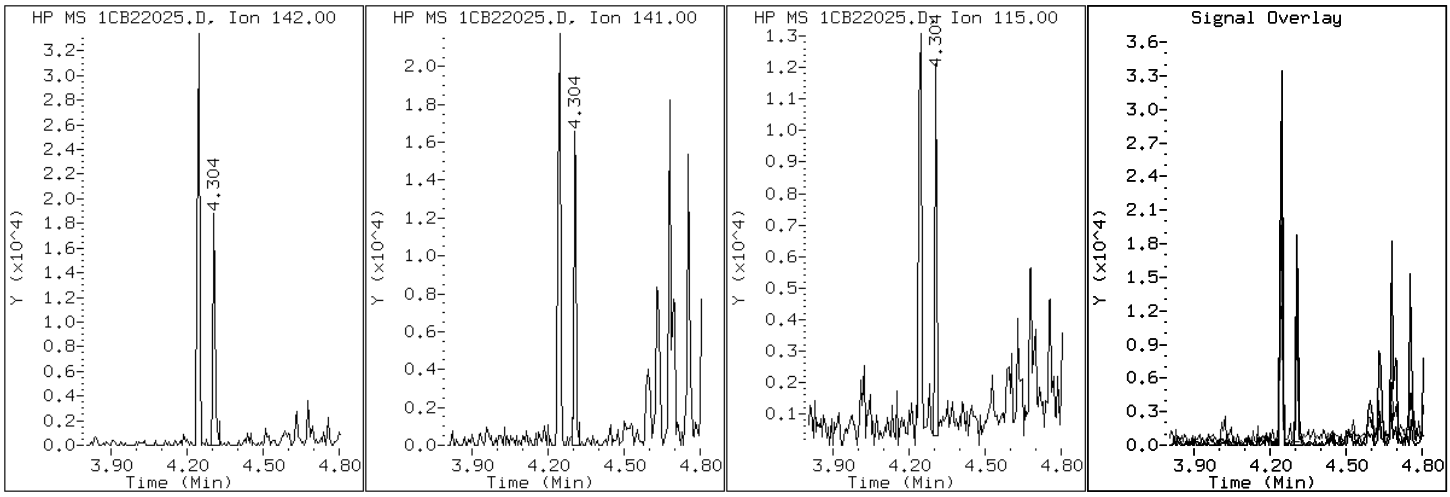
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

4 1-Methylnaphthalene



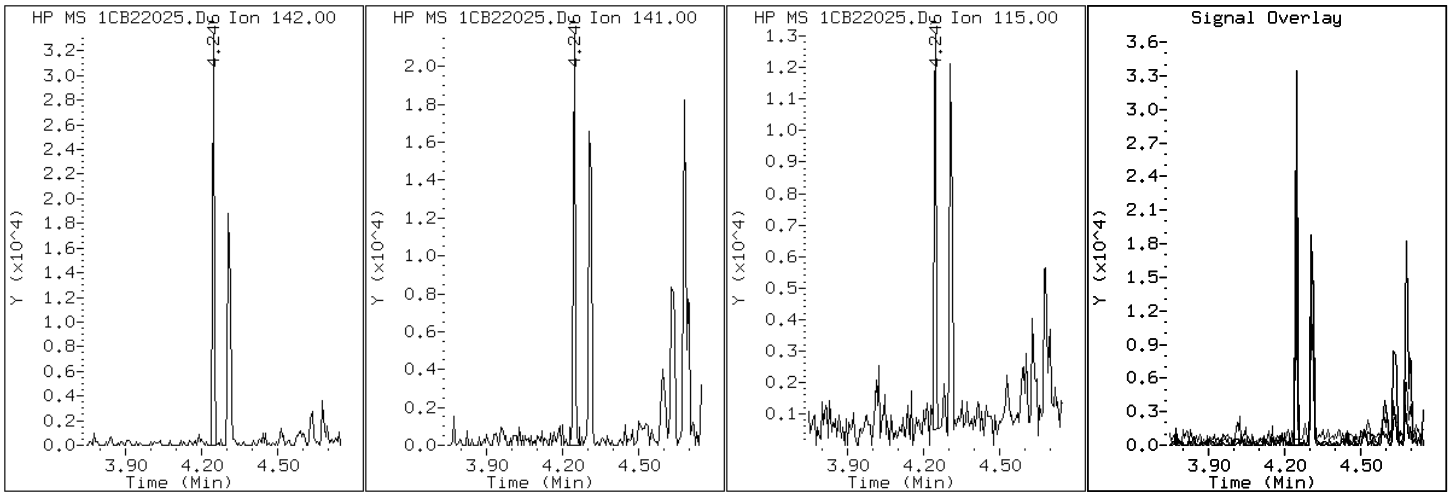
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

3 2-Methylnaphthalene



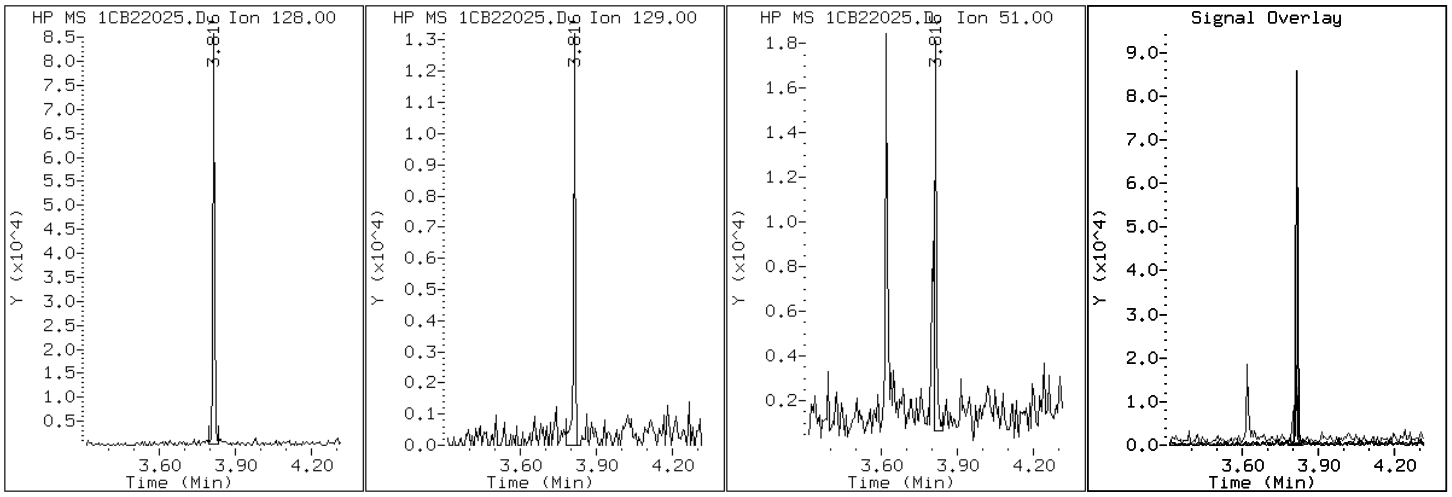
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

2 Naphthalene



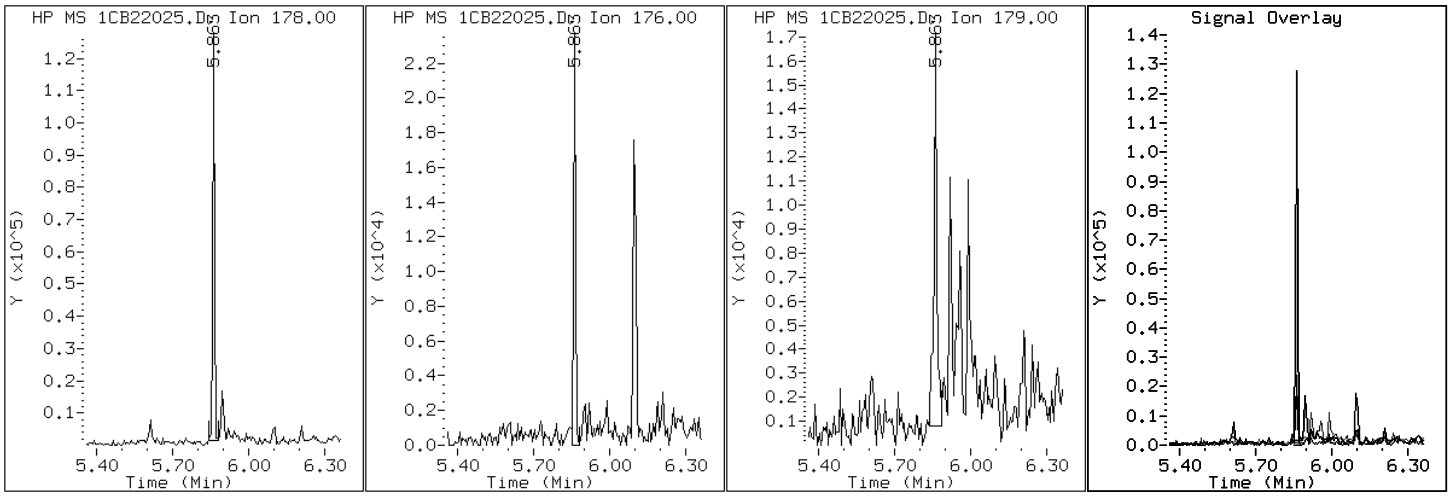
Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

Client ID: FM0161J-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a Operator: SCC

11 Phenanthrene



Data File: 1CB22025.D

Date: 22-FEB-2013 18:43

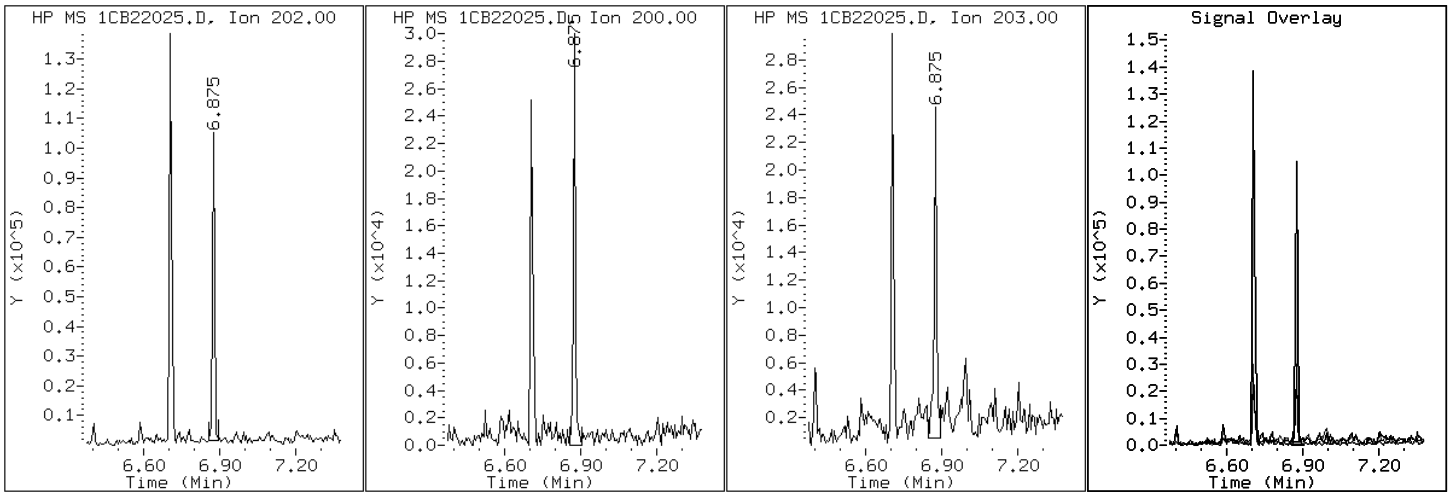
Client ID: FM0161J-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-19-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22025.D
Inj. Date and Time: 22-FEB-2013 18:43
Instrument ID: BSMC5973.i
Client ID: FM0161J-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

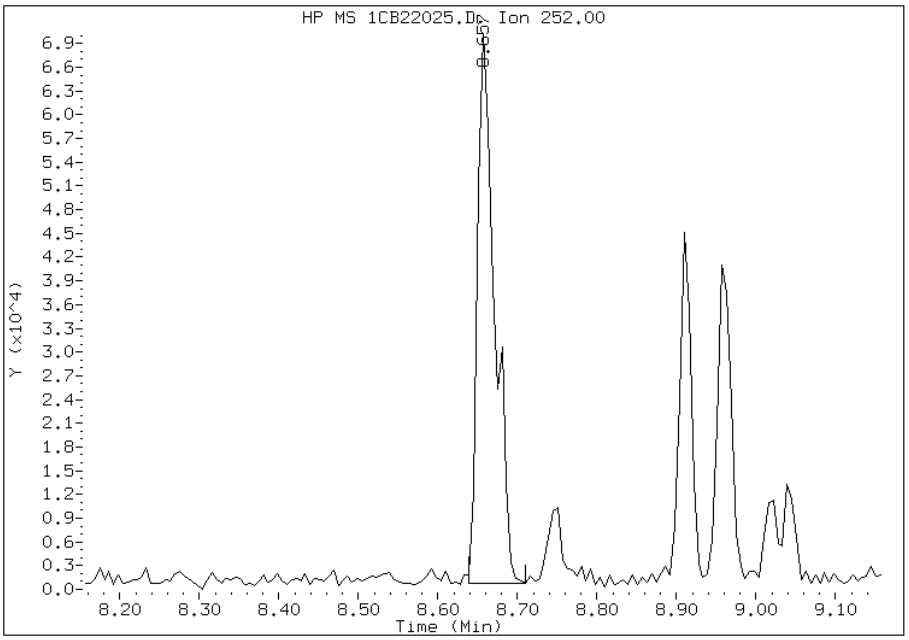
Processing Integration Results

RT: 8.66

Response: 105507

Amount: 2

Conc: 103



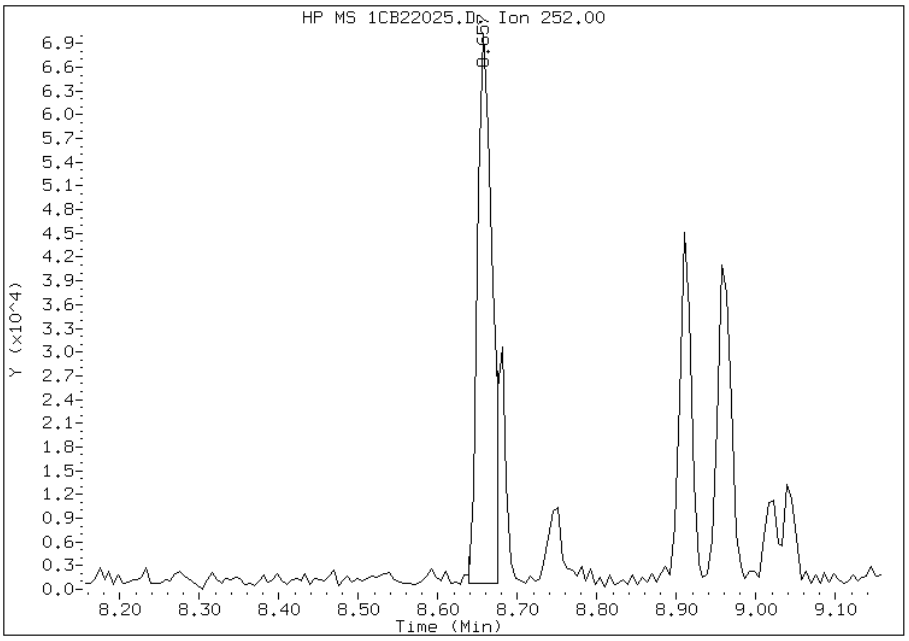

Manual Integration Results

RT: 8.66

Response: 89156

Amount: 1

Conc: 87




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:36
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22025.D
Inj. Date and Time: 22-FEB-2013 18:43
Instrument ID: BSMC5973.i
Client ID: FM0161J-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

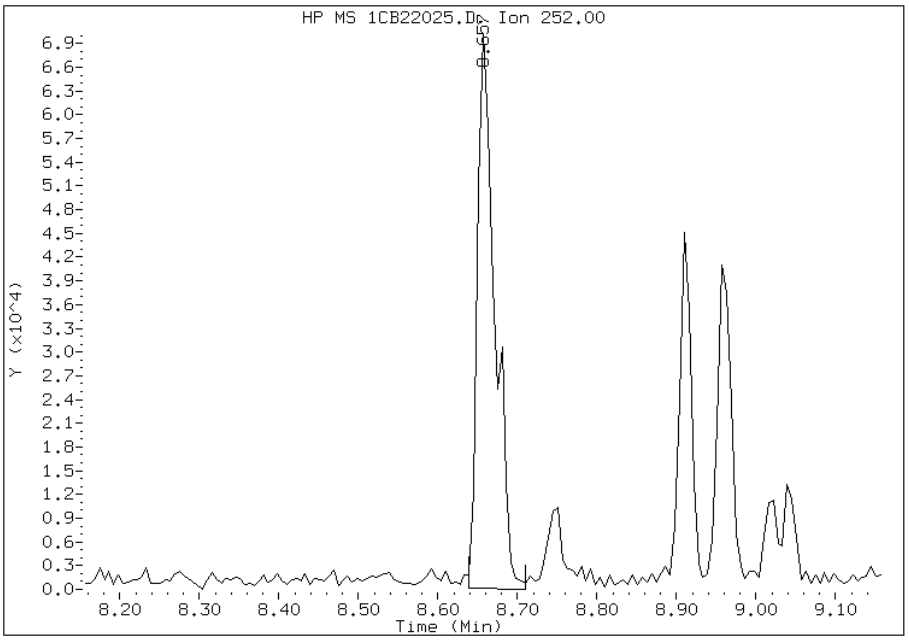
Processing Integration Results

RT: 8.66

Response: 108530

Amount: 2

Conc: 103



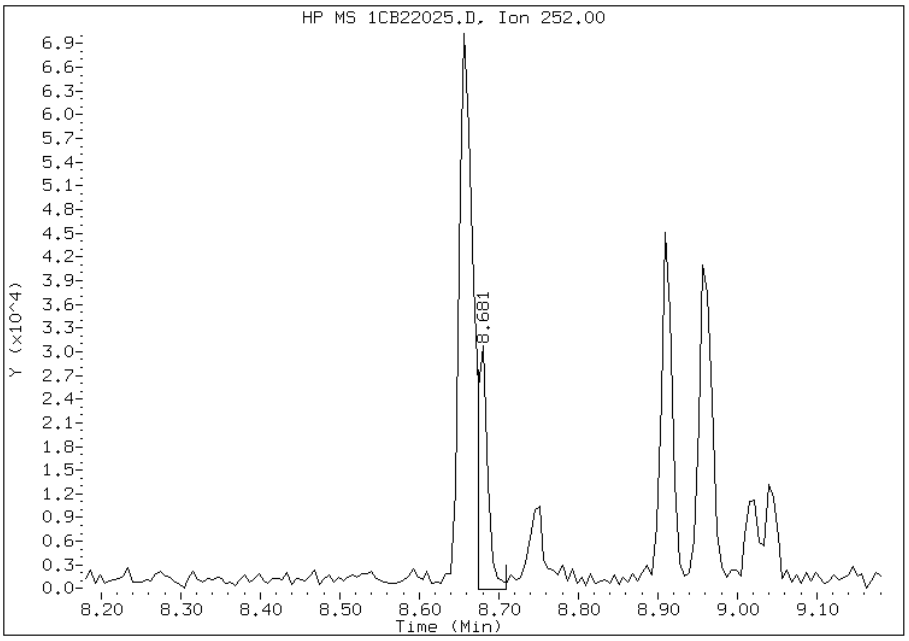

Manual Integration Results

RT: 8.68

Response: 27005

Amount: 0

Conc: 26




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:36
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22025.D
Inj. Date and Time: 22-FEB-2013 18:43
Instrument ID: BSMC5973.i
Client ID: FM0161J-CS
Compound: 25 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 02/26/2013

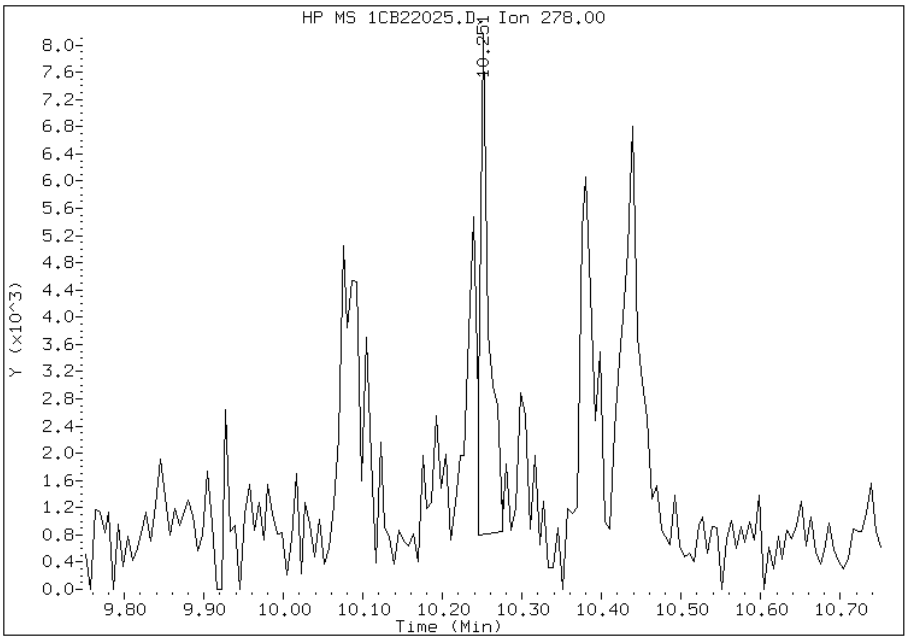
Processing Integration Results

RT: 10.25

Response: 5824

Amount: 0

Conc: 6



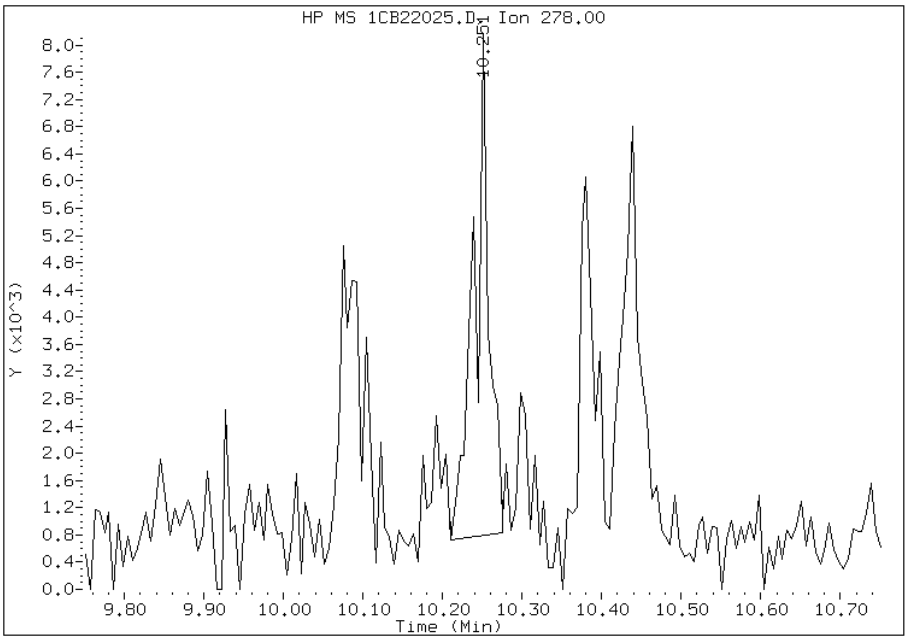

Manual Integration Results

RT: 10.25

Response: 9607

Amount: 0

Conc: 11




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:37
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22025.D
Inj. Date and Time: 22-FEB-2013 18:43
Instrument ID: BSMC5973.i
Client ID: FM0161J-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

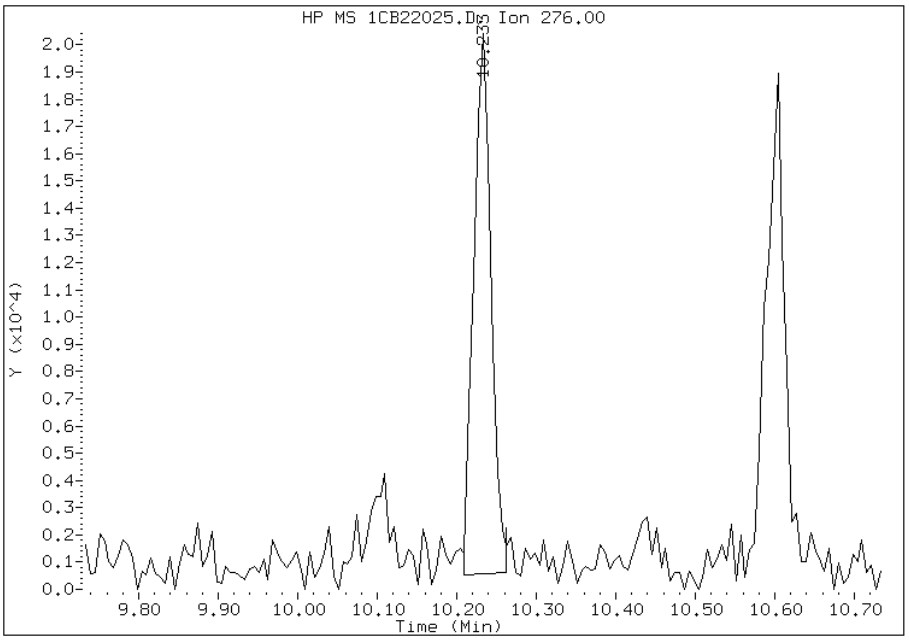
Processing Integration Results

RT: 10.23

Response: 29693

Amount: 0

Conc: 32



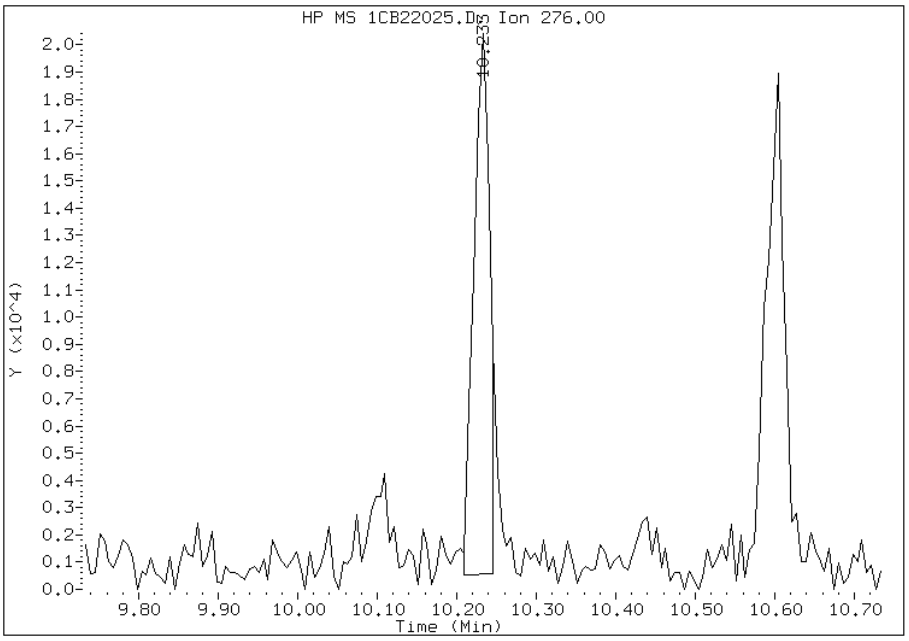

Manual Integration Results

RT: 10.23

Response: 27487

Amount: 0

Conc: 29




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:37
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: FM0161K-CS | Lab Sample ID: 680-87545-20

Matrix: Solid | Lab File ID: 1CB22026.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 09:37

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 14.96(g) | Date Analyzed: 02/22/2013 19:01

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 3.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 100 | U | 100 | 21 |
| 208-96-8 | Acenaphthylene | 8.2 | J | 41 | 5.2 |
| 120-12-7 | Anthracene | 10 | | 8.7 | 4.4 |
| 56-55-3 | Benzo[a]anthracene | 70 | | 8.3 | 4.0 |
| 50-32-8 | Benzo[a]pyrene | 62 | | 11 | 5.4 |
| 205-99-2 | Benzo[b]fluoranthene | 110 | | 13 | 6.3 |
| 191-24-2 | Benzo[g,h,i]perylene | 53 | | 21 | 4.6 |
| 207-08-9 | Benzo[k]fluoranthene | 48 | | 8.3 | 3.7 |
| 218-01-9 | Chrysene | 79 | | 9.3 | 4.7 |
| 53-70-3 | Dibenz(a,h)anthracene | 15 | J | 21 | 4.2 |
| 206-44-0 | Fluoranthene | 100 | | 21 | 4.1 |
| 86-73-7 | Fluorene | 9.1 | J | 21 | 4.2 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 38 | | 21 | 7.4 |
| 90-12-0 | 1-Methylnaphthalene | 52 | | 41 | 4.6 |
| 91-57-6 | 2-Methylnaphthalene | 57 | | 41 | 7.4 |
| 91-20-3 | Naphthalene | 75 | | 41 | 4.6 |
| 85-01-8 | Phenanthrene | 84 | | 8.3 | 4.0 |
| 129-00-0 | Pyrene | 87 | | 21 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 85 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22026.D
Lab Smp Id: 680-87545-A-20-A Client Smp ID: FM0161K-CS
Inj Date : 22-FEB-2013 19:01
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-20-a
Misc Info : 680-87545-A-20-A
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 14.960 | Weight Extracted |
| M | 3.261 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1650628 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1319446 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2579476 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 331213 | 8.50448 | 587.6438 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2792879 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.021 | 9.016 | (1.000) | 2669645 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 46407 | 1.07993 | 74.6213 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 23632 | 0.82444 | 56.9673 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 19605 | 0.75097 | 51.8905 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 6304 | 0.11851 | 8.1884 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 5487 | 0.13122 | 9.0669(Q) |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 90856 | 1.21812 | 84.1698 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 11048 | 0.15146 | 10.4652 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 11640 | 0.17951 | 12.4037 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 120302 | 1.47281 | 101.7685 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 94270 | 1.25602 | 86.7885 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 82087 | 1.01835 | 70.3660 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 92055 | 1.14115 | 78.8515 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.657 | (0.960) | 108748 | 1.55871 | 107.7042(M) |
| 21 Benzo(k)fluoranthene | 252 | 8.668 | 8.680 | (0.961) | 50108 | 0.70012 | 48.3767(M) |
| 22 Benzo(a)pyrene | 252 | 8.962 | 8.963 | (0.993) | 60879 | 0.89835 | 62.0745 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.239 | (1.134) | 35200 | 0.55216 | 38.1530(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.257 | (1.136) | 13559 | 0.21744 | 15.0249(M) |
| 26 Benzo(g,h,i)perylene | 276 | 10.598 | 10.610 | (1.175) | 50853 | 0.76255 | 52.6910(M) |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22026.D

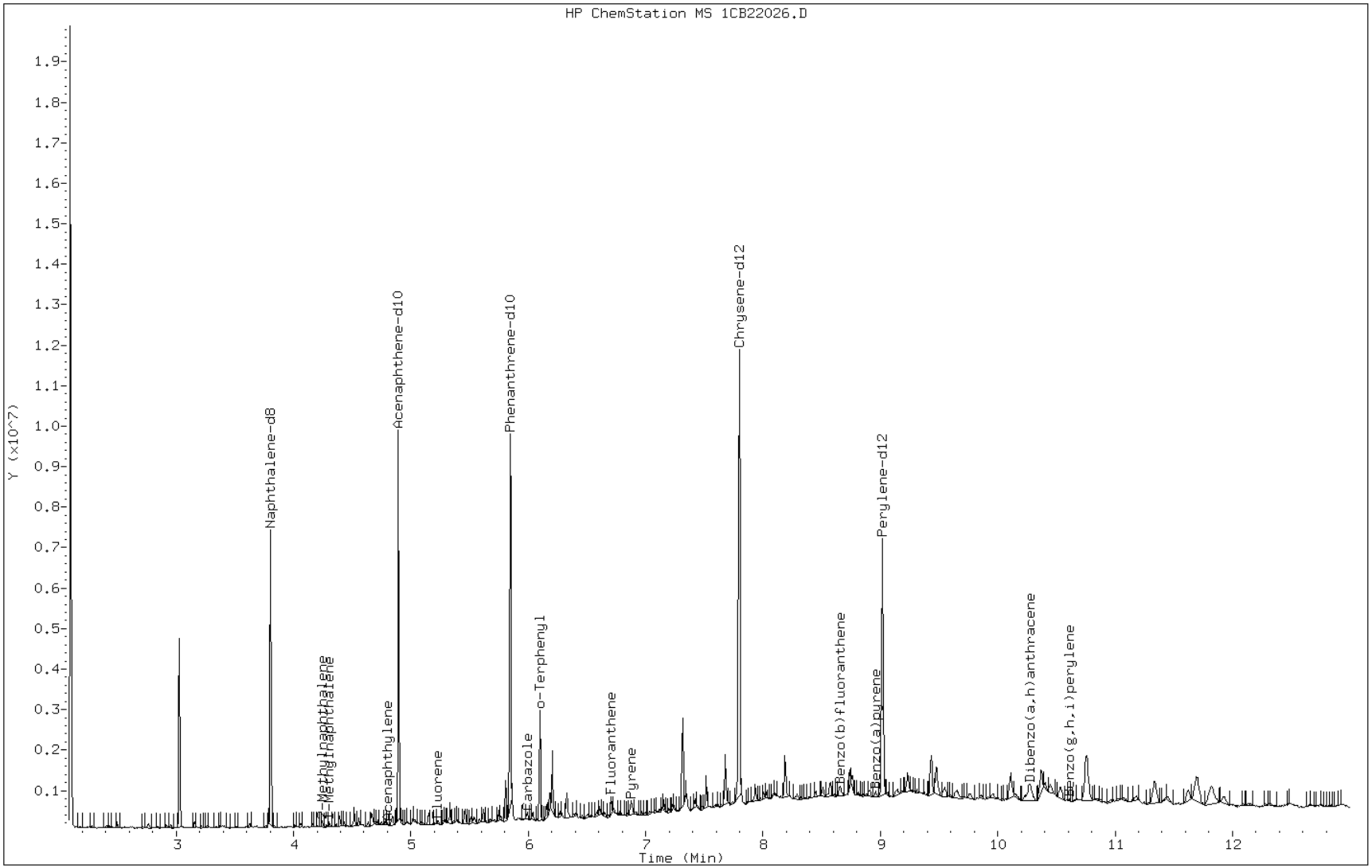
Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC



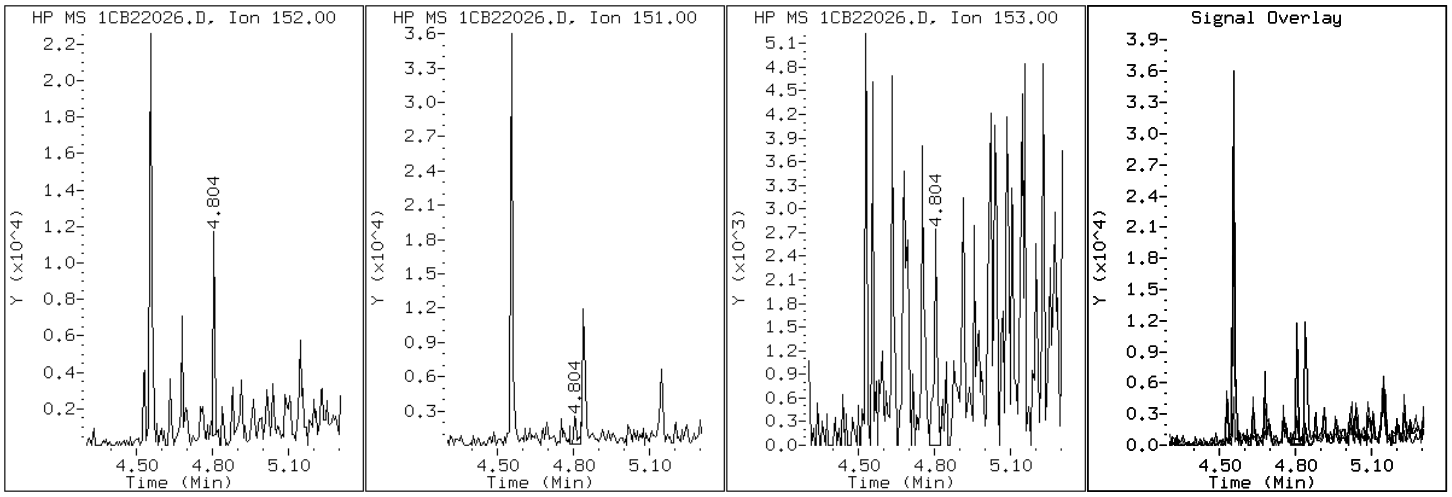
Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a Operator: SCC

5 Acenaphthylene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

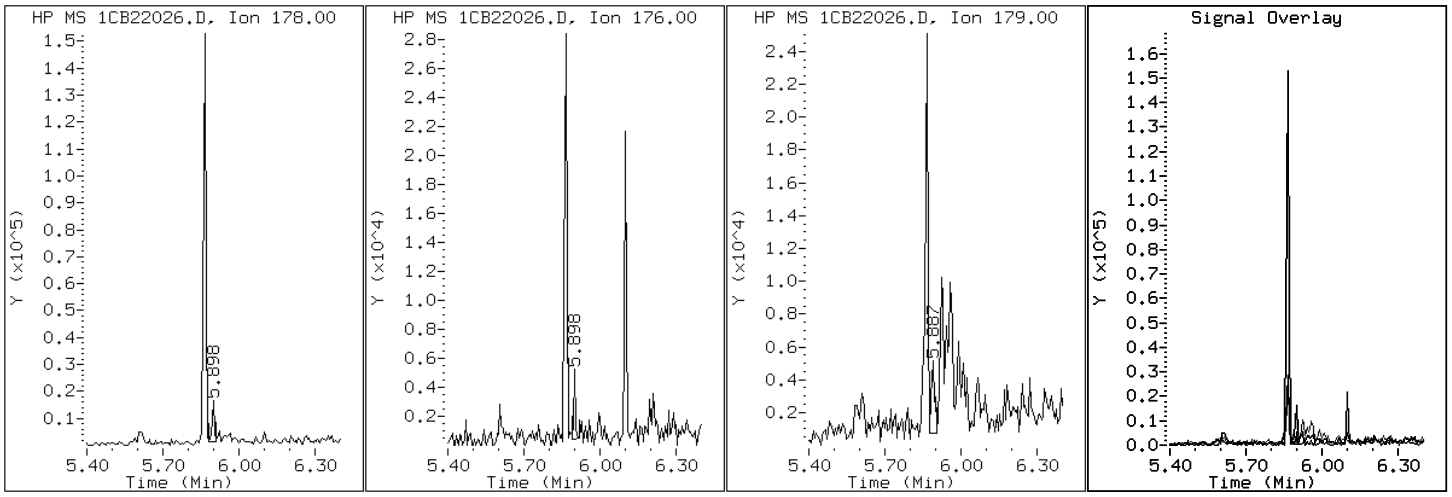
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

12 Anthracene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

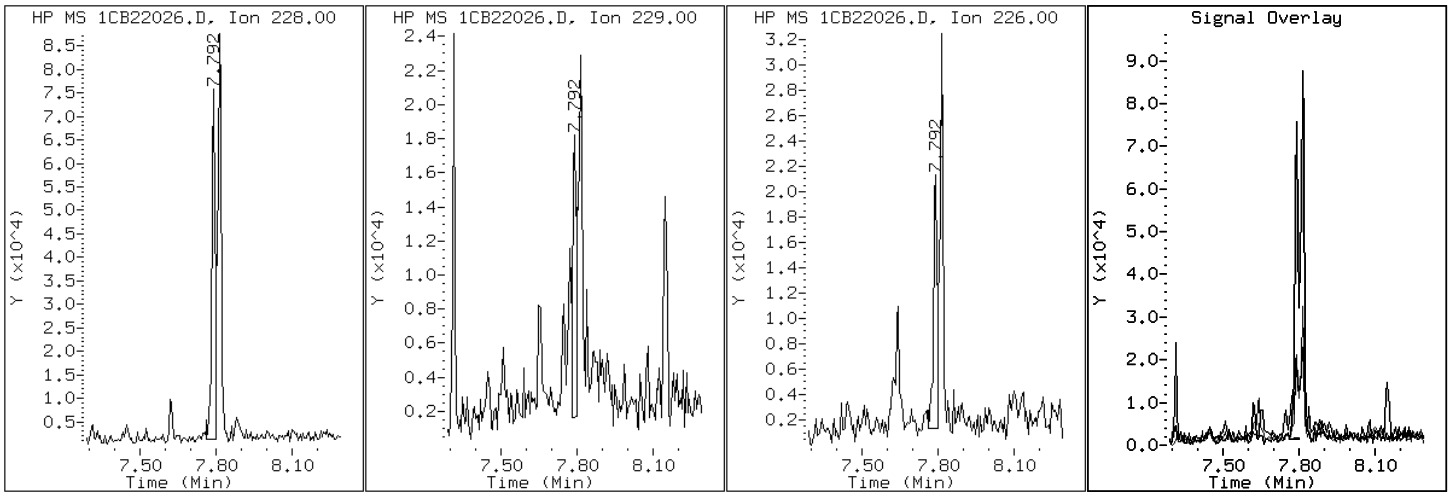
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

17 Benzo(a)anthracene



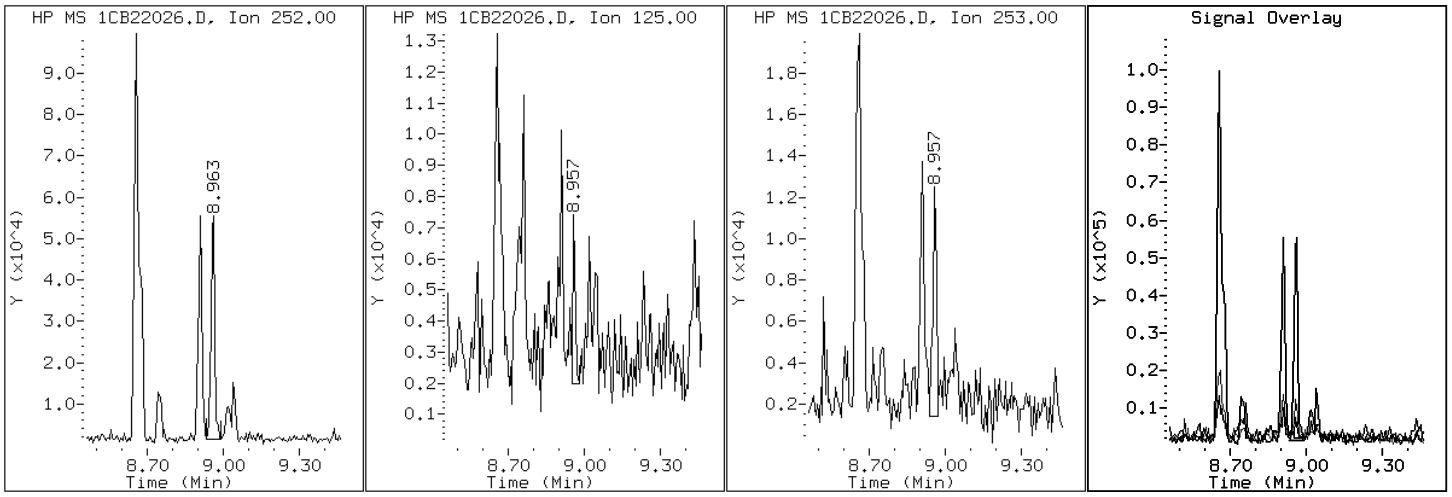
Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a Operator: SCC

22 Benzo(a)pyrene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

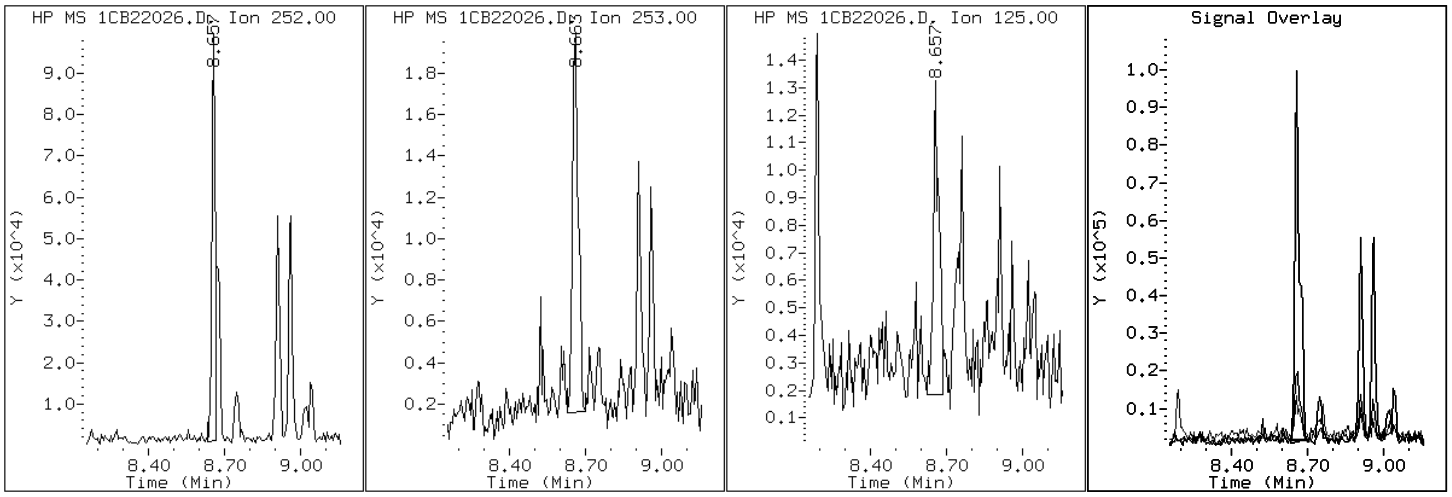
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

20 Benzo(b)fluoranthene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

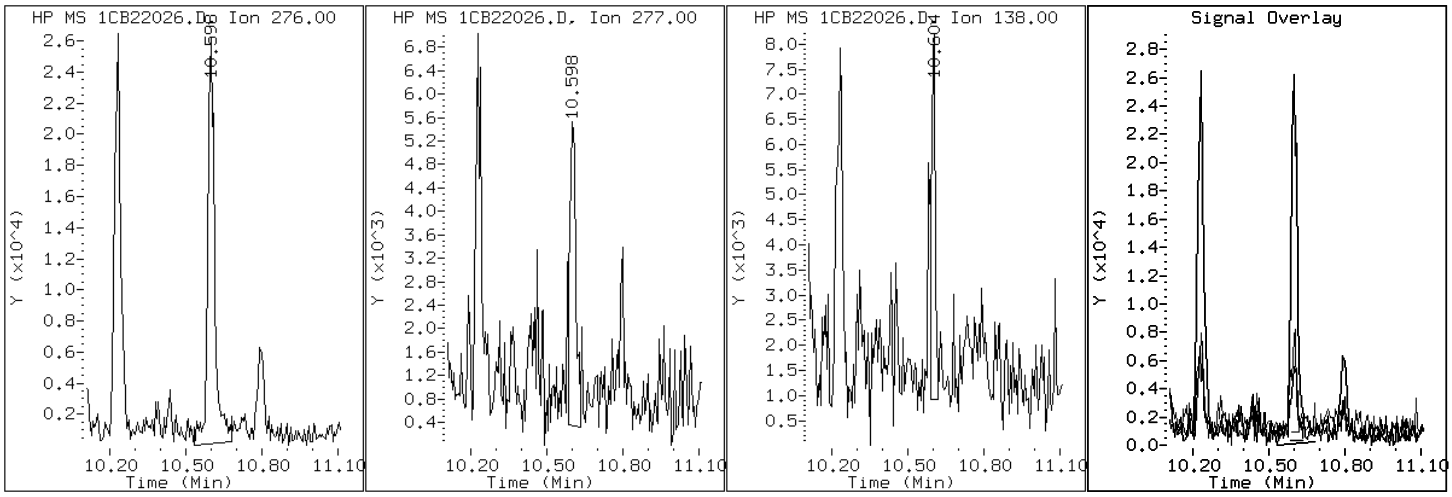
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

26 Benzo(g,h,i)perylene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

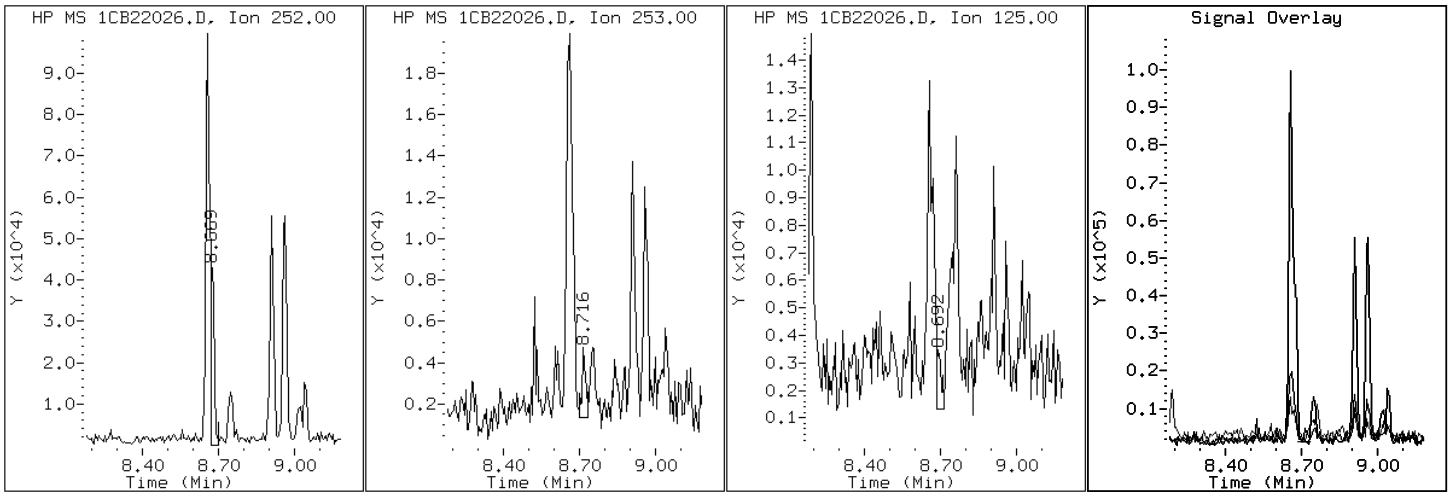
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

21 Benzo(k)fluoranthene



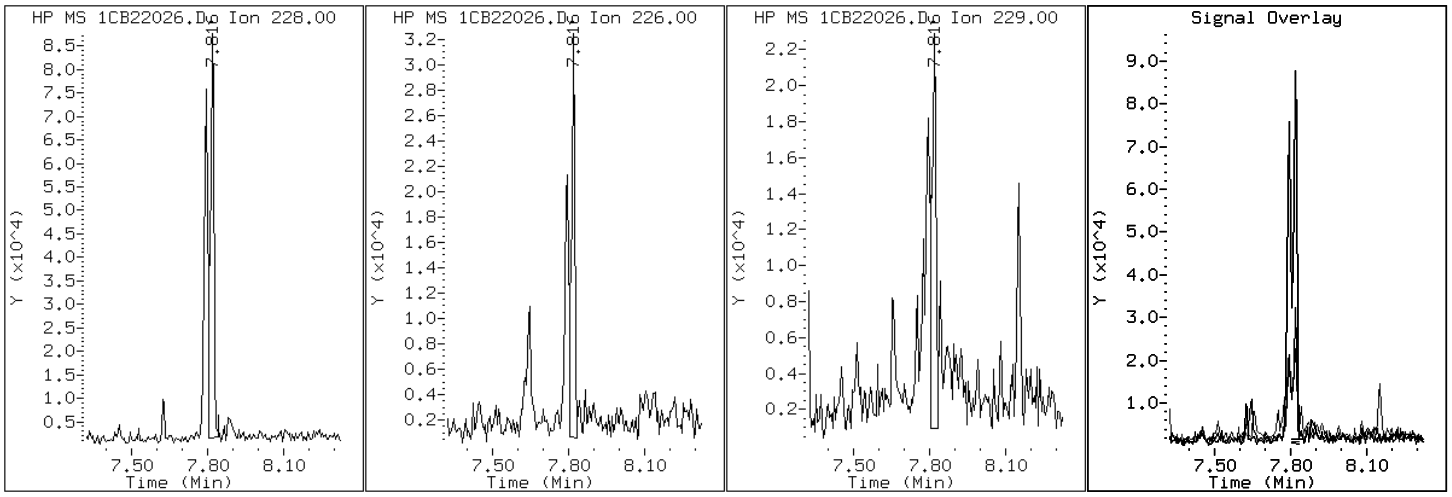
Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a Operator: SCC

19 Chrysene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

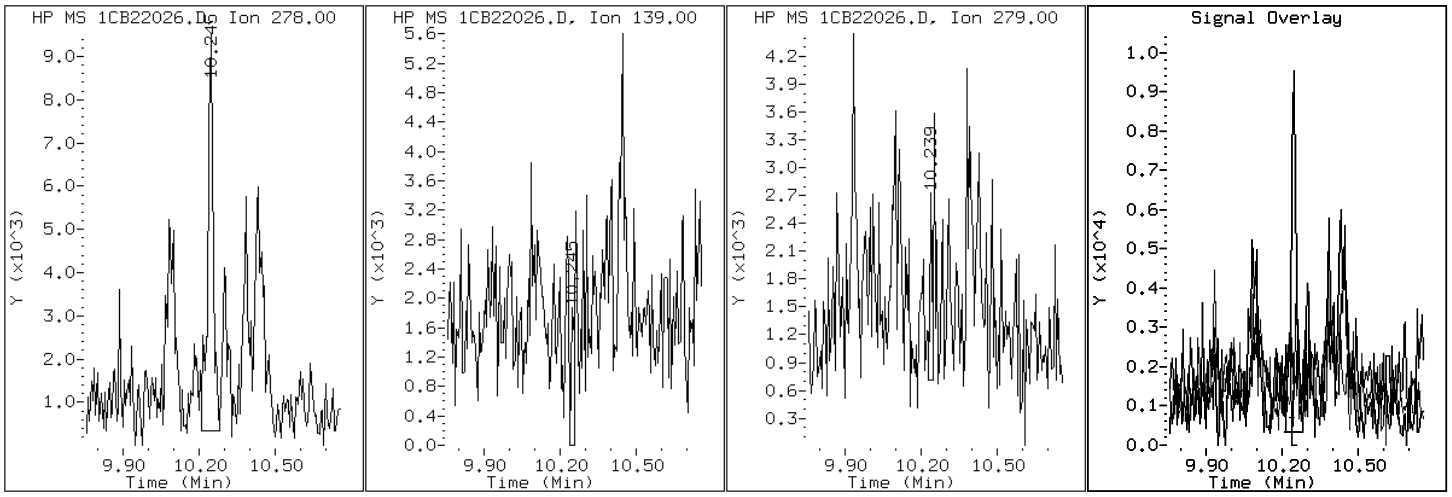
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

