BC LABORATORIES, INC.

**Work Order Number: 1703480**

# Laboratory Documentation Requirements
# For Data Validation of
# GC Analysis

**Prepared By**

**BC Laboratories**

**For AMEC Environmental & Infrastructure**

**5023146096**

All pages have been paginated and results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Certifications: CA ELAP #1186; NV #CA00014; AK UST101; OR ELAP #4032; DoD ELAP #66175

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## Case Narrative

**Analyses Requested**: **RSK 175M**
**Submission Number: 17-03480**

Instrument ID: GC-V1
Model: Varian 3400

Column Type: RTX 502.2, 60m x 0.25mm ID, 1.4µm film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

**Holding Time**: All analyses and extractions took place within holding times.

**Calibration**: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

**Blanks**: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

**Laboratory Control Sample and Duplicate:** Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

# CHAIN OF CUSTODY

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

DATE: 2/7/2017
COC #: COC170207
PAGE: 1 OF 3

17-03480

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023146096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Oness | Project Phase: | .03 **** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases- (RSK175) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27EW-17_170207 | 02/07/17 08:50 -1 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 2 | 27EW-18_170207 | 02/07/17 09:55 -2 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 3 | 39B-MW1_170207 | 02/07/17 08:42 -3 | WG | N | N | X | | | | | | | | | | | | |
| 4 | IR11-OU2B-MW02_170207 | 02/07/17 10:05 -4 | WG | N | N | X | | | | | | | | | | | | |
| 5 | IR11-OU2B-MW03_170207 | 02/07/17 09:00 -5 | WG | N | N | X | | | | | | | | | | | | |
| 6 | M11-02_170207 | 02/07/17 08:20 -6 | WG | N | N | X | | | | | | | | | | | | |
| 7 | OU2B-MW02_170207 | 02/07/17 10:12 -7 | WG | N | N | X | | | | | | | | | | | | |
| 8 | OU2B-MW04_170207 | 02/07/17 09:32 -8 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW05A_170207 | 02/07/17 08:37 -9 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW05C_170207 | 02/07/17 10:22 -10 | WG | N | N | X | | | | | | | | | | | | |
| 11 | S21-TT-MW05D_170207 | 02/07/17 09:44 -11 | WG | N | N | X | | | | | | | | | | | | |
| 12 | S21-TT-MW05E_170207 | 02/07/17 09:12 -12 | WG | N | N | X | | | | | | | | | | | | |

CHK BY
DISTRIBUTION
SUB-OUT
SHORT HOLDING TIME
Cr+6 NO NO OP SS

| | | |
|---|---|---|
| Sampler's Signature: | Date: 2/7/17 | Time: 14:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 14:45 |
| Received By: | Date: 2/7/17 | Time: 14:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 1830 |
| Received By: | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | Date: 2/7 | Time: 2200 |

For Lab Use: DO Cl2 BOD MBAS COT

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| WSDOT contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | *C |

Comments:
X=Analyze H=Hold Analysis Request
Report DL/LOD/LOQ with Navy NIRIS valid values
VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg
NUMBER OF COOLERS SENT:

# CHAIN OF CUSTODY

DATE: 2/7/2017
COC #: COC170207
PAGE: 2 OF 3

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

17-03480

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023140096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Olness | Project Phase: | 03.**** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases- (RSK175) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27EW-13_170207 | 02/07/17 11:05 -13 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 2 | 27MW01_170207 | 02/07/17 11:55 -14 | WG | N | Y | X | | | | | | | | | | | | |
| 3 | IR11-OU2B-MW01_170207 | 02/07/17 11:25 -15 | WG | N | N | X | X | X | X | X | X | | | | | | | |
| 4 | M07B-01_170207 | 02/07/17 11:25 -16 | WG | N | N | X | | | | | | | | | | | | |
| 5 | OU2B-MW01_170207 | 02/07/17 10:44 -17 | WG | N | Y | X | | | | | | | | | | | | |
| 6 | S11-TT-MW01C_170207 | 02/07/17 13:09 -18 | WG | N | N | X | | | | | | | | | | | | |
| 7 | S11-TT-MW01D_170207 | 02/07/17 12:34 -19 | WG | N | N | X | | | | | | | | | | | | |
| 8 | S11-TT-MW01E_170207 | 02/07/17 11:59 -20 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW01E_170207 | 02/07/17 12:50 -21 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW05B_170207 | 02/07/17 10:52 -22 | WG | N | N | X | | | | | | | | | | | | |
| 11 | TB14_170207 | 02/07/17 12:00 -23 | WQ | TB | N | X | | | | | | | | | | | | |
| 12 | TB15_170207 | 02/07/17 12:15 -24 | WQ | TB | N | X | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Sampler's Signature: | | Date: 2/7/17 | Time: 16:65 |
| Relinquished By/Affiliation: | | Date: 2/7/17 | Time: 16:65 |
| Received By: | | Date: 2/7/17 | Time: 16:65 |
| Relinquished By/Affiliation: | | Date: 2-7-17 | Time: 1830 |
| Received By: | | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | | Date: 2/7 | Time: 2200 |

For Lab Use

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| WSDOT contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | °C |

Comments:
X=Analyze H=Hold Analysis Request

Report DL/LOD/LOQ with Navy NIRIS valid values

VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg

NUMBER OF COOLERS SENT:

# CHAIN OF CUSTODY

MMEC Group
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17-03480

SHIP TO:
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Attn:
Lab Phone#

DATE: 2/7/2017
COC #: COC170207
PAGE: 3 OF 3

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| Project Manager: | Kevin Olness | Project Phase: | .03.**** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases - (RSKI75) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EB26_170207 | 02/07/17 14:00 , 25 | WQ | EB | N | X | | | | | | | | | | | | |
| 2 | EB27_170207 | 02/07/17 14:10 , 26 | WQ | EB | N | X | | | | | | | | | | | | |
| 3 | EB28_170207 | 02/07/17 14:20 , 27 | WQ | EB | N | X | | | | | | | | | | | | |
| 4 | EB29_170207 | 02/07/17 14:30 , 28 | WQ | EB | N | X | | | | | | | | | | | | |
| 5 | IR11-OU2B-MW04_170207 | 02/07/17 13:30 , 29 | WG | N | N | X | | | | | | | | | | | | |
| 6 | M11-01_170207 | 02/07/17 14:00 , 30 | WG | N | N | X | X | X | X | X | X | | | | | | | |
| 7 | S11-TT-MW01A_170207 | 02/07/17 14:11 , 31 | WG | N | N | X | | | | | | | | | | | | |
| 8 | S11-TT-MW01B_170207 | 02/07/17 13:48 , 32 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW01A_170207 | 02/07/17 13:51 , 33 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW01B_170207 | 02/07/17 13:55 , 34 | WG | N | N | X | | | | | | | | | | | | |
| 11 | S21-TT-MW01C_170207 | 02/07/17 13:23 , 35 | WG | N | N | X | | | | | | | | | | | | |
| 12 | S21-TT-MW01D_170207 | 02/07/17 13:25 , 36 | WG | N | N | X | | | | | | | | | | | | |

| | | |
|---|---|---|
| Sampler's Signature: | Date: 2/7/17 | Time: 16:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 16:45 |
| Received By: | Date: 2/7/17 | Time: 16:45 |
| Relinquished By/Affiliation: | Date: 2-7-17 | Time: 1830 |
| Received By: | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | Date: 2/7 | Time: 2200 |

For Lab Use

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| WSDOT contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | °C |

Comments:
X=Analyze H=Hold Analysis Request

Report DL/LOD/LOQ with Navy NIRIS valid values

VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg

NUMBER OF COOLERS SENT:

**Chain of Custody and Cooler Receipt Form for 1703480 Page 4 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 86

Submission #: 17-03480

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☐ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2200

Temperature: ( A ) 0.8 °C / ( C ) 1.1 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 15 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | G | G | G | | | | | | | |
| ~~8oz Cu~~ 8oz. unpres | | | | G→+ | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | H | H | H | J | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | I | I | I | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL | | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:_____
Sample Numbering Completed By: JDL Date/Time: 2-8-17 Rev 21 05/23/2016
A = Actual / C = Corrected
[S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC.rev 20]

**Chain of Custody and Cooler Receipt Form for 1703480 Page 5 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 Of 6

Submission #: 17-03480

| SHIPPING INFORMATION | SHIPPING CONTAINER | FREE LIQUID |
|---|---|---|
| Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐<br>BC Lab Field Service ☒ Other ☐ (Specify)_____ | Ice Chest ☒ None ☐ Box ☐<br>Other ☐ (Specify)_____ | YES ☐ NO ☐<br>W / S |

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209

Temperature: ( A ) 1.7 °C / ( C ) 1.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 30 | 31 | 32 | 34 | 36 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | G=I | | | | | | | | | |
| 2oz Cr+6 | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | J | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | K | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PIA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL ~~TRAVEL BLANK~~ 096 | ABC | ABC | ABC | ABC | ABC | | | | | |
| 40ml VOA VIAL 098 | DEF | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:

Sample Numbering Completed By: JM Date/Time: 2-8-17 Rev 21 05/23/2016

A = Actual / C = Corrected (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

BC LABORATORIES INC. COOLER RECEIPT FORM Page 38 Of 55

Submission #: 17-0348 R

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VBA Thermometer ID: 207 Date/Time 2/7 2209
Temperature: (A) 1.7 °C / (C) 1.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 4 | 5 | 24 | 26 | 27 | 28 | 29 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL ~~TRAVEL BLANK~~ 096 | ABC | ABC | ABC | A-21 | ABC | 10/28/17 | ABC | ABC | ABC | ABC |
| 40ml VOA VIAL 098 | DEF | DEF | DEF | | DEF | ~~AB~~ | | | | |
| QT EPA 1664 4/2ml vial 094 | | | | | | AB | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDL Date/Time: 2-8-17
A = Actual / C = Corrected

Rev 21 05/23/2016
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**Chain of Custody and Cooler Receipt Form for 1703480 Page 7 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 4 Of 6

Submission #: 17-03480

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209

Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL 036 | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDC Date/Time: 2-8-17
A = Actual / C = Corrected

Rev 21 05/23/2016
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**Chain of Custody and Cooler Receipt Form for 1703480 Page 8 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 54 Of 56

Submission #: 17-03480 KG 3/17

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209

Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 16 | 17 7 | 18 8 | 19 9 | 20 9 | 21 9 | 22 1 | 23 8 | 25 9 | 26 3 |
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | // | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL 0916 | ABC | A-J | ABC | ABC | ABC | ABC | ABC | A 28 17 AB | ABC | ABC |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDL Date/Time: 2-8-17 Rev 21 05/23/2016
A = Actual / C = Corrected
(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC-rev 20)

**Chain of Custody and Cooler Receipt Form for 1703480 Page 9 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 65 Of 66

Submission #: 17-03480

| SHIPPING INFORMATION | SHIPPING CONTAINER | FREE LIQUID |
|---|---|---|
| Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐ | Ice Chest ☒ None ☐ Box ☐ | YES ☐ NO ☐ |
| BC Lab Field Service ☒ Other ☐ (Specify)_____ | Other ☐ (Specify)_____ | W / S |

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☐ No ☐ All samples containers intact? Yes ☐ No ☐ Description(s) match COC? Yes ☐ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209

Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PIA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL | | ABC | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:

Sample Numbering Completed By: JDL Date/Time: 2 8 17

A = Actual / C = Corrected

Rev 21 05/23/2016

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AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

**SDG:** **17-03480**
**Class:** **GC**
**Method:** **RSK-175M**

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## RSK-175M

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| 27EW-17_170207 | 1703480-01 |
| 27EW-18_170207 | 1703480-02 |
| 27EW-13_170207 | 1703480-13 |
| IR11-OU2B-MW01_170207 | 1703480-15 |
| M11-01_170207 | 1703480-30 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 03-13-2017
Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## RSK-175M

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** GC-V1

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Methane | 0.00028 | 0.0006 | 0.001 | mg/L |
| Ethane | 0.00075 | 0.001 | 0.002 | mg/L |
| Ethene | 0.00077 | 0.001 | 0.002 | mg/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## RSK-175M

**27EW-17_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-01 | File ID: | 21FEB09.D |
| Sampled: | 02/07/17 08:50 | Prepared: | 02/16/17 12:10 | Analyzed: | 02/21/17 09:43 |
| Solids: | | Preparation: | RSK-175M | Initial/Final: | 1 ml / 1 ml |
| Batch: | B[B1446 | Sequence: | 1702815 | Calibration: | 1702007 |
| Instrument: | GC-V1 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 74-82-8 | Methane | 1 | 0.19 | 0.00028 | 0.00060 | 0.0010 | |
| 74-84-0 | Ethane | 1 | 0.0010 | 0.00075 | 0.0010 | 0.0020 | U |
| 74-85-1 | Ethene | 1 | 0.0010 | 0.00077 | 0.0010 | 0.0020 | U |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## RSK-175M

**27EW-18_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-02 | File ID: | 21FEB10.D |
| Sampled: | 02/07/17 09:55 | Prepared: | 02/16/17 12:10 | Analyzed: | 02/21/17 09:48 |
| Solids: | | Preparation: | RSK-175M | Initial/Final: | 1 ml / 1 ml |
| Batch: | B[B1446 | Sequence: | 1702815 | Calibration: | 1702007 |
| Instrument: | GC-V1 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 74-82-8 | Methane | 1 | 0.00060 | 0.00028 | 0.00060 | 0.0010 | U |
| 74-84-0 | Ethane | 1 | 0.0010 | 0.00075 | 0.0010 | 0.0020 | U |
| 74-85-1 | Ethene | 1 | 0.0010 | 0.00077 | 0.0010 | 0.0020 | U |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## RSK-175M

**27EW-13_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-13 | File ID: | 21FEB11.D |
| Sampled: | 02/07/17 11:05 | Prepared: | 02/16/17 12:10 | Analyzed: | 02/21/17 10:01 |
| Solids: | | Preparation: | RSK-175M | Initial/Final: | 1 ml / 1 ml |
| Batch: | B[B1446 | Sequence: | 1702815 | Calibration: | 1702007 |
| Instrument: | GC-V1 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 74-82-8 | Methane | 1 | 0.00060 | 0.00028 | 0.00060 | 0.0010 | U |
| 74-84-0 | Ethane | 1 | 0.0010 | 0.00075 | 0.0010 | 0.0020 | U |
| 74-85-1 | Ethene | 1 | 0.0010 | 0.00077 | 0.0010 | 0.0020 | U |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## RSK-175M

**IR11-OU2B-MW01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-15 | File ID: | 21FEB12.D |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/16/17 12:10 | Analyzed: | 02/21/17 10:18 |
| Solids: | | Preparation: | RSK-175M | Initial/Final: | 1 ml / 1 ml |
| Batch: | B[B1446 | Sequence: | 1702815 | Calibration: | 1702007 |
| Instrument: | GC-V1 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 74-82-8 | Methane | 1 | 0.079 | 0.00028 | 0.00060 | 0.0010 | |
| 74-84-0 | Ethane | 1 | 0.0010 | 0.00075 | 0.0010 | 0.0020 | U |
| 74-85-1 | Ethene | 1 | 0.0010 | 0.00077 | 0.0010 | 0.0020 | U |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## RSK-175M

**M11-01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-30 | File ID: | 21FEB13.D |
| Sampled: | 02/07/17 14:00 | Prepared: | 02/16/17 12:10 | Analyzed: | 02/21/17 10:25 |
| Solids: | | Preparation: | RSK-175M | Initial/Final: | 1 ml / 1 ml |
| Batch: | B[B1446 | Sequence: | 1702815 | Calibration: | 1702007 |
| Instrument: | GC-V1 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 74-82-8 | Methane | 1 | 0.00060 | 0.00028 | 0.00060 | 0.0010 | U |
| 74-84-0 | Ethane | 1 | 0.0010 | 0.00075 | 0.0010 | 0.0020 | U |
| 74-85-1 | Ethene | 1 | 0.0010 | 0.00077 | 0.0010 | 0.0020 | U |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## RSK-175M

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B1446
Batch Matrix: Water
Preparation: RSK-175M

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-17_170207 | 1703480-01 | 21FEB09.D | 02/16/17 12:10 | |
| 27EW-18_170207 | 1703480-02 | 21FEB10.D | 02/16/17 12:10 | |
| 27EW-13_170207 | 1703480-13 | 21FEB11.D | 02/16/17 12:10 | |
| IR11-OU2B-MW01_170207 | 1703480-15 | 21FEB12.D | 02/16/17 12:10 | |
| M11-01_170207 | 1703480-30 | 21FEB13.D | 02/16/17 12:10 | |
| Blank | B[B1446-BLK1 | 21FEB04.D | 02/16/17 12:10 | |
| LCS | B[B1446-BS1 | 21FEB05.D | 02/16/17 12:10 | |
| LCS Dup | B[B1446-BSD1 | 21FEB06.D | 02/16/17 12:10 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## RSK-175M

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1446-BLK1 | File ID: | 21FEB04.D |
| Prepared: | 02/16/17 12:10 | Preparation: | RSK-175M | Initial/Final: | 1 ml / 1 ml |
| Analyzed: | 02/21/17 09:20 | Instrument: | GC-V1 | | |
| Batch: | B[B1446 | Sequence: | 1702815 | Calibration: | 1702007 |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 74-82-8 | Methane | 0.00060 | 0.00028 | 0.00060 | 0.0010 | U |
| 74-84-0 | Ethane | 0.0010 | 0.00075 | 0.0010 | 0.0020 | U |
| 74-85-1 | Ethene | 0.0010 | 0.00077 | 0.0010 | 0.0020 | U |

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San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
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Project Manager: Kelli Miller

# LCS RECOVERY
## RSK-175M

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1446
Laboratory ID: B[B1446-BS1
Preparation: RSK-175M
Initial/Final: 1 ml / 1 ml

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Methane | 0.010843 | 0.0094079 | 86.8 | 73 - 125 |
| Ethane | 0.021736 | 0.023488 | 108 | 74 - 131 |
| Ethene | 0.028446 | 0.024630 | 86.6 | 72 - 133 |

| COMPOUND | SPIKE ADDED (mg/L) | LCSD CONCENTRATION (mg/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Methane | 0.010843 | 0.0094925 | 87.5 | 0.895 | 20 | 73 - 125 |
| Ethane | 0.021736 | 0.023623 | 109 | 0.572 | 20 | 74 - 131 |
| Ethene | 0.028446 | 0.024942 | 87.7 | 1.26 | 20 | 72 - 133 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

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9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## RSK-175M

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1701454 | Instrument: | GC-V1 |
| Matrix: | Water | Calibration: | 1702007 |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1701454-CAL4 | 27JAN02.D | 01/27/17 07:43 |
| Cal Standard | 1701454-CAL3 | 27JAN03.D | 01/27/17 07:47 |
| Cal Standard | 1701454-CAL2 | 27JAN04.D | 01/27/17 07:52 |
| Cal Standard | 1701454-CAL1 | 27JAN05.D | 01/27/17 07:56 |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## RSK-175M

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702815 | Instrument: | GC-V1 |
| Matrix: | Water | Calibration: | 1702007 |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Initial Cal Check | 1702815-ICV1 | 27JAN06.D | 01/27/17 08:40 |
| Initial Cal Blank | 1702815-ICB1 | 27JAN07.D | 01/27/17 08:45 |
| Calibration Check | 1702815-CCV1 | 21FEB02.D | 02/21/17 09:10 |
| Calibration Blank | 1702815-CCB1 | 21FEB03.D | 02/21/17 09:15 |
| Blank | B[B1446-BLK1 | 21FEB04.D | 02/21/17 09:20 |
| LCS | B[B1446-BS1 | 21FEB05.D | 02/21/17 09:24 |
| LCS Dup | B[B1446-BSD1 | 21FEB06.D | 02/21/17 09:30 |
| Calibration Check | 1702815-CCV2 | 21FEB07.D | 02/21/17 09:34 |
| Calibration Blank | 1702815-CCB2 | 21FEB08.D | 02/21/17 09:39 |
| 27EW-17_170207 | 1703480-01 | 21FEB09.D | 02/21/17 09:43 |
| 27EW-18_170207 | 1703480-02 | 21FEB10.D | 02/21/17 09:48 |
| 27EW-13_170207 | 1703480-13 | 21FEB11.D | 02/21/17 10:01 |
| IR11-OU2B-MW01_170207 | 1703480-15 | 21FEB12.D | 02/21/17 10:18 |
| M11-01_170207 | 1703480-30 | 21FEB13.D | 02/21/17 10:25 |
| Calibration Check | 1702815-CCV3 | 21FEB18.D | 02/21/17 13:22 |
| Calibration Blank | 1702815-CCB3 | 21FEB19.D | 02/21/17 13:26 |

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9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## RSK-175M

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | GC-V1 | Calibration: | 1702007 |
| Lab File ID: | 27JAN06.D | Calibration Date: | 01/27/17 07:43 |
| Sequence: | 1702815 | Injection Date: | 01/27/17 |
| Lab Sample ID: | 1702815-ICV1 | Injection Time: | 08:40 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Methane | A | 10.843 | 12.174 | 605292.5 | 679565.1 | | 12.3 | 15 |
| Ethane | A | 21.736 | 24.956 | 580938.9 | 666976.9 | | 14.8 | 15 |
| Ethene | A | 28.446 | 31.820 | 402477.4 | 450214.1 | | 11.9 | 15 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

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9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## RSK-175M

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | GC-V1 | Calibration: | 1702007 |
| Lab File ID: | 21FEB02.D | Calibration Date: | 01/27/17 07:43 |
| Sequence: | 1702815 | Injection Date: | 02/21/17 |
| Lab Sample ID: | 1702815-CCV1 | Injection Time: | 09:10 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Methane | A | 10.843 | 10.370 | 605292.5 | 578862.5 | | -4.4 | 15 |
| Ethane | A | 21.736 | 24.588 | 580938.9 | 657125 | | 13.1 | 15 |
| Ethene | A | 28.446 | 26.318 | 402477.4 | 372364.8 | | -7.5 | 15 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## RSK-175M

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | GC-V1 | Calibration: | 1702007 |
| Lab File ID: | 21FEB07.D | Calibration Date: | 01/27/17 07:43 |
| Sequence: | 1702815 | Injection Date: | 02/21/17 |
| Lab Sample ID: | 1702815-CCV2 | Injection Time: | 09:34 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Methane | A | 10.843 | 9.5115 | 605292.5 | 530965 | | -12.3 | 15 |
| Ethane | A | 21.736 | 23.444 | 580938.9 | 626549.5 | | 7.9 | 15 |
| Ethene | A | 28.446 | 25.228 | 402477.4 | 356953.9 | | -11.3 | 15 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## RSK-175M

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | GC-V1 | Calibration: | 1702007 |
| Lab File ID: | 21FEB18.D | Calibration Date: | 01/27/17 07:43 |
| Sequence: | 1702815 | Injection Date: | 02/21/17 |
| Lab Sample ID: | 1702815-CCV3 | Injection Time: | 13:22 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Methane | A | 10.843 | 9.8348 | 605292.5 | 549011.3 | | -9.3 | 15 |
| Ethane | A | 21.736 | 23.435 | 580938.9 | 626326.8 | | 7.8 | 15 |
| Ethene | A | 28.446 | 24.975 | 402477.4 | 353365 | | -12.2 | 15 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION STANDARDS

## RSK-175M

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1701454 | Instrument: | GC-V1 |
| Calibration: | 1702007 | | |

| Standard ID | Description | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|---|
| 7B07024 | RSK-175M CAL4 | 1701454-CAL4 | 27JAN02.D | 01/27/17 07:43 |
| 7B07023 | RSK-175M CAL3 | 1701454-CAL3 | 27JAN03.D | 01/27/17 07:47 |
| 7B07022 | RSK-175M CAL2 | 1701454-CAL2 | 27JAN04.D | 01/27/17 07:52 |
| 7B07021 | RSK-175M CAL1 | 1701454-CAL1 | 27JAN05.D | 01/27/17 07:56 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA
## RSK-175M

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Calibration: 1702007
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: GC-V1
Calibration Date: 01/27/17 07:43

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methane | 1.0843 | 637975.6 | 10.843 | 692653.9 | 108.43 | 493653.4 | 542.15 | 596887 | | | | |
| Ethane | 2.1736 | 586625.4 | 21.736 | 661756.1 | 217.36 | 501173.7 | 1086.8 | 574200.6 | | | | |
| Ethene | 2.8446 | 439934.3 | 28.446 | 440075.9 | 284.46 | 333630.7 | 1422.3 | 396268.7 | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## RSK-175M

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Calibration: 1702007
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: GC-V1
Calibration Date: 01/27/17 07:43

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Methane | 605292.5 | 13.89925 | 0.73 | 1.372967E-02 | | | 20 | |
| Ethane | 580938.9 | 11.31896 | 2.0825 | 0.4599198 | | | 20 | |
| Ethene | 402477.4 | 12.50156 | 1.7325 | 0.5526404 | | | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## RSK-175M

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/16/17 12:10 | 14.00 | 14.00 | 02/21/17 09:43 | 14.00 | 14.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/16/17 12:10 | 14.00 | 14.00 | 02/21/17 09:48 | 14.00 | 14.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/16/17 12:10 | 14.00 | 14.00 | 02/21/17 10:01 | 14.00 | 14.00 | |
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/16/17 12:10 | 14.00 | 14.00 | 02/21/17 10:18 | 14.00 | 14.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/16/17 12:10 | 14.00 | 14.00 | 02/21/17 10:25 | 14.00 | 14.00 | |

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

**Raw Data From Instrument GC-V1**

**Raw Data - Samples**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB09.D Vial: 9
Acq On : 21 Feb 2017 9:43 am Operator: JH2
Sample : 1703480-01 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| Target Compounds | | | |
| 1) m Methane | 0.82 | 114712884 | 189.5164 ug/L |
| 2) m Ethene | 0.00 | 0 | N.D. ug/L d |
| 3) m Ethane | 0.00 | 0 | N.D. ug/L d |

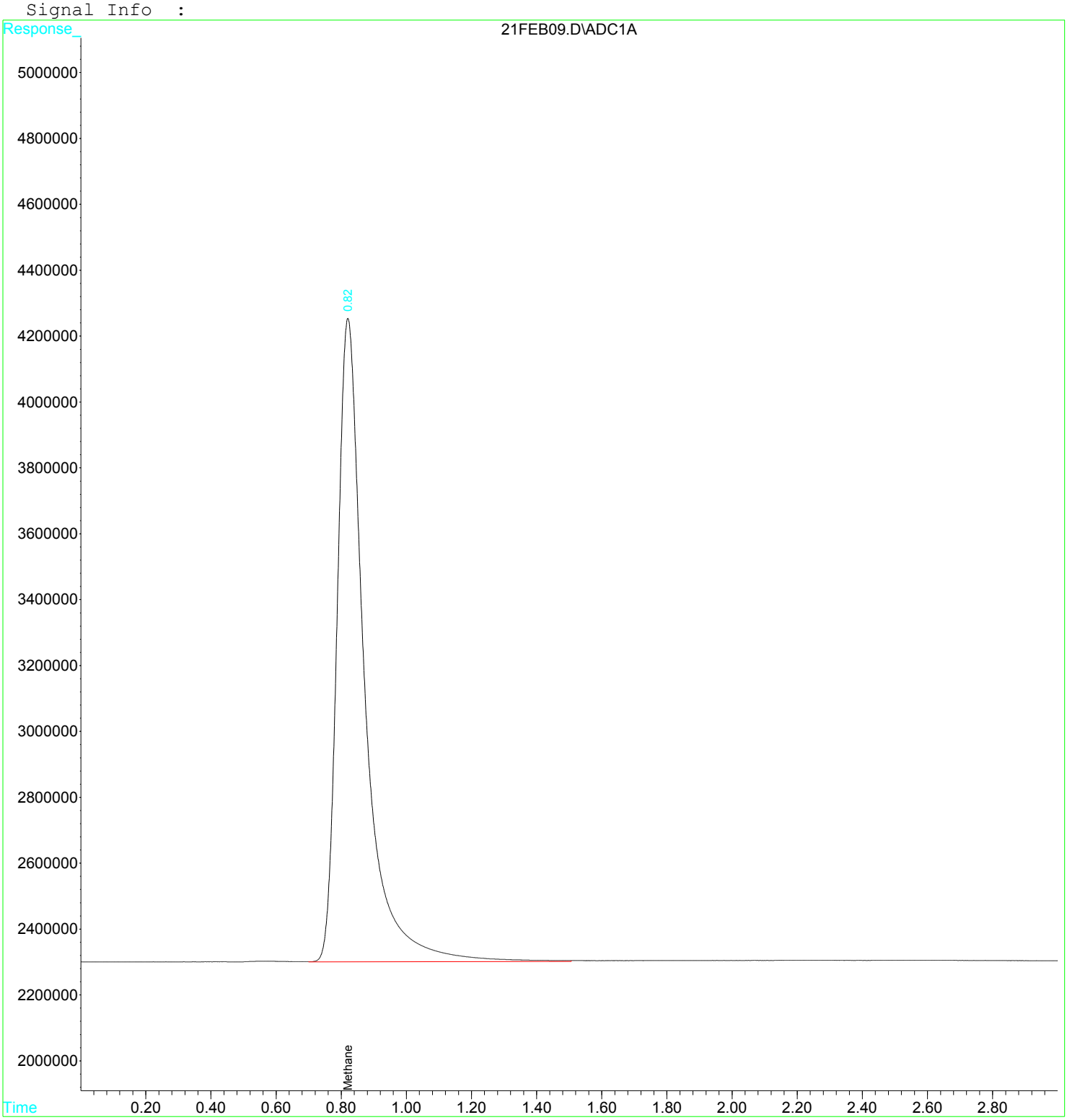
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB09.D Vial: 9
Acq On : 21 Feb 2017 9:43 am Operator: JH2
Sample : 1703480-01 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

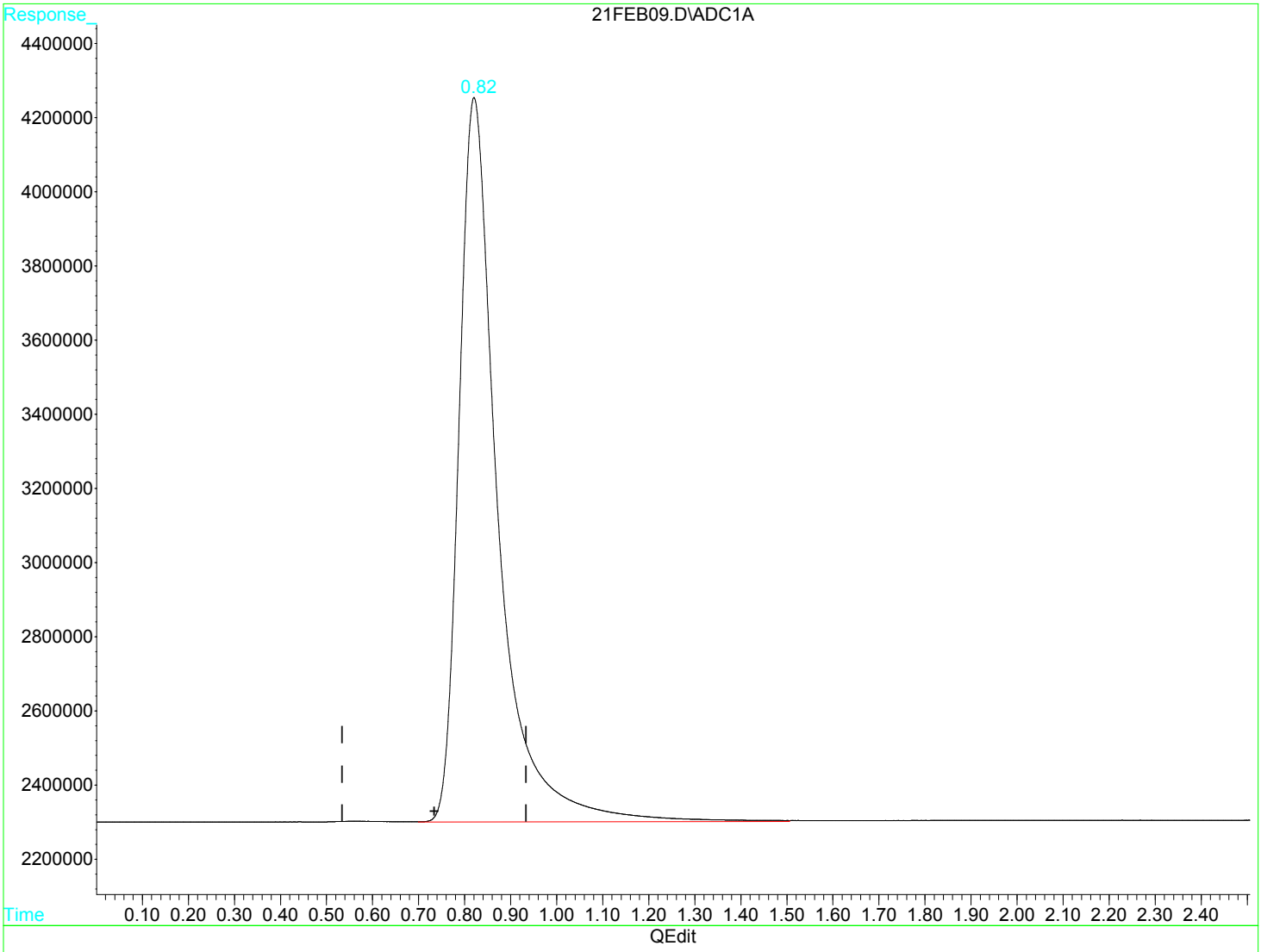
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB09.D Vial: 9
Acq On : 21 Feb 2017 9:43 am Operator: JH2
Sample : 1703480-01 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:46 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.82min 189.516ug/L

response 114712884

(+) = Expected Retention Time

21FEB09.D RSK175.M Tue Feb 21 12:55:08 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB10.D Vial: 10
Acq On : 21 Feb 2017 9:48 am Operator: JH2
Sample : 1703480-02 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:57 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|
| Target Compounds | | | | |
| 1) m Methane | 0.00 | 0 | N.D. | ug/L d |
| 2) m Ethene | 0.00 | 0 | N.D. | ug/L d |
| 3) m Ethane | 0.00 | 0 | N.D. | ug/L d |

(f)=RT Delta > 1/2 Window (m)=manual int



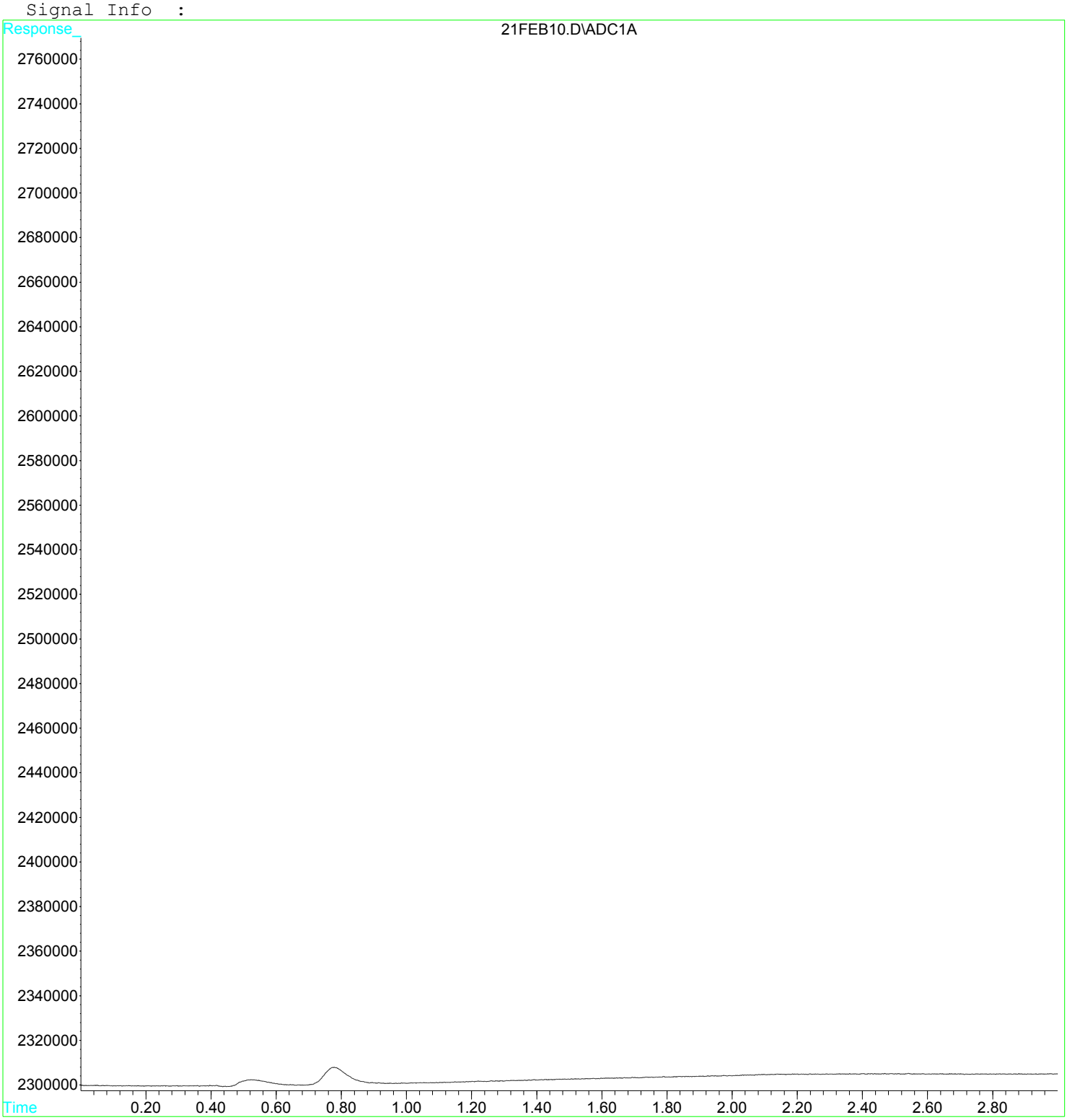
21FEB10.D RSK175.M Tue Feb 21 12:57:55 2017 MSD1 Page 1

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB10.D Vial: 10
Acq On : 21 Feb 2017 9:48 am Operator: JH2
Sample : 1703480-02 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:57 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB11.D Vial: 11
Acq On : 21 Feb 2017 10:01 am Operator: JH2
Sample : 1703480-13 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:58 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|
| Target Compounds | | | | |
| 1) m Methane | 0.00 | 0 | N.D. | ug/L d |
| 2) m Ethene | 0.00 | 0 | N.D. | ug/L d |
| 3) m Ethane | 0.00 | 0 | N.D. | ug/L d |

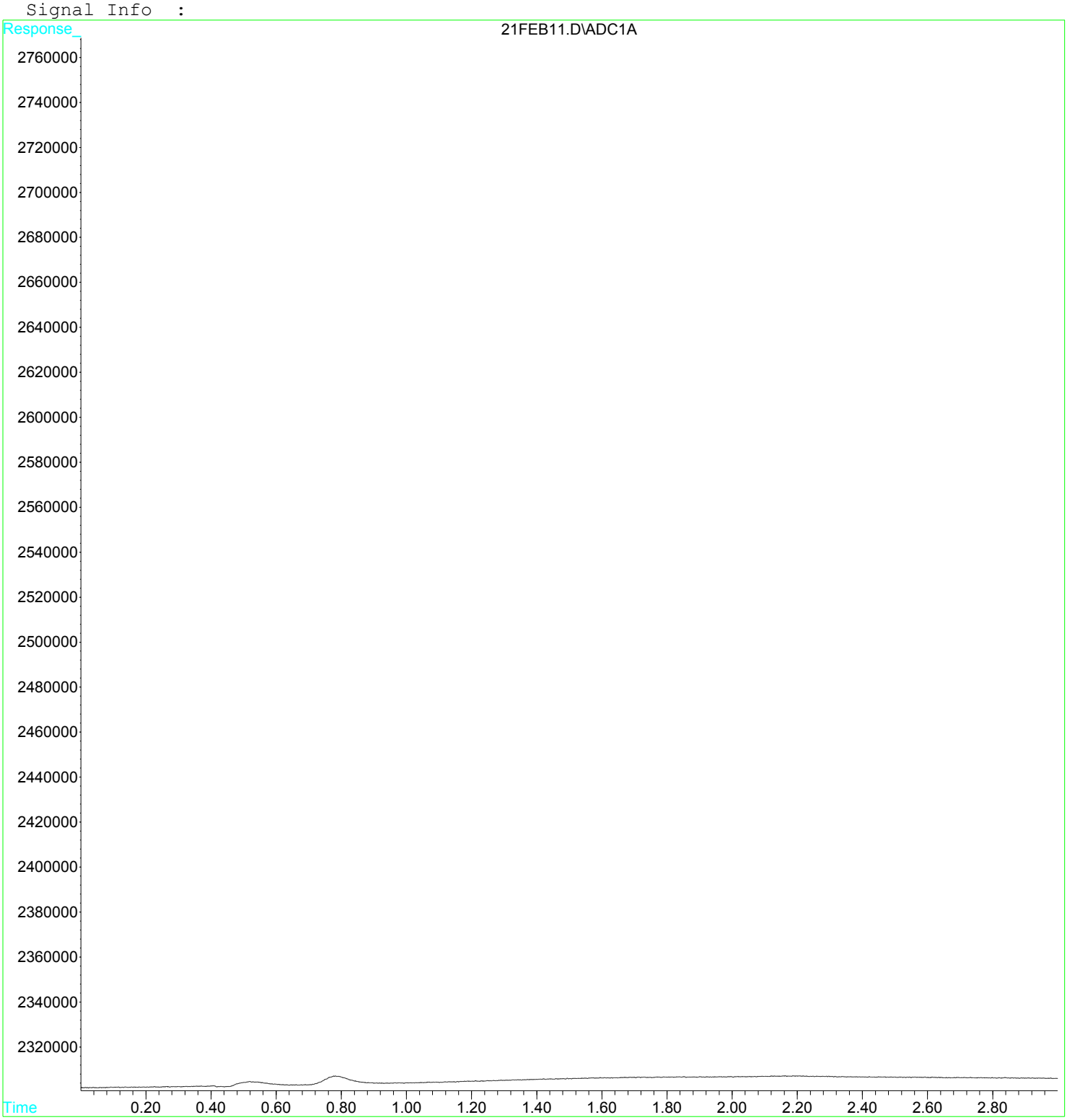
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB11.D Vial: 11
Acq On : 21 Feb 2017 10:01 am Operator: JH2
Sample : 1703480-13 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:58 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB12.D Vial: 12
Acq On : 21 Feb 2017 10:18 am Operator: JH2
Sample : 1703480-15 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:58 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|---|
| | Target Compounds | | | | | |
| 1) m | Methane | 0.94f | 47627487 | 78.6851 | ug/L | m |
| 2) m | Ethene | 0.00 | 0 | N.D. | ug/L | d |
| 3) m | Ethane | 0.00 | 0 | N.D. | ug/L | d |

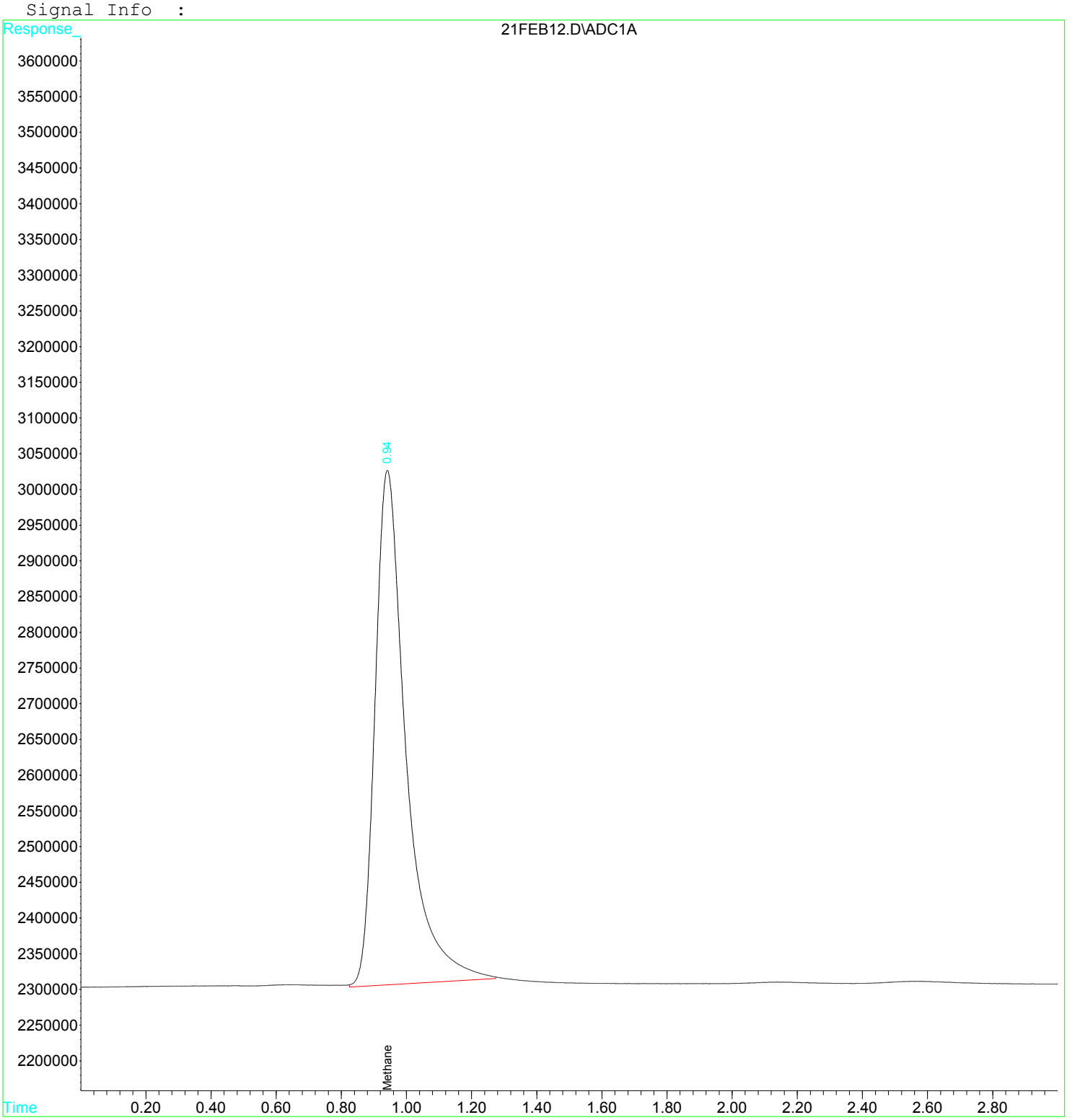
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB12.D Vial: 12
Acq On : 21 Feb 2017 10:18 am Operator: JH2
Sample : 1703480-15 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:58 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

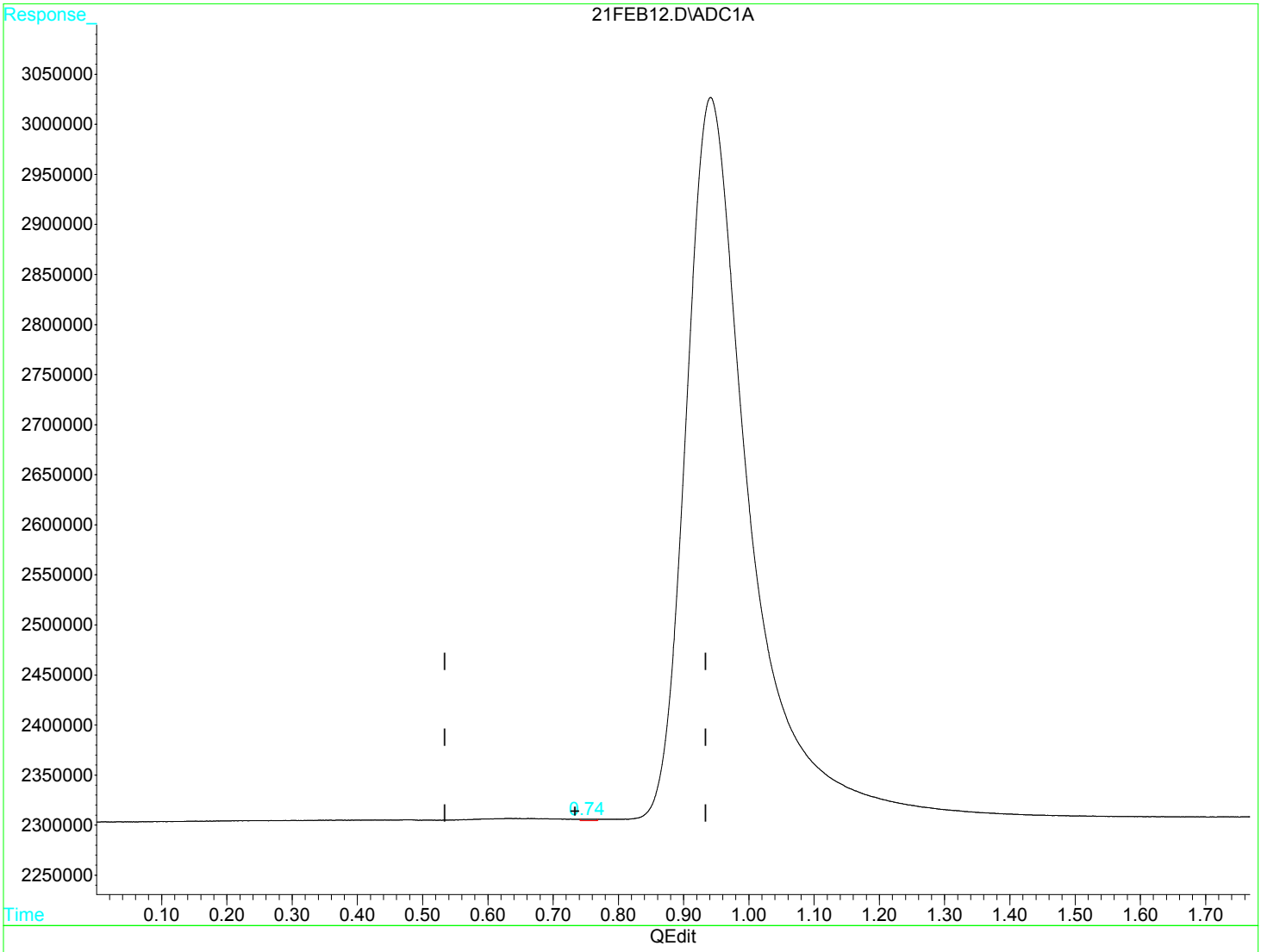
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB12.D Vial: 12
Acq On : 21 Feb 2017 10:18 am Operator: JH2
Sample : 1703480-15 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 10:22 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.74min 0.038ug/L

response 22891

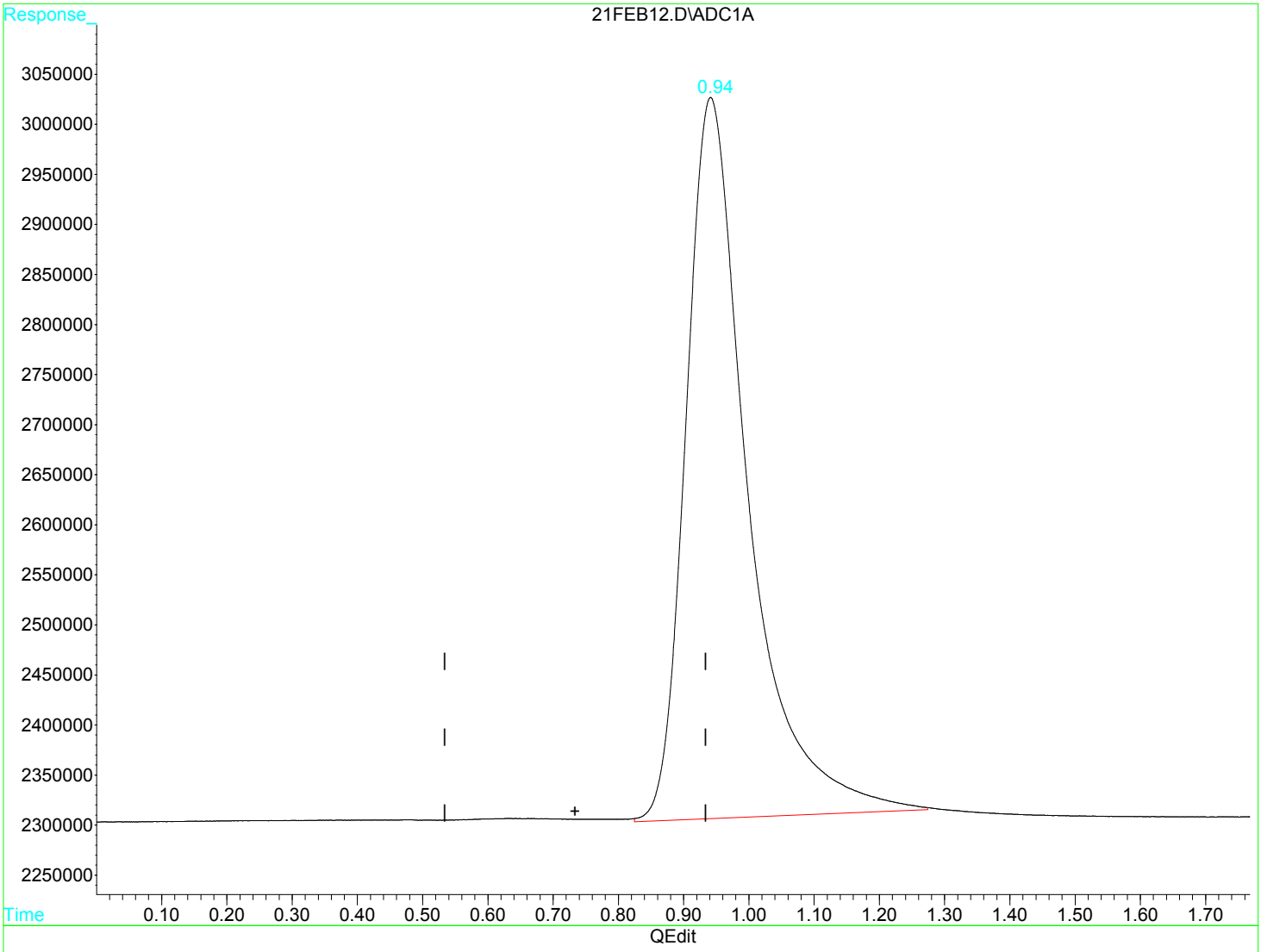
(+) = Expected Retention Time

21FEB12.D RSK175.M Tue Feb 21 12:58:13 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB12.D Vial: 12
Acq On : 21 Feb 2017 10:18 am Operator: JH2
Sample : 1703480-15 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 10:22 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.94min 78.685ug/L m

response 47627487

(+) = Expected Retention Time

21FEB12.D RSK175.M Tue Feb 21 12:58:19 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB13.D Vial: 13
Acq On : 21 Feb 2017 10:25 am Operator: JH2
Sample : 1703480-30 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:58 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) m | Methane | 0.00 | 0 | N.D. | ug/L | d |
| 2) m | Ethene | 0.00 | 0 | N.D. | ug/L | d |
| 3) m | Ethane | 0.00 | 0 | N.D. | ug/L | d |

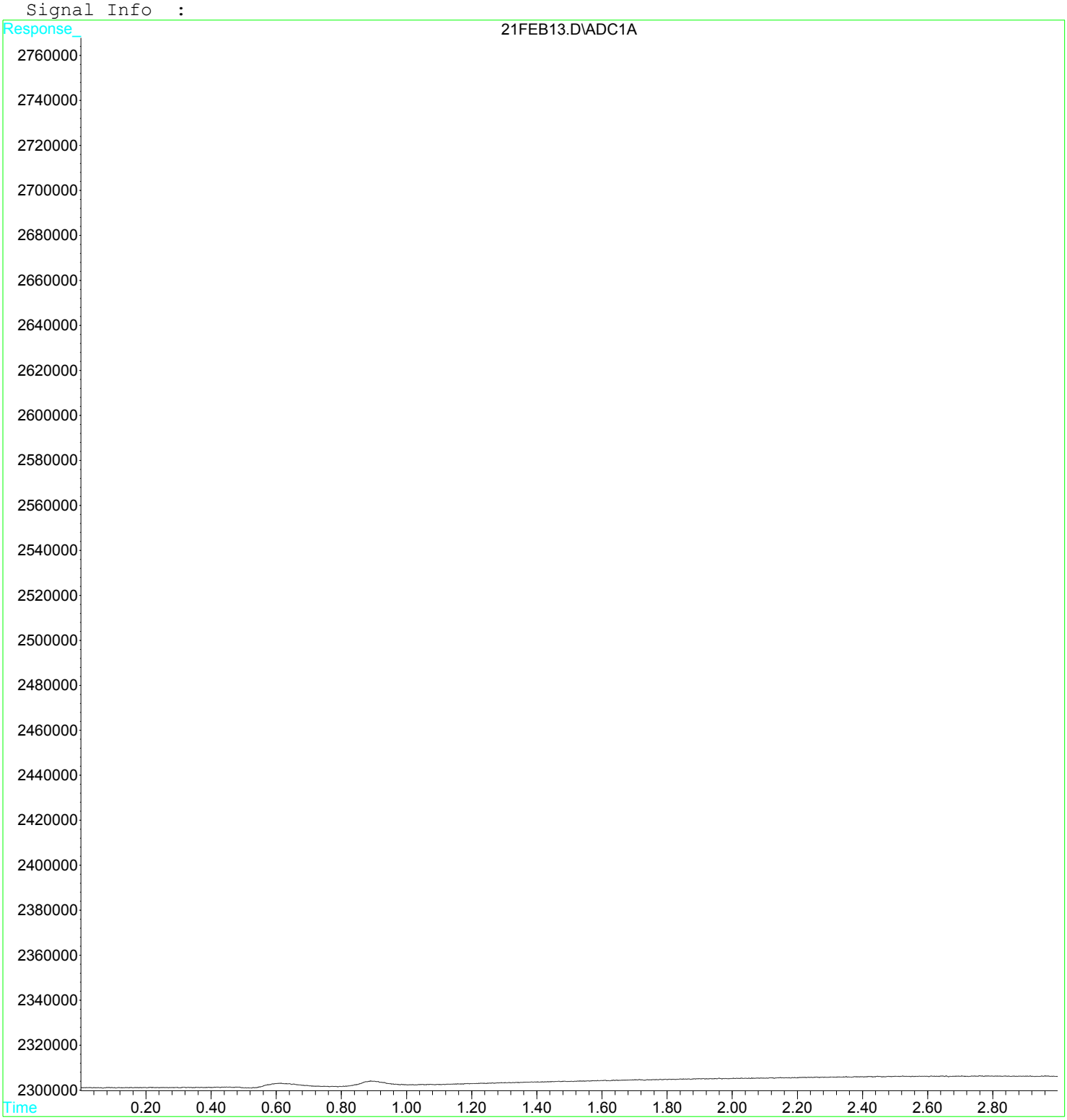
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB13.D Vial: 13
Acq On : 21 Feb 2017 10:25 am Operator: JH2
Sample : 1703480-30 Inst : GC-V1
Misc : 1 E RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:58 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



**Raw Data - Calibration Standards**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| Target Compounds | | | | |
| 1) m | Methane | 0.73 | 691757 | 1.1814 ug/L |
| 2) m | Ethene | 1.72 | 1251437 | 3.2424 ug/L |
| 3) m | Ethane | 2.07 | 1275089 | 2.2179 ug/L |

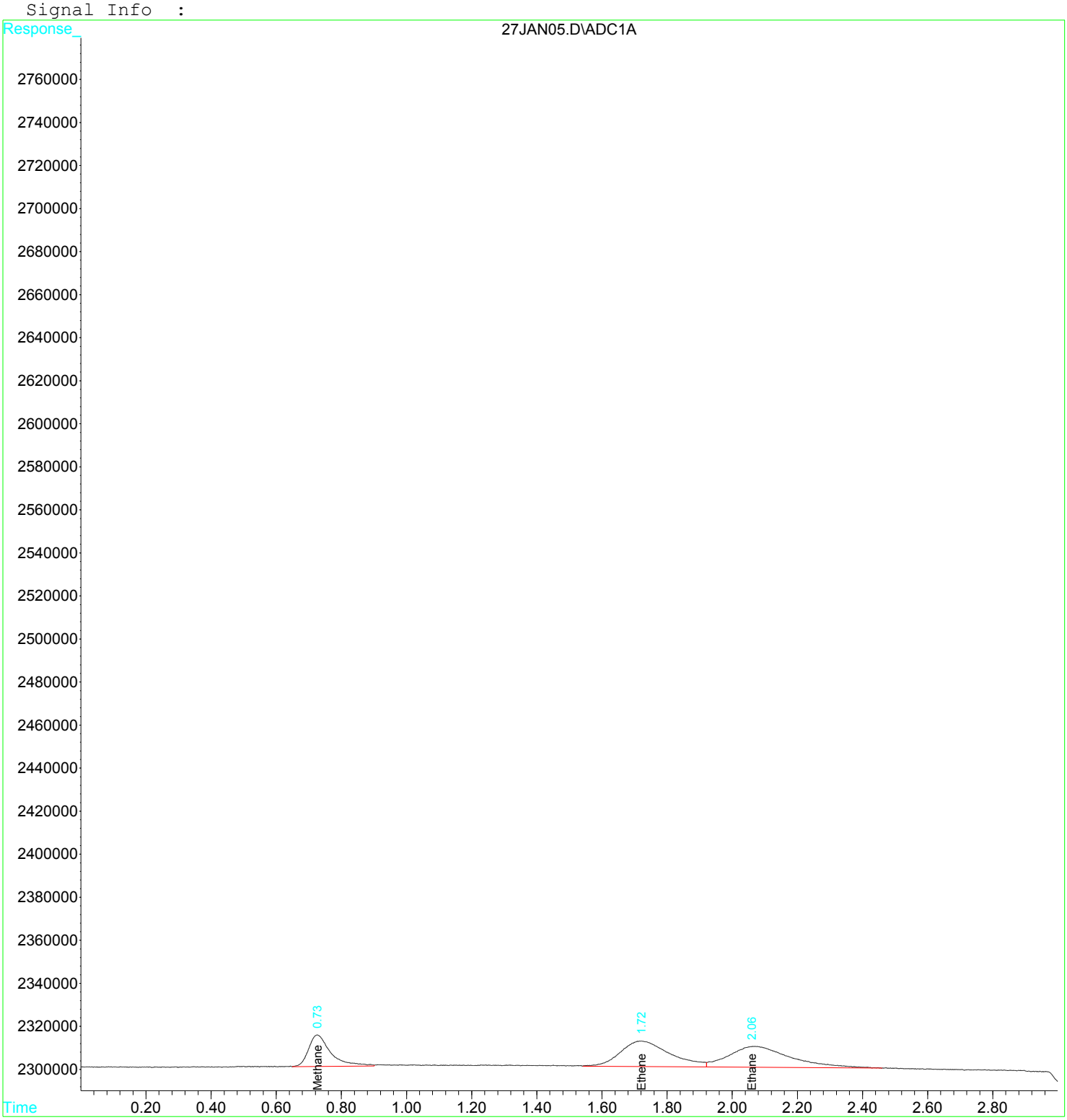
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

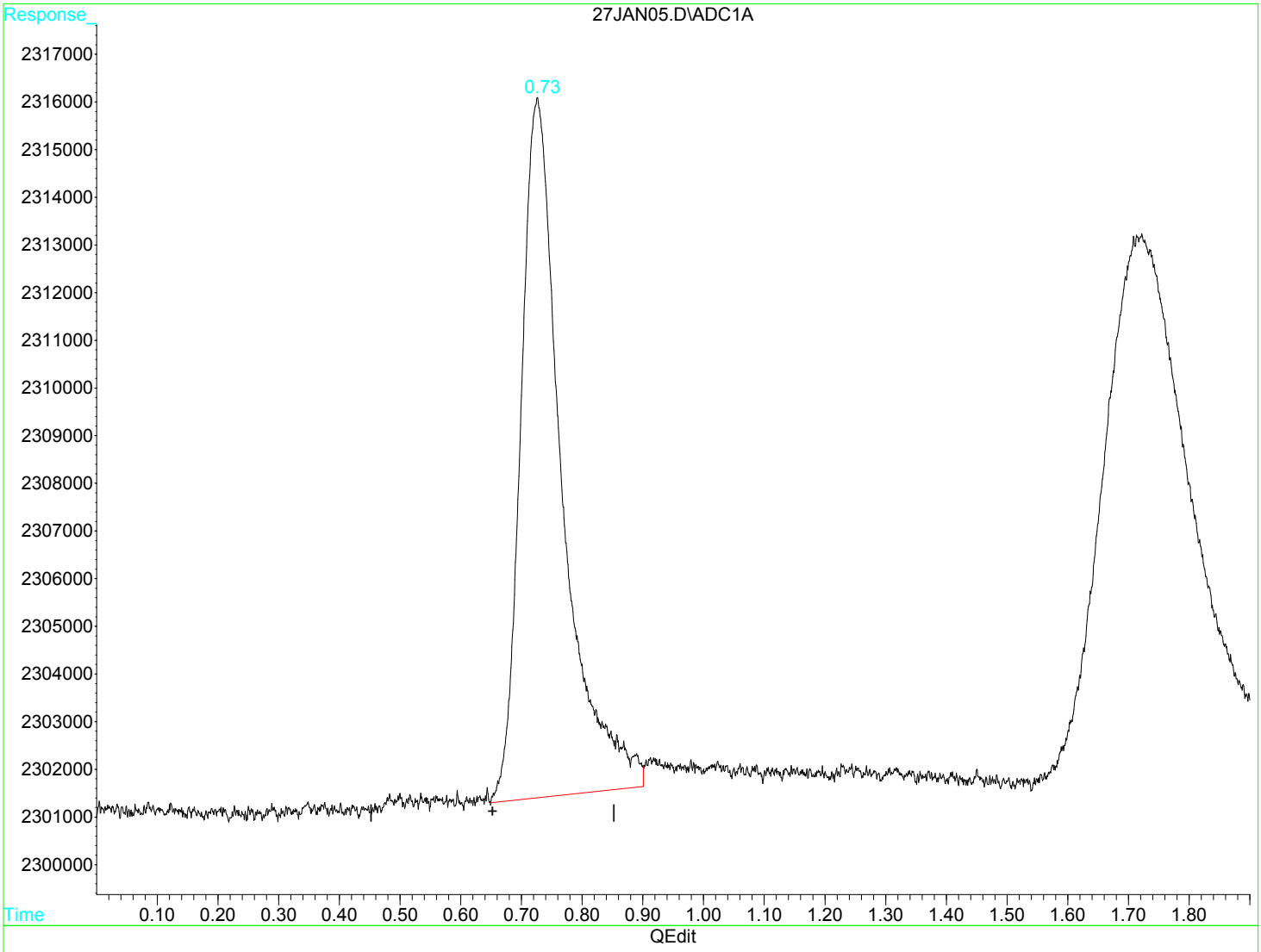
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.73min 1.181ug/L

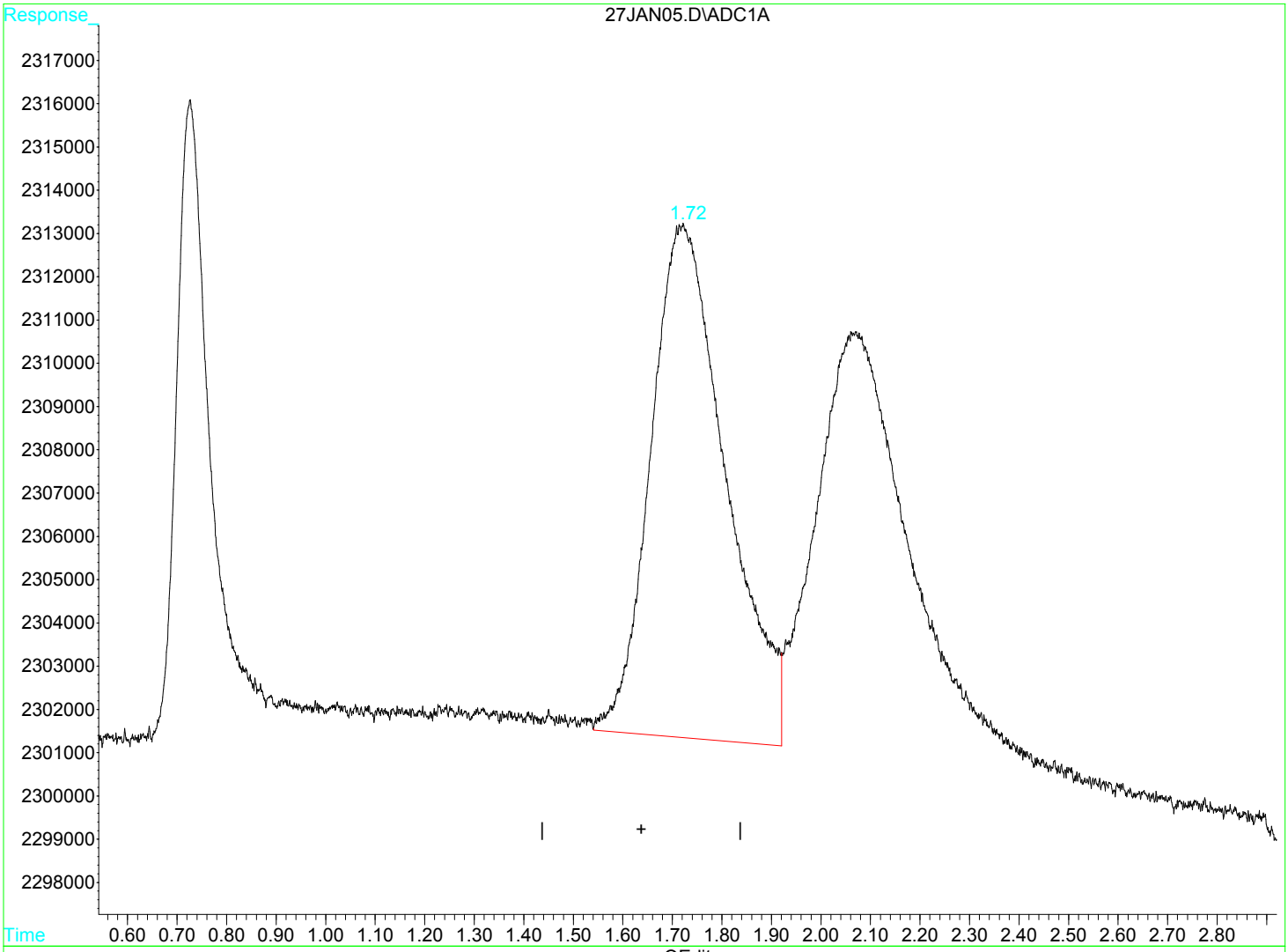
response 691757

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.72min 3.242ug/L

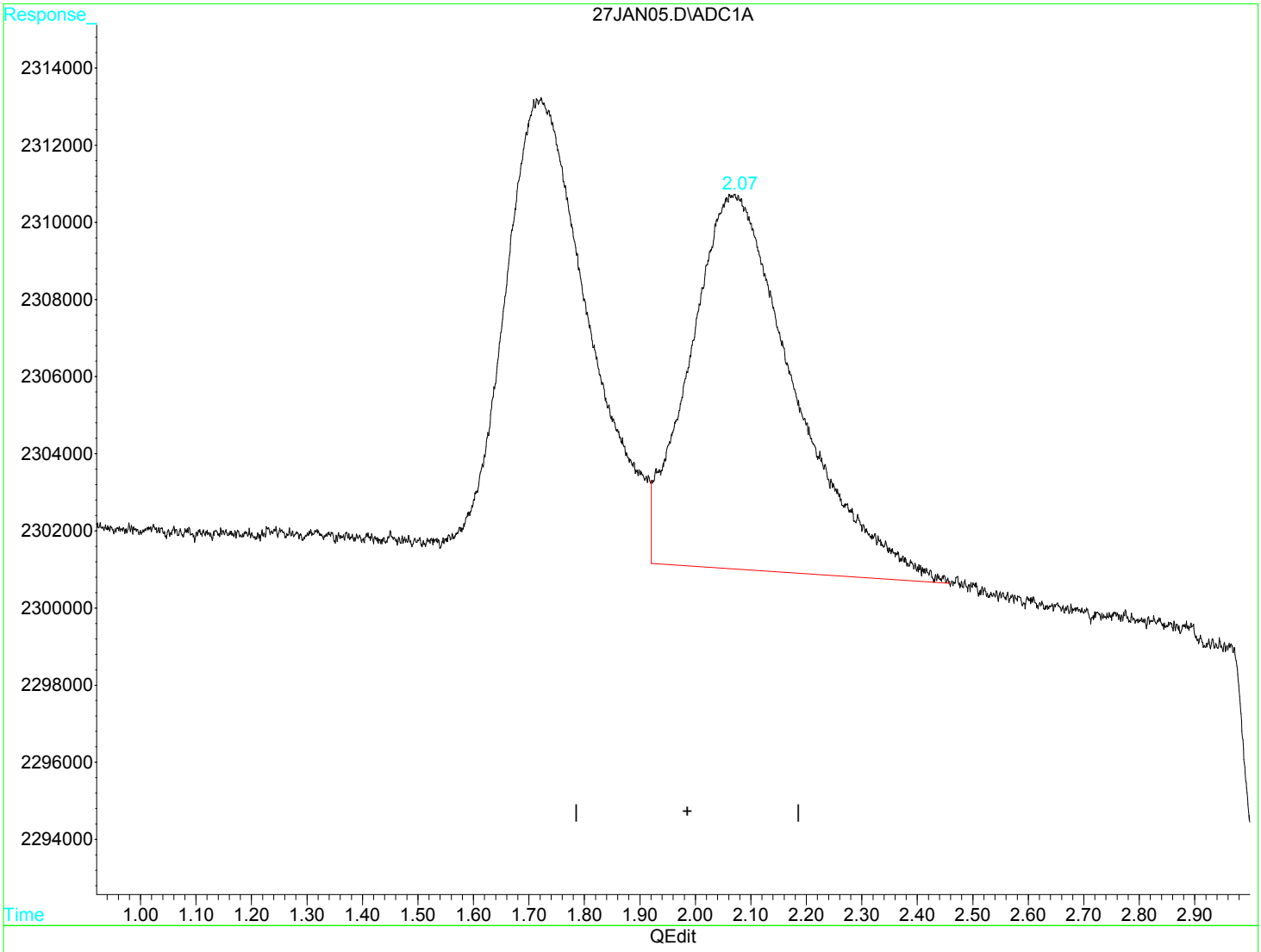
response 1251437

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.07min 2.218ug/L

response 1275089

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| Target Compounds | | | | |
| 1) m | Methane | 0.73 | 7510447 | 12.8269 ug/L |
| 2) m | Ethene | 1.74f | 12518403 | 32.4341 ug/L |
| 3) m | Ethane | 2.09f | 14383928 | 25.0192 ug/L |

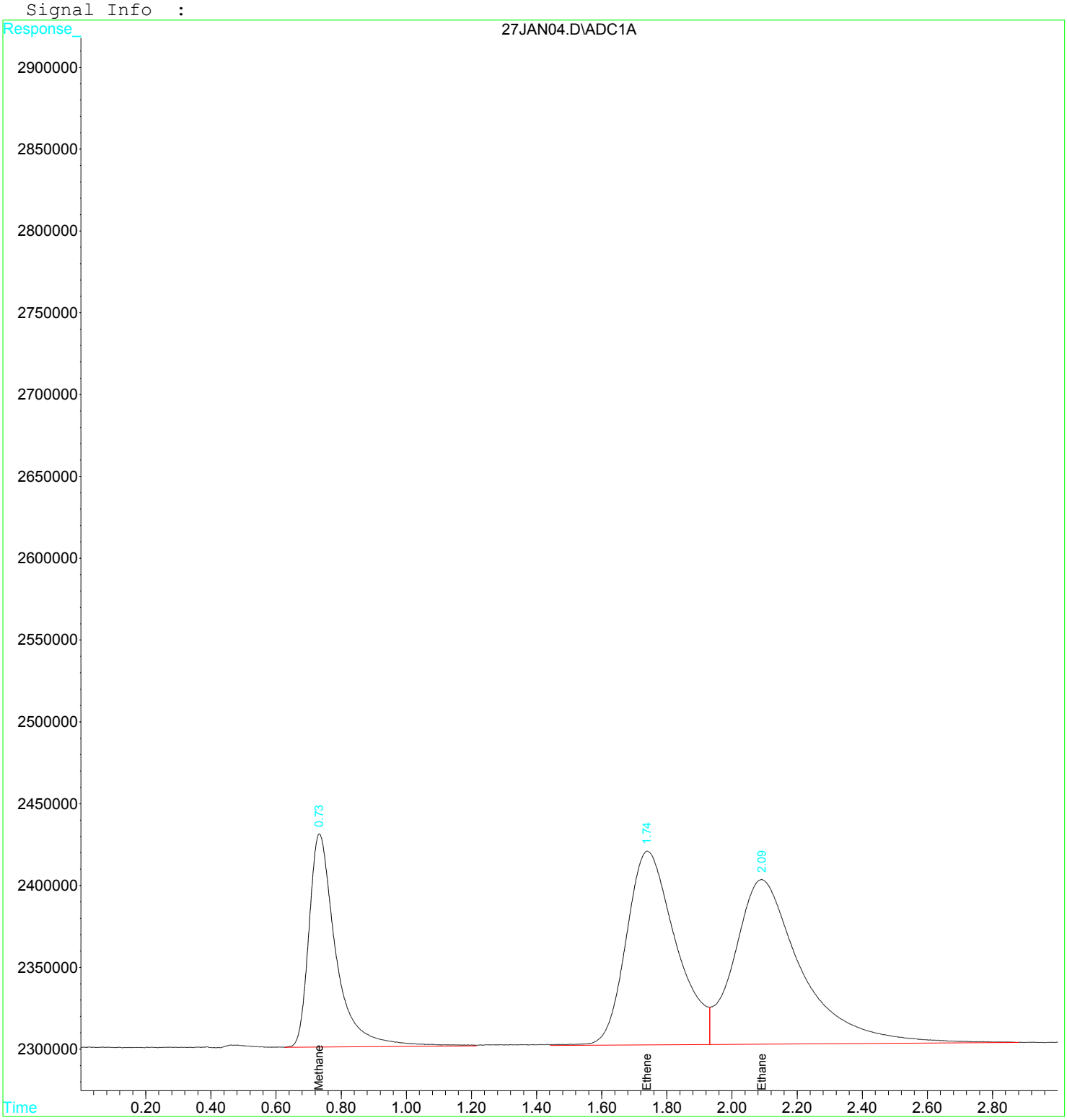
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

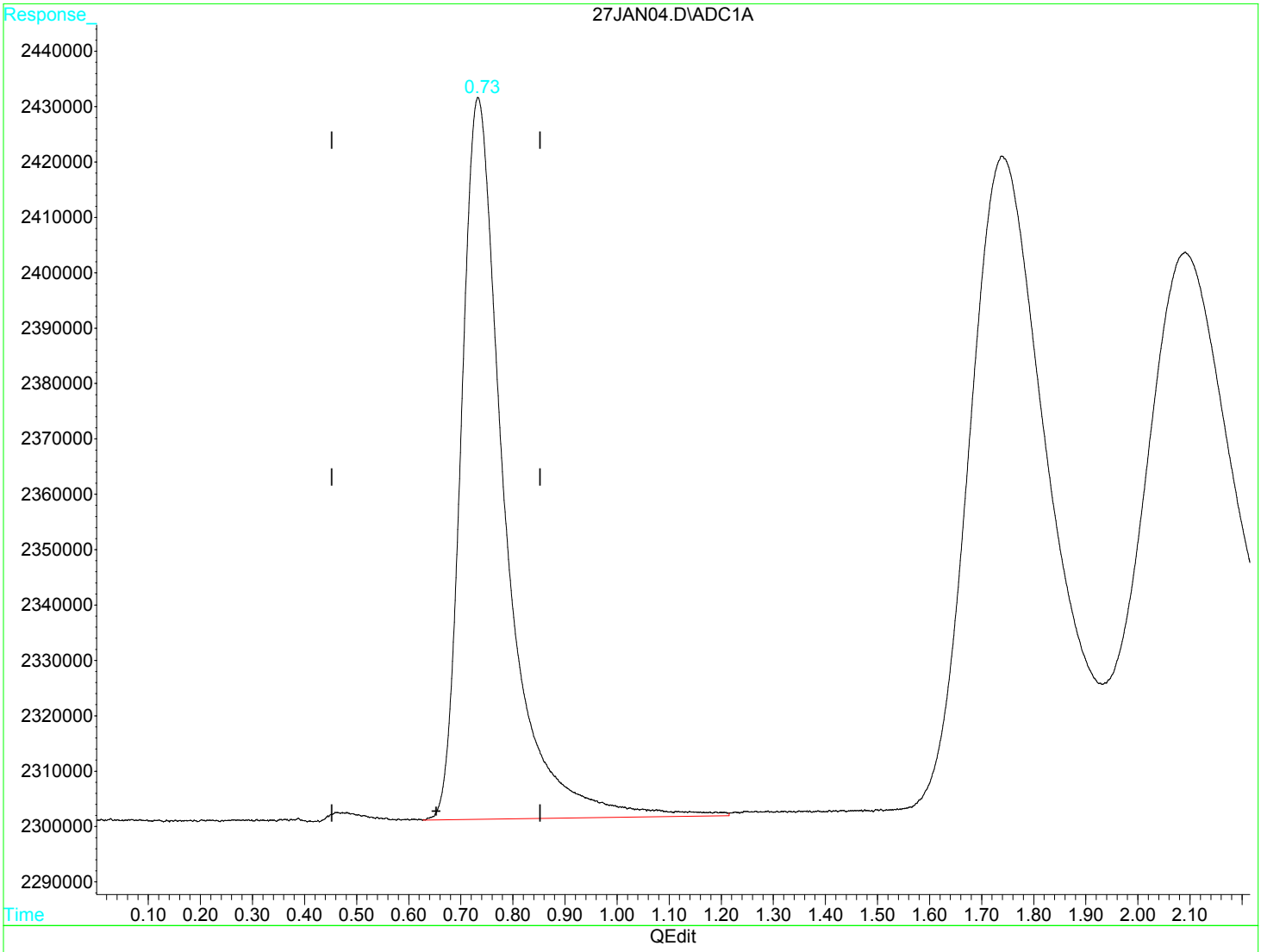
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.73min 12.827ug/L

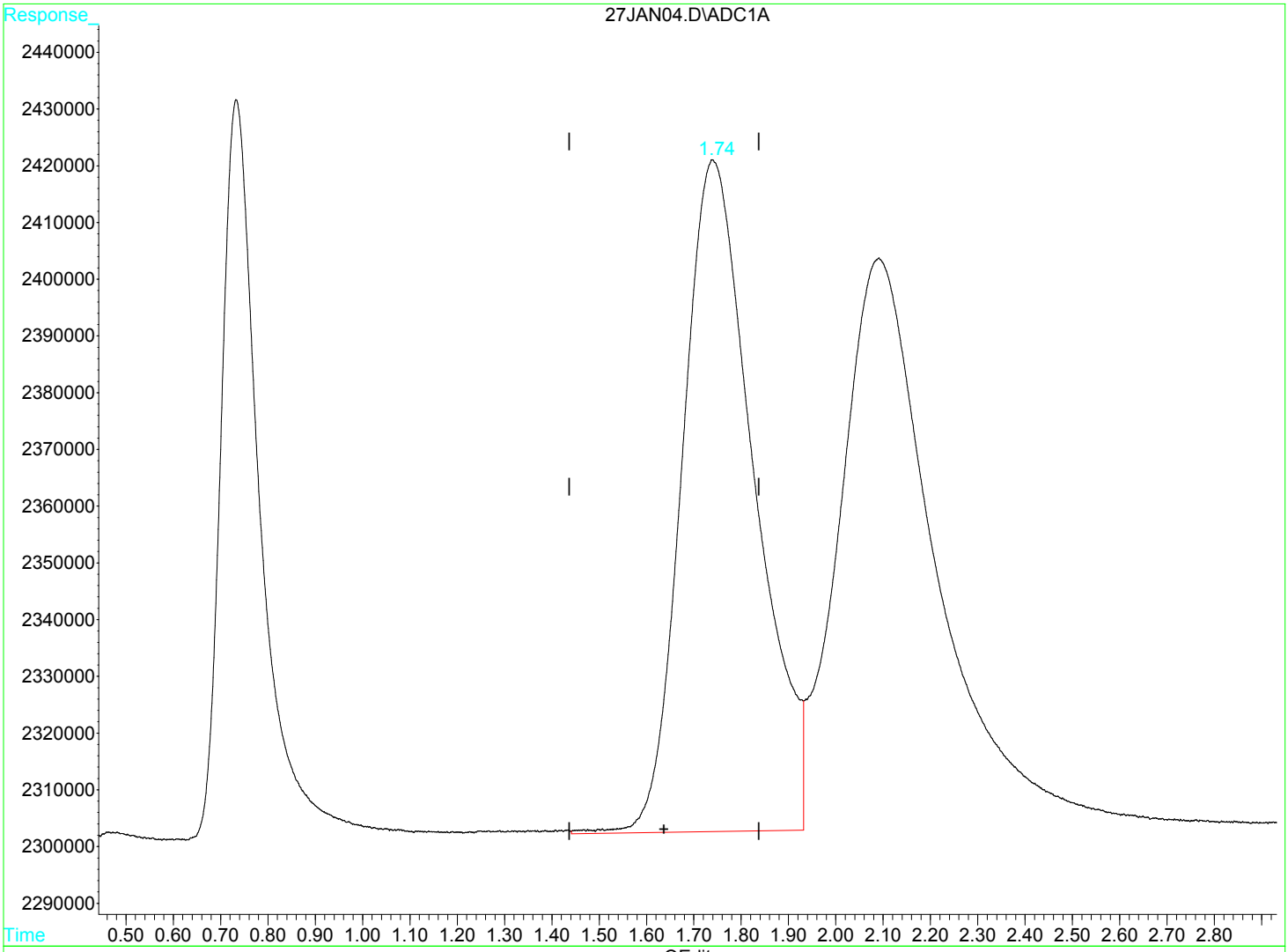
response 7510447

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.74min 32.434ug/L

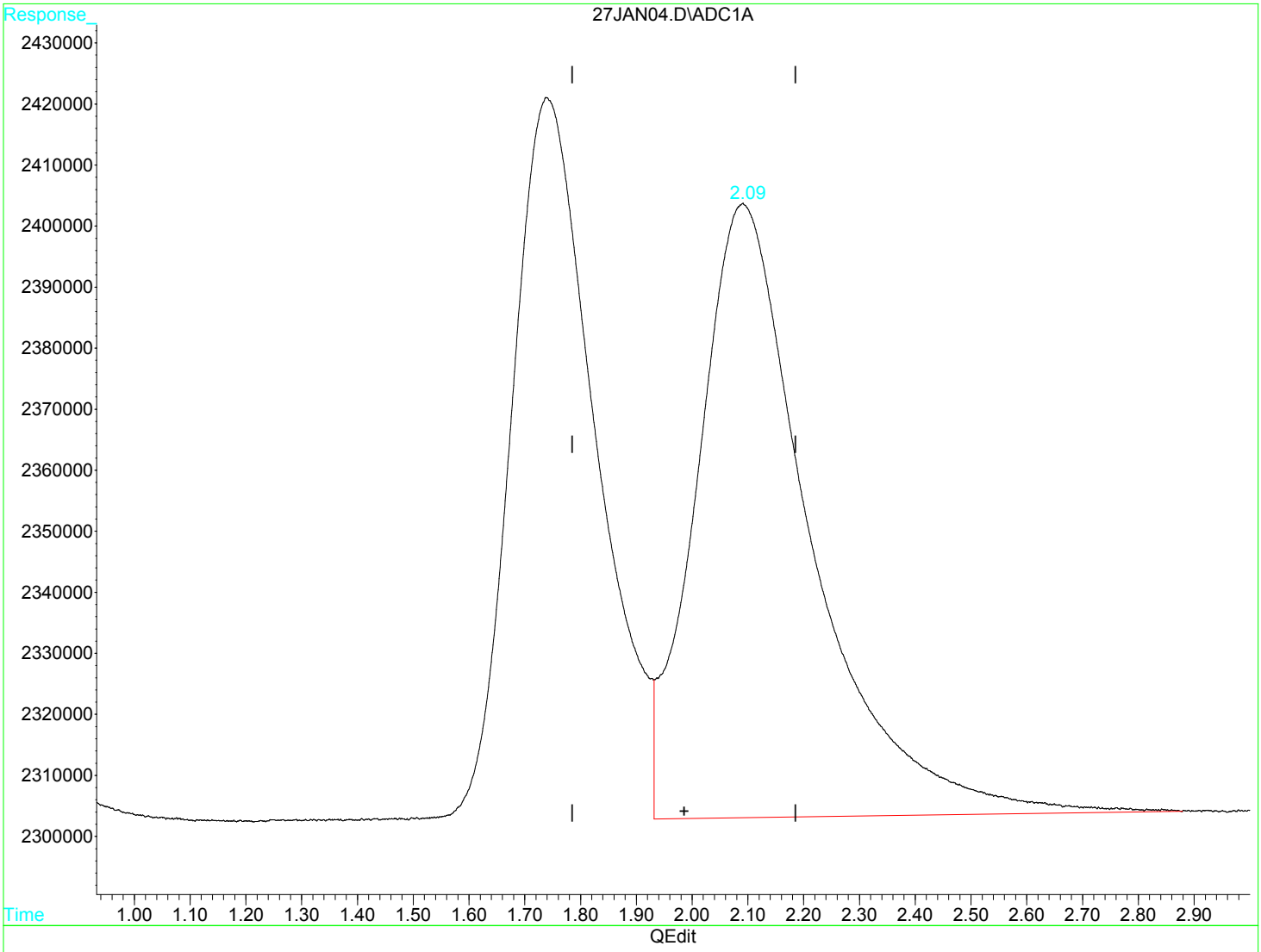
response 12518403

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.09min 25.019ug/L

response 14383928

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|---|
| | Target Compounds | | | | |
| 1) m | Methane | 0.73 | 53526843 | 91.4168 | ug/L |
| 2) m | Ethene | 1.73 | 94904572 | 245.8892 | ug/L |
| 3) m | Ethane | 2.08 | 108935077 | 189.4801 | ug/L |

(f)=RT Delta > 1/2 Window (m)=manual int



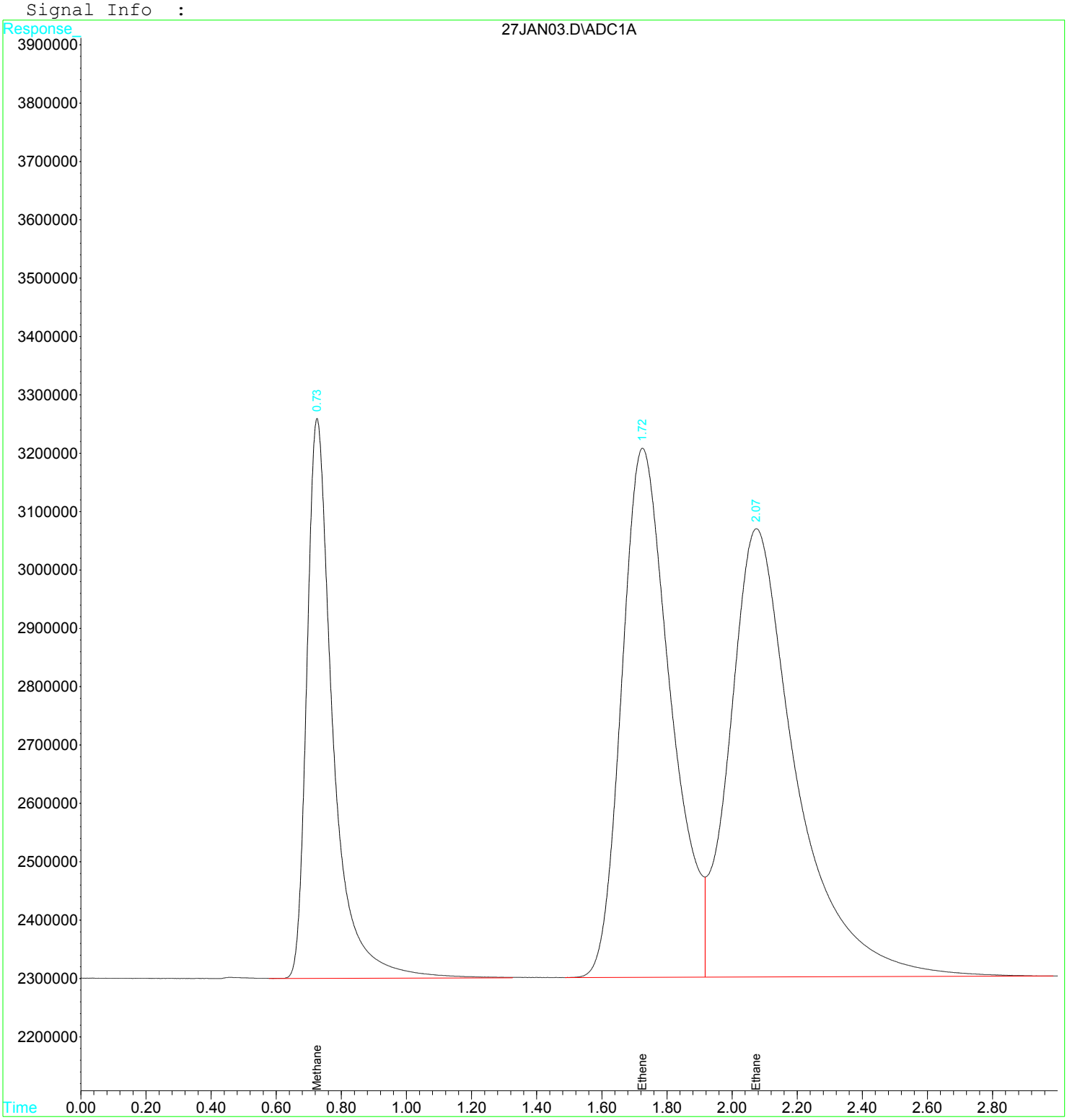
27JAN03.D RSK175.M Wed Feb 15 08:42:47 2017 MSD1 Page 1

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

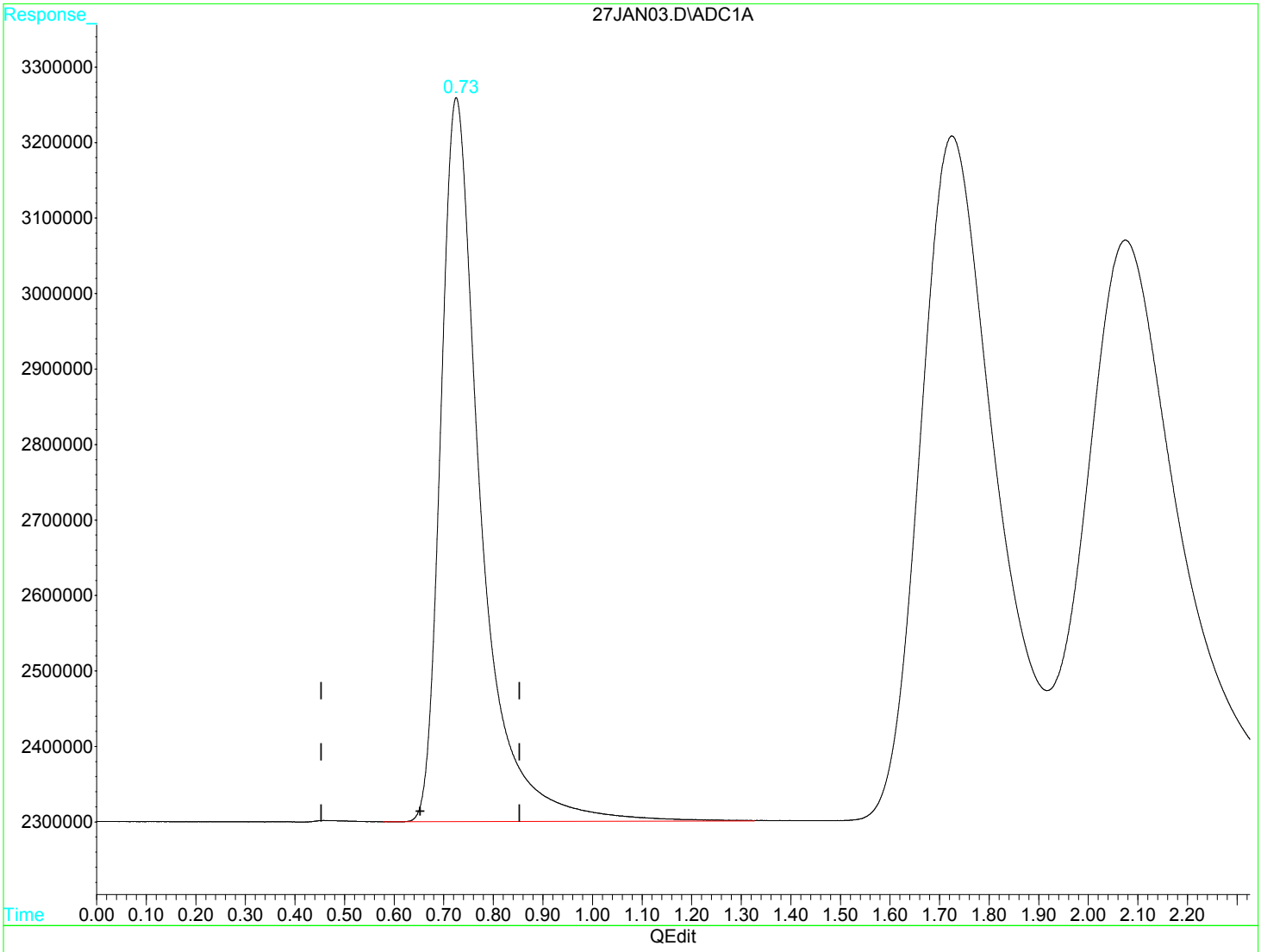
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.73min 91.417ug/L

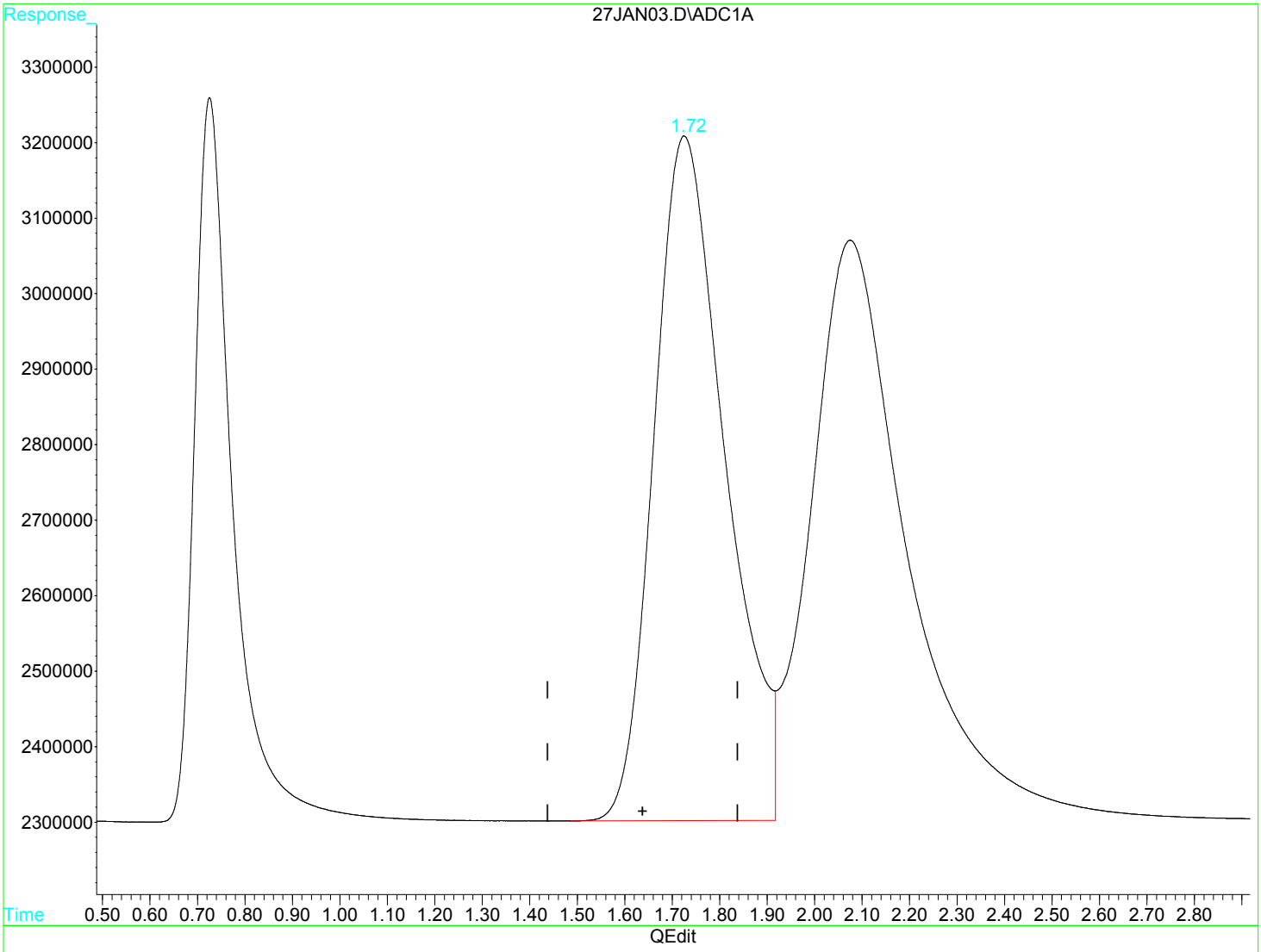
response 53526843

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.73min 245.889ug/L

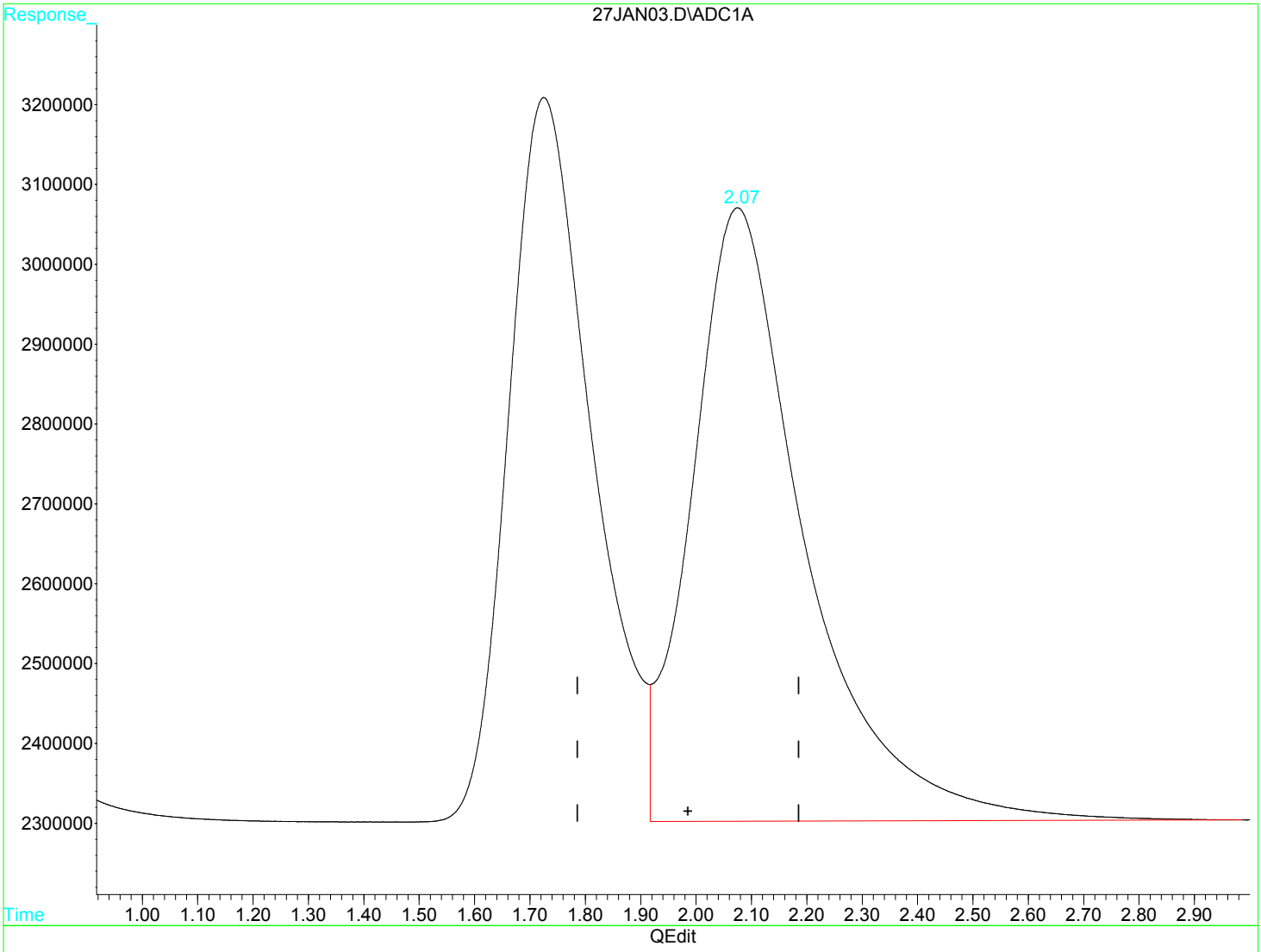
response 94904572

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.08min 189.480ug/L

response 108935077

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|---|
| | Target Compounds | | | | |
| 1) m | Methane | 0.73 | 323602300 | 552.6703 | ug/L |
| 2) m | Ethene | 1.74f | 563612878 | 1460.2703 | ug/L |
| 3) m | Ethane | 2.09f | 624041169 | 1085.4482 | ug/L |

(f)=RT Delta > 1/2 Window (m)=manual int



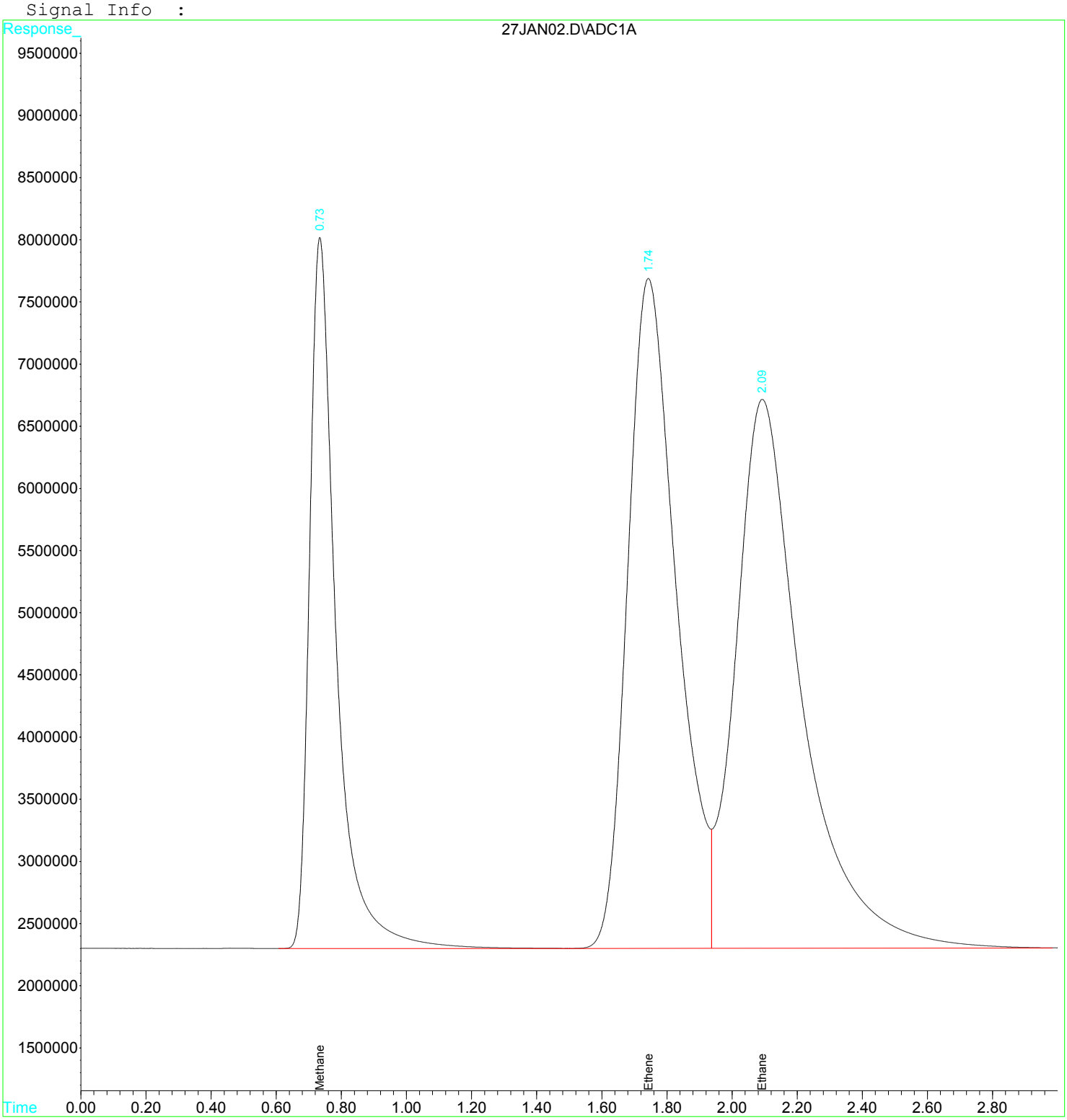
27JAN02.D RSK175.M Wed Feb 15 08:42:24 2017 MSD1 Page 1

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

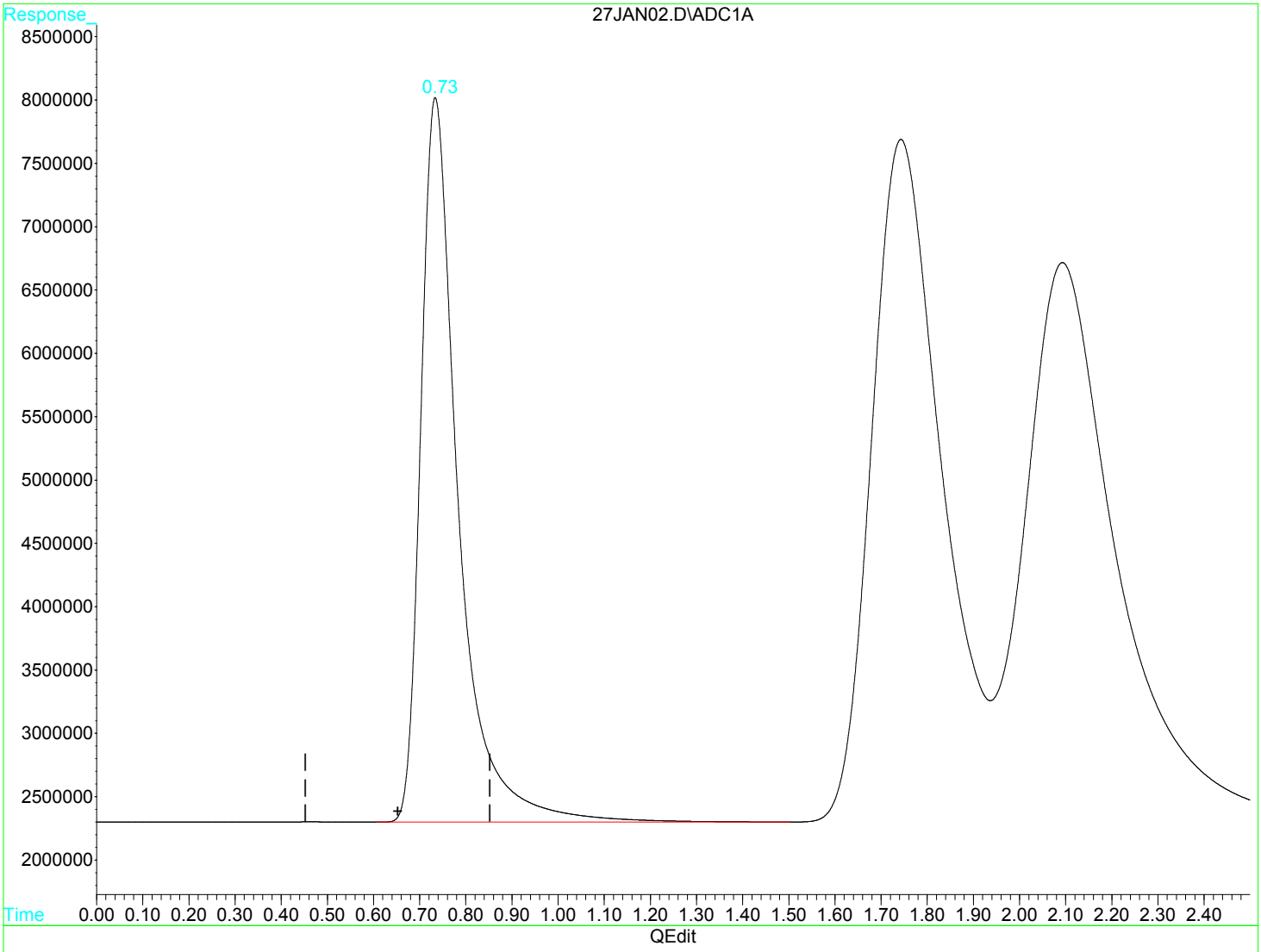
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.73min 552.670ug/L

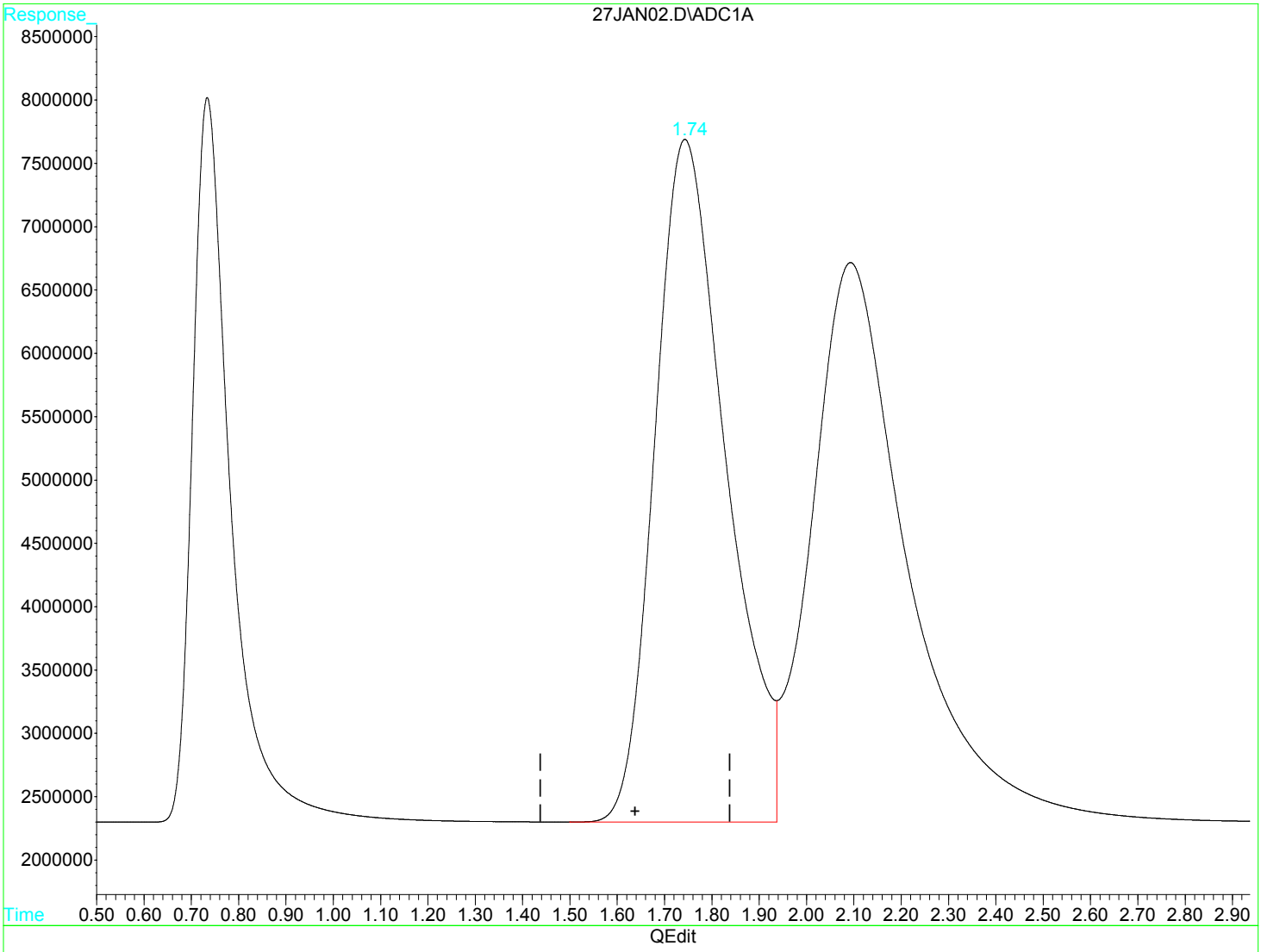
response 323602300

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.74min 1460.270ug/L

response 563612878

(+) = Expected Retention Time

**Raw Data - ICV**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | Target Compounds | | | |
| 1) m | Methane | 0.74 | 7368524 | 12.1735 ug/L |
| 2) m | Ethene | 1.75 | 12806794 | 31.8199 ug/L |
| 3) m | Ethane | 2.10 | 14497414 | 24.9563 ug/L |

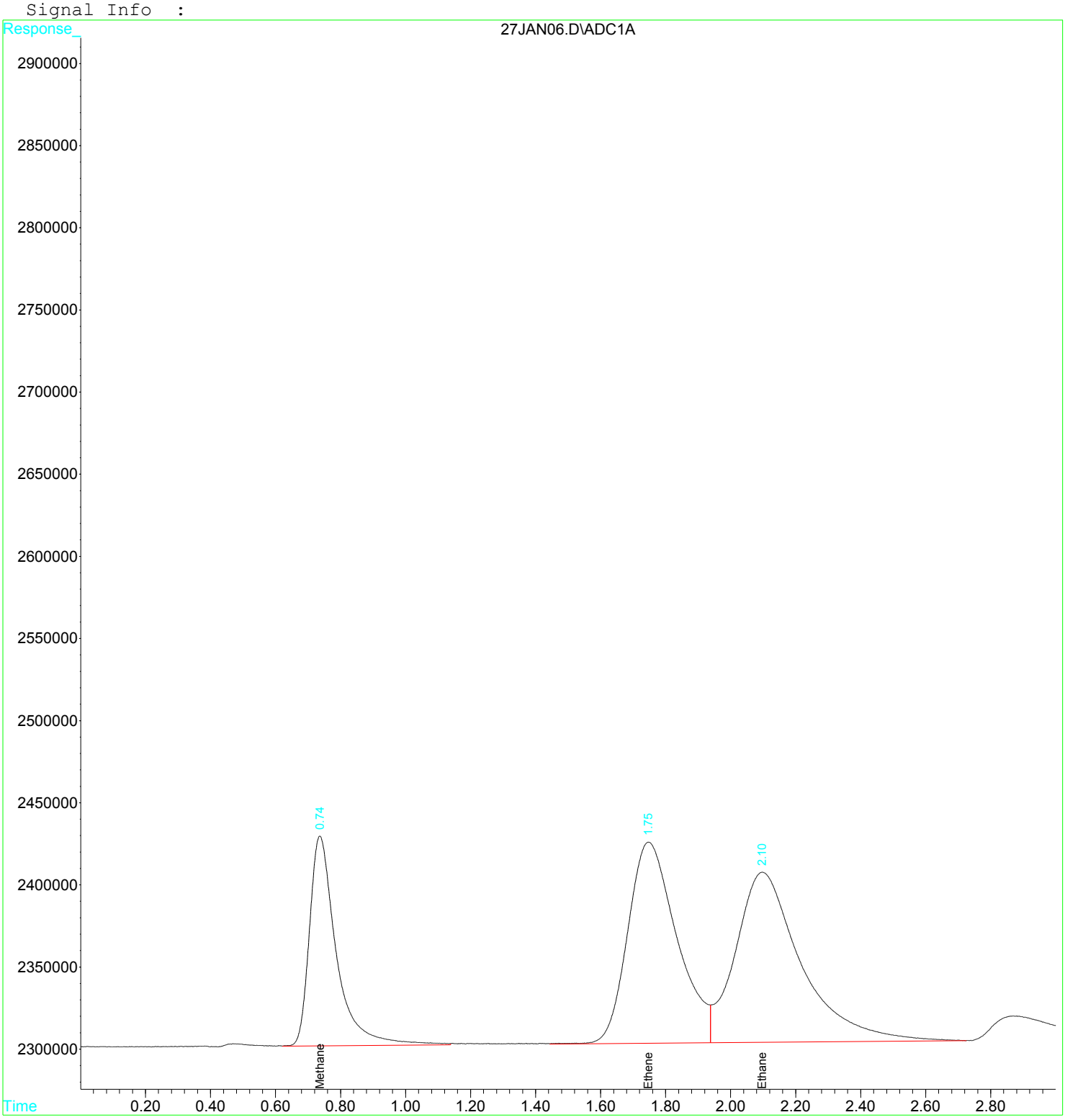
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

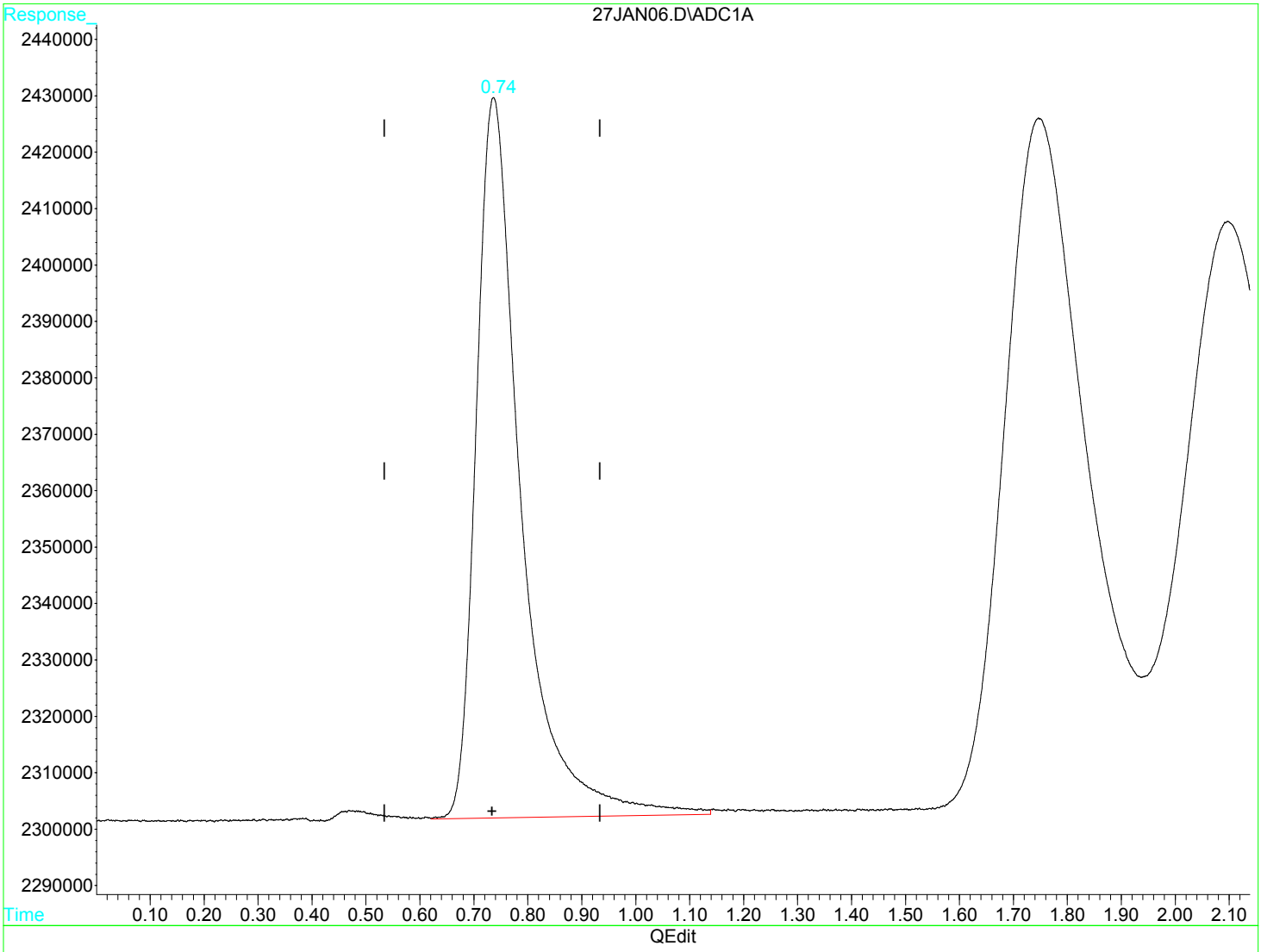
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.74min 12.173ug/L

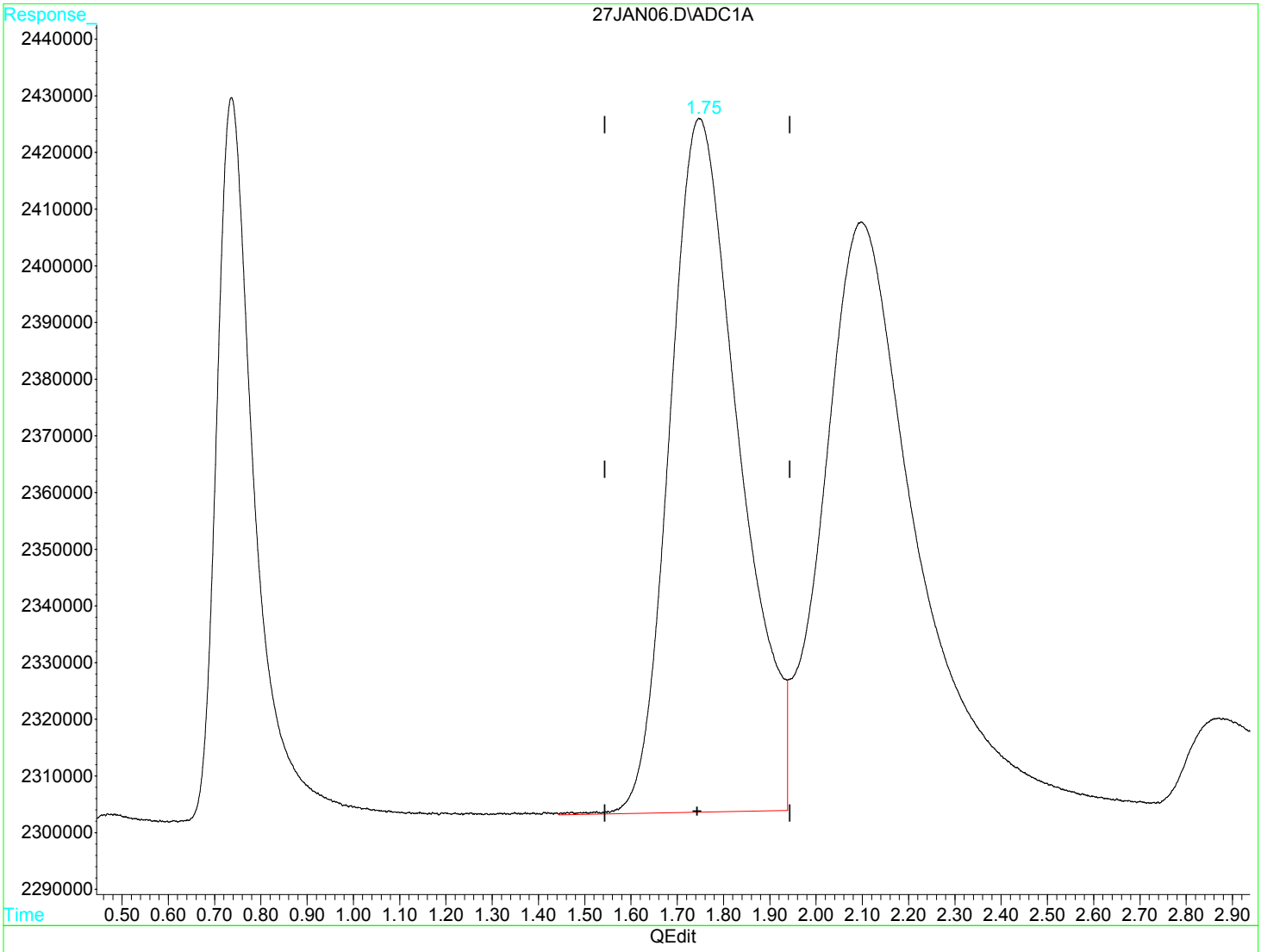
response 7368524

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.75min 31.820ug/L

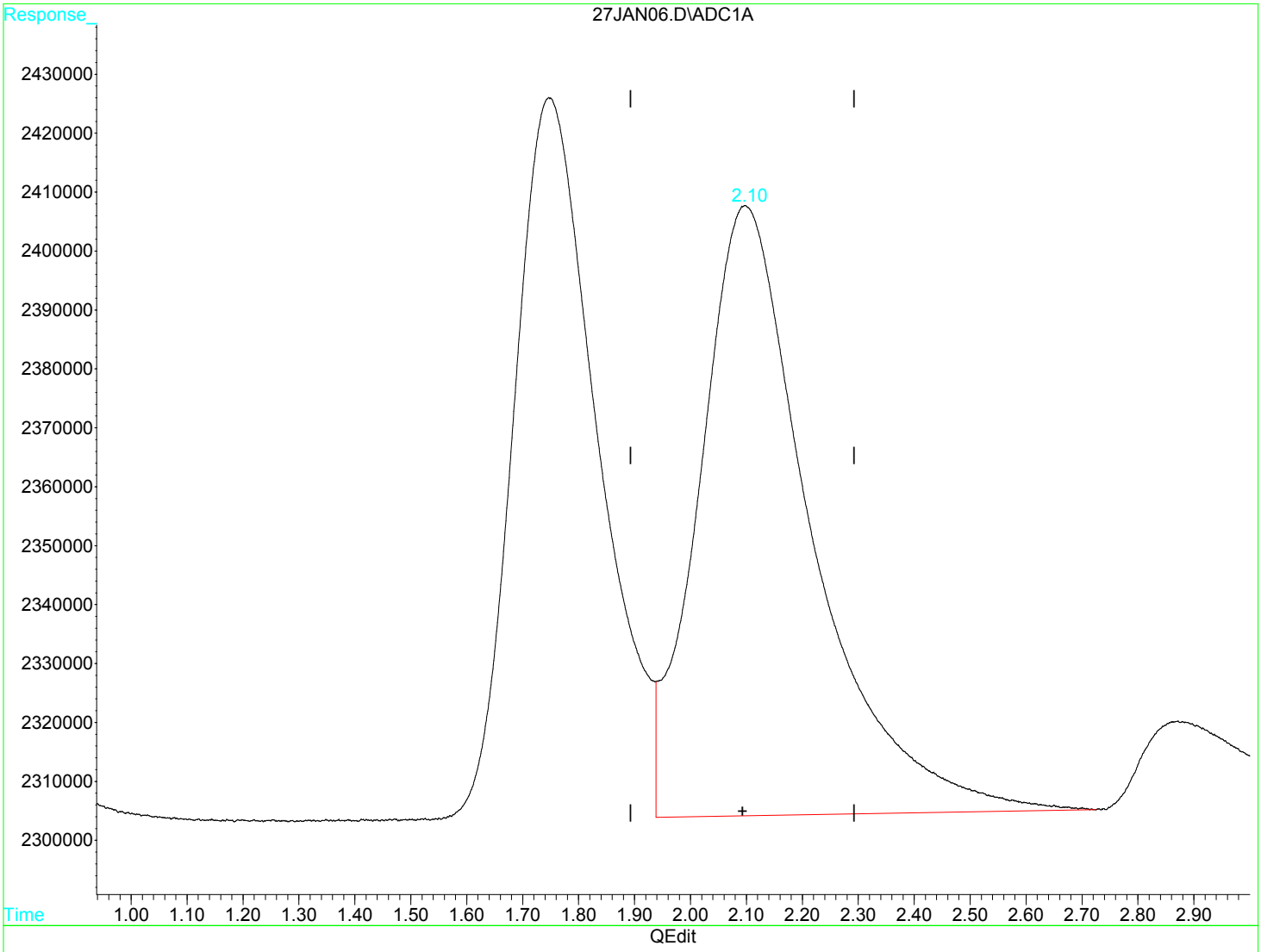
response 12806794

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.10min 24.956ug/L

response 14497414

(+) = Expected Retention Time

**Raw Data - ICB**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN07.D Vial: 7
Acq On : 27 Jan 2017 8:45 am Operator: JH2
Sample : 1701454-ICB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:21 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|
| Target Compounds | | | | |
| 1) m Methane | 0.00 | 0 | N.D. | ug/L d |
| 2) m Ethene | 0.00 | 0 | N.D. | ug/L |
| 3) m Ethane | 0.00 | 0 | N.D. | ug/L |

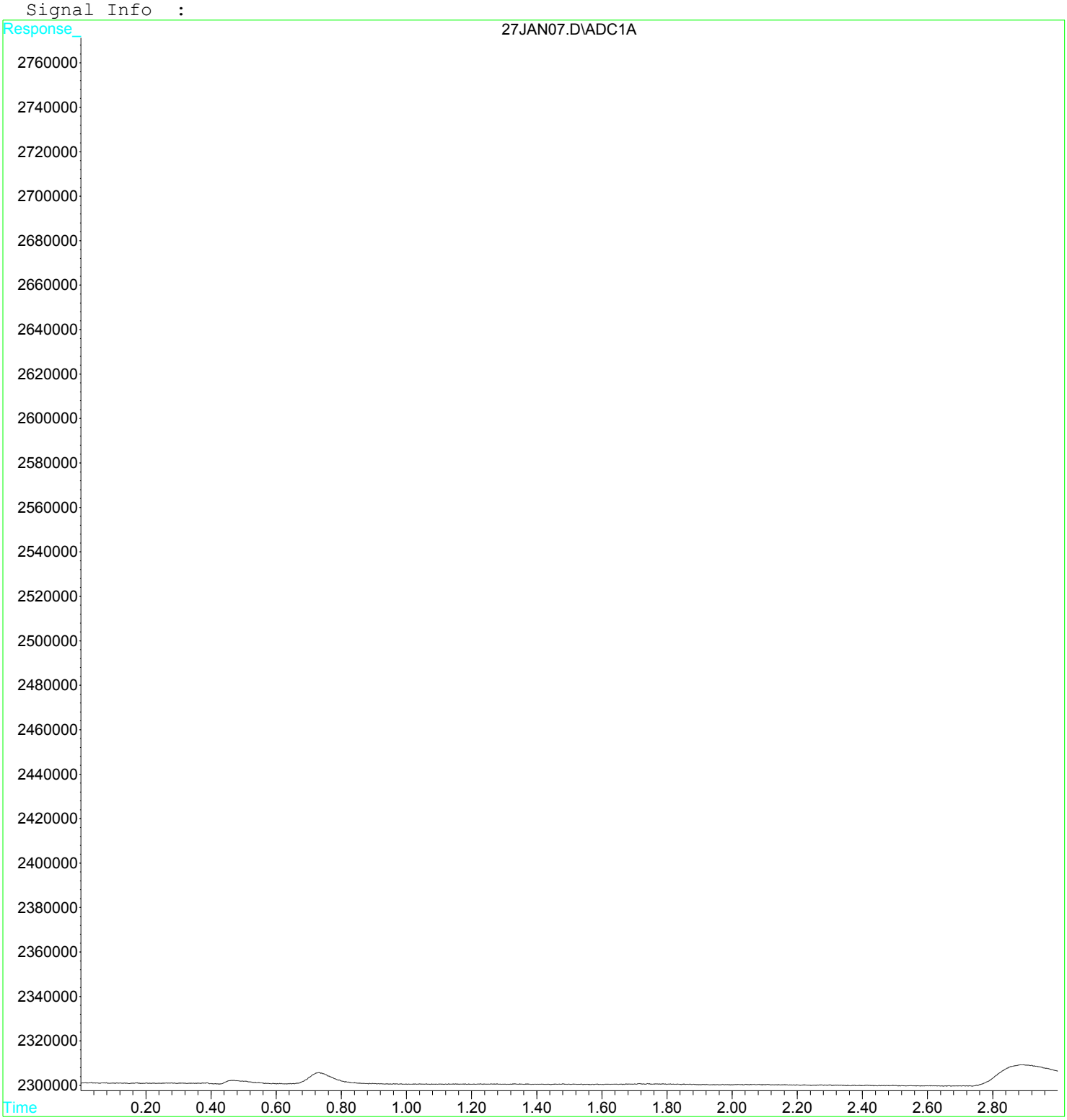
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN07.D Vial: 7
Acq On : 27 Jan 2017 8:45 am Operator: JH2
Sample : 1701454-ICB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:21 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



**Raw Data - CCV**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB02.D Vial: 2
Acq On : 21 Feb 2017 9:10 am Operator: JH2
Sample : 1702815-CCV1 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| Target Compounds | | | |
| 1) m Methane | 0.74 | 6276606 | 10.3695 ug/L |
| 2) m Ethene | 1.73 | 10592285 | 26.3177 ug/L |
| 3) m Ethane | 2.07 | 14283273 | 24.5877 ug/L m |

(f)=RT Delta > 1/2 Window (m)=manual int



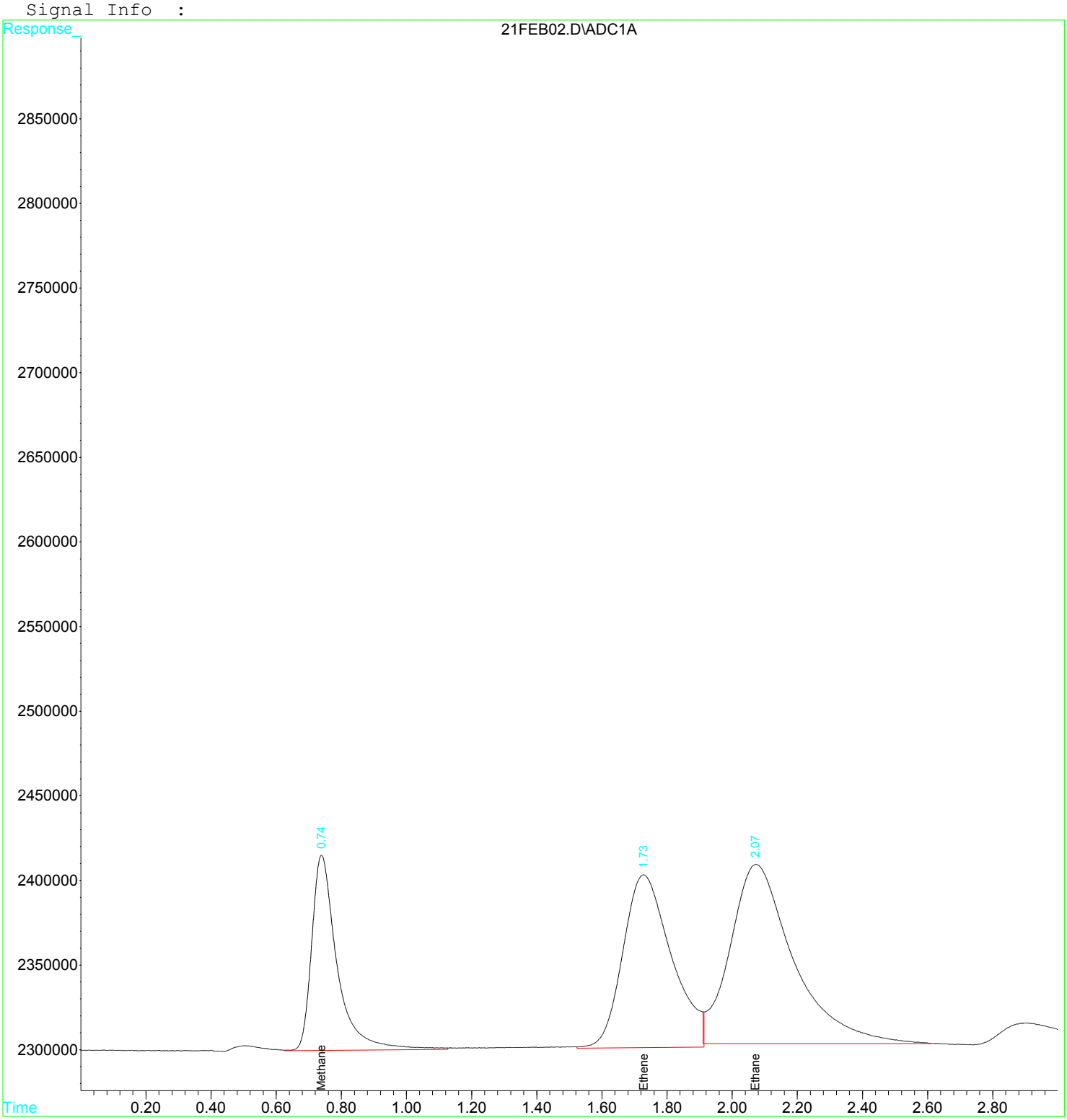
21FEB02.D RSK175.M Tue Feb 21 12:46:28 2017 MSD1 Page 1

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB02.D Vial: 2
Acq On : 21 Feb 2017 9:10 am Operator: JH2
Sample : 1702815-CCV1 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

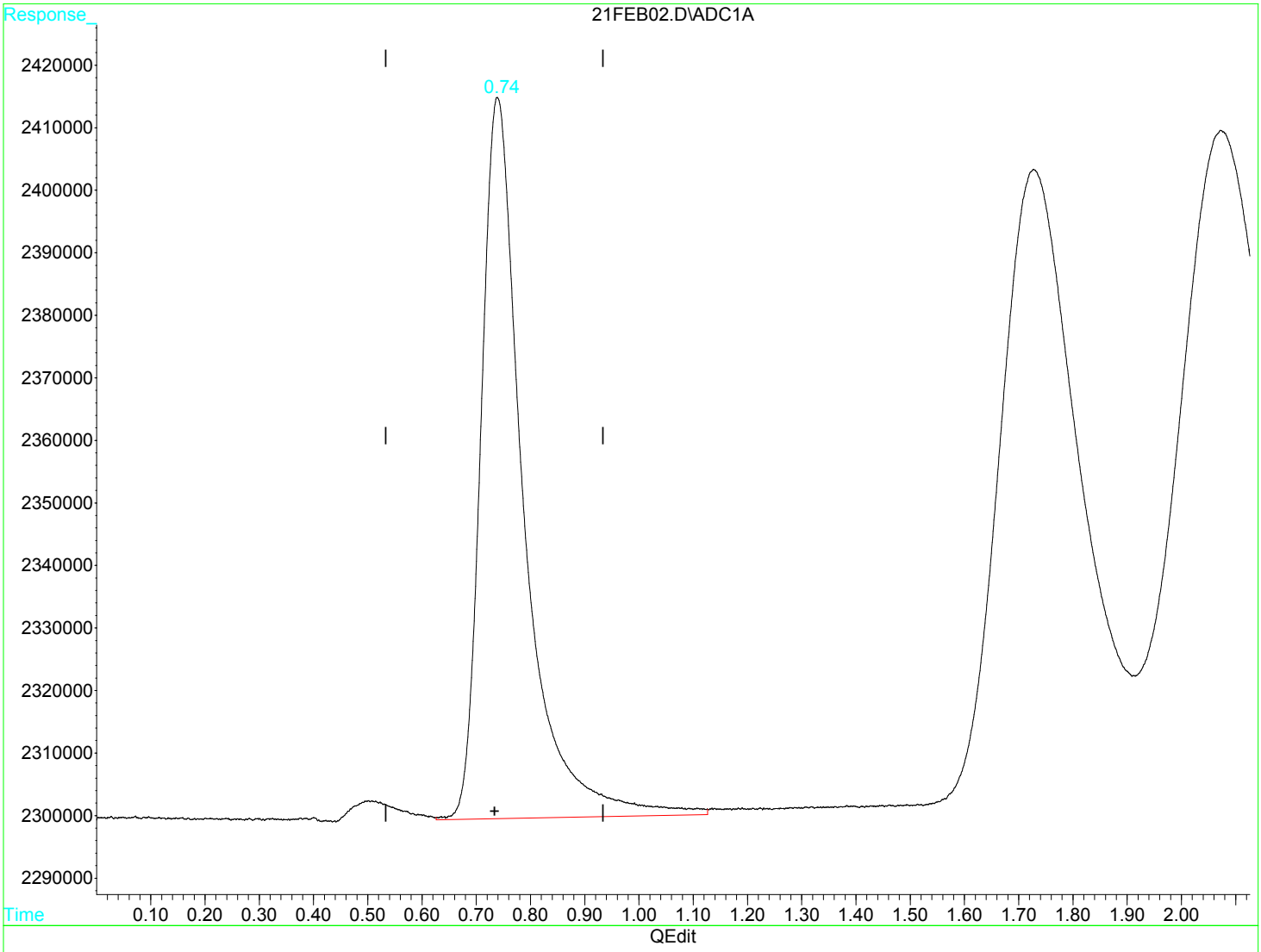
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB02.D Vial: 2
Acq On : 21 Feb 2017 9:10 am Operator: JH2
Sample : 1702815-CCV1 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:13 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.74min 10.370ug/L

response 6276606

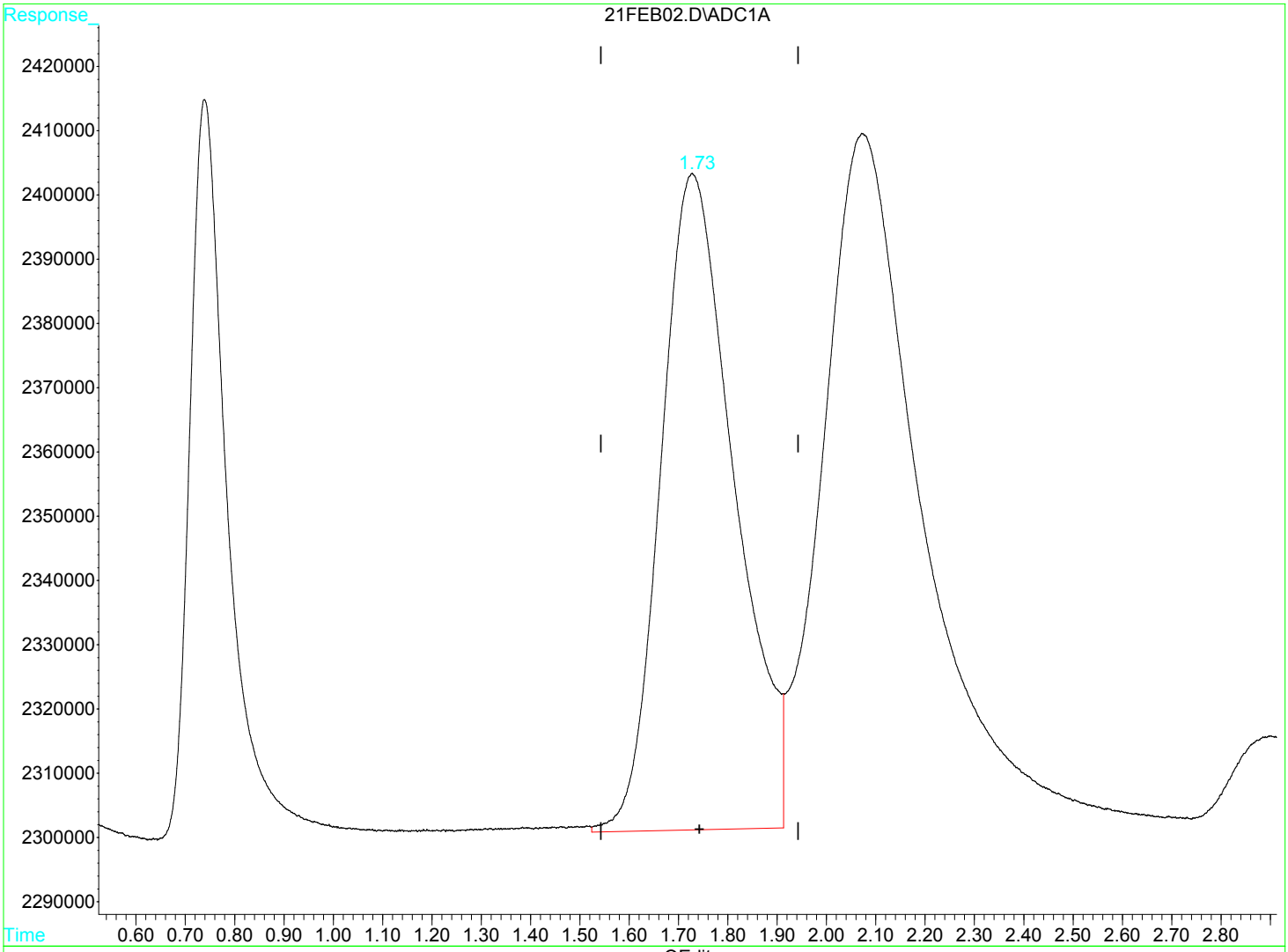
(+) = Expected Retention Time

21FEB02.D RSK175.M Tue Feb 21 12:46:06 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB02.D Vial: 2
Acq On : 21 Feb 2017 9:10 am Operator: JH2
Sample : 1702815-CCV1 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:13 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.73min 26.318ug/L

response 10592285

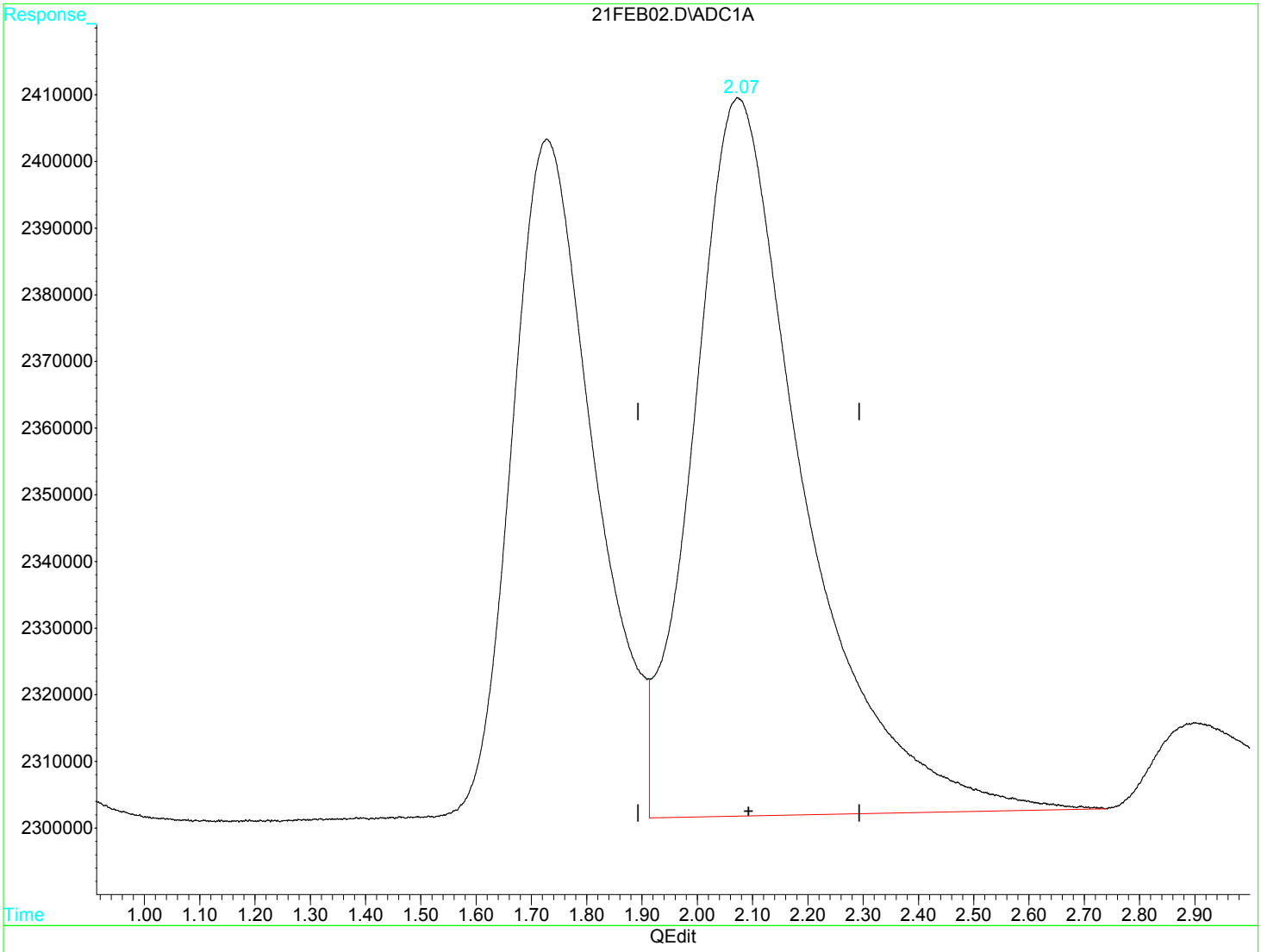
(+) = Expected Retention Time

21FEB02.D RSK175.M Tue Feb 21 12:46:10 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB02.D Vial: 2
Acq On : 21 Feb 2017 9:10 am Operator: JH2
Sample : 1702815-CCV1 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:13 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.07min 25.761ug/L

response 14964635

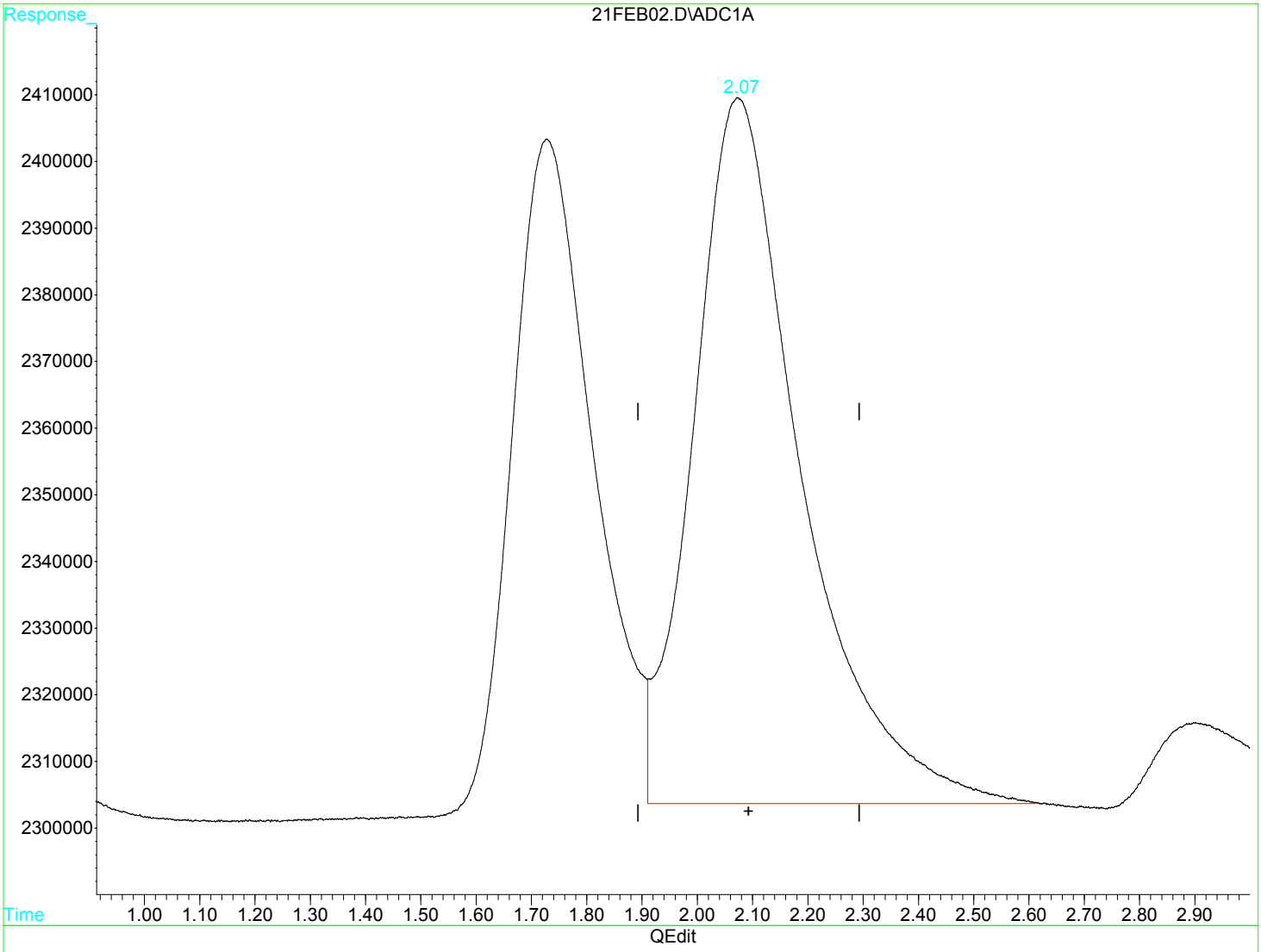
(+) = Expected Retention Time

21FEB02.D RSK175.M Tue Feb 21 12:46:15 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB02.D Vial: 2
Acq On : 21 Feb 2017 9:10 am Operator: JH2
Sample : 1702815-CCV1 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:13 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.07min 24.588ug/L m

response 14283273

(+) = Expected Retention Time

21FEB02.D RSK175.M Tue Feb 21 12:46:24 2017 MSD1

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:54 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|---|
| | Target Compounds | | | | | |
| 1) m | Methane | 0.91f | 5757253 | 9.5115 | ug/L | m |
| 2) m | Ethene | 2.02f | 10153912 | 25.2285 | ug/L | m |
| 3) m | Ethane | 2.42f | 13618675 | 23.4436 | ug/L | m |

(f)=RT Delta > 1/2 Window (m)=manual int



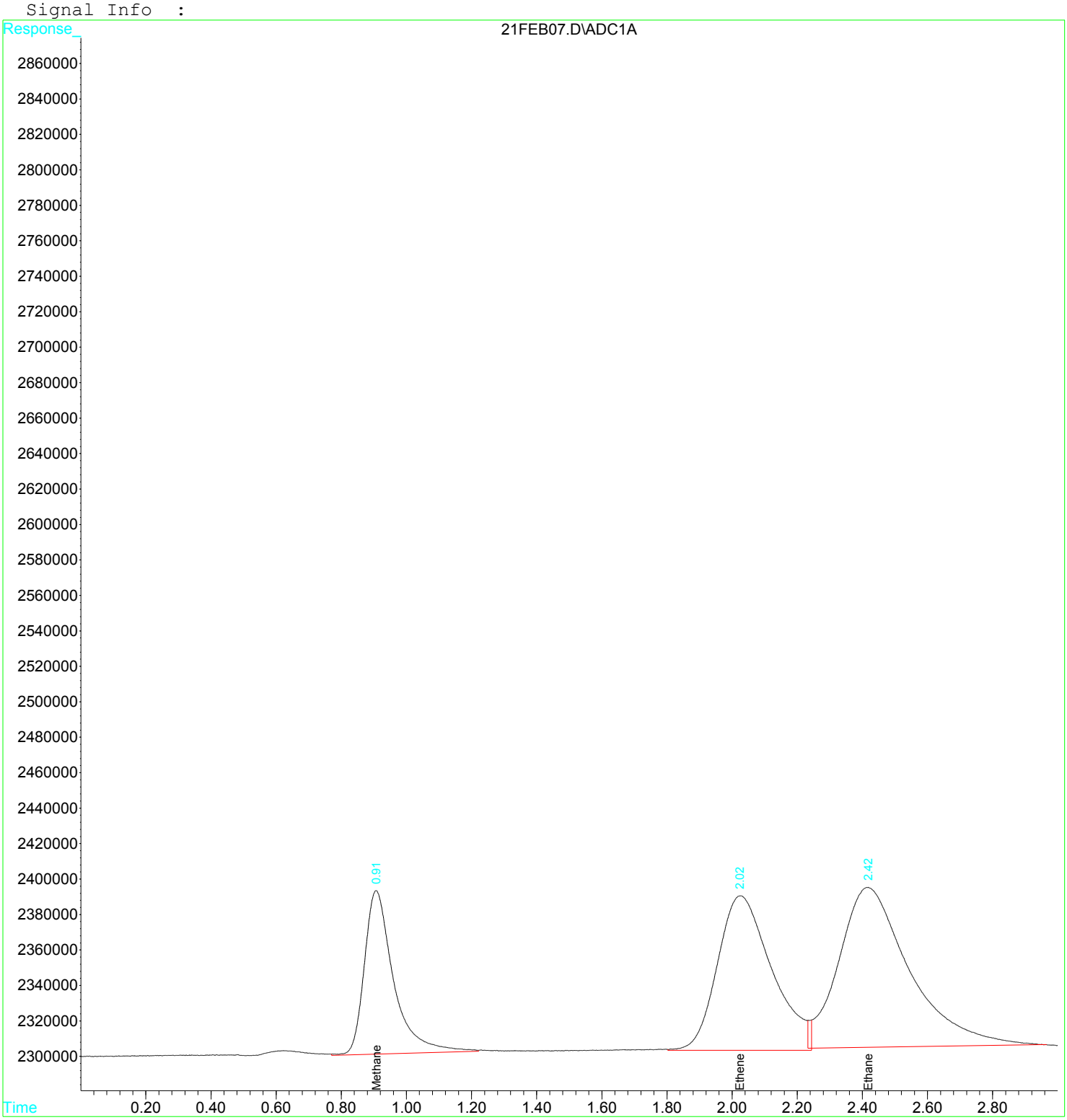
21FEB07.D RSK175.M Tue Feb 21 12:54:30 2017 MSD1 Page 1

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:54 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

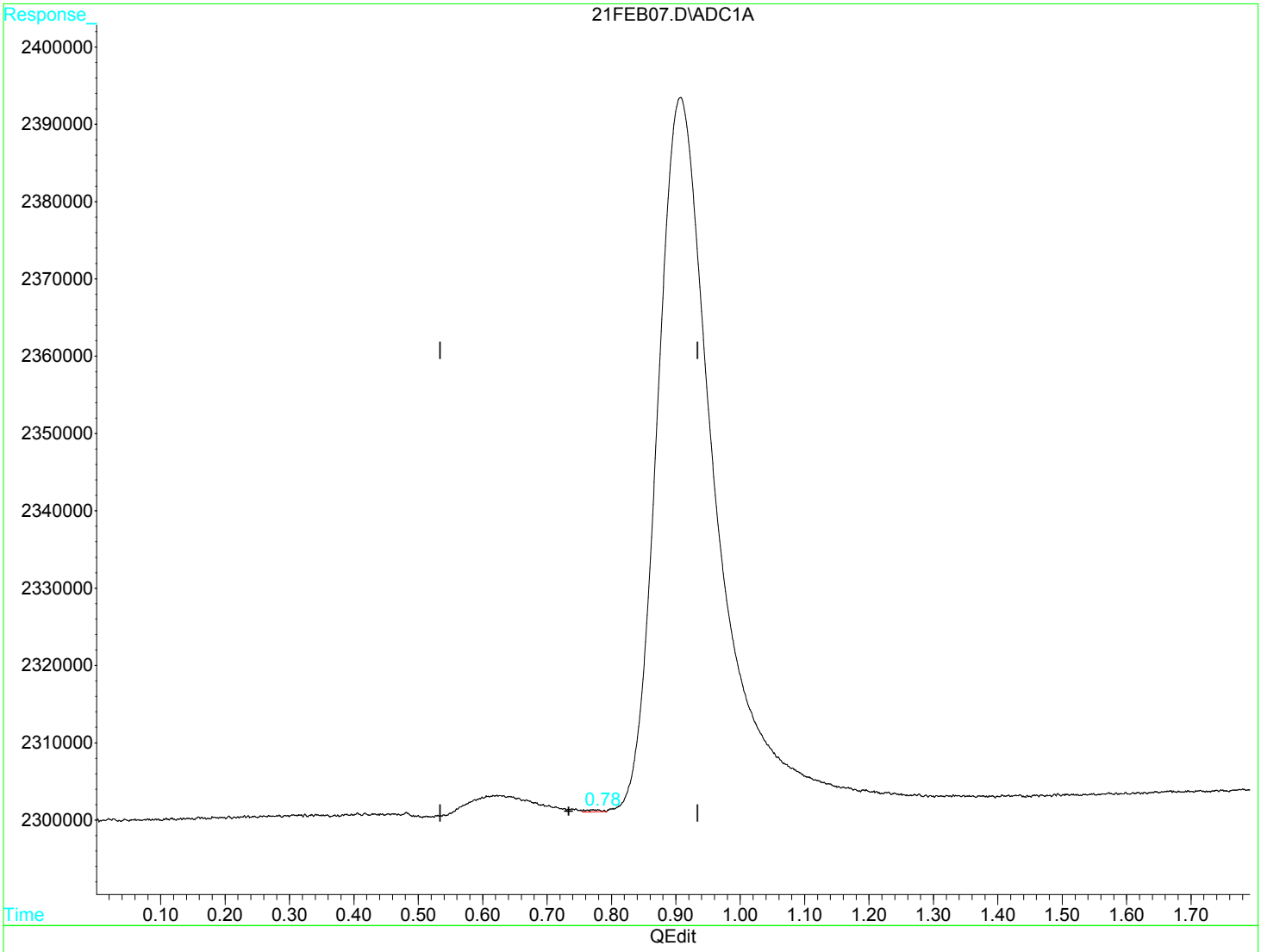
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:53 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.77min 0.007ug/L

response 3997

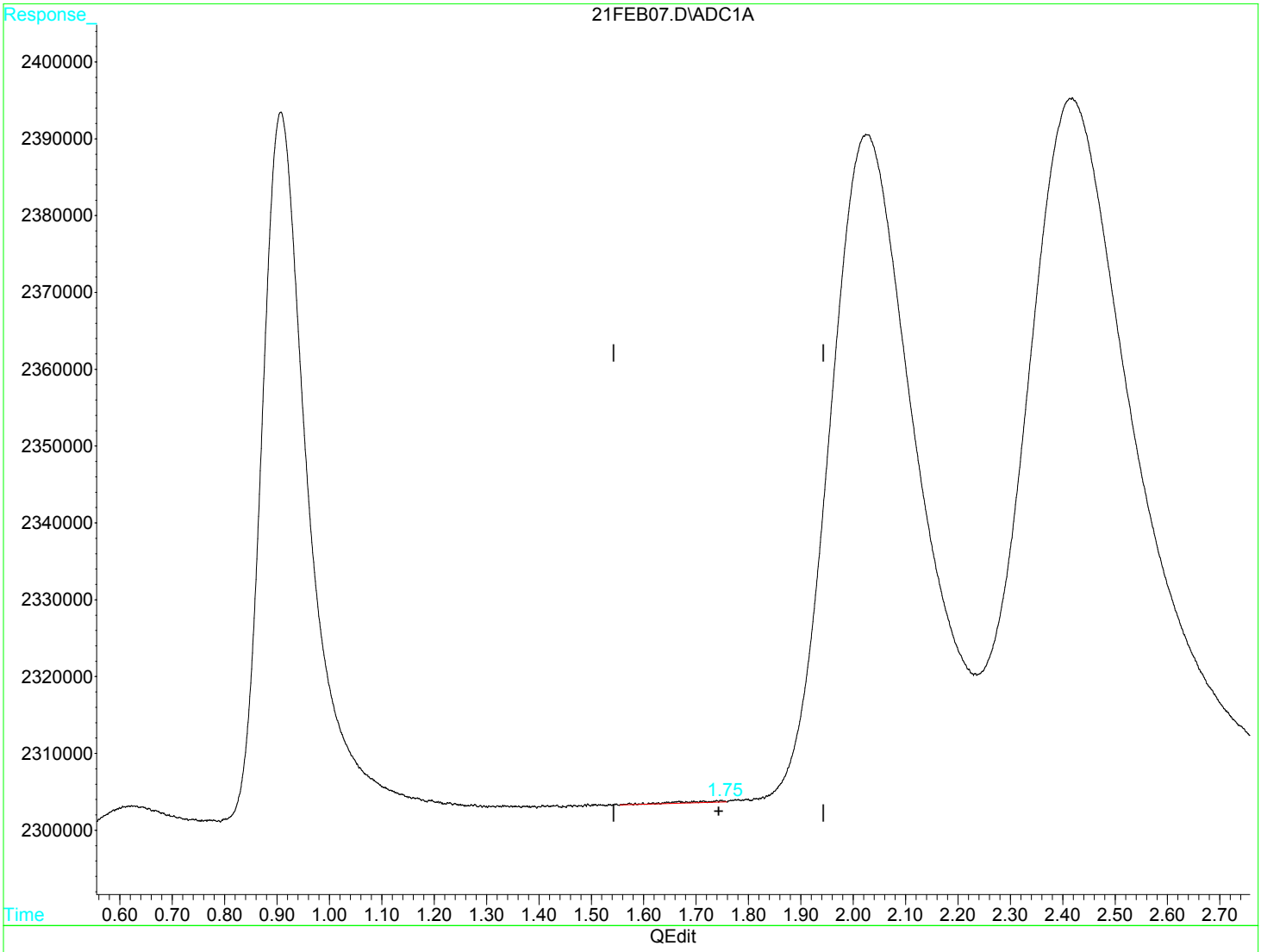
(+) = Expected Retention Time

21FEB07.D RSK175.M Tue Feb 21 12:53:51 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:53 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.75min 0.029ug/L

response 11791

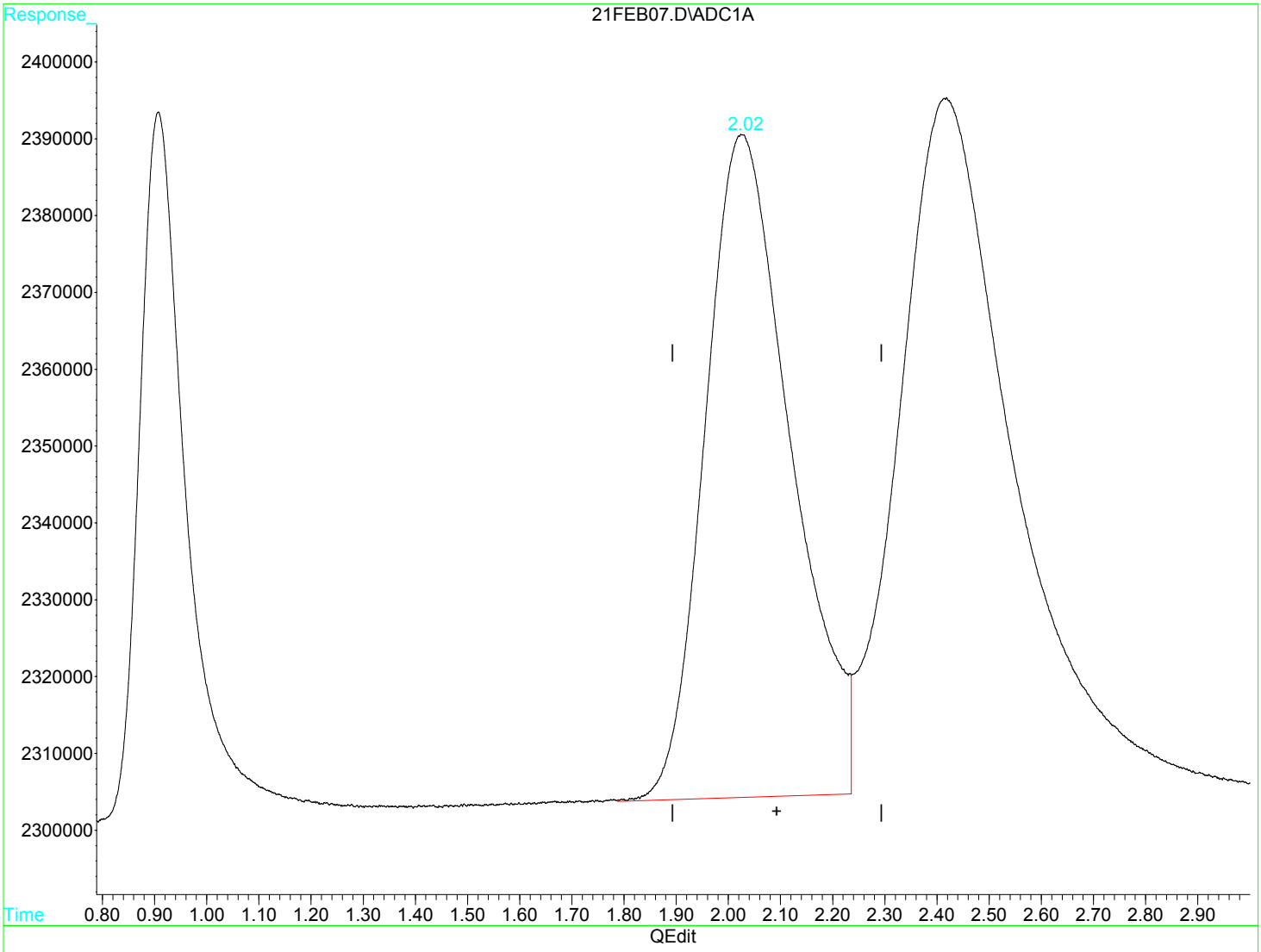
(+) = Expected Retention Time

21FEB07.D RSK175.M Tue Feb 21 12:54:03 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:53 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.03min 16.989ug/L

response 9868945

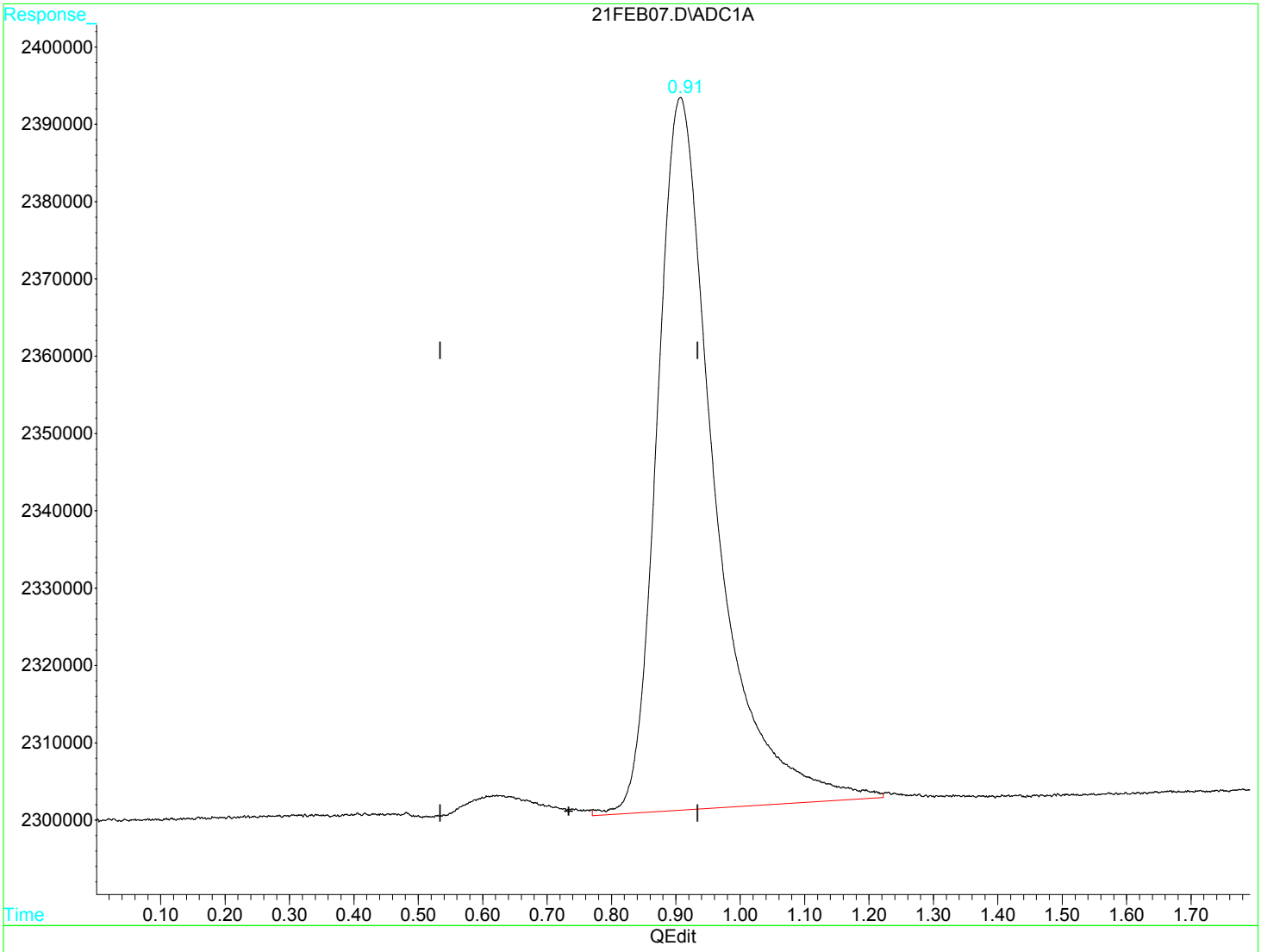
(+) = Expected Retention Time

21FEB07.D RSK175.M Tue Feb 21 12:54:16 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:53 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.91min 9.512ug/L m

response 5757253

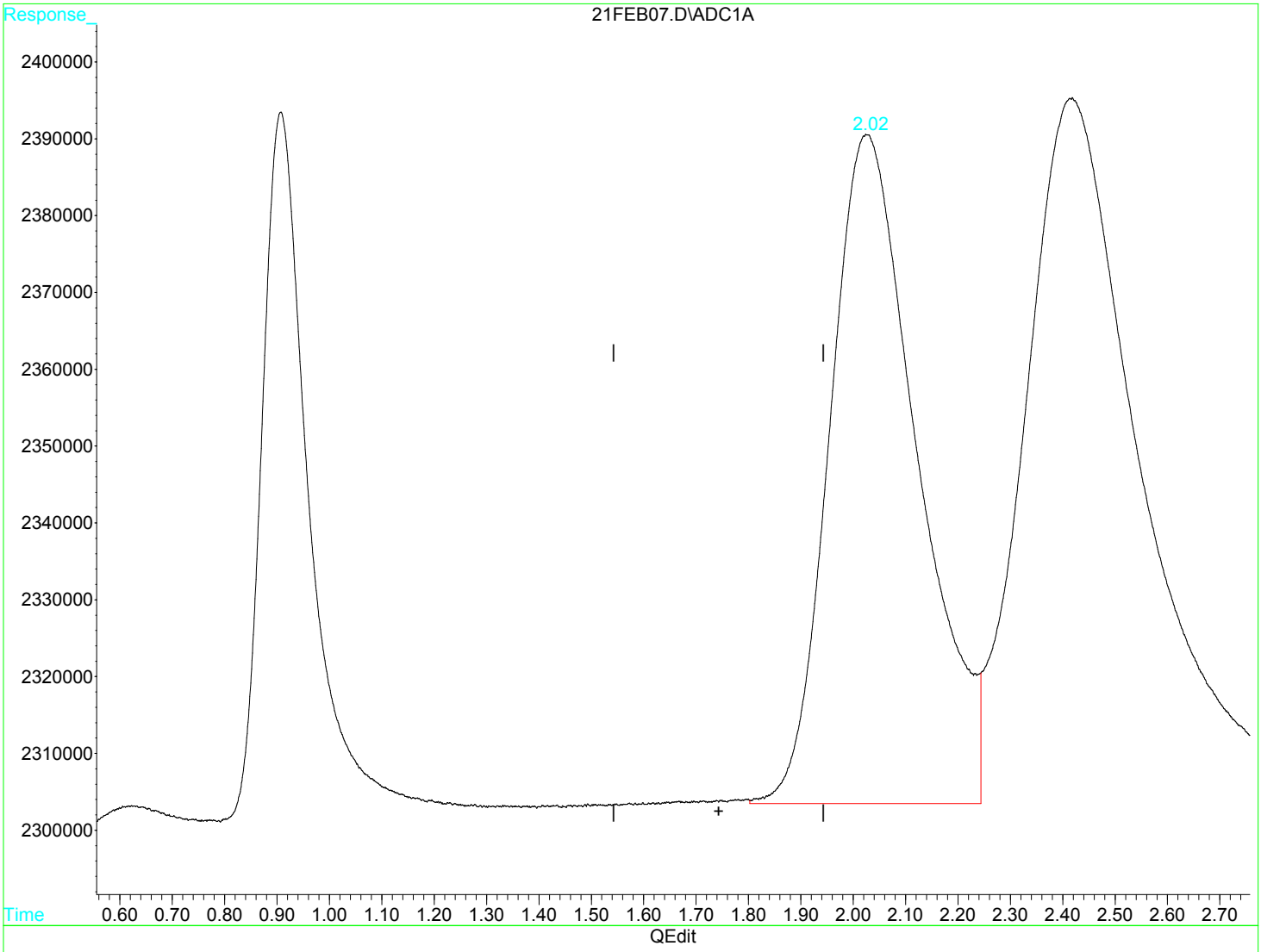
(+) = Expected Retention Time

21FEB07.D RSK175.M Tue Feb 21 12:53:59 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:53 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

2.02min 25.229ug/L m

response 10153912

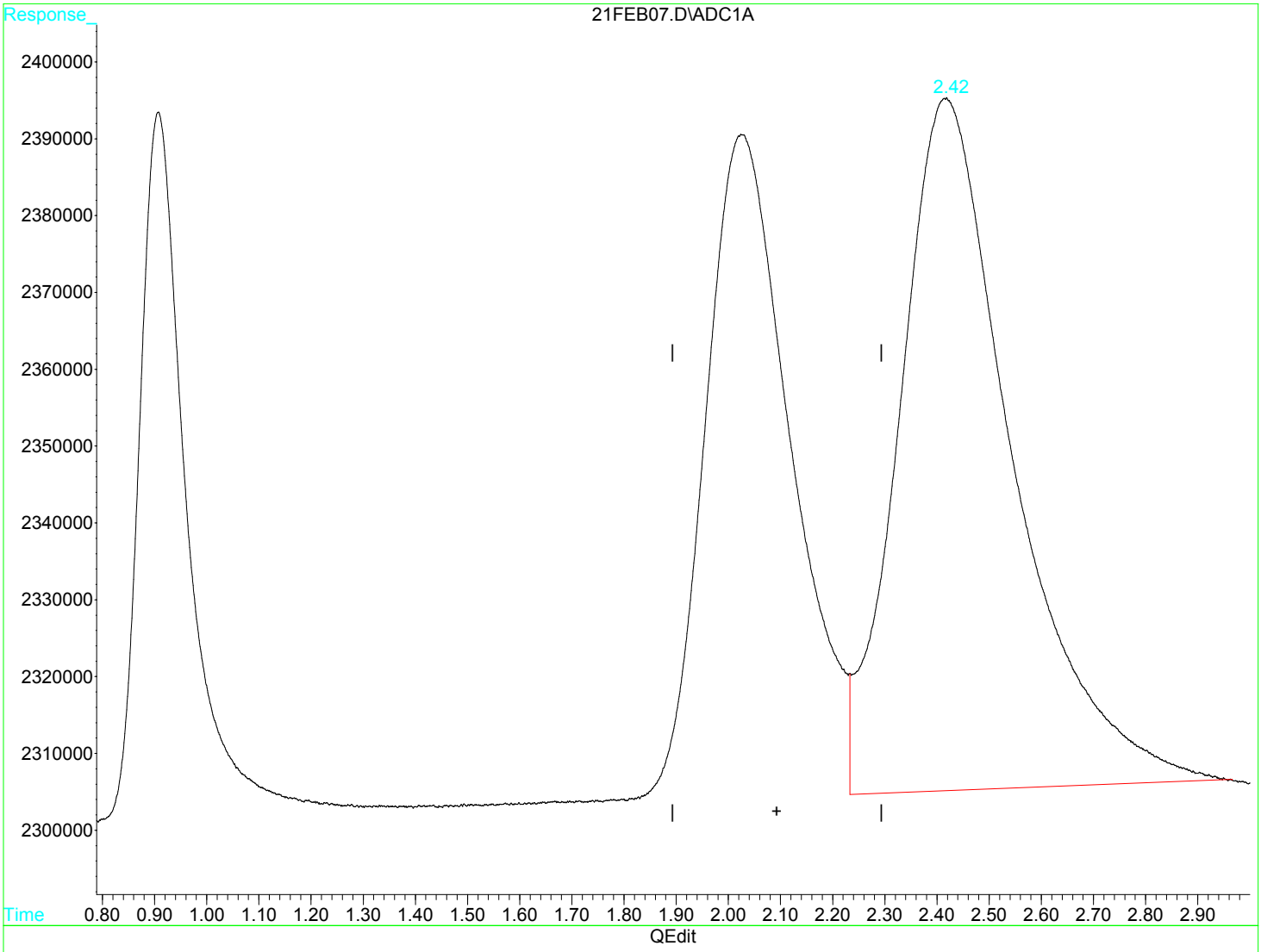
(+) = Expected Retention Time

21FEB07.D RSK175.M Tue Feb 21 12:54:11 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB07.D Vial: 7
Acq On : 21 Feb 2017 9:34 am Operator: JH2
Sample : 1702815-CCV2 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:53 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.42min 23.444ug/L m

response 13618675

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|---|
| | Target Compounds | | | | | |
| 1) m | Methane | 0.90f | 5952930 | 9.8348 | ug/L | m |
| 2) m | Ethene | 2.04f | 10051824 | 24.9749 | ug/L | m |
| 3) m | Ethane | 2.44f | 13613840 | 23.4353 | ug/L | m |

(f)=RT Delta > 1/2 Window (m)=manual int



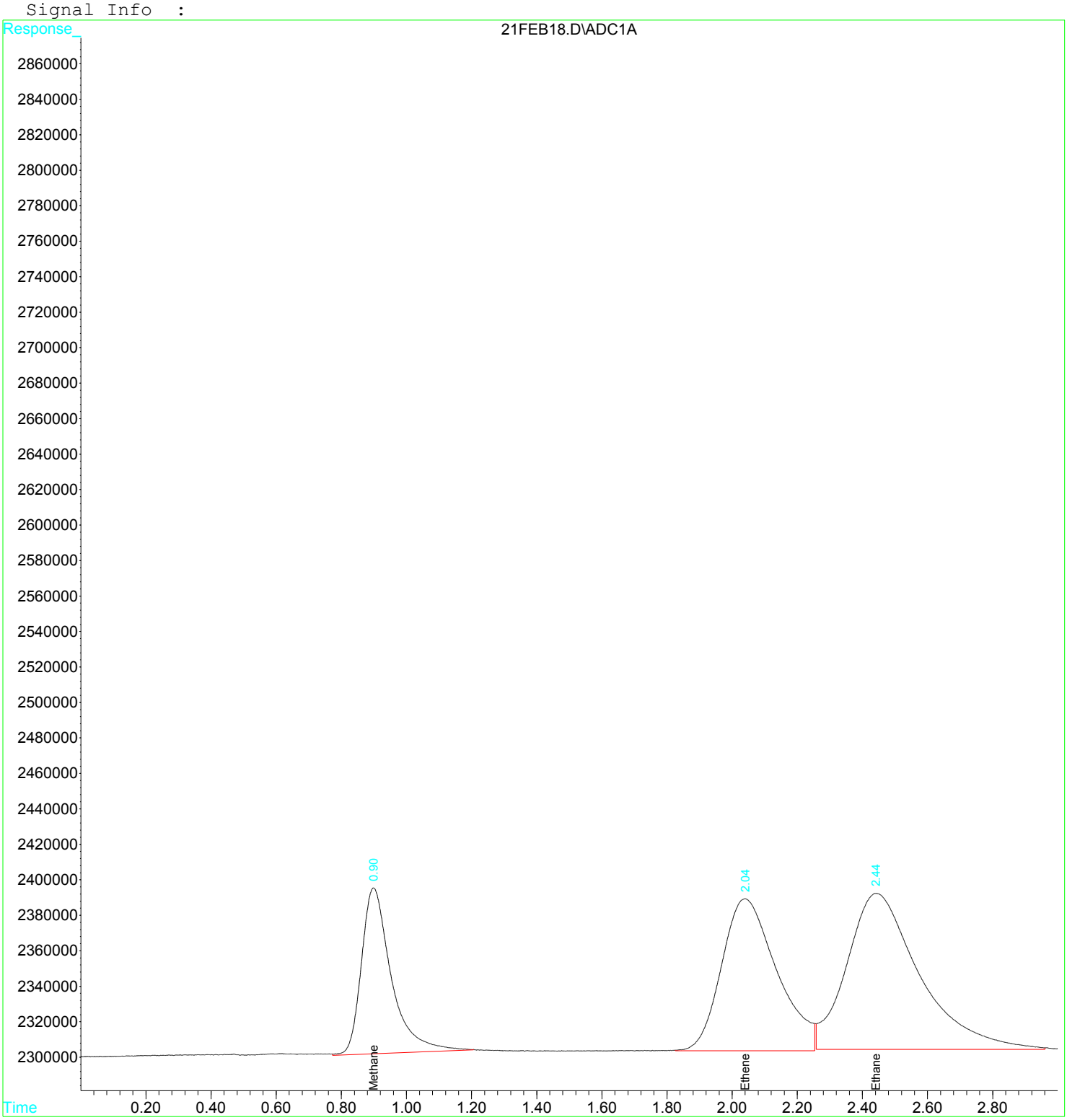
21FEB18.D RSK175.M Tue Feb 21 13:32:53 2017 MSD1 Page 1

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

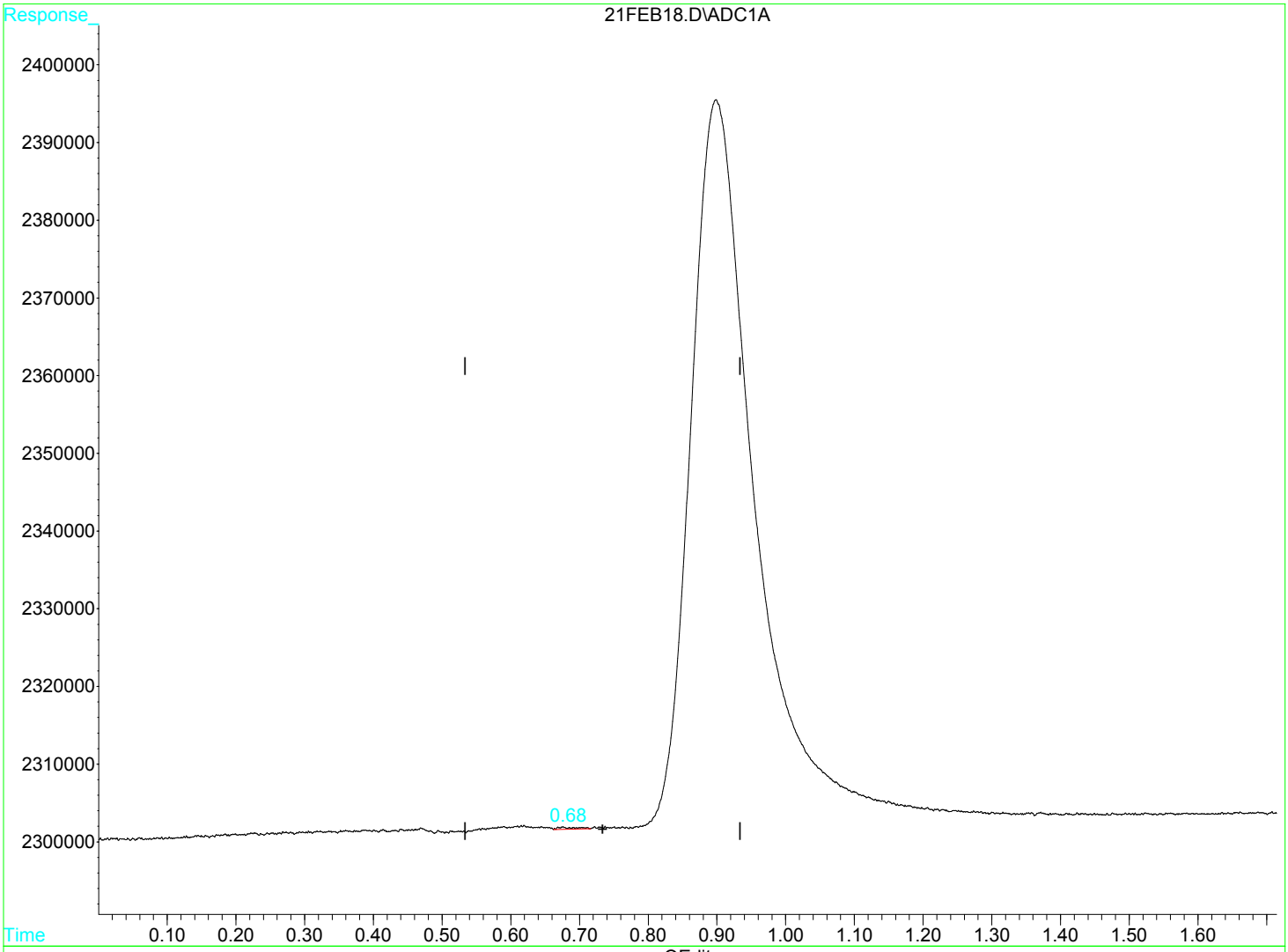
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.68min 0.009ug/L

response 5225

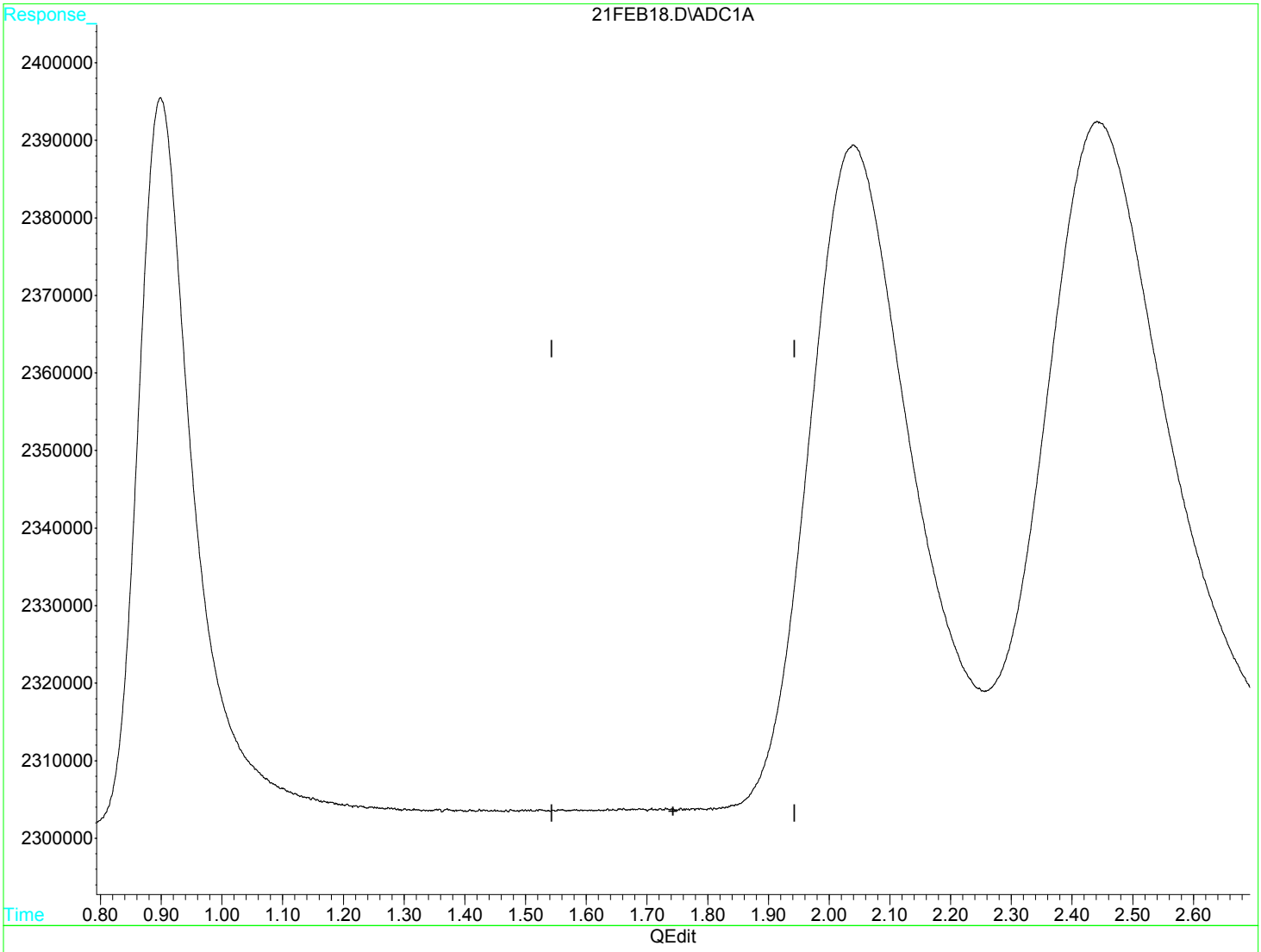
(+) = Expected Retention Time

21FEB18.D RSK175.M Tue Feb 21 13:32:11 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.74min 0.000ug/L

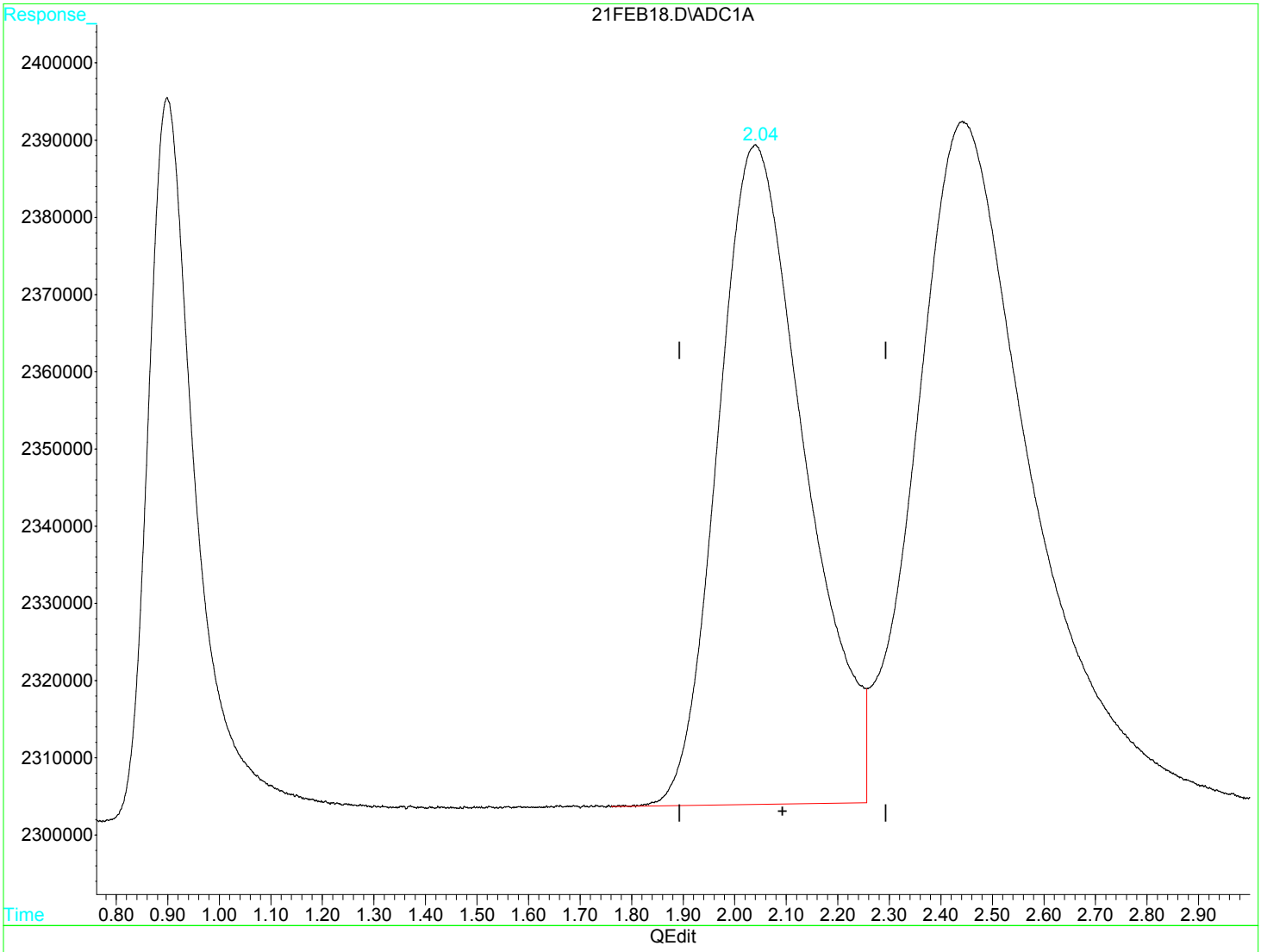
response 0

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.04min 17.220ug/L

response 10003122

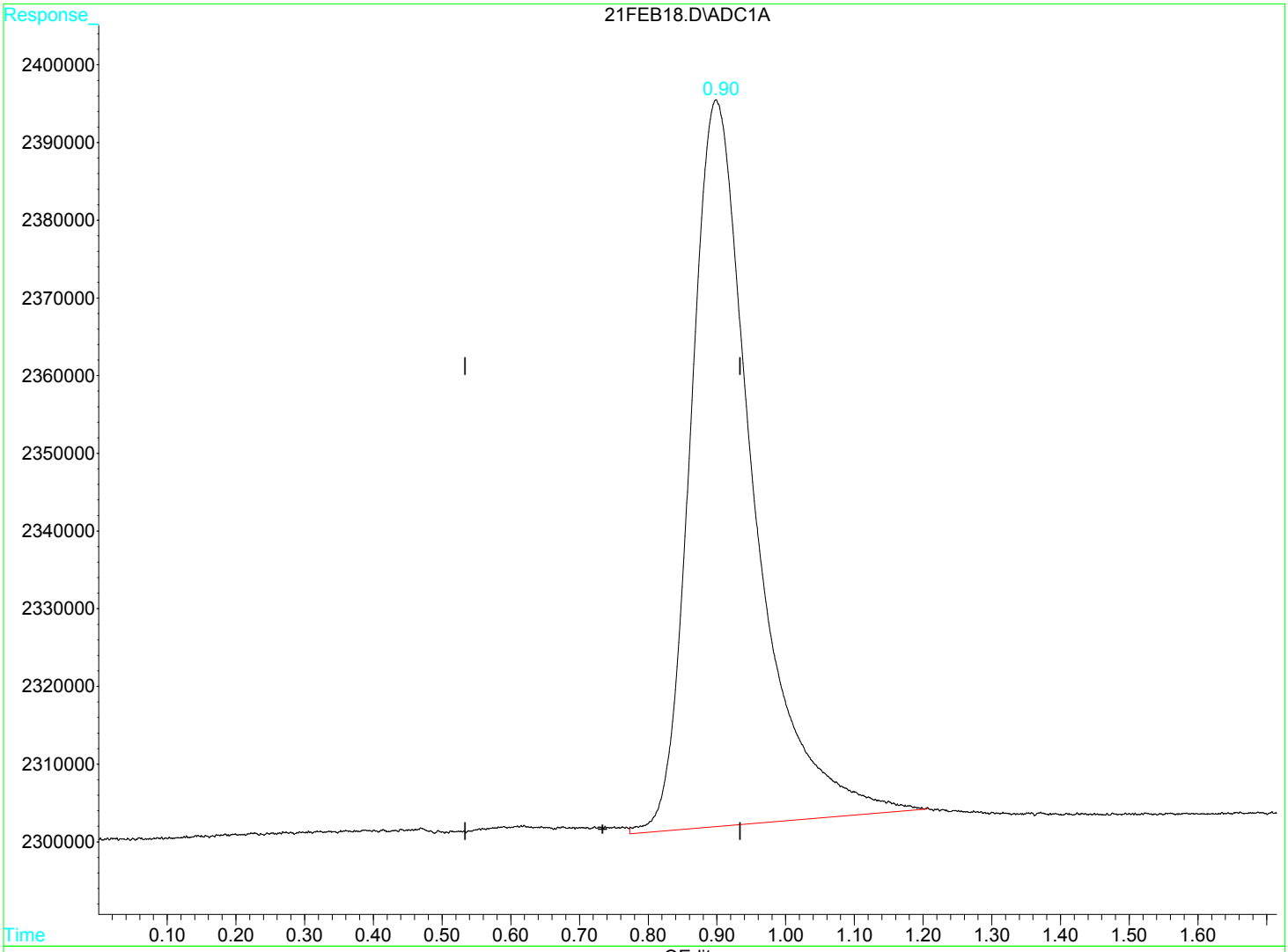
(+) = Expected Retention Time

21FEB18.D RSK175.M Tue Feb 21 13:32:40 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.90min 9.835ug/L m

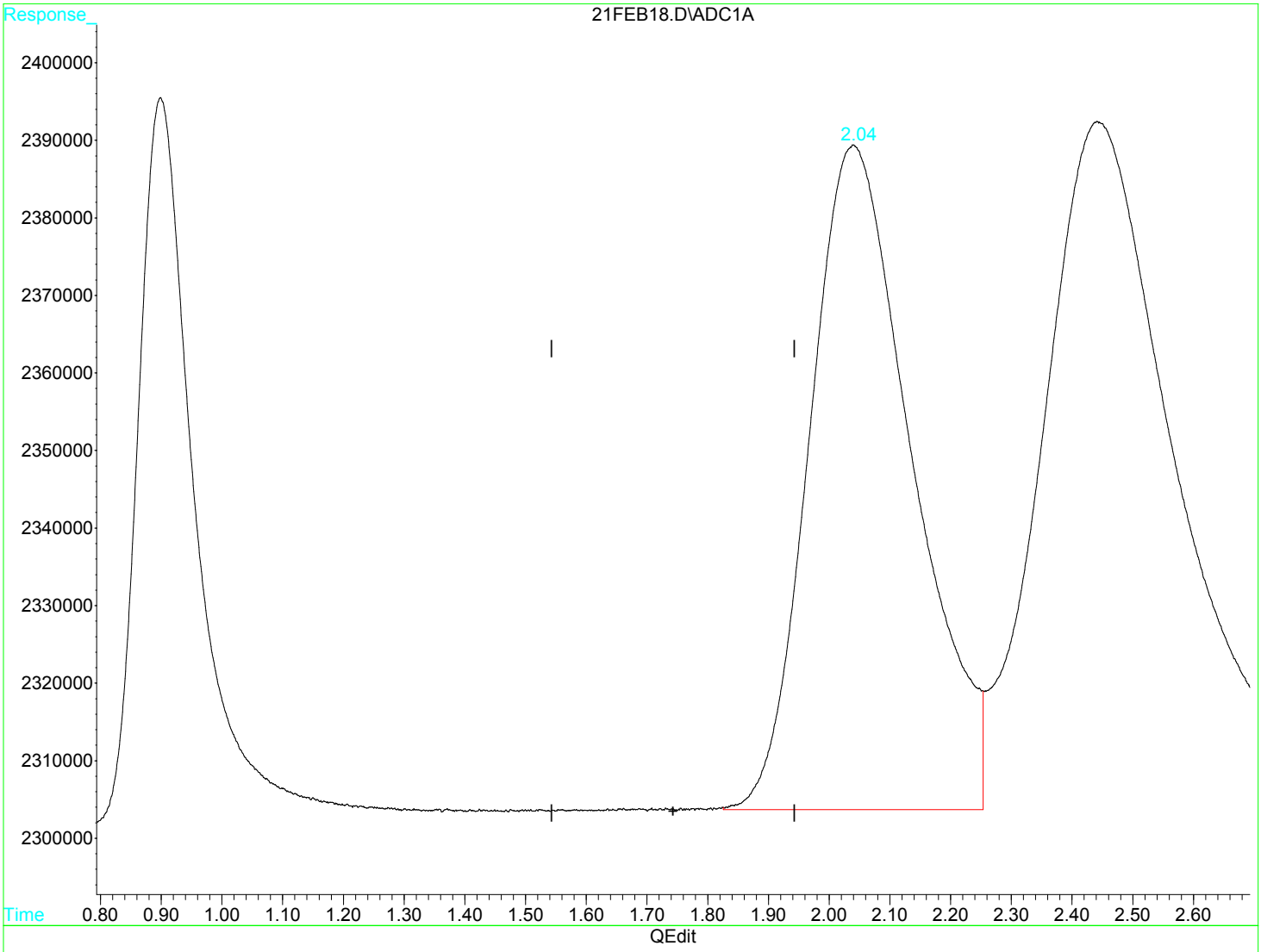
response 5952930

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

2.04min 24.975ug/L m

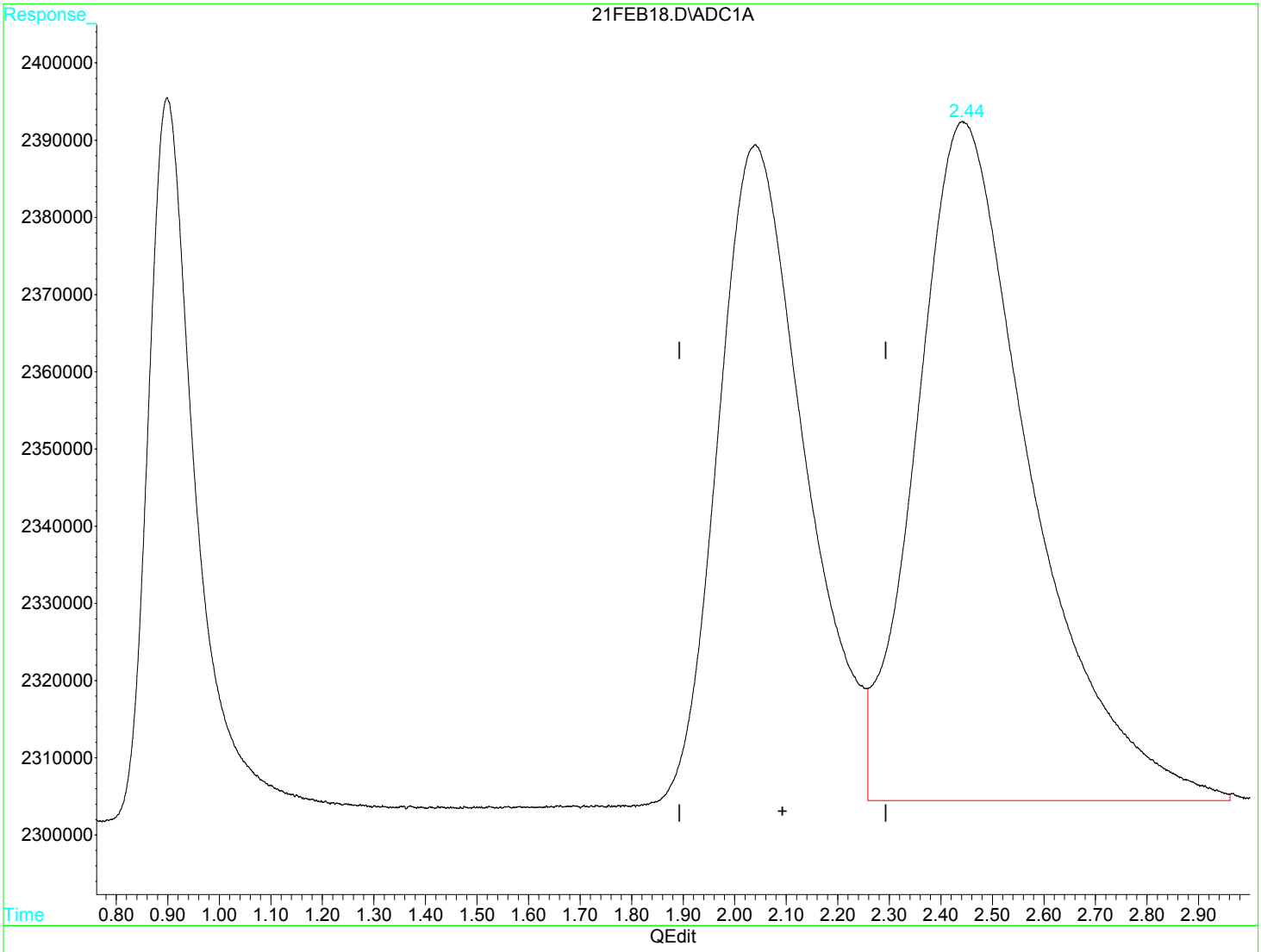
response 10051824

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB18.D Vial: 18
Acq On : 21 Feb 2017 1:22 pm Operator: JH2
Sample : 1702815-CCV3 Inst : GC-V1
Misc : 1 CCV RSK-175 250UL VOC-16-0979 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.44min 23.435ug/L m

response 13613840

(+) = Expected Retention Time

**Raw Data - CCB**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB03.D Vial: 3
Acq On : 21 Feb 2017 9:15 am Operator: JH2
Sample : 1702815-CCB1 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|
| Target Compounds | | | | | |
| 1) m Methane | 0.00 | 0 | N.D. | ug/L | d |
| 2) m Ethene | 0.00 | 0 | N.D. | ug/L | d |
| 3) m Ethane | 0.00 | 0 | N.D. | ug/L | d |

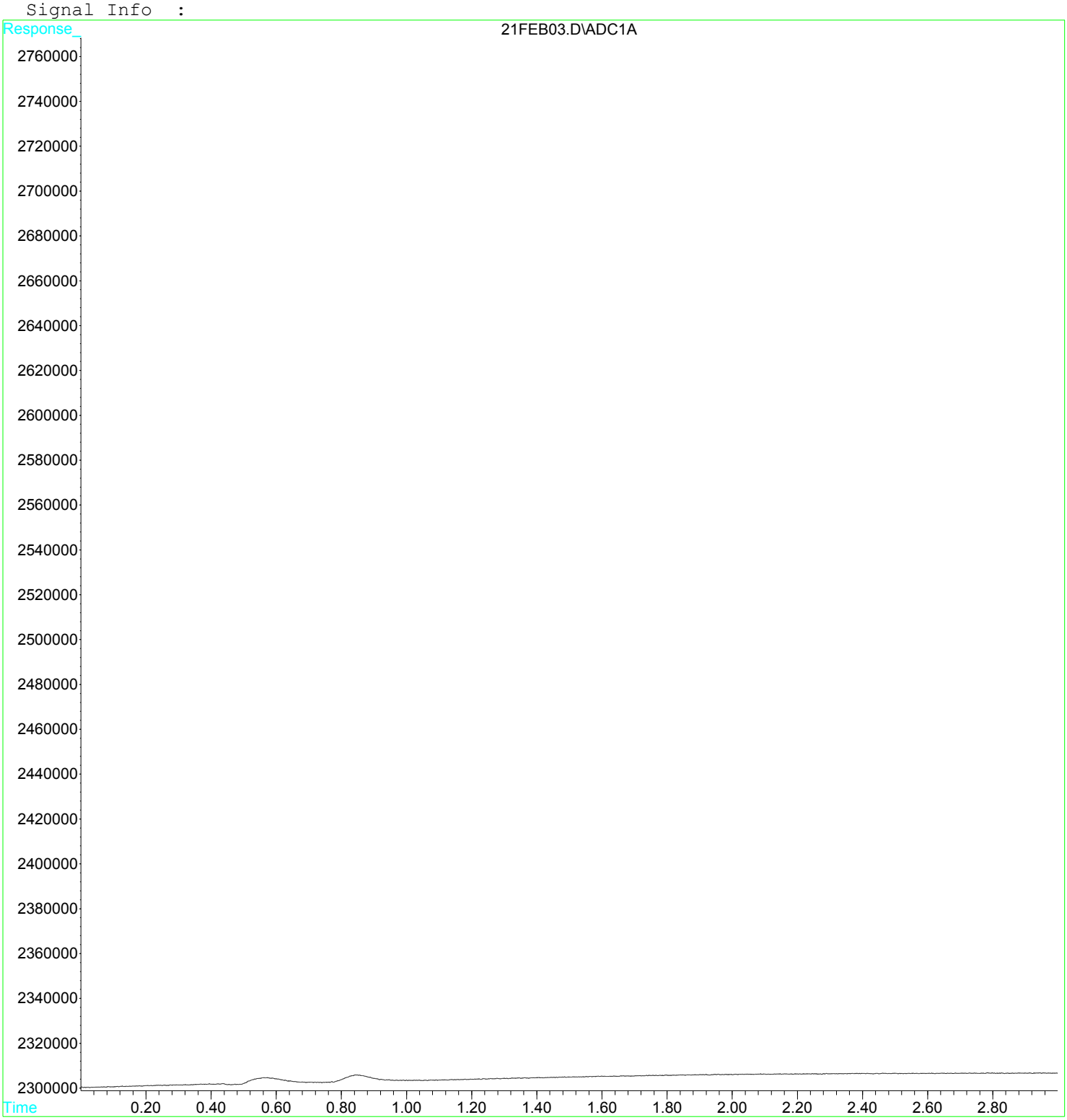
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB03.D Vial: 3
Acq On : 21 Feb 2017 9:15 am Operator: JH2
Sample : 1702815-CCB1 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB08.D Vial: 8
Acq On : 21 Feb 2017 9:39 am Operator: JH2
Sample : 1702815-CCB2 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:54 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|
| Target Compounds | | | | |
| 1) m Methane | 0.00 | 0 | N.D. | ug/L d |
| 2) m Ethene | 0.00 | 0 | N.D. | ug/L d |
| 3) m Ethane | 0.00 | 0 | N.D. | ug/L d |

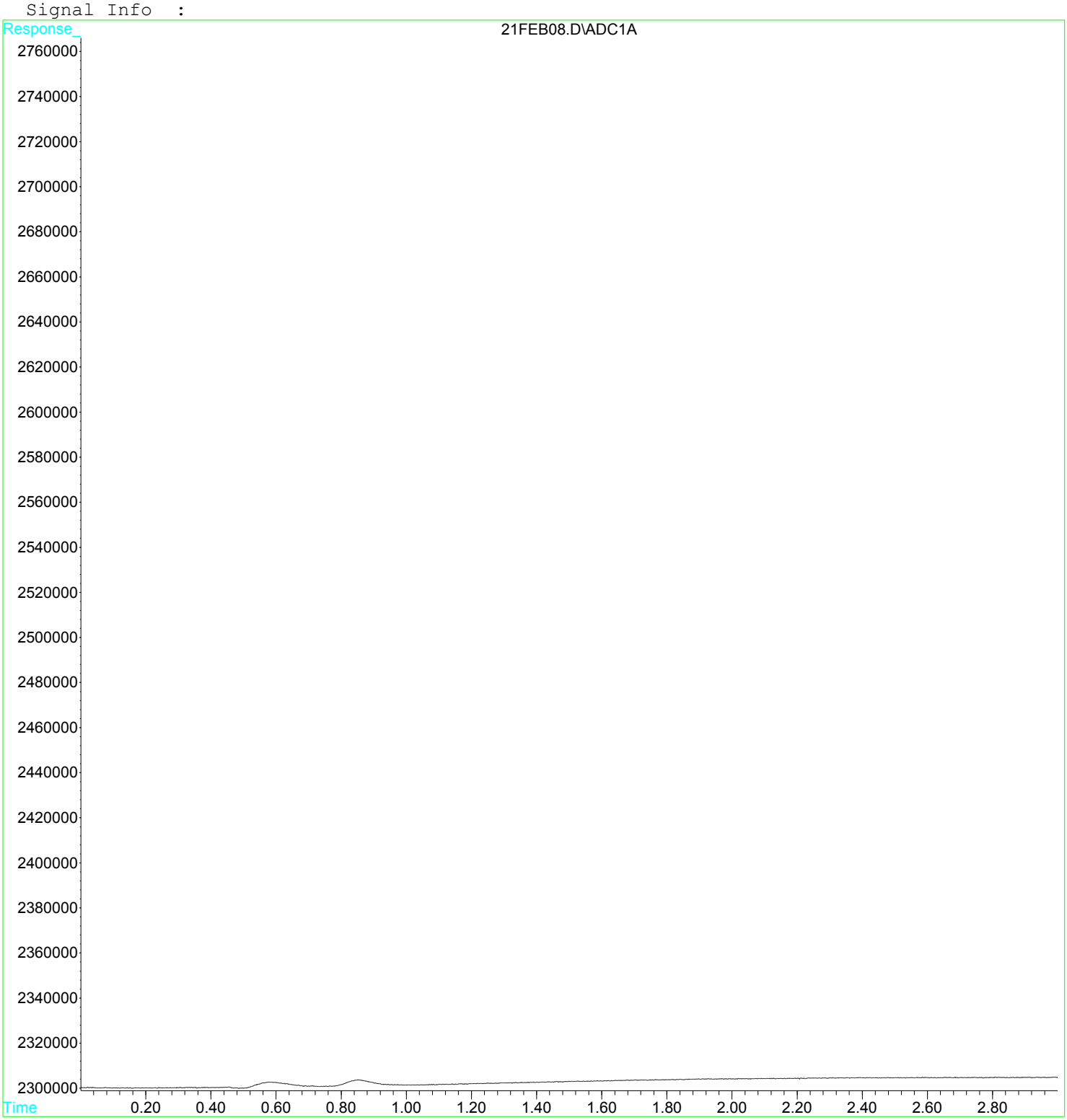
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB08.D Vial: 8
Acq On : 21 Feb 2017 9:39 am Operator: JH2
Sample : 1702815-CCB2 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:54 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB19.D Vial: 19
Acq On : 21 Feb 2017 1:26 pm Operator: JH2
Sample : 1702815-CCB3 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:33 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|---|
| Target Compounds | | | | | | |
| 1) m | Methane | 0.00 | 0 | N.D. | ug/L | d |
| 2) m | Ethene | 0.00 | 0 | N.D. | ug/L | d |
| 3) m | Ethane | 0.00 | 0 | N.D. | ug/L | d |

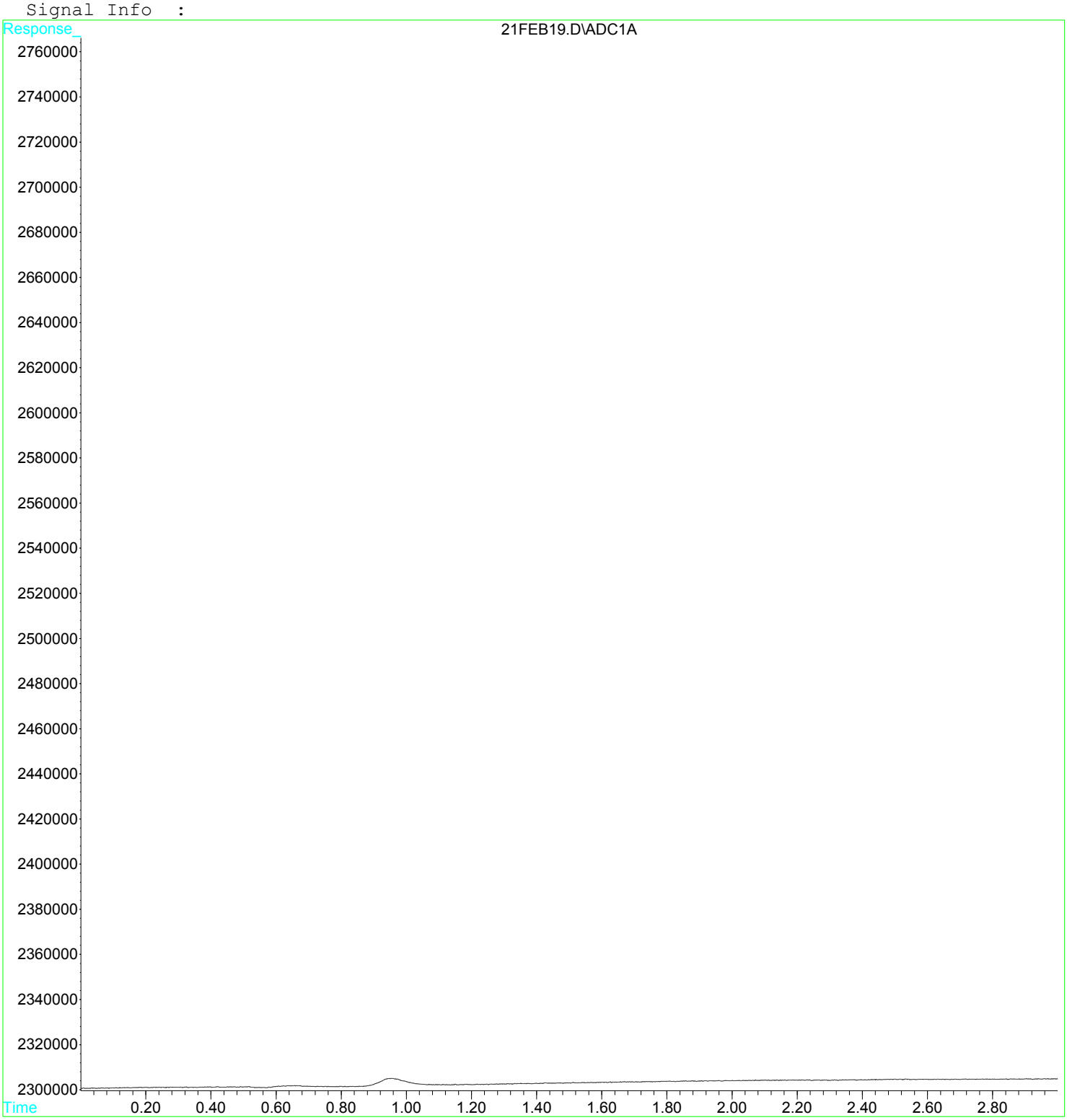
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB19.D Vial: 19
Acq On : 21 Feb 2017 1:26 pm Operator: JH2
Sample : 1702815-CCB3 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 13:33 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



**Raw Data - Method Blank**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB04.D Vial: 4
Acq On : 21 Feb 2017 9:20 am Operator: JH2
Sample : B[B1446-BLK1 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|
| Target Compounds | | | | | |
| 1) m Methane | 0.00 | 0 | N.D. | ug/L | d |
| 2) m Ethene | 0.00 | 0 | N.D. | ug/L | d |
| 3) m Ethane | 0.00 | 0 | N.D. | ug/L | d |

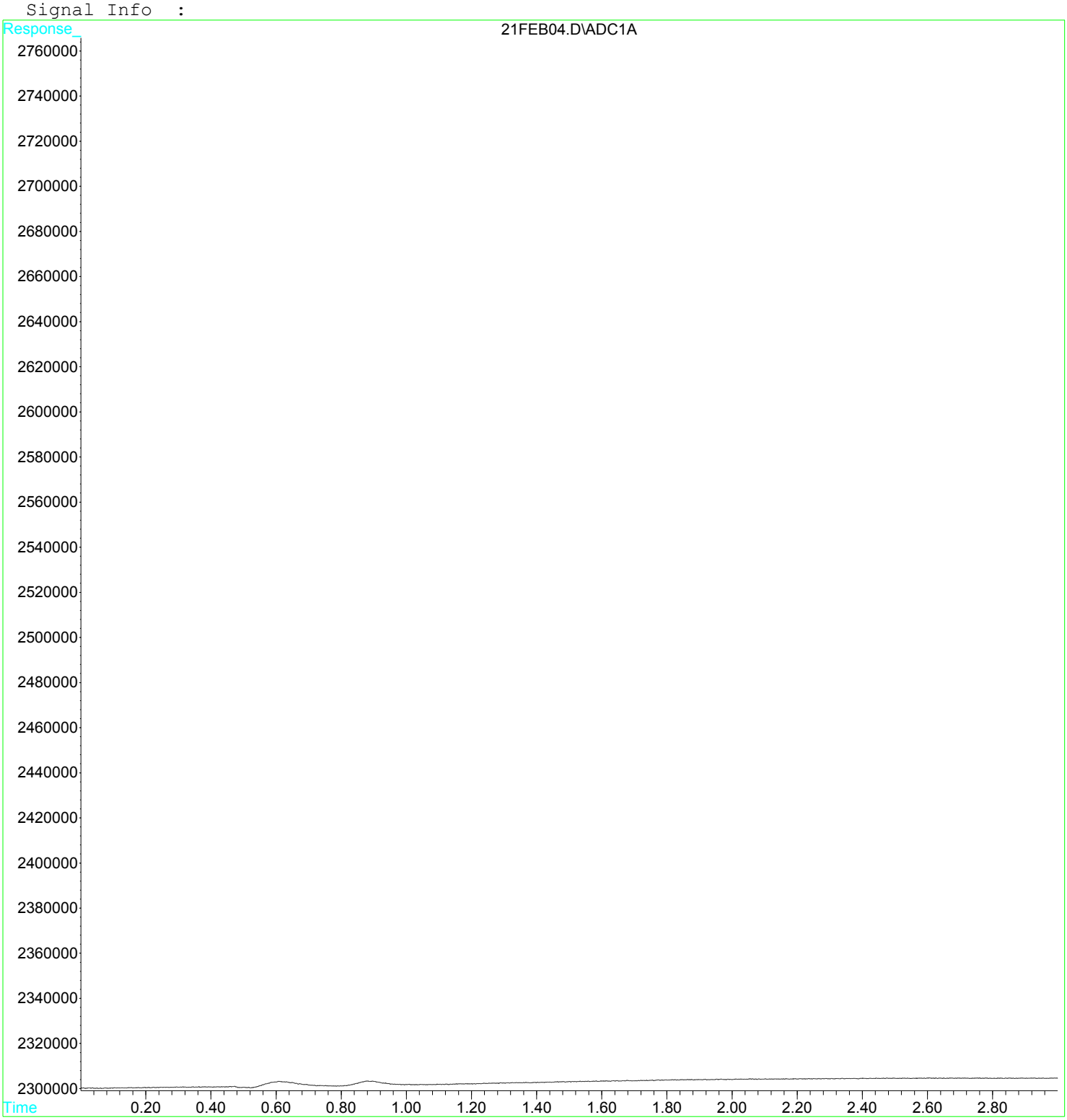
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB04.D Vial: 4
Acq On : 21 Feb 2017 9:20 am Operator: JH2
Sample : B[B1446-BLK1 Inst : GC-V1
Misc : 1 HE RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



**Raw Data - Lab Control Sample**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB05.D Vial: 5
Acq On : 21 Feb 2017 9:24 am Operator: JH2
Sample : B[B1446-BS1 Inst : GC-V1
Misc : 1 BS RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:47 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| Target Compounds | | | |
| 1) m Methane | 0.88f | 5694514 | 9.4079 ug/L m |
| 2) m Ethene | 1.99f | 9913222 | 24.6305 ug/L m |
| 3) m Ethane | 2.39f | 13644459 | 23.4880 ug/L m |

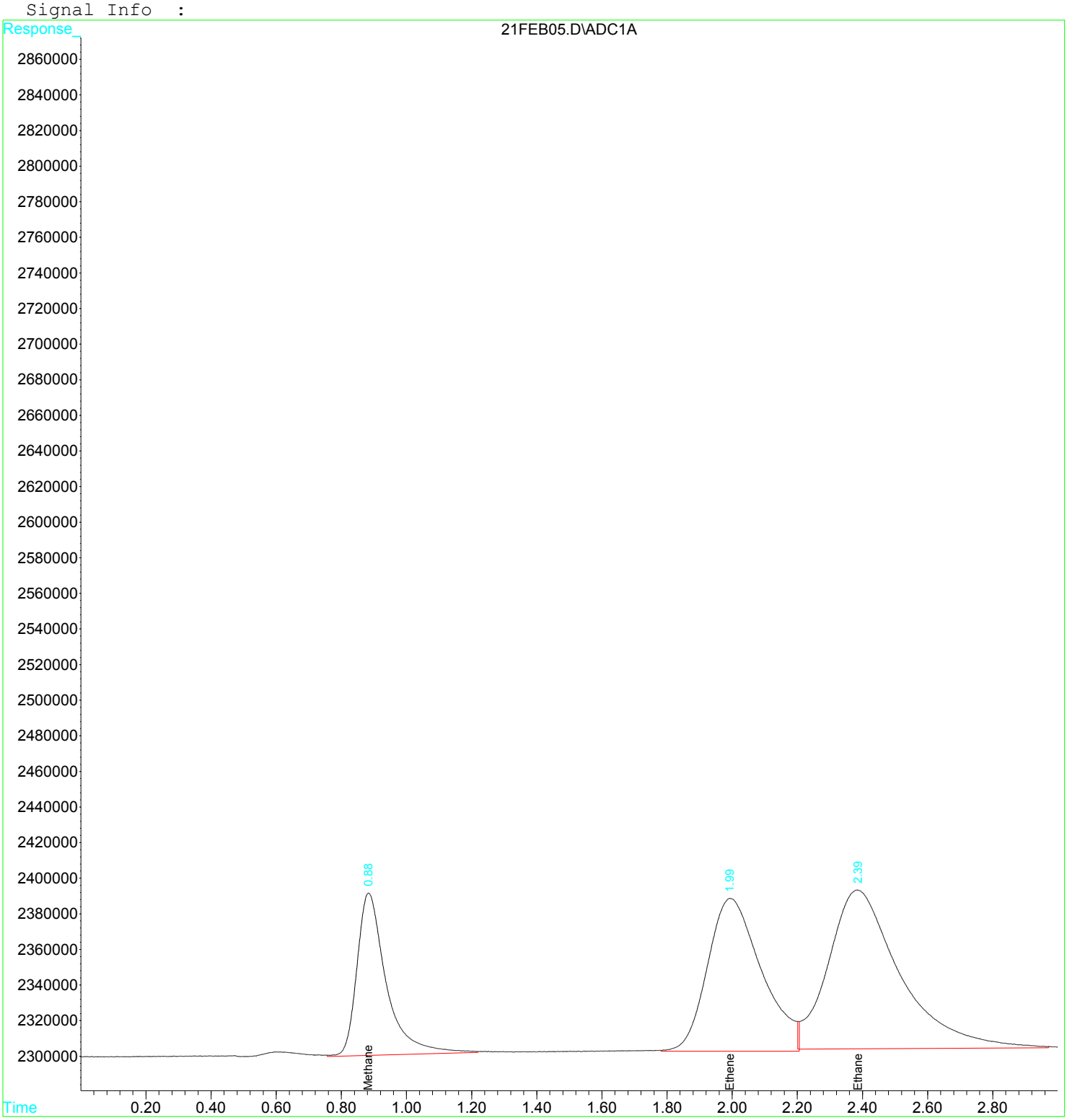
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB05.D Vial: 5
Acq On : 21 Feb 2017 9:24 am Operator: JH2
Sample : B[B1446-BS1 Inst : GC-V1
Misc : 1 BS RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:47 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

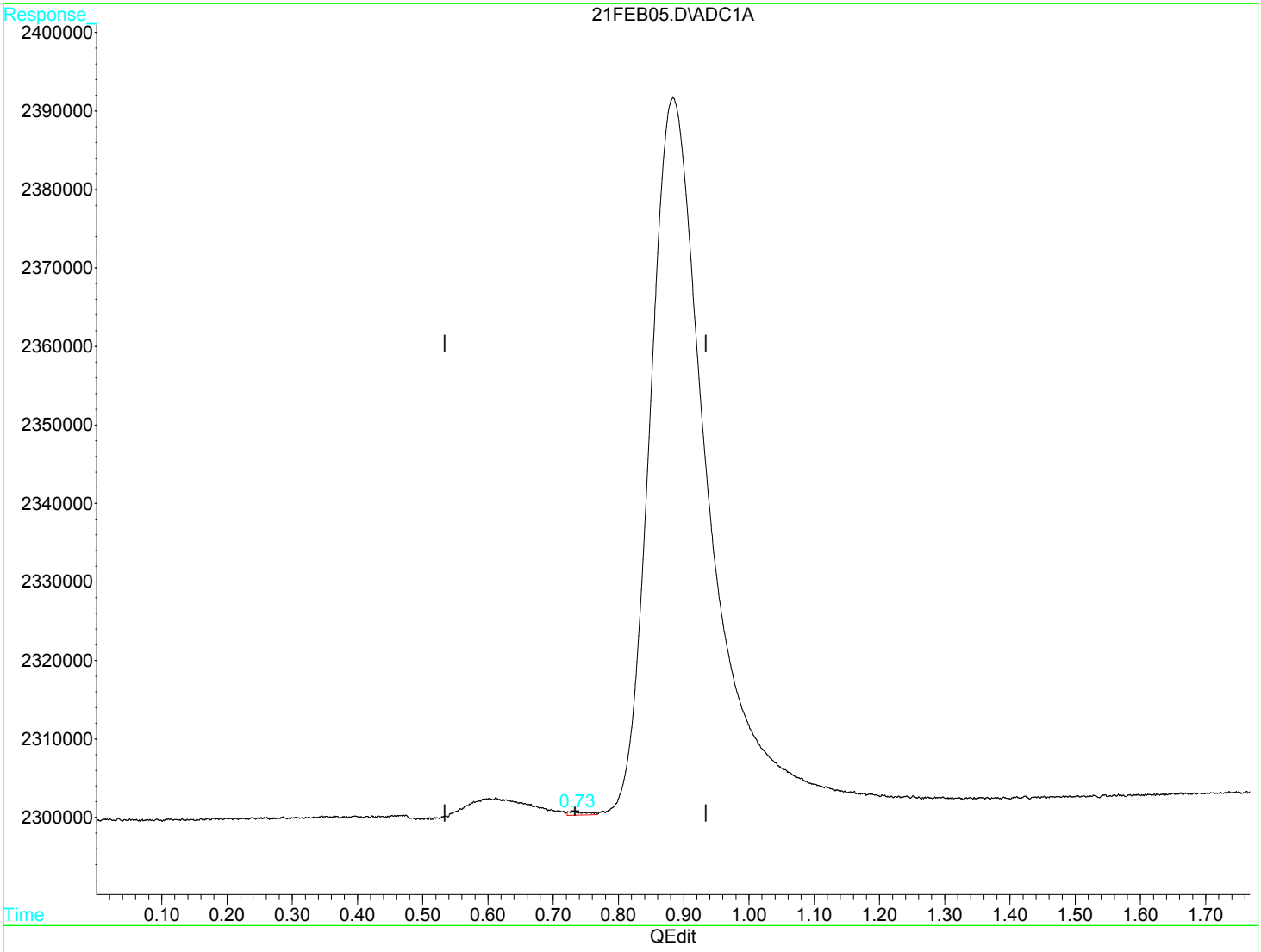
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB05.D Vial: 5
Acq On : 21 Feb 2017 9:24 am Operator: JH2
Sample : B[B1446-BS1 Inst : GC-V1
Misc : 1 BS RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:47 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.73min 0.015ug/L

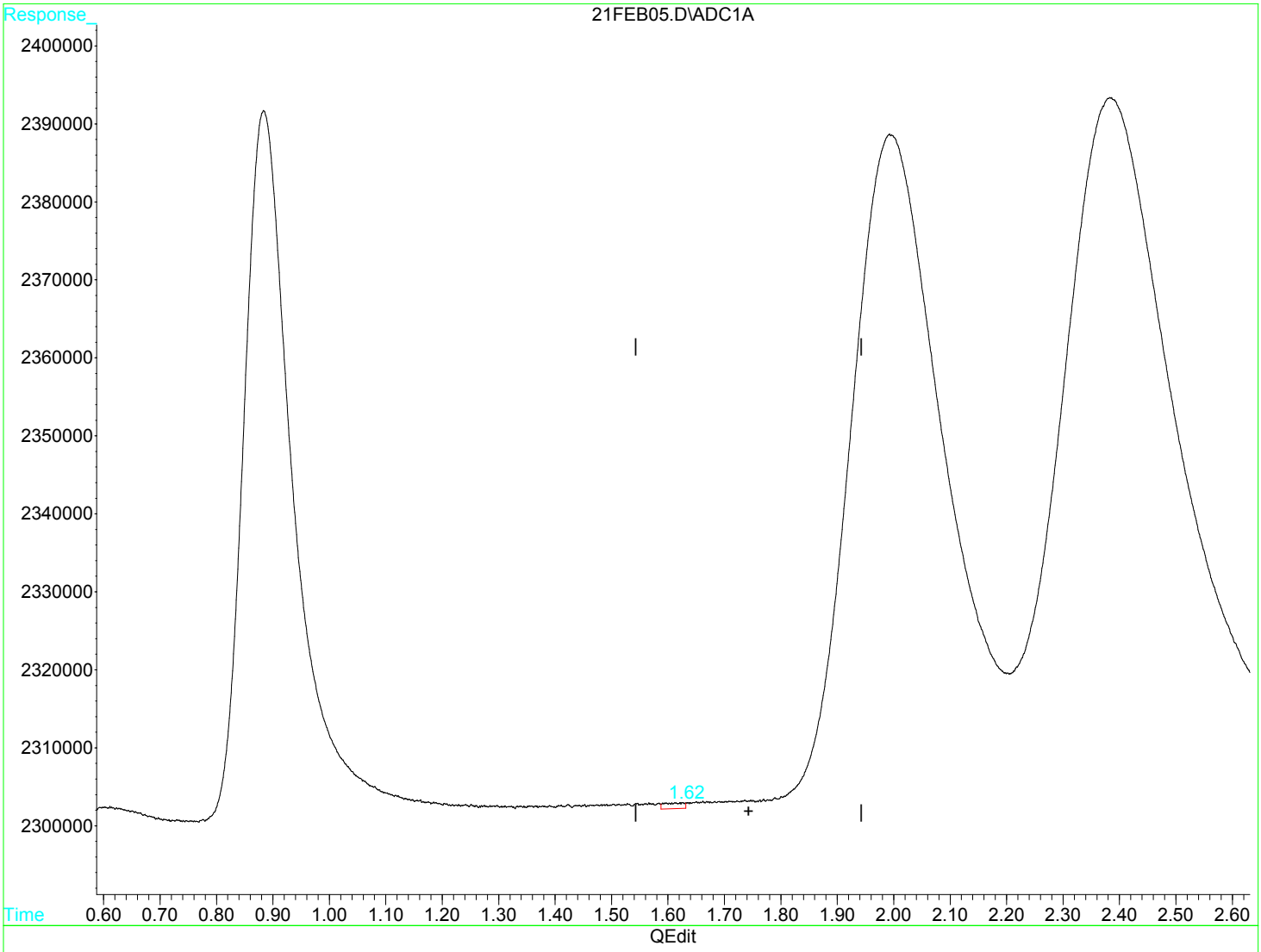
response 8994

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB05.D Vial: 5
Acq On : 21 Feb 2017 9:24 am Operator: JH2
Sample : B[B1446-BS1 Inst : GC-V1
Misc : 1 BS RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:47 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.60min 0.044ug/L

response 17753

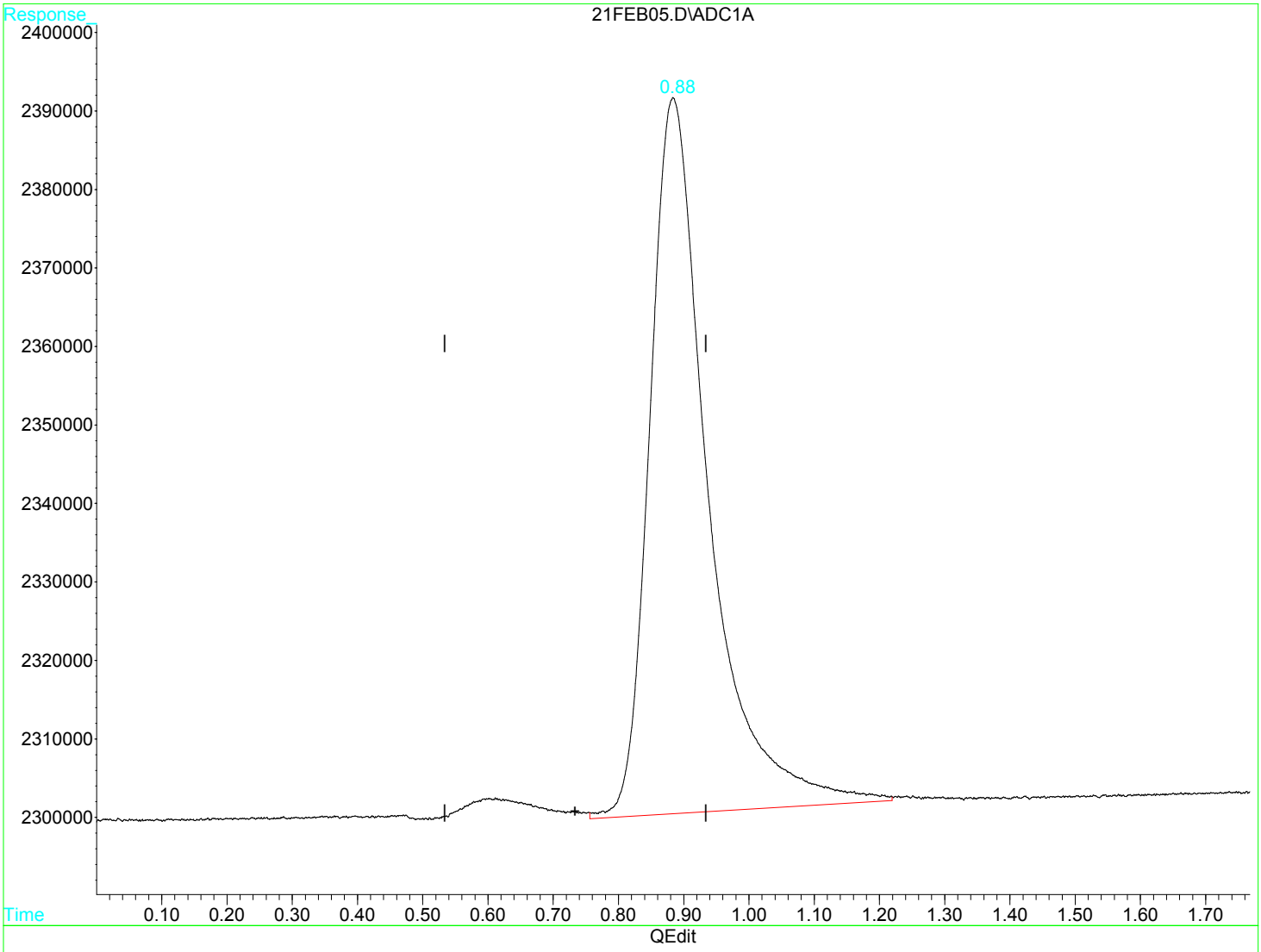
(+) = Expected Retention Time

21FEB05.D RSK175.M Tue Feb 21 12:47:34 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB05.D Vial: 5
Acq On : 21 Feb 2017 9:24 am Operator: JH2
Sample : B[B1446-BS1 Inst : GC-V1
Misc : 1 BS RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:47 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.88min 9.408ug/L m

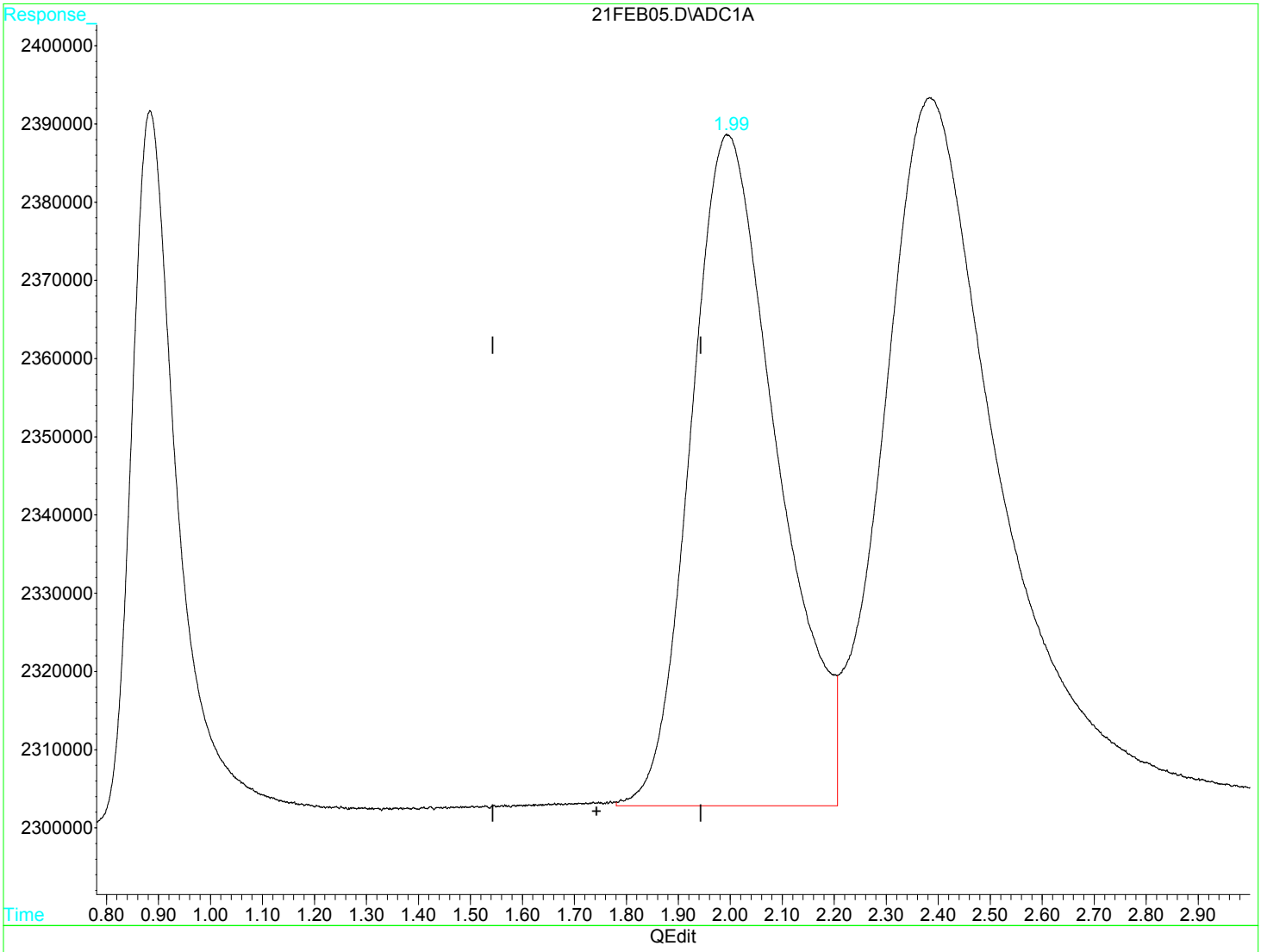
response 5694514

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB05.D Vial: 5
Acq On : 21 Feb 2017 9:24 am Operator: JH2
Sample : B[B1446-BS1 Inst : GC-V1
Misc : 1 BS RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:47 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.99min 24.631ug/L m

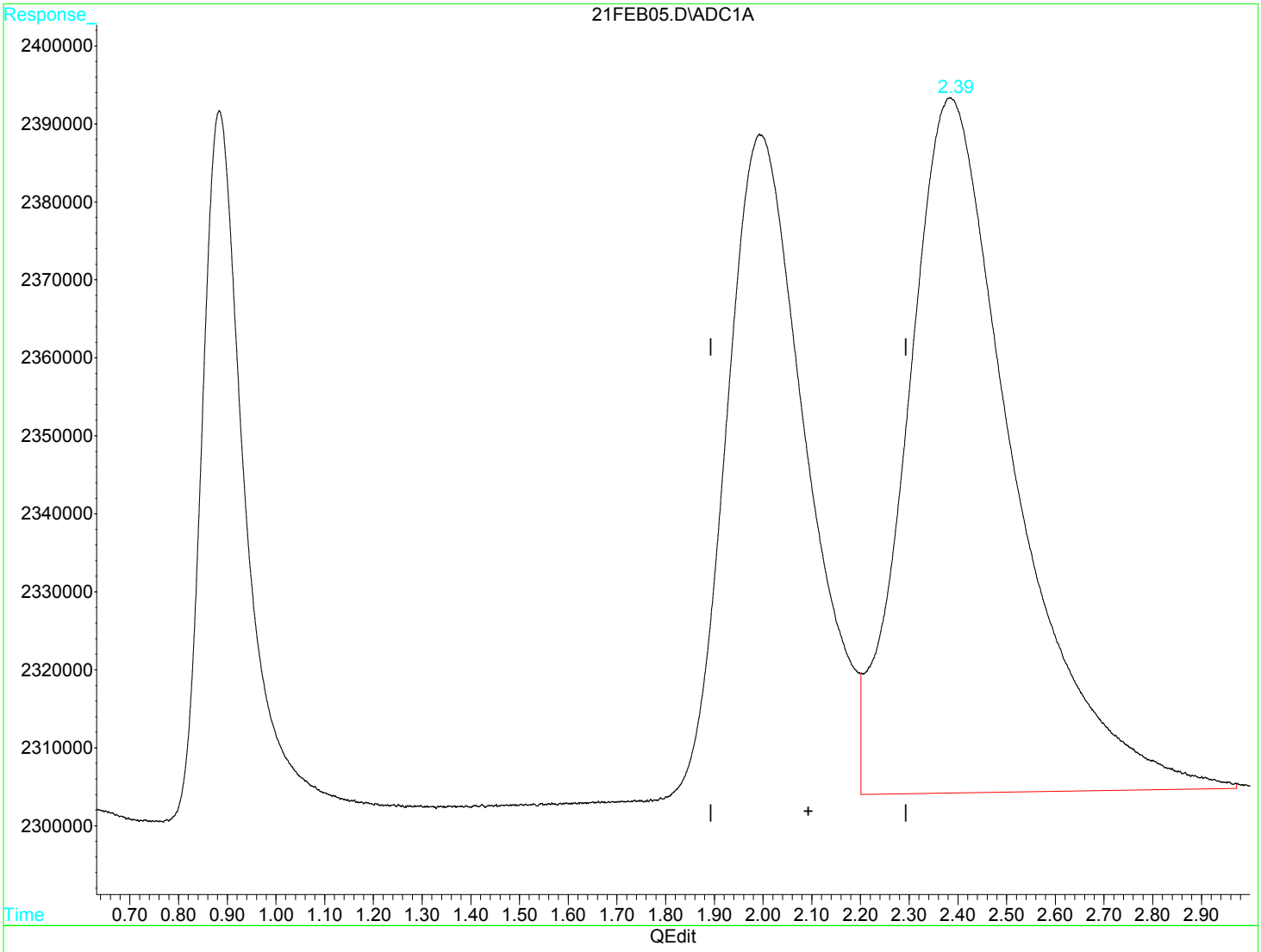
response 9913222

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB05.D Vial: 5
Acq On : 21 Feb 2017 9:24 am Operator: JH2
Sample : B[B1446-BS1 Inst : GC-V1
Misc : 1 BS RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:47 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.39min 23.488ug/L m

response 13644459

(+) = Expected Retention Time

21FEB05.D RSK175.M Tue Feb 21 12:47:59 2017 MSD1

**Raw Data - Lab Control Sample Duplicate**

Quantitation Report (QT Reviewed)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:49 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

| | Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|---|
| | Target Compounds | | | | | |
| 1) m | Methane | 0.90f | 5745752 | 9.4925 | ug/L | m |
| 2) m | Ethene | 2.02f | 10038509 | 24.9418 | ug/L | m |
| 3) m | Ethane | 2.42f | 13722739 | 23.6227 | ug/L | m |

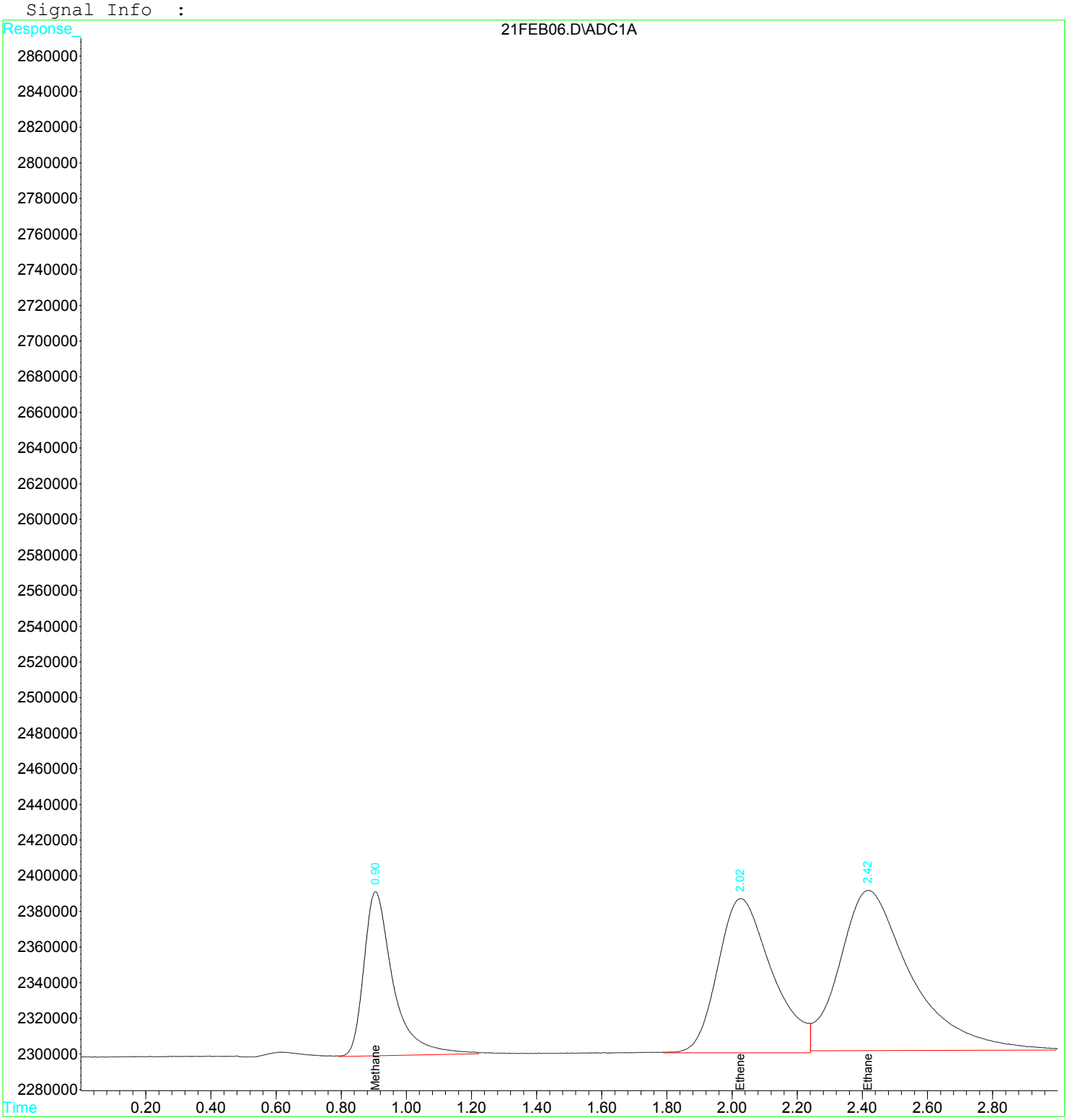
(f)=RT Delta > 1/2 Window (m)=manual int

Quantitation Report

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:49 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

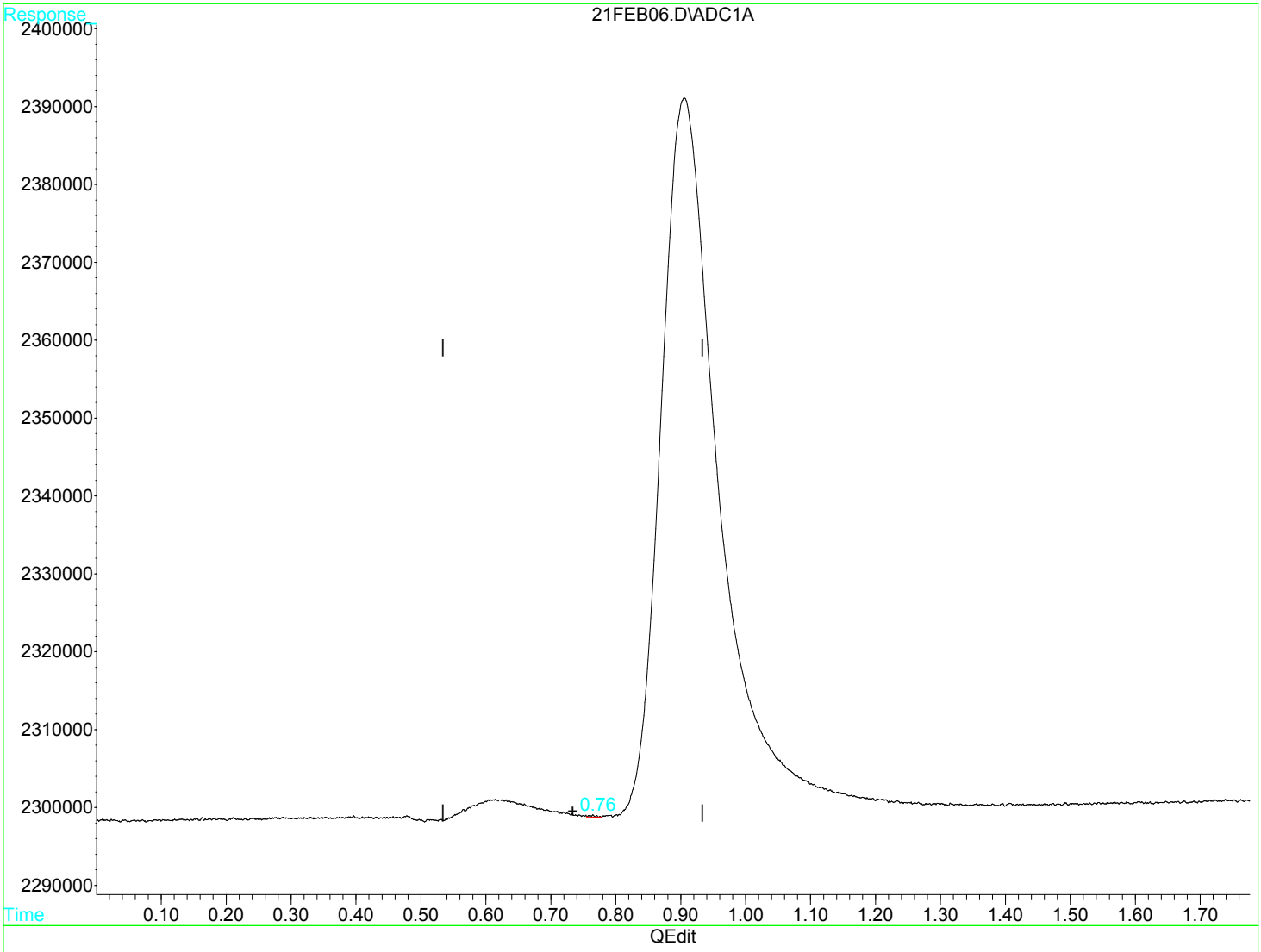
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:33 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.76min 0.003ug/L

response 1999

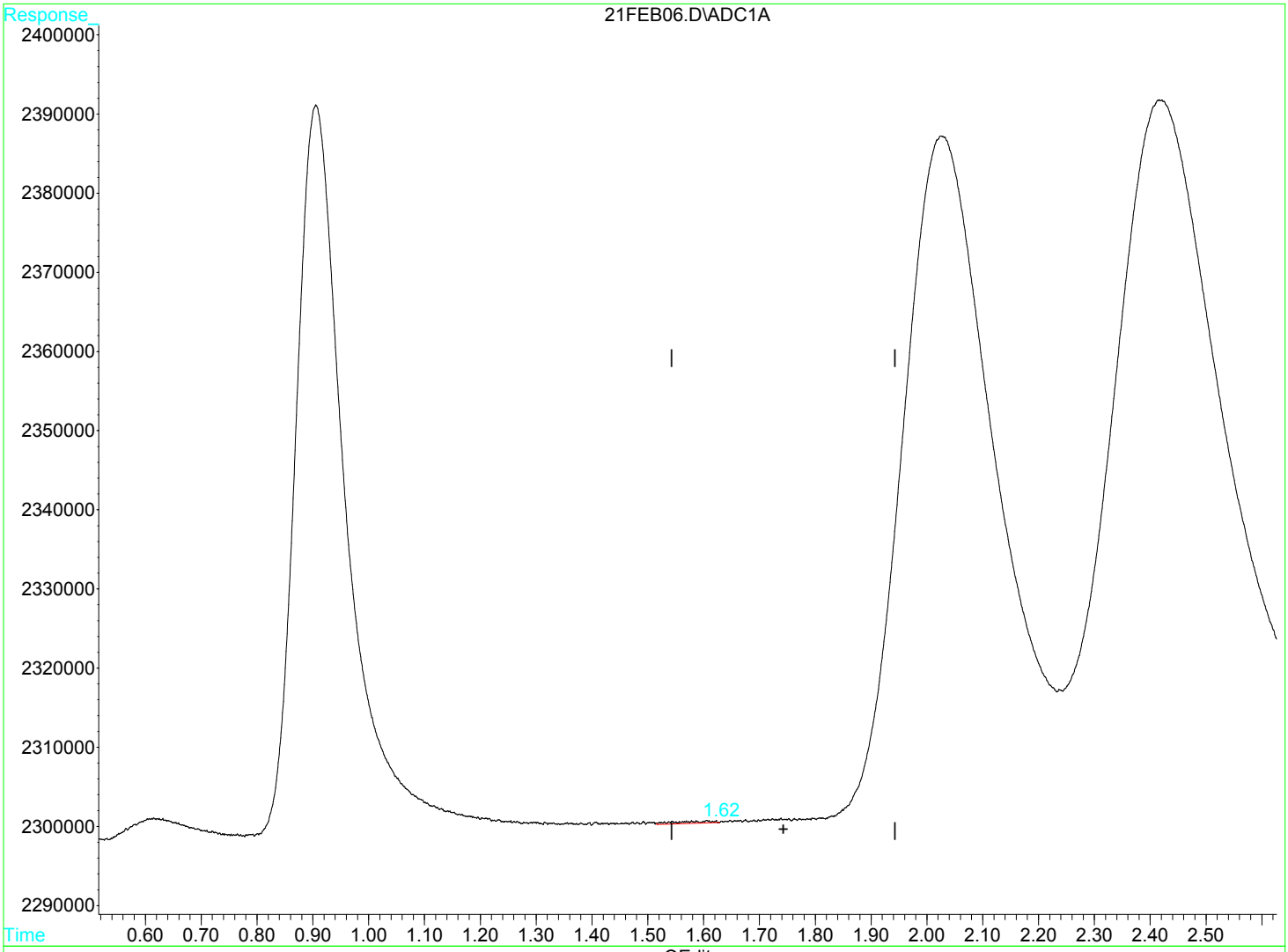
(+) = Expected Retention Time

21FEB06.D RSK175.M Tue Feb 21 12:48:20 2017 MSD1

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:33 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

1.61min 0.032ug/L

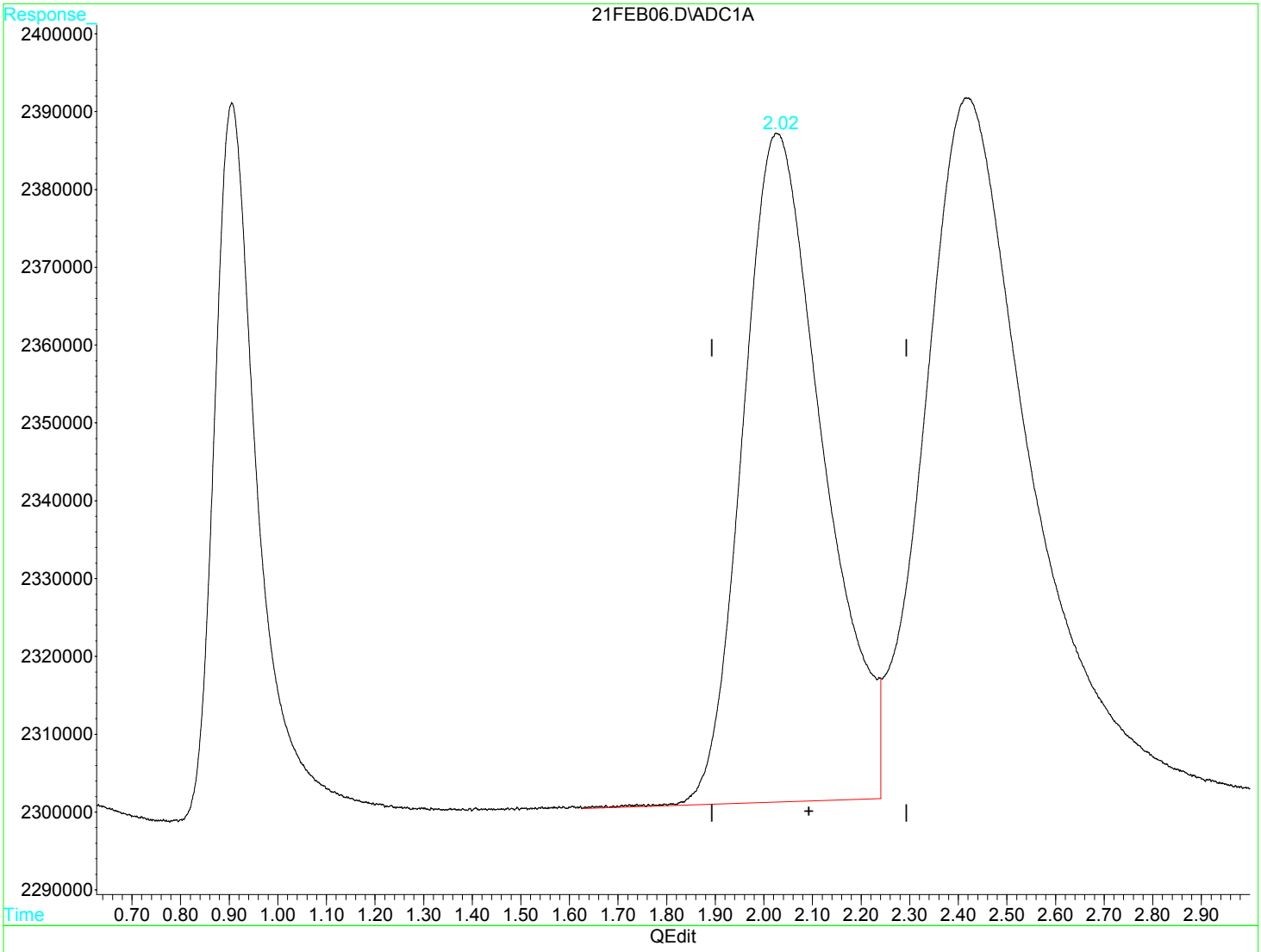
response 12718

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:33 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.03min 16.995ug/L

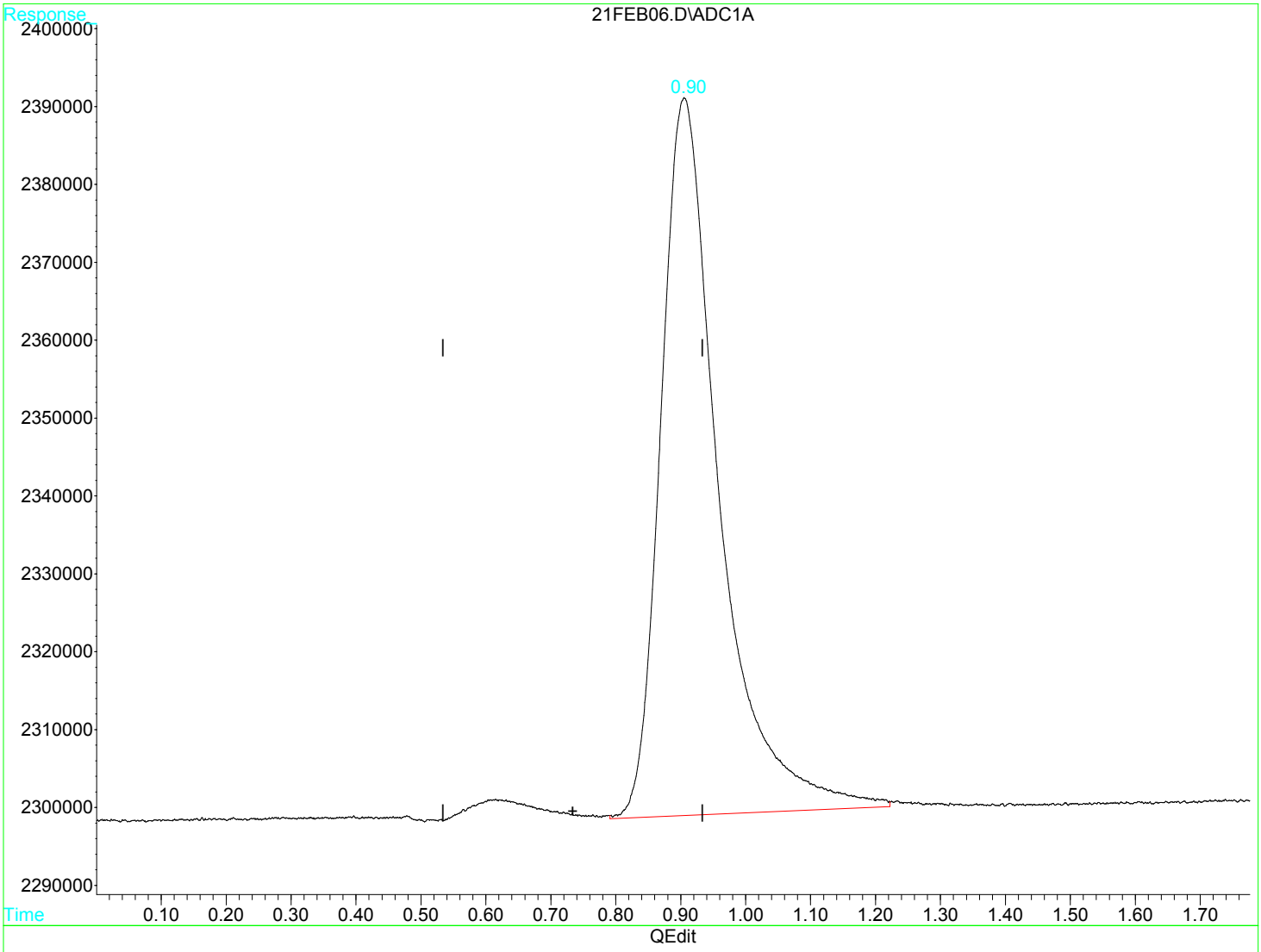
response 9872561

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:33 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(1) Methane (m)

0.90min 9.493ug/L m

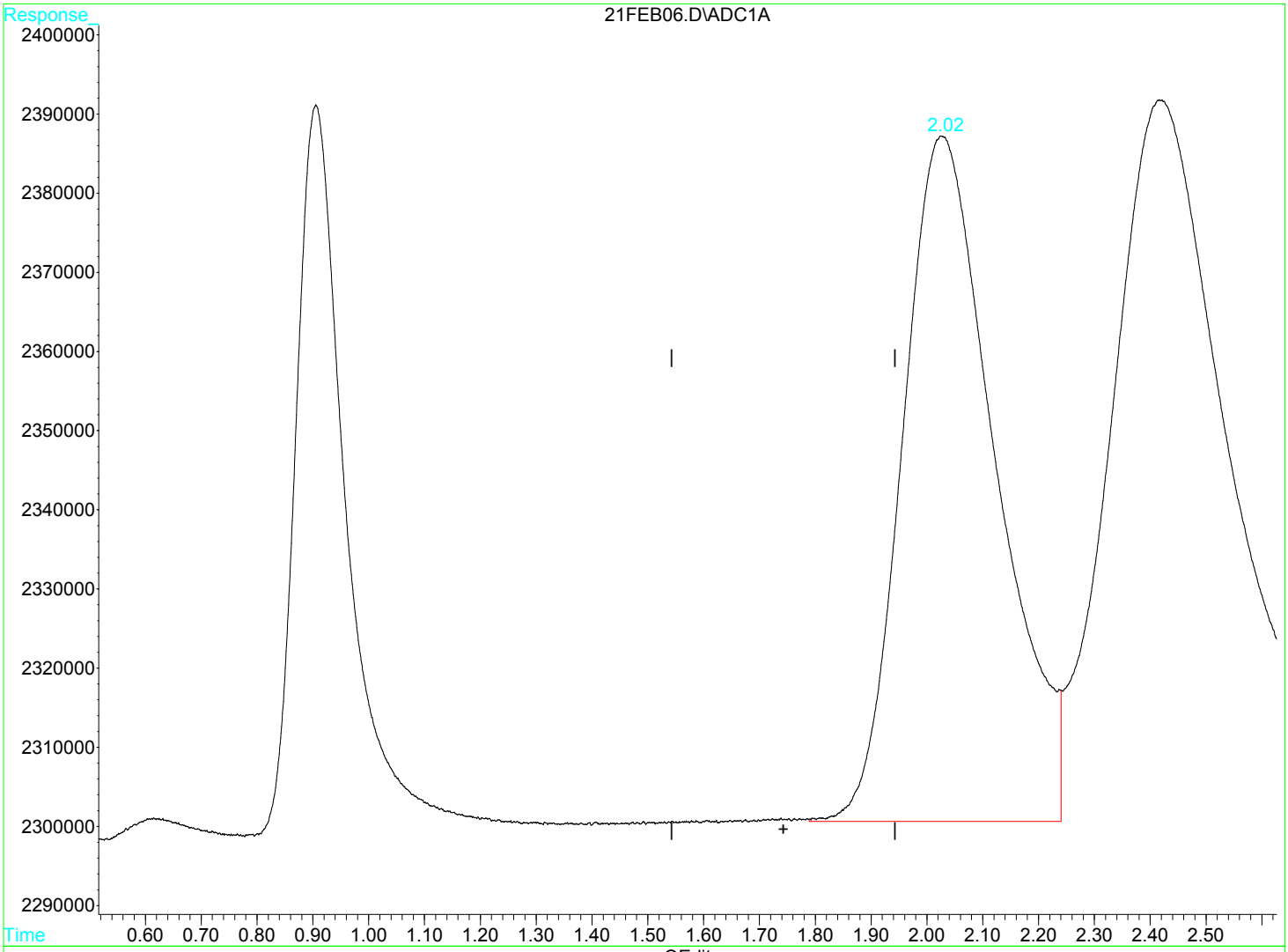
response 5745752

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 9:33 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(2) Ethene (m)

2.02min 24.942ug/L m

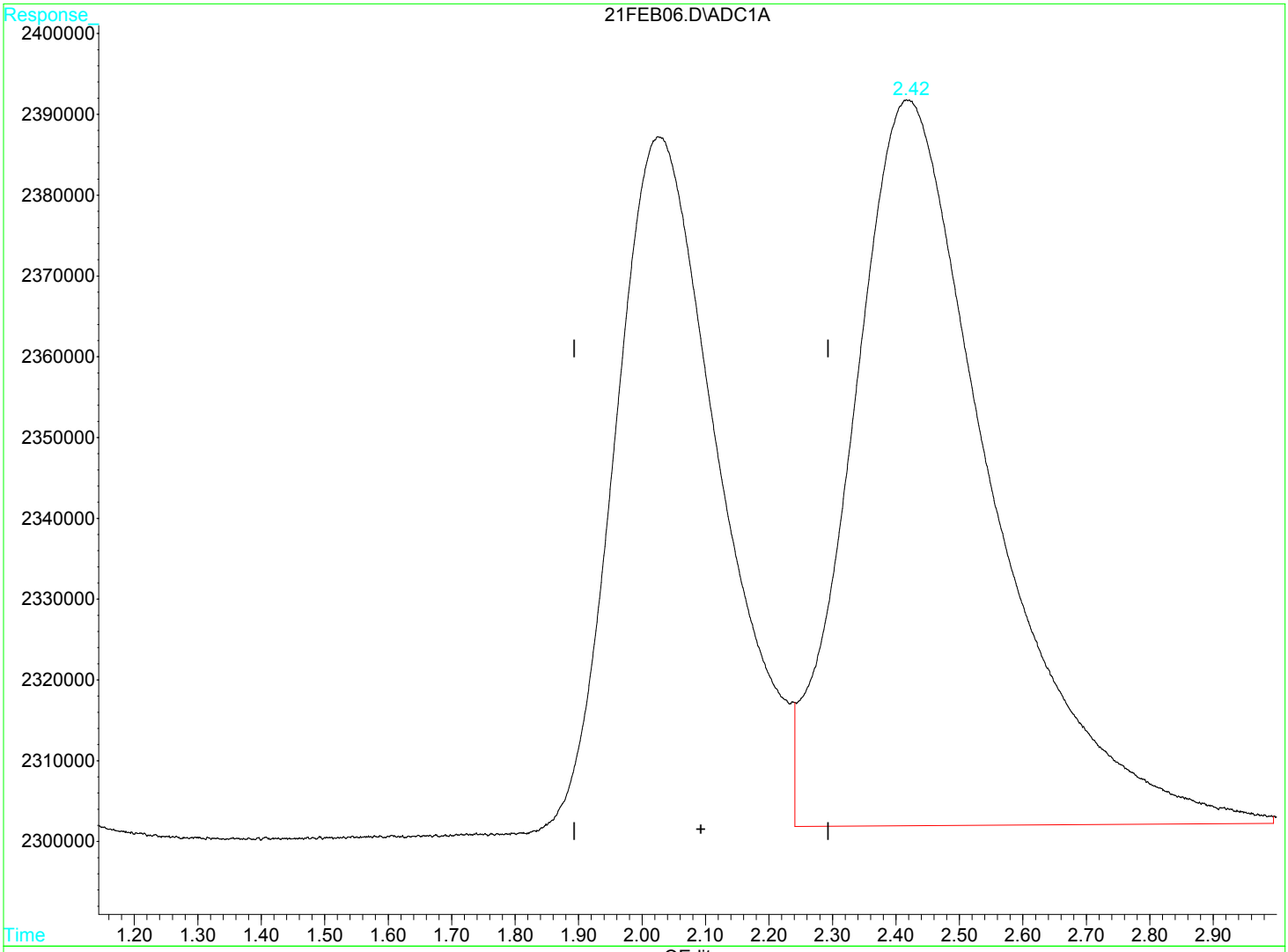
response 10038509

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\FEB2017\FEB21\21FEB06.D Vial: 6
Acq On : 21 Feb 2017 9:30 am Operator: JH2
Sample : B[B1446-BSD1 Inst : GC-V1
Misc : 1 BSD RSK-175 250UL VOC-16-0987 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 21 12:49 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration




(3) Ethane (m)

2.42min 23.623ug/L m

response 13722739

(+) = Expected Retention Time

**Raw Data - Batch Information**

**Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

## B[B1446

**BC Laboratories**

Printed: 3/13/2017 4:20:49PM

Matrix: Water

Prepared using: Volatiles - GC - RSK-175M

(No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703480-01 A | gmRSK175 Diss Methane, Etha | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703480-02 A | gmRSK175 Diss Methane, Etha | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703480-13 A | gmRSK175 Diss Methane, Etha | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703480-15 A | gmRSK175 Diss Methane, Etha | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703480-30 A | gmRSK175 Diss Methane, Etha | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703554-01 E | gRSK175 Diss Methane | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703555-01 E | gRSK175 Diss Methane | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703556-01 E | gRSK175 Diss Methane | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| 1703557-01 E | gRSK175 Diss Methane | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| B[B1446-BLK1 | QC | 2/16/2017 12:10PM | JH2 | 1 | 1 | | | | | |
| B[B1446-BS1 | QC | 2/16/2017 12:10PM | JH2 | 1 | 1 | 7B07033 | | 1000 | | |
| B[B1446-BSD1 | QC | 2/16/2017 12:10PM | JH2 | 1 | 1 | 7B07033 | | 1000 | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 7B07033 | RSK-175M Spike | Helium | 1/27/2017 by Jacob Hernandez | 1/27/2018 |

**Raw Data - Sequence Information**

# ANALYSIS SEQUENCE

**1701454**

Instrument: GC-V1
Calibration ID: 1702007
Sequence Date: 01/27/2017
Printed: 3/13/2017 4:20:49PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1701454-CAL1 | QC | | 1 | | 7B07021 | | |
| 1701454-CAL2 | QC | | 2 | | 7B07022 | | |
| 1701454-CAL3 | QC | | 3 | | 7B07023 | | |
| 1701454-CAL4 | QC | | 4 | | 7B07024 | | |
| 1701454-ICV1 | QC | | 5 | | 7B07025 | | |
| 1701454-ICB1 | QC | | 6 | | 7B07026 | | |

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

## ANALYSIS SEQUENCE

**1702815**

Instrument: GC-V1
Calibration ID: 1702007 Sequence Date: 02/17/2017 Printed: 3/13/2017 4:20:49PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702815-ICV1 | QC | | 1 | | 7B07022 | | |
| 1702815-ICB1 | QC | | 2 | | 7B07026 | | |
| 1702815-CCV1 | QC | | 3 | | 7B07027 | | |
| 1702815-CCB1 | QC | | 4 | | 6A07009 | | |
| B[B1446-BLK1 | QC | | 5 | | | | |
| B[B1446-BS1 | QC | | 6 | | | | |
| B[B1446-BSD1 | QC | | 7 | | | | |
| 1702815-CCV2 | QC | | 8 | | 7B07027 | | |
| 1702815-CCB2 | QC | | 9 | | 6A07009 | | |
| 1703480-01 | gmRSK175 Diss Methane, Ethan | A | 10 | | | | |
| 1703480-02 | gmRSK175 Diss Methane, Ethan | A | 11 | | | | |
| 1703480-13 | gmRSK175 Diss Methane, Ethan | A | 12 | | | | |
| 1703480-15 | gmRSK175 Diss Methane, Ethan | A | 13 | | | | |
| 1703480-30 | gmRSK175 Diss Methane, Ethan | A | 14 | | | | |
| 1703554-01 | gRSK175 Diss Methane | E | 15 | | | | |
| 1703555-01 | gRSK175 Diss Methane | E | 16 | | | | |
| 1703556-01 | gRSK175 Diss Methane | E | 17 | | | | |
| 1703557-01 | gRSK175 Diss Methane | E | 18 | | | | |
| 1702815-CCV3 | QC | | 19 | | 7B07027 | | |
| 1702815-CCB3 | QC | | 20 | | 6A07009 | | |
| B[B1618-BLK1 | QC | | 21 | | | | |
| B[B1618-BS1 | QC | | 22 | | | | |
| B[B1618-BSD1 | QC | | 23 | | | | |
| 1703569-02 | gRSK175 Diss Methan, Ethane, l | A | 24 | | | | |
| 1703569-03 | gRSK175 Diss Methan, Ethane, l | A | 25 | | | | |
| 1703569-04 | gRSK175 Diss Methan, Ethane, l | A | 26 | | | | |
| 1703603-03 | gmRSK175 Diss Methane, Ethan | A | 27 | | | | |
| 1703603-04 | gmRSK175 Diss Methane, Ethan | A | 28 | | | | |
| 1703603-05 | gmRSK175 Diss Methane, Ethan | A | 29 | | | | |
| 1702815-CCV4 | QC | | 30 | | 7B07027 | | |
| 1702815-CCB4 | QC | | 31 | | 6A07009 | | |
| 1703603-06 | gmRSK175 Diss Methane, Ethan | A | 32 | | | | |
| 1703603-07 | gmRSK175 Diss Methane, Ethan | A | 33 | | | | |
| 1704034-01 | gRSK175 Diss Methan, Ethane, l | A | 34 | | | | |
| 1704034-02 | gRSK175 Diss Methan, Ethane, l | A | 35 | | | | |
| 1704034-03 | gRSK175 Diss Methan, Ethane, l | A | 36 | | | | |
| 1702815-CCV5 | QC | | 37 | | 6F15038 | | |
| 1702815-CCB5 | QC | | 38 | | 6A07009 | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:20:49PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

## Notes and Definitions

| | |
|---|---|
| B | Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank. |
| D | The reported value is from a dilution. |
| E | The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration. |
| J | The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL. |
| U | The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client. |

BC LABORATORIES, INC.

**Work Order Number: 1703480**

# Laboratory Documentation Requirements
# For Data Validation of
# Volatiles Analysis

**Prepared By**

**BC Laboratories**

**For AMEC Environmental & Infrastructure**

**5023146096**

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Certifications: CA ELAP #1186; NV #CA00014; AK UST101; OR ELAP #4032; DoD ELAP #66175

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1702423-CCB3 (12FEB66.D)..... 840
1702431-CCB1 (13FEB04.D)..... 844
1702431-CCB2 (13FEB35.D)..... 848
1702431-CCB3 (14FEB04.D)..... 852
1702527-CCB2 (14FEB31.D)..... 856
1702527-CCB3 (14FEB61.D)..... 860

**Raw Data - Tune**

1702048-TUN1 (26JAN03.D)..... 865
1702048-TUN2 (07FEB05.D)..... 867
1702048-TUN3 (13DEC05.D)..... 869
1702423-TUN1 (12FEB01.D)..... 871
1702423-TUN2 (12FEB32.D)..... 873
1702423-TUN3 (12FEB63.D)..... 875
1702431-TUN1 (13FEB01.D)..... 877
1702431-TUN2 (13FEB32.D)..... 879
1702431-TUN3 (14FEB01.D)..... 881
1702527-TUN2 (14FEB28.D)..... 883
1702527-TUN3 (14FEB58.D)..... 885

**Raw Data - Method Blank**

B[B1006-BLK1 (12FEB22.D)..... 888
B[B1007-BLK1 (13FEB05.D)..... 892

**Raw Data - Matrix Spike**

B[B1006-MS1 (12FEB25.D)..... 897
B[B1007-MS1 (13FEB08.D)..... 902

**Raw Data - Matrix Spike Duplicate**

B[B1006-MSD1 (12FEB26.D)..... 908
B[B1007-MSD1 (13FEB09.D)..... 913

**Raw Data - Lab Control Sample**

B[B1006-BS1 (12FEB24.D)..... 919
B[B1007-BS1 (13FEB07.D)..... 924

**Raw Data - Batch Information**

B[B1006 - Batch..... 930
B[B1007 - Batch..... 932

**Raw Data - Sequence Information**

1702048 - Sequence..... 935
1702423 - Sequence..... 936
1702431 - Sequence..... 938

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1702527 - Sequence..... 940
1702527 - Sequence Raw Data..... 942
**Notes and Definitions**..... 945

## Case Narrative

**Analyses Requested: 8260**

**Submission Number: 17-03480**

Instrument ID: MS-V5
Model: HP5973/GC6890

Column Type: Rxi R-624 Sil MS 30m x 0.25mm ID, 1.4µm film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

**Holding Time:** All analyses and extractions took place within holding times.

**Calibration:** Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) were met. Frequency and accuracy criteria for continuing calibration verification (CCV) were met except the recoveries for Bromomethane in 1702423-CCV1, 1702423-CCV4, 1702431-CCV1, 1702431-CCV3, and 1702527-CCV3, the recovery for t-Butyl alcohol in 1702423-CCV5, and the recovery for Acetone in 1702527-CCV4 were outside QC limits.
Ending CCV criteria of fifty percent were met except the recovery for Bromomethane in 1702431-CCV5 was outside QC limits. Any compounds that were flagged, but not required, were not noted here.

**Blanks:** Method blanks were prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

**Laboratory Control Sample:** Laboratory control sample analyses were performed at the required frequency. All parameters for the required compounds were within QC limits.

**Matrix Spikes and Duplicates:** Matrix spike analyses were performed at the required frequencies. All accuracy requirements were met except the matrix spike and matrix spike duplicate recoveries for Methyl ethyl ketone in batch B[B1007 were outside QC limits. All precision requirements were met.

**Notes:** For samples 17-03480-04, 17-03480-10, 17-03480-11, 17-03480-12, 17-03480-18, 17-03480-20, 17-03480-22, 17-03480-29, 17-03480-32, 17-03480-34, 17-03480-36, the surrogate recoveries for 1,2-Dichloroethane-d4 were outside QC limits.