25 Dibenzo(a,h)anthracene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

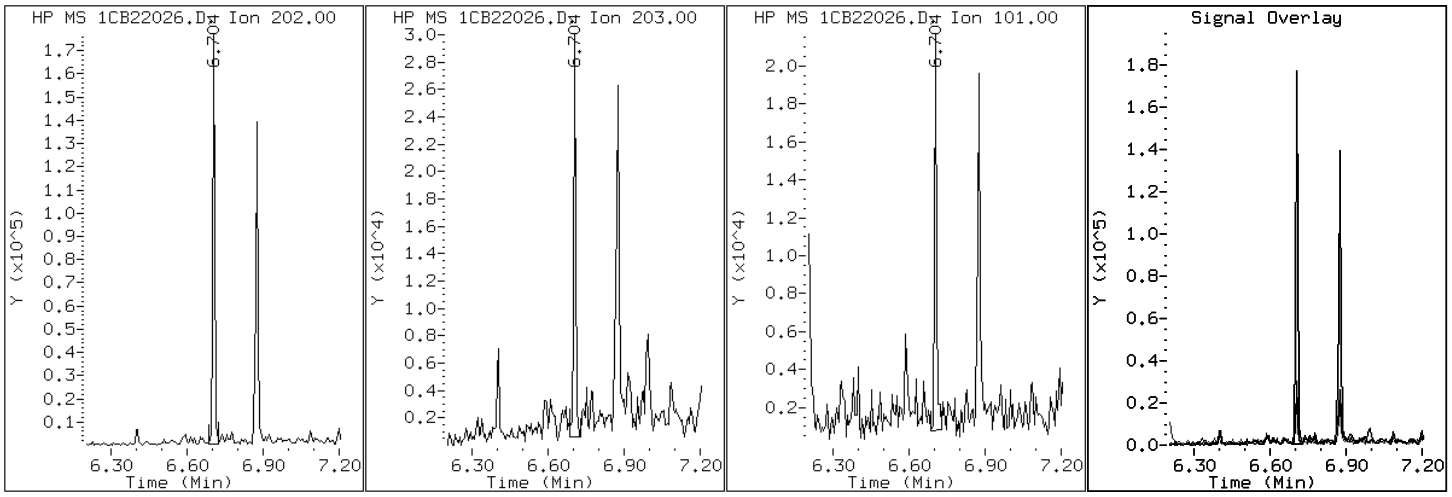
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

15 Fluoranthene



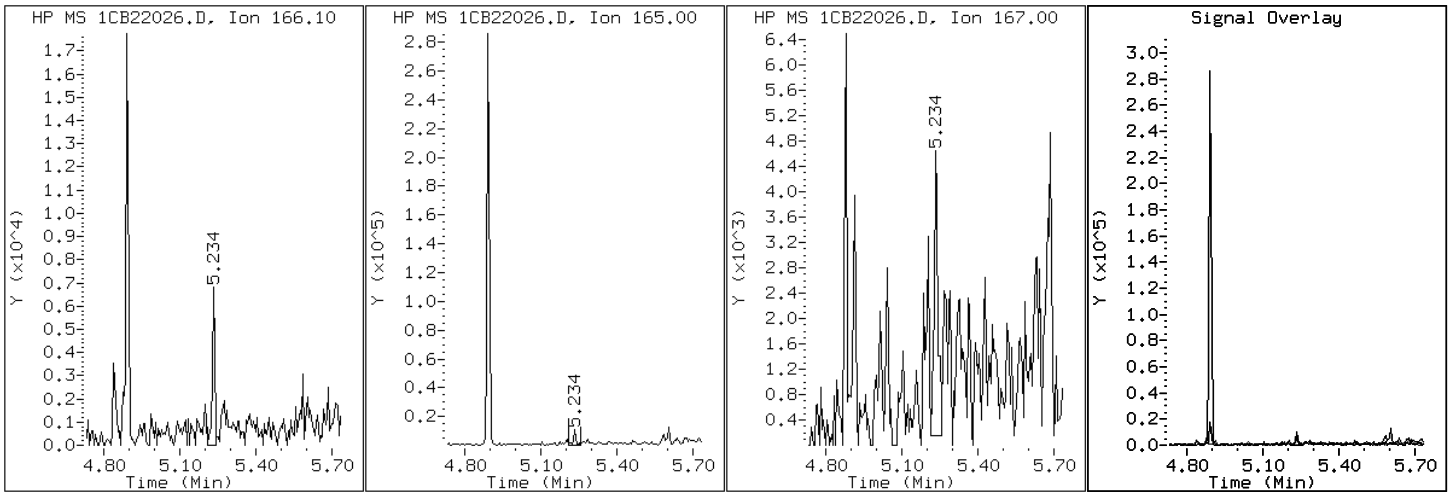
Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a Operator: SCC

9 Fluorene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

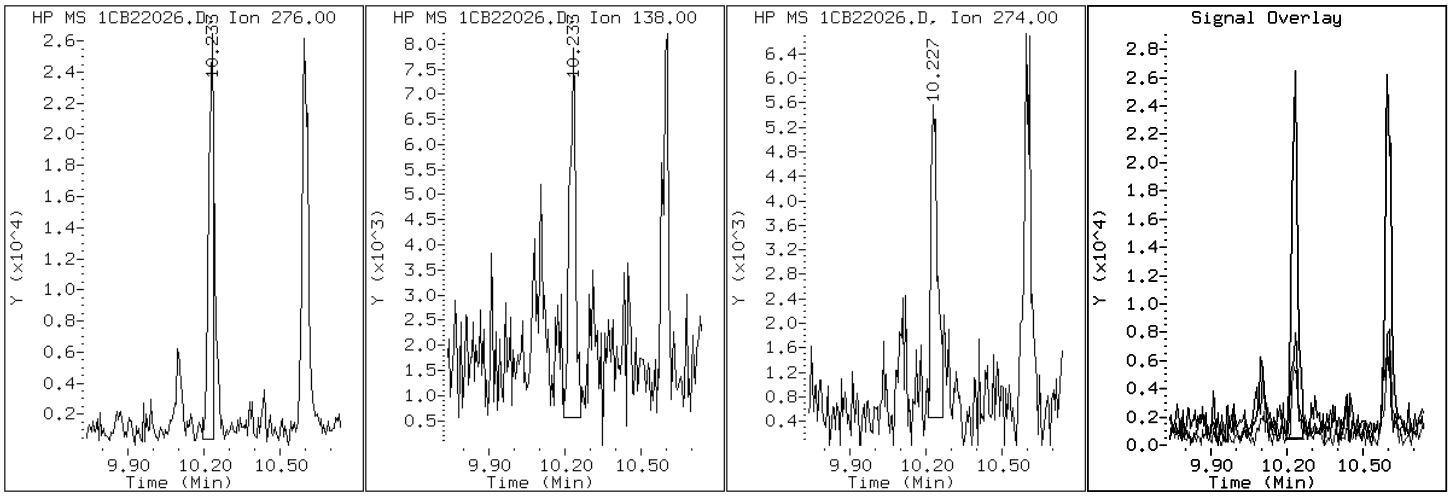
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

24 Indeno(1,2,3-cd)pyrene



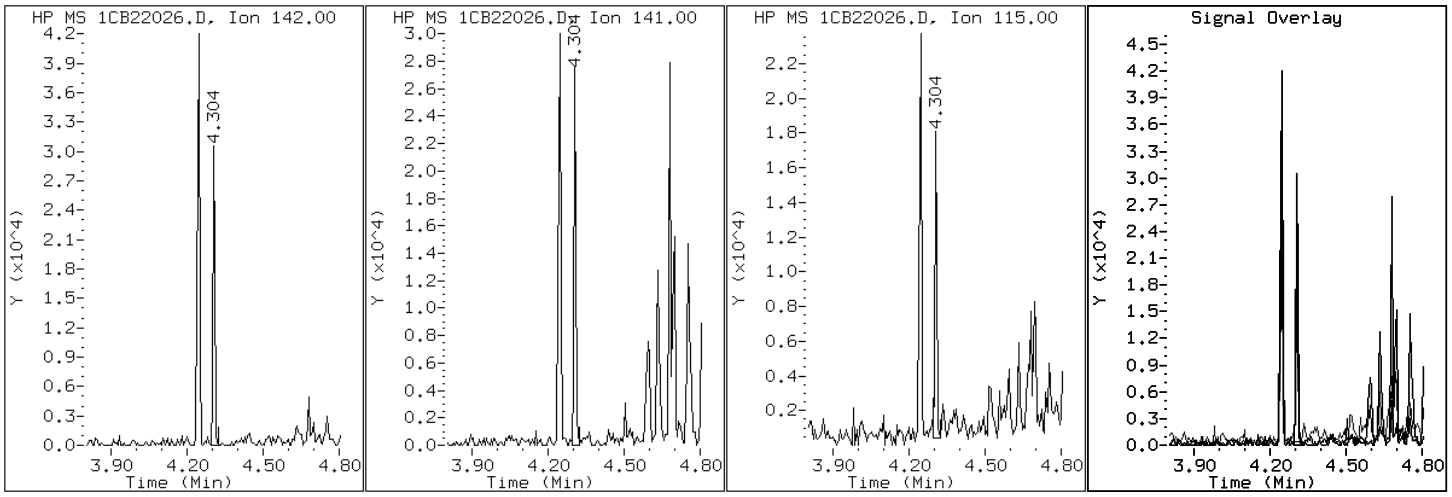
Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a Operator: SCC

4 1-Methylnaphthalene



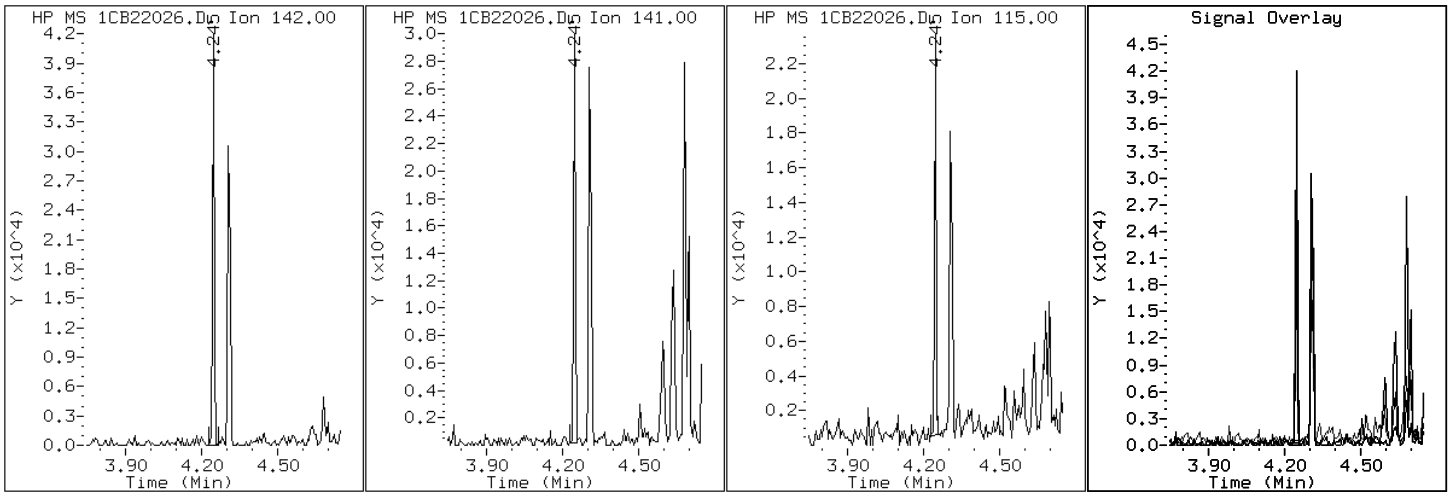
Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a Operator: SCC

3 2-Methylnaphthalene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

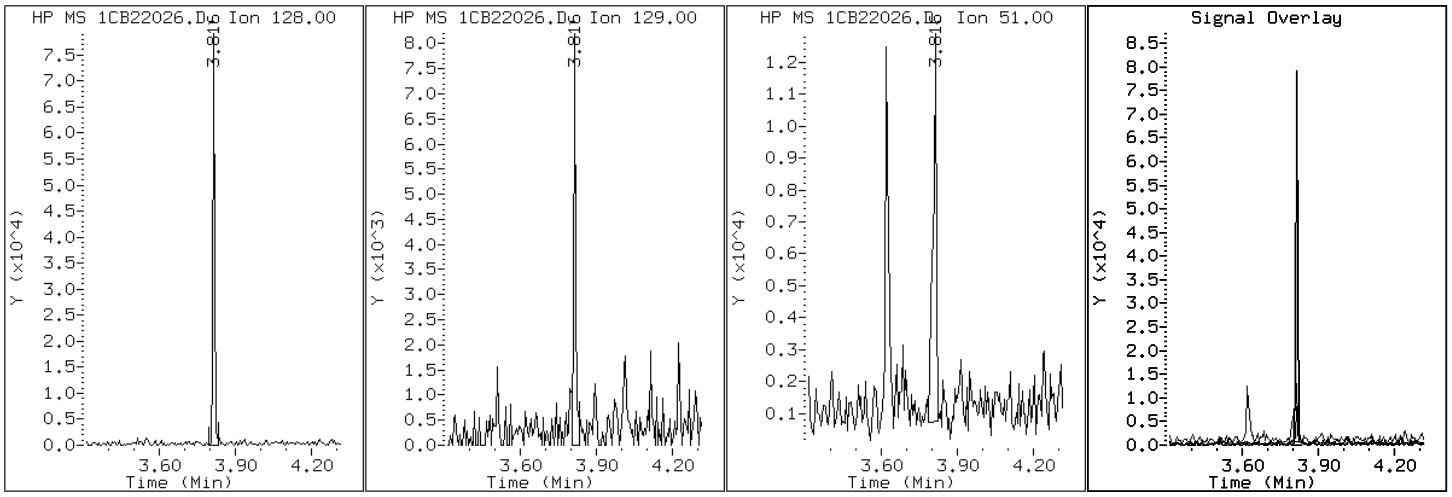
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

2 Naphthalene



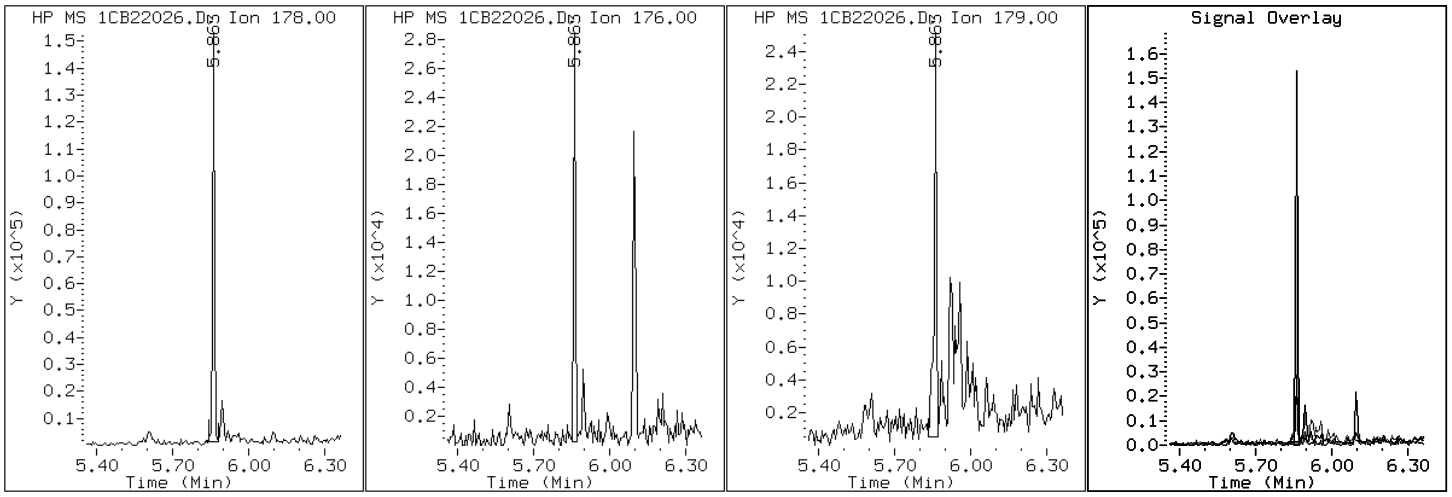
Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

Client ID: FM0161K-CS Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a Operator: SCC

11 Phenanthrene



Data File: 1CB22026.D

Date: 22-FEB-2013 19:01

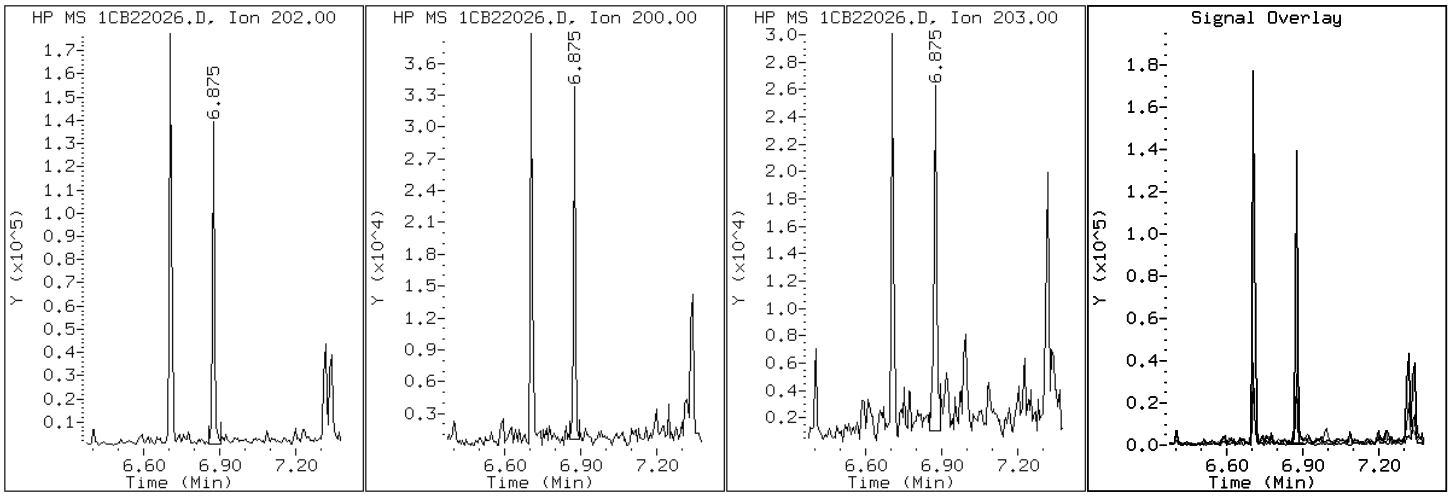
Client ID: FM0161K-CS

Instrument: BSMC5973.i

Sample Info: 680-87545-a-20-a

Operator: SCC

16 Pyrene



Manual Integration Report

Data File: 1CB22026.D
Inj. Date and Time: 22-FEB-2013 19:01
Instrument ID: BSMC5973.i
Client ID: FM0161K-CS
Compound: 20 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 02/26/2013

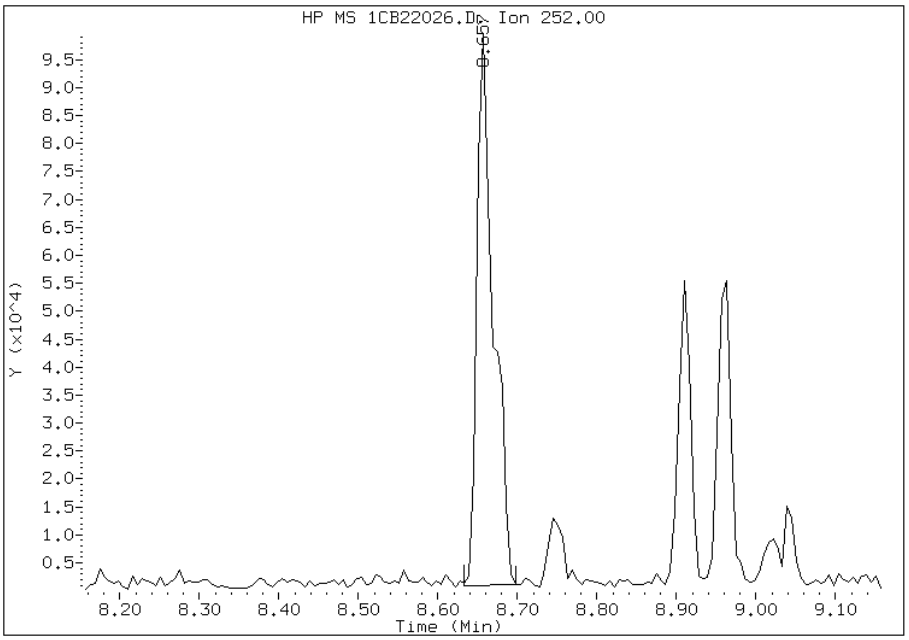
Processing Integration Results

RT: 8.66

Response: 141601

Amount: 2

Conc: 140



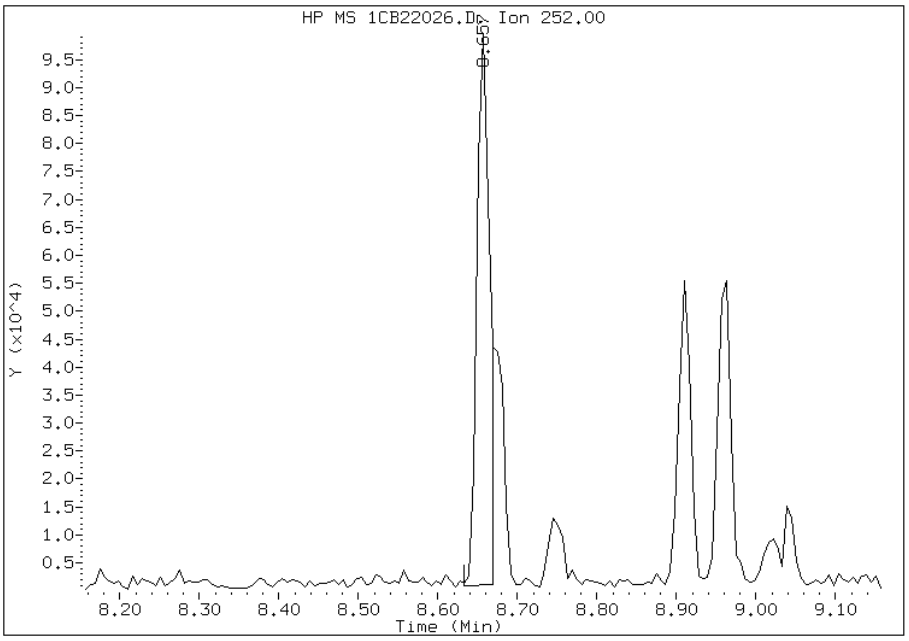

Manual Integration Results

RT: 8.66

Response: 108748

Amount: 2

Conc: 108




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:38
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: 1CB22026.D
Inj. Date and Time: 22-FEB-2013 19:01
Instrument ID: BSMC5973.i
Client ID: FM0161K-CS
Compound: 26 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 02/26/2013

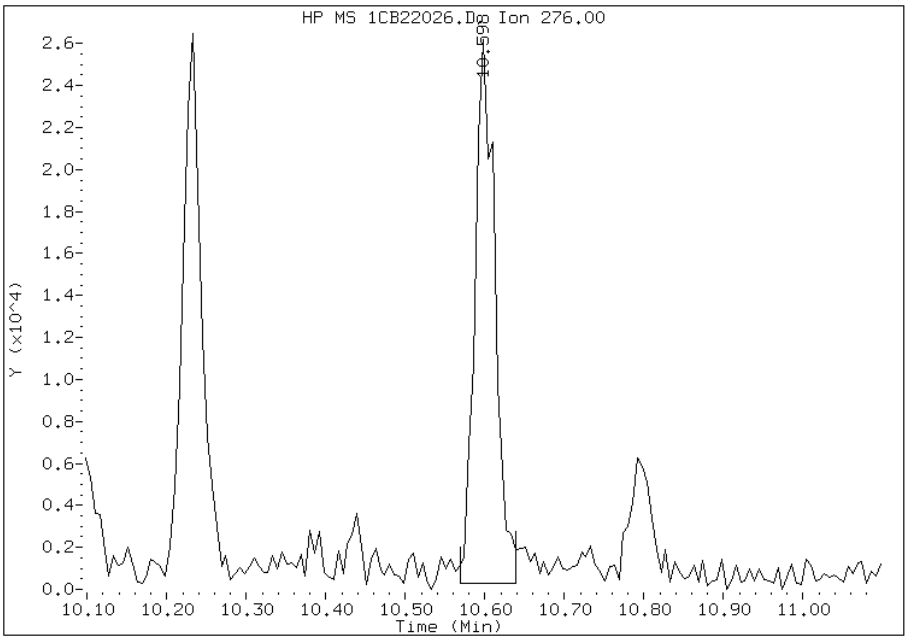
Processing Integration Results

RT: 10.60

Response: 45465

Amount: 1

Conc: 47



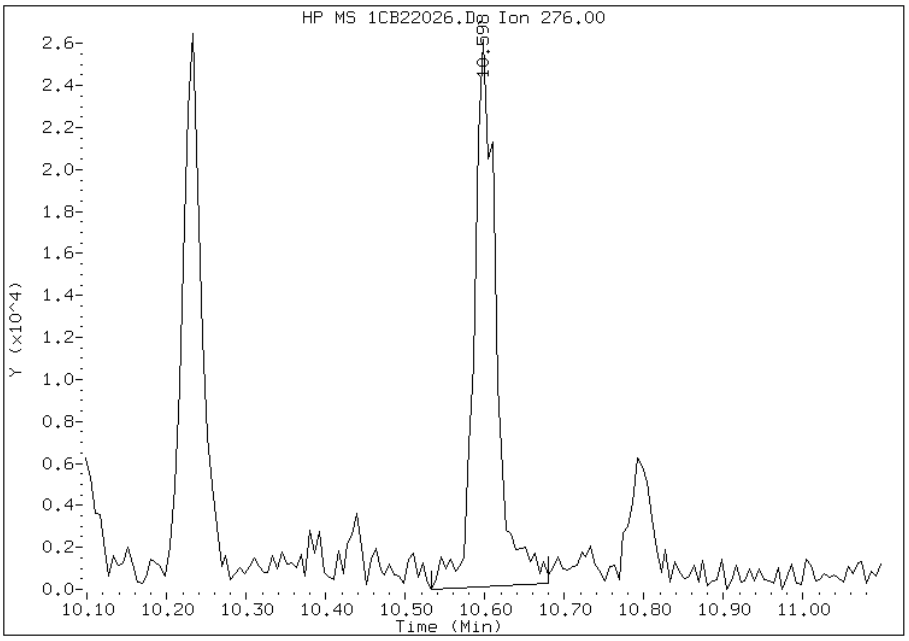

Manual Integration Results

RT: 10.60

Response: 50853

Amount: 1

Conc: 53




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:39
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22026.D
Inj. Date and Time: 22-FEB-2013 19:01
Instrument ID: BSMC5973.i
Client ID: FM0161K-CS
Compound: 21 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 02/26/2013

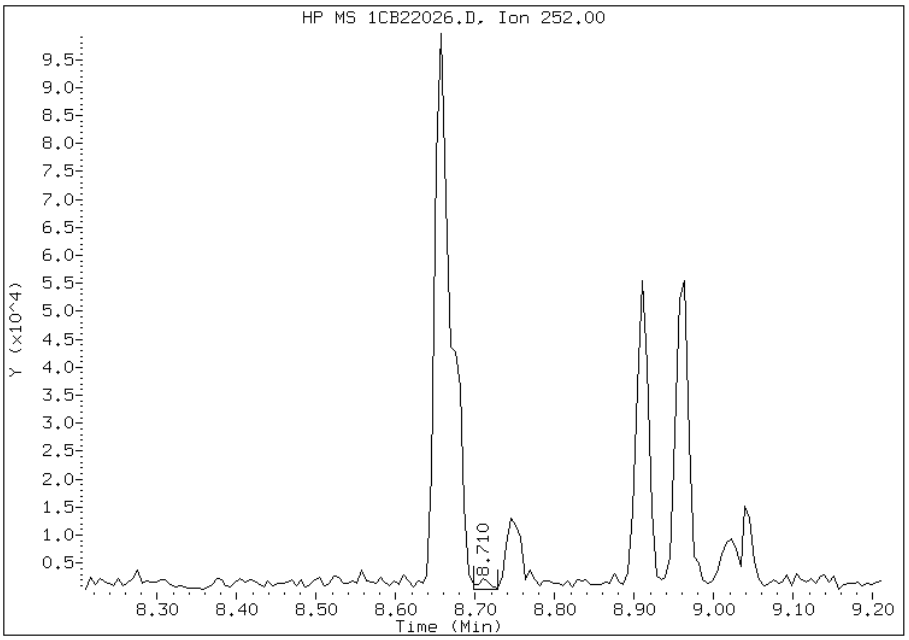
Processing Integration Results

RT: 8.71

Response: 1850

Amount: 0

Conc: 2



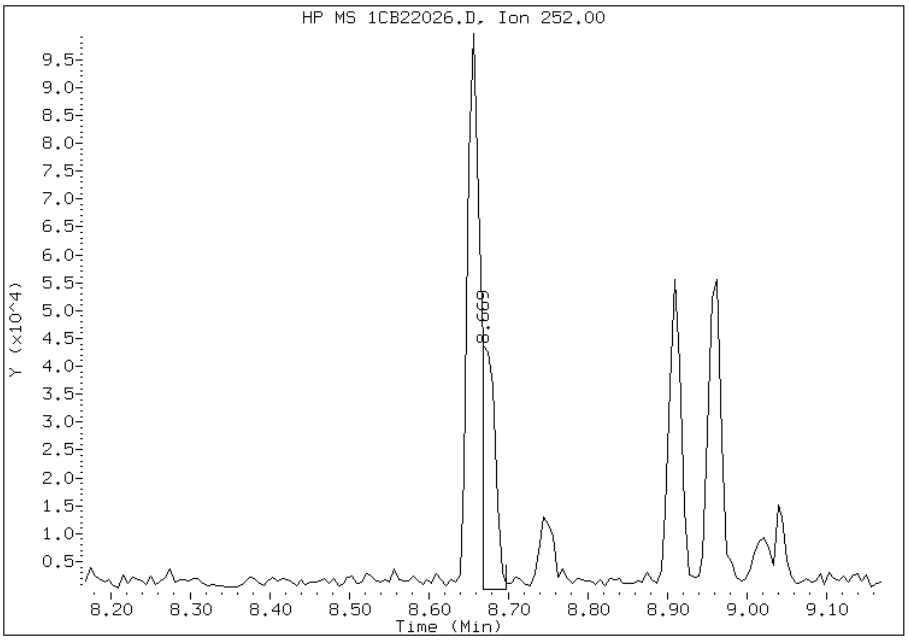

Manual Integration Results

RT: 8.67

Response: 50108

Amount: 1

Conc: 48




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:38
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22026.D
Inj. Date and Time: 22-FEB-2013 19:01
Instrument ID: BSMC5973.i
Client ID: FM0161K-CS
Compound: 25 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 02/26/2013

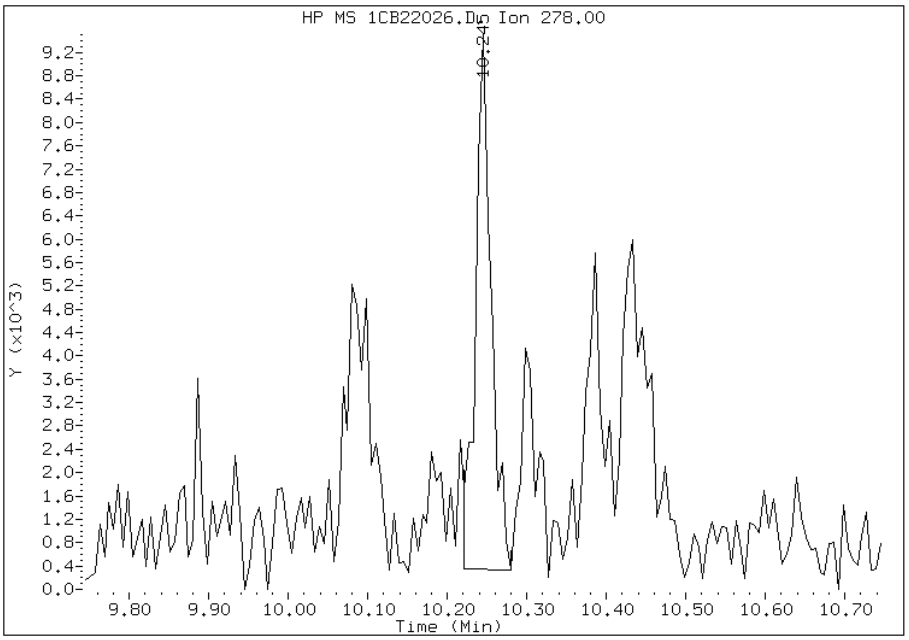
Processing Integration Results

RT: 10.25

Response: 12621

Amount: 0

Conc: 14



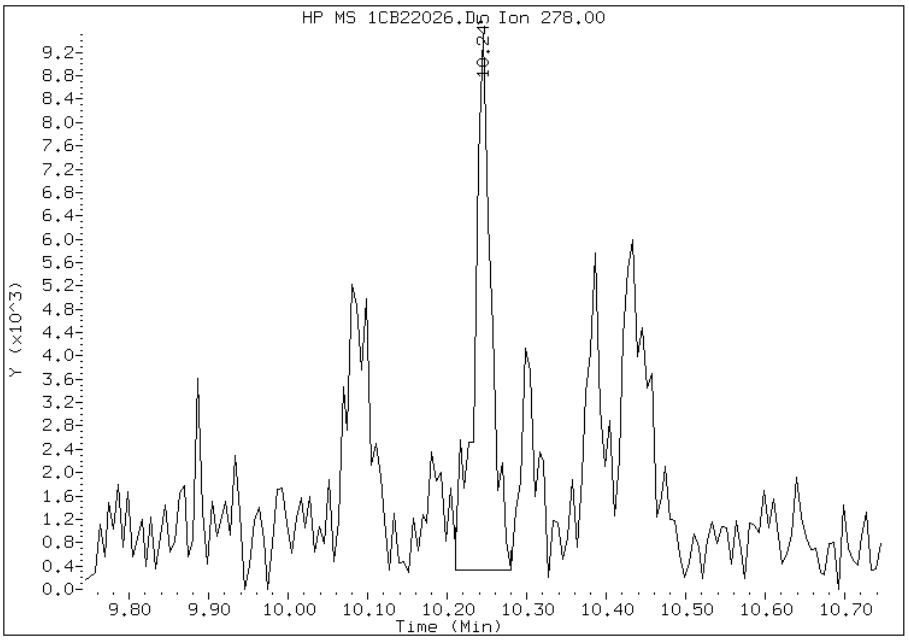

Manual Integration Results

RT: 10.25

Response: 13559

Amount: 0

Conc: 15




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:38
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1CB22026.D
Inj. Date and Time: 22-FEB-2013 19:01
Instrument ID: BSMC5973.i
Client ID: FM0161K-CS
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

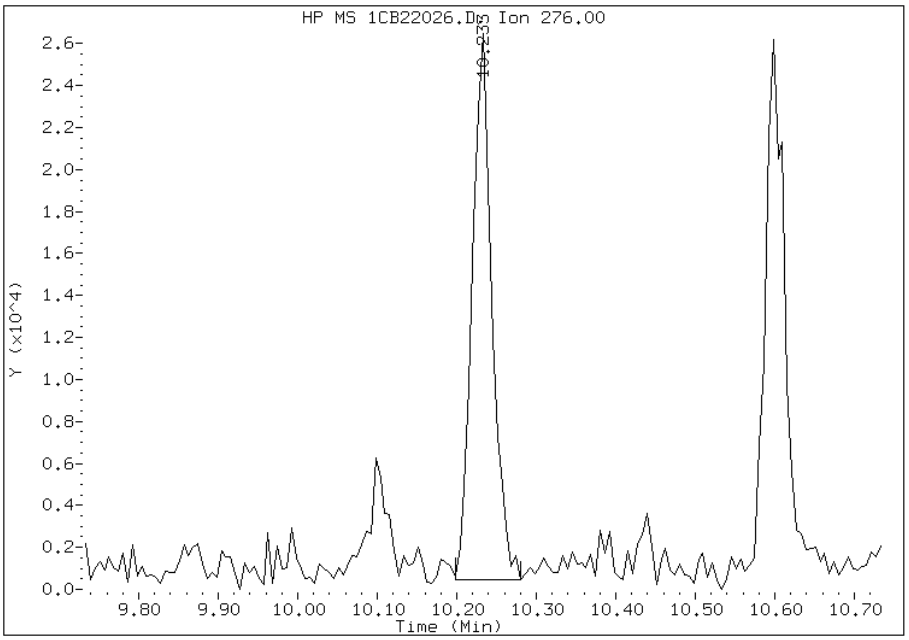
Processing Integration Results

RT: 10.23

Response: 44846

Amount: 1

Conc: 49



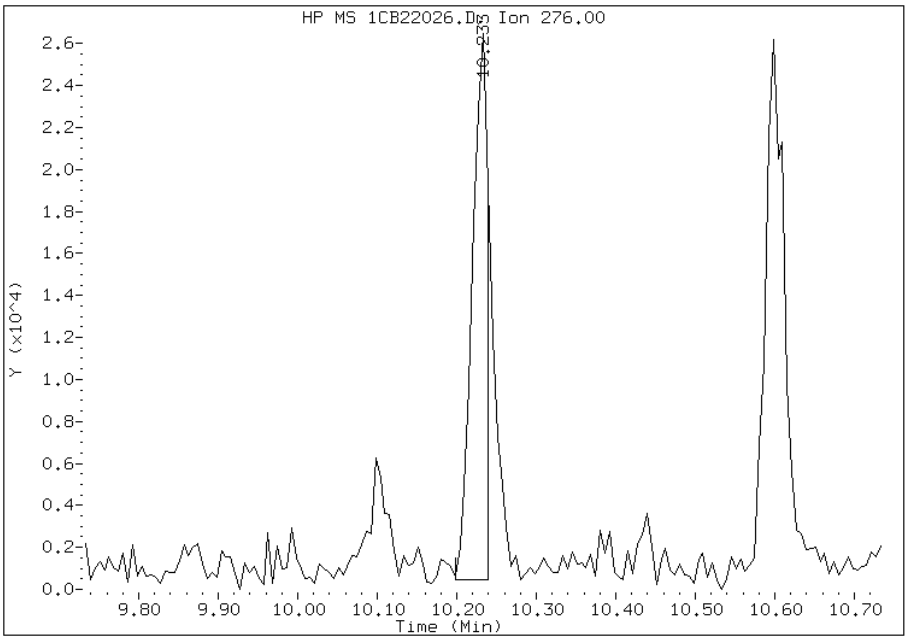

Manual Integration Results

RT: 10.23

Response: 35200

Amount: 1

Conc: 38




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 11:39
Manual Integration Reason: Split Peak

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134771

SDG No.: 68087545-1

Instrument ID: BSMA5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:01 Calibration End Date: 02/22/2013 12:32 Calibration ID: 2759

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | IC 660-134771/3 | 1AB22003.D |
| Level 2 | IC 660-134771/4 | 1AB22004.D |
| Level 3 | IC 660-134771/5 | 1AB22005.D |
| Level 4 | IC 660-134771/6 | 1AB22006.D |
| Level 5 | ICIS 660-134771/7 | 1AB22007.D |
| Level 6 | IC 660-134771/8 | 1AB22008.D |
| Level 7 | IC 660-134771/9 | 1AB22009.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Naphthalene | 0.8964<br>1.0153 | 0.9159<br>1.0399 | 0.9668 | 0.9629 | 0.9496 | Ave | | 0.9639 | | | 0.0000 | 5.3 | | 15.0 | | | |
| 2-Methylnaphthalene | 0.5063<br>0.5277 | 0.4390<br>0.5498 | 0.4723 | 0.4869 | 0.5011 | Ave | | 0.4976 | | | 0.0000 | 7.3 | | 15.0 | | | |
| 1-Methylnaphthalene | 0.5486<br>0.5967 | 0.4750<br>0.6283 | 0.5452 | 0.5377 | 0.5470 | Ave | | 0.5541 | | | 0.0000 | 8.7 | | 15.0 | | | |
| Acenaphthylene | 1.1966<br>1.6216 | 1.3446<br>1.8173 | 1.4050 | 1.4842 | 1.5855 | Ave | | 1.4935 | | | 0.0000 | 13.6 | | 15.0 | | | |
| Acenaphthene | 0.8808<br>0.9421 | 0.7126<br>1.0791 | 0.7647 | 0.8116 | 0.8502 | Ave | | 0.8630 | | | 0.0000 | 14.1 | | 15.0 | | | |
| Fluorene | 1.1431<br>1.1704 | 0.9064<br>1.3325 | 0.9874 | 1.0111 | 1.0737 | Ave | | 1.0892 | | | 0.0000 | 12.9 | | 15.0 | | | |
| Phenanthrene | 0.9312<br>1.0691 | 0.9111<br>1.1691 | 0.9176 | 0.9689 | 0.9927 | Ave | | 0.9943 | | | 0.0000 | 9.5 | | 15.0 | | | |
| Anthracene | 0.7803<br>1.0576 | 0.9213<br>1.1455 | 0.8949 | 0.9850 | 0.9759 | Ave | | 0.9658 | | | 0.0000 | 12.1 | | 15.0 | | | |
| Carbazole | 0.8186<br>0.9329 | 0.8109<br>0.9551 | 0.7765 | 0.8355 | 0.8385 | Ave | | 0.8526 | | | 0.0000 | 7.7 | | 15.0 | | | |
| Fluoranthene | 0.8986<br>1.1004 | 0.8625<br>1.1530 | 0.9211 | 1.0002 | 1.0230 | Ave | | 0.9941 | | | 0.0000 | 10.8 | | 15.0 | | | |
| Pyrene | 1.0843<br>1.2795 | 0.9905<br>1.3394 | 1.0929 | 1.1780 | 1.2482 | Ave | | 1.1733 | | | 0.0000 | 10.6 | | 15.0 | | | |
| Benzo[a]anthracene | 1.7411<br>1.1723 | 1.2086<br>1.2117 | 1.1255 | 1.1892 | 1.1354 | LinF | | 1.1944 | | | 0.0000 | | | | 0.9990 | | 0.9900 |
| Chrysene | 1.1973<br>1.0763 | 0.9703<br>1.0809 | 1.0168 | 1.0640 | 1.0717 | Ave | | 1.0682 | | | 0.0000 | 6.5 | | 15.0 | | | |
| Benzo[b]fluoranthene | 0.9061<br>1.0772 | 0.9726<br>1.1120 | 0.9385 | 1.0042 | 1.0873 | Ave | | 1.0140 | | | 0.0000 | 7.9 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134771

SDG No.: 68087545-1

Instrument ID: BSMA5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:01 Calibration End Date: 02/22/2013 12:32 Calibration ID: 2759

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Benzo[k]fluoranthene | 0.9231<br>1.0263 | 0.9685<br>1.1087 | 1.0370 | 1.0317 | 1.0456 | Ave | | 1.0201 | | | 0.0000 | 5.8 | | 15.0 | | | |
| Benzo[a]pyrene | 0.8117<br>0.9918 | 0.8272<br>1.0398 | 0.9008 | 0.9421 | 0.9868 | Ave | | 0.9286 | | | 0.0000 | 9.3 | | 15.0 | | | |
| Indeno[1,2,3-cd]pyrene | 0.7333<br>0.8566 | 0.6724<br>0.8736 | 0.7089 | 0.8640 | 0.8679 | Ave | | 0.7967 | | | 0.0000 | 11.0 | | 15.0 | | | |
| Dibenz(a,h)anthracene | 0.7469<br>0.8730 | 0.7508<br>0.9377 | 0.7976 | 0.8318 | 0.8737 | Ave | | 0.8302 | | | 0.0000 | 8.5 | | 15.0 | | | |
| Benzo[g,h,i]perylene | 0.7605<br>0.8858 | 0.7997<br>0.9208 | 0.8165 | 0.8606 | 0.8875 | Ave | | 0.8473 | | | 0.0000 | 6.7 | | 15.0 | | | |
| o-Terphenyl | 0.6186<br>0.6322 | 0.5097<br>0.6801 | 0.5130 | 0.5639 | 0.5567 | Ave | | 0.5820 | | | 0.0000 | 11.0 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134771

SDG No.: 68087545-1

Instrument ID: BSMA5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:01 Calibration End Date: 02/22/2013 12:32 Calibration ID: 2759

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | IC 660-134771/3 | 1AB22003.D |
| Level 2 | IC 660-134771/4 | 1AB22004.D |
| Level 3 | IC 660-134771/5 | 1AB22005.D |
| Level 4 | IC 660-134771/6 | 1AB22006.D |
| Level 5 | ICIS 660-134771/7 | 1AB22007.D |
| Level 6 | IC 660-134771/8 | 1AB22008.D |
| Level 7 | IC 660-134771/9 | 1AB22009.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Naphthalene | NPT | Ave | 4492<br>755068 | 23071<br>1297783 | 116527 | 240277 | 470879 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| 2-Methylnaphthalene | NPT | Ave | 2537<br>392415 | 11057<br>686127 | 56925 | 121491 | 248487 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| 1-Methylnaphthalene | NPT | Ave | 2749<br>443774 | 11965<br>784083 | 65710 | 134180 | 271250 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Acenaphthylene | ANT | Ave | 4028<br>777111 | 22465<br>1395142 | 113930 | 243677 | 493767 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Acenaphthene | ANT | Ave | 2965<br>451477 | 11906<br>828395 | 62010 | 133244 | 264764 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Fluorene | ANT | Ave | 3848<br>560865 | 15143<br>1022945 | 80068 | 165999 | 334396 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Phenanthrene | PHN | Ave | 4653<br>768793 | 22599<br>1384065 | 115139 | 234292 | 480919 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Anthracene | PHN | Ave | 3899<br>760474 | 22852<br>1356027 | 112287 | 238178 | 472782 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Carbazole | PHN | Ave | 4090<br>670812 | 20113<br>1130623 | 97425 | 202035 | 406225 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Fluoranthene | PHN | Ave | 4490<br>791244 | 21394<br>1364989 | 115579 | 241853 | 495614 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Pyrene | CRY | Ave | 4786<br>842188 | 22037<br>1493658 | 120317 | 254540 | 525727 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[a]anthracene | CRY | LinF | 7685<br>771629 | 26890<br>1351230 | 123907 | 256962 | 478213 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Chrysene | CRY | Ave | 5285<br>708418 | 21588<br>1205320 | 111943 | 229916 | 451380 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[b]fluoranthene | PRY | Ave | 4262<br>734907 | 23073<br>1222288 | 108525 | 230016 | 467596 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[k]fluoranthene | PRY | Ave | 4342<br>700196 | 22977<br>1218648 | 119915 | 236303 | 449664 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134771

SDG No.: 68087545-1

Instrument ID: BSMA5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:01 Calibration End Date: 02/22/2013 12:32 Calibration ID: 2759

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Benzo[a]pyrene | PRY | Ave | 3818<br>676641 | 19624<br>1142888 | 104167 | 215789 | 424369 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Indeno[1,2,3-cd]pyrene | PRY | Ave | 3449<br>584416 | 15951<br>960232 | 81971 | 197900 | 373229 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Dibenz(a,h)anthracene | PRY | Ave | 3513<br>595548 | 17811<br>1030642 | 92232 | 190519 | 375714 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[g,h,i]perylene | PRY | Ave | 3577<br>604332 | 18973<br>1012084 | 94413 | 197121 | 381649 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| o-Terphenyl | PHN | Ave | 3091<br>454607 | 12643<br>805122 | 64371 | 136353 | 269717 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |

Curve Type Legend:

Ave = Average ISTD
LinF = Linear ISTD forced zero

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22003.D
Lab Smp Id: IC-1512358
Inj Date : 22-FEB-2013 11:01
Operator : SCC Inst ID: BSMA5973.i
Smp Info : IC-1512358
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 12:56 BSMA5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.389 | 2.396 | (1.000) | 1002176 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.415 | 3.416 | (1.000) | 673260 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.355 | 4.351 | (1.000) | 999327 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.628 | 4.634 | (1.063) | 3091 | 0.20000 | 0.2125 |
| * 18 Chrysene-d12 | 240 | 6.364 | 6.365 | (1.000) | 882800 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.459 | 7.455 | (1.000) | 940724 | 40.0000 | |
| 2 Naphthalene | 128 | 2.405 | 2.401 | (1.007) | 4492 | 0.20000 | 0.1860(Q) |
| 3 2-Methylnaphthalene | 141 | 2.806 | 2.807 | (1.174) | 2537 | 0.20000 | 0.2035 |
| 4 1-Methylnaphthalene | 142 | 2.859 | 2.861 | (1.197) | 2749 | 0.20000 | 0.1980 |
| 5 Acenaphthylene | 152 | 3.330 | 3.331 | (0.975) | 4028 | 0.20000 | 0.1602 |
| 7 Acenaphthene | 154 | 3.431 | 3.433 | (1.005) | 2965 | 0.20000 | 0.2041 |
| 9 Fluorene | 166 | 3.741 | 3.742 | (1.095) | 3848 | 0.20000 | 0.2098 |
| 11 Phenanthrene | 178 | 4.366 | 4.367 | (1.002) | 4653 | 0.20000 | 0.1873 |
| 12 Anthracene | 178 | 4.398 | 4.399 | (1.010) | 3899 | 0.20000 | 0.1615 |
| 13 Carbazole | 167 | 4.553 | 4.554 | (1.045) | 4090 | 0.20000 | 0.1920 |
| 15 Fluoranthene | 202 | 5.226 | 5.227 | (1.200) | 4490 | 0.20000 | 0.1807 |
| 16 Pyrene | 202 | 5.392 | 5.393 | (0.847) | 4786 | 0.20000 | 0.1848 |
| 17 Benzo(a)anthracene | 228 | 6.359 | 6.355 | (0.999) | 7685 | 0.20000 | 0.2915 |
| 19 Chrysene | 228 | 6.375 | 6.387 | (1.002) | 5285 | 0.20000 | 0.2241 |
| 20 Benzo(b)fluoranthene | 252 | 7.171 | 7.177 | (0.961) | 4262 | 0.20000 | 0.1787 |
| 21 Benzo(k)fluoranthene | 252 | 7.192 | 7.199 | (0.964) | 4342 | 0.20000 | 0.1809 |
| 22 Benzo(a)pyrene | 252 | 7.400 | 7.407 | (0.992) | 3818 | 0.20000 | 0.1748 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.175 | 8.176 | (1.096) | 3449 | 0.20000 | 0.1840(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.191 | 8.192 | (1.098) | 3513 | 0.20000 | 0.1799 |
| 26 Benzo(g,h,i)perylene | 276 | 8.378 | 8.385 | (1.123) | 3577 | 0.20000 | 0.1794 |

QC Flag Legend

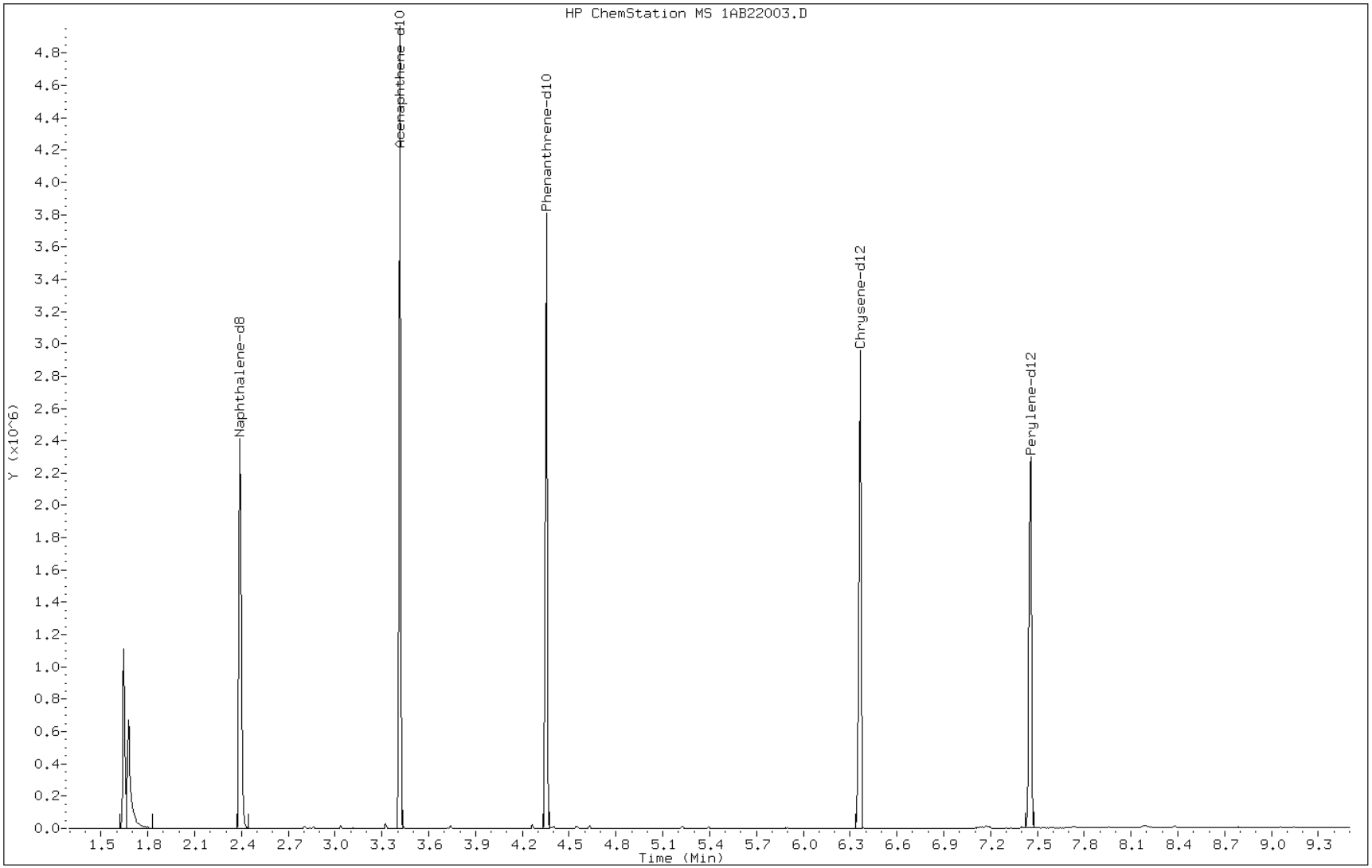
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1AB22003.D

Date: 22-FEB-2013 11:01

Client ID: Instrument: BSMA5973.i

Sample Info: IC-1512358 Operator: SCC



Manual Integration Report

Data File: 1AB22003.D
Inj. Date and Time: 22-FEB-2013 11:01
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

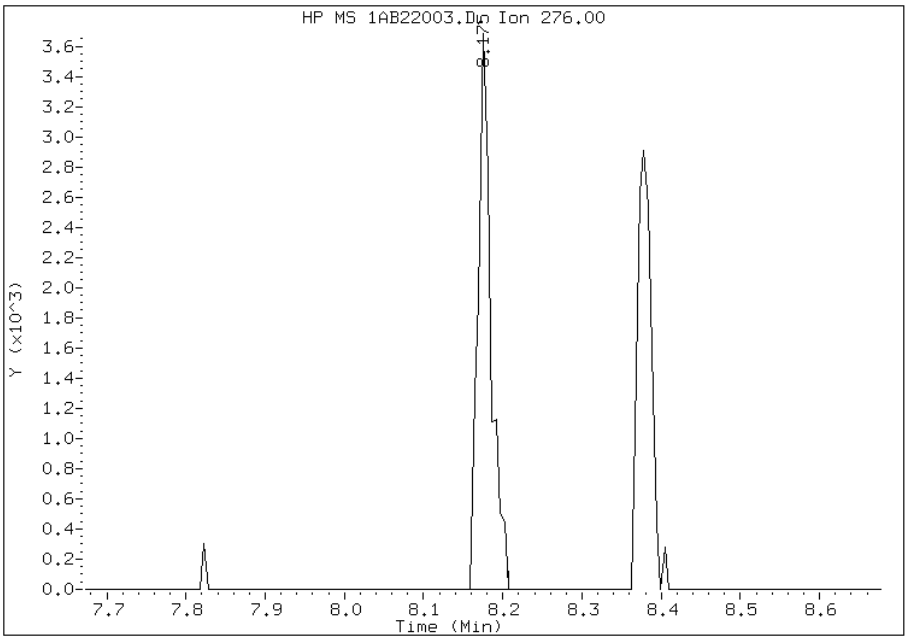
Processing Integration Results

RT: 8.18

Response: 4114

Amount: 0

Conc: 0



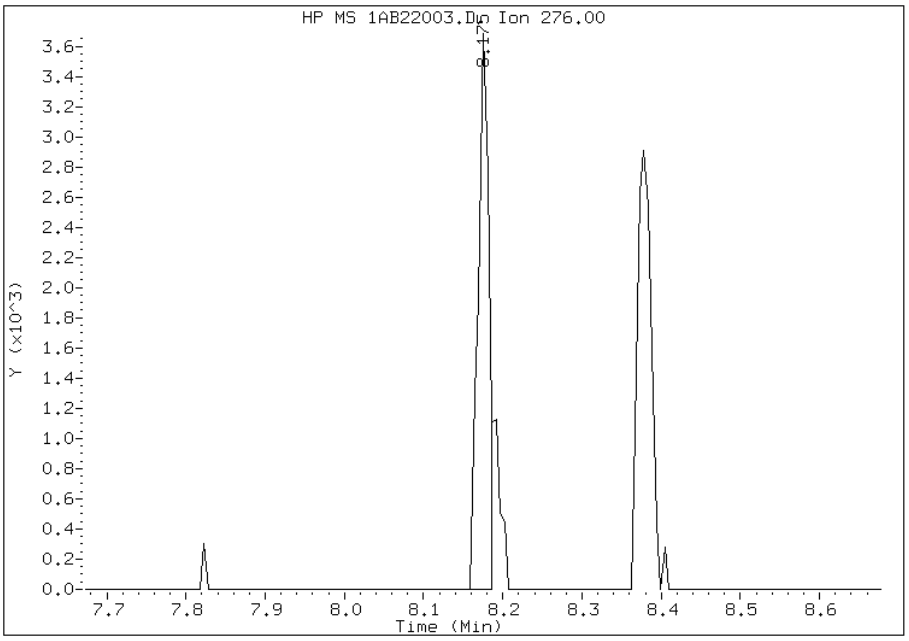

Manual Integration Results

RT: 8.18

Response: 3449

Amount: 0

Conc: 0




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 12:53
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22004.D
Lab Smp Id: IC-1512359
Inj Date : 22-FEB-2013 11:16
Operator : SCC Inst ID: BSMA5973.i
Smp Info : IC-1512359
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 12:56 BSMA5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 11:01 Cal File: 1AB22003.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.389 | 2.396 | (1.000) | 1007546 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.414 | 3.416 | (1.000) | 668302 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.354 | 4.351 | (1.000) | 992180 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.627 | 4.634 | (1.063) | 12643 | 1.00000 | 0.8757 |
| * 18 Chrysene-d12 | 240 | 6.363 | 6.365 | (1.000) | 889971 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.453 | 7.455 | (1.000) | 948962 | 40.0000 | |
| 2 Naphthalene | 128 | 2.399 | 2.401 | (1.004) | 23071 | 1.00000 | 0.9502(Q) |
| 3 2-Methylnaphthalene | 141 | 2.805 | 2.807 | (1.174) | 11057 | 1.00000 | 0.8822 |
| 4 1-Methylnaphthalene | 142 | 2.859 | 2.861 | (1.197) | 11965 | 1.00000 | 0.8573 |
| 5 Acenaphthylene | 152 | 3.329 | 3.331 | (0.975) | 22465 | 1.00000 | 0.9002 |
| 7 Acenaphthene | 154 | 3.430 | 3.433 | (1.005) | 11906 | 1.00000 | 0.8257 |
| 9 Fluorene | 166 | 3.740 | 3.742 | (1.095) | 15143 | 1.00000 | 0.8321 |
| 11 Phenanthrene | 178 | 4.365 | 4.367 | (1.002) | 22599 | 1.00000 | 0.9163 |
| 12 Anthracene | 178 | 4.397 | 4.399 | (1.010) | 22852 | 1.00000 | 0.9539 |
| 13 Carbazole | 167 | 4.552 | 4.554 | (1.045) | 20113 | 1.00000 | 0.9511 |
| 15 Fluoranthene | 202 | 5.225 | 5.227 | (1.200) | 21394 | 1.00000 | 0.8676 |
| 16 Pyrene | 202 | 5.386 | 5.393 | (0.846) | 22037 | 1.00000 | 0.8441 |
| 17 Benzo(a)anthracene | 228 | 6.347 | 6.355 | (0.997) | 26890 | 1.00000 | 1.0118 |
| 19 Chrysene | 228 | 6.379 | 6.387 | (1.003) | 21588 | 1.00000 | 0.9083 |
| 20 Benzo(b)fluoranthene | 252 | 7.170 | 7.177 | (0.962) | 23073 | 1.00000 | 0.9591 |
| 21 Benzo(k)fluoranthene | 252 | 7.191 | 7.199 | (0.965) | 22977 | 1.00000 | 0.9493 |
| 22 Benzo(a)pyrene | 252 | 7.399 | 7.407 | (0.993) | 19624 | 1.00000 | 0.8907 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.169 | 8.176 | (1.096) | 15951 | 1.00000 | 0.8439(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.179 | 8.192 | (1.097) | 17811 | 1.00000 | 0.9043 |
| 26 Benzo(g,h,i)perylene | 276 | 8.372 | 8.385 | (1.123) | 18973 | 1.00000 | 0.9438 |

QC Flag Legend

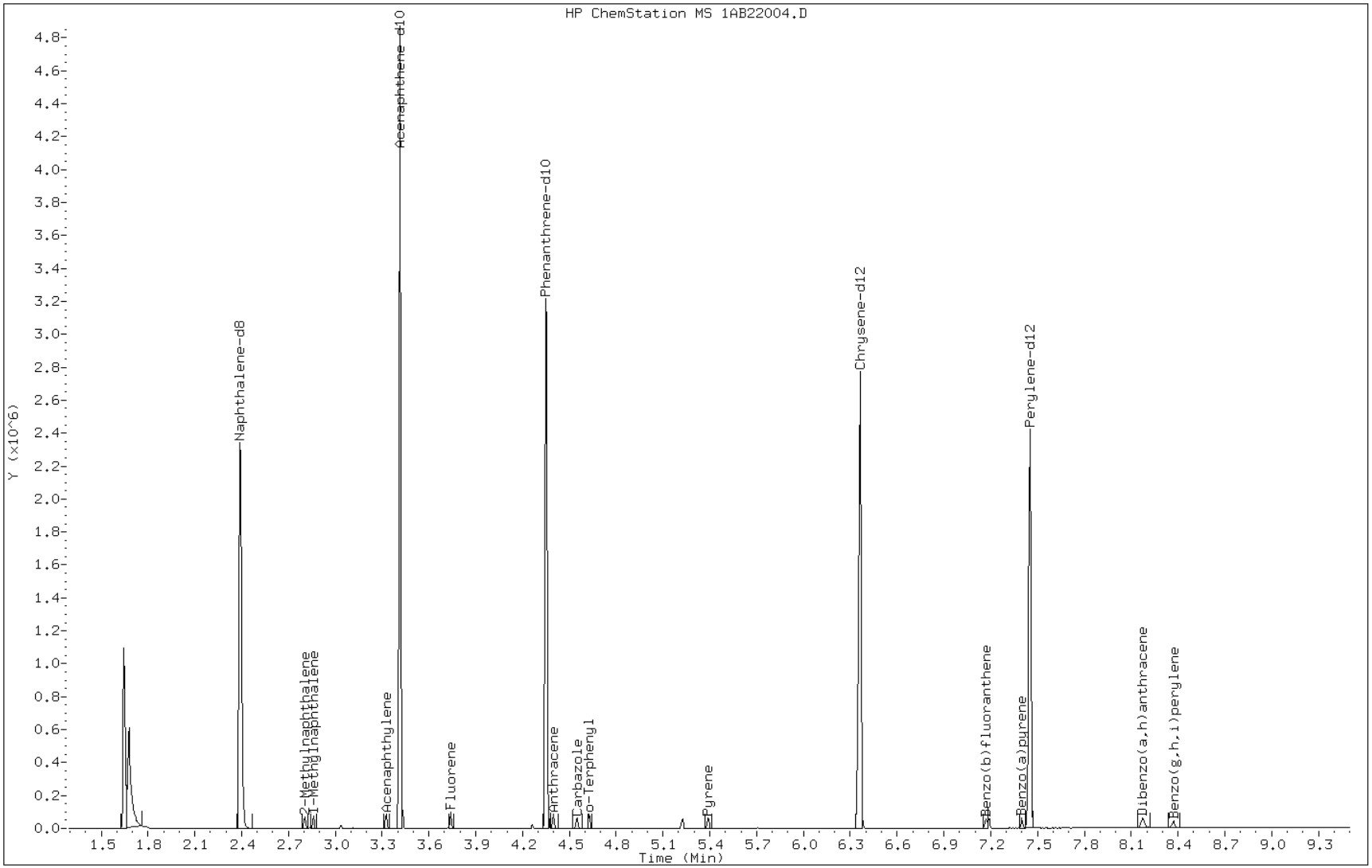
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1AB22004.D

Date: 22-FEB-2013 11:16

Client ID: Instrument: BSMA5973.i

Sample Info: IC-1512359 Operator: SCC



Manual Integration Report

Data File: 1AB22004.D
Inj. Date and Time: 22-FEB-2013 11:16
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

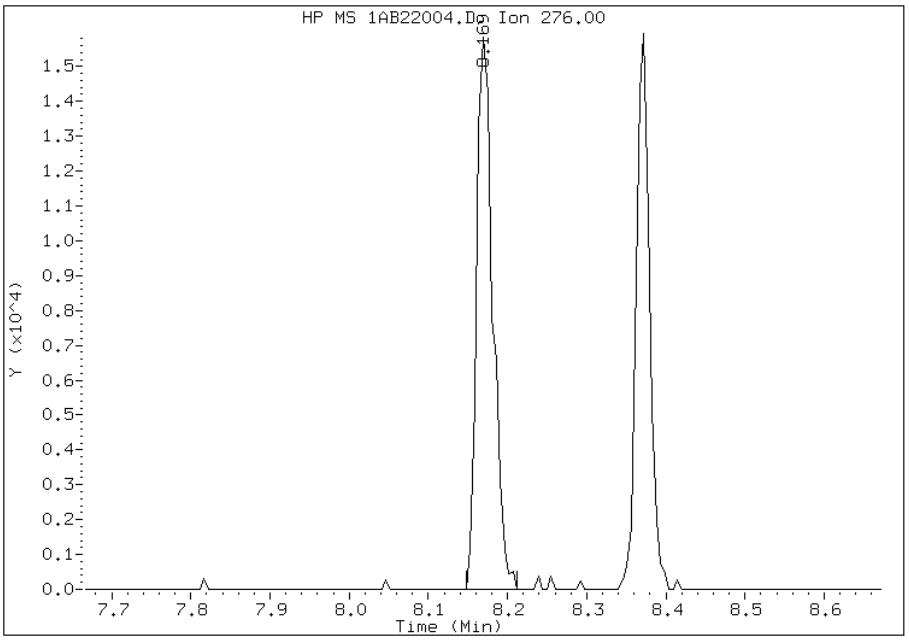
Processing Integration Results

RT: 8.17

Response: 22224

Amount: 1

Conc: 1



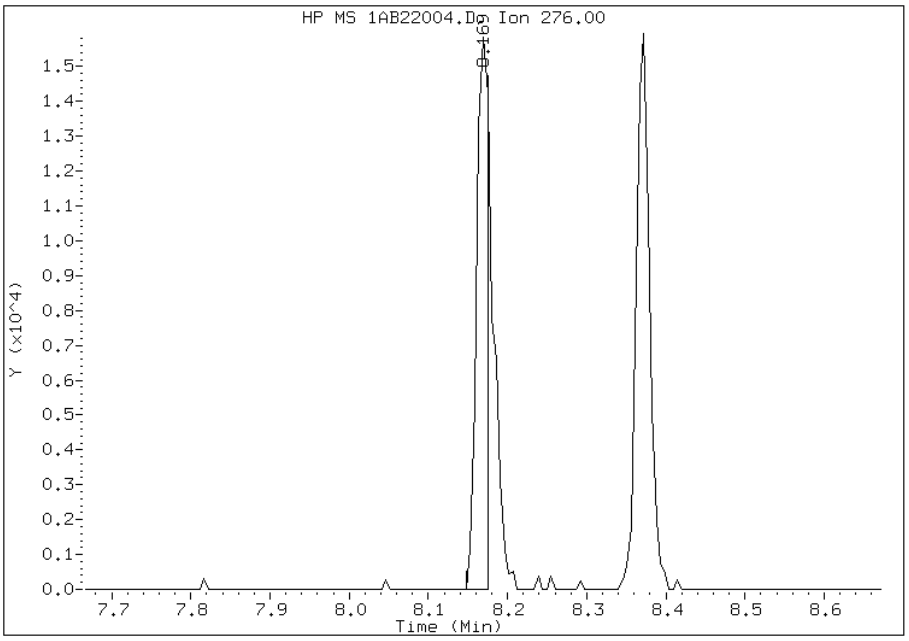

Manual Integration Results

RT: 8.17

Response: 15951

Amount: 1

Conc: 1




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 12:54
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22005.D
Lab Smp Id: IC-1512360
Inj Date : 22-FEB-2013 11:31
Operator : SCC Inst ID: BSMA5973.i
Smp Info : IC-1512360
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 12:56 BSMA5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 11:16 Cal File: 1AB22004.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.394 | 2.396 | (1.000) | 964215 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.414 | 3.416 | (1.000) | 648695 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.349 | 4.351 | (1.000) | 1003789 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.627 | 4.634 | (1.064) | 64371 | 5.00000 | 4.4071 |
| * 18 Chrysene-d12 | 240 | 6.363 | 6.365 | (1.000) | 880707 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.453 | 7.455 | (1.000) | 925085 | 40.0000 | |
| 2 Naphthalene | 128 | 2.404 | 2.401 | (1.004) | 116527 | 5.00000 | 5.0153 |
| 3 2-Methylnaphthalene | 141 | 2.805 | 2.807 | (1.172) | 56925 | 5.00000 | 4.7460 |
| 4 1-Methylnaphthalene | 142 | 2.858 | 2.861 | (1.194) | 65710 | 5.00000 | 4.9197 |
| 5 Acenaphthylene | 152 | 3.329 | 3.331 | (0.975) | 113930 | 5.00000 | 4.7037 |
| 7 Acenaphthene | 154 | 3.430 | 3.433 | (1.005) | 62010 | 5.00000 | 4.4306 |
| 9 Fluorene | 166 | 3.740 | 3.742 | (1.095) | 80068 | 5.00000 | 4.5327 |
| 11 Phenanthrene | 178 | 4.365 | 4.367 | (1.004) | 115139 | 5.00000 | 4.6146 |
| 12 Anthracene | 178 | 4.397 | 4.399 | (1.011) | 112287 | 5.00000 | 4.6330 |
| 13 Carbazole | 167 | 4.547 | 4.554 | (1.045) | 97425 | 5.00000 | 4.5537 |
| 15 Fluoranthene | 202 | 5.220 | 5.227 | (1.200) | 115579 | 5.00000 | 4.6329 |
| 16 Pyrene | 202 | 5.391 | 5.393 | (0.847) | 120317 | 5.00000 | 4.6576 |
| 17 Benzo(a)anthracene | 228 | 6.352 | 6.355 | (0.998) | 123907 | 5.00000 | 4.7117 |
| 19 Chrysene | 228 | 6.379 | 6.387 | (1.003) | 111943 | 5.00000 | 4.7596 |
| 20 Benzo(b)fluoranthene | 252 | 7.170 | 7.177 | (0.962) | 108525 | 5.00000 | 4.6277 |
| 21 Benzo(k)fluoranthene | 252 | 7.191 | 7.199 | (0.965) | 119915 | 5.00000 | 5.0826 |
| 22 Benzo(a)pyrene | 252 | 7.399 | 7.407 | (0.993) | 104167 | 5.00000 | 4.8503 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.169 | 8.176 | (1.096) | 81971 | 5.00000 | 4.4490(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.185 | 8.192 | (1.098) | 92232 | 5.00000 | 4.8037 |
| 26 Benzo(g,h,i)perylene | 276 | 8.372 | 8.385 | (1.123) | 94413 | 5.00000 | 4.8178 |

QC Flag Legend

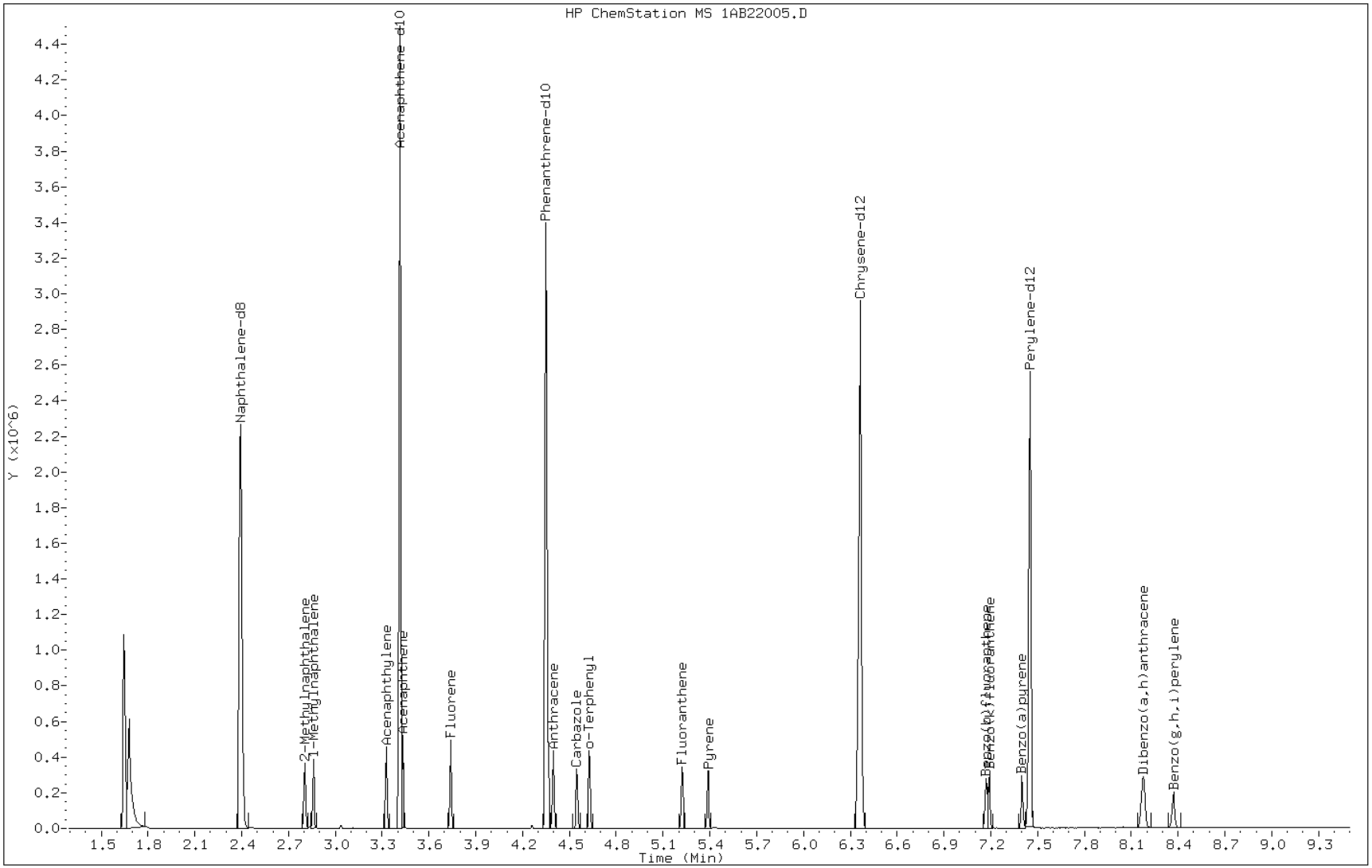
M - Compound response manually integrated.

Data File: 1AB22005.D

Date: 22-FEB-2013 11:31

Client ID: Instrument: BSMA5973.i

Sample Info: IC-1512360 Operator: SCC



Manual Integration Report

Data File: 1AB22005.D
Inj. Date and Time: 22-FEB-2013 11:31
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

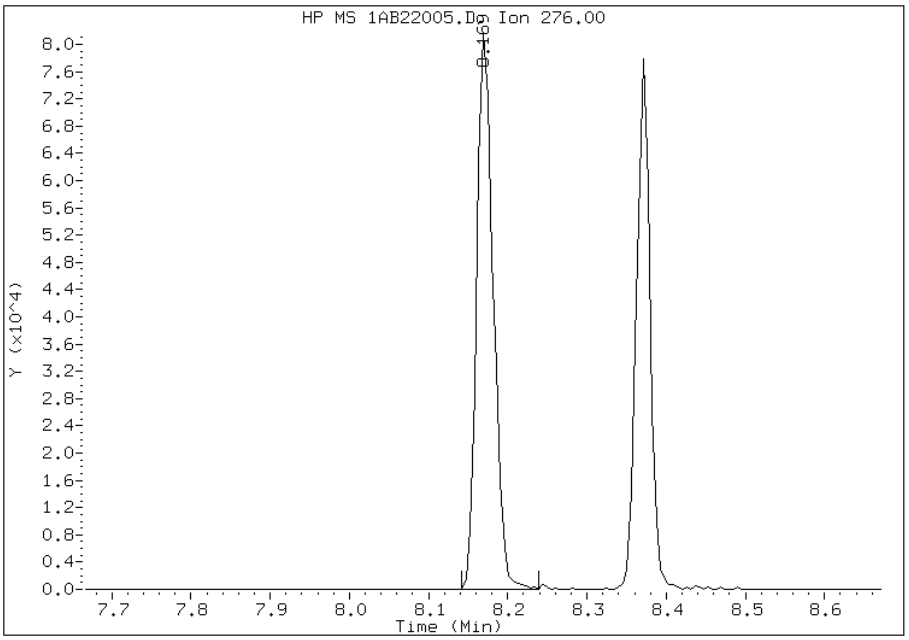
Processing Integration Results

RT: 8.17

Response: 116998

Amount: 6

Conc: 6



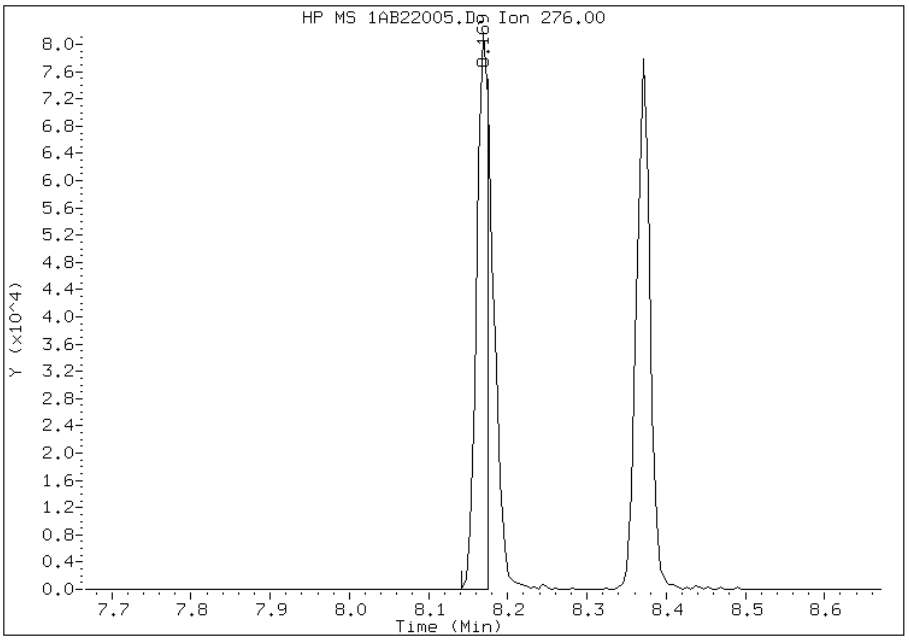

Manual Integration Results

RT: 8.17

Response: 81971

Amount: 4

Conc: 4




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 12:54
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22006.D
Lab Smp Id: IC-1512361
Inj Date : 22-FEB-2013 11:47
Operator : SCC Inst ID: BSMA5973.i
Smp Info : IC-1512361
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 12:56 BSMA5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 11:31 Cal File: 1AB22005.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.391 | 2.396 | (1.000) | 998088 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.417 | 3.416 | (1.000) | 656726 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.352 | 4.351 | (1.000) | 967220 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.630 | 4.634 | (1.064) | 136353 | 10.0000 | 9.6882 |
| * 18 Chrysene-d12 | 240 | 6.366 | 6.365 | (1.000) | 864311 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.456 | 7.455 | (1.000) | 916189 | 40.0000 | |
| 2 Naphthalene | 128 | 2.402 | 2.401 | (1.004) | 240277 | 10.0000 | 9.9906 |
| 3 2-Methylnaphthalene | 141 | 2.803 | 2.807 | (1.172) | 121491 | 10.0000 | 9.7853 |
| 4 1-Methylnaphthalene | 142 | 2.861 | 2.861 | (1.197) | 134180 | 10.0000 | 9.7051 |
| 5 Acenaphthylene | 152 | 3.331 | 3.331 | (0.975) | 243677 | 10.0000 | 9.9374 |
| 7 Acenaphthene | 154 | 3.433 | 3.433 | (1.005) | 133244 | 10.0000 | 9.4039 |
| 9 Fluorene | 166 | 3.743 | 3.742 | (1.095) | 165999 | 10.0000 | 9.2825 |
| 11 Phenanthrene | 178 | 4.368 | 4.367 | (1.004) | 234292 | 10.0000 | 9.7451 |
| 12 Anthracene | 178 | 4.400 | 4.399 | (1.011) | 238178 | 10.0000 | 10.1990 |
| 13 Carbazole | 167 | 4.549 | 4.554 | (1.045) | 202035 | 10.0000 | 9.8003 |
| 15 Fluoranthene | 202 | 5.222 | 5.227 | (1.200) | 241853 | 10.0000 | 10.0611 |
| 16 Pyrene | 202 | 5.393 | 5.393 | (0.847) | 254540 | 10.0000 | 10.0404 |
| 17 Benzo(a)anthracene | 228 | 6.355 | 6.355 | (0.998) | 256962 | 10.0000 | 9.9568 |
| 19 Chrysene | 228 | 6.382 | 6.387 | (1.003) | 229916 | 10.0000 | 9.9611 |
| 20 Benzo(b)fluoranthene | 252 | 7.172 | 7.177 | (0.962) | 230016 | 10.0000 | 9.9036 |
| 21 Benzo(k)fluoranthene | 252 | 7.194 | 7.199 | (0.965) | 236303 | 10.0000 | 10.1130 |
| 22 Benzo(a)pyrene | 252 | 7.402 | 7.407 | (0.993) | 215789 | 10.0000 | 10.1454 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.171 | 8.176 | (1.096) | 197900 | 10.0000 | 10.8454(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.187 | 8.192 | (1.098) | 190519 | 10.0000 | 10.0192 |
| 26 Benzo(g,h,i)perylene | 276 | 8.374 | 8.385 | (1.123) | 197121 | 10.0000 | 10.1566 |

QC Flag Legend

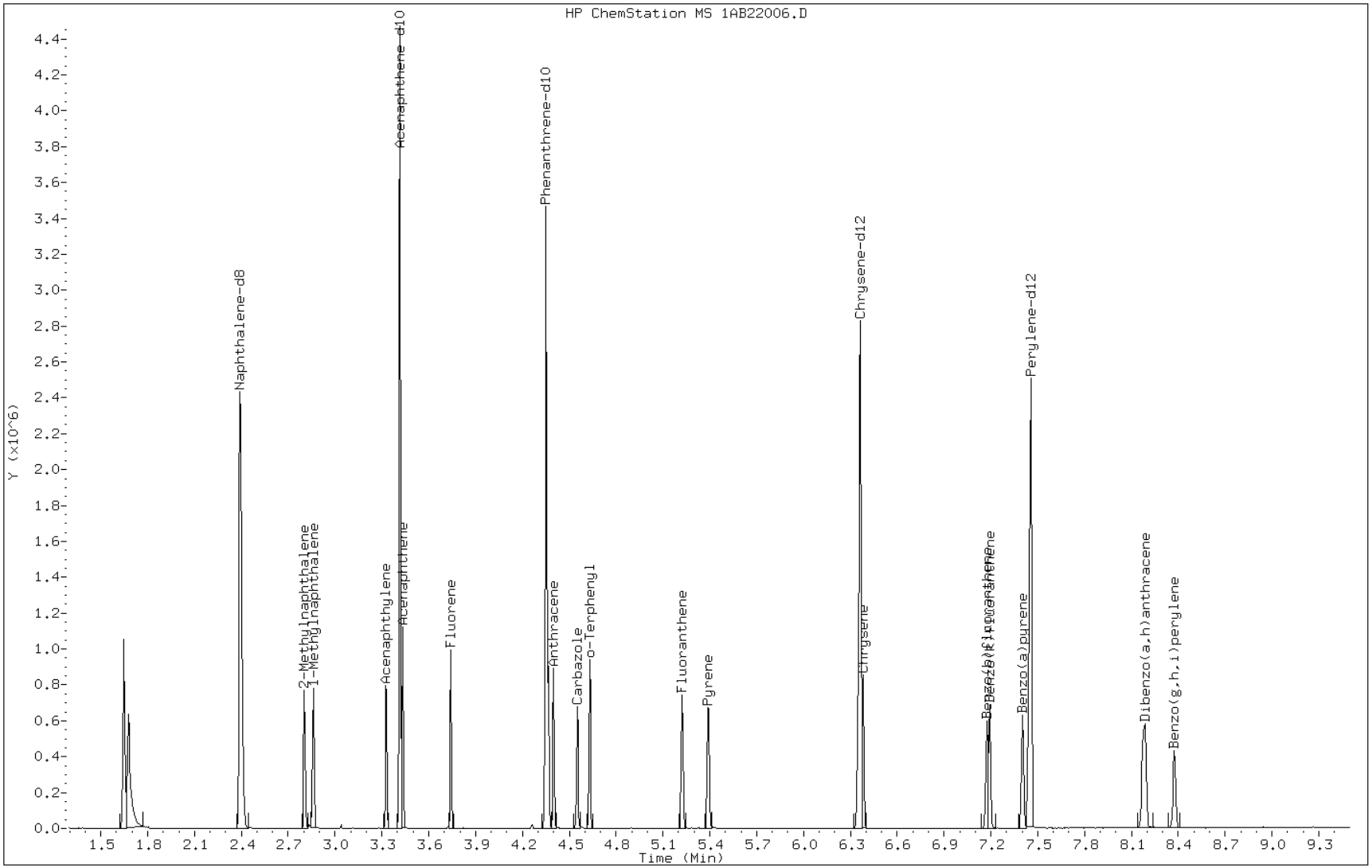
M - Compound response manually integrated.

Data File: 1AB22006.D

Date: 22-FEB-2013 11:47

Client ID: Instrument: BSMA5973.i

Sample Info: IC-1512361 Operator: SCC



Manual Integration Report

Data File: 1AB22006.D
Inj. Date and Time: 22-FEB-2013 11:47
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

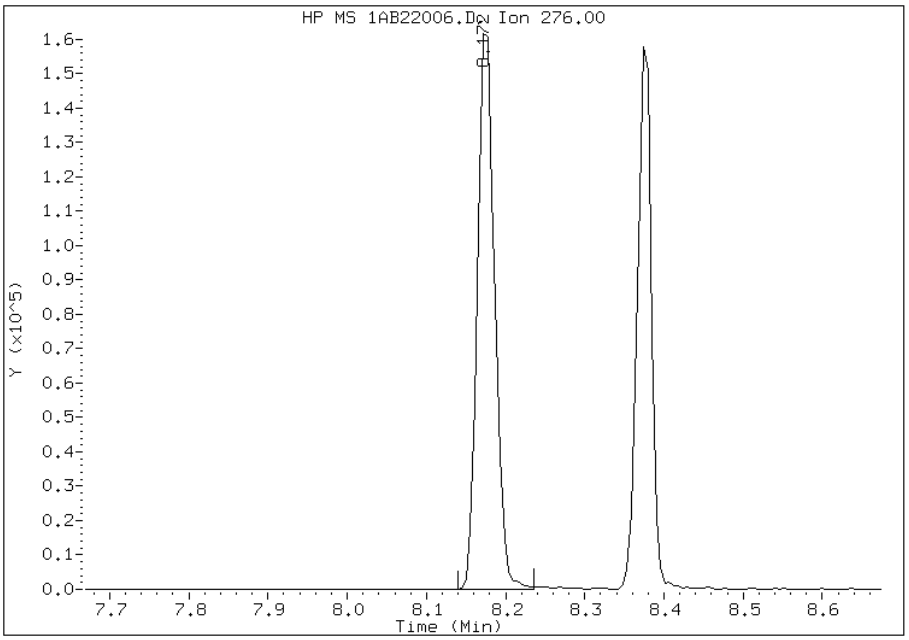
Processing Integration Results

RT: 8.17

Response: 242829

Amount: 11

Conc: 11



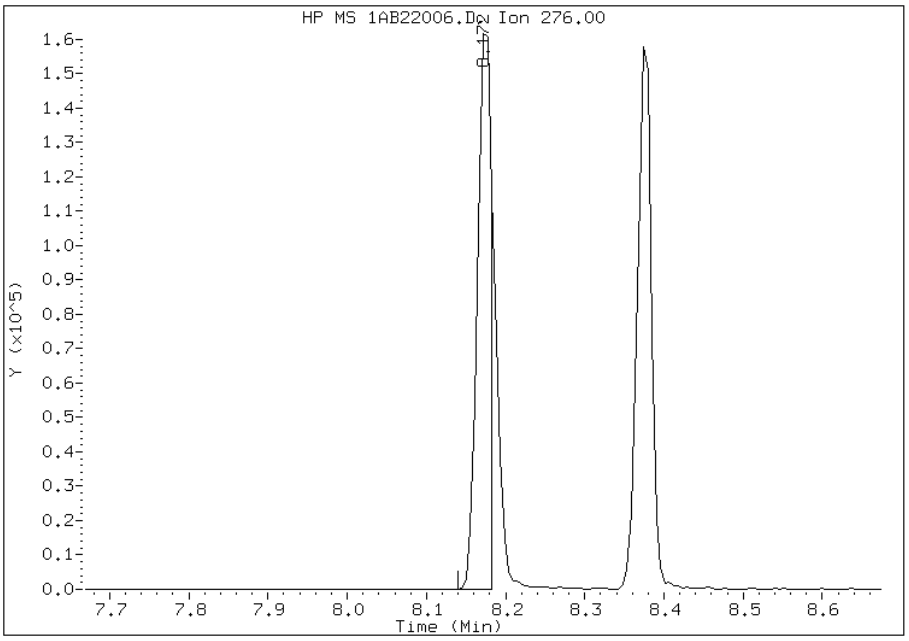

Manual Integration Results

RT: 8.17

Response: 197900

Amount: 11

Conc: 11




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 12:54
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22007.D
Lab Smp Id: ICIS-1512372
Inj Date : 22-FEB-2013 12:02
Operator : SCC Inst ID: BSMA5973.i
Smp Info : ICIS-1512372
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 12:56 BSMA5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 11:47 Cal File: 1AB22006.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.396 | 2.396 | (1.000) | 991704 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.416 | 3.416 | (1.000) | 622858 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.351 | 4.351 | (1.000) | 968921 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.634 | 4.634 | (1.065) | 269717 | 20.0000 | 19.1304 |
| * 18 Chrysene-d12 | 240 | 6.365 | 6.365 | (1.000) | 842371 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.455 | 7.455 | (1.000) | 860097 | 40.0000 | |
| 2 Naphthalene | 128 | 2.401 | 2.401 | (1.002) | 470879 | 20.0000 | 19.7050 |
| 3 2-Methylnaphthalene | 141 | 2.807 | 2.807 | (1.172) | 248487 | 20.0000 | 20.1429 |
| 4 1-Methylnaphthalene | 142 | 2.861 | 2.861 | (1.194) | 271250 | 20.0000 | 19.7457 |
| 5 Acenaphthylene | 152 | 3.331 | 3.331 | (0.975) | 493767 | 20.0000 | 21.2312 |
| 7 Acenaphthene | 154 | 3.433 | 3.433 | (1.005) | 264764 | 20.0000 | 19.7023 |
| 9 Fluorene | 166 | 3.742 | 3.742 | (1.095) | 334396 | 20.0000 | 19.7158 |
| 11 Phenanthrene | 178 | 4.367 | 4.367 | (1.004) | 480919 | 20.0000 | 19.9683 |
| 12 Anthracene | 178 | 4.399 | 4.399 | (1.011) | 472782 | 20.0000 | 20.2094 |
| 13 Carbazole | 167 | 4.554 | 4.554 | (1.047) | 406225 | 20.0000 | 19.6706 |
| 15 Fluoranthene | 202 | 5.227 | 5.227 | (1.201) | 495614 | 20.0000 | 20.5813 |
| 16 Pyrene | 202 | 5.393 | 5.393 | (0.847) | 525727 | 20.0000 | 21.2776 |
| 17 Benzo(a)anthracene | 228 | 6.355 | 6.355 | (0.998) | 478213 | 20.0000 | 19.0125 |
| 19 Chrysene | 228 | 6.387 | 6.387 | (1.003) | 451380 | 20.0000 | 20.0655 |
| 20 Benzo(b)fluoranthene | 252 | 7.177 | 7.177 | (0.963) | 467596 | 20.0000 | 21.4460 |
| 21 Benzo(k)fluoranthene | 252 | 7.199 | 7.199 | (0.966) | 449664 | 20.0000 | 20.4993 |
| 22 Benzo(a)pyrene | 252 | 7.407 | 7.407 | (0.994) | 424369 | 20.0000 | 21.2532 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.176 | 8.176 | (1.097) | 373229 | 20.0000 | 21.7877(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.192 | 8.192 | (1.099) | 375714 | 20.0000 | 21.0471 |
| 26 Benzo(g,h,i)perylene | 276 | 8.385 | 8.385 | (1.125) | 381649 | 20.0000 | 20.9468 |

QC Flag Legend

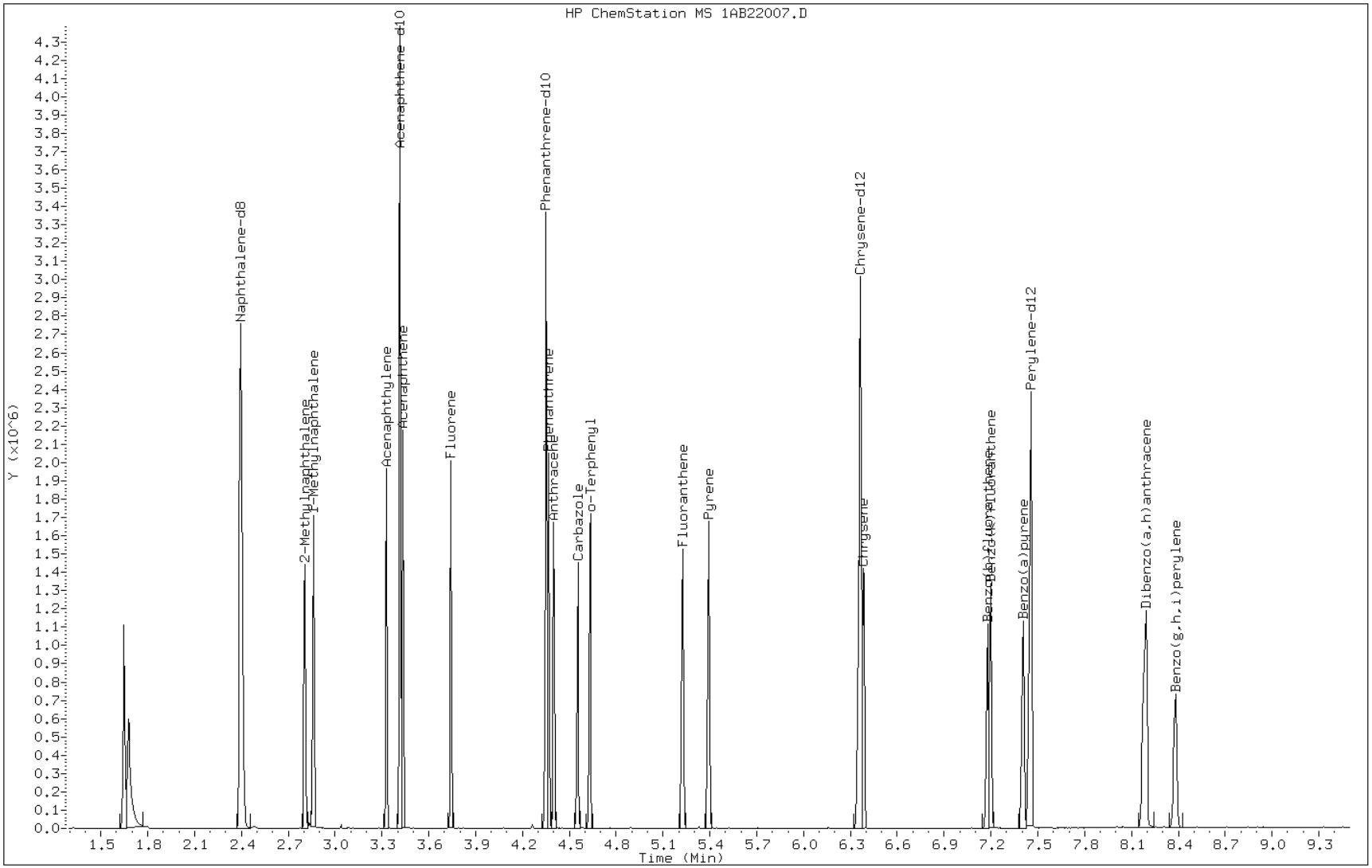
M - Compound response manually integrated.

Data File: 1AB22007.D

Date: 22-FEB-2013 12:02

Client ID: Instrument: BSMA5973.i

Sample Info: ICIS-1512372 Operator: SCC



Manual Integration Report

Data File: 1AB22007.D
Inj. Date and Time: 22-FEB-2013 12:02
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

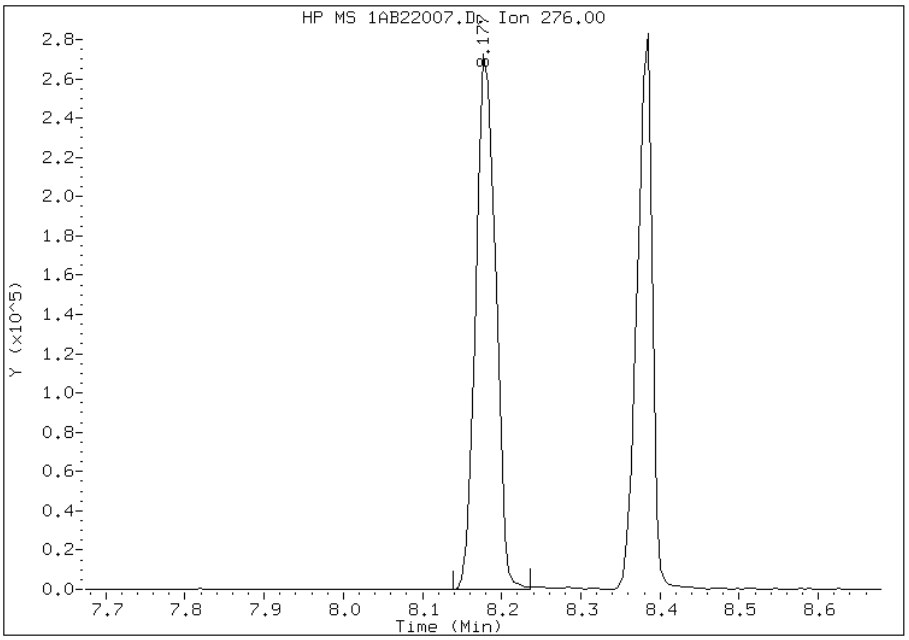
Processing Integration Results

RT: 8.18

Response: 469388

Amount: 25

Conc: 25



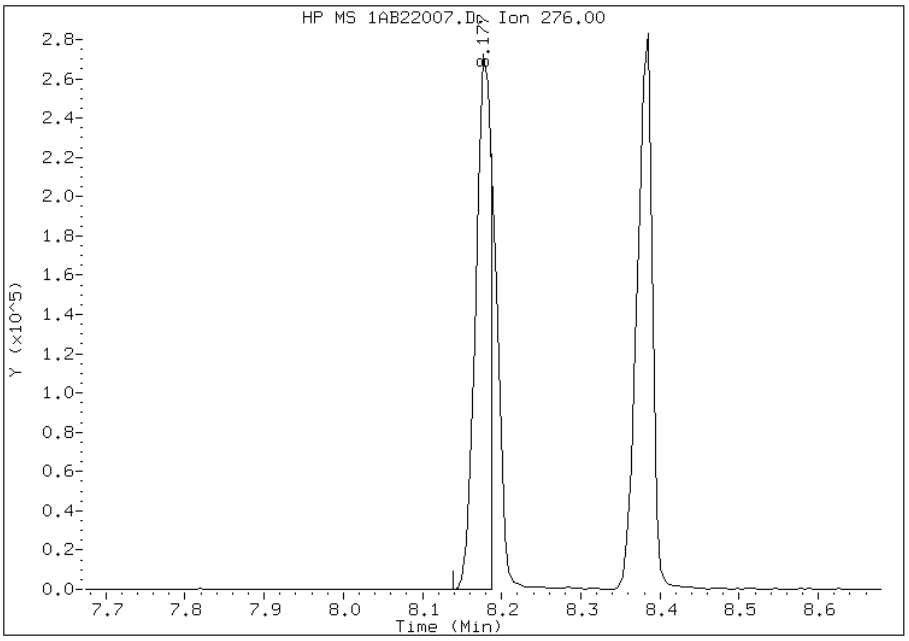

Manual Integration Results

RT: 8.18

Response: 373229

Amount: 22

Conc: 22




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 12:51
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22008.D
Lab Smp Id: IC-1512373
Inj Date : 22-FEB-2013 12:17
Operator : SCC Inst ID: BSMA5973.i
Smp Info : IC-1512373
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 12:56 BSMA5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 12:02 Cal File: 1AB22007.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.389 | 2.396 | (1.000) | 991596 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.415 | 3.416 | (1.000) | 638966 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.355 | 4.351 | (1.000) | 958764 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.633 | 4.634 | (1.064) | 454607 | 30.0000 | 32.5859 |
| * 18 Chrysene-d12 | 240 | 6.369 | 6.365 | (1.000) | 877633 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.459 | 7.455 | (1.000) | 909629 | 40.0000 | |
| 2 Naphthalene | 128 | 2.405 | 2.401 | (1.007) | 755068 | 30.0000 | 31.6010 |
| 3 2-Methylnaphthalene | 141 | 2.806 | 2.807 | (1.174) | 392415 | 30.0000 | 31.8135 |
| 4 1-Methylnaphthalene | 142 | 2.859 | 2.861 | (1.197) | 443774 | 30.0000 | 32.3081 |
| 5 Acenaphthylene | 152 | 3.329 | 3.331 | (0.975) | 777111 | 30.0000 | 32.5722 |
| 7 Acenaphthene | 154 | 3.436 | 3.433 | (1.006) | 451477 | 30.0000 | 32.7495 |
| 9 Fluorene | 166 | 3.746 | 3.742 | (1.097) | 560865 | 30.0000 | 32.2347 |
| 11 Phenanthrene | 178 | 4.371 | 4.367 | (1.004) | 768793 | 30.0000 | 32.2593 |
| 12 Anthracene | 178 | 4.403 | 4.399 | (1.011) | 760474 | 30.0000 | 32.8515 |
| 13 Carbazole | 167 | 4.558 | 4.554 | (1.047) | 670812 | 30.0000 | 32.8268 |
| 15 Fluoranthene | 202 | 5.231 | 5.227 | (1.201) | 791244 | 30.0000 | 33.2061 |
| 16 Pyrene | 202 | 5.397 | 5.393 | (0.847) | 842188 | 30.0000 | 32.7162 |
| 17 Benzo(a)anthracene | 228 | 6.358 | 6.355 | (0.998) | 771629 | 30.0000 | 29.4453 |
| 19 Chrysene | 228 | 6.390 | 6.387 | (1.003) | 708418 | 30.0000 | 30.2265 |
| 20 Benzo(b)fluoranthene | 252 | 7.181 | 7.177 | (0.963) | 734907 | 30.0000 | 31.8706 |
| 21 Benzo(k)fluoranthene | 252 | 7.202 | 7.199 | (0.966) | 700196 | 30.0000 | 30.1824 |
| 22 Benzo(a)pyrene | 252 | 7.411 | 7.407 | (0.994) | 676641 | 30.0000 | 32.0421 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.191 | 8.176 | (1.098) | 584416 | 30.0000 | 32.2584(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.207 | 8.192 | (1.100) | 595548 | 30.0000 | 31.5453 |
| 26 Benzo(g,h,i)perylene | 276 | 8.394 | 8.385 | (1.125) | 604332 | 30.0000 | 31.3627 |

QC Flag Legend

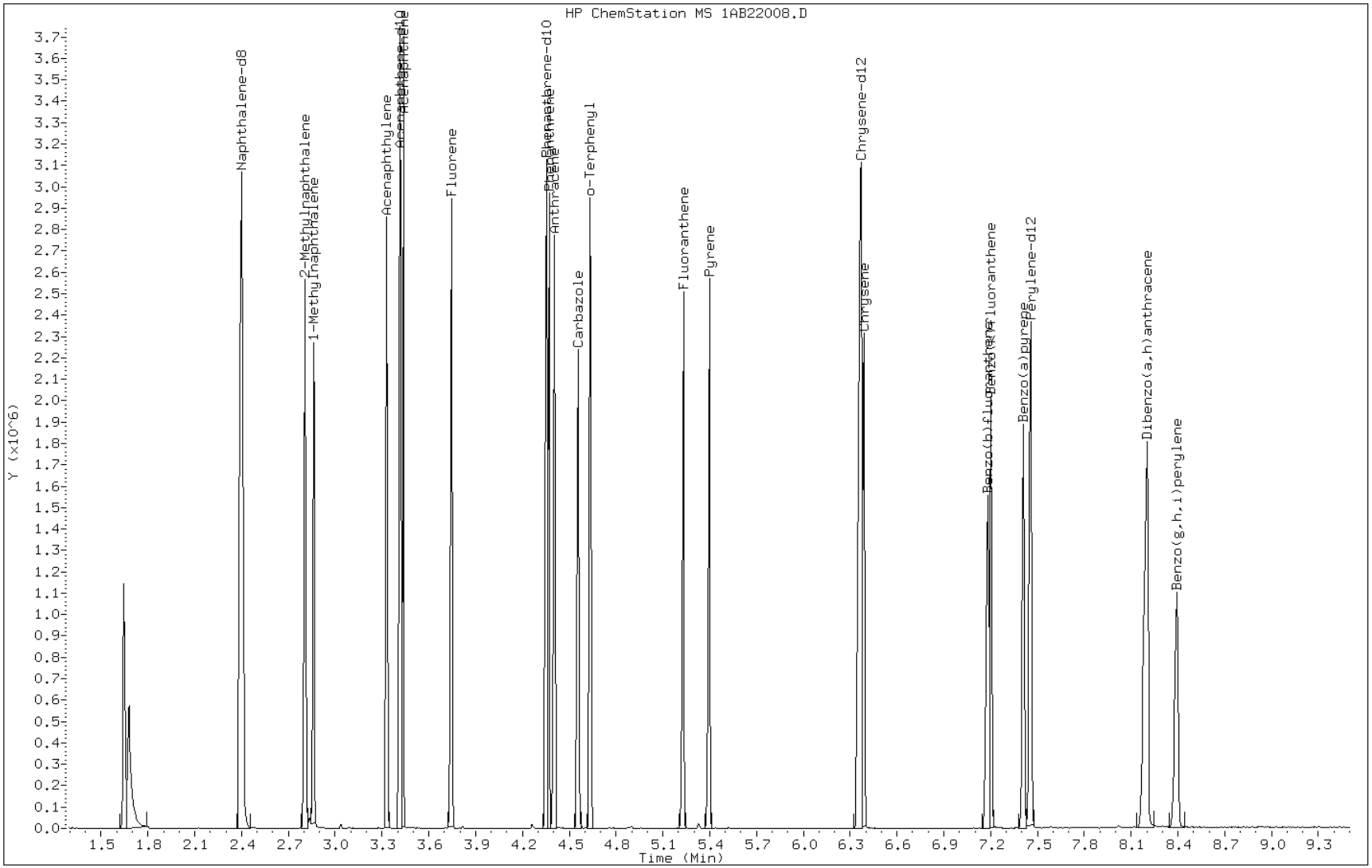
M - Compound response manually integrated.