# CHAIN OF CUSTODY

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

DATE: 2/7/2017
COC #: COC170207
PAGE: 1 OF 3

17-03480

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023146096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Oness | Project Phase: | .03 **** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases- (RSK175) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27EW-17_170207 | 02/07/17 08:50 -1 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 2 | 27EW-18_170207 | 02/07/17 09:55 -2 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 3 | 39B-MW1_170207 | 02/07/17 08:42 -3 | WG | N | N | X | | | | | | | | | | | | |
| 4 | IR11-OU2B-MW02_170207 | 02/07/17 10:05 -4 | WG | N | N | X | | | | | | | | | | | | |
| 5 | IR11-OU2B-MW03_170207 | 02/07/17 09:00 -5 | WG | N | N | X | | | | | | | | | | | | |
| 6 | M11-02_170207 | 02/07/17 08:20 -6 | WG | N | N | X | | | | | | | | | | | | |
| 7 | OU2B-MW02_170207 | 02/07/17 10:12 -7 | WG | N | N | X | | | | | | | | | | | | |
| 8 | OU2B-MW04_170207 | 02/07/17 09:32 -8 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW05A_170207 | 02/07/17 08:37 -9 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW05C_170207 | 02/07/17 10:22 -10 | WG | N | N | X | | | | | | | | | | | | |
| 11 | S21-TT-MW05D_170207 | 02/07/17 09:44 -11 | WG | N | N | X | | | | | | | | | | | | |
| 12 | S21-TT-MW05E_170207 | 02/07/17 09:12 -12 | WG | N | N | X | | | | | | | | | | | | |

CHK BY: KJ
DISTRIBUTION: SUB-OUT
SHORT HOLDING TIME: Cr+6 NO NO OP SS

| | | |
|---|---|---|
| Sampler's Signature: | Date: 2/7/17 | Time: 14:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 14:45 |
| Received By: | Date: 2/7/17 | Time: 14:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 1830 |
| Received By: | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | Date: 2/7 | Time: 2200 |

For Lab Use: DO Cl2 BOD MBAS COT

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____
Cooler Temperature at receipt: ____ °C

Comments:
X=Analyze H=Hold Analysis Request
Report DL/LOD/LOQ with Navy NIRIS valid values
VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg
NUMBER OF COOLERS SENT:

**Chain of Custody and Cooler Receipt Form for 1703480 Page 2 of 9**

# CHAIN OF CUSTODY

DATE: 2/7/2017
COC #: COC170207
PAGE: 2 OF 3

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

17-03480

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023140096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Olness | Project Phase: | 03.**** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases- (RSK175) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27EW-13_170207 | 02/07/17 11:05 -13 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 2 | 27MW01_170207 | 02/07/17 11:55 -14 | WG | N | Y | X | | | | | | | | | | | | |
| 3 | IR11-OU2B-MW01_170207 | 02/07/17 11:25 -15 | WG | N | N | X | X | X | X | X | X | | | | | | | |
| 4 | M07B-01_170207 | 02/07/17 11:25 -16 | WG | N | N | X | | | | | | | | | | | | |
| 5 | OU2B-MW01_170207 | 02/07/17 10:44 -17 | WG | N | Y | X | | | | | | | | | | | | |
| 6 | S11-TT-MW01C_170207 | 02/07/17 13:09 -18 | WG | N | N | X | | | | | | | | | | | | |
| 7 | S11-TT-MW01D_170207 | 02/07/17 12:34 -19 | WG | N | N | X | | | | | | | | | | | | |
| 8 | S11-TT-MW01E_170207 | 02/07/17 11:59 -20 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW01E_170207 | 02/07/17 12:50 -21 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW05B_170207 | 02/07/17 10:52 -22 | WG | N | N | X | | | | | | | | | | | | |
| 11 | TB14_170207 | 02/07/17 12:00 -23 | WQ | TB | N | X | | | | | | | | | | | | |
| 12 | TB15_170207 | 02/07/17 12:15 -24 | WQ | TB | N | X | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Sampler's Signature: | | Date: 2/7/17 | Time: 16:65 |
| Relinquished By/Affiliation: | | Date: 2/7/17 | Time: 16:65 |
| Received By: | | Date: 2/7/17 | Time: 16:65 |
| Relinquished By/Affiliation: | | Date: 2-7-17 | Time: 1830 |
| Received By: | | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | | Date: 2/7 | Time: 2200 |

**For Lab Use**

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| WSDOT contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | °C |

Comments:
X=Analyze H=Hold Analysis Request

Report DL/LOD/LOQ with Navy NIRIS valid values

VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg

NUMBER OF COOLERS SENT:

# CHAIN OF CUSTODY

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

17-03480

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

DATE: 2/7/2017
COC #: COC170207
PAGE: 3 OF 3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023146096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Otness | Project Phase: | .03.**** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases - (RSKI75) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EB26_170207 | 02/07/17 14:00 | 25 | WQ | EB | N | X | | | | | | | | | | | | |
| 2 | EB27_170207 | 02/07/17 14:10 | 26 | WQ | EB | N | X | | | | | | | | | | | | |
| 3 | EB28_170207 | 02/07/17 14:20 | 27 | WQ | EB | N | X | | | | | | | | | | | | |
| 4 | EB29_170207 | 02/07/17 14:30 | 28 | WQ | EB | N | X | | | | | | | | | | | | |
| 5 | IR11-OU2B-MW04_170207 | 02/07/17 13:30 | 29 | WG | N | N | X | | | | | | | | | | | | |
| 6 | M11-01_170207 | 02/07/17 14:00 | 30 | WG | N | N | X | X | X | X | X | X | | | | | | | |
| 7 | S11-TT-MW01A_170207 | 02/07/17 14:11 | 31 | WG | N | N | X | | | | | | | | | | | | |
| 8 | S11-TT-MW01B_170207 | 02/07/17 13:48 | 32 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW01A_170207 | 02/07/17 13:51 | 33 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW01B_170207 | 02/07/17 13:55 | 34 | WG | N | N | X | | | | | | | | | | | | |
| 11 | S21-TT-MW01C_170207 | 02/07/17 13:23 | 35 | WG | N | N | X | | | | | | | | | | | | |
| 12 | S21-TT-MW01D_170207 | 02/07/17 13:25 | 36 | WG | N | N | X | | | | | | | | | | | | |

| | | |
|---|---|---|
| Sampler's Signature: | Date: 2/7/17 | Time: 16:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 16:45 |
| Received By: | Date: 2/7/17 | Time: 16:45 |
| Relinquished By/Affiliation: | Date: 2-7-17 | Time: 1830 |
| Received By: | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | Date: 2/7 | Time: 2200 |

For Lab Use

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| WSDOT contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | °C |

Comments:
X=Analyze H=Hold Analysis Request

Report DL/LOD/LOQ with Navy NIRIS valid values

VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg

NUMBER OF COOLERS SENT:

**Chain of Custody and Cooler Receipt Form for 1703480 Page 4 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 86

Submission #: 17-03480

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☐ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2200

Temperature: ( A ) 0.8 °C / ( C ) 1.1 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 15 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | G | G | G | | | | | | | |
| ~~8oz Cr+6~~ 8oz. unpres | | | | G→+ | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | H | H | H | J | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | I | I | I | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL | | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDL Date/Time: 2-8-17 Rev 21 05/23/2016
A = Actual / C = Corrected
[S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC.rev 20]

BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 Of 6

Submission #: 17-03480

| SHIPPING INFORMATION | SHIPPING CONTAINER | FREE LIQUID |
|---|---|---|
| Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐<br>BC Lab Field Service ☒ Other ☐ (Specify)_____ | Ice Chest ☒ None ☐ Box ☐<br>Other ☐ (Specify)_____ | YES ☐ NO ☐<br>W / S |

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

| COC Received | | |
|---|---|---|
| ☒ YES ☐ NO | Emissivity: 0.97 Container: VOA Thermometer ID: 207<br>Temperature: ( A ) 1.7 °C / ( C ) 1.9 °C | Date/Time 2/7 2209<br>Analyst Init GSP |

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 30 / | 31 / | 32 / | 34 / | 36 5 / | 6 | 7 | 8 | 9 | 10 |
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | G=I | | | | | | | | | |
| 2oz Cr+6 | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | J | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | K | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PIA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL ~~TRAVEL BLANK~~ 096 | ABC | ABC | ABC | ABC | ABC | | | | | |
| 40ml VOA VIAL 098 | DEF | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:

Sample Numbering Completed By: JM Date/Time: 2-8-17 Rev 21 05/23/2016

A = Actual / C = Corrected (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

BC LABORATORIES INC. COOLER RECEIPT FORM Page 38 Of 55

Submission #: 17-0348 R

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VBA Thermometer ID: 207 Date/Time 2/7 2209
Temperature: (A) 1.7 °C / (C) 1.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 4 | 5 | 24 | 26 | 27 | 28 | 29 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL ~~TRAVEL BLANK~~ 096 | ABC | ABC | ABC | A-21 | ABC | 10% 2814 | ABC | ABC | ABC | ABC |
| 40ml VOA VIAL 098 | DEF | DEF | DEF | | DEF | ~~AB~~ | | | | |
| QT EPA 1664 4/2ml vial 094 | | | | | | AB | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDL Date/Time: 2-8-17 Rev 21 05/23/2016
A = Actual / C = Corrected (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

**Chain of Custody and Cooler Receipt Form for 1703480 Page 7 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 4 Of 6

Submission #: 17-03480

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

**COC Received**
☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209
Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL 036 | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDC Date/Time: 2-8-17
A = Actual / C = Corrected

Rev 21 05/23/2016
(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

**Chain of Custody and Cooler Receipt Form for 1703480 Page 8 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 54 Of 56

Submission #: 17-03480 KG 3/17

| SHIPPING INFORMATION | SHIPPING CONTAINER | FREE LIQUID |
|---|---|---|
| Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐<br>BC Lab Field Service ☒ Other ☐ (Specify)_____ | Ice Chest ☒ None ☐ Box ☐<br>Other ☐ (Specify)_____ | YES ☐ NO ☐<br>W / S |

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209

Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 16 | 17 7 | 18 8 | 19 9 | 20 9 | 21 9 | 22 1 | 23 8 | 25 9 | 26 3 |
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | // | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL 0916 | ABC | A→I | ABC | ABC | ABC | ABC | ABC | A 2817 AB | ABC | ABC |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:

Sample Numbering Completed By: JDL Date/Time: 2-8-17

A = Actual / C = Corrected

Rev 21 05/23/2016

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**Chain of Custody and Cooler Receipt Form for 1703480 Page 9 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 65 Of 66

Submission #: 17-03480

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

**COC Received**
☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207
Temperature: (A) 2.7 °C / (C) 2.9 °C

Date/Time 2/7 2209
Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PIA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL | ABC | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDL Date/Time: 2 8 17
A = Actual / C = Corrected

Rev 21 05/23/2016
(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

**SDG:** **17-03480**
**Class:** **VOA**
**Method:** **EPA-8260B**

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| 27EW-17_170207 | 1703480-01 |
| 27EW-17_170207 | 1703480-01RE1 |
| 27EW-18_170207 | 1703480-02 |
| 398-MW1_170207 | 1703480-03 |
| IR11-OU2B-MW02_170207 | 1703480-04 |
| IR11-OU2B-MW02_170207 | 1703480-04RE1 |
| IR11-OU2B-MW03_170207 | 1703480-05 |
| IR11-OU2B-MW03_170207 | 1703480-05RE1 |
| M11-02_170207 | 1703480-06 |
| OU2B-MW02_170207 | 1703480-07 |
| OU2B-MW04_170207 | 1703480-08 |
| S21-TT-MW05A_170207 | 1703480-09 |
| S21-TT-MW05C_170207 | 1703480-10 |
| S21-TT-MW05C_170207 | 1703480-10RE1 |
| S21-TT-MW05D_170207 | 1703480-11 |
| S21-TT-MW05E_170207 | 1703480-12 |
| 27EW-13_170207 | 1703480-13 |
| 27MW01_170207 | 1703480-14 |
| IR11-OU2B-MW01_170207 | 1703480-15 |
| IR11-OU2B-MW01_170207 | 1703480-15RE1 |
| M07B-01_170207 | 1703480-16 |
| OU2B-MW01_170207 | 1703480-17 |
| S11-TT-MW01C_170207 | 1703480-18 |
| S11-TT-MW01D_170207 | 1703480-19 |
| S11-TT-MW01E_170207 | 1703480-20 |
| S21-TT-MW01E_170207 | 1703480-21 |
| S21-TT-MW05B_170207 | 1703480-22 |
| S21-TT-MW05B_170207 | 1703480-22RE1 |
| TB14_170207 | 1703480-23 |
| TB15_170207 | 1703480-24 |
| EB26_170207 | 1703480-25 |
| EB27_170207 | 1703480-26 |
| EB28_170207 | 1703480-27 |
| EB29_170207 | 1703480-28 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

| | |
|---|---|
| IR11-OU2B-MW04_170207 | 1703480-29 |
| IR11-OU2B-MW04_170207 | 1703480-29RE1 |
| M11-01_170207 | 1703480-30 |
| S11-TT-MW01A_170207 | 1703480-31 |
| S11-TT-MW01B_170207 | 1703480-32 |
| S21-TT-MW01A_170207 | 1703480-33 |
| S21-TT-MW01A_170207 | 1703480-33RE1 |
| S21-TT-MW01B_170207 | 1703480-34 |
| S21-TT-MW01B_170207 | 1703480-34RE1 |
| S21-TT-MW01C_170207 | 1703480-35 |
| S21-TT-MW01D_170207 | 1703480-36 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron

Name: Sara Guron

Date: 03-13-2017

Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-8260B

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** MS-V5

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Benzene | 0.083 | 0.16 | 0.50 | ug/L |
| Bromobenzene | 0.13 | 0.16 | 0.50 | ug/L |
| Bromochloromethane | 0.24 | 0.30 | 1.0 | ug/L |
| Bromodichloromethane | 0.14 | 0.30 | 0.50 | ug/L |
| Bromoform | 0.27 | 0.30 | 0.60 | ug/L |
| Bromomethane | 0.25 | 0.25 | 0.60 | ug/L |
| n-Butylbenzene | 0.11 | 0.16 | 0.50 | ug/L |
| sec-Butylbenzene | 0.15 | 0.16 | 0.50 | ug/L |
| tert-Butylbenzene | 0.13 | 0.16 | 0.50 | ug/L |
| Carbon tetrachloride | 0.18 | 0.20 | 0.50 | ug/L |
| Chlorobenzene | 0.093 | 0.16 | 0.50 | ug/L |
| Chloroethane | 0.14 | 0.16 | 0.50 | ug/L |
| Chloroform | 0.12 | 0.16 | 0.50 | ug/L |
| Chloromethane | 0.14 | 0.16 | 0.50 | ug/L |
| 2-Chlorotoluene | 0.20 | 0.20 | 0.50 | ug/L |
| 4-Chlorotoluene | 0.15 | 0.16 | 0.50 | ug/L |
| Dibromochloromethane | 0.13 | 0.16 | 0.50 | ug/L |
| 1,2-Dibromo-3-chloropropane | 0.44 | 0.50 | 1.0 | ug/L |
| 1,2-Dibromoethane | 0.16 | 0.16 | 0.50 | ug/L |
| Dibromomethane | 0.24 | 0.30 | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 0.072 | 0.16 | 0.50 | ug/L |
| 1,3-Dichlorobenzene | 0.15 | 0.16 | 0.50 | ug/L |
| 1,4-Dichlorobenzene | 0.062 | 0.16 | 0.50 | ug/L |
| Dichlorodifluoromethane | 0.099 | 0.16 | 0.50 | ug/L |
| 1,1-Dichloroethane | 0.11 | 0.16 | 0.50 | ug/L |
| 1,2-Dichloroethane | 0.17 | 0.20 | 0.50 | ug/L |
| 1,1-Dichloroethene | 0.18 | 0.20 | 0.50 | ug/L |
| cis-1,2-Dichloroethene | 0.085 | 0.16 | 0.50 | ug/L |
| trans-1,2-Dichloroethene | 0.15 | 0.16 | 0.50 | ug/L |
| 1,2-Dichloropropane | 0.13 | 0.16 | 0.50 | ug/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-8260B

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** MS-V5

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| 1,3-Dichloropropane | 0.086 | 0.16 | 0.50 | ug/L |
| 2,2-Dichloropropane | 0.13 | 0.16 | 0.50 | ug/L |
| 1,1-Dichloropropene | 0.085 | 0.16 | 0.50 | ug/L |
| cis-1,3-Dichloropropene | 0.14 | 0.16 | 0.50 | ug/L |
| trans-1,3-Dichloropropene | 0.079 | 0.16 | 0.50 | ug/L |
| Ethylbenzene | 0.098 | 0.16 | 0.50 | ug/L |
| Hexachlorobutadiene | 0.17 | 0.20 | 0.50 | ug/L |
| Isopropylbenzene | 0.14 | 0.16 | 0.50 | ug/L |
| p-Isopropyltoluene | 0.12 | 0.16 | 0.50 | ug/L |
| Methylene chloride | 0.48 | 0.50 | 1.0 | ug/L |
| Methyl t-butyl ether | 0.11 | 0.16 | 0.50 | ug/L |
| Naphthalene | 0.36 | 0.40 | 0.50 | ug/L |
| n-Propylbenzene | 0.11 | 0.16 | 0.50 | ug/L |
| Styrene | 0.068 | 0.16 | 0.50 | ug/L |
| 1,1,1,2-Tetrachloroethane | 0.18 | 0.20 | 0.50 | ug/L |
| 1,1,2,2-Tetrachloroethane | 0.17 | 0.20 | 0.50 | ug/L |
| Tetrachloroethene | 0.13 | 0.16 | 0.50 | ug/L |
| Toluene | 0.093 | 0.16 | 0.50 | ug/L |
| 1,2,3-Trichlorobenzene | 0.16 | 0.16 | 0.50 | ug/L |
| 1,2,4-Trichlorobenzene | 0.19 | 0.20 | 0.50 | ug/L |
| 1,1,1-Trichloroethane | 0.11 | 0.16 | 0.50 | ug/L |
| 1,1,2-Trichloroethane | 0.16 | 0.16 | 0.50 | ug/L |
| Trichloroethene | 0.085 | 0.16 | 0.50 | ug/L |
| Trichlorofluoromethane | 0.13 | 0.16 | 0.50 | ug/L |
| 1,2,3-Trichloropropane | 0.24 | 0.33 | 0.50 | ug/L |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.15 | 0.16 | 0.50 | ug/L |
| 1,2,4-Trimethylbenzene | 0.12 | 0.16 | 0.50 | ug/L |
| 1,3,5-Trimethylbenzene | 0.12 | 0.16 | 0.50 | ug/L |
| Vinyl chloride | 0.12 | 0.16 | 0.50 | ug/L |
| Total Xylenes | 0.36 | 0.46 | 1.0 | ug/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-8260B

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** MS-V5

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Acetone | 4.6 | 5.0 | 10 | ug/L |
| Acetonitrile | 5.5 | 6.0 | 10 | ug/L |
| Allyl chloride | 0.80 | 1.0 | 5.0 | ug/L |
| t-Amyl Methyl ether | 0.25 | 0.30 | 0.50 | ug/L |
| Benzyl chloride | 0.60 | 0.60 | 1.0 | ug/L |
| t-Butyl alcohol | 9.4 | 10 | 12 | ug/L |
| Carbon disulfide | 0.38 | 0.40 | 1.0 | ug/L |
| Chloroprene | 0.37 | 1.0 | 5.0 | ug/L |
| Diisopropyl ether | 0.23 | 0.30 | 0.50 | ug/L |
| Ethyl t-butyl ether | 0.18 | 0.20 | 0.50 | ug/L |
| 2-Hexanone | 3.4 | 4.0 | 10 | ug/L |
| Methyl ethyl ketone | 2.5 | 3.0 | 10 | ug/L |
| Methyl isobutyl ketone | 2.1 | 3.0 | 10 | ug/L |
| Vinyl acetate | 1.8 | 6.0 | 20 | ug/L |
| p- & m-Xylenes | 0.28 | 0.30 | 0.50 | ug/L |
| o-Xylene | 0.082 | 0.16 | 0.50 | ug/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01
File ID: 12FEB54.D
Sampled: 02/07/17 08:50
Prepared: 02/12/17 11:39
Analyzed: 02/13/17 01:31
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702423
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.45 | 0.083 | 0.16 | 0.50 | J |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.17 | 0.11 | 0.16 | 0.50 | J |
| 135-98-8 | sec-Butylbenzene | 1 | 6.1 | 0.15 | 0.16 | 0.50 | |
| 98-06-6 | tert-Butylbenzene | 1 | 1.1 | 0.13 | 0.16 | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 15 | 0.15 | 0.16 | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 85 | 0.062 | 0.16 | 0.50 | |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 7.2 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 1.8 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.33 | 0.098 | 0.16 | 0.50 | J |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01
File ID: 12FEB54.D
Sampled: 02/07/17 08:50
Prepared: 02/12/17 11:39
Analyzed: 02/13/17 01:31
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702423
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 2.8 | 0.14 | 0.16 | 0.50 | |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.20 | 0.11 | 0.16 | 0.50 | J |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.59 | 0.093 | 0.16 | 0.50 | |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 3.5 | 0.16 | 0.16 | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 13 | 0.19 | 0.20 | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 3.7 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 3.6 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 1 | 0.40 | 0.082 | 0.16 | 0.50 | J |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-17_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-01 | File ID: | 12FEB54.D |
| Sampled: | 02/07/17 08:50 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 01:31 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.030 | 100 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.7900 | 97.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.450 | 104 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 208247 | 6.58 | 209784 | 6.58 | |
| Chlorobenzene-d5 (IS) | 62016 | 9.62 | 67298 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 273061 | 7.39 | 280430 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-17_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-01RE1 | File ID: | 13FEB52.D |
| Sampled: | 02/07/17 08:50 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 02:15 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 108-90-7 | Chlorobenzene | 10 | 230 | 0.93 | 1.6 | 5.0 | D |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | 170 | 0.72 | 1.6 | 5.0 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.440 | 104 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 10.200 | 102 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.100 | 101 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 205844 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 62373 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 256144 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-02
File ID: 13FEB42.D
Sampled: 02/07/17 09:55
Prepared: 02/12/17 11:39
Analyzed: 02/13/17 22:24
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 11 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.25 | 0.15 | 0.16 | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-18_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-02 | File ID: | 13FEB42.D |
| Sampled: | 02/07/17 09:55 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 22:24 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.46 | 0.085 | 0.16 | 0.50 | J |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-18_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-02 | File ID: | 13FEB42.D | | |
| Sampled: | 02/07/17 09:55 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 22:24 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.130 | 101 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.5700 | 95.7 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.6600 | 96.6 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 205798 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 67149 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 271306 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**398-MW1_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-03 | File ID: | 12FEB56.D |
| Sampled: | 02/07/17 08:42 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 02:18 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**398-MW1_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-03 | File ID: | 12FEB56.D |
| Sampled: | 02/07/17 08:42 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 02:18 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**398-MW1_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-03 | | File ID: | 12FEB56.D | |
| Sampled: | 02/07/17 08:42 | Prepared: | 02/12/17 11:39 | | Analyzed: | 02/13/17 02:18 | |
| Solids: | | Preparation: | EPA 5030 Water MS | | Initial/Final: | 25 ml / 25 ml | |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.810 | 108 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.2100 | 92.1 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.3300 | 93.3 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 210566 | 6.58 | 209784 | 6.58 | |
| Chlorobenzene-d5 (IS) | 67869 | 9.62 | 67298 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 280007 | 7.39 | 280430 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW02_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-04 | File ID: | 12FEB57.D |
| Sampled: | 02/07/17 10:05 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 02:41 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.65 | 0.083 | 0.16 | 0.50 | |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | J |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 16 | 0.18 | 0.20 | 0.50 | |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 17 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 4.5 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW02_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-04 | File ID: | 12FEB57.D |
| Sampled: | 02/07/17 10:05 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 02:41 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.18 | 0.085 | 0.16 | 0.50 | J |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.84 | 0.13 | 0.16 | 0.50 | |
| 108-88-3 | Toluene | 1 | 0.52 | 0.093 | 0.16 | 0.50 | |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 2.0 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.33 | 0.28 | 0.30 | 0.50 | J |
| 95-47-6 | o-Xylene | 1 | 0.18 | 0.082 | 0.16 | 0.50 | J |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW02_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-04 | File ID: | 12FEB57.D |
| Sampled: | 02/07/17 10:05 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 02:41 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.340 | 123 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 10.100 | 101 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.8800 | 98.8 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 206955 | 6.58 | 209784 | 6.58 | |
| Chlorobenzene-d5 (IS) | 74525 | 9.62 | 67298 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 279710 | 7.39 | 280430 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW02_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-04RE1 | File ID: | 13FEB53.D |
| Sampled: | 02/07/17 10:05 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 02:38 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 100 | 1100 | 8.5 | 16 | 50 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.500 | 105 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.7000 | 97.0 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.6800 | 96.8 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 207320 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 65048 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 271560 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW03_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-05 | File ID: | 12FEB58.D |
| Sampled: | 02/07/17 09:00 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 03:04 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 1.4 | 0.14 | 0.16 | 0.50 | |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 3.0 | 0.18 | 0.20 | 0.50 | |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 7.8 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 1.1 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW03_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-05 | File ID: | 12FEB58.D |
| Sampled: | 02/07/17 09:00 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 03:04 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 1.4 | 0.13 | 0.16 | 0.50 | |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.50 | 0.16 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 10 | 4.6 | 5.0 | 10 | |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.60 | 0.38 | 0.40 | 1.0 | J |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.44 | 0.28 | 0.30 | 0.50 | J |
| 95-47-6 | o-Xylene | 1 | 0.20 | 0.082 | 0.16 | 0.50 | J |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW03_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-05 | File ID: | 12FEB58.D |
| Sampled: | 02/07/17 09:00 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 03:04 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 11.650 | 116 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.7800 | 97.8 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.240 | 102 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 209491 | 6.58 | 209784 | 6.58 | |
| Chlorobenzene-d5 (IS) | 72044 | 9.62 | 67298 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 278442 | 7.39 | 280430 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW03_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-05RE1 | File ID: | 13FEB54.D |
| Sampled: | 02/07/17 09:00 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 03:01 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 100 | 960 | 8.5 | 16 | 50 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.290 | 103 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.5600 | 95.6 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.9900 | 99.9 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 199714 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 62984 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 261800 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M11-02_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-06
File ID: 13FEB43.D
Sampled: 02/07/17 08:20
Prepared: 02/12/17 11:39
Analyzed: 02/13/17 22:47
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.17 | 0.11 | 0.16 | 0.50 | J |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.56 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.37 | 0.15 | 0.16 | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M11-02_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-06
File ID: 13FEB43.D
Sampled: 02/07/17 08:20
Prepared: 02/12/17 11:39
Analyzed: 02/13/17 22:47
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 4.2 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M11-02_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-06 | File ID: | 13FEB43.D | | |
| Sampled: | 02/07/17 08:20 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 22:47 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.030 | 100 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.5000 | 95.0 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.6700 | 96.7 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 207752 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 65779 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 266454 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW02_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-07 | File ID: | 13FEB44.D |
| Sampled: | 02/07/17 10:12 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:10 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW02_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-07 | File ID: | 13FEB44.D |
| Sampled: | 02/07/17 10:12 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:10 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 23 | 9.4 | 10 | 15 | |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW02_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-07 | File ID: | 13FEB44.D | | |
| Sampled: | 02/07/17 10:12 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:10 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 11.570 | 116 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.4900 | 94.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.8800 | 98.8 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 183111 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 61771 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 240310 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW04_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-08 | File ID: | 13FEB45.D |
| Sampled: | 02/07/17 09:32 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:33 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW04_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-08 | File ID: | 13FEB45.D |
| Sampled: | 02/07/17 09:32 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:33 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.57 | 0.38 | 0.40 | 1.0 | J |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW04_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-08 | File ID: | 13FEB45.D | | |
| Sampled: | 02/07/17 09:32 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:33 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.180 | 102 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.9000 | 99.0 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.320 | 103 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 203167 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 63082 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 253603 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-09 | File ID: | 13FEB46.D |
| Sampled: | 02/07/17 08:37 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:57 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 45 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 4.7 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-09 | File ID: | 13FEB46.D |
| Sampled: | 02/07/17 08:37 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:57 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 1.5 | 0.16 | 0.16 | 0.50 | |
| 79-01-6 | Trichloroethene | 1 | 5.0 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.83 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.48 | 0.38 | 0.40 | 1.0 | J |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-09 | File ID: | 13FEB46.D |
| Sampled: | 02/07/17 08:37 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 23:57 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 11.710 | 117 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.6800 | 96.8 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.420 | 104 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 200786 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 67208 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 270633 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-10 | File ID: | 13FEB12.D |
| Sampled: | 02/07/17 10:22 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 10:48 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.24 | 0.18 | 0.20 | 0.50 | J |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 28 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.22 | 0.15 | 0.16 | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-10 | File ID: | 13FEB12.D |
| Sampled: | 02/07/17 10:22 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 10:48 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.63 | 0.16 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-10 | File ID: | 13FEB12.D |
| Sampled: | 02/07/17 10:22 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 10:48 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.020 | 120 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.8000 | 98.0 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.9900 | 99.9 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 217845 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 76560 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 293876 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-10RE1 | File ID: | 13FEB55.D |
| Sampled: | 02/07/17 10:22 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 03:25 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 10 | 430 | 0.85 | 1.6 | 5.0 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.870 | 109 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.7100 | 97.1 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.3200 | 93.2 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 205176 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 63172 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 259641 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05D_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-11 | File ID: | 13FEB47.D |
| Sampled: | 02/07/17 09:44 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 00:20 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 3.9 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05D_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-11 | File ID: | 13FEB47.D |
| Sampled: | 02/07/17 09:44 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 00:20 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 2.4 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05D_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-11 | File ID: | 13FEB47.D |
| Sampled: | 02/07/17 09:44 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 00:20 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.680 | 127 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.5500 | 95.5 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.7100 | 97.1 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 193528 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 68694 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 271904 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05E_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-12 | File ID: | 13FEB48.D |
| Sampled: | 02/07/17 09:12 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 00:43 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 3.4 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05E_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-12 | File ID: | 13FEB48.D |
| Sampled: | 02/07/17 09:12 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 00:43 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.65 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05E_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-12 | File ID: | 13FEB48.D | | |
| Sampled: | 02/07/17 09:12 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 00:43 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.590 | 126 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.9200 | 99.2 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.250 | 102 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 201514 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 66140 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 270631 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-13_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-13
File ID: 13FEB15.D
Sampled: 02/07/17 11:05
Prepared: 02/12/17 11:39
Analyzed: 02/13/17 11:58
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.26 | 0.11 | 0.16 | 0.50 | J |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 6.4 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.29 | 0.15 | 0.16 | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-13_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-13 | File ID: | 13FEB15.D |
| Sampled: | 02/07/17 11:05 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 11:58 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.42 | 0.085 | 0.16 | 0.50 | J |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.62 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27EW-13_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-13 | File ID: | 13FEB15.D | | |
| Sampled: | 02/07/17 11:05 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 11:58 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.230 | 102 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.7800 | 97.8 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.290 | 103 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 213703 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 66593 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 280506 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-14
File ID: 12FEB23.D
Sampled: 02/07/17 11:55
Prepared: 02/12/17 11:39
Analyzed: 02/12/17 13:34
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702423
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.89 | 0.093 | 0.16 | 0.50 | |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 1.9 | 0.072 | 0.16 | 0.50 | |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.35 | 0.062 | 0.16 | 0.50 | J |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 6.2 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.85 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-14
File ID: 12FEB23.D
Sampled: 02/07/17 11:55
Prepared: 02/12/17 11:39
Analyzed: 02/12/17 13:34
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1006
Sequence: 1702423
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.49 | 0.085 | 0.16 | 0.50 | J |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 1.2 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**27MW01_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-14 | | File ID: | 12FEB23.D | |
| Sampled: | 02/07/17 11:55 | Prepared: | 02/12/17 11:39 | | Analyzed: | 02/12/17 13:34 | |
| Solids: | | Preparation: | EPA 5030 Water MS | | Initial/Final: | 25 ml / 25 ml | |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.670 | 107 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.9100 | 99.1 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.5500 | 95.5 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 201570 | 6.58 | 204871 | 6.58 | |
| Chlorobenzene-d5 (IS) | 64326 | 9.62 | 66742 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 266412 | 7.39 | 270832 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW01_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-15 | File ID: | 13FEB16.D | | |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 12:21 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 13 | 0.083 | 0.16 | 0.50 | |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.27 | 0.14 | 0.16 | 0.50 | J |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 13 | 0.18 | 0.20 | 0.50 | |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 18 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 4.0 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-15 | File ID: | 13FEB16.D |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 12:21 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.38 | 0.13 | 0.16 | 0.50 | J |
| 108-88-3 | Toluene | 1 | 0.43 | 0.093 | 0.16 | 0.50 | J |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 1.9 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-15 | File ID: | 13FEB16.D |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/13/17 12:21 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 11.440 | 114 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 10.100 | 101 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.9900 | 99.9 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 208530 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 73911 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 281604 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-15RE1 | File ID: | 13FEB56.D |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 03:48 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 100 | 1300 | 8.5 | 16 | 50 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.320 | 103 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 10.020 | 100 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.5400 | 95.4 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 205423 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 63791 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 266365 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M07B-01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-16 | File ID: | 13FEB49.D |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 01:06 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.25 | 0.085 | 0.16 | 0.50 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M07B-01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-16 | File ID: | 13FEB49.D |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 01:06 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 14 | 4.6 | 5.0 | 10 | |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M07B-01_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-16 | File ID: | 13FEB49.D | | |
| Sampled: | 02/07/17 11:25 | Prepared: | 02/12/17 11:39 | Analyzed: | 02/14/17 01:06 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1006 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.570 | 106 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.8300 | 98.3 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.5200 | 95.2 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 201698 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 64783 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 263354 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-17 | File ID: | 13FEB06.D |
| Sampled: | 02/07/17 10:44 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 08:29 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.29 | 0.13 | 0.16 | 0.50 | J |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-17 | File ID: | 13FEB06.D |
| Sampled: | 02/07/17 10:44 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 08:29 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.29 | 0.098 | 0.16 | 0.50 | J |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 17 | 0.14 | 0.16 | 0.50 | |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 2.0 | 0.11 | 0.16 | 0.50 | |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**OU2B-MW01_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-17 | File ID: | 13FEB06.D | | |
| Sampled: | 02/07/17 10:44 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 08:29 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.890 | 109 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.4000 | 94.0 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.9700 | 99.7 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 205838 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 68824 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 274883 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-18 | File ID: | 13FEB50.D |
| Sampled: | 02/07/17 13:09 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/14/17 01:29 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-18 | File ID: | 13FEB50.D |
| Sampled: | 02/07/17 13:09 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/14/17 01:29 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-18 | File ID: | 13FEB50.D |
| Sampled: | 02/07/17 13:09 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/14/17 01:29 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.150 | 122 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.8500 | 98.5 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.8200 | 98.2 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 200429 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 69548 | 9.63 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 268335 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01D_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-19 | File ID: | 13FEB19.D |
| Sampled: | 02/07/17 12:34 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 13:30 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01D_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-19 | File ID: | 13FEB19.D |
| Sampled: | 02/07/17 12:34 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 13:30 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01D_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-19 | File ID: | 13FEB19.D | | |
| Sampled: | 02/07/17 12:34 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 13:30 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.090 | 101 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.7500 | 97.5 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.4700 | 94.7 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 215046 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 66698 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 279390 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01E_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-20 | File ID: | 13FEB51.D |
| Sampled: | 02/07/17 11:59 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/14/17 01:52 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01E_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-20 | File ID: | 13FEB51.D |
| Sampled: | 02/07/17 11:59 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/14/17 01:52 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01E_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-20 | File ID: | 13FEB51.D | | |
| Sampled: | 02/07/17 11:59 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/14/17 01:52 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.070 | 121 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.7100 | 97.1 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.580 | 106 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 203063 | 6.59 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 66439 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 272026 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01E_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-21 | | | File ID: | 13FEB21.D |
| Sampled: | 02/07/17 12:50 | Prepared: | 02/13/17 07:00 | | | Analyzed: | 02/13/17 14:16 |
| Solids: | | Preparation: | EPA 5030 Water MS | | | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01E_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-21 | File ID: | 13FEB21.D |
| Sampled: | 02/07/17 12:50 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 14:16 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01E_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-21 | File ID: | 13FEB21.D | | |
| Sampled: | 02/07/17 12:50 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 14:16 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 11.260 | 113 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 10.040 | 100 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.9700 | 99.7 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 213224 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 70397 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 277471 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-22 | File ID: | 13FEB22.D |
| Sampled: | 02/07/17 10:52 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 14:40 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 1.5 | 0.18 | 0.20 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 3.0 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05B_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-22 | | | File ID: | 13FEB22.D |
| Sampled: | 02/07/17 10:52 | Prepared: | 02/13/17 07:00 | | | Analyzed: | 02/13/17 14:40 |
| Solids: | | Preparation: | EPA 5030 Water MS | | | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 1.8 | 0.16 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.70 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-22 | File ID: | 13FEB22.D |
| Sampled: | 02/07/17 10:52 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 14:40 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.170 | 122 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 10.080 | 101 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.410 | 104 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 208366 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 70388 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 274186 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW05B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-22RE1 | File ID: | 14FEB35.D |
| Sampled: | 02/07/17 10:52 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 19:16 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 156-59-2 | cis-1,2-Dichloroethene | 10 | 370 | 0.85 | 1.6 | 5.0 | D |
| 79-01-6 | Trichloroethene | 10 | 460 | 0.85 | 1.6 | 5.0 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.600 | 106 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.4100 | 94.1 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.3600 | 93.6 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 207100 | 6.58 | 173861 | 6.58 | |
| Chlorobenzene-d5 (IS) | 63544 | 9.62 | 57803 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 270545 | 7.39 | 234557 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**TB14_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-23 | File ID: | 13FEB36.D |
| Sampled: | 02/07/17 12:00 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:05 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**TB14_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-23 | File ID: | 13FEB36.D |
| Sampled: | 02/07/17 12:00 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:05 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**TB14_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-23 | | File ID: | 13FEB36.D | |
| Sampled: | 02/07/17 12:00 | Prepared: | 02/13/17 07:00 | | Analyzed: | 02/13/17 20:05 | |
| Solids: | | Preparation: | EPA 5030 Water MS | | Initial/Final: | 25 ml / 25 ml | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 9.9900 | 99.9 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.5300 | 95.3 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.8100 | 98.1 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 208366 | 6.59 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 65339 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 277203 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**TB15_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-24 | File ID: | 13FEB37.D |
| Sampled: | 02/07/17 12:15 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:28 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**TB15_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-24 | File ID: | 13FEB37.D |
| Sampled: | 02/07/17 12:15 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:28 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**TB15_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-24 | File ID: | 13FEB37.D |
| Sampled: | 02/07/17 12:15 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:28 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.200 | 102 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.9900 | 99.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.5900 | 95.9 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 205684 | 6.59 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 66394 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 265850 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB26_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-25 | File ID: | 13FEB38.D |
| Sampled: | 02/07/17 14:00 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:51 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB26_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-25 | File ID: | 13FEB38.D |
| Sampled: | 02/07/17 14:00 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:51 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB26_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-25 | File ID: | 13FEB38.D |
| Sampled: | 02/07/17 14:00 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 20:51 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.460 | 105 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.5900 | 95.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.090 | 101 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 204860 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 64713 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 276036 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB27_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-26
File ID: 13FEB39.D
Sampled: 02/07/17 14:10
Prepared: 02/13/17 07:00
Analyzed: 02/13/17 21:14
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1007
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB27_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-26 | File ID: | 13FEB39.D |
| Sampled: | 02/07/17 14:10 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 21:14 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB27_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-26 | File ID: | 13FEB39.D |
| Sampled: | 02/07/17 14:10 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 21:14 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.540 | 105 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 10.020 | 100 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.8300 | 98.3 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 210079 | 6.59 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 64417 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 261769 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB28_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-27 | File ID: | 13FEB40.D |
| Sampled: | 02/07/17 14:20 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 21:38 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB28_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-27
File ID: 13FEB40.D
Sampled: 02/07/17 14:20
Prepared: 02/13/17 07:00
Analyzed: 02/13/17 21:38
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1007
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB28_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-27 | File ID: | 13FEB40.D |
| Sampled: | 02/07/17 14:20 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 21:38 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.850 | 108 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.6400 | 96.4 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.4700 | 94.7 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 204653 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 66208 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 277732 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB29_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-28
File ID: 13FEB41.D
Sampled: 02/07/17 14:30
Prepared: 02/13/17 07:00
Analyzed: 02/13/17 22:01
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1007
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB29_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-28
File ID: 13FEB41.D
Sampled: 02/07/17 14:30
Prepared: 02/13/17 07:00
Analyzed: 02/13/17 22:01
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1007
Sequence: 1702431
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**EB29_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-28 | File ID: | 13FEB41.D |
| Sampled: | 02/07/17 14:30 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 22:01 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.790 | 108 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.6900 | 96.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.040 | 100 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 204631 | 6.58 | 206916 | 6.58 | |
| Chlorobenzene-d5 (IS) | 65222 | 9.62 | 67530 | 9.63 | |
| 1,4-Difluorobenzene (IS) | 273276 | 7.39 | 268532 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW04_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-29 | File ID: | 13FEB23.D |
| Sampled: | 02/07/17 13:30 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 15:03 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 6.4 | 0.083 | 0.16 | 0.50 | |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 26 | 0.18 | 0.20 | 0.50 | |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 41 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 8.0 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW04_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-29 | File ID: | 13FEB23.D |
| Sampled: | 02/07/17 13:30 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 15:03 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.25 | 0.085 | 0.16 | 0.50 | J |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.55 | 0.13 | 0.16 | 0.50 | |
| 108-88-3 | Toluene | 1 | 0.43 | 0.093 | 0.16 | 0.50 | J |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 4.8 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW04_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-29 | File ID: | 13FEB23.D |
| Sampled: | 02/07/17 13:30 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 15:03 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.620 | 126 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.5900 | 95.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.280 | 103 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 196220 | 6.59 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 69633 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 283532 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**IR11-OU2B-MW04_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-29RE1 | File ID: | 14FEB36.D |
| Sampled: | 02/07/17 13:30 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 19:39 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 100 | 2200 | 8.5 | 16 | 50 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.940 | 109 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.1900 | 91.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.9500 | 99.5 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 199365 | 6.58 | 173861 | 6.58 | |
| Chlorobenzene-d5 (IS) | 62885 | 9.62 | 57803 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 274942 | 7.39 | 234557 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

M11-01_170207

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-30
File ID: 14FEB32.D
Sampled: 02/07/17 14:00
Prepared: 02/14/17 07:00
Analyzed: 02/14/17 18:06
Solids:
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Batch: B[B1007
Sequence: 1702527
Calibration: 1702011
Instrument: MS-V5

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M11-01_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-30 | File ID: | 14FEB32.D |
| Sampled: | 02/07/17 14:00 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 18:06 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 2.4 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**M11-01_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-30 | | | File ID: | 14FEB32.D |
| Sampled: | 02/07/17 14:00 | Prepared: | 02/14/17 07:00 | | | Analyzed: | 02/14/17 18:06 |
| Solids: | | Preparation: | EPA 5030 Water MS | | | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.480 | 105 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.5400 | 95.4 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.6200 | 96.2 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 201095 | 6.58 | 173861 | 6.58 | |
| Chlorobenzene-d5 (IS) | 64522 | 9.62 | 57803 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 267917 | 7.39 | 234557 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-31 | File ID: | 13FEB25.D |
| Sampled: | 02/07/17 14:11 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 15:49 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 32 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 2.0 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-31 | File ID: | 13FEB25.D |
| Sampled: | 02/07/17 14:11 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 15:49 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 5.8 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 2.7 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01A_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-31 | File ID: | 13FEB25.D | | |
| Sampled: | 02/07/17 14:11 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 15:49 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.070 | 101 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.9200 | 99.2 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.5600 | 95.6 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 206309 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 66448 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 272484 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-32 | File ID: | 14FEB33.D |
| Sampled: | 02/07/17 13:48 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 18:29 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 11 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-32 | File ID: | 14FEB33.D |
| Sampled: | 02/07/17 13:48 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 18:29 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 68 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.32 | 0.12 | 0.16 | 0.50 | J |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S11-TT-MW01B_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-32 | | File ID: | 14FEB33.D | |
| Sampled: | 02/07/17 13:48 | Prepared: | 02/14/17 07:00 | | Analyzed: | 02/14/17 18:29 | |
| Solids: | | Preparation: | EPA 5030 Water MS | | Initial/Final: | 25 ml / 25 ml | |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.290 | 123 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.6400 | 96.4 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.9700 | 99.7 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 204372 | 6.58 | 173861 | 6.58 | |
| Chlorobenzene-d5 (IS) | 70001 | 9.62 | 57803 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 281462 | 7.39 | 234557 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-33 | File ID: | 13FEB27.D |
| Sampled: | 02/07/17 13:51 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 16:36 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.38 | 0.12 | 0.16 | 0.50 | J |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 15 | 0.11 | 0.16 | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 1 | 3.2 | 0.17 | 0.20 | 0.50 | |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 4.5 | 0.085 | 0.16 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.69 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-33 | File ID: | 13FEB27.D |
| Sampled: | 02/07/17 13:51 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 16:36 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.18 | 0.11 | 0.16 | 0.50 | J |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.65 | 0.16 | 0.16 | 0.50 | |
| 79-01-6 | Trichloroethene | 1 | 1.6 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.57 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01A_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-33 | File ID: | 13FEB27.D |
| Sampled: | 02/07/17 13:51 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 16:36 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.730 | 107 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.6900 | 96.9 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.160 | 102 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 204495 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 65481 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 279304 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01A_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-33RE1 | File ID: | 14FEB37.D | | |
| Sampled: | 02/07/17 13:51 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 20:02 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 75-35-4 | 1,1-Dichloroethene | 10 | 380 | 1.8 | 2.0 | 5.0 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.370 | 104 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.4300 | 94.3 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.4600 | 94.6 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 208920 | 6.58 | 173861 | 6.58 | |
| Chlorobenzene-d5 (IS) | 63652 | 9.62 | 57803 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 266390 | 7.39 | 234557 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-34 | File ID: | 13FEB28.D |
| Sampled: | 02/07/17 13:55 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 16:59 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.26 | 0.17 | 0.20 | 0.50 | J |
| 75-35-4 | 1,1-Dichloroethene | 1 | 1.6 | 0.18 | 0.20 | 0.50 | |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 1.2 | 0.15 | 0.16 | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-34 | File ID: | 13FEB28.D |
| Sampled: | 02/07/17 13:55 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 16:59 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 12 | 0.085 | 0.16 | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 2.6 | 0.12 | 0.16 | 0.50 | |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-34 | File ID: | 13FEB28.D |
| Sampled: | 02/07/17 13:55 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 16:59 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 11.940 | 119 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.6100 | 96.1 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.010 | 100 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 202519 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 67675 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 270474 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01B_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-34RE1 | File ID: | 14FEB38.D |
| Sampled: | 02/07/17 13:55 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 20:25 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 156-59-2 | cis-1,2-Dichloroethene | 10 | 210 | 0.85 | 1.6 | 5.0 | D |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.420 | 104 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.8200 | 98.2 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.6900 | 96.9 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 206800 | 6.58 | 173861 | 6.58 | |
| Chlorobenzene-d5 (IS) | 65922 | 9.62 | 57803 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 264027 | 7.39 | 234557 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-35 | File ID: | 13FEB29.D |
| Sampled: | 02/07/17 13:23 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 17:22 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-35 | File ID: | 13FEB29.D |
| Sampled: | 02/07/17 13:23 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 17:22 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01C_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-35 | File ID: | 13FEB29.D |
| Sampled: | 02/07/17 13:23 | Prepared: | 02/13/17 07:00 | Analyzed: | 02/13/17 17:22 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 11.030 | 110 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.7600 | 97.6 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.180 | 102 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 207609 | 6.58 | 210178 | 6.59 | |
| Chlorobenzene-d5 (IS) | 68594 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 277842 | 7.39 | 276582 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01D_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-36 | File ID: | 14FEB34.D |
| Sampled: | 02/07/17 13:25 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 18:52 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1 | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1 | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 1 | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 1 | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 1 | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1 | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 1 | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1 | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1 | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 1 | 0.16 | 0.099 | 0.16 | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 1 | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 1 | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01D_170207**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | 1703480-36 | File ID: | 14FEB34.D |
| Sampled: | 02/07/17 13:25 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 18:52 |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 |
| Instrument: | MS-V5 | | | | |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 563-58-6 | 1,1-Dichloropropene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 1 | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 1 | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 1 | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 1 | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 1 | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1 | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 1 | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1 | 0.20 | 0.19 | 0.20 | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1 | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1 | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 1 | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 1 | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 1 | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 1 | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 1 | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 1 | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 1 | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 1 | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 1 | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 1 | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 1 | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 1 | 0.30 | 0.28 | 0.30 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ORGANIC ANALYSIS DATA SHEET
## EPA-8260B

**S21-TT-MW01D_170207**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 | | |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda | | |
| Matrix: | Water | Laboratory ID: | 1703480-36 | File ID: | 14FEB34.D | | |
| Sampled: | 02/07/17 13:25 | Prepared: | 02/14/17 07:00 | Analyzed: | 02/14/17 18:52 | | |
| Solids: | | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml | | |
| Batch: | B[B1007 | Sequence: | 1702527 | Calibration: | 1702011 | Instrument: | MS-V5 |

| CAS NO. | COMPOUND | DILUTION | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 1 | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 12.480 | 125 | 81 - 118 | * |
| Toluene-d8 (Surrogate) | 10.000 | 9.6100 | 96.1 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.210 | 102 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 203091 | 6.58 | 173861 | 6.58 | |
| Chlorobenzene-d5 (IS) | 68630 | 9.62 | 57803 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 277150 | 7.39 | 234557 | 7.39 | |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B1006
Batch Matrix: Water
Preparation: EPA 5030 Water MS

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-17_170207 | 1703480-01 | 12FEB54.D | 02/12/17 11:39 | Full SAP LIST |
| 27EW-17_170207 | 1703480-01RE1 | 13FEB52.D | 02/12/17 11:39 | Full SAP LIST |
| 27EW-18_170207 | 1703480-02 | 13FEB42.D | 02/12/17 11:39 | Full SAP LIST |
| 398-MW1_170207 | 1703480-03 | 12FEB56.D | 02/12/17 11:39 | Full SAP LIST |
| IR11-OU2B-MW02_170207 | 1703480-04 | 12FEB57.D | 02/12/17 11:39 | Full SAP LIST |
| IR11-OU2B-MW02_170207 | 1703480-04RE1 | 13FEB53.D | 02/12/17 11:39 | Full SAP LIST |
| IR11-OU2B-MW03_170207 | 1703480-05 | 12FEB58.D | 02/12/17 11:39 | Full SAP LIST |
| IR11-OU2B-MW03_170207 | 1703480-05RE1 | 13FEB54.D | 02/12/17 11:39 | Full SAP LIST |
| M11-02_170207 | 1703480-06 | 13FEB43.D | 02/12/17 11:39 | Full SAP LIST |
| OU2B-MW02_170207 | 1703480-07 | 13FEB44.D | 02/12/17 11:39 | Full SAP LIST |
| OU2B-MW04_170207 | 1703480-08 | 13FEB45.D | 02/12/17 11:39 | Full SAP LIST |
| S21-TT-MW05A_170207 | 1703480-09 | 13FEB46.D | 02/12/17 11:39 | Full SAP LIST |
| S21-TT-MW05C_170207 | 1703480-10 | 13FEB12.D | 02/12/17 11:39 | Full SAP LIST |
| S21-TT-MW05C_170207 | 1703480-10RE1 | 13FEB55.D | 02/12/17 11:39 | Full SAP LIST |
| S21-TT-MW05D_170207 | 1703480-11 | 13FEB47.D | 02/12/17 11:39 | Full SAP LIST |
| S21-TT-MW05E_170207 | 1703480-12 | 13FEB48.D | 02/12/17 11:39 | Full SAP LIST |
| 27EW-13_170207 | 1703480-13 | 13FEB15.D | 02/12/17 11:39 | Full SAP LIST |
| 27MW01_170207 | 1703480-14 | 12FEB23.D | 02/12/17 11:39 | Full SAP LIST |
| IR11-OU2B-MW01_170207 | 1703480-15 | 13FEB16.D | 02/12/17 11:39 | Full SAP LIST |
| IR11-OU2B-MW01_170207 | 1703480-15RE1 | 13FEB56.D | 02/12/17 11:39 | Full SAP LIST |
| M07B-01_170207 | 1703480-16 | 13FEB49.D | 02/12/17 11:39 | Full SAP LIST |
| Blank | B[B1006-BLK1 | 12FEB22.D | 02/12/17 11:39 | |
| LCS | B[B1006-BS1 | 12FEB24.D | 02/12/17 11:39 | |
| 27MW01_170207 | B[B1006-MS1 | 12FEB25.D | 02/12/17 11:39 | |
| 27MW01_170207 | B[B1006-MSD1 | 12FEB26.D | 02/12/17 11:39 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B1007
Batch Matrix: Water
Preparation: EPA 5030 Water MS

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| OU2B-MW01_170207 | 1703480-17 | 13FEB06.D | 02/13/17 07:00 | Full SAP LIST |
| S11-TT-MW01C_170207 | 1703480-18 | 13FEB50.D | 02/13/17 07:00 | Full SAP LIST |
| S11-TT-MW01D_170207 | 1703480-19 | 13FEB19.D | 02/13/17 07:00 | Full SAP LIST |
| S11-TT-MW01E_170207 | 1703480-20 | 13FEB51.D | 02/13/17 07:00 | Full SAP LIST |
| S21-TT-MW01E_170207 | 1703480-21 | 13FEB21.D | 02/13/17 07:00 | Full SAP LIST |
| S21-TT-MW05B_170207 | 1703480-22 | 13FEB22.D | 02/13/17 07:00 | Full SAP LIST |
| S21-TT-MW05B_170207 | 1703480-22RE1 | 14FEB35.D | 02/14/17 07:00 | Full SAP LIST |
| TB14_170207 | 1703480-23 | 13FEB36.D | 02/13/17 07:00 | Full SAP LIST |
| TB15_170207 | 1703480-24 | 13FEB37.D | 02/13/17 07:00 | Full SAP LIST |
| EB26_170207 | 1703480-25 | 13FEB38.D | 02/13/17 07:00 | Full SAP LIST |
| EB27_170207 | 1703480-26 | 13FEB39.D | 02/13/17 07:00 | Full SAP LIST |
| EB28_170207 | 1703480-27 | 13FEB40.D | 02/13/17 07:00 | Full SAP LIST |
| EB29_170207 | 1703480-28 | 13FEB41.D | 02/13/17 07:00 | Full SAP LIST |
| IR11-OU2B-MW04_170207 | 1703480-29 | 13FEB23.D | 02/13/17 07:00 | Full SAP LIST |
| IR11-OU2B-MW04_170207 | 1703480-29RE1 | 14FEB36.D | 02/14/17 07:00 | Full SAP LIST |
| M11-01_170207 | 1703480-30 | 14FEB32.D | 02/14/17 07:00 | Full SAP LIST |
| S11-TT-MW01A_170207 | 1703480-31 | 13FEB25.D | 02/13/17 07:00 | Full SAP LIST |
| S11-TT-MW01B_170207 | 1703480-32 | 14FEB33.D | 02/14/17 07:00 | Full SAP LIST |
| S21-TT-MW01A_170207 | 1703480-33 | 13FEB27.D | 02/13/17 07:00 | Full SAP LIST |
| S21-TT-MW01A_170207 | 1703480-33RE1 | 14FEB37.D | 02/14/17 07:00 | Full SAP LIST |
| S21-TT-MW01B_170207 | 1703480-34 | 13FEB28.D | 02/13/17 07:00 | Full SAP LIST |
| S21-TT-MW01B_170207 | 1703480-34RE1 | 14FEB38.D | 02/14/17 07:00 | Full SAP LIST |
| S21-TT-MW01C_170207 | 1703480-35 | 13FEB29.D | 02/13/17 07:00 | Full SAP LIST |
| S21-TT-MW01D_170207 | 1703480-36 | 14FEB34.D | 02/14/17 07:00 | Full SAP LIST |
| Blank | B[B1007-BLK1 | 13FEB05.D | 02/13/17 07:00 | |
| LCS | B[B1007-BS1 | 13FEB07.D | 02/13/17 07:00 | |
| OU2B-MW01_170207 | B[B1007-MS1 | 13FEB08.D | 02/13/17 07:00 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B1007
Batch Matrix: Water
Preparation: EPA 5030 Water MS

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| OU2B-MW01_170207 | B[B1007-MSD1 | 13FEB09.D | 02/13/17 07:00 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1006-BLK1 | File ID: | 12FEB22.D |
| Prepared: | 02/12/17 11:39 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/12/17 13:11 | Instrument: | MS-V5 | | |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 0.16 | 0.099 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1006-BLK1 | File ID: | 12FEB22.D |
| Prepared: | 02/12/17 11:39 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/12/17 13:11 | Instrument: | MS-V5 | | |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-34-3 | 1,1-Dichloroethane | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.20 | 0.19 | 0.20 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1006-BLK1 | File ID: | 12FEB22.D |
| Prepared: | 02/12/17 11:39 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/12/17 13:11 | Instrument: | MS-V5 | | |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 9.9500 | 99.5 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.8500 | 98.5 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 10.250 | 102 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 210084 | 6.58 | 204871 | 6.58 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1006-BLK1 | File ID: | 12FEB22.D |
| Prepared: | 02/12/17 11:39 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/12/17 13:11 | Instrument: | MS-V5 | | |
| Batch: | B[B1006 | Sequence: | 1702423 | Calibration: | 1702011 |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Chlorobenzene-d5 (IS) | 62590 | 9.62 | 66742 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 279302 | 7.39 | 270832 | 7.39 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1007-BLK1 | File ID: | 13FEB05.D |
| Prepared: | 02/13/17 07:00 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/13/17 08:06 | Instrument: | MS-V5 | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 0.16 | 0.083 | 0.16 | 0.50 | U |
| 108-86-1 | Bromobenzene | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 74-97-5 | Bromochloromethane | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 0.30 | 0.14 | 0.30 | 0.50 | U |
| 75-25-2 | Bromoform | 0.30 | 0.27 | 0.30 | 0.60 | U |
| 74-83-9 | Bromomethane | 0.25 | 0.25 | 0.25 | 0.60 | U |
| 104-51-8 | n-Butylbenzene | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 135-98-8 | sec-Butylbenzene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 98-06-6 | tert-Butylbenzene | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 108-90-7 | Chlorobenzene | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 75-00-3 | Chloroethane | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 67-66-3 | Chloroform | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 74-87-3 | Chloromethane | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 95-49-8 | 2-Chlorotoluene | 0.20 | 0.20 | 0.20 | 0.50 | U |
| 106-43-4 | 4-Chlorotoluene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 124-48-1 | Dibromochloromethane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 0.50 | 0.44 | 0.50 | 1.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 74-95-3 | Dibromomethane | 0.30 | 0.24 | 0.30 | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 0.16 | 0.072 | 0.16 | 0.50 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | 0.062 | 0.16 | 0.50 | U |
| 75-71-8 | Dichlorodifluoromethane | 0.16 | 0.099 | 0.16 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1007-BLK1 | File ID: | 13FEB05.D |
| Prepared: | 02/13/17 07:00 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/13/17 08:06 | Instrument: | MS-V5 | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-34-3 | 1,1-Dichloroethane | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.16 | 0.15 | 0.16 | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 142-28-9 | 1,3-Dichloropropane | 0.16 | 0.086 | 0.16 | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 100-41-4 | Ethylbenzene | 0.16 | 0.098 | 0.16 | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 98-82-8 | Isopropylbenzene | 0.16 | 0.14 | 0.16 | 0.50 | U |
| 99-87-6 | p-Isopropyltoluene | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-09-2 | Methylene chloride | 0.50 | 0.48 | 0.50 | 1.0 | U |
| 1634-04-4 | Methyl t-butyl ether | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 91-20-3 | Naphthalene | 0.40 | 0.36 | 0.40 | 0.50 | U |
| 103-65-1 | n-Propylbenzene | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 100-42-5 | Styrene | 0.16 | 0.068 | 0.16 | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.20 | 0.17 | 0.20 | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 108-88-3 | Toluene | 0.16 | 0.093 | 0.16 | 0.50 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.20 | 0.19 | 0.20 | 0.50 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1007-BLK1 | File ID: | 13FEB05.D |
| Prepared: | 02/13/17 07:00 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/13/17 08:06 | Instrument: | MS-V5 | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.16 | 0.11 | 0.16 | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 0.16 | 0.16 | 0.16 | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.16 | 0.085 | 0.16 | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | 0.16 | 0.13 | 0.16 | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 0.33 | 0.24 | 0.33 | 0.50 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 75-01-4 | Vinyl chloride | 0.16 | 0.12 | 0.16 | 0.50 | U |
| 67-64-1 | Acetone | 5.0 | 4.6 | 5.0 | 10 | U |
| 994-05-8 | t-Amyl Methyl ether | 0.30 | 0.25 | 0.30 | 0.50 | U |
| 75-65-0 | t-Butyl alcohol | 10 | 9.4 | 10 | 15 | U |
| 75-15-0 | Carbon disulfide | 0.40 | 0.38 | 0.40 | 1.0 | U |
| 108-20-3 | Diisopropyl ether | 0.30 | 0.23 | 0.30 | 0.50 | U |
| 637-92-3 | Ethyl t-butyl ether | 0.20 | 0.18 | 0.20 | 0.50 | U |
| 78-93-3 | Methyl ethyl ketone | 3.0 | 2.5 | 3.0 | 10 | U |
| 179601-23-1 | p- & m-Xylenes | 0.30 | 0.28 | 0.30 | 0.50 | U |
| 95-47-6 | o-Xylene | 0.16 | 0.082 | 0.16 | 0.50 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 10.520 | 105 | 81 - 118 | |
| Toluene-d8 (Surrogate) | 10.000 | 9.4400 | 94.4 | 89 - 112 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 9.4200 | 94.2 | 85 - 114 | |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Pentafluorobenzene (IS) | 207874 | 6.59 | 210178 | 6.59 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1007-BLK1 | File ID: | 13FEB05.D |
| Prepared: | 02/13/17 07:00 | Preparation: | EPA 5030 Water MS | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/13/17 08:06 | Instrument: | MS-V5 | | |
| Batch: | B[B1007 | Sequence: | 1702431 | Calibration: | 1702011 |

| INTERNAL STANDARD | AREA | RT | REF AREA | REF RT | Q |
|---|---|---|---|---|---|
| Chlorobenzene-d5 (IS) | 69153 | 9.62 | 68627 | 9.62 | |
| 1,4-Difluorobenzene (IS) | 293378 | 7.39 | 276582 | 7.39 | |

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9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-14

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Benzene | 25.000 | 0.13000 | 25.750 | 102 | 79 - 120 |
| Bromobenzene | 25.000 | ND | 25.910 | 104 | 80 - 120 |
| Bromochloromethane | 25.000 | ND | 26.780 | 107 | 78 - 123 |
| Bromodichloromethane | 25.000 | ND | 26.510 | 106 | 79 - 125 |
| Bromoform | 25.000 | ND | 24.950 | 99.8 | 66 - 130 |
| Bromomethane | 25.000 | ND | 23.450 | 93.8 | 53 - 141 |
| n-Butylbenzene | 25.000 | ND | 26.900 | 108 | 75 - 128 |
| sec-Butylbenzene | 25.000 | ND | 24.370 | 97.5 | 77 - 126 |
| tert-Butylbenzene | 25.000 | ND | 25.420 | 102 | 78 - 124 |
| Carbon tetrachloride | 25.000 | ND | 30.350 | 121 | 72 - 136 |
| Chlorobenzene | 25.000 | 0.89000 | 28.090 | 109 | 82 - 118 |
| Chloroethane | 25.000 | ND | 26.650 | 107 | 60 - 138 |
| Chloroform | 25.000 | ND | 26.810 | 107 | 79 - 124 |
| Chloromethane | 25.000 | ND | 27.450 | 110 | 50 - 139 |
| 2-Chlorotoluene | 25.000 | ND | 27.090 | 108 | 79 - 122 |
| 4-Chlorotoluene | 25.000 | ND | 26.540 | 106 | 78 - 122 |
| Dibromochloromethane | 25.000 | ND | 26.100 | 104 | 74 - 126 |
| 1,2-Dibromo-3-chloropropane | 25.000 | ND | 23.340 | 93.4 | 62 - 128 |
| 1,2-Dibromoethane | 25.000 | ND | 25.410 | 102 | 77 - 121 |
| Dibromomethane | 25.000 | ND | 23.920 | 95.7 | 79 - 123 |
| 1,2-Dichlorobenzene | 25.000 | 1.8900 | 26.490 | 98.4 | 80 - 119 |
| 1,3-Dichlorobenzene | 25.000 | ND | 24.790 | 99.2 | 80 - 119 |
| 1,4-Dichlorobenzene | 25.000 | 0.35000 | 26.170 | 103 | 79 - 118 |
| Dichlorodifluoromethane | 25.000 | ND | 30.060 | 120 | 32 - 152 |
| 1,1-Dichloroethane | 25.000 | 0.14000 | 24.640 | 98.0 | 77 - 125 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-14

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| 1,2-Dichloroethane | 25.000 | ND | 26.380 | 106 | 73 - 128 |
| 1,1-Dichloroethene | 25.000 | ND | 28.910 | 116 | 71 - 131 |
| cis-1,2-Dichloroethene | 25.000 | 6.1500 | 33.860 | 111 | 78 - 123 |
| trans-1,2-Dichloroethene | 25.000 | 0.85000 | 28.880 | 112 | 75 - 124 |
| 1,2-Dichloropropane | 25.000 | ND | 24.500 | 98.0 | 78 - 122 |
| 1,3-Dichloropropane | 25.000 | ND | 25.890 | 104 | 80 - 119 |
| 2,2-Dichloropropane | 25.000 | ND | 29.210 | 117 | 60 - 139 |
| 1,1-Dichloropropene | 25.000 | ND | 29.070 | 116 | 79 - 125 |
| cis-1,3-Dichloropropene | 25.000 | ND | 26.370 | 105 | 75 - 124 |
| trans-1,3-Dichloropropene | 25.000 | ND | 25.910 | 104 | 73 - 127 |
| Ethylbenzene | 25.000 | ND | 27.260 | 109 | 79 - 121 |
| Hexachlorobutadiene | 25.000 | ND | 29.220 | 117 | 66 - 134 |
| Isopropylbenzene | 25.000 | ND | 24.730 | 98.9 | 72 - 131 |
| p-Isopropyltoluene | 25.000 | ND | 25.650 | 103 | 77 - 127 |
| Methylene chloride | 25.000 | ND | 26.400 | 106 | 74 - 124 |
| Methyl t-butyl ether | 25.000 | ND | 25.990 | 104 | 71 - 124 |
| Naphthalene | 25.000 | ND | 27.500 | 110 | 61 - 128 |
| n-Propylbenzene | 25.000 | ND | 25.810 | 103 | 76 - 126 |
| Styrene | 25.000 | ND | 27.420 | 110 | 78 - 123 |
| 1,1,1,2-Tetrachloroethane | 25.000 | ND | 26.050 | 104 | 78 - 124 |
| 1,1,2,2-Tetrachloroethane | 25.000 | ND | 24.990 | 100 | 71 - 121 |
| Tetrachloroethene | 25.000 | ND | 29.170 | 117 | 74 - 129 |
| Toluene | 25.000 | ND | 26.520 | 106 | 80 - 121 |
| 1,2,3-Trichlorobenzene | 25.000 | ND | 26.710 | 107 | 69 - 129 |
| 1,2,4-Trichlorobenzene | 25.000 | ND | 26.670 | 107 | 69 - 130 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-14

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.000 | ND | 27.640 | 111 | 74 - 131 |
| 1,1,2-Trichloroethane | 25.000 | ND | 25.620 | 102 | 80 - 119 |
| Trichloroethene | 25.000 | 0.49000 | 28.090 | 110 | 79 - 123 |
| Trichlorofluoromethane | 25.000 | ND | 30.060 | 120 | 65 - 141 |
| 1,2,3-Trichloropropane | 25.000 | ND | 27.270 | 109 | 73 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.000 | ND | 27.500 | 110 | 70 - 136 |
| 1,2,4-Trimethylbenzene | 25.000 | ND | 25.980 | 104 | 76 - 124 |
| 1,3,5-Trimethylbenzene | 25.000 | ND | 25.750 | 103 | 75 - 124 |
| Vinyl chloride | 25.000 | 1.2300 | 32.560 | 125 | 58 - 137 |
| Total Xylenes | 75.000 | ND | 81.570 | 109 | 79 - 121 |
| Acetone | 320.00 | ND | 351.65 | 110 | 39 - 160 |
| Acetonitrile | 160.00 | ND | 228.35 | 143 * | 50 - 142 |
| Allyl chloride | 32.000 | ND | 35.390 | 111 | 68 - 130 |
| t-Amyl Methyl ether | 16.000 | ND | 17.190 | 107 | 68 - 128 |
| Benzyl chloride | 32.000 | ND | 34.500 | 108 | 42 - 138 |
| t-Butyl alcohol | 800.00 | ND | 833.73 | 104 | 68 - 129 |
| Carbon disulfide | 32.000 | ND | 37.360 | 117 | 64 - 133 |
| Chloroprene | 32.000 | ND | 35.770 | 112 | 65 - 135 |
| Diisopropyl ether | 16.000 | ND | 19.280 | 120 | 67 - 128 |
| Ethyl t-butyl ether | 16.000 | ND | 16.520 | 103 | 70 - 127 |
| 2-Hexanone | 320.00 | ND | 325.17 | 102 | 57 - 139 |
| Methyl ethyl ketone | 160.00 | ND | 156.81 | 98.0 | 56 - 143 |
| Methyl isobutyl ketone | 160.00 | ND | 157.83 | 98.6 | 67 - 130 |
| Vinyl acetate | 160.00 | ND | 154.43 | 96.5 | 54 - 146 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-14

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Benzene | 25.000 | 21.980 | 87.4 | 15.8 | 30 | 79 - 120 |
| Bromobenzene | 25.000 | 24.330 | 97.3 | 6.29 | 30 | 80 - 120 |
| Bromochloromethane | 25.000 | 21.590 | 86.4 | 21.5 | 30 | 78 - 123 |
| Bromodichloromethane | 25.000 | 24.230 | 96.9 | 8.99 | 30 | 79 - 125 |
| Bromoform | 25.000 | 24.060 | 96.2 | 3.63 | 30 | 66 - 130 |
| Bromomethane | 25.000 | 22.220 | 88.9 | 5.39 | 30 | 53 - 141 |
| n-Butylbenzene | 25.000 | 25.530 | 102 | 5.23 | 30 | 75 - 128 |
| sec-Butylbenzene | 25.000 | 22.400 | 89.6 | 8.42 | 30 | 77 - 126 |
| tert-Butylbenzene | 25.000 | 23.480 | 93.9 | 7.93 | 30 | 78 - 124 |
| Carbon tetrachloride | 25.000 | 25.710 | 103 | 16.6 | 30 | 72 - 136 |
| Chlorobenzene | 25.000 | 26.510 | 102 | 5.79 | 30 | 82 - 118 |
| Chloroethane | 25.000 | 23.980 | 95.9 | 10.5 | 30 | 60 - 138 |
| Chloroform | 25.000 | 22.700 | 90.8 | 16.6 | 30 | 79 - 124 |
| Chloromethane | 25.000 | 24.660 | 98.6 | 10.7 | 30 | 50 - 139 |
| 2-Chlorotoluene | 25.000 | 25.970 | 104 | 4.22 | 30 | 79 - 122 |
| 4-Chlorotoluene | 25.000 | 25.330 | 101 | 4.67 | 30 | 78 - 122 |
| Dibromochloromethane | 25.000 | 24.540 | 98.2 | 6.16 | 30 | 74 - 126 |
| 1,2-Dibromo-3-chloropropane | 25.000 | 20.210 | 80.8 | 14.4 | 30 | 62 - 128 |
| 1,2-Dibromoethane | 25.000 | 22.710 | 90.8 | 11.2 | 30 | 77 - 121 |
| Dibromomethane | 25.000 | 21.630 | 86.5 | 10.1 | 30 | 79 - 123 |
| 1,2-Dichlorobenzene | 25.000 | 24.810 | 91.7 | 6.55 | 30 | 80 - 119 |
| 1,3-Dichlorobenzene | 25.000 | 23.050 | 92.2 | 7.27 | 30 | 80 - 119 |
| 1,4-Dichlorobenzene | 25.000 | 24.710 | 97.4 | 5.74 | 30 | 79 - 118 |
| Dichlorodifluoromethane | 25.000 | 25.460 | 102 | 16.6 | 30 | 32 - 152 |
| 1,1-Dichloroethane | 25.000 | 21.670 | 86.1 | 12.8 | 30 | 77 - 125 |
| 1,2-Dichloroethane | 25.000 | 21.640 | 86.6 | 19.7 | 30 | 73 - 128 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-14

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 25.000 | 25.540 | 102 | 12.4 | 30 | 71 - 131 |
| cis-1,2-Dichloroethene | 25.000 | 28.330 | 88.7 | 17.8 | 30 | 78 - 123 |
| trans-1,2-Dichloroethene | 25.000 | 25.140 | 97.2 | 13.8 | 30 | 75 - 124 |
| 1,2-Dichloropropane | 25.000 | 23.000 | 92.0 | 6.32 | 30 | 78 - 122 |
| 1,3-Dichloropropane | 25.000 | 22.810 | 91.2 | 12.6 | 30 | 80 - 119 |
| 2,2-Dichloropropane | 25.000 | 24.720 | 98.9 | 16.7 | 30 | 60 - 139 |
| 1,1-Dichloropropene | 25.000 | 24.790 | 99.2 | 15.9 | 30 | 79 - 125 |
| cis-1,3-Dichloropropene | 25.000 | 23.390 | 93.6 | 12.0 | 30 | 75 - 124 |
| trans-1,3-Dichloropropene | 25.000 | 23.130 | 92.5 | 11.3 | 30 | 73 - 127 |
| Ethylbenzene | 25.000 | 25.990 | 104 | 4.77 | 30 | 79 - 121 |
| Hexachlorobutadiene | 25.000 | 28.730 | 115 | 1.69 | 30 | 66 - 134 |
| Isopropylbenzene | 25.000 | 23.970 | 95.9 | 3.12 | 30 | 72 - 131 |
| p-Isopropyltoluene | 25.000 | 24.130 | 96.5 | 6.11 | 30 | 77 - 127 |
| Methylene chloride | 25.000 | 23.430 | 93.7 | 11.9 | 30 | 74 - 124 |
| Methyl t-butyl ether | 25.000 | 21.830 | 87.3 | 17.4 | 30 | 71 - 124 |
| Naphthalene | 25.000 | 25.230 | 101 | 8.61 | 30 | 61 - 128 |
| n-Propylbenzene | 25.000 | 24.730 | 98.9 | 4.27 | 30 | 76 - 126 |
| Styrene | 25.000 | 25.330 | 101 | 7.92 | 30 | 78 - 123 |
| 1,1,1,2-Tetrachloroethane | 25.000 | 24.810 | 99.2 | 4.88 | 30 | 78 - 124 |
| 1,1,2,2-Tetrachloroethane | 25.000 | 23.240 | 93.0 | 7.26 | 30 | 71 - 121 |
| Tetrachloroethene | 25.000 | 26.070 | 104 | 11.2 | 30 | 74 - 129 |
| Toluene | 25.000 | 23.350 | 93.4 | 12.7 | 30 | 80 - 121 |
| 1,2,3-Trichlorobenzene | 25.000 | 24.700 | 98.8 | 7.82 | 30 | 69 - 129 |
| 1,2,4-Trichlorobenzene | 25.000 | 25.280 | 101 | 5.35 | 30 | 69 - 130 |
| 1,1,1-Trichloroethane | 25.000 | 24.310 | 97.2 | 12.8 | 30 | 74 - 131 |
| 1,1,2-Trichloroethane | 25.000 | 21.320 | 85.3 | 18.3 | 30 | 80 - 119 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**27MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-14

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Trichloroethene | 25.000 | 26.540 | 104 | 5.67 | 30 | 79 - 123 |
| Trichlorofluoromethane | 25.000 | 25.280 | 101 | 17.3 | 30 | 65 - 141 |
| 1,2,3-Trichloropropane | 25.000 | 27.640 | 111 | 1.35 | 30 | 73 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.000 | 24.400 | 97.6 | 11.9 | 30 | 70 - 136 |
| 1,2,4-Trimethylbenzene | 25.000 | 23.770 | 95.1 | 8.88 | 30 | 76 - 124 |
| 1,3,5-Trimethylbenzene | 25.000 | 23.590 | 94.4 | 8.76 | 30 | 75 - 124 |
| Vinyl chloride | 25.000 | 28.670 | 110 | 12.7 | 30 | 58 - 137 |
| Total Xylenes | 75.000 | 75.770 | 101 | 7.37 | 30 | 79 - 121 |
| Acetone | 320.00 | 291.72 | 91.2 | 18.6 | 30 | 39 - 160 |
| Acetonitrile | 160.00 | 204.32 | 128 | 11.1 | 30 | 50 - 142 |
| Allyl chloride | 32.000 | 31.810 | 99.4 | 10.7 | 30 | 68 - 130 |
| t-Amyl Methyl ether | 16.000 | 14.140 | 88.4 | 19.5 | 30 | 68 - 128 |
| Benzyl chloride | 32.000 | 33.270 | 104 | 3.63 | 30 | 42 - 138 |
| t-Butyl alcohol | 800.00 | 747.61 | 93.5 | 10.9 | 30 | 68 - 129 |
| Carbon disulfide | 32.000 | 33.640 | 105 | 10.5 | 30 | 64 - 133 |
| Chloroprene | 32.000 | 33.320 | 104 | 7.09 | 30 | 65 - 135 |
| Diisopropyl ether | 16.000 | 17.350 | 108 | 10.5 | 30 | 67 - 128 |
| Ethyl t-butyl ether | 16.000 | 14.250 | 89.1 | 14.8 | 30 | 70 - 127 |
| 2-Hexanone | 320.00 | 284.29 | 88.8 | 13.4 | 30 | 57 - 139 |
| Methyl ethyl ketone | 160.00 | 129.80 | 81.1 | 18.8 | 30 | 56 - 143 |
| Methyl isobutyl ketone | 160.00 | 140.83 | 88.0 | 11.4 | 30 | 67 - 130 |
| Vinyl acetate | 160.00 | 131.01 | 81.9 | 16.4 | 30 | 54 - 146 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-17

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Benzene | 25.000 | ND | 23.780 | 95.1 | 79 - 120 |
| Bromobenzene | 25.000 | ND | 24.880 | 99.5 | 80 - 120 |
| Bromochloromethane | 25.000 | ND | 24.540 | 98.2 | 78 - 123 |
| Bromodichloromethane | 25.000 | ND | 25.420 | 102 | 79 - 125 |
| Bromoform | 25.000 | ND | 23.810 | 95.2 | 66 - 130 |
| Bromomethane | 25.000 | ND | 16.250 | 65.0 | 53 - 141 |
| n-Butylbenzene | 25.000 | ND | 26.210 | 105 | 75 - 128 |
| sec-Butylbenzene | 25.000 | ND | 23.510 | 94.0 | 77 - 126 |
| tert-Butylbenzene | 25.000 | 0.29000 | 24.730 | 97.8 | 78 - 124 |
| Carbon tetrachloride | 25.000 | ND | 26.170 | 105 | 72 - 136 |
| Chlorobenzene | 25.000 | ND | 26.140 | 105 | 82 - 118 |
| Chloroethane | 25.000 | ND | 24.770 | 99.1 | 60 - 138 |
| Chloroform | 25.000 | ND | 23.990 | 96.0 | 79 - 124 |
| Chloromethane | 25.000 | ND | 19.940 | 79.8 | 50 - 139 |
| 2-Chlorotoluene | 25.000 | ND | 25.890 | 104 | 79 - 122 |
| 4-Chlorotoluene | 25.000 | ND | 25.210 | 101 | 78 - 122 |
| Dibromochloromethane | 25.000 | ND | 24.920 | 99.7 | 74 - 126 |
| 1,2-Dibromo-3-chloropropane | 25.000 | ND | 22.120 | 88.5 | 62 - 128 |
| 1,2-Dibromoethane | 25.000 | ND | 24.570 | 98.3 | 77 - 121 |
| Dibromomethane | 25.000 | ND | 22.620 | 90.5 | 79 - 123 |
| 1,2-Dichlorobenzene | 25.000 | ND | 24.220 | 96.9 | 80 - 119 |
| 1,3-Dichlorobenzene | 25.000 | ND | 23.450 | 93.8 | 80 - 119 |
| 1,4-Dichlorobenzene | 25.000 | ND | 24.820 | 99.3 | 79 - 118 |
| Dichlorodifluoromethane | 25.000 | ND | 27.400 | 110 | 32 - 152 |
| 1,1-Dichloroethane | 25.000 | ND | 21.700 | 86.8 | 77 - 125 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-17

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| 1,2-Dichloroethane | 25.000 | ND | 23.240 | 93.0 | 73 - 128 |
| 1,1-Dichloroethene | 25.000 | ND | 26.680 | 107 | 71 - 131 |
| cis-1,2-Dichloroethene | 25.000 | ND | 24.280 | 97.1 | 78 - 123 |
| trans-1,2-Dichloroethene | 25.000 | ND | 25.160 | 101 | 75 - 124 |
| 1,2-Dichloropropane | 25.000 | ND | 23.480 | 93.9 | 78 - 122 |
| 1,3-Dichloropropane | 25.000 | ND | 24.360 | 97.4 | 80 - 119 |
| 2,2-Dichloropropane | 25.000 | ND | 26.030 | 104 | 60 - 139 |
| 1,1-Dichloropropene | 25.000 | ND | 25.670 | 103 | 79 - 125 |
| cis-1,3-Dichloropropene | 25.000 | ND | 24.150 | 96.6 | 75 - 124 |
| trans-1,3-Dichloropropene | 25.000 | ND | 24.670 | 98.7 | 73 - 127 |
| Ethylbenzene | 25.000 | 0.29000 | 26.750 | 106 | 79 - 121 |
| Hexachlorobutadiene | 25.000 | ND | 31.060 | 124 | 66 - 134 |
| Isopropylbenzene | 25.000 | 17.380 | 38.530 | 84.6 | 72 - 131 |
| p-Isopropyltoluene | 25.000 | ND | 24.990 | 100 | 77 - 127 |
| Methylene chloride | 25.000 | ND | 23.210 | 92.8 | 74 - 124 |
| Methyl t-butyl ether | 25.000 | ND | 23.220 | 92.9 | 71 - 124 |
| Naphthalene | 25.000 | ND | 29.400 | 118 | 61 - 128 |
| n-Propylbenzene | 25.000 | 1.9800 | 26.590 | 98.4 | 76 - 126 |
| Styrene | 25.000 | ND | 25.860 | 103 | 78 - 123 |
| 1,1,1,2-Tetrachloroethane | 25.000 | ND | 24.850 | 99.4 | 78 - 124 |
| 1,1,2,2-Tetrachloroethane | 25.000 | ND | 24.460 | 97.8 | 71 - 121 |
| Tetrachloroethene | 25.000 | ND | 28.510 | 114 | 74 - 129 |
| Toluene | 25.000 | ND | 24.960 | 99.8 | 80 - 121 |
| 1,2,3-Trichlorobenzene | 25.000 | ND | 28.570 | 114 | 69 - 129 |
| 1,2,4-Trichlorobenzene | 25.000 | ND | 28.490 | 114 | 69 - 130 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-MS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-17

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.000 | ND | 25.320 | 101 | 74 - 131 |
| 1,1,2-Trichloroethane | 25.000 | ND | 24.710 | 98.8 | 80 - 119 |
| Trichloroethene | 25.000 | ND | 26.940 | 108 | 79 - 123 |
| Trichlorofluoromethane | 25.000 | ND | 26.870 | 107 | 65 - 141 |
| 1,2,3-Trichloropropane | 25.000 | ND | 26.870 | 107 | 73 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.000 | ND | 25.760 | 103 | 70 - 136 |
| 1,2,4-Trimethylbenzene | 25.000 | ND | 24.880 | 99.5 | 76 - 124 |
| 1,3,5-Trimethylbenzene | 25.000 | ND | 24.520 | 98.1 | 75 - 124 |
| Vinyl chloride | 25.000 | ND | 24.780 | 99.1 | 58 - 137 |
| Total Xylenes | 75.000 | ND | 77.780 | 104 | 79 - 121 |
| Acetone | 320.00 | ND | 326.24 | 102 | 39 - 160 |
| Acetonitrile | 160.00 | ND | 186.08 | 116 | 50 - 142 |
| Allyl chloride | 32.000 | ND | 31.830 | 99.5 | 68 - 130 |
| t-Amyl Methyl ether | 16.000 | ND | 12.520 | 78.2 | 68 - 128 |
| Benzyl chloride | 32.000 | ND | 32.410 | 101 | 42 - 138 |
| t-Butyl alcohol | 800.00 | ND | 664.25 | 83.0 | 68 - 129 |
| Carbon disulfide | 32.000 | ND | 34.160 | 107 | 64 - 133 |
| Chloroprene | 32.000 | ND | 32.800 | 102 | 65 - 135 |
| Diisopropyl ether | 16.000 | ND | 17.270 | 108 | 67 - 128 |
| Ethyl t-butyl ether | 16.000 | ND | 14.020 | 87.6 | 70 - 127 |
| 2-Hexanone | 320.00 | ND | 287.35 | 89.8 | 57 - 139 |
| Methyl ethyl ketone | 160.00 | ND | 273.06 | 171 * | 56 - 143 |
| Methyl isobutyl ketone | 160.00 | ND | 145.42 | 90.9 | 67 - 130 |
| Vinyl acetate | 160.00 | ND | 133.99 | 83.7 | 54 - 146 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-17

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Benzene | 25.000 | 23.240 | 93.0 | 2.30 | 30 | 79 - 120 |
| Bromobenzene | 25.000 | 24.060 | 96.2 | 3.35 | 30 | 80 - 120 |
| Bromochloromethane | 25.000 | 24.160 | 96.6 | 1.56 | 30 | 78 - 123 |
| Bromodichloromethane | 25.000 | 24.470 | 97.9 | 3.81 | 30 | 79 - 125 |
| Bromoform | 25.000 | 23.110 | 92.4 | 2.98 | 30 | 66 - 130 |
| Bromomethane | 25.000 | 18.660 | 74.6 | 13.8 | 30 | 53 - 141 |
| n-Butylbenzene | 25.000 | 24.740 | 99.0 | 5.77 | 30 | 75 - 128 |
| sec-Butylbenzene | 25.000 | 23.000 | 92.0 | 2.19 | 30 | 77 - 126 |
| tert-Butylbenzene | 25.000 | 23.960 | 94.7 | 3.16 | 30 | 78 - 124 |
| Carbon tetrachloride | 25.000 | 24.610 | 98.4 | 6.14 | 30 | 72 - 136 |
| Chlorobenzene | 25.000 | 24.850 | 99.4 | 5.06 | 30 | 82 - 118 |
| Chloroethane | 25.000 | 24.600 | 98.4 | 0.689 | 30 | 60 - 138 |
| Chloroform | 25.000 | 23.530 | 94.1 | 1.94 | 30 | 79 - 124 |
| Chloromethane | 25.000 | 20.790 | 83.2 | 4.17 | 30 | 50 - 139 |
| 2-Chlorotoluene | 25.000 | 24.310 | 97.2 | 6.29 | 30 | 79 - 122 |
| 4-Chlorotoluene | 25.000 | 24.370 | 97.5 | 3.39 | 30 | 78 - 122 |
| Dibromochloromethane | 25.000 | 24.070 | 96.3 | 3.47 | 30 | 74 - 126 |
| 1,2-Dibromo-3-chloropropane | 25.000 | 20.890 | 83.6 | 5.72 | 30 | 62 - 128 |
| 1,2-Dibromoethane | 25.000 | 23.460 | 93.8 | 4.62 | 30 | 77 - 121 |
| Dibromomethane | 25.000 | 21.710 | 86.8 | 4.11 | 30 | 79 - 123 |
| 1,2-Dichlorobenzene | 25.000 | 23.720 | 94.9 | 2.09 | 30 | 80 - 119 |
| 1,3-Dichlorobenzene | 25.000 | 22.920 | 91.7 | 2.29 | 30 | 80 - 119 |
| 1,4-Dichlorobenzene | 25.000 | 23.880 | 95.5 | 3.86 | 30 | 79 - 118 |
| Dichlorodifluoromethane | 25.000 | 25.700 | 103 | 6.40 | 30 | 32 - 152 |
| 1,1-Dichloroethane | 25.000 | 21.970 | 87.9 | 1.24 | 30 | 77 - 125 |
| 1,2-Dichloroethane | 25.000 | 23.040 | 92.2 | 0.864 | 30 | 73 - 128 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-17

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 25.000 | 26.460 | 106 | 0.828 | 30 | 71 - 131 |
| cis-1,2-Dichloroethene | 25.000 | 23.560 | 94.2 | 3.01 | 30 | 78 - 123 |
| trans-1,2-Dichloroethene | 25.000 | 25.300 | 101 | 0.555 | 30 | 75 - 124 |
| 1,2-Dichloropropane | 25.000 | 22.220 | 88.9 | 5.51 | 30 | 78 - 122 |
| 1,3-Dichloropropane | 25.000 | 23.970 | 95.9 | 1.61 | 30 | 80 - 119 |
| 2,2-Dichloropropane | 25.000 | 25.190 | 101 | 3.28 | 30 | 60 - 139 |
| 1,1-Dichloropropene | 25.000 | 24.920 | 99.7 | 2.97 | 30 | 79 - 125 |
| cis-1,3-Dichloropropene | 25.000 | 23.650 | 94.6 | 2.09 | 30 | 75 - 124 |
| trans-1,3-Dichloropropene | 25.000 | 23.240 | 93.0 | 5.97 | 30 | 73 - 127 |
| Ethylbenzene | 25.000 | 25.400 | 100 | 5.18 | 30 | 79 - 121 |
| Hexachlorobutadiene | 25.000 | 28.190 | 113 | 9.69 | 30 | 66 - 134 |
| Isopropylbenzene | 25.000 | 37.810 | 81.7 | 1.89 | 30 | 72 - 131 |
| p-Isopropyltoluene | 25.000 | 23.970 | 95.9 | 4.17 | 30 | 77 - 127 |
| Methylene chloride | 25.000 | 22.370 | 89.5 | 3.69 | 30 | 74 - 124 |
| Methyl t-butyl ether | 25.000 | 23.670 | 94.7 | 1.92 | 30 | 71 - 124 |
| Naphthalene | 25.000 | 29.130 | 117 | 0.923 | 30 | 61 - 128 |
| n-Propylbenzene | 25.000 | 25.300 | 93.3 | 4.97 | 30 | 76 - 126 |
| Styrene | 25.000 | 25.160 | 101 | 2.74 | 30 | 78 - 123 |
| 1,1,1,2-Tetrachloroethane | 25.000 | 23.300 | 93.2 | 6.44 | 30 | 78 - 124 |
| 1,1,2,2-Tetrachloroethane | 25.000 | 23.700 | 94.8 | 3.16 | 30 | 71 - 121 |
| Tetrachloroethene | 25.000 | 26.250 | 105 | 8.25 | 30 | 74 - 129 |
| Toluene | 25.000 | 24.120 | 96.5 | 3.42 | 30 | 80 - 121 |
| 1,2,3-Trichlorobenzene | 25.000 | 26.820 | 107 | 6.32 | 30 | 69 - 129 |
| 1,2,4-Trichlorobenzene | 25.000 | 26.440 | 106 | 7.46 | 30 | 69 - 130 |
| 1,1,1-Trichloroethane | 25.000 | 24.700 | 98.8 | 2.48 | 30 | 74 - 131 |
| 1,1,2-Trichloroethane | 25.000 | 23.560 | 94.2 | 4.76 | 30 | 80 - 119 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-8260B

**OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-MSD1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-17

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Trichloroethene | 25.000 | 25.640 | 103 | 4.94 | 30 | 79 - 123 |
| Trichlorofluoromethane | 25.000 | 25.840 | 103 | 3.91 | 30 | 65 - 141 |
| 1,2,3-Trichloropropane | 25.000 | 24.540 | 98.2 | 9.06 | 30 | 73 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.000 | 24.950 | 99.8 | 3.19 | 30 | 70 - 136 |
| 1,2,4-Trimethylbenzene | 25.000 | 24.030 | 96.1 | 3.48 | 30 | 76 - 124 |
| 1,3,5-Trimethylbenzene | 25.000 | 22.660 | 90.6 | 7.88 | 30 | 75 - 124 |
| Vinyl chloride | 25.000 | 25.690 | 103 | 3.61 | 30 | 58 - 137 |
| Total Xylenes | 75.000 | 73.960 | 98.6 | 5.03 | 30 | 79 - 121 |
| Acetone | 320.00 | 348.65 | 109 | 6.64 | 30 | 39 - 160 |
| Acetonitrile | 160.00 | 200.37 | 125 | 7.40 | 30 | 50 - 142 |
| Allyl chloride | 32.000 | 31.690 | 99.0 | 0.441 | 30 | 68 - 130 |
| t-Amyl Methyl ether | 16.000 | 13.270 | 82.9 | 5.82 | 30 | 68 - 128 |
| Benzyl chloride | 32.000 | 33.130 | 104 | 2.20 | 30 | 42 - 138 |
| t-Butyl alcohol | 800.00 | 787.01 | 98.4 | 16.9 | 30 | 68 - 129 |
| Carbon disulfide | 32.000 | 34.740 | 109 | 1.68 | 30 | 64 - 133 |
| Chloroprene | 32.000 | 32.540 | 102 | 0.796 | 30 | 65 - 135 |
| Diisopropyl ether | 16.000 | 17.240 | 108 | 0.174 | 30 | 67 - 128 |
| Ethyl t-butyl ether | 16.000 | 14.680 | 91.8 | 4.60 | 30 | 70 - 127 |
| 2-Hexanone | 320.00 | 303.23 | 94.8 | 5.38 | 30 | 57 - 139 |
| Methyl ethyl ketone | 160.00 | 296.26 | 185 * | 8.15 | 30 | 56 - 143 |
| Methyl isobutyl ketone | 160.00 | 151.82 | 94.9 | 4.31 | 30 | 67 - 130 |
| Vinyl acetate | 160.00 | 140.87 | 88.0 | 5.01 | 30 | 54 - 146 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Benzene | 25.000 | 22.400 | 89.6 | 79 - 120 |
| Bromobenzene | 25.000 | 23.360 | 93.4 | 80 - 120 |
| Bromochloromethane | 25.000 | 23.010 | 92.0 | 78 - 123 |
| Bromodichloromethane | 25.000 | 25.140 | 101 | 79 - 125 |
| Bromoform | 25.000 | 22.170 | 88.7 | 66 - 130 |
| Bromomethane | 25.000 | 18.430 | 73.7 | 53 - 141 |
| n-Butylbenzene | 25.000 | 25.180 | 101 | 75 - 128 |
| sec-Butylbenzene | 25.000 | 22.030 | 88.1 | 77 - 126 |
| tert-Butylbenzene | 25.000 | 23.780 | 95.1 | 78 - 124 |
| Carbon tetrachloride | 25.000 | 26.040 | 104 | 72 - 136 |
| Chlorobenzene | 25.000 | 25.330 | 101 | 82 - 118 |
| Chloroethane | 25.000 | 22.890 | 91.6 | 60 - 138 |
| Chloroform | 25.000 | 23.040 | 92.2 | 79 - 124 |
| Chloromethane | 25.000 | 22.110 | 88.4 | 50 - 139 |
| 2-Chlorotoluene | 25.000 | 24.690 | 98.8 | 79 - 122 |
| 4-Chlorotoluene | 25.000 | 24.190 | 96.8 | 78 - 122 |
| Dibromochloromethane | 25.000 | 24.590 | 98.4 | 74 - 126 |
| 1,2-Dibromo-3-chloropropane | 25.000 | 20.120 | 80.5 | 62 - 128 |
| 1,2-Dibromoethane | 25.000 | 23.110 | 92.4 | 77 - 121 |
| Dibromomethane | 25.000 | 22.530 | 90.1 | 79 - 123 |
| 1,2-Dichlorobenzene | 25.000 | 22.850 | 91.4 | 80 - 119 |
| 1,3-Dichlorobenzene | 25.000 | 22.640 | 90.6 | 80 - 119 |
| 1,4-Dichlorobenzene | 25.000 | 23.360 | 93.4 | 79 - 118 |
| Dichlorodifluoromethane | 25.000 | 27.270 | 109 | 32 - 152 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| 1,1-Dichloroethane | 25.000 | 20.790 | 83.2 | 77 - 125 |
| 1,2-Dichloroethane | 25.000 | 21.970 | 87.9 | 73 - 128 |
| 1,1-Dichloroethene | 25.000 | 25.900 | 104 | 71 - 131 |
| cis-1,2-Dichloroethene | 25.000 | 22.550 | 90.2 | 78 - 123 |
| trans-1,2-Dichloroethene | 25.000 | 24.070 | 96.3 | 75 - 124 |
| 1,2-Dichloropropane | 25.000 | 22.840 | 91.4 | 78 - 122 |
| 1,3-Dichloropropane | 25.000 | 23.250 | 93.0 | 80 - 119 |
| 2,2-Dichloropropane | 25.000 | 25.350 | 101 | 60 - 139 |
| 1,1-Dichloropropene | 25.000 | 25.020 | 100 | 79 - 125 |
| cis-1,3-Dichloropropene | 25.000 | 23.690 | 94.8 | 75 - 124 |
| trans-1,3-Dichloropropene | 25.000 | 23.890 | 95.6 | 73 - 127 |
| Ethylbenzene | 25.000 | 25.280 | 101 | 79 - 121 |
| Hexachlorobutadiene | 25.000 | 27.360 | 109 | 66 - 134 |
| Isopropylbenzene | 25.000 | 22.470 | 89.9 | 72 - 131 |
| p-Isopropyltoluene | 25.000 | 23.880 | 95.5 | 77 - 127 |
| Methylene chloride | 25.000 | 22.820 | 91.3 | 74 - 124 |
| Methyl t-butyl ether | 25.000 | 21.640 | 86.6 | 71 - 124 |
| Naphthalene | 25.000 | 23.800 | 95.2 | 61 - 128 |
| n-Propylbenzene | 25.000 | 24.000 | 96.0 | 76 - 126 |
| Styrene | 25.000 | 24.270 | 97.1 | 78 - 123 |
| 1,1,1,2-Tetrachloroethane | 25.000 | 23.440 | 93.8 | 78 - 124 |
| 1,1,2,2-Tetrachloroethane | 25.000 | 21.790 | 87.2 | 71 - 121 |
| Tetrachloroethene | 25.000 | 29.560 | 118 | 74 - 129 |
| Toluene | 25.000 | 24.650 | 98.6 | 80 - 121 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | 25.000 | 23.880 | 95.5 | 69 - 129 |
| 1,2,4-Trichlorobenzene | 25.000 | 24.580 | 98.3 | 69 - 130 |
| 1,1,1-Trichloroethane | 25.000 | 24.710 | 98.8 | 74 - 131 |
| 1,1,2-Trichloroethane | 25.000 | 22.730 | 90.9 | 80 - 119 |
| Trichloroethene | 25.000 | 26.090 | 104 | 79 - 123 |
| Trichlorofluoromethane | 25.000 | 25.900 | 104 | 65 - 141 |
| 1,2,3-Trichloropropane | 25.000 | 22.890 | 91.6 | 73 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.000 | 24.340 | 97.4 | 70 - 136 |
| 1,2,4-Trimethylbenzene | 25.000 | 24.230 | 96.9 | 76 - 124 |
| 1,3,5-Trimethylbenzene | 25.000 | 22.840 | 91.4 | 75 - 124 |
| Vinyl chloride | 25.000 | 26.120 | 104 | 58 - 137 |
| Total Xylenes | 75.000 | 72.320 | 96.4 | 79 - 121 |
| Acetone | 320.00 | 281.44 | 88.0 | 39 - 160 |
| Acetonitrile | 160.00 | 174.39 | 109 | 50 - 142 |
| Allyl chloride | 32.000 | 30.370 | 94.9 | 68 - 130 |
| t-Amyl Methyl ether | 16.000 | 14.090 | 88.1 | 68 - 128 |
| Benzyl chloride | 32.000 | 30.560 | 95.5 | 42 - 138 |
| t-Butyl alcohol | 800.00 | 630.39 | 78.8 | 68 - 129 |
| Carbon disulfide | 32.000 | 32.040 | 100 | 64 - 133 |
| Chloroprene | 32.000 | 32.310 | 101 | 65 - 135 |
| Diisopropyl ether | 16.000 | 16.710 | 104 | 67 - 128 |
| Ethyl t-butyl ether | 16.000 | 14.040 | 87.8 | 70 - 127 |
| 2-Hexanone | 320.00 | 281.88 | 88.1 | 57 - 139 |
| Methyl ethyl ketone | 160.00 | 129.65 | 81.0 | 56 - 143 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1006
Laboratory ID: B[B1006-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Methyl isobutyl ketone | 160.00 | 138.34 | 86.5 | 67 - 130 |
| Vinyl acetate | 160.00 | 126.04 | 78.8 | 54 - 146 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Benzene | 25.000 | 22.220 | 88.9 | 79 - 120 |
| Bromobenzene | 25.000 | 22.590 | 90.4 | 80 - 120 |
| Bromochloromethane | 25.000 | 23.120 | 92.5 | 78 - 123 |
| Bromodichloromethane | 25.000 | 23.970 | 95.9 | 79 - 125 |
| Bromoform | 25.000 | 20.600 | 82.4 | 66 - 130 |
| Bromomethane | 25.000 | 14.370 | 57.5 | 53 - 141 |
| n-Butylbenzene | 25.000 | 23.540 | 94.2 | 75 - 128 |
| sec-Butylbenzene | 25.000 | 21.120 | 84.5 | 77 - 126 |
| tert-Butylbenzene | 25.000 | 22.390 | 89.6 | 78 - 124 |
| Carbon tetrachloride | 25.000 | 25.450 | 102 | 72 - 136 |
| Chlorobenzene | 25.000 | 23.620 | 94.5 | 82 - 118 |
| Chloroethane | 25.000 | 23.960 | 95.8 | 60 - 138 |
| Chloroform | 25.000 | 22.950 | 91.8 | 79 - 124 |
| Chloromethane | 25.000 | 23.770 | 95.1 | 50 - 139 |
| 2-Chlorotoluene | 25.000 | 23.220 | 92.9 | 79 - 122 |
| 4-Chlorotoluene | 25.000 | 23.090 | 92.4 | 78 - 122 |
| Dibromochloromethane | 25.000 | 23.020 | 92.1 | 74 - 126 |
| 1,2-Dibromo-3-chloropropane | 25.000 | 17.290 | 69.2 | 62 - 128 |
| 1,2-Dibromoethane | 25.000 | 22.260 | 89.0 | 77 - 121 |
| Dibromomethane | 25.000 | 21.690 | 86.8 | 79 - 123 |
| 1,2-Dichlorobenzene | 25.000 | 21.400 | 85.6 | 80 - 119 |
| 1,3-Dichlorobenzene | 25.000 | 21.180 | 84.7 | 80 - 119 |
| 1,4-Dichlorobenzene | 25.000 | 22.330 | 89.3 | 79 - 118 |
| Dichlorodifluoromethane | 25.000 | 26.550 | 106 | 32 - 152 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| 1,1-Dichloroethane | 25.000 | 20.570 | 82.3 | 77 - 125 |
| 1,2-Dichloroethane | 25.000 | 21.870 | 87.5 | 73 - 128 |
| 1,1-Dichloroethene | 25.000 | 24.840 | 99.4 | 71 - 131 |
| cis-1,2-Dichloroethene | 25.000 | 22.720 | 90.9 | 78 - 123 |
| trans-1,2-Dichloroethene | 25.000 | 23.930 | 95.7 | 75 - 124 |
| 1,2-Dichloropropane | 25.000 | 22.430 | 89.7 | 78 - 122 |
| 1,3-Dichloropropane | 25.000 | 22.610 | 90.4 | 80 - 119 |
| 2,2-Dichloropropane | 25.000 | 25.310 | 101 | 60 - 139 |
| 1,1-Dichloropropene | 25.000 | 24.890 | 99.6 | 79 - 125 |
| cis-1,3-Dichloropropene | 25.000 | 22.620 | 90.5 | 75 - 124 |
| trans-1,3-Dichloropropene | 25.000 | 22.020 | 88.1 | 73 - 127 |
| Ethylbenzene | 25.000 | 23.370 | 93.5 | 79 - 121 |
| Hexachlorobutadiene | 25.000 | 26.160 | 105 | 66 - 134 |
| Isopropylbenzene | 25.000 | 21.560 | 86.2 | 72 - 131 |
| p-Isopropyltoluene | 25.000 | 22.080 | 88.3 | 77 - 127 |
| Methylene chloride | 25.000 | 22.920 | 91.7 | 74 - 124 |
| Methyl t-butyl ether | 25.000 | 21.890 | 87.6 | 71 - 124 |
| Naphthalene | 25.000 | 23.440 | 93.8 | 61 - 128 |
| n-Propylbenzene | 25.000 | 22.370 | 89.5 | 76 - 126 |
| Styrene | 25.000 | 23.640 | 94.6 | 78 - 123 |
| 1,1,1,2-Tetrachloroethane | 25.000 | 22.340 | 89.4 | 78 - 124 |
| 1,1,2,2-Tetrachloroethane | 25.000 | 20.240 | 81.0 | 71 - 121 |
| Tetrachloroethene | 25.000 | 27.940 | 112 | 74 - 129 |
| Toluene | 25.000 | 23.590 | 94.4 | 80 - 121 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | 25.000 | 23.470 | 93.9 | 69 - 129 |
| 1,2,4-Trichlorobenzene | 25.000 | 23.650 | 94.6 | 69 - 130 |
| 1,1,1-Trichloroethane | 25.000 | 24.480 | 97.9 | 74 - 131 |
| 1,1,2-Trichloroethane | 25.000 | 23.090 | 92.4 | 80 - 119 |
| Trichloroethene | 25.000 | 25.810 | 103 | 79 - 123 |
| Trichlorofluoromethane | 25.000 | 25.600 | 102 | 65 - 141 |
| 1,2,3-Trichloropropane | 25.000 | 22.510 | 90.0 | 73 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.000 | 23.360 | 93.4 | 70 - 136 |
| 1,2,4-Trimethylbenzene | 25.000 | 22.310 | 89.2 | 76 - 124 |
| 1,3,5-Trimethylbenzene | 25.000 | 22.100 | 88.4 | 75 - 124 |
| Vinyl chloride | 25.000 | 26.600 | 106 | 58 - 137 |
| Total Xylenes | 75.000 | 69.660 | 92.9 | 79 - 121 |
| Acetone | 320.00 | 284.22 | 88.8 | 39 - 160 |
| Acetonitrile | 160.00 | 194.05 | 121 | 50 - 142 |
| Allyl chloride | 32.000 | 29.750 | 93.0 | 68 - 130 |
| t-Amyl Methyl ether | 16.000 | 14.650 | 91.6 | 68 - 128 |
| Benzyl chloride | 32.000 | 27.890 | 87.2 | 42 - 138 |
| t-Butyl alcohol | 800.00 | 725.57 | 90.7 | 68 - 129 |
| Carbon disulfide | 32.000 | 32.510 | 102 | 64 - 133 |
| Chloroprene | 32.000 | 32.110 | 100 | 65 - 135 |
| Diisopropyl ether | 16.000 | 17.200 | 108 | 67 - 128 |
| Ethyl t-butyl ether | 16.000 | 13.730 | 85.8 | 70 - 127 |
| 2-Hexanone | 320.00 | 277.78 | 86.8 | 57 - 139 |
| Methyl ethyl ketone | 160.00 | 130.26 | 81.4 | 56 - 143 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B1007
Laboratory ID: B[B1007-BS1
Preparation: EPA 5030 Water MS
Initial/Final: 25 ml / 25 ml

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Methyl isobutyl ketone | 160.00 | 138.53 | 86.6 | 67 - 130 |
| Vinyl acetate | 160.00 | 128.46 | 80.3 | 54 - 146 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702048
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1702048-TUN1 | 26JAN03.D | 01/26/17 12:01 |
| Cal Standard | 1702048-CAL1 | 26JAN06.D | 01/26/17 16:07 |
| Cal Standard | 1702048-CAL2 | 26JAN07.D | 01/26/17 16:30 |
| Cal Standard | 1702048-CAL3 | 26JAN08.D | 01/26/17 16:53 |
| Cal Standard | 1702048-CAL5 | 26JAN10.D | 01/26/17 17:39 |
| Cal Standard | 1702048-CAL6 | 26JAN11.D | 01/26/17 18:02 |
| Cal Standard | 1702048-CAL4 | 26JAN14.D | 01/26/17 19:12 |
| MS Tune | 1702048-TUN2 | 07FEB05.D | 02/07/17 08:42 |
| Cal Standard | 1702048-CAL7 | 07FEB07.D | 02/07/17 09:30 |
| Cal Standard | 1702048-CAL8 | 07FEB08.D | 02/07/17 09:53 |
| Cal Standard | 1702048-CAL9 | 07FEB09.D | 02/07/17 10:17 |
| Cal Standard | 1702048-CALA | 07FEB10.D | 02/07/17 10:40 |
| Cal Standard | 1702048-CALB | 07FEB11.D | 02/07/17 11:03 |
| Cal Standard | 1702048-CALC | 07FEB12.D | 02/07/17 11:27 |
| MS Tune | 1702048-TUN3 | 13DEC05.D | 12/13/16 09:45 |
| Cal Standard | 1702048-CALD | 13DEC06.D | 12/13/16 10:10 |
| Cal Standard | 1702048-CALE | 13DEC07.D | 12/13/16 10:32 |
| Cal Standard | 1702048-CALF | 13DEC08.D | 12/13/16 10:55 |
| Cal Standard | 1702048-CALG | 13DEC09.D | 12/13/16 11:18 |
| Cal Standard | 1702048-CALH | 13DEC10.D | 12/13/16 11:41 |
| Cal Standard | 1702048-CALI | 13DEC11.D | 12/13/16 12:04 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702423
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Initial Cal Check | 1702423-ICV1 | 26JAN15.D | 01/26/17 19:35 |
| Initial Cal Blank | 1702423-ICB1 | 26JAN17.D | 01/26/17 20:23 |
| Initial Cal Check | 1702423-ICV2 | 07FEB15.D | 02/07/17 12:46 |
| Initial Cal Blank | 1702423-ICB2 | 07FEB17.D | 02/07/17 13:33 |
| MS Tune | 1702423-TUN1 | 12FEB01.D | 02/12/17 05:04 |
| Calibration Check | 1702423-CCV1 | 12FEB02.D | 02/12/17 05:28 |
| Calibration Check | 1702423-CCV2 | 12FEB03.D | 02/12/17 05:51 |
| Calibration Blank | 1702423-CCB1 | 12FEB05.D | 02/12/17 06:37 |
| Blank | B[B1006-BLK1 | 12FEB22.D | 02/12/17 13:11 |
| 27MW01_170207 | 1703480-14 | 12FEB23.D | 02/12/17 13:34 |
| LCS | B[B1006-BS1 | 12FEB24.D | 02/12/17 13:57 |
| 27MW01_170207 | B[B1006-MS1 | 12FEB25.D | 02/12/17 14:20 |
| 27MW01_170207 | B[B1006-MSD1 | 12FEB26.D | 02/12/17 14:43 |
| MS Tune | 1702423-TUN2 | 12FEB32.D | 02/12/17 17:02 |
| Calibration Check | 1702423-CCV4 | 12FEB33.D | 02/12/17 17:25 |
| Calibration Check | 1702423-CCV5 | 12FEB34.D | 02/12/17 17:48 |
| Calibration Blank | 1702423-CCB2 | 12FEB35.D | 02/12/17 18:11 |
| 27EW-17_170207 | 1703480-01 | 12FEB54.D | 02/13/17 01:31 |
| 398-MW1_170207 | 1703480-03 | 12FEB56.D | 02/13/17 02:18 |
| IR11-OU2B-MW02_170207 | 1703480-04 | 12FEB57.D | 02/13/17 02:41 |
| IR11-OU2B-MW03_170207 | 1703480-05 | 12FEB58.D | 02/13/17 03:04 |
| MS Tune | 1702423-TUN3 | 12FEB63.D | 02/13/17 05:00 |
| Calibration Check | 1702423-CCV6 | 12FEB64.D | 02/13/17 05:23 |
| Calibration Check | 1702423-CCV7 | 12FEB65.D | 02/13/17 05:46 |
| Calibration Blank | 1702423-CCB3 | 12FEB66.D | 02/13/17 06:09 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Initial Cal Check | 1702431-ICV1 | 26JAN15.D | 01/26/17 19:35 |
| Initial Cal Blank | 1702431-ICB1 | 26JAN17.D | 01/26/17 20:23 |
| Initial Cal Check | 1702431-ICV2 | 07FEB15.D | 02/07/17 12:46 |
| Initial Cal Blank | 1702431-ICB2 | 07FEB17.D | 02/07/17 13:33 |
| MS Tune | 1702431-TUN1 | 13FEB01.D | 02/13/17 06:34 |
| Calibration Check | 1702431-CCV1 | 13FEB02.D | 02/13/17 06:57 |
| Calibration Check | 1702431-CCV2 | 13FEB03.D | 02/13/17 07:20 |
| Calibration Blank | 1702431-CCB1 | 13FEB04.D | 02/13/17 07:43 |
| Blank | B[B1007-BLK1 | 13FEB05.D | 02/13/17 08:06 |
| OU2B-MW01_170207 | 1703480-17 | 13FEB06.D | 02/13/17 08:29 |
| LCS | B[B1007-BS1 | 13FEB07.D | 02/13/17 08:52 |
| OU2B-MW01_170207 | B[B1007-MS1 | 13FEB08.D | 02/13/17 09:15 |
| OU2B-MW01_170207 | B[B1007-MSD1 | 13FEB09.D | 02/13/17 09:39 |
| S21-TT-MW05C_170207 | 1703480-10 | 13FEB12.D | 02/13/17 10:48 |
| 27EW-13_170207 | 1703480-13 | 13FEB15.D | 02/13/17 11:58 |
| IR11-OU2B-MW01_170207 | 1703480-15 | 13FEB16.D | 02/13/17 12:21 |
| S11-TT-MW01D_170207 | 1703480-19 | 13FEB19.D | 02/13/17 13:30 |
| S21-TT-MW01E_170207 | 1703480-21 | 13FEB21.D | 02/13/17 14:16 |
| S21-TT-MW05B_170207 | 1703480-22 | 13FEB22.D | 02/13/17 14:40 |
| IR11-OU2B-MW04_170207 | 1703480-29 | 13FEB23.D | 02/13/17 15:03 |
| S11-TT-MW01A_170207 | 1703480-31 | 13FEB25.D | 02/13/17 15:49 |
| S21-TT-MW01A_170207 | 1703480-33 | 13FEB27.D | 02/13/17 16:36 |
| S21-TT-MW01B_170207 | 1703480-34 | 13FEB28.D | 02/13/17 16:59 |
| S21-TT-MW01C_170207 | 1703480-35 | 13FEB29.D | 02/13/17 17:22 |
| MS Tune | 1702431-TUN2 | 13FEB32.D | 02/13/17 18:32 |
| Calibration Check | 1702431-CCV3 | 13FEB33.D | 02/13/17 18:55 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1702431-CCV4 | 13FEB34.D | 02/13/17 19:18 |
| Calibration Blank | 1702431-CCB2 | 13FEB35.D | 02/13/17 19:42 |
| TB14_170207 | 1703480-23 | 13FEB36.D | 02/13/17 20:05 |
| TB15_170207 | 1703480-24 | 13FEB37.D | 02/13/17 20:28 |
| EB26_170207 | 1703480-25 | 13FEB38.D | 02/13/17 20:51 |
| EB27_170207 | 1703480-26 | 13FEB39.D | 02/13/17 21:14 |
| EB28_170207 | 1703480-27 | 13FEB40.D | 02/13/17 21:38 |
| EB29_170207 | 1703480-28 | 13FEB41.D | 02/13/17 22:01 |
| 27EW-18_170207 | 1703480-02 | 13FEB42.D | 02/13/17 22:24 |
| M11-02_170207 | 1703480-06 | 13FEB43.D | 02/13/17 22:47 |
| OU2B-MW02_170207 | 1703480-07 | 13FEB44.D | 02/13/17 23:10 |
| OU2B-MW04_170207 | 1703480-08 | 13FEB45.D | 02/13/17 23:33 |
| S21-TT-MW05A_170207 | 1703480-09 | 13FEB46.D | 02/13/17 23:57 |
| S21-TT-MW05D_170207 | 1703480-11 | 13FEB47.D | 02/14/17 00:20 |
| S21-TT-MW05E_170207 | 1703480-12 | 13FEB48.D | 02/14/17 00:43 |
| M07B-01_170207 | 1703480-16 | 13FEB49.D | 02/14/17 01:06 |
| S11-TT-MW01C_170207 | 1703480-18 | 13FEB50.D | 02/14/17 01:29 |
| S11-TT-MW01E_170207 | 1703480-20 | 13FEB51.D | 02/14/17 01:52 |
| 27EW-17_170207 | 1703480-01RE1 | 13FEB52.D | 02/14/17 02:15 |
| IR11-OU2B-MW02_170207 | 1703480-04RE1 | 13FEB53.D | 02/14/17 02:38 |
| IR11-OU2B-MW03_170207 | 1703480-05RE1 | 13FEB54.D | 02/14/17 03:01 |
| S21-TT-MW05C_170207 | 1703480-10RE1 | 13FEB55.D | 02/14/17 03:25 |
| IR11-OU2B-MW01_170207 | 1703480-15RE1 | 13FEB56.D | 02/14/17 03:48 |
| MS Tune | 1702431-TUN3 | 14FEB01.D | 02/14/17 06:06 |
| Calibration Check | 1702431-CCV5 | 14FEB02.D | 02/14/17 06:30 |
| Calibration Check | 1702431-CCV6 | 14FEB03.D | 02/14/17 06:54 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702431 | Instrument: | MS-V5 |
| Matrix: | Water | Calibration: | 1702011 |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Blank | 1702431-CCB3 | 14FEB04.D | 02/14/17 07:17 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702527
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Initial Cal Check | 1702527-ICV1 | 26JAN15.D | 01/26/17 19:35 |
| Initial Cal Blank | 1702527-ICB1 | 26JAN17.D | 01/26/17 20:23 |
| Initial Cal Check | 1702527-ICV2 | 07FEB15.D | 02/07/17 12:46 |
| Initial Cal Blank | 1702527-ICB2 | 07FEB17.D | 02/07/17 13:33 |
| MS Tune | 1702527-TUN2 | 14FEB28.D | 02/14/17 16:33 |
| Calibration Check | 1702527-CCV3 | 14FEB29.D | 02/14/17 16:57 |
| Calibration Check | 1702527-CCV4 | 14FEB30.D | 02/14/17 17:20 |
| Calibration Blank | 1702527-CCB2 | 14FEB31.D | 02/14/17 17:43 |
| M11-01_170207 | 1703480-30 | 14FEB32.D | 02/14/17 18:06 |
| S11-TT-MW01B_170207 | 1703480-32 | 14FEB33.D | 02/14/17 18:29 |
| S21-TT-MW01D_170207 | 1703480-36 | 14FEB34.D | 02/14/17 18:52 |
| S21-TT-MW05B_170207 | 1703480-22RE1 | 14FEB35.D | 02/14/17 19:16 |
| IR11-OU2B-MW04_170207 | 1703480-29RE1 | 14FEB36.D | 02/14/17 19:39 |
| S21-TT-MW01A_170207 | 1703480-33RE1 | 14FEB37.D | 02/14/17 20:02 |
| S21-TT-MW01B_170207 | 1703480-34RE1 | 14FEB38.D | 02/14/17 20:25 |
| MS Tune | 1702527-TUN3 | 14FEB58.D | 02/15/17 04:04 |
| Calibration Check | 1702527-CCV5 | 14FEB59.D | 02/15/17 04:27 |
| Calibration Check | 1702527-CCV6 | 14FEB60.D | 02/15/17 04:49 |
| Calibration Blank | 1702527-CCB3 | 14FEB61.D | 02/15/17 05:12 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 26JAN03.D | Injection Date: | 01/26/17 |
| Instrument ID: | MS-V5 | Injection Time: | 12:01 |
| Sequence: | 1702048 | Lab Sample ID: | 1702048-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 32.2 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 50.9 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 6.86 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 64.3 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 7.93 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 98.5 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 5.13 | PASS |

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Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 07FEB05.D | Injection Date: | 02/07/17 |
| Instrument ID: | MS-V5 | Injection Time: | 08:42 |
| Sequence: | 1702048 | Lab Sample ID: | 1702048-TUN2 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 25.6 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 46.1 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 6.48 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0.982 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 89.9 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 8.56 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 101 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 5.99 | PASS |

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Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 13DEC05.D | Injection Date: | 12/13/16 |
| Instrument ID: | MS-V5 | Injection Time: | 09:45 |
| Sequence: | 1702048 | Lab Sample ID: | 1702048-TUN3 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 25.9 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 54.3 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 6.64 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 1.48 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 75.1 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 7.62 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 98 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 6.02 | PASS |

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# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 12FEB01.D | Injection Date: | 02/12/17 |
| Instrument ID: | MS-V5 | Injection Time: | 05:04 |
| Sequence: | 1702423 | Lab Sample ID: | 1702423-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 26.7 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 50.4 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 7.33 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 1.13 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 72.6 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 6.33 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 98.6 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 8.49 | PASS |

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# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 12FEB32.D | Injection Date: | 02/12/17 |
| Instrument ID: | MS-V5 | Injection Time: | 17:02 |
| Sequence: | 1702423 | Lab Sample ID: | 1702423-TUN2 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 22.2 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 46.1 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 6.67 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0.786 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 93.9 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 6.53 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 98.6 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 6.58 | PASS |

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# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 12FEB63.D | Injection Date: | 02/13/17 |
| Instrument ID: | MS-V5 | Injection Time: | 05:00 |
| Sequence: | 1702423 | Lab Sample ID: | 1702423-TUN3 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 25.5 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 40.4 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 6.88 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 83.5 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 8.46 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 99.4 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 8.29 | PASS |

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Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 13FEB01.D | Injection Date: | 02/13/17 |
| Instrument ID: | MS-V5 | Injection Time: | 06:34 |
| Sequence: | 1702431 | Lab Sample ID: | 1702431-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 21.4 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 37.8 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 7.99 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0.84 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 97.7 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 8.96 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 99.7 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 6.67 | PASS |

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Project Number: 5023146096
Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 13FEB32.D | Injection Date: | 02/13/17 |
| Instrument ID: | MS-V5 | Injection Time: | 18:32 |
| Sequence: | 1702431 | Lab Sample ID: | 1702431-TUN2 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 16.7 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 47.6 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 5.29 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 98.9 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 5.53 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 99.7 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 5.53 | PASS |

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Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 14FEB01.D | Injection Date: | 02/14/17 |
| Instrument ID: | MS-V5 | Injection Time: | 06:06 |
| Sequence: | 1702431 | Lab Sample ID: | 1702431-TUN3 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 22.6 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 45.5 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 5.45 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0.672 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 94.9 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 8.46 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 101 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 7.38 | PASS |

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San Diego, CA 92123

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Project Number: 5023146096
Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 14FEB28.D | Injection Date: | 02/14/17 |
| Instrument ID: | MS-V5 | Injection Time: | 16:33 |
| Sequence: | 1702527 | Lab Sample ID: | 1702527-TUN2 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 20.8 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 44 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 6.79 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 84.8 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 8.4 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 99.9 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 7.06 | PASS |

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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Lab File ID: | 14FEB58.D | Injection Date: | 02/15/17 |
| Instrument ID: | MS-V5 | Injection Time: | 04:04 |
| Sequence: | 1702527 | Lab Sample ID: | 1702527-TUN3 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| Mass 50 | 15 - 40% of Mass 95 | 24.5 | PASS |
| Mass 75 | 30 - 60% of Mass 95 | 45.1 | PASS |
| Mass 95 | Base peak, 100% relative abundance | 100 | PASS |
| Mass 96 | 5 - 9% of Mass 95 | 6.2 | PASS |
| Mass 173 | Less than 2% of Mass 174 | 0.875 | PASS |
| Mass 174 | 50 - 100% of Mass 95 | 74 | PASS |
| Mass 175 | 5 - 9% of Mass 174 | 5.91 | PASS |
| Mass 176 | 95 - 101% of Mass 174 | 101 | PASS |
| Mass 177 | 5 - 9% of Mass 176 | 6.24 | PASS |

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Project: Alameda
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Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702423-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 24.520 | 1.889545 | 1.853263 | | -1.9 | 20 |
| Bromobenzene | A | 25.000 | 26.750 | 1.179324 | 1.261962 | | 7.0 | 20 |
| Bromochloromethane | A | 25.000 | 27.870 | 0.1547174 | 0.1724858 | | 11.5 | 20 |
| Bromodichloromethane | A | 25.000 | 26.320 | 0.3292103 | 0.3466539 | | 5.3 | 20 |
| Bromoform | A | 25.000 | 29.540 | 0.3506939 | 0.4143899 | 0.1 | 18.2 | 20 |
| Bromomethane | A | 25.000 | 25.400 | 0.3180084 | 0.323081 | | 1.6 | 20 |
| n-Butylbenzene | A | 25.000 | 24.450 | 3.493597 | 3.416282 | | -2.2 | 20 |
| sec-Butylbenzene | A | 25.000 | 22.320 | 5.379312 | 4.803427 | | -10.7 | 20 |
| tert-Butylbenzene | A | 25.000 | 24.540 | 3.852201 | 3.780801 | | -1.9 | 20 |
| Carbon tetrachloride | A | 25.000 | 24.550 | 0.4688551 | 0.4604308 | | -1.8 | 20 |
| Chlorobenzene | A | 25.000 | 25.550 | 2.978027 | 3.04388 | 0.3 | 2.2 | 20 |
| Chloroethane | A | 25.000 | 25.010 | 0.3902835 | 0.3904325 | | 0.04 | 20 |
| Chloroform | A | 25.000 | 25.080 | 0.7548469 | 0.7572197 | | 0.3 | 20 |
| Chloromethane | L | 25.000 | 21.450 | 0.6989857 | 0.5449247 | 0.1 | -14.2 | 20 |
| 2-Chlorotoluene | A | 25.000 | 25.230 | 3.666018 | 3.699401 | | 0.9 | 20 |
| 4-Chlorotoluene | A | 25.000 | 25.250 | 3.285453 | 3.318671 | | 1.0 | 20 |
| Dibromochloromethane | A | 25.000 | 28.210 | 0.1708407 | 0.1927603 | | 12.8 | 20 |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 26.780 | 0.0666406 | 0.0808198 | | 7.1 | 20 |
| 1,2-Dibromoethane | A | 25.000 | 28.160 | 0.1390115 | 0.1565905 | | 12.6 | 20 |
| Dibromomethane | A | 25.000 | 25.600 | 0.1132441 | 0.1159592 | | 2.4 | 20 |
| 1,2-Dichlorobenzene | A | 25.000 | 25.120 | 1.693334 | 1.701651 | | 0.5 | 20 |
| 1,3-Dichlorobenzene | A | 25.000 | 23.440 | 2.068389 | 1.939285 | | -6.2 | 20 |
| 1,4-Dichlorobenzene | A | 25.000 | 25.950 | 1.916207 | 1.989058 | | 3.8 | 20 |

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# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702423-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 23.190 | 0.4765408 | 0.4420548 | | -7.2 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 25.000 | 1.030991 | 1.031141 | 0.1 | 0.01 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 26.060 | 0.438219 | 0.4568204 | | 4.2 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 24.850 | 0.7766588 | 0.7719666 | | -0.6 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 25.440 | 0.46668 | 0.474977 | | 1.8 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 23.910 | 0.4502706 | 0.4305847 | | -4.4 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 25.240 | 0.3723232 | 0.3758662 | | 1.0 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 27.900 | 0.2667047 | 0.2976682 | | 11.6 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 23.050 | 0.6461859 | 0.595668 | | -7.8 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 24.340 | 0.61317 | 0.5969539 | | -2.6 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 25.890 | 0.436368 | 0.4519754 | | 3.6 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 27.510 | 0.3001727 | 0.3303126 | | 10.0 | 20 |
| Ethylbenzene | A | 25.000 | 24.810 | 1.699115 | 1.686003 | | -0.8 | 20 |
| Hexachlorobutadiene | A | 25.000 | 22.520 | 0.8012975 | 0.7218586 | | -9.9 | 20 |
| Isopropylbenzene | A | 25.000 | 23.670 | 5.188549 | 4.913541 | | -5.3 | 20 |
| p-Isopropyltoluene | A | 25.000 | 22.960 | 4.064913 | 3.733001 | | -8.2 | 20 |
| Methylene chloride | L | 25.000 | 27.090 | 0.601454 | 0.4144394 | | 8.4 | 20 |
| Methyl t-butyl ether | A | 25.000 | 29.040 | 0.6285989 | 0.7300879 | | 16.1 | 20 |
| Naphthalene | A | 25.000 | 28.850 | 1.162765 | 1.341925 | | 15.4 | 20 |
| n-Propylbenzene | A | 25.000 | 23.210 | 5.959786 | 5.533521 | | -7.2 | 20 |
| Styrene | A | 25.000 | 26.030 | 2.90027 | 3.020175 | | 4.1 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 25.800 | 0.9261768 | 0.9556971 | | 3.2 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 28.950 | 0.555952 | 0.6436956 | 0.3 | 15.8 | 20 |

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# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702423-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | A | 25.000 | 23.430 | 0.3412463 | 0.3197576 | | -6.3 | 20 |
| Toluene | A | 25.000 | 24.190 | 0.7797766 | 0.7546079 | | -3.2 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 26.710 | 1.02527 | 1.095334 | | 6.8 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 26.280 | 1.194842 | 1.256226 | | 5.1 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 24.320 | 0.6397625 | 0.6223499 | | -2.7 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 28.140 | 0.1533095 | 0.1725615 | | 12.6 | 20 |
| Trichloroethene | A | 25.000 | 25.380 | 0.3255704 | 0.3305227 | | 1.5 | 20 |
| Trichlorofluoromethane | A | 25.000 | 23.360 | 0.5867905 | 0.5482351 | | -6.6 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 29.760 | 0.105337 | 0.1291837 | | 19.0 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 22.390 | 0.4183029 | 0.3745928 | | -10.4 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 24.970 | 3.597754 | 3.593467 | | -0.1 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 23.180 | 3.970515 | 3.680896 | | -7.3 | 20 |
| Vinyl chloride | A | 25.000 | 20.170 | 0.5958562 | 0.4807637 | | -19.3 | 20 |
| Total Xylenes | A | 75.000 | 74.270 | 1.988127 | 1.96886 | | -1.0 | 20 |
| Total Trihalomethanes | A | 100.00 | 109.15 | 8361.618 | 8912.16 | | 6.6 | 20 |
| p- & m-Xylenes | A | 50.000 | 49.530 | 2.011739 | 1.992895 | | -0.9 | 20 |
| o-Xylene | A | 25.000 | 24.740 | 1.940902 | 1.920791 | | -1.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 07FEB15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/07/17 |
| Lab Sample ID: | 1702423-ICV2 | Injection Time: | 12:46 |

| | (1) CAL | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acetone | A | 320.00 | 315.03 | 0.044841 | 4.414517E-02 | | -1.6 | 20 |
| Acetonitrile | L | 160.00 | 201.66 | 1.965066E-02 | 2.067974E-02 | | 26.0 | 20 * |
| Allyl chloride | A | 32.000 | 31.180 | 1.114402 | 1.08574 | | -2.6 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 15.090 | 0.7281162 | 0.6866905 | | -5.7 | 20 |
| Benzyl chloride | A | 32.000 | 31.760 | 0.8656921 | 0.8592213 | | -0.7 | 20 |
| t-Butyl alcohol | A | 800.00 | 811.29 | 1.280474E-02 | 1.298544E-02 | | 1.4 | 20 |
| Carbon disulfide | A | 32.000 | 32.220 | 1.344744 | 1.354047 | | 0.7 | 20 |
| Chloroprene | A | 32.000 | 31.360 | 1.000946 | 0.9807911 | | -2.0 | 20 |
| Diisopropyl ether | A | 16.000 | 15.550 | 0.3174881 | 0.3085884 | | -2.8 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 15.050 | 1.311089 | 1.233435 | | -5.9 | 20 |
| 2-Hexanone | Q | 320.00 | 312.86 | 0.0923643 | 8.615645E-02 | | -2.2 | 20 |
| Methyl ethyl ketone | A | 160.00 | 154.88 | 0.0879739 | 0.0851614 | | -3.2 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 147.91 | 0.1389299 | 0.12843 | | -7.6 | 20 |
| Vinyl acetate | A | 160.00 | 147.71 | 0.6344058 | 0.5856918 | | -7.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV1 | Injection Time: | 05:28 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 22.390 | 1.889545 | 1.692426 | | -10.4 | 20 | |
| Bromobenzene | A | 25.000 | 23.320 | 1.179324 | 1.099965 | | -6.7 | 20 | |
| Bromochloromethane | A | 25.000 | 23.190 | 0.1547174 | 0.1434916 | | -7.3 | 20 | |
| Bromodichloromethane | A | 25.000 | 22.500 | 0.3292103 | 0.2963347 | | -10.0 | 20 | |
| Bromoform | A | 25.000 | 21.990 | 0.3506939 | 0.3085243 | 0.1 | -12.0 | 20 | |
| Bromomethane | A | 25.000 | 15.260 | 0.3180084 | 0.1940699 | | -39.0 | 20 | * |
| n-Butylbenzene | A | 25.000 | 24.130 | 3.493597 | 3.372196 | | -3.5 | 20 | |
| sec-Butylbenzene | A | 25.000 | 22.270 | 5.379312 | 4.791874 | | -10.9 | 20 | |
| tert-Butylbenzene | A | 25.000 | 22.640 | 3.852201 | 3.488036 | | -9.5 | 20 | |
| Carbon tetrachloride | A | 25.000 | 24.700 | 0.4688551 | 0.4632848 | | -1.2 | 20 | |
| Chlorobenzene | A | 25.000 | 23.850 | 2.978027 | 2.841525 | 0.3 | -4.6 | 20 | |
| Chloroethane | A | 25.000 | 23.640 | 0.3902835 | 0.3689803 | | -5.5 | 20 | |
| Chloroform | A | 25.000 | 22.510 | 0.7548469 | 0.6796659 | | -10.0 | 20 | |
| Chloromethane | L | 25.000 | 24.020 | 0.6989857 | 0.6079859 | 0.1 | -3.9 | 20 | |
| 2-Chlorotoluene | A | 25.000 | 23.760 | 3.666018 | 3.483817 | | -5.0 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 23.710 | 3.285453 | 3.116566 | | -5.1 | 20 | |
| Dibromochloromethane | A | 25.000 | 22.970 | 0.1708407 | 0.1569496 | | -8.1 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 21.920 | 0.0666406 | 6.622628E-02 | | -12.3 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 21.170 | 0.1390115 | 0.1177425 | | -15.3 | 20 | |
| Dibromomethane | A | 25.000 | 22.090 | 0.1132441 | 0.1000413 | | -11.7 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 22.050 | 1.693334 | 1.493296 | | -11.8 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 22.230 | 2.068389 | 1.838819 | | -11.1 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 23.250 | 1.916207 | 1.782151 | | -7.0 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV1 | Injection Time: | 05:28 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 27.490 | 0.4765408 | 0.5239708 | | 10.0 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 20.890 | 1.030991 | 0.8614724 | 0.1 | -16.4 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 22.140 | 0.438219 | 0.388062 | | -11.4 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 24.810 | 0.7766588 | 0.7707947 | | -0.8 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 22.870 | 0.46668 | 0.42686 | | -8.5 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 23.010 | 0.4502706 | 0.414439 | | -8.0 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 21.480 | 0.3723232 | 0.3199211 | | -14.1 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 21.440 | 0.2667047 | 0.2286998 | | -14.2 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 25.120 | 0.6461859 | 0.6491811 | | 0.5 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 23.430 | 0.61317 | 0.5747527 | | -6.3 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 21.770 | 0.436368 | 0.3799878 | | -12.9 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 22.300 | 0.3001727 | 0.2677361 | | -10.8 | 20 |
| Ethylbenzene | A | 25.000 | 23.110 | 1.699115 | 1.570754 | | -7.6 | 20 |
| Hexachlorobutadiene | A | 25.000 | 26.700 | 0.8012975 | 0.8556691 | | 6.8 | 20 |
| Isopropylbenzene | A | 25.000 | 22.670 | 5.188549 | 4.704552 | | -9.3 | 20 |
| p-Isopropyltoluene | A | 25.000 | 23.590 | 4.064913 | 3.835533 | | -5.6 | 20 |
| Methylene chloride | L | 25.000 | 22.380 | 0.601454 | 0.3488508 | | -10.5 | 20 |
| Methyl t-butyl ether | A | 25.000 | 22.250 | 0.6285989 | 0.5593537 | | -11.0 | 20 |
| Naphthalene | A | 25.000 | 24.030 | 1.162765 | 1.117535 | | -3.9 | 20 |
| n-Propylbenzene | A | 25.000 | 22.510 | 5.959786 | 5.365545 | | -10.0 | 20 |
| Styrene | A | 25.000 | 23.600 | 2.90027 | 2.737457 | | -5.6 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 22.740 | 0.9261768 | 0.8425117 | | -9.0 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 21.060 | 0.555952 | 0.4682667 | 0.3 | -15.8 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV1 | Injection Time: | 05:28 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 24.380 | 0.3412463 | 0.3328293 | | -2.5 | 20 |
| Toluene | A | 25.000 | 21.900 | 0.7797766 | 0.6831205 | | -12.4 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 24.130 | 1.02527 | 0.9895842 | | -3.5 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 25.130 | 1.194842 | 1.200849 | | 0.5 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 22.980 | 0.6397625 | 0.588042 | | -8.1 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 21.970 | 0.1533095 | 0.134753 | | -12.1 | 20 |
| Trichloroethene | A | 25.000 | 23.940 | 0.3255704 | 0.3117448 | | -4.2 | 20 |
| Trichlorofluoromethane | A | 25.000 | 26.860 | 0.5867905 | 0.6305486 | | 7.5 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 24.170 | 0.105337 | 0.1063424 | | -3.3 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 24.220 | 0.4183029 | 0.4052494 | | -3.1 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 22.990 | 3.597754 | 3.308383 | | -8.0 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 22.440 | 3.970515 | 3.563784 | | -10.2 | 20 |
| Vinyl chloride | A | 25.000 | 26.030 | 0.5958562 | 0.6204269 | | 4.1 | 20 |
| Total Xylenes | A | 75.000 | 69.760 | 1.988127 | 1.848999 | | -7.0 | 20 |
| Total Trihalomethanes | A | 100.00 | 89.970 | 8361.618 | 7101.03 | | -15.1 | 20 |
| p- & m-Xylenes | A | 50.000 | 46.230 | 2.011739 | 1.86024 | | -7.5 | 20 |
| o-Xylene | A | 25.000 | 23.530 | 1.940902 | 1.826516 | | -5.9 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB03.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV2 | Injection Time: | 05:51 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acetone | A | 320.00 | 321.80 | 0.044841 | 4.509255E-02 | | 0.6 | 20 |
| Acetonitrile | L | 160.00 | 178.81 | 1.965066E-02 | 1.850768E-02 | | 11.8 | 20 |
| Allyl chloride | A | 32.000 | 27.730 | 1.114402 | 0.9655512 | | -13.4 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 14.160 | 0.7281162 | 0.6442194 | | -11.5 | 20 |
| Benzyl chloride | A | 32.000 | 30.920 | 0.8656921 | 0.8363924 | | -3.4 | 20 |
| t-Butyl alcohol | A | 800.00 | 713.13 | 1.280474E-02 | 1.141432E-02 | | -10.9 | 20 |
| Carbon disulfide | A | 32.000 | 30.070 | 1.344744 | 1.263545 | | -6.0 | 20 |
| Chloroprene | A | 32.000 | 30.380 | 1.000946 | 0.9501863 | | -5.1 | 20 |
| Diisopropyl ether | A | 16.000 | 15.860 | 0.3174881 | 0.3147621 | | -0.9 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 13.630 | 1.311089 | 1.117264 | | -14.8 | 20 |
| 2-Hexanone | Q | 320.00 | 291.05 | 0.0923643 | 8.106513E-02 | | -9.0 | 20 |
| Methyl ethyl ketone | A | 160.00 | 144.41 | 0.0879739 | 7.940393E-02 | | -9.7 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 138.15 | 0.1389299 | 0.1199561 | | -13.7 | 20 |
| Vinyl acetate | A | 160.00 | 131.55 | 0.6344058 | 0.5215849 | | -17.8 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB33.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV4 | Injection Time: | 17:25 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 22.360 | 1.889545 | 1.689926 | | -10.6 | 20 | |
| Bromobenzene | A | 25.000 | 23.450 | 1.179324 | 1.106298 | | -6.2 | 20 | |
| Bromochloromethane | A | 25.000 | 24.390 | 0.1547174 | 0.1509335 | | -2.4 | 20 | |
| Bromodichloromethane | A | 25.000 | 22.800 | 0.3292103 | 0.3002231 | | -8.8 | 20 | |
| Bromoform | A | 25.000 | 23.280 | 0.3506939 | 0.3265963 | 0.1 | -6.9 | 20 | |
| Bromomethane | A | 25.000 | 18.690 | 0.3180084 | 0.2377006 | | -25.3 | 20 | * |
| n-Butylbenzene | A | 25.000 | 22.790 | 3.493597 | 3.184956 | | -8.8 | 20 | |
| sec-Butylbenzene | A | 25.000 | 21.540 | 5.379312 | 4.634358 | | -13.8 | 20 | |
| tert-Butylbenzene | A | 25.000 | 23.970 | 3.852201 | 3.693158 | | -4.1 | 20 | |
| Carbon tetrachloride | A | 25.000 | 24.620 | 0.4688551 | 0.4616638 | | -1.5 | 20 | |
| Chlorobenzene | A | 25.000 | 23.900 | 2.978027 | 2.846417 | 0.3 | -4.4 | 20 | |
| Chloroethane | A | 25.000 | 24.820 | 0.3902835 | 0.3874951 | | -0.7 | 20 | |
| Chloroform | A | 25.000 | 22.520 | 0.7548469 | 0.6800097 | | -9.9 | 20 | |
| Chloromethane | L | 25.000 | 27.130 | 0.6989857 | 0.6842019 | 0.1 | 8.5 | 20 | |
| 2-Chlorotoluene | A | 25.000 | 22.510 | 3.666018 | 3.300691 | | -10.0 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 22.580 | 3.285453 | 2.967933 | | -9.7 | 20 | |
| Dibromochloromethane | A | 25.000 | 23.570 | 0.1708407 | 0.1610678 | | -5.7 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 21.480 | 0.0666406 | 6.489223E-02 | | -14.1 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 23.320 | 0.1390115 | 0.1296655 | | -6.7 | 20 | |
| Dibromomethane | A | 25.000 | 21.800 | 0.1132441 | 9.873143E-02 | | -12.8 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 22.710 | 1.693334 | 1.538383 | | -9.2 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 20.580 | 2.068389 | 1.702989 | | -17.7 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 23.080 | 1.916207 | 1.768697 | | -7.7 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB33.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV4 | Injection Time: | 17:25 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Dichlorodifluoromethane | A | 25.000 | 26.630 | 0.4765408 | 0.5076682 | | 6.5 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 21.560 | 1.030991 | 0.8892319 | 0.1 | -13.7 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 22.960 | 0.438219 | 0.4025324 | | -8.1 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 24.700 | 0.7766588 | 0.7672539 | | -1.2 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 23.510 | 0.46668 | 0.4387809 | | -6.0 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 23.720 | 0.4502706 | 0.4272202 | | -5.1 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 22.190 | 0.3723232 | 0.3304926 | | -11.2 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 23.290 | 0.2667047 | 0.2485107 | | -6.8 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 23.110 | 0.6461859 | 0.5973275 | | -7.6 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 23.580 | 0.61317 | 0.578422 | | -5.7 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 22.140 | 0.436368 | 0.3865101 | | -11.4 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 23.920 | 0.3001727 | 0.28718 | | -4.3 | 20 |
| Ethylbenzene | A | 25.000 | 22.640 | 1.699115 | 1.539013 | | -9.4 | 20 |
| Hexachlorobutadiene | A | 25.000 | 25.840 | 0.8012975 | 0.8281556 | | 3.4 | 20 |
| Isopropylbenzene | A | 25.000 | 22.250 | 5.188549 | 4.618713 | | -11.0 | 20 |
| p-Isopropyltoluene | A | 25.000 | 21.640 | 4.064913 | 3.518143 | | -13.5 | 20 |
| Methylene chloride | L | 25.000 | 24.560 | 0.601454 | 0.3791585 | | -1.8 | 20 |
| Methyl t-butyl ether | A | 25.000 | 23.830 | 0.6285989 | 0.5992854 | | -4.7 | 20 |
| Naphthalene | A | 25.000 | 23.540 | 1.162765 | 1.09468 | | -5.9 | 20 |
| n-Propylbenzene | A | 25.000 | 21.960 | 5.959786 | 5.234405 | | -12.2 | 20 |
| Styrene | A | 25.000 | 23.720 | 2.90027 | 2.752246 | | -5.1 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 21.620 | 0.9261768 | 0.8008679 | | -13.5 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 21.370 | 0.555952 | 0.4751627 | 0.3 | -14.5 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB33.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV4 | Injection Time: | 17:25 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 24.680 | 0.3412463 | 0.3369102 | | -1.3 | 20 |
| Toluene | A | 25.000 | 23.120 | 0.7797766 | 0.7210759 | | -7.5 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 22.620 | 1.02527 | 0.9275105 | | -9.5 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 23.650 | 1.194842 | 1.130236 | | -5.4 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 23.240 | 0.6397625 | 0.5946937 | | -7.0 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 23.380 | 0.1533095 | 0.143363 | | -6.5 | 20 |
| Trichloroethene | A | 25.000 | 24.060 | 0.3255704 | 0.3133635 | | -3.7 | 20 |
| Trichlorofluoromethane | A | 25.000 | 26.660 | 0.5867905 | 0.6258596 | | 6.7 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 24.450 | 0.105337 | 0.1074844 | | -2.2 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 24.110 | 0.4183029 | 0.4033513 | | -3.6 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 23.030 | 3.597754 | 3.314034 | | -7.9 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 21.620 | 3.970515 | 3.434387 | | -13.5 | 20 |
| Vinyl chloride | A | 25.000 | 27.230 | 0.5958562 | 0.6488995 | | 8.9 | 20 |
| Total Xylenes | A | 75.000 | 70.410 | 1.988127 | 1.866867 | | -6.1 | 20 |
| Total Trihalomethanes | A | 100.00 | 92.170 | 8361.618 | 7206.31 | | -13.8 | 20 |
| p- & m-Xylenes | A | 50.000 | 47.410 | 2.011739 | 1.90767 | | -5.2 | 20 |
| o-Xylene | A | 25.000 | 23.000 | 1.940902 | 1.785263 | | -8.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB34.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/12/17 |
| Lab Sample ID: | 1702423-CCV5 | Injection Time: | 17:48 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | 320.00 | 302.33 | 0.044841 | 4.236456E-02 | | -5.5 | 20 |
| Acetonitrile | L | 160.00 | 170.30 | 1.965066E-02 | 1.769946E-02 | | 6.4 | 20 |
| Allyl chloride | A | 32.000 | 28.090 | 1.114402 | 0.9782592 | | -12.2 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 14.110 | 0.7281162 | 0.6420473 | | -11.8 | 20 |
| Benzyl chloride | A | 32.000 | 26.520 | 0.8656921 | 0.7175687 | | -17.1 | 20 |
| t-Butyl alcohol | A | 800.00 | 587.09 | 1.280474E-02 | 9.396927E-03 | | -26.6 | 20 * |
| Carbon disulfide | A | 32.000 | 29.590 | 1.344744 | 1.243586 | | -7.5 | 20 |
| Chloroprene | A | 32.000 | 29.740 | 1.000946 | 0.9301681 | | -7.1 | 20 |
| Diisopropyl ether | A | 16.000 | 14.900 | 0.3174881 | 0.2957447 | | -6.8 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 13.160 | 1.311089 | 1.078767 | | -17.7 | 20 |
| 2-Hexanone | Q | 320.00 | 278.93 | 0.0923643 | 7.818217E-02 | | -12.8 | 20 |
| Methyl ethyl ketone | A | 160.00 | 139.62 | 0.0879739 | 7.676676E-02 | | -12.7 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 139.60 | 0.1389299 | 0.1212167 | | -12.7 | 20 |
| Vinyl acetate | A | 160.00 | 115.58 | 0.6344058 | 0.4582663 | | -27.8 | 20 * |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB64.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702423-CCV6 | Injection Time: | 05:23 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 27.410 | 1.889545 | 2.071584 | | 9.6 | 20 | |
| Bromobenzene | A | 25.000 | 28.020 | 1.179324 | 1.321623 | | 12.1 | 20 | |
| Bromochloromethane | A | 25.000 | 29.090 | 0.1547174 | 0.180003 | | 16.3 | 20 | |
| Bromodichloromethane | A | 25.000 | 26.620 | 0.3292103 | 0.350487 | | 6.5 | 20 | |
| Bromoform | A | 25.000 | 25.890 | 0.3506939 | 0.3631417 | 0.1 | 3.5 | 20 | |
| Bromomethane | A | 25.000 | 12.520 | 0.3180084 | 0.1592247 | | -49.9 | 20 | * |
| n-Butylbenzene | A | 25.000 | 28.420 | 3.493597 | 3.971831 | | 13.7 | 20 | |
| sec-Butylbenzene | A | 25.000 | 27.330 | 5.379312 | 5.880868 | | 9.3 | 20 | |
| tert-Butylbenzene | A | 25.000 | 28.920 | 3.852201 | 4.455568 | | 15.7 | 20 | |
| Carbon tetrachloride | A | 25.000 | 29.380 | 0.4688551 | 0.5510719 | | 17.5 | 20 | |
| Chlorobenzene | A | 25.000 | 28.180 | 2.978027 | 3.356608 | 0.3 | 12.7 | 20 | |
| Chloroethane | A | 25.000 | 30.010 | 0.3902835 | 0.4684363 | | 20.0 | 20 | |
| Chloroform | A | 25.000 | 26.840 | 0.7548469 | 0.8103594 | | 7.4 | 20 | |
| Chloromethane | L | 25.000 | 30.400 | 0.6989857 | 0.7642754 | 0.1 | 21.6 | 20 | * |
| 2-Chlorotoluene | A | 25.000 | 28.810 | 3.666018 | 4.22428 | | 15.2 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 28.020 | 3.285453 | 3.682267 | | 12.1 | 20 | |
| Dibromochloromethane | A | 25.000 | 27.010 | 0.1708407 | 0.1845974 | | 8.1 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 24.030 | 0.0666406 | 7.255062E-02 | | -3.9 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 27.480 | 0.1390115 | 0.152789 | | 9.9 | 20 | |
| Dibromomethane | A | 25.000 | 25.580 | 0.1132441 | 0.1158675 | | 2.3 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 27.250 | 1.693334 | 1.845995 | | 9.0 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 26.170 | 2.068389 | 2.164998 | | 4.7 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 28.250 | 1.916207 | 2.165116 | | 13.0 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB64.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702423-CCV6 | Injection Time: | 05:23 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 32.650 | 0.4765408 | 0.6224527 | | 30.6 | 20 | * |
| 1,1-Dichloroethane | A | 25.000 | 25.690 | 1.030991 | 1.059516 | 0.1 | 2.8 | 20 | |
| 1,2-Dichloroethane | A | 25.000 | 26.400 | 0.438219 | 0.4626843 | | 5.6 | 20 | |
| 1,1-Dichloroethene | A | 25.000 | 30.110 | 0.7766588 | 0.935559 | | 20.5 | 20 | * |
| cis-1,2-Dichloroethene | A | 25.000 | 27.710 | 0.46668 | 0.5172684 | | 10.8 | 20 | |
| trans-1,2-Dichloroethene | A | 25.000 | 27.680 | 0.4502706 | 0.4986123 | | 10.7 | 20 | |
| 1,2-Dichloropropane | A | 25.000 | 25.500 | 0.3723232 | 0.3797174 | | 2.0 | 20 | |
| 1,3-Dichloropropane | A | 25.000 | 26.100 | 0.2667047 | 0.278405 | | 4.4 | 20 | |
| 2,2-Dichloropropane | A | 25.000 | 29.720 | 0.6461859 | 0.768177 | | 18.9 | 20 | |
| 1,1-Dichloropropene | A | 25.000 | 29.140 | 0.61317 | 0.7145934 | | 16.5 | 20 | |
| cis-1,3-Dichloropropene | A | 25.000 | 25.730 | 0.436368 | 0.4490666 | | 2.9 | 20 | |
| trans-1,3-Dichloropropene | A | 25.000 | 26.470 | 0.3001727 | 0.3178121 | | 5.9 | 20 | |
| Ethylbenzene | A | 25.000 | 28.480 | 1.699115 | 1.93543 | | 13.9 | 20 | |
| Hexachlorobutadiene | A | 25.000 | 31.260 | 0.8012975 | 1.002016 | | 25.0 | 20 | * |
| Isopropylbenzene | A | 25.000 | 27.710 | 5.188549 | 5.750979 | | 10.8 | 20 | |
| p-Isopropyltoluene | A | 25.000 | 27.850 | 4.064913 | 4.527765 | | 11.4 | 20 | |
| Methylene chloride | L | 25.000 | 28.150 | 0.601454 | 0.4292257 | | 12.6 | 20 | |
| Methyl t-butyl ether | A | 25.000 | 27.580 | 0.6285989 | 0.6935228 | | 10.3 | 20 | |
| Naphthalene | A | 25.000 | 30.530 | 1.162765 | 1.420046 | | 22.1 | 20 | * |
| n-Propylbenzene | A | 25.000 | 26.790 | 5.959786 | 6.386238 | | 7.2 | 20 | |
| Styrene | A | 25.000 | 28.990 | 2.90027 | 3.363117 | | 16.0 | 20 | |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 27.320 | 0.9261768 | 1.012253 | | 9.3 | 20 | |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 26.840 | 0.555952 | 0.5969707 | 0.3 | 7.4 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB64.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702423-CCV6 | Injection Time: | 05:23 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | A | 25.000 | 31.870 | 0.3412463 | 0.4350304 | | 27.5 | 20 * |
| Toluene | A | 25.000 | 27.520 | 0.7797766 | 0.8582698 | | 10.1 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 28.810 | 1.02527 | 1.181699 | | 15.3 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 29.610 | 1.194842 | 1.41523 | | 18.4 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 28.180 | 0.6397625 | 0.7211312 | | 12.7 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 27.370 | 0.1533095 | 0.167858 | | 9.5 | 20 |
| Trichloroethene | A | 25.000 | 29.470 | 0.3255704 | 0.3837746 | | 17.9 | 20 |
| Trichlorofluoromethane | A | 25.000 | 31.590 | 0.5867905 | 0.7414069 | | 26.3 | 20 * |
| 1,2,3-Trichloropropane | L | 25.000 | 28.070 | 0.105337 | 0.1222895 | | 12.3 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 28.500 | 0.4183029 | 0.4769248 | | 14.0 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 27.770 | 3.597754 | 3.995711 | | 11.1 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 27.080 | 3.970515 | 4.301535 | | 8.3 | 20 |
| Vinyl chloride | A | 25.000 | 30.820 | 0.5958562 | 0.7345859 | | 23.3 | 20 * |
| Total Xylenes | A | 75.000 | 83.330 | 1.988127 | 2.208734 | | 11.1 | 20 |
| Total Trihalomethanes | A | 100.00 | 106.36 | 8361.618 | 7319.08 | | -12.5 | 20 |
| p- & m-Xylenes | A | 50.000 | 55.240 | 2.011739 | 2.222753 | | 10.5 | 20 |
| o-Xylene | A | 25.000 | 28.090 | 1.940902 | 2.180696 | | 12.4 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 12FEB65.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702423 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702423-CCV7 | Injection Time: | 05:46 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | 320.00 | 341.88 | 0.044841 | 4.790655E-02 | | 6.8 | 20 |
| Acetonitrile | L | 160.00 | 194.16 | 1.965066E-02 | 1.996674E-02 | | 21.4 | 20 * |
| Allyl chloride | A | 32.000 | 27.390 | 1.114402 | 0.9538721 | | -14.4 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 14.440 | 0.7281162 | 0.6570318 | | -9.8 | 20 |
| Benzyl chloride | A | 32.000 | 27.550 | 0.8656921 | 0.7452866 | | -13.9 | 20 |
| t-Butyl alcohol | A | 800.00 | 741.72 | 1.280474E-02 | 1.187186E-02 | | -7.3 | 20 |
| Carbon disulfide | A | 32.000 | 29.620 | 1.344744 | 1.244553 | | -7.5 | 20 |
| Chloroprene | A | 32.000 | 29.410 | 1.000946 | 0.9200564 | | -8.1 | 20 |
| Diisopropyl ether | A | 16.000 | 15.510 | 0.3174881 | 0.3076886 | | -3.1 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 13.720 | 1.311089 | 1.124064 | | -14.3 | 20 |
| 2-Hexanone | Q | 320.00 | 294.04 | 0.0923643 | 8.177082E-02 | | -8.1 | 20 |
| Methyl ethyl ketone | A | 160.00 | 155.70 | 0.0879739 | 8.560713E-02 | | -2.7 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 141.35 | 0.1389299 | 0.1227376 | | -11.7 | 20 |
| Vinyl acetate | A | 160.00 | 131.05 | 0.6344058 | 0.519619 | | -18.1 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702431-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 24.520 | 1.889545 | 1.853263 | | -1.9 | 20 |
| Bromobenzene | A | 25.000 | 26.750 | 1.179324 | 1.261962 | | 7.0 | 20 |
| Bromochloromethane | A | 25.000 | 27.870 | 0.1547174 | 0.1724858 | | 11.5 | 20 |
| Bromodichloromethane | A | 25.000 | 26.320 | 0.3292103 | 0.3466539 | | 5.3 | 20 |
| Bromoform | A | 25.000 | 29.540 | 0.3506939 | 0.4143899 | 0.1 | 18.2 | 20 |
| Bromomethane | A | 25.000 | 25.400 | 0.3180084 | 0.323081 | | 1.6 | 20 |
| n-Butylbenzene | A | 25.000 | 24.450 | 3.493597 | 3.416282 | | -2.2 | 20 |
| sec-Butylbenzene | A | 25.000 | 22.320 | 5.379312 | 4.803427 | | -10.7 | 20 |
| tert-Butylbenzene | A | 25.000 | 24.540 | 3.852201 | 3.780801 | | -1.9 | 20 |
| Carbon tetrachloride | A | 25.000 | 24.550 | 0.4688551 | 0.4604308 | | -1.8 | 20 |
| Chlorobenzene | A | 25.000 | 25.550 | 2.978027 | 3.04388 | 0.3 | 2.2 | 20 |
| Chloroethane | A | 25.000 | 25.010 | 0.3902835 | 0.3904325 | | 0.04 | 20 |
| Chloroform | A | 25.000 | 25.080 | 0.7548469 | 0.7572197 | | 0.3 | 20 |
| Chloromethane | L | 25.000 | 21.450 | 0.6989857 | 0.5449247 | 0.1 | -14.2 | 20 |
| 2-Chlorotoluene | A | 25.000 | 25.230 | 3.666018 | 3.699401 | | 0.9 | 20 |
| 4-Chlorotoluene | A | 25.000 | 25.250 | 3.285453 | 3.318671 | | 1.0 | 20 |
| Dibromochloromethane | A | 25.000 | 28.210 | 0.1708407 | 0.1927603 | | 12.8 | 20 |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 26.780 | 0.0666406 | 0.0808198 | | 7.1 | 20 |
| 1,2-Dibromoethane | A | 25.000 | 28.160 | 0.1390115 | 0.1565905 | | 12.6 | 20 |
| Dibromomethane | A | 25.000 | 25.600 | 0.1132441 | 0.1159592 | | 2.4 | 20 |
| 1,2-Dichlorobenzene | A | 25.000 | 25.120 | 1.693334 | 1.701651 | | 0.5 | 20 |
| 1,3-Dichlorobenzene | A | 25.000 | 23.440 | 2.068389 | 1.939285 | | -6.2 | 20 |
| 1,4-Dichlorobenzene | A | 25.000 | 25.950 | 1.916207 | 1.989058 | | 3.8 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702431-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 23.190 | 0.4765408 | 0.4420548 | | -7.2 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 25.000 | 1.030991 | 1.031141 | 0.1 | 0.01 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 26.060 | 0.438219 | 0.4568204 | | 4.2 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 24.850 | 0.7766588 | 0.7719666 | | -0.6 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 25.440 | 0.46668 | 0.474977 | | 1.8 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 23.910 | 0.4502706 | 0.4305847 | | -4.4 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 25.240 | 0.3723232 | 0.3758662 | | 1.0 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 27.900 | 0.2667047 | 0.2976682 | | 11.6 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 23.050 | 0.6461859 | 0.595668 | | -7.8 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 24.340 | 0.61317 | 0.5969539 | | -2.6 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 25.890 | 0.436368 | 0.4519754 | | 3.6 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 27.510 | 0.3001727 | 0.3303126 | | 10.0 | 20 |
| Ethylbenzene | A | 25.000 | 24.810 | 1.699115 | 1.686003 | | -0.8 | 20 |
| Hexachlorobutadiene | A | 25.000 | 22.520 | 0.8012975 | 0.7218586 | | -9.9 | 20 |
| Isopropylbenzene | A | 25.000 | 23.670 | 5.188549 | 4.913541 | | -5.3 | 20 |
| p-Isopropyltoluene | A | 25.000 | 22.960 | 4.064913 | 3.733001 | | -8.2 | 20 |
| Methylene chloride | L | 25.000 | 27.090 | 0.601454 | 0.4144394 | | 8.4 | 20 |
| Methyl t-butyl ether | A | 25.000 | 29.040 | 0.6285989 | 0.7300879 | | 16.1 | 20 |
| Naphthalene | A | 25.000 | 28.850 | 1.162765 | 1.341925 | | 15.4 | 20 |
| n-Propylbenzene | A | 25.000 | 23.210 | 5.959786 | 5.533521 | | -7.2 | 20 |
| Styrene | A | 25.000 | 26.030 | 2.90027 | 3.020175 | | 4.1 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 25.800 | 0.9261768 | 0.9556971 | | 3.2 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 28.950 | 0.555952 | 0.6436956 | 0.3 | 15.8 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702431-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | A | 25.000 | 23.430 | 0.3412463 | 0.3197576 | | -6.3 | 20 |
| Toluene | A | 25.000 | 24.190 | 0.7797766 | 0.7546079 | | -3.2 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 26.710 | 1.02527 | 1.095334 | | 6.8 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 26.280 | 1.194842 | 1.256226 | | 5.1 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 24.320 | 0.6397625 | 0.6223499 | | -2.7 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 28.140 | 0.1533095 | 0.1725615 | | 12.6 | 20 |
| Trichloroethene | A | 25.000 | 25.380 | 0.3255704 | 0.3305227 | | 1.5 | 20 |
| Trichlorofluoromethane | A | 25.000 | 23.360 | 0.5867905 | 0.5482351 | | -6.6 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 29.760 | 0.105337 | 0.1291837 | | 19.0 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 22.390 | 0.4183029 | 0.3745928 | | -10.4 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 24.970 | 3.597754 | 3.593467 | | -0.1 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 23.180 | 3.970515 | 3.680896 | | -7.3 | 20 |
| Vinyl chloride | A | 25.000 | 20.170 | 0.5958562 | 0.4807637 | | -19.3 | 20 |
| Total Xylenes | A | 75.000 | 74.270 | 1.988127 | 1.96886 | | -1.0 | 20 |
| p- & m-Xylenes | A | 50.000 | 49.530 | 2.011739 | 1.992895 | | -0.9 | 20 |
| o-Xylene | A | 25.000 | 24.740 | 1.940902 | 1.920791 | | -1.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 07FEB15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/07/17 |
| Lab Sample ID: | 1702431-ICV2 | Injection Time: | 12:46 |

| | (1)CAL | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acetone | A | 320.00 | 315.03 | 0.044841 | 4.414517E-02 | | -1.6 | 20 |
| Acetonitrile | L | 160.00 | 201.66 | 1.965066E-02 | 2.067974E-02 | | 26.0 | 20 * |
| Allyl chloride | A | 32.000 | 31.180 | 1.114402 | 1.08574 | | -2.6 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 15.090 | 0.7281162 | 0.6866905 | | -5.7 | 20 |
| Benzyl chloride | A | 32.000 | 31.760 | 0.8656921 | 0.8592213 | | -0.7 | 20 |
| t-Butyl alcohol | A | 800.00 | 811.29 | 1.280474E-02 | 1.298544E-02 | | 1.4 | 20 |
| Carbon disulfide | A | 32.000 | 32.220 | 1.344744 | 1.354047 | | 0.7 | 20 |
| Chloroprene | A | 32.000 | 31.360 | 1.000946 | 0.9807911 | | -2.0 | 20 |
| Cyclohexane | A | 25.000 | 25.810 | 1.086285 | 1.121441 | | 3.2 | 20 |
| Cyclohexanone | A | 400.00 | 389.65 | 4.458125E-02 | 4.342801E-02 | | -2.6 | 20 |
| Diisopropyl ether | A | 16.000 | 15.550 | 0.3174881 | 0.3085884 | | -2.8 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 15.050 | 1.311089 | 1.233435 | | -5.9 | 20 |
| 2-Hexanone | Q | 320.00 | 312.86 | 0.0923643 | 8.615645E-02 | | -2.2 | 20 |
| Methylcyclohexane | A | 25.000 | 24.850 | 0.617876 | 0.6141882 | | -0.6 | 20 |
| Methyl ethyl ketone | A | 160.00 | 154.88 | 0.0879739 | 0.0851614 | | -3.2 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 147.91 | 0.1389299 | 0.12843 | | -7.6 | 20 |
| Vinyl acetate | A | 160.00 | 147.71 | 0.6344058 | 0.5856918 | | -7.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV1 | Injection Time: | 06:57 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 22.890 | 1.889545 | 1.730016 | | -8.4 | 20 | |
| Bromobenzene | A | 25.000 | 24.920 | 1.179324 | 1.175437 | | -0.3 | 20 | |
| Bromochloromethane | A | 25.000 | 25.000 | 0.1547174 | 0.1547459 | | 0.02 | 20 | |
| Bromodichloromethane | A | 25.000 | 23.210 | 0.3292103 | 0.3055977 | | -7.2 | 20 | |
| Bromoform | A | 25.000 | 23.370 | 0.3506939 | 0.3278225 | 0.1 | -6.5 | 20 | |
| Bromomethane | A | 25.000 | 9.8200 | 0.3180084 | 0.1249756 | | -60.7 | 20 | * |
| n-Butylbenzene | A | 25.000 | 25.630 | 3.493597 | 3.581979 | | 2.5 | 20 | |
| sec-Butylbenzene | A | 25.000 | 24.180 | 5.379312 | 5.20389 | | -3.3 | 20 | |
| tert-Butylbenzene | A | 25.000 | 25.910 | 3.852201 | 3.992862 | | 3.7 | 20 | |
| Carbon tetrachloride | A | 25.000 | 24.090 | 0.4688551 | 0.4518321 | | -3.6 | 20 | |
| Chlorobenzene | A | 25.000 | 25.430 | 2.978027 | 3.029356 | 0.3 | 1.7 | 20 | |
| Chloroethane | A | 25.000 | 23.810 | 0.3902835 | 0.3717682 | | -4.7 | 20 | |
| Chloroform | A | 25.000 | 22.430 | 0.7548469 | 0.6773233 | | -10.3 | 20 | |
| Chloromethane | L | 25.000 | 25.660 | 0.6989857 | 0.6481922 | 0.1 | 2.6 | 20 | |
| 2-Chlorotoluene | A | 25.000 | 25.740 | 3.666018 | 3.774768 | | 3.0 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 25.270 | 3.285453 | 3.321487 | | 1.1 | 20 | |
| Dibromochloromethane | A | 25.000 | 24.100 | 0.1708407 | 0.1647024 | | -3.6 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 22.250 | 0.0666406 | 6.720284E-02 | | -11.0 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 24.390 | 0.1390115 | 0.1356312 | | -2.4 | 20 | |
| Dibromomethane | A | 25.000 | 22.530 | 0.1132441 | 0.1020533 | | -9.9 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 24.520 | 1.693334 | 1.660528 | | -1.9 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 23.640 | 2.068389 | 1.956262 | | -5.4 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 24.950 | 1.916207 | 1.912568 | | -0.2 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV1 | Injection Time: | 06:57 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 26.780 | 0.4765408 | 0.5104338 | | 7.1 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 21.140 | 1.030991 | 0.8716128 | 0.1 | -15.5 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 22.630 | 0.438219 | 0.396639 | | -9.5 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 24.560 | 0.7766588 | 0.7631226 | | -1.7 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 23.470 | 0.46668 | 0.4381281 | | -6.1 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 23.290 | 0.4502706 | 0.4194293 | | -6.8 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 22.330 | 0.3723232 | 0.3325609 | | -10.7 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 23.910 | 0.2667047 | 0.2550371 | | -4.4 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 24.360 | 0.6461859 | 0.629555 | | -2.6 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 23.810 | 0.61317 | 0.5839902 | | -4.8 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 22.840 | 0.436368 | 0.3986583 | | -8.6 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 23.640 | 0.3001727 | 0.2838559 | | -5.4 | 20 |
| Ethylbenzene | A | 25.000 | 25.000 | 1.699115 | 1.699208 | | 0.005 | 20 |
| Hexachlorobutadiene | A | 25.000 | 28.030 | 0.8012975 | 0.8983264 | | 12.1 | 20 |
| Isopropylbenzene | A | 25.000 | 25.110 | 5.188549 | 5.21231 | | 0.5 | 20 |
| p-Isopropyltoluene | A | 25.000 | 24.540 | 4.064913 | 3.989315 | | -1.9 | 20 |
| Methylene chloride | L | 25.000 | 23.360 | 0.601454 | 0.3625171 | | -6.6 | 20 |
| Methyl t-butyl ether | A | 25.000 | 24.450 | 0.6285989 | 0.6147889 | | -2.2 | 20 |
| Naphthalene | A | 25.000 | 27.520 | 1.162765 | 1.27997 | | 10.1 | 20 |
| n-Propylbenzene | A | 25.000 | 23.870 | 5.959786 | 5.689894 | | -4.5 | 20 |
| Styrene | A | 25.000 | 25.620 | 2.90027 | 2.972084 | | 2.5 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 24.660 | 0.9261768 | 0.9134155 | | -1.4 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 23.410 | 0.555952 | 0.5205159 | 0.3 | -6.4 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV1 | Injection Time: | 06:57 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 26.770 | 0.3412463 | 0.3653549 | | 7.1 | 20 |
| Toluene | A | 25.000 | 23.790 | 0.7797766 | 0.7420674 | | -4.8 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 27.220 | 1.02527 | 1.116376 | | 8.9 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 26.180 | 1.194842 | 1.251168 | | 4.7 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 23.280 | 0.6397625 | 0.5956454 | | -6.9 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 23.300 | 0.1533095 | 0.1428946 | | -6.8 | 20 |
| Trichloroethene | A | 25.000 | 25.510 | 0.3255704 | 0.3322541 | | 2.1 | 20 |
| Trichlorofluoromethane | A | 25.000 | 26.890 | 0.5867905 | 0.6312543 | | 7.6 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 24.220 | 0.105337 | 0.1065372 | | -3.1 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 23.680 | 0.4183029 | 0.3961407 | | -5.3 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 25.350 | 3.597754 | 3.648065 | | 1.4 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 24.120 | 3.970515 | 3.830803 | | -3.5 | 20 |
| Vinyl chloride | A | 25.000 | 25.590 | 0.5958562 | 0.6098914 | | 2.4 | 20 |
| Total Xylenes | A | 75.000 | 74.370 | 1.988127 | 1.971436 | | -0.8 | 20 |
| p- & m-Xylenes | A | 50.000 | 49.740 | 2.011739 | 2.001174 | | -0.5 | 20 |
| o-Xylene | A | 25.000 | 24.630 | 1.940902 | 1.911959 | | -1.5 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB03.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV2 | Injection Time: | 07:20 |

| | (1) CAL | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acetone | A | 320.00 | 338.05 | 0.044841 | 4.736997E-02 | | 5.6 | 20 |
| Acetonitrile | L | 160.00 | 195.84 | 1.965066E-02 | 0.0201258 | | 22.4 | 20 * |
| Allyl chloride | A | 32.000 | 26.090 | 1.114402 | 0.9087446 | | -18.5 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 14.250 | 0.7281162 | 0.6486942 | | -10.9 | 20 |
| Benzyl chloride | A | 32.000 | 27.740 | 0.8656921 | 0.7503698 | | -13.3 | 20 |
| t-Butyl alcohol | A | 800.00 | 765.57 | 1.280474E-02 | 0.0122536 | | -4.3 | 20 |
| Carbon disulfide | A | 32.000 | 27.380 | 1.344744 | 1.150639 | | -14.4 | 20 |
| Chloroprene | A | 32.000 | 27.570 | 1.000946 | 0.8623896 | | -13.8 | 20 |
| Cyclohexane | A | 25.000 | 22.980 | 1.086285 | 0.9986526 | | -8.1 | 20 |
| Cyclohexanone | A | 400.00 | 254.10 | 4.458125E-02 | 2.832049E-02 | | -36.5 | 20 * |
| Diisopropyl ether | A | 16.000 | 15.400 | 0.3174881 | 0.3055476 | | -3.8 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 13.230 | 1.311089 | 1.083852 | | -17.3 | 20 |
| 2-Hexanone | Q | 320.00 | 289.26 | 0.0923643 | 8.064256E-02 | | -9.6 | 20 |
| Methylcyclohexane | A | 25.000 | 23.220 | 0.617876 | 0.573819 | | -7.1 | 20 |
| Methyl ethyl ketone | A | 160.00 | 152.92 | 0.0879739 | 8.407844E-02 | | -4.4 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 144.62 | 0.1389299 | 0.1255758 | | -9.6 | 20 |
| Vinyl acetate | A | 160.00 | 122.50 | 0.6344058 | 0.4857326 | | -23.4 | 20 * |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB33.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV3 | Injection Time: | 18:55 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 22.390 | 1.889545 | 1.692262 | | -10.4 | 20 | |
| Bromobenzene | A | 25.000 | 24.280 | 1.179324 | 1.145408 | | -2.9 | 20 | |
| Bromochloromethane | A | 25.000 | 23.890 | 0.1547174 | 0.1478545 | | -4.4 | 20 | |
| Bromodichloromethane | A | 25.000 | 24.270 | 0.3292103 | 0.3195458 | | -2.9 | 20 | |
| Bromoform | A | 25.000 | 23.910 | 0.3506939 | 0.335419 | 0.1 | -4.4 | 20 | |
| Bromomethane | A | 25.000 | 15.410 | 0.3180084 | 0.1960817 | | -38.3 | 20 | * |
| n-Butylbenzene | A | 25.000 | 24.130 | 3.493597 | 3.371498 | | -3.5 | 20 | |
| sec-Butylbenzene | A | 25.000 | 23.300 | 5.379312 | 5.01399 | | -6.8 | 20 | |
| tert-Butylbenzene | A | 25.000 | 22.510 | 3.852201 | 3.468463 | | -10.0 | 20 | |
| Carbon tetrachloride | A | 25.000 | 25.010 | 0.4688551 | 0.4691269 | | 0.06 | 20 | |
| Chlorobenzene | A | 25.000 | 24.680 | 2.978027 | 2.939909 | 0.3 | -1.3 | 20 | |
| Chloroethane | A | 25.000 | 24.120 | 0.3902835 | 0.376486 | | -3.5 | 20 | |
| Chloroform | A | 25.000 | 22.380 | 0.7548469 | 0.6756159 | | -10.5 | 20 | |
| Chloromethane | L | 25.000 | 23.640 | 0.6989857 | 0.598686 | 0.1 | -5.4 | 20 | |
| 2-Chlorotoluene | A | 25.000 | 24.660 | 3.666018 | 3.61613 | | -1.4 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 24.140 | 3.285453 | 3.17214 | | -3.4 | 20 | |
| Dibromochloromethane | A | 25.000 | 24.800 | 0.1708407 | 0.169481 | | -0.8 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 22.790 | 0.0666406 | 6.883587E-02 | | -8.8 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 23.690 | 0.1390115 | 0.1317072 | | -5.3 | 20 | |
| Dibromomethane | A | 25.000 | 22.580 | 0.1132441 | 0.1022701 | | -9.7 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 24.350 | 1.693334 | 1.649097 | | -2.6 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 23.120 | 2.068389 | 1.912509 | | -7.5 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 24.790 | 1.916207 | 1.900045 | | -0.8 | 20 | |

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# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB33.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV3 | Injection Time: | 18:55 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Dichlorodifluoromethane | A | 25.000 | 26.360 | 0.4765408 | 0.5023823 | | 5.4 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 20.480 | 1.030991 | 0.8446636 | 0.1 | -18.1 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 22.700 | 0.438219 | 0.3979229 | | -9.2 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 24.350 | 0.7766588 | 0.7564008 | | -2.6 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 22.590 | 0.46668 | 0.421653 | | -9.6 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 22.990 | 0.4502706 | 0.4140462 | | -8.0 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 22.190 | 0.3723232 | 0.330482 | | -11.2 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 23.780 | 0.2667047 | 0.2537399 | | -4.9 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 21.670 | 0.6461859 | 0.5600714 | | -13.3 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 23.260 | 0.61317 | 0.570439 | | -7.0 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 22.420 | 0.436368 | 0.3913677 | | -10.3 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 23.210 | 0.3001727 | 0.2787243 | | -7.1 | 20 |
| Ethylbenzene | A | 25.000 | 24.860 | 1.699115 | 1.689784 | | -0.5 | 20 |
| Hexachlorobutadiene | A | 25.000 | 26.060 | 0.8012975 | 0.8352106 | | 4.2 | 20 |
| Isopropylbenzene | A | 25.000 | 23.860 | 5.188549 | 4.952561 | | -4.5 | 20 |
| p-Isopropyltoluene | A | 25.000 | 23.590 | 4.064913 | 3.836204 | | -5.6 | 20 |
| Methylene chloride | L | 25.000 | 21.750 | 0.601454 | 0.3401249 | | -13.0 | 20 |
| Methyl t-butyl ether | A | 25.000 | 23.180 | 0.6285989 | 0.5827371 | | -7.3 | 20 |
| Naphthalene | A | 25.000 | 25.400 | 1.162765 | 1.181395 | | 1.6 | 20 |
| n-Propylbenzene | A | 25.000 | 23.480 | 5.959786 | 5.596572 | | -6.1 | 20 |
| Styrene | A | 25.000 | 25.270 | 2.90027 | 2.931593 | | 1.1 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 24.390 | 0.9261768 | 0.9037394 | | -2.4 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 23.350 | 0.555952 | 0.5193427 | 0.3 | -6.6 | 20 |

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Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB33.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV3 | Injection Time: | 18:55 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 25.620 | 0.3412463 | 0.3496444 | | 2.5 | 20 |
| Toluene | A | 25.000 | 23.470 | 0.7797766 | 0.7319603 | | -6.1 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 25.210 | 1.02527 | 1.033691 | | 0.8 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 25.000 | 1.194842 | 1.195006 | | 0.01 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 23.170 | 0.6397625 | 0.5929918 | | -7.3 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 24.010 | 0.1533095 | 0.1472351 | | -4.0 | 20 |
| Trichloroethene | A | 25.000 | 26.140 | 0.3255704 | 0.3404477 | | 4.6 | 20 |
| Trichlorofluoromethane | A | 25.000 | 26.650 | 0.5867905 | 0.6255475 | | 6.6 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 24.890 | 0.105337 | 0.1092538 | | -0.4 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 22.740 | 0.4183029 | 0.380553 | | -9.0 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 24.840 | 3.597754 | 3.57526 | | -0.6 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 23.420 | 3.970515 | 3.719349 | | -6.3 | 20 |
| Vinyl chloride | A | 25.000 | 26.370 | 0.5958562 | 0.6285442 | | 5.5 | 20 |
| Total Xylenes | A | 75.000 | 71.700 | 1.988127 | 1.900812 | | -4.4 | 20 |
| p- & m-Xylenes | A | 50.000 | 47.950 | 2.011739 | 1.929237 | | -4.1 | 20 |
| o-Xylene | A | 25.000 | 23.750 | 1.940902 | 1.843962 | | -5.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 13FEB34.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/13/17 |
| Lab Sample ID: | 1702431-CCV4 | Injection Time: | 19:18 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | 320.00 | 337.64 | 0.044841 | 4.731298E-02 | | 5.5 | 20 |
| Acetonitrile | L | 160.00 | 205.27 | 1.965066E-02 | 2.102272E-02 | | 28.3 | 20 * |
| Allyl chloride | A | 32.000 | 27.990 | 1.114402 | 0.9748234 | | -12.5 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 14.000 | 0.7281162 | 0.6371033 | | -12.5 | 20 |
| Benzyl chloride | A | 32.000 | 24.860 | 0.8656921 | 0.6724419 | | -22.3 | 20 * |
| t-Butyl alcohol | A | 800.00 | 772.60 | 1.280474E-02 | 1.236619E-02 | | -3.4 | 20 |
| Carbon disulfide | A | 32.000 | 29.570 | 1.344744 | 1.242616 | | -7.6 | 20 |
| Chloroprene | A | 32.000 | 29.870 | 1.000946 | 0.9341985 | | -6.7 | 20 |
| Cyclohexane | A | 25.000 | 23.470 | 1.086285 | 1.019708 | | -6.1 | 20 |
| Cyclohexanone | A | 400.00 | 232.99 | 4.458125E-02 | 2.596698E-02 | | -41.8 | 20 * |
| Diisopropyl ether | A | 16.000 | 14.270 | 0.3174881 | 0.2830708 | | -10.8 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 13.420 | 1.311089 | 1.099344 | | -16.2 | 20 |
| 2-Hexanone | Q | 320.00 | 291.07 | 0.0923643 | 8.107111E-02 | | -9.0 | 20 |
| Methyl ethyl ketone | A | 160.00 | 153.83 | 0.0879739 | 8.458384E-02 | | -3.9 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 142.82 | 0.1389299 | 0.1240118 | | -10.7 | 20 |
| Vinyl acetate | A | 160.00 | 97.510 | 0.6344058 | 0.3866373 | | -39.1 | 20 * |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702431-CCV5 | Injection Time: | 06:30 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 23.590 | 1.889545 | 1.782872 | | -5.6 | 20 | |
| Bromobenzene | A | 25.000 | 24.790 | 1.179324 | 1.169643 | | -0.8 | 20 | |
| Bromochloromethane | A | 25.000 | 24.050 | 0.1547174 | 0.1488447 | | -3.8 | 20 | |
| Bromodichloromethane | A | 25.000 | 24.830 | 0.3292103 | 0.326963 | | -0.7 | 20 | |
| Bromoform | A | 25.000 | 23.530 | 0.3506939 | 0.3300657 | 0.1 | -5.9 | 20 | |
| Bromomethane | A | 25.000 | 10.070 | 0.3180084 | 0.1280771 | | -59.7 | 20 | * |
| n-Butylbenzene | A | 25.000 | 25.320 | 3.493597 | 3.537716 | | 1.3 | 20 | |
| sec-Butylbenzene | A | 25.000 | 23.630 | 5.379312 | 5.08444 | | -5.5 | 20 | |
| tert-Butylbenzene | A | 25.000 | 24.120 | 3.852201 | 3.71613 | | -3.5 | 20 | |
| Carbon tetrachloride | A | 25.000 | 26.280 | 0.4688551 | 0.4928742 | | 5.1 | 20 | |
| Chlorobenzene | A | 25.000 | 24.860 | 2.978027 | 2.960782 | 0.3 | -0.6 | 20 | |
| Chloroethane | A | 25.000 | 25.900 | 0.3902835 | 0.4043616 | | 3.6 | 20 | |
| Chloroform | A | 25.000 | 24.090 | 0.7548469 | 0.7274694 | | -3.6 | 20 | |
| Chloromethane | L | 25.000 | 23.280 | 0.6989857 | 0.5898483 | 0.1 | -6.9 | 20 | |
| 2-Chlorotoluene | A | 25.000 | 23.330 | 3.666018 | 3.421861 | | -6.7 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 24.810 | 3.285453 | 3.260958 | | -0.7 | 20 | |
| Dibromochloromethane | A | 25.000 | 24.810 | 0.1708407 | 0.1695298 | | -0.8 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 22.130 | 0.0666406 | 6.683966E-02 | | -11.5 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 24.210 | 0.1390115 | 0.1345982 | | -3.2 | 20 | |
| Dibromomethane | A | 25.000 | 22.820 | 0.1132441 | 0.1033481 | | -8.7 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 23.570 | 1.693334 | 1.596579 | | -5.7 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 22.840 | 2.068389 | 1.890072 | | -8.6 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 24.670 | 1.916207 | 1.890553 | | -1.3 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702431-CCV5 | Injection Time: | 06:30 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 28.950 | 0.4765408 | 0.5519276 | | 15.8 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 22.650 | 1.030991 | 0.9342407 | 0.1 | -9.4 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 24.530 | 0.438219 | 0.4299361 | | -1.9 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 26.340 | 0.7766588 | 0.8183199 | | 5.4 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 24.550 | 0.46668 | 0.4582748 | | -1.8 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 25.040 | 0.4502706 | 0.4510645 | | 0.2 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 22.150 | 0.3723232 | 0.3298684 | | -11.4 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 23.140 | 0.2667047 | 0.2468923 | | -7.4 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 26.520 | 0.6461859 | 0.6854635 | | 6.1 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 24.750 | 0.61317 | 0.6070815 | | -1.0 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 23.720 | 0.436368 | 0.4139605 | | -5.1 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 24.360 | 0.3001727 | 0.2925204 | | -2.5 | 20 |
| Ethylbenzene | A | 25.000 | 24.520 | 1.699115 | 1.666635 | | -1.9 | 20 |
| Hexachlorobutadiene | A | 25.000 | 28.610 | 0.8012975 | 0.9168861 | | 14.4 | 20 |
| Isopropylbenzene | A | 25.000 | 24.620 | 5.188549 | 5.109768 | | -1.5 | 20 |
| p-Isopropyltoluene | A | 25.000 | 24.050 | 4.064913 | 3.910338 | | -3.8 | 20 |
| Methylene chloride | L | 25.000 | 23.640 | 0.601454 | 0.3664409 | | -5.4 | 20 |
| Methyl t-butyl ether | A | 25.000 | 24.580 | 0.6285989 | 0.6180477 | | -1.7 | 20 |
| Naphthalene | A | 25.000 | 26.240 | 1.162765 | 1.220567 | | 5.0 | 20 |
| n-Propylbenzene | A | 25.000 | 23.840 | 5.959786 | 5.682281 | | -4.7 | 20 |
| Styrene | A | 25.000 | 25.060 | 2.90027 | 2.907749 | | 0.3 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 24.350 | 0.9261768 | 0.9019254 | | -2.6 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 22.820 | 0.555952 | 0.5073907 | 0.3 | -8.7 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB02.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702431-CCV5 | Injection Time: | 06:30 |

| | (1) CAL | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 27.710 | 0.3412463 | 0.3782638 | | 10.8 | 20 |
| Toluene | A | 25.000 | 24.580 | 0.7797766 | 0.7666174 | | -1.7 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 26.410 | 1.02527 | 1.083101 | | 5.6 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 26.560 | 1.194842 | 1.269274 | | 6.2 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 24.890 | 0.6397625 | 0.6368361 | | -0.5 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 23.660 | 0.1533095 | 0.1451132 | | -5.3 | 20 |
| Trichloroethene | A | 25.000 | 27.150 | 0.3255704 | 0.3535291 | | 8.6 | 20 |
| Trichlorofluoromethane | A | 25.000 | 29.000 | 0.5867905 | 0.6806356 | | 16.0 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 27.100 | 0.105337 | 0.1183149 | | 8.4 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 25.130 | 0.4183029 | 0.4205229 | | 0.5 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 25.010 | 3.597754 | 3.5995 | | 0.05 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 23.960 | 3.970515 | 3.805331 | | -4.2 | 20 |
| Vinyl chloride | A | 25.000 | 25.230 | 0.5958562 | 0.6012703 | | 0.9 | 20 |
| Total Xylenes | A | 75.000 | 73.990 | 1.988127 | 1.961536 | | -1.3 | 20 |
| p- & m-Xylenes | A | 50.000 | 49.380 | 2.011739 | 1.986917 | | -1.2 | 20 |
| o-Xylene | A | 25.000 | 24.610 | 1.940902 | 1.910774 | | -1.6 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB03.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702431 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702431-CCV6 | Injection Time: | 06:54 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | A | 320.00 | 310.08 | 0.044841 | 4.345047E-02 | | -3.1 | 20 | |
| Acetonitrile | L | 160.00 | 163.35 | 1.965066E-02 | 1.703872E-02 | | 2.1 | 20 | |
| Allyl chloride | A | 32.000 | 26.290 | 1.114402 | 0.9154375 | | -17.9 | 20 | |
| t-Amyl Methyl ether | A | 16.000 | 13.750 | 0.7281162 | 0.6256907 | | -14.1 | 20 | |
| Benzyl chloride | A | 32.000 | 26.180 | 0.8656921 | 0.7083585 | | -18.2 | 20 | |
| t-Butyl alcohol | A | 800.00 | 615.79 | 1.280474E-02 | 9.856266E-03 | | -23.0 | 20 | * |
| Carbon disulfide | A | 32.000 | 28.540 | 1.344744 | 1.199308 | | -10.8 | 20 | |
| Chloroprene | A | 32.000 | 28.120 | 1.000946 | 0.8797378 | | -12.1 | 20 | |
| Cyclohexane | A | 25.000 | 23.350 | 1.086285 | 1.014511 | | -6.6 | 20 | |
| Cyclohexanone | A | 400.00 | 201.28 | 4.458125E-02 | 2.243315E-02 | | -49.7 | 20 | * |
| Diisopropyl ether | A | 16.000 | 15.050 | 0.3174881 | 0.2985614 | | -6.0 | 20 | |
| Ethyl t-butyl ether | A | 16.000 | 13.630 | 1.311089 | 1.116915 | | -14.8 | 20 | |
| 2-Hexanone | Q | 320.00 | 285.46 | 0.0923643 | 7.974234E-02 | | -10.8 | 20 | |
| Methylcyclohexane | A | 25.000 | 23.680 | 0.617876 | 0.5853423 | | -5.3 | 20 | |
| Methyl ethyl ketone | A | 160.00 | 137.33 | 0.0879739 | 7.551177E-02 | | -14.2 | 20 | |
| Methyl isobutyl ketone | A | 160.00 | 140.43 | 0.1389299 | 0.1219386 | | -12.2 | 20 | |
| Vinyl acetate | A | 160.00 | 130.53 | 0.6344058 | 0.5175426 | | -18.4 | 20 | |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702527-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 24.520 | 1.889545 | 1.853263 | | -1.9 | 20 |
| Bromobenzene | A | 25.000 | 26.750 | 1.179324 | 1.261962 | | 7.0 | 20 |
| Bromochloromethane | A | 25.000 | 27.870 | 0.1547174 | 0.1724858 | | 11.5 | 20 |
| Bromodichloromethane | A | 25.000 | 26.320 | 0.3292103 | 0.3466539 | | 5.3 | 20 |
| Bromoform | A | 25.000 | 29.540 | 0.3506939 | 0.4143899 | 0.1 | 18.2 | 20 |
| Bromomethane | A | 25.000 | 25.400 | 0.3180084 | 0.323081 | | 1.6 | 20 |
| n-Butylbenzene | A | 25.000 | 24.450 | 3.493597 | 3.416282 | | -2.2 | 20 |
| sec-Butylbenzene | A | 25.000 | 22.320 | 5.379312 | 4.803427 | | -10.7 | 20 |
| tert-Butylbenzene | A | 25.000 | 24.540 | 3.852201 | 3.780801 | | -1.9 | 20 |
| Carbon tetrachloride | A | 25.000 | 24.550 | 0.4688551 | 0.4604308 | | -1.8 | 20 |
| Chlorobenzene | A | 25.000 | 25.550 | 2.978027 | 3.04388 | 0.3 | 2.2 | 20 |
| Chloroethane | A | 25.000 | 25.010 | 0.3902835 | 0.3904325 | | 0.04 | 20 |
| Chloroform | A | 25.000 | 25.080 | 0.7548469 | 0.7572197 | | 0.3 | 20 |
| Chloromethane | L | 25.000 | 21.450 | 0.6989857 | 0.5449247 | 0.1 | -14.2 | 20 |
| 2-Chlorotoluene | A | 25.000 | 25.230 | 3.666018 | 3.699401 | | 0.9 | 20 |
| 4-Chlorotoluene | A | 25.000 | 25.250 | 3.285453 | 3.318671 | | 1.0 | 20 |
| Dibromochloromethane | A | 25.000 | 28.210 | 0.1708407 | 0.1927603 | | 12.8 | 20 |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 26.780 | 0.0666406 | 0.0808198 | | 7.1 | 20 |
| 1,2-Dibromoethane | A | 25.000 | 28.160 | 0.1390115 | 0.1565905 | | 12.6 | 20 |
| Dibromomethane | A | 25.000 | 25.600 | 0.1132441 | 0.1159592 | | 2.4 | 20 |
| 1,2-Dichlorobenzene | A | 25.000 | 25.120 | 1.693334 | 1.701651 | | 0.5 | 20 |
| 1,3-Dichlorobenzene | A | 25.000 | 23.440 | 2.068389 | 1.939285 | | -6.2 | 20 |
| 1,4-Dichlorobenzene | A | 25.000 | 25.950 | 1.916207 | 1.989058 | | 3.8 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702527-ICV1 | Injection Time: | 19:35 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Dichlorodifluoromethane | A | 25.000 | 23.190 | 0.4765408 | 0.4420548 | | -7.2 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 25.000 | 1.030991 | 1.031141 | 0.1 | 0.01 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 26.060 | 0.438219 | 0.4568204 | | 4.2 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 24.850 | 0.7766588 | 0.7719666 | | -0.6 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 25.440 | 0.46668 | 0.474977 | | 1.8 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 23.910 | 0.4502706 | 0.4305847 | | -4.4 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 25.240 | 0.3723232 | 0.3758662 | | 1.0 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 27.900 | 0.2667047 | 0.2976682 | | 11.6 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 23.050 | 0.6461859 | 0.595668 | | -7.8 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 24.340 | 0.61317 | 0.5969539 | | -2.6 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 25.890 | 0.436368 | 0.4519754 | | 3.6 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 27.510 | 0.3001727 | 0.3303126 | | 10.0 | 20 |
| Ethylbenzene | A | 25.000 | 24.810 | 1.699115 | 1.686003 | | -0.8 | 20 |
| Hexachlorobutadiene | A | 25.000 | 22.520 | 0.8012975 | 0.7218586 | | -9.9 | 20 |
| Isopropylbenzene | A | 25.000 | 23.670 | 5.188549 | 4.913541 | | -5.3 | 20 |
| p-Isopropyltoluene | A | 25.000 | 22.960 | 4.064913 | 3.733001 | | -8.2 | 20 |
| Methylene chloride | L | 25.000 | 27.090 | 0.601454 | 0.4144394 | | 8.4 | 20 |
| Methyl t-butyl ether | A | 25.000 | 29.040 | 0.6285989 | 0.7300879 | | 16.1 | 20 |
| Naphthalene | A | 25.000 | 28.850 | 1.162765 | 1.341925 | | 15.4 | 20 |
| n-Propylbenzene | A | 25.000 | 23.210 | 5.959786 | 5.533521 | | -7.2 | 20 |
| Styrene | A | 25.000 | 26.030 | 2.90027 | 3.020175 | | 4.1 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 25.800 | 0.9261768 | 0.9556971 | | 3.2 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 28.950 | 0.555952 | 0.6436956 | 0.3 | 15.8 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 26JAN15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 01/26/17 |
| Lab Sample ID: | 1702527-ICV1 | Injection Time: | 19:35 |

| | (1) CAL | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 23.430 | 0.3412463 | 0.3197576 | | -6.3 | 20 |
| Toluene | A | 25.000 | 24.190 | 0.7797766 | 0.7546079 | | -3.2 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 26.710 | 1.02527 | 1.095334 | | 6.8 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 26.280 | 1.194842 | 1.256226 | | 5.1 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 24.320 | 0.6397625 | 0.6223499 | | -2.7 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 28.140 | 0.1533095 | 0.1725615 | | 12.6 | 20 |
| Trichloroethene | A | 25.000 | 25.380 | 0.3255704 | 0.3305227 | | 1.5 | 20 |
| Trichlorofluoromethane | A | 25.000 | 23.360 | 0.5867905 | 0.5482351 | | -6.6 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 29.760 | 0.105337 | 0.1291837 | | 19.0 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 22.390 | 0.4183029 | 0.3745928 | | -10.4 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 24.970 | 3.597754 | 3.593467 | | -0.1 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 23.180 | 3.970515 | 3.680896 | | -7.3 | 20 |
| Vinyl chloride | A | 25.000 | 20.170 | 0.5958562 | 0.4807637 | | -19.3 | 20 |
| Total Xylenes | A | 75.000 | 74.270 | 1.988127 | 1.96886 | | -1.0 | 20 |
| p- & m-Xylenes | A | 50.000 | 49.530 | 2.011739 | 1.992895 | | -0.9 | 20 |
| o-Xylene | A | 25.000 | 24.740 | 1.940902 | 1.920791 | | -1.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 07FEB15.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/07/17 |
| Lab Sample ID: | 1702527-ICV2 | Injection Time: | 12:46 |

| | (1) CAL | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acetone | A | 320.00 | 315.03 | 0.044841 | 4.414517E-02 | | -1.6 | 20 |
| Acetonitrile | L | 160.00 | 201.66 | 1.965066E-02 | 2.067974E-02 | | 26.0 | 20 * |
| Allyl chloride | A | 32.000 | 31.180 | 1.114402 | 1.08574 | | -2.6 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 15.090 | 0.7281162 | 0.6866905 | | -5.7 | 20 |
| Benzyl chloride | A | 32.000 | 31.760 | 0.8656921 | 0.8592213 | | -0.7 | 20 |
| t-Butyl alcohol | A | 800.00 | 811.29 | 1.280474E-02 | 1.298544E-02 | | 1.4 | 20 |
| Carbon disulfide | A | 32.000 | 32.220 | 1.344744 | 1.354047 | | 0.7 | 20 |
| Chloroprene | A | 32.000 | 31.360 | 1.000946 | 0.9807911 | | -2.0 | 20 |
| Diisopropyl ether | A | 16.000 | 15.550 | 0.3174881 | 0.3085884 | | -2.8 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 15.050 | 1.311089 | 1.233435 | | -5.9 | 20 |
| 2-Hexanone | Q | 320.00 | 312.86 | 0.0923643 | 8.615645E-02 | | -2.2 | 20 |
| Methyl ethyl ketone | A | 160.00 | 154.88 | 0.0879739 | 0.0851614 | | -3.2 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 147.91 | 0.1389299 | 0.12843 | | -7.6 | 20 |
| Vinyl acetate | A | 160.00 | 147.71 | 0.6344058 | 0.5856918 | | -7.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB29.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702527-CCV3 | Injection Time: | 16:57 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 22.490 | 1.889545 | 1.699561 | | -10.1 | 20 | |
| Bromobenzene | A | 25.000 | 24.760 | 1.179324 | 1.168027 | | -1.0 | 20 | |
| Bromochloromethane | A | 25.000 | 25.380 | 0.1547174 | 0.1570894 | | 1.5 | 20 | |
| Bromodichloromethane | A | 25.000 | 23.850 | 0.3292103 | 0.3141177 | | -4.6 | 20 | |
| Bromoform | A | 25.000 | 24.310 | 0.3506939 | 0.341001 | 0.1 | -2.8 | 20 | |
| Bromomethane | A | 25.000 | 13.100 | 0.3180084 | 0.1666436 | | -47.6 | 20 | * |
| n-Butylbenzene | A | 25.000 | 23.650 | 3.493597 | 3.30436 | | -5.4 | 20 | |
| sec-Butylbenzene | A | 25.000 | 23.120 | 5.379312 | 4.975175 | | -7.5 | 20 | |
| tert-Butylbenzene | A | 25.000 | 23.450 | 3.852201 | 3.613181 | | -6.2 | 20 | |
| Carbon tetrachloride | A | 25.000 | 25.570 | 0.4688551 | 0.4795039 | | 2.3 | 20 | |
| Chlorobenzene | A | 25.000 | 24.900 | 2.978027 | 2.965907 | 0.3 | -0.4 | 20 | |
| Chloroethane | A | 25.000 | 24.120 | 0.3902835 | 0.3765644 | | -3.5 | 20 | |
| Chloroform | A | 25.000 | 23.760 | 0.7548469 | 0.7172656 | | -5.0 | 20 | |
| Chloromethane | L | 25.000 | 23.160 | 0.6989857 | 0.5867684 | 0.1 | -7.4 | 20 | |
| 2-Chlorotoluene | A | 25.000 | 24.340 | 3.666018 | 3.568666 | | -2.7 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 23.760 | 3.285453 | 3.122322 | | -5.0 | 20 | |
| Dibromochloromethane | A | 25.000 | 25.380 | 0.1708407 | 0.1734181 | | 1.5 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 21.830 | 0.0666406 | 6.594342E-02 | | -12.7 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 24.480 | 0.1390115 | 0.1361131 | | -2.1 | 20 | |
| Dibromomethane | A | 25.000 | 23.040 | 0.1132441 | 0.1043693 | | -7.8 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 23.100 | 1.693334 | 1.564589 | | -7.6 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 22.970 | 2.068389 | 1.900487 | | -8.1 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 23.710 | 1.916207 | 1.817136 | | -5.2 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB29.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702527-CCV3 | Injection Time: | 16:57 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 27.970 | 0.4765408 | 0.5332418 | | 11.9 | 20 |
| 1,1-Dichloroethane | A | 25.000 | 21.910 | 1.030991 | 0.903624 | 0.1 | -12.4 | 20 |
| 1,2-Dichloroethane | A | 25.000 | 24.350 | 0.438219 | 0.4267379 | | -2.6 | 20 |
| 1,1-Dichloroethene | A | 25.000 | 25.800 | 0.7766588 | 0.8015149 | | 3.2 | 20 |
| cis-1,2-Dichloroethene | A | 25.000 | 23.720 | 0.46668 | 0.4428694 | | -5.1 | 20 |
| trans-1,2-Dichloroethene | A | 25.000 | 23.540 | 0.4502706 | 0.4240018 | | -5.8 | 20 |
| 1,2-Dichloropropane | A | 25.000 | 22.740 | 0.3723232 | 0.3386883 | | -9.0 | 20 |
| 1,3-Dichloropropane | A | 25.000 | 23.370 | 0.2667047 | 0.2492662 | | -6.5 | 20 |
| 2,2-Dichloropropane | A | 25.000 | 23.110 | 0.6461859 | 0.5972396 | | -7.6 | 20 |
| 1,1-Dichloropropene | A | 25.000 | 24.410 | 0.61317 | 0.5985855 | | -2.4 | 20 |
| cis-1,3-Dichloropropene | A | 25.000 | 23.030 | 0.436368 | 0.4019262 | | -7.9 | 20 |
| trans-1,3-Dichloropropene | A | 25.000 | 23.410 | 0.3001727 | 0.2810759 | | -6.4 | 20 |
| Ethylbenzene | A | 25.000 | 23.830 | 1.699115 | 1.619286 | | -4.7 | 20 |
| Hexachlorobutadiene | A | 25.000 | 26.830 | 0.8012975 | 0.8600197 | | 7.3 | 20 |
| Isopropylbenzene | A | 25.000 | 23.490 | 5.188549 | 4.875706 | | -6.0 | 20 |
| p-Isopropyltoluene | A | 25.000 | 22.940 | 4.064913 | 3.730465 | | -8.2 | 20 |
| Methylene chloride | L | 25.000 | 23.290 | 0.601454 | 0.3615781 | | -6.8 | 20 |
| Methyl t-butyl ether | A | 25.000 | 25.050 | 0.6285989 | 0.629735 | | 0.2 | 20 |
| Naphthalene | A | 25.000 | 25.280 | 1.162765 | 1.175598 | | 1.1 | 20 |
| n-Propylbenzene | A | 25.000 | 22.590 | 5.959786 | 5.384724 | | -9.6 | 20 |
| Styrene | A | 25.000 | 24.620 | 2.90027 | 2.856739 | | -1.5 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 23.900 | 0.9261768 | 0.8856056 | | -4.4 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 22.880 | 0.555952 | 0.5088996 | 0.3 | -8.5 | 20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB29.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702527-CCV3 | Injection Time: | 16:57 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 25.720 | 0.3412463 | 0.351107 | | 2.9 | 20 |
| Toluene | A | 25.000 | 23.770 | 0.7797766 | 0.7415601 | | -4.9 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 25.920 | 1.02527 | 1.062903 | | 3.7 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 25.650 | 1.194842 | 1.226112 | | 2.6 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 24.290 | 0.6397625 | 0.6215435 | | -2.8 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 23.170 | 0.1533095 | 0.1420635 | | -7.3 | 20 |
| Trichloroethene | A | 25.000 | 25.220 | 0.3255704 | 0.3284748 | | 0.9 | 20 |
| Trichlorofluoromethane | A | 25.000 | 28.000 | 0.5867905 | 0.6571068 | | 12.0 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 26.350 | 0.105337 | 0.1152554 | | 5.4 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 24.660 | 0.4183029 | 0.4126517 | | -1.4 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 24.480 | 3.597754 | 3.522873 | | -2.1 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 22.580 | 3.970515 | 3.58571 | | -9.7 | 20 |
| Vinyl chloride | A | 25.000 | 25.960 | 0.5958562 | 0.6188137 | | 3.9 | 20 |
| Total Xylenes | A | 75.000 | 72.840 | 1.988127 | 1.93098 | | -2.9 | 20 |
| p- & m-Xylenes | A | 50.000 | 48.520 | 2.011739 | 1.952241 | | -3.0 | 20 |
| o-Xylene | A | 25.000 | 24.320 | 1.940902 | 1.888458 | | -2.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB30.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/14/17 |
| Lab Sample ID: | 1702527-CCV4 | Injection Time: | 17:20 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | 320.00 | 394.60 | 0.044841 | 5.529399E-02 | | 23.3 | 20 * |
| Acetonitrile | L | 160.00 | 220.95 | 1.965066E-02 | 0.0225126 | | 38.1 | 20 * |
| Allyl chloride | A | 32.000 | 30.760 | 1.114402 | 1.071053 | | -3.9 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 16.210 | 0.7281162 | 0.7377014 | | 1.3 | 20 |
| Benzyl chloride | A | 32.000 | 28.570 | 0.8656921 | 0.7729324 | | -10.7 | 20 |
| t-Butyl alcohol | A | 800.00 | 831.28 | 1.280474E-02 | 1.330546E-02 | | 3.9 | 20 |
| Carbon disulfide | A | 32.000 | 33.850 | 1.344744 | 1.422492 | | 5.8 | 20 |
| Chloroprene | A | 32.000 | 33.820 | 1.000946 | 1.057734 | | 5.7 | 20 |
| Diisopropyl ether | A | 16.000 | 18.040 | 0.3174881 | 0.3579512 | | 12.7 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 15.960 | 1.311089 | 1.307801 | | -0.3 | 20 |
| 2-Hexanone | Q | 320.00 | 332.38 | 0.0923643 | 9.060458E-02 | | 3.9 | 20 |
| Methyl ethyl ketone | A | 160.00 | 167.53 | 0.0879739 | 9.211453E-02 | | 4.7 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 159.22 | 0.1389299 | 0.138251 | | -0.5 | 20 |
| Vinyl acetate | A | 160.00 | 148.89 | 0.6344058 | 0.5903355 | | -6.9 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB59.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/15/17 |
| Lab Sample ID: | 1702527-CCV5 | Injection Time: | 04:27 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | A | 25.000 | 22.460 | 1.889545 | 1.697804 | | -10.1 | 20 | |
| Bromobenzene | A | 25.000 | 22.100 | 1.179324 | 1.042614 | | -11.6 | 20 | |
| Bromochloromethane | A | 25.000 | 25.580 | 0.1547174 | 0.1582773 | | 2.3 | 20 | |
| Bromodichloromethane | A | 25.000 | 23.930 | 0.3292103 | 0.315149 | | -4.3 | 20 | |
| Bromoform | A | 25.000 | 22.220 | 0.3506939 | 0.3116894 | 0.1 | -11.1 | 20 | |
| Bromomethane | A | 25.000 | 17.300 | 0.3180084 | 0.220056 | | -30.8 | 20 | * |
| n-Butylbenzene | A | 25.000 | 23.130 | 3.493597 | 3.232935 | | -7.5 | 20 | |
| sec-Butylbenzene | A | 25.000 | 21.680 | 5.379312 | 4.664938 | | -13.3 | 20 | |
| tert-Butylbenzene | A | 25.000 | 21.460 | 3.852201 | 3.306306 | | -14.2 | 20 | |
| Carbon tetrachloride | A | 25.000 | 25.400 | 0.4688551 | 0.4763154 | | 1.6 | 20 | |
| Chlorobenzene | A | 25.000 | 23.340 | 2.978027 | 2.779804 | 0.3 | -6.7 | 20 | |
| Chloroethane | A | 25.000 | 23.900 | 0.3902835 | 0.3730576 | | -4.4 | 20 | |
| Chloroform | A | 25.000 | 23.030 | 0.7548469 | 0.6954035 | | -7.9 | 20 | |
| Chloromethane | L | 25.000 | 25.560 | 0.6989857 | 0.6458024 | 0.1 | 2.2 | 20 | |
| 2-Chlorotoluene | A | 25.000 | 22.800 | 3.666018 | 3.343284 | | -8.8 | 20 | |
| 4-Chlorotoluene | A | 25.000 | 22.530 | 3.285453 | 2.960812 | | -9.9 | 20 | |
| Dibromochloromethane | A | 25.000 | 23.850 | 0.1708407 | 0.1630031 | | -4.6 | 20 | |
| 1,2-Dibromo-3-chloropropane | L | 25.000 | 25.550 | 0.0666406 | 0.077129 | | 2.2 | 20 | |
| 1,2-Dibromoethane | A | 25.000 | 23.460 | 0.1390115 | 0.1304572 | | -6.2 | 20 | |
| Dibromomethane | A | 25.000 | 21.960 | 0.1132441 | 9.949058E-02 | | -12.1 | 20 | |
| 1,2-Dichlorobenzene | A | 25.000 | 23.690 | 1.693334 | 1.60477 | | -5.2 | 20 | |
| 1,3-Dichlorobenzene | A | 25.000 | 21.800 | 2.068389 | 1.803793 | | -12.8 | 20 | |
| 1,4-Dichlorobenzene | A | 25.000 | 23.410 | 1.916207 | 1.794565 | | -6.3 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB59.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/15/17 |
| Lab Sample ID: | 1702527-CCV5 | Injection Time: | 04:27 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) | |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | A | 25.000 | 26.780 | 0.4765408 | 0.5104032 | | 7.1 | 20 | |
| 1,1-Dichloroethane | A | 25.000 | 21.600 | 1.030991 | 0.8907072 | 0.1 | -13.6 | 20 | |
| 1,2-Dichloroethane | A | 25.000 | 23.520 | 0.438219 | 0.4123334 | | -5.9 | 20 | |
| 1,1-Dichloroethene | A | 25.000 | 25.120 | 0.7766588 | 0.780541 | | 0.5 | 20 | |
| cis-1,2-Dichloroethene | A | 25.000 | 23.840 | 0.46668 | 0.4451155 | | -4.6 | 20 | |
| trans-1,2-Dichloroethene | A | 25.000 | 23.510 | 0.4502706 | 0.4235014 | | -5.9 | 20 | |
| 1,2-Dichloropropane | A | 25.000 | 21.940 | 0.3723232 | 0.3266954 | | -12.3 | 20 | |
| 1,3-Dichloropropane | A | 25.000 | 23.050 | 0.2667047 | 0.2459262 | | -7.8 | 20 | |
| 2,2-Dichloropropane | A | 25.000 | 16.860 | 0.6461859 | 0.4358589 | | -32.5 | 20 | * |
| 1,1-Dichloropropene | A | 25.000 | 23.540 | 0.61317 | 0.5773325 | | -5.8 | 20 | |
| cis-1,3-Dichloropropene | A | 25.000 | 21.500 | 0.436368 | 0.3753566 | | -14.0 | 20 | |
| trans-1,3-Dichloropropene | A | 25.000 | 21.450 | 0.3001727 | 0.2575204 | | -14.2 | 20 | |
| Ethylbenzene | A | 25.000 | 22.420 | 1.699115 | 1.523488 | | -10.3 | 20 | |
| Hexachlorobutadiene | A | 25.000 | 28.290 | 0.8012975 | 0.9066957 | | 13.2 | 20 | |
| Isopropylbenzene | A | 25.000 | 22.000 | 5.188549 | 4.566718 | | -12.0 | 20 | |
| p-Isopropyltoluene | A | 25.000 | 22.540 | 4.064913 | 3.664857 | | -9.8 | 20 | |
| Methylene chloride | L | 25.000 | 24.150 | 0.601454 | 0.3734833 | | -3.4 | 20 | |
| Methyl t-butyl ether | A | 25.000 | 23.840 | 0.6285989 | 0.5994272 | | -4.6 | 20 | |
| Naphthalene | A | 25.000 | 20.880 | 1.162765 | 0.9709363 | | -16.5 | 20 | |
| n-Propylbenzene | A | 25.000 | 21.410 | 5.959786 | 5.10483 | | -14.3 | 20 | |
| Styrene | A | 25.000 | 23.110 | 2.90027 | 2.681331 | | -7.5 | 20 | |
| 1,1,1,2-Tetrachloroethane | A | 25.000 | 22.120 | 0.9261768 | 0.8195791 | | -11.5 | 20 | |
| 1,1,2,2-Tetrachloroethane | A | 25.000 | 20.250 | 0.555952 | 0.4503788 | 0.3 | -19.0 | 20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB59.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/15/17 |
| Lab Sample ID: | 1702527-CCV5 | Injection Time: | 04:27 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT (2) | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Tetrachloroethene | A | 25.000 | 23.470 | 0.3412463 | 0.3202942 | | -6.1 | 20 |
| Toluene | A | 25.000 | 22.580 | 0.7797766 | 0.7043779 | | -9.7 | 20 |
| 1,2,3-Trichlorobenzene | A | 25.000 | 20.280 | 1.02527 | 0.8318445 | | -18.9 | 20 |
| 1,2,4-Trichlorobenzene | A | 25.000 | 23.370 | 1.194842 | 1.117056 | | -6.5 | 20 |
| 1,1,1-Trichloroethane | A | 25.000 | 24.720 | 0.6397625 | 0.6325737 | | -1.1 | 20 |
| 1,1,2-Trichloroethane | A | 25.000 | 23.070 | 0.1533095 | 0.1414847 | | -7.7 | 20 |
| Trichloroethene | A | 25.000 | 23.710 | 0.3255704 | 0.308786 | | -5.2 | 20 |
| Trichlorofluoromethane | A | 25.000 | 27.560 | 0.5867905 | 0.6469918 | | 10.3 | 20 |
| 1,2,3-Trichloropropane | L | 25.000 | 22.590 | 0.105337 | 9.985561E-02 | | -9.6 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | A | 25.000 | 23.690 | 0.4183029 | 0.3963329 | | -5.3 | 20 |
| 1,2,4-Trimethylbenzene | A | 25.000 | 23.090 | 3.597754 | 3.323244 | | -7.6 | 20 |
| 1,3,5-Trimethylbenzene | A | 25.000 | 22.180 | 3.970515 | 3.523163 | | -11.3 | 20 |
| Vinyl chloride | A | 25.000 | 27.900 | 0.5958562 | 0.6650486 | | 11.6 | 20 |
| Total Xylenes | A | 75.000 | 66.940 | 1.988127 | 1.774151 | | -10.8 | 20 |
| p- & m-Xylenes | A | 50.000 | 44.370 | 2.011739 | 1.785269 | | -11.3 | 20 |
| o-Xylene | A | 25.000 | 22.570 | 1.940902 | 1.751915 | | -9.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# CONTINUING CALIBRATION CHECK

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Instrument ID: | MS-V5 | Calibration: | 1702011 |
| Lab File ID: | 14FEB60.D | Calibration Date: | 01/26/17 17:00 |
| Sequence: | 1702527 | Injection Date: | 02/15/17 |
| Lab Sample ID: | 1702527-CCV6 | Injection Time: | 04:49 |

| COMPOUND | (1) CAL TYPE | CONC. (ug/L) STD | CONC. (ug/L) CCV | RESPONSE FACTOR ICAL | RESPONSE FACTOR CCV | RESPONSE FACTOR MIN (#) | % DIFF / DRIFT (2) CCV | % DIFF / DRIFT (2) LIMIT (#) |
|---|---|---|---|---|---|---|---|---|
| Acetone | A | 320.00 | 321.12 | 0.044841 | 4.499762E-02 | | 0.3 | 20 |
| Acetonitrile | L | 160.00 | 192.06 | 1.965066E-02 | 1.976693E-02 | | 20.0 | 20 |
| Allyl chloride | A | 32.000 | 27.910 | 1.114402 | 0.9719905 | | -12.8 | 20 |
| t-Amyl Methyl ether | A | 16.000 | 14.070 | 0.7281162 | 0.6404077 | | -12.0 | 20 |
| Benzyl chloride | A | 32.000 | 17.740 | 0.8656921 | 0.4797899 | | -44.6 | 20 * |
| t-Butyl alcohol | A | 800.00 | 703.26 | 1.280474E-02 | 1.125628E-02 | | -12.1 | 20 |
| Carbon disulfide | A | 32.000 | 29.890 | 1.344744 | 1.256279 | | -6.6 | 20 |
| Chloroprene | A | 32.000 | 30.100 | 1.000946 | 0.9415849 | | -5.9 | 20 |
| Diisopropyl ether | A | 16.000 | 14.810 | 0.3174881 | 0.2938601 | | -7.4 | 20 |
| Ethyl t-butyl ether | A | 16.000 | 13.720 | 1.311089 | 1.124478 | | -14.2 | 20 |
| 2-Hexanone | Q | 320.00 | 279.64 | 0.0923643 | 7.835233E-02 | | -12.6 | 20 |
| Methyl ethyl ketone | A | 160.00 | 135.29 | 0.0879739 | 7.438495E-02 | | -15.4 | 20 |
| Methyl isobutyl ketone | A | 160.00 | 140.97 | 0.1389299 | 0.1224069 | | -11.9 | 20 |
| Vinyl acetate | A | 160.00 | 130.82 | 0.6344058 | 0.5187031 | | -18.2 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702048
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Cal Standard (1702048-CAL1 )** | | | Lab File ID: 26JAN06.D | | Analyzed: 01/26/17 16:07 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 98.6 | | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.5 | | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 88.4 | | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Cal Standard (1702048-CAL2 )** | | | Lab File ID: 26JAN07.D | | Analyzed: 01/26/17 16:30 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 99.3 | | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.1 | | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 90.4 | | 10.36 | 10.355 | 0.0050 | +/-1.0 | |
| **Cal Standard (1702048-CAL3 )** | | | Lab File ID: 26JAN08.D | | Analyzed: 01/26/17 16:53 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 103 | | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.8 | | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.0 | | 10.36 | 10.355 | 0.0050 | +/-1.0 | |
| **Cal Standard (1702048-CAL5 )** | | | Lab File ID: 26JAN10.D | | Analyzed: 01/26/17 17:39 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 97.1 | | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.2 | | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 93.3 | | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Cal Standard (1702048-CAL6 )** | | | Lab File ID: 26JAN11.D | | Analyzed: 01/26/17 18:02 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 86.6 | | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 93.4 | | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 89.5 | | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Cal Standard (1702048-CAL4 )** | | | Lab File ID: 26JAN14.D | | Analyzed: 01/26/17 19:12 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 106 | | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 102 | | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | | 10.36 | 10.355 | 0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702423
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Initial Cal Check (1702423-ICV1 )** | | | Lab File ID: 26JAN15.D | | Analyzed: 01/26/17 19:35 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 108 | 85 - 114 | 10.36 | 10.355 | 0.0050 | +/-1.0 | |
| **Initial Cal Blank (1702423-ICB1 )** | | | Lab File ID: 26JAN17.D | | Analyzed: 01/26/17 20:23 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 113 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 103 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702423-CCV1 )** | | | Lab File ID: 12FEB02.D | | Analyzed: 02/12/17 05:28 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 93.6 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 95.7 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Blank (1702423-CCB1 )** | | | Lab File ID: 12FEB05.D | | Analyzed: 02/12/17 06:37 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 100 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 102 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 97.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Blank (B[B1006-BLK1 )** | | | Lab File ID: 12FEB22.D | | Analyzed: 02/12/17 13:11 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 99.5 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.5 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **27MW01_170207 (1703480-14 )** | | | Lab File ID: 12FEB23.D | | Analyzed: 02/12/17 13:34 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 107 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 95.5 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **LCS (B[B1006-BS1 )** | | | Lab File ID: 12FEB24.D | | Analyzed: 02/12/17 13:57 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 98.4 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 97.8 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702423
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Matrix Spike (B[B1006-MS1 )** | | | Lab File ID: 12FEB25.D | | Analyzed: 02/12/17 14:20 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 96.6 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.8 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.5 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Matrix Spike Dup (B[B1006-MSD1 )** | | | Lab File ID: 12FEB26.D | | Analyzed: 02/12/17 14:43 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 91.9 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.8 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 104 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702423-CCV4 )** | | | Lab File ID: 12FEB33.D | | Analyzed: 02/12/17 17:25 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 97.5 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.4 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.2 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Blank (1702423-CCB2 )** | | | Lab File ID: 12FEB35.D | | Analyzed: 02/12/17 18:11 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 102 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **27EW-17_170207 (1703480-01 )** | | | Lab File ID: 12FEB54.D | | Analyzed: 02/13/17 01:31 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 100 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 104 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **398-MW1_170207 (1703480-03 )** | | | Lab File ID: 12FEB56.D | | Analyzed: 02/13/17 02:18 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 108 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 92.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 93.3 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **IR11-OU2B-MW02_170207 (1703480-04 )** | | | Lab File ID: 12FEB57.D | | Analyzed: 02/13/17 02:41 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 123 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 101 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.8 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702423 | Instrument: | MS-V5 |
| Matrix: | Water | Calibration: | 1702011 |

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **IR11-OU2B-MW03_170207 (1703480-05 )** | | | Lab File ID: 12FEB58.D | | Analyzed: 02/13/17 03:04 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 116 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.8 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702423-CCV6 )** | | | Lab File ID: 12FEB64.D | | Analyzed: 02/13/17 05:23 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 101 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 100 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Blank (1702423-CCB3 )** | | | Lab File ID: 12FEB66.D | | Analyzed: 02/13/17 06:09 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 105 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.1 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702431
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Initial Cal Check (1702431-ICV1 )** | | | Lab File ID: 26JAN15.D | | Analyzed: 01/26/17 19:35 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 108 | 85 - 114 | 10.36 | 10.355 | 0.0050 | +/-1.0 | |
| **Initial Cal Blank (1702431-ICB1 )** | | | Lab File ID: 26JAN17.D | | Analyzed: 01/26/17 20:23 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 113 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 103 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702431-CCV1 )** | | | Lab File ID: 13FEB02.D | | Analyzed: 02/13/17 06:57 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 99.0 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.4 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Blank (1702431-CCB1 )** | | | Lab File ID: 13FEB04.D | | Analyzed: 02/13/17 07:43 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.2 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 94.0 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Blank (B[B1007-BLK1 )** | | | Lab File ID: 13FEB05.D | | Analyzed: 02/13/17 08:06 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 105 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.4 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 94.2 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **OU2B-MW01_170207 (1703480-17 )** | | | Lab File ID: 13FEB06.D | | Analyzed: 02/13/17 08:29 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 109 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.0 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.7 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **LCS (B[B1007-BS1 )** | | | Lab File ID: 13FEB07.D | | Analyzed: 02/13/17 08:52 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 95.5 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.2 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 92.2 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Matrix Spike (B[B1007-MS1 )** | | | Lab File ID: 13FEB08.D | | Analyzed: 02/13/17 09:15 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 99.4 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 100 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Matrix Spike Dup (B[B1007-MSD1 )** | | | Lab File ID: 13FEB09.D | | Analyzed: 02/13/17 09:39 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 103 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW05C_170207 (1703480-10 )** | | | Lab File ID: 13FEB12.D | | Analyzed: 02/13/17 10:48 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 120 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 98.0 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **27EW-13_170207 (1703480-13 )** | | | Lab File ID: 13FEB15.D | | Analyzed: 02/13/17 11:58 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 102 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.8 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 103 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **IR11-OU2B-MW01_170207 (1703480-15 )** | | | Lab File ID: 13FEB16.D | | Analyzed: 02/13/17 12:21 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 114 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 101 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S11-TT-MW01D_170207 (1703480-19 )** | | | Lab File ID: 13FEB19.D | | Analyzed: 02/13/17 13:30 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 101 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.5 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 94.7 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW01E_170207 (1703480-21 )** | | | Lab File ID: 13FEB21.D | | Analyzed: 02/13/17 14:16 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 113 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 100 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.7 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **S21-TT-MW05B_170207 (1703480-22 )** | | | Lab File ID: 13FEB22.D | | Analyzed: 02/13/17 14:40 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 122 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 101 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 104 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **IR11-OU2B-MW04_170207 (1703480-29 )** | | | Lab File ID: 13FEB23.D | | Analyzed: 02/13/17 15:03 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 126 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 95.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 103 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S11-TT-MW01A_170207 (1703480-31 )** | | | Lab File ID: 13FEB25.D | | Analyzed: 02/13/17 15:49 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 101 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.2 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 95.6 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW01A_170207 (1703480-33 )** | | | Lab File ID: 13FEB27.D | | Analyzed: 02/13/17 16:36 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 107 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 96.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW01B_170207 (1703480-34 )** | | | Lab File ID: 13FEB28.D | | Analyzed: 02/13/17 16:59 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 119 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 96.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 100 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW01C_170207 (1703480-35 )** | | | Lab File ID: 13FEB29.D | | Analyzed: 02/13/17 17:22 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 110 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.6 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702431-CCV3 )** | | | Lab File ID: 13FEB33.D | | Analyzed: 02/13/17 18:55 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 99.1 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 96.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Blank (1702431-CCB2 )** | | | Lab File ID: 13FEB35.D | | Analyzed: 02/13/17 19:42 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 99.9 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 96.2 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 100 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **TB14_170207 (1703480-23 )** | | | Lab File ID: 13FEB36.D | | Analyzed: 02/13/17 20:05 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 99.9 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.1 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **TB15_170207 (1703480-24 )** | | | Lab File ID: 13FEB37.D | | Analyzed: 02/13/17 20:28 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 102 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 95.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **EB26_170207 (1703480-25 )** | | | Lab File ID: 13FEB38.D | | Analyzed: 02/13/17 20:51 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 105 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 101 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **EB27_170207 (1703480-26 )** | | | Lab File ID: 13FEB39.D | | Analyzed: 02/13/17 21:14 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 105 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 100 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.3 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **EB28_170207 (1703480-27 )** | | | Lab File ID: 13FEB40.D | | Analyzed: 02/13/17 21:38 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 108 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 96.4 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 94.7 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **EB29_170207 (1703480-28 )** | | | Lab File ID: 13FEB41.D | | Analyzed: 02/13/17 22:01 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 108 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 96.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 100 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **27EW-18_170207 (1703480-02 )** | | | Lab File ID: 13FEB42.D | | Analyzed: 02/13/17 22:24 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 101 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.7 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.6 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **M11-02_170207 (1703480-06 )** | | | Lab File ID: 13FEB43.D | | Analyzed: 02/13/17 22:47 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 100 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.0 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.7 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **OU2B-MW02_170207 (1703480-07 )** | | | Lab File ID: 13FEB44.D | | Analyzed: 02/13/17 23:10 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 116 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.8 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **OU2B-MW04_170207 (1703480-08 )** | | | Lab File ID: 13FEB45.D | | Analyzed: 02/13/17 23:33 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 102 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.0 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 103 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW05A_170207 (1703480-09 )** | | | Lab File ID: 13FEB46.D | | Analyzed: 02/13/17 23:57 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 117 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 96.8 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 104 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW05D_170207 (1703480-11 )** | | | Lab File ID: 13FEB47.D | | Analyzed: 02/14/17 00:20 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 127 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 95.5 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 97.1 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW05E_170207 (1703480-12 )** | | | Lab File ID: 13FEB48.D | | Analyzed: 02/14/17 00:43 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 126 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 99.2 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **M07B-01_170207 (1703480-16 )** | | | Lab File ID: 13FEB49.D | | Analyzed: 02/14/17 01:06 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 106 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 95.2 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S11-TT-MW01C_170207 (1703480-18 )** | | | Lab File ID: 13FEB50.D | | Analyzed: 02/14/17 01:29 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 122 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 98.5 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 98.2 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S11-TT-MW01E_170207 (1703480-20 )** | | | Lab File ID: 13FEB51.D | | Analyzed: 02/14/17 01:52 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 121 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 97.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 106 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **27EW-17_170207 (1703480-01RE1 )** | | | Lab File ID: 13FEB52.D | | Analyzed: 02/14/17 02:15 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 102 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 101 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **IR11-OU2B-MW02_170207 (1703480-04RE1 )** | | | Lab File ID: 13FEB53.D | | Analyzed: 02/14/17 02:38 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 105 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.0 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.8 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **IR11-OU2B-MW03_170207 (1703480-05RE1 )** | | | Lab File ID: 13FEB54.D | | Analyzed: 02/14/17 03:01 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 103 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.6 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW05C_170207 (1703480-10RE1 )** | | | Lab File ID: 13FEB55.D | | Analyzed: 02/14/17 03:25 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 109 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 93.2 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702431 | Instrument: | MS-V5 |
| Matrix: | Water | Calibration: | 1702011 |

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **IR11-OU2B-MW01_170207 (1703480-15RE1 )** | | | Lab File ID: 13FEB56.D | | Analyzed: 02/14/17 03:48 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 103 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 100 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 95.4 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702431-CCV5 )** | | | Lab File ID: 14FEB02.D | | Analyzed: 02/14/17 06:30 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 106 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.5 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.1 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Blank (1702431-CCB3 )** | | | Lab File ID: 14FEB04.D | | Analyzed: 02/14/17 07:17 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 103 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 97.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702527
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Initial Cal Check (1702527-ICV1 )** | | | Lab File ID: 26JAN15.D | | Analyzed: 01/26/17 19:35 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 108 | 85 - 114 | 10.36 | 10.355 | 0.0050 | +/-1.0 | |
| **Initial Cal Blank (1702527-ICB1 )** | | | Lab File ID: 26JAN17.D | | Analyzed: 01/26/17 20:23 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 113 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 99.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 103 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702527-CCV3 )** | | | Lab File ID: 14FEB29.D | | Analyzed: 02/14/17 16:57 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 102 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 93.5 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 97.0 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Blank (1702527-CCB2 )** | | | Lab File ID: 14FEB31.D | | Analyzed: 02/14/17 17:43 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 101 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.6 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 105 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **M11-01_170207 (1703480-30 )** | | | Lab File ID: 14FEB32.D | | Analyzed: 02/14/17 18:06 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 105 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 95.4 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.2 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S11-TT-MW01B_170207 (1703480-32 )** | | | Lab File ID: 14FEB33.D | | Analyzed: 02/14/17 18:29 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 123 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 96.4 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.7 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW01D_170207 (1703480-36 )** | | | Lab File ID: 14FEB34.D | | Analyzed: 02/14/17 18:52 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 125 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | * |
| Toluene-d8 (Surrogate) | 10.000 | 96.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 102 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702527
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Surrogate Compound | Spike Level ug/L | % Recovery | Recovery Limits | RT | Calibration Mean RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **S21-TT-MW05B_170207 (1703480-22RE1 )** | | | Lab File ID: 14FEB35.D | | Analyzed: 02/14/17 19:16 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 106 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.1 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 93.6 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **IR11-OU2B-MW04_170207 (1703480-29RE1 )** | | | Lab File ID: 14FEB36.D | | Analyzed: 02/14/17 19:39 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 109 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 91.9 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 99.5 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW01A_170207 (1703480-33RE1 )** | | | Lab File ID: 14FEB37.D | | Analyzed: 02/14/17 20:02 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 94.3 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 94.6 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **S21-TT-MW01B_170207 (1703480-34RE1 )** | | | Lab File ID: 14FEB38.D | | Analyzed: 02/14/17 20:25 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 104 | 81 - 118 | 6.92 | 6.921667 | -0.0017 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 98.2 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 96.9 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Check (1702527-CCV5 )** | | | Lab File ID: 14FEB59.D | | Analyzed: 02/15/17 04:27 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 100 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 93.0 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 94.4 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |
| **Calibration Blank (1702527-CCB3 )** | | | Lab File ID: 14FEB61.D | | Analyzed: 02/15/17 05:12 | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10.000 | 103 | 81 - 118 | 6.93 | 6.921667 | 0.0083 | +/-1.0 | |
| Toluene-d8 (Surrogate) | 10.000 | 91.5 | 89 - 112 | 8.61 | 8.61 | 0.0000 | +/-1.0 | |
| 4-Bromofluorobenzene (Surrogate) | 10.000 | 101 | 85 - 114 | 10.35 | 10.355 | -0.0050 | +/-1.0 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702048
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Cal Standard (1702048-CALD )** | | | Lab File ID: 13DEC06.D | | | Analyzed: 12/13/16 10:10 | | | |
| Pentafluorobenzene (IS) | 179698 | 6.71 | 210237 | 6.59 | 85 | 50 - 200 | 0.1200 | +/-0.50 | |
| **Cal Standard (1702048-CALE )** | | | Lab File ID: 13DEC07.D | | | Analyzed: 12/13/16 10:32 | | | |
| Pentafluorobenzene (IS) | 181927 | 6.7 | 210237 | 6.59 | 87 | 50 - 200 | 0.1100 | +/-0.50 | |
| **Cal Standard (1702048-CALF )** | | | Lab File ID: 13DEC08.D | | | Analyzed: 12/13/16 10:55 | | | |
| Pentafluorobenzene (IS) | 182850 | 6.7 | 210237 | 6.59 | 87 | 50 - 200 | 0.1100 | +/-0.50 | |
| **Cal Standard (1702048-CALG )** | | | Lab File ID: 13DEC09.D | | | Analyzed: 12/13/16 11:18 | | | |
| Pentafluorobenzene (IS) | 175456 | 6.7 | 210237 | 6.59 | 83 | 50 - 200 | 0.1100 | +/-0.50 | |
| **Cal Standard (1702048-CALH )** | | | Lab File ID: 13DEC10.D | | | Analyzed: 12/13/16 11:41 | | | |
| Pentafluorobenzene (IS) | 178003 | 6.7 | 210237 | 6.59 | 85 | 50 - 200 | 0.1100 | +/-0.50 | |
| **Cal Standard (1702048-CALI )** | | | Lab File ID: 13DEC11.D | | | Analyzed: 12/13/16 12:04 | | | |
| Pentafluorobenzene (IS) | 180722 | 6.71 | 210237 | 6.59 | 86 | 50 - 200 | 0.1200 | +/-0.50 | |
| **Cal Standard (1702048-CAL1 )** | | | Lab File ID: 26JAN06.D | | | Analyzed: 01/26/17 16:07 | | | |
| Pentafluorobenzene (IS) | 220247 | 6.58 | 210237 | 6.59 | 105 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 74437 | 9.62 | 76990 | 9.62 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 307137 | 7.39 | 296345 | 7.39 | 104 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CAL2 )** | | | Lab File ID: 26JAN07.D | | | Analyzed: 01/26/17 16:30 | | | |
| Pentafluorobenzene (IS) | 220154 | 6.58 | 210237 | 6.59 | 105 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 72326 | 9.62 | 76990 | 9.62 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 293817 | 7.39 | 296345 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CAL3 )** | | | Lab File ID: 26JAN08.D | | | Analyzed: 01/26/17 16:53 | | | |
| Pentafluorobenzene (IS) | 205618 | 6.58 | 210237 | 6.59 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 69095 | 9.62 | 76990 | 9.62 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 296048 | 7.39 | 296345 | 7.39 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CAL5 )** | | | Lab File ID: 26JAN10.D | | | Analyzed: 01/26/17 17:39 | | | |
| Pentafluorobenzene (IS) | 205022 | 6.58 | 210237 | 6.59 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 71070 | 9.63 | 76990 | 9.62 | 92 | 50 - 200 | 0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 294320 | 7.39 | 296345 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702048
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Cal Standard (1702048-CAL6 )** | | | Lab File ID: 26JAN11.D | | | Analyzed: 01/26/17 18:02 | | | |
| Pentafluorobenzene (IS) | 209417 | 6.58 | 210237 | 6.59 | 100 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67636 | 9.63 | 76990 | 9.62 | 88 | 50 - 200 | 0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 306655 | 7.39 | 296345 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CAL4 )** | | | Lab File ID: 26JAN14.D | | | Analyzed: 01/26/17 19:12 | | | |
| Pentafluorobenzene (IS) | 210237 | 6.59 | 210237 | 6.59 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 76990 | 9.62 | 76990 | 9.62 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 296345 | 7.39 | 296345 | 7.39 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CAL7 )** | | | Lab File ID: 07FEB07.D | | | Analyzed: 02/07/17 09:30 | | | |
| Pentafluorobenzene (IS) | 198502 | 6.59 | 210237 | 6.59 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65644 | 9.62 | 76990 | 9.62 | 85 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 262651 | 7.39 | 296345 | 7.39 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CAL8 )** | | | Lab File ID: 07FEB08.D | | | Analyzed: 02/07/17 09:53 | | | |
| Pentafluorobenzene (IS) | 197084 | 6.59 | 210237 | 6.59 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66400 | 9.62 | 76990 | 9.62 | 86 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 256192 | 7.39 | 296345 | 7.39 | 86 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CAL9 )** | | | Lab File ID: 07FEB09.D | | | Analyzed: 02/07/17 10:17 | | | |
| Pentafluorobenzene (IS) | 199098 | 6.58 | 210237 | 6.59 | 95 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66850 | 9.62 | 76990 | 9.62 | 87 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 268584 | 7.39 | 296345 | 7.39 | 91 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CALA )** | | | Lab File ID: 07FEB10.D | | | Analyzed: 02/07/17 10:40 | | | |
| Pentafluorobenzene (IS) | 189807 | 6.59 | 210237 | 6.59 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67543 | 9.63 | 76990 | 9.62 | 88 | 50 - 200 | 0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 267711 | 7.39 | 296345 | 7.39 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Cal Standard (1702048-CALB )** | | | Lab File ID: 07FEB11.D | | | Analyzed: 02/07/17 11:03 | | | |
| Pentafluorobenzene (IS) | 192292 | 6.58 | 210237 | 6.59 | 91 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 64347 | 9.62 | 76990 | 9.62 | 84 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 268075 | 7.39 | 296345 | 7.39 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702048 | Instrument: | MS-V5 |
| Matrix: | Water | Calibration: | 1702011 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Cal Standard (1702048-CALC )** | | | Lab File ID: 07FEB12.D | | | Analyzed: 02/07/17 11:27 | | | |
| Pentafluorobenzene (IS) | 198987 | 6.58 | 210237 | 6.59 | 95 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68486 | 9.62 | 76990 | 9.62 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 272690 | 7.39 | 296345 | 7.39 | 92 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702423
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Initial Cal Check (1702423-ICV1 )** | | | Lab File ID: 26JAN15.D | | | Analyzed: 01/26/17 19:35 | | | |
| Pentafluorobenzene (IS) | 213388 | 6.58 | 210237 | 6.59 | 101 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 73774 | 9.62 | 76990 | 9.62 | 96 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 304652 | 7.39 | 296345 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Blank (1702423-ICB1 )** | | | Lab File ID: 26JAN17.D | | | Analyzed: 01/26/17 20:23 | | | |
| Pentafluorobenzene (IS) | 218750 | 6.59 | 213388 | 6.58 | 103 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 72255 | 9.62 | 73774 | 9.62 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 295229 | 7.39 | 304652 | 7.39 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Check (1702423-ICV2 )** | | | Lab File ID: 07FEB15.D | | | Analyzed: 02/07/17 12:46 | | | |
| Pentafluorobenzene (IS) | 188542 | 6.59 | 210237 | 6.59 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65064 | 9.63 | 76990 | 9.62 | 85 | 50 - 200 | 0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 259624 | 7.39 | 296345 | 7.39 | 88 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Blank (1702423-ICB2 )** | | | Lab File ID: 07FEB17.D | | | Analyzed: 02/07/17 13:33 | | | |
| Pentafluorobenzene (IS) | 199643 | 6.58 | 188542 | 6.59 | 106 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66387 | 9.63 | 65064 | 9.63 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 275356 | 7.39 | 259624 | 7.39 | 106 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702423-CCV1 )** | | | Lab File ID: 12FEB02.D | | | Analyzed: 02/12/17 05:28 | | | |
| Pentafluorobenzene (IS) | 200402 | 6.58 | 210237 | 6.59 | 95 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66457 | 9.62 | 76990 | 9.62 | 86 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 280908 | 7.39 | 296345 | 7.39 | 95 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702423-CCV2 )** | | | Lab File ID: 12FEB03.D | | | Analyzed: 02/12/17 05:51 | | | |
| Pentafluorobenzene (IS) | 204871 | 6.58 | 210237 | 6.59 | 97 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66742 | 9.62 | 76990 | 9.62 | 87 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 270832 | 7.39 | 296345 | 7.39 | 91 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Blank (1702423-CCB1 )** | | | Lab File ID: 12FEB05.D | | | Analyzed: 02/12/17 06:37 | | | |
| Pentafluorobenzene (IS) | 215456 | 6.58 | 204871 | 6.58 | 105 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 69351 | 9.62 | 66742 | 9.62 | 104 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 280117 | 7.39 | 270832 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702423
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Blank (B[B1006-BLK1 )** | | | Lab File ID: 12FEB22.D | | | Analyzed: 02/12/17 13:11 | | | |
| Pentafluorobenzene (IS) | 210084 | 6.58 | 204871 | 6.58 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62590 | 9.62 | 66742 | 9.62 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 279302 | 7.39 | 270832 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **27MW01_170207 (1703480-14 )** | | | Lab File ID: 12FEB23.D | | | Analyzed: 02/12/17 13:34 | | | |
| Pentafluorobenzene (IS) | 201570 | 6.58 | 204871 | 6.58 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 64326 | 9.62 | 66742 | 9.62 | 96 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 266412 | 7.39 | 270832 | 7.39 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| **LCS (B[B1006-BS1 )** | | | Lab File ID: 12FEB24.D | | | Analyzed: 02/12/17 13:57 | | | |
| Pentafluorobenzene (IS) | 203205 | 6.58 | 204871 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65605 | 9.62 | 66742 | 9.62 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 268538 | 7.39 | 270832 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Matrix Spike (B[B1006-MS1 )** | | | Lab File ID: 12FEB25.D | | | Analyzed: 02/12/17 14:20 | | | |
| Pentafluorobenzene (IS) | 178456 | 6.58 | 204871 | 6.58 | 87 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 61494 | 9.62 | 66742 | 9.62 | 92 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 252231 | 7.39 | 270832 | 7.39 | 93 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Matrix Spike Dup (B[B1006-MSD1 )** | | | Lab File ID: 12FEB26.D | | | Analyzed: 02/12/17 14:43 | | | |
| Pentafluorobenzene (IS) | 206072 | 6.58 | 204871 | 6.58 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65084 | 9.62 | 66742 | 9.62 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 278738 | 7.39 | 270832 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702423-CCV4 )** | | | Lab File ID: 12FEB33.D | | | Analyzed: 02/12/17 17:25 | | | |
| Pentafluorobenzene (IS) | 201233 | 6.58 | 210237 | 6.59 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 69130 | 9.62 | 76990 | 9.62 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 279291 | 7.39 | 296345 | 7.39 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702423-CCV5 )** | | | Lab File ID: 12FEB34.D | | | Analyzed: 02/12/17 17:48 | | | |
| Pentafluorobenzene (IS) | 209784 | 6.58 | 210237 | 6.59 | 100 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67298 | 9.62 | 76990 | 9.62 | 87 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 280430 | 7.39 | 296345 | 7.39 | 95 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702423
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Blank (1702423-CCB2 )** | | | Lab File ID: 12FEB35.D | | | Analyzed: 02/12/17 18:11 | | | |
| Pentafluorobenzene (IS) | 216907 | 6.58 | 209784 | 6.58 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67485 | 9.62 | 67298 | 9.62 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 276928 | 7.39 | 280430 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **27EW-17_170207 (1703480-01 )** | | | Lab File ID: 12FEB54.D | | | Analyzed: 02/13/17 01:31 | | | |
| Pentafluorobenzene (IS) | 208247 | 6.58 | 209784 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62016 | 9.62 | 67298 | 9.62 | 92 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 273061 | 7.39 | 280430 | 7.39 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| **398-MW1_170207 (1703480-03 )** | | | Lab File ID: 12FEB56.D | | | Analyzed: 02/13/17 02:18 | | | |
| Pentafluorobenzene (IS) | 210566 | 6.58 | 209784 | 6.58 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67869 | 9.62 | 67298 | 9.62 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 280007 | 7.39 | 280430 | 7.39 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| **IR11-OU2B-MW02_170207 (1703480-04 )** | | | Lab File ID: 12FEB57.D | | | Analyzed: 02/13/17 02:41 | | | |
| Pentafluorobenzene (IS) | 206955 | 6.58 | 209784 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 74525 | 9.62 | 67298 | 9.62 | 111 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 279710 | 7.39 | 280430 | 7.39 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| **IR11-OU2B-MW03_170207 (1703480-05 )** | | | Lab File ID: 12FEB58.D | | | Analyzed: 02/13/17 03:04 | | | |
| Pentafluorobenzene (IS) | 209491 | 6.58 | 209784 | 6.58 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 72044 | 9.62 | 67298 | 9.62 | 107 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 278442 | 7.39 | 280430 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702423-CCV6 )** | | | Lab File ID: 12FEB64.D | | | Analyzed: 02/13/17 05:23 | | | |
| Pentafluorobenzene (IS) | 175106 | 6.59 | 210237 | 6.59 | 83 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 57637 | 9.62 | 76990 | 9.62 | 75 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 242829 | 7.39 | 296345 | 7.39 | 82 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702423-CCV7 )** | | | Lab File ID: 12FEB65.D | | | Analyzed: 02/13/17 05:46 | | | |
| Pentafluorobenzene (IS) | 207060 | 6.58 | 210237 | 6.59 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68542 | 9.62 | 76990 | 9.62 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 273957 | 7.39 | 296345 | 7.39 | 92 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702423 | Instrument: | MS-V5 |
| Matrix: | Water | Calibration: | 1702011 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Blank (1702423-CCB3 )** | | | Lab File ID: 12FEB66.D | | | Analyzed: 02/13/17 06:09 | | | |
| Pentafluorobenzene (IS) | 210993 | 6.58 | 207060 | 6.58 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 64660 | 9.62 | 68542 | 9.62 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 280537 | 7.39 | 273957 | 7.39 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702431
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Initial Cal Check (1702431-ICV1 )** | | | Lab File ID: 26JAN15.D | | | Analyzed: 01/26/17 19:35 | | | |
| Pentafluorobenzene (IS) | 213388 | 6.58 | 210237 | 6.59 | 101 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 73774 | 9.62 | 76990 | 9.62 | 96 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 304652 | 7.39 | 296345 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Blank (1702431-ICB1 )** | | | Lab File ID: 26JAN17.D | | | Analyzed: 01/26/17 20:23 | | | |
| Pentafluorobenzene (IS) | 218750 | 6.59 | 213388 | 6.58 | 103 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 72255 | 9.62 | 73774 | 9.62 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 295229 | 7.39 | 304652 | 7.39 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Check (1702431-ICV2 )** | | | Lab File ID: 07FEB15.D | | | Analyzed: 02/07/17 12:46 | | | |
| Pentafluorobenzene (IS) | 188542 | 6.59 | 210237 | 6.59 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65064 | 9.63 | 76990 | 9.62 | 85 | 50 - 200 | 0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 259624 | 7.39 | 296345 | 7.39 | 88 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Blank (1702431-ICB2 )** | | | Lab File ID: 07FEB17.D | | | Analyzed: 02/07/17 13:33 | | | |
| Pentafluorobenzene (IS) | 199643 | 6.58 | 188542 | 6.59 | 106 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66387 | 9.63 | 65064 | 9.63 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 275356 | 7.39 | 259624 | 7.39 | 106 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702431-CCV1 )** | | | Lab File ID: 13FEB02.D | | | Analyzed: 02/13/17 06:57 | | | |
| Pentafluorobenzene (IS) | 201489 | 6.58 | 210237 | 6.59 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63039 | 9.62 | 76990 | 9.62 | 82 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 272489 | 7.39 | 296345 | 7.39 | 92 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702431-CCV2 )** | | | Lab File ID: 13FEB03.D | | | Analyzed: 02/13/17 07:20 | | | |
| Pentafluorobenzene (IS) | 210178 | 6.59 | 210237 | 6.59 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68627 | 9.62 | 76990 | 9.62 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 276582 | 7.39 | 296345 | 7.39 | 93 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Blank (1702431-CCB1 )** | | | Lab File ID: 13FEB04.D | | | Analyzed: 02/13/17 07:43 | | | |
| Pentafluorobenzene (IS) | 212297 | 6.58 | 210178 | 6.59 | 101 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68454 | 9.62 | 68627 | 9.62 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 284493 | 7.39 | 276582 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Blank (B[B1007-BLK1 )** | | | Lab File ID: 13FEB05.D | | | Analyzed: 02/13/17 08:06 | | | |
| Pentafluorobenzene (IS) | 207874 | 6.59 | 210178 | 6.59 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 69153 | 9.62 | 68627 | 9.62 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 293378 | 7.39 | 276582 | 7.39 | 106 | 50 - 200 | 0.0000 | +/-0.50 | |
| **OU2B-MW01_170207 (1703480-17 )** | | | Lab File ID: 13FEB06.D | | | Analyzed: 02/13/17 08:29 | | | |
| Pentafluorobenzene (IS) | 205838 | 6.58 | 210178 | 6.59 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68824 | 9.62 | 68627 | 9.62 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 274883 | 7.39 | 276582 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **LCS (B[B1007-BS1 )** | | | Lab File ID: 13FEB07.D | | | Analyzed: 02/13/17 08:52 | | | |
| Pentafluorobenzene (IS) | 208239 | 6.58 | 210178 | 6.59 | 99 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 69754 | 9.62 | 68627 | 9.62 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 281468 | 7.39 | 276582 | 7.39 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Matrix Spike (B[B1007-MS1 )** | | | Lab File ID: 13FEB08.D | | | Analyzed: 02/13/17 09:15 | | | |
| Pentafluorobenzene (IS) | 199906 | 6.58 | 210178 | 6.59 | 95 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63602 | 9.62 | 68627 | 9.62 | 93 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 270669 | 7.39 | 276582 | 7.39 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Matrix Spike Dup (B[B1007-MSD1 )** | | | Lab File ID: 13FEB09.D | | | Analyzed: 02/13/17 09:39 | | | |
| Pentafluorobenzene (IS) | 201650 | 6.58 | 210178 | 6.59 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66701 | 9.62 | 68627 | 9.62 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 279784 | 7.39 | 276582 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW05C_170207 (1703480-10 )** | | | Lab File ID: 13FEB12.D | | | Analyzed: 02/13/17 10:48 | | | |
| Pentafluorobenzene (IS) | 217845 | 6.58 | 210178 | 6.59 | 104 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 76560 | 9.62 | 68627 | 9.62 | 112 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 293876 | 7.39 | 276582 | 7.39 | 106 | 50 - 200 | 0.0000 | +/-0.50 | |
| **27EW-13_170207 (1703480-13 )** | | | Lab File ID: 13FEB15.D | | | Analyzed: 02/13/17 11:58 | | | |
| Pentafluorobenzene (IS) | 213703 | 6.58 | 210178 | 6.59 | 102 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66593 | 9.62 | 68627 | 9.62 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 280506 | 7.39 | 276582 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **IR11-OU2B-MW01_170207 (1703480-15 )** | | | Lab File ID: 13FEB16.D | | | Analyzed: 02/13/17 12:21 | | | |
| Pentafluorobenzene (IS) | 208530 | 6.58 | 210178 | 6.59 | 99 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 73911 | 9.62 | 68627 | 9.62 | 108 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 281604 | 7.39 | 276582 | 7.39 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S11-TT-MW01D_170207 (1703480-19 )** | | | Lab File ID: 13FEB19.D | | | Analyzed: 02/13/17 13:30 | | | |
| Pentafluorobenzene (IS) | 215046 | 6.58 | 210178 | 6.59 | 102 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66698 | 9.62 | 68627 | 9.62 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 279390 | 7.39 | 276582 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW01E_170207 (1703480-21 )** | | | Lab File ID: 13FEB21.D | | | Analyzed: 02/13/17 14:16 | | | |
| Pentafluorobenzene (IS) | 213224 | 6.58 | 210178 | 6.59 | 101 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 70397 | 9.62 | 68627 | 9.62 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 277471 | 7.39 | 276582 | 7.39 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW05B_170207 (1703480-22 )** | | | Lab File ID: 13FEB22.D | | | Analyzed: 02/13/17 14:40 | | | |
| Pentafluorobenzene (IS) | 208366 | 6.58 | 210178 | 6.59 | 99 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 70388 | 9.62 | 68627 | 9.62 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 274186 | 7.39 | 276582 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **IR11-OU2B-MW04_170207 (1703480-29 )** | | | Lab File ID: 13FEB23.D | | | Analyzed: 02/13/17 15:03 | | | |
| Pentafluorobenzene (IS) | 196220 | 6.59 | 210178 | 6.59 | 93 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 69633 | 9.62 | 68627 | 9.62 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 283532 | 7.39 | 276582 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S11-TT-MW01A_170207 (1703480-31 )** | | | Lab File ID: 13FEB25.D | | | Analyzed: 02/13/17 15:49 | | | |
| Pentafluorobenzene (IS) | 206309 | 6.58 | 210178 | 6.59 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66448 | 9.62 | 68627 | 9.62 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 272484 | 7.39 | 276582 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW01A_170207 (1703480-33 )** | | | Lab File ID: 13FEB27.D | | | Analyzed: 02/13/17 16:36 | | | |
| Pentafluorobenzene (IS) | 204495 | 6.58 | 210178 | 6.59 | 97 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65481 | 9.62 | 68627 | 9.62 | 95 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 279304 | 7.39 | 276582 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
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Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **S21-TT-MW01B_170207 (1703480-34 )** | | | Lab File ID: 13FEB28.D | | | Analyzed: 02/13/17 16:59 | | | |
| Pentafluorobenzene (IS) | 202519 | 6.58 | 210178 | 6.59 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67675 | 9.62 | 68627 | 9.62 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 270474 | 7.39 | 276582 | 7.39 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW01C_170207 (1703480-35 )** | | | Lab File ID: 13FEB29.D | | | Analyzed: 02/13/17 17:22 | | | |
| Pentafluorobenzene (IS) | 207609 | 6.58 | 210178 | 6.59 | 99 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68594 | 9.62 | 68627 | 9.62 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 277842 | 7.39 | 276582 | 7.39 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702431-CCV3 )** | | | Lab File ID: 13FEB33.D | | | Analyzed: 02/13/17 18:55 | | | |
| Pentafluorobenzene (IS) | 201820 | 6.58 | 210237 | 6.59 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63833 | 9.62 | 76990 | 9.62 | 83 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 267879 | 7.39 | 296345 | 7.39 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702431-CCV4 )** | | | Lab File ID: 13FEB34.D | | | Analyzed: 02/13/17 19:18 | | | |
| Pentafluorobenzene (IS) | 206916 | 6.58 | 210237 | 6.59 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67530 | 9.63 | 76990 | 9.62 | 88 | 50 - 200 | 0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 268532 | 7.39 | 296345 | 7.39 | 91 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Blank (1702431-CCB2 )** | | | Lab File ID: 13FEB35.D | | | Analyzed: 02/13/17 19:42 | | | |
| Pentafluorobenzene (IS) | 184300 | 6.58 | 206916 | 6.58 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 57196 | 9.62 | 67530 | 9.63 | 85 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 239702 | 7.39 | 268532 | 7.39 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |
| **TB14_170207 (1703480-23 )** | | | Lab File ID: 13FEB36.D | | | Analyzed: 02/13/17 20:05 | | | |
| Pentafluorobenzene (IS) | 208366 | 6.59 | 206916 | 6.58 | 101 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65339 | 9.62 | 67530 | 9.63 | 97 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 277203 | 7.39 | 268532 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **TB15_170207 (1703480-24 )** | | | Lab File ID: 13FEB37.D | | | Analyzed: 02/13/17 20:28 | | | |
| Pentafluorobenzene (IS) | 205684 | 6.59 | 206916 | 6.58 | 99 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66394 | 9.62 | 67530 | 9.63 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 265850 | 7.39 | 268532 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **EB26_170207 (1703480-25 )** | | | Lab File ID: 13FEB38.D | | | Analyzed: 02/13/17 20:51 | | | |
| Pentafluorobenzene (IS) | 204860 | 6.58 | 206916 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 64713 | 9.62 | 67530 | 9.63 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 276036 | 7.39 | 268532 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **EB27_170207 (1703480-26 )** | | | Lab File ID: 13FEB39.D | | | Analyzed: 02/13/17 21:14 | | | |
| Pentafluorobenzene (IS) | 210079 | 6.59 | 206916 | 6.58 | 102 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 64417 | 9.62 | 67530 | 9.63 | 95 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 261769 | 7.39 | 268532 | 7.39 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| **EB28_170207 (1703480-27 )** | | | Lab File ID: 13FEB40.D | | | Analyzed: 02/13/17 21:38 | | | |
| Pentafluorobenzene (IS) | 204653 | 6.58 | 206916 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66208 | 9.62 | 67530 | 9.63 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 277732 | 7.39 | 268532 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **EB29_170207 (1703480-28 )** | | | Lab File ID: 13FEB41.D | | | Analyzed: 02/13/17 22:01 | | | |
| Pentafluorobenzene (IS) | 204631 | 6.58 | 206916 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65222 | 9.62 | 67530 | 9.63 | 97 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 273276 | 7.39 | 268532 | 7.39 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| **27EW-18_170207 (1703480-02 )** | | | Lab File ID: 13FEB42.D | | | Analyzed: 02/13/17 22:24 | | | |
| Pentafluorobenzene (IS) | 205798 | 6.58 | 206916 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67149 | 9.62 | 67530 | 9.63 | 99 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 271306 | 7.39 | 268532 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| **M11-02_170207 (1703480-06 )** | | | Lab File ID: 13FEB43.D | | | Analyzed: 02/13/17 22:47 | | | |
| Pentafluorobenzene (IS) | 207752 | 6.58 | 206916 | 6.58 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65779 | 9.62 | 67530 | 9.63 | 97 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 266454 | 7.39 | 268532 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **OU2B-MW02_170207 (1703480-07 )** | | | Lab File ID: 13FEB44.D | | | Analyzed: 02/13/17 23:10 | | | |
| Pentafluorobenzene (IS) | 183111 | 6.58 | 206916 | 6.58 | 88 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 61771 | 9.62 | 67530 | 9.63 | 91 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 240310 | 7.39 | 268532 | 7.39 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **OU2B-MW04_170207 (1703480-08 )** | | | Lab File ID: 13FEB45.D | | | Analyzed: 02/13/17 23:33 | | | |
| Pentafluorobenzene (IS) | 203167 | 6.58 | 206916 | 6.58 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63082 | 9.62 | 67530 | 9.63 | 93 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 253603 | 7.39 | 268532 | 7.39 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW05A_170207 (1703480-09 )** | | | Lab File ID: 13FEB46.D | | | Analyzed: 02/13/17 23:57 | | | |
| Pentafluorobenzene (IS) | 200786 | 6.58 | 206916 | 6.58 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 67208 | 9.62 | 67530 | 9.63 | 100 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 270633 | 7.39 | 268532 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW05D_170207 (1703480-11 )** | | | Lab File ID: 13FEB47.D | | | Analyzed: 02/14/17 00:20 | | | |
| Pentafluorobenzene (IS) | 193528 | 6.58 | 206916 | 6.58 | 94 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68694 | 9.62 | 67530 | 9.63 | 102 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 271904 | 7.39 | 268532 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW05E_170207 (1703480-12 )** | | | Lab File ID: 13FEB48.D | | | Analyzed: 02/14/17 00:43 | | | |
| Pentafluorobenzene (IS) | 201514 | 6.58 | 206916 | 6.58 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66140 | 9.62 | 67530 | 9.63 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 270631 | 7.39 | 268532 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| **M07B-01_170207 (1703480-16 )** | | | Lab File ID: 13FEB49.D | | | Analyzed: 02/14/17 01:06 | | | |
| Pentafluorobenzene (IS) | 201698 | 6.58 | 206916 | 6.58 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 64783 | 9.62 | 67530 | 9.63 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 263354 | 7.39 | 268532 | 7.39 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S11-TT-MW01C_170207 (1703480-18 )** | | | Lab File ID: 13FEB50.D | | | Analyzed: 02/14/17 01:29 | | | |
| Pentafluorobenzene (IS) | 200429 | 6.58 | 206916 | 6.58 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 69548 | 9.63 | 67530 | 9.63 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 268335 | 7.39 | 268532 | 7.39 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S11-TT-MW01E_170207 (1703480-20 )** | | | Lab File ID: 13FEB51.D | | | Analyzed: 02/14/17 01:52 | | | |
| Pentafluorobenzene (IS) | 203063 | 6.59 | 206916 | 6.58 | 98 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66439 | 9.62 | 67530 | 9.63 | 98 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 272026 | 7.39 | 268532 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702431
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **27EW-17_170207 (1703480-01RE1 )** | | | Lab File ID: 13FEB52.D | | | Analyzed: 02/14/17 02:15 | | | |
| Pentafluorobenzene (IS) | 205844 | 6.58 | 206916 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62373 | 9.62 | 67530 | 9.63 | 92 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 256144 | 7.39 | 268532 | 7.39 | 95 | 50 - 200 | 0.0000 | +/-0.50 | |
| **IR11-OU2B-MW02_170207 (1703480-04RE1 )** | | | Lab File ID: 13FEB53.D | | | Analyzed: 02/14/17 02:38 | | | |
| Pentafluorobenzene (IS) | 207320 | 6.58 | 206916 | 6.58 | 100 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65048 | 9.62 | 67530 | 9.63 | 96 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 271560 | 7.39 | 268532 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| **IR11-OU2B-MW03_170207 (1703480-05RE1 )** | | | Lab File ID: 13FEB54.D | | | Analyzed: 02/14/17 03:01 | | | |
| Pentafluorobenzene (IS) | 199714 | 6.58 | 206916 | 6.58 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62984 | 9.62 | 67530 | 9.63 | 93 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 261800 | 7.39 | 268532 | 7.39 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW05C_170207 (1703480-10RE1 )** | | | Lab File ID: 13FEB55.D | | | Analyzed: 02/14/17 03:25 | | | |
| Pentafluorobenzene (IS) | 205176 | 6.58 | 206916 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63172 | 9.62 | 67530 | 9.63 | 94 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 259641 | 7.39 | 268532 | 7.39 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| **IR11-OU2B-MW01_170207 (1703480-15RE1 )** | | | Lab File ID: 13FEB56.D | | | Analyzed: 02/14/17 03:48 | | | |
| Pentafluorobenzene (IS) | 205423 | 6.58 | 206916 | 6.58 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63791 | 9.62 | 67530 | 9.63 | 94 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 266365 | 7.39 | 268532 | 7.39 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702431-CCV5 )** | | | Lab File ID: 14FEB02.D | | | Analyzed: 02/14/17 06:30 | | | |
| Pentafluorobenzene (IS) | 189564 | 6.59 | 210237 | 6.59 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62430 | 9.62 | 76990 | 9.62 | 81 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 257727 | 7.39 | 296345 | 7.39 | 87 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702431-CCV6 )** | | | Lab File ID: 14FEB03.D | | | Analyzed: 02/14/17 06:54 | | | |
| Pentafluorobenzene (IS) | 199065 | 6.58 | 210237 | 6.59 | 95 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65294 | 9.62 | 76990 | 9.62 | 85 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 262401 | 7.39 | 296345 | 7.39 | 89 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702431 | Instrument: | MS-V5 |
| Matrix: | Water | Calibration: | 1702011 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Blank (1702431-CCB3 )** | | | Lab File ID: 14FEB04.D | | | Analyzed: 02/14/17 07:17 | | | |
| Pentafluorobenzene (IS) | 199884 | 6.59 | 199065 | 6.58 | 100 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62028 | 9.62 | 65294 | 9.62 | 95 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 265862 | 7.39 | 262401 | 7.39 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702527
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Initial Cal Check (1702527-ICV1 )** | | | Lab File ID: 26JAN15.D | | | Analyzed: 01/26/17 19:35 | | | |
| Pentafluorobenzene (IS) | 213388 | 6.58 | 210237 | 6.59 | 101 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 73774 | 9.62 | 76990 | 9.62 | 96 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 304652 | 7.39 | 296345 | 7.39 | 103 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Blank (1702527-ICB1 )** | | | Lab File ID: 26JAN17.D | | | Analyzed: 01/26/17 20:23 | | | |
| Pentafluorobenzene (IS) | 218750 | 6.59 | 213388 | 6.58 | 103 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 72255 | 9.62 | 73774 | 9.62 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 295229 | 7.39 | 304652 | 7.39 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Check (1702527-ICV2 )** | | | Lab File ID: 07FEB15.D | | | Analyzed: 02/07/17 12:46 | | | |
| Pentafluorobenzene (IS) | 188542 | 6.59 | 210237 | 6.59 | 90 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65064 | 9.63 | 76990 | 9.62 | 85 | 50 - 200 | 0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 259624 | 7.39 | 296345 | 7.39 | 88 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Initial Cal Blank (1702527-ICB2 )** | | | Lab File ID: 07FEB17.D | | | Analyzed: 02/07/17 13:33 | | | |
| Pentafluorobenzene (IS) | 199643 | 6.58 | 188542 | 6.59 | 106 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 66387 | 9.63 | 65064 | 9.63 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 275356 | 7.39 | 259624 | 7.39 | 106 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702527-CCV3 )** | | | Lab File ID: 14FEB29.D | | | Analyzed: 02/14/17 16:57 | | | |
| Pentafluorobenzene (IS) | 189319 | 6.58 | 210237 | 6.59 | 90 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63879 | 9.62 | 76990 | 9.62 | 83 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 261027 | 7.39 | 296345 | 7.39 | 88 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702527-CCV4 )** | | | Lab File ID: 14FEB30.D | | | Analyzed: 02/14/17 17:20 | | | |
| Pentafluorobenzene (IS) | 173861 | 6.58 | 210237 | 6.59 | 83 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 57803 | 9.62 | 76990 | 9.62 | 75 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 234557 | 7.39 | 296345 | 7.39 | 79 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Blank (1702527-CCB2 )** | | | Lab File ID: 14FEB31.D | | | Analyzed: 02/14/17 17:43 | | | |
| Pentafluorobenzene (IS) | 208365 | 6.58 | 173861 | 6.58 | 120 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62868 | 9.62 | 57803 | 9.62 | 109 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 272809 | 7.39 | 234557 | 7.39 | 116 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702527
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **M11-01_170207 (1703480-30 )** | | | Lab File ID: 14FEB32.D | | | Analyzed: 02/14/17 18:06 | | | |
| Pentafluorobenzene (IS) | 201095 | 6.58 | 173861 | 6.58 | 116 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 64522 | 9.62 | 57803 | 9.62 | 112 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 267917 | 7.39 | 234557 | 7.39 | 114 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S11-TT-MW01B_170207 (1703480-32 )** | | | Lab File ID: 14FEB33.D | | | Analyzed: 02/14/17 18:29 | | | |
| Pentafluorobenzene (IS) | 204372 | 6.58 | 173861 | 6.58 | 118 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 70001 | 9.62 | 57803 | 9.62 | 121 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 281462 | 7.39 | 234557 | 7.39 | 120 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW01D_170207 (1703480-36 )** | | | Lab File ID: 14FEB34.D | | | Analyzed: 02/14/17 18:52 | | | |
| Pentafluorobenzene (IS) | 203091 | 6.58 | 173861 | 6.58 | 117 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 68630 | 9.62 | 57803 | 9.62 | 119 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 277150 | 7.39 | 234557 | 7.39 | 118 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW05B_170207 (1703480-22RE1 )** | | | Lab File ID: 14FEB35.D | | | Analyzed: 02/14/17 19:16 | | | |
| Pentafluorobenzene (IS) | 207100 | 6.58 | 173861 | 6.58 | 119 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63544 | 9.62 | 57803 | 9.62 | 110 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 270545 | 7.39 | 234557 | 7.39 | 115 | 50 - 200 | 0.0000 | +/-0.50 | |
| **IR11-OU2B-MW04_170207 (1703480-29RE1 )** | | | Lab File ID: 14FEB36.D | | | Analyzed: 02/14/17 19:39 | | | |
| Pentafluorobenzene (IS) | 199365 | 6.58 | 173861 | 6.58 | 115 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 62885 | 9.62 | 57803 | 9.62 | 109 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 274942 | 7.39 | 234557 | 7.39 | 117 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW01A_170207 (1703480-33RE1 )** | | | Lab File ID: 14FEB37.D | | | Analyzed: 02/14/17 20:02 | | | |
| Pentafluorobenzene (IS) | 208920 | 6.58 | 173861 | 6.58 | 120 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 63652 | 9.62 | 57803 | 9.62 | 110 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 266390 | 7.39 | 234557 | 7.39 | 114 | 50 - 200 | 0.0000 | +/-0.50 | |
| **S21-TT-MW01B_170207 (1703480-34RE1 )** | | | Lab File ID: 14FEB38.D | | | Analyzed: 02/14/17 20:25 | | | |
| Pentafluorobenzene (IS) | 206800 | 6.58 | 173861 | 6.58 | 119 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 65922 | 9.62 | 57803 | 9.62 | 114 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 264027 | 7.39 | 234557 | 7.39 | 113 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INTERNAL STANDARD AREA AND RT SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702527
Instrument: MS-V5
Matrix: Water
Calibration: 1702011

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1702527-CCV5 )** | | | Lab File ID: 14FEB59.D | | | Analyzed: 02/15/17 04:27 | | | |
| Pentafluorobenzene (IS) | 182270 | 6.58 | 210237 | 6.59 | 87 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 61637 | 9.62 | 76990 | 9.62 | 80 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 251264 | 7.39 | 296345 | 7.39 | 85 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Check (1702527-CCV6 )** | | | Lab File ID: 14FEB60.D | | | Analyzed: 02/15/17 04:49 | | | |
| Pentafluorobenzene (IS) | 189110 | 6.58 | 210237 | 6.59 | 90 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 58863 | 9.62 | 76990 | 9.62 | 76 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 249293 | 7.39 | 296345 | 7.39 | 84 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Calibration Blank (1702527-CCB3 )** | | | Lab File ID: 14FEB61.D | | | Analyzed: 02/15/17 05:12 | | | |
| Pentafluorobenzene (IS) | 192966 | 6.59 | 189110 | 6.58 | 102 | 50 - 200 | 0.0100 | +/-0.50 | |
| Chlorobenzene-d5 (IS) | 57097 | 9.62 | 58863 | 9.62 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Difluorobenzene (IS) | 254986 | 7.39 | 249293 | 7.39 | 102 | 50 - 200 | 0.0000 | +/-0.50 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION STANDARDS

## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Sequence: 1702048
Calibration: 1702011

SDG: 17-03480
Project: Alameda
Instrument: MS-V5

| Standard ID | Description | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|---|
| 6J06023 | 8260 V5 BFB 50NG | 1702048-TUN3 | 13DEC05.D | 12/13/16 09:45 |
| 6L13070 | 8260 V5 1621865 TPPH IC1 | 1702048-CALD | 13DEC06.D | 12/13/16 10:10 |
| 6L13071 | 8260 V5 1621865 TPPH IC2 | 1702048-CALE | 13DEC07.D | 12/13/16 10:32 |
| 6L13072 | 8260 V5 1621865 TPPH IC3 | 1702048-CALF | 13DEC08.D | 12/13/16 10:55 |
| 6L13073 | 8260 V5 1621865 TPPH IC4 | 1702048-CALG | 13DEC09.D | 12/13/16 11:18 |
| 6L13074 | 8260 V5 1621865 TPPH IC5 | 1702048-CALH | 13DEC10.D | 12/13/16 11:41 |
| 6L13075 | 8260 V5 1621865 TPPH IC6 | 1702048-CALI | 13DEC11.D | 12/13/16 12:04 |
| 7A05057 | 8260 V5 BFB 25NG | 1702048-TUN1 | 26JAN03.D | 01/26/17 12:01 |
| 7A26048 | 8260 V5 1701474 IC1 | 1702048-CAL1 | 26JAN06.D | 01/26/17 16:07 |
| 7A26049 | 8260 V5 1701474 IC2 | 1702048-CAL2 | 26JAN07.D | 01/26/17 16:30 |
| 7A26050 | 8260 V5 1701474 IC3 | 1702048-CAL3 | 26JAN08.D | 01/26/17 16:53 |
| 7A26052 | 8260 V5 1701474 IC5 | 1702048-CAL5 | 26JAN10.D | 01/26/17 17:39 |
| 7A26053 | 8260 V5 1701474 IC6 | 1702048-CAL6 | 26JAN11.D | 01/26/17 18:02 |
| 7A26051 | 8260 V5 1701474 IC4 | 1702048-CAL4 | 26JAN14.D | 01/26/17 19:12 |
| 7A05057 | 8260 V5 BFB 25NG | 1702048-TUN2 | 07FEB05.D | 02/07/17 08:42 |
| 7B08028 | 8260 V5 1702048 XIC1 | 1702048-CAL7 | 07FEB07.D | 02/07/17 09:30 |
| 7B08029 | 8260 V5 1702048 XIC2 | 1702048-CAL8 | 07FEB08.D | 02/07/17 09:53 |
| 7B08030 | 8260 V5 1702048 XIC3 | 1702048-CAL9 | 07FEB09.D | 02/07/17 10:17 |
| 7B08031 | 8260 V5 1702048 XIC4 | 1702048-CALA | 07FEB10.D | 02/07/17 10:40 |
| 7B08032 | 8260 V5 1702048 XIC5 | 1702048-CALB | 07FEB11.D | 02/07/17 11:03 |
| 7B08033 | 8260 V5 1702048 XIC6 | 1702048-CALC | 07FEB12.D | 02/07/17 11:27 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Benzene | 0.5 | 2.001299 | 1 | 2.095124 | 10 | 1.998001 | 25 | 1.814919 | 50 | 1.805429 | 100 | 1.622498 |
| Bromobenzene | 0.5 | 1.235138 | 1 | 1.233305 | 10 | 1.314683 | 25 | 1.165975 | 50 | 1.096814 | 100 | 1.03003 |
| Bromochloromethane | 0.5 | 0.1425672 | 1 | 0.1325436 | 10 | 0.1711621 | 25 | 0.1646656 | 50 | 0.1627728 | 100 | 0.154593 |
| Bromodichloromethane | 0.5 | 0.3039686 | 1 | 0.3564123 | 10 | 0.3451298 | 25 | 0.3564332 | 50 | 0.3208134 | 100 | 0.2925043 |
| Bromoform | 0.5 | 0.2880288 | 1 | 0.2935321 | 10 | 0.3894204 | 25 | 0.3803455 | 50 | 0.3835852 | 100 | 0.3692516 |
| Bromomethane | 0.5 | 0.3263609 | 1 | 0.2894338 | 10 | 0.3174722 | 25 | 0.3148428 | 50 | 0.3352665 | 100 | 0.3246742 |
| n-Butylbenzene | 0.5 | 3.799186 | 1 | 3.935929 | 10 | 3.945626 | 25 | 3.241273 | 50 | 3.207154 | 100 | 2.832412 |
| sec-Butylbenzene | 0.5 | 6.128404 | 1 | 5.946271 | 10 | 5.702019 | 25 | 4.595516 | 50 | 4.524348 | 100 | ~~3.86744~~ |
| tert-Butylbenzene | 0.5 | 4.422263 | 1 | 4.154523 | 10 | 4.063275 | 25 | 3.618345 | 50 | 3.62728 | 100 | 3.227521 |
| Carbon tetrachloride | 0.5 | 0.5077027 | 1 | 0.4617677 | 10 | 0.4844907 | 25 | 0.4578262 | 50 | 0.4643785 | 100 | 0.4369645 |
| Chlorobenzene | 0.5 | 3.403415 | 1 | 3.032519 | 10 | 3.204125 | 25 | 2.822528 | 50 | 2.805949 | 100 | 2.599626 |
| Chloroethane | 0.5 | 0.3998238 | 1 | 0.4016734 | 10 | 0.4094729 | 25 | 0.3785956 | 50 | 0.3854055 | 100 | 0.3667295 |
| Chloroform | 0.5 | 0.7843921 | 1 | 0.7785005 | 10 | 0.807726 | 25 | 0.7485419 | 50 | 0.7363083 | 100 | 0.6736125 |
| Chloromethane | 0.5 | 0.8379683 | 1 | 0.7822706 | 10 | 0.7263955 | 25 | 0.5612485 | 50 | 0.6787272 | 100 | 0.6073041 |
| 2-Chlorotoluene | 0.5 | 3.913108 | 1 | 4.135581 | 10 | 4.180331 | 25 | 3.40969 | 50 | 3.352137 | 100 | 3.005263 |
| 4-Chlorotoluene | 0.5 | 3.679622 | 1 | 3.680004 | 10 | 3.650988 | 25 | 3.096584 | 50 | 3.016066 | 100 | 2.589454 |
| Dibromochloromethane | 0.5 | 0.1342072 | 1 | 0.1716034 | 10 | 0.182467 | 25 | 0.1914998 | 50 | 0.1804288 | 100 | 0.1648377 |
| 1,2-Dibromo-3-chloropropane | 0.5 | 3.895912E-02 | 1 | 5.295468E-02 | 10 | 8.012157E-02 | 25 | 0.0787323 | 50 | 7.379204E-02 | 100 | 7.528387E-02 |
| 1,2-Dibromoethane | 0.5 | 0.1336863 | 1 | 0.1367178 | 10 | 0.1480571 | 25 | 0.1507689 | 50 | 0.1407957 | 100 | 0.1240433 |
| Dibromomethane | 0.5 | 0.1271745 | 1 | 0.1174541 | 10 | 0.1114515 | 25 | 0.1179693 | 50 | 0.1072479 | 100 | 9.816732E-02 |
| 1,2-Dichlorobenzene | 0.5 | 2.013515 | 1 | 1.889639 | 10 | 1.776988 | 25 | 1.627884 | 50 | 1.504987 | 100 | 1.346993 |
| 1,3-Dichlorobenzene | 0.5 | 2.385104 | 1 | 2.233775 | 10 | 2.130371 | 25 | 1.857124 | 50 | 1.735571 | 100 | ~~1.491212~~ |
| 1,4-Dichlorobenzene | 0.5 | 1.946344 | 1 | 2.30263 | 10 | 2.087517 | 25 | 1.848552 | 50 | 1.760416 | 100 | 1.551786 |
| Dichlorodifluoromethane | 0.5 | 0.5168742 | 1 | 0.5226796 | 10 | 0.485405 | 25 | 0.4207518 | 50 | 0.4655754 | 100 | 0.4479589 |
| 1,1-Dichloroethane | 0.5 | 1.107756 | 1 | 1.088874 | 10 | 1.102973 | 25 | 0.9868425 | 50 | 0.9803533 | 100 | 0.9191498 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,2-Dichloroethane | 0.5 | 0.4109931 | 1 | 0.4806181 | 10 | 0.4661897 | 25 | 0.4574951 | 50 | 0.4285013 | 100 | 0.3855169 |
| 1,1-Dichloroethene | 0.5 | 0.822077 | 1 | 0.8447269 | 10 | 0.830404 | 25 | 0.7319283 | 50 | 0.7397421 | 100 | 0.6910743 |
| cis-1,2-Dichloroethene | 0.5 | 0.4787352 | 1 | 0.465674 | 10 | 0.49377 | 25 | 0.4738671 | 50 | 0.4573558 | 100 | 0.430678 |
| trans-1,2-Dichloroethene | 0.5 | 0.5134236 | 1 | 0.4547271 | 10 | 0.4717729 | 25 | 0.4184687 | 50 | 0.4370799 | 100 | 0.4061514 |
| Total 1,2-Dichloroethene | 1 | 0.4960794 | 2 | 0.4602006 | 20 | 0.4827714 | 50 | 0.4461679 | 100 | 0.4472179 | 200 | 0.4184147 |
| 1,2-Dichloropropane | 0.5 | 0.3695419 | 1 | 0.4161093 | 10 | 0.3856841 | 25 | 0.3855479 | 50 | 0.3571677 | 100 | 0.3198885 |
| 1,3-Dichloropropane | 0.5 | 0.2666562 | 1 | 0.2813996 | 10 | 0.2688449 | 25 | 0.2920285 | 50 | 0.2572662 | 100 | 0.234033 |
| 2,2-Dichloropropane | 0.5 | 0.6856847 | 1 | 0.694105 | 10 | 0.685368 | 25 | 0.5958894 | 50 | 0.6303353 | 100 | 0.5857332 |
| 1,1-Dichloropropene | 0.5 | 0.6661612 | 1 | 0.6603559 | 10 | 0.6514751 | 25 | 0.5887013 | 50 | 0.577937 | 100 | 0.5343898 |
| cis-1,3-Dichloropropene | 0.5 | 0.4324455 | 1 | 0.4859147 | 10 | 0.4515889 | 25 | 0.4616187 | 50 | 0.417184 | 100 | 0.3694562 |
| trans-1,3-Dichloropropene | 0.5 | 0.2934847 | 1 | 0.3018546 | 10 | 0.3177998 | 25 | 0.3282147 | 50 | 0.2922465 | 100 | 0.267436 |
| Total 1,3-Dichloropropene | 1 | 0.3629651 | 2 | 0.3938846 | 20 | 0.3846944 | 50 | 0.3949167 | 100 | 0.3547153 | 200 | 0.3184461 |
| Ethylbenzene | 0.5 | 1.998469 | 1 | 1.919642 | 10 | 1.822346 | 25 | 1.555085 | 50 | 1.559384 | 100 | 1.339764 |
| Hexachlorobutadiene | 0.5 | 0.8608622 | 1 | 0.9649365 | 10 | 0.8274984 | 25 | 0.6743993 | 50 | 0.7067595 | 100 | 0.7733293 |
| Isopropylbenzene | 0.5 | 5.541599 | 1 | 5.735282 | 10 | 5.562761 | 25 | 4.617893 | 50 | 4.485209 | 100 | ~~3.88485~~ |
| p-Isopropyltoluene | 0.5 | 4.370139 | 1 | 4.541797 | 10 | 4.403227 | 25 | 3.50592 | 50 | 3.503481 | 100 | ~~2.972745~~ |
| Methylene chloride | 0.5 | 1.380813 | 1 | 0.6020785 | 10 | 0.4907061 | 25 | 0.4037044 | 50 | 0.3786286 | 100 | 0.3527932 |
| Methyl t-butyl ether | 0.5 | 0.620576 | 1 | 0.5944021 | 10 | 0.6643339 | 25 | 0.6932177 | 50 | 0.6343534 | 100 | 0.5647101 |
| Naphthalene | 0.5 | 0.995204 | 1 | 0.996737 | 10 | 1.150575 | 25 | 1.26631 | 50 | 1.223878 | 100 | 1.343888 |
| n-Propylbenzene | 0.5 | 6.643739 | 1 | 6.607306 | 10 | 6.34069 | 25 | 5.187874 | 50 | 5.019322 | 100 | ~~4.296814~~ |
| Styrene | 0.5 | 2.962237 | 1 | 3.059481 | 10 | 3.303756 | 25 | 2.912087 | 50 | 2.761897 | 100 | 2.402163 |
| 1,1,1,2-Tetrachloroethane | 0.5 | 1.045717 | 1 | 0.9335509 | 10 | 1.031739 | 25 | 0.8899909 | 50 | 0.8747263 | 100 | 0.7813369 |
| 1,1,2,2-Tetrachloroethane | 0.5 | 0.4779881 | 1 | 0.5739292 | 10 | 0.6053115 | 25 | 0.5986648 | 50 | 0.5656142 | 100 | 0.514204 |
| Tetrachloroethene | 0.5 | 0.406138 | 1 | 0.3933741 | 10 | 0.3359388 | 25 | 0.3169185 | 50 | 0.3112157 | 100 | 0.283893 |
| Toluene | 0.5 | 0.8762214 | 1 | 0.8889887 | 10 | 0.7874331 | 25 | 0.7579031 | 50 | 0.7340921 | 100 | 0.6340213 |
| 1,2,3-Trichlorobenzene | 0.5 | 1.0124 | 1 | 0.9600973 | 10 | 1.063608 | 25 | 1.029141 | 50 | 1.01769 | 100 | 1.068681 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
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Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,2,4-Trichlorobenzene | 0.5 | 1.113693 | 1 | 1.202472 | 10 | 1.312367 | 25 | 1.172028 | 50 | 1.14853 | 100 | 1.219963 |
| 1,1,1-Trichloroethane | 0.5 | 0.6923136 | 1 | 0.6673965 | 10 | 0.6767841 | 25 | 0.6119399 | 50 | 0.6120982 | 100 | 0.5780424 |
| 1,1,2-Trichloroethane | 0.5 | 0.1807662 | 1 | 0.141823 | 10 | 0.1556943 | 25 | 0.1617588 | 50 | 0.1464725 | 100 | 0.1333424 |
| Trichloroethene | 0.5 | 0.3552161 | 1 | 0.3431728 | 10 | 0.3314023 | 25 | 0.325283 | 50 | 0.3122907 | 100 | 0.2860576 |
| Trichlorofluoromethane | 0.5 | 0.6536298 | 1 | 0.6396432 | 10 | 0.5947437 | 25 | 0.5430728 | 50 | 0.5589381 | 100 | 0.5307153 |
| 1,2,3-Trichloropropane | 0.5 | 6.824563E-02 | 1 | 9.885795E-02 | 10 | 0.1319488 | 25 | 0.1216781 | 50 | 0.1086731 | 100 | 0.1026184 |
| 1,1,2-Trichloro-1,2,2-trifluoroethan | 0.5 | 0.4622083 | 1 | 0.4936999 | 10 | 0.4101976 | 25 | 0.3755476 | 50 | 0.3851518 | 100 | 0.3830124 |
| 1,2,4-Trimethylbenzene | 0.5 | 4.004191 | 1 | 3.987501 | 10 | 4.061929 | 25 | 3.387905 | 50 | 3.272467 | 100 | 2.872534 |
| 1,3,5-Trimethylbenzene | 0.5 | 4.453162 | 1 | 4.32265 | 10 | 4.183573 | 25 | 3.511978 | 50 | 3.38121 | 100 | ~~2.864052~~ |
| Vinyl chloride | 0.5 | 0.6796914 | 1 | 0.6803874 | 10 | 0.6002247 | 25 | 0.500264 | 50 | 0.5785057 | 100 | 0.5360639 |
| Total Xylenes | 1.5 | 2.24521 | 3 | 2.17529 | 30 | 2.169568 | 75 | 1.863115 | 150 | 1.843755 | 300 | 1.631824 |
| Total Trihalomethanes | 2 | 8219.5 | 4 | 8694 | 40 | 8729.6 | 100 | 8725.78 | 200 | 8143.66 | 400 | 7657.17 |
| Acetone | | | | | | | | | | | | |
| Acetonitrile | | | | | | | | | | | | |
| Acrolein | | | | | | | | | | | | |
| Acrylonitrile | | | | | | | | | | | | |
| Allyl chloride | | | | | | | | | | | | |
| t-Amyl Alcohol | | | | | | | | | | | | |
| t-Amyl Methyl ether | | | | | | | | | | | | |
| Benzyl chloride | | | | | | | | | | | | |
| t-Butyl alcohol | | | | | | | | | | | | |
| Carbon disulfide | | | | | | | | | | | | |
| 2-Chloroethyl vinyl ether | 2 | 9.966237E-02 | 4 | 0.1032701 | 40 | 0.1104221 | 100 | 0.1195954 | 200 | 0.1023104 | 400 | 9.026862E-02 |
| Chloroprene | | | | | | | | | | | | |
| Chlorotrifluoroethene | | | | | | | | | | | | |
| Cyclohexane | | | | | | | | | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Cyclohexanone | | | | | | | | | | | | |
| trans-1,4-Dichloro-2-butene | | | | | | | | | | | | |
| 1,2-Dichlorotrifluoroethane | | | | | | | | | | | | |
| 2,2-Dichloro-1,1,1-trifluoroethane | | | | | | | | | | | | |
| Diethyl ether | | | | | | | | | | | | |
| Diisopropyl ether | | | | | | | | | | | | |
| 1,4-Dioxane | | | | | | | | | | | | |
| Ethanol | | | | | | | | | | | | |
| Ethyl Amyl Ketone | | | | | | | | | | | | |
| Ethyl methacrylate | | | | | | | | | | | | |
| Ethyl t-butyl ether | | | | | | | | | | | | |
| Hexachloroethane | 0.5 | 0.6636485 | 1 | 0.674308 | 10 | 0.8036327 | 25 | 0.7136875 | 50 | 0.7169495 | 100 | 0.6525504 |
| Hexane | | | | | | | | | | | | |
| 2-Hexanone | | | | | | | | | | | | |
| Isobutanol | | | | | | | | | | | | |
| Isopropyl alcohol | | | | | | | | | | | | |
| Methacrylonitrile | | | | | | | | | | | | |
| Methyl acetate | | | | | | | | | | | | |
| Methylcyclohexane | | | | | | | | | | | | |
| Methyl ethyl ketone | | | | | | | | | | | | |
| 5-Methyl-3-heptanone | | | | | | | | | | | | |
| Methyl iodide | | | | | | | | | | | | |
| Methyl isobutyl ketone | | | | | | | | | | | | |
| Methyl methacrylate | | | | | | | | | | | | |
| Pentachloroethane | | | | | | | | | | | | |
| Propionitrile | | | | | | | | | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Tetrahydrofuran | | | | | | | | | | | | |
| Vinyl acetate | | | | | | | | | | | | |
| p- & m-Xylenes | 1 | 2.334995 | 2 | 2.206122 | 20 | 2.207287 | 50 | 1.86021 | 100 | 1.846253 | 200 | 1.615567 |
| o-Xylene | 0.5 | 2.065639 | 1 | 2.113624 | 10 | 2.094131 | 25 | 1.868923 | 50 | 1.838759 | 100 | 1.664337 |
| Total Purgeable Petroleum Hydroc | | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | 10 | 0.2973525 | 10 | 0.2996357 | 10 | 0.3100069 | 10 | 0.3141835 | 10 | 0.2929637 | 10 | 0.2610772 |
| Toluene-d8 (Surrogate) | 10 | 1.132547 | 10 | 1.15171 | 10 | 1.124811 | 10 | 1.157786 | 10 | 1.153517 | 10 | 1.108464 |
| 4-Bromofluorobenzene (Surrogate) | 10 | 1.327082 | 10 | 1.358059 | 10 | 1.440958 | 10 | 1.403026 | 10 | 1.400549 | 10 | 1.344476 |

AMEC Environmental & Infrastructure
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Reported: 3/13/2017 4:27:00PM
Project: Alameda
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Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Benzene | | | | | | | | | | | | |
| Bromobenzene | | | | | | | | | | | | |
| Bromochloromethane | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | |
| Bromomethane | | | | | | | | | | | | |
| n-Butylbenzene | | | | | | | | | | | | |
| sec-Butylbenzene | | | | | | | | | | | | |
| tert-Butylbenzene | | | | | | | | | | | | |
| Carbon tetrachloride | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | |
| Chloromethane | | | | | | | | | | | | |
| 2-Chlorotoluene | | | | | | | | | | | | |
| 4-Chlorotoluene | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | | | | | | | | | | | |
| 1,2-Dibromoethane | | | | | | | | | | | | |
| Dibromomethane | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | |
| 1,1-Dichloroethane | | | | | | | | | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Calibration: 1702011
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration Date: 01/26/17 17:00

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,2-Dichloroethane | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | |
| trans-1,2-Dichloroethene | | | | | | | | | | | | |
| Total 1,2-Dichloroethene | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | |
| 1,3-Dichloropropane | | | | | | | | | | | | |
| 2,2-Dichloropropane | | | | | | | | | | | | |
| 1,1-Dichloropropene | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | |
| Total 1,3-Dichloropropene | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | |
| p-Isopropyltoluene | | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | | |
| Methyl t-butyl ether | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| n-Propylbenzene | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
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# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Calibration: 1702011
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration Date: 01/26/17 17:00

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,2,3-Trichlorobenzene | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | | | | | | | |
| 1,2,3-Trichloropropane | | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethan | | | | | | | | | | | | |
| 1,2,4-Trimethylbenzene | | | | | | | | | | | | |
| 1,3,5-Trimethylbenzene | | | | | | | | | | | | |
| Vinyl chloride | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | |
| Total Trihalomethanes | | | | | | | | | | | | |
| Acetone | 16 | ~~5.885331E-02~~ | 64 | 5.486477E-02 | 160 | 4.575636E-02 | 320 | 4.303549E-02 | 480 | 4.238974E-02 | 800 | 3.815865E-02 |
| Acetonitrile | 8 | 2.630956E-02 | 32 | 2.305172E-02 | 80 | 1.904401E-02 | 160 | 1.759122E-02 | 240 | 1.628795E-02 | 400 | 1.561949E-02 |
| Acrolein | 10 | 2.014086E-02 | 40 | 2.119655E-02 | 100 | 2.164562E-02 | 200 | 2.087963E-02 | 320 | 1.881822E-02 | 500 | 1.687929E-02 |
| Acrylonitrile | 4 | 6.314798E-02 | 16 | 6.407166E-02 | 40 | 6.566992E-02 | 80 | 6.695815E-02 | 128 | 6.401479E-02 | 200 | 5.844955E-02 |
| Allyl chloride | 1.6 | 1.246209 | 6.4 | 1.315699 | 16 | 1.051404 | 32 | 1.112253 | 48 | 1.013242 | 80 | 0.9476071 |
| t-Amyl Alcohol | 50 | 8.368681E-03 | 800 | 1.000823E-02 | 1250 | 1.074325E-02 | 2500 | 8.599915E-03 | 5000 | 8.577871E-03 | 10000 | 7.209516E-03 |
| t-Amyl Methyl ether | 0.8 | 0.7890978 | 3.2 | 0.7684858 | 8 | 0.6892523 | 16 | 0.7455567 | 24 | 0.6924863 | 40 | 0.6838185 |
| Benzyl chloride | 1.6 | 0.7442607 | 6.4 | 0.925193 | 16 | 0.8848822 | 32 | 0.8672207 | 48 | 0.9347496 | 80 | 0.8378464 |
| t-Butyl alcohol | 40 | 1.442177E-02 | 160 | 1.491686E-02 | 400 | 1.279973E-02 | 800 | 1.090766E-02 | 1200 | 1.097766E-02 | 2000 | ~~9.742395E-03~~ |
| Carbon disulfide | 1.6 | 1.43122 | 6.4 | 1.565917 | 16 | 1.28503 | 32 | 1.374396 | 48 | 1.250966 | 80 | 1.160933 |
| 2-Chloroethyl vinyl ether | | | | | | | | | | | | |
| Chloroprene | 1.6 | 1.052005 | 6.4 | 1.14178 | 16 | 0.9459726 | 32 | 1.015339 | 48 | 0.9445065 | 80 | 0.9060749 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Chlorotrifluoroethene | 0.5 | | 8 | | 12.5 | | 25 | | 50 | | 100 | |
| Cyclohexane | 0.5 | ~~1.513133~~ | 8 | 1.14025 | 12.5 | 1.122121 | 25 | 1.141619 | 50 | 1.049253 | 100 | 0.978181 |
| Cyclohexanone | 20 | 4.801657E-02 | 80 | 5.026732E-02 | 200 | 4.903964E-02 | 400 | 3.924352E-02 | 640 | 0.0394305 | 1000 | 4.148994E-02 |
| trans-1,4-Dichloro-2-butene | 4 | 0.1390074 | 16 | 0.1734846 | 40 | 0.1540015 | 80 | 0.152377 | 120 | 0.1664349 | 200 | 0.1456137 |
| 1,2-Dichlorotrifluoroethane | 0.5 | 0.600397 | 8 | 0.5858479 | 12.5 | 0.5631237 | 25 | 0.5863303 | 50 | 0.5569051 | 100 | 0.5084212 |
| 2,2-Dichloro-1,1,1-trifluoroethane | 0.5 | 0.9930379 | 8 | 0.8988426 | 12.5 | 0.9032416 | 25 | 0.9175067 | 50 | 0.8494633 | 100 | 0.7593999 |
| Diethyl ether | 0.5 | ~~0.168764~~ | 8 | 0.2685847 | 12.5 | 0.2588715 | 25 | 0.2706454 | 50 | 0.2602594 | 100 | 0.2429581 |
| Diisopropyl ether | 0.8 | 0.3453366 | 3.2 | 0.3248456 | 8 | 0.2930466 | 16 | 0.3157978 | 24 | 0.3161555 | 40 | 0.3097464 |
| 1,4-Dioxane | 100 | 8.646455E-04 | 400 | 8.345304E-04 | 1000 | 7.697778E-04 | 2000 | 6.080998E-04 | 3200 | 5.754803E-04 | 5000 | 6.211009E-04 |
| Ethanol | 200 | ~~1.961189E-03~~ | 800 | 1.782235E-03 | 2000 | 1.806949E-03 | 4000 | 1.342245E-03 | 6400 | 1.380193E-03 | 10000 | 0.0014058 |
| Ethyl Amyl Ketone | 0.5 | 0.2848699 | 8 | 0.3774285 | 12.5 | 0.401472 | 25 | 0.3713427 | 50 | 0.3908216 | 100 | 0.3433067 |
| Ethyl methacrylate | 4 | 0.1918515 | 16 | 0.2069249 | 40 | 0.1730604 | 80 | 0.1709325 | 120 | 0.1677136 | 200 | 0.1550915 |
| Ethyl t-butyl ether | 0.8 | 1.430653 | 3.2 | 1.466063 | 8 | 1.203704 | 16 | 1.304881 | 24 | 1.259166 | 40 | 1.202068 |
| Hexachloroethane | | | | | | | | | | | | |
| Hexane | 0.5 | 0.5949562 | 8 | 0.5887845 | 12.5 | 0.6051452 | 25 | 0.6307923 | 50 | 0.5943815 | 100 | 0.5593928 |
| 2-Hexanone | 16 | 0.1142652 | 64 | 0.1125322 | 160 | 9.156423E-02 | 320 | 8.783667E-02 | 480 | 8.119867E-02 | 800 | 6.678884E-02 |
| Isobutanol | 20 | 7.123354E-03 | 80 | 7.148602E-03 | 200 | 7.636189E-03 | 400 | 5.953416E-03 | 640 | 5.847877E-03 | 1000 | 5.458246E-03 |
| Isopropyl alcohol | 40 | 0.0104873 | 160 | 1.050187E-02 | 400 | 1.022373E-02 | 800 | 7.093126E-03 | 1280 | 7.063923E-03 | 2000 | 6.91995E-03 |
| Methacrylonitrile | 8 | 6.219711E-02 | 32 | 6.763931E-02 | 80 | 5.980472E-02 | 160 | 6.207918E-02 | 240 | 5.981788E-02 | 400 | 5.885384E-02 |
| Methyl acetate | 5 | 0.1573687 | 80 | 0.1495466 | 125 | 0.1512381 | 250 | 0.1460355 | 500 | 0.1424513 | 1000 | 0.1260794 |
| Methylcyclohexane | 0.5 | 0.7070219 | 8 | 0.6529624 | 12.5 | 0.6367468 | 25 | 0.6175689 | 50 | 0.5696085 | 100 | 0.5233474 |
| Methyl ethyl ketone | 8 | 0.1067181 | 32 | 9.618836E-02 | 80 | 8.350096E-02 | 160 | 8.184004E-02 | 240 | 8.202846E-02 | 400 | 0.0775675 |
| 5-Methyl-3-heptanone | 1 | 0.4867162 | 16 | 0.508622 | 25 | 0.54838 | 50 | 0.4803251 | 100 | 0.4967023 | 200 | 0.3939813 |
| Methyl iodide | 1.6 | 0.5789929 | 6.4 | 0.6355158 | 16 | 0.5537757 | 32 | 0.609476 | 48 | 0.5838484 | 80 | 0.547304 |
| Methyl isobutyl ketone | 8 | 0.1497377 | 32 | 0.1713839 | 80 | 0.1389002 | 160 | 0.1345446 | 240 | 0.1270829 | 400 | 0.1119302 |

AMEC Environmental & Infrastructure
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# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Calibration: 1702011
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration Date: 01/26/17 17:00

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl methacrylate | 4 | 8.801604E-02 | 16 | 9.652917E-02 | 40 | 7.997498E-02 | 80 | 7.903812E-02 | 120 | 7.863968E-02 | 200 | 7.818512E-02 |
| Pentachloroethane | 0.8 | 0.4423481 | 3.2 | 0.5834902 | 8 | 0.5450262 | 16 | 0.5418493 | 24 | 0.5844225 | 40 | 0.5225192 |
| Propionitrile | 20 | 0.0264355 | 80 | 2.570414E-02 | 200 | 2.384504E-02 | 400 | 2.216291E-02 | 640 | 2.125608E-02 | 1000 | 1.865313E-02 |
| Tetrahydrofuran | 16 | 5.908316E-02 | 64 | 5.764278E-02 | 160 | 4.946151E-02 | 320 | 4.948612E-02 | 480 | 0.0473374 | 800 | 4.534272E-02 |
| Vinyl acetate | 8 | 0.728072 | 32 | 0.7392454 | 80 | 0.5993619 | 160 | 0.6205669 | 240 | 0.584189 | 400 | 0.5349996 |
| p- & m-Xylenes | | | | | | | | | | | | |
| o-Xylene | | | | | | | | | | | | |
| Total Purgeable Petroleum Hydroca | | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 (Surrogate) | | | | | | | | | | | | |
| Toluene-d8 (Surrogate) | | | | | | | | | | | | |
| 4-Bromofluorobenzene (Surrogate) | | | | | | | | | | | | |

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# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
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Calibration: 1702011
Matrix: Water

SDG: 17-03480
Project: Alameda
Instrument: MS-V5
Calibration Date: 01/26/17 17:00

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Benzene | | | | | | | | | | | | |
| Bromobenzene | | | | | | | | | | | | |
| Bromochloromethane | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | |
| Bromomethane | | | | | | | | | | | | |
| n-Butylbenzene | | | | | | | | | | | | |
| sec-Butylbenzene | | | | | | | | | | | | |
| tert-Butylbenzene | | | | | | | | | | | | |
| Carbon tetrachloride | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | |
| Chloromethane | | | | | | | | | | | | |
| 2-Chlorotoluene | | | | | | | | | | | | |
| 4-Chlorotoluene | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | | | | | | | | | | | |
| 1,2-Dibromoethane | | | | | | | | | | | | |
| Dibromomethane | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | |

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Matrix: Water
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| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,1-Dichloroethane | | | | | | | | | | | | |
| 1,2-Dichloroethane | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | |
| trans-1,2-Dichloroethene | | | | | | | | | | | | |
| Total 1,2-Dichloroethene | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | |
| 1,3-Dichloropropane | | | | | | | | | | | | |
| 2,2-Dichloropropane | | | | | | | | | | | | |
| 1,1-Dichloropropene | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | |
| Total 1,3-Dichloropropene | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | |
| p-Isopropyltoluene | | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | | |
| Methyl t-butyl ether | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| n-Propylbenzene | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | |

AMEC Environmental & Infrastructure
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# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
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Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Toluene | | | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | | | | | | | |
| 1,2,3-Trichloropropane | | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethan | | | | | | | | | | | | |
| 1,2,4-Trimethylbenzene | | | | | | | | | | | | |
| 1,3,5-Trimethylbenzene | | | | | | | | | | | | |
| Vinyl chloride | | | | | | | | | | | | |
| Total Xylenes | | | | | | | | | | | | |
| Total Trihalomethanes | | | | | | | | | | | | |
| Acetone | | | | | | | | | | | | |
| Acetonitrile | | | | | | | | | | | | |
| Acrolein | | | | | | | | | | | | |
| Acrylonitrile | | | | | | | | | | | | |
| Allyl chloride | | | | | | | | | | | | |
| t-Amyl Alcohol | | | | | | | | | | | | |
| t-Amyl Methyl ether | | | | | | | | | | | | |
| Benzyl chloride | | | | | | | | | | | | |
| t-Butyl alcohol | | | | | | | | | | | | |
| Carbon disulfide | | | | | | | | | | | | |
| 2-Chloroethyl vinyl ether | | | | | | | | | | | | |

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# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Chloroprene | | | | | | | | | | | | |
| Chlorotrifluoroethene | | | | | | | | | | | | |
| Cyclohexane | | | | | | | | | | | | |
| Cyclohexanone | | | | | | | | | | | | |
| trans-1,4-Dichloro-2-butene | | | | | | | | | | | | |
| 1,2-Dichlorotrifluoroethane | | | | | | | | | | | | |
| 2,2-Dichloro-1,1,1-trifluoroethane | | | | | | | | | | | | |
| Diethyl ether | | | | | | | | | | | | |
| Diisopropyl ether | | | | | | | | | | | | |
| 1,4-Dioxane | | | | | | | | | | | | |
| Ethanol | | | | | | | | | | | | |
| Ethyl Amyl Ketone | | | | | | | | | | | | |
| Ethyl methacrylate | | | | | | | | | | | | |
| Ethyl t-butyl ether | | | | | | | | | | | | |
| Hexachloroethane | | | | | | | | | | | | |
| Hexane | | | | | | | | | | | | |
| 2-Hexanone | | | | | | | | | | | | |
| Isobutanol | | | | | | | | | | | | |
| Isopropyl alcohol | | | | | | | | | | | | |
| Methacrylonitrile | | | | | | | | | | | | |
| Methyl acetate | | | | | | | | | | | | |
| Methylcyclohexane | | | | | | | | | | | | |
| Methyl ethyl ketone | | | | | | | | | | | | |
| 5-Methyl-3-heptanone | | | | | | | | | | | | |
| Methyl iodide | | | | | | | | | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl isobutyl ketone | | | | | | | | | | | | |
| Methyl methacrylate | | | | | | | | | | | | |
| Pentachloroethane | | | | | | | | | | | | |
| Propionitrile | | | | | | | | | | | | |
| Tetrahydrofuran | | | | | | | | | | | | |
| Vinyl acetate | | | | | | | | | | | | |
| p- & m-Xylenes | | | | | | | | | | | | |
| o-Xylene | | | | | | | | | | | | |
| Total Purgeable Petroleum Hydroc | 50 | 2.870791 | 500 | 3.087034 | 1000 | 3.029454 | 1500 | 3.069891 | 2000 | 2.877825 | 2500 | 2.932973 |
| 1,2-Dichloroethane-d4 (Surrogate) | | | | | | | | | | | | |
| Toluene-d8 (Surrogate) | | | | | | | | | | | | |
| 4-Bromofluorobenzene (Surrogate) | | | | | | | | | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Benzene | 1.889545 | 9.180943 | 6.94 | 5.634228E-03 | | | 15 | |
| Bromobenzene | 1.179324 | 8.781515 | 10.45 | 1.926087E-02 | | | 15 | |
| Bromochloromethane | 0.1547174 | 9.471048 | 6.183333 | 0.1673501 | | | 15 | |
| Bromodichloromethane | 0.3292103 | 8.362367 | 8.06 | 1.375235E-02 | | | 15 | |
| Bromoform | 0.3506939 | 13.37441 | 10.16 | 1.968264E-02 | | | SPCC (0.10) | |
| Bromomethane | 0.3180084 | 4.949792 | 2.436667 | 0.2126912 | | | 15 | |
| n-Butylbenzene | 3.493597 | 13.28005 | 11.23667 | 9.156336E-02 | | | 15 | |
| sec-Butylbenzene | 5.379312 | 14.19416 | 10.914 | 8.097688E-02 | | | 15 | |
| tert-Butylbenzene | 3.852201 | 11.35355 | 10.78333 | 5.100083E-02 | | | 15 | |
| Carbon tetrachloride | 0.4688551 | 5.191681 | 6.72 | 1.146183E-02 | | | 15 | |
| Chlorobenzene | 2.978027 | 9.870514 | 9.643333 | 4.988898E-02 | | | SPCC (0.30) | |
| Chloroethane | 0.3902835 | 4.138092 | 2.566667 | 0.2020673 | | | 15 | |
| Chloroform | 0.7548469 | 6.273066 | 6.331667 | 6.112167E-02 | | | CCC (20) | |
| Chloromethane | 0.6989857 | 14.97623 | 1.943333 | 0.2654085 | 0.99772 | | SPCC (0.10) | |
| 2-Chlorotoluene | 3.666018 | 13.06413 | 10.555 | 0.0536519 | | | 15 | |
| 4-Chlorotoluene | 3.285453 | 13.86354 | 10.62667 | 4.983224E-02 | | | 15 | |
| Dibromochloromethane | 0.1708407 | 11.80164 | 9.241666 | 4.175574E-02 | | | 15 | |
| 1,2-Dibromo-3-chloropropane | 0.0666406 | 25.17557 | 11.73833 | 8.312334E-02 | 0.99981 | | 0.99 | |
| 1,2-Dibromoethane | 0.1390115 | 7.054979 | 9.328333 | 4.188551E-02 | | | 15 | |
| Dibromomethane | 0.1132441 | 8.835653 | 7.91 | 1.653285E-02 | | | 15 | |
| 1,2-Dichlorobenzene | 1.693334 | 14.65138 | 11.27833 | 8.752717E-02 | | | 15 | |
| 1,3-Dichlorobenzene | 2.068389 | 12.94808 | 11.008 | 0.1004115 | | | 15 | |
| 1,4-Dichlorobenzene | 1.916207 | 13.63312 | 11.065 | 7.433322E-02 | | | 15 | |
| Dichlorodifluoromethane | 0.4765408 | 8.332592 | 1.76 | 8.063699E-03 | | | 15 | |
| 1,1-Dichloroethane | 1.030991 | 7.692112 | 5.058333 | 8.126204E-02 | | | SPCC (0.10) | |
| 1,2-Dichloroethane | 0.438219 | 8.268656 | 7.005 | 7.754629E-02 | | | 15 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 0.7766588 | 8.198684 | 3.515 | 0.1557692 | | | CCC (20) | |
| cis-1,2-Dichloroethene | 0.46668 | 4.610702 | 5.831667 | 0.1294296 | | | 15 | |
| trans-1,2-Dichloroethene | 0.4502706 | 8.659956 | 4.501667 | 0.0902417 | | | 15 | |
| Total 1,2-Dichloroethene | 0.4584753 | 6.08411 | 5.831667 | 0.1294296 | | | 15 | |
| 1,2-Dichloropropane | 0.3723232 | 8.709297 | 7.84 | 9.702376E-03 | | | CCC (20) | |
| 1,3-Dichloropropane | 0.2667047 | 7.533232 | 9.09 | 0.0186287 | | | 15 | |
| 2,2-Dichloropropane | 0.6461859 | 7.526579 | 5.84 | 0.1091096 | | | 15 | |
| 1,1-Dichloropropene | 0.61317 | 8.797094 | 6.726667 | 7.685787E-02 | | | 15 | |
| cis-1,3-Dichloropropene | 0.436368 | 9.271827 | 8.408333 | 4.530242E-02 | | | 15 | |
| trans-1,3-Dichloropropene | 0.3001727 | 7.112617 | 8.83 | 2.384445E-02 | | | 15 | |
| Total 1,3-Dichloropropene | 0.3682704 | 7.991017 | 8.83 | 2.384445E-02 | | | 15 | |
| Ethylbenzene | 1.699115 | 14.95483 | 9.698333 | 4.299496E-02 | | | CCC (20) | |
| Hexachlorobutadiene | 0.8012975 | 13.30544 | 12.28833 | 0.1407559 | | | 15 | |
| Isopropylbenzene | 5.188549 | 11.33656 | 10.24 | 0.015589 | | | 15 | |
| p-Isopropyltoluene | 4.064913 | 12.68025 | 10.998 | 7.728538E-02 | | | 15 | |
| Methylene chloride | 0.601454 | 65.25738 | 4.151667 | 9.579772E-02 | 0.99908 | | 0.99 | |
| Methyl t-butyl ether | 0.6285989 | 7.393993 | 4.491666 | 8.862136E-02 | | | 15 | |
| Naphthalene | 1.162765 | 12.34674 | 12.385 | 0.1128744 | | | 15 | |
| n-Propylbenzene | 5.959786 | 13.29814 | 10.488 | 3.977509E-02 | | | 15 | |
| Styrene | 2.90027 | 10.45117 | 10.03167 | 3.567744E-02 | | | 15 | |
| 1,1,1,2-Tetrachloroethane | 0.9261768 | 10.84263 | 9.698333 | 4.299496E-02 | | | 15 | |
| 1,1,2,2-Tetrachloroethane | 0.555952 | 8.993065 | 10.42 | 9.595757E-03 | | | SPCC (0.30) | |
| Tetrachloroethene | 0.3412463 | 14.19945 | 9.038333 | 3.957867E-02 | | | 15 | |
| Toluene | 0.7797766 | 12.17928 | 8.661667 | 0.04731 | | | CCC (20) | |
| 1,2,3-Trichlorobenzene | 1.02527 | 3.862187 | 12.51667 | 0.1652262 | | | 15 | |
| 1,2,4-Trichlorobenzene | 1.194842 | 5.768365 | 12.22 | 0.1261601 | | | 15 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.6397625 | 7.075288 | 6.528334 | 6.356984E-02 | | | 15 | |
| 1,1,2-Trichloroethane | 0.1533095 | 10.94703 | 8.978333 | 0.0413948 | | | 15 | |
| Trichloroethene | 0.3255704 | 7.473897 | 7.605 | 0.0716509 | | | 15 | |
| Trichlorofluoromethane | 0.5867905 | 8.741507 | 2.868333 | 0.1427778 | | | 15 | |
| 1,2,3-Trichloropropane | 0.105337 | 20.84859 | 10.46167 | 3.519845E-02 | 0.99859 | | 0.99 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.4183029 | 11.63839 | 3.535 | 0.154669 | | | 15 | |
| 1,2,4-Trimethylbenzene | 3.597754 | 13.66403 | 10.81667 | 4.928939E-02 | | | 15 | |
| 1,3,5-Trimethylbenzene | 3.970515 | 12.33762 | 10.588 | 4.151475E-02 | | | 15 | |
| Vinyl chloride | 0.5958562 | 12.3798 | 2.07 | 5.801038E-03 | | | CCC (20) | |
| Total Xylenes | 1.988127 | 12.26843 | 10.02 | 0.0198293 | | | 15 | |
| Total Trihalomethanes | 8361.618 | 5.192236 | 10.16 | 1.968264E-02 | | | 15 | |
| Acetone | 0.044841 | 13.89285 | 3.566 | 0.1535831 | | | 15 | |
| Acetonitrile | 1.965066E-02 | 21.35825 | 3.915 | 0.1394718 | 0.99895 | | 0.99 | |
| Acrolein | 0.0199267 | 8.98742 | 3.396667 | 0.2401525 | | | 15 | |
| Acrylonitrile | 6.371868E-02 | 4.581122 | 4.443333 | 0.1152199 | | | 15 | |
| Allyl chloride | 1.114402 | 12.68532 | 3.991667 | 0.1026915 | | | 15 | |
| t-Amyl Alcohol | 8.917911E-03 | 14.14637 | 6.971666 | 6.115328E-02 | | | 15 | |
| t-Amyl Methyl ether | 0.7281162 | 6.262118 | 7.09 | 1.844497E-02 | | | 15 | |
| Benzyl chloride | 0.8656921 | 8.036501 | 11.1 | 1.307304E-02 | | | 15 | |
| t-Butyl alcohol | 1.280474E-02 | 14.61721 | 4.276 | 0.2100331 | | | 15 | |
| Carbon disulfide | 1.344744 | 10.69499 | 3.8 | 0.1664058 | | | 15 | |
| 2-Chloroethyl vinyl ether | 0.1042548 | 9.542111 | 8.283333 | 6.161591E-02 | | | 15 | |
| Chloroprene | 1.000946 | 8.693085 | 5.151667 | 7.949544E-02 | | | 15 | |
| Chlorotrifluoroethene | | | | | | | 15 | |
| Cyclohexane | 1.086285 | 6.560645 | 6.622 | 6.679619E-02 | | | 15 | |
| Cyclohexanone | 4.458125E-02 | 11.37529 | 10.3 | 2.077223E-03 | | | 15 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | 0.1551532 | 8.274238 | 10.43167 | 3.686923E-02 | | | 15 | |
| 1,2-Dichlorotrifluoroethane | 0.5668375 | 5.793663 | 3.3 | 1.804918E-02 | | | 15 | |
| 2,2-Dichloro-1,1,1-trifluoroethane | 0.8869153 | 8.772737 | 3.391667 | 0.1202184 | | | 15 | |
| Diethyl ether | 0.2602638 | 4.202131 | 3.22 | 2.166916E-02 | | | 15 | |
| Diisopropyl ether | 0.3174881 | 5.440254 | 5.103333 | 9.952656E-02 | | | 15 | |
| 1,4-Dioxane | 7.122724E-04 | 17.68626 | 7.9 | 0.1123963 | 0.99707 | | 0.99 | |
| Ethanol | 1.543484E-03 | 14.9342 | 3.09 | 0.7928208 | | | 15 | |
| Ethyl Amyl Ketone | 0.3615402 | 11.74224 | 10.76 | 1.356797E-02 | | | 15 | |
| Ethyl methacrylate | 0.1775957 | 10.48137 | 8.86 | 1.624233E-02 | | | 15 | |
| Ethyl t-butyl ether | 1.311089 | 8.660484 | 5.591667 | 7.395801E-02 | | | 15 | |
| Hexachloroethane | 0.7041294 | 7.867683 | 11.45 | 0.0960662 | | | 15 | |
| Hexane | 0.5955754 | 3.893747 | 4.861667 | 8.576904E-02 | | | 15 | |
| 2-Hexanone | 0.0923643 | 19.88289 | 9.103333 | 0.0561633 | | 0.9995528 | 0.99 | |
| Isobutanol | 6.527947E-03 | 13.53742 | 6.845 | 0.1220592 | | | 15 | |
| Isopropyl alcohol | 8.714983E-03 | 21.27518 | 3.753333 | 0.575574 | 0.99615 | | 0.99 | |
| Methacrylonitrile | 6.173201E-02 | 5.168261 | 6.13 | 1.714861E-02 | | | 15 | |
| Methyl acetate | 0.1454533 | 7.384817 | 3.973333 | 0.2059519 | | | 15 | |
| Methylcyclohexane | 0.617876 | 10.4386 | 7.815 | 6.776742E-02 | | | 15 | |
| Methyl ethyl ketone | 0.0879739 | 12.65874 | 5.813333 | 8.944584E-02 | | | 15 | |
| 5-Methyl-3-heptanone | 0.4857878 | 10.50343 | 10.44 | 2.779896E-03 | | | 15 | |
| Methyl iodide | 0.5848188 | 5.714397 | 3.705 | 0.1477932 | | | 15 | |
| Methyl isobutyl ketone | 0.1389299 | 14.60526 | 8.51 | 1.340775E-02 | | | 15 | |
| Methyl methacrylate | 8.339718E-02 | 8.88122 | 7.88 | 9.924249E-03 | | | 15 | |
| Pentachloroethane | 0.5366092 | 9.742643 | 10.8 | 1.727045E-02 | | | 15 | |
| Propionitrile | 2.300947E-02 | 12.66567 | 5.898333 | 0.1266948 | | | 15 | |
| Tetrahydrofuran | 5.139228E-02 | 10.95959 | 6.196667 | 8.478846E-02 | | | 15 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL CALIBRATION DATA (Continued)

## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Calibration: 1702011
Instrument: MS-V5
Matrix: Water
Calibration Date: 01/26/17 17:00

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Vinyl acetate | 0.6344058 | 12.91925 | 5.063333 | 0.1028759 | | | 15 | |
| p- & m-Xylenes | 2.011739 | 13.84385 | 9.78 | 1.957201E-02 | | | 15 | |
| o-Xylene | 1.940902 | 9.244618 | 10.02 | 0.0198293 | | | 15 | |
| Total Purgeable Petroleum Hydrocarbons | 2.977995 | 3.239537 | 9.668333 | 4.855941 | | | 15 | |
| 1,2-Dichloroethane-d4 (Surrogate) | 0.2958699 | 6.360265 | 6.921667 | 6.116163E-02 | | | 15 | |
| Toluene-d8 (Surrogate) | 1.138139 | 1.710998 | 8.61 | 0.0142186 | | | 15 | |
| 4-Bromofluorobenzene (Surrogate) | 1.379025 | 3.111593 | 10.355 | 4.975555E-02 | | | 15 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## EPA-8260B

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 01:31 | 6.00 | 14.00 | |
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 02:15 | 7.00 | 14.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 22:24 | 6.00 | 14.00 | |
| 398-MW1_170207 | 02/07/17 08:42 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 02:18 | 6.00 | 14.00 | |
| IR11-OU2B-MW02_170207 | 02/07/17 10:05 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 02:41 | 6.00 | 14.00 | |
| IR11-OU2B-MW02_170207 | 02/07/17 10:05 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 02:38 | 7.00 | 14.00 | |
| IR11-OU2B-MW03_170207 | 02/07/17 09:00 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 03:04 | 6.00 | 14.00 | |
| IR11-OU2B-MW03_170207 | 02/07/17 09:00 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 03:01 | 7.00 | 14.00 | |
| M11-02_170207 | 02/07/17 08:20 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 22:47 | 6.00 | 14.00 | |
| OU2B-MW02_170207 | 02/07/17 10:12 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 23:10 | 6.00 | 14.00 | |
| OU2B-MW04_170207 | 02/07/17 09:32 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 23:33 | 6.00 | 14.00 | |
| S21-TT-MW05A_170207 | 02/07/17 08:37 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 23:57 | 6.00 | 14.00 | |
| S21-TT-MW05C_170207 | 02/07/17 10:22 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 10:48 | 6.00 | 14.00 | |
| S21-TT-MW05C_170207 | 02/07/17 10:22 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 03:25 | 7.00 | 14.00 | |
| S21-TT-MW05D_170207 | 02/07/17 09:44 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 00:20 | 7.00 | 14.00 | |
| S21-TT-MW05E_170207 | 02/07/17 09:12 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 00:43 | 7.00 | 14.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 11:58 | 6.00 | 14.00 | |
| 27MW01_170207 | 02/07/17 11:55 | 02/07/17 22:00 | 02/12/17 11:39 | 5.00 | 14.00 | 02/12/17 13:34 | 5.00 | 14.00 | |
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/12/17 11:39 | 6.00 | 14.00 | 02/13/17 12:21 | 6.00 | 14.00 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 03:48 | 7.00 | 14.00 | |
| M07B-01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/12/17 11:39 | 7.00 | 14.00 | 02/14/17 01:06 | 7.00 | 14.00 | |
| OU2B-MW01_170207 | 02/07/17 10:44 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 08:29 | 6.00 | 14.00 | |
| S11-TT-MW01C_170207 | 02/07/17 13:09 | 02/07/17 22:00 | 02/13/17 07:00 | 7.00 | 14.00 | 02/14/17 01:29 | 7.00 | 14.00 | |
| S11-TT-MW01D_170207 | 02/07/17 12:34 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 13:30 | 6.00 | 14.00 | |
| S11-TT-MW01E_170207 | 02/07/17 11:59 | 02/07/17 22:00 | 02/13/17 07:00 | 7.00 | 14.00 | 02/14/17 01:52 | 7.00 | 14.00 | |
| S21-TT-MW01E_170207 | 02/07/17 12:50 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 14:16 | 6.00 | 14.00 | |
| S21-TT-MW05B_170207 | 02/07/17 10:52 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 14:40 | 6.00 | 14.00 | |
| S21-TT-MW05B_170207 | 02/07/17 10:52 | 02/07/17 22:00 | 02/14/17 07:00 | 7.00 | 14.00 | 02/14/17 19:16 | 7.00 | 14.00 | |
| TB14_170207 | 02/07/17 12:00 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 20:05 | 6.00 | 14.00 | |
| TB15_170207 | 02/07/17 12:15 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 20:28 | 6.00 | 14.00 | |
| EB26_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 20:51 | 6.00 | 14.00 | |
| EB27_170207 | 02/07/17 14:10 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 21:14 | 6.00 | 14.00 | |
| EB28_170207 | 02/07/17 14:20 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 21:38 | 6.00 | 14.00 | |
| EB29_170207 | 02/07/17 14:30 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 22:01 | 6.00 | 14.00 | |
| IR11-OU2B-MW04_170207 | 02/07/17 13:30 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 15:03 | 6.00 | 14.00 | |
| IR11-OU2B-MW04_170207 | 02/07/17 13:30 | 02/07/17 22:00 | 02/14/17 07:00 | 7.00 | 14.00 | 02/14/17 19:39 | 7.00 | 14.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/14/17 07:00 | 7.00 | 14.00 | 02/14/17 18:06 | 7.00 | 14.00 | |
| S11-TT-MW01A_170207 | 02/07/17 14:11 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 15:49 | 6.00 | 14.00 | |
| S11-TT-MW01B_170207 | 02/07/17 13:48 | 02/07/17 22:00 | 02/14/17 07:00 | 7.00 | 14.00 | 02/14/17 18:29 | 7.00 | 14.00 | |
| S21-TT-MW01A_170207 | 02/07/17 13:51 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 16:36 | 6.00 | 14.00 | |
| S21-TT-MW01A_170207 | 02/07/17 13:51 | 02/07/17 22:00 | 02/14/17 07:00 | 7.00 | 14.00 | 02/14/17 20:02 | 7.00 | 14.00 | |
| S21-TT-MW01B_170207 | 02/07/17 13:55 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 16:59 | 6.00 | 14.00 | |
| S21-TT-MW01B_170207 | 02/07/17 13:55 | 02/07/17 22:00 | 02/14/17 07:00 | 7.00 | 14.00 | 02/14/17 20:25 | 7.00 | 14.00 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| S21-TT-MW01C_170207 | 02/07/17 13:23 | 02/07/17 22:00 | 02/13/17 07:00 | 6.00 | 14.00 | 02/13/17 17:22 | 6.00 | 14.00 | |
| S21-TT-MW01D_170207 | 02/07/17 13:25 | 02/07/17 22:00 | 02/14/17 07:00 | 7.00 | 14.00 | 02/14/17 18:52 | 7.00 | 14.00 | |

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

## Raw Data From Instrument MS-V5

**Raw Data - Samples**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB54.D Vial: 54
Acq On : 13 Feb 2017 1:31 am Operator: MGC
Sample : 1703480-01 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:52 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208247 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 273061 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62016 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61779 | 10.03 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 100.30% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 304352 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 89400 | 10.45 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 104.50% | | | |

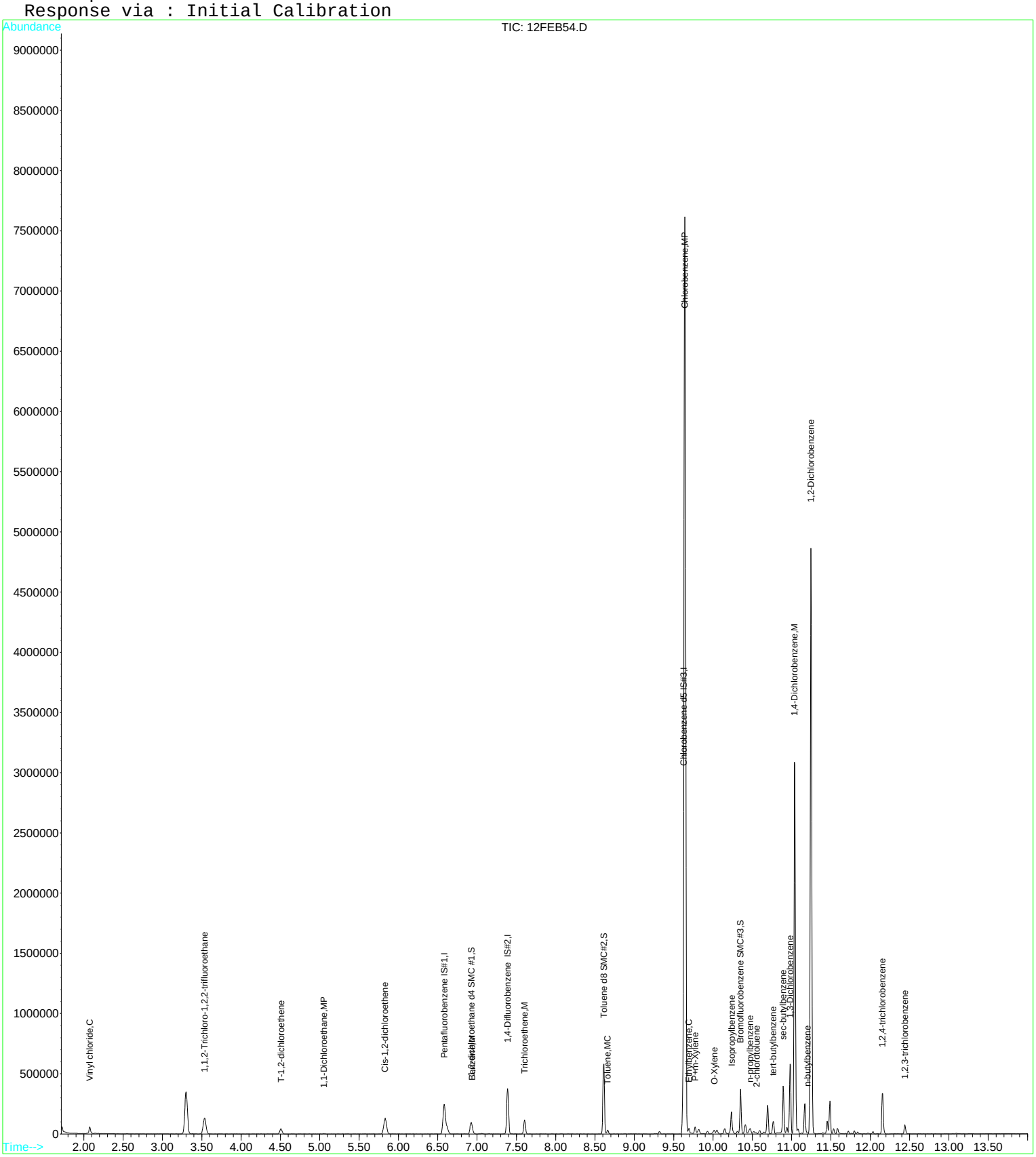
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.08 | 62 | 45200 | 3.64 | ug/L | 92 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 73237 | 8.41 | ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 17040 | 1.82 | ug/L | 94 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 2207 | 0.10 | ug/L # | 52 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 69962 | 7.20 | ug/L | 90 |
| 23) Benzene | 6.94 | 78 | 17560 | 0.45 | ug/L # | 1 |
| 25) Trichloroethene | 7.60 | 130 | 33040 | 3.72 | ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 12656 | 0.59 | ug/L | 88 |
| 40) Chlorobenzene | 9.64 | 112 | 3414610 | 184.89 | ug/L | 95 |
| 42) Ethylbenzene | 9.69 | 106 | 3523 | 0.33 | ug/L | 66 |
| 43) P+m-Xylene | 9.78 | 106 | 2456 | 0.20 | ug/L # | 34 |
| 44) O-Xylene | 10.02 | 106 | 4842 | 0.40 | ug/L # | 48 |
| 47) Isopropylbenzene | 10.24 | 105 | 89064 | 2.77 | ug/L | 92 |
| 51) n-propylbenzene | 10.48 | 91 | 7570 | 0.20 | ug/L | 89 |
| 54) 2-chlorotoluene | 10.55 | 91 | 2122 | 0.09 | ug/L | 99 |
| 56) tert-butylbenzene | 10.77 | 119 | 25367 | 1.06 | ug/L | 94 |
| 58) sec-butylbenzene | 10.89 | 105 | 202763 | 6.08 | ug/L | 94 |
| 60) 1,3-Dichlorobenzene | 10.99 | 146 | 191291 | 14.91 | ug/L | 98 |
| 61) 1,4-Dichlorobenzene | 11.04 | 146 | 1009845 | 84.98 | ug/L | 99 |
| 62) n-butylbenzene | 11.21 | 91 | 3575 | 0.17 | ug/L # | 62 |
| 63) 1,2-Dichlorobenzene | 11.25 | 146 | 1606002 | 152.93 | ug/L | 99 |
| 66) 1,2,4-trichlorobenzene | 12.16 | 180 | 95643 | 12.91 | ug/L | 93 |
| 69) 1,2,3-trichlorobenzene | 12.44 | 180 | 22429 | 3.53 | ug/L | 83 |

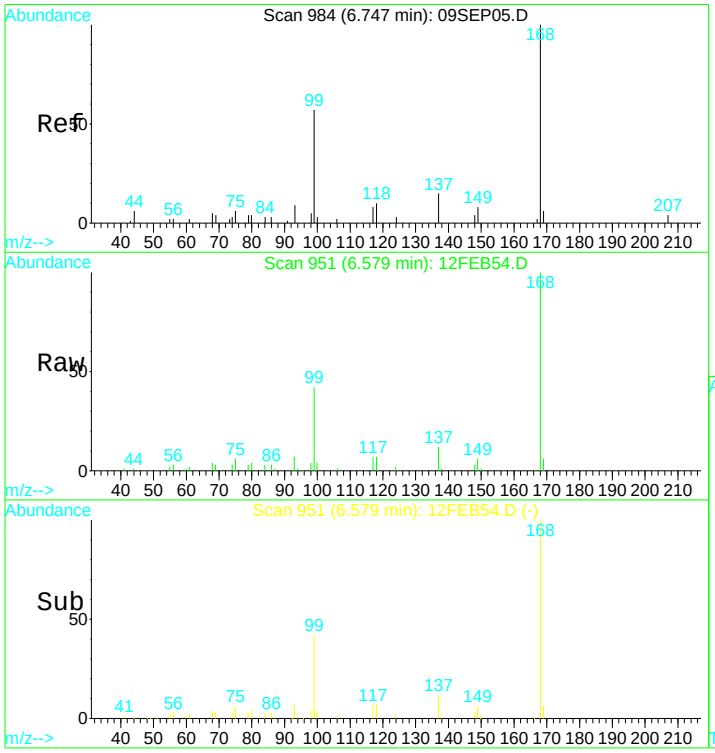
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB54.D Vial: 54
Acq On : 13 Feb 2017 1:31 am Operator: MGC
Sample : 1703480-01 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:52 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

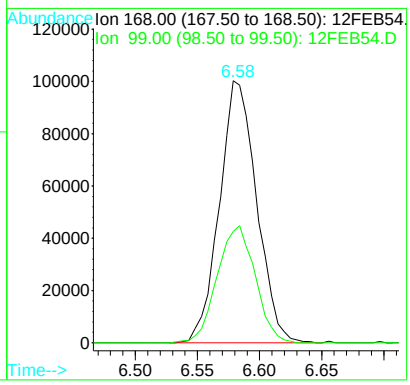


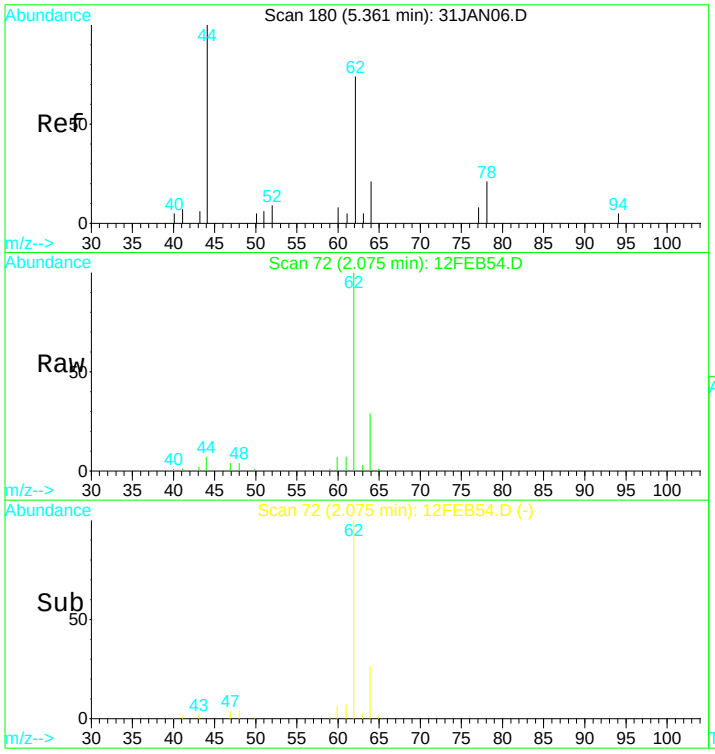



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:168 Resp: 208247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.6 | 305.1 | 566.7# |

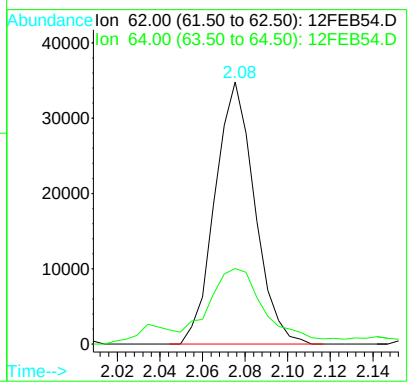


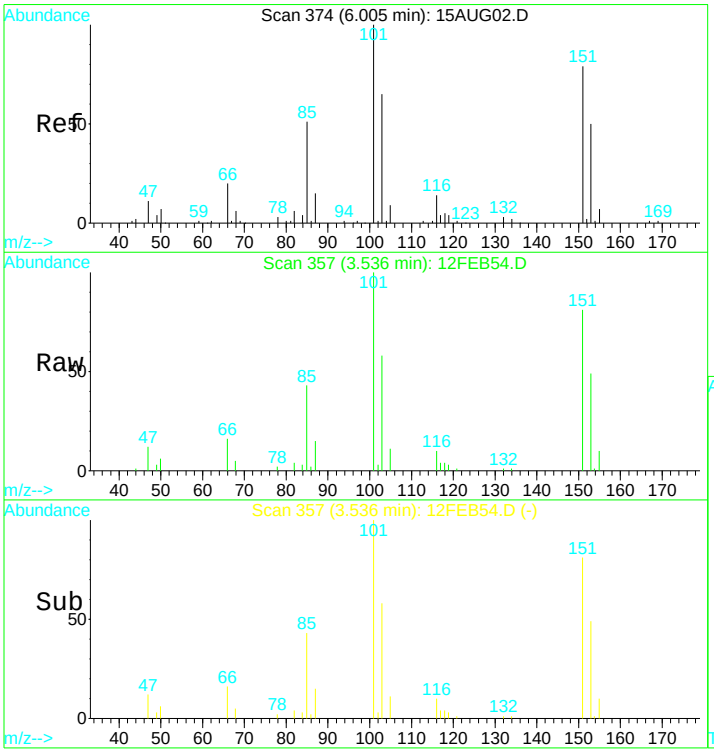




#4
Vinyl chloride
Concen: 3.64 ug/L
RT: 2.08 min Scan# 72
Delta R.T. 0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 62 Resp: 45200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 36.6 | 22.4 | 41.6 |

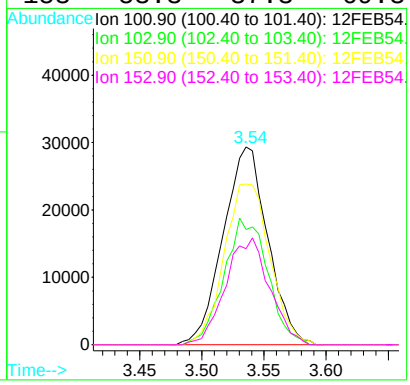


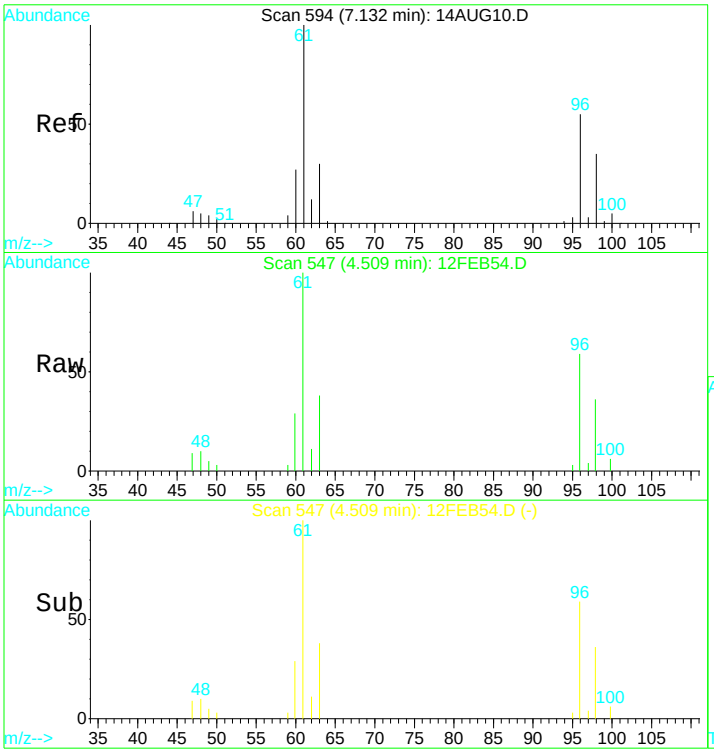



#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 8.41 ug/L
RT: 3.54 min Scan# 357
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:101 Resp: 73237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 62.5 | 46.1 | 85.5 |
| 151 | 83.3 | 58.0 | 107.8 |
| 153 | 53.3 | 37.3 | 69.3 |

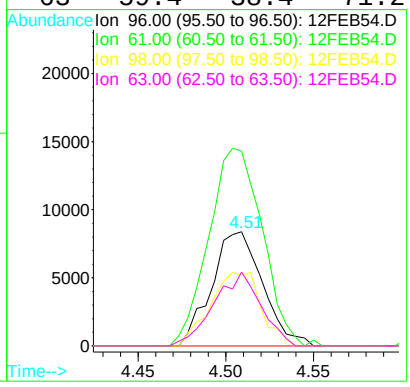


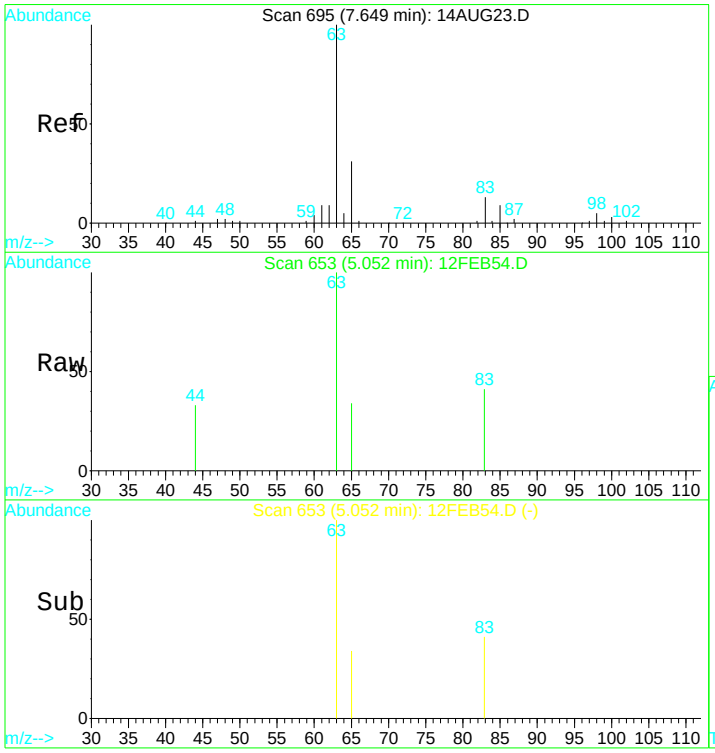




#12
T-1,2-dichloroethene
Concen: 1.82 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 96 Resp: 17040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 181.0 | 119.6 | 222.2 |
| 98 | 63.9 | 46.1 | 85.5 |
| 63 | 59.4 | 38.4 | 71.2 |

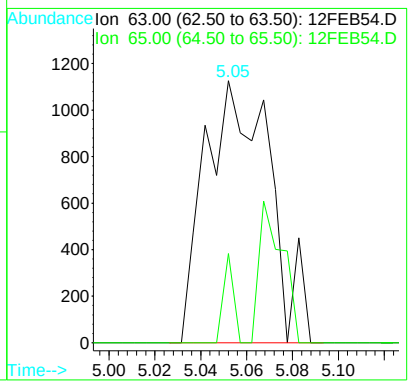


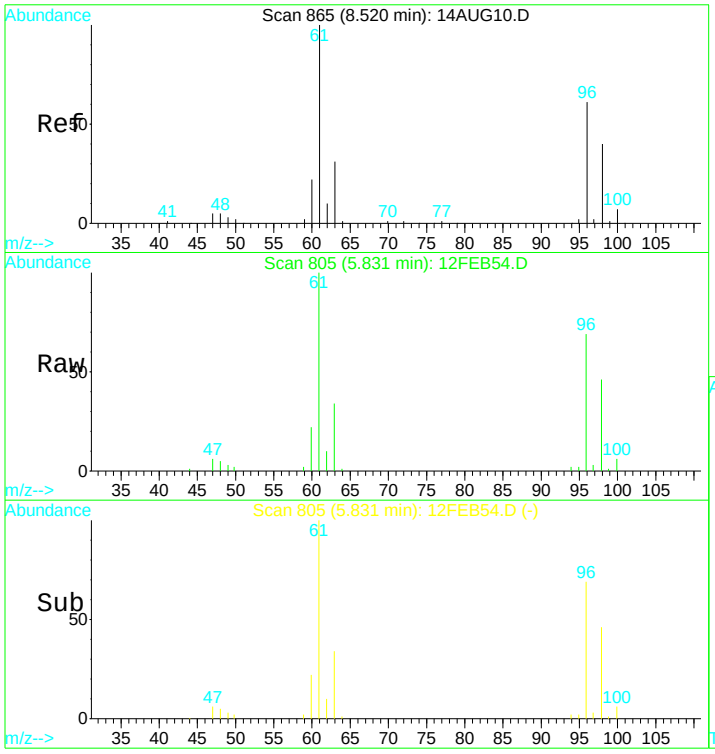



#13
1,1-Dichloroethane
Concen: 0.10 ug/L
RT: 5.05 min Scan# 653
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 63 Resp: 2207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 5.3 | 22.4 | 41.6# |

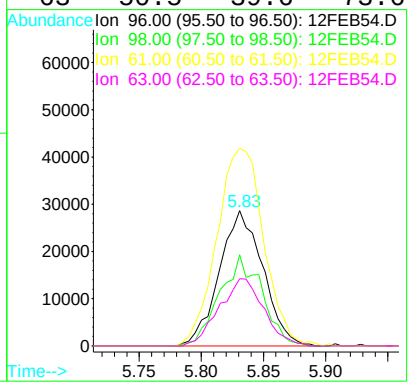


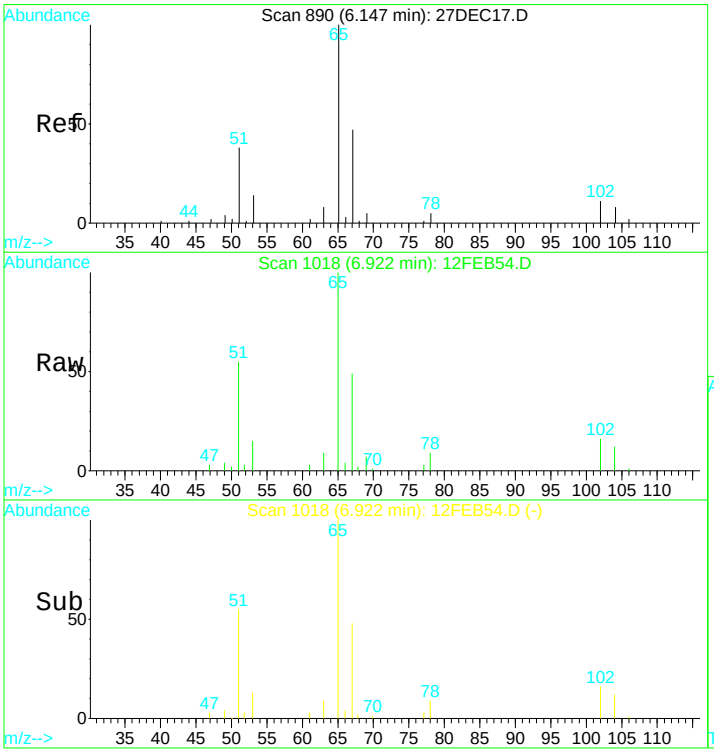




#15
Cis-1,2-dichloroethene
Concen: 7.20 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 96 Resp: 69962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 64.4 | 46.2 | 85.8 |
| 61 | 156.9 | 122.8 | 228.0 |
| 63 | 50.5 | 39.6 | 73.6 |

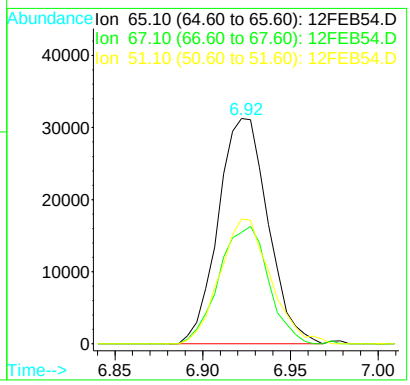


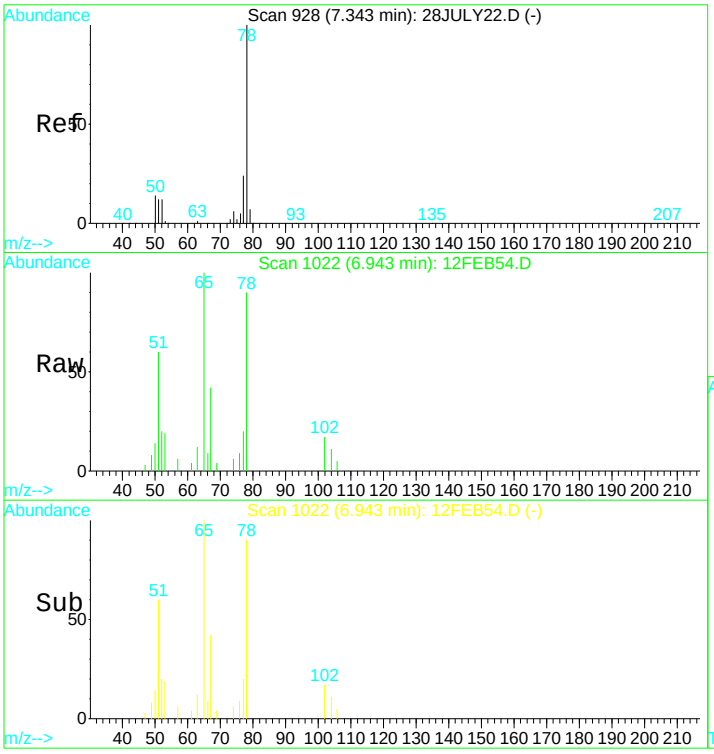



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 65 Resp: 61779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.7 | 38.4 | 71.4 |
| 51 | 56.3 | 1006.3 | 1868.8# |

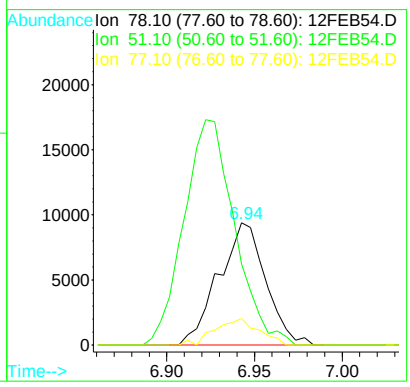


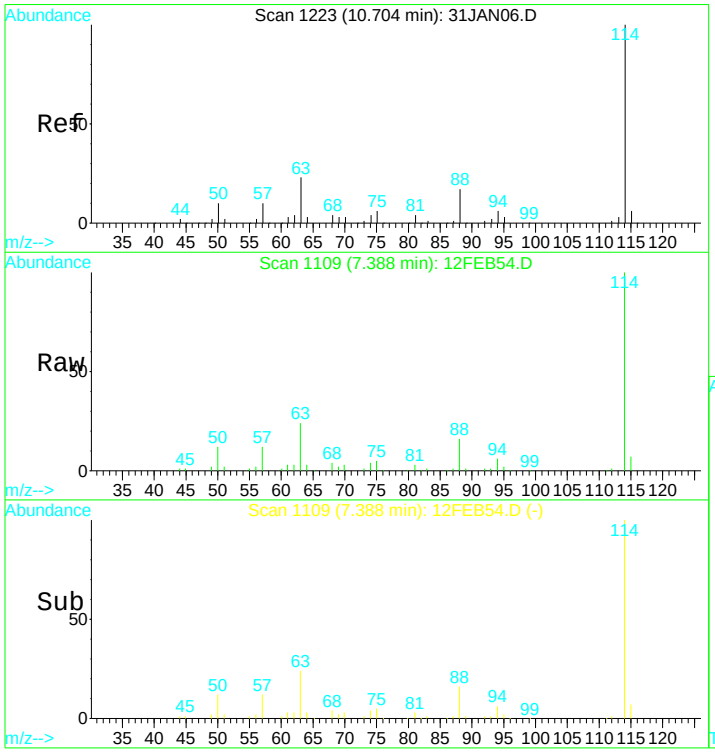




#23
Benzene
Concen: 0.45 ug/L
RT: 6.94 min Scan# 1022
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 78 Resp: 17560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 51 | 198.1 | 16.2 | 30.0# |
| 77 | 20.3 | 16.3 | 30.3 |

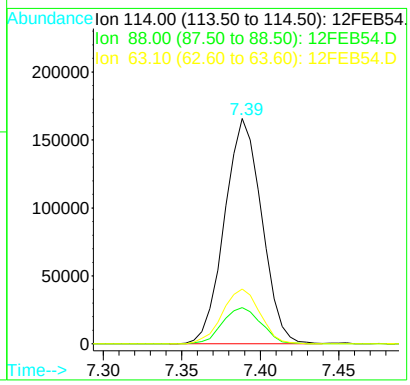


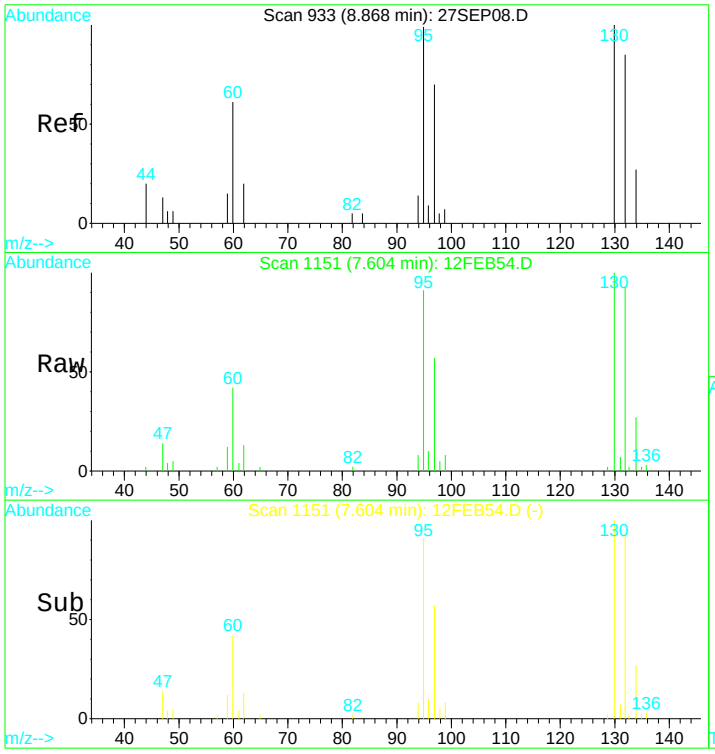



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:114 Resp: 273061

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.7 | 12.0 | 22.2 |
| 63 | 24.6 | 16.9 | 31.5 |

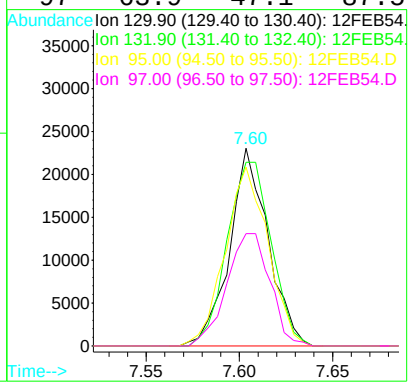


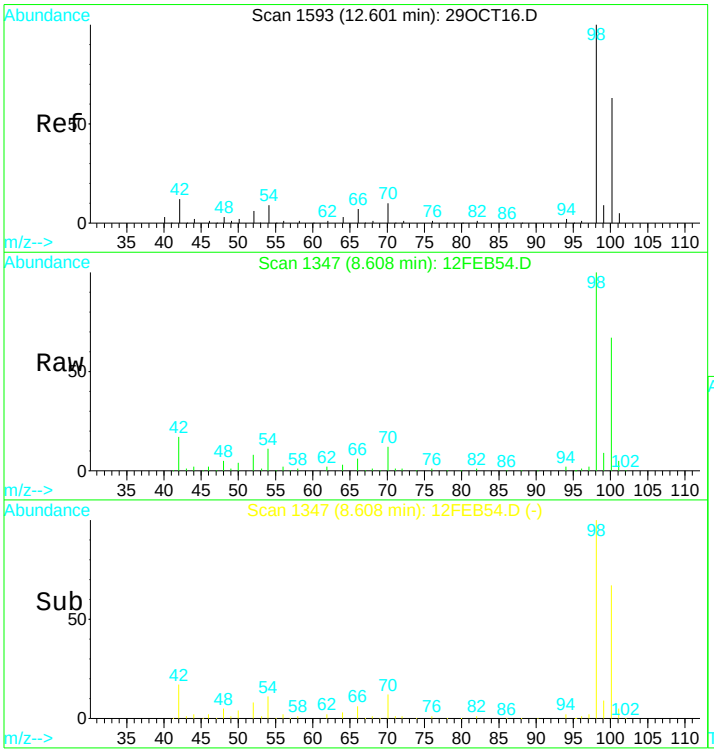




#25
Trichloroethene
Concen: 3.72 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:130 Resp: 33040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 107.1 | 74.3 | 137.9 |
| 95 | 100.8 | 70.8 | 131.6 |
| 97 | 63.9 | 47.1 | 87.5 |

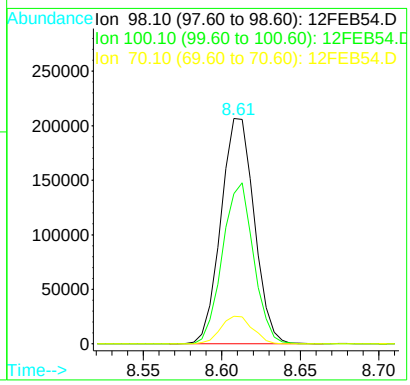


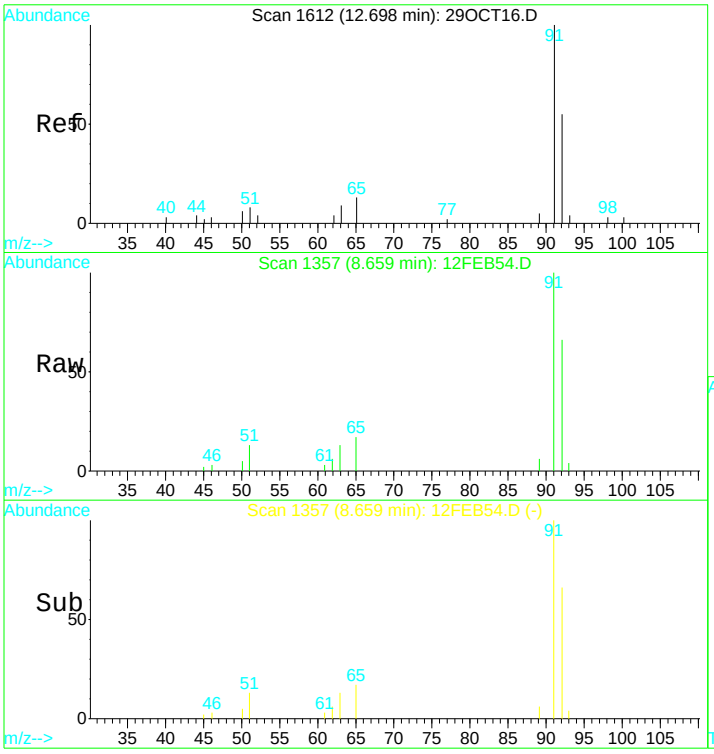



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 98 Resp: 304352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.6 | 47.0 | 87.4 |
| 70 | 11.7 | 7.3 | 13.7 |

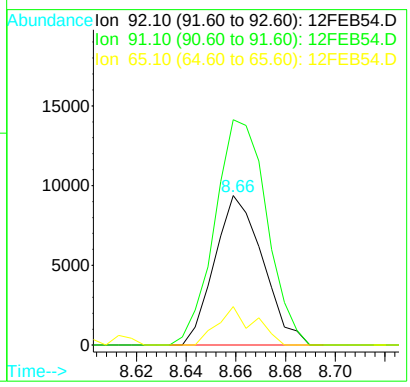


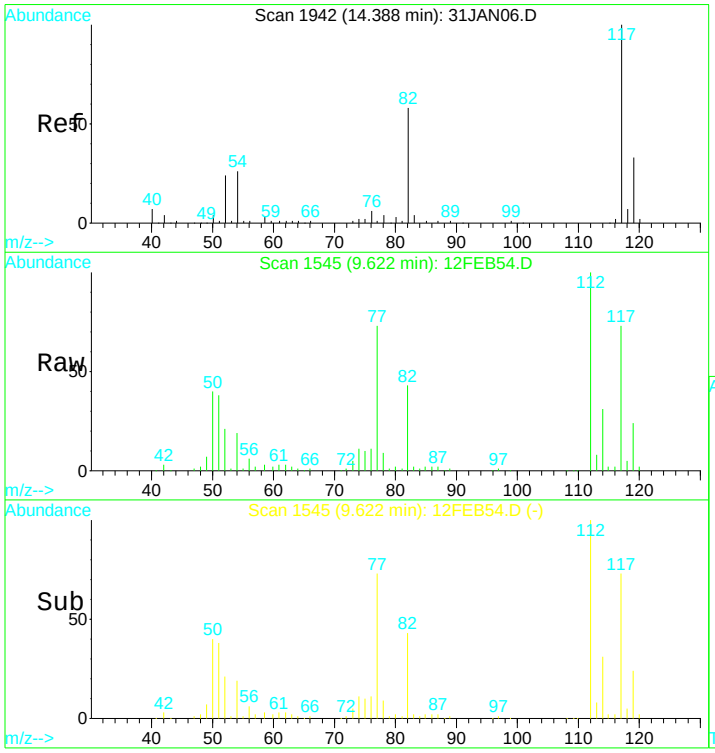




#32
Toluene
Concen: 0.59 ug/L
RT: 8.66 min Scan# 1357
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 92 Resp: 12656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 162.6 | 102.5 | 190.3 |
| 65 | 19.9 | 15.0 | 27.8 |

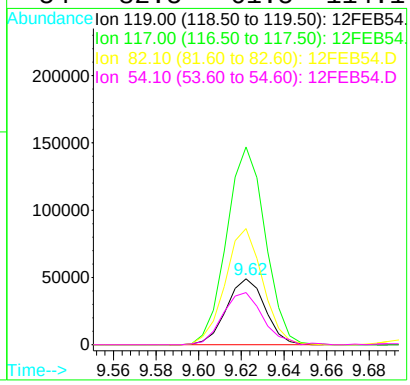


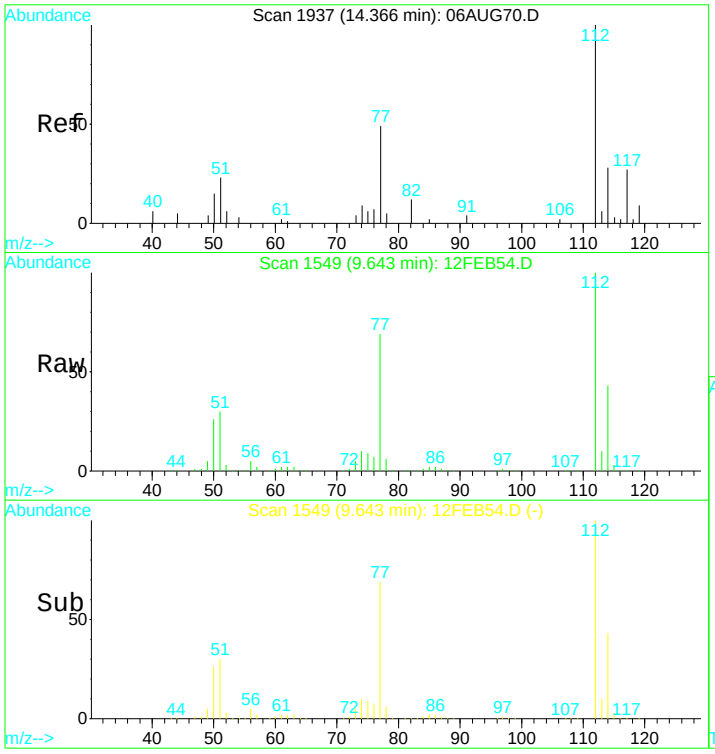



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:119 Resp: 62016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 299.9 | 220.4 | 409.4 |
| 82 | 171.1 | 123.9 | 230.1 |
| 54 | 82.5 | 61.5 | 114.1 |

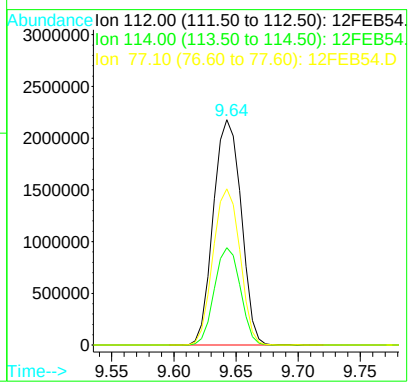


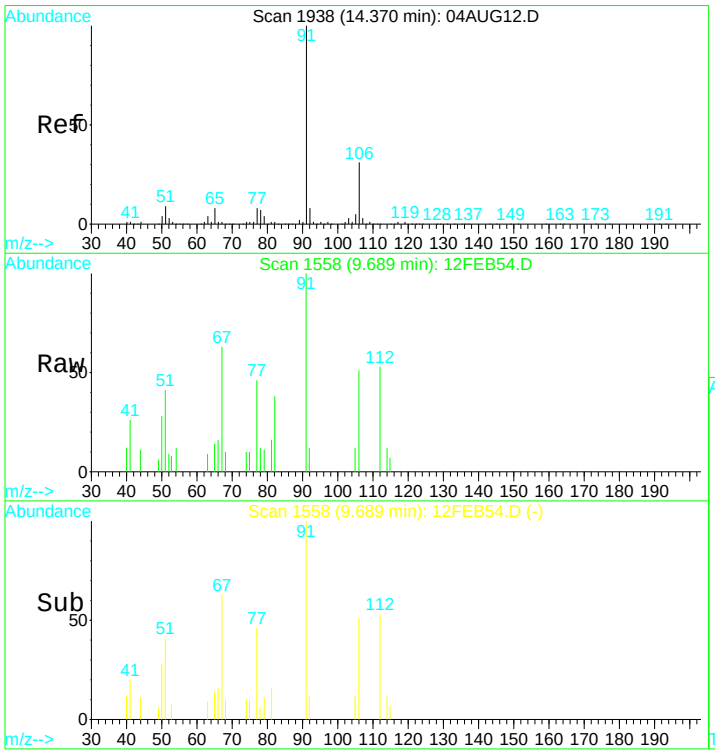




#40
Chlorobenzene
Concen: 184.89 ug/L
RT: 9.64 min Scan# 1549
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:112 Resp: 3414610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 40.2 | 25.1 | 46.5 |
| 77 | 67.0 | 44.6 | 82.8 |

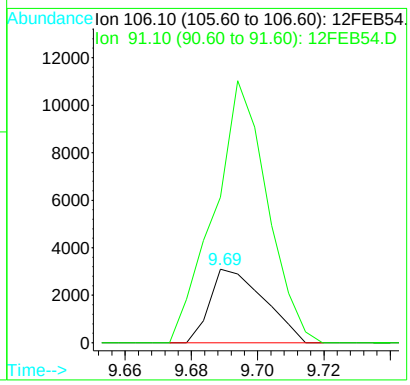


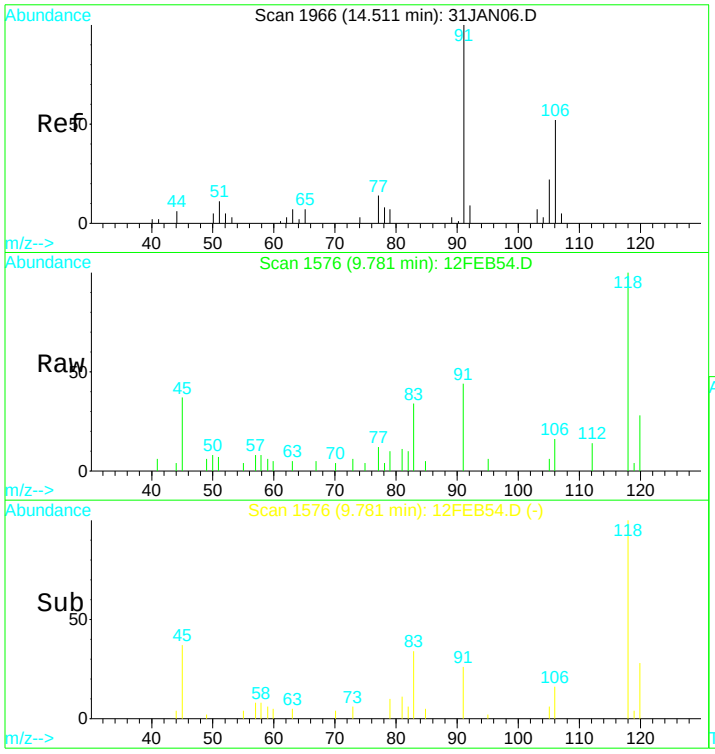



#42
Ethylbenzene
Concen: 0.33 ug/L
RT: 9.69 min Scan# 1558
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:106 Resp: 3523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 347.6 | 197.9 | 367.5 |

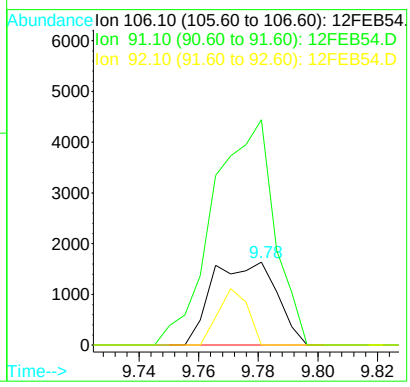


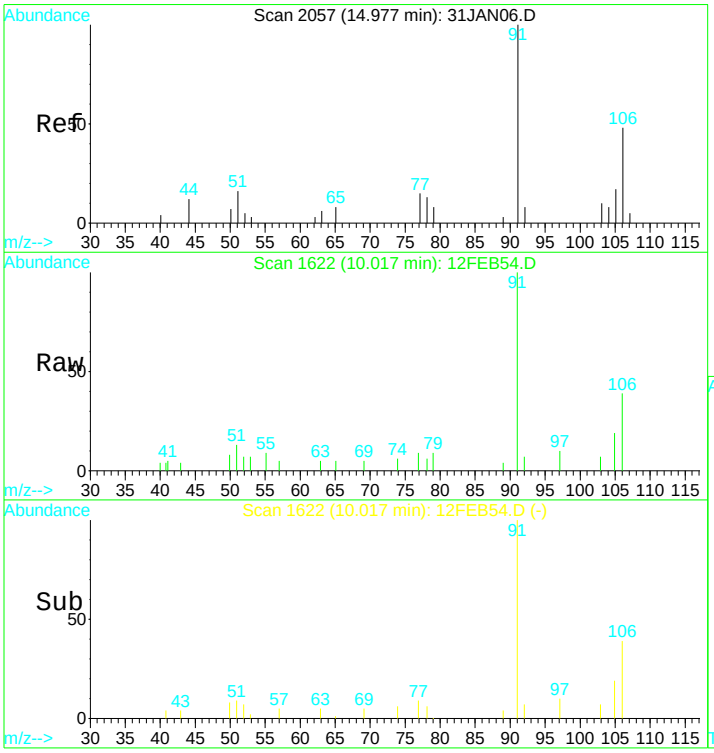




#43
P+m-Xylene
Concen: 0.20 ug/L
RT: 9.78 min Scan# 1576
Delta R.T. 0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:106 Resp: 2456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 259.4 | 116.4 | 216.2# |
| 92 | 31.5 | 10.8 | 20.0# |

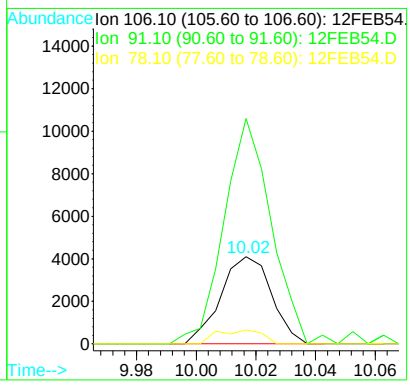


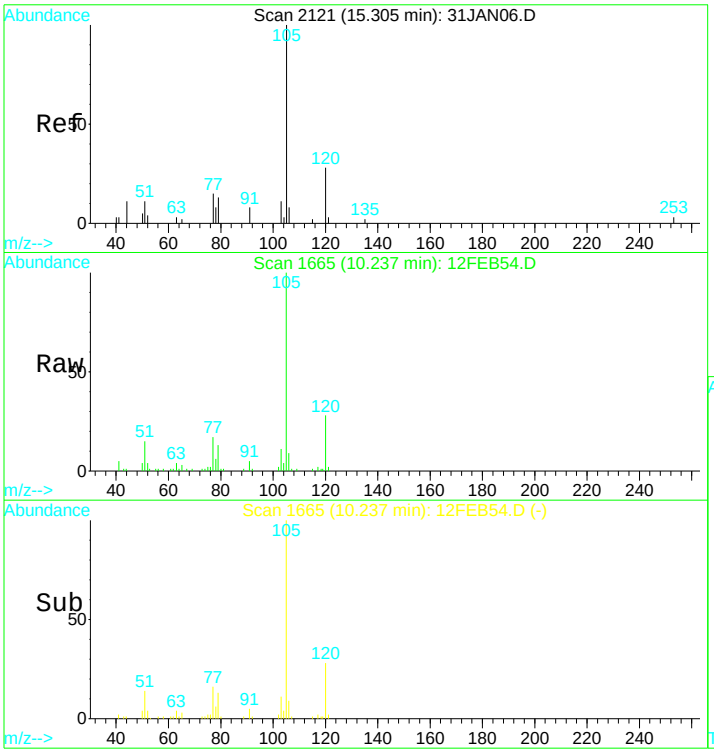



#44
O-Xylene
Concen: 0.40 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:106 Resp: 4842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 240.8 | 124.3 | 230.9# |
| 78 | 14.2 | 51.7 | 95.9# |

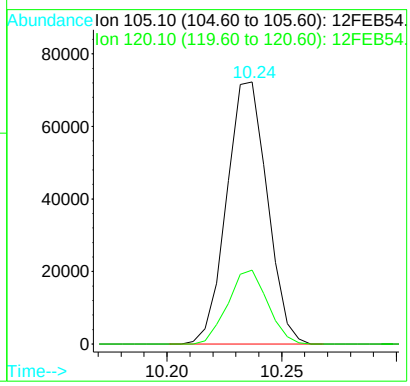


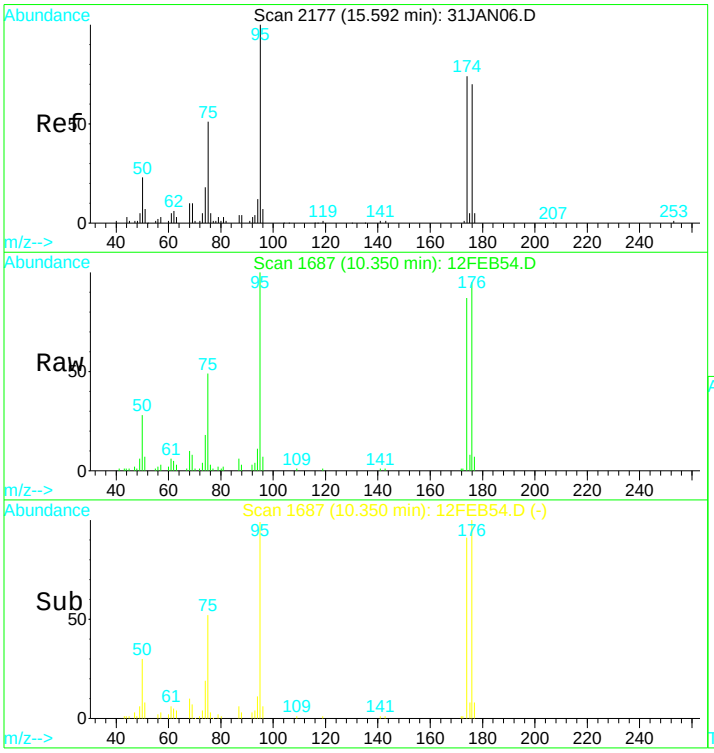




#47
Isopropylbenzene
Concen: 2.77 ug/L
RT: 10.24 min Scan# 1665
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:105 Resp: 89064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.6 | 22.3 | 41.3 |

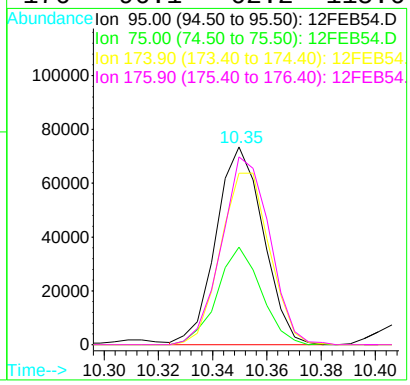


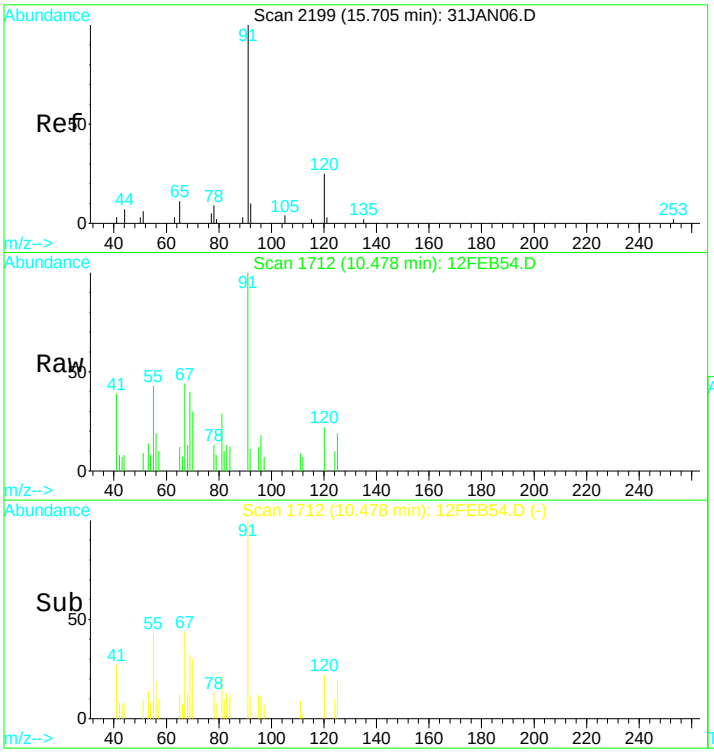



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 95 Resp: 89400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.0 | 32.6 | 60.5 |
| 174 | 89.7 | 60.9 | 113.1 |
| 176 | 96.1 | 62.2 | 115.6 |

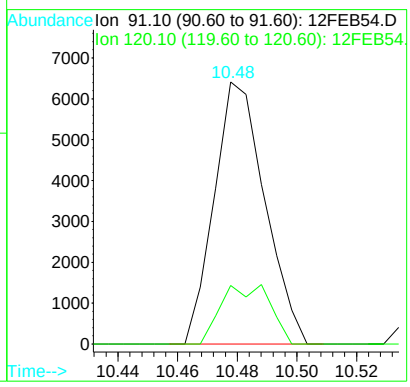


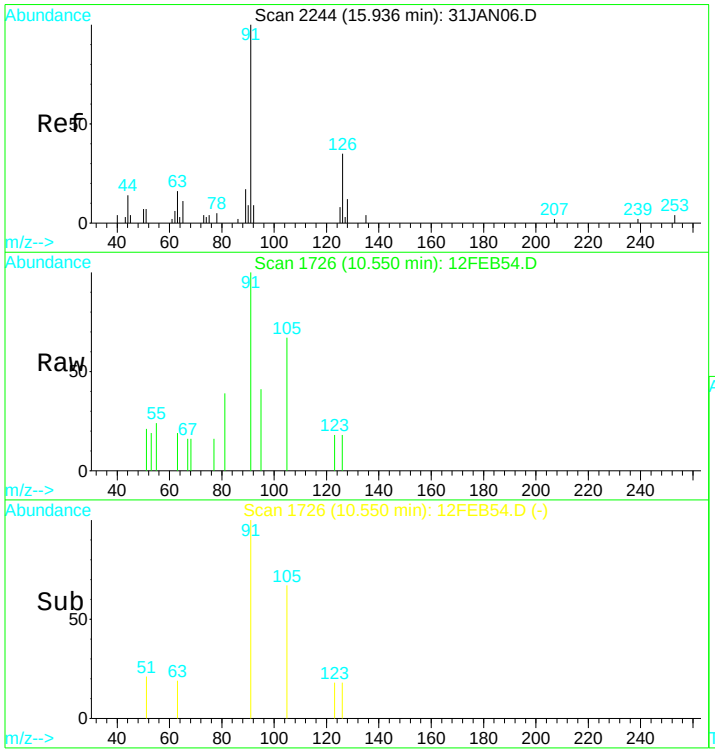




#51
n-propylbenzene
Concen: 0.20 ug/L
RT: 10.48 min Scan# 1712
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 91 Resp: 7570

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 19.3 | 35.8 |

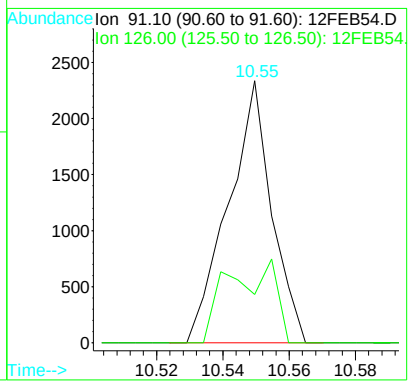


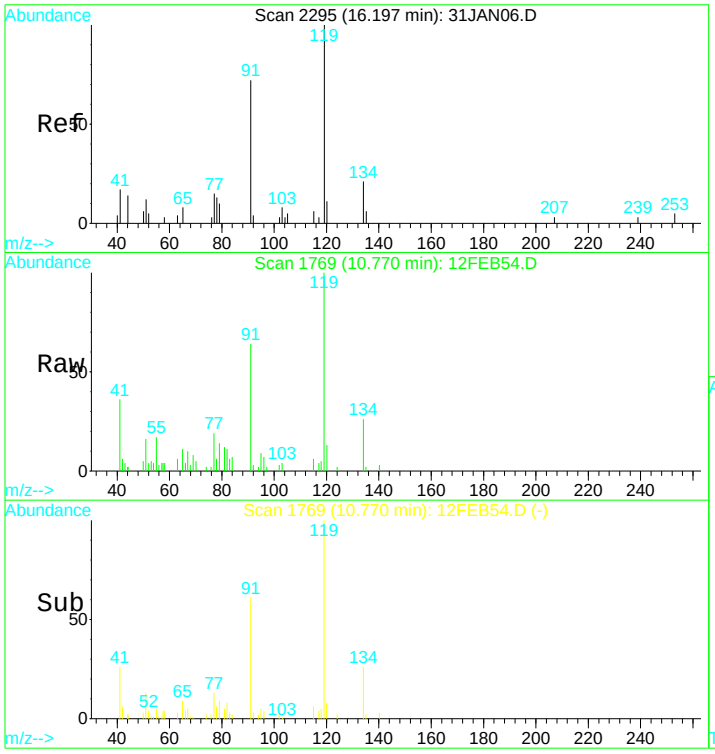



#54
2-chlorotoluene
Concen: 0.09 ug/L
RT: 10.55 min Scan# 1726
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 91 Resp: 2122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 34.4 | 23.5 | 43.7 |

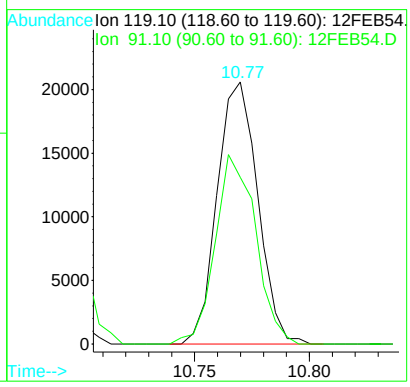


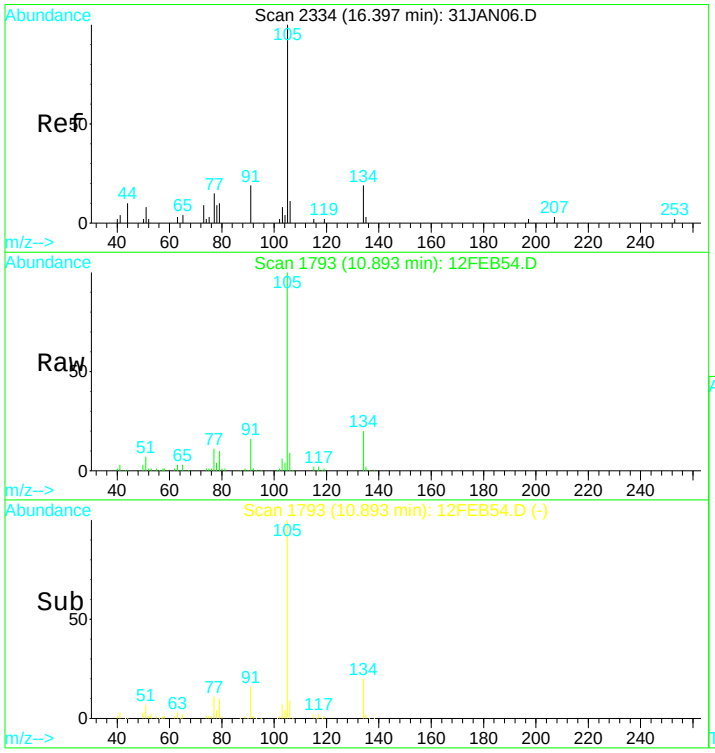




#56
tert-butylbenzene
Concen: 1.06 ug/L
RT: 10.77 min Scan# 1769
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:119 Resp: 25367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.9 | 46.8 | 87.0 |

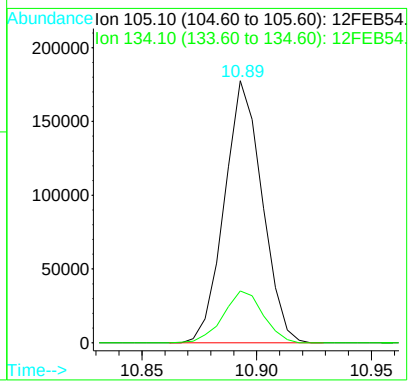


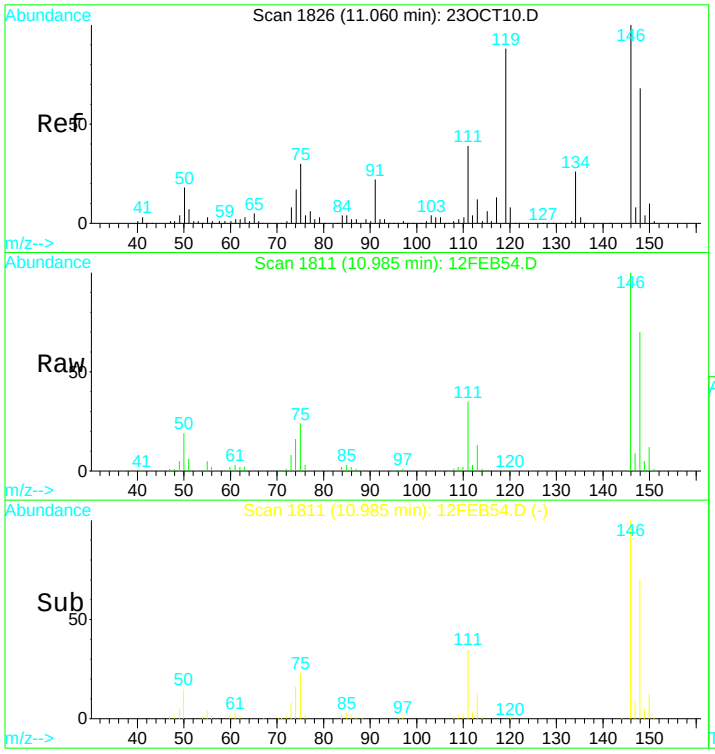



#58
sec-butylbenzene
Concen: 6.08 ug/L
RT: 10.89 min Scan# 1793
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:105 Resp: 202763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 21.0 | 16.6 | 30.8 |

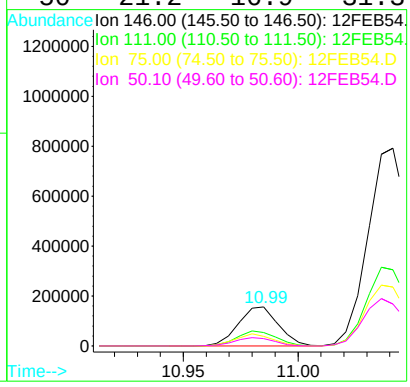


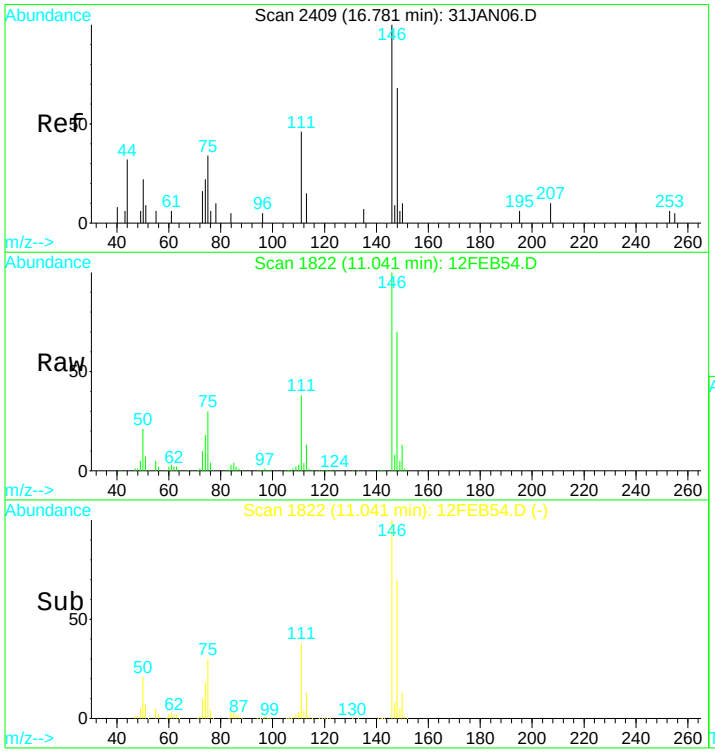




#60
1,3-Dichlorobenzene
Concen: 14.91 ug/L
RT: 10.99 min Scan# 1811
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:146 Resp: 191291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.8 | 26.4 | 49.0 |
| 75 | 28.7 | 20.0 | 37.2 |
| 50 | 21.2 | 16.9 | 31.3 |

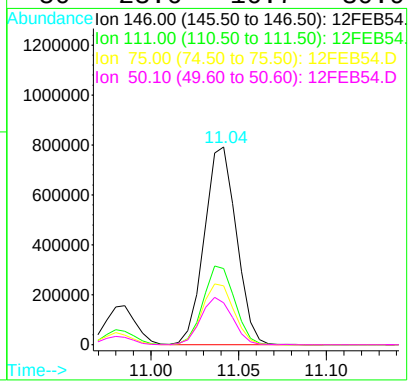


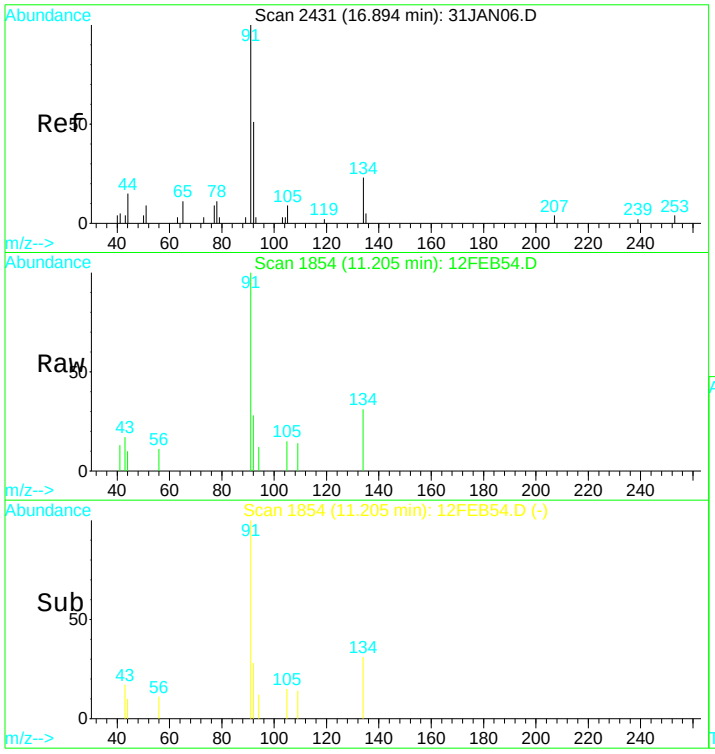



#61
1,4-Dichlorobenzene
Concen: 84.98 ug/L
RT: 11.04 min Scan# 1822
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:146 Resp: 1009845

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.0 | 27.7 | 51.5 |
| 75 | 30.5 | 21.1 | 39.3 |
| 50 | 23.6 | 16.7 | 30.9 |

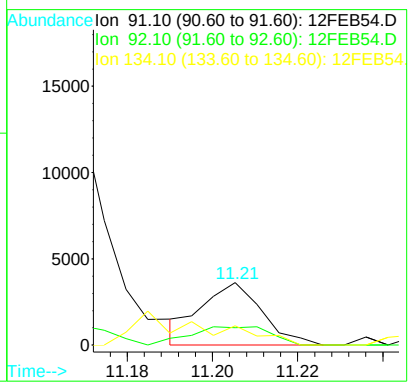


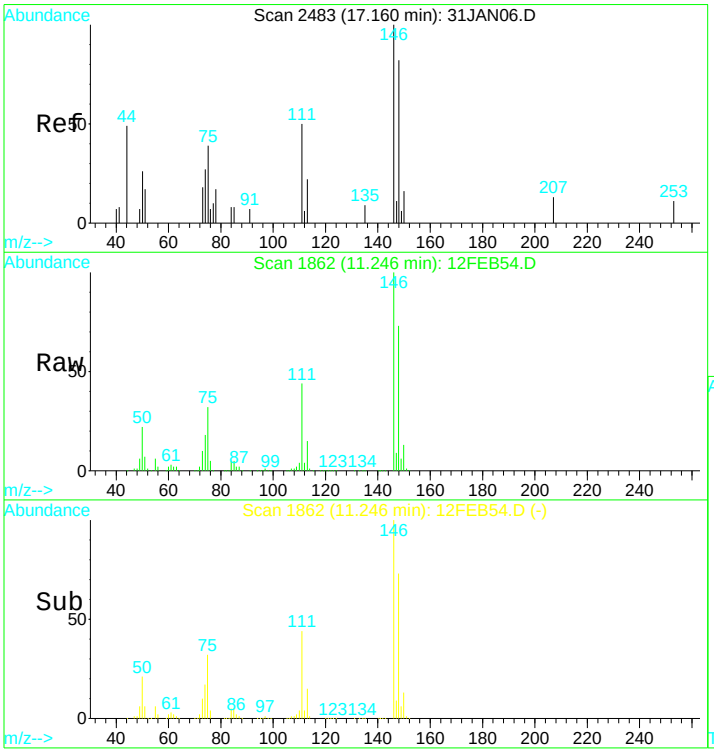




#62
n-butylbenzene
Concen: 0.17 ug/L
RT: 11.21 min Scan# 1854
Delta R.T. -0.02 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 91 Resp: 3575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 39.5 | 41.9 | 77.9# |
| 134 | 64.8 | 22.5 | 41.9# |

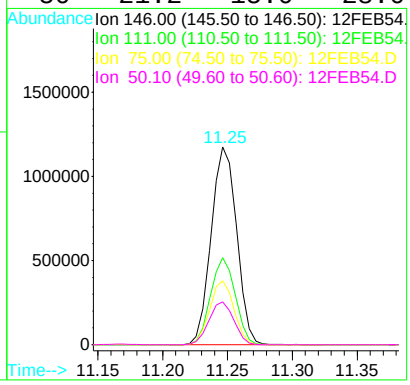


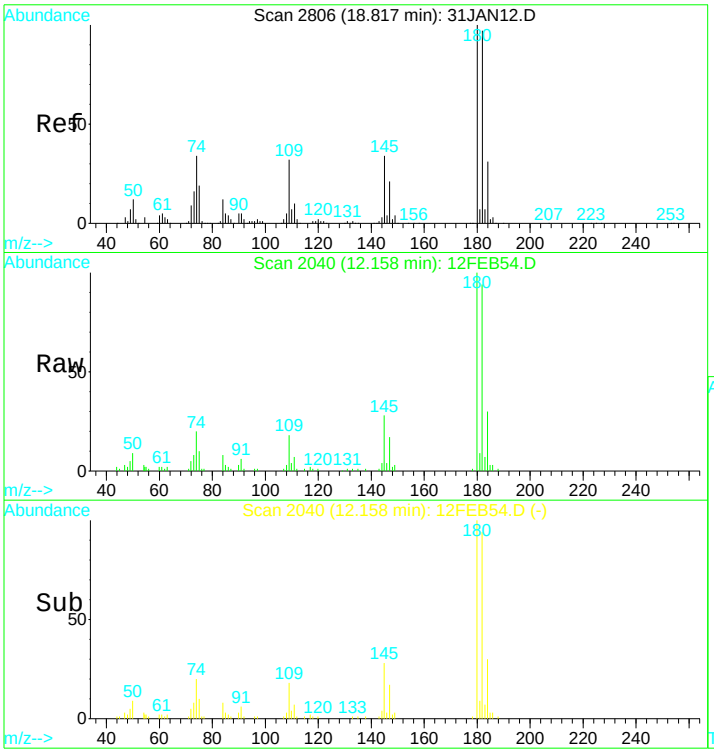



#63
1,2-Dichlorobenzene
Concen: 152.93 ug/L
RT: 11.25 min Scan# 1862
Delta R.T. -0.02 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:146 Resp: 1606002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.5 | 29.2 | 54.2 |
| 75 | 30.7 | 21.1 | 39.1 |
| 50 | 21.2 | 15.0 | 28.0 |

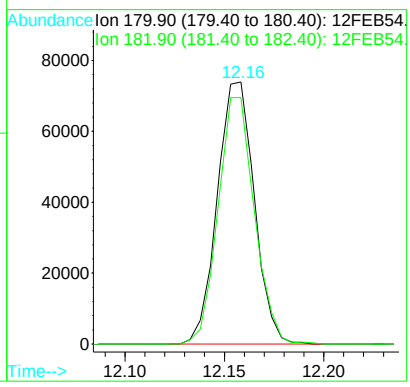


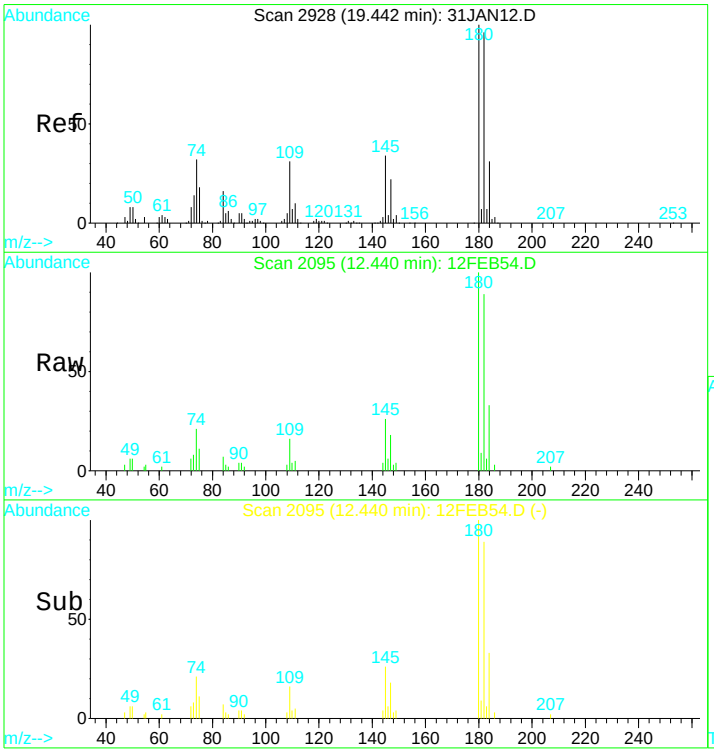




#66
1,2,4-trichlorobenzene
Concen: 12.91 ug/L
RT: 12.16 min Scan# 2040
Delta R.T. -0.03 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:180 Resp: 95643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.4 | 69.5 | 129.1 |

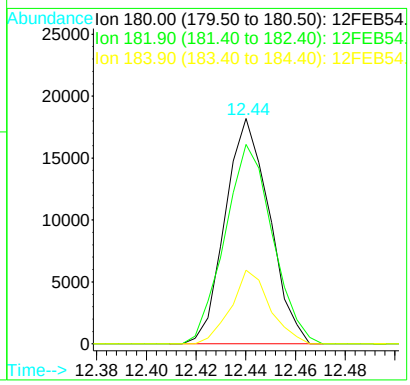





#69
1,2,3-trichlorobenzene
Concen: 3.53 ug/L
RT: 12.44 min Scan# 2095
Delta R.T. -0.04 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:180 Resp: 22429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.4 | 79.4 | 147.4 |
| 184 | 28.6 | 26.8 | 49.8 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB54.D Vial: 54
Acq On : 13 Feb 2017 1:31 am Operator: MGC
Sample : 1703480-01 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:10 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208247 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 273061 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62016 | 10.00 | ug/L | 0.00 |

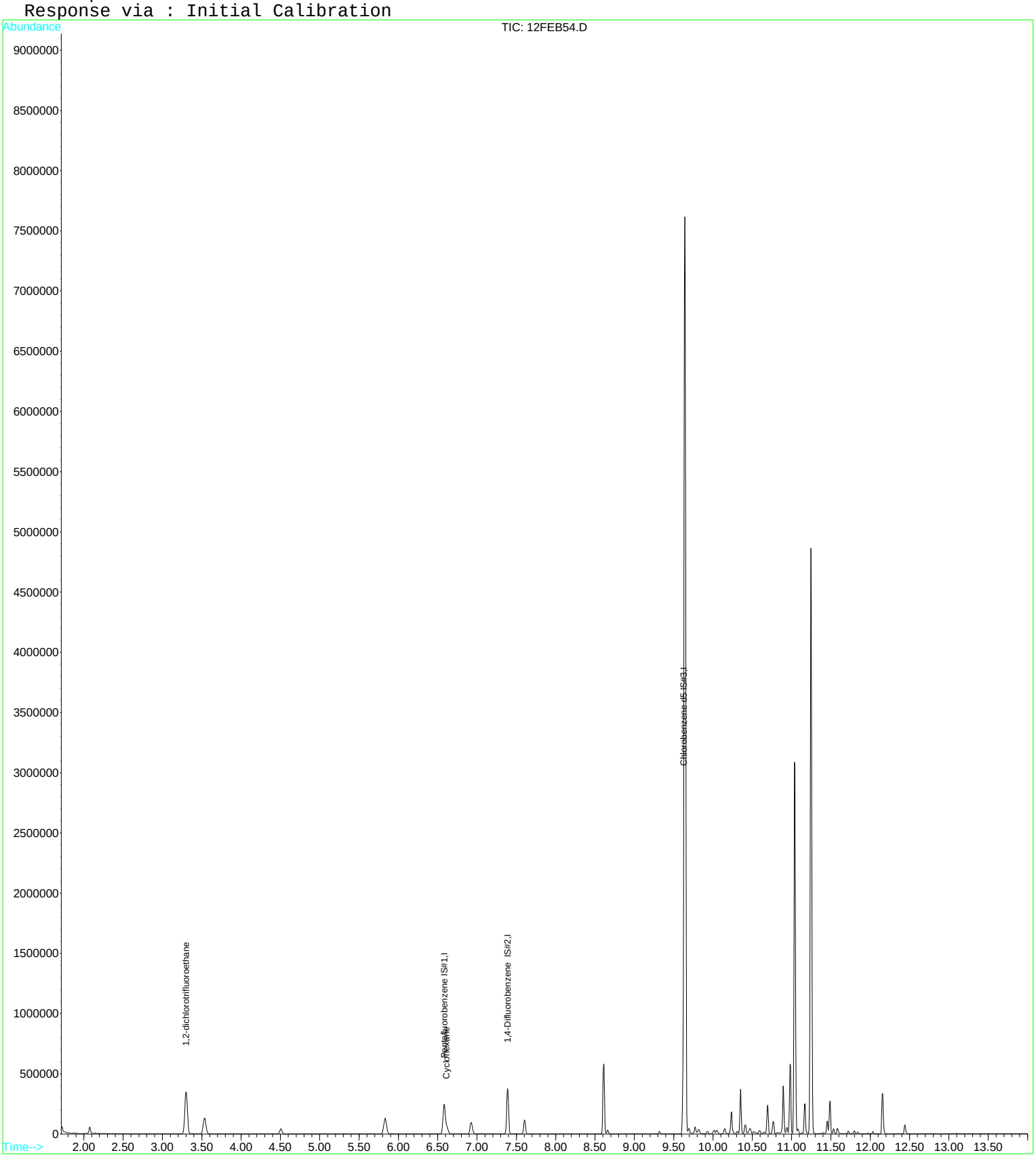
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 228481 | 19.36 | ug/L | 97 |
| 27) Cyclohexane | 6.61 | 56 | 36534 | 1.62 | ug/L | 93 |

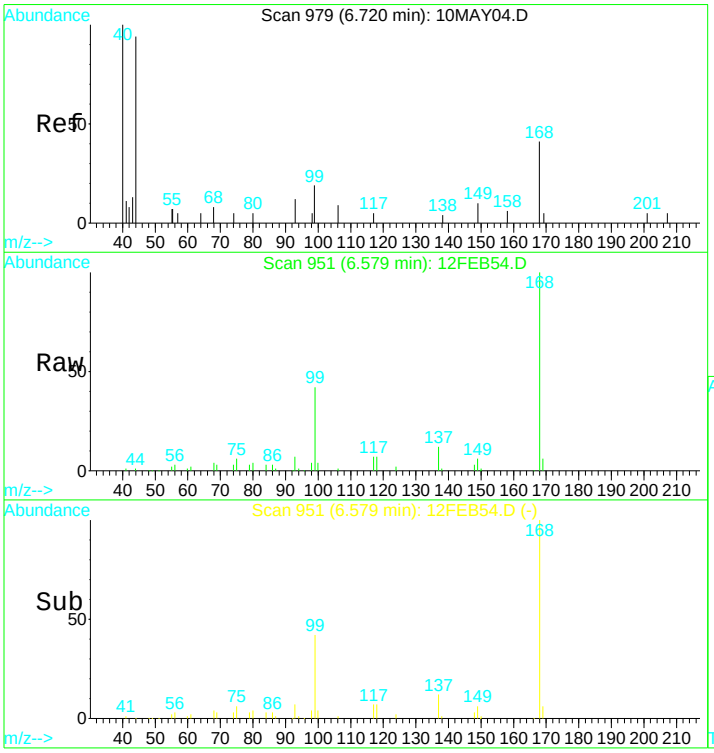
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB54.D Vial: 54
Acq On : 13 Feb 2017 1:31 am Operator: MGC
Sample : 1703480-01 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:10 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

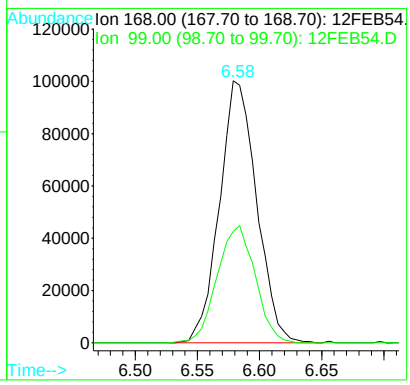


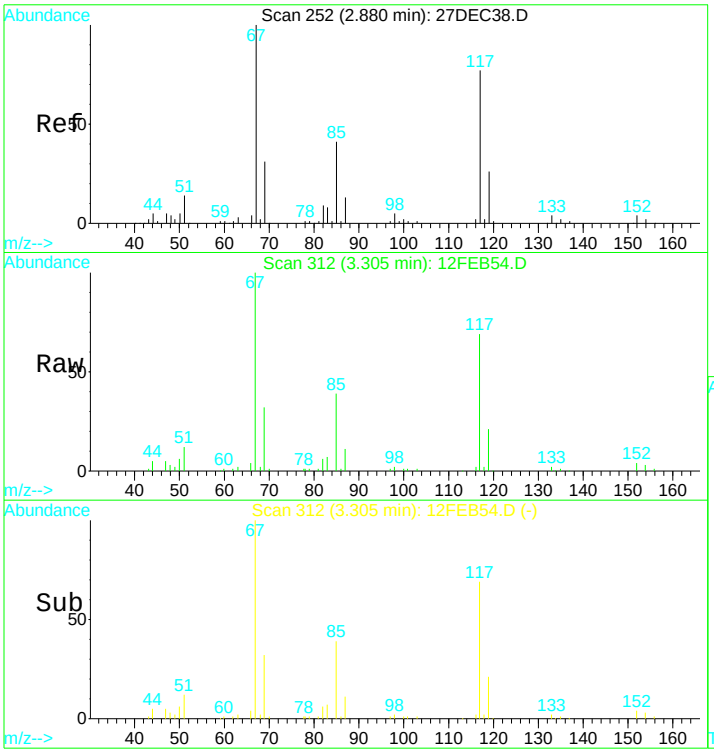



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:168 Resp: 208247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.6 | 32.8 | 60.8 |

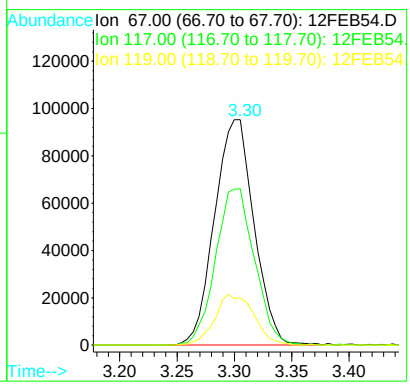


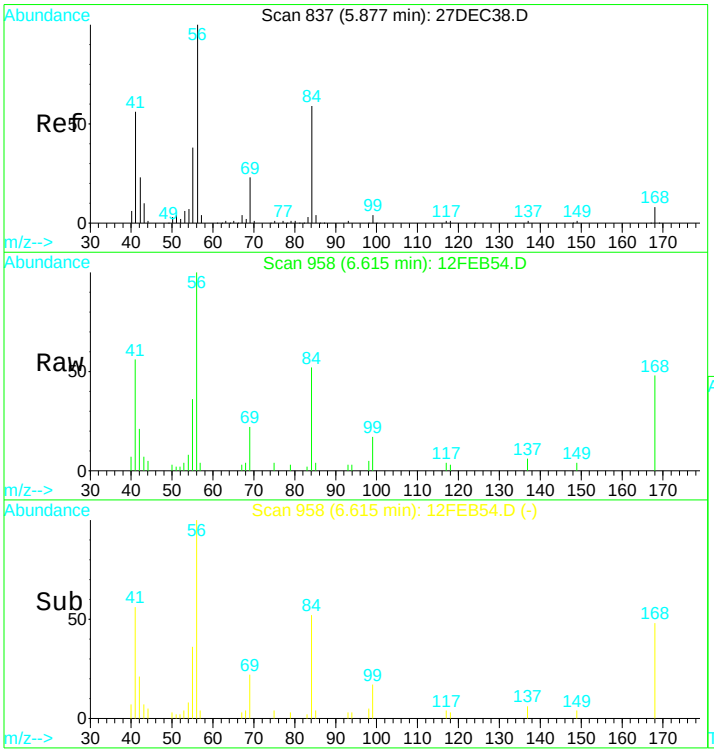




#4
1,2-dichlorotrifluoroethane
Concen: 19.36 ug/L
RT: 3.30 min Scan# 312
Delta R.T. 0.01 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 67 Resp: 228481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 67 | 100 | | |
| 117 | 68.4 | 45.8 | 85.0 |
| 119 | 22.3 | 15.1 | 28.1 |

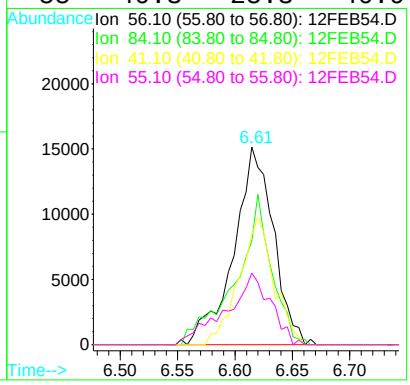


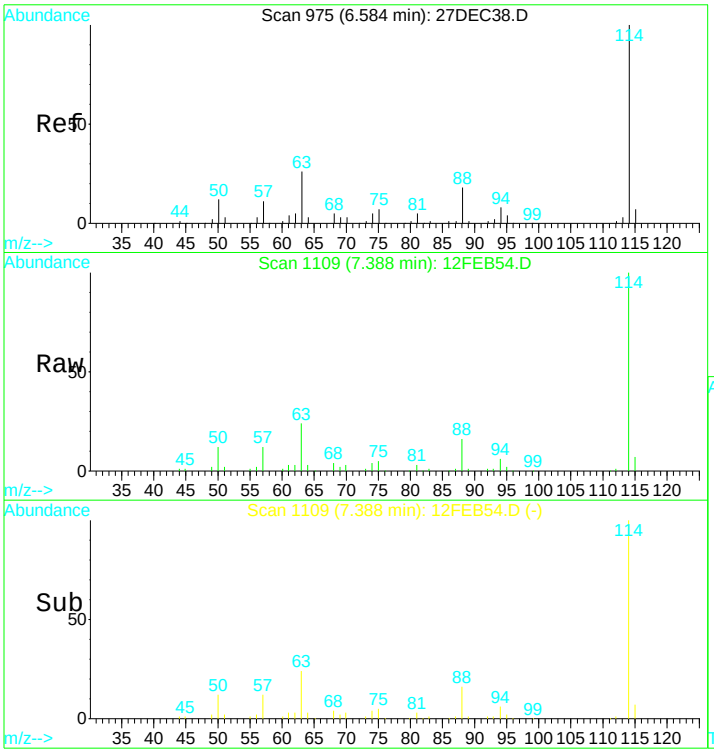



#27
Cyclohexane
Concen: 1.62 ug/L
RT: 6.61 min Scan# 958
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion: 56 Resp: 36534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 84 | 68.4 | 43.3 | 80.3 |
| 41 | 55.8 | 42.1 | 78.1 |
| 55 | 40.3 | 25.3 | 46.9 |

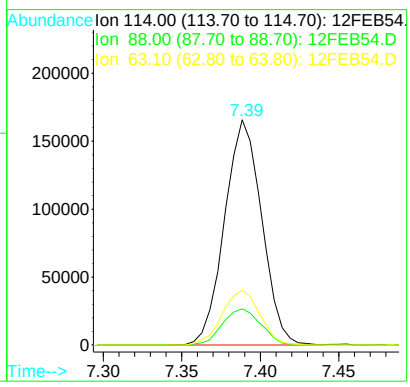


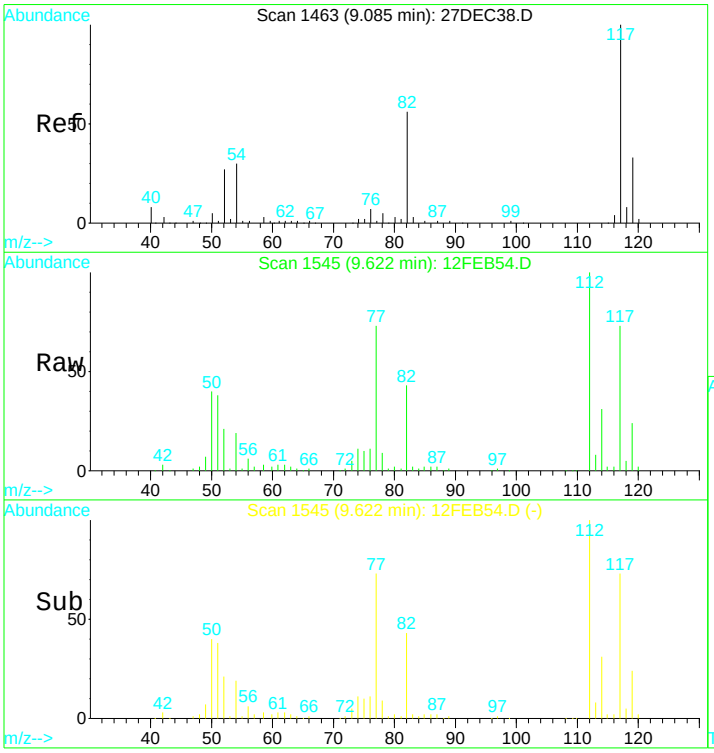




#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:114 Resp: 273061

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.7 | 11.3 | 21.1 |
| 63 | 24.6 | 16.1 | 29.9 |

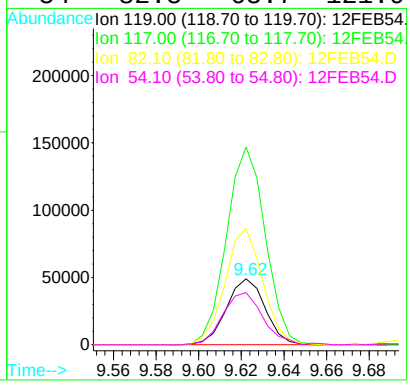





#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 12FEB54.D
Acq: 13 Feb 2017 1:31 am

Tgt Ion:119 Resp: 62016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 299.9 | 218.6 | 406.0 |
| 82 | 171.1 | 128.7 | 238.9 |
| 54 | 82.5 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB52.D Vial: 52
Acq On : 14 Feb 2017 2:15 am Operator: MGC
Sample : 1703480-01RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:59 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205844 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 256144 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62373 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 63593 | 10.44 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 104.40% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 297228 | 10.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.00% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 86837 | 10.10 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 101.00% | | | |

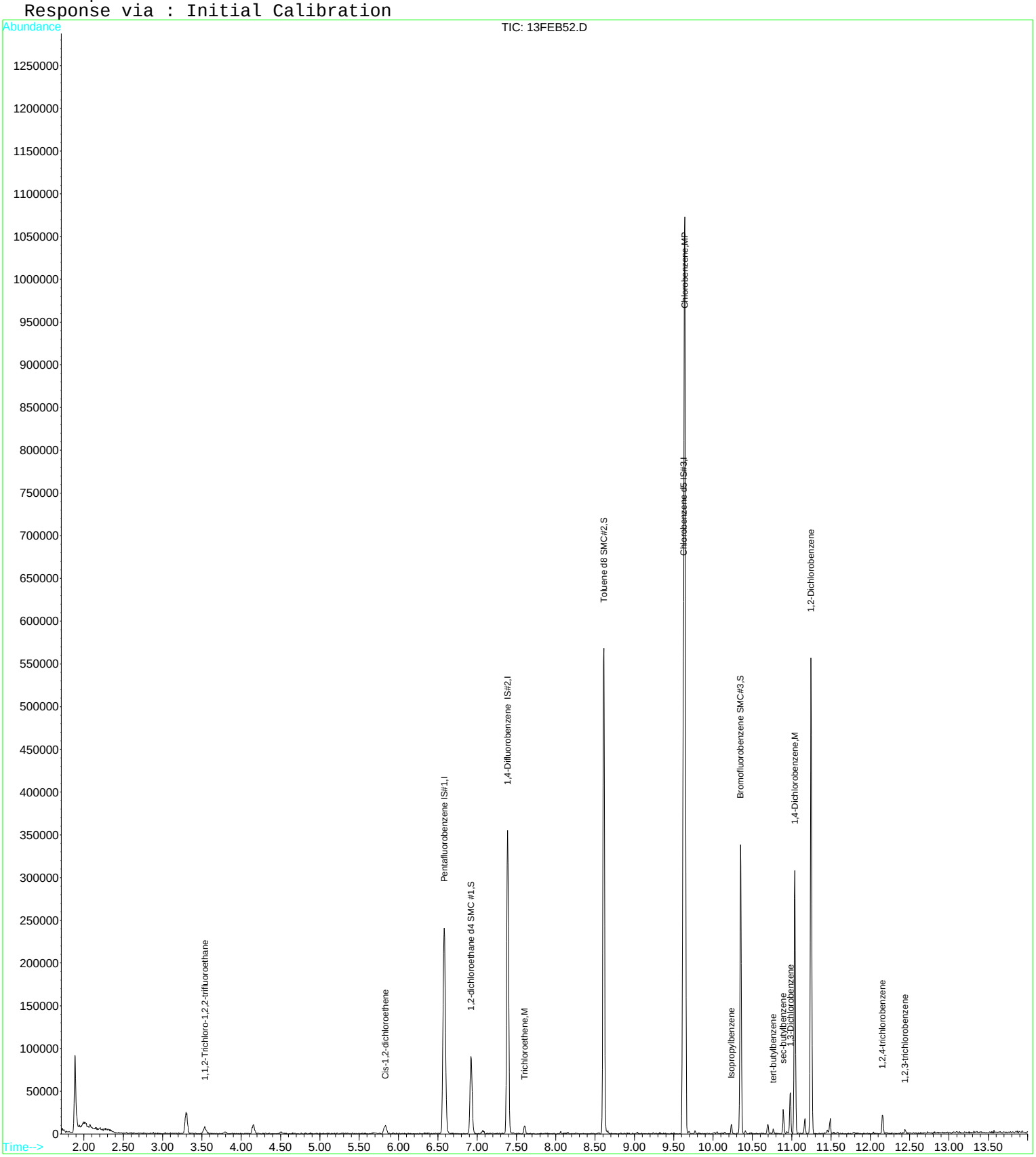
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 4890 | 0.57 | ug/L | 92 |
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 4767 | 0.50 | ug/L | 90 |
| 25) Trichloroethene | 7.61 | 130 | 2868 | 0.34 | ug/L | 91 |
| 40) Chlorobenzene | 9.64 | 112 | 424365 | 22.85 | ug/L | 97 |
| 47) Isopropylbenzene | 10.23 | 105 | 6449 | 0.20 | ug/L | 83 |
| 56) tert-butylbenzene | 10.76 | 119 | 1643 | 0.07 | ug/L | 98 |
| 58) sec-butylbenzene | 10.89 | 105 | 12894 | 0.38 | ug/L | 97 |
| 60) 1,3-Dichlorobenzene | 10.98 | 146 | 16741 | 1.30 | ug/L | 96 |
| 61) 1,4-Dichlorobenzene | 11.04 | 146 | 98297 | 8.22 | ug/L | 97 |
| 63) 1,2-Dichlorobenzene | 11.25 | 146 | 178730 | 16.92 | ug/L | 97 |
| 66) 1,2,4-trichlorobenzene | 12.16 | 180 | 7109 | 0.95 | ug/L | 87 |
| 69) 1,2,3-trichlorobenzene | 12.44 | 180 | 1425 | 0.22 | ug/L # | 74 |

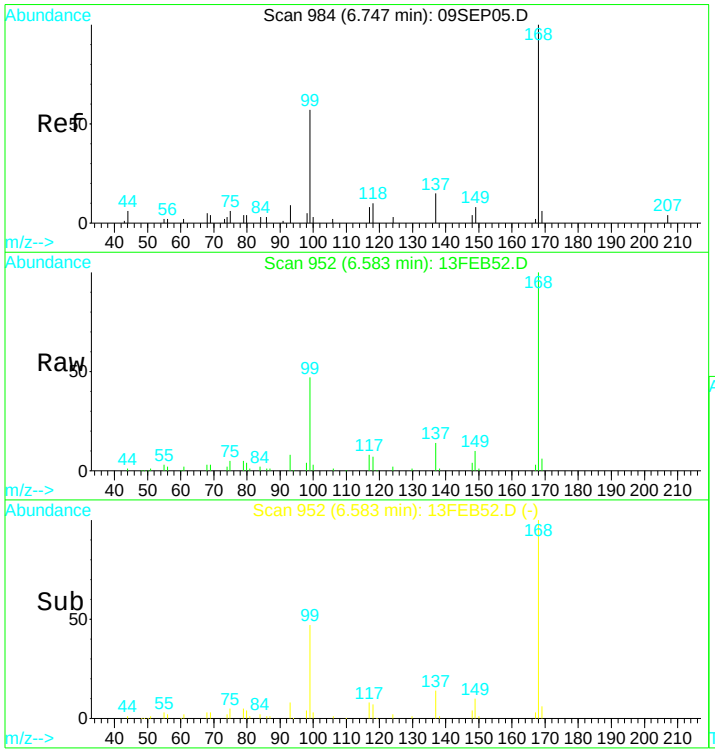
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB52.D Vial: 52
Acq On : 14 Feb 2017 2:15 am Operator: MGC
Sample : 1703480-01RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:59 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

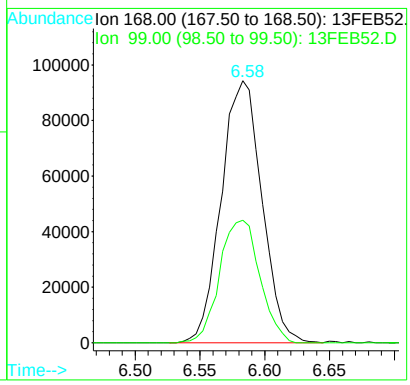


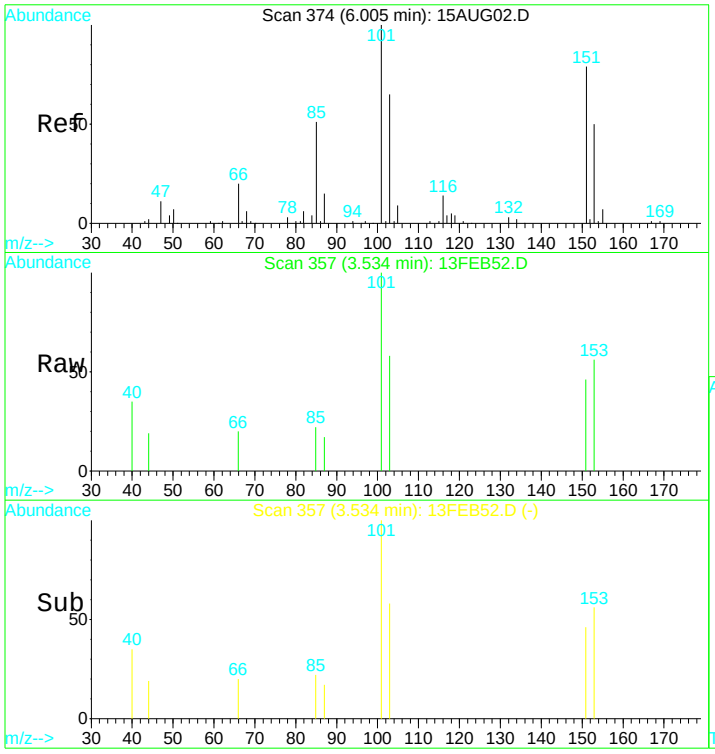



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:168 Resp: 205844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.2 | 305.1 | 566.7# |

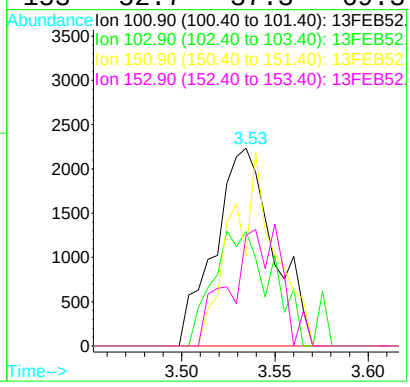


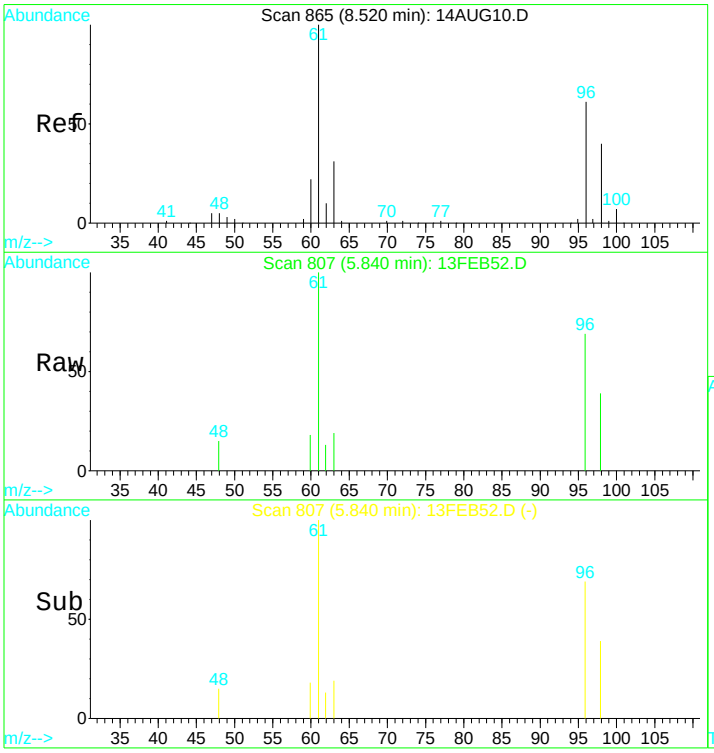




#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.57 ug/L
RT: 3.53 min Scan# 357
Delta R.T. -0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:101 Resp: 4890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 57.9 | 46.1 | 85.5 |
| 151 | 72.7 | 58.0 | 107.8 |
| 153 | 52.7 | 37.3 | 69.3 |

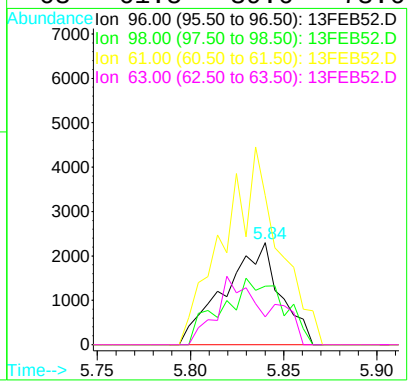


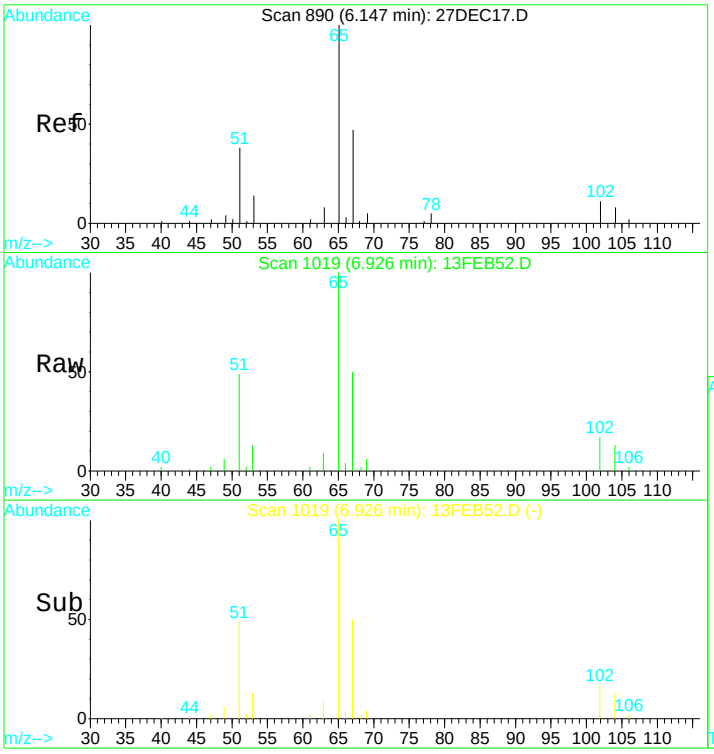



#15
Cis-1,2-dichloroethene
Concen: 0.50 ug/L
RT: 5.84 min Scan# 807
Delta R.T. 0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion: 96 Resp: 4767

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 72.0 | 46.2 | 85.8 |
| 61 | 191.1 | 122.8 | 228.0 |
| 63 | 61.5 | 39.6 | 73.6 |

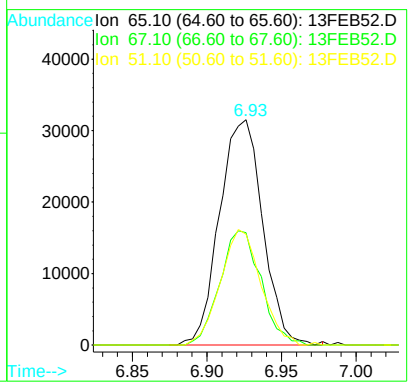


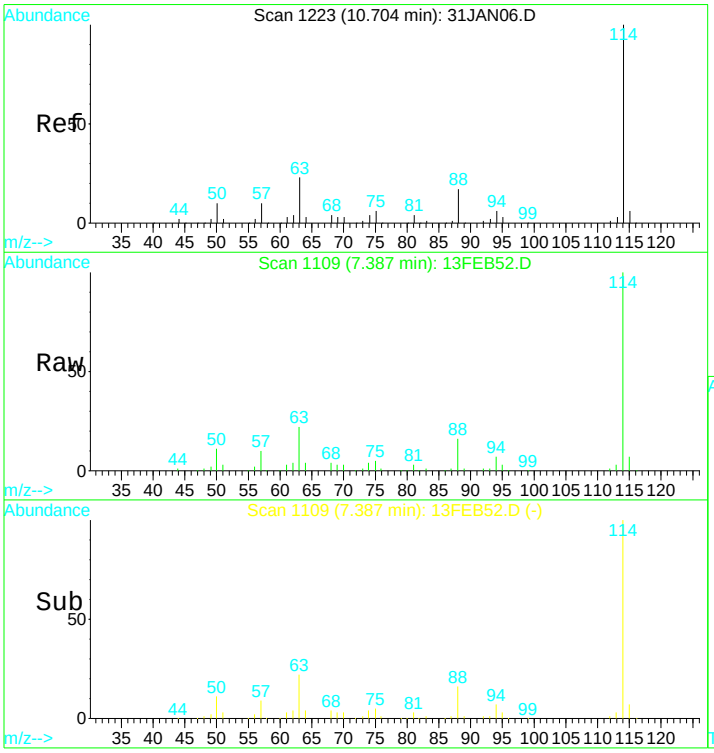




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion: 65 Resp: 63593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 48.1 | 38.4 | 71.4 |
| 51 | 47.9 | 1006.3 | 1868.8# |

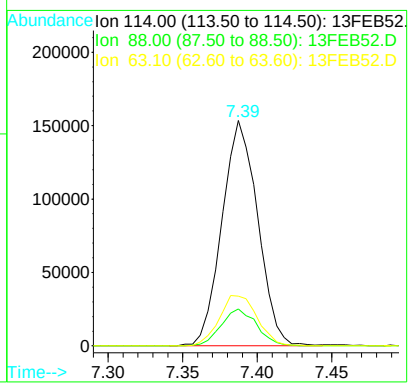


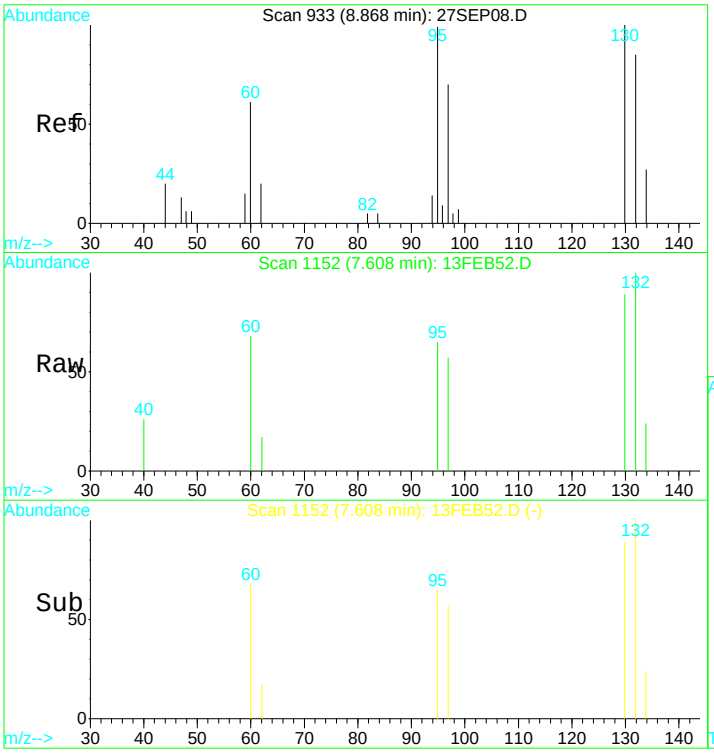



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:114 Resp: 256144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.2 | 12.0 | 22.2 |
| 63 | 23.7 | 16.9 | 31.5 |

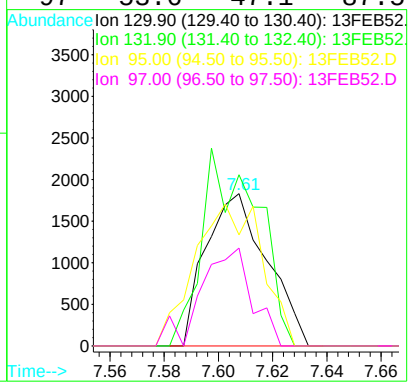


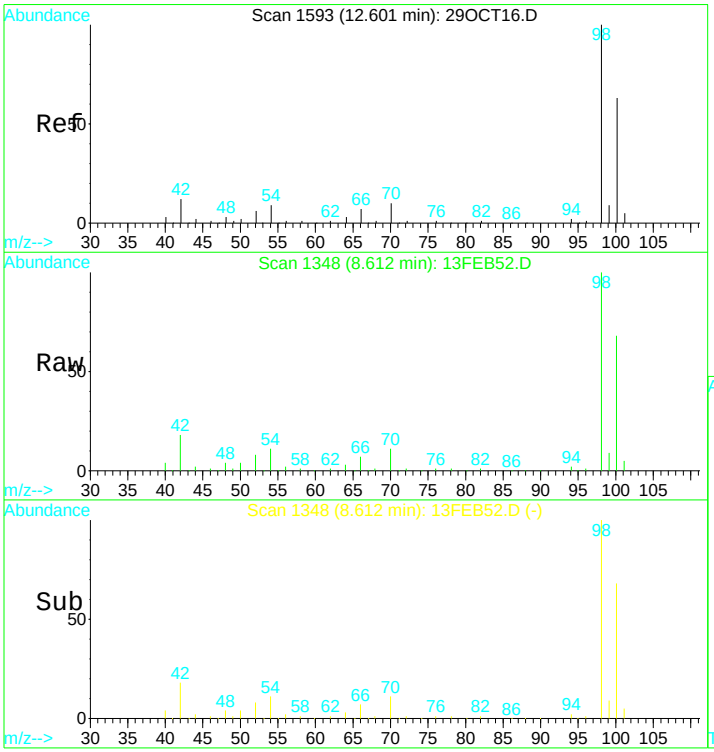




#25
Trichloroethene
Concen: 0.34 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:130 Resp: 2868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 117.1 | 74.3 | 137.9 |
| 95 | 103.0 | 70.8 | 131.6 |
| 97 | 53.6 | 47.1 | 87.5 |

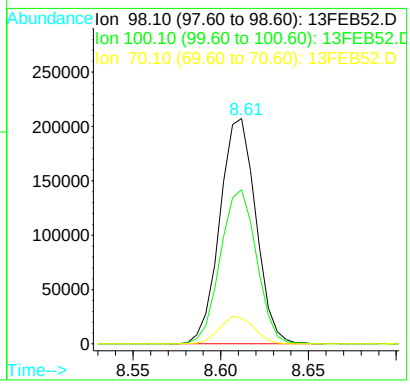


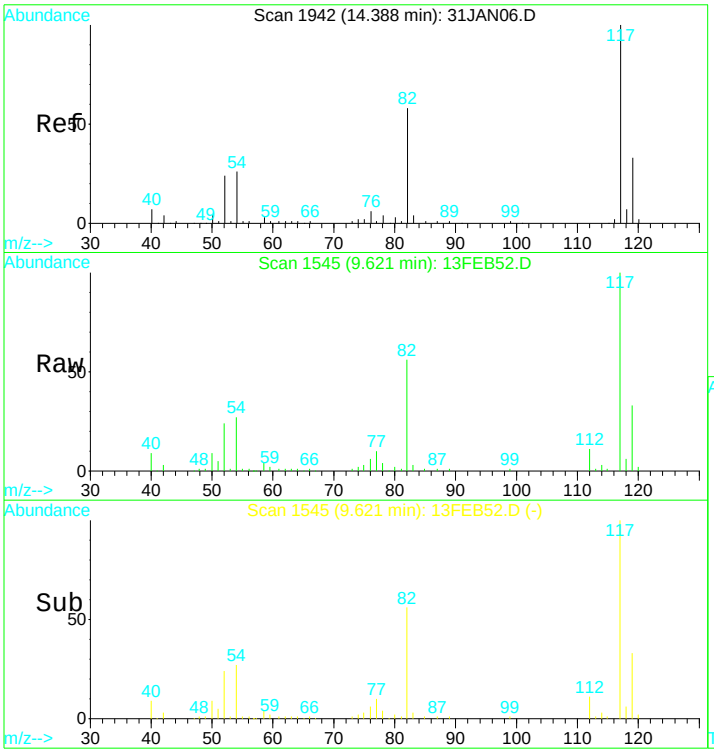



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion: 98 Resp: 297228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.5 | 47.0 | 87.4 |
| 70 | 11.8 | 7.3 | 13.7 |

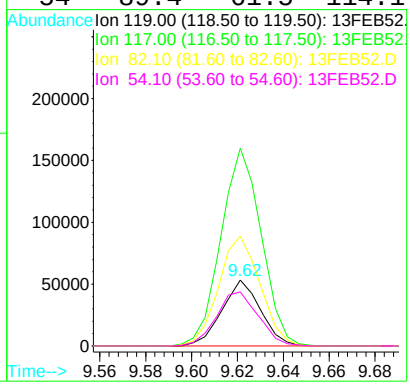


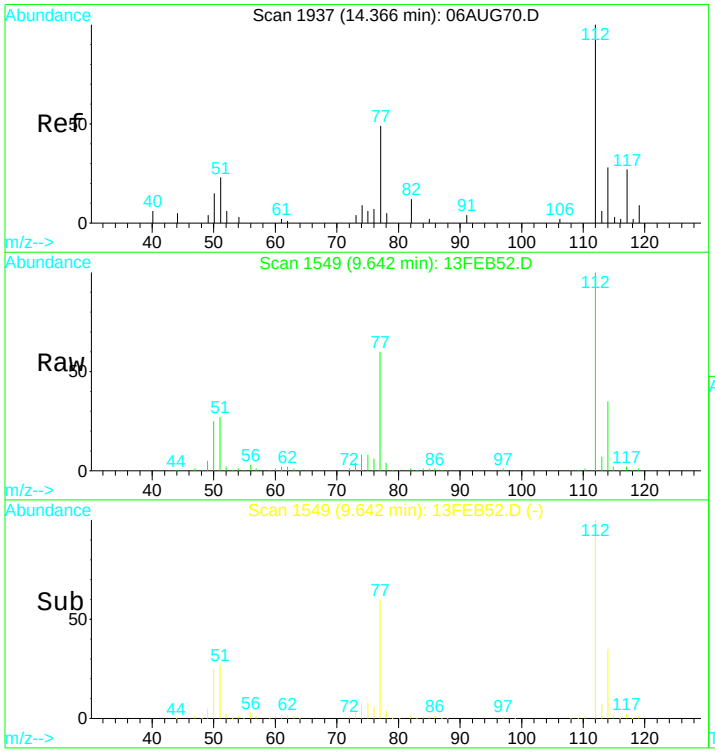




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:119 Resp: 62373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 313.5 | 220.4 | 409.4 |
| 82 | 178.8 | 123.9 | 230.1 |
| 54 | 89.4 | 61.5 | 114.1 |

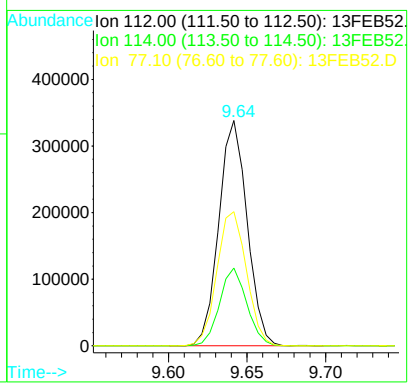


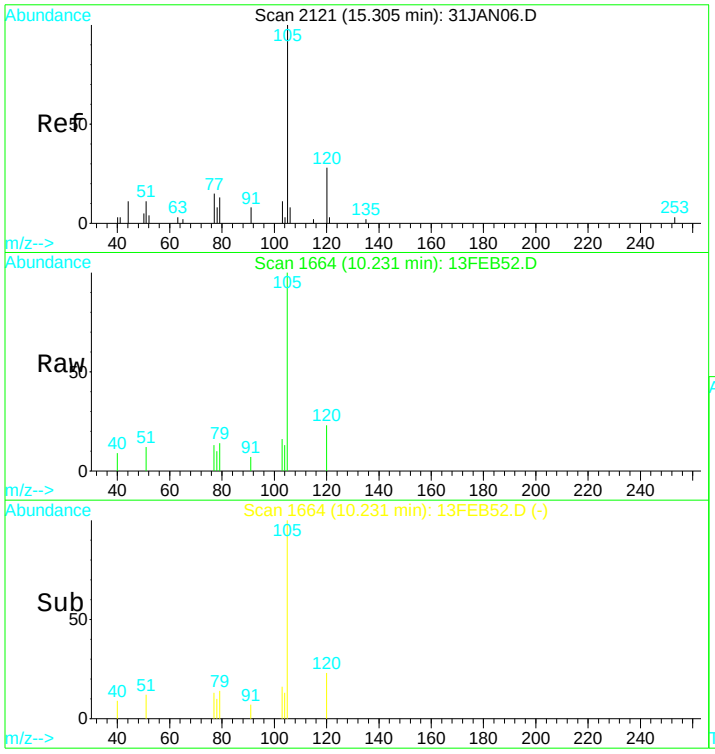



#40
Chlorobenzene
Concen: 22.85 ug/L
RT: 9.64 min Scan# 1549
Delta R.T. -0.00 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:112 Resp: 424365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 33.1 | 25.1 | 46.5 |
| 77 | 62.1 | 44.6 | 82.8 |

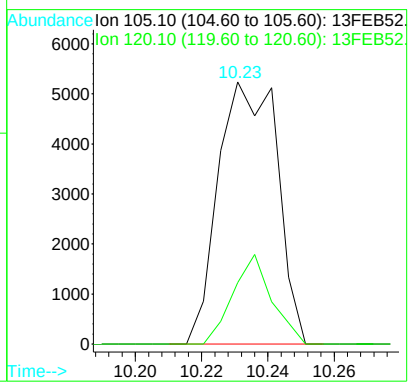


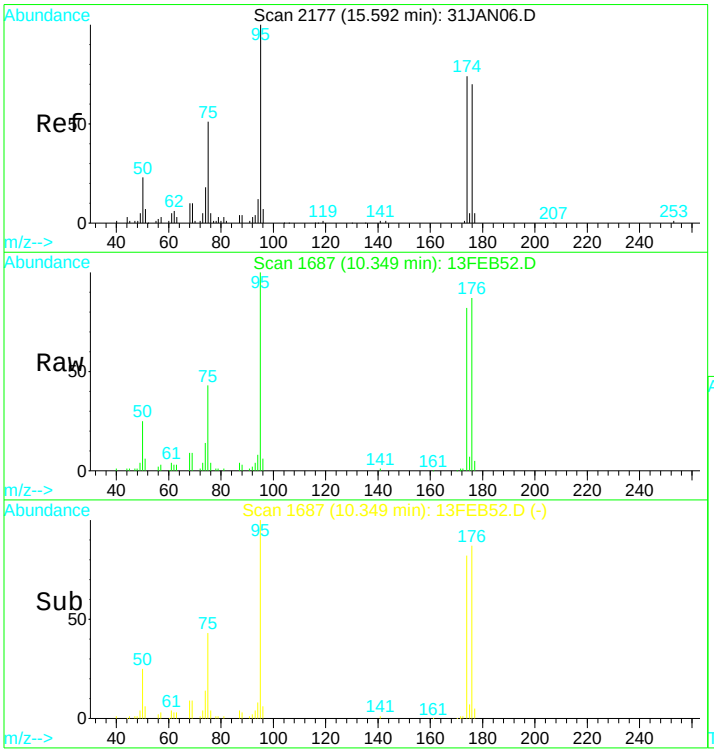




#47
Isopropylbenzene
Concen: 0.20 ug/L
RT: 10.23 min Scan# 1664
Delta R.T. -0.01 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:105 Resp: 6449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 22.6 | 22.3 | 41.3 |

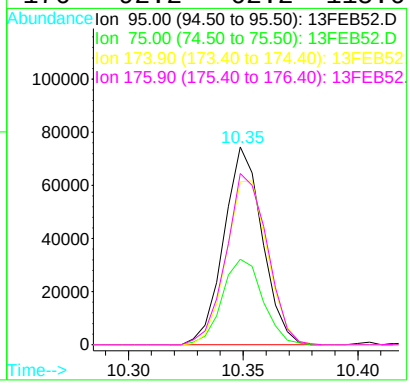


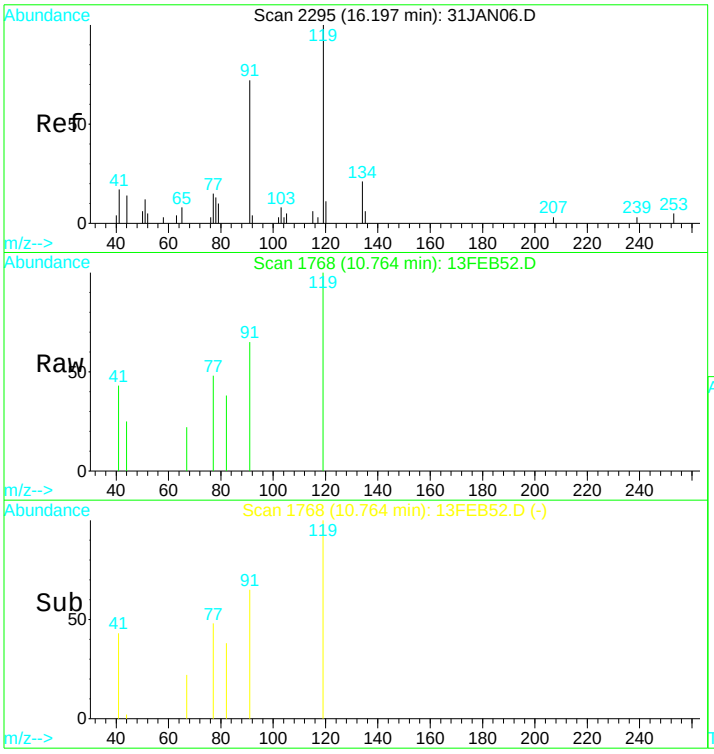



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion: 95 Resp: 86837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 45.5 | 32.6 | 60.5 |
| 174 | 88.8 | 60.9 | 113.1 |
| 176 | 92.2 | 62.2 | 115.6 |

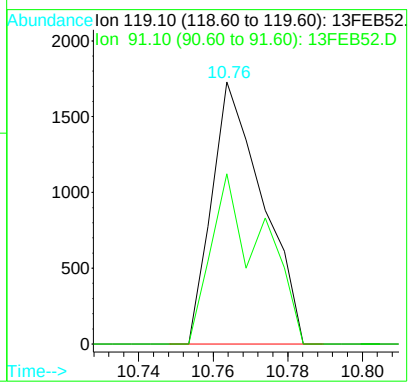


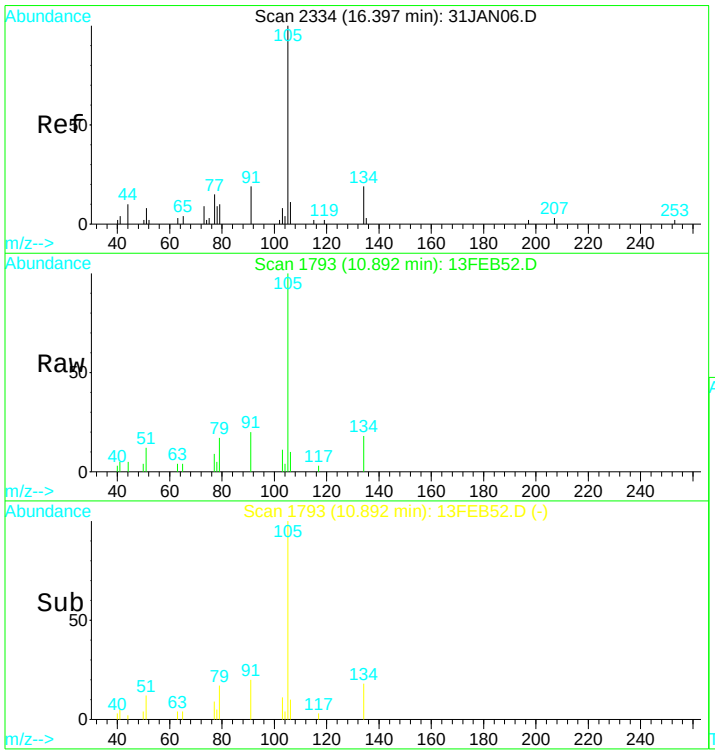




#56
tert-butylbenzene
Concen: 0.07 ug/L
RT: 10.76 min Scan# 1768
Delta R.T. -0.01 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:119 Resp: 1643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.6 | 46.8 | 87.0 |

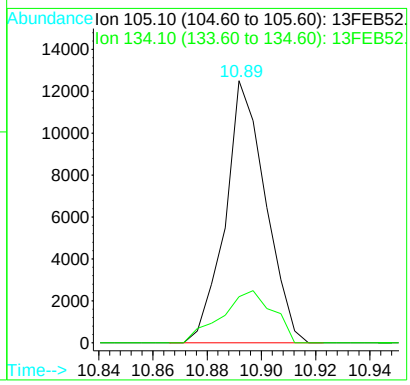


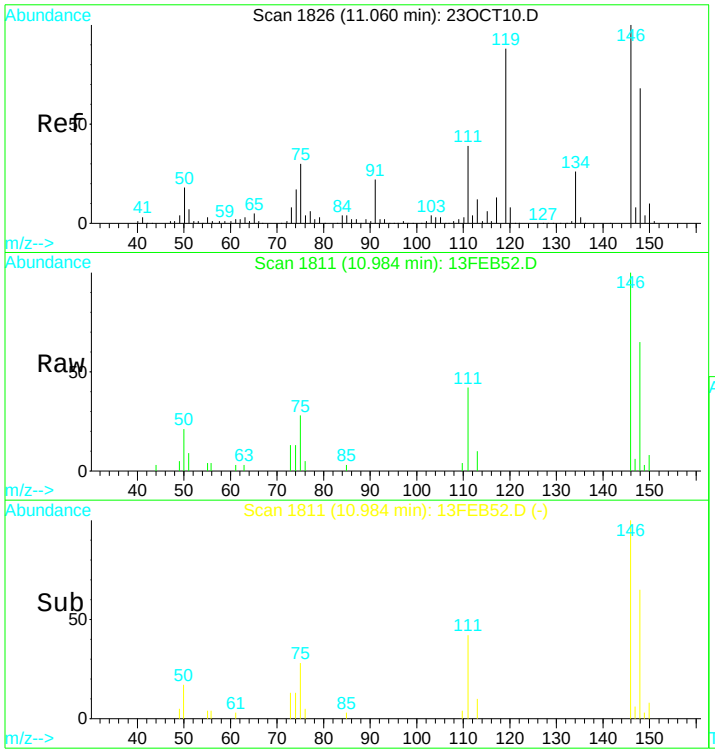



#58
sec-butylbenzene
Concen: 0.38 ug/L
RT: 10.89 min Scan# 1793
Delta R.T. -0.01 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:105 Resp: 12894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 25.4 | 16.6 | 30.8 |

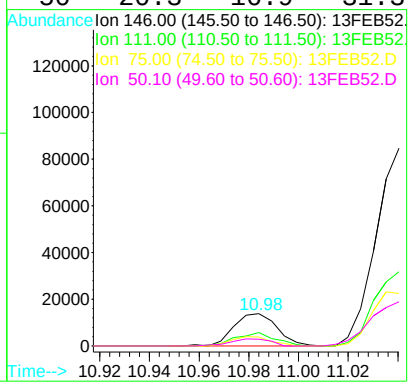


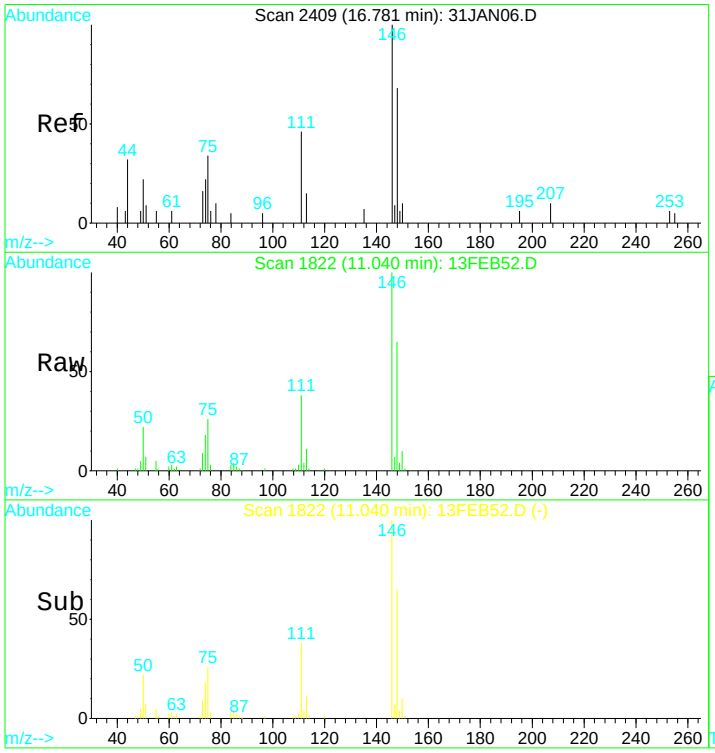




#60
1,3-Dichlorobenzene
Concen: 1.30 ug/L
RT: 10.98 min Scan# 1811
Delta R.T. -0.01 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:146 Resp: 16741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 38.3 | 26.4 | 49.0 |
| 75 | 26.5 | 20.0 | 37.2 |
| 50 | 20.3 | 16.9 | 31.3 |

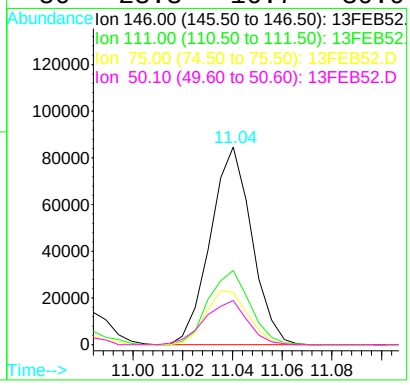


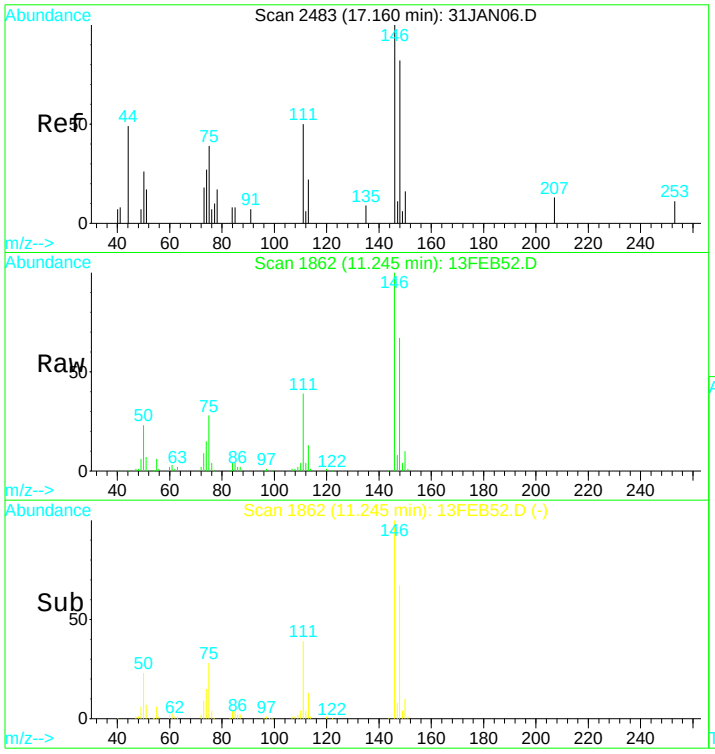



#61
1,4-Dichlorobenzene
Concen: 8.22 ug/L
RT: 11.04 min Scan# 1822
Delta R.T. -0.01 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:146 Resp: 98297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.7 | 27.7 | 51.5 |
| 75 | 27.9 | 21.1 | 39.3 |
| 50 | 23.3 | 16.7 | 30.9 |

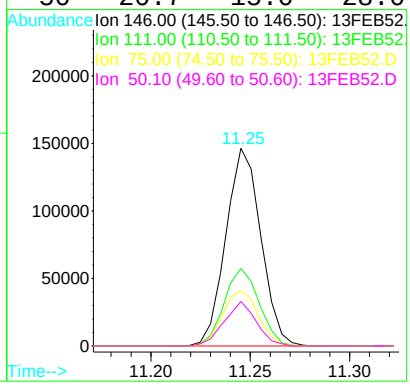


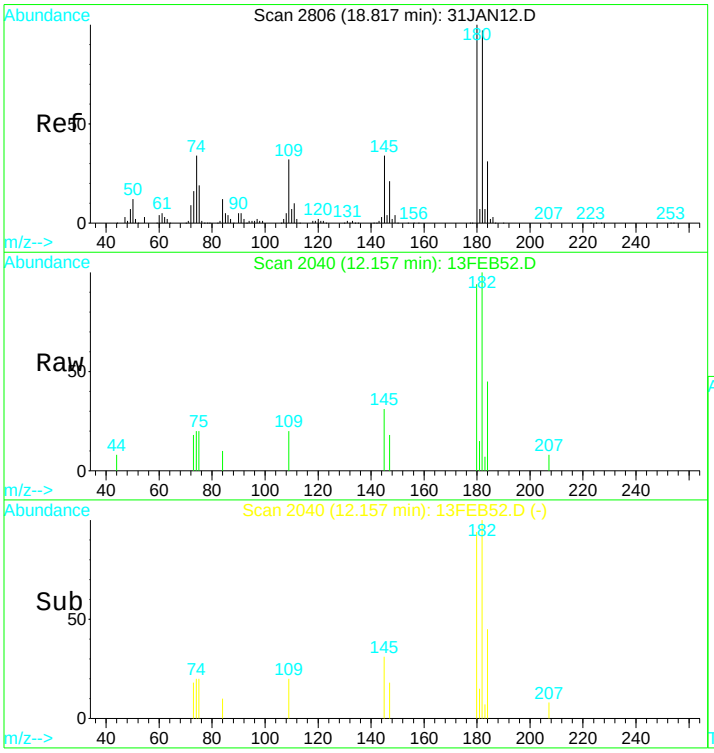




#63
1,2-Dichlorobenzene
Concen: 16.92 ug/L
RT: 11.25 min Scan# 1862
Delta R.T. -0.02 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:146 Resp: 178730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.0 | 29.2 | 54.2 |
| 75 | 28.3 | 21.1 | 39.1 |
| 50 | 20.7 | 15.0 | 28.0 |

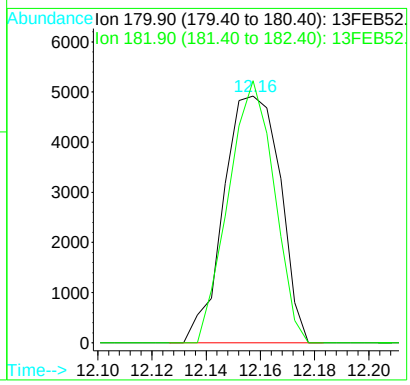


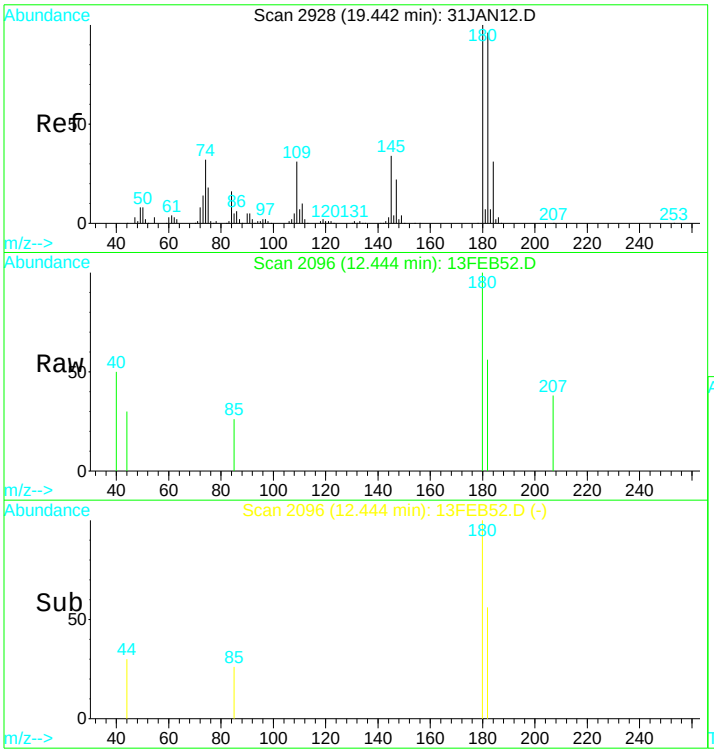



#66
1,2,4-trichlorobenzene
Concen: 0.95 ug/L
RT: 12.16 min Scan# 2040
Delta R.T. -0.03 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:180 Resp: 7109

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 85.9 | 69.5 | 129.1 |

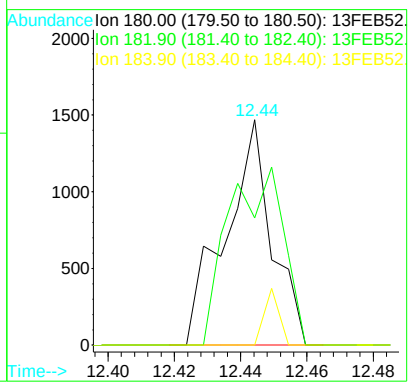



#69
1,2,3-trichlorobenzene
Concen: 0.22 ug/L
RT: 12.44 min Scan# 2096
Delta R.T. -0.04 min
Lab File: 13FEB52.D
Acq: 14 Feb 2017 2:15 am

Tgt Ion:180 Resp: 1425

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.7 | 79.4 | 147.4 |
| 184 | 8.0 | 26.8 | 49.8# |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB42.D Vial: 42
Acq On : 13 Feb 2017 10:24 pm Operator: MGC
Sample : 1703480-02 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:38 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205798 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 271306 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67149 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61651 | 10.13 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 101.30% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 295509 | 9.57 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.70% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 89449 | 9.66 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.60% | | | |

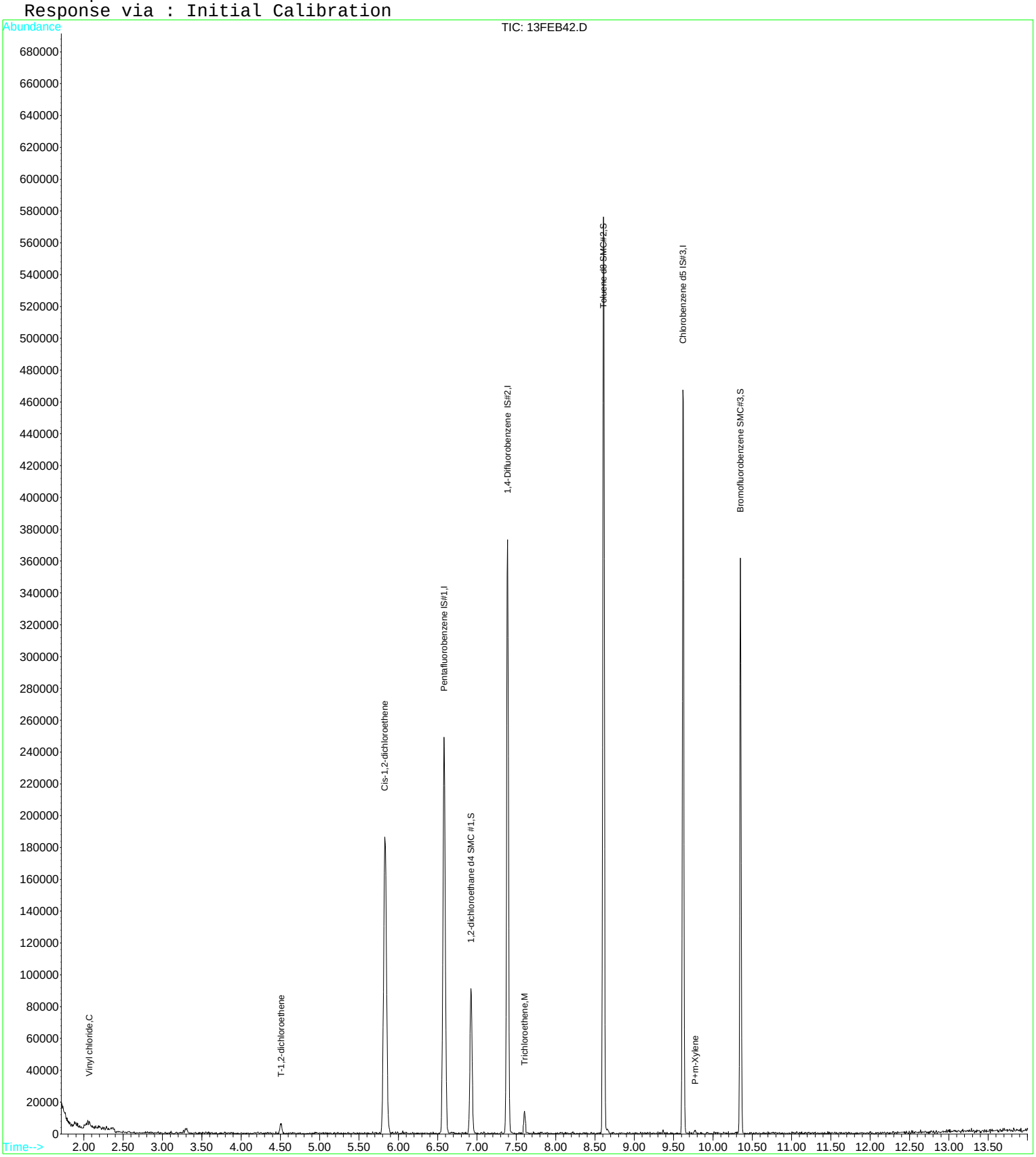
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.08 | 62 | 1476 | 0.12 | ug/L # | 1 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 2278 | 0.25 | ug/L # | 86 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 105620 | 11.00 | ug/L | 91 |
| 25) Trichloroethene | 7.60 | 130 | 4066 | 0.46 | ug/L | 87 |
| 43) P+m-Xylene | 9.78 | 106 | 778 | 0.06 | ug/L # | 79 |

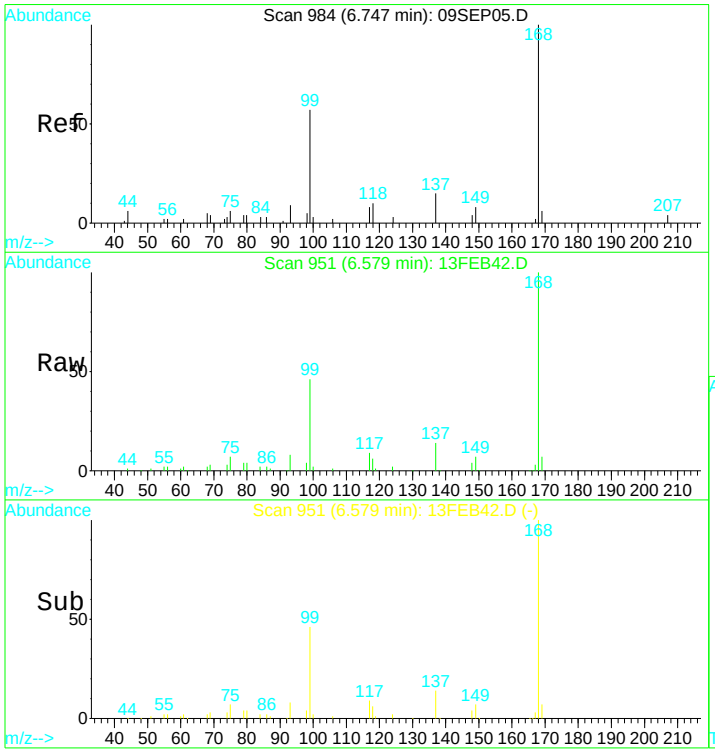
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB42.D Vial: 42
Acq On : 13 Feb 2017 10:24 pm Operator: MGC
Sample : 1703480-02 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:38 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

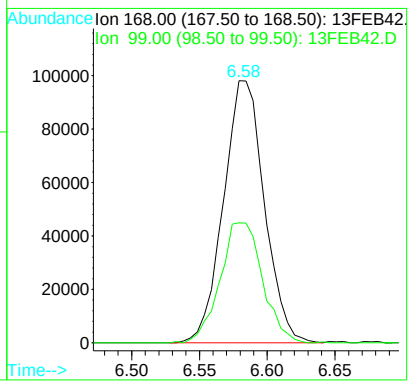


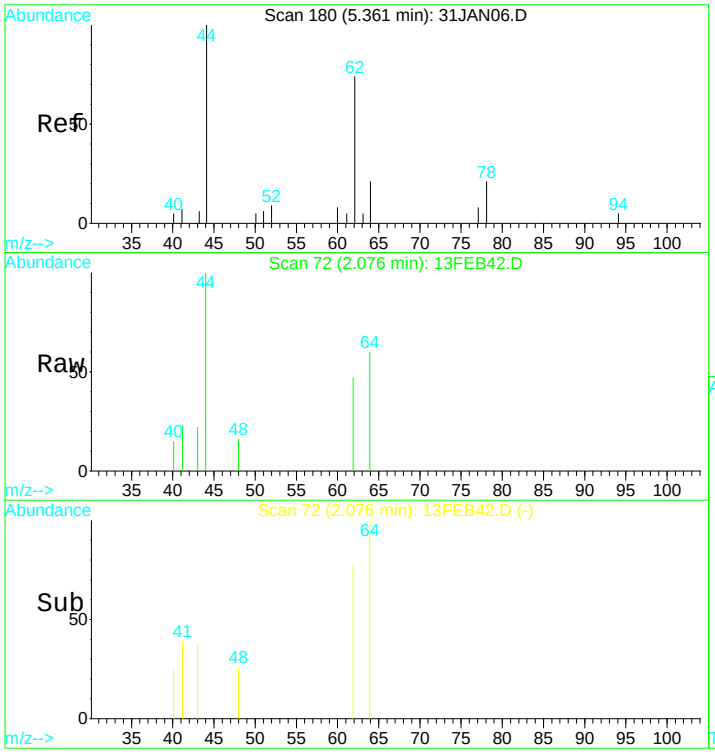



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion:168 Resp: 205798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 47.4 | 305.1 | 566.7# |

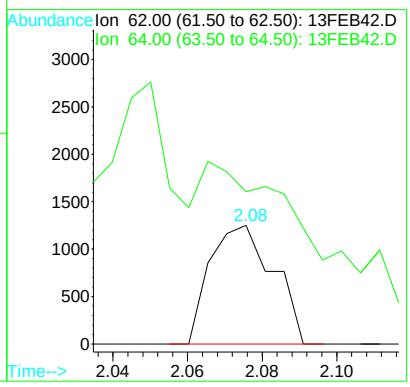


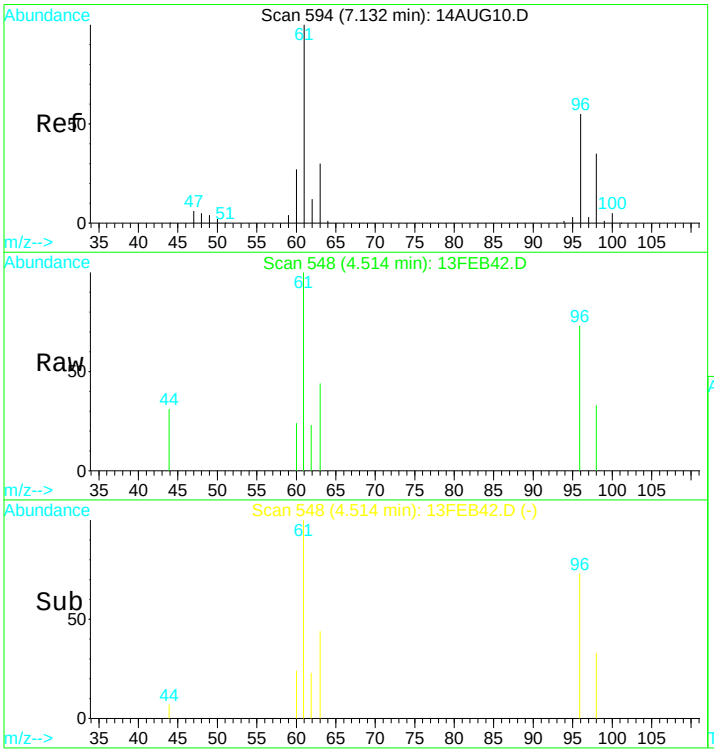




#4
Vinyl chloride
Concen: 0.12 ug/L
RT: 2.08 min Scan# 72
Delta R.T. 0.01 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion: 62 Resp: 1476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 409.8 | 22.4 | 41.6# |

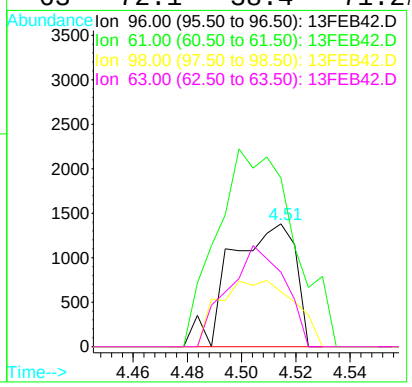


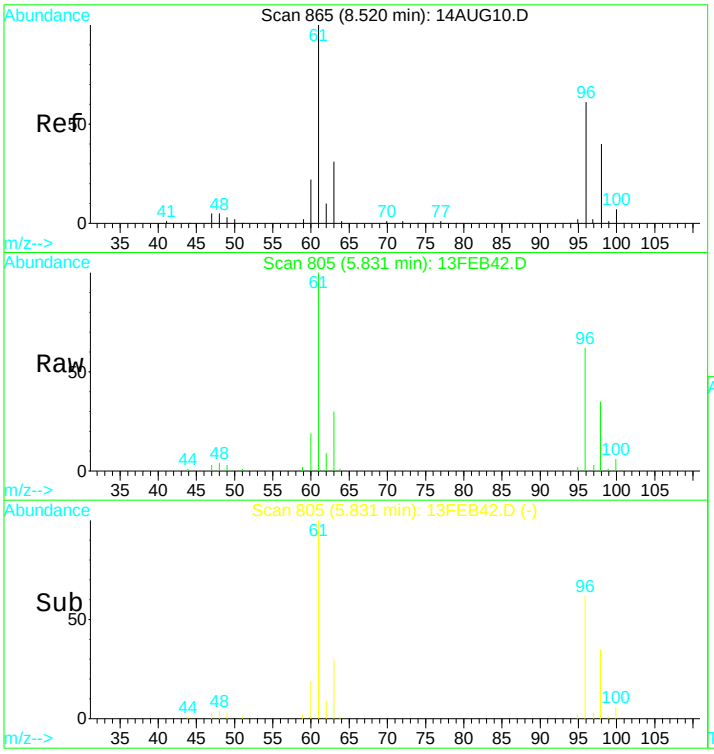



#12
T-1,2-dichloroethene
Concen: 0.25 ug/L
RT: 4.51 min Scan# 548
Delta R.T. 0.01 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion: 96 Resp: 2278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 191.1 | 119.6 | 222.2 |
| 98 | 63.5 | 46.1 | 85.5 |
| 63 | 72.1 | 38.4 | 71.2# |

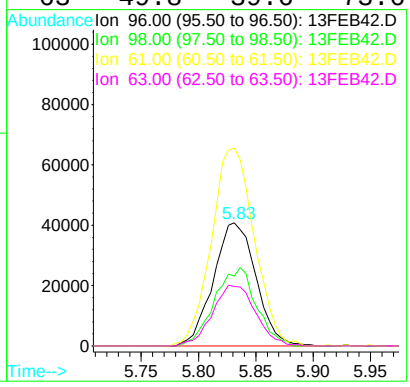


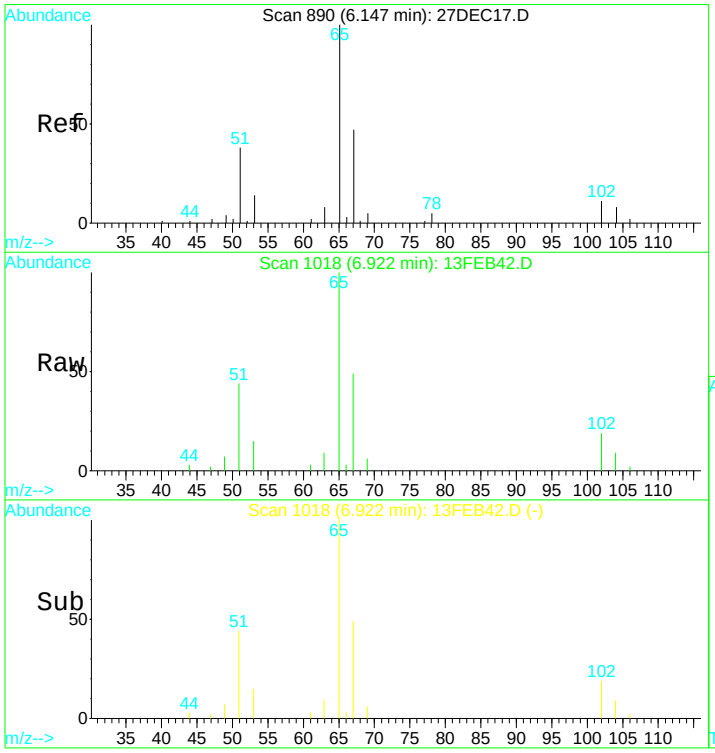




#15
Cis-1,2-dichloroethene
Concen: 11.00 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion: 96 Resp: 105620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 62.1 | 46.2 | 85.8 |
| 61 | 161.2 | 122.8 | 228.0 |
| 63 | 49.8 | 39.6 | 73.6 |

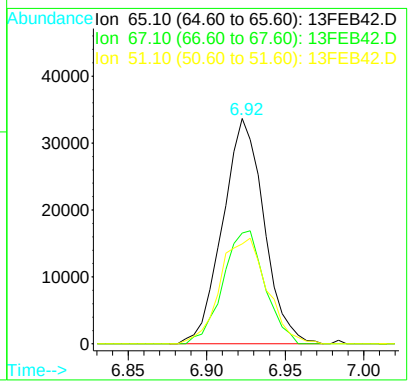


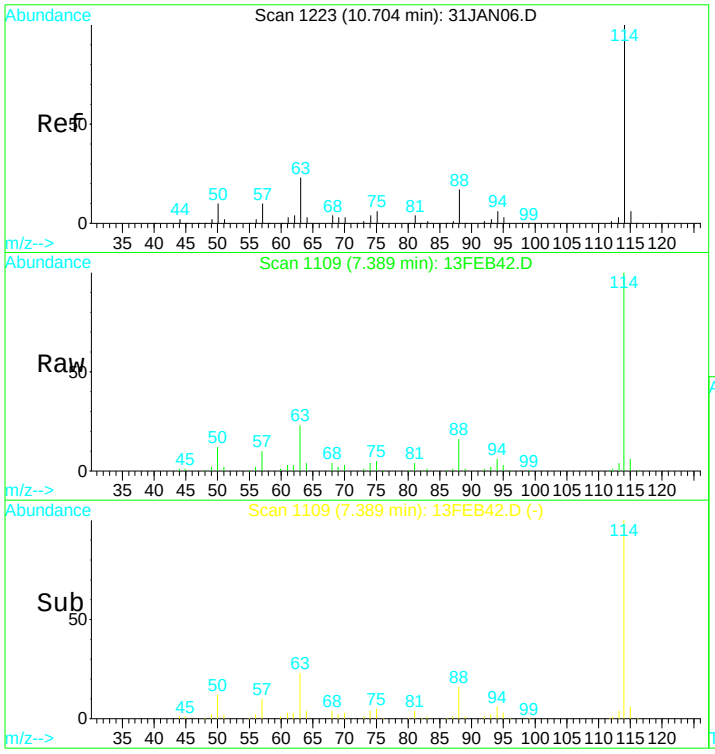



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion: 65 Resp: 61651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.7 | 38.4 | 71.4 |
| 51 | 53.3 | 1006.3 | 1868.8# |

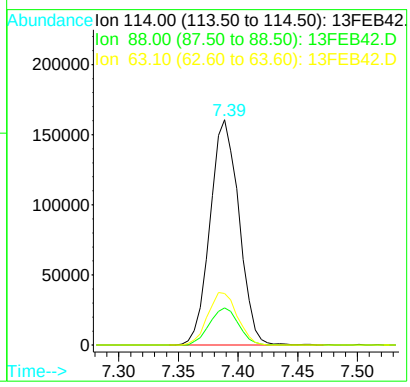


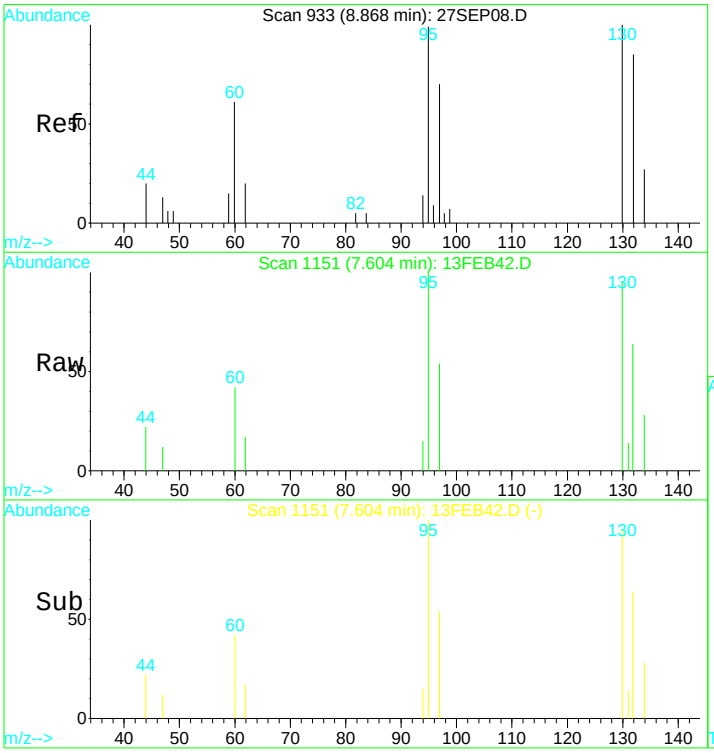




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion:114 Resp: 271306

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.6 | 12.0 | 22.2 |
| 63 | 23.9 | 16.9 | 31.5 |

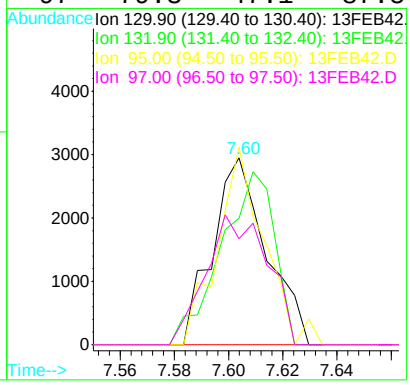


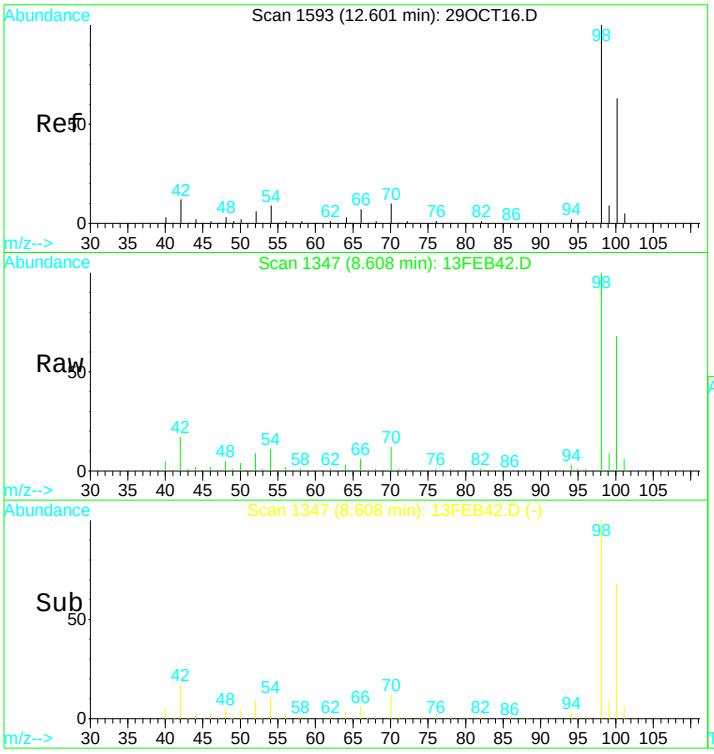



#25
Trichloroethene
Concen: 0.46 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion:130 Resp: 4066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 91.6 | 74.3 | 137.9 |
| 95 | 91.4 | 70.8 | 131.6 |
| 97 | 79.3 | 47.1 | 87.5 |

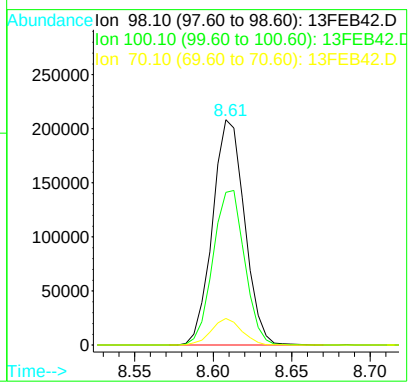


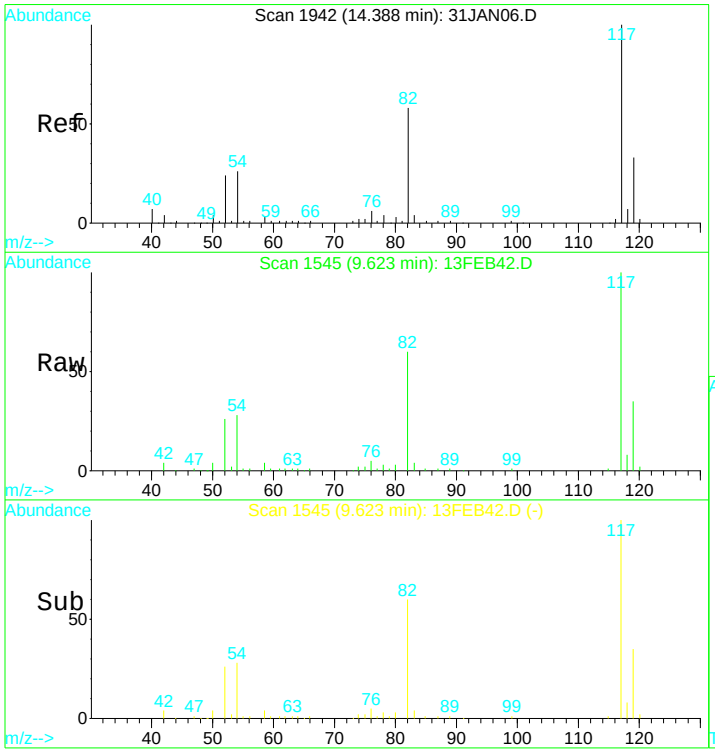




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion: 98 Resp: 295509

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.6 | 47.0 | 87.4 |
| 70 | 11.3 | 7.3 | 13.7 |

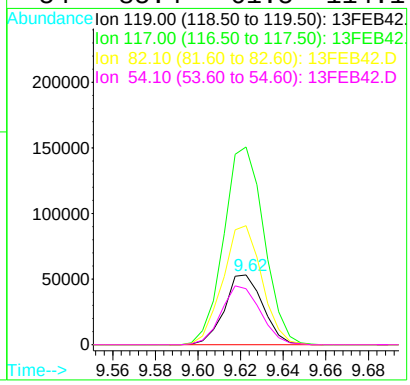


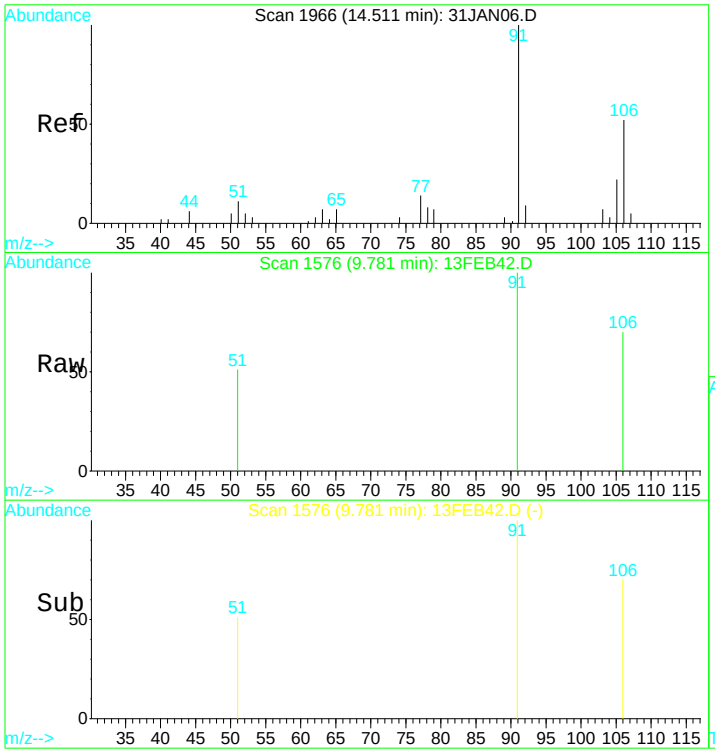



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion:119 Resp: 67149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 296.0 | 220.4 | 409.4 |
| 82 | 172.9 | 123.9 | 230.1 |
| 54 | 85.4 | 61.5 | 114.1 |

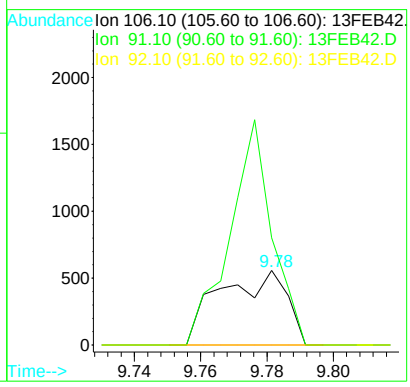


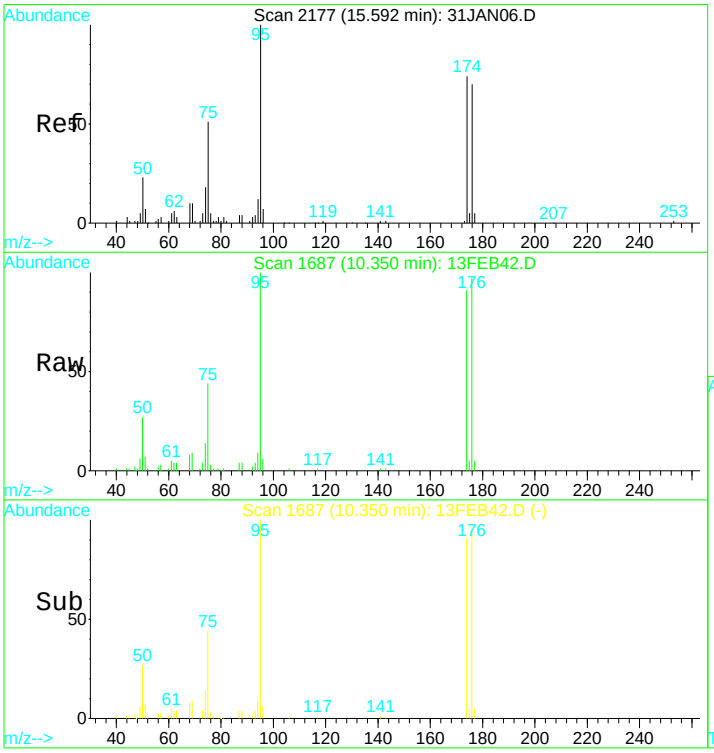




#43
P+m-Xylene
Concen: 0.06 ug/L
RT: 9.78 min Scan# 1576
Delta R.T. 0.00 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion:106 Resp: 778

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 192.7 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

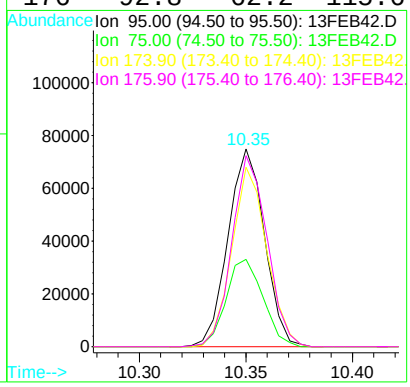





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB42.D
Acq: 13 Feb 2017 10:24 pm

Tgt Ion: 95 Resp: 89449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 44.6 | 32.6 | 60.5 |
| 174 | 87.1 | 60.9 | 113.1 |
| 176 | 92.8 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB42.D Vial: 42
Acq On : 13 Feb 2017 10:24 pm Operator: MGC
Sample : 1703480-02 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:39 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205798 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 271306 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67149 | 10.00 | ug/L | 0.00 |

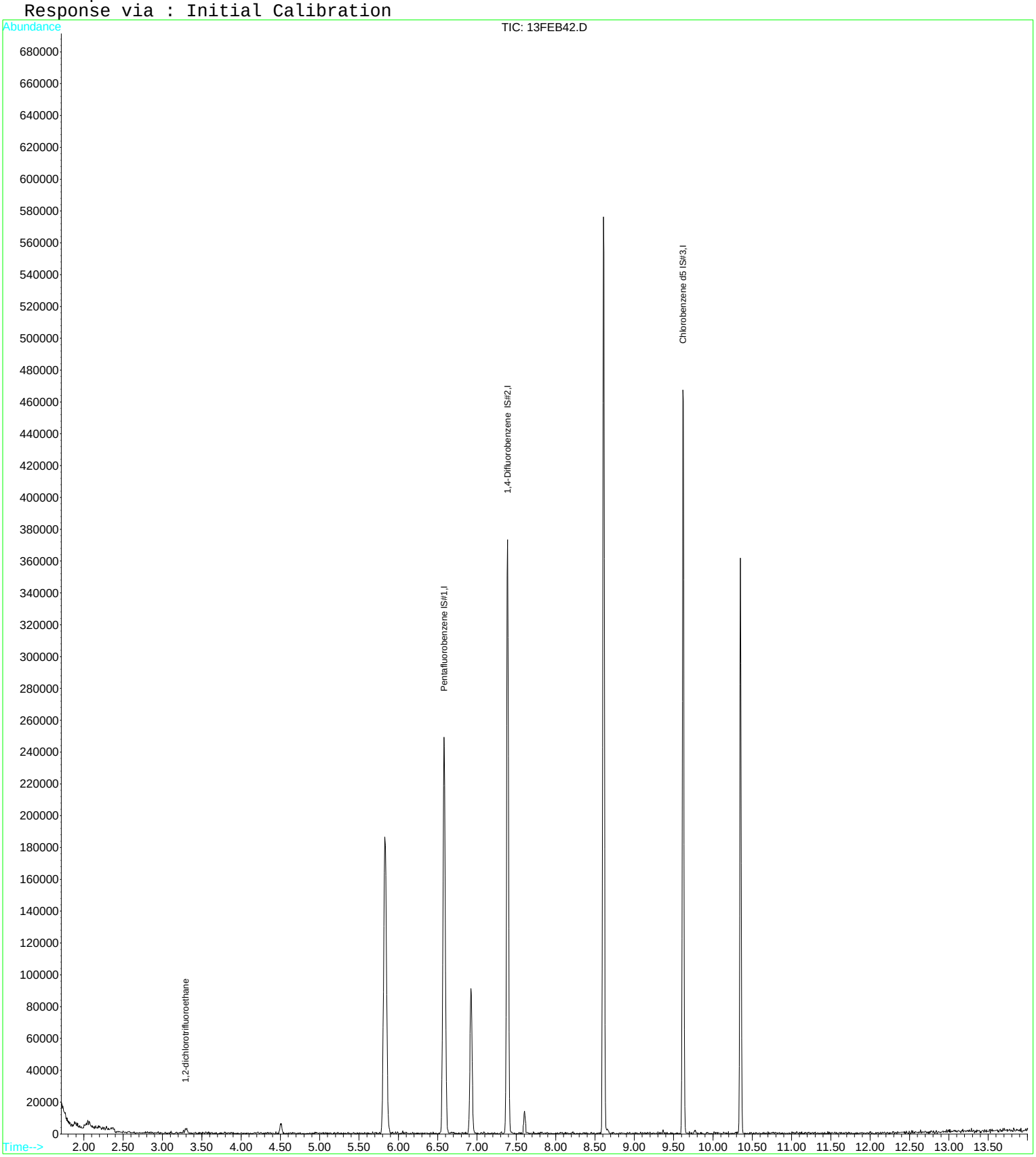
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) 1,2-dichlorotrifluoroethan | 3.29 | 67 | 2552 | 0.22 | ug/L # | 69 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB42.D Vial: 42
Acq On : 13 Feb 2017 10:24 pm Operator: MGC
Sample : 1703480-02 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:39 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB56.D Vial: 56
Acq On : 13 Feb 2017 2:18 am Operator: MGC
Sample : 1703480-03 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 210566 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280007 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67869 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 67353 | 10.81 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 108.10% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 293582 | 9.21 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 92.10% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87367 | 9.33 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 93.30% | | | |

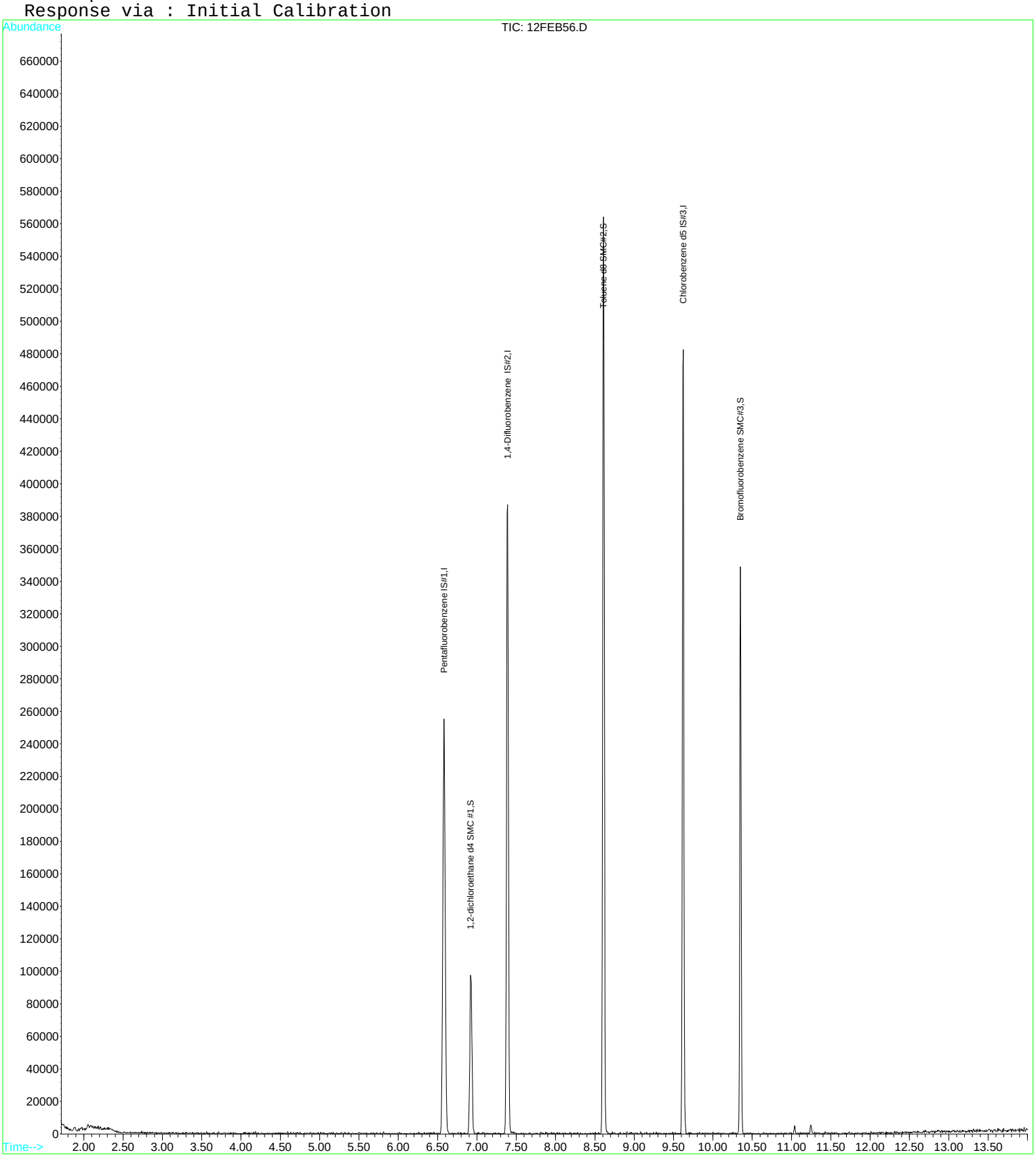
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB56.D Vial: 56
Acq On : 13 Feb 2017 2:18 am Operator: MGC
Sample : 1703480-03 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:11 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB56.D Vial: 56
Acq On : 13 Feb 2017 2:18 am Operator: MGC
Sample : 1703480-03 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:11 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 210566 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280007 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67869 | 10.00 | ug/L | 0.00 |

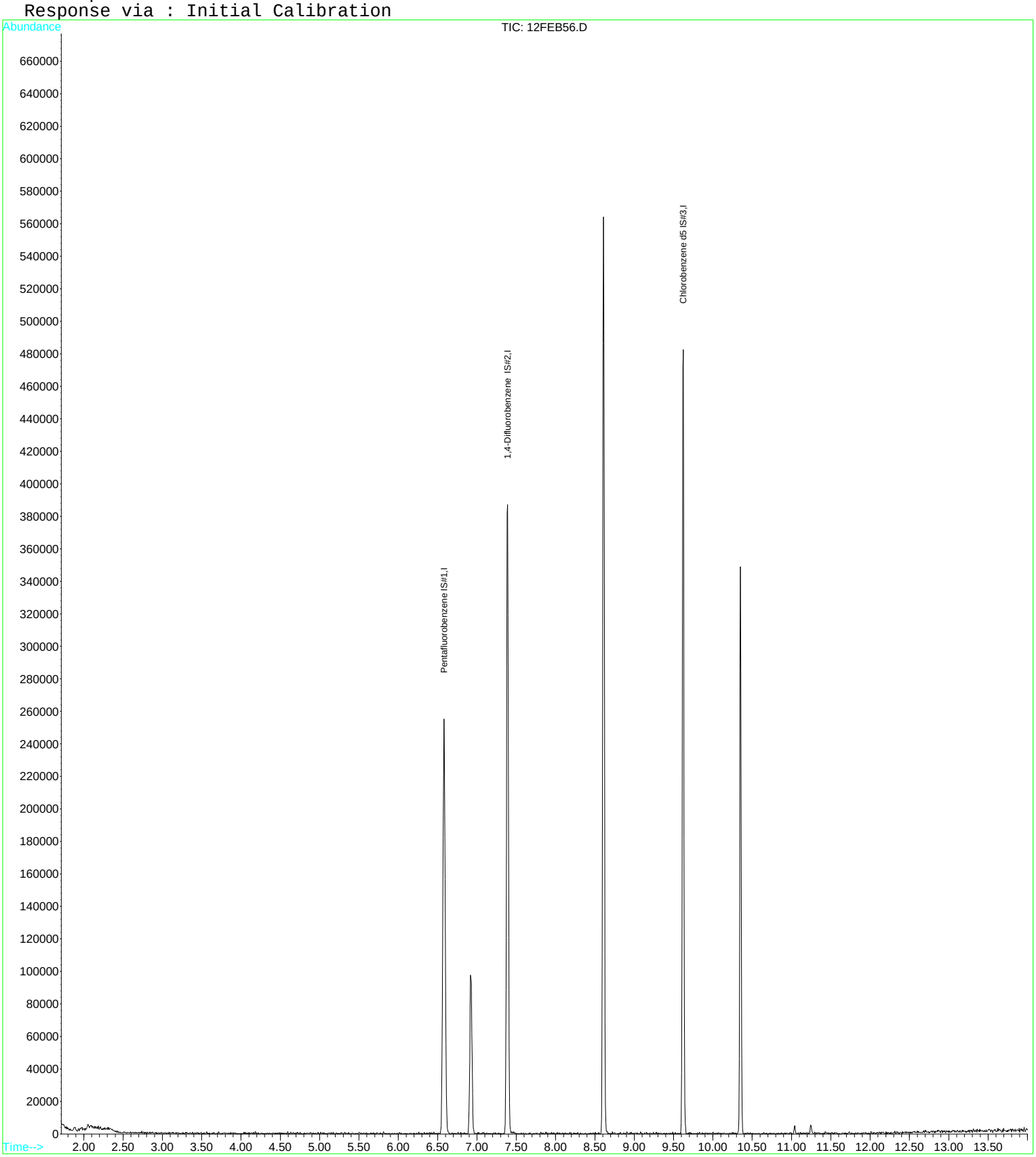
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB56.D Vial: 56
Acq On : 13 Feb 2017 2:18 am Operator: MGC
Sample : 1703480-03 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:11 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB57.D Vial: 57
Acq On : 13 Feb 2017 2:41 am Operator: MGC
Sample : 1703480-04 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:16 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206955 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279710 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 74525 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 75575 | 12.34 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 123.40% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 321465 | 10.10 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 101.00% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 101573 | 9.88 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.80% | | | |

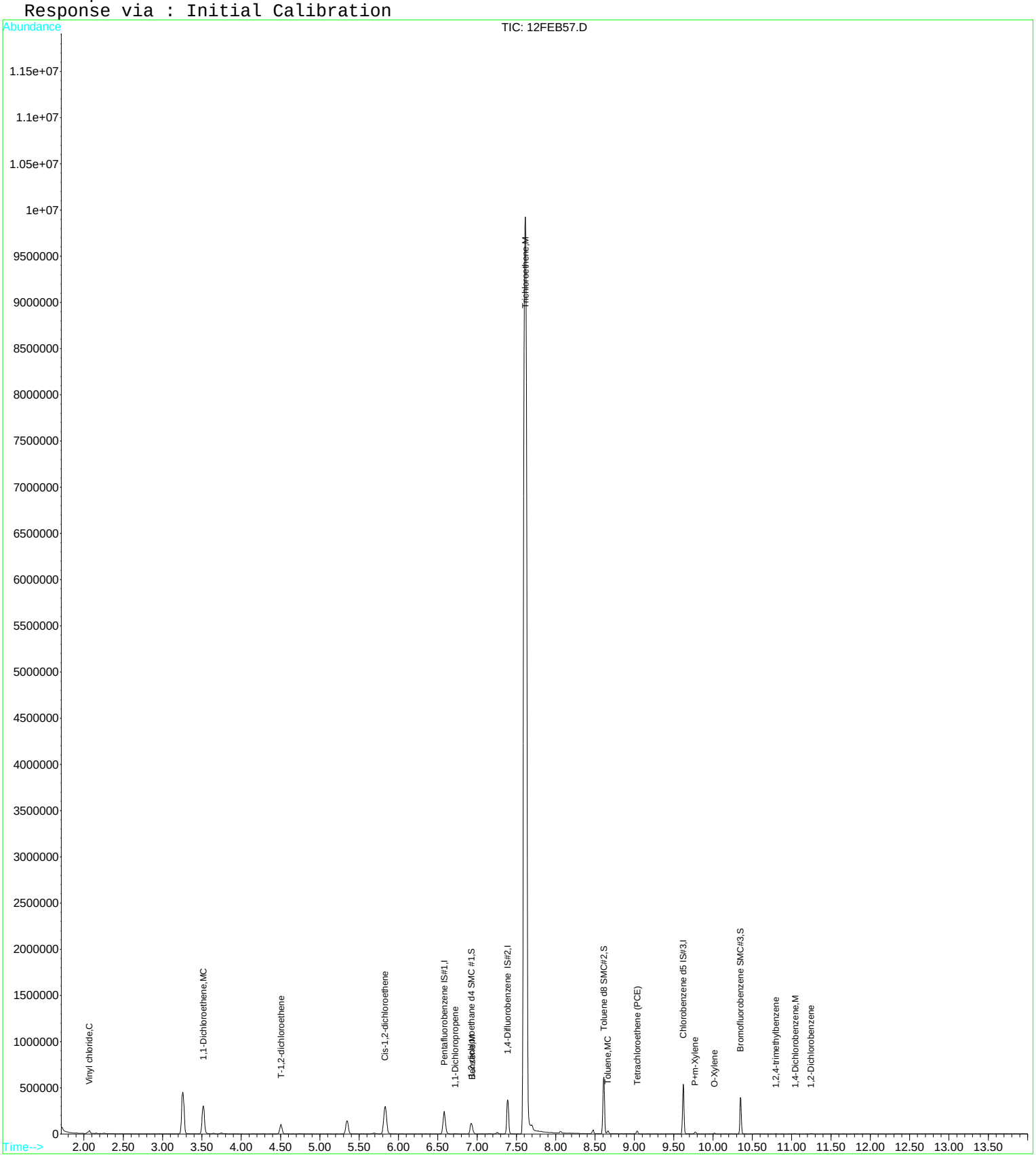
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 24123 | 1.96 | ug/L # | 50 |
| 9) 1,1-Dichloroethene | 3.51 | 61 | 256949 | 15.99 | ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 41948 | 4.50 | ug/L | 95 |
| 15) Cis-1,2-dichloroethene | 5.82 | 96 | 168417 | 17.44 | ug/L | 90 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 2297 | 0.18 | ug/L # | 57 |
| 23) Benzene | 6.94 | 78 | 25597 | 0.65 | ug/L # | 1 |
| 25) Trichloroethene | 7.61 | 130 | 4437535 | 487.29 | ug/L | 96 |
| 32) Toluene | 8.66 | 92 | 11284 | 0.52 | ug/L | 91 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 8005 | 0.84 | ug/L | 98 |
| 43) P+m-Xylene | 9.77 | 106 | 4874 | 0.33 | ug/L # | 65 |
| 44) O-Xylene | 10.02 | 106 | 2555 | 0.18 | ug/L # | 63 |
| 57) 1,2,4-trimethylbenzene | 10.80 | 105 | 1786 | 0.07 | ug/L | 87 |
| 61) 1,4-Dichlorobenzene | 11.05 | 146 | 1118 | 0.08 | ug/L # | 70 |
| 63) 1,2-Dichlorobenzene | 11.25 | 146 | 2060 | 0.16 | ug/L # | 86 |

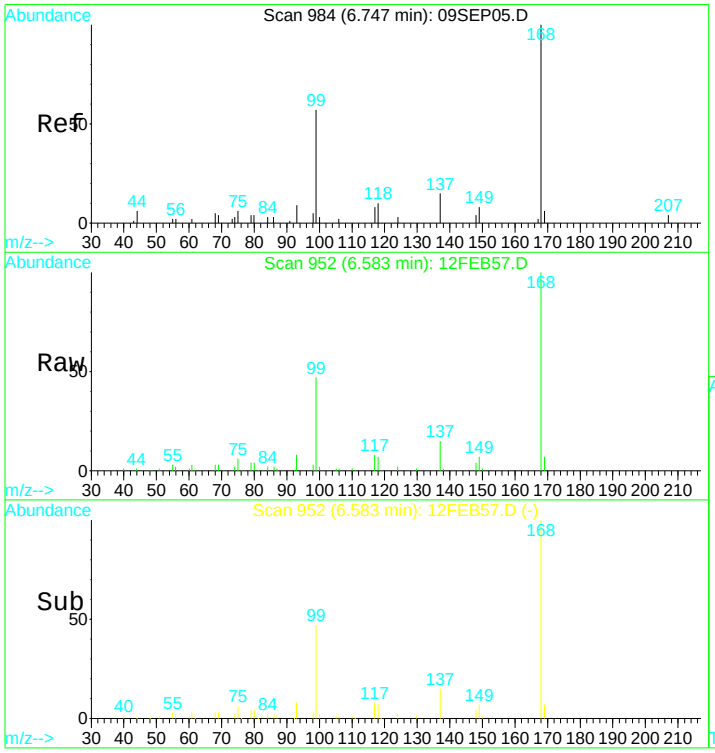
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB57.D Vial: 57
Acq On : 13 Feb 2017 2:41 am Operator: MGC
Sample : 1703480-04 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:16 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

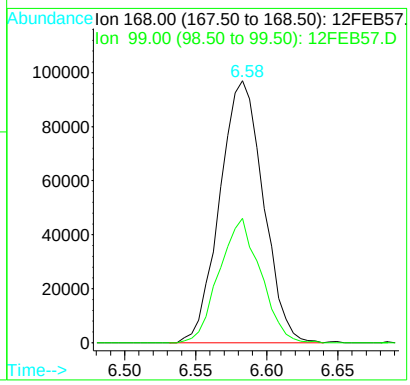


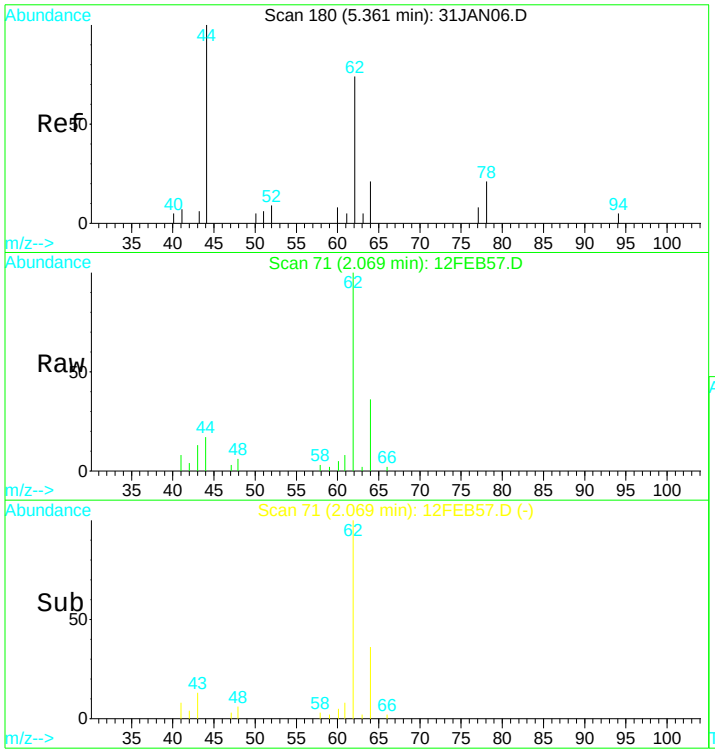



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:168 Resp: 206955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.1 | 305.1 | 566.7# |

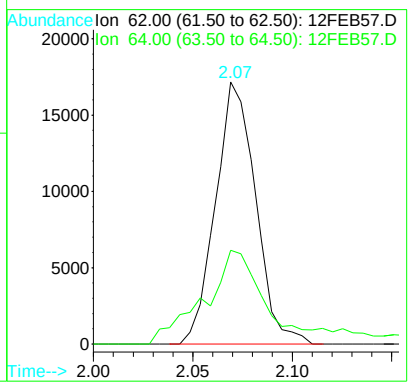


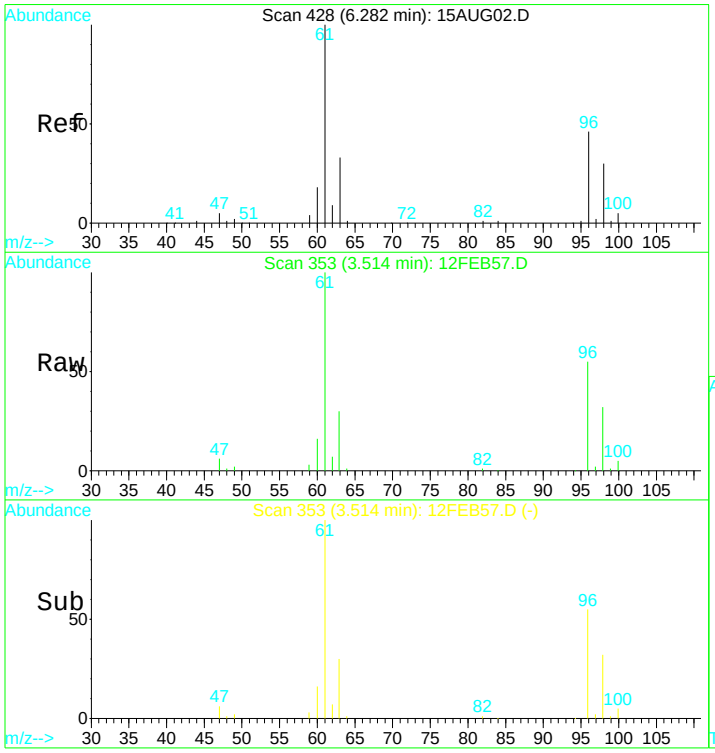




#4
Vinyl chloride
Concen: 1.96 ug/L
RT: 2.07 min Scan# 71
Delta R.T. 0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 62 Resp: 24123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 59.6 | 22.4 | 41.6# |

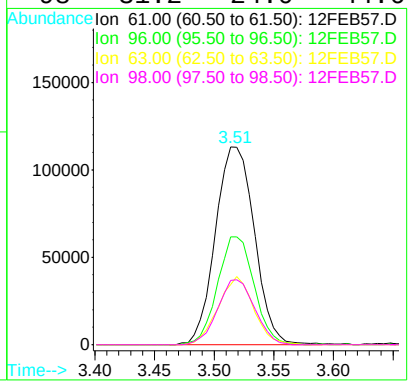


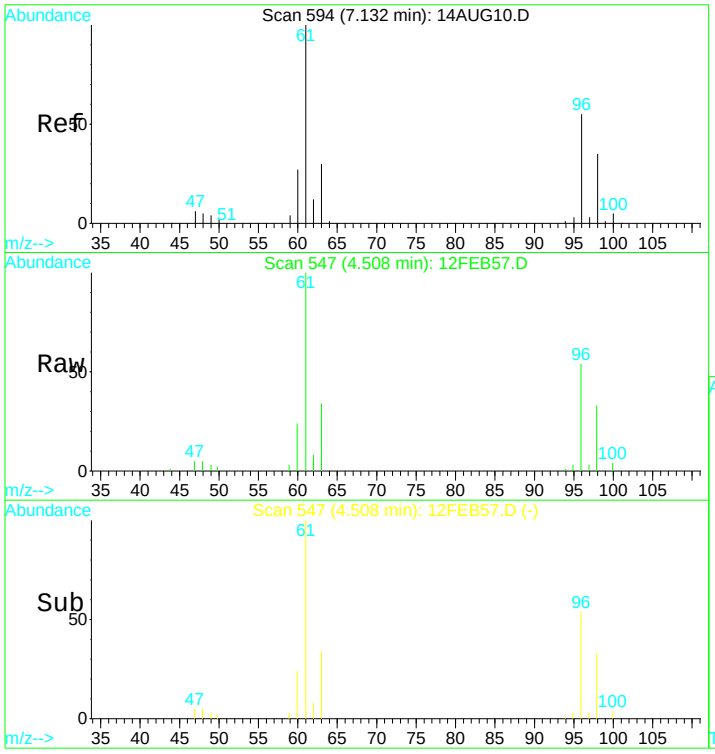



#9
1,1-Dichloroethene
Concen: 15.99 ug/L
RT: 3.51 min Scan# 353
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 61 Resp: 256949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 51.1 | 36.6 | 68.0 |
| 63 | 31.3 | 22.0 | 40.8 |
| 98 | 31.2 | 24.0 | 44.6 |

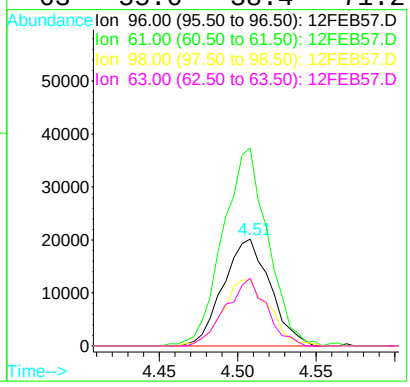


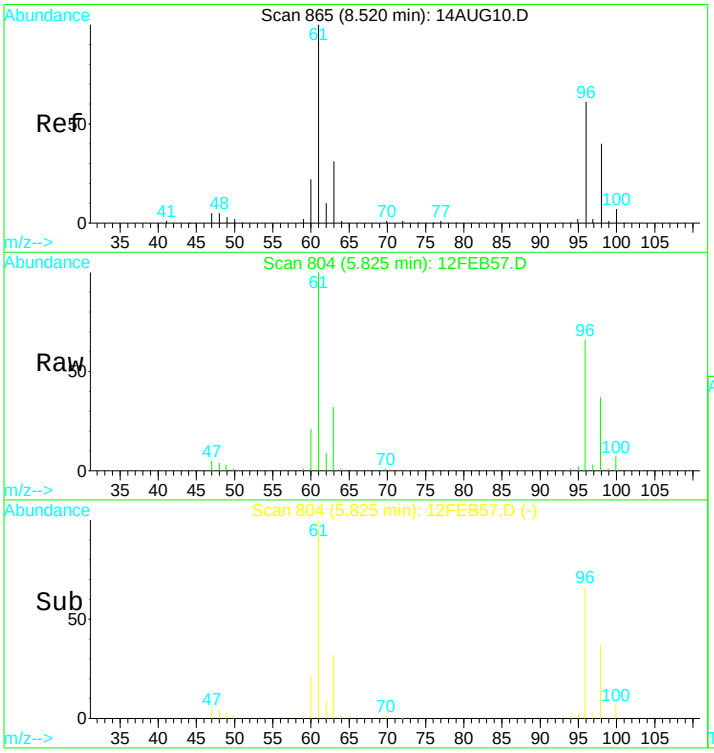




#12
T-1,2-dichloroethene
Concen: 4.50 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 96 Resp: 41948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 178.3 | 119.6 | 222.2 |
| 98 | 61.4 | 46.1 | 85.5 |
| 63 | 55.6 | 38.4 | 71.2 |

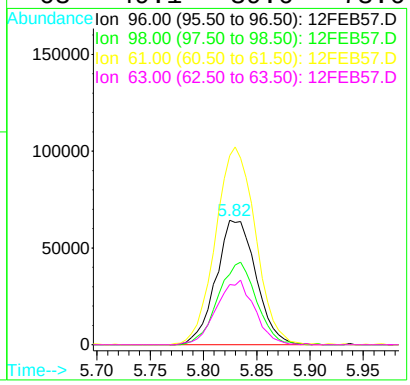


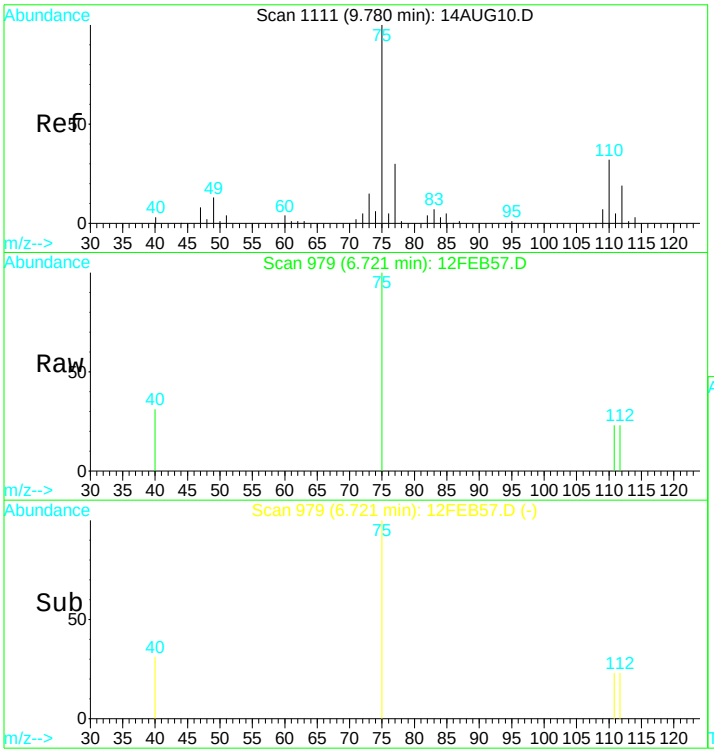



#15
Cis-1,2-dichloroethene
Concen: 17.44 ug/L
RT: 5.82 min Scan# 804
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 96 Resp: 168417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 63.7 | 46.2 | 85.8 |
| 61 | 158.7 | 122.8 | 228.0 |
| 63 | 49.1 | 39.6 | 73.6 |

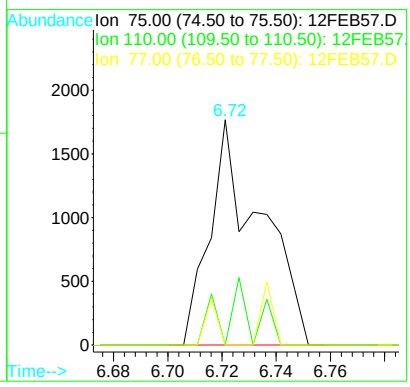


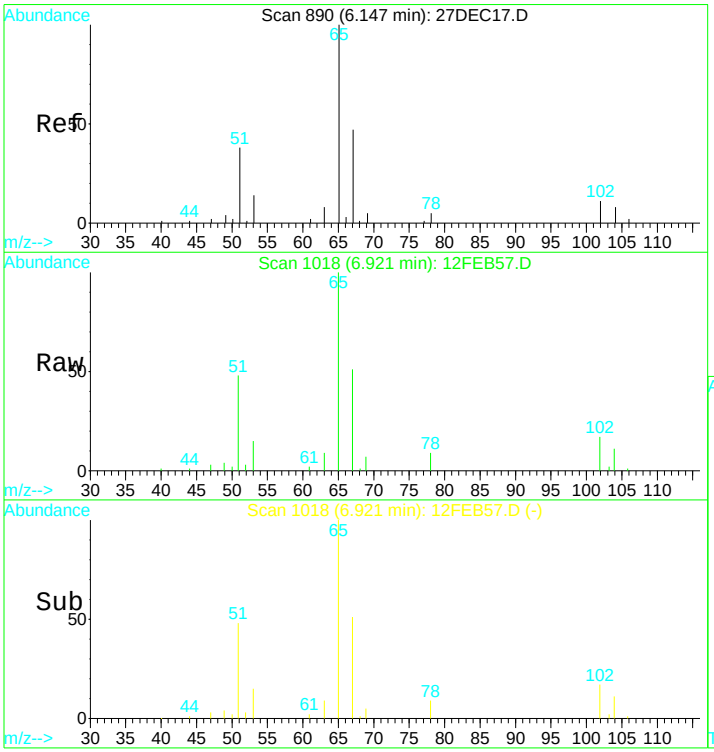




#19
1,1-Dichloropropene
Concen: 0.18 ug/L
RT: 6.72 min Scan# 979
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 75 Resp: 2297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 11.9 | 25.1 | 46.5# |
| 77 | 6.7 | 22.3 | 41.5# |

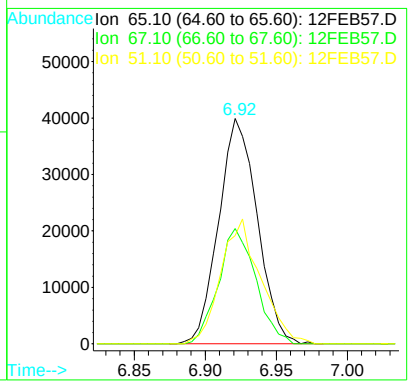


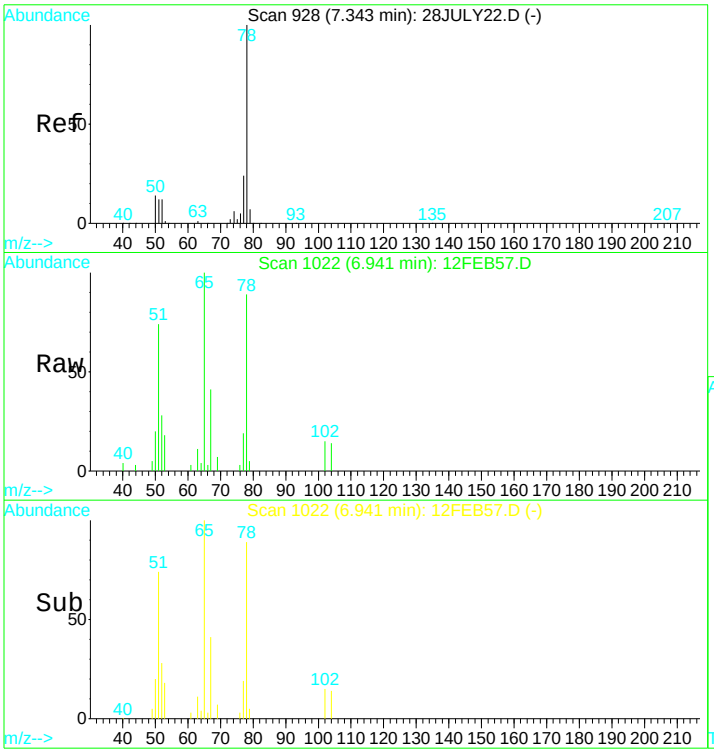



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 65 Resp: 75575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.6 | 38.4 | 71.4 |
| 51 | 57.6 | 1006.3 | 1868.8# |

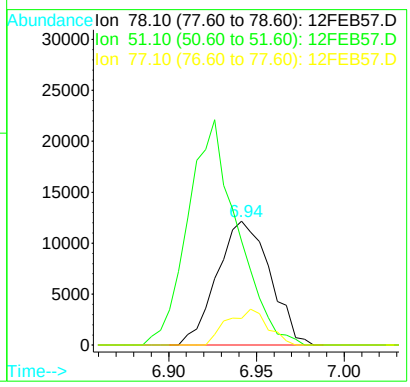


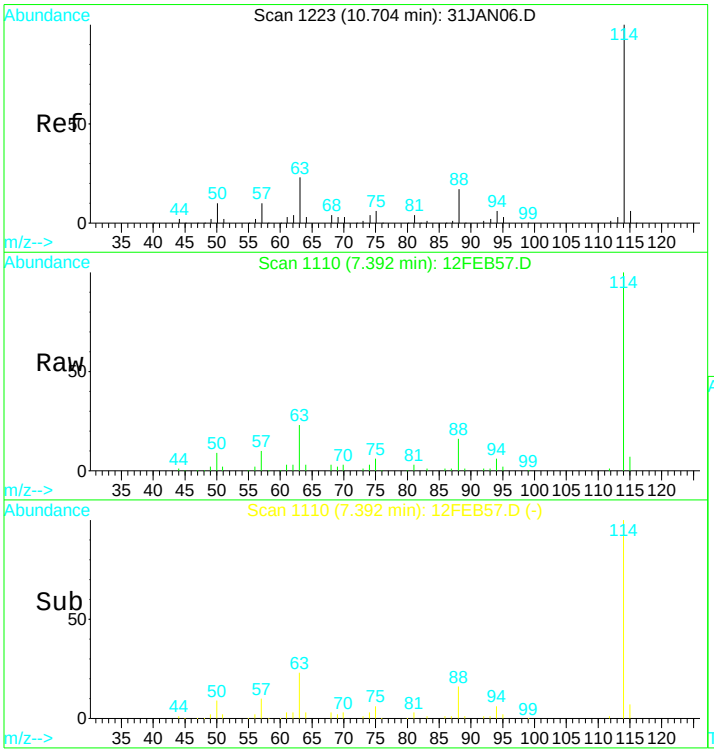




#23
Benzene
Concen: 0.65 ug/L
RT: 6.94 min Scan# 1022
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 78 Resp: 25597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 51 | 170.0 | 16.2 | 30.0# |
| 77 | 22.2 | 16.3 | 30.3 |

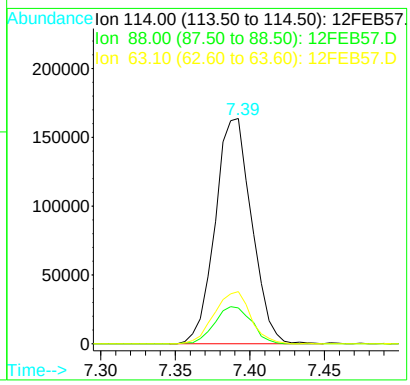


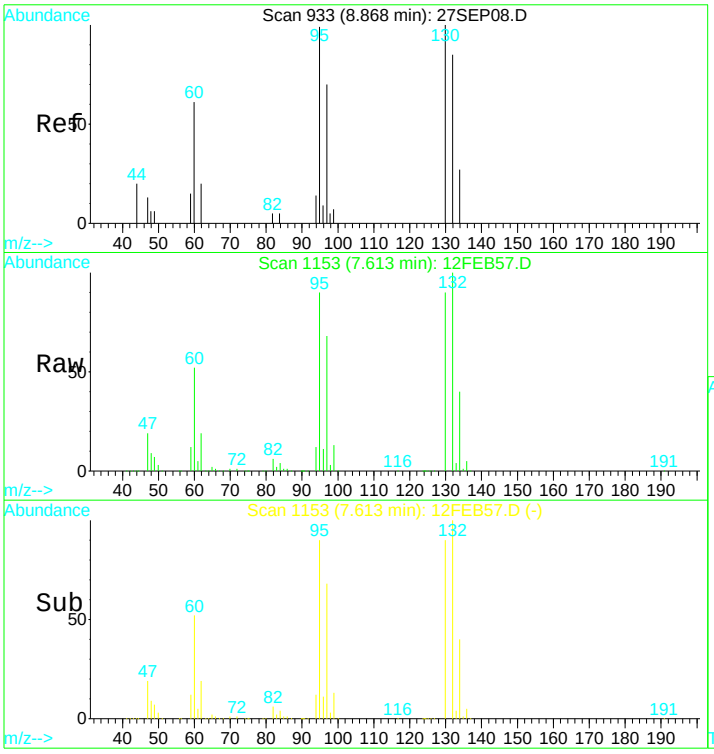



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:114 Resp: 279710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.8 | 12.0 | 22.2 |
| 63 | 23.2 | 16.9 | 31.5 |

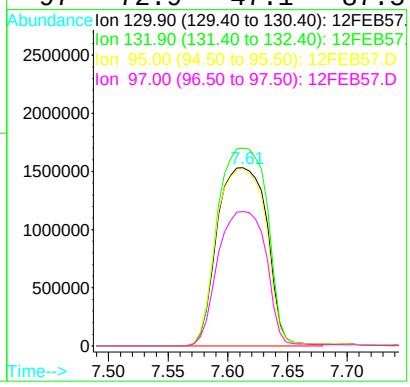


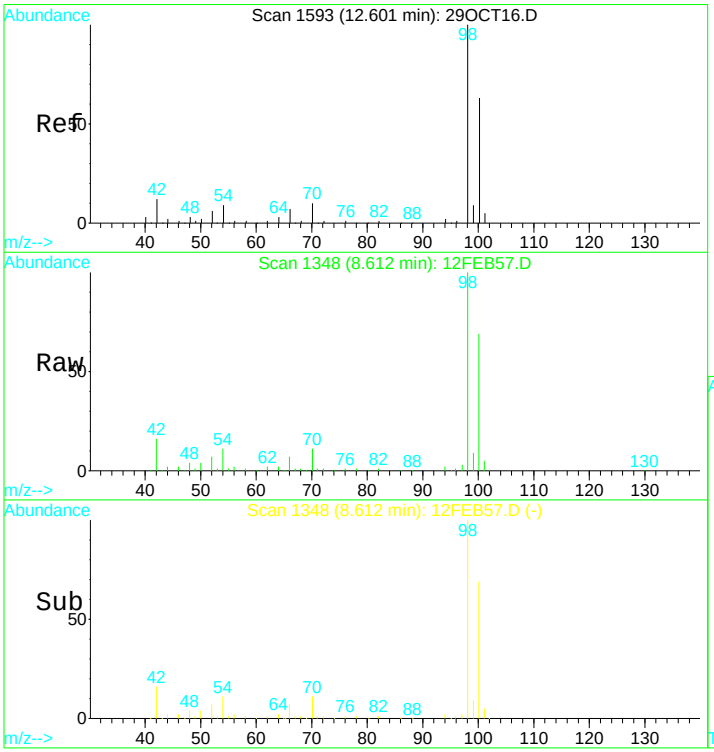




#25
Trichloroethene
Concen: 487.29 ug/L
RT: 7.61 min Scan# 1153
Delta R.T. 0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:130 Resp: 4437535

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 110.7 | 74.3 | 137.9 |
| 95 | 98.8 | 70.8 | 131.6 |
| 97 | 72.9 | 47.1 | 87.5 |

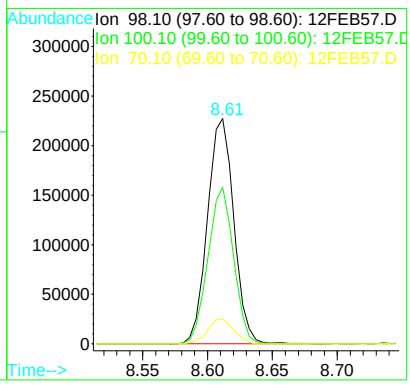


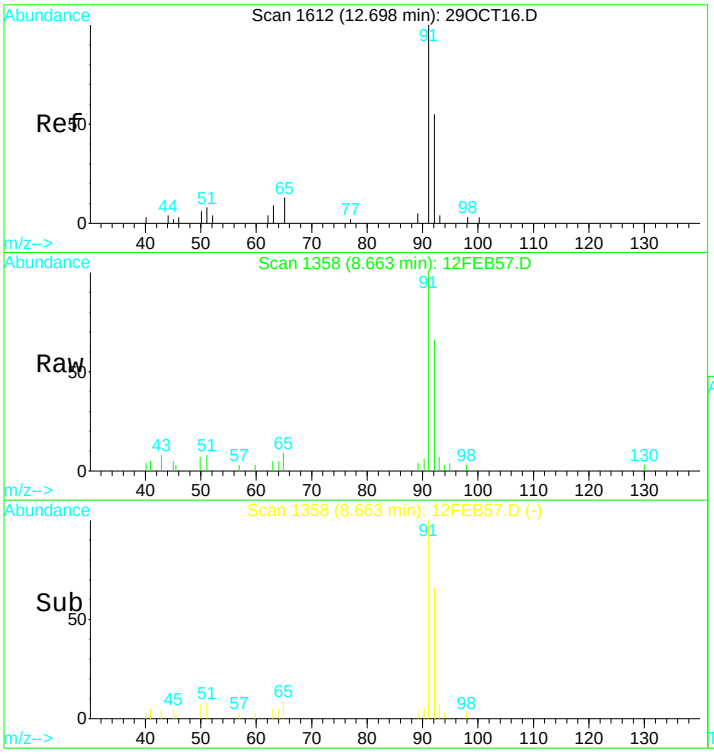



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 98 Resp: 321465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.5 | 47.0 | 87.4 |
| 70 | 11.0 | 7.3 | 13.7 |

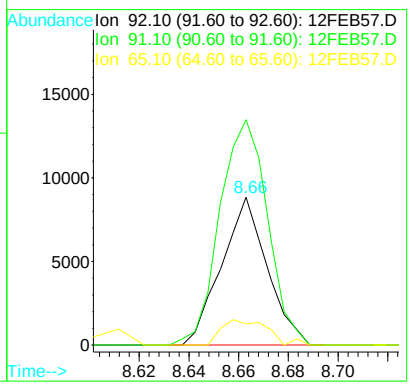


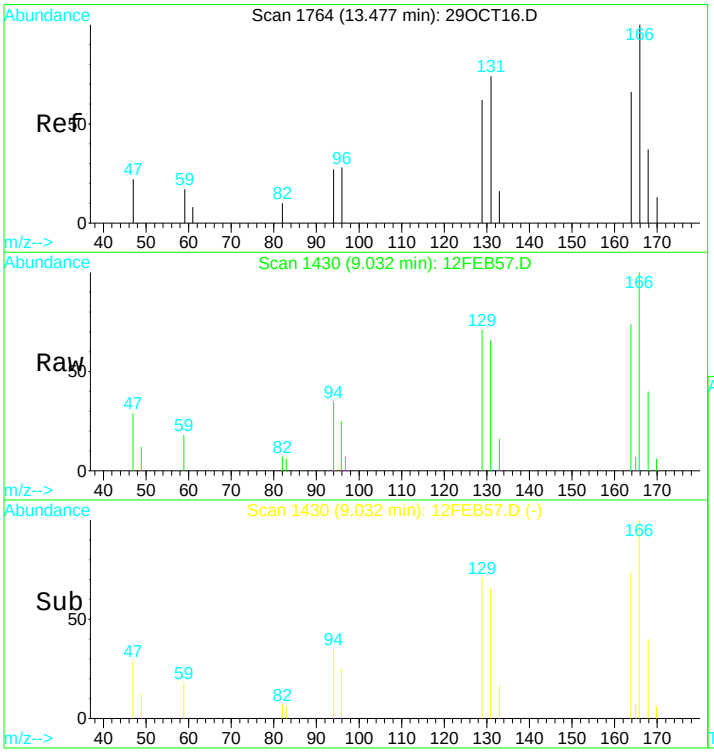




#32
Toluene
Concen: 0.52 ug/L
RT: 8.66 min Scan# 1358
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 92 Resp: 11284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 158.1 | 102.5 | 190.3 |
| 65 | 17.5 | 15.0 | 27.8 |

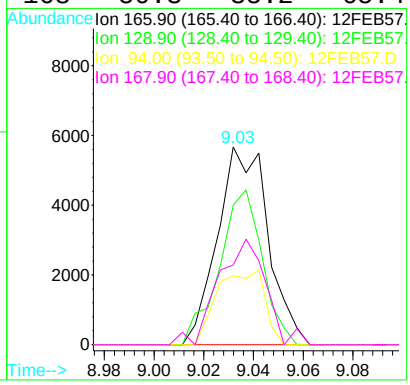


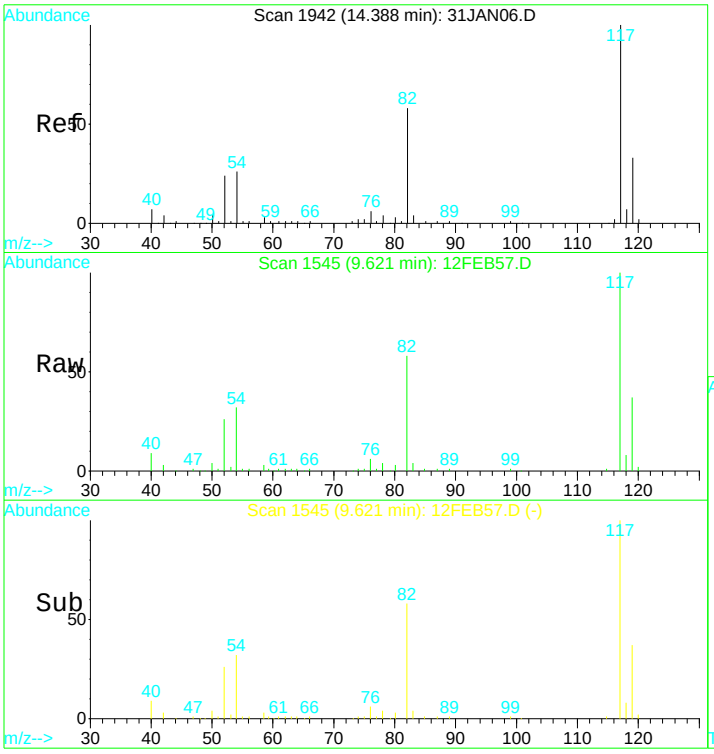



#35
Tetrachloroethene (PCE)
Concen: 0.84 ug/L
RT: 9.03 min Scan# 1430
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:166 Resp: 8005

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 129 | 68.4 | 45.5 | 84.5 |
| 94 | 35.3 | 23.7 | 43.9 |
| 168 | 50.3 | 35.2 | 65.4 |

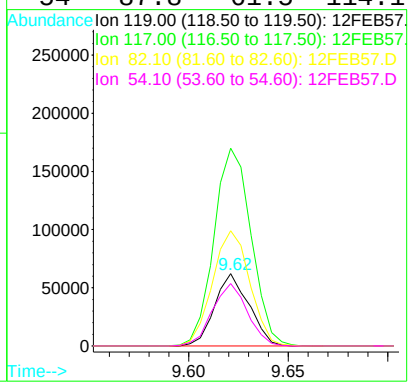


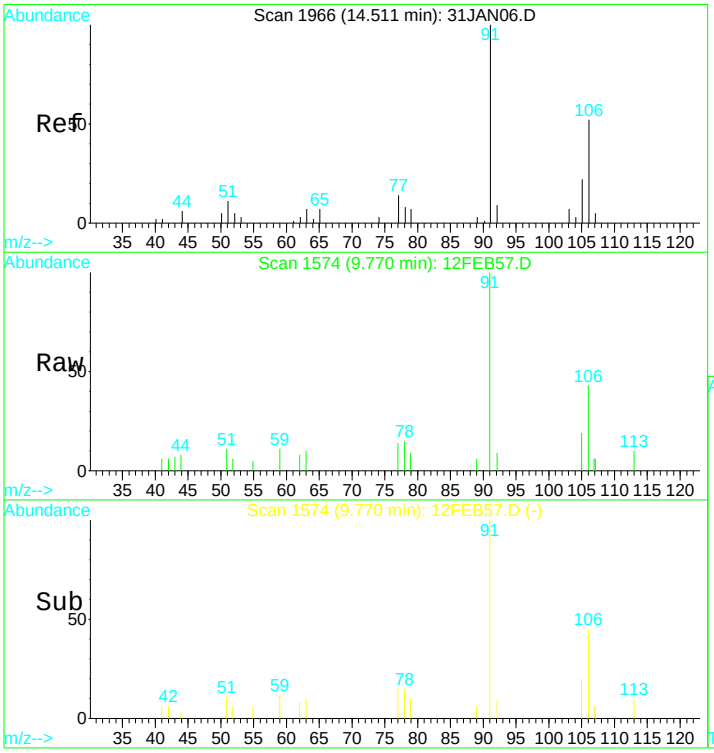




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:119 Resp: 74525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 296.5 | 220.4 | 409.4 |
| 82 | 172.8 | 123.9 | 230.1 |
| 54 | 87.8 | 61.5 | 114.1 |

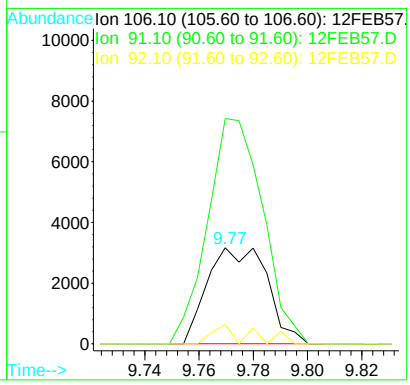


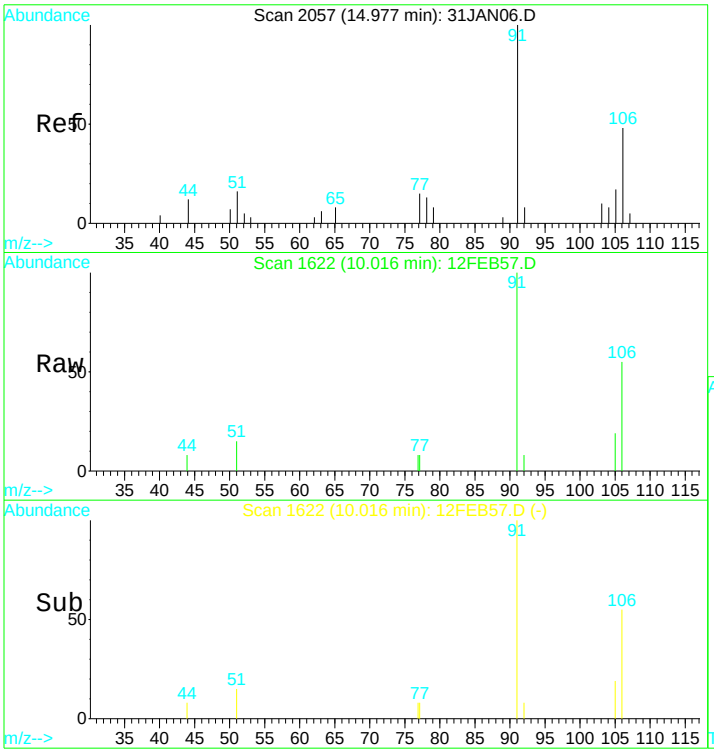



#43
P+m-Xylene
Concen: 0.33 ug/L
RT: 9.77 min Scan# 1574
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:106 Resp: 4874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.8 | 116.4 | 216.2 |
| 92 | 6.4 | 10.8 | 20.0# |

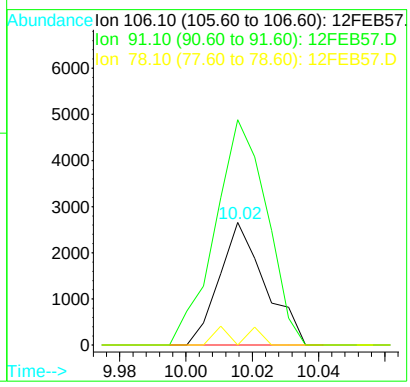


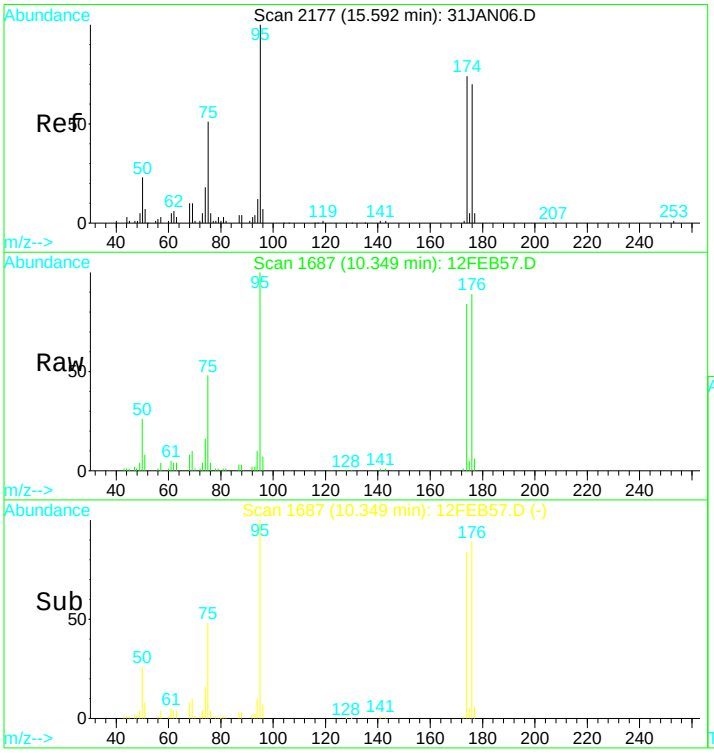




#44
O-Xylene
Concen: 0.18 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:106 Resp: 2555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.5 | 124.3 | 230.9 |
| 78 | 9.7 | 51.7 | 95.9# |

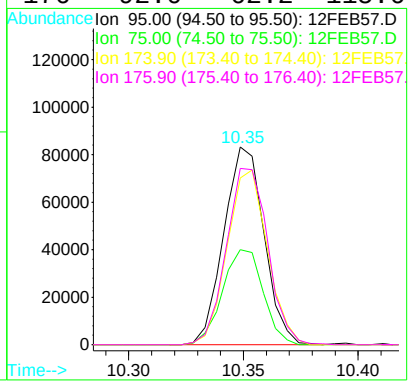


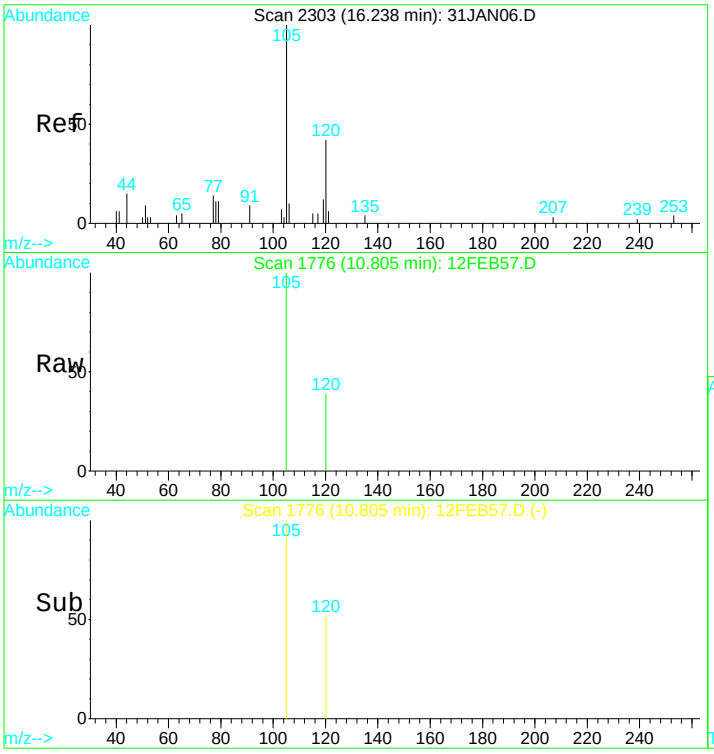



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 95 Resp: 101573

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 48.6 | 32.6 | 60.5 |
| 174 | 88.3 | 60.9 | 113.1 |
| 176 | 92.0 | 62.2 | 115.6 |

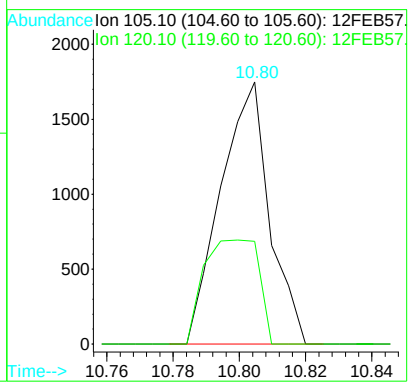


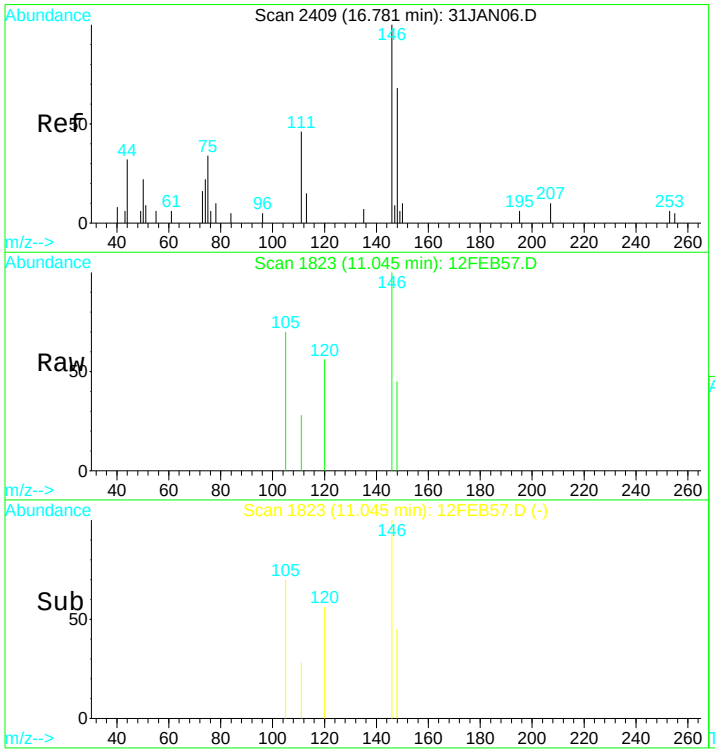




#57
1,2,4-trimethylbenzene
Concen: 0.07 ug/L
RT: 10.80 min Scan# 1776
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:105 Resp: 1786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.6 | 37.5 | 69.7 |

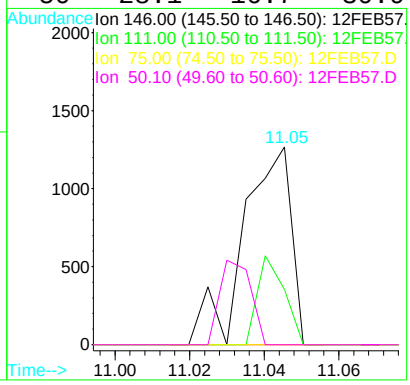


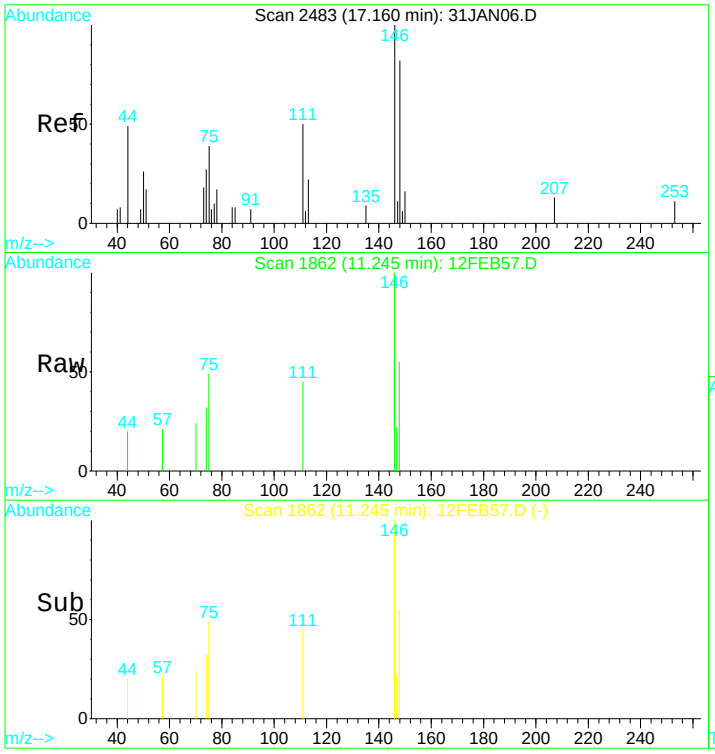



#61
1,4-Dichlorobenzene
Concen: 0.08 ug/L
RT: 11.05 min Scan# 1823
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:146 Resp: 1118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 25.4 | 27.7 | 51.5# |
| 75 | 0.0 | 21.1 | 39.3# |
| 50 | 28.1 | 16.7 | 30.9 |

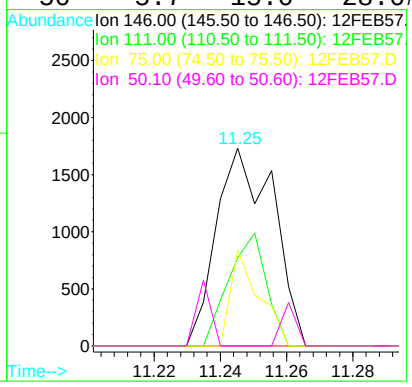



#63
1,2-Dichlorobenzene
Concen: 0.16 ug/L
RT: 11.25 min Scan# 1862
Delta R.T. -0.02 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:146 Resp: 2060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.7 | 29.2 | 54.2 |
| 75 | 24.4 | 21.1 | 39.1 |
| 50 | 5.7 | 15.0 | 28.0# |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB57.D Vial: 57
Acq On : 13 Feb 2017 2:41 am Operator: MGC
Sample : 1703480-04 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:16 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206955 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279710 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 74525 | 10.00 ug/L | 0.00 |

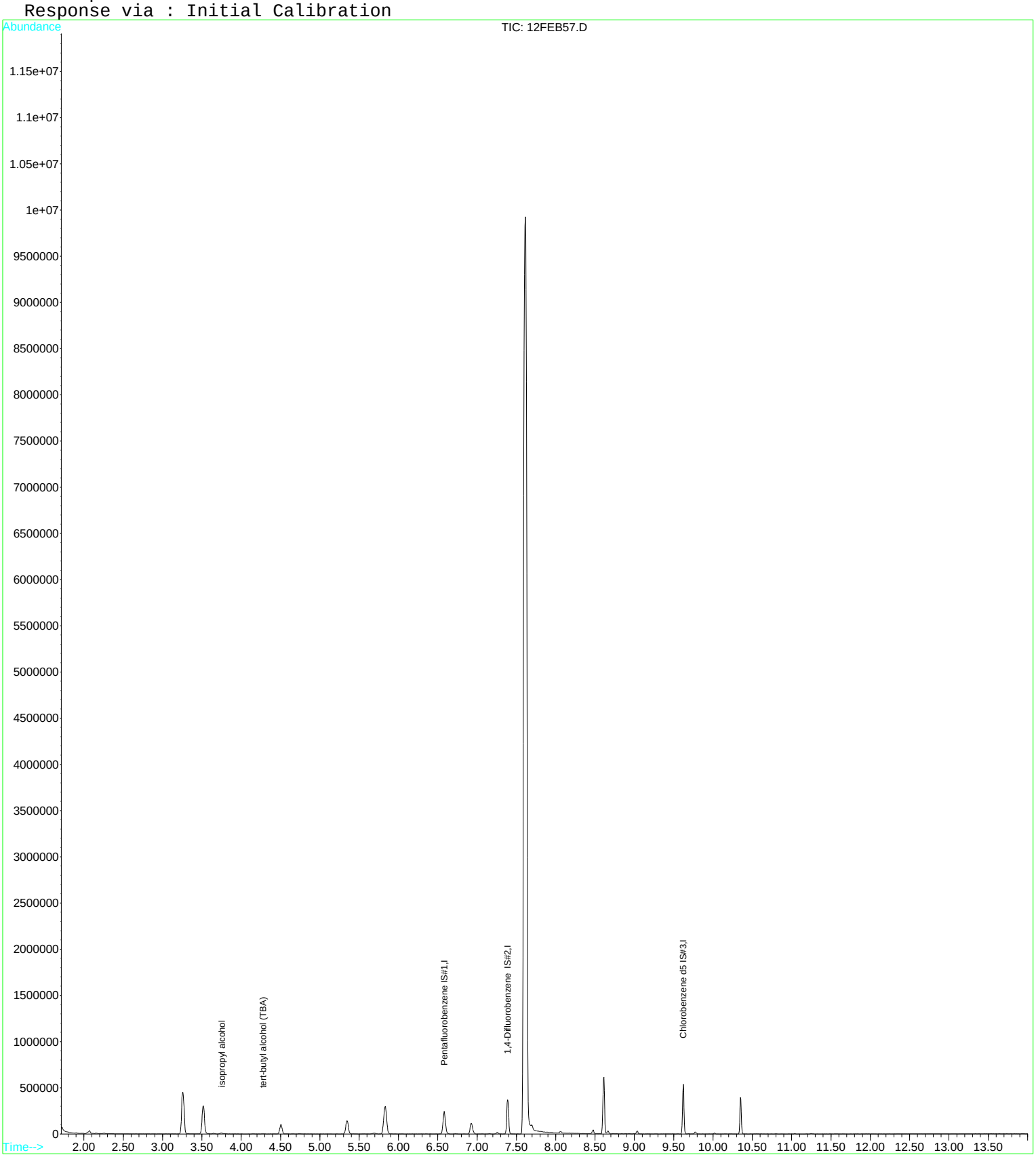
| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 6) isopropyl alcohol | 3.75 | 45 | 17862 | 34.66 ug/L # | 3 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 2142 | 8.08 ug/L | 100 |
| 10) acetonitrile | 3.92 | 41 | 324 | Below Cal # | 1 |

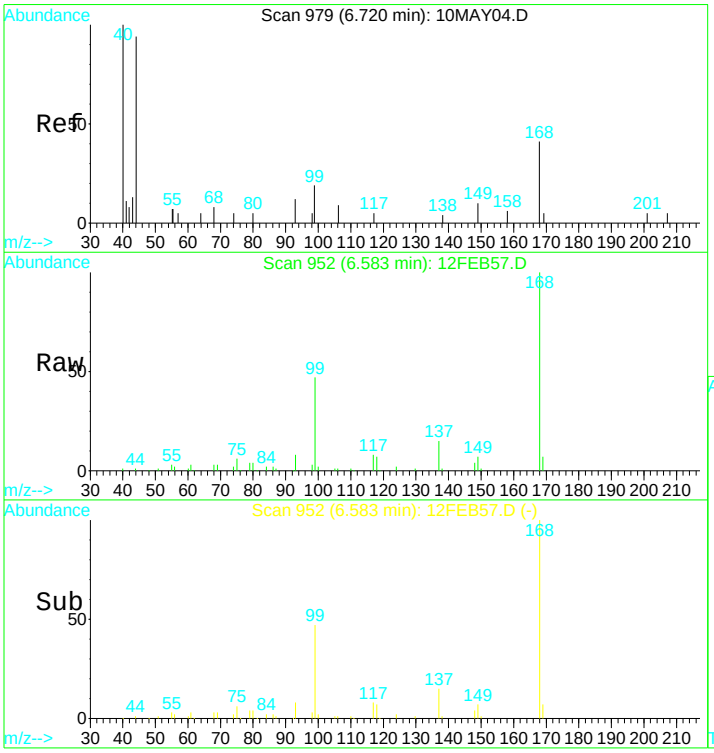
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB57.D Vial: 57
Acq On : 13 Feb 2017 2:41 am Operator: MGC
Sample : 1703480-04 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:16 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

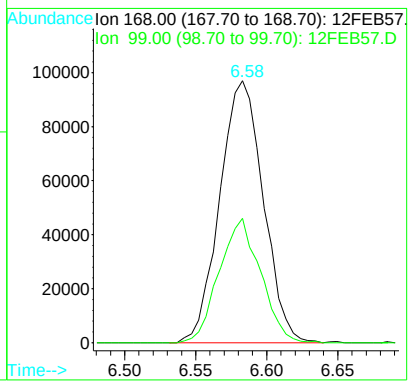


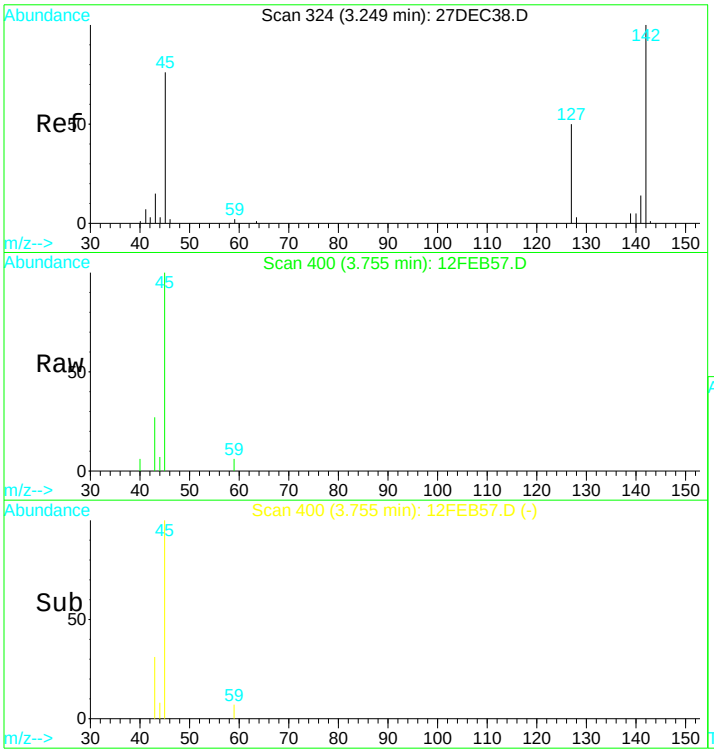



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:168 Resp: 206955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.1 | 32.8 | 60.8 |

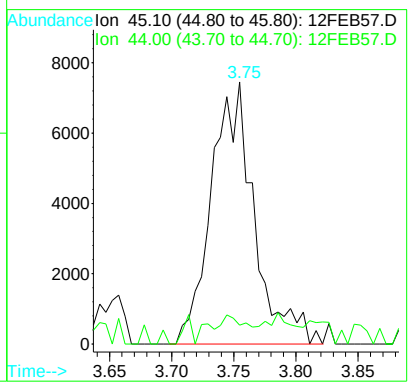


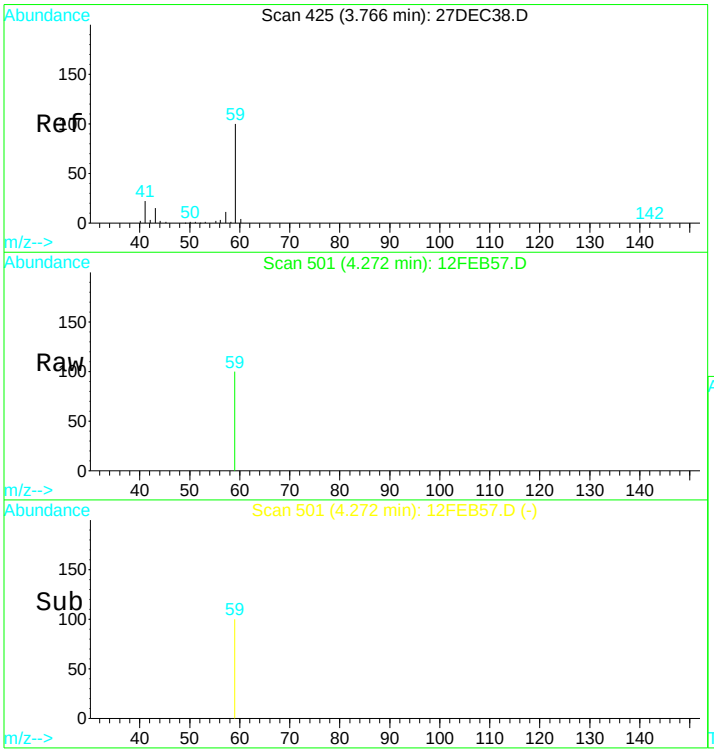




#6
isopropyl alcohol
Concen: 34.66 ug/L
RT: 3.75 min Scan# 400
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 45 Resp: 17862

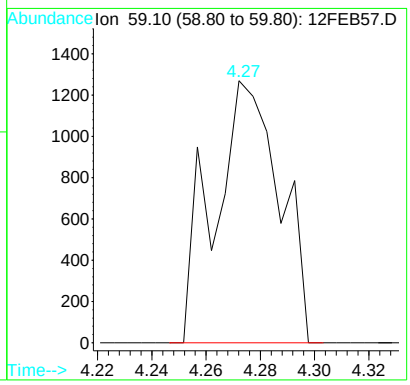
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 44 | 7.3 | 75.8 | 140.8# |

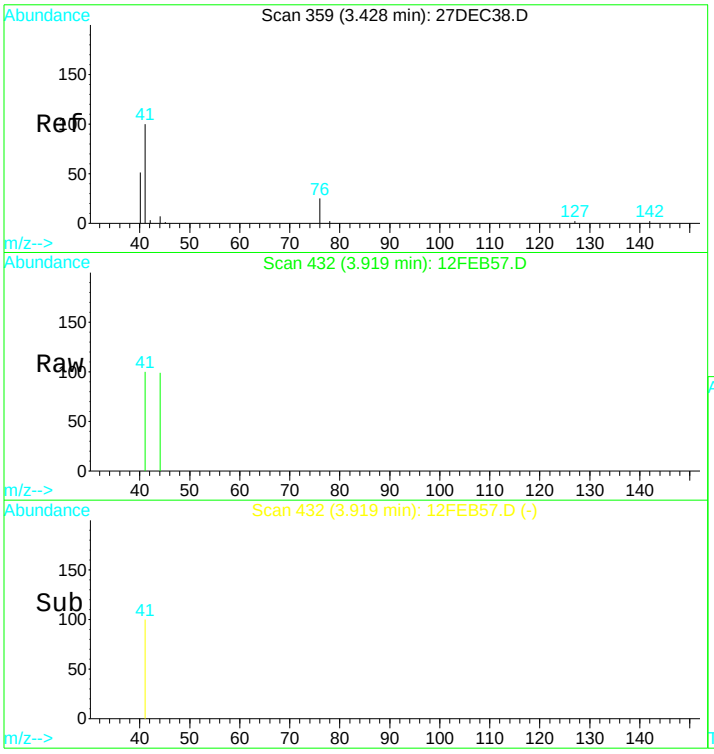





#9
tert-butyl alcohol (TBA)
Concen: 8.08 ug/L
RT: 4.27 min Scan# 501
Delta R.T. -0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 59 Resp: 2142

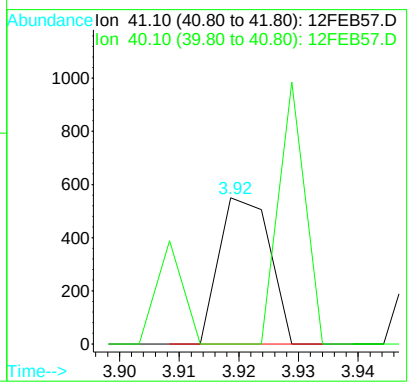


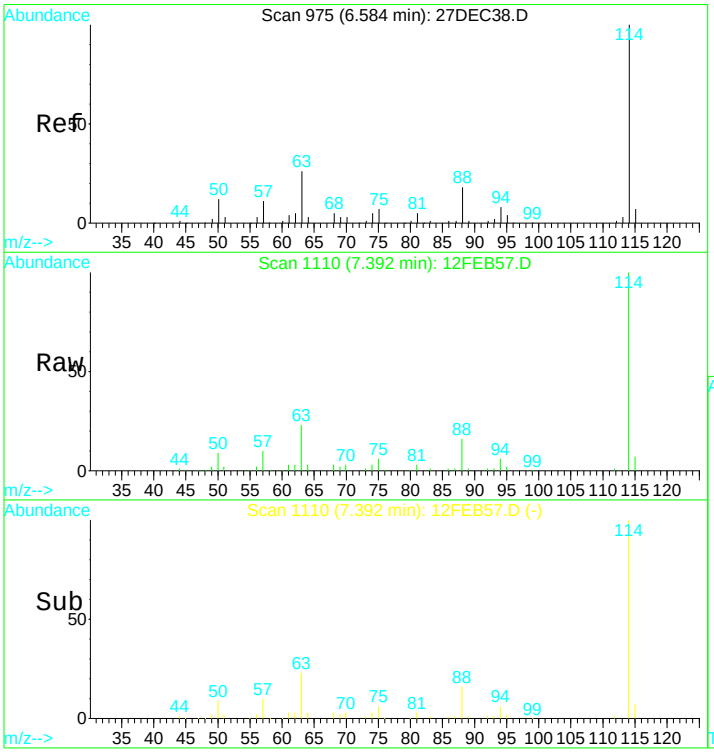




#10
acetonitrile
Concen: Below Cal
RT: 3.92 min Scan# 432
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion: 41 Resp: 324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 40 | 93.5 | 11.2 | 20.8# |

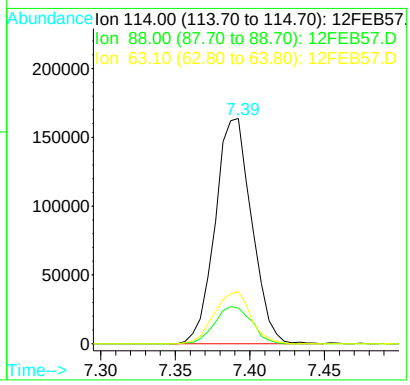


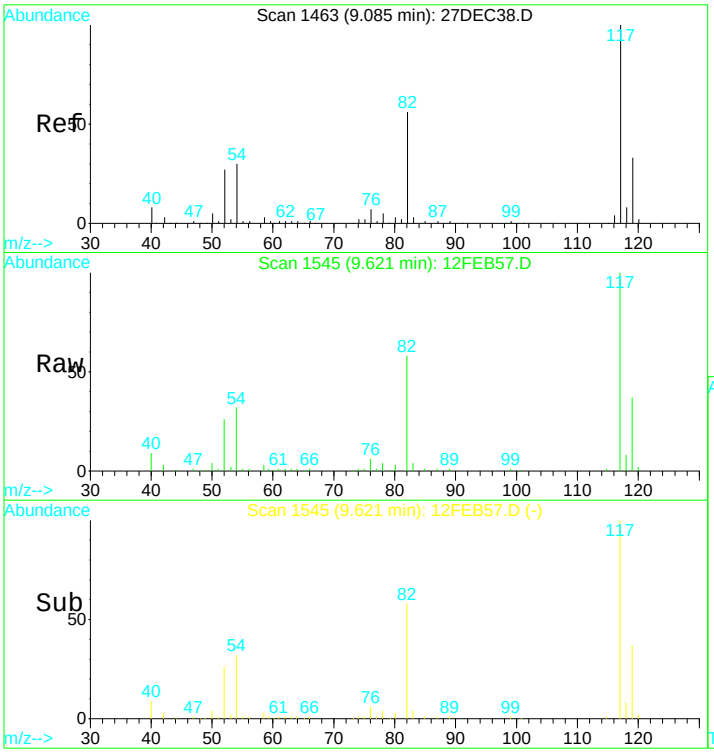



#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.01 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:114 Resp: 279710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.8 | 11.3 | 21.1 |
| 63 | 23.2 | 16.1 | 29.9 |

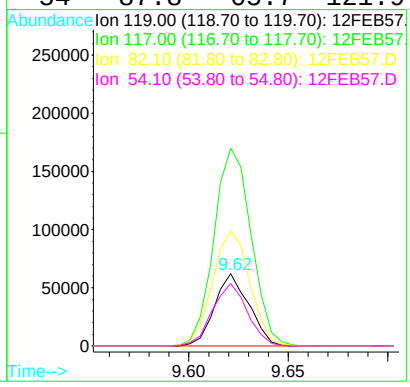



#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 12FEB57.D
Acq: 13 Feb 2017 2:41 am

Tgt Ion:119 Resp: 74525

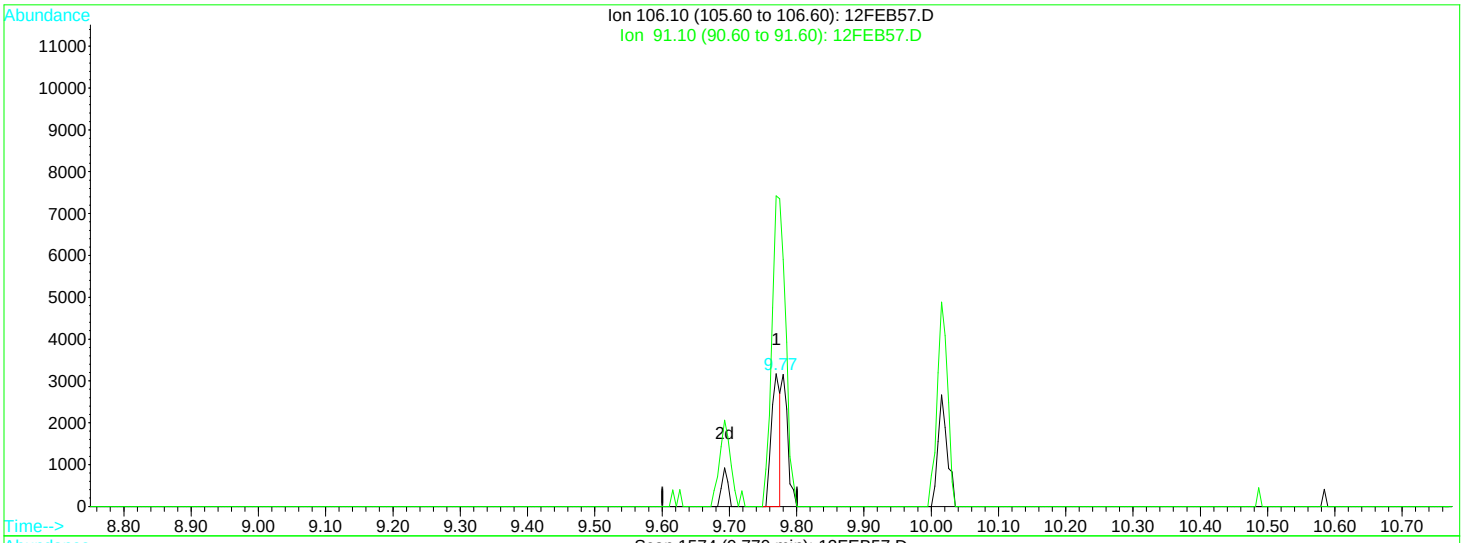
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 296.5 | 218.6 | 406.0 |
| 82 | 172.8 | 128.7 | 238.9 |
| 54 | 87.8 | 65.7 | 121.9 |

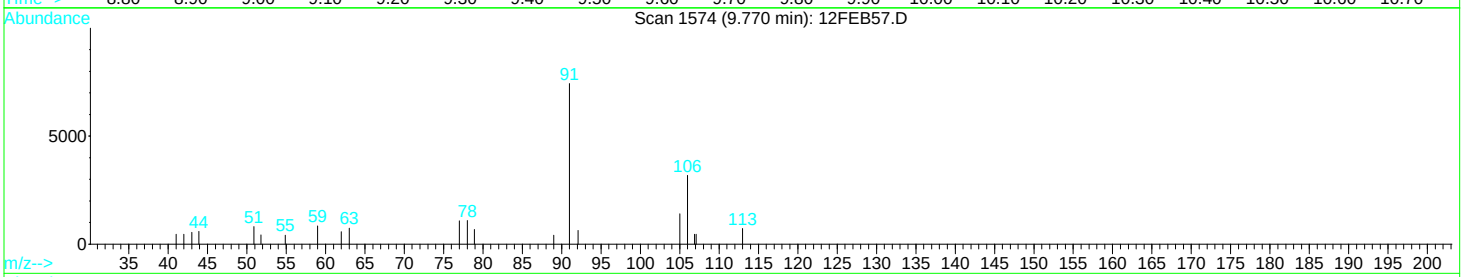


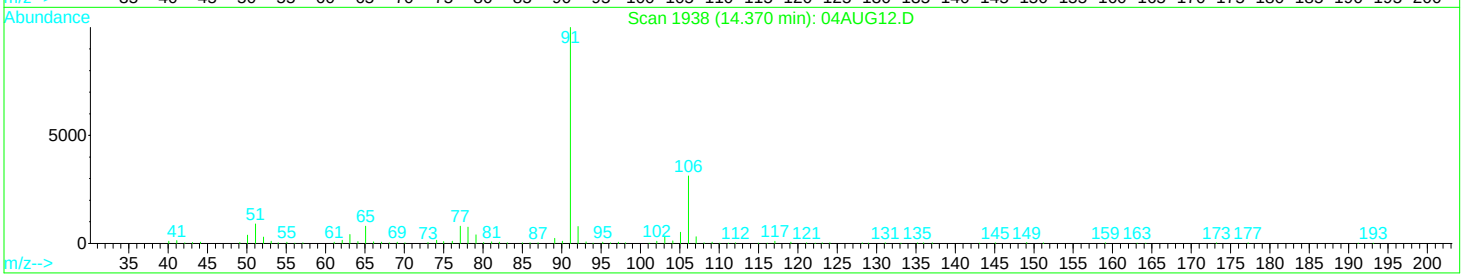
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB57.D Vial: 57
Acq On : 13 Feb 2017 2:41 am Operator: MGC
Sample : 1703480-04 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:14 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Multiple Level Calibration




TIC: 12FEB57.D

(42) Ethylbenzene (C)

9.77min 0.23ug/L

response 2900

| Ion | Exp% | Act% |
|---|---|---|
| 106.10 | 100 | 100 |
| 91.10 | 282.70 | 302.03 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB53.D Vial: 53
Acq On : 14 Feb 2017 2:38 am Operator: MGC
Sample : 1703480-04RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:00 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 207320 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 271560 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65048 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 64431 | 10.50 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 105.00% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 299783 | 9.70 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.00% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 86870 | 9.68 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 96.80% | | | | | | |

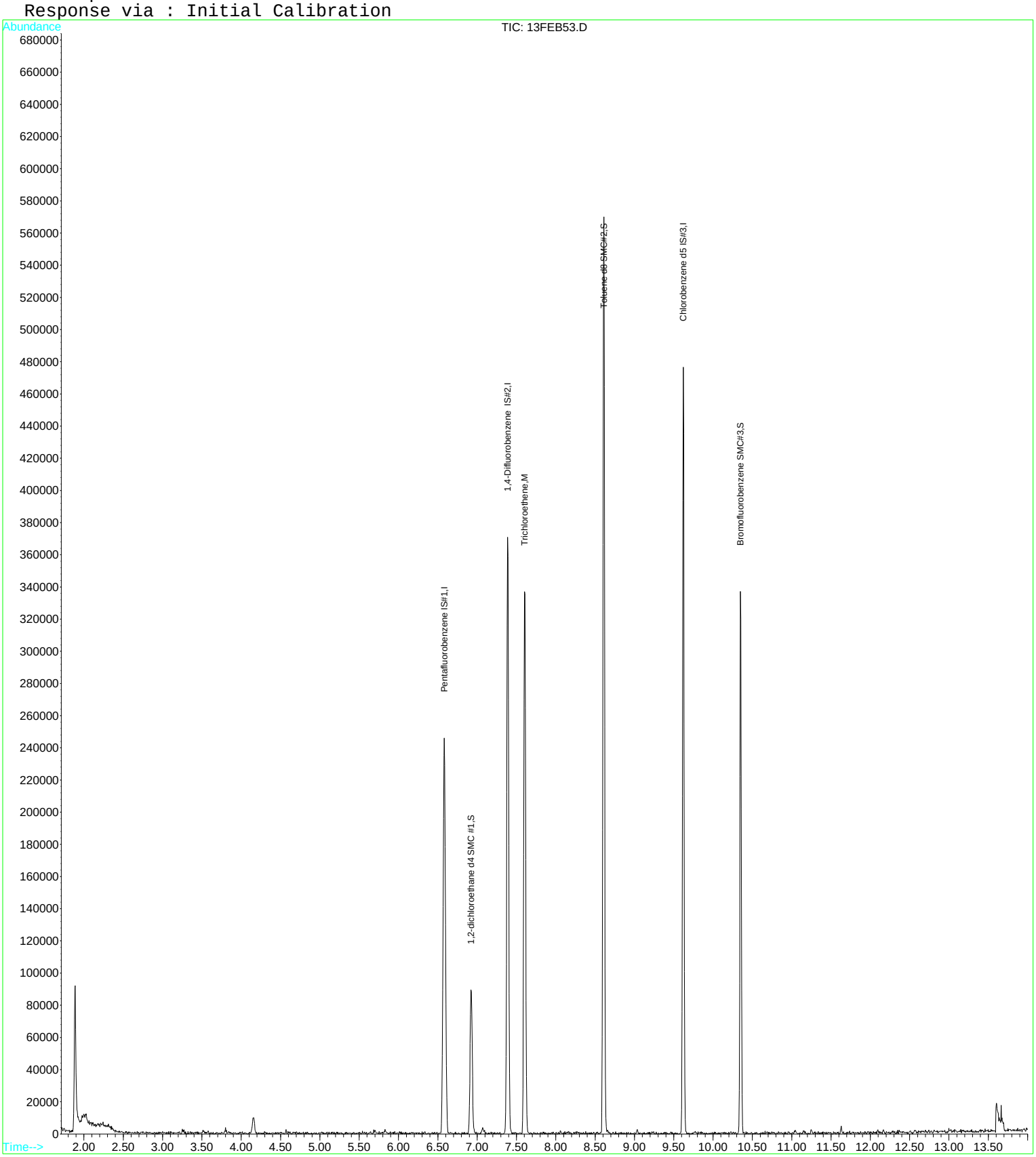
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 25) Trichloroethene | 7.60 | 130 | 98804 | 11.18 | ug/L | 97 |

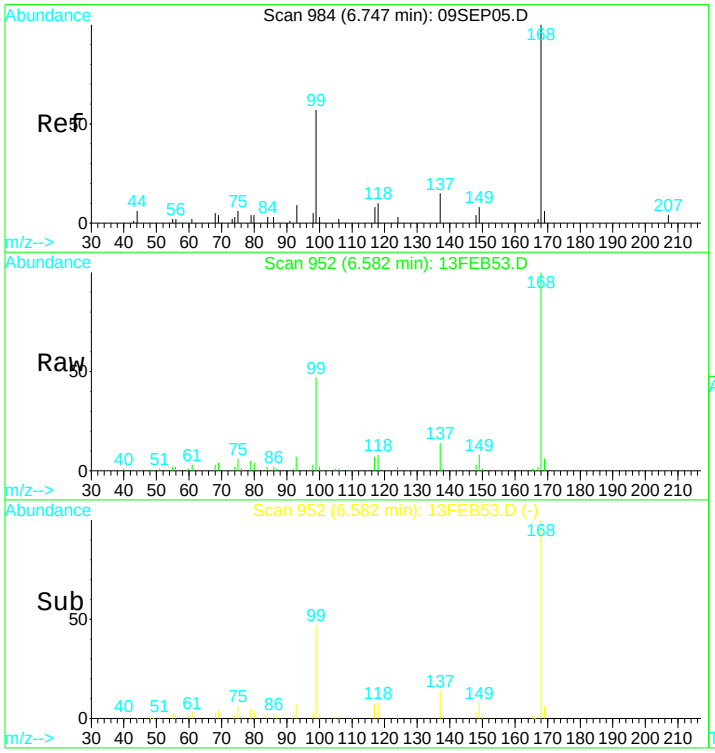
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB53.D Vial: 53
Acq On : 14 Feb 2017 2:38 am Operator: MGC
Sample : 1703480-04RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:00 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

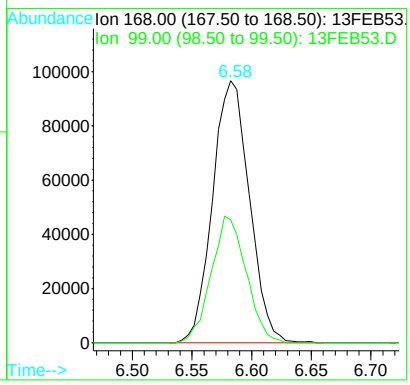


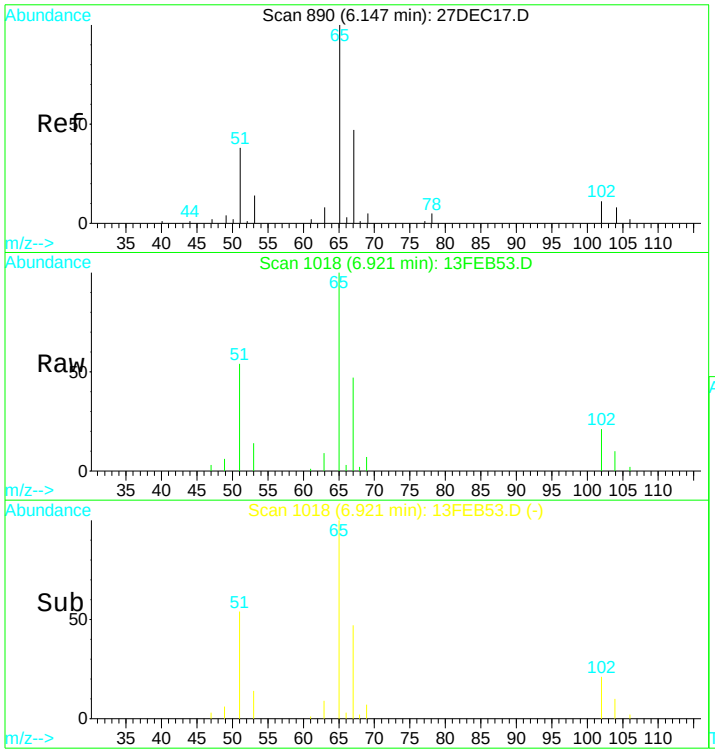



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB53.D
Acq: 14 Feb 2017 2:38 am

Tgt Ion:168 Resp: 207320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.8 | 305.1 | 566.7# |

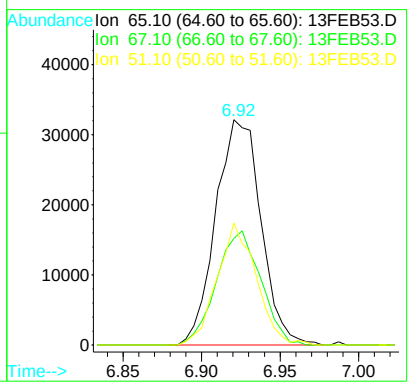


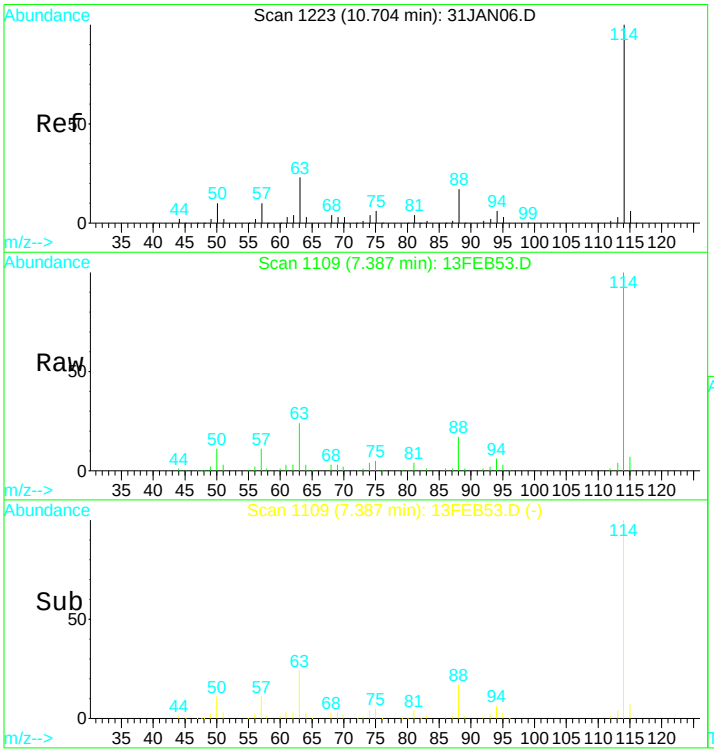




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB53.D
Acq: 14 Feb 2017 2:38 am

Tgt Ion: 65 Resp: 64431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.7 | 38.4 | 71.4 |
| 51 | 46.9 | 1006.3 | 1868.8# |

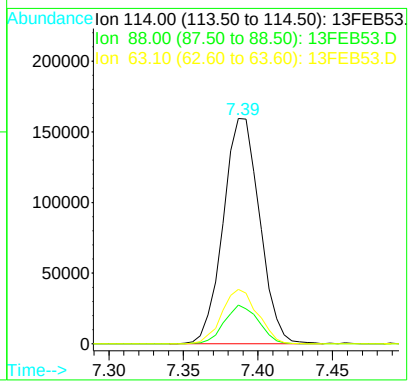


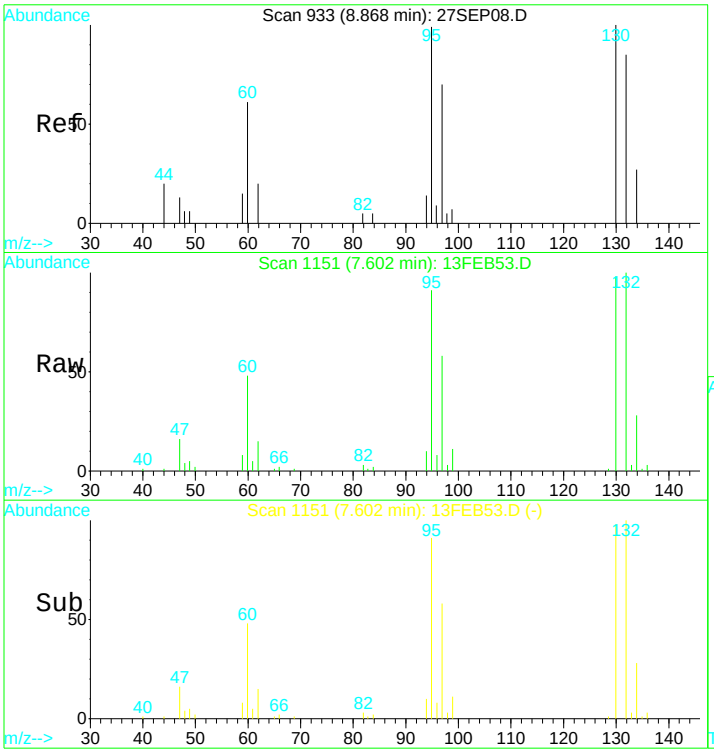



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB53.D
Acq: 14 Feb 2017 2:38 am

Tgt Ion:114 Resp: 271560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.2 | 12.0 | 22.2 |
| 63 | 23.7 | 16.9 | 31.5 |

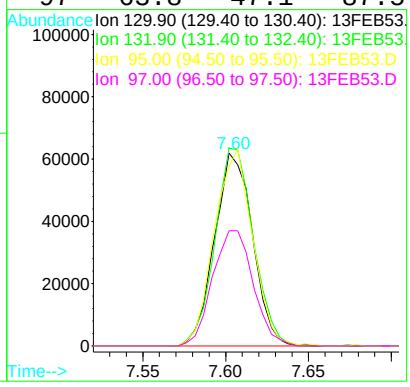


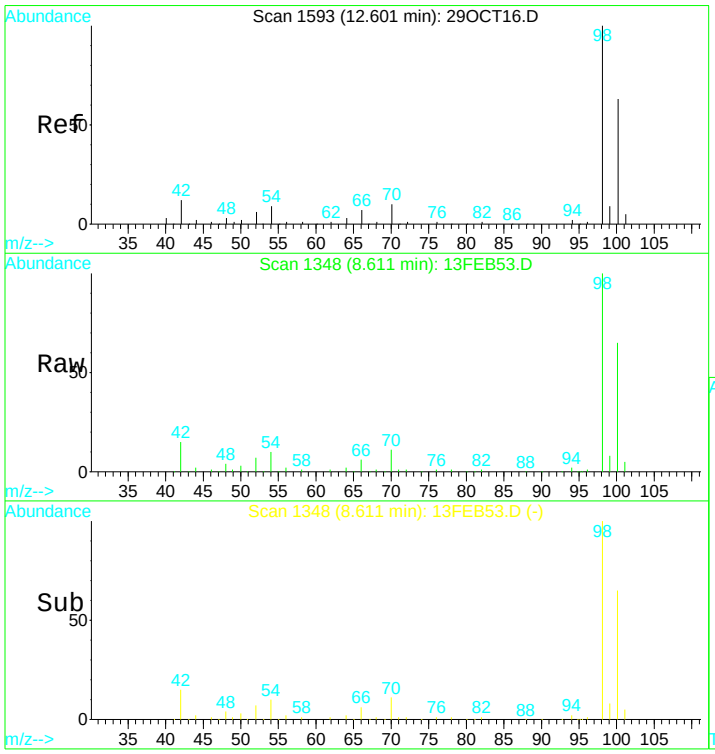




#25
Trichloroethene
Concen: 11.18 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB53.D
Acq: 14 Feb 2017 2:38 am

Tgt Ion:130 Resp: 98804

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 103.4 | 74.3 | 137.9 |
| 95 | 102.6 | 70.8 | 131.6 |
| 97 | 63.8 | 47.1 | 87.5 |

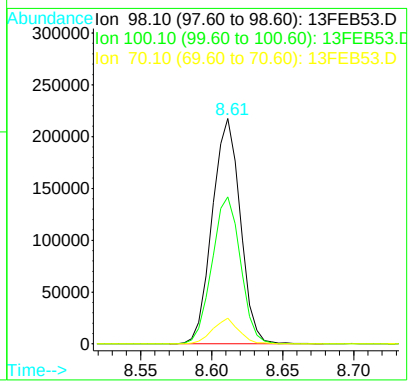


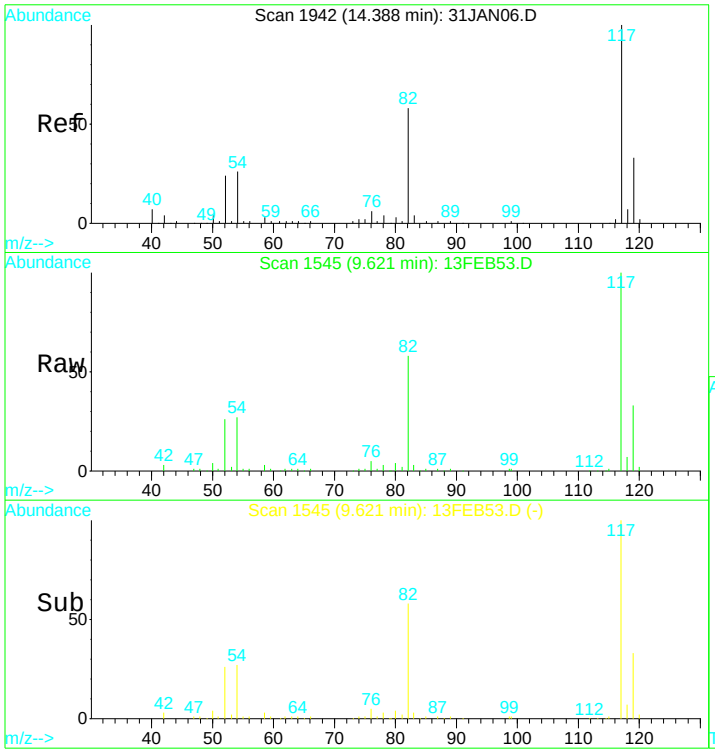



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB53.D
Acq: 14 Feb 2017 2:38 am

Tgt Ion: 98 Resp: 299783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.0 | 47.0 | 87.4 |
| 70 | 10.6 | 7.3 | 13.7 |

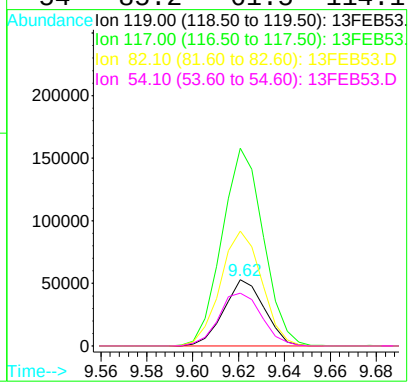


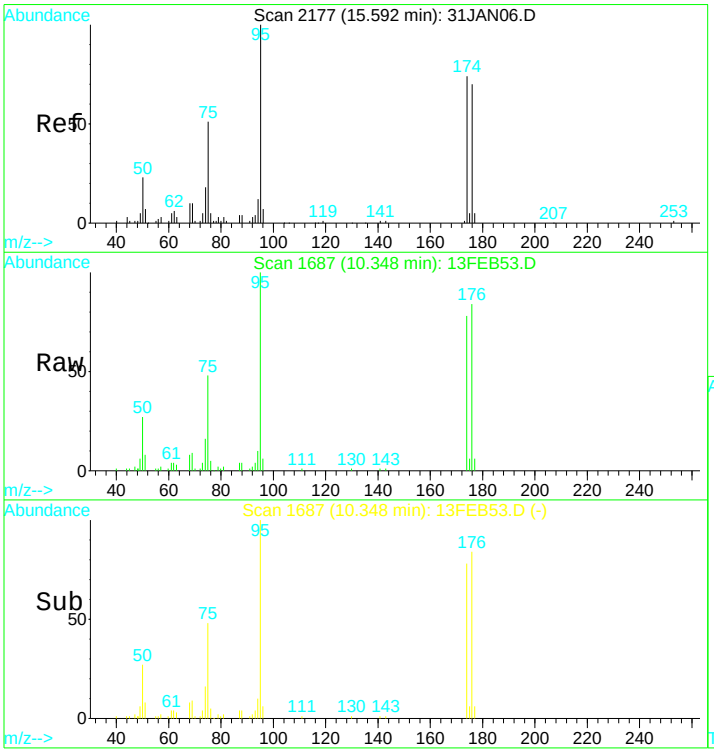




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB53.D
Acq: 14 Feb 2017 2:38 am

Tgt Ion:119 Resp: 65048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 305.1 | 220.4 | 409.4 |
| 82 | 177.1 | 123.9 | 230.1 |
| 54 | 85.2 | 61.5 | 114.1 |

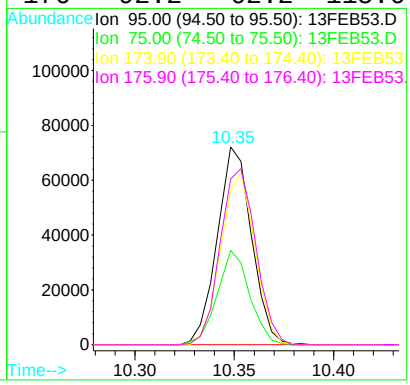





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB53.D
Acq: 14 Feb 2017 2:38 am

Tgt Ion: 95 Resp: 86870

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 45.1 | 32.6 | 60.5 |
| 174 | 86.5 | 60.9 | 113.1 |
| 176 | 92.2 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB58.D Vial: 58
Acq On : 13 Feb 2017 3:04 am Operator: MGC
Sample : 1703480-05 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:18 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 209491 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 278442 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 72044 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 72225 | 11.65 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 116.50% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 310054 | 9.78 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.80% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 101725 | 10.24 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.40% | | | |

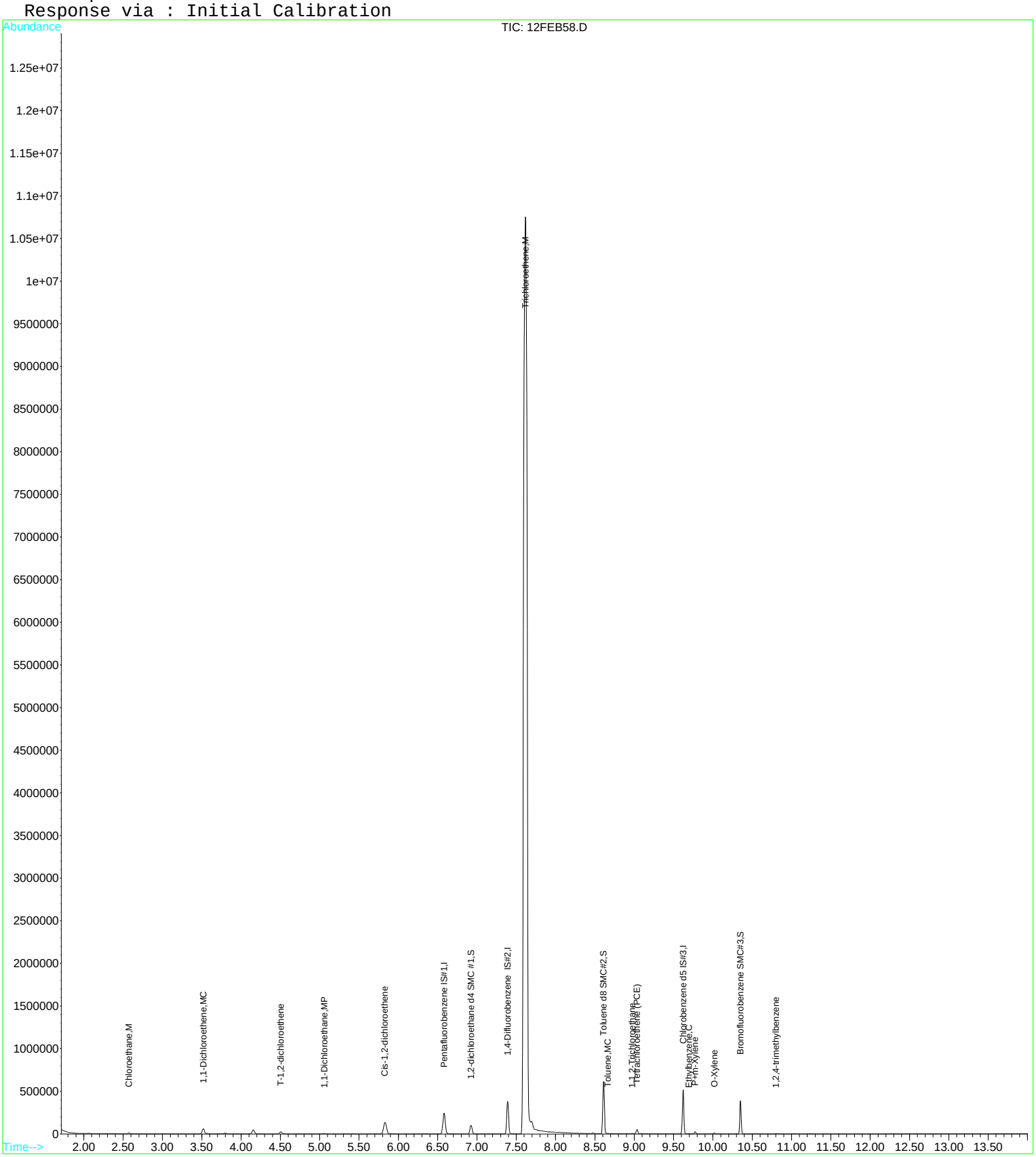
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 6) Chloroethane | 2.57 | 64 | 11096 | 1.36 | ug/L | 96 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 48335 | 2.97 | ug/L | 96 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 10601 | 1.12 | ug/L | 94 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 3289 | 0.15 | ug/L | 92 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 76011 | 7.77 | ug/L | 91 |
| 25) Trichloroethene | 7.61 | 130 | 5170724 | 570.39 | ug/L | 96 |
| 32) Toluene | 8.66 | 92 | 2087 | 0.10 | ug/L # | 90 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 2128 | 0.50 | ug/L # | 40 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 12936 | 1.36 | ug/L | 98 |
| 42) Ethylbenzene | 9.69 | 106 | 1332 | 0.11 | ug/L | 95 |
| 43) P+m-Xylene | 9.77 | 106 | 6341 | 0.44 | ug/L | 74 |
| 44) O-Xylene | 10.02 | 106 | 2795 | 0.20 | ug/L # | 62 |
| 57) 1,2,4-trimethylbenzene | 10.80 | 105 | 2797 | 0.11 | ug/L | 98 |

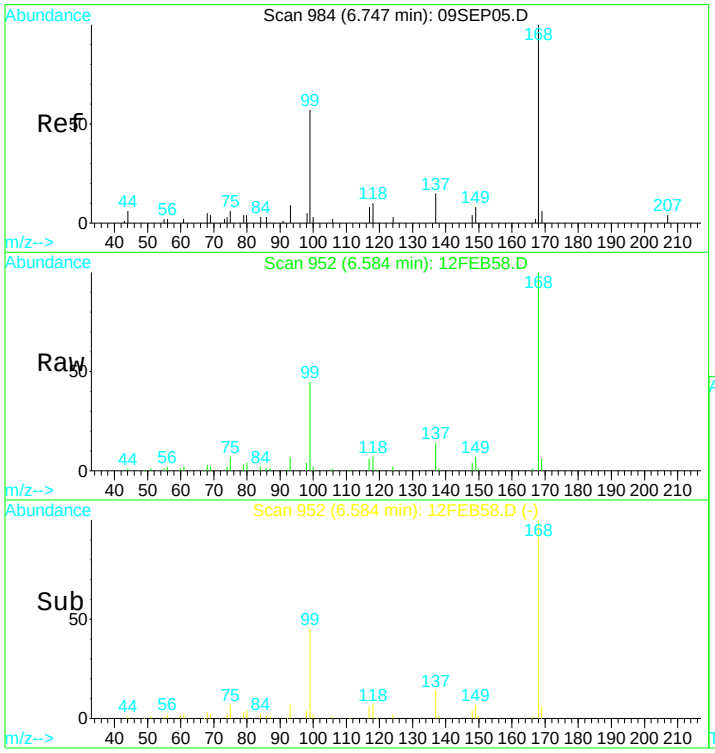
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB58.D Vial: 58
Acq On : 13 Feb 2017 3:04 am Operator: MGC
Sample : 1703480-05 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:18 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

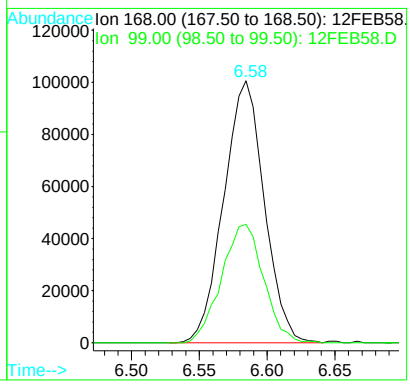


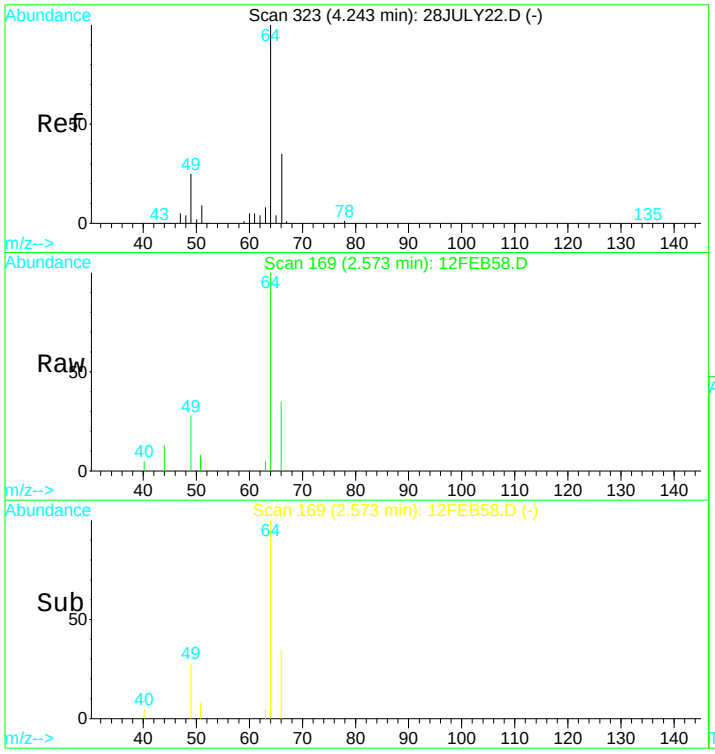



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:168 Resp: 209491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.9 | 305.1 | 566.7# |

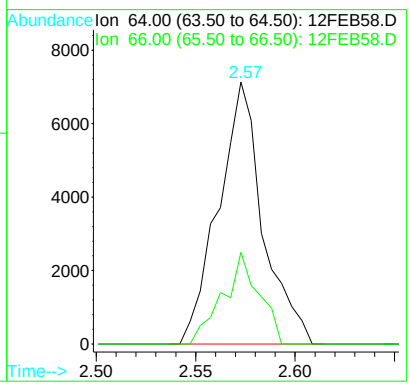


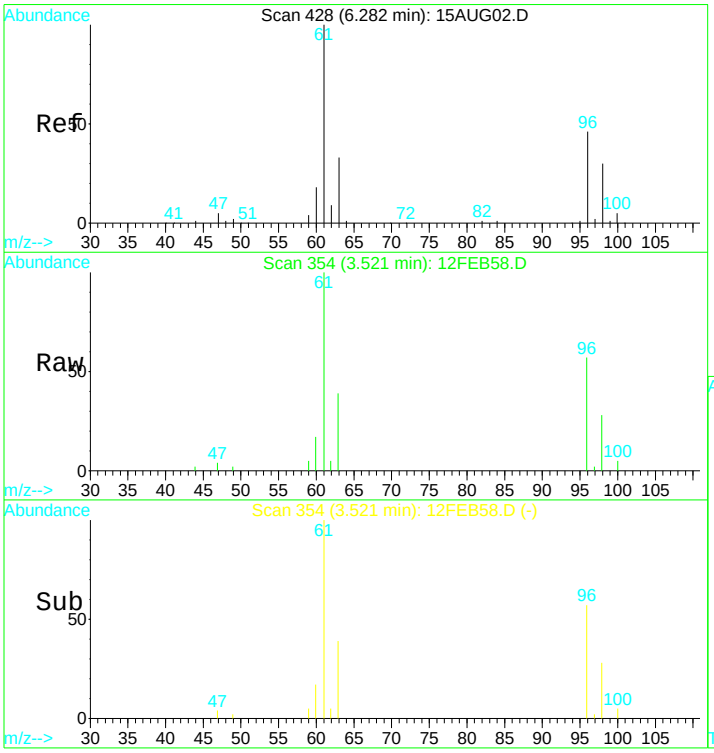




#6
Chloroethane
Concen: 1.36 ug/L
RT: 2.57 min Scan# 169
Delta R.T. 0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 64 Resp: 11096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 28.4 | 21.4 | 39.8 |

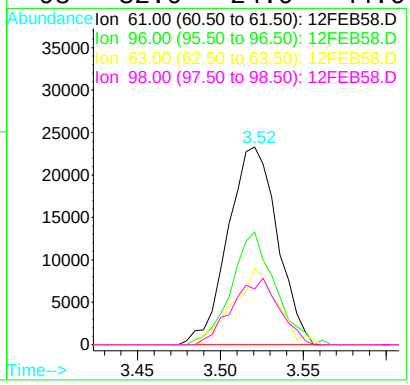


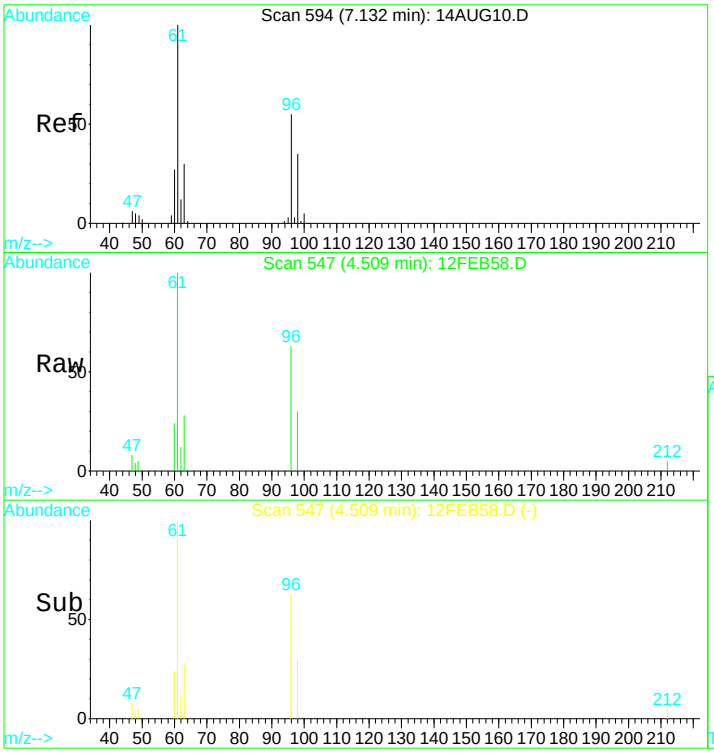



#9
1,1-Dichloroethene
Concen: 2.97 ug/L
RT: 3.52 min Scan# 354
Delta R.T. 0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 61 Resp: 48335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 50.1 | 36.6 | 68.0 |
| 63 | 34.4 | 22.0 | 40.8 |
| 98 | 32.0 | 24.0 | 44.6 |

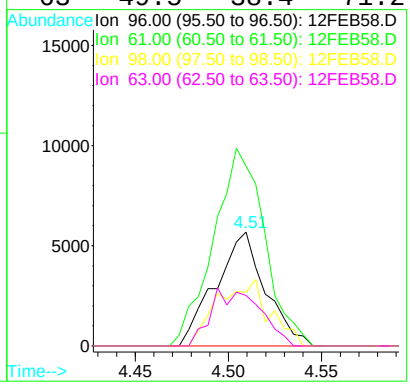


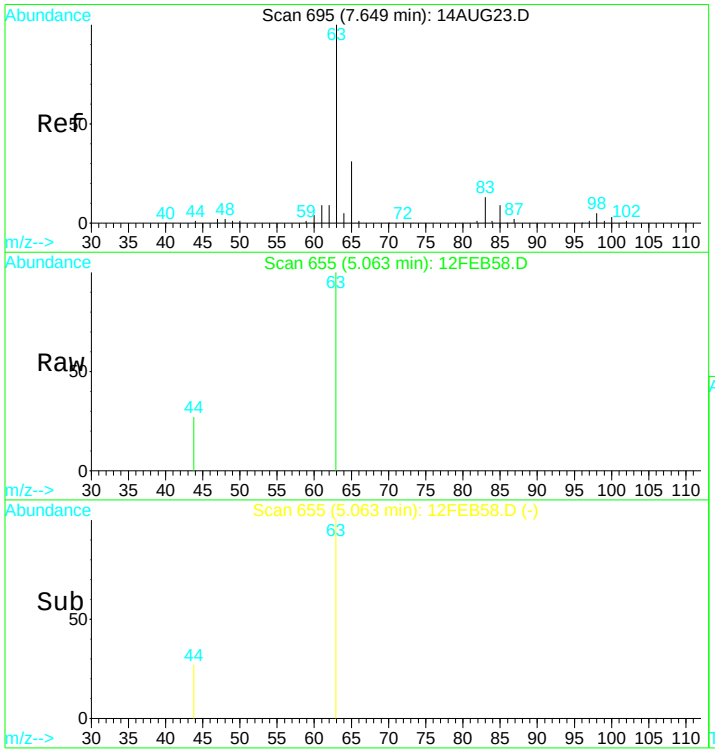




#12
T-1,2-dichloroethene
Concen: 1.12 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 96 Resp: 10601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 178.0 | 119.6 | 222.2 |
| 98 | 59.8 | 46.1 | 85.5 |
| 63 | 49.5 | 38.4 | 71.2 |

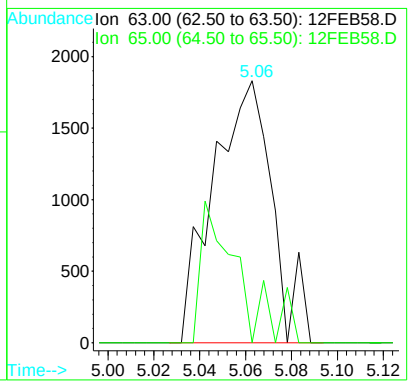


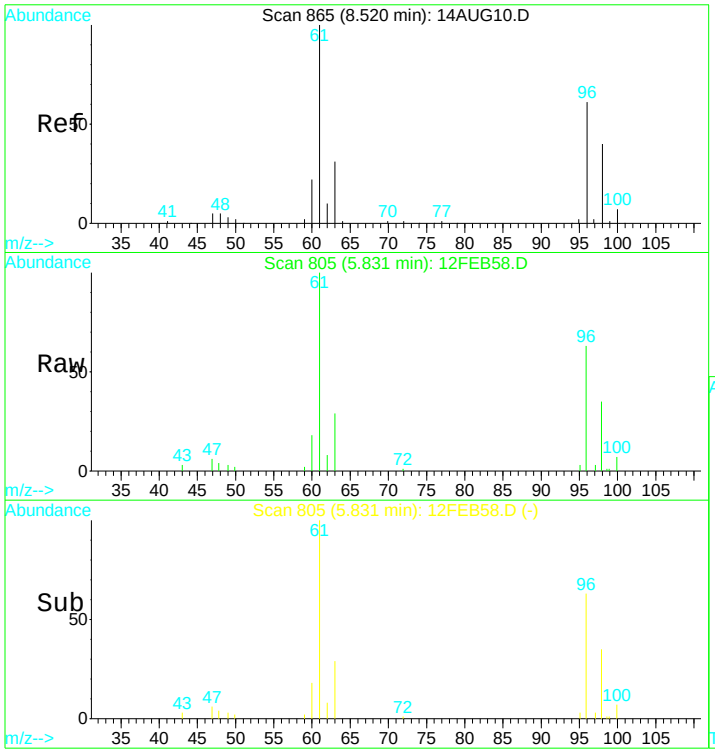



#13
1,1-Dichloroethane
Concen: 0.15 ug/L
RT: 5.06 min Scan# 655
Delta R.T. 0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 63 Resp: 3289

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 27.3 | 22.4 | 41.6 |

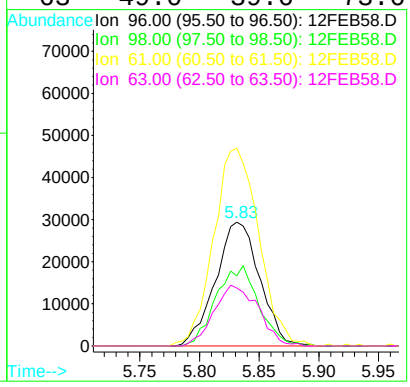


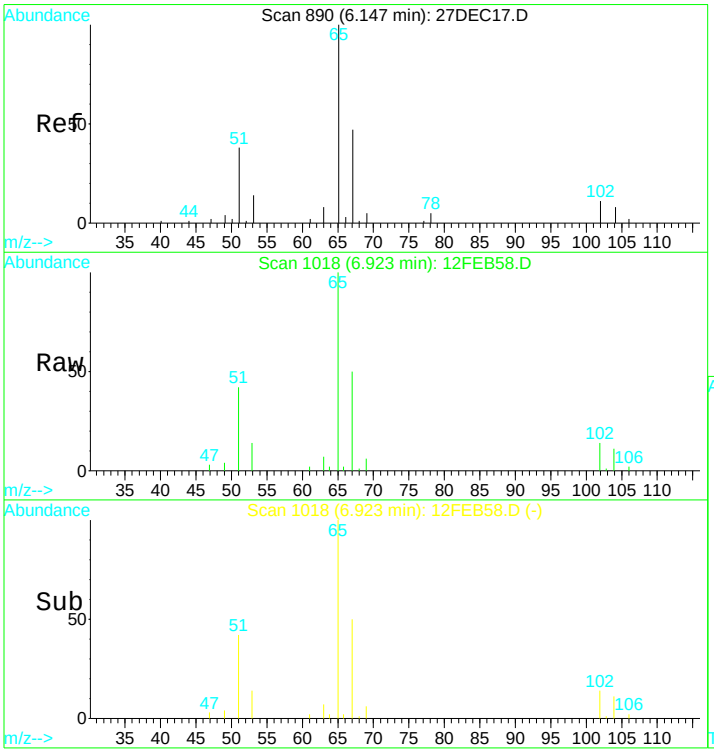




#15
Cis-1,2-dichloroethene
Concen: 7.77 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 96 Resp: 76011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 62.2 | 46.2 | 85.8 |
| 61 | 162.2 | 122.8 | 228.0 |
| 63 | 49.0 | 39.6 | 73.6 |

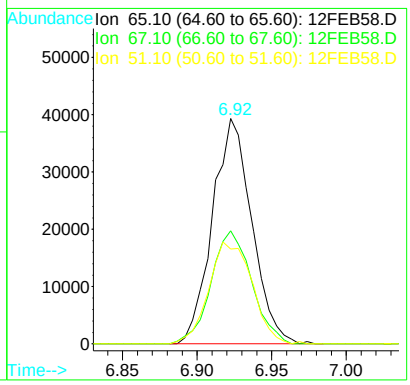


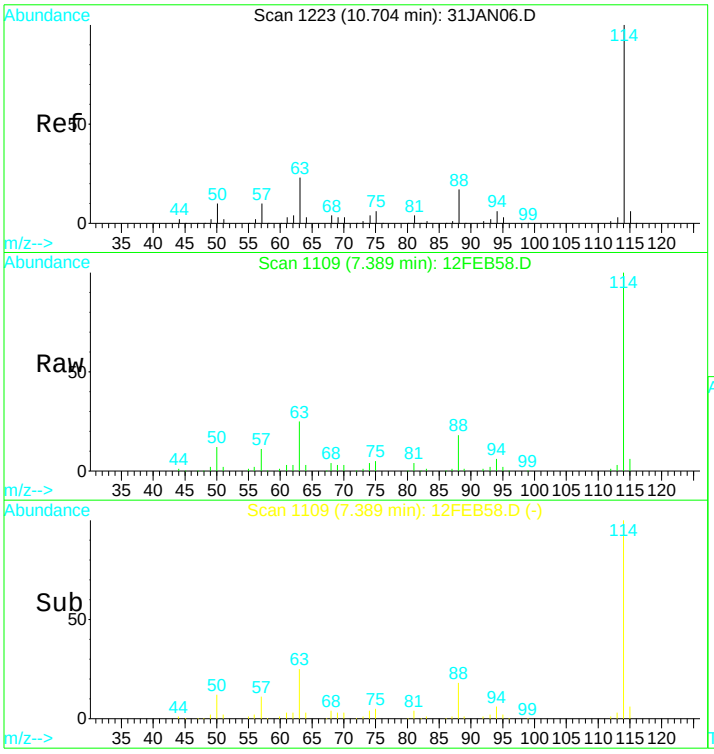



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 65 Resp: 72225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.8 | 38.4 | 71.4 |
| 51 | 49.6 | 1006.3 | 1868.8# |

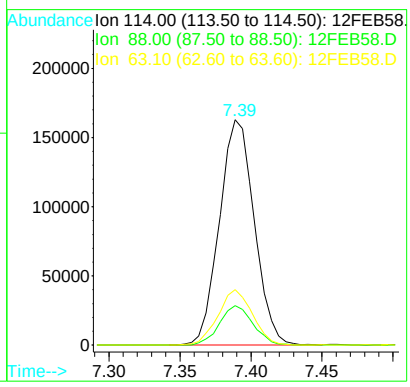


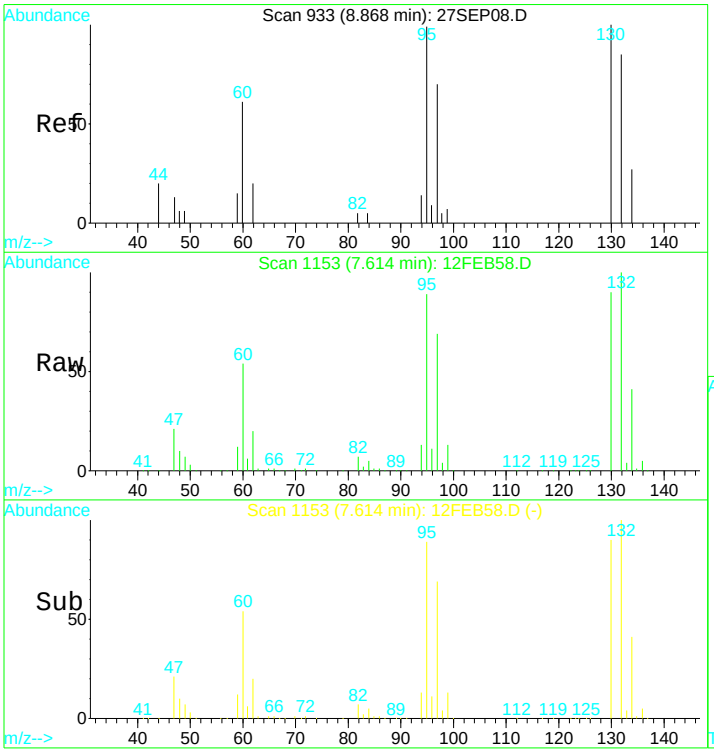




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:114 Resp: 278442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.8 | 12.0 | 22.2 |
| 63 | 24.2 | 16.9 | 31.5 |

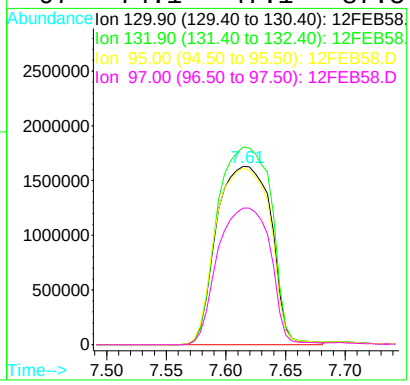


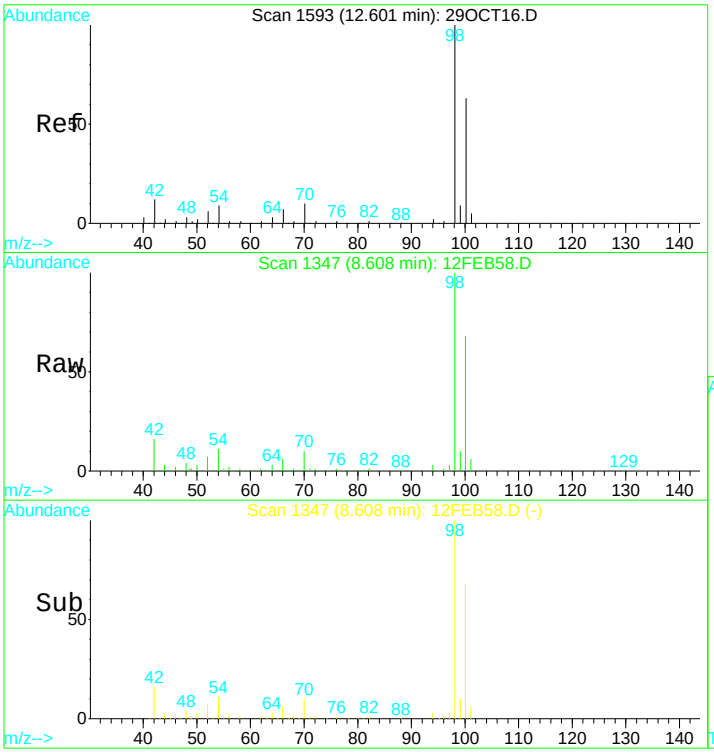



#25
Trichloroethene
Concen: 570.39 ug/L
RT: 7.61 min Scan# 1153
Delta R.T. 0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:130 Resp: 5170724

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 110.0 | 74.3 | 137.9 |
| 95 | 98.7 | 70.8 | 131.6 |
| 97 | 74.1 | 47.1 | 87.5 |

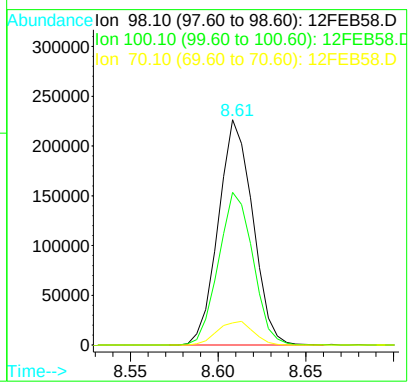


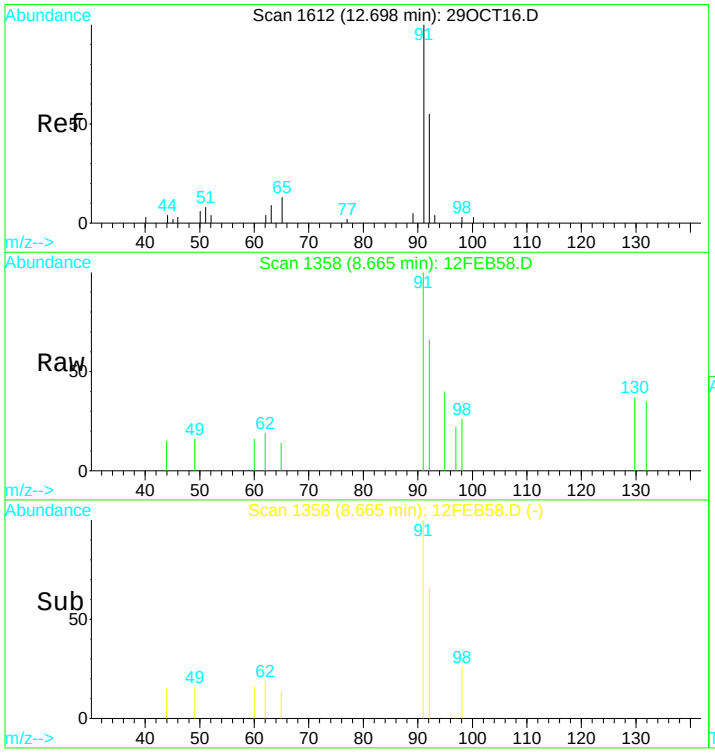




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 98 Resp: 310054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.8 | 47.0 | 87.4 |
| 70 | 11.0 | 7.3 | 13.7 |

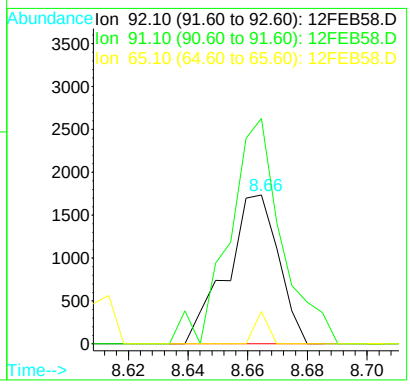


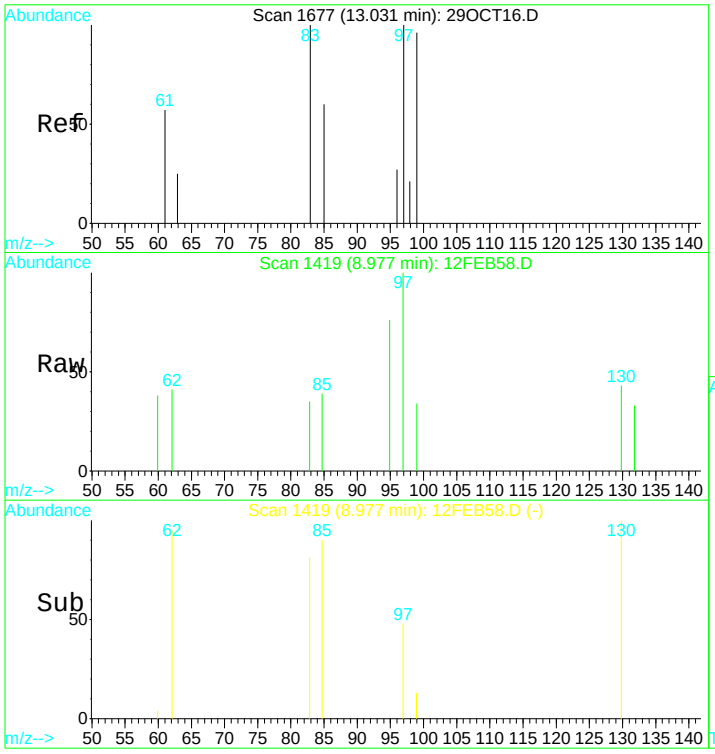



#32
Toluene
Concen: 0.10 ug/L
RT: 8.66 min Scan# 1358
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 92 Resp: 2087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 154.4 | 102.5 | 190.3 |
| 65 | 5.6 | 15.0 | 27.8# |

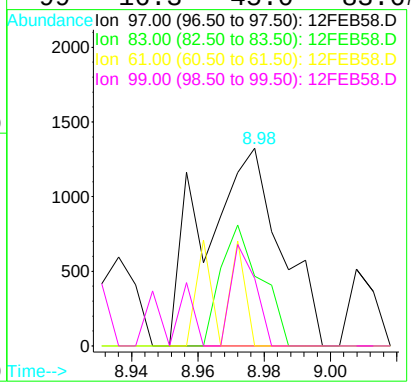


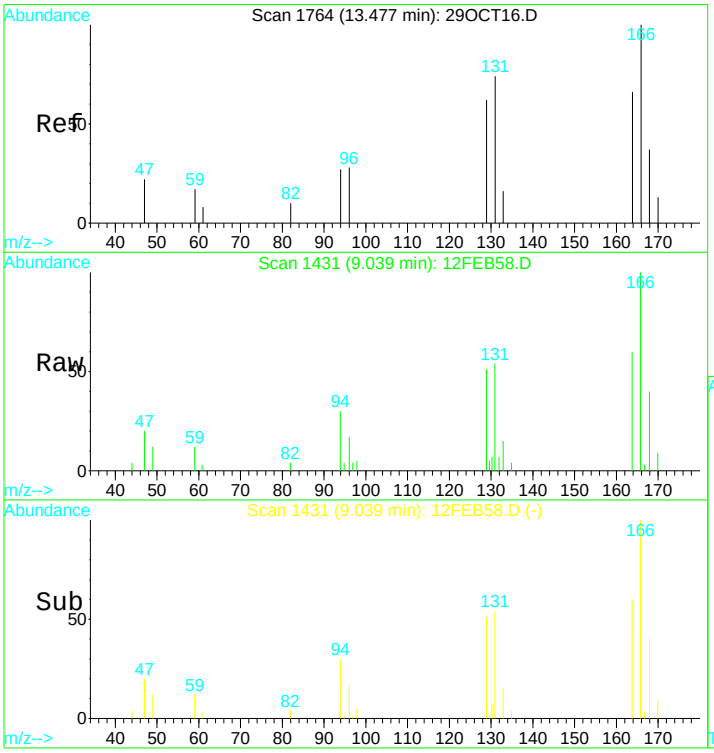




#34
1,1,2-Trichloroethane
Concen: 0.50 ug/L
RT: 8.98 min Scan# 1419
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 97 Resp: 2128

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 31.8 | 61.6 | 114.4# |
| 61 | 20.4 | 47.0 | 87.4# |
| 99 | 16.3 | 45.0 | 83.6# |

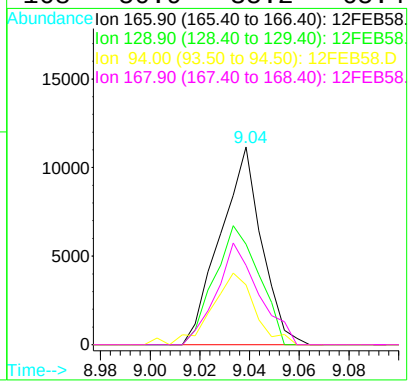


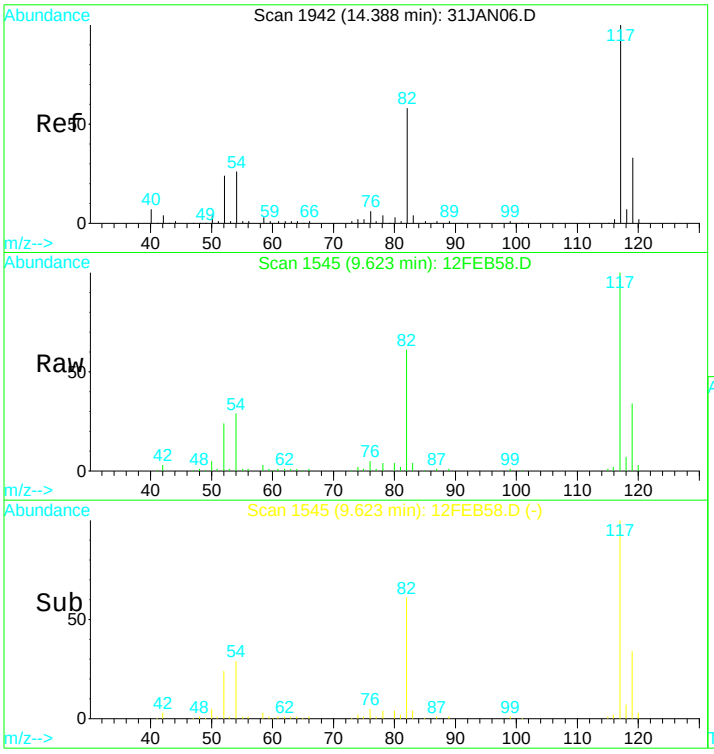



#35
Tetrachloroethene (PCE)
Concen: 1.36 ug/L
RT: 9.04 min Scan# 1431
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:166 Resp: 12936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 129 | 64.5 | 45.5 | 84.5 |
| 94 | 38.0 | 23.7 | 43.9 |
| 168 | 50.9 | 35.2 | 65.4 |

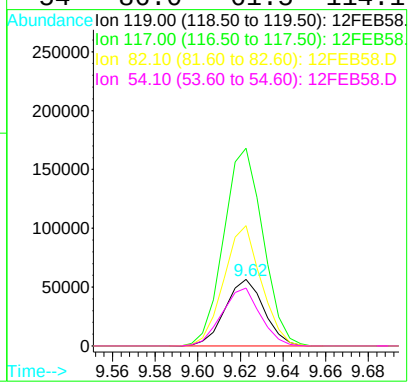


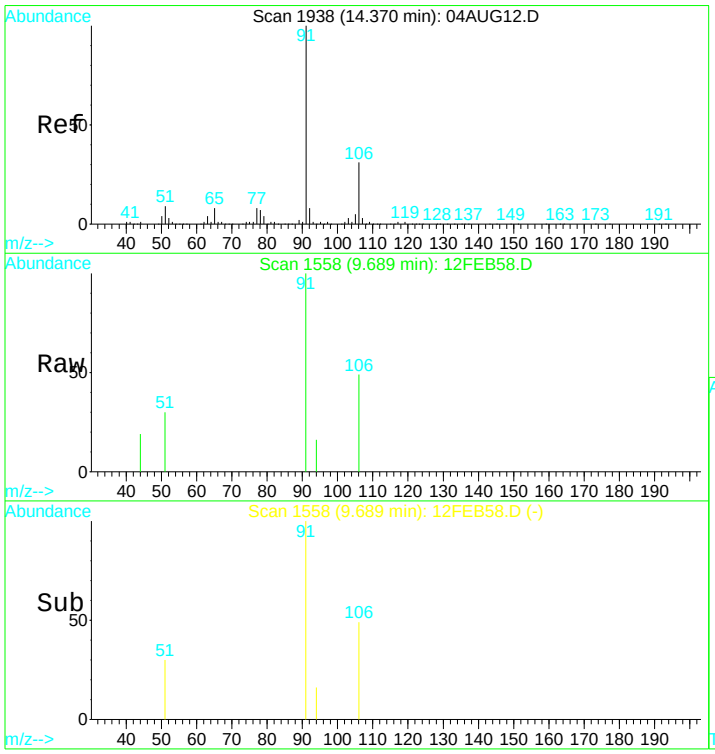




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:119 Resp: 72044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 299.8 | 220.4 | 409.4 |
| 82 | 173.8 | 123.9 | 230.1 |
| 54 | 86.0 | 61.5 | 114.1 |

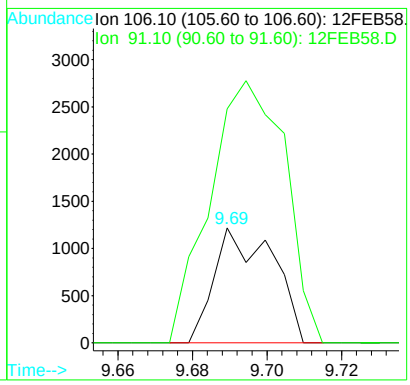


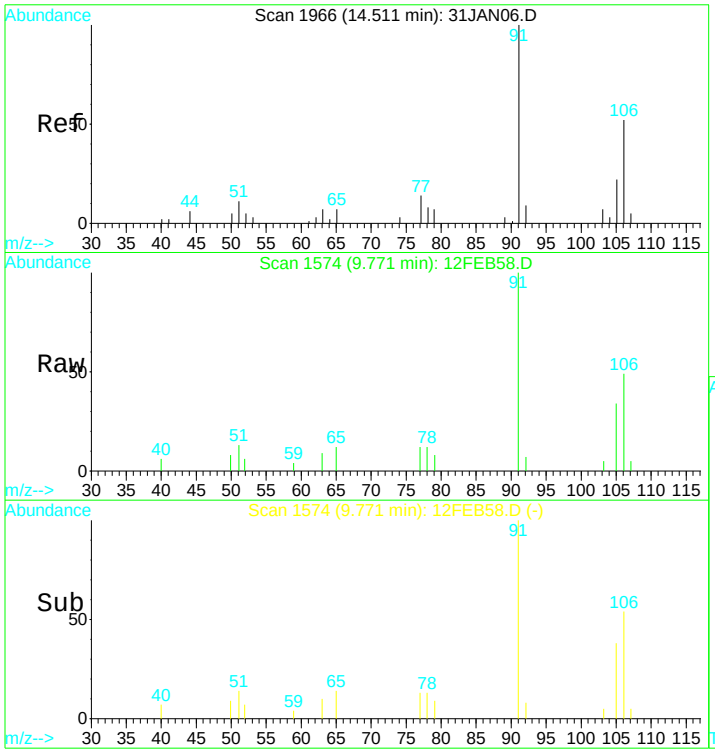



#42
Ethylbenzene
Concen: 0.11 ug/L
RT: 9.69 min Scan# 1558
Delta R.T. -0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:106 Resp: 1332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 292.7 | 197.9 | 367.5 |

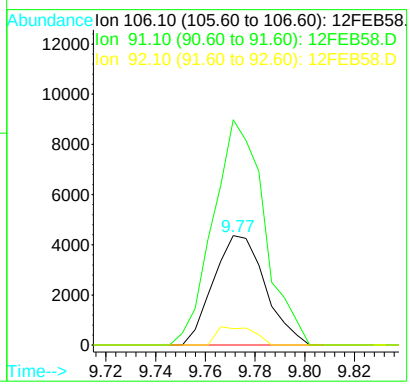


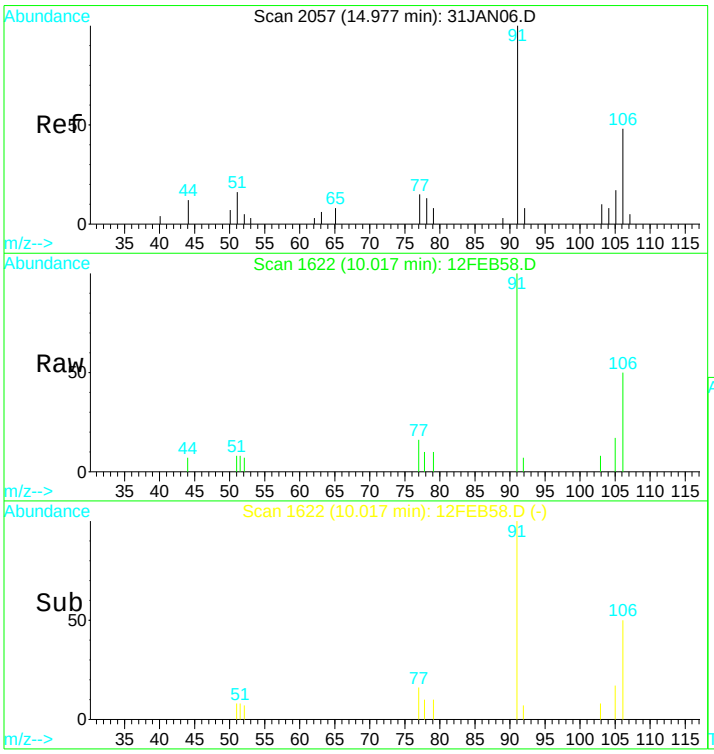




#43
P+m-Xylene
Concen: 0.44 ug/L
RT: 9.77 min Scan# 1574
Delta R.T. -0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:106 Resp: 6341

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 203.4 | 116.4 | 216.2 |
| 92 | 12.0 | 10.8 | 20.0 |

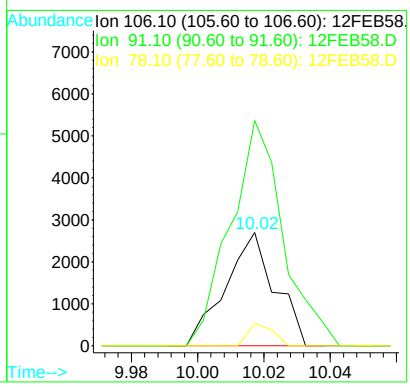


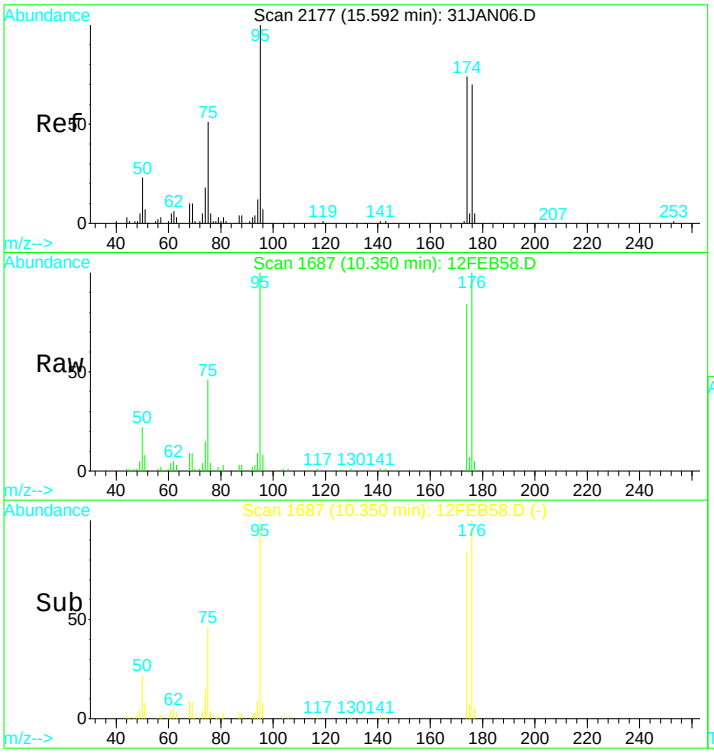



#44
O-Xylene
Concen: 0.20 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:106 Resp: 2795

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 212.6 | 124.3 | 230.9 |
| 78 | 14.9 | 51.7 | 95.9# |

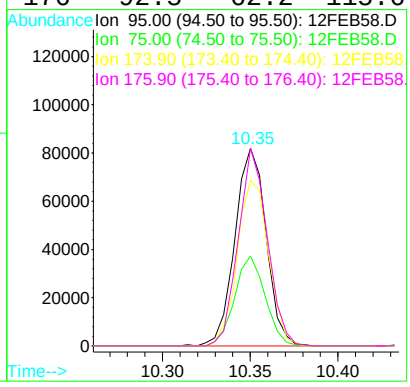


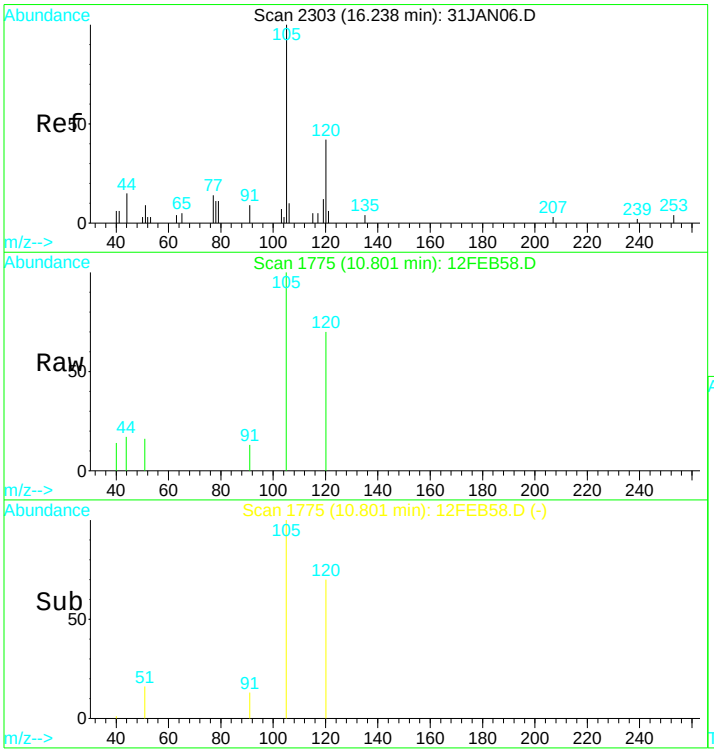




#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 95 Resp: 101725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 44.4 | 32.6 | 60.5 |
| 174 | 84.2 | 60.9 | 113.1 |
| 176 | 92.5 | 62.2 | 115.6 |

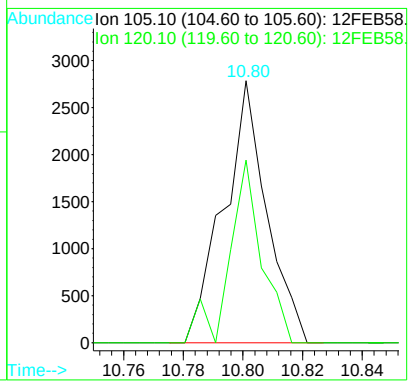





#57
1,2,4-trimethylbenzene
Concen: 0.11 ug/L
RT: 10.80 min Scan# 1775
Delta R.T. -0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:105 Resp: 2797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 51.9 | 37.5 | 69.7 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB58.D Vial: 58
Acq On : 13 Feb 2017 3:04 am Operator: MGC
Sample : 1703480-05 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:20 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 209491 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 278442 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 72044 | 10.00 | ug/L | 0.00 |

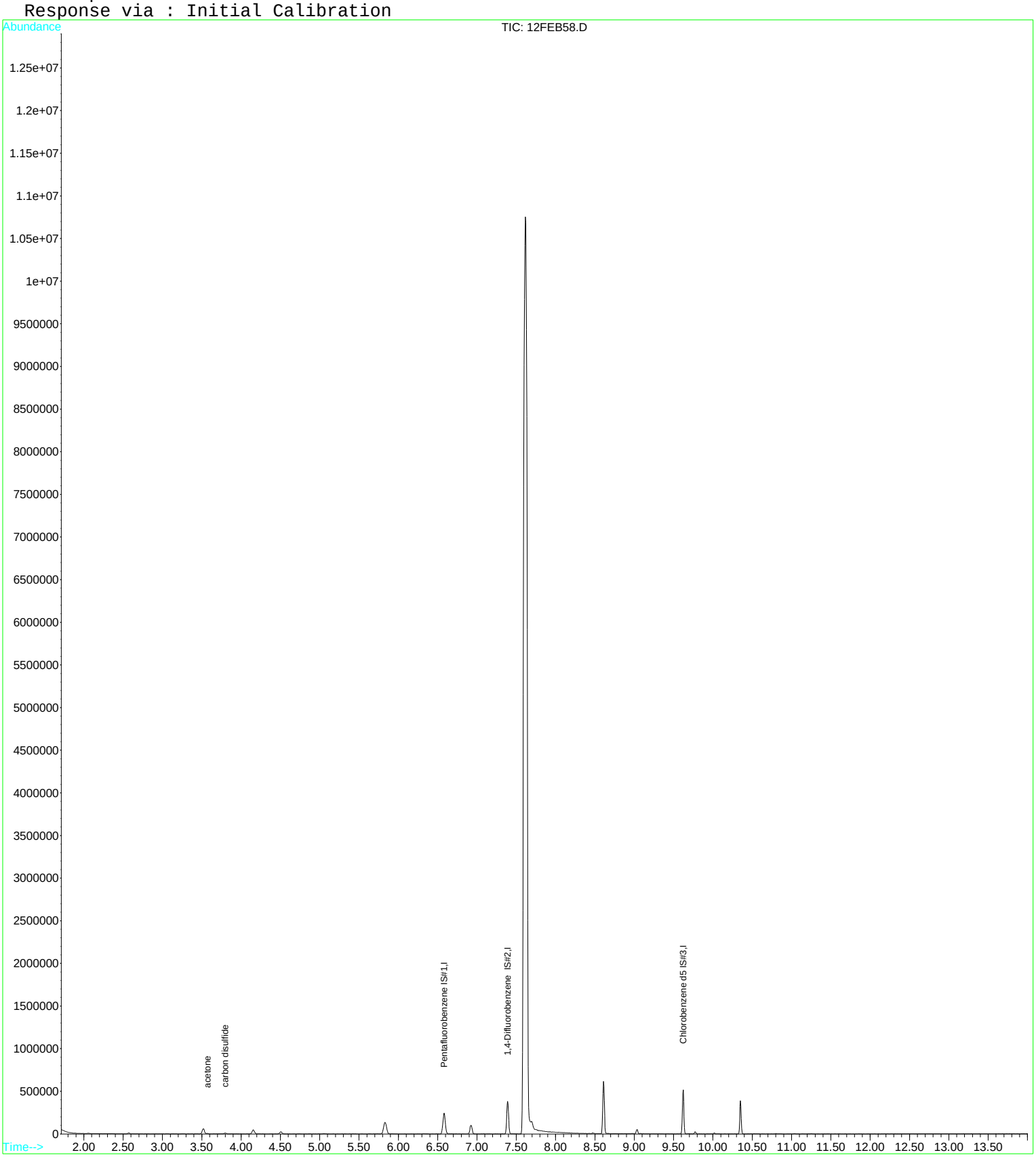
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 8) acetone | 3.58 | 43 | 9643 | 10.27 | ug/L | 98 |
| 15) carbon disulfide | 3.80 | 76 | 16998 | 0.60 | ug/L | 94 |

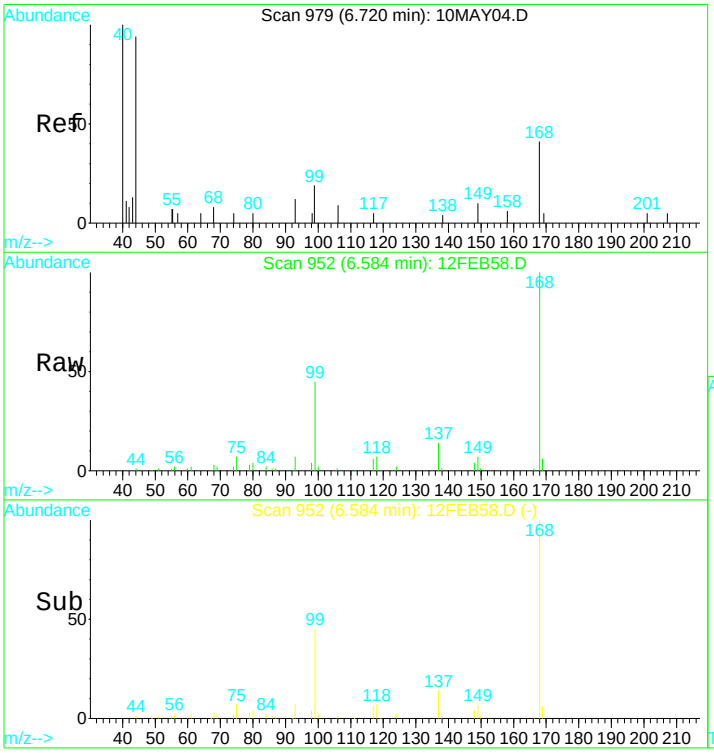
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB58.D Vial: 58
Acq On : 13 Feb 2017 3:04 am Operator: MGC
Sample : 1703480-05 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:20 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

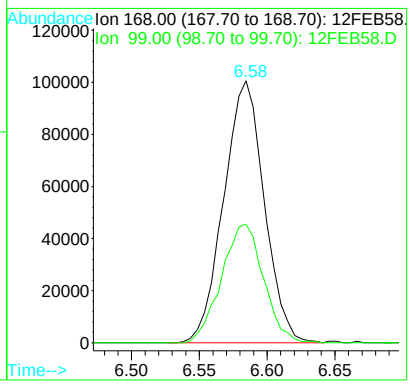


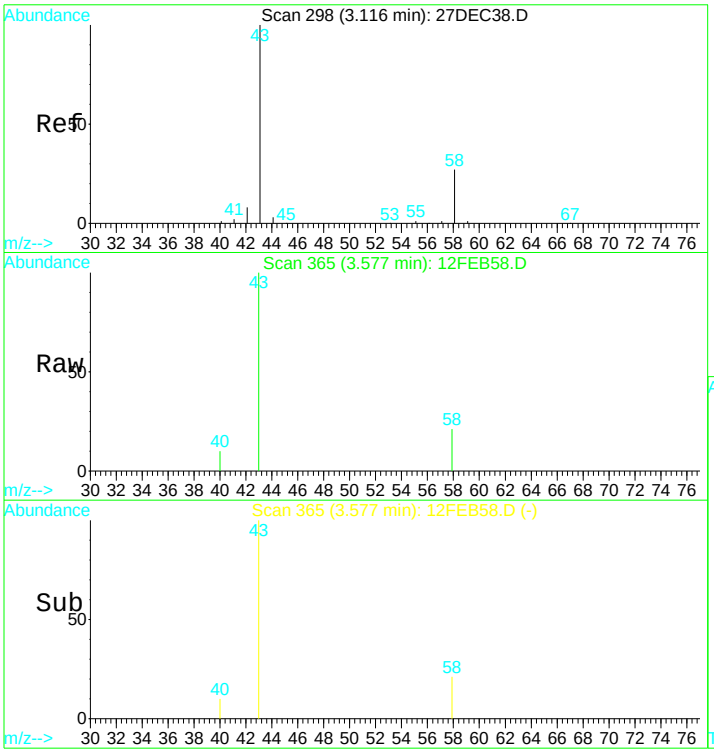



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:168 Resp: 209491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.9 | 32.8 | 60.8 |

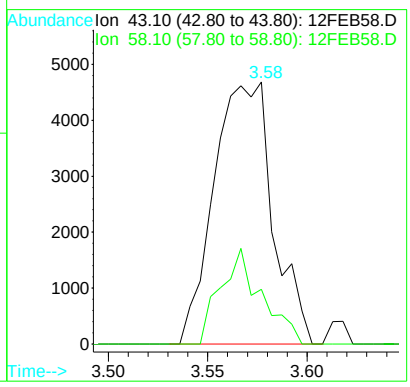


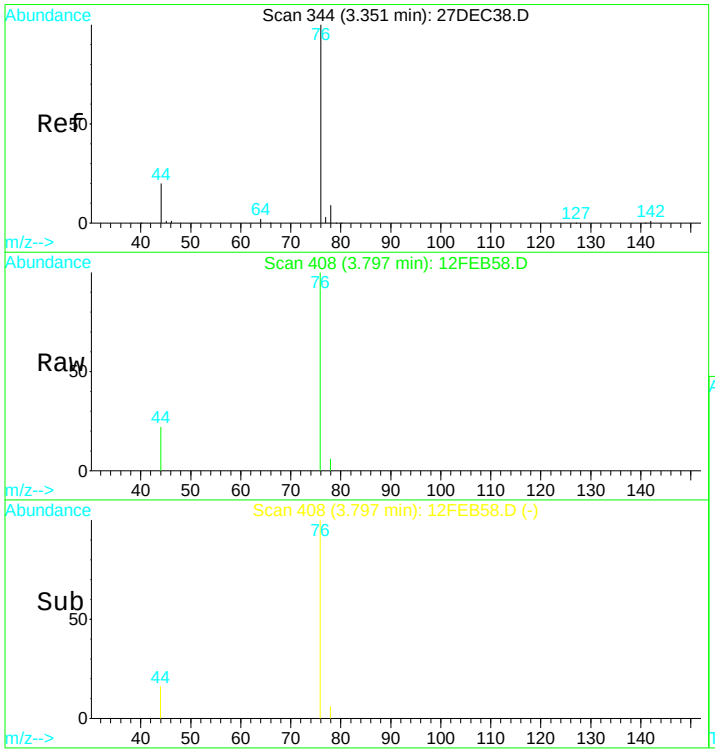




#8
acetone
Concen: 10.27 ug/L
RT: 3.58 min Scan# 365
Delta R.T. 0.01 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 43 Resp: 9643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 25.4 | 18.5 | 34.3 |

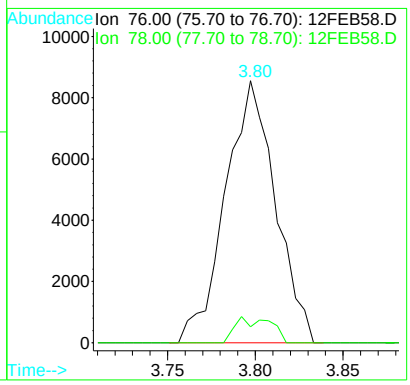


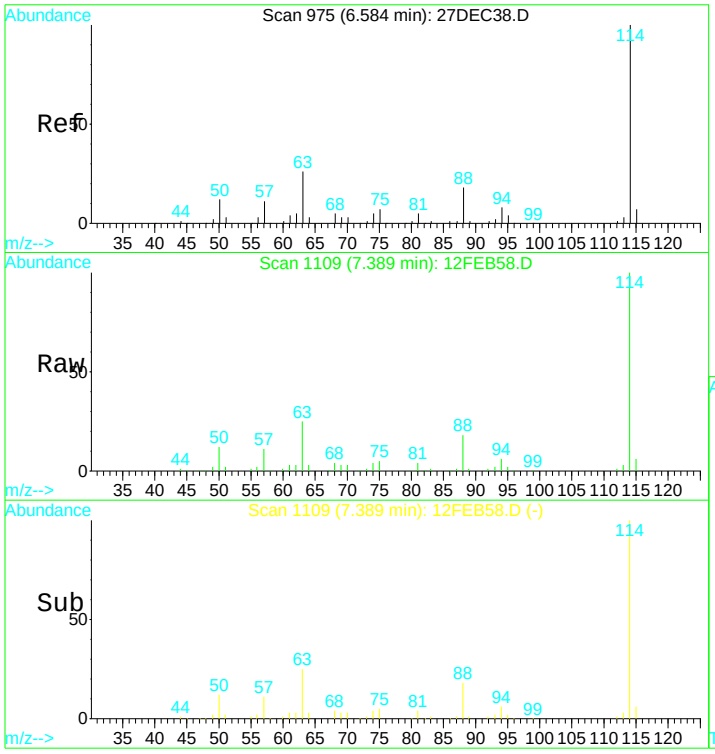



#15
carbon disulfide
Concen: 0.60 ug/L
RT: 3.80 min Scan# 408
Delta R.T. 0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion: 76 Resp: 16998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 7.0 | 6.5 | 12.1 |

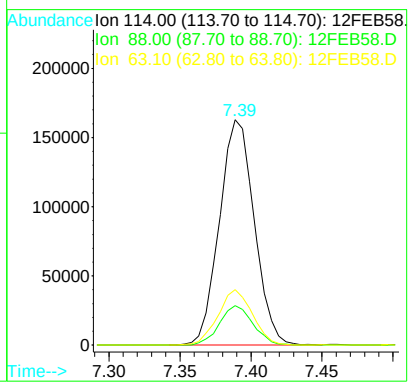


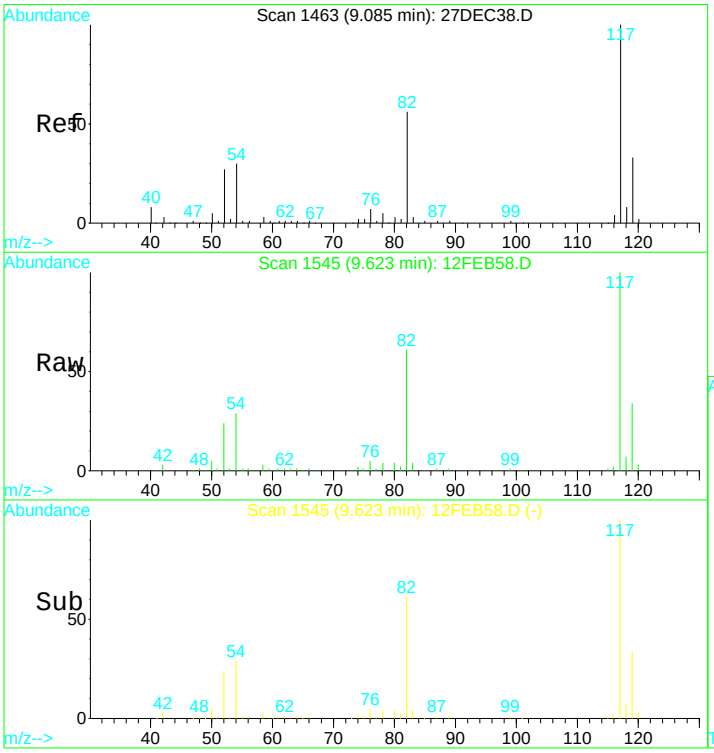




#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:114 Resp: 278442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.8 | 11.3 | 21.1 |
| 63 | 24.2 | 16.1 | 29.9 |

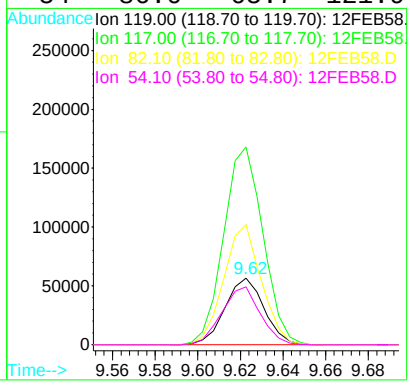





#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 12FEB58.D
Acq: 13 Feb 2017 3:04 am

Tgt Ion:119 Resp: 72044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 299.8 | 218.6 | 406.0 |
| 82 | 173.8 | 128.7 | 238.9 |
| 54 | 86.0 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB54.D Vial: 54
Acq On : 14 Feb 2017 3:01 am Operator: MGC
Sample : 1703480-05RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:00 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 199714 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 261800 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62984 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 60775 | 10.29 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 102.90% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 284793 | 9.56 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.60% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 86736 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.90% | | | |

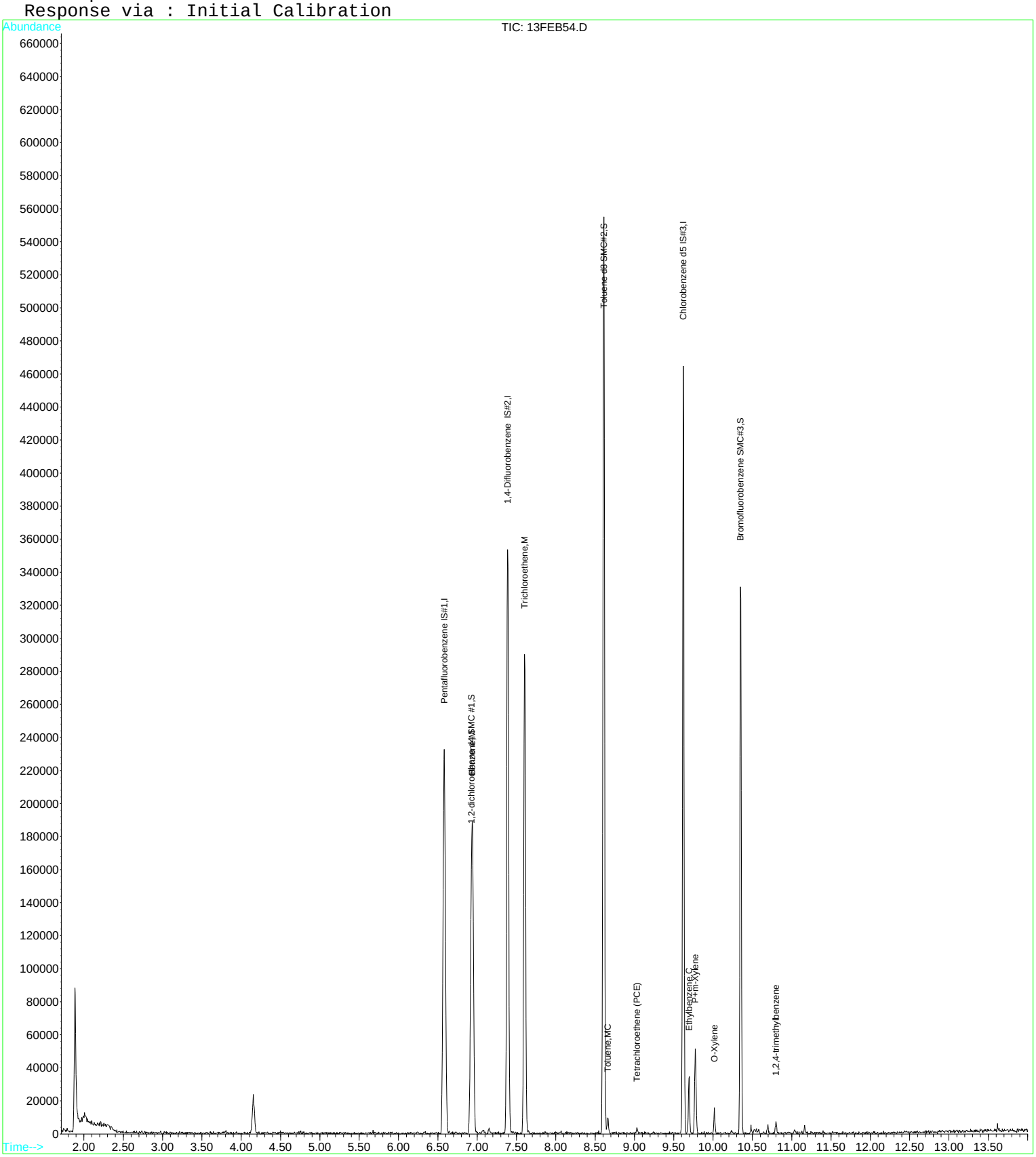
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 23) Benzene | 6.94 | 78 | 135536 | 3.59 | ug/L # | 78 |
| 25) Trichloroethene | 7.61 | 130 | 82281 | 9.65 | ug/L | 99 |
| 32) Toluene | 8.67 | 92 | 3422 | 0.17 | ug/L # | 78 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 937 | 0.10 | ug/L # | 70 |
| 42) Ethylbenzene | 9.70 | 106 | 5943 | 0.56 | ug/L | 70 |
| 43) P+m-Xylene | 9.77 | 106 | 13702 | 1.08 | ug/L | 89 |
| 44) O-Xylene | 10.02 | 106 | 3351 | 0.27 | ug/L # | 68 |
| 57) 1,2,4-trimethylbenzene | 10.80 | 105 | 4730 | 0.21 | ug/L | 82 |

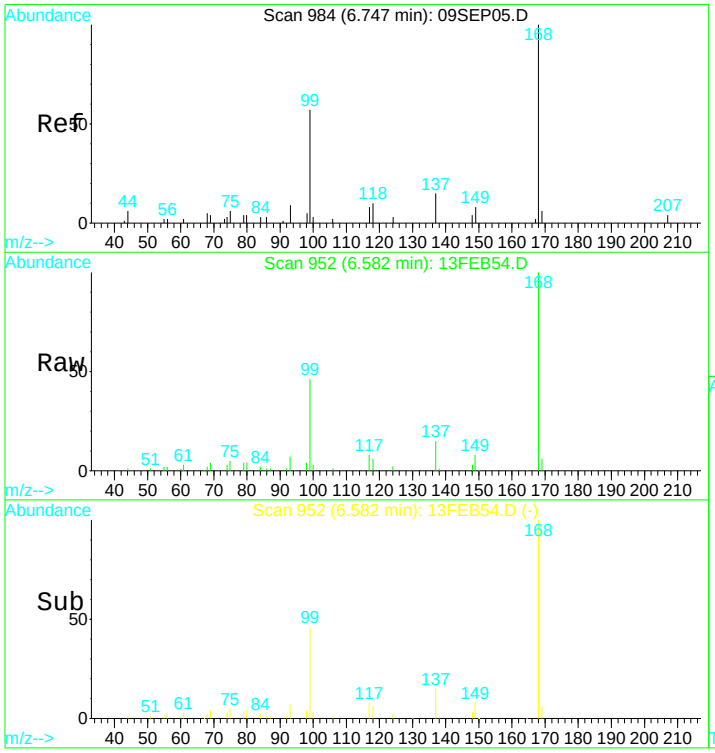
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB54.D Vial: 54
Acq On : 14 Feb 2017 3:01 am Operator: MGC
Sample : 1703480-05RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:00 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

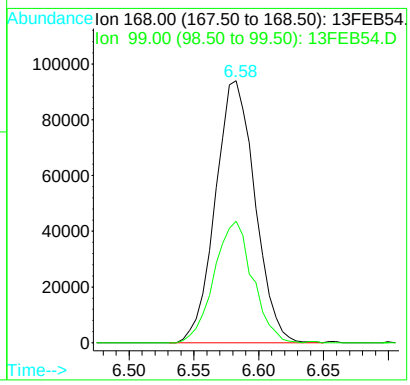


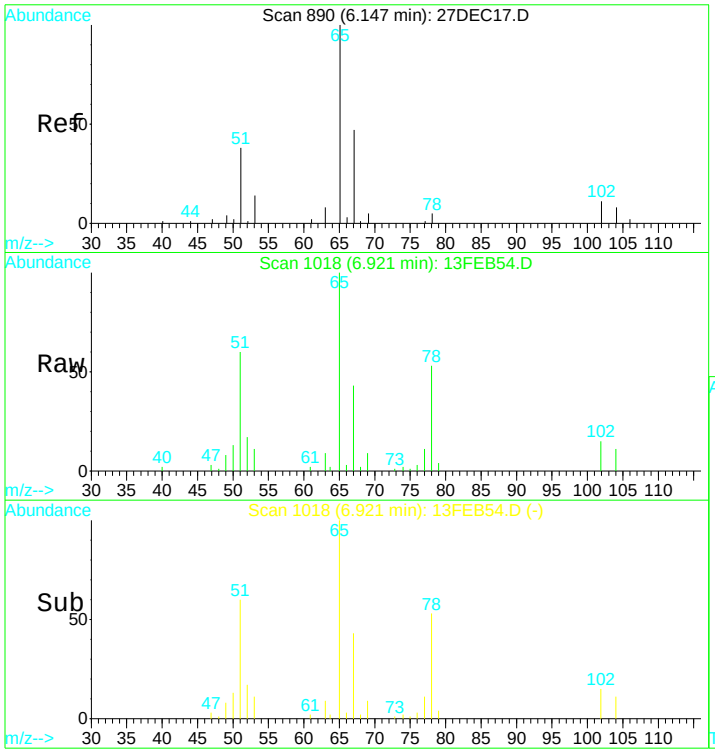



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:168 Resp: 199714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.1 | 305.1 | 566.7# |

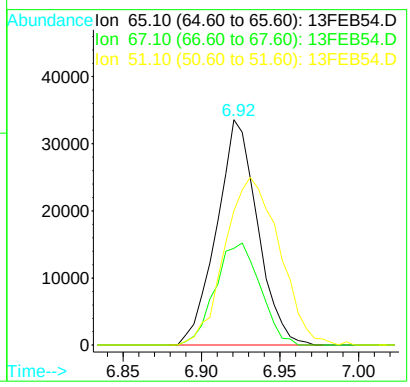


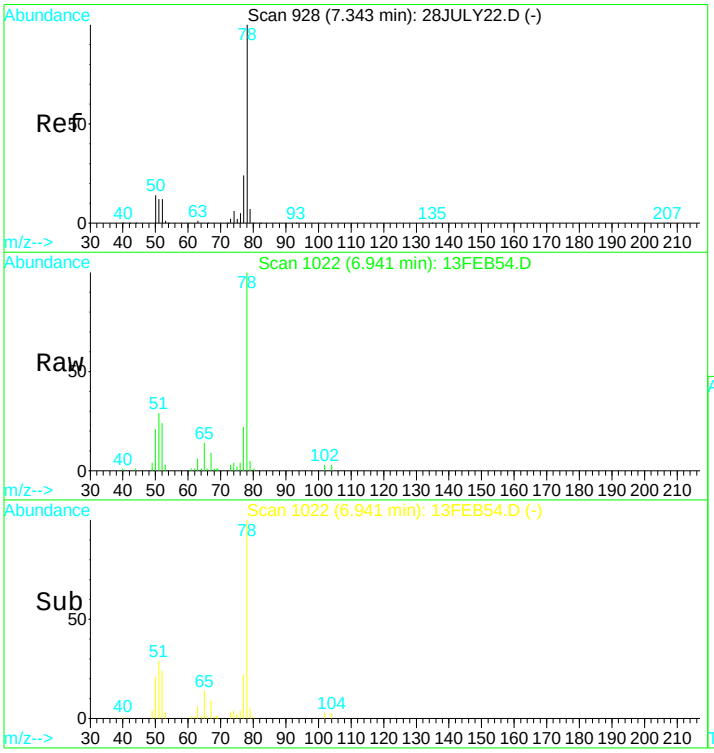




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion: 65 Resp: 60775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.7 | 38.4 | 71.4 |
| 51 | 99.6 | 1006.3 | 1868.8# |

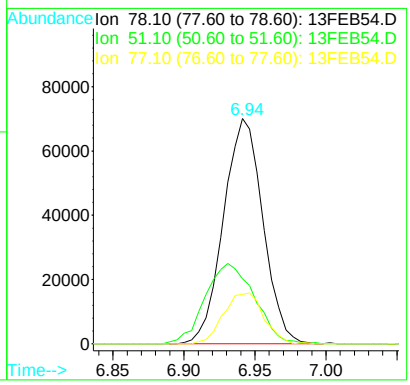


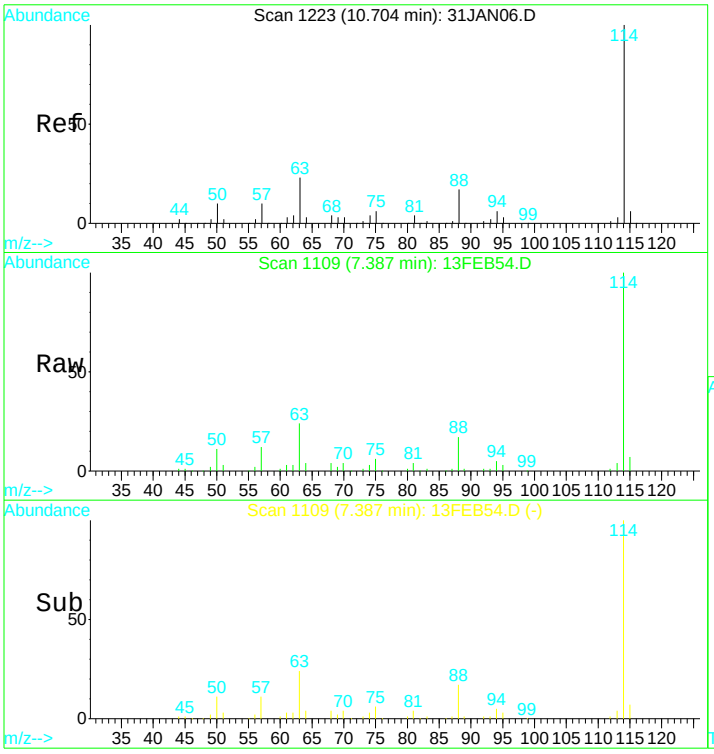



#23
Benzene
Concen: 3.59 ug/L
RT: 6.94 min Scan# 1022
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion: 78 Resp: 135536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 51 | 44.7 | 16.2 | 30.0# |
| 77 | 23.1 | 16.3 | 30.3 |

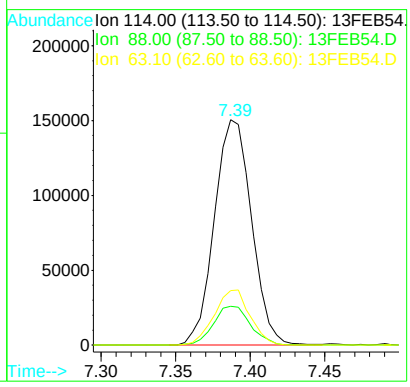


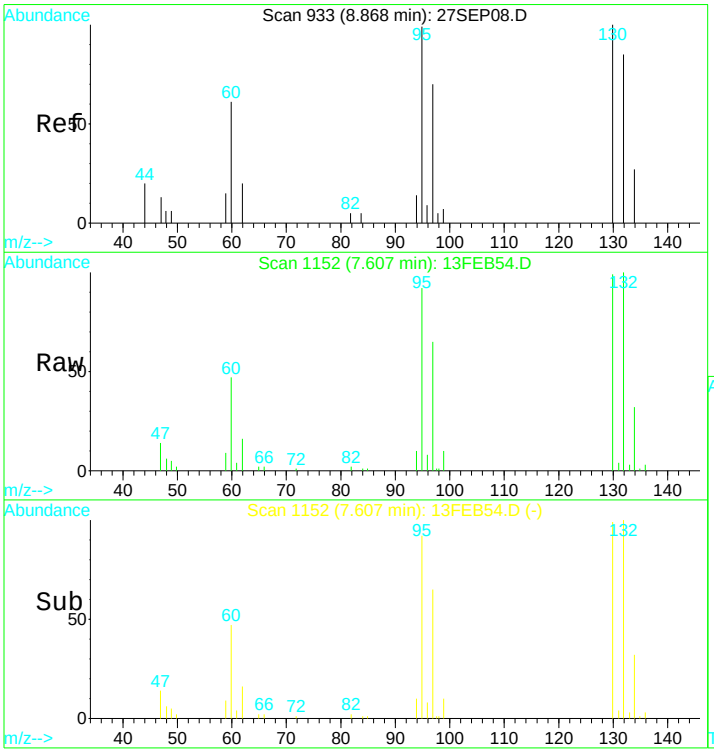




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:114 Resp: 261800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.2 | 12.0 | 22.2 |
| 63 | 23.4 | 16.9 | 31.5 |

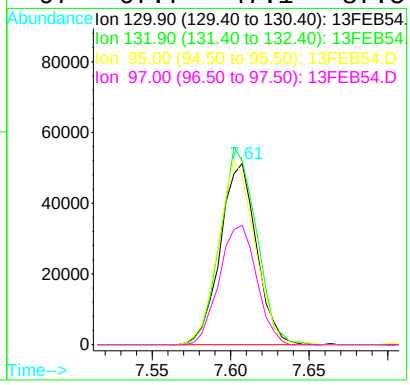


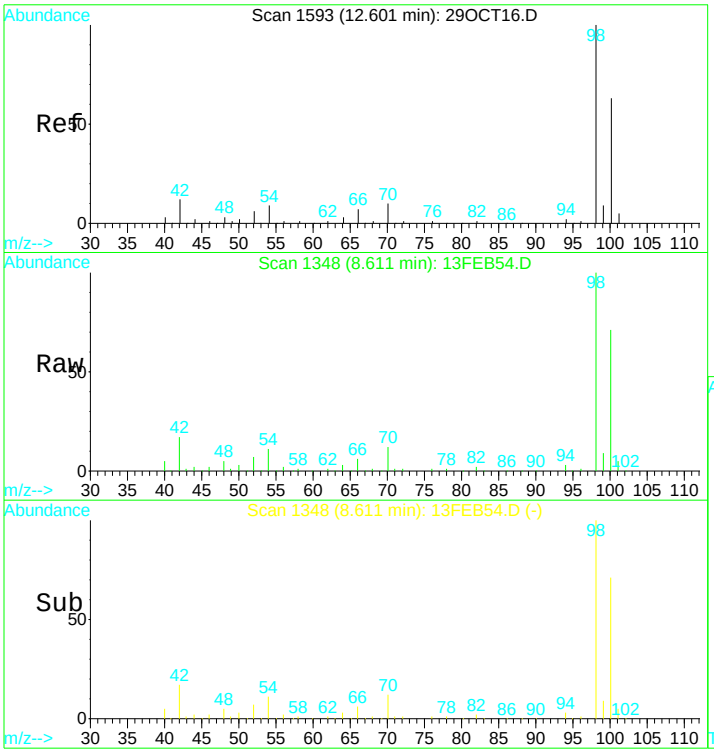



#25
Trichloroethene
Concen: 9.65 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:130 Resp: 82281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 108.7 | 74.3 | 137.9 |
| 95 | 101.9 | 70.8 | 131.6 |
| 97 | 67.7 | 47.1 | 87.5 |

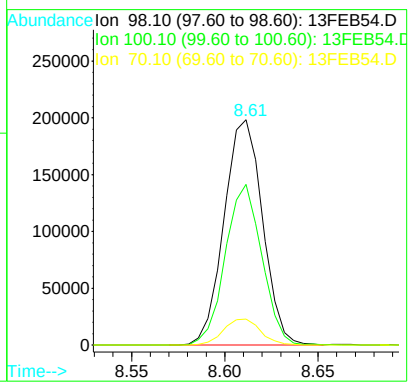


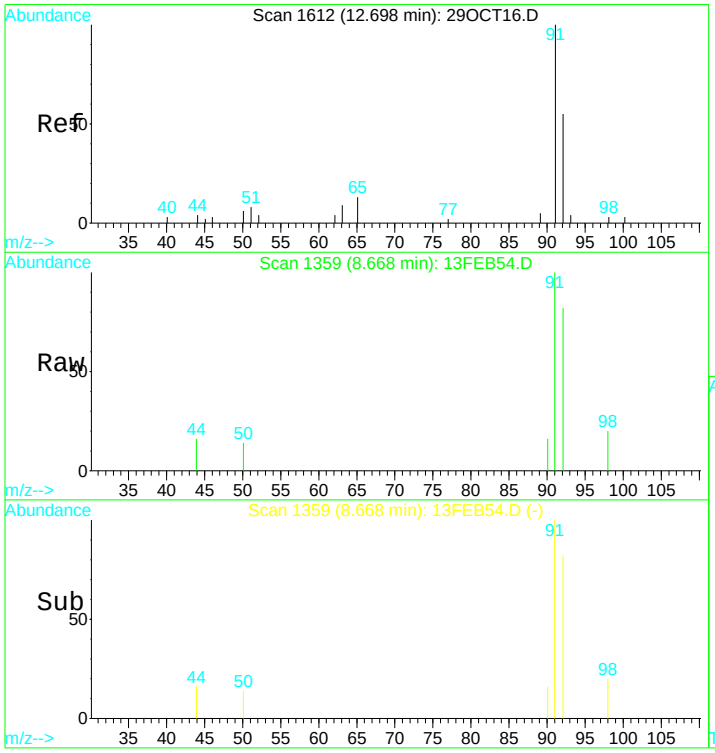




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion: 98 Resp: 284793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.6 | 47.0 | 87.4 |
| 70 | 11.2 | 7.3 | 13.7 |

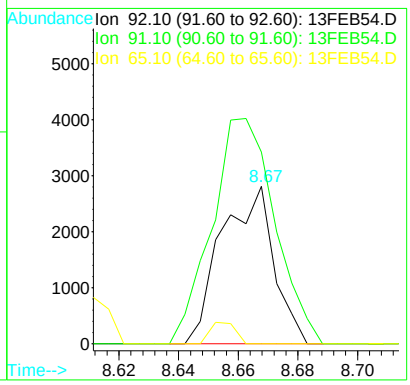


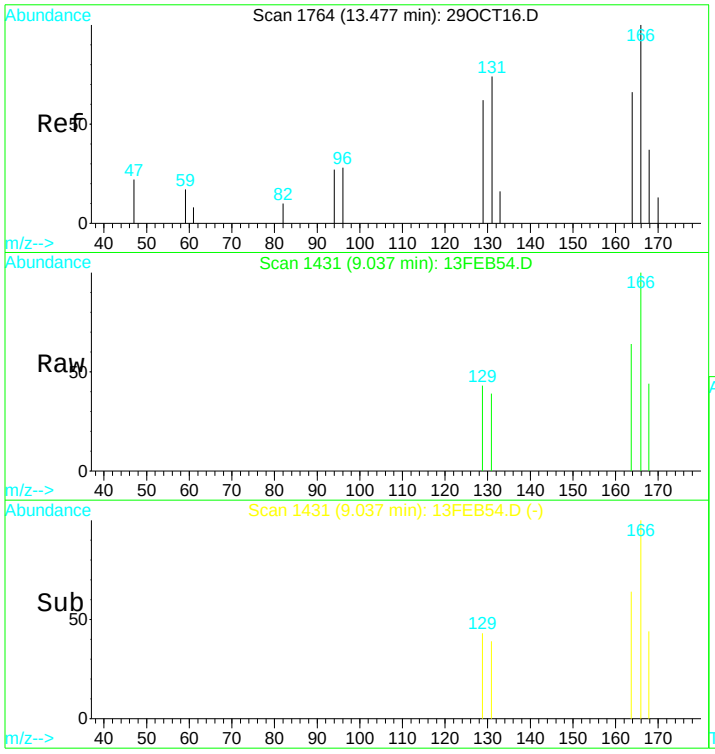



#32
Toluene
Concen: 0.17 ug/L
RT: 8.67 min Scan# 1359
Delta R.T. 0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion: 92 Resp: 3422

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.5 | 102.5 | 190.3 |
| 65 | 6.7 | 15.0 | 27.8# |

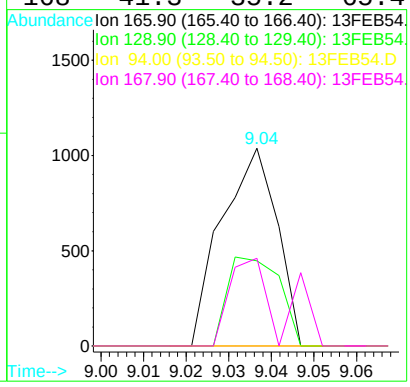


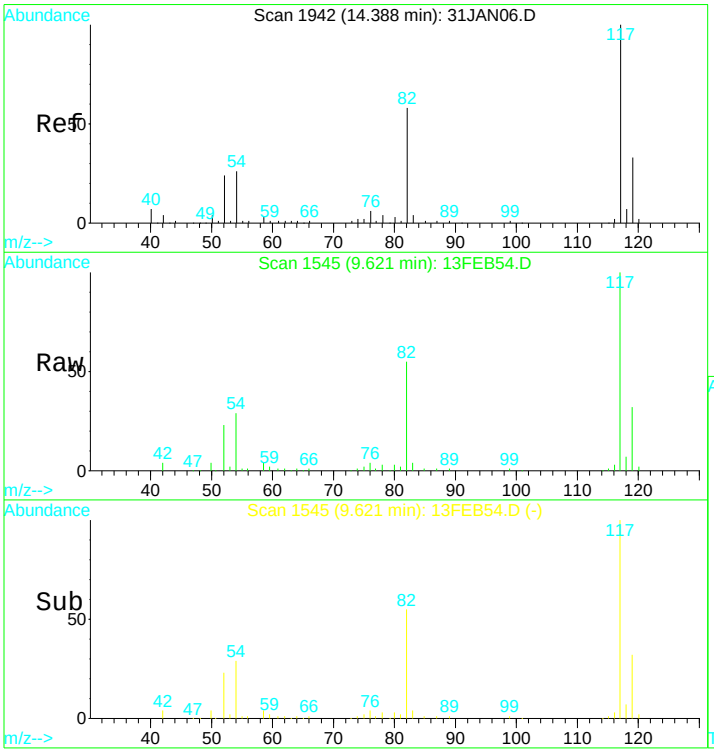




#35
Tetrachloroethene (PCE)
Concen: 0.10 ug/L
RT: 9.04 min Scan# 1431
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:166 Resp: 937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 129 | 42.2 | 45.5 | 84.5# |
| 94 | 0.0 | 23.7 | 43.9# |
| 168 | 41.3 | 35.2 | 65.4 |

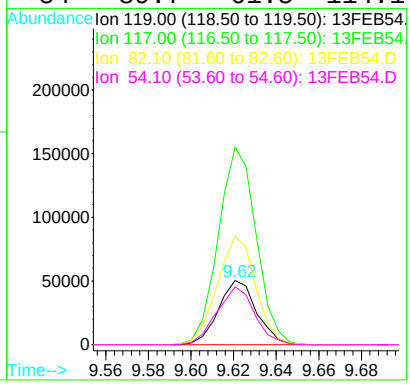


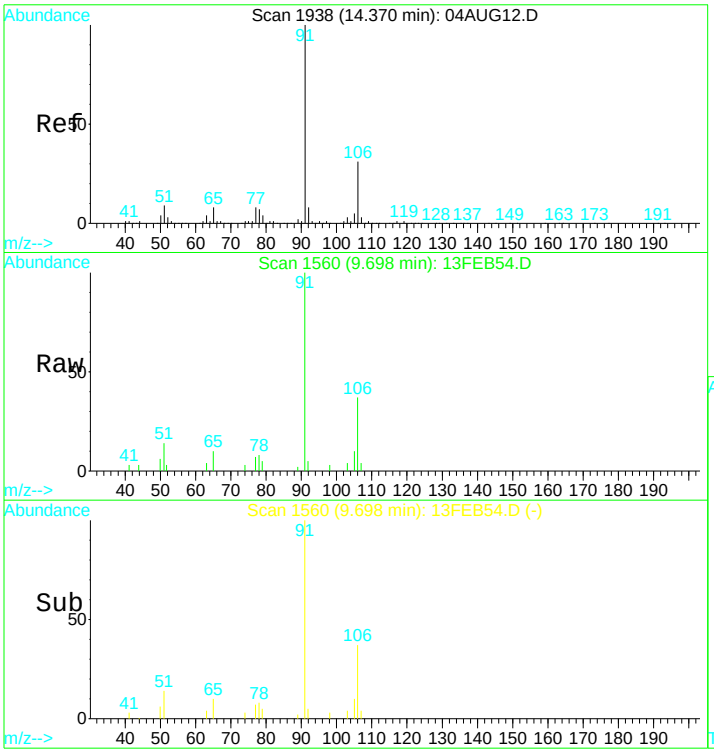



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:119 Resp: 62984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 304.5 | 220.4 | 409.4 |
| 82 | 169.7 | 123.9 | 230.1 |
| 54 | 89.7 | 61.5 | 114.1 |

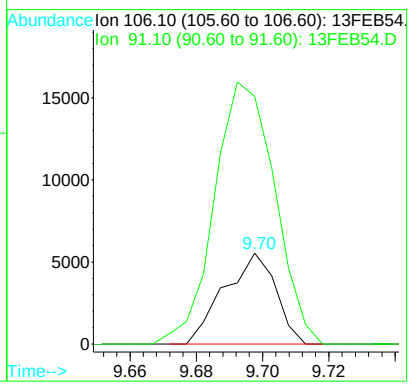


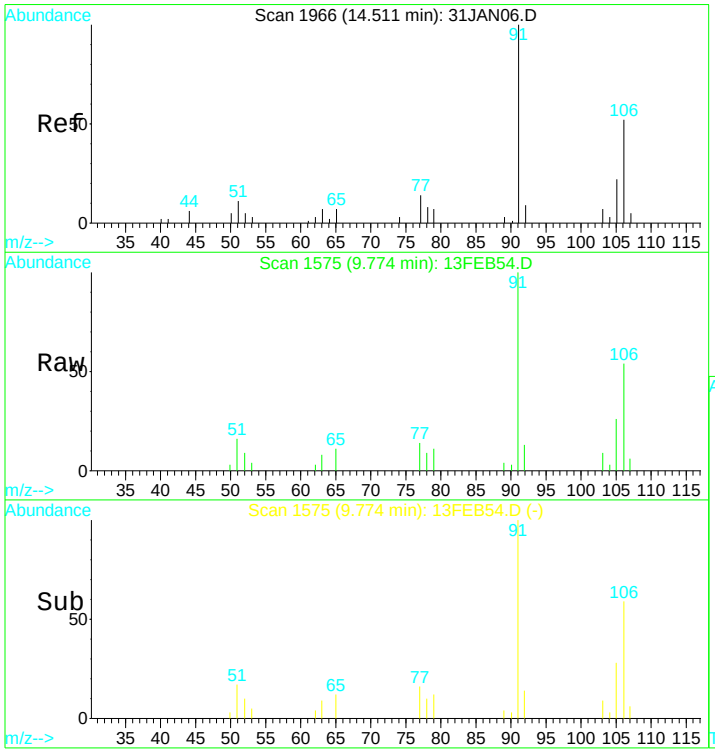




#42
Ethylbenzene
Concen: 0.56 ug/L
RT: 9.70 min Scan# 1560
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:106 Resp: 5943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 338.9 | 197.9 | 367.5 |

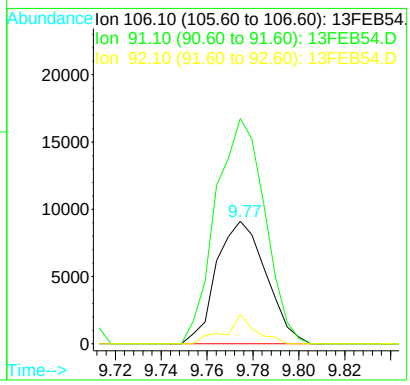


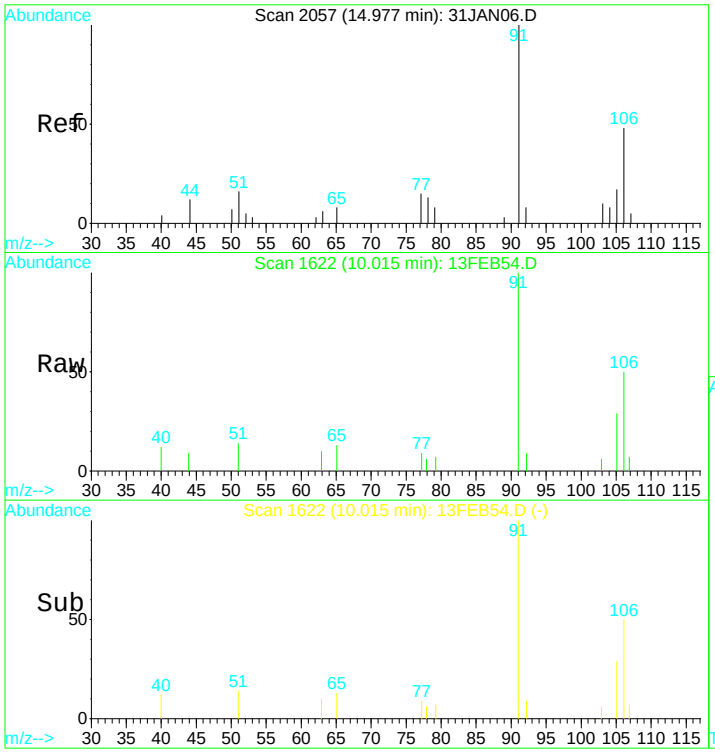



#43
P+m-Xylene
Concen: 1.08 ug/L
RT: 9.77 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:106 Resp: 13702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 182.4 | 116.4 | 216.2 |
| 92 | 14.5 | 10.8 | 20.0 |

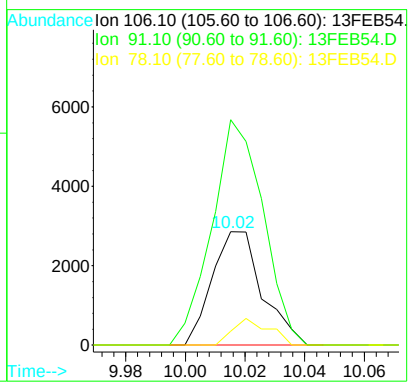


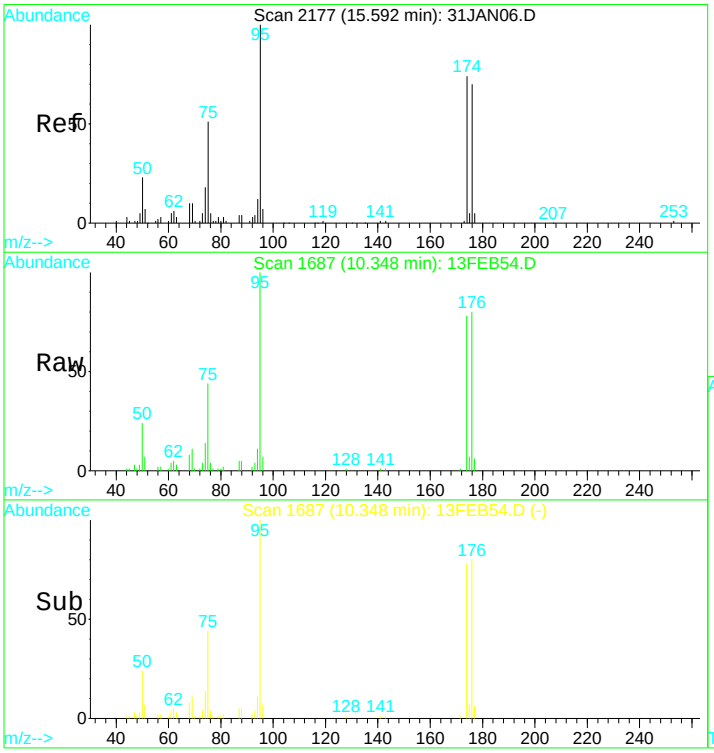




#44
O-Xylene
Concen: 0.27 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:106 Resp: 3351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 202.7 | 124.3 | 230.9 |
| 78 | 16.8 | 51.7 | 95.9# |

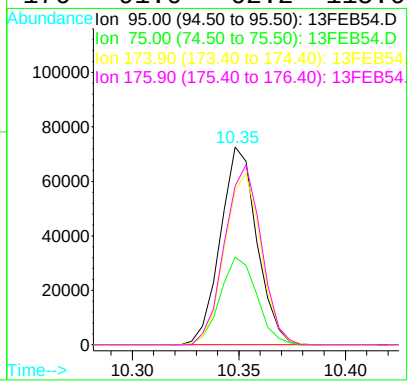


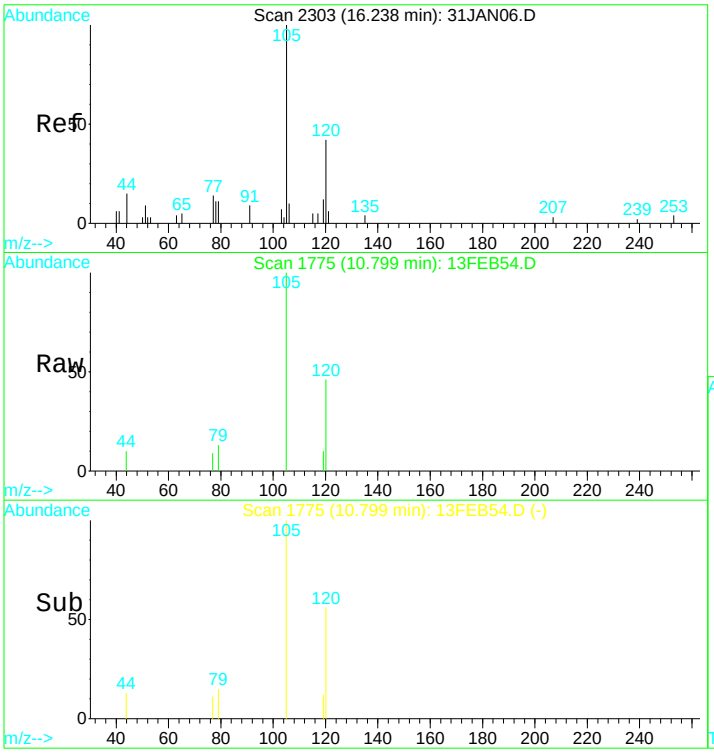



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion: 95 Resp: 86736

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 44.3 | 32.6 | 60.5 |
| 174 | 86.3 | 60.9 | 113.1 |
| 176 | 91.0 | 62.2 | 115.6 |

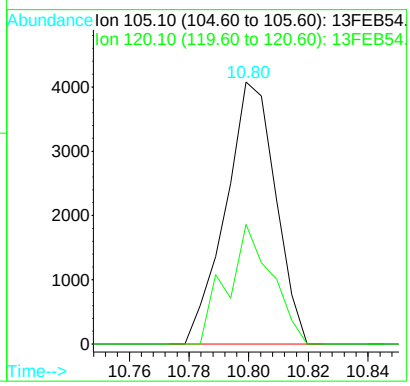



#57
1,2,4-trimethylbenzene
Concen: 0.21 ug/L
RT: 10.80 min Scan# 1775
Delta R.T. -0.01 min
Lab File: 13FEB54.D
Acq: 14 Feb 2017 3:01 am

Tgt Ion:105 Resp: 4730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 40.9 | 37.5 | 69.7 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB43.D Vial: 43
Acq On : 13 Feb 2017 10:47 pm Operator: MGC
Sample : 1703480-06 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:40 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 207752 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 266454 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65779 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 61681 | 10.03 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 100.30% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 288027 | 9.50 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.00% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87717 | 9.67 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 96.70% | | | | | | |

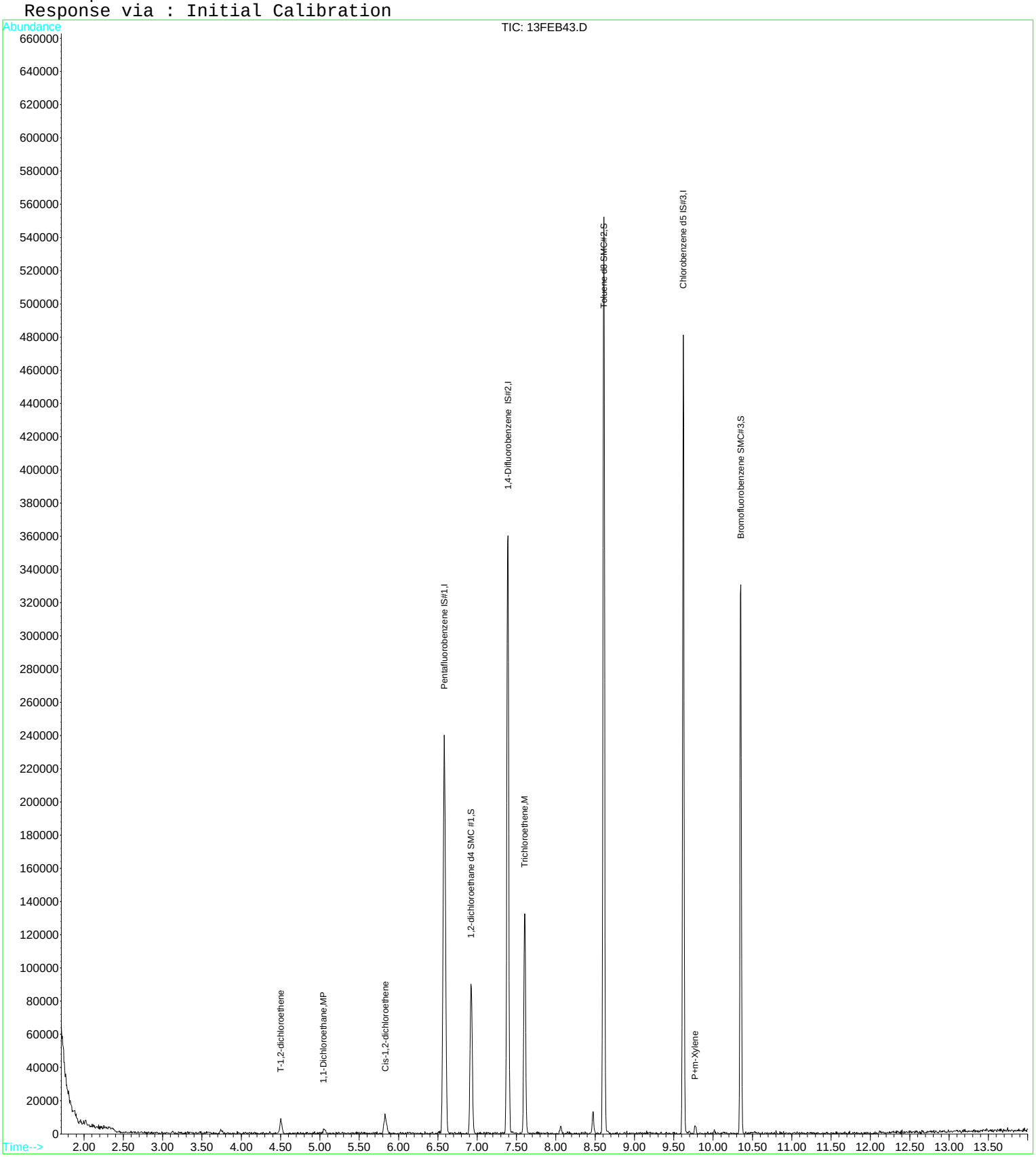
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 12) T-1,2-dichloroethene | 4.50 | 96 | 3485 | 0.37 | ug/L | 92 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 3743 | 0.17 | ug/L # | 83 |
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 5463 | 0.56 | ug/L | 85 |
| 25) Trichloroethene | 7.60 | 130 | 36455 | 4.20 | ug/L | 95 |
| 43) P+m-Xylene | 9.77 | 106 | 1224 | 0.09 | ug/L # | 28 |

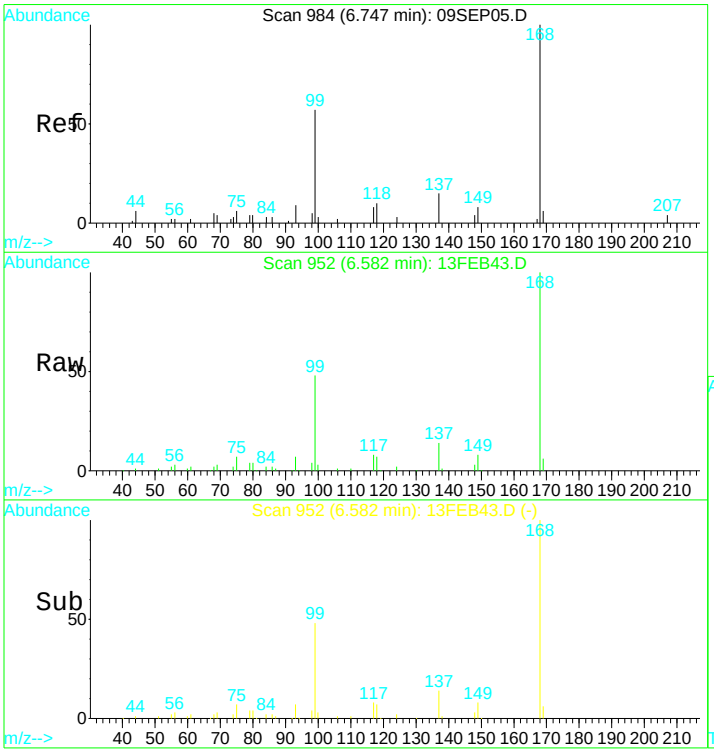
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB43.D Vial: 43
Acq On : 13 Feb 2017 10:47 pm Operator: MGC
Sample : 1703480-06 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:40 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

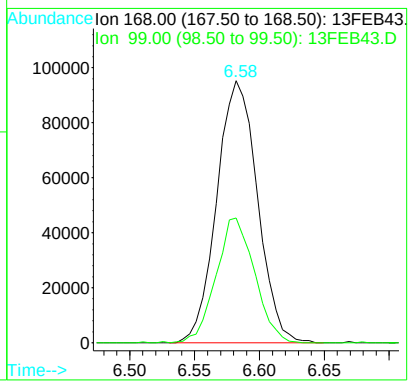


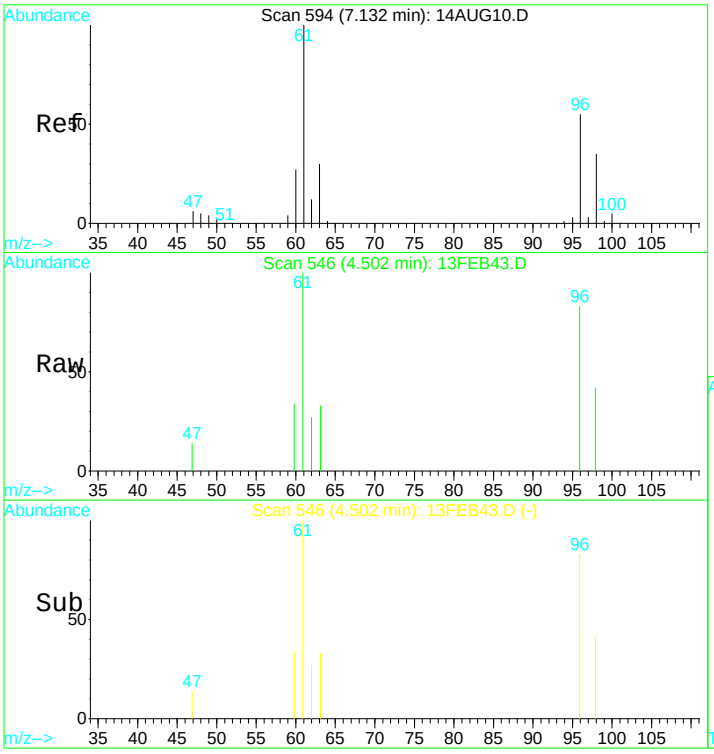



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion:168 Resp: 207752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.0 | 305.1 | 566.7# |

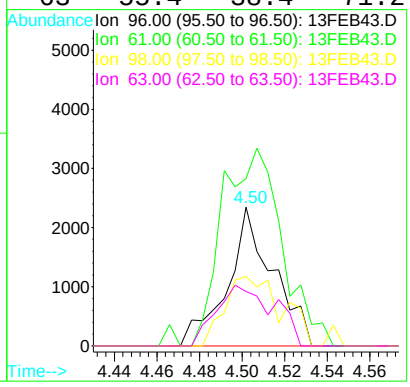


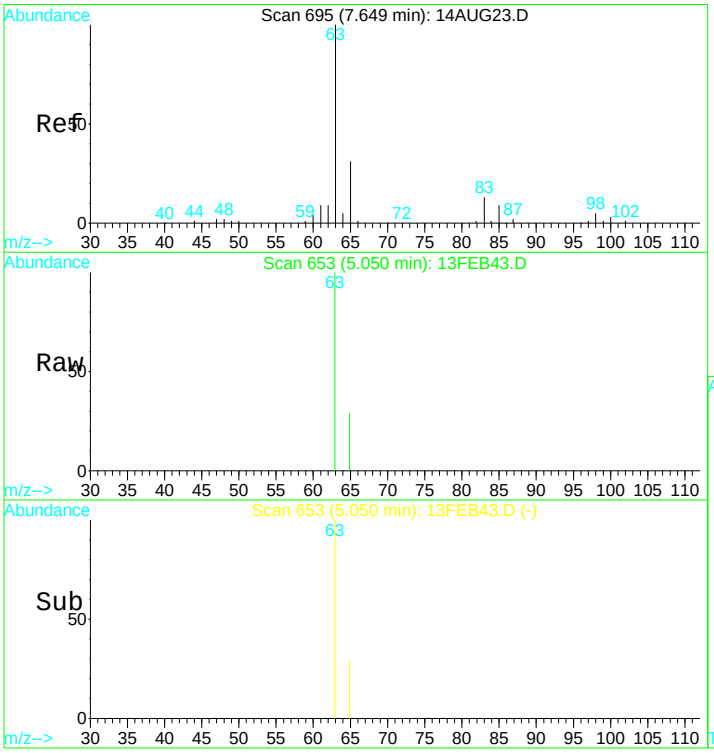




#12
T-1,2-dichloroethene
Concen: 0.37 ug/L
RT: 4.50 min Scan# 546
Delta R.T. -0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion: 96 Resp: 3485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 187.0 | 119.6 | 222.2 |
| 98 | 63.1 | 46.1 | 85.5 |
| 63 | 55.4 | 38.4 | 71.2 |

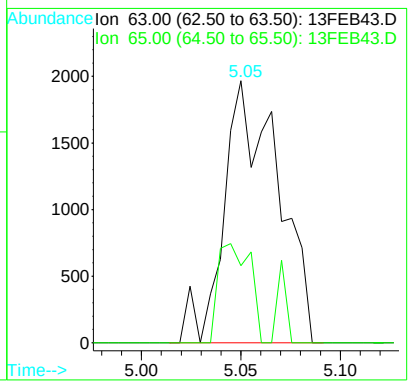


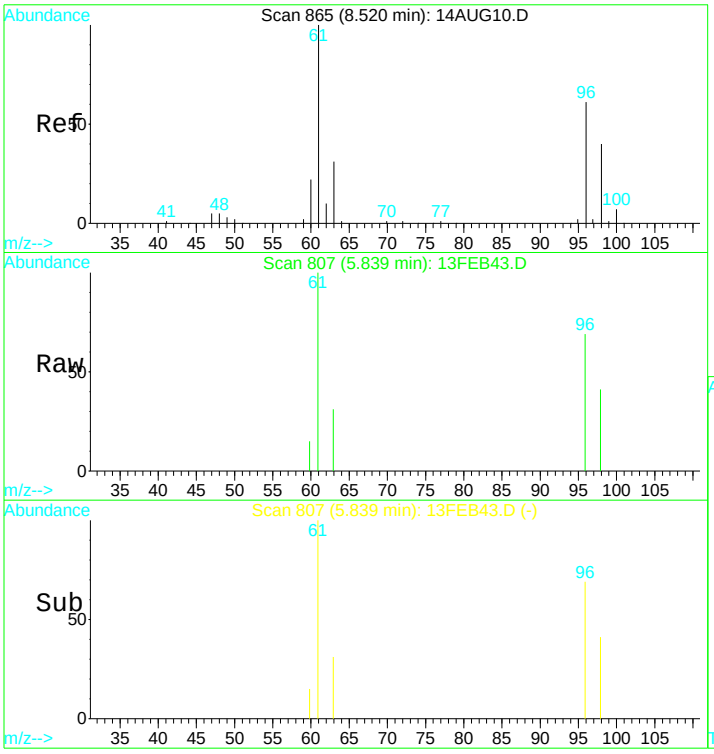



#13
1,1-Dichloroethane
Concen: 0.17 ug/L
RT: 5.05 min Scan# 653
Delta R.T. -0.01 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion: 63 Resp: 3743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 22.3 | 22.4 | 41.6# |

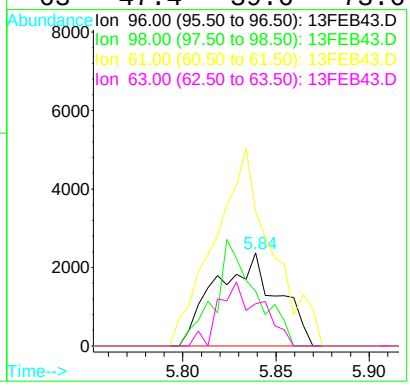


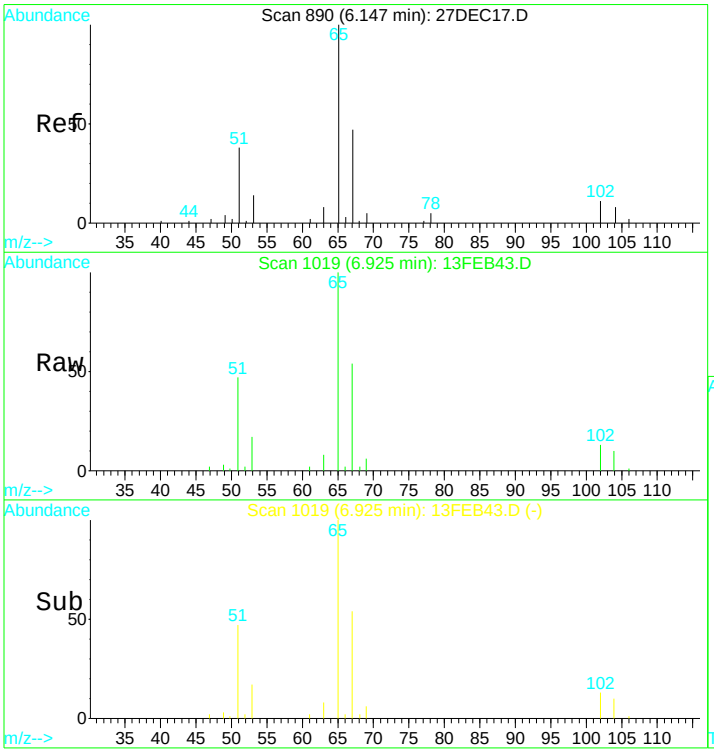




#15
Cis-1,2-dichloroethene
Concen: 0.56 ug/L
RT: 5.84 min Scan# 807
Delta R.T. 0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion: 96 Resp: 5463

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 76.3 | 46.2 | 85.8 |
| 61 | 197.3 | 122.8 | 228.0 |
| 63 | 47.4 | 39.6 | 73.6 |

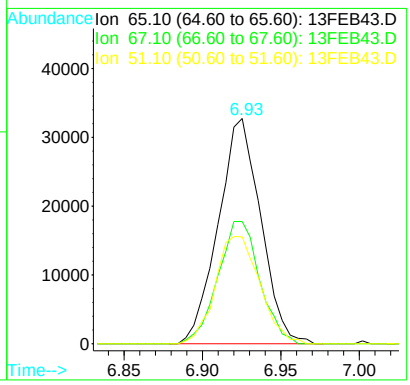


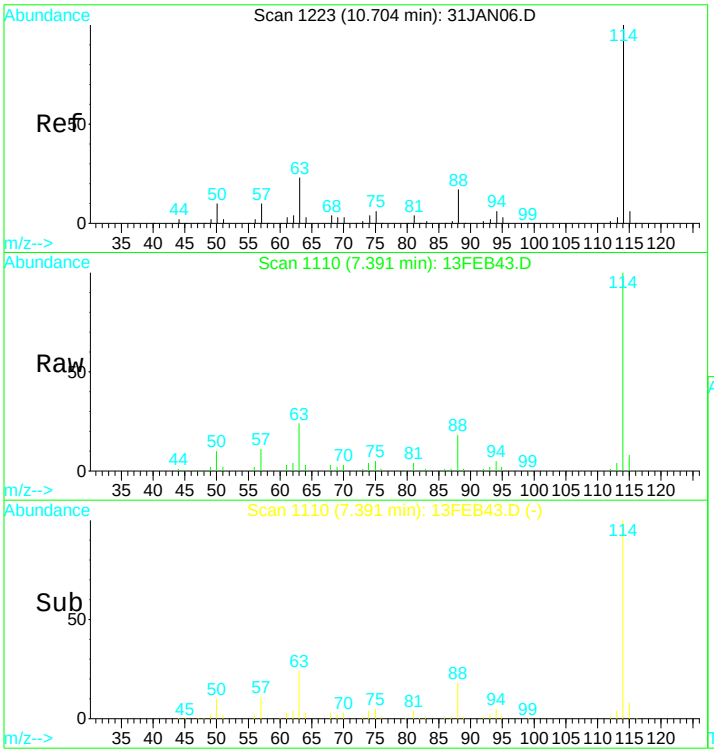



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion: 65 Resp: 61681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.5 | 38.4 | 71.4 |
| 51 | 50.1 | 1006.3 | 1868.8# |