Data File: 1AB22008.D

Date: 22-FEB-2013 12:17

Client ID: Instrument: BSMA5973.i

Sample Info: IC-1512373 Operator: SCC



Manual Integration Report

Data File: 1AB22008.D
Inj. Date and Time: 22-FEB-2013 12:17
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

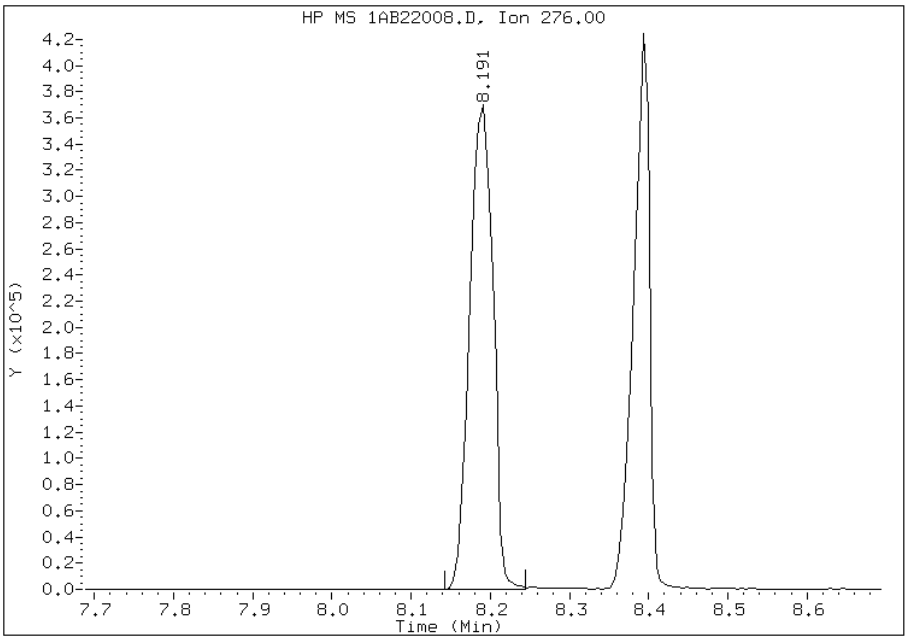
Processing Integration Results

RT: 8.19

Response: 747475

Amount: 34

Conc: 34



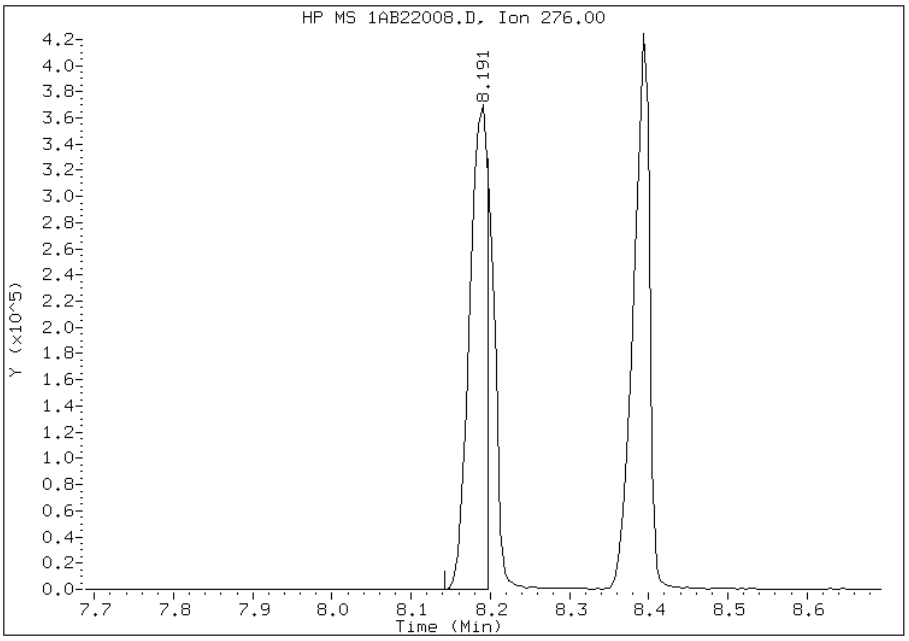

Manual Integration Results

RT: 8.19

Response: 584416

Amount: 32

Conc: 32




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 12:55
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22009.D
Lab Smp Id: IC-1512374
Inj Date : 22-FEB-2013 12:32
Operator : SCC Inst ID: BSMA5973.i
Smp Info : IC-1512374
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 12:56 BSMA5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 12:17 Cal File: 1AB22008.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.398 | 2.396 | (1.000) | 998404 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.419 | 3.416 | (1.000) | 614159 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.354 | 4.351 | (1.000) | 947061 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.637 | 4.634 | (1.065) | 805122 | 50.0000 | 58.4237(A) |
| * 18 Chrysene-d12 | 240 | 6.373 | 6.365 | (1.000) | 892104 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.457 | 7.455 | (1.000) | 879311 | 40.0000 | |
| 2 Naphthalene | 128 | 2.404 | 2.401 | (1.002) | 1297783 | 50.0000 | 53.9443(A) |
| 3 2-Methylnaphthalene | 141 | 2.810 | 2.807 | (1.171) | 686127 | 50.0000 | 55.2458(A) |
| 4 1-Methylnaphthalene | 142 | 2.863 | 2.861 | (1.194) | 784083 | 50.0000 | 56.6945(A) |
| 5 Acenaphthylene | 152 | 3.333 | 3.331 | (0.975) | 1395142 | 50.0000 | 60.8387(A) |
| 7 Acenaphthene | 154 | 3.440 | 3.433 | (1.006) | 828395 | 50.0000 | 62.5178(A) |
| 9 Fluorene | 166 | 3.745 | 3.742 | (1.095) | 1022945 | 50.0000 | 61.1667(A) |
| 11 Phenanthrene | 178 | 4.375 | 4.367 | (1.005) | 1384065 | 50.0000 | 58.7944(A) |
| 12 Anthracene | 178 | 4.407 | 4.399 | (1.012) | 1356027 | 50.0000 | 59.3025(A) |
| 13 Carbazole | 167 | 4.562 | 4.554 | (1.048) | 1130623 | 50.0000 | 56.0118(A) |
| 15 Fluoranthene | 202 | 5.235 | 5.227 | (1.202) | 1364989 | 50.0000 | 57.9923(A) |
| 16 Pyrene | 202 | 5.401 | 5.393 | (0.847) | 1493658 | 50.0000 | 57.0824(A) |
| 17 Benzo(a)anthracene | 228 | 6.357 | 6.355 | (0.997) | 1351230 | 50.0000 | 50.7265(A) |
| 19 Chrysene | 228 | 6.394 | 6.387 | (1.003) | 1205320 | 50.0000 | 50.5940(A) |
| 20 Benzo(b)fluoranthene | 252 | 7.185 | 7.177 | (0.963) | 1222288 | 50.0000 | 54.8345(A) |
| 21 Benzo(k)fluoranthene | 252 | 7.212 | 7.199 | (0.967) | 1218648 | 50.0000 | 54.3418(A) |
| 22 Benzo(a)pyrene | 252 | 7.420 | 7.407 | (0.995) | 1142888 | 50.0000 | 55.9872(A) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.200 | 8.176 | (1.100) | 960232 | 50.0000 | 54.8300(AM) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.216 | 8.192 | (1.102) | 1030642 | 50.0000 | 56.4740(A) |
| 26 Benzo(g,h,i)perylene | 276 | 8.403 | 8.385 | (1.127) | 1012084 | 50.0000 | 54.3345(A) |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: 1AB22009.D

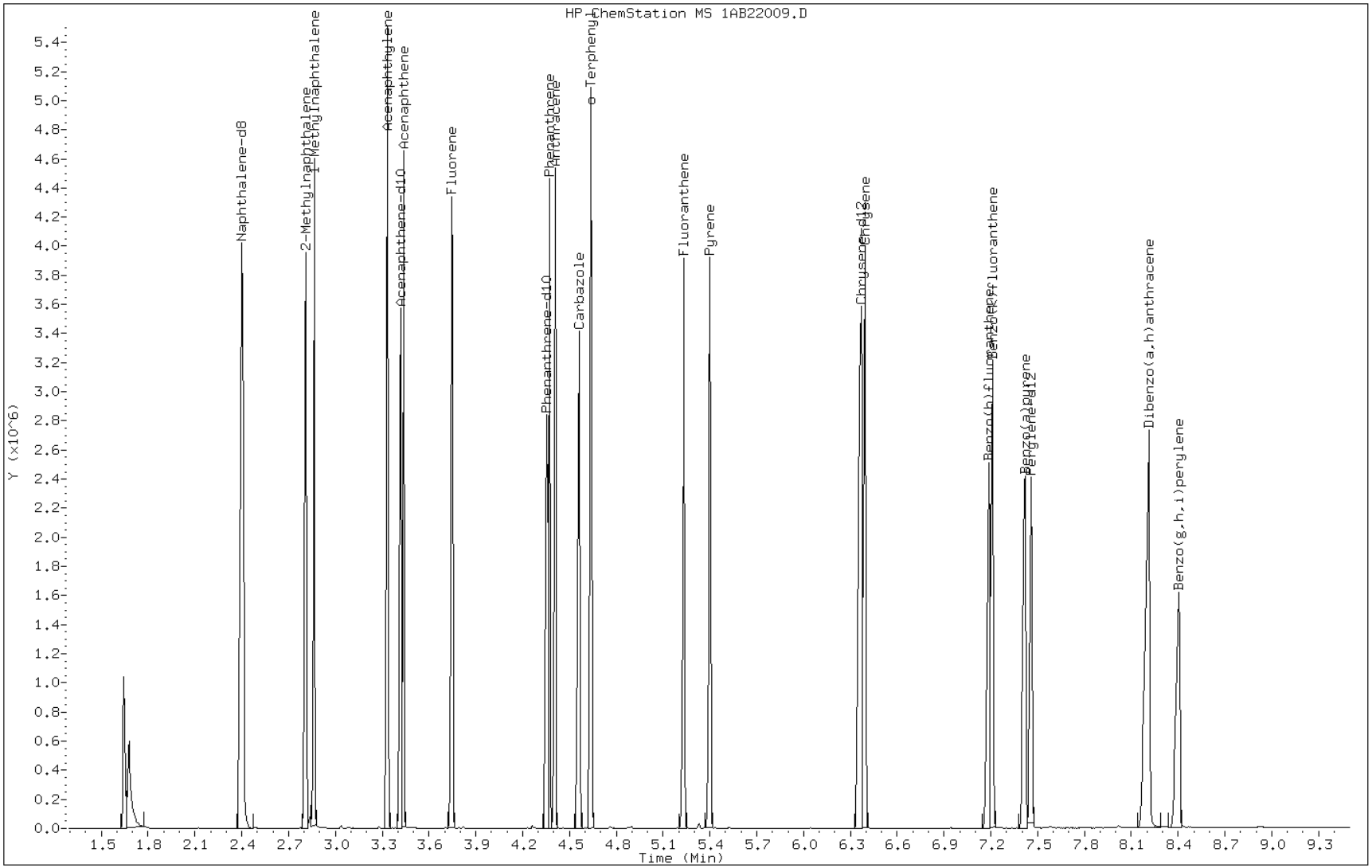
Date: 22-FEB-2013 12:32

Client ID:

Instrument: BSMA5973.i

Sample Info: IC-1512374

Operator: SCC



Manual Integration Report

Data File: 1AB22009.D
Inj. Date and Time: 22-FEB-2013 12:32
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

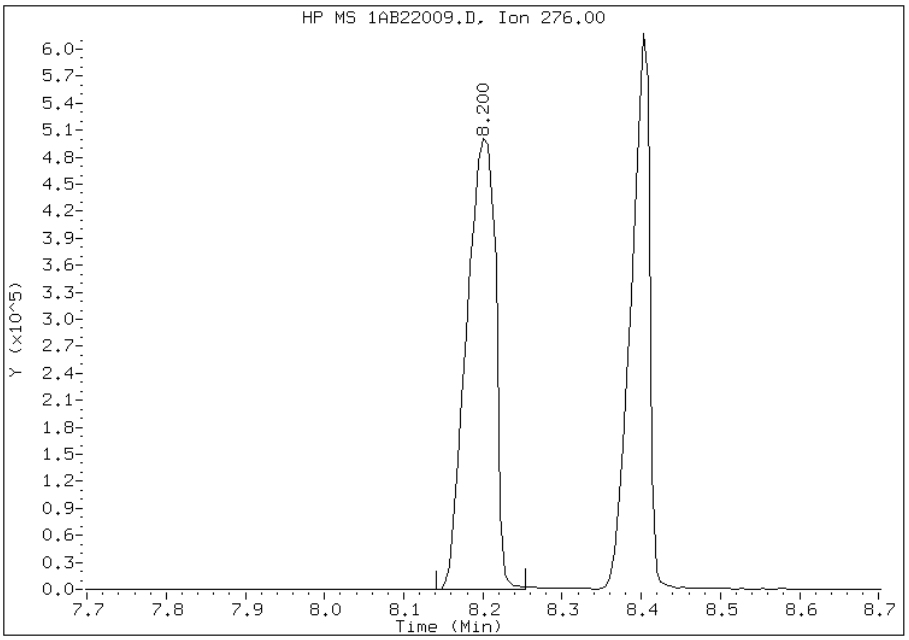
Processing Integration Results

RT: 8.20

Response: 1257157

Amount: 57

Conc: 57



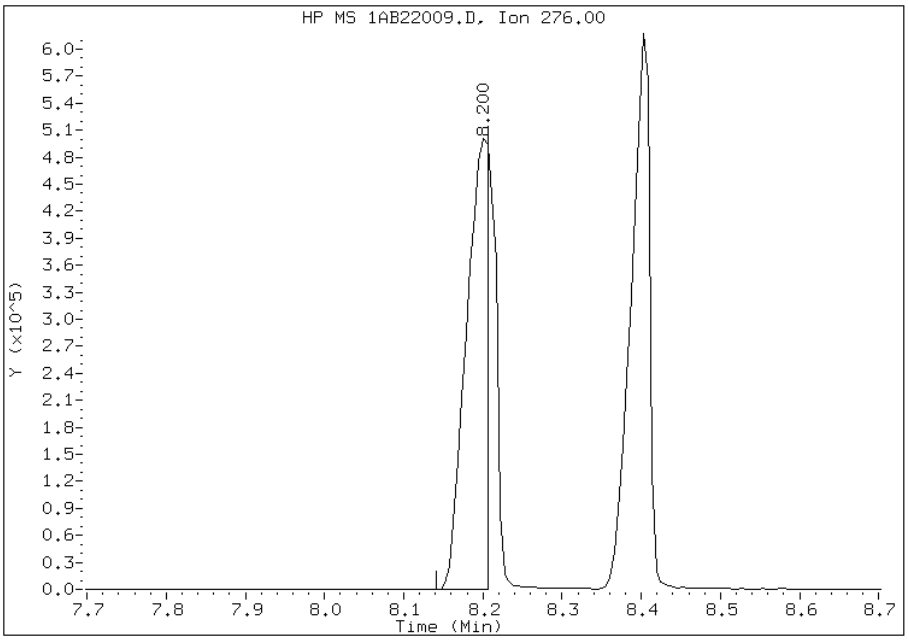

Manual Integration Results

RT: 8.20

Response: 960232

Amount: 55

Conc: 55




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 12:56
Manual Integration Reason: Split Peak

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134776

SDG No.: 68087545-1

Instrument ID: BSMC5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:57 Calibration End Date: 02/22/2013 13:48 Calibration ID: 2760

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | IC 660-134776/3 | 1CB22003.D |
| Level 2 | IC 660-134776/4 | 1CB22004.D |
| Level 3 | IC 660-134776/5 | 1CB22005.D |
| Level 4 | IC 660-134776/6 | 1CB22006.D |
| Level 5 | ICIS 660-134776/7 | 1CB22007.D |
| Level 6 | IC 660-134776/8 | 1CB22008.D |
| Level 7 | IC 660-134776/9 | 1CB22009.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Naphthalene | 0.9712<br>1.0467 | 1.0104<br>1.0669 | 1.0471 | 1.0871 | 1.0600 | Ave | | 1.0414 | | | 0.0000 | 3.7 | | 15.0 | | | |
| 2-Methylnaphthalene | 0.7372<br>0.6936 | 0.6277<br>0.6981 | 0.6498 | 0.7330 | 0.7230 | Ave | | 0.6946 | | | 0.0000 | 6.0 | | 15.0 | | | |
| 1-Methylnaphthalene | 0.5602<br>0.6374 | 0.5666<br>0.6603 | 0.6541 | 0.6977 | 0.6523 | Ave | | 0.6326 | | | 0.0000 | 8.0 | | 15.0 | | | |
| Acenaphthylene | 1.6507<br>1.6289 | 1.4259<br>1.6887 | 1.5782 | 1.6615 | 1.6547 | Ave | | 1.6127 | | | 0.0000 | 5.5 | | 15.0 | | | |
| Acenaphthene | 1.1992<br>0.9520 | 0.9269<br>0.9711 | 1.0052 | 0.9958 | 0.9664 | Ave | | 1.0024 | | | 0.0000 | 9.0 | | 15.0 | | | |
| Fluorene | 1.2003<br>1.2968 | 1.2155<br>1.3216 | 1.2084 | 1.3213 | 1.3097 | Ave | | 1.2677 | | | 0.0000 | 4.5 | | 15.0 | | | |
| Phenanthrene | 1.3236<br>1.1268 | 1.1829<br>1.1367 | 1.1369 | 1.0982 | 1.0913 | Ave | | 1.1566 | | | 0.0000 | 6.9 | | 15.0 | | | |
| Anthracene | 1.1830<br>1.1477 | 1.0495<br>1.1690 | 1.1368 | 1.1486 | 1.0836 | Ave | | 1.1312 | | | 0.0000 | 4.2 | | 15.0 | | | |
| Carbazole | 1.1097<br>0.9866 | 0.9191<br>1.0122 | 0.9992 | 1.0253 | 0.9866 | Ave | | 1.0055 | | | 0.0000 | 5.7 | | 15.0 | | | |
| Fluoranthene | 1.3263<br>1.3062 | 1.1270<br>1.2838 | 1.2811 | 1.2806 | 1.2615 | Ave | | 1.2666 | | | 0.0000 | 5.1 | | 15.0 | | | |
| Pyrene | 1.0694<br>1.0644 | 1.0908<br>1.1171 | 1.0556 | 1.0637 | 1.0636 | Ave | | 1.0749 | | | 0.0000 | 2.0 | | 15.0 | | | |
| Benzo[a]anthracene | 1.5187<br>1.0791 | 1.1715<br>1.0797 | 1.0862 | 1.0840 | 1.0620 | Ave | | 1.1545 | | | 0.0000 | 14.3 | | 15.0 | | | |
| Chrysene | 1.3833<br>1.1146 | 1.1955<br>1.1060 | 1.0804 | 1.1163 | 1.0913 | Ave | | 1.1553 | | | 0.0000 | 9.3 | | 15.0 | | | |
| Benzo[b]fluoranthene | 1.0729<br>1.0767 | 0.9591<br>1.0902 | 0.9699 | 1.0114 | 1.1373 | Ave | | 1.0453 | | | 0.0000 | 6.4 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134776

SDG No.: 68087545-1

Instrument ID: BSMC5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:57 Calibration End Date: 02/22/2013 13:48 Calibration ID: 2760

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Benzo[k]fluoranthene | 1.0803<br>1.0851 | 0.9472<br>1.1214 | 1.1337 | 1.1178 | 1.0210 | Ave | | 1.0724 | | | 0.0000 | 6.2 | | 15.0 | | | |
| Benzo[a]pyrene | 0.9920<br>1.0612 | 0.9445<br>1.0775 | 0.9754 | 1.0337 | 1.0234 | Ave | | 1.0154 | | | 0.0000 | 4.7 | | 15.0 | | | |
| Indeno[1,2,3-cd]pyrene | 0.9988<br>0.9513 | 0.8331<br>1.0162 | 0.9231 | 0.9673 | 0.9964 | Ave | | 0.9552 | | | 0.0000 | 6.5 | | 15.0 | | | |
| Dibenz(a,h)anthracene | 0.9790<br>0.9541 | 0.8572<br>0.9549 | 0.9225 | 0.9559 | 0.9165 | Ave | | 0.9343 | | | 0.0000 | 4.3 | | 15.0 | | | |
| Benzo[g,h,i]perylene | 1.0736<br>0.9972 | 0.9178<br>1.0017 | 1.0049 | 1.0311 | 0.9680 | Ave | | 0.9992 | | | 0.0000 | 4.9 | | 15.0 | | | |
| o-Terphenyl | 0.5990<br>0.6241 | 0.5420<br>0.6195 | 0.6120 | 0.6306 | 0.6003 | Ave | | 0.6039 | | | 0.0000 | 4.9 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134776

SDG No.: 68087545-1

Instrument ID: BSMC5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:57 Calibration End Date: 02/22/2013 13:48 Calibration ID: 2760

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | IC 660-134776/3 | 1CB22003.D |
| Level 2 | IC 660-134776/4 | 1CB22004.D |
| Level 3 | IC 660-134776/5 | 1CB22005.D |
| Level 4 | IC 660-134776/6 | 1CB22006.D |
| Level 5 | ICIS 660-134776/7 | 1CB22007.D |
| Level 6 | IC 660-134776/8 | 1CB22008.D |
| Level 7 | IC 660-134776/9 | 1CB22009.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Naphthalene | NPT | Ave | 5702<br>977462 | 31413<br>1788680 | 148399 | 315626 | 643945 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| 2-Methylnaphthalene | NPT | Ave | 4328<br>647691 | 19516<br>1170415 | 92089 | 212804 | 439231 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| 1-Methylnaphthalene | NPT | Ave | 3289<br>595177 | 17615<br>1106965 | 92698 | 202550 | 396283 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Acenaphthylene | ANT | Ave | 7443<br>1208002 | 33214<br>2158422 | 172573 | 371048 | 771781 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Acenaphthene | ANT | Ave | 5407<br>706037 | 21590<br>1241216 | 109910 | 222376 | 450754 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Fluorene | ANT | Ave | 5412<br>961751 | 28314<br>1689190 | 132137 | 295086 | 610839 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Phenanthrene | PHN | Ave | 11408<br>1575924 | 51473<br>2774518 | 234717 | 474400 | 1014750 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Anthracene | PHN | Ave | 10196<br>1605221 | 45666<br>2853457 | 234701 | 496179 | 1007571 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Carbazole | PHN | Ave | 9564<br>1379814 | 39992<br>2470847 | 206292 | 442919 | 917432 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Fluoranthene | PHN | Ave | 11431<br>1826908 | 49039<br>3133704 | 264484 | 553174 | 1173070 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Pyrene | CRY | Ave | 12023<br>1978030 | 58472<br>3458322 | 286919 | 587163 | 1289224 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[a]anthracene | CRY | Ave | 17074<br>2005529 | 62799<br>3342573 | 295256 | 598352 | 1287277 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Chrysene | CRY | Ave | 15552<br>2071419 | 64086<br>3423784 | 293675 | 616185 | 1322748 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[b]fluoranthene | PRY | Ave | 13018<br>2159068 | 56338<br>3419972 | 280988 | 609549 | 1514965 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[k]fluoranthene | PRY | Ave | 13108<br>2175966 | 55640<br>3517880 | 328460 | 673624 | 1360131 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Tampa Job No.: 680-87545-1 Analy Batch No.: 134776

SDG No.: 68087545-1

Instrument ID: BSMC5973 GC Column: DB-5MS ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/22/2013 11:57 Calibration End Date: 02/22/2013 13:48 Calibration ID: 2760

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/ML) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Benzo[a]pyrene | PRY | Ave | 12036<br>2128065 | 55481<br>3380087 | 282594 | 622966 | 1363217 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Indeno[1,2,3-cd]pyrene | PRY | Ave | 12119<br>1907725 | 48940<br>3187834 | 267436 | 582935 | 1327322 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Dibenz(a,h)anthracene | PRY | Ave | 11879<br>1913283 | 50354<br>2995648 | 267252 | 576071 | 1220845 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| Benzo[g,h,i]perylene | PRY | Ave | 13026<br>1999689 | 53913<br>3142464 | 291148 | 621425 | 1289503 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |
| o-Terphenyl | PHN | Ave | 5163<br>872937 | 23584<br>1512079 | 126358 | 272397 | 558161 | 0.200<br>30.0 | 1.00<br>50.0 | 5.00 | 10.0 | 20.0 |

Curve Type Legend:
Ave = Average ISTD

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22003.D
Lab Smp Id: IC-1512358
Inj Date : 22-FEB-2013 11:57
Operator : SCC Inst ID: BSMC5973.i
Smp Info : IC-1512358
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:16 BSMC5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1174200 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 901777 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 1723779 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 5163 | 0.20000 | 0.1983 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2248468 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.015 | (1.000) | 2426654 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 5702 | 0.20000 | 0.1865(Q) |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 4328 | 0.20000 | 0.2122 |
| 4 1-Methylnaphthalene | 142 | 4.310 | 4.310 | (1.133) | 3289 | 0.20000 | 0.1771 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 7443 | 0.20000 | 0.2047 |
| 7 Acenaphthene | 154 | 4.915 | 4.915 | (1.005) | 5407 | 0.20000 | 0.2392 |
| 9 Fluorene | 166 | 5.233 | 5.233 | (1.070) | 5412 | 0.20000 | 0.1893 |
| 11 Phenanthrene | 178 | 5.862 | 5.862 | (1.003) | 11408 | 0.20000 | 0.2288 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 10196 | 0.20000 | 0.2091 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 9564 | 0.20000 | 0.2207 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 11431 | 0.20000 | 0.2094 |
| 16 Pyrene | 202 | 6.874 | 6.874 | (0.882) | 12023 | 0.20000 | 0.1989 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 17074 | 0.20000 | 0.2631 |
| 19 Chrysene | 228 | 7.815 | 7.815 | (1.002) | 15552 | 0.20000 | 0.2394 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.656 | (0.960) | 13018 | 0.20000 | 0.2052 |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.674 | (0.962) | 13108 | 0.20000 | 0.2014 |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.956 | (0.993) | 12036 | 0.20000 | 0.1953 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.233 | (1.135) | 12119 | 0.20000 | 0.2001(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.250 | (1.137) | 11879 | 0.20000 | 0.2095 |
| 26 Benzo(g,h,i)perylene | 276 | 10.592 | 10.592 | (1.175) | 13026 | 0.20000 | 0.2148 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22003.D

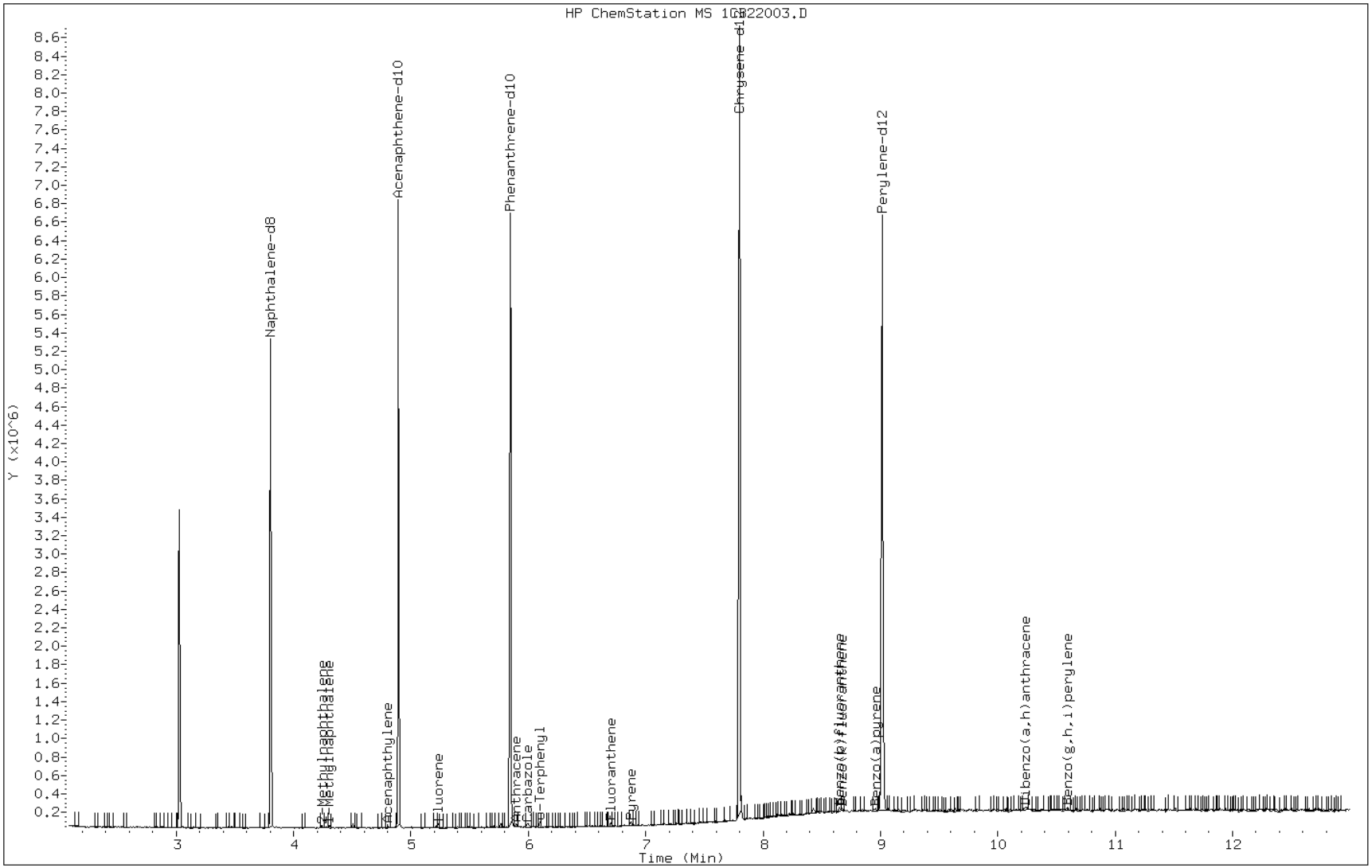
Date: 22-FEB-2013 11:57

Client ID:

Instrument: BSMC5973.i

Sample Info: IC-1512358

Operator: SCC



Manual Integration Report

Data File: 1CB22003.D
Inj. Date and Time: 22-FEB-2013 11:57
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

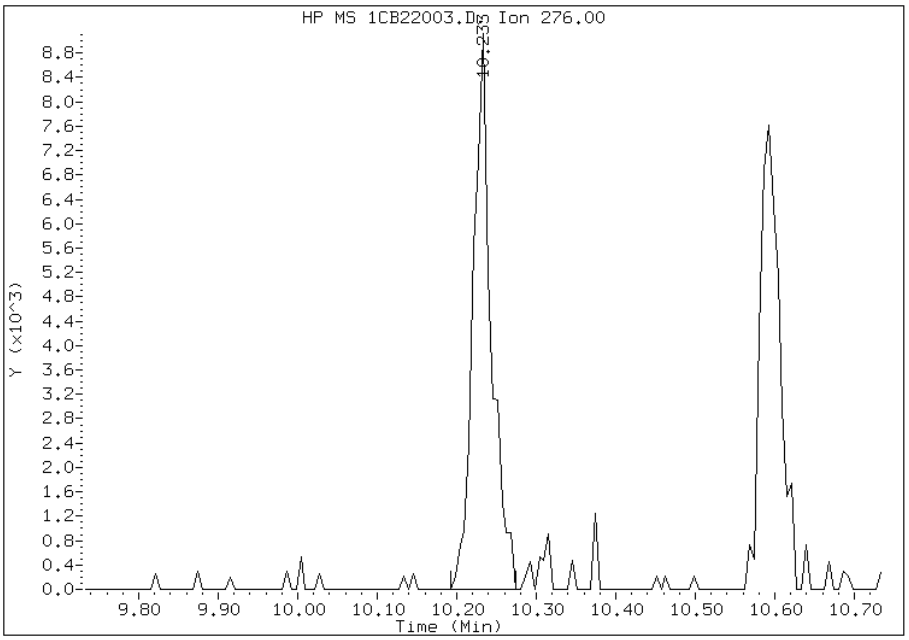
Processing Integration Results

RT: 10.23

Response: 14380

Amount: 0

Conc: 0



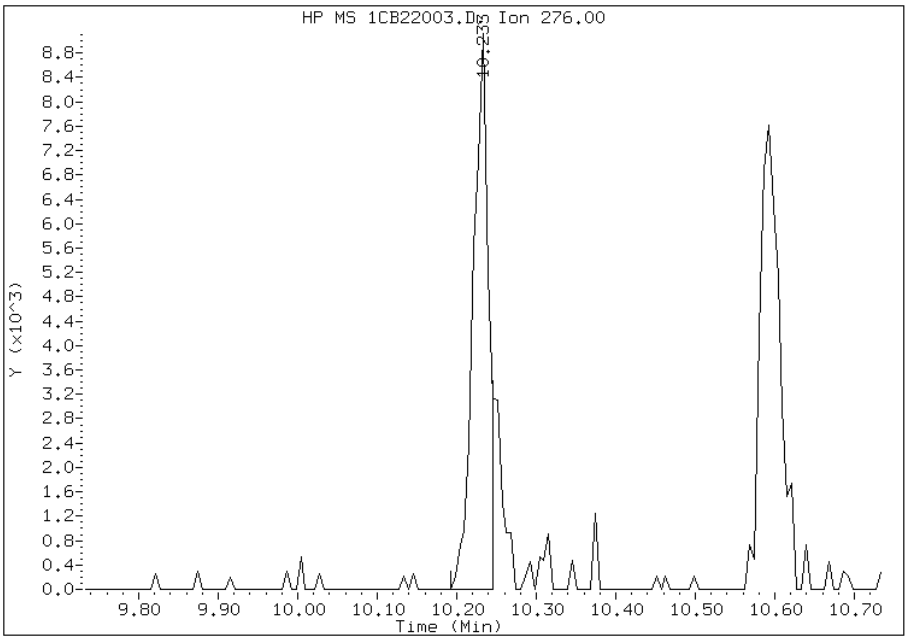

Manual Integration Results

RT: 10.23

Response: 12119

Amount: 0

Conc: 0




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:13
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22004.D
Lab Smp Id: IC-1512359
Inj Date : 22-FEB-2013 12:16
Operator : SCC Inst ID: BSMC5973.i
Smp Info : IC-1512359
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:16 BSMC5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 11:57 Cal File: 1CB22003.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1243608 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 931732 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 1740509 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 23584 | 1.00000 | 0.8974 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2144273 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.015 | (1.000) | 2349732 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 31413 | 1.00000 | 0.9702(Q) |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 19516 | 1.00000 | 0.9036 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 17615 | 1.00000 | 0.8955 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 33214 | 1.00000 | 0.8841 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 21590 | 1.00000 | 0.9246 |
| 9 Fluorene | 166 | 5.233 | 5.233 | (1.070) | 28314 | 1.00000 | 0.9588 |
| 11 Phenanthrene | 178 | 5.862 | 5.862 | (1.003) | 51473 | 1.00000 | 1.0227 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 45666 | 1.00000 | 0.9277 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 39992 | 1.00000 | 0.9140 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 49039 | 1.00000 | 0.8897 |
| 16 Pyrene | 202 | 6.874 | 6.874 | (0.882) | 58472 | 1.00000 | 1.0147 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 62799 | 1.00000 | 1.0147 |
| 19 Chrysene | 228 | 7.815 | 7.815 | (1.002) | 64086 | 1.00000 | 1.0347 |
| 20 Benzo(b)fluoranthene | 252 | 8.651 | 8.651 | (0.960) | 56338 | 1.00000 | 0.9174 |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.674 | (0.962) | 55640 | 1.00000 | 0.8832 |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.956 | (0.993) | 55481 | 1.00000 | 0.9301 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.221 | 10.221 | (1.134) | 48940 | 1.00000 | 0.8346(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.245 | (1.136) | 50354 | 1.00000 | 0.9174 |
| 26 Benzo(g,h,i)perylene | 276 | 10.592 | 10.592 | (1.175) | 53913 | 1.00000 | 0.9185 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: 1CB22004.D

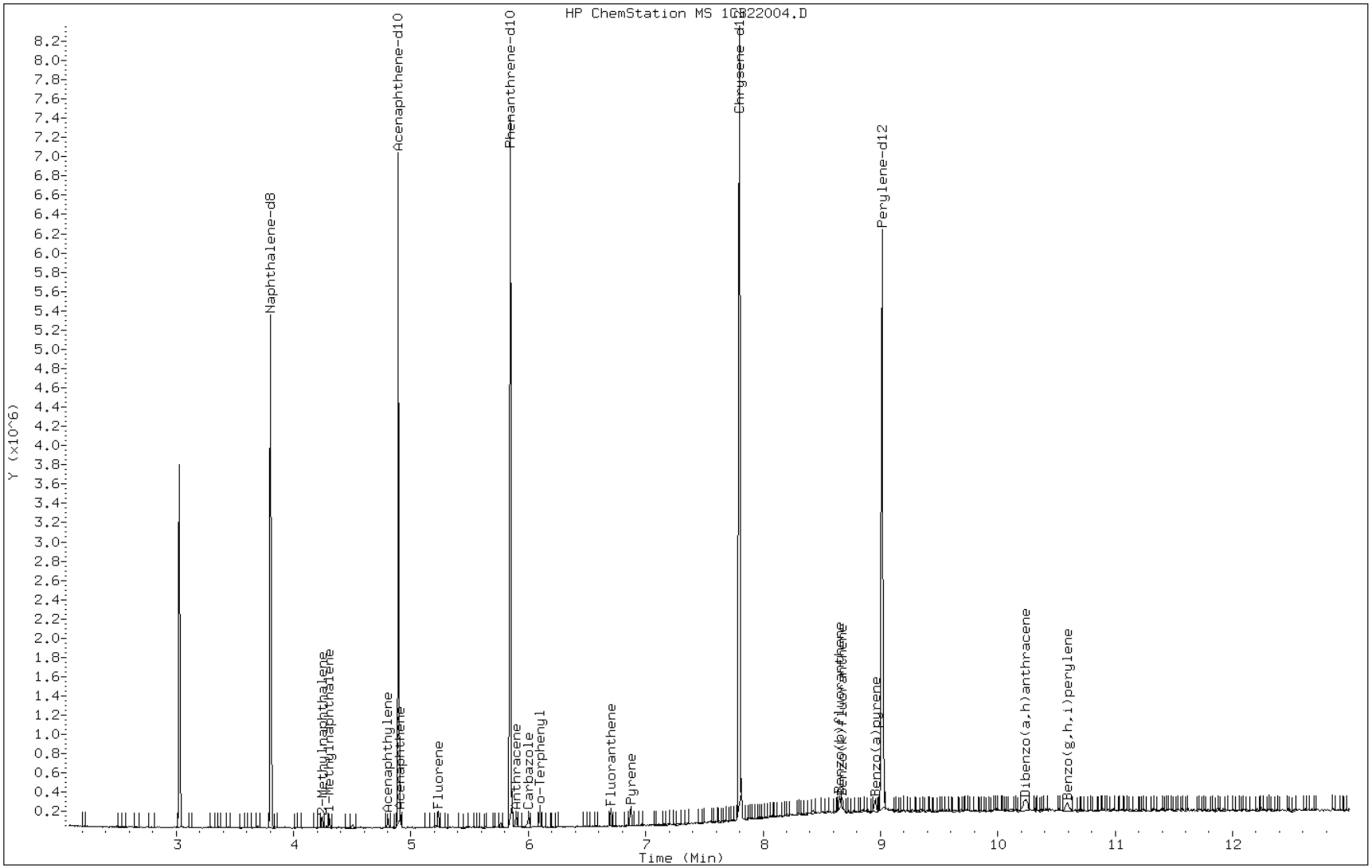
Date: 22-FEB-2013 12:16

Client ID:

Instrument: BSMC5973.i

Sample Info: IC-1512359

Operator: SCC



Manual Integration Report

Data File: 1CB22004.D
Inj. Date and Time: 22-FEB-2013 12:16
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

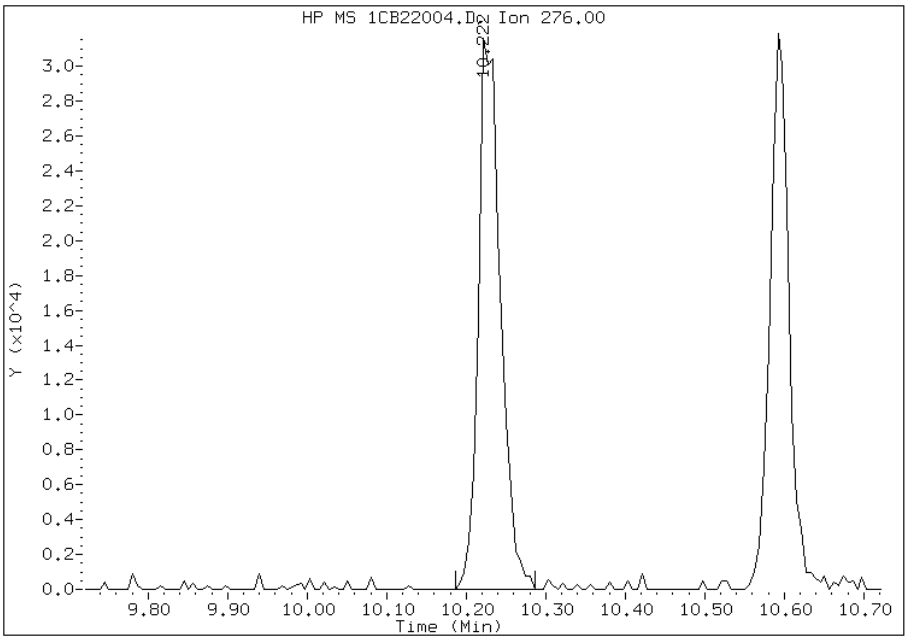
Processing Integration Results

RT: 10.22

Response: 61246

Amount: 1

Conc: 1



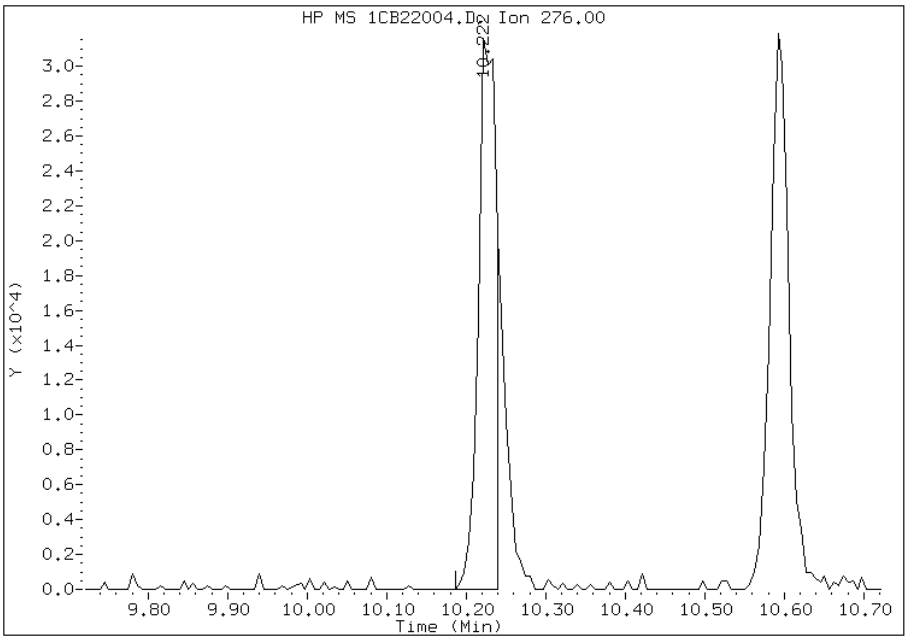

Manual Integration Results

RT: 10.22

Response: 48940

Amount: 1

Conc: 1




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:14
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22005.D
Lab Smp Id: IC-1512360
Inj Date : 22-FEB-2013 12:34
Operator : SCC Inst ID: BSMC5973.i
Smp Info : IC-1512360
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:16 BSMC5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 12:16 Cal File: 1CB22004.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1133793 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 874757 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 1651631 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 126358 | 5.00000 | 5.0671 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2174554 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.015 | (1.000) | 2317716 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 148399 | 5.00000 | 5.0275 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 92089 | 5.00000 | 4.6771 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 92698 | 5.00000 | 5.1694 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 172573 | 5.00000 | 4.8932 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 109910 | 5.00000 | 5.0139 |
| 9 Fluorene | 166 | 5.233 | 5.233 | (1.070) | 132137 | 5.00000 | 4.7663 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 234717 | 5.00000 | 4.9147 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 234701 | 5.00000 | 5.0249 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 206292 | 5.00000 | 4.9685 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 264484 | 5.00000 | 5.0569 |
| 16 Pyrene | 202 | 6.874 | 6.874 | (0.882) | 286919 | 5.00000 | 4.9098 |
| 17 Benzo(a)anthracene | 228 | 7.786 | 7.786 | (0.998) | 295256 | 5.00000 | 4.7043 |
| 19 Chrysene | 228 | 7.815 | 7.815 | (1.002) | 293675 | 5.00000 | 4.6756 |
| 20 Benzo(b)fluoranthene | 252 | 8.651 | 8.651 | (0.960) | 280988 | 5.00000 | 4.6390 |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.674 | (0.962) | 328460 | 5.00000 | 5.2861 |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.956 | (0.993) | 282594 | 5.00000 | 4.8032 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.227 | (1.134) | 267436 | 5.00000 | 4.6238(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.245 | (1.136) | 267252 | 5.00000 | 4.9366 |
| 26 Benzo(g,h,i)perylene | 276 | 10.592 | 10.592 | (1.175) | 291148 | 5.00000 | 5.0287 |

QC Flag Legend

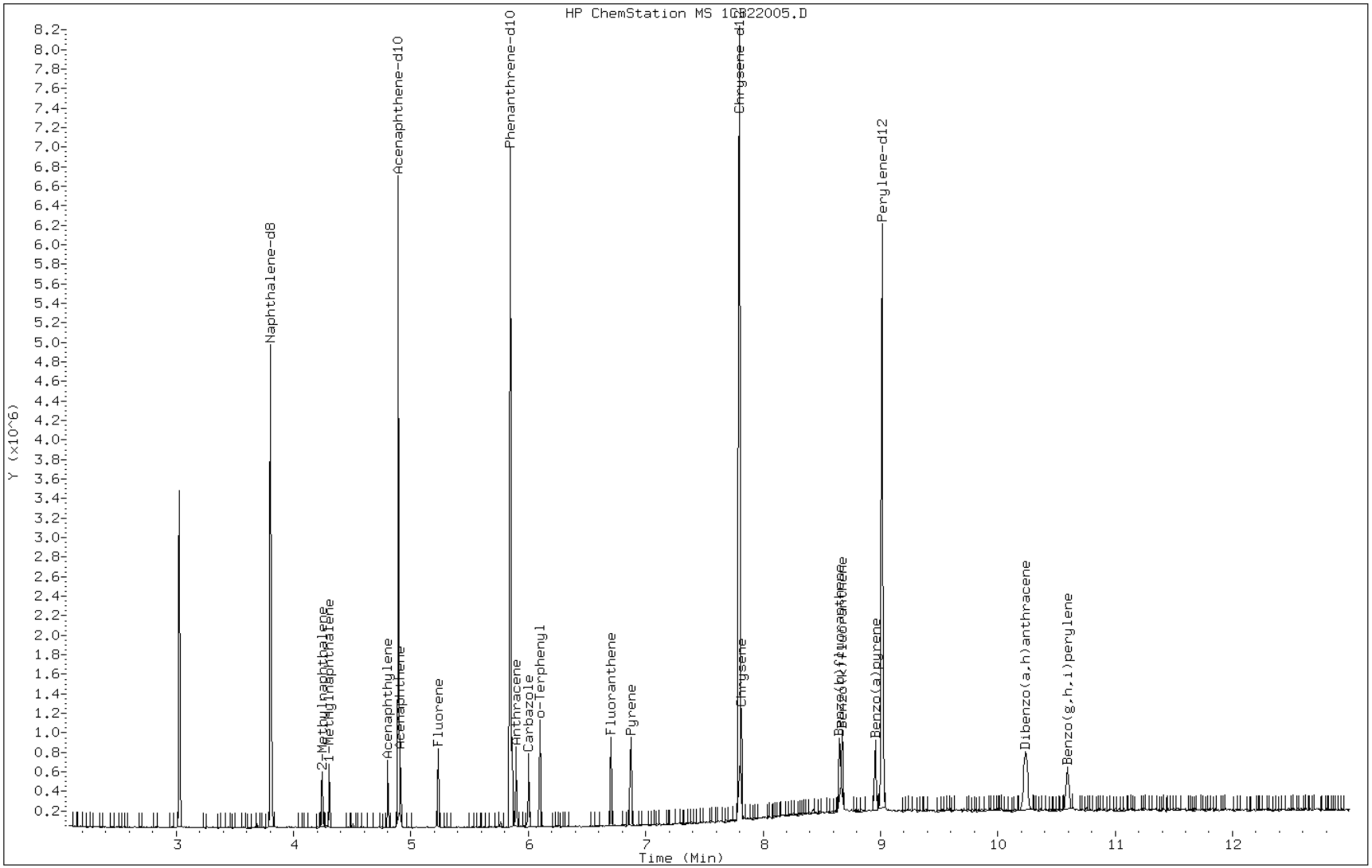
M - Compound response manually integrated.

Data File: 1CB22005.D

Date: 22-FEB-2013 12:34

Client ID: Instrument: BSMC5973.i

Sample Info: IC-1512360 Operator: SCC



Manual Integration Report

Data File: 1CB22005.D
Inj. Date and Time: 22-FEB-2013 12:34
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

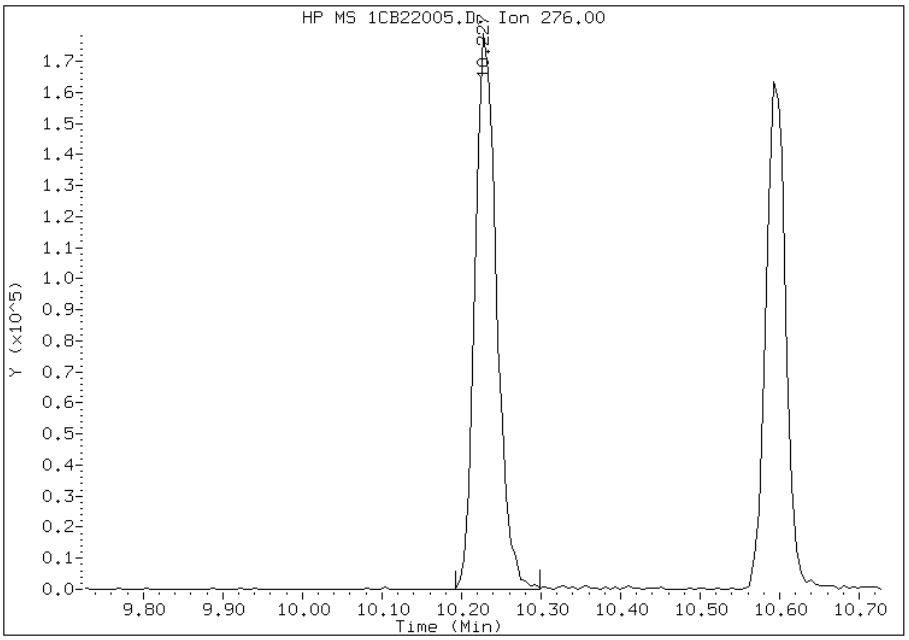
Processing Integration Results

RT: 10.23

Response: 336913

Amount: 6

Conc: 6



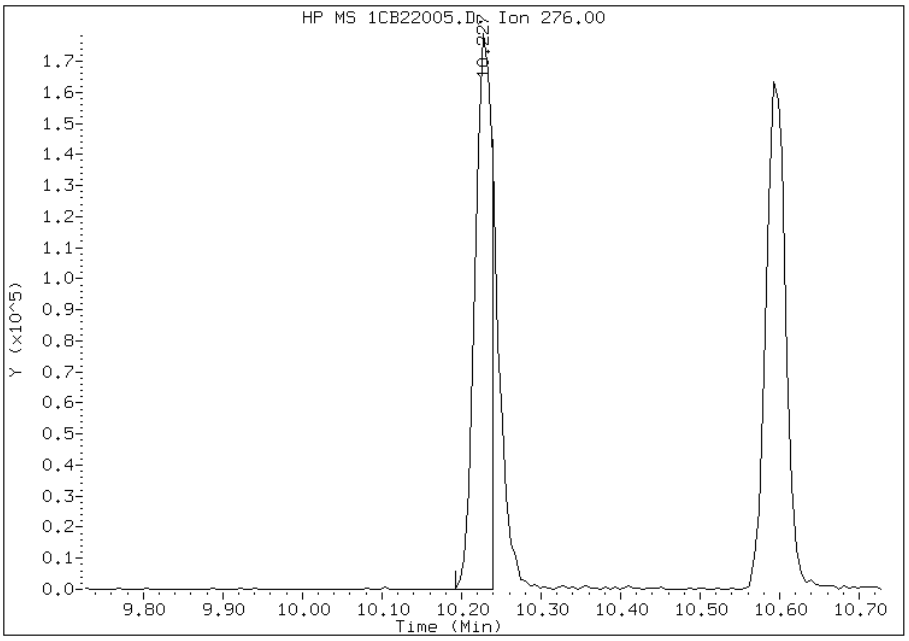

Manual Integration Results

RT: 10.23

Response: 267436

Amount: 5

Conc: 5




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:14
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22006.D
Lab Smp Id: IC-1512361
Inj Date : 22-FEB-2013 12:53
Operator : SCC Inst ID: BSMC5973.i
Smp Info : IC-1512361
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:16 BSMC5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 12:34 Cal File: 1CB22005.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1161301 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 893287 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 1727894 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 272397 | 10.0000 | 10.4413 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2207928 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.015 | (1.000) | 2410622 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 315626 | 10.0000 | 10.4397 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 212804 | 10.0000 | 10.5522 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 202550 | 10.0000 | 11.0278 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 371048 | 10.0000 | 10.3027 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 222376 | 10.0000 | 9.9341 |
| 9 Fluorene | 166 | 5.233 | 5.233 | (1.070) | 295086 | 10.0000 | 10.4233 |
| 11 Phenanthrene | 178 | 5.862 | 5.862 | (1.003) | 474400 | 10.0000 | 9.4950 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 496179 | 10.0000 | 10.1543 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 442919 | 10.0000 | 10.1969 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 553174 | 10.0000 | 10.1099 |
| 16 Pyrene | 202 | 6.874 | 6.874 | (0.882) | 587163 | 10.0000 | 9.8957 |
| 17 Benzo(a)anthracene | 228 | 7.786 | 7.786 | (0.998) | 598352 | 10.0000 | 9.3895 |
| 19 Chrysene | 228 | 7.815 | 7.815 | (1.002) | 616185 | 10.0000 | 9.6621 |
| 20 Benzo(b)fluoranthene | 252 | 8.650 | 8.650 | (0.960) | 609549 | 10.0000 | 9.6756 |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.674 | (0.962) | 673624 | 10.0000 | 10.4233 |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.956 | (0.993) | 622966 | 10.0000 | 10.1804 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.227 | (1.134) | 582935 | 10.0000 | 9.6902(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.245 | (1.136) | 576071 | 10.0000 | 10.2310 |
| 26 Benzo(g,h,i)perylene | 276 | 10.592 | 10.592 | (1.175) | 621425 | 10.0000 | 10.3197 |

QC Flag Legend

M - Compound response manually integrated.