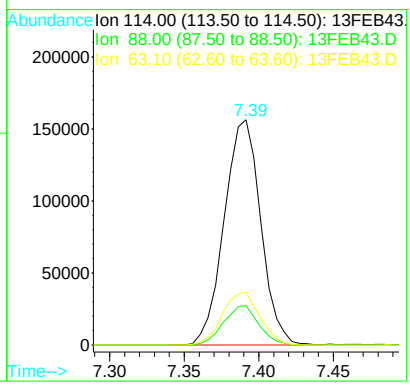


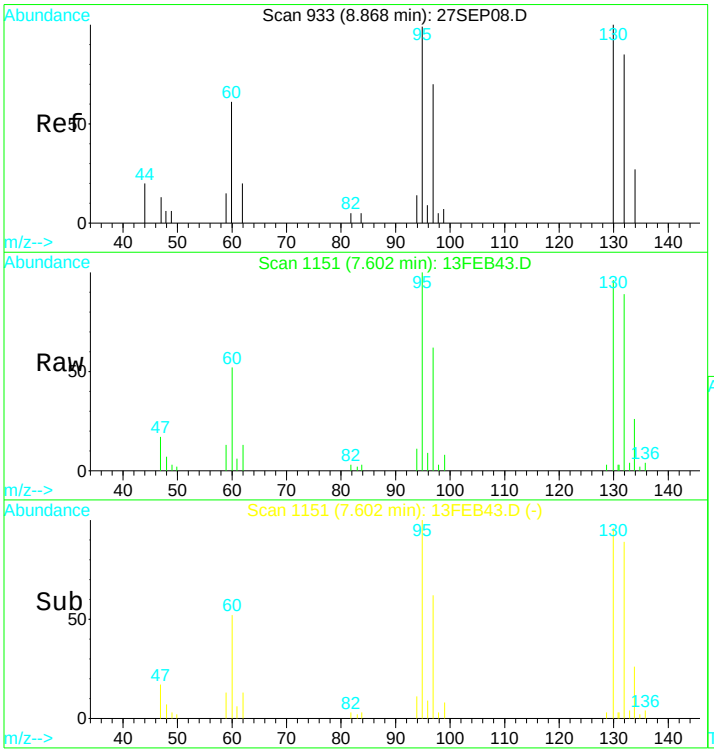




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion:114 Resp: 266454

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.0 | 12.0 | 22.2 |
| 63 | 23.9 | 16.9 | 31.5 |

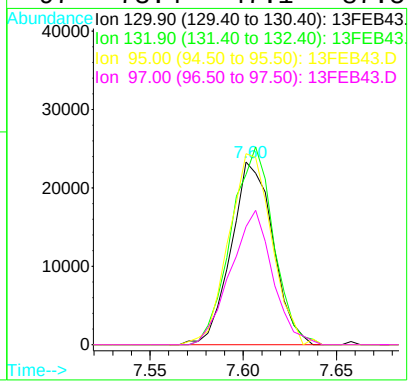


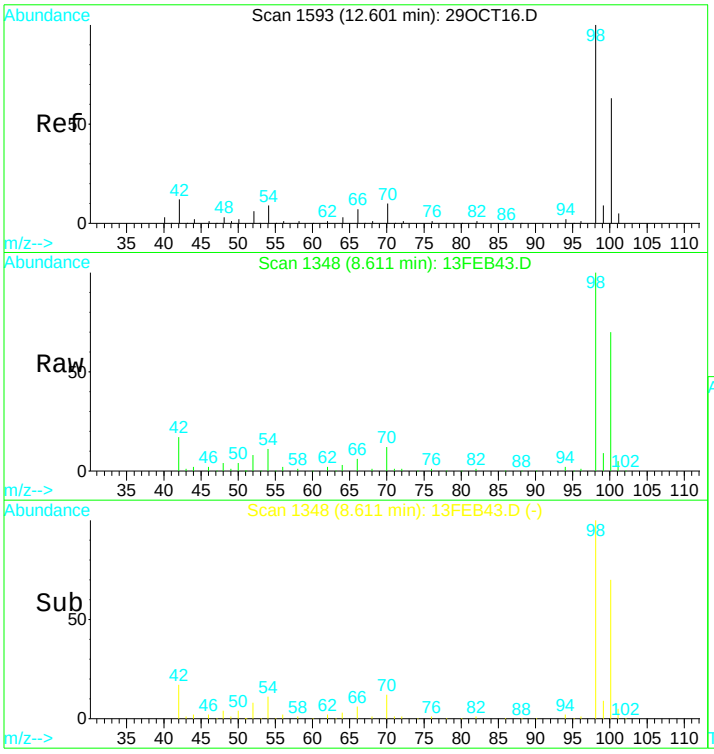



#25
Trichloroethene
Concen: 4.20 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion:130 Resp: 36455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 109.6 | 74.3 | 137.9 |
| 95 | 107.3 | 70.8 | 131.6 |
| 97 | 73.4 | 47.1 | 87.5 |

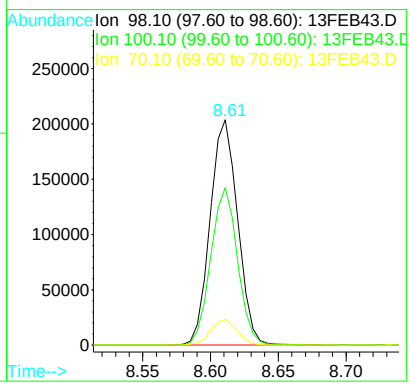


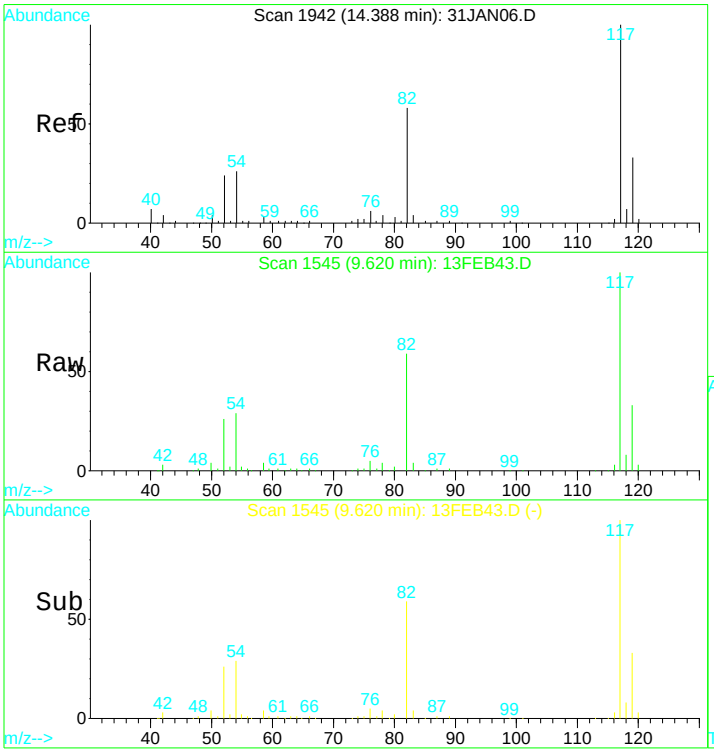




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion: 98 Resp: 288027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.9 | 47.0 | 87.4 |
| 70 | 11.1 | 7.3 | 13.7 |

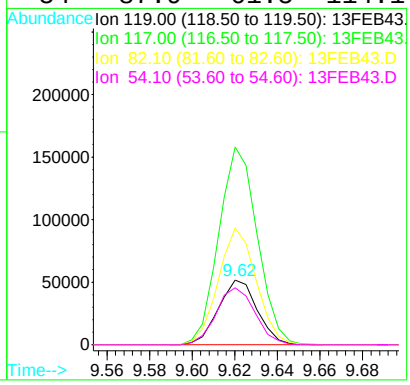


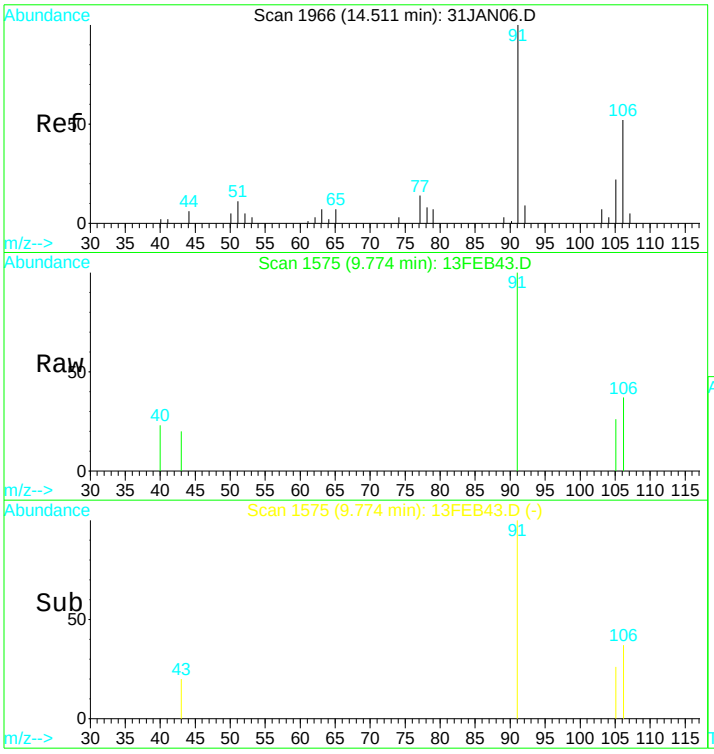



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion:119 Resp: 65779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 302.5 | 220.4 | 409.4 |
| 82 | 175.9 | 123.9 | 230.1 |
| 54 | 87.9 | 61.5 | 114.1 |

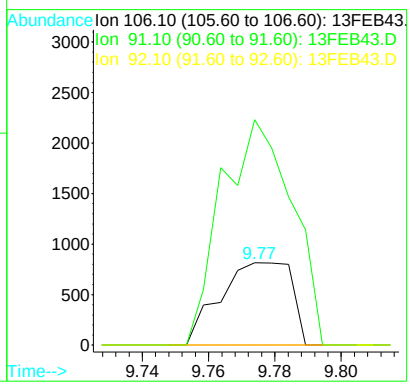


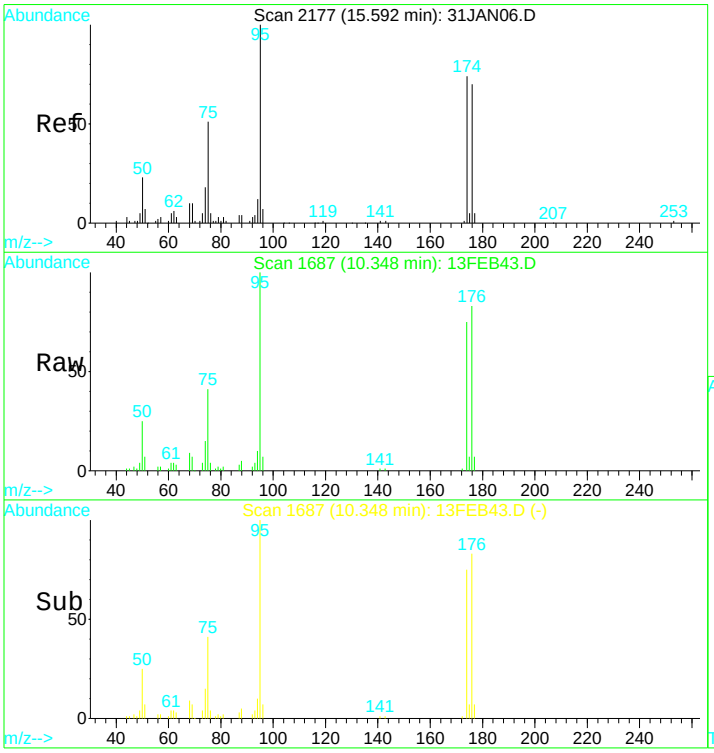




#43
P+m-Xylene
Concen: 0.09 ug/L
RT: 9.77 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion:106 Resp: 1224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 268.4 | 116.4 | 216.2# |
| 92 | 0.0 | 10.8 | 20.0# |

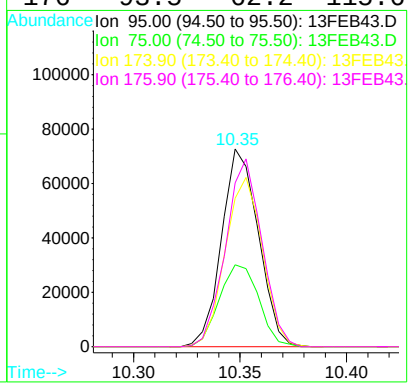





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB43.D
Acq: 13 Feb 2017 10:47 pm

Tgt Ion: 95 Resp: 87717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 44.5 | 32.6 | 60.5 |
| 174 | 86.7 | 60.9 | 113.1 |
| 176 | 93.5 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB43.D Vial: 43
Acq On : 13 Feb 2017 10:47 pm Operator: MGC
Sample : 1703480-06 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:41 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 207752 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 266454 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65779 | 10.00 | ug/L | 0.00 |

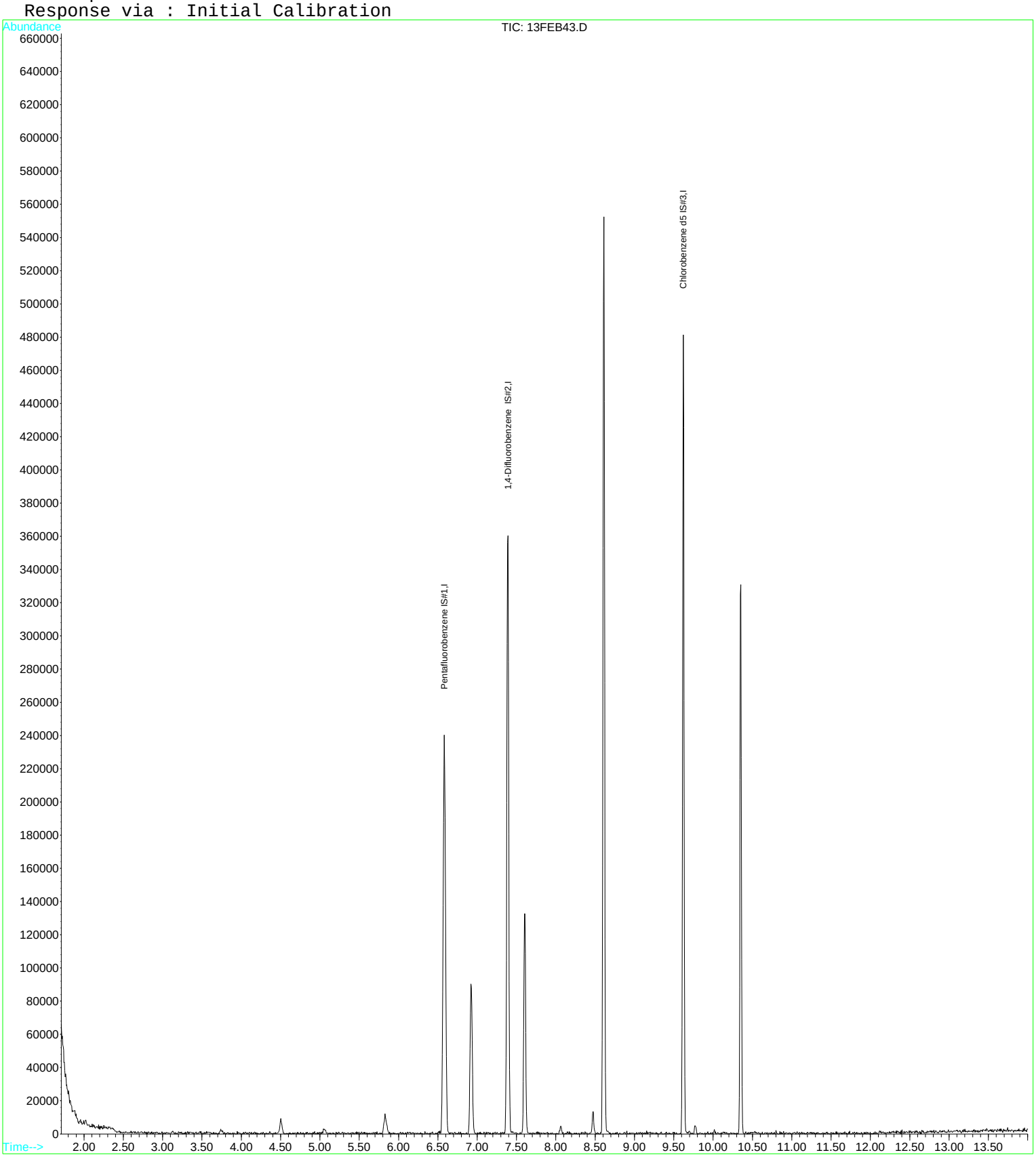
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB43.D Vial: 43
Acq On : 13 Feb 2017 10:47 pm Operator: MGC
Sample : 1703480-06 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:41 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB44.D Vial: 44
Acq On : 13 Feb 2017 11:10 pm Operator: MGC
Sample : 1703480-07 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:42 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 183111 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 240310 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 61771 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 62671 | 11.57 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 115.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 259628 | 9.49 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 84148 | 9.88 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.80% | | | |

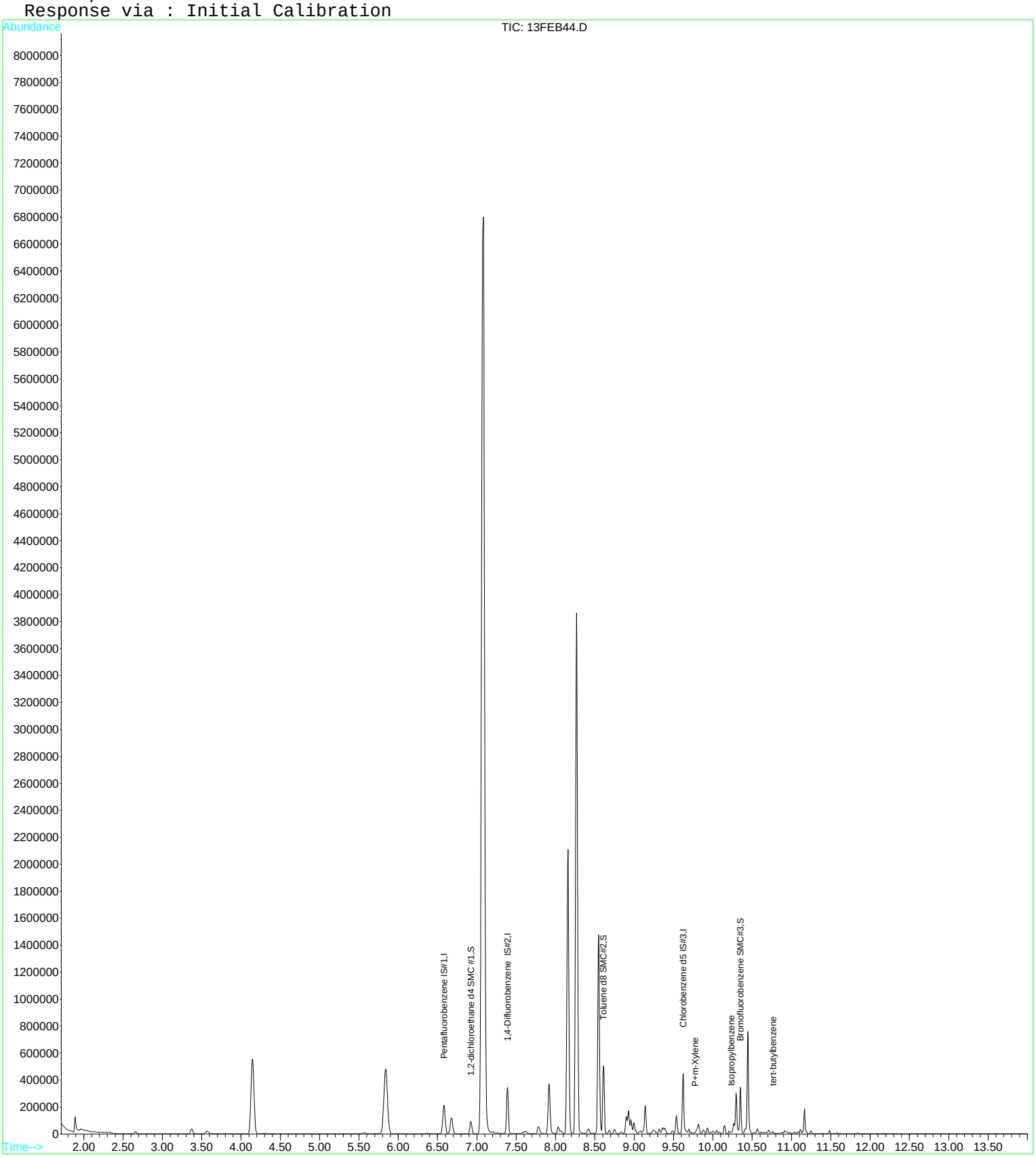
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 43) P+m-Xylene | 9.77 | 106 | 1641 | 0.13 | ug/L | 72 |
| 47) Isopropylbenzene | 10.23 | 105 | 2523 | 0.08 | ug/L | 99 |
| 56) tert-butylbenzene | 10.77 | 119 | 3149 | 0.13 | ug/L | 91 |

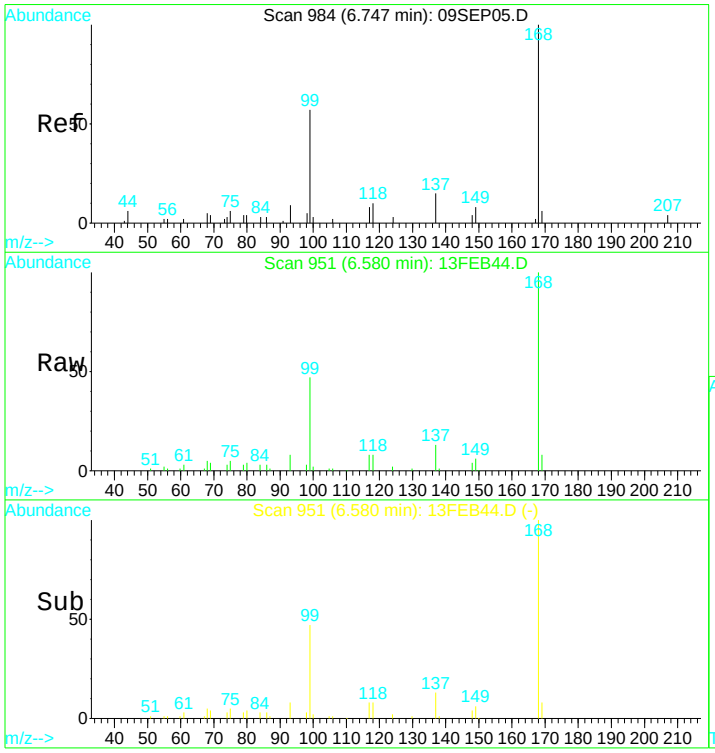
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB44.D Vial: 44
Acq On : 13 Feb 2017 11:10 pm Operator: MGC
Sample : 1703480-07 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:42 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

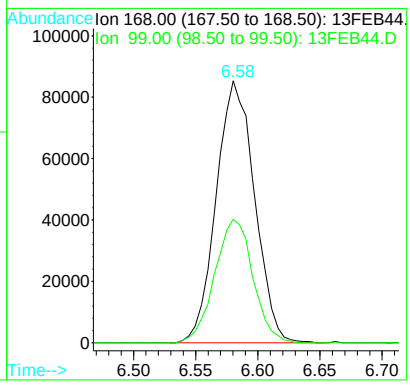


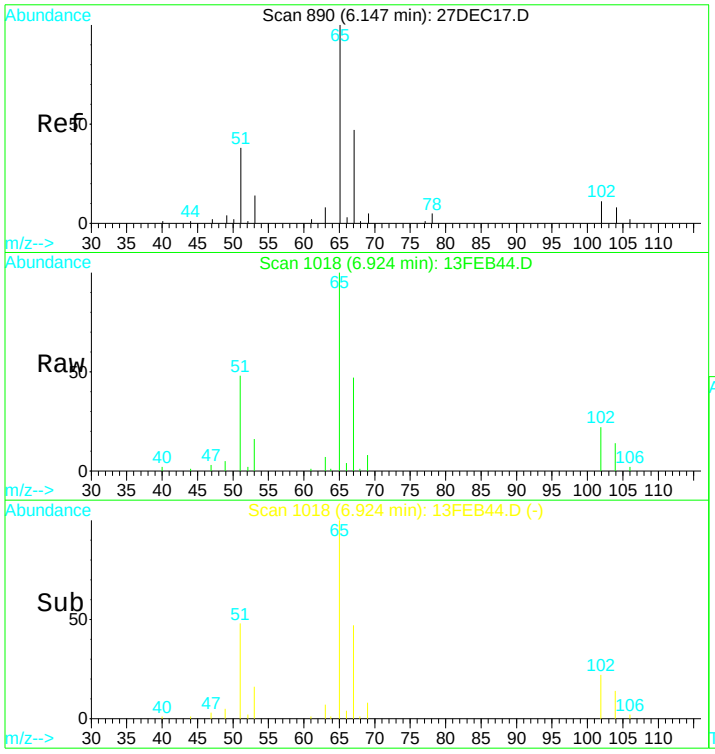



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:168 Resp: 183111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.7 | 305.1 | 566.7# |

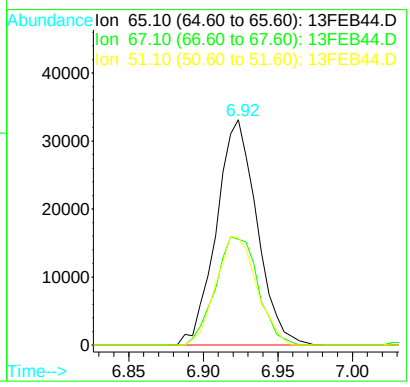


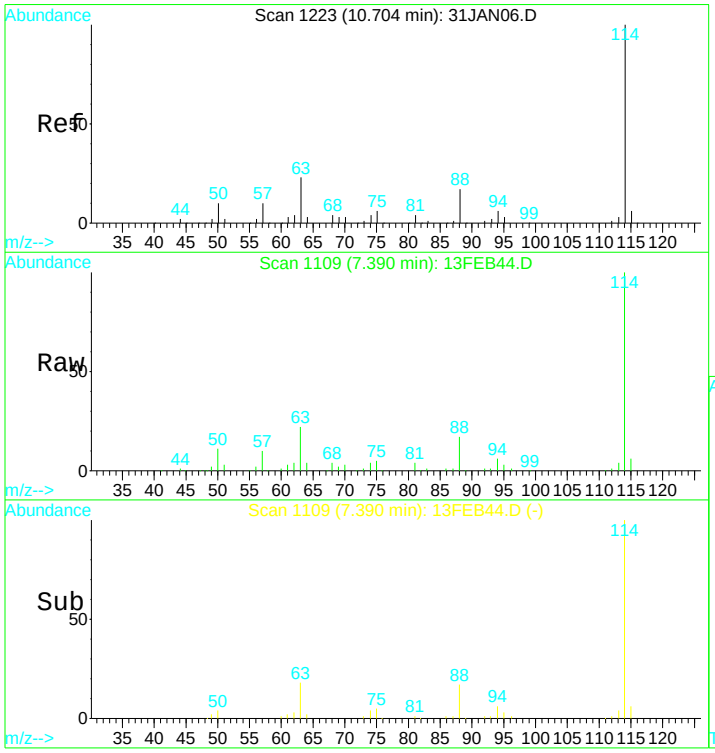




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion: 65 Resp: 62671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.3 | 38.4 | 71.4 |
| 51 | 48.3 | 1006.3 | 1868.8# |

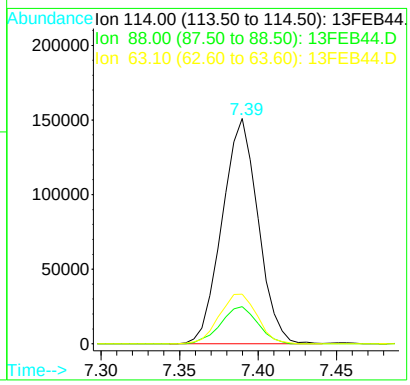


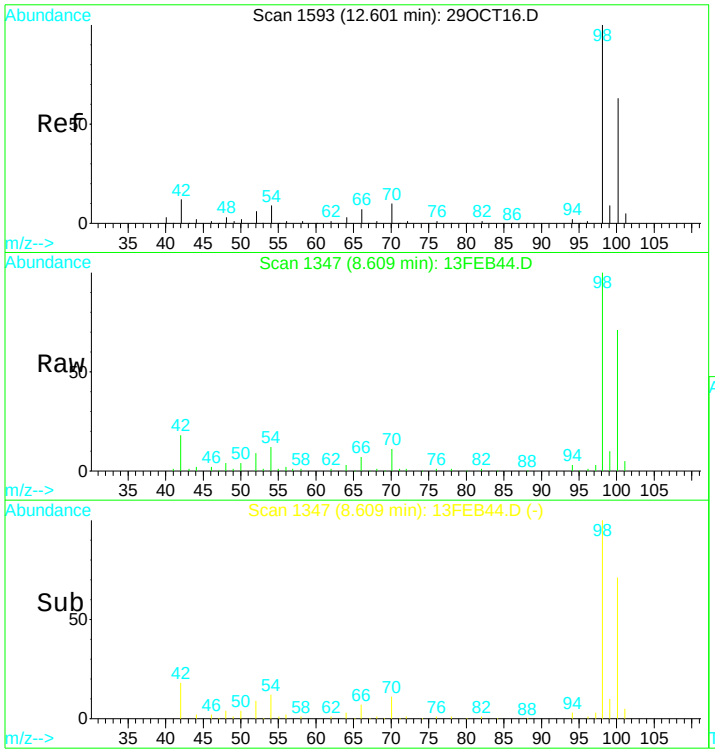



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:114 Resp: 240310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.1 | 12.0 | 22.2 |
| 63 | 23.1 | 16.9 | 31.5 |

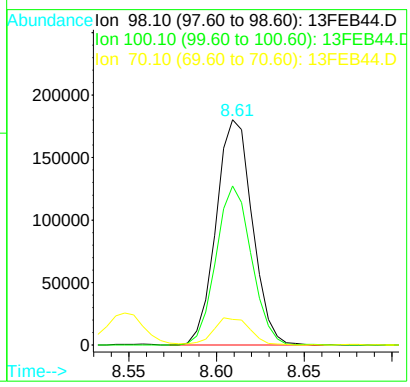


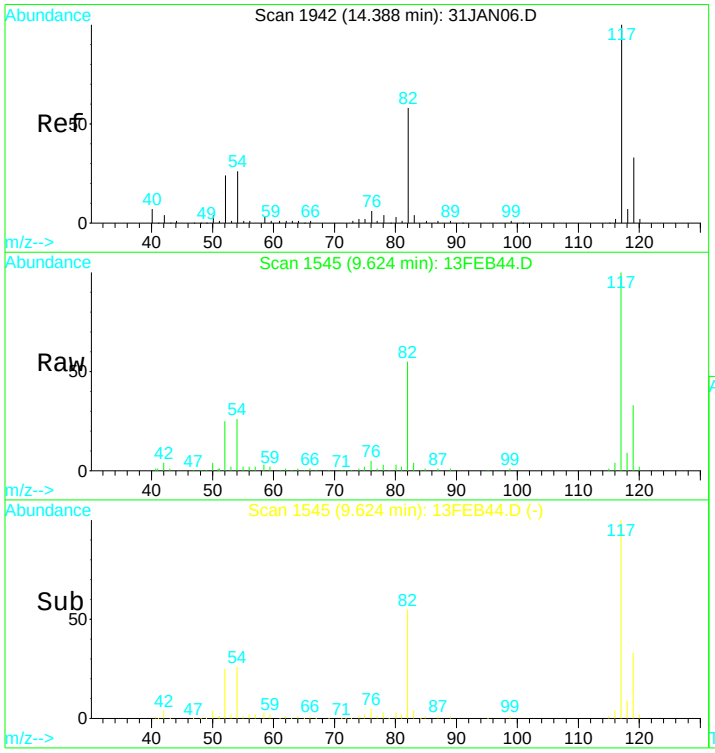




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion: 98 Resp: 259628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 69.2 | 47.0 | 87.4 |
| 70 | 12.2 | 7.3 | 13.7 |

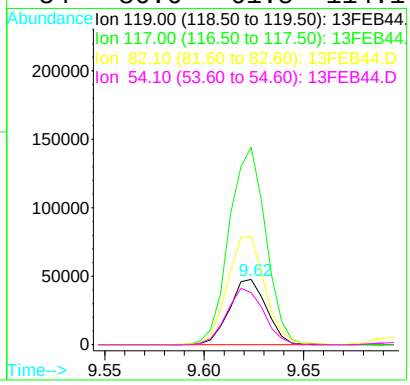


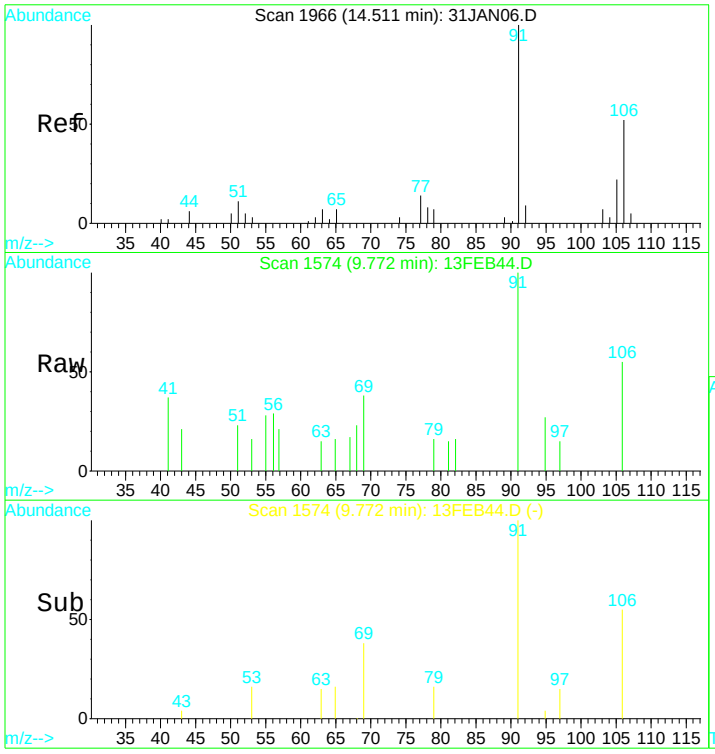



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:119 Resp: 61771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 299.0 | 220.4 | 409.4 |
| 82 | 168.5 | 123.9 | 230.1 |
| 54 | 86.6 | 61.5 | 114.1 |

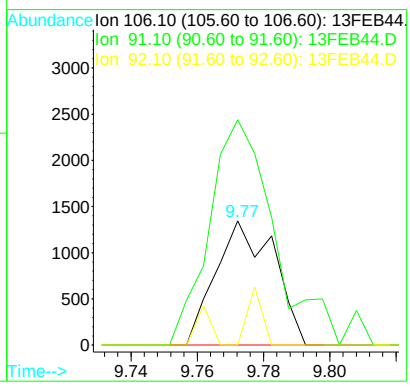


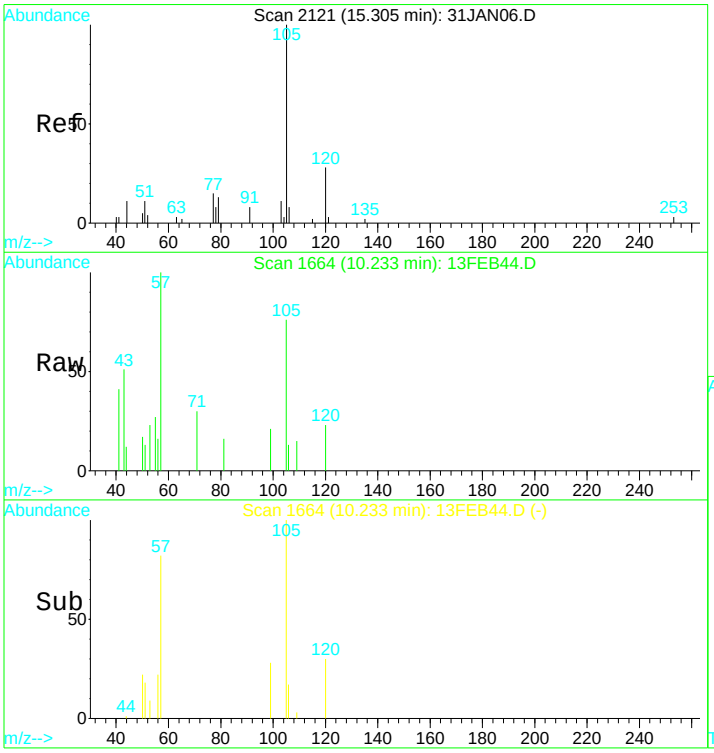




#43
P+m-Xylene
Concen: 0.13 ug/L
RT: 9.77 min Scan# 1574
Delta R.T. -0.01 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:106 Resp: 1641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.3 | 116.4 | 216.2 |
| 92 | 11.8 | 10.8 | 20.0 |

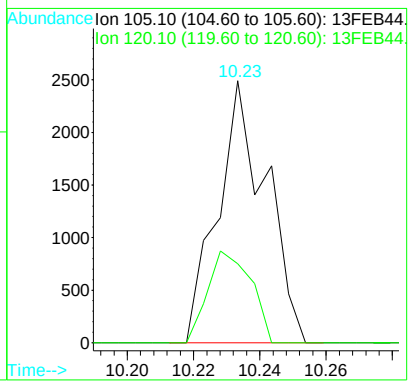


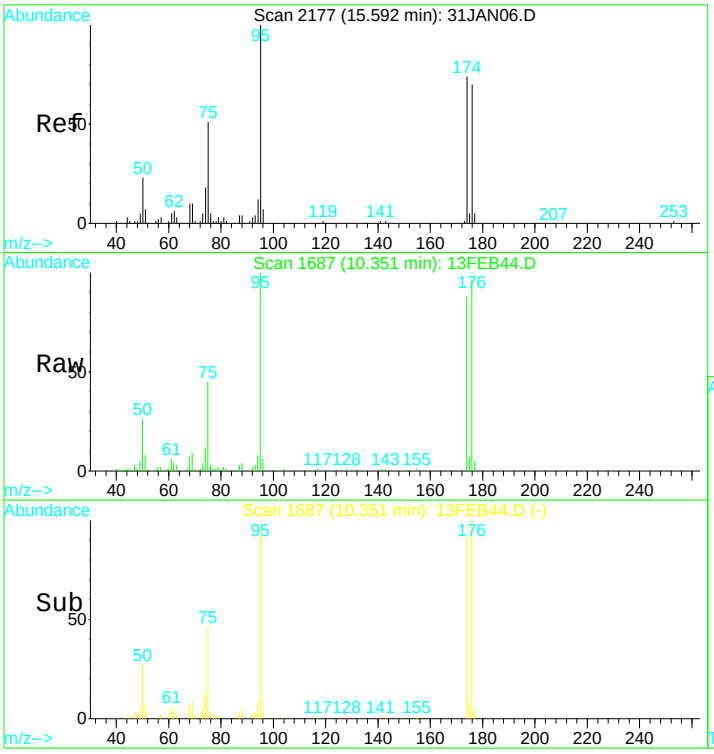



#47
Isopropylbenzene
Concen: 0.08 ug/L
RT: 10.23 min Scan# 1664
Delta R.T. -0.00 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:105 Resp: 2523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 31.2 | 22.3 | 41.3 |

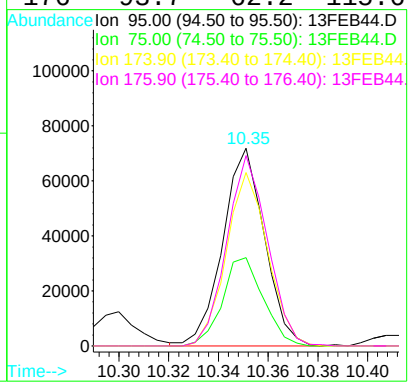


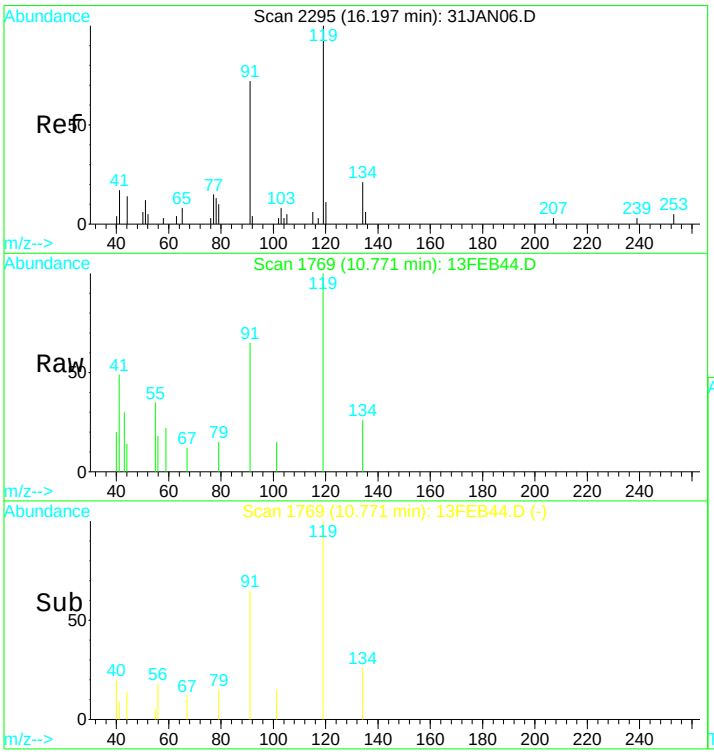




#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion: 95 Resp: 84148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 43.6 | 32.6 | 60.5 |
| 174 | 86.6 | 60.9 | 113.1 |
| 176 | 93.7 | 62.2 | 115.6 |

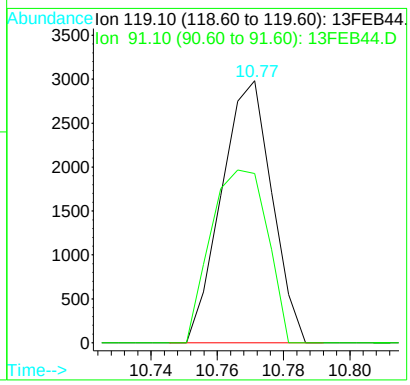





#56
tert-butylbenzene
Concen: 0.13 ug/L
RT: 10.77 min Scan# 1769
Delta R.T. -0.01 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:119 Resp: 3149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 74.2 | 46.8 | 87.0 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB44.D Vial: 44
Acq On : 13 Feb 2017 11:10 pm Operator: MGC
Sample : 1703480-07 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:44 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 183111 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 240310 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 61771 | 10.00 | ug/L | 0.00 |

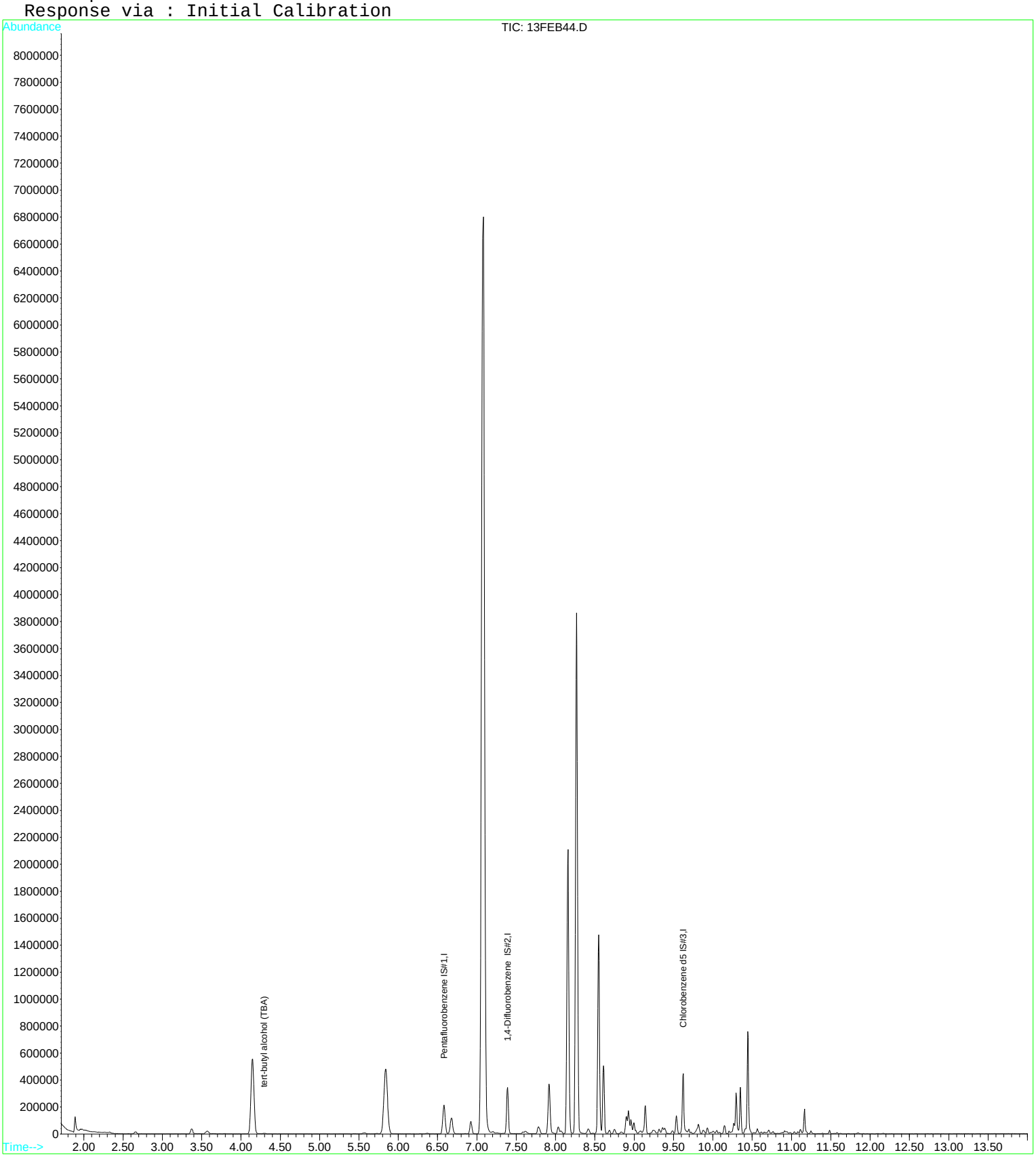
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 9) tert-butyl alcohol (TBA) | 4.30 | 59 | 5378 | 22.94 | ug/L | 100 |

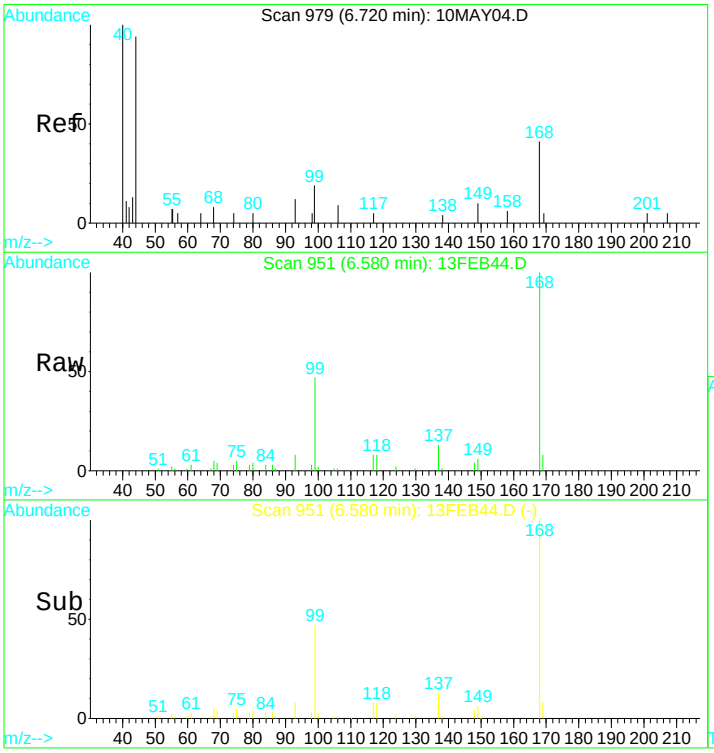
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB44.D Vial: 44
Acq On : 13 Feb 2017 11:10 pm Operator: MGC
Sample : 1703480-07 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:44 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

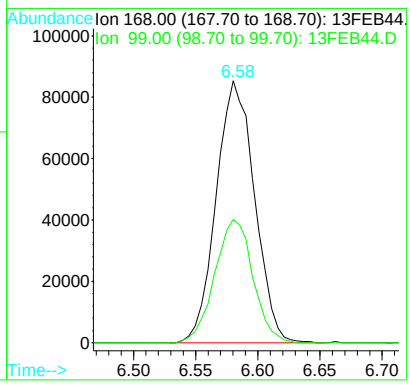


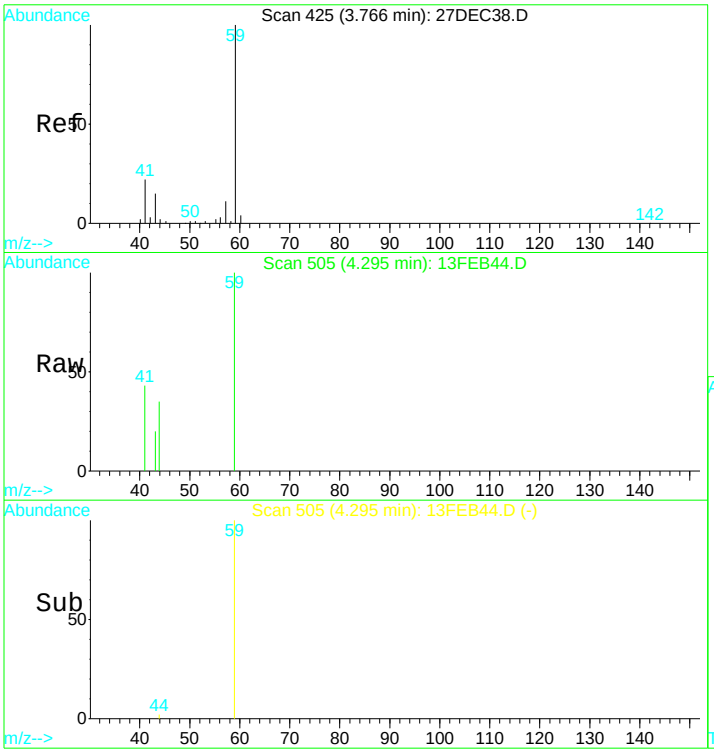



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:168 Resp: 183111

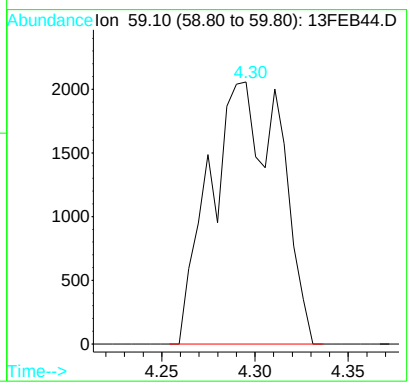
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.7 | 32.8 | 60.8 |

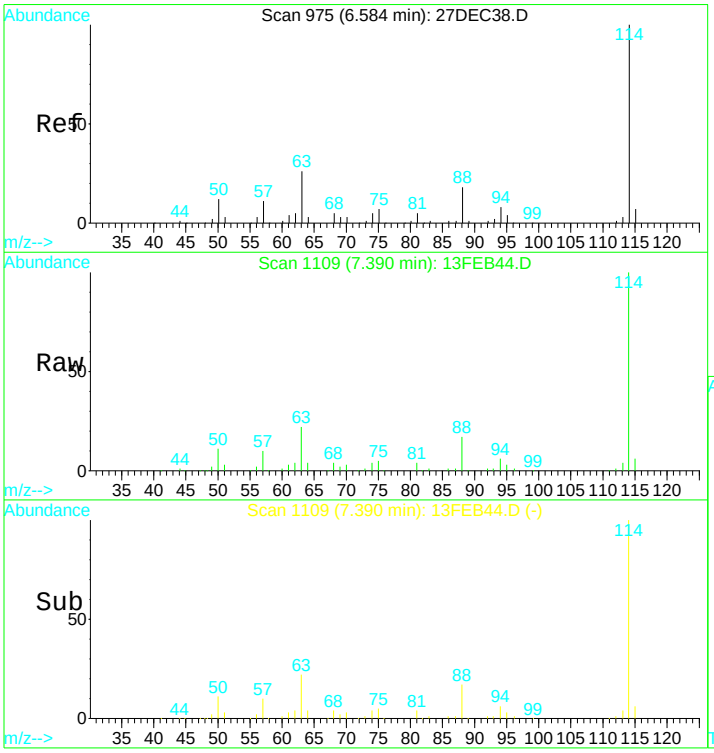



#9
tert-butyl alcohol (TBA)
Concen: 22.94 ug/L
RT: 4.30 min Scan# 505
Delta R.T. 0.01 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion: 59 Resp: 5378

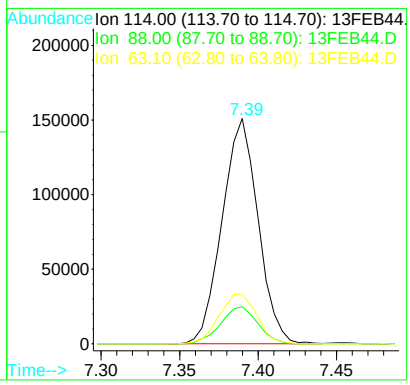


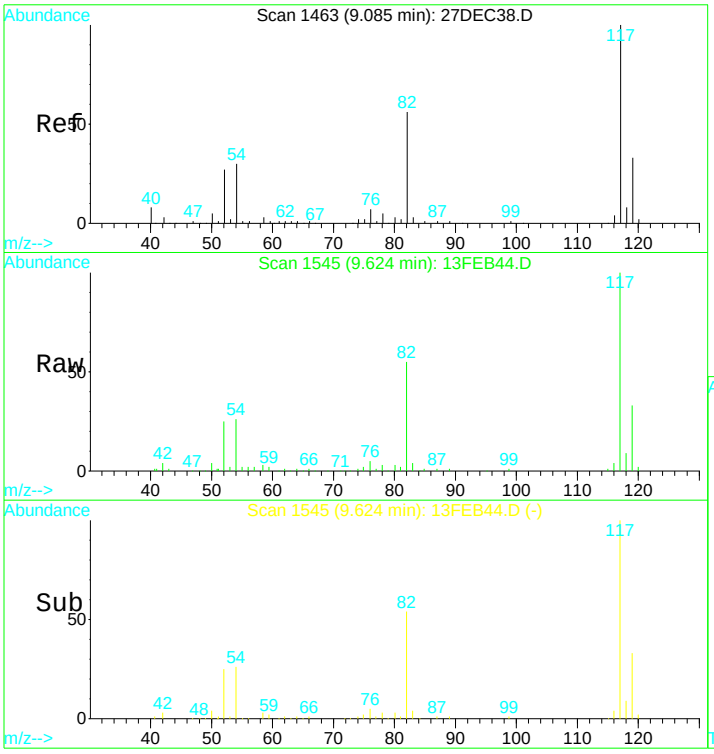



#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:114 Resp: 240310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.1 | 11.3 | 21.1 |
| 63 | 23.1 | 16.1 | 29.9 |

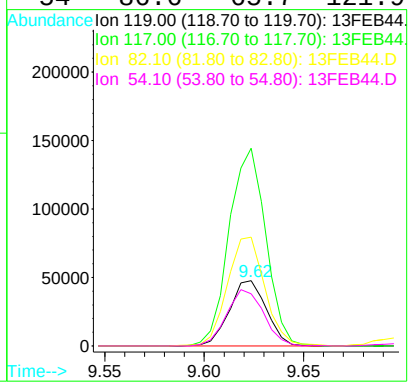



#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB44.D
Acq: 13 Feb 2017 11:10 pm

Tgt Ion:119 Resp: 61771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 299.0 | 218.6 | 406.0 |
| 82 | 168.5 | 128.7 | 238.9 |
| 54 | 86.6 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB45.D Vial: 45
Acq On : 13 Feb 2017 11:33 pm Operator: MGC
Sample : 1703480-08 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:44 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 203167 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 253603 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63082 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61199 | 10.18 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 101.80% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 285743 | 9.90 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.00% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 89739 | 10.32 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 103.20% | | | |

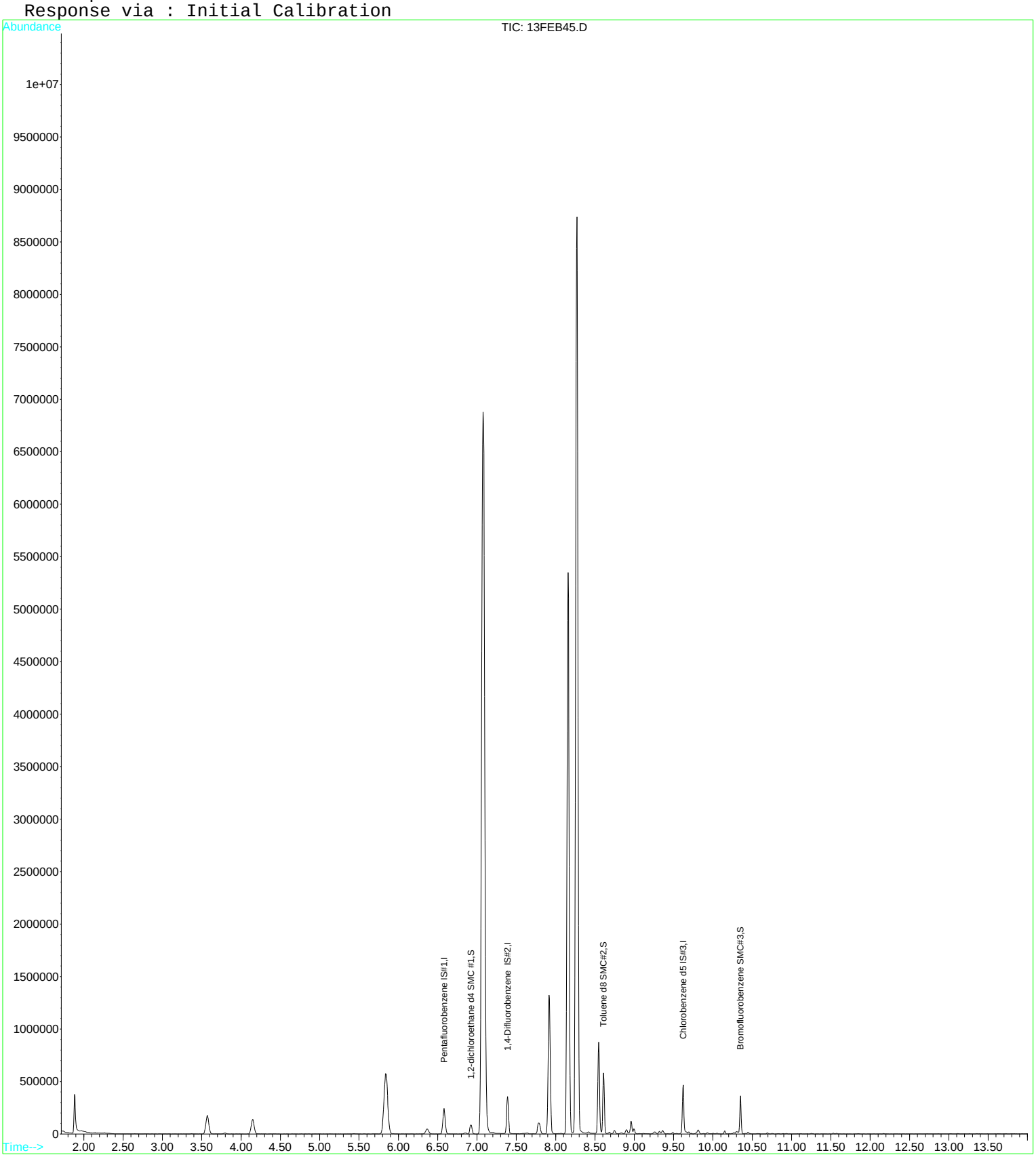
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB45.D Vial: 45
Acq On : 13 Feb 2017 11:33 pm Operator: MGC
Sample : 1703480-08 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:44 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB45.D Vial: 45
Acq On : 13 Feb 2017 11:33 pm Operator: MGC
Sample : 1703480-08 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:46 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 203167 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 253603 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63082 | 10.00 | ug/L | 0.00 |

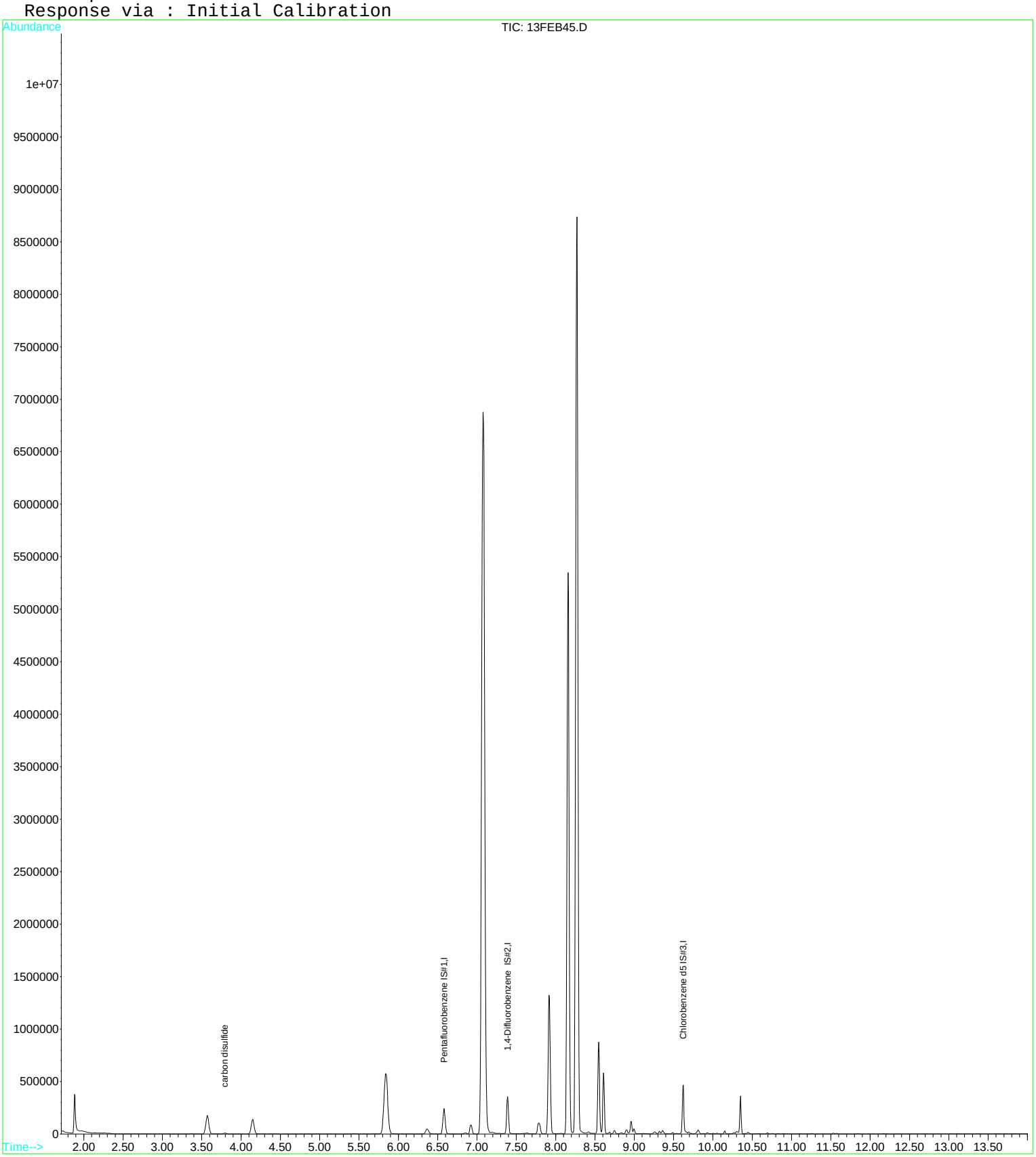
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 15) carbon disulfide | 3.80 | 76 | 15615 | 0.57 | ug/L | 96 |

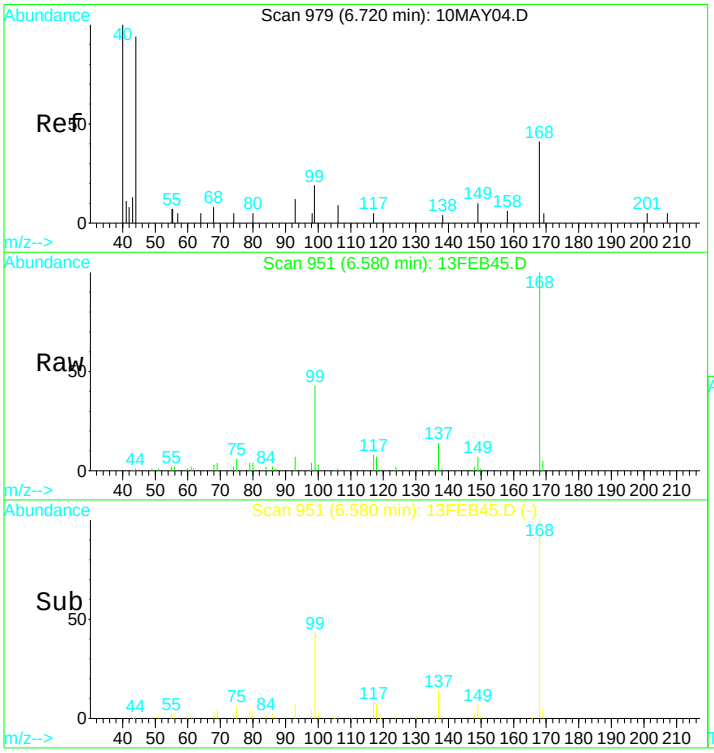
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB45.D Vial: 45
Acq On : 13 Feb 2017 11:33 pm Operator: MGC
Sample : 1703480-08 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:46 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

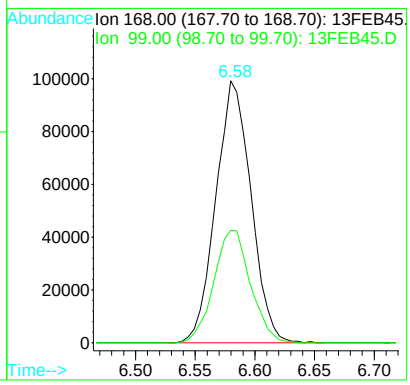


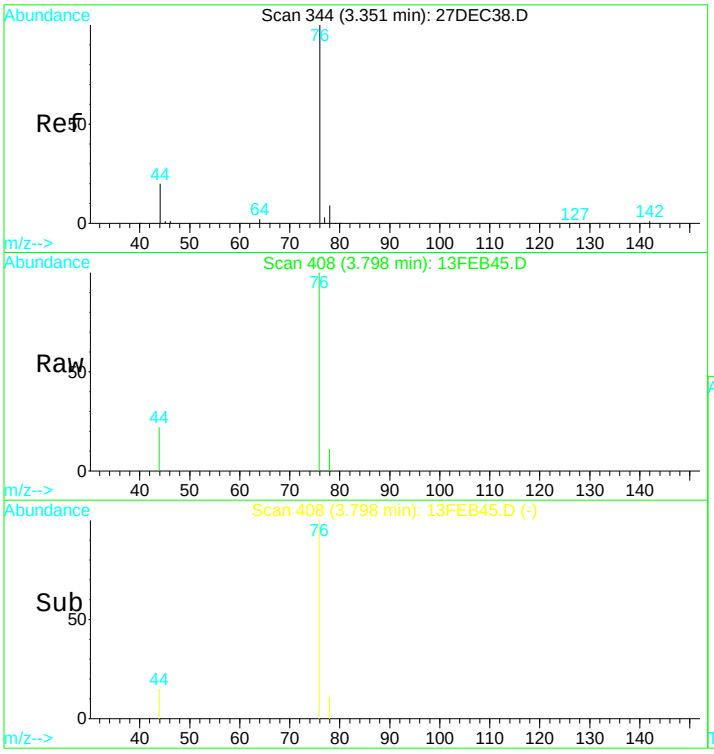



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB45.D
Acq: 13 Feb 2017 11:33 pm

Tgt Ion:168 Resp: 203167

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 44.6 | 32.8 | 60.8 |

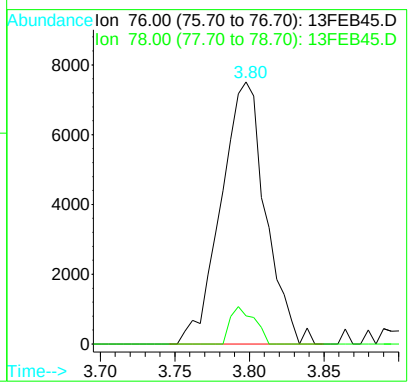


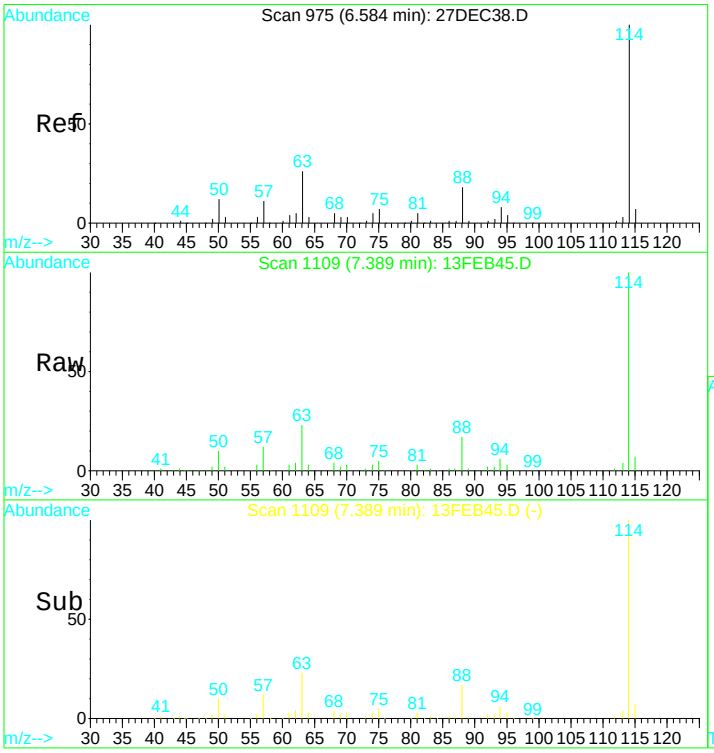




#15
carbon disulfide
Concen: 0.57 ug/L
RT: 3.80 min Scan# 408
Delta R.T. 0.00 min
Lab File: 13FEB45.D
Acq: 13 Feb 2017 11:33 pm

Tgt Ion: 76 Resp: 15615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 7.7 | 6.5 | 12.1 |

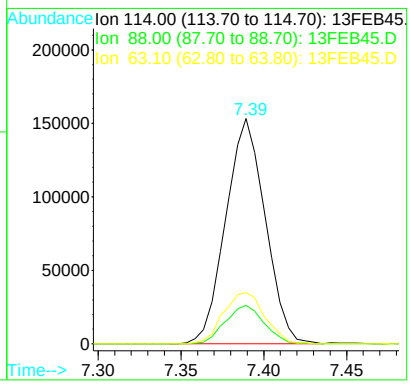


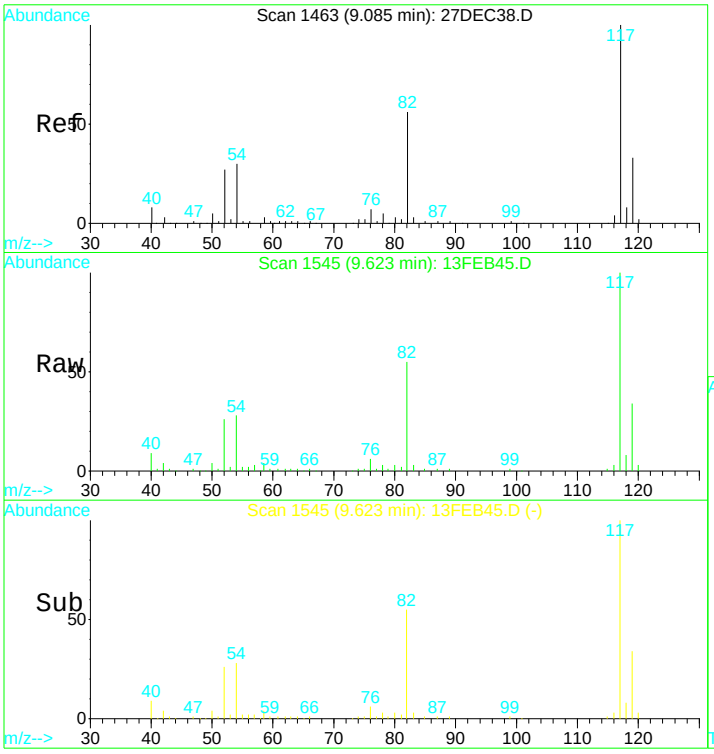



#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 13FEB45.D
Acq: 13 Feb 2017 11:33 pm

Tgt Ion:114 Resp: 253603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.9 | 11.3 | 21.1 |
| 63 | 23.9 | 16.1 | 29.9 |

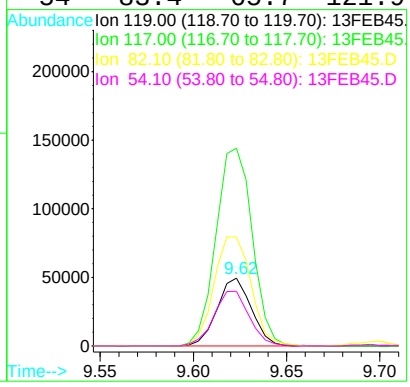



#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB45.D
Acq: 13 Feb 2017 11:33 pm

Tgt Ion:119 Resp: 63082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 309.6 | 218.6 | 406.0 |
| 82 | 174.6 | 128.7 | 238.9 |
| 54 | 83.4 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB46.D Vial: 46
Acq On : 13 Feb 2017 11:57 pm Operator: MGC
Sample : 1703480-09 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:47 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 200786 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270633 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67208 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 69537 | 11.71 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 117.10% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 298227 | 9.68 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.80% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 96560 | 10.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 104.20% | | | |

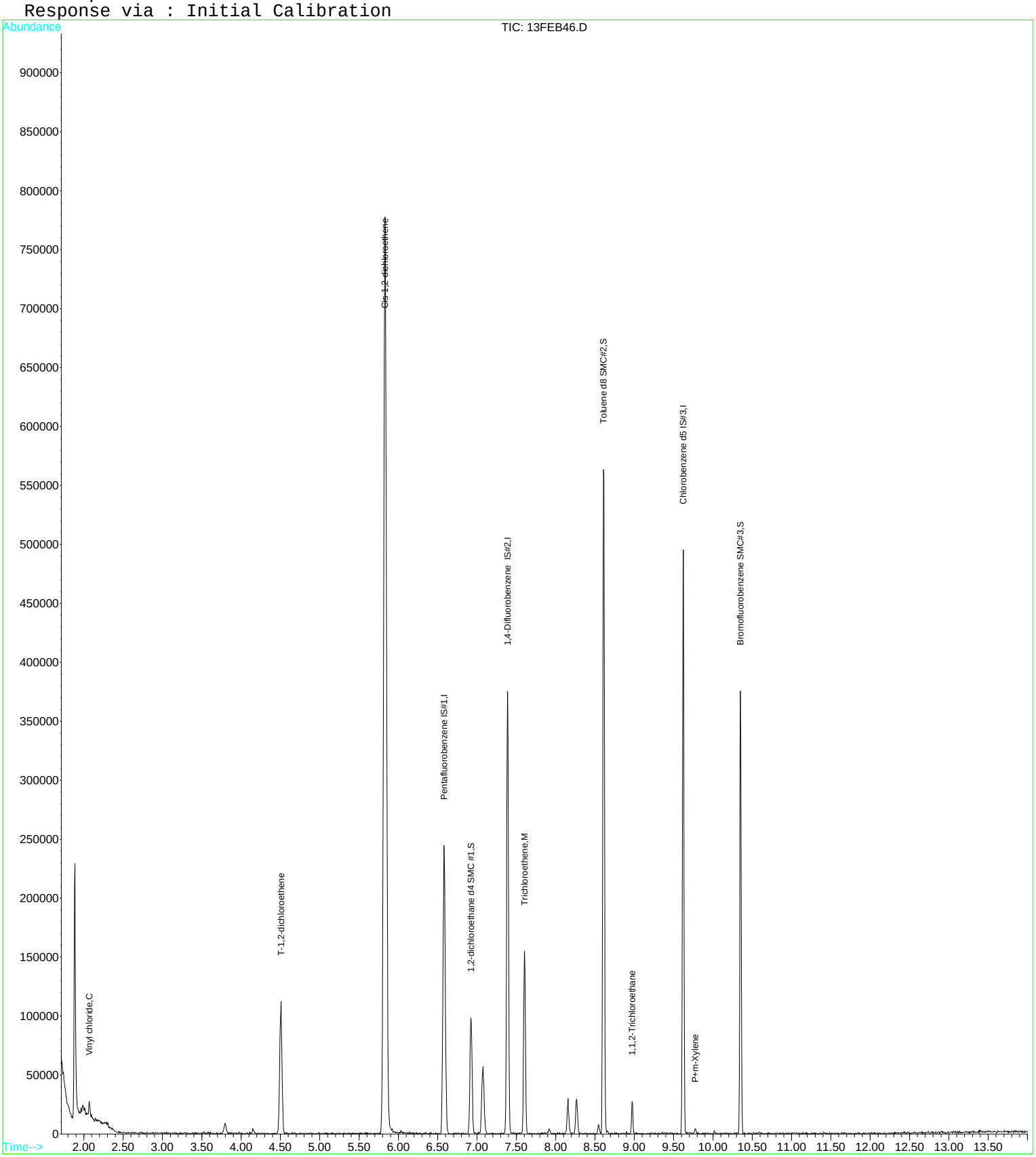
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 9914 | 0.83 | ug/L # | 1 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 42176 | 4.67 | ug/L | 94 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 425938 | 45.46 | ug/L | 92 |
| 25) Trichloroethene | 7.60 | 130 | 44188 | 5.02 | ug/L | 97 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 6334 | 1.53 | ug/L | 97 |
| 43) P+m-Xylene | 9.78 | 106 | 1488 | 0.11 | ug/L # | 76 |

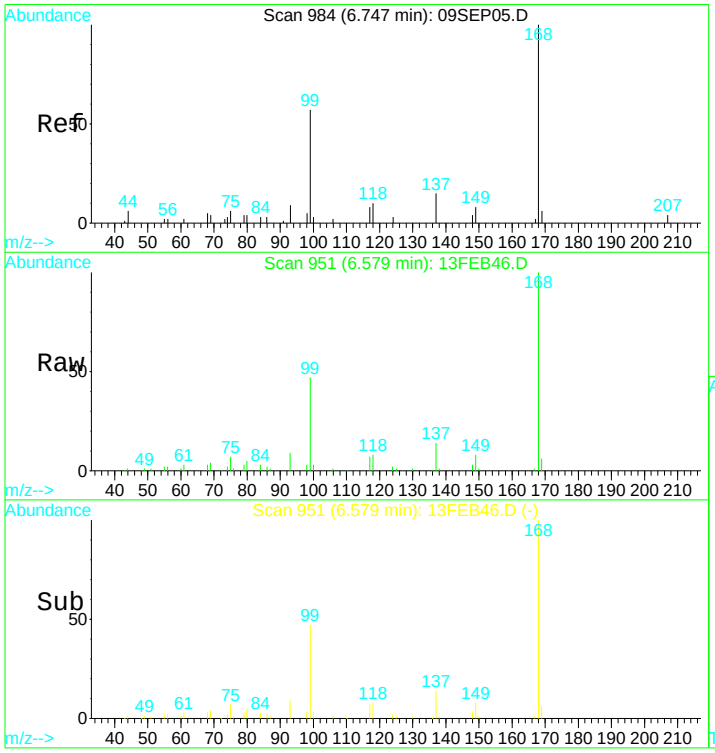
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB46.D Vial: 46
Acq On : 13 Feb 2017 11:57 pm Operator: MGC
Sample : 1703480-09 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:47 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

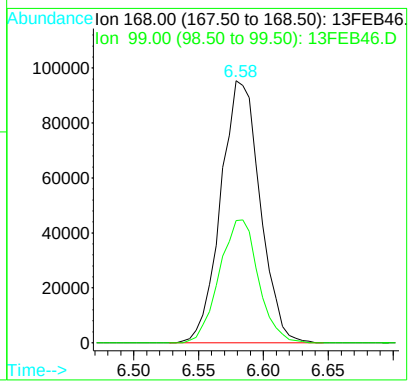


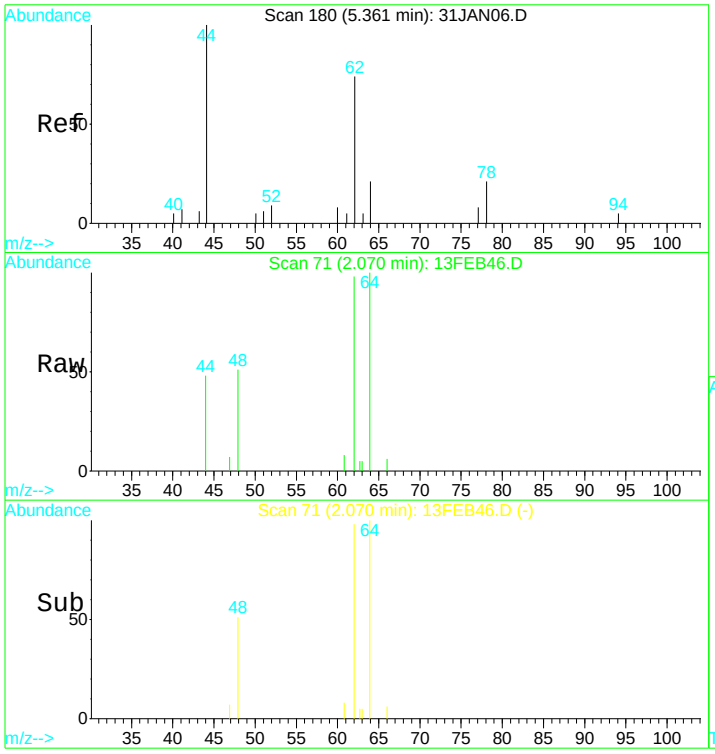



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:168 Resp: 200786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.6 | 305.1 | 566.7# |

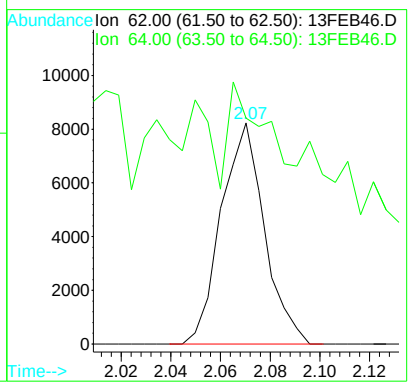


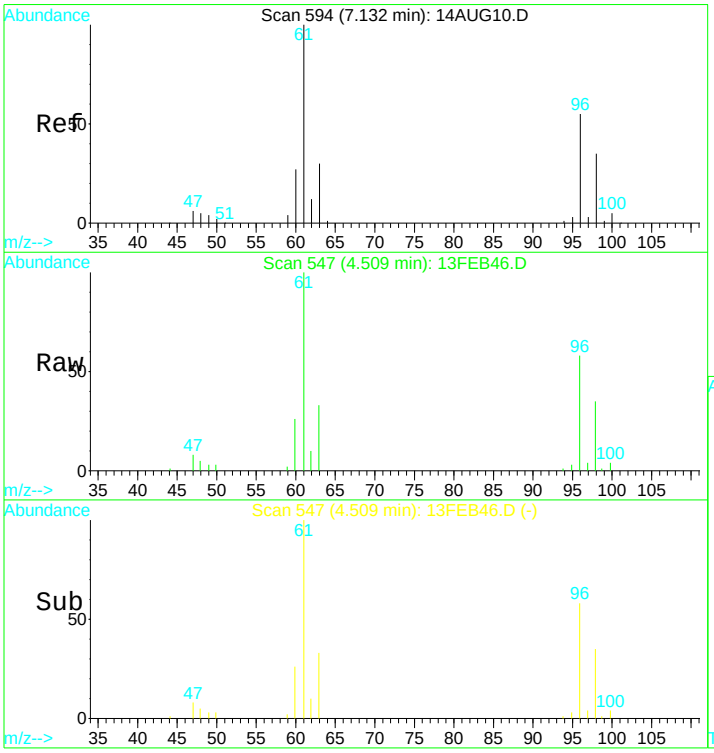




#4
Vinyl chloride
Concen: 0.83 ug/L
RT: 2.07 min Scan# 71
Delta R.T. 0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 62 Resp: 9914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 88.4 | 22.4 | 41.6# |

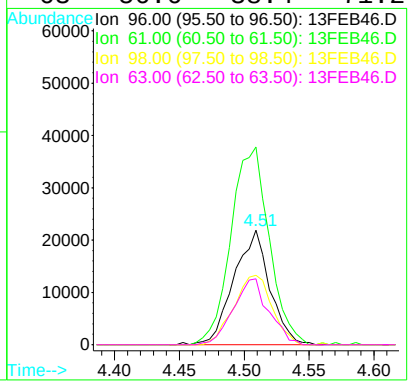


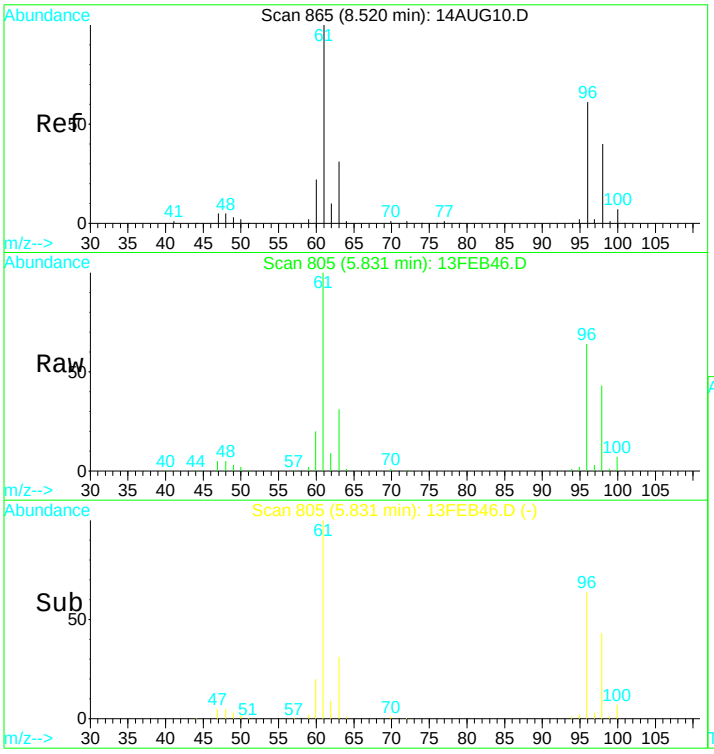



#12
T-1,2-dichloroethene
Concen: 4.67 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 96 Resp: 42176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 183.1 | 119.6 | 222.2 |
| 98 | 64.4 | 46.1 | 85.5 |
| 63 | 56.6 | 38.4 | 71.2 |

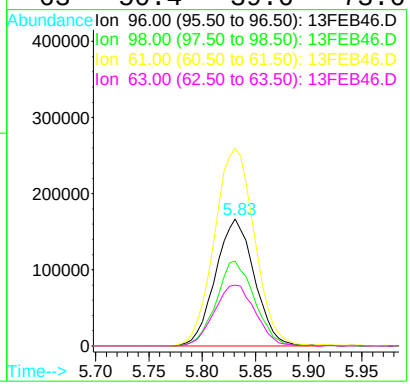


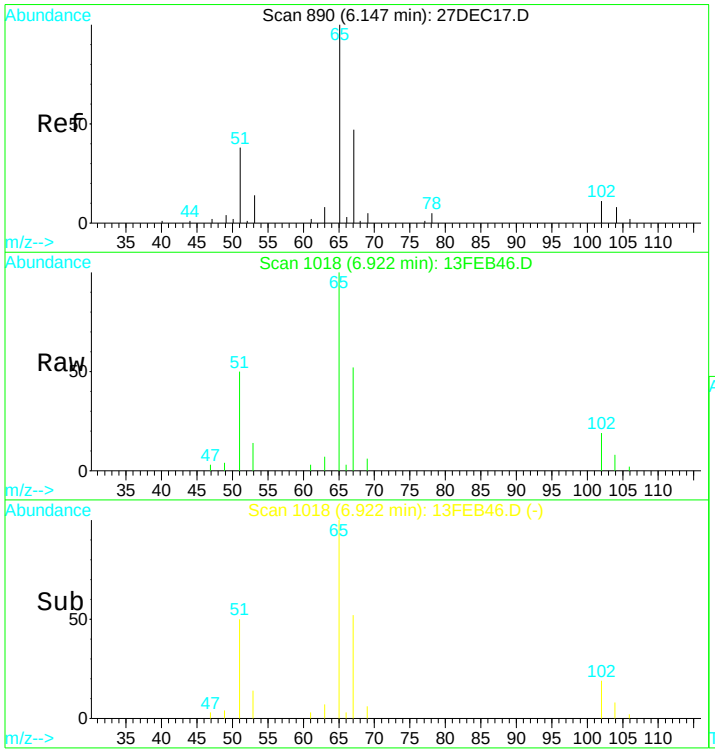




#15
Cis-1,2-dichloroethene
Concen: 45.46 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 96 Resp: 425938

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 65.4 | 46.2 | 85.8 |
| 61 | 160.0 | 122.8 | 228.0 |
| 63 | 50.4 | 39.6 | 73.6 |

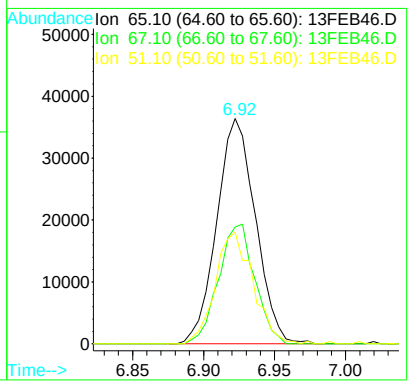


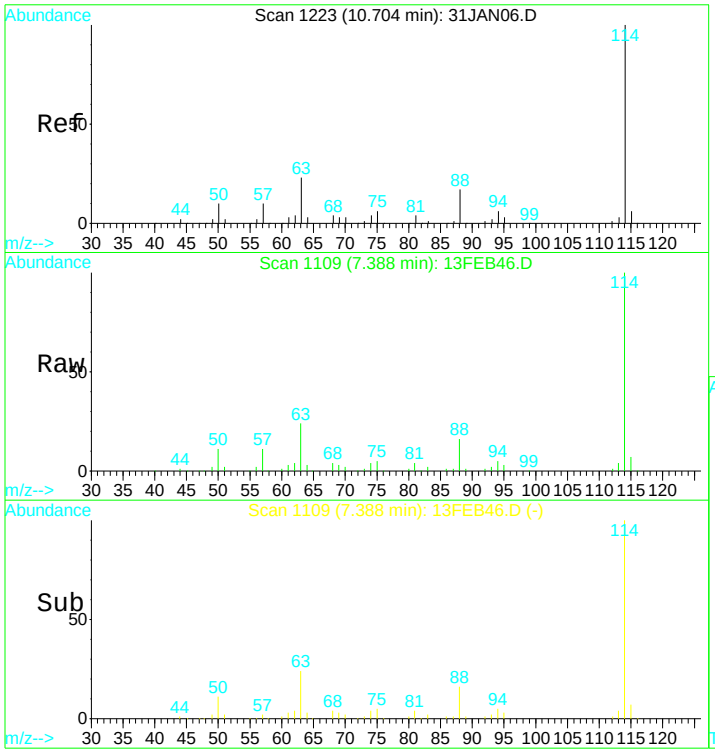



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 65 Resp: 69537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.4 | 38.4 | 71.4 |
| 51 | 48.1 | 1006.3 | 1868.8# |

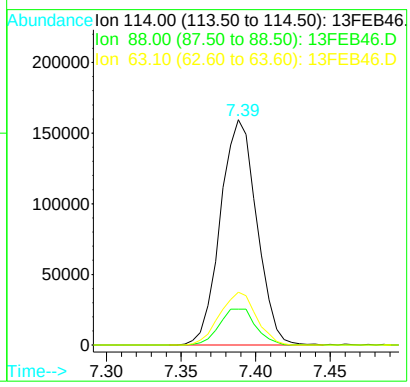


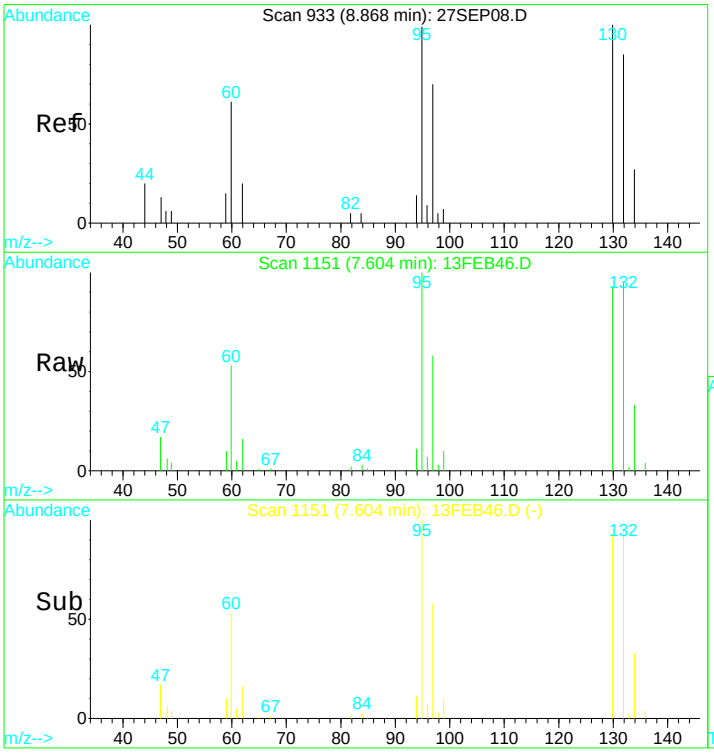




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:114 Resp: 270633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.2 | 12.0 | 22.2 |
| 63 | 23.6 | 16.9 | 31.5 |

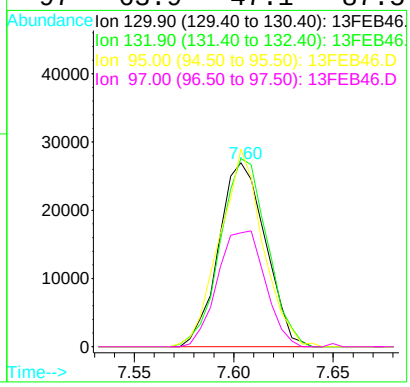


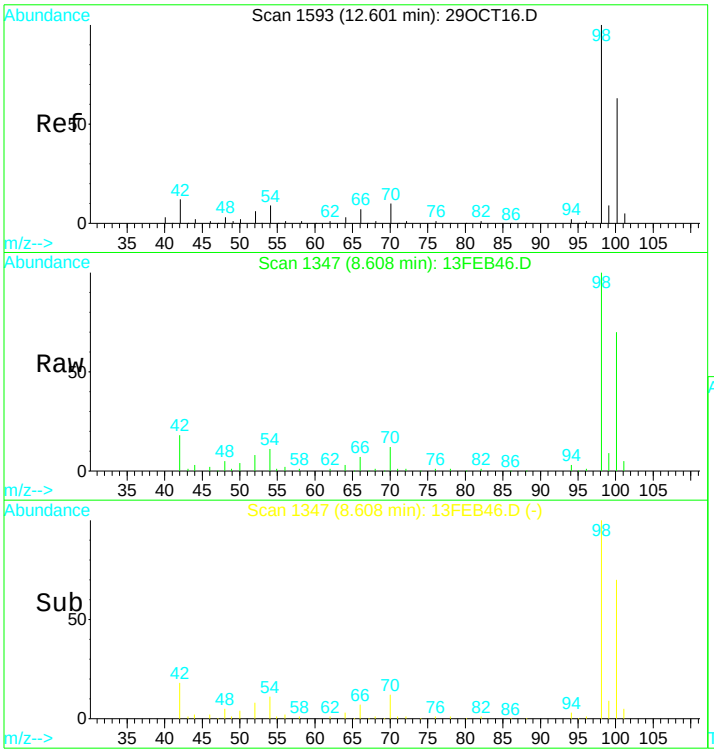



#25
Trichloroethene
Concen: 5.02 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:130 Resp: 44188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 101.7 | 74.3 | 137.9 |
| 95 | 99.4 | 70.8 | 131.6 |
| 97 | 63.9 | 47.1 | 87.5 |

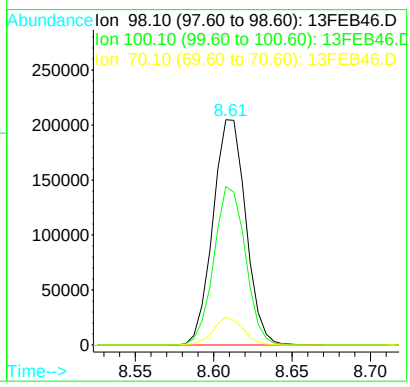


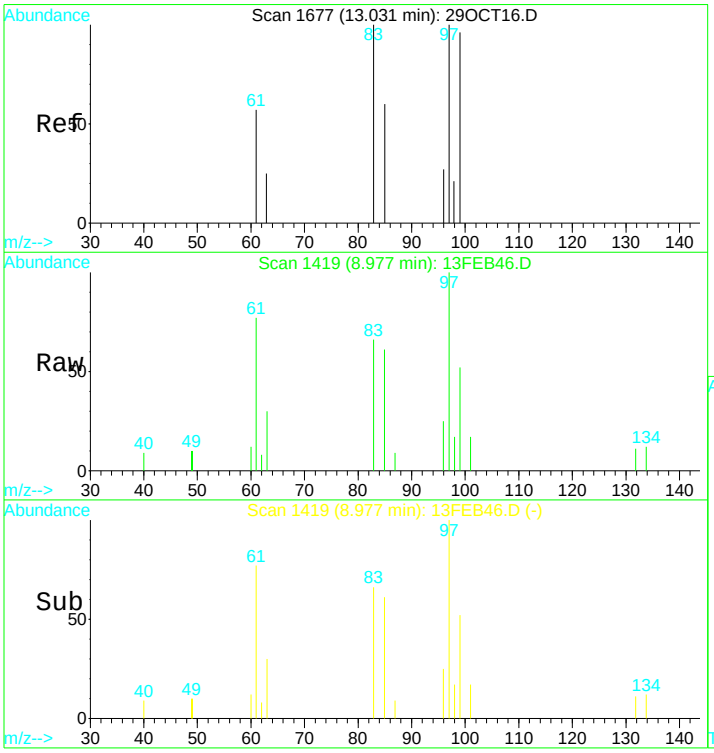




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 98 Resp: 298227

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.7 | 47.0 | 87.4 |
| 70 | 11.4 | 7.3 | 13.7 |

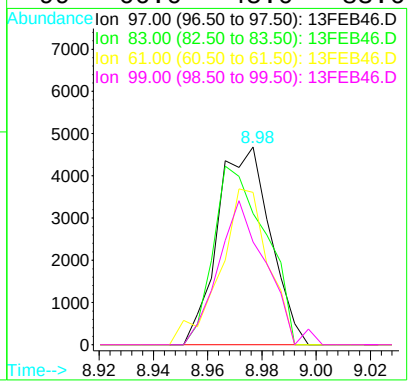


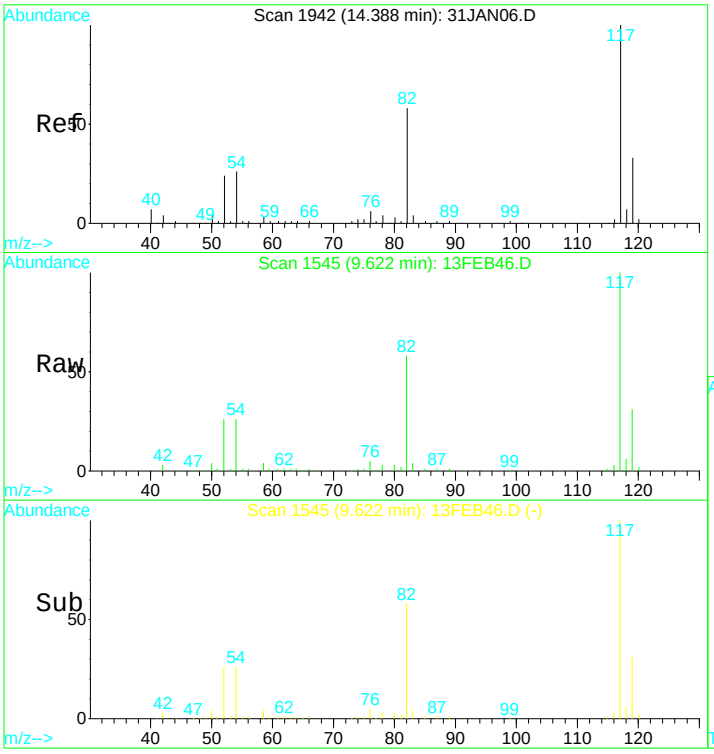



#34
1,1,2-Trichloroethane
Concen: 1.53 ug/L
RT: 8.98 min Scan# 1419
Delta R.T. -0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 97 Resp: 6334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 89.1 | 61.6 | 114.4 |
| 61 | 71.7 | 47.0 | 87.4 |
| 99 | 66.0 | 45.0 | 83.6 |

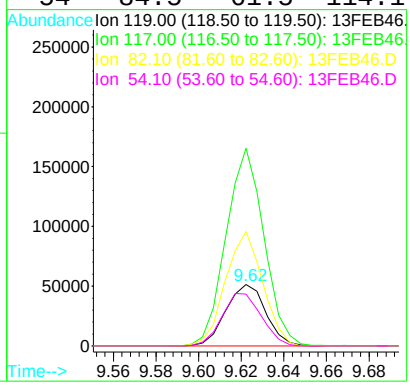


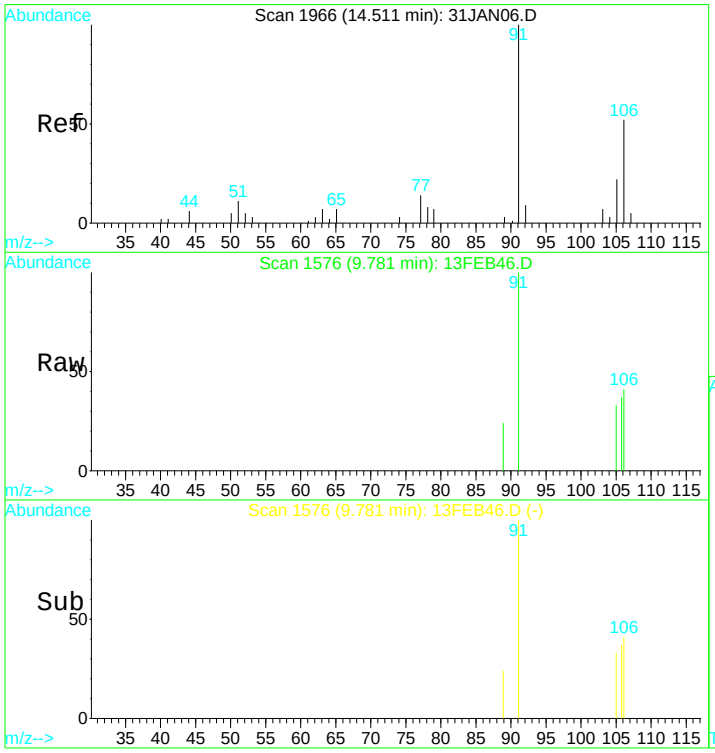




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:119 Resp: 67208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 304.5 | 220.4 | 409.4 |
| 82 | 173.3 | 123.9 | 230.1 |
| 54 | 84.5 | 61.5 | 114.1 |

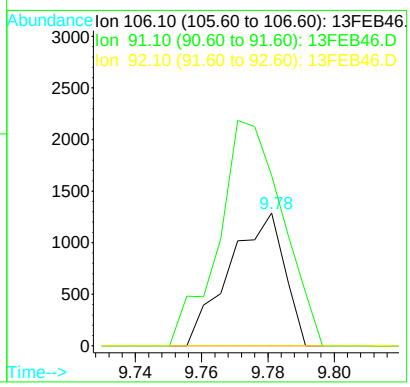


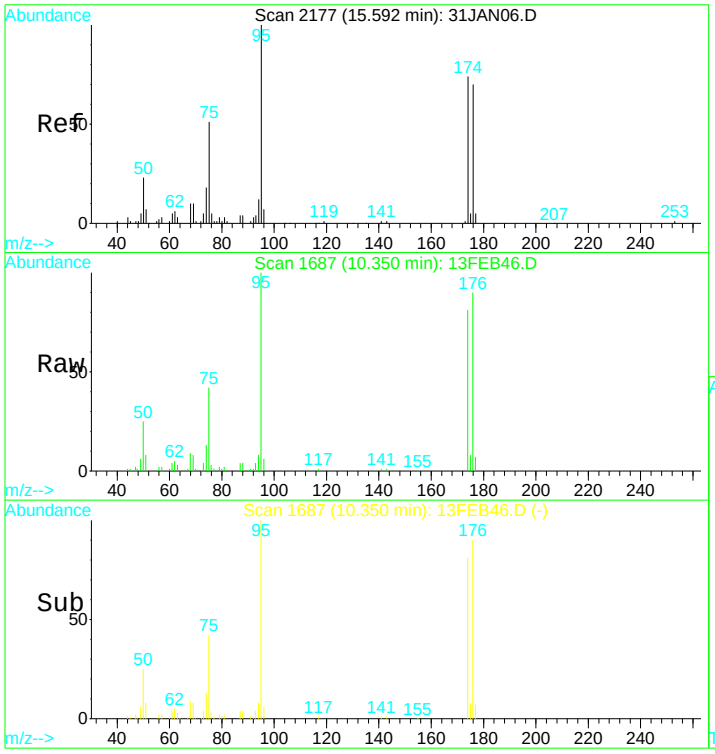



#43
P+m-Xylene
Concen: 0.11 ug/L
RT: 9.78 min Scan# 1576
Delta R.T. 0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:106 Resp: 1488

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 196.9 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

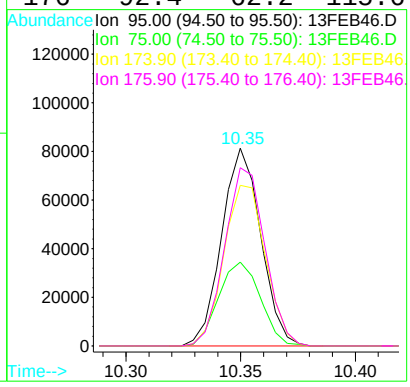



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 95 Resp: 96560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 45.3 | 32.6 | 60.5 |
| 174 | 86.6 | 60.9 | 113.1 |
| 176 | 92.4 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB46.D Vial: 46
Acq On : 13 Feb 2017 11:57 pm Operator: MGC
Sample : 1703480-09 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:48 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 200786 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270633 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67208 | 10.00 | ug/L | 0.00 |

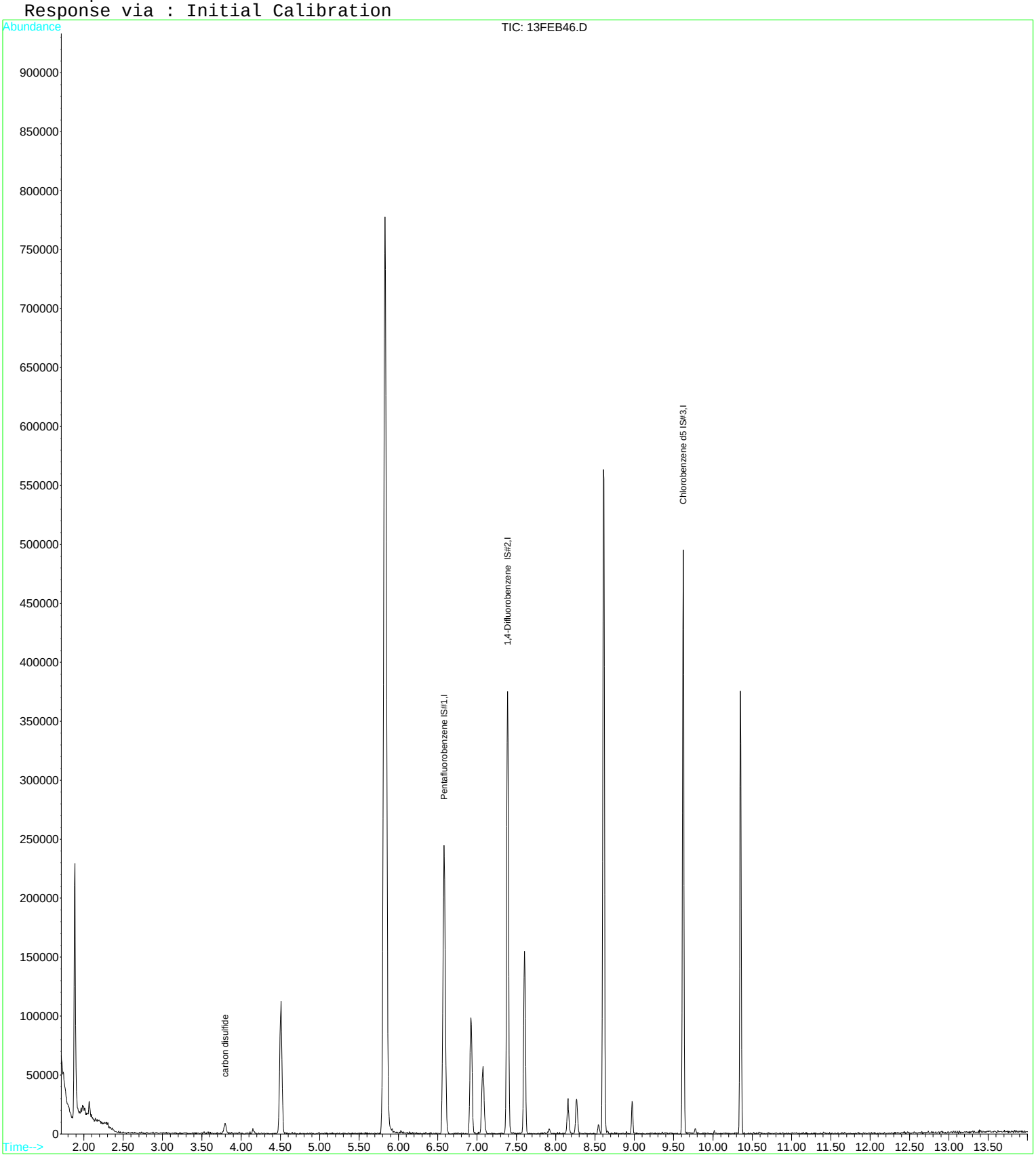
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 15) carbon disulfide | 3.80 | 76 | 13013 | 0.48 | ug/L | 98 |

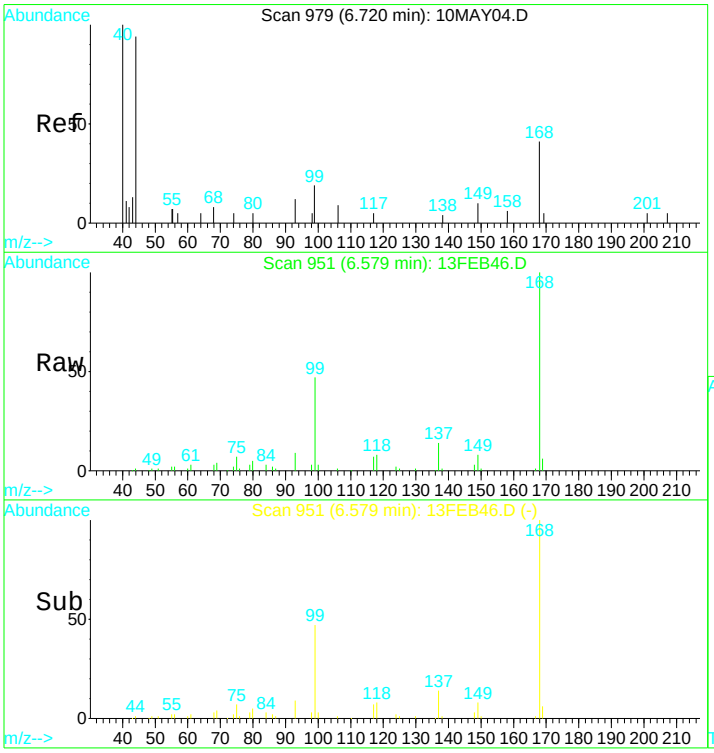
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB46.D Vial: 46
Acq On : 13 Feb 2017 11:57 pm Operator: MGC
Sample : 1703480-09 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:48 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

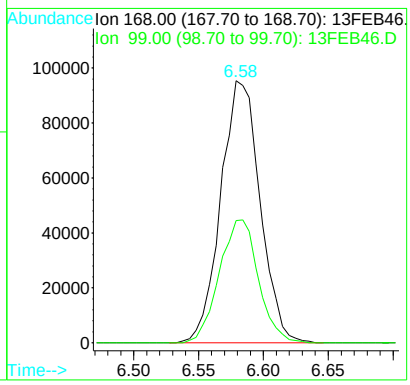


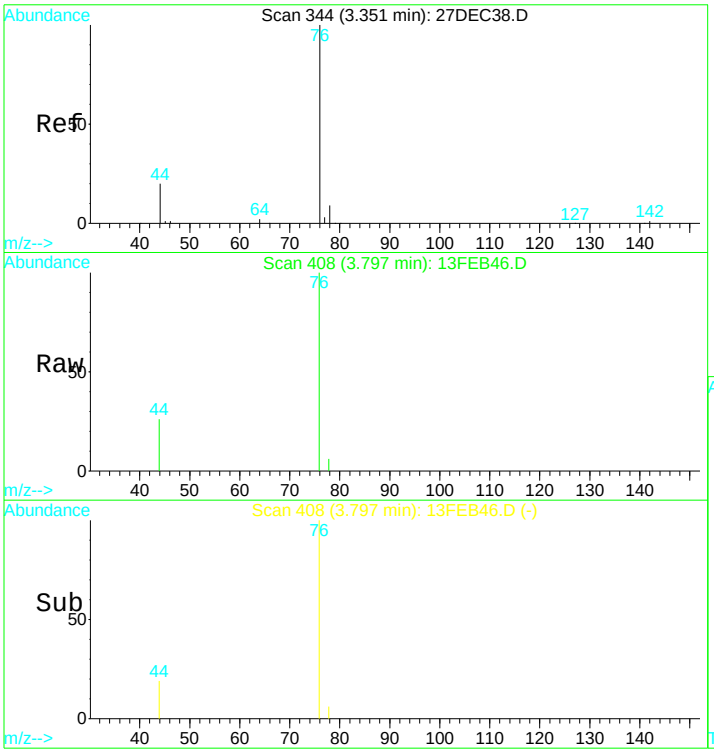



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:168 Resp: 200786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.6 | 32.8 | 60.8 |

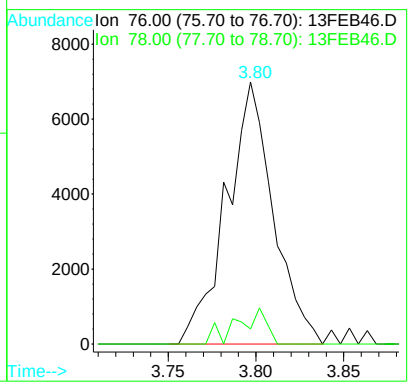


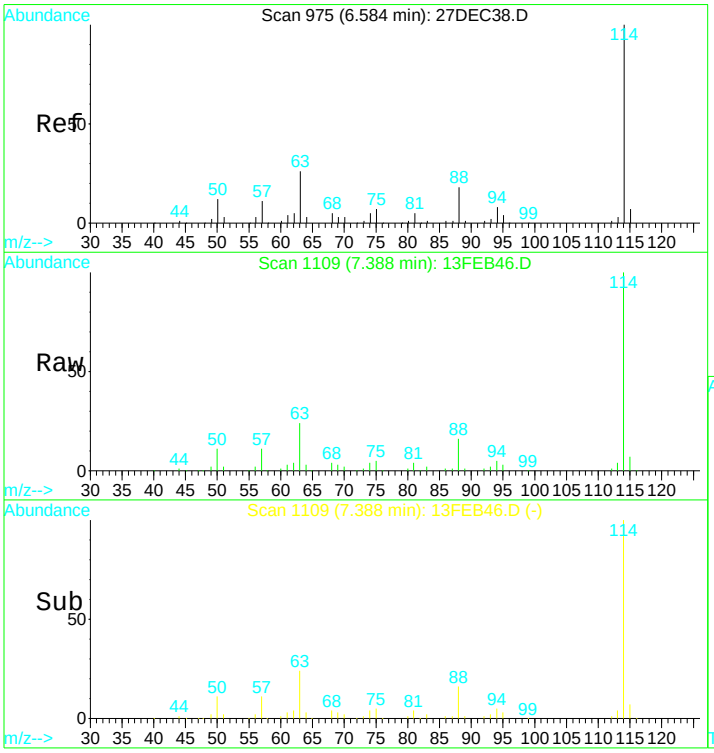




#15
carbon disulfide
Concen: 0.48 ug/L
RT: 3.80 min Scan# 408
Delta R.T. 0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion: 76 Resp: 13013

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.7 | 6.5 | 12.1 |

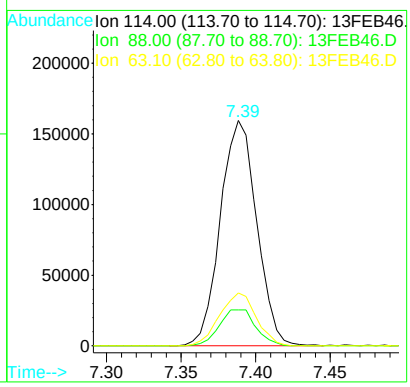


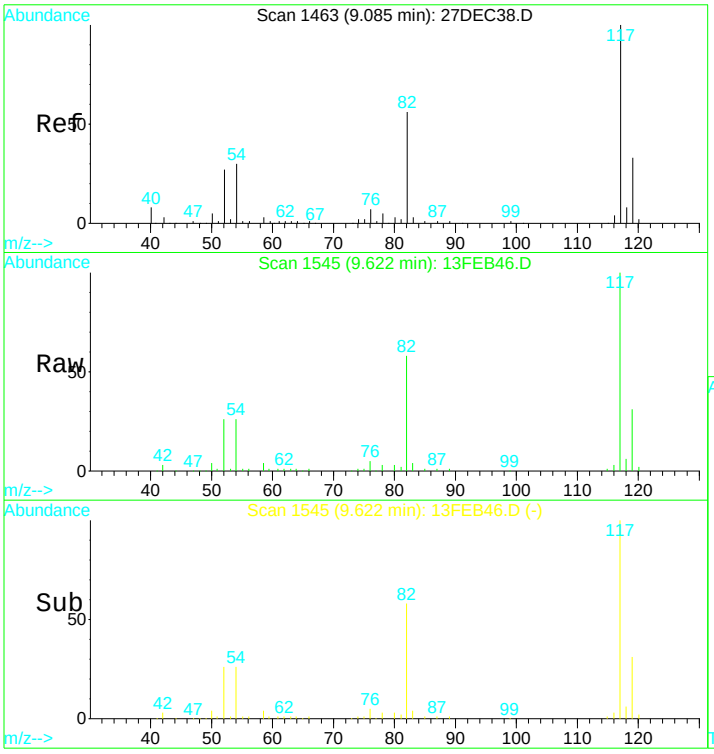



#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:114 Resp: 270633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.2 | 11.3 | 21.1 |
| 63 | 23.6 | 16.1 | 29.9 |

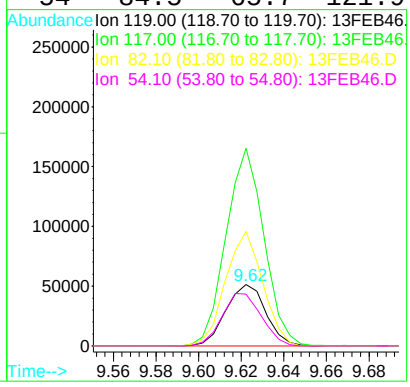



#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB46.D
Acq: 13 Feb 2017 11:57 pm

Tgt Ion:119 Resp: 67208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 304.5 | 218.6 | 406.0 |
| 82 | 173.3 | 128.7 | 238.9 |
| 54 | 84.5 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB12.D Vial: 12
Acq On : 13 Feb 2017 10:48 am Operator: MGC
Sample : 1703480-10 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:05 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 217845 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 293876 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 76560 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 77504 | 12.02 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 120.20% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 327913 | 9.80 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 98.00% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 105494 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 99.90% | | | | | | |

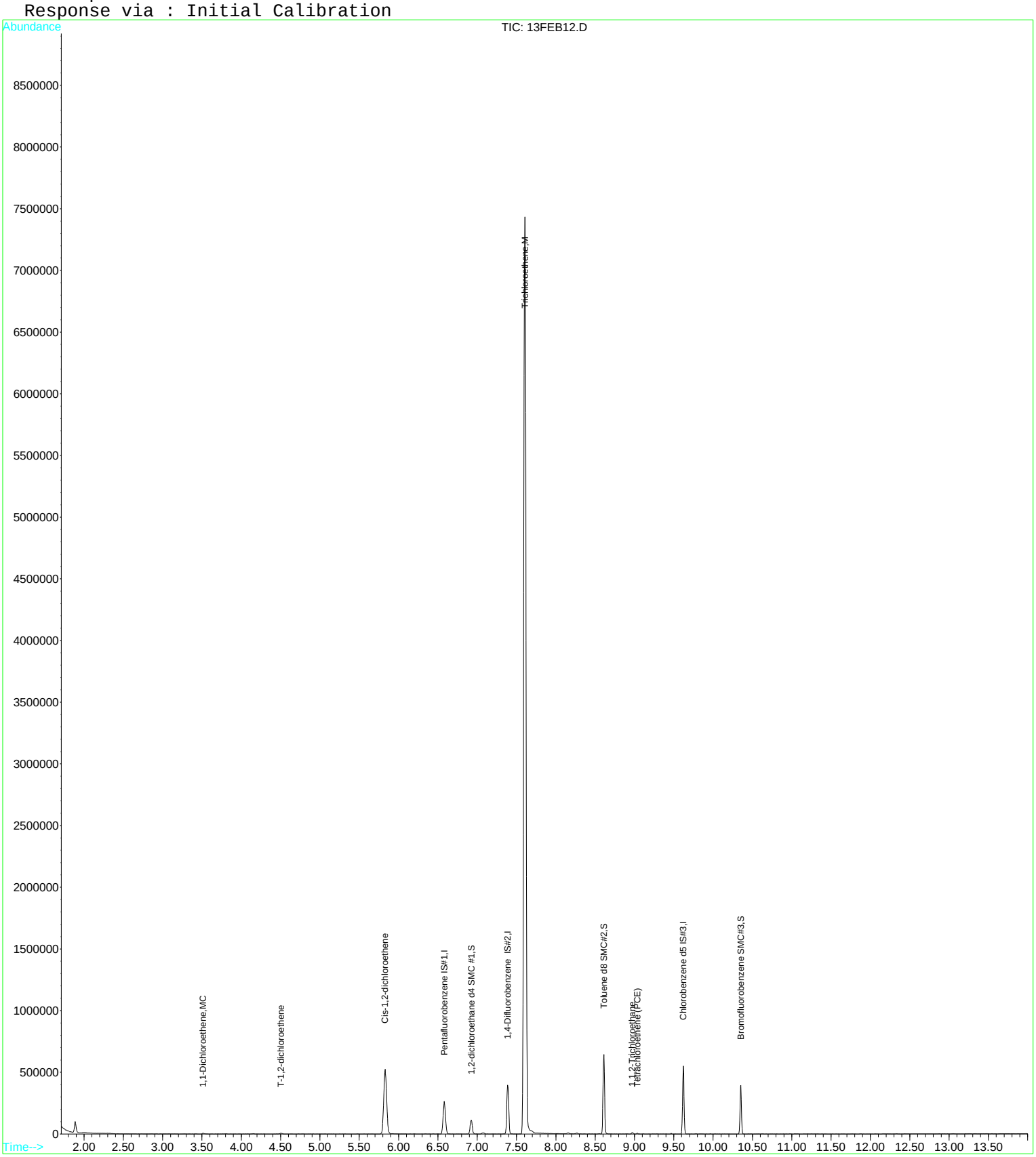
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 9) 1,1-Dichloroethene | 3.51 | 61 | 3977 | 0.24 | ug/L | 90 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 2119 | 0.22 | ug/L | 85 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 288830 | 28.41 | ug/L | 92 |
| 25) Trichloroethene | 7.61 | 130 | 2581347 | 269.80 | ug/L | 97 |
| 34) 1,1,2-Trichloroethane | 8.96 | 97 | 2842 | 0.63 | ug/L | 93 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 1286 | 0.13 | ug/L # | 80 |

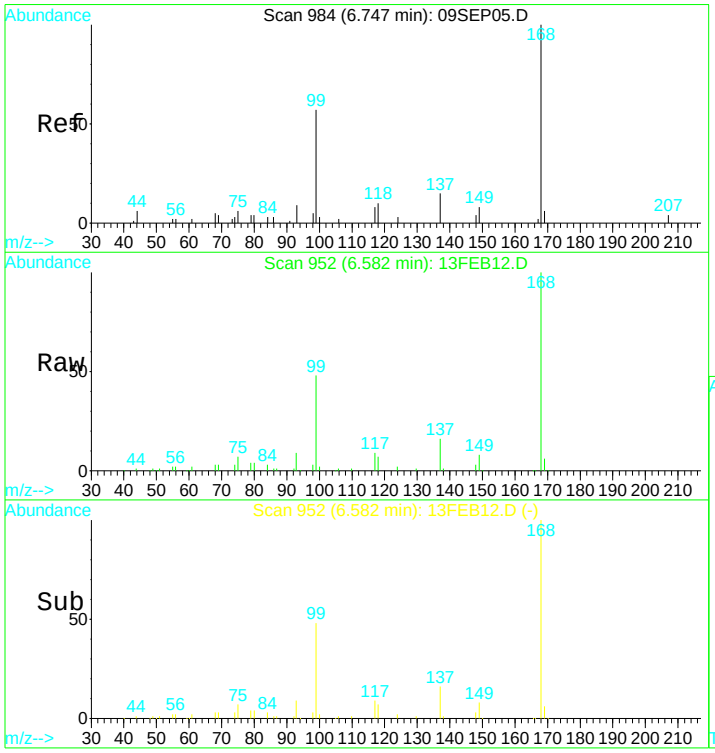
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB12.D Vial: 12
Acq On : 13 Feb 2017 10:48 am Operator: MGC
Sample : 1703480-10 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:05 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

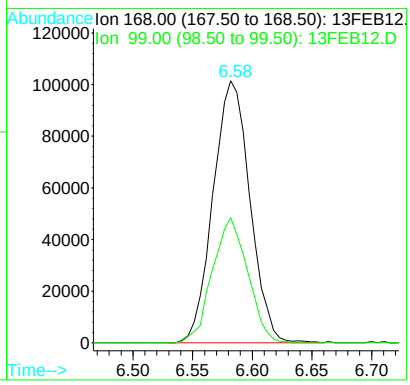


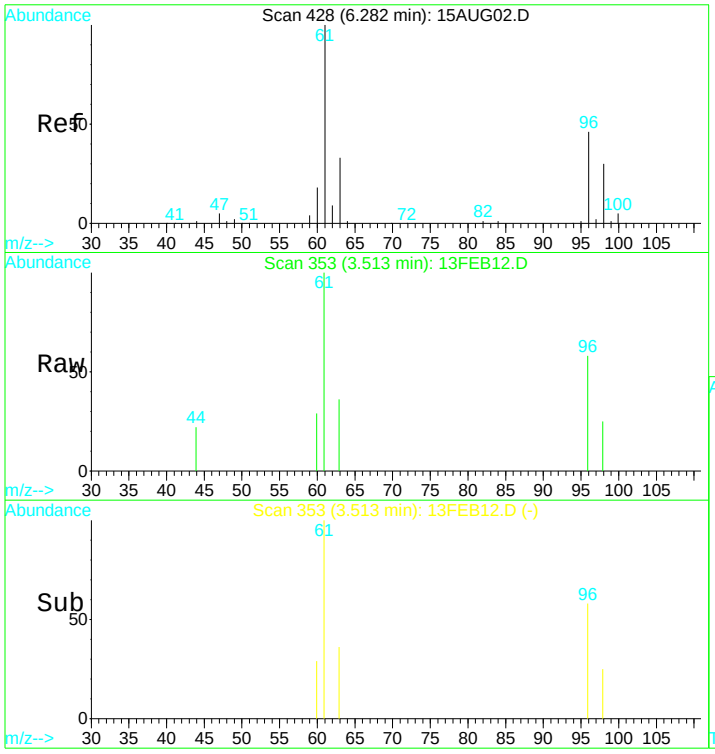



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion:168 Resp: 217845

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.7 | 305.1 | 566.7# |

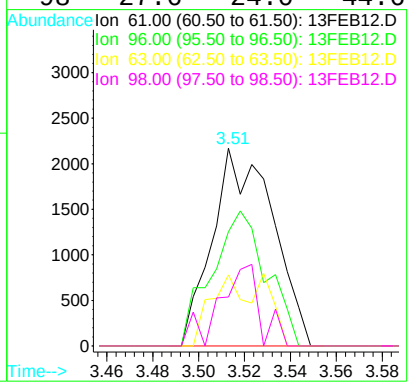


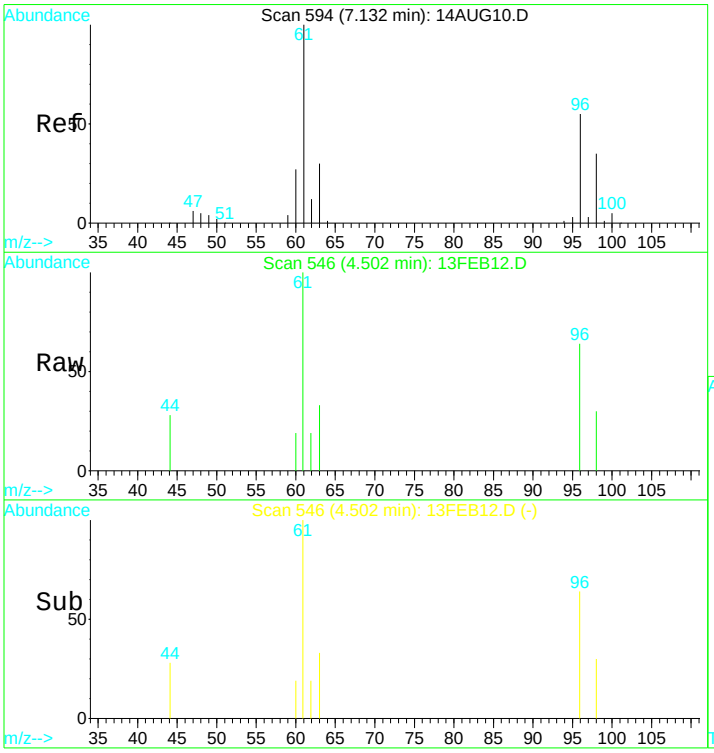




#9
1,1-Dichloroethene
Concen: 0.24 ug/L
RT: 3.51 min Scan# 353
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion: 61 Resp: 3977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 62.1 | 36.6 | 68.0 |
| 63 | 31.2 | 22.0 | 40.8 |
| 98 | 27.6 | 24.0 | 44.6 |

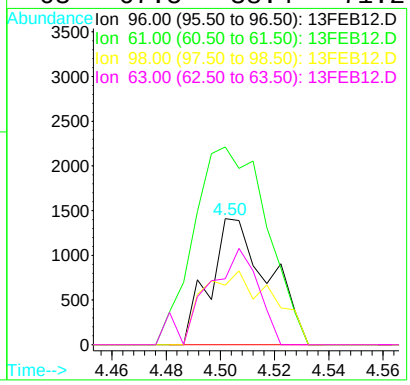


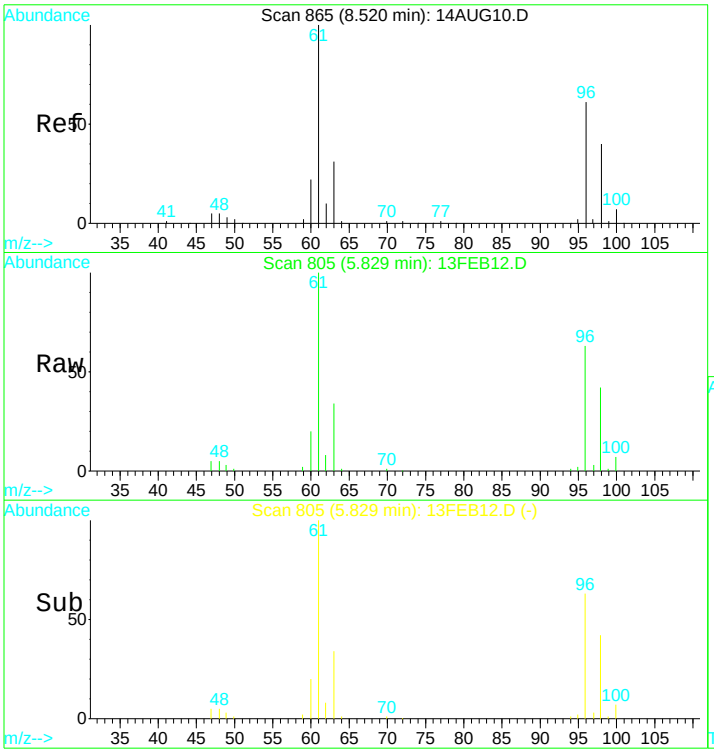



#12
T-1,2-dichloroethene
Concen: 0.22 ug/L
RT: 4.50 min Scan# 546
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion: 96 Resp: 2119

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 195.4 | 119.6 | 222.2 |
| 98 | 69.0 | 46.1 | 85.5 |
| 63 | 67.5 | 38.4 | 71.2 |

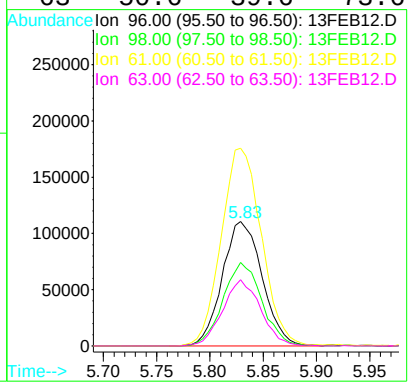


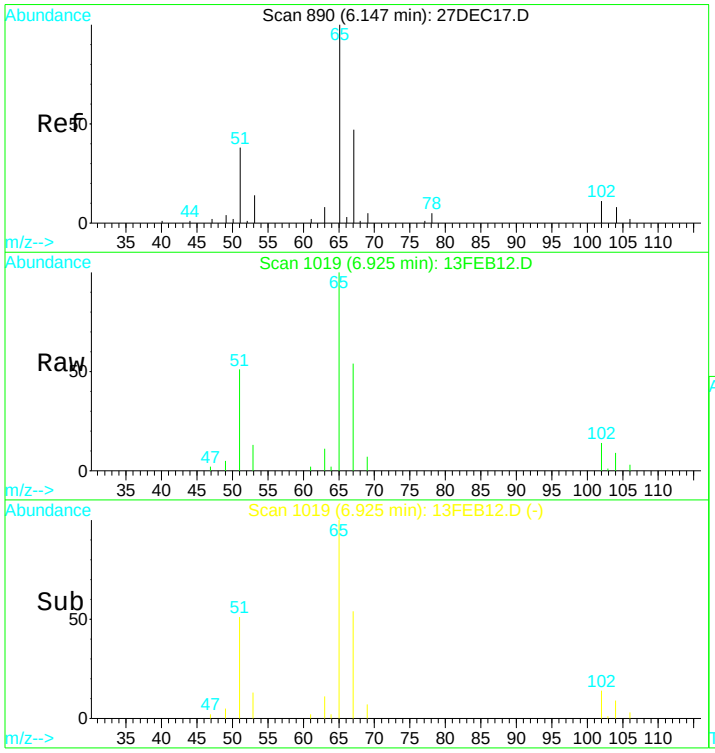




#15
Cis-1,2-dichloroethene
Concen: 28.41 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion: 96 Resp: 288830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 65.2 | 46.2 | 85.8 |
| 61 | 160.3 | 122.8 | 228.0 |
| 63 | 50.6 | 39.6 | 73.6 |

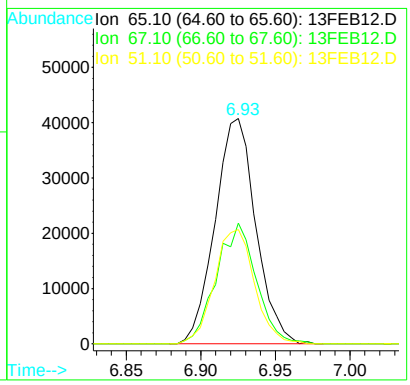


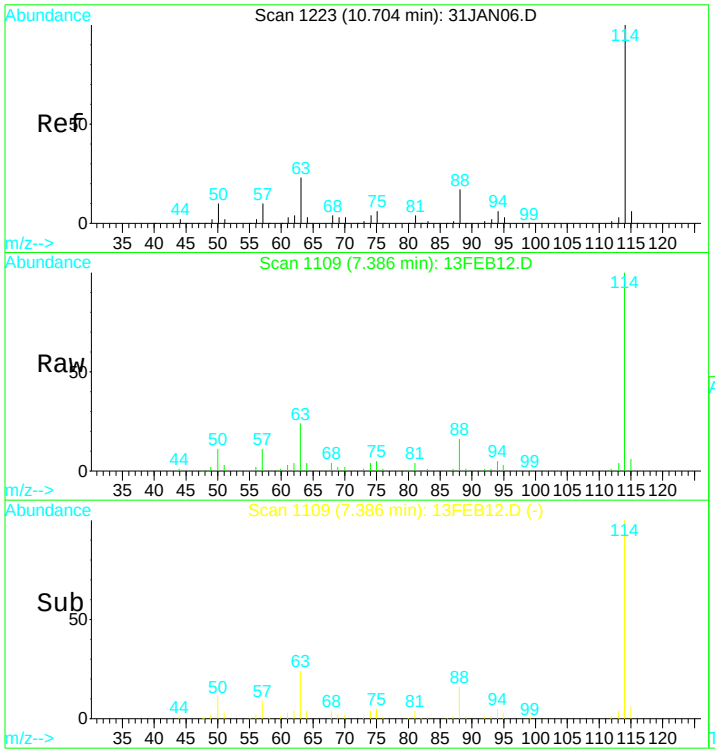



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion: 65 Resp: 77504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.5 | 38.4 | 71.4 |
| 51 | 49.8 | 1006.3 | 1868.8# |

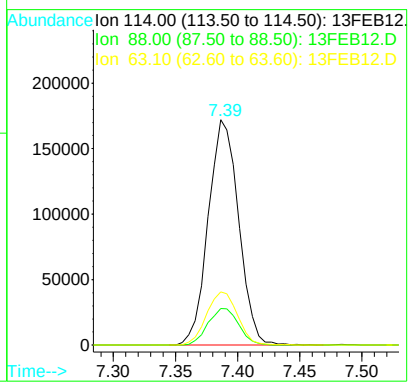


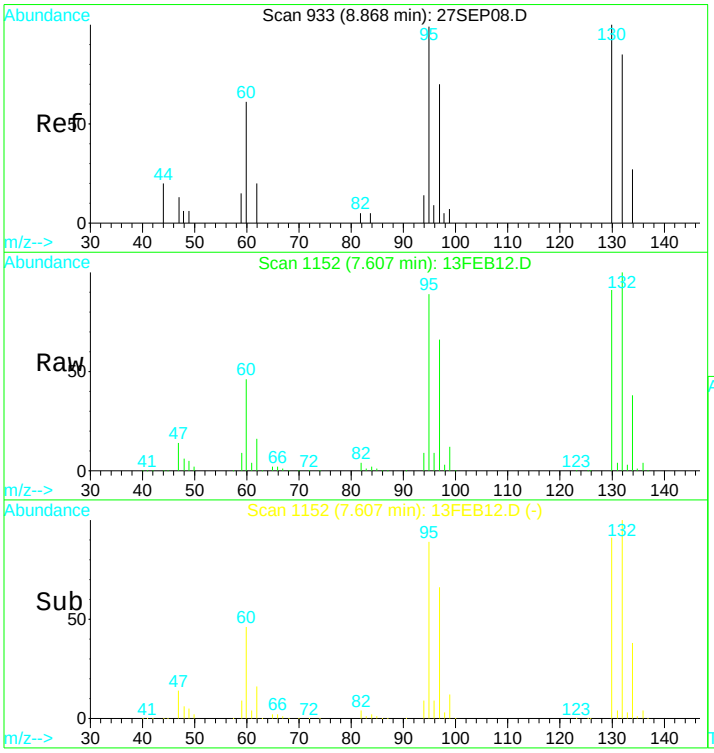




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion:114 Resp: 293876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.4 | 12.0 | 22.2 |
| 63 | 24.1 | 16.9 | 31.5 |

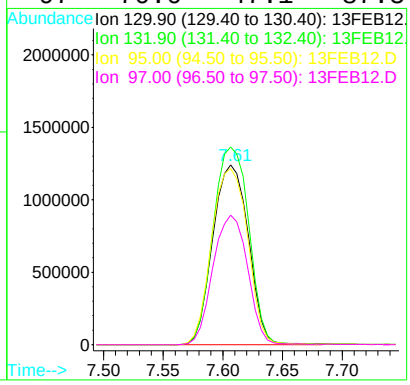


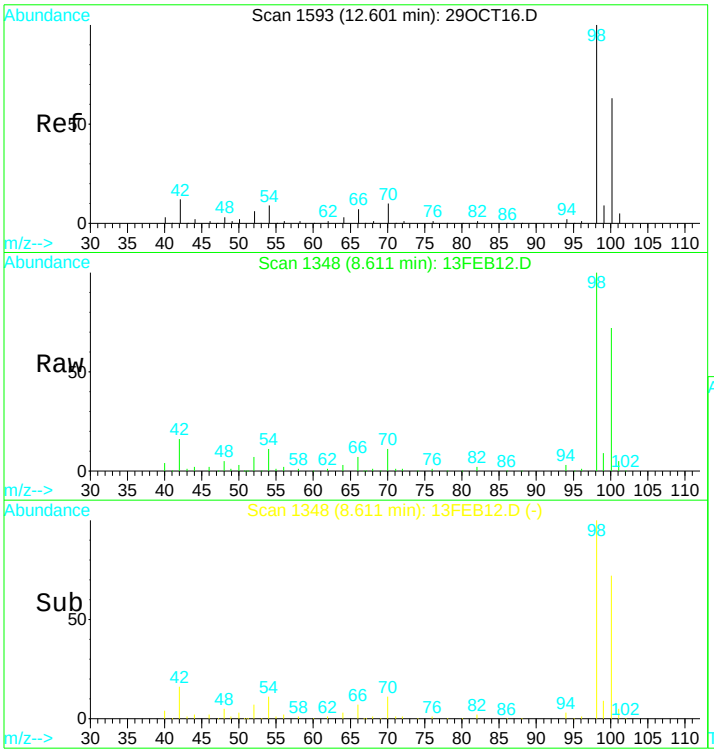



#25
Trichloroethene
Concen: 269.80 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion:130 Resp: 2581347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 110.1 | 74.3 | 137.9 |
| 95 | 98.9 | 70.8 | 131.6 |
| 97 | 70.0 | 47.1 | 87.5 |

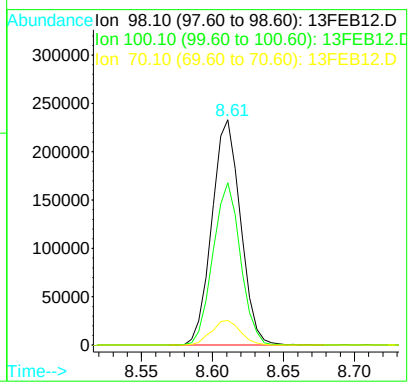


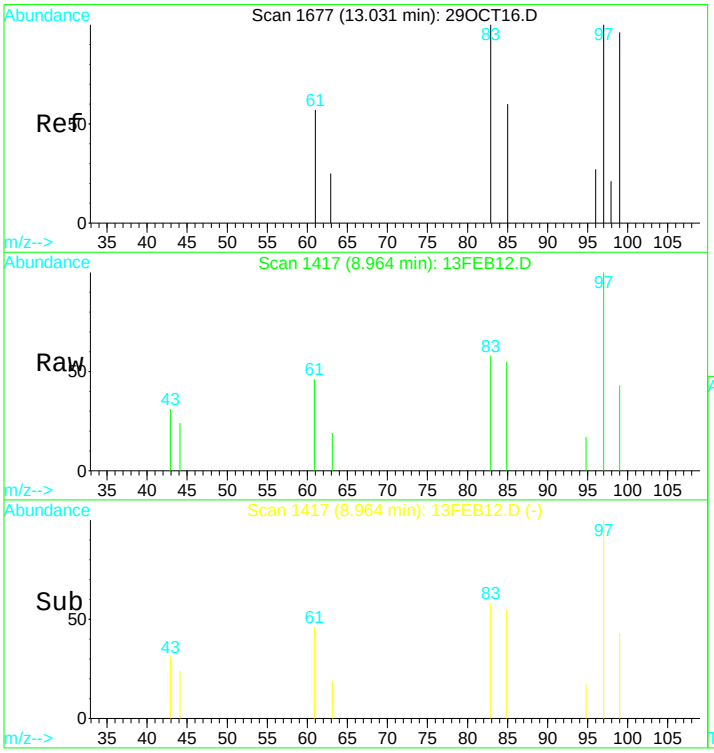




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion: 98 Resp: 327913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 69.1 | 47.0 | 87.4 |
| 70 | 11.2 | 7.3 | 13.7 |

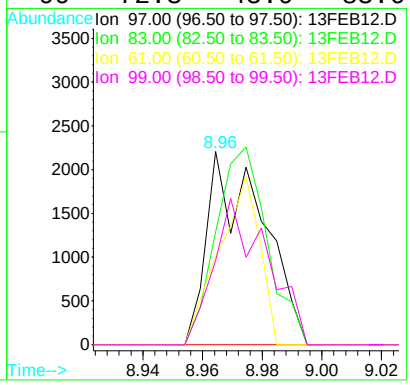


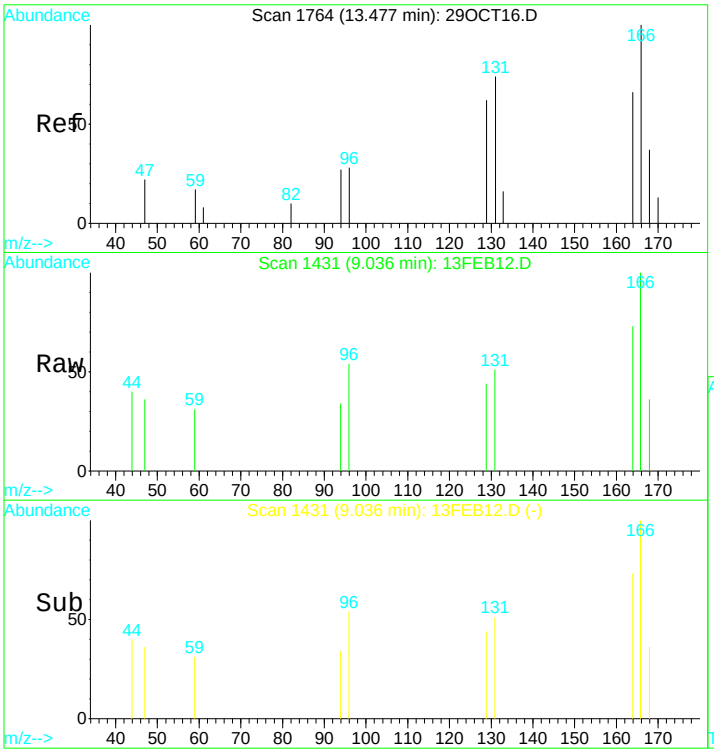



#34
1,1,2-Trichloroethane
Concen: 0.63 ug/L
RT: 8.96 min Scan# 1417
Delta R.T. -0.01 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion: 97 Resp: 2842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 93.9 | 61.6 | 114.4 |
| 61 | 64.0 | 47.0 | 87.4 |
| 99 | 72.3 | 45.0 | 83.6 |

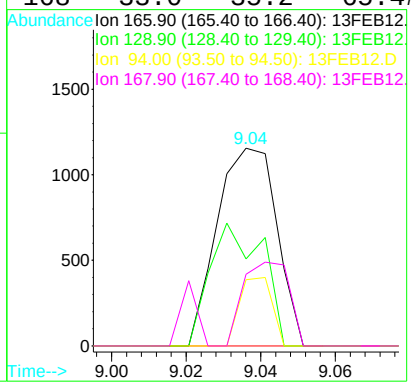


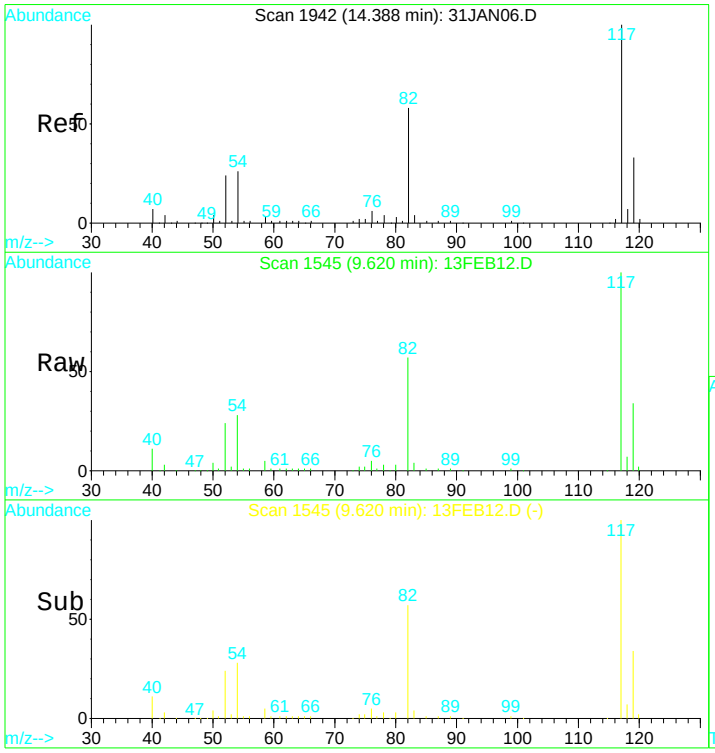




#35
Tetrachloroethene (PCE)
Concen: 0.13 ug/L
RT: 9.04 min Scan# 1431
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion:166 Resp: 1286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 129 | 54.6 | 45.5 | 84.5 |
| 94 | 18.8 | 23.7 | 43.9# |
| 168 | 33.0 | 35.2 | 65.4# |

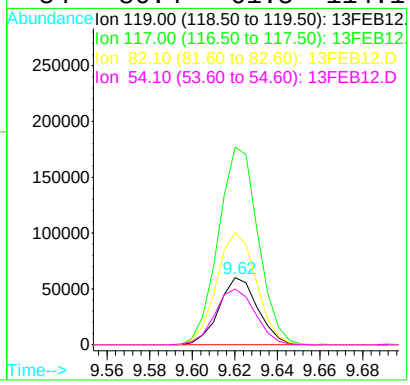


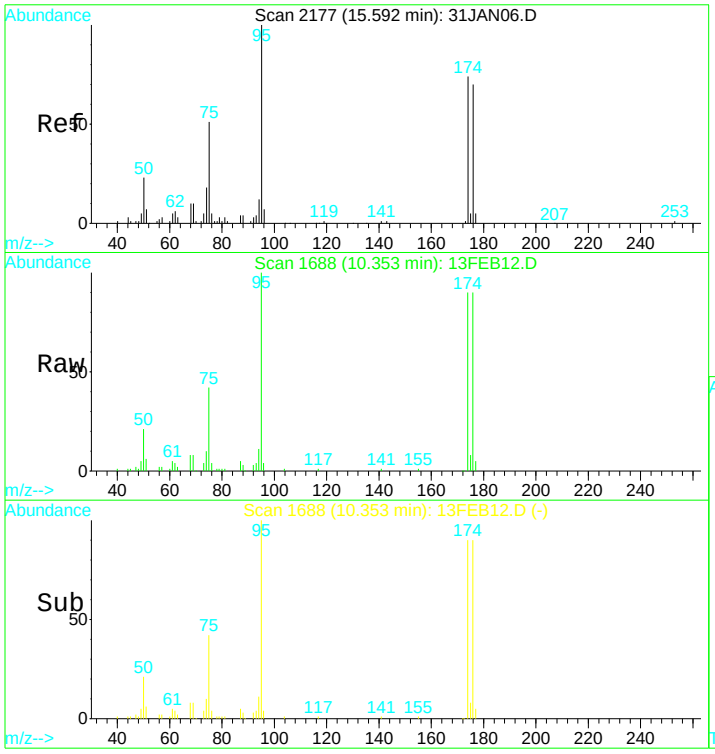



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion:119 Resp: 76560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 301.5 | 220.4 | 409.4 |
| 82 | 171.8 | 123.9 | 230.1 |
| 54 | 86.4 | 61.5 | 114.1 |

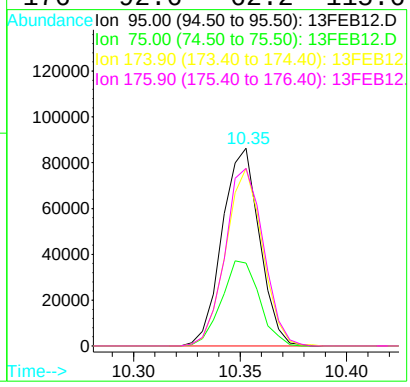



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1688
Delta R.T. -0.00 min
Lab File: 13FEB12.D
Acq: 13 Feb 2017 10:48 am

Tgt Ion: 95 Resp: 105494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 43.6 | 32.6 | 60.5 |
| 174 | 88.5 | 60.9 | 113.1 |
| 176 | 92.6 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB12.D Vial: 12
Acq On : 13 Feb 2017 10:48 am Operator: MGC
Sample : 1703480-10 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:06 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 217845 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 293876 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 76560 | 10.00 | ug/L | 0.00 |

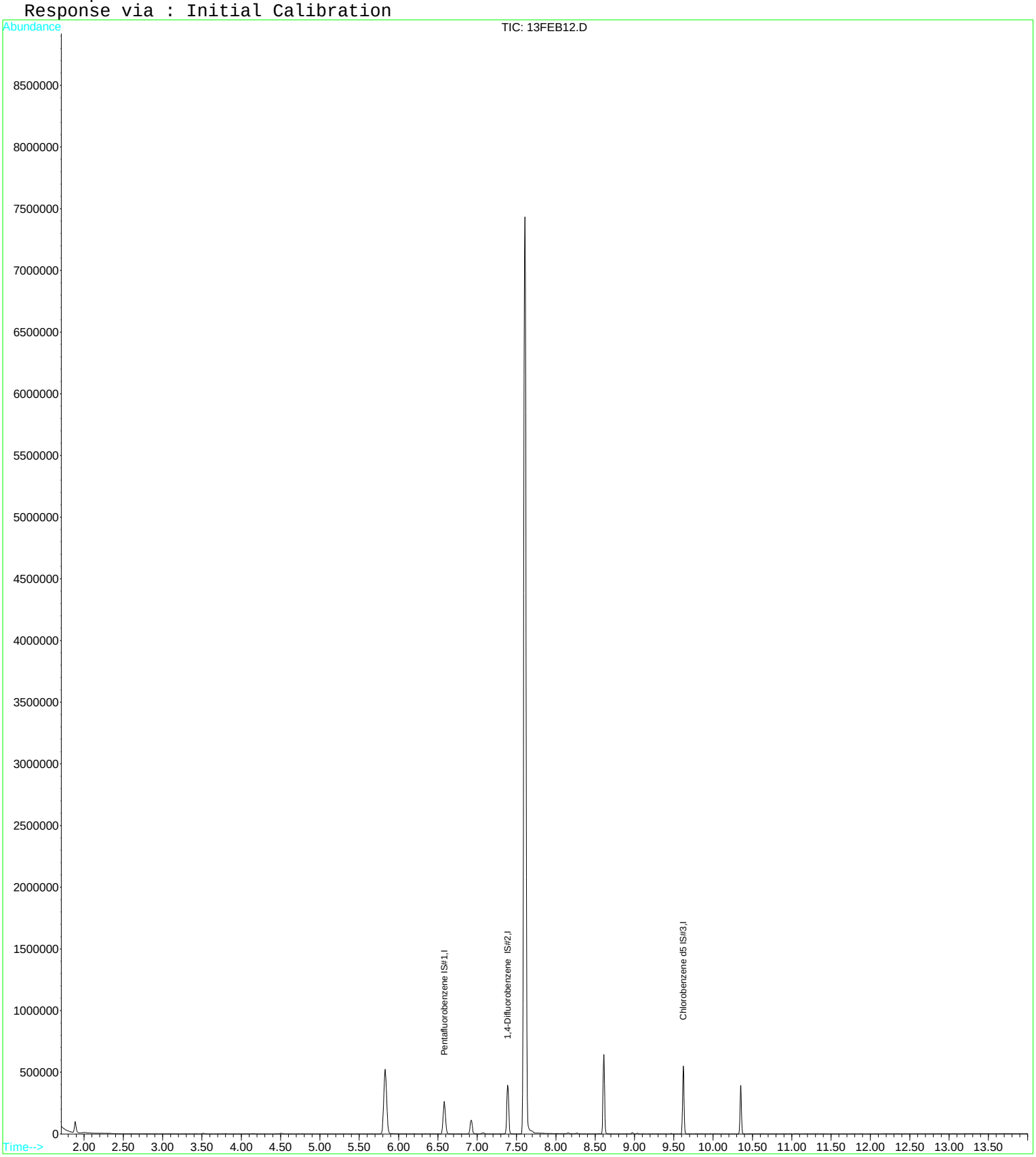
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
13FEB12.D 82605X.M Mon Feb 13 13:06:27 2017 Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB12.D Vial: 12
Acq On : 13 Feb 2017 10:48 am Operator: MGC
Sample : 1703480-10 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:06 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB55.D Vial: 55
Acq On : 14 Feb 2017 3:25 am Operator: MGC
Sample : 1703480-10RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:01 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205176 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 259641 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63172 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65967 | 10.87 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 108.70% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 287026 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.10% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 81162 | 9.32 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 93.20% | | | | | | |

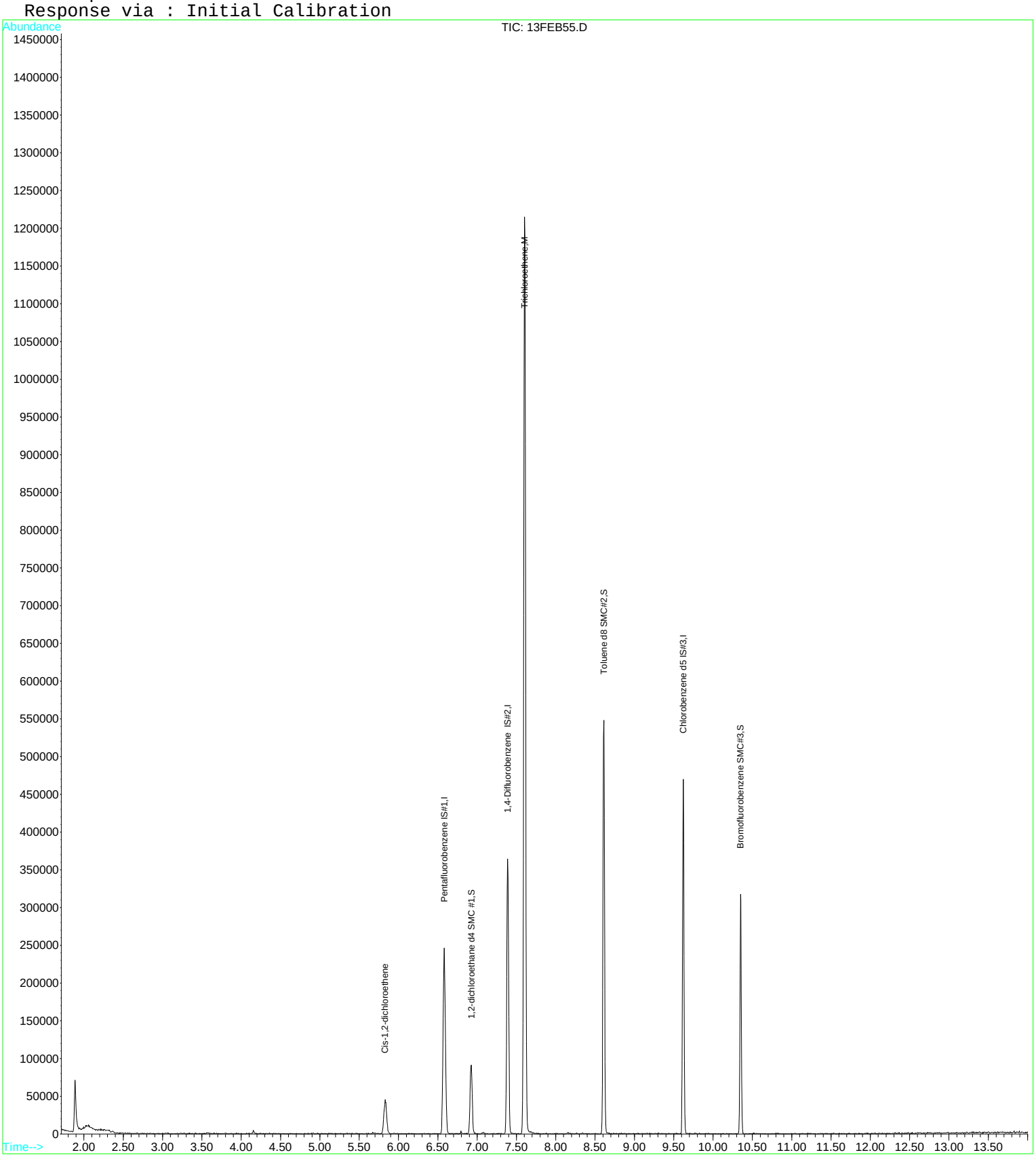
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 24832 | 2.59 | ug/L | 89 |
| 25) Trichloroethene | 7.60 | 130 | 363075 | 42.95 | ug/L | 97 |

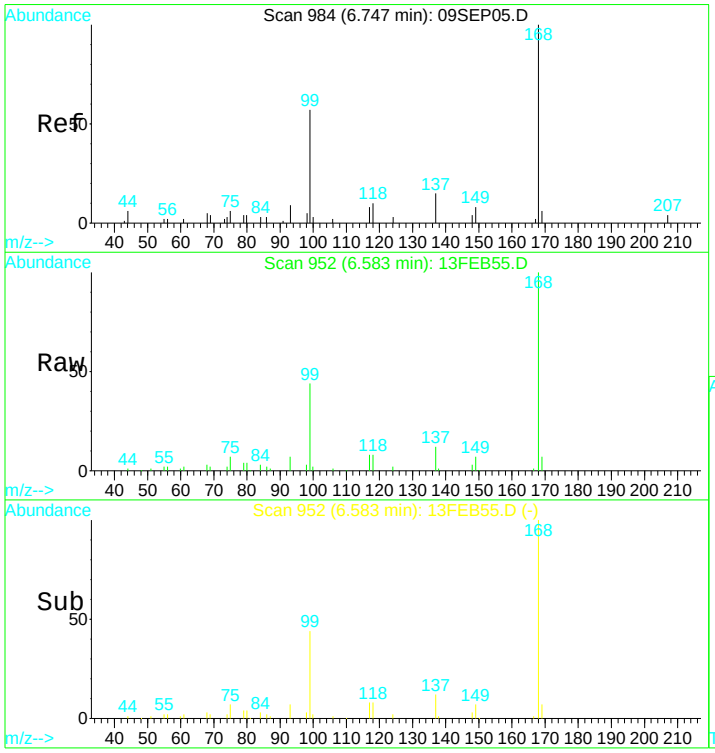
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB55.D Vial: 55
Acq On : 14 Feb 2017 3:25 am Operator: MGC
Sample : 1703480-10RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:01 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

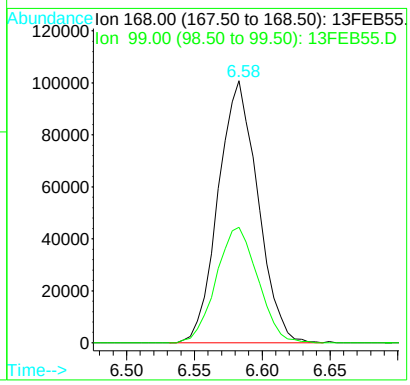


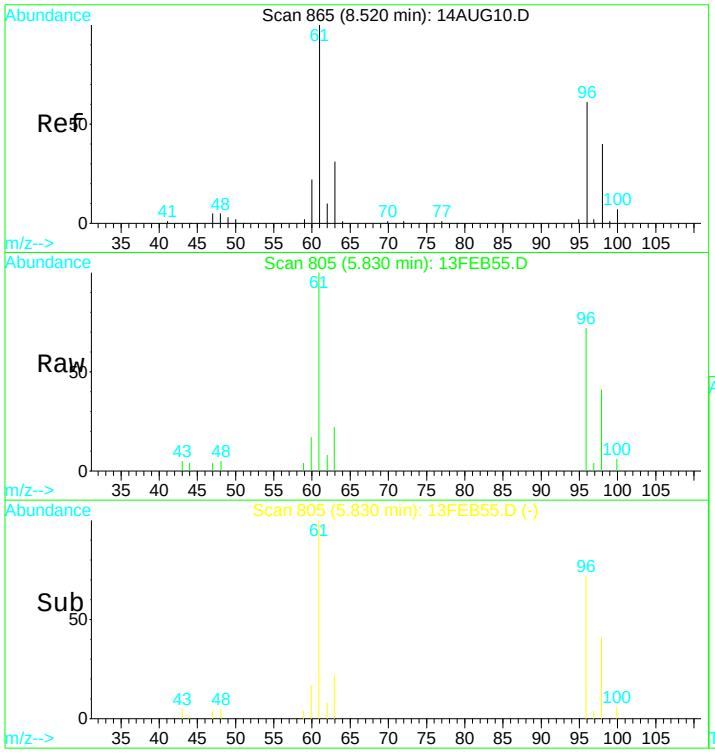



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion:168 Resp: 205176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.3 | 305.1 | 566.7# |

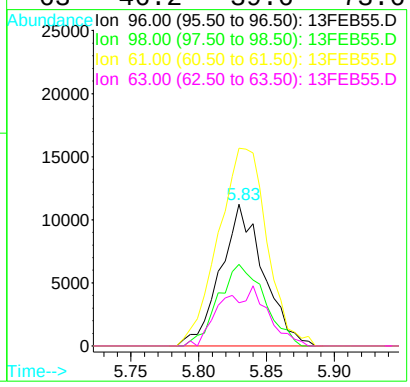


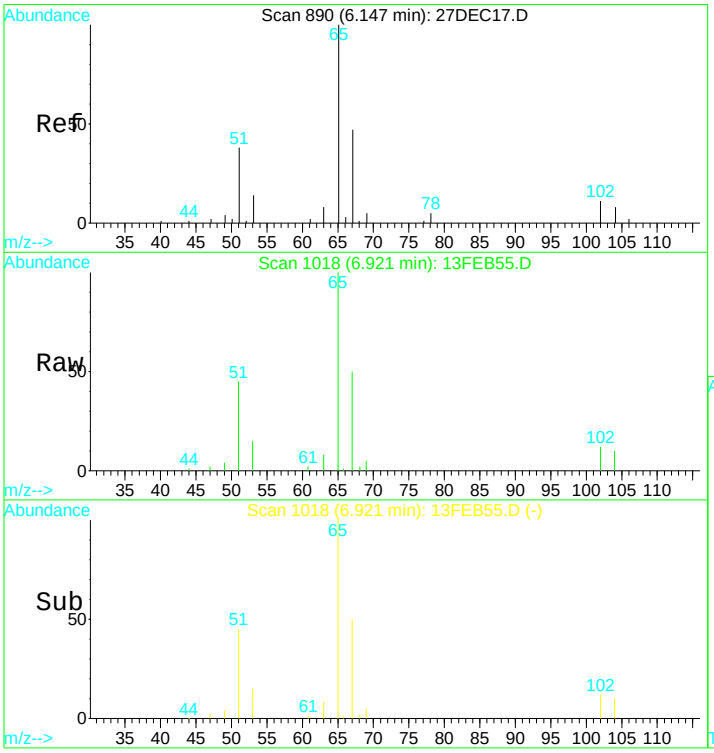




#15
Cis-1,2-dichloroethene
Concen: 2.59 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion: 96 Resp: 24832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 61.7 | 46.2 | 85.8 |
| 61 | 158.1 | 122.8 | 228.0 |
| 63 | 46.2 | 39.6 | 73.6 |

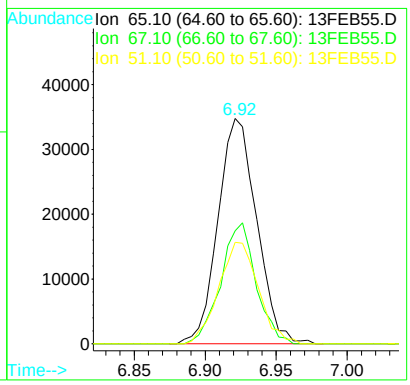


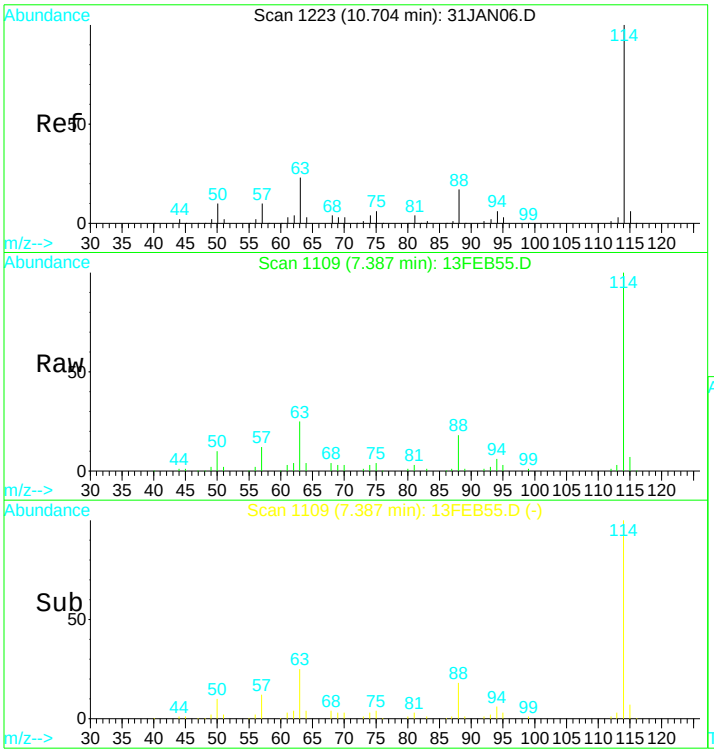



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion: 65 Resp: 65967

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 48.9 | 38.4 | 71.4 |
| 51 | 46.1 | 1006.3 | 1868.8# |

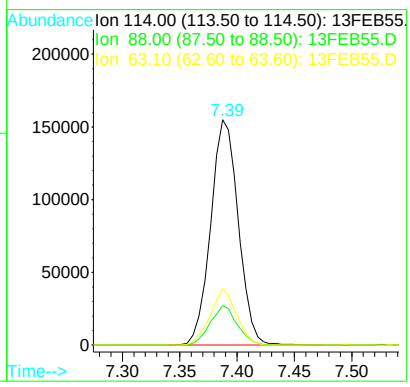


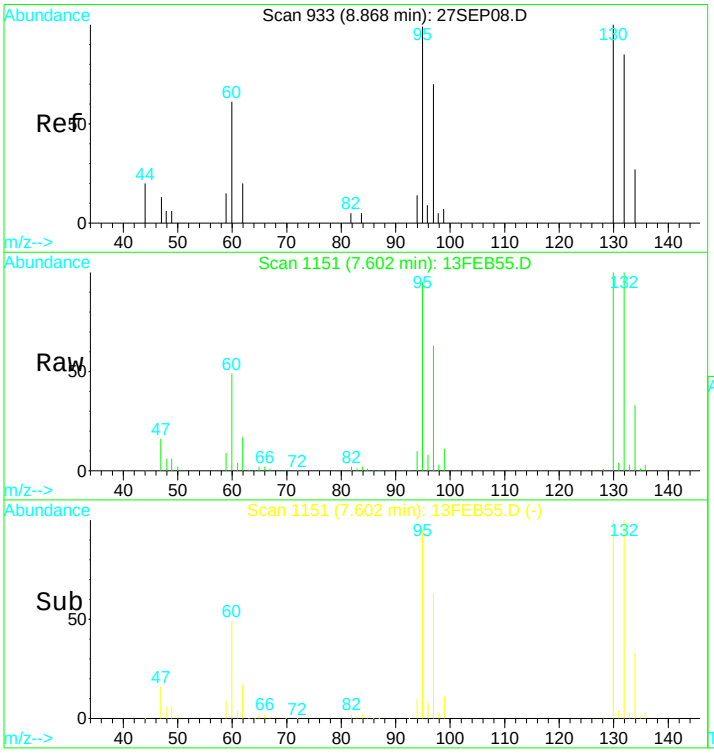




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion:114 Resp: 259641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.1 | 12.0 | 22.2 |
| 63 | 23.7 | 16.9 | 31.5 |

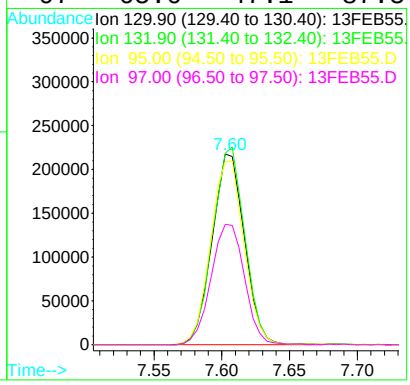


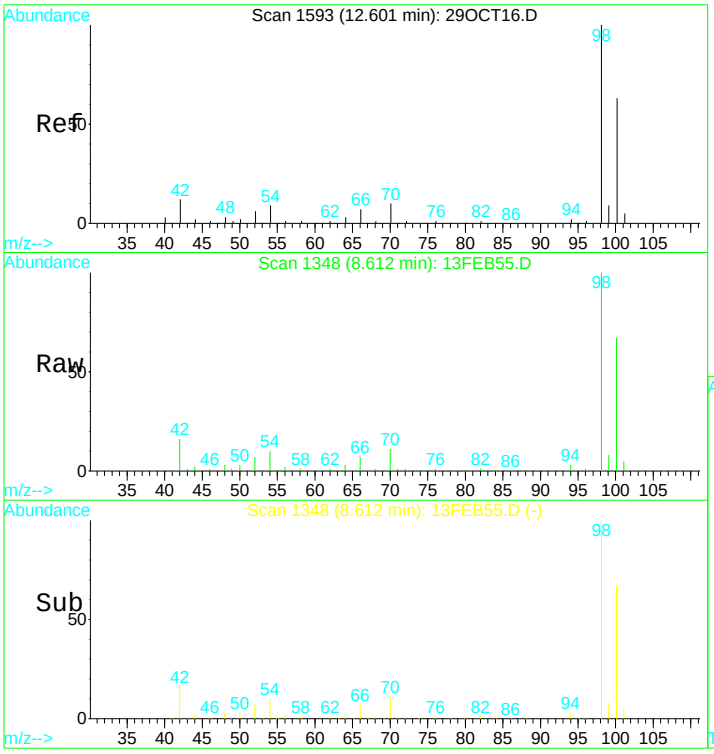



#25
Trichloroethene
Concen: 42.95 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion:130 Resp: 363075

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 102.6 | 74.3 | 137.9 |
| 95 | 99.0 | 70.8 | 131.6 |
| 97 | 65.0 | 47.1 | 87.5 |

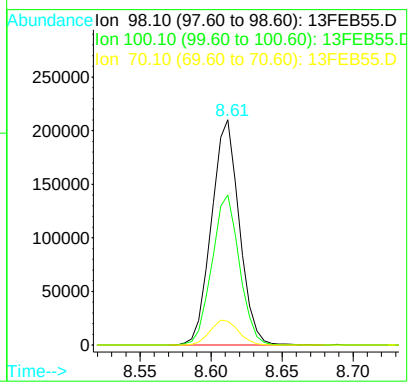


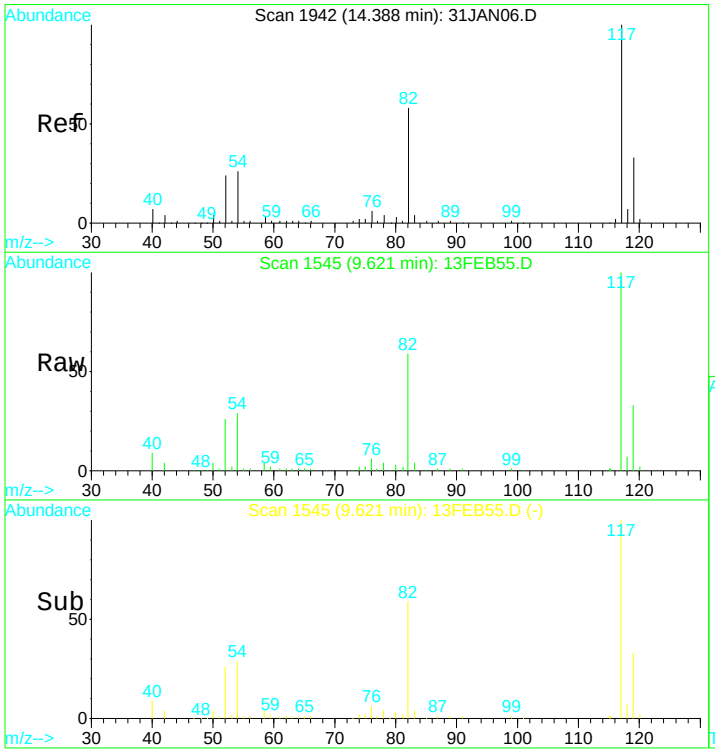




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion: 98 Resp: 287026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 47.0 | 87.4 |
| 70 | 11.5 | 7.3 | 13.7 |

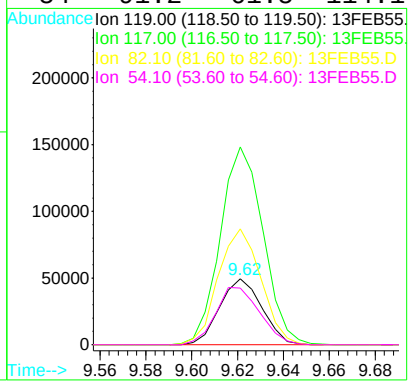


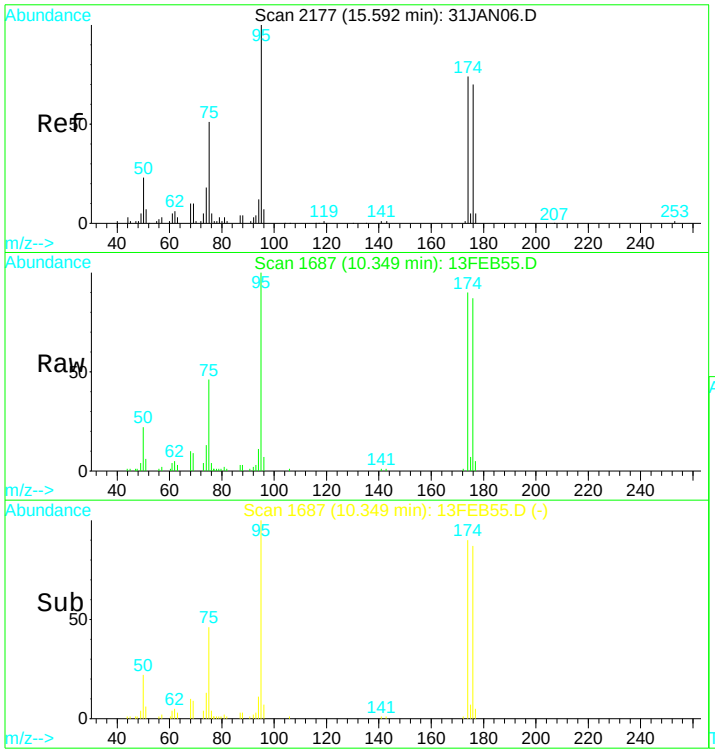



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion:119 Resp: 63172

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 305.1 | 220.4 | 409.4 |
| 82 | 178.3 | 123.9 | 230.1 |
| 54 | 91.2 | 61.5 | 114.1 |

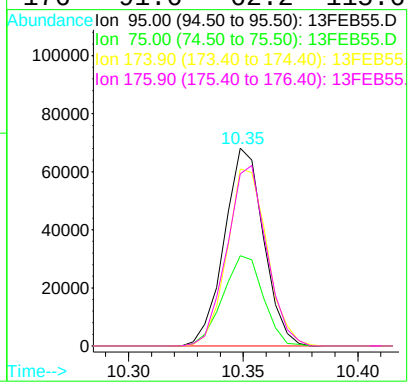



#49
Bromofluorobenzene SMC#3
Concen: Below ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB55.D
Acq: 14 Feb 2017 3:25 am

Tgt Ion: 95 Resp: 81162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.9 | 32.6 | 60.5 |
| 174 | 91.1 | 60.9 | 113.1 |
| 176 | 91.6 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB47.D Vial: 47
Acq On : 14 Feb 2017 12:20 am Operator: MGC
Sample : 1703480-11 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:50 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 193528 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 271904 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68694 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 72598 | 12.68 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 126.80%# | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 295536 | 9.55 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.50% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 91992 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.10% | | | | | | |

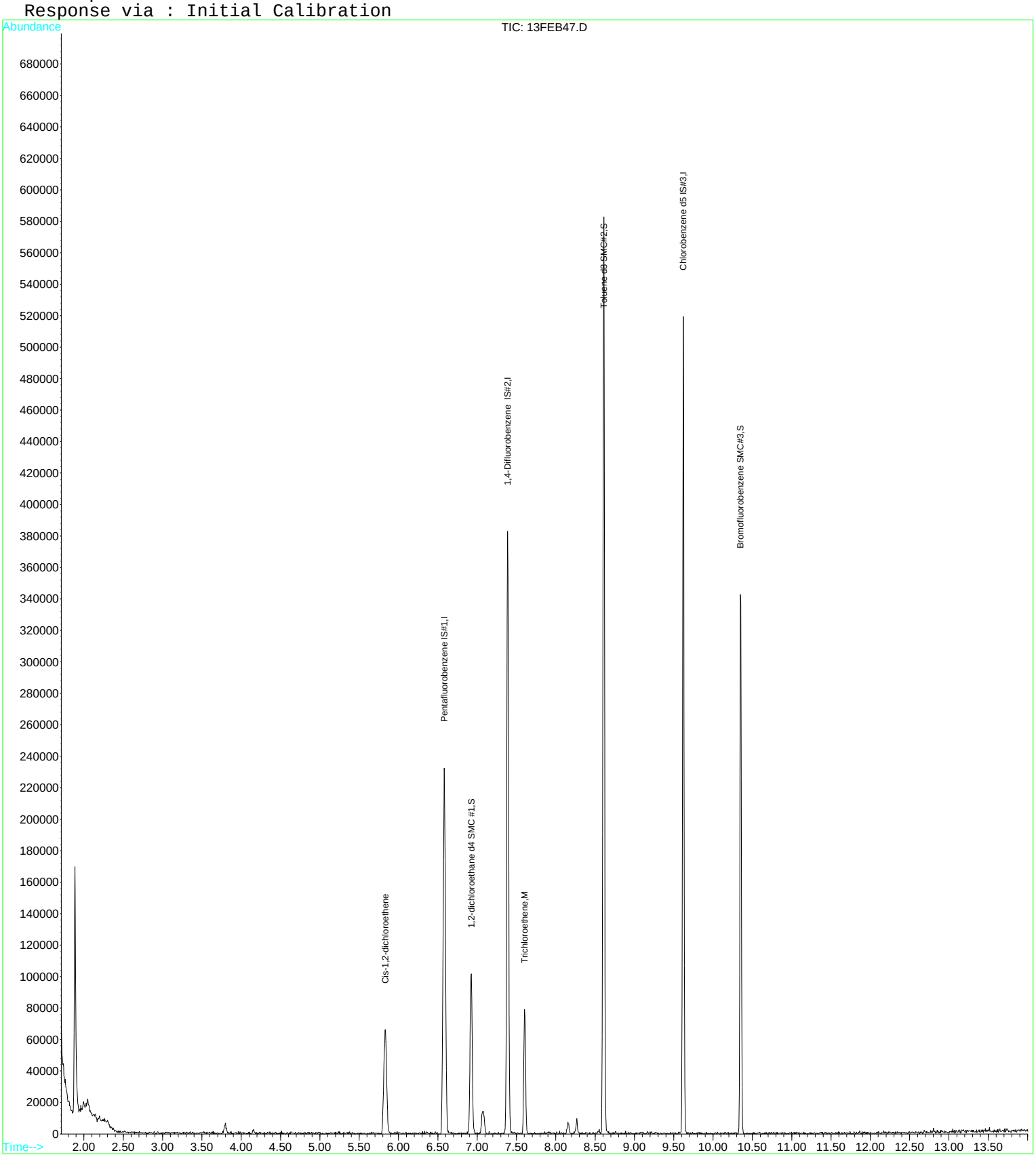
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 35083 | 3.88 | ug/L | 94 |
| 25) Trichloroethene | 7.60 | 130 | 21451 | 2.42 | ug/L | 96 |

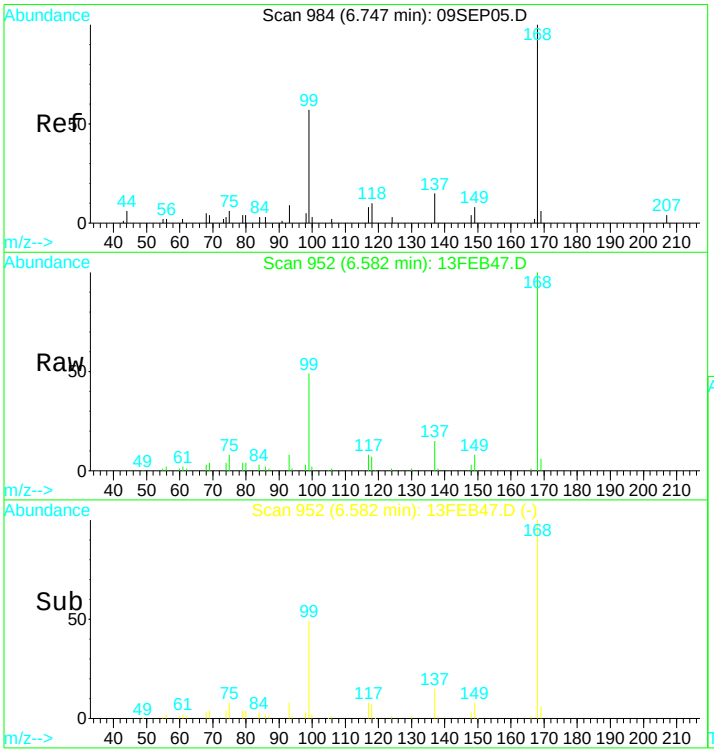
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB47.D Vial: 47
Acq On : 14 Feb 2017 12:20 am Operator: MGC
Sample : 1703480-11 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:50 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

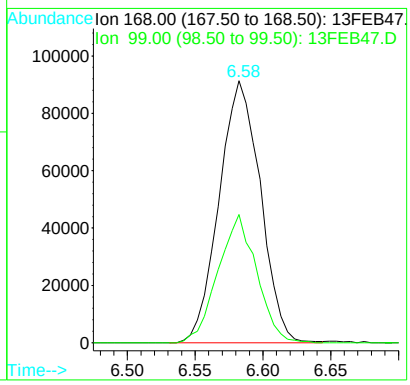


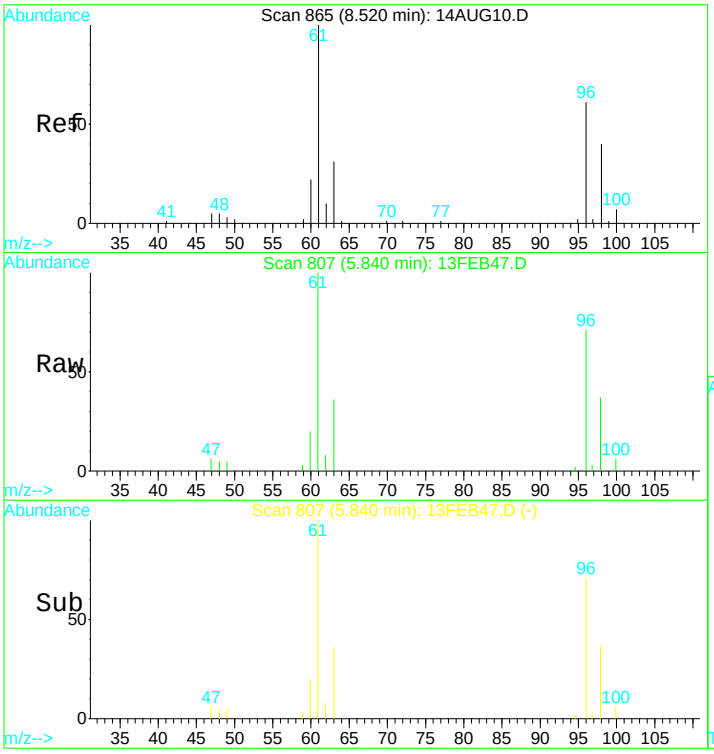



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion:168 Resp: 193528

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.7 | 305.1 | 566.7# |

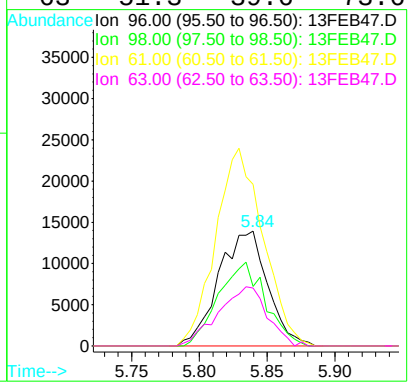


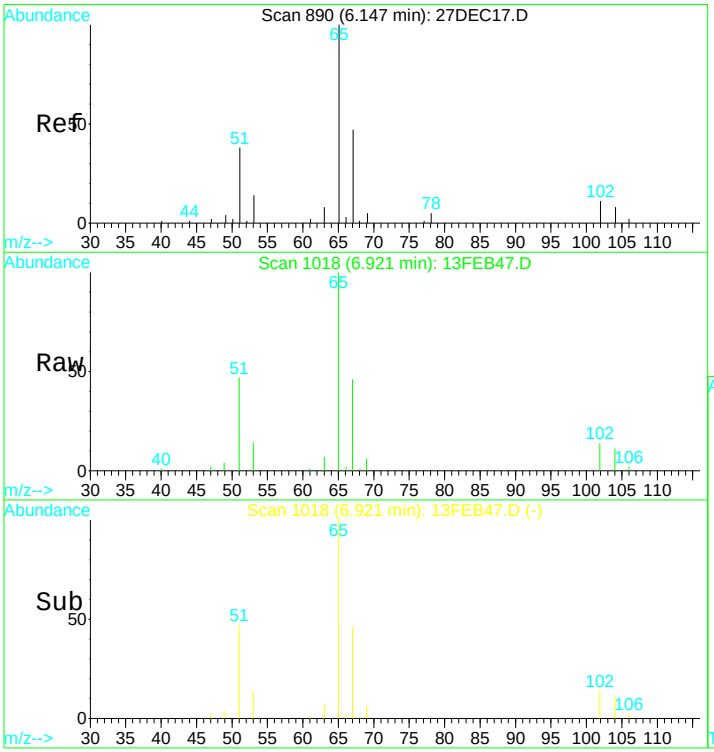




#15
Cis-1,2-dichloroethene
Concen: 3.88 ug/L
RT: 5.84 min Scan# 807
Delta R.T. 0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion: 96 Resp: 35083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 69.8 | 46.2 | 85.8 |
| 61 | 166.1 | 122.8 | 228.0 |
| 63 | 51.3 | 39.6 | 73.6 |

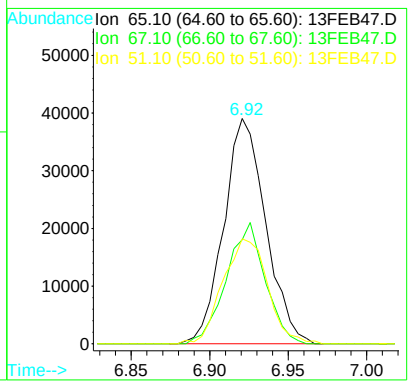


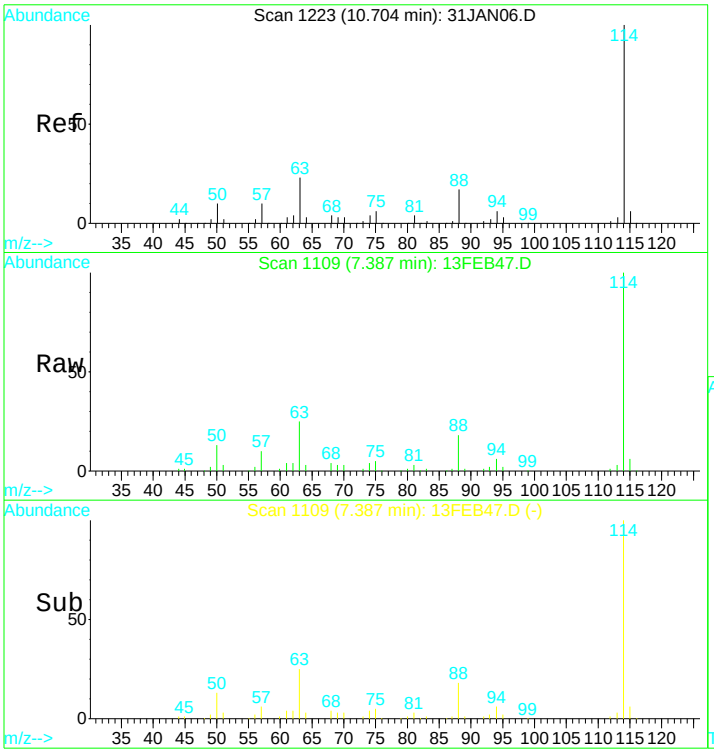



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion: 65 Resp: 72598

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.7 | 38.4 | 71.4 |
| 51 | 50.0 | 1006.3 | 1868.8# |

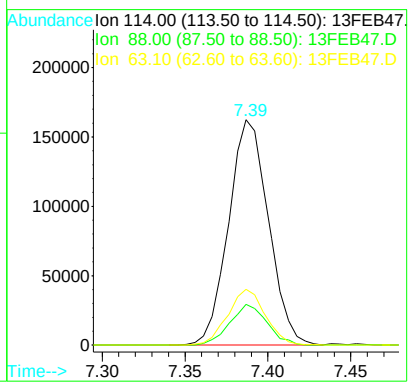


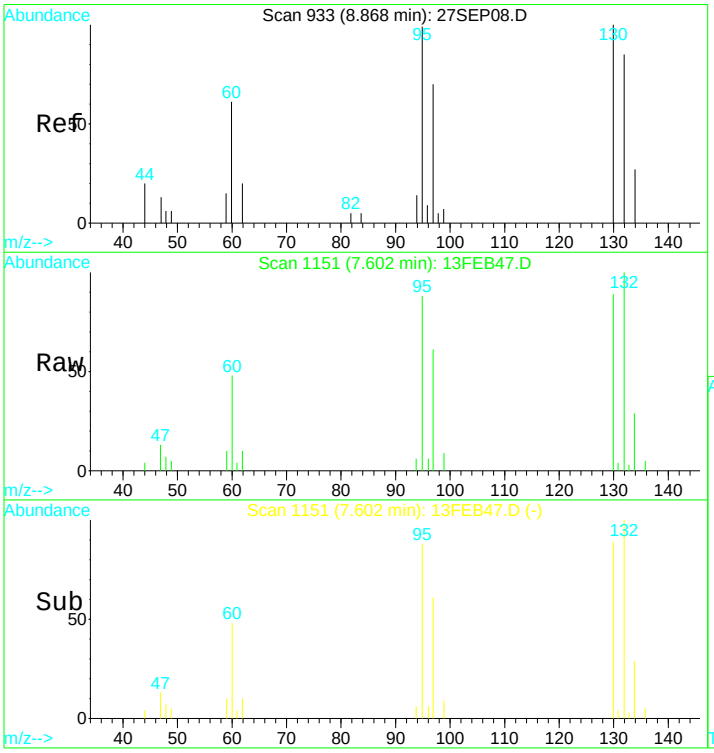




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion:114 Resp: 271904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.8 | 12.0 | 22.2 |
| 63 | 23.3 | 16.9 | 31.5 |

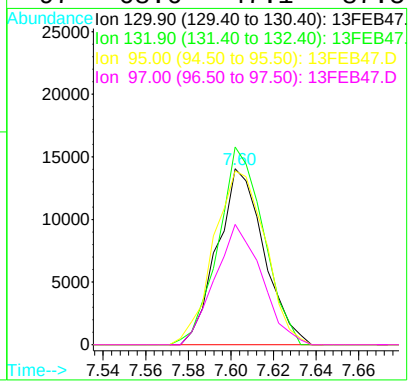


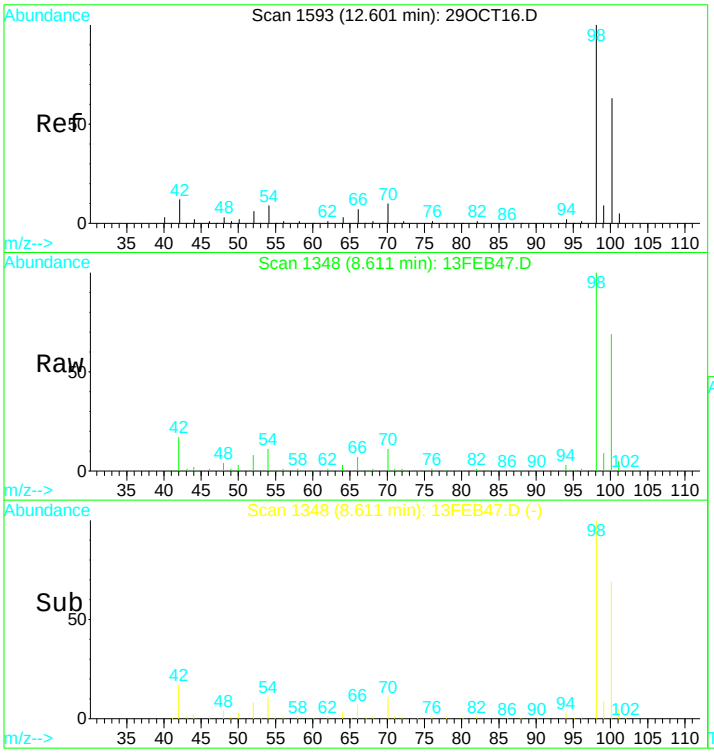



#25
Trichloroethene
Concen: 2.42 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion:130 Resp: 21451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 108.9 | 74.3 | 137.9 |
| 95 | 108.8 | 70.8 | 131.6 |
| 97 | 68.6 | 47.1 | 87.5 |

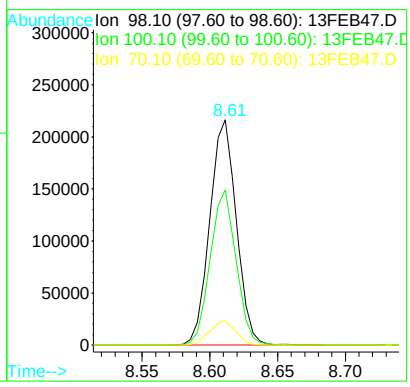


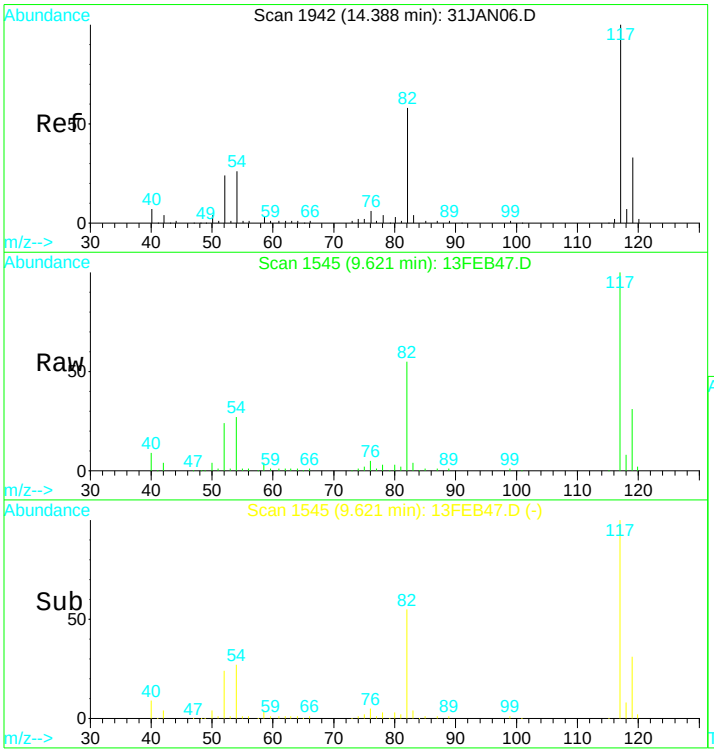




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion: 98 Resp: 295536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.9 | 47.0 | 87.4 |
| 70 | 10.8 | 7.3 | 13.7 |

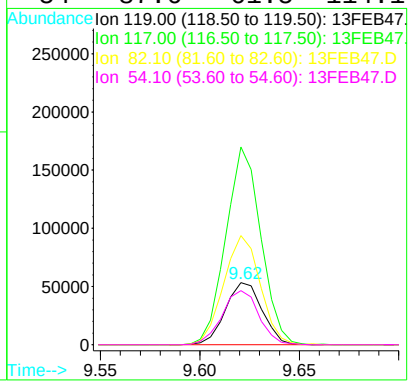


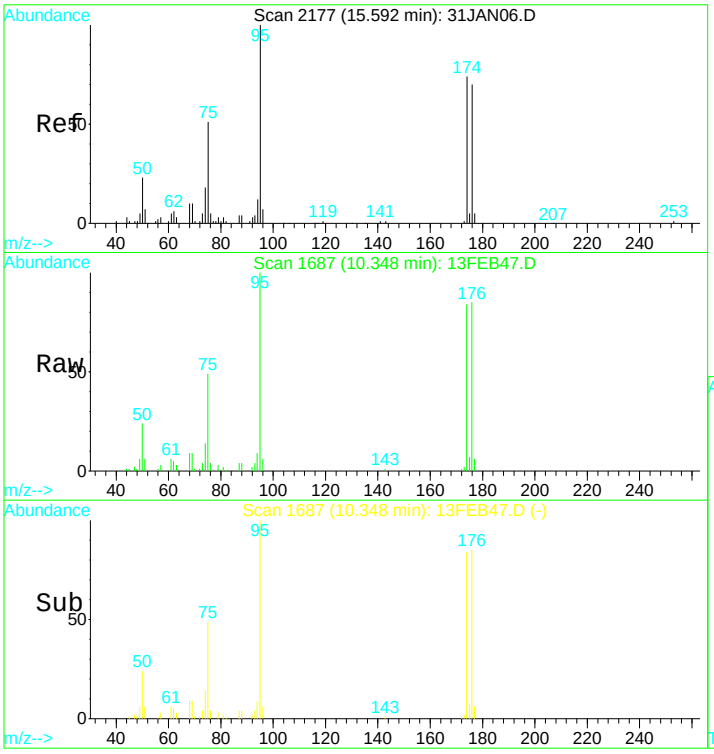



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion:119 Resp: 68694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 303.1 | 220.4 | 409.4 |
| 82 | 173.8 | 123.9 | 230.1 |
| 54 | 87.6 | 61.5 | 114.1 |

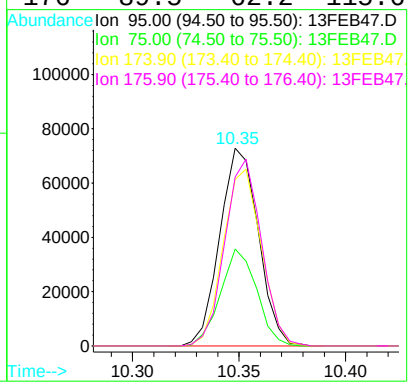



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion: 95 Resp: 91992

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.0 | 32.6 | 60.5 |
| 174 | 88.2 | 60.9 | 113.1 |
| 176 | 89.5 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB47.D Vial: 47
Acq On : 14 Feb 2017 12:20 am Operator: MGC
Sample : 1703480-11 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:51 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 193528 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 271904 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68694 | 10.00 ug/L | 0.00 |

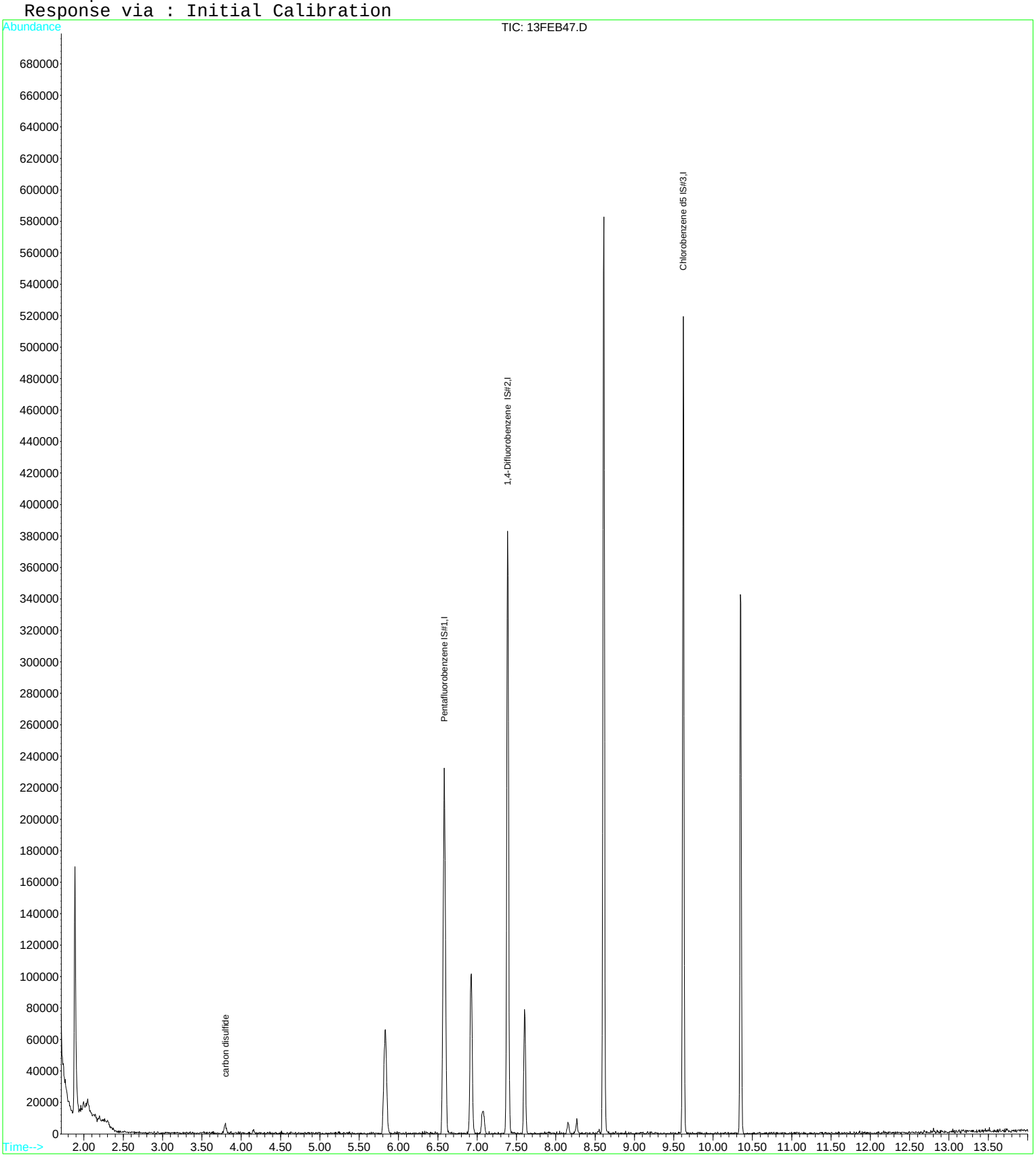
| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 15) carbon disulfide | 3.80 | 76 | 9347 | 0.36 ug/L # | 79 |

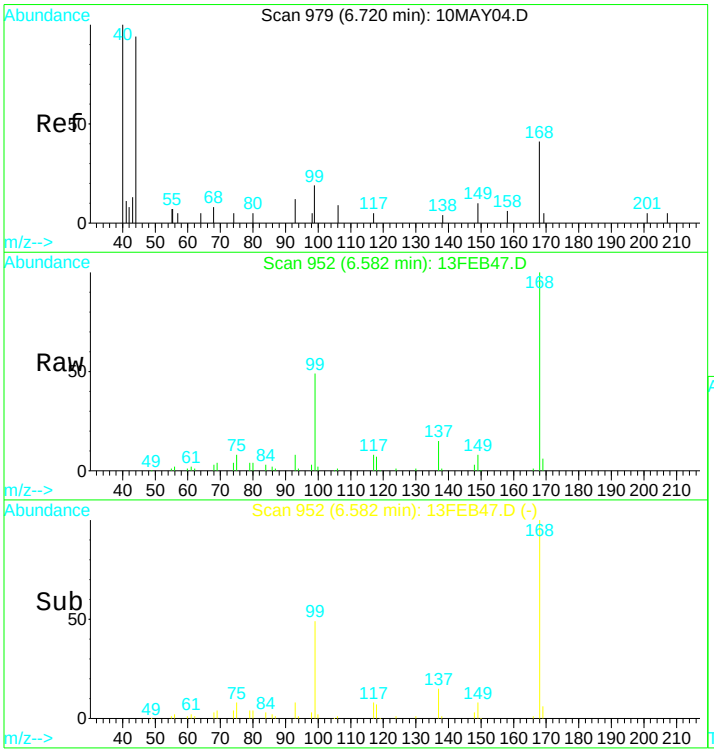
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB47.D Vial: 47
Acq On : 14 Feb 2017 12:20 am Operator: MGC
Sample : 1703480-11 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:51 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

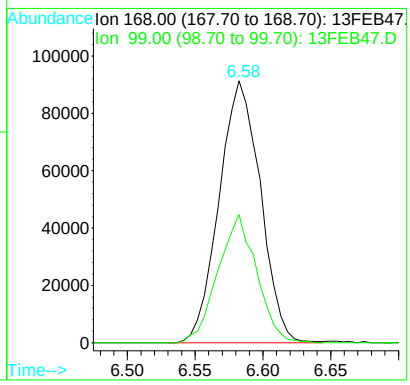


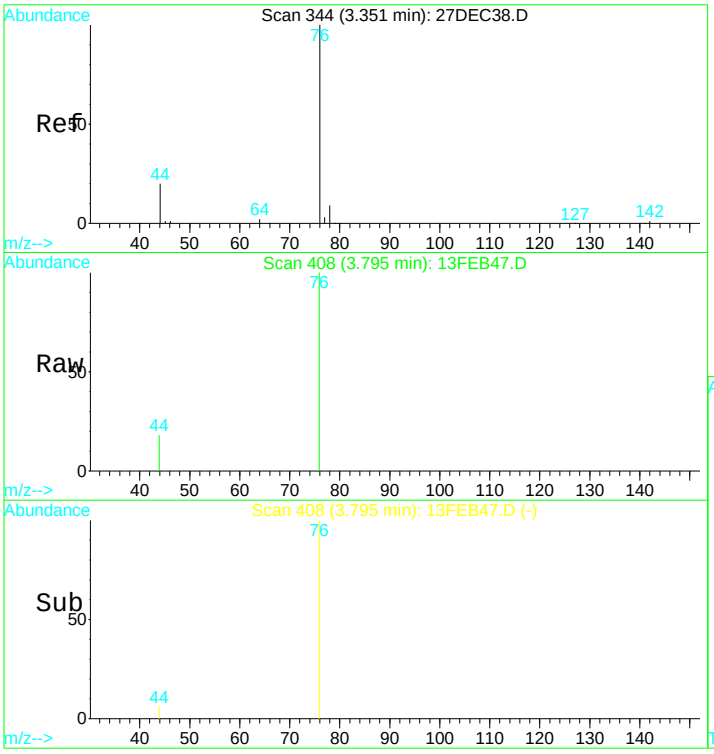



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion:168 Resp: 193528

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.7 | 32.8 | 60.8 |

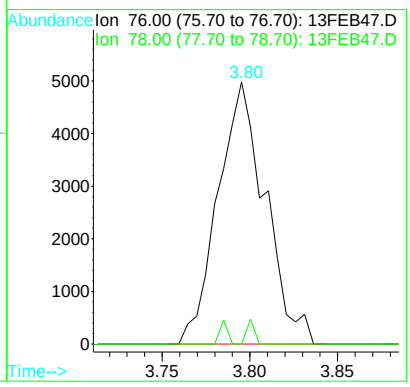


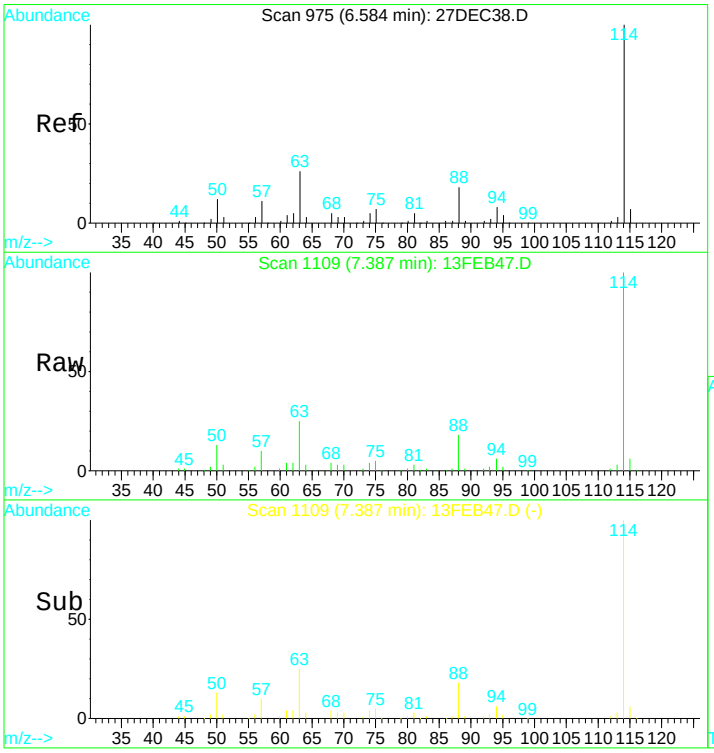




#15
carbon disulfide
Concen: 0.36 ug/L
RT: 3.80 min Scan# 408
Delta R.T. 0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion: 76 Resp: 9347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 1.6 | 6.5 | 12.1# |

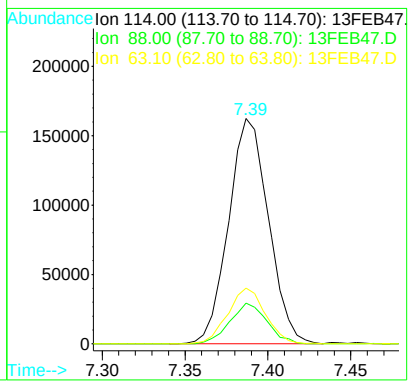


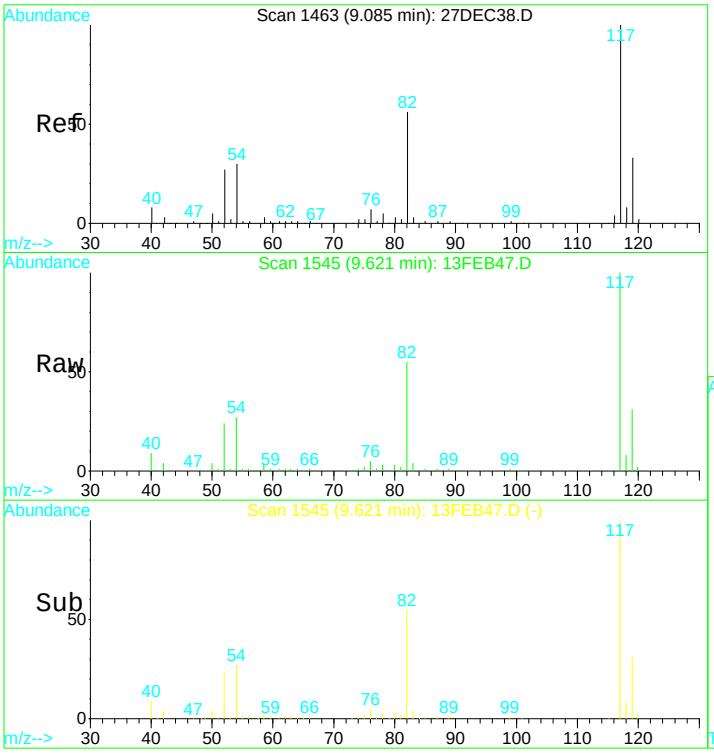



#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion:114 Resp: 271904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.8 | 11.3 | 21.1 |
| 63 | 23.3 | 16.1 | 29.9 |

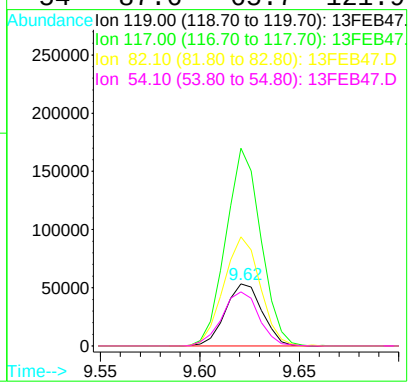



#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB47.D
Acq: 14 Feb 2017 12:20 am

Tgt Ion:119 Resp: 68694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 303.1 | 218.6 | 406.0 |
| 82 | 173.8 | 128.7 | 238.9 |
| 54 | 87.6 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB48.D Vial: 48
Acq On : 14 Feb 2017 12:43 am Operator: MGC
Sample : 1703480-12 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:51 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201514 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270631 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66140 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 75047 | 12.59 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 125.90%# | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 305449 | 9.92 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 93480 | 10.25 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.50% | | | |

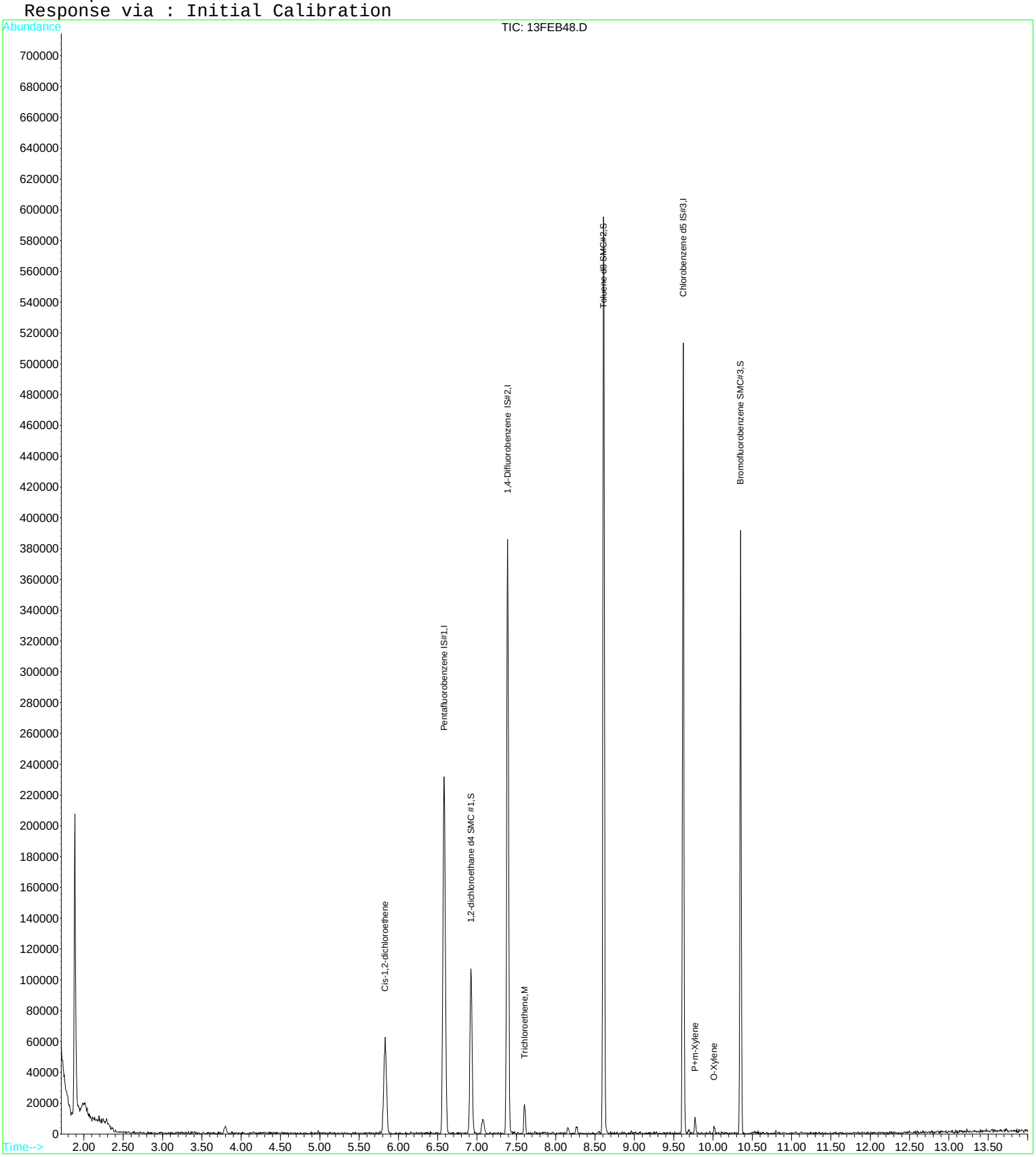
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 31755 | 3.38 | ug/L | 95 |
| 25) Trichloroethene | 7.60 | 130 | 5739 | 0.65 | ug/L | 96 |
| 43) P+m-Xylene | 9.78 | 106 | 2839 | 0.21 | ug/L # | 79 |
| 44) O-Xylene | 10.02 | 106 | 1335 | 0.10 | ug/L # | 69 |

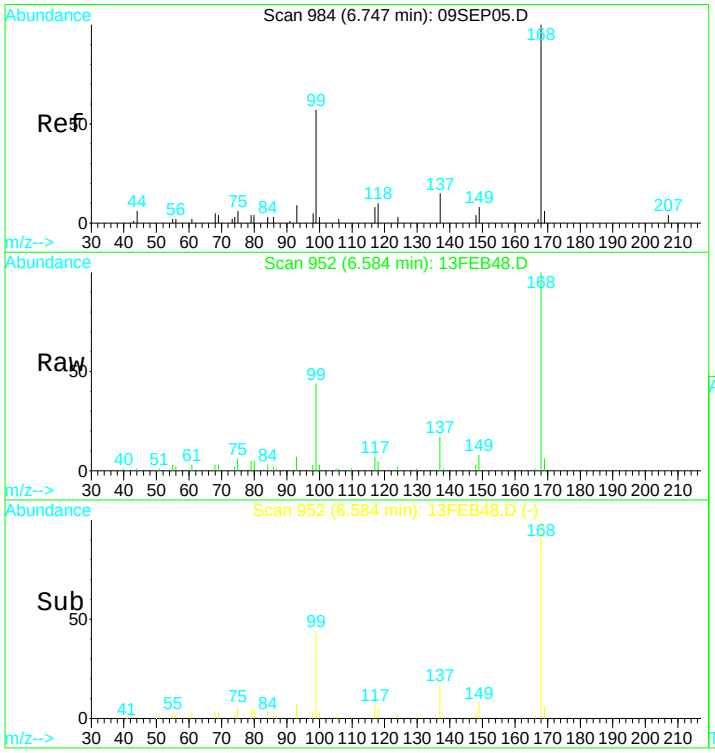
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB48.D Vial: 48
Acq On : 14 Feb 2017 12:43 am Operator: MGC
Sample : 1703480-12 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:51 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

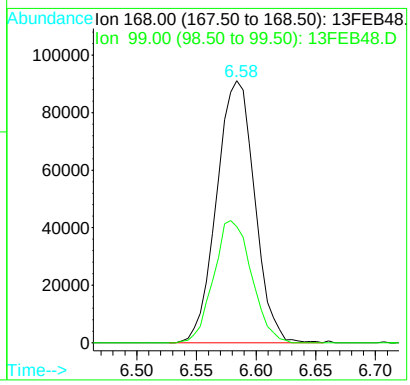


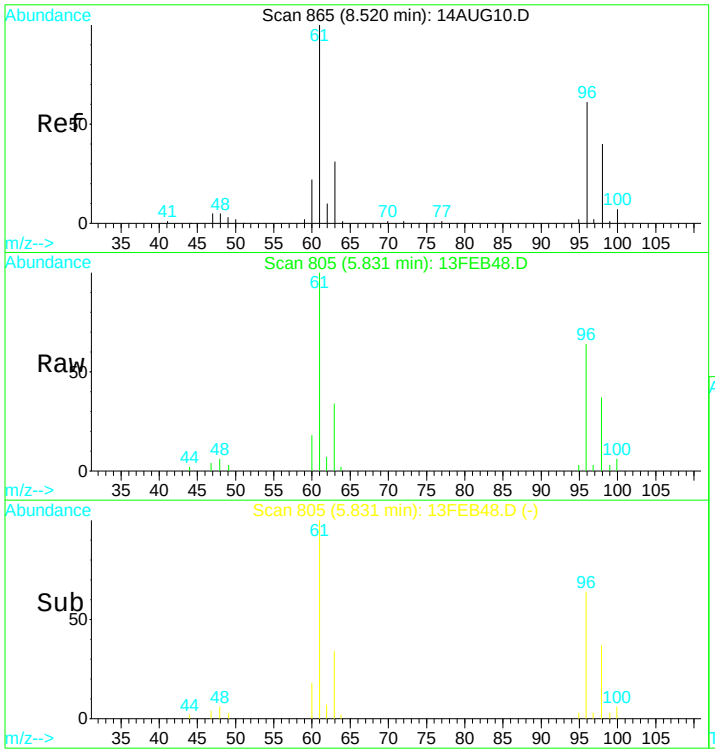



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion:168 Resp: 201514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.4 | 305.1 | 566.7# |

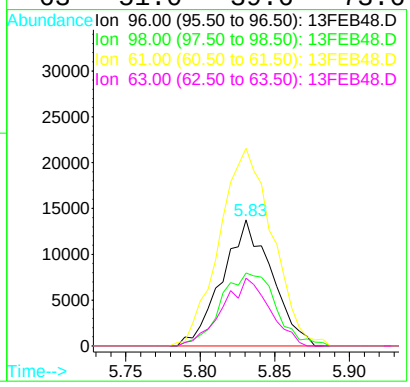


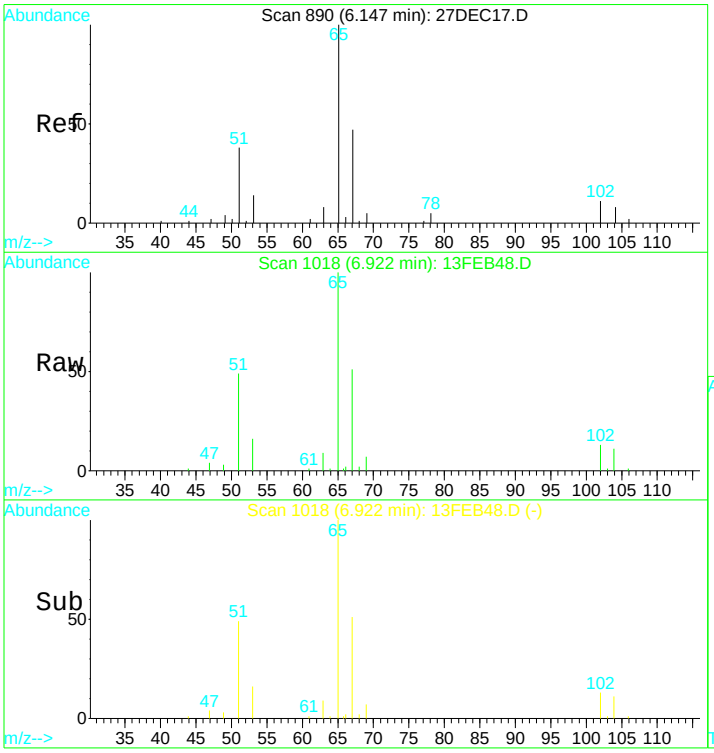




#15
Cis-1,2-dichloroethene
Concen: 3.38 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion: 96 Resp: 31755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 64.2 | 46.2 | 85.8 |
| 61 | 168.0 | 122.8 | 228.0 |
| 63 | 51.0 | 39.6 | 73.6 |

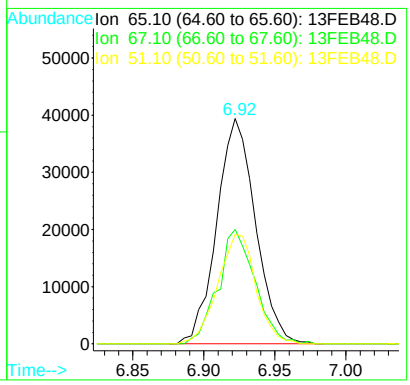


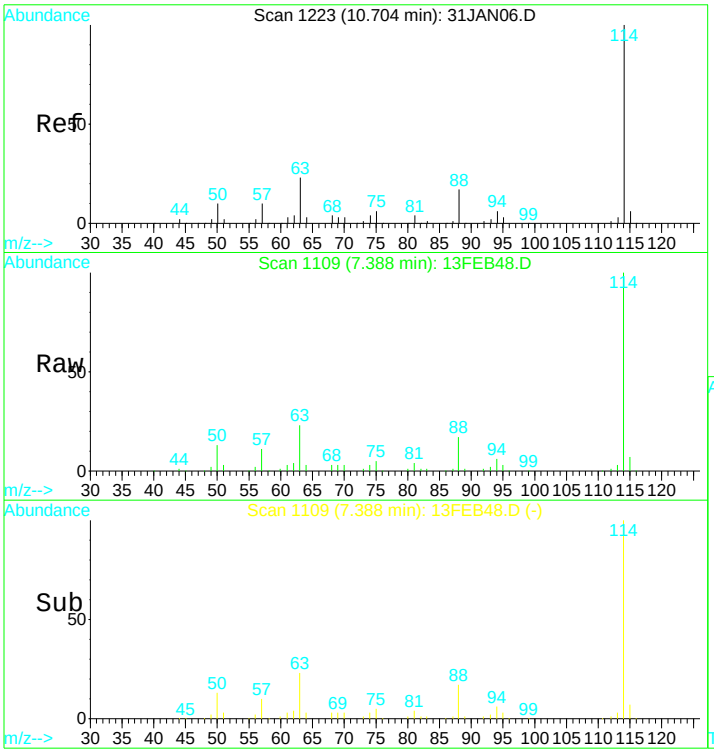



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion: 65 Resp: 75047

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 48.6 | 38.4 | 71.4 |
| 51 | 47.8 | 1006.3 | 1868.8# |

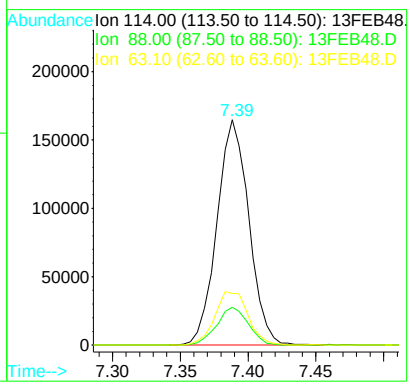


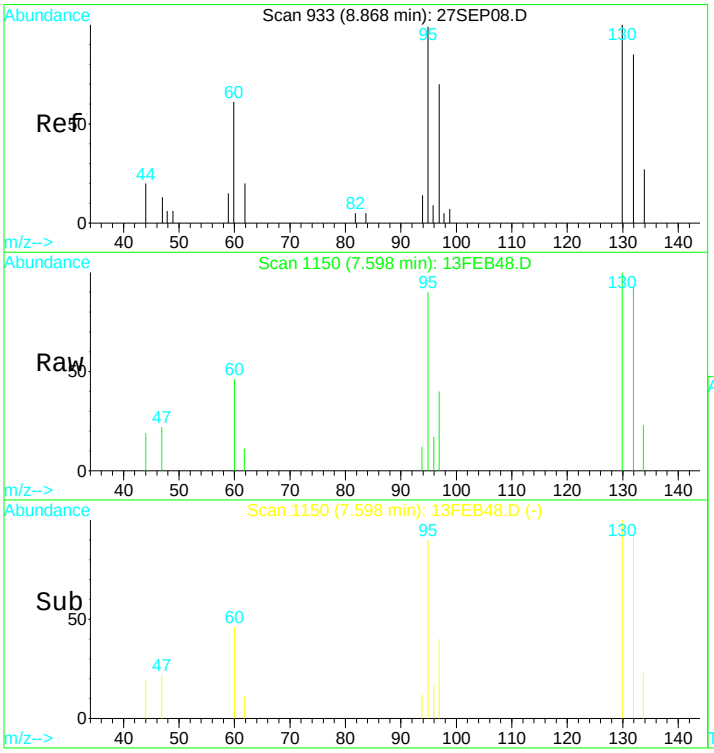




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion:114 Resp: 270631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.6 | 12.0 | 22.2 |
| 63 | 24.6 | 16.9 | 31.5 |

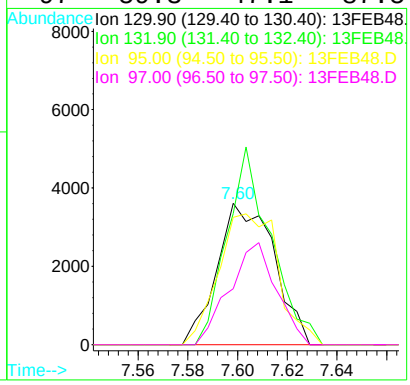


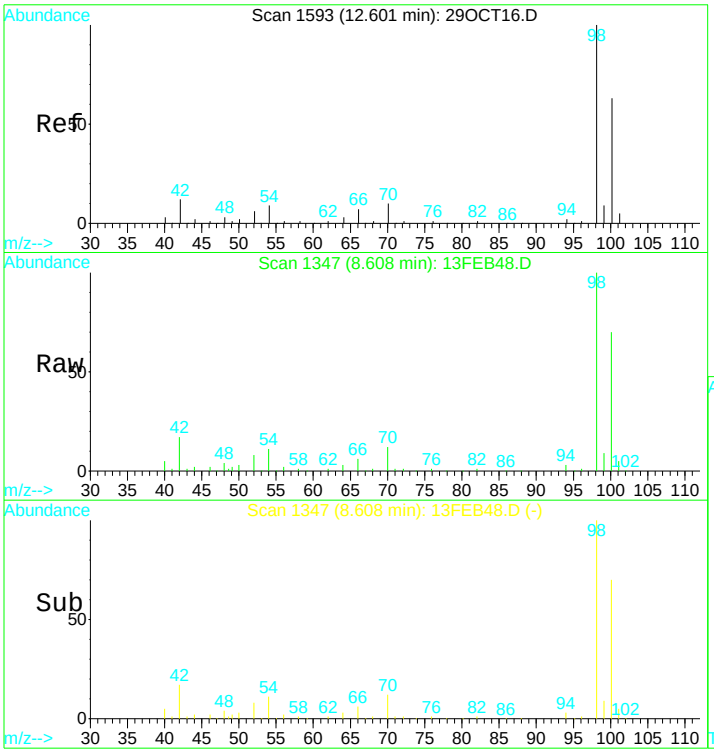



#25
Trichloroethene
Concen: 0.65 ug/L
RT: 7.60 min Scan# 1150
Delta R.T. -0.01 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion:130 Resp: 5739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 107.5 | 74.3 | 137.9 |
| 95 | 97.2 | 70.8 | 131.6 |
| 97 | 59.3 | 47.1 | 87.5 |

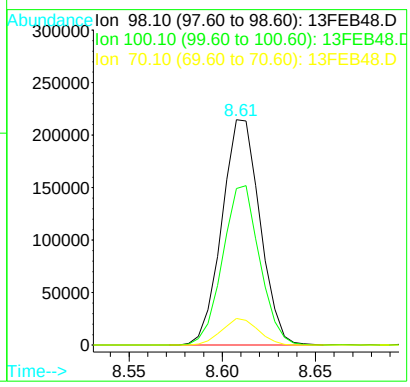


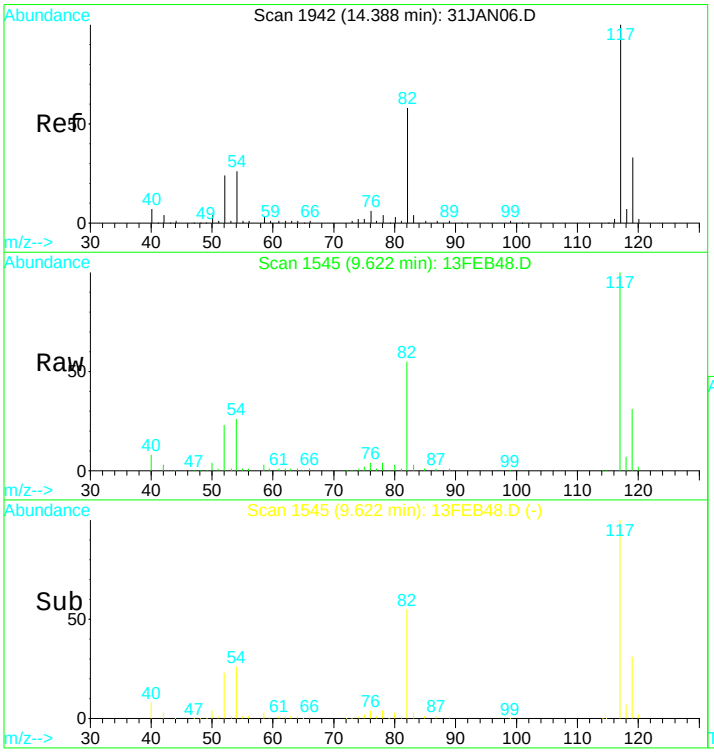




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion: 98 Resp: 305449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.6 | 47.0 | 87.4 |
| 70 | 11.3 | 7.3 | 13.7 |

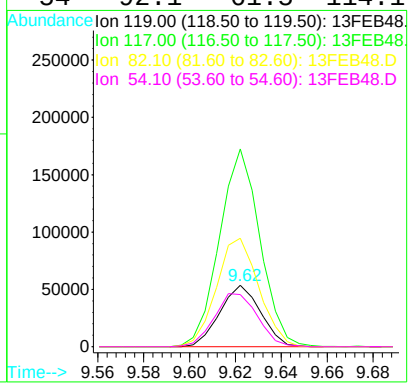


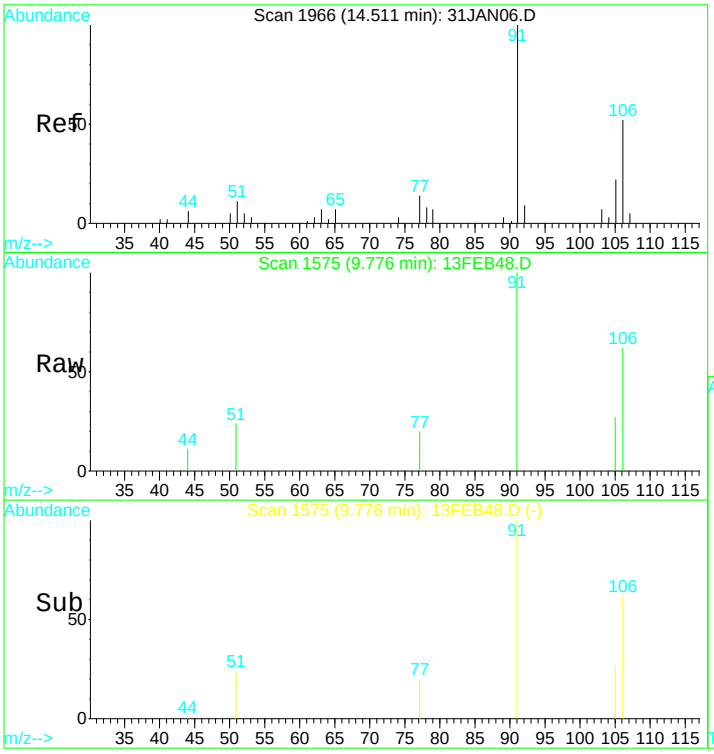



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion:119 Resp: 66140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 320.3 | 220.4 | 409.4 |
| 82 | 183.8 | 123.9 | 230.1 |
| 54 | 92.1 | 61.5 | 114.1 |

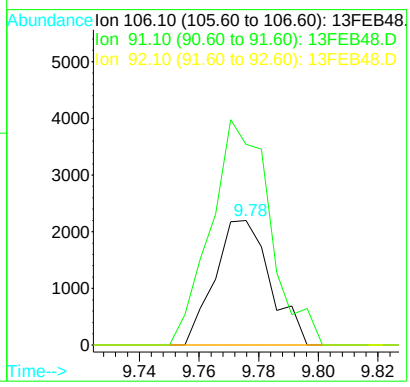


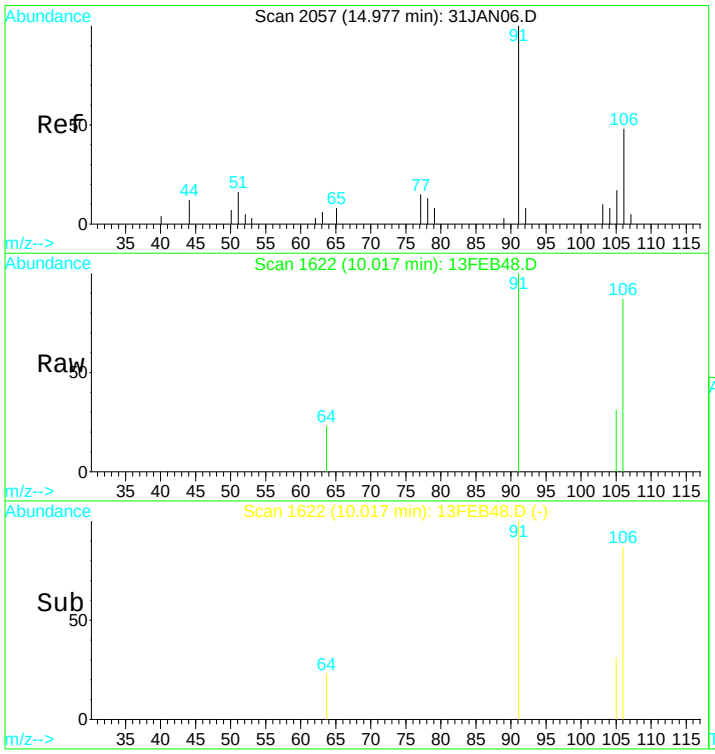




#43
P+m-Xylene
Concen: 0.21 ug/L
RT: 9.78 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion:106 Resp: 2839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 192.8 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

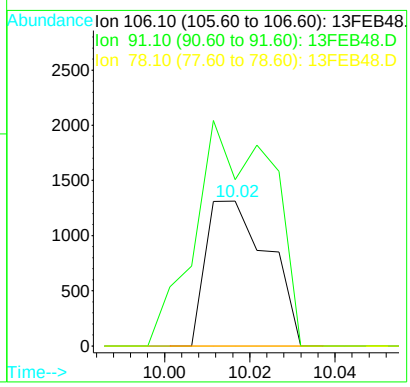


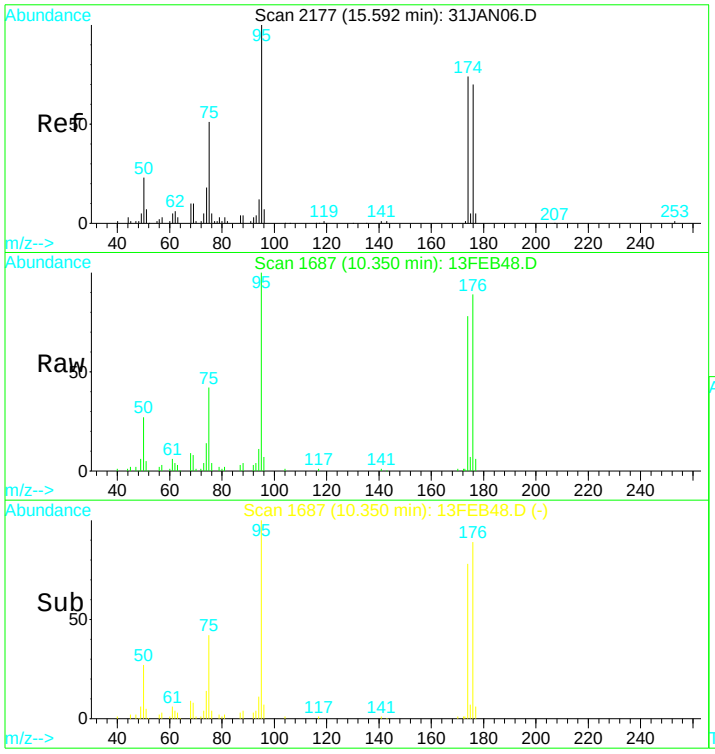



#44
O-Xylene
Concen: 0.10 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion:106 Resp: 1335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 189.1 | 124.3 | 230.9 |
| 78 | 0.0 | 51.7 | 95.9# |

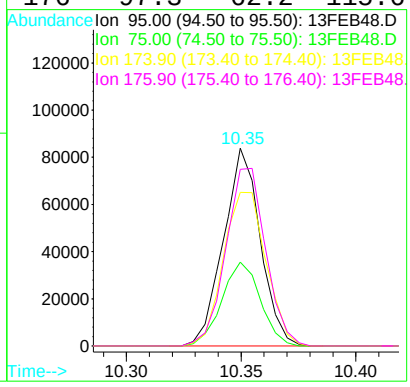



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB48.D
Acq: 14 Feb 2017 12:43 am

Tgt Ion: 95 Resp: 93480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 44.3 | 32.6 | 60.5 |
| 174 | 89.8 | 60.9 | 113.1 |
| 176 | 97.3 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB48.D Vial: 48
Acq On : 14 Feb 2017 12:43 am Operator: MGC
Sample : 1703480-12 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:52 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201514 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270631 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66140 | 10.00 | ug/L | 0.00 |

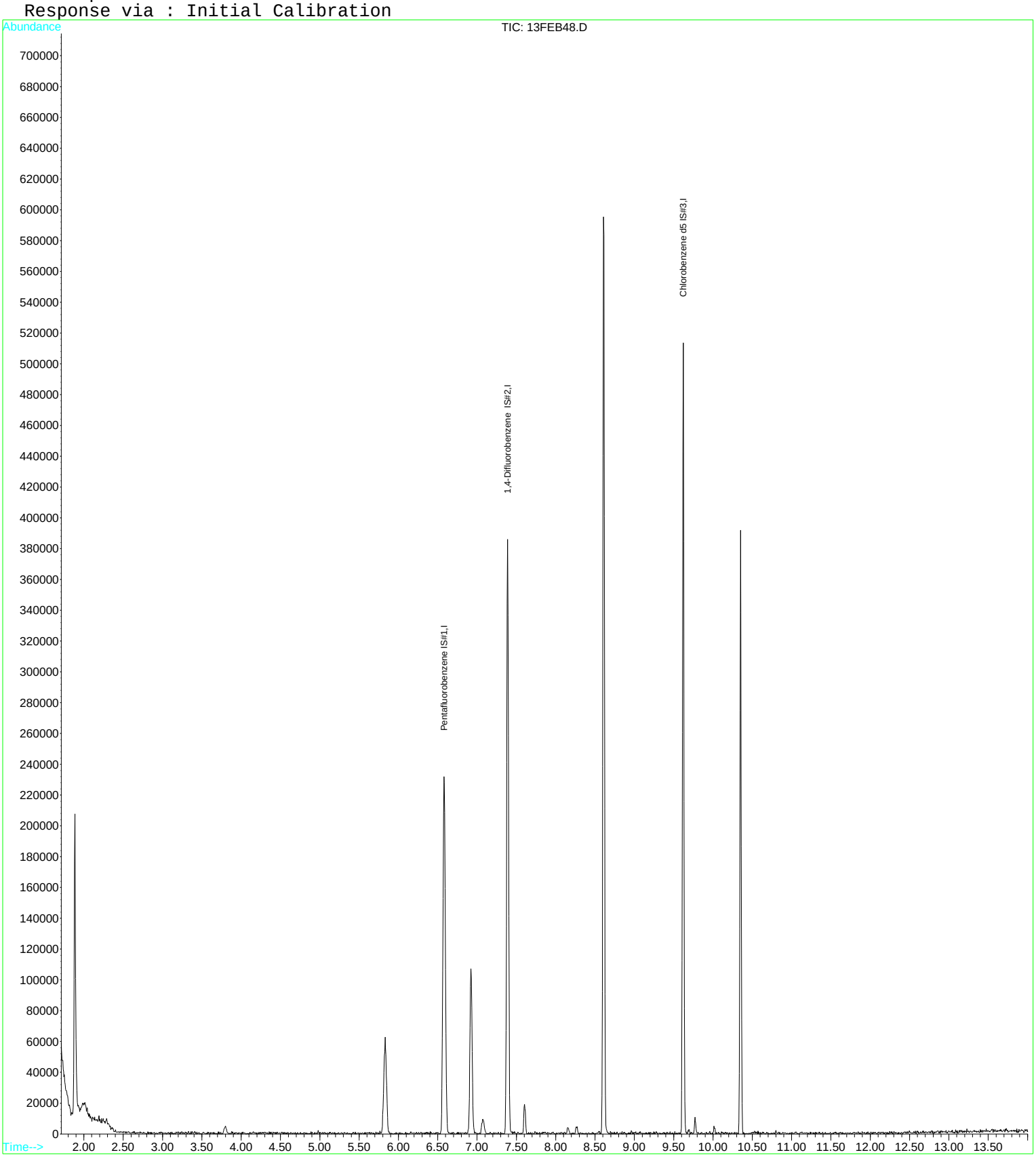
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB48.D  Vial: 48
Acq On : 14 Feb 2017 12:43 am  Operator: MGC
Sample : 1703480-12  Inst : MS-V5
Misc : 1 ;25ML;pH=1  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:52 2017  Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB15.D Vial: 15
Acq On : 13 Feb 2017 11:58 am Operator: MGC
Sample : 1703480-13 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:09 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 213703 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280506 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66593 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 64653 | 10.23 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 102.30% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 312274 | 9.78 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.80% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 94499 | 10.29 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.90% | | | |

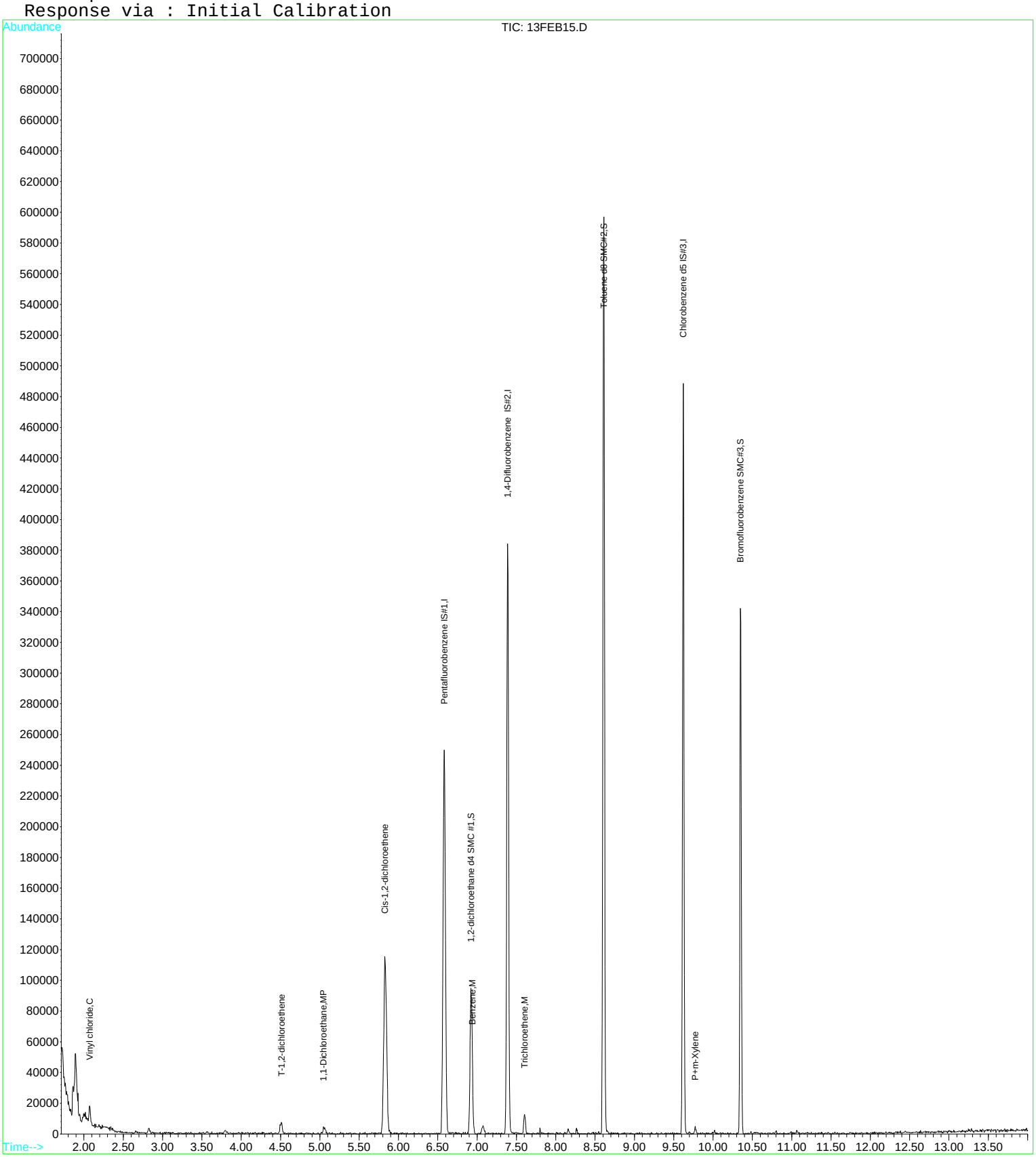
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 7925 | 0.62 | ug/L # | 10 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 2832 | 0.29 | ug/L | 77 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 5794 | 0.26 | ug/L | 95 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 63748 | 6.39 | ug/L | 93 |
| 23) Benzene | 6.95 | 78 | 4479 | 0.11 | ug/L # | 1 |
| 25) Trichloroethene | 7.60 | 130 | 3805 | 0.42 | ug/L | 92 |
| 43) P+m-Xylene | 9.77 | 106 | 1094 | 0.08 | ug/L # | 18 |

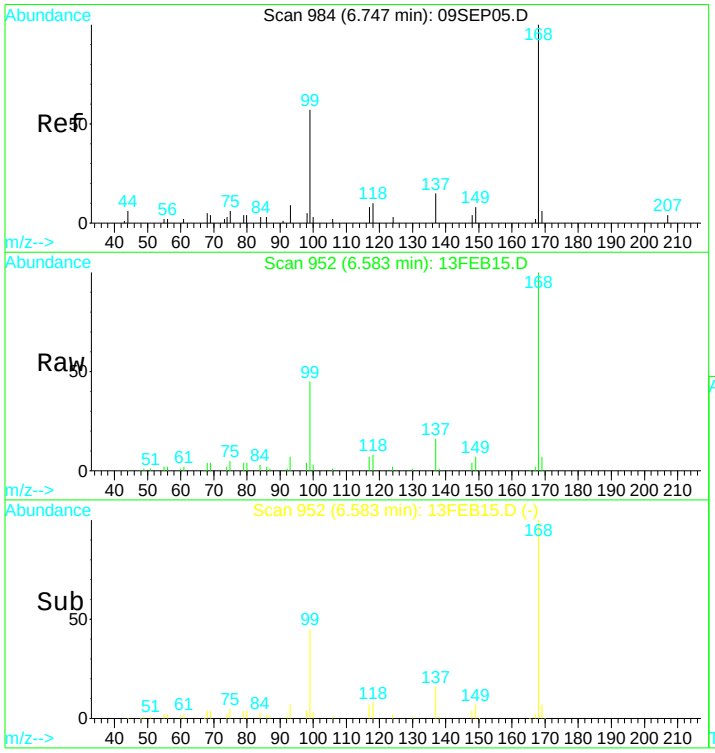
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB15.D Vial: 15
Acq On : 13 Feb 2017 11:58 am Operator: MGC
Sample : 1703480-13 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:09 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

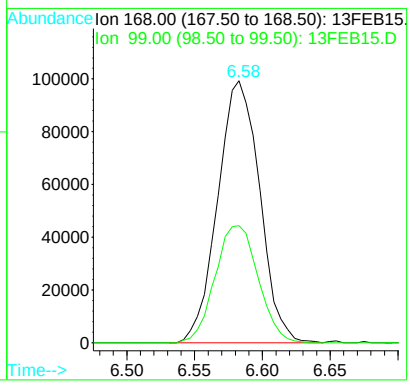


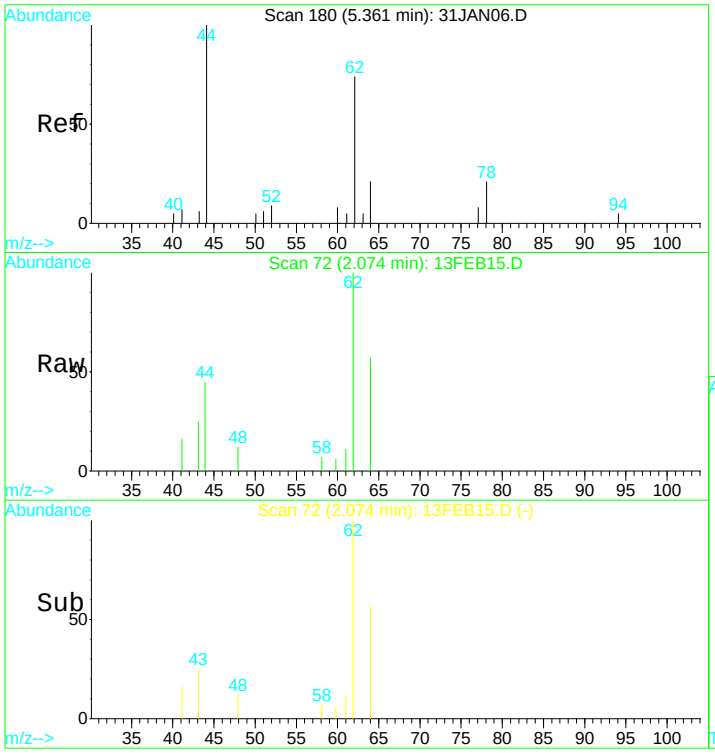



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion:168 Resp: 213703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.9 | 305.1 | 566.7# |

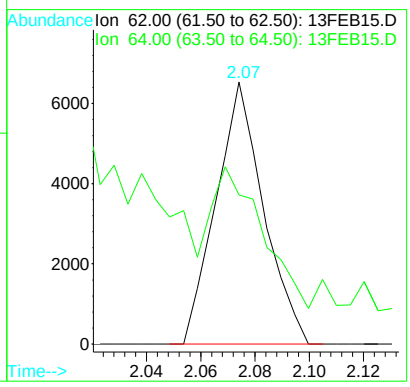


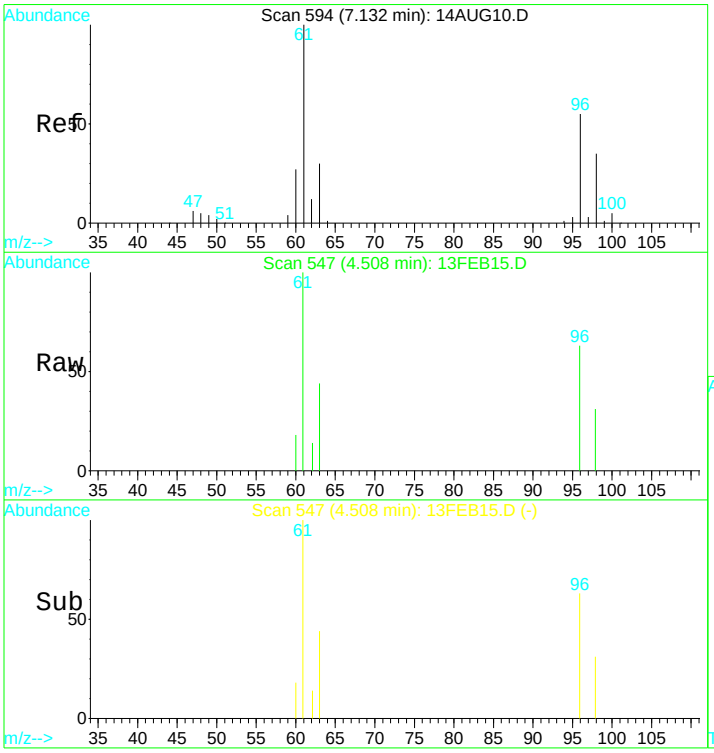




#4
Vinyl chloride
Concen: 0.62 ug/L
RT: 2.07 min Scan# 72
Delta R.T. 0.01 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 62 Resp: 7925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 82.4 | 22.4 | 41.6# |

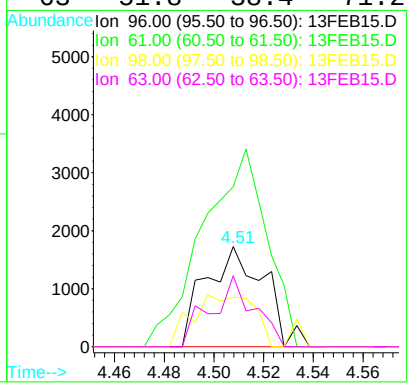


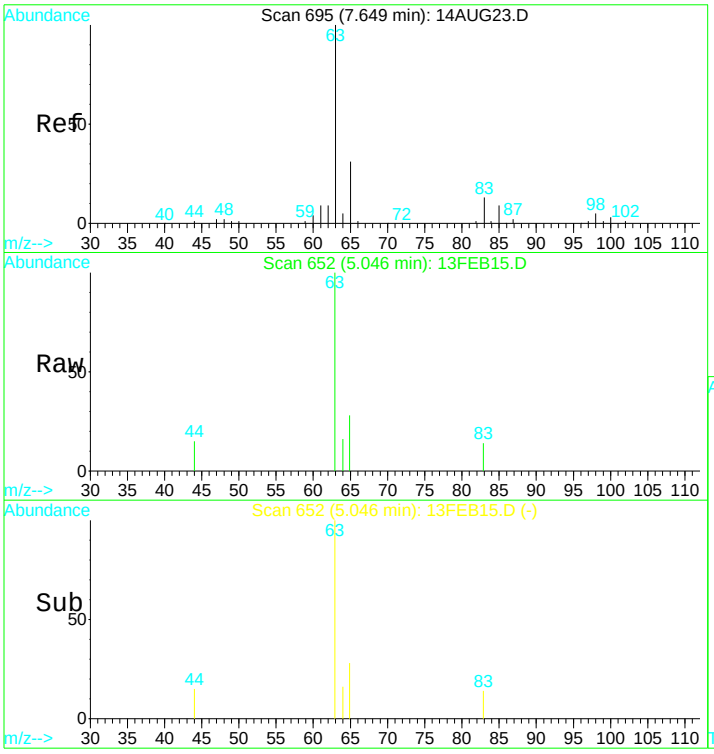



#12
T-1,2-dichloroethene
Concen: 0.29 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 96 Resp: 2832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 214.6 | 119.6 | 222.2 |
| 98 | 54.4 | 46.1 | 85.5 |
| 63 | 51.8 | 38.4 | 71.2 |

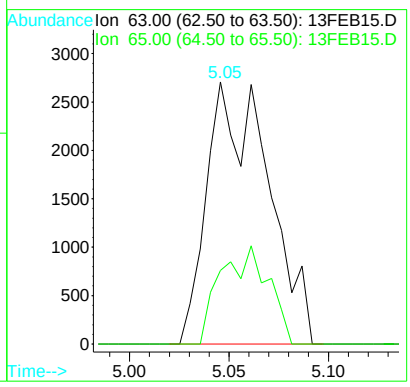


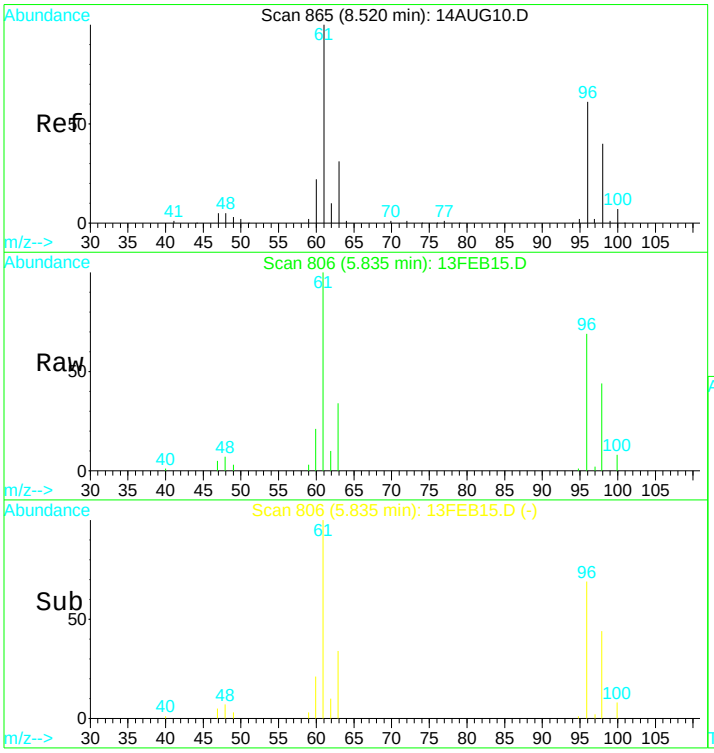




#13
1,1-Dichloroethane
Concen: 0.26 ug/L
RT: 5.05 min Scan# 652
Delta R.T. -0.01 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 63 Resp: 5794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.2 | 22.4 | 41.6 |

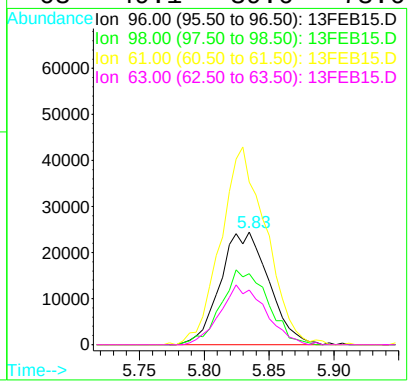


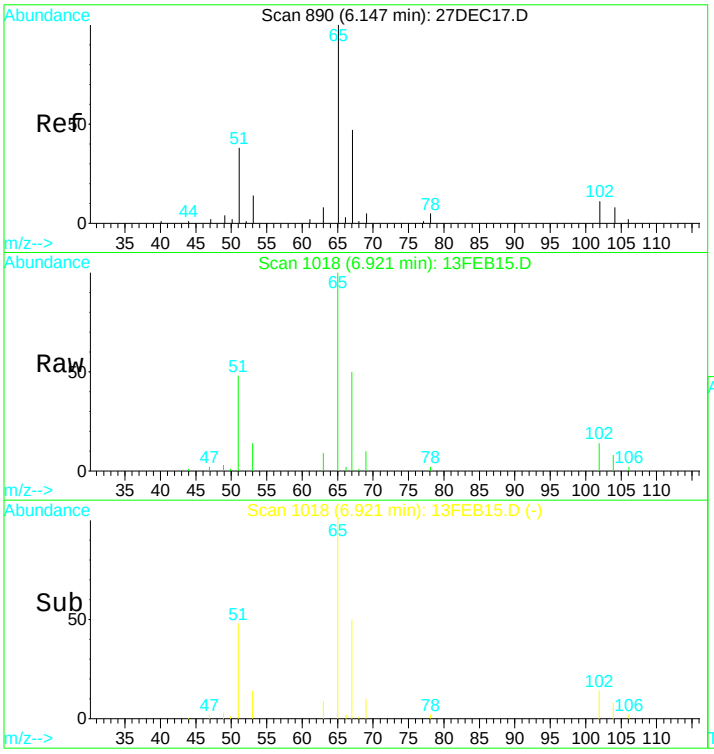



#15
Cis-1,2-dichloroethene
Concen: 6.39 ug/L
RT: 5.83 min Scan# 806
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 96 Resp: 63748

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 63.5 | 46.2 | 85.8 |
| 61 | 164.4 | 122.8 | 228.0 |
| 63 | 49.1 | 39.6 | 73.6 |

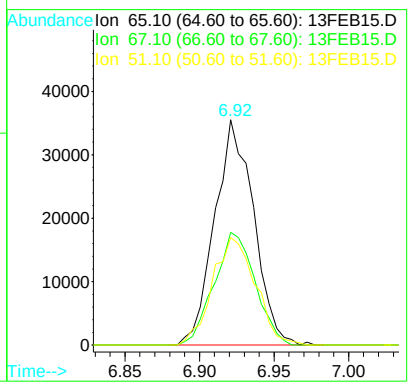


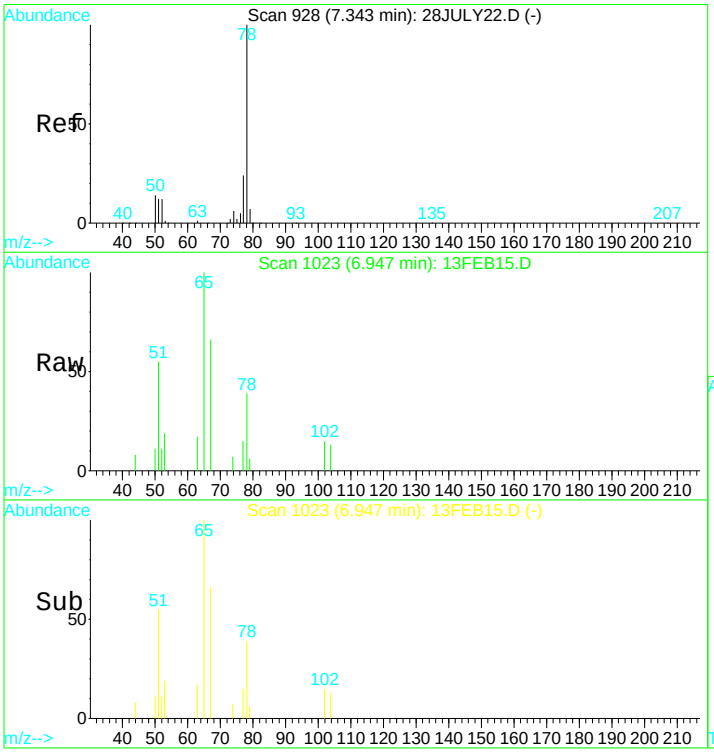




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 65 Resp: 64653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.8 | 38.4 | 71.4 |
| 51 | 52.6 | 1006.3 | 1868.8# |

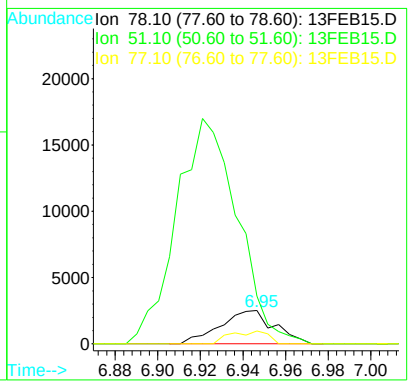


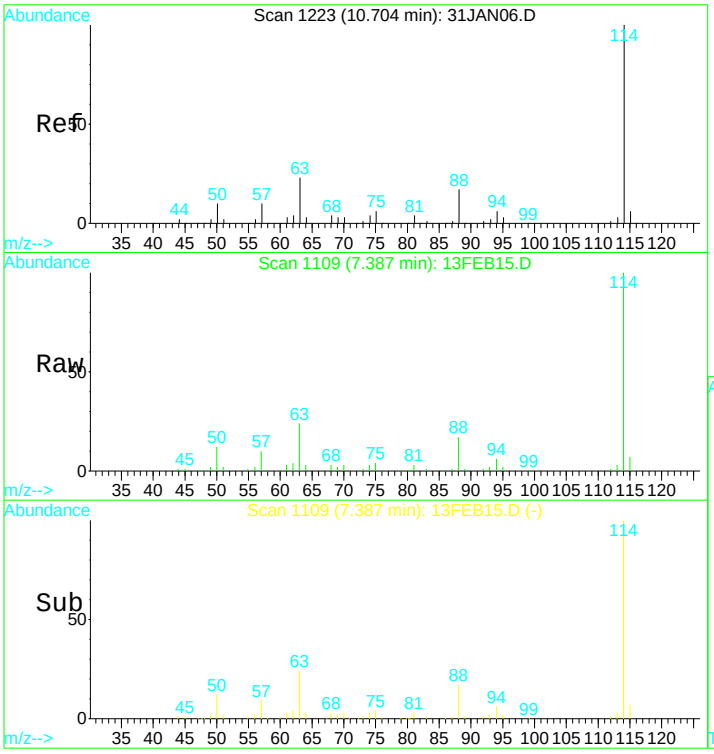



#23
Benzene
Concen: 0.11 ug/L
RT: 6.95 min Scan# 1023
Delta R.T. 0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 78 Resp: 4479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 51 | 759.3 | 16.2 | 30.0# |
| 77 | 26.5 | 16.3 | 30.3 |

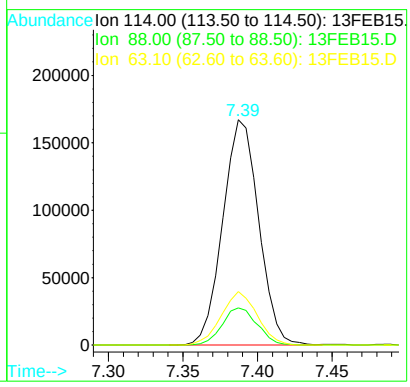


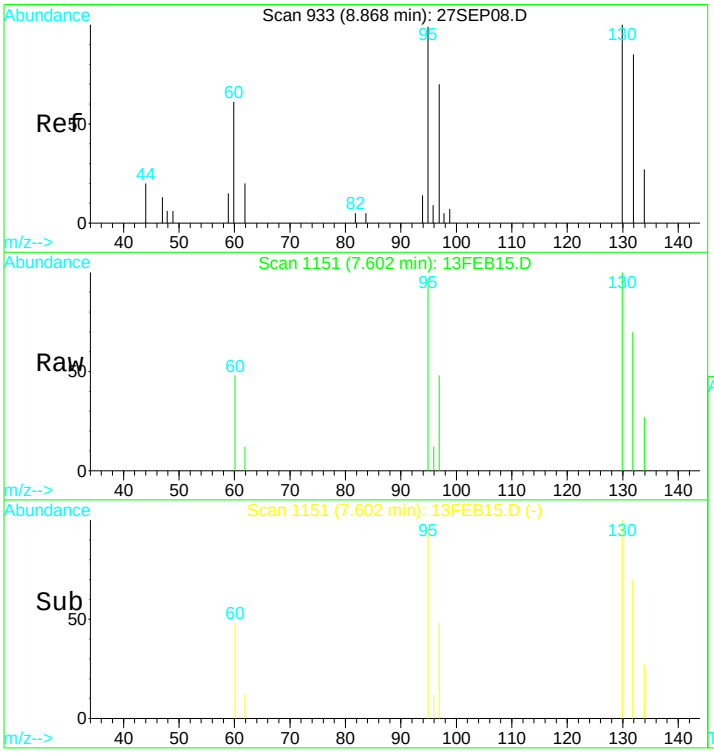




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion:114 Resp: 280506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.1 | 12.0 | 22.2 |
| 63 | 23.6 | 16.9 | 31.5 |

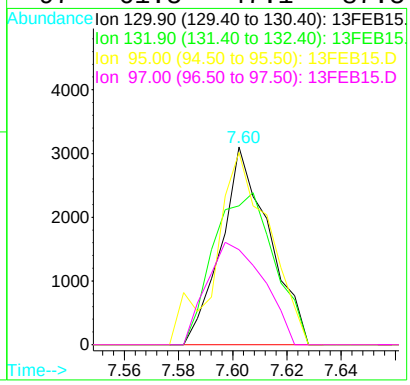


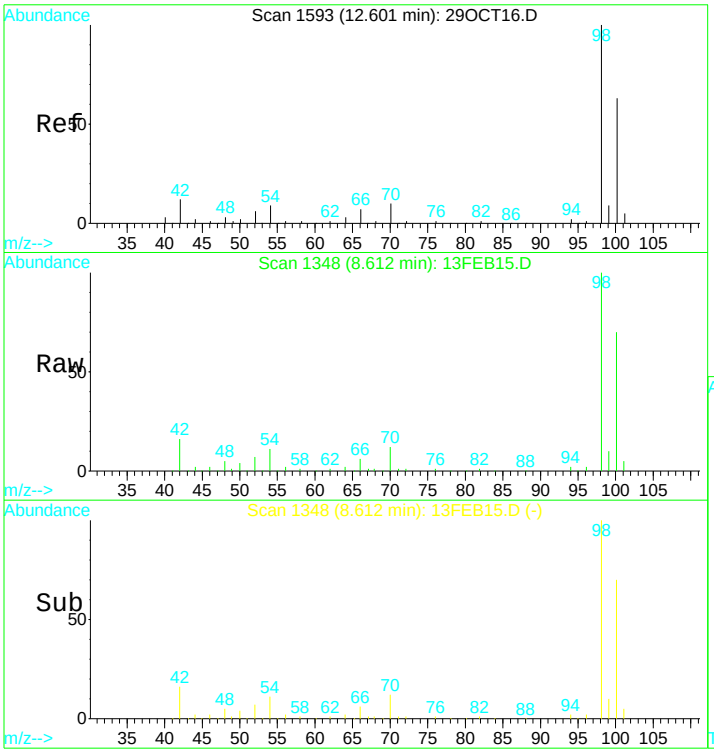



#25
Trichloroethene
Concen: 0.42 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion:130 Resp: 3805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 97.8 | 74.3 | 137.9 |
| 95 | 108.8 | 70.8 | 131.6 |
| 97 | 61.5 | 47.1 | 87.5 |

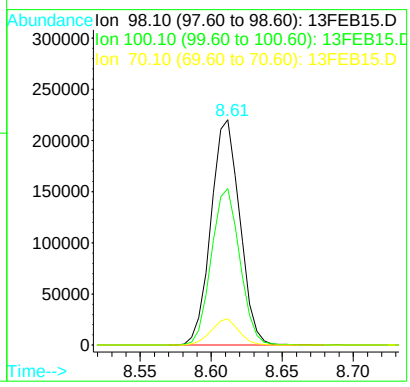


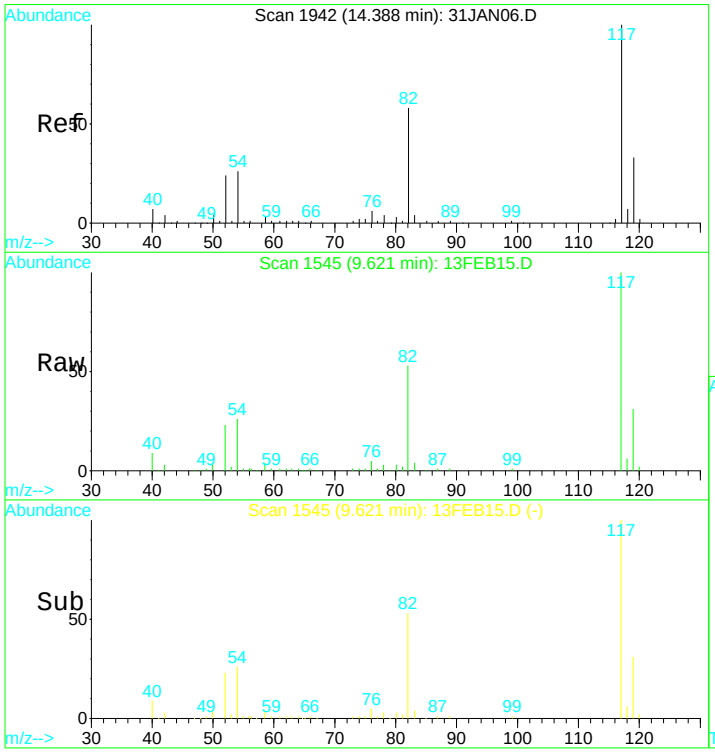




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 98 Resp: 312274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.5 | 47.0 | 87.4 |
| 70 | 11.2 | 7.3 | 13.7 |

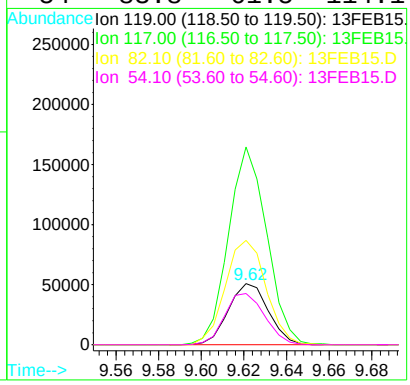


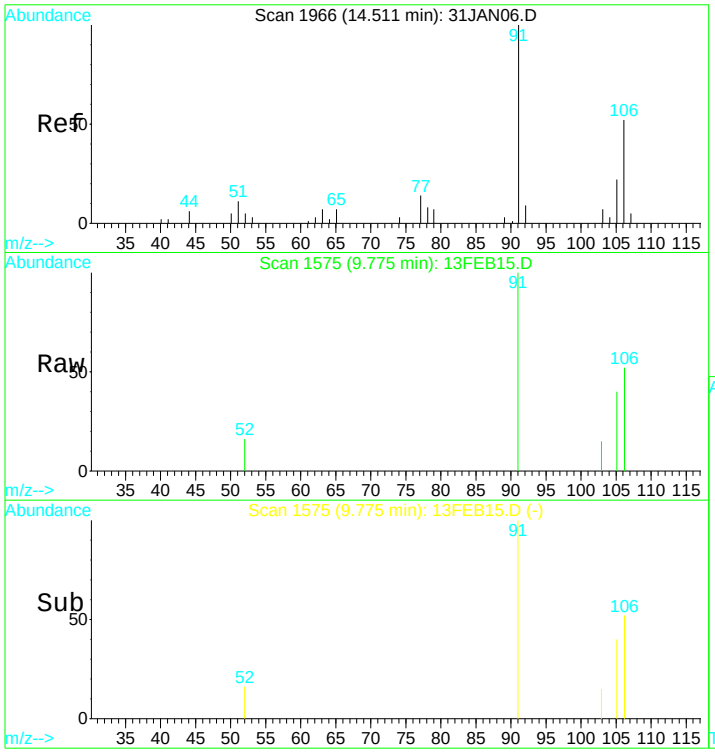



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion:119 Resp: 66593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 309.3 | 220.4 | 409.4 |
| 82 | 173.5 | 123.9 | 230.1 |
| 54 | 83.8 | 61.5 | 114.1 |

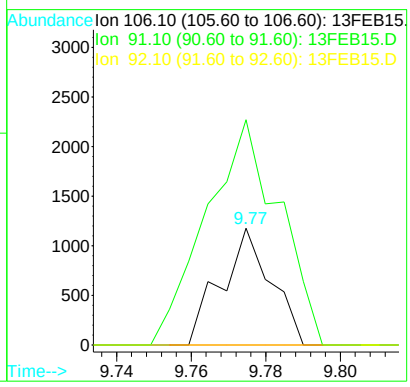


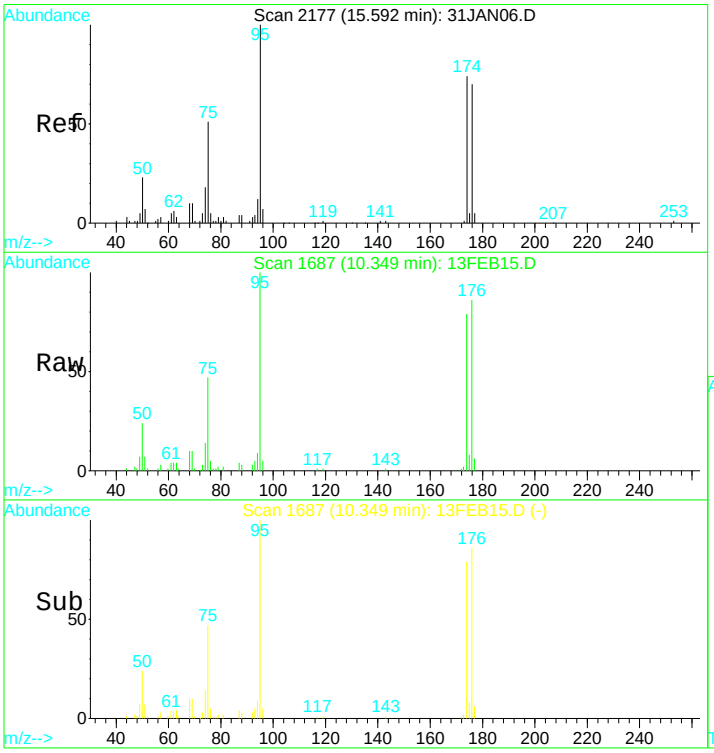




#43
P+m-Xylene
Concen: 0.08 ug/L
RT: 9.77 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion:106 Resp: 1094

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 282.6 | 116.4 | 216.2# |
| 92 | 0.0 | 10.8 | 20.0# |

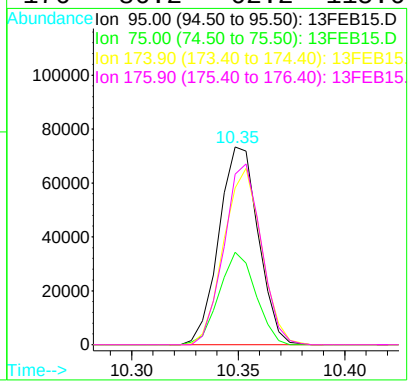





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB15.D
Acq: 13 Feb 2017 11:58 am

Tgt Ion: 95 Resp: 94499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 43.4 | 32.6 | 60.5 |
| 174 | 85.7 | 60.9 | 113.1 |
| 176 | 86.2 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB15.D Vial: 15
Acq On : 13 Feb 2017 11:58 am Operator: MGC
Sample : 1703480-13 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:10 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 213703 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280506 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66593 | 10.00 ug/L | 0.00 |

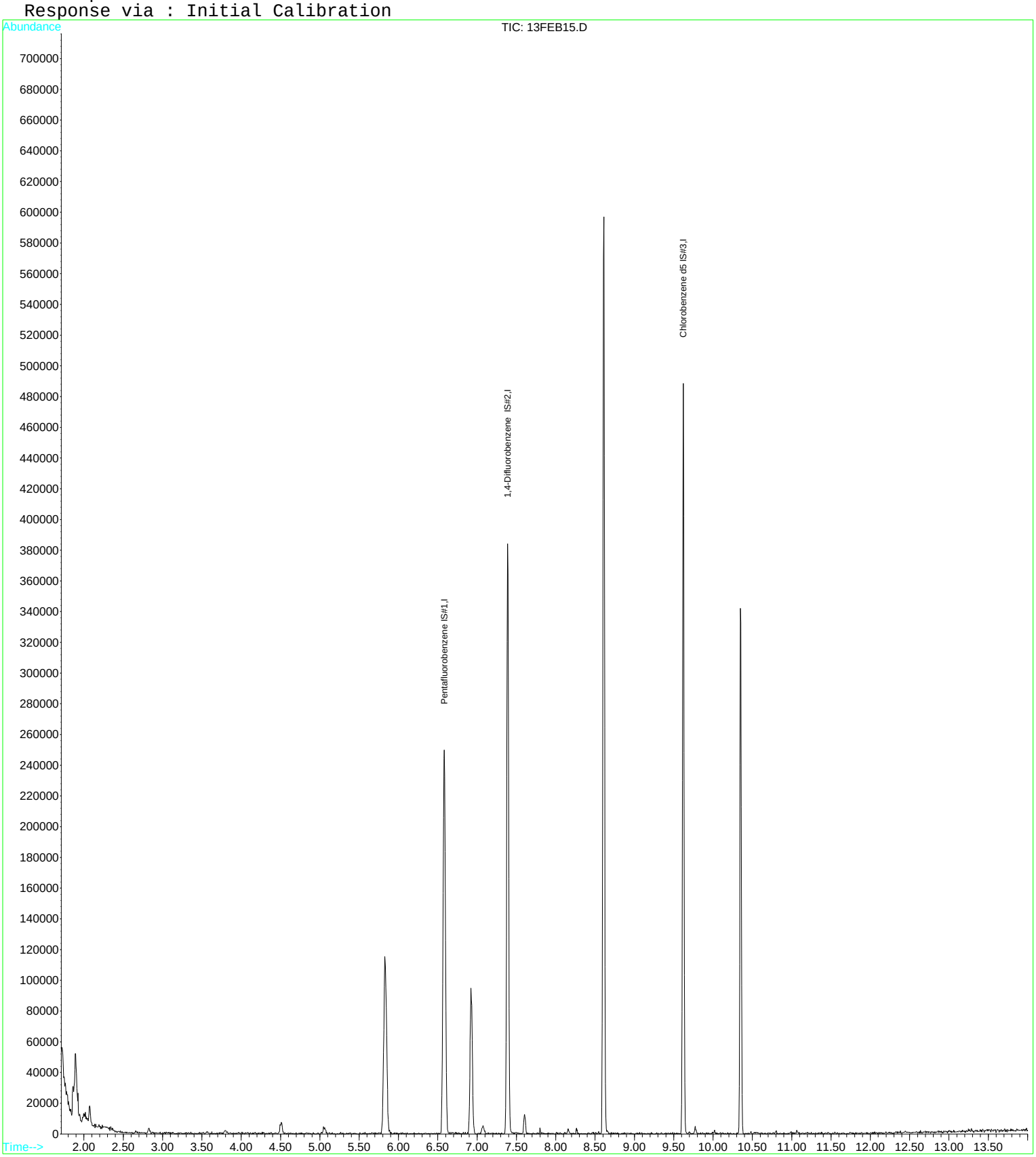
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB15.D Vial: 15
Acq On : 13 Feb 2017 11:58 am Operator: MGC
Sample : 1703480-13 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:10 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D Vial: 23
Acq On : 12 Feb 2017 1:34 pm Operator: MGC
Sample : 1703480-14 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:23 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201570 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 266412 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64326 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 63606 | 10.67 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 106.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 300490 | 9.91 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.10% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 84684 | 9.55 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.50% | | | |

Target Compounds

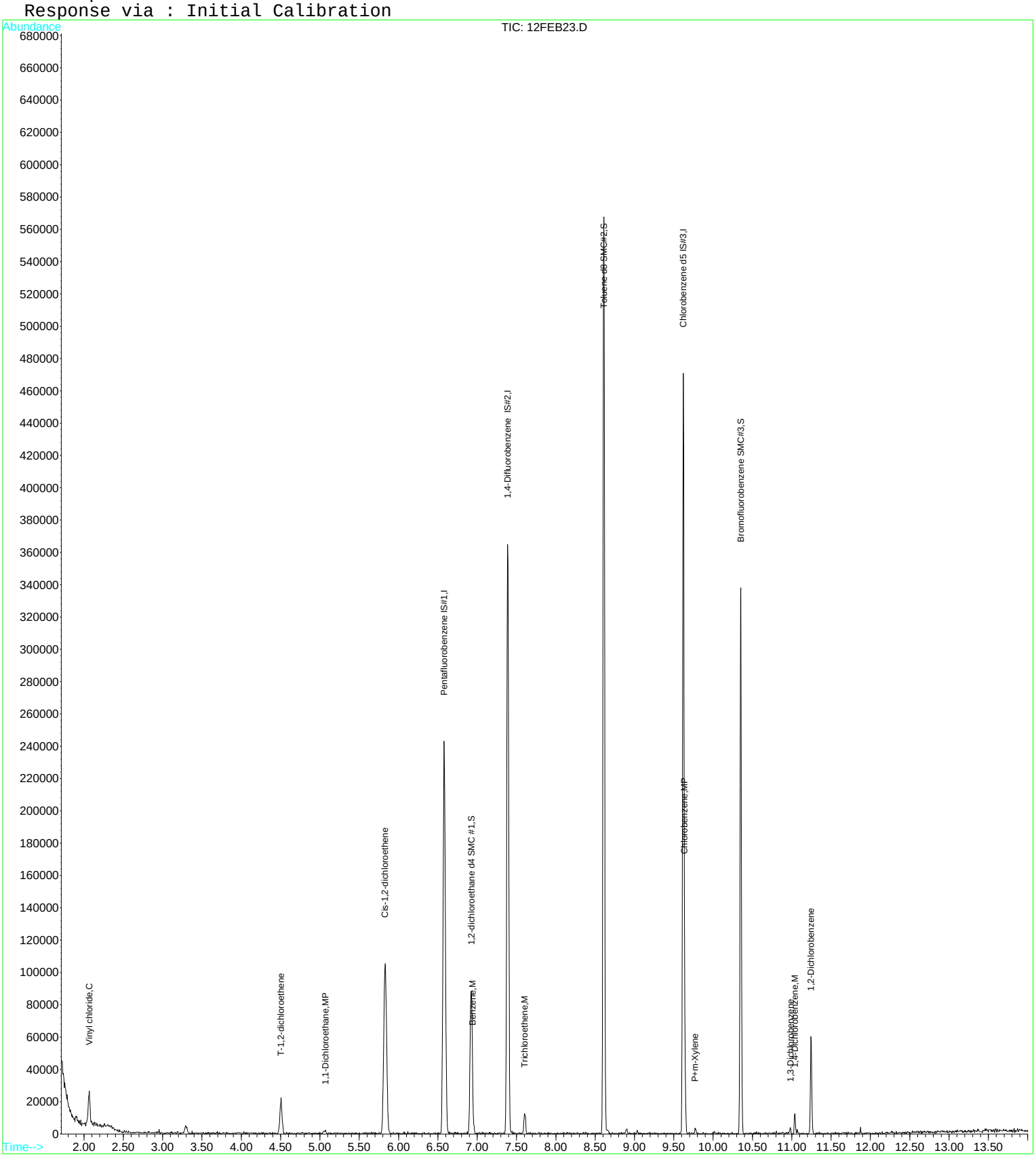
| | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 14761 | 1.23 | ug/L # | 1 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 7702 | 0.85 | ug/L | 90 |
| 13) 1,1-Dichloroethane | 5.07 | 63 | 2841m | 0.14 | ug/L | |
| 15) Cis-1,2-dichloroethene | 5.82 | 96 | 57821 | 6.15 | ug/L | 93 |
| 23) Benzene | 6.95 | 78 | 5018 | 0.13 | ug/L # | 1 |
| 25) Trichloroethene | 7.60 | 130 | 4267 | 0.49 | ug/L | 88 |
| 40) Chlorobenzene | 9.64 | 112 | 17081 | 0.89 | ug/L | 89 |
| 43) P+m-Xylene | 9.77 | 106 | 966 | 0.07 | ug/L # | 74 |
| 60) 1,3-Dichlorobenzene | 10.98 | 146 | 936m | 0.07 | ug/L | |
| 61) 1,4-Dichlorobenzene | 11.04 | 146 | 4359 | 0.35 | ug/L | 88 |
| 63) 1,2-Dichlorobenzene | 11.24 | 146 | 20596 | 1.89 | ug/L | 97 |

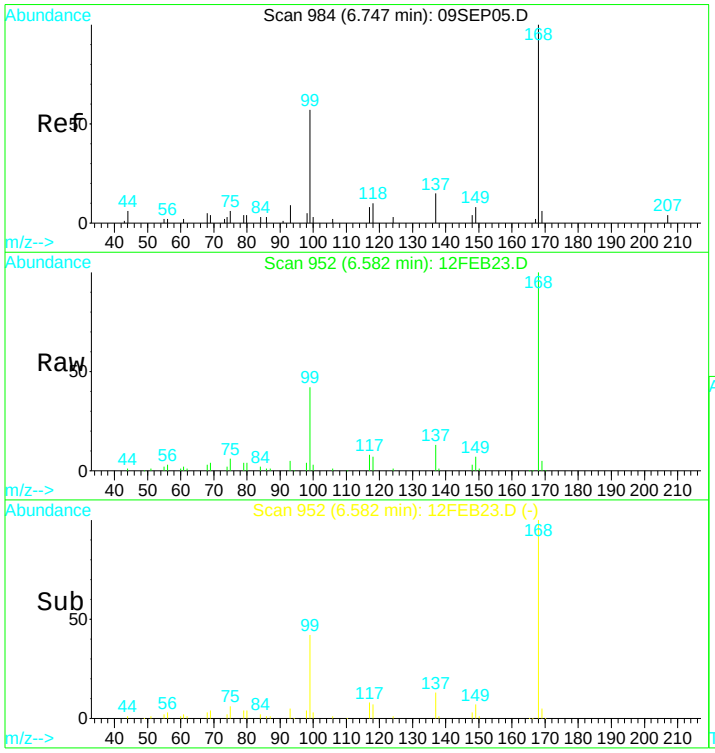
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D Vial: 23
Acq On : 12 Feb 2017 1:34 pm Operator: MGC
Sample : 1703480-14 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:23 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

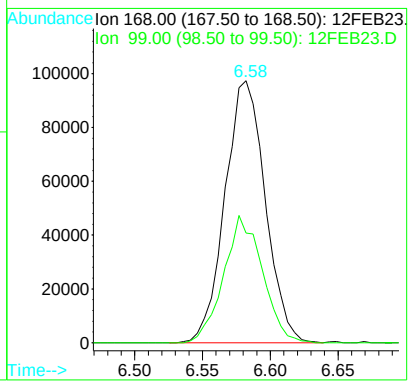


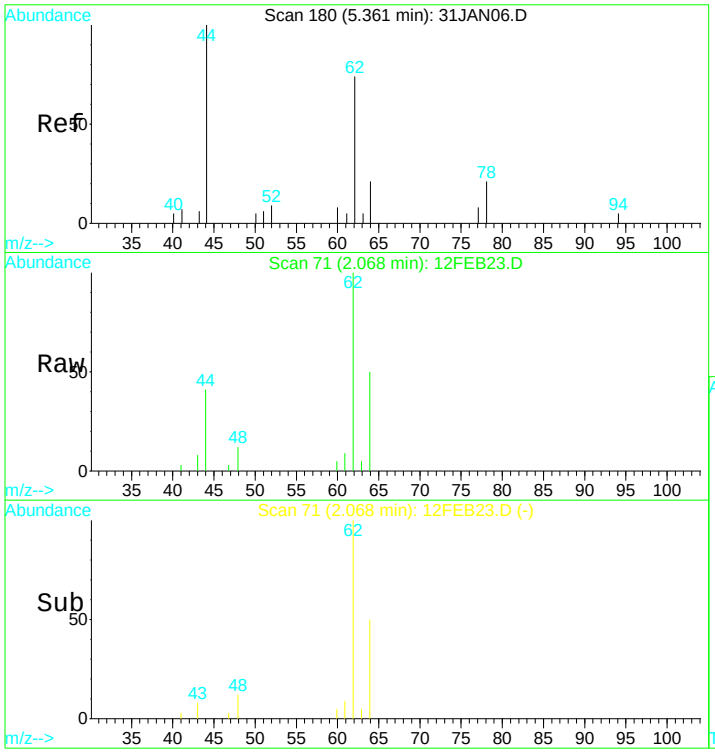



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:168 Resp: 201570

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.5 | 305.1 | 566.7# |

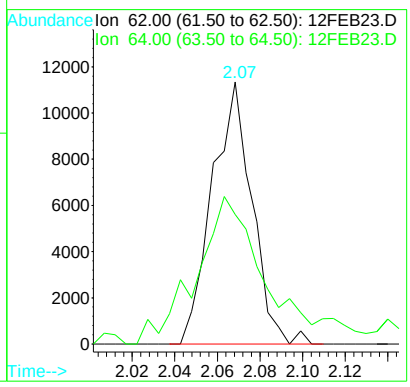


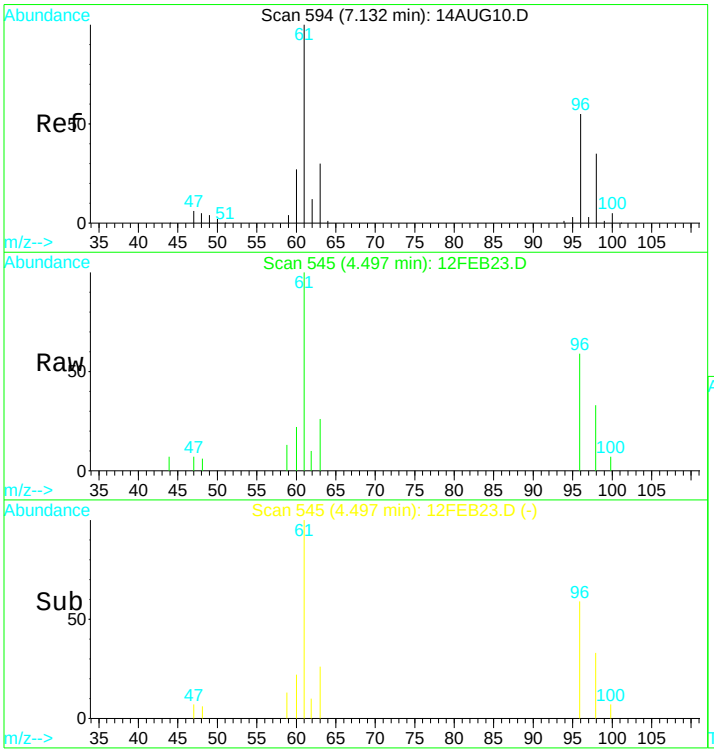




#4
Vinyl chloride
Concen: 1.23 ug/L
RT: 2.07 min Scan# 71
Delta R.T. 0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 62 Resp: 14761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 100.9 | 22.4 | 41.6# |

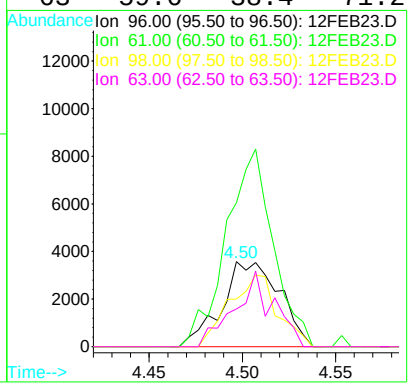


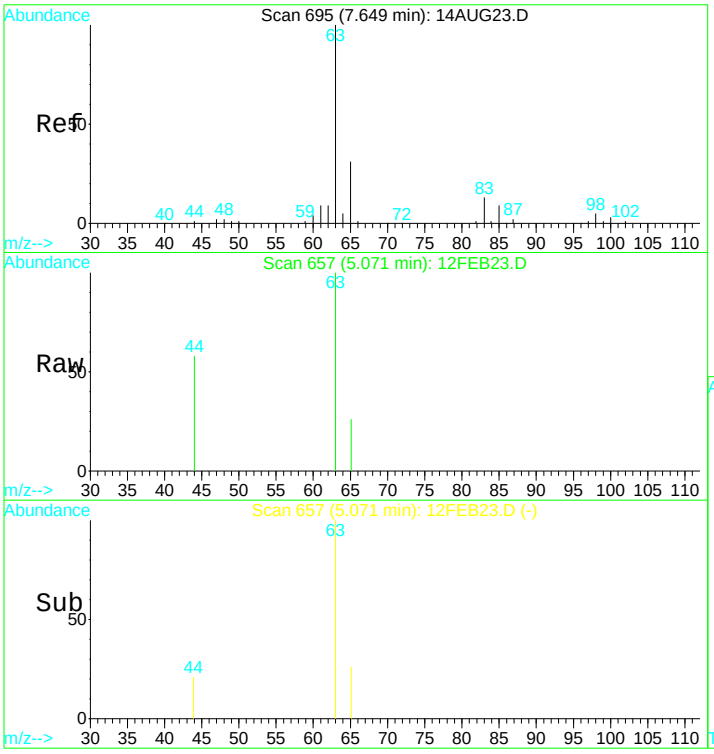



#12
T-1,2-dichloroethene
Concen: 0.85 ug/L
RT: 4.50 min Scan# 545
Delta R.T. -0.01 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 96 Resp: 7702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 189.2 | 119.6 | 222.2 |
| 98 | 70.4 | 46.1 | 85.5 |
| 63 | 59.6 | 38.4 | 71.2 |

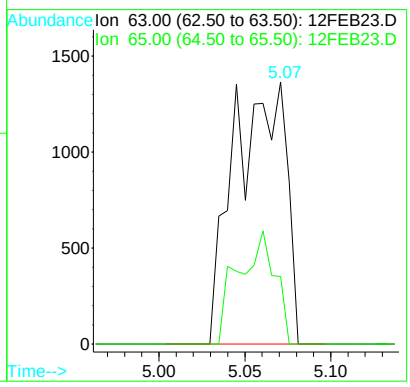


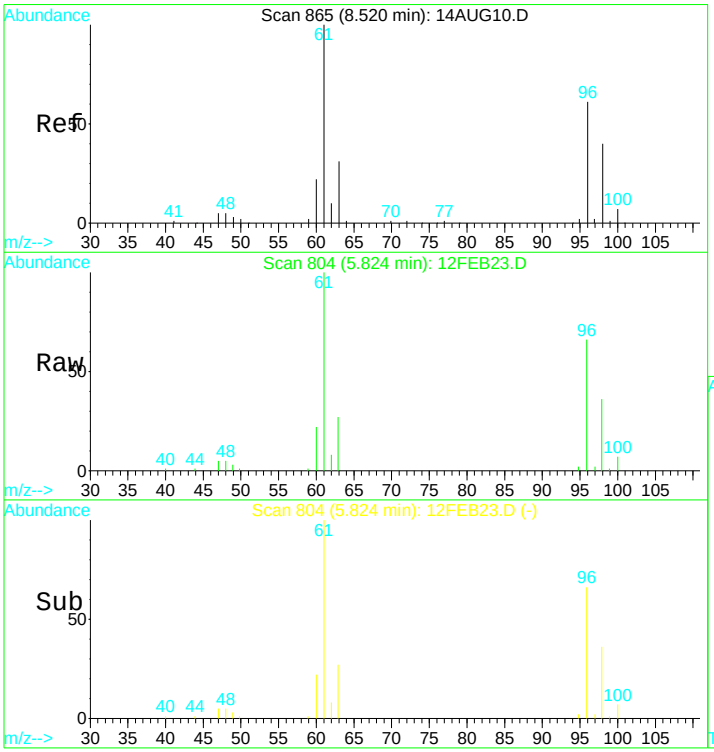




#13
1,1-Dichloroethane
Concen: 0.14 ug/L m
RT: 5.07 min Scan# 657
Delta R.T. 0.01 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 63 Resp: 2841

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.9 | 22.4 | 41.6 |

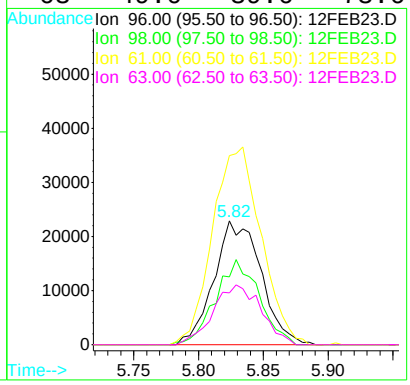


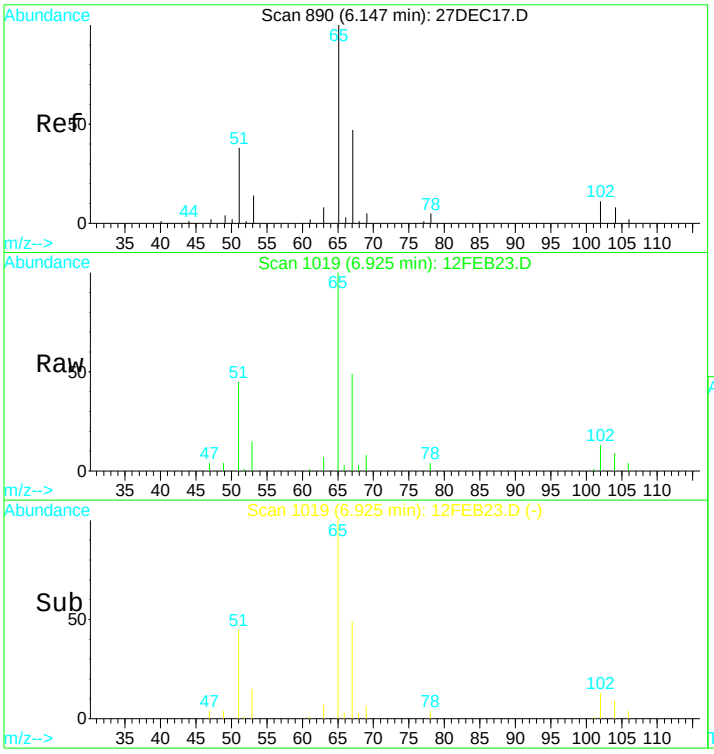



#15
Cis-1,2-dichloroethene
Concen: 6.15 ug/L
RT: 5.82 min Scan# 804
Delta R.T. -0.01 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 96 Resp: 57821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 63.4 | 46.2 | 85.8 |
| 61 | 164.4 | 122.8 | 228.0 |
| 63 | 49.0 | 39.6 | 73.6 |

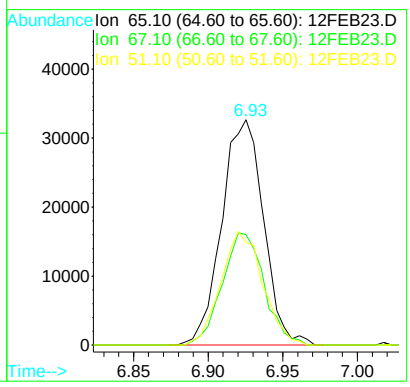


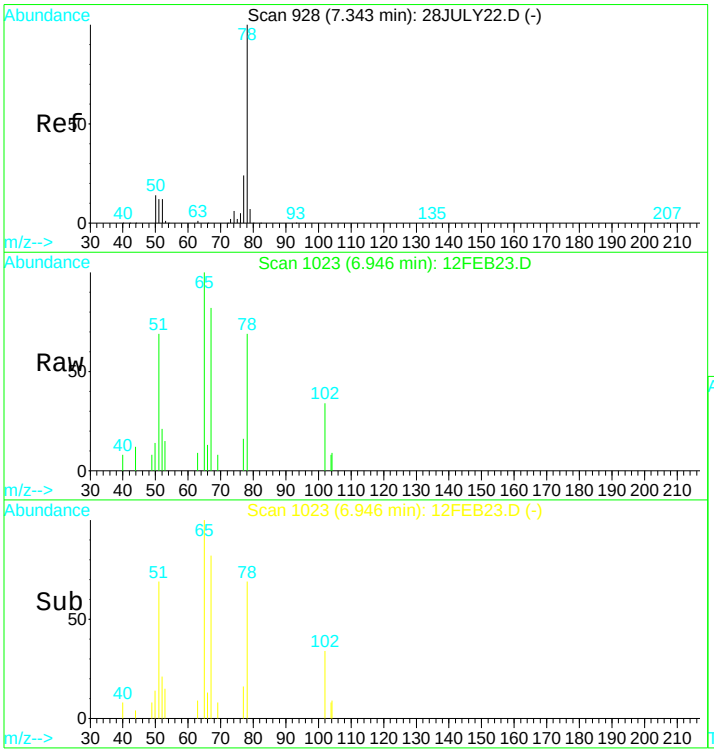




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 65 Resp: 63606

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.8 | 38.4 | 71.4 |
| 51 | 50.7 | 1006.3 | 1868.8# |

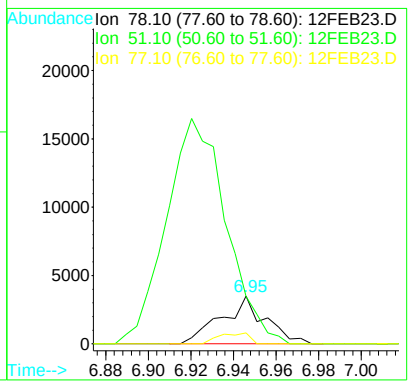


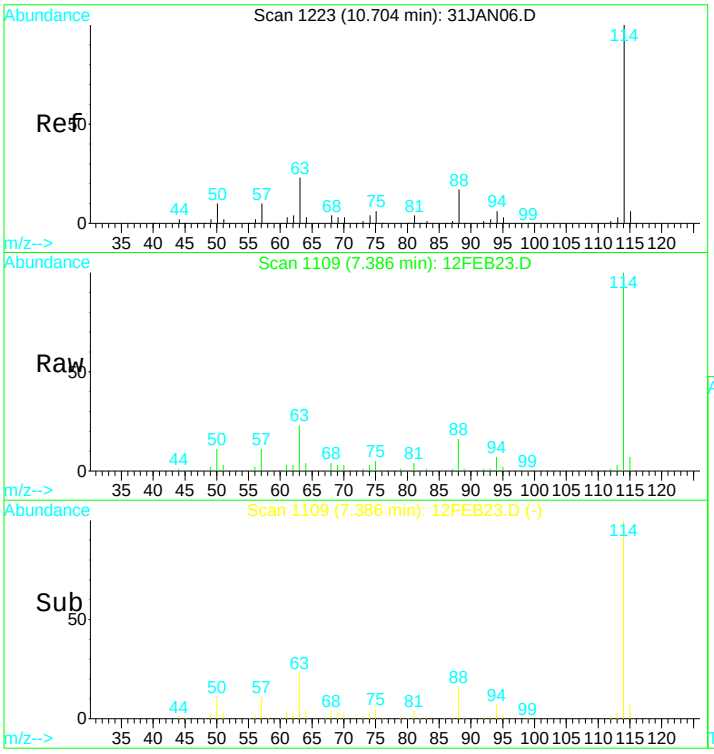



#23
Benzene
Concen: 0.13 ug/L
RT: 6.95 min Scan# 1023
Delta R.T. 0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 78 Resp: 5018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 51 | 642.3 | 16.2 | 30.0# |
| 77 | 15.8 | 16.3 | 30.3# |

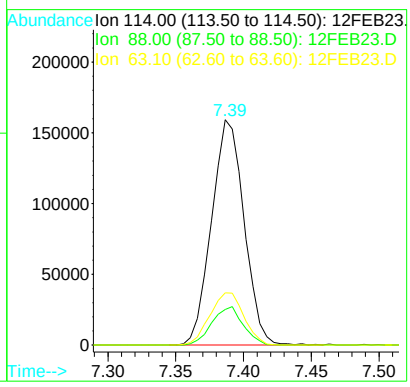


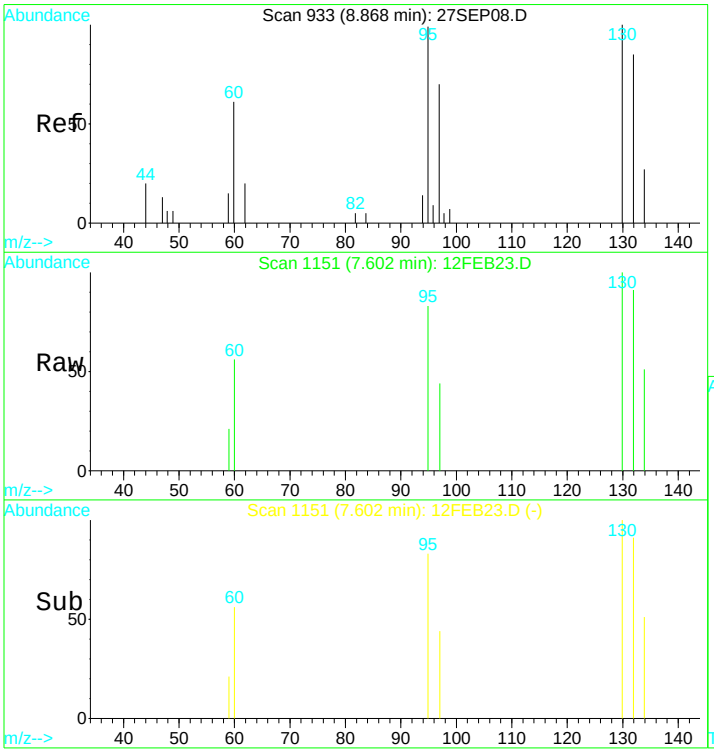




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:114 Resp: 266412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.4 | 12.0 | 22.2 |
| 63 | 24.2 | 16.9 | 31.5 |

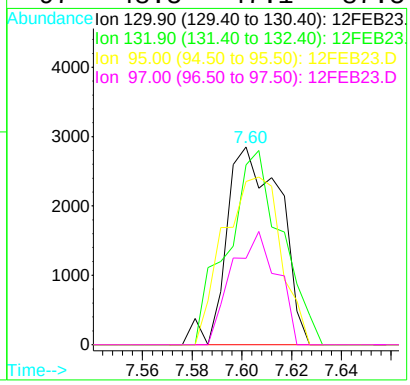


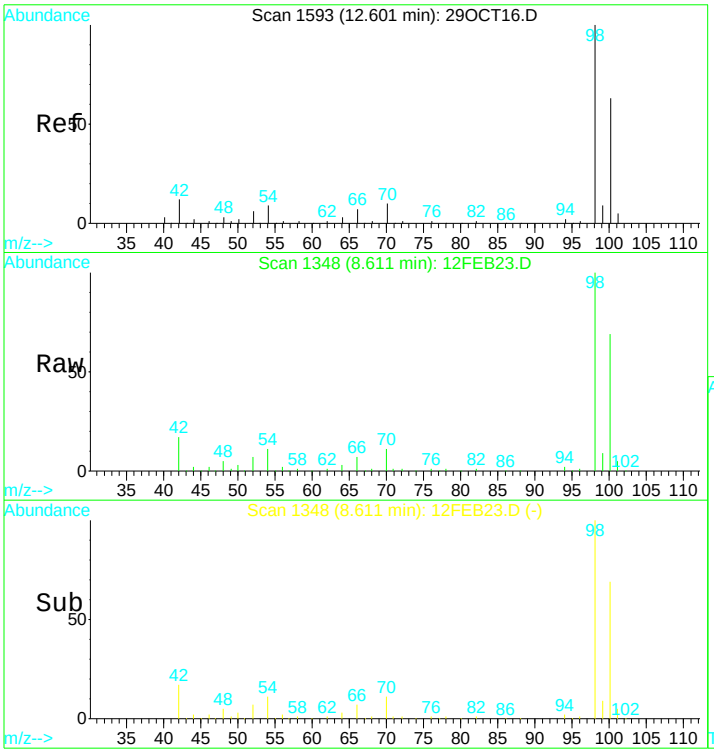



#25
Trichloroethene
Concen: 0.49 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:130 Resp: 4267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 99.0 | 74.3 | 137.9 |
| 95 | 91.0 | 70.8 | 131.6 |
| 97 | 48.5 | 47.1 | 87.5 |

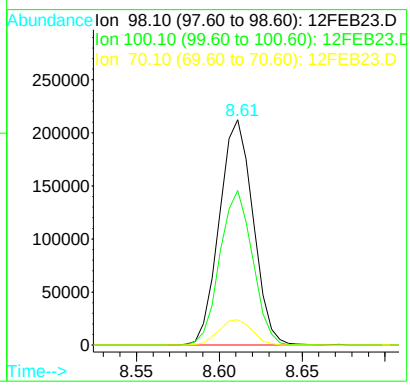


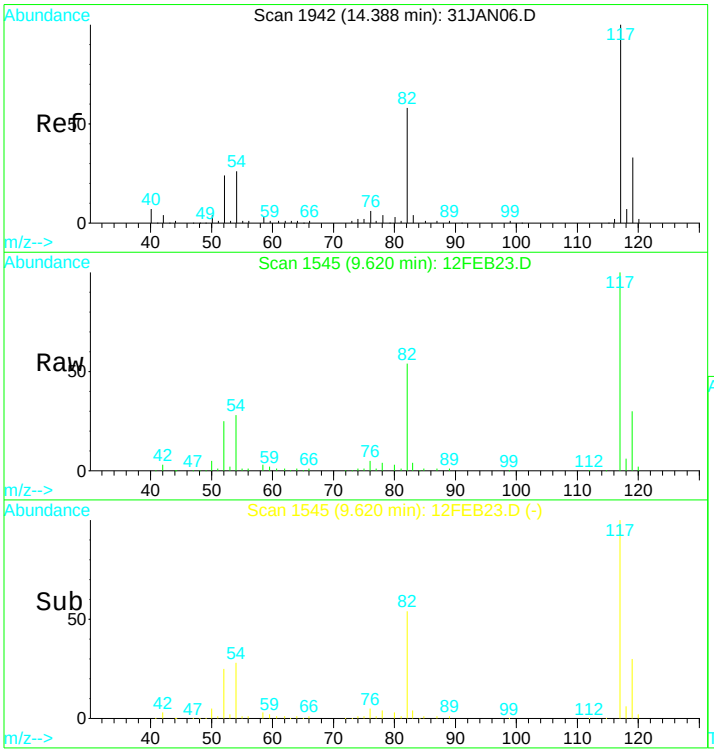




#31
Toluene d8 SMC#2
Concen: Below ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 98 Resp: 300490

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.4 | 47.0 | 87.4 |
| 70 | 11.1 | 7.3 | 13.7 |

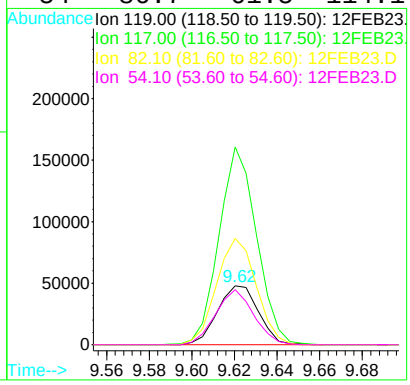


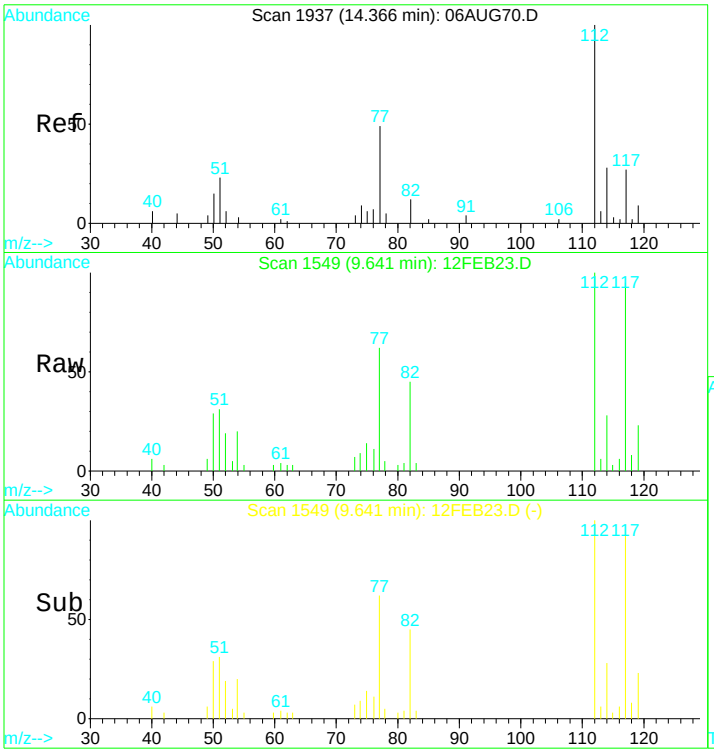



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:119 Resp: 64326

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 307.3 | 220.4 | 409.4 |
| 82 | 173.7 | 123.9 | 230.1 |
| 54 | 86.7 | 61.5 | 114.1 |

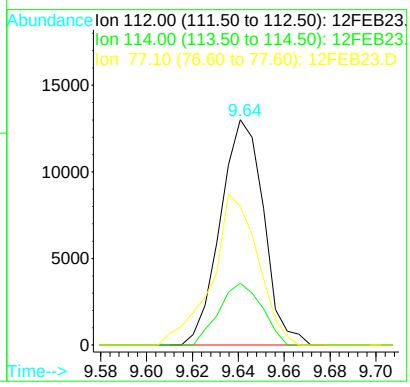


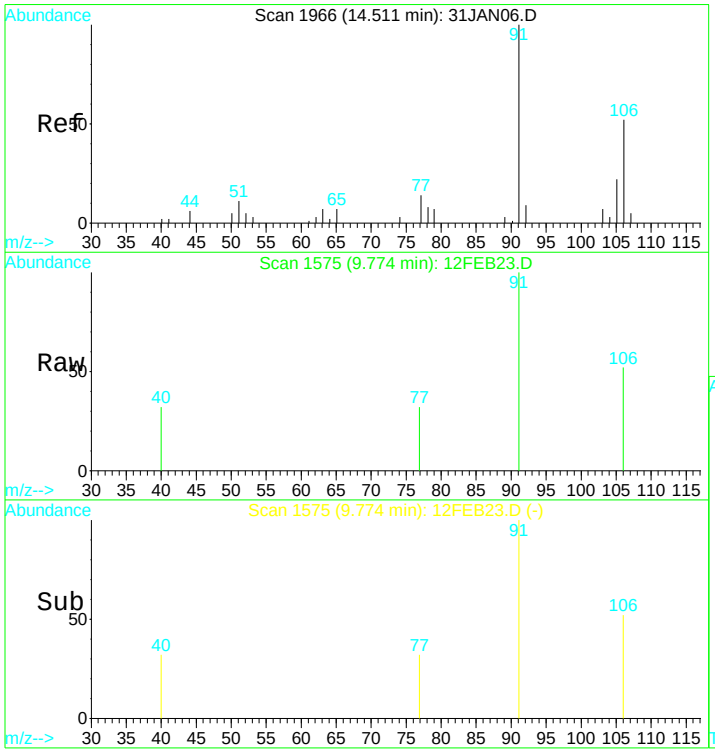




#40
Chlorobenzene
Concen: 0.89 ug/L
RT: 9.64 min Scan# 1549
Delta R.T. -0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:112 Resp: 17081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 27.2 | 25.1 | 46.5 |
| 77 | 70.9 | 44.6 | 82.8 |

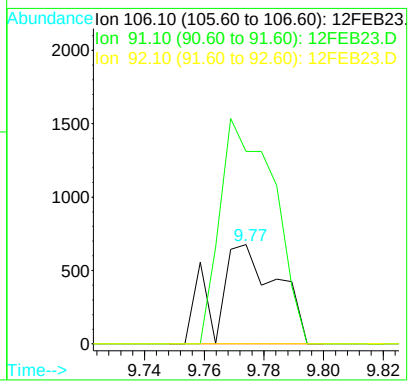


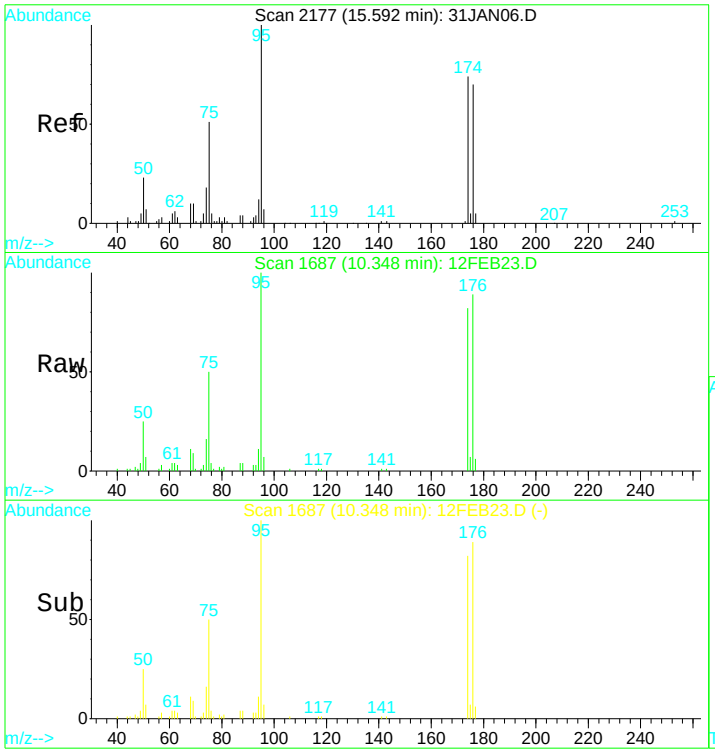



#43
P+m-Xylene
Concen: 0.07 ug/L
RT: 9.77 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:106 Resp: 966

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 200.1 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

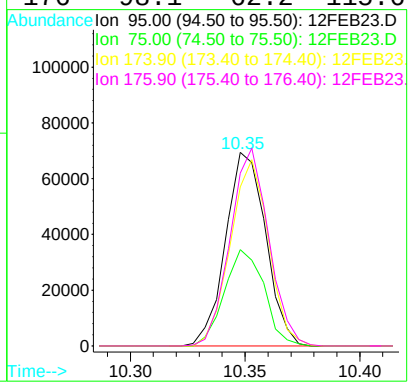


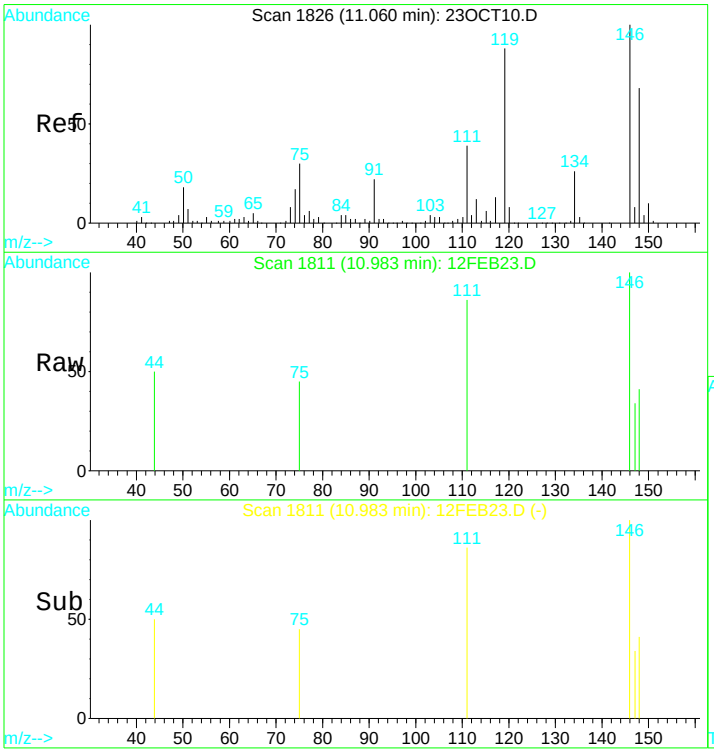




#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion: 95 Resp: 84684

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 49.0 | 32.6 | 60.5 |
| 174 | 91.6 | 60.9 | 113.1 |
| 176 | 98.1 | 62.2 | 115.6 |

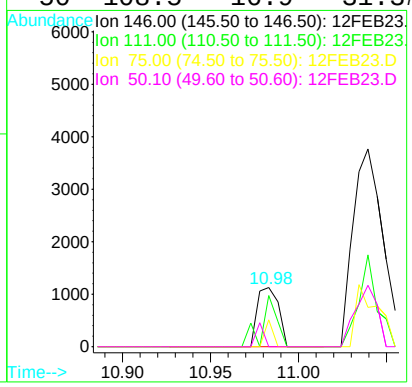


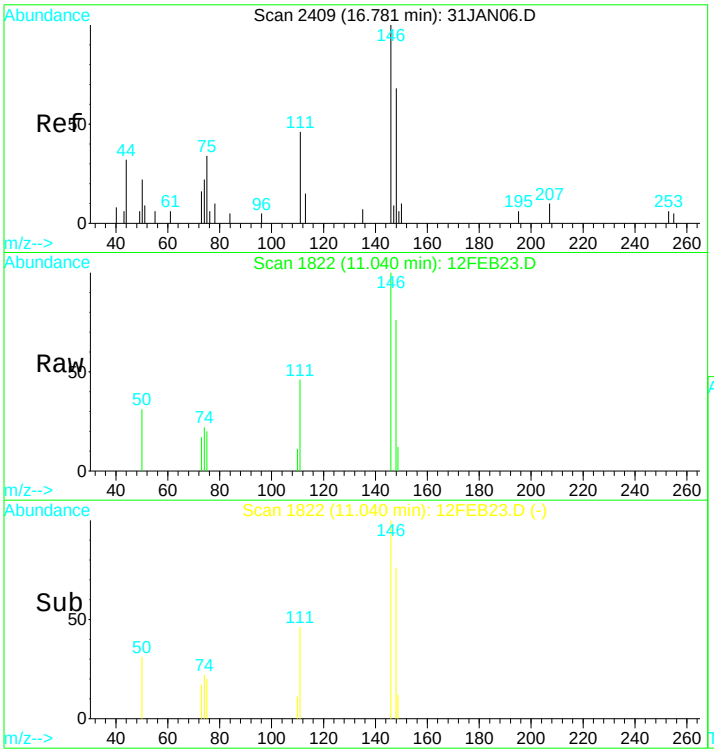



#60
1,3-Dichlorobenzene
Concen: 0.07 ug/L m
RT: 10.98 min Scan# 1811
Delta R.T. -0.01 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:146 Resp: 936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 136.0 | 26.4 | 49.0# |
| 75 | 108.0 | 20.0 | 37.2# |
| 50 | 108.5 | 16.9 | 31.3# |

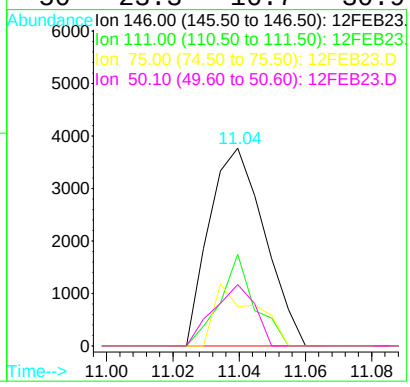


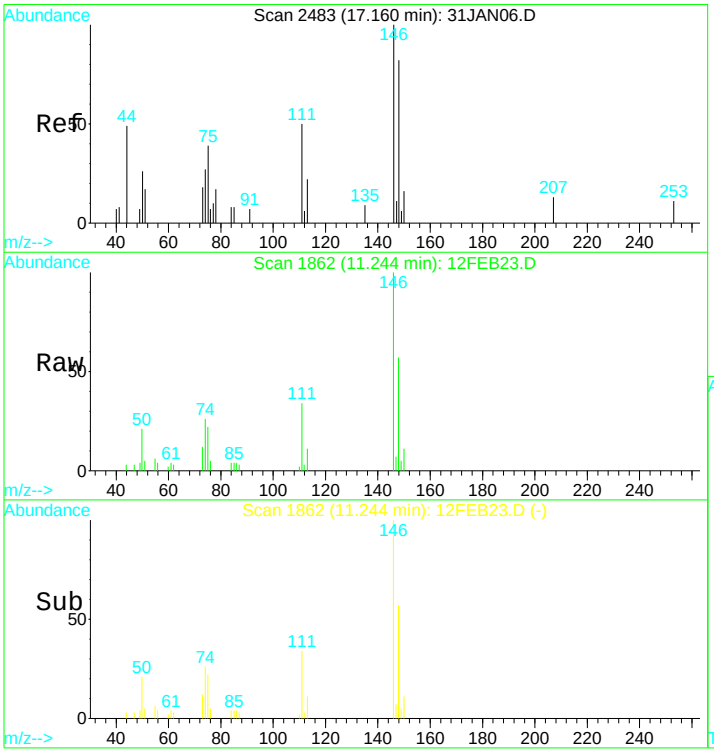




#61
1,4-Dichlorobenzene
Concen: 0.35 ug/L
RT: 11.04 min Scan# 1822
Delta R.T. -0.01 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:146 Resp: 4359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 29.2 | 27.7 | 51.5 |
| 75 | 23.2 | 21.1 | 39.3 |
| 50 | 23.3 | 16.7 | 30.9 |

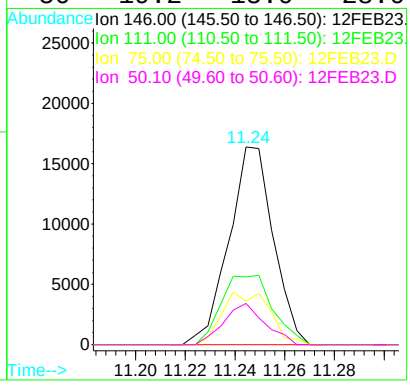





#63
1,2-Dichlorobenzene
Concen: 1.89 ug/L
RT: 11.24 min Scan# 1862
Delta R.T. -0.02 min
Lab File: 12FEB23.D
Acq: 12 Feb 2017 1:34 pm

Tgt Ion:146 Resp: 20596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.2 | 29.2 | 54.2 |
| 75 | 28.2 | 21.1 | 39.1 |
| 50 | 19.2 | 15.0 | 28.0 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D Vial: 23
Acq On : 12 Feb 2017 1:34 pm Operator: MGC
Sample : 1703480-14 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:31 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201570 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 266412 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64326 | 10.00 | ug/L | 0.00 |

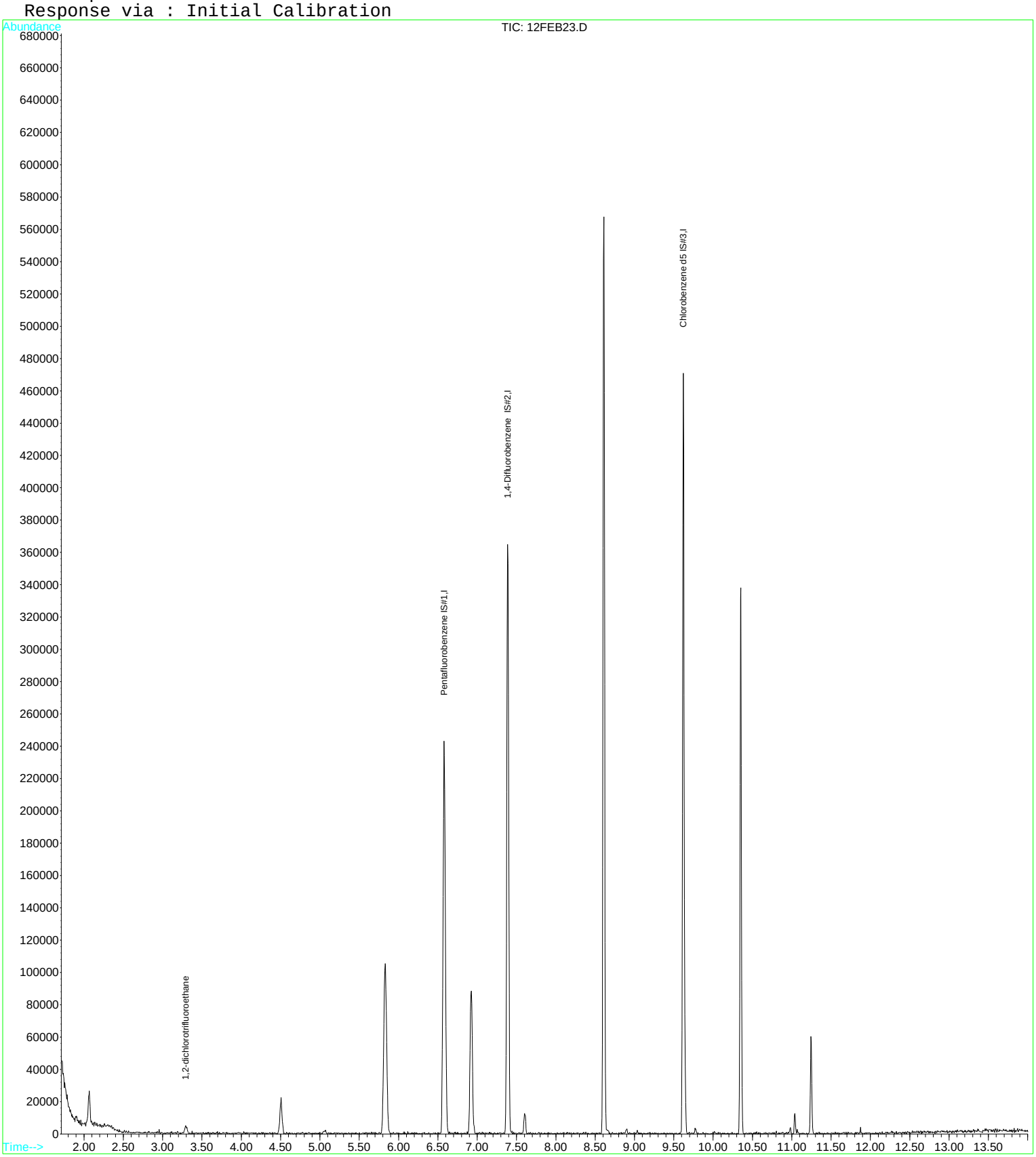
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 3516 | 0.31 | ug/L # | 51 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D Vial: 23
Acq On : 12 Feb 2017 1:34 pm Operator: MGC
Sample : 1703480-14 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:31 2017 Quant Results File: 82605X.RES

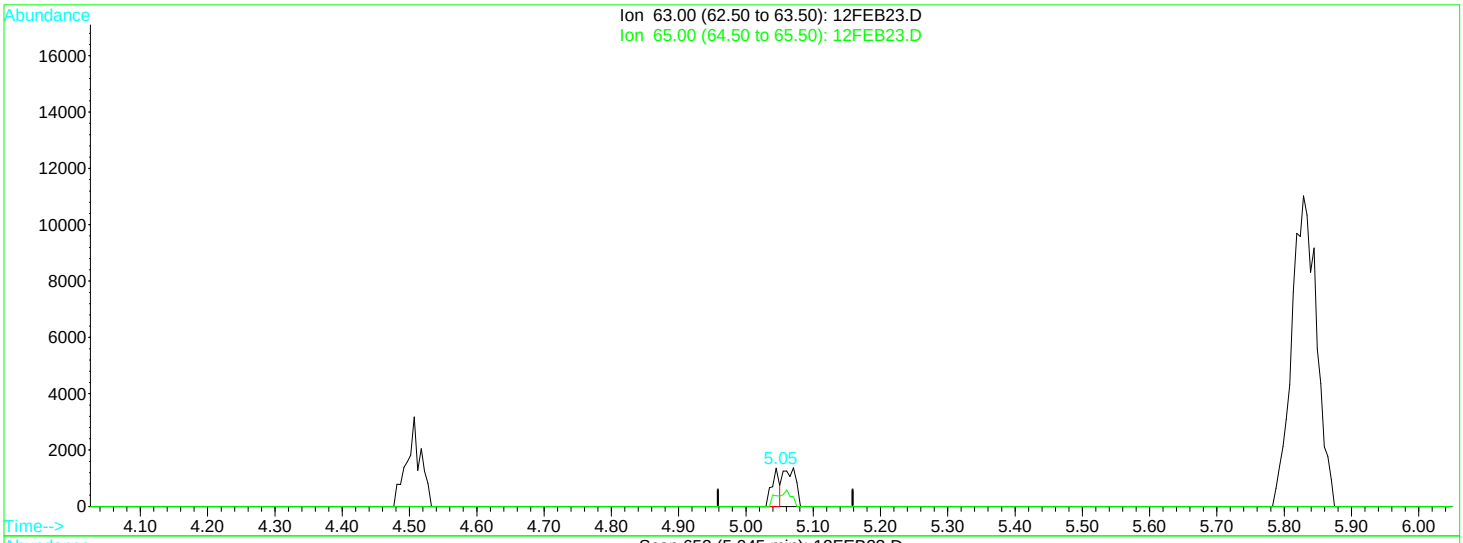
Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

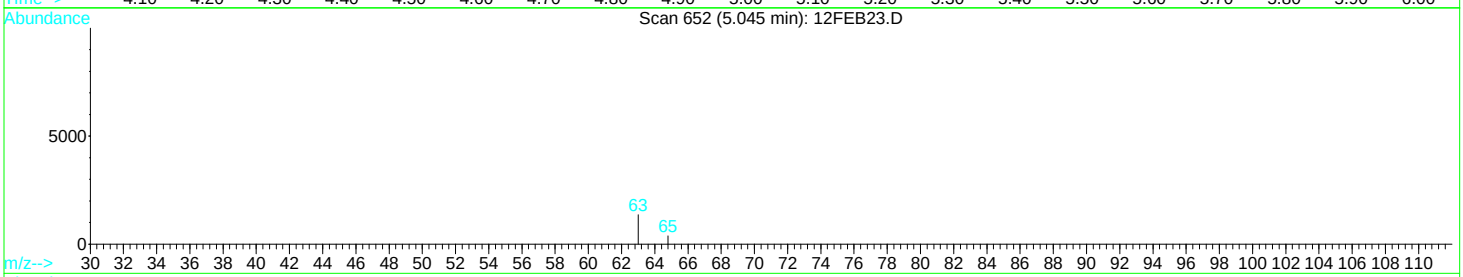


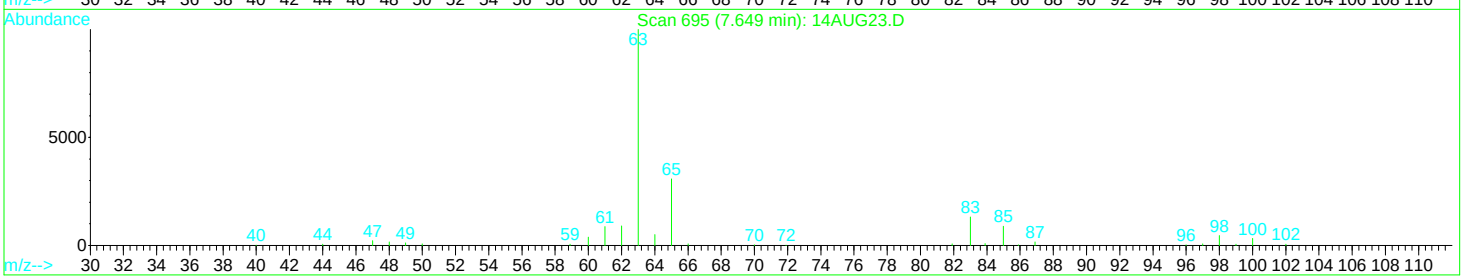
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D Vial: 23
Acq On : 12 Feb 2017 1:34 pm Operator: MGC
Sample : 1703480-14 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:22 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Multiple Level Calibration




TIC: 12FEB23.D

(13) 1,1-Dichloroethane (MP)

5.05min 0.05ug/L

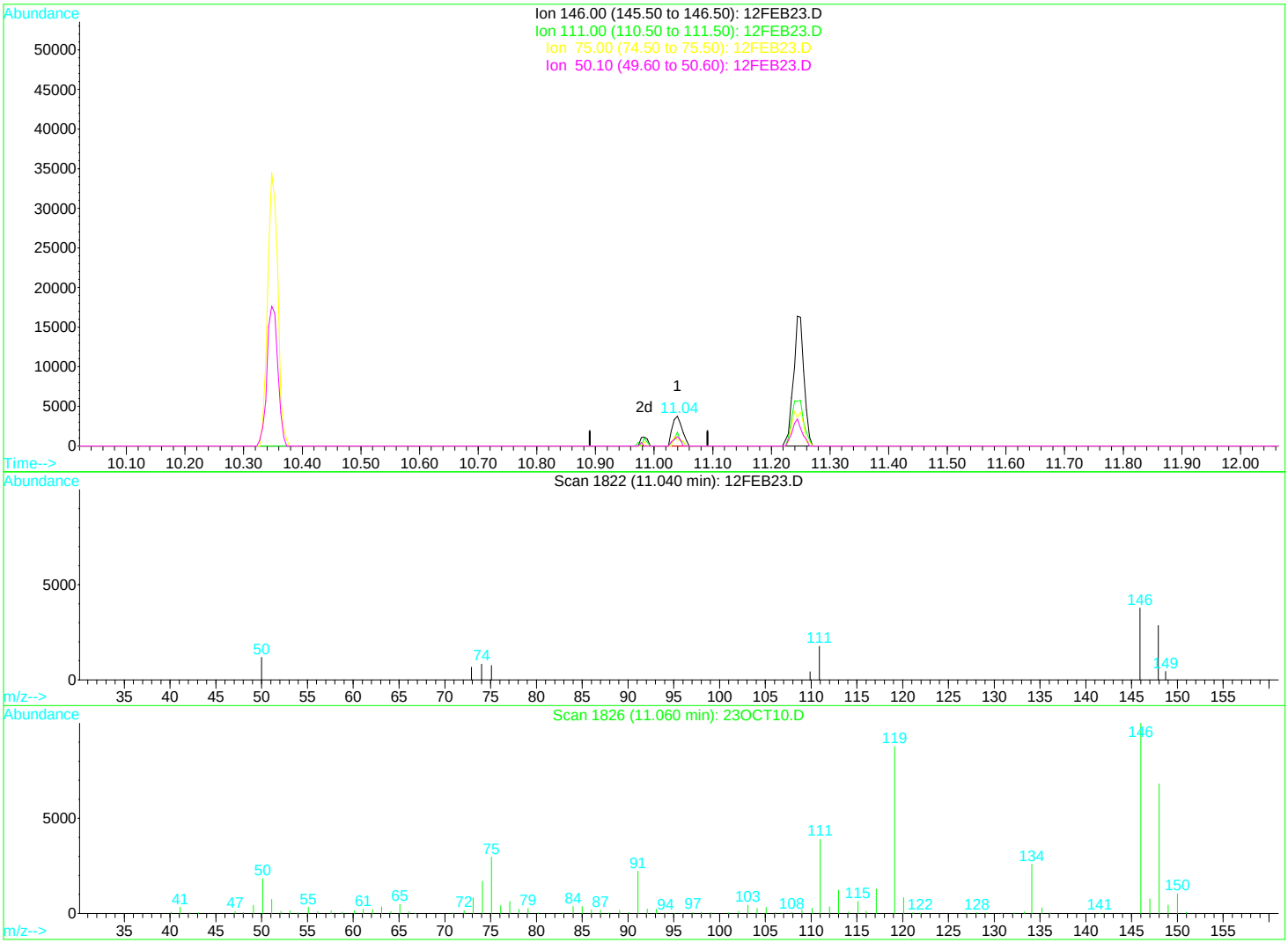
response 1065

| Ion | Exp% | Act% |
|---|---|---|
| 63.00 | 100 | 100 |
| 65.00 | 32.00 | 82.44# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D  Vial: 23
Acq On : 12 Feb 2017 1:34 pm  Operator: MGC
Sample : 1703480-14  Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:22 2017  Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Multiple Level Calibration




TIC: 12FEB23.D

(60) 1,3-Dichlorobenzene

11.04min 0.33ug/L

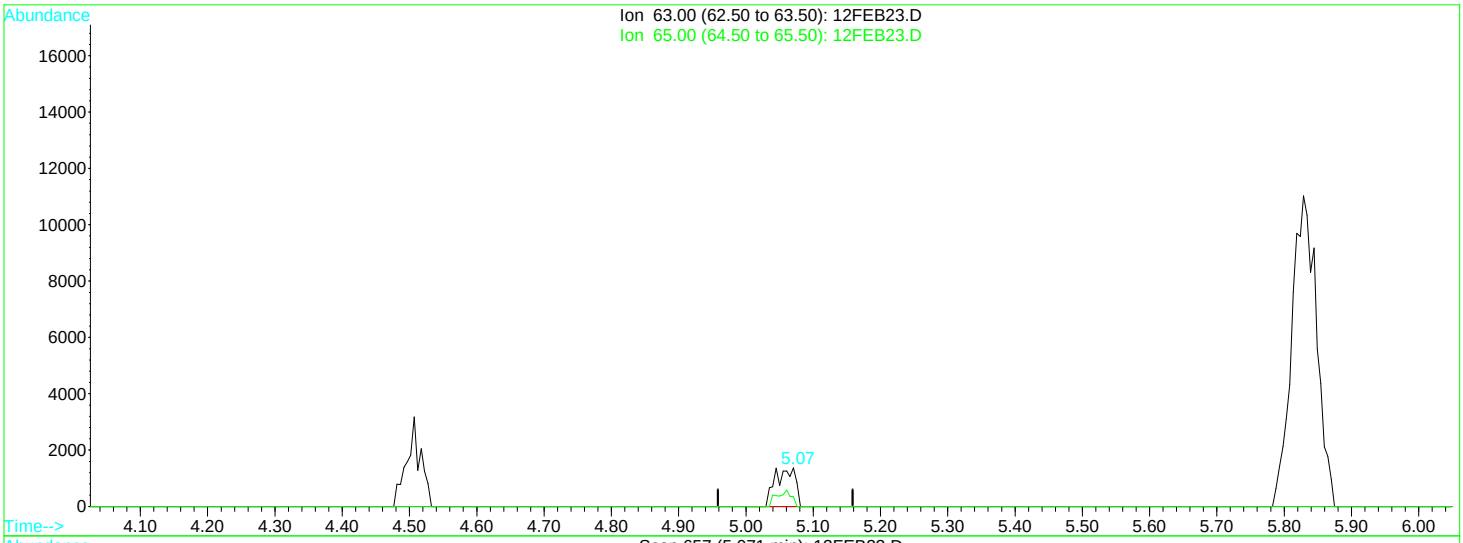
response 4359

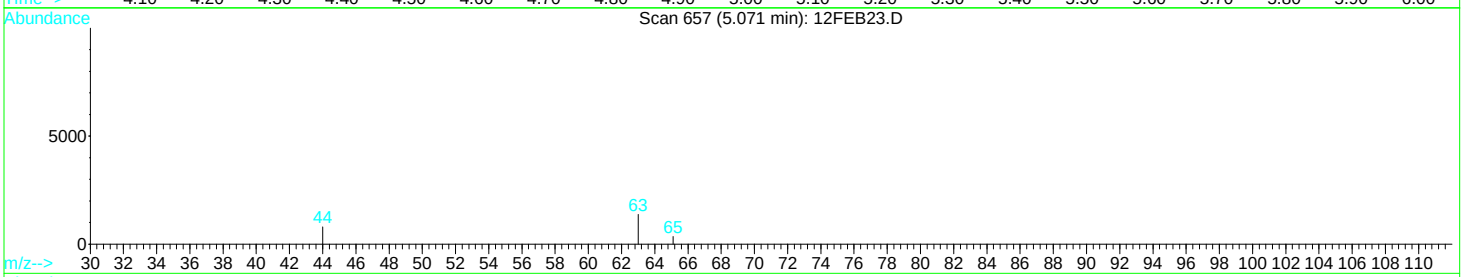
| Ion | Exp% | Act% |
|---|---|---|
| 146.00 | 100 | 100 |
| 111.00 | 37.70 | 29.20 |
| 75.00 | 28.60 | 23.19 |
| 50.10 | 24.10 | 23.31 |

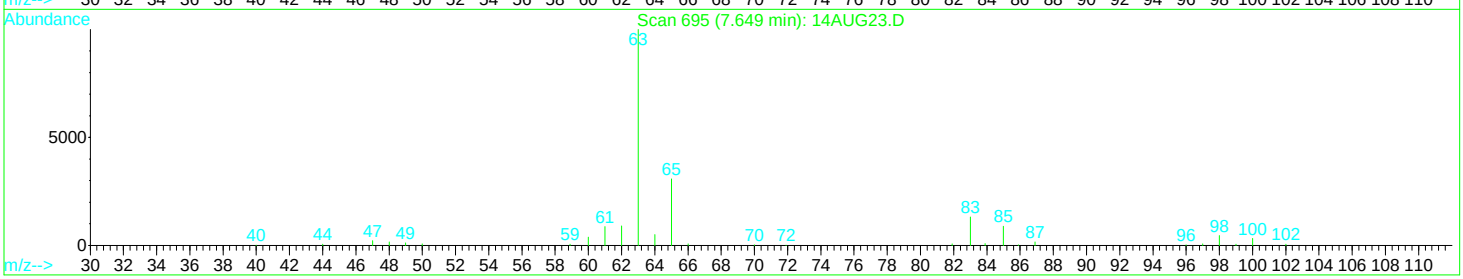
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D Vial: 23
Acq On : 12 Feb 2017 1:34 pm Operator: MGC
Sample : 1703480-14 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:22 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Multiple Level Calibration




TIC: 12FEB23.D

(13) 1,1-Dichloroethane (MP)

5.07min 0.14ug/L m

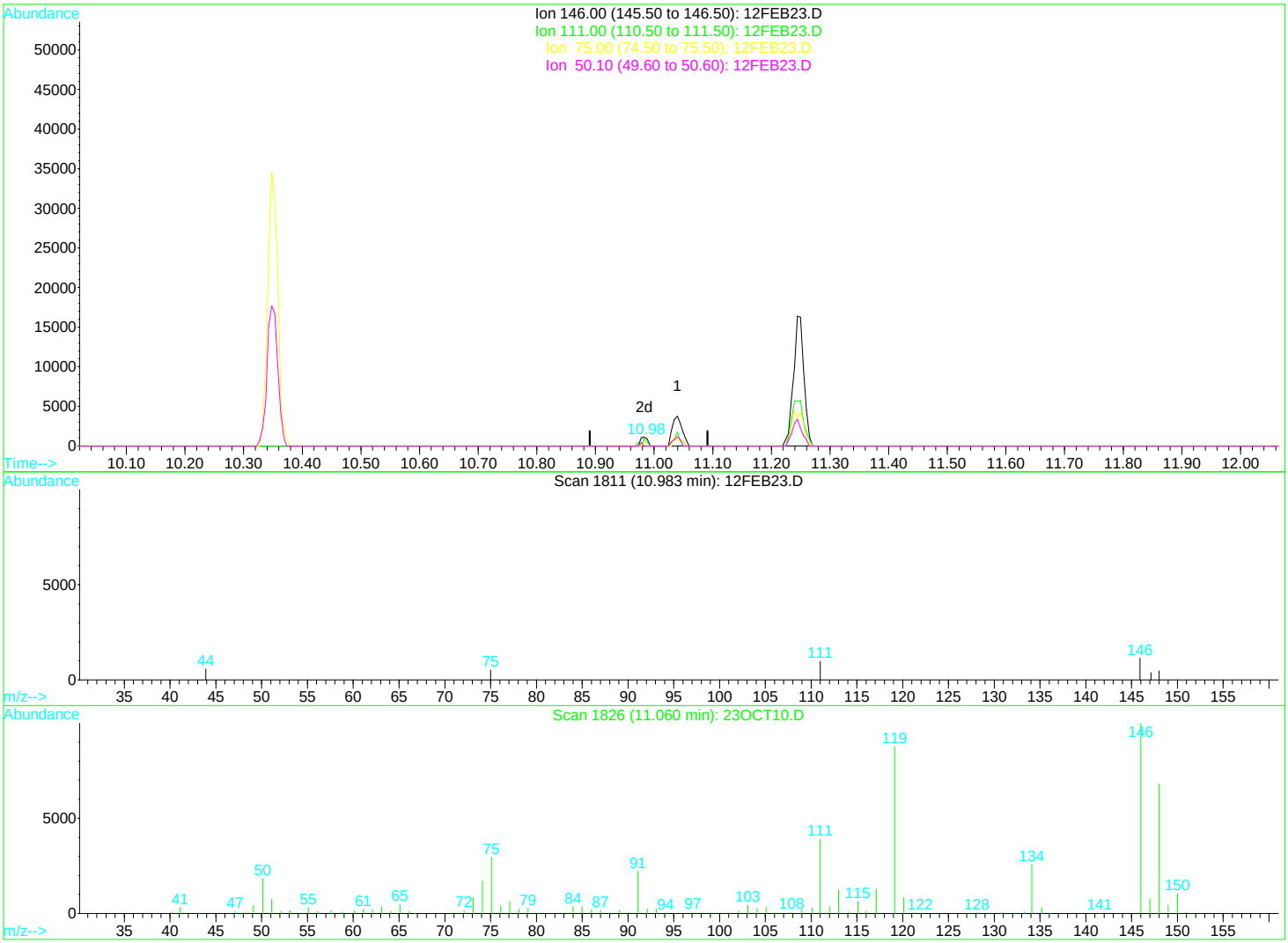
response 2841

| Ion | Exp% | Act% |
|---|---|---|
| 63.00 | 100 | 100 |
| 65.00 | 32.00 | 30.90 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB23.D  Vial: 23
Acq On : 12 Feb 2017 1:34 pm  Operator: MGC
Sample : 1703480-14  Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:23 2017  Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Multiple Level Calibration




TIC: 12FEB23.D

(60) 1,3-Dichlorobenzene

10.98min 0.07ug/L m

response 936

| Ion | Exp% | Act% |
|---|---|---|
| 146.00 | 100 | 100 |
| 111.00 | 37.70 | 136.00# |
| 75.00 | 28.60 | 108.01# |
| 50.10 | 24.10 | 108.55# |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB16.D Vial: 16
Acq On : 13 Feb 2017 12:21 pm Operator: MGC
Sample : 1703480-15 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208530 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 281604 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 73911 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 70574 | 11.44 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 114.40% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 323754 | 10.10 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 101.00% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 101820 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 99.90% | | | | | | |

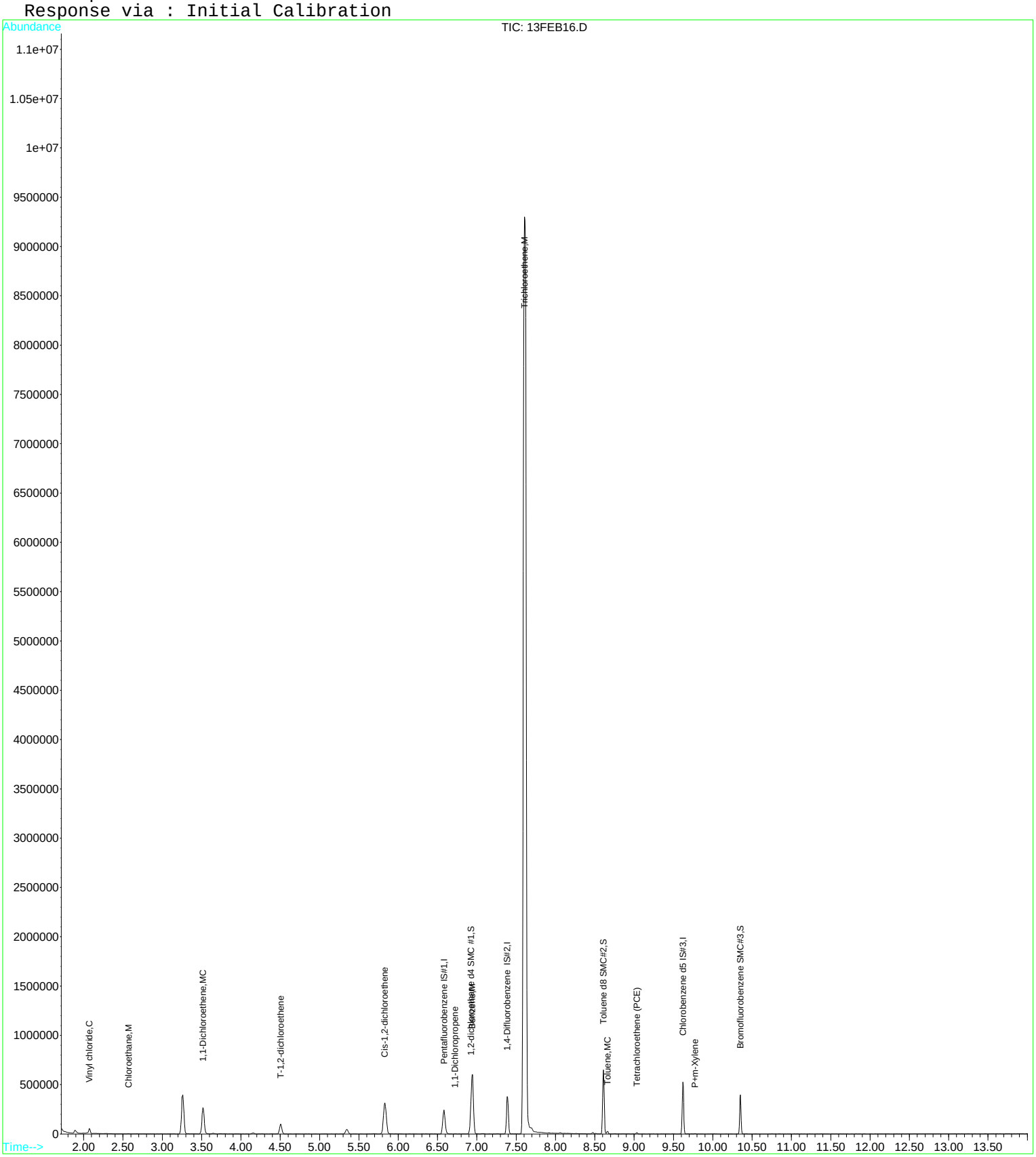
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 23943 | 1.93 | ug/L # | 23 |
| 6) Chloroethane | 2.57 | 64 | 2188 | 0.27 | ug/L | 85 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 212065 | 13.09 | ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 37899 | 4.04 | ug/L | 91 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 171458 | 17.62 | ug/L | 93 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 1496 | 0.12 | ug/L | 93 |
| 23) Benzene | 6.94 | 78 | 529030 | 13.43 | ug/L | 93 |
| 25) Trichloroethene | 7.61 | 130 | 3856819 | 420.67 | ug/L | 96 |
| 32) Toluene | 8.66 | 92 | 9358 | 0.43 | ug/L | 81 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 3673 | 0.38 | ug/L | 89 |
| 43) P+m-Xylene | 9.78 | 106 | 788 | 0.05 | ug/L # | 50 |

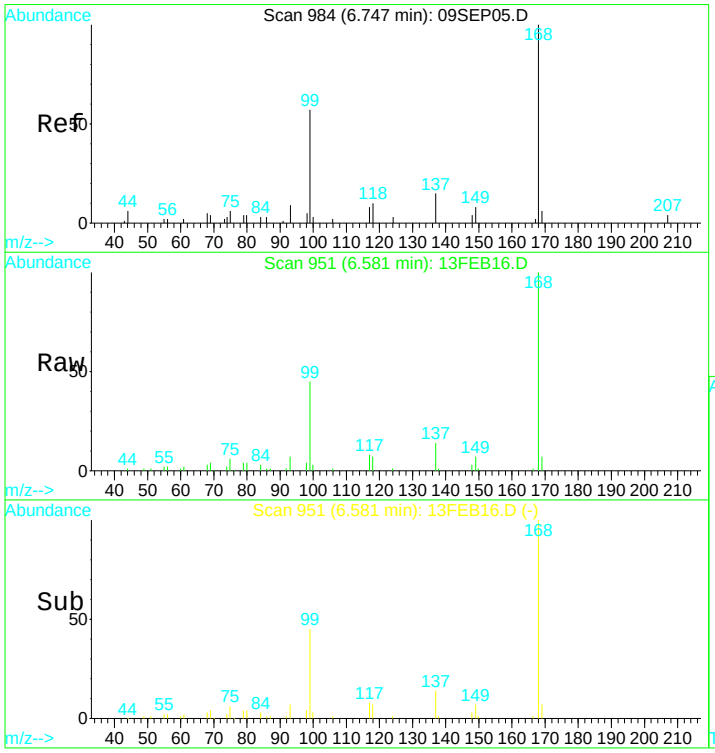
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB16.D Vial: 16
Acq On : 13 Feb 2017 12:21 pm Operator: MGC
Sample : 1703480-15 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:11 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

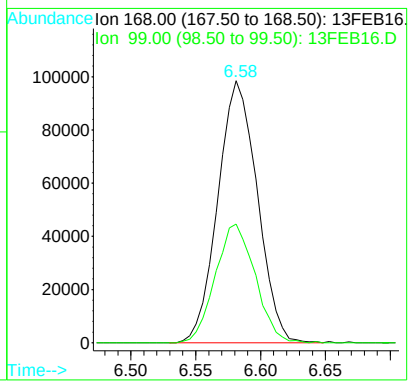


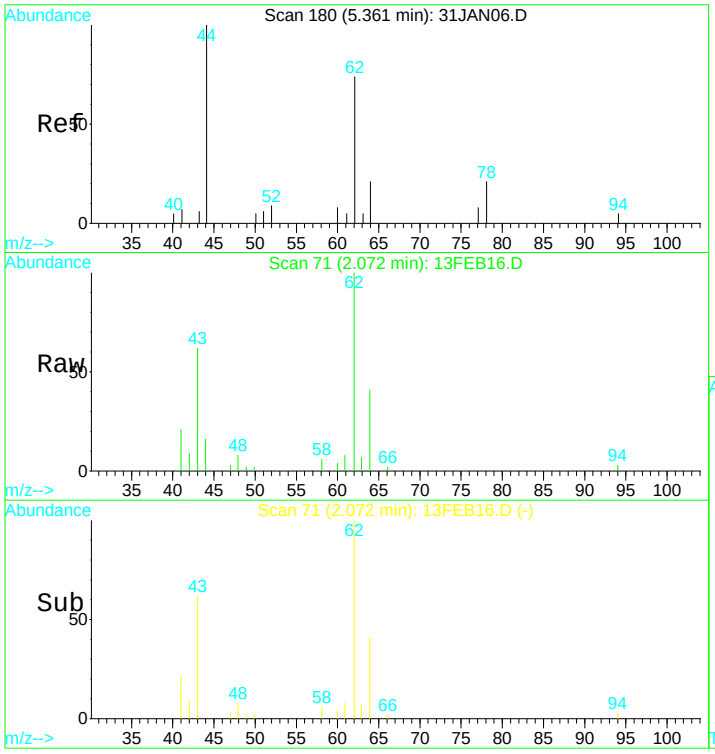



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion:168 Resp: 208530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.6 | 305.1 | 566.7# |

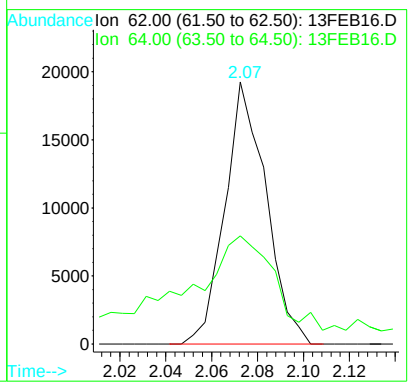


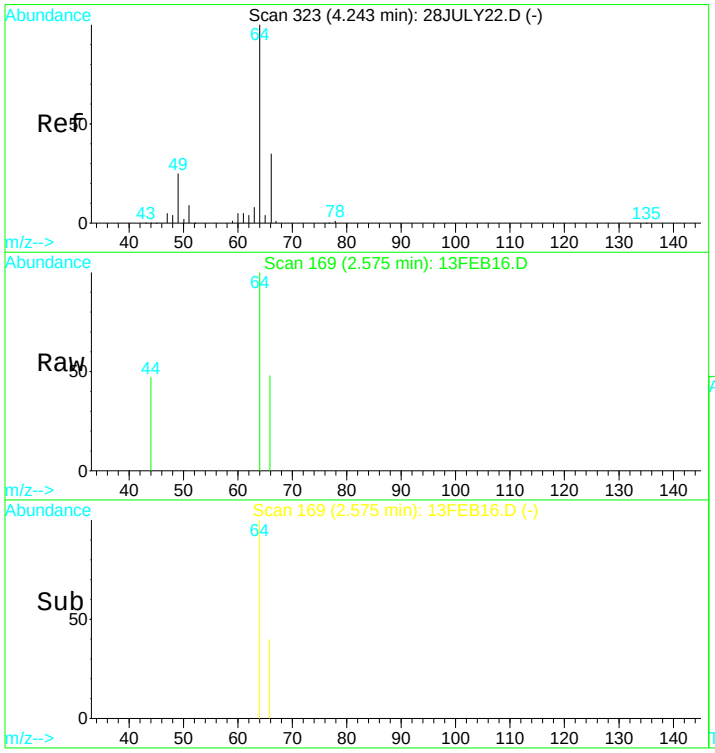




#4
Vinyl chloride
Concen: 1.93 ug/L
RT: 2.07 min Scan# 71
Delta R.T. 0.01 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 62 Resp: 23943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 74.9 | 22.4 | 41.6# |

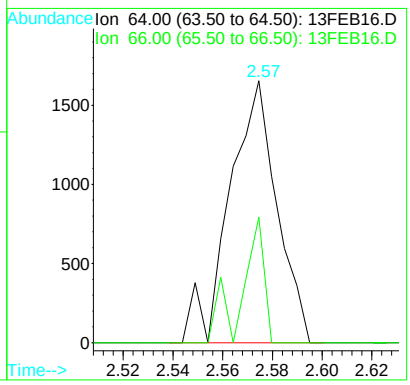


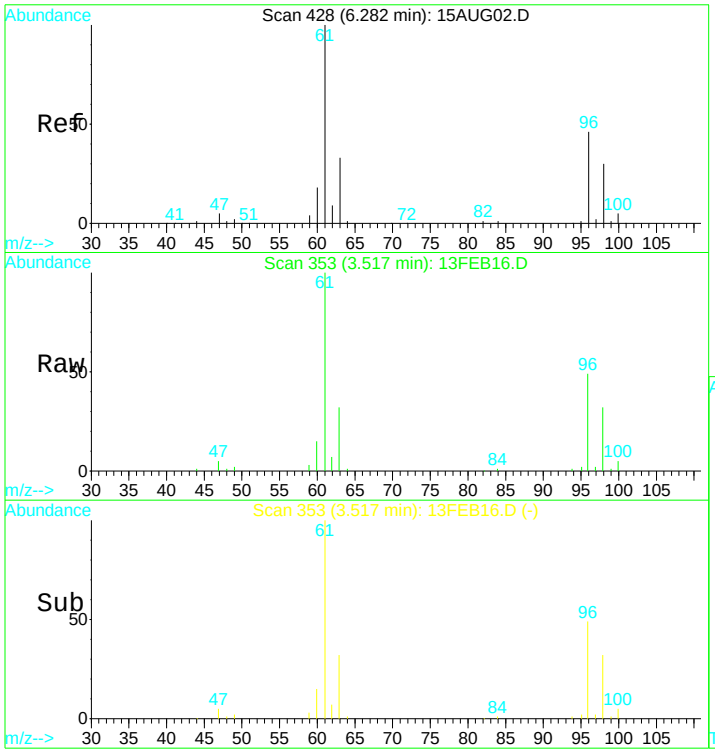



#6
Chloroethane
Concen: 0.27 ug/L
RT: 2.57 min Scan# 169
Delta R.T. 0.01 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 64 Resp: 2188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 22.7 | 21.4 | 39.8 |

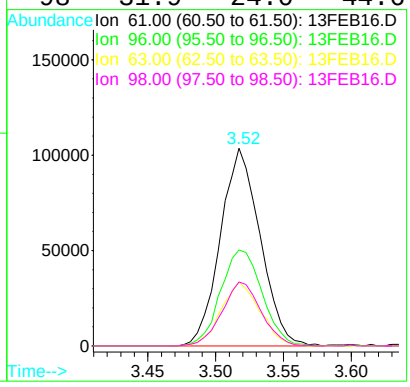


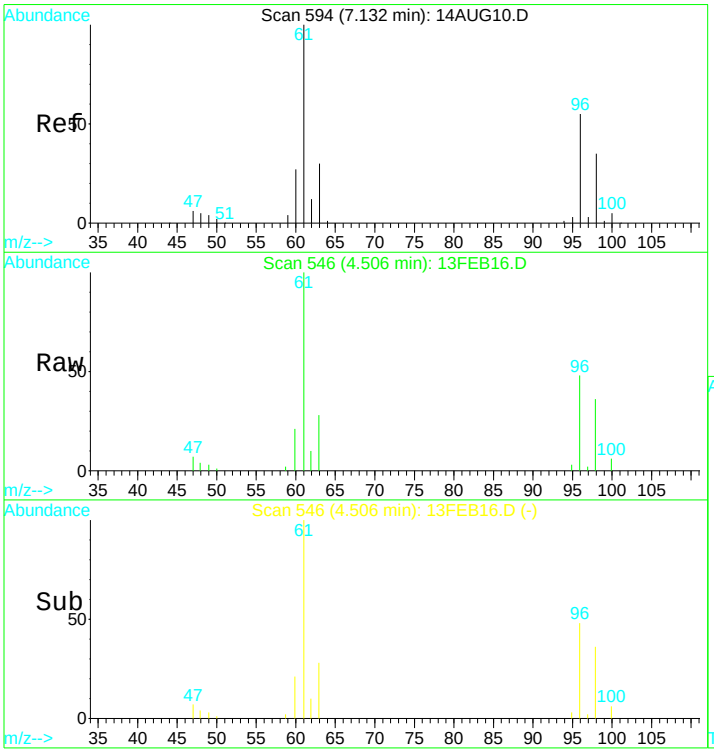




#9
1,1-Dichloroethene
Concen: 13.09 ug/L
RT: 3.52 min Scan# 353
Delta R.T. 0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 61 Resp: 212065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 50.7 | 36.6 | 68.0 |
| 63 | 31.5 | 22.0 | 40.8 |
| 98 | 31.9 | 24.0 | 44.6 |

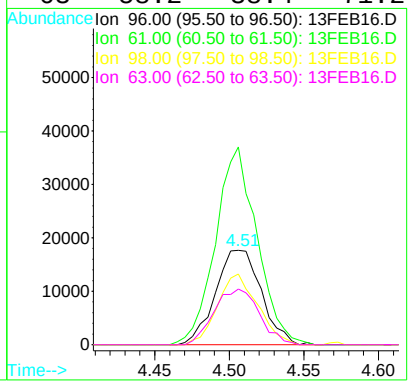


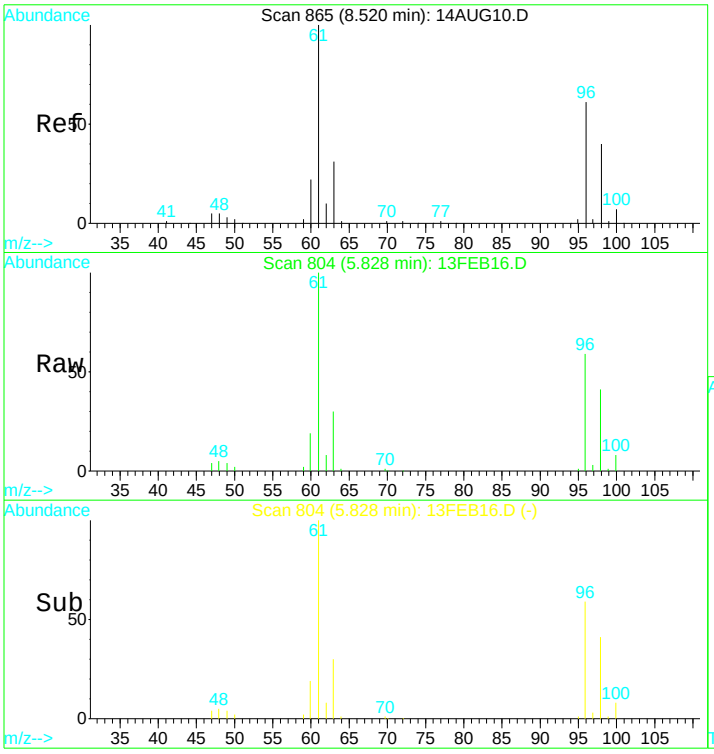



#12
T-1,2-dichloroethene
Concen: 4.04 ug/L
RT: 4.51 min Scan# 546
Delta R.T. 0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 96 Resp: 37899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 188.7 | 119.6 | 222.2 |
| 98 | 65.5 | 46.1 | 85.5 |
| 63 | 58.2 | 38.4 | 71.2 |

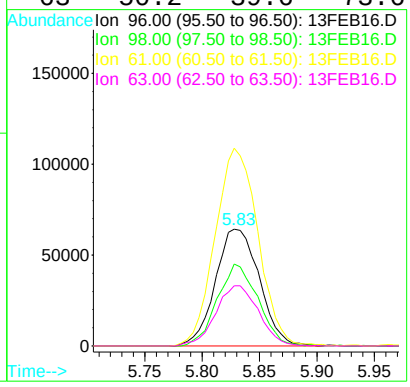


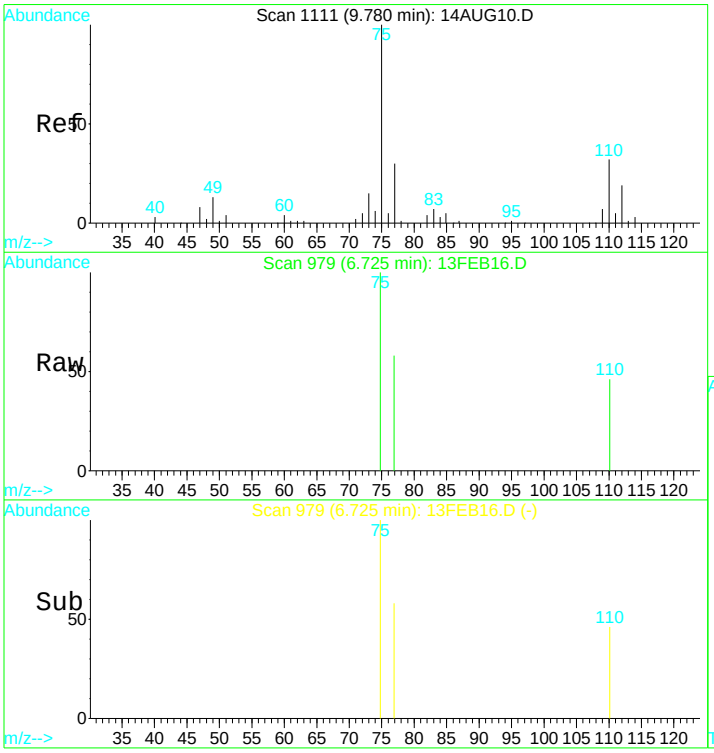




#15
Cis-1,2-dichloroethene
Concen: 17.62 ug/L
RT: 5.83 min Scan# 804
Delta R.T. -0.01 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 96 Resp: 171458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 64.6 | 46.2 | 85.8 |
| 61 | 164.7 | 122.8 | 228.0 |
| 63 | 50.2 | 39.6 | 73.6 |

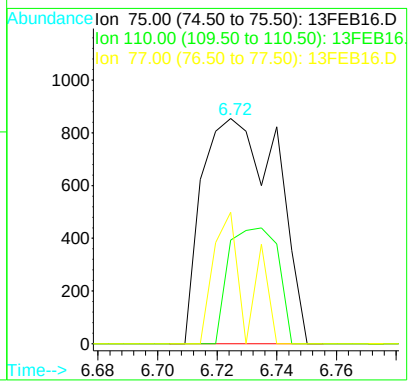


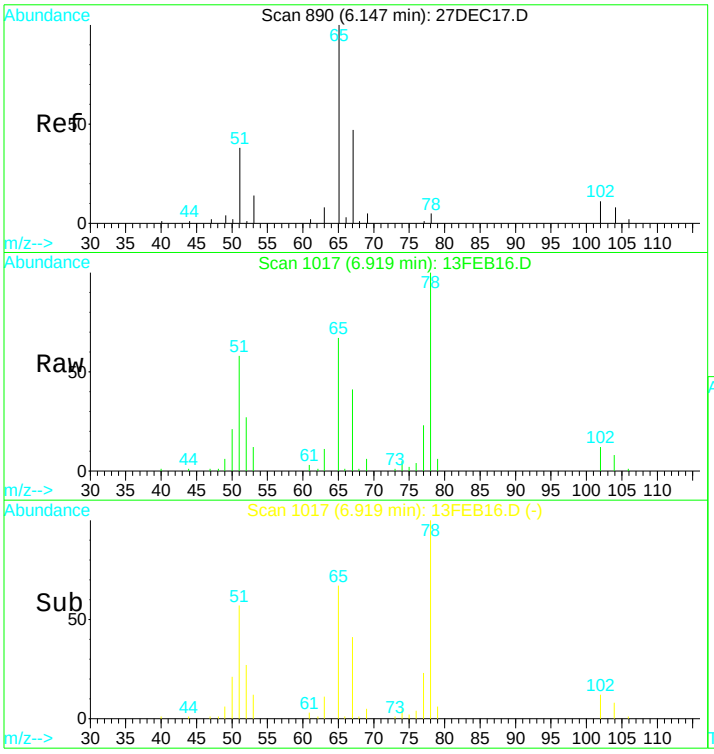



#19
1,1-Dichloropropene
Concen: 0.12 ug/L
RT: 6.72 min Scan# 979
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 75 Resp: 1496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.8 | 25.1 | 46.5 |
| 77 | 25.9 | 22.3 | 41.5 |

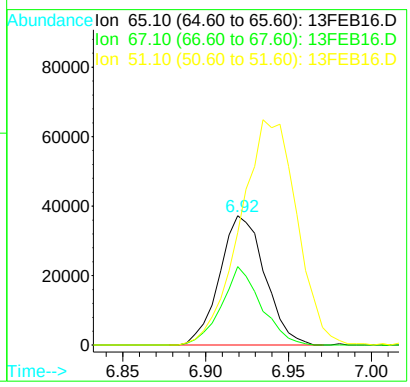


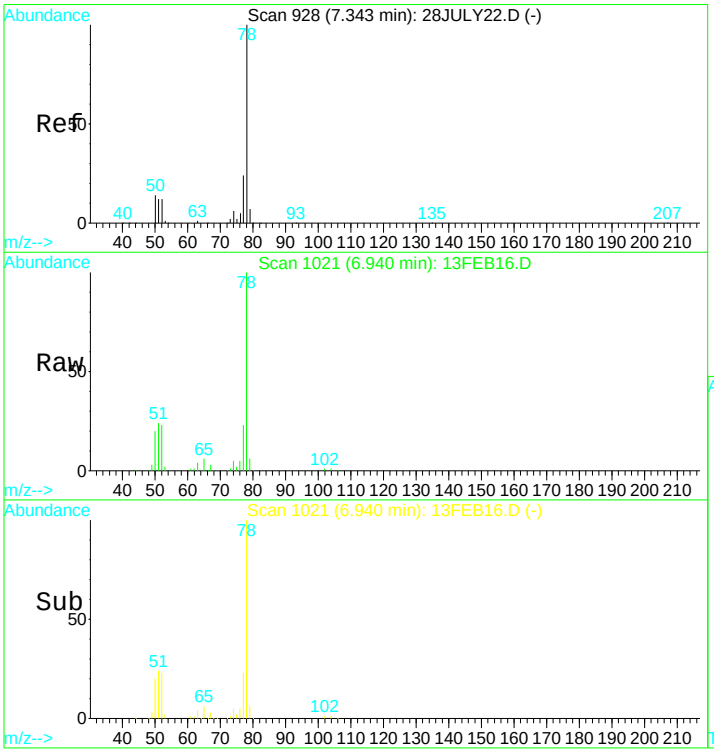




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1017
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 65 Resp: 70574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.2 | 38.4 | 71.4 |
| 51 | 219.3 | 1006.3 | 1868.8# |

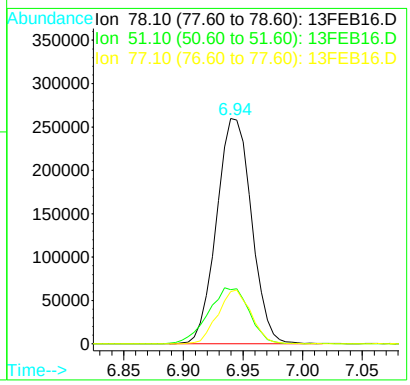


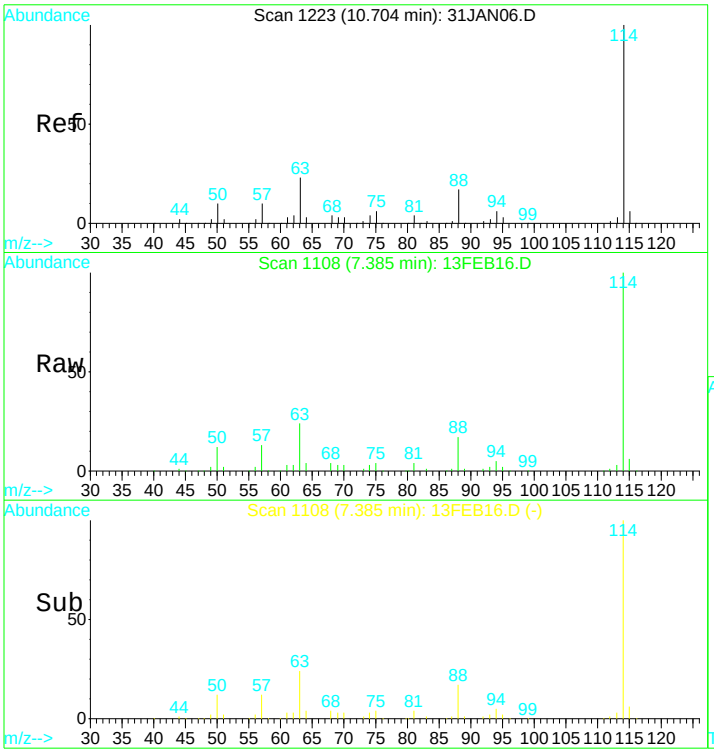



#23
Benzene
Concen: 13.43 ug/L
RT: 6.94 min Scan# 1021
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 78 Resp: 529030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 51 | 29.3 | 16.2 | 30.0 |
| 77 | 22.7 | 16.3 | 30.3 |

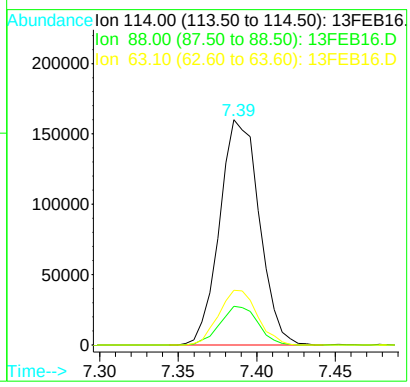


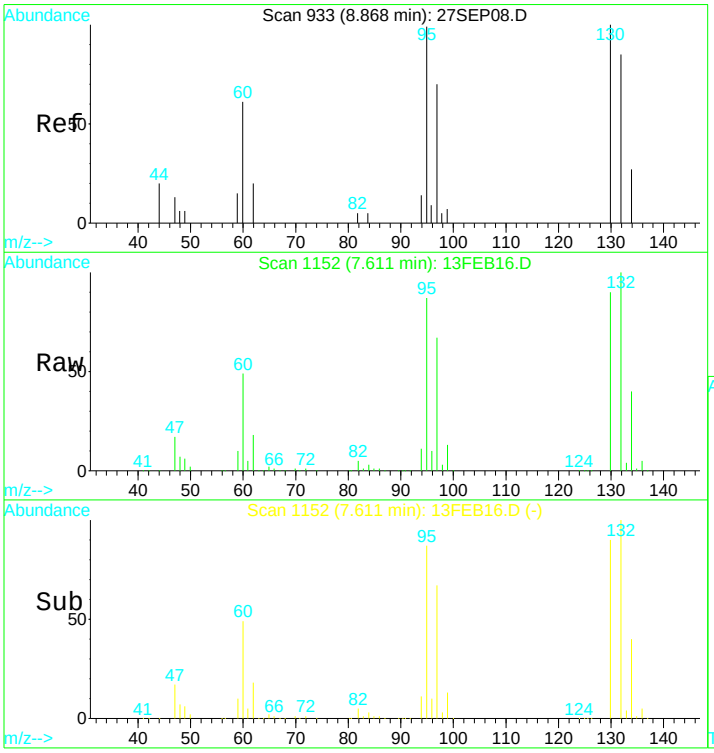




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1108
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion:114 Resp: 281604

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.6 | 12.0 | 22.2 |
| 63 | 23.7 | 16.9 | 31.5 |

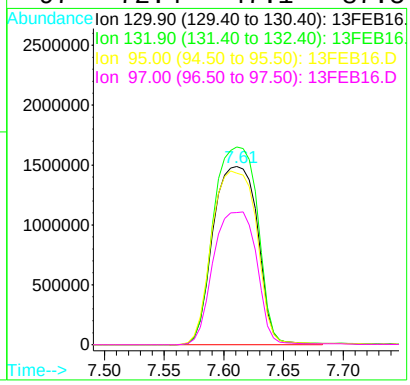


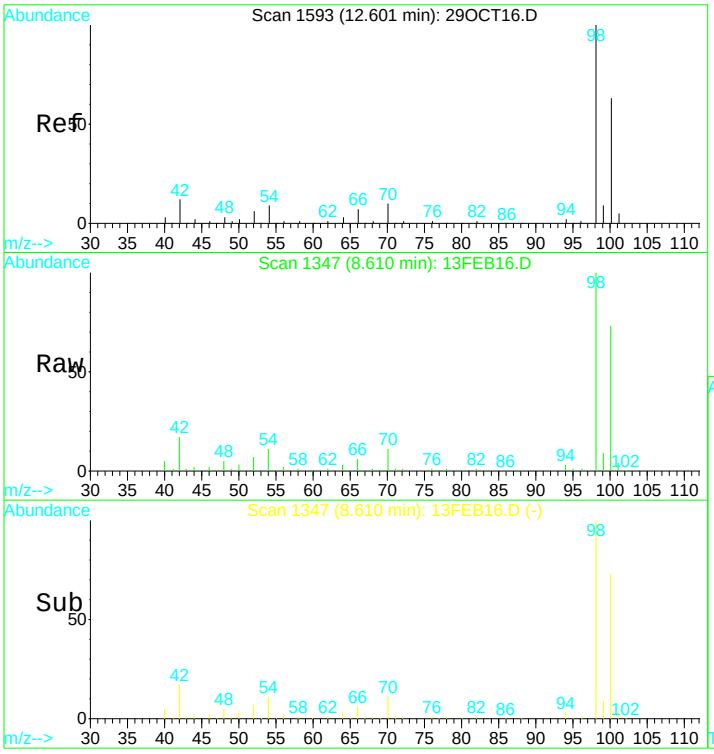



#25
Trichloroethene
Concen: 420.67 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.01 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion:130 Resp: 3856819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 110.1 | 74.3 | 137.9 |
| 95 | 98.2 | 70.8 | 131.6 |
| 97 | 72.4 | 47.1 | 87.5 |

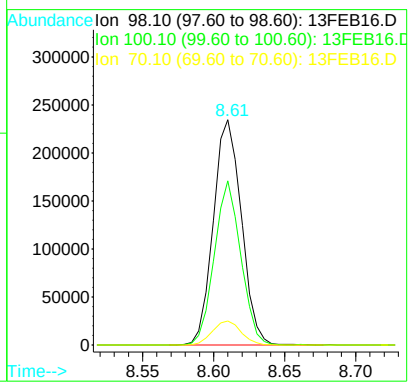


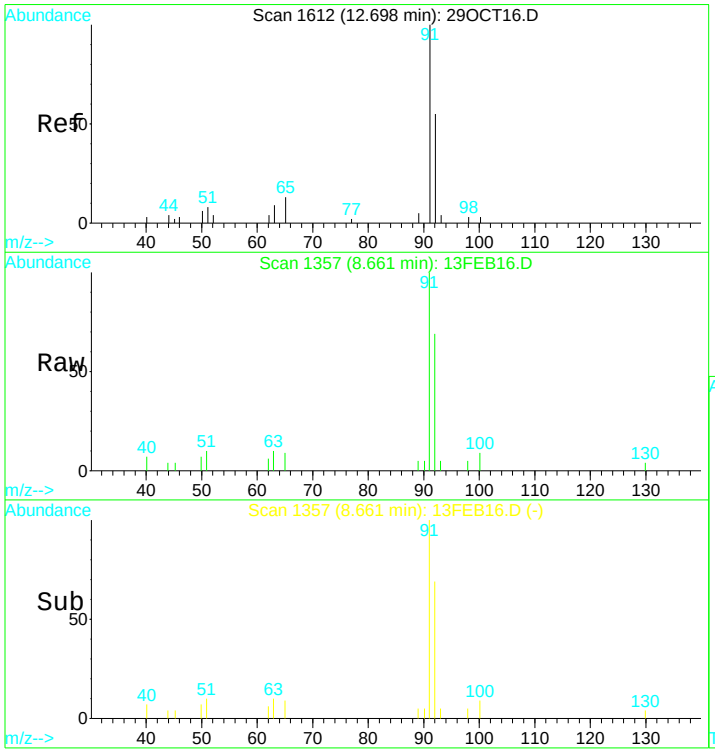




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 98 Resp: 323754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.5 | 47.0 | 87.4 |
| 70 | 11.0 | 7.3 | 13.7 |

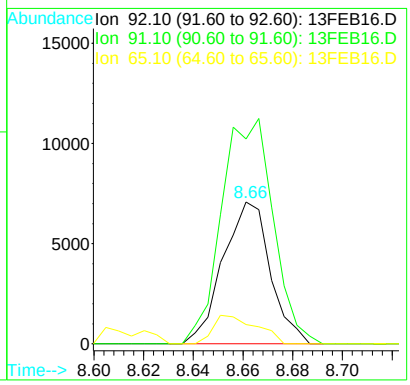


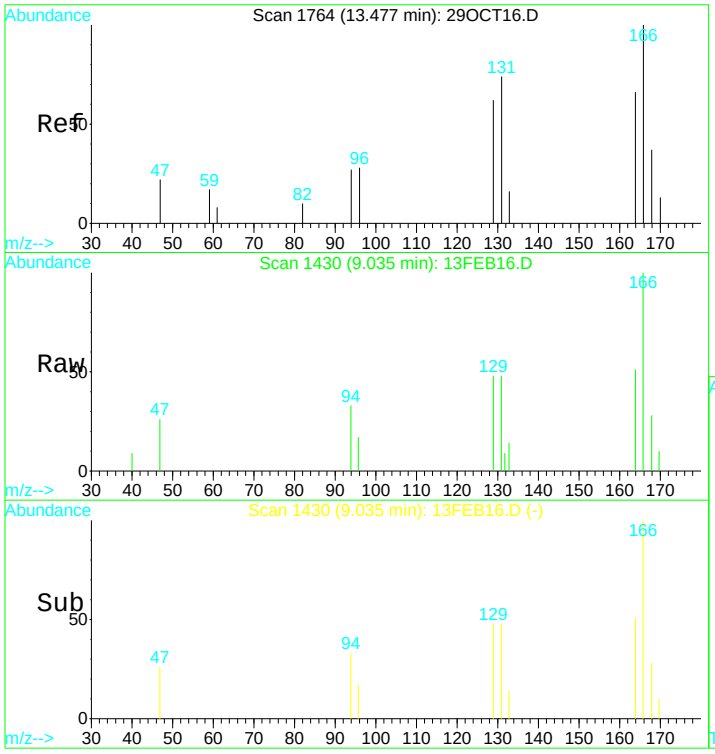



#32
Toluene
Concen: 0.43 ug/L
RT: 8.66 min Scan# 1357
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 92 Resp: 9358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.0 | 102.5 | 190.3 |
| 65 | 18.6 | 15.0 | 27.8 |

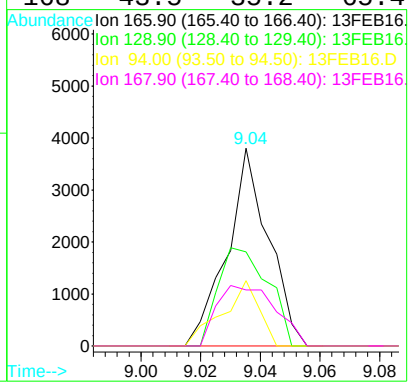


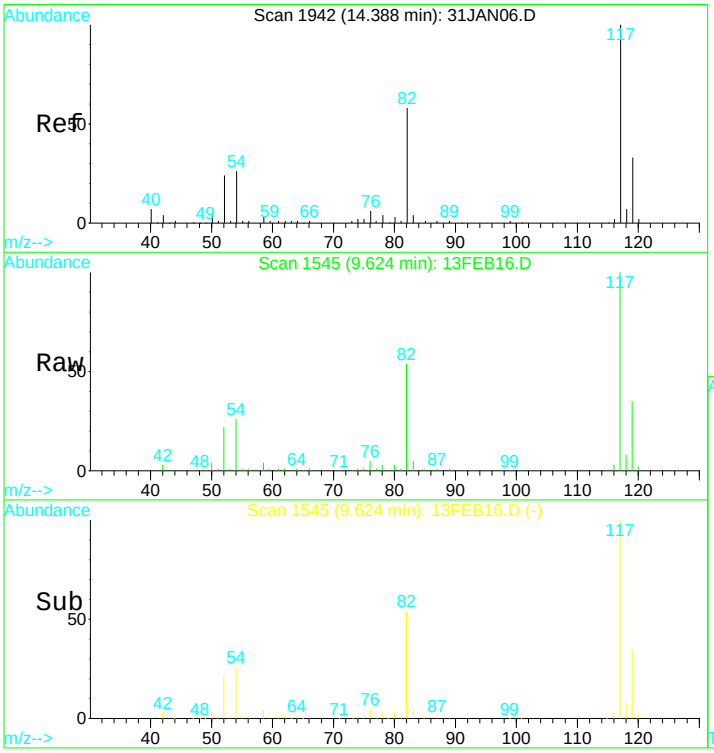




#35
Tetrachloroethene (PCE)
Concen: 0.38 ug/L
RT: 9.04 min Scan# 1430
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion:166 Resp: 3673

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 129 | 55.3 | 45.5 | 84.5 |
| 94 | 29.2 | 23.7 | 43.9 |
| 168 | 43.5 | 35.2 | 65.4 |

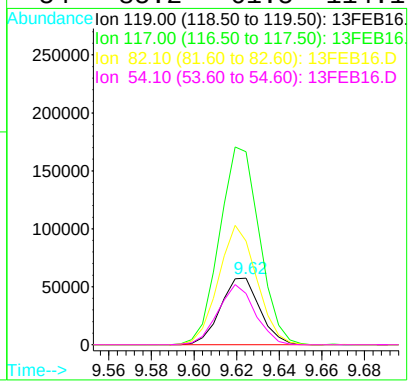


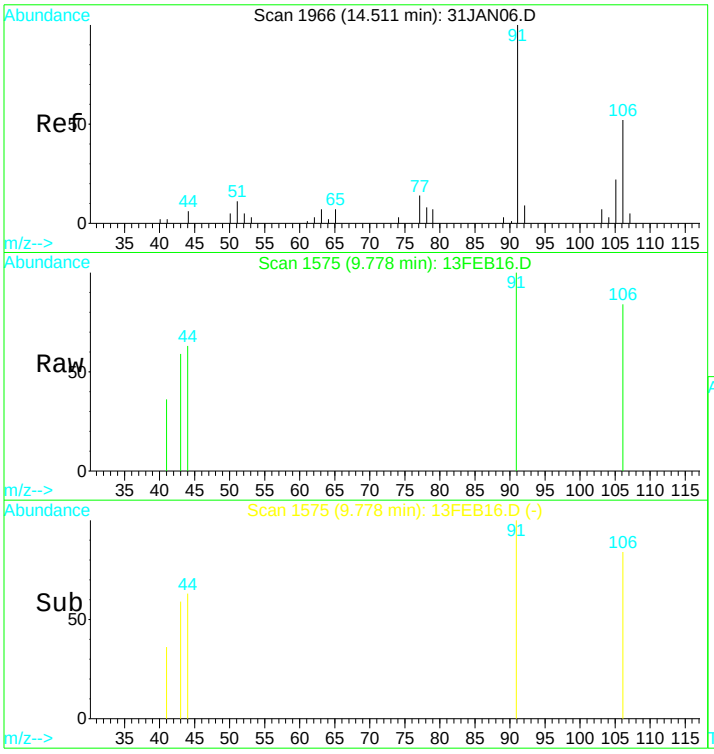



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. 0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion:119 Resp: 73911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 301.4 | 220.4 | 409.4 |
| 82 | 174.8 | 123.9 | 230.1 |
| 54 | 85.2 | 61.5 | 114.1 |

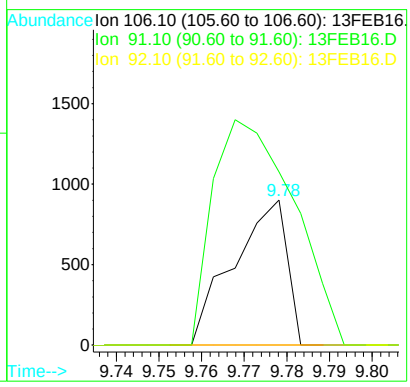


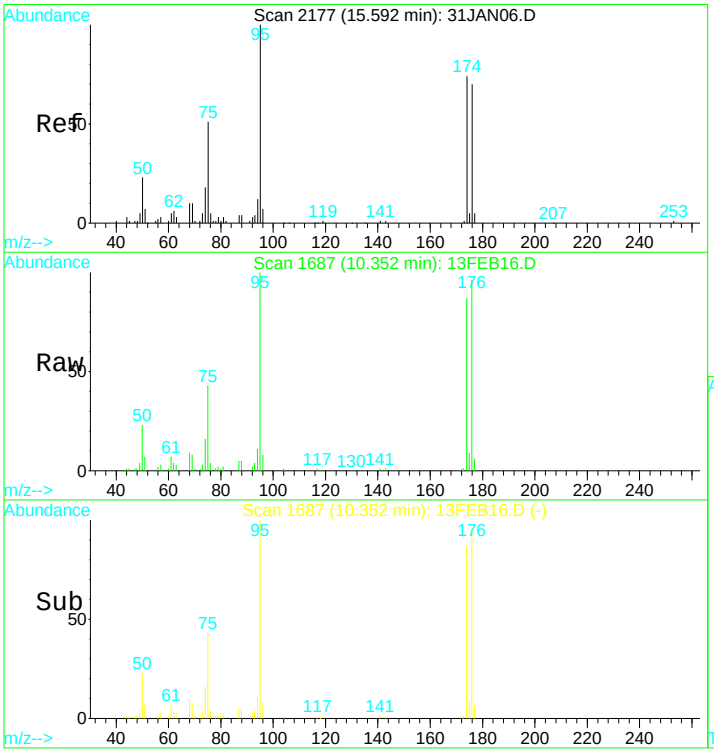




#43
P+m-Xylene
Concen: 0.05 ug/L
RT: 9.78 min Scan# 1575
Delta R.T. 0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion:106 Resp: 788

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 235.3 | 116.4 | 216.2# |
| 92 | 0.0 | 10.8 | 20.0# |

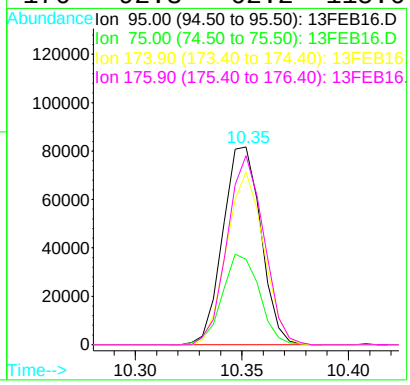





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.00 min
Lab File: 13FEB16.D
Acq: 13 Feb 2017 12:21 pm

Tgt Ion: 95 Resp: 101820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 44.6 | 32.6 | 60.5 |
| 174 | 85.2 | 60.9 | 113.1 |
| 176 | 92.3 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB16.D Vial: 16
Acq On : 13 Feb 2017 12:21 pm Operator: MGC
Sample : 1703480-15 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:12 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208530 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 281604 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 73911 | 10.00 | ug/L | 0.00 |

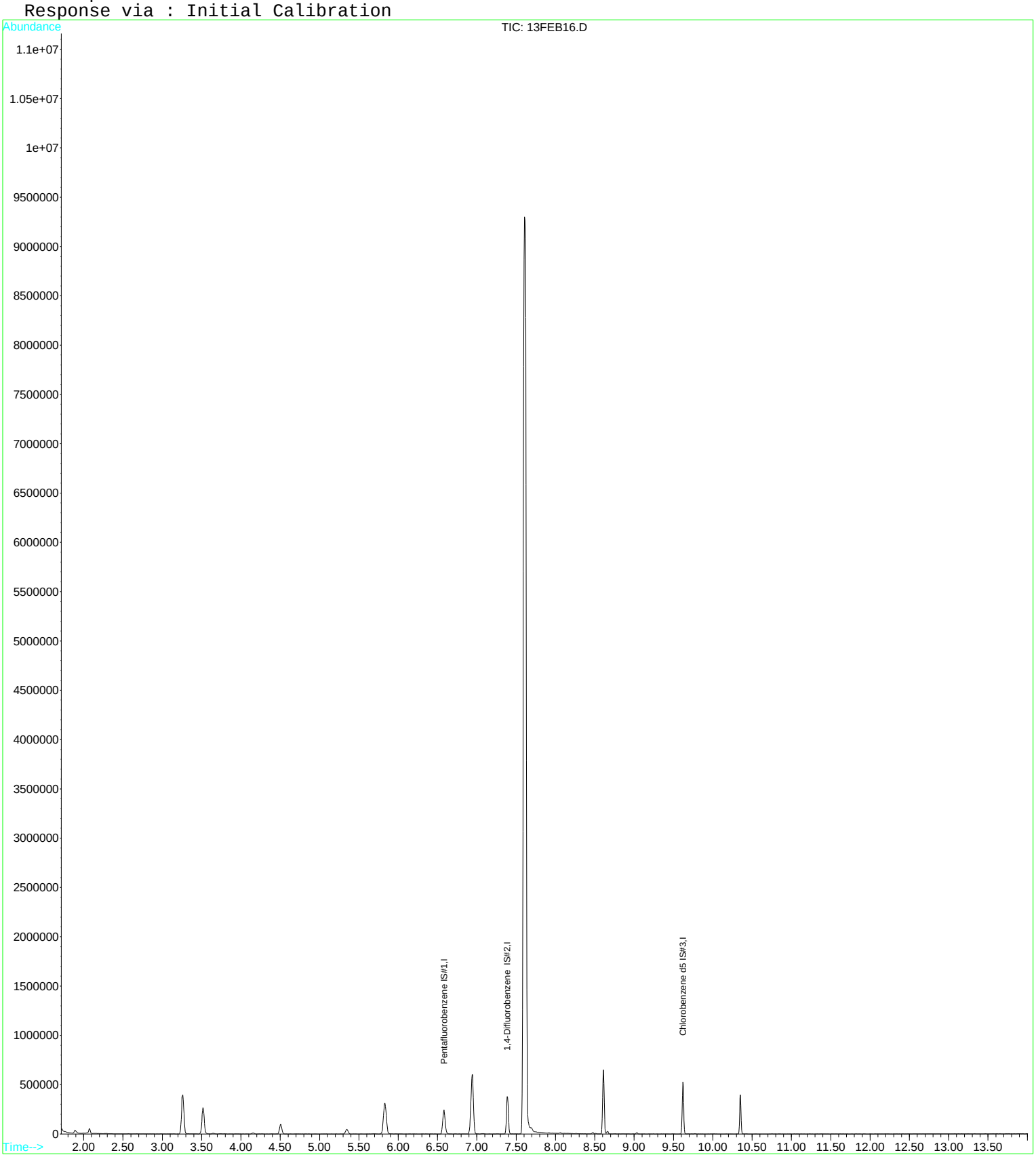
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
13FEB16.D 82605X.M Mon Feb 13 13:12:34 2017 Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB16.D Vial: 16
Acq On : 13 Feb 2017 12:21 pm Operator: MGC
Sample : 1703480-15 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:12 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB56.D Vial: 56
Acq On : 14 Feb 2017 3:48 am Operator: MGC
Sample : 1703480-15RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:01 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205423 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 266365 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63791 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 62719 | 10.32 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 103.20% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 303773 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 100.20% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 83956 | 9.54 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.40% | | | | | | |

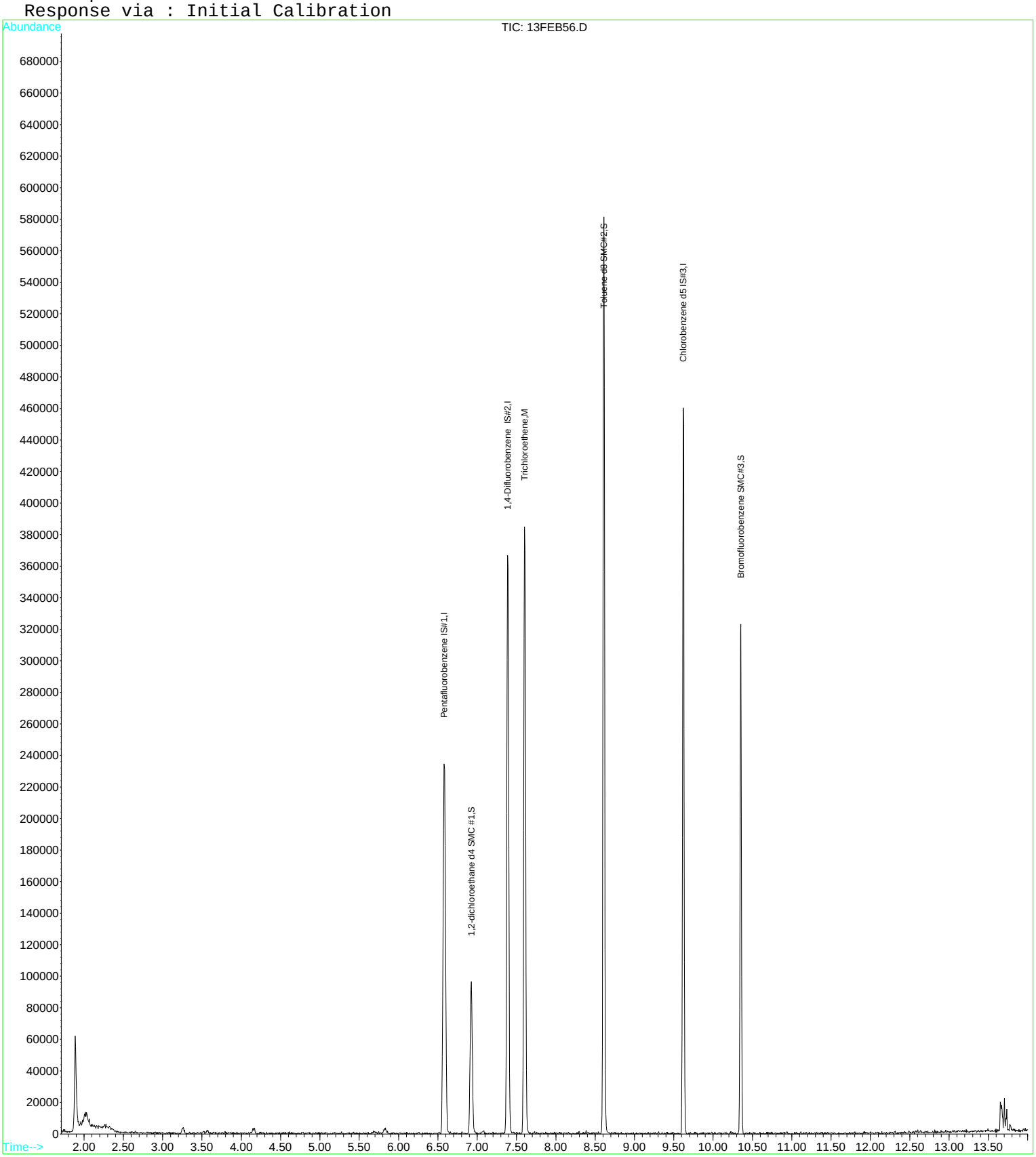
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 25) Trichloroethene | 7.61 | 130 | 115647 | 13.34 | ug/L | 96 |

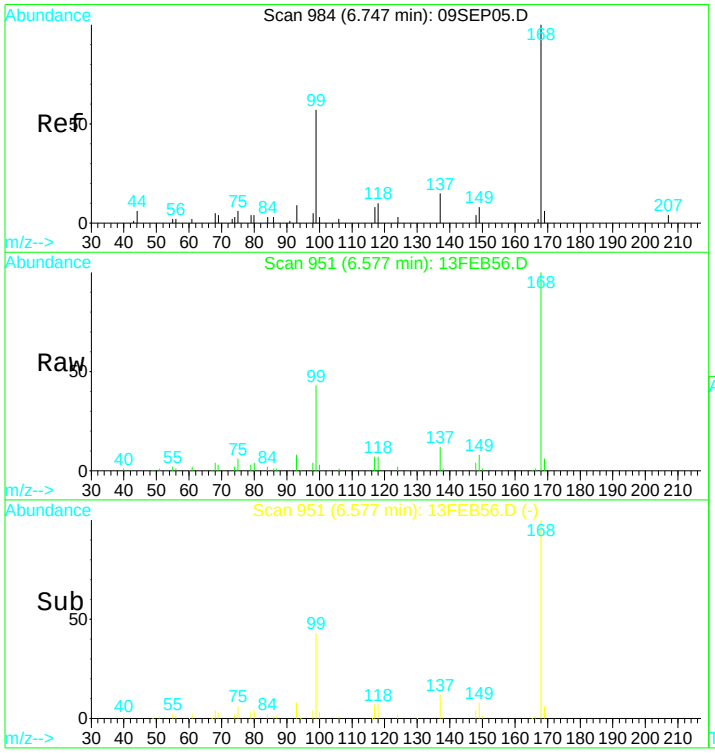
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB56.D Vial: 56
Acq On : 14 Feb 2017 3:48 am Operator: MGC
Sample : 1703480-15RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:01 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

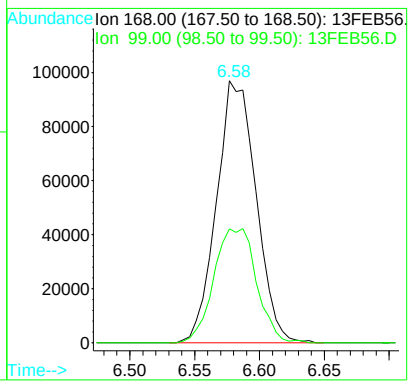


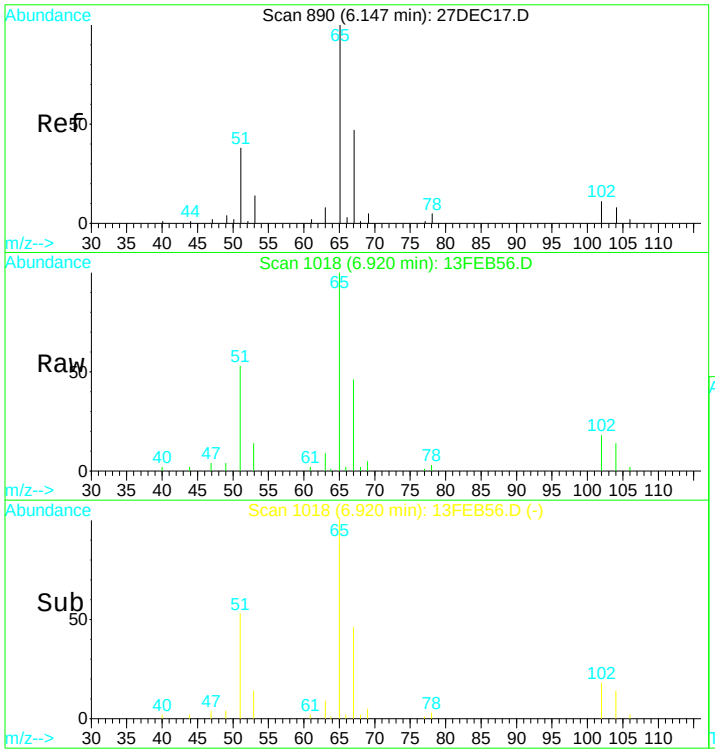



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB56.D
Acq: 14 Feb 2017 3:48 am

Tgt Ion:168 Resp: 205423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 47.0 | 305.1 | 566.7# |

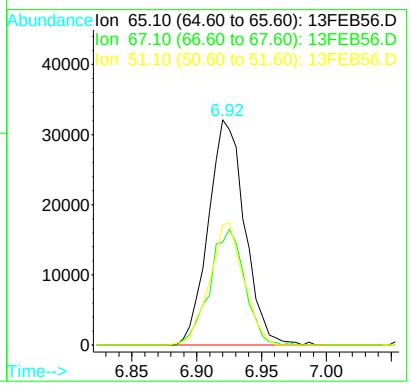


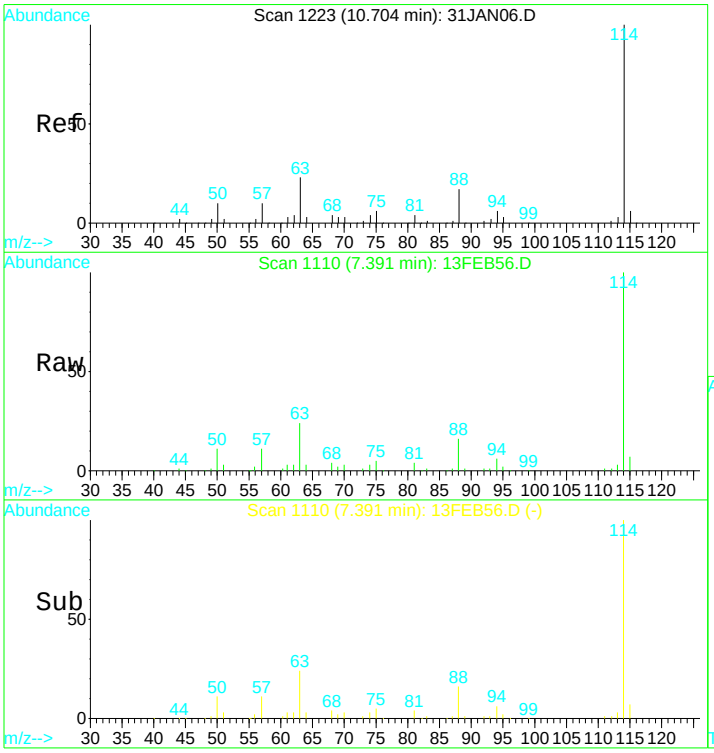




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB56.D
Acq: 14 Feb 2017 3:48 am

Tgt Ion: 65 Resp: 62719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.6 | 38.4 | 71.4 |
| 51 | 51.2 | 1006.3 | 1868.8# |

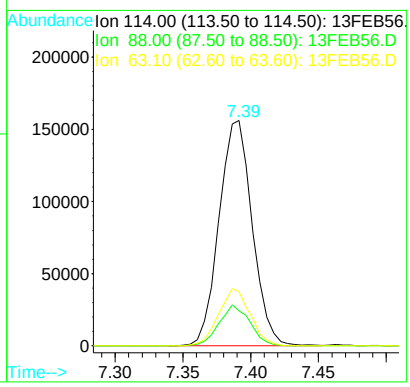


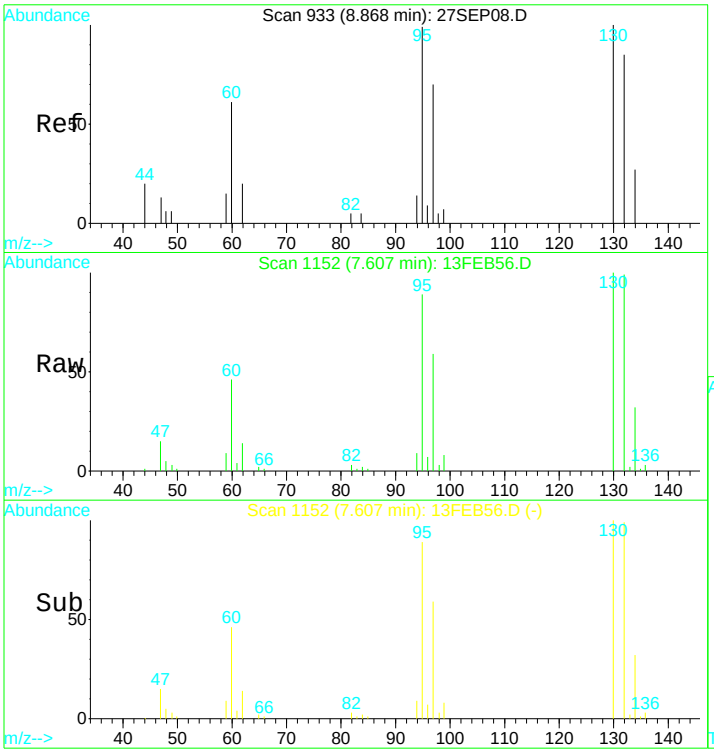



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.00 min
Lab File: 13FEB56.D
Acq: 14 Feb 2017 3:48 am

Tgt Ion:114 Resp: 266365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.8 | 12.0 | 22.2 |
| 63 | 24.1 | 16.9 | 31.5 |

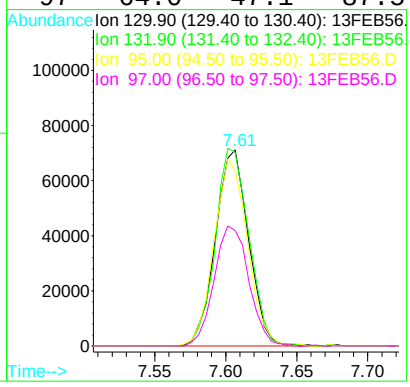


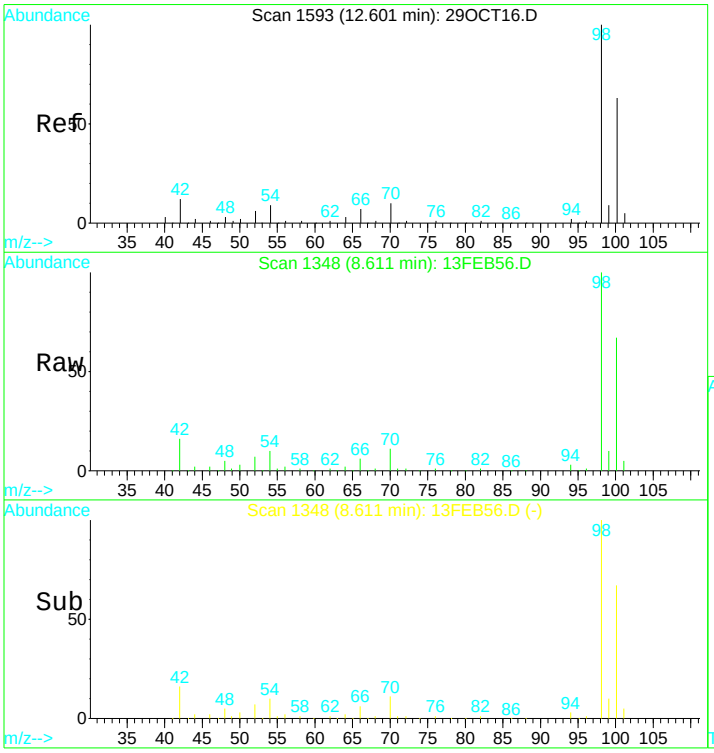




#25
Trichloroethene
Concen: 13.34 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 13FEB56.D
Acq: 14 Feb 2017 3:48 am

Tgt Ion:130 Resp: 115647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 102.2 | 74.3 | 137.9 |
| 95 | 96.2 | 70.8 | 131.6 |
| 97 | 64.0 | 47.1 | 87.5 |

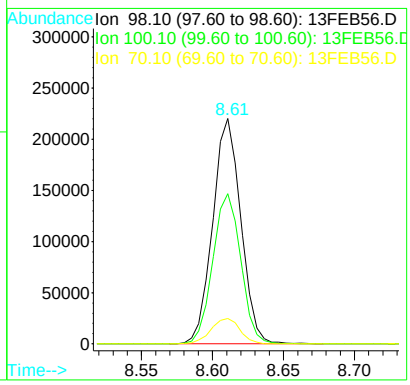


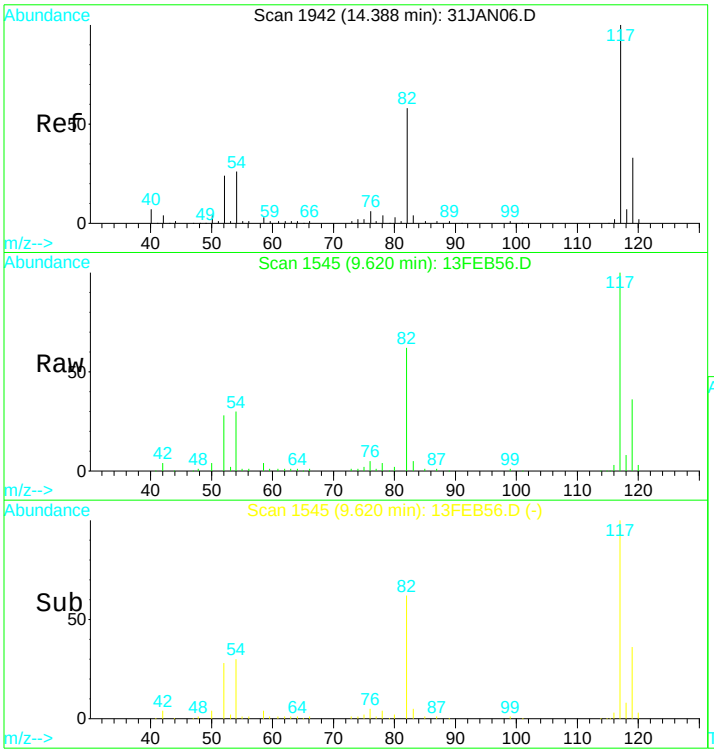



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB56.D
Acq: 14 Feb 2017 3:48 am

Tgt Ion: 98 Resp: 303773

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.1 | 47.0 | 87.4 |
| 70 | 11.7 | 7.3 | 13.7 |

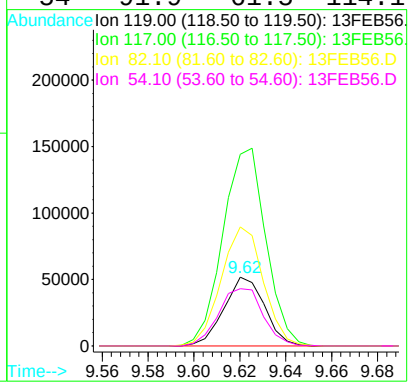


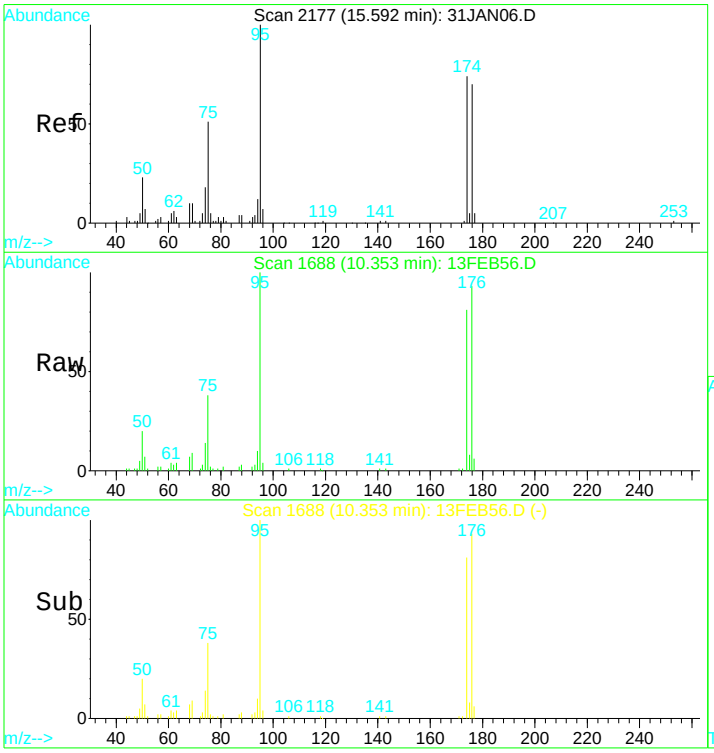




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB56.D
Acq: 14 Feb 2017 3:48 am

Tgt Ion:119 Resp: 63791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 304.1 | 220.4 | 409.4 |
| 82 | 179.7 | 123.9 | 230.1 |
| 54 | 91.9 | 61.5 | 114.1 |

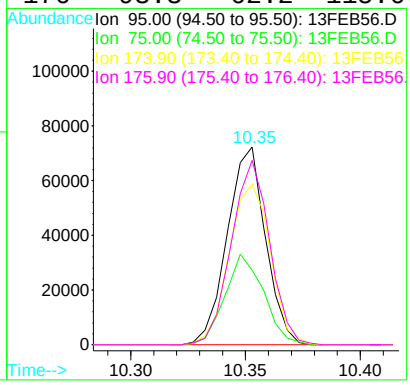





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1688
Delta R.T. -0.00 min
Lab File: 13FEB56.D
Acq: 14 Feb 2017 3:48 am

Tgt Ion: 95 Resp: 83956

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.1 | 32.6 | 60.5 |
| 174 | 87.3 | 60.9 | 113.1 |
| 176 | 93.3 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB49.D Vial: 49
Acq On : 14 Feb 2017 1:06 am Operator: MGC
Sample : 1703480-16 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:53 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201698 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 263354 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64783 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 63058 | 10.57 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 105.70% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 294500 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 98.30% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 85063 | 9.52 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.20% | | | | | | |

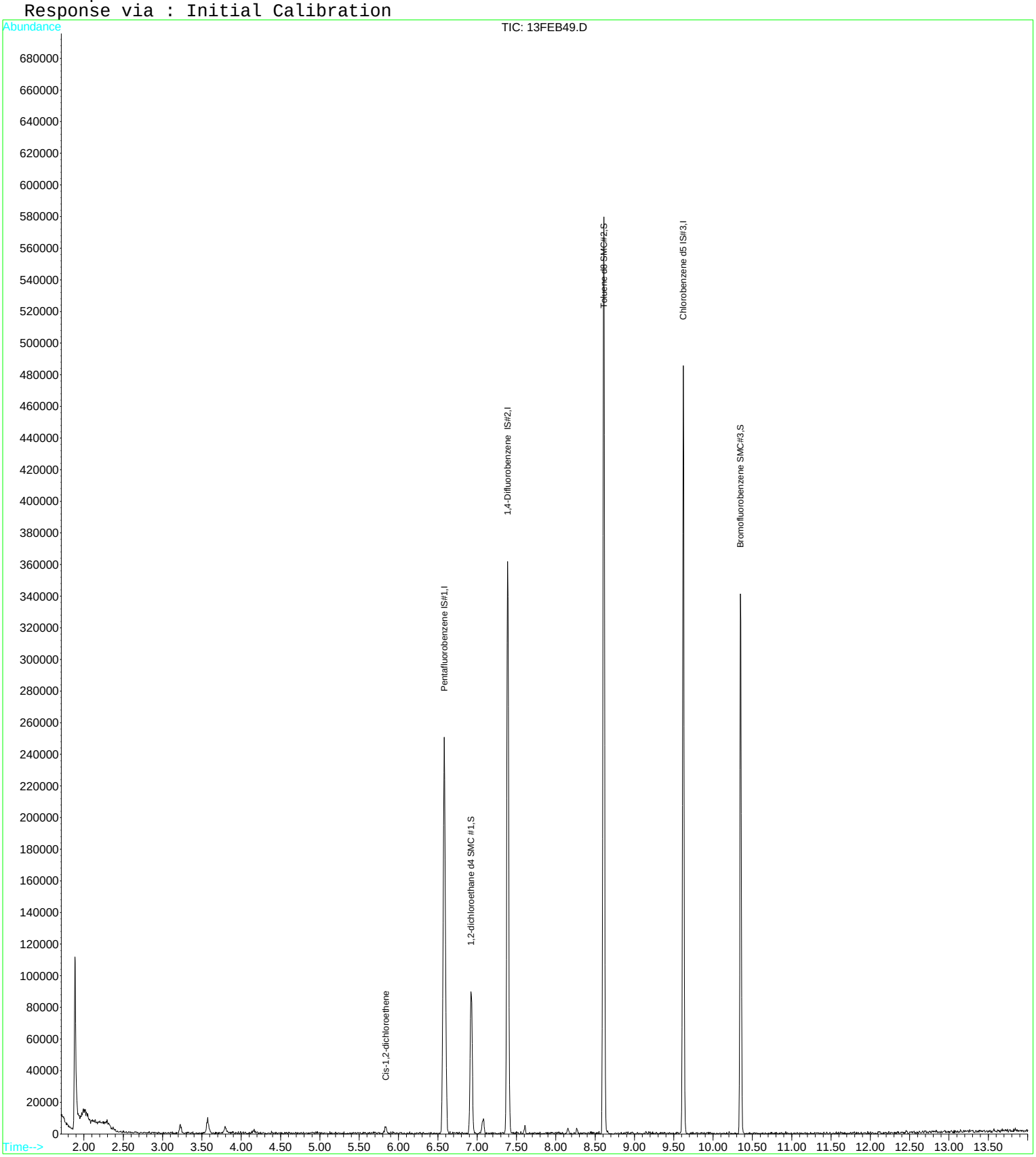
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 2346 | 0.25 | ug/L # | 78 |

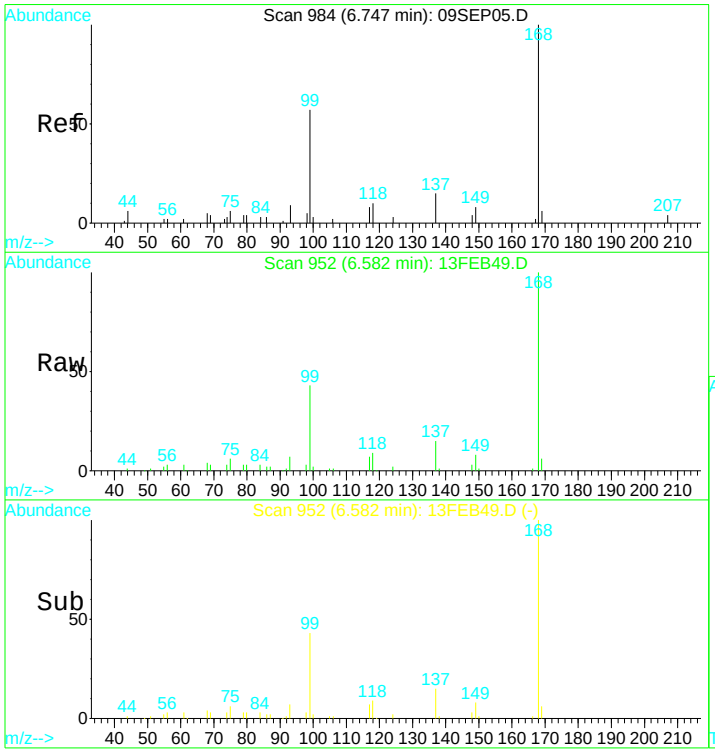
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB49.D Vial: 49
Acq On : 14 Feb 2017 1:06 am Operator: MGC
Sample : 1703480-16 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:53 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

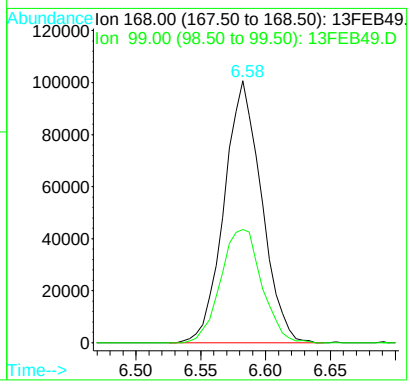


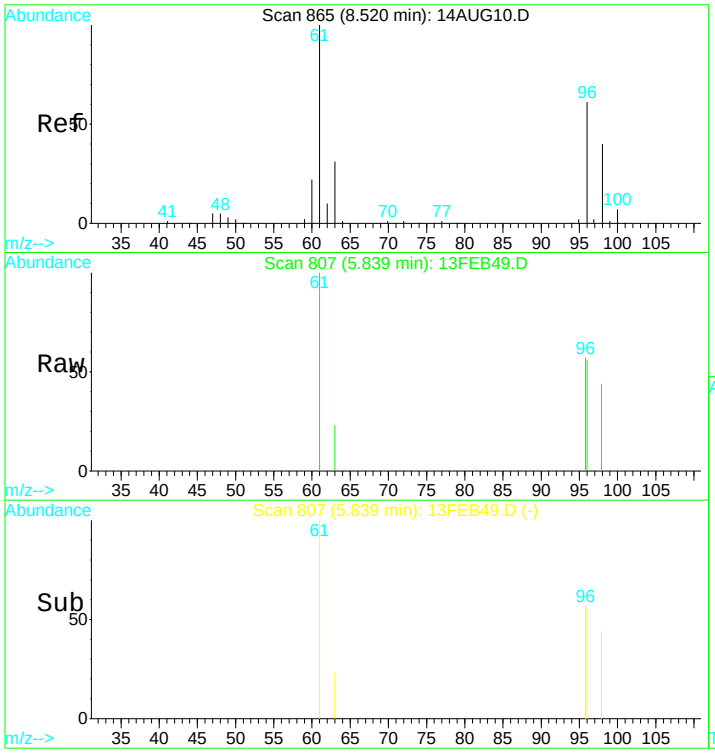



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion:168 Resp: 201698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 47.4 | 305.1 | 566.7# |

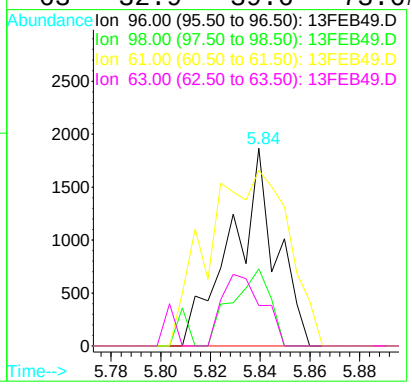


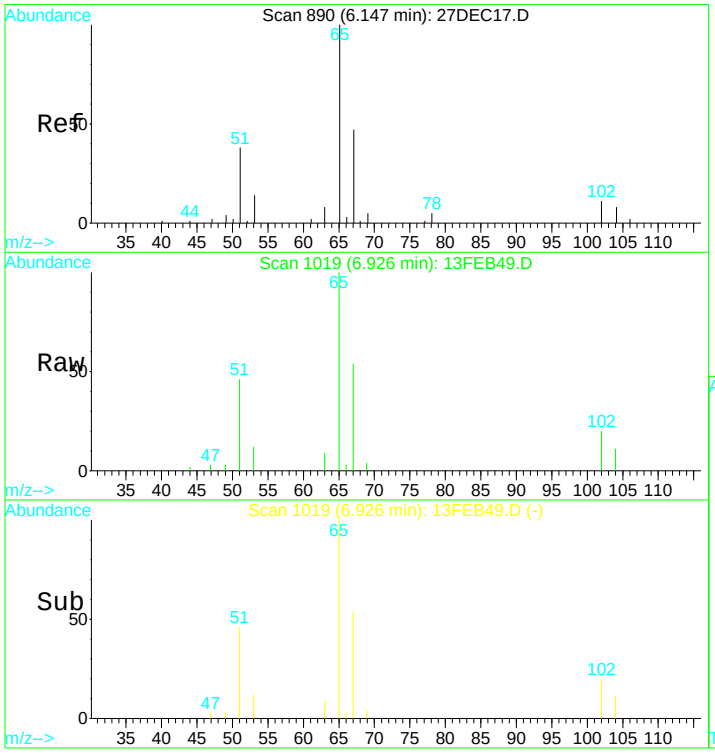




#15
Cis-1,2-dichloroethene
Concen: 0.25 ug/L
RT: 5.84 min Scan# 807
Delta R.T. 0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion: 96 Resp: 2346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 33.0 | 46.2 | 85.8# |
| 61 | 159.8 | 122.8 | 228.0 |
| 63 | 32.9 | 39.6 | 73.6# |

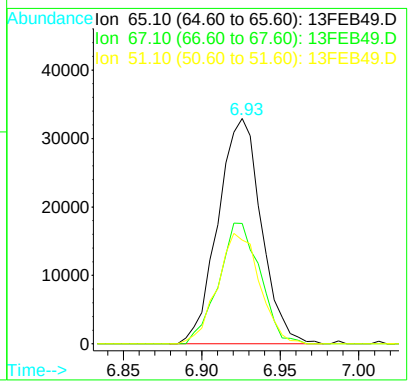


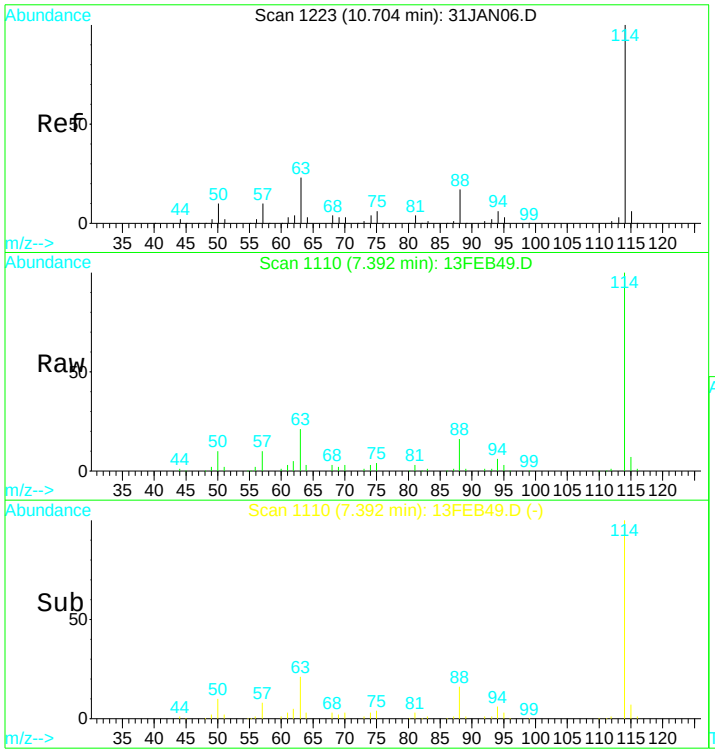



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion: 65 Resp: 63058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.3 | 38.4 | 71.4 |
| 51 | 47.9 | 1006.3 | 1868.8# |

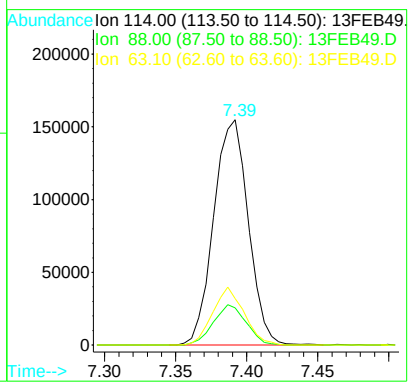


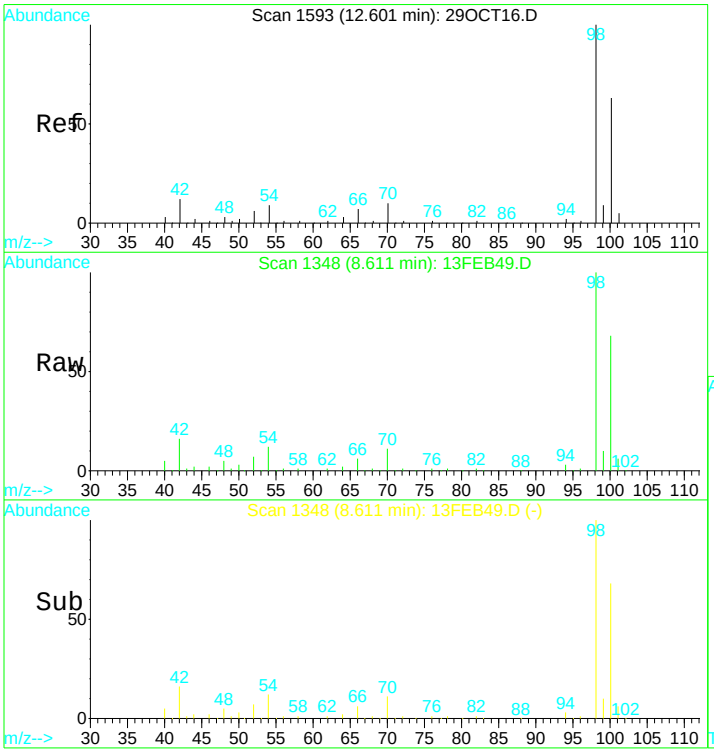




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion:114 Resp: 263354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.0 | 12.0 | 22.2 |
| 63 | 23.4 | 16.9 | 31.5 |

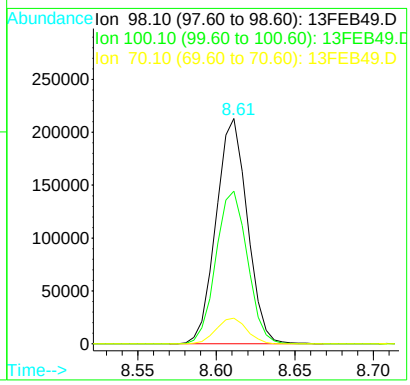


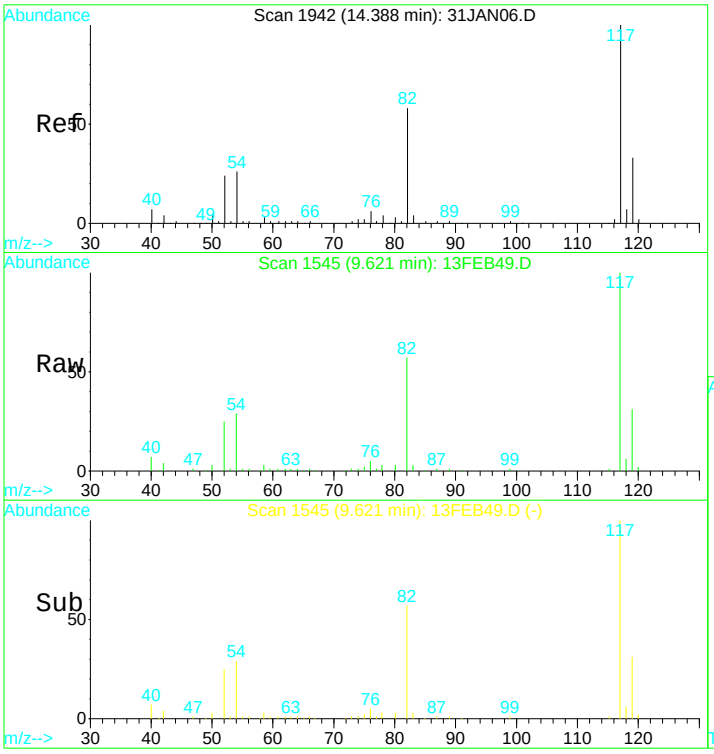



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion: 98 Resp: 294500

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.2 | 47.0 | 87.4 |
| 70 | 11.3 | 7.3 | 13.7 |

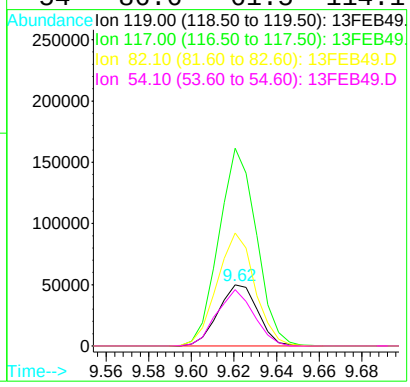


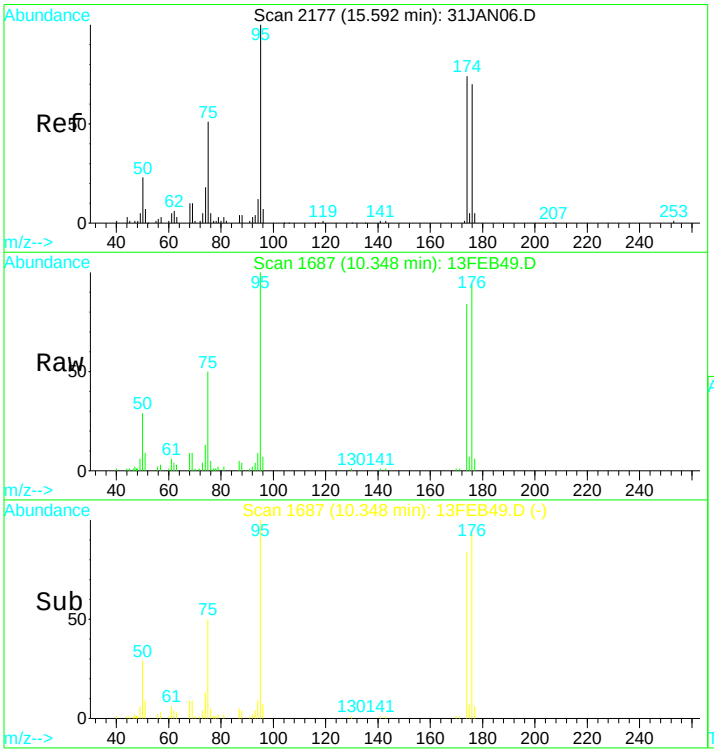




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion:119 Resp: 64783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 306.2 | 220.4 | 409.4 |
| 82 | 176.6 | 123.9 | 230.1 |
| 54 | 86.6 | 61.5 | 114.1 |

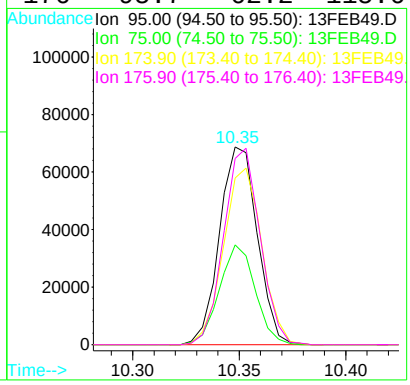





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion: 95 Resp: 85063

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 47.8 | 32.6 | 60.5 |
| 174 | 90.7 | 60.9 | 113.1 |
| 176 | 95.7 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB49.D Vial: 49
Acq On : 14 Feb 2017 1:06 am Operator: MGC
Sample : 1703480-16 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:56 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201698 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 263354 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64783 | 10.00 ug/L | 0.00 |

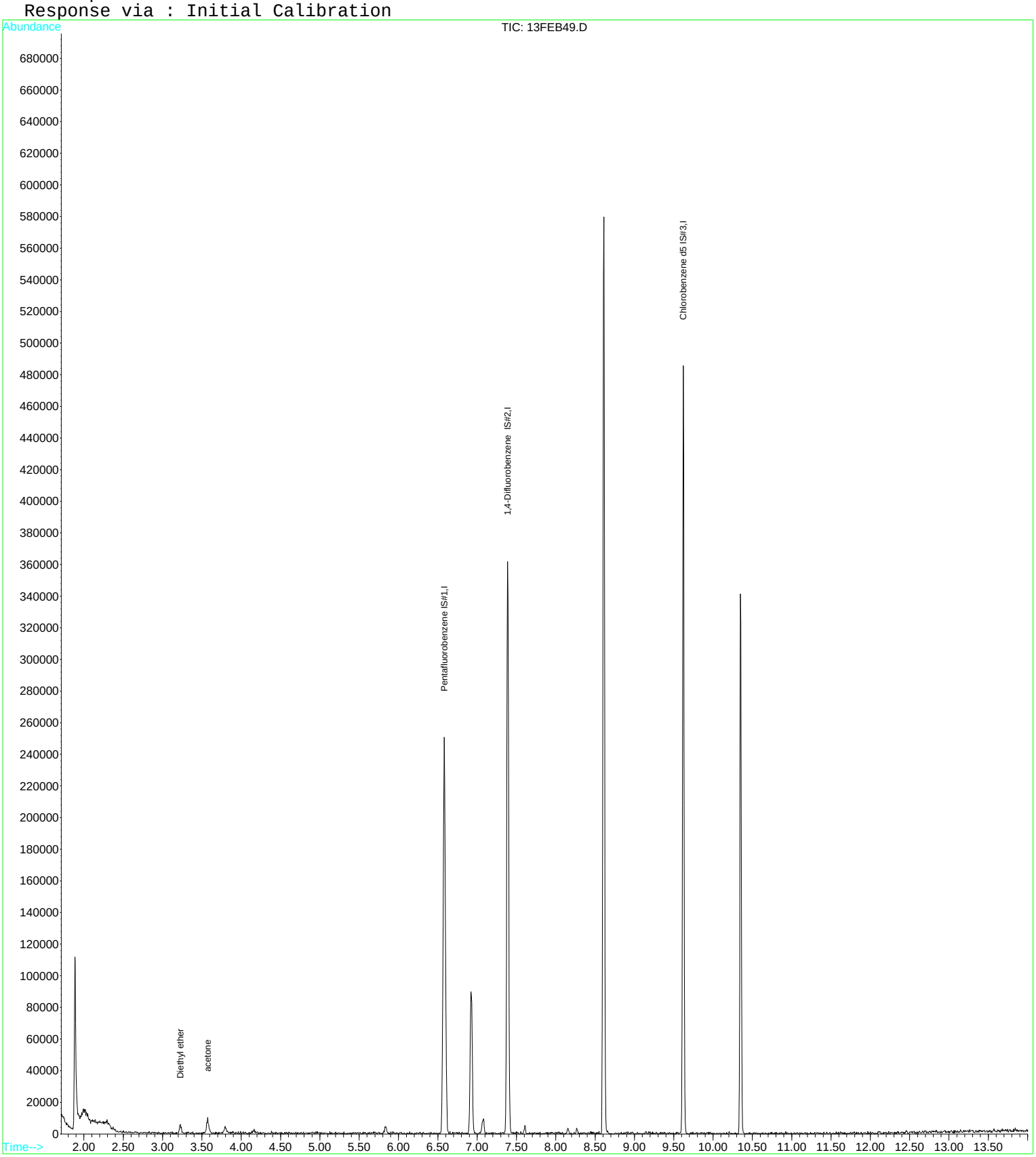
| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 5) Diethyl ether | 3.23 | 59 | 3254 | 0.62 ug/L | 92 |
| 8) acetone | 3.57 | 43 | 13083 | 14.47 ug/L | 93 |

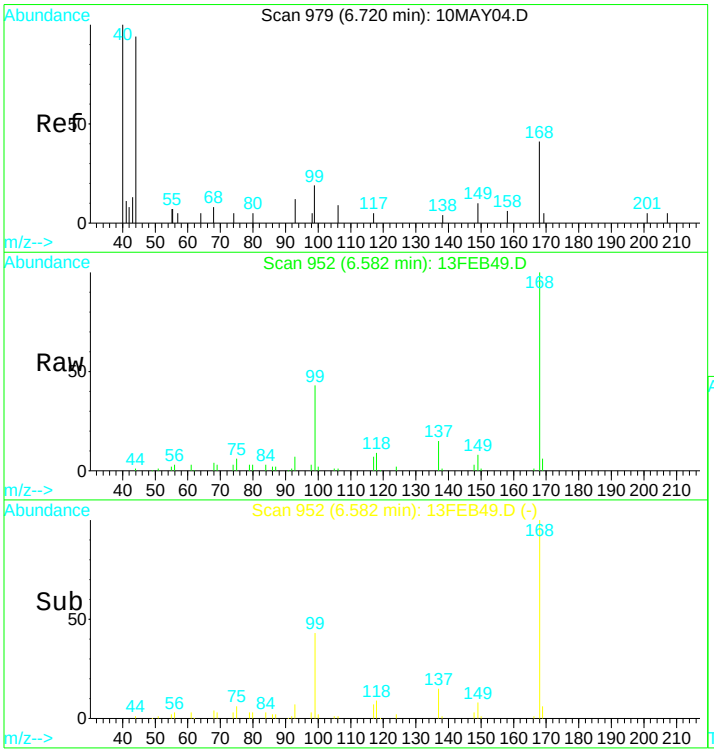
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB49.D Vial: 49
Acq On : 14 Feb 2017 1:06 am Operator: MGC
Sample : 1703480-16 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:56 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

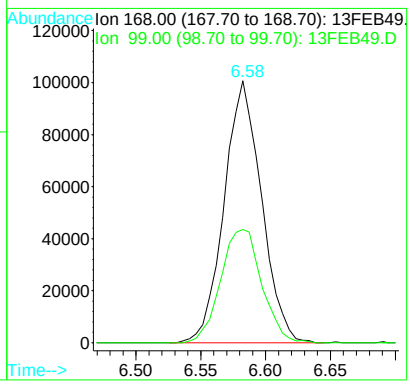


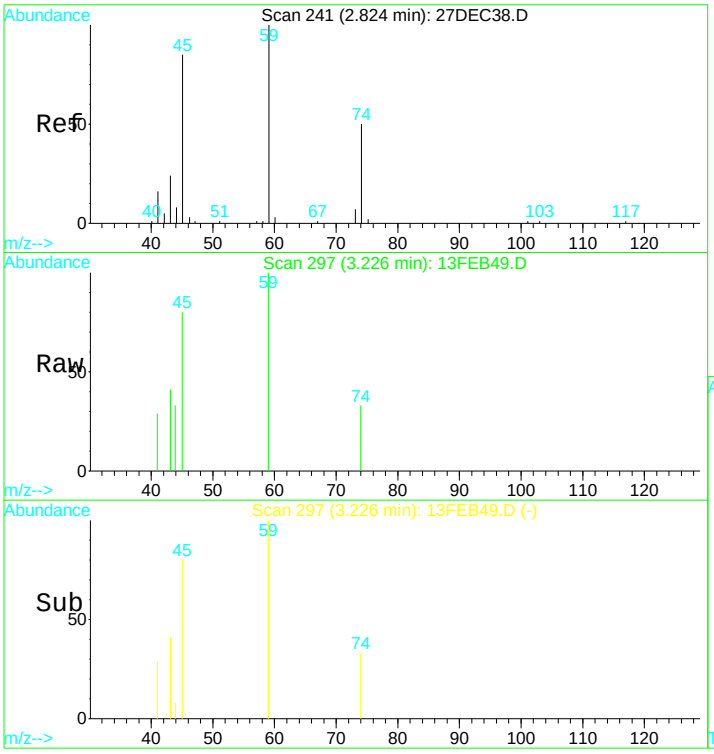



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion:168 Resp: 201698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 47.4 | 32.8 | 60.8 |

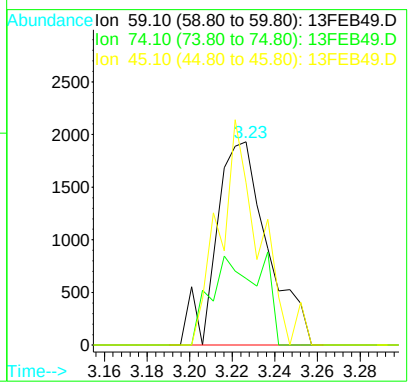


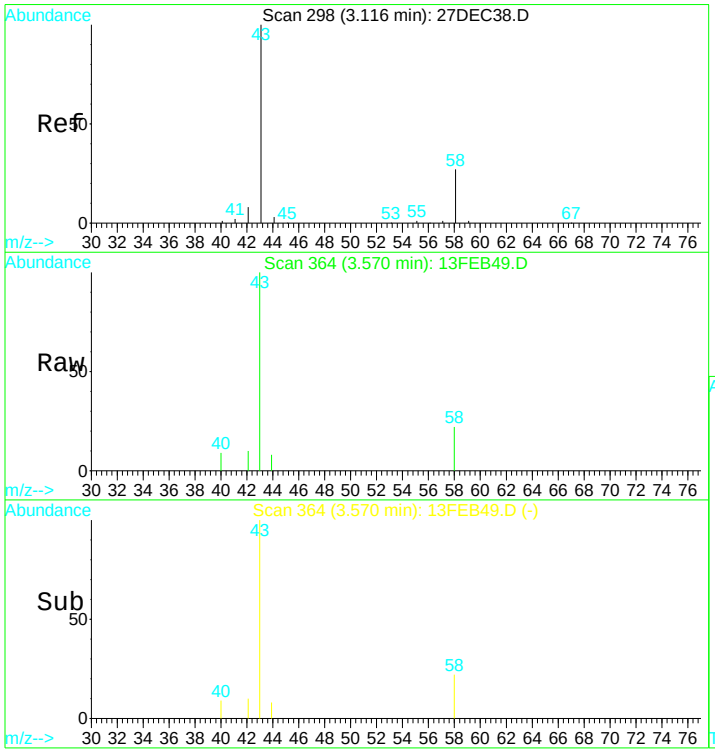




#5
Diethyl ether
Concen: 0.62 ug/L
RT: 3.23 min Scan# 297
Delta R.T. 0.01 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion: 59 Resp: 3254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 74 | 43.2 | 37.8 | 70.2 |
| 45 | 86.4 | 63.2 | 117.4 |

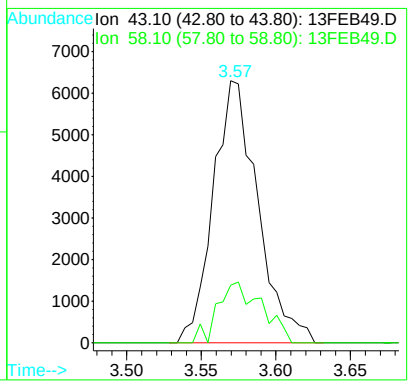


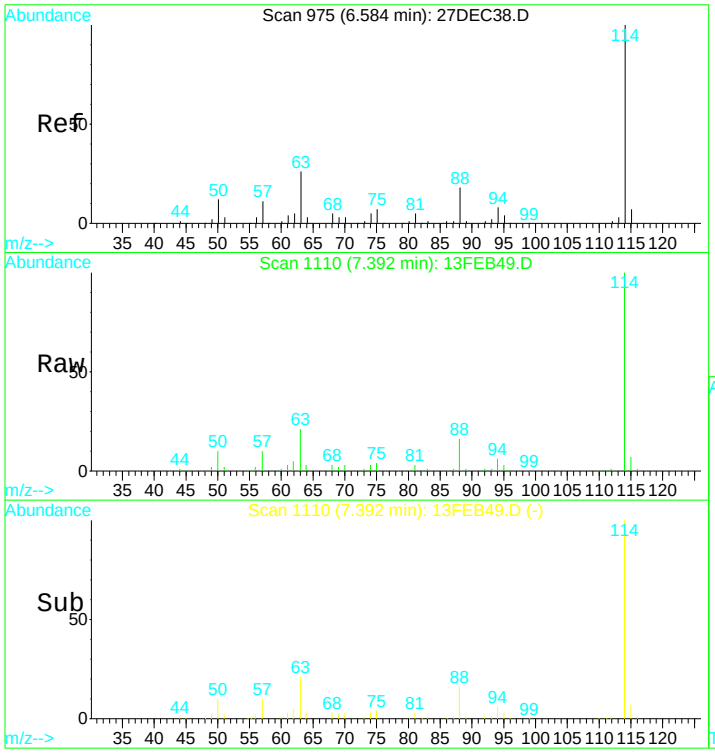



#8
acetone
Concen: 14.47 ug/L
RT: 3.57 min Scan# 364
Delta R.T. 0.01 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion: 43 Resp: 13083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 22.9 | 18.5 | 34.3 |

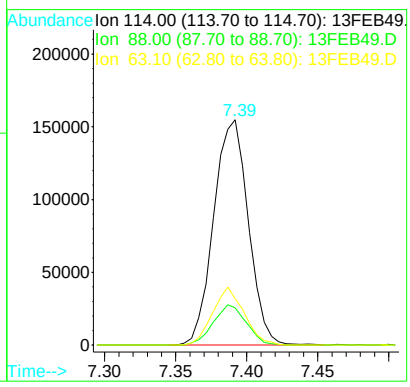


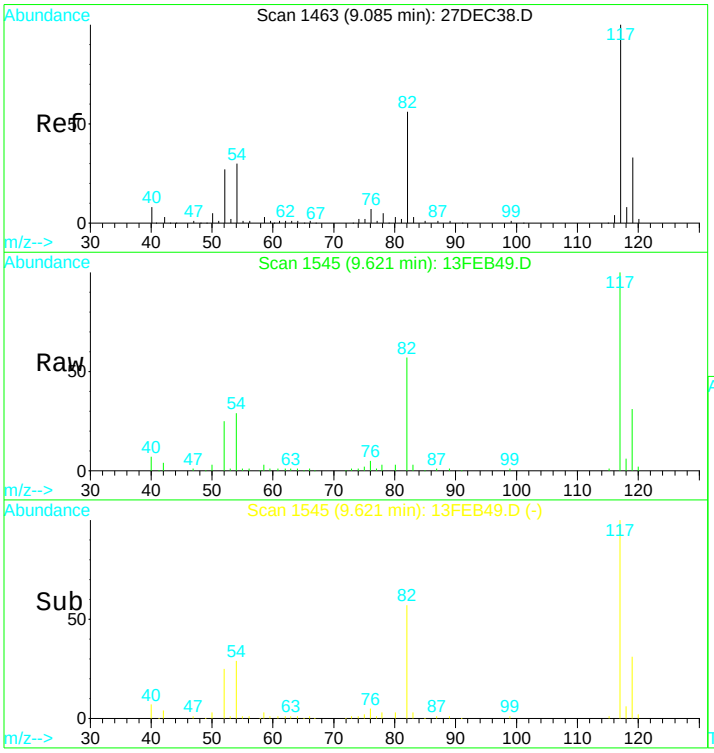




#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.01 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion:114 Resp: 263354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.0 | 11.3 | 21.1 |
| 63 | 23.4 | 16.1 | 29.9 |

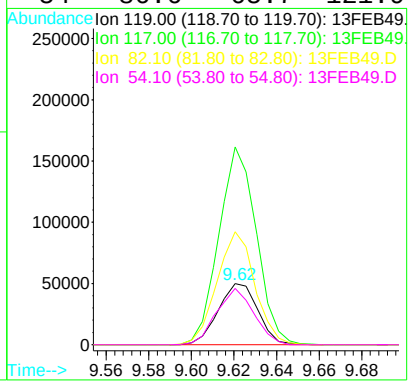





#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB49.D
Acq: 14 Feb 2017 1:06 am

Tgt Ion:119 Resp: 64783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 306.2 | 218.6 | 406.0 |
| 82 | 176.6 | 128.7 | 238.9 |
| 54 | 86.6 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB06.D Vial: 6
Acq On : 13 Feb 2017 8:29 am Operator: MGC
Sample : 1703480-17 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:57 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205838 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 274883 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68824 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 66311 | 10.89 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 108.90% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 294235 | 9.40 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.00% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 94585 | 9.97 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.70% | | | |

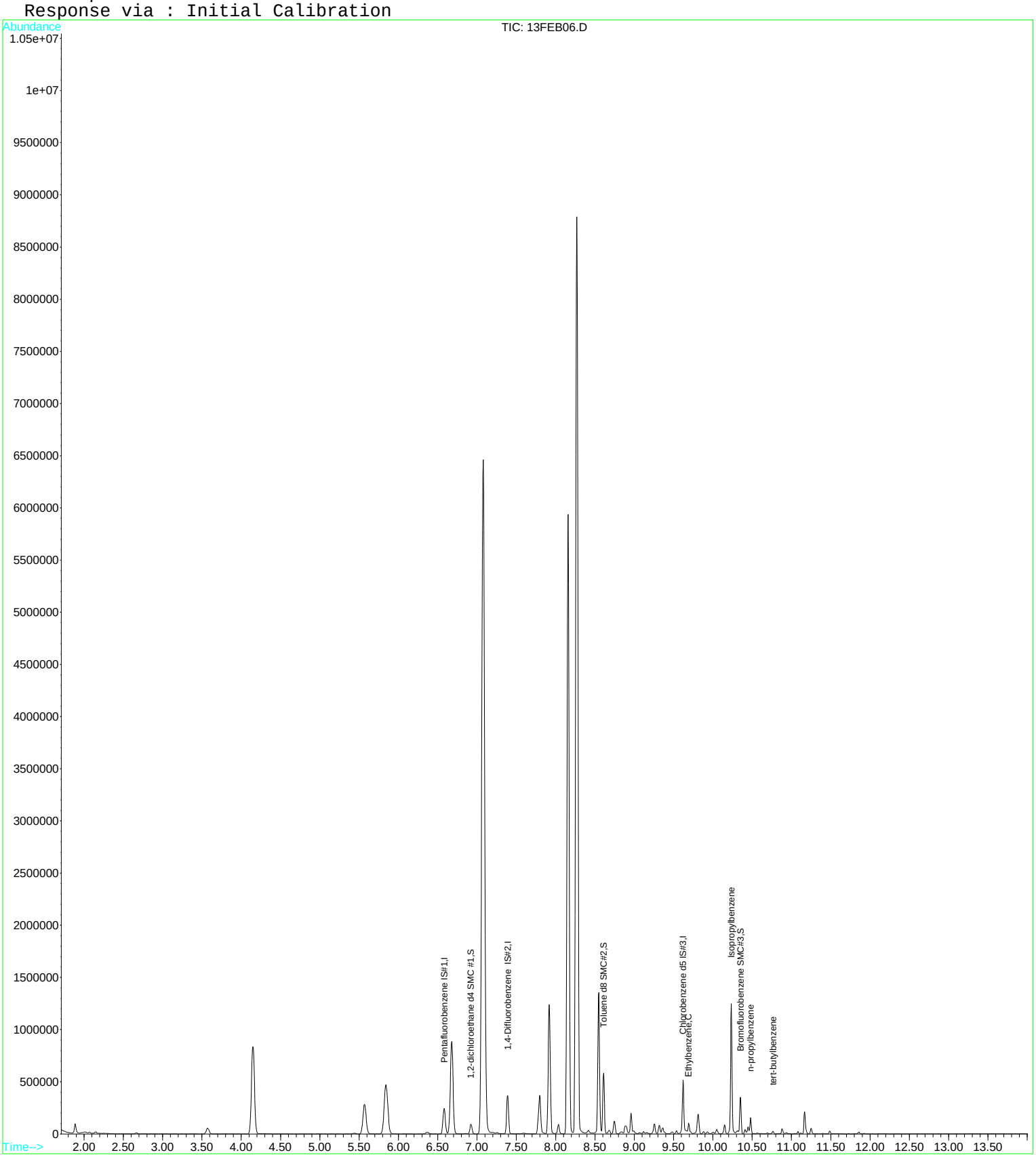
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 42) Ethylbenzene | 9.69 | 106 | 3376 | 0.29 | ug/L # | 51 |
| 47) Isopropylbenzene | 10.23 | 105 | 620518 | 17.38 | ug/L | 92 |
| 51) n-propylbenzene | 10.48 | 91 | 81406 | 1.98 | ug/L | 88 |
| 56) tert-butylbenzene | 10.77 | 119 | 7718 | 0.29 | ug/L | 93 |

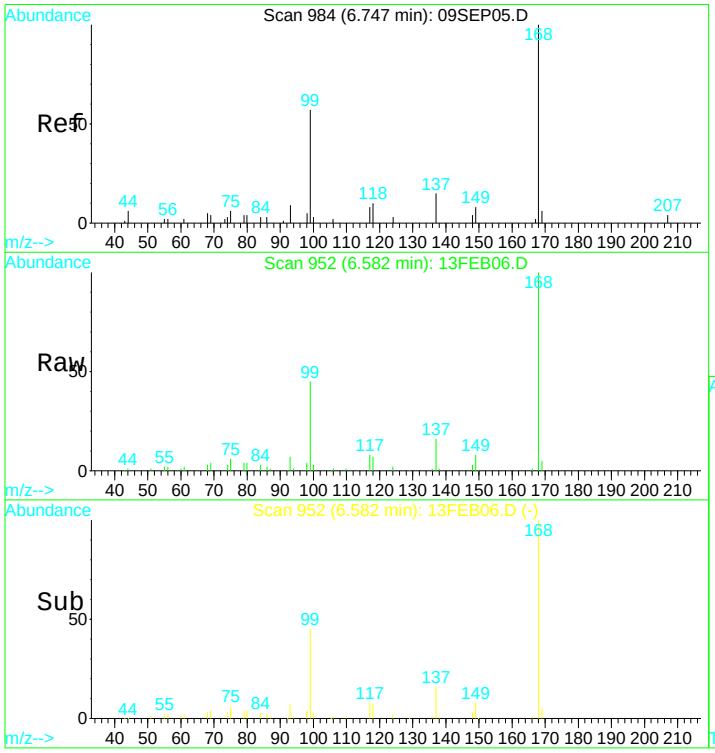
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB06.D Vial: 6
Acq On : 13 Feb 2017 8:29 am Operator: MGC
Sample : 1703480-17 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:57 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

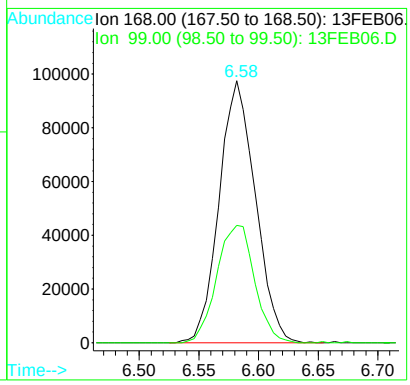


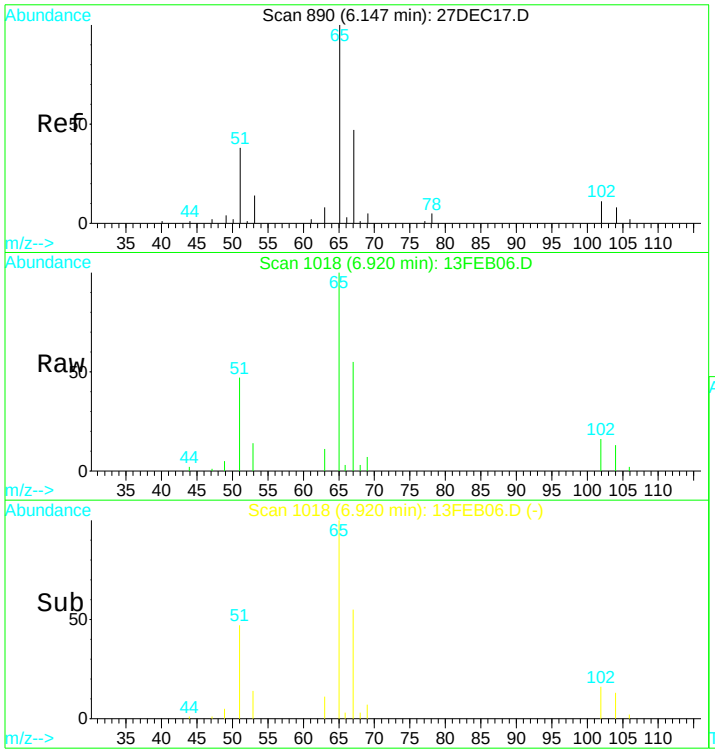



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion:168 Resp: 205838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.6 | 305.1 | 566.7# |

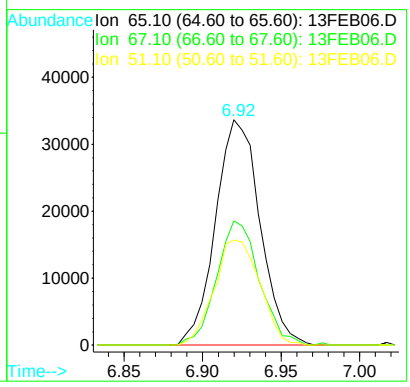


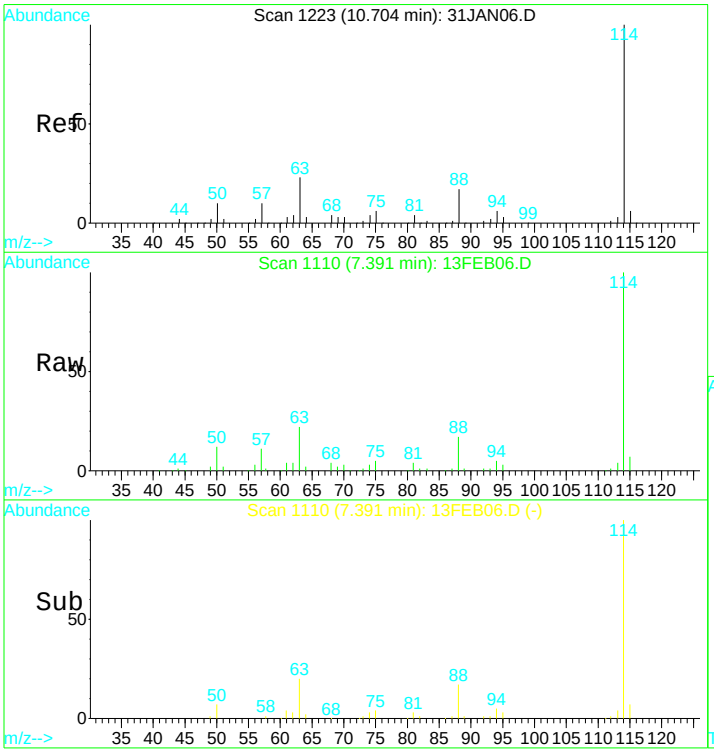




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion: 65 Resp: 66311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.8 | 38.4 | 71.4 |
| 51 | 47.9 | 1006.3 | 1868.8# |

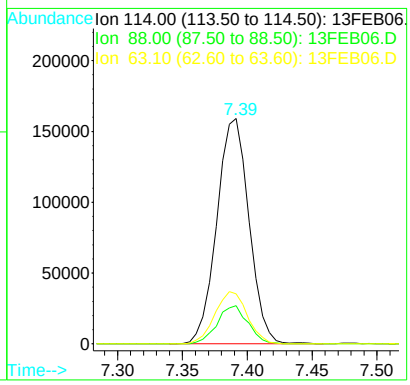


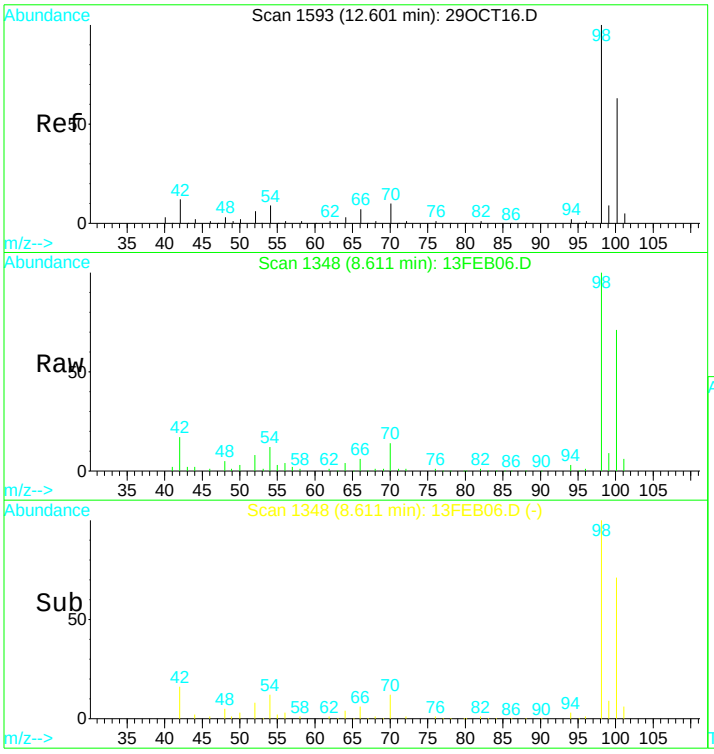



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion:114 Resp: 274883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.2 | 12.0 | 22.2 |
| 63 | 23.3 | 16.9 | 31.5 |

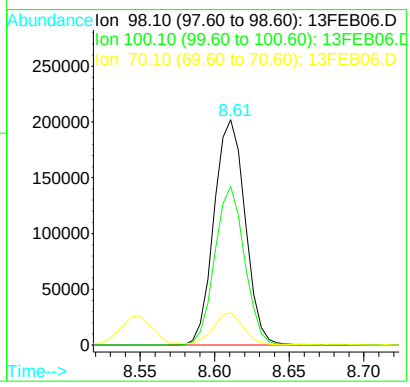


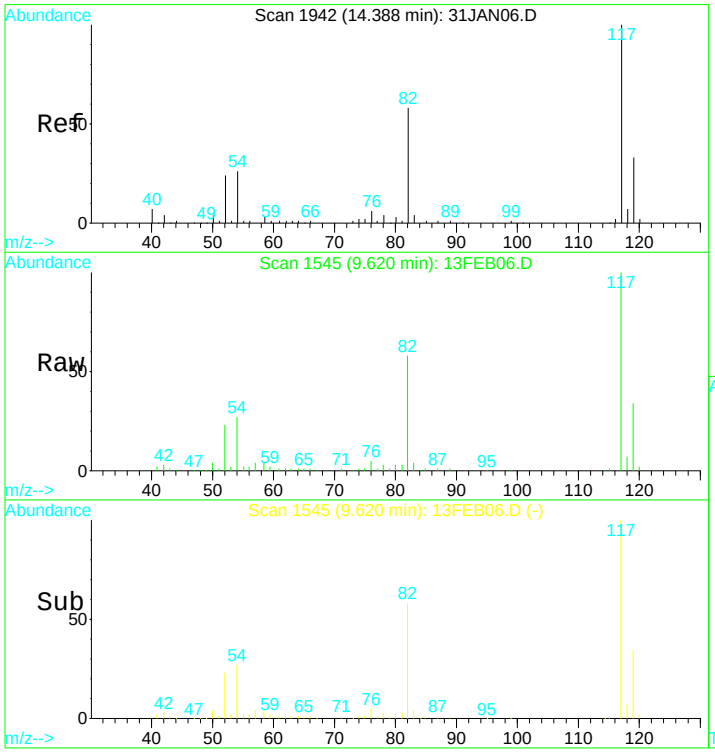




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion: 98 Resp: 294235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.5 | 47.0 | 87.4 |
| 70 | 13.5 | 7.3 | 13.7 |

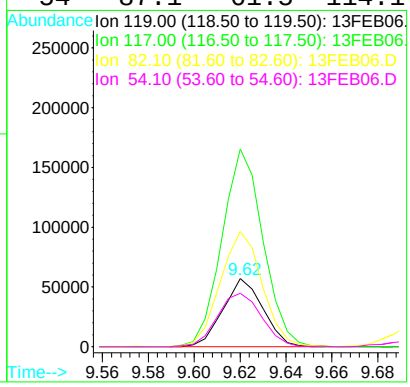


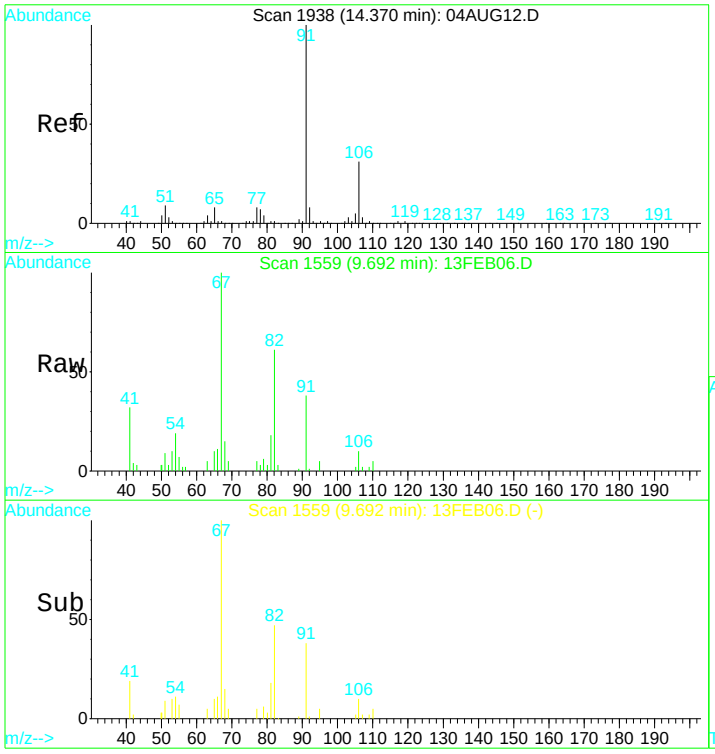



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion:119 Resp: 68824

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 298.7 | 220.4 | 409.4 |
| 82 | 178.3 | 123.9 | 230.1 |
| 54 | 87.1 | 61.5 | 114.1 |

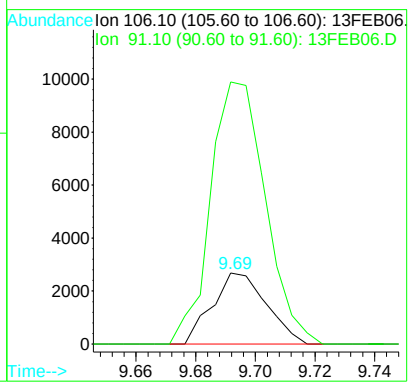


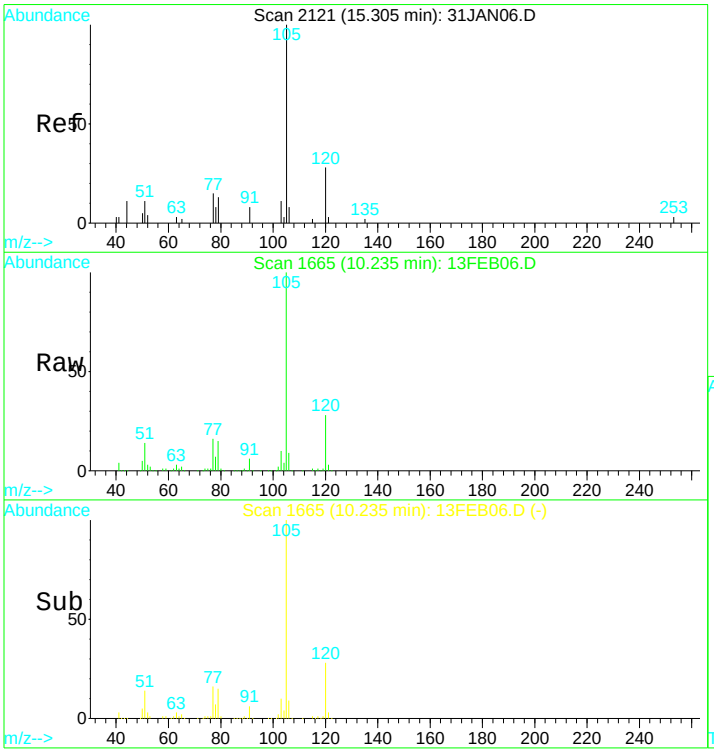




#42
Ethylbenzene
Concen: 0.29 ug/L
RT: 9.69 min Scan# 1559
Delta R.T. -0.01 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion:106 Resp: 3376

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 374.3 | 197.9 | 367.5# |

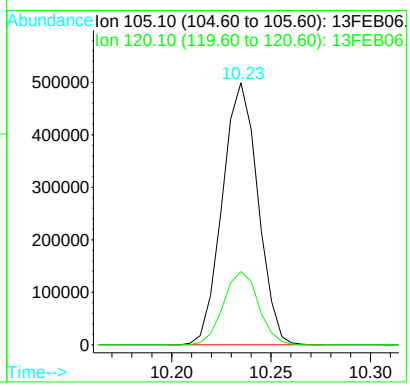


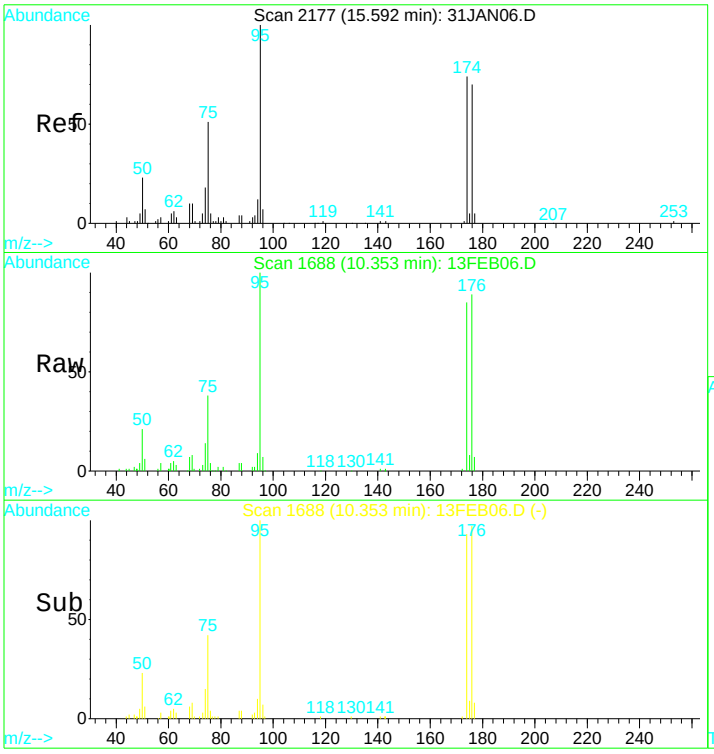



#47
Isopropylbenzene
Concen: 17.38 ug/L
RT: 10.23 min Scan# 1665
Delta R.T. -0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion:105 Resp: 620518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.5 | 22.3 | 41.3 |

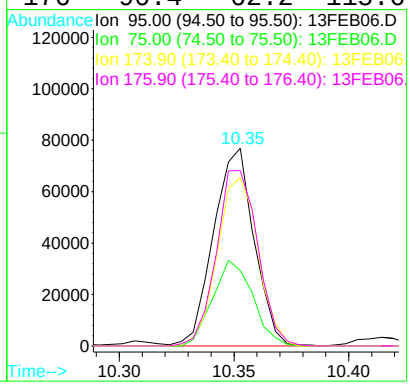


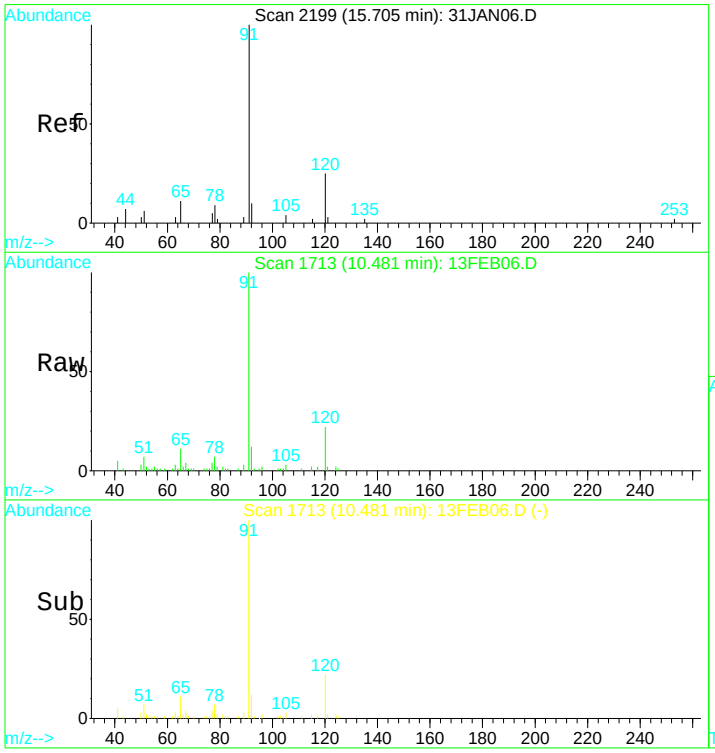




#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1688
Delta R.T. -0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion: 95 Resp: 94585

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 42.7 | 32.6 | 60.5 |
| 174 | 85.7 | 60.9 | 113.1 |
| 176 | 90.4 | 62.2 | 115.6 |

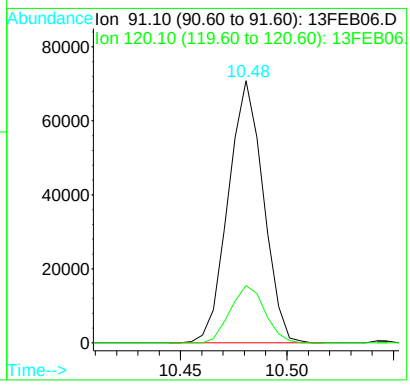


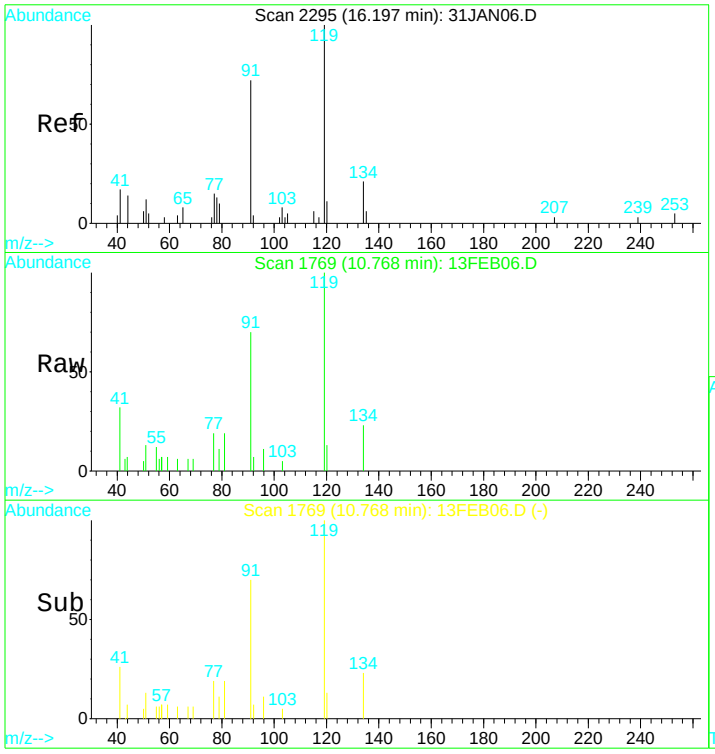



#51
n-propylbenzene
Concen: 1.98 ug/L
RT: 10.48 min Scan# 1713
Delta R.T. -0.00 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion: 91 Resp: 81406

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.4 | 19.3 | 35.8 |

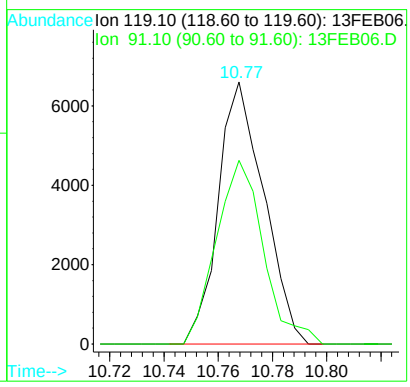



#56
tert-butylbenzene
Concen: 0.29 ug/L
RT: 10.77 min Scan# 1769
Delta R.T. -0.01 min
Lab File: 13FEB06.D
Acq: 13 Feb 2017 8:29 am

Tgt Ion:119 Resp: 7718

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 72.4 | 46.8 | 87.0 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB06.D Vial: 6
Acq On : 13 Feb 2017 8:29 am Operator: MGC
Sample : 1703480-17 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:58 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205838 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 274883 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68824 | 10.00 ug/L | 0.00 |

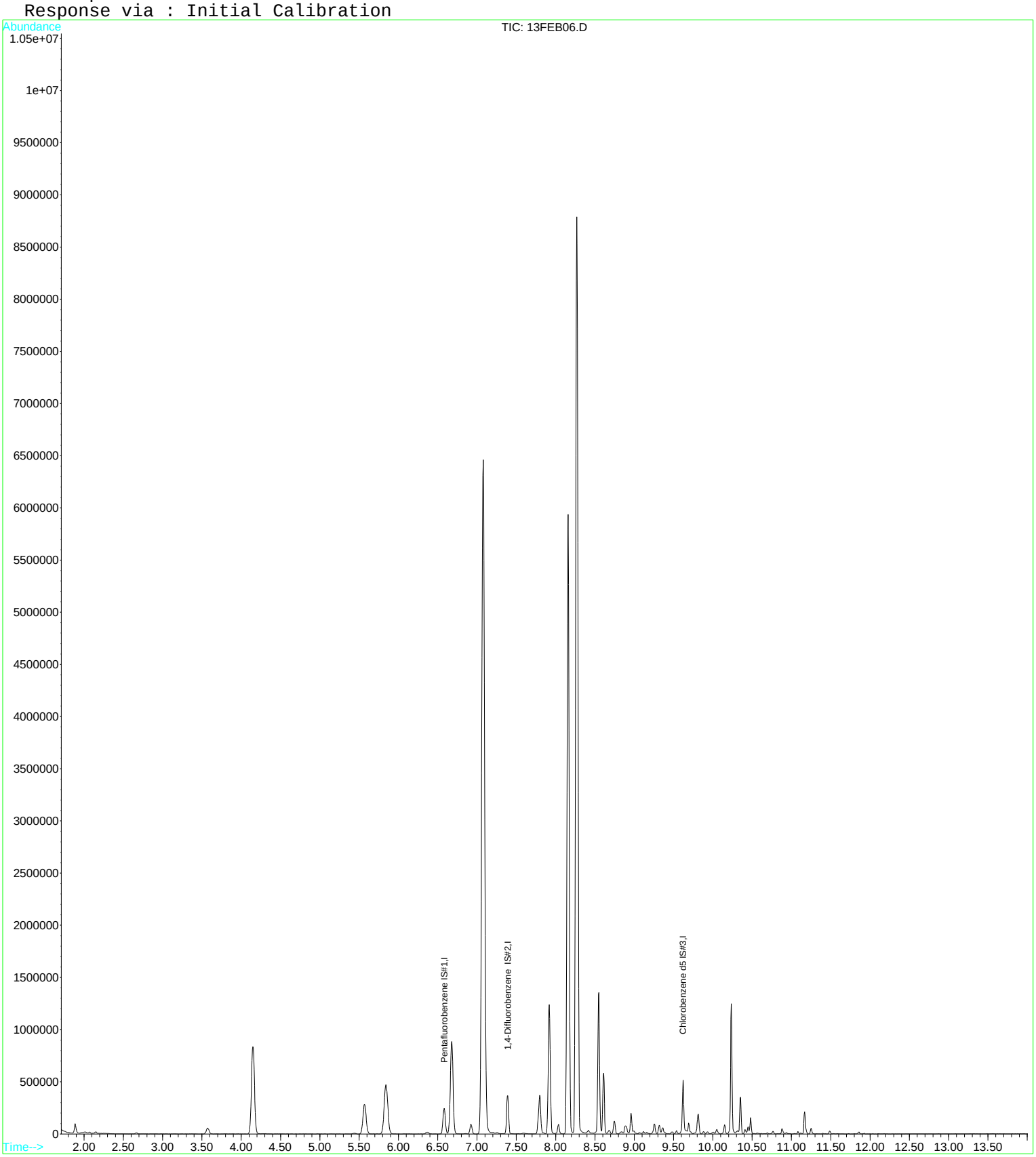
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB06.D Vial: 6
Acq On : 13 Feb 2017 8:29 am Operator: MGC
Sample : 1703480-17 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:58 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB50.D Vial: 50
Acq On : 14 Feb 2017 1:29 am Operator: MGC
Sample : 1703480-18 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:55 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 200429 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 268335 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.63 | 119 | 69548 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 72028 | 12.15 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 121.50% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 300682 | 9.85 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.50% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 94148 | 9.82 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.20% | | | |

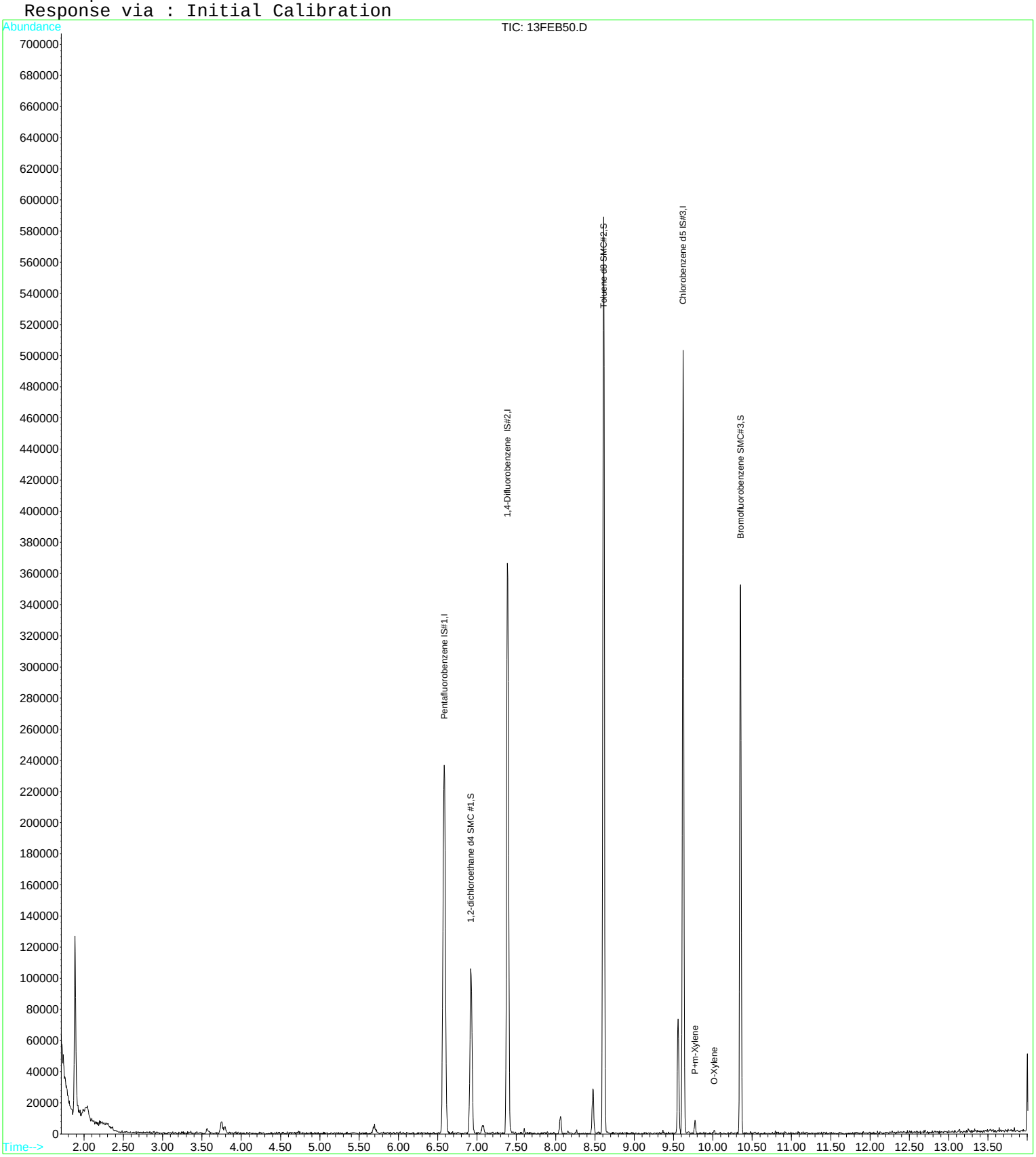
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 43) P+m-Xylene | 9.77 | 106 | 1806 | 0.13 | ug/L # | 74 |
| 44) O-Xylene | 10.01 | 106 | 921 | 0.07 | ug/L # | 54 |

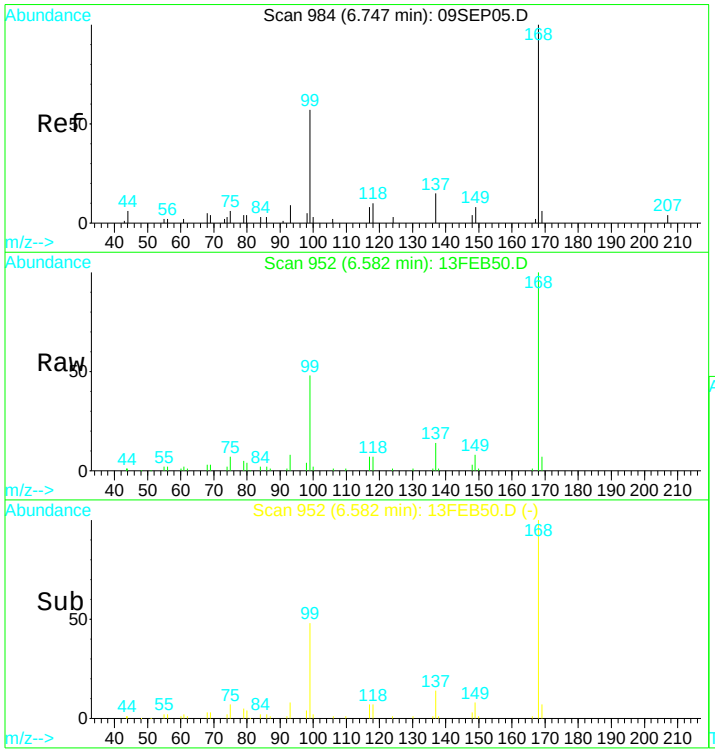
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB50.D Vial: 50
Acq On : 14 Feb 2017 1:29 am Operator: MGC
Sample : 1703480-18 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:55 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

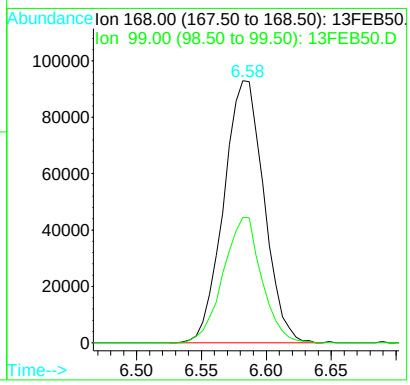


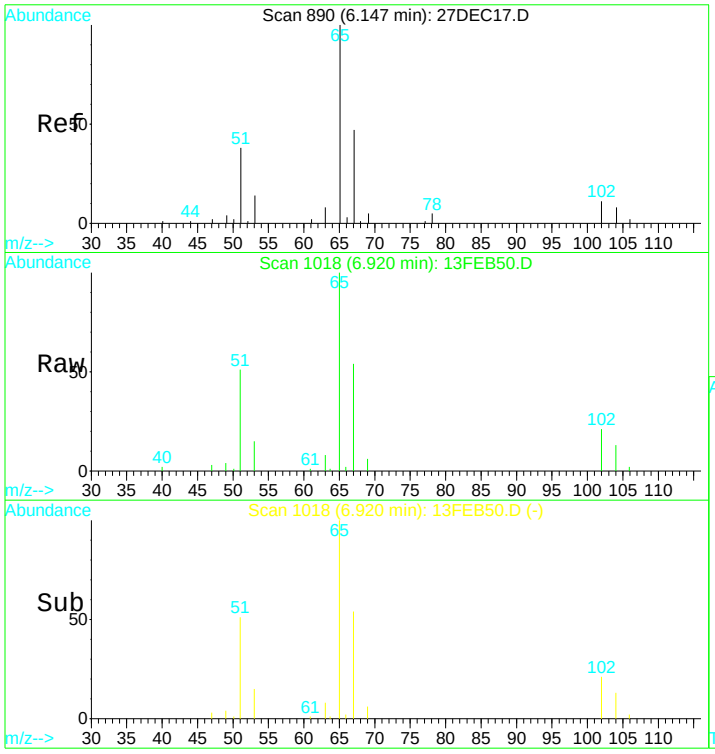



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion:168 Resp: 200429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.7 | 305.1 | 566.7# |

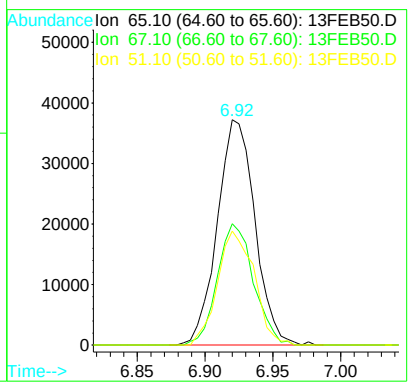


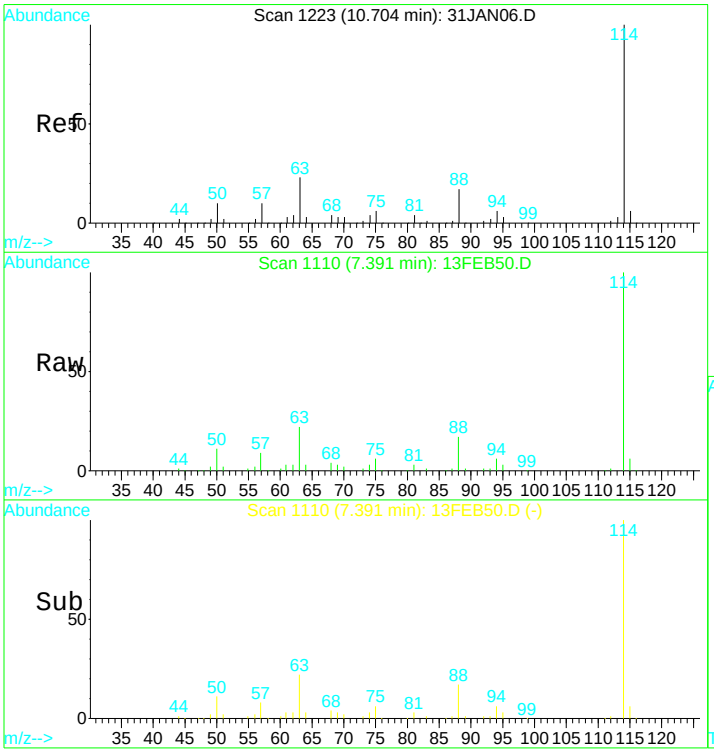




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion: 65 Resp: 72028

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.8 | 38.4 | 71.4 |
| 51 | 49.4 | 1006.3 | 1868.8# |

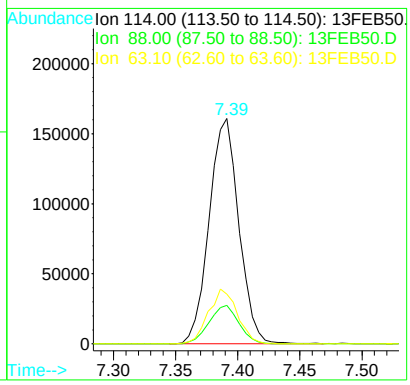


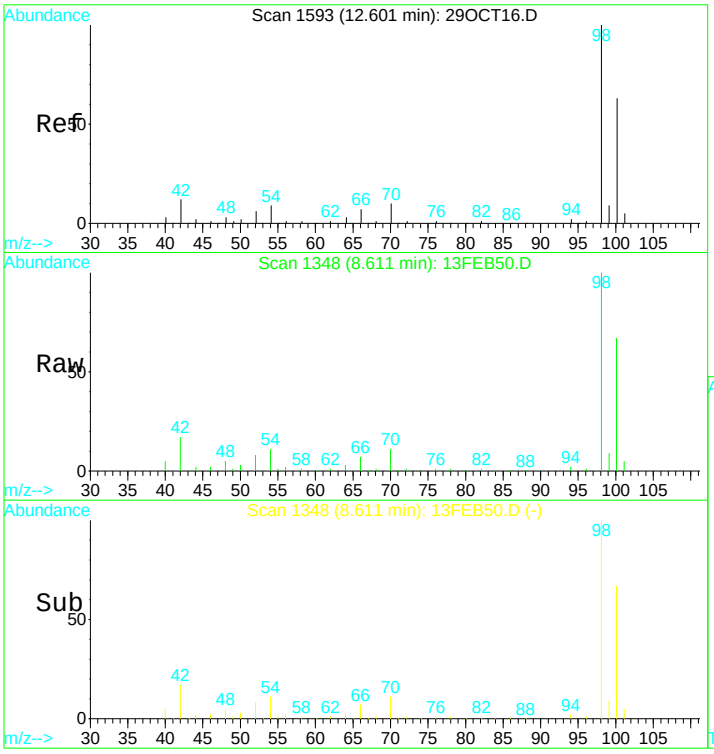



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.00 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion:114 Resp: 268335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.1 | 12.0 | 22.2 |
| 63 | 23.6 | 16.9 | 31.5 |

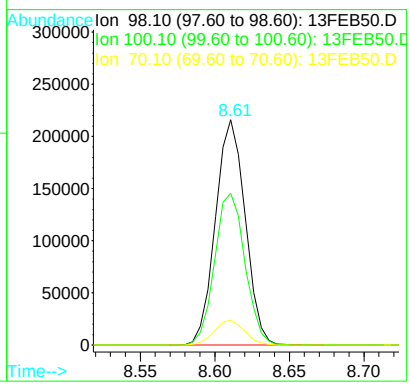


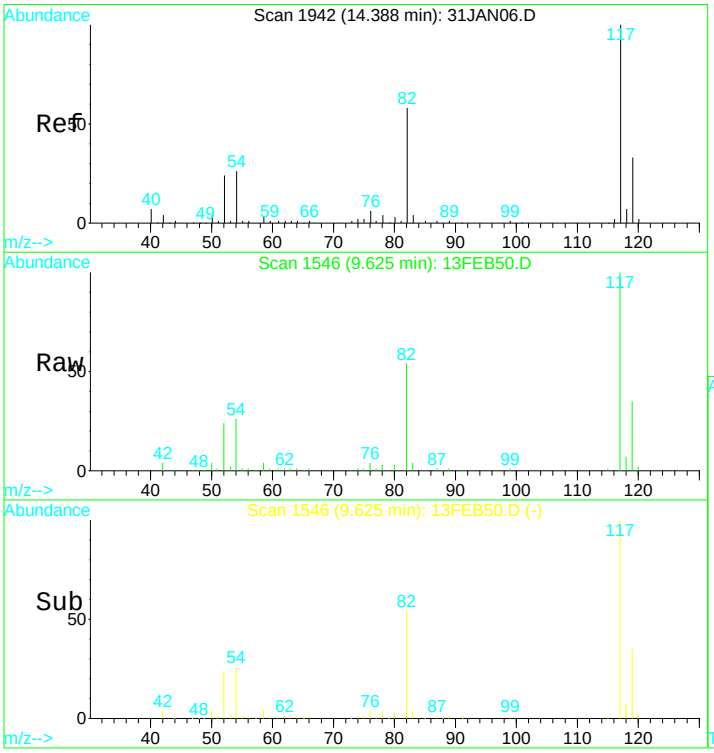




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion: 98 Resp: 300682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.6 | 47.0 | 87.4 |
| 70 | 11.2 | 7.3 | 13.7 |

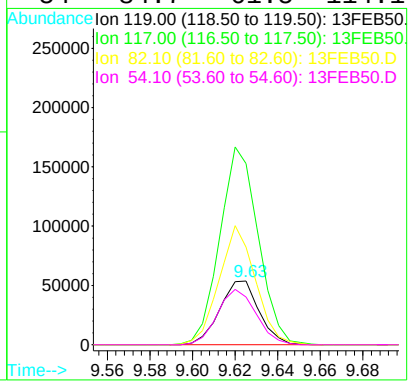


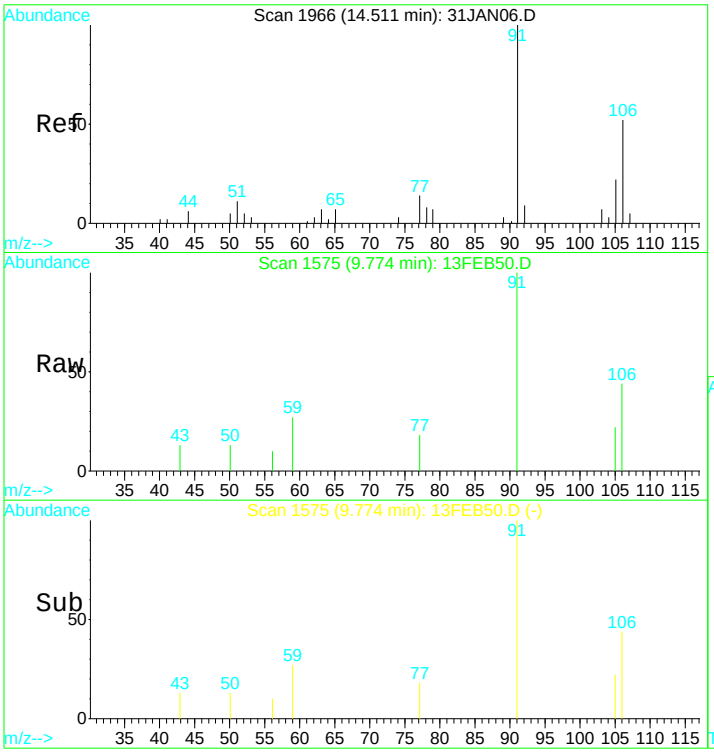



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.63 min Scan# 1546
Delta R.T. 0.00 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion:119 Resp: 69548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 301.1 | 220.4 | 409.4 |
| 82 | 171.6 | 123.9 | 230.1 |
| 54 | 84.7 | 61.5 | 114.1 |

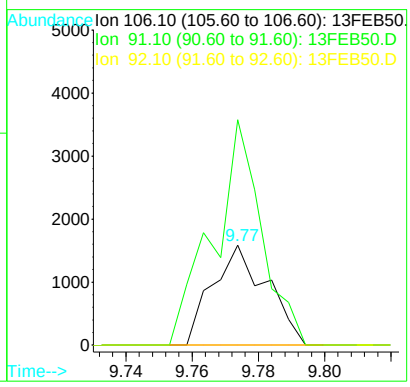


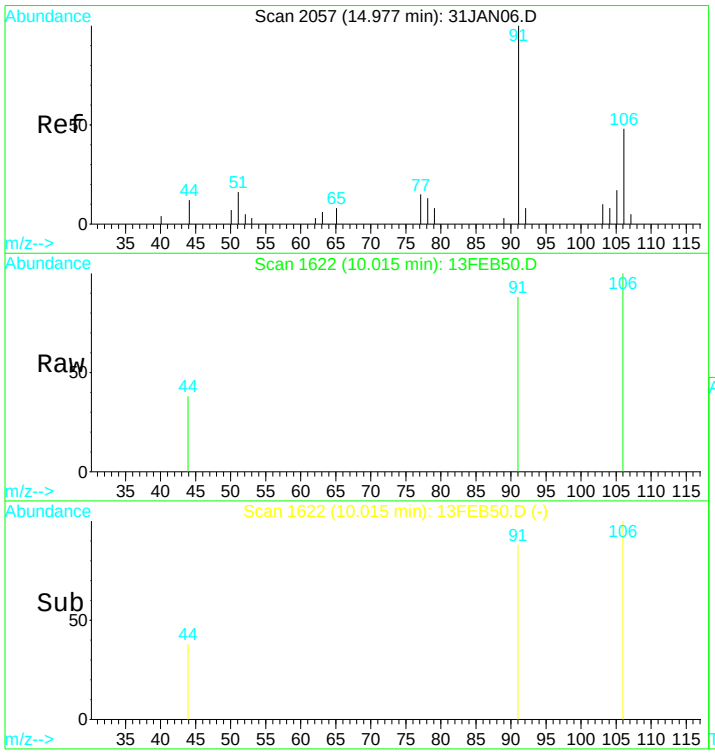




#43
P+m-Xylene
Concen: 0.13 ug/L
RT: 9.77 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion:106 Resp: 1806

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 200.1 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

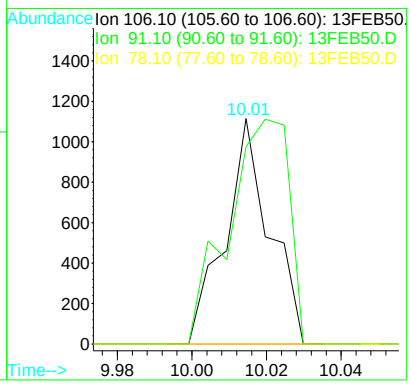


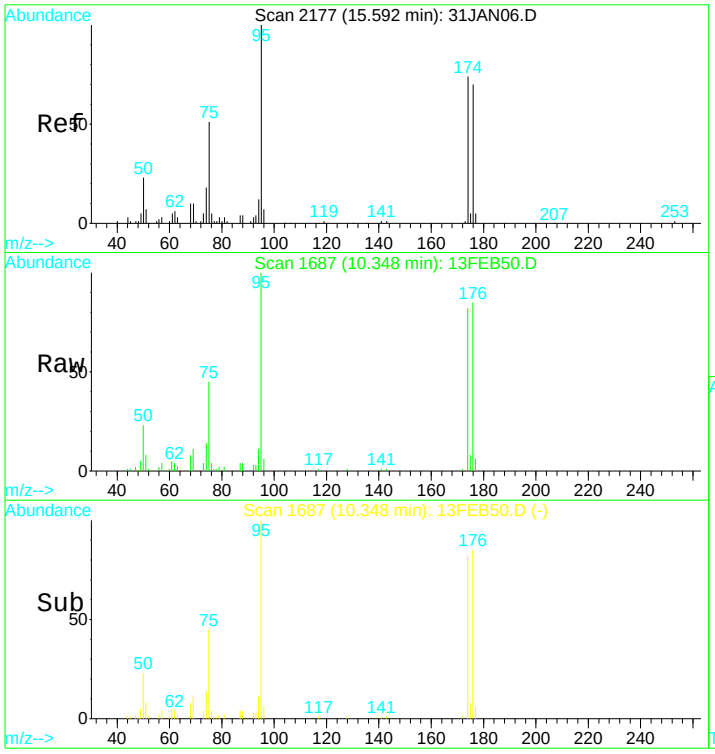



#44
O-Xylene
Concen: 0.07 ug/L
RT: 10.01 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion:106 Resp: 921

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 136.8 | 124.3 | 230.9 |
| 78 | 0.0 | 51.7 | 95.9# |

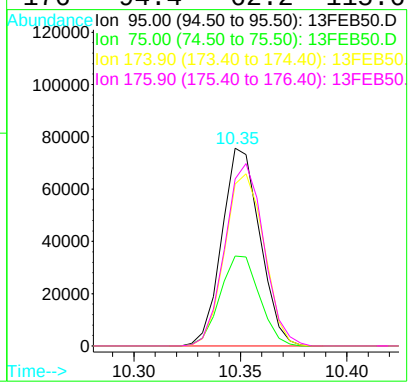



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB50.D
Acq: 14 Feb 2017 1:29 am

Tgt Ion: 95 Resp: 94148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 47.0 | 32.6 | 60.5 |
| 174 | 90.0 | 60.9 | 113.1 |
| 176 | 94.4 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB50.D Vial: 50
Acq On : 14 Feb 2017 1:29 am Operator: MGC
Sample : 1703480-18 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:56 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 200429 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 268335 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.63 | 119 | 69548 | 10.00 | ug/L | 0.00 |

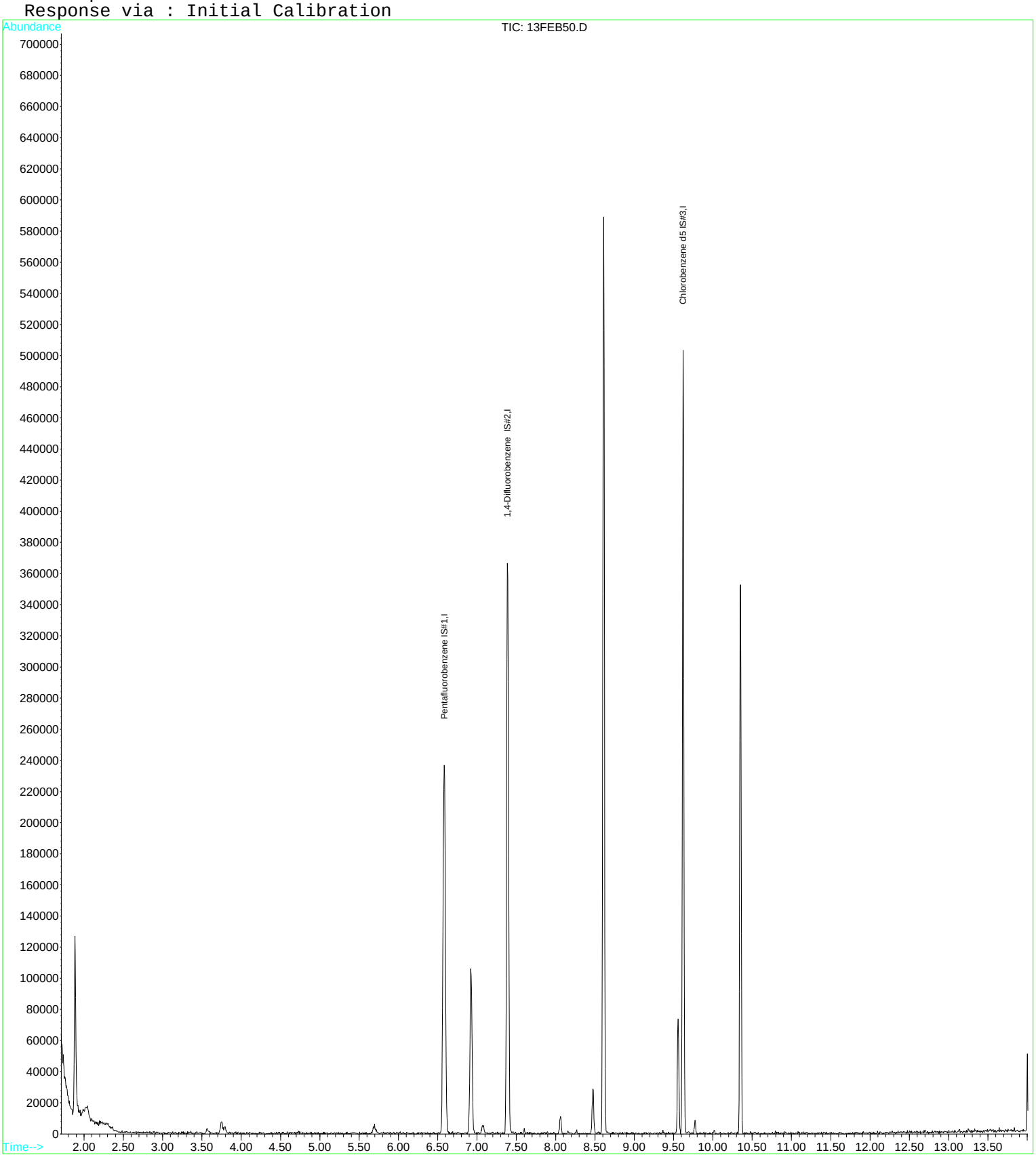
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB50.D Vial: 50
Acq On : 14 Feb 2017 1:29 am Operator: MGC
Sample : 1703480-18 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:56 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB19.D Vial: 19
Acq On : 13 Feb 2017 1:30 pm Operator: MGC
Sample : 1703480-19 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:07 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

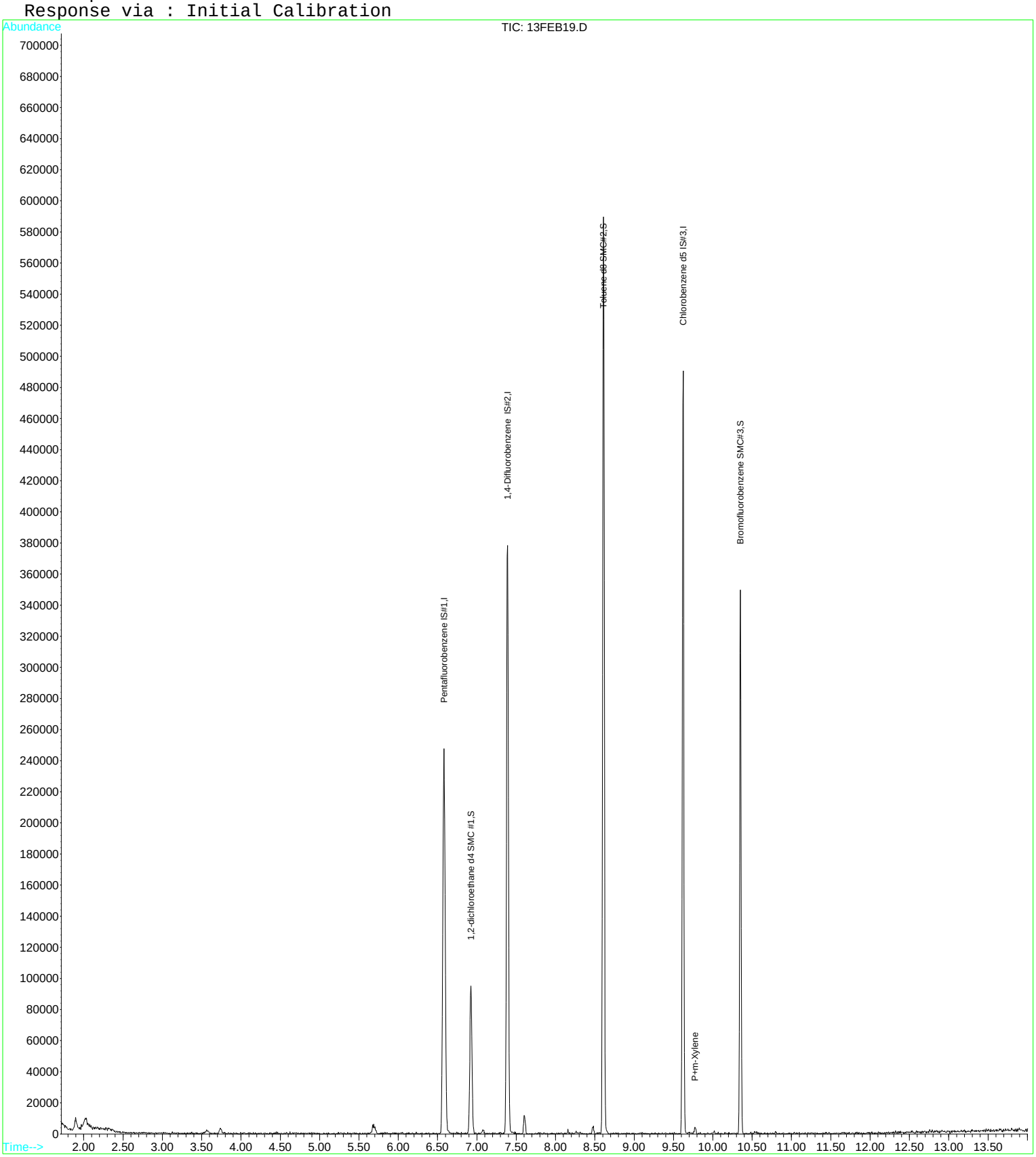
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 215046 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279390 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66698 | 10.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 64224 | 10.09 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 100.90% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 309946 | 9.75 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.50% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87124 | 9.47 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 94.70% | | | | | | |
| Target Compounds | | | | | | Qvalue |
| 43) P+m-Xylene | 9.77 | 106 | 1556 | 0.12 | ug/L # | 77 |

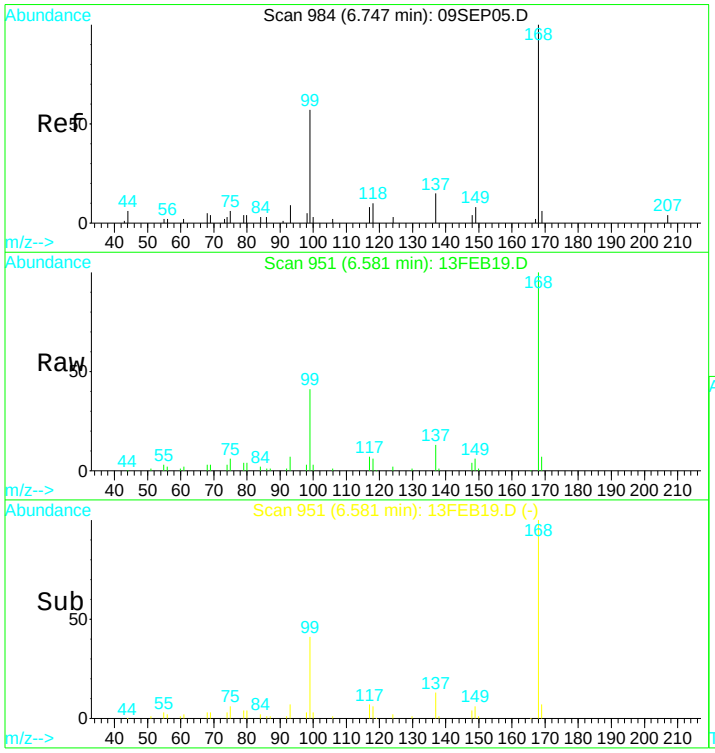
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB19.D Vial: 19
Acq On : 13 Feb 2017 1:30 pm Operator: MGC
Sample : 1703480-19 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:07 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

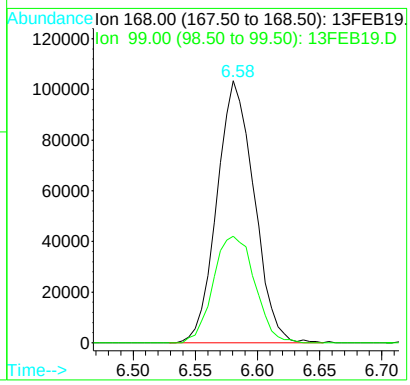


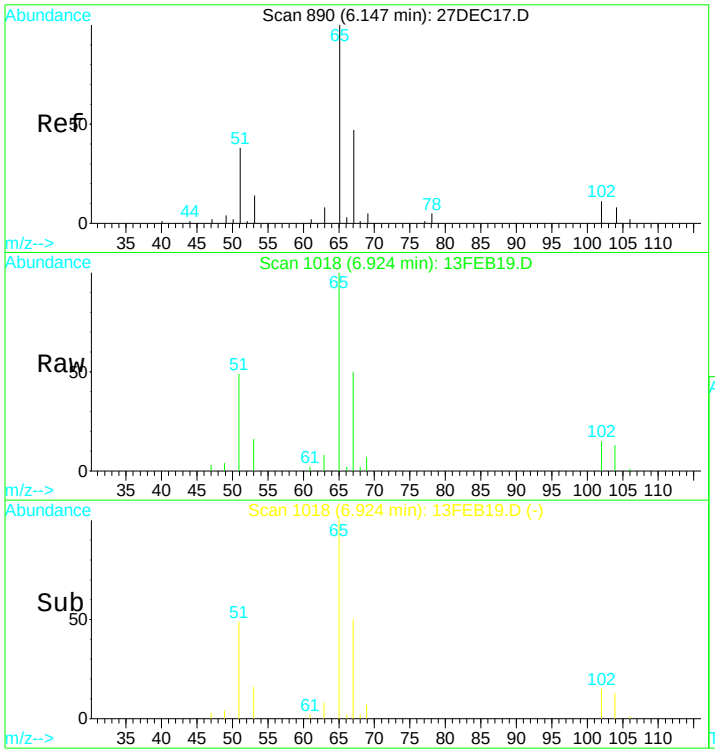



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB19.D
Acq: 13 Feb 2017 1:30 pm

Tgt Ion:168 Resp: 215046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.3 | 305.1 | 566.7# |

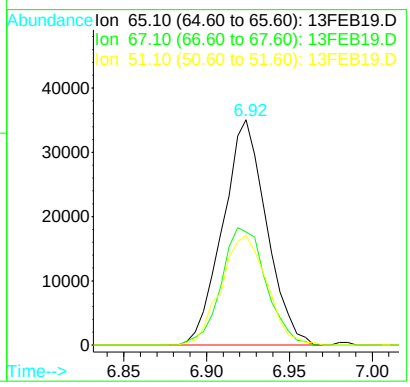


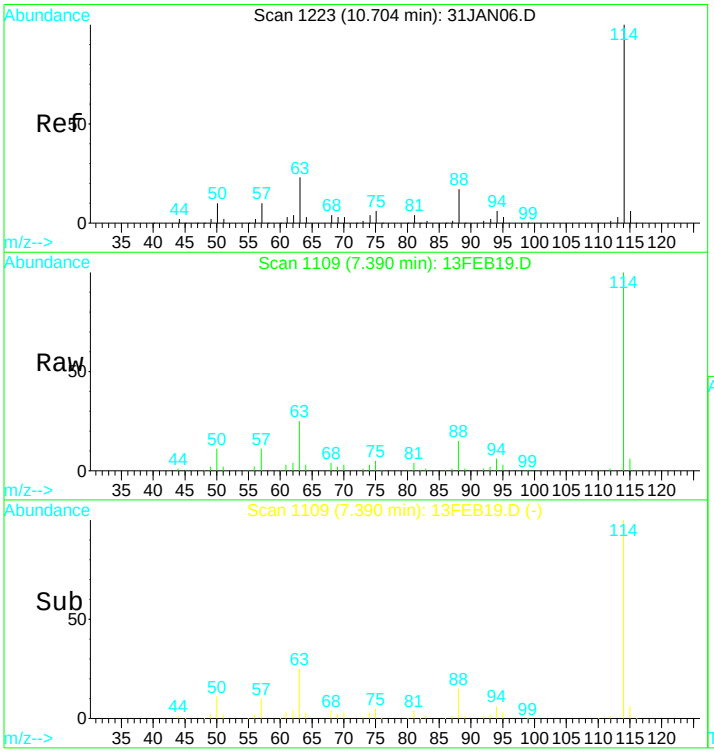




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. 0.00 min
Lab File: 13FEB19.D
Acq: 13 Feb 2017 1:30 pm

Tgt Ion: 65 Resp: 64224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.3 | 38.4 | 71.4 |
| 51 | 51.0 | 1006.3 | 1868.8# |

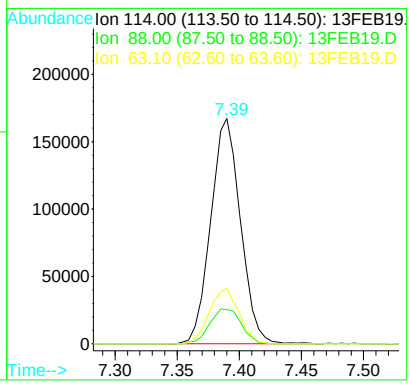


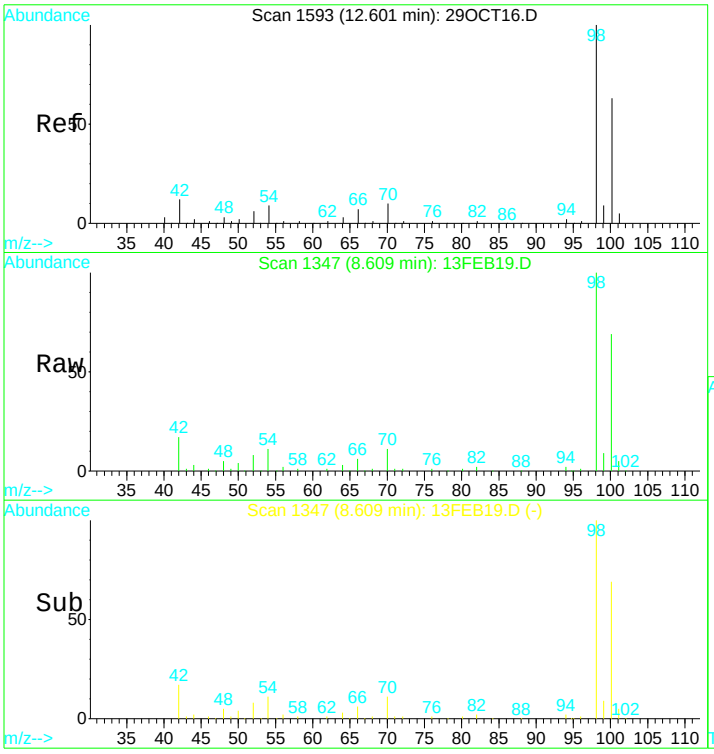



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 13FEB19.D
Acq: 13 Feb 2017 1:30 pm

Tgt Ion:114 Resp: 279390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.5 | 12.0 | 22.2 |
| 63 | 24.3 | 16.9 | 31.5 |

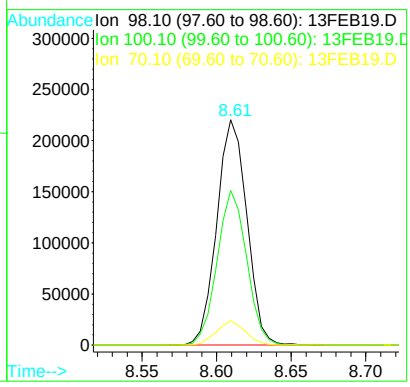


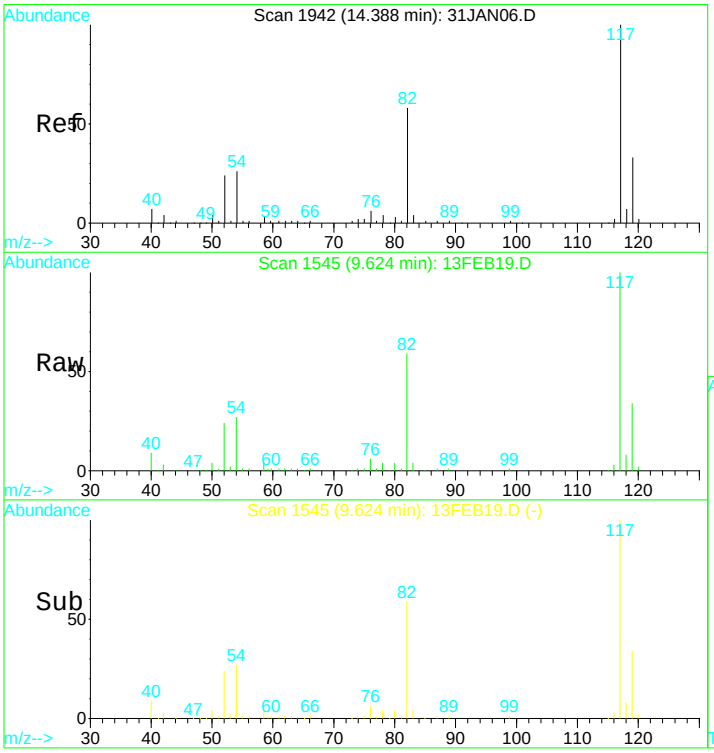




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB19.D
Acq: 13 Feb 2017 1:30 pm

Tgt Ion: 98 Resp: 309946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.4 | 47.0 | 87.4 |
| 70 | 10.4 | 7.3 | 13.7 |

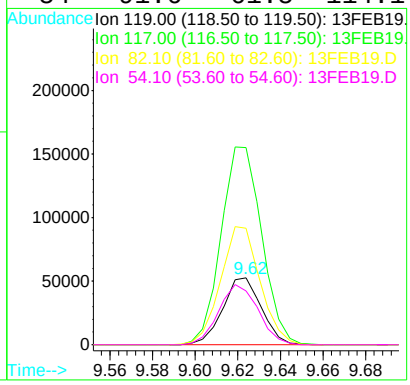


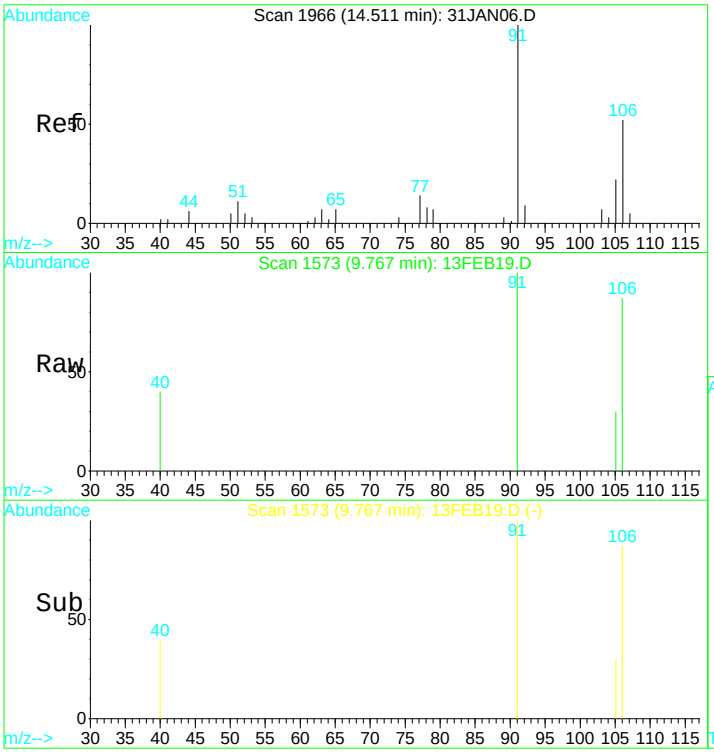



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. 0.00 min
Lab File: 13FEB19.D
Acq: 13 Feb 2017 1:30 pm

Tgt Ion:119 Resp: 66698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 309.5 | 220.4 | 409.4 |
| 82 | 180.2 | 123.9 | 230.1 |
| 54 | 91.6 | 61.5 | 114.1 |

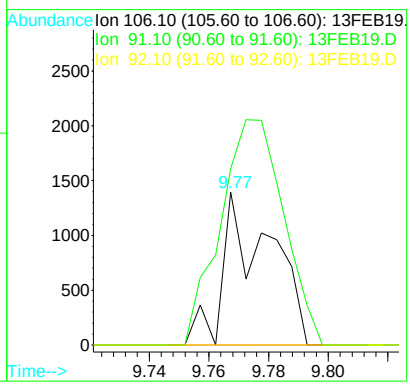


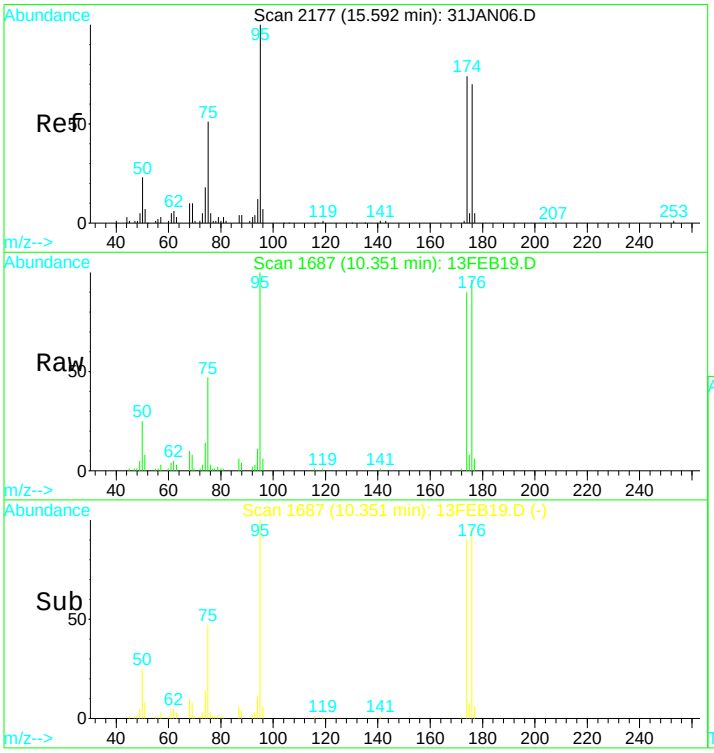




#43
P+m-Xylene
Concen: 0.12 ug/L
RT: 9.77 min Scan# 1573
Delta R.T. -0.01 min
Lab File: 13FEB19.D
Acq: 13 Feb 2017 1:30 pm

Tgt Ion:106 Resp: 1556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 195.0 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

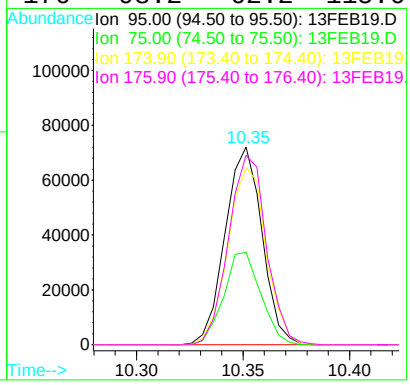





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB19.D
Acq: 13 Feb 2017 1:30 pm

Tgt Ion: 95 Resp: 87124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 47.1 | 32.6 | 60.5 |
| 174 | 93.0 | 60.9 | 113.1 |
| 176 | 98.2 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB19.D Vial: 19
Acq On : 13 Feb 2017 1:30 pm Operator: MGC
Sample : 1703480-19 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:08 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 215046 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279390 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66698 | 10.00 | ug/L | 0.00 |

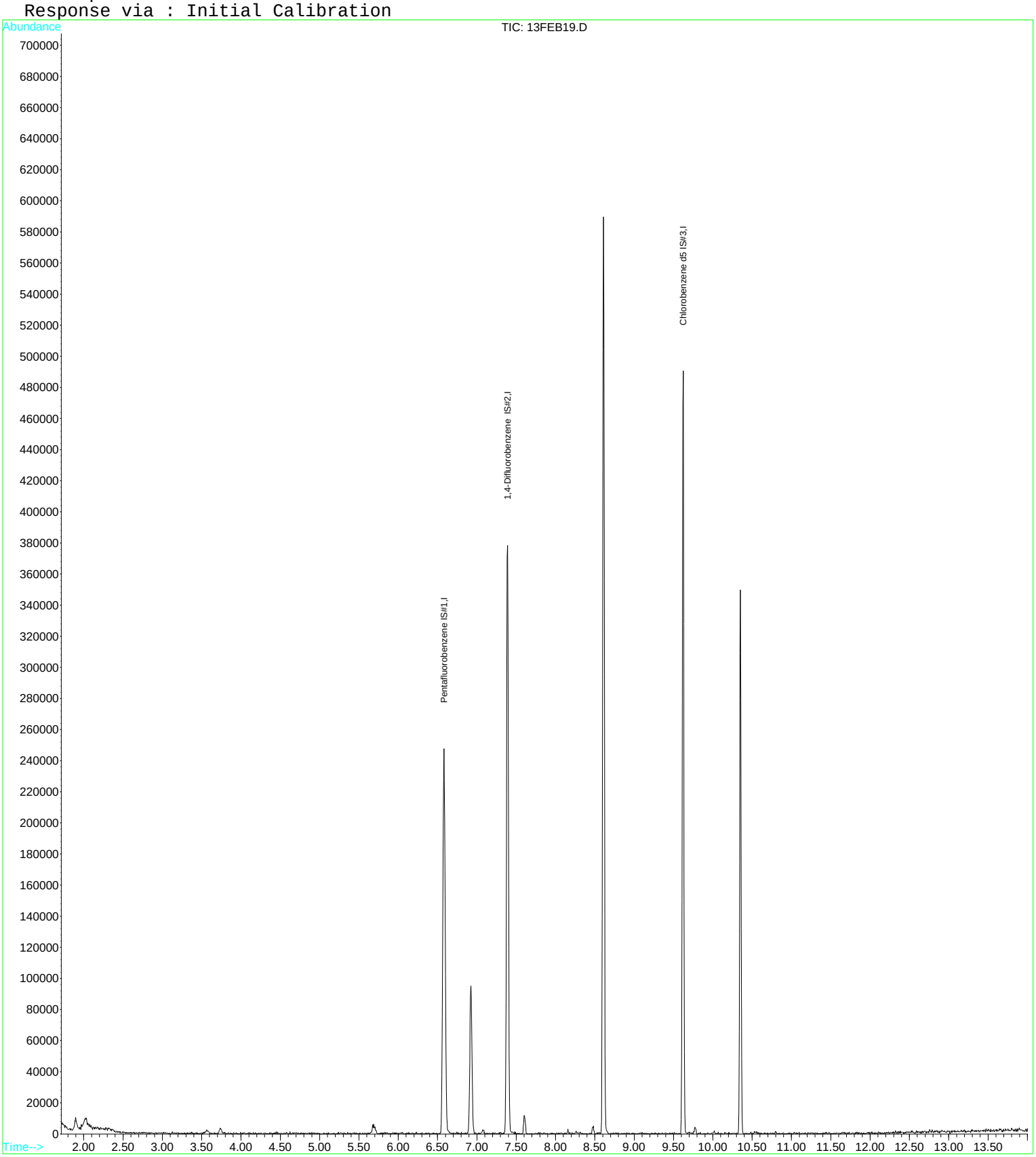
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB19.D Vial: 19
Acq On : 13 Feb 2017 1:30 pm Operator: MGC
Sample : 1703480-19 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:08 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB51.D Vial: 51
Acq On : 14 Feb 2017 1:52 am Operator: MGC
Sample : 1703480-20 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:57 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 203063 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272026 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66439 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 72542 | 12.07 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 120.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 300555 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.10% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 96958 | 10.58 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 105.80% | | | |

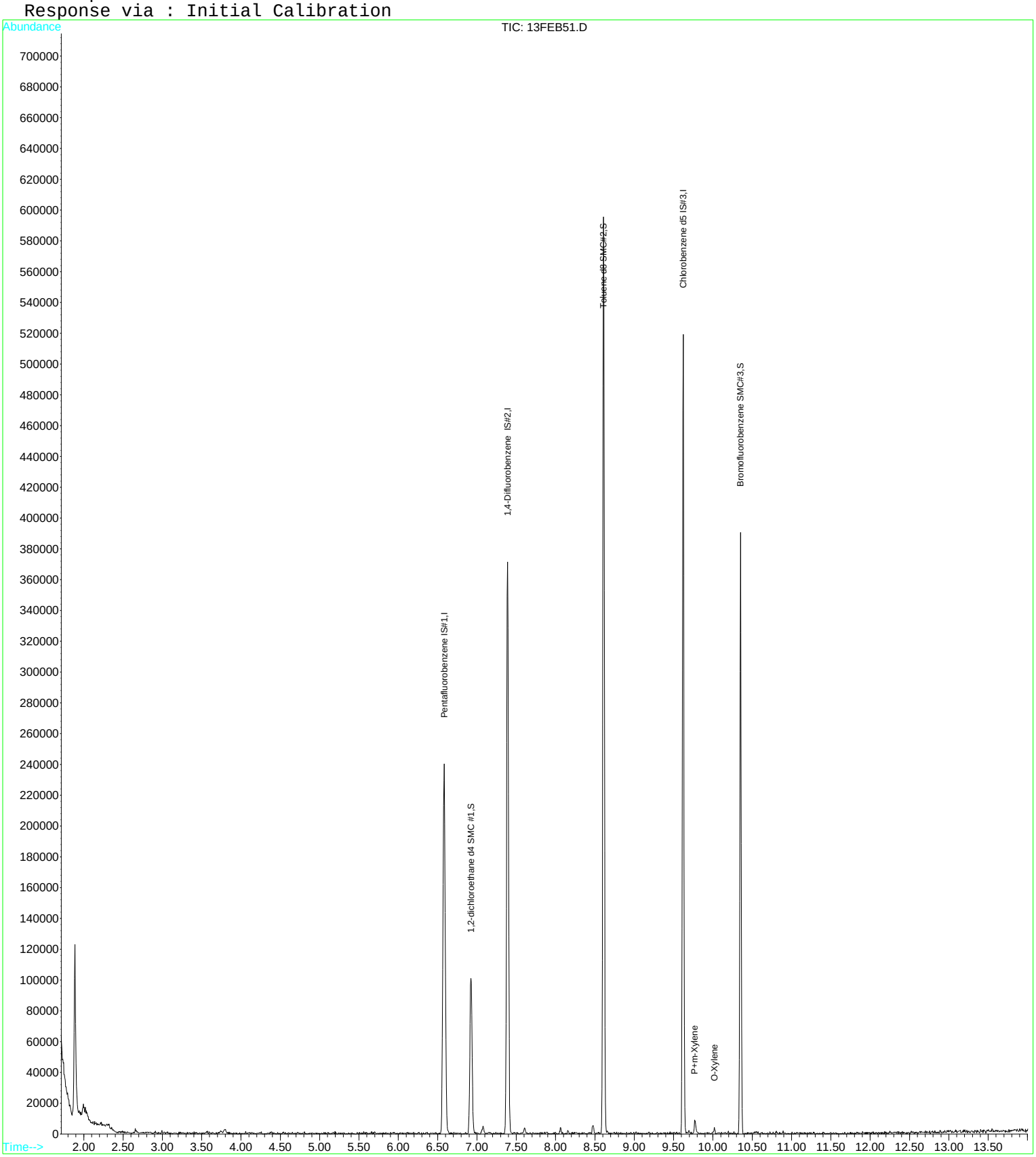
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 43) P+m-Xylene | 9.77 | 106 | 2553 | 0.19 | ug/L # | 52 |
| 44) O-Xylene | 10.02 | 106 | 1099 | 0.09 | ug/L # | 73 |

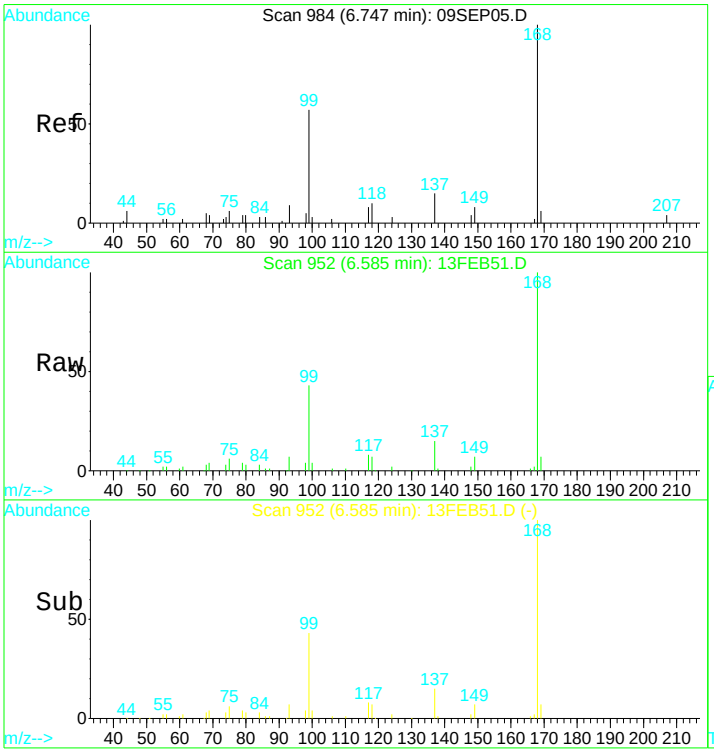
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB51.D Vial: 51
Acq On : 14 Feb 2017 1:52 am Operator: MGC
Sample : 1703480-20 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:57 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

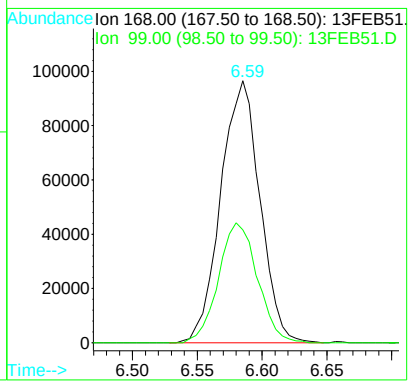


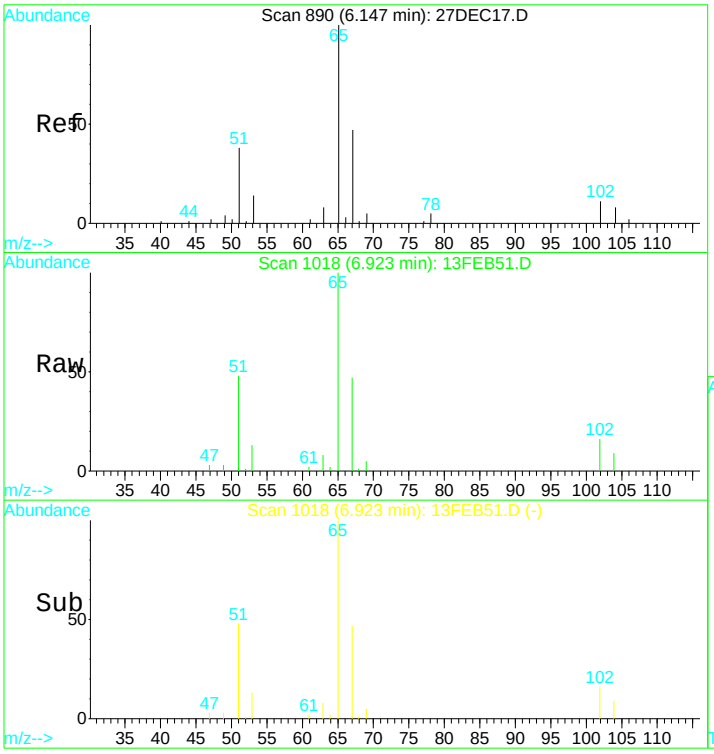



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.59 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion:168 Resp: 203063

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.4 | 305.1 | 566.7# |

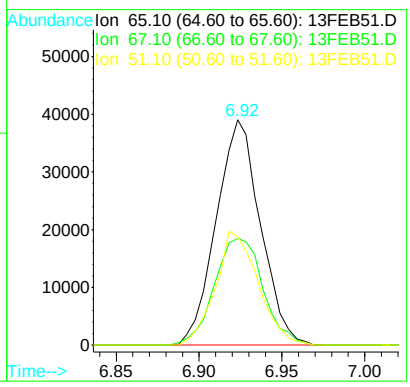


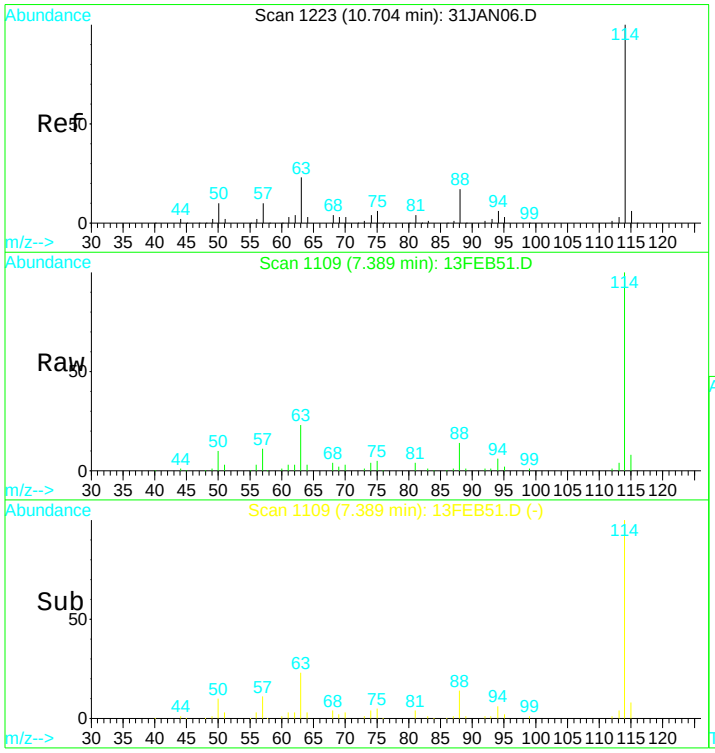




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion: 65 Resp: 72542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.0 | 38.4 | 71.4 |
| 51 | 48.6 | 1006.3 | 1868.8# |

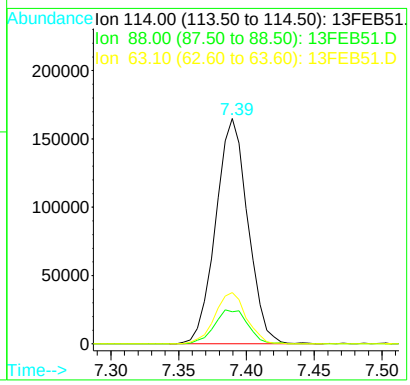


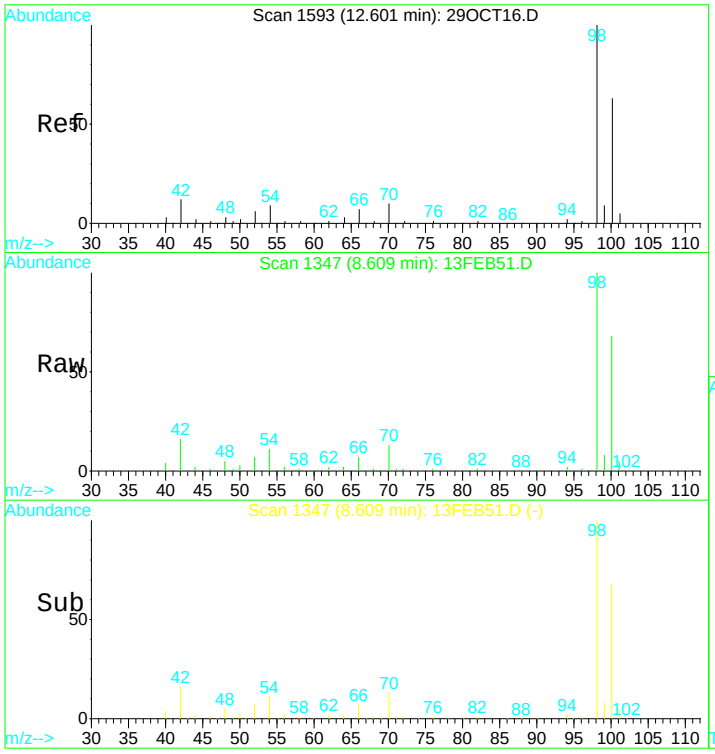



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion:114 Resp: 272026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 15.8 | 12.0 | 22.2 |
| 63 | 22.4 | 16.9 | 31.5 |

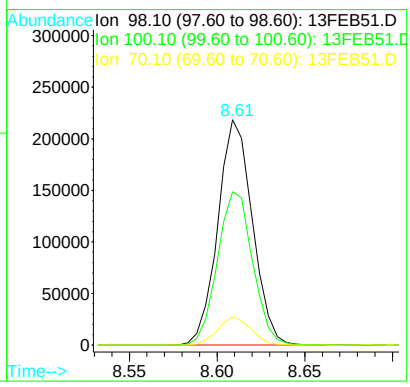


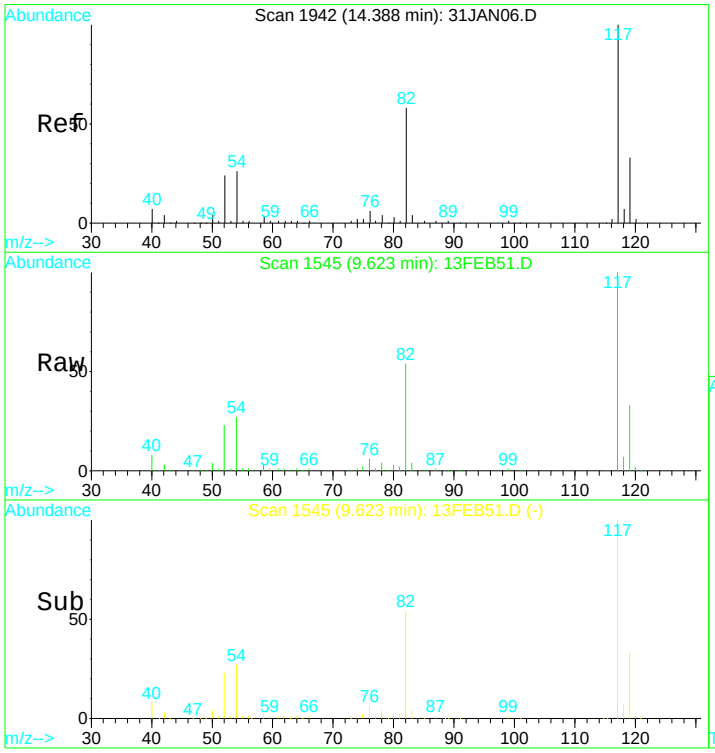




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion: 98 Resp: 300555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 69.2 | 47.0 | 87.4 |
| 70 | 12.1 | 7.3 | 13.7 |

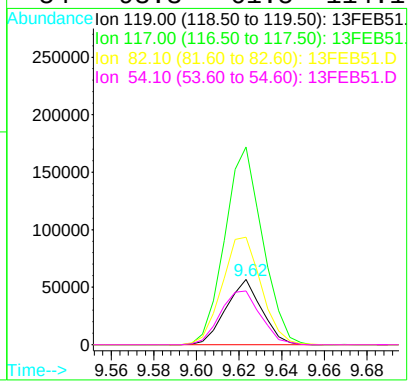


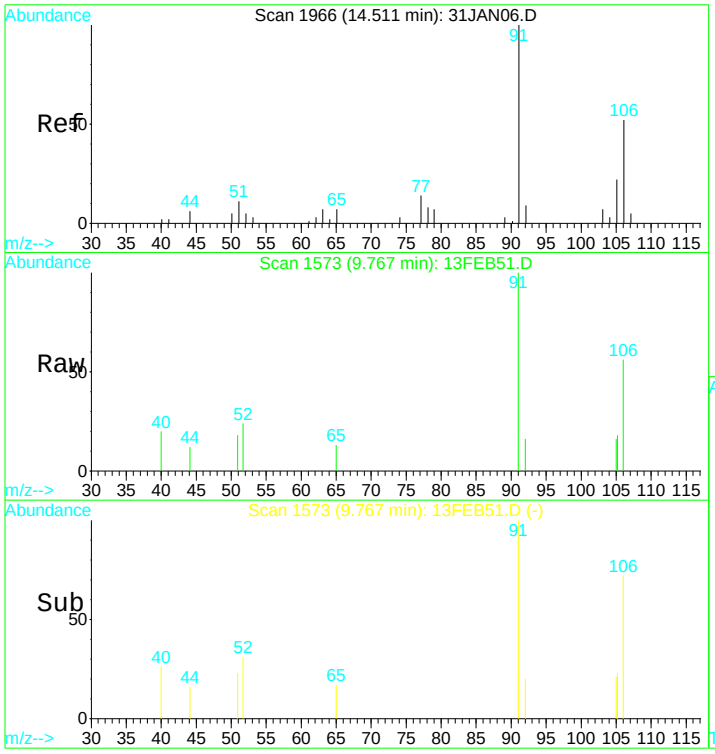



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion:119 Resp: 66439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 318.5 | 220.4 | 409.4 |
| 82 | 181.0 | 123.9 | 230.1 |
| 54 | 93.3 | 61.5 | 114.1 |

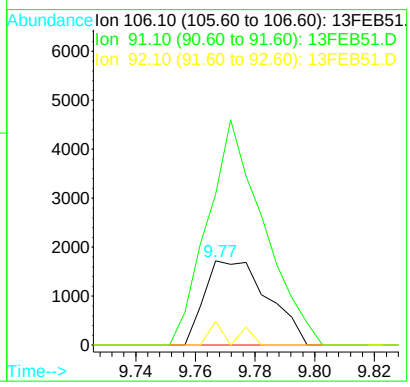


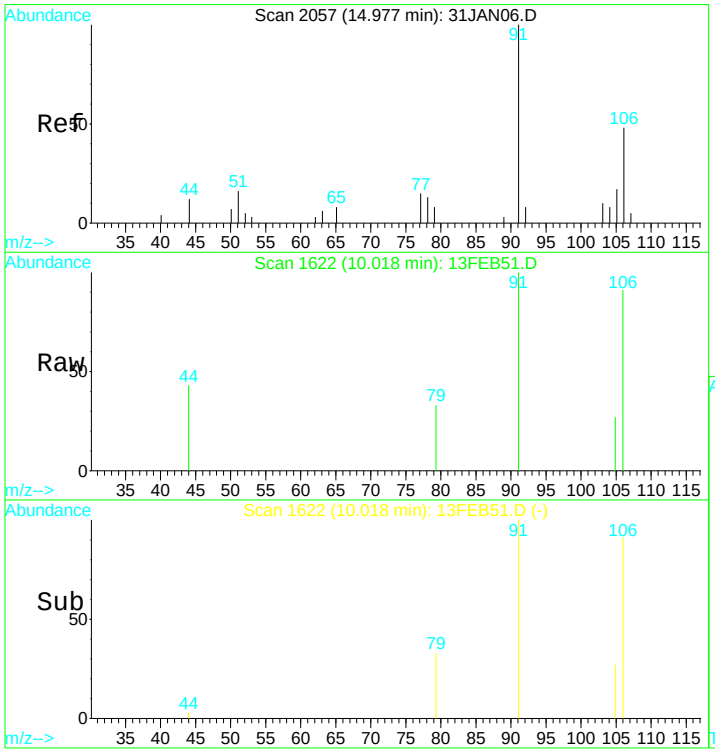




#43
P+m-Xylene
Concen: 0.19 ug/L
RT: 9.77 min Scan# 1573
Delta R.T. -0.01 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion:106 Resp: 2553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 235.8 | 116.4 | 216.2# |
| 92 | 10.3 | 10.8 | 20.0# |

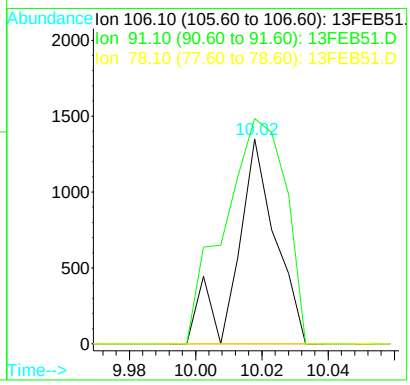


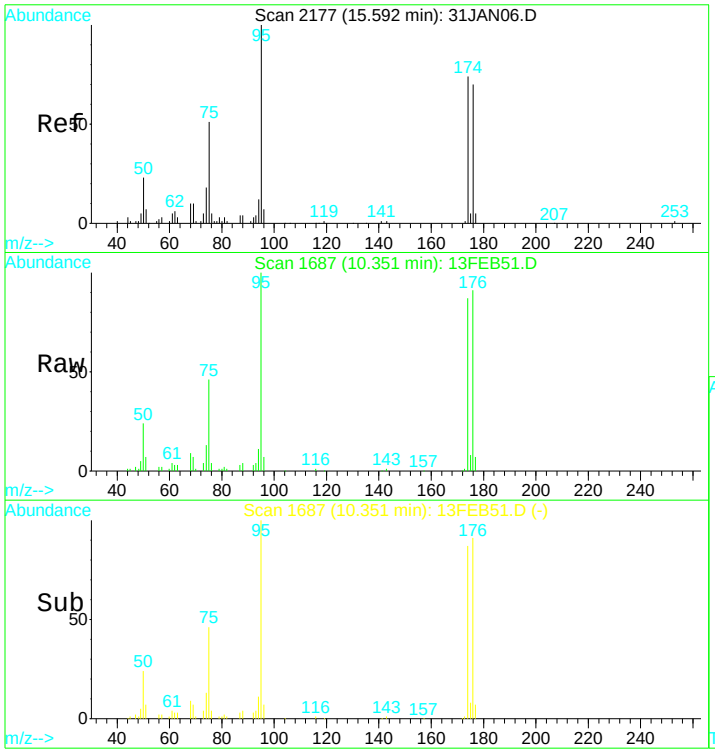



#44
O-Xylene
Concen: 0.09 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion:106 Resp: 1099

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 174.8 | 124.3 | 230.9 |
| 78 | 0.0 | 51.7 | 95.9# |

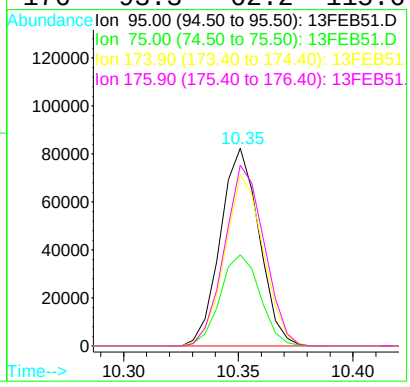



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB51.D
Acq: 14 Feb 2017 1:52 am

Tgt Ion: 95 Resp: 96958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 47.4 | 32.6 | 60.5 |
| 174 | 86.1 | 60.9 | 113.1 |
| 176 | 93.3 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB51.D Vial: 51
Acq On : 14 Feb 2017 1:52 am Operator: MGC
Sample : 1703480-20 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:58 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 203063 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272026 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66439 | 10.00 ug/L | 0.00 |

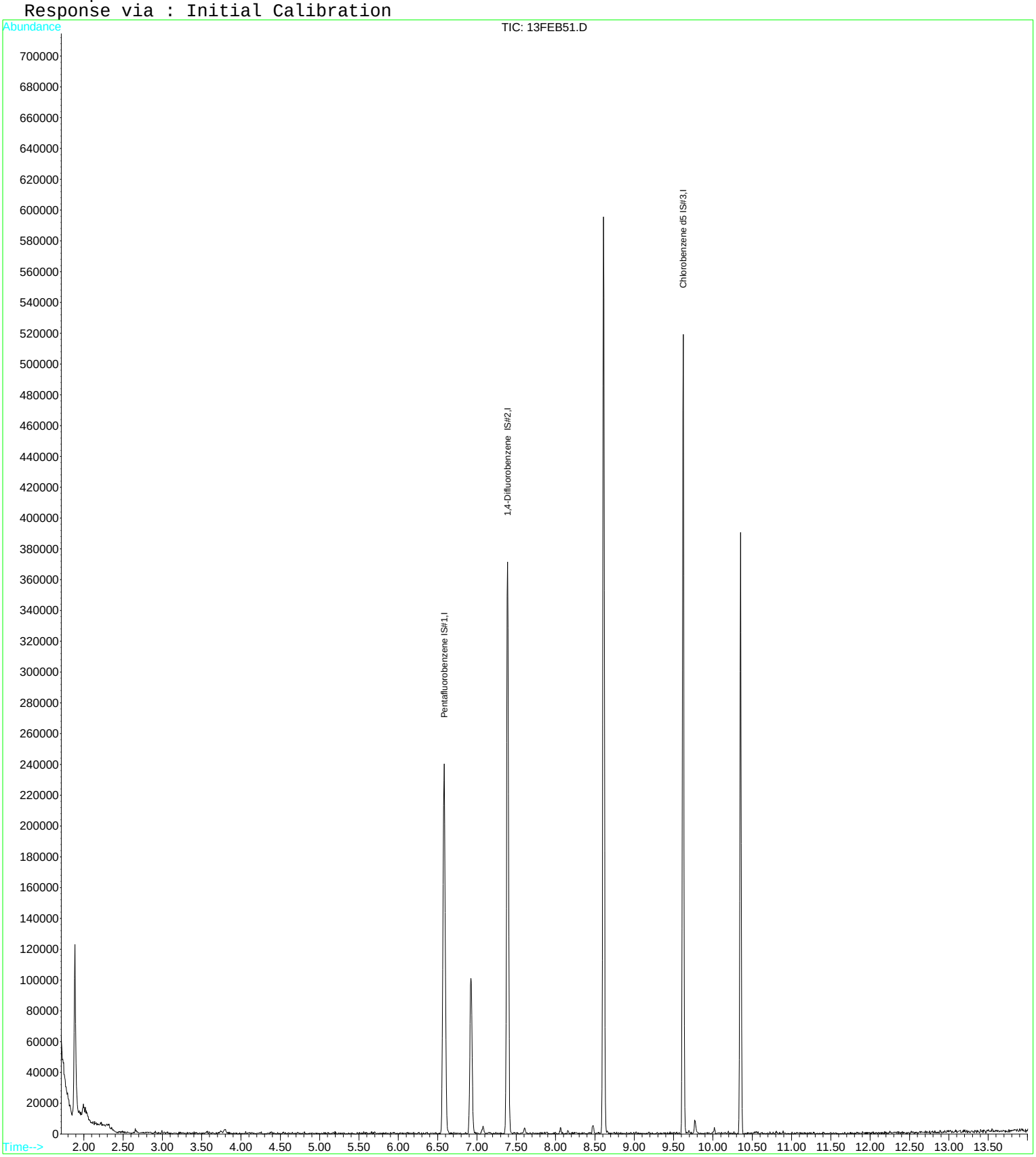
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB51.D Vial: 51
Acq On : 14 Feb 2017 1:52 am Operator: MGC
Sample : 1703480-20 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:58 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB21.D Vial: 21
Acq On : 13 Feb 2017 2:16 pm Operator: MGC
Sample : 1703480-21 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:09 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 213224 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277471 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 70397 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 71026 | 11.26 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 112.60% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 316945 | 10.04 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 100.40% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 96758 | 9.97 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 99.70% | | | | | | |

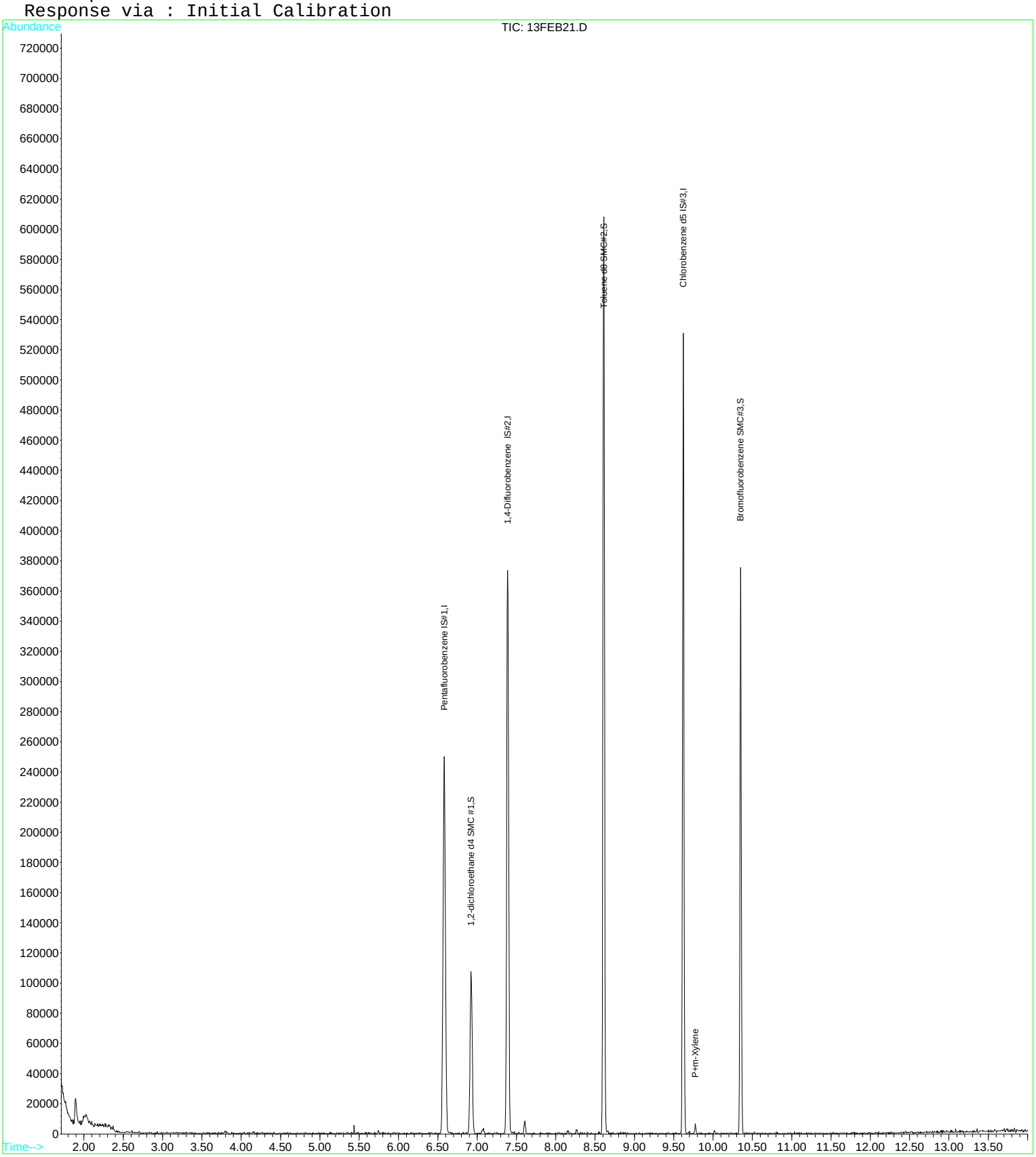
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 43) P+m-Xylene | 9.78 | 106 | 1240 | 0.09 | ug/L | # 49 |

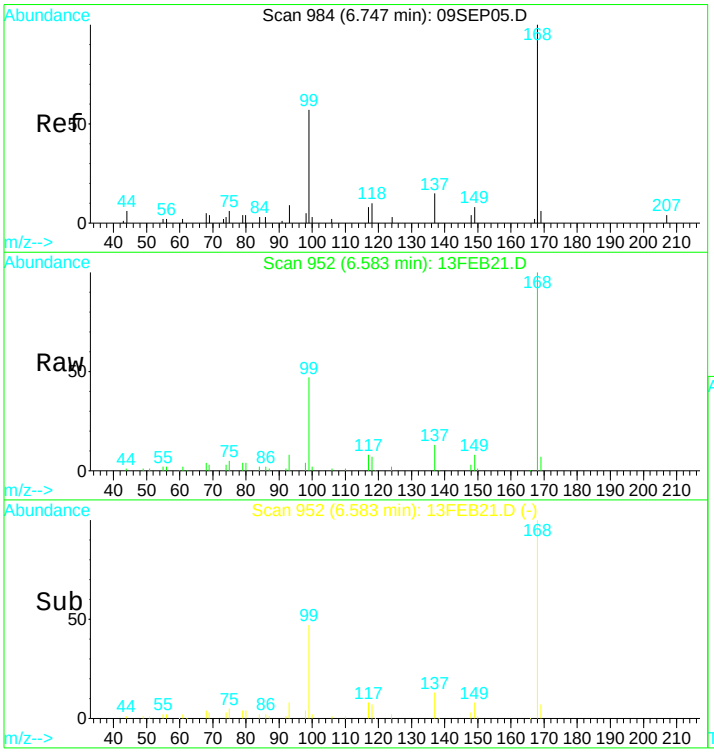
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB21.D Vial: 21
Acq On : 13 Feb 2017 2:16 pm Operator: MGC
Sample : 1703480-21 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:09 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

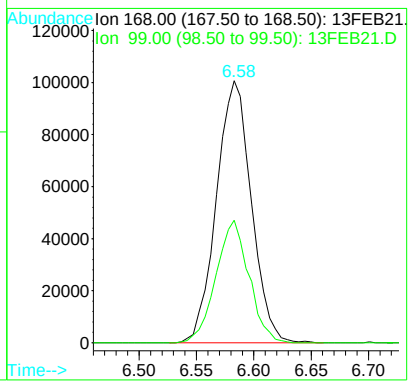


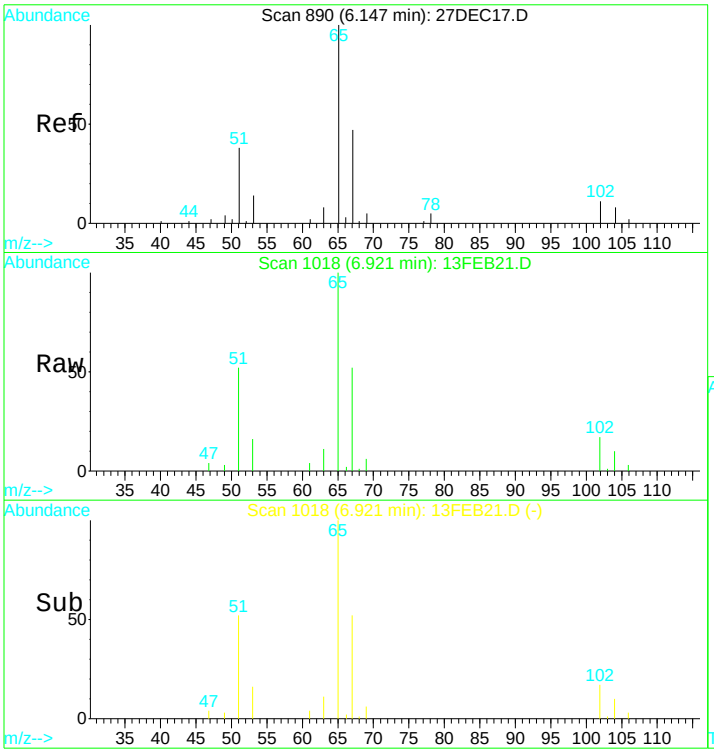



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB21.D
Acq: 13 Feb 2017 2:16 pm

Tgt Ion:168 Resp: 213224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 44.1 | 305.1 | 566.7# |

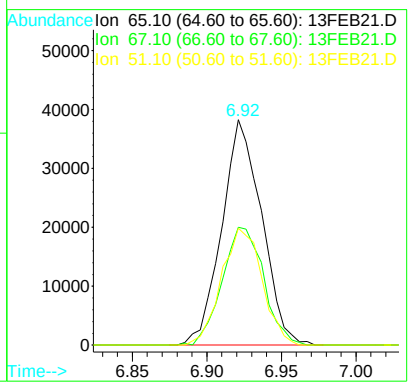


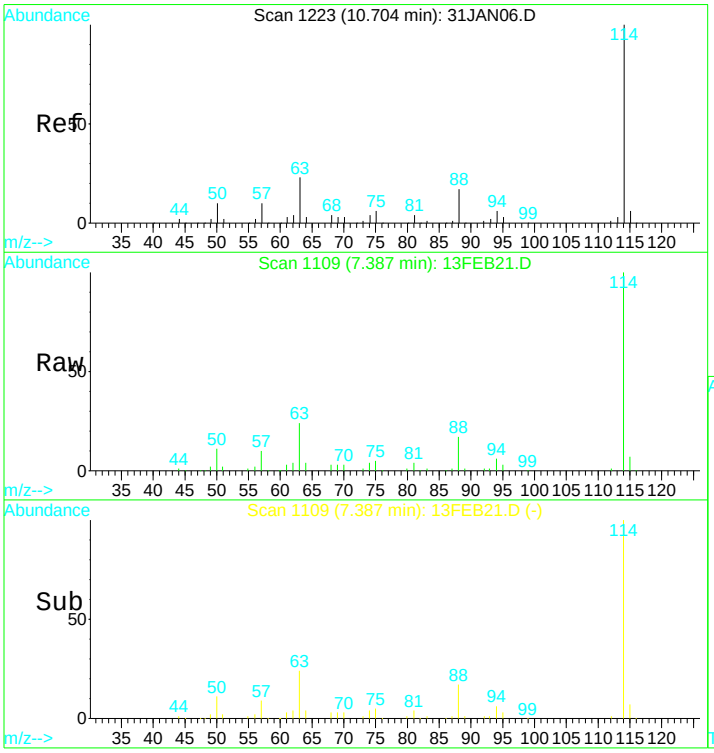




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB21.D
Acq: 13 Feb 2017 2:16 pm

Tgt Ion: 65 Resp: 71026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.4 | 38.4 | 71.4 |
| 51 | 52.8 | 1006.3 | 1868.8# |

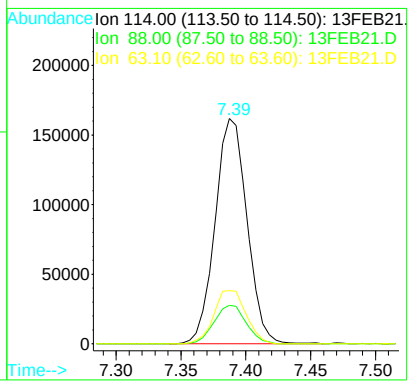


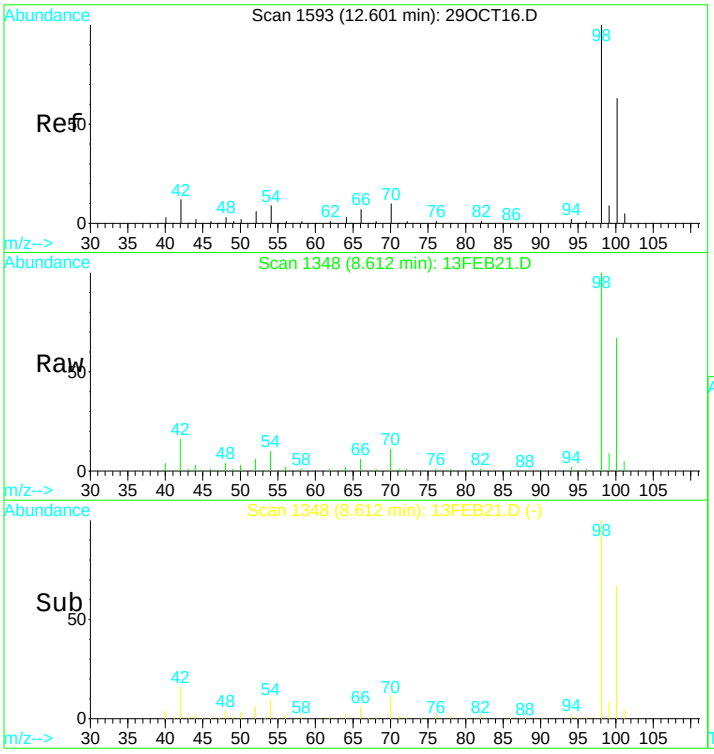



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB21.D
Acq: 13 Feb 2017 2:16 pm

Tgt Ion:114 Resp: 277471

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.2 | 12.0 | 22.2 |
| 63 | 24.0 | 16.9 | 31.5 |

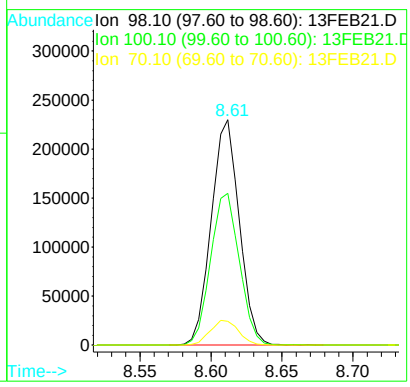


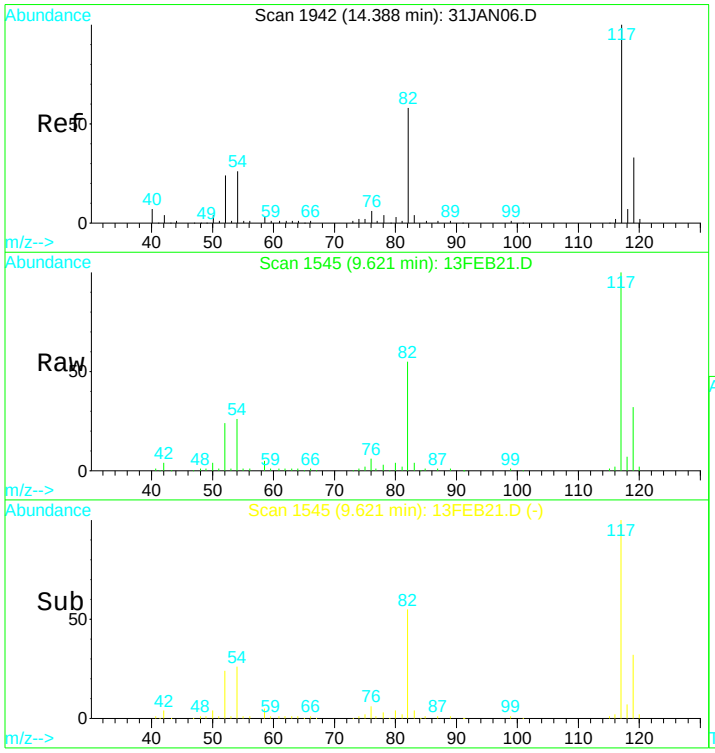




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB21.D
Acq: 13 Feb 2017 2:16 pm

Tgt Ion: 98 Resp: 316945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.9 | 47.0 | 87.4 |
| 70 | 11.2 | 7.3 | 13.7 |

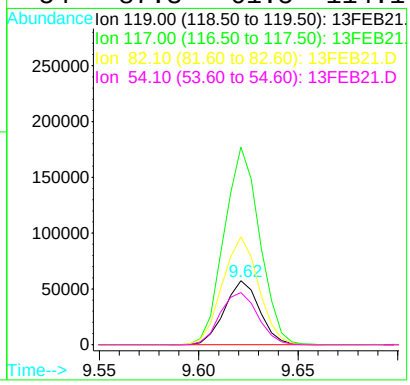


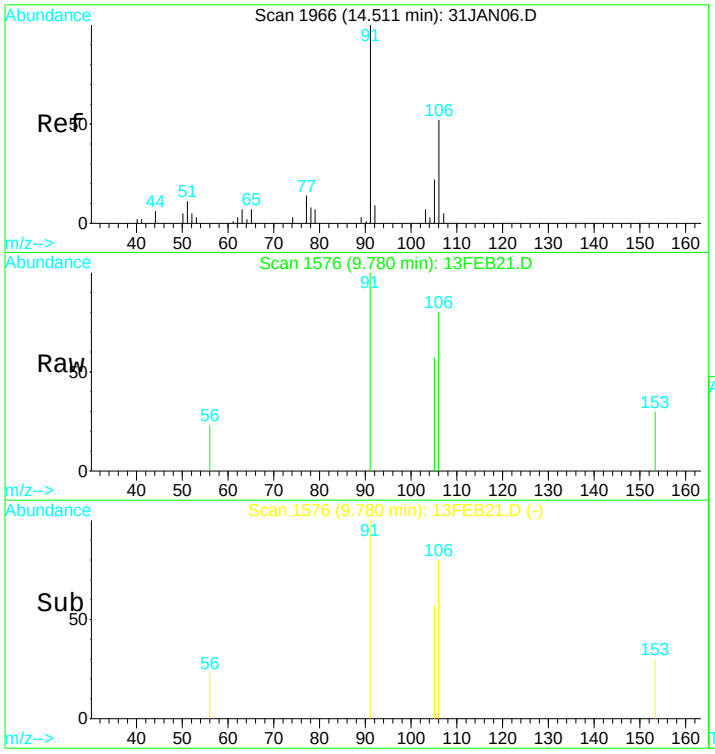



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB21.D
Acq: 13 Feb 2017 2:16 pm

Tgt Ion:119 Resp: 70397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 311.8 | 220.4 | 409.4 |
| 82 | 173.5 | 123.9 | 230.1 |
| 54 | 87.3 | 61.5 | 114.1 |

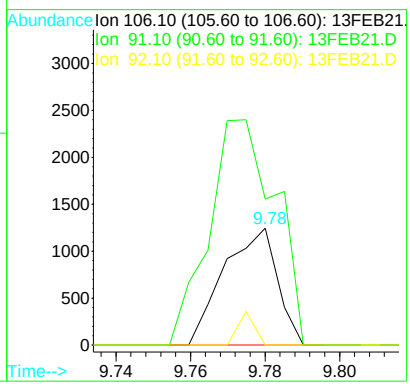


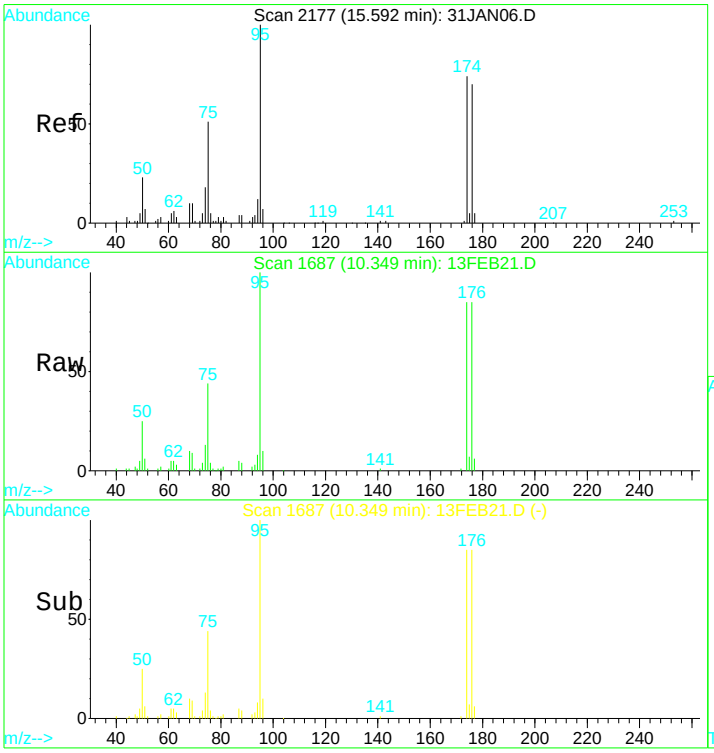




#43
P+m-Xylene
Concen: 0.09 ug/L
RT: 9.78 min Scan# 1576
Delta R.T. 0.00 min
Lab File: 13FEB21.D
Acq: 13 Feb 2017 2:16 pm

Tgt Ion:106 Resp: 1240

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 239.6 | 116.4 | 216.2# |
| 92 | 8.9 | 10.8 | 20.0# |

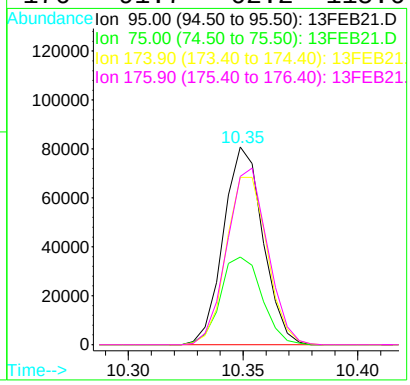





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB21.D
Acq: 13 Feb 2017 2:16 pm

Tgt Ion: 95 Resp: 96758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.7 | 32.6 | 60.5 |
| 174 | 87.8 | 60.9 | 113.1 |
| 176 | 91.7 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB21.D Vial: 21
Acq On : 13 Feb 2017 2:16 pm Operator: MGC
Sample : 1703480-21 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:10 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 213224 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277471 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 70397 | 10.00 | ug/L | 0.00 |

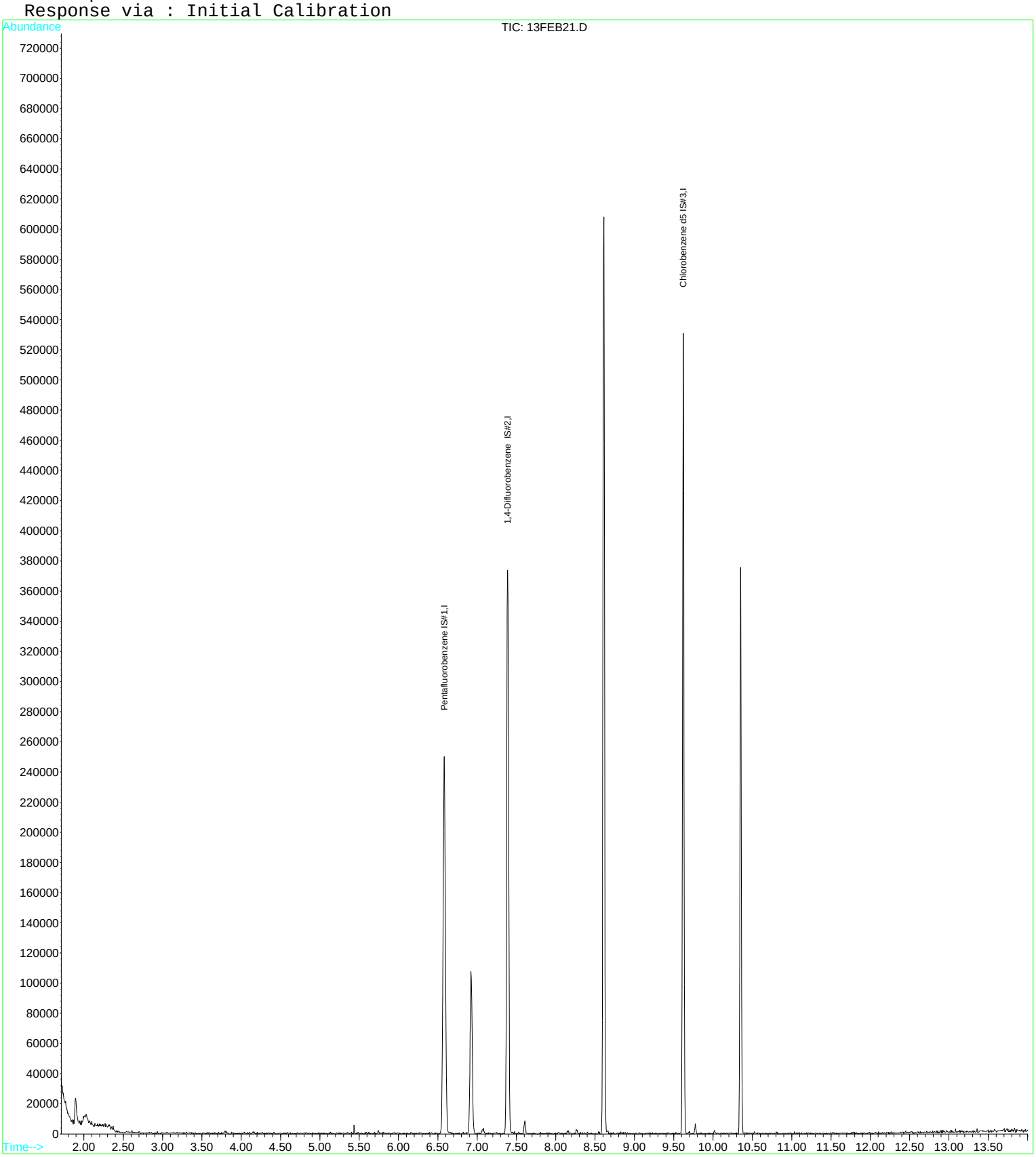
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB21.D Vial: 21
Acq On : 13 Feb 2017 2:16 pm Operator: MGC
Sample : 1703480-21 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:10 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB22.D Vial: 22
Acq On : 13 Feb 2017 2:40 pm Operator: MGC
Sample : 1703480-22 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208366 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 274186 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 70388 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 75049 | 12.17 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 121.70% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 314537 | 10.08 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 100.80% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 101083 | 10.41 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 104.10% | | | | | | |

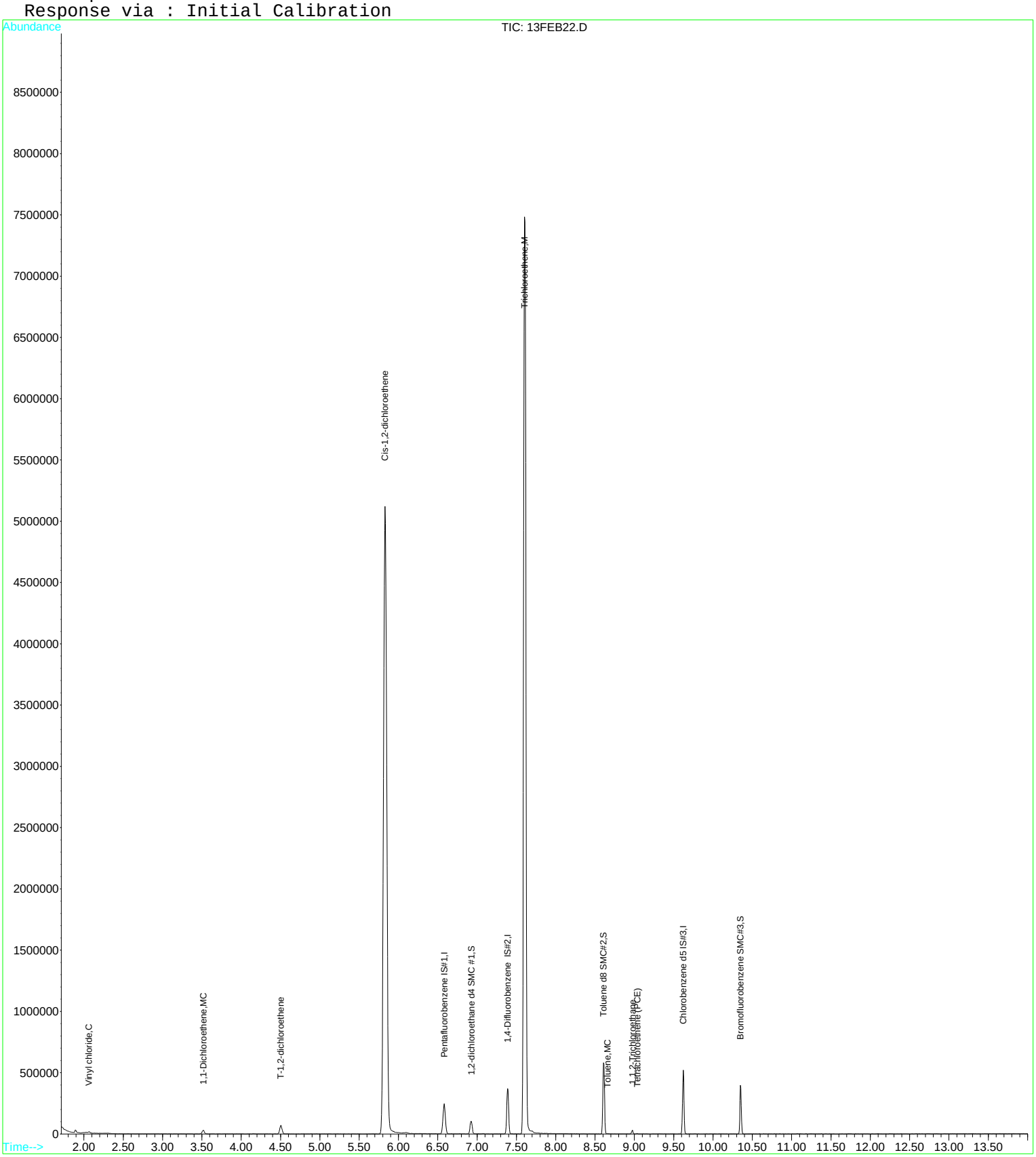
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.06 | 62 | 8648 | 0.70 | ug/L # | 15 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 23681 | 1.46 | ug/L | 97 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 28403 | 3.03 | ug/L | 97 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 3177816 | 326.80 | ug/L | 85 |
| 25) Trichloroethene | 7.60 | 130 | 2585921 | 289.68 | ug/L | 97 |
| 32) Toluene | 8.66 | 92 | 1071 | 0.05 | ug/L # | 94 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 7565 | 1.80 | ug/L | 94 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 1350 | 0.14 | ug/L # | 54 |

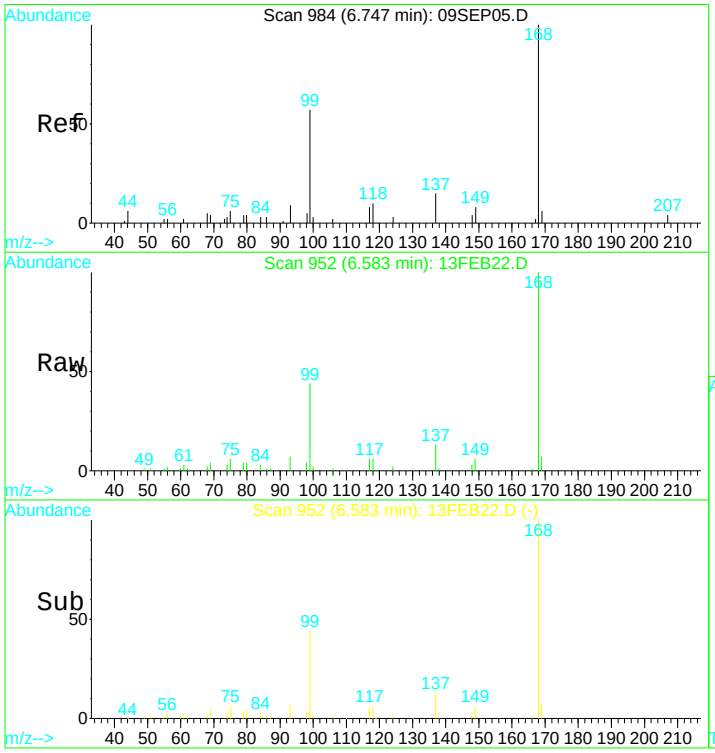
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB22.D Vial: 22
Acq On : 13 Feb 2017 2:40 pm Operator: MGC
Sample : 1703480-22 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:11 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

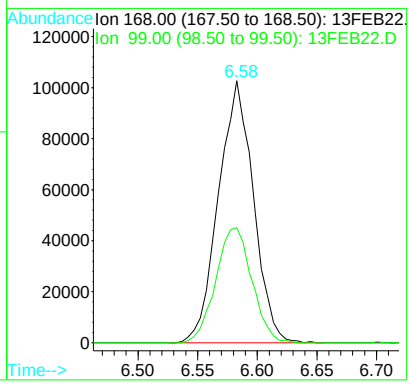


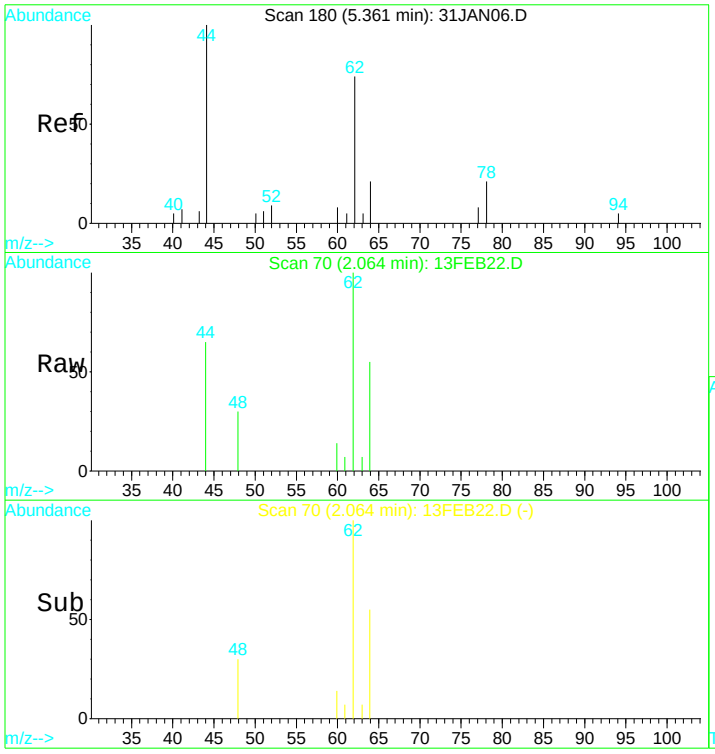



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion:168 Resp: 208366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.3 | 305.1 | 566.7# |

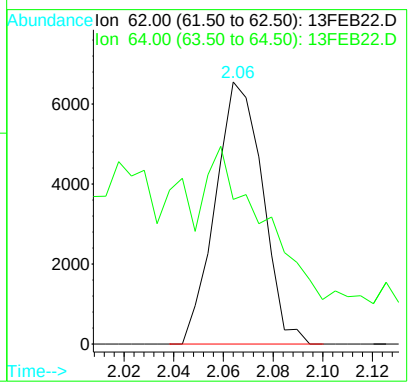


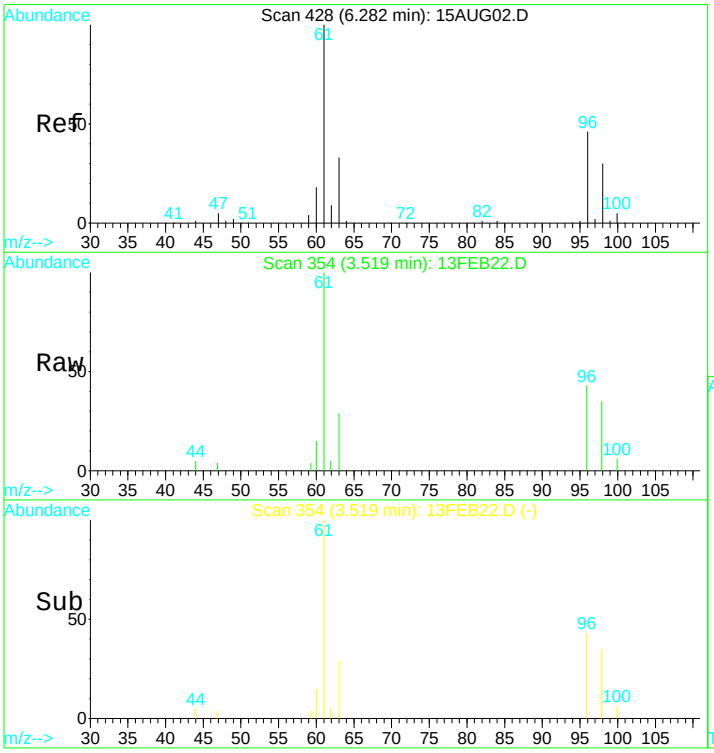




#4
Vinyl chloride
Concen: 0.70 ug/L
RT: 2.06 min Scan# 70
Delta R.T. -0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 62 Resp: 8648

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 79.5 | 22.4 | 41.6# |

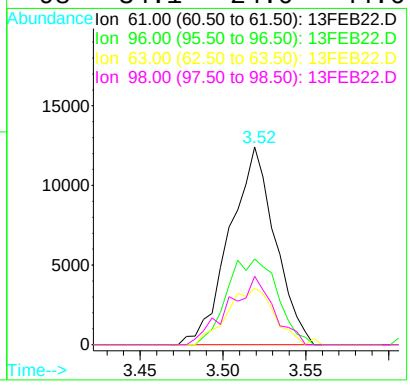


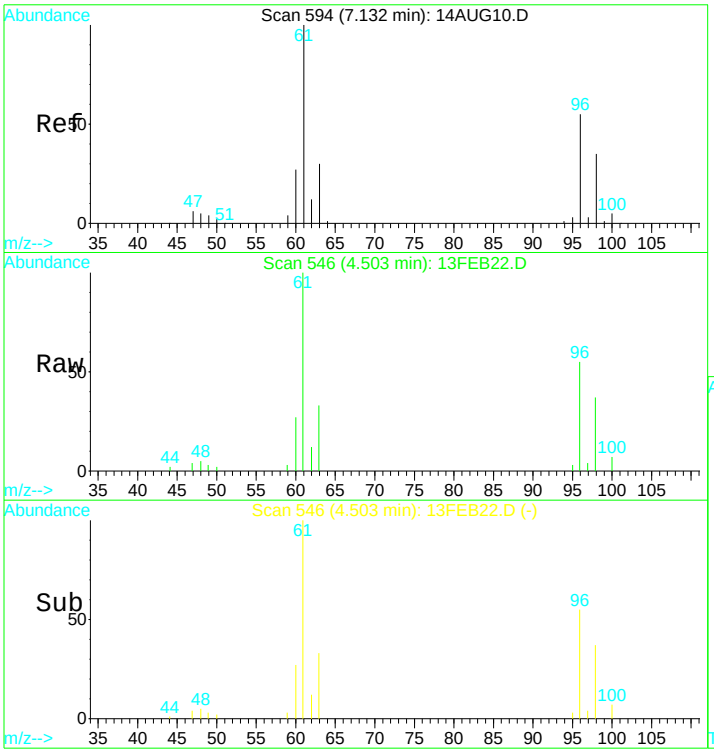



#9
1,1-Dichloroethene
Concen: 1.46 ug/L
RT: 3.52 min Scan# 354
Delta R.T. 0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 61 Resp: 23681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 48.5 | 36.6 | 68.0 |
| 63 | 30.0 | 22.0 | 40.8 |
| 98 | 34.1 | 24.0 | 44.6 |

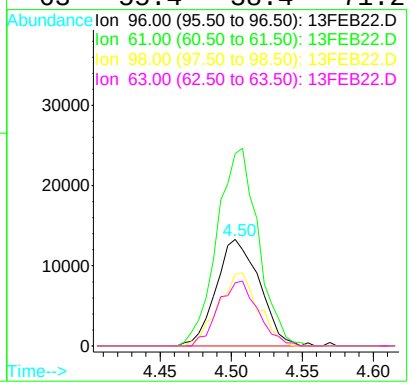


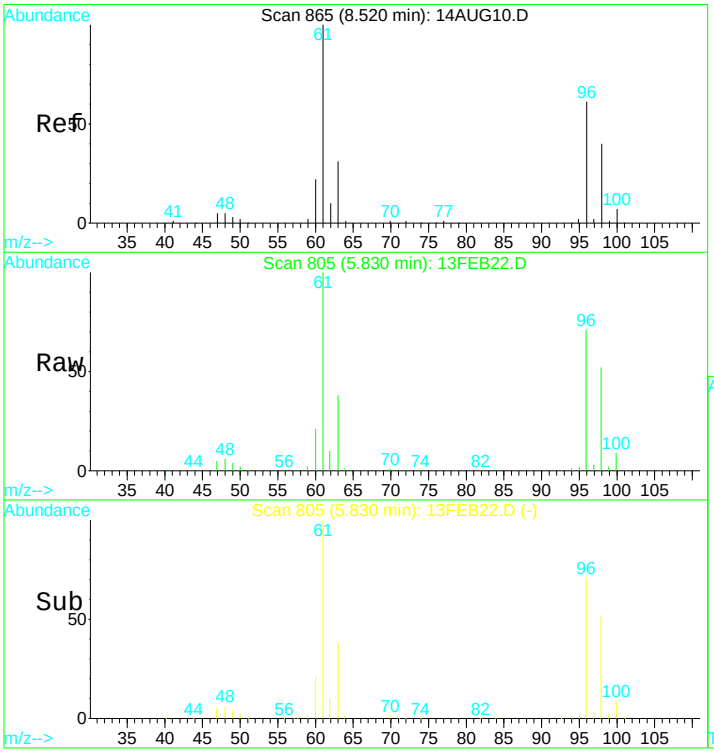




#12
T-1,2-dichloroethene
Concen: 3.03 ug/L
RT: 4.50 min Scan# 546
Delta R.T. -0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 96 Resp: 28403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 175.7 | 119.6 | 222.2 |
| 98 | 62.5 | 46.1 | 85.5 |
| 63 | 55.4 | 38.4 | 71.2 |

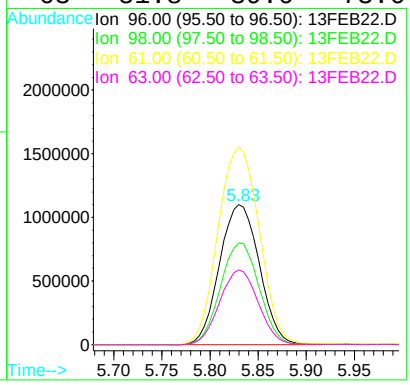


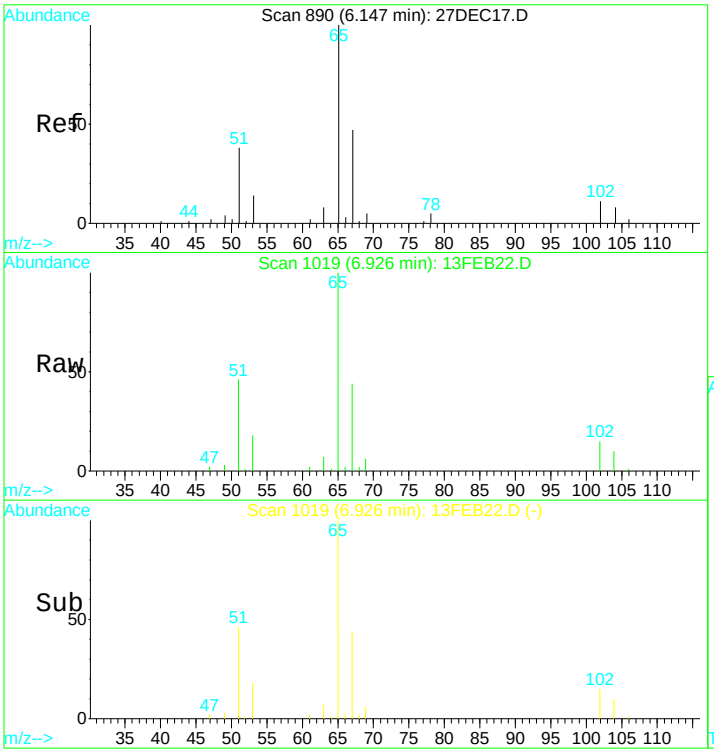



#15
Cis-1,2-dichloroethene
Concen: 326.80 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 96 Resp: 3177816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 70.3 | 46.2 | 85.8 |
| 61 | 146.1 | 122.8 | 228.0 |
| 63 | 51.8 | 39.6 | 73.6 |

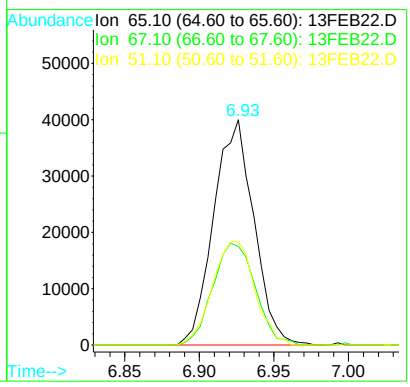


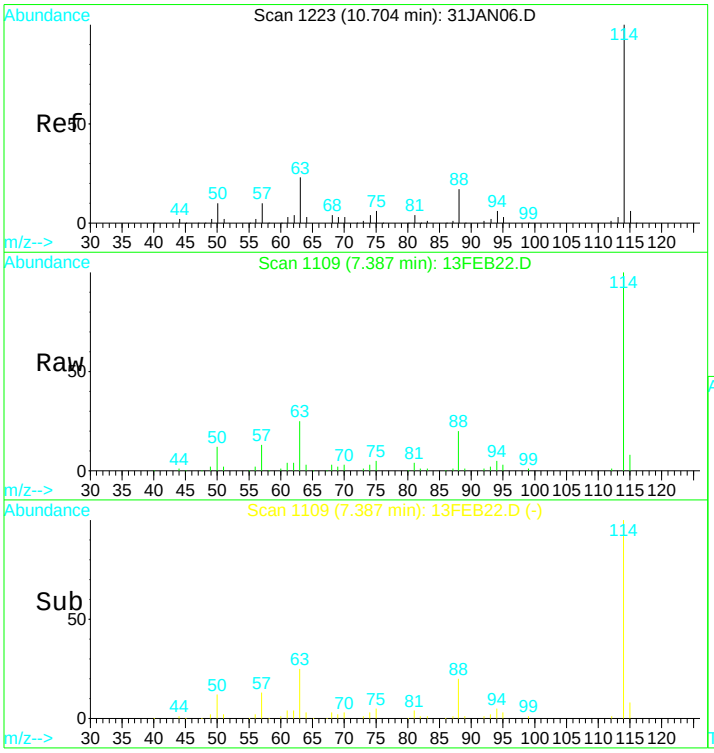




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 65 Resp: 75049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 47.9 | 38.4 | 71.4 |
| 51 | 48.4 | 1006.3 | 1868.8# |

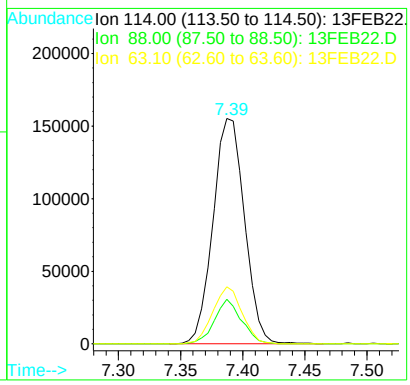


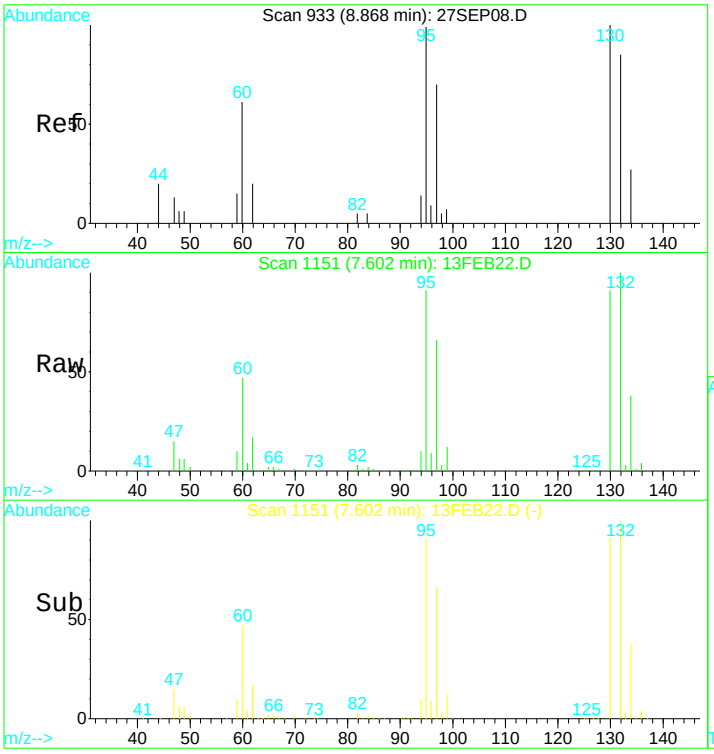



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion:114 Resp: 274186

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.0 | 12.0 | 22.2 |
| 63 | 23.5 | 16.9 | 31.5 |

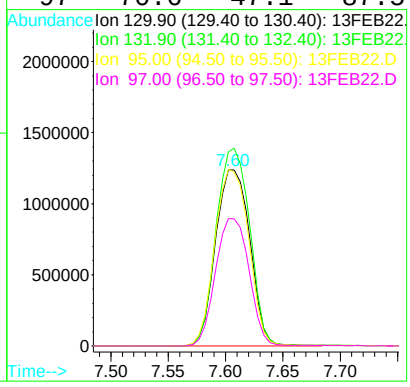


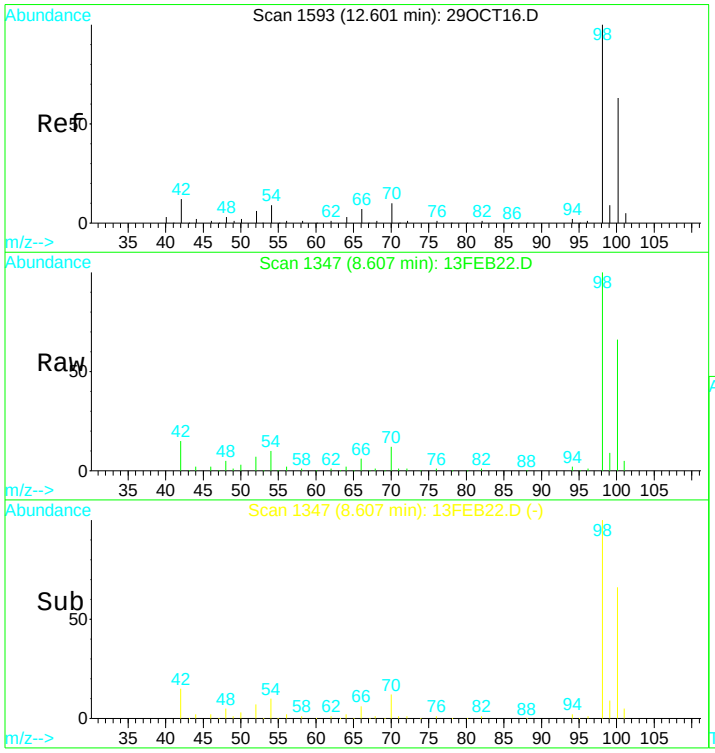




#25
Trichloroethene
Concen: 289.68 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion:130 Resp: 2585921

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 109.8 | 74.3 | 137.9 |
| 95 | 99.1 | 70.8 | 131.6 |
| 97 | 70.6 | 47.1 | 87.5 |

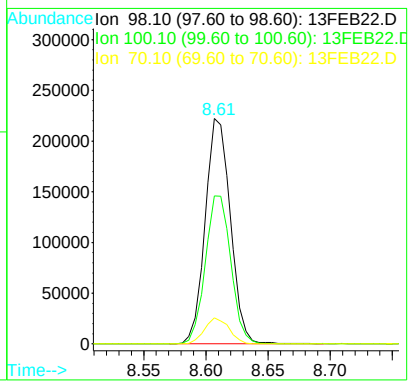


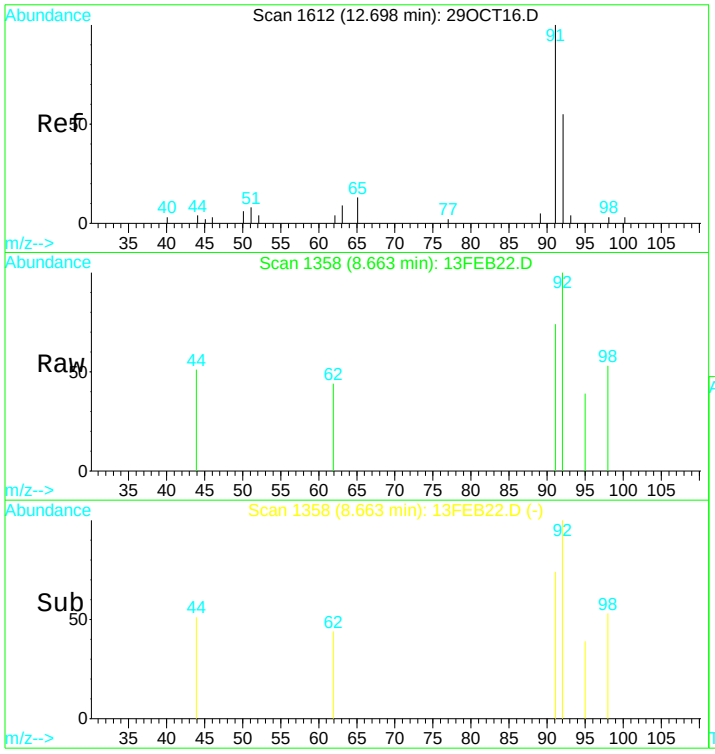



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 98 Resp: 314537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.4 | 47.0 | 87.4 |
| 70 | 11.2 | 7.3 | 13.7 |

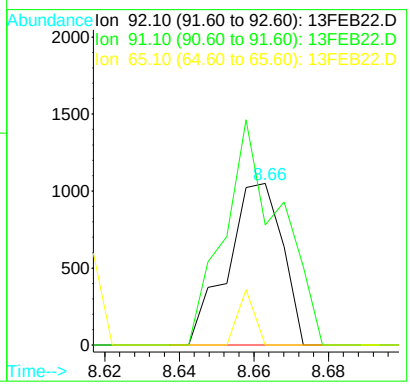


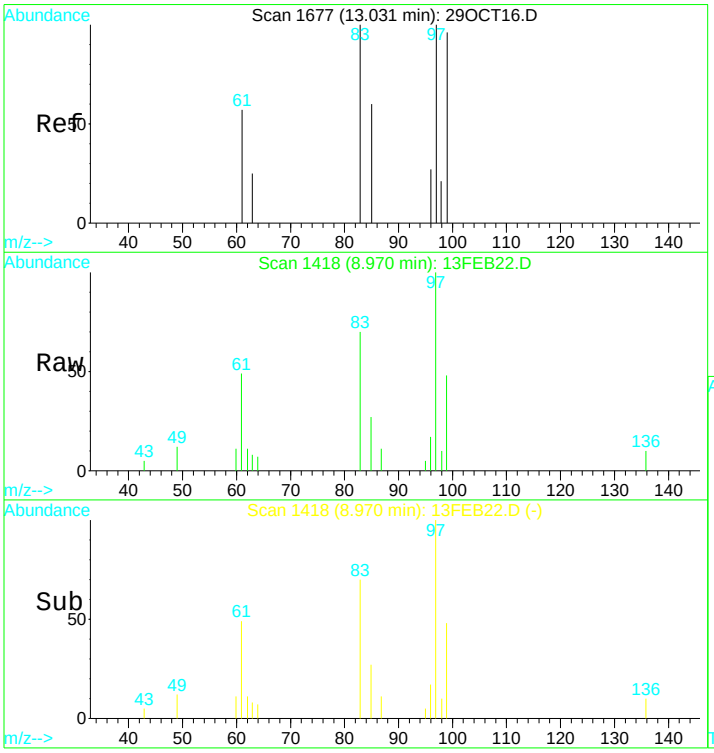




#32
Toluene
Concen: 0.05 ug/L
RT: 8.66 min Scan# 1358
Delta R.T. -0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 92 Resp: 1071

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 141.4 | 102.5 | 190.3 |
| 65 | 10.4 | 15.0 | 27.8# |

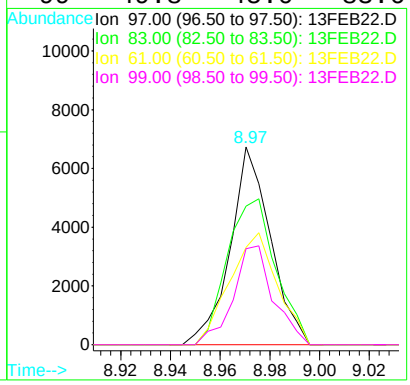


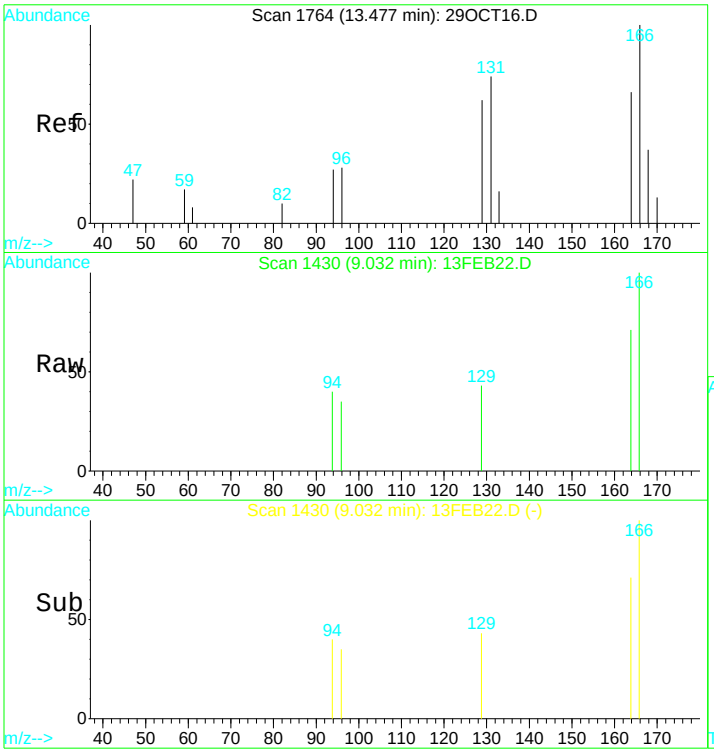



#34
1,1,2-Trichloroethane
Concen: 1.80 ug/L
RT: 8.97 min Scan# 1418
Delta R.T. -0.01 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 97 Resp: 7565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 89.0 | 61.6 | 114.4 |
| 61 | 67.0 | 47.0 | 87.4 |
| 99 | 49.8 | 45.0 | 83.6 |

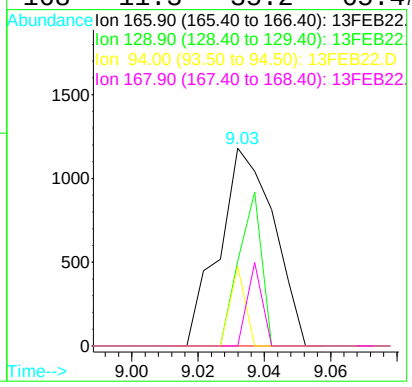


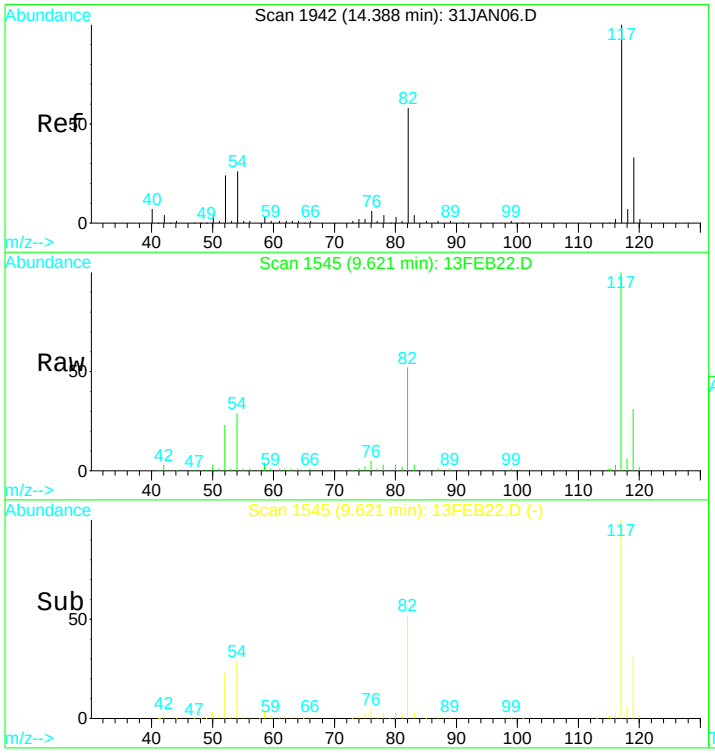




#35
Tetrachloroethene (PCE)
Concen: 0.14 ug/L
RT: 9.03 min Scan# 1430
Delta R.T. -0.01 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion:166 Resp: 1350

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 129 | 32.4 | 45.5 | 84.5# |
| 94 | 10.8 | 23.7 | 43.9# |
| 168 | 11.3 | 35.2 | 65.4# |

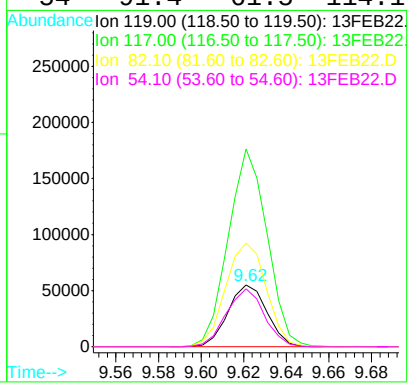


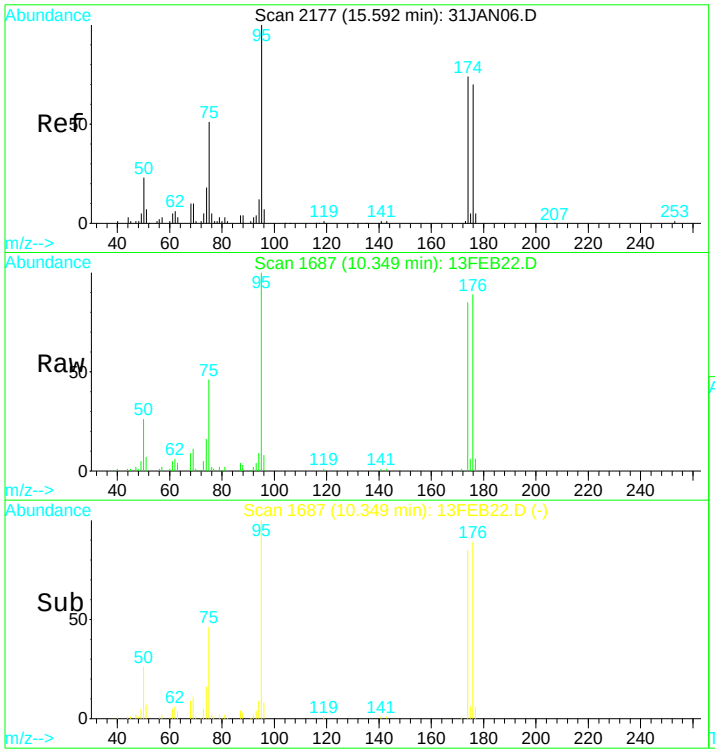



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion:119 Resp: 70388

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 317.4 | 220.4 | 409.4 |
| 82 | 174.5 | 123.9 | 230.1 |
| 54 | 91.4 | 61.5 | 114.1 |

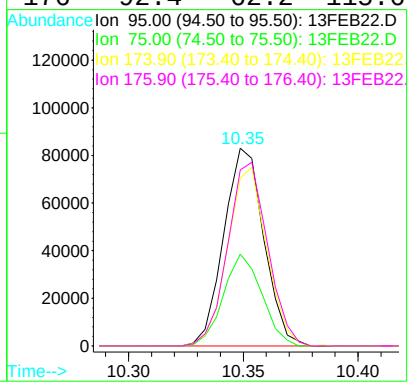



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB22.D
Acq: 13 Feb 2017 2:40 pm

Tgt Ion: 95 Resp: 101083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 44.5 | 32.6 | 60.5 |
| 174 | 88.0 | 60.9 | 113.1 |
| 176 | 92.4 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB22.D Vial: 22
Acq On : 13 Feb 2017 2:40 pm Operator: MGC
Sample : 1703480-22 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:12 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208366 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 274186 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 70388 | 10.00 | ug/L | 0.00 |

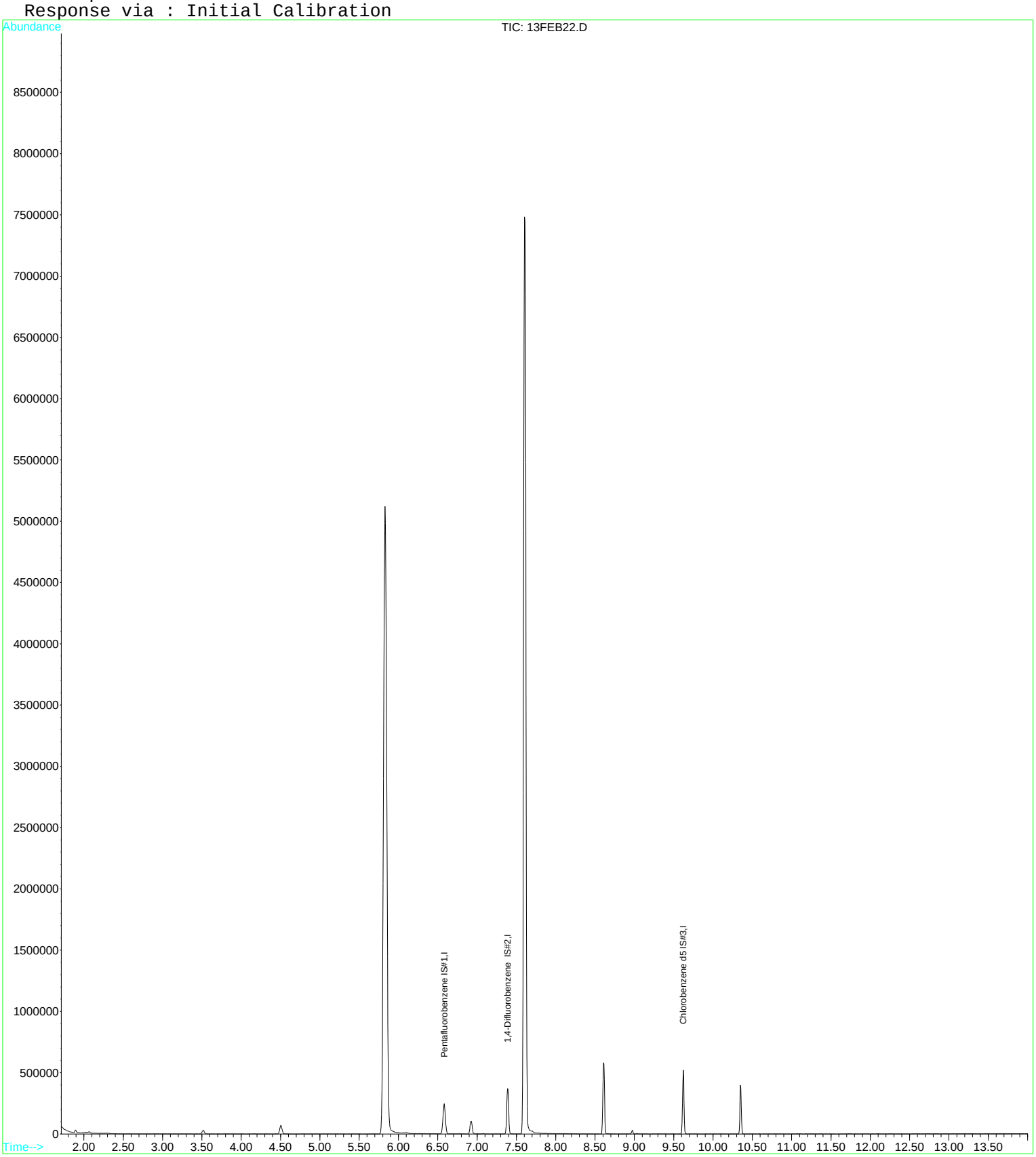
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB22.D Vial: 22
Acq On : 13 Feb 2017 2:40 pm Operator: MGC
Sample : 1703480-22 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:12 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB35.D Vial: 35
Acq On : 14 Feb 2017 7:16 pm Operator: MGC
Sample : 1703480-22RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 207100 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270545 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63544 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 64976 | 10.60 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 106.00% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 289900 | 9.41 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.10% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 81984 | 9.36 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 93.60% | | | |

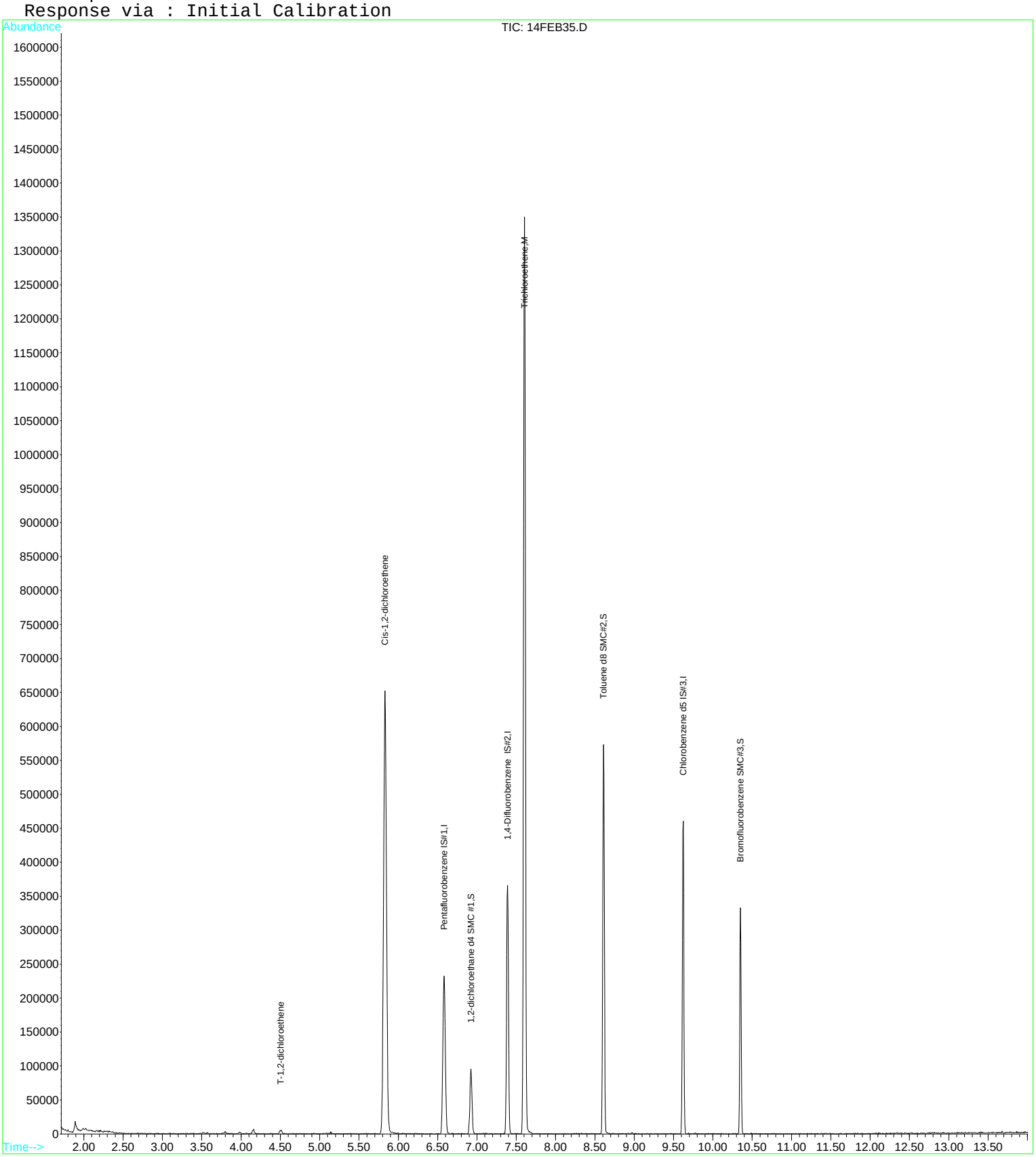
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 12) T-1,2-dichloroethene | 4.50 | 96 | 2328 | 0.25 | ug/L | 87 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 360550 | 37.30 | ug/L | 92 |
| 25) Trichloroethene | 7.60 | 130 | 402234 | 45.67 | ug/L | 98 |

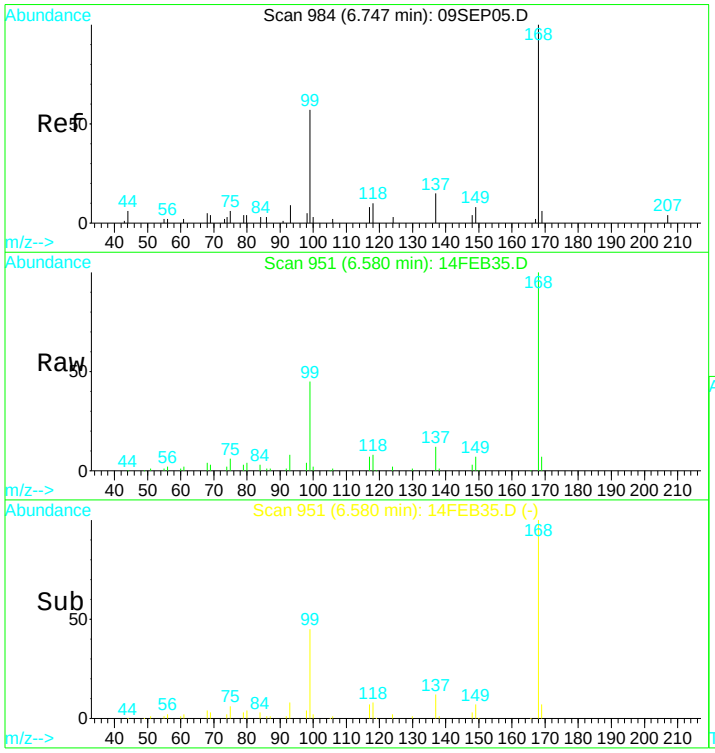
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB35.D Vial: 35
Acq On : 14 Feb 2017 7:16 pm Operator: MGC
Sample : 1703480-22RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:19 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

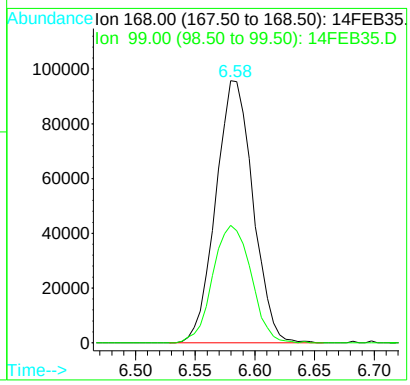


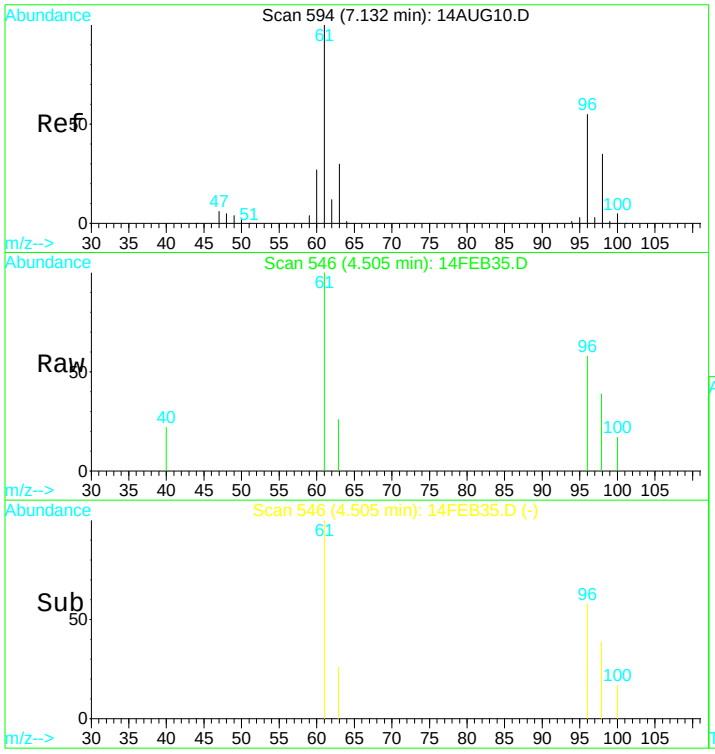



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion:168 Resp: 207100

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.1 | 305.1 | 566.7# |

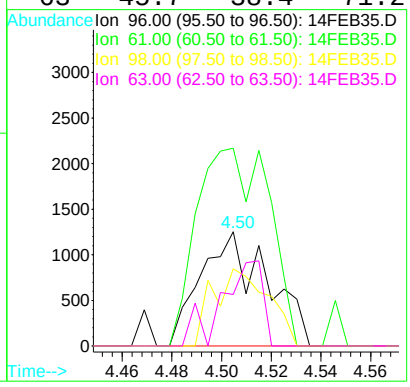


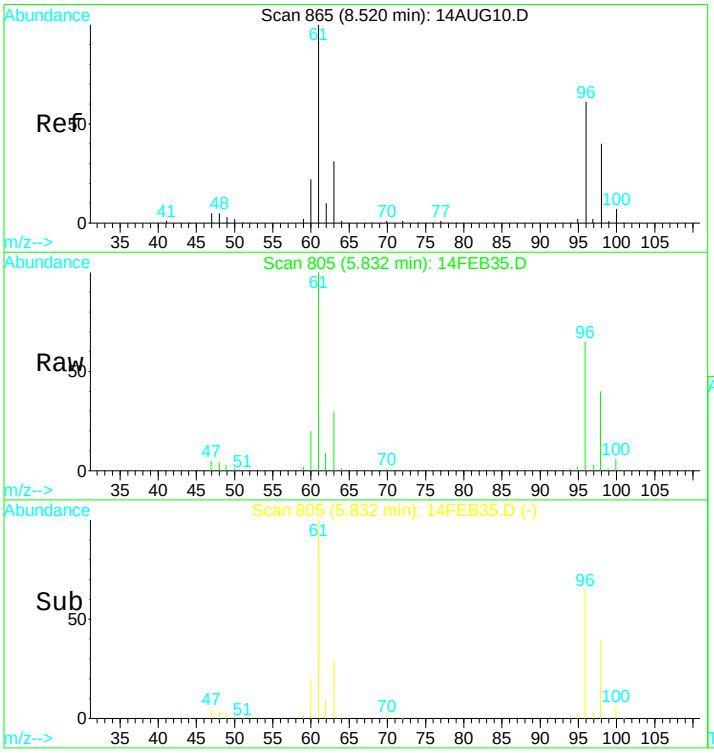




#12
T-1,2-dichloroethene
Concen: 0.25 ug/L
RT: 4.50 min Scan# 546
Delta R.T. -0.00 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion: 96 Resp: 2328

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 188.5 | 119.6 | 222.2 |
| 98 | 56.1 | 46.1 | 85.5 |
| 63 | 45.7 | 38.4 | 71.2 |

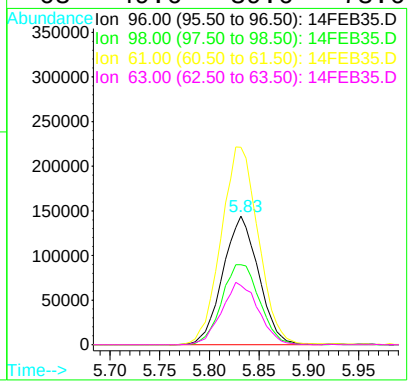


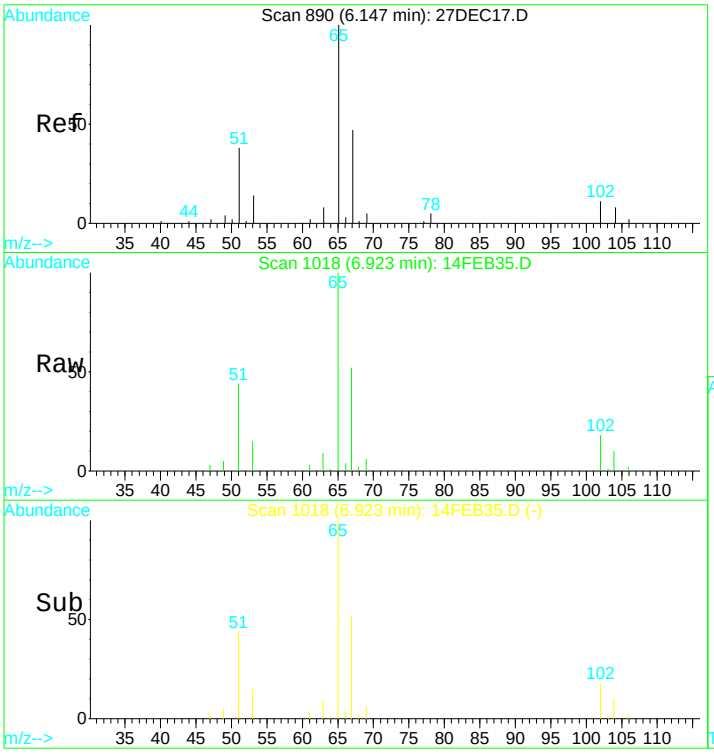



#15
Cis-1,2-dichloroethene
Concen: 37.30 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion: 96 Resp: 360550

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 65.6 | 46.2 | 85.8 |
| 61 | 160.1 | 122.8 | 228.0 |
| 63 | 49.6 | 39.6 | 73.6 |

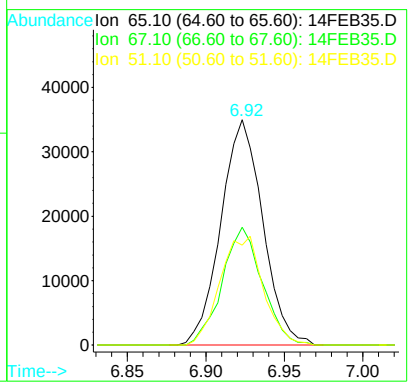


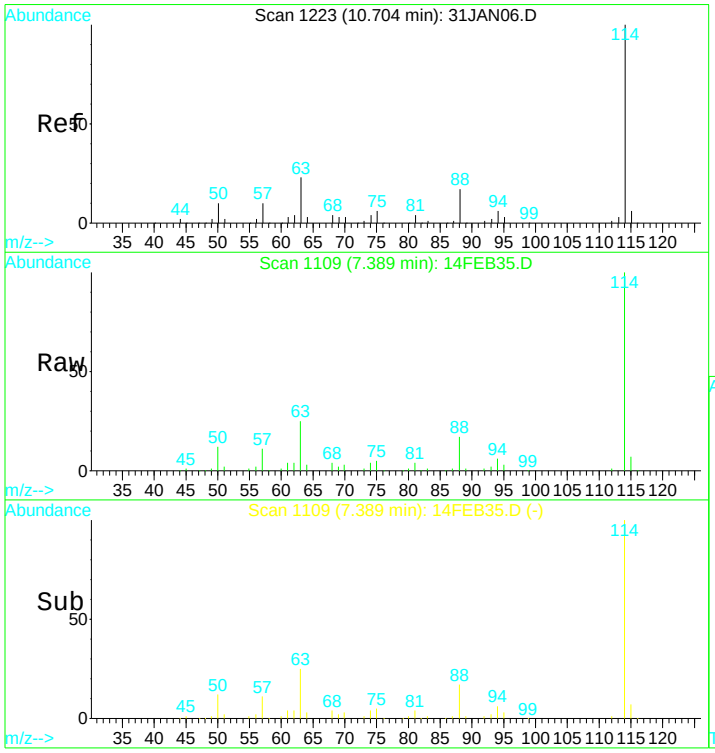




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion: 65 Resp: 64976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.1 | 38.4 | 71.4 |
| 51 | 49.9 | 1006.3 | 1868.8# |

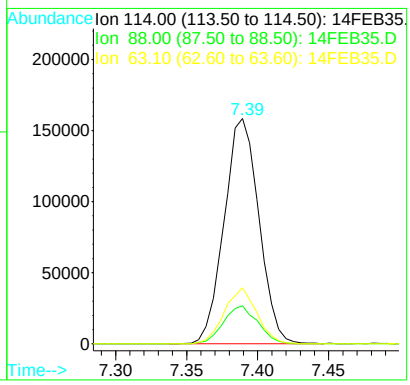


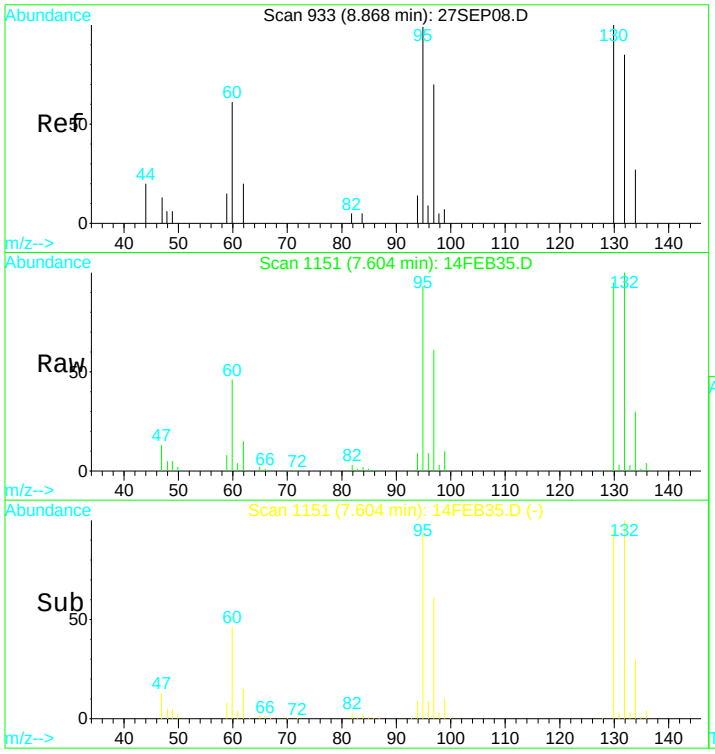



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion:114 Resp: 270545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.6 | 12.0 | 22.2 |
| 63 | 23.3 | 16.9 | 31.5 |

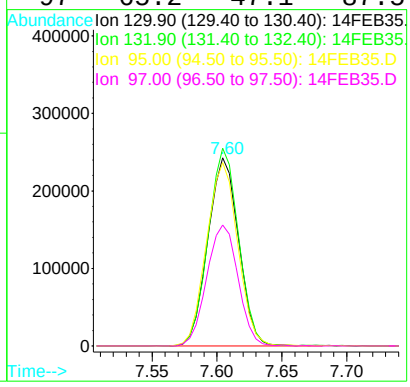


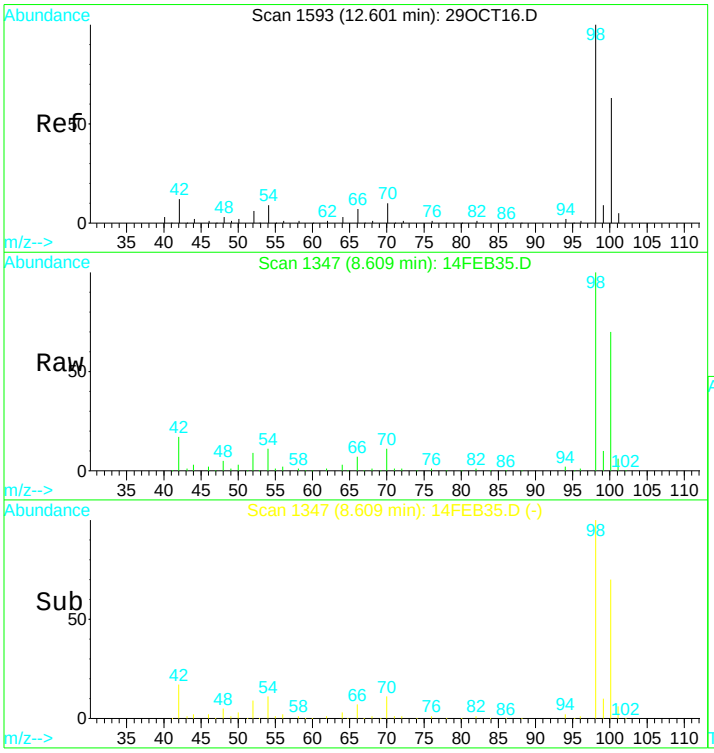




#25
Trichloroethene
Concen: 45.67 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion:130 Resp: 402234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 103.5 | 74.3 | 137.9 |
| 95 | 98.8 | 70.8 | 131.6 |
| 97 | 65.2 | 47.1 | 87.5 |

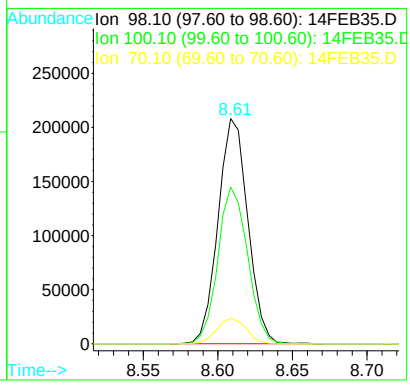


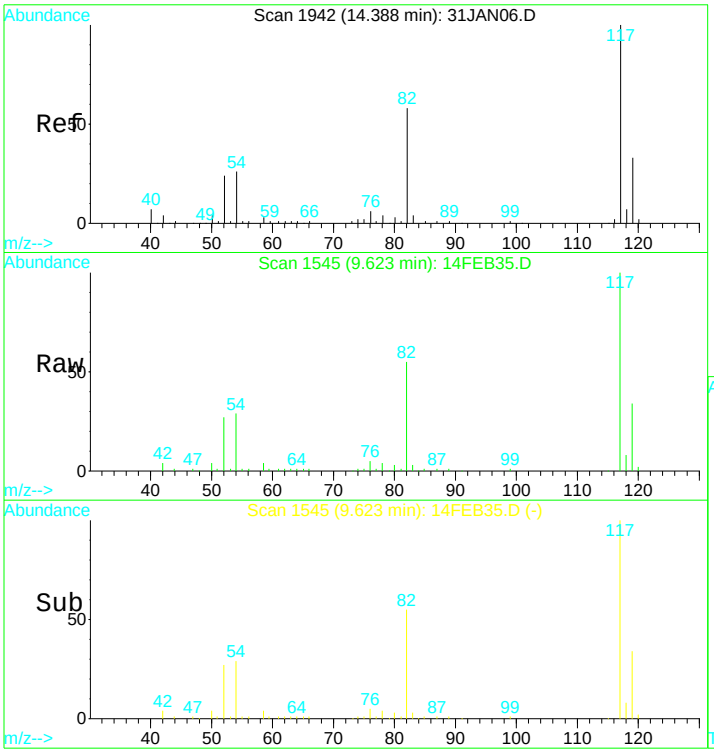



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion: 98 Resp: 289900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 69.4 | 47.0 | 87.4 |
| 70 | 11.3 | 7.3 | 13.7 |

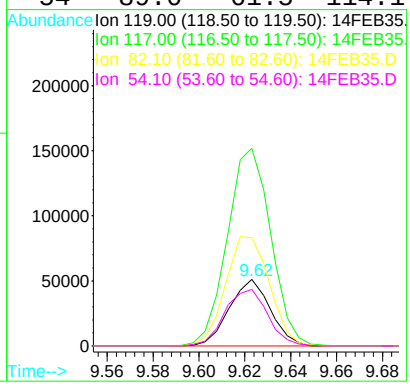


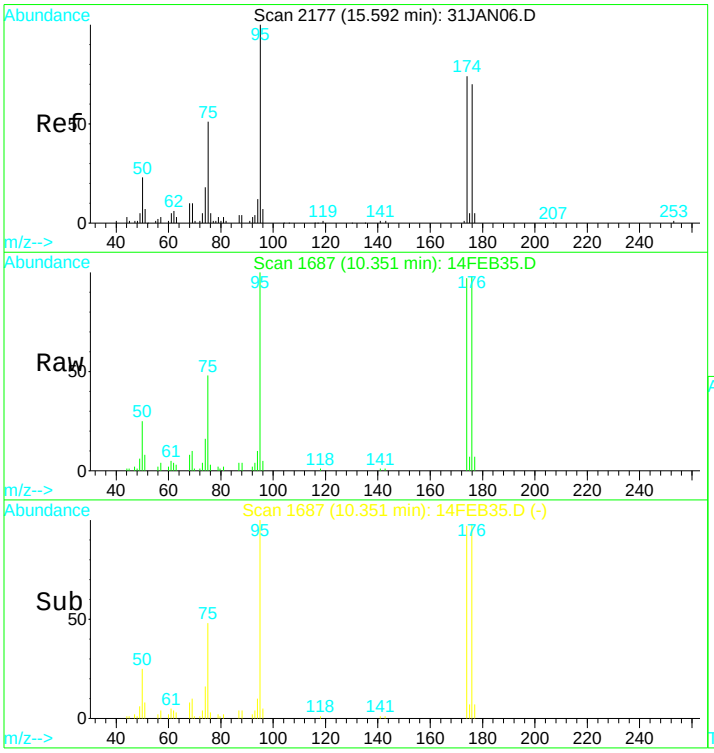




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion:119 Resp: 63544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 315.1 | 220.4 | 409.4 |
| 82 | 176.1 | 123.9 | 230.1 |
| 54 | 89.0 | 61.5 | 114.1 |

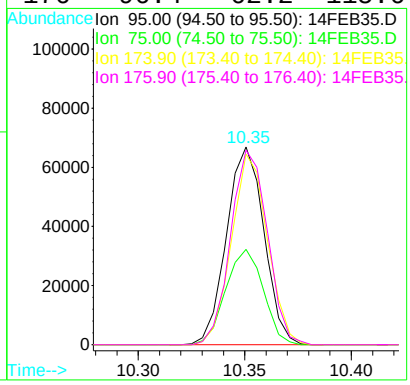





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 14FEB35.D
Acq: 14 Feb 2017 7:16 pm

Tgt Ion: 95 Resp: 81984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 48.2 | 32.6 | 60.5 |
| 174 | 92.7 | 60.9 | 113.1 |
| 176 | 96.4 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB36.D Vial: 36
Acq On : 13 Feb 2017 8:05 pm Operator: MGC
Sample : 1703480-23 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:33 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 208366 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277203 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65339 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61588 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 99.90% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 300584 | 9.53 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.30% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88398 | 9.81 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.10% | | | |

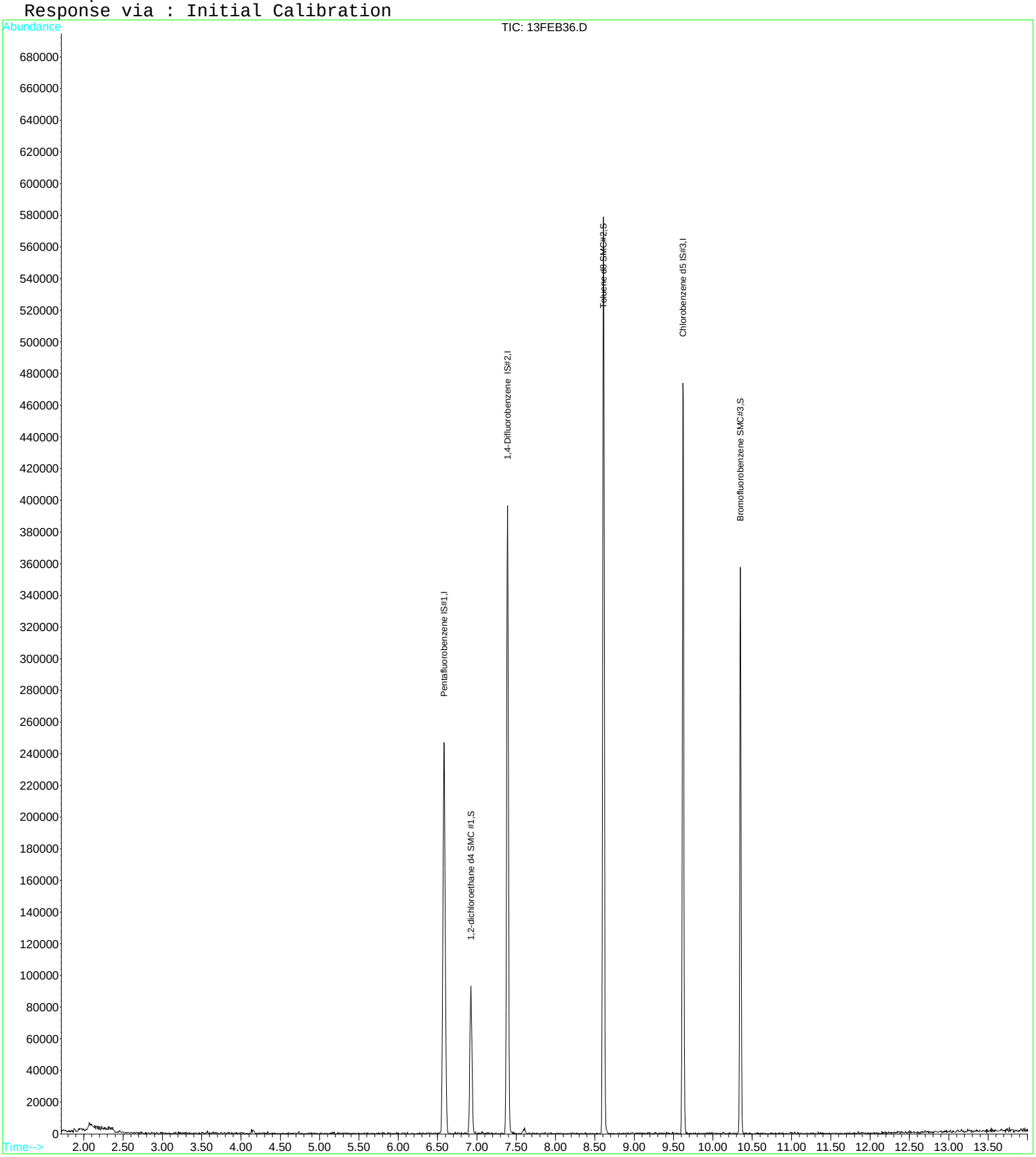
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB36.D Vial: 36
Acq On : 13 Feb 2017 8:05 pm Operator: MGC
Sample : 1703480-23 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:33 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB36.D Vial: 36
Acq On : 13 Feb 2017 8:05 pm Operator: MGC
Sample : 1703480-23 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:33 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 208366 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277203 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65339 | 10.00 | ug/L | 0.00 |

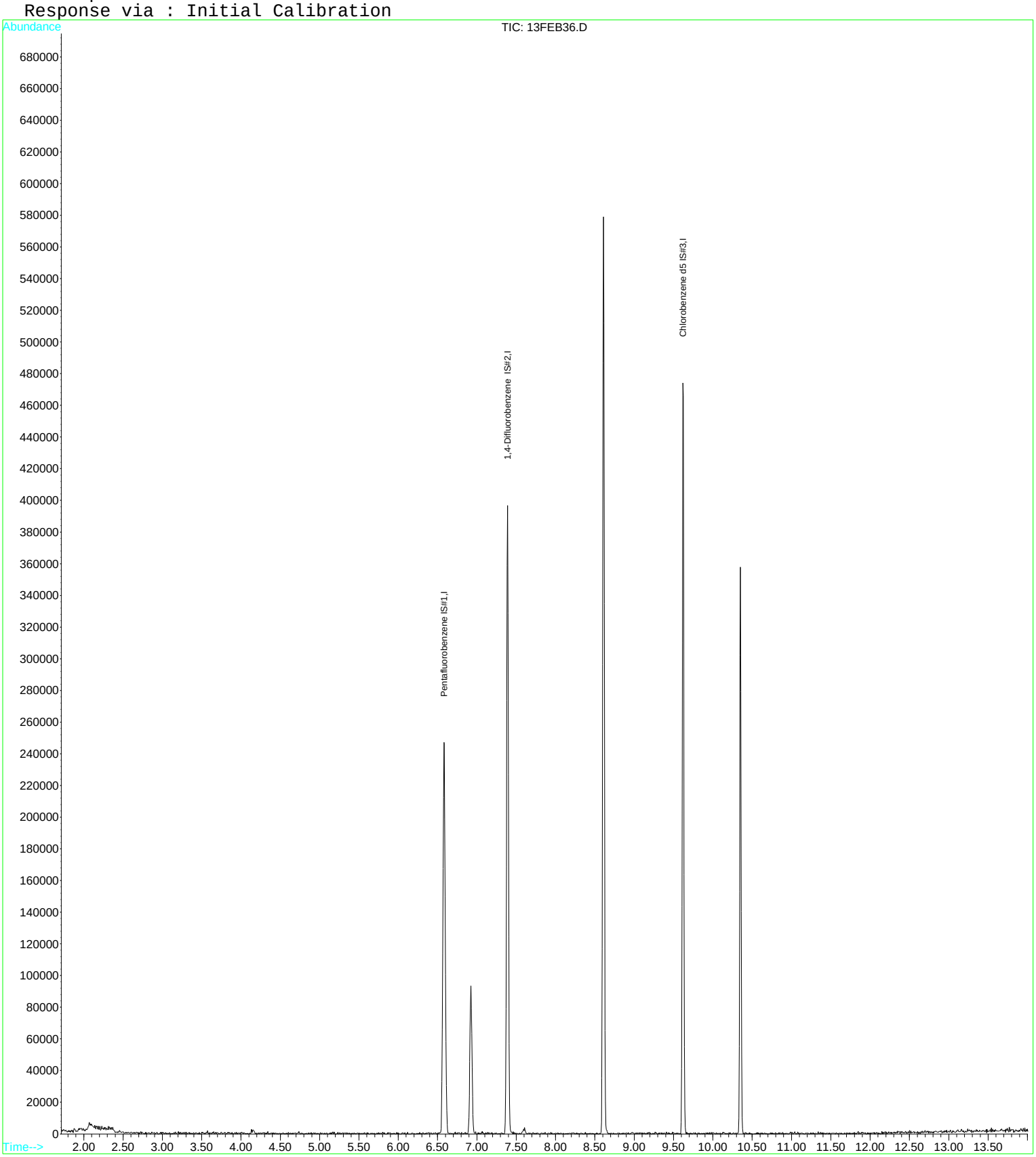
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB36.D Vial: 36
Acq On : 13 Feb 2017 8:05 pm Operator: MGC
Sample : 1703480-23 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:33 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB37.D Vial: 37
Acq On : 13 Feb 2017 8:28 pm Operator: MGC
Sample : 1703480-24 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:33 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 205684 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 265850 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66394 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 62045 | 10.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 102.00% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 302408 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87829 | 9.59 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.90% | | | |