Data File: 1CB22006.D

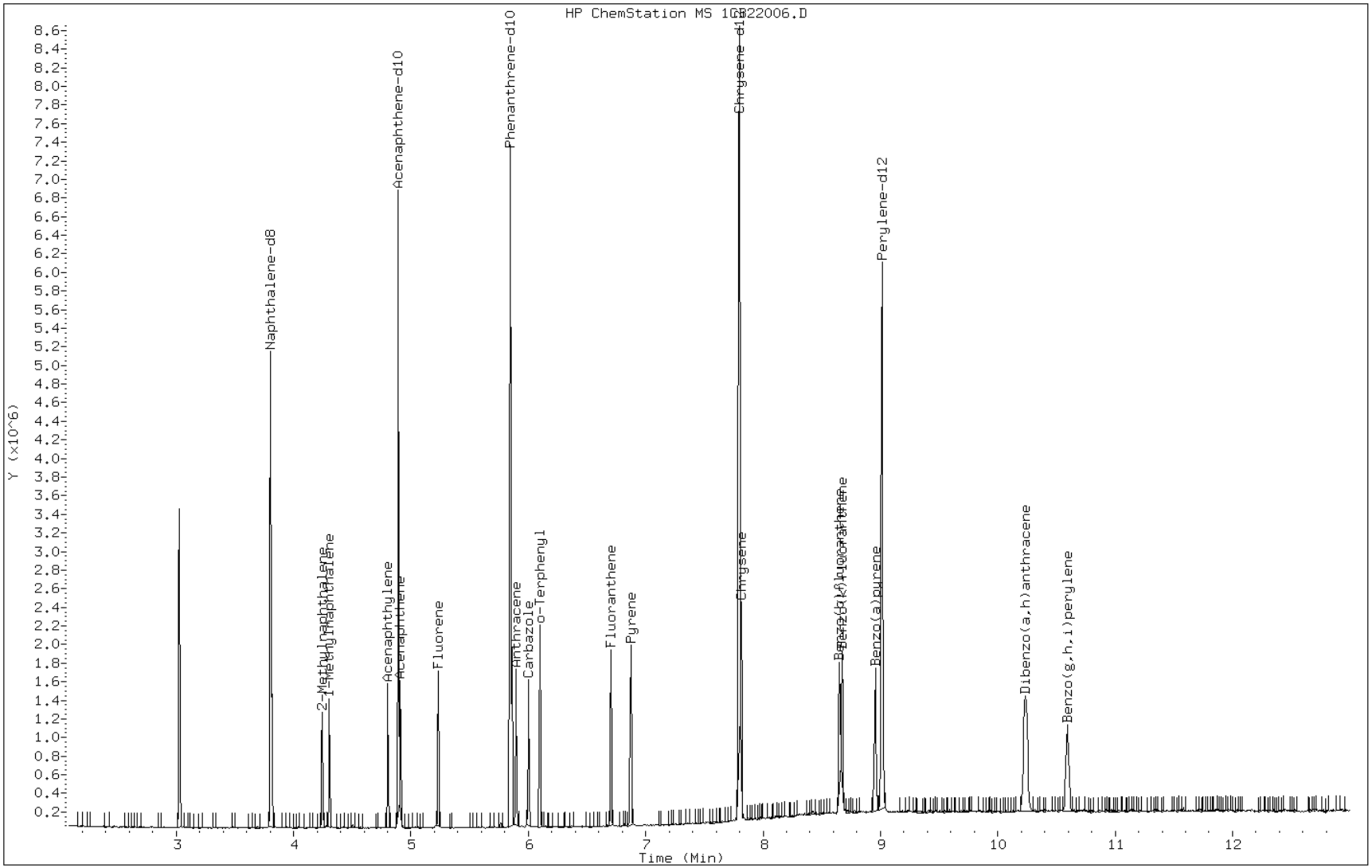
Date: 22-FEB-2013 12:53

Client ID:

Instrument: BSMC5973.i

Sample Info: IC-1512361

Operator: SCC



Manual Integration Report

Data File: 1CB22006.D
Inj. Date and Time: 22-FEB-2013 12:53
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

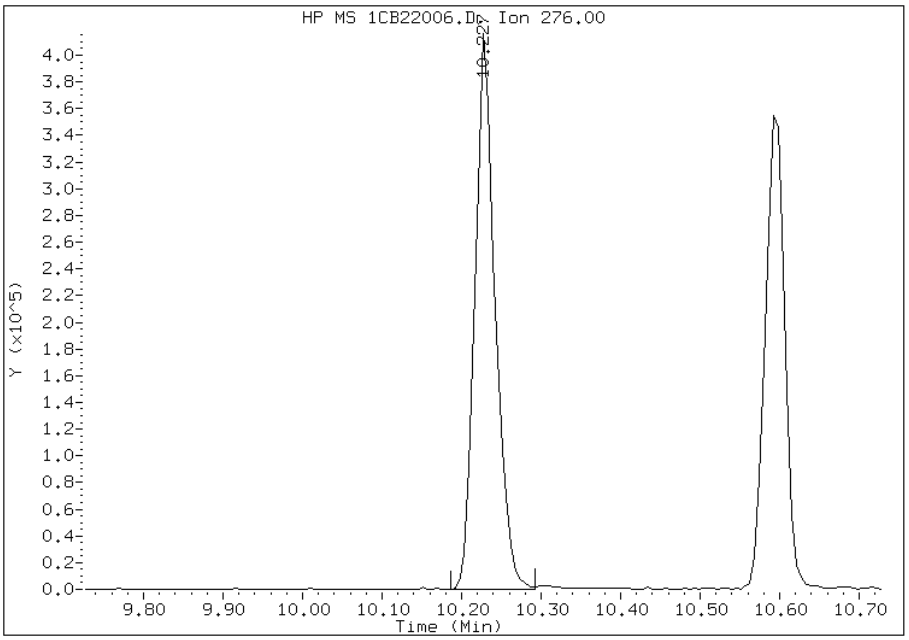
Processing Integration Results

RT: 10.23

Response: 727358

Amount: 13

Conc: 13



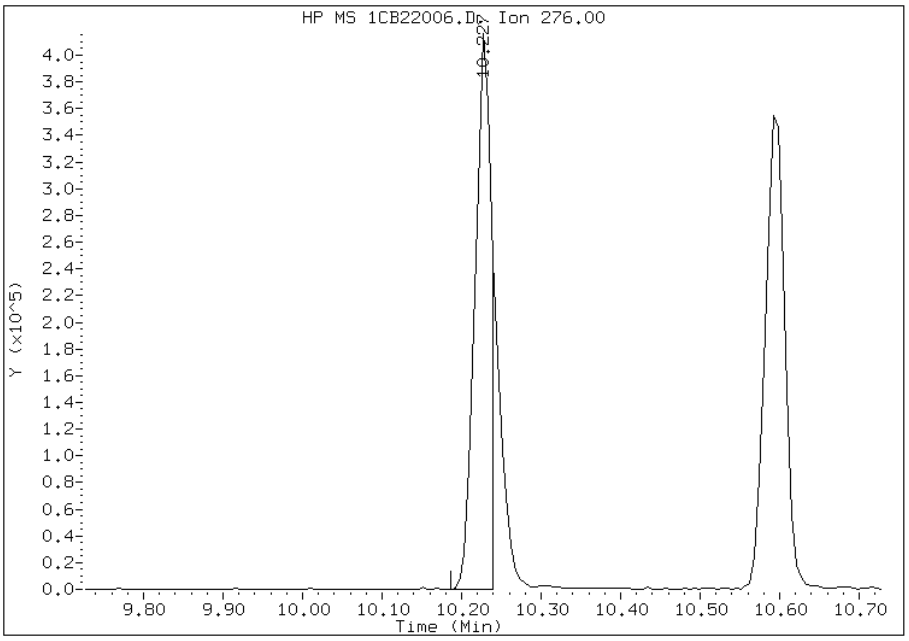

Manual Integration Results

RT: 10.23

Response: 582935

Amount: 10

Conc: 10




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:14
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22007.D
Lab Smp Id: ICIS-1512372
Inj Date : 22-FEB-2013 13:11
Operator : SCC Inst ID: BSMC5973.i
Smp Info : ICIS-1512372
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:16 BSMC5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 12:53 Cal File: 1CB22006.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1215005 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 932815 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 1859738 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 558161 | 20.0000 | 19.8783 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2424157 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.015 | (1.000) | 2664188 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 643945 | 20.0000 | 20.3579 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 439231 | 20.0000 | 20.8172 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 396283 | 20.0000 | 20.6220 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 771781 | 20.0000 | 20.5216 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 450754 | 20.0000 | 19.2831 |
| 9 Fluorene | 166 | 5.233 | 5.233 | (1.070) | 610839 | 20.0000 | 20.6625 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 1014750 | 20.0000 | 18.8701 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 1007571 | 20.0000 | 19.1582 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 917432 | 20.0000 | 19.6239 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 1173070 | 20.0000 | 19.9194 |
| 16 Pyrene | 202 | 6.874 | 6.874 | (0.882) | 1289224 | 20.0000 | 19.7898 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 1287277 | 20.0000 | 18.3986 |
| 19 Chrysene | 228 | 7.815 | 7.815 | (1.002) | 1322748 | 20.0000 | 18.8914 |
| 20 Benzo(b)fluoranthene | 252 | 8.657 | 8.657 | (0.960) | 1514965 | 20.0000 | 21.7588 |
| 21 Benzo(k)fluoranthene | 252 | 8.680 | 8.680 | (0.963) | 1360131 | 20.0000 | 19.0428 |
| 22 Benzo(a)pyrene | 252 | 8.957 | 8.957 | (0.993) | 1363217 | 20.0000 | 20.1573 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.233 | (1.135) | 1327322 | 20.0000 | 19.9642(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.251 | 10.251 | (1.137) | 1220845 | 20.0000 | 19.6186 |
| 26 Benzo(g,h,i)perylene | 276 | 10.598 | 10.598 | (1.175) | 1289503 | 20.0000 | 19.3760 |

QC Flag Legend

M - Compound response manually integrated.

Data File: 1CB22007.D

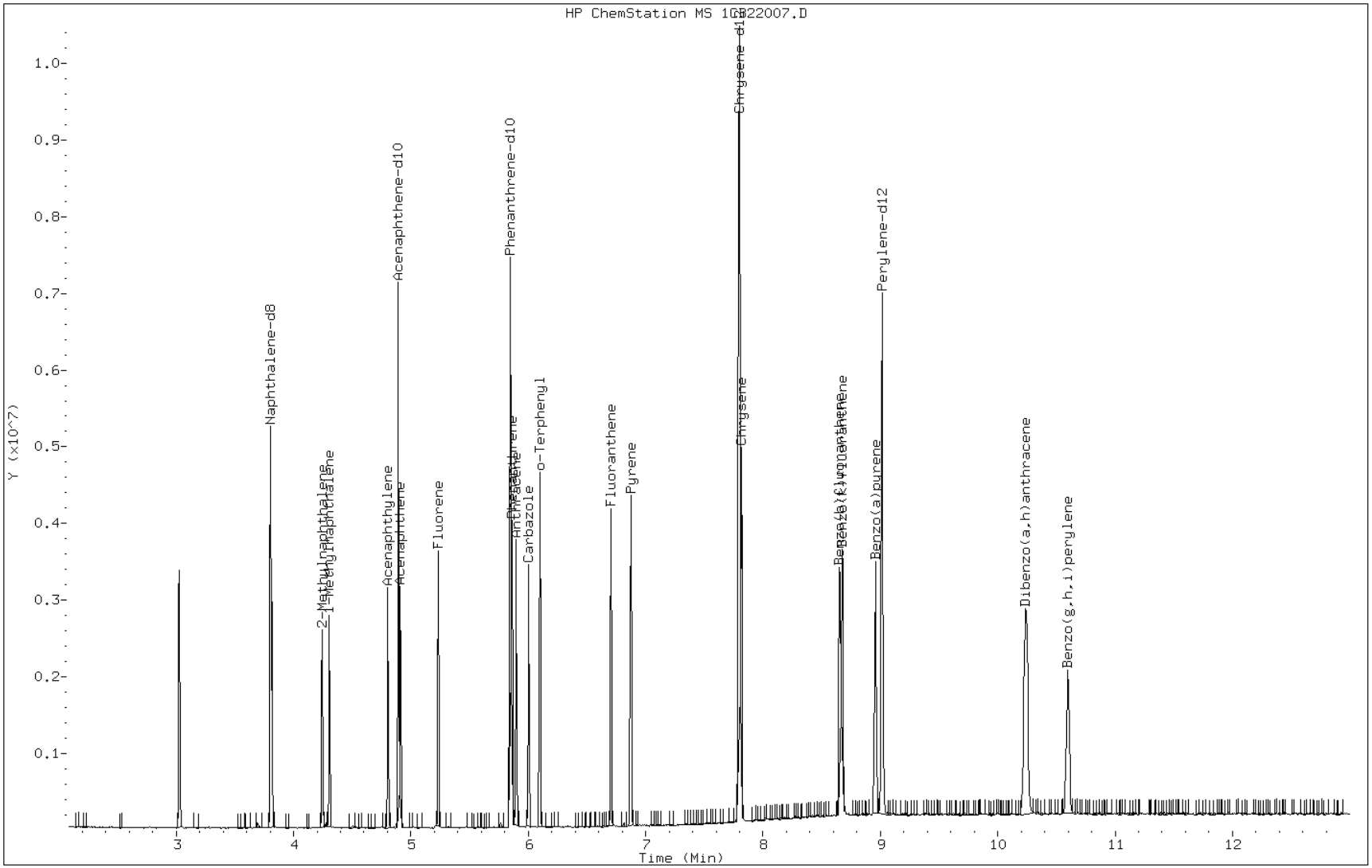
Date: 22-FEB-2013 13:11

Client ID:

Instrument: BSMC5973.i

Sample Info: ICIS-1512372

Operator: SCC



Manual Integration Report

Data File: 1CB22007.D
Inj. Date and Time: 22-FEB-2013 13:11
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

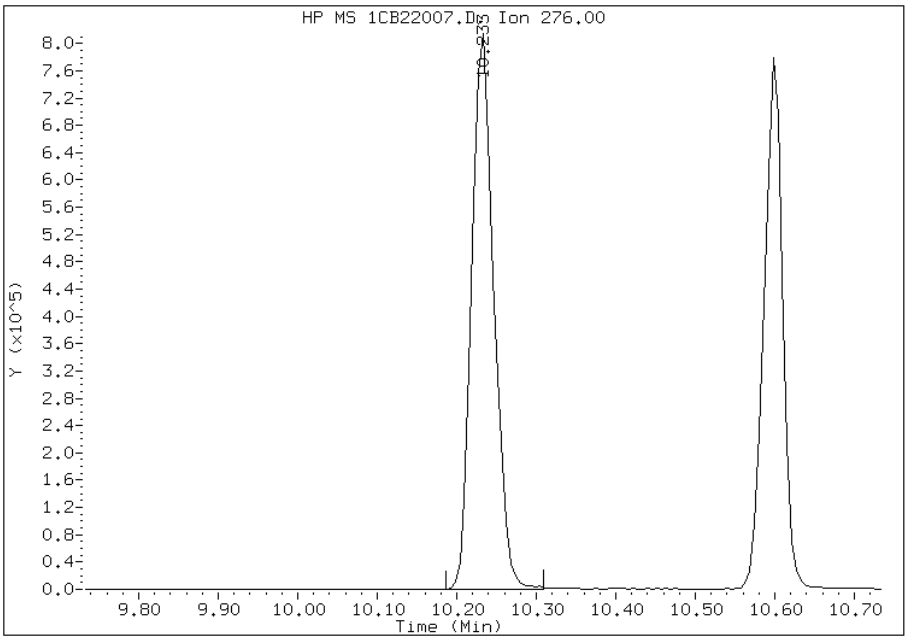
Processing Integration Results

RT: 10.23

Response: 1569498

Amount: 25

Conc: 25



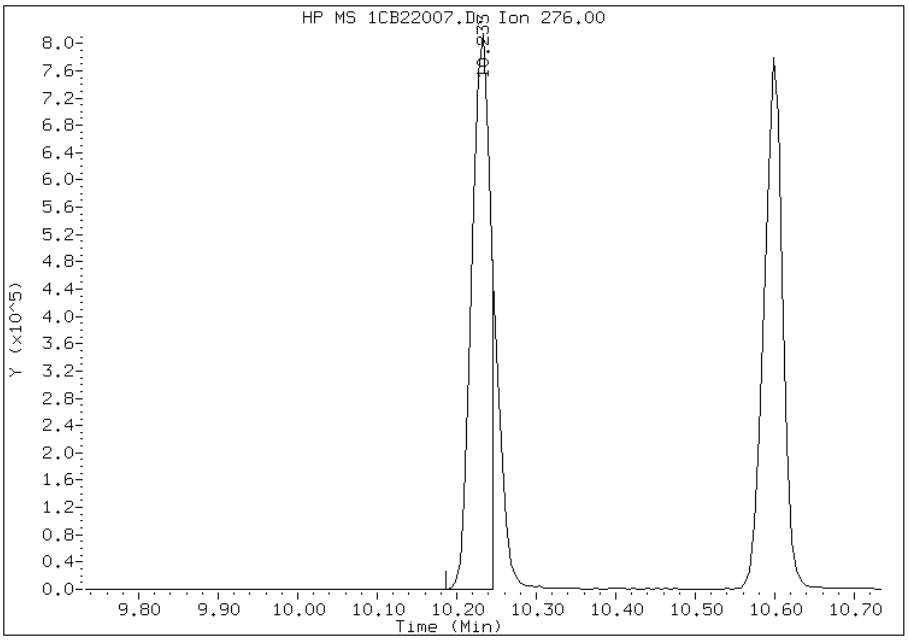

Manual Integration Results

RT: 10.23

Response: 1327322

Amount: 20

Conc: 20




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:11
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22008.D
Lab Smp Id: IC-1512373
Inj Date : 22-FEB-2013 13:29
Operator : SCC Inst ID: BSMC5973.i
Smp Info : IC-1512373
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:16 BSMC5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 13:11 Cal File: 1CB22007.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1245095 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 988838 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 1864829 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 872937 | 30.0000 | 31.0038 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2477918 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.015 | (1.000) | 2673716 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 977462 | 30.0000 | 30.1550 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 647691 | 30.0000 | 29.9553 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 595177 | 30.0000 | 30.2237 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 1208002 | 30.0000 | 30.3009 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 706037 | 30.0000 | 28.4928 |
| 9 Fluorene | 166 | 5.233 | 5.233 | (1.070) | 961751 | 30.0000 | 30.6894 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 1575924 | 30.0000 | 29.2256 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 1605221 | 30.0000 | 30.4388 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 1379814 | 30.0000 | 29.4337 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 1826908 | 30.0000 | 30.9373 |
| 16 Pyrene | 202 | 6.874 | 6.874 | (0.882) | 1978030 | 30.0000 | 29.7043 |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 2005529 | 30.0000 | 28.0424 |
| 19 Chrysene | 228 | 7.821 | 7.821 | (1.003) | 2071419 | 30.0000 | 28.9420 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.656 | (0.960) | 2159068 | 30.0000 | 30.8993 |
| 21 Benzo(k)fluoranthene | 252 | 8.680 | 8.680 | (0.963) | 2175966 | 30.0000 | 30.3566 |
| 22 Benzo(a)pyrene | 252 | 8.962 | 8.962 | (0.994) | 2128065 | 30.0000 | 31.3547 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.233 | (1.135) | 1907725 | 30.0000 | 28.5918(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.250 | (1.137) | 1913283 | 30.0000 | 30.6363 |
| 26 Benzo(g,h,i)perylene | 276 | 10.603 | 10.603 | (1.176) | 1999689 | 30.0000 | 29.9402 |

QC Flag Legend

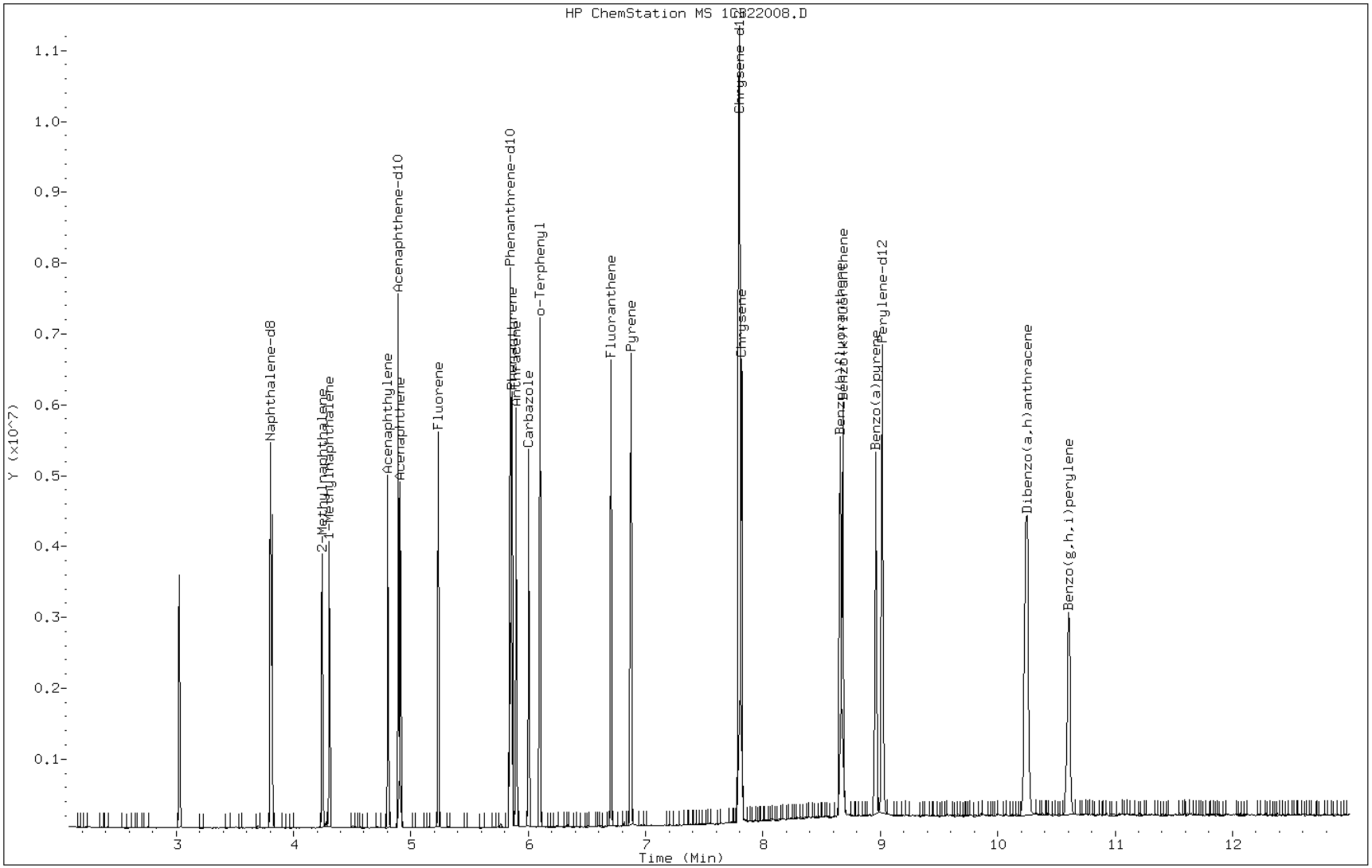
M - Compound response manually integrated.

Data File: 1CB22008.D

Date: 22-FEB-2013 13:29

Client ID: Instrument: BSMC5973.i

Sample Info: IC-1512373 Operator: SCC



Manual Integration Report

Data File: 1CB22008.D
Inj. Date and Time: 22-FEB-2013 13:29
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

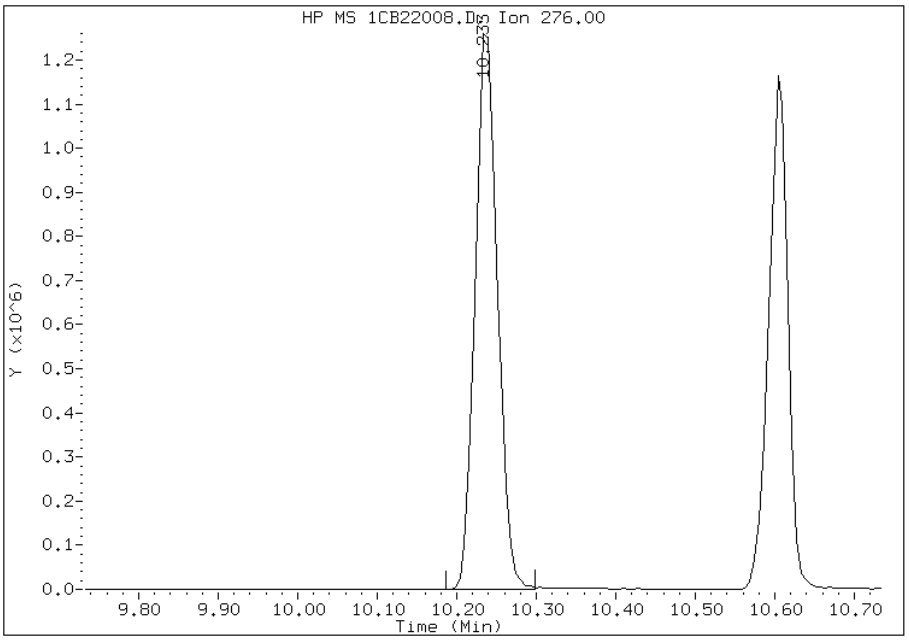
Processing Integration Results

RT: 10.23

Response: 2435528

Amount: 36

Conc: 36



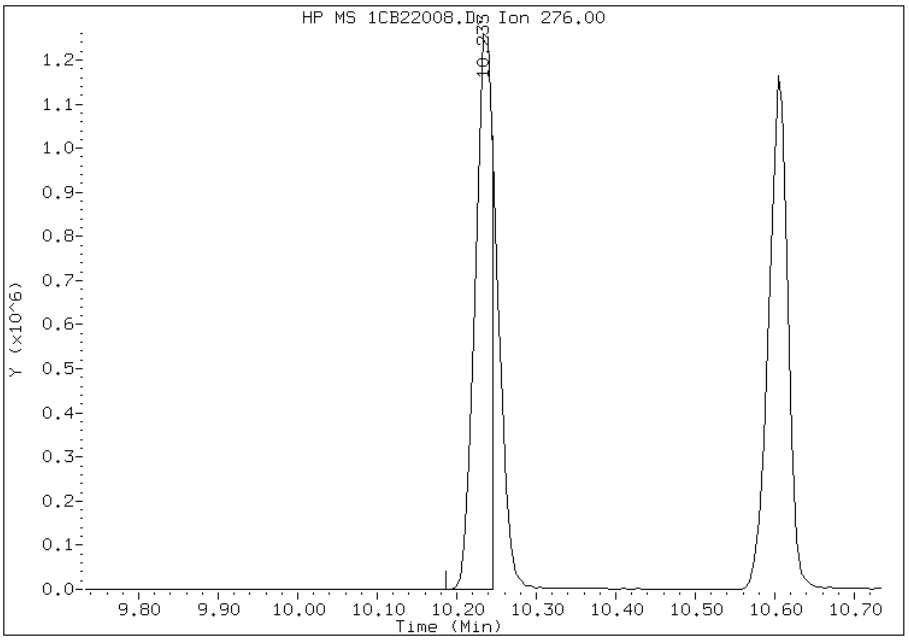

Manual Integration Results

RT: 10.23

Response: 1907725

Amount: 29

Conc: 29




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:15
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22009.D
Lab Smp Id: IC-1512374
Inj Date : 22-FEB-2013 13:48
Operator : SCC Inst ID: BSMC5973.i
Smp Info : IC-1512374
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:16 BSMC5973.i Quant Type: ISTD
Cal Date : 22-FEB-2013 13:29 Cal File: 1CB22008.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT (ug/ml) | AMOUNTS ON-COL (ug/ml) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1341221 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1022497 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 1952764 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 1512079 | 50.0000 | 51.2857(A) |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2476604 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.015 | (1.000) | 2509650 | 40.0000 | |
| 2 Naphthalene | 128 | 3.815 | 3.815 | (1.003) | 1788680 | 50.0000 | 51.2265(A) |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 1170415 | 50.0000 | 50.2513(A) |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 1106965 | 50.0000 | 52.1840(A) |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 2158422 | 50.0000 | 52.3585(A) |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 1241216 | 50.0000 | 48.4415 |
| 9 Fluorene | 166 | 5.233 | 5.233 | (1.070) | 1689190 | 50.0000 | 52.1276(A) |
| 11 Phenanthrene | 178 | 5.862 | 5.862 | (1.003) | 2774518 | 50.0000 | 49.1366 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 2853457 | 50.0000 | 51.6717(A) |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 2470847 | 50.0000 | 50.3338(A) |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 3133704 | 50.0000 | 50.6773(A) |
| 16 Pyrene | 202 | 6.874 | 6.874 | (0.882) | 3458322 | 50.0000 | 51.9617(A) |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 3342573 | 50.0000 | 46.7626 |
| 19 Chrysene | 228 | 7.821 | 7.821 | (1.003) | 3423784 | 50.0000 | 47.8628 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.656 | (0.960) | 3419972 | 50.0000 | 52.1444(A) |
| 21 Benzo(k)fluoranthene | 252 | 8.680 | 8.680 | (0.963) | 3517880 | 50.0000 | 52.2859(A) |
| 22 Benzo(a)pyrene | 252 | 8.962 | 8.962 | (0.994) | 3380087 | 50.0000 | 53.0576(A) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.239 | 10.239 | (1.136) | 3187834 | 50.0000 | 50.9008(AM) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.256 | 10.256 | (1.138) | 2995648 | 50.0000 | 51.1034(A) |
| 26 Benzo(g,h,i)perylene | 276 | 10.609 | 10.609 | (1.177) | 3142464 | 50.0000 | 50.1261(A) |

QC Flag Legend

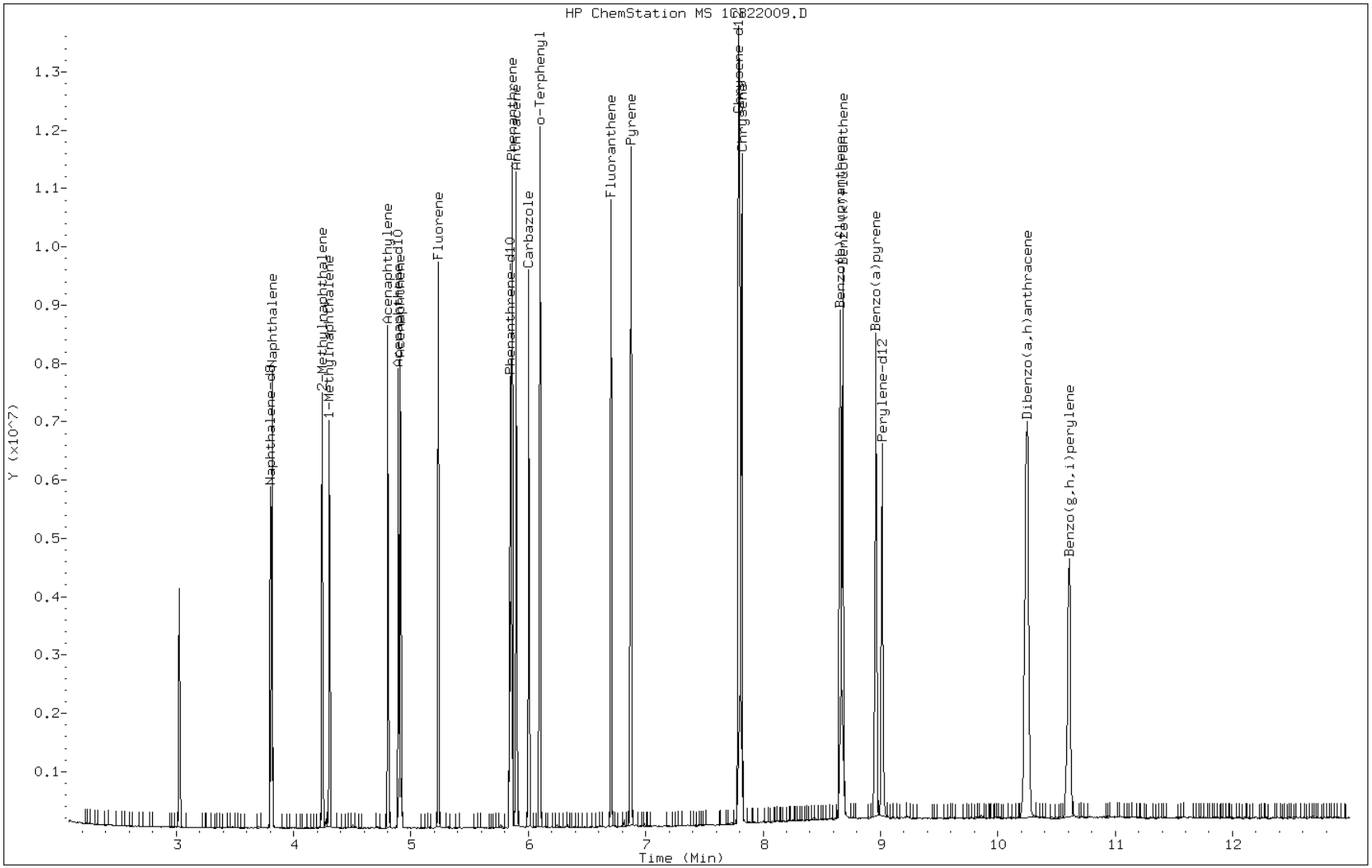
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: 1CB22009.D

Date: 22-FEB-2013 13:48

Client ID: Instrument: BSMC5973.i

Sample Info: IC-1512374 Operator: SCC



Manual Integration Report

Data File: 1CB22009.D
Inj. Date and Time: 22-FEB-2013 13:48
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

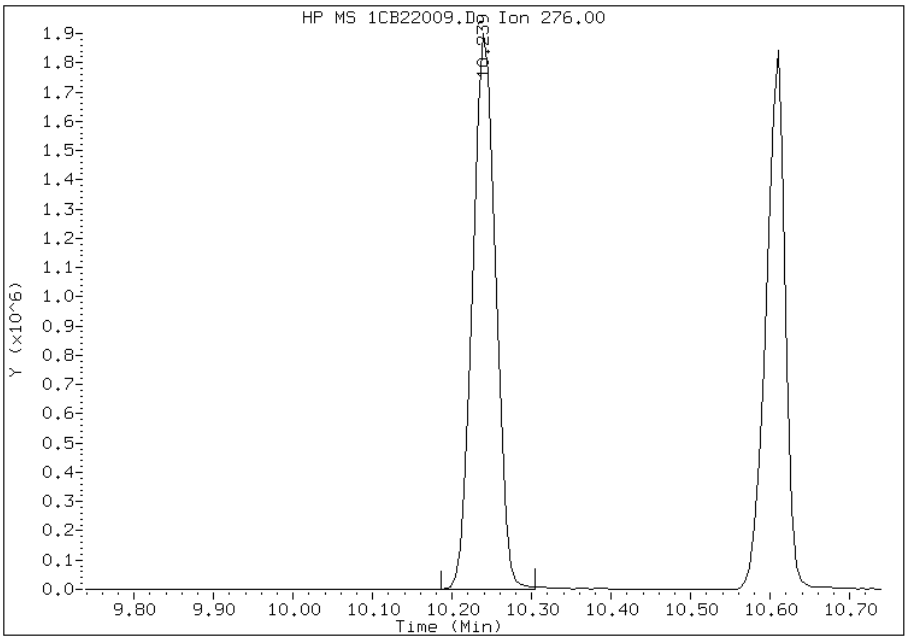
Processing Integration Results

RT: 10.24

Response: 3825990

Amount: 51

Conc: 51



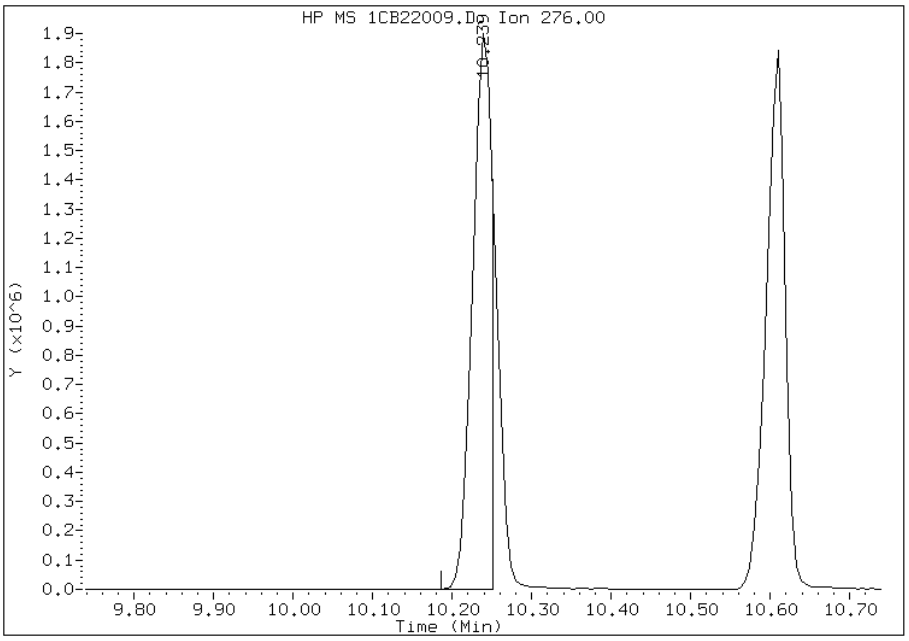

Manual Integration Results

RT: 10.24

Response: 3187834

Amount: 51

Conc: 51




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:15
Manual Integration Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Lab Sample ID: ICV 660-134771/10 Calibration Date: 02/22/2013 12:48

Instrument ID: BSMA5973 Calib Start Date: 02/22/2013 11:01

GC Column: DB-5MS ID: 250.00(um) Calib End Date: 02/22/2013 12:32

Lab File ID: 1AB22010.D Conc. Units: ug/Kg

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | Ave | 0.9639 | 1.041 | 0.0000 | 21600 | 20000 | 8.0 | 35.0 |
| 2-Methylnaphthalene | Ave | 0.4976 | 0.6073 | 0.0000 | 24400 | 20000 | 22.1 | 35.0 |
| 1-Methylnaphthalene | Ave | 0.5541 | 0.6133 | 0.0000 | 22100 | 20000 | 10.7 | 35.0 |
| Acenaphthylene | Ave | 1.494 | 1.591 | 0.0000 | 21300 | 20000 | 6.5 | 35.0 |
| Acenaphthene | Ave | 0.8630 | 0.9140 | 0.0000 | 21200 | 20000 | 5.9 | 35.0 |
| Fluorene | Ave | 1.089 | 1.173 | 0.0000 | 21500 | 20000 | 7.7 | 35.0 |
| Phenanthrene | Ave | 0.9943 | 1.047 | 0.0000 | 21100 | 20000 | 5.3 | 35.0 |
| Anthracene | Ave | 0.9658 | 1.032 | 0.0000 | 21400 | 20000 | 6.8 | 35.0 |
| Carbazole | Ave | 0.8526 | 0.6904 | 0.0000 | 16200 | 20000 | -19.0 | 35.0 |
| Fluoranthene | Ave | 0.9941 | 1.121 | 0.0000 | 22600 | 20000 | 12.8 | 35.0 |
| Pyrene | Ave | 1.173 | 1.180 | 0.0000 | 20100 | 20000 | 0.5 | 35.0 |
| Benzo[a]anthracene | LinF | 1.255 | 1.249 | 0.0000 | 20900 | 20000 | 4.6 | 35.0 |
| Chrysene | Ave | 1.068 | 1.082 | 0.0000 | 20300 | 20000 | 1.3 | 35.0 |
| Benzo[b]fluoranthene | Ave | 1.014 | 1.214 | 0.0000 | 23900 | 20000 | 19.7 | 35.0 |
| Benzo[k]fluoranthene | Ave | 1.020 | 0.9836 | 0.0000 | 19300 | 20000 | -3.6 | 35.0 |
| Benzo[a]pyrene | Ave | 0.9286 | 0.9134 | 0.0000 | 19700 | 20000 | -1.6 | 35.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 0.7967 | 0.8998 | 0.0000 | 22600 | 20000 | 12.9 | 35.0 |
| Dibenz(a,h)anthracene | Ave | 0.8302 | 0.9949 | 0.0000 | 24000 | 20000 | 19.8 | 35.0 |
| Benzo[g,h,i]perylene | Ave | 0.8473 | 0.9097 | 0.0000 | 21500 | 20000 | 7.4 | 35.0 |
| o-Terphenyl | Ave | 0.5820 | 0.5933 | 0.0000 | 20400 | 20000 | 1.9 | 35.0 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22010.D
Lab Smp Id: ICV-1448440
Inj Date : 22-FEB-2013 12:48
Operator : SCC Inst ID: BSMA5973.i
Smp Info : ICV-1448440
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula: Amt * DF * 1/Vi * Vt/Vo * A * B * C * D * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Vo | 1000.000 | Sample Volume |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | mL to L conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1= if no con |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL ( ug/l) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.399 | 2.397 | (1.000) | 1470215 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.420 | 3.417 | (1.000) | 948405 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.360 | 4.352 | (1.000) | 1446139 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.632 | 4.635 | (1.062) | 428980 | 20.3860 | 20.3860 |
| * 18 Chrysene-d12 | 240 | 6.374 | 6.366 | (1.000) | 1373239 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.464 | 7.456 | (1.000) | 1363331 | 40.0000 | |
| 2 Naphthalene | 128 | 2.405 | 2.402 | (1.002) | 765124 | 21.5974 | 21.5973 |
| 3 2-Methylnaphthalene | 141 | 2.811 | 2.808 | (1.171) | 446439 | 24.4108 | 24.4108 |
| 4 1-Methylnaphthalene | 142 | 2.864 | 2.861 | (1.194) | 450855 | 22.1381 | 22.1381 |
| 5 Acenaphthylene | 152 | 3.334 | 3.332 | (0.975) | 754514 | 21.3067 | 21.3066 |
| 7 Acenaphthene | 154 | 3.441 | 3.433 | (1.006) | 433440 | 21.1828 | 21.1827 |
| 9 Fluorene | 166 | 3.751 | 3.743 | (1.097) | 556408 | 21.5449 | 21.5448 |
| 11 Phenanthrene | 178 | 4.376 | 4.368 | (1.004) | 756904 | 21.0566 | 21.0566 |
| 12 Anthracene | 178 | 4.408 | 4.400 | (1.011) | 745923 | 21.3632 | 21.3632 |
| 13 Carbazole | 167 | 4.552 | 4.555 | (1.044) | 499181 | 16.1953 | 16.1952(M) |
| 15 Fluoranthene | 202 | 5.231 | 5.228 | (1.200) | 810723 | 22.5570 | 22.5570 |
| 16 Pyrene | 202 | 5.396 | 5.394 | (0.847) | 809912 | 20.1075 | 20.1075 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL ( ug/l) |
|---|---|---|---|---|---|---|---|
| 17 Benzo(a)anthracene | 228 | 6.363 | 6.355 | (0.998) | 857818 | 20.9204 | 20.9204 |
| 19 Chrysene | 228 | 6.390 | 6.387 | (1.002) | 742781 | 20.2547 | 20.2547 |
| 20 Benzo(b)fluoranthene | 252 | 7.186 | 7.178 | (0.963) | 827441 | 23.9419 | 23.9419 |
| 21 Benzo(k)fluoranthene | 252 | 7.207 | 7.199 | (0.966) | 670501 | 19.2840 | 19.2839 |
| 22 Benzo(a)pyrene | 252 | 7.410 | 7.408 | (0.993) | 622627 | 19.6723 | 19.6722 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.190 | 8.177 | (1.097) | 613332 | 22.5881 | 22.5880(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.206 | 8.193 | (1.099) | 678184 | 23.9679 | 23.9678 |
| 26 Benzo(g,h,i)perylene | 276 | 8.399 | 8.385 | (1.125) | 620086 | 21.4710 | 21.4710 |

QC Flag Legend

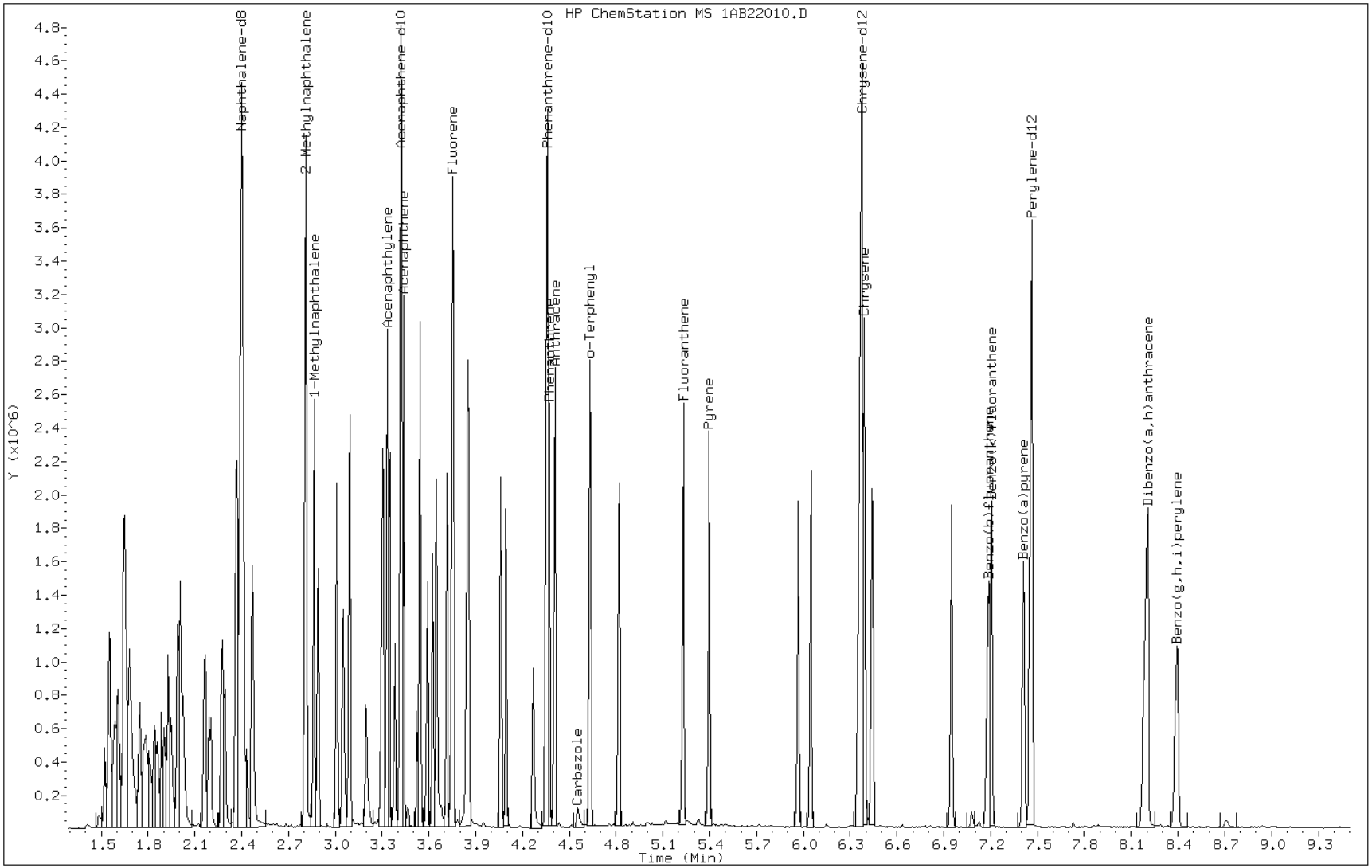
M - Compound response manually integrated.