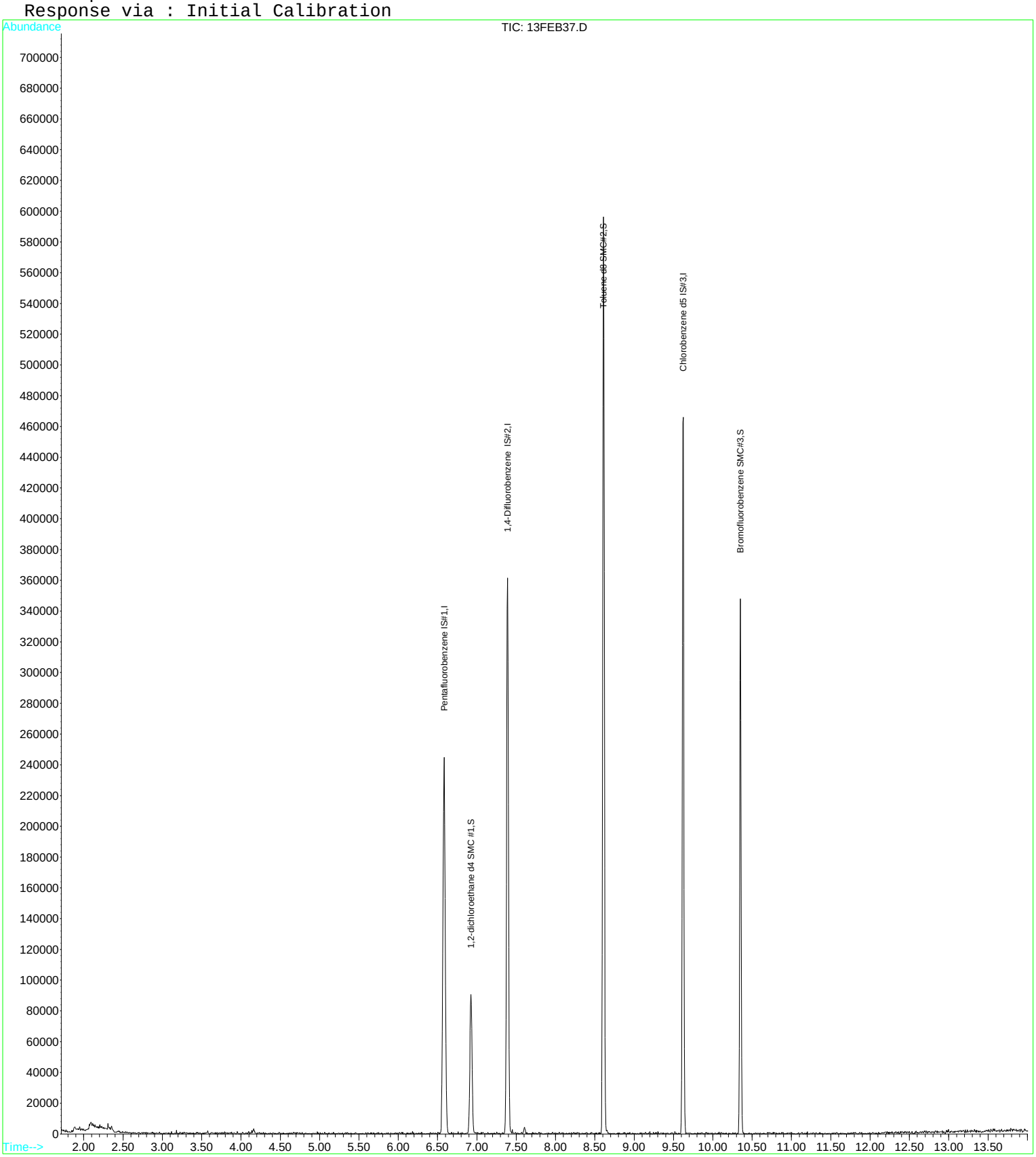
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB37.D Vial: 37
Acq On : 13 Feb 2017 8:28 pm Operator: MGC
Sample : 1703480-24 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:33 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB37.D Vial: 37
Acq On : 13 Feb 2017 8:28 pm Operator: MGC
Sample : 1703480-24 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:34 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 205684 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 265850 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66394 | 10.00 | ug/L | 0.00 |

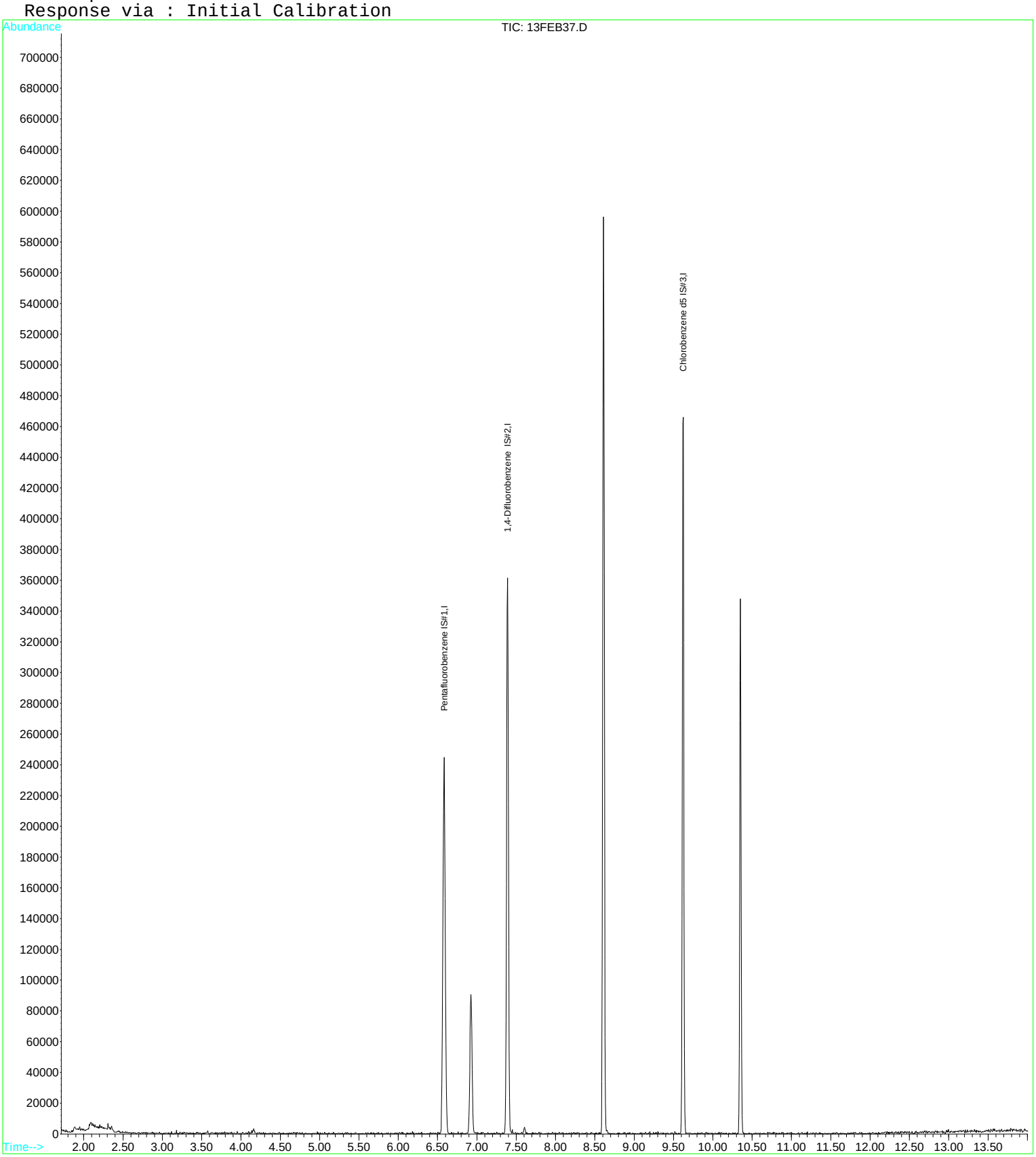
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB37.D Vial: 37
Acq On : 13 Feb 2017 8:28 pm Operator: MGC
Sample : 1703480-24 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:34 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB38.D Vial: 38
Acq On : 13 Feb 2017 8:51 pm Operator: MGC
Sample : 1703480-25 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:34 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204860 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 276036 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64713 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 63398 | 10.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 104.60% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 301288 | 9.59 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 90003 | 10.09 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 100.90% | | | |

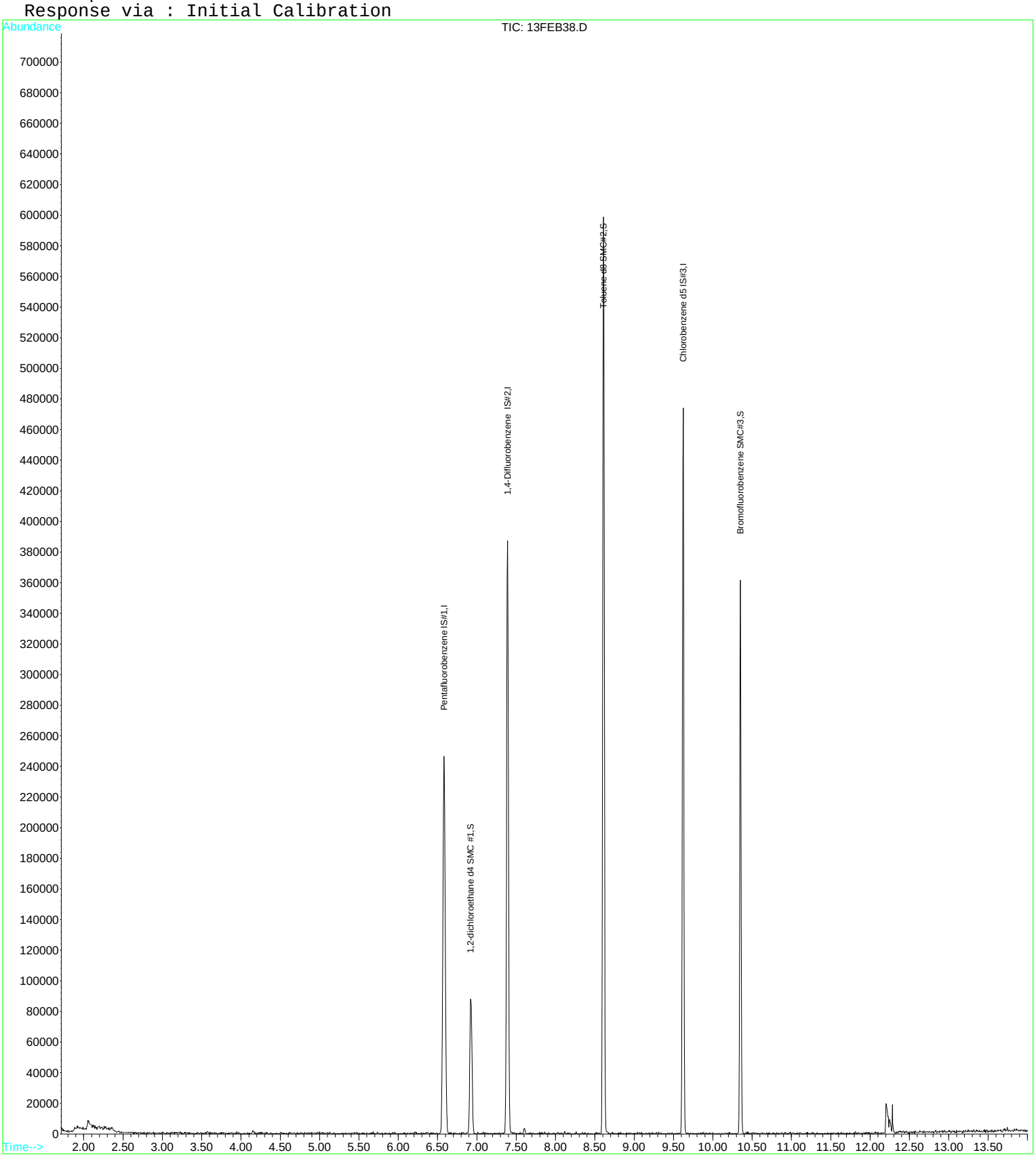
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB38.D Vial: 38
Acq On : 13 Feb 2017 8:51 pm Operator: MGC
Sample : 1703480-25 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:34 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB38.D Vial: 38
Acq On : 13 Feb 2017 8:51 pm Operator: MGC
Sample : 1703480-25 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:35 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204860 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 276036 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64713 | 10.00 | ug/L | 0.00 |

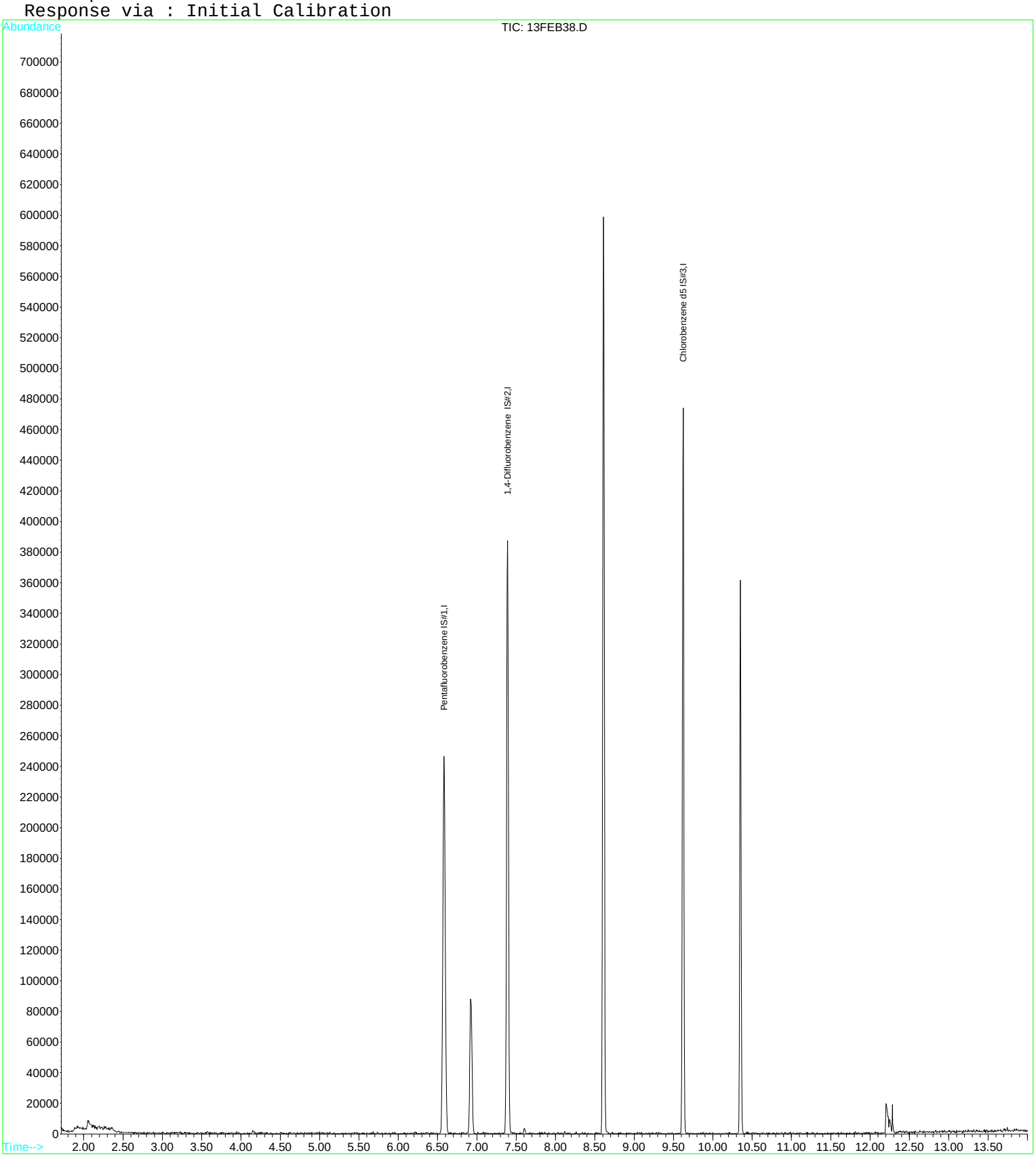
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB38.D  Vial: 38
Acq On : 13 Feb 2017 8:51 pm  Operator: MGC
Sample : 1703480-25  Inst : MS-V5
Misc : 1 ;25ML;pH=1  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:35 2017  Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB39.D Vial: 39
Acq On : 13 Feb 2017 9:14 pm Operator: MGC
Sample : 1703480-26 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:35 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 210079 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 261769 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64417 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65538 | 10.54 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 105.40% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 298563 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 100.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87360 | 9.83 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.30% | | | |

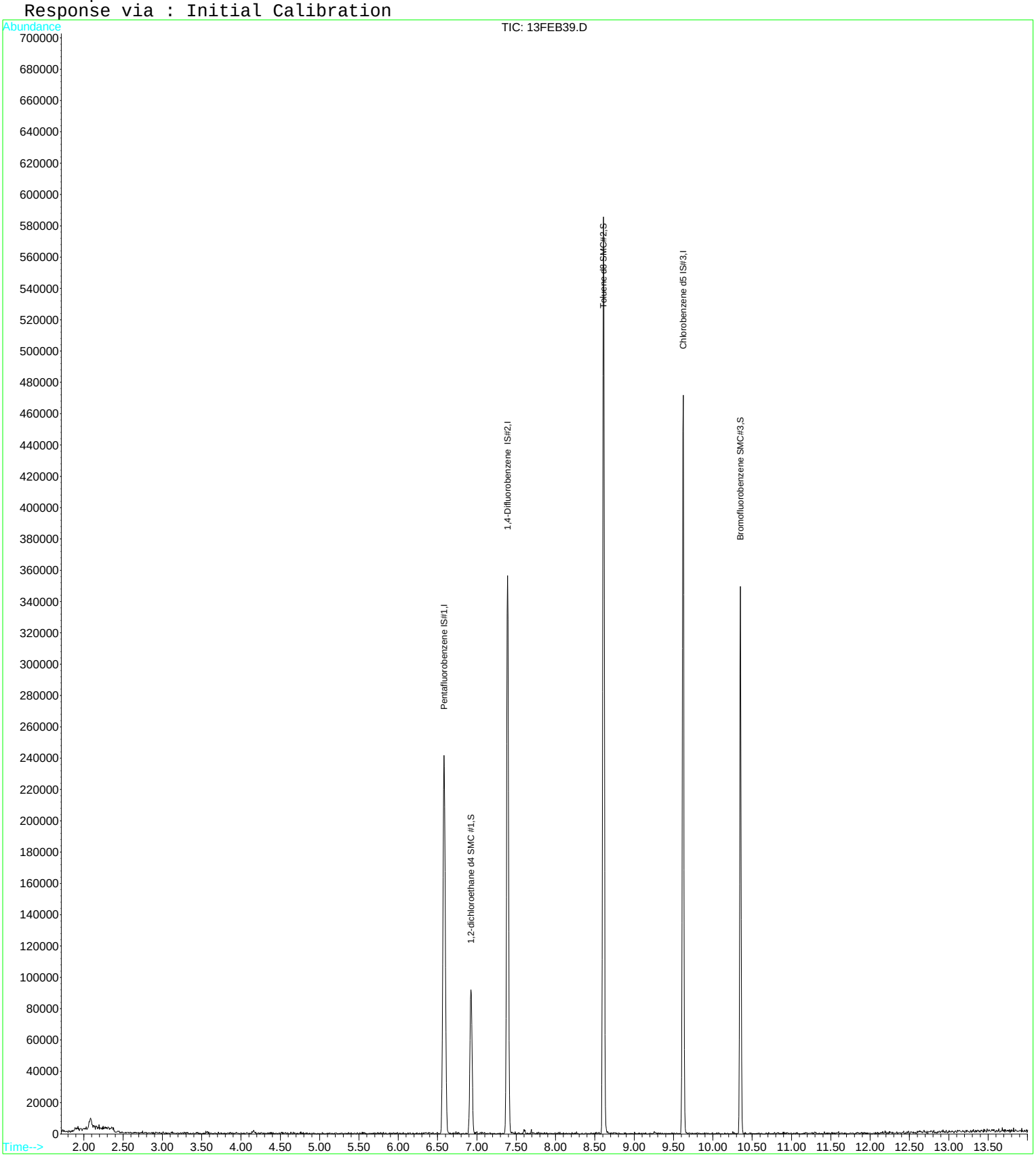
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB39.D Vial: 39
Acq On : 13 Feb 2017 9:14 pm Operator: MGC
Sample : 1703480-26 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:35 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB39.D Vial: 39
Acq On : 13 Feb 2017 9:14 pm Operator: MGC
Sample : 1703480-26 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:36 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 210079 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 261769 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64417 | 10.00 | ug/L | 0.00 |

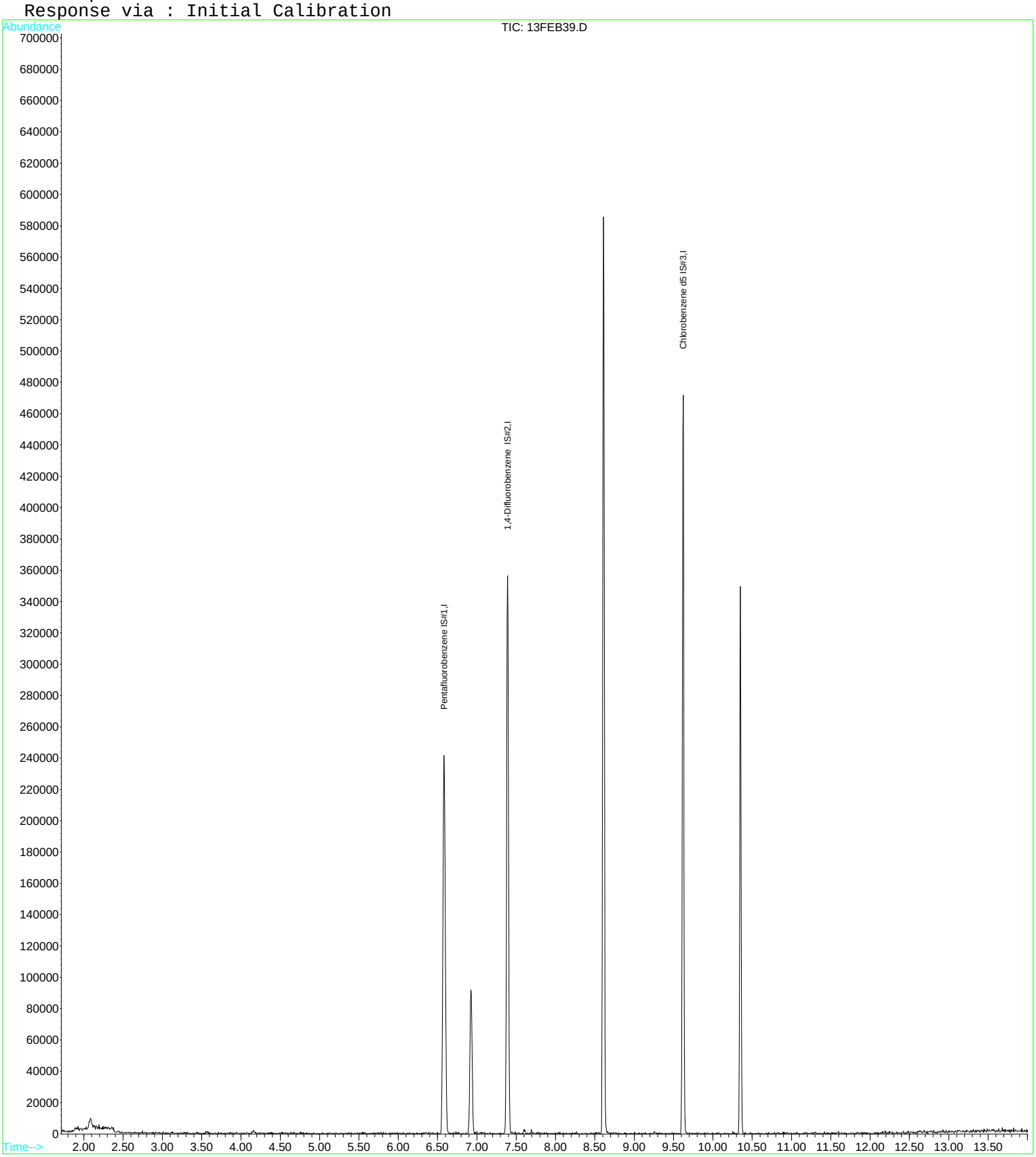
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB39.D Vial: 39
Acq On : 13 Feb 2017 9:14 pm Operator: MGC
Sample : 1703480-26 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:36 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB40.D Vial: 40
Acq On : 13 Feb 2017 9:38 pm Operator: MGC
Sample : 1703480-27 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:36 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204653 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277732 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66208 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65710 | 10.85 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 108.50% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 304568 | 9.64 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.40% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 86471 | 9.47 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.70% | | | |

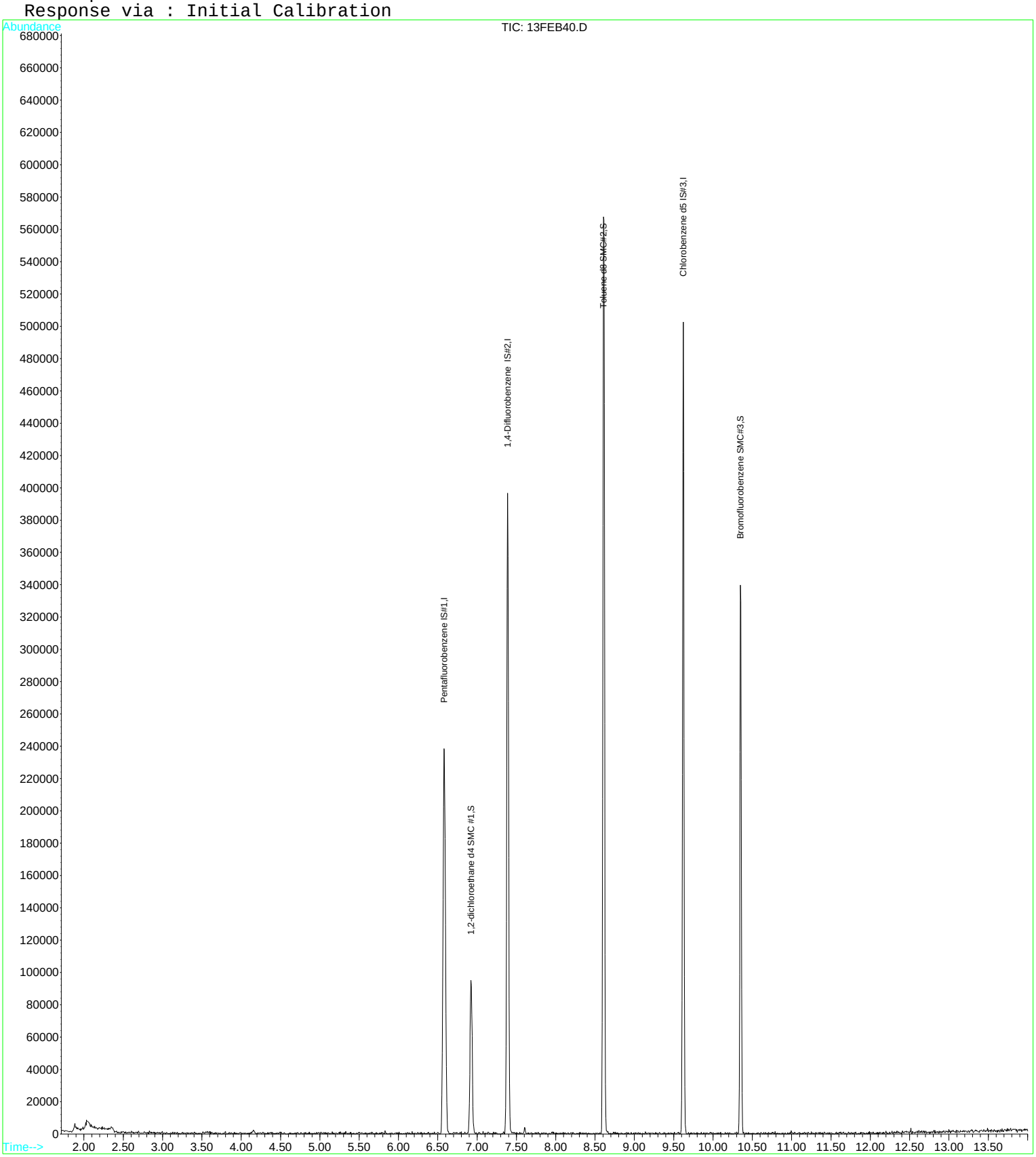
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB40.D Vial: 40
Acq On : 13 Feb 2017 9:38 pm Operator: MGC
Sample : 1703480-27 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:36 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB40.D Vial: 40
Acq On : 13 Feb 2017 9:38 pm Operator: MGC
Sample : 1703480-27 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:37 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204653 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277732 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66208 | 10.00 | ug/L | 0.00 |

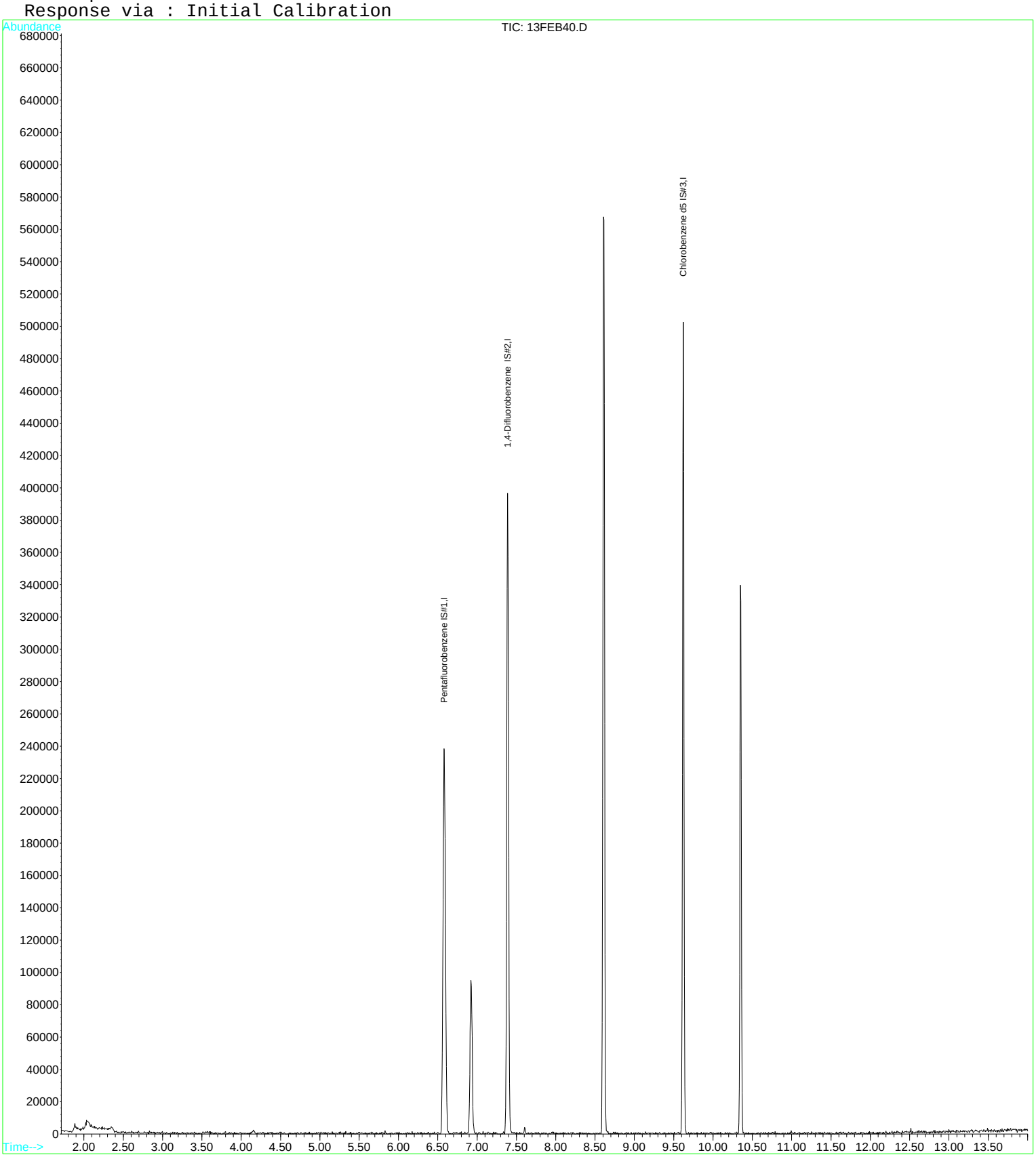
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB40.D Vial: 40
Acq On : 13 Feb 2017 9:38 pm Operator: MGC
Sample : 1703480-27 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:37 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB41.D Vial: 41
Acq On : 13 Feb 2017 10:01 pm Operator: MGC
Sample : 1703480-28 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:37 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204631 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 273276 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65222 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65320 | 10.79 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 107.90% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 301257 | 9.69 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 96.90% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 90265 | 10.04 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 100.40% | | | | | | |

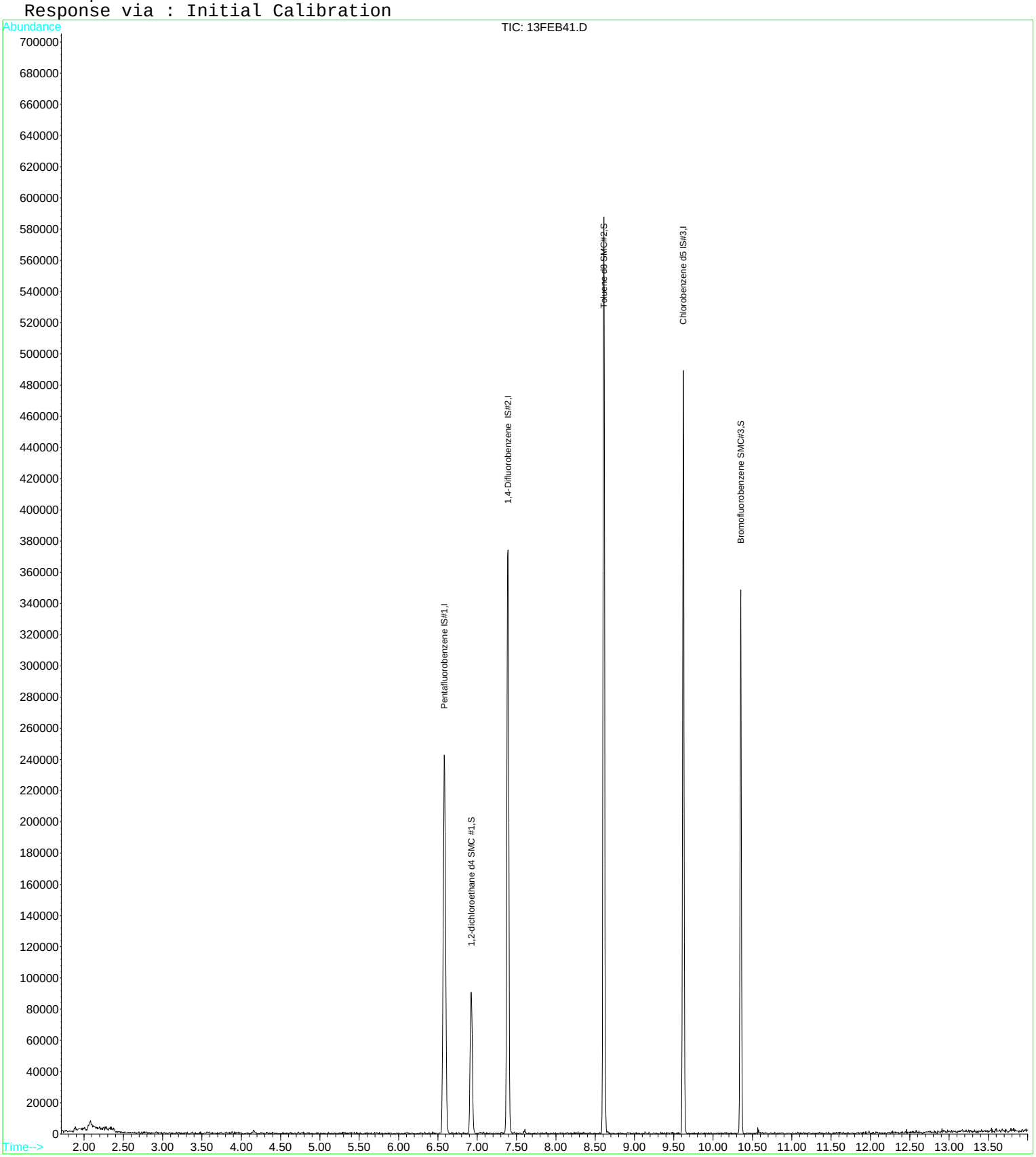
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB41.D Vial: 41
Acq On : 13 Feb 2017 10:01 pm Operator: MGC
Sample : 1703480-28 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:37 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB41.D Vial: 41
Acq On : 13 Feb 2017 10:01 pm Operator: MGC
Sample : 1703480-28 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:38 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204631 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 273276 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65222 | 10.00 | ug/L | 0.00 |

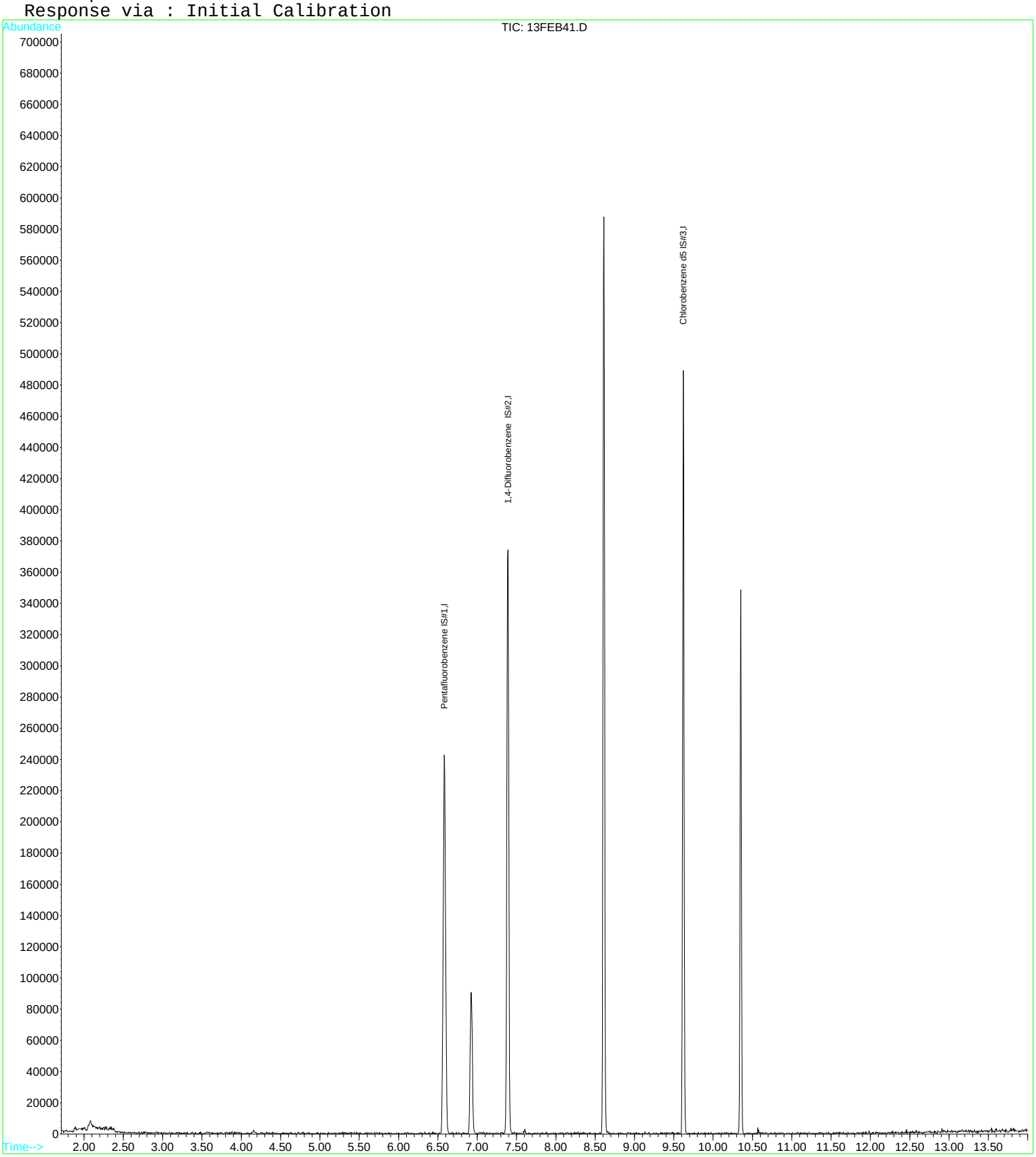
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB41.D Vial: 41
Acq On : 13 Feb 2017 10:01 pm Operator: MGC
Sample : 1703480-28 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:38 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB23.D Vial: 23
Acq On : 13 Feb 2017 3:03 pm Operator: MGC
Sample : 1703480-29 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:13 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 196220 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 283532 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69633 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 73264 | 12.62 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 126.20%# | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 309561 | 9.59 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 98755 | 10.28 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.80% | | | |

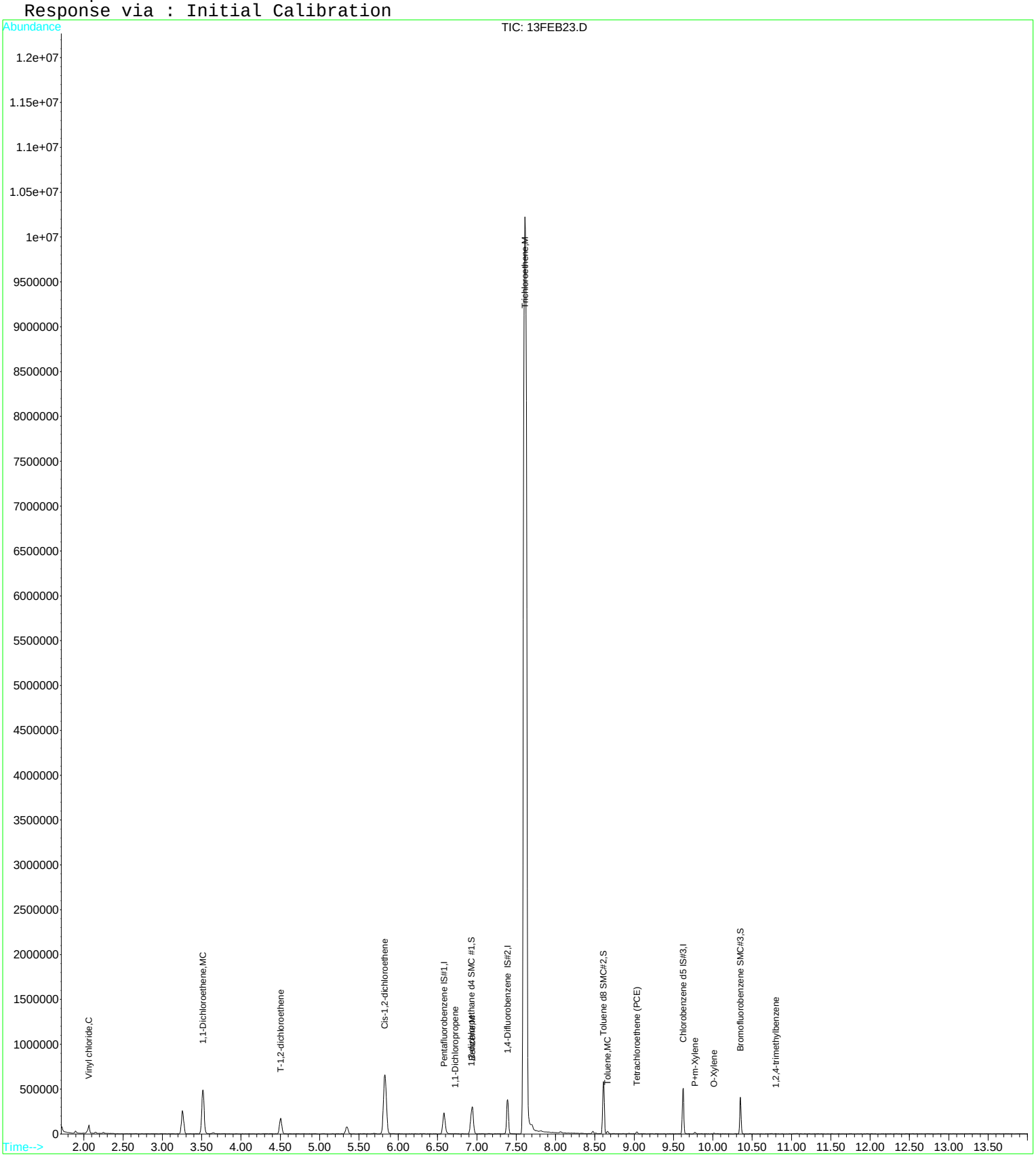
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 56678 | 4.85 | ug/L # | 63 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 402299 | 26.40 | ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 70311 | 7.96 | ug/L | 94 |
| 15) Cis-1,2-dichloroethene | 5.82 | 96 | 374596 | 40.91 | ug/L | 91 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 3032 | 0.25 | ug/L # | 80 |
| 23) Benzene | 6.94 | 78 | 236952 | 6.39 | ug/L # | 85 |
| 25) Trichloroethene | 7.61 | 130 | 4686998 | 507.75 | ug/L | 95 |
| 32) Toluene | 8.66 | 92 | 9567 | 0.43 | ug/L | 78 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 5365 | 0.55 | ug/L | 88 |
| 43) P+m-Xylene | 9.78 | 106 | 3975 | 0.28 | ug/L # | 62 |
| 44) O-Xylene | 10.02 | 106 | 1743 | 0.13 | ug/L # | 64 |
| 57) 1,2,4-trimethylbenzene | 10.80 | 105 | 1438 | 0.06 | ug/L | 88 |

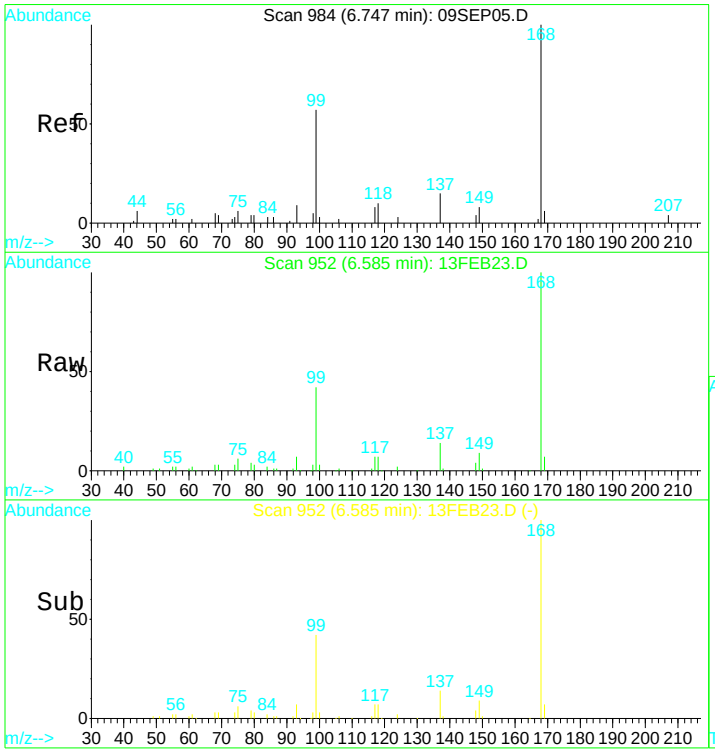
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB23.D Vial: 23
Acq On : 13 Feb 2017 3:03 pm Operator: MGC
Sample : 1703480-29 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:13 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

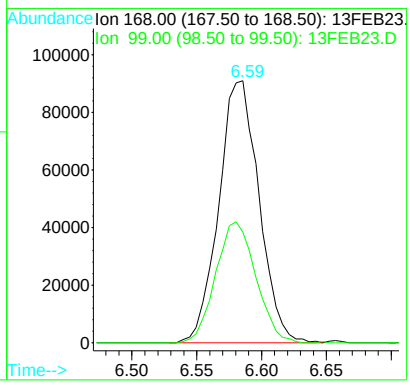


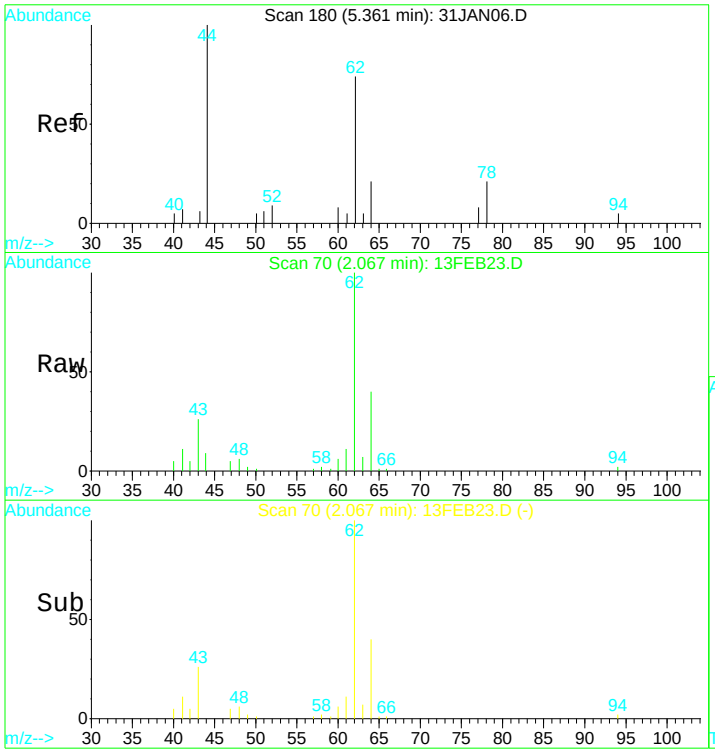



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.59 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:168 Resp: 196220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.1 | 305.1 | 566.7# |

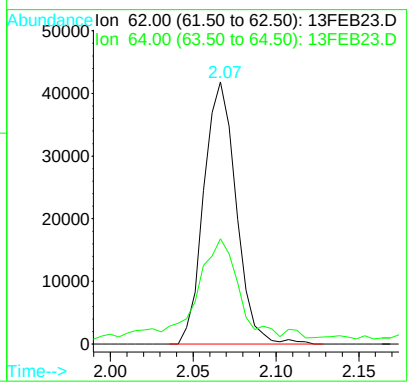


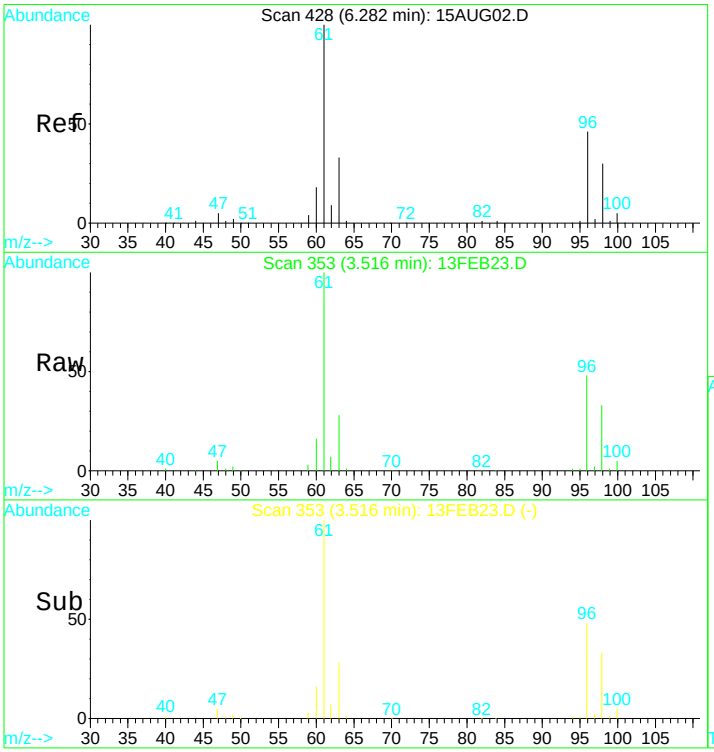




#4
Vinyl chloride
Concen: 4.85 ug/L
RT: 2.07 min Scan# 70
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 62 Resp: 56678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 52.8 | 22.4 | 41.6# |

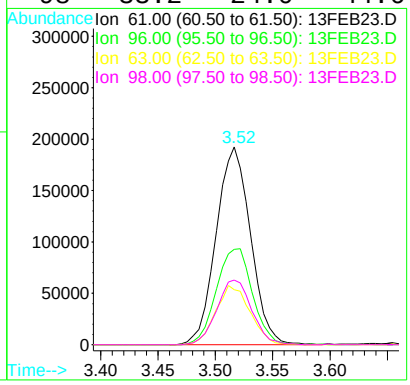


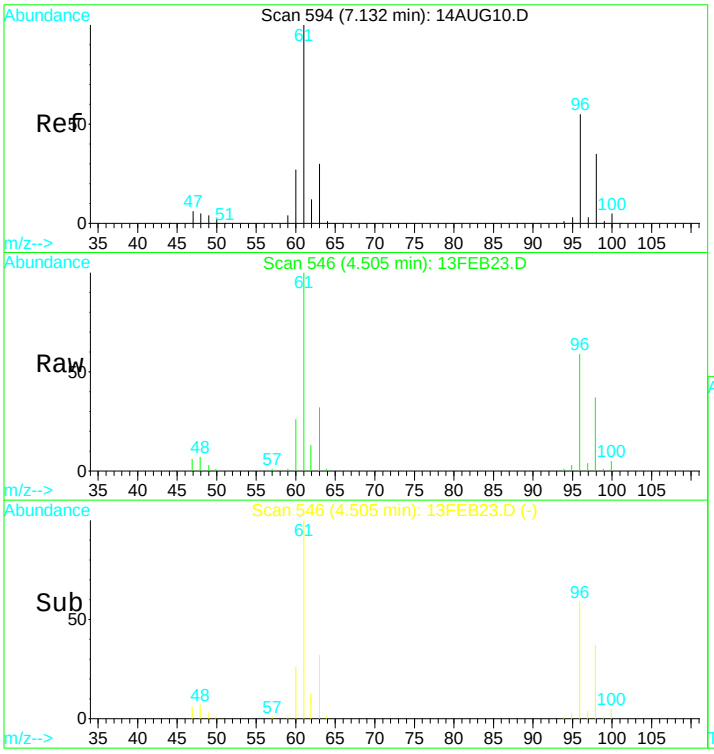



#9
1,1-Dichloroethene
Concen: 26.40 ug/L
RT: 3.52 min Scan# 353
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 61 Resp: 402299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 50.8 | 36.6 | 68.0 |
| 63 | 30.0 | 22.0 | 40.8 |
| 98 | 33.2 | 24.0 | 44.6 |

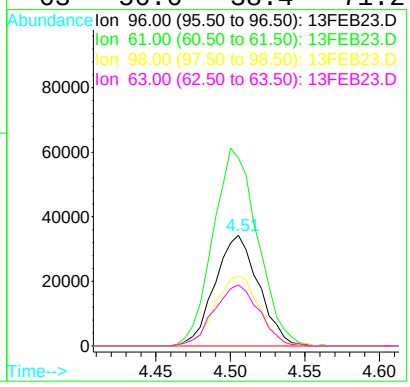


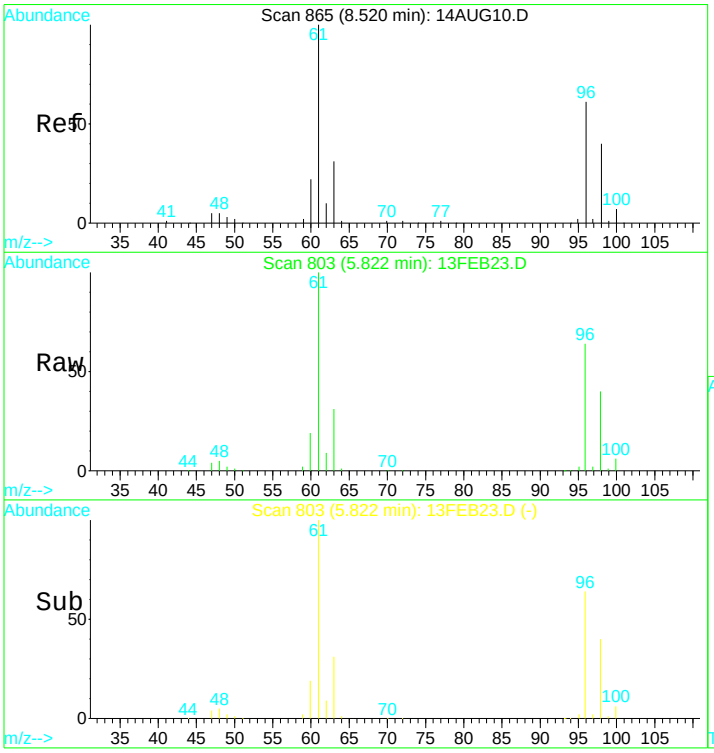




#12
T-1,2-dichloroethene
Concen: 7.96 ug/L
RT: 4.51 min Scan# 546
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 96 Resp: 70311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 181.4 | 119.6 | 222.2 |
| 98 | 63.8 | 46.1 | 85.5 |
| 63 | 56.6 | 38.4 | 71.2 |

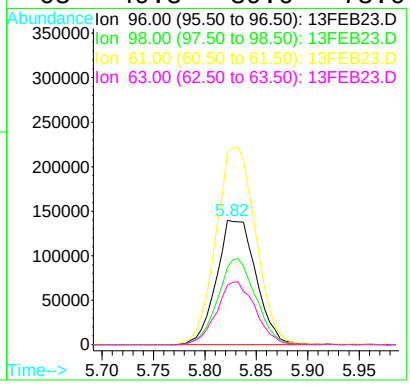


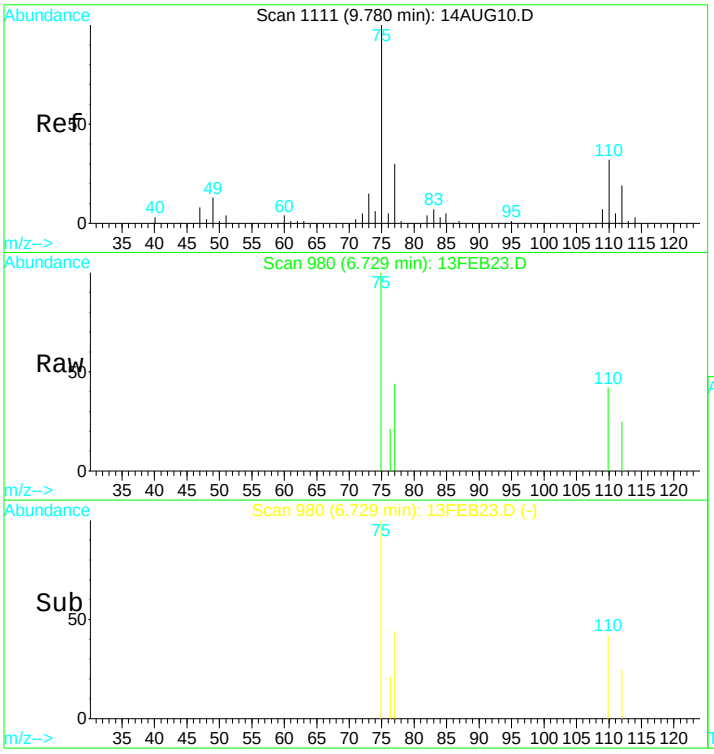



#15
Cis-1,2-dichloroethene
Concen: 40.91 ug/L
RT: 5.82 min Scan# 803
Delta R.T. -0.02 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 96 Resp: 374596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 66.0 | 46.2 | 85.8 |
| 61 | 159.5 | 122.8 | 228.0 |
| 63 | 49.5 | 39.6 | 73.6 |

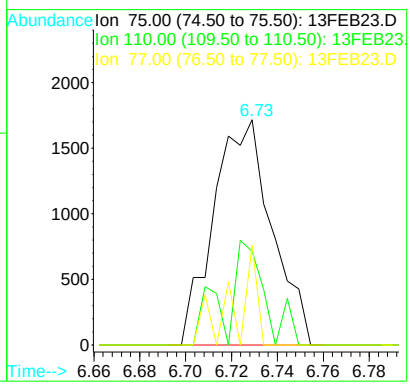


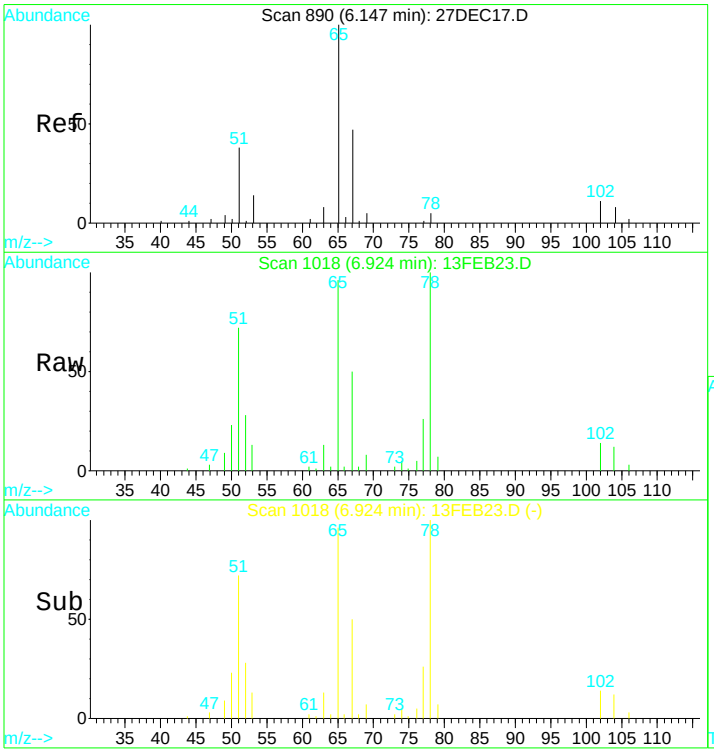




#19
1,1-Dichloropropene
Concen: 0.25 ug/L
RT: 6.73 min Scan# 980
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 75 Resp: 3032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 31.8 | 25.1 | 46.5 |
| 77 | 12.6 | 22.3 | 41.5# |

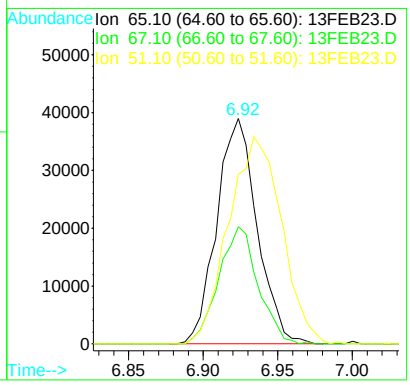


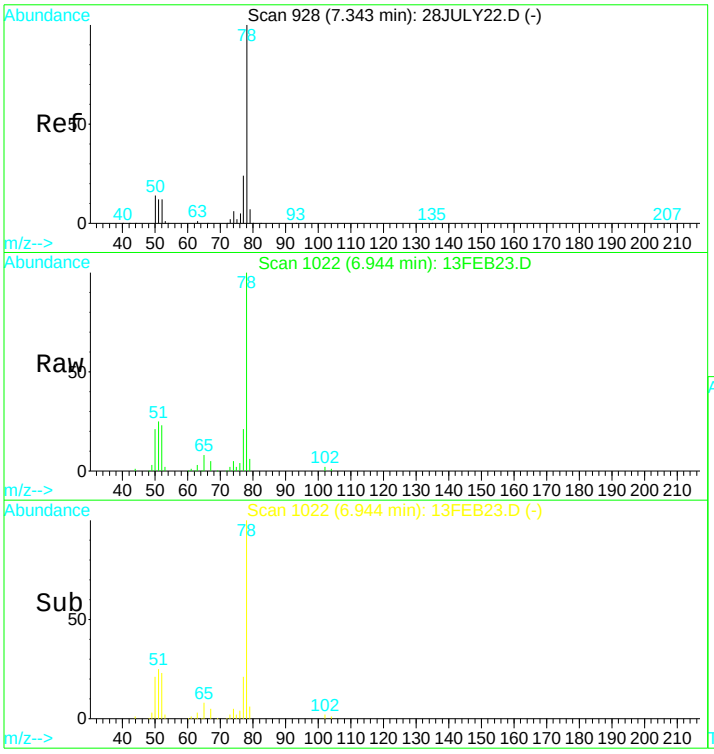



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 65 Resp: 73264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.7 | 38.4 | 71.4 |
| 51 | 120.9 | 1006.3 | 1868.8# |

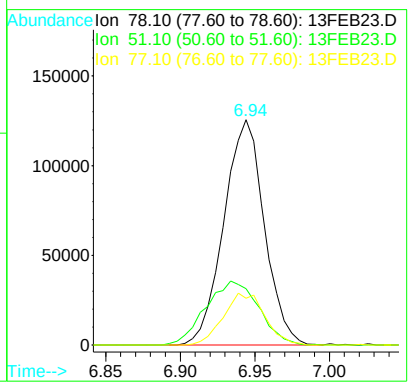


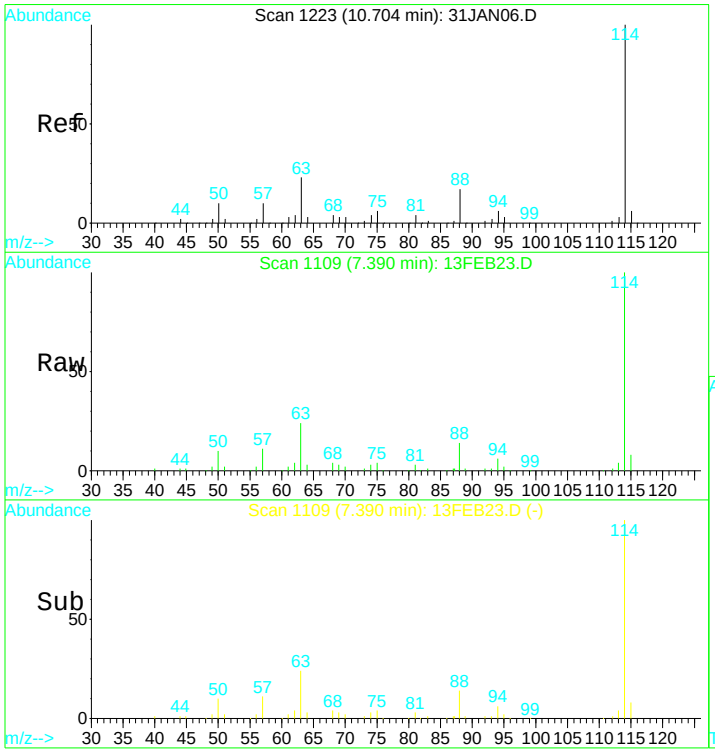




#23
Benzene
Concen: 6.39 ug/L
RT: 6.94 min Scan# 1022
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 78 Resp: 236952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 51 | 37.4 | 16.2 | 30.0# |
| 77 | 23.7 | 16.3 | 30.3 |

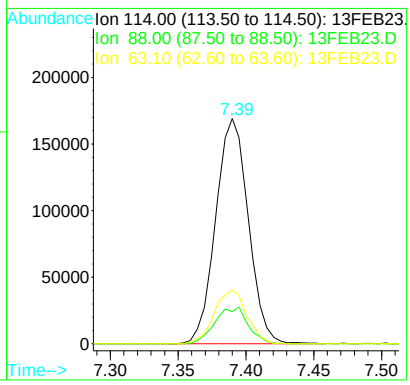


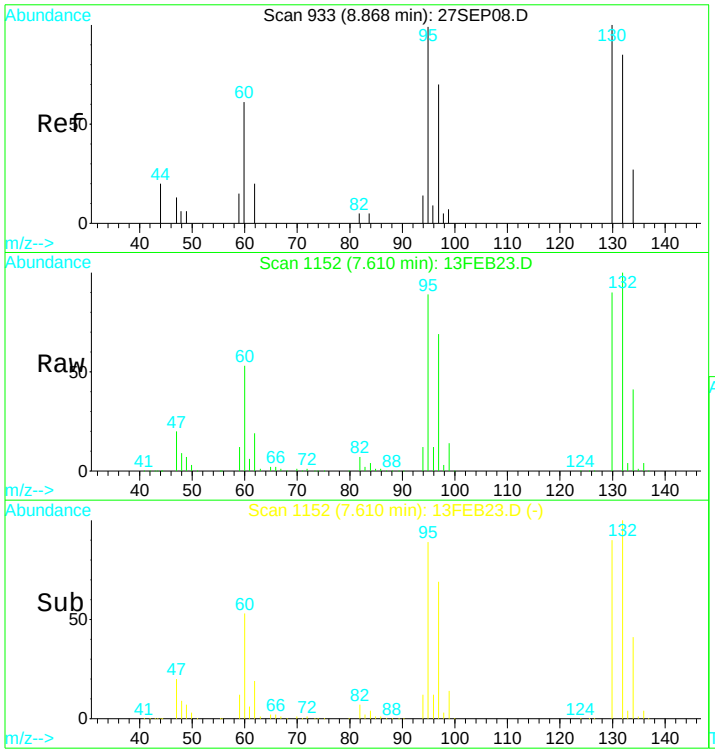



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:114 Resp: 283532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.6 | 12.0 | 22.2 |
| 63 | 23.7 | 16.9 | 31.5 |

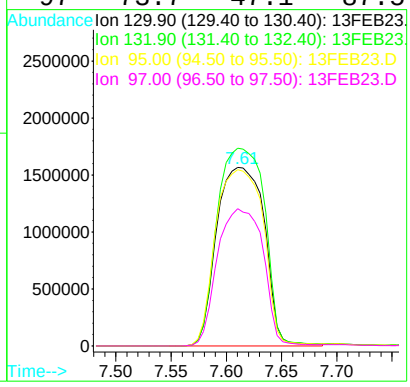


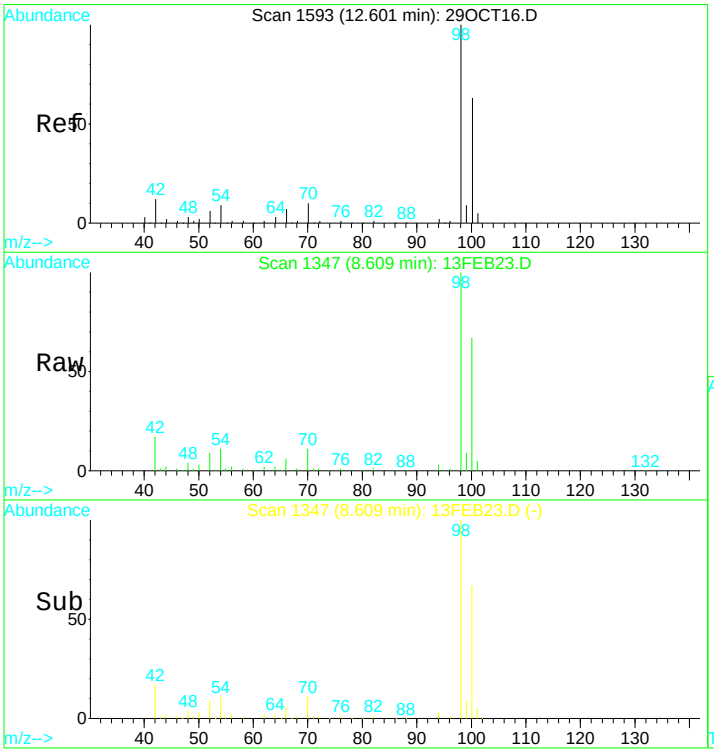




#25
Trichloroethene
Concen: 507.75 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:130 Resp: 4686998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 110.7 | 74.3 | 137.9 |
| 95 | 98.9 | 70.8 | 131.6 |
| 97 | 73.7 | 47.1 | 87.5 |

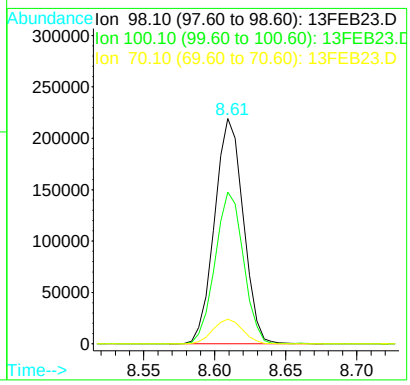


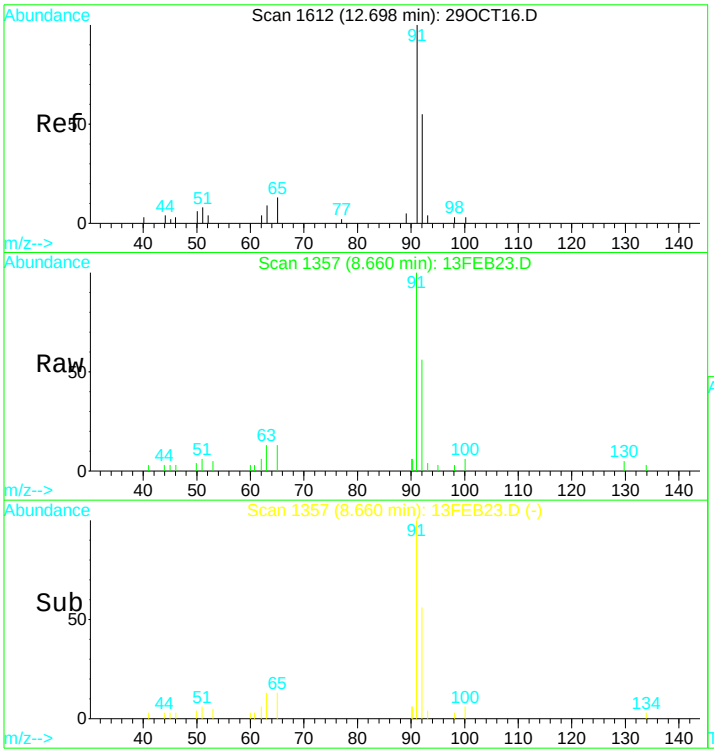



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 98 Resp: 309561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.4 | 47.0 | 87.4 |
| 70 | 11.3 | 7.3 | 13.7 |

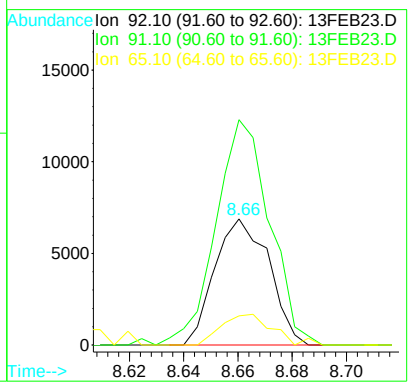


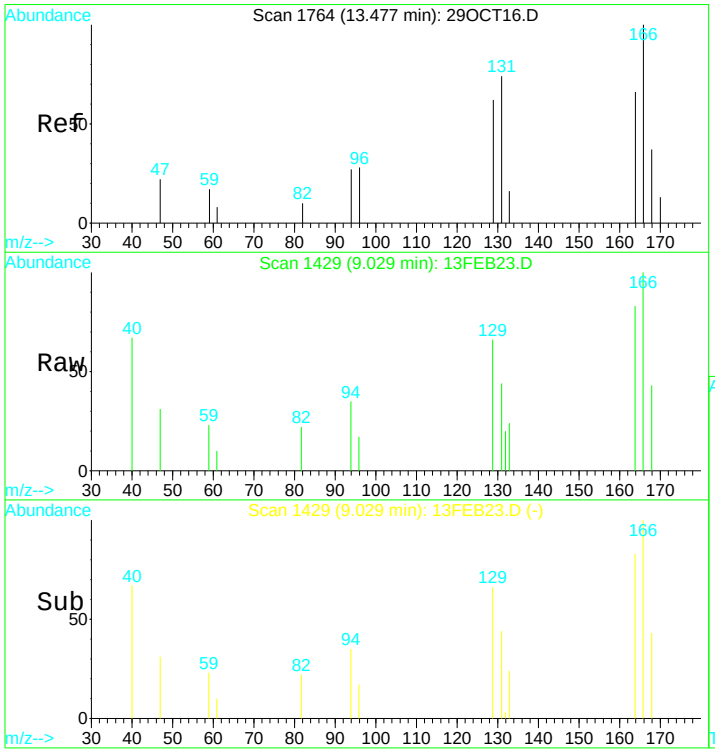




#32
Toluene
Concen: 0.43 ug/L
RT: 8.66 min Scan# 1357
Delta R.T. -0.01 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 92 Resp: 9567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 177.9 | 102.5 | 190.3 |
| 65 | 23.2 | 15.0 | 27.8 |

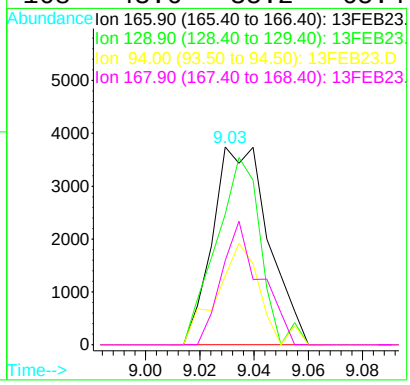


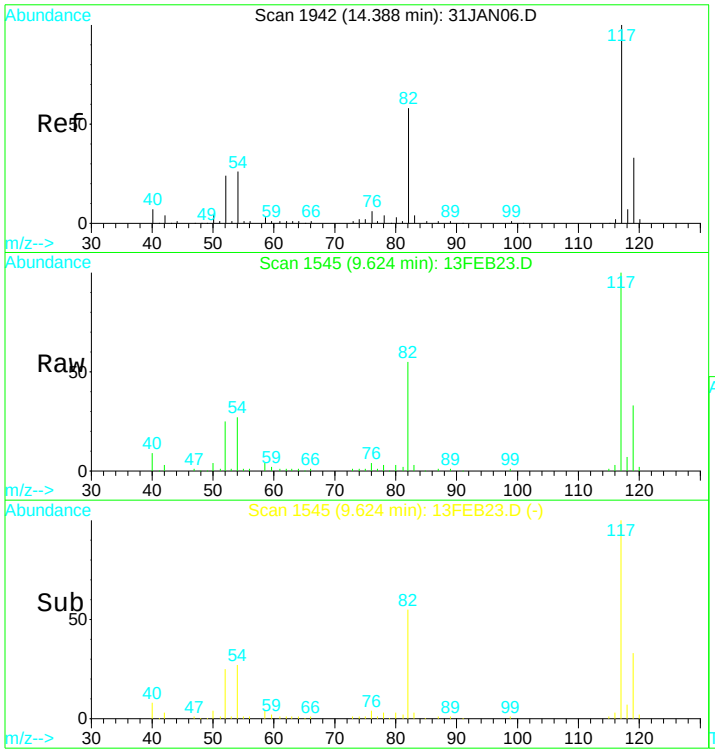



#35
Tetrachloroethene (PCE)
Concen: 0.55 ug/L
RT: 9.03 min Scan# 1429
Delta R.T. -0.01 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:166 Resp: 5365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 129 | 75.2 | 45.5 | 84.5 |
| 94 | 42.2 | 23.7 | 43.9 |
| 168 | 43.6 | 35.2 | 65.4 |

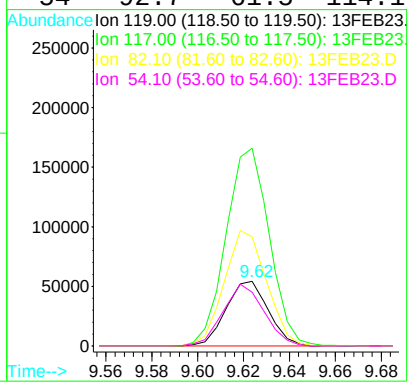


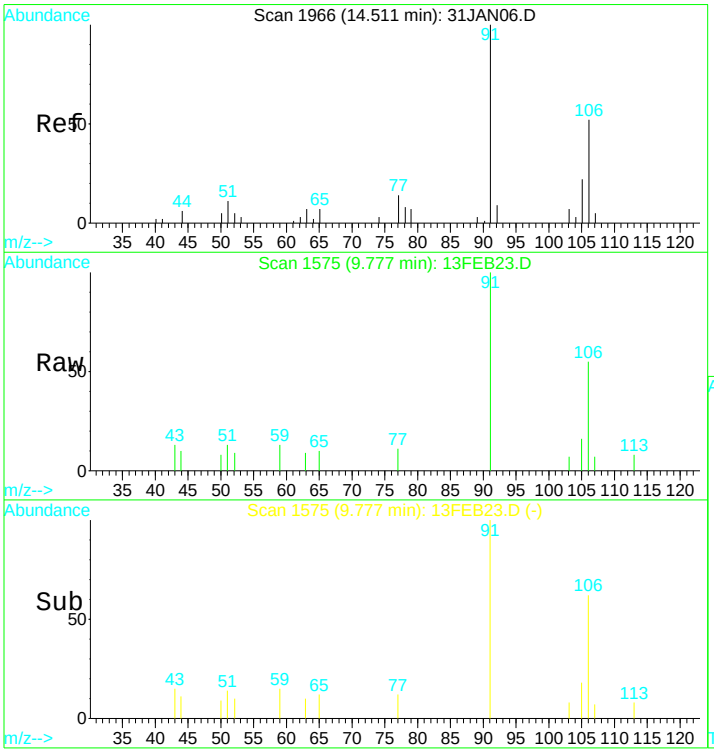




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:119 Resp: 69633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 311.9 | 220.4 | 409.4 |
| 82 | 178.3 | 123.9 | 230.1 |
| 54 | 92.7 | 61.5 | 114.1 |

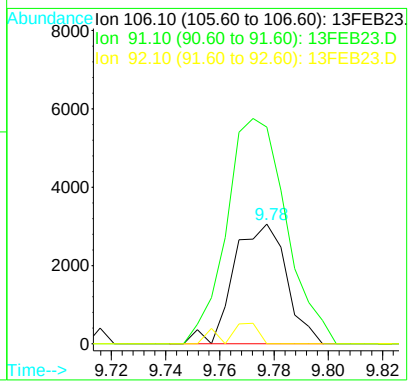


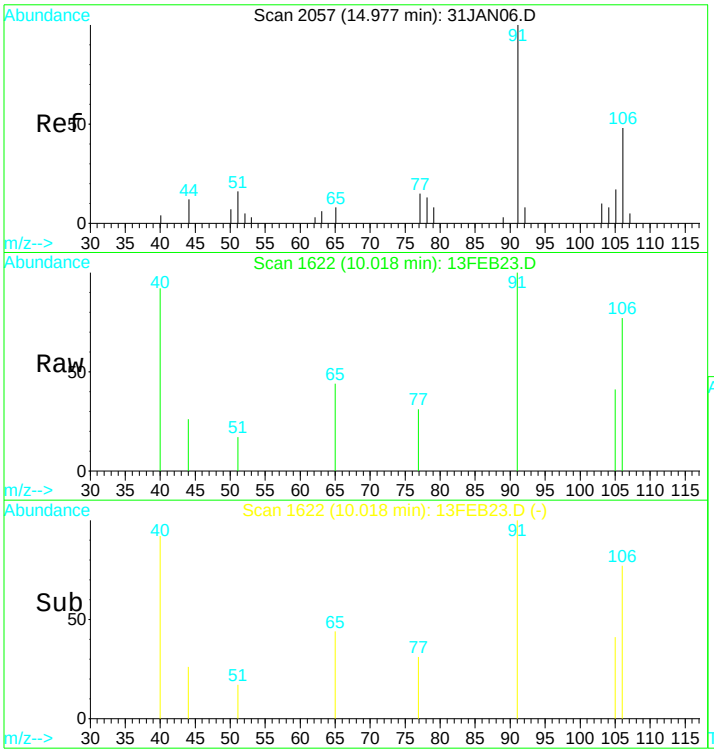



#43
P+m-Xylene
Concen: 0.28 ug/L
RT: 9.78 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:106 Resp: 3975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.2 | 116.4 | 216.2# |
| 92 | 11.1 | 10.8 | 20.0 |

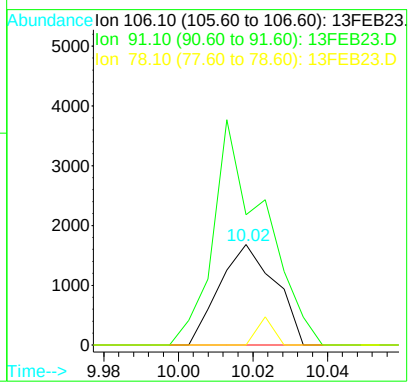


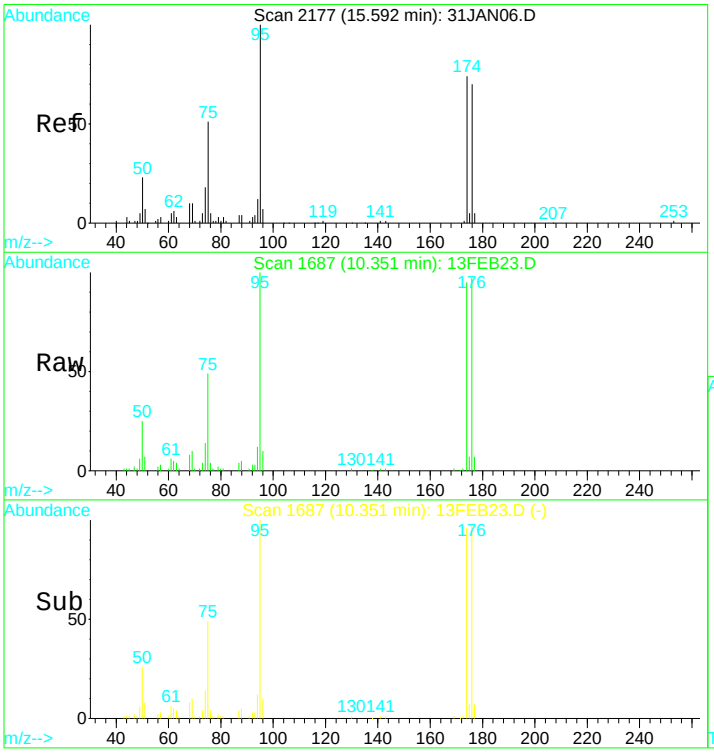




#44
O-Xylene
Concen: 0.13 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:106 Resp: 1743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 204.5 | 124.3 | 230.9 |
| 78 | 8.3 | 51.7 | 95.9# |

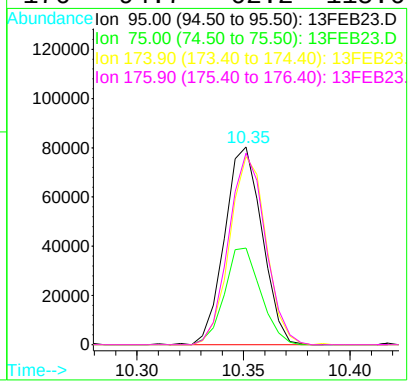


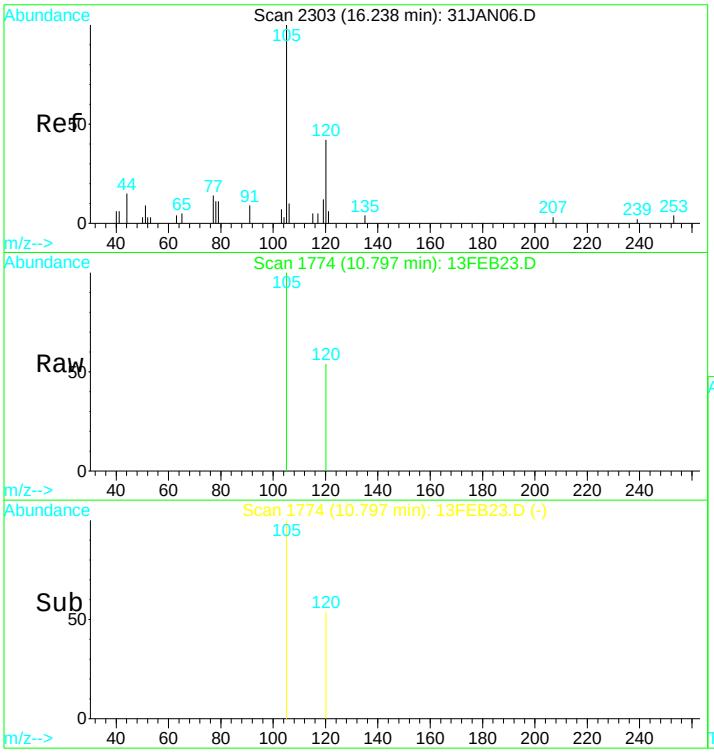



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion: 95 Resp: 98755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 47.2 | 32.6 | 60.5 |
| 174 | 92.1 | 60.9 | 113.1 |
| 176 | 94.7 | 62.2 | 115.6 |

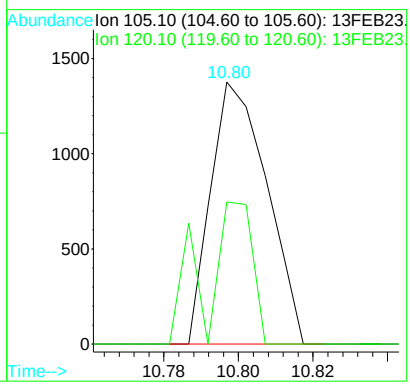



#57
1,2,4-trimethylbenzene
Concen: 0.06 ug/L
RT: 10.80 min Scan# 1774
Delta R.T. -0.01 min
Lab File: 13FEB23.D
Acq: 13 Feb 2017 3:03 pm

Tgt Ion:105 Resp: 1438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.3 | 37.5 | 69.7 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB23.D Vial: 23
Acq On : 13 Feb 2017 3:03 pm Operator: MGC
Sample : 1703480-29 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:14 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 196220 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 283532 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69633 | 10.00 | ug/L | 0.00 |

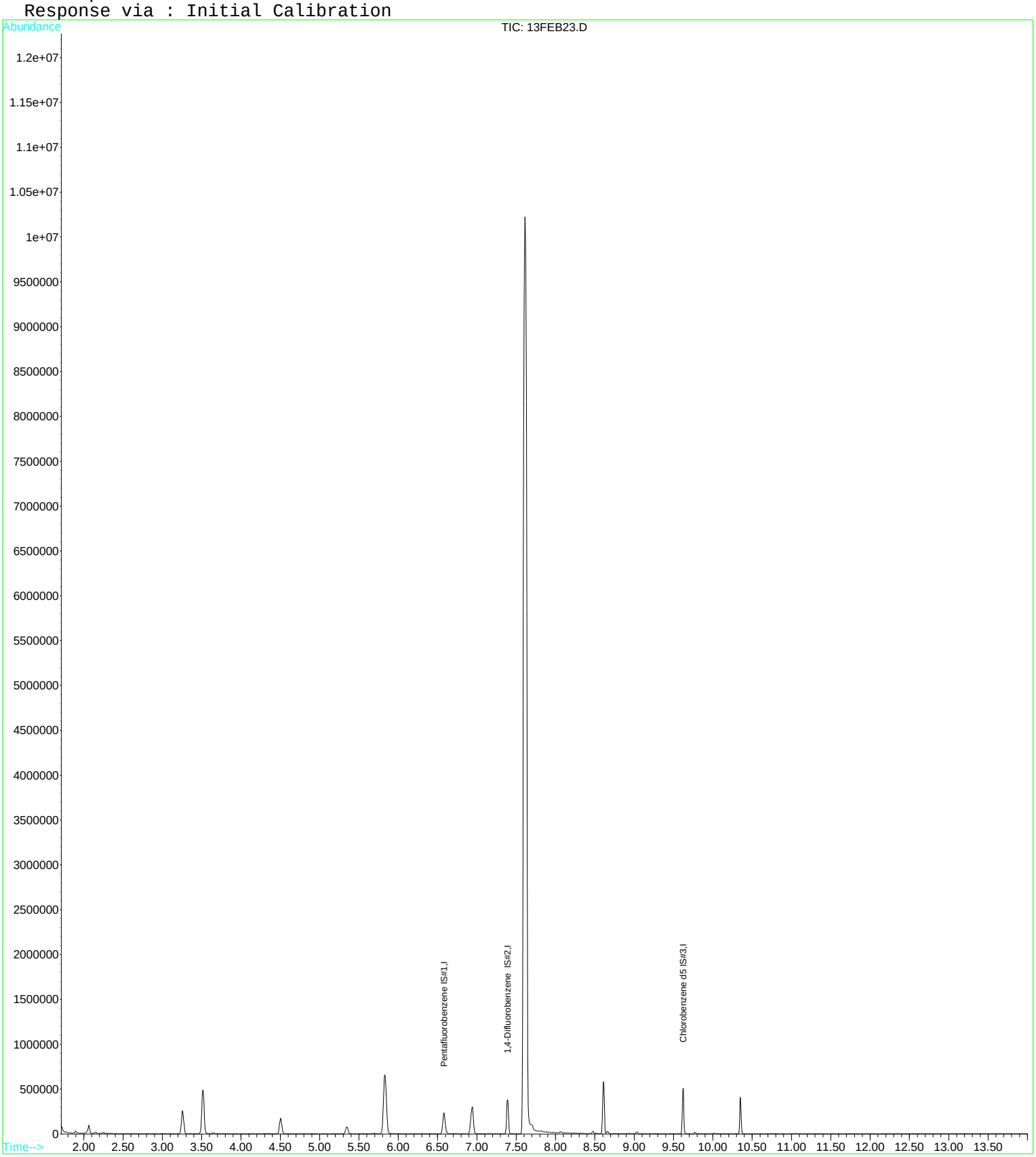
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB23.D Vial: 23
Acq On : 13 Feb 2017 3:03 pm Operator: MGC
Sample : 1703480-29 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:14 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB36.D Vial: 36
Acq On : 14 Feb 2017 7:39 pm Operator: MGC
Sample : 1703480-29RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 199365 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 274942 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62885 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 64529 | 10.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 109.40% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 287562 | 9.19 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 91.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 86276 | 9.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.50% | | | |

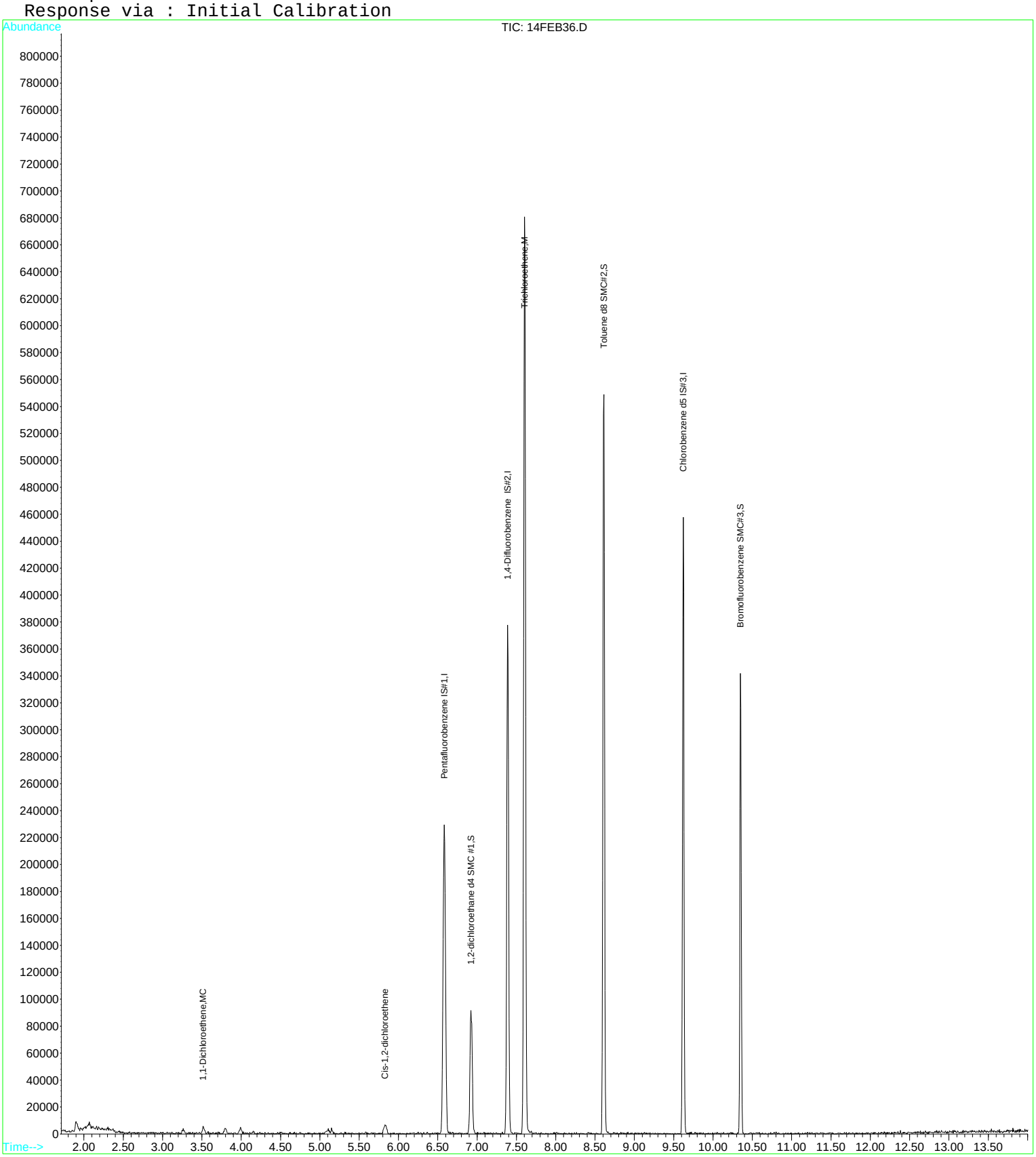
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 9) 1,1-Dichloroethene | 3.51 | 61 | 3673 | 0.24 | ug/L | 94 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 4278 | 0.46 | ug/L | 85 |
| 25) Trichloroethene | 7.61 | 130 | 195210 | 21.81 | ug/L | 99 |

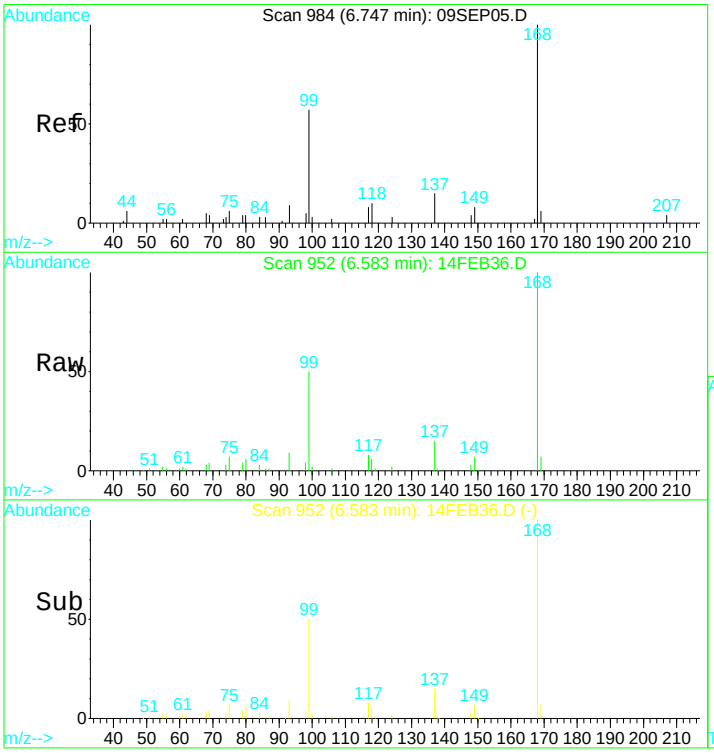
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB36.D Vial: 36
Acq On : 14 Feb 2017 7:39 pm Operator: MGC
Sample : 1703480-29RE1 Inst : MS-V5
Misc : 100 ;0.5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:19 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

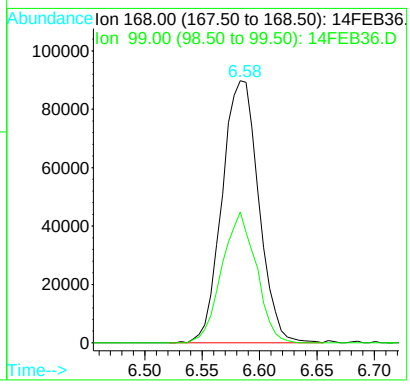


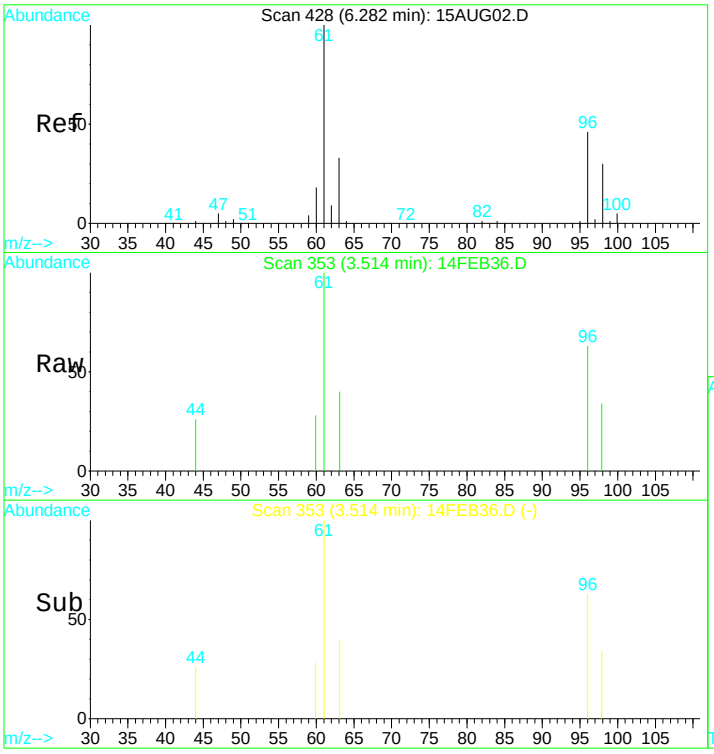



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion:168 Resp: 199365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.7 | 305.1 | 566.7# |

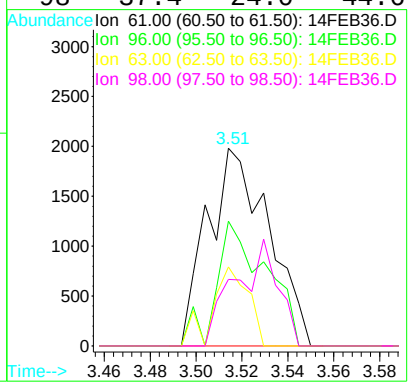


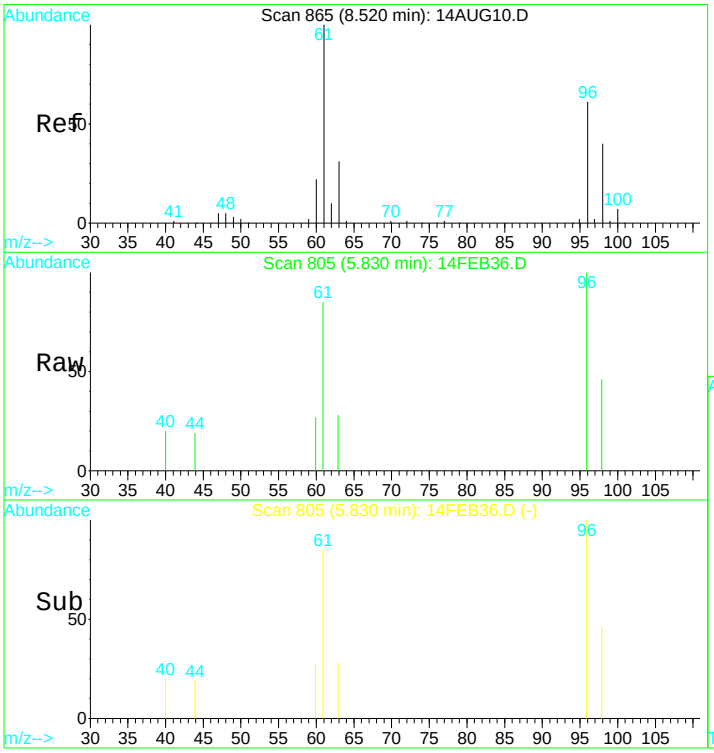




#9
1,1-Dichloroethene
Concen: 0.24 ug/L
RT: 3.51 min Scan# 353
Delta R.T. -0.00 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion: 61 Resp: 3673

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 50.9 | 36.6 | 68.0 |
| 63 | 23.4 | 22.0 | 40.8 |
| 98 | 37.4 | 24.0 | 44.6 |

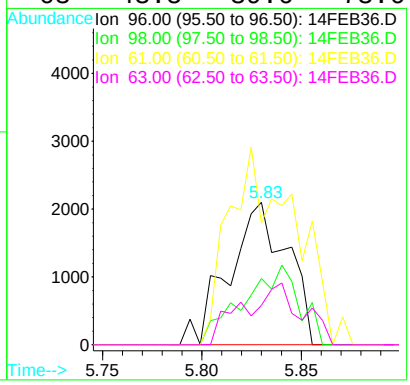


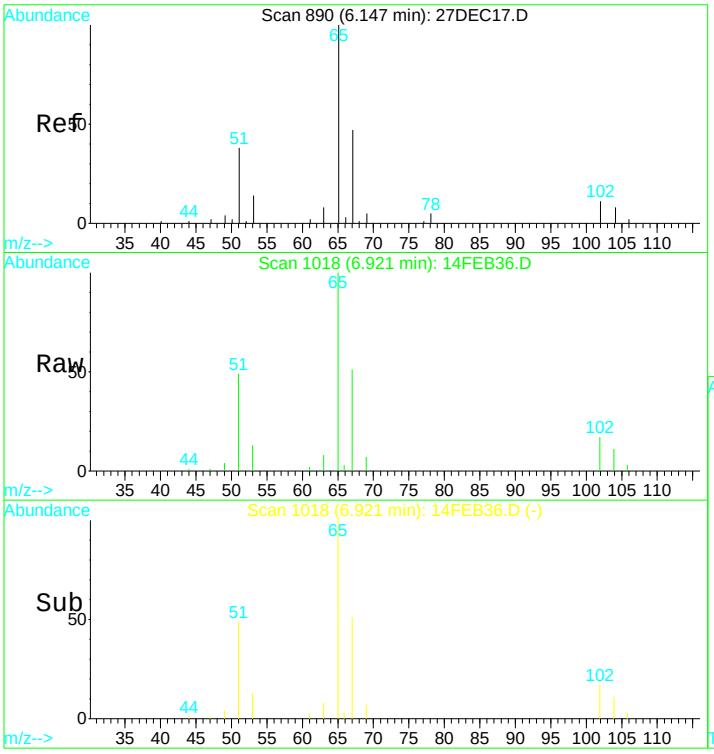



#15
Cis-1,2-dichloroethene
Concen: 0.46 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion: 96 Resp: 4278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 53.8 | 46.2 | 85.8 |
| 61 | 156.1 | 122.8 | 228.0 |
| 63 | 43.5 | 39.6 | 73.6 |

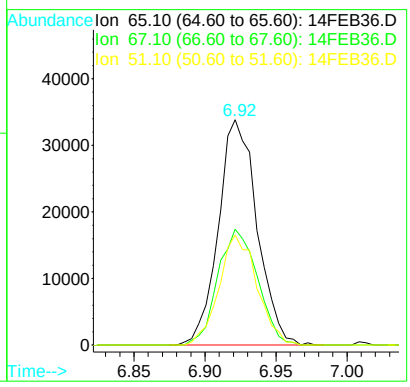


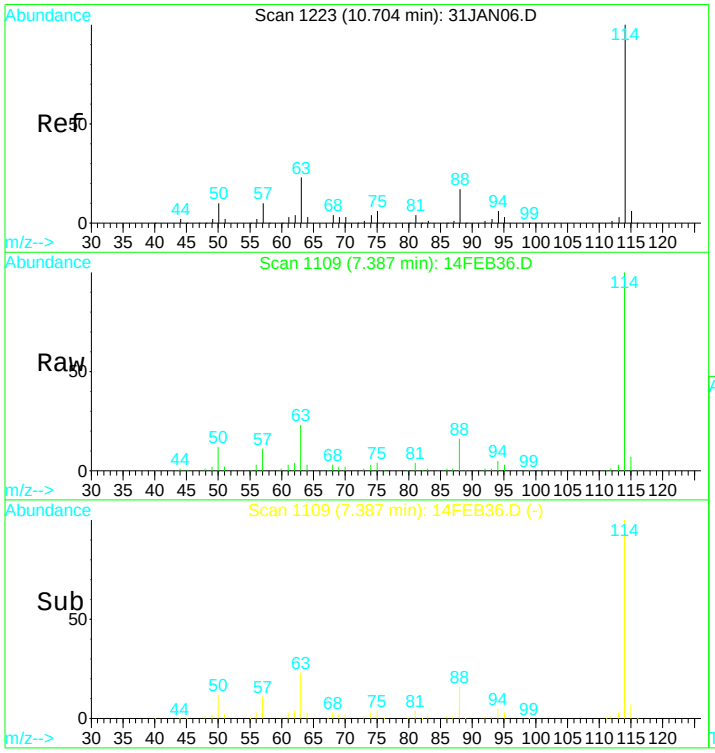




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion: 65 Resp: 64529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.1 | 38.4 | 71.4 |
| 51 | 47.9 | 1006.3 | 1868.8# |

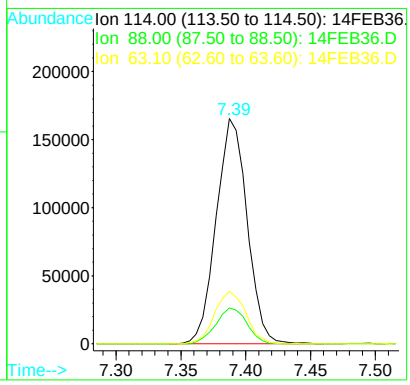


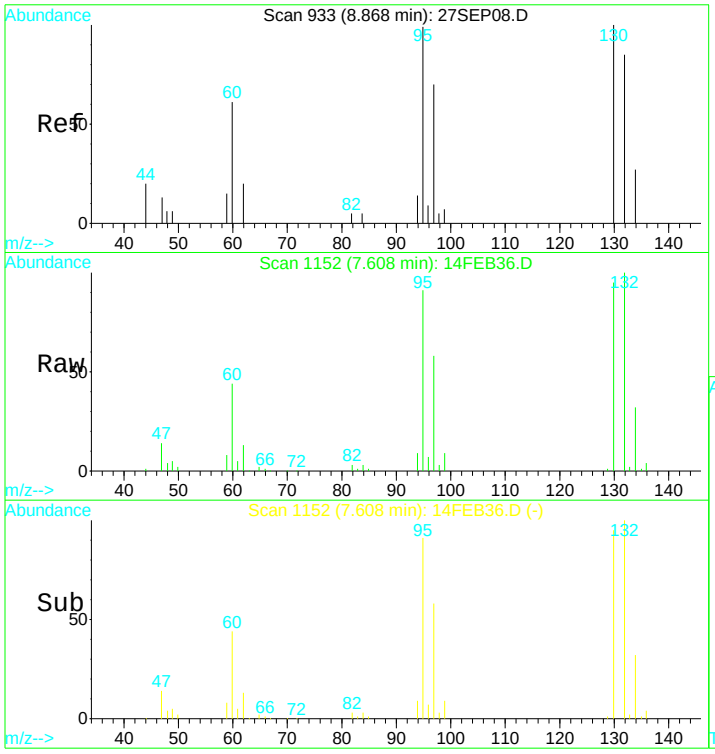



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion:114 Resp: 274942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.1 | 12.0 | 22.2 |
| 63 | 23.6 | 16.9 | 31.5 |

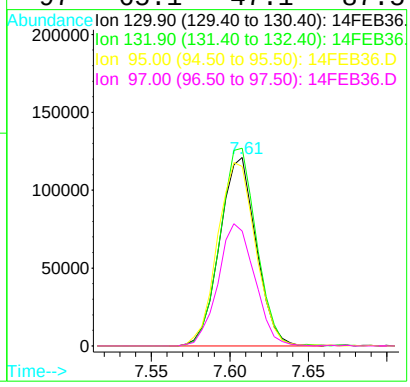


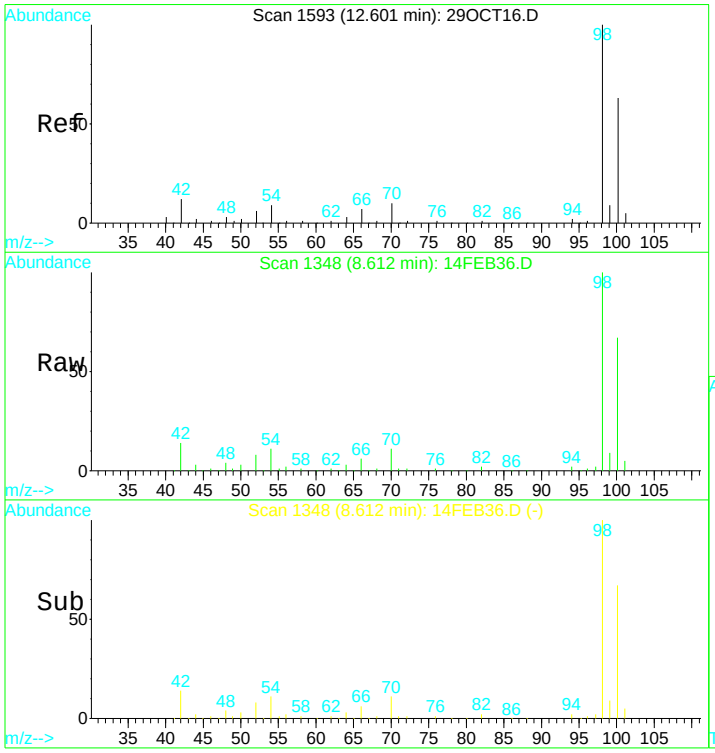




#25
Trichloroethene
Concen: 21.81 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion:130 Resp: 195210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 104.6 | 74.3 | 137.9 |
| 95 | 101.6 | 70.8 | 131.6 |
| 97 | 65.1 | 47.1 | 87.5 |

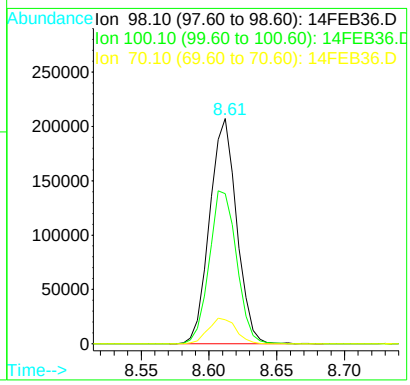


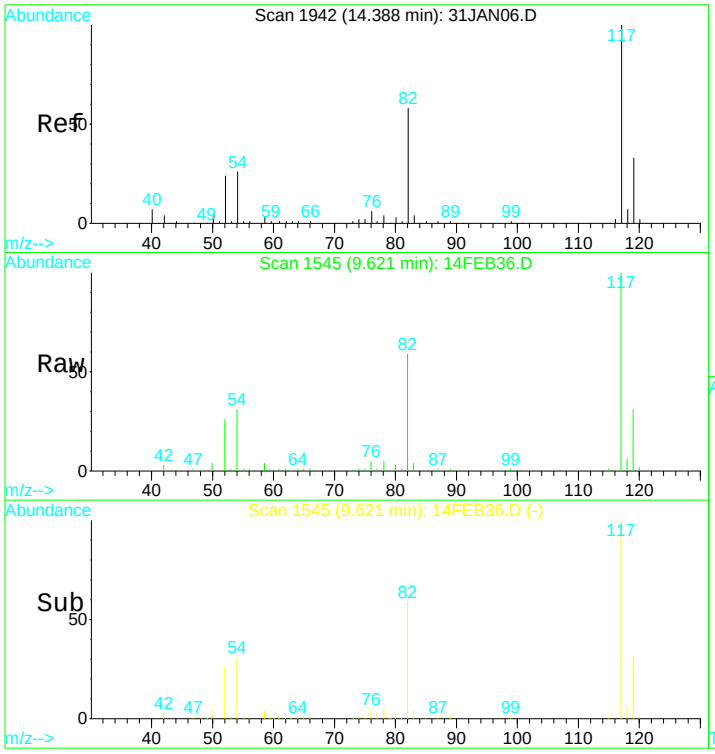



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion: 98 Resp: 287562

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.8 | 47.0 | 87.4 |
| 70 | 11.8 | 7.3 | 13.7 |

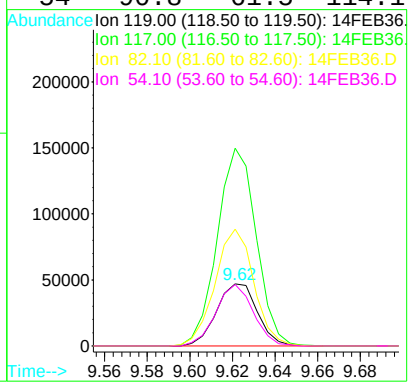


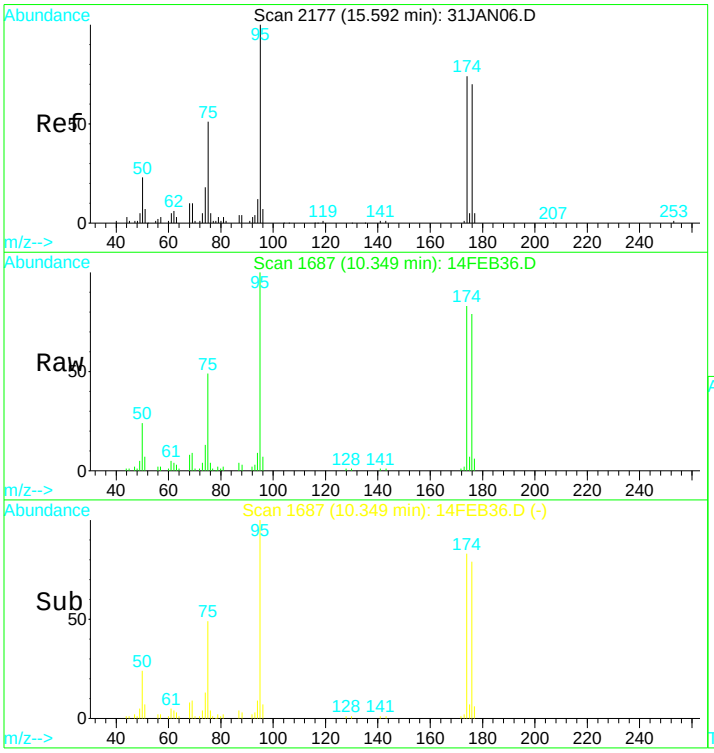




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion:119 Resp: 62885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 303.3 | 220.4 | 409.4 |
| 82 | 178.7 | 123.9 | 230.1 |
| 54 | 90.8 | 61.5 | 114.1 |

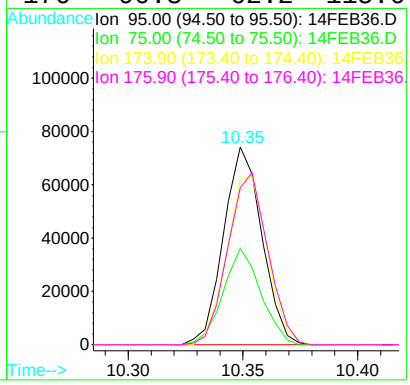





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 14FEB36.D
Acq: 14 Feb 2017 7:39 pm

Tgt Ion: 95 Resp: 86276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 47.9 | 32.6 | 60.5 |
| 174 | 90.0 | 60.9 | 113.1 |
| 176 | 90.3 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB32.D Vial: 32
Acq On : 14 Feb 2017 6:06 pm Operator: MGC
Sample : 1703480-30 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:17 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201095 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 267917 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64522 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 62332 | 10.48 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 104.80% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 291021 | 9.54 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.40% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 85591 | 9.62 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 96.20% | | | | | | |

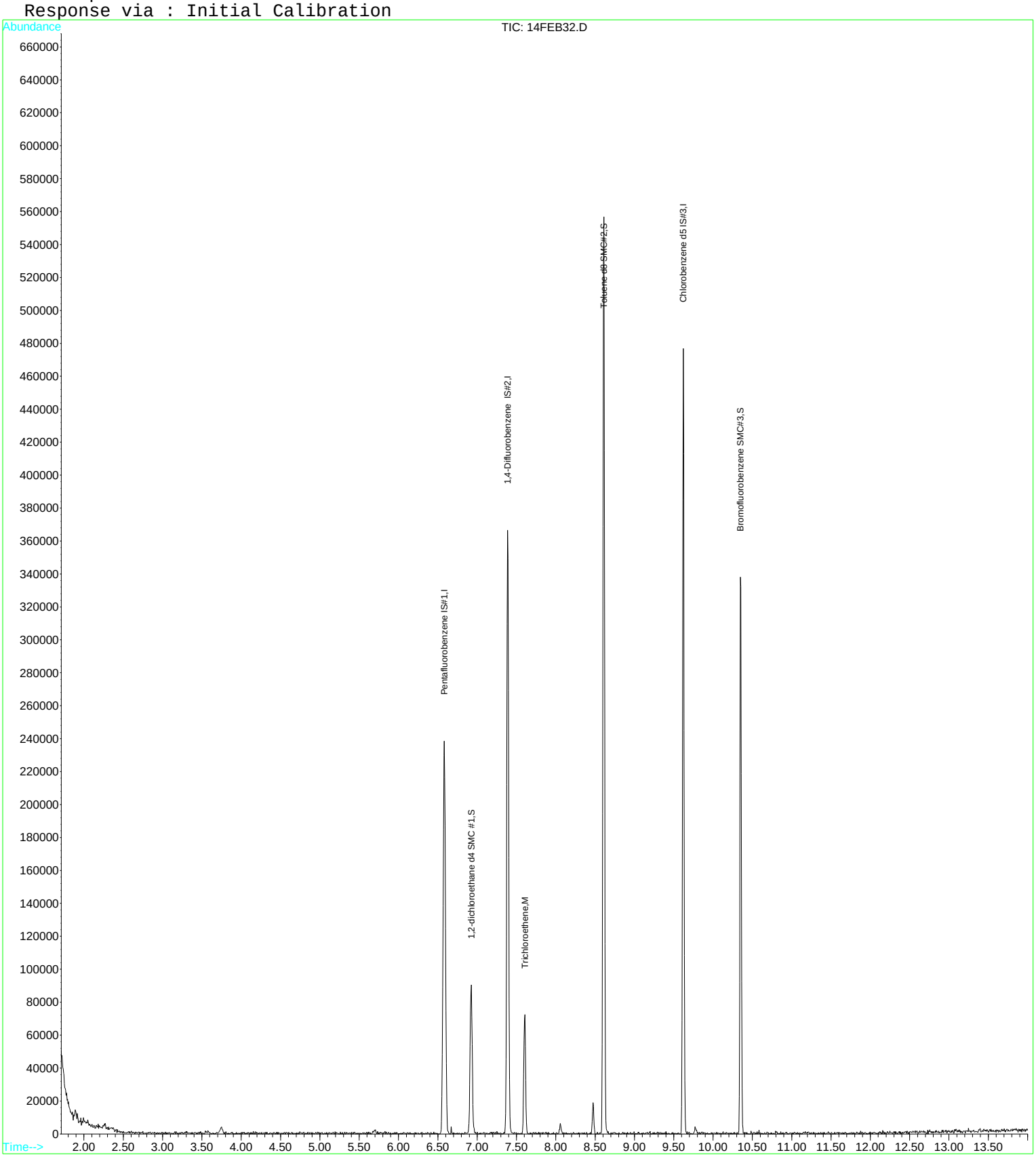
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 25) Trichloroethene | 7.61 | 130 | 21216 | 2.43 | ug/L | 94 |

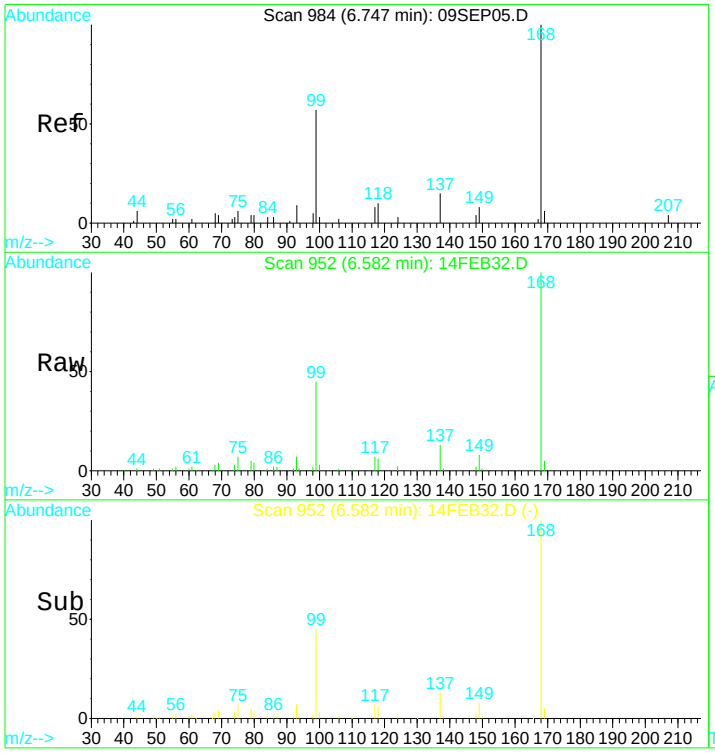
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB32.D Vial: 32
Acq On : 14 Feb 2017 6:06 pm Operator: MGC
Sample : 1703480-30 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:17 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

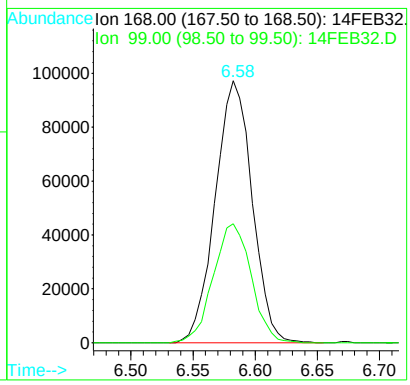


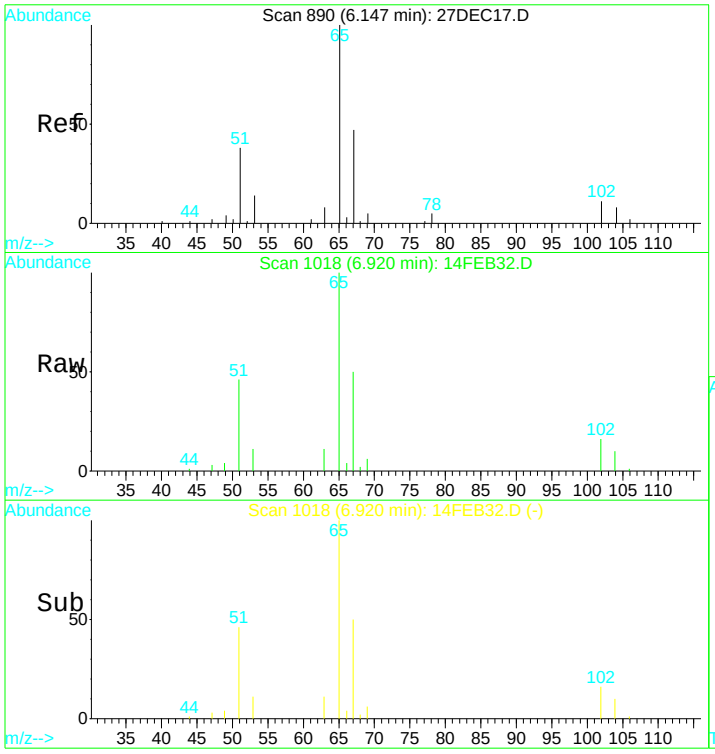



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion:168 Resp: 201095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.6 | 305.1 | 566.7# |

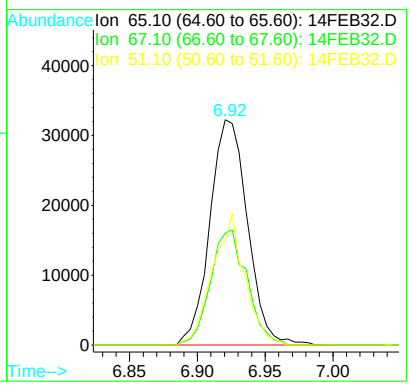


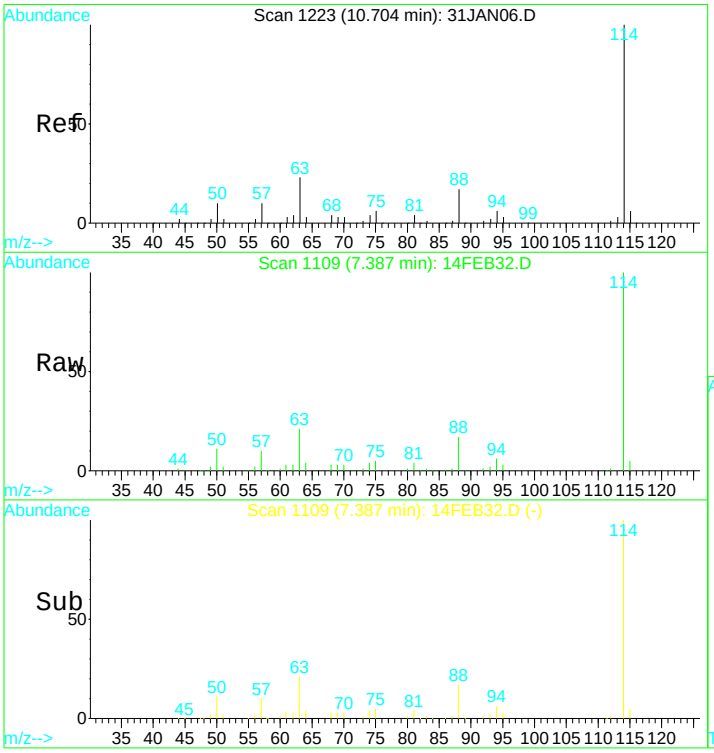




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion: 65 Resp: 62332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.5 | 38.4 | 71.4 |
| 51 | 50.1 | 1006.3 | 1868.8# |

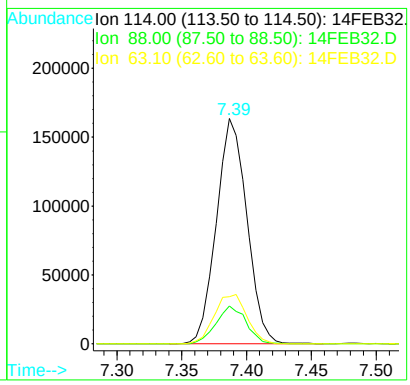


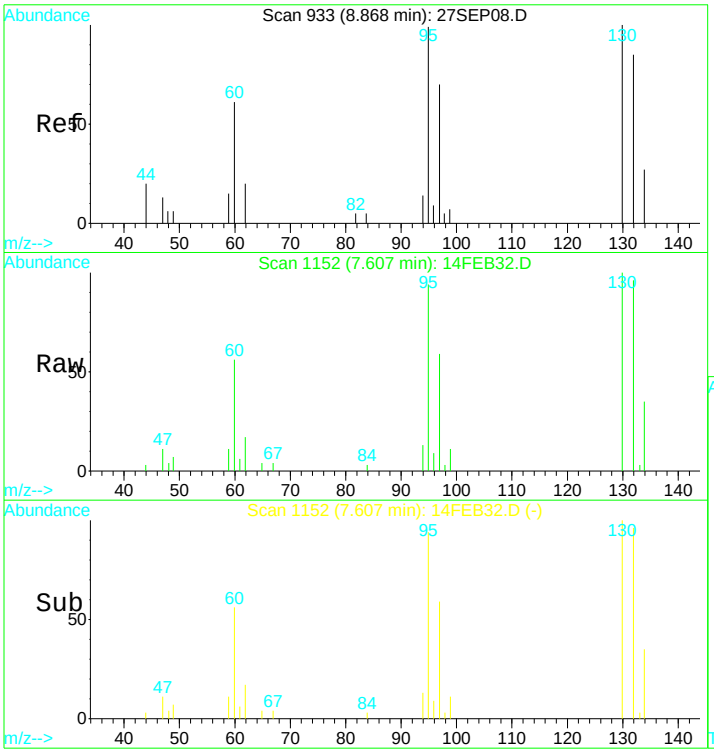



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion:114 Resp: 267917

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.5 | 12.0 | 22.2 |
| 63 | 23.5 | 16.9 | 31.5 |

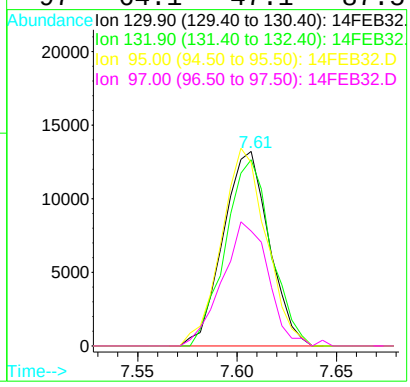


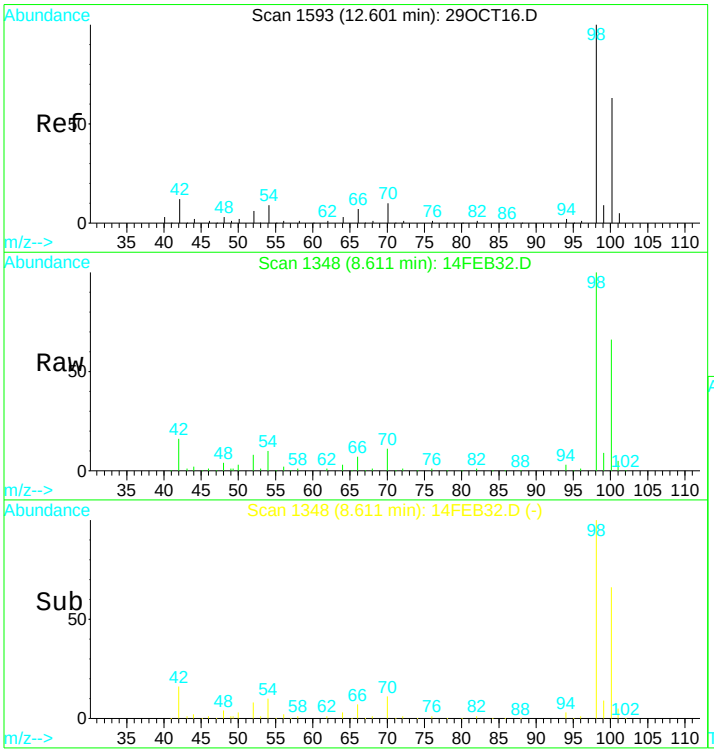




#25
Trichloroethene
Concen: 2.43 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion:130 Resp: 21216

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 95.4 | 74.3 | 137.9 |
| 95 | 99.1 | 70.8 | 131.6 |
| 97 | 64.1 | 47.1 | 87.5 |

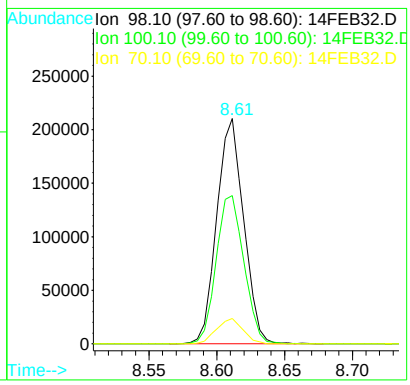


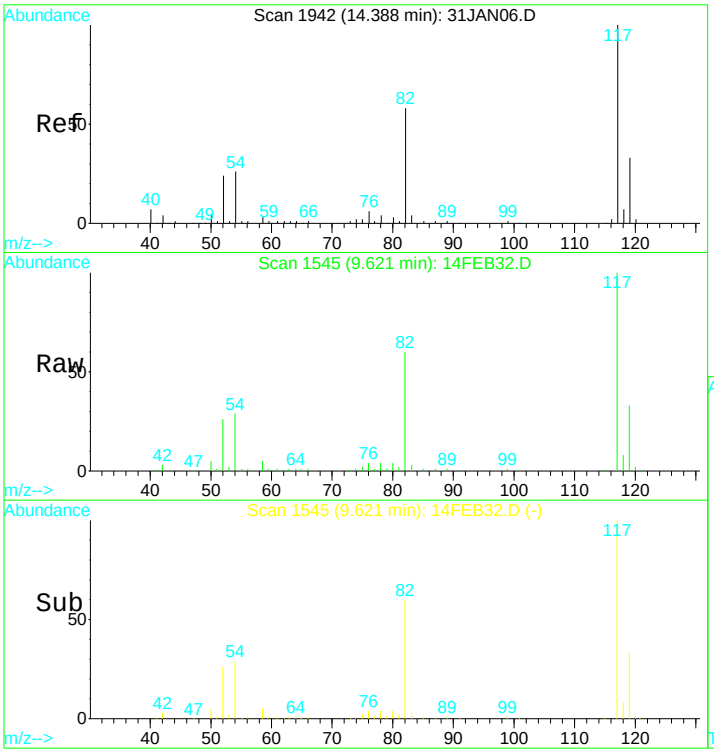



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion: 98 Resp: 291021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.8 | 47.0 | 87.4 |
| 70 | 11.1 | 7.3 | 13.7 |

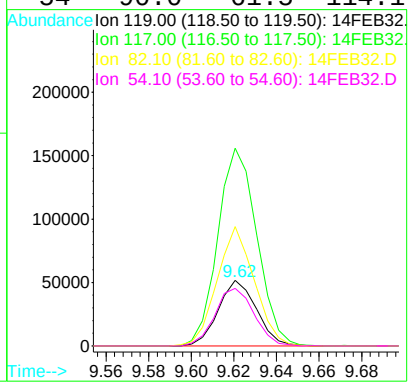


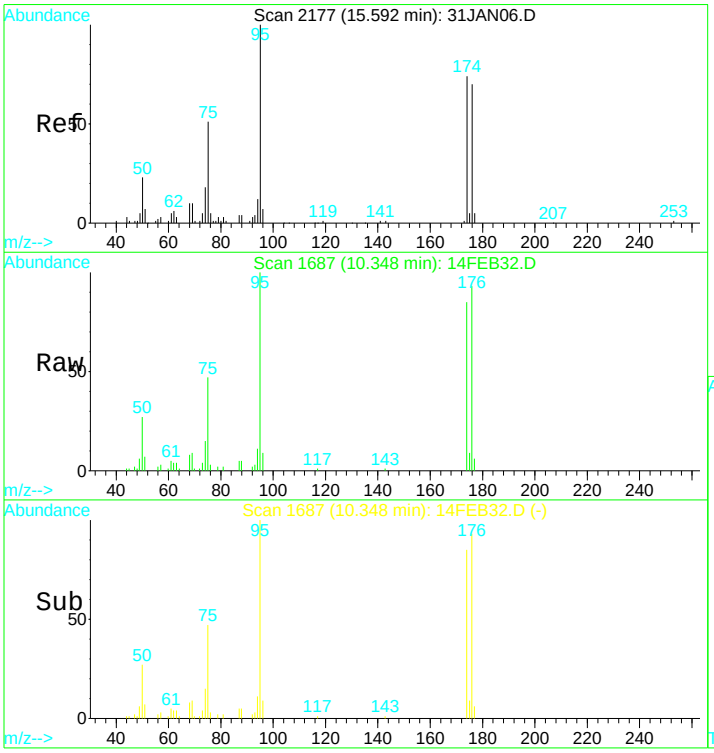




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion:119 Resp: 64522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 308.5 | 220.4 | 409.4 |
| 82 | 177.6 | 123.9 | 230.1 |
| 54 | 90.0 | 61.5 | 114.1 |

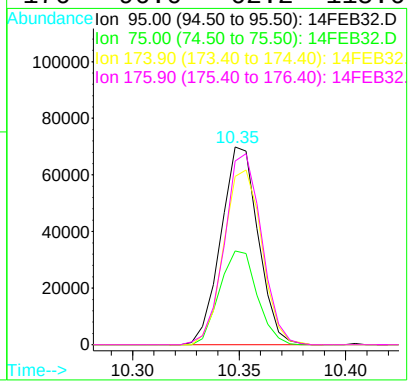





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion: 95 Resp: 85591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 47.4 | 32.6 | 60.5 |
| 174 | 89.8 | 60.9 | 113.1 |
| 176 | 96.0 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB32.D Vial: 32
Acq On : 14 Feb 2017 6:06 pm Operator: MGC
Sample : 1703480-30 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:23 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201095 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 267917 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64522 | 10.00 | ug/L | 0.00 |

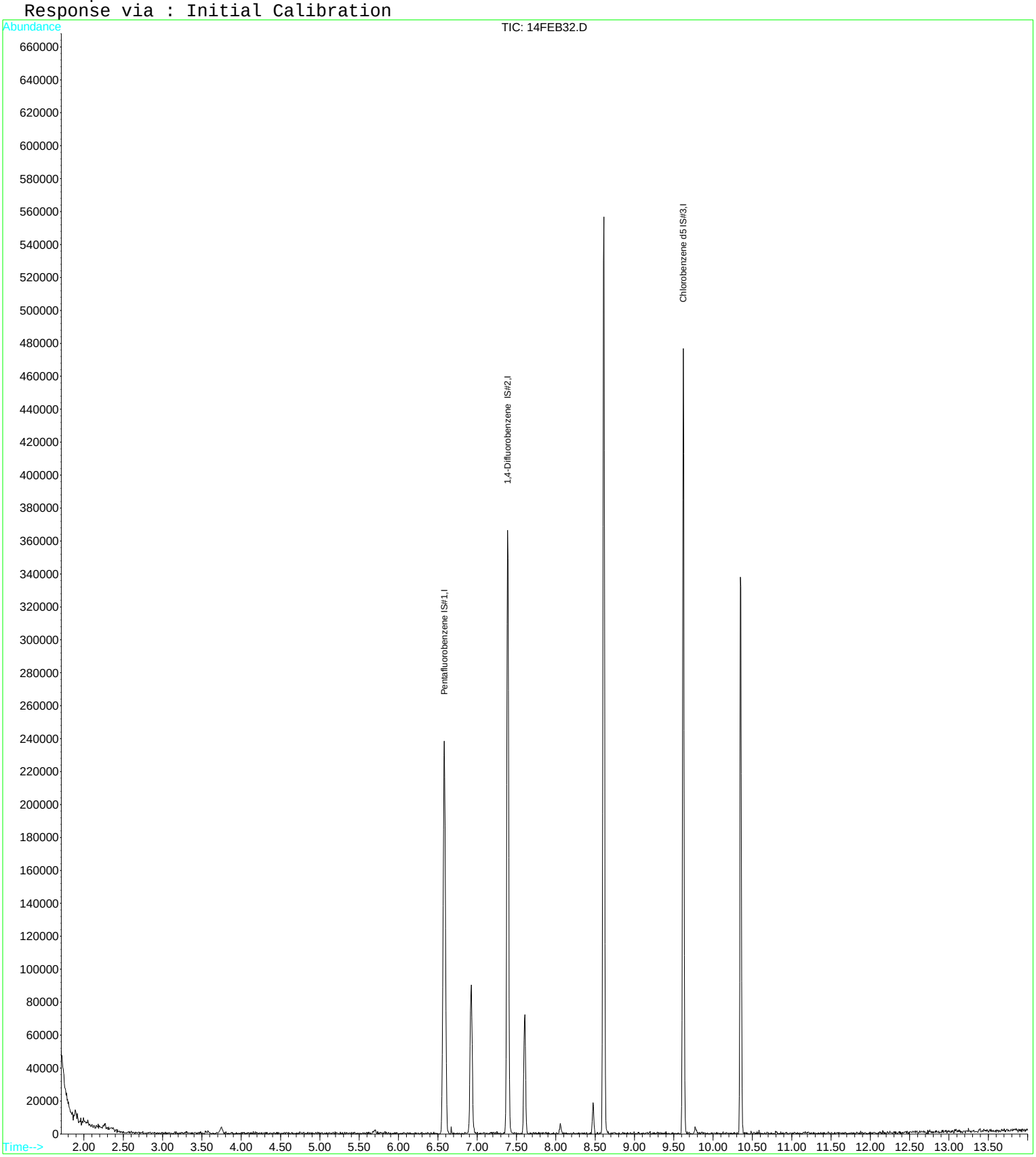
Target Compounds Qvalue

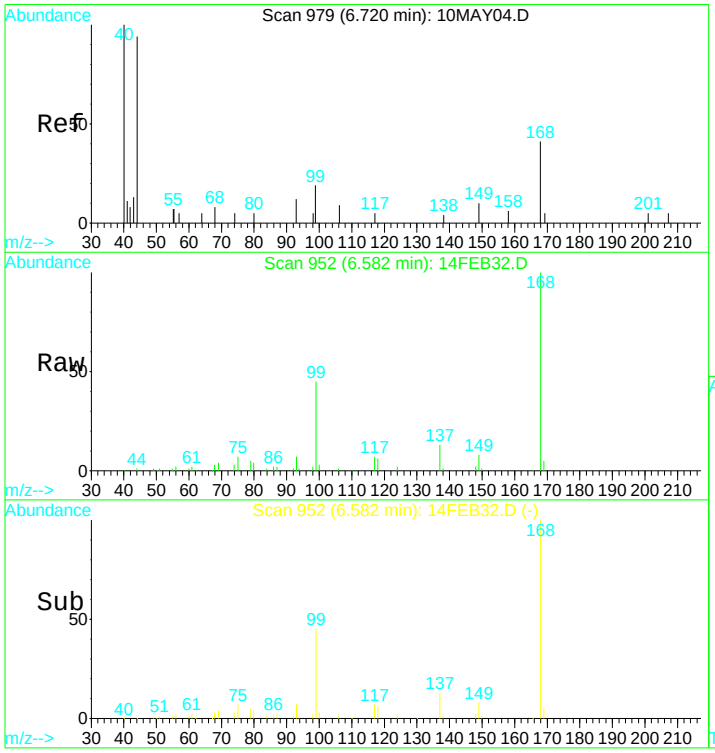
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB32.D Vial: 32
Acq On : 14 Feb 2017 6:06 pm Operator: MGC
Sample : 1703480-30 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:23 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

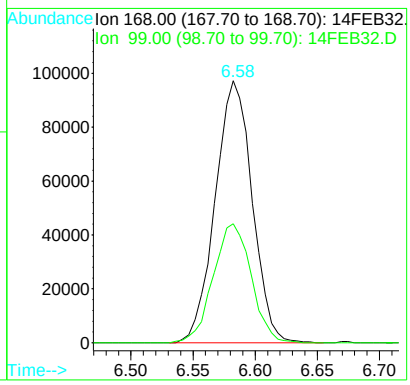


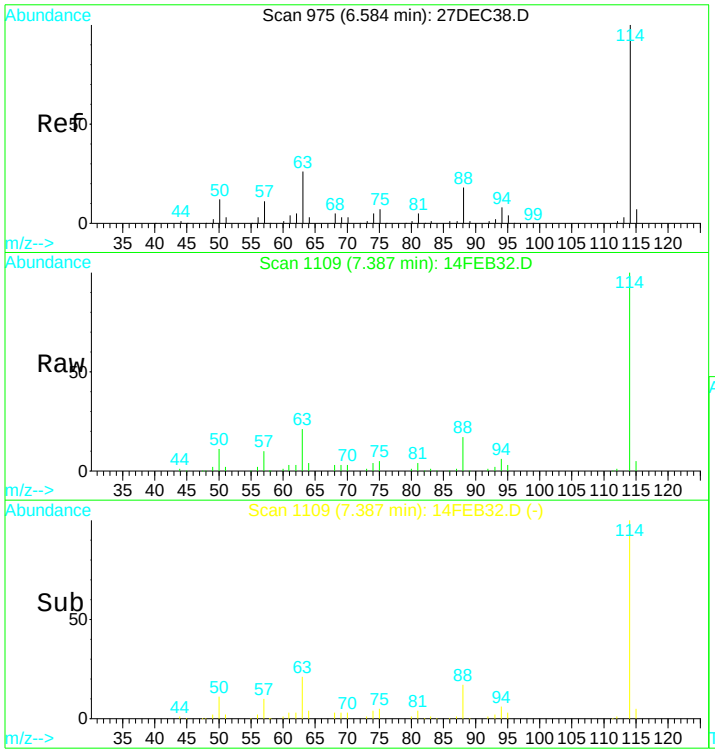



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion:168 Resp: 201095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.6 | 32.8 | 60.8 |

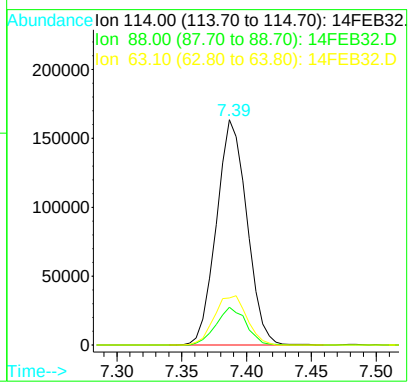


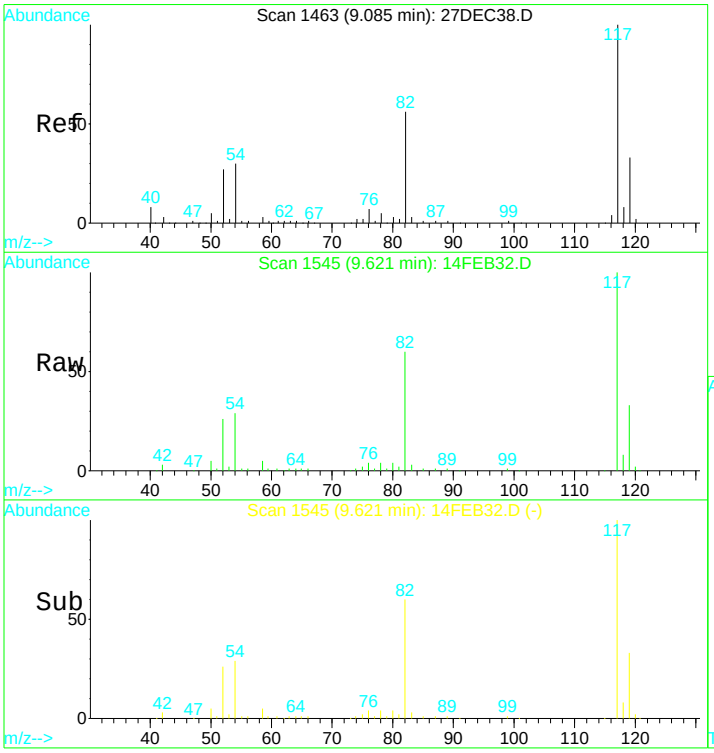




#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion:114 Resp: 267917

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.5 | 11.3 | 21.1 |
| 63 | 23.5 | 16.1 | 29.9 |

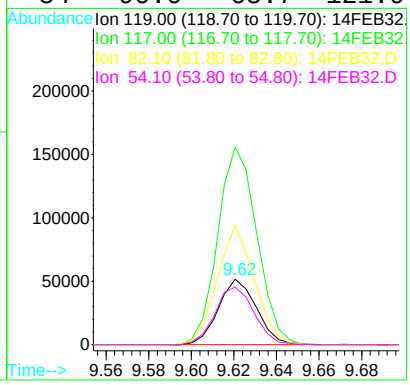





#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB32.D
Acq: 14 Feb 2017 6:06 pm

Tgt Ion:119 Resp: 64522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 308.5 | 218.6 | 406.0 |
| 82 | 177.6 | 128.7 | 238.9 |
| 54 | 90.0 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB25.D Vial: 25
Acq On : 13 Feb 2017 3:49 pm Operator: MGC
Sample : 1703480-31 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:16 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206309 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272484 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66448 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61493 | 10.07 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 100.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 307564 | 9.92 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87634 | 9.56 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.60% | | | |

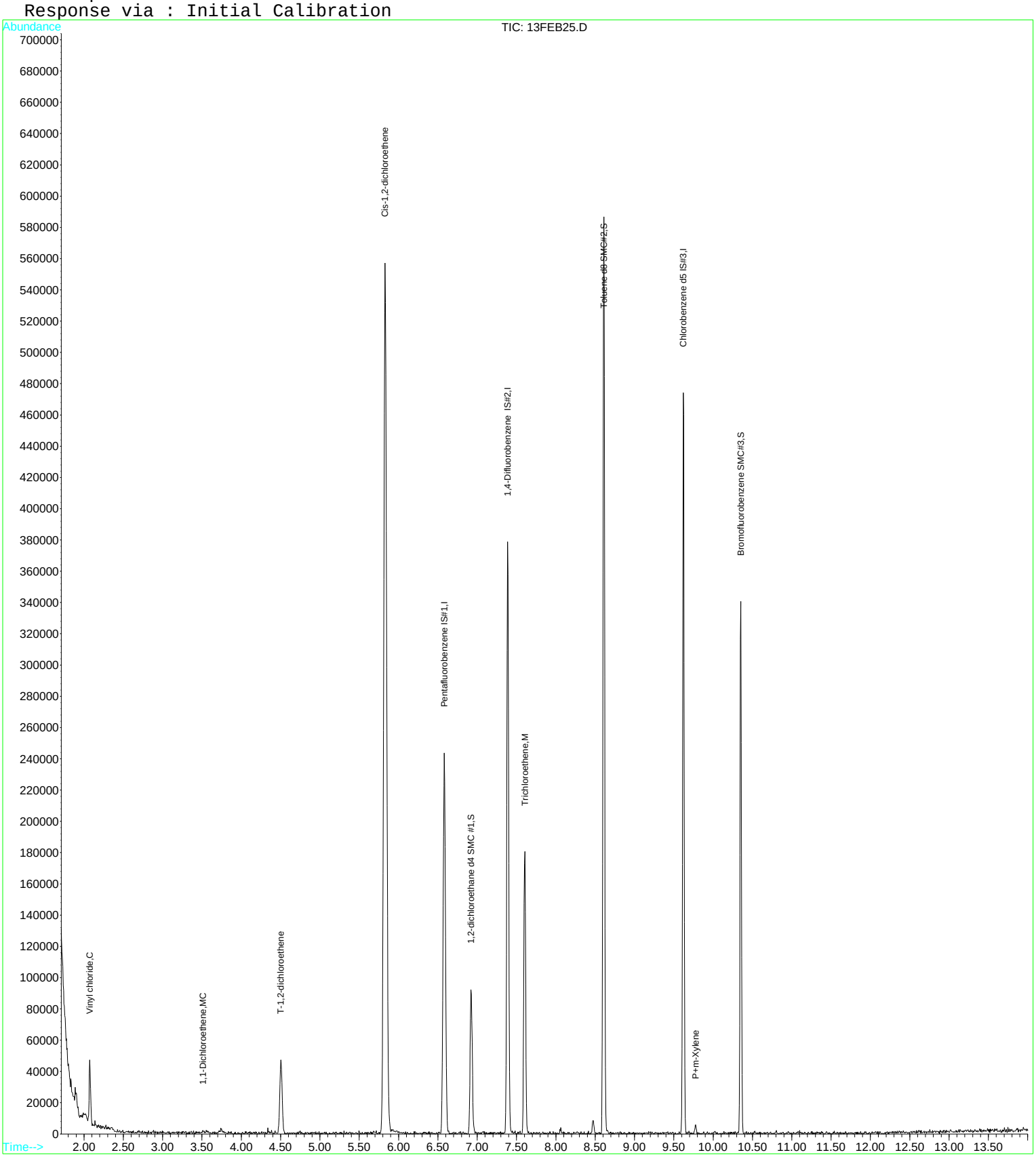
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 33260 | 2.71 | ug/L | 85 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 1165 | 0.07 | ug/L # | 47 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 18151 | 1.95 | ug/L | 95 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 311281 | 32.33 | ug/L | 91 |
| 25) Trichloroethene | 7.60 | 130 | 51936 | 5.85 | ug/L | 98 |
| 43) P+m-Xylene | 9.77 | 106 | 1825 | 0.14 | ug/L # | 83 |

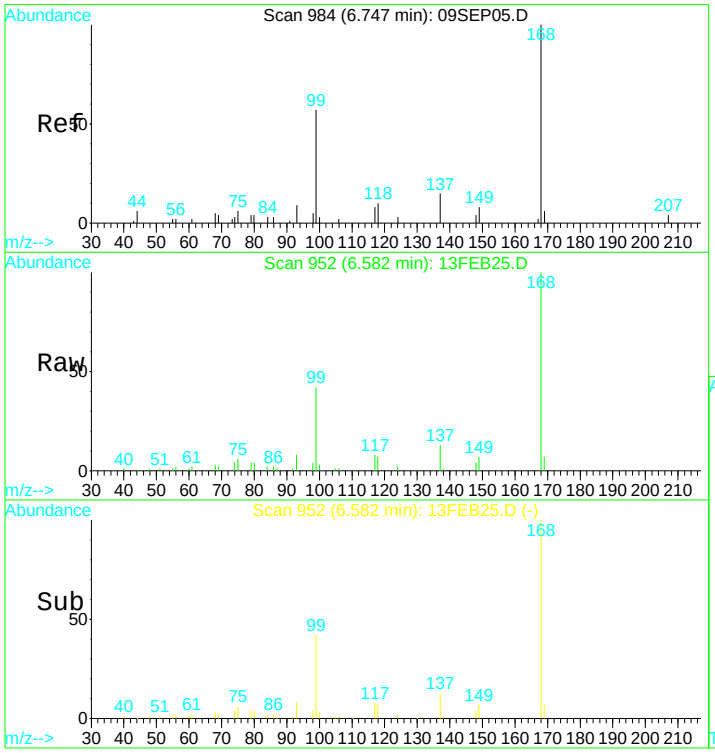
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB25.D Vial: 25
Acq On : 13 Feb 2017 3:49 pm Operator: MGC
Sample : 1703480-31 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:16 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

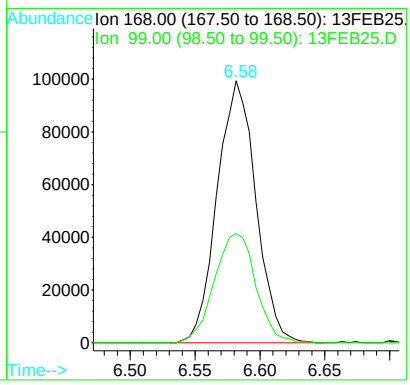


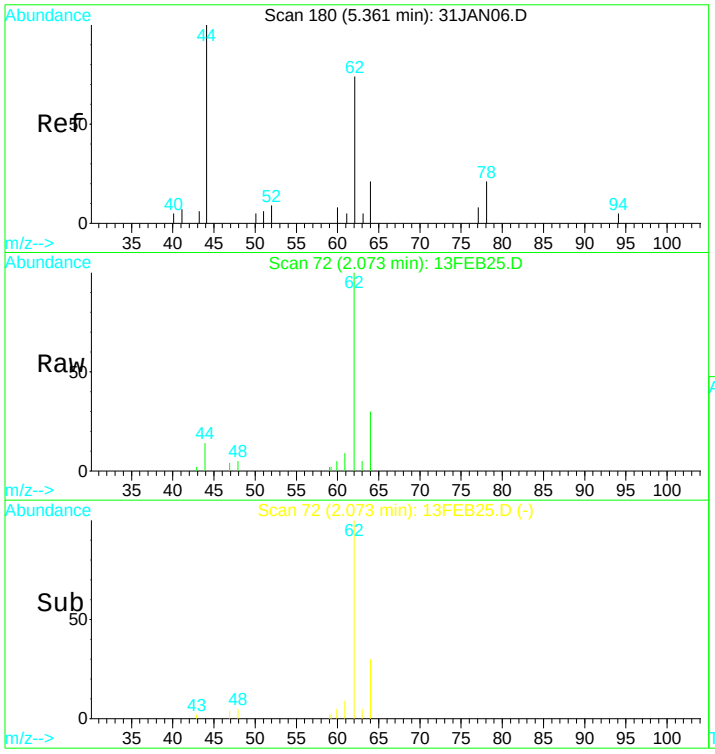



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion:168 Resp: 206309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 44.7 | 305.1 | 566.7# |

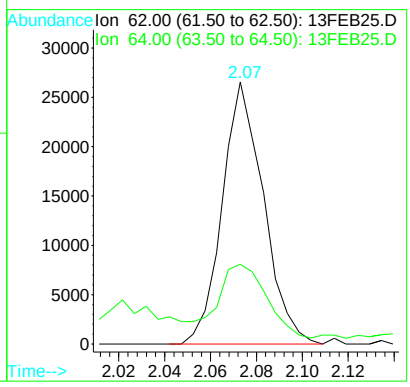


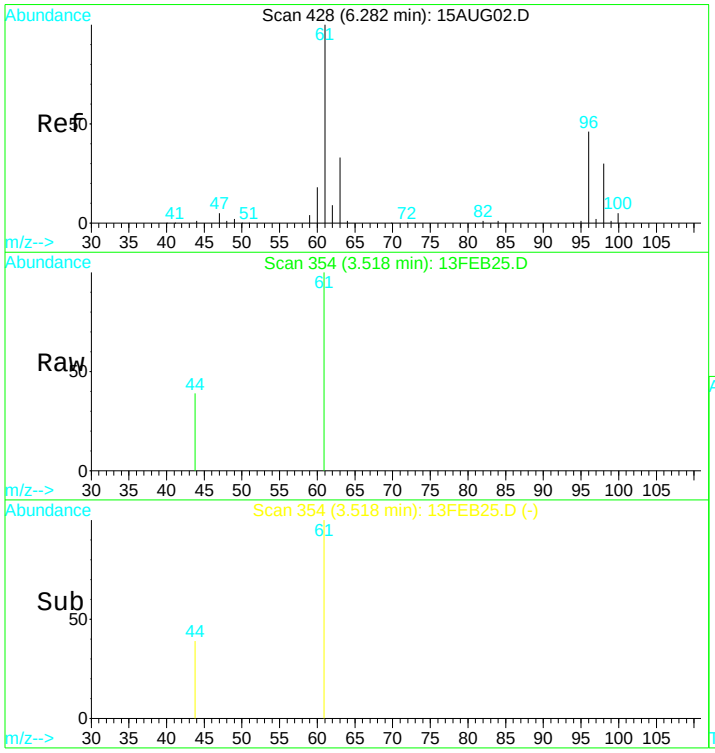




#4
Vinyl chloride
Concen: 2.71 ug/L
RT: 2.07 min Scan# 72
Delta R.T. 0.01 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion: 62 Resp: 33260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 40.3 | 22.4 | 41.6 |

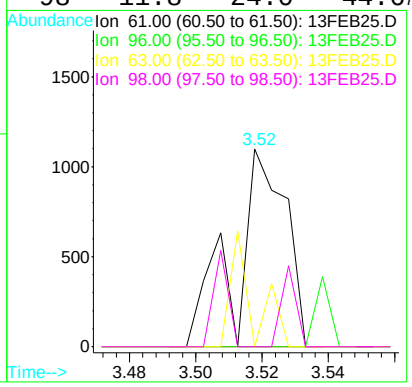


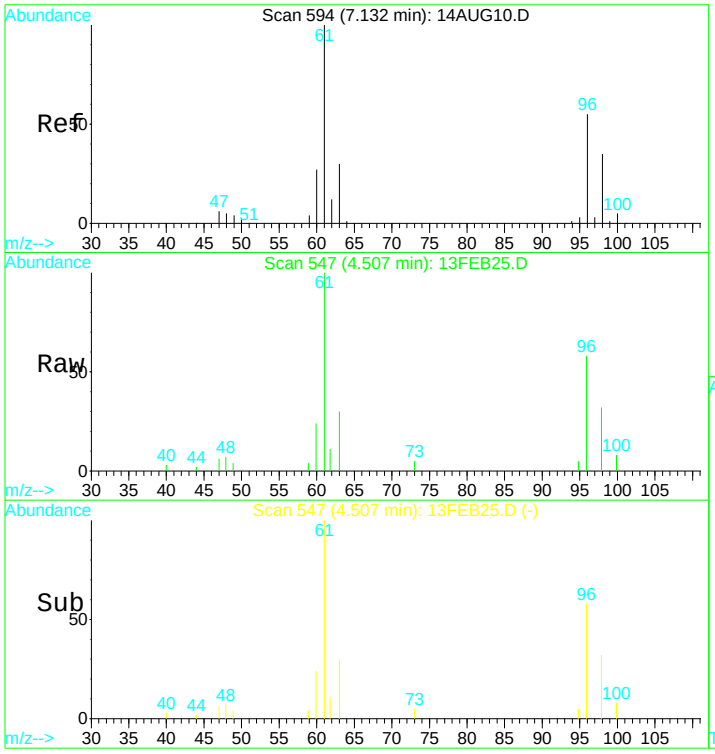



#9
1,1-Dichloroethene
Concen: 0.07 ug/L
RT: 3.52 min Scan# 354
Delta R.T. 0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion: 61 Resp: 1165

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 10.3 | 36.6 | 68.0# |
| 63 | 0.0 | 22.0 | 40.8# |
| 98 | 11.8 | 24.0 | 44.6# |

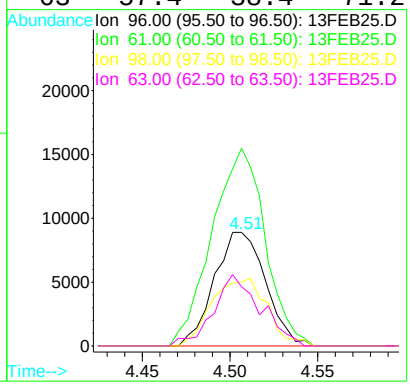


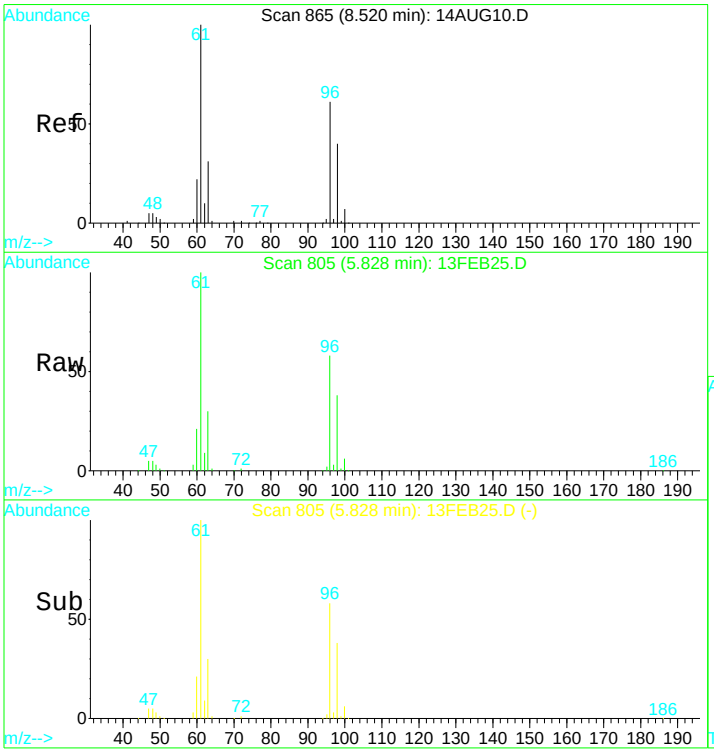




#12
T-1,2-dichloroethene
Concen: 1.95 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion: 96 Resp: 18151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 179.8 | 119.6 | 222.2 |
| 98 | 64.3 | 46.1 | 85.5 |
| 63 | 57.4 | 38.4 | 71.2 |

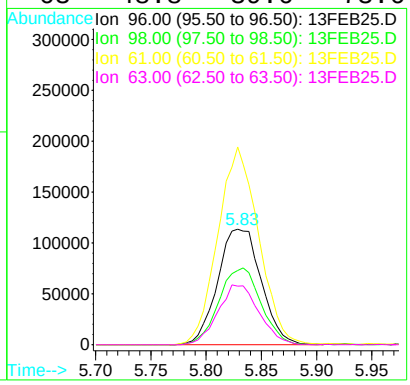


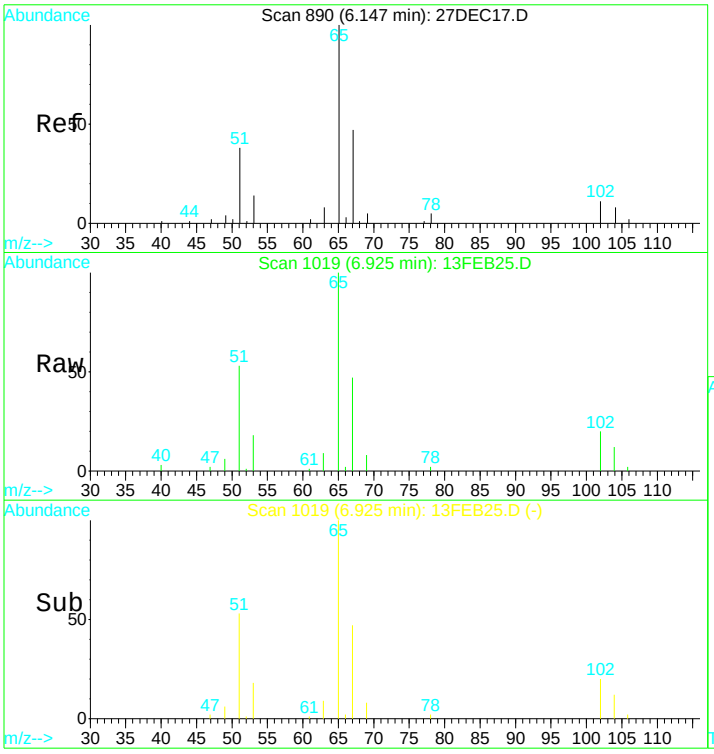



#15
Cis-1,2-dichloroethene
Concen: 32.33 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion: 96 Resp: 311281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 64.0 | 46.2 | 85.8 |
| 61 | 160.5 | 122.8 | 228.0 |
| 63 | 48.8 | 39.6 | 73.6 |

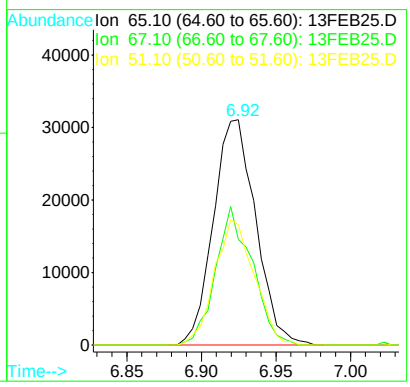


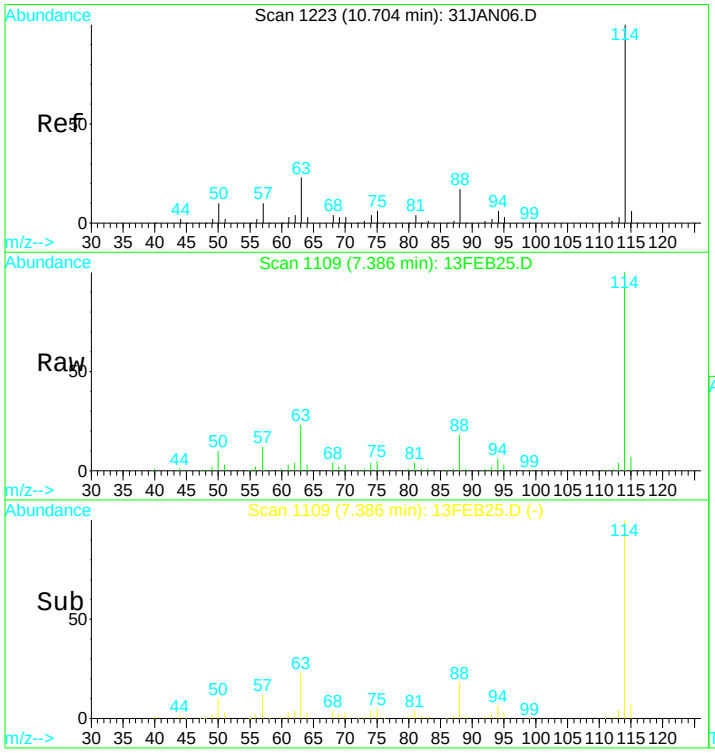




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion: 65 Resp: 61493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.0 | 38.4 | 71.4 |
| 51 | 52.1 | 1006.3 | 1868.8# |

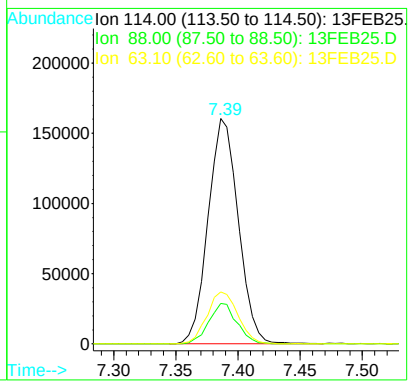


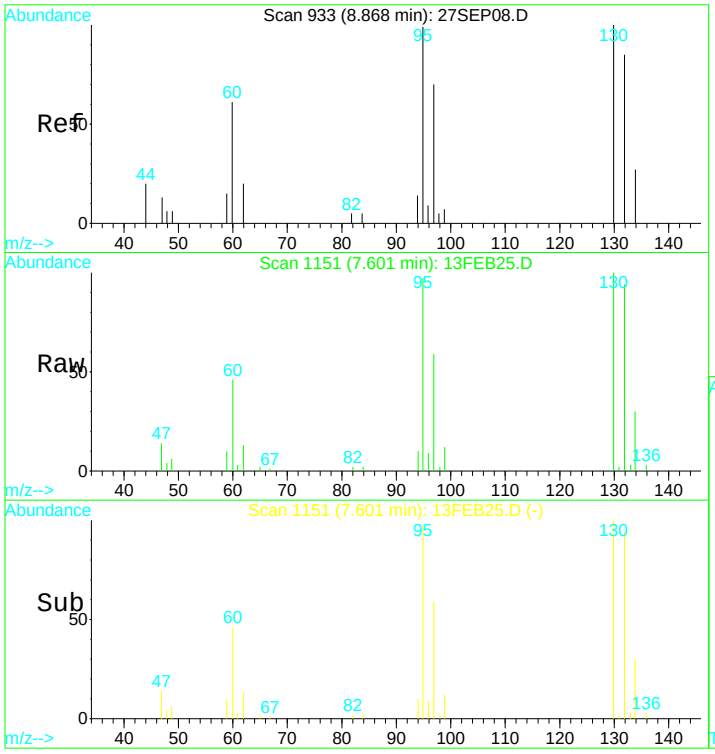



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion:114 Resp: 272484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.6 | 12.0 | 22.2 |
| 63 | 23.6 | 16.9 | 31.5 |

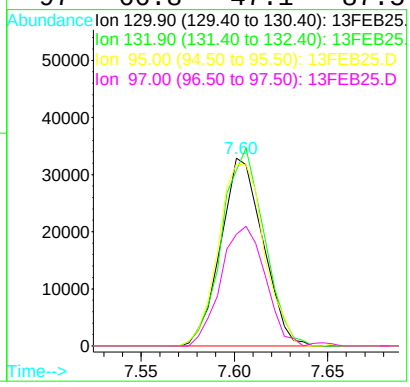


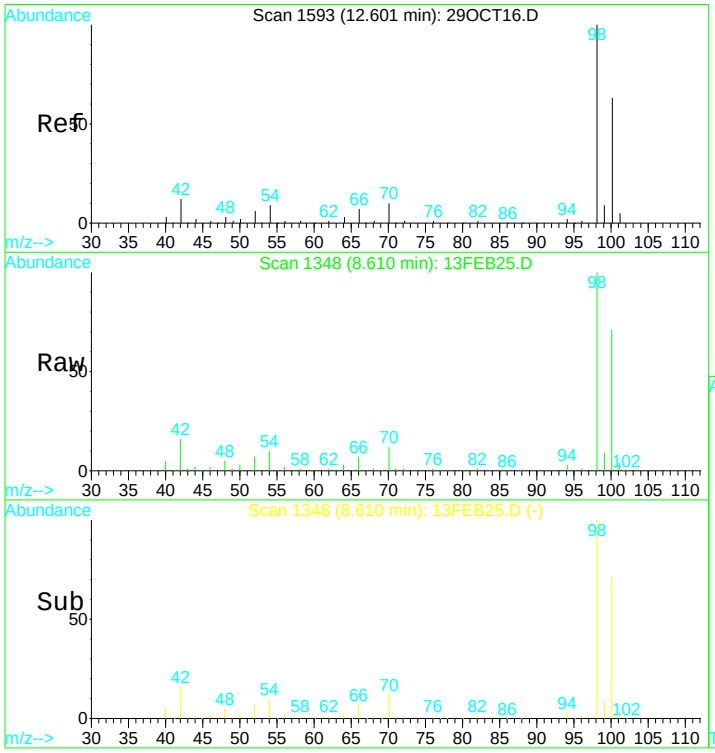




#25
Trichloroethene
Concen: 5.85 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion:130 Resp: 51936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 105.6 | 74.3 | 137.9 |
| 95 | 104.5 | 70.8 | 131.6 |
| 97 | 66.8 | 47.1 | 87.5 |

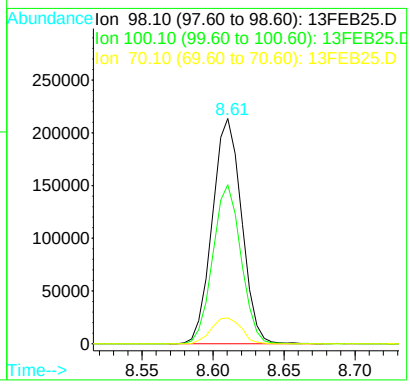


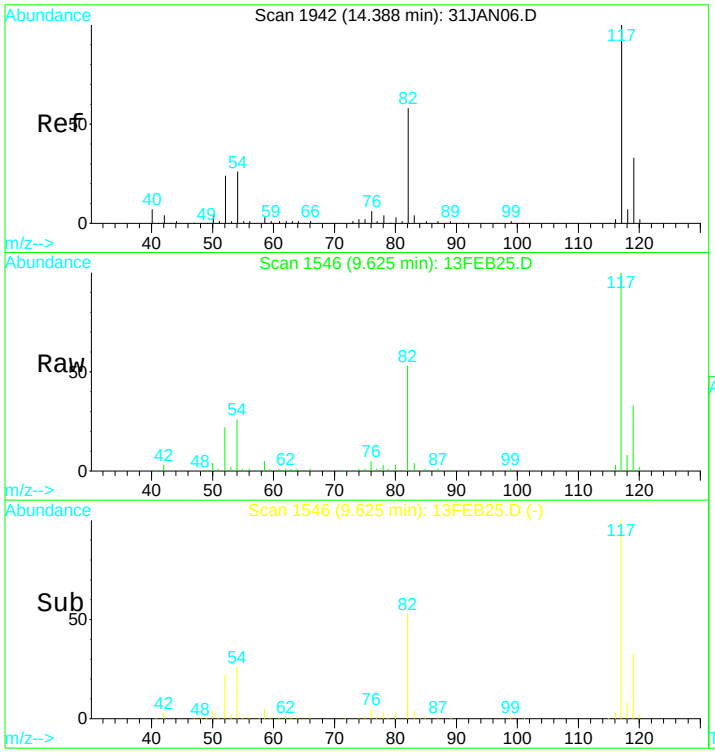



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion: 98 Resp: 307564

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.8 | 47.0 | 87.4 |
| 70 | 11.8 | 7.3 | 13.7 |

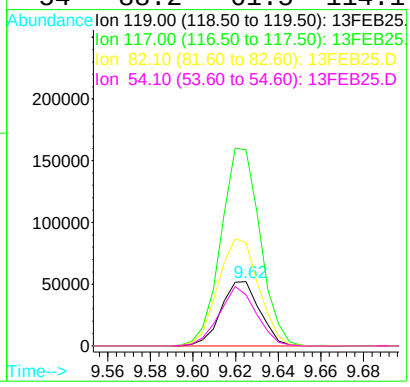


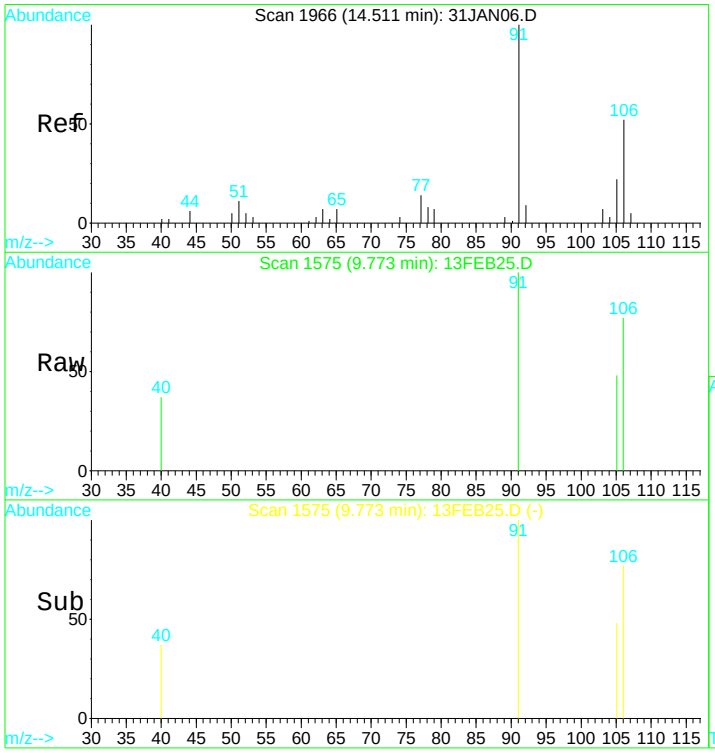




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1546
Delta R.T. 0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion:119 Resp: 66448

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 309.4 | 220.4 | 409.4 |
| 82 | 174.2 | 123.9 | 230.1 |
| 54 | 88.2 | 61.5 | 114.1 |

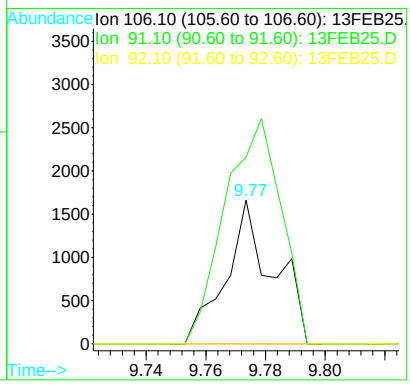


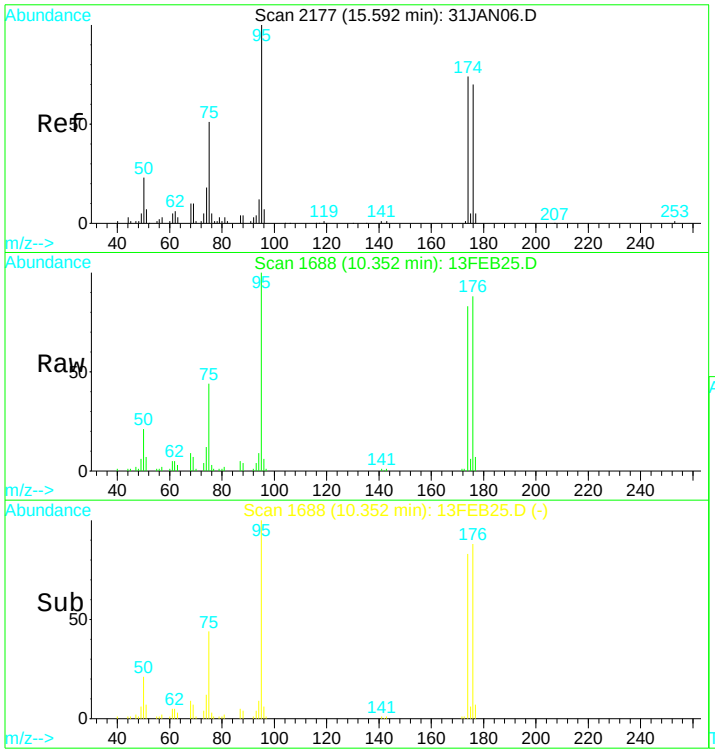



#43
P+m-Xylene
Concen: 0.14 ug/L
RT: 9.77 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion:106 Resp: 1825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 186.9 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

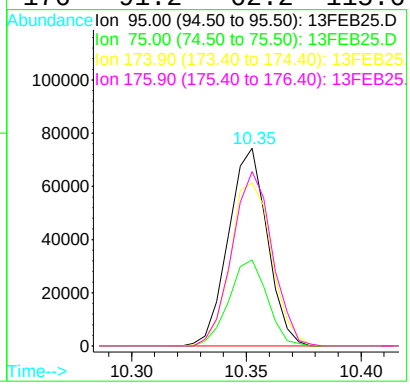



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1688
Delta R.T. -0.00 min
Lab File: 13FEB25.D
Acq: 13 Feb 2017 3:49 pm

Tgt Ion: 95 Resp: 87634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 42.7 | 32.6 | 60.5 |
| 174 | 88.2 | 60.9 | 113.1 |
| 176 | 91.2 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB25.D Vial: 25
Acq On : 13 Feb 2017 3:49 pm Operator: MGC
Sample : 1703480-31 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:17 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206309 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272484 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66448 | 10.00 | ug/L | 0.00 |

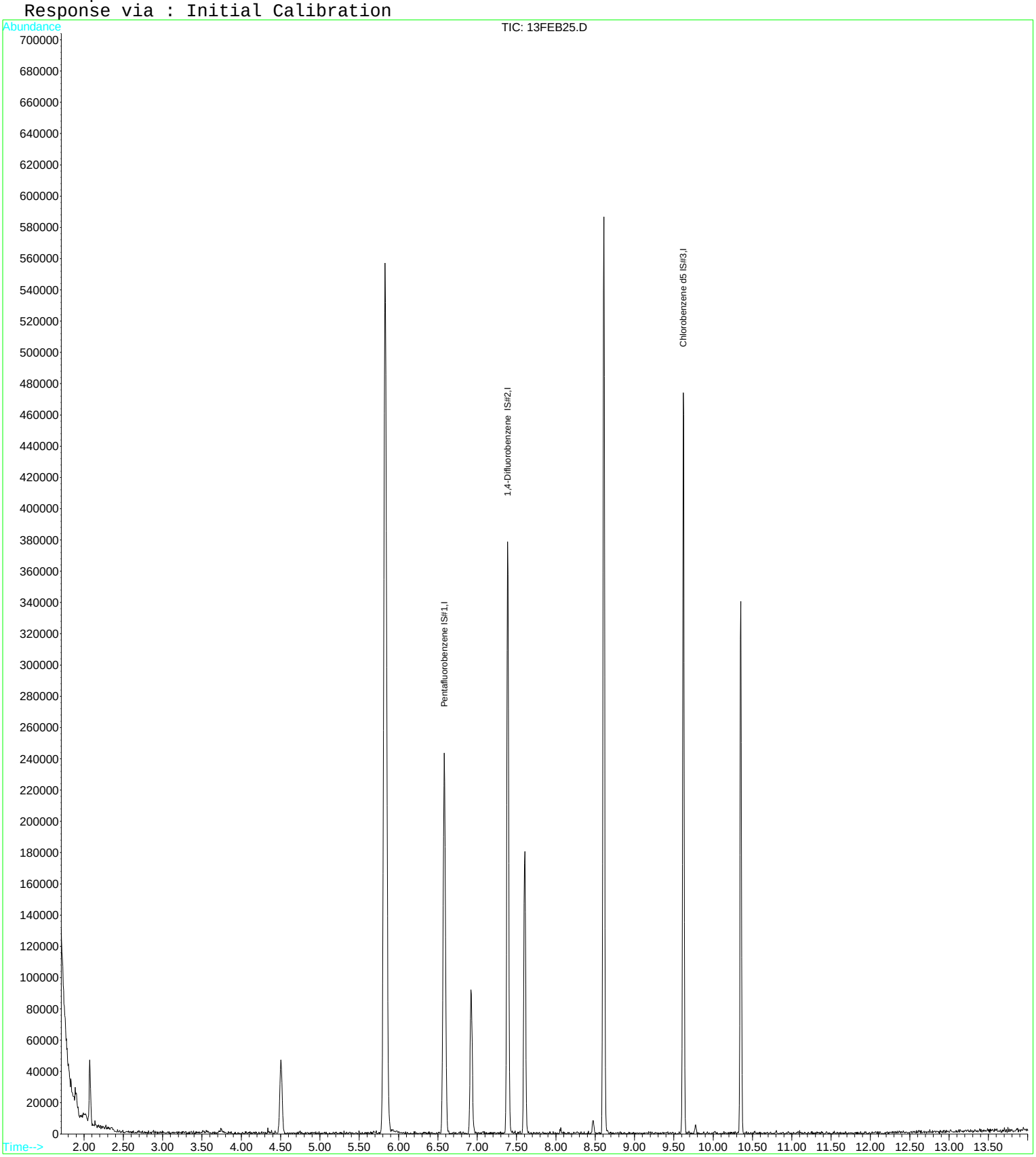
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB25.D Vial: 25
Acq On : 13 Feb 2017 3:49 pm Operator: MGC
Sample : 1703480-31 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:17 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB33.D Vial: 33
Acq On : 14 Feb 2017 6:29 pm Operator: MGC
Sample : 1703480-32 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:18 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204372 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 281462 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 70001 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 74319 | 12.29 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 122.90% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 308942 | 9.64 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.40% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 96200 | 9.97 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.70% | | | |

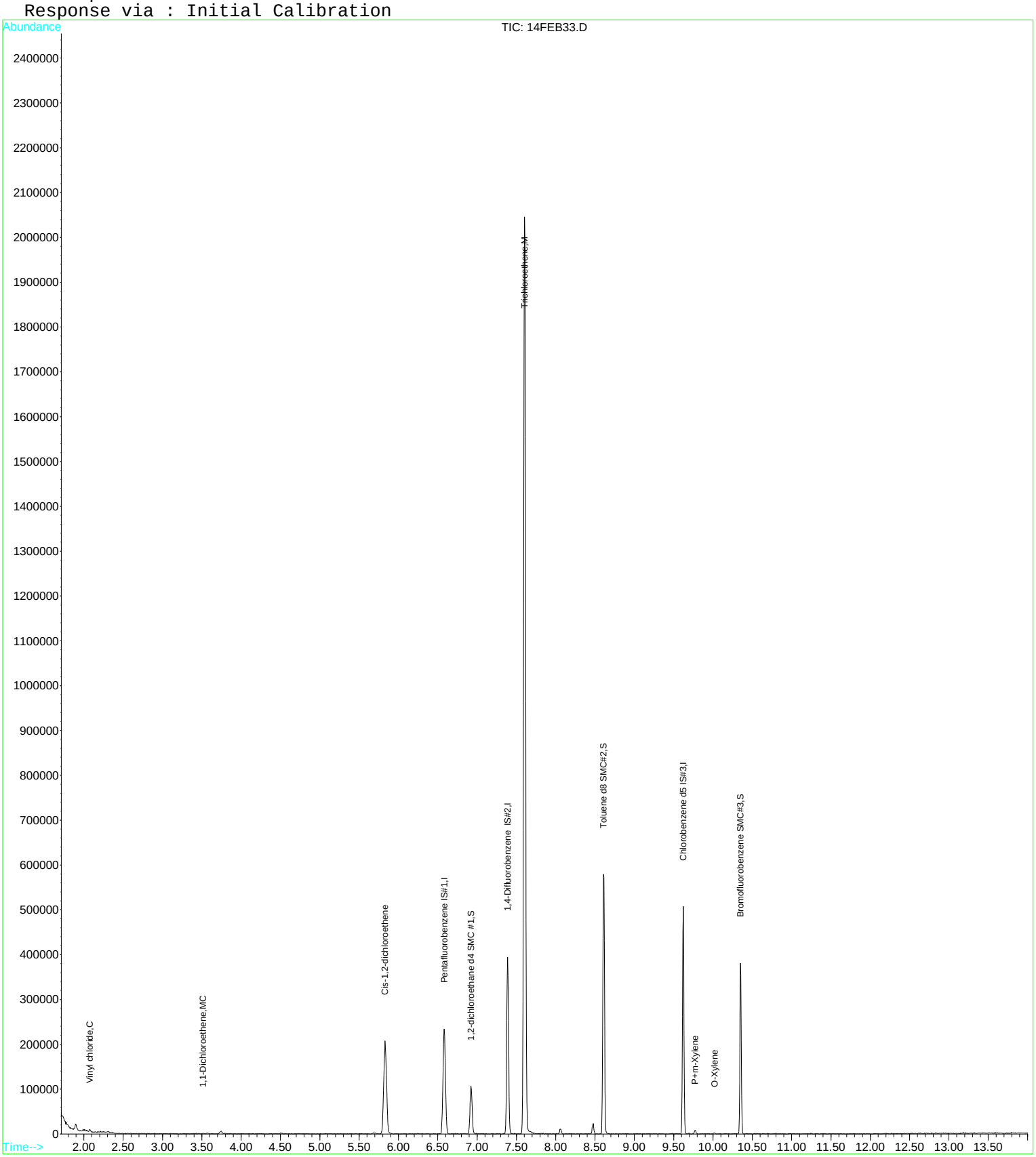
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 3910 | 0.32 | ug/L # | 1 |
| 9) 1,1-Dichloroethene | 3.51 | 61 | 1162 | 0.07 | ug/L # | 56 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 109149 | 11.44 | ug/L | 93 |
| 25) Trichloroethene | 7.61 | 130 | 623752 | 68.07 | ug/L | 99 |
| 43) P+m-Xylene | 9.78 | 106 | 1919 | 0.14 | ug/L # | 54 |
| 44) O-Xylene | 10.02 | 106 | 846 | 0.06 | ug/L # | 47 |

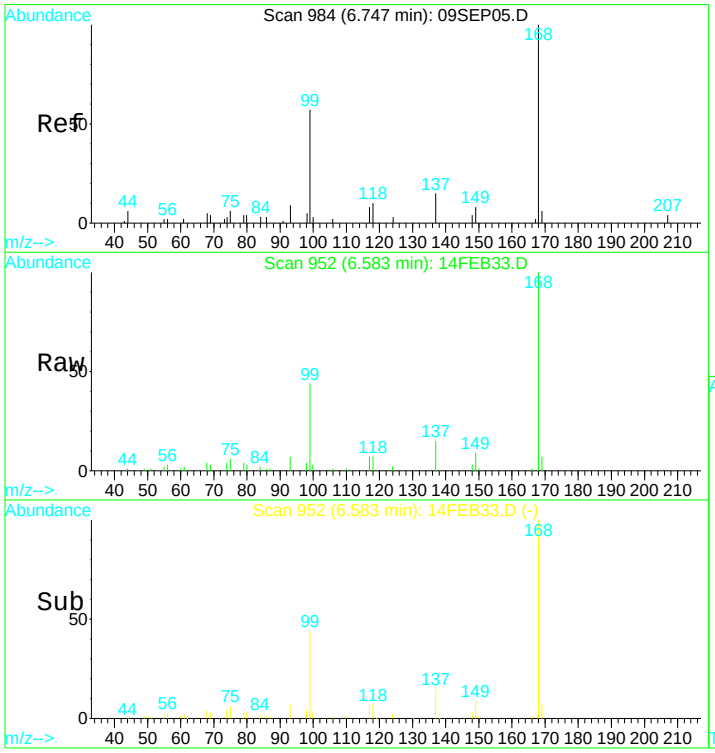
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB33.D Vial: 33
Acq On : 14 Feb 2017 6:29 pm Operator: MGC
Sample : 1703480-32 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:18 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

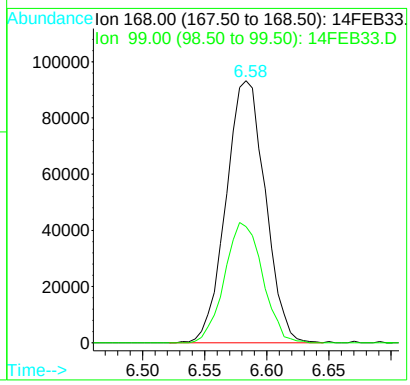


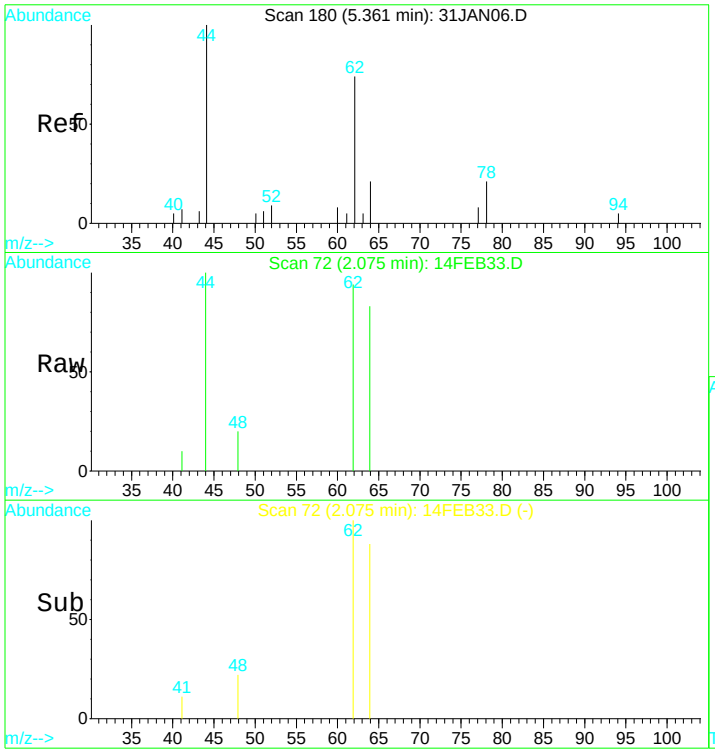



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:168 Resp: 204372

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 44.4 | 305.1 | 566.7# |

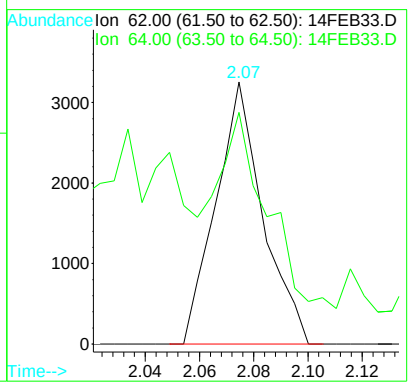


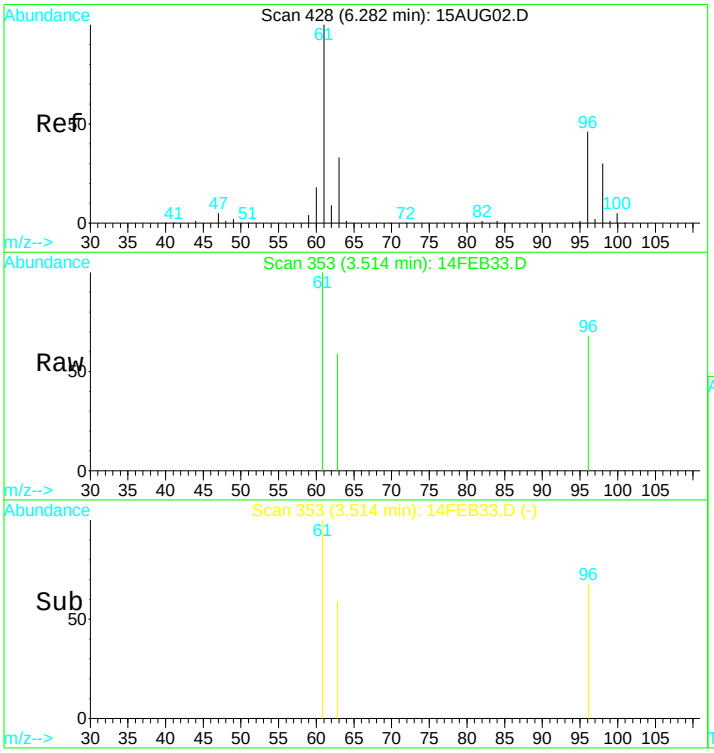




#4
Vinyl chloride
Concen: 0.32 ug/L
RT: 2.07 min Scan# 72
Delta R.T. 0.01 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion: 62 Resp: 3910

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 113.0 | 22.4 | 41.6# |

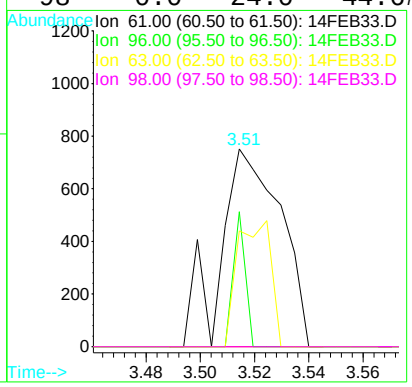


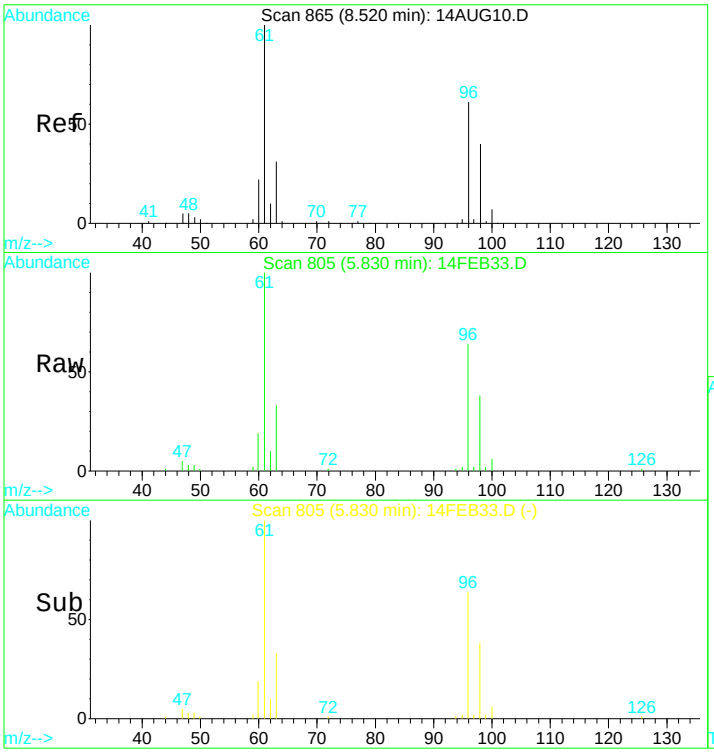



#9
1,1-Dichloroethene
Concen: 0.07 ug/L
RT: 3.51 min Scan# 353
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion: 61 Resp: 1162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 13.6 | 36.6 | 68.0# |
| 63 | 35.3 | 22.0 | 40.8 |
| 98 | 0.0 | 24.0 | 44.6# |

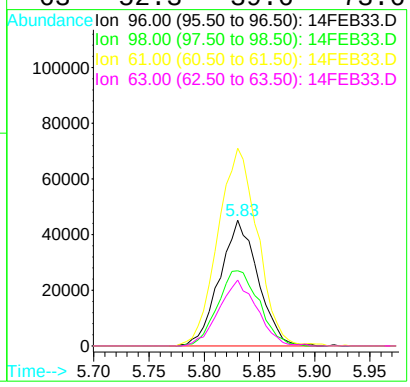


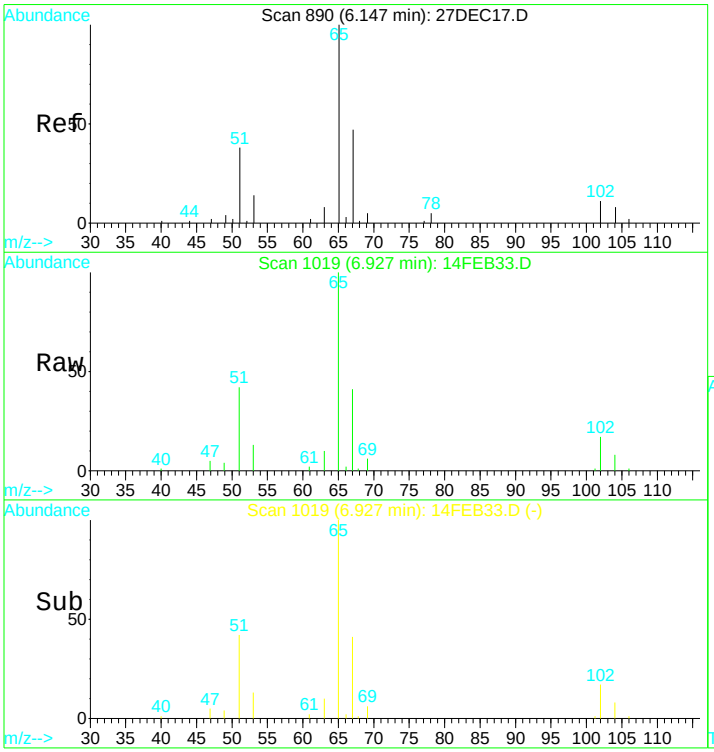




#15
Cis-1,2-dichloroethene
Concen: 11.44 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion: 96 Resp: 109149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 64.5 | 46.2 | 85.8 |
| 61 | 163.3 | 122.8 | 228.0 |
| 63 | 52.3 | 39.6 | 73.6 |

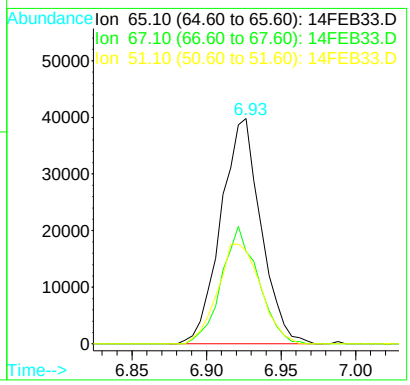


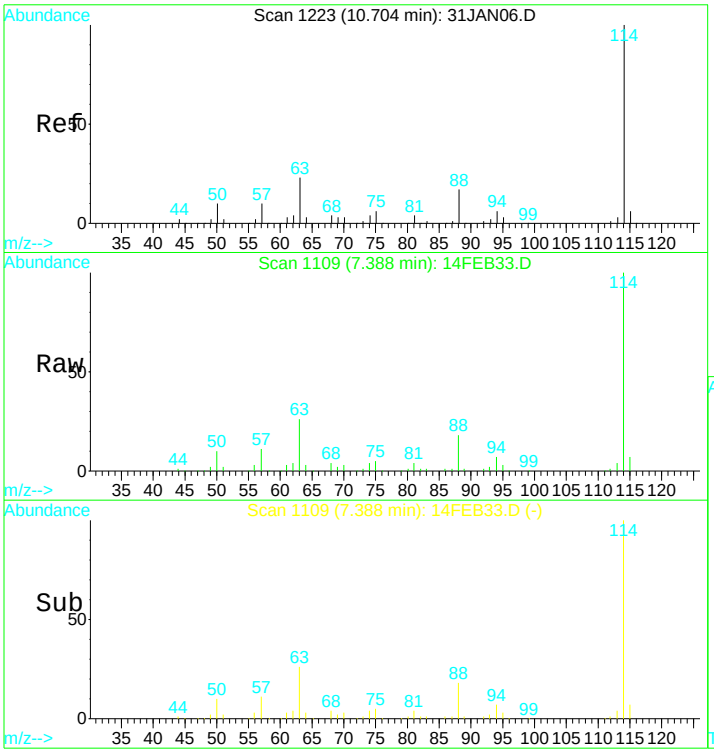



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion: 65 Resp: 74319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 47.7 | 38.4 | 71.4 |
| 51 | 47.5 | 1006.3 | 1868.8# |

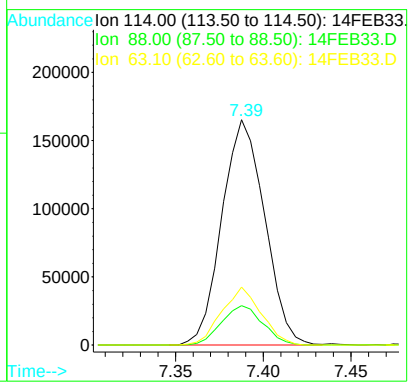


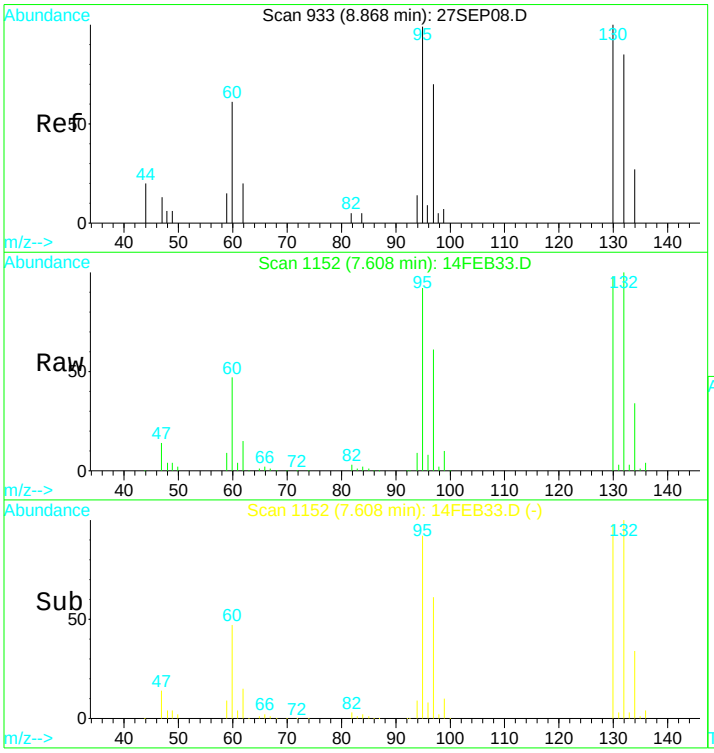




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:114 Resp: 281462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.0 | 12.0 | 22.2 |
| 63 | 23.8 | 16.9 | 31.5 |

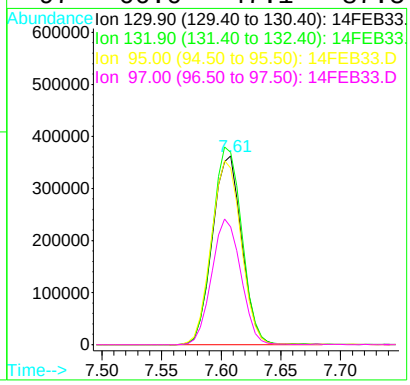


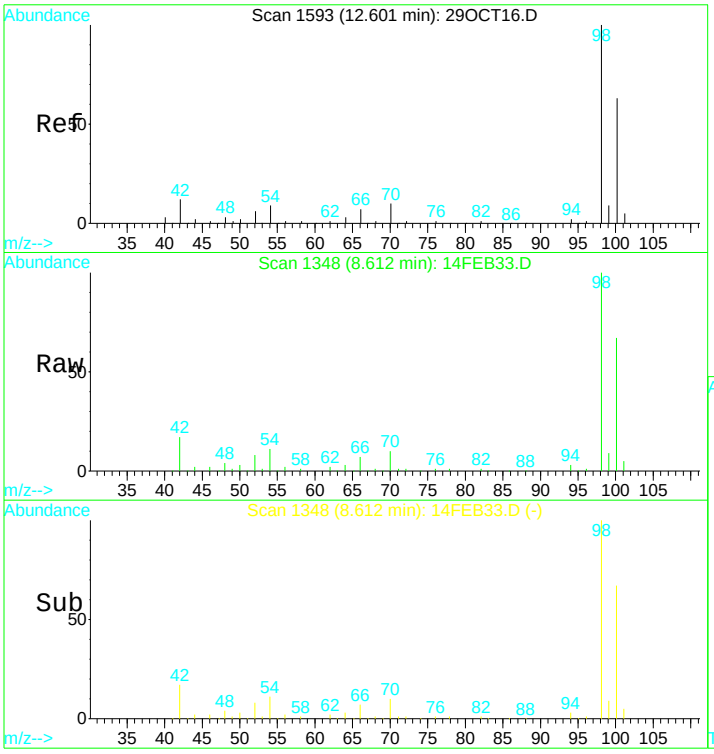



#25
Trichloroethene
Concen: 68.07 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:130 Resp: 623752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 105.4 | 74.3 | 137.9 |
| 95 | 98.9 | 70.8 | 131.6 |
| 97 | 66.0 | 47.1 | 87.5 |

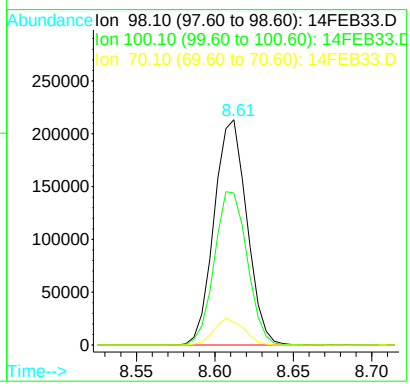


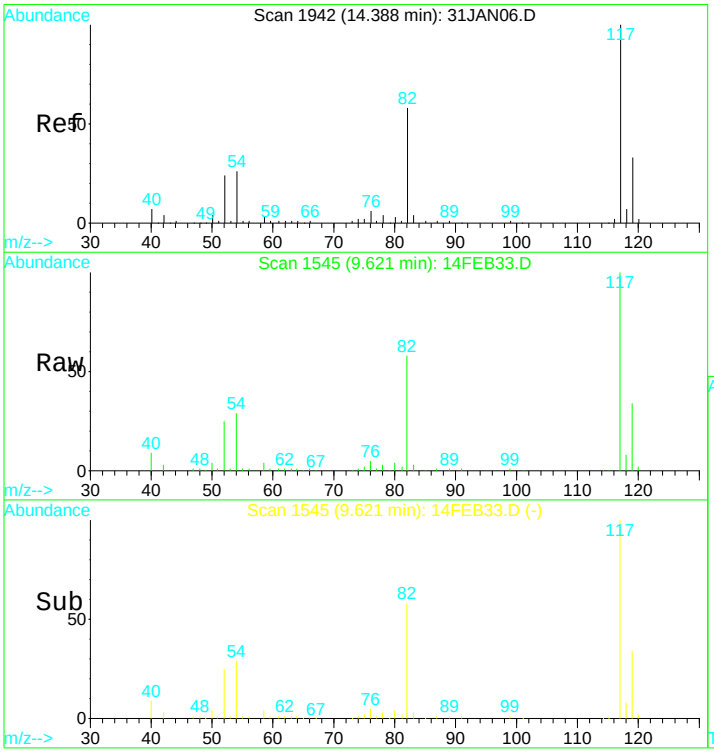




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion: 98 Resp: 308942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.3 | 47.0 | 87.4 |
| 70 | 11.0 | 7.3 | 13.7 |

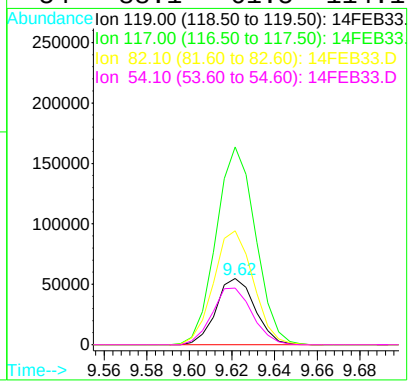


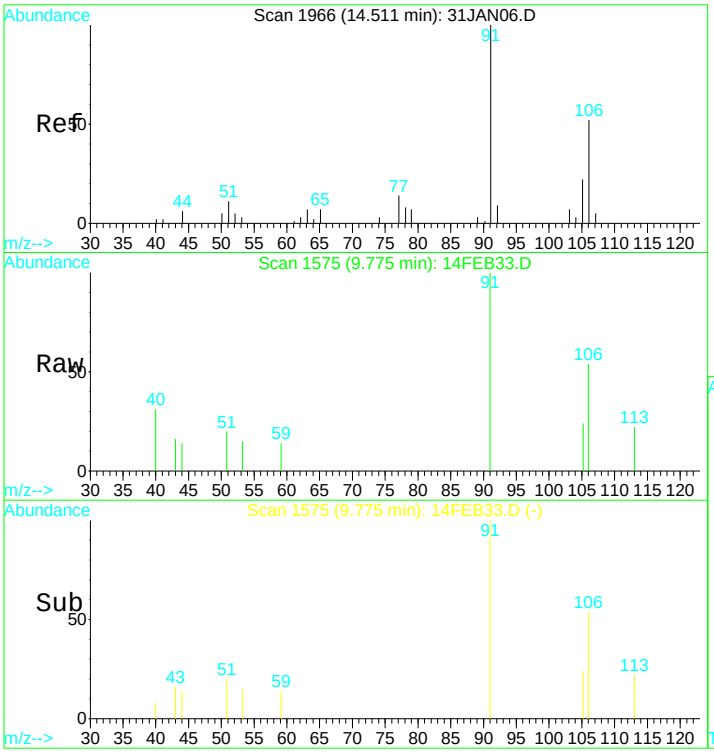



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:119 Resp: 70001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 301.5 | 220.4 | 409.4 |
| 82 | 175.1 | 123.9 | 230.1 |
| 54 | 88.1 | 61.5 | 114.1 |

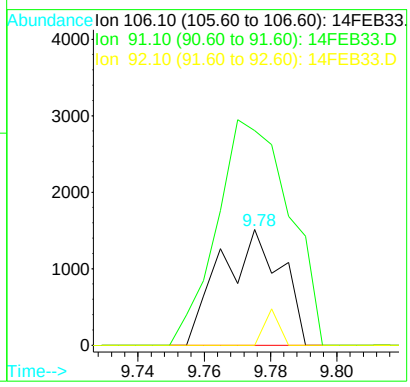


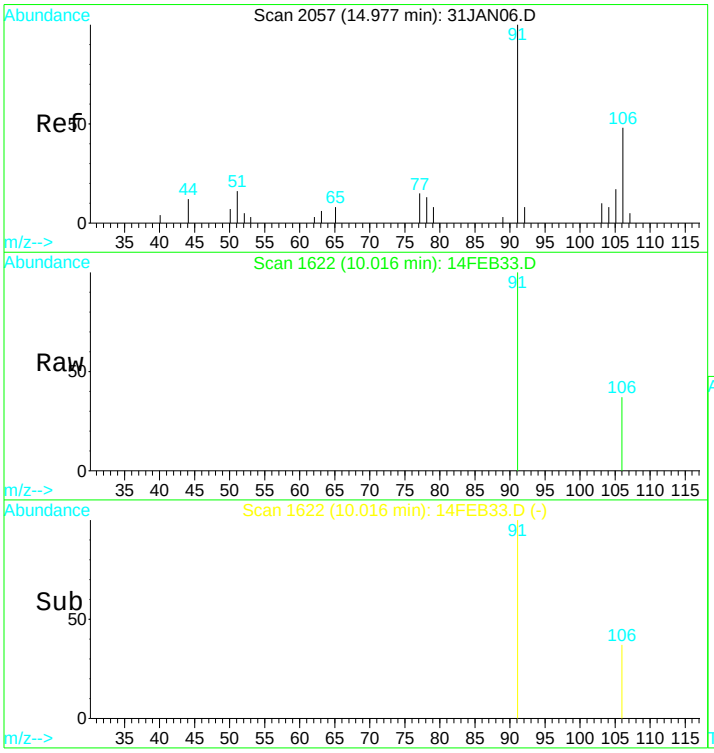




#43
P+m-Xylene
Concen: 0.14 ug/L
RT: 9.78 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:106 Resp: 1919

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 231.9 | 116.4 | 216.2# |
| 92 | 7.6 | 10.8 | 20.0# |

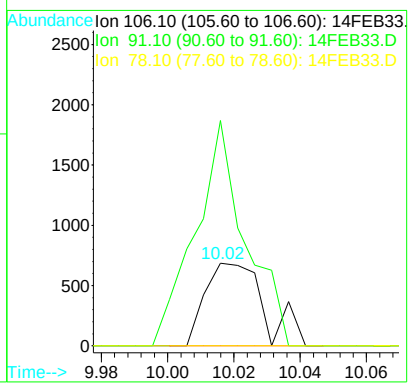


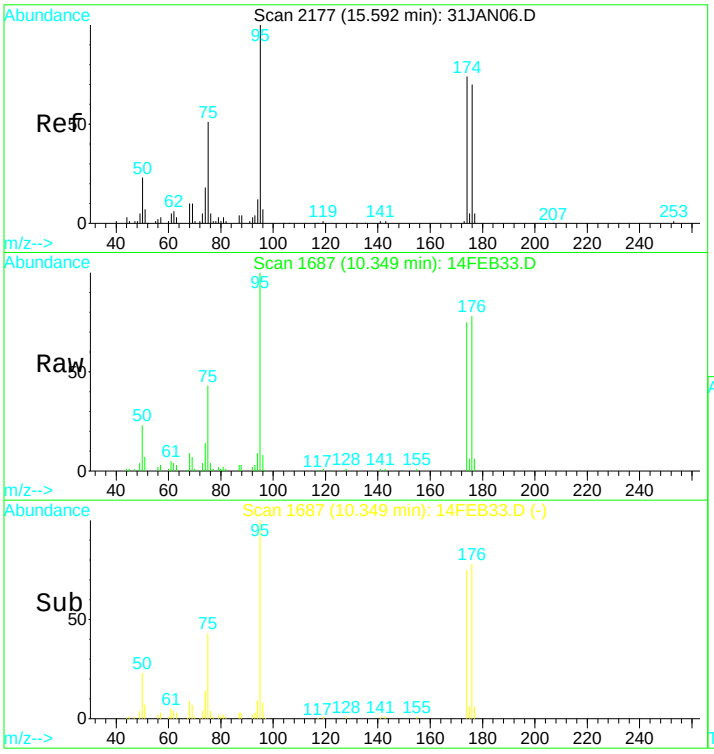



#44
O-Xylene
Concen: 0.06 ug/L
RT: 10.02 min Scan# 1622
Delta R.T. -0.01 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:106 Resp: 846

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 232.3 | 124.3 | 230.9# |
| 78 | 0.0 | 51.7 | 95.9# |

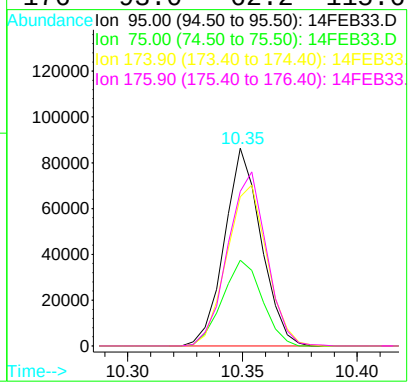



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion: 95 Resp: 96200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.8 | 32.6 | 60.5 |
| 174 | 89.1 | 60.9 | 113.1 |
| 176 | 93.0 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB33.D Vial: 33
Acq On : 14 Feb 2017 6:29 pm Operator: MGC
Sample : 1703480-32 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:23 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204372 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 281462 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 70001 | 10.00 | ug/L | 0.00 |

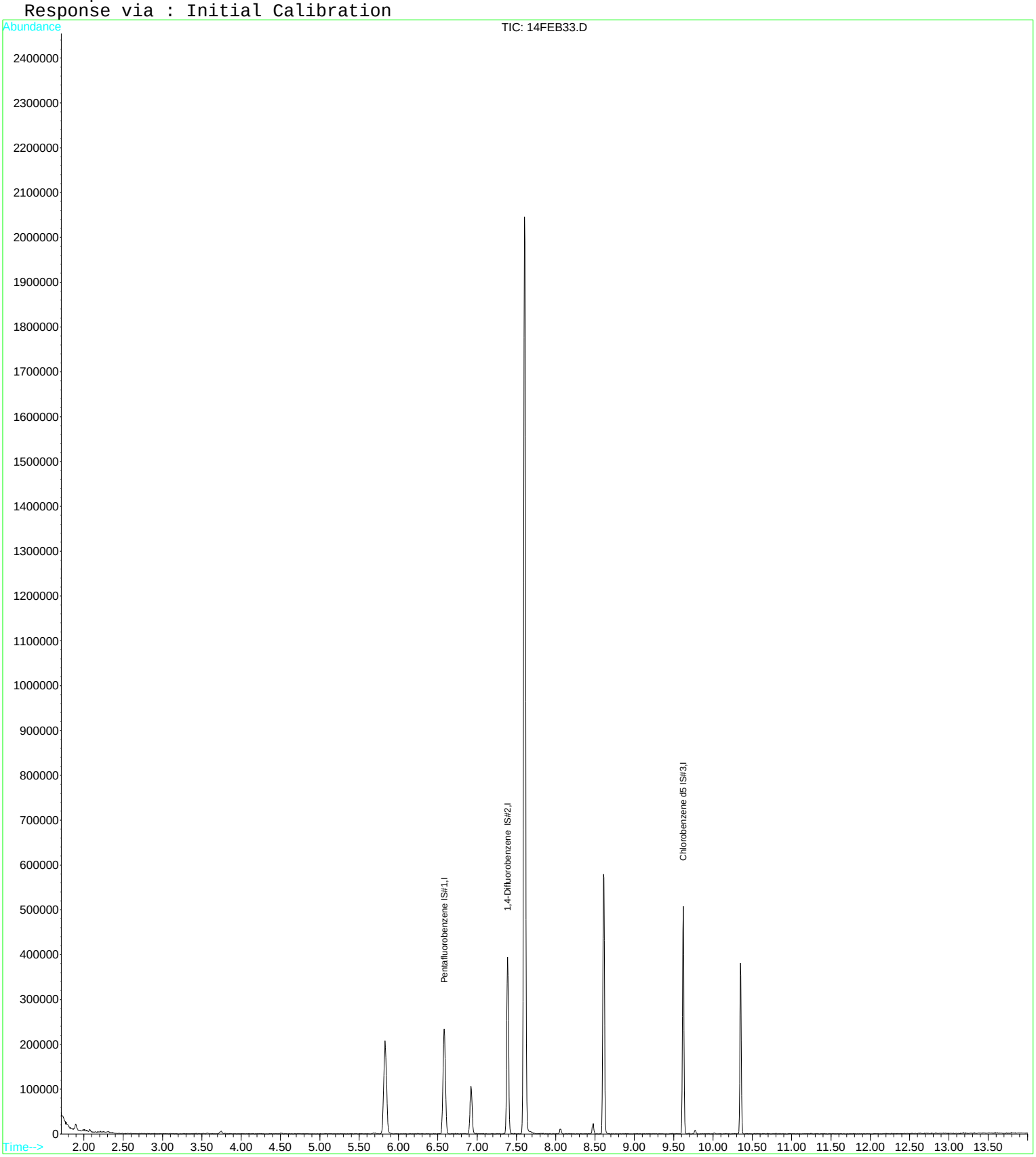
Target Compounds Qvalue

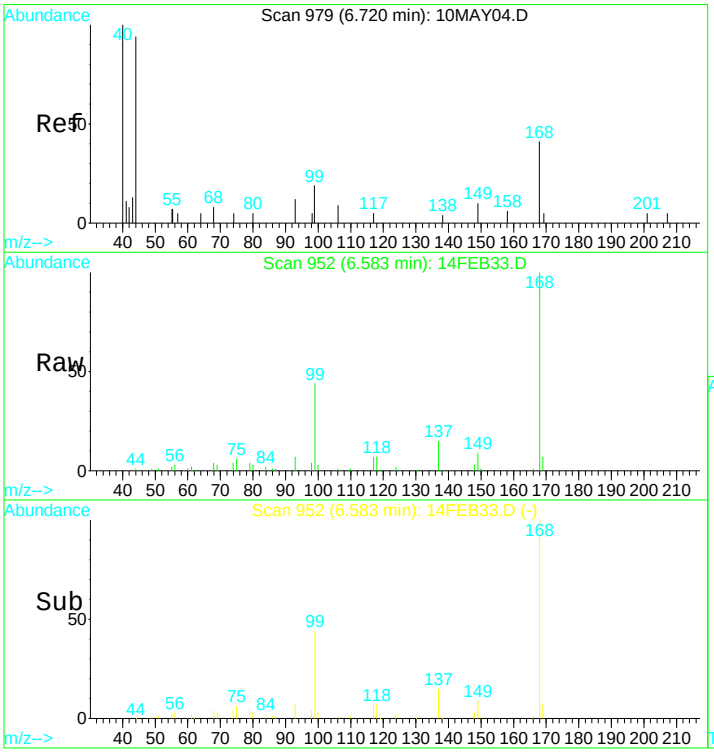
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB33.D Vial: 33
Acq On : 14 Feb 2017 6:29 pm Operator: MGC
Sample : 1703480-32 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:23 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

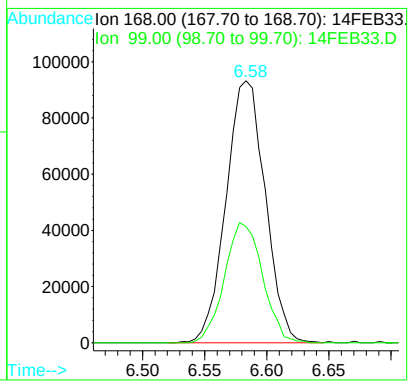


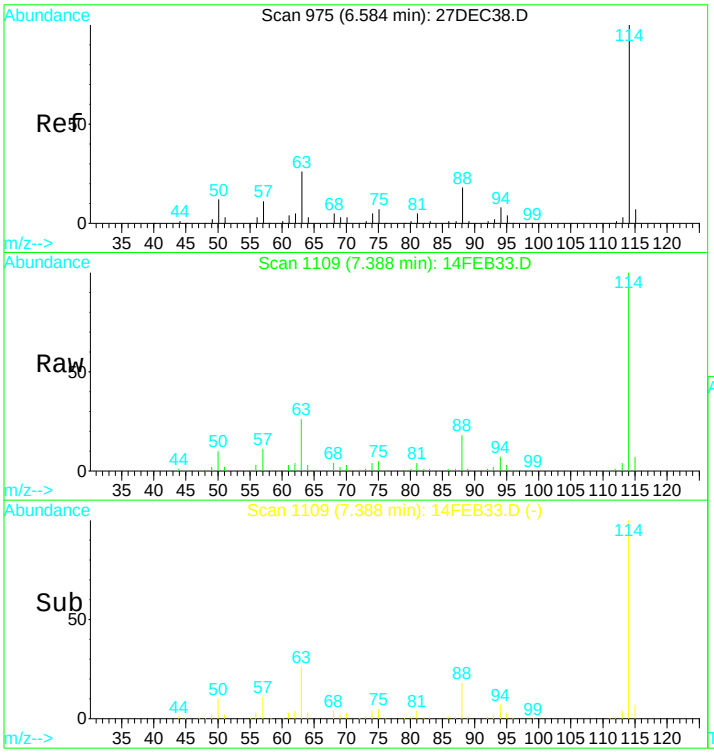



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:168 Resp: 204372

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 44.4 | 32.8 | 60.8 |

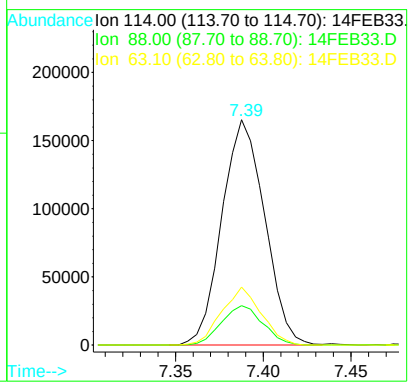


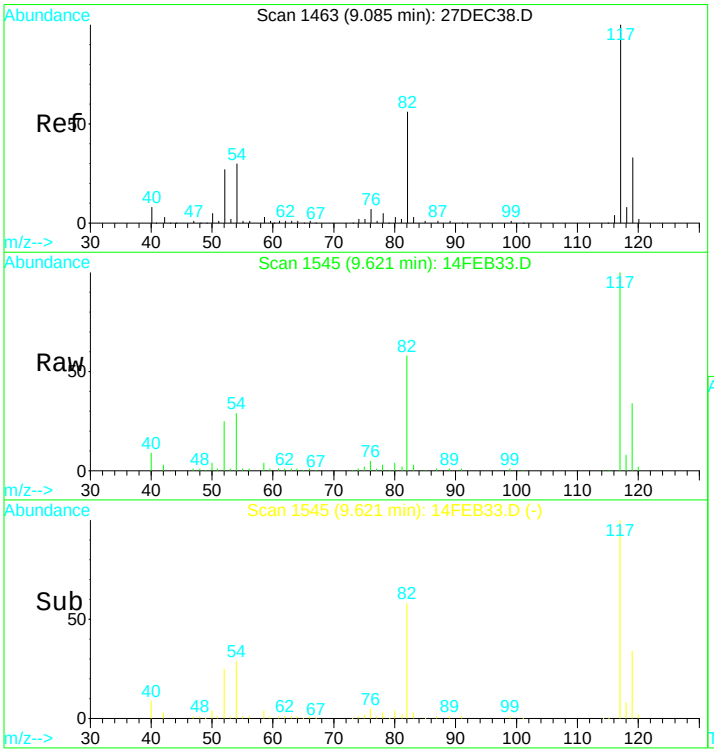




#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:114 Resp: 281462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.0 | 11.3 | 21.1 |
| 63 | 23.8 | 16.1 | 29.9 |

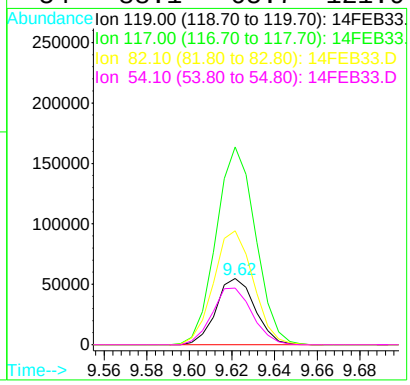





#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB33.D
Acq: 14 Feb 2017 6:29 pm

Tgt Ion:119 Resp: 70001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 301.5 | 218.6 | 406.0 |
| 82 | 175.1 | 128.7 | 238.9 |
| 54 | 88.1 | 65.7 | 121.9 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB27.D Vial: 27
Acq On : 13 Feb 2017 4:36 pm Operator: MGC
Sample : 1703480-33 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:25 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204495 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279304 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65481 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 64892 | 10.73 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 107.30% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 308084 | 9.69 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 91715 | 10.16 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 101.60% | | | |

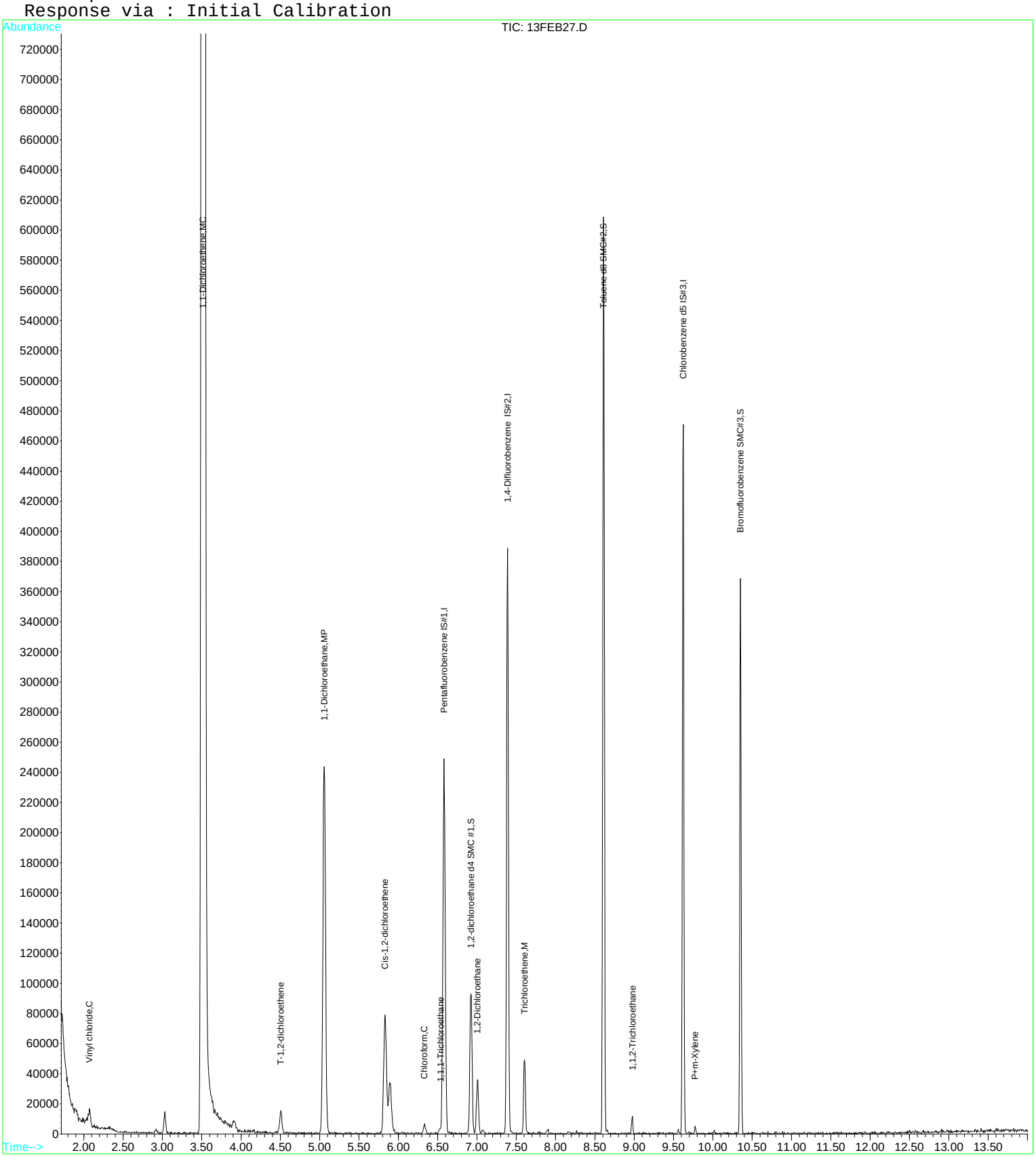
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 6920 | 0.57 | ug/L # | 1 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 4596954 | 289.44 | ug/L | 89 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 6351 | 0.69 | ug/L | 89 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 308766 | 14.65 | ug/L | 96 |
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 42998 | 4.51 | ug/L | 92 |
| 17) Chloroform | 6.32 | 83 | 5847 | 0.38 | ug/L | 83 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 2345 | 0.18 | ug/L # | 40 |
| 22) 1,2-Dichloroethane | 7.00 | 62 | 29076 | 3.24 | ug/L | 95 |
| 25) Trichloroethene | 7.61 | 130 | 14321 | 1.57 | ug/L | 94 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 2794 | 0.65 | ug/L | 97 |
| 43) P+m-Xylene | 9.77 | 106 | 1350 | 0.10 | ug/L # | 85 |

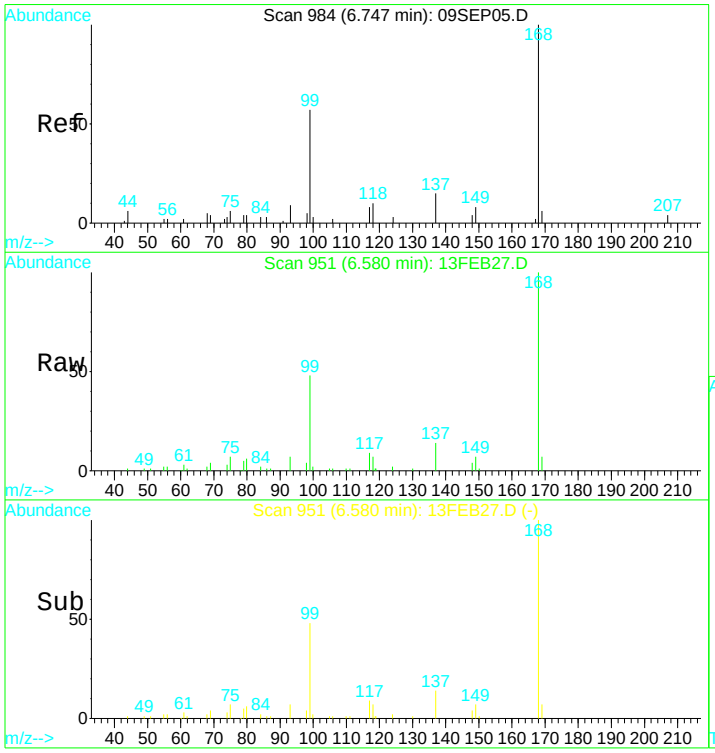
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB27.D Vial: 27
Acq On : 13 Feb 2017 4:36 pm Operator: MGC
Sample : 1703480-33 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:25 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

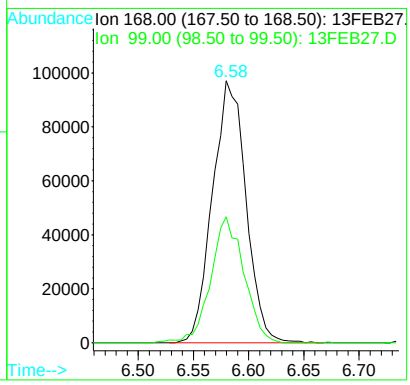


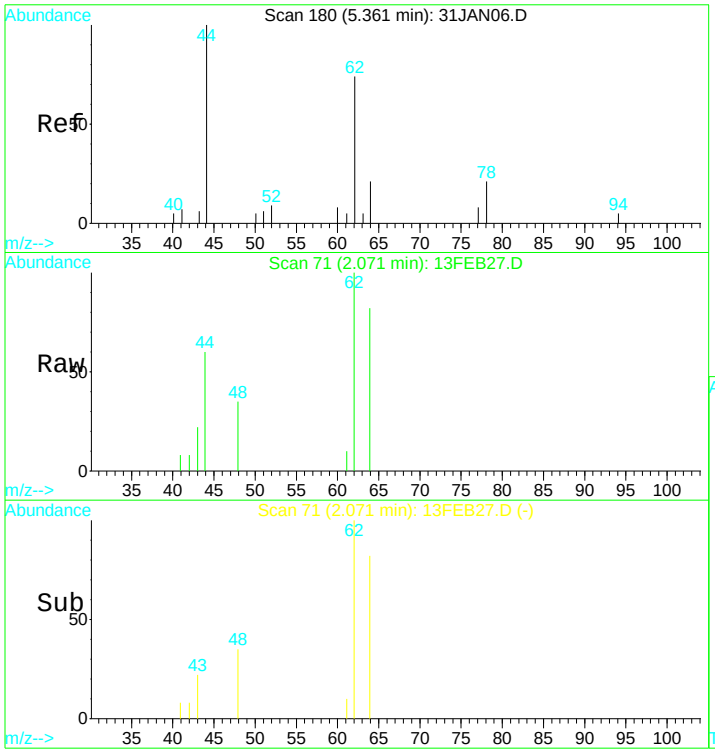



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion:168 Resp: 204495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 47.7 | 305.1 | 566.7# |

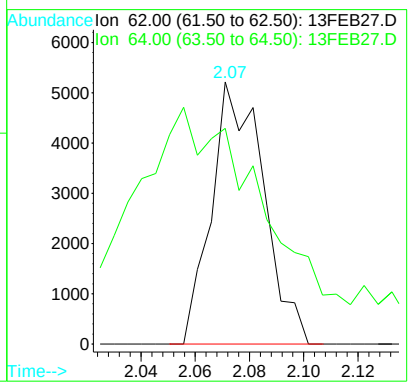


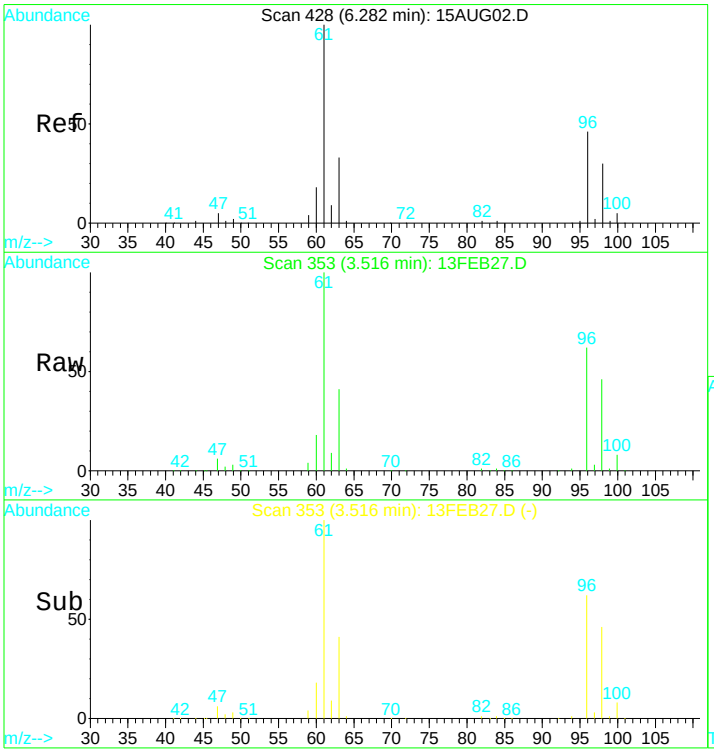




#4
Vinyl chloride
Concen: 0.57 ug/L
RT: 2.07 min Scan# 71
Delta R.T. 0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 62 Resp: 6920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 302.2 | 22.4 | 41.6# |

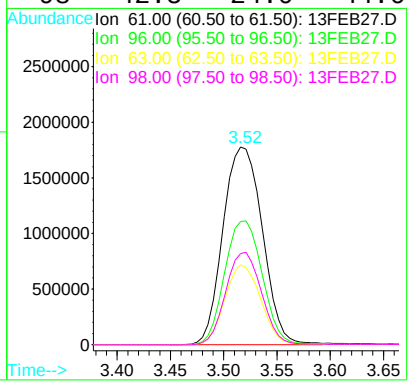


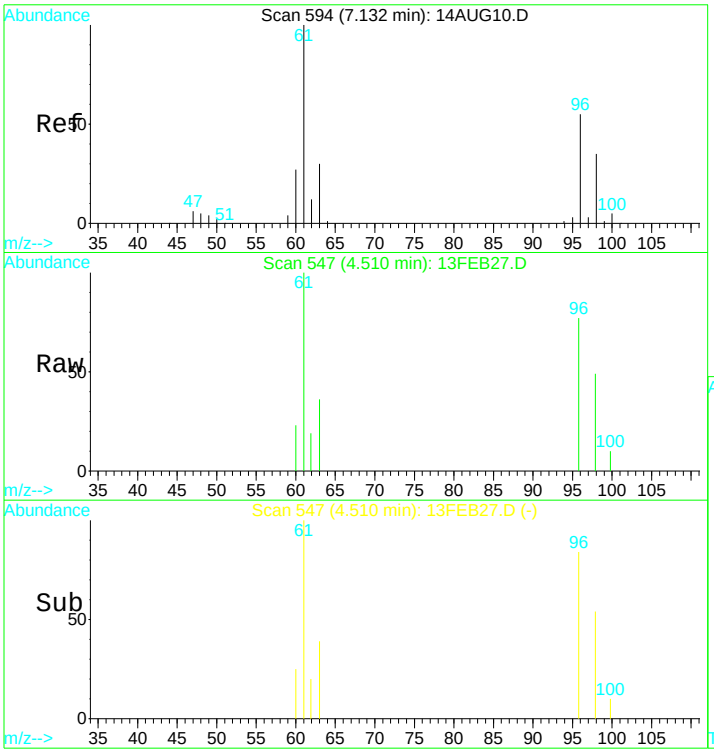



#9
1,1-Dichloroethene
Concen: 289.44 ug/L
RT: 3.52 min Scan# 353
Delta R.T. -0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 61 Resp: 4596954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 59.6 | 36.6 | 68.0 |
| 63 | 36.9 | 22.0 | 40.8 |
| 98 | 42.5 | 24.0 | 44.6 |

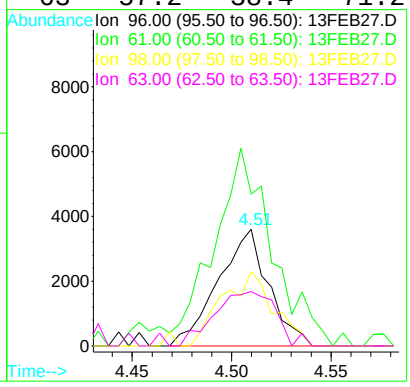


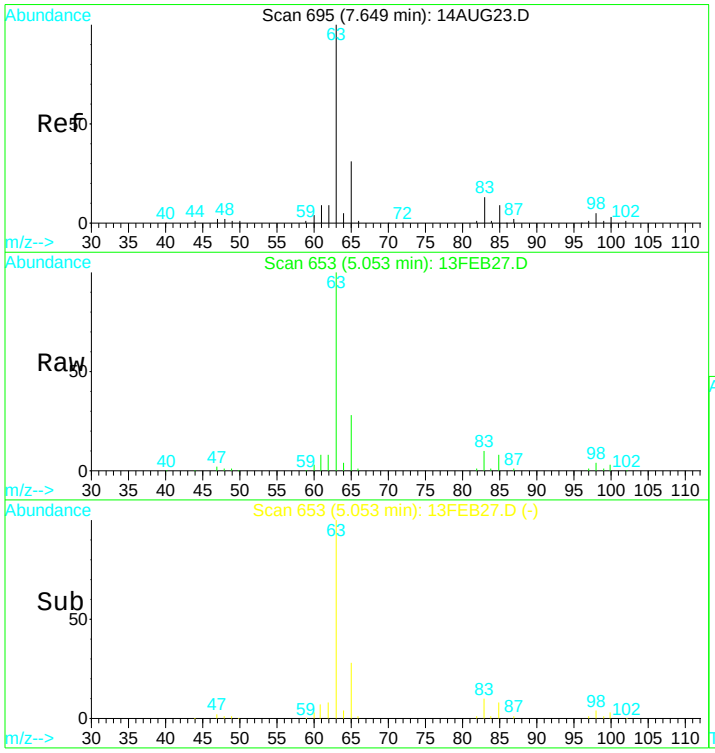




#12
T-1,2-dichloroethene
Concen: 0.69 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 96 Resp: 6351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 196.1 | 119.6 | 222.2 |
| 98 | 65.6 | 46.1 | 85.5 |
| 63 | 57.2 | 38.4 | 71.2 |

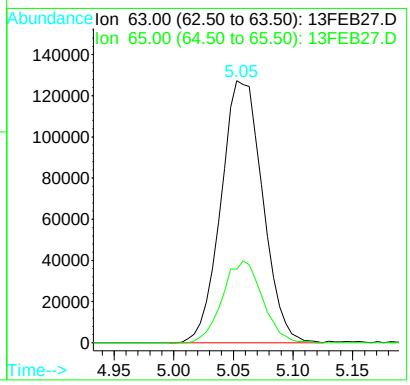


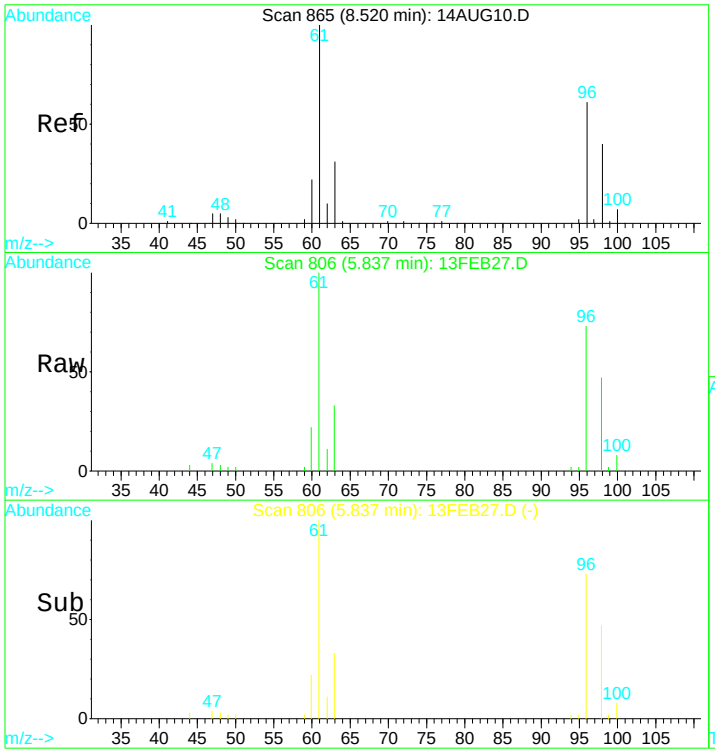



#13
1,1-Dichloroethane
Concen: 14.65 ug/L
RT: 5.05 min Scan# 653
Delta R.T. -0.01 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 63 Resp: 308766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.9 | 22.4 | 41.6 |

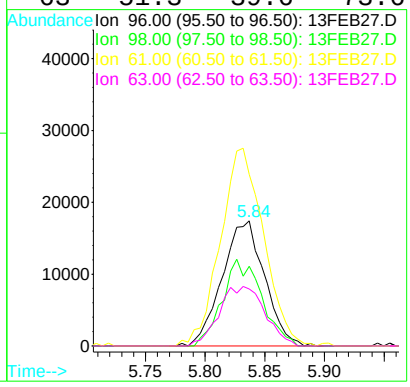


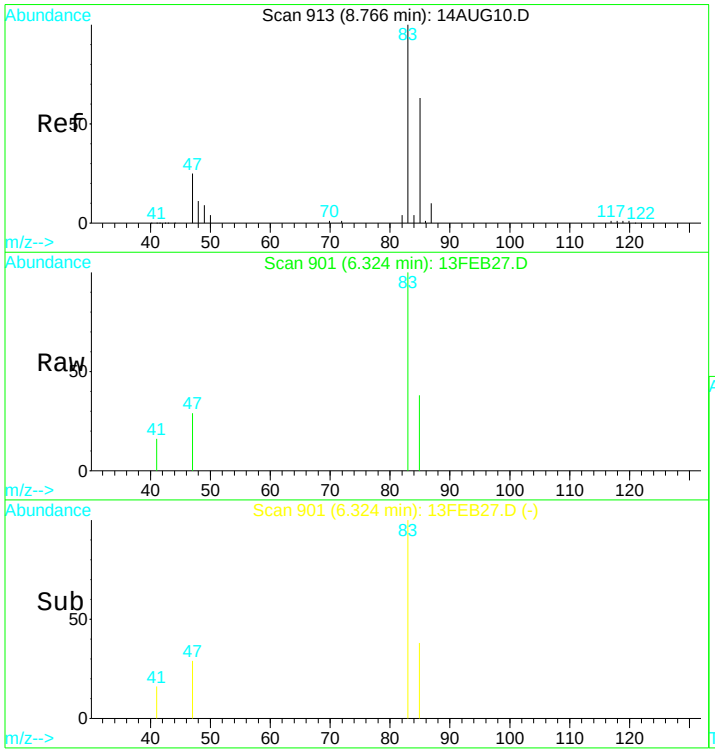




#15
Cis-1,2-dichloroethene
Concen: 4.51 ug/L
RT: 5.84 min Scan# 806
Delta R.T. -0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 96 Resp: 42998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 64.5 | 46.2 | 85.8 |
| 61 | 160.8 | 122.8 | 228.0 |
| 63 | 51.3 | 39.6 | 73.6 |

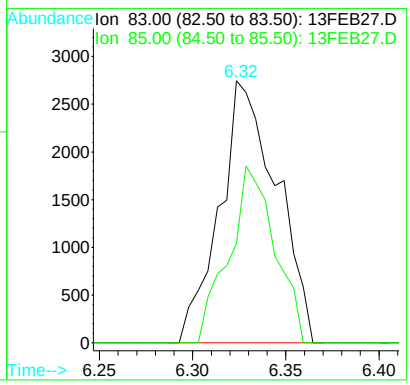


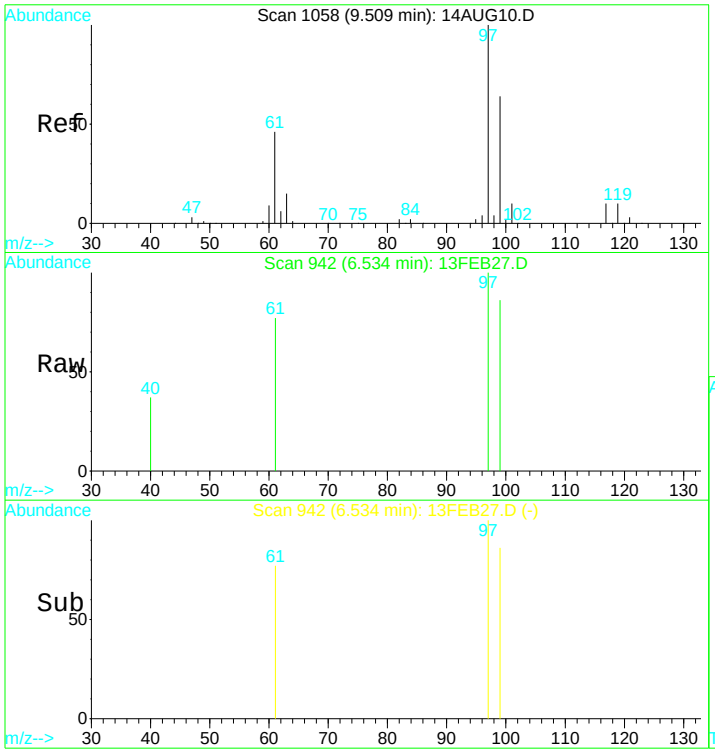



#17
Chloroform
Concen: 0.38 ug/L
RT: 6.32 min Scan# 901
Delta R.T. -0.01 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 83 Resp: 5847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 54.2 | 47.4 | 88.0 |

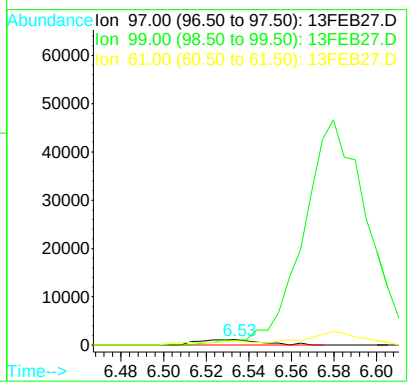


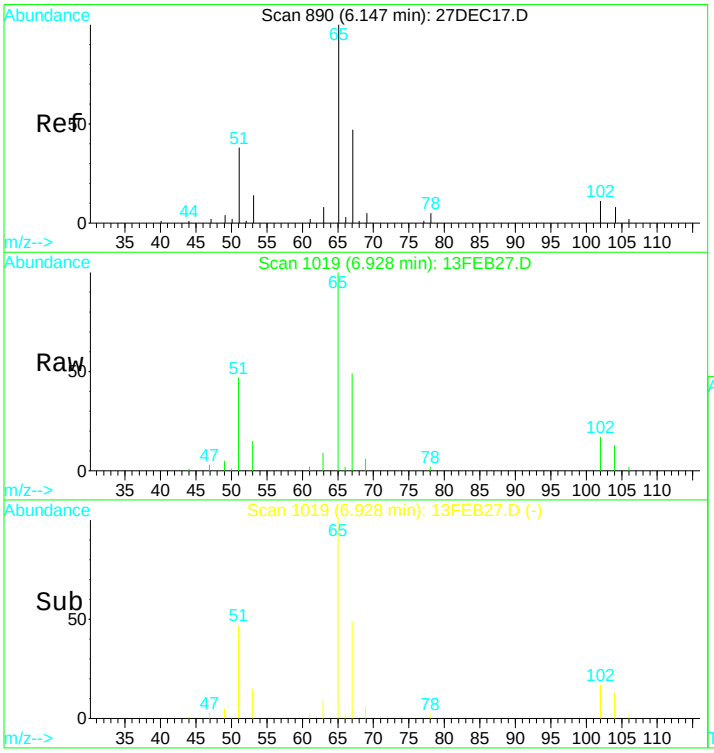




#18
1,1,1-Trichloroethane
Concen: 0.18 ug/L
RT: 6.53 min Scan# 942
Delta R.T. 0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 97 Resp: 2345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 52.7 | 97.9# |
| 61 | 74.2 | 40.0 | 74.4 |

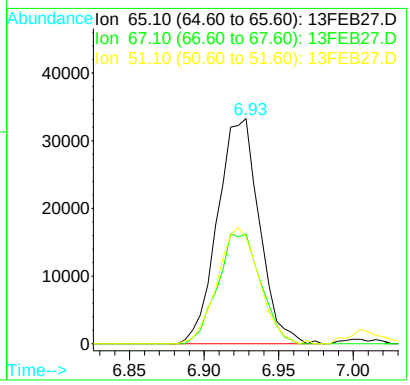


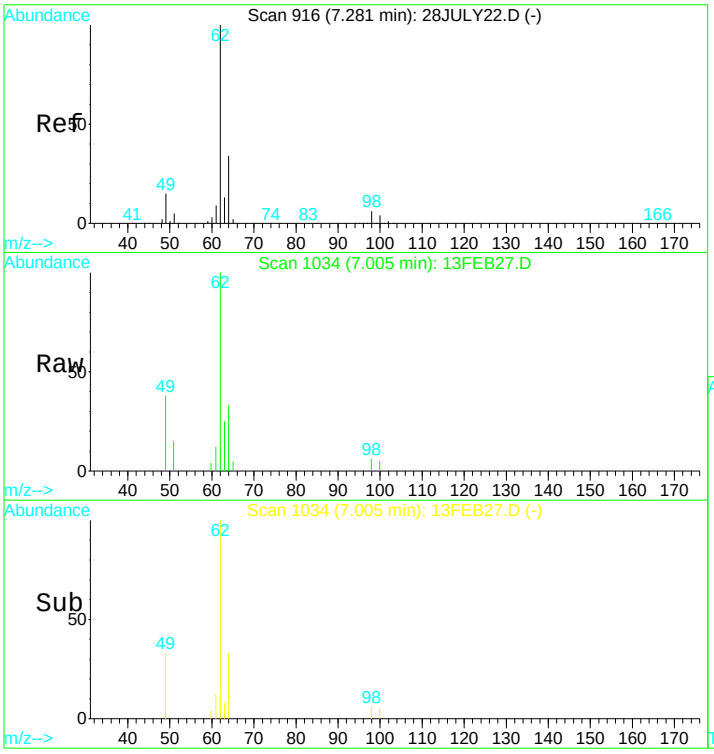



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.93 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 65 Resp: 64892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.2 | 38.4 | 71.4 |
| 51 | 51.7 | 1006.3 | 1868.8# |

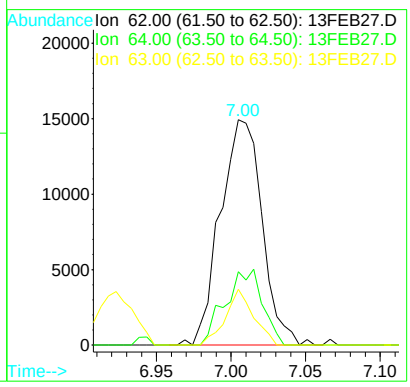


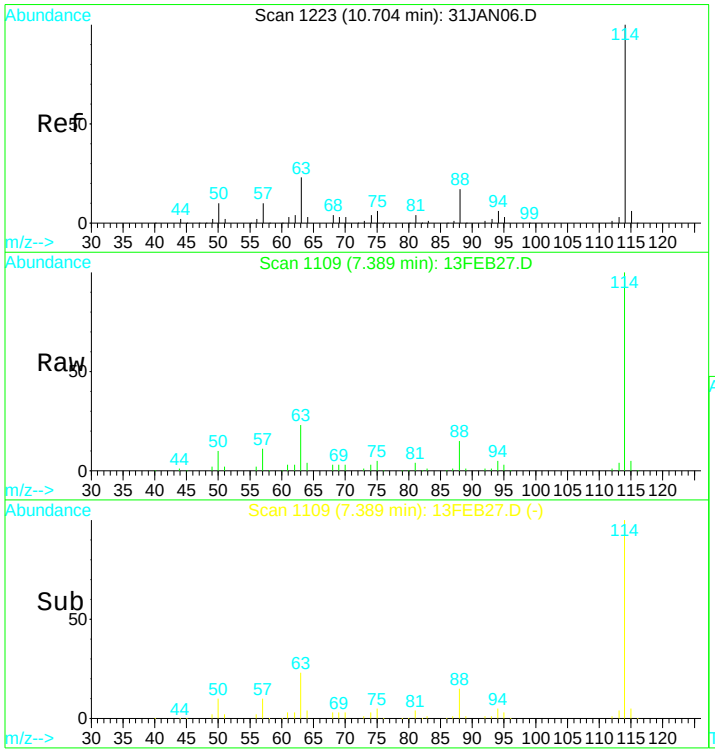




#22
1,2-Dichloroethane
Concen: 3.24 ug/L
RT: 7.00 min Scan# 1034
Delta R.T. -0.01 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 62 Resp: 29076

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.9 | 23.4 | 43.6 |
| 63 | 16.6 | 12.7 | 23.5 |

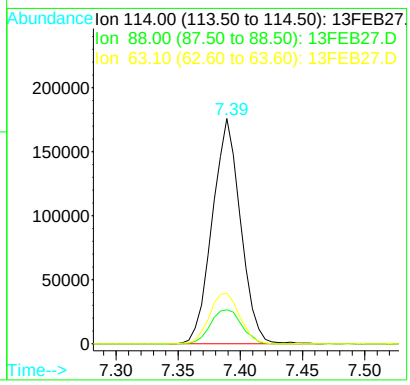


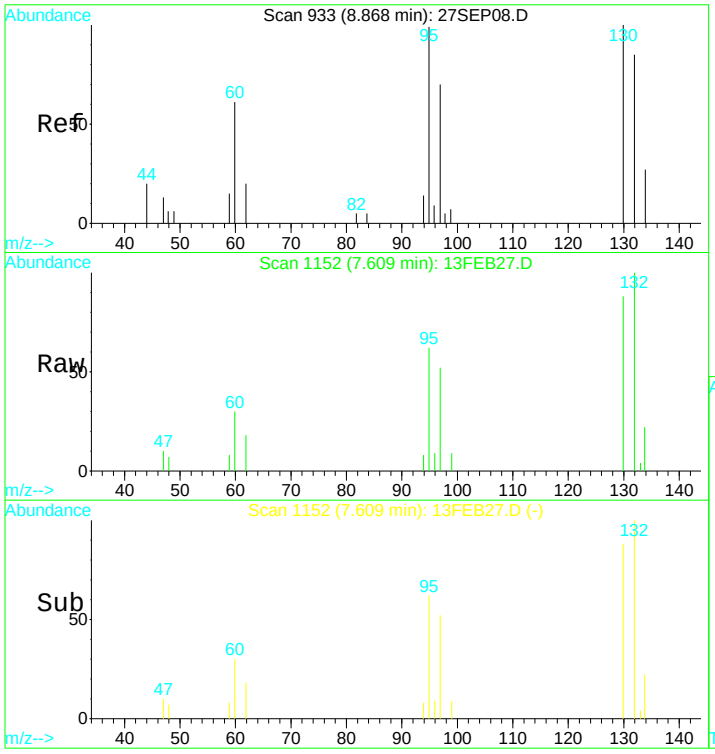



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion:114 Resp: 279304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.7 | 12.0 | 22.2 |
| 63 | 24.0 | 16.9 | 31.5 |

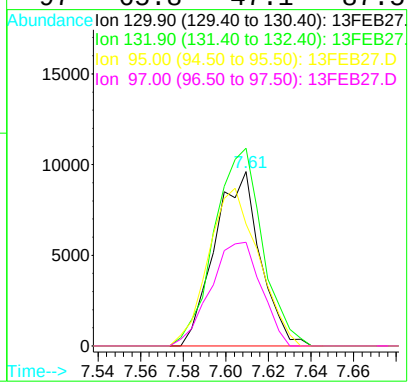


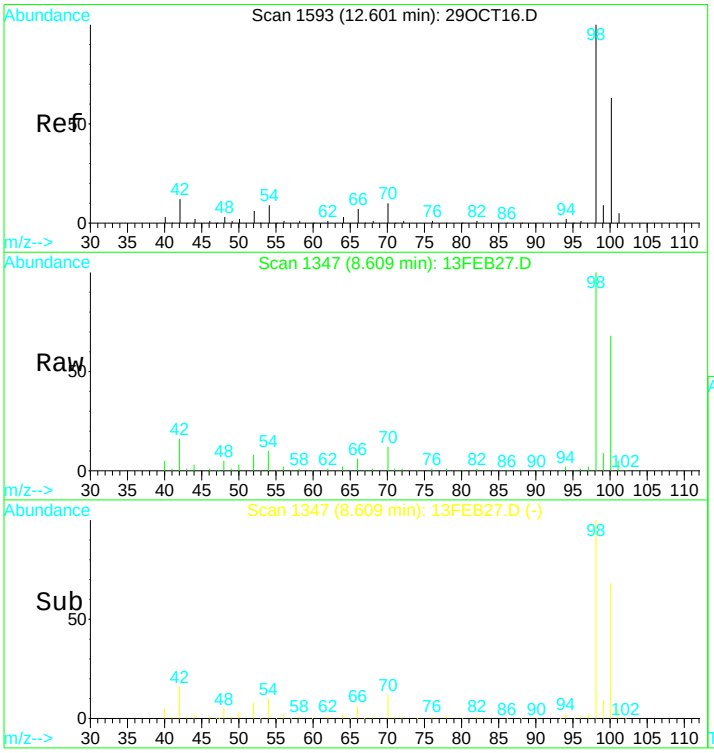




#25
Trichloroethene
Concen: 1.57 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion:130 Resp: 14321

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 119.6 | 74.3 | 137.9 |
| 95 | 99.3 | 70.8 | 131.6 |
| 97 | 65.8 | 47.1 | 87.5 |

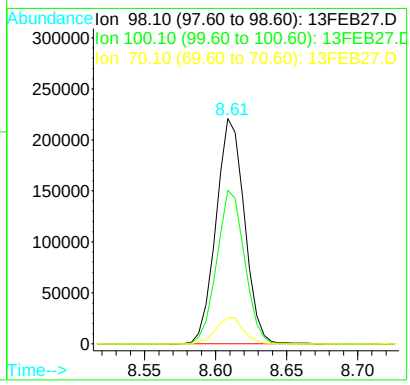


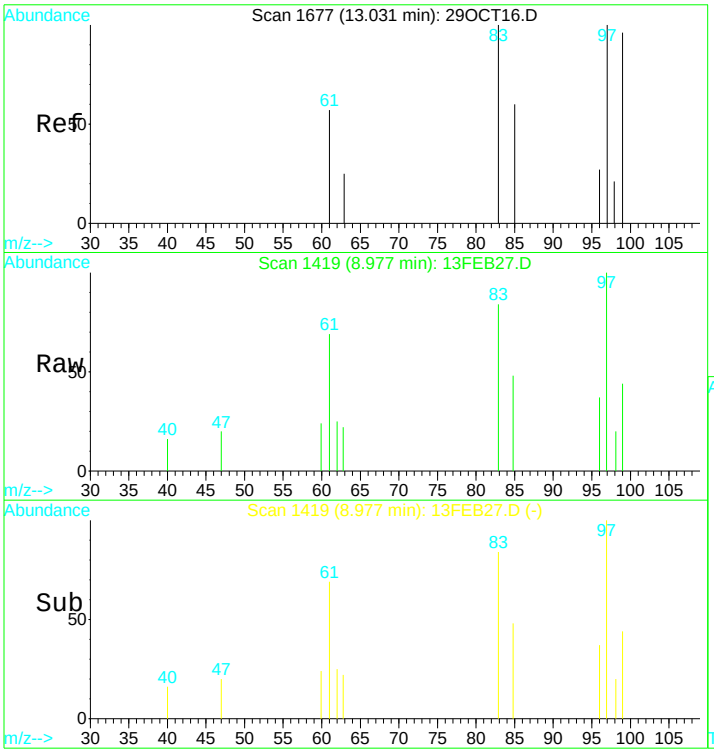



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 98 Resp: 308084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.8 | 47.0 | 87.4 |
| 70 | 11.5 | 7.3 | 13.7 |

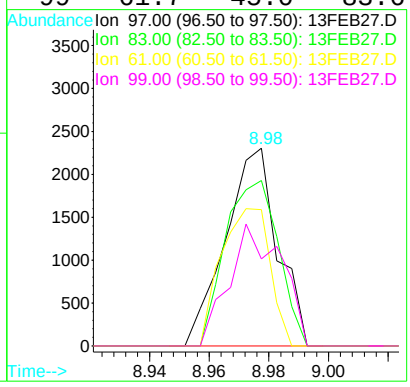


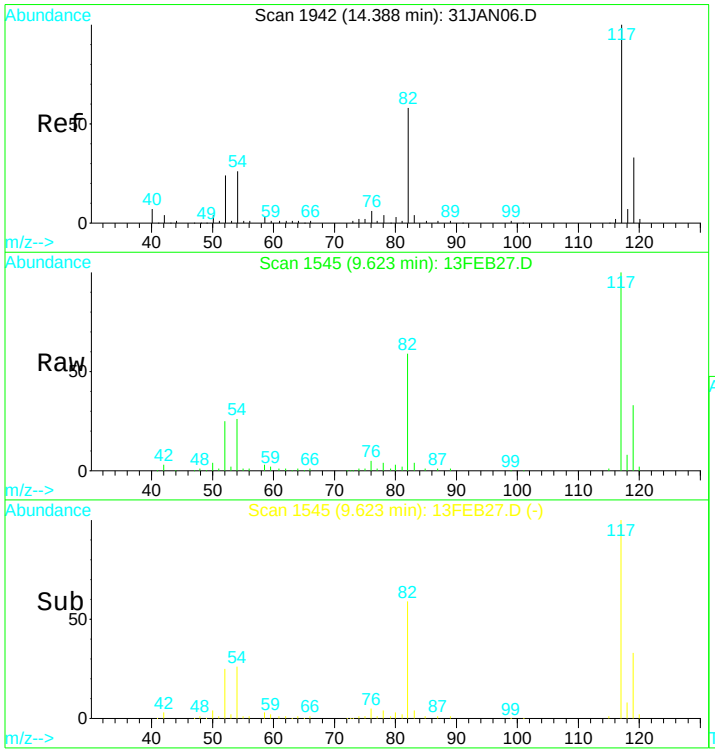




#34
1,1,2-Trichloroethane
Concen: 0.65 ug/L
RT: 8.98 min Scan# 1419
Delta R.T. -0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 97 Resp: 2794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 85.4 | 61.6 | 114.4 |
| 61 | 65.3 | 47.0 | 87.4 |
| 99 | 61.7 | 45.0 | 83.6 |

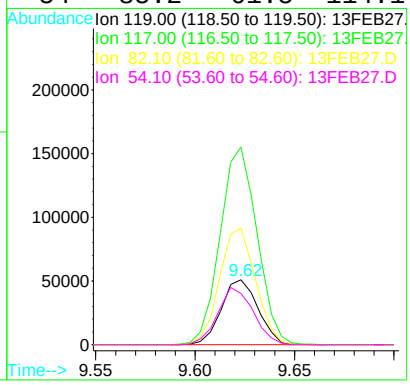


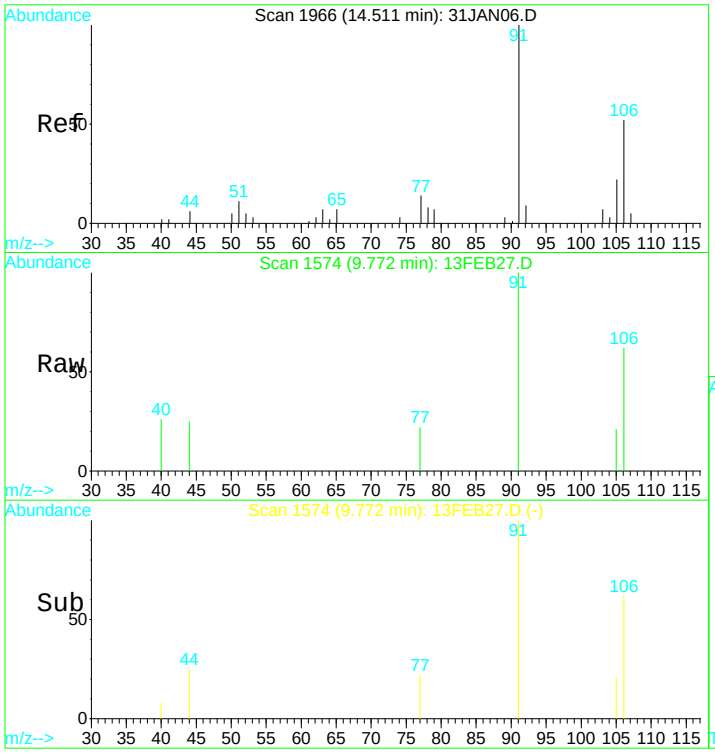



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion:119 Resp: 65481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 305.7 | 220.4 | 409.4 |
| 82 | 175.5 | 123.9 | 230.1 |
| 54 | 85.2 | 61.5 | 114.1 |

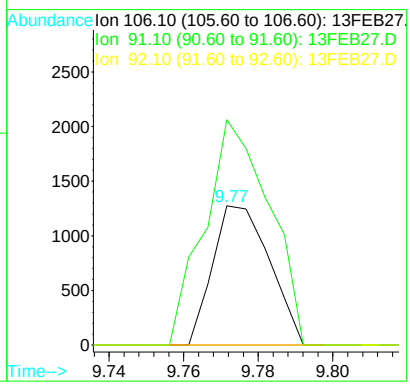


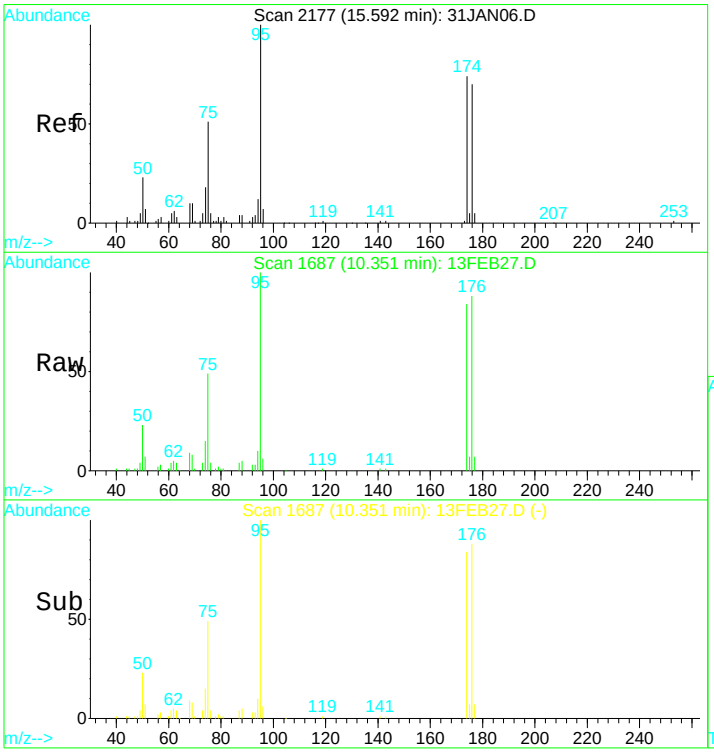




#43
P+m-Xylene
Concen: 0.10 ug/L
RT: 9.77 min Scan# 1574
Delta R.T. -0.01 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion:106 Resp: 1350

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 184.4 | 116.4 | 216.2 |
| 92 | 0.0 | 10.8 | 20.0# |

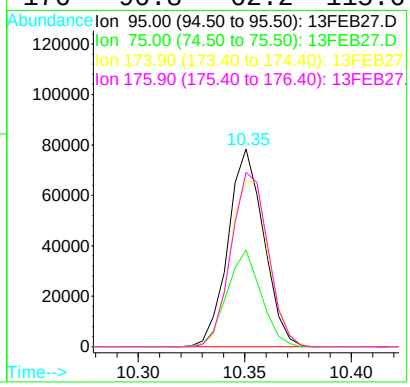





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB27.D
Acq: 13 Feb 2017 4:36 pm

Tgt Ion: 95 Resp: 91715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.9 | 32.6 | 60.5 |
| 174 | 90.1 | 60.9 | 113.1 |
| 176 | 90.8 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB27.D Vial: 27
Acq On : 13 Feb 2017 4:36 pm Operator: MGC
Sample : 1703480-33 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:26 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204495 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279304 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65481 | 10.00 | ug/L | 0.00 |

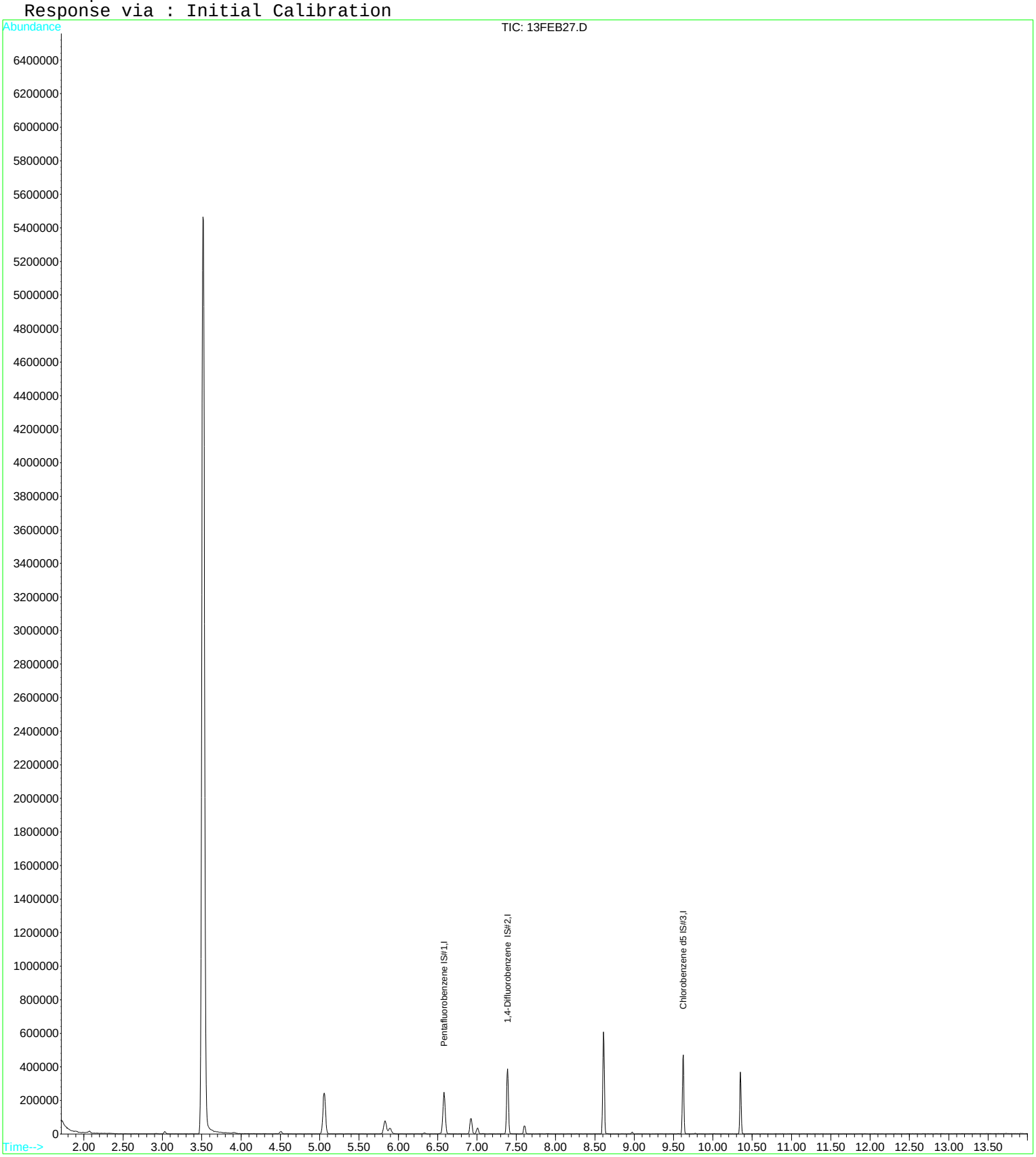
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB27.D Vial: 27
Acq On : 13 Feb 2017 4:36 pm Operator: MGC
Sample : 1703480-33 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:26 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB37.D Vial: 37
Acq On : 14 Feb 2017 8:02 pm Operator: MGC
Sample : 1703480-33RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208920 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 266390 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63652 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 64113 | 10.37 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 103.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 285851 | 9.43 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.30% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 83081 | 9.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.60% | | | |

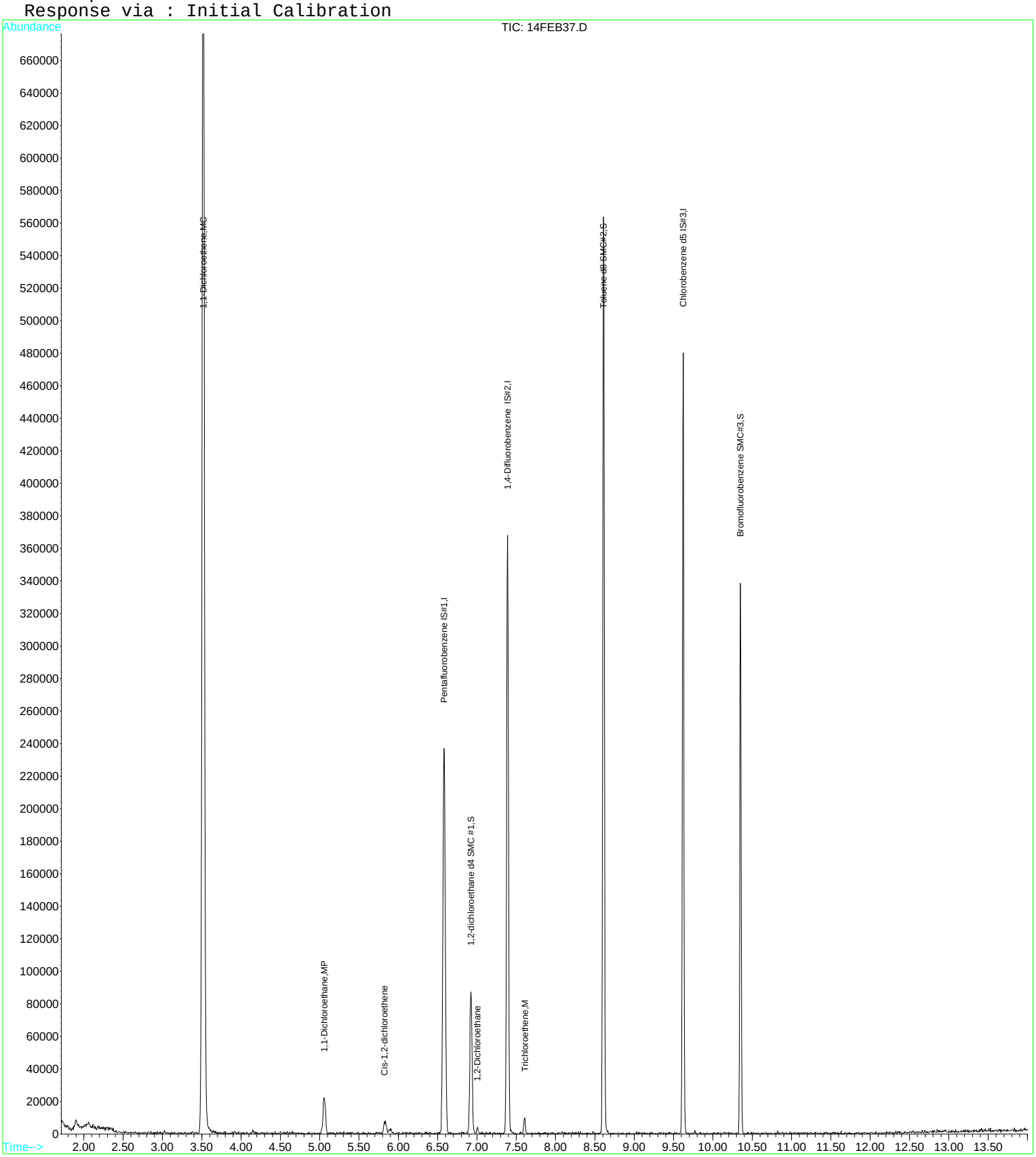
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 9) 1,1-Dichloroethene | 3.52 | 61 | 622984 | 38.39 | ug/L | 99 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 28284 | 1.31 | ug/L | 98 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 4343 | 0.45 | ug/L # | 75 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 2863 | 0.31 | ug/L # | 83 |
| 25) Trichloroethene | 7.60 | 130 | 2636 | 0.30 | ug/L | 92 |

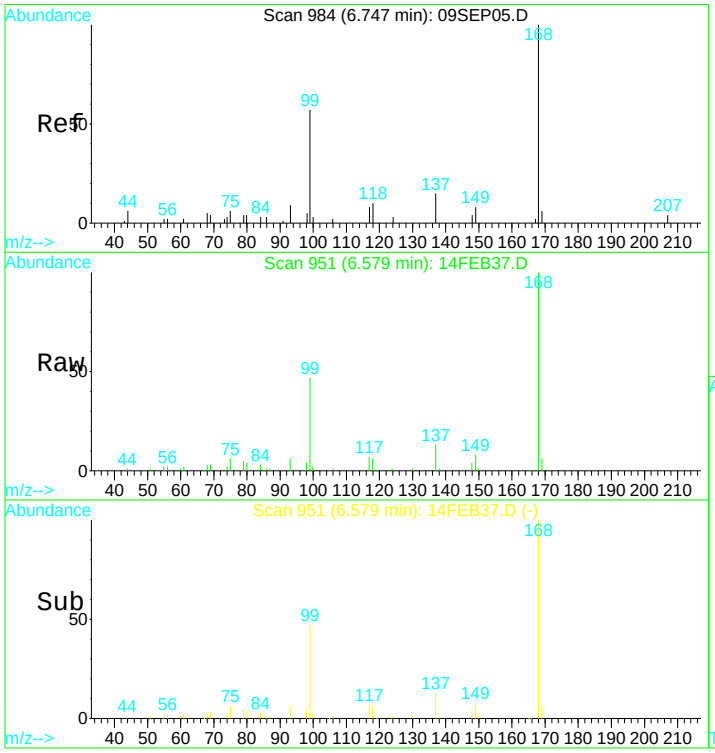
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB37.D Vial: 37
Acq On : 14 Feb 2017 8:02 pm Operator: MGC
Sample : 1703480-33RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:19 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

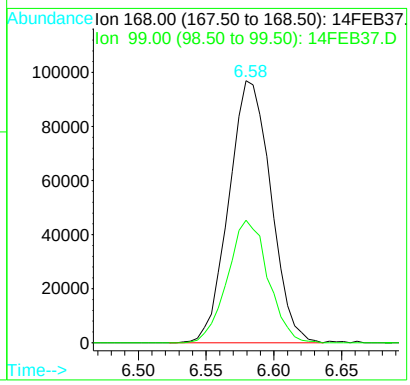


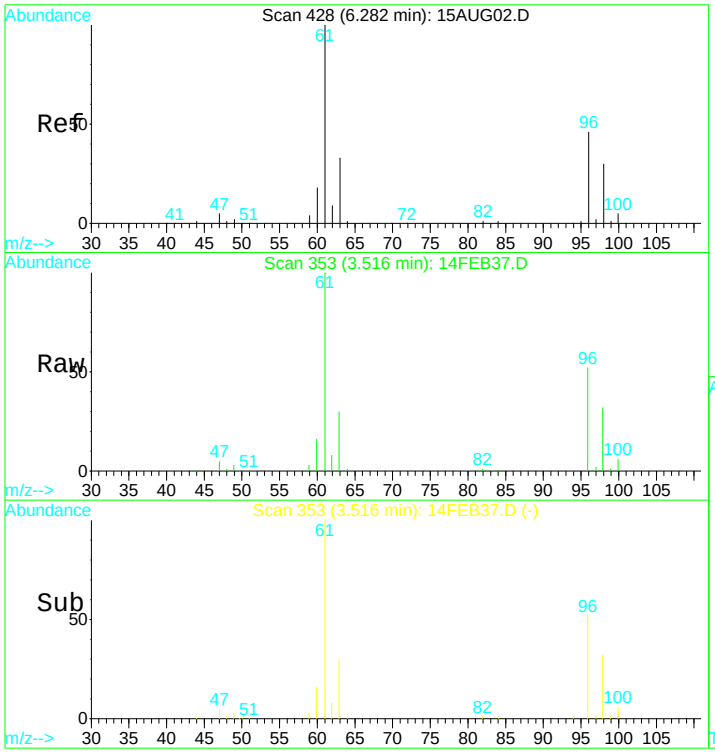



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion:168 Resp: 208920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.2 | 305.1 | 566.7# |

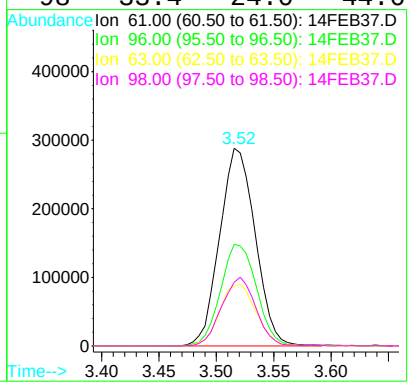


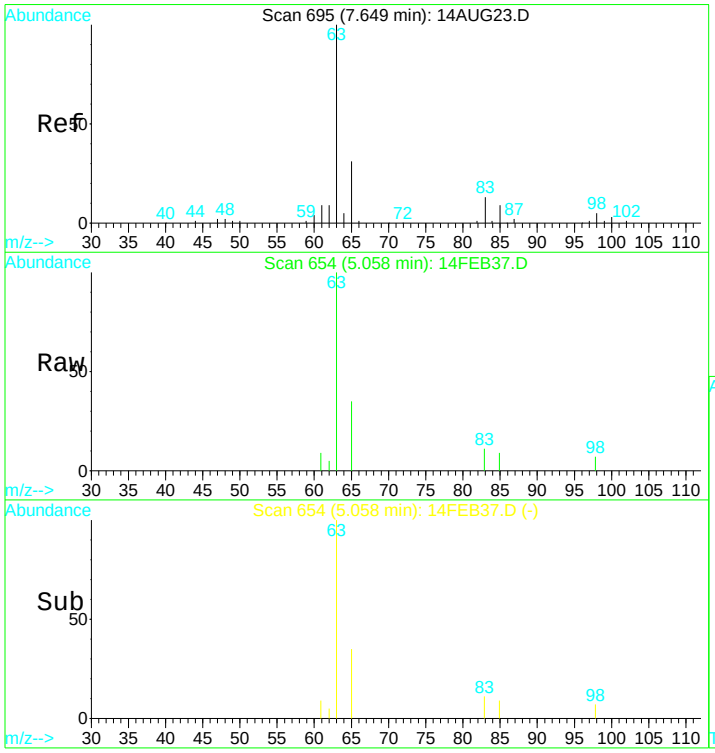




#9
1,1-Dichloroethene
Concen: 38.39 ug/L
RT: 3.52 min Scan# 353
Delta R.T. -0.00 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion: 61 Resp: 622984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 52.1 | 36.6 | 68.0 |
| 63 | 31.7 | 22.0 | 40.8 |
| 98 | 33.4 | 24.0 | 44.6 |

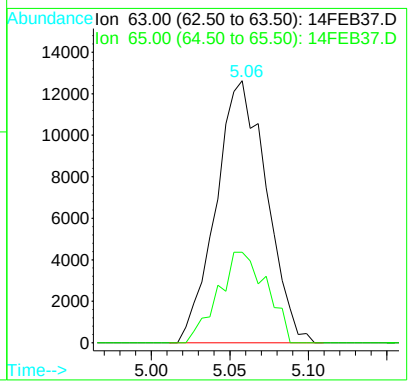


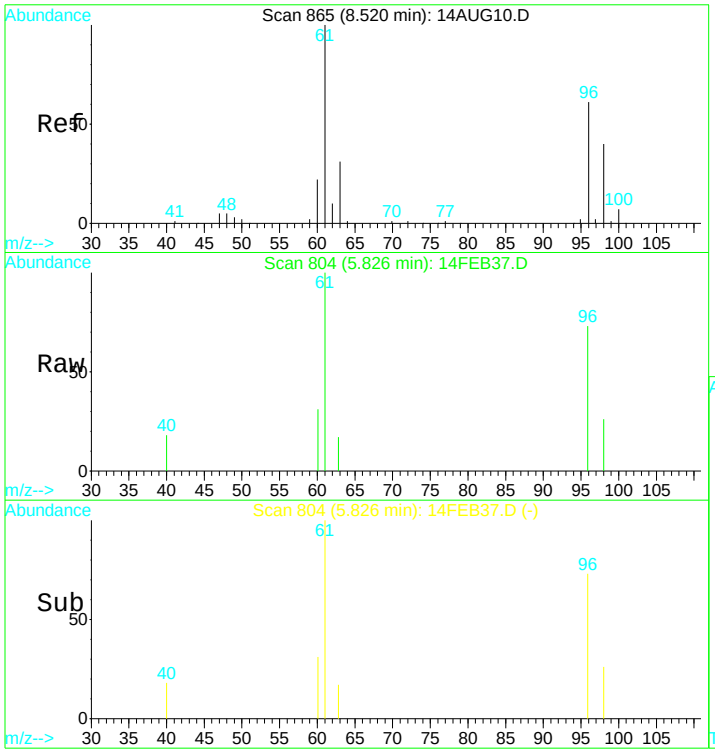



#13
1,1-Dichloroethane
Concen: 1.31 ug/L
RT: 5.06 min Scan# 654
Delta R.T. -0.00 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion: 63 Resp: 28284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.9 | 22.4 | 41.6 |

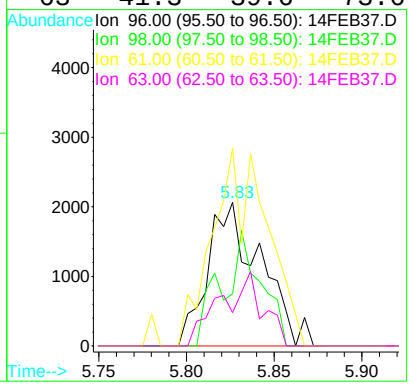


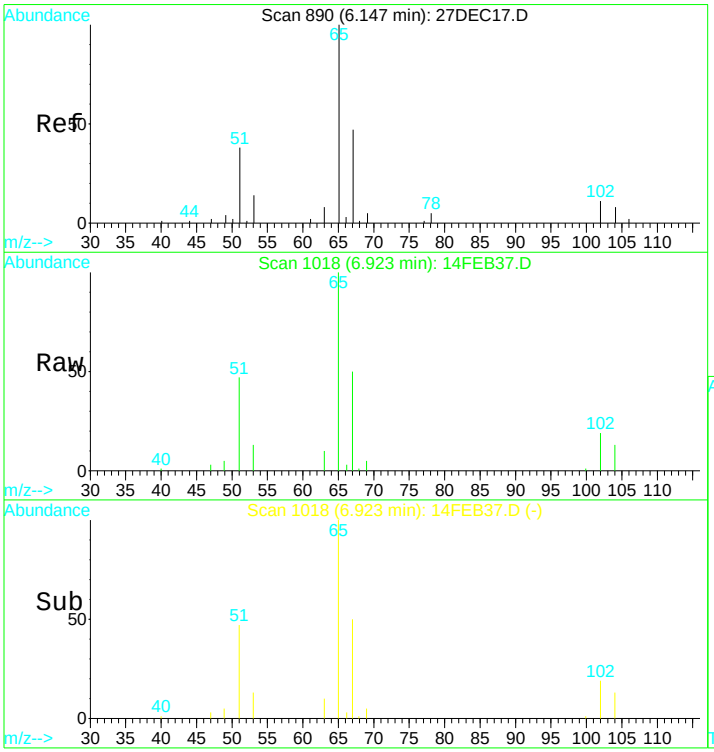




#15
Cis-1,2-dichloroethene
Concen: 0.45 ug/L
RT: 5.83 min Scan# 804
Delta R.T. -0.01 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion: 96 Resp: 4343

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 41.1 | 46.2 | 85.8# |
| 61 | 141.2 | 122.8 | 228.0 |
| 63 | 41.3 | 39.6 | 73.6 |

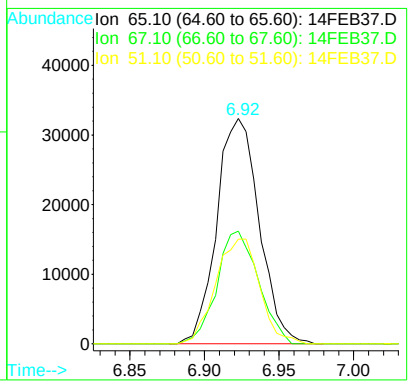


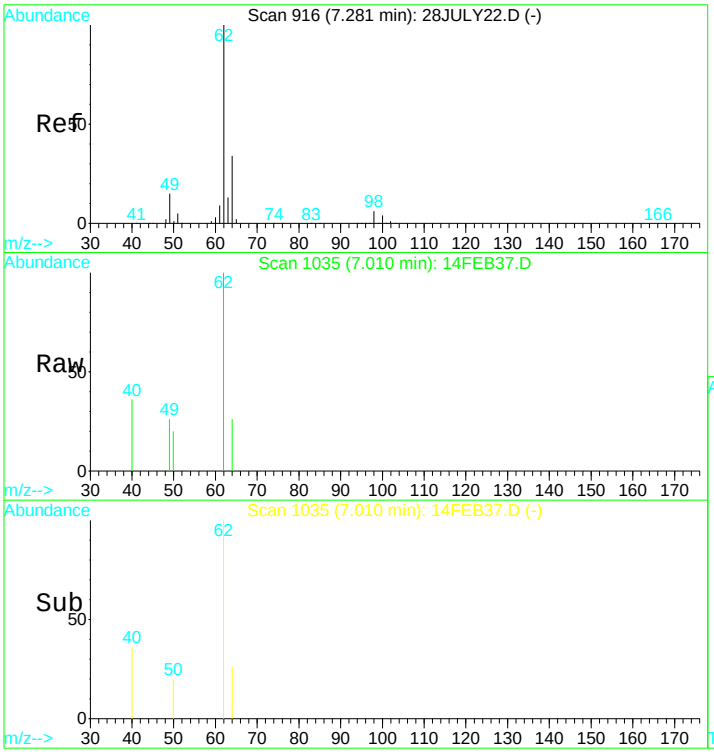



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion: 65 Resp: 64113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 48.9 | 38.4 | 71.4 |
| 51 | 48.3 | 1006.3 | 1868.8# |

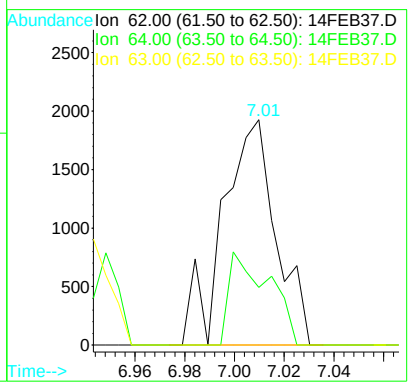


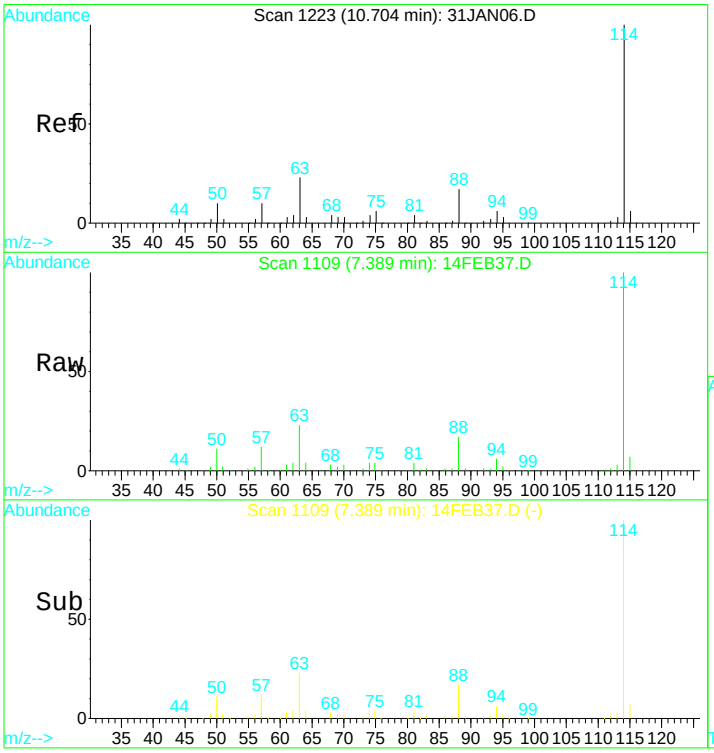




#22
1,2-Dichloroethane
Concen: 0.31 ug/L
RT: 7.01 min Scan# 1035
Delta R.T. -0.00 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion: 62 Resp: 2863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.3 | 23.4 | 43.6 |
| 63 | 0.0 | 12.7 | 23.5# |

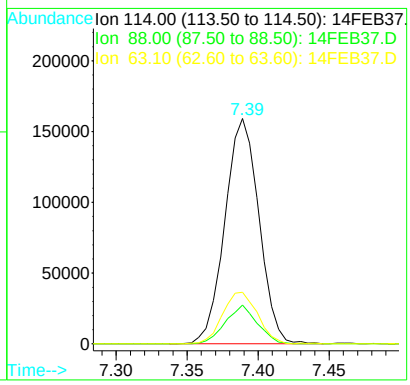


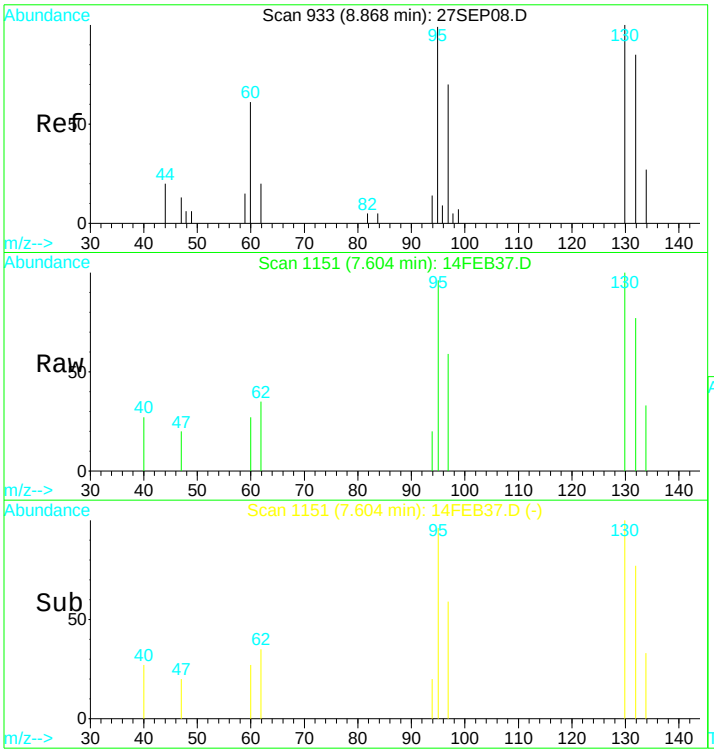



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion:114 Resp: 266390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.1 | 12.0 | 22.2 |
| 63 | 23.4 | 16.9 | 31.5 |

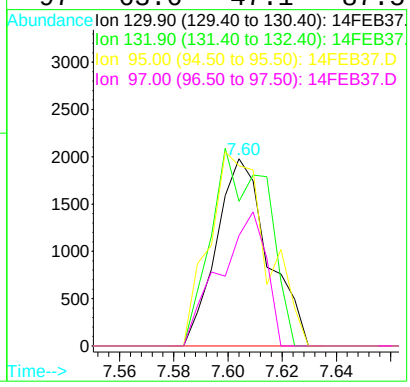


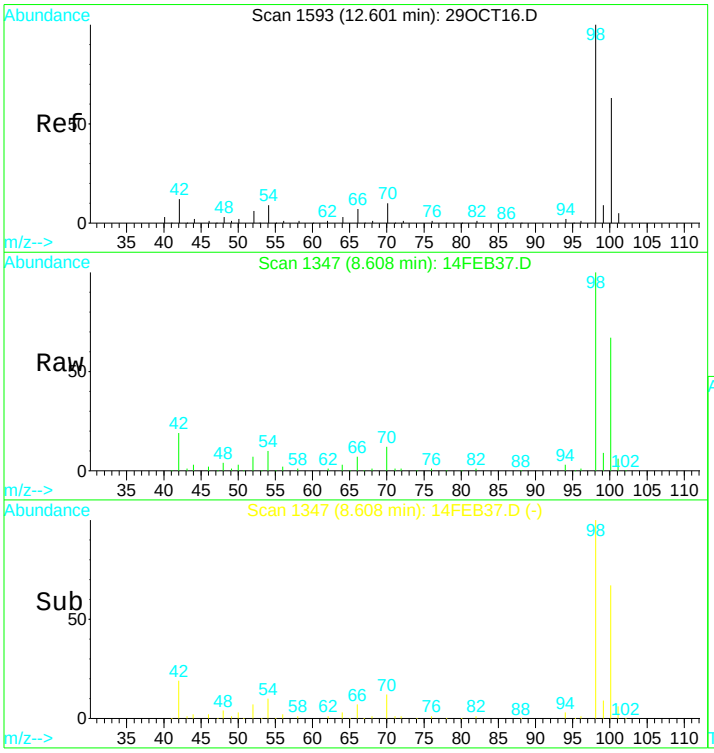




#25
Trichloroethene
Concen: 0.30 ug/L
RT: 7.60 min Scan# 1151
Delta R.T. -0.00 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion:130 Resp: 2636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 112.5 | 74.3 | 137.9 |
| 95 | 114.6 | 70.8 | 131.6 |
| 97 | 63.6 | 47.1 | 87.5 |

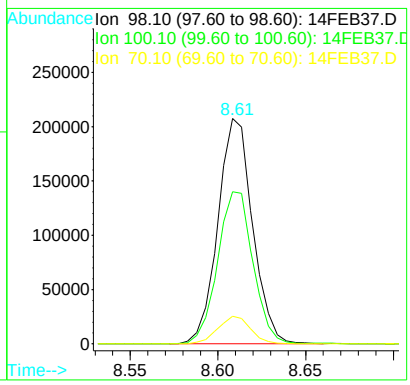


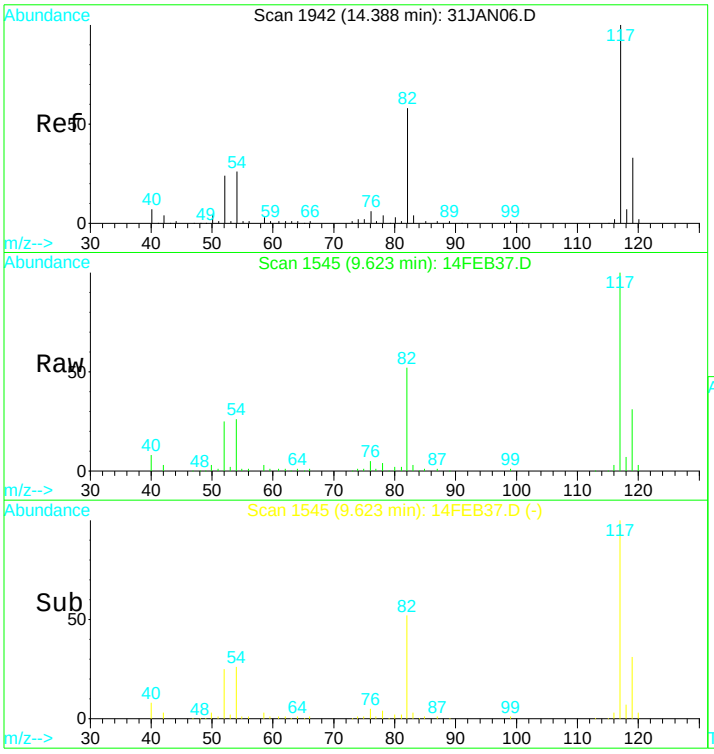



#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion: 98 Resp: 285851

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 69.0 | 47.0 | 87.4 |
| 70 | 11.6 | 7.3 | 13.7 |

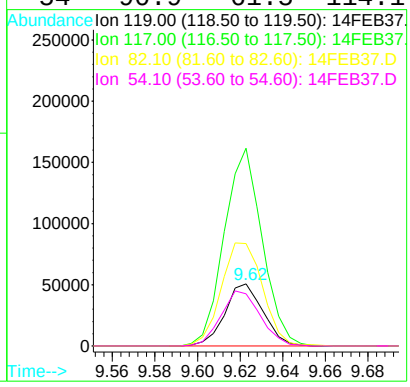


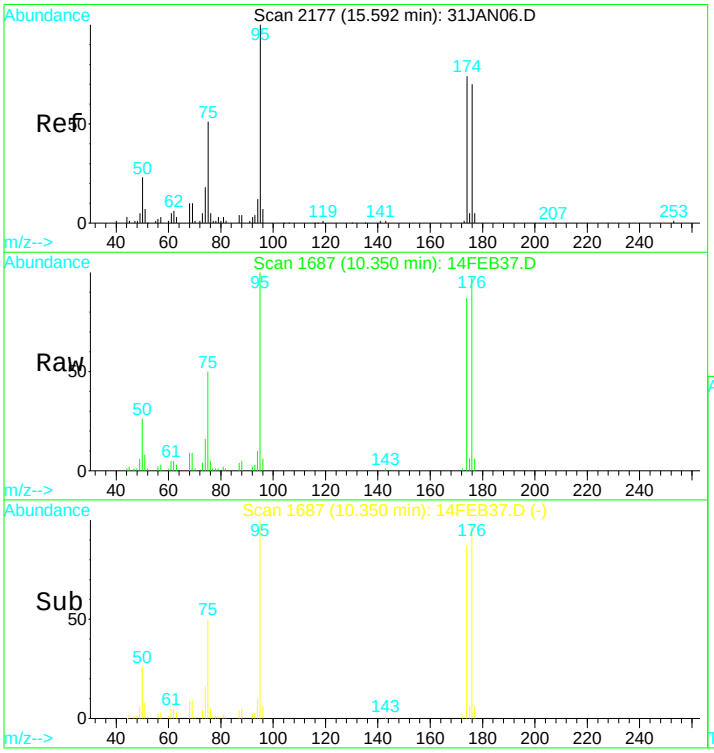




#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion:119 Resp: 63652

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 314.6 | 220.4 | 409.4 |
| 82 | 179.2 | 123.9 | 230.1 |
| 54 | 90.9 | 61.5 | 114.1 |

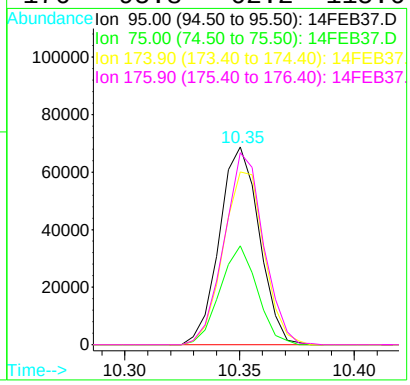





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 14FEB37.D
Acq: 14 Feb 2017 8:02 pm

Tgt Ion: 95 Resp: 83081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.6 | 32.6 | 60.5 |
| 174 | 89.8 | 60.9 | 113.1 |
| 176 | 95.8 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB28.D Vial: 28
Acq On : 13 Feb 2017 4:59 pm Operator: MGC
Sample : 1703480-34 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:27 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 202519 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270474 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67675 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 71556 | 11.94 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 119.40% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 295701 | 9.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.10% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 93417 | 10.01 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 100.10% | | | |

Target Compounds

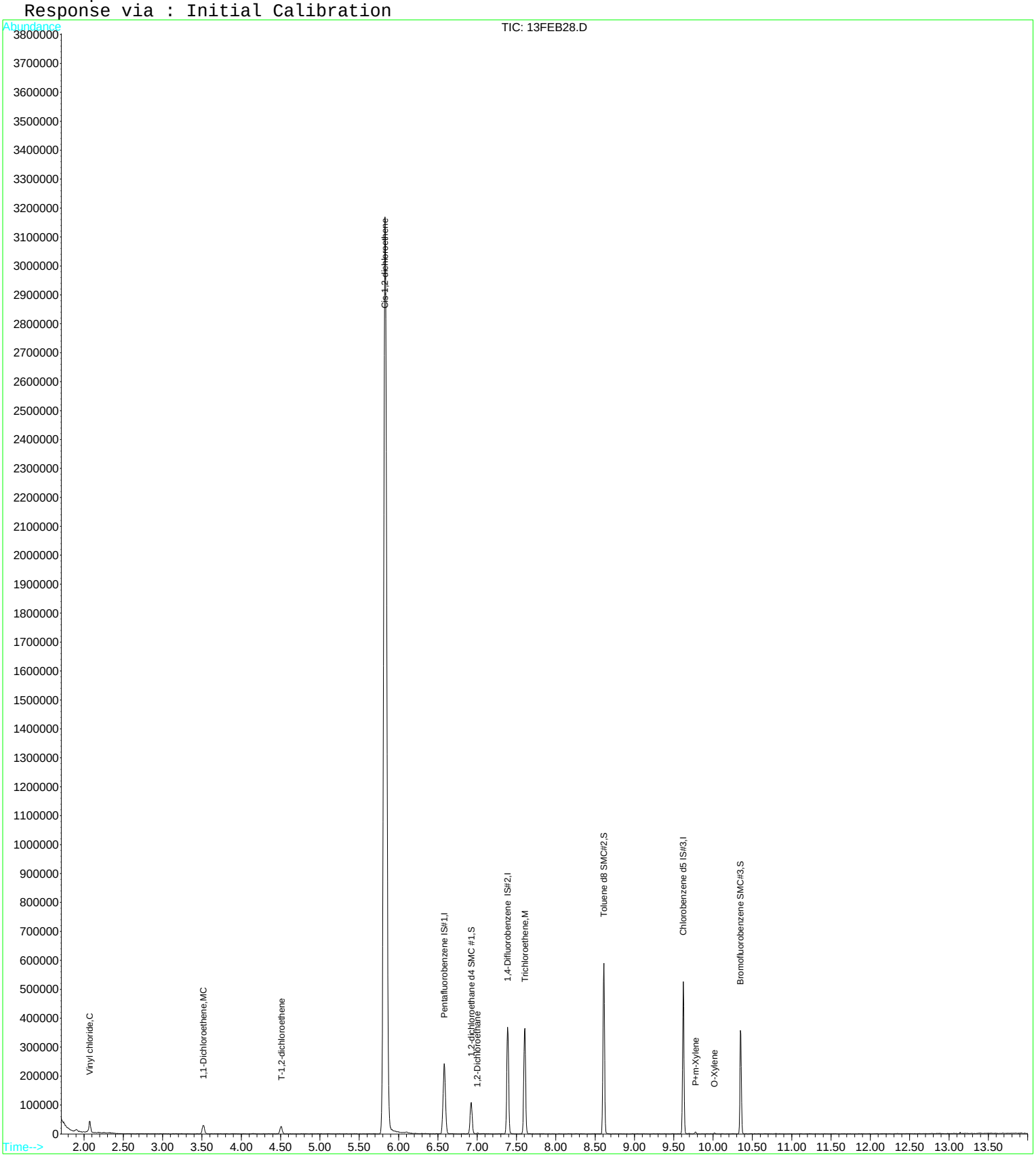
| | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.07 | 62 | 31513 | 2.61 | ug/L # | 1 |
| 9) 1,1-Dichloroethene | 3.51 | 61 | 25254 | 1.61 | ug/L | 95 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 10659 | 1.17 | ug/L | 93 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 1895779 | 200.59 | ug/L | 87 |
| 22) 1,2-Dichloroethane | 7.00 | 62 | 2314 | 0.26 | ug/L # | 73 |
| 25) Trichloroethene | 7.61 | 130 | 106112 | 12.05 | ug/L | 97 |
| 43) P+m-Xylene | 9.77 | 106 | 1766 | 0.13 | ug/L # | 40 |
| 44) O-Xylene | 10.02 | 106 | 906 | 0.07 | ug/L # | 67 |

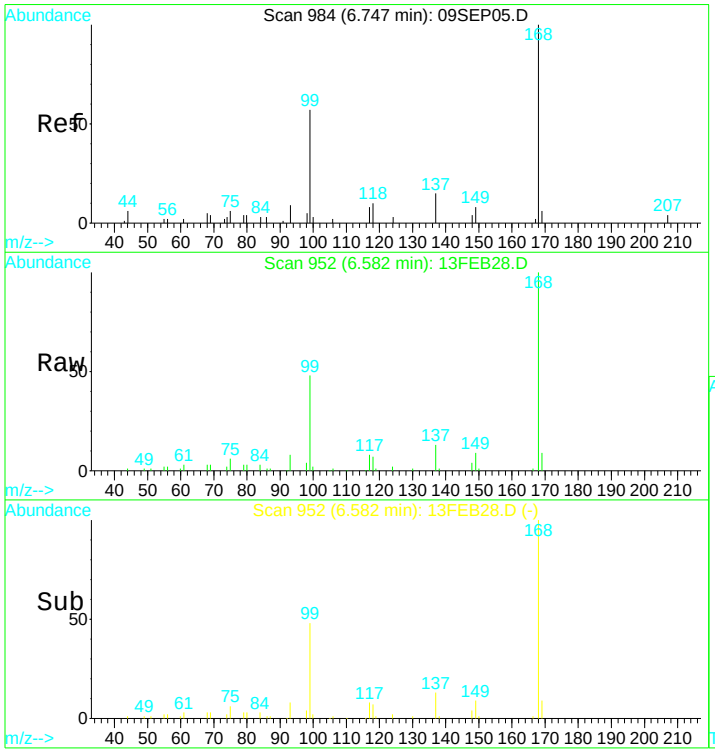
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB28.D Vial: 28
Acq On : 13 Feb 2017 4:59 pm Operator: MGC
Sample : 1703480-34 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:27 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

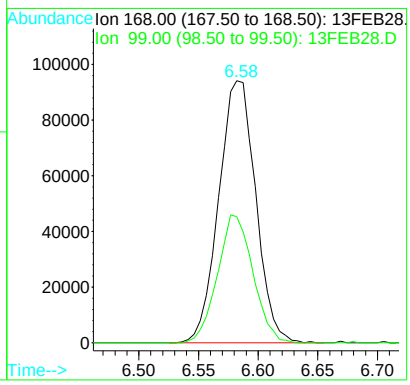


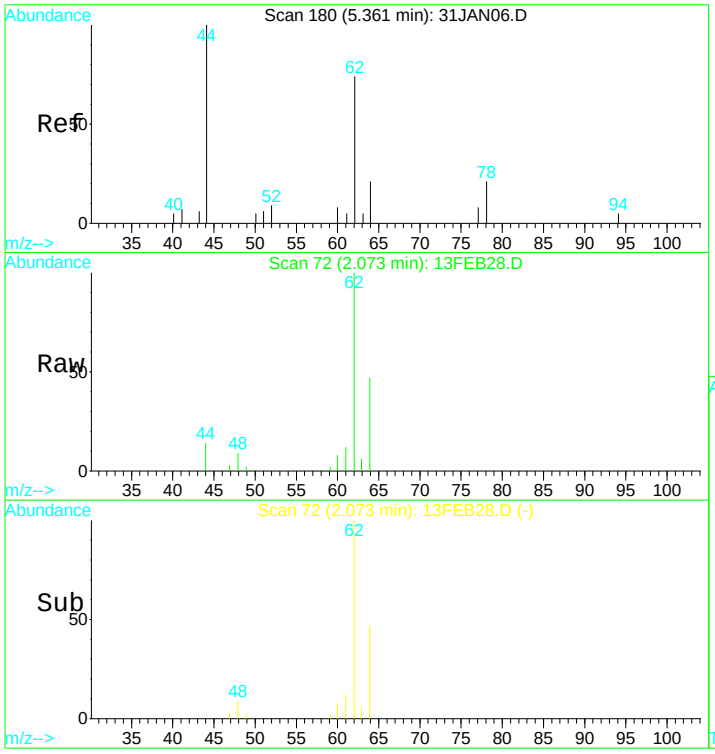



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion:168 Resp: 202519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.8 | 305.1 | 566.7# |

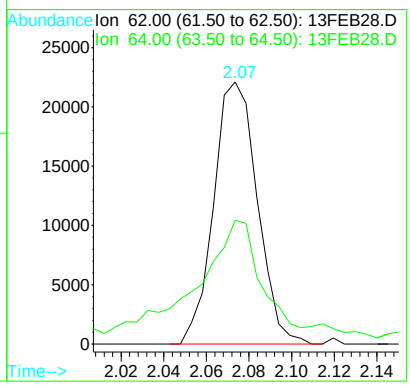


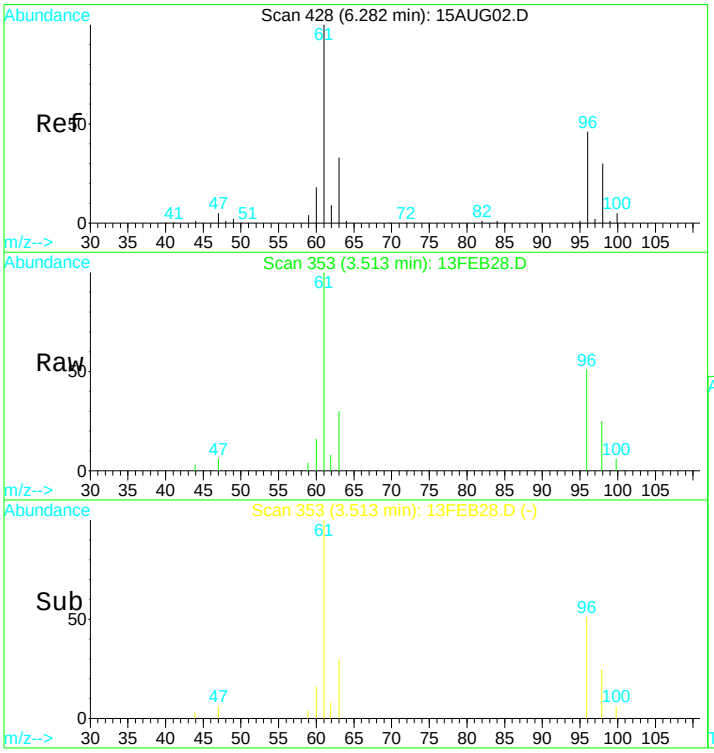




#4
Vinyl chloride
Concen: 2.61 ug/L
RT: 2.07 min Scan# 72
Delta R.T. 0.01 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 62 Resp: 31513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 87.5 | 22.4 | 41.6# |

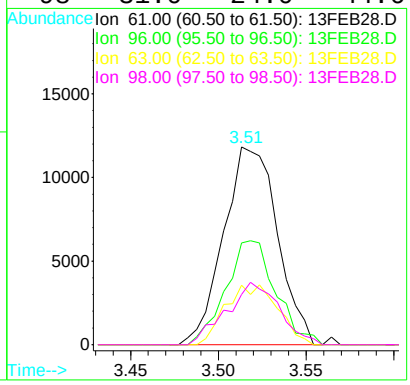


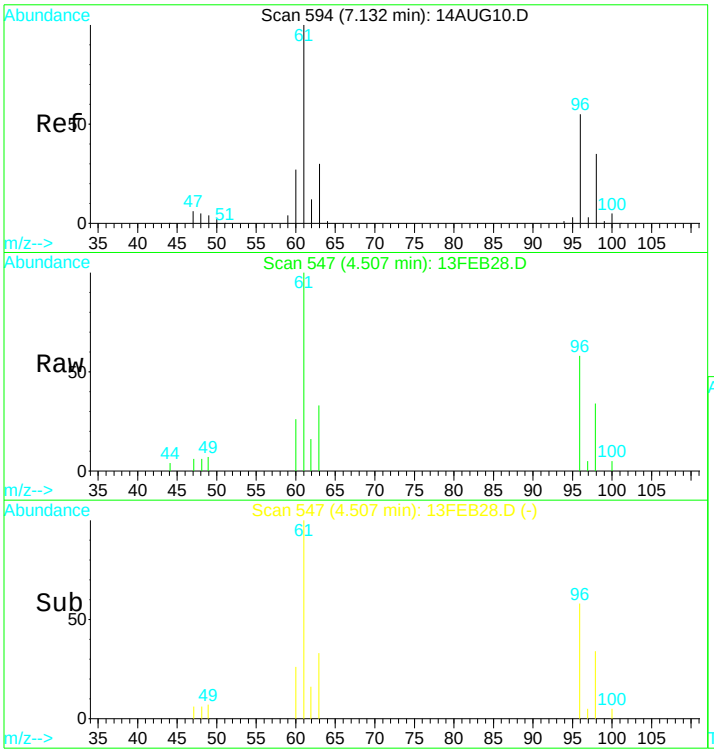



#9
1,1-Dichloroethene
Concen: 1.61 ug/L
RT: 3.51 min Scan# 353
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 61 Resp: 25254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 48.8 | 36.6 | 68.0 |
| 63 | 29.5 | 22.0 | 40.8 |
| 98 | 31.0 | 24.0 | 44.6 |

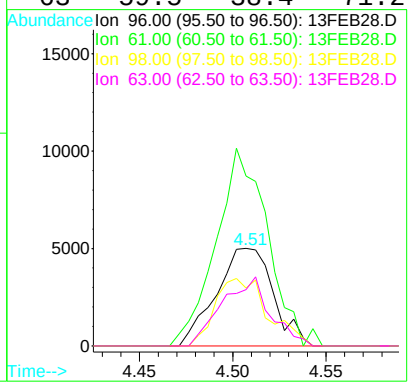


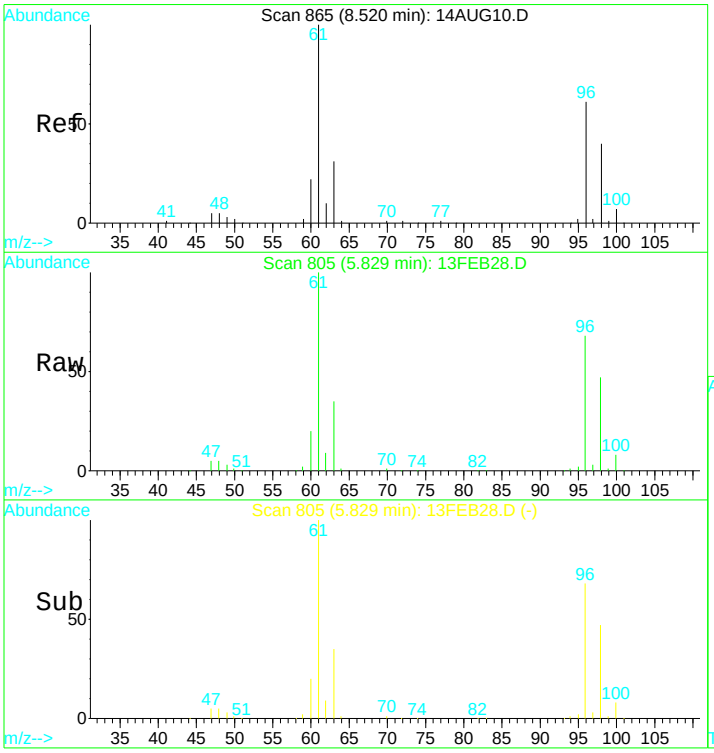




#12
T-1,2-dichloroethene
Concen: 1.17 ug/L
RT: 4.51 min Scan# 547
Delta R.T. 0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 96 Resp: 10659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 182.9 | 119.6 | 222.2 |
| 98 | 64.4 | 46.1 | 85.5 |
| 63 | 59.5 | 38.4 | 71.2 |

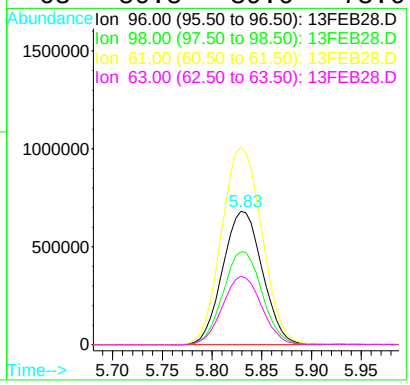


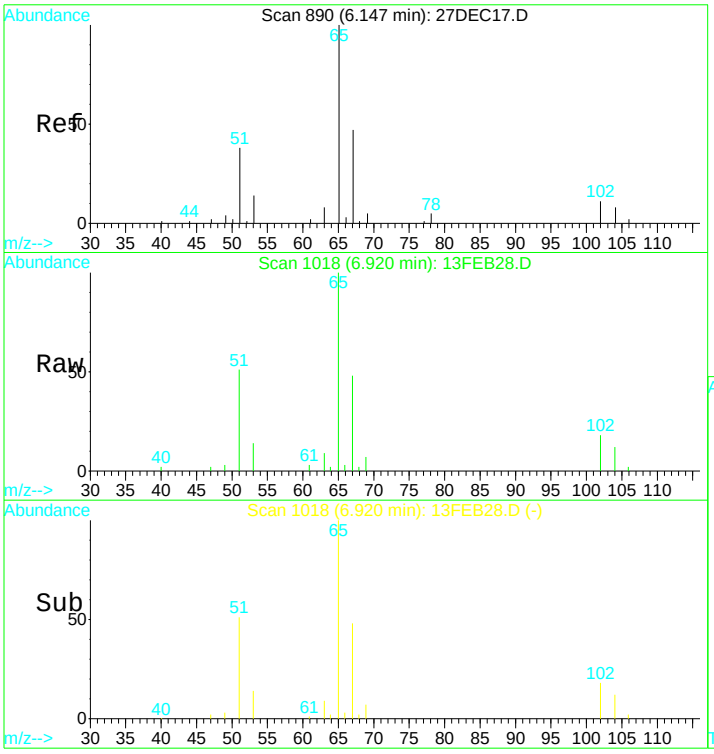



#15
Cis-1,2-dichloroethene
Concen: 200.59 ug/L
RT: 5.83 min Scan# 805
Delta R.T. -0.01 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 96 Resp: 1895779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 68.3 | 46.2 | 85.8 |
| 61 | 150.5 | 122.8 | 228.0 |
| 63 | 50.5 | 39.6 | 73.6 |

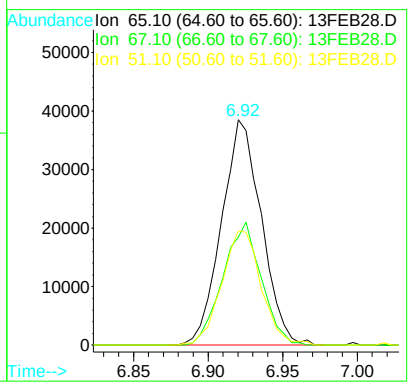


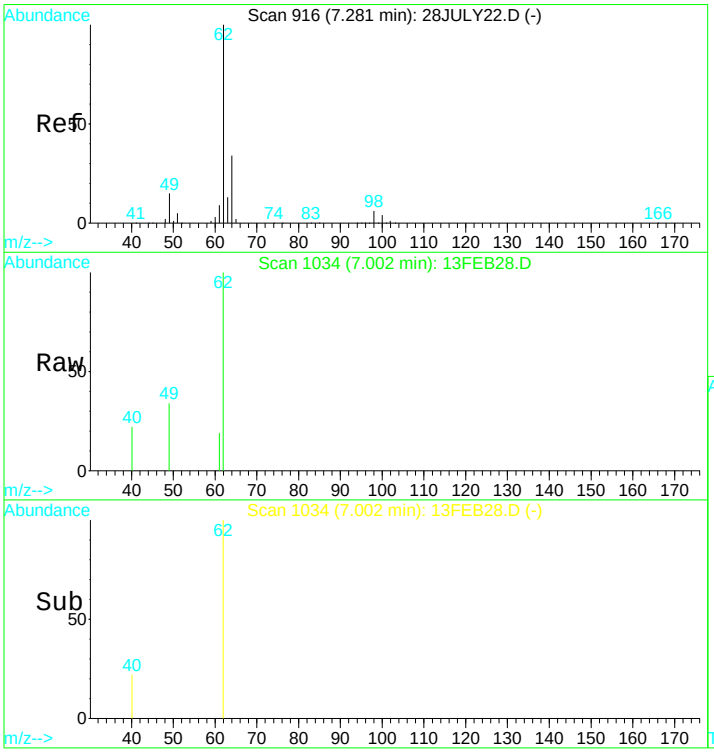




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 65 Resp: 71556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.4 | 38.4 | 71.4 |
| 51 | 50.3 | 1006.3 | 1868.8# |

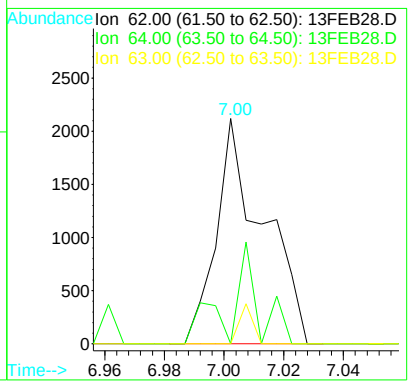


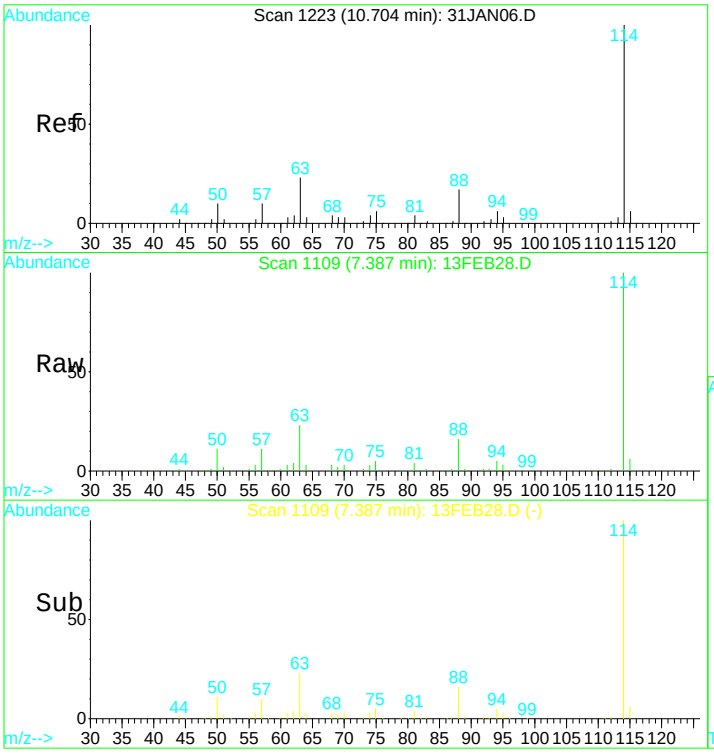



#22
1,2-Dichloroethane
Concen: 0.26 ug/L
RT: 7.00 min Scan# 1034
Delta R.T. -0.01 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 62 Resp: 2314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 18.7 | 23.4 | 43.6# |
| 63 | 5.0 | 12.7 | 23.5# |

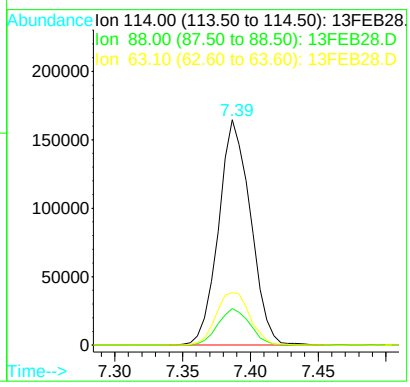


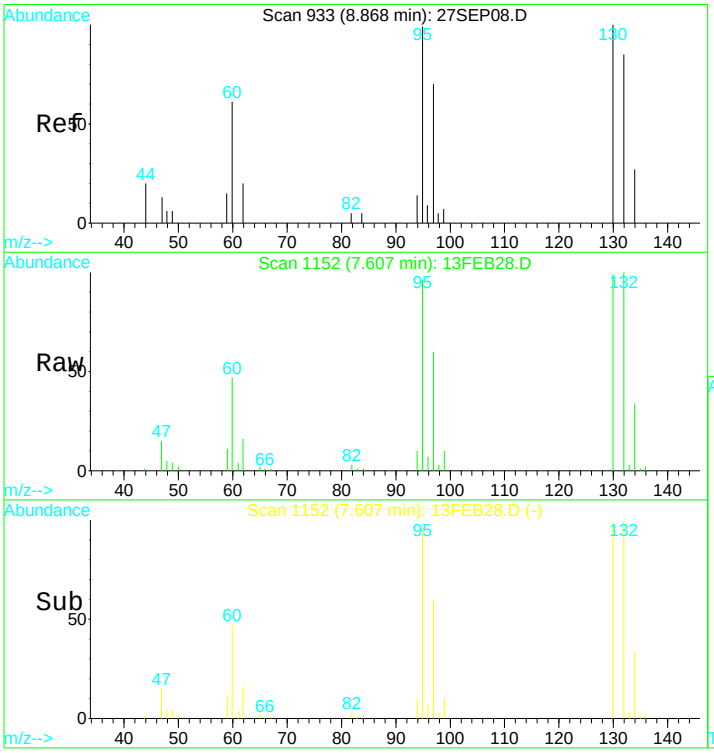




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion:114 Resp: 270474

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.2 | 12.0 | 22.2 |
| 63 | 24.8 | 16.9 | 31.5 |

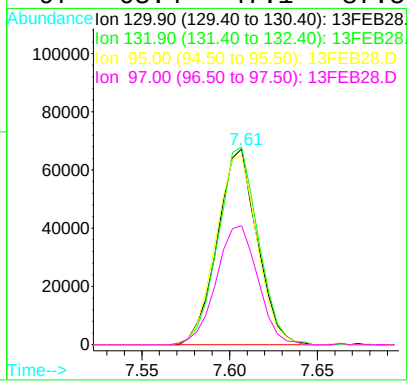


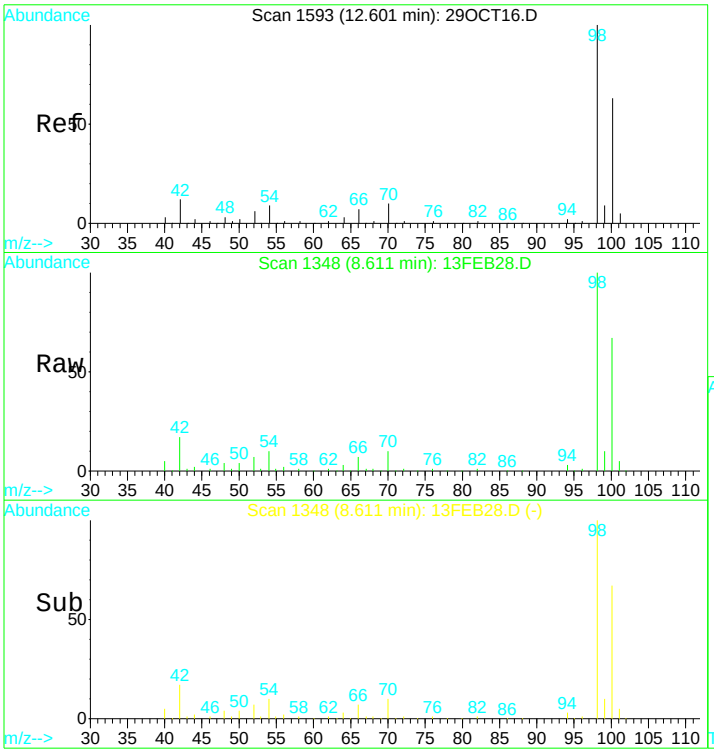



#25
Trichloroethene
Concen: 12.05 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion:130 Resp: 106112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 101.9 | 74.3 | 137.9 |
| 95 | 100.3 | 70.8 | 131.6 |
| 97 | 63.4 | 47.1 | 87.5 |

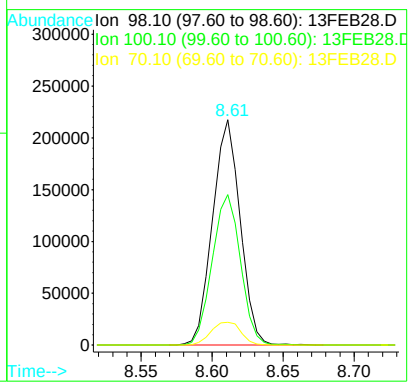


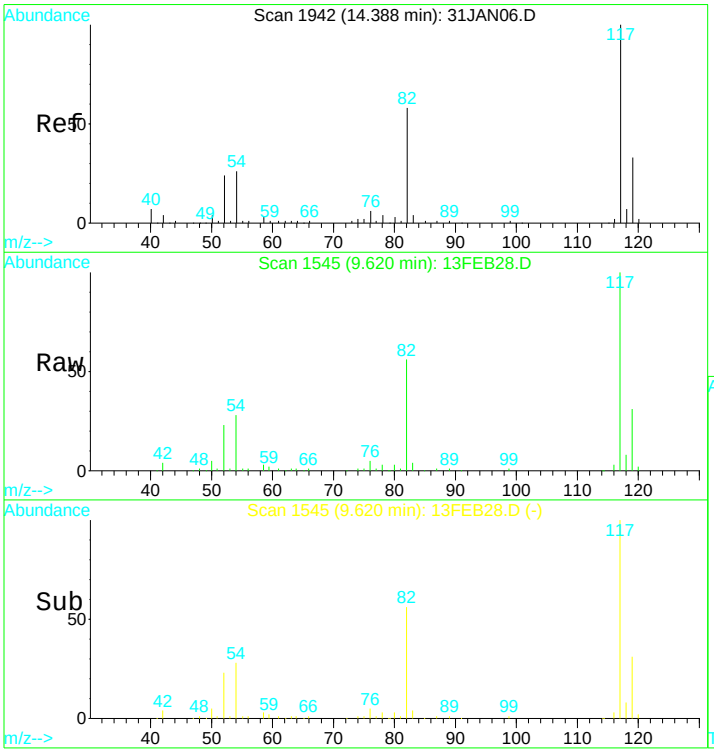




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 98 Resp: 295701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.2 | 47.0 | 87.4 |
| 70 | 11.1 | 7.3 | 13.7 |

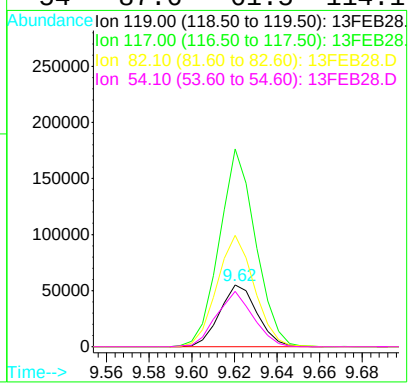


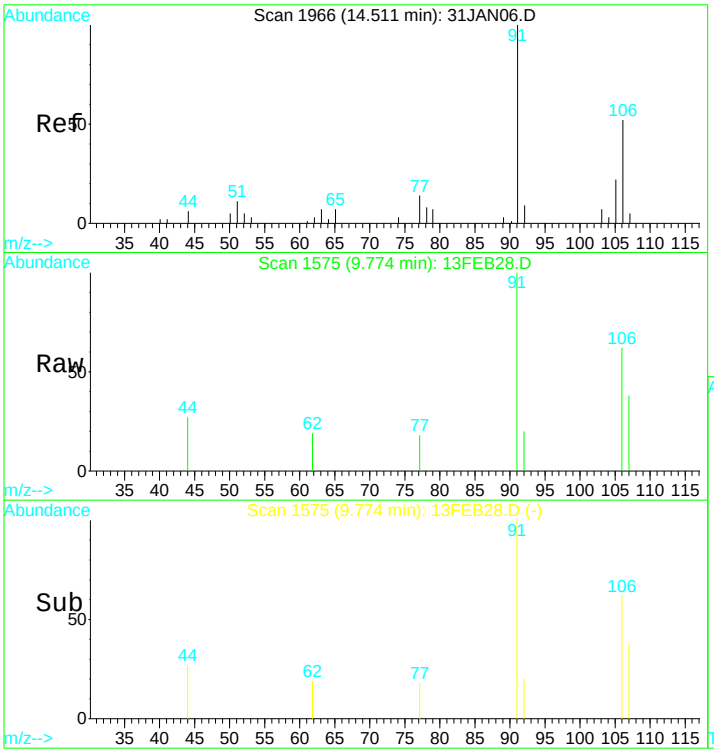



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion:119 Resp: 67675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 309.1 | 220.4 | 409.4 |
| 82 | 179.1 | 123.9 | 230.1 |
| 54 | 87.6 | 61.5 | 114.1 |

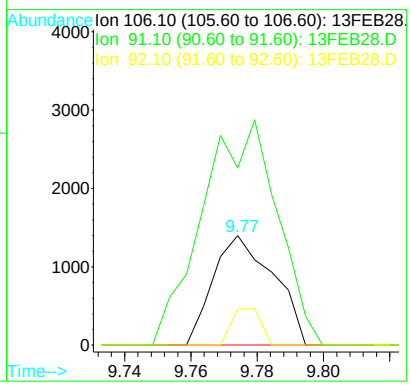


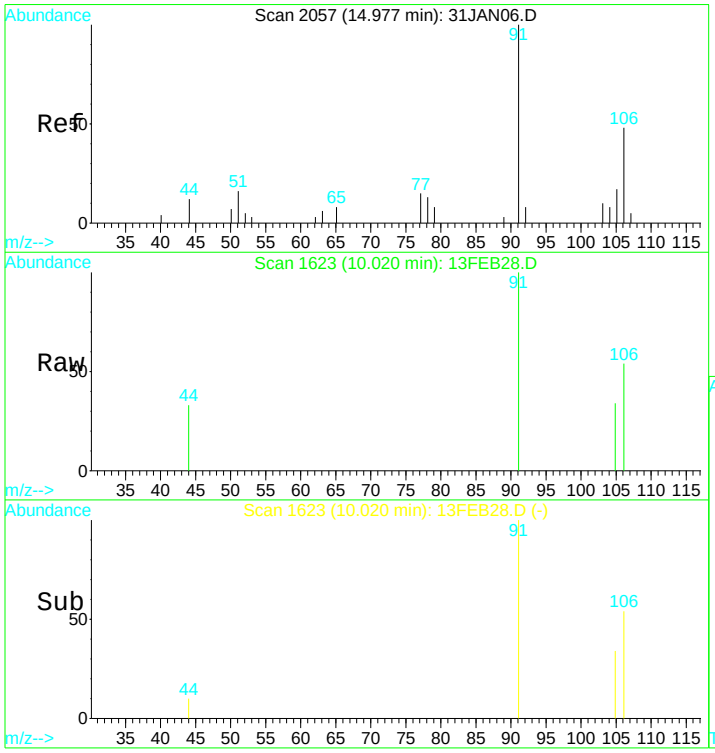




#43
P+m-Xylene
Concen: 0.13 ug/L
RT: 9.77 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion:106 Resp: 1766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 254.8 | 116.4 | 216.2# |
| 92 | 16.1 | 10.8 | 20.0 |

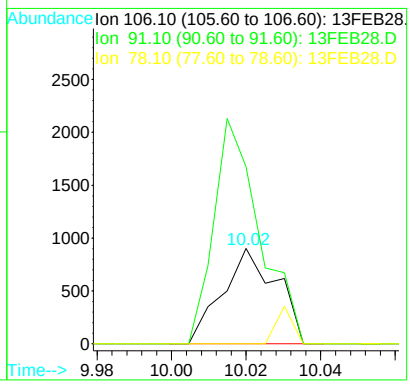


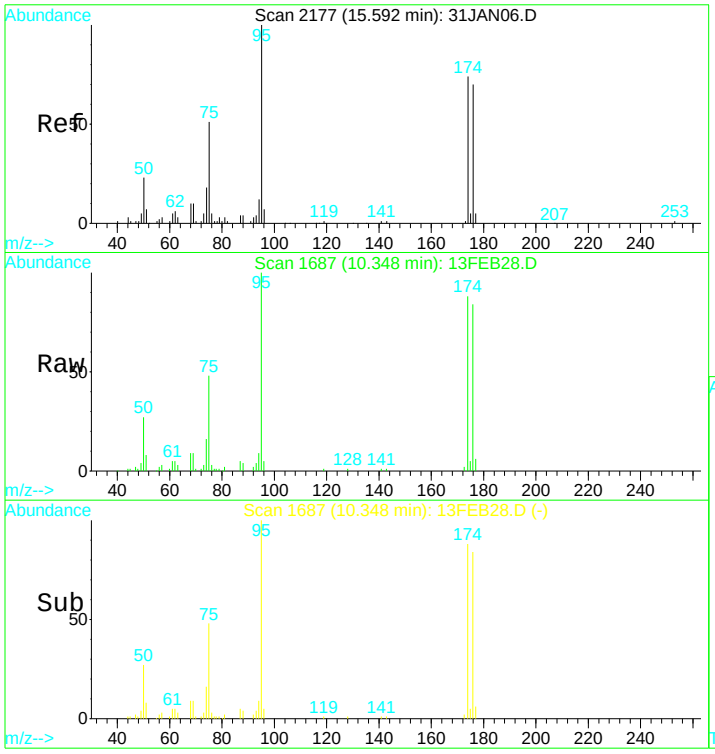



#44
O-Xylene
Concen: 0.07 ug/L
RT: 10.02 min Scan# 1623
Delta R.T. -0.00 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion:106 Resp: 906

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 201.3 | 124.3 | 230.9 |
| 78 | 12.0 | 51.7 | 95.9# |

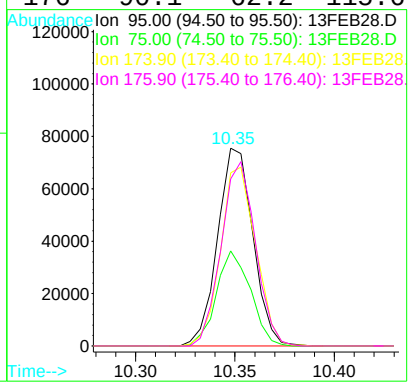



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB28.D
Acq: 13 Feb 2017 4:59 pm

Tgt Ion: 95 Resp: 93417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 46.2 | 32.6 | 60.5 |
| 174 | 89.9 | 60.9 | 113.1 |
| 176 | 90.1 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB28.D Vial: 28
Acq On : 13 Feb 2017 4:59 pm Operator: MGC
Sample : 1703480-34 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:28 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 202519 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270474 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67675 | 10.00 | ug/L | 0.00 |

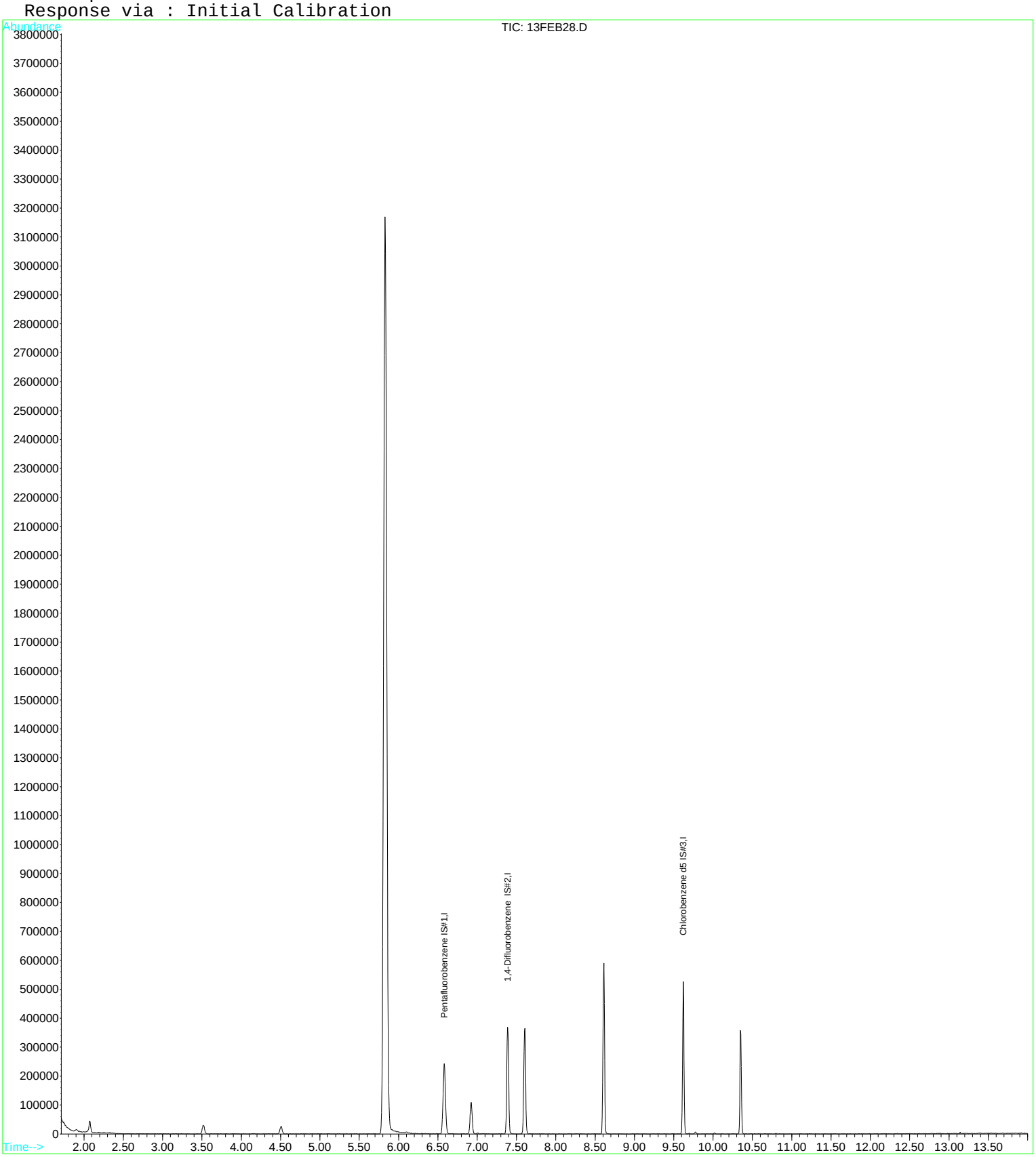
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB28.D Vial: 28
Acq On : 13 Feb 2017 4:59 pm Operator: MGC
Sample : 1703480-34 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:28 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB38.D Vial: 38
Acq On : 14 Feb 2017 8:25 pm Operator: MGC
Sample : 1703480-34RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 17 8:30 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206800 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 264027 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65922 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 63761 | 10.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 104.20% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 294995 | 9.82 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88075 | 9.69 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.90% | | | |

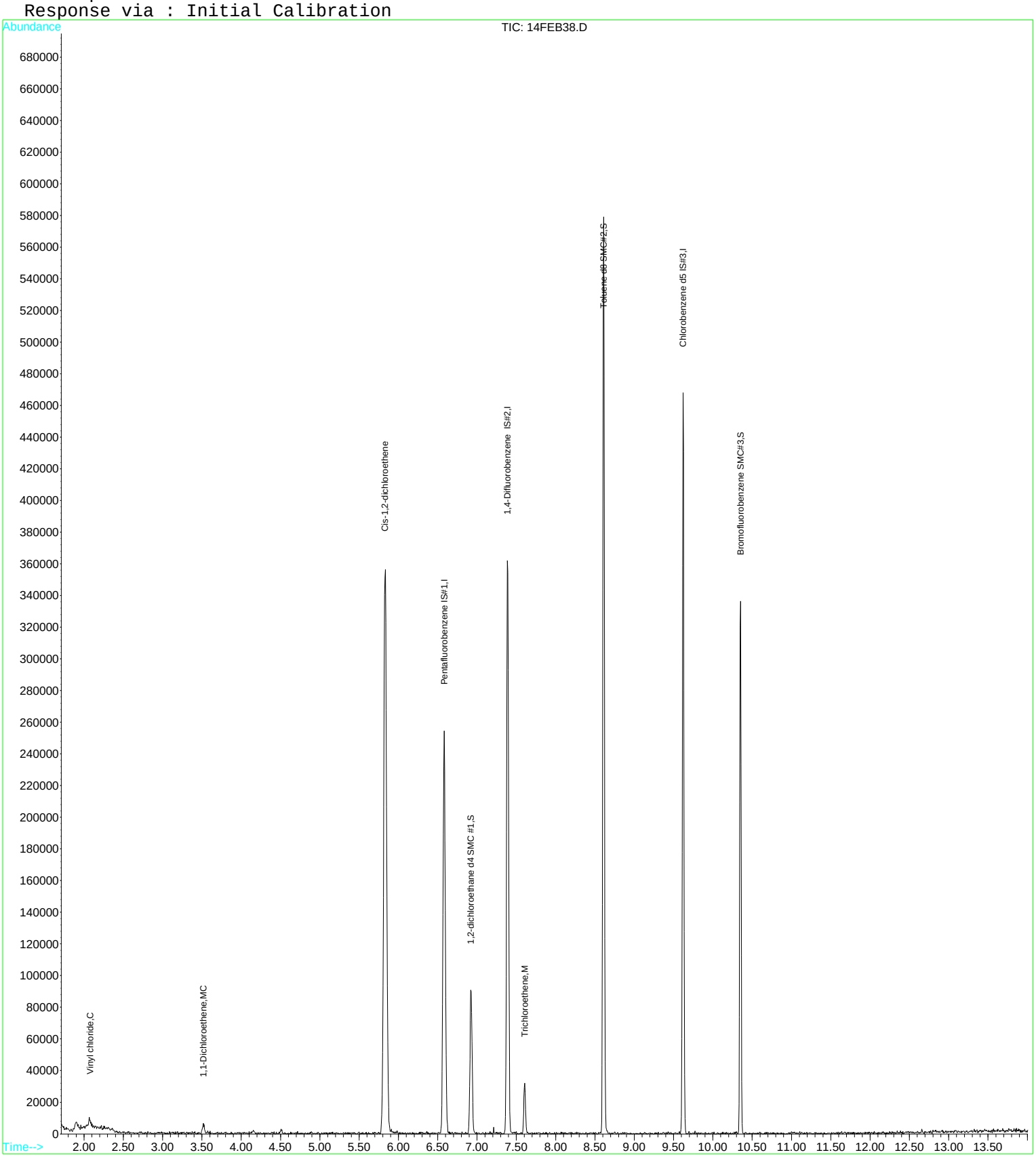
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 4) Vinyl chloride | 2.08 | 62 | 2872 | 0.23 | ug/L # | 1 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 4710 | 0.29 | ug/L | 97 |
| 15) Cis-1,2-dichloroethene | 5.82 | 96 | 199139 | 20.63 | ug/L | 91 |
| 25) Trichloroethene | 7.61 | 130 | 8883 | 1.03 | ug/L | 93 |

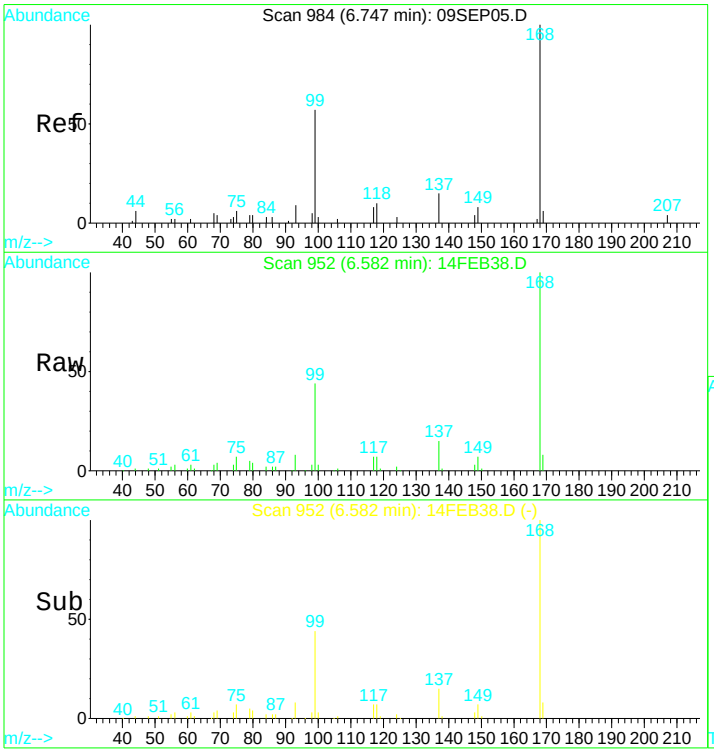
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB38.D Vial: 38
Acq On : 14 Feb 2017 8:25 pm Operator: MGC
Sample : 1703480-34RE1 Inst : MS-V5
Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 17 8:30 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

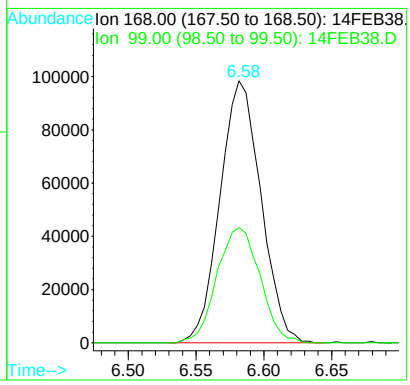


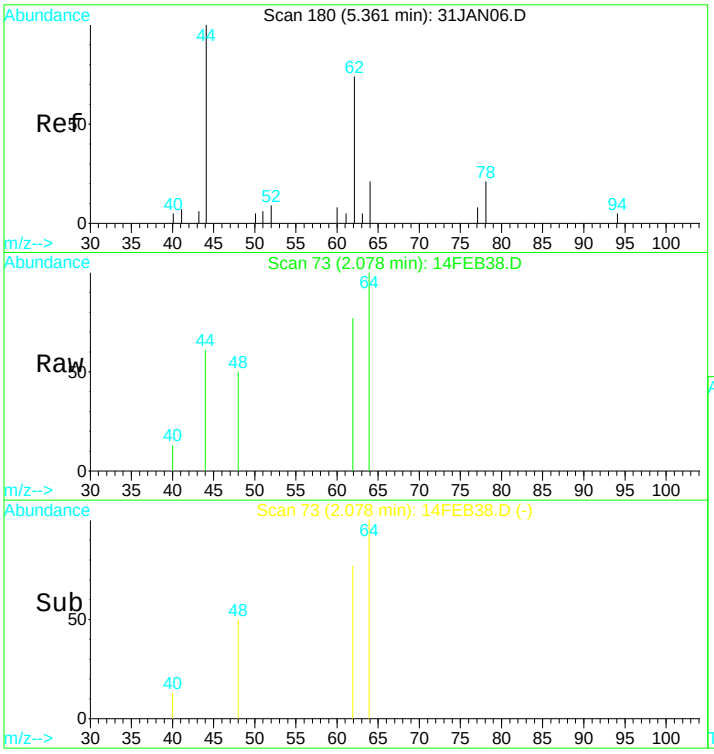



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion:168 Resp: 206800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.2 | 305.1 | 566.7# |

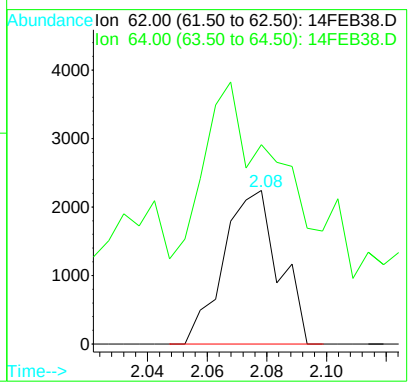


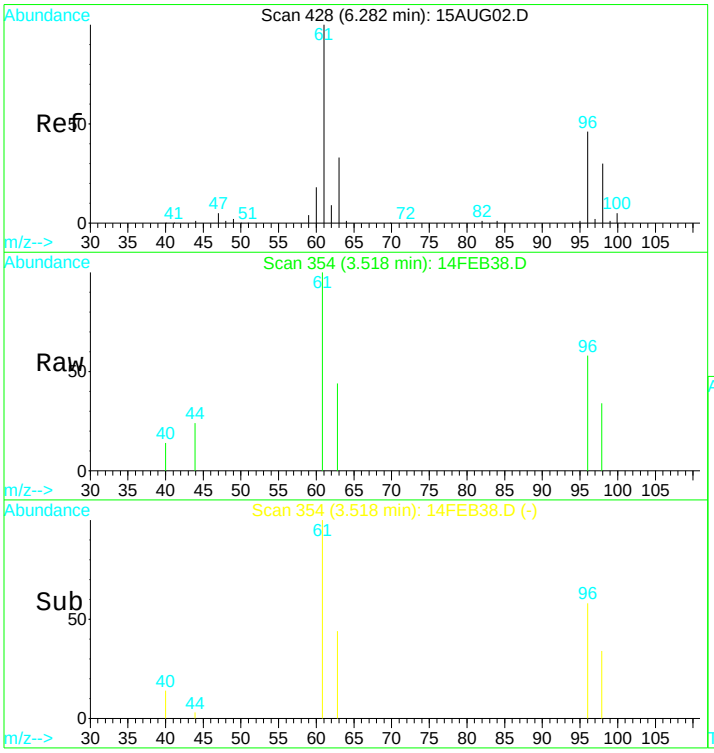




#4
Vinyl chloride
Concen: 0.23 ug/L
RT: 2.08 min Scan# 73
Delta R.T. 0.01 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion: 62 Resp: 2872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 330.8 | 22.4 | 41.6# |

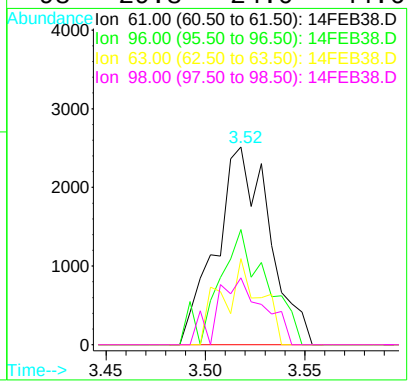


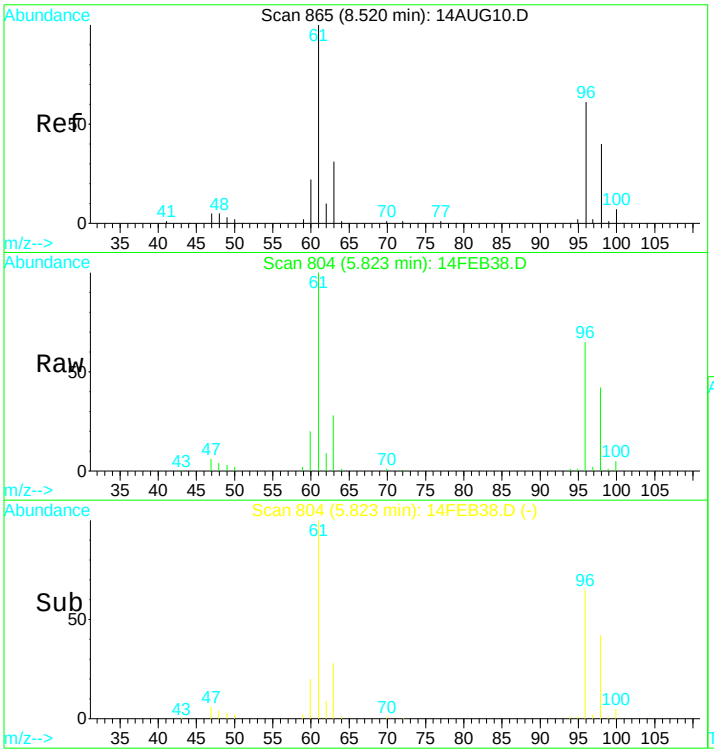



#9
1,1-Dichloroethene
Concen: 0.29 ug/L
RT: 3.52 min Scan# 354
Delta R.T. 0.00 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion: 61 Resp: 4710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 61 | 100 | | |
| 96 | 52.7 | 36.6 | 68.0 |
| 63 | 30.9 | 22.0 | 40.8 |
| 98 | 29.8 | 24.0 | 44.6 |

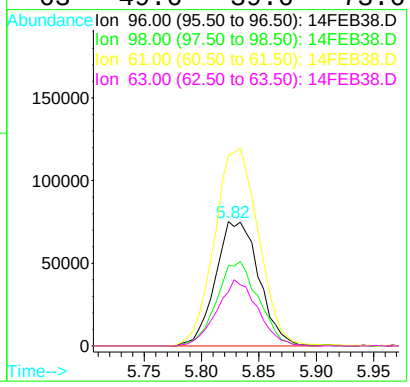


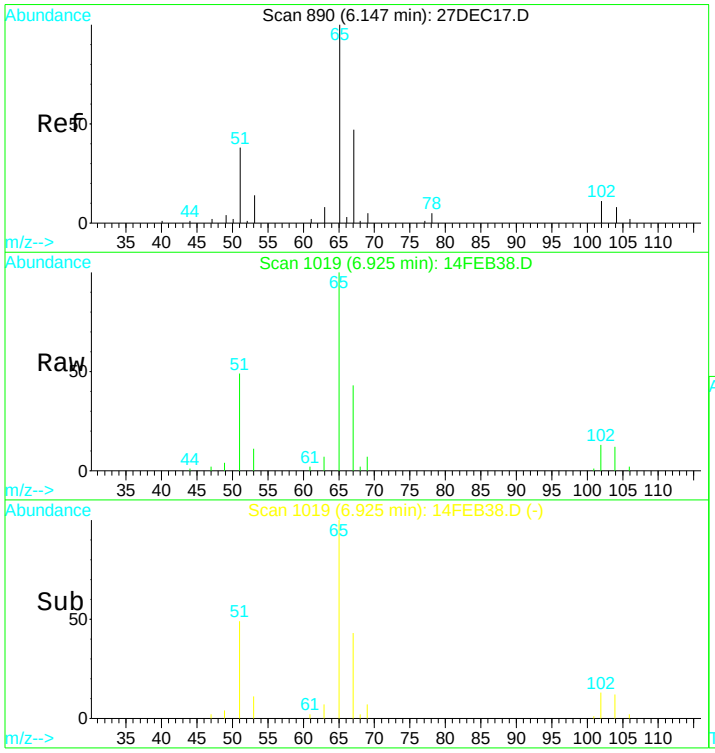




#15
Cis-1,2-dichloroethene
Concen: 20.63 ug/L
RT: 5.82 min Scan# 804
Delta R.T. -0.01 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion: 96 Resp: 199139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 98 | 65.0 | 46.2 | 85.8 |
| 61 | 160.1 | 122.8 | 228.0 |
| 63 | 49.6 | 39.6 | 73.6 |

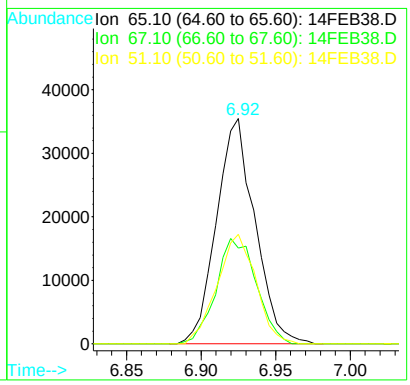


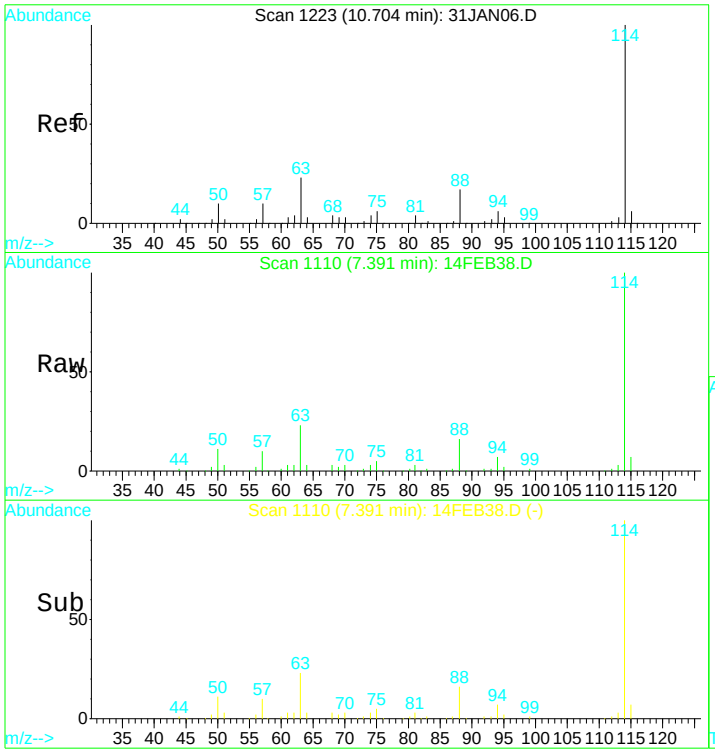



#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1019
Delta R.T. 0.00 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion: 65 Resp: 63761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 48.6 | 38.4 | 71.4 |
| 51 | 48.8 | 1006.3 | 1868.8# |

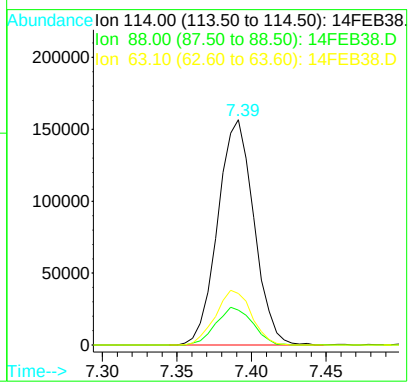


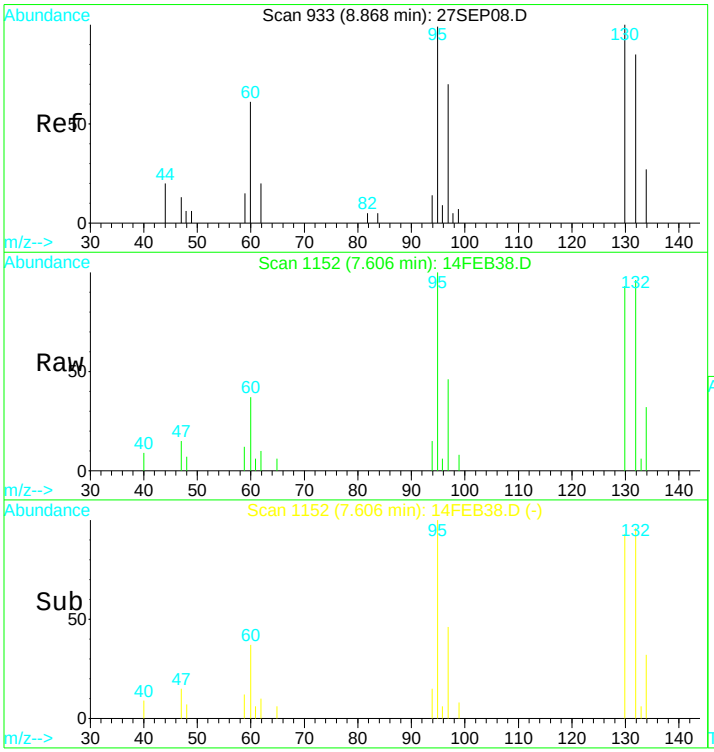




#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1110
Delta R.T. 0.00 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion:114 Resp: 264027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 17.0 | 12.0 | 22.2 |
| 63 | 24.2 | 16.9 | 31.5 |

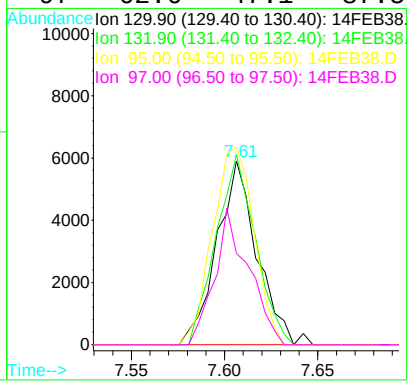


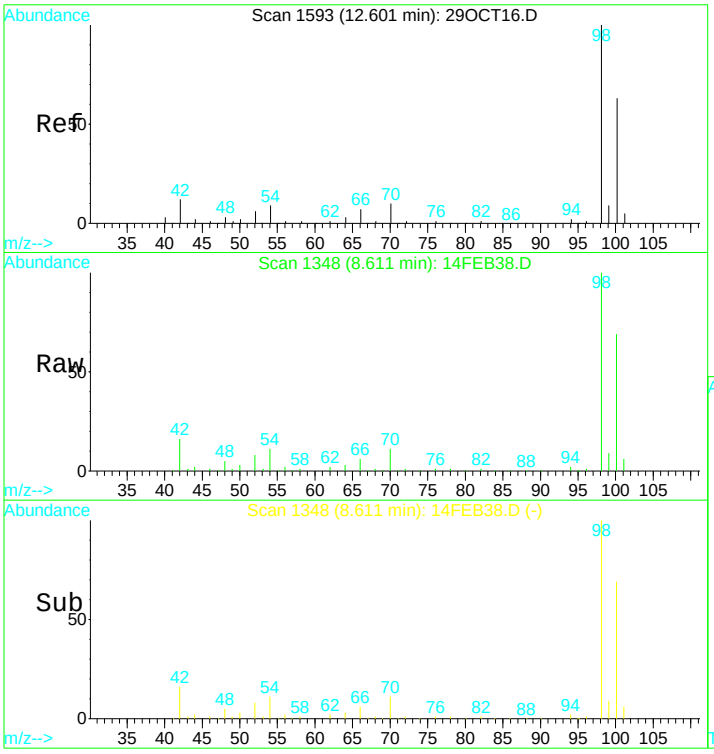



#25
Trichloroethene
Concen: 1.03 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.00 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion:130 Resp: 8883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 132 | 101.3 | 74.3 | 137.9 |
| 95 | 110.8 | 70.8 | 131.6 |
| 97 | 62.6 | 47.1 | 87.5 |

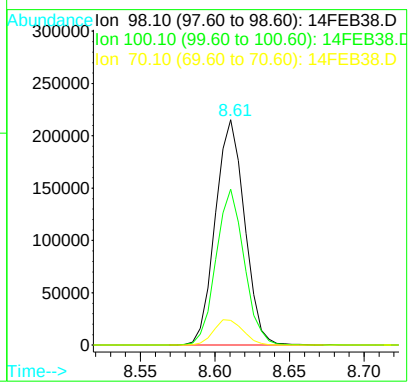


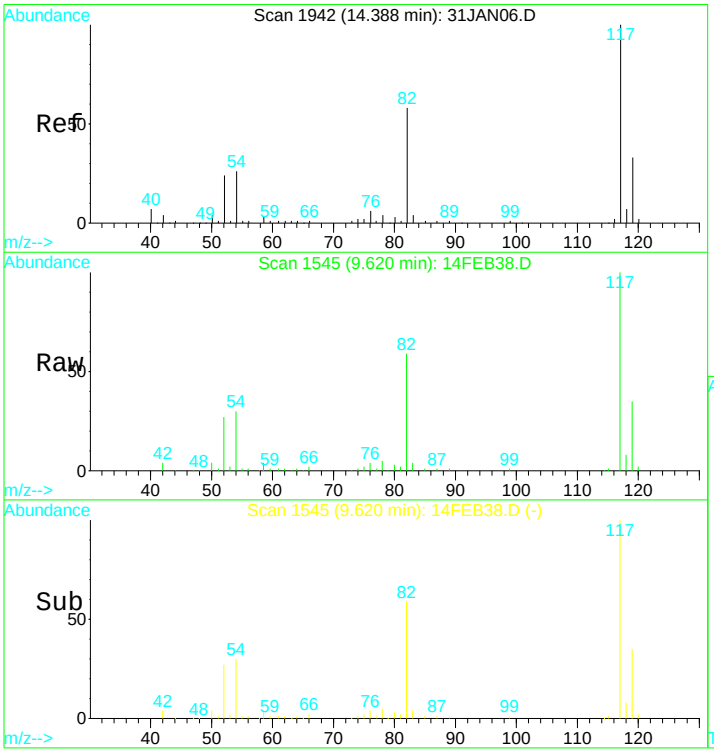




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1348
Delta R.T. -0.00 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion: 98 Resp: 294995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.6 | 47.0 | 87.4 |
| 70 | 11.5 | 7.3 | 13.7 |

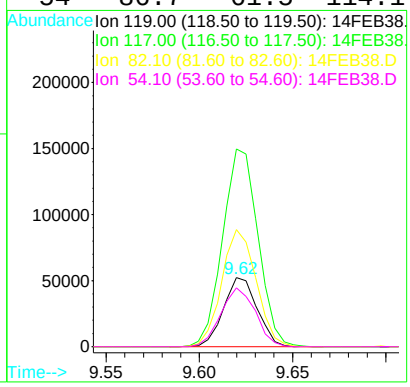


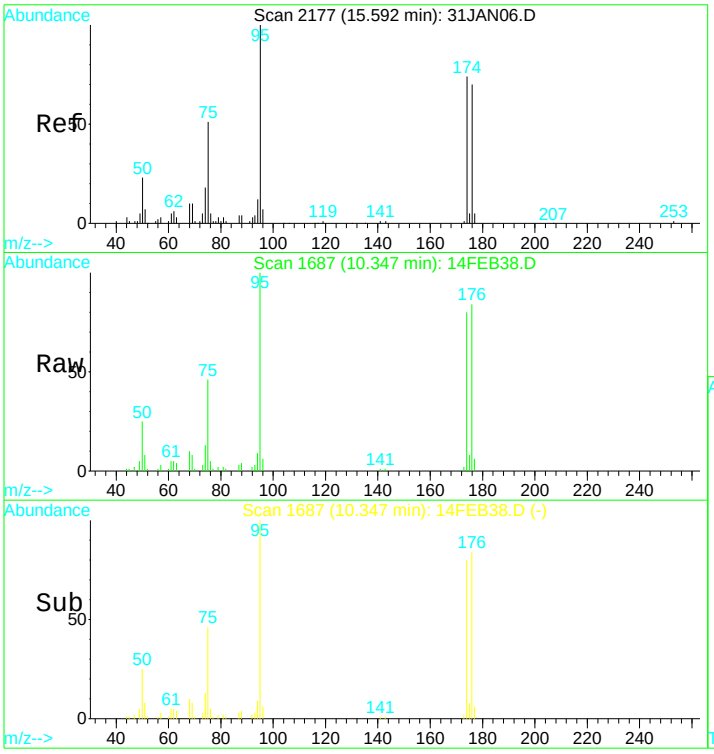



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion:119 Resp: 65922

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 299.3 | 220.4 | 409.4 |
| 82 | 172.7 | 123.9 | 230.1 |
| 54 | 86.7 | 61.5 | 114.1 |

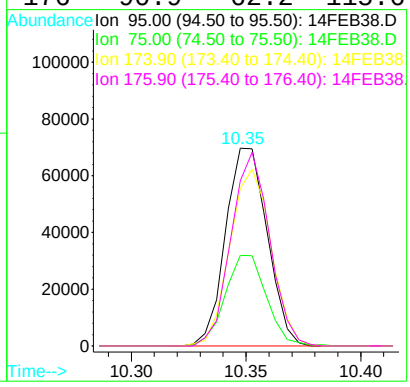



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 14FEB38.D
Acq: 14 Feb 2017 8:25 pm

Tgt Ion: 95 Resp: 88075

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 45.6 | 32.6 | 60.5 |
| 174 | 88.5 | 60.9 | 113.1 |
| 176 | 90.9 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB29.D Vial: 29
Acq On : 13 Feb 2017 5:22 pm Operator: MGC
Sample : 1703480-35 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:30 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 207609 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277842 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68594 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 67741 | 11.03 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 110.30% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 308664 | 9.76 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.60% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 96292 | 10.18 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 101.80% | | | |

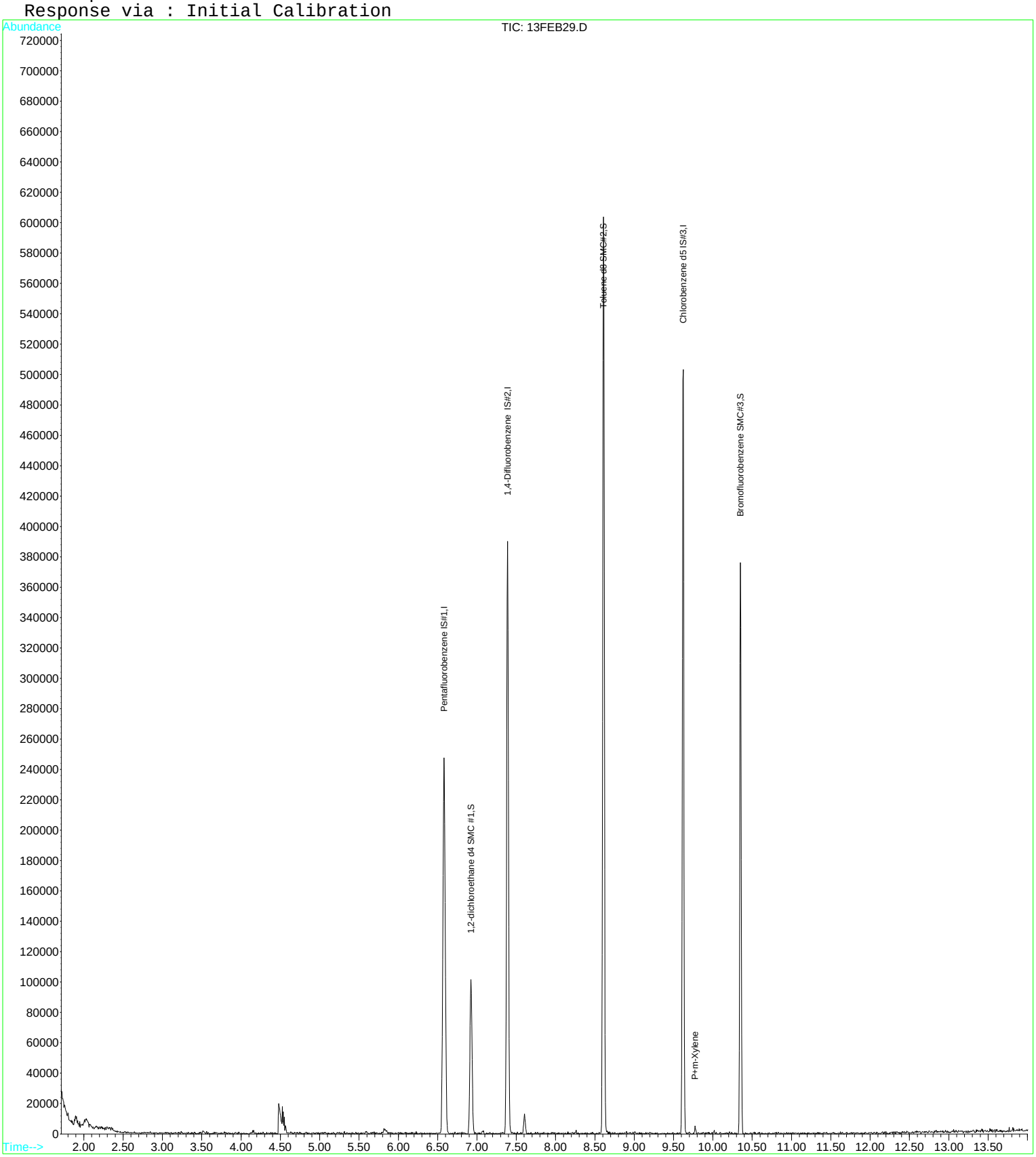
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 43) P+m-Xylene | 9.78 | 106 | 1281 | 0.09 | ug/L | 92 |

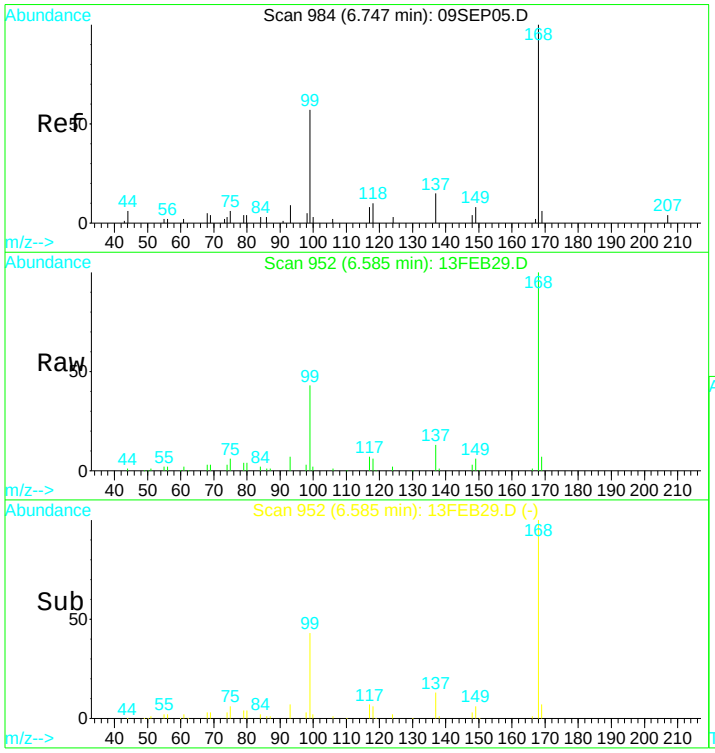
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB29.D Vial: 29
Acq On : 13 Feb 2017 5:22 pm Operator: MGC
Sample : 1703480-35 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:30 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

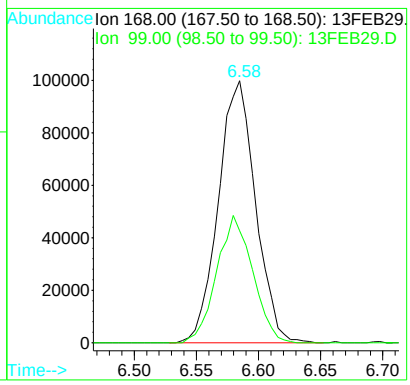


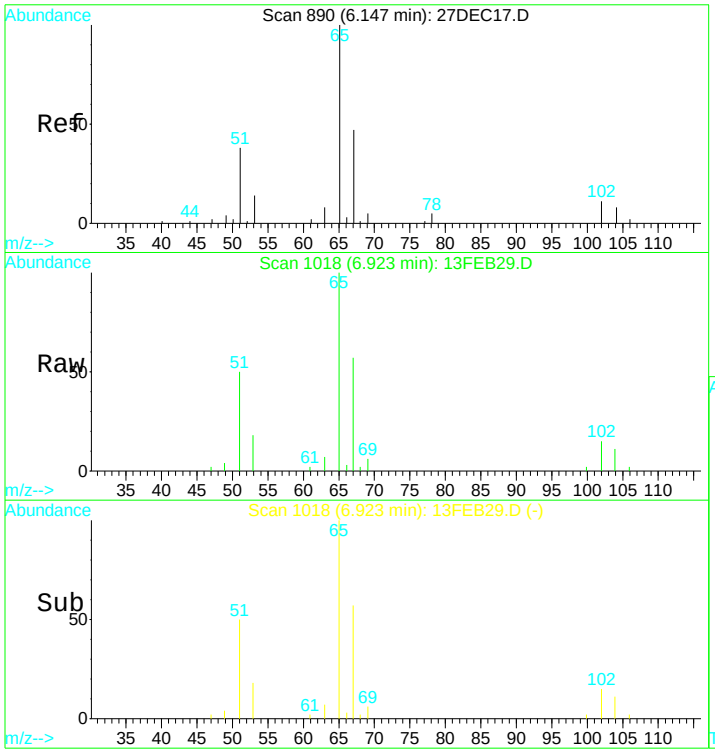



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 952
Delta R.T. -0.00 min
Lab File: 13FEB29.D
Acq: 13 Feb 2017 5:22 pm

Tgt Ion:168 Resp: 207609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 46.8 | 305.1 | 566.7# |

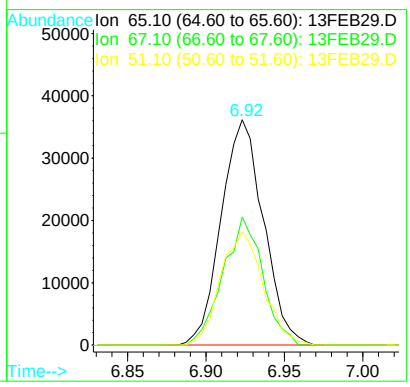


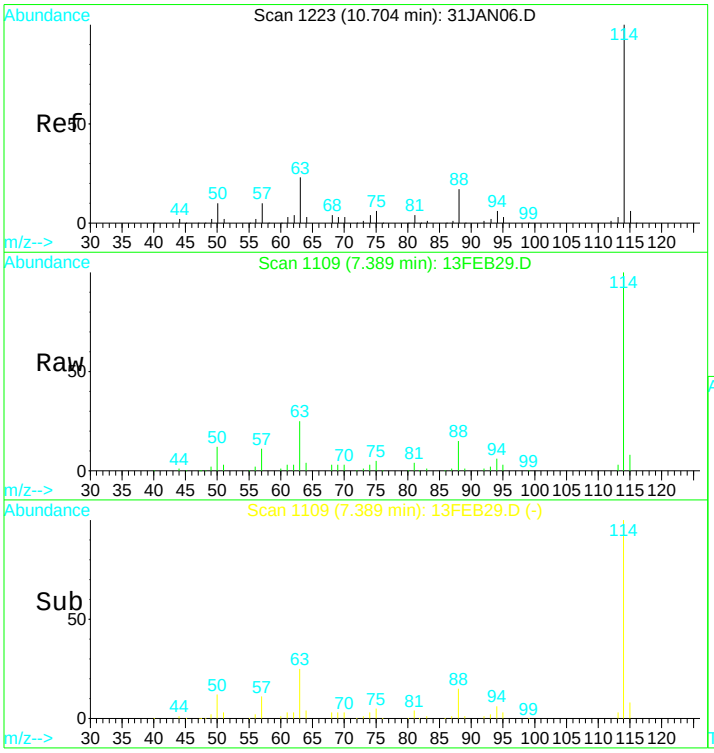




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1018
Delta R.T. -0.00 min
Lab File: 13FEB29.D
Acq: 13 Feb 2017 5:22 pm

Tgt Ion: 65 Resp: 67741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.1 | 38.4 | 71.4 |
| 51 | 50.9 | 1006.3 | 1868.8# |

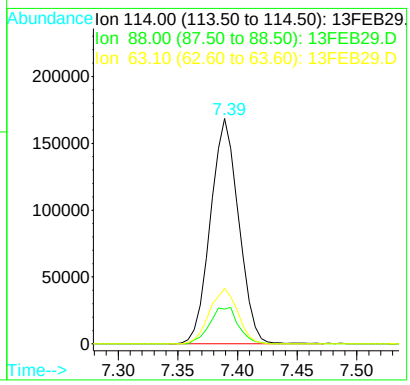


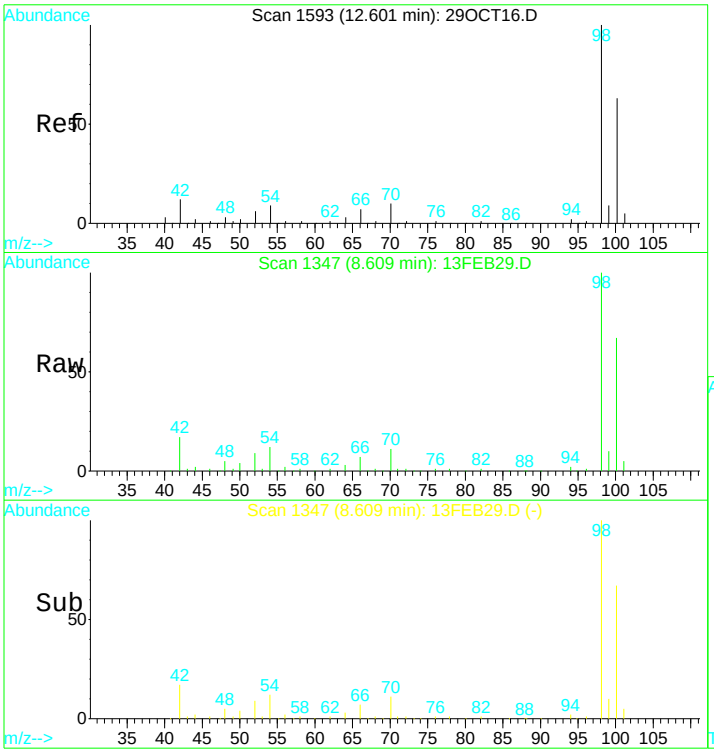



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 13FEB29.D
Acq: 13 Feb 2017 5:22 pm

Tgt Ion:114 Resp: 277842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.5 | 12.0 | 22.2 |
| 63 | 24.5 | 16.9 | 31.5 |

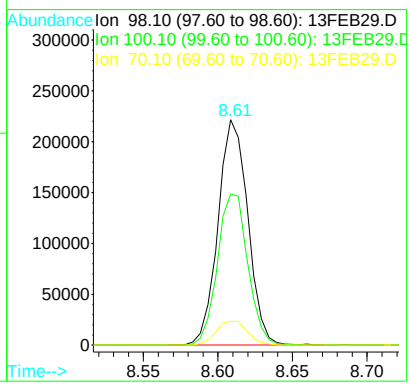


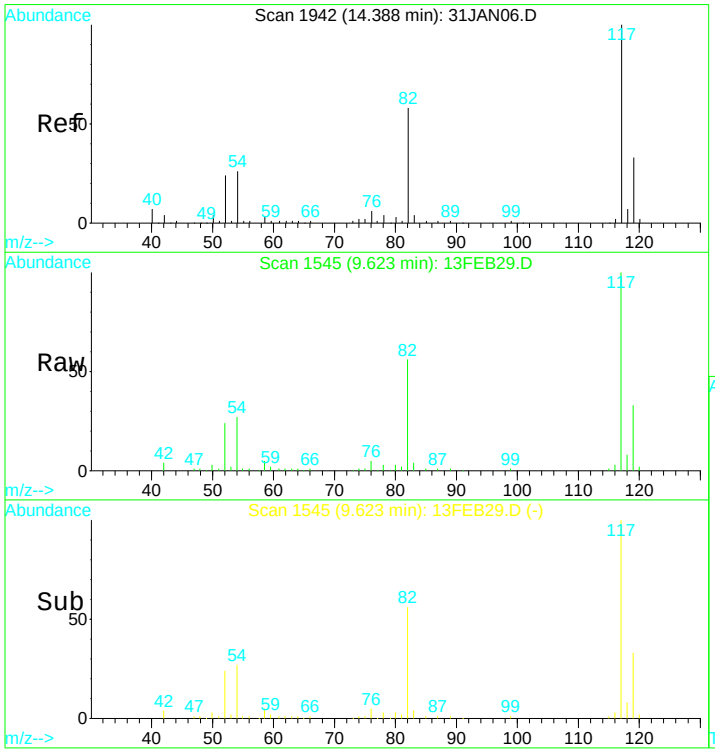




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 13FEB29.D
Acq: 13 Feb 2017 5:22 pm

Tgt Ion: 98 Resp: 308664

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.1 | 47.0 | 87.4 |
| 70 | 11.4 | 7.3 | 13.7 |

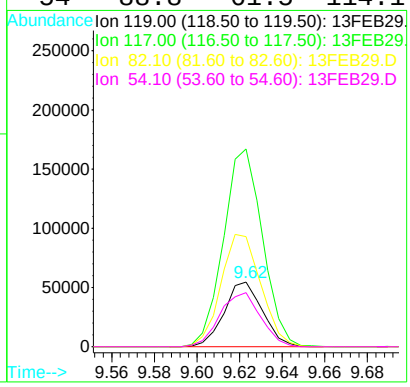


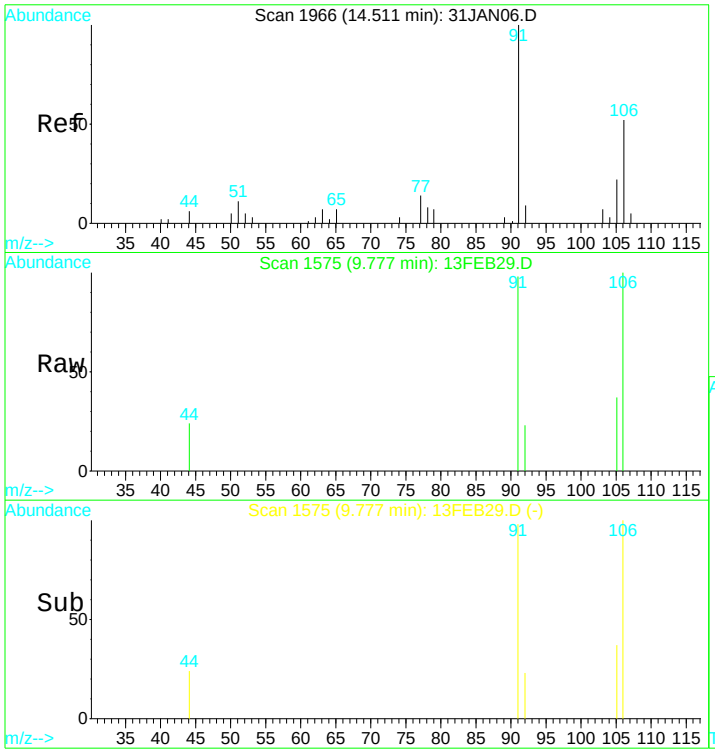



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 13FEB29.D
Acq: 13 Feb 2017 5:22 pm

Tgt Ion:119 Resp: 68594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 311.4 | 220.4 | 409.4 |
| 82 | 180.6 | 123.9 | 230.1 |
| 54 | 88.8 | 61.5 | 114.1 |

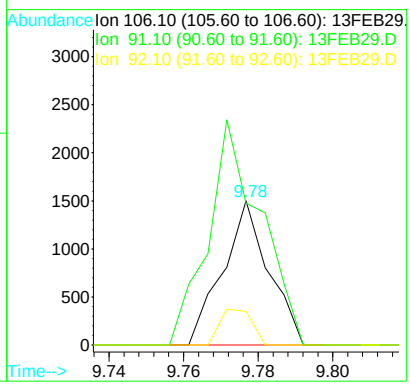


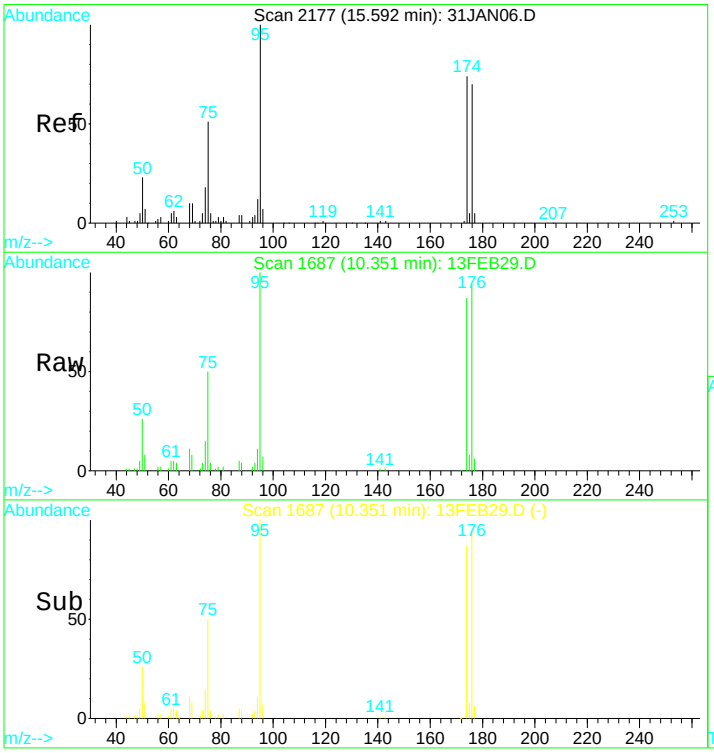




#43
P+m-Xylene
Concen: 0.09 ug/L
RT: 9.78 min Scan# 1575
Delta R.T. -0.00 min
Lab File: 13FEB29.D
Acq: 13 Feb 2017 5:22 pm

Tgt Ion:106 Resp: 1281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 178.0 | 116.4 | 216.2 |
| 92 | 17.4 | 10.8 | 20.0 |

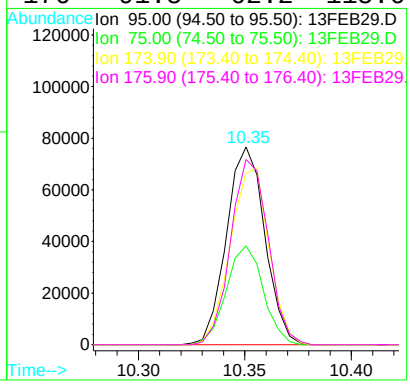





#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 13FEB29.D
Acq: 13 Feb 2017 5:22 pm

Tgt Ion: 95 Resp: 96292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 48.0 | 32.6 | 60.5 |
| 174 | 90.4 | 60.9 | 113.1 |
| 176 | 91.5 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB29.D Vial: 29
Acq On : 13 Feb 2017 5:22 pm Operator: MGC
Sample : 1703480-35 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:30 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 207609 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277842 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68594 | 10.00 | ug/L | 0.00 |

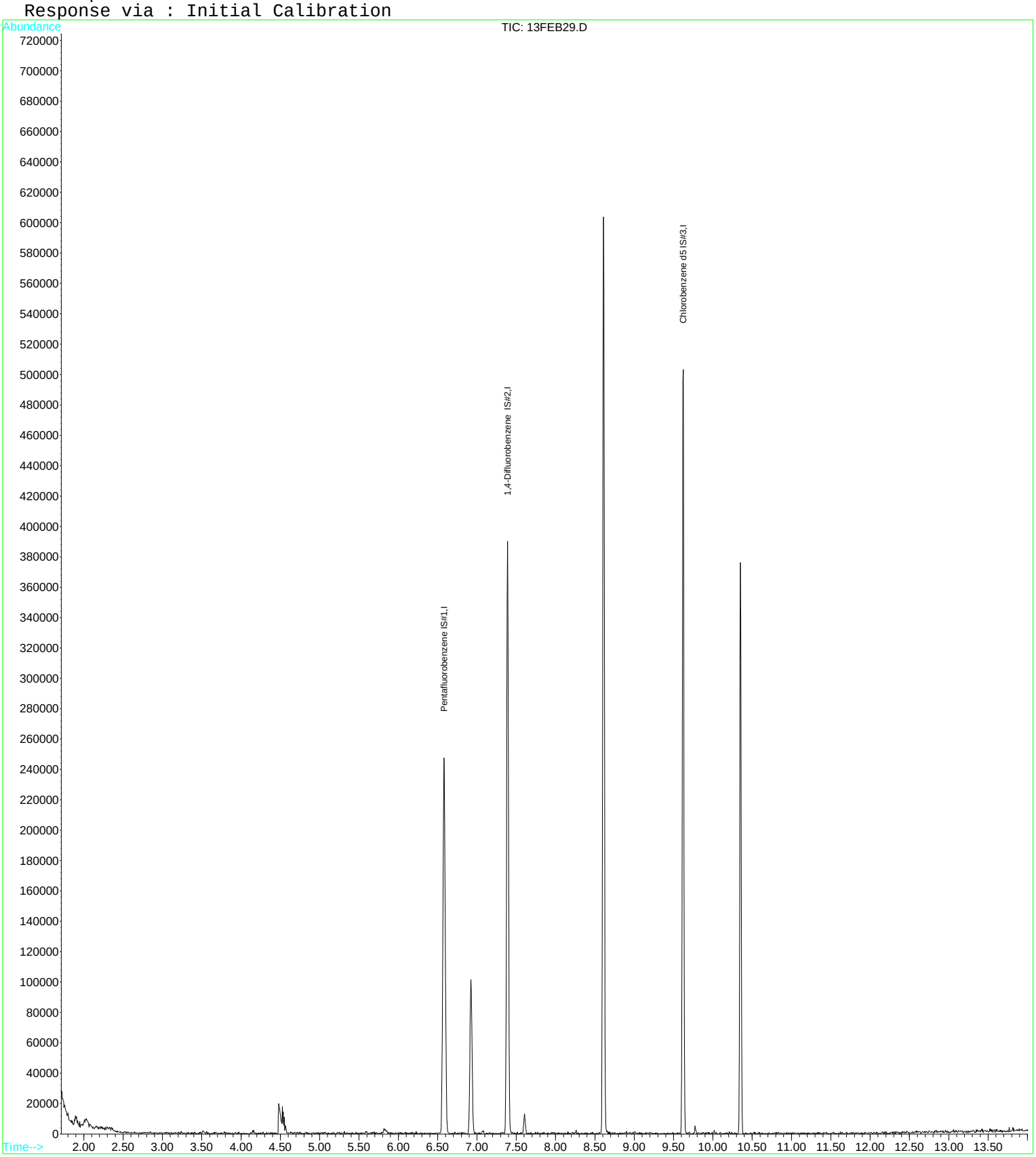
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB29.D Vial: 29
Acq On : 13 Feb 2017 5:22 pm Operator: MGC
Sample : 1703480-35 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:30 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB34.D Vial: 34
Acq On : 14 Feb 2017 6:52 pm Operator: MGC
Sample : 1703480-36 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:18 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 203091 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277150 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68630 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 75002 | 12.48 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 124.80% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 303081 | 9.61 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.10% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 96647 | 10.21 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.10% | | | |

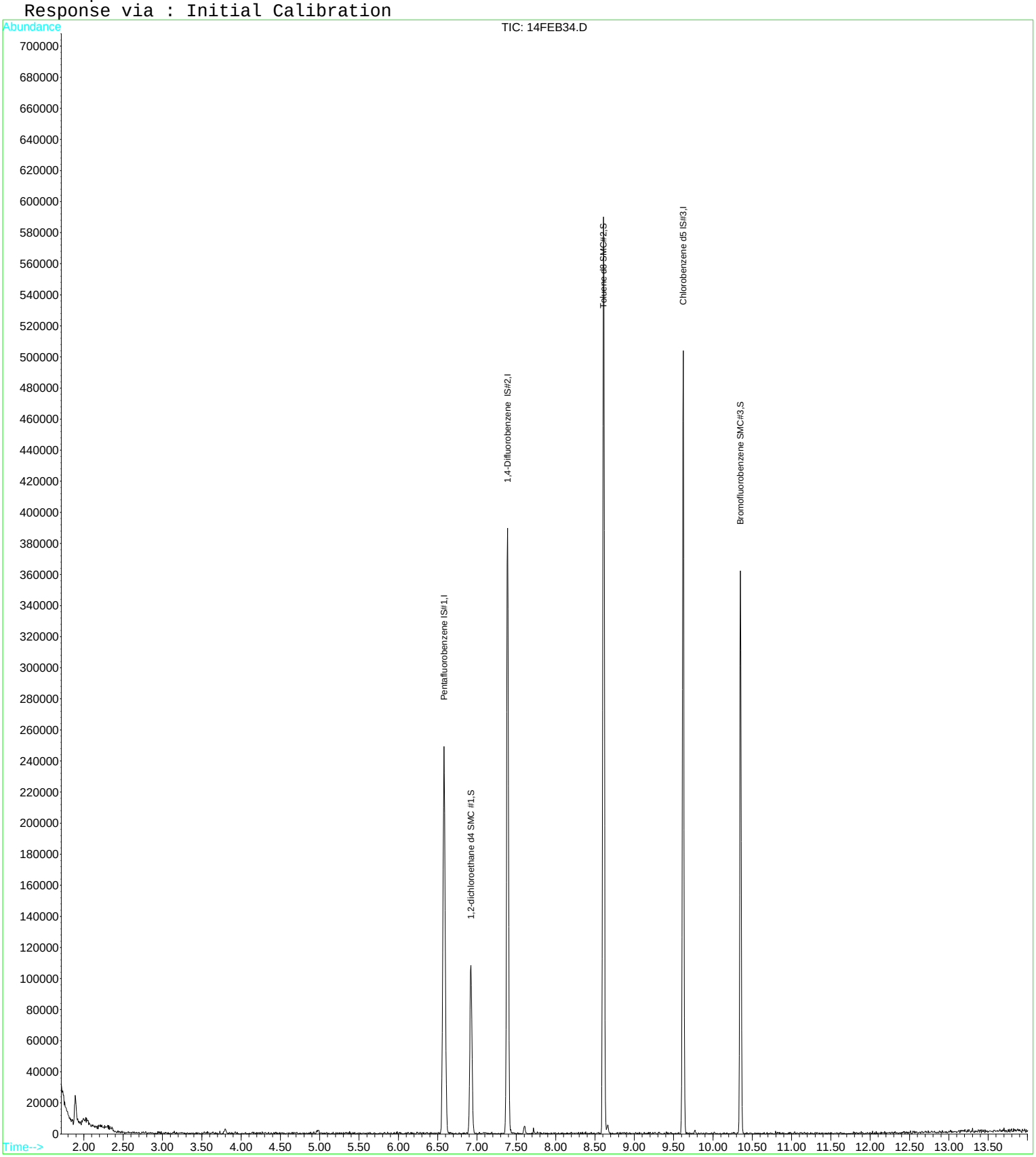
Target Compounds Qvalue

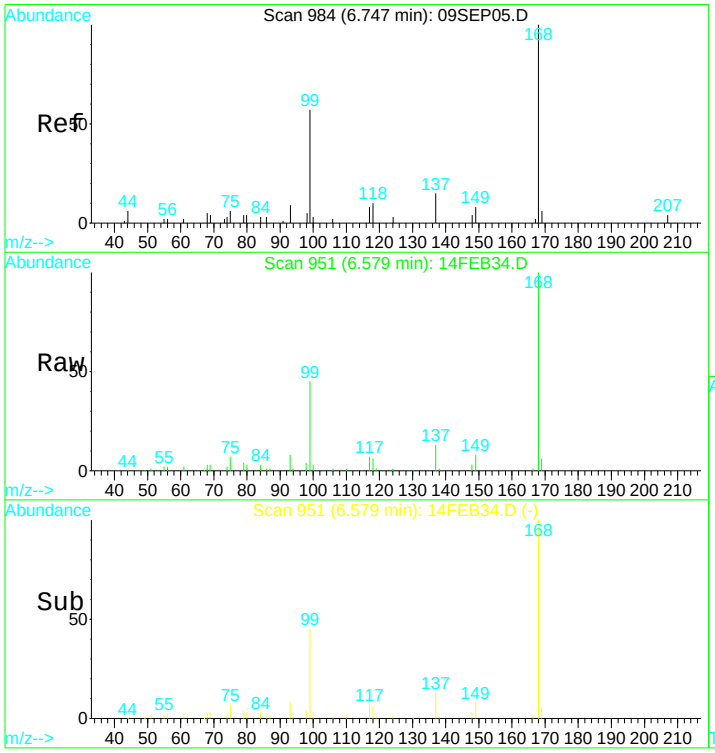
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB34.D Vial: 34
Acq On : 14 Feb 2017 6:52 pm Operator: MGC
Sample : 1703480-36 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:18 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration

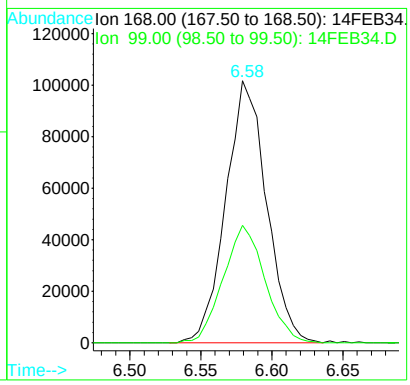


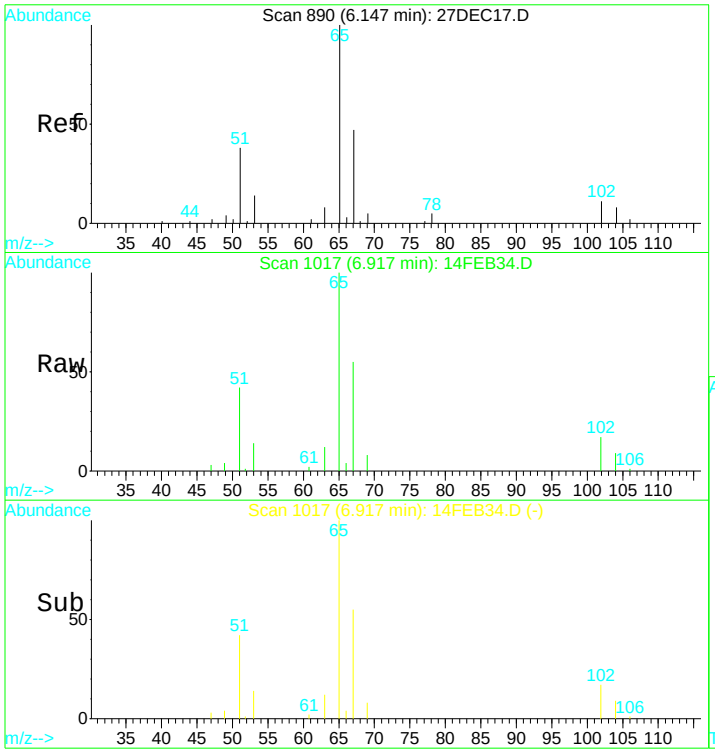



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion:168 Resp: 203091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.9 | 305.1 | 566.7# |

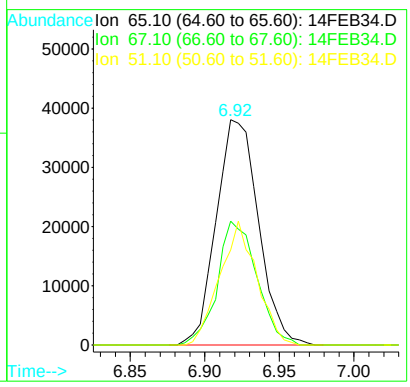


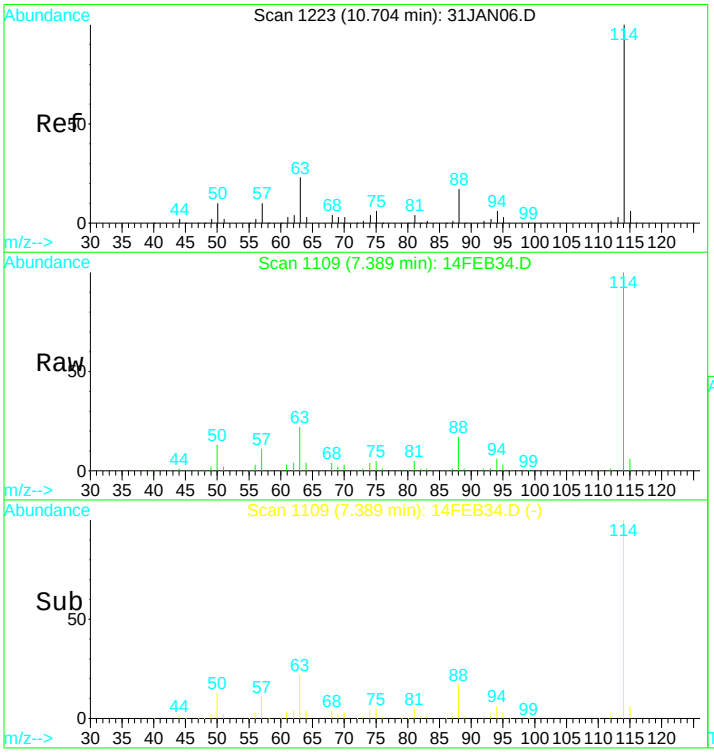




#21
1,2-dichloroethane d4 SMC #1
Concen: N.D. ug/L
RT: 6.92 min Scan# 1017
Delta R.T. -0.01 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion: 65 Resp: 75002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.2 | 38.4 | 71.4 |
| 51 | 48.2 | 1006.3 | 1868.8# |

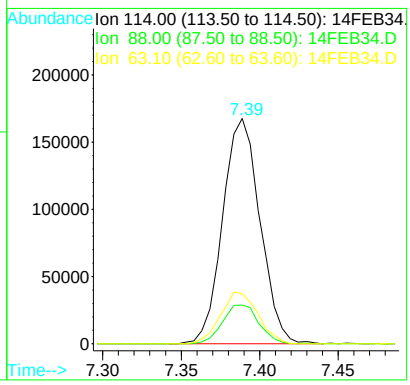


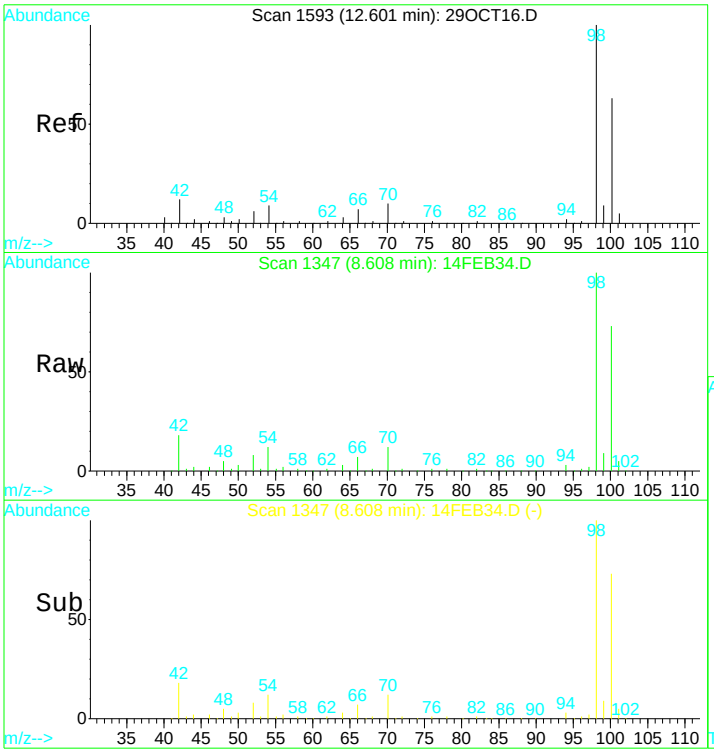



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. -0.00 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion:114 Resp: 277150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.9 | 12.0 | 22.2 |
| 63 | 23.1 | 16.9 | 31.5 |

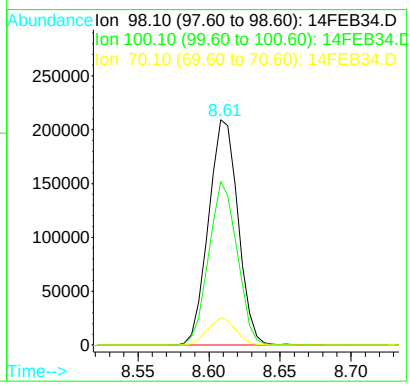


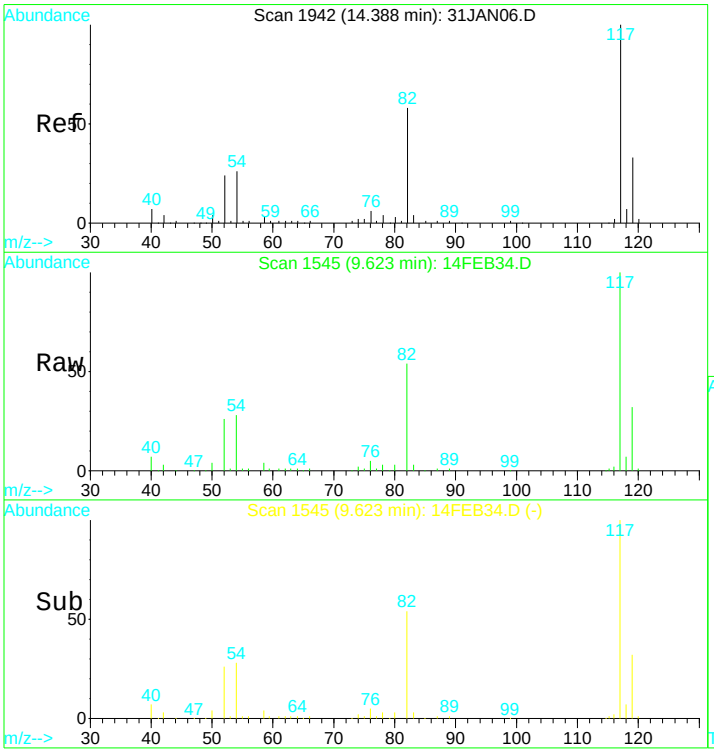




#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.61 min Scan# 1347
Delta R.T. -0.01 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion: 98 Resp: 303081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 69.8 | 47.0 | 87.4 |
| 70 | 11.5 | 7.3 | 13.7 |

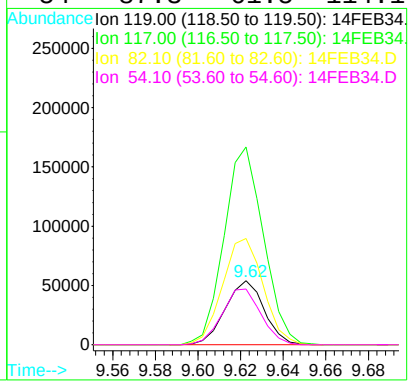


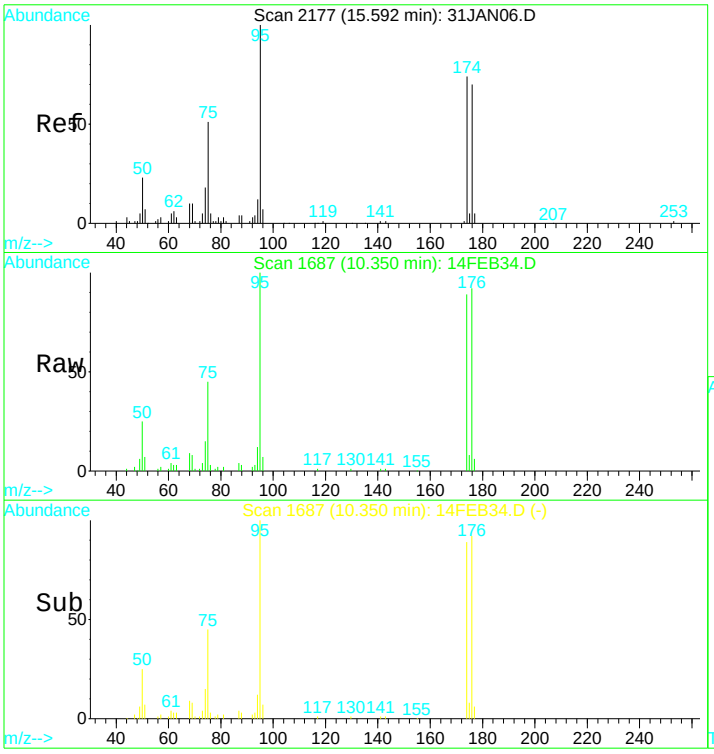



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion:119 Resp: 68630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 312.5 | 220.4 | 409.4 |
| 82 | 173.6 | 123.9 | 230.1 |
| 54 | 87.3 | 61.5 | 114.1 |

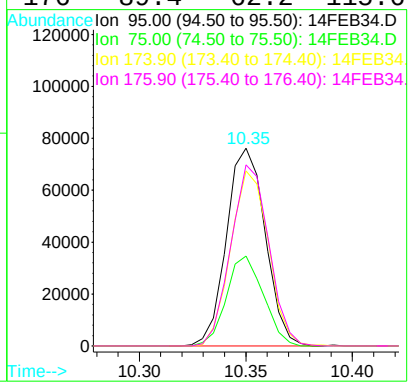



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.35 min Scan# 1687
Delta R.T. -0.01 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion: 95 Resp: 96647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 75 | 43.4 | 32.6 | 60.5 |
| 174 | 86.6 | 60.9 | 113.1 |
| 176 | 89.4 | 62.2 | 115.6 |



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB34.D Vial: 34
Acq On : 14 Feb 2017 6:52 pm Operator: MGC
Sample : 1703480-36 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:23 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 203091 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 277150 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68630 | 10.00 | ug/L | 0.00 |

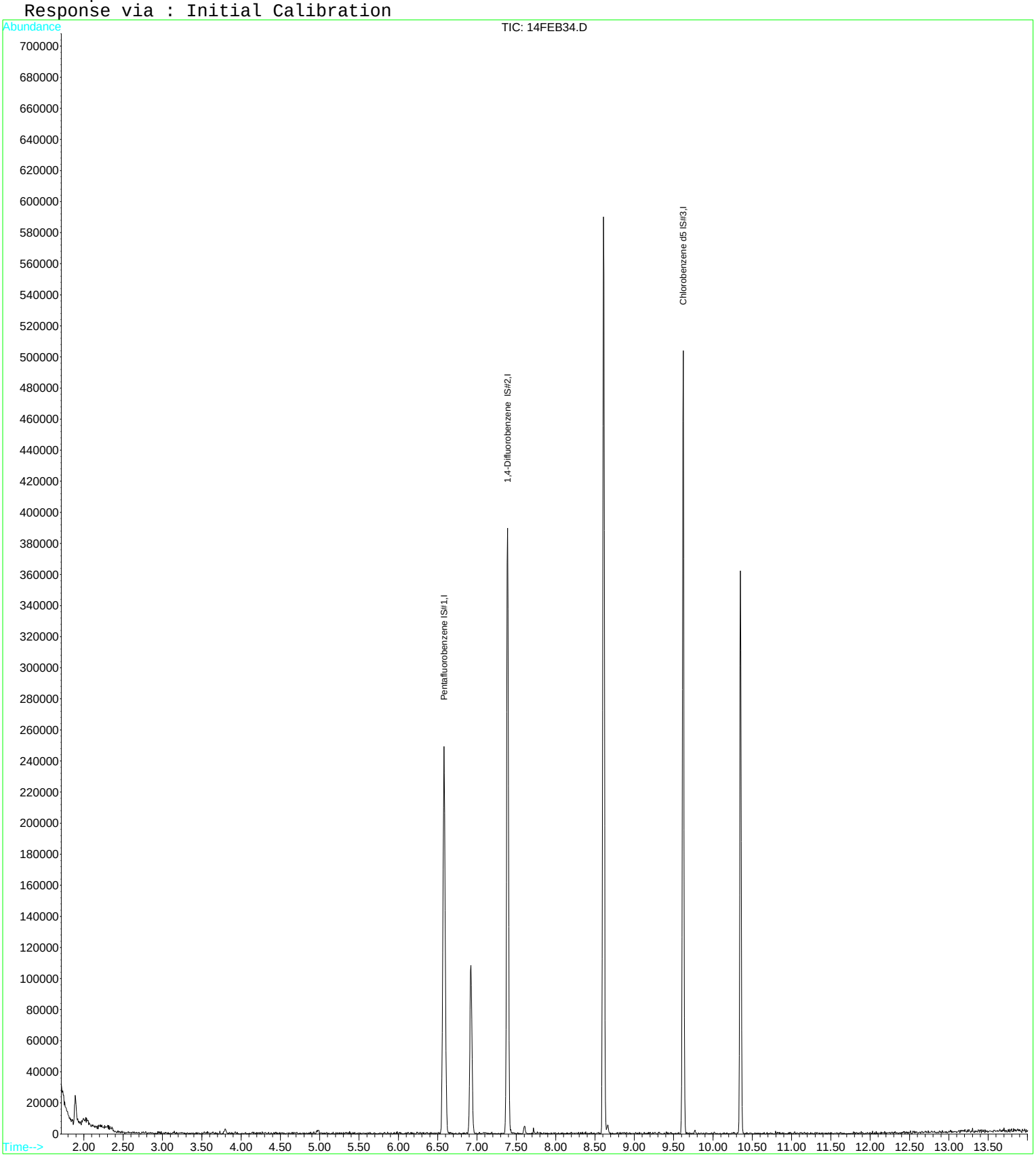
Target Compounds Qvalue

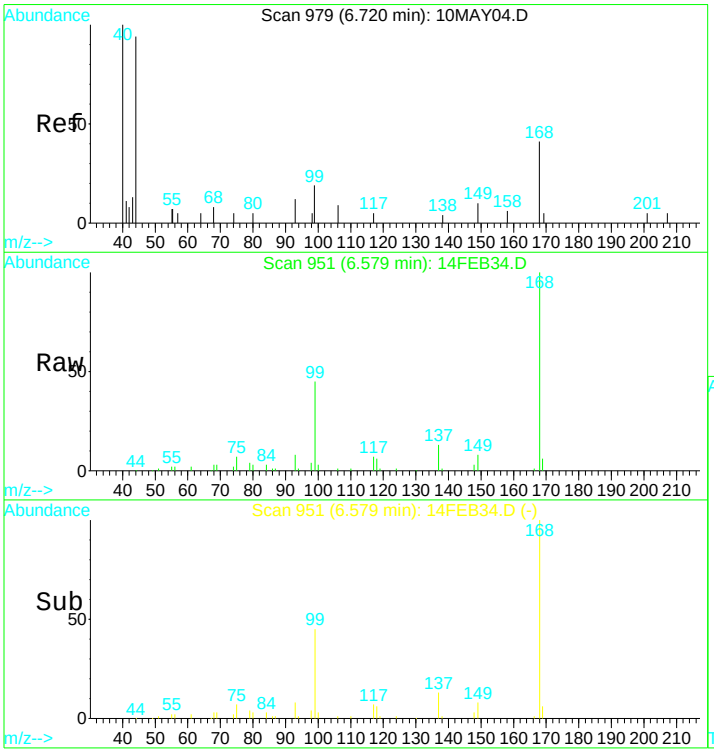
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB34.D Vial: 34
Acq On : 14 Feb 2017 6:52 pm Operator: MGC
Sample : 1703480-36 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:23 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration

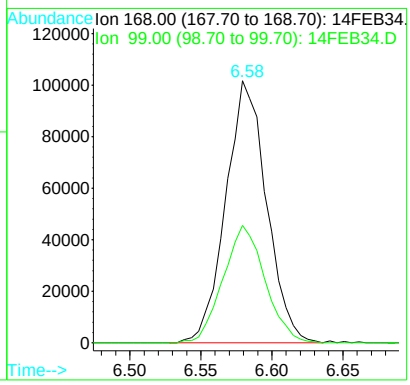


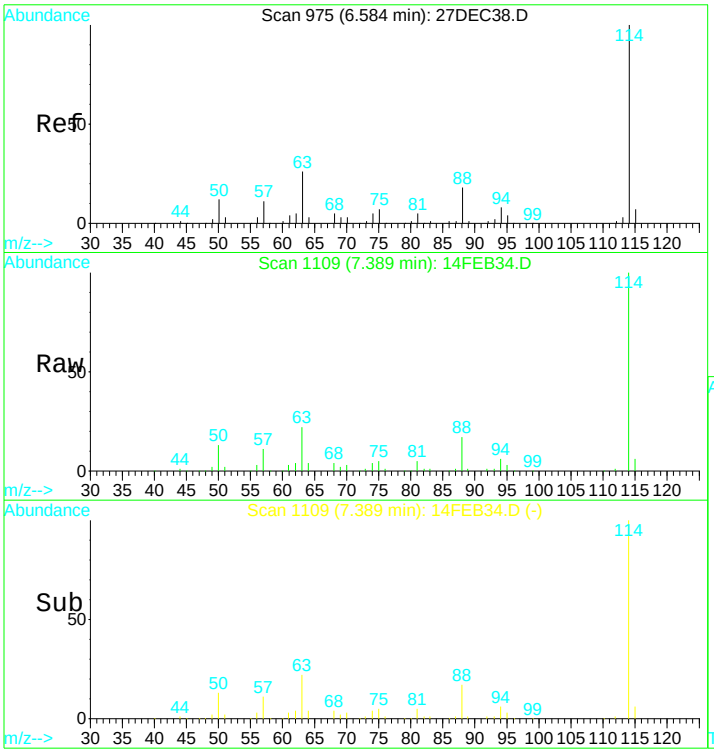



#1
Pentafluorobenzene IS#1
Concen: 10.00 ug/L
RT: 6.58 min Scan# 951
Delta R.T. -0.01 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion:168 Resp: 203091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 45.9 | 32.8 | 60.8 |

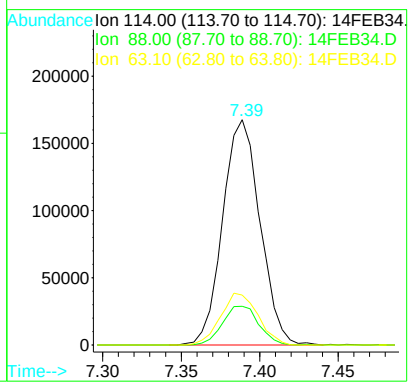


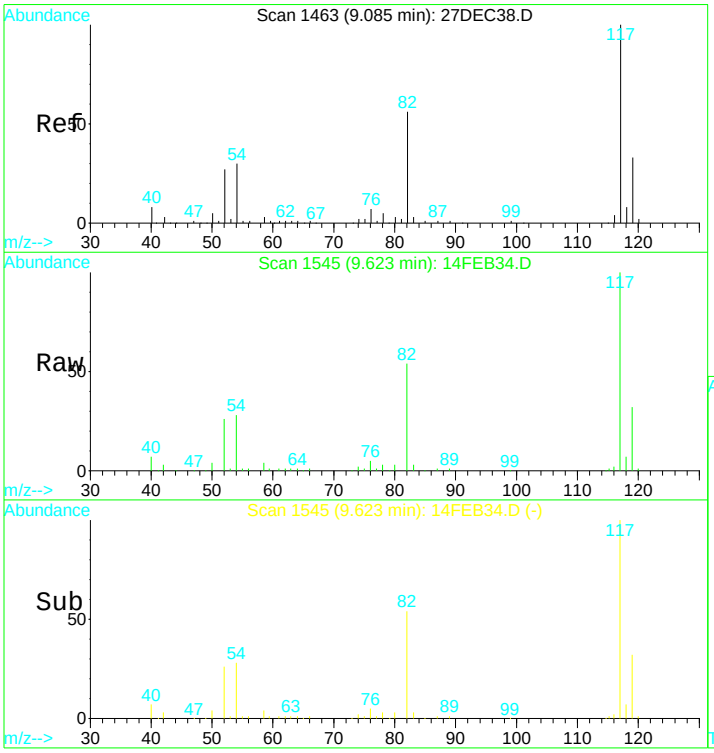




#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.39 min Scan# 1109
Delta R.T. 0.00 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion:114 Resp: 277150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 88 | 16.9 | 11.3 | 21.1 |
| 63 | 23.1 | 16.1 | 29.9 |

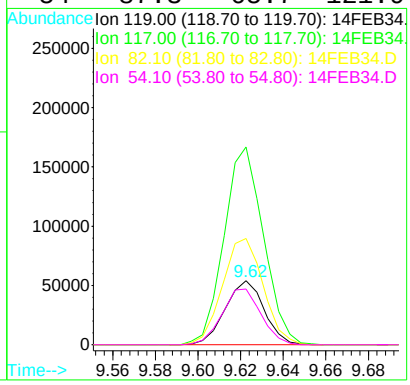





#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.62 min Scan# 1545
Delta R.T. -0.00 min
Lab File: 14FEB34.D
Acq: 14 Feb 2017 6:52 pm

Tgt Ion:119 Resp: 68630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 117 | 312.5 | 218.6 | 406.0 |
| 82 | 173.6 | 128.7 | 238.9 |
| 54 | 87.3 | 65.7 | 121.9 |



**Raw Data - Calibration Standards**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN06.D Vial: 6
Acq On : 26 Jan 2017 4:07 pm Operator: MGC
Sample : 1701474-CAL1 Inst : MS-V5
Misc : REG VO-107-69228;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:55 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 220247 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 307137 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 74437 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65491 | 9.86 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 98.60% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 347847 | 9.55 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.50% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 98784 | 8.84 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 88.40% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 5692 | 0.44 | ug/L | 89 |
| 3) Chloromethane | 1.94 | 50 | 9228 | 0.53 | ug/L | 88 |
| 4) Vinyl chloride | 2.07 | 62 | 7485 | 0.47 | ug/L | 87 |
| 5) Bromomethane | 2.43 | 94 | 3594 | 0.67 | ug/L # | 93 |
| 6) Chloroethane | 2.57 | 64 | 4403 | 0.46 | ug/L # | 73 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 7198 | 0.49 | ug/L | 83 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 5090 | 0.55 | ug/L | 95 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 9053 | 0.50 | ug/L | 94 |
| 10) Methylene chloride | 4.16 | 84 | 15206 | 1.24 | ug/L | 93 |
| 11) MTBE | 4.49 | 73 | 6834 | 0.48 | ug/L # | 82 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 5654 | 0.57 | ug/L | 93 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 12199 | 0.55 | ug/L | 92 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 7551 | 0.51 | ug/L # | 1 |
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 5272 | 0.51 | ug/L | 79 |
| 16) Bromochloromethane | 6.20 | 128 | 1570 | 0.48 | ug/L # | 55 |
| 17) Chloroform | 6.34 | 83 | 8638 | 0.50 | ug/L | 99 |
| 18) 1,1,1-Trichloroethane | 6.52 | 97 | 7624 | 0.53 | ug/L # | 47 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 7336 | 0.48 | ug/L | 93 |
| 20) Carbon tetrachloride | 6.72 | 119 | 5591 | 0.55 | ug/L # | 91 |
| 22) 1,2-Dichloroethane | 7.00 | 62 | 4526 | 0.47 | ug/L | 96 |
| 23) Benzene | 6.94 | 78 | 22039 | 0.52 | ug/L # | 1 |
| 25) Trichloroethene | 7.60 | 130 | 5455 | 0.50 | ug/L | 96 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 5675 | 0.49 | ug/L # | 72 |
| 27) Dibromomethane | 7.91 | 93 | 1953 | 0.62 | ug/L # | 62 |
| 28) Bromodichloromethane | 8.06 | 83 | 4668 | 0.47 | ug/L # | 89 |
| 29) 2-ceve | 8.28 | 63 | 6122 | 1.84 | ug/L # | 62 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 6641 | 0.48 | ug/L # | 89 |
| 32) Toluene | 8.66 | 92 | 13456 | 0.51 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 4507 | 0.49 | ug/L | 96 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 2776 | 0.59 | ug/L # | 64 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 6237 | 0.53 | ug/L | 94 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 4095 | 0.47 | ug/L | 87 |
| 37) Dibromochloromethane | 9.25 | 129 | 2061 | 0.40 | ug/L # | 88 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 2053 | 0.48 | ug/L | 87 |
| 40) Chlorobenzene | 9.64 | 112 | 12667 | 0.54 | ug/L | 90 |
| 41) 1,1,1,2-Tetrachloroethane | 9.69 | 131 | 3892 | 0.62 | ug/L | 89 |
| 42) Ethylbenzene | 9.69 | 106 | 7438 | 0.53 | ug/L | 92 |
| 43) P+m-Xylene | 9.78 | 106 | 17381 | 0.98 | ug/L | 92 |
| 44) O-Xylene | 10.02 | 106 | 7688 | 0.46 | ug/L | 95 |
| 45) Styrene | 10.03 | 104 | 11025 | 0.44 | ug/L | 94 |
| 46) Bromoform | 10.16 | 173 | 1072 | 0.43 | ug/L # | 64 |
| 47) Isopropylbenzene | 10.24 | 105 | 20625 | 0.46 | ug/L | 92 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 1779 | 0.41 | ug/L | 96 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 254 | 0.27 | ug/L | 99 |
| 51) n-propylbenzene | 10.49 | 91 | 24727 | 0.46 | ug/L | 96 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN06.D Vial: 6
Acq On : 26 Jan 2017 4:07 pm Operator: MGC
Sample : 1701474-CAL1 Inst : MS-V5
Misc : REG VO-107-69228;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:55 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

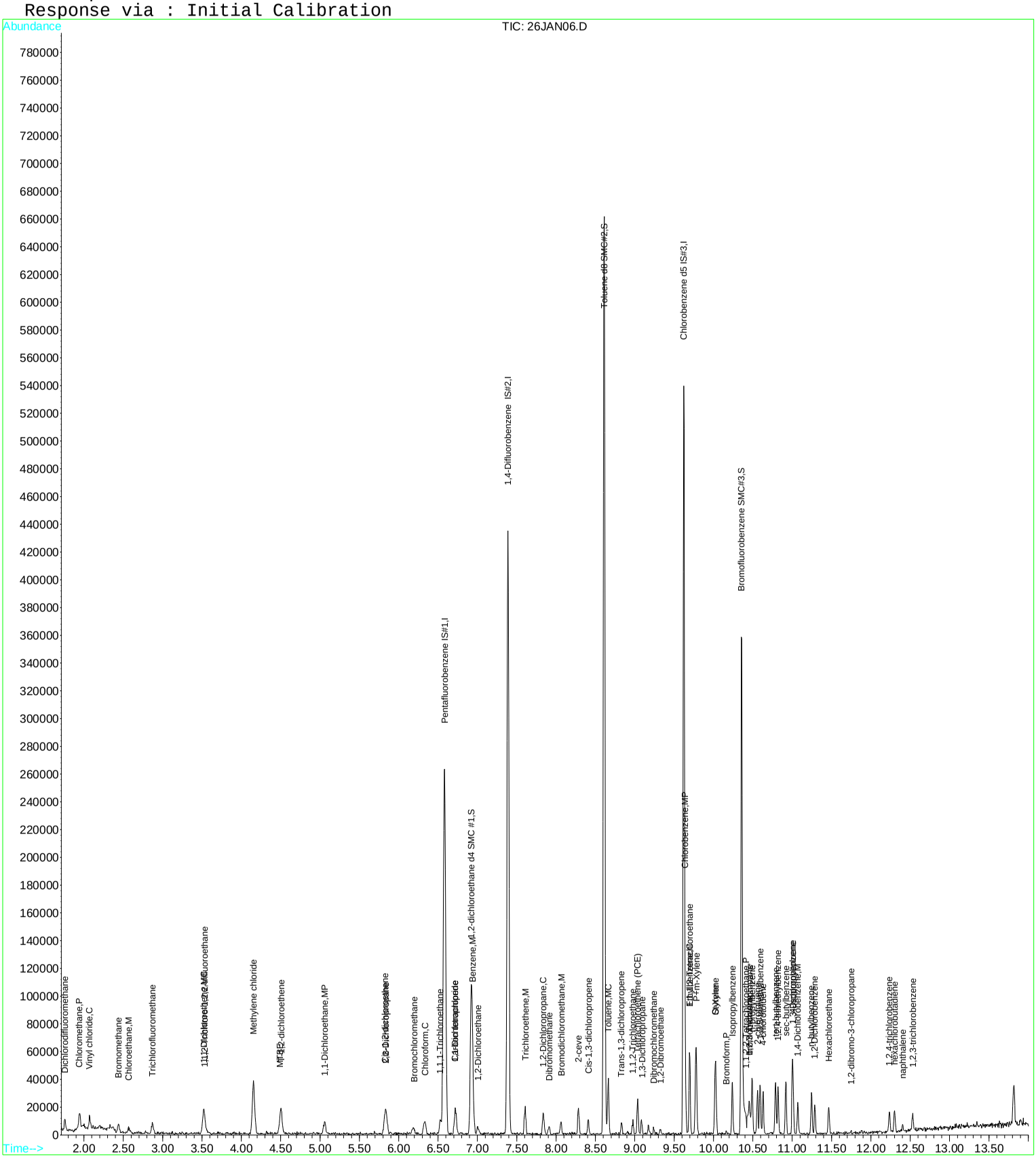
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 4597 | 0.46 | ug/L | | 92 |
| 53) | 1,3,5-trimethylbenzene | 10.59 | 105 | 16574 | 0.45 | ug/L | | 97 |
| 54) | 2-chlorotoluene | 10.56 | 91 | 14564 | 0.41 | ug/L | | 95 |
| 55) | 4-chlorotoluene | 10.63 | 91 | 13695 | 0.46 | ug/L | | 95 |
| 56) | tert-butylbenzene | 10.79 | 119 | 16459 | 0.46 | ug/L | | 91 |
| 57) | 1,2,4-trimethylbenzene | 10.82 | 105 | 14903 | 0.42 | ug/L | | 95 |
| 58) | sec-butylbenzene | 10.92 | 105 | 22809 | 0.47 | ug/L | | 99 |
| 59) | 4-isopropyltoluene | 11.01 | 119 | 16265 | 0.43 | ug/L | | 96 |
| 60) | 1,3-Dichlorobenzene | 11.02 | 146 | 8877 | 0.49 | ug/L | | 94 |
| 61) | 1,4-Dichlorobenzene | 11.07 | 146 | 7244 | 0.41 | ug/L | | 92 |
| 62) | n-butylbenzene | 11.25 | 91 | 14140 | 0.41 | ug/L | # | 87 |
| 63) | 1,2-Dichlorobenzene | 11.29 | 146 | 7494 | 0.49 | ug/L | | 87 |
| 64) | Hexachloroethane | 11.46 | 117 | 2470 | 0.48 | ug/L | # | 66 |
| 65) | 1,2-dibromo-3-chloropropan | 11.75 | 75 | 145 | 0.24 | ug/L | # | 6 |
| 66) | 1,2,4-trichlorobenzene | 12.23 | 180 | 4145 | 0.36 | ug/L | | 86 |
| 67) | hexachlorobutadiene | 12.31 | 225 | 3204 | 0.39 | ug/L | # | 85 |
| 68) | naphthalene | 12.40 | 128 | 3704 | 0.33 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.54 | 180 | 3768m | 0.38 | ug/L | | |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN06.D Vial: 6
Acq On : 26 Jan 2017 4:07 pm Operator: MGC
Sample : 1701474-CAL1 Inst : MS-V5
Misc : REG VO-107-69228;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:55 2017 Quant Results File: 82605.RES

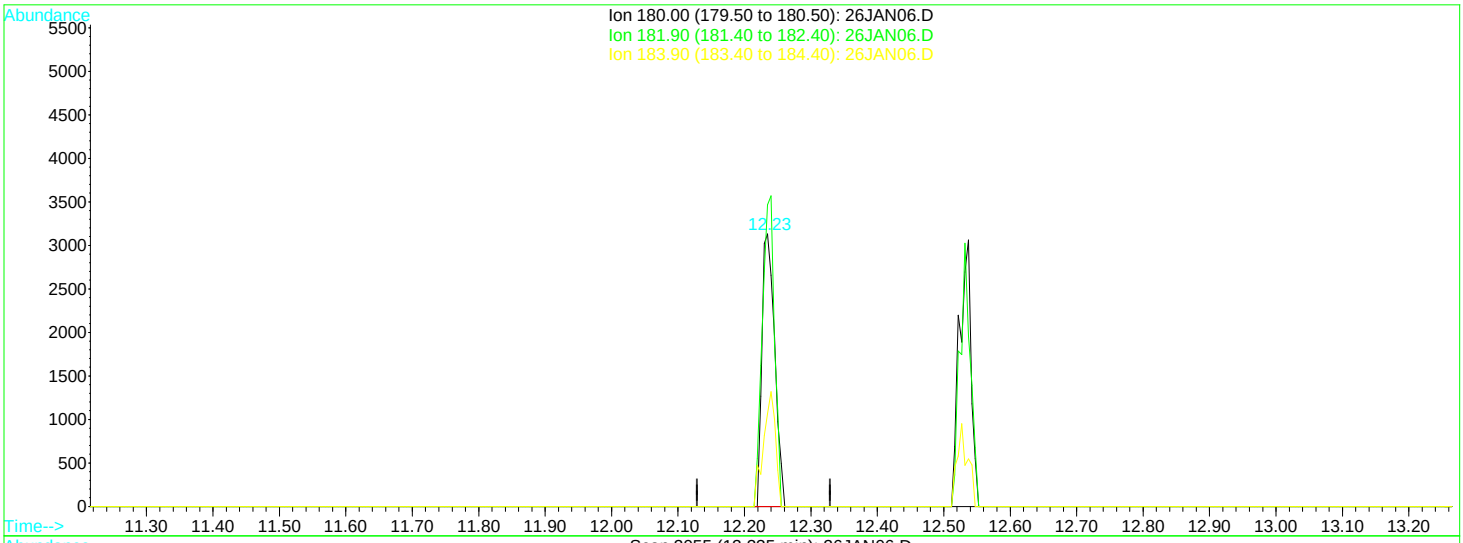
Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Initial Calibration

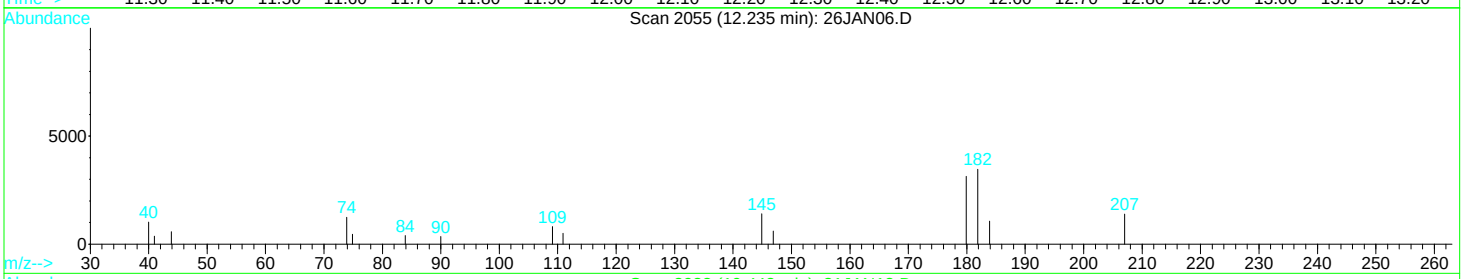


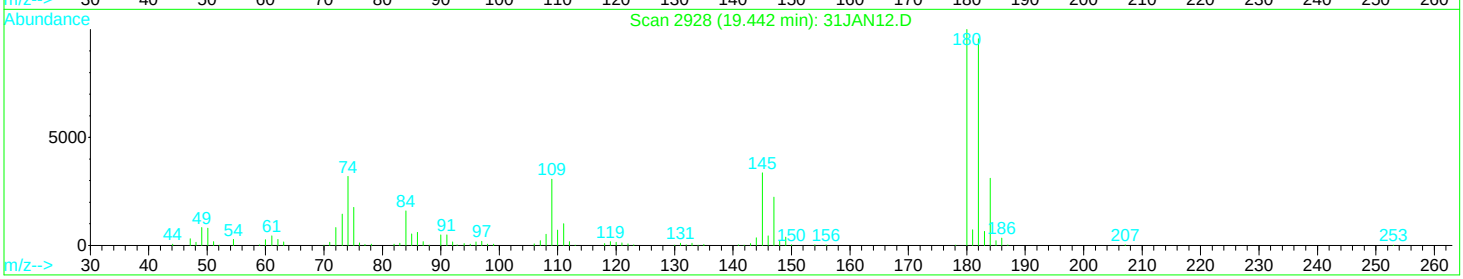
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN06.D Vial: 6
Acq On : 26 Jan 2017 4:07 pm Operator: MGC
Sample : 1701474-CAL1 Inst : MS-V5
Misc : REG VO-107-69228;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:41 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN06.D

(69) 1,2,3-trichlorobenzene

12.23min 0.42ug/L

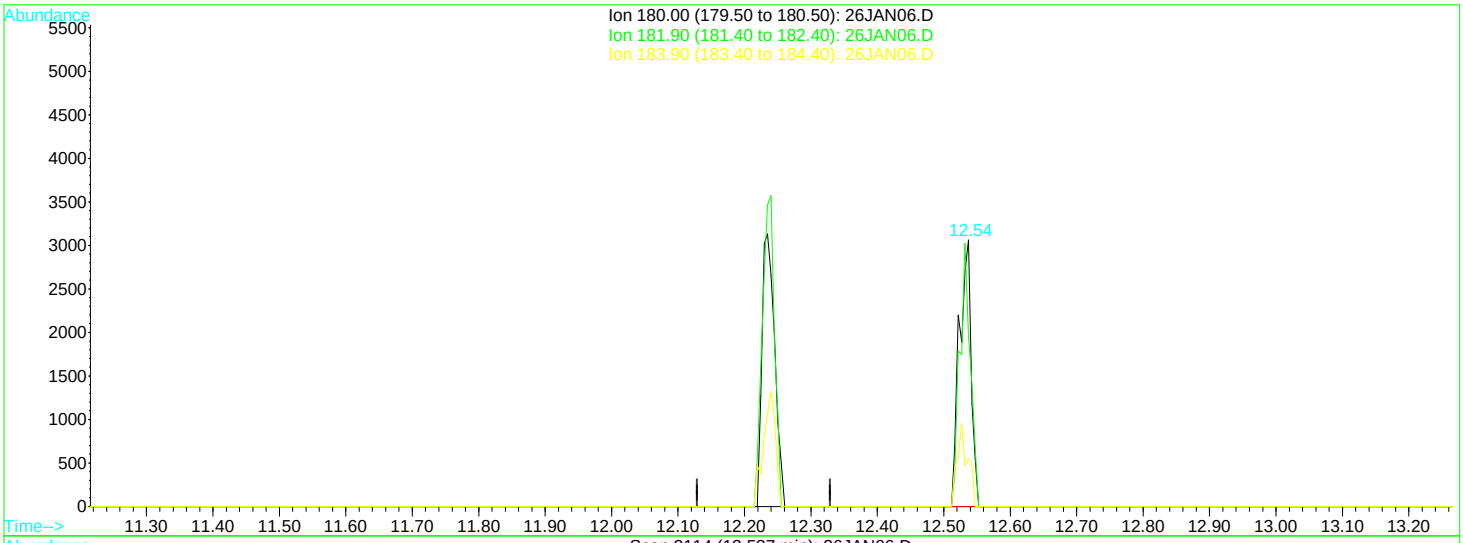
response 4145

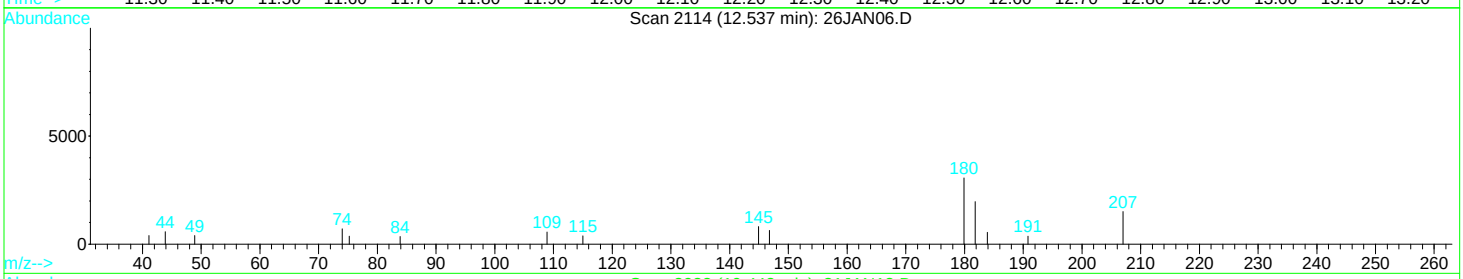
| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 110.16 |
| 183.90 | 31.10 | 40.46# |
| 0.00 | 0.00 | 0.00 |

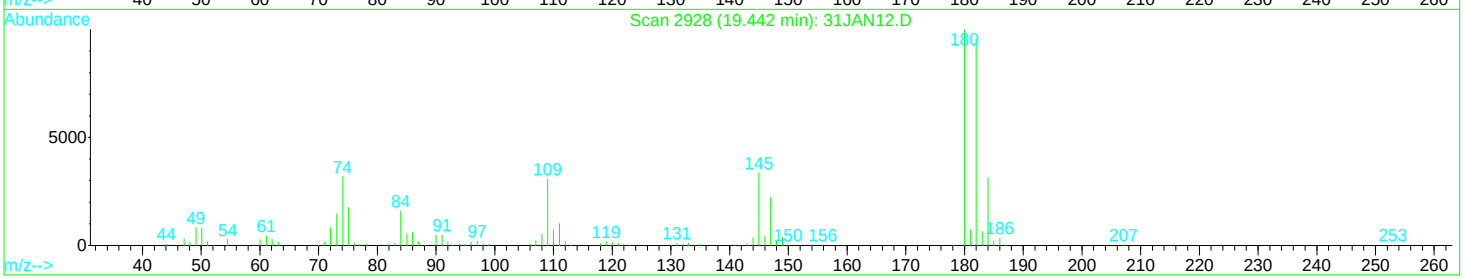
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN06.D Vial: 6
Acq On : 26 Jan 2017 4:07 pm Operator: MGC
Sample : 1701474-CAL1 Inst : MS-V5
Misc : REG VO-107-69228;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:55 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN06.D

(69) 1,2,3-trichlorobenzene

12.54min 0.38ug/L m

response 3768

| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 121.18 |
| 183.90 | 31.10 | 44.51# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN07.D Vial: 7
Acq On : 26 Jan 2017 4:30 pm Operator: MGC
Sample : 1701474-CAL2 Inst : MS-V5
Misc : REG VO-107-69229;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:57 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 220154 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 293817 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 72326 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65966 | 9.93 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 99.30% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 338392 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.10% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.36 | 95 | 98223 | 9.04 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 90.40% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 11507 | 0.89 | ug/L | 93 |
| 3) Chloromethane | 1.95 | 50 | 17222 | 0.98 | ug/L | 98 |
| 4) Vinyl chloride | 2.07 | 62 | 14979 | 0.94 | ug/L | 94 |
| 5) Bromomethane | 2.44 | 94 | 6372 | 1.18 | ug/L | 95 |
| 6) Chloroethane | 2.56 | 64 | 8843 | 0.93 | ug/L | 86 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 14082 | 0.96 | ug/L | 94 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 10869 | 1.16 | ug/L | 88 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 18597 | 1.03 | ug/L | 95 |
| 10) Methylene chloride | 4.15 | 84 | 13255 | 1.09 | ug/L | 85 |
| 11) MTBE | 4.50 | 73 | 13086 | 0.92 | ug/L # | 79 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 10011 | 1.01 | ug/L | 94 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 23972 | 1.07 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.85 | 77 | 15281 | 1.03 | ug/L # | 1 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 10252 | 1.00 | ug/L | 76 |
| 16) Bromochloromethane | 6.17 | 128 | 2918 | 0.89 | ug/L # | 50 |
| 17) Chloroform | 6.33 | 83 | 17139 | 0.99 | ug/L | 96 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 14693 | 1.02 | ug/L # | 1 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 14538 | 0.95 | ug/L | 98 |
| 20) Carbon tetrachloride | 6.72 | 119 | 10166 | 0.99 | ug/L | 88 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 10581 | 1.11 | ug/L # | 88 |
| 23) Benzene | 6.94 | 78 | 46125 | 1.09 | ug/L # | 22 |
| 25) Trichloroethene | 7.60 | 130 | 10083 | 0.96 | ug/L # | 83 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 12226 | 1.10 | ug/L # | 81 |
| 27) Dibromomethane | 7.91 | 93 | 3451 | 1.14 | ug/L | 85 |
| 28) Bromodichloromethane | 8.06 | 83 | 10472 | 1.10 | ug/L # | 75 |
| 29) 2-ceve | 8.28 | 63 | 12137 | 3.82 | ug/L # | 59 |
| 30) Cis-1,3-dichloropropene | 8.40 | 75 | 14277 | 1.08 | ug/L # | 89 |
| 32) Toluene | 8.66 | 92 | 26120 | 1.03 | ug/L | 92 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 8869 | 1.00 | ug/L | 90 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 4167 | 0.93 | ug/L # | 80 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 11558 | 1.03 | ug/L # | 85 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 8268 | 1.00 | ug/L # | 78 |
| 37) Dibromochloromethane | 9.24 | 129 | 5042 | 1.02 | ug/L # | 82 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 4017 | 0.98 | ug/L | 86 |
| 40) Chlorobenzene | 9.64 | 112 | 21933 | 0.97 | ug/L | 89 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 6752 | 1.10 | ug/L | 92 |
| 42) Ethylbenzene | 9.70 | 106 | 13884 | 1.01 | ug/L | 98 |
| 43) P+m-Xylene | 9.78 | 106 | 31912 | 1.85 | ug/L | 79 |
| 44) O-Xylene | 10.02 | 106 | 15287 | 0.93 | ug/L | 88 |
| 45) Styrene | 10.03 | 104 | 22128 | 0.91 | ug/L | 91 |
| 46) Bromoform | 10.16 | 173 | 2123 | 0.88 | ug/L | 93 |
| 47) Isopropylbenzene | 10.24 | 105 | 41481 | 0.95 | ug/L | 97 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 4151 | 1.00 | ug/L | 96 |
| 50) 1,2,3-Trichloropropane | 10.47 | 110 | 715 | 0.77 | ug/L | 78 |
| 51) n-propylbenzene | 10.49 | 91 | 47788 | 0.92 | ug/L | 92 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN07.D Vial: 7
Acq On : 26 Jan 2017 4:30 pm Operator: MGC
Sample : 1701474-CAL2 Inst : MS-V5
Misc : REG VO-107-69229;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:57 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

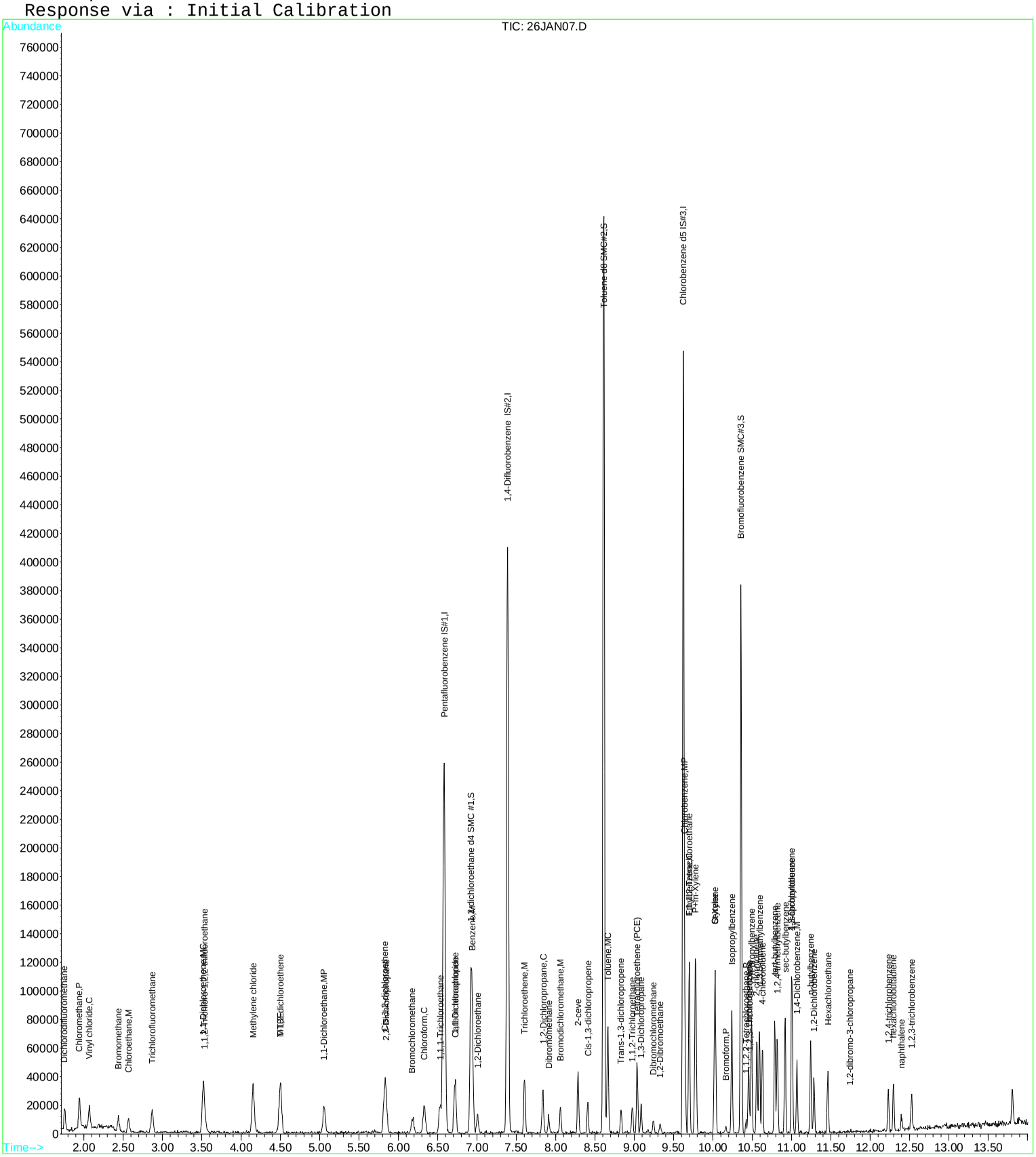
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 8920 | 0.91 | ug/L | | 79 |
| 53) | 1,3,5-trimethylbenzene | 10.59 | 105 | 31264 | 0.88 | ug/L | | 97 |
| 54) | 2-chlorotoluene | 10.56 | 91 | 29911 | 0.87 | ug/L | | 91 |
| 55) | 4-chlorotoluene | 10.63 | 91 | 26616 | 0.91 | ug/L | | 95 |
| 56) | tert-butylbenzene | 10.79 | 119 | 30048 | 0.86 | ug/L | | 97 |
| 57) | 1,2,4-trimethylbenzene | 10.82 | 105 | 28840 | 0.83 | ug/L | | 95 |
| 58) | sec-butylbenzene | 10.92 | 105 | 43007 | 0.91 | ug/L | | 100 |
| 59) | 4-isopropyltoluene | 11.00 | 119 | 32849 | 0.89 | ug/L | | 97 |
| 60) | 1,3-Dichlorobenzene | 11.01 | 146 | 16156m | 0.92 | ug/L | | |
| 61) | 1,4-Dichlorobenzene | 11.07 | 146 | 16654 | 0.97 | ug/L | | 93 |
| 62) | n-butylbenzene | 11.24 | 91 | 28467 | 0.86 | ug/L | | 96 |
| 63) | 1,2-Dichlorobenzene | 11.28 | 146 | 13667 | 0.91 | ug/L | # | 84 |
| 64) | Hexachloroethane | 11.46 | 117 | 4877 | 0.97 | ug/L | # | 80 |
| 65) | 1,2-dibromo-3-chloropropan | 11.74 | 75 | 383 | 0.66 | ug/L | # | 70 |
| 66) | 1,2,4-trichlorobenzene | 12.23 | 180 | 8697 | 0.77 | ug/L | | 89 |
| 67) | hexachlorobutadiene | 12.30 | 225 | 6979 | 0.87 | ug/L | # | 82 |
| 68) | naphthalene | 12.39 | 128 | 7209 | 0.67 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.53 | 180 | 6944m | 0.72 | ug/L | | |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN07.D Vial: 7
Acq On : 26 Jan 2017 4:30 pm Operator: MGC
Sample : 1701474-CAL2 Inst : MS-V5
Misc : REG VO-107-69229;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:57 2017 Quant Results File: 82605.RES

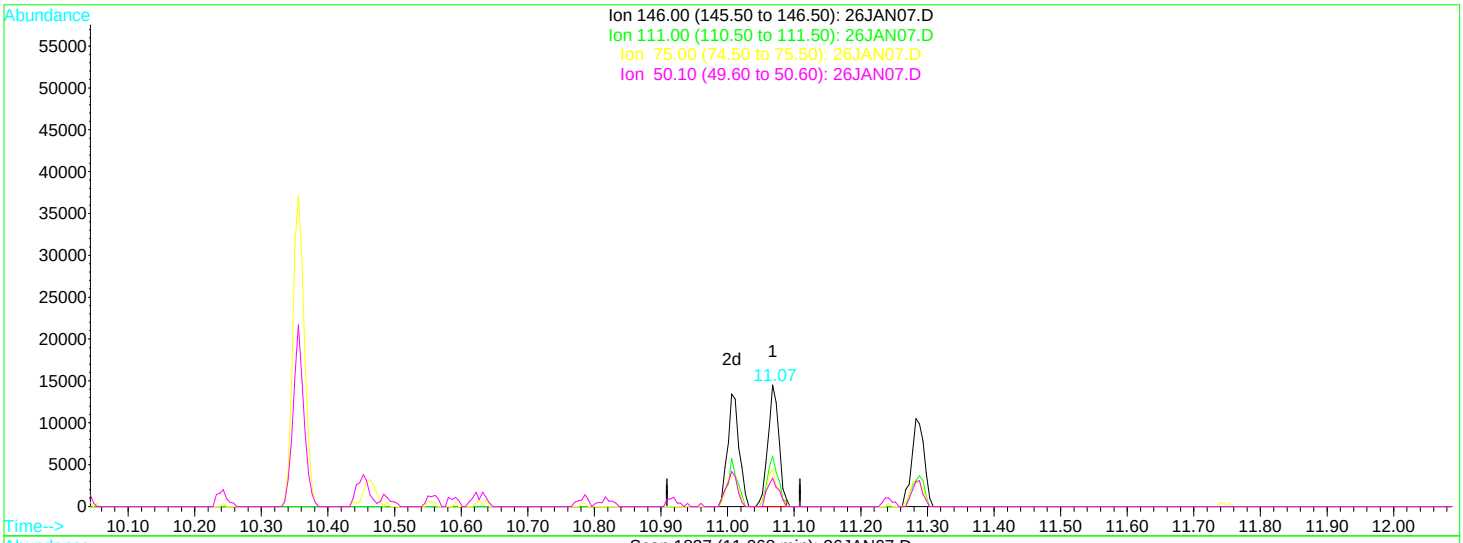
Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Initial Calibration

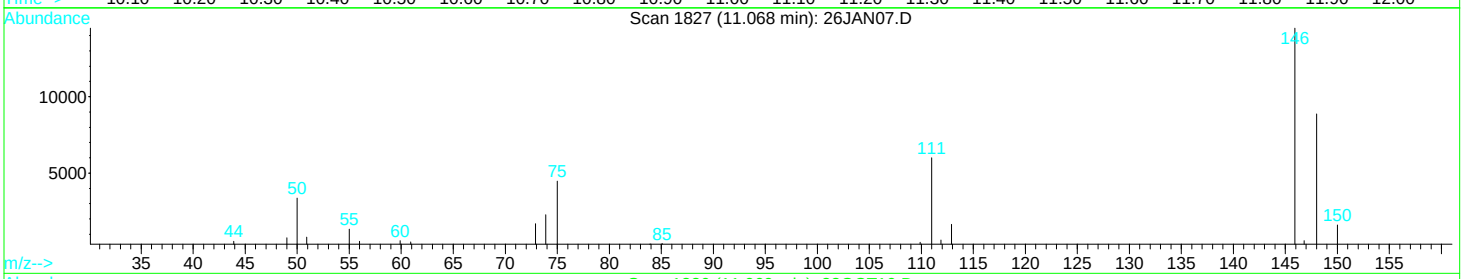


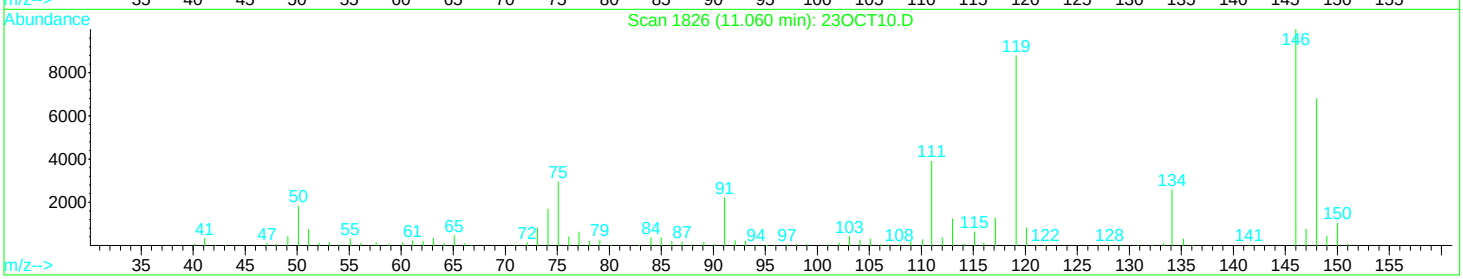
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN07.D Vial: 7
Acq On : 26 Jan 2017 4:30 pm Operator: MGC
Sample : 1701474-CAL2 Inst : MS-V5
Misc : REG VO-107-69229;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:41 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Multiple Level Calibration




TIC: 26JAN07.D

(60) 1,3-Dichlorobenzene

11.07min 0.95ug/L

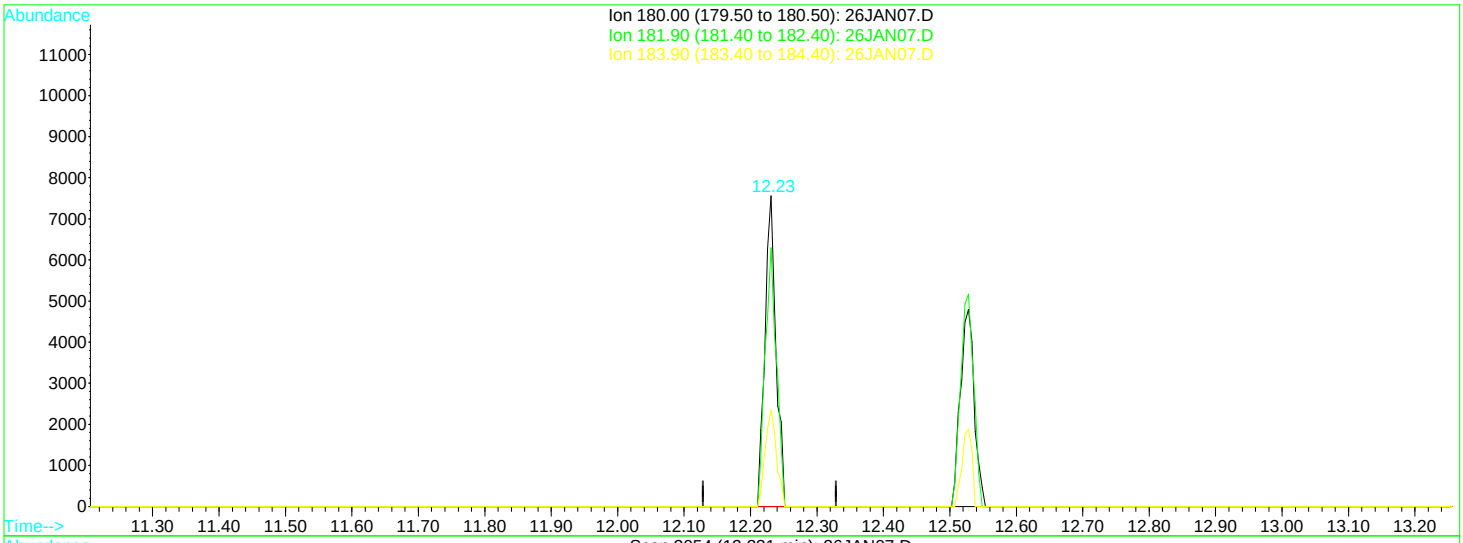
response 16652

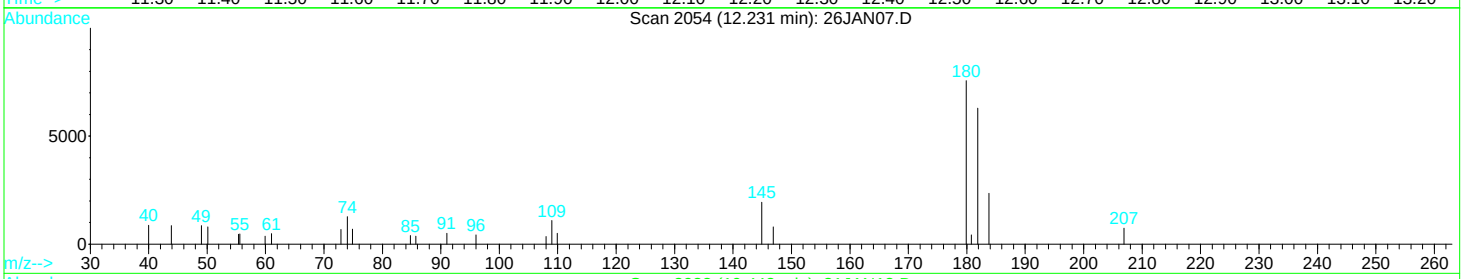
| Ion | Exp% | Act% |
|---|---|---|
| 146.00 | 100 | 100 |
| 111.00 | 38.90 | 41.20 |
| 75.00 | 29.60 | 29.33 |
| 50.10 | 18.30 | 23.66 |

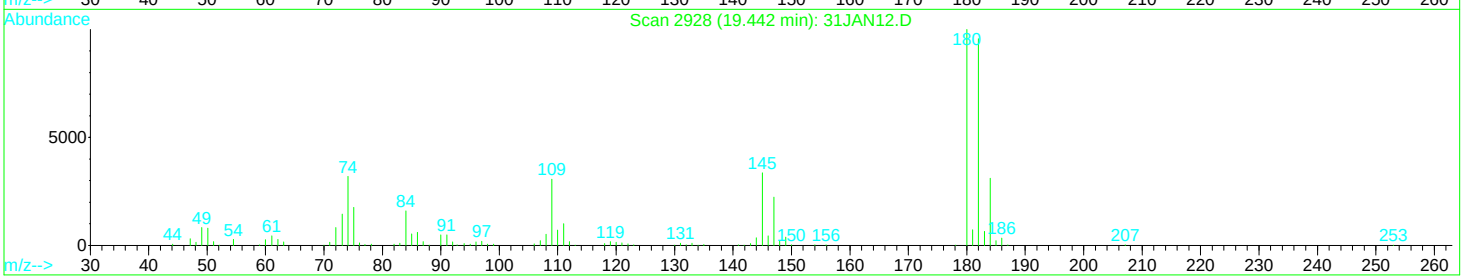
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN07.D Vial: 7
Acq On : 26 Jan 2017 4:30 pm Operator: MGC
Sample : 1701474-CAL2 Inst : MS-V5
Misc : REG VO-107-69229;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:45 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN07.D

(69) 1,2,3-trichlorobenzene

12.23min 0.90ug/L

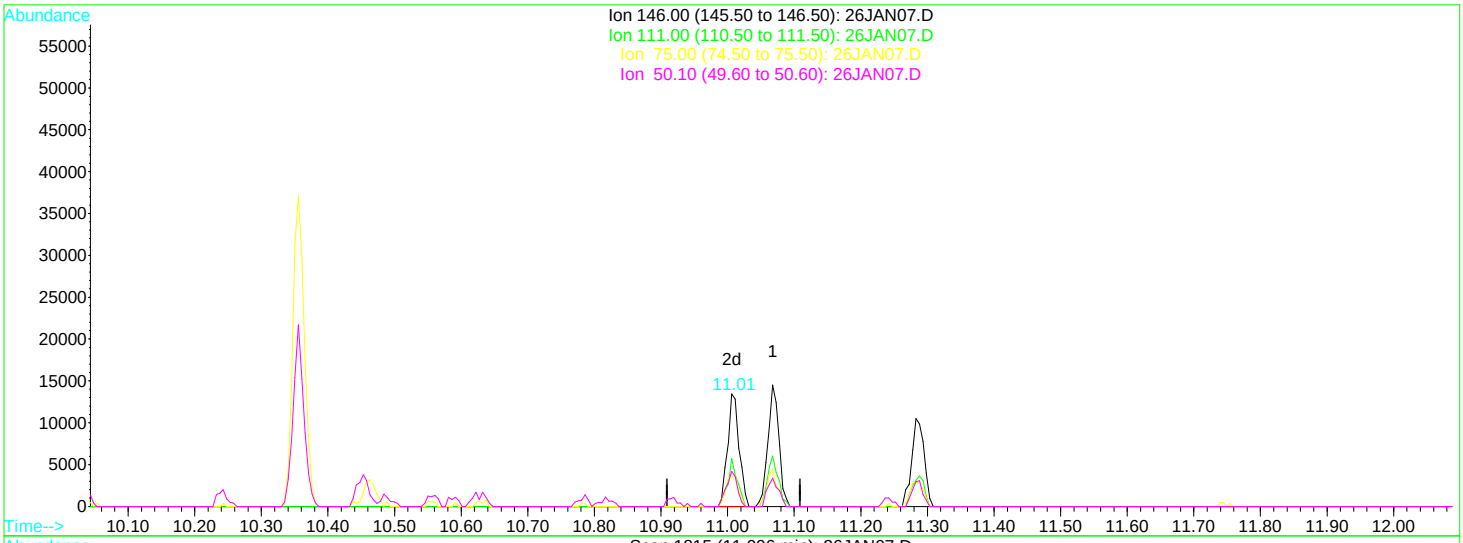
response 8697

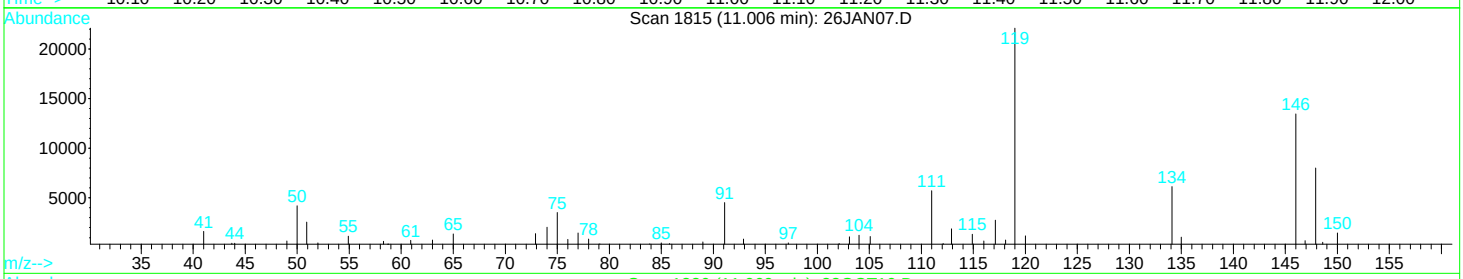
| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 86.13 |
| 183.90 | 31.10 | 32.05 |
| 0.00 | 0.00 | 0.00 |

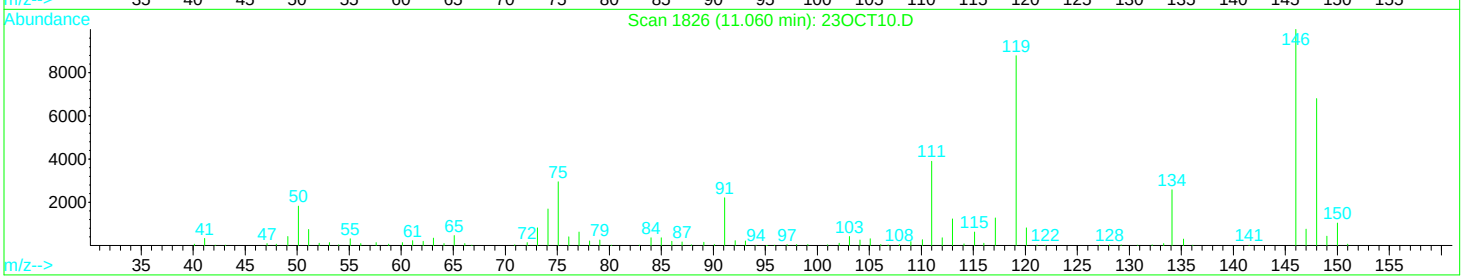
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN07.D Vial: 7
Acq On : 26 Jan 2017 4:30 pm Operator: MGC
Sample : 1701474-CAL2 Inst : MS-V5
Misc : REG VO-107-69229;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:45 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Multiple Level Calibration




TIC: 26JAN07.D

(60) 1,3-Dichlorobenzene

11.01min 0.92ug/L m

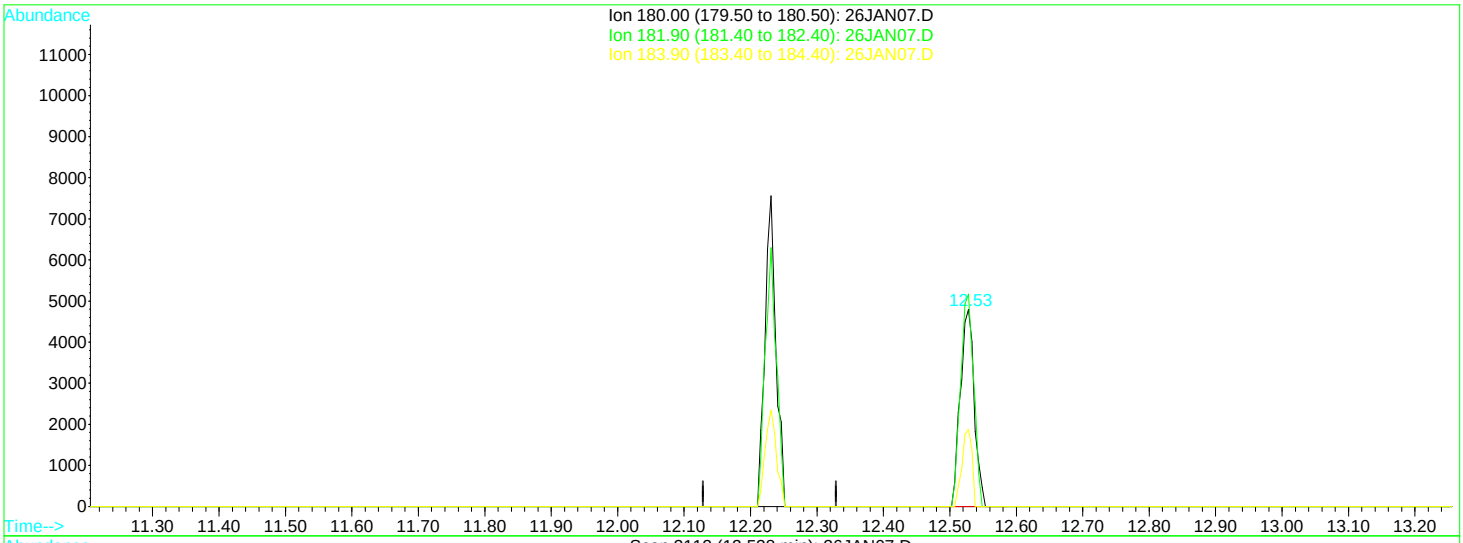
response 16156

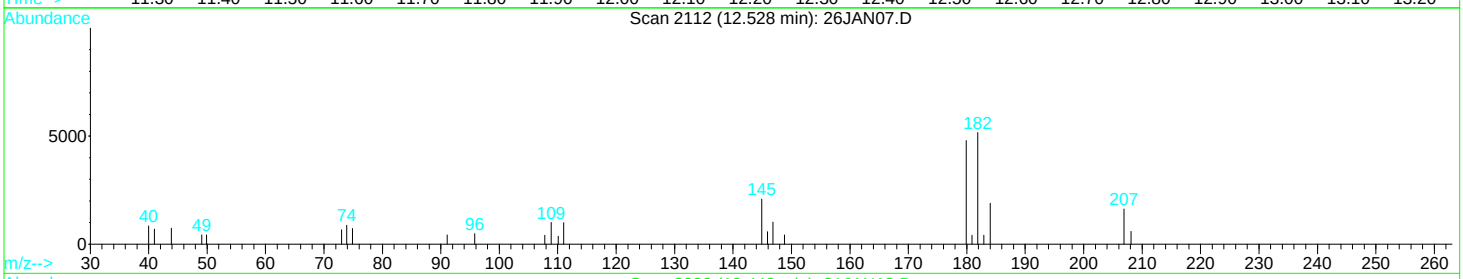
| Ion | Exp% | Act% |
|---|---|---|
| 146.00 | 100 | 100 |
| 111.00 | 38.90 | 42.47 |
| 75.00 | 29.60 | 30.23 |
| 50.10 | 18.30 | 24.39# |

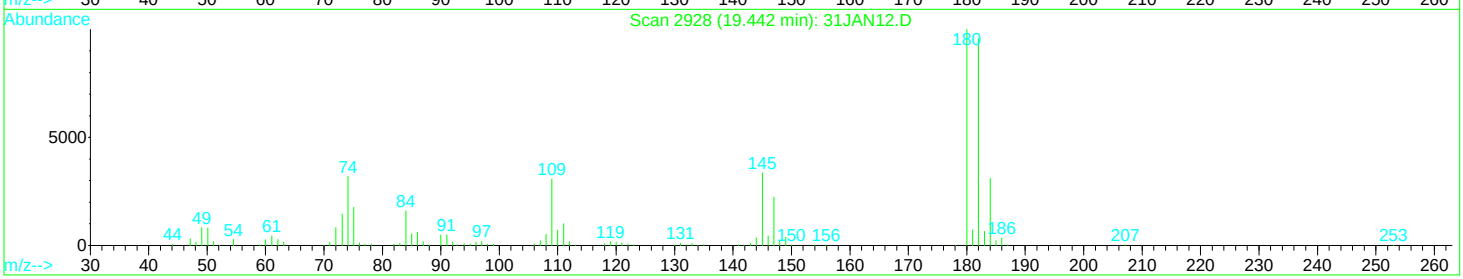
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN07.D Vial: 7
Acq On : 26 Jan 2017 4:30 pm Operator: MGC
Sample : 1701474-CAL2 Inst : MS-V5
Misc : REG VO-107-69229;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:57 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN07.D

(69) 1,2,3-trichlorobenzene

12.53min 0.72ug/L m

response 6944

| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 107.88 |
| 183.90 | 31.10 | 40.14 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN08.D Vial: 8
Acq On : 26 Jan 2017 4:53 pm Operator: MGC
Sample : 1701474-CAL3 Inst : MS-V5
Misc : REG VO-107-69230;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:58 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205618 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 296048 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69095 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 63743 | 10.28 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 102.80% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 332998 | 9.48 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 94.80% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.36 | 95 | 99563 | 9.60 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 96.00% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 99808 | 8.27 | ug/L | 97 |
| 3) Chloromethane | 1.95 | 50 | 149360 | 9.13 | ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 123417 | 8.32 | ug/L | 98 |
| 5) Bromomethane | 2.44 | 94 | 65278 | 12.96 | ug/L | 97 |
| 6) Chloroethane | 2.57 | 64 | 84195 | 9.43 | ug/L | 90 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 122290 | 8.96 | ug/L | 96 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 84344 | 9.68 | ug/L | 97 |
| 9) 1,1-Dichloroethene | 3.51 | 61 | 170746 | 10.09 | ug/L | 95 |
| 10) Methylene chloride | 4.15 | 84 | 100898 | 8.84 | ug/L | 97 |
| 11) MTBE | 4.49 | 73 | 136599 | 10.25 | ug/L # | 84 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 97005 | 10.47 | ug/L | 98 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 226791 | 10.86 | ug/L | 100 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 140924 | 10.21 | ug/L # | 1 |
| 15) Cis-1,2-dichloroethene | 5.82 | 96 | 101528 | 10.60 | ug/L | 86 |
| 16) Bromochloromethane | 6.18 | 128 | 35194 | 11.43 | ug/L # | 69 |
| 17) Chloroform | 6.33 | 83 | 166083 | 10.26 | ug/L | 96 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 139159 | 10.33 | ug/L | 92 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 133955 | 9.39 | ug/L | 97 |
| 20) Carbon tetrachloride | 6.72 | 119 | 99620 | 10.43 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.00 | 62 | 95857 | 10.72 | ug/L # | 92 |
| 23) Benzene | 6.94 | 78 | 410825 | 10.38 | ug/L # | 92 |
| 25) Trichloroethene | 7.61 | 130 | 98111 | 9.32 | ug/L | 90 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 114181 | 10.22 | ug/L # | 83 |
| 27) Dibromomethane | 7.91 | 93 | 32995 | 10.80 | ug/L | 87 |
| 28) Bromodichloromethane | 8.06 | 83 | 102175 | 10.64 | ug/L # | 89 |
| 29) 2-ceve | 8.28 | 63 | 130761 | 40.84 | ug/L # | 79 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 133692 | 10.01 | ug/L # | 85 |
| 32) Toluene | 8.66 | 92 | 233118 | 9.14 | ug/L | 92 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 94084 | 10.51 | ug/L # | 87 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 46093 | 10.24 | ug/L # | 80 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 99454 | 8.80 | ug/L # | 86 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 79591 | 9.54 | ug/L | 88 |
| 37) Dibromochloromethane | 9.24 | 129 | 54019 | 10.81 | ug/L # | 93 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 43832 | 10.61 | ug/L | 92 |
| 40) Chlorobenzene | 9.65 | 112 | 221389 | 10.20 | ug/L | 98 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 71288 | 12.19 | ug/L | 95 |
| 42) Ethylbenzene | 9.70 | 106 | 125915 | 9.63 | ug/L | 99 |
| 43) P+m-Xylene | 9.78 | 106 | 305025 | 18.50 | ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 144694 | 9.23 | ug/L | 88 |
| 45) Styrene | 10.03 | 104 | 228273 | 9.82 | ug/L | 97 |
| 46) Bromoform | 10.16 | 173 | 26907 | 11.69 | ug/L | 94 |
| 47) Isopropylbenzene | 10.24 | 105 | 384359 | 9.25 | ug/L | 97 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 41824 | 10.50 | ug/L | 97 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 9117 | 10.31 | ug/L | 90 |
| 51) n-propylbenzene | 10.49 | 91 | 438110 | 8.87 | ug/L | 96 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN08.D Vial: 8
Acq On : 26 Jan 2017 4:53 pm Operator: MGC
Sample : 1701474-CAL3 Inst : MS-V5
Misc : REG VO-107-69230;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:58 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

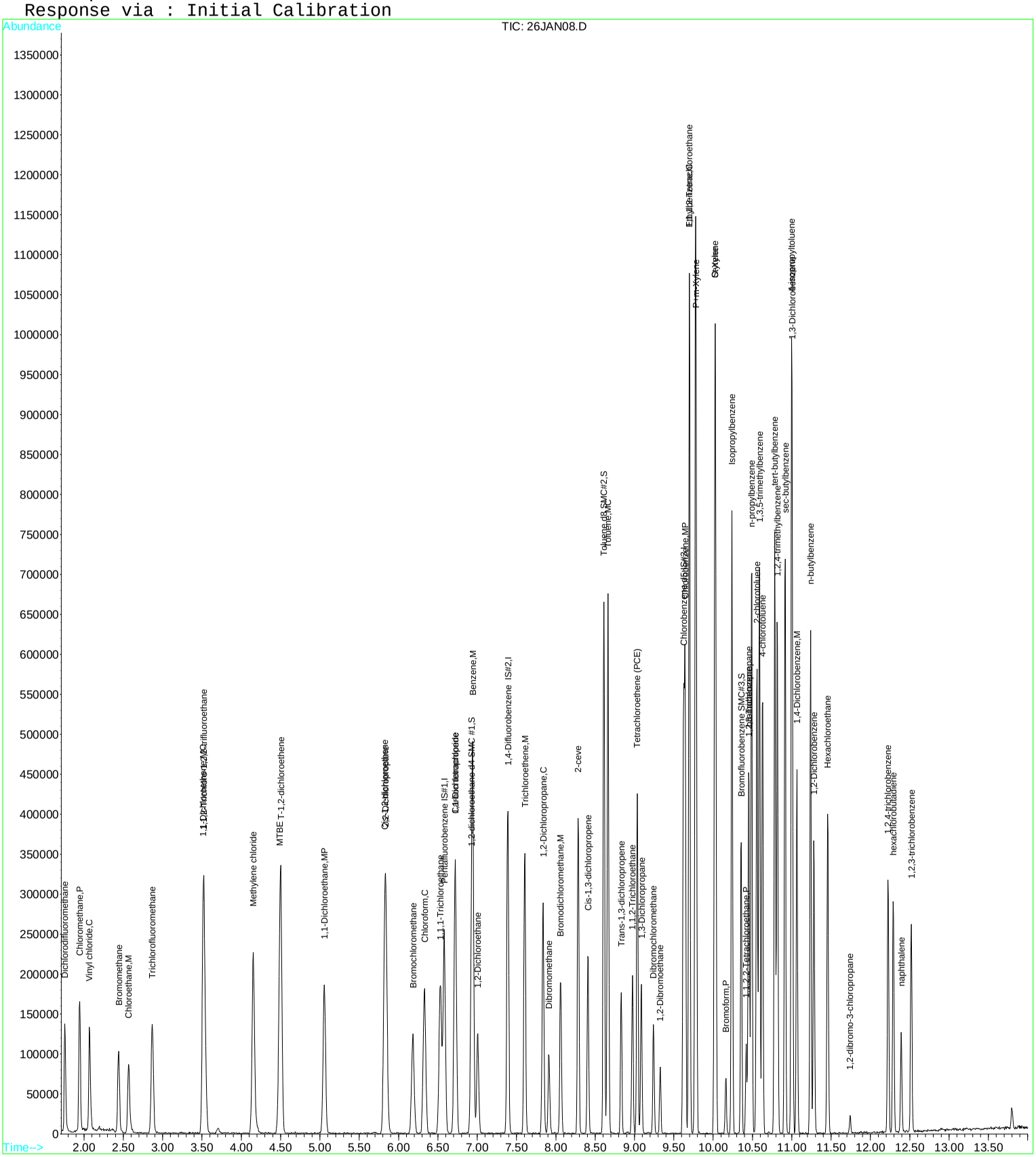
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 90838 | 9.70 | ug/L | | 78 |
| 53) | 1,3,5-trimethylbenzene | 10.59 | 105 | 289064 | 8.49 | ug/L | | 96 |
| 54) | 2-chlorotoluene | 10.56 | 91 | 288840 | 8.82 | ug/L | | 93 |
| 55) | 4-chlorotoluene | 10.63 | 91 | 252265 | 9.08 | ug/L | | 96 |
| 56) | tert-butylbenzene | 10.78 | 119 | 280752 | 8.37 | ug/L | | 96 |
| 57) | 1,2,4-trimethylbenzene | 10.82 | 105 | 280659 | 8.46 | ug/L | | 95 |
| 58) | sec-butylbenzene | 10.92 | 105 | 393981 | 8.70 | ug/L | | 96 |
| 59) | 4-isopropyltoluene | 11.00 | 119 | 304241 | 8.63 | ug/L | | 97 |
| 60) | 1,3-Dichlorobenzene | 11.01 | 146 | 147198 | 8.77 | ug/L | # | 95 |
| 61) | 1,4-Dichlorobenzene | 11.07 | 146 | 144237 | 8.77 | ug/L | | 92 |
| 62) | n-butylbenzene | 11.24 | 91 | 272623 | 8.59 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.28 | 146 | 122781 | 8.58 | ug/L | | 88 |
| 64) | Hexachloroethane | 11.45 | 117 | 55527 | 11.59 | ug/L | # | 83 |
| 65) | 1,2-dibromo-3-chloropropan | 11.74 | 75 | 5536 | 10.03 | ug/L | | 94 |
| 66) | 1,2,4-trichlorobenzene | 12.23 | 180 | 90678 | 8.46 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.29 | 225 | 57176 | 7.43 | ug/L | # | 89 |
| 68) | naphthalene | 12.39 | 128 | 79499 | 7.70 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.52 | 180 | 73490m | 7.96 | ug/L | | |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN08.D Vial: 8
Acq On : 26 Jan 2017 4:53 pm Operator: MGC
Sample : 1701474-CAL3 Inst : MS-V5
Misc : REG VO-107-69230;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:58 2017 Quant Results File: 82605.RES

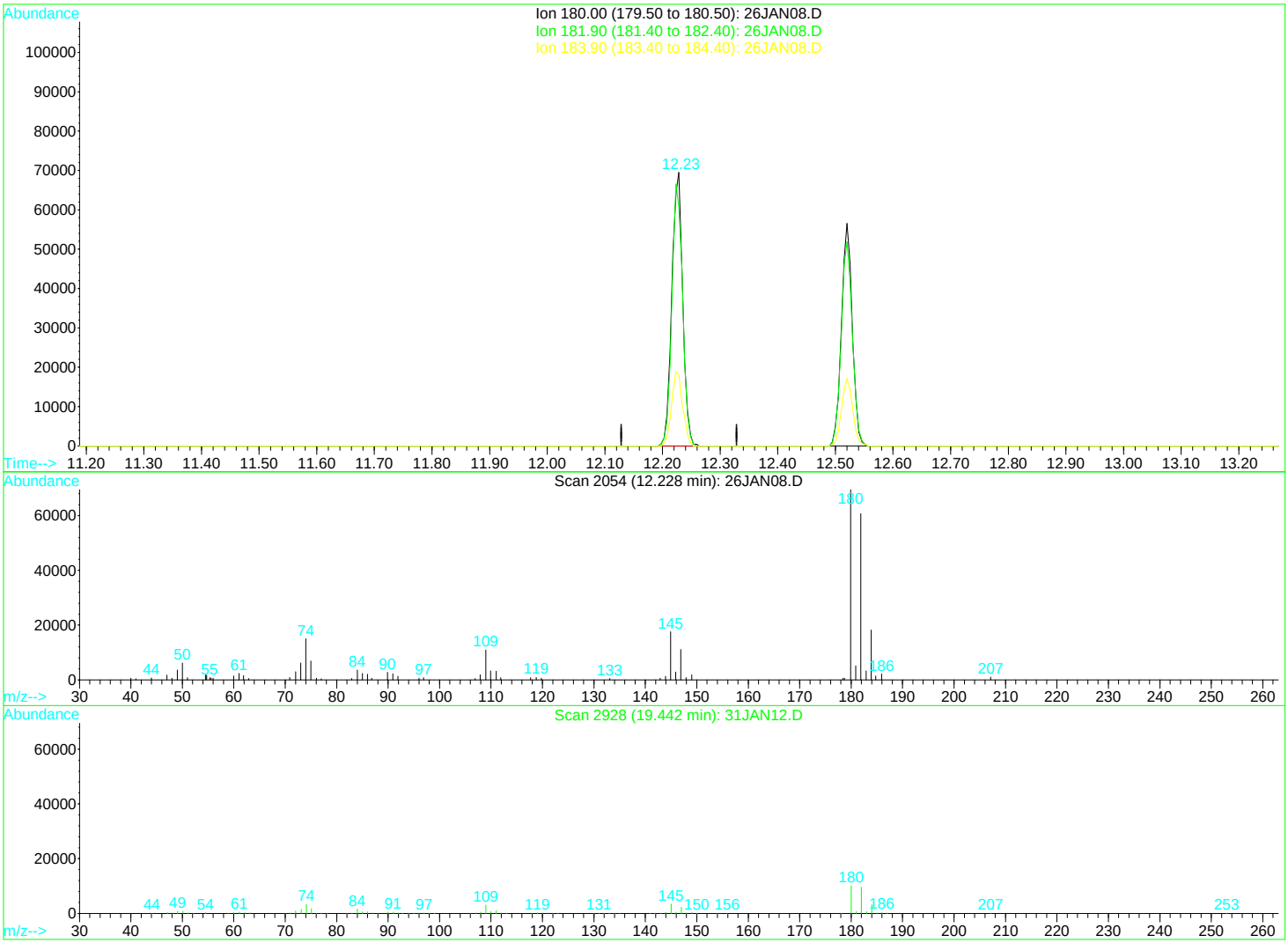
Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN08.D Vial: 8
Acq On : 26 Jan 2017 4:53 pm Operator: MGC
Sample : 1701474-CAL3 Inst : MS-V5
Misc : REG VO-107-69230;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:41 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN08.D

(69) 1,2,3-trichlorobenzene

12.23min 9.82ug/L

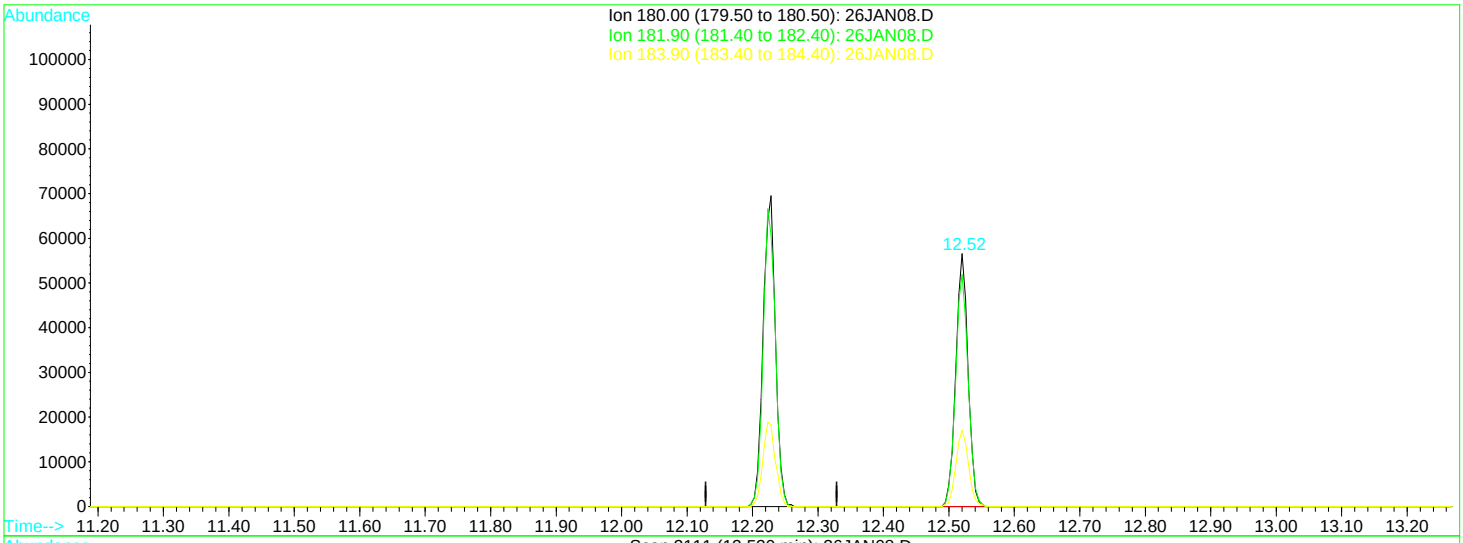
response 90678

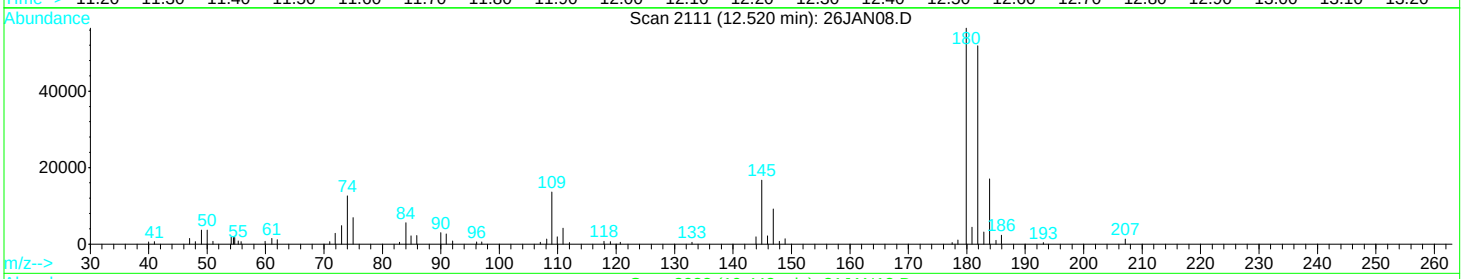
| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 94.69 |
| 183.90 | 31.10 | 27.97 |
| 0.00 | 0.00 | 0.00 |

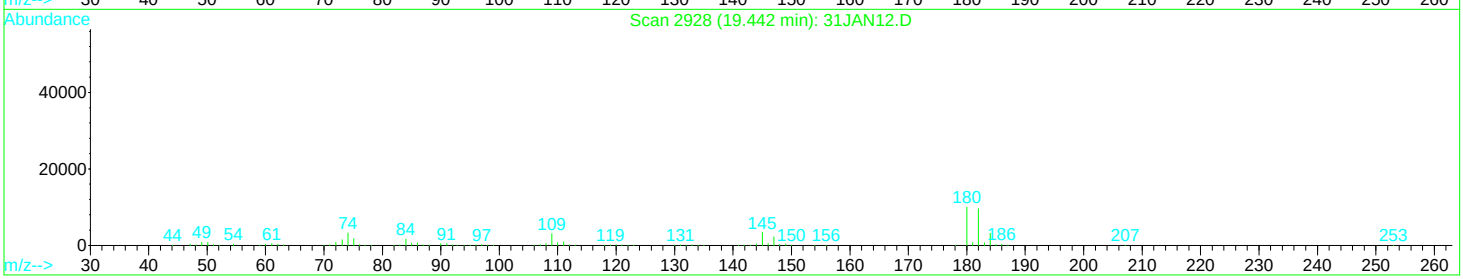
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN08.D Vial: 8
Acq On : 26 Jan 2017 4:53 pm Operator: MGC
Sample : 1701474-CAL3 Inst : MS-V5
Misc : REG VO-107-69230;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:58 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN08.D

(69) 1,2,3-trichlorobenzene

12.52min 7.96ug/L m

response 73490

| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 116.83 |
| 183.90 | 31.10 | 34.51 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN14.D Vial: 14
Acq On : 26 Jan 2017 7:12 pm Operator: MGC
Sample : 1701474-CAL4 Inst : MS-V5
Misc : REG VO-107-69231;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:17 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:14:03 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 210237 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 296345 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 76990 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 66053 | 10.62 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 106.20% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 343104 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 101.70% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.36 | 95 | 108019 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 101.70% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 221144 | 22.07 | ug/L | 97 |
| 3) Chloromethane | 1.94 | 50 | 294988 | 20.07 | ug/L | 98 |
| 4) Vinyl chloride | 2.07 | 62 | 262935 | 20.99 | ug/L | 100 |
| 5) Bromomethane | 2.44 | 94 | 165479 | 24.75 | ug/L | 94 |
| 6) Chloroethane | 2.56 | 64 | 198987 | 24.25 | ug/L | 97 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 285435 | 23.14 | ug/L | 100 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 197385 | 22.44 | ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 384696 | 23.56 | ug/L | 97 |
| 10) Methylene chloride | 4.15 | 84 | 212184 | 26.32 | ug/L | 96 |
| 11) MTBE | 4.49 | 73 | 364350 | 27.57 | ug/L | 100 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 219944 | 23.23 | ug/L | 95 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 518677 | 23.93 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 313195 | 23.06 | ug/L | 89 |
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 249061 | 25.39 | ug/L | 97 |
| 16) Bromochloromethane | 6.19 | 128 | 86547 | 26.61 | ug/L | 91 |
| 17) Chloroform | 6.33 | 83 | 393428 | 24.79 | ug/L | 95 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 321631 | 23.91 | ug/L | 94 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 309417 | 24.00 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 240630 | 24.41 | ug/L | 99 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 240456 | 26.10 | ug/L | 96 |
| 23) Benzene | 6.94 | 78 | 953908 | 24.01 | ug/L | 96 |
| 25) Trichloroethene | 7.61 | 130 | 240990 | 24.98 | ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 285638 | 25.89 | ug/L | 98 |
| 27) Dibromomethane | 7.91 | 93 | 87399 | 26.04 | ug/L | 97 |
| 28) Bromodichloromethane | 8.06 | 83 | 264068 | 27.07 | ug/L | 96 |
| 29) 2-ceve | 8.29 | 63 | 354415 | 114.71 | ug/L | 97 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 341996 | 26.45 | ug/L | 96 |
| 32) Toluene | 8.67 | 92 | 561502 | 24.30 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 243162 | 27.34 | ug/L | 97 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 119841 | 26.38 | ug/L | 98 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 234793 | 23.22 | ug/L | 98 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 216353 | 27.37 | ug/L | 98 |
| 37) Dibromochloromethane | 9.24 | 129 | 141875 | 28.02 | ug/L | 99 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 111699 | 27.11 | ug/L | 100 |
| 40) Chlorobenzene | 9.64 | 112 | 543266 | 23.69 | ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 171301 | 24.02 | ug/L | 97 |
| 42) Ethylbenzene | 9.70 | 106 | 299315 | 22.88 | ug/L | 88 |
| 43) P+m-Xylene | 9.78 | 106 | 716088 | 46.23 | ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 359721 | 24.07 | ug/L | 89 |
| 45) Styrene | 10.03 | 104 | 560504 | 25.10 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 73207 | 27.11 | ug/L | 98 |
| 47) Isopropylbenzene | 10.24 | 105 | 888829 | 22.25 | ug/L | 92 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 115228 | 26.92 | ug/L | 99 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 23420 | 27.92 | ug/L | 92 |
| 51) n-propylbenzene | 10.48 | 91 | 998536 | 21.76 | ug/L | 93 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN14.D Vial: 14
Acq On : 26 Jan 2017 7:12 pm Operator: MGC
Sample : 1701474-CAL4 Inst : MS-V5
Misc : REG VO-107-69231;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:17 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:14:03 2017
Response via : Initial Calibration
DataAcq Meth : 82605

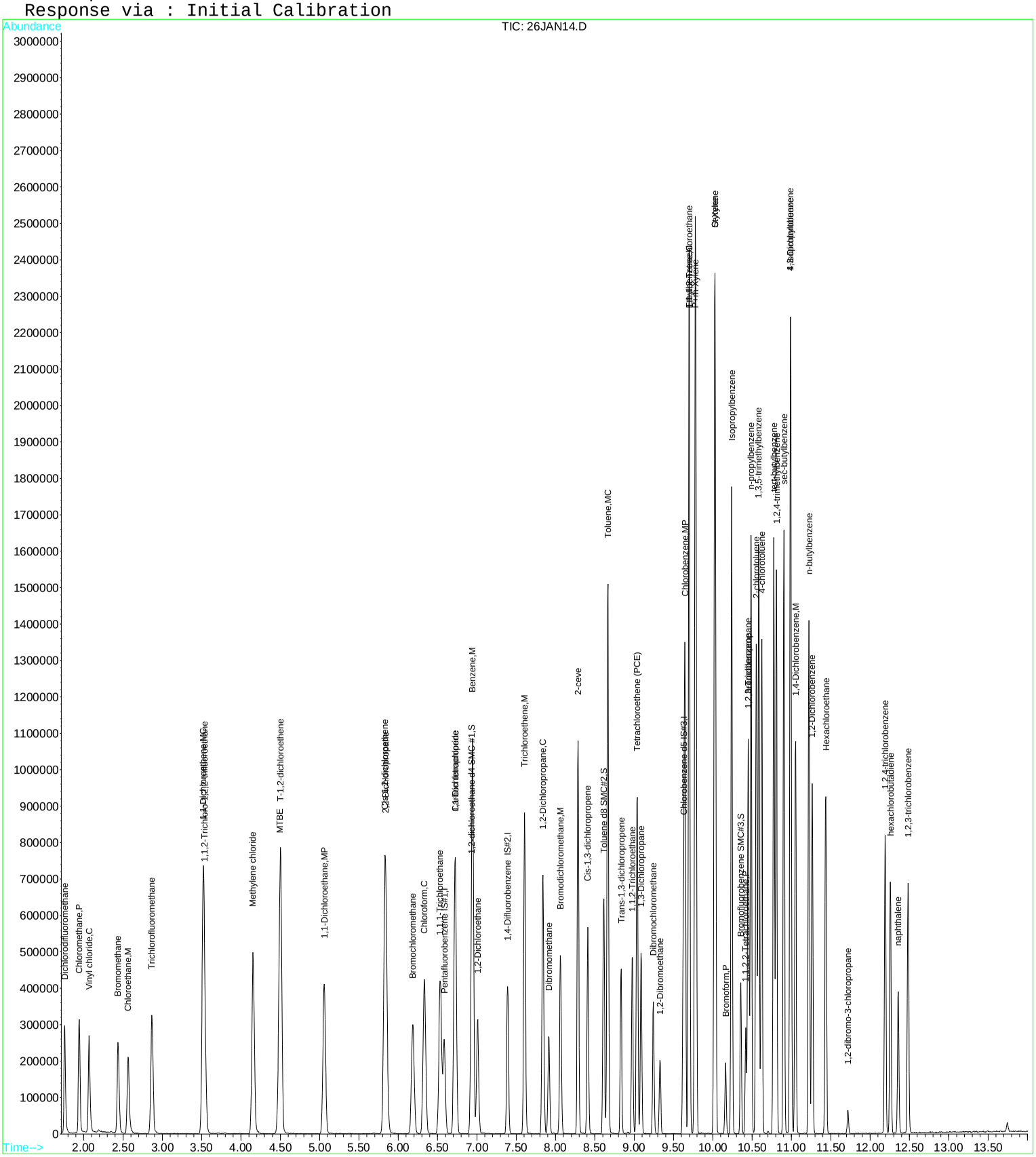
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 224421 | 24.72 | ug/L | 97 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 675968 | 22.11 | ug/L | 93 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 656280 | 23.25 | ug/L | 96 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 596015 | 23.56 | ug/L | 95 |
| 56) | tert-butylbenzene | 10.78 | 119 | 696441 | 23.48 | ug/L | 92 |
| 57) | 1,2,4-trimethylbenzene | 10.81 | 105 | 652087 | 23.54 | ug/L | 92 |
| 58) | sec-butylbenzene | 10.90 | 105 | 884522 | 21.36 | ug/L | 96 |
| 59) | 4-isopropyltoluene | 10.99 | 119 | 674802 | 21.56 | ug/L | 97 |
| 60) | 1,3-Dichlorobenzene | 10.99 | 146 | 357450 | 22.45 | ug/L | 99 |
| 61) | 1,4-Dichlorobenzene | 11.05 | 146 | 355800 | 24.12 | ug/L | 98 |
| 62) | n-butylbenzene | 11.22 | 91 | 623864 | 23.19 | ug/L | 94 |
| 63) | 1,2-Dichlorobenzene | 11.26 | 146 | 313327 | 24.03 | ug/L | 99 |
| 64) | Hexachloroethane | 11.43 | 117 | 137367 | 25.34 | ug/L | 94 |
| 65) | 1,2-dibromo-3-chloropropan | 11.72 | 75 | 15154 | 26.09 | ug/L | 95 |
| 66) | 1,2,4-trichlorobenzene | 12.19 | 180 | 225586 | 24.52 | ug/L | 98 |
| 67) | hexachlorobutadiene | 12.26 | 225 | 129805 | 21.04 | ug/L | 99 |
| 68) | naphthalene | 12.36 | 128 | 243733 | 27.23 | ug/L | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.48 | 180 | 198084 | 25.09 | ug/L | 86 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN14.D Vial: 14
Acq On : 26 Jan 2017 7:12 pm Operator: MGC
Sample : 1701474-CAL4 Inst : MS-V5
Misc : REG VO-107-69231;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:17 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:14:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN10.D Vial: 10
Acq On : 26 Jan 2017 5:39 pm Operator: MGC
Sample : 1701474-CAL5 Inst : MS-V5
Misc : REG VO-107-69232;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:59 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 205022 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 294320 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.63 | 119 | 71070 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 60064 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 97.10% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 339503 | 9.72 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.20% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 99537 | 9.33 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 93.30% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 477266 | 39.67 | ug/L | 99 |
| 3) Chloromethane | 1.94 | 50 | 695770 | 42.68 | ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 593032 | 40.09 | ug/L | 99 |
| 5) Bromomethane | 2.44 | 94 | 343685 | 68.45 | ug/L | 99 |
| 6) Chloroethane | 2.57 | 64 | 395083 | 44.39 | ug/L | 91 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 572973 | 42.12 | ug/L | 97 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 394823 | 45.44 | ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.51 | 61 | 758317 | 44.92 | ug/L | 94 |
| 10) Methylene chloride | 4.15 | 84 | 388136 | 34.12 | ug/L | 99 |
| 11) MTBE | 4.49 | 73 | 650282 | 48.95 | ug/L # | 85 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 448055 | 48.51 | ug/L | 97 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 1004970 | 48.26 | ug/L | 100 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 646163 | 46.97 | ug/L # | 1 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 468840 | 49.09 | ug/L | 88 |
| 16) Bromochloromethane | 6.18 | 128 | 166860 | 54.35 | ug/L # | 69 |
| 17) Chloroform | 6.33 | 83 | 754797 | 46.78 | ug/L | 100 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 627468 | 46.70 | ug/L | 91 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 592449 | 41.64 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 476039 | 49.97 | ug/L | 99 |
| 22) 1,2-Dichloroethane | 7.00 | 62 | 439261 | 49.27 | ug/L # | 96 |
| 23) Benzene | 6.94 | 78 | 1850763 | 46.88 | ug/L | 99 |
| 25) Trichloroethene | 7.60 | 130 | 459567 | 43.90 | ug/L | 91 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 525608 | 47.34 | ug/L # | 85 |
| 27) Dibromomethane | 7.91 | 93 | 157826 | 51.94 | ug/L | 89 |
| 28) Bromodichloromethane | 8.06 | 83 | 472109 | 49.44 | ug/L # | 91 |
| 29) 2-ceve | 8.28 | 63 | 602240 | 189.21 | ug/L | 84 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 613928 | 46.25 | ug/L # | 85 |
| 32) Toluene | 8.66 | 92 | 1080290 | 42.62 | ug/L | 82 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 430070 | 48.31 | ug/L | 88 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 215549 | 48.17 | ug/L # | 80 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 457985 | 40.76 | ug/L # | 88 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 378593 | 45.65 | ug/L | 85 |
| 37) Dibromochloromethane | 9.24 | 129 | 265519 | 53.45 | ug/L # | 94 |
| 38) 1,2-Dibromoethane | 9.32 | 107 | 207195 | 50.46 | ug/L | 92 |
| 40) Chlorobenzene | 9.64 | 112 | 997094 | 44.68 | ug/L | 99 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 310834 | 51.69 | ug/L | 98 |
| 42) Ethylbenzene | 9.70 | 106 | 554127 | 41.20 | ug/L | 88 |
| 43) P+m-Xylene | 9.78 | 106 | 1312132 | 77.35 | ug/L | 96 |
| 44) O-Xylene | 10.02 | 106 | 653403 | 40.54 | ug/L | 99 |
| 45) Styrene | 10.03 | 104 | 981440 | 41.04 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 136307 | 57.59 | ug/L | 98 |
| 47) Isopropylbenzene | 10.24 | 105 | 1593819 | 37.30 | ug/L | 97 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 200991 | 49.07 | ug/L | 100 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 38617 | 42.44 | ug/L | 99 |
| 51) n-propylbenzene | 10.49 | 91 | 1783616 | 35.10 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN10.D Vial: 10
Acq On : 26 Jan 2017 5:39 pm Operator: MGC
Sample : 1701474-CAL5 Inst : MS-V5
Misc : REG VO-107-69232;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:59 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

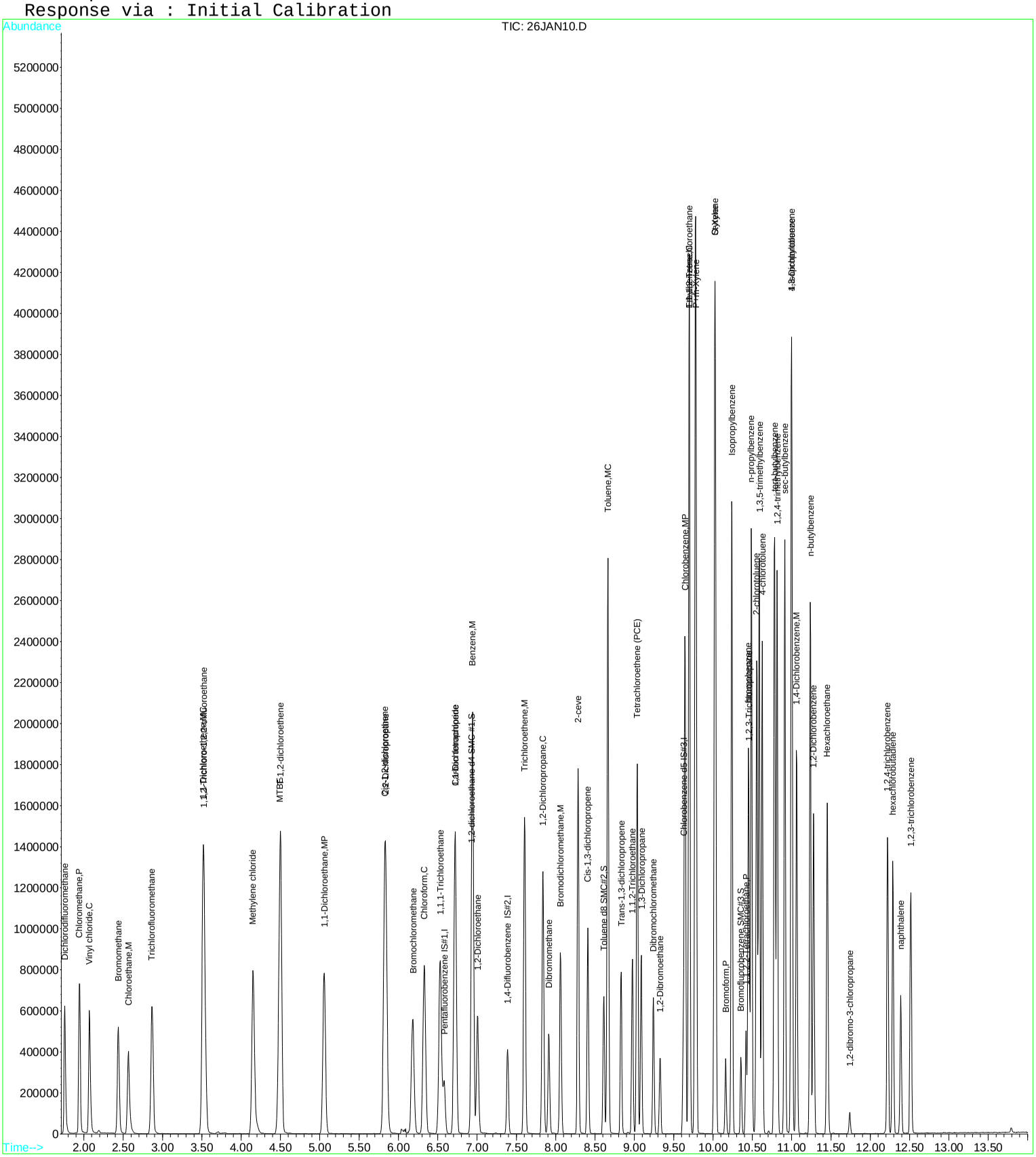
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 389753 | 40.45 | ug/L | | 74 |
| 53) | 1,3,5-trimethylbenzene | 10.59 | 105 | 1201513 | 34.33 | ug/L | | 90 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 1191182 | 35.35 | ug/L | | 95 |
| 55) | 4-chlorotoluene | 10.63 | 91 | 1071759 | 37.49 | ug/L | | 93 |
| 56) | tert-butylbenzene | 10.78 | 119 | 1288954 | 37.37 | ug/L | | 87 |
| 57) | 1,2,4-trimethylbenzene | 10.82 | 105 | 1162871 | 34.10 | ug/L | | 87 |
| 58) | sec-butylbenzene | 10.91 | 105 | 1607727 | 34.52 | ug/L | | 92 |
| 59) | 4-isopropyltoluene | 10.99 | 119 | 1244962 | 34.35 | ug/L | | 99 |
| 60) | 1,3-Dichlorobenzene | 11.01 | 146 | 616735 | 35.71 | ug/L | # | 95 |
| 61) | 1,4-Dichlorobenzene | 11.07 | 146 | 625564 | 36.99 | ug/L | | 92 |
| 62) | n-butylbenzene | 11.24 | 91 | 1139662 | 34.89 | ug/L | # | 89 |
| 63) | 1,2-Dichlorobenzene | 11.28 | 146 | 534797 | 36.32 | ug/L | | 88 |
| 64) | Hexachloroethane | 11.45 | 117 | 254768 | 51.70 | ug/L | # | 74 |
| 65) | 1,2-dibromo-3-chloropropan | 11.74 | 75 | 26222 | 46.21 | ug/L | | 85 |
| 66) | 1,2,4-trichlorobenzene | 12.22 | 180 | 408130 | 37.01 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.29 | 225 | 251147 | 31.75 | ug/L | # | 90 |
| 68) | naphthalene | 12.39 | 128 | 434905 | 40.98 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.52 | 180 | 361636m | 38.09 | ug/L | | |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN10.D Vial: 10
Acq On : 26 Jan 2017 5:39 pm Operator: MGC
Sample : 1701474-CAL5 Inst : MS-V5
Misc : REG VO-107-69232;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:59 2017 Quant Results File: 82605.RES

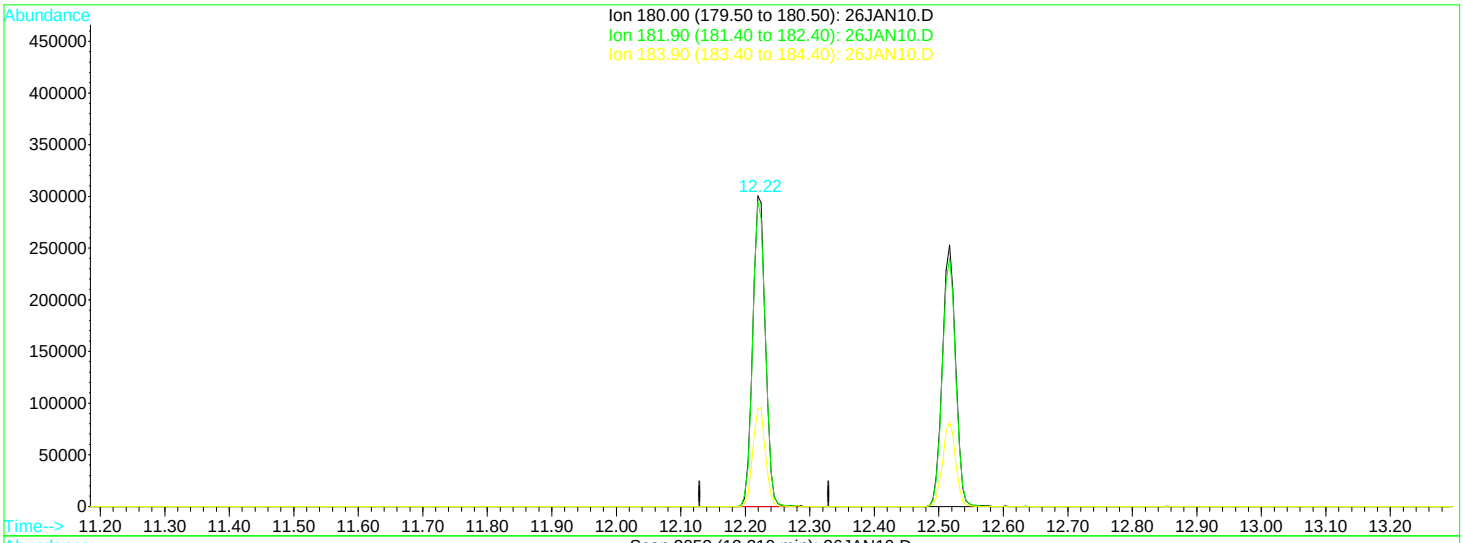
Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Initial Calibration

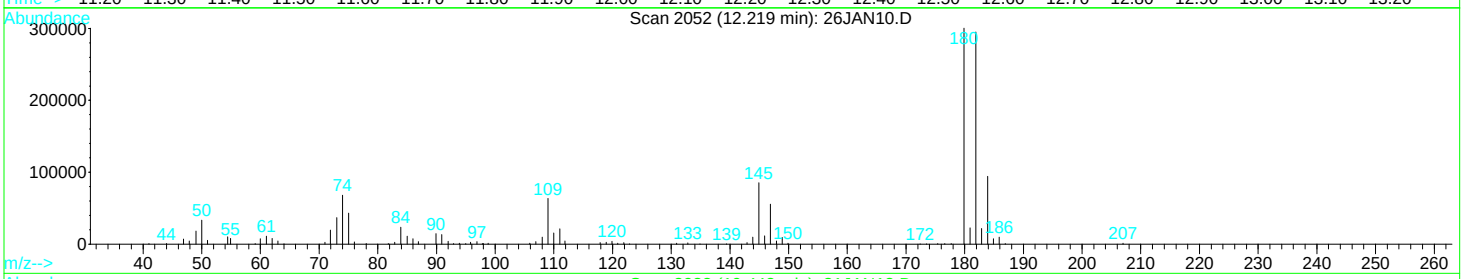


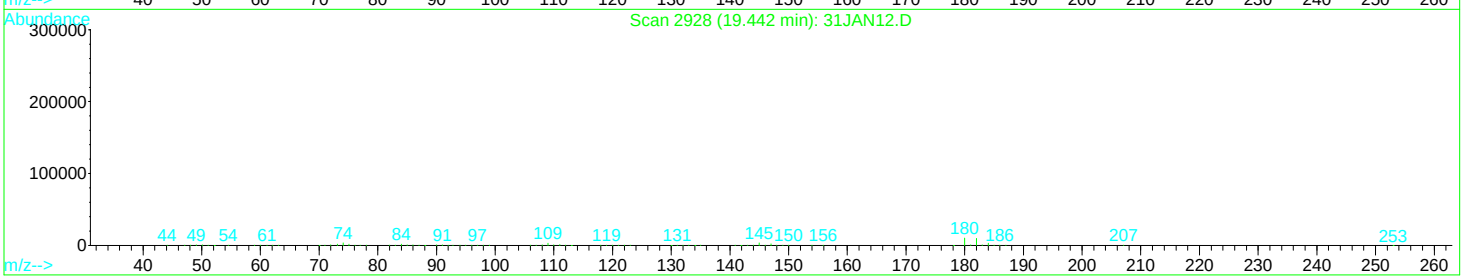
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN10.D Vial: 10
Acq On : 26 Jan 2017 5:39 pm Operator: MGC
Sample : 1701474-CAL5 Inst : MS-V5
Misc : REG VO-107-69232;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:41 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN10.D

(69) 1,2,3-trichlorobenzene

12.22min 42.99ug/L

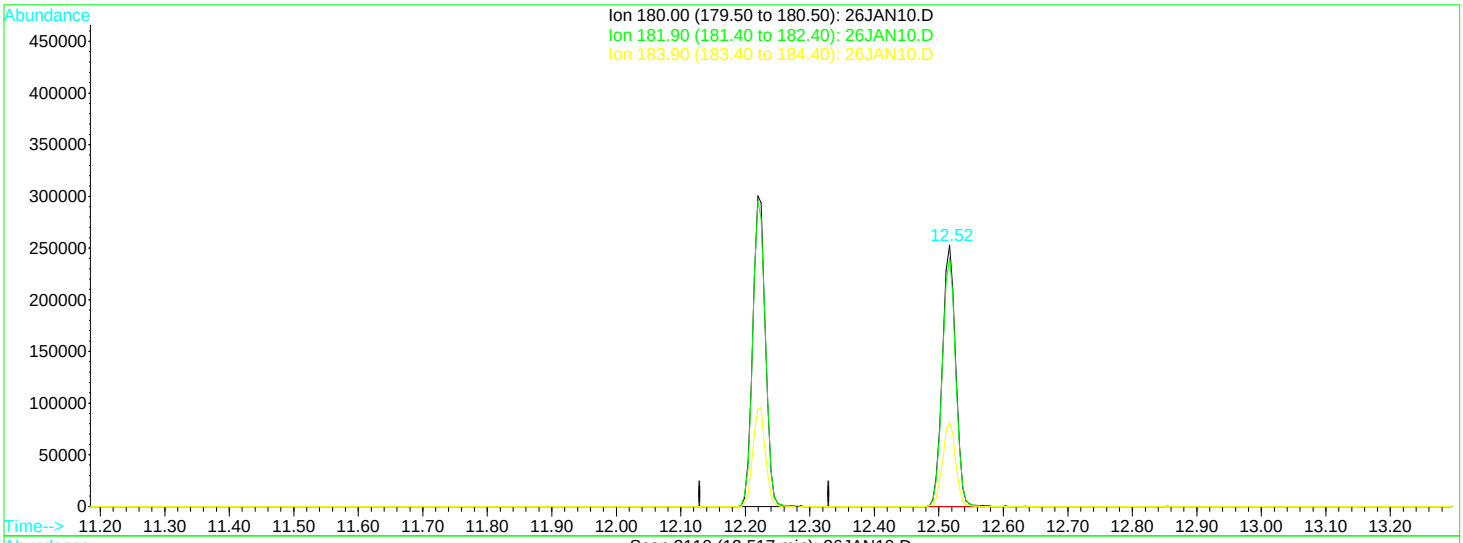
response 408130

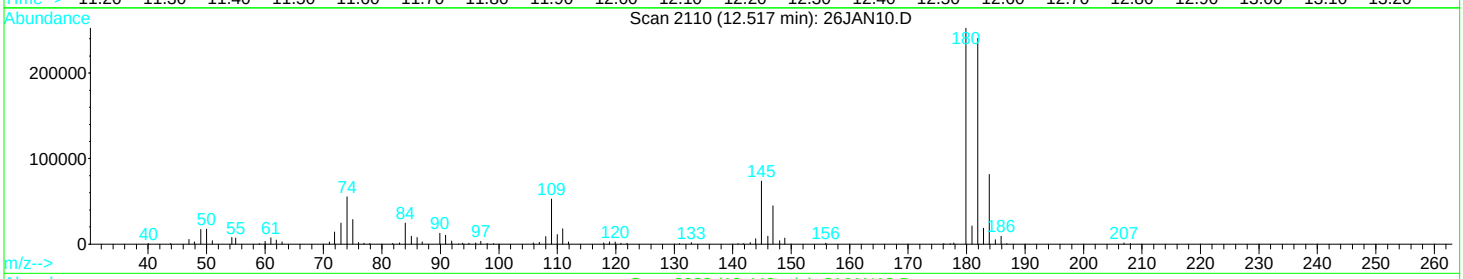
| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 98.46 |
| 183.90 | 31.10 | 31.56 |
| 0.00 | 0.00 | 0.00 |

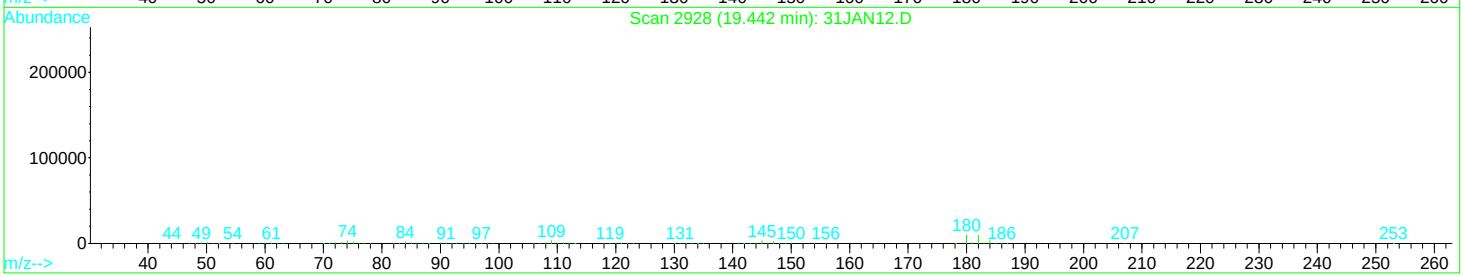
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN10.D Vial: 10
Acq On : 26 Jan 2017 5:39 pm Operator: MGC
Sample : 1701474-CAL5 Inst : MS-V5
Misc : REG VO-107-69232;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 7:59 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN10.D

(69) 1,2,3-trichlorobenzene

12.52min 38.09ug/L m

response 361636

| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 111.12 |
| 183.90 | 31.10 | 35.62 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN11.D Vial: 11
Acq On : 26 Jan 2017 6:02 pm Operator: MGC
Sample : 1701474-CAL6 Inst : MS-V5
Misc : REG VO-107-69233;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:00 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 209417 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 306655 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.63 | 119 | 67636 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 54674 | 8.66 | ug/L | 0.01 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 86.60% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 339916 | 9.34 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 93.40% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 90935 | 8.95 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 89.50% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 938102 | 76.34 | ug/L | 99 |
| 3) Chloromethane | 1.94 | 50 | 1271798 | 76.37 | ug/L | 100 |
| 4) Vinyl chloride | 2.07 | 62 | 1122609 | 74.29 | ug/L | 99 |
| 5) Bromomethane | 2.43 | 94 | 679923 | 132.57 | ug/L | 97 |
| 6) Chloroethane | 2.57 | 64 | 767994 | 84.48 | ug/L | 92 |
| 7) Trichlorofluoromethane | 2.86 | 101 | 1111408 | 79.99 | ug/L | 96 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 802093 | 90.37 | ug/L | 96 |
| 9) 1,1-Dichloroethene | 3.51 | 61 | 1447227 | 83.93 | ug/L | 93 |
| 10) Methylene chloride | 4.15 | 84 | 738809 | 63.58 | ug/L | 98 |
| 11) MTBE | 4.49 | 73 | 1182599 | 87.15 | ug/L | 87 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 850550 | 90.15 | ug/L | 95 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 1924856 | 90.50 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.83 | 77 | 1226625 | 87.30 | ug/L # | 1 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 901913 | 92.46 | ug/L | 93 |
| 16) Bromochloromethane | 6.18 | 128 | 323744 | 103.24 | ug/L # | 72 |
| 17) Chloroform | 6.33 | 83 | 1410659 | 85.60 | ug/L | 98 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 1210519 | 88.20 | ug/L | 97 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 1119103 | 77.00 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 915078 | 94.03 | ug/L | 99 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 807338 | 88.66 | ug/L # | 96 |
| 23) Benzene | 6.94 | 78 | 3397786 | 84.25 | ug/L | 99 |
| 25) Trichloroethene | 7.61 | 130 | 877210 | 80.42 | ug/L | 90 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 980954 | 84.81 | ug/L # | 83 |
| 27) Dibromomethane | 7.91 | 93 | 301035 | 95.08 | ug/L | 92 |
| 28) Bromodichloromethane | 8.06 | 83 | 896979 | 90.16 | ug/L # | 94 |
| 29) 2-ceve | 8.29 | 63 | 1107253 | 333.88 | ug/L | 86 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 1132956 | 81.92 | ug/L # | 83 |
| 32) Toluene | 8.66 | 92 | 1944258 | 73.62 | ug/L | 77 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 820106 | 88.42 | ug/L # | 85 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 408901 | 87.71 | ug/L # | 80 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 870572 | 74.37 | ug/L # | 89 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 717674 | 83.05 | ug/L | 85 |
| 37) Dibromochloromethane | 9.24 | 129 | 505483 | 97.67 | ug/L # | 93 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 380385 | 88.90 | ug/L | 89 |
| 40) Chlorobenzene | 9.65 | 112 | 1758283 | 82.79 | ug/L | 98 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 528465 | 92.35 | ug/L | 98 |
| 42) Ethylbenzene | 9.70 | 106 | 906163 | 70.80 | ug/L | 81 |
| 43) P+m-Xylene | 9.78 | 106 | 2185410 | 135.37 | ug/L | 96 |
| 44) O-Xylene | 10.02 | 106 | 1125691 | 73.38 | ug/L | 95 |
| 45) Styrene | 10.04 | 104 | 1624727 | 71.40 | ug/L | 100 |
| 46) Bromoform | 10.16 | 173 | 249747 | 110.88 | ug/L | 98 |
| 47) Isopropylbenzene | 10.24 | 105 | 2627557 | 64.61 | ug/L | 92 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 347787 | 89.22 | ug/L | 99 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 69407 | 80.15 | ug/L | 95 |
| 51) n-propylbenzene | 10.49 | 91 | 2906193 | 60.10 | ug/L | 95 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN11.D Vial: 11
Acq On : 26 Jan 2017 6:02 pm Operator: MGC
Sample : 1701474-CAL6 Inst : MS-V5
Misc : REG VO-107-69233;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:00 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 05:41:08 2017
Response via : Initial Calibration
DataAcq Meth : 82605

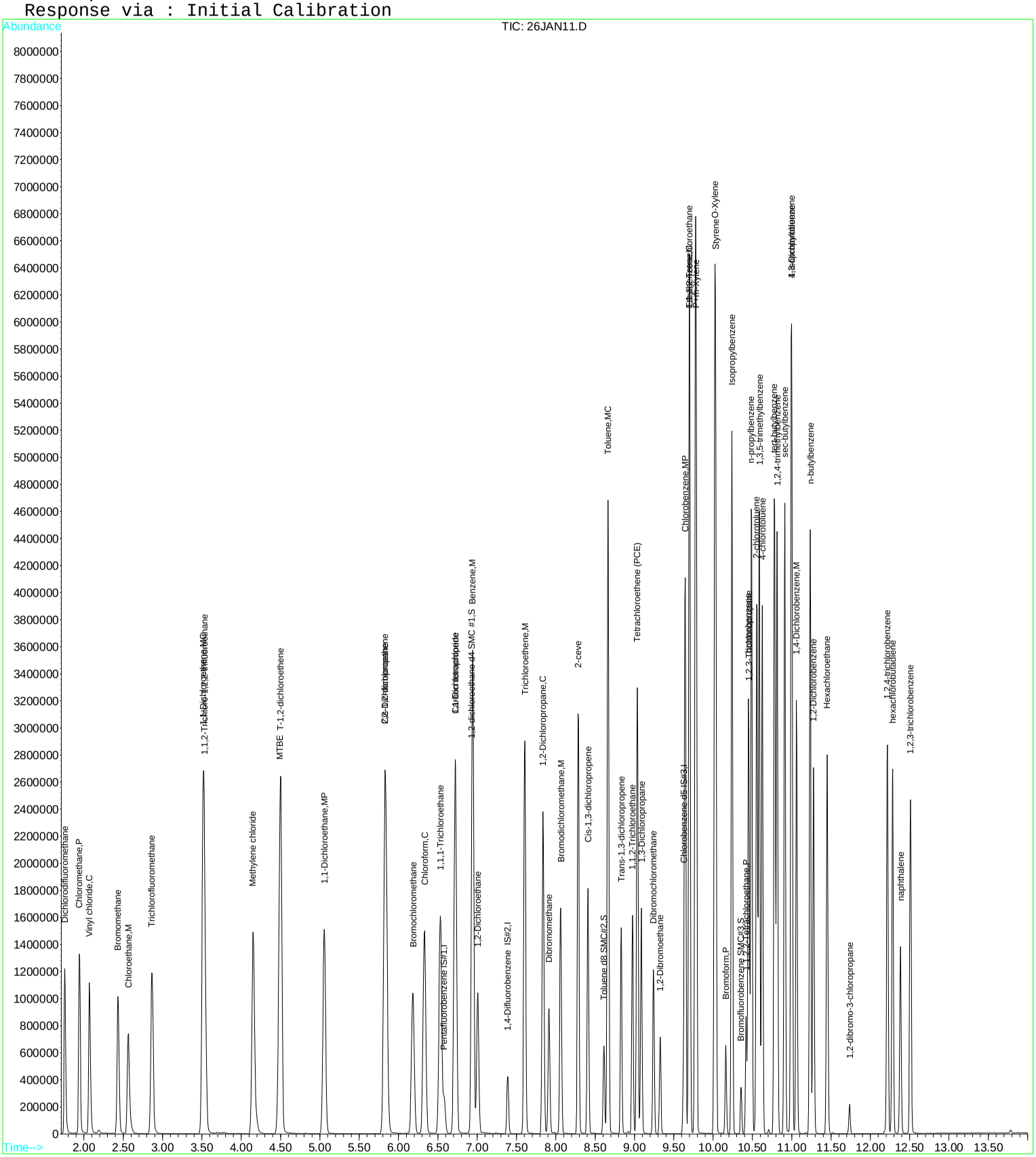
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 696671 | 75.97 | ug/L | | 73 |
| 53) | 1,3,5-trimethylbenzene | 10.59 | 105 | 1937130 | 58.15 | ug/L | | 86 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 2032640 | 63.38 | ug/L | | 98 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 1751403 | 64.38 | ug/L | | 89 |
| 56) | tert-butylbenzene | 10.78 | 119 | 2182966 | 66.50 | ug/L | | 94 |
| 57) | 1,2,4-trimethylbenzene | 10.81 | 105 | 1942867 | 59.86 | ug/L | | 82 |
| 58) | sec-butylbenzene | 10.91 | 105 | 2615782 | 59.01 | ug/L | | 89 |
| 59) | 4-isopropyltoluene | 10.99 | 119 | 2010646 | 58.29 | ug/L | | 98 |
| 60) | 1,3-Dichlorobenzene | 11.00 | 146 | 1008596 | 61.37 | ug/L | # | 96 |
| 61) | 1,4-Dichlorobenzene | 11.06 | 146 | 1049566 | 65.21 | ug/L | | 93 |
| 62) | n-butylbenzene | 11.23 | 91 | 1915730 | 61.63 | ug/L | # | 86 |
| 63) | 1,2-Dichlorobenzene | 11.28 | 146 | 911052 | 65.01 | ug/L | | 87 |
| 64) | Hexachloroethane | 11.45 | 117 | 441359 | 94.11 | ug/L | # | 72 |
| 65) | 1,2-dibromo-3-chloropropan | 11.74 | 75 | 50919 | 94.29 | ug/L | | 80 |
| 66) | 1,2,4-trichlorobenzene | 12.22 | 180 | 825134 | 78.61 | ug/L | | 97 |
| 67) | hexachlorobutadiene | 12.28 | 225 | 523049 | 69.47 | ug/L | # | 89 |
| 68) | naphthalene | 12.38 | 128 | 908952 | 89.99 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.51 | 180 | 722813m | 80.00 | ug/L | | |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN11.D Vial: 11
Acq On : 26 Jan 2017 6:02 pm Operator: MGC
Sample : 1701474-CAL6 Inst : MS-V5
Misc : REG VO-107-69233;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:00 2017 Quant Results File: 82605.RES

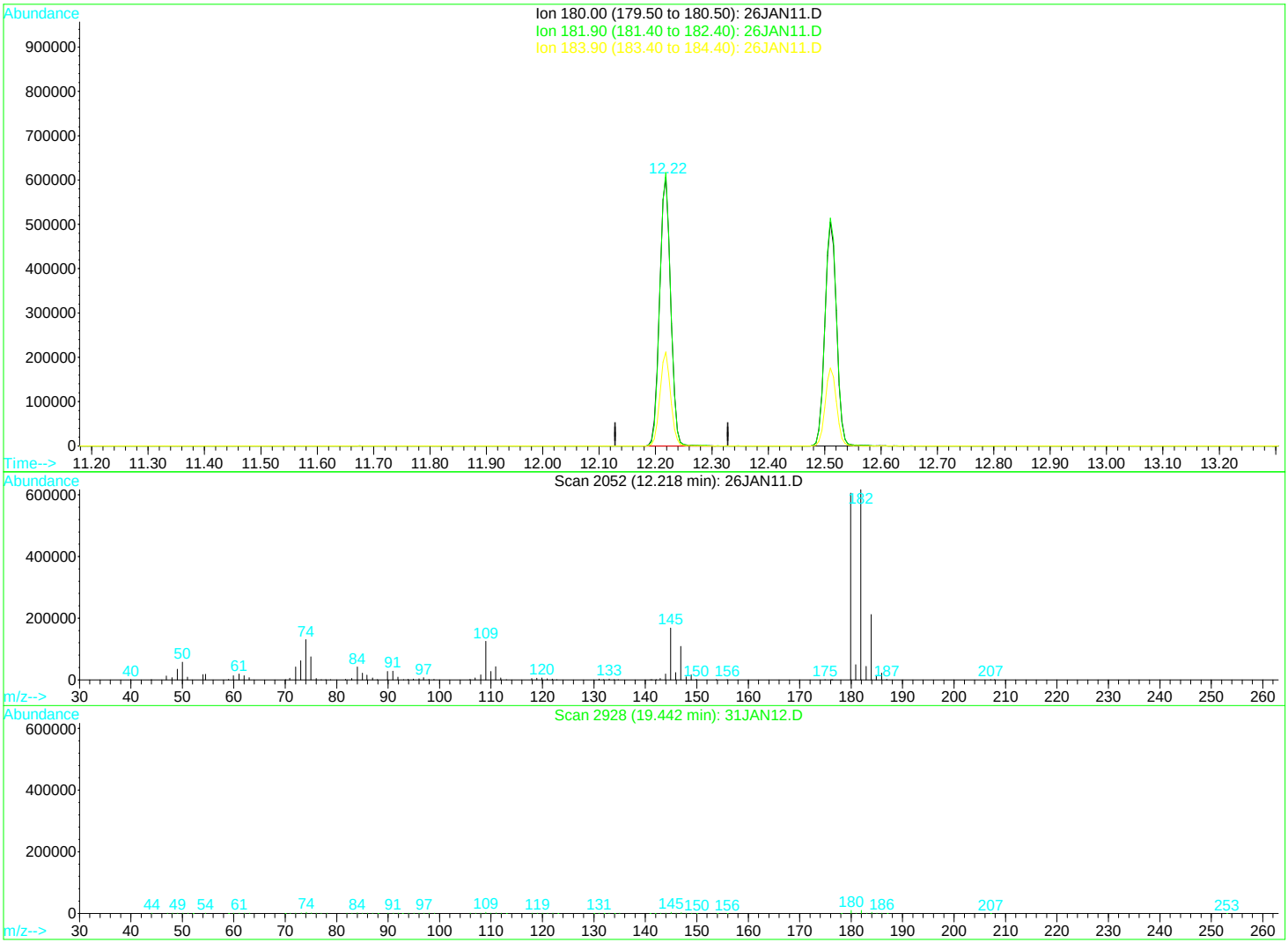
Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN11.D Vial: 11
Acq On : 26 Jan 2017 6:02 pm Operator: MGC
Sample : 1701474-CAL6 Inst : MS-V5
Misc : REG VO-107-69233;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:41 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN11.D

(69) 1,2,3-trichlorobenzene

12.22min 91.32ug/L

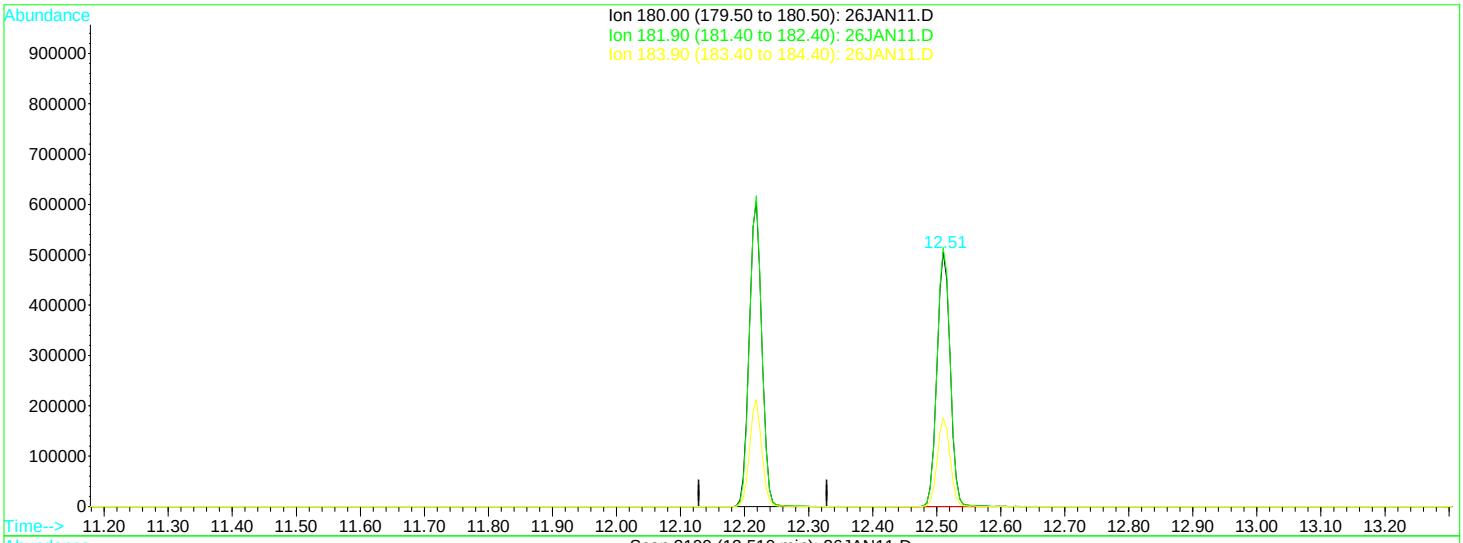
response 825134

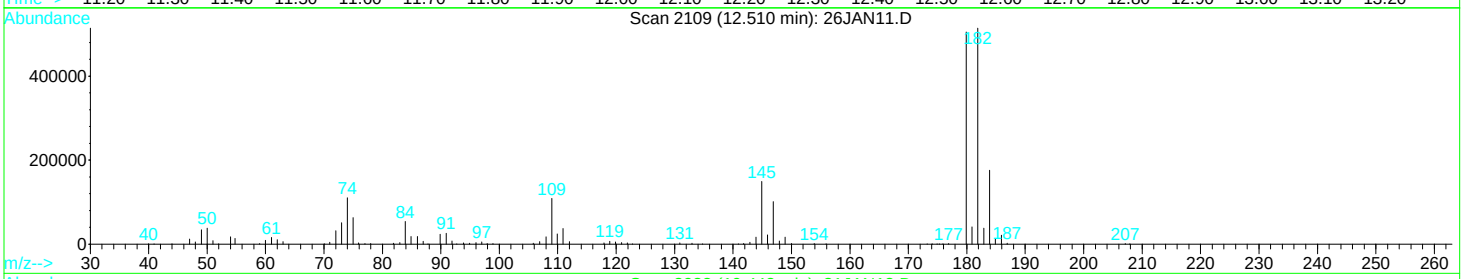
| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 99.31 |
| 183.90 | 31.10 | 33.58 |
| 0.00 | 0.00 | 0.00 |

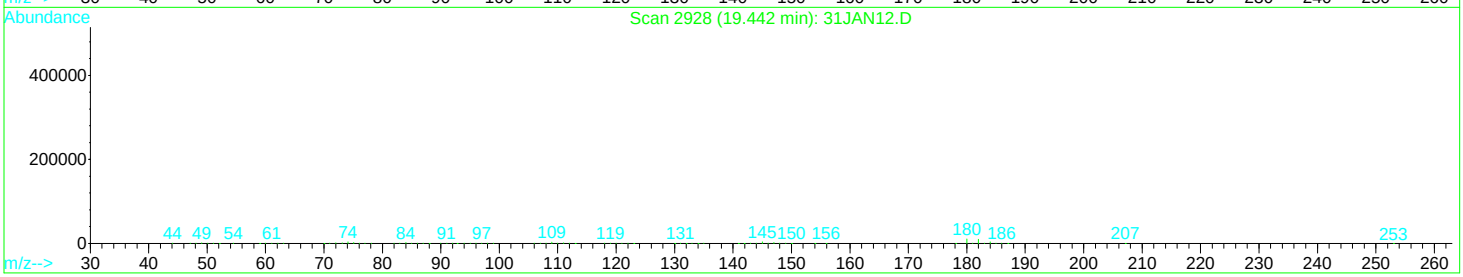
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN11.D Vial: 11
Acq On : 26 Jan 2017 6:02 pm Operator: MGC
Sample : 1701474-CAL6 Inst : MS-V5
Misc : REG VO-107-69233;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:00 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Multiple Level Calibration




TIC: 26JAN11.D

(69) 1,2,3-trichlorobenzene

12.51min 80.00ug/L m

response 722813

| Ion | Exp% | Act% |
|---|---|---|
| 180.00 | 100 | 100 |
| 181.90 | 95.60 | 113.37 |
| 183.90 | 31.10 | 38.33 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB07.D Vial: 7
Acq On : 7 Feb 2017 9:30 am Operator: MGC
Sample : 1702048-CAL7 Inst : MS-V5
Misc : 1 VO-107-69296;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:03 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 198502 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 262651 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65644 | 10.00 | ug/L | | 0.00 |

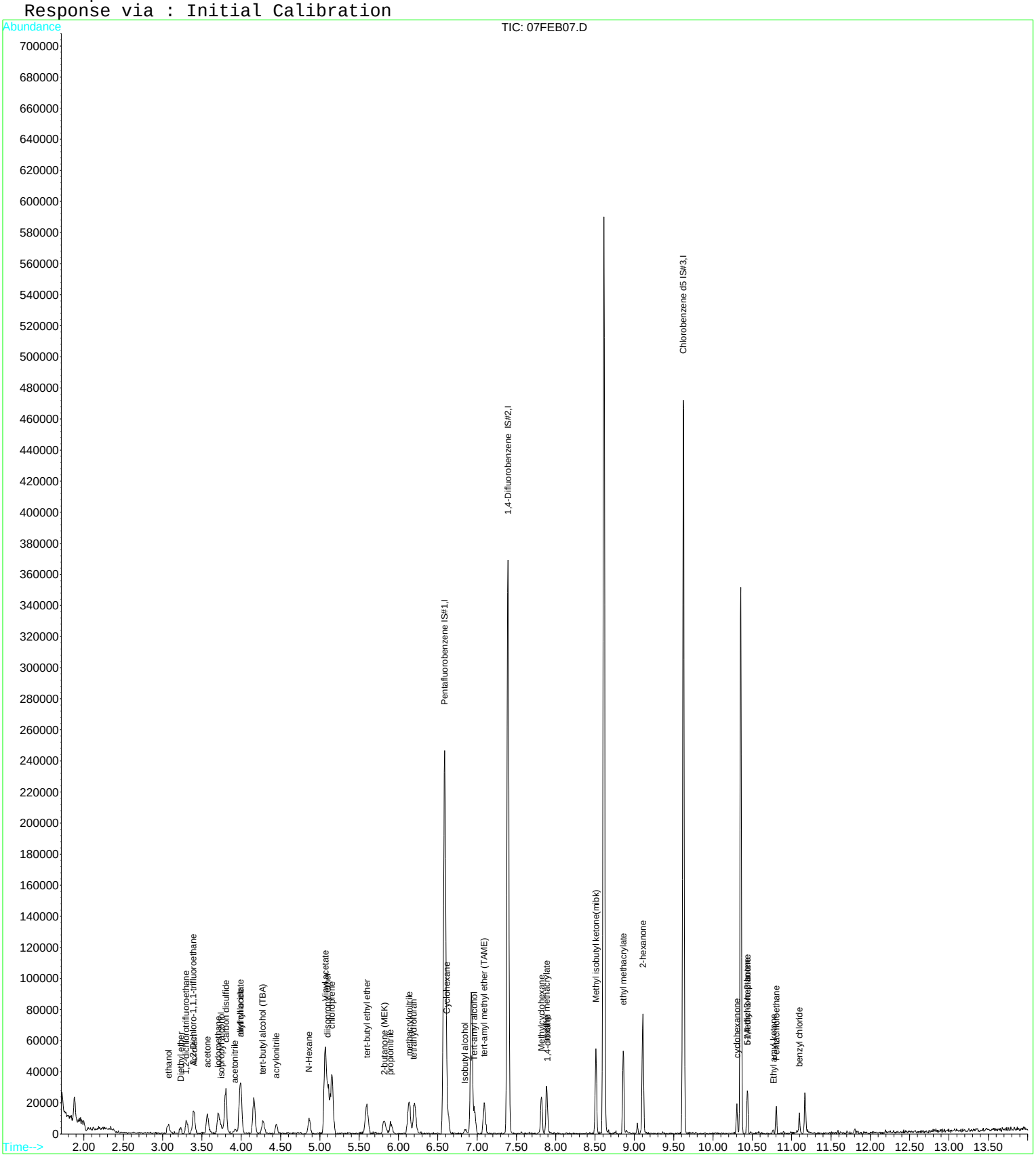
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.07 | 45 | 7786 | 202.21 | ug/L | # | 69 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.40 | 83 | 9856 | 0.57 | ug/L | # | 91 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 5959 | 0.51 | ug/L | # | 22 |
| 5) Diethyl ether | 3.23 | 59 | 1675 | 0.34 | ug/L | # | 38 |
| 6) isopropyl alcohol | 3.74 | 45 | 8327 | 44.14 | ug/L | # | 91 |
| 7) Acrolein | 3.41 | 56 | 3998 | 9.17 | ug/L | | 86 |
| 8) acetone | 3.57 | 43 | 18692 | 19.72 | ug/L | | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 11451 | 46.74 | ug/L | | 100 |
| 10) acetonitrile | 3.92 | 41 | 4178 | 9.49 | ug/L | # | 40 |
| 11) methyl acetate | 3.99 | 43 | 15619 | 5.48 | ug/L | # | 85 |
| 12) allyl chloride | 4.00 | 41 | 39580 | 1.84 | ug/L | | 93 |
| 13) iodomethane | 3.71 | 142 | 18389 | 2.85 | ug/L | # | 75 |
| 14) acrylonitrile | 4.45 | 53 | 5014 | 3.84 | ug/L | | 93 |
| 15) carbon disulfide | 3.81 | 76 | 45456 | 1.72 | ug/L | | 100 |
| 16) N-Hexane | 4.86 | 57 | 5905 | 0.51 | ug/L | # | 88 |
| 17) diisopropyl ether | 5.10 | 87 | 5484 | 0.86 | ug/L | | 70 |
| 18) Vinyl acetate | 5.07 | 43 | 115619 | 9.69 | ug/L | # | 94 |
| 19) chloroprene | 5.16 | 53 | 33412 | 1.71 | ug/L | | 93 |
| 20) tert-butyl ethyl ether | 5.60 | 59 | 22719 | 0.94 | ug/L | | 94 |
| 21) 2-butanone (MEK) | 5.82 | 43 | 16947 | 10.42 | ug/L | | 100 |
| 22) propionitrile | 5.89 | 54 | 10495 | 22.55 | ug/L | # | 62 |
| 23) Isobutyl alcohol | 6.84 | 43 | 2828 | 20.12 | ug/L | # | 75 |
| 24) methacrylonitrile | 6.13 | 67 | 9877 | 8.47 | ug/L | | 70 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 8306 | 41.43 | ug/L | # | 88 |
| 26) tetrahydrofuran | 6.19 | 42 | 18765 | 18.68 | ug/L | | 96 |
| 27) Cyclohexane | 6.62 | 56 | 15018 | 0.69 | ug/L | # | 71 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 12531 | 0.95 | ug/L | | 89 |
| 30) methyl methacrylate | 7.88 | 69 | 9247 | 4.43 | ug/L | | 77 |
| 31) Methylcyclohexane | 7.81 | 55 | 9285 | 0.55 | ug/L | | 91 |
| 32) 1,4-dioxane | 7.90 | 88 | 2271 | 102.27 | ug/L | | 94 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 31463 | 8.59 | ug/L | | 94 |
| 34) ethyl methacrylate | 8.86 | 69 | 20156 | 4.45 | ug/L | | 97 |
| 35) 2-hexanone | 9.11 | 43 | 48019 | 19.03 | ug/L | | 91 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 3195 | 0.86 | ug/L | # | 77 |
| 38) cyclohexanone | 10.30 | 55 | 6304 | 17.25 | ug/L | | 91 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 3650 | 3.81 | ug/L | # | 86 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 935 | 0.33 | ug/L | # | 63 |
| 41) Pentachloroethane | 10.80 | 167 | 2323 | 0.81 | ug/L | | 93 |
| 42) benzyl chloride | 11.10 | 91 | 7817 | 1.56 | ug/L | | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB07.D Vial: 7
Acq On : 7 Feb 2017 9:30 am Operator: MGC
Sample : 1702048-CAL7 Inst : MS-V5
Misc : 1 VO-107-69296;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:03 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\19-1721\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB08.D Vial: 8
Acq On : 7 Feb 2017 9:53 am Operator: MGC
Sample : 1702048-CAL8 Inst : MS-V5
Misc : 1 VO-107-69297;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:20 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 197084 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 256192 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66400 | 10.00 | ug/L | | 0.00 |

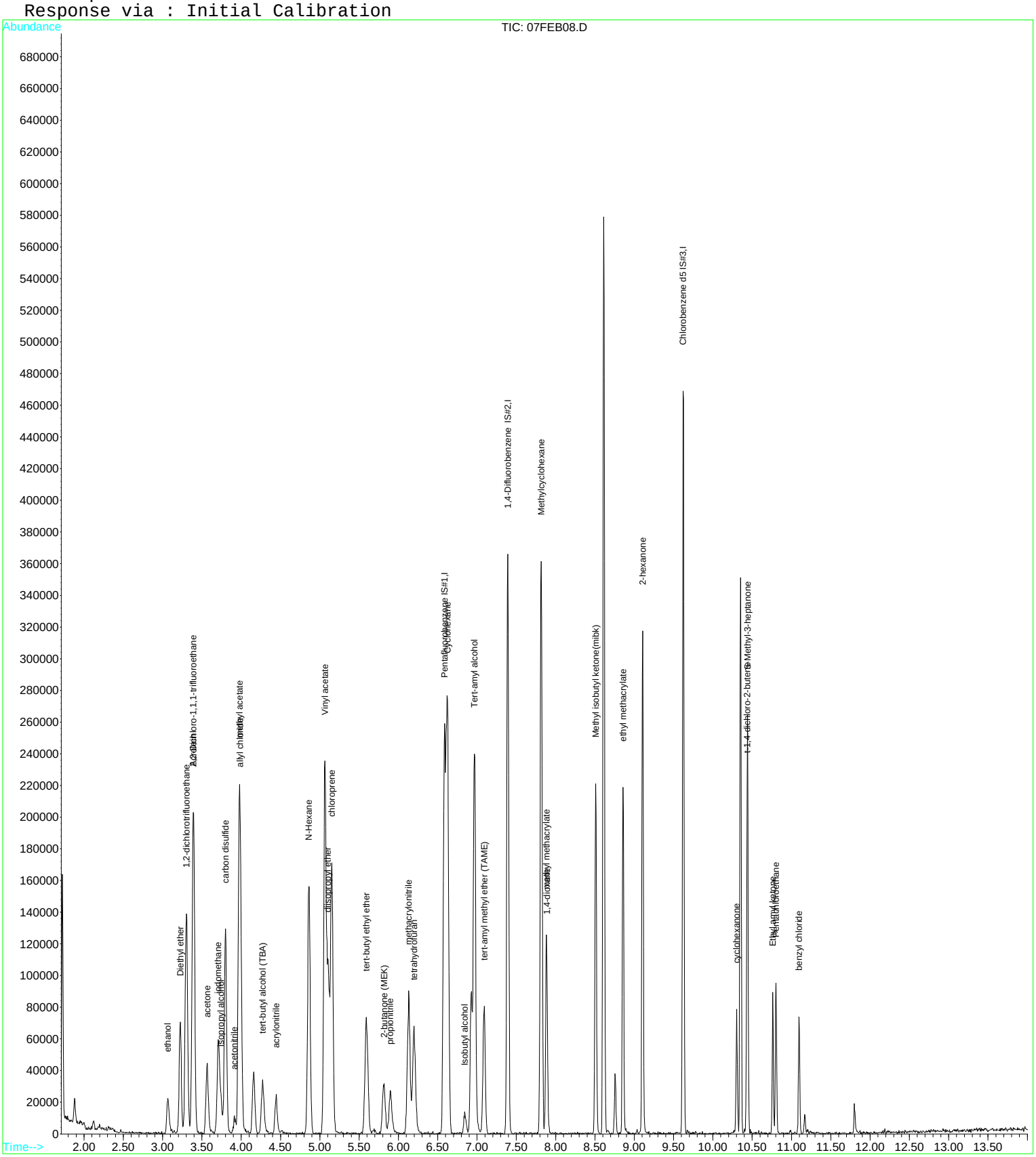
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.07 | 45 | 28100m | 735.05 | ug/L | | |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 141718 | 8.19 | ug/L | # | 94 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 92369 | 8.02 | ug/L | | 86 |
| 5) Diethyl ether | 3.22 | 59 | 42347 | 8.60 | ug/L | | 93 |
| 6) isopropyl alcohol | 3.74 | 45 | 33116 | 176.82 | ug/L | | 97 |
| 7) Acrolein | 3.39 | 56 | 16710 | 38.59 | ug/L | | 100 |
| 8) acetone | 3.57 | 43 | 69203 | 73.52 | ug/L | | 93 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 47038 | 193.40 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 14538 | 33.24 | ug/L | # | 56 |
| 11) methyl acetate | 3.97 | 43 | 235786 | 83.27 | ug/L | | 92 |
| 12) allyl chloride | 3.99 | 41 | 165954 | 7.76 | ug/L | | 98 |
| 13) iodomethane | 3.71 | 142 | 80160 | 12.53 | ug/L | # | 77 |
| 14) acrylonitrile | 4.45 | 53 | 20204 | 15.57 | ug/L | | 98 |
| 15) carbon disulfide | 3.80 | 76 | 197515 | 7.51 | ug/L | | 99 |
| 16) N-Hexane | 4.87 | 57 | 92832 | 8.01 | ug/L | | 93 |
| 17) diisopropyl ether | 5.10 | 87 | 20487 | 3.25 | ug/L | | 68 |
| 18) Vinyl acetate | 5.06 | 43 | 466219 | 39.34 | ug/L | | 96 |
| 19) chloroprene | 5.15 | 53 | 144017 | 7.42 | ug/L | | 91 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 92460 | 3.85 | ug/L | | 93 |
| 21) 2-butanone (MEK) | 5.82 | 43 | 60663 | 37.55 | ug/L | | 99 |
| 22) propionitrile | 5.90 | 54 | 40527 | 87.72 | ug/L | | 95 |
| 23) Isobutyl alcohol | 6.84 | 43 | 11271 | 80.76 | ug/L | | 96 |
| 24) methacrylonitrile | 6.13 | 67 | 42658 | 36.85 | ug/L | | 87 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 157797 | 792.74 | ug/L | | 93 |
| 26) tetrahydrofuran | 6.20 | 42 | 72707 | 72.88 | ug/L | | 97 |
| 27) Cyclohexane | 6.63 | 56 | 179780 | 8.32 | ug/L | | 97 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 48466 | 3.69 | ug/L | | 90 |
| 30) methyl methacrylate | 7.88 | 69 | 39568 | 19.43 | ug/L | | 89 |
| 31) Methylcyclohexane | 7.82 | 55 | 133827 | 8.06 | ug/L | | 98 |
| 32) 1,4-dioxane | 7.89 | 88 | 8552 | 394.82 | ug/L | | 90 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 140503 | 39.31 | ug/L | | 92 |
| 34) ethyl methacrylate | 8.86 | 69 | 84820 | 19.18 | ug/L | | 98 |
| 35) 2-hexanone | 9.11 | 43 | 184511 | 74.95 | ug/L | | 95 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 54036 | 14.33 | ug/L | | 84 |
| 38) cyclohexanone | 10.30 | 55 | 26702 | 72.24 | ug/L | | 96 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 18431 | 19.01 | ug/L | # | 86 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 20049 | 7.00 | ug/L | | 84 |
| 41) Pentachloroethane | 10.80 | 167 | 12398 | 4.29 | ug/L | # | 85 |
| 42) benzyl chloride | 11.10 | 91 | 39317 | 7.78 | ug/L | | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB08.D Vial: 8
Acq On : 7 Feb 2017 9:53 am Operator: MGC
Sample : 1702048-CAL8 Inst : MS-V5
Misc : 1 VO-107-69297;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:20 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:19:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB09.D Vial: 9
Acq On : 7 Feb 2017 10:17 am Operator: MGC
Sample : 1702048-CAL9 Inst : MS-V5
Misc : 1 VO-107-69298;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:19 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 199098 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 268584 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66850 | 10.00 | ug/L | | 0.00 |

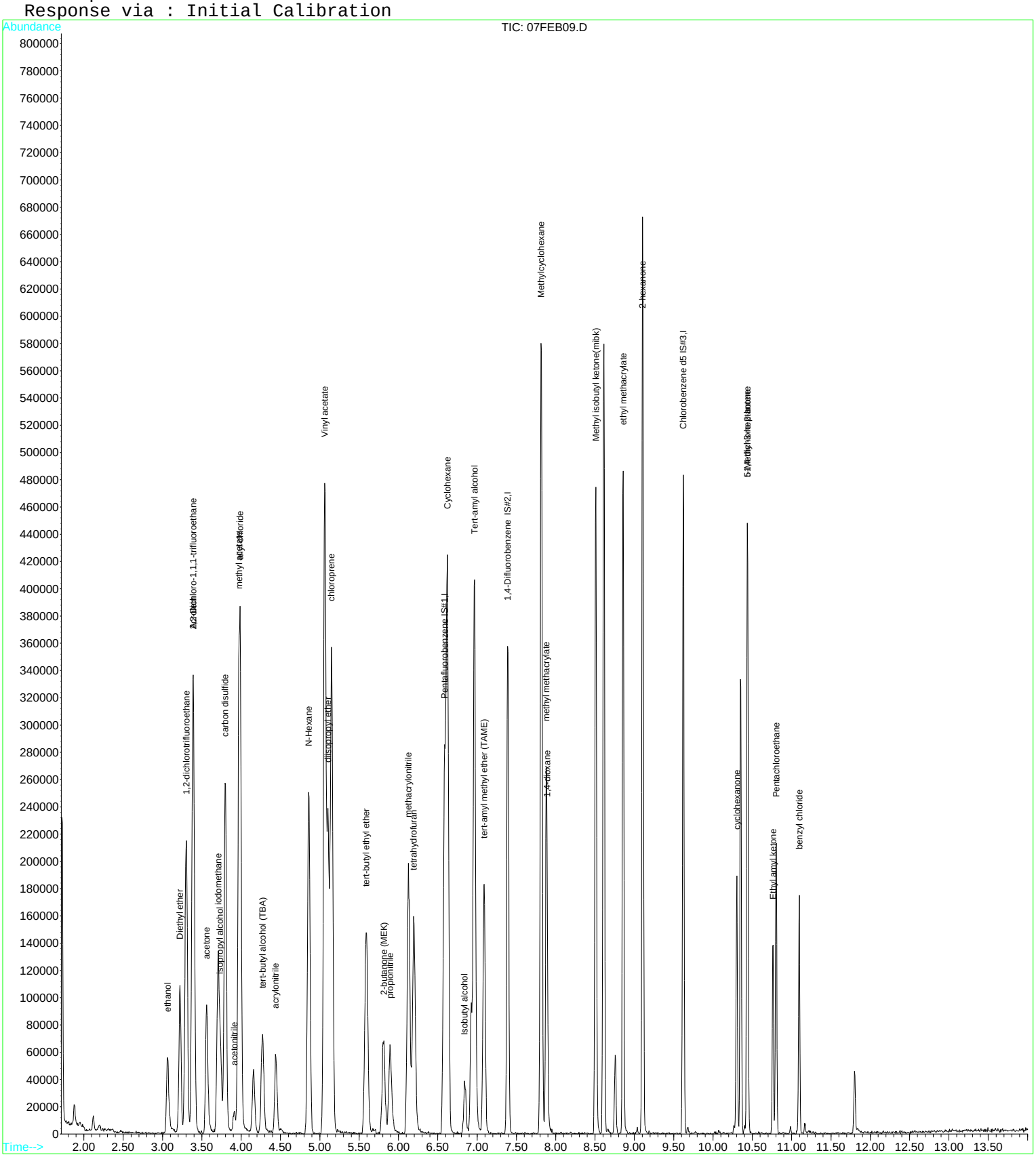
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.06 | 45 | 71952m | 1863.10 | ug/L | | |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 224792 | 12.85 | ug/L | # | 93 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 140146 | 12.04 | ug/L | | 89 |
| 5) Diethyl ether | 3.22 | 59 | 64426 | 12.96 | ug/L | | 91 |
| 6) isopropyl alcohol | 3.73 | 45 | 81421 | 430.35 | ug/L | | 99 |
| 7) Acrolein | 3.39 | 56 | 43096 | 98.51 | ug/L | | 94 |
| 8) acetone | 3.56 | 43 | 145760 | 153.28 | ug/L | | 98 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 101936 | 414.87 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 30333 | 68.66 | ug/L | # | 37 |
| 11) methyl acetate | 3.97 | 43 | 376390 | 131.58 | ug/L | | 91 |
| 12) allyl chloride | 3.99 | 41 | 334932 | 15.50 | ug/L | | 100 |
| 13) iodomethane | 3.71 | 142 | 176409 | 27.30 | ug/L | # | 76 |
| 14) acrylonitrile | 4.44 | 53 | 52299 | 39.91 | ug/L | | 98 |
| 15) carbon disulfide | 3.80 | 76 | 409355 | 15.40 | ug/L | | 98 |
| 16) N-Hexane | 4.86 | 57 | 150604 | 12.87 | ug/L | | 93 |
| 17) diisopropyl ether | 5.11 | 87 | 46676 | 7.32 | ug/L | | 87 |
| 18) Vinyl acetate | 5.06 | 43 | 954654 | 79.75 | ug/L | | 96 |
| 19) chloroprene | 5.15 | 53 | 301346 | 15.36 | ug/L | | 92 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 191724 | 7.90 | ug/L | | 91 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 132999 | 81.50 | ug/L | | 100 |
| 22) propionitrile | 5.89 | 54 | 94950 | 203.43 | ug/L | | 96 |
| 23) Isobutyl alcohol | 6.84 | 43 | 30407 | 215.66 | ug/L | | 96 |
| 24) methacrylonitrile | 6.13 | 67 | 95256 | 81.46 | ug/L | | 88 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 267370 | 1329.63 | ug/L | | 95 |
| 26) tetrahydrofuran | 6.20 | 42 | 157563 | 156.34 | ug/L | | 98 |
| 27) Cyclohexane | 6.62 | 56 | 279265 | 12.80 | ug/L | | 96 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 109783 | 8.28 | ug/L | | 93 |
| 30) methyl methacrylate | 7.88 | 69 | 85920 | 40.25 | ug/L | | 81 |
| 31) Methylcyclohexane | 7.81 | 55 | 213775 | 12.28 | ug/L | | 96 |
| 32) 1,4-dioxane | 7.89 | 88 | 20675 | 910.47 | ug/L | | 98 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 298451 | 79.65 | ug/L | | 94 |
| 34) ethyl methacrylate | 8.86 | 69 | 185925 | 40.10 | ug/L | | 98 |
| 35) 2-hexanone | 9.10 | 43 | 393483 | 152.46 | ug/L | | 94 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 91648 | 24.14 | ug/L | | 81 |
| 38) cyclohexanone | 10.30 | 55 | 65566 | 176.20 | ug/L | | 96 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 41180 | 42.20 | ug/L | | 89 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 33548 | 11.63 | ug/L | | 88 |
| 41) Pentachloroethane | 10.80 | 167 | 29148 | 10.03 | ug/L | | 83 |
| 42) benzyl chloride | 11.10 | 91 | 94647 | 18.60 | ug/L | | 98 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB09.D Vial: 9
Acq On : 7 Feb 2017 10:17 am Operator: MGC
Sample : 1702048-CAL9 Inst : MS-V5
Misc : 1 VO-107-69298;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:19 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:19:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB10.D Vial: 10
Acq On : 7 Feb 2017 10:40 am Operator: MGC
Sample : 1702048-CALA Inst : MS-V5
Misc : 1 VO-107-69299;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:42 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 189807 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 267711 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.63 | 119 | 67543 | 10.00 | ug/L | | 0.00 |

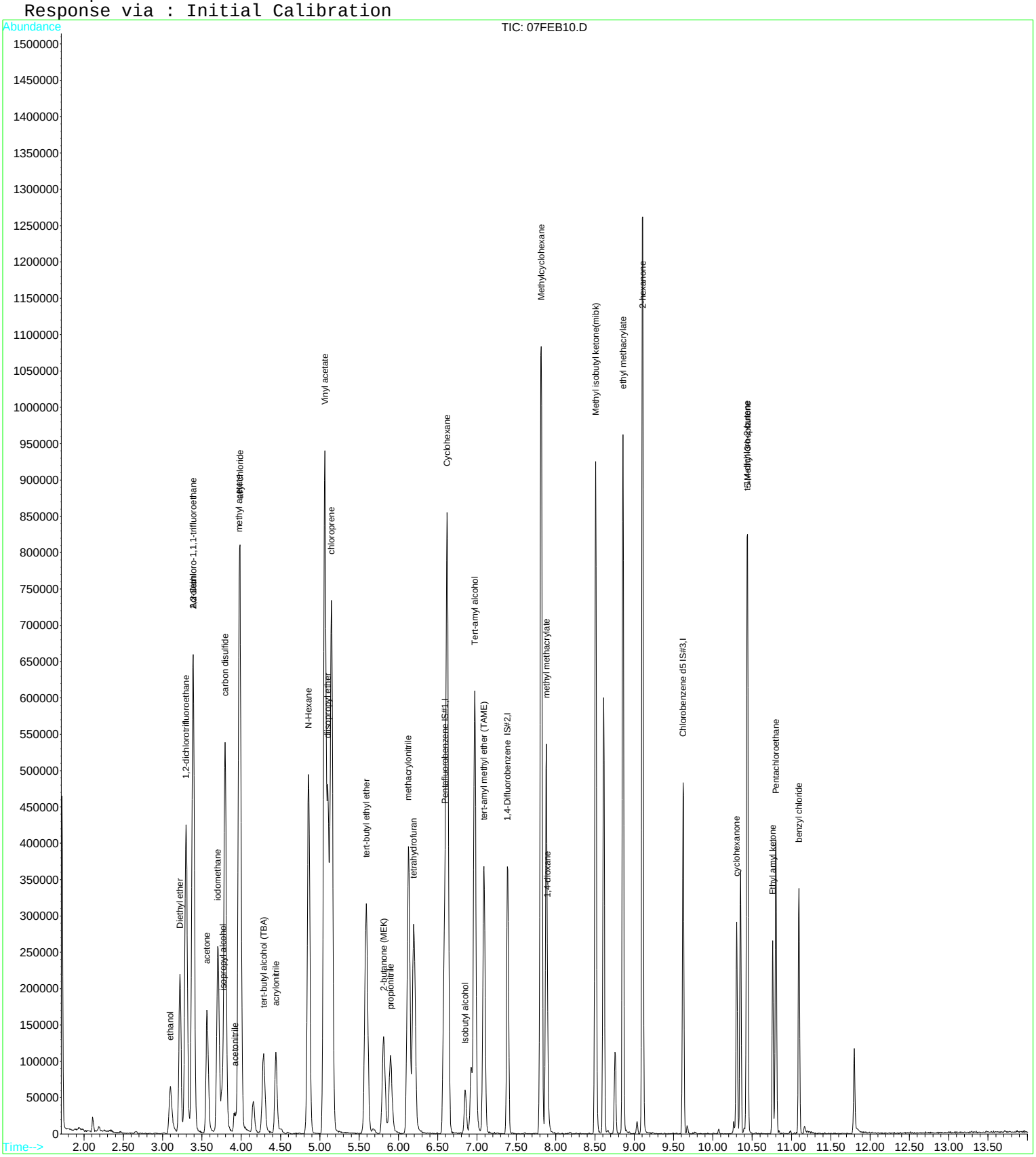
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.10 | 45 | 101907m | 2767.91 | ug/L | | |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 435373 | 26.11 | ug/L | # | 93 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 278224 | 25.07 | ug/L | | 89 |
| 5) Diethyl ether | 3.22 | 59 | 128426 | 27.10 | ug/L | | 92 |
| 6) isopropyl alcohol | 3.76 | 45 | 107706 | 597.15 | ug/L | # | 1 |
| 7) Acrolein | 3.39 | 56 | 79262 | 190.05 | ug/L | | 97 |
| 8) acetone | 3.56 | 43 | 261390 | 288.33 | ug/L | | 96 |
| 9) tert-butyl alcohol (TBA) | 4.29 | 59 | 165628m | 707.10 | ug/L | | |
| 10) acetonitrile | 3.92 | 41 | 53423 | 126.84 | ug/L | # | 43 |
| 11) methyl acetate | 3.97 | 43 | 692964 | 254.11 | ug/L | | 91 |
| 12) allyl chloride | 3.99 | 41 | 675563 | 32.79 | ug/L | | 100 |
| 13) iodomethane | 3.70 | 142 | 370185 | 60.08 | ug/L | # | 74 |
| 14) acrylonitrile | 4.44 | 53 | 101673 | 81.38 | ug/L | | 98 |
| 15) carbon disulfide | 3.79 | 76 | 834784 | 32.95 | ug/L | | 99 |
| 16) N-Hexane | 4.86 | 57 | 299322 | 26.82 | ug/L | | 95 |
| 17) diisopropyl ether | 5.11 | 87 | 95905 | 15.78 | ug/L | | 93 |
| 18) Vinyl acetate | 5.07 | 43 | 1884607 | 165.14 | ug/L | | 96 |
| 19) chloroprene | 5.15 | 53 | 616699 | 32.98 | ug/L | | 90 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 396281 | 17.12 | ug/L | | 93 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 248541 | 159.75 | ug/L | | 97 |
| 22) propionitrile | 5.90 | 54 | 168267 | 378.16 | ug/L | | 96 |
| 23) Isobutyl alcohol | 6.85 | 43 | 45200 | 336.27 | ug/L | | 95 |
| 24) methacrylonitrile | 6.13 | 67 | 188529 | 169.12 | ug/L | | 89 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 408081 | 2128.72 | ug/L | | 95 |
| 26) tetrahydrofuran | 6.19 | 42 | 300570 | 312.85 | ug/L | | 98 |
| 27) Cyclohexane | 6.62 | 56 | 541718 | 26.03 | ug/L | | 97 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 226419 | 17.91 | ug/L | | 92 |
| 30) methyl methacrylate | 7.88 | 69 | 169275 | 79.55 | ug/L | | 89 |
| 31) Methylcyclohexane | 7.82 | 55 | 413325 | 23.81 | ug/L | | 97 |
| 32) 1,4-dioxane | 7.90 | 88 | 32559 | 1438.49 | ug/L | | 99 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 576305 | 154.30 | ug/L | | 95 |
| 34) ethyl methacrylate | 8.86 | 69 | 366084 | 79.21 | ug/L | | 98 |
| 35) 2-hexanone | 9.10 | 43 | 752475 | 292.50 | ug/L | | 95 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 162213 | 42.29 | ug/L | | 84 |
| 38) cyclohexanone | 10.30 | 55 | 106025 | 282.01 | ug/L | | 99 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 82336 | 83.50 | ug/L | | 88 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 62704 | 21.51 | ug/L | | 86 |
| 41) Pentachloroethane | 10.80 | 167 | 58557 | 19.94 | ug/L | | 84 |
| 42) benzyl chloride | 11.10 | 91 | 187439 | 36.47 | ug/L | | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB10.D Vial: 10
Acq On : 7 Feb 2017 10:40 am Operator: MGC
Sample : 1702048-CALA Inst : MS-V5
Misc : 1 VO-107-69299;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:42 2017 Quant Results File: 82605X.RES

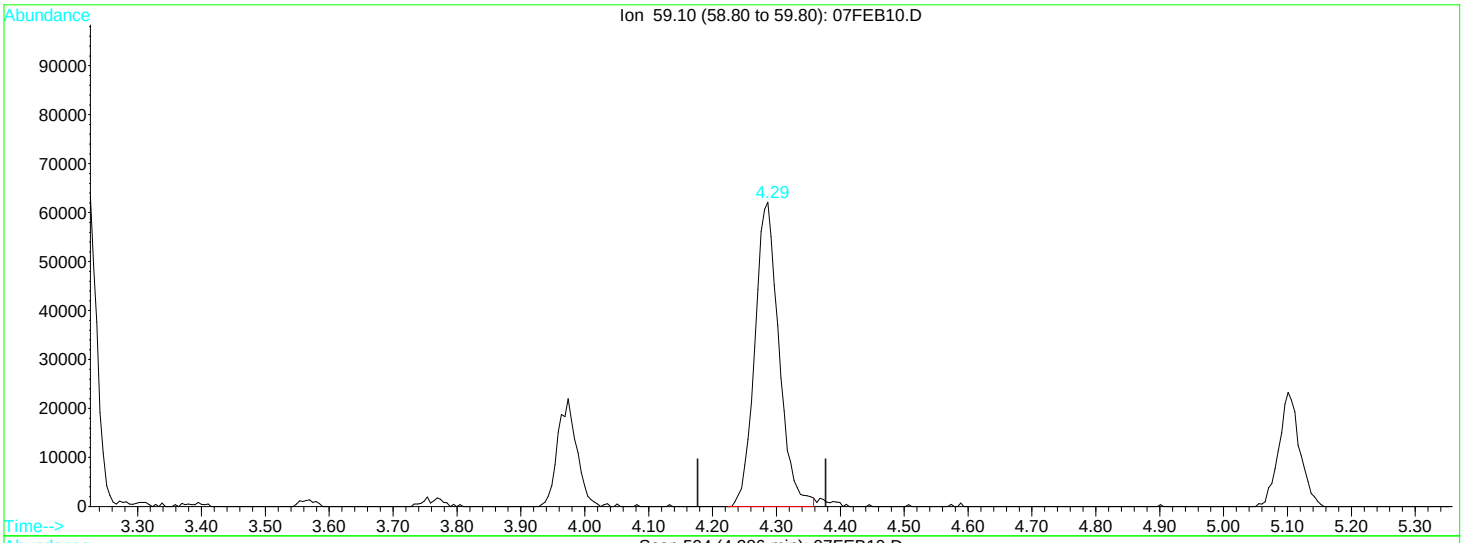
Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:41:04 2017
Response via : Initial Calibration

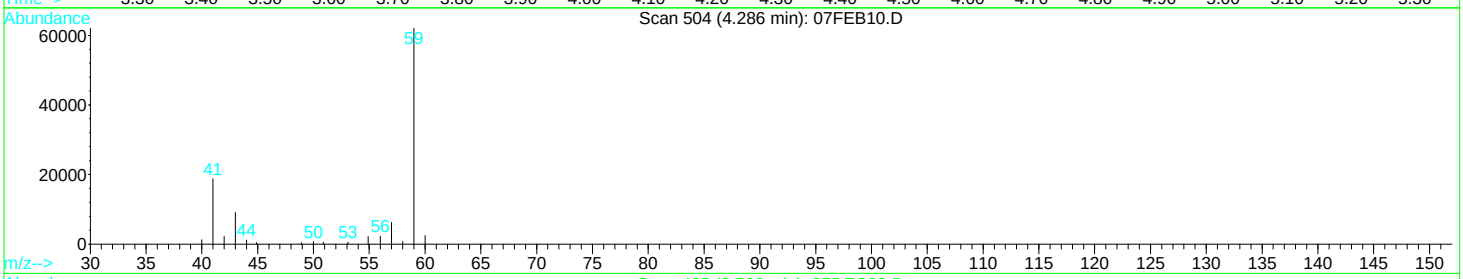


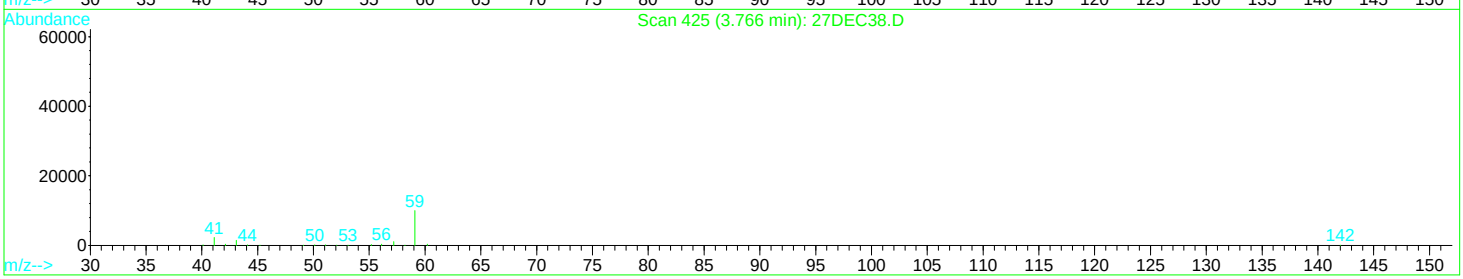
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB10.D Vial: 10
Acq On : 7 Feb 2017 10:40 am Operator: MGC
Sample : 1702048-CALA Inst : MS-V5
Misc : 1 VO-107-69299;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:18 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:35:48 2017
Response via : Multiple Level Calibration




TIC: 07FEB10.D

(9) tert-butyl alcohol (TBA)

4.29min 695.03ug/L

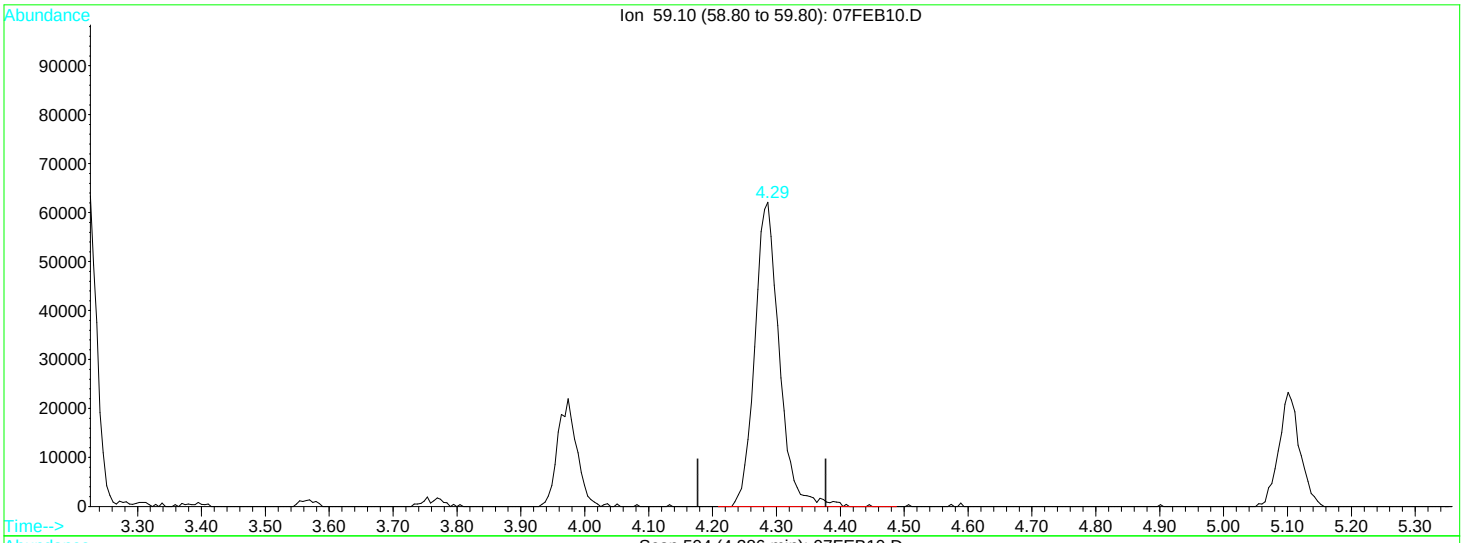
response 162801

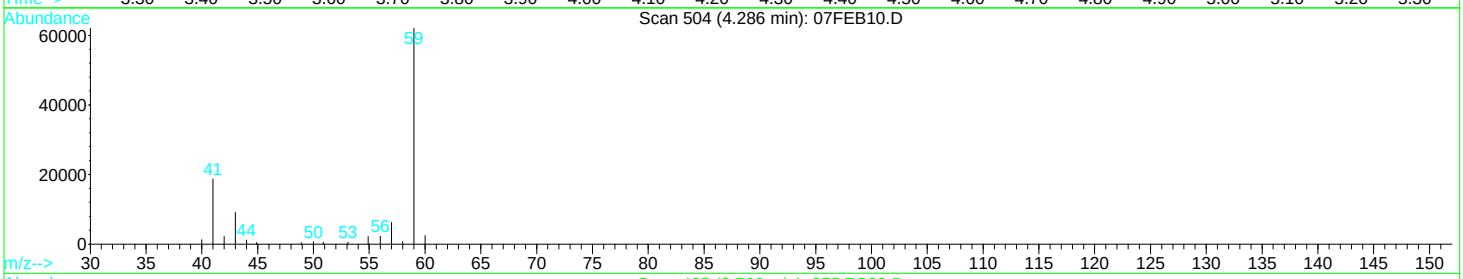
| Ion | Exp% | Act% |
|---|---|---|
| 59.10 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

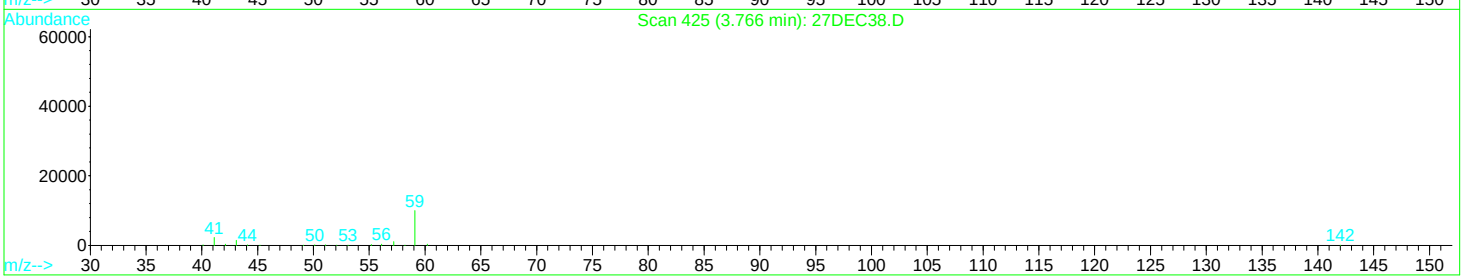
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB10.D Vial: 10
Acq On : 7 Feb 2017 10:40 am Operator: MGC
Sample : 1702048-CALA Inst : MS-V5
Misc : 1 VO-107-69299;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:42 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:35:48 2017
Response via : Multiple Level Calibration




TIC: 07FEB10.D

(9) tert-butyl alcohol (TBA)

4.29min 707.10ug/L m

response 165628

| Ion | Exp% | Act% |
|---|---|---|
| 59.10 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB11.D Vial: 11
Acq On : 7 Feb 2017 11:03 am Operator: MGC
Sample : 1702048-CALB Inst : MS-V5
Misc : 1 VO-107-69300;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:43 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:15:19 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 192292 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 268075 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64347 | 10.00 ug/L | 0.00 |

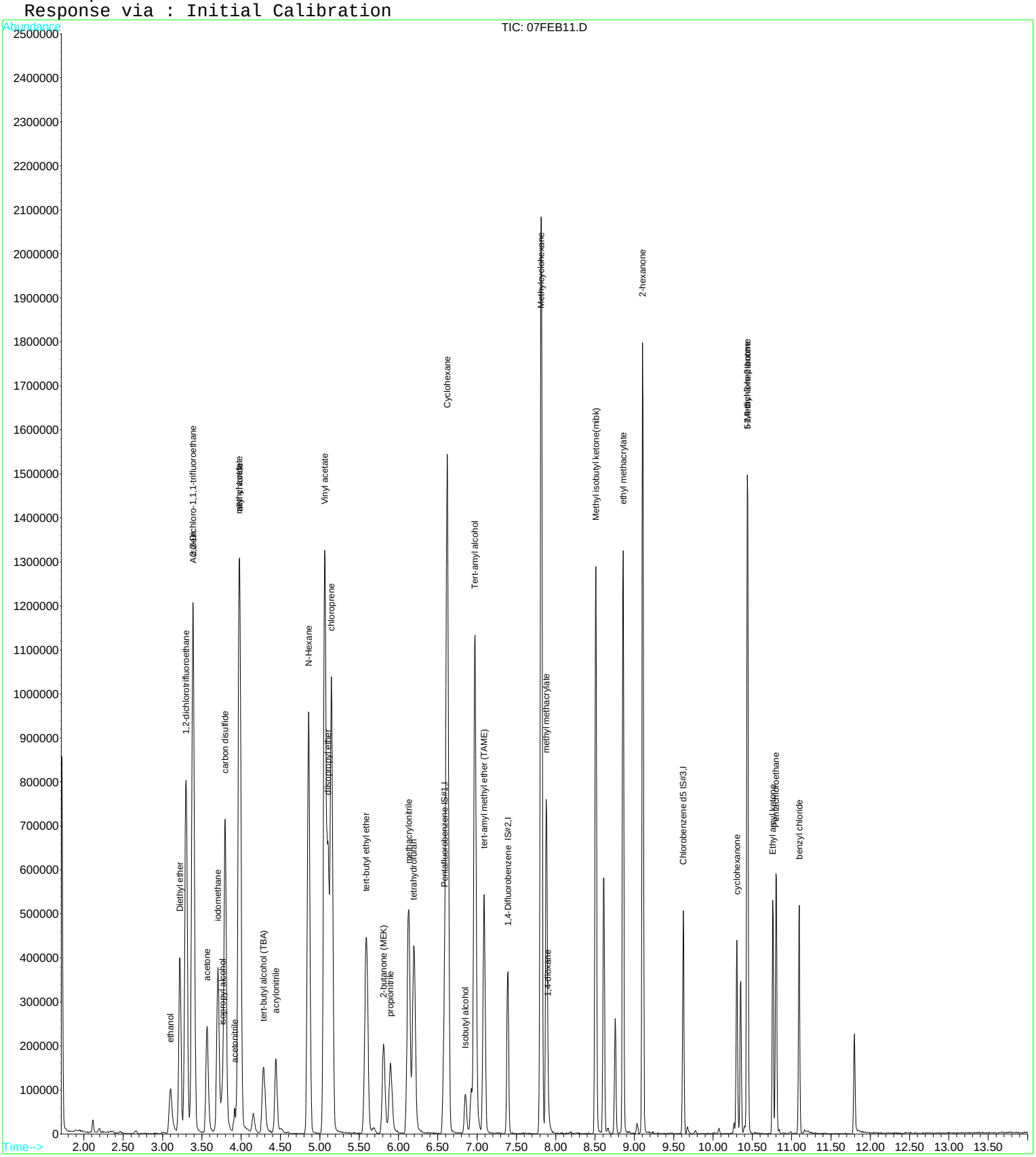
| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) ethanol | 3.10 | 45 | 169856m | 5117.46 ug/L | |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 816725 | 49.12 ug/L | 100 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 535442 | 48.49 ug/L | 100 |
| 5) Diethyl ether | 3.22 | 59 | 250229 | 52.04 ug/L | 100 |
| 6) isopropyl alcohol | 3.76 | 45 | 173867 | 1049.57 ug/L | 100 |
| 7) Acrolein | 3.40 | 56 | 115795 | 294.43 ug/L | 100 |
| 8) acetone | 3.57 | 43 | 391258 | 444.17 ug/L | 100 |
| 9) tert-butyl alcohol (TBA) | 4.28 | 59 | 253310m | 1141.18 ug/L | |
| 10) acetonitrile | 3.91 | 41 | 75169 | 193.18 ug/L | 100 |
| 11) methyl acetate | 3.97 | 43 | 1369612 | 499.15 ug/L | 100 |
| 12) allyl chloride | 3.99 | 41 | 935224 | 45.51 ug/L | 100 |
| 13) iodomethane | 3.70 | 142 | 538893 | 69.11 ug/L | 100 |
| 14) acrylonitrile | 4.44 | 53 | 157562 | 128.42 ug/L | 100 |
| 15) carbon disulfide | 3.80 | 76 | 1154644 | 45.98 ug/L | 100 |
| 16) N-Hexane | 4.86 | 57 | 571474 | 50.92 ug/L | 100 |
| 17) diisopropyl ether | 5.10 | 87 | 145906 | 23.87 ug/L | 100 |
| 18) Vinyl acetate | 5.06 | 43 | 2696037 | 235.78 ug/L | 100 |
| 19) chloroprene | 5.15 | 53 | 871781 | 46.53 ug/L | 100 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 581106 | 24.75 ug/L | 100 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 378562 | 241.16 ug/L | 100 |
| 22) propionitrile | 5.90 | 54 | 261592 | 608.85 ug/L | 100 |
| 23) Isobutyl alcohol | 6.84 | 43 | 71968 | 583.07 ug/L | 100 |
| 24) methacrylonitrile | 6.13 | 67 | 276060 | 241.61 ug/L | 100 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 824728 | 4578.05 ug/L | 100 |
| 26) tetrahydrofuran | 6.20 | 42 | 436925 | 457.35 ug/L | 100 |
| 27) Cyclohexane | 6.62 | 56 | 1008815 | 48.76 ug/L | 100 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 319583 | 24.81 ug/L | 100 |
| 30) methyl methacrylate | 7.88 | 69 | 252976 | 119.99 ug/L | 100 |
| 31) Methylcyclohexane | 7.81 | 55 | 763489 | 45.48 ug/L | 100 |
| 32) 1,4-dioxane | 7.91 | 88 | 49367 | 2415.77 ug/L | 100 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 817626 | 225.59 ug/L | 100 |
| 34) ethyl methacrylate | 8.86 | 69 | 539518 | 118.26 ug/L | 100 |
| 35) 2-hexanone | 9.10 | 43 | 1044832 | 425.98 ug/L | 100 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 319613 | 92.89 ug/L | 100 |
| 38) cyclohexanone | 10.30 | 55 | 162383 | 495.35 ug/L | 100 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 128515 | 137.36 ug/L | 100 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 125741 | 48.61 ug/L | 100 |
| 41) Pentachloroethane | 10.80 | 167 | 90254 | 30.66 ug/L | 100 |
| 42) benzyl chloride | 11.10 | 91 | 288712 | 57.66 ug/L | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB11.D Vial: 11
Acq On : 7 Feb 2017 11:03 am Operator: MGC
Sample : 1702048-CALB Inst : MS-V5
Misc : 1 VO-107-69300;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:43 2017 Quant Results File: 82605X.RES

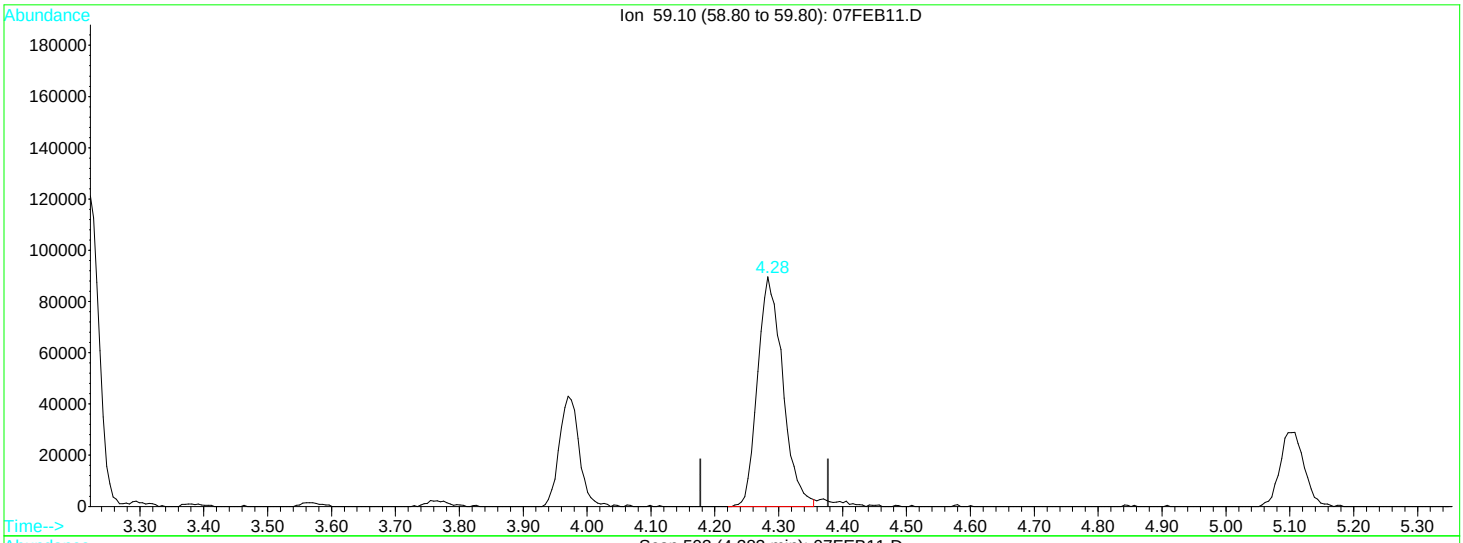
Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:42:45 2017
Response via : Initial Calibration

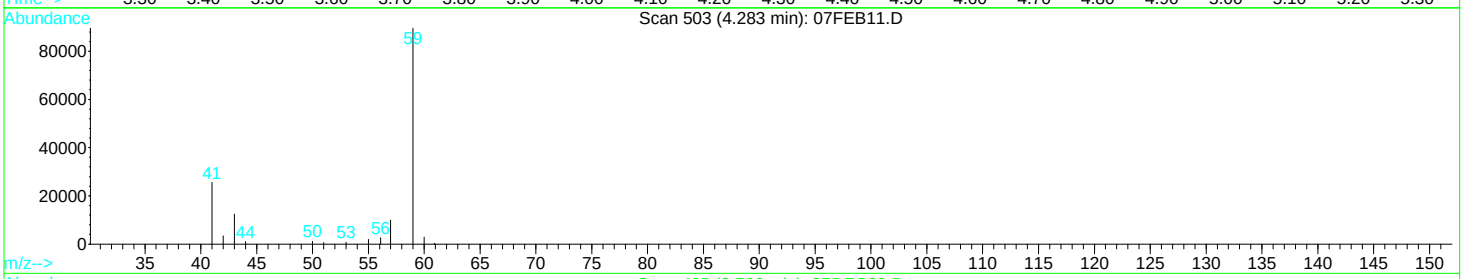


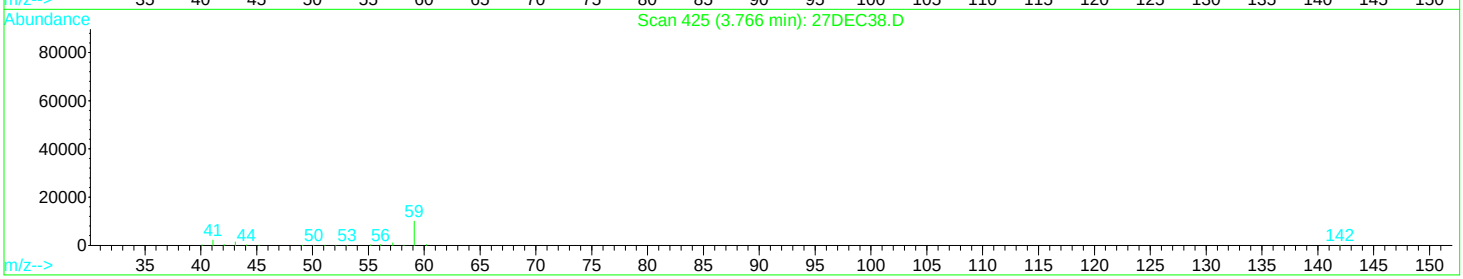
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB11.D  Vial: 11
Acq On : 7 Feb 2017 11:03 am  Operator: MGC
Sample : 1702048-CALB  Inst : MS-V5
Misc : 1 VO-107-69300;25ML  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:17 2017  Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:42:45 2017
Response via : Multiple Level Calibration




TIC: 07FEB11.D

(9) tert-butyl alcohol (TBA)

4.28min 1106.34ug/L

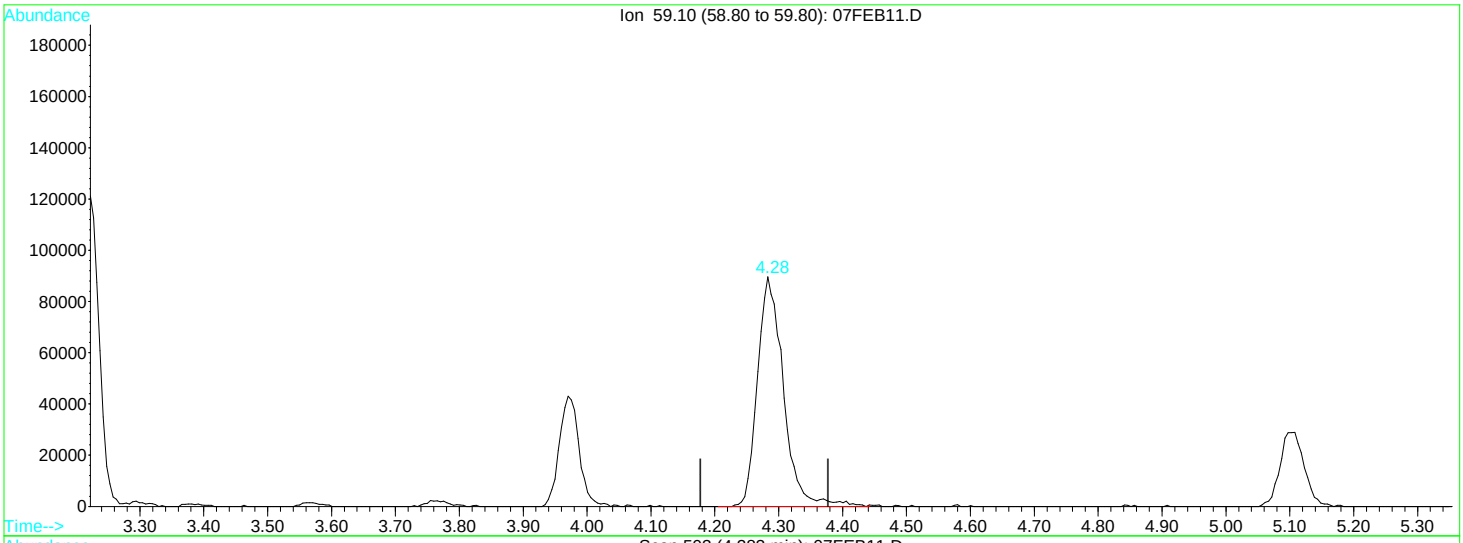
response 245577

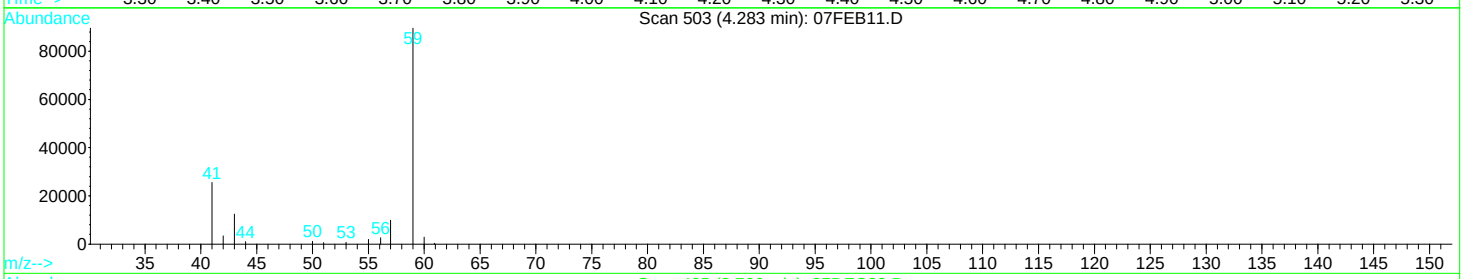
| Ion | Exp% | Act% |
|---|---|---|
| 59.10 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

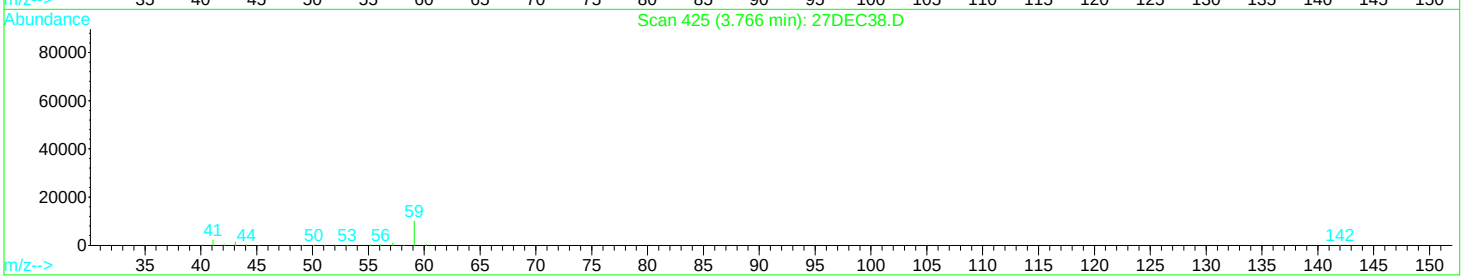
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB11.D Vial: 11
Acq On : 7 Feb 2017 11:03 am Operator: MGC
Sample : 1702048-CALB Inst : MS-V5
Misc : 1 VO-107-69300;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:43 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:42:45 2017
Response via : Multiple Level Calibration




TIC: 07FEB11.D

(9) tert-butyl alcohol (TBA)

4.28min 1141.18ug/L m

response 253310

| Ion | Exp% | Act% |
|---|---|---|
| 59.10 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB12.D Vial: 12
Acq On : 7 Feb 2017 11:27 am Operator: MGC
Sample : 1702048-CALC Inst : MS-V5
Misc : 1 VO-107-69301;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:13 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 198987 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272690 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68486 | 10.00 | ug/L | | 0.00 |

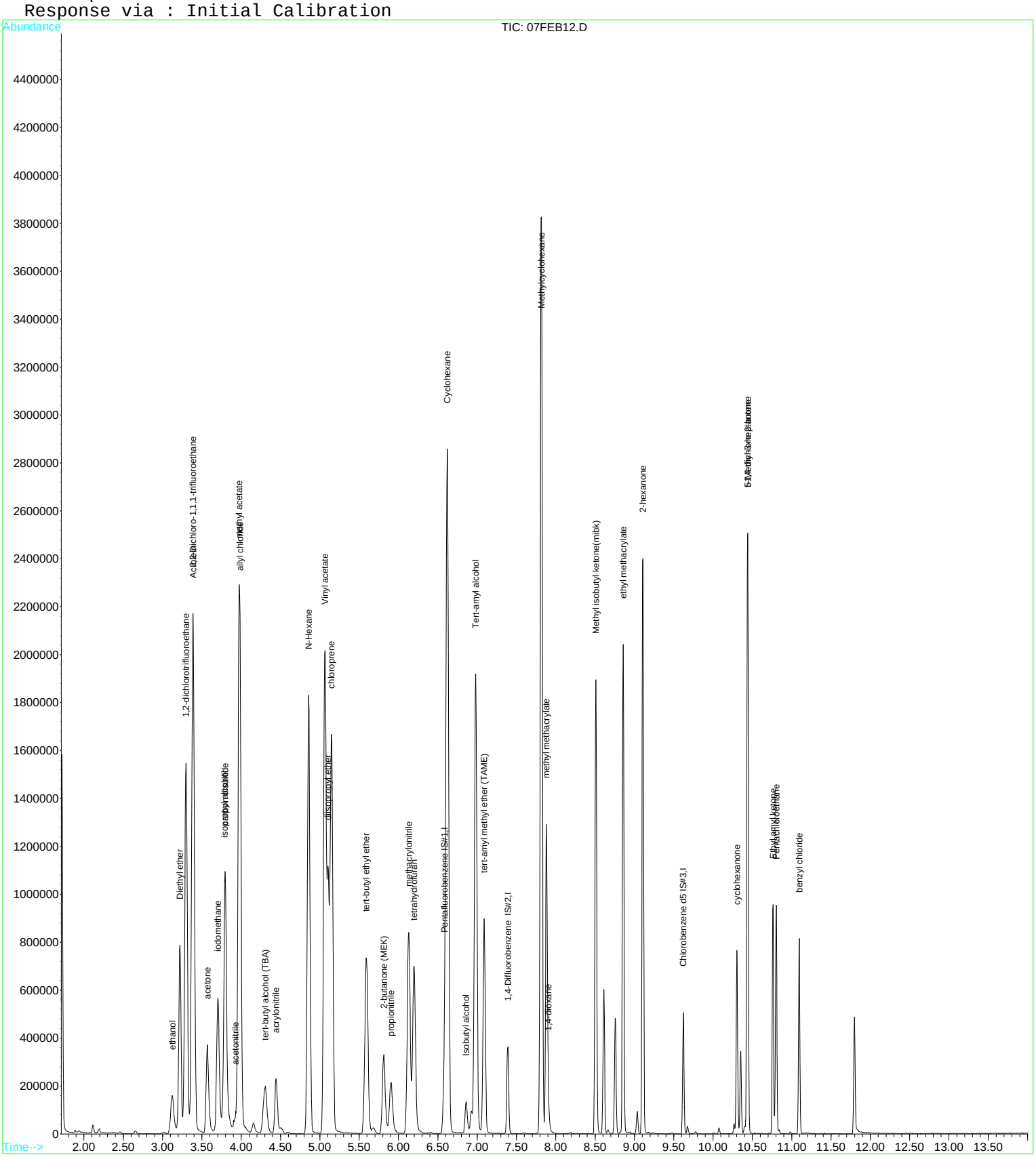
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.12 | 45 | 279736m | 7247.42 | ug/L | | |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 1511107 | 86.44 | ug/L | # | 91 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 1011692 | 86.95 | ug/L | | 90 |
| 5) Diethyl ether | 3.22 | 59 | 483455 | 97.30 | ug/L | | 92 |
| 6) isopropyl alcohol | 3.79 | 45 | 275396m | 1456.42 | ug/L | | |
| 7) Acrolein | 3.40 | 56 | 167938 | 384.10 | ug/L | | 96 |
| 8) acetone | 3.57 | 43 | 607446 | 639.14 | ug/L | | 98 |
| 9) tert-butyl alcohol (TBA) | 4.31 | 59 | 387722m | 1578.89 | ug/L | | |
| 10) acetonitrile | 3.92 | 41 | 124323 | 281.56 | ug/L | # | 44 |
| 11) methyl acetate | 3.97 | 43 | 2508816 | 877.55 | ug/L | | 95 |
| 12) allyl chloride | 3.99 | 41 | 1508492 | 69.85 | ug/L | | 95 |
| 13) iodomethane | 3.70 | 142 | 871251 | 134.88 | ug/L | # | 75 |
| 14) acrylonitrile | 4.44 | 53 | 232614 | 177.60 | ug/L | | 97 |
| 15) carbon disulfide | 3.80 | 76 | 1848085 | 69.58 | ug/L | | 100 |
| 16) N-Hexane | 4.86 | 57 | 1113119 | 95.14 | ug/L | | 96 |
| 17) diisopropyl ether | 5.10 | 87 | 246542 | 38.70 | ug/L | | 96 |
| 18) Vinyl acetate | 5.06 | 43 | 4258319 | 355.92 | ug/L | | 98 |
| 19) chloroprene | 5.15 | 53 | 1442377 | 73.57 | ug/L | | 86 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 956784 | 39.43 | ug/L | | 95 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 617397 | 378.52 | ug/L | | 98 |
| 22) propionitrile | 5.91 | 54 | 371173 | 795.69 | ug/L | | 94 |
| 23) Isobutyl alcohol | 6.86 | 43 | 108612 | 770.76 | ug/L | | 96 |
| 24) methacrylonitrile | 6.13 | 67 | 468446 | 400.83 | ug/L | | 89 |
| 25) Tert-amyl alcohol | 6.98 | 59 | 1434600 | 7138.22 | ug/L | | 97 |
| 26) tetrahydrofuran | 6.20 | 42 | 721809 | 716.63 | ug/L | | 96 |
| 27) Cyclohexane | 6.62 | 56 | 1946453 | 89.23 | ug/L | | 95 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 544284 | 41.06 | ug/L | | 96 |
| 30) methyl methacrylate | 7.88 | 69 | 426406 | 196.73 | ug/L | | 92 |
| 31) Methylcyclohexane | 7.82 | 55 | 1427116 | 80.72 | ug/L | | 91 |
| 32) 1,4-dioxane | 7.91 | 88 | 84684 | 3673.11 | ug/L | | 98 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 1220890 | 320.92 | ug/L | | 99 |
| 34) ethyl methacrylate | 8.86 | 69 | 845838 | 179.68 | ug/L | | 99 |
| 35) 2-hexanone | 9.10 | 43 | 1457012 | 556.02 | ug/L | | 99 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 539644 | 138.77 | ug/L | | 88 |
| 38) cyclohexanone | 10.30 | 55 | 284148 | 745.37 | ug/L | | 99 |
| 39) t-1,4-dichloro-2-butene | 10.44 | 75 | 199450 | 199.49 | ug/L | | 86 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 235117 | 79.55 | ug/L | | 87 |
| 41) Pentachloroethane | 10.80 | 167 | 143141 | 48.07 | ug/L | | 91 |
| 42) benzyl chloride | 11.10 | 91 | 459046 | 88.08 | ug/L | | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB12.D Vial: 12
Acq On : 7 Feb 2017 11:27 am Operator: MGC
Sample : 1702048-CALC Inst : MS-V5
Misc : 1 VO-107-69301;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:13 2017 Quant Results File: 82605X.RES

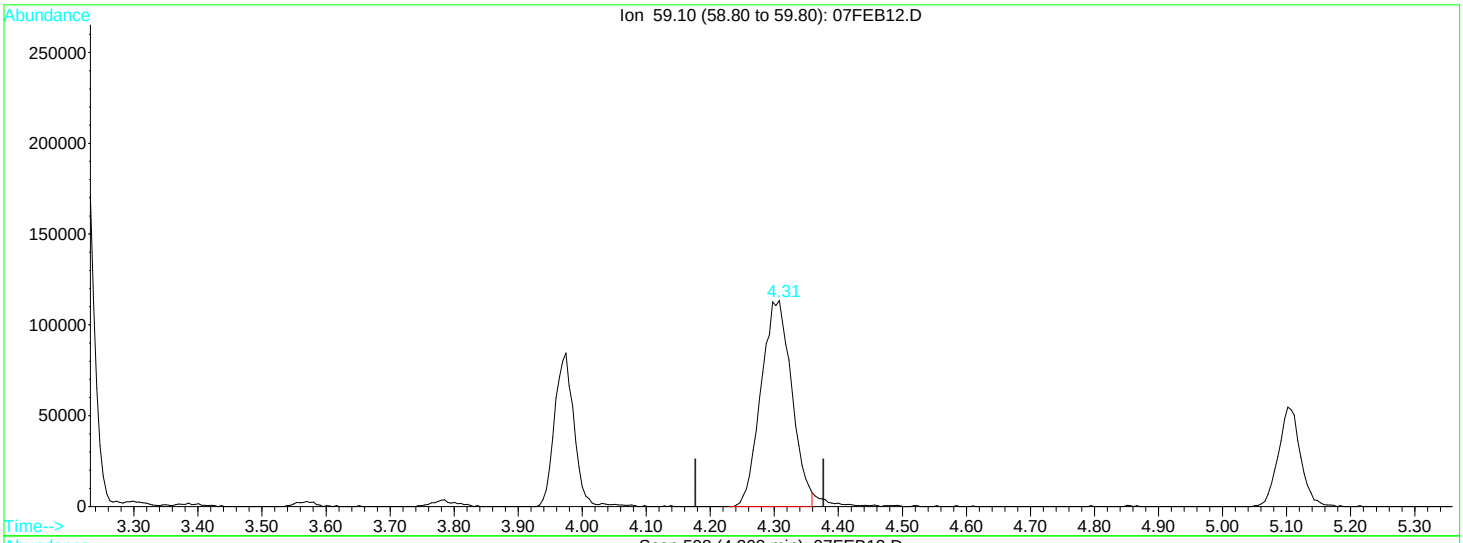
Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Initial Calibration

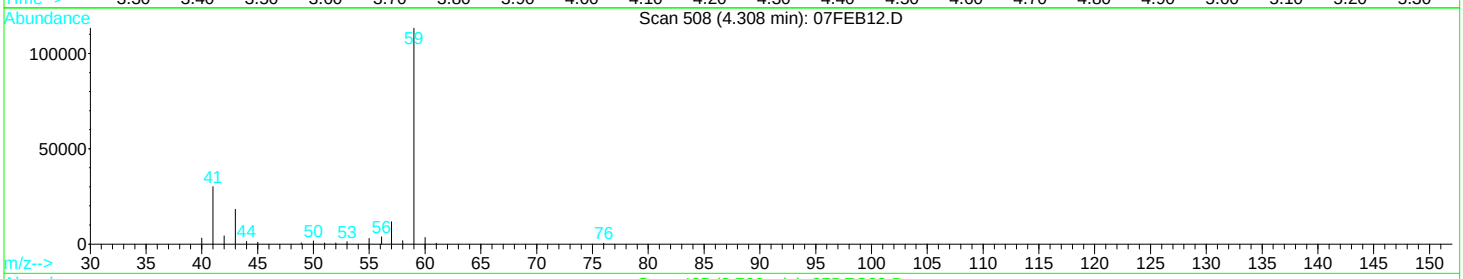


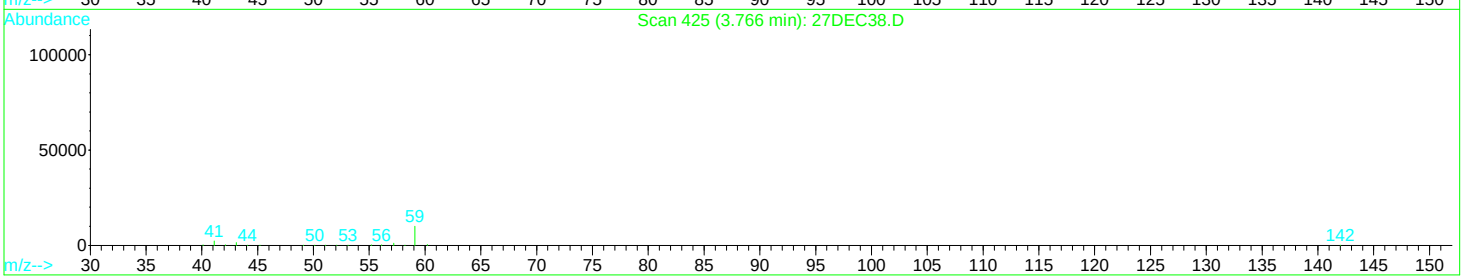
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB12.D  Vial: 12
Acq On : 7 Feb 2017 11:27 am  Operator: MGC
Sample : 1702048-CALC  Inst : MS-V5
Misc : 1 VO-107-69301;25ML  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:13 2017  Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Multiple Level Calibration




TIC: 07FEB12.D

(9) tert-butyl alcohol (TBA)

4.31min 1540.38ug/L

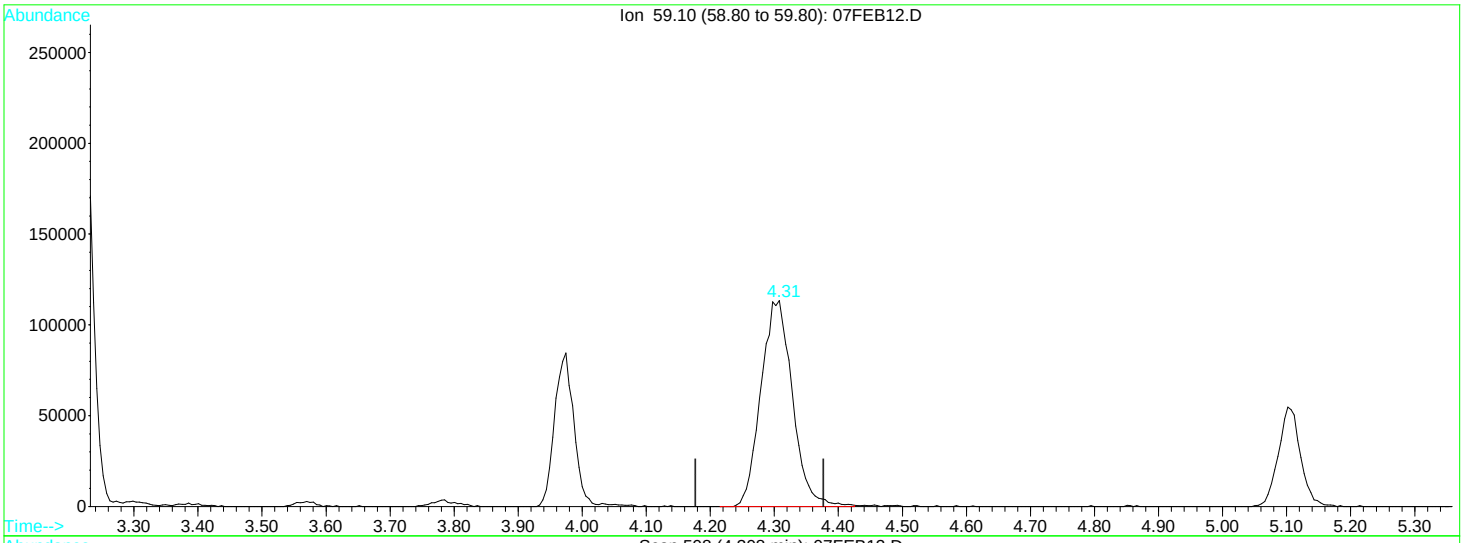
response 378265

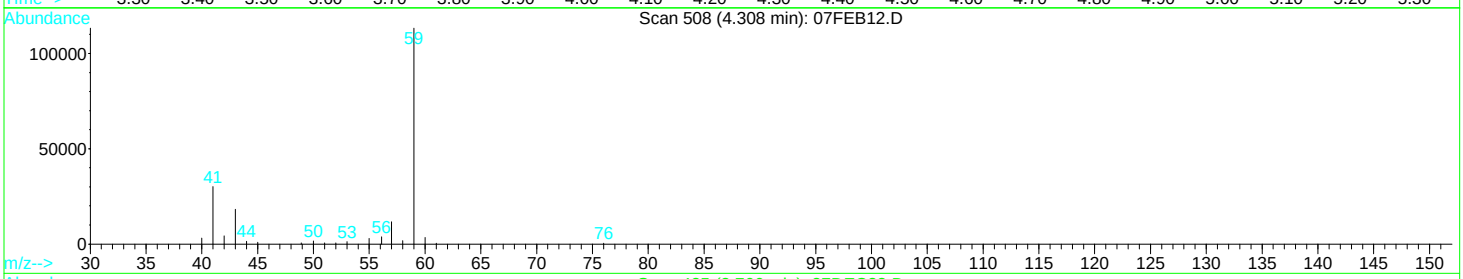
| Ion | Exp% | Act% |
|---|---|---|
| 59.10 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

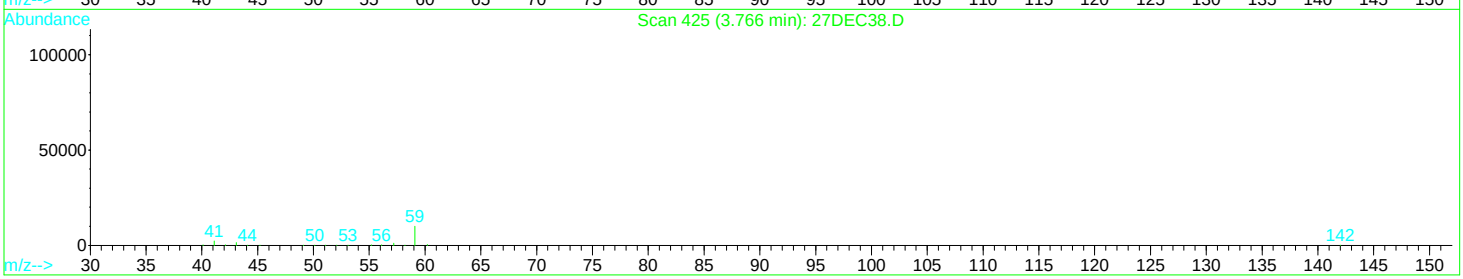
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB12.D Vial: 12
Acq On : 7 Feb 2017 11:27 am Operator: MGC
Sample : 1702048-CALC Inst : MS-V5
Misc : 1 VO-107-69301;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:13 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Thu Jan 26 13:28:25 2017
Response via : Multiple Level Calibration




TIC: 07FEB12.D

(9) tert-butyl alcohol (TBA)

4.31min 1578.89ug/L m

response 387722

| Ion | Exp% | Act% |
|---|---|---|
| 59.10 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC06.D Vial: 6
Acq On : 13 Dec 2016 10:10 am Operator: MGC
Sample : 1621865-CALD Inst : MS-V5
Misc : 1 VO-107-68901;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:10 2016 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration
DataAcq Meth : 82605

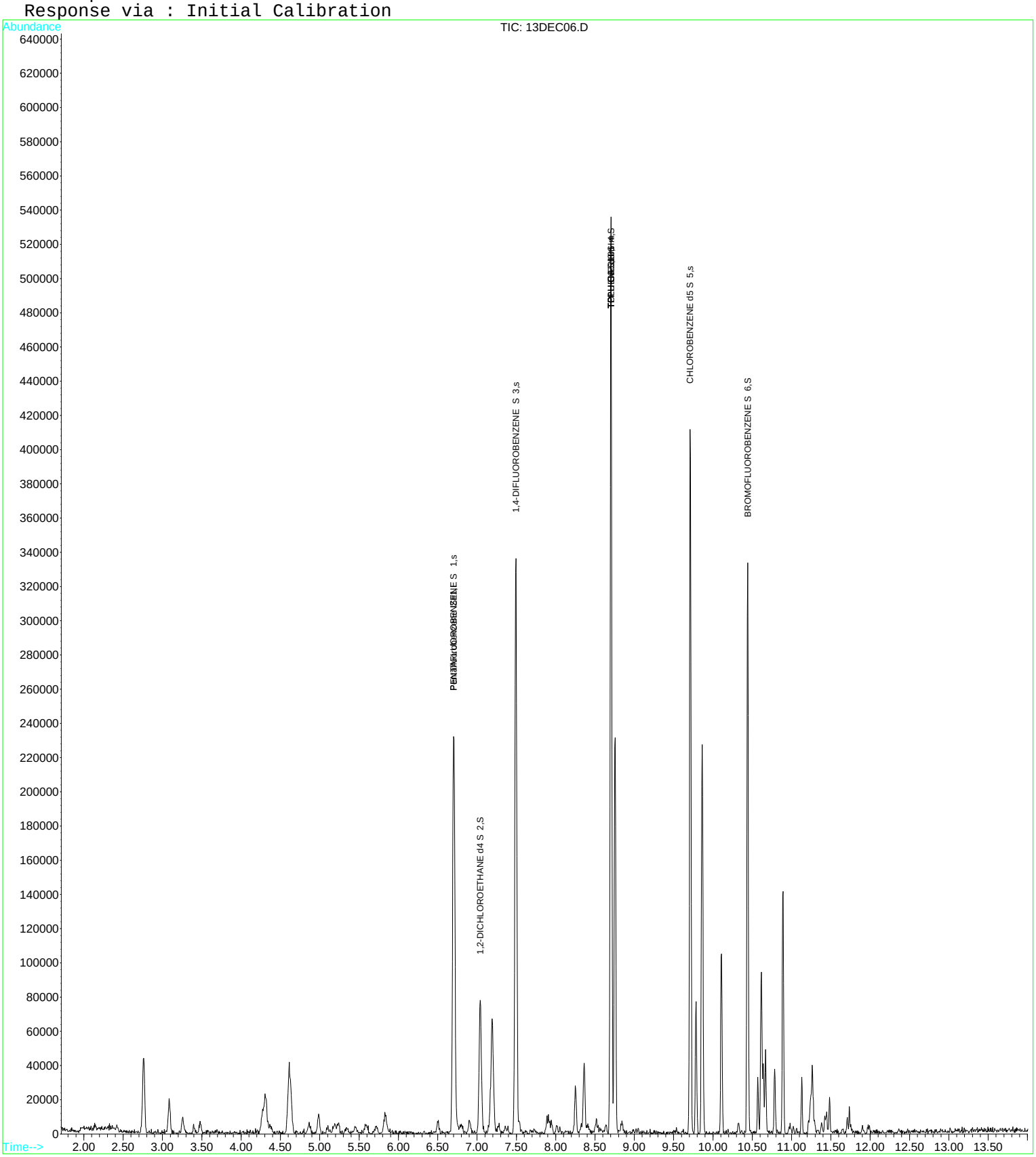
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.71 | 168 | 179698 | 10.00 | ug/L | -0.03 |
| System Monitoring Compounds | | | | | | |
| 2) PENTAFLUOROBENZENE S 1 | 6.70 | TIC | 498402m | 4.18 | ug/L | -0.03 |
| 3) 1,2-DICHLOROETHANE d4 S 2 | 7.04 | TIC | 166360m | 2.07 | ug/L | -0.05 |
| 4) 1,4-DIFLUOROBENZENE S 3 | 7.50 | TIC | 571292m | 4.28 | ug/L | -0.02 |
| 5) TOLUENE d8 S 4 | 8.71 | TIC | 762759m | 6.61 | ug/L | -0.02 |
| 6) CHLOROBENZENE d5 S 5 | 9.71 | TIC | 537763m | 6.38 | ug/L | -0.02 |
| 7) BROMOFLUOROBENZENE S 6 | 10.44 | TIC | 410765m | 7.68 | ug/L | 0.00 |
| Target Compounds | | | | | | Qvalue |
| 8) TPPH-GAS | 8.71 | TIC | 2579377m | 36.29 | ug/L | |
| 9) TPPH C6-C10 | 8.71 | TIC | 1902654m | 38.72 | ug/L | |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC06.D Vial: 6
Acq On : 13 Dec 2016 10:10 am Operator: MGC
Sample : 1621865-CALD Inst : MS-V5
Misc : 1 VO-107-68901;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:10 2016 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\07-2027\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC07.D Vial: 7
Acq On : 13 Dec 2016 10:32 am Operator: MGC
Sample : 1621865-CALE Inst : MS-V5
Misc : 1 VO-107-68902;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:11 2016 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration
DataAcq Meth : 82605

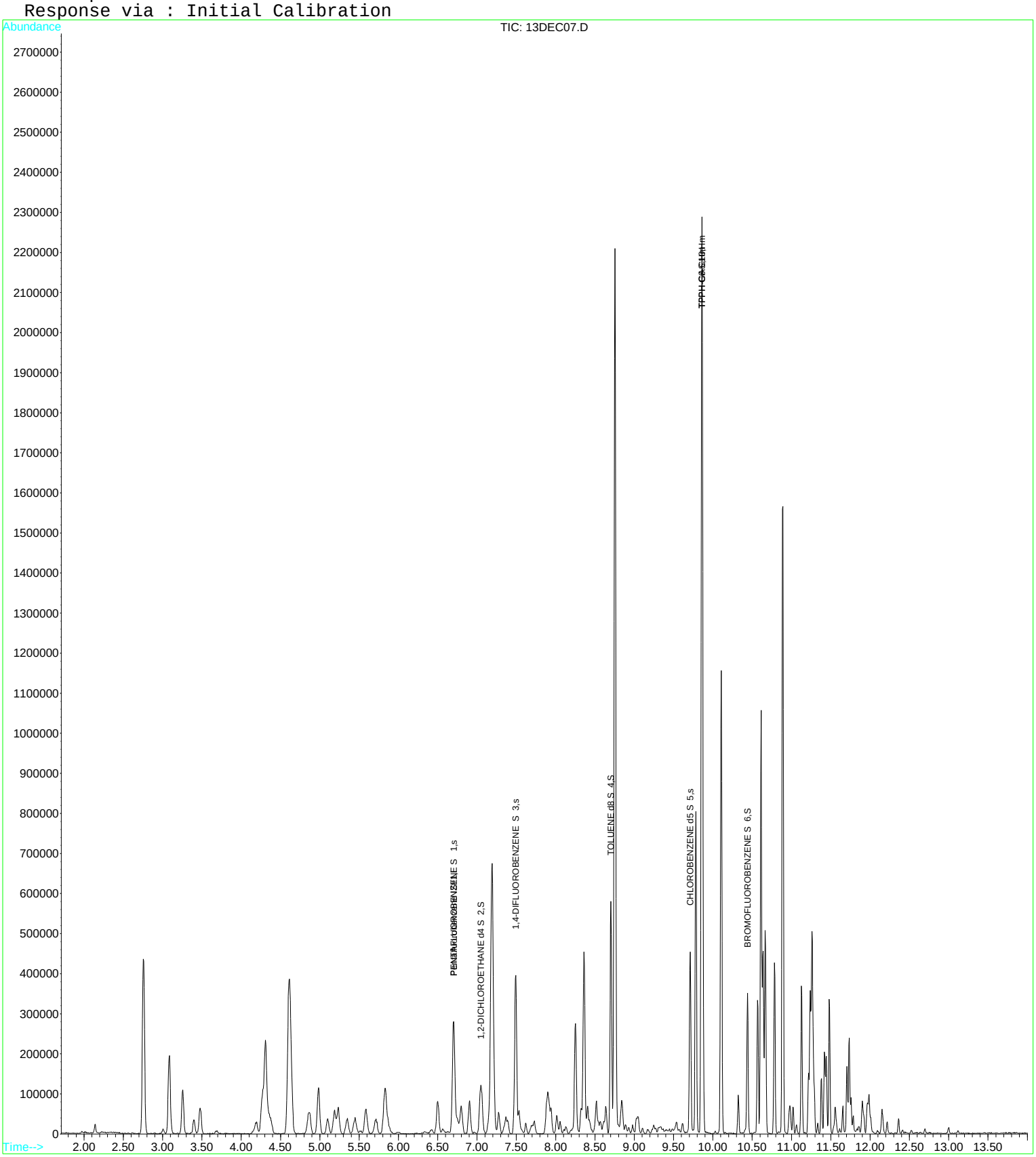
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.70 | 168 | 181927 | 10.00 | ug/L | -0.03 |
| System Monitoring Compounds | | | | | | |
| 2) PENTAFLUOROBENZENE S 1 | 6.70 | TIC | 708653m | 5.87 | ug/L | -0.03 |
| 3) 1,2-DICHLOROETHANE d4 S 2 | 7.05 | TIC | 323622m | 3.97 | ug/L | -0.04 |
| 4) 1,4-DIFLUOROBENZENE S 3 | 7.49 | TIC | 748204m | 5.54 | ug/L | -0.02 |
| 5) TOLUENE d8 S 4 | 8.70 | TIC | 822416m | 7.03 | ug/L | -0.02 |
| 6) CHLOROBENZENE d5 S 5 | 9.71 | TIC | 609536m | 7.14 | ug/L | -0.01 |
| 7) BROMOFLUOROBENZENE S 6 | 10.44 | TIC | 438041m | 8.09 | ug/L | 0.00 |
| Target Compounds | | | | | | Qvalue |
| 8) TPPH-GAS | 9.86 | TIC | 28080741m | 390.21 | ug/L | |
| 9) TPPH C6-C10 | 9.86 | TIC | 19484015m | 391.67 | ug/L | |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC07.D Vial: 7
Acq On : 13 Dec 2016 10:32 am Operator: MGC
Sample : 1621865-CALE Inst : MS-V5
Misc : 1 VO-107-68902;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:11 2016 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\07-2027\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC08.D Vial: 8
Acq On : 13 Dec 2016 10:55 am Operator: MGC
Sample : 1621865-CALF Inst : MS-V5
Misc : 1 VO-107-68903;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:12 2016 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.70 | 168 | 182850 | 10.00 | ug/L | -0.03 |
| System Monitoring Compounds | | | | | | |
| 2) PENTAFLUOROBENZENE S 1 | 6.70 | TIC | 878238m | 7.24 | ug/L | -0.03 |
| 3) 1,2-DICHLOROETHANE d4 S 2 | 7.05 | TIC | 478343m | 5.84 | ug/L | -0.03 |
| 4) 1,4-DIFLUOROBENZENE S 3 | 7.49 | TIC | 932138m | 6.86 | ug/L | -0.03 |
| 5) TOLUENE d8 S 4 | 8.70 | TIC | 876243m | 7.46 | ug/L | -0.02 |
| 6) CHLOROBENZENE d5 S 5 | 9.71 | TIC | 652843m | 7.61 | ug/L | -0.01 |
| 7) BROMOFLUOROBENZENE S 6 | 10.44 | TIC | 452356m | 8.31 | ug/L | 0.00 |

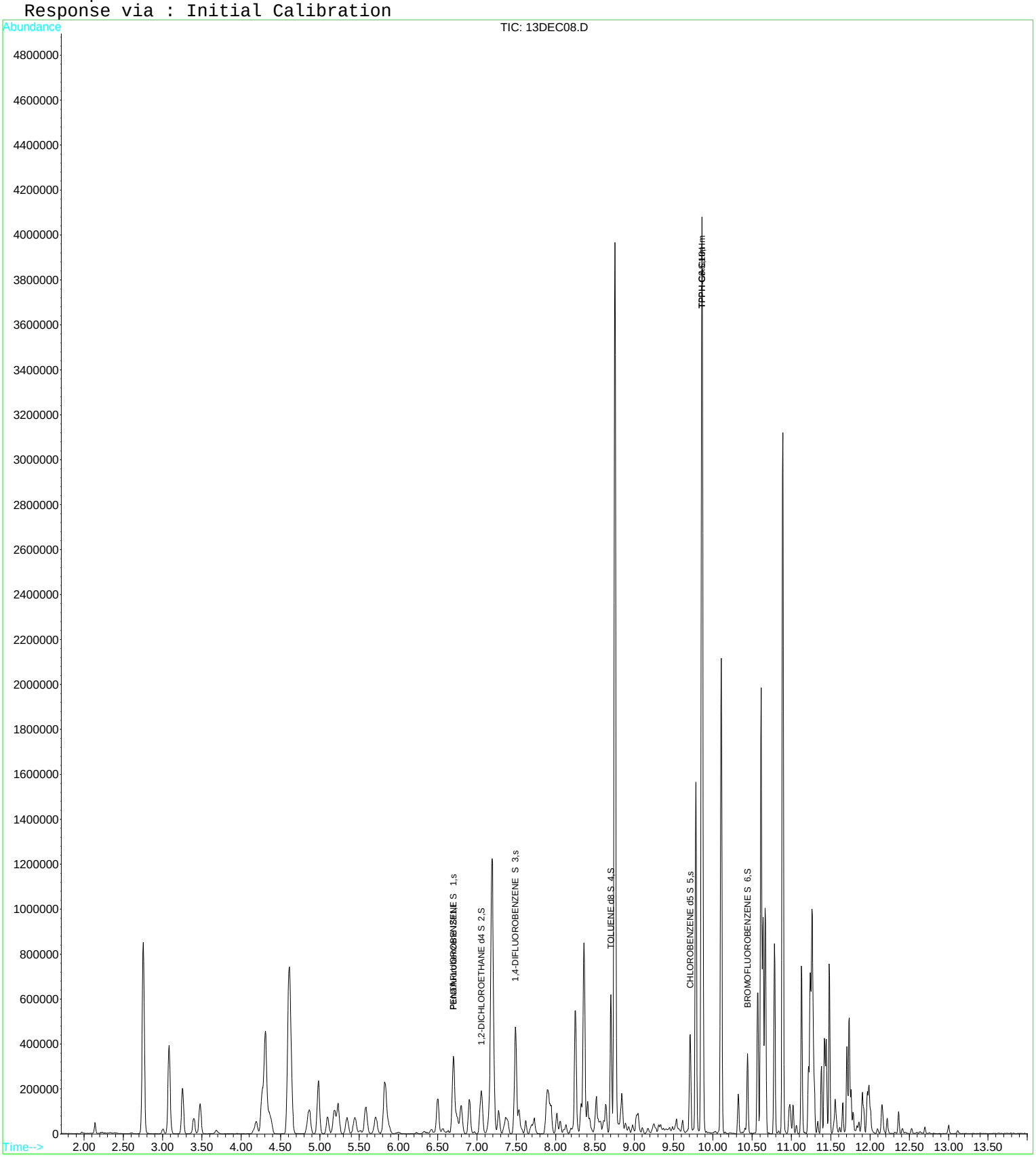
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 8) TPPH-GAS | 9.86 | TIC | 55393563m | 765.85 | ug/L | |
| 9) TPPH C6-C10 | 9.86 | TIC | 37696493m | 753.95 | ug/L | |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC08.D Vial: 8
Acq On : 13 Dec 2016 10:55 am Operator: MGC
Sample : 1621865-CALF Inst : MS-V5
Misc : 1 VO-107-68903;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:12 2016 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\07-2027\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC09.D Vial: 9
Acq On : 13 Dec 2016 11:18 am Operator: MGC
Sample : 1621865-CALG Inst : MS-V5
Misc : 1 VO-107-68904;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:39 2016 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration
DataAcq Meth : 82605

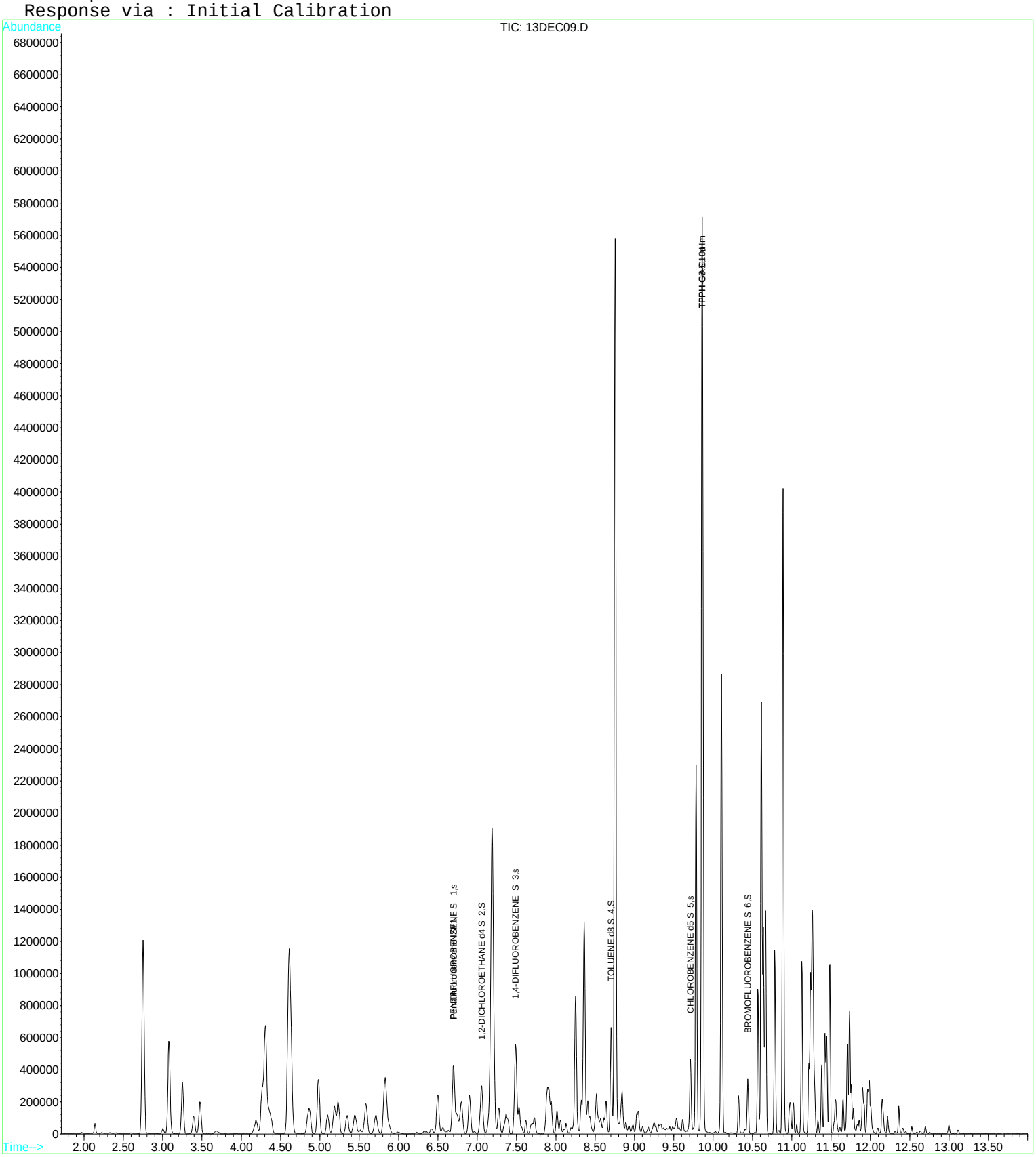
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.70 | 168 | 175456 | 10.00 | ug/L | -0.03 |
| System Monitoring Compounds | | | | | | |
| 2) PENTAFLUOROBENZENE S 1 | 6.70 | TIC | 1089765m | 9.36 | ug/L | -0.03 |
| 3) 1,2-DICHLOROETHANE d4 S 2 | 7.06 | TIC | 690795m | 8.79 | ug/L | -0.03 |
| 4) 1,4-DIFLUOROBENZENE S 3 | 7.49 | TIC | 1171263m | 8.99 | ug/L | -0.03 |
| 5) TOLUENE d8 S 4 | 8.70 | TIC | 969279m | 8.60 | ug/L | -0.02 |
| 6) CHLOROBENZENE d5 S 5 | 9.71 | TIC | 685403m | 8.32 | ug/L | -0.01 |
| 7) BROMOFLUOROBENZENE S 6 | 10.44 | TIC | 418071m | 8.00 | ug/L | 0.00 |
| Target Compounds | | | | | | Qvalue |
| 8) TPPH-GAS | 9.86 | TIC | 80794616m | 1164.12 | ug/L | |
| 9) TPPH C6-C10 | 9.86 | TIC | 55212402m | 1150.81 | ug/L | |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC09.D Vial: 9
Acq On : 13 Dec 2016 11:18 am Operator: MGC
Sample : 1621865-CALG Inst : MS-V5
Misc : 1 VO-107-68904;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:39 2016 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\07-2027\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC10.D Vial: 10
Acq On : 13 Dec 2016 11:41 am Operator: MGC
Sample : 1621865-CALH Inst : MS-V5
Misc : 1 VO-107-68905;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 12:18 2016 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration
DataAcq Meth : 82605

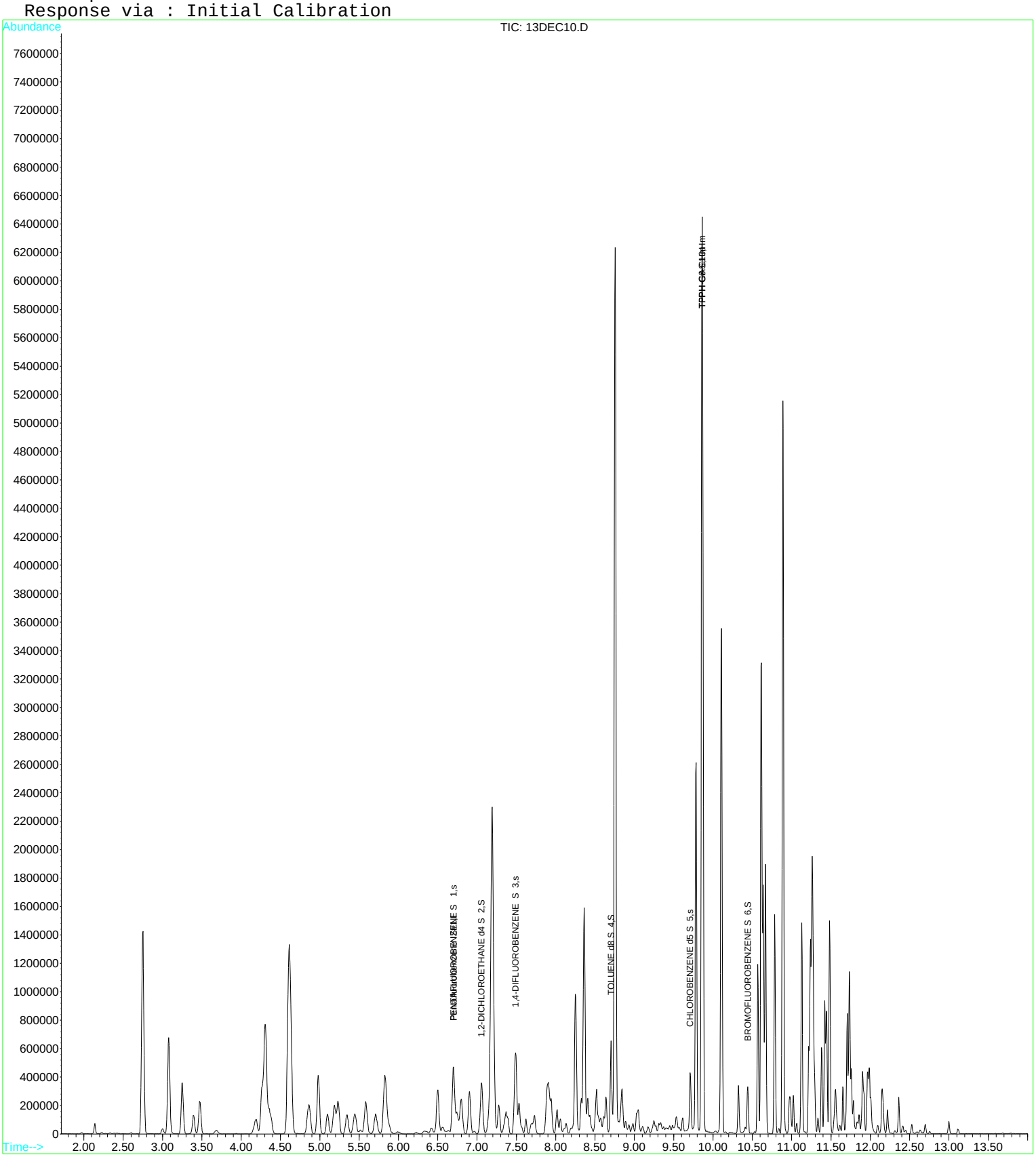
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.70 | 168 | 178003 | 10.00 | ug/L | -0.03 |
| System Monitoring Compounds | | | | | | |
| 2) PENTAFLUOROBENZENE S 1 | 6.70 | TIC | 1128296m | 9.56 | ug/L | -0.03 |
| 3) 1,2-DICHLOROETHANE d4 S 2 | 7.05 | TIC | 801559m | 10.05 | ug/L | -0.03 |
| 4) 1,4-DIFLUOROBENZENE S 3 | 7.49 | TIC | 1247302m | 9.43 | ug/L | -0.03 |
| 5) TOLUENE d8 S 4 | 8.70 | TIC | 985352m | 8.61 | ug/L | -0.02 |
| 6) CHLOROBENZENE d5 S 5 | 9.71 | TIC | 655584m | 7.85 | ug/L | -0.02 |
| 7) BROMOFLUOROBENZENE S 6 | 10.44 | TIC | 426542m | 8.05 | ug/L | 0.00 |
| Target Compounds | | | | | | Qvalue |
| 8) TPPH-GAS | 9.86 | TIC | 102452304m | 1455.04 | ug/L | |
| 9) TPPH C6-C10 | 9.86 | TIC | 67480665m | 1386.39 | ug/L | |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC10.D Vial: 10
Acq On : 13 Dec 2016 11:41 am Operator: MGC
Sample : 1621865-CALH Inst : MS-V5
Misc : 1 VO-107-68905;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 12:18 2016 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\07-2027\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC11.D Vial: 11
Acq On : 13 Dec 2016 12:04 pm Operator: MGC
Sample : 1621865-CALI Inst : MS-V5
Misc : 1 VO-107-68906;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 12:20 2016 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration
DataAcq Meth : 82605

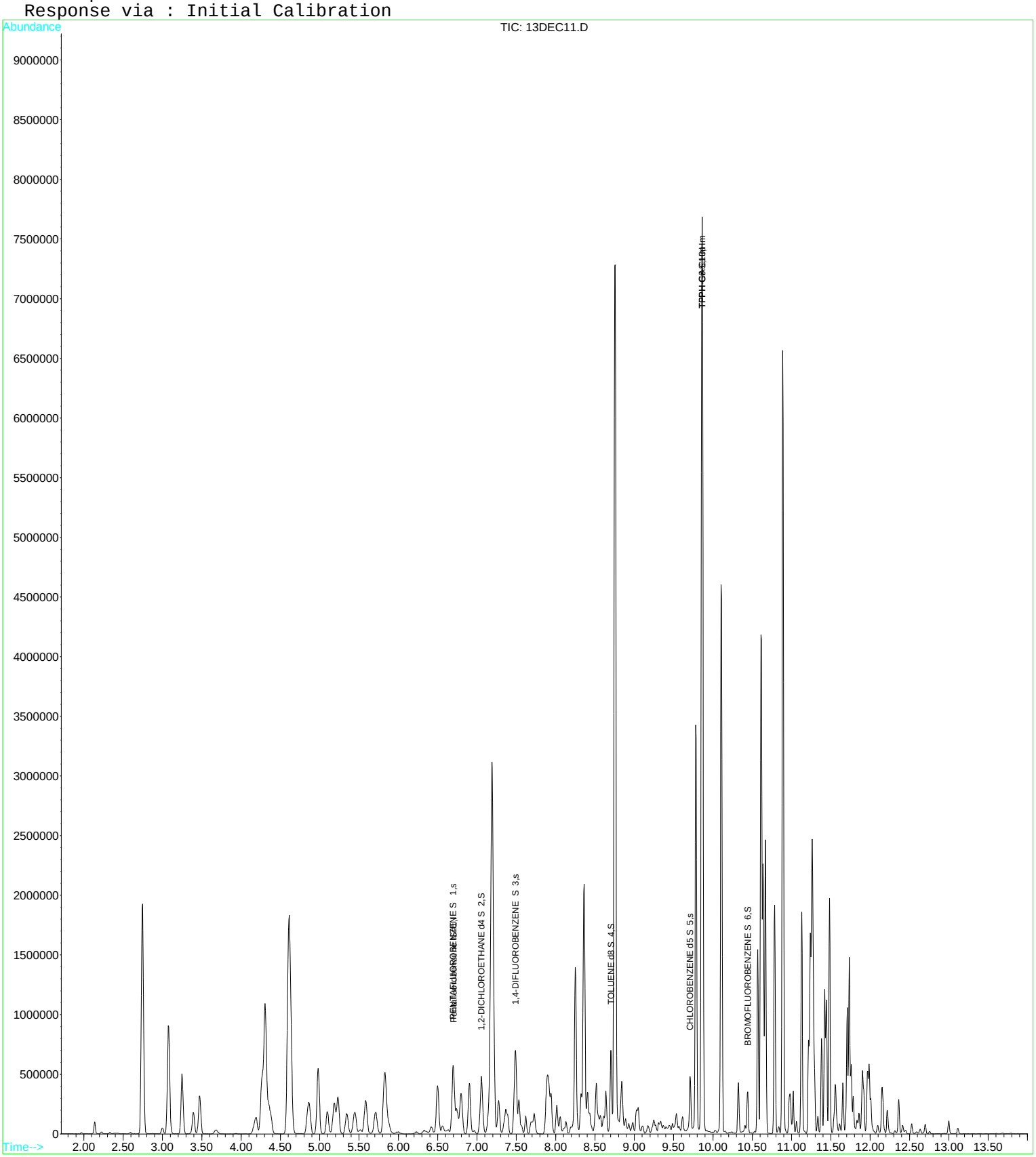
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.71 | 168 | 180722 | 10.00 | ug/L | -0.03 |
| System Monitoring Compounds | | | | | | |
| 2) PENTAFLUOROBENZENE S 1 | 6.70 | TIC | 1370850m | 11.44 | ug/L | -0.04 |
| 3) 1,2-DICHLOROETHANE d4 S 2 | 7.06 | TIC | 1056404m | 13.05 | ug/L | -0.03 |
| 4) 1,4-DIFLUOROBENZENE S 3 | 7.49 | TIC | 1557667m | 11.60 | ug/L | -0.03 |
| 5) TOLUENE d8 S 4 | 8.71 | TIC | 1107523m | 9.54 | ug/L | -0.02 |
| 6) CHLOROBENZENE d5 S 5 | 9.71 | TIC | 740236m | 8.73 | ug/L | -0.02 |
| 7) BROMOFLUOROBENZENE S 6 | 10.44 | TIC | 472461m | 8.78 | ug/L | 0.00 |
| Target Compounds | | | | | | Qvalue |
| 8) TPPH-GAS | 9.86 | TIC | 132513216m | 1853.66 | ug/L | |
| 9) TPPH C6-C10 | 9.86 | TIC | 87810923m | 1776.94 | ug/L | |

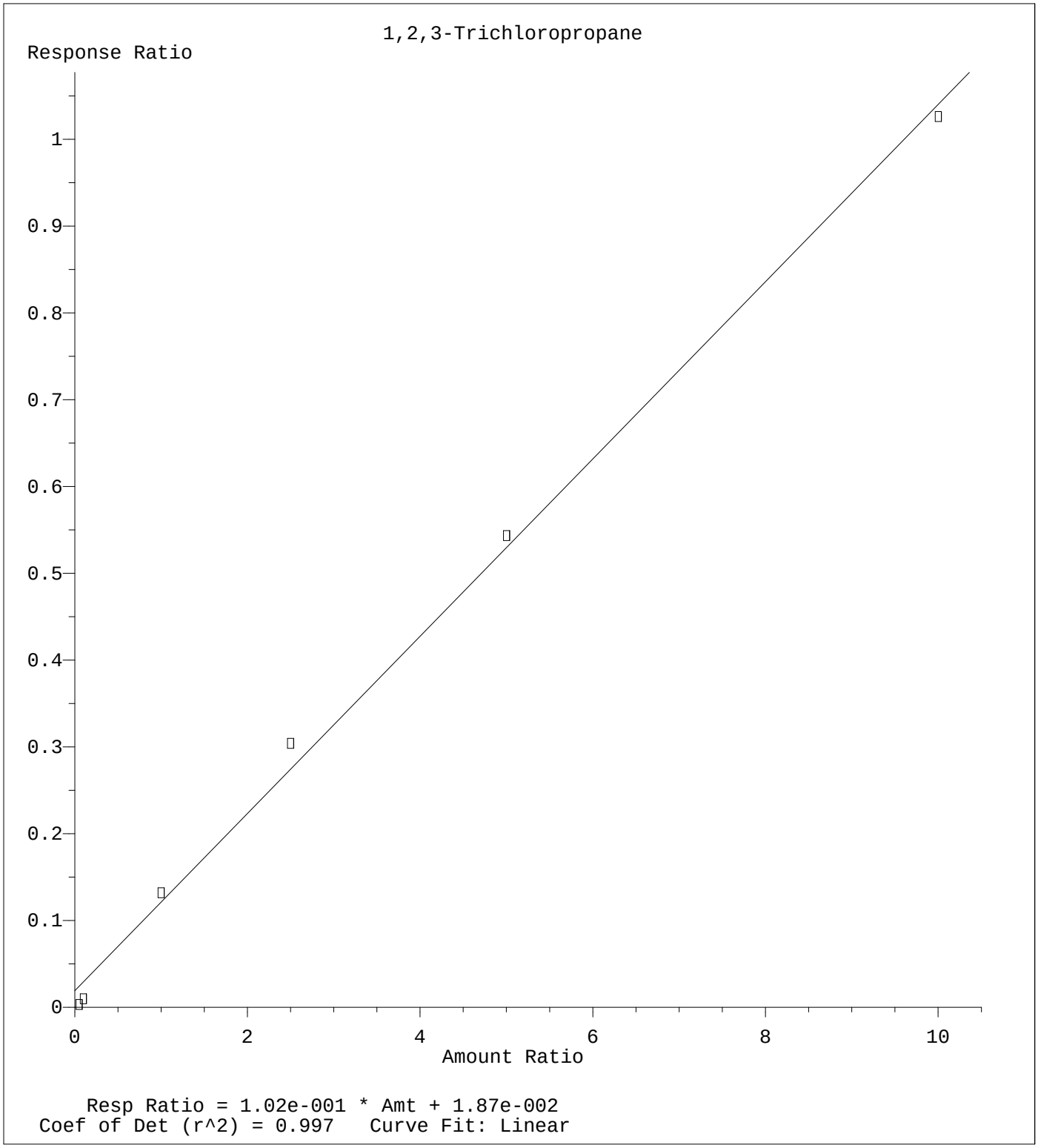
(#) = qualifier out of range (m) = manual integration