Data File: 1AB22010.D

Date: 22-FEB-2013 12:48

Client ID: Instrument: BSMA5973.i

Sample Info: ICV-1448440 Operator: SCC



Manual Integration Report

Data File: 1AB22010.D
Inj. Date and Time: 22-FEB-2013 12:48
Instrument ID: BSMA5973.i
Client ID:
Compound: 13 Carbazole
CAS #: 86-74-8
Report Date: 02/22/2013

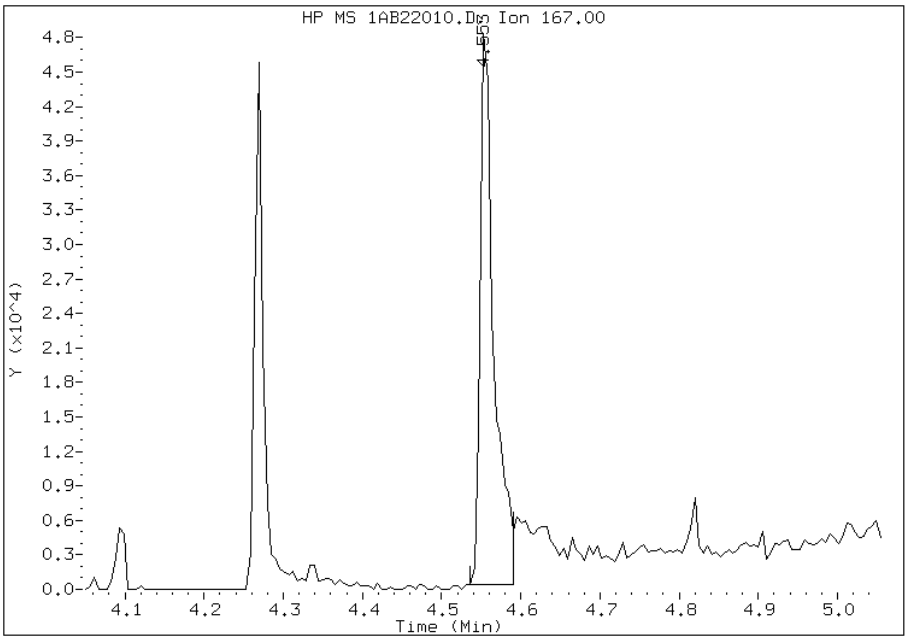
Processing Integration Results

RT: 4.55

Response: 57208

Amount: 2

Conc: 2



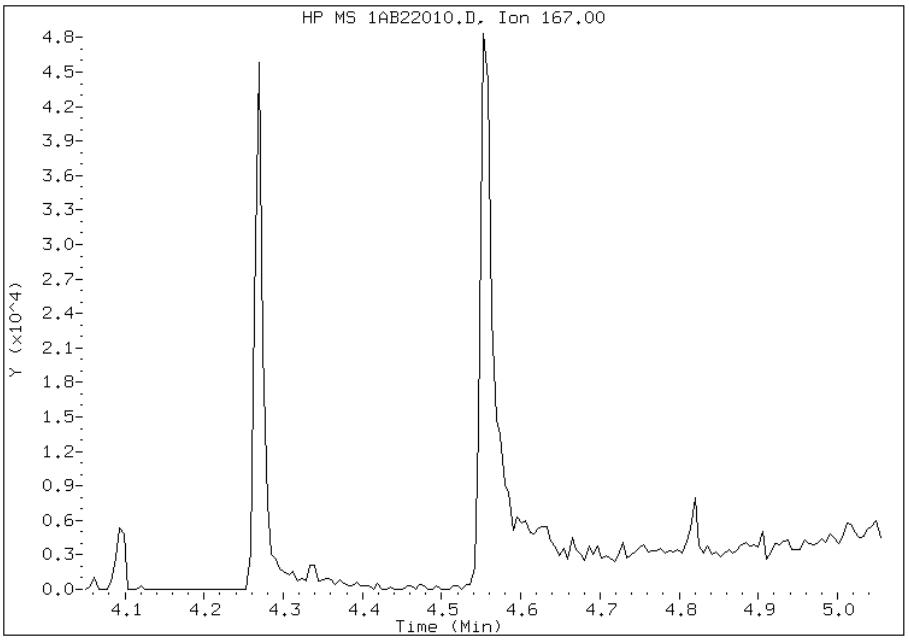

Manual Integration Results

RT: 4.55

Response: 499181

Amount: 16

Conc: 16




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 13:04
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 1AB22010.D
Inj. Date and Time: 22-FEB-2013 12:48
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

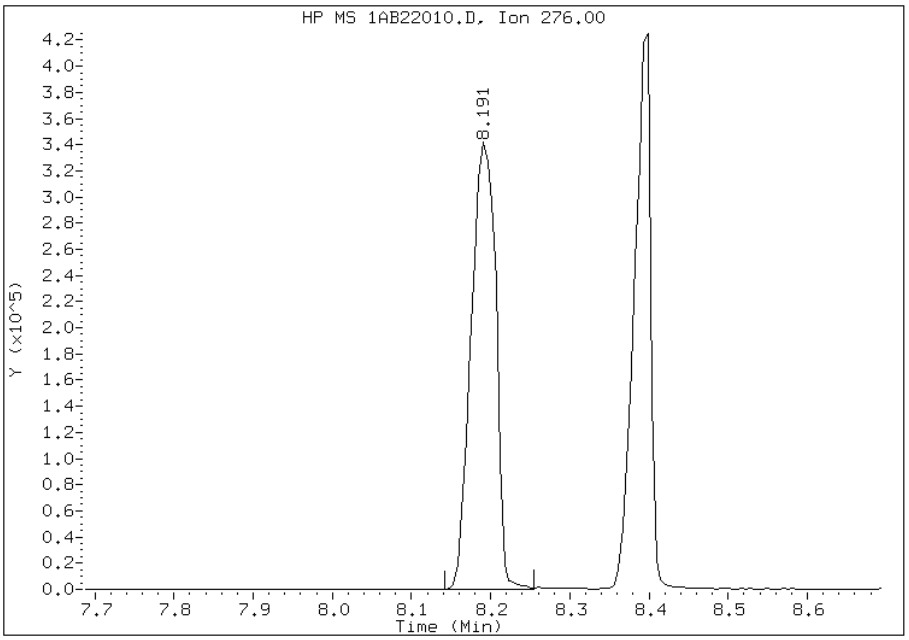
Processing Integration Results

RT: 8.19

Response: 733813

Amount: 27

Conc: 27



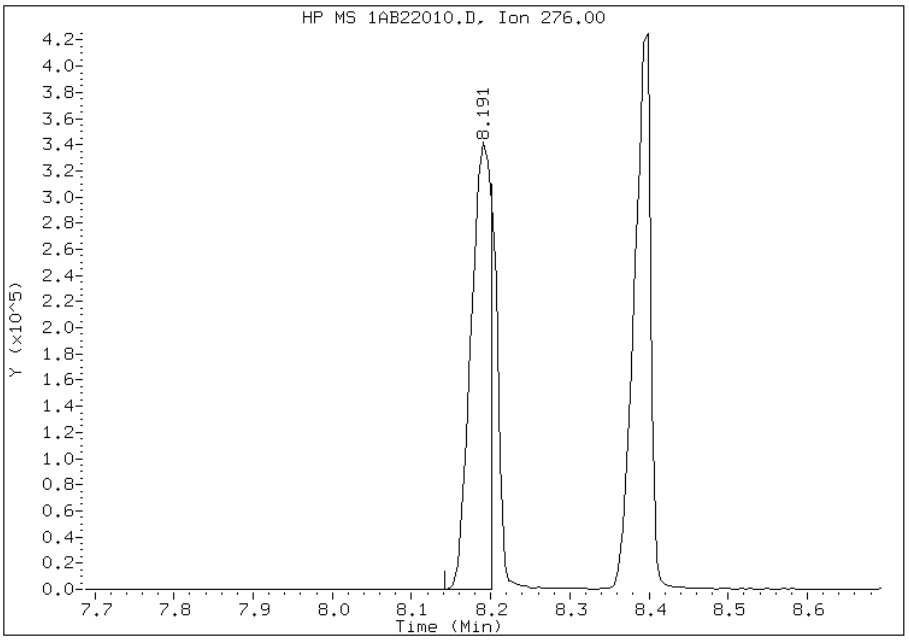

Manual Integration Results

RT: 8.19

Response: 613332

Amount: 23

Conc: 23




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 13:02
Manual Integration Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Lab Sample ID: ICV 660-134776/10 Calibration Date: 02/22/2013 14:06

Instrument ID: BSMC5973 Calib Start Date: 02/22/2013 11:57

GC Column: DB-5MS ID: 250.00(um) Calib End Date: 02/22/2013 13:48

Lab File ID: 1CB22010.D Conc. Units: ug/Kg

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | Ave | 1.041 | 0.9304 | 0.0000 | 17900 | 20000 | -10.7 | 35.0 |
| 2-Methylnaphthalene | Ave | 0.6946 | 0.6168 | 0.0000 | 17800 | 20000 | -11.2 | 35.0 |
| 1-Methylnaphthalene | Ave | 0.6326 | 0.5884 | 0.0000 | 18600 | 20000 | -7.0 | 35.0 |
| Acenaphthylene | Ave | 1.613 | 1.474 | 0.0000 | 18300 | 20000 | -8.6 | 35.0 |
| Acenaphthene | Ave | 1.002 | 0.9523 | 0.0000 | 19000 | 20000 | -5.0 | 35.0 |
| Fluorene | Ave | 1.268 | 1.140 | 0.0000 | 18000 | 20000 | -10.1 | 35.0 |
| Phenanthrene | Ave | 1.157 | 0.9494 | 0.0000 | 16400 | 20000 | -17.9 | 35.0 |
| Anthracene | Ave | 1.131 | 0.9716 | 0.0000 | 17200 | 20000 | -14.1 | 35.0 |
| Carbazole | Ave | 1.006 | 0.8745 | 0.0000 | 17400 | 20000 | -13.0 | 35.0 |
| Fluoranthene | Ave | 1.267 | 1.118 | 0.0000 | 17700 | 20000 | -11.7 | 35.0 |
| Pyrene | Ave | 1.075 | 0.8809 | 0.0000 | 16400 | 20000 | -18.1 | 35.0 |
| Benzo[a]anthracene | Ave | 1.154 | 0.9788 | 0.0000 | 17000 | 20000 | -15.2 | 35.0 |
| Chrysene | Ave | 1.155 | 0.9170 | 0.0000 | 15900 | 20000 | -20.6 | 35.0 |
| Benzo[b]fluoranthene | Ave | 1.045 | 0.9777 | 0.0000 | 18700 | 20000 | -6.5 | 35.0 |
| Benzo[k]fluoranthene | Ave | 1.072 | 0.8826 | 0.0000 | 16500 | 20000 | -17.7 | 35.0 |
| Benzo[a]pyrene | Ave | 1.015 | 0.7948 | 0.0000 | 15700 | 20000 | -21.7 | 35.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 0.9552 | 0.8384 | 0.0000 | 17600 | 20000 | -12.2 | 35.0 |
| Dibenz(a,h)anthracene | Ave | 0.9343 | 0.8876 | 0.0000 | 19000 | 20000 | -5.0 | 35.0 |
| Benzo[g,h,i]perylene | Ave | 0.999 | 0.8655 | 0.0000 | 17300 | 20000 | -13.4 | 35.0 |
| o-Terphenyl | Ave | 0.6039 | 0.4936 | 0.0000 | 16300 | 20000 | -18.3 | 35.0 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22010.D
Lab Smp Id: ICV-1448440
Inj Date : 22-FEB-2013 14:06
Operator : SCC Inst ID: BSMC5973.i
Smp Info : ICV-1448440
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula: Amt * DF * 1/Vi * Vt/Vo * A * B * C * D * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Vo | 1000.000 | Sample Volume |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | mL to L conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1= if no con |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL ( ug/l) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1383069 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1075067 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2141313 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 528461 | 16.3458 | 16.3457 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2766374 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 3034368 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 643385 | 17.8686 | 17.8685 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 426527 | 17.7587 | 17.7586 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 406896 | 18.6013 | 18.6013 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 792099 | 18.2750 | 18.2749 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 511893 | 19.0010 | 19.0010 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 612561 | 17.9790 | 17.9790 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 1016506 | 16.4172 | 16.4171 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 1040221 | 17.1782 | 17.1781 |
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 936321 | 17.3944 | 17.3943 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 1196804 | 17.6502 | 17.6501 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 1218381 | 16.3888 | 16.3887 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL ( ug/l) |
|---|---|---|---|---|---|---|---|
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 1353867 | 16.9566 | 16.9566 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 1268380 | 15.8740 | 15.8740 |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.657 | (0.960) | 1483299 | 18.7051 | 18.7050 |
| 21 Benzo(k)fluoranthene | 252 | 8.680 | 8.680 | (0.963) | 1339047 | 16.4606 | 16.4605 |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 1205817 | 15.6548 | 15.6547 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.239 | (1.135) | 1271997 | 17.5546 | 17.5546(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.257 | (1.137) | 1346652 | 19.0003 | 19.0002 |
| 26 Benzo(g,h,i)perylene | 276 | 10.597 | 10.610 | (1.175) | 1313135 | 17.3240 | 17.3240 |

QC Flag Legend

M - Compound response manually integrated.

Data File: 1CB22010.D

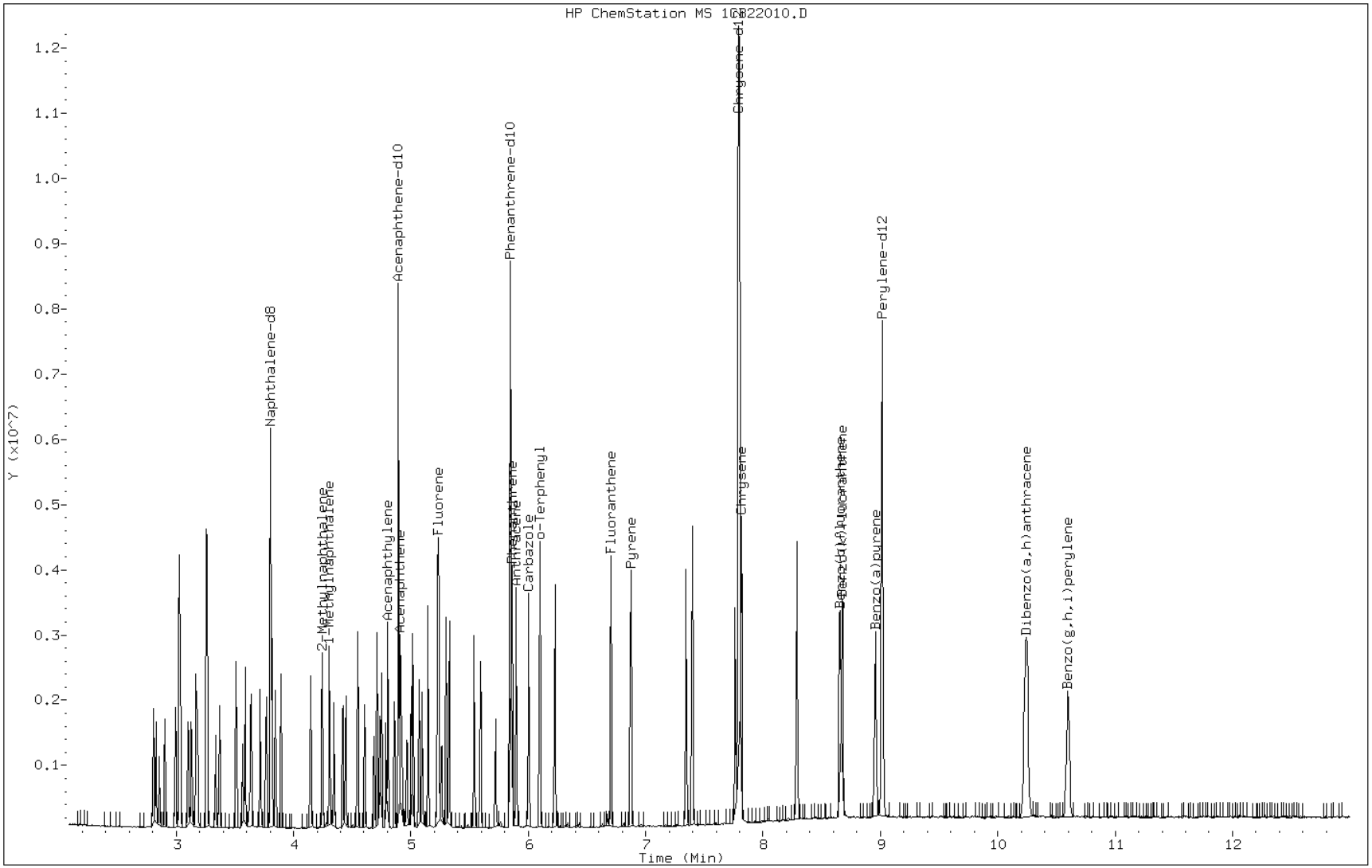
Date: 22-FEB-2013 14:06

Client ID:

Instrument: BSMC5973.i

Sample Info: ICV-1448440

Operator: SCC



Manual Integration Report

Data File: 1CB22010.D
Inj. Date and Time: 22-FEB-2013 14:06
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/22/2013

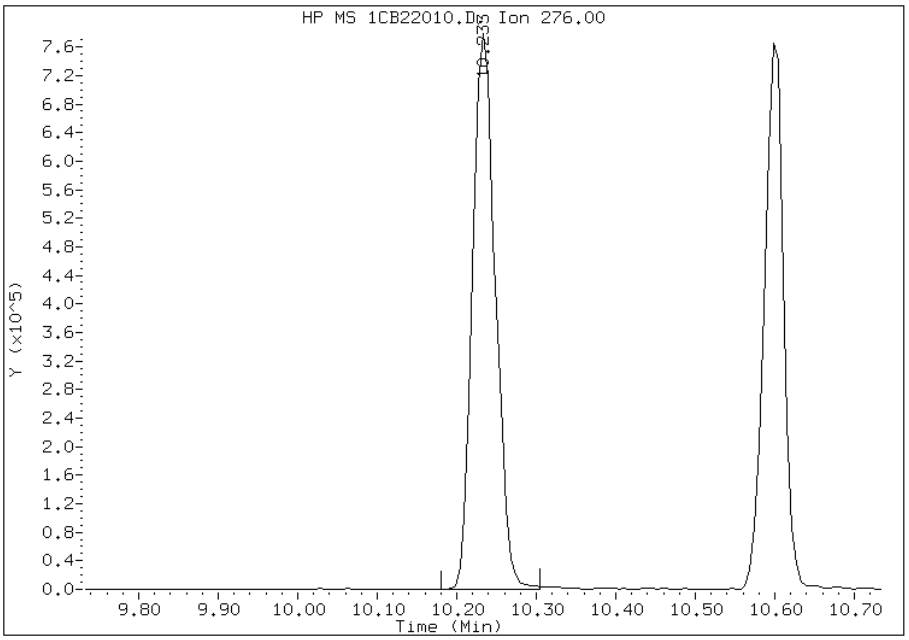
Processing Integration Results

RT: 10.23

Response: 1550656

Amount: 21

Conc: 21



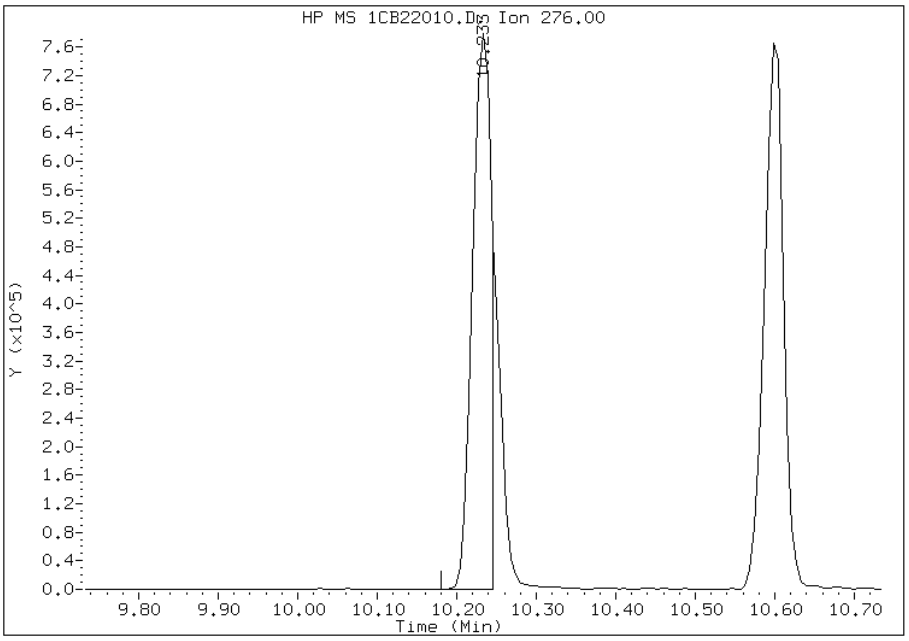

Manual Integration Results

RT: 10.23

Response: 1271997

Amount: 18

Conc: 18




Manually Integrated By: cantins
Modification Date: 22-Feb-2013 14:21
Manual Integration Reason: Split Peak

TestAmerica Laboratories

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\1AB22002.D
Lab Smp Id: DFTPP  Client Smp ID: DFTPP
Inj Date : 22-FEB-2013 10:42
Operator : SCC  Inst ID: BSMA5973.i
Smp Info : DFTPP-1465456
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213.b\a-dftpp198.m
Meth Date : 09-Jan-2013 15:25 cantins  Quant Type: ESTD
Cal Date :  Cal File:
Als bottle: 2  QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE  Compound Sublist: all.sub
Target Version: 4.14  Sample Matrix: None
Processing Host: TAM1000

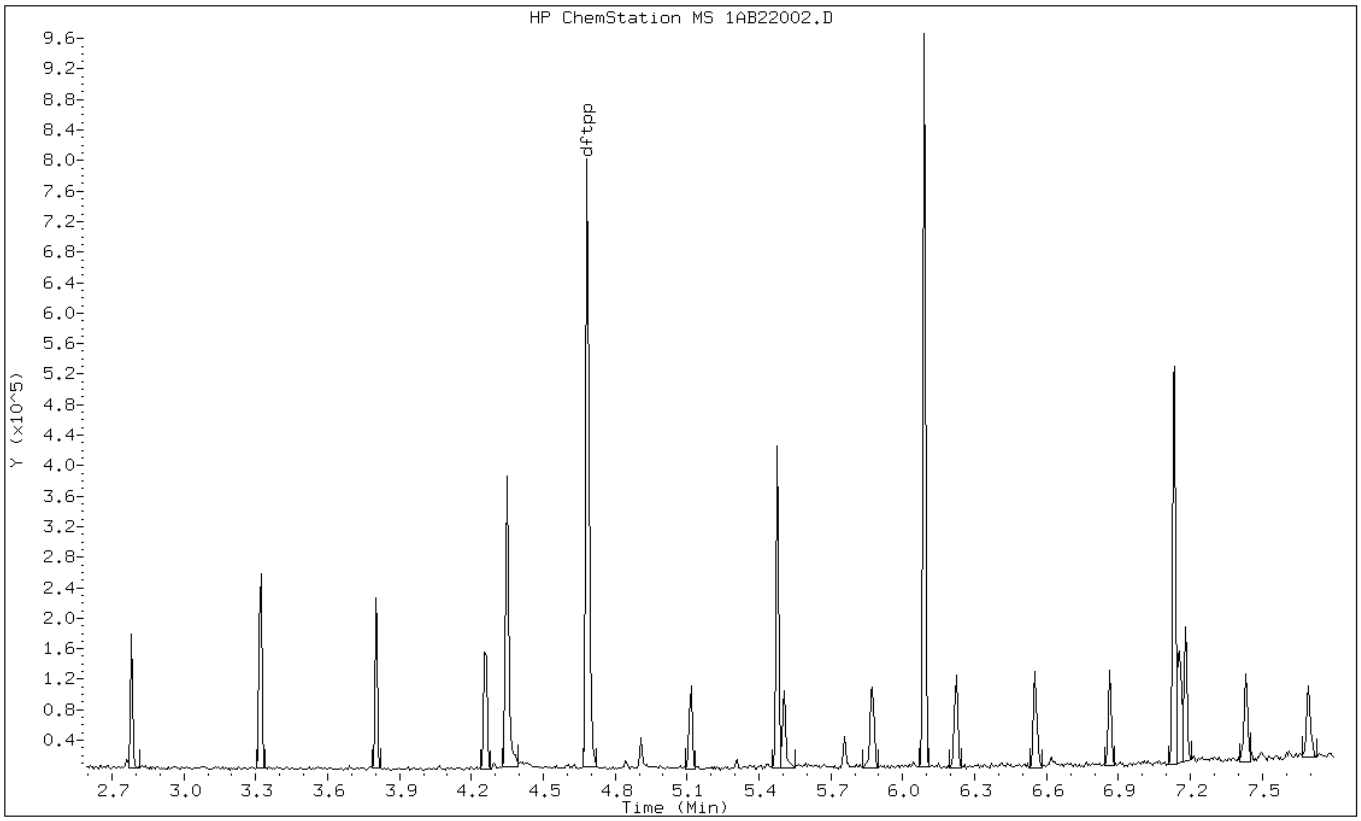
| RT | EXP RT | DLT RT | MASS | RESPONSE | CONCENTRATIONS ON-COL ( ug/L) | CONCENTRATIONS FINAL ( ug/L) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|---|
| 1 dftpp | | | | | | CAS #: 5074-71-5 | | |
| 4.683 | 4.928 | -0.245 | 198 | 76440 | | | 50.00- 0.00 | 100.00 |
| 4.683 | 4.928 | -0.245 | 51 | 48552 | | | 10.00- 80.00 | 63.52 |
| 4.683 | 4.928 | -0.245 | 68 | 695 | | | 0.00- 2.00 | 1.70 |
| 4.683 | 4.928 | -0.245 | 69 | 40984 | | | 0.00- 0.00 | 53.62 |
| 4.683 | 4.928 | -0.245 | 70 | 313 | | | 0.00- 2.00 | 0.76 |
| 4.683 | 4.928 | -0.245 | 127 | 33880 | | | 10.00- 80.00 | 44.32 |
| 4.683 | 4.928 | -0.245 | 197 | 0 | 0.0 | 0.0 | 0.00- 2.00 | 0.00 |
| 4.683 | 4.928 | -0.245 | 442 | 51640 | | | 50.00- 0.00 | 67.56 |
| 4.683 | 4.928 | -0.245 | 199 | 4343 | | | 5.00- 9.00 | 5.68 |
| 4.683 | 4.928 | -0.245 | 275 | 19136 | | | 10.00- 60.00 | 25.03 |
| 4.683 | 4.928 | -0.245 | 365 | 2453 | | | 1.00- 0.00 | 3.21 |
| 4.683 | 4.928 | -0.245 | 441 | 6484 | | | 0.01- 99.99 | 79.28 |
| 4.683 | 4.928 | -0.245 | 443 | 8179 | | | 15.00- 24.00 | 15.84 |

Data File: 1AB22002.D

Date: 22-FEB-2013 10:42

Client ID: DFTPP | Instrument: BSMA5973.i

Sample Info: DFTPP-1465456 | Operator: SCC



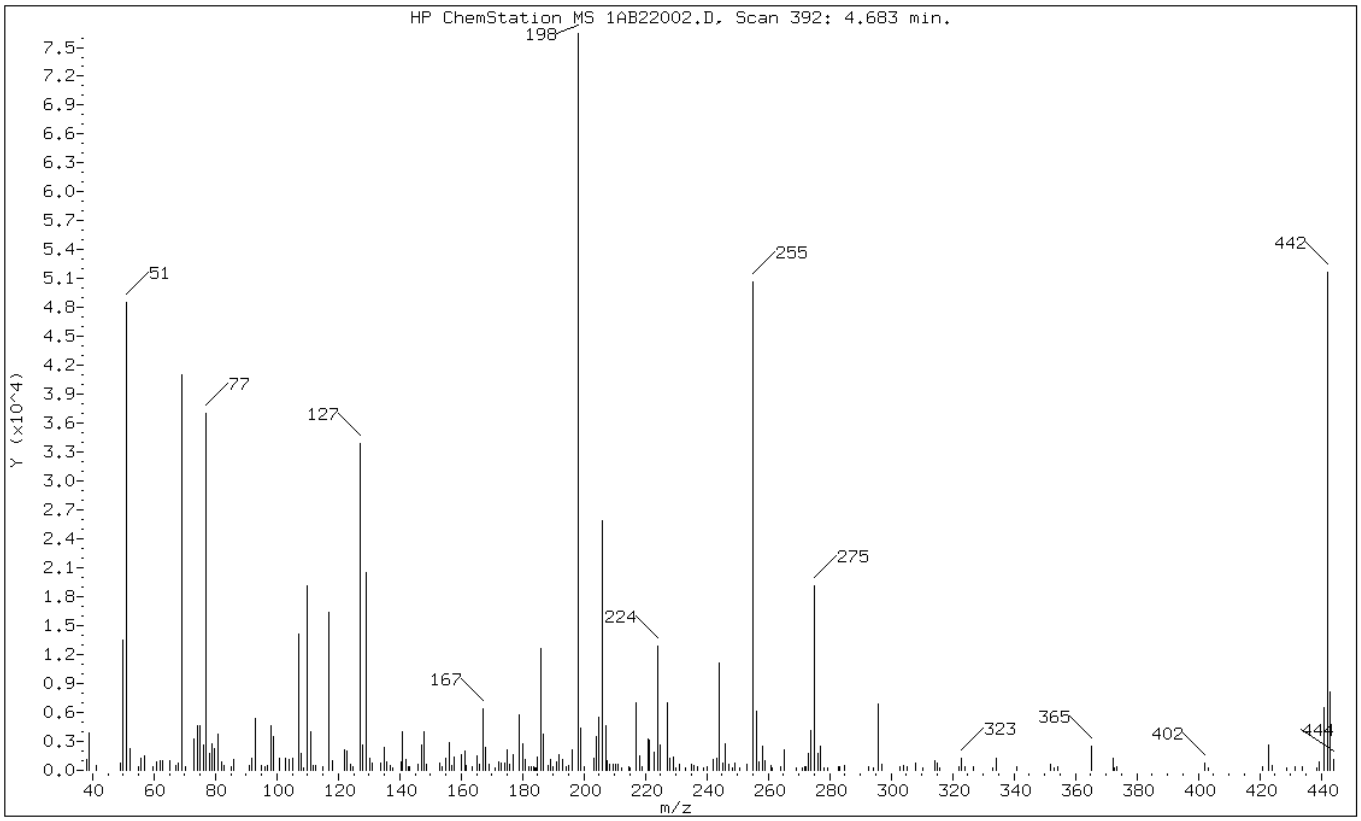
Data File: 1AB22002.D

Date: 22-FEB-2013 10:42

Client ID: DFTPP  Instrument: BSMA5973.i

Sample Info: DFTPP-1465456  Operator: SCC

1 dftpp




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 198 | Base Peak, 100% relative abundance | 100.00 |
| 51 | 10.00 - 80.00% of mass 198 | 63.52 |
| 68 | Less than 2.00% of mass 69 | 0.91 ( 1.70) |
| 69 | Mass 69 relative abundance | 53.62 |
| 70 | Less than 2.00% of mass 69 | 0.41 ( 0.76) |
| 127 | 10.00 - 80.00% of mass 198 | 44.32 |
| 197 | Less than 2.00% of mass 198 | 0.00 |
| 442 | Greater than 50.00% of mass 198 | 67.56 |
| 199 | 5.00 - 9.00% of mass 198 | 5.68 |
| 275 | 10.00 - 60.00% of mass 198 | 25.03 |
| 365 | Greater than 1.00% of mass 198 | 3.21 |
| 441 | Present, but less than mass 443 | 8.48 |
| 443 | 15.00 - 24.00% of mass 442 | 10.70 ( 15.84) |

Data File: 1AB22002.D

Date: 22-FEB-2013 10:42

Client ID: DFTPP Instrument: BSMA5973.i

Sample Info: DFTPP-1465456 Operator: SCC

Data File: \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22002.D
Spectrum: HP ChemStation MS 1AB22002.D, Scan 392: 4.683 min.
Location of Maximum: 198.00
Number of points: 228

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 38.10 | 1153 | 127.00 | 33880 | 194.20 | 434 | 269.20 | 256 |
| 39.00 | 3901 | 128.00 | 2620 | 195.20 | 479 | 271.10 | 267 |
| 41.10 | 559 | 129.00 | 20472 | 196.00 | 2162 | 271.80 | 321 |
| 49.00 | 742 | 130.10 | 1229 | 198.00 | 76440 | 272.30 | 357 |
| 50.00 | 13495 | 131.10 | 707 | 198.90 | 4343 | 273.00 | 1788 |
| 51.10 | 48552 | 134.00 | 733 | 200.10 | 313 | 274.00 | 4170 |
| 52.10 | 2289 | 135.00 | 2429 | 203.10 | 1213 | 275.00 | 19136 |
| 55.10 | 393 | 135.90 | 826 | 204.10 | 3455 | 276.10 | 1704 |
| 55.90 | 1274 | 137.00 | 527 | 205.00 | 5534 | 277.10 | 2520 |
| 57.00 | 1489 | 137.80 | 258 | 206.00 | 25944 | 278.30 | 253 |
| 59.70 | 351 | 140.30 | 859 | 207.10 | 4571 | 279.20 | 254 |
| 61.00 | 921 | 141.00 | 3943 | 207.70 | 997 | 282.80 | 333 |
| 62.00 | 978 | 142.10 | 1176 | 208.20 | 617 | 283.10 | 392 |
| 63.00 | 1049 | 142.90 | 410 | 209.40 | 639 | 285.00 | 539 |
| 65.00 | 989 | 143.10 | 410 | 210.20 | 629 | 292.80 | 317 |
| 67.00 | 554 | 146.00 | 603 | 211.00 | 591 | 294.40 | 260 |
| 67.80 | 695 | 147.10 | 2625 | 212.10 | 283 | 296.00 | 6928 |
| 69.00 | 40984 | 148.00 | 3950 | 214.50 | 412 | 297.10 | 604 |
| 70.10 | 313 | 148.80 | 676 | 215.20 | 311 | 303.00 | 324 |
| 73.10 | 3244 | 152.90 | 760 | 217.00 | 6968 | 304.10 | 484 |
| 74.00 | 4690 | 153.80 | 361 | 218.10 | 1521 | 305.10 | 409 |
| 75.00 | 4581 | 155.00 | 1227 | 218.80 | 315 | 308.10 | 725 |
| 76.10 | 2591 | 156.10 | 2898 | 221.00 | 3248 | 310.20 | 250 |
| 77.10 | 37072 | 157.00 | 445 | 221.30 | 3132 | 314.10 | 976 |
| 78.10 | 1749 | 157.90 | 1331 | 223.00 | 1909 | 315.20 | 810 |
| 78.90 | 2758 | 160.00 | 1611 | 224.10 | 12886 | 316.00 | 275 |
| 79.80 | 2228 | 161.10 | 2037 | 225.00 | 2626 | 322.00 | 374 |
| 81.00 | 3724 | 161.80 | 525 | 227.00 | 7049 | 323.00 | 1296 |
| 82.10 | 889 | 163.80 | 323 | 227.90 | 1242 | 324.20 | 381 |
| 83.00 | 487 | 165.00 | 1535 | 229.00 | 1425 | 326.80 | 328 |
| 85.10 | 368 | 166.10 | 619 | 230.10 | 312 | 333.00 | 311 |
| 86.00 | 1135 | 167.00 | 6330 | 231.20 | 601 | 334.10 | 1292 |
| 91.00 | 478 | 168.10 | 2348 | 232.90 | 260 | 340.90 | 433 |
| 92.00 | 1243 | 169.20 | 579 | 235.00 | 643 | 352.00 | 686 |
| 93.00 | 5320 | 171.10 | 295 | 236.00 | 555 | 353.20 | 307 |
| 95.00 | 452 | 172.10 | 909 | 236.80 | 320 | 354.20 | 418 |
| 96.30 | 341 | 173.00 | 778 | 239.10 | 304 | 365.10 | 2453 |
| 97.10 | 462 | 174.10 | 770 | 240.10 | 385 | 372.30 | 1226 |
| 98.00 | 4672 | 175.00 | 2158 | 242.00 | 1100 | 372.80 | 254 |
| 99.00 | 3560 | 175.80 | 583 | 243.10 | 1259 | 373.40 | 339 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 101.00 | 1215 | 177.00 | 1626 | 244.10 | 11075 | 402.00 | 723 |
| 103.00 | 1200 | 179.00 | 5738 | 245.20 | 781 | 403.30 | 273 |
| 104.10 | 1188 | 180.10 | 2793 | 246.10 | 2764 | 421.10 | 397 |
| 105.00 | 1287 | 180.90 | 1134 | 247.00 | 596 | 423.10 | 2660 |
| 107.00 | 14120 | 182.10 | 437 | 248.30 | 297 | 423.90 | 559 |
| 107.90 | 1762 | 182.90 | 346 | 249.30 | 777 | 428.80 | 261 |
| 108.80 | 304 | 183.70 | 418 | 250.90 | 273 | 431.40 | 365 |
| 110.00 | 19200 | 184.10 | 287 | 253.20 | 565 | 433.80 | 325 |
| 111.00 | 3941 | 184.30 | 289 | 255.10 | 50672 | 438.60 | 291 |
| 112.00 | 530 | 184.90 | 1381 | 256.10 | 6117 | 439.20 | 886 |
| 112.60 | 470 | 186.00 | 12633 | 257.10 | 937 | 441.00 | 6484 |
| 115.10 | 321 | 186.90 | 3785 | 258.10 | 2516 | 442.00 | 51640 |
| 117.00 | 16392 | 188.20 | 480 | 259.00 | 942 | 443.00 | 8179 |
| 118.10 | 945 | 189.00 | 1158 | 260.90 | 490 | 444.10 | 1146 |
| 122.00 | 2165 | 190.00 | 413 | 261.30 | 276 | | |
| 122.90 | 1978 | 190.90 | 838 | 263.90 | 325 | | |
| 123.90 | 580 | 192.00 | 1684 | 264.20 | 322 | | |
| 124.80 | 382 | 193.10 | 1067 | 265.20 | 2067 | | |

TestAmerica Laboratories

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\1CB22002.D
Lab Smp Id: DFTPP  Client Smp ID: DFTPP
Inj Date : 22-FEB-2013 11:41
Operator : SCC  Inst ID: BSMC5973.i
Smp Info : DFTPP-1490607
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213.b\c-dftpp198.m
Meth Date : 04-Feb-2013 16:33 cantins  Quant Type: ESTD
Cal Date :  Cal File:
Als bottle: 2  QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE  Compound Sublist: all.sub
Target Version: 4.14  Sample Matrix: None
Processing Host: TAM1000

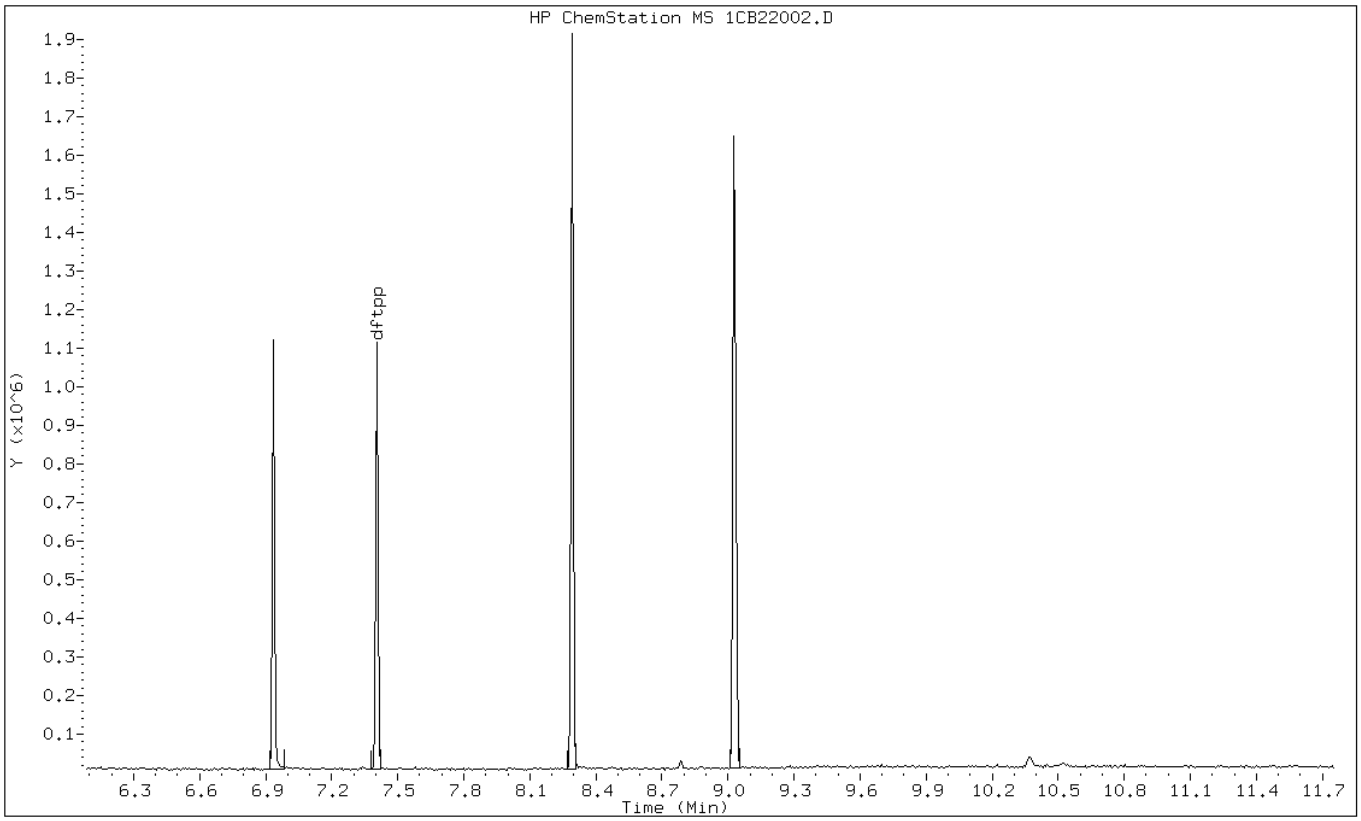
| RT | EXP RT | DLT RT | MASS | RESPONSE | CONCENTRATIONS ON-COL ( ug/L) | FINAL ( ug/L) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|---|
| 1 dftpp | | | | | | CAS #: 5074-71-5 | | |
| 7.404 | 7.469 | -0.065 | 198 | 73440 | | | 50.00- 0.00 | 100.00 |
| 7.404 | 7.469 | -0.065 | 51 | 31096 | | | 10.00- 80.00 | 42.34 |
| 7.404 | 7.469 | -0.065 | 68 | 471 | | | 0.00- 2.00 | 1.08 |
| 7.404 | 7.469 | -0.065 | 69 | 43512 | | | 0.00- 0.00 | 59.25 |
| 7.404 | 7.469 | -0.065 | 70 | 192 | | | 0.00- 2.00 | 0.44 |
| 7.404 | 7.469 | -0.065 | 127 | 39368 | | | 10.00- 80.00 | 53.61 |
| 7.404 | 7.469 | -0.065 | 197 | 733 | | | 0.00- 2.00 | 1.00 |
| 7.404 | 7.469 | -0.065 | 442 | 38240 | | | 50.00- 0.00 | 52.07 |
| 7.404 | 7.469 | -0.065 | 199 | 6330 | | | 5.00- 9.00 | 8.62 |
| 7.404 | 7.469 | -0.065 | 275 | 14104 | | | 10.00- 60.00 | 19.20 |
| 7.404 | 7.469 | -0.065 | 365 | 1462 | | | 1.00- 0.00 | 1.99 |
| 7.404 | 7.469 | -0.065 | 441 | 5496 | | | 0.01- 99.99 | 86.06 |
| 7.404 | 7.469 | -0.065 | 443 | 6386 | | | 15.00- 24.00 | 16.70 |

Data File: 1CB22002.D

Date: 22-FEB-2013 11:41

Client ID: DFTPP | Instrument: BSMC5973.i

Sample Info: DFTPP-1490607 | Operator: SCC



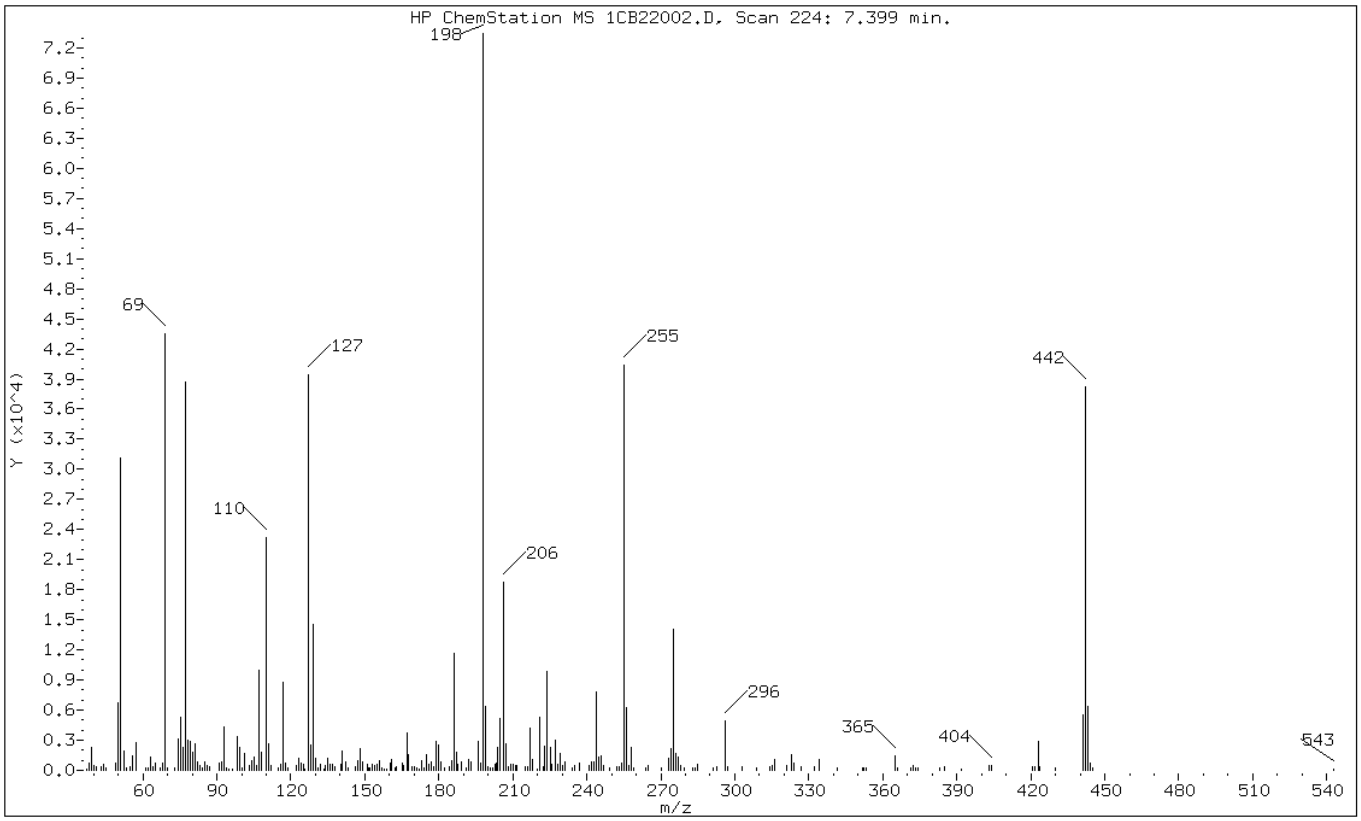
Data File: 1CB22002.D

Date: 22-FEB-2013 11:41

Client ID: DFTPP  Instrument: BSMC5973.i

Sample Info: DFTPP-1490607  Operator: SCC

1 dftpp




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 198 | Base Peak, 100% relative abundance | 100.00 |
| 51 | 10.00 - 80.00% of mass 198 | 42.34 |
| 68 | Less than 2.00% of mass 69 | 0.64 ( 1.08) |
| 69 | Mass 69 relative abundance | 59.25 |
| 70 | Less than 2.00% of mass 69 | 0.26 ( 0.44) |
| 127 | 10.00 - 80.00% of mass 198 | 53.61 |
| 197 | Less than 2.00% of mass 198 | 1.00 |
| 442 | Greater than 50.00% of mass 198 | 52.07 |
| 199 | 5.00 - 9.00% of mass 198 | 8.62 |
| 275 | 10.00 - 60.00% of mass 198 | 19.20 |
| 365 | Greater than 1.00% of mass 198 | 1.99 |
| 441 | Present, but less than mass 443 | 7.48 |
| 443 | 15.00 - 24.00% of mass 442 | 8.70 ( 16.70) |

Data File: 1CB22002.D

Date: 22-FEB-2013 11:41

Client ID: DFTPP  Instrument: BSMC5973.i

Sample Info: DFTPP-1490607  Operator: SCC

Data File: \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22002.D
Spectrum: HP ChemStation MS 1CB22002.D, Scan 224: 7.399 min.
Location of Maximum: 198.00
Number of points: 238

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 37.20 | 176 | 115.10 | 214 | 181.00 | 901 | 256.00 | 6303 |
| 38.10 | 755 | 116.00 | 605 | 182.10 | 220 | 256.90 | 429 |
| 39.10 | 2229 | 117.00 | 8730 | 184.00 | 307 | 257.90 | 2280 |
| 40.10 | 531 | 117.90 | 749 | 185.10 | 1015 | 258.90 | 258 |
| 41.10 | 318 | 119.00 | 225 | 186.10 | 11683 | 263.90 | 210 |
| 42.90 | 335 | 122.00 | 424 | 187.10 | 1756 | 265.00 | 509 |
| 44.00 | 648 | 123.00 | 1147 | 187.90 | 552 | 270.00 | 205 |
| 45.20 | 211 | 124.10 | 749 | 188.90 | 869 | 273.00 | 1169 |
| 49.10 | 738 | 125.10 | 635 | 191.00 | 237 | 274.00 | 2122 |
| 50.10 | 6757 | 125.80 | 170 | 192.00 | 1104 | 275.00 | 14104 |
| 51.10 | 31096 | 127.10 | 39368 | 193.10 | 865 | 275.90 | 1652 |
| 52.10 | 1930 | 128.10 | 2564 | 196.00 | 2872 | 277.00 | 1264 |
| 53.20 | 277 | 129.00 | 14531 | 196.90 | 733 | 277.90 | 505 |
| 55.00 | 369 | 129.80 | 1177 | 198.00 | 73440 | 279.70 | 194 |
| 56.00 | 1418 | 131.00 | 276 | 199.00 | 6330 | 283.00 | 190 |
| 57.00 | 2762 | 132.10 | 570 | 199.90 | 373 | 283.80 | 183 |
| 61.00 | 226 | 133.20 | 171 | 201.00 | 298 | 285.00 | 556 |
| 62.00 | 292 | 134.10 | 490 | 201.60 | 269 | 291.10 | 200 |
| 63.20 | 1348 | 135.10 | 1144 | 202.90 | 583 | 292.90 | 373 |
| 64.00 | 333 | 136.10 | 602 | 203.30 | 687 | 296.00 | 4941 |
| 65.10 | 737 | 137.00 | 557 | 204.00 | 2340 | 297.00 | 339 |
| 66.90 | 287 | 137.80 | 323 | 205.00 | 5123 | 302.90 | 397 |
| 67.80 | 471 | 140.10 | 644 | 206.10 | 18696 | 308.90 | 282 |
| 68.20 | 663 | 141.00 | 1972 | 207.10 | 2615 | 314.00 | 365 |
| 69.10 | 43512 | 142.00 | 851 | 208.00 | 418 | 315.10 | 502 |
| 70.00 | 192 | 143.10 | 211 | 209.00 | 555 | 316.10 | 1036 |
| 73.10 | 186 | 146.10 | 337 | 210.30 | 624 | 321.00 | 472 |
| 74.10 | 3155 | 147.00 | 919 | 210.90 | 494 | 323.00 | 1518 |
| 75.10 | 5232 | 148.00 | 2159 | 211.60 | 459 | 324.00 | 680 |
| 76.10 | 2236 | 149.00 | 790 | 214.90 | 324 | 327.10 | 397 |
| 77.10 | 38720 | 151.00 | 613 | 215.80 | 325 | 332.10 | 308 |
| 78.10 | 3056 | 151.70 | 298 | 217.00 | 4236 | 334.20 | 1026 |
| 79.10 | 2911 | 152.20 | 189 | 218.00 | 1088 | 341.30 | 184 |
| 80.00 | 1751 | 153.00 | 575 | 220.00 | 170 | 351.80 | 221 |
| 81.10 | 2627 | 154.10 | 436 | 221.10 | 5285 | 352.40 | 258 |
| 82.00 | 869 | 155.10 | 587 | 222.20 | 336 | 353.20 | 226 |
| 83.10 | 502 | 156.00 | 912 | 222.80 | 2398 | 364.90 | 1462 |
| 83.90 | 288 | 156.80 | 189 | 224.00 | 9837 | 365.90 | 266 |
| 85.00 | 785 | 158.00 | 151 | 225.10 | 2230 | 371.10 | 209 |
| 86.10 | 533 | 158.90 | 165 | 226.00 | 626 | 372.10 | 462 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 87.10 | 324 | 160.10 | 719 | 227.00 | 3030 | 373.10 | 210 |
| 91.10 | 726 | 160.90 | 1140 | 228.00 | 610 | 374.50 | 233 |
| 91.90 | 792 | 162.10 | 280 | 229.00 | 1664 | 383.20 | 274 |
| 93.10 | 4314 | 162.70 | 420 | 230.00 | 453 | 384.80 | 322 |
| 94.00 | 297 | 165.00 | 758 | 231.00 | 869 | 391.80 | 159 |
| 95.00 | 178 | 165.90 | 506 | 234.00 | 203 | 402.90 | 522 |
| 96.10 | 155 | 167.00 | 3698 | 234.90 | 491 | 404.10 | 524 |
| 98.10 | 3307 | 167.80 | 1598 | 236.90 | 687 | 420.90 | 334 |
| 99.10 | 2331 | 169.10 | 332 | 240.80 | 432 | 421.80 | 348 |
| 100.00 | 203 | 170.20 | 321 | 242.00 | 793 | 423.00 | 2839 |
| 101.00 | 1667 | 171.10 | 292 | 242.90 | 893 | 423.80 | 381 |
| 103.00 | 538 | 171.80 | 156 | 244.00 | 7817 | 430.10 | 181 |
| 104.10 | 935 | 173.20 | 904 | 245.00 | 1351 | 441.00 | 5496 |
| 105.10 | 1280 | 174.10 | 287 | 246.00 | 1390 | 442.00 | 38240 |
| 106.20 | 492 | 175.00 | 1609 | 246.80 | 435 | 443.10 | 6386 |
| 107.00 | 9992 | 176.00 | 544 | 249.00 | 291 | 444.00 | 706 |
| 108.00 | 1788 | 177.10 | 810 | 252.10 | 410 | 444.90 | 181 |
| 110.00 | 23216 | 177.80 | 349 | 252.90 | 317 | 542.80 | 156 |
| 111.10 | 2593 | 179.10 | 2922 | 253.90 | 662 | | |
| 112.10 | 540 | 180.00 | 2572 | 255.00 | 40344 | | |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa
Job No.: 680-87545-1
SDG No.: 68087545-1
Client Sample ID:
Lab Sample ID: MB 660-134699/1-A
Matrix: Solid
Lab File ID: 1AB22025.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 02/21/2013 09:55
Sample wt/vol: 15.33(g)
Date Analyzed: 02/22/2013 16:39
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 134771
Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 98 | U | 98 | 20 |
| 208-96-8 | Acenaphthylene | 39 | U | 39 | 4.9 |
| 120-12-7 | Anthracene | 8.2 | U | 8.2 | 4.1 |
| 56-55-3 | Benzo[a]anthracene | 7.8 | U | 7.8 | 3.8 |
| 50-32-8 | Benzo[a]pyrene | 10 | U | 10 | 5.1 |
| 205-99-2 | Benzo[b]fluoranthene | 12 | U | 12 | 6.0 |
| 191-24-2 | Benzo[g,h,i]perylene | 20 | U | 20 | 4.3 |
| 207-08-9 | Benzo[k]fluoranthene | 7.8 | U | 7.8 | 3.5 |
| 218-01-9 | Chrysene | 8.8 | U | 8.8 | 4.4 |
| 53-70-3 | Dibenz(a,h)anthracene | 20 | U | 20 | 4.0 |
| 206-44-0 | Fluoranthene | 20 | U | 20 | 3.9 |
| 86-73-7 | Fluorene | 20 | U | 20 | 4.0 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 20 | U | 20 | 6.9 |
| 90-12-0 | 1-Methylnaphthalene | 39 | U | 39 | 4.3 |
| 91-57-6 | 2-Methylnaphthalene | 39 | U | 39 | 6.9 |
| 91-20-3 | Naphthalene | 39 | U | 39 | 4.3 |
| 85-01-8 | Phenanthrene | 7.8 | U | 7.8 | 3.8 |
| 129-00-0 | Pyrene | 20 | U | 20 | 3.6 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 73 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22025.D
Lab Smp Id: mb 660-134699/1-a
Inj Date : 22-FEB-2013 16:39
Operator : SCC Inst ID: BSMA5973.i
Smp Info : mb 660-134699/1-a
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 25 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.330 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

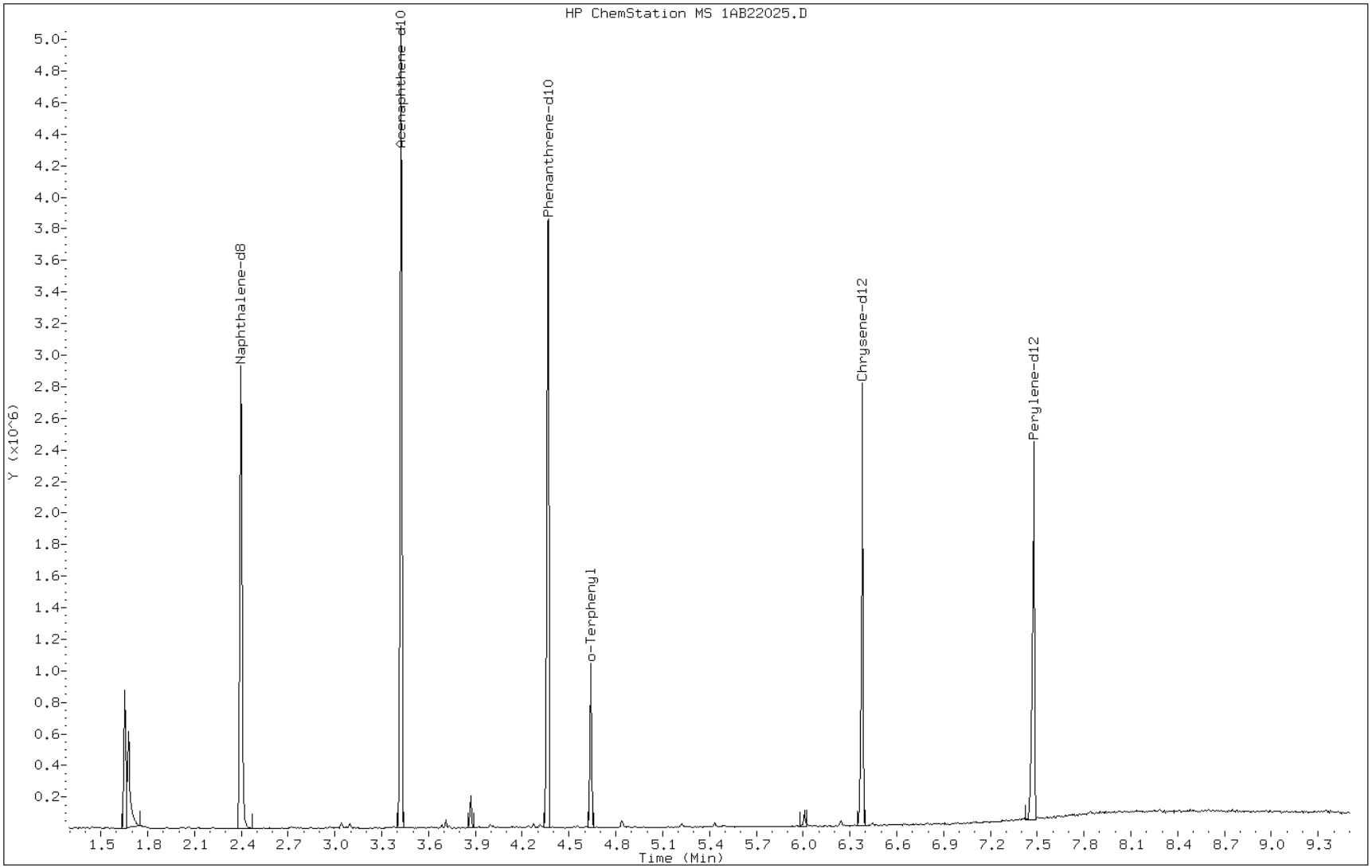
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.396 | 2.397 | (1.000) | 1054254 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.421 | 3.417 | (1.000) | 839973 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.367 | 4.352 | (1.000) | 1221542 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.640 | 4.635 | (1.062) | 129343 | 7.27680 | 474.6768 |
| * 18 Chrysene-d12 | 240 | 6.381 | 6.366 | (1.000) | 764305 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.482 | 7.456 | (1.000) | 915808 | 40.0000 | |