Quantitation Report

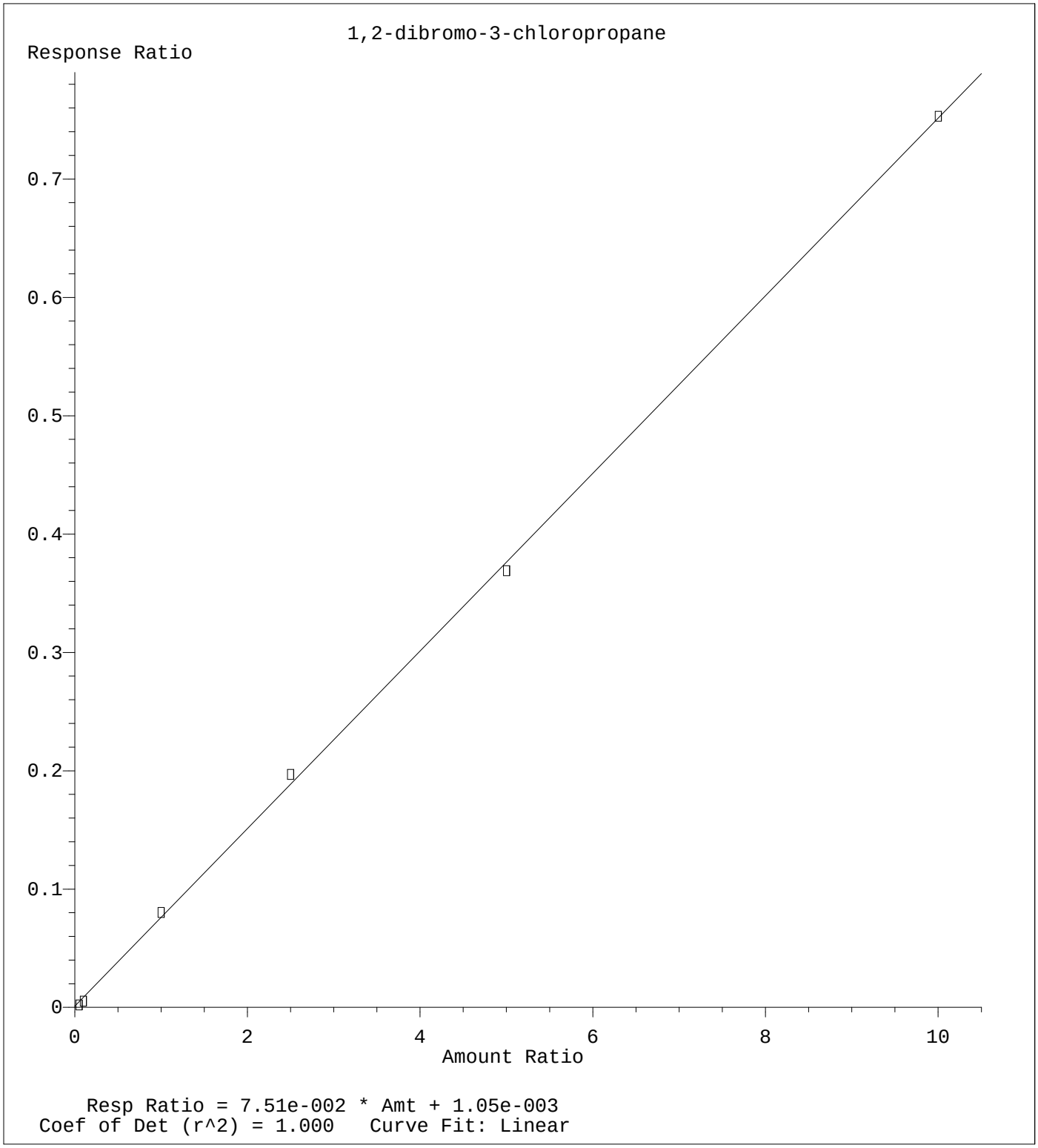
Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC11.D Vial: 11
Acq On : 13 Dec 2016 12:04 pm Operator: MGC
Sample : 1621865-CALI Inst : MS-V5
Misc : 1 VO-107-68906;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 12:20 2016 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\07-2027\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Dec 08 06:01:05 2016
Response via : Initial Calibration

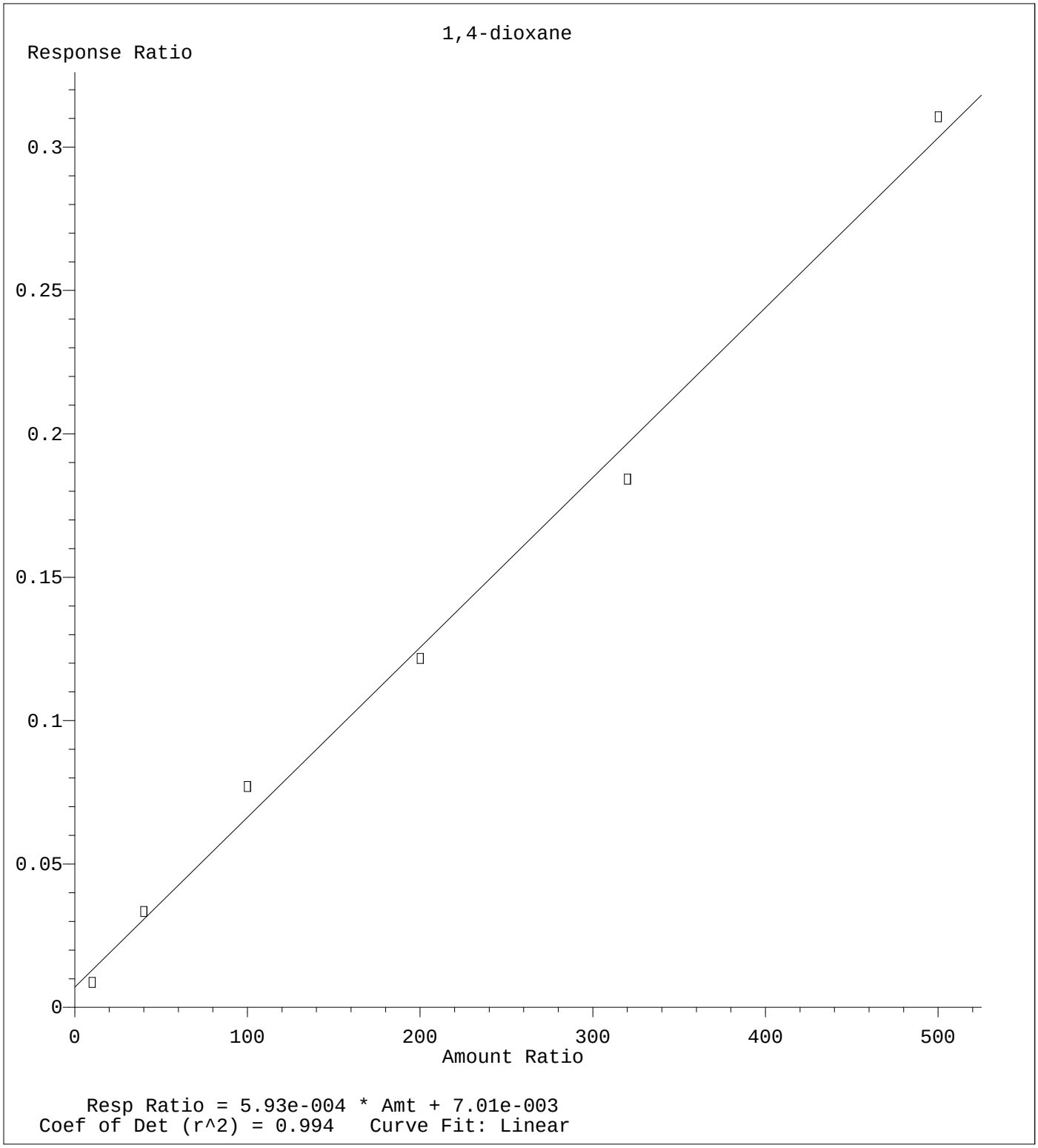




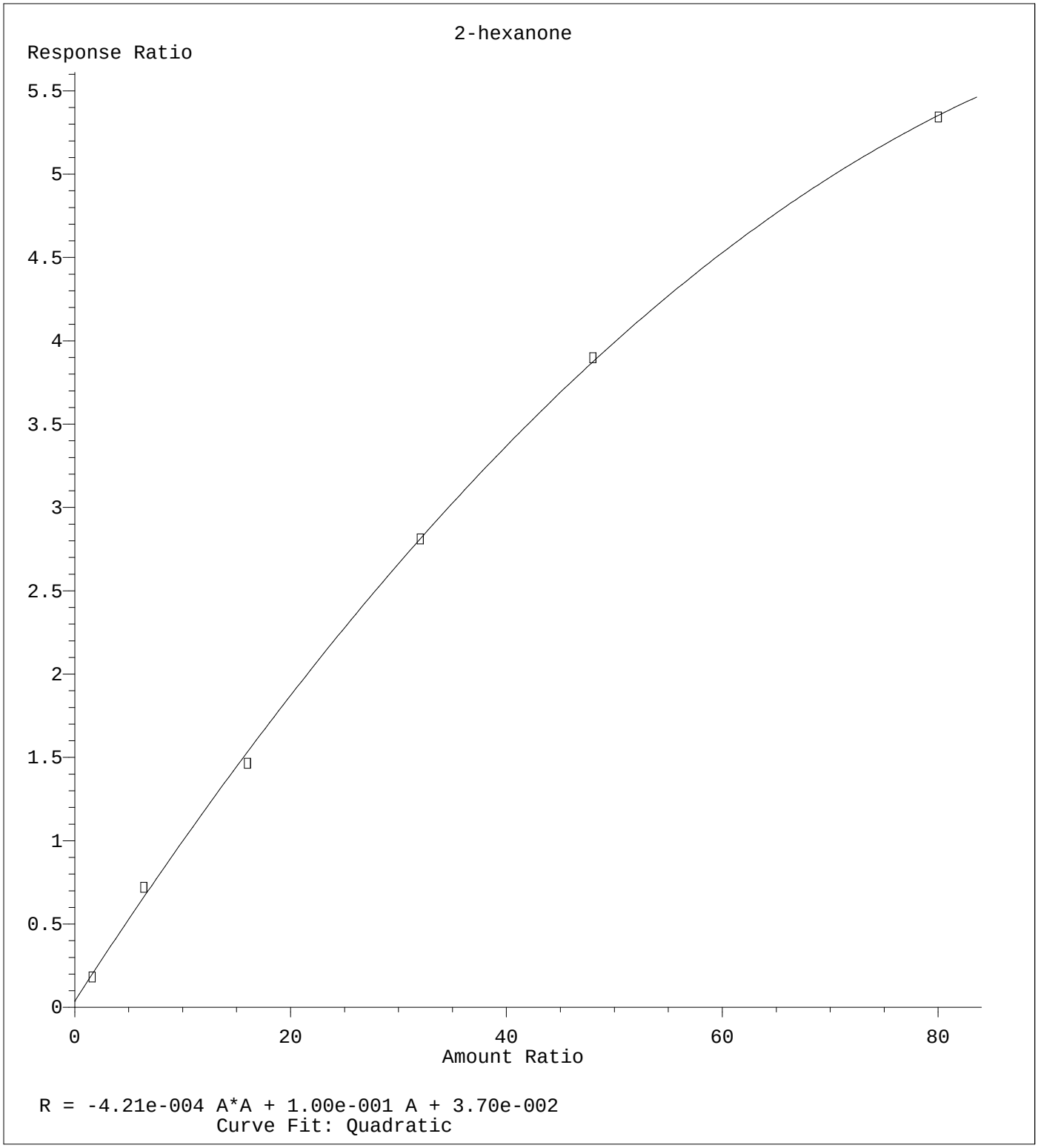

Method Name: C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M
Calibration Table Last Updated: Fri Jan 27 06:00:52 2017



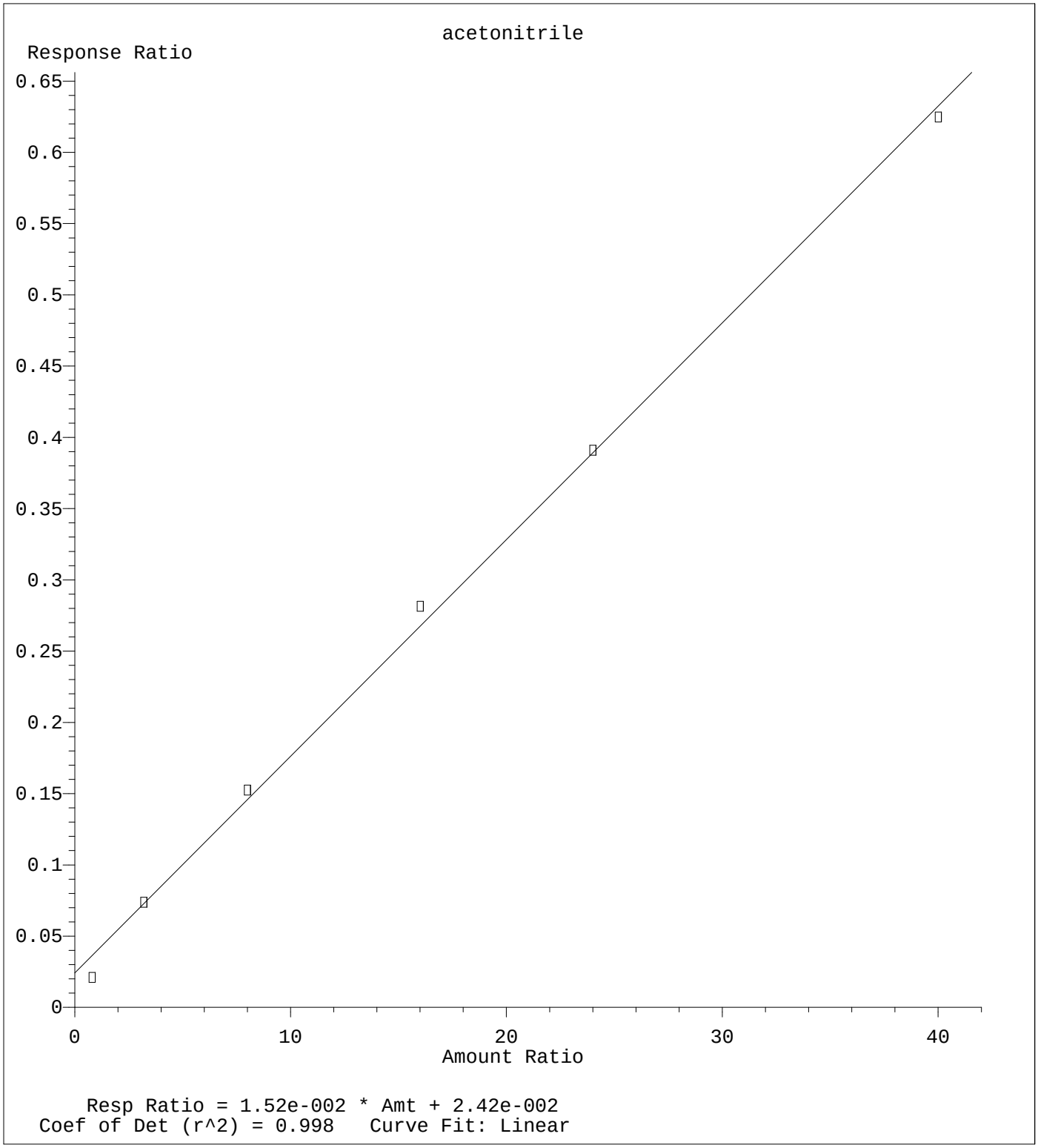

Method Name: C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M
Calibration Table Last Updated: Fri Jan 27 06:00:52 2017



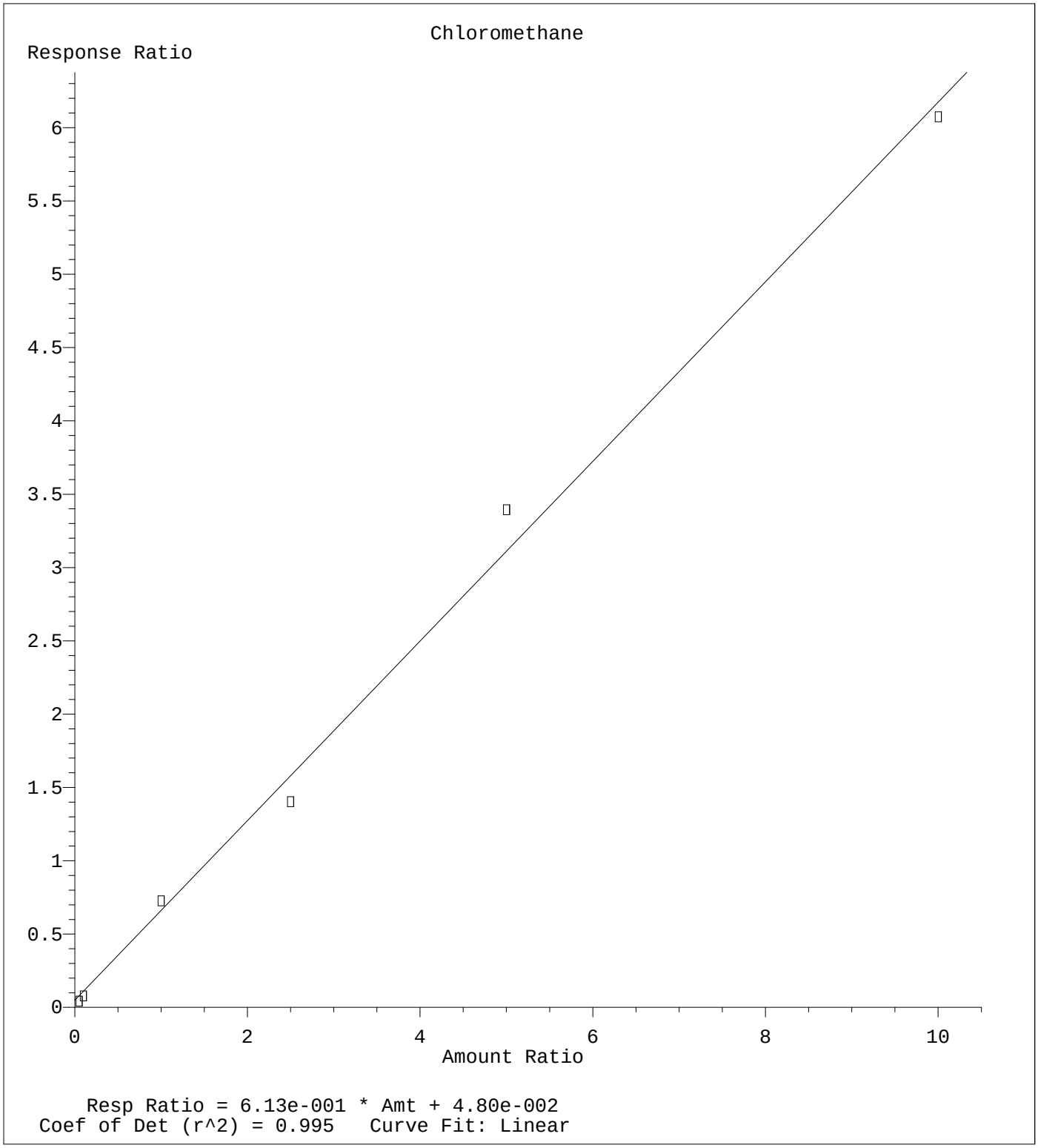

Method Name: C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M
Calibration Table Last Updated: Tue Feb 07 12:43:24 2017



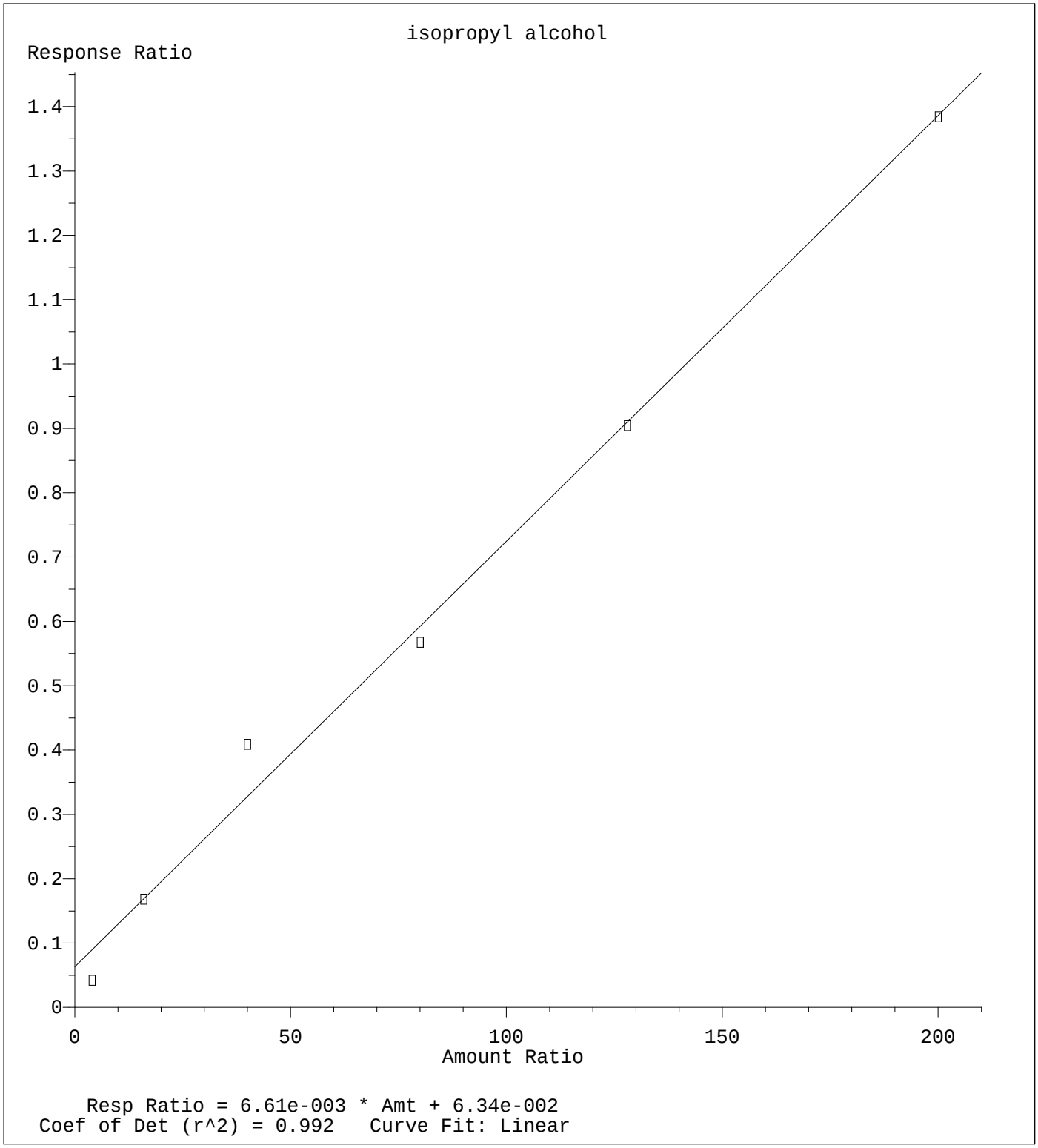

Method Name: C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M
Calibration Table Last Updated: Tue Feb 07 12:43:24 2017



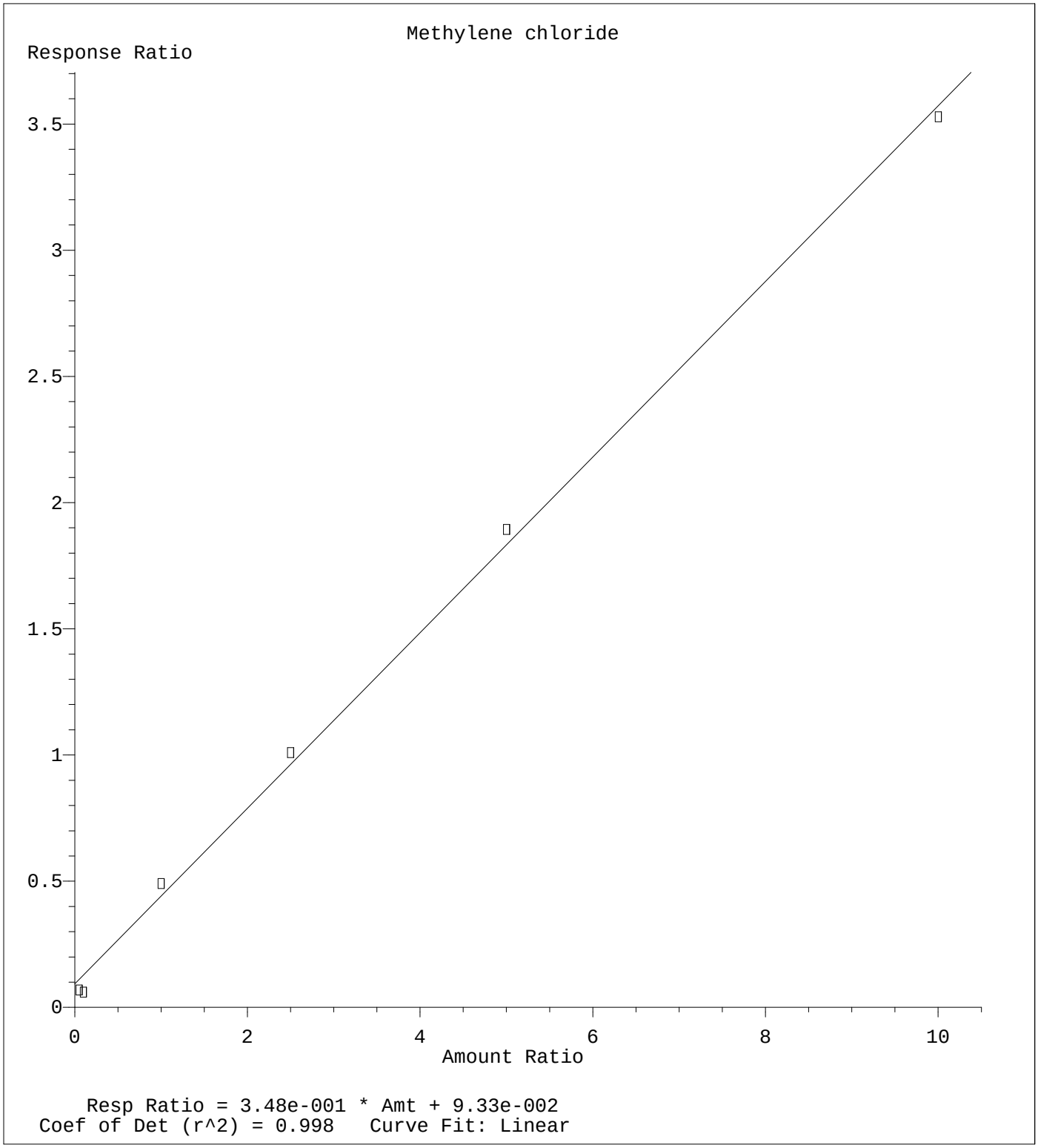

Method Name: C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M
Calibration Table Last Updated: Tue Feb 07 12:43:24 2017




Method Name: C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M
Calibration Table Last Updated: Fri Jan 27 06:00:52 2017




Method Name: C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M
Calibration Table Last Updated: Tue Feb 07 12:43:24 2017




Method Name: C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M
Calibration Table Last Updated: Fri Jan 27 06:00:52 2017

**Raw Data - ICV**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN15.D Vial: 15
Acq On : 26 Jan 2017 7:35 pm Operator: MGC
Sample : 1701474-ICV1 Inst : MS-V5
Misc : REG VO-107-69234;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:35 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 213388 | 10.00 ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 304652 | 10.00 ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 73774 | 10.00 ug/L | 0.00 |
| System Monitoring Compounds | | | | | |
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65568 | 10.39 ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 103.90% | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 340204 | 9.81 ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 98.10% | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.36 | 95 | 109533 | 10.77 ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 107.70% | | | | | |
| Target Compounds | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.76 | 85 | 235823 | 23.19 ug/L | 99 |
| 3) Chloromethane | 1.94 | 50 | 290701 | 21.45 ug/L | 98 |
| 4) Vinyl chloride | 2.07 | 62 | 256473 | 20.17 ug/L | 98 |
| 5) Bromomethane | 2.43 | 94 | 172354 | 25.40 ug/L | 96 |
| 6) Chloroethane | 2.56 | 64 | 208284 | 25.01 ug/L | 98 |
| 7) Trichlorofluoromethane | 2.86 | 101 | 292467 | 23.36 ug/L | 99 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 199834 | 22.39 ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 411821 | 24.85 ug/L | 96 |
| 10) Methylene chloride | 4.16 | 84 | 221091 | 27.09 ug/L | 98 |
| 11) MTBE | 4.49 | 73 | 389480 | 29.04 ug/L | 99 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 229704 | 23.91 ug/L | 95 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 550083 | 25.00 ug/L | 95 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 317771 | 23.05 ug/L | 88 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 253386 | 25.44 ug/L | 97 |
| 16) Bromochloromethane | 6.18 | 128 | 92016 | 27.87 ug/L | 93 |
| 17) Chloroform | 6.33 | 83 | 403954 | 25.08 ug/L | 98 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 332005 | 24.32 ug/L | 94 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 318457 | 24.34 ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 245626 | 24.55 ug/L | 99 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 243700 | 26.06 ug/L | 98 |
| 23) Benzene | 6.94 | 78 | 988660 | 24.52 ug/L | 96 |
| 25) Trichloroethene | 7.60 | 130 | 251736 | 25.38 ug/L | 98 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 286271 | 25.24 ug/L | 97 |
| 27) Dibromomethane | 7.91 | 93 | 88318 | 25.60 ug/L | 100 |
| 28) Bromodichloromethane | 8.06 | 83 | 264022 | 26.32 ug/L | 96 |
| 29) 2-ceve | 8.29 | 63 | 367167 | 115.60 ug/L | 97 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 344238 | 25.89 ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 574732 | 24.19 ug/L | 89 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 251576 | 27.51 ug/L | 96 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 131428 | 28.14 ug/L | 99 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 243537 | 23.43 ug/L | 98 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 226713 | 27.90 ug/L | 99 |
| 37) Dibromochloromethane | 9.24 | 129 | 146812 | 28.21 ug/L | 97 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 119264 | 28.16 ug/L | 98 |
| 40) Chlorobenzene | 9.64 | 112 | 561398 | 25.55 ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 176264 | 25.80 ug/L | 97 |
| 42) Ethylbenzene | 9.70 | 106 | 310958 | 24.81 ug/L | 89 |
| 43) P+m-Xylene | 9.78 | 106 | 735119 | 49.53 ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 354261 | 24.74 ug/L | 86 |
| 45) Styrene | 10.03 | 104 | 557026 | 26.03 ug/L | 98 |
| 46) Bromoform | 10.16 | 173 | 76428 | 29.54 ug/L | 97 |
| 47) Isopropylbenzene | 10.24 | 105 | 906229 | 23.67 ug/L | 92 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 118720 | 28.95 ug/L | 97 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 23826 | 29.76 ug/L | 90 |
| 51) n-propylbenzene | 10.48 | 91 | 1020575 | 23.21 ug/L | 92 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN15.D Vial: 15
Acq On : 26 Jan 2017 7:35 pm Operator: MGC
Sample : 1701474-ICV1 Inst : MS-V5
Misc : REG VO-107-69234;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:35 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

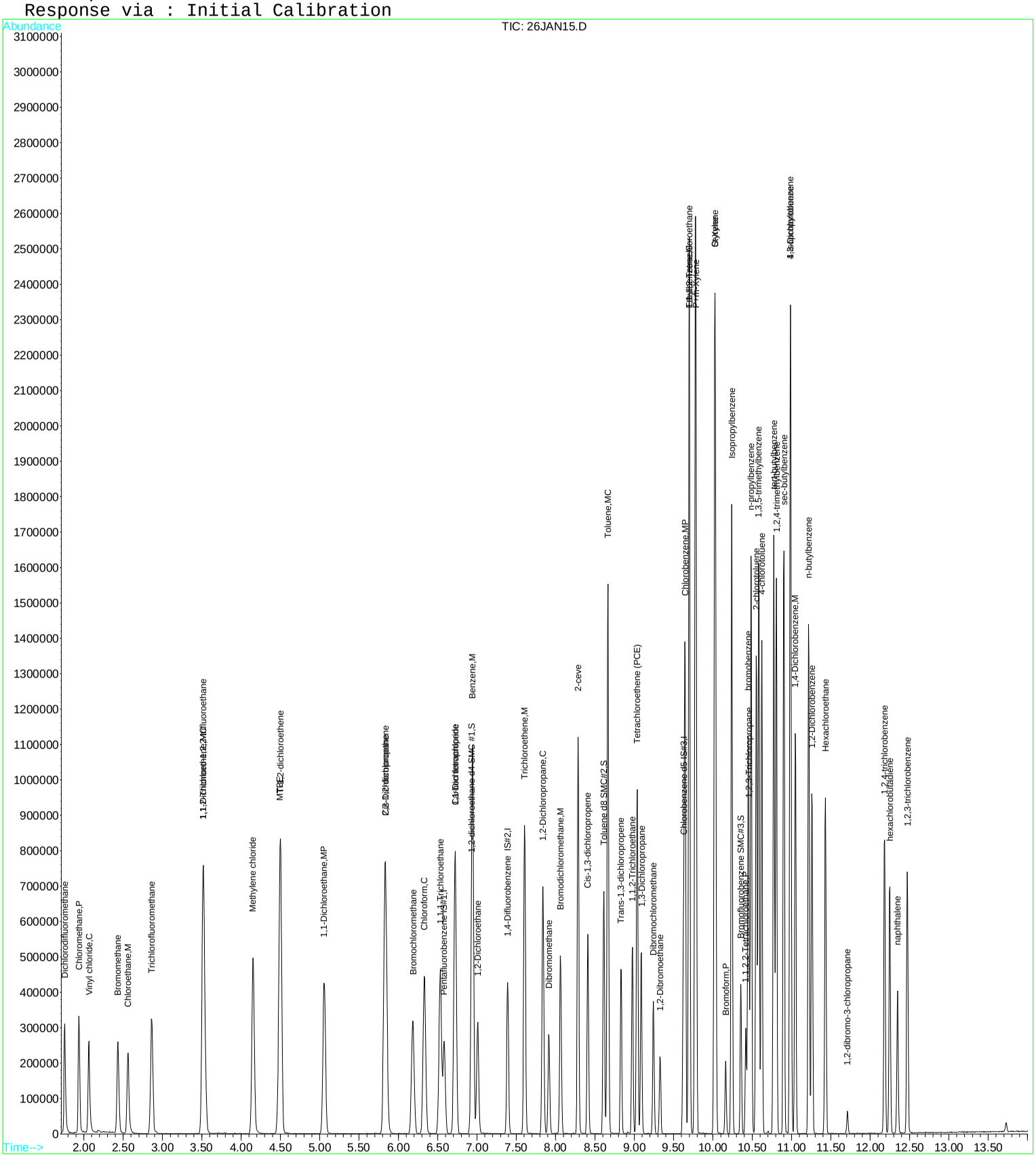
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 232750 | 26.75 | ug/L | 97 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 678886 | 23.18 | ug/L | 94 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 682299 | 25.23 | ug/L | 96 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 612079 | 25.25 | ug/L | 93 |
| 56) | tert-butylbenzene | 10.78 | 119 | 697312 | 24.54 | ug/L | 97 |
| 57) | 1,2,4-trimethylbenzene | 10.81 | 105 | 662761 | 24.97 | ug/L | 93 |
| 58) | sec-butylbenzene | 10.90 | 105 | 885920 | 22.32 | ug/L | 96 |
| 59) | 4-isopropyltoluene | 10.98 | 119 | 688496 | 22.96 | ug/L | 98 |
| 60) | 1,3-Dichlorobenzene | 10.99 | 146 | 357672 | 23.44 | ug/L | 98 |
| 61) | 1,4-Dichlorobenzene | 11.05 | 146 | 366852 | 25.95 | ug/L | 99 |
| 62) | n-butylbenzene | 11.22 | 91 | 630082 | 24.45 | ug/L | 95 |
| 63) | 1,2-Dichlorobenzene | 11.26 | 146 | 313844 | 25.12 | ug/L | 99 |
| 64) | Hexachloroethane | 11.43 | 117 | 134865 | 25.96 | ug/L | 97 |
| 65) | 1,2-dibromo-3-chloropropan | 11.71 | 75 | 14906 | 26.78 | ug/L | 99 |
| 66) | 1,2,4-trichlorobenzene | 12.18 | 180 | 231692 | 26.28 | ug/L | 98 |
| 67) | hexachlorobutadiene | 12.25 | 225 | 133136 | 22.52 | ug/L | 98 |
| 68) | naphthalene | 12.35 | 128 | 247498 | 28.85 | ug/L | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.47 | 180 | 202018 | 26.71 | ug/L | 88 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN15.D Vial: 15
Acq On : 26 Jan 2017 7:35 pm Operator: MGC
Sample : 1701474-ICV1 Inst : MS-V5
Misc : REG VO-107-69234;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:35 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB15.D Vial: 15
Acq On : 7 Feb 2017 12:46 pm Operator: MGC
Sample : 1702048-ICV2 Inst : MS-V5
Misc : 1 VO-107-69302;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 13:10 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 188542 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 259624 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.63 | 119 | 65064 | 10.00 ug/L | 0.00 |

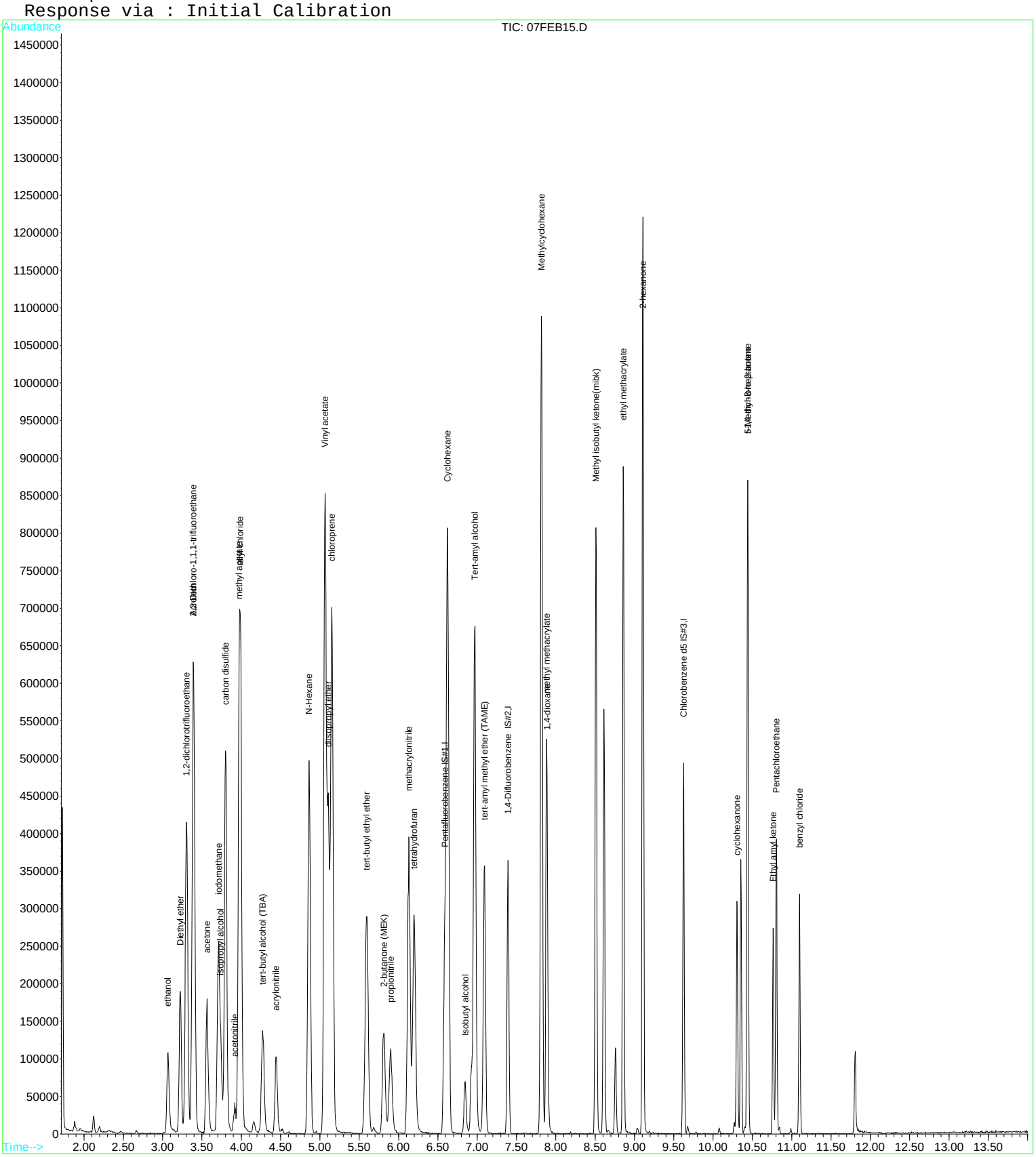
| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) ethanol | 3.06 | 45 | 137387m | 4721.01 ug/L | |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.40 | 83 | 417219 | 24.95 ug/L | 100 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 273032 | 25.55 ug/L | 99 |
| 5) Diethyl ether | 3.22 | 59 | 118410 | 24.13 ug/L | 99 |
| 6) isopropyl alcohol | 3.74 | 45 | 137793m | 1009.51 ug/L | |
| 7) Acrolein | 3.40 | 56 | 70037 | 186.42 ug/L | 97 |
| 8) acetone | 3.56 | 43 | 266343 | 315.03 ug/L | 100 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 195864 | 811.29 ug/L | 100 |
| 10) acetonitrile | 3.91 | 41 | 62384 | 201.66 ug/L | 96 |
| 11) methyl acetate | 3.97 | 43 | 678324 | 247.35 ug/L | 99 |
| 12) allyl chloride | 3.99 | 41 | 655064 | 31.18 ug/L | 96 |
| 13) iodomethane | 3.71 | 142 | 354400 | 32.14 ug/L | 98 |
| 14) acrylonitrile | 4.44 | 53 | 97713 | 81.34 ug/L | 96 |
| 15) carbon disulfide | 3.80 | 76 | 816943 | 32.22 ug/L | 100 |
| 16) N-Hexane | 4.87 | 57 | 299447 | 26.67 ug/L | 100 |
| 17) diisopropyl ether | 5.11 | 87 | 93091 | 15.55 ug/L | 90 |
| 18) Vinyl acetate | 5.07 | 43 | 1766840 | 147.71 ug/L | 99 |
| 19) chloroprene | 5.15 | 53 | 591745 | 31.36 ug/L | 99 |
| 20) tert-butyl ethyl ether | 5.60 | 59 | 372087 | 15.05 ug/L | 100 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 256904 | 154.88 ug/L | 100 |
| 22) propionitrile | 5.90 | 54 | 177719 | 409.66 ug/L | 98 |
| 23) Isobutyl alcohol | 6.85 | 43 | 52724 | 428.37 ug/L | 100 |
| 24) methacrylonitrile | 6.13 | 67 | 184367 | 158.40 ug/L | 98 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 473997 | 2819.06 ug/L | 99 |
| 26) tetrahydrofuran | 6.20 | 42 | 297461 | 306.99 ug/L | 98 |
| 27) Cyclohexane | 6.62 | 56 | 528597 | 25.81 ug/L | 98 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 207152 | 15.09 ug/L | 99 |
| 30) methyl methacrylate | 7.88 | 69 | 166060 | 76.70 ug/L | 96 |
| 31) Methylcyclohexane | 7.82 | 55 | 398645 | 24.85 ug/L | 97 |
| 32) 1,4-dioxane | 7.89 | 88 | 41012 | 2547.62 ug/L | 94 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 533496 | 147.91 ug/L | 97 |
| 34) ethyl methacrylate | 8.86 | 69 | 357638 | 77.57 ug/L | 99 |
| 35) 2-hexanone | 9.11 | 43 | 715785 | 312.86 ug/L | 98 |
| 37) 5-Methyl-3-heptanone | 10.45 | 43 | 163777 | 51.82 ug/L | 100 |
| 38) cyclohexanone | 10.31 | 55 | 113024 | 389.65 ug/L | 100 |
| 39) t-1,4-dichloro-2-butene | 10.44 | 75 | 77417 | 76.69 ug/L | 91 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 63351 | 26.93 ug/L | 97 |
| 41) Pentachloroethane | 10.80 | 167 | 55393 | 15.87 ug/L | 95 |
| 42) benzyl chloride | 11.10 | 91 | 178894 | 31.76 ug/L | 98 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB15.D Vial: 15
Acq On : 7 Feb 2017 12:46 pm Operator: MGC
Sample : 1702048-ICV2 Inst : MS-V5
Misc : 1 VO-107-69302;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 13:10 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - ICB**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN17.D Vial: 17
Acq On : 26 Jan 2017 8:23 pm Operator: MGC
Sample : 1701474-ICB1 Inst : MS-V5
Misc : 1 ICB;25mL;VRL-15-5636 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:36 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 218750 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 295229 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 72255 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 72932 | 11.27 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 112.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 333551 | 9.93 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 99.30% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 102328 | 10.27 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.70% | | | |

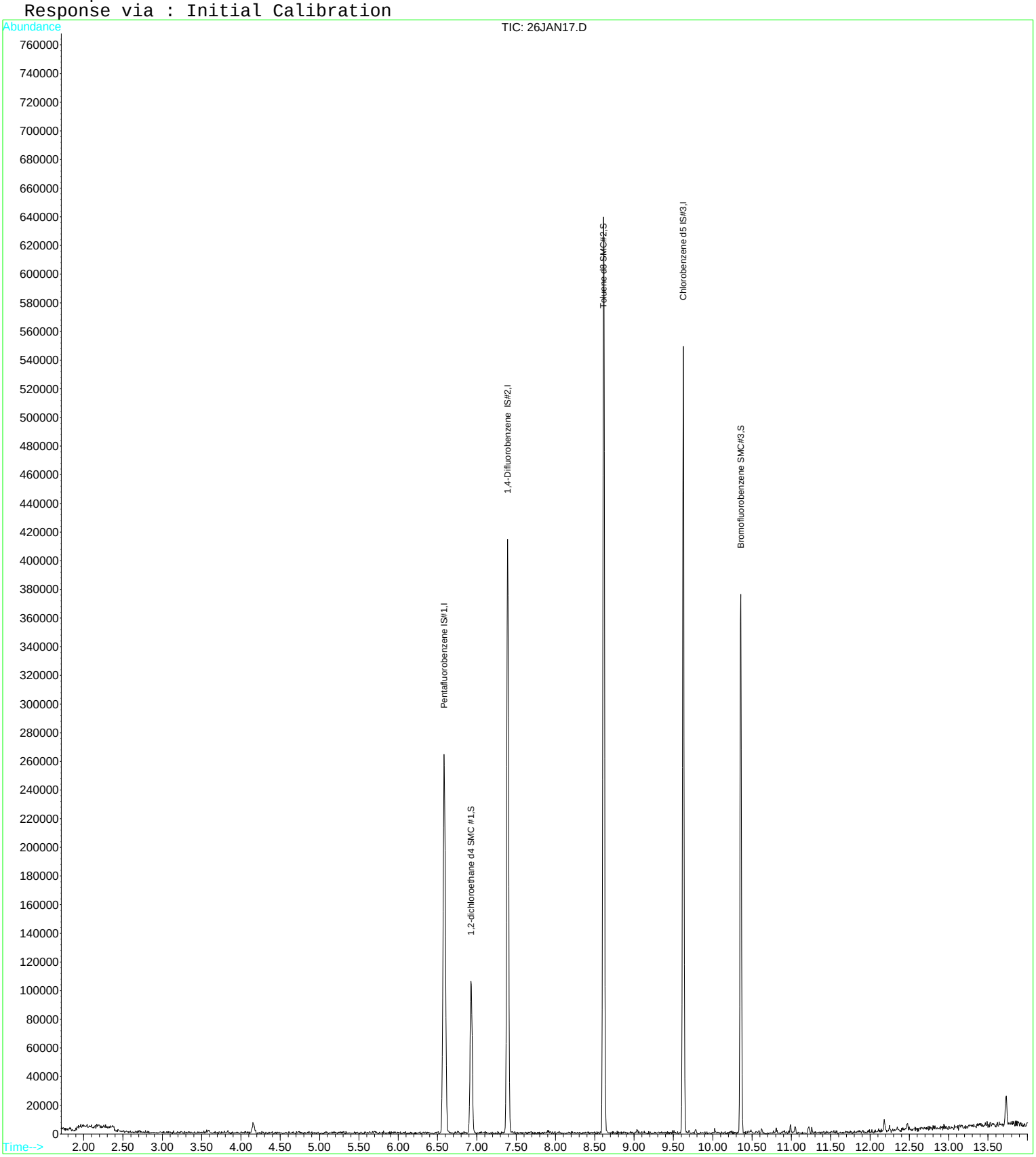
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN17.D Vial: 17
Acq On : 26 Jan 2017 8:23 pm Operator: MGC
Sample : 1701474-ICB1 Inst : MS-V5
Misc : 1 ICB;25mL;VRL-15-5636 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 9 8:36 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB17.D Vial: 17
Acq On : 7 Feb 2017 1:33 pm Operator: MGC
Sample : 1702048-ICB2 Inst : MS-V5
Misc : 1 ICB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 14:33 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 199643 | 10.00 ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 275356 | 10.00 ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.63 | 119 | 66387 | 10.00 ug/L | 0.00 |

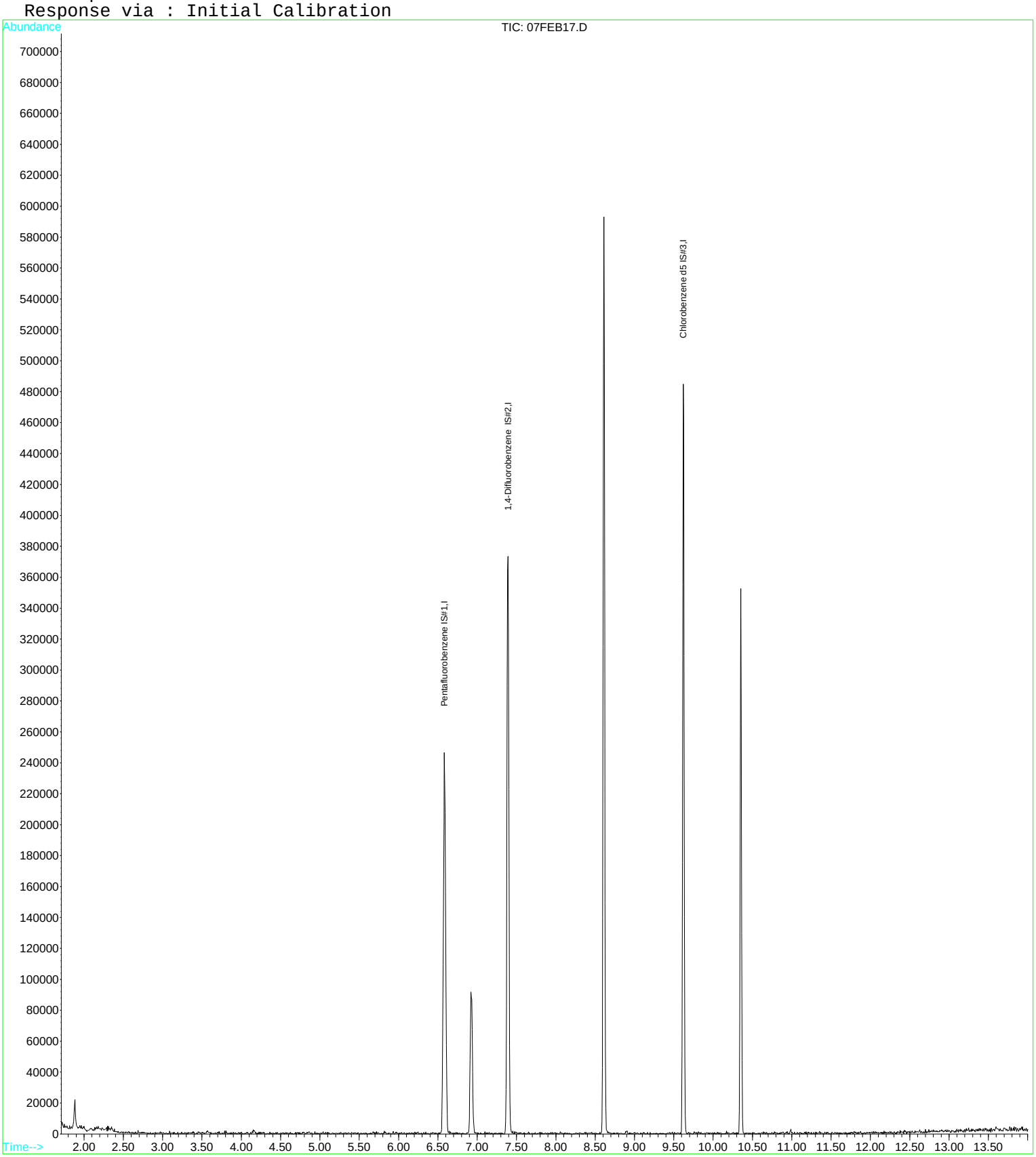
| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 35) 2-hexanone | 9.11 | 43 | 141 | Below Cal | # 28 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB17.D Vial: 17
Acq On : 7 Feb 2017 1:33 pm Operator: MGC
Sample : 1702048-ICB2 Inst : MS-V5
Misc : 1 ICB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 14:33 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - CCV**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB02.D Vial: 2
Acq On : 12 Feb 2017 5:28 am Operator: MGC
Sample : 1702423-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 5:42 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 200402 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280908 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66457 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 61647 | 10.40 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 104.00% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 299361 | 9.36 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 93.60% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87709 | 9.57 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.70% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 262512 | 27.49 | ug/L | 100 |
| 3) Chloromethane | 1.95 | 50 | 304604 | 24.02 | ug/L | 99 |
| 4) Vinyl chloride | 2.07 | 62 | 310837 | 26.03 | ug/L | 97 |
| 5) Bromomethane | 2.44 | 94 | 97230 | 15.26 | ug/L | 98 |
| 6) Chloroethane | 2.57 | 64 | 184861 | 23.64 | ug/L | 98 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 315908 | 26.86 | ug/L | 99 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 203032 | 24.22 | ug/L | 99 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 386172 | 24.81 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 174776 | 22.38 | ug/L | 97 |
| 11) MTBE | 4.49 | 73 | 280239 | 22.25 | ug/L | 99 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 207636 | 23.01 | ug/L | 96 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 431602 | 20.89 | ug/L | 97 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 325243 | 25.12 | ug/L | 92 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 213859 | 22.87 | ug/L | 96 |
| 16) Bromochloromethane | 6.19 | 128 | 71890 | 23.19 | ug/L | 96 |
| 17) Chloroform | 6.33 | 83 | 340516 | 22.51 | ug/L | 97 |
| 18) 1,1,1-Trichloroethane | 6.54 | 97 | 294612 | 22.98 | ug/L | 95 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 287954 | 23.43 | ug/L | 98 |
| 20) Carbon tetrachloride | 6.72 | 119 | 232108 | 24.70 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 194421 | 22.14 | ug/L | 97 |
| 23) Benzene | 6.95 | 78 | 847914 | 22.39 | ug/L | 96 |
| 25) Trichloroethene | 7.61 | 130 | 218929 | 23.94 | ug/L | 98 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 224671 | 21.48 | ug/L | 96 |
| 27) Dibromomethane | 7.91 | 93 | 70256 | 22.09 | ug/L | 97 |
| 28) Bromodichloromethane | 8.06 | 83 | 208107 | 22.50 | ug/L | 97 |
| 29) 2-ceve | 8.28 | 63 | 236532 | 80.77 | ug/L | 98 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 266854 | 21.77 | ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 479735 | 21.90 | ug/L | 89 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 188023 | 22.30 | ug/L | 96 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 94633 | 21.97 | ug/L | 99 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 233736 | 24.38 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 160609 | 21.44 | ug/L | 99 |
| 37) Dibromochloromethane | 9.24 | 129 | 110221 | 22.97 | ug/L | 100 |
| 38) 1,2-Dibromoethane | 9.32 | 107 | 82687 | 21.17 | ug/L | 99 |
| 40) Chlorobenzene | 9.64 | 112 | 472098 | 23.85 | ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 139977 | 22.74 | ug/L | 99 |
| 42) Ethylbenzene | 9.70 | 106 | 260969 | 23.11 | ug/L | 89 |
| 43) P+m-Xylene | 9.78 | 106 | 618130 | 46.23 | ug/L | 84 |
| 44) O-Xylene | 10.02 | 106 | 303462 | 23.53 | ug/L | 86 |
| 45) Styrene | 10.03 | 104 | 454808 | 23.60 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 51259 | 21.99 | ug/L | 97 |
| 47) Isopropylbenzene | 10.24 | 105 | 781626 | 22.67 | ug/L | 94 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 77799 | 21.06 | ug/L | 97 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 17668 | 24.17 | ug/L | 99 |
| 51) n-propylbenzene | 10.48 | 91 | 891445 | 22.51 | ug/L | 93 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB02.D Vial: 2
Acq On : 12 Feb 2017 5:28 am Operator: MGC
Sample : 1702423-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 5:42 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

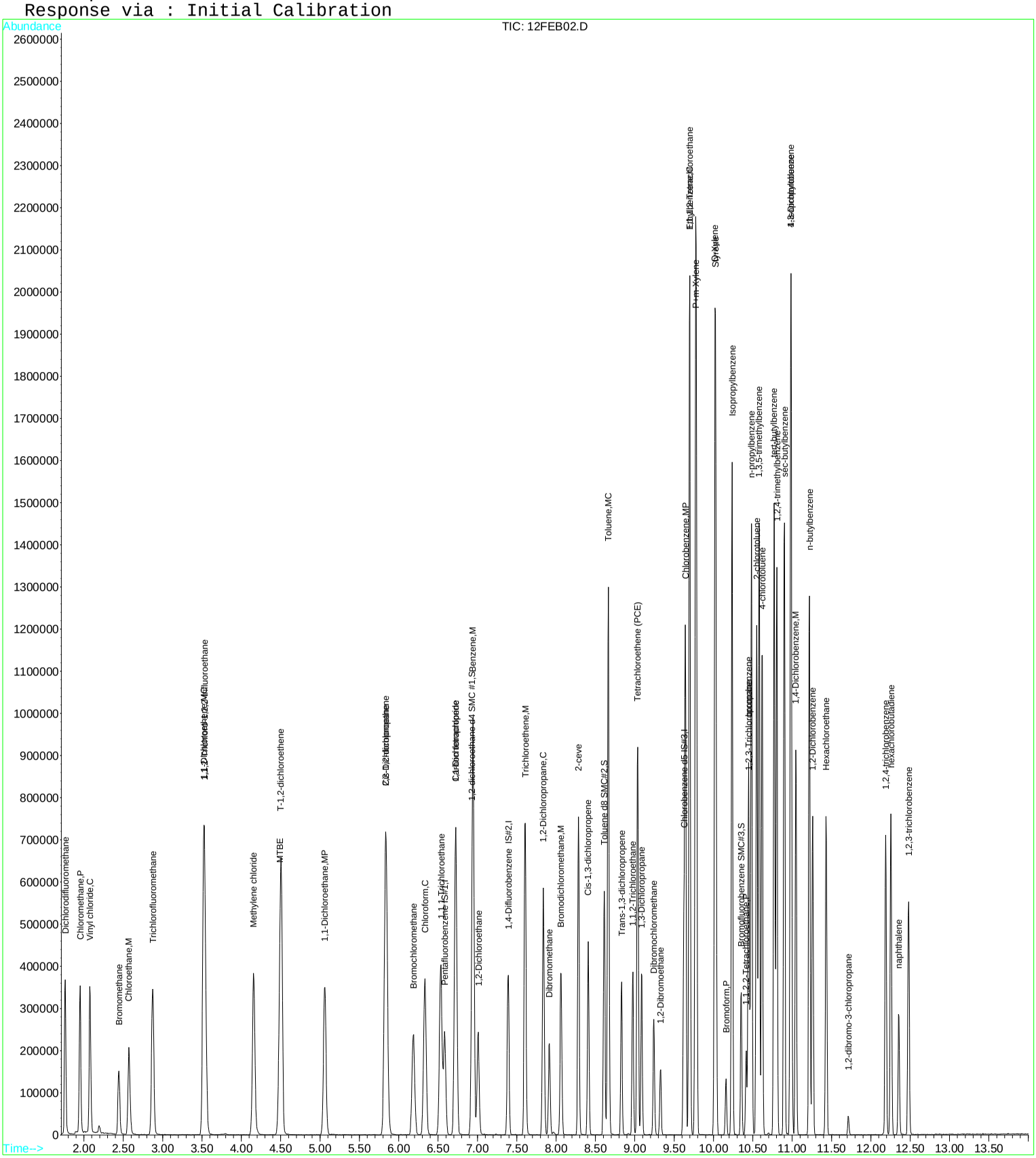
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 182751 | 23.32 | ug/L | | 93 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 592096 | 22.44 | ug/L | | 93 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 578810 | 23.76 | ug/L | | 97 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 517794 | 23.71 | ug/L | | 94 |
| 56) | tert-butylbenzene | 10.77 | 119 | 579511 | 22.64 | ug/L | | 99 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 549663 | 22.99 | ug/L | | 93 |
| 58) | sec-butylbenzene | 10.90 | 105 | 796134 | 22.27 | ug/L | | 94 |
| 59) | 4-isopropyltoluene | 10.98 | 119 | 637245 | 23.59 | ug/L | | 98 |
| 60) | 1,3-Dichlorobenzene | 10.99 | 146 | 305506 | 22.23 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.05 | 146 | 296091 | 23.25 | ug/L | | 98 |
| 62) | n-butylbenzene | 11.22 | 91 | 560265 | 24.13 | ug/L | | 95 |
| 63) | 1,2-Dichlorobenzene | 11.26 | 146 | 248100 | 22.05 | ug/L | | 98 |
| 64) | Hexachloroethane | 11.43 | 117 | 100540 | 21.49 | ug/L | # | 92 |
| 65) | 1,2-dibromo-3-chloropropan | 11.71 | 75 | 11003 | 21.92 | ug/L | | 92 |
| 66) | 1,2,4-trichlorobenzene | 12.19 | 180 | 199512 | 25.13 | ug/L | | 95 |
| 67) | hexachlorobutadiene | 12.25 | 225 | 142163 | 26.70 | ug/L | | 99 |
| 68) | naphthalene | 12.35 | 128 | 185670 | 24.03 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.48 | 180 | 164412 | 24.13 | ug/L | | 86 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB02.D Vial: 2
Acq On : 12 Feb 2017 5:28 am Operator: MGC
Sample : 1702423-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 5:42 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB03.D Vial: 3
Acq On : 12 Feb 2017 5:51 am Operator: MGC
Sample : 1702423-CCV2 Inst : MS-V5
Misc : 1 VO-107-69122;69123;69124;69125;69126;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 6:27 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 204871 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270832 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66742 | 10.00 | ug/L | | 0.00 |

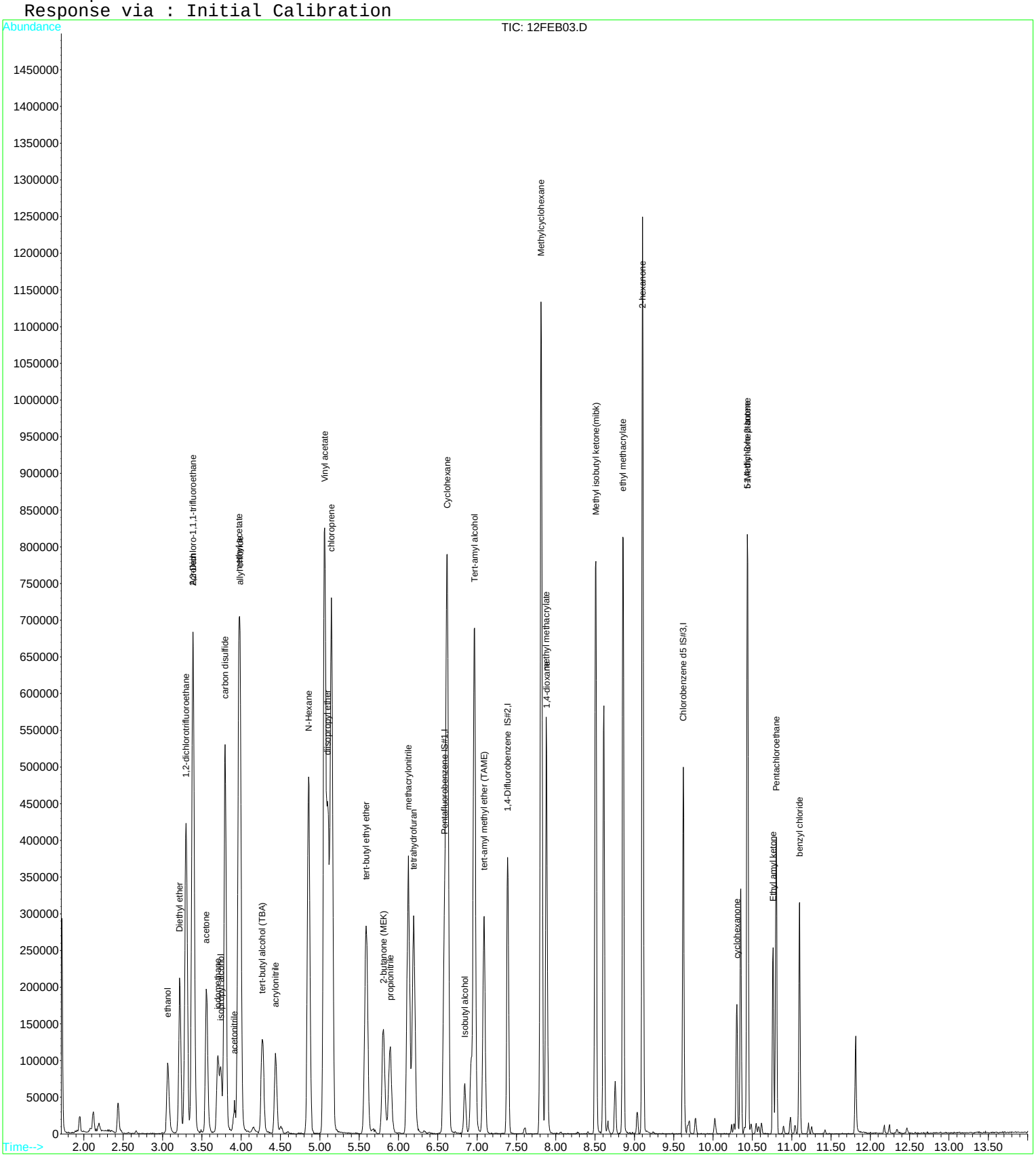
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.07 | 45 | 127865 | 4043.61 | ug/L | | 96 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 426611 | 23.48 | ug/L | | 98 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 273346 | 23.54 | ug/L | | 98 |
| 5) Diethyl ether | 3.22 | 59 | 124245 | 23.30 | ug/L | | 99 |
| 6) isopropyl alcohol | 3.74 | 45 | 137644 | 920.31 | ug/L | # | 1 |
| 7) Acrolein | 3.39 | 56 | 114937 | 281.54 | ug/L | | 97 |
| 8) acetone | 3.56 | 43 | 295621 | 321.80 | ug/L | | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 187077 | 713.13 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 60667 | 178.81 | ug/L | | 93 |
| 11) methyl acetate | 3.97 | 43 | 694378 | 233.02 | ug/L | | 99 |
| 12) allyl chloride | 3.99 | 41 | 633003 | 27.73 | ug/L | | 99 |
| 13) iodomethane | 3.70 | 142 | 139938 | 11.68 | ug/L | | 99 |
| 14) acrylonitrile | 4.44 | 53 | 102257 | 78.33 | ug/L | | 99 |
| 15) carbon disulfide | 3.80 | 76 | 828364 | 30.07 | ug/L | | 100 |
| 16) N-Hexane | 4.86 | 57 | 296672 | 24.31 | ug/L | | 99 |
| 17) diisopropyl ether | 5.10 | 87 | 103177 | 15.86 | ug/L | | 95 |
| 18) Vinyl acetate | 5.06 | 43 | 1709722 | 131.55 | ug/L | | 99 |
| 19) chloroprene | 5.15 | 53 | 622930 | 30.38 | ug/L | | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 366232 | 13.63 | ug/L | | 98 |
| 21) 2-butanone (MEK) | 5.80 | 43 | 260281 | 144.41 | ug/L | | 98 |
| 22) propionitrile | 5.89 | 54 | 185378 | 393.25 | ug/L | | 98 |
| 23) Isobutyl alcohol | 6.84 | 43 | 48483 | 362.52 | ug/L | | 99 |
| 24) methacrylonitrile | 6.13 | 67 | 180876 | 143.02 | ug/L | | 98 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 461493 | 2525.93 | ug/L | | 100 |
| 26) tetrahydrofuran | 6.19 | 42 | 292097 | 277.43 | ug/L | | 98 |
| 27) Cyclohexane | 6.61 | 56 | 527090 | 23.68 | ug/L | | 100 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 211171 | 14.16 | ug/L | | 97 |
| 30) methyl methacrylate | 7.88 | 69 | 163863 | 72.55 | ug/L | | 98 |
| 31) Methylcyclohexane | 7.81 | 55 | 402511 | 24.05 | ug/L | | 99 |
| 32) 1,4-dioxane | 7.89 | 88 | 34809 | 2050.77 | ug/L | | 95 |
| 33) Methyl isobutyl ketone(mib | 8.50 | 43 | 519807 | 138.15 | ug/L | | 98 |
| 34) ethyl methacrylate | 8.85 | 69 | 333012 | 69.24 | ug/L | | 98 |
| 35) 2-hexanone | 9.10 | 43 | 702561 | 291.05 | ug/L | | 99 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 156952 | 48.41 | ug/L | | 99 |
| 38) cyclohexanone | 10.30 | 55 | 65226 | 219.21 | ug/L | | 99 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 76870 | 74.23 | ug/L | | 96 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 58736 | 24.34 | ug/L | | 99 |
| 41) Pentachloroethane | 10.80 | 167 | 61648 | 17.21 | ug/L | | 97 |
| 42) benzyl chloride | 11.10 | 91 | 178632 | 30.92 | ug/L | | 97 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB03.D Vial: 3
Acq On : 12 Feb 2017 5:51 am Operator: MGC
Sample : 1702423-CCV2 Inst : MS-V5
Misc : 1 VO-107-69122;69123;69124;69125;69126;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 6:27 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB33.D Vial: 33
Acq On : 12 Feb 2017 5:25 pm Operator: MGC
Sample : 1702423-CCV4 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 17:39 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201233 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279291 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69130 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 58053 | 9.75 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 97.50% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 312660 | 9.84 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 98.40% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 93633 | 9.82 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 98.20% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 255399 | 26.63 | ug/L | 96 |
| 3) Chloromethane | 1.95 | 50 | 344210 | 27.13 | ug/L | 99 |
| 4) Vinyl chloride | 2.07 | 62 | 326450 | 27.23 | ug/L | 95 |
| 5) Bromomethane | 2.44 | 94 | 119583 | 18.69 | ug/L | 97 |
| 6) Chloroethane | 2.57 | 64 | 194942 | 24.82 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 314859 | 26.66 | ug/L | 98 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 202919 | 24.11 | ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 385992 | 24.70 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 190748 | 24.56 | ug/L | 96 |
| 11) MTBE | 4.49 | 73 | 301490 | 23.83 | ug/L | 100 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 214927 | 23.72 | ug/L | 98 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 447357 | 21.56 | ug/L | 97 |
| 14) 2,2-Dichloropropane | 5.83 | 77 | 300505 | 23.11 | ug/L | 98 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 220743 | 23.51 | ug/L | 98 |
| 16) Bromochloromethane | 6.18 | 128 | 75932 | 24.39 | ug/L | 97 |
| 17) Chloroform | 6.33 | 83 | 342101 | 22.52 | ug/L | 98 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 299180 | 23.24 | ug/L | 95 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 290994 | 23.58 | ug/L | 100 |
| 20) Carbon tetrachloride | 6.72 | 119 | 232255 | 24.62 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.00 | 62 | 202507 | 22.96 | ug/L | 97 |
| 23) Benzene | 6.94 | 78 | 850172 | 22.36 | ug/L | 97 |
| 25) Trichloroethene | 7.61 | 130 | 218799 | 24.06 | ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 230759 | 22.19 | ug/L | 96 |
| 27) Dibromomethane | 7.91 | 93 | 68937 | 21.80 | ug/L | 99 |
| 28) Bromodichloromethane | 8.06 | 83 | 209624 | 22.80 | ug/L | 99 |
| 29) 2-ceve | 8.28 | 63 | 250557 | 86.05 | ug/L | 98 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 269872 | 22.14 | ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 503475 | 23.12 | ug/L | 89 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 200517 | 23.92 | ug/L | 98 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 100100 | 23.38 | ug/L | 99 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 235240 | 24.68 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.08 | 76 | 173517 | 23.29 | ug/L | 97 |
| 37) Dibromochloromethane | 9.24 | 129 | 112462 | 23.57 | ug/L | 99 |
| 38) 1,2-Dibromoethane | 9.32 | 107 | 90536 | 23.32 | ug/L | 98 |
| 40) Chlorobenzene | 9.64 | 112 | 491932 | 23.90 | ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 138410 | 21.62 | ug/L | 97 |
| 42) Ethylbenzene | 9.70 | 106 | 265980 | 22.64 | ug/L | 87 |
| 43) P+m-Xylene | 9.77 | 106 | 659386 | 47.41 | ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 308538 | 23.00 | ug/L | 87 |
| 45) Styrene | 10.03 | 104 | 475657 | 23.72 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 56444 | 23.28 | ug/L | 100 |
| 47) Isopropylbenzene | 10.24 | 105 | 798229 | 22.25 | ug/L | 93 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 82120 | 21.37 | ug/L | 99 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 18576 | 24.45 | ug/L | 93 |
| 51) n-propylbenzene | 10.48 | 91 | 904636 | 21.96 | ug/L | 95 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB33.D Vial: 33
Acq On : 12 Feb 2017 5:25 pm Operator: MGC
Sample : 1702423-CCV4 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 17:39 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

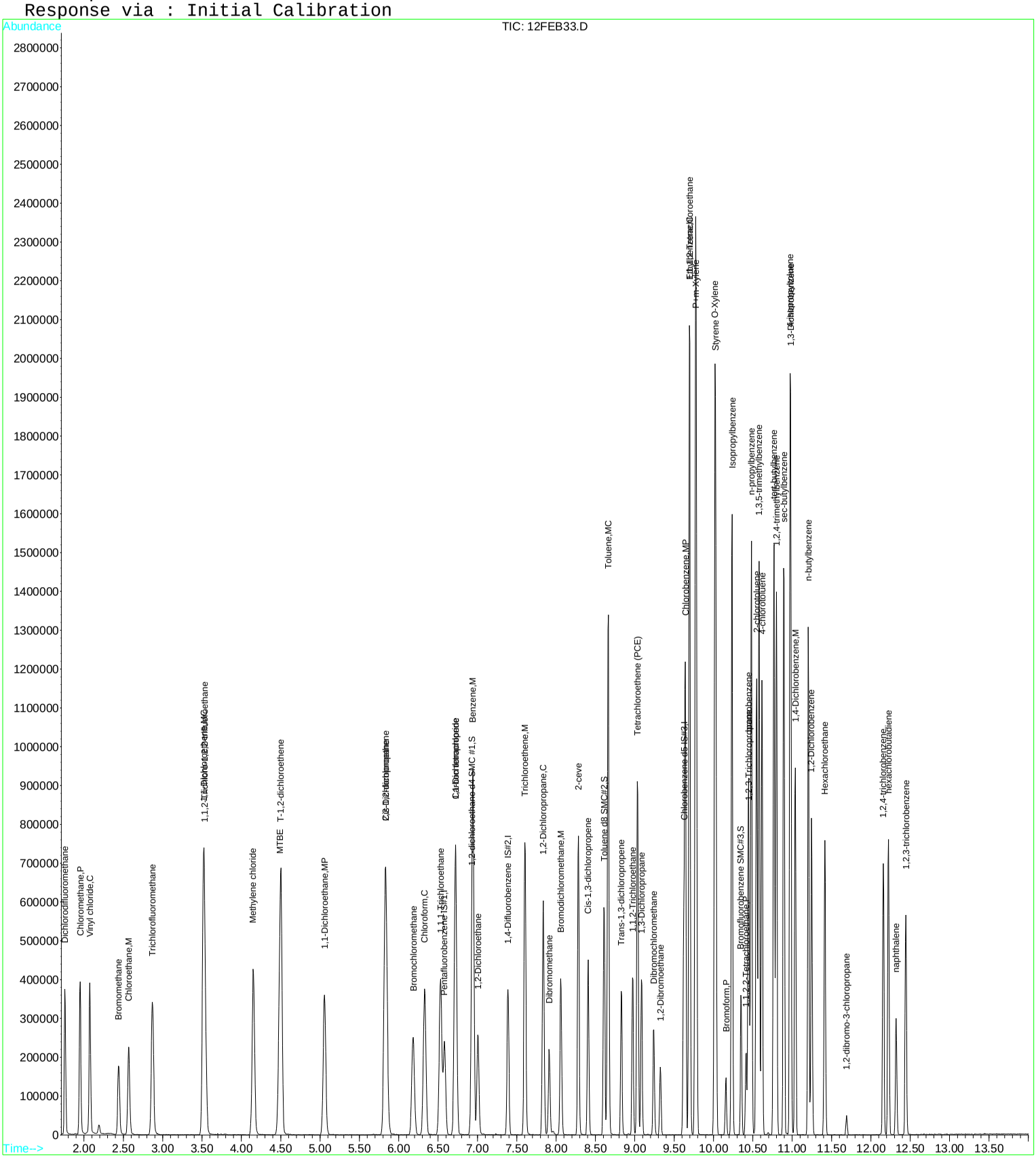
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 191196 | 23.45 | ug/L | | 96 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 593548 | 21.62 | ug/L | | 92 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 570442 | 22.51 | ug/L | | 96 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 512933 | 22.58 | ug/L | | 97 |
| 56) | tert-butylbenzene | 10.77 | 119 | 638270 | 23.97 | ug/L | | 97 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 572748 | 23.03 | ug/L | | 93 |
| 58) | sec-butylbenzene | 10.89 | 105 | 800933 | 21.54 | ug/L | | 94 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 608023 | 21.64 | ug/L | | 97 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 294319 | 20.58 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 305675 | 23.08 | ug/L | | 96 |
| 62) | n-butylbenzene | 11.20 | 91 | 550440 | 22.79 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 265871 | 22.71 | ug/L | | 97 |
| 64) | Hexachloroethane | 11.41 | 117 | 100066 | 20.56 | ug/L | # | 90 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 11215 | 21.48 | ug/L | | 97 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 195333 | 23.65 | ug/L | | 97 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 143126 | 25.84 | ug/L | | 98 |
| 68) | naphthalene | 12.32 | 128 | 189188 | 23.54 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 160297 | 22.62 | ug/L | | 87 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB33.D Vial: 33
Acq On : 12 Feb 2017 5:25 pm Operator: MGC
Sample : 1702423-CCV4 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 17:39 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB34.D Vial: 34
Acq On : 12 Feb 2017 5:48 pm Operator: MGC
Sample : 1702423-CCV5 Inst : MS-V5
Misc : 1 VO-107-69122;69123;69124;69125;69126;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:27 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 209784 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280430 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67298 | 10.00 | ug/L | 0.00 |

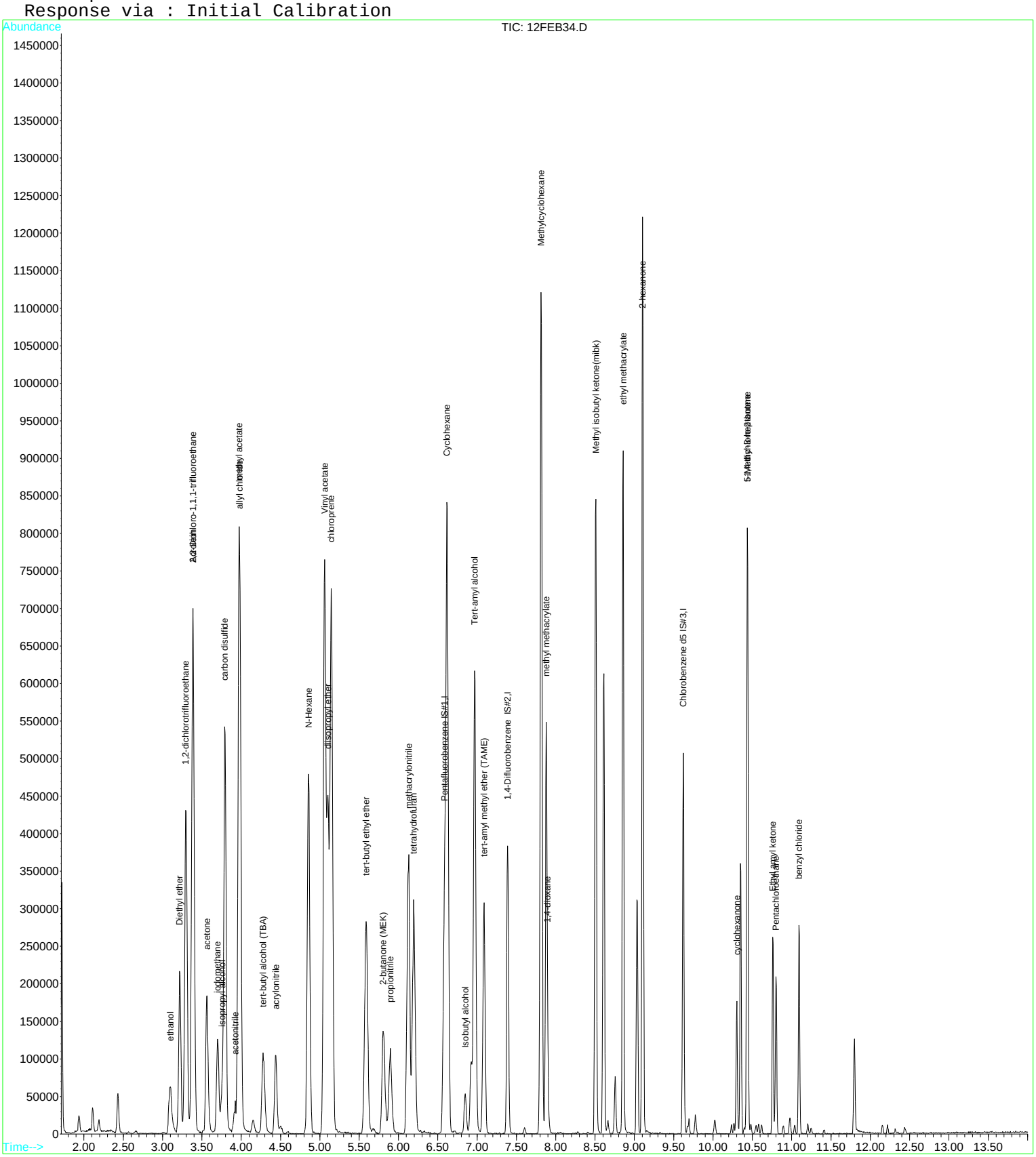
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) ethanol | 3.10 | 45 | 105141 | 3247.11 | ug/L | 95 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 441653 | 23.74 | ug/L | 99 |
| 4) 1,2-dichlorotrifluoroethan | 3.29 | 67 | 275241 | 23.15 | ug/L | 98 |
| 5) Diethyl ether | 3.22 | 59 | 131499 | 24.08 | ug/L | 98 |
| 6) isopropyl alcohol | 3.75 | 45 | 105599 | 665.47 | ug/L | 79 |
| 7) Acrolein | 3.39 | 56 | 112235 | 268.49 | ug/L | 93 |
| 8) acetone | 3.57 | 43 | 284397 | 302.33 | ug/L | 100 |
| 9) tert-butyl alcohol (TBA) | 4.28 | 59 | 157706 | 587.09 | ug/L | 100 |
| 10) acetonitrile | 3.92 | 41 | 59409 | 170.30 | ug/L | 90 |
| 11) methyl acetate | 3.97 | 43 | 728178 | 238.64 | ug/L | 99 |
| 12) allyl chloride | 3.99 | 41 | 656714 | 28.09 | ug/L | 100 |
| 13) iodomethane | 3.70 | 142 | 173487 | 14.14 | ug/L | 99 |
| 14) acrylonitrile | 4.44 | 53 | 98813 | 73.92 | ug/L | 96 |
| 15) carbon disulfide | 3.79 | 76 | 834830 | 29.59 | ug/L | 100 |
| 16) N-Hexane | 4.86 | 57 | 285297 | 22.83 | ug/L | 98 |
| 17) diisopropyl ether | 5.10 | 87 | 99268 | 14.90 | ug/L | 96 |
| 18) Vinyl acetate | 5.06 | 43 | 1538191 | 115.58 | ug/L | 99 |
| 19) chloroprene | 5.15 | 53 | 624430 | 29.74 | ug/L | 100 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 362093 | 13.16 | ug/L | 98 |
| 21) 2-butanone (MEK) | 5.80 | 43 | 257671 | 139.62 | ug/L | 100 |
| 22) propionitrile | 5.90 | 54 | 165564 | 342.99 | ug/L | 96 |
| 23) Isobutyl alcohol | 6.85 | 43 | 38270 | 279.45 | ug/L | 96 |
| 24) methacrylonitrile | 6.13 | 67 | 190444 | 147.06 | ug/L | 95 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 406151 | 2170.96 | ug/L | 97 |
| 26) tetrahydrofuran | 6.19 | 42 | 293421 | 272.16 | ug/L | 99 |
| 27) Cyclohexane | 6.62 | 56 | 535332 | 23.49 | ug/L | 99 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 215506 | 14.11 | ug/L | 97 |
| 30) methyl methacrylate | 7.88 | 69 | 171792 | 73.46 | ug/L | 99 |
| 31) Methylcyclohexane | 7.81 | 55 | 406586 | 23.47 | ug/L | 99 |
| 32) 1,4-dioxane | 7.90 | 88 | 32231 | 1821.39 | ug/L | 95 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 543885 | 139.60 | ug/L | 99 |
| 34) ethyl methacrylate | 8.86 | 69 | 357251 | 71.73 | ug/L | 99 |
| 35) 2-hexanone | 9.10 | 43 | 701588 | 278.93 | ug/L | 99 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 157761 | 48.26 | ug/L | 98 |
| 38) cyclohexanone | 10.30 | 55 | 62140 | 207.12 | ug/L | 99 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 71676 | 68.65 | ug/L | 98 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 61531 | 25.29 | ug/L | 99 |
| 41) Pentachloroethane | 10.80 | 167 | 28036 | 7.76 | ug/L | 97 |
| 42) benzyl chloride | 11.09 | 91 | 154531 | 26.52 | ug/L | 98 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB34.D Vial: 34
Acq On : 12 Feb 2017 5:48 pm Operator: MGC
Sample : 1702423-CCV5 Inst : MS-V5
Misc : 1 VO-107-69122;69123;69124;69125;69126;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:27 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB64.D Vial: 64
Acq On : 13 Feb 2017 5:23 am Operator: MGC
Sample : 1702423-CCV6 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:37 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 175106 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 242829 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 57637 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 52151 | 10.07 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 100.70% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 268330 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.10% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 79618 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 100.20% | | | | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.76 | 85 | 272488 | 32.65 | ug/L | 97 |
| 3) Chloromethane | 1.94 | 50 | 334573 | 30.40 | ug/L | 99 |
| 4) Vinyl chloride | 2.07 | 62 | 321576 | 30.82 | ug/L | 97 |
| 5) Bromomethane | 2.44 | 94 | 69703 | 12.52 | ug/L | 98 |
| 6) Chloroethane | 2.56 | 64 | 205065 | 30.01 | ug/L | 97 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 324562 | 31.59 | ug/L | 100 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 208781 | 28.50 | ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 409555 | 30.11 | ug/L | 98 |
| 10) Methylene chloride | 4.15 | 84 | 187900 | 28.15 | ug/L | 96 |
| 11) MTBE | 4.49 | 73 | 303600 | 27.58 | ug/L | 100 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 218275 | 27.68 | ug/L | 97 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 463819 | 25.69 | ug/L | 97 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 336281 | 29.72 | ug/L | 94 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 226442 | 27.71 | ug/L | 97 |
| 16) Bromochloromethane | 6.19 | 128 | 78799 | 29.09 | ug/L | 93 |
| 17) Chloroform | 6.33 | 83 | 354747 | 26.84 | ug/L | 96 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 315686 | 28.18 | ug/L | 98 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 312824 | 29.14 | ug/L | 98 |
| 20) Carbon tetrachloride | 6.72 | 119 | 241240 | 29.38 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 202547 | 26.40 | ug/L | 97 |
| 23) Benzene | 6.94 | 78 | 906867 | 27.41 | ug/L | 97 |
| 25) Trichloroethene | 7.61 | 130 | 232979 | 29.47 | ug/L | 97 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 230516 | 25.50 | ug/L | 94 |
| 27) Dibromomethane | 7.91 | 93 | 70340 | 25.58 | ug/L | 95 |
| 28) Bromodichloromethane | 8.06 | 83 | 212771 | 26.62 | ug/L | 99 |
| 29) 2-ceve | 8.28 | 63 | 220337 | 87.03 | ug/L | 98 |
| 30) Cis-1,3-dichloropropene | 8.40 | 75 | 272616 | 25.73 | ug/L | 99 |
| 32) Toluene | 8.66 | 92 | 521032 | 27.52 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 192935 | 26.47 | ug/L | 98 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 101902 | 27.37 | ug/L | 98 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 264095 | 31.87 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 169012 | 26.10 | ug/L | 99 |
| 37) Dibromochloromethane | 9.24 | 129 | 112064 | 27.01 | ug/L | 98 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 92754 | 27.48 | ug/L | 96 |
| 40) Chlorobenzene | 9.64 | 112 | 483662 | 28.18 | ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 145858 | 27.32 | ug/L | 99 |
| 42) Ethylbenzene | 9.70 | 106 | 278881 | 28.48 | ug/L | 87 |
| 43) P+m-Xylene | 9.78 | 106 | 640564 | 55.24 | ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 314222 | 28.09 | ug/L | 86 |
| 45) Styrene | 10.03 | 104 | 484600 | 28.99 | ug/L | 100 |
| 46) Bromoform | 10.16 | 173 | 52326 | 25.89 | ug/L | 98 |
| 47) Isopropylbenzene | 10.23 | 105 | 828673 | 27.71 | ug/L | 94 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 86019 | 26.84 | ug/L | 98 |
| 50) 1,2,3-Trichloropropane | 10.45 | 110 | 17621 | 28.07 | ug/L | 87 |
| 51) n-propylbenzene | 10.48 | 91 | 920209 | 26.79 | ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB64.D Vial: 64
Acq On : 13 Feb 2017 5:23 am Operator: MGC
Sample : 1702423-CCV6 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:37 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

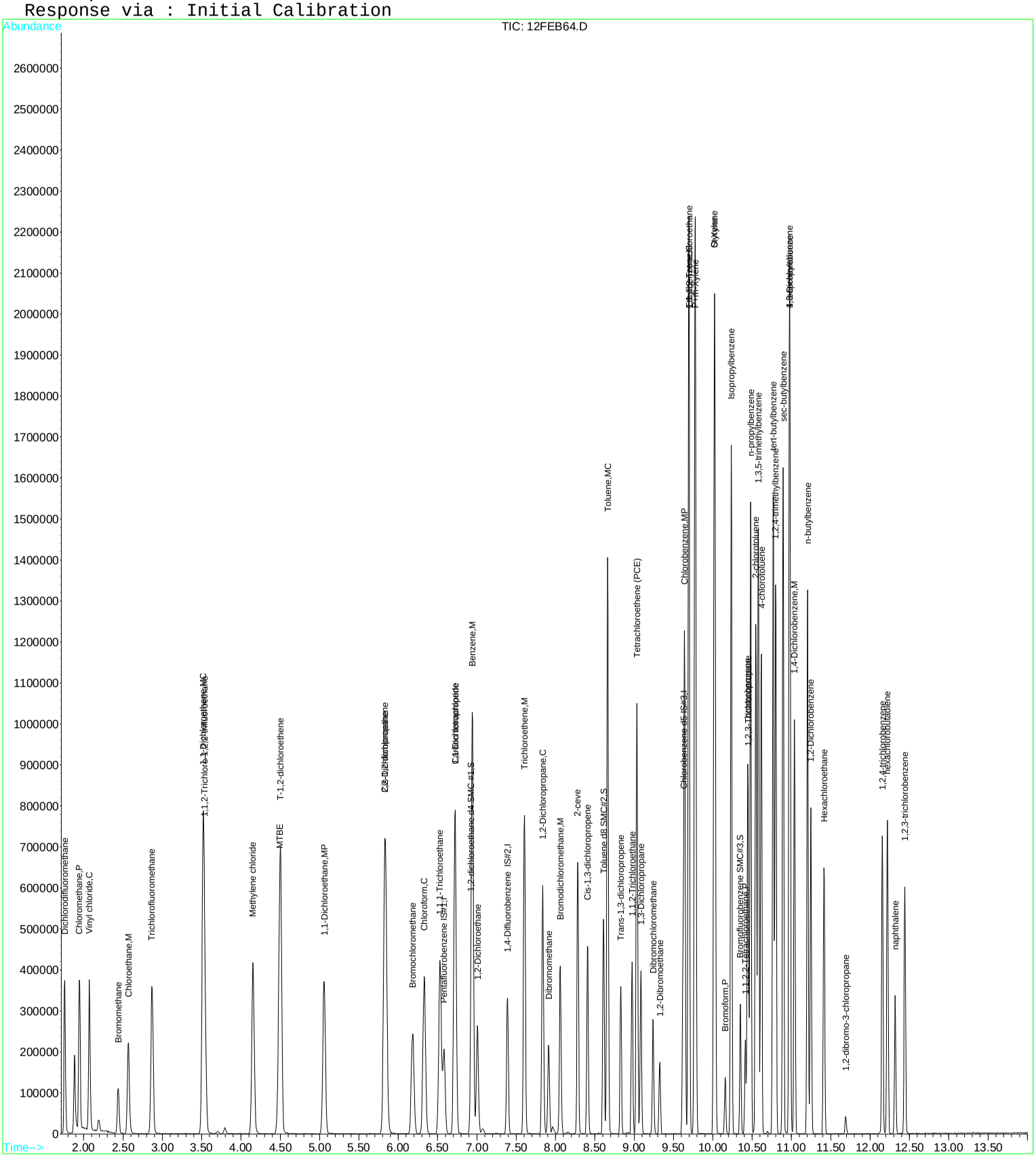
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.44 | 156 | 190436 | 28.02 | ug/L | | 95 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 619819 | 27.08 | ug/L | | 93 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 608687 | 28.81 | ug/L | | 96 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 530587 | 28.02 | ug/L | | 95 |
| 56) | tert-butylbenzene | 10.77 | 119 | 642014 | 28.92 | ug/L | | 96 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 575752 | 27.77 | ug/L | | 91 |
| 58) | sec-butylbenzene | 10.89 | 105 | 847389 | 27.33 | ug/L | | 95 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 652417 | 27.85 | ug/L | | 98 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 311960 | 26.17 | ug/L | | 98 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 311977 | 28.25 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 572311 | 28.42 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 265994 | 27.25 | ug/L | | 97 |
| 64) | Hexachloroethane | 11.42 | 117 | 82315 | 20.28 | ug/L | # | 89 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10454 | 24.03 | ug/L | | 93 |
| 66) | 1,2,4-trichlorobenzene | 12.15 | 180 | 203924 | 29.61 | ug/L | | 97 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 144383 | 31.26 | ug/L | | 98 |
| 68) | naphthalene | 12.32 | 128 | 204618 | 30.53 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 170274 | 28.81 | ug/L | | 87 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB64.D Vial: 64
Acq On : 13 Feb 2017 5:23 am Operator: MGC
Sample : 1702423-CCV6 Inst : MS-V5
Misc : 1 REG VO-107-69113;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:37 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB65.D Vial: 65
Acq On : 13 Feb 2017 5:46 am Operator: MGC
Sample : 1702423-CCV7 Inst : MS-V5
Misc : 1 VO-107-69122;69123;69124;69125;69126;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 6:20 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 207060 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 273957 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68542 | 10.00 | ug/L | 0.00 |

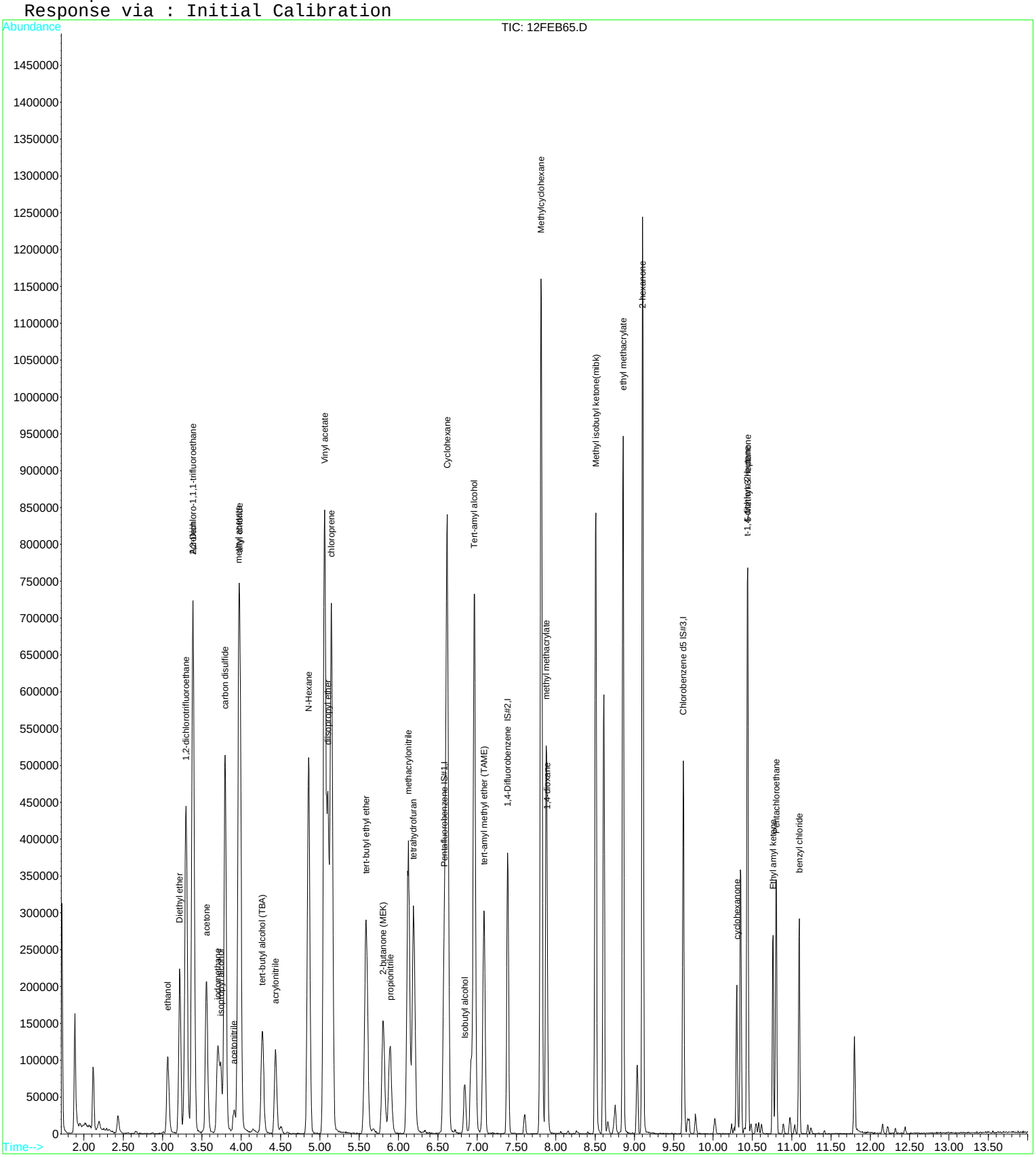
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) ethanol | 3.07 | 45 | 133346 | 4172.36 | ug/L | 93 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.38 | 83 | 451909 | 24.61 | ug/L | 99 |
| 4) 1,2-dichlorotrifluoroethan | 3.29 | 67 | 288423 | 24.57 | ug/L | 98 |
| 5) Diethyl ether | 3.22 | 59 | 129687 | 24.07 | ug/L | 97 |
| 6) isopropyl alcohol | 3.74 | 45 | 147910 | 984.55 | ug/L | 89 |
| 7) Acrolein | 3.39 | 56 | 116139 | 281.48 | ug/L | 97 |
| 8) acetone | 3.55 | 43 | 317425 | 341.88 | ug/L | 100 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 196655 | 741.72 | ug/L | 100 |
| 10) acetonitrile | 3.91 | 41 | 66149 | 194.16 | ug/L # | 71 |
| 11) methyl acetate | 3.96 | 43 | 734888 | 244.01 | ug/L | 99 |
| 12) allyl chloride | 3.98 | 41 | 632028 | 27.39 | ug/L | 99 |
| 13) iodomethane | 3.70 | 142 | 161743 | 13.36 | ug/L | 97 |
| 14) acrylonitrile | 4.44 | 53 | 106801 | 80.95 | ug/L | 96 |
| 15) carbon disulfide | 3.80 | 76 | 824631 | 29.62 | ug/L | 100 |
| 16) N-Hexane | 4.86 | 57 | 305436 | 24.77 | ug/L | 99 |
| 17) diisopropyl ether | 5.10 | 87 | 101936 | 15.51 | ug/L | 99 |
| 18) Vinyl acetate | 5.06 | 43 | 1721477 | 131.05 | ug/L | 99 |
| 19) chloroprene | 5.15 | 53 | 609622 | 29.41 | ug/L | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 372398 | 13.72 | ug/L | 99 |
| 21) 2-butanone (MEK) | 5.80 | 43 | 283613 | 155.70 | ug/L | 99 |
| 22) propionitrile | 5.90 | 54 | 188103 | 394.81 | ug/L | 97 |
| 23) Isobutyl alcohol | 6.84 | 43 | 50893 | 376.52 | ug/L | 100 |
| 24) methacrylonitrile | 6.12 | 67 | 192658 | 150.72 | ug/L | 99 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 481834 | 2609.38 | ug/L | 99 |
| 26) tetrahydrofuran | 6.19 | 42 | 303468 | 285.18 | ug/L | 99 |
| 27) Cyclohexane | 6.62 | 56 | 540676 | 24.04 | ug/L | 99 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 217672 | 14.44 | ug/L | 98 |
| 30) methyl methacrylate | 7.88 | 69 | 168509 | 73.75 | ug/L | 100 |
| 31) Methylcyclohexane | 7.81 | 55 | 424889 | 25.10 | ug/L | 99 |
| 32) 1,4-dioxane | 7.89 | 88 | 37170 | 2171.47 | ug/L | 98 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 537997 | 141.35 | ug/L | 98 |
| 34) ethyl methacrylate | 8.86 | 69 | 375004 | 77.08 | ug/L | 98 |
| 35) 2-hexanone | 9.10 | 43 | 716854 | 294.04 | ug/L | 99 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 178010 | 53.46 | ug/L | 98 |
| 38) cyclohexanone | 10.30 | 55 | 71673 | 234.56 | ug/L | 97 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 49337 | 46.39 | ug/L | 93 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 64093 | 25.86 | ug/L | 94 |
| 41) Pentachloroethane | 10.80 | 167 | 49164 | 13.37 | ug/L | 98 |
| 42) benzyl chloride | 11.10 | 91 | 163467 | 27.55 | ug/L | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB65.D Vial: 65
Acq On : 13 Feb 2017 5:46 am Operator: MGC
Sample : 1702423-CCV7 Inst : MS-V5
Misc : 1 VO-107-69122;69123;69124;69125;69126;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 6:20 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB02.D Vial: 2
Acq On : 13 Feb 2017 6:57 am Operator: MGC
Sample : 1702431-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 7:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201489 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272489 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63039 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 59023 | 9.90 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 99.00% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 301912 | 9.74 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.40% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88431 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 101.70% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 257117 | 26.78 | ug/L | 99 |
| 3) Chloromethane | 1.95 | 50 | 326509 | 25.66 | ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 307216 | 25.59 | ug/L | 83 |
| 5) Bromomethane | 2.44 | 94 | 62953 | 9.82 | ug/L | 96 |
| 6) Chloroethane | 2.57 | 64 | 187268 | 23.81 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 317977 | 26.89 | ug/L | 97 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 199545 | 23.68 | ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 384402 | 24.56 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 182608 | 23.36 | ug/L | 95 |
| 11) MTBE | 4.49 | 73 | 309683 | 24.45 | ug/L | 99 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 211276 | 23.29 | ug/L | 97 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 439051 | 21.14 | ug/L | 97 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 317121 | 24.36 | ug/L | 97 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 220695 | 23.47 | ug/L | 96 |
| 16) Bromochloromethane | 6.18 | 128 | 77949 | 25.00 | ug/L | 96 |
| 17) Chloroform | 6.33 | 83 | 341183 | 22.43 | ug/L | 98 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 300040 | 23.28 | ug/L | 94 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 294169 | 23.81 | ug/L | 100 |
| 20) Carbon tetrachloride | 6.72 | 119 | 227598 | 24.09 | ug/L | 97 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 199796 | 22.63 | ug/L | 98 |
| 23) Benzene | 6.94 | 78 | 871448 | 22.89 | ug/L | 96 |
| 25) Trichloroethene | 7.60 | 130 | 226339 | 25.51 | ug/L | 98 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 226548 | 22.33 | ug/L | 95 |
| 27) Dibromomethane | 7.91 | 93 | 69521 | 22.53 | ug/L | 96 |
| 28) Bromodichloromethane | 8.06 | 83 | 208180 | 23.21 | ug/L | 99 |
| 29) 2-ceve | 8.28 | 63 | 207406 | 73.01 | ug/L | 99 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 271575 | 22.84 | ug/L | 100 |
| 32) Toluene | 8.66 | 92 | 505513 | 23.79 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 193369 | 23.64 | ug/L | 97 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 97343 | 23.30 | ug/L | 97 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 248888 | 26.77 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.08 | 76 | 173737 | 23.91 | ug/L | 97 |
| 37) Dibromochloromethane | 9.24 | 129 | 112199 | 24.10 | ug/L | 99 |
| 38) 1,2-Dibromoethane | 9.32 | 107 | 92395 | 24.39 | ug/L | 97 |
| 40) Chlorobenzene | 9.64 | 112 | 477419 | 25.43 | ug/L | 96 |
| 41) 1,1,1,2-Tetrachloroethane | 9.69 | 131 | 143952 | 24.66 | ug/L | 99 |
| 42) Ethylbenzene | 9.69 | 106 | 267791 | 25.00 | ug/L | 89 |
| 43) P+m-Xylene | 9.78 | 106 | 630760 | 49.74 | ug/L | 85 |
| 44) O-Xylene | 10.02 | 106 | 301320 | 24.63 | ug/L | 86 |
| 45) Styrene | 10.03 | 104 | 468393 | 25.62 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 51664 | 23.37 | ug/L | 98 |
| 47) Isopropylbenzene | 10.24 | 105 | 821447 | 25.11 | ug/L | 93 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 82032 | 23.41 | ug/L | 98 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 16790 | 24.22 | ug/L | 93 |
| 51) n-propylbenzene | 10.48 | 91 | 896713 | 23.87 | ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB02.D Vial: 2
Acq On : 13 Feb 2017 6:57 am Operator: MGC
Sample : 1702431-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 7:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

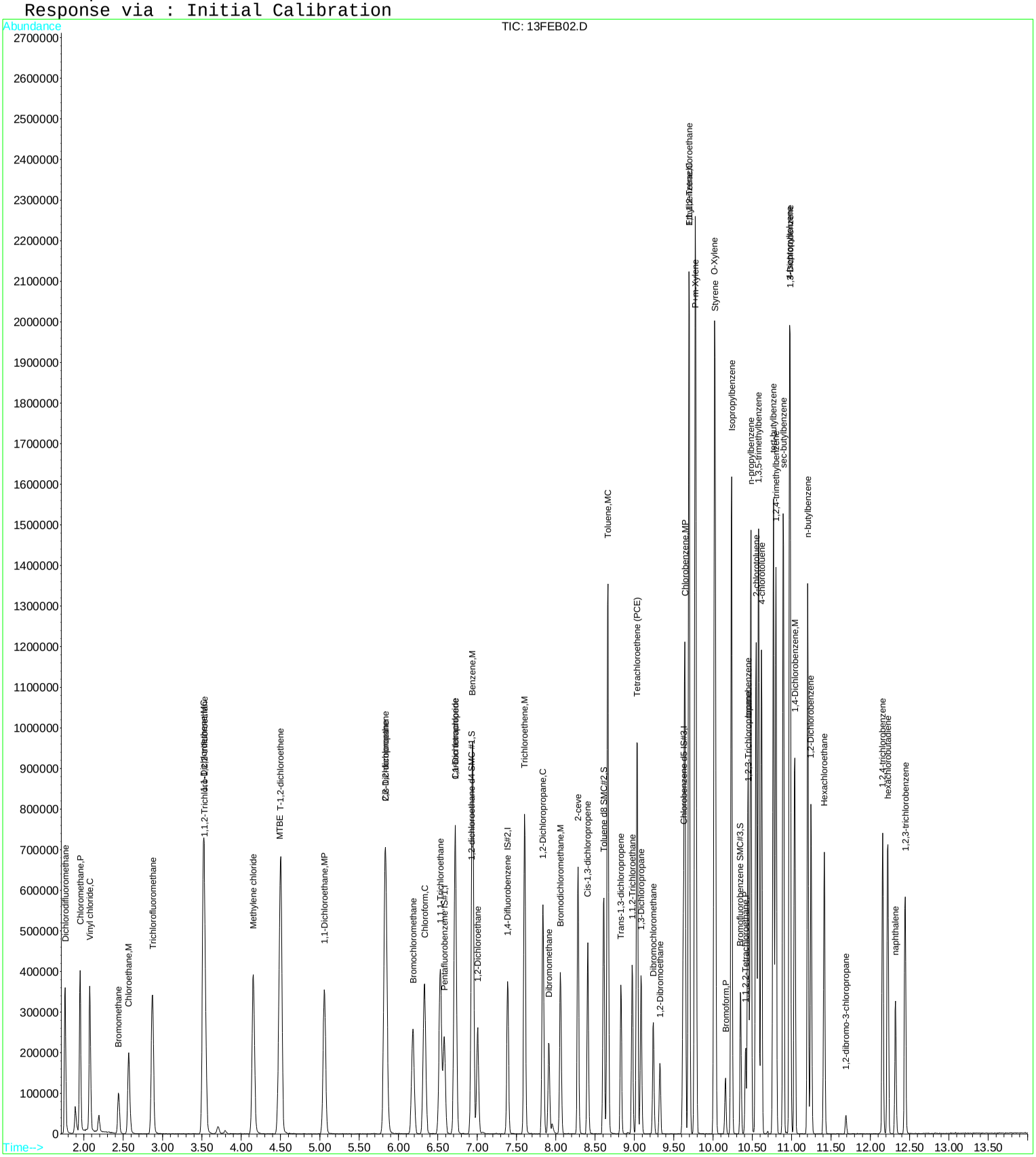
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 185246 | 24.92 | ug/L | | 96 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 603725 | 24.12 | ug/L | | 92 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 594894 | 25.74 | ug/L | | 96 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 523458 | 25.27 | ug/L | | 96 |
| 56) | tert-butylbenzene | 10.77 | 119 | 629265 | 25.91 | ug/L | | 94 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 574926 | 25.35 | ug/L | | 92 |
| 58) | sec-butylbenzene | 10.89 | 105 | 820120 | 24.18 | ug/L | | 96 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 628706 | 24.54 | ug/L | | 97 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 308302 | 23.64 | ug/L | | 98 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 301416 | 24.95 | ug/L | | 98 |
| 62) | n-butylbenzene | 11.20 | 91 | 564511 | 25.63 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 261695 | 24.52 | ug/L | | 98 |
| 64) | Hexachloroethane | 11.41 | 117 | 83065 | 18.71 | ug/L | # | 86 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10591 | 22.25 | ug/L | | 96 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 197181 | 26.18 | ug/L | | 99 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 141574 | 28.03 | ug/L | | 97 |
| 68) | naphthalene | 12.32 | 128 | 201720 | 27.52 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 175938 | 27.22 | ug/L | | 83 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB02.D Vial: 2
Acq On : 13 Feb 2017 6:57 am Operator: MGC
Sample : 1702431-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 7:11 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB03.D Vial: 3
Acq On : 13 Feb 2017 7:20 am Operator: MGC
Sample : 1702431-CCV2 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 8:01 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 210178 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 276582 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68627 | 10.00 | ug/L | 0.00 |

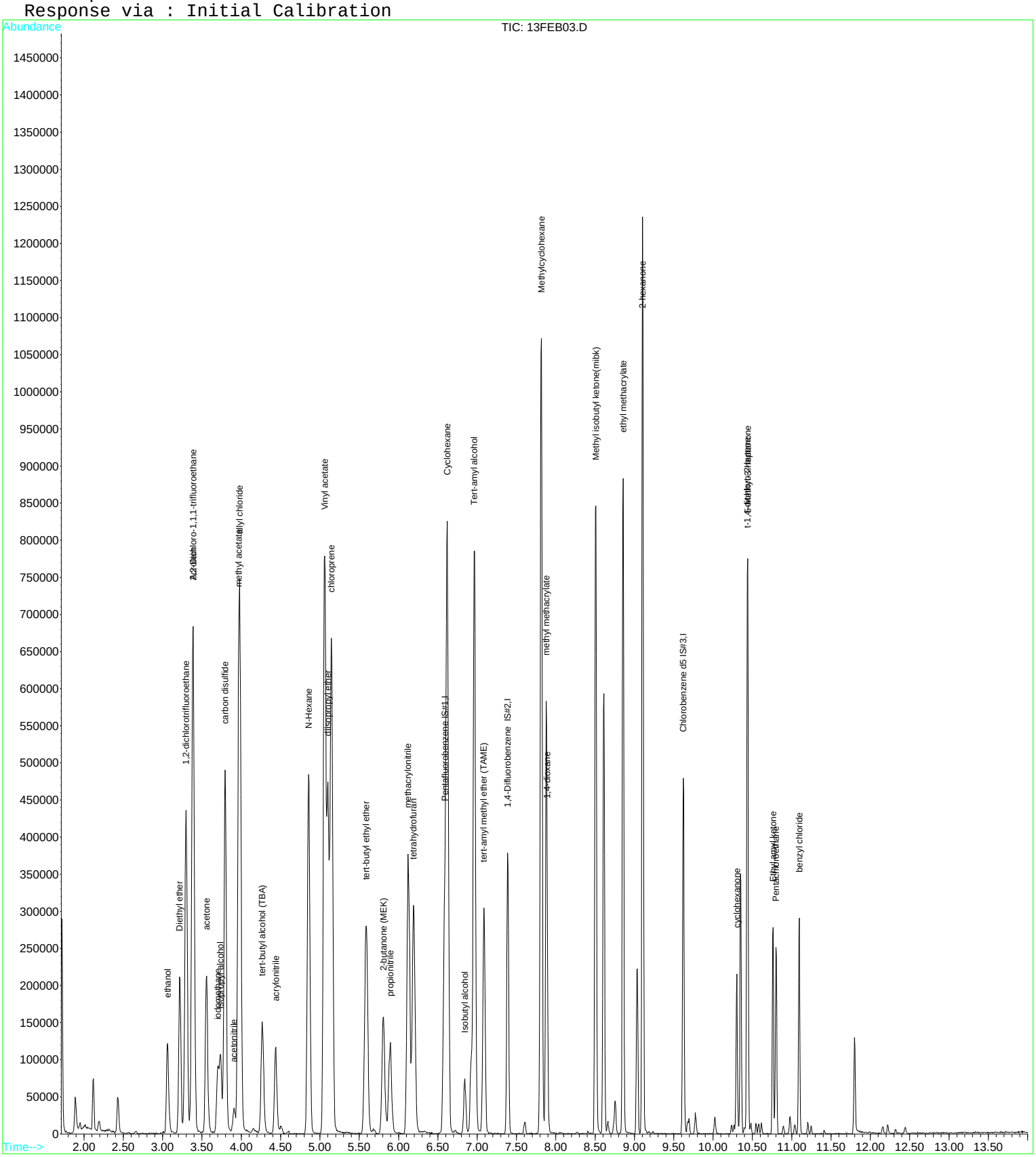
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) ethanol | 3.06 | 45 | 148282 | 4570.87 | ug/L | 96 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 428586 | 22.99 | ug/L | 99 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 272253 | 22.85 | ug/L | 98 |
| 5) Diethyl ether | 3.22 | 59 | 126878 | 23.19 | ug/L | 98 |
| 6) isopropyl alcohol | 3.74 | 45 | 156741 | 1032.08 | ug/L # | 1 |
| 7) Acrolein | 3.39 | 56 | 114917 | 274.39 | ug/L | 97 |
| 8) acetone | 3.56 | 43 | 318596 | 338.05 | ug/L | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 206035 | 765.57 | ug/L | 100 |
| 10) acetonitrile | 3.91 | 41 | 67680 | 195.84 | ug/L # | 84 |
| 11) methyl acetate | 3.96 | 43 | 742998 | 243.04 | ug/L | 100 |
| 12) allyl chloride | 3.98 | 41 | 611194 | 26.09 | ug/L | 100 |
| 13) iodomethane | 3.70 | 142 | 122395 | 9.96 | ug/L | 99 |
| 14) acrylonitrile | 4.44 | 53 | 109623 | 81.86 | ug/L | 96 |
| 15) carbon disulfide | 3.79 | 76 | 773885 | 27.38 | ug/L | 99 |
| 16) N-Hexane | 4.86 | 57 | 291704 | 23.30 | ug/L | 99 |
| 17) diisopropyl ether | 5.10 | 87 | 102751 | 15.40 | ug/L | 100 |
| 18) Vinyl acetate | 5.06 | 43 | 1633445 | 122.50 | ug/L | 99 |
| 19) chloroprene | 5.15 | 53 | 580017 | 27.57 | ug/L | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 364483 | 13.23 | ug/L | 100 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 282743 | 152.92 | ug/L | 97 |
| 22) propionitrile | 5.90 | 54 | 187902 | 388.54 | ug/L | 98 |
| 23) Isobutyl alcohol | 6.84 | 43 | 53523 | 390.10 | ug/L | 98 |
| 24) methacrylonitrile | 6.13 | 67 | 186165 | 143.48 | ug/L | 99 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 517348 | 2760.15 | ug/L | 99 |
| 26) tetrahydrofuran | 6.19 | 42 | 310821 | 287.76 | ug/L | 99 |
| 27) Cyclohexane | 6.62 | 56 | 524737 | 22.98 | ug/L | 99 |
| 28) tert-amyl methyl ether (TA | 7.08 | 73 | 218146 | 14.25 | ug/L | 96 |
| 30) methyl methacrylate | 7.88 | 69 | 167885 | 72.78 | ug/L | 99 |
| 31) Methylcyclohexane | 7.81 | 55 | 396770 | 23.22 | ug/L | 98 |
| 32) 1,4-dioxane | 7.89 | 88 | 40226 | 2336.21 | ug/L | 92 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 555712 | 144.62 | ug/L | 97 |
| 34) ethyl methacrylate | 8.86 | 69 | 355627 | 72.40 | ug/L | 99 |
| 35) 2-hexanone | 9.10 | 43 | 713737 | 289.26 | ug/L | 99 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 175069 | 52.51 | ug/L | 99 |
| 38) cyclohexanone | 10.30 | 55 | 77742 | 254.10 | ug/L | 96 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 57731 | 54.22 | ug/L | 97 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 64554 | 26.02 | ug/L | 98 |
| 41) Pentachloroethane | 10.80 | 167 | 35167 | 9.55 | ug/L | 99 |
| 42) benzyl chloride | 11.10 | 91 | 164786 | 27.74 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB03.D Vial: 3
Acq On : 13 Feb 2017 7:20 am Operator: MGC
Sample : 1702431-CCV2 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 8:01 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB33.D Vial: 33
Acq On : 13 Feb 2017 6:55 pm Operator: MGC
Sample : 1702431-CCV3 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 19:09 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201820 | 10.00 ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 267879 | 10.00 ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63833 | 10.00 ug/L | 0.00 |

System Monitoring Compounds

| | | | | | |
|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 59150 | 9.91 ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 99.10% | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 293594 | 9.63 ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 96.30% | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 90107 | 10.24 ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 102.40% | | | | | |

| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 253477 | 26.36 ug/L | 98 |
| 3) Chloromethane | 1.95 | 50 | 302067 | 23.64 ug/L | 98 |
| 4) Vinyl chloride | 2.08 | 62 | 317132 | 26.37 ug/L | 97 |
| 5) Bromomethane | 2.44 | 94 | 98933 | 15.41 ug/L | 98 |
| 6) Chloroethane | 2.57 | 64 | 189956 | 24.12 ug/L | 99 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 315620 | 26.65 ug/L | 98 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 192008 | 22.74 ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 381642 | 24.35 ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 171610 | 21.75 ug/L | 99 |
| 11) MTBE | 4.49 | 73 | 294020 | 23.18 ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 208907 | 22.99 ug/L | 97 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 426175 | 20.48 ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 282584 | 21.67 ug/L | 96 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 212745 | 22.59 ug/L | 98 |
| 16) Bromochloromethane | 6.19 | 128 | 74600 | 23.89 ug/L | 93 |
| 17) Chloroform | 6.33 | 83 | 340882 | 22.38 ug/L | 97 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 299194 | 23.17 ug/L | 95 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 287815 | 23.26 ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 236698 | 25.01 ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 200772 | 22.70 ug/L | 97 |
| 23) Benzene | 6.94 | 78 | 853831 | 22.39 ug/L | 97 |
| 25) Trichloroethene | 7.60 | 130 | 227997 | 26.14 ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.83 | 63 | 221323 | 22.19 ug/L | 94 |
| 27) Dibromomethane | 7.91 | 93 | 68490 | 22.58 ug/L | 95 |
| 28) Bromodichloromethane | 8.06 | 83 | 213999 | 24.27 ug/L | 97 |
| 29) 2-ceve | 8.29 | 63 | 237439 | 85.02 ug/L | 98 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 262098 | 22.42 ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 490192 | 23.47 ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 186661 | 23.21 ug/L | 97 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 98603 | 24.01 ug/L | 97 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 234156 | 25.62 ug/L | 98 |
| 36) 1,3-Dichloropropane | 9.08 | 76 | 169929 | 23.78 ug/L | 100 |
| 37) Dibromochloromethane | 9.24 | 129 | 113501 | 24.80 ug/L | 96 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 88204 | 23.69 ug/L | 99 |
| 40) Chlorobenzene | 9.64 | 112 | 469158 | 24.68 ug/L | 98 |
| 41) 1,1,1,2-Tetrachloroethane | 9.69 | 131 | 144221 | 24.39 ug/L | 97 |
| 42) Ethylbenzene | 9.69 | 106 | 269660 | 24.86 ug/L | 89 |
| 43) P+m-Xylene | 9.78 | 106 | 615745 | 47.95 ug/L | 83 |
| 44) O-Xylene | 10.02 | 106 | 294264 | 23.75 ug/L | 83 |
| 45) Styrene | 10.03 | 104 | 467831 | 25.27 ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 53527 | 23.91 ug/L | 97 |
| 47) Isopropylbenzene | 10.24 | 105 | 790342 | 23.86 ug/L | 94 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 82878 | 23.35 ug/L | 96 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 17435 | 24.89 ug/L | 91 |
| 51) n-propylbenzene | 10.48 | 91 | 893115 | 23.48 ug/L | 93 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB33.D Vial: 33
Acq On : 13 Feb 2017 6:55 pm Operator: MGC
Sample : 1702431-CCV3 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 19:09 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

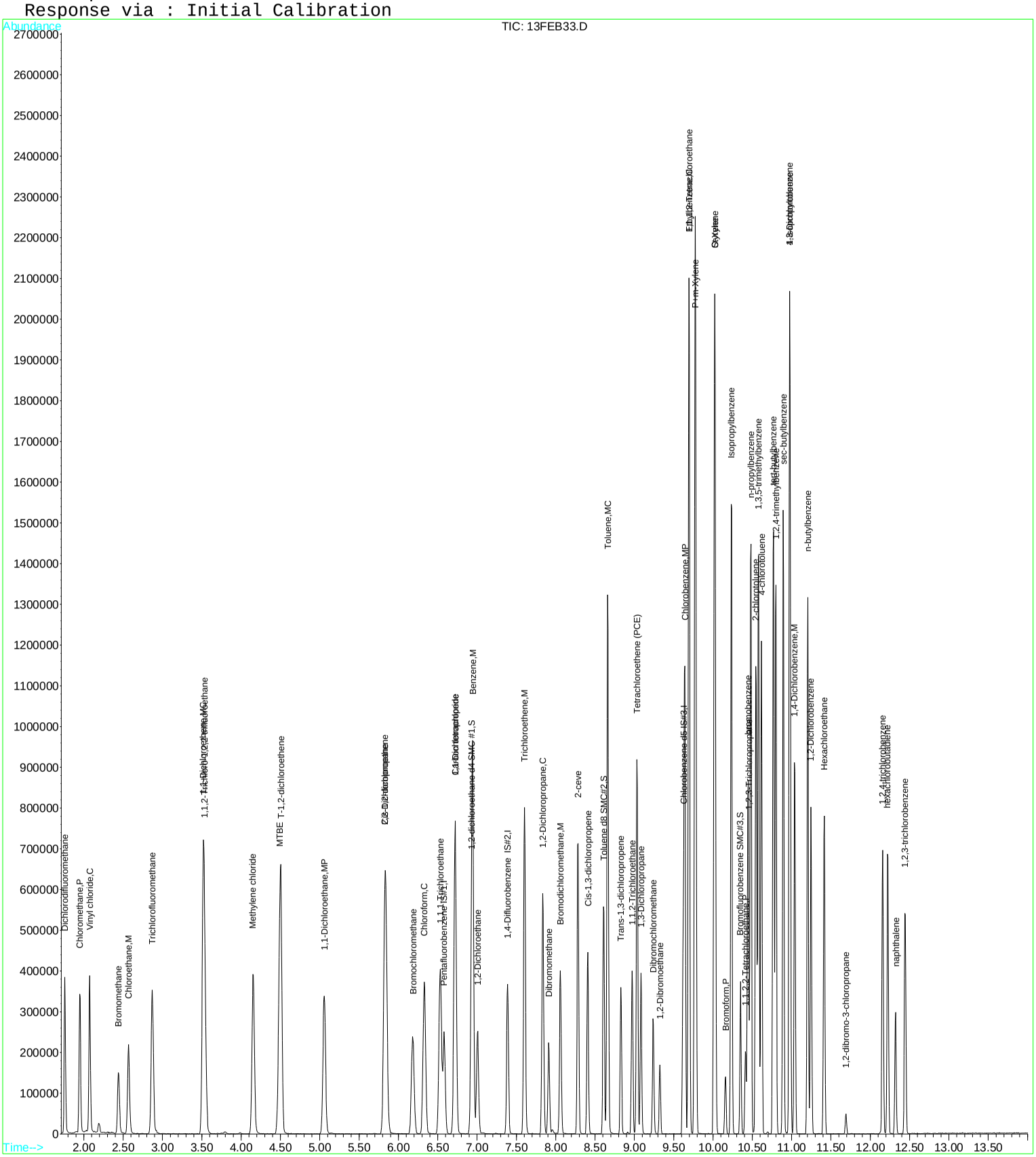
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 182787 | 24.28 | ug/L | | 96 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 593543 | 23.42 | ug/L | | 92 |
| 54) | 2-chlorotoluene | 10.54 | 91 | 577071 | 24.66 | ug/L | | 95 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 506218 | 24.14 | ug/L | | 96 |
| 56) | tert-butylbenzene | 10.77 | 119 | 553506 | 22.51 | ug/L | | 96 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 570549 | 24.84 | ug/L | | 91 |
| 58) | sec-butylbenzene | 10.89 | 105 | 800145 | 23.30 | ug/L | | 96 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 612191 | 23.59 | ug/L | | 97 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 305203 | 23.12 | ug/L | | 98 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 303214 | 24.79 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 538032 | 24.13 | ug/L | | 95 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 263167 | 24.35 | ug/L | | 96 |
| 64) | Hexachloroethane | 11.42 | 117 | 97312 | 21.65 | ug/L | # | 91 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10985 | 22.79 | ug/L | | 97 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 190702 | 25.00 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 133285 | 26.06 | ug/L | | 99 |
| 68) | naphthalene | 12.32 | 128 | 188530 | 25.40 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.45 | 180 | 164959 | 25.21 | ug/L | | 86 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB33.D Vial: 33
Acq On : 13 Feb 2017 6:55 pm Operator: MGC
Sample : 1702431-CCV3 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 19:09 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB34.D Vial: 34
Acq On : 13 Feb 2017 7:18 pm Operator: MGC
Sample : 1702431-CCV4 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:05 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206916 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 268532 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.63 | 119 | 67530 | 10.00 | ug/L | 0.00 |

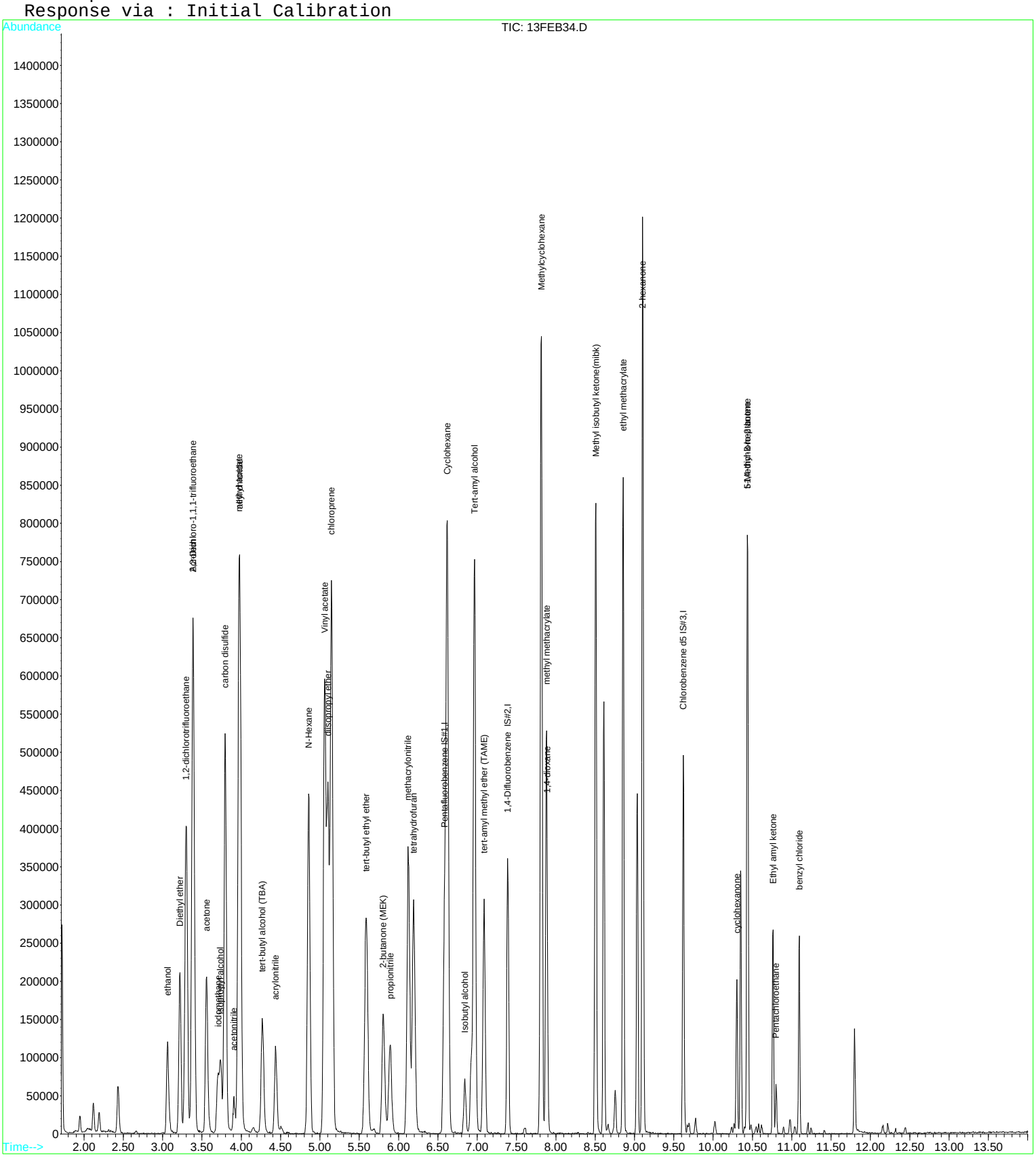
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) ethanol | 3.06 | 45 | 143221 | 4484.46 | ug/L | 95 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.38 | 83 | 428028 | 23.32 | ug/L | 99 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 269728 | 23.00 | ug/L | 99 |
| 5) Diethyl ether | 3.22 | 59 | 128927 | 23.94 | ug/L | 98 |
| 6) isopropyl alcohol | 3.74 | 45 | 144621 | 961.26 | ug/L # | 1 |
| 7) Acrolein | 3.39 | 56 | 109492 | 265.55 | ug/L | 93 |
| 8) acetone | 3.56 | 43 | 313274 | 337.64 | ug/L | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 204701 | 772.60 | ug/L | 100 |
| 10) acetonitrile | 3.91 | 41 | 69599 | 205.27 | ug/L | 94 |
| 11) methyl acetate | 3.97 | 43 | 743616 | 247.08 | ug/L | 100 |
| 12) allyl chloride | 3.98 | 41 | 645461 | 27.99 | ug/L | 98 |
| 13) iodomethane | 3.70 | 142 | 108707 | 8.98 | ug/L | 96 |
| 14) acrylonitrile | 4.44 | 53 | 104749 | 79.45 | ug/L | 98 |
| 15) carbon disulfide | 3.79 | 76 | 822775 | 29.57 | ug/L | 99 |
| 16) N-Hexane | 4.86 | 57 | 267906 | 21.74 | ug/L | 99 |
| 17) diisopropyl ether | 5.10 | 87 | 93715 | 14.27 | ug/L | 88 |
| 18) Vinyl acetate | 5.06 | 43 | 1280023 | 97.51 | ug/L | 98 |
| 19) chloroprene | 5.15 | 53 | 618562 | 29.87 | ug/L | 100 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 363955 | 13.42 | ug/L | 99 |
| 21) 2-butanone (MEK) | 5.80 | 43 | 280028 | 153.83 | ug/L | 98 |
| 22) propionitrile | 5.90 | 54 | 182470 | 383.26 | ug/L | 98 |
| 23) Isobutyl alcohol | 6.84 | 43 | 49552 | 366.85 | ug/L | 94 |
| 24) methacrylonitrile | 6.13 | 67 | 184324 | 144.30 | ug/L | 98 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 484597 | 2626.17 | ug/L | 96 |
| 26) tetrahydrofuran | 6.19 | 42 | 307769 | 289.42 | ug/L | 98 |
| 27) Cyclohexane | 6.61 | 56 | 527485 | 23.47 | ug/L | 99 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 210923 | 14.00 | ug/L | 100 |
| 30) methyl methacrylate | 7.88 | 69 | 163687 | 73.09 | ug/L | 100 |
| 31) Methylcyclohexane | 7.81 | 55 | 390807 | 23.55 | ug/L | 98 |
| 32) 1,4-dioxane | 7.89 | 88 | 39182 | 2344.18 | ug/L | 93 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 532818 | 142.82 | ug/L | 99 |
| 34) ethyl methacrylate | 8.86 | 69 | 345890 | 72.53 | ug/L | 100 |
| 35) 2-hexanone | 9.10 | 43 | 696646 | 291.07 | ug/L | 98 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 159967 | 48.76 | ug/L | 98 |
| 38) cyclohexanone | 10.30 | 55 | 70142 | 232.99 | ug/L | 98 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 74207 | 70.83 | ug/L | 98 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 62746 | 25.70 | ug/L | 97 |
| 41) Pentachloroethane | 10.80 | 167 | 7600 | 2.10 | ug/L | 98 |
| 42) benzyl chloride | 11.10 | 91 | 145312 | 24.86 | ug/L | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB34.D Vial: 34
Acq On : 13 Feb 2017 7:18 pm Operator: MGC
Sample : 1702431-CCV4 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:05 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB02.D Vial: 2
Acq On : 14 Feb 2017 6:30 am Operator: MGC
Sample : 1702527-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:44 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 189564 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 257727 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62430 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 59371 | 10.59 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 105.90% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 291738 | 9.95 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 99.50% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 85310 | 9.91 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 99.10% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 261564 | 28.95 | ug/L | 98 |
| 3) Chloromethane | 1.94 | 50 | 279535 | 23.28 | ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 284948 | 25.23 | ug/L | 99 |
| 5) Bromomethane | 2.44 | 94 | 60697 | 10.07 | ug/L | 98 |
| 6) Chloroethane | 2.57 | 64 | 191631 | 25.90 | ug/L | 97 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 322560 | 29.00 | ug/L | 100 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 199290 | 25.13 | ug/L | 99 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 387810 | 26.34 | ug/L | 98 |
| 10) Methylene chloride | 4.15 | 84 | 173660 | 23.64 | ug/L | 97 |
| 11) MTBE | 4.49 | 73 | 292899 | 24.58 | ug/L | 100 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 213764 | 25.04 | ug/L | 96 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 442746 | 22.65 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 324848 | 26.52 | ug/L | 93 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 217181 | 24.55 | ug/L | 97 |
| 16) Bromochloromethane | 6.19 | 128 | 70539 | 24.05 | ug/L | 95 |
| 17) Chloroform | 6.33 | 83 | 344755 | 24.09 | ug/L | 96 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 301803 | 24.89 | ug/L | 94 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 287702 | 24.75 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 233578 | 26.28 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 203751 | 24.53 | ug/L | 94 |
| 23) Benzene | 6.94 | 78 | 844921 | 23.59 | ug/L | 96 |
| 25) Trichloroethene | 7.60 | 130 | 227785 | 27.15 | ug/L | 98 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 212540 | 22.15 | ug/L | 93 |
| 27) Dibromomethane | 7.91 | 93 | 66589 | 22.82 | ug/L | 96 |
| 28) Bromodichloromethane | 8.06 | 83 | 210668 | 24.83 | ug/L | 96 |
| 29) 2-ceve | 8.29 | 63 | 191647 | 71.33 | ug/L | 97 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 266722 | 23.72 | ug/L | 99 |
| 32) Toluene | 8.66 | 92 | 493945 | 24.58 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 188476 | 24.36 | ug/L | 96 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 93499 | 23.66 | ug/L | 97 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 243722 | 27.71 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 159077 | 23.14 | ug/L | 100 |
| 37) Dibromochloromethane | 9.24 | 129 | 109231 | 24.81 | ug/L | 96 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 86724 | 24.21 | ug/L | 98 |
| 40) Chlorobenzene | 9.64 | 112 | 462104 | 24.86 | ug/L | 96 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 140768 | 24.35 | ug/L | 99 |
| 42) Ethylbenzene | 9.70 | 106 | 260120 | 24.52 | ug/L | 87 |
| 43) P+m-Xylene | 9.78 | 106 | 620216 | 49.38 | ug/L | 85 |
| 44) O-Xylene | 10.02 | 106 | 298224 | 24.61 | ug/L | 86 |
| 45) Styrene | 10.03 | 104 | 453827 | 25.06 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 51515 | 23.53 | ug/L | 97 |
| 47) Isopropylbenzene | 10.23 | 105 | 797507 | 24.62 | ug/L | 92 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 79191 | 22.82 | ug/L | 100 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 18466 | 27.10 | ug/L | 97 |
| 51) n-propylbenzene | 10.48 | 91 | 886862 | 23.84 | ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB02.D Vial: 2
Acq On : 14 Feb 2017 6:30 am Operator: MGC
Sample : 1702527-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:44 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

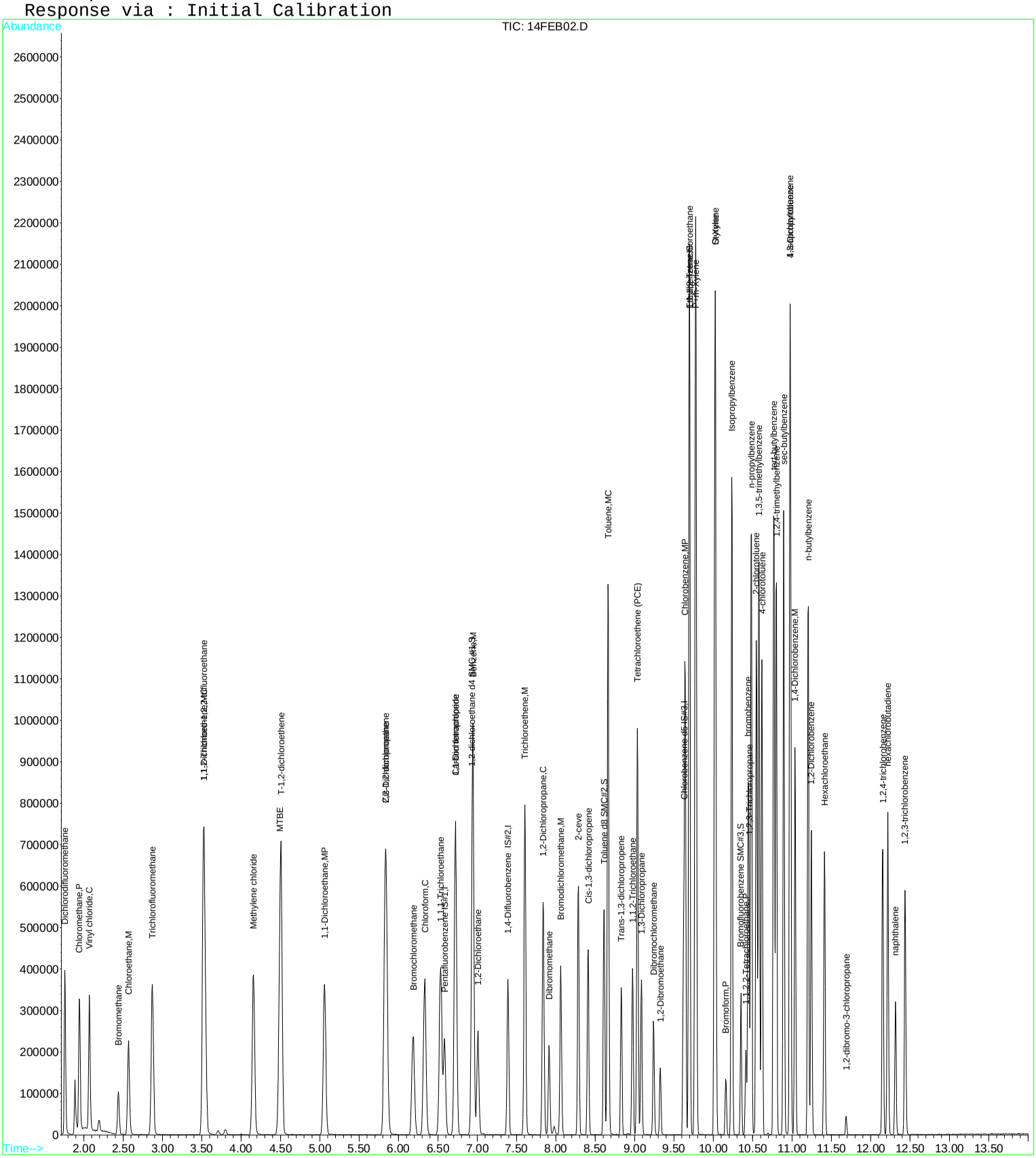
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.44 | 156 | 182552 | 24.79 | ug/L | | 94 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 593917 | 23.96 | ug/L | | 92 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 534067 | 23.33 | ug/L | | 99 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 508954 | 24.81 | ug/L | | 94 |
| 56) | tert-butylbenzene | 10.77 | 119 | 579995 | 24.12 | ug/L | | 99 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 561792 | 25.01 | ug/L | | 92 |
| 58) | sec-butylbenzene | 10.89 | 105 | 793554 | 23.63 | ug/L | | 94 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 610306 | 24.05 | ug/L | | 98 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 294993 | 22.84 | ug/L | | 100 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 295068 | 24.67 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 552149 | 25.32 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 249186 | 23.57 | ug/L | | 97 |
| 64) | Hexachloroethane | 11.41 | 117 | 86200 | 19.61 | ug/L | # | 91 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10432 | 22.13 | ug/L | | 95 |
| 66) | 1,2,4-trichlorobenzene | 12.15 | 180 | 198102 | 26.56 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 143103 | 28.61 | ug/L | | 98 |
| 68) | naphthalene | 12.31 | 128 | 190500 | 26.24 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 169045 | 26.41 | ug/L | | 85 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB02.D Vial: 2
Acq On : 14 Feb 2017 6:30 am Operator: MGC
Sample : 1702527-CCV1 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:44 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB03.D Vial: 3
Acq On : 14 Feb 2017 6:54 am Operator: MGC
Sample : 1702527-CCV2 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:22 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 199065 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 262401 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65294 | 10.00 | ug/L | 0.00 |

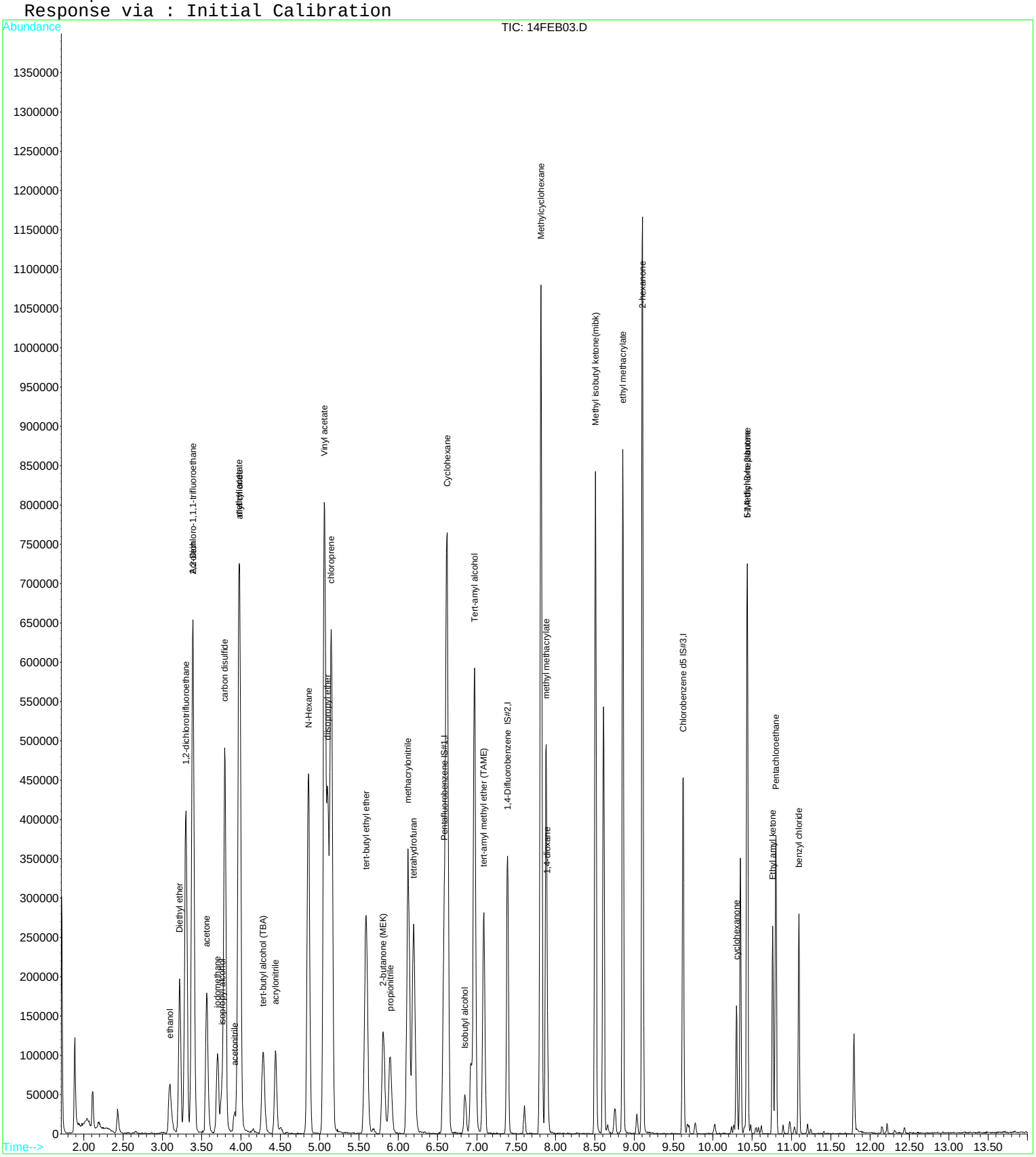
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) ethanol | 3.09 | 45 | 99525 | 3239.18 | ug/L | 97 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.38 | 83 | 407437 | 23.08 | ug/L | 99 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 262641 | 23.28 | ug/L | 96 |
| 5) Diethyl ether | 3.22 | 59 | 116925 | 22.57 | ug/L | 99 |
| 6) isopropyl alcohol | 3.76 | 45 | 102715 | 684.55 | ug/L | 82 |
| 7) Acrolein | 3.39 | 56 | 102122 | 257.45 | ug/L | 97 |
| 8) acetone | 3.56 | 43 | 276783 | 310.08 | ug/L | 98 |
| 9) tert-butyl alcohol (TBA) | 4.28 | 59 | 156963 | 615.79 | ug/L | 100 |
| 10) acetonitrile | 3.92 | 41 | 54269 | 163.35 | ug/L # | 82 |
| 11) methyl acetate | 3.97 | 43 | 678493 | 234.33 | ug/L | 99 |
| 12) allyl chloride | 3.99 | 41 | 583141 | 26.29 | ug/L | 99 |
| 13) iodomethane | 3.70 | 142 | 138972 | 11.94 | ug/L | 99 |
| 14) acrylonitrile | 4.44 | 53 | 94320 | 74.36 | ug/L | 100 |
| 15) carbon disulfide | 3.79 | 76 | 763969 | 28.54 | ug/L | 99 |
| 16) N-Hexane | 4.86 | 57 | 271208 | 22.88 | ug/L | 98 |
| 17) diisopropyl ether | 5.10 | 87 | 95093 | 15.05 | ug/L | 97 |
| 18) Vinyl acetate | 5.06 | 43 | 1648394 | 130.53 | ug/L | 99 |
| 19) chloroprene | 5.15 | 53 | 560400 | 28.12 | ug/L | 100 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 355742 | 13.63 | ug/L | 99 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 240508 | 137.33 | ug/L | 99 |
| 22) propionitrile | 5.90 | 54 | 156279 | 341.19 | ug/L | 97 |
| 23) Isobutyl alcohol | 6.85 | 43 | 38848 | 298.95 | ug/L | 97 |
| 24) methacrylonitrile | 6.12 | 67 | 175375 | 142.71 | ug/L | 97 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 399475 | 2250.25 | ug/L | 99 |
| 26) tetrahydrofuran | 6.20 | 42 | 275817 | 269.61 | ug/L | 98 |
| 27) Cyclohexane | 6.62 | 56 | 504884 | 23.35 | ug/L | 99 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 199285 | 13.75 | ug/L | 98 |
| 30) methyl methacrylate | 7.88 | 69 | 158973 | 72.65 | ug/L | 99 |
| 31) Methylcyclohexane | 7.81 | 55 | 383986 | 23.68 | ug/L | 99 |
| 32) 1,4-dioxane | 7.90 | 88 | 28089 | 1688.27 | ug/L | 98 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 511949 | 140.43 | ug/L | 97 |
| 34) ethyl methacrylate | 8.85 | 69 | 338105 | 72.55 | ug/L | 98 |
| 35) 2-hexanone | 9.11 | 43 | 669583 | 285.46 | ug/L | 100 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 150628 | 47.49 | ug/L | 99 |
| 38) cyclohexanone | 10.30 | 55 | 58590 | 201.28 | ug/L | 98 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 57785 | 57.04 | ug/L | 93 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 61876 | 26.21 | ug/L | 93 |
| 41) Pentachloroethane | 10.80 | 167 | 55708 | 15.90 | ug/L | 97 |
| 42) benzyl chloride | 11.09 | 91 | 148005 | 26.18 | ug/L | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB03.D Vial: 3
Acq On : 14 Feb 2017 6:54 am Operator: MGC
Sample : 1702527-CCV2 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 7:22 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB29.D Vial: 29
Acq On : 14 Feb 2017 4:57 pm Operator: MGC
Sample : 1702527-CCV3 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 17:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 189319 | 10.00 ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 261027 | 10.00 ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63879 | 10.00 ug/L | 0.00 |

System Monitoring Compounds

| | | | | | |
|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 57425 | 10.25 ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 102.50% | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 277806 | 9.35 ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 93.50% | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 85444 | 9.70 ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.00% | | | | | |

| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 252382 | 27.97 ug/L | 100 |
| 3) Chloromethane | 1.95 | 50 | 277716 | 23.16 ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 292883 | 25.96 ug/L | 93 |
| 5) Bromomethane | 2.44 | 94 | 78872 | 13.10 ug/L | 97 |
| 6) Chloroethane | 2.57 | 64 | 178227 | 24.12 ug/L | 99 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 311007 | 28.00 ug/L | 97 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 195307 | 24.66 ug/L | 99 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 379355 | 25.80 ug/L | 98 |
| 10) Methylene chloride | 4.15 | 84 | 171134 | 23.29 ug/L | 97 |
| 11) MTBE | 4.49 | 73 | 298052 | 25.05 ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 200679 | 23.54 ug/L | 97 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 427683 | 21.91 ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 282672 | 23.11 ug/L | 97 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 209609 | 23.72 ug/L | 97 |
| 16) Bromochloromethane | 6.19 | 128 | 74350 | 25.38 ug/L | 93 |
| 17) Chloroform | 6.33 | 83 | 339480 | 23.76 ug/L | 96 |
| 18) 1,1,1-Trichloroethane | 6.54 | 97 | 294175 | 24.29 ug/L | 95 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 283309 | 24.41 ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 226948 | 25.57 ug/L | 97 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 201974 | 24.35 ug/L | 98 |
| 23) Benzene | 6.94 | 78 | 804398 | 22.49 ug/L | 96 |
| 25) Trichloroethene | 7.61 | 130 | 214352 | 25.22 ug/L | 98 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 221017 | 22.74 ug/L | 93 |
| 27) Dibromomethane | 7.91 | 93 | 68108 | 23.04 ug/L | 95 |
| 28) Bromodichloromethane | 8.06 | 83 | 204983 | 23.85 ug/L | 99 |
| 29) 2-ceve | 8.28 | 63 | 233377 | 85.76 ug/L | 99 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 262284 | 23.03 ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 483918 | 23.77 ug/L | 89 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 183421 | 23.41 ug/L | 97 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 92706 | 23.17 ug/L | 97 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 229121 | 25.72 ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 162663 | 23.37 ug/L | 99 |
| 37) Dibromochloromethane | 9.24 | 129 | 113167 | 25.38 ug/L | 99 |
| 38) 1,2-Dibromoethane | 9.32 | 107 | 88823 | 24.48 ug/L | 98 |
| 40) Chlorobenzene | 9.64 | 112 | 473648 | 24.90 ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 141429 | 23.90 ug/L | 98 |
| 42) Ethylbenzene | 9.70 | 106 | 258596 | 23.83 ug/L | 88 |
| 43) P+m-Xylene | 9.77 | 106 | 623536 | 48.52 ug/L | 84 |
| 44) O-Xylene | 10.02 | 106 | 301582 | 24.32 ug/L | 88 |
| 45) Styrene | 10.03 | 104 | 456214 | 24.62 ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 54457 | 24.31 ug/L | 99 |
| 47) Isopropylbenzene | 10.23 | 105 | 778638 | 23.49 ug/L | 93 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 81270 | 22.88 ug/L | 99 |
| 50) 1,2,3-Trichloropropane | 10.45 | 110 | 18406 | 26.35 ug/L | 89 |
| 51) n-propylbenzene | 10.48 | 91 | 859927 | 22.59 ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB29.D Vial: 29
Acq On : 14 Feb 2017 4:57 pm Operator: MGC
Sample : 1702527-CCV3 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 17:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

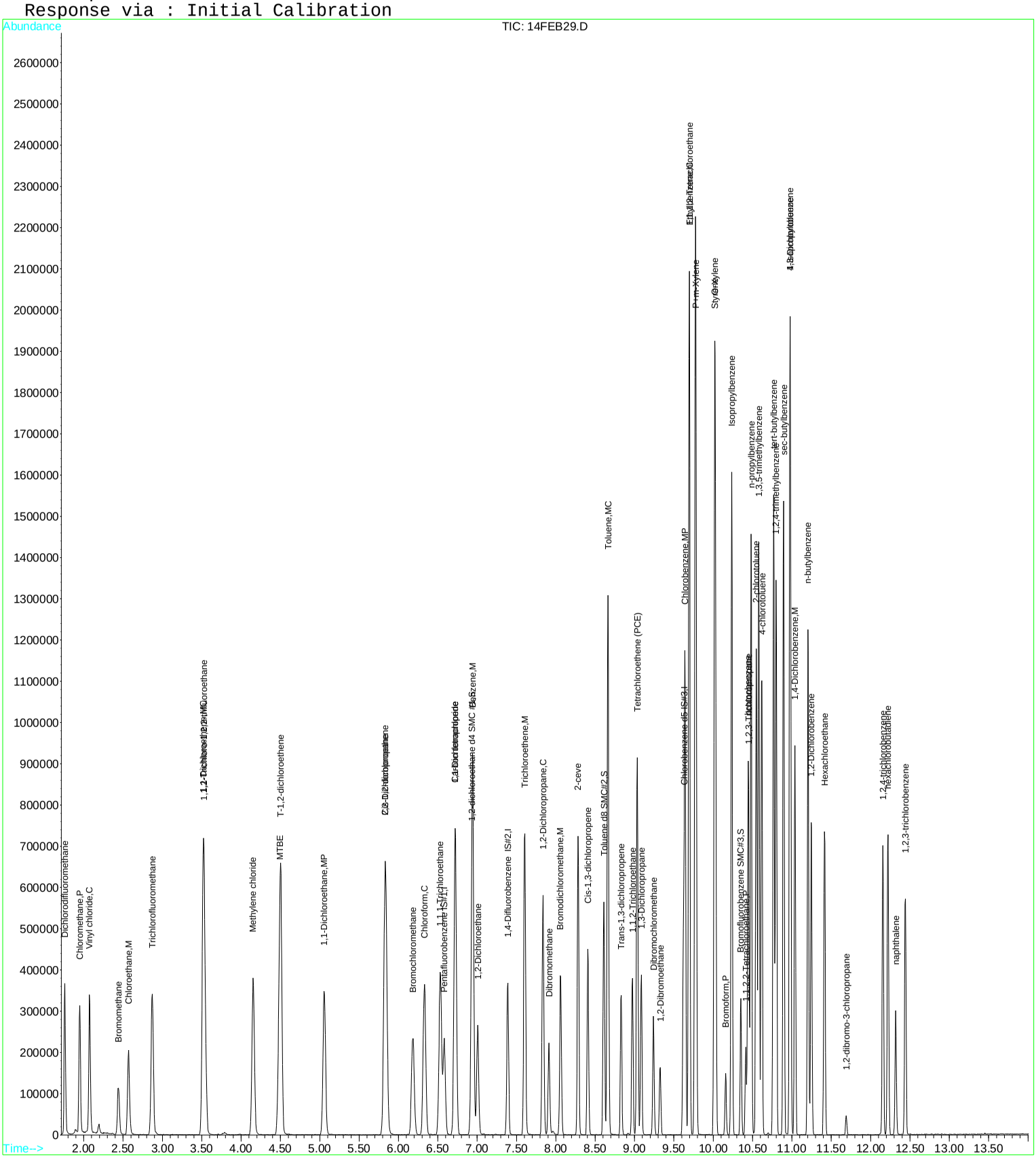
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.44 | 156 | 186531 | 24.76 | ug/L | | 94 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 572629 | 22.58 | ug/L | | 91 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 569907 | 24.34 | ug/L | | 97 |
| 55) | 4-chlorotoluene | 10.61 | 91 | 498627 | 23.76 | ug/L | | 95 |
| 56) | tert-butylbenzene | 10.77 | 119 | 577016 | 23.45 | ug/L | | 89 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 562594 | 24.48 | ug/L | | 91 |
| 58) | sec-butylbenzene | 10.90 | 105 | 794523 | 23.12 | ug/L | | 96 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 595746 | 22.94 | ug/L | | 98 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 303503 | 22.97 | ug/L | | 100 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 290192 | 23.71 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.20 | 91 | 527698 | 23.65 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 249861 | 23.10 | ug/L | | 98 |
| 64) | Hexachloroethane | 11.41 | 117 | 94171 | 20.94 | ug/L | # | 90 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10531 | 21.83 | ug/L | | 95 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 195807 | 25.65 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 137343 | 26.83 | ug/L | | 99 |
| 68) | naphthalene | 12.32 | 128 | 187740 | 25.28 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 169743 | 25.92 | ug/L | | 86 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB29.D Vial: 29
Acq On : 14 Feb 2017 4:57 pm Operator: MGC
Sample : 1702527-CCV3 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 17:11 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB30.D Vial: 30
Acq On : 14 Feb 2017 5:20 pm Operator: MGC
Sample : 1702527-CCV4 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:15 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 173861 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 234557 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 57803 | 10.00 | ug/L | | 0.00 |

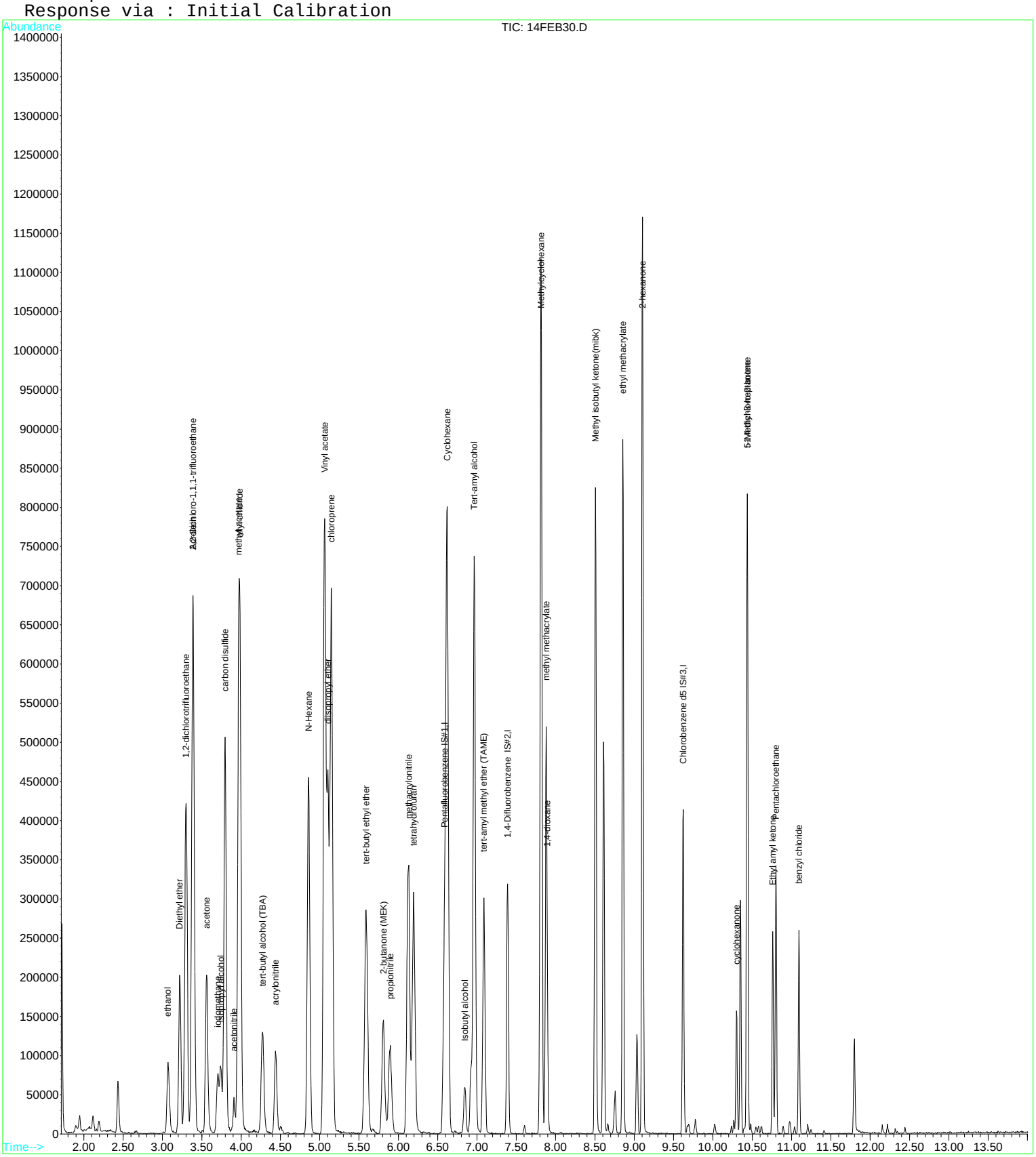
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.07 | 45 | 122075 | 4549.07 | ug/L | | 97 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 436354 | 28.30 | ug/L | | 99 |
| 4) 1,2-dichlorotrifluoroethan | 3.30 | 67 | 276540 | 28.06 | ug/L | | 97 |
| 5) Diethyl ether | 3.22 | 59 | 125233 | 27.68 | ug/L | | 99 |
| 6) isopropyl alcohol | 3.75 | 45 | 132252 | 1054.65 | ug/L | # | 1 |
| 7) Acrolein | 3.39 | 56 | 110835 | 319.92 | ug/L | | 92 |
| 8) acetone | 3.56 | 43 | 307631 | 394.60 | ug/L | | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 185064 | 831.28 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 62625 | 220.95 | ug/L | | 92 |
| 11) methyl acetate | 3.97 | 43 | 705677 | 279.05 | ug/L | | 100 |
| 12) allyl chloride | 3.99 | 41 | 595886 | 30.76 | ug/L | | 100 |
| 13) iodomethane | 3.71 | 142 | 103172 | 10.15 | ug/L | | 100 |
| 14) acrylonitrile | 4.44 | 53 | 98967 | 89.33 | ug/L | | 98 |
| 15) carbon disulfide | 3.80 | 76 | 791411 | 33.85 | ug/L | | 100 |
| 16) N-Hexane | 4.86 | 57 | 273595 | 26.42 | ug/L | | 99 |
| 17) diisopropyl ether | 5.10 | 87 | 99574 | 18.04 | ug/L | | 98 |
| 18) Vinyl acetate | 5.06 | 43 | 1642181 | 148.89 | ug/L | | 99 |
| 19) chloroprene | 5.15 | 53 | 588476 | 33.82 | ug/L | | 100 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 363801 | 15.96 | ug/L | | 99 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 256242 | 167.53 | ug/L | | 99 |
| 22) propionitrile | 5.90 | 54 | 174986 | 437.42 | ug/L | | 97 |
| 23) Isobutyl alcohol | 6.85 | 43 | 47340 | 417.11 | ug/L | | 93 |
| 24) methacrylonitrile | 6.13 | 67 | 177561 | 165.44 | ug/L | | 98 |
| 25) Tert-amyl alcohol | 6.96 | 59 | 460119 | 2967.60 | ug/L | | 97 |
| 26) tetrahydrofuran | 6.20 | 42 | 292221 | 327.05 | ug/L | | 99 |
| 27) Cyclohexane | 6.62 | 56 | 534904 | 28.32 | ug/L | | 100 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 205212 | 16.21 | ug/L | | 96 |
| 30) methyl methacrylate | 7.88 | 69 | 158827 | 81.19 | ug/L | | 100 |
| 31) Methylcyclohexane | 7.81 | 55 | 400059 | 27.60 | ug/L | | 98 |
| 32) 1,4-dioxane | 7.90 | 88 | 32814 | 2242.68 | ug/L | | 98 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 518844 | 159.22 | ug/L | | 97 |
| 34) ethyl methacrylate | 8.85 | 69 | 342401 | 82.20 | ug/L | | 99 |
| 35) 2-hexanone | 9.11 | 43 | 680062 | 332.38 | ug/L | | 99 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 152053 | 54.15 | ug/L | | 98 |
| 38) cyclohexanone | 10.30 | 55 | 57747 | 224.09 | ug/L | | 98 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 76420 | 85.21 | ug/L | | 96 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 58460 | 27.97 | ug/L | | 95 |
| 41) Pentachloroethane | 10.80 | 167 | 45614 | 14.71 | ug/L | | 98 |
| 42) benzyl chloride | 11.09 | 91 | 142969 | 28.57 | ug/L | | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB30.D Vial: 30
Acq On : 14 Feb 2017 5:20 pm Operator: MGC
Sample : 1702527-CCV4 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:15 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB59.D Vial: 59
Acq On : 15 Feb 2017 4:27 am Operator: MGC
Sample : 1702527-CCV5 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 4:41 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 182270 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 251264 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 61637 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 53959 | 10.01 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 100.10% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 266014 | 9.30 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 93.00% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 80205 | 9.44 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 94.40% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.77 | 85 | 232578 | 26.78 | ug/L | 100 |
| 3) Chloromethane | 1.96 | 50 | 294276 | 25.56 | ug/L | 99 |
| 4) Vinyl chloride | 2.08 | 62 | 303046 | 27.90 | ug/L | 99 |
| 5) Bromomethane | 2.46 | 94 | 100274 | 17.30 | ug/L | 96 |
| 6) Chloroethane | 2.58 | 64 | 169993 | 23.90 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.88 | 101 | 294818 | 27.56 | ug/L | 98 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 180599 | 23.69 | ug/L | 99 |
| 9) 1,1-Dichloroethene | 3.53 | 61 | 355673 | 25.12 | ug/L | 99 |
| 10) Methylene chloride | 4.16 | 84 | 170187 | 24.15 | ug/L | 94 |
| 11) MTBE | 4.49 | 73 | 273144 | 23.84 | ug/L | 99 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 192979 | 23.51 | ug/L | 96 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 405873 | 21.60 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 198610 | 16.86 | ug/L # | 60 |
| 15) Cis-1,2-dichloroethene | 5.84 | 96 | 202828 | 23.84 | ug/L | 99 |
| 16) Bromochloromethane | 6.18 | 128 | 72123 | 25.58 | ug/L | 91 |
| 17) Chloroform | 6.33 | 83 | 316878 | 23.03 | ug/L | 96 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 288248 | 24.72 | ug/L | 92 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 263076 | 23.54 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 217045 | 25.40 | ug/L | 97 |
| 22) 1,2-Dichloroethane | 7.00 | 62 | 187890 | 23.52 | ug/L | 96 |
| 23) Benzene | 6.94 | 78 | 773647 | 22.46 | ug/L | 97 |
| 25) Trichloroethene | 7.61 | 130 | 193967 | 23.71 | ug/L | 98 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 205217 | 21.94 | ug/L | 95 |
| 27) Dibromomethane | 7.91 | 93 | 62496 | 21.96 | ug/L | 95 |
| 28) Bromodichloromethane | 8.06 | 83 | 197964 | 23.93 | ug/L | 95 |
| 29) 2-ceve | 8.29 | 63 | 233722 | 89.22 | ug/L | 98 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 235784 | 21.50 | ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 442462 | 22.58 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 161764 | 21.45 | ug/L | 100 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 88875 | 23.07 | ug/L | 99 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 201196 | 23.47 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.08 | 76 | 154481 | 23.05 | ug/L | 98 |
| 37) Dibromochloromethane | 9.24 | 129 | 102392 | 23.85 | ug/L | 98 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 81948 | 23.46 | ug/L | 96 |
| 40) Chlorobenzene | 9.64 | 112 | 428347 | 23.34 | ug/L | 96 |
| 41) 1,1,1,2-Tetrachloroethane | 9.69 | 131 | 126291 | 22.12 | ug/L | 98 |
| 42) Ethylbenzene | 9.69 | 106 | 234758 | 22.42 | ug/L | 87 |
| 43) P+m-Xylene | 9.78 | 106 | 550193 | 44.37 | ug/L | 83 |
| 44) O-Xylene | 10.02 | 106 | 269957 | 22.57 | ug/L | 87 |
| 45) Styrene | 10.03 | 104 | 413173 | 23.11 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 48029 | 22.22 | ug/L | 98 |
| 47) Isopropylbenzene | 10.24 | 105 | 703697 | 22.00 | ug/L | 92 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 69400 | 20.25 | ug/L | 97 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 15387 | 22.59 | ug/L | 89 |
| 51) n-propylbenzene | 10.48 | 91 | 786616 | 21.41 | ug/L | 93 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB59.D Vial: 59
Acq On : 15 Feb 2017 4:27 am Operator: MGC
Sample : 1702527-CCV5 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 4:41 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

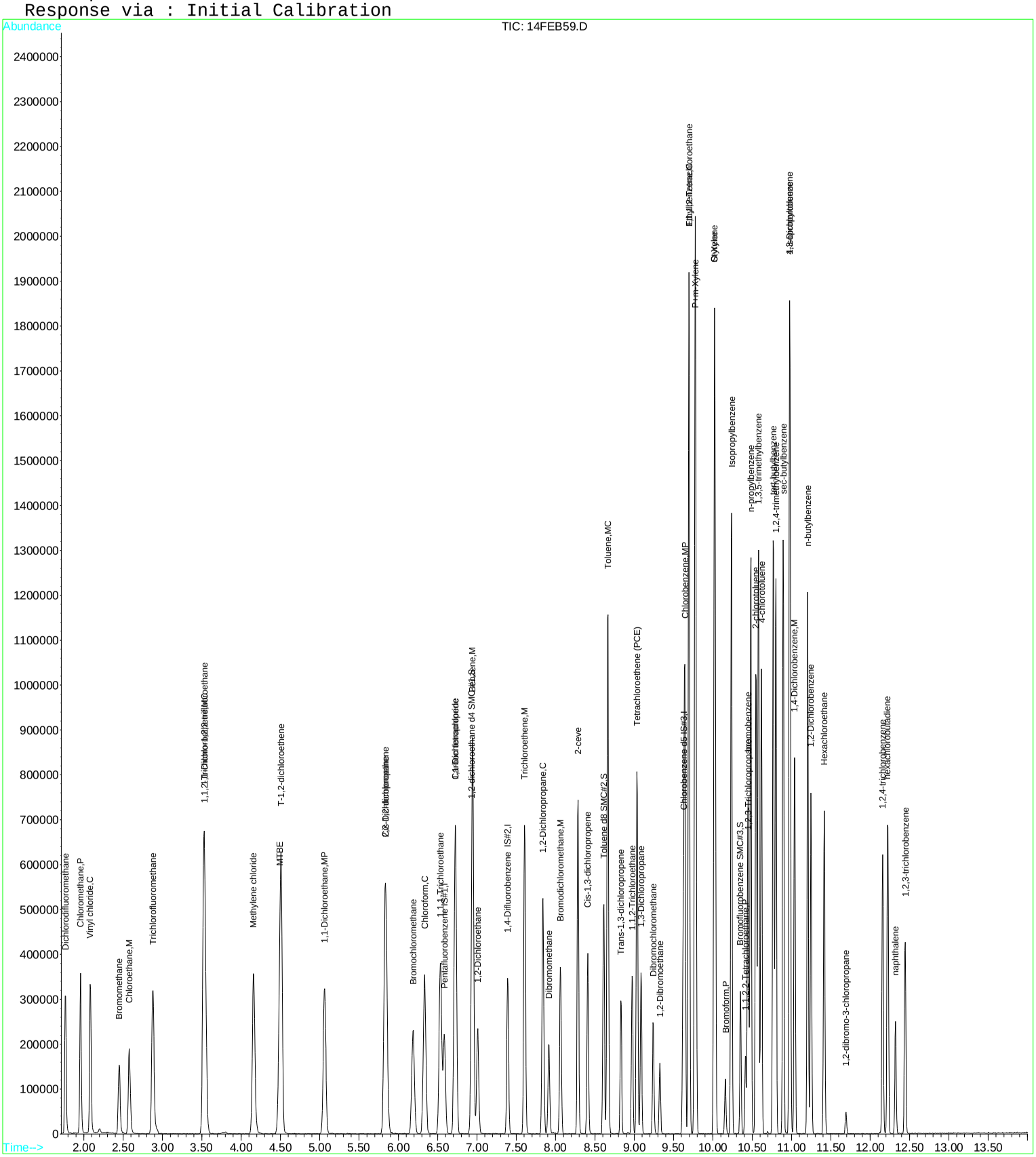
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 160659 | 22.10 | ug/L | | 92 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 542893 | 22.18 | ug/L | | 92 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 515175 | 22.80 | ug/L | | 96 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 456239 | 22.53 | ug/L | | 95 |
| 56) | tert-butylbenzene | 10.77 | 119 | 509477 | 21.46 | ug/L | | 98 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 512087 | 23.09 | ug/L | | 91 |
| 58) | sec-butylbenzene | 10.89 | 105 | 718832 | 21.68 | ug/L | | 94 |
| 59) | 4-isopropyltoluene | 10.98 | 119 | 564727 | 22.54 | ug/L | | 98 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 277951 | 21.80 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 276529 | 23.41 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 498171 | 23.13 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 247283 | 23.69 | ug/L | | 98 |
| 64) | Hexachloroethane | 11.42 | 117 | 89721 | 20.67 | ug/L | # | 89 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 11885 | 25.55 | ug/L | | 97 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 172130 | 23.37 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.23 | 225 | 139715 | 28.29 | ug/L | | 97 |
| 68) | naphthalene | 12.32 | 128 | 149614 | 20.88 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.45 | 180 | 128181 | 20.28 | ug/L | | 84 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB59.D Vial: 59
Acq On : 15 Feb 2017 4:27 am Operator: MGC
Sample : 1702527-CCV5 Inst : MS-V5
Misc : 1 REG VO-107-69405;25mL Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 4:41 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB60.D Vial: 60
Acq On : 15 Feb 2017 4:49 am Operator: MGC
Sample : 1702527-CCV6 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 5:51 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 189110 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 249293 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 58863 | 10.00 | ug/L | | 0.00 |

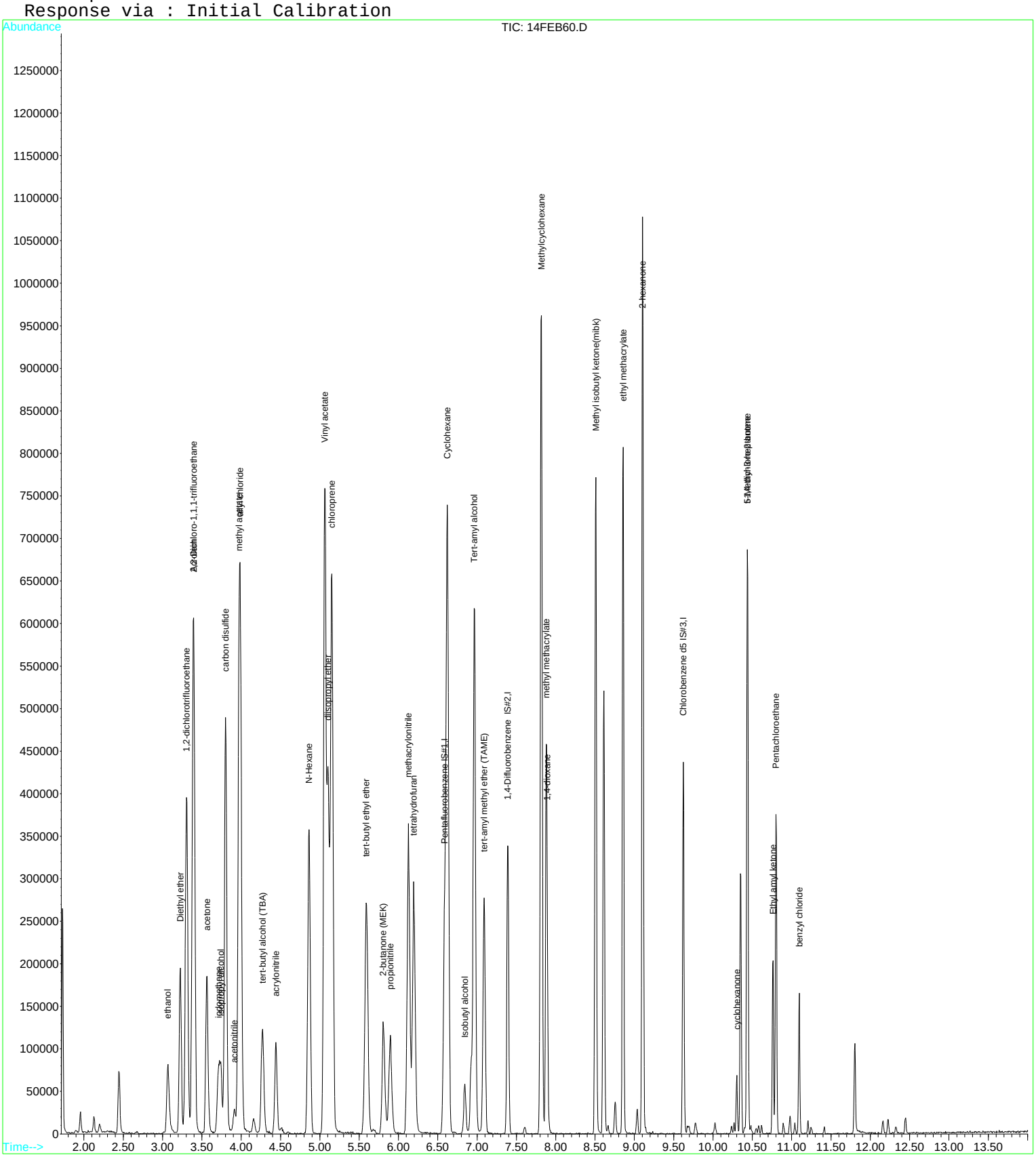
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.07 | 45 | 113028 | 3872.30 | ug/L | | 94 |
| 3) 2,2-Dichloro-1,1,1-trifluo | 3.39 | 83 | 396512 | 23.64 | ug/L | | 98 |
| 4) 1,2-dichlorotrifluoroethan | 3.31 | 67 | 248216 | 23.16 | ug/L | | 96 |
| 5) Diethyl ether | 3.23 | 59 | 114187 | 23.20 | ug/L | | 99 |
| 6) isopropyl alcohol | 3.74 | 45 | 125279 | 906.10 | ug/L | # | 1 |
| 7) Acrolein | 3.40 | 56 | 95074 | 252.30 | ug/L | | 95 |
| 8) acetone | 3.57 | 43 | 272304 | 321.12 | ug/L | | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 170294 | 703.26 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 59810 | 192.06 | ug/L | # | 67 |
| 11) methyl acetate | 3.97 | 43 | 673786 | 244.95 | ug/L | | 99 |
| 12) allyl chloride | 3.99 | 41 | 588202 | 27.91 | ug/L | | 100 |
| 13) iodomethane | 3.71 | 142 | 98849 | 8.94 | ug/L | | 100 |
| 14) acrylonitrile | 4.44 | 53 | 96559 | 80.13 | ug/L | | 98 |
| 15) carbon disulfide | 3.80 | 76 | 760240 | 29.89 | ug/L | | 100 |
| 16) N-Hexane | 4.87 | 57 | 217913 | 19.35 | ug/L | | 99 |
| 17) diisopropyl ether | 5.11 | 87 | 88915 | 14.81 | ug/L | | 91 |
| 18) Vinyl acetate | 5.06 | 43 | 1569471 | 130.82 | ug/L | | 99 |
| 19) chloroprene | 5.15 | 53 | 569802 | 30.10 | ug/L | | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 340240 | 13.72 | ug/L | | 98 |
| 21) 2-butanone (MEK) | 5.80 | 43 | 225071 | 135.29 | ug/L | | 97 |
| 22) propionitrile | 5.89 | 54 | 172242 | 395.84 | ug/L | | 97 |
| 23) Isobutyl alcohol | 6.84 | 43 | 44354 | 359.29 | ug/L | | 97 |
| 24) methacrylonitrile | 6.13 | 67 | 168050 | 143.95 | ug/L | | 98 |
| 25) Tert-amyl alcohol | 6.97 | 59 | 406347 | 2409.46 | ug/L | | 98 |
| 26) tetrahydrofuran | 6.19 | 42 | 273588 | 281.50 | ug/L | | 99 |
| 27) Cyclohexane | 6.62 | 56 | 470592 | 22.91 | ug/L | | 98 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 193772 | 14.07 | ug/L | | 98 |
| 30) methyl methacrylate | 7.88 | 69 | 149386 | 71.85 | ug/L | | 100 |
| 31) Methylcyclohexane | 7.81 | 55 | 354360 | 23.01 | ug/L | | 98 |
| 32) 1,4-dioxane | 7.89 | 88 | 28234 | 1793.07 | ug/L | | 97 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 488243 | 140.97 | ug/L | | 98 |
| 34) ethyl methacrylate | 8.86 | 69 | 319878 | 72.25 | ug/L | | 99 |
| 35) 2-hexanone | 9.10 | 43 | 625046 | 279.64 | ug/L | | 99 |
| 37) 5-Methyl-3-heptanone | 10.44 | 43 | 144636 | 50.58 | ug/L | | 97 |
| 38) cyclohexanone | 10.30 | 55 | 25552 | 97.37 | ug/L | | 97 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 60781 | 66.55 | ug/L | | 95 |
| 40) Ethyl amyl ketone | 10.76 | 57 | 48372 | 22.73 | ug/L | | 99 |
| 41) Pentachloroethane | 10.80 | 167 | 52755 | 16.70 | ug/L | | 97 |
| 42) benzyl chloride | 11.10 | 91 | 90374 | 17.74 | ug/L | | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB60.D Vial: 60
Acq On : 15 Feb 2017 4:49 am Operator: MGC
Sample : 1702527-CCV6 Inst : MS-V5
Misc : 1 VO-107-69354;69355;69356;69407;69408;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 5:51 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - CCB**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB05.D Vial: 5
Acq On : 12 Feb 2017 6:37 am Operator: MGC
Sample : 1702423-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 11:49 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 215456 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280117 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69351 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 63742 | 10.00 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 100.00% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 325938 | 10.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 93661 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.90% | | | |

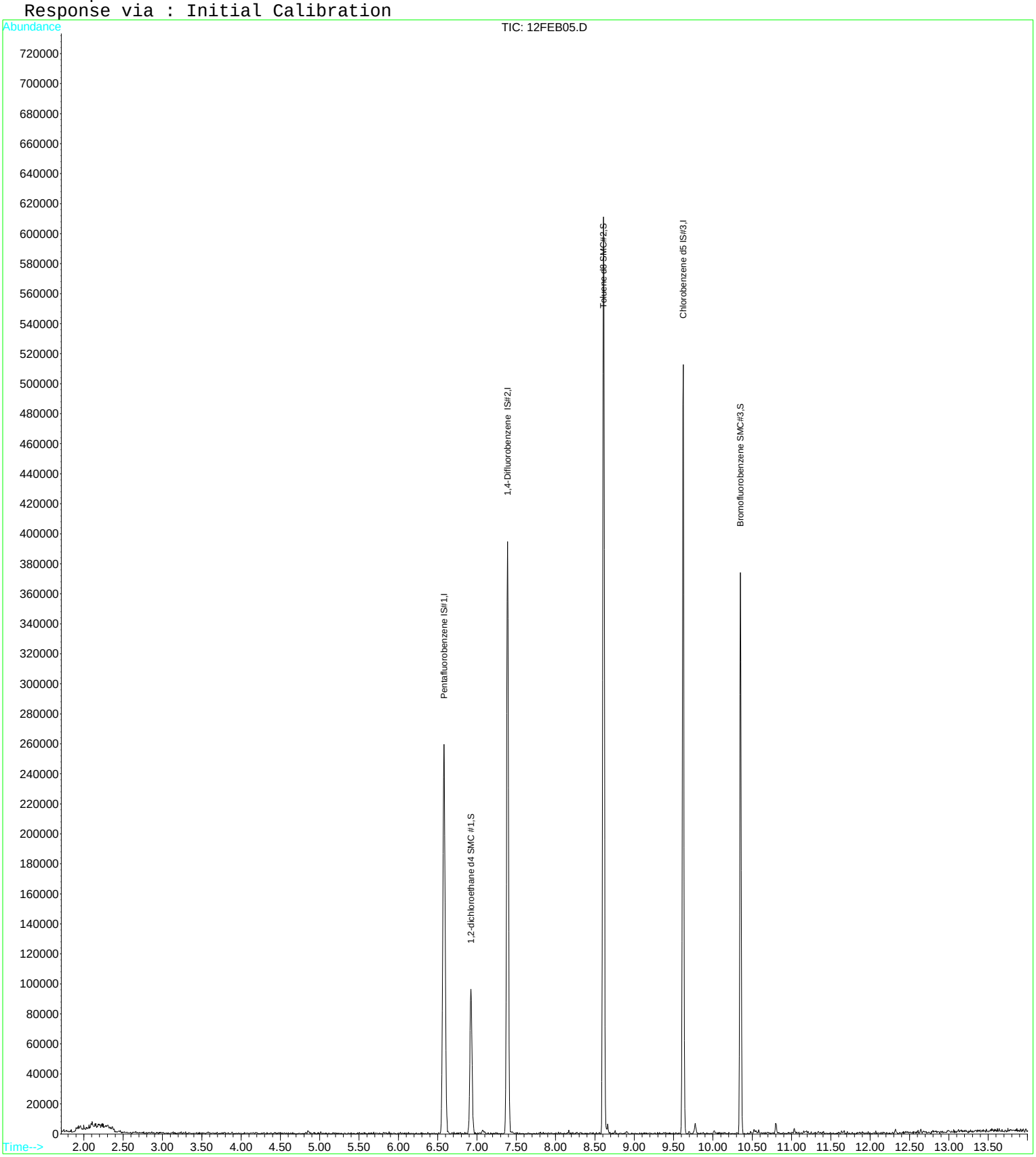
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB05.D Vial: 5
Acq On : 12 Feb 2017 6:37 am Operator: MGC
Sample : 1702423-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 11:49 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB05.D Vial: 5
Acq On : 12 Feb 2017 6:37 am Operator: MGC
Sample : 1702423-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 11:50 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 215456 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280117 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69351 | 10.00 | ug/L | 0.00 |

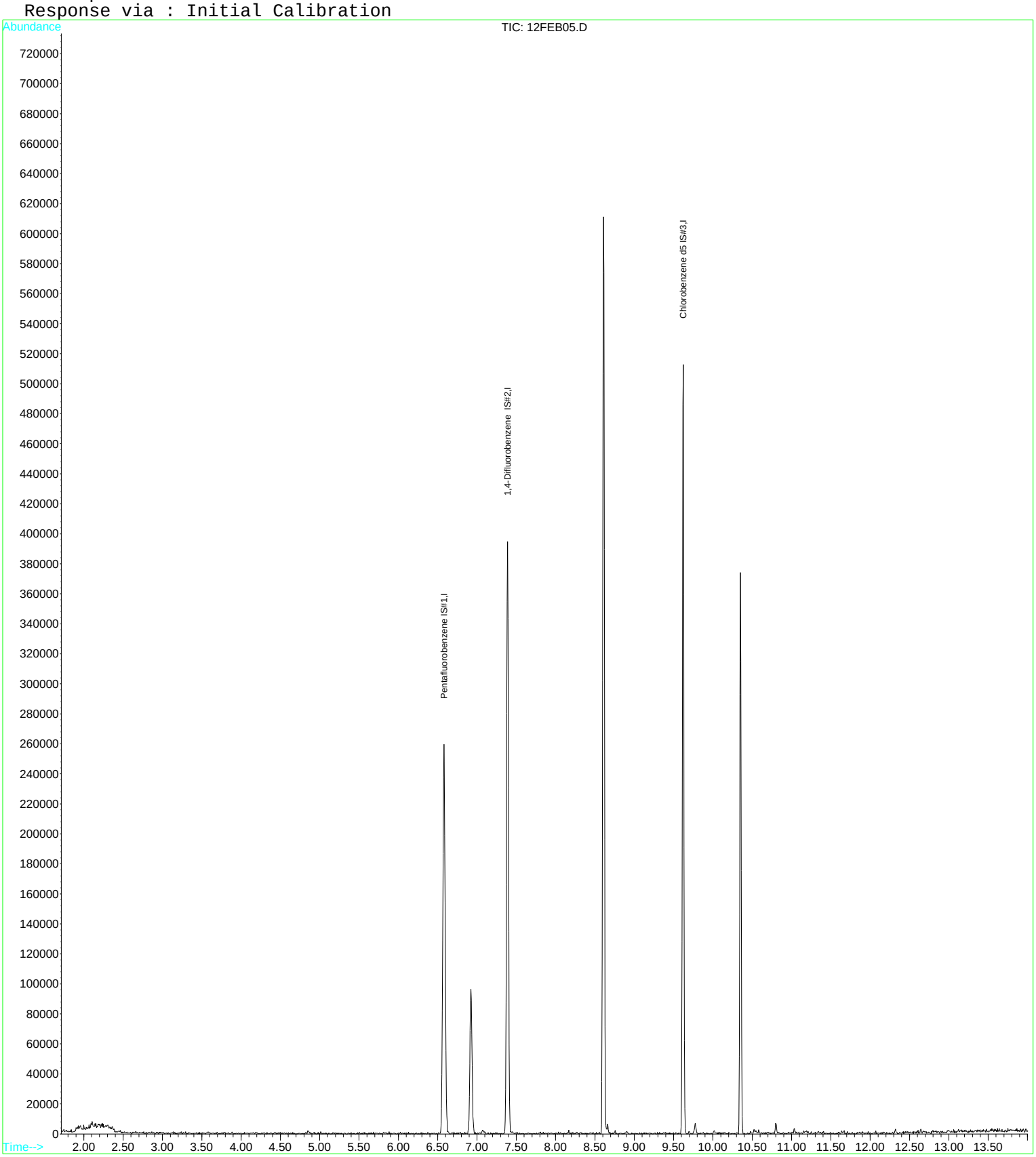
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB05.D Vial: 5
Acq On : 12 Feb 2017 6:37 am Operator: MGC
Sample : 1702423-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 11:50 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB05.D Vial: 5
Acq On : 12 Feb 2017 6:37 am Operator: MGC
Sample : 1702423-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 11:51 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Tue Dec 13 12:22:47 2016
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 215456 | 10.00 | ug/L | -0.15 |
| System Monitoring Compounds | | | | | | |
| 2) PENTAFLUOROBENZENE S 1 | 6.58 | TIC | 545050m | 4.80 | ug/L | -0.15 |
| 3) 1,2-DICHLOROETHANE d4 S 2 | 6.92 | TIC | 182983m | 2.60 | ug/L | -0.16 |
| 4) 1,4-DIFLUOROBENZENE S 3 | 7.39 | TIC | 656444m | 5.27 | ug/L | -0.13 |
| 5) TOLUENE d8 S 4 | 8.61 | TIC | 881013m | 7.98 | ug/L | -0.11 |
| 6) CHLOROBENZENE d5 S 5 | 9.62 | TIC | 645117m | 8.32 | ug/L | -0.10 |
| 7) BROMOFLUOROBENZENE S 6 | 10.35 | TIC | 445132m | 8.51 | ug/L | -0.10 |

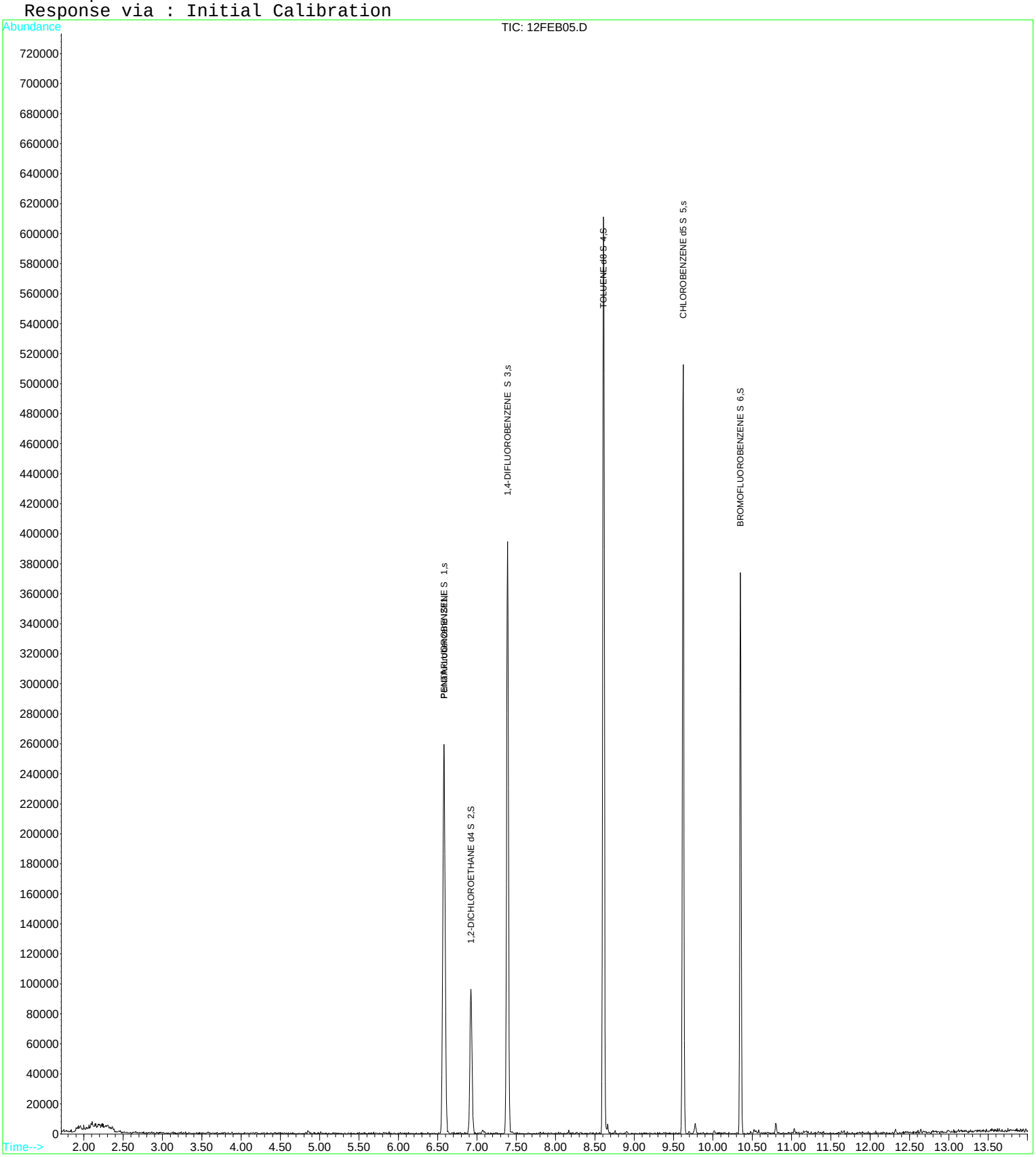
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB05.D Vial: 5
Acq On : 12 Feb 2017 6:37 am Operator: MGC
Sample : 1702423-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 11:51 2017 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\13-1055\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Tue Dec 13 12:22:47 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB35.D Vial: 35
Acq On : 12 Feb 2017 6:11 pm Operator: MGC
Sample : 1702423-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:36 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 216907 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 276928 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67485 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 65292 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 101.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 311762 | 9.89 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 94947 | 10.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.00% | | | |

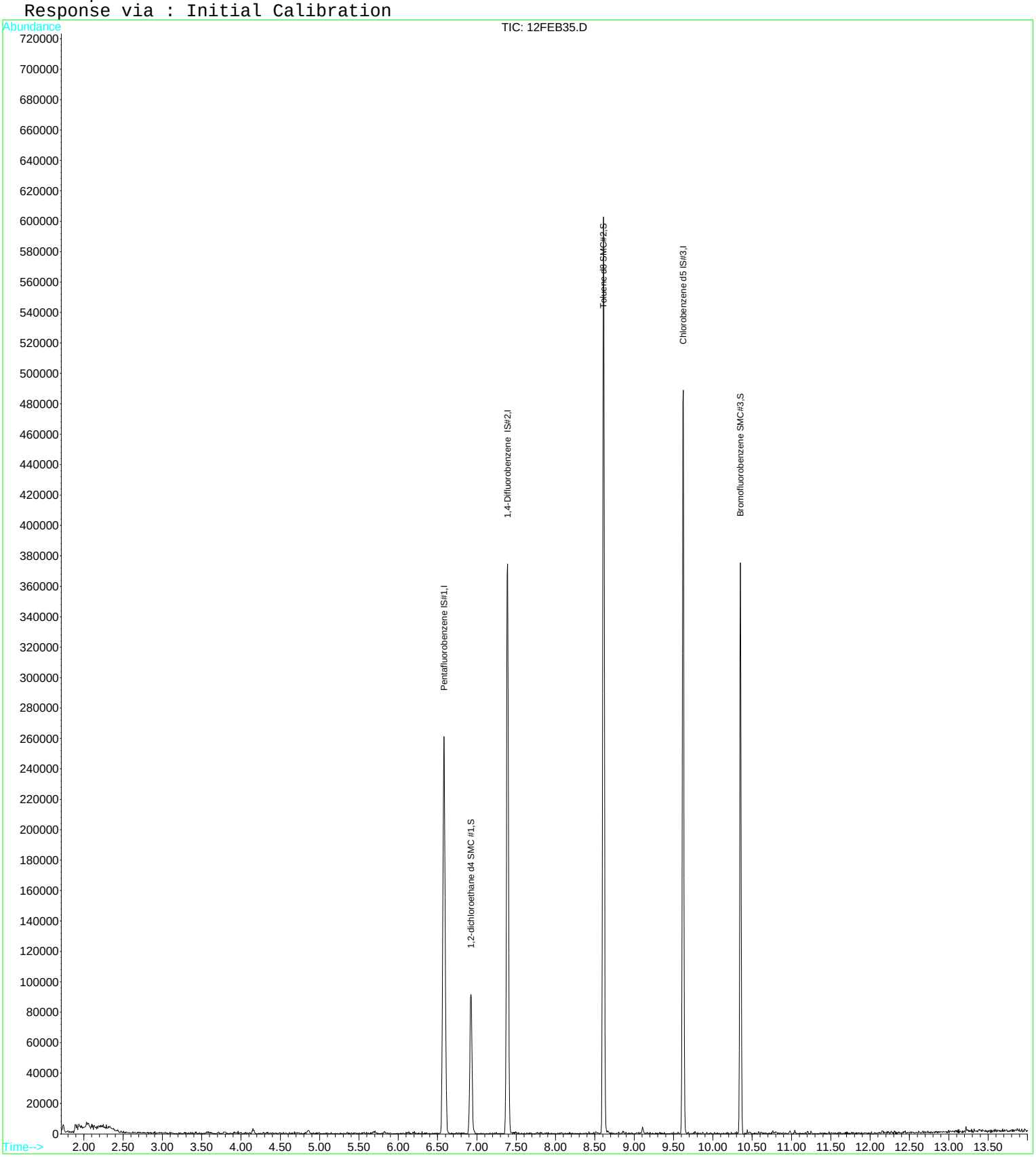
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB35.D Vial: 35
Acq On : 12 Feb 2017 6:11 pm Operator: MGC
Sample : 1702423-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:36 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB35.D Vial: 35
Acq On : 12 Feb 2017 6:11 pm Operator: MGC
Sample : 1702423-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:36 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 216907 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 276928 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 67485 | 10.00 | ug/L | 0.00 |

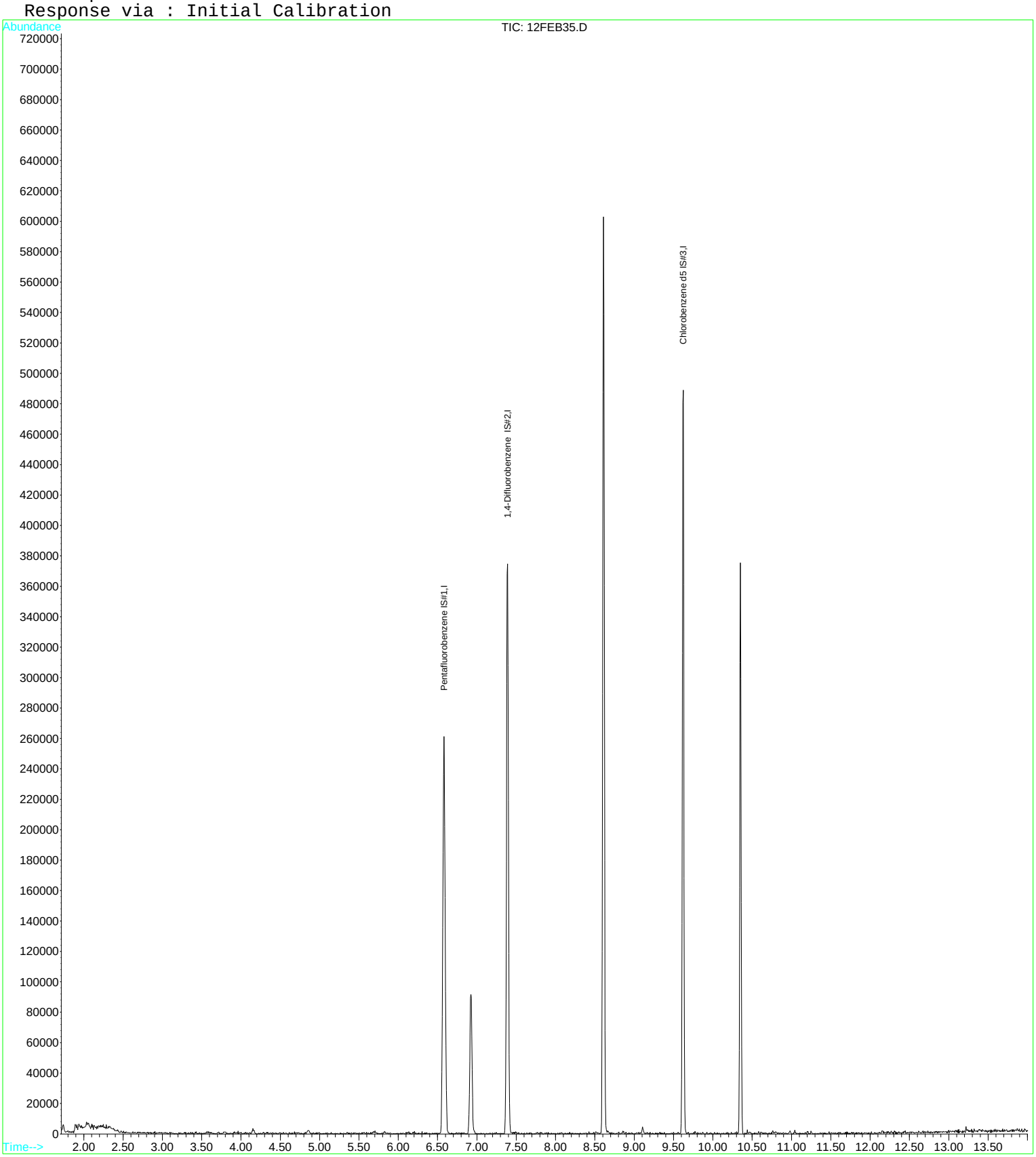
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB35.D Vial: 35
Acq On : 12 Feb 2017 6:11 pm Operator: MGC
Sample : 1702423-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:36 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB66.D Vial: 66
Acq On : 13 Feb 2017 6:09 am Operator: MGC
Sample : 1702423-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:21 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 210993 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280537 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64660 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65439 | 10.48 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 104.80% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 304356 | 9.53 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.30% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 87474 | 9.81 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.10% | | | |

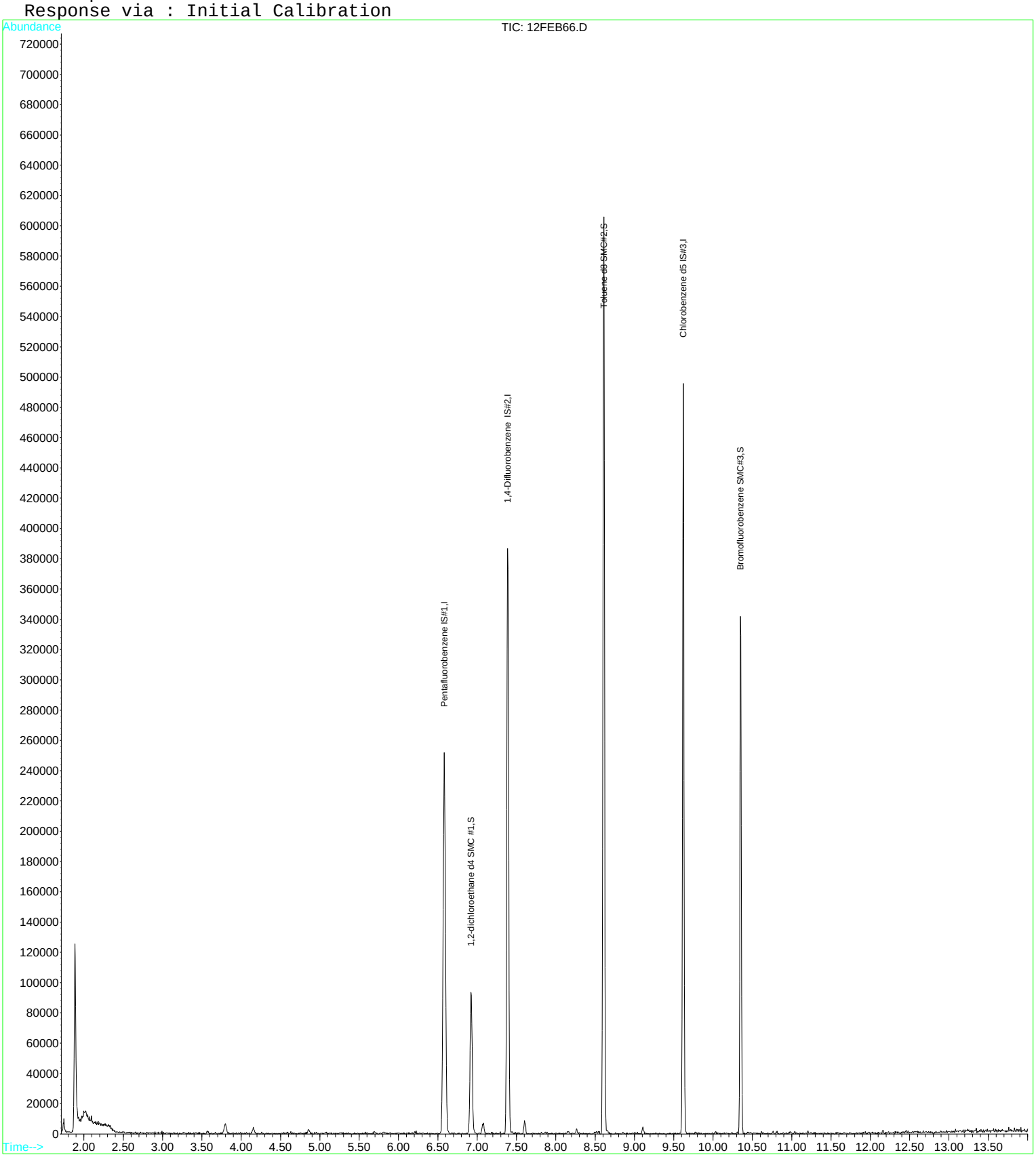
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB66.D Vial: 66
Acq On : 13 Feb 2017 6:09 am Operator: MGC
Sample : 1702423-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:21 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB66.D Vial: 66
Acq On : 13 Feb 2017 6:09 am Operator: MGC
Sample : 1702423-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:22 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 210993 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 280537 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 64660 | 10.00 | ug/L | 0.00 |

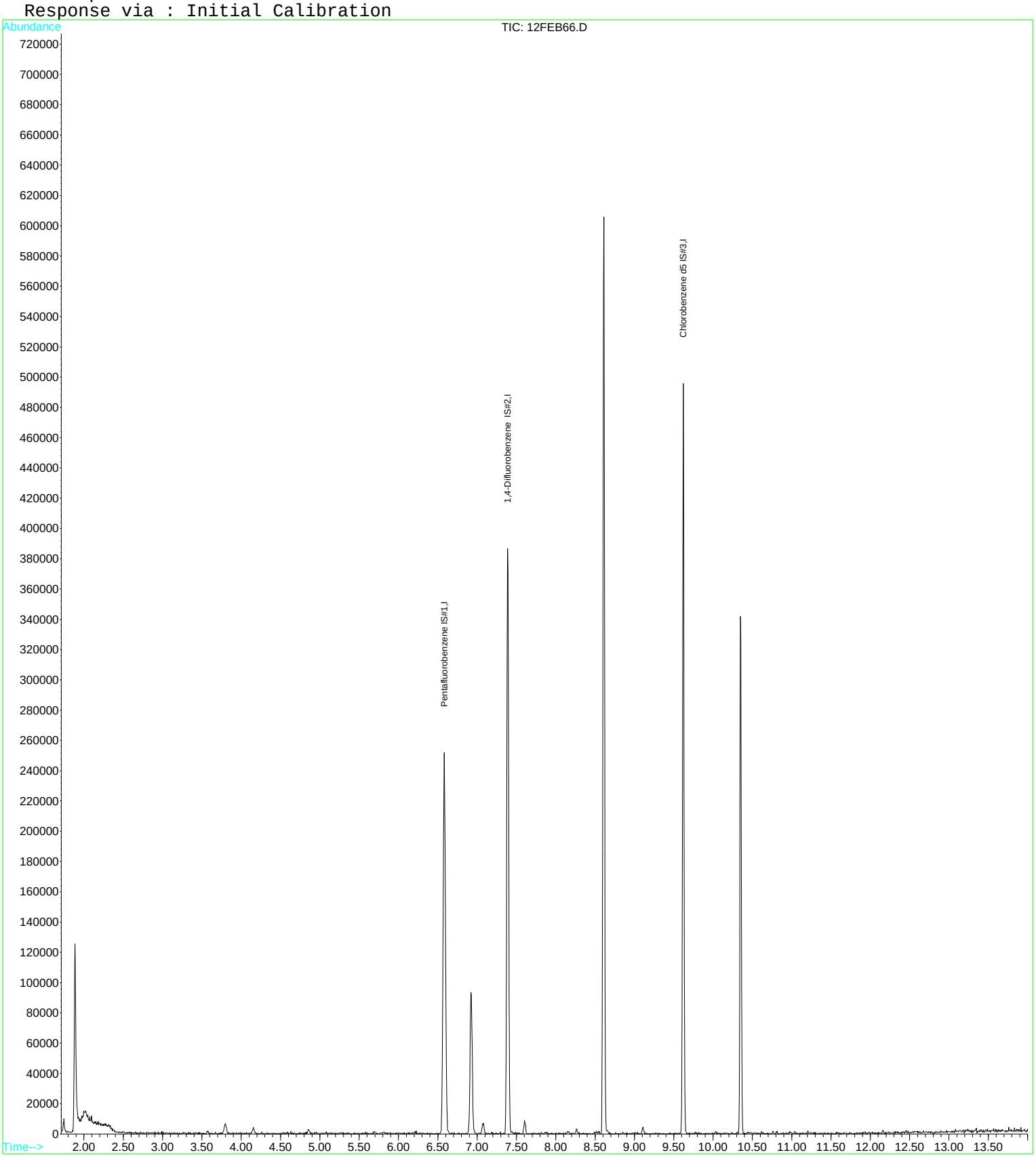
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB66.D Vial: 66
Acq On : 13 Feb 2017 6:09 am Operator: MGC
Sample : 1702423-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 10:22 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB04.D Vial: 4
Acq On : 13 Feb 2017 7:43 am Operator: MGC
Sample : 1702431-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:54 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 212297 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 284493 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68454 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 65026 | 10.35 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 103.50% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 314845 | 9.72 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88696 | 9.40 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.00% | | | |

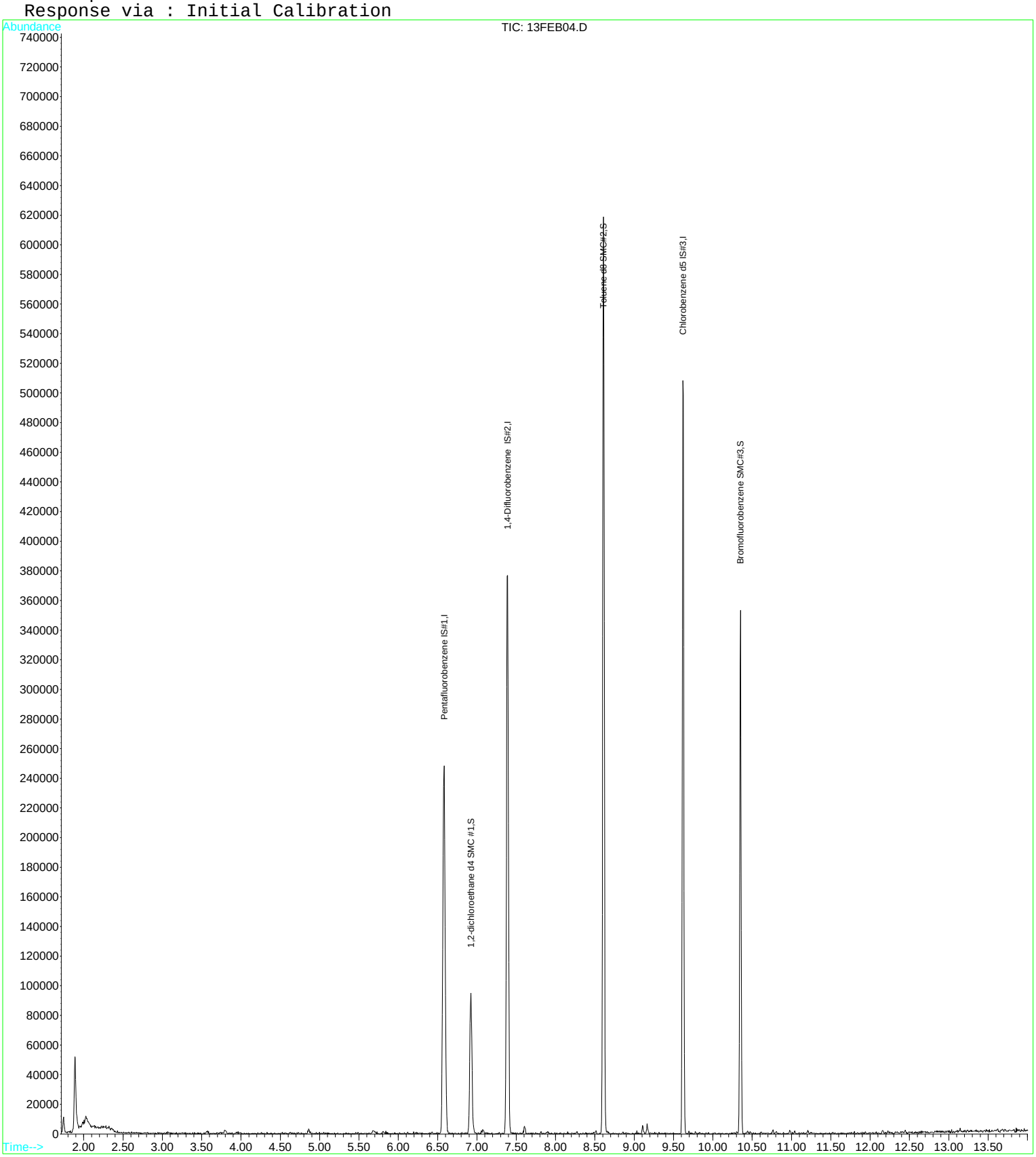
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB04.D Vial: 4
Acq On : 13 Feb 2017 7:43 am Operator: MGC
Sample : 1702431-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:54 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB04.D Vial: 4
Acq On : 13 Feb 2017 7:43 am Operator: MGC
Sample : 1702431-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:54 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 212297 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 284493 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 68454 | 10.00 | ug/L | 0.00 |

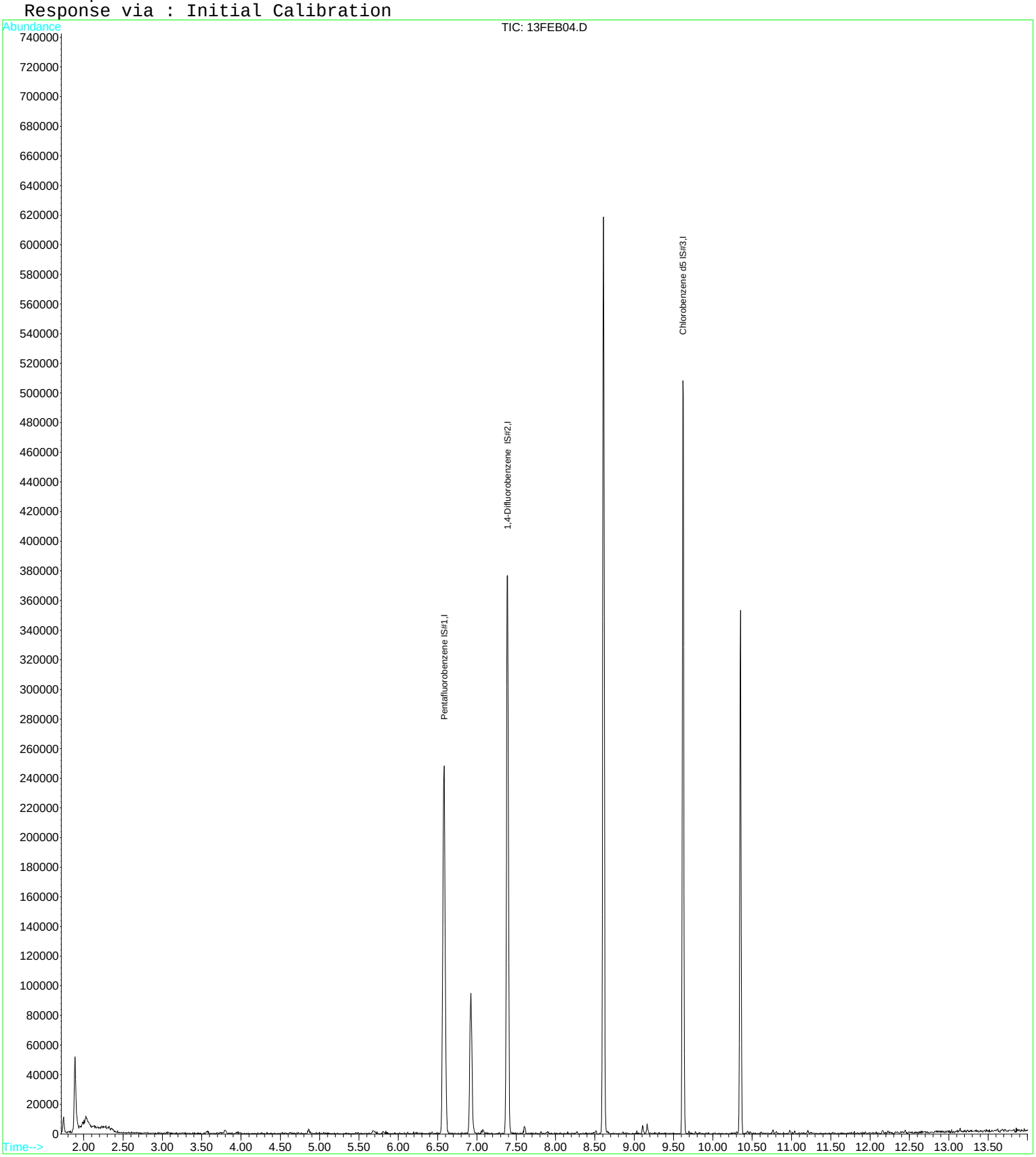
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB04.D Vial: 4
Acq On : 13 Feb 2017 7:43 am Operator: MGC
Sample : 1702431-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:54 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB35.D Vial: 35
Acq On : 13 Feb 2017 7:42 pm Operator: MGC
Sample : 1702431-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:32 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 184300 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 239702 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 57196 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 54492 | 9.99 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 99.90% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 262559 | 9.62 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 79002 | 10.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 100.20% | | | |

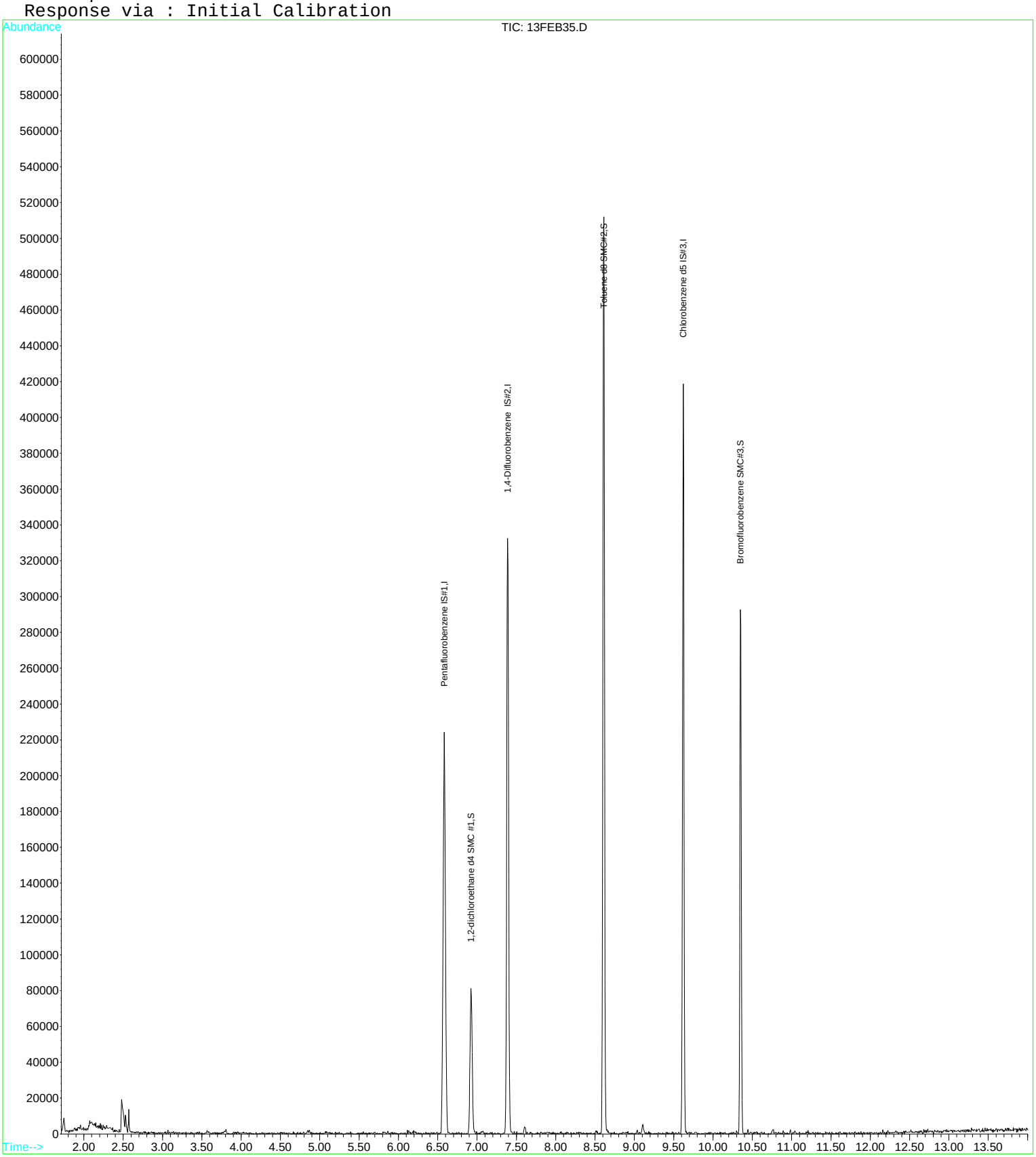
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB35.D Vial: 35
Acq On : 13 Feb 2017 7:42 pm Operator: MGC
Sample : 1702431-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:32 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB35.D Vial: 35
Acq On : 13 Feb 2017 7:42 pm Operator: MGC
Sample : 1702431-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:32 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 184300 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 239702 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 57196 | 10.00 | ug/L | 0.00 |

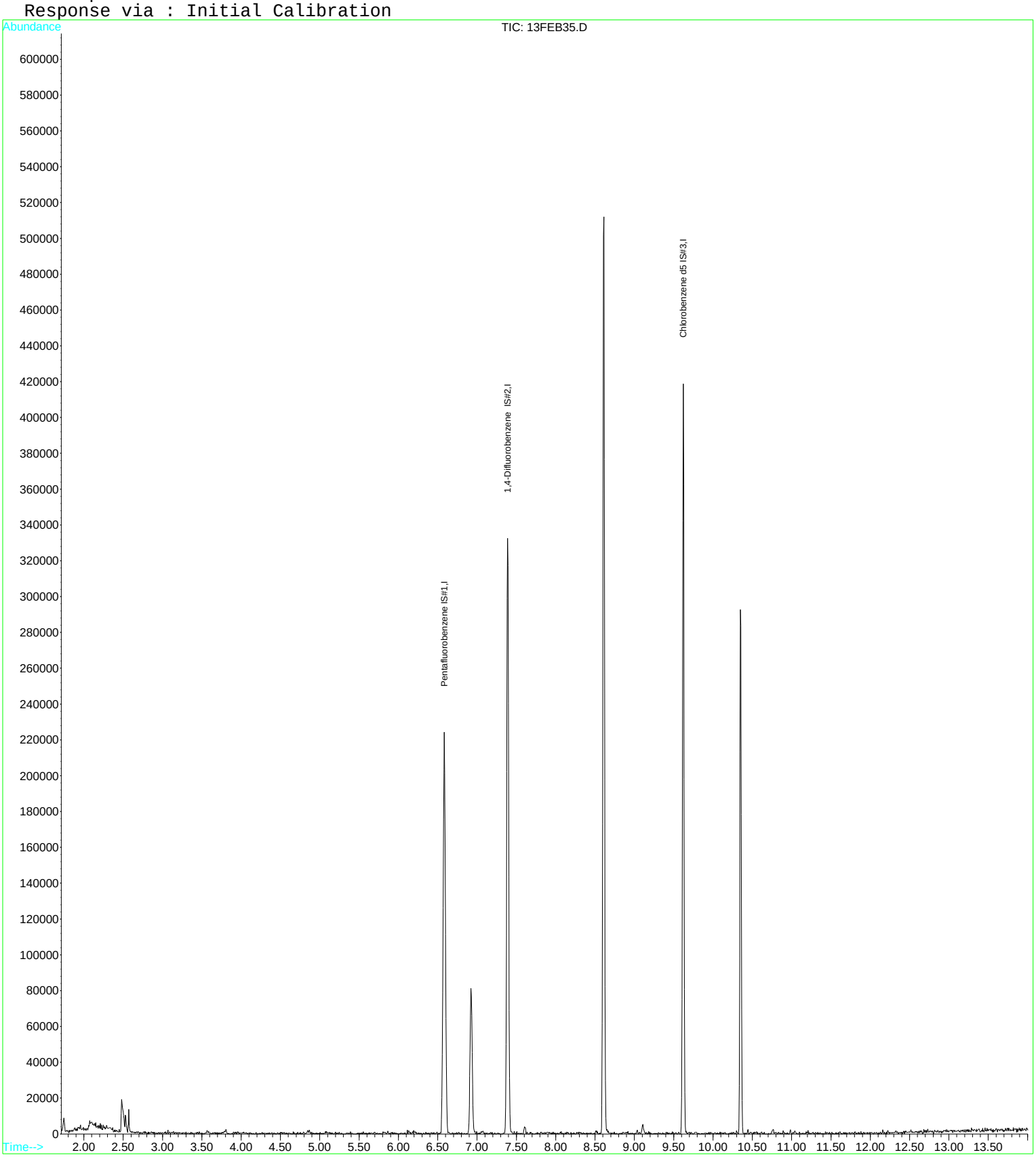
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB35.D  Vial: 35
Acq On : 13 Feb 2017 7:42 pm  Operator: MGC
Sample : 1702431-CCB2  Inst : MS-V5
Misc : 1 CCB2;25ML  Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:32 2017  Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB04.D Vial: 4
Acq On : 14 Feb 2017 7:17 am Operator: MGC
Sample : 1702527-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 9:58 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 199884 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 265862 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62028 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61012 | 10.32 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 103.20% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 293866 | 9.71 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 97.10% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 82925 | 9.69 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 96.90% | | | |

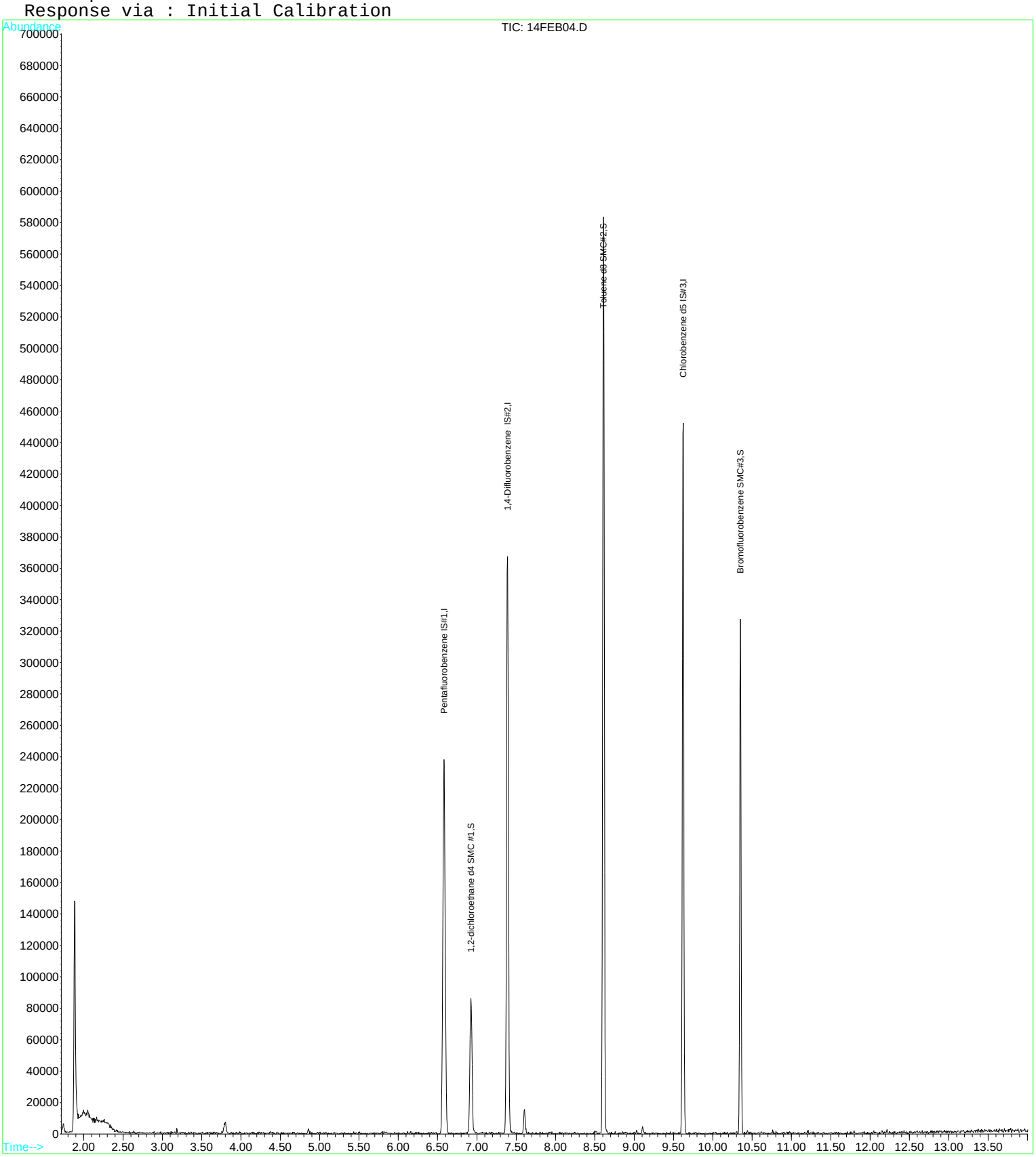
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB04.D Vial: 4
Acq On : 14 Feb 2017 7:17 am Operator: MGC
Sample : 1702527-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 9:58 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB04.D Vial: 4
Acq On : 14 Feb 2017 7:17 am Operator: MGC
Sample : 1702527-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 9:58 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 199884 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 265862 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62028 | 10.00 | ug/L | 0.00 |

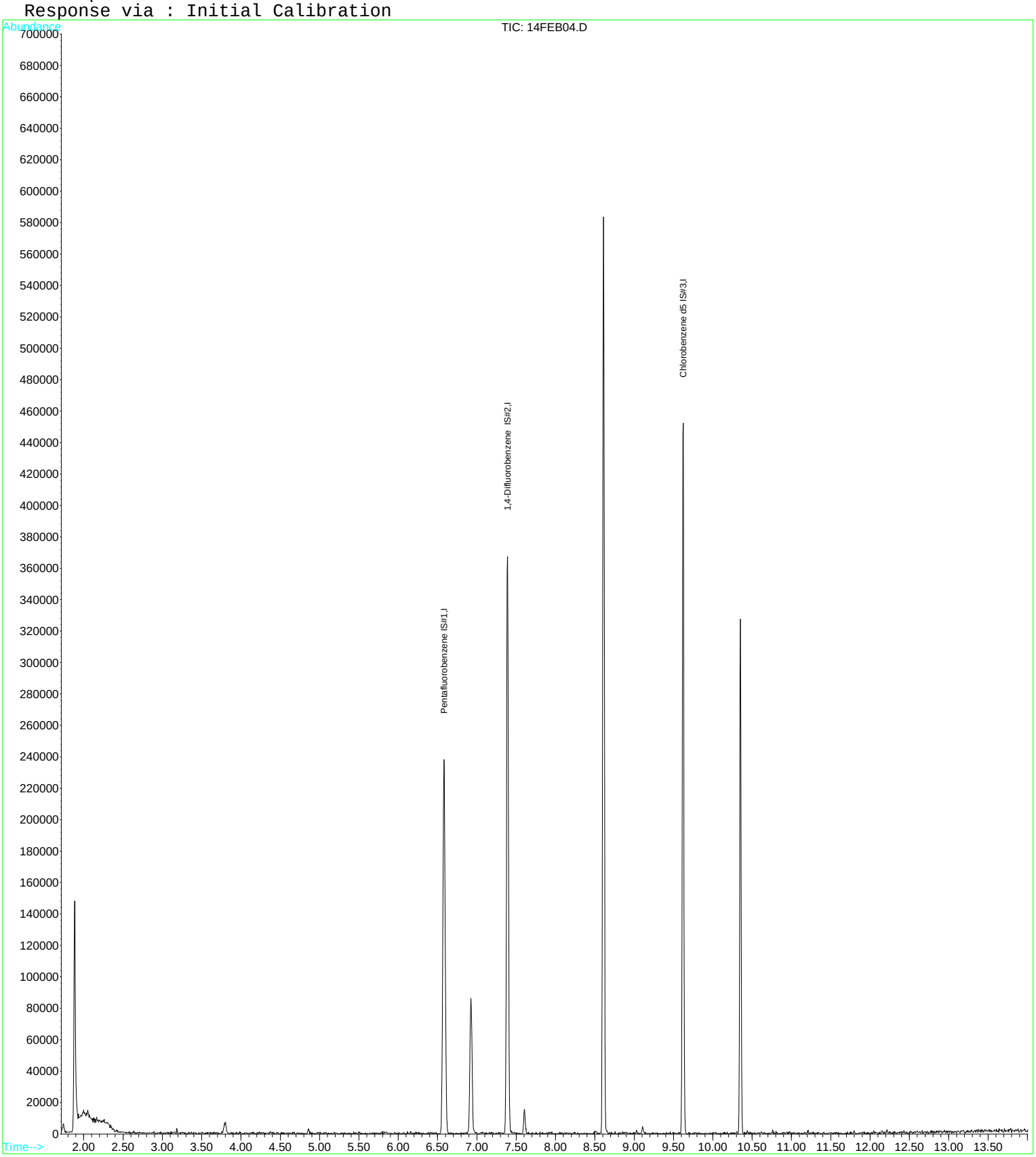
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB04.D Vial: 4
Acq On : 14 Feb 2017 7:17 am Operator: MGC
Sample : 1702527-CCB1 Inst : MS-V5
Misc : 1 CCB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 9:58 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB31.D Vial: 31
Acq On : 14 Feb 2017 5:43 pm Operator: MGC
Sample : 1702527-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:16 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208365 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272809 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62868 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 62466 | 10.13 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 101.30% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 293724 | 9.46 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.60% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 91104 | 10.51 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 105.10% | | | |

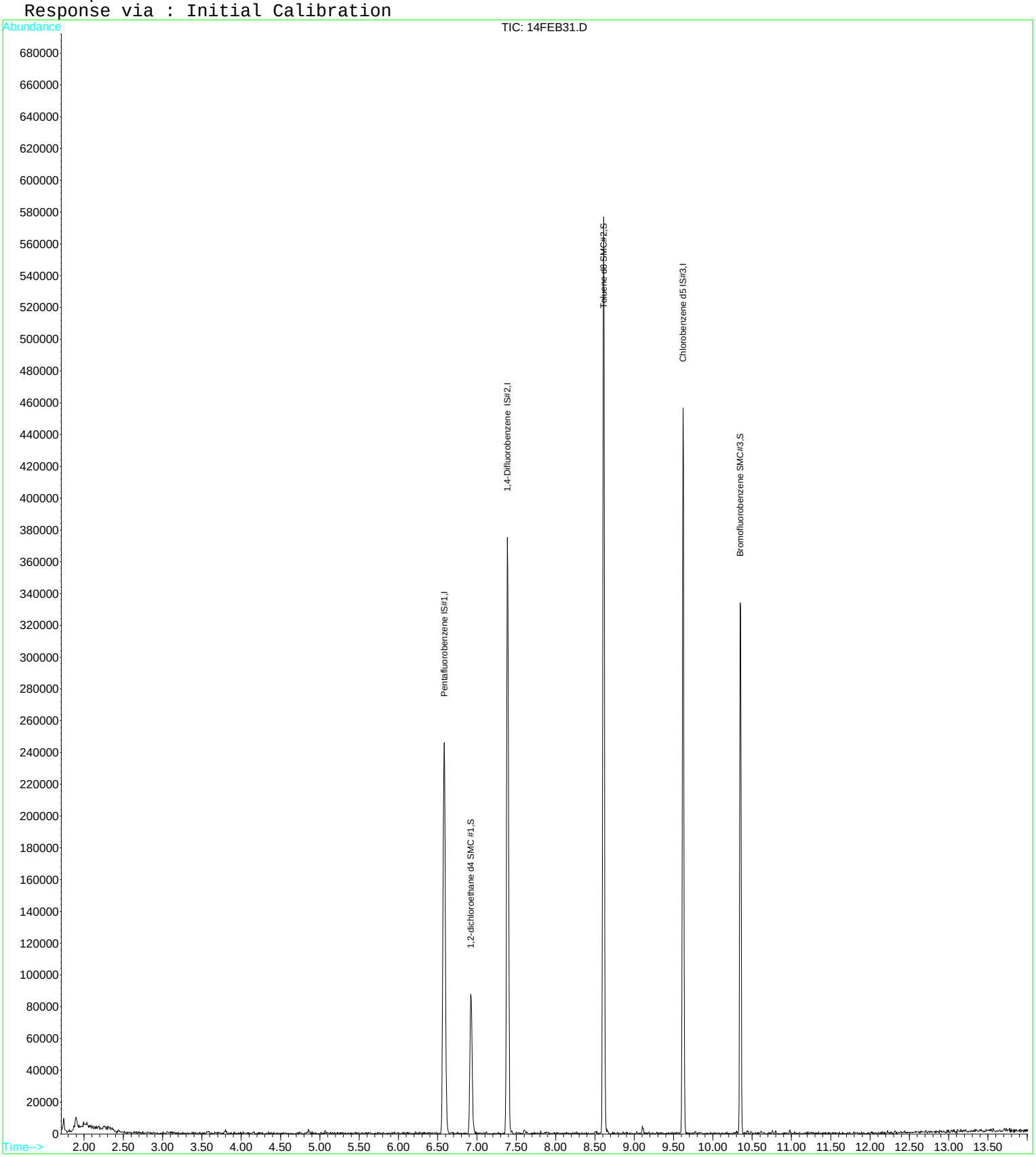
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB31.D Vial: 31
Acq On : 14 Feb 2017 5:43 pm Operator: MGC
Sample : 1702527-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:16 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB31.D Vial: 31
Acq On : 14 Feb 2017 5:43 pm Operator: MGC
Sample : 1702527-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:16 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208365 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 272809 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62868 | 10.00 | ug/L | 0.00 |

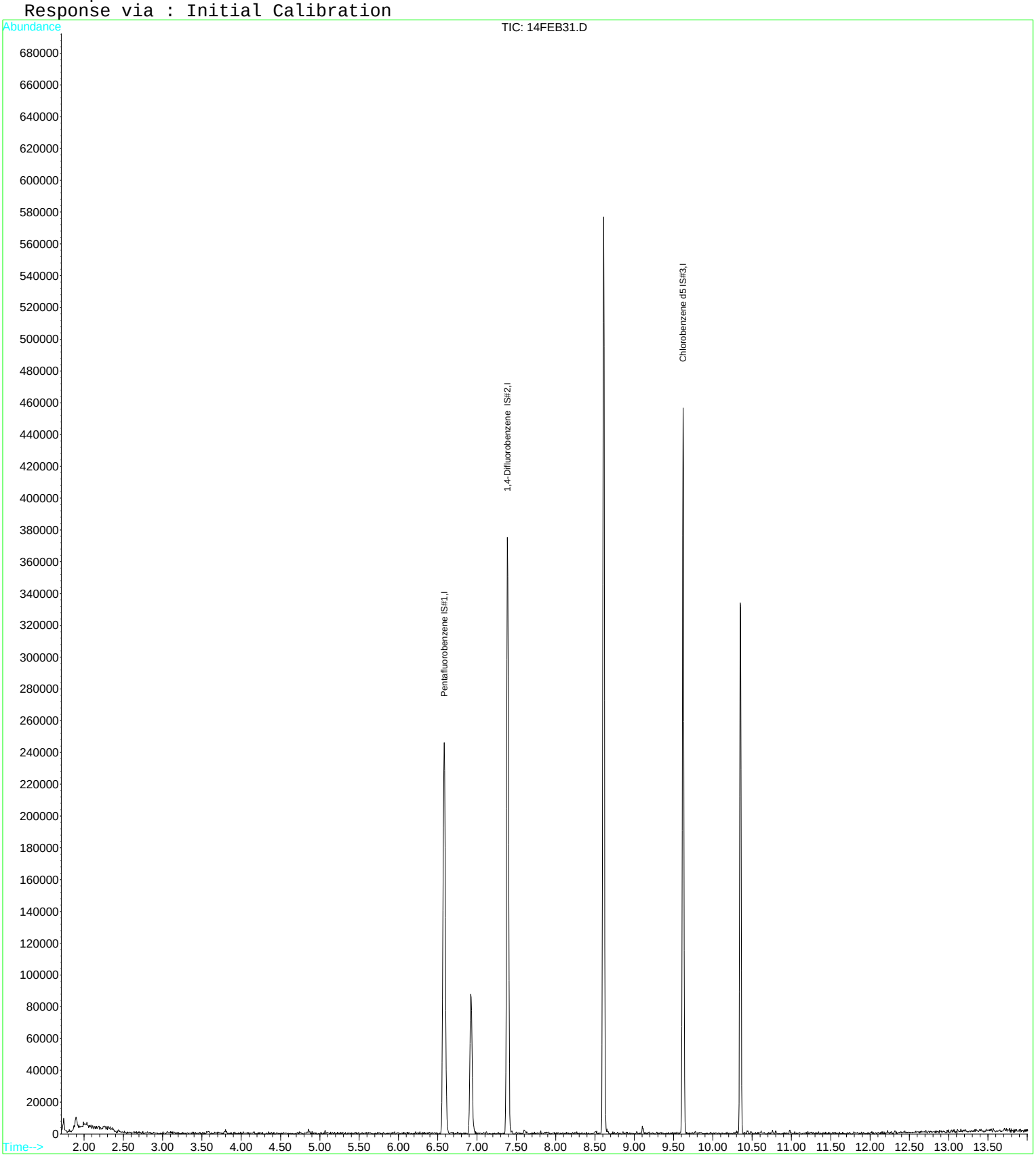
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB31.D Vial: 31
Acq On : 14 Feb 2017 5:43 pm Operator: MGC
Sample : 1702527-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:16 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB61.D Vial: 61
Acq On : 15 Feb 2017 5:12 am Operator: MGC
Sample : 1702527-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:47 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 192966 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 254986 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 57097 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 58585 | 10.26 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 102.60% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 265594 | 9.15 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 91.50% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 79572 | 10.11 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 101.10% | | | |

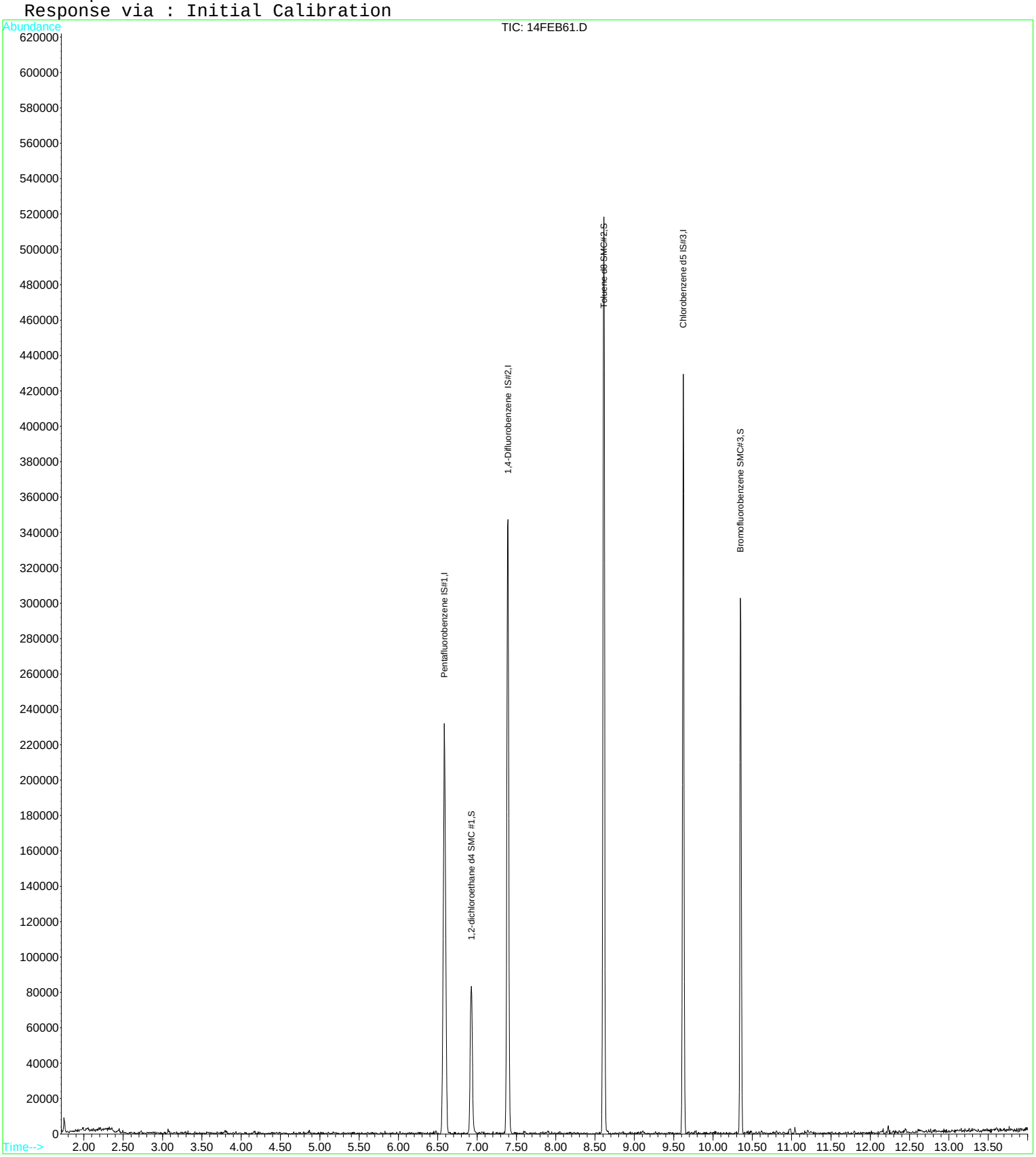
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB61.D Vial: 61
Acq On : 15 Feb 2017 5:12 am Operator: MGC
Sample : 1702527-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:47 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB61.D Vial: 61
Acq On : 15 Feb 2017 5:12 am Operator: MGC
Sample : 1702527-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:47 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 192966 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 254986 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 57097 | 10.00 | ug/L | 0.00 |

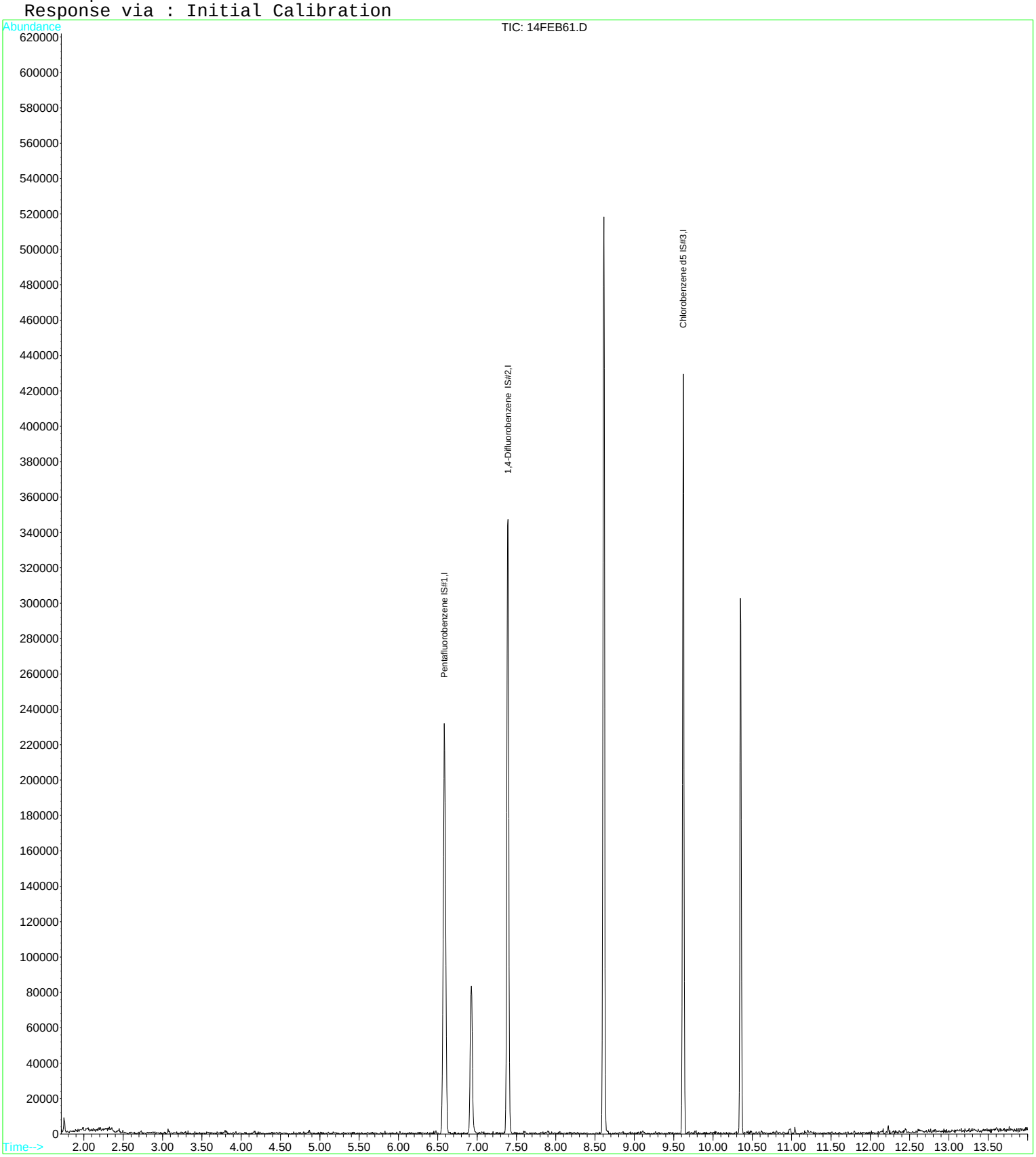
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB61.D Vial: 61
Acq On : 15 Feb 2017 5:12 am Operator: MGC
Sample : 1702527-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:47 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - Tune**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN03.D Vial: 3
Acq On : 26 Jan 2017 12:01 pm Operator: MGC
Sample : 1701474-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:36 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jan 19 13:50:45 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 34103 | 10.00 | ug/L | -0.12 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 56417 | 10.00 | ug/L | -0.10 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 13951 | 10.00 | ug/L | -0.09 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 11414 | 11.10 | ug/L | -0.11 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 111.00% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 61904 | 9.25 | ug/L | -0.09 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 92.50% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 16767 | 8.00 | ug/L | -0.09 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 80.00% | | | |

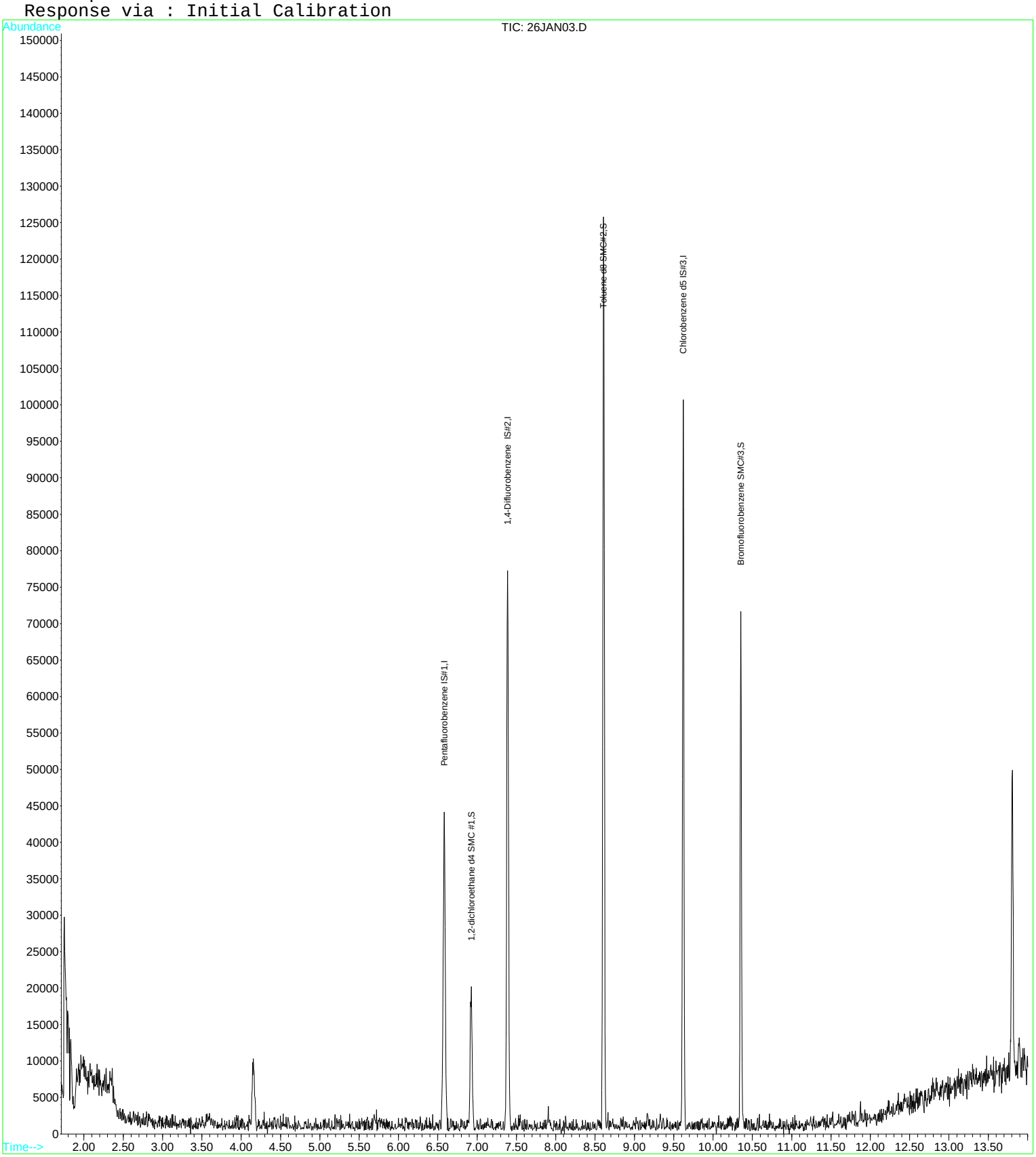
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\JAN2017\JAN26\26JAN03.D Vial: 3
Acq On : 26 Jan 2017 12:01 pm Operator: MGC
Sample : 1701474-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 27 5:36 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jan 26 12:47:18 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB05.D Vial: 5
Acq On : 7 Feb 2017 8:42 am Operator: MGC
Sample : 1702048-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:02 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 35384 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.40 | 114 | 47230 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 10882 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 9612 | 9.18 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 91.80% | | | |
| 31) Toluene d8 SMC#2 | 8.62 | 98 | 54952 | 10.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.36 | 95 | 15682 | 10.45 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 104.50% | | | |

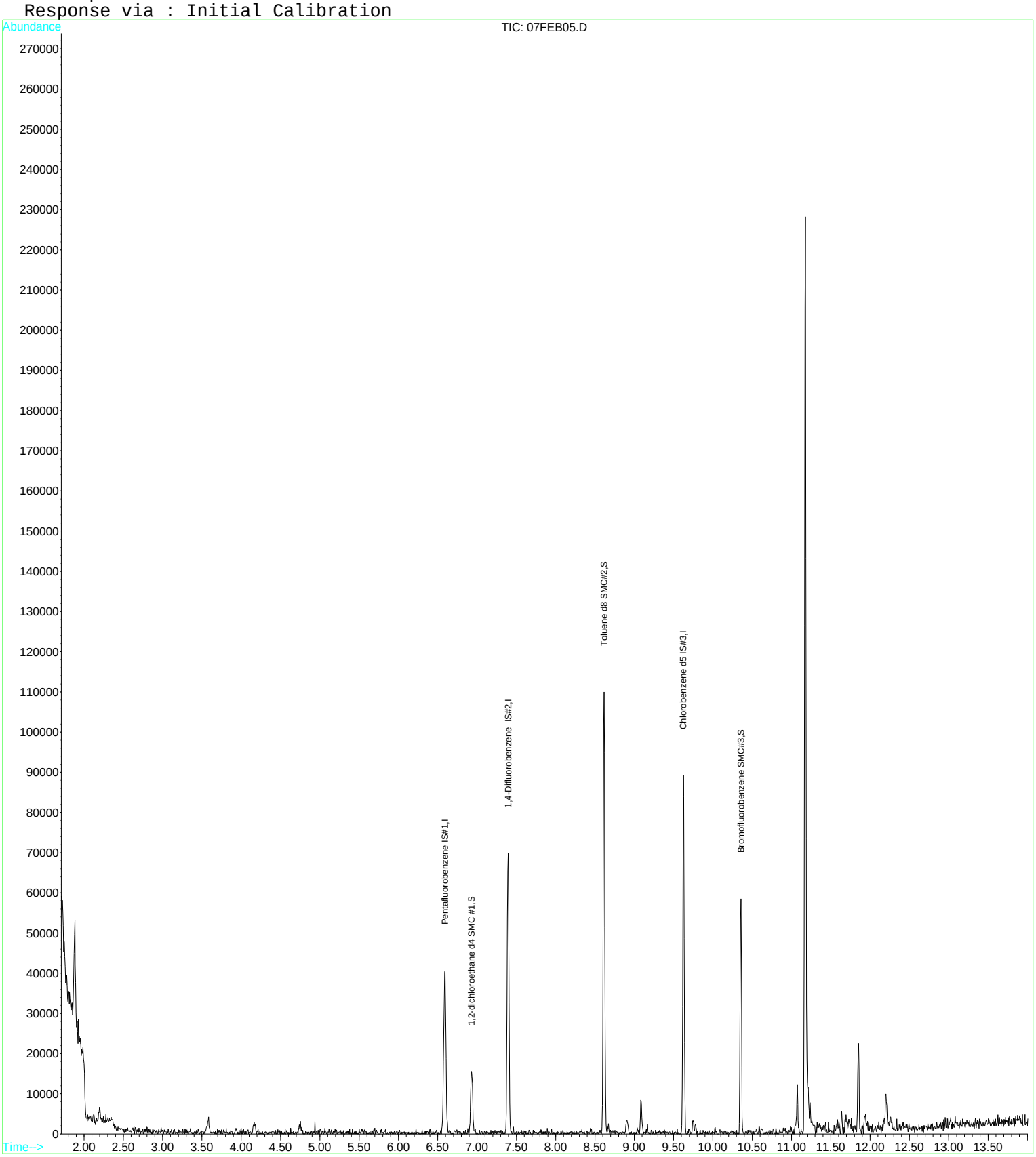
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB07\07FEB05.D Vial: 5
Acq On : 7 Feb 2017 8:42 am Operator: MGC
Sample : 1702048-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 7 12:02 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1607\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Fri Jan 27 06:00:52 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC05.D Vial: 5
Acq On : 13 Dec 2016 9:45 am Operator: MGC
Sample : 1621865-TUN2 Inst : MS-V5
Misc : 1 VO-106-68375;50NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:09 2016 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Mon Dec 12 12:50:39 2016
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.70 | 168 | 42630 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.50 | 114 | 65290 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.71 | 119 | 18149 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 7.04 | 65 | 16060 | 12.90 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 129.00%# | | | |
| 31) Toluene d8 SMC#2 | 8.71 | 98 | 79768 | 10.22 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.44 | 95 | 25179 | 9.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 91.70% | | | |

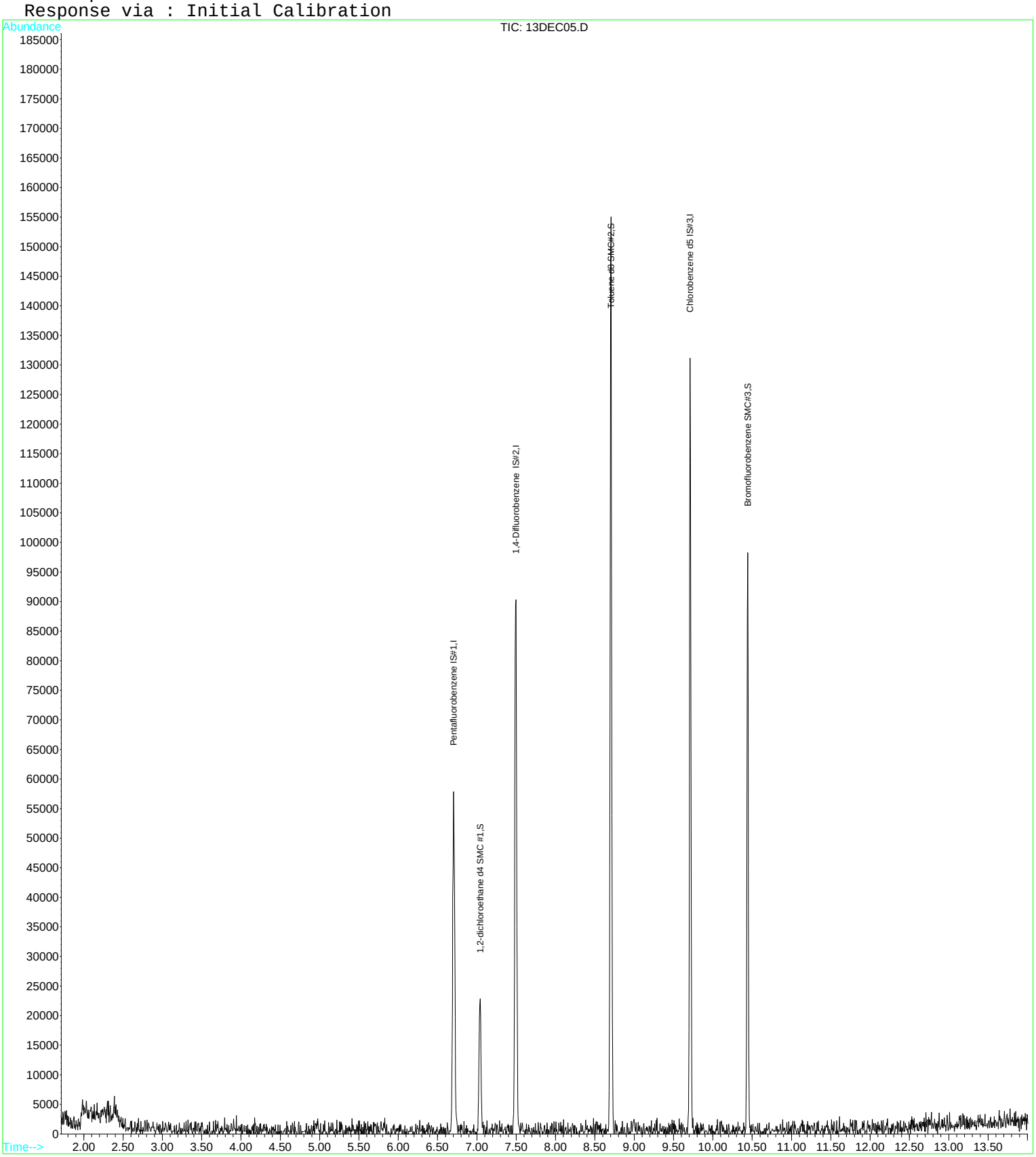
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\DEC2016\DEC13\13DEC05.D Vial: 5
Acq On : 13 Dec 2016 9:45 am Operator: MGC
Sample : 1621865-TUN2 Inst : MS-V5
Misc : 1 VO-106-68375;50NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:09 2016 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201612\12-0930\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Mon Dec 12 12:50:39 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB01.D Vial: 1
Acq On : 12 Feb 2017 5:04 am Operator: MGC
Sample : 1702423-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 5:55 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 54344 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 80678 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.63 | 119 | 18795 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 17266 | 10.74 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 107.40% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 89994 | 9.80 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.00% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 23854 | 9.20 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 92.00% | | | |

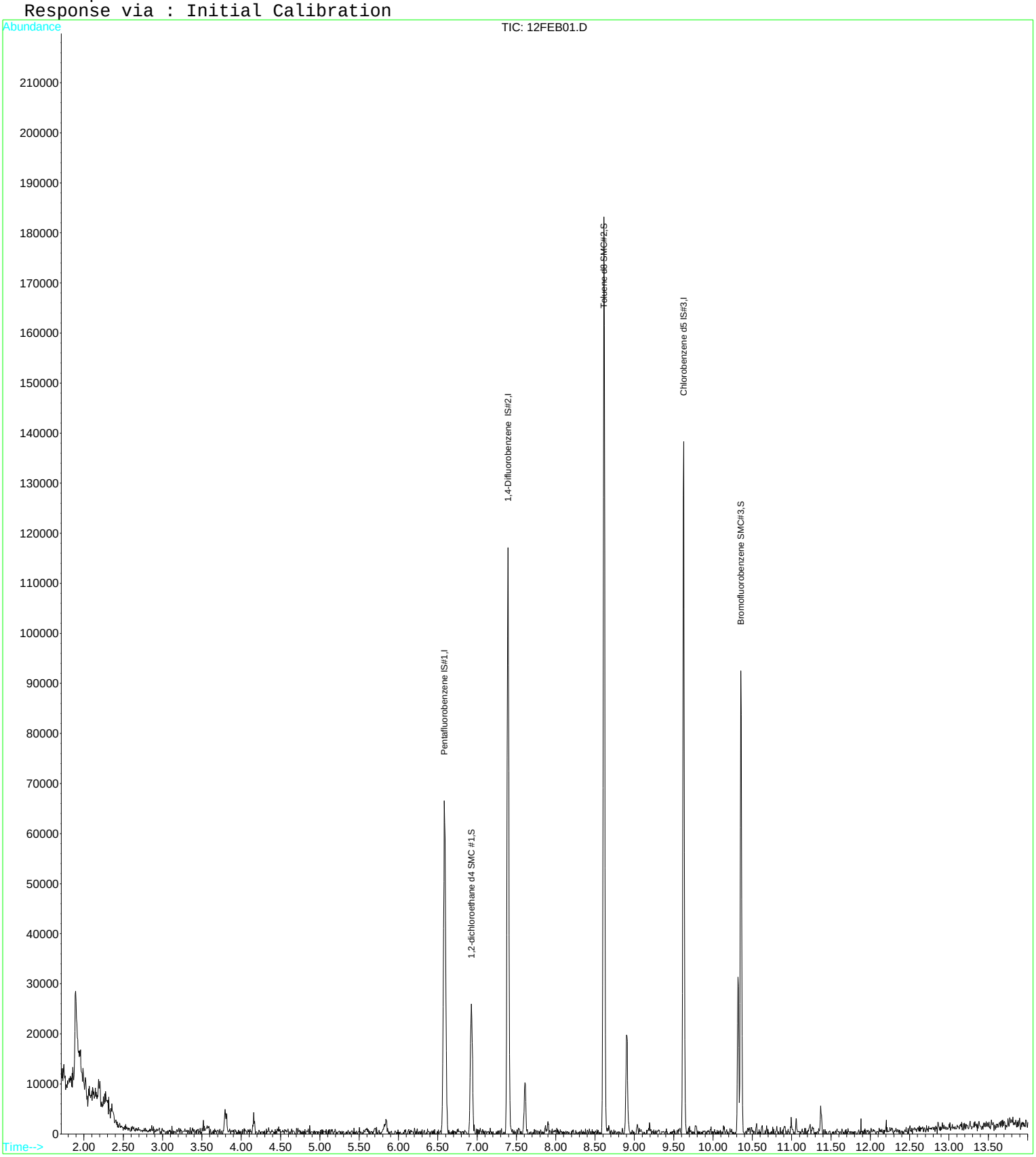
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB01.D Vial: 1
Acq On : 12 Feb 2017 5:04 am Operator: MGC
Sample : 1702423-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 5:55 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB32.D Vial: 32
Acq On : 12 Feb 2017 5:02 pm Operator: MGC
Sample : 1702423-TUN2 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:26 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 53262 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 88568 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 19664 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 20939 | 13.29 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 132.90%# | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 95973 | 9.52 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.20% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 25193 | 9.29 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 92.90% | | | |

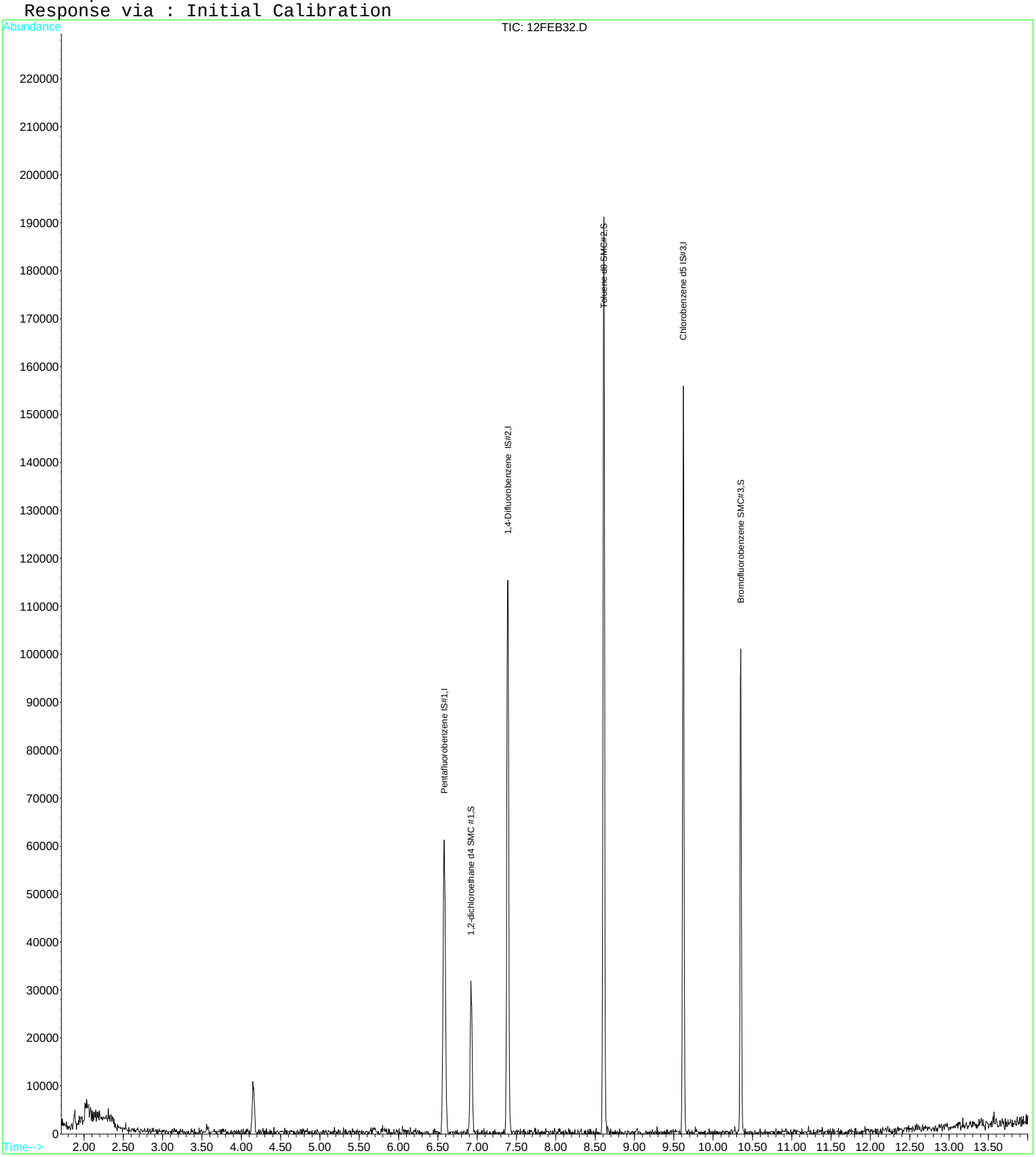
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB32.D Vial: 32
Acq On : 12 Feb 2017 5:02 pm Operator: MGC
Sample : 1702423-TUN2 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:26 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB63.D Vial: 63
Acq On : 13 Feb 2017 5:00 am Operator: MGC
Sample : 1702423-TUN3 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:34 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 51623 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 81915 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 20315 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 19365 | 12.68 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 126.80%# | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 94978 | 10.19 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 101.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 25700 | 9.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 91.70% | | | |

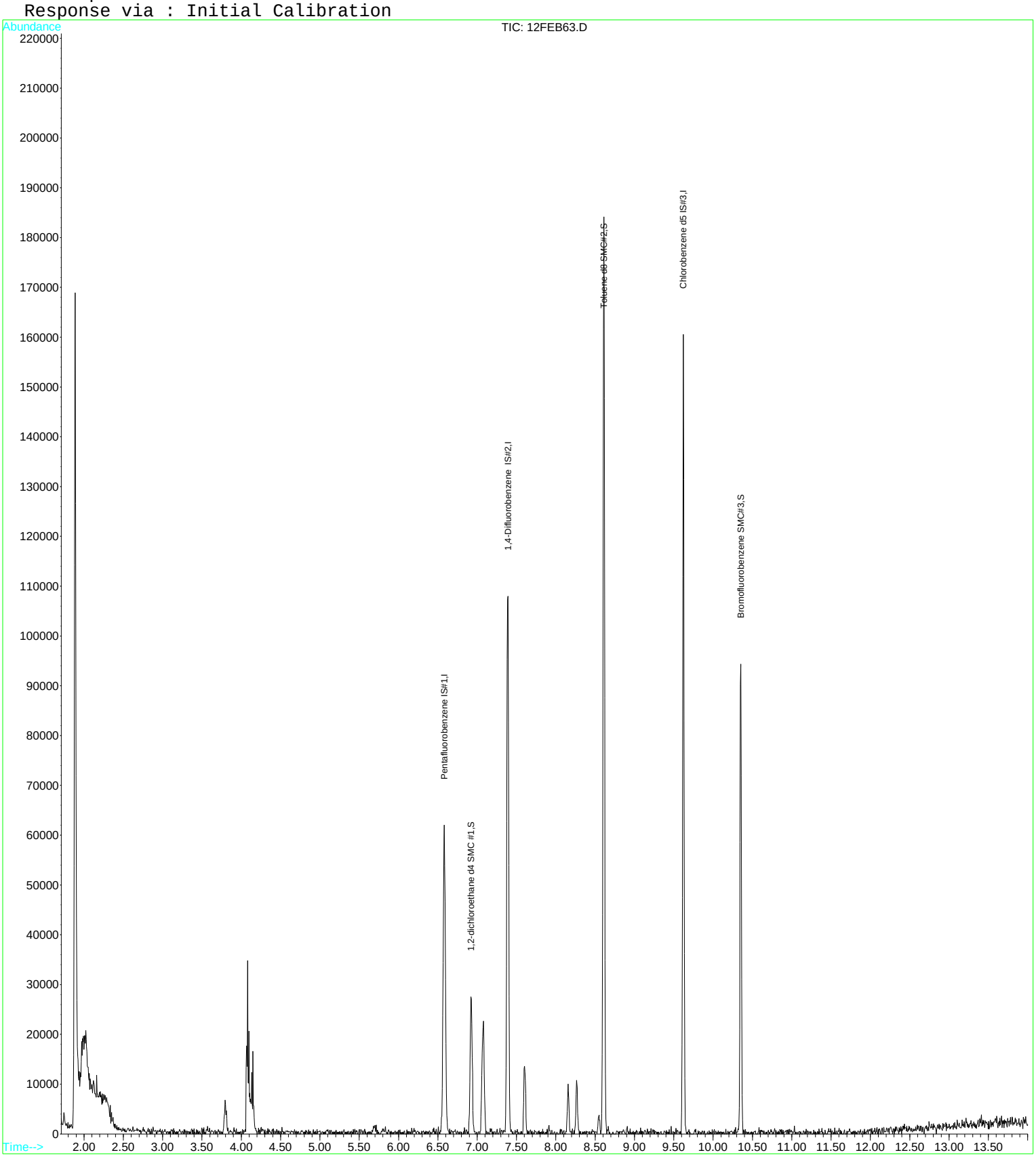
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB63.D Vial: 63
Acq On : 13 Feb 2017 5:00 am Operator: MGC
Sample : 1702423-TUN3 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 5:34 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB01.D Vial: 1
Acq On : 13 Feb 2017 6:34 am Operator: MGC
Sample : 1702431-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 7:28 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 55219 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 81892 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 20178 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 18408 | 11.27 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 112.70% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 94775 | 10.17 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 101.70% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 25637 | 9.21 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 92.10% | | | |

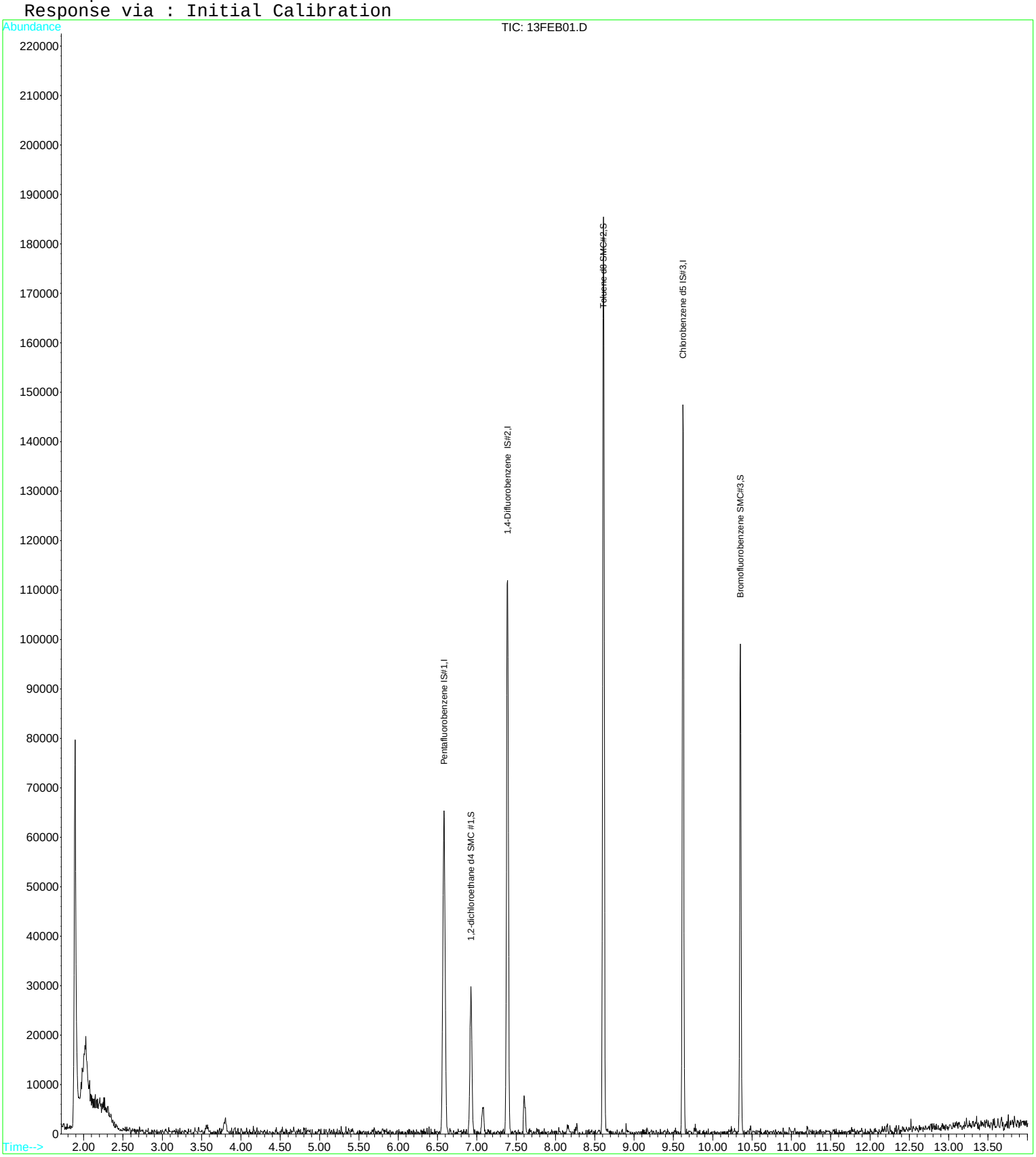
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB01.D Vial: 1
Acq On : 13 Feb 2017 6:34 am Operator: MGC
Sample : 1702431-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 7:28 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB32.D Vial: 32
Acq On : 13 Feb 2017 6:32 pm Operator: MGC
Sample : 1702431-TUN2 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:00 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 51329 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 82879 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.63 | 119 | 18130 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 18259 | 12.02 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 120.20% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 90316 | 9.57 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 95.70% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 25595 | 10.24 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.40% | | | |

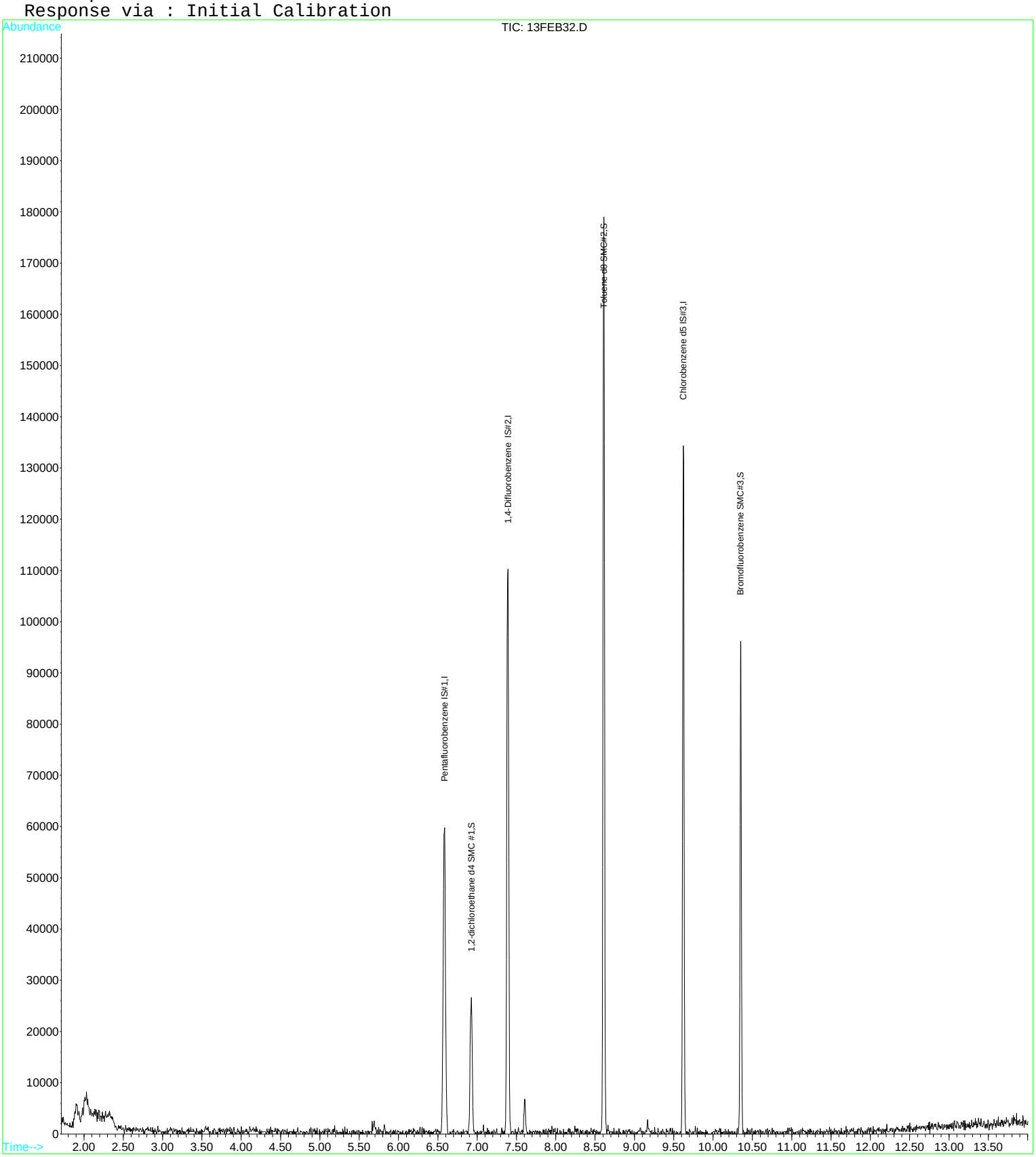
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB32.D Vial: 32
Acq On : 13 Feb 2017 6:32 pm Operator: MGC
Sample : 1702431-TUN2 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:00 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB01.D Vial: 1
Acq On : 14 Feb 2017 6:06 am Operator: MGC
Sample : 1702527-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:21 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 46278 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 73305 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 18461 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 17306 | 12.64 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 126.40%# | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 84174 | 10.09 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 100.90% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 24000 | 9.43 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.30% | | | |

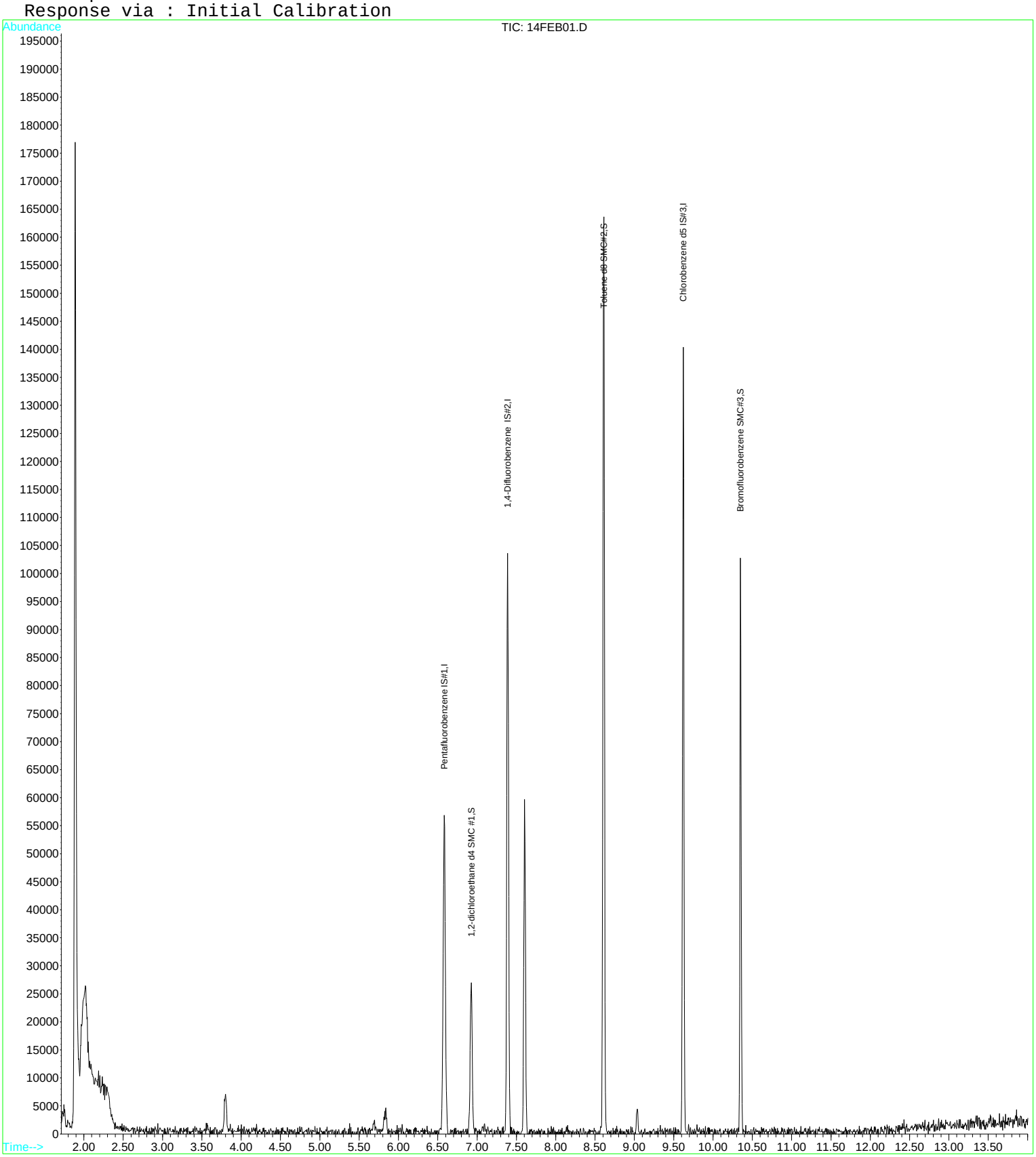
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB01.D Vial: 1
Acq On : 14 Feb 2017 6:06 am Operator: MGC
Sample : 1702527-TUN1 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 14 6:21 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB28.D Vial: 28
Acq On : 14 Feb 2017 4:33 pm Operator: MGC
Sample : 1702527-TUN2 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:12 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 50425 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 77865 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 18998 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 19872 | 13.32 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 133.20%# | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 90381 | 10.20 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 102.00% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 24469 | 9.34 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 93.40% | | | | | | |

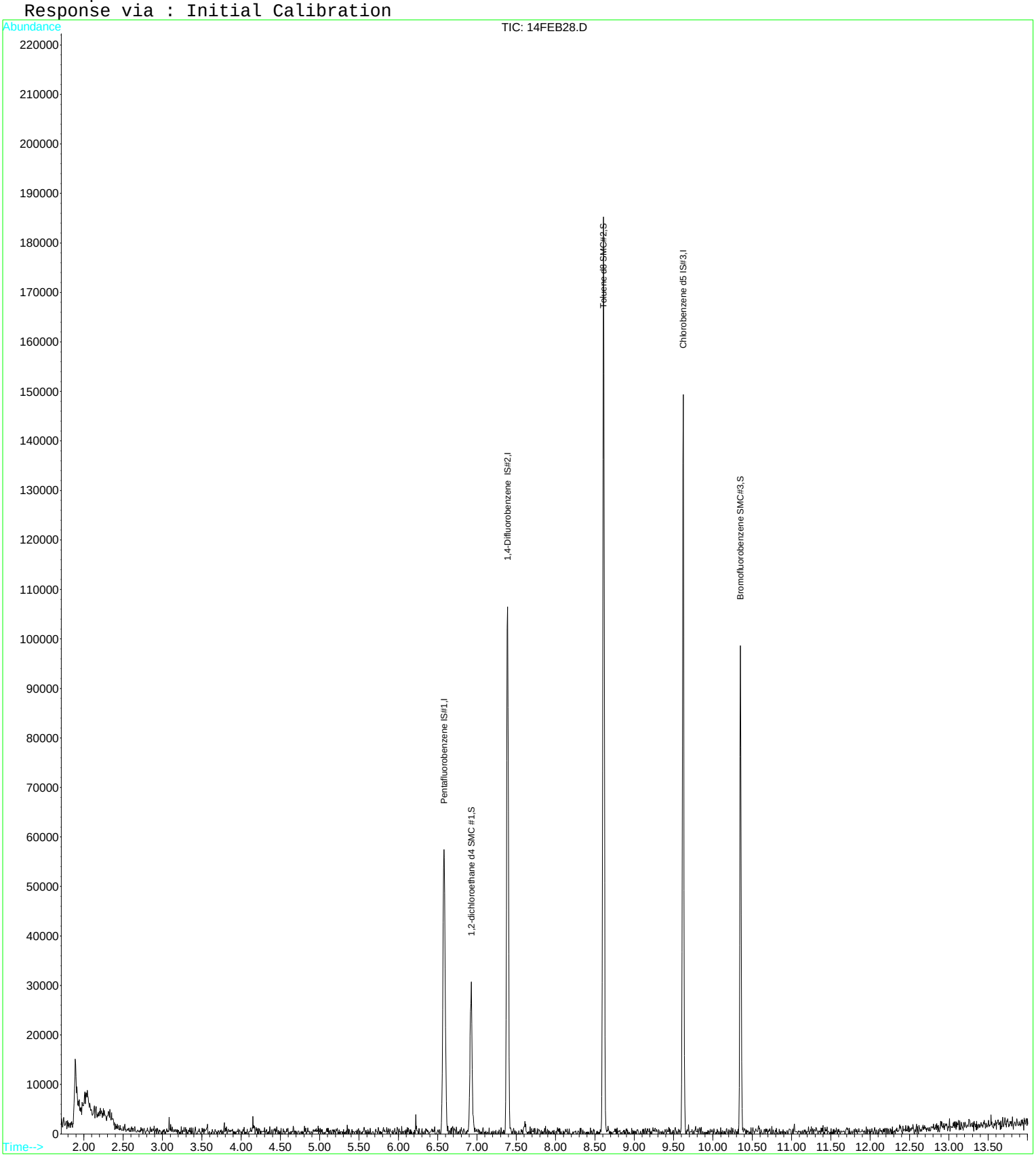
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB28.D Vial: 28
Acq On : 14 Feb 2017 4:33 pm Operator: MGC
Sample : 1702527-TUN2 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 9:12 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB58.D Vial: 58
Acq On : 15 Feb 2017 4:04 am Operator: MGC
Sample : 1702527-TUN3 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 5:50 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 49644 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 80011 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 17691 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.93 | 65 | 18915 | 12.88 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 128.80%# | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 81993 | 9.00 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 90.00% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 22967 | 9.41 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.10% | | | |

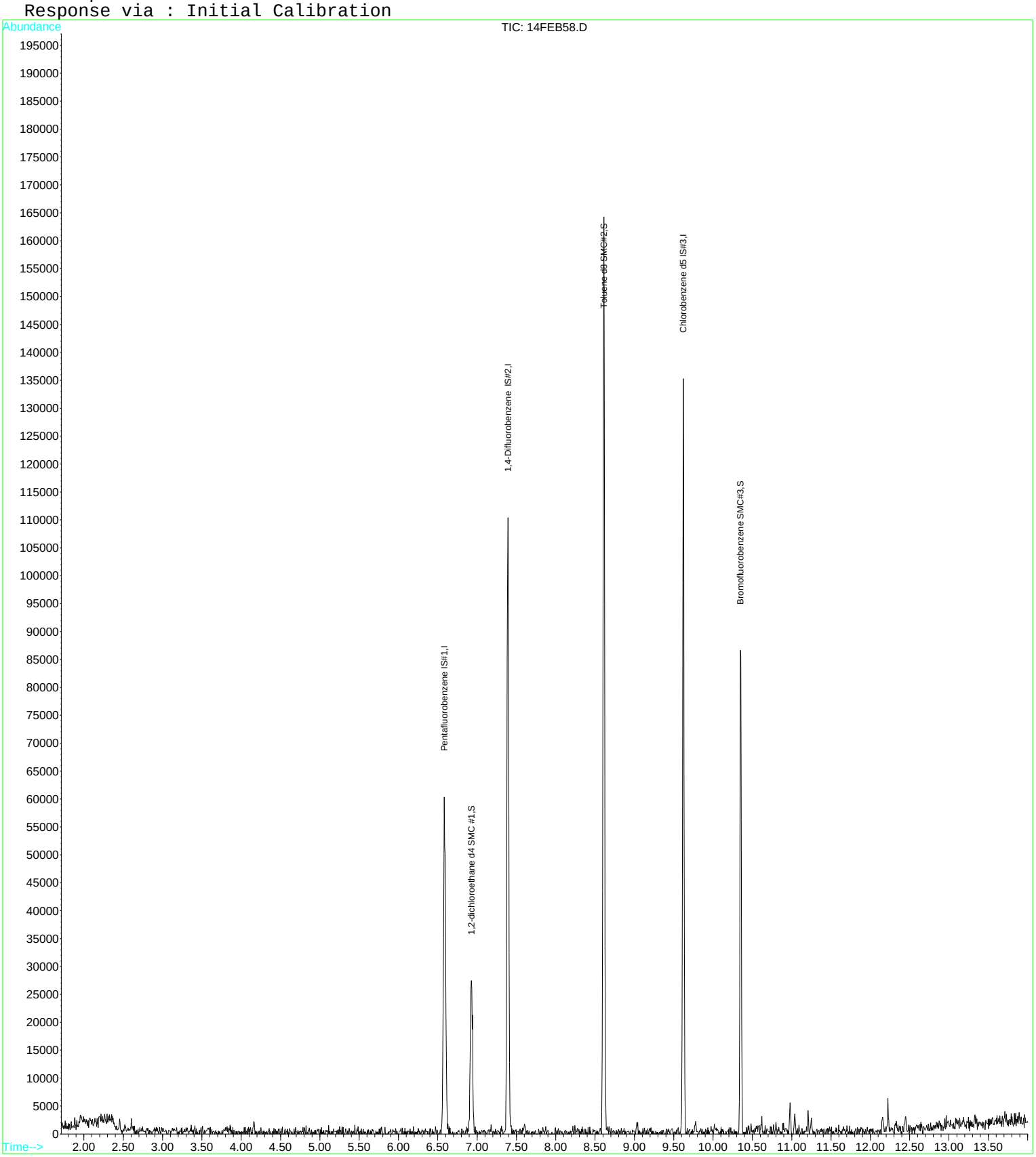
| Target Compounds | | | | | Qvalue |
|---|---|---|---|---|---|
| 3) Chloromethane | 1.95 | 50 | 1019 | Below Cal | # 41 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB14\14FEB58.D Vial: 58
Acq On : 15 Feb 2017 4:04 am Operator: MGC
Sample : 1702527-TUN3 Inst : MS-V5
Misc : 1 VO-107-69044;25NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 15 5:50 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



**Raw Data - Method Blank**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB22.D Vial: 22
Acq On : 12 Feb 2017 1:11 pm Operator: MGC
Sample : B[B1006-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5640;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:22 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 210084 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279302 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62590 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61875 | 9.95 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 99.50% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 313038 | 9.85 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 98.50% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88466 | 10.25 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 102.50% | | | |

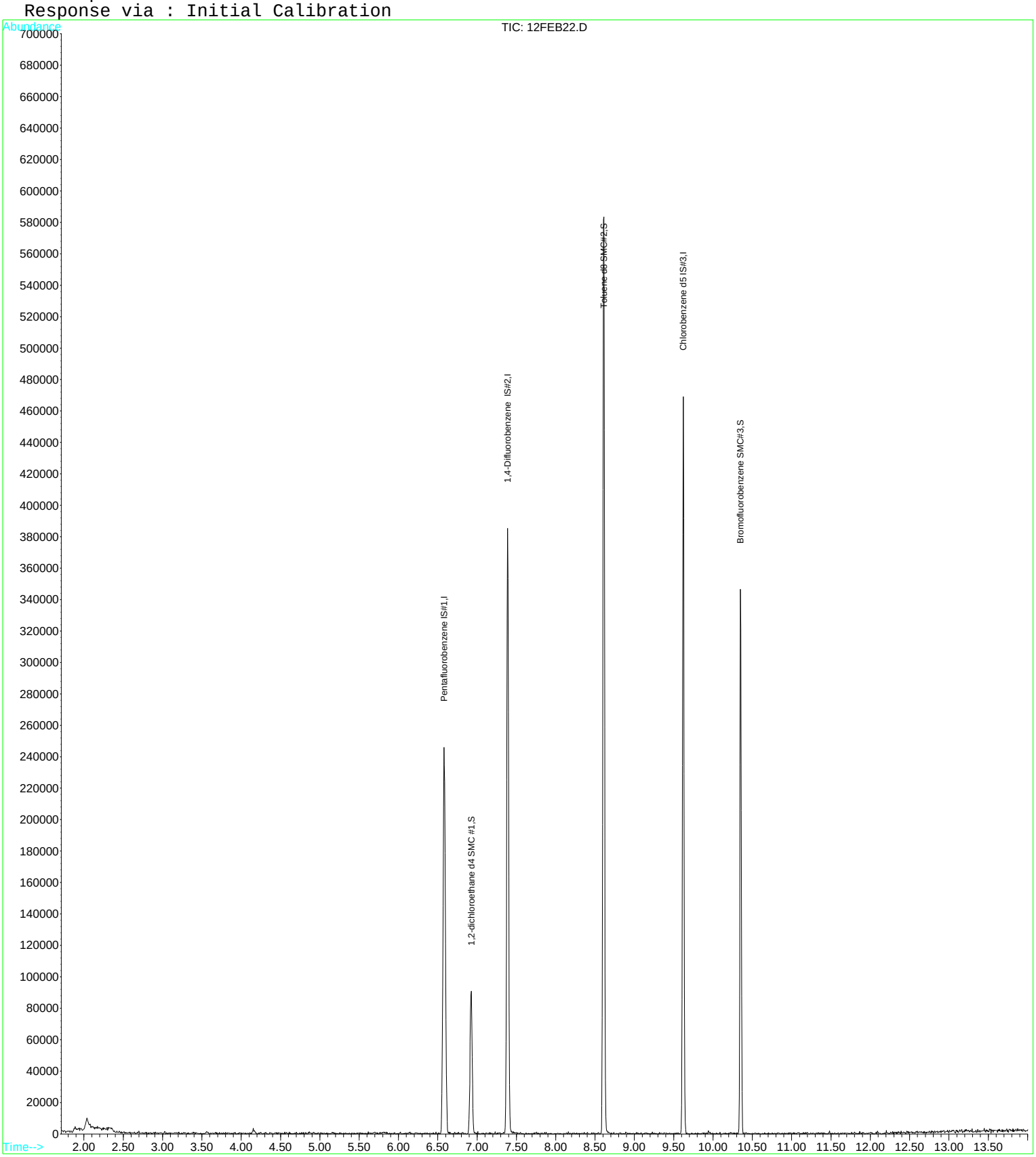
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB22.D Vial: 22
Acq On : 12 Feb 2017 1:11 pm Operator: MGC
Sample : B[B1006-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5640;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:22 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB22.D Vial: 22
Acq On : 12 Feb 2017 1:11 pm Operator: MGC
Sample : B[B1006-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5640;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:22 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 210084 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279302 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 62590 | 10.00 | ug/L | 0.00 |

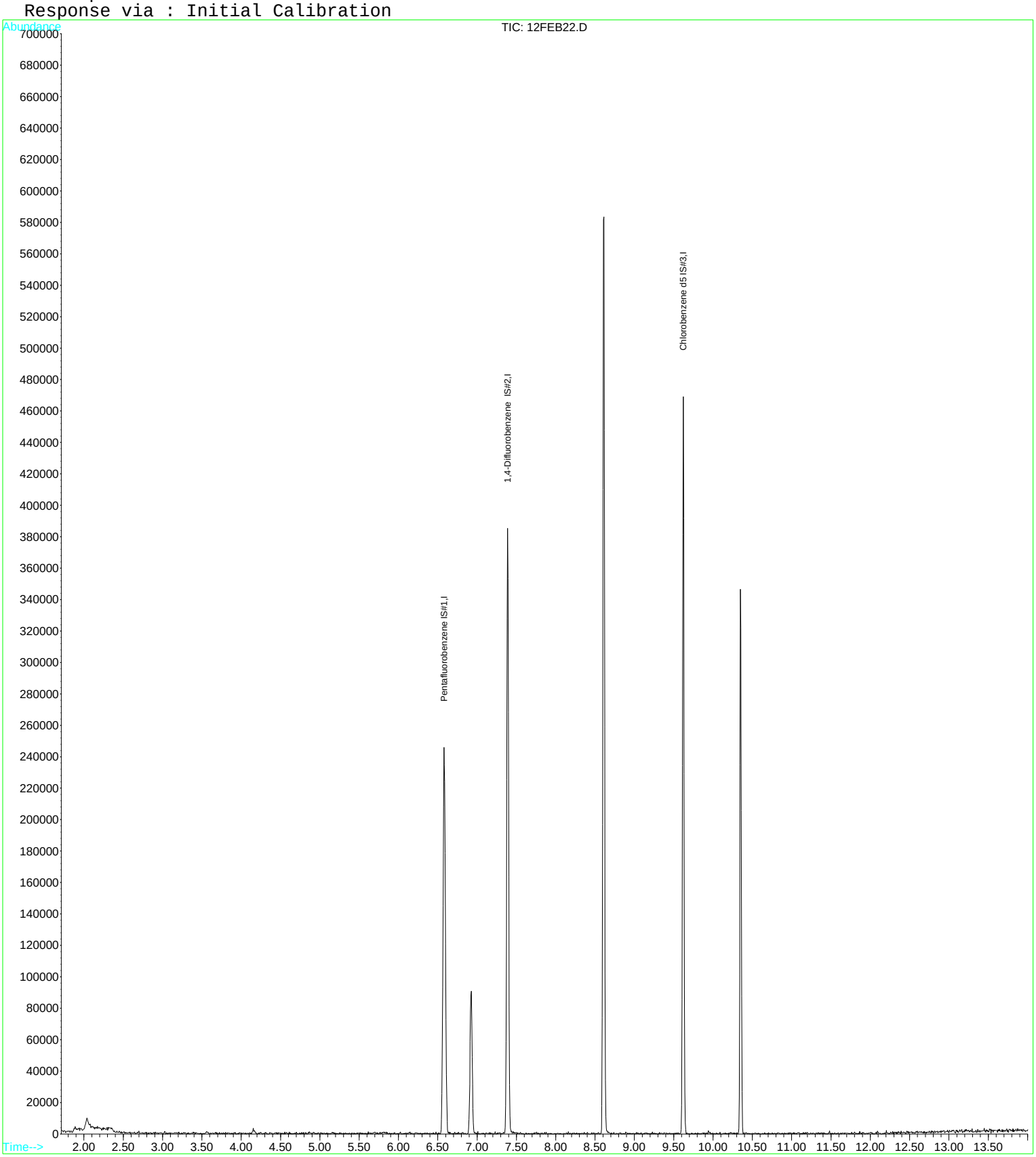
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB22.D Vial: 22
Acq On : 12 Feb 2017 1:11 pm Operator: MGC
Sample : B[B1006-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5640;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:22 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB05.D Vial: 5
Acq On : 13 Feb 2017 8:06 am Operator: MGC
Sample : B[B1007-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5643;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:56 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 207874 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 293378 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69153 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 64713 | 10.52 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 75 - 125 | | Recovery = 105.20% | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 315290 | 9.44 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.40% | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 89792 | 9.42 | ug/L | 0.00 |
| Spiked Amount 10.000 | Range 80 - 120 | | Recovery = 94.20% | | | |

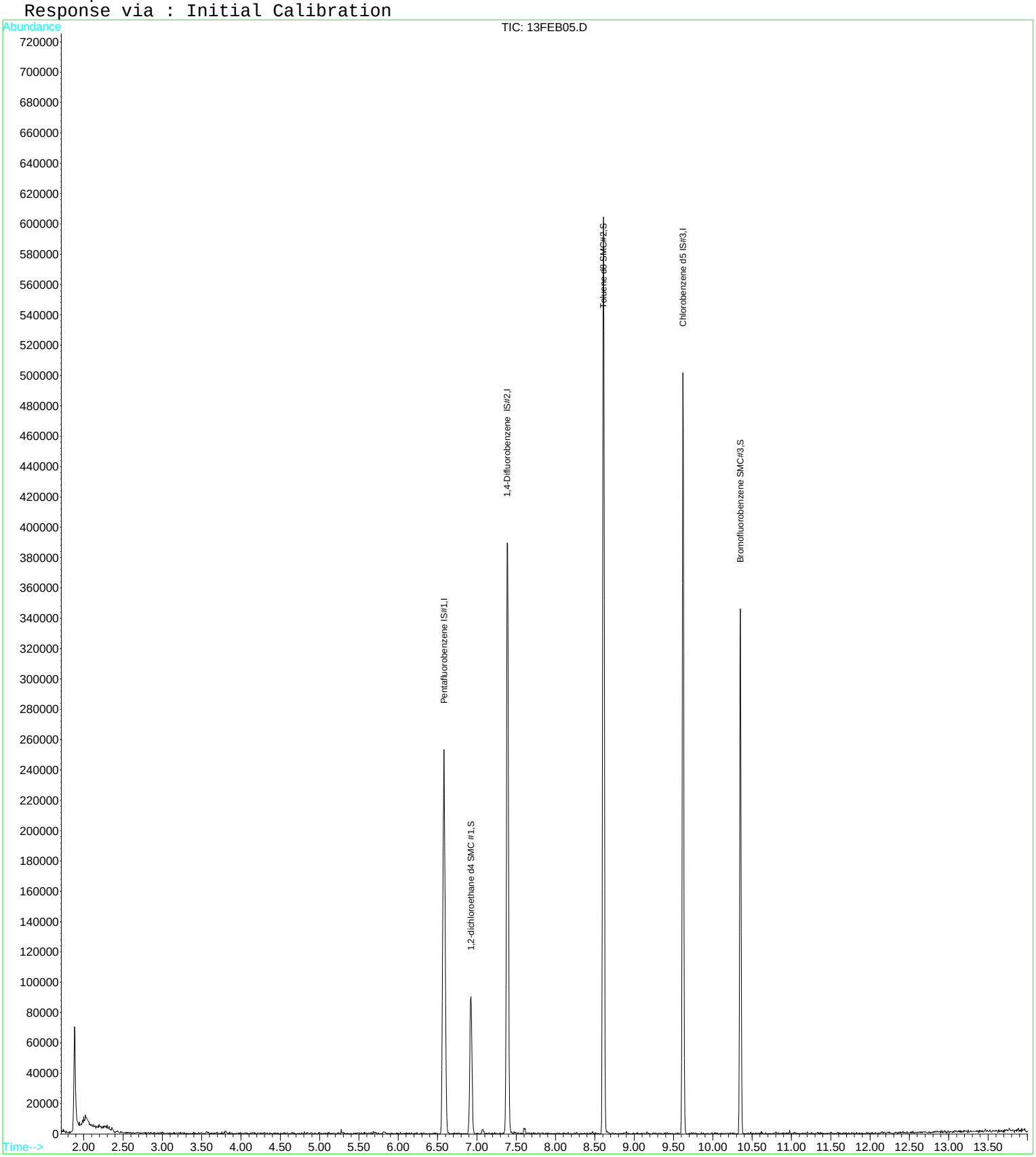
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB05.D Vial: 5
Acq On : 13 Feb 2017 8:06 am Operator: MGC
Sample : B[B1007-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5643;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:56 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB05.D Vial: 5
Acq On : 13 Feb 2017 8:06 am Operator: MGC
Sample : B[B1007-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5643;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:55 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.59 | 168 | 207874 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 293378 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69153 | 10.00 | ug/L | 0.00 |

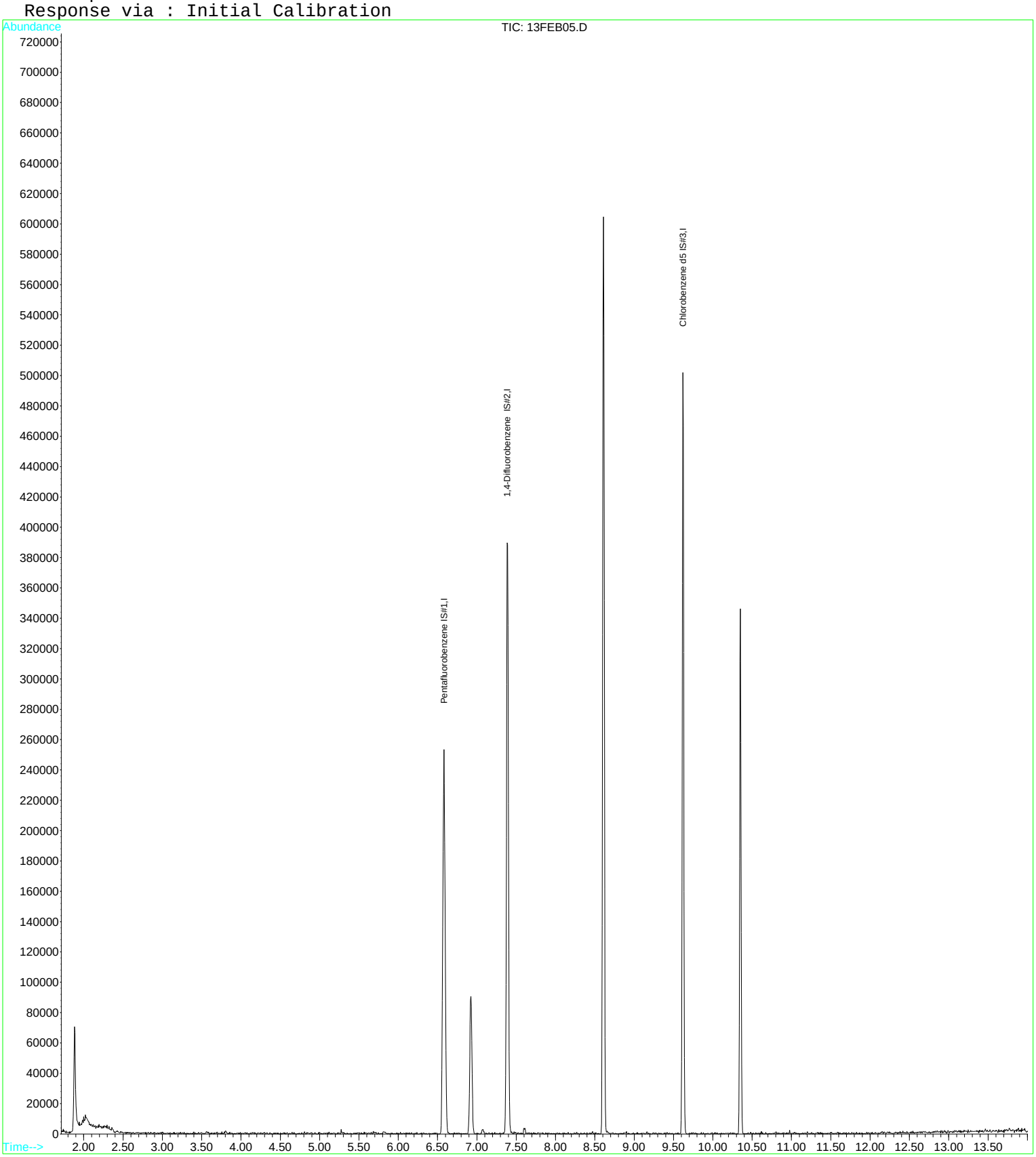
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB05.D Vial: 5
Acq On : 13 Feb 2017 8:06 am Operator: MGC
Sample : B[B1007-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5643;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:55 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - Matrix Spike**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB25.D Vial: 25
Acq On : 12 Feb 2017 2:20 pm Operator: MGC
Sample : B[B1006-MS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:34 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 178456 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 252231 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 61494 | 10.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 51014 | 9.66 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 96.60% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 274926 | 9.58 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.80% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 81876 | 9.65 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 96.50% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.75 | 85 | 255675 | 30.06 | ug/L | 98 |
| 3) Chloromethane | 1.94 | 50 | 308777 | 27.45 | ug/L | 99 |
| 4) Vinyl chloride | 2.07 | 62 | 346261 | 32.56 | ug/L | 92 |
| 5) Bromomethane | 2.44 | 94 | 133084 | 23.45 | ug/L | 95 |
| 6) Chloroethane | 2.56 | 64 | 185595 | 26.65 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 314773 | 30.06 | ug/L | 99 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 205299 | 27.50 | ug/L | 97 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 400695 | 28.91 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 180634 | 26.40 | ug/L | 97 |
| 11) MTBE | 4.49 | 73 | 291517 | 25.99 | ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 232100 | 28.88 | ug/L | 98 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 453278 | 24.64 | ug/L | 97 |
| 14) 2,2-Dichloropropane | 5.83 | 77 | 336822 | 29.21 | ug/L | 86 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 281996 | 33.86 | ug/L | 99 |
| 16) Bromochloromethane | 6.18 | 128 | 73947 | 26.78 | ug/L | 95 |
| 17) Chloroform | 6.33 | 83 | 361102 | 26.81 | ug/L | 96 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 315579 | 27.64 | ug/L | 95 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 318120 | 29.07 | ug/L | 98 |
| 20) Carbon tetrachloride | 6.71 | 119 | 253943 | 30.35 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 206320 | 26.38 | ug/L | 95 |
| 23) Benzene | 6.94 | 78 | 868417 | 25.75 | ug/L | 97 |
| 25) Trichloroethene | 7.61 | 130 | 230634 | 28.09 | ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 230045 | 24.50 | ug/L | 96 |
| 27) Dibromomethane | 7.91 | 93 | 68335 | 23.92 | ug/L | 95 |
| 28) Bromodichloromethane | 8.06 | 83 | 220094 | 26.51 | ug/L | 99 |
| 30) Cis-1,3-dichloropropene | 8.40 | 75 | 290198 | 26.37 | ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 521534 | 26.52 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 196207 | 25.91 | ug/L | 98 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 99083 | 25.62 | ug/L | 100 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 251065 | 29.17 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 174165 | 25.89 | ug/L | 98 |
| 37) Dibromochloromethane | 9.24 | 129 | 112455 | 26.10 | ug/L | 97 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 89104 | 25.41 | ug/L | 97 |
| 40) Chlorobenzene | 9.64 | 112 | 514433 | 28.09 | ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 148389 | 26.05 | ug/L | 97 |
| 42) Ethylbenzene | 9.70 | 106 | 284863 | 27.26 | ug/L | 86 |
| 43) P+m-Xylene | 9.78 | 106 | 675729 | 54.62 | ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 321657 | 26.95 | ug/L | 87 |
| 45) Styrene | 10.03 | 104 | 489074 | 27.42 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 53801 | 24.95 | ug/L | 97 |
| 47) Isopropylbenzene | 10.23 | 105 | 789189 | 24.73 | ug/L | 93 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 85445 | 24.99 | ug/L | 97 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 18292 | 27.27 | ug/L | 95 |
| 51) n-propylbenzene | 10.48 | 91 | 946020 | 25.81 | ug/L | 94 |
| 52) bromobenzene | 10.44 | 156 | 187939 | 25.91 | ug/L | 96 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB25.D Vial: 25
Acq On : 12 Feb 2017 2:20 pm Operator: MGC
Sample : B[B1006-MS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:34 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

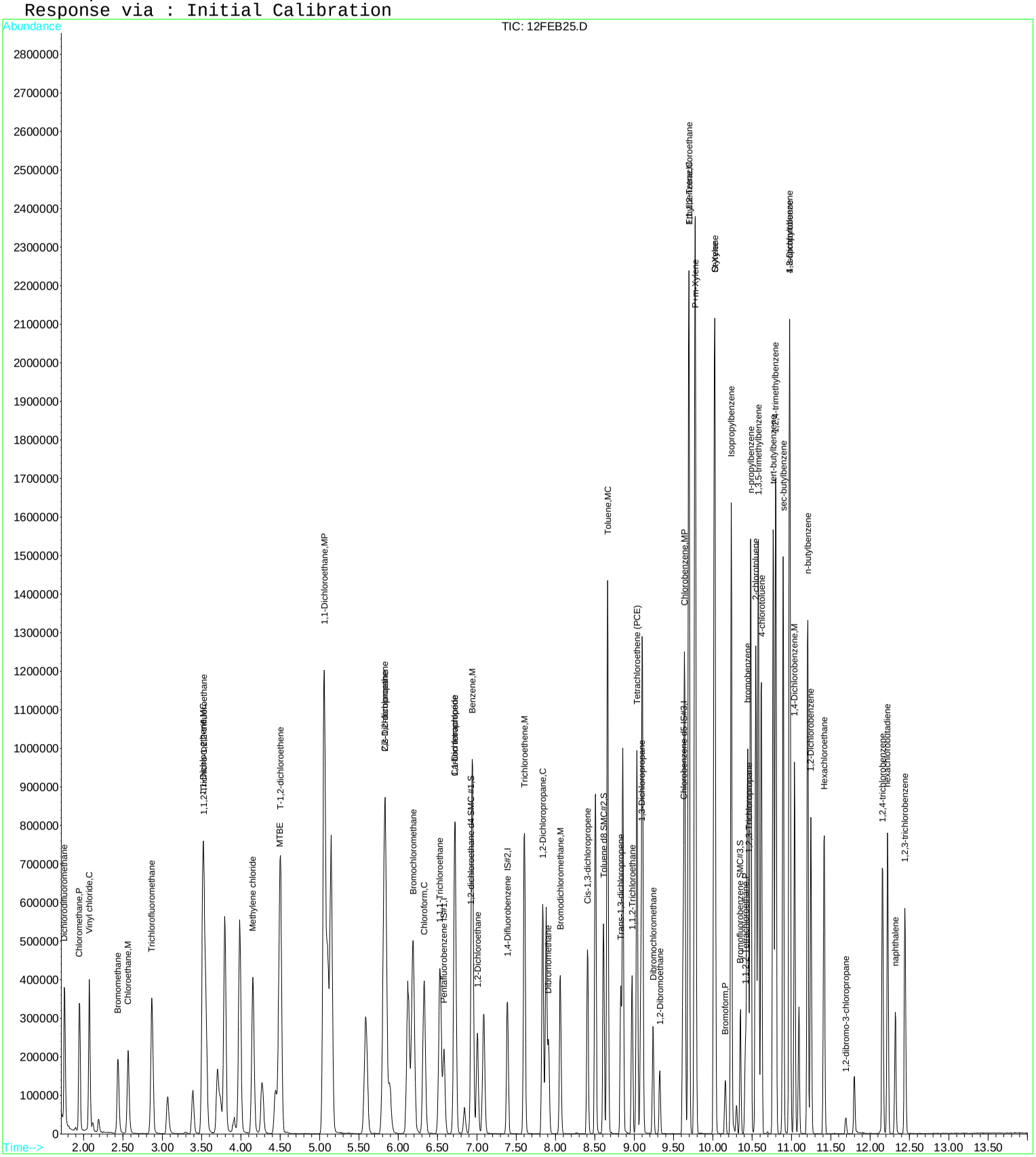
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 628710 | 25.75 | ug/L | 92 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 610736 | 27.09 | ug/L | 97 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 536274 | 26.54 | ug/L | 96 |
| 56) | tert-butylbenzene | 10.77 | 119 | 602252 | 25.42 | ug/L | 100 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 574697 | 25.98 | ug/L | 93 |
| 58) | sec-butylbenzene | 10.89 | 105 | 806173 | 24.37 | ug/L | 95 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 641208 | 25.65 | ug/L | 97 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 315285 | 24.79 | ug/L | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 308408 | 26.17 | ug/L | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 577863 | 26.90 | ug/L | 95 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 275829 | 26.49 | ug/L | 97 |
| 64) | Hexachloroethane | 11.41 | 117 | 105075 | 24.27 | ug/L | 94 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10835 | 23.34 | ug/L | 96 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 195927 | 26.67 | ug/L | 98 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 144000 | 29.22 | ug/L | 100 |
| 68) | naphthalene | 12.32 | 128 | 196599 | 27.50 | ug/L | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 168426 | 26.71 | ug/L | 83 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB25.D Vial: 25
Acq On : 12 Feb 2017 2:20 pm Operator: MGC
Sample : B[B1006-MS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:34 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB25.D Vial: 25
Acq On : 12 Feb 2017 2:20 pm Operator: MGC
Sample : B[B1006-MS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:26 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 178456 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 252231 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 61494 | 10.00 | ug/L | | 0.00 |

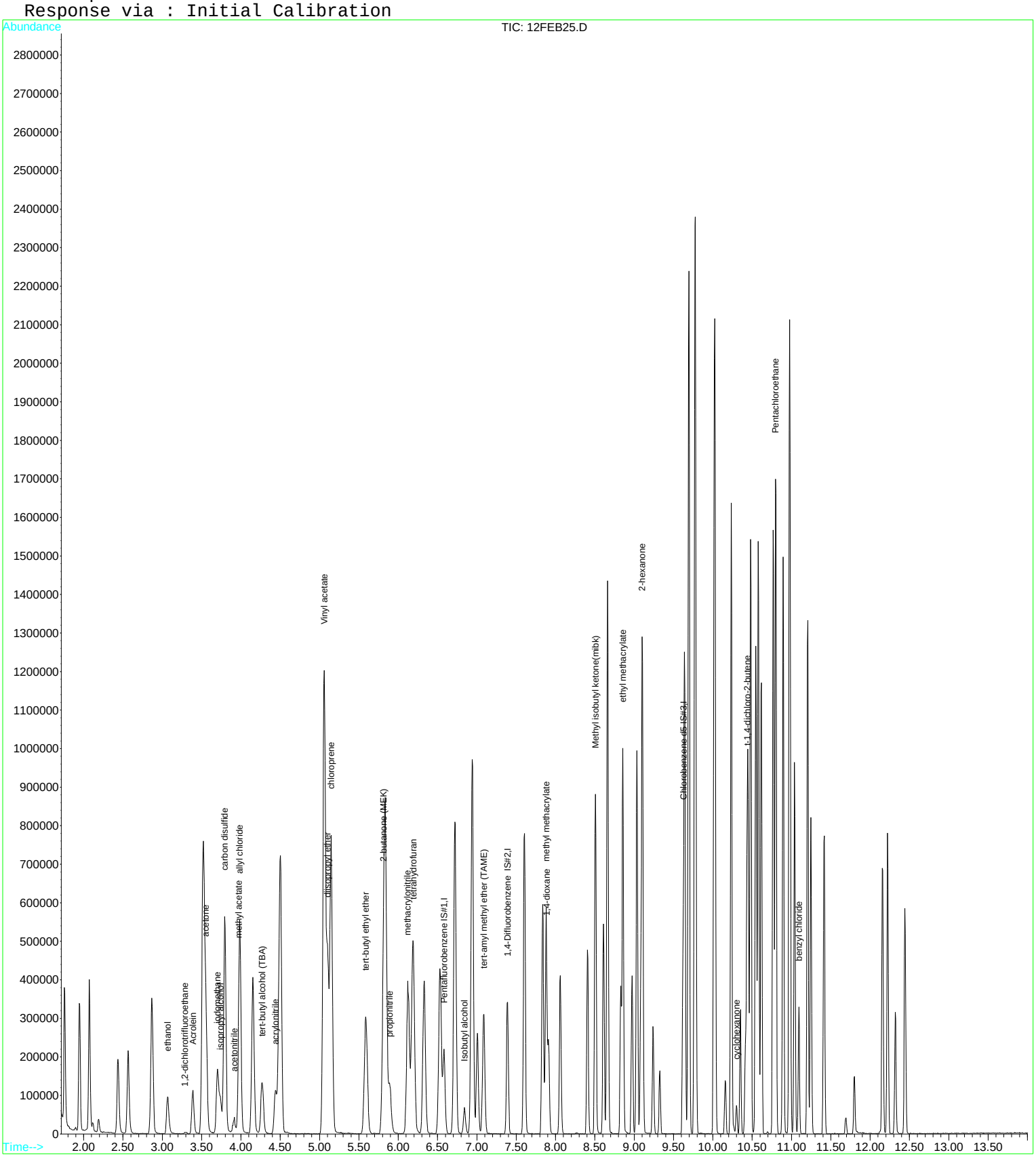
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.07 | 45 | 122200 | 4436.47 | ug/L | | 92 |
| 4) 1,2-dichlorotrifluoroethan | 3.29 | 67 | 3440 | 0.34 | ug/L | # | 54 |
| 6) isopropyl alcohol | 3.74 | 45 | 133369 | 1034.49 | ug/L | # | 1 |
| 7) Acrolein | 3.39 | 56 | 119620 | 336.39 | ug/L | | 95 |
| 8) acetone | 3.56 | 43 | 281396 | 351.65 | ug/L | | 99 |
| 9) tert-butyl alcohol (TBA) | 4.26 | 59 | 190515 | 833.73 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 66289 | 228.35 | ug/L | # | 77 |
| 11) methyl acetate | 3.97 | 43 | 70205 | 27.05 | ug/L | | 100 |
| 12) allyl chloride | 3.98 | 41 | 703822 | 35.39 | ug/L | | 98 |
| 13) iodomethane | 3.70 | 142 | 236580 | 22.67 | ug/L | | 98 |
| 14) acrylonitrile | 4.44 | 53 | 106583 | 93.73 | ug/L | | 97 |
| 15) carbon disulfide | 3.79 | 76 | 896550 | 37.36 | ug/L | | 100 |
| 17) diisopropyl ether | 5.11 | 87 | 109226 | 19.28 | ug/L | | 95 |
| 18) Vinyl acetate | 5.06 | 43 | 1748401 | 154.43 | ug/L | | 99 |
| 19) chloroprene | 5.15 | 53 | 638879 | 35.77 | ug/L | | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 386433 | 16.52 | ug/L | | 99 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 246186 | 156.81 | ug/L | | 97 |
| 22) propionitrile | 5.89 | 54 | 176705 | 430.34 | ug/L | | 99 |
| 23) Isobutyl alcohol | 6.84 | 43 | 48655 | 417.66 | ug/L | | 95 |
| 24) methacrylonitrile | 6.12 | 67 | 197932 | 179.67 | ug/L | | 99 |
| 26) tetrahydrofuran | 6.20 | 42 | 300522 | 327.68 | ug/L | | 98 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 223329 | 17.19 | ug/L | | 96 |
| 30) methyl methacrylate | 7.88 | 69 | 178217 | 84.72 | ug/L | | 98 |
| 32) 1,4-dioxane | 7.89 | 88 | 34863 | 2214.34 | ug/L | | 97 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 553069 | 157.83 | ug/L | | 100 |
| 34) ethyl methacrylate | 8.86 | 69 | 372082 | 83.06 | ug/L | | 99 |
| 35) 2-hexanone | 9.10 | 43 | 718126 | 325.17 | ug/L | | 99 |
| 38) cyclohexanone | 10.30 | 55 | 26189 | 95.53 | ug/L | | 97 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 160950 | 168.69 | ug/L | # | 52 |
| 41) Pentachloroethane | 10.80 | 167 | 62811 | 19.03 | ug/L | | 89 |
| 42) benzyl chloride | 11.09 | 91 | 183682 | 34.50 | ug/L | | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB25.D Vial: 25
Acq On : 12 Feb 2017 2:20 pm Operator: MGC
Sample : B[B1006-MS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:26 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB08.D Vial: 8
Acq On : 13 Feb 2017 9:15 am Operator: MGC
Sample : B[B1007-MS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:30 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 199906 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270669 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63602 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 58806 | 9.94 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 99.40% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 295369 | 9.59 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 95.90% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88153 | 10.05 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 100.50% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 261061 | 27.40 | ug/L | 99 |
| 3) Chloromethane | 1.94 | 50 | 253800 | 19.94 | ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 295177 | 24.78 | ug/L | 93 |
| 5) Bromomethane | 2.43 | 94 | 103280 | 16.25 | ug/L | 97 |
| 6) Chloroethane | 2.56 | 64 | 193280 | 24.77 | ug/L | 98 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 315159 | 26.87 | ug/L | 97 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 215400 | 25.76 | ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 414189 | 26.68 | ug/L | 99 |
| 10) Methylene chloride | 4.16 | 84 | 180132 | 23.21 | ug/L | 95 |
| 11) MTBE | 4.49 | 73 | 291831 | 23.22 | ug/L | 100 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 226511 | 25.16 | ug/L | 98 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 447211 | 21.70 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 336252 | 26.03 | ug/L | 94 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 226478 | 24.28 | ug/L | 97 |
| 16) Bromochloromethane | 6.18 | 128 | 75903 | 24.54 | ug/L | 96 |
| 17) Chloroform | 6.33 | 83 | 361937 | 23.99 | ug/L | 97 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 323867 | 25.32 | ug/L | 93 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 314615 | 25.67 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 245266 | 26.17 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 203554 | 23.24 | ug/L | 97 |
| 23) Benzene | 6.94 | 78 | 898340 | 23.78 | ug/L | 97 |
| 25) Trichloroethene | 7.60 | 130 | 237434 | 26.94 | ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 236641 | 23.48 | ug/L # | 88 |
| 27) Dibromomethane | 7.91 | 93 | 69345 | 22.62 | ug/L | 99 |
| 28) Bromodichloromethane | 8.06 | 83 | 226514 | 25.42 | ug/L | 98 |
| 29) 2-ceve | 8.28 | 63 | 10159 | 3.60 | ug/L # | 1 |
| 30) Cis-1,3-dichloropropene | 8.40 | 75 | 285180 | 24.15 | ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 526729 | 24.96 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 200414 | 24.67 | ug/L | 96 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 102527 | 24.71 | ug/L | 98 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 263364 | 28.51 | ug/L | 98 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 175886 | 24.36 | ug/L | 99 |
| 37) Dibromochloromethane | 9.24 | 129 | 115214 | 24.92 | ug/L | 98 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 92440 | 24.57 | ug/L | 98 |
| 40) Chlorobenzene | 9.64 | 112 | 495094 | 26.14 | ug/L | 98 |
| 41) 1,1,1,2-Tetrachloroethane | 9.69 | 131 | 146411 | 24.85 | ug/L | 98 |
| 42) Ethylbenzene | 9.69 | 106 | 289094 | 26.75 | ug/L | 87 |
| 43) P+m-Xylene | 9.78 | 106 | 670782 | 52.43 | ug/L | 85 |
| 44) O-Xylene | 10.02 | 106 | 312975 | 25.35 | ug/L | 88 |
| 45) Styrene | 10.03 | 104 | 477060 | 25.86 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 53108 | 23.81 | ug/L | 99 |
| 47) Isopropylbenzene | 10.23 | 105 | 1271465 | 38.53 | ug/L | 95 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 86490 | 24.46 | ug/L | 100 |
| 50) 1,2,3-Trichloropropane | 10.45 | 110 | 18662 | 26.87 | ug/L | 95 |
| 51) n-propylbenzene | 10.48 | 91 | 1007784 | 26.59 | ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB08.D Vial: 8
Acq On : 13 Feb 2017 9:15 am Operator: MGC
Sample : B[B1007-MS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:30 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

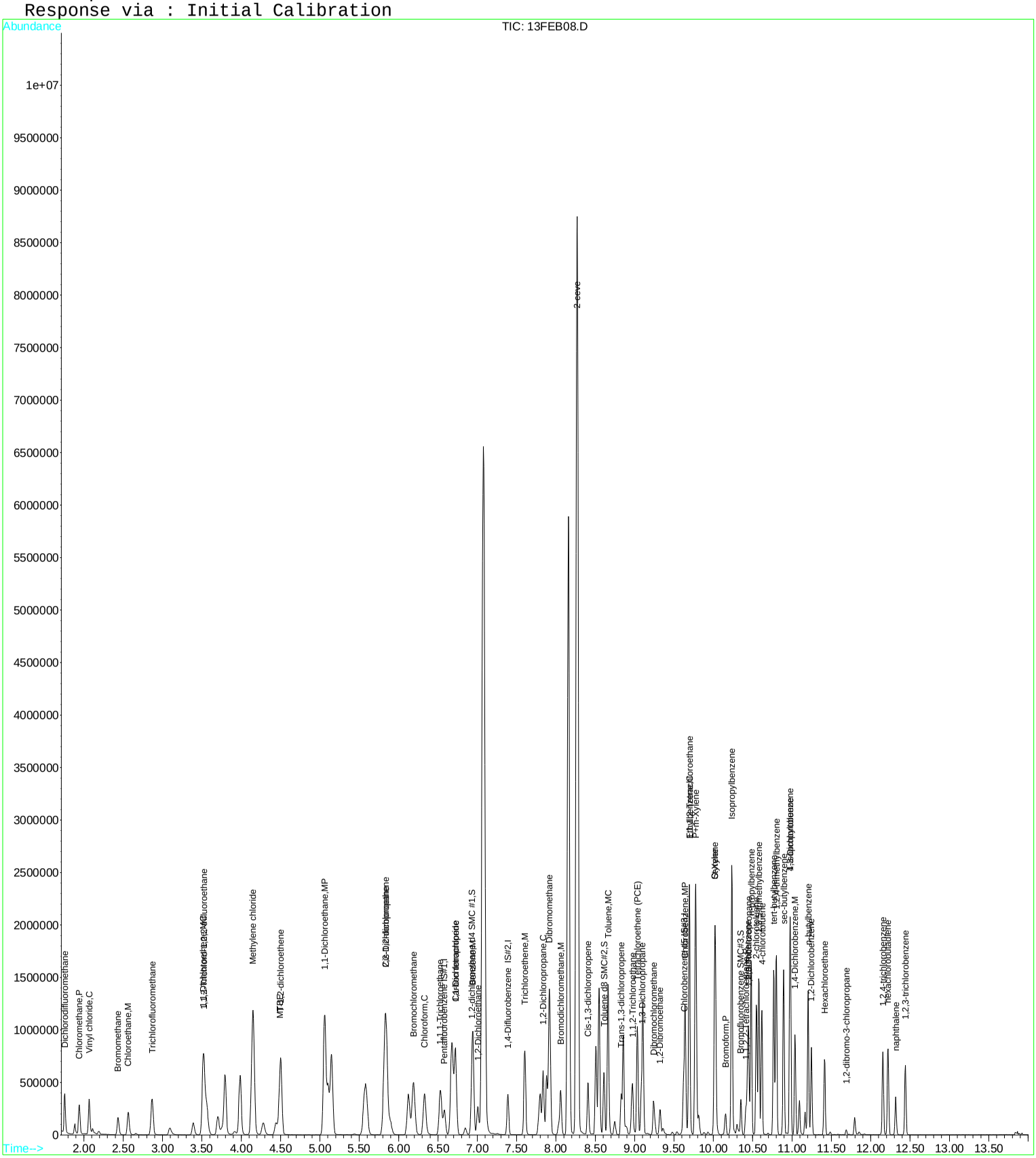
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 186625 | 24.88 | ug/L | | 96 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 619336 | 24.52 | ug/L | | 94 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 603