Data File: 1AB22025.D

Date: 22-FEB-2013 16:39

Client ID: Instrument: BSMA5973.i

Sample Info: mb 660-134699/1-a Operator: SCC



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa
Job No.: 680-87545-1
SDG No.: 68087545-1
Client Sample ID:
Lab Sample ID: MB 660-134712/1-A
Matrix: Solid
Lab File ID: 1CB22011.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 02/21/2013 12:14
Sample wt/vol: 15.42(g)
Date Analyzed: 02/22/2013 14:26
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 134776
Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 97 | U | 97 | 19 |
| 208-96-8 | Acenaphthylene | 39 | U | 39 | 4.9 |
| 120-12-7 | Anthracene | 8.2 | U | 8.2 | 4.1 |
| 56-55-3 | Benzo[a]anthracene | 7.8 | U | 7.8 | 3.8 |
| 50-32-8 | Benzo[a]pyrene | 10 | U | 10 | 5.1 |
| 205-99-2 | Benzo[b]fluoranthene | 12 | U | 12 | 5.9 |
| 191-24-2 | Benzo[g,h,i]perylene | 19 | U | 19 | 4.3 |
| 207-08-9 | Benzo[k]fluoranthene | 7.8 | U | 7.8 | 3.5 |
| 218-01-9 | Chrysene | 8.8 | U | 8.8 | 4.4 |
| 53-70-3 | Dibenz(a,h)anthracene | 19 | U | 19 | 4.0 |
| 206-44-0 | Fluoranthene | 19 | U | 19 | 3.9 |
| 86-73-7 | Fluorene | 19 | U | 19 | 4.0 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 19 | U | 19 | 6.9 |
| 90-12-0 | 1-Methylnaphthalene | 39 | U | 39 | 4.3 |
| 91-57-6 | 2-Methylnaphthalene | 39 | U | 39 | 6.9 |
| 91-20-3 | Naphthalene | 39 | U | 39 | 4.3 |
| 85-01-8 | Phenanthrene | 7.8 | U | 7.8 | 3.8 |
| 129-00-0 | Pyrene | 19 | U | 19 | 3.6 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 88 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22011.D
Lab Smp Id: mb 660-134712/1-a
Inj Date : 22-FEB-2013 14:26
Operator : SCC Inst ID: BSMC5973.i
Smp Info : mb 660-134712/1-a
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 11 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.420 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

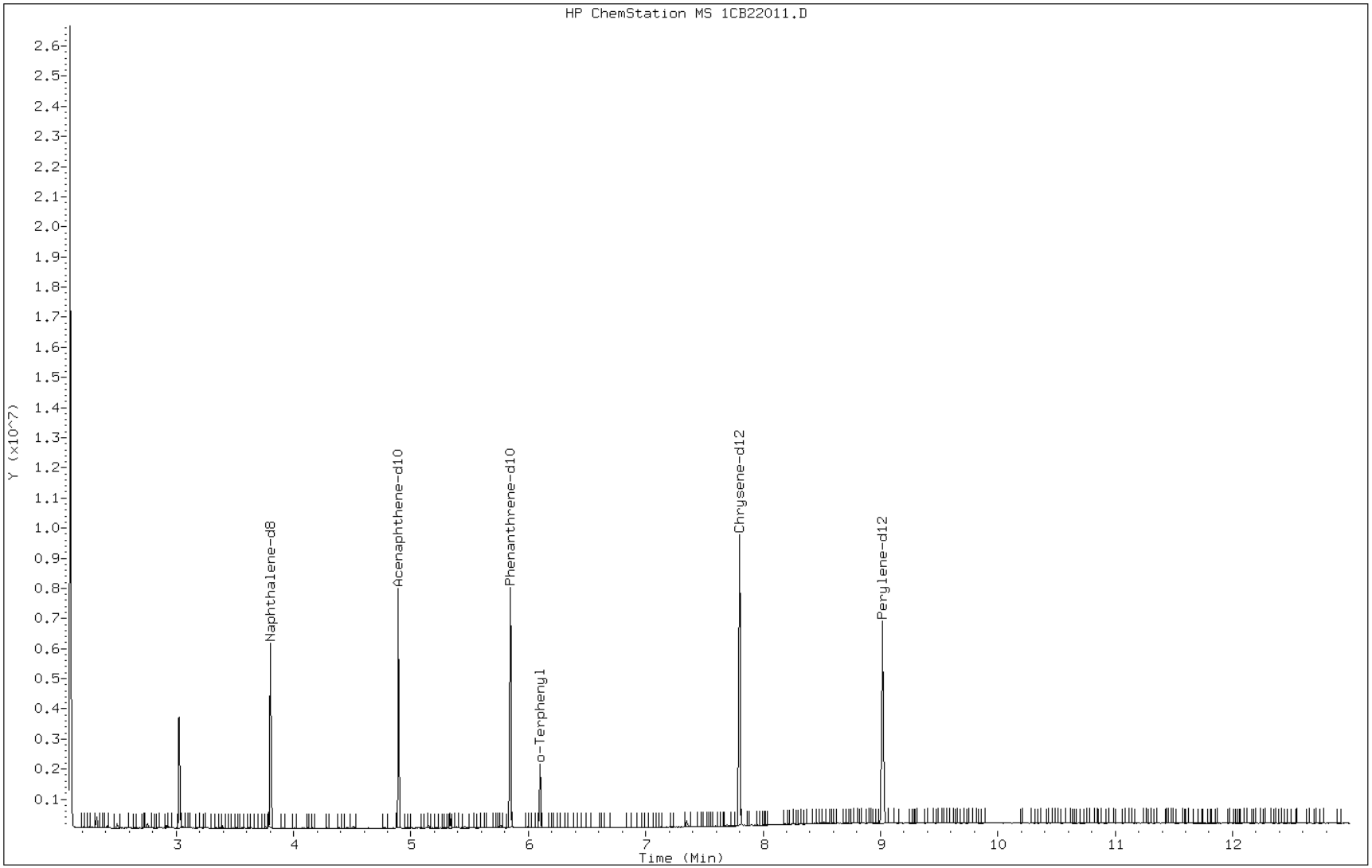
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1406557 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1068093 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2055482 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 272374 | 8.77655 | 569.1669 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2590099 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.021 | 9.016 | (1.000) | 2734541 | 40.0000 | |

Data File: 1CB22011.D

Date: 22-FEB-2013 14:26

Client ID: Instrument: BSMC5973.i

Sample Info: mb 660-134712/1-a Operator: SCC



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa
Job No.: 680-87545-1
SDG No.: 68087545-1
Client Sample ID:
Lab Sample ID: LCS 660-134699/2-A
Matrix: Solid
Lab File ID: 1AB22026.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 02/21/2013 09:55
Sample wt/vol: 15.33(g)
Date Analyzed: 02/22/2013 16:55
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 134771
Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 448 | | 98 | 20 |
| 208-96-8 | Acenaphthylene | 498 | | 39 | 4.9 |
| 120-12-7 | Anthracene | 503 | | 8.2 | 4.1 |
| 56-55-3 | Benzo[a]anthracene | 538 | | 7.8 | 3.8 |
| 50-32-8 | Benzo[a]pyrene | 363 | | 10 | 5.1 |
| 205-99-2 | Benzo[b]fluoranthene | 364 | | 12 | 6.0 |
| 191-24-2 | Benzo[g,h,i]perylene | 490 | | 20 | 4.3 |
| 207-08-9 | Benzo[k]fluoranthene | 421 | | 7.8 | 3.5 |
| 218-01-9 | Chrysene | 449 | | 8.8 | 4.4 |
| 53-70-3 | Dibenz(a,h)anthracene | 504 | | 20 | 4.0 |
| 206-44-0 | Fluoranthene | 531 | | 20 | 3.9 |
| 86-73-7 | Fluorene | 491 | | 20 | 4.0 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 484 | | 20 | 6.9 |
| 90-12-0 | 1-Methylnaphthalene | 580 | | 39 | 4.3 |
| 91-57-6 | 2-Methylnaphthalene | 561 | | 39 | 6.9 |
| 91-20-3 | Naphthalene | 497 | | 39 | 4.3 |
| 85-01-8 | Phenanthrene | 496 | | 7.8 | 3.8 |
| 129-00-0 | Pyrene | 623 | | 20 | 3.6 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 81 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22026.D
Lab Smp Id: lcs 660-134699/2-a
Inj Date : 22-FEB-2013 16:55
Operator : SCC Inst ID: BSMA5973.i
Smp Info : lcs 660-134699/2-a
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 26 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.330 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.399 | 2.397 | (1.000) | 1080818 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.425 | 3.417 | (1.000) | 807413 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.365 | 4.352 | (1.000) | 1222937 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.643 | 4.635 | (1.064) | 144382 | 8.11362 | 529.2641 |
| * 18 Chrysene-d12 | 240 | 6.384 | 6.366 | (1.000) | 893924 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.480 | 7.456 | (1.000) | 1000053 | 40.0000 | |
| 2 Naphthalene | 128 | 2.410 | 2.402 | (1.004) | 198313 | 7.61463 | 496.7145 |
| 3 2-Methylnaphthalene | 141 | 2.811 | 2.808 | (1.171) | 115650 | 8.60190 | 561.1153 |
| 4 1-Methylnaphthalene | 142 | 2.869 | 2.861 | (1.196) | 133231 | 8.89893 | 580.4914 |
| 5 Acenaphthylene | 152 | 3.339 | 3.332 | (0.975) | 230381 | 7.64176 | 498.4842 |
| 7 Acenaphthene | 154 | 3.441 | 3.433 | (1.005) | 119624 | 6.86705 | 447.9484 |
| 9 Fluorene | 166 | 3.751 | 3.743 | (1.095) | 165352 | 7.52069 | 490.5865 |
| 11 Phenanthrene | 178 | 4.376 | 4.368 | (1.002) | 231157 | 7.60433 | 496.0421 |
| 12 Anthracene | 178 | 4.413 | 4.400 | (1.011) | 227713 | 7.71199 | 503.0652 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 13 Carbazole | 167 | 4.568 | 4.555 | (1.047) | 185649 | 7.12244 | 464.6077 |
| 15 Fluoranthene | 202 | 5.236 | 5.228 | (1.199) | 247280 | 8.13587 | 530.7158 |
| 16 Pyrene | 202 | 5.407 | 5.394 | (0.847) | 250429 | 9.55105 | 623.0302 |
| 17 Benzo(a)anthracene | 228 | 6.374 | 6.355 | (0.998) | 219991 | 8.24187 | 537.6301 |
| 19 Chrysene | 228 | 6.400 | 6.387 | (1.002) | 164226 | 6.87945 | 448.7570 |
| 20 Benzo(b)fluoranthene | 252 | 7.196 | 7.178 | (0.962) | 141474 | 5.58055 | 364.0277 |
| 21 Benzo(k)fluoranthene | 252 | 7.212 | 7.199 | (0.964) | 164555 | 6.45189 | 420.8668 |
| 22 Benzo(a)pyrene | 252 | 7.426 | 7.408 | (0.993) | 129302 | 5.56943 | 363.3024 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.206 | 8.177 | (1.097) | 147786 | 7.41986 | 484.0088(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.217 | 8.193 | (1.099) | 160381 | 7.72704 | 504.0472 |
| 26 Benzo(g,h,i)perylene | 276 | 8.414 | 8.385 | (1.125) | 159219 | 7.51578 | 490.2662 |

QC Flag Legend

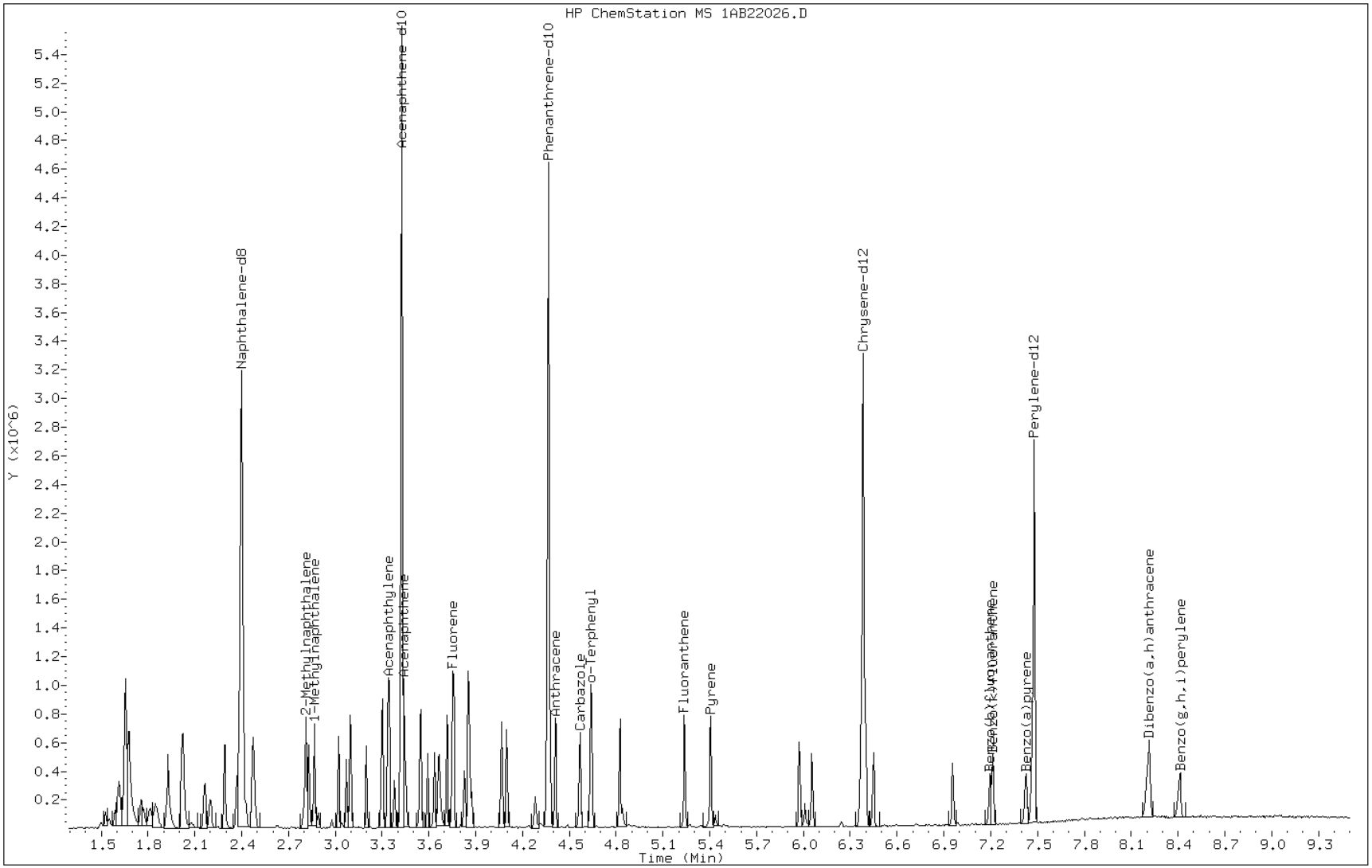
M - Compound response manually integrated.

Data File: 1AB22026.D

Date: 22-FEB-2013 16:55

Client ID: Instrument: BSMA5973.i

Sample Info: lcs 660-134699/2-a Operator: SCC



Manual Integration Report

Data File: 1AB22026.D
Inj. Date and Time: 22-FEB-2013 16:55
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

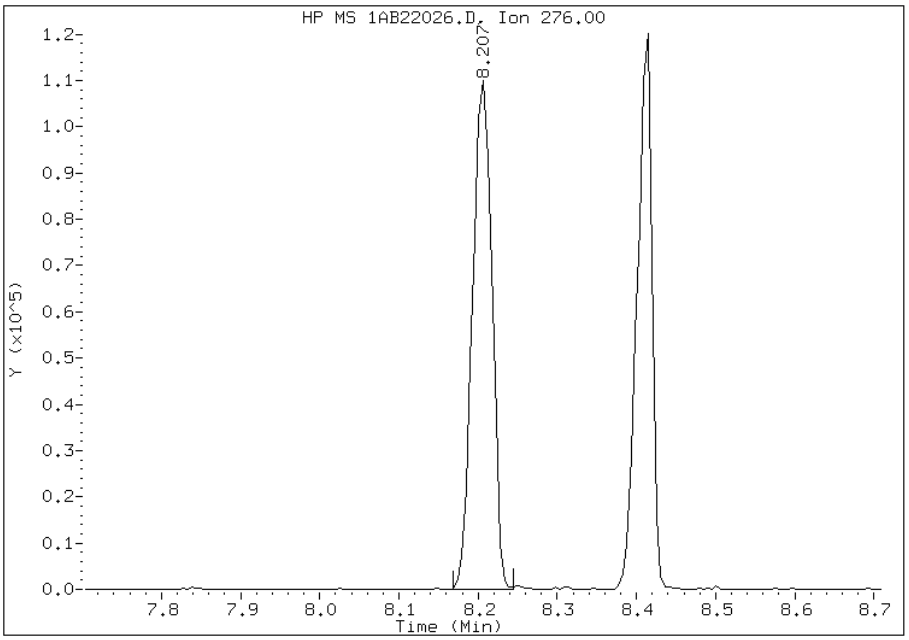
Processing Integration Results

RT: 8.21

Response: 186141

Amount: 9

Conc: 610



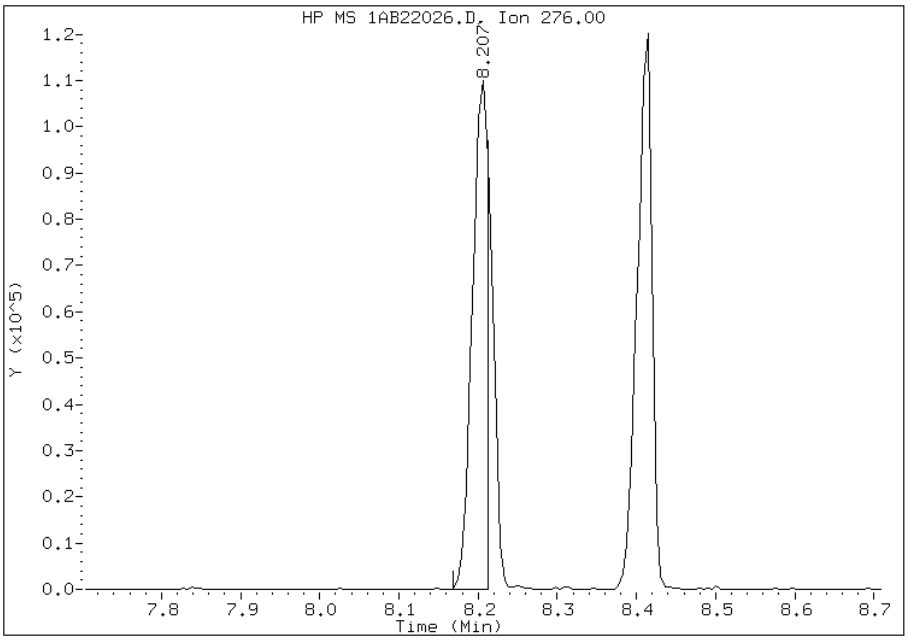

Manual Integration Results

RT: 8.21

Response: 147786

Amount: 7

Conc: 484




Manually Integrated By: cantins
Modification Date: 25-Feb-2013 13:43
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa
Job No.: 680-87545-1
SDG No.: 68087545-1
Client Sample ID:
Lab Sample ID: LCS 660-134712/2-A
Matrix: Solid
Lab File ID: 1CB22012.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 02/21/2013 12:14
Sample wt/vol: 15.39(g)
Date Analyzed: 02/22/2013 14:45
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 134776
Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 499 | | 97 | 19 |
| 208-96-8 | Acenaphthylene | 491 | | 39 | 4.9 |
| 120-12-7 | Anthracene | 491 | | 8.2 | 4.1 |
| 56-55-3 | Benzo[a]anthracene | 505 | | 7.8 | 3.8 |
| 50-32-8 | Benzo[a]pyrene | 466 | | 10 | 5.1 |
| 205-99-2 | Benzo[b]fluoranthene | 472 | | 12 | 5.9 |
| 191-24-2 | Benzo[g,h,i]perylene | 508 | | 19 | 4.3 |
| 207-08-9 | Benzo[k]fluoranthene | 544 | | 7.8 | 3.5 |
| 218-01-9 | Chrysene | 474 | | 8.8 | 4.4 |
| 53-70-3 | Dibenz(a,h)anthracene | 527 | | 19 | 4.0 |
| 206-44-0 | Fluoranthene | 515 | | 19 | 3.9 |
| 86-73-7 | Fluorene | 490 | | 19 | 4.0 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 466 | | 19 | 6.9 |
| 90-12-0 | 1-Methylnaphthalene | 517 | | 39 | 4.3 |
| 91-57-6 | 2-Methylnaphthalene | 492 | | 39 | 6.9 |
| 91-20-3 | Naphthalene | 501 | | 39 | 4.3 |
| 85-01-8 | Phenanthrene | 486 | | 7.8 | 3.8 |
| 129-00-0 | Pyrene | 494 | | 19 | 3.6 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 83 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22012.D
Lab Smp Id: lcs 660-134712/2-a
Inj Date : 22-FEB-2013 14:45
Operator : SCC Inst ID: BSMC5973.i
Smp Info : lcs 660-134712/2-a
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.390 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1346104 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1065240 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2030307 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 254424 | 8.29982 | 539.2992 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2618435 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2799637 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 270173 | 7.70950 | 500.9420 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 177151 | 7.57833 | 492.4189 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 169504 | 7.96169 | 517.3289 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 324739 | 7.56137 | 491.3168 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 205091 | 7.68302 | 499.2218 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 254622 | 7.54224 | 490.0739 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 438831 | 7.47487 | 485.6965 |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 434239 | 7.56309 | 491.4286 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 406856 | 7.97156 | 517.9701 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 509256 | 7.92101 | 514.6853 |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 534472 | 7.59553 | 493.5365 |
| 17 Benzo(a)anthracene | 228 | 7.786 | 7.792 | (0.998) | 587447 | 7.77323 | 505.0831 |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 551334 | 7.28990 | 473.6776 |
| 20 Benzo(b)fluoranthene | 252 | 8.651 | 8.657 | (0.960) | 531587 | 7.26560 | 472.0987 |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 628042 | 8.36766 | 543.7077 |
| 22 Benzo(a)pyrene | 252 | 8.957 | 8.963 | (0.993) | 509980 | 7.17603 | 466.2790 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.233 | 10.239 | (1.135) | 479936 | 7.17886 | 466.4629(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.245 | 10.257 | (1.136) | 530357 | 8.11035 | 526.9881 |
| 26 Benzo(g,h,i)perylene | 276 | 10.598 | 10.610 | (1.175) | 547142 | 7.82359 | 508.3552 |

QC Flag Legend

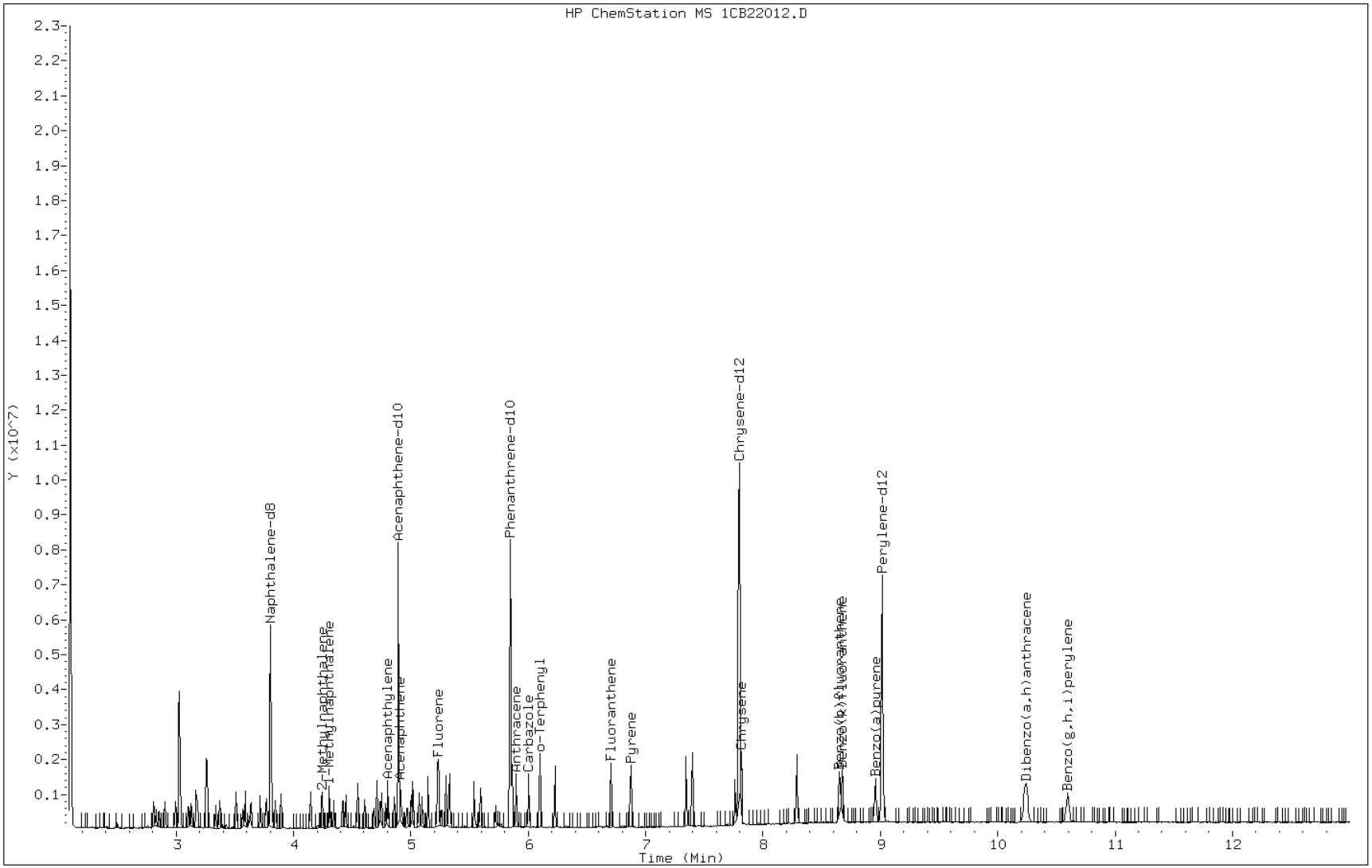
M - Compound response manually integrated.

Data File: 1CB22012.D

Date: 22-FEB-2013 14:45

Client ID: Instrument: BSMC5973.i

Sample Info: lcs 660-134712/2-a Operator: SCC



Manual Integration Report

Data File: 1CB22012.D
Inj. Date and Time: 22-FEB-2013 14:45
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

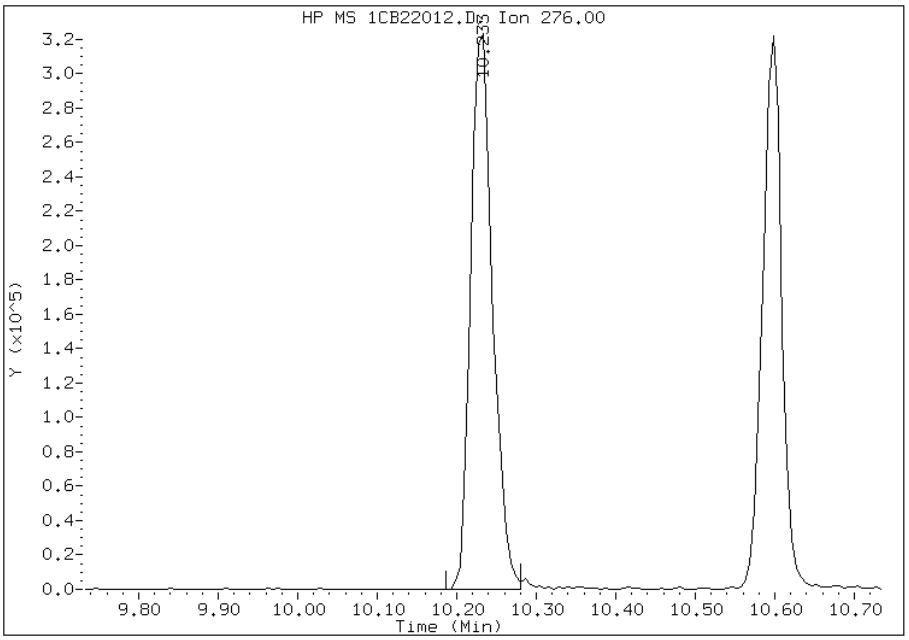
Processing Integration Results

RT: 10.23

Response: 616070

Amount: 9

Conc: 599



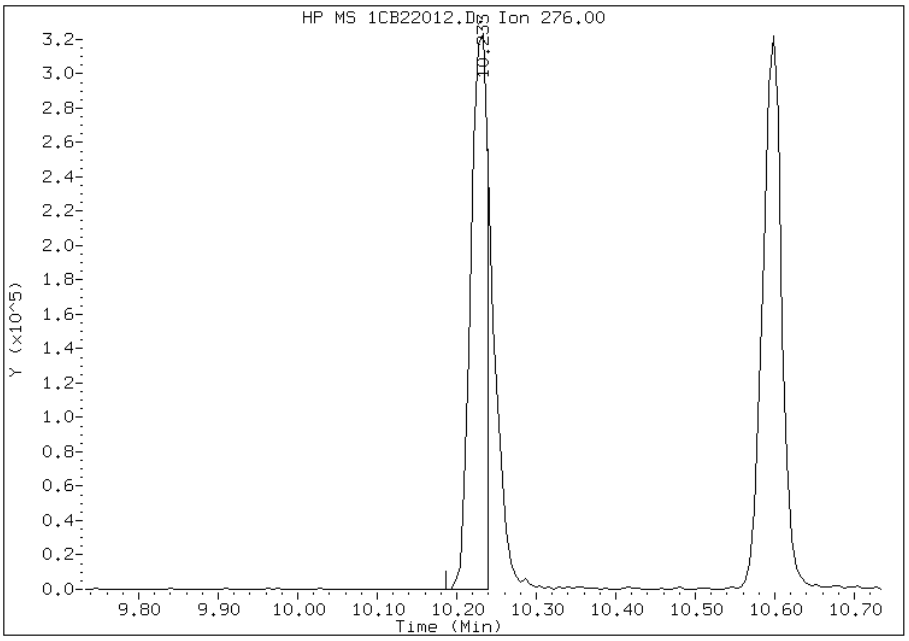

Manual Integration Results

RT: 10.23

Response: 479936

Amount: 7

Conc: 466




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:50
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa
Job No.: 680-87545-1
SDG No.: 68087545-1
Client Sample ID:
Lab Sample ID: 680-87496-A-61-B MS
Matrix: Solid
Lab File ID: 1AB22028.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 02/21/2013 09:55
Sample wt/vol: 15.28(g)
Date Analyzed: 02/22/2013 17:25
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture: 4.4
GPC Cleanup:(Y/N) N
Analysis Batch No.: 134771
Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 385 | | 100 | 21 |
| 208-96-8 | Acenaphthylene | 401 | | 41 | 5.1 |
| 120-12-7 | Anthracene | 414 | | 8.6 | 4.3 |
| 56-55-3 | Benzo[a]anthracene | 434 | | 8.2 | 4.0 |
| 50-32-8 | Benzo[a]pyrene | 314 | | 11 | 5.3 |
| 205-99-2 | Benzo[b]fluoranthene | 321 | | 13 | 6.3 |
| 191-24-2 | Benzo[g,h,i]perylene | 396 | | 21 | 4.5 |
| 207-08-9 | Benzo[k]fluoranthene | 335 | | 8.2 | 3.7 |
| 218-01-9 | Chrysene | 388 | | 9.2 | 4.6 |
| 53-70-3 | Dibenz(a,h)anthracene | 413 | | 21 | 4.2 |
| 206-44-0 | Fluoranthene | 347 | | 21 | 4.1 |
| 86-73-7 | Fluorene | 401 | | 21 | 4.2 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 395 | | 21 | 7.3 |
| 90-12-0 | 1-Methylnaphthalene | 492 | | 41 | 4.5 |
| 91-57-6 | 2-Methylnaphthalene | 468 | | 41 | 7.3 |
| 91-20-3 | Naphthalene | 457 | | 41 | 4.5 |
| 85-01-8 | Phenanthrene | 450 | | 8.2 | 4.0 |
| 129-00-0 | Pyrene | 417 | | 21 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 57 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22028.D
Lab Smp Id: 680-87496-a-61-b ms
Inj Date : 22-FEB-2013 17:25
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87496-a-61-b ms
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 28 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.280 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.401 | 2.397 | (1.000) | 1128067 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.427 | 3.417 | (1.000) | 855211 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.362 | 4.352 | (1.000) | 1240491 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.640 | 4.635 | (1.064) | 103099 | 5.71171 | 373.8033 |
| * 18 Chrysene-d12 | 240 | 6.381 | 6.366 | (1.000) | 801823 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.482 | 7.456 | (1.000) | 1085241 | 40.0000 | |
| 2 Naphthalene | 128 | 2.407 | 2.402 | (1.002) | 181563 | 6.67948 | 437.1389 |
| 3 2-Methylnaphthalene | 141 | 2.813 | 2.808 | (1.171) | 95931 | 6.83637 | 447.4061 |
| 4 1-Methylnaphthalene | 142 | 2.866 | 2.861 | (1.194) | 112399 | 7.19305 | 470.7490 |
| 5 Acenaphthylene | 152 | 3.336 | 3.332 | (0.973) | 187169 | 5.86143 | 383.6012 |
| 7 Acenaphthene | 154 | 3.443 | 3.433 | (1.005) | 103719 | 5.62125 | 367.8826 |
| 9 Fluorene | 166 | 3.748 | 3.743 | (1.094) | 136334 | 5.85430 | 383.1348 |
| 11 Phenanthrene | 178 | 4.378 | 4.368 | (1.004) | 202821 | 6.57775 | 430.4807 |
| 12 Anthracene | 178 | 4.410 | 4.400 | (1.011) | 181308 | 6.05349 | 396.1710 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 13 Carbazole | 167 | 4.565 | 4.555 | (1.047) | 138744 | 5.24760 | 343.4292 |
| 15 Fluoranthene | 202 | 5.238 | 5.228 | (1.201) | 156460 | 5.07492 | 332.1281 |
| 16 Pyrene | 202 | 5.404 | 5.394 | (0.847) | 143157 | 6.08697 | 398.3621 |
| 17 Benzo(a)anthracene | 228 | 6.376 | 6.355 | (0.999) | 151627 | 6.33315 | 414.4729 |
| 19 Chrysene | 228 | 6.397 | 6.387 | (1.002) | 121259 | 5.66301 | 370.6160 |
| 20 Benzo(b)fluoranthene | 252 | 7.199 | 7.178 | (0.962) | 128926 | 4.68638 | 306.7001 |
| 21 Benzo(k)fluoranthene | 252 | 7.215 | 7.199 | (0.964) | 135418 | 4.89270 | 320.2031 |
| 22 Benzo(a)pyrene | 252 | 7.428 | 7.408 | (0.993) | 115671 | 4.59120 | 300.4714(R) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.208 | 8.177 | (1.097) | 124688 | 5.76878 | 377.5376(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.219 | 8.193 | (1.099) | 135870 | 6.03227 | 394.7821 |
| 26 Benzo(g,h,i)perylene | 276 | 8.417 | 8.385 | (1.125) | 133072 | 5.78846 | 378.8256 |

QC Flag Legend

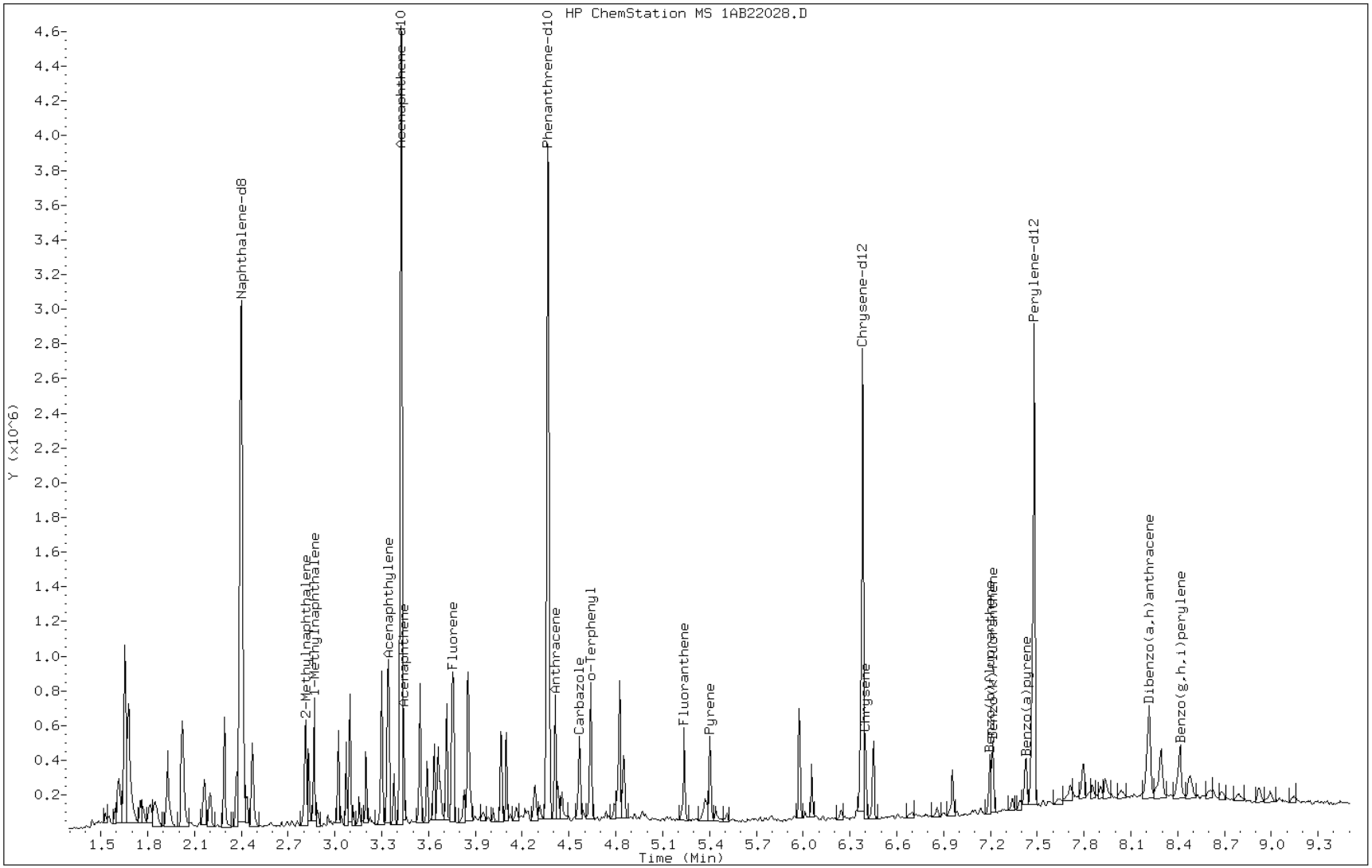
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: 1AB22028.D

Date: 22-FEB-2013 17:25

Client ID: Instrument: BSMA5973.i

Sample Info: 680-87496-a-61-b ms Operator: SCC



Manual Integration Report

Data File: 1AB22028.D
Inj. Date and Time: 22-FEB-2013 17:25
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

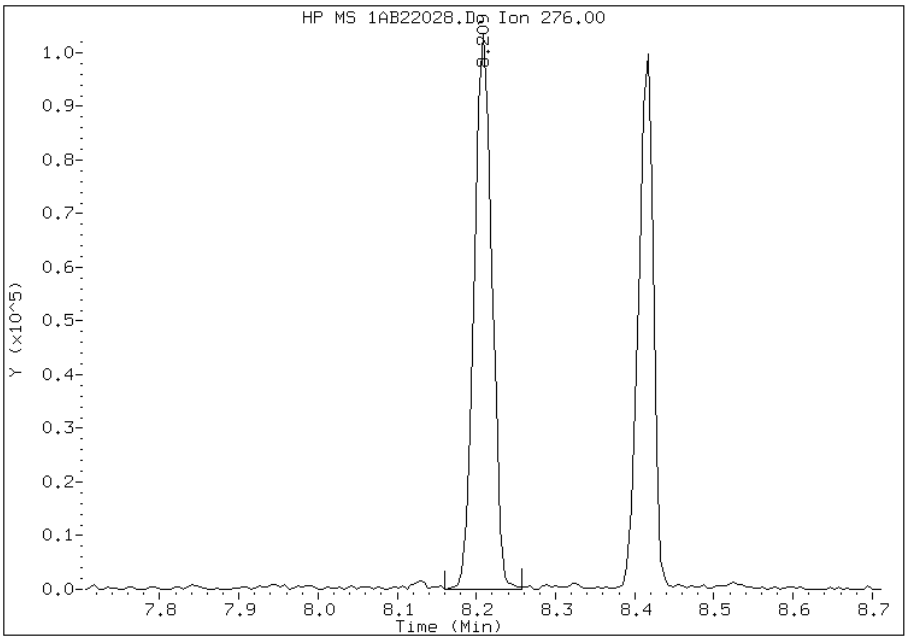
Processing Integration Results

RT: 8.21

Response: 160399

Amount: 7

Conc: 486



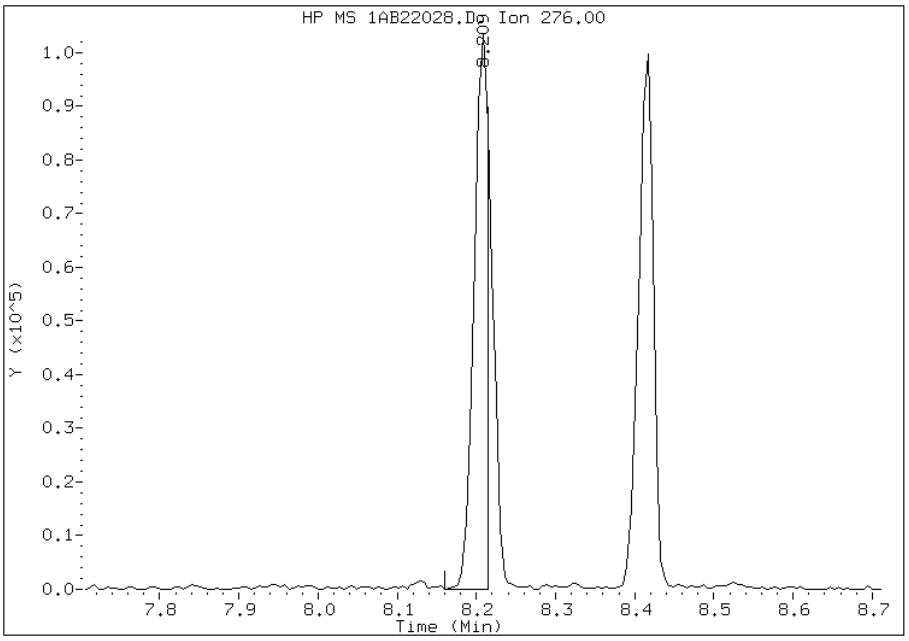

Manual Integration Results

RT: 8.21

Response: 124688

Amount: 6

Conc: 378




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:03
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: CV0240A-CS MS | Lab Sample ID: 680-87545-1 MS

Matrix: Solid | Lab File ID: 1CB22014.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:46

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.42(g) | Date Analyzed: 02/22/2013 15:21

Con. Extract Vol.: 1(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 9.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 619 | | 430 | 86 |
| 208-96-8 | Acenaphthylene | 620 | | 170 | 21 |
| 120-12-7 | Anthracene | 793 | | 36 | 18 |
| 56-55-3 | Benzo[a]anthracene | 1740 | | 34 | 17 |
| 50-32-8 | Benzo[a]pyrene | 1580 | | 45 | 22 |
| 205-99-2 | Benzo[b]fluoranthene | 2340 | | 52 | 26 |
| 191-24-2 | Benzo[g,h,i]perylene | 1250 | | 86 | 19 |
| 207-08-9 | Benzo[k]fluoranthene | 1230 | | 34 | 15 |
| 218-01-9 | Chrysene | 1760 | | 39 | 19 |
| 53-70-3 | Dibenz(a,h)anthracene | 769 | | 86 | 18 |
| 206-44-0 | Fluoranthene | 2990 | | 86 | 17 |
| 86-73-7 | Fluorene | 629 | | 86 | 18 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 1260 | | 86 | 31 |
| 90-12-0 | 1-Methylnaphthalene | 853 | | 170 | 19 |
| 91-57-6 | 2-Methylnaphthalene | 816 | | 170 | 31 |
| 91-20-3 | Naphthalene | 743 | | 170 | 19 |
| 85-01-8 | Phenanthrene | 1490 | | 34 | 17 |
| 129-00-0 | Pyrene | 2600 | | 86 | 16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 95 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22014.D
Lab Smp Id: 680-87545-a-1-b ms
Inj Date : 22-FEB-2013 15:21
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-1-b ms
Misc Info : 4.0
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 14 QC Sample: MS
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 4.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.420 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1521773 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1223502 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2332357 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 83573 | 2.37325 | 615.6284 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2866063 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2845732 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 102667 | 2.59146 | 672.2323 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 75213 | 2.84611 | 738.2901 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 71662 | 2.97744 | 772.3582 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 106722 | 2.16353 | 561.2265 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 66162 | 2.15793 | 559.7738 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 85152 | 2.19605 | 569.6623 |
| 11 Phenanthrene | 178 | 5.863 | 5.863 | (1.003) | 350880 | 5.20273 | 1349.6068(R) |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 182374 | 2.76503 | 717.2581 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 149617 | 2.55182 | 661.9510 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 770673 | 10.4347 | 2706.8036(R) |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 697445 | 9.05522 | 2348.9544(R) |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 502435 | 6.07392 | 1575.5941(R) |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 507080 | 6.12547 | 1588.9669(R) |
| 20 Benzo(b)fluoranthene | 252 | 8.651 | 8.657 | (0.960) | 607594 | 8.16993 | 2119.3071(R) |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 328167 | 4.30148 | 1115.8188(R) |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 397622 | 5.50439 | 1427.8582(R) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 297775 | 4.38196 | 1136.6952(RM) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.257 | (1.137) | 178400 | 2.68395 | 696.2245 |
| 26 Benzo(g,h,i)perylene | 276 | 10.598 | 10.610 | (1.175) | 309513 | 4.35404 | 1129.4528(R) |

## QC Flag Legend

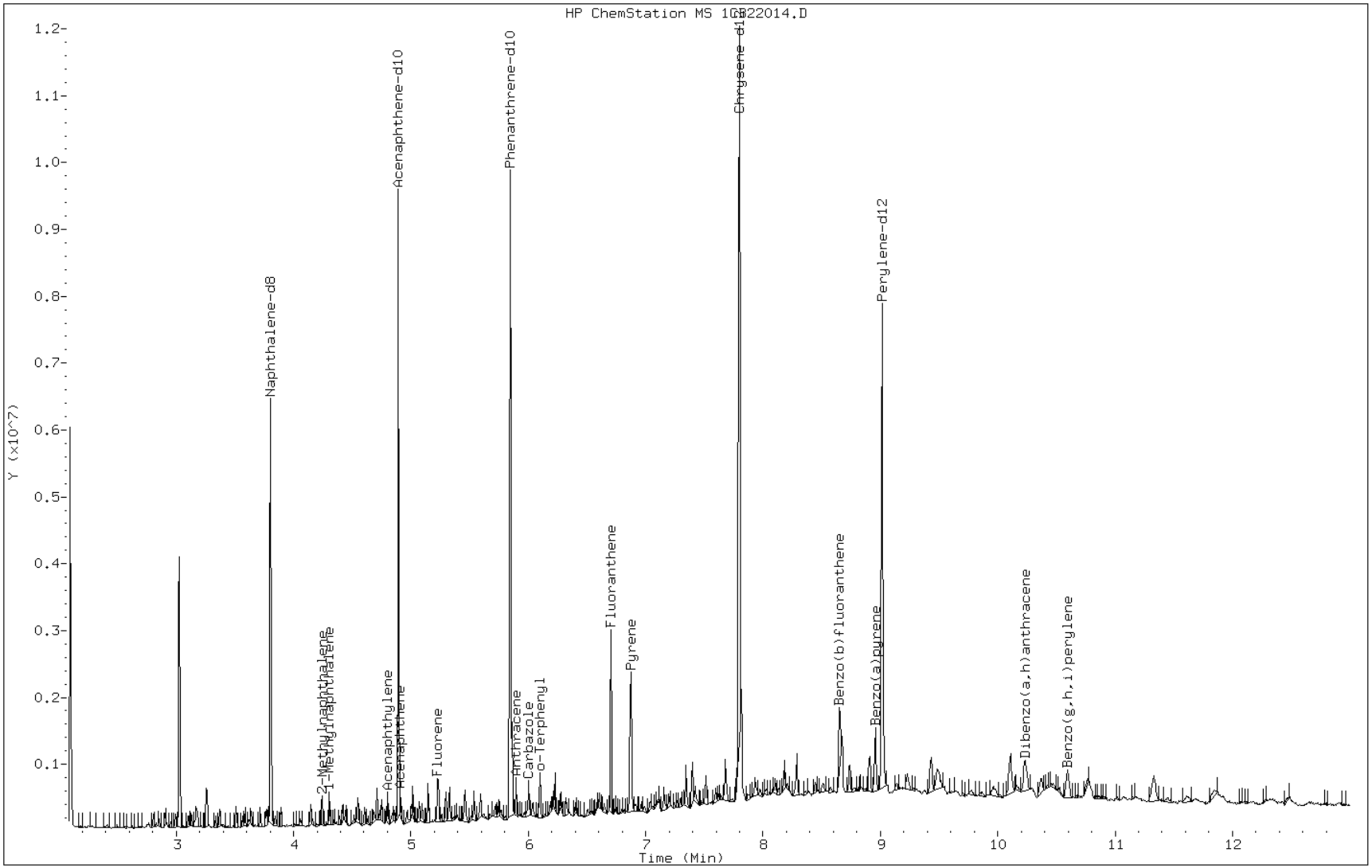
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: 1CB22014.D

Date: 22-FEB-2013 15:21

Client ID: Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-b ms Operator: SCC



Manual Integration Report

Data File: 1CB22014.D
Inj. Date and Time: 22-FEB-2013 15:21
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

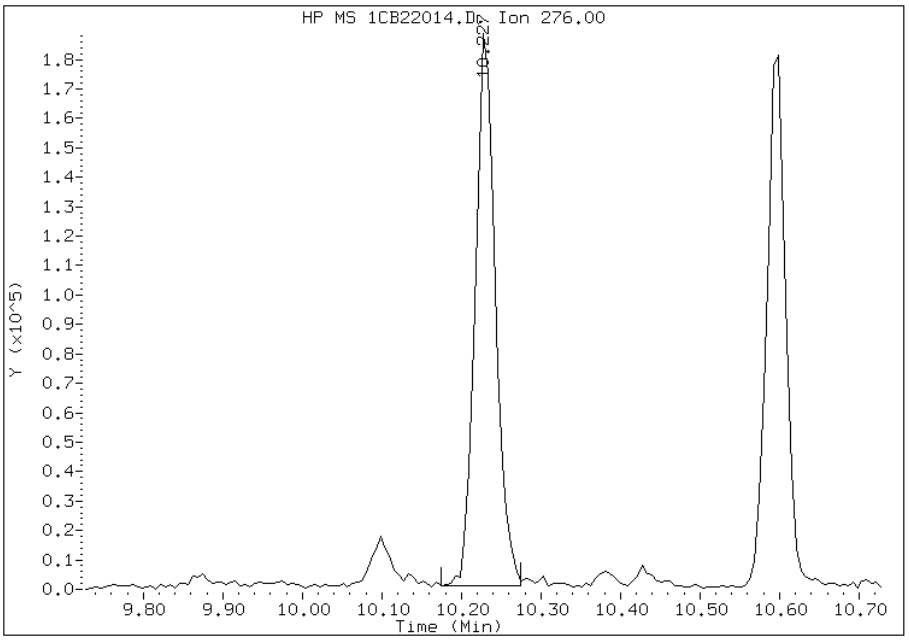
Processing Integration Results

RT: 10.23

Response: 329093

Amount: 5

Conc: 1256



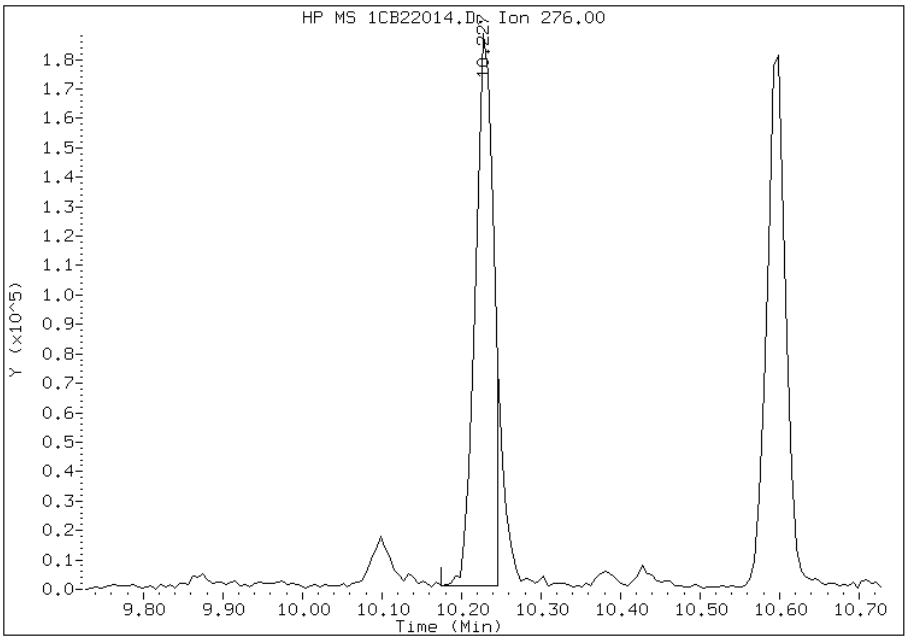

Manual Integration Results

RT: 10.23

Response: 297775

Amount: 4

Conc: 1137




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:52
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa
Job No.: 680-87545-1
SDG No.: 68087545-1
Client Sample ID:
Lab Sample ID: 680-87496-A-61-C MSD
Matrix: Solid
Lab File ID: 1AB22029.D
Analysis Method: 8270C LL
Date Collected:
Extract. Method: 3546
Date Extracted: 02/21/2013 09:55
Sample wt/vol: 15.28(g)
Date Analyzed: 02/22/2013 17:40
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture: 4.4
GPC Cleanup:(Y/N) N
Analysis Batch No.: 134771
Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 463 | | 100 | 21 |
| 208-96-8 | Acenaphthylene | 501 | | 41 | 5.1 |
| 120-12-7 | Anthracene | 512 | | 8.6 | 4.3 |
| 56-55-3 | Benzo[a]anthracene | 530 | | 8.2 | 4.0 |
| 50-32-8 | Benzo[a]pyrene | 402 | | 11 | 5.3 |
| 205-99-2 | Benzo[b]fluoranthene | 412 | | 13 | 6.3 |
| 191-24-2 | Benzo[g,h,i]perylene | 508 | | 21 | 4.5 |
| 207-08-9 | Benzo[k]fluoranthene | 425 | | 8.2 | 3.7 |
| 218-01-9 | Chrysene | 475 | | 9.2 | 4.6 |
| 53-70-3 | Dibenz(a,h)anthracene | 514 | | 21 | 4.2 |
| 206-44-0 | Fluoranthene | 413 | | 21 | 4.1 |
| 86-73-7 | Fluorene | 508 | | 21 | 4.2 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 528 | | 21 | 7.3 |
| 90-12-0 | 1-Methylnaphthalene | 572 | | 41 | 4.5 |
| 91-57-6 | 2-Methylnaphthalene | 569 | | 41 | 7.3 |
| 91-20-3 | Naphthalene | 525 | | 41 | 4.5 |
| 85-01-8 | Phenanthrene | 537 | | 8.2 | 4.0 |
| 129-00-0 | Pyrene | 515 | | 21 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 69 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\1AB22029.D
Lab Smp Id: 680-87496-a-61-c ms
Inj Date : 22-FEB-2013 17:40
Operator : SCC Inst ID: BSMA5973.i
Smp Info : 680-87496-a-61-c msd
Misc Info :
Comment :
Method : \\tam-chemsvr\chem\SM\BSMA5973.i\1A022213_IC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 13:00 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 12:32 Cal File: 1AB22009.D
Als bottle: 29 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.280 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 2.398 | 2.397 | (1.000) | 1049303 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 3.424 | 3.417 | (1.000) | 784243 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 4.364 | 4.352 | (1.000) | 1180099 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 4.642 | 4.635 | (1.064) | 118685 | 6.91167 | 452.3345 |
| * 18 Chrysene-d12 | 240 | 6.383 | 6.366 | (1.000) | 765601 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 7.484 | 7.456 | (1.000) | 1035149 | 40.0000 | |
| 2 Naphthalene | 128 | 2.409 | 2.402 | (1.004) | 194012 | 7.67323 | 502.1745 |
| 3 2-Methylnaphthalene | 141 | 2.810 | 2.808 | (1.171) | 108426 | 8.30680 | 543.6387 |
| 4 1-Methylnaphthalene | 142 | 2.868 | 2.861 | (1.196) | 121391 | 8.35162 | 546.5721 |
| 5 Acenaphthylene | 152 | 3.338 | 3.332 | (0.975) | 214237 | 7.31622 | 478.8099 |
| 7 Acenaphthene | 154 | 3.440 | 3.433 | (1.005) | 114346 | 6.75800 | 442.2772 |
| 9 Fluorene | 166 | 3.750 | 3.743 | (1.095) | 158496 | 7.42184 | 485.7226 |
| 11 Phenanthrene | 178 | 4.380 | 4.368 | (1.004) | 230182 | 7.84713 | 513.5554 |
| 12 Anthracene | 178 | 4.412 | 4.400 | (1.011) | 213280 | 7.48539 | 489.8815 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 13 Carbazole | 167 | 4.567 | 4.555 | (1.047) | 160125 | 6.36621 | 416.6365 |
| 15 Fluoranthene | 202 | 5.240 | 5.228 | (1.201) | 177148 | 6.04000 | 395.2880 |
| 16 Pyrene | 202 | 5.406 | 5.394 | (0.847) | 169093 | 7.52992 | 492.7958 |
| 17 Benzo(a)anthracene | 228 | 6.378 | 6.355 | (0.999) | 176964 | 7.74112 | 506.6179 |
| 19 Chrysene | 228 | 6.400 | 6.387 | (1.002) | 141815 | 6.93636 | 453.9504 |
| 20 Benzo(b)fluoranthene | 252 | 7.196 | 7.178 | (0.961) | 157993 | 6.02085 | 394.0348 |
| 21 Benzo(k)fluoranthene | 252 | 7.217 | 7.199 | (0.964) | 163713 | 6.20125 | 405.8408 |
| 22 Benzo(a)pyrene | 252 | 7.425 | 7.408 | (0.992) | 141130 | 5.87279 | 384.3451 |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 8.211 | 8.177 | (1.097) | 158945 | 7.70955 | 504.5518(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 8.227 | 8.193 | (1.099) | 161454 | 7.51501 | 491.8198 |
| 26 Benzo(g,h,i)perylene | 276 | 8.424 | 8.385 | (1.126) | 162564 | 7.41351 | 485.1772 |

QC Flag Legend

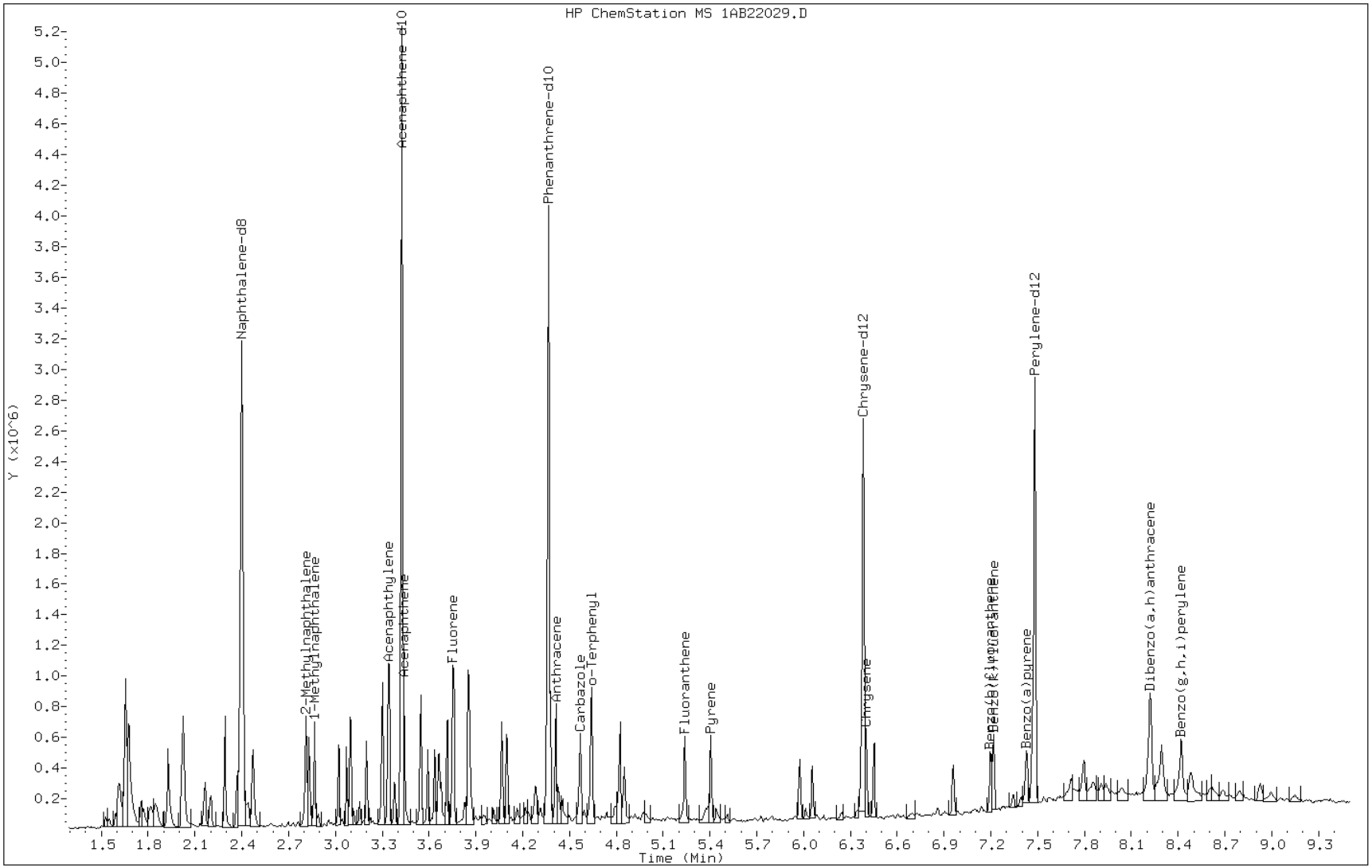
M - Compound response manually integrated.

Data File: 1AB22029.D

Date: 22-FEB-2013 17:40

Client ID: Instrument: BSMA5973.i

Sample Info: 680-87496-a-61-c msd Operator: SCC



Manual Integration Report

Data File: 1AB22029.D
Inj. Date and Time: 22-FEB-2013 17:40
Instrument ID: BSMA5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

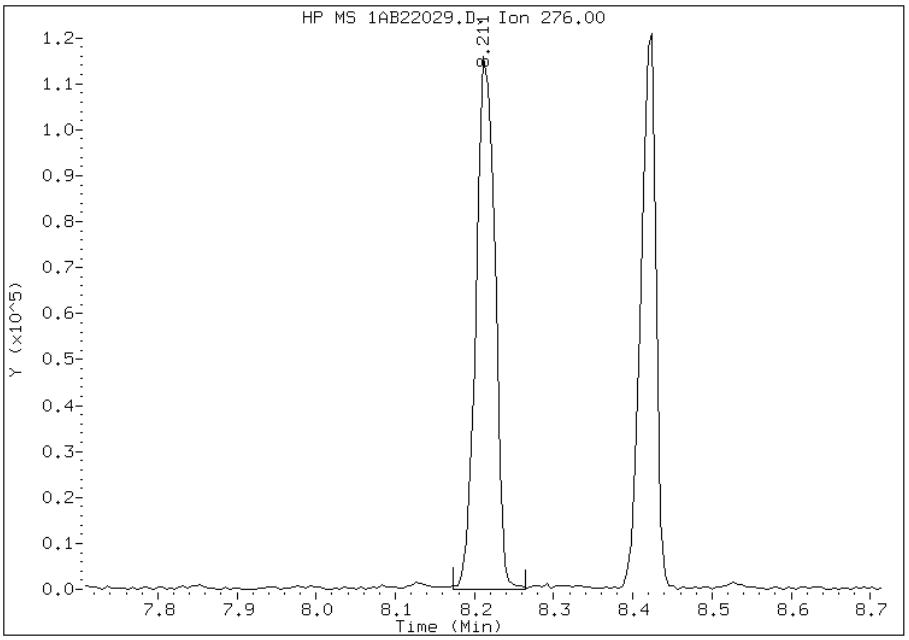
Processing Integration Results

RT: 8.21

Response: 191373

Amount: 9

Conc: 607



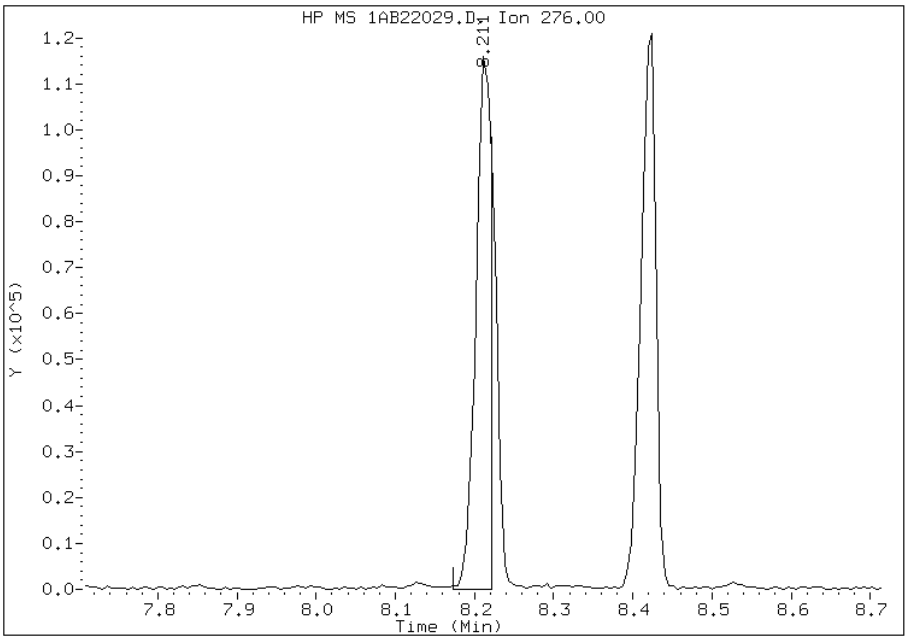

Manual Integration Results

RT: 8.21

Response: 158945

Amount: 8

Conc: 505




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 09:04
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Tampa | Job No.: 680-87545-1

SDG No.: 68087545-1

Client Sample ID: CV0240A-CS MSD | Lab Sample ID: 680-87545-1 MSD

Matrix: Solid | Lab File ID: 1CB22015.D

Analysis Method: 8270C LL | Date Collected: 02/14/2013 08:46

Extract. Method: 3546 | Date Extracted: 02/21/2013 12:14

Sample wt/vol: 15.42(g) | Date Analyzed: 02/22/2013 15:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 9.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 134776 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 585 | | 430 | 86 |
| 208-96-8 | Acenaphthylene | 662 | | 170 | 21 |
| 120-12-7 | Anthracene | 711 | | 36 | 18 |
| 56-55-3 | Benzo[a]anthracene | 1450 | | 34 | 17 |
| 50-32-8 | Benzo[a]pyrene | 1330 | | 45 | 22 |
| 205-99-2 | Benzo[b]fluoranthene | 1860 | | 52 | 26 |
| 191-24-2 | Benzo[g,h,i]perylene | 1110 | | 86 | 19 |
| 207-08-9 | Benzo[k]fluoranthene | 1110 | | 34 | 15 |
| 218-01-9 | Chrysene | 1490 | | 39 | 19 |
| 53-70-3 | Dibenz(a,h)anthracene | 711 | | 86 | 18 |
| 206-44-0 | Fluoranthene | 2230 | | 86 | 17 |
| 86-73-7 | Fluorene | 591 | | 86 | 18 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 930 | | 86 | 31 |
| 90-12-0 | 1-Methylnaphthalene | 809 | | 170 | 19 |
| 91-57-6 | 2-Methylnaphthalene | 781 | | 170 | 31 |
| 91-20-3 | Naphthalene | 648 | | 170 | 19 |
| 85-01-8 | Phenanthrene | 1240 | | 34 | 17 |
| 129-00-0 | Pyrene | 1940 | | 86 | 16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 94 | | 30-130 |

TestAmerica Laboratories

Semivolatile 8270C low level PAH

Data file : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\1CB22015.D
Lab Smp Id: 680-87545-a-1-c msd
Inj Date : 22-FEB-2013 15:40
Operator : SCC Inst ID: BSMC5973.i
Smp Info : 680-87545-a-1-c msd
Misc Info : 4.0
Comment :
Method : \\tam-chemsvr\chem\SM\BSMC5973.i\1C022213_pahIC.b\a-bFASTPAHi-m.m
Meth Date : 22-Feb-2013 14:18 cantins Quant Type: ISTD
Cal Date : 22-FEB-2013 13:48 Cal File: 1CB22009.D
Als bottle: 15 QC Sample: MSD
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: pah.sub
Target Version: 4.14
Processing Host: TAM1000

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 4.000 | Dilution Factor |
| Vi | 1.000 | Injection Volume |
| Vt | 1.000 | Final Volume |
| Ws | 15.420 | Weight Extracted |
| M | 0.00000 | % Moisture |
| A | 1000.000 | uL to mL conversion |
| B | 1000.000 | g to kg conversion |
| C | 0.00100 | ng to ug conversion |
| D | 1.000 | ug to mg conversion(value = 1 if no conv |
| GPC | 1.000 | GPC FACTOR |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| * 1 Naphthalene-d8 | 136 | 3.804 | 3.804 | (1.000) | 1546272 | 40.0000 | |
| * 6 Acenaphthene-d10 | 164 | 4.892 | 4.892 | (1.000) | 1227946 | 40.0000 | |
| * 10 Phenanthrene-d10 | 188 | 5.845 | 5.845 | (1.000) | 2308829 | 40.0000 | |
| $ 14 o-Terphenyl | 230 | 6.098 | 6.098 | (1.043) | 81756 | 2.34531 | 608.3808 |
| * 18 Chrysene-d12 | 240 | 7.798 | 7.798 | (1.000) | 2831067 | 40.0000 | |
| * 23 Perylene-d12 | 264 | 9.015 | 9.016 | (1.000) | 2793829 | 40.0000 | |
| 2 Naphthalene | 128 | 3.816 | 3.816 | (1.003) | 90951 | 2.25935 | 586.0841 |
| 3 2-Methylnaphthalene | 142 | 4.245 | 4.245 | (1.116) | 73207 | 2.72631 | 707.2138 |
| 4 1-Methylnaphthalene | 142 | 4.304 | 4.304 | (1.131) | 69046 | 2.82330 | 732.3730 |
| 5 Acenaphthylene | 152 | 4.804 | 4.804 | (0.982) | 114403 | 2.31085 | 599.4419 |
| 7 Acenaphthene | 154 | 4.910 | 4.910 | (1.004) | 62806 | 2.04106 | 529.4567 |
| 9 Fluorene | 166 | 5.233 | 5.234 | (1.070) | 80193 | 2.06067 | 534.5453 |
| 11 Phenanthrene | 178 | 5.862 | 5.863 | (1.003) | 288388 | 4.31970 | 1120.5444(R) |
| 12 Anthracene | 178 | 5.898 | 5.898 | (1.009) | 161935 | 2.48017 | 643.3636 |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN (ug/ml) | FINAL (ug/Kg) |
|---|---|---|---|---|---|---|---|
| 13 Carbazole | 167 | 6.004 | 6.004 | (1.027) | 133604 | 2.30193 | 597.1282 |
| 15 Fluoranthene | 202 | 6.704 | 6.704 | (1.147) | 569353 | 7.78746 | 2020.0935(R) |
| 16 Pyrene | 202 | 6.874 | 6.875 | (0.882) | 516187 | 6.78472 | 1759.9781(R) |
| 17 Benzo(a)anthracene | 228 | 7.792 | 7.792 | (0.999) | 413059 | 5.05518 | 1311.3304(R) |
| 19 Chrysene | 228 | 7.815 | 7.822 | (1.002) | 423678 | 5.18125 | 1344.0328(R) |
| 20 Benzo(b)fluoranthene | 252 | 8.656 | 8.657 | (0.960) | 473903 | 6.49065 | 1683.6974(R) |
| 21 Benzo(k)fluoranthene | 252 | 8.674 | 8.680 | (0.962) | 289193 | 3.86105 | 1001.5686(R) |
| 22 Benzo(a)pyrene | 252 | 8.956 | 8.963 | (0.993) | 327966 | 4.62447 | 1199.6034(R) |
| 24 Indeno(1,2,3-cd)pyrene | 276 | 10.227 | 10.239 | (1.134) | 216344 | 3.24279 | 841.1914(M) |
| 25 Dibenzo(a,h)anthracene | 278 | 10.250 | 10.257 | (1.137) | 161770 | 2.47897 | 643.0528 |
| 26 Benzo(g,h,i)perylene | 276 | 10.597 | 10.610 | (1.175) | 270367 | 3.87402 | 1004.9329(R) |

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: 1CB22015.D

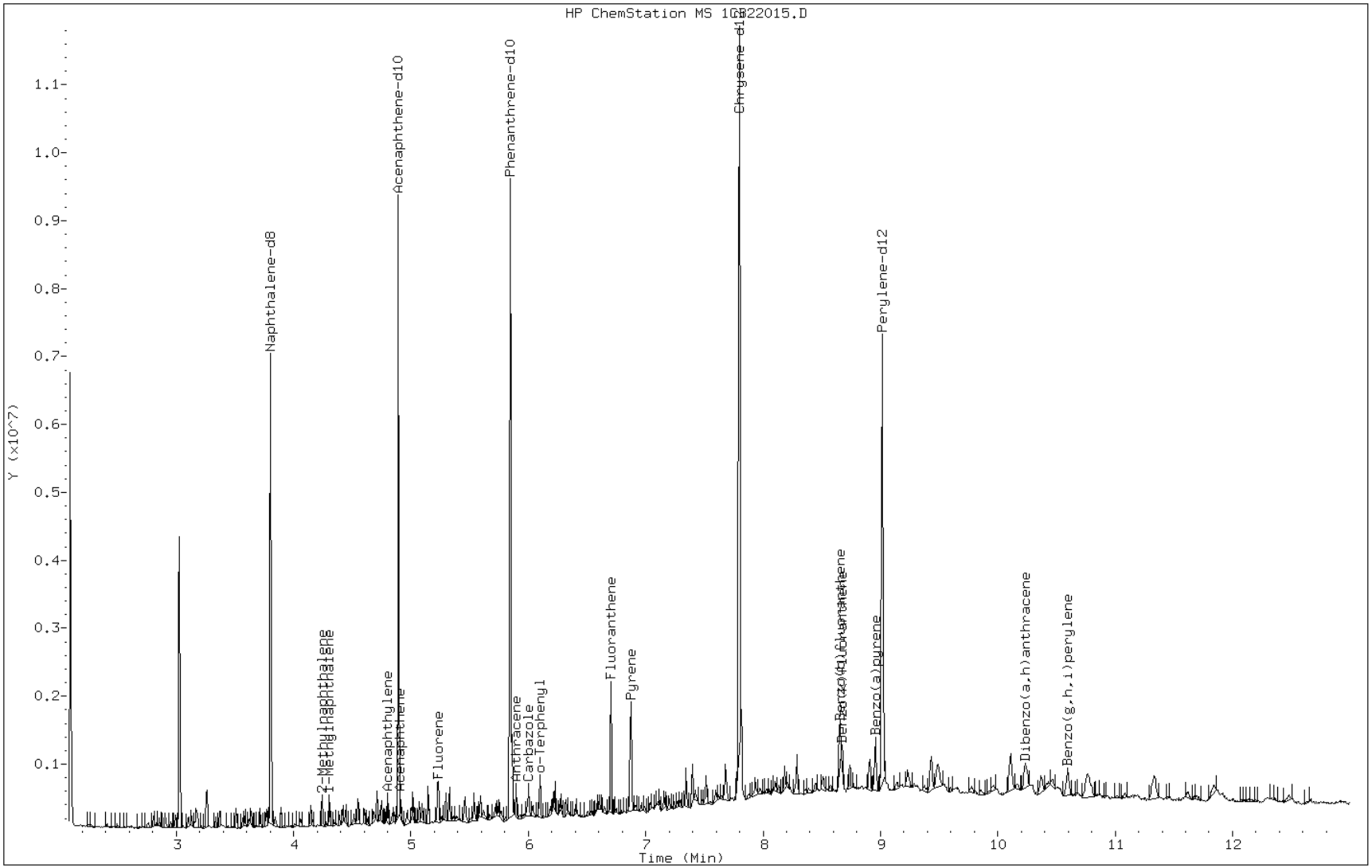
Date: 22-FEB-2013 15:40

Client ID:

Instrument: BSMC5973.i

Sample Info: 680-87545-a-1-c msd

Operator: SCC



Manual Integration Report

Data File: 1CB22015.D
Inj. Date and Time: 22-FEB-2013 15:40
Instrument ID: BSMC5973.i
Client ID:
Compound: 24 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 02/26/2013

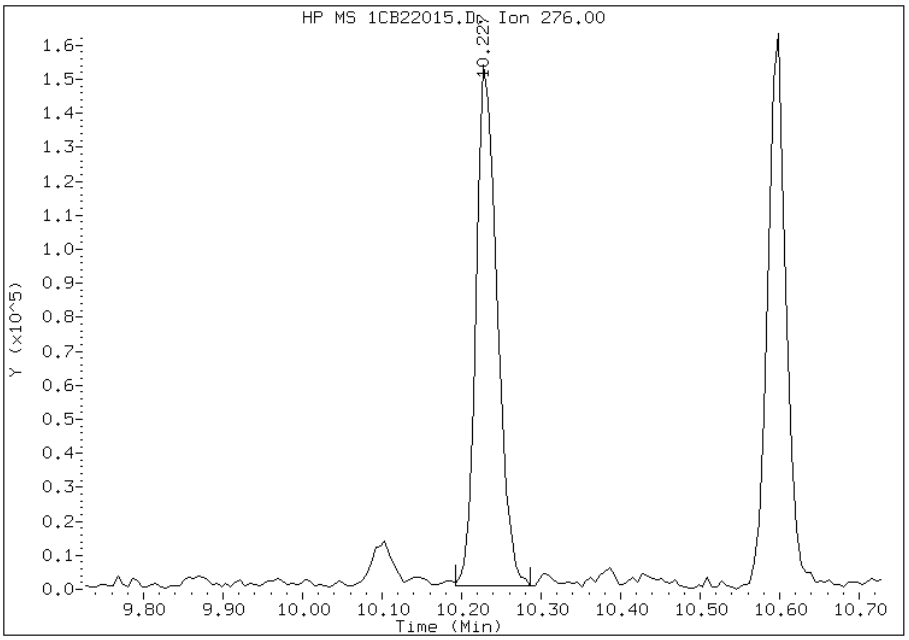
Processing Integration Results

RT: 10.23

Response: 281441

Amount: 4

Conc: 1094



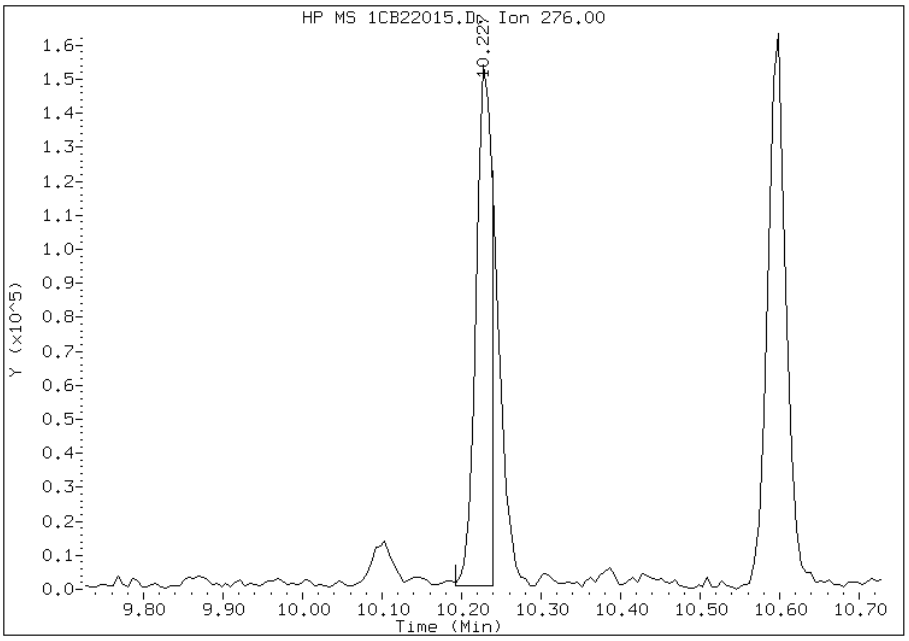

Manual Integration Results

RT: 10.23

Response: 216344

Amount: 3

Conc: 841




Manually Integrated By: cantins
Modification Date: 26-Feb-2013 10:52
Manual Integration Reason: Split Peak

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMA5973 Start Date: 02/22/2013 10:12

Analysis Batch Number: 134771 End Date: 02/22/2013 22:28

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| ZZZZZ | | 02/22/2013 10:12 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 10:27 | 1 | | DB-5MS 250(um) |
| DFTPP 660-134771/2 | | 02/22/2013 10:42 | 1 | 1AB22002.D | DB-5MS 250(um) |
| IC 660-134771/3 | | 02/22/2013 11:01 | 1 | 1AB22003.D | DB-5MS 250(um) |
| IC 660-134771/4 | | 02/22/2013 11:16 | 1 | 1AB22004.D | DB-5MS 250(um) |
| IC 660-134771/5 | | 02/22/2013 11:31 | 1 | 1AB22005.D | DB-5MS 250(um) |
| IC 660-134771/6 | | 02/22/2013 11:47 | 1 | 1AB22006.D | DB-5MS 250(um) |
| ICIS 660-134771/7 | | 02/22/2013 12:02 | 1 | 1AB22007.D | DB-5MS 250(um) |
| IC 660-134771/8 | | 02/22/2013 12:17 | 1 | 1AB22008.D | DB-5MS 250(um) |
| IC 660-134771/9 | | 02/22/2013 12:32 | 1 | 1AB22009.D | DB-5MS 250(um) |
| ICV 660-134771/10 | | 02/22/2013 12:48 | 1 | 1AB22010.D | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 13:08 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 13:23 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 13:38 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 13:53 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 14:08 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 14:24 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 14:39 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 14:54 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 15:09 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 15:24 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 15:39 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 15:55 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 16:09 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 16:25 | 1 | | DB-5MS 250(um) |
| MB 660-134699/1-A | | 02/22/2013 16:39 | 1 | 1AB22025.D | DB-5MS 250(um) |
| LCS 660-134699/2-A | | 02/22/2013 16:55 | 1 | 1AB22026.D | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 17:10 | 1 | | DB-5MS 250(um) |
| 680-87496-A-61-B MS | | 02/22/2013 17:25 | 1 | 1AB22028.D | DB-5MS 250(um) |
| 680-87496-A-61-C MSD | | 02/22/2013 17:40 | 1 | 1AB22029.D | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 17:55 | 4 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 18:10 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 18:26 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 18:41 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 18:55 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 19:11 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 19:26 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 19:41 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 19:56 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 20:11 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 20:27 | 1 | | DB-5MS 250(um) |
| 680-87545-2 | CV0240B-CS | 02/22/2013 20:42 | 4 | 1AB22041.D | DB-5MS 250(um) |
| 680-87545-3 | FM0161E-CS | 02/22/2013 20:57 | 1 | 1AB22042.D | DB-5MS 250(um) |
| 680-87545-4 | FM0161F-CS | 02/22/2013 21:12 | 1 | 1AB22043.D | DB-5MS 250(um) |
| 680-87545-5 | FM0161G-CS | 02/22/2013 21:27 | 1 | 1AB22044.D | DB-5MS 250(um) |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMA5973 Start Date: 02/22/2013 10:12

Analysis Batch Number: 134771 End Date: 02/22/2013 22:28

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| 680-87545-6 | FM0161H-CS | 02/22/2013 21:43 | 1 | 1AB22045.D | DB-5MS 250(um) |
| 680-87545-7 | FM0161H-CSD | 02/22/2013 21:58 | 1 | 1AB22046.D | DB-5MS 250(um) |
| 680-87545-8 | FM0161I-CS | 02/22/2013 22:13 | 1 | 1AB22047.D | DB-5MS 250(um) |
| 680-87545-9 | FM0161AD-GS | 02/22/2013 22:28 | 1 | 1AB22048.D | DB-5MS 250(um) |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: BSMC5973 Start Date: 02/22/2013 11:04

Analysis Batch Number: 134776 End Date: 02/22/2013 19:38

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| ZZZZZ | | 02/22/2013 11:04 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 11:23 | 1 | | DB-5MS 250(um) |
| DFTPP 660-134776/2 | | 02/22/2013 11:41 | 1 | 1CB22002.D | DB-5MS 250(um) |
| IC 660-134776/3 | | 02/22/2013 11:57 | 1 | 1CB22003.D | DB-5MS 250(um) |
| IC 660-134776/4 | | 02/22/2013 12:16 | 1 | 1CB22004.D | DB-5MS 250(um) |
| IC 660-134776/5 | | 02/22/2013 12:34 | 1 | 1CB22005.D | DB-5MS 250(um) |
| IC 660-134776/6 | | 02/22/2013 12:53 | 1 | 1CB22006.D | DB-5MS 250(um) |
| ICIS 660-134776/7 | | 02/22/2013 13:11 | 1 | 1CB22007.D | DB-5MS 250(um) |
| IC 660-134776/8 | | 02/22/2013 13:29 | 1 | 1CB22008.D | DB-5MS 250(um) |
| IC 660-134776/9 | | 02/22/2013 13:48 | 1 | 1CB22009.D | DB-5MS 250(um) |
| ICV 660-134776/10 | | 02/22/2013 14:06 | 1 | 1CB22010.D | DB-5MS 250(um) |
| MB 660-134712/1-A | | 02/22/2013 14:26 | 1 | 1CB22011.D | DB-5MS 250(um) |
| LCS 660-134712/2-A | | 02/22/2013 14:45 | 1 | 1CB22012.D | DB-5MS 250(um) |
| 680-87545-1 | CV0240A-CS | 02/22/2013 15:03 | 4 | 1CB22013.D | DB-5MS 250(um) |
| 680-87545-1 MS | CV0240A-CS MS | 02/22/2013 15:21 | 4 | 1CB22014.D | DB-5MS 250(um) |
| 680-87545-1 MSD | CV0240A-CS MSD | 02/22/2013 15:40 | 4 | 1CB22015.D | DB-5MS 250(um) |
| 680-87545-10 | FM0161AE-GS | 02/22/2013 15:58 | 1 | 1CB22016.D | DB-5MS 250(um) |
| 680-87545-11 | FM0161AF-GS | 02/22/2013 16:16 | 1 | 1CB22017.D | DB-5MS 250(um) |
| 680-87545-12 | FM0161AG-GS | 02/22/2013 16:34 | 1 | 1CB22018.D | DB-5MS 250(um) |
| 680-87545-13 | FM0161AH-GS | 02/22/2013 16:53 | 1 | 1CB22019.D | DB-5MS 250(um) |
| 680-87545-14 | FM0161AI-GS | 02/22/2013 17:11 | 1 | 1CB22020.D | DB-5MS 250(um) |
| 680-87545-15 | FM0161AJ-GS | 02/22/2013 17:29 | 1 | 1CB22021.D | DB-5MS 250(um) |
| 680-87545-16 | FM0161AK-GS | 02/22/2013 17:48 | 1 | 1CB22022.D | DB-5MS 250(um) |
| 680-87545-17 | FM0161AL-GS | 02/22/2013 18:06 | 1 | 1CB22023.D | DB-5MS 250(um) |
| 680-87545-18 | FM0161AM-GS | 02/22/2013 18:24 | 1 | 1CB22024.D | DB-5MS 250(um) |
| 680-87545-19 | FM0161J-CS | 02/22/2013 18:43 | 1 | 1CB22025.D | DB-5MS 250(um) |
| 680-87545-20 | FM0161K-CS | 02/22/2013 19:01 | 1 | 1CB22026.D | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 19:19 | 1 | | DB-5MS 250(um) |
| ZZZZZ | | 02/22/2013 19:38 | 1 | | DB-5MS 250(um) |

# GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Tampa  Job No.: 680-87545-1

SDG No.: 68087545-1

Batch Number: 134699  Batch Start Date: 02/21/13 09:55  Batch Analyst: Cerome, Saurel

Batch Method: 3546  Batch End Date: 02/22/13 08:55

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | EX-625LVI SPK 00019 | EXLLSURINT 00175 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 660-134699/1 | | 3546, 8270C LL | | 15.33 g | 1 mL | | 1 mL | | |
| LCS 660-134699/2 | | 3546, 8270C LL | | 15.33 g | 1 mL | 1 mL | 1 mL | | |
| 680-87496-A-61 MS | | 3546, 8270C LL | T | 15.28 g | 1 mL | 1 mL | 1 mL | | |
| 680-87496-A-61 MSD | | 3546, 8270C LL | T | 15.28 g | 1 mL | 1 mL | 1 mL | | |
| 680-87545-A-2 | CV0240B-CS | 3546, 8270C LL | T | 15.01 g | 1 mL | | 1 mL | | |
| 680-87545-A-3 | FM0161E-CS | 3546, 8270C LL | T | 15.08 g | 1 mL | | 1 mL | | |
| 680-87545-A-4 | FM0161F-CS | 3546, 8270C LL | T | 15.19 g | 1 mL | | 1 mL | | |
| 680-87545-A-5 | FM0161G-CS | 3546, 8270C LL | T | 15.46 g | 1 mL | | 1 mL | | |
| 680-87545-A-6 | FM0161H-CS | 3546, 8270C LL | T | 14.93 g | 1 mL | | 1 mL | | |
| 680-87545-A-7 | FM0161H-CSD | 3546, 8270C LL | T | 15.02 g | 1 mL | | 1 mL | | |
| 680-87545-A-8 | FM0161I-CS | 3546, 8270C LL | T | 14.94 g | 1 mL | | 1 mL | | |
| 680-87545-A-9 | FM0161AD-GS | 3546, 8270C LL | T | 15.01 g | 1 mL | | 1 mL | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Batch Number: 134699 Batch Start Date: 02/21/13 09:55 Batch Analyst: Cerome, Saurel

Batch Method: 3546 Batch End Date: 02/22/13 08:55

| Batch Notes | |
|---|---|
| Acetone Lot # | EX-ACETON BOT_46 |
| Balance ID | B001 |
| Batch Comment | NONE |
| Person's name who did the concentration | SAUREL |
| Exchange Solvent Lot # | EX-MC CYCL_54 |
| Exchange Solvent Name | DCM |
| Final Concentrator Volume | 1 mL |
| MeCL2 Lot # | EX-MC CYCL_54 |
| MeCl2/Acetone Lot # | EX-DCM/ACETON_21 |
| Microwave Start Time | 12:00 2/21/13 |
| Microwave Stop Time | 12:35 2/21/13 |
| Na2SO4 Lot Number | EX-NA2S04A_62 |
| Ottawa Sand Lot # | EX-OTTOWA SAND_10 |
| Person's name who did the prep | SAUREL |
| SOP Number | TP-EX014 |
| Person who witnessed spiking | AG |
| Surrogate Lot Number | EXLLSURINT_175 |
| Water Bath ID | TURBOVAP2 #1/2/3/4 |
| Water Bath Temperature | 40 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Batch Number: 134712 Batch Start Date: 02/21/13 12:14 Batch Analyst: Cerome, Saurel

Batch Method: 3546 Batch End Date: 02/22/13 08:20

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | EX-625LVI SPK 00019 | EXLLSURINT 00175 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 660-134712/1 | | 3546, 8270C LL | | 15.42 g | 1 mL | | 1 mL | | |
| LCS 660-134712/2 | | 3546, 8270C LL | | 15.39 g | 1 mL | 1 mL | 1 mL | | |
| 680-87545-A-1 | CV0240A-CS | 3546, 8270C LL | T | 15.42 g | 1 mL | | 1 mL | | |
| 680-87545-A-1 MS | CV0240A-CS | 3546, 8270C LL | T | 15.42 g | 1 mL | 1 mL | 1 mL | | |
| 680-87545-A-1 MSD | CV0240A-CS | 3546, 8270C LL | T | 15.42 g | 1 mL | 1 mL | 1 mL | | |
| 680-87545-A-10 | FM0161AE-GS | 3546, 8270C LL | T | 14.98 g | 1 mL | | 1 mL | | |
| 680-87545-A-11 | FM0161AF-GS | 3546, 8270C LL | T | 14.96 g | 1 mL | | 1 mL | | |
| 680-87545-A-12 | FM0161AG-GS | 3546, 8270C LL | T | 14.91 g | 1 mL | | 1 mL | | |
| 680-87545-A-13 | FM0161AH-GS | 3546, 8270C LL | T | 15.08 g | 1 mL | | 1 mL | | |
| 680-87545-A-14 | FM0161AI-GS | 3546, 8270C LL | T | 15.26 g | 1 mL | | 1 mL | | |
| 680-87545-A-15 | FM0161AJ-GS | 3546, 8270C LL | T | 15.41 g | 1 mL | | 1 mL | | |
| 680-87545-A-16 | FM0161AK-GS | 3546, 8270C LL | T | 15.14 g | 1 mL | | 1 mL | | |
| 680-87545-A-17 | FM0161AL-GS | 3546, 8270C LL | T | 14.96 g | 1 mL | | 1 mL | | |
| 680-87545-A-18 | FM0161AM-GS | 3546, 8270C LL | T | 15.44 g | 1 mL | | 1 mL | | |
| 680-87545-A-19 | FM0161J-CS | 3546, 8270C LL | T | 15.24 g | 1 mL | | 1 mL | | |
| 680-87545-A-20 | FM0161K-CS | 3546, 8270C LL | T | 14.96 g | 1 mL | | 1 mL | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Batch Number: 134712 Batch Start Date: 02/21/13 12:14 Batch Analyst: Cerome, Saurel

Batch Method: 3546 Batch End Date: 02/22/13 08:20

| Batch Notes | |
|---|---|
| Acetone Lot # | EX ACETON BOT _46 |
| Balance ID | B001 |
| Batch Comment | RUSH |
| Person's name who did the concentration | AG |
| Exchange Solvent Lot # | EX MC CYCL _54 |
| Exchange Solvent Name | DCM |
| Final Concentrator Volume | 1 ML mL |
| MeCL2 Lot # | EX MC CYCL _54 |
| MeCl2/Acetone Lot # | EX DCM/ACETON _21 |
| Microwave Start Time | 13.45/2/21/13 |
| Microwave Stop Time | 14.20/2/21/13 |
| Na2SO4 Lot Number | EX NA2S04 A_62 |
| Ottawa Sand Lot # | ex-OTTAWSAND_11 |
| Person's name who did the prep | SAUREL |
| SOP Number | T P EX 014 |
| Person who witnessed spiking | AG |
| Surrogate Lot Number | EXLLSURINT _175 |
| Water Bath ID | TURBOVAP2#1/2/3 |
| Water Bath Temperature | 40 C |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Tampa Job Number: 680-87545-1

SDG No.: 68087545-1

Project: 35th Avenue Superfund Site

| Client Sample ID | Lab Sample ID |
|---|---|
| CV0240A-CS | 680-87545-1 |
| CV0240B-CS | 680-87545-2 |
| FM0161E-CS | 680-87545-3 |
| FM0161F-CS | 680-87545-4 |
| FM0161G-CS | 680-87545-5 |
| FM0161H-CS | 680-87545-6 |
| FM0161H-CSD | 680-87545-7 |
| FM0161I-CS | 680-87545-8 |
| FM0161AD-GS | 680-87545-9 |
| FM0161AE-GS | 680-87545-10 |
| FM0161AF-GS | 680-87545-11 |
| FM0161AG-GS | 680-87545-12 |
| FM0161AH-GS | 680-87545-13 |
| FM0161AI-GS | 680-87545-14 |
| FM0161AJ-GS | 680-87545-15 |
| FM0161AK-GS | 680-87545-16 |
| FM0161AL-GS | 680-87545-17 |
| FM0161AM-GS | 680-87545-18 |
| FM0161J-CS | 680-87545-19 |
| FM0161K-CS | 680-87545-20 |

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Tampa Job Number: 680-87545-1

SDG Number: 68087545-1

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/01/2004 18:10

| Analyte | Wavelength/ Mass | RL (%) | |
|---|---|---|---|
| Percent Moisture | | 0.1 | |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Tampa Job Number: 680-87545-1

SDG Number: 68087545-1

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 04/12/2010 08:14

| Analyte | Wavelength/ Mass | XRL (%) | |
|---|---|---|---|
| Percent Moisture | | 0.1 | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: NOEQUIP Method: Moisture

Start Date: 02/20/2013 05:33 End Date: 02/20/2013 05:33

| Lab Sample ID | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Moist | | | | | | | | | | | | | | | | | | | |
| MB 660-134638/1 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-1 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-1 MS | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-1 MSD | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-2 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-3 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-4 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-5 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-6 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-7 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-8 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-9 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-10 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-11 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-12 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-13 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-14 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-15 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-16 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-17 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-18 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-19 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| 680-87545-20 | 1 | T | 05:33 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Instrument ID: NOEQUIP Method: Moisture

Start Date: 02/20/2013 05:33 End Date: 02/20/2013 05:33

| Lab Sample ID | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Moist | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:33 | | | | | | | | | | | | | | | | | | | | |

Prep Types
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Batch Number: 134638 Batch Start Date: 02/20/13 05:33 Batch Analyst: Galio, Andrew

Batch Method: Moisture Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | DISH# | DishWeight | SampleMassWet | SampleMassDry | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 660-134638/1 | | Moisture | | 1 | 0 g | 9.64 g | 9.67 g | | |
| 680-87545-A-1 | CV0240A-CS | Moisture | T | 2 | 0 g | 4.42 g | 4.00 g | | |
| 680-87545-A-1 MS | CV0240A-CS | Moisture | T | 2 | 0 g | 4.42 g | 4.00 g | | |
| 680-87545-A-1 MSD | CV0240A-CS | Moisture | T | 2 | 0 g | 4.42 g | 4.00 g | | |
| 680-87545-A-2 | CV0240B-CS | Moisture | T | 3 | 0 g | 4.30 g | 3.99 g | | |
| 680-87545-A-3 | FM0161E-CS | Moisture | T | 4 | 0 g | 5.67 g | 4.58 g | | |
| 680-87545-A-4 | FM0161F-CS | Moisture | T | 5 | 0 g | 5.42 g | 5.39 g | | |
| 680-87545-A-5 | FM0161G-CS | Moisture | T | 6 | 0 g | 4.94 g | 4.75 g | | |
| 680-87545-A-6 | FM0161H-CS | Moisture | T | 7 | 0 g | 5.39 g | 5.24 g | | |
| 680-87545-A-7 | FM0161H-CSD | Moisture | T | 8 | 0 g | 5.05 g | 3.62 g | | |
| 680-87545-A-8 | FM0161I-CS | Moisture | T | 9 | 0 g | 5.58 g | 5.48 g | | |
| 680-87545-A-9 | FM0161AD-GS | Moisture | T | 10 | 0 g | 5.19 g | 4.84 g | | |
| 680-87545-A-10 | FM0161AE-GS | Moisture | T | 11 | 0 g | 5.11 g | 4.68 g | | |
| 680-87545-A-11 | FM0161AF-GS | Moisture | T | 12 | 0 g | 4.93 g | 4.71 g | | |
| 680-87545-A-12 | FM0161AG-GS | Moisture | T | 13 | 0 g | 4.82 g | 4.77 g | | |
| 680-87545-A-13 | FM0161AH-GS | Moisture | T | 14 | 0 g | 4.59 g | 4.35 g | | |
| 680-87545-A-14 | FM0161AI-GS | Moisture | T | 15 | 0 g | 5.08 g | 2.29 g | | |
| 680-87545-A-15 | FM0161AJ-GS | Moisture | T | 16 | 0 g | 4.29 g | 4.22 g | | |
| 680-87545-A-16 | FM0161AK-GS | Moisture | T | 17 | 0 g | 4.47 g | 4.44 g | | |
| 680-87545-A-17 | FM0161AL-GS | Moisture | T | 18 | 0 g | 4.56 g | 4.06 g | | |
| 680-87545-A-18 | FM0161AM-GS | Moisture | T | 19 | 0 g | 5.05 g | 4.15 g | | |
| 680-87545-A-19 | FM0161J-CS | Moisture | T | 20 | 0 g | 4.48 g | 4.34 g | | |
| 680-87545-A-20 | FM0161K-CS | Moisture | T | 21 | 0 g | 4.60 g | 4.45 g | | |

| Batch Notes | |
|---|---|
| Balance ID | 2 No Unit |
| Date samples were placed in the oven | 2.20.13 |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Tampa Job No.: 680-87545-1

SDG No.: 68087545-1

Batch Number: 134638 Batch Start Date: 02/20/13 05:33 Batch Analyst: Galio, Andrew

Batch Method: Moisture Batch End Date:

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Shipping and Receiving Documents

Serial Number 59540

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


(✓) TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

( ) Alternate Laboratory Name/Location
Phone:
Fax:


| | | |
|---|---|---|
| PROJECT REFERENCE: 35th Ave Removal | PROJECT NO.: 20057HB-1356 | PROJECT LOCATION (STATE): AL |
| TAL (LAB) PROJECT MANAGER: Lisa Harvey | P.O. NUMBER: | CONTRACT NO.: |
| CLIENT (SITE) PM: R. Henderson | CLIENT PHONE: | CLIENT FAX: |
| CLIENT NAME: OTIE | CLIENT E-MAIL: LKrebs@otie.com | |
| CLIENT ADDRESS: | | |
| COMPANY CONTRACTING THIS WORK (if applicable): | | |

PAGE 1 OF 8

STANDARD REPORT DELIVERY ( )

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ( )

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

| SAMPLE DATE | SAMPLE TIME | SAMPLE IDENTIFICATION | COMPOSITE (C) OR GRAB (G) INDICATE | AQUEOUS (WATER) | SOLID OR SEMISOLID | AIR | NONAQUEOUS LIQUID (OIL, SOLVENT, ...) | LL PAH 8270 | 8270 SVOC | RCRA Metals | | | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | PRESERVATIVE | | | | | | | | | | |
| 2/14/13 | 846 | CV0240A-CS | C | | X | | | X | | X | | | | | | | | |
| | 858 | CV0240B-CS | C | | X | | | X | | X | | | | | | | | |
| | 839 | FM0161E-CS | C | | X | | | X | | | | | | | | | | |
| | 847 | FM0161F-CS | C | | X | | | X | X | | | | | | | | | |
| | 858 | FM0161G-CS | C | | X | | | X | | | | | | | | | | |
| | 905 | FM0161H-CS | C | | X | | | X | | | | | | | | | | |
| | 908 | FM0161H-CSD | C | | X | | | X | | | | | | | | | | |
| | 910 | FM0161I-CS | C | | X | | | X | | | | | | | | | | |
| | 849 | FM0161AD-GS | G | | X | | | X | | | | | | | | | | |
| | 852 | FM0161AE-GS | G | | X | | | X | | | | | | | | | | |
| | 858 | FM0161AF-GS | G | | X | | | X | | | | | | | | | | |
| | 941 | FM0161AG-GS | G | | X | | | X | | | | | | | | | | |

NUMBER OF CONTAINERS SUBMITTED

| RELINQUISHED BY: (SIGNATURE) | DATE | TIME | RELINQUISHED BY: (SIGNATURE) | DATE | TIME | RELINQUISHED BY: (SIGNATURE) | DATE | TIME |
|---|---|---|---|---|---|---|---|---|
| [signature] | 2/15/13 | 1130 | | | | | | |
| RECEIVED BY: (SIGNATURE) | DATE | TIME | RECEIVED BY: (SIGNATURE) | DATE | TIME | RECEIVED BY: (SIGNATURE) | DATE | TIME |
| | | | | | | | | |

LABORATORY USE ONLY

| RECEIVED FOR LABORATORY BY: (SIGNATURE) | DATE | TIME | CUSTODY INTACT | CUSTODY SEAL NO. | SAVANNAH LOG NO. | LABORATORY REMARKS |
|---|---|---|---|---|---|---|
| Ruth A Daughtry | 2/16/13 | 0903 | YES ( ) NO ( ) | | 6080 87545 | Temp 2.8°C / 3.4°C |

TAL8240-680 (1008)

Serial Number 59541

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


✓ TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165


◯ Alternate Laboratory Name/Location

Phone:
Fax:

| PROJECT REFERENCE | PROJECT NO. | PROJECT LOCATION (STATE) |
|---|---|---|
| 35th Ave Removal | 20051148-1356 | AL |

| TAL (LAB) PROJECT MANAGER | P.O. NUMBER | CONTRACT NO. |
|---|---|---|
| Lisa Harvey | | |

| CLIENT (SITE) PM | CLIENT PHONE | CLIENT FAX |
|---|---|---|
| R. Henderson | | |

| CLIENT NAME | CLIENT E-MAIL |
|---|---|
| OTIE | LKrebs@otie.com |

CLIENT ADDRESS

COMPANY CONTRACTING THIS WORK (if applicable)

PAGE 2 OF 8

STANDARD REPORT DELIVERY ◯

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

REQUIRED ANALYSIS: LL PAH 8270

PRESERVATIVE

| SAMPLE DATE | SAMPLE TIME | SAMPLE IDENTIFICATION | COMPOSITE (C) OR GRAB (G) INDICATE | AQUEOUS (WATER) | SOLID OR SEMISOLID | AIR | NONAQUEOUS LIQUID (OIL, SOLVENT, ...) | LL PAH 8270 | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 2/14/13 | 943 | FM0161AH-GS | G | | X | | | X | |
| | 952 | FM0161AI-GS | G | | X | | | X | |
| | 1004 | FM0161AJ-GS | G | | X | | | X | |
| | 1037 | FM0161AK-GS | G | | X | | | X | |
| | 1052 | FM0161AL-GS | G | | X | | | X | |
| | 1053 | FM0161AM-GS | G | | X | | | X | |
| | 931 | FM0161J-CS | C | | X | | | X | |
| | 937 | FM0161K-CS | C | | X | | | X | |
| | 948 | FM0161L-CS | C | | X | | | X | |
| | 955 | FM0161M-CS | C | | X | | | X | |
| | 958 | FM0161M-CSD | C | | X | | | X | |
| | 1005 | FM0161N-CS | C | | X | | | X | |

| RELINQUISHED BY: (SIGNATURE) | DATE | TIME | RELINQUISHED BY: (SIGNATURE) | DATE | TIME | RELINQUISHED BY: (SIGNATURE) | DATE | TIME |
|---|---|---|---|---|---|---|---|---|
| Mike Sa[illegible] | 2/15/13 | 1130 | | | | | | |

| RECEIVED BY: (SIGNATURE) | DATE | TIME | RECEIVED BY: (SIGNATURE) | DATE | TIME | RECEIVED BY: (SIGNATURE) | DATE | TIME |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

LABORATORY USE ONLY

| RECEIVED FOR LABORATORY BY: (SIGNATURE) | DATE | TIME | CUSTODY INTACT | CUSTODY SEAL NO. | SAVANNAH LOG NO. | LABORATORY REMARKS |
|---|---|---|---|---|---|---|
| Beth A Daughtry | 2/16/13 | 0903 | YES ◯ NO ◯ | | 680 87545 | Temp 2.8°C, 3.4°C |

TAL8240-680 (1008)

# Login Sample Receipt Checklist

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
SDG Number: 68087545-1

**Login Number: 87545**
**List Number: 1**
**Creator: Daughtry, Beth**

**List Source: TestAmerica Savannah**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | N/A | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-87545-1
SDG Number: 68087545-1

**Login Number: 87545**
**List Number: 1**
**Creator: Snead, Joshua**

**List Source: TestAmerica Tampa**
**List Creation: 02/19/13 10:59 AM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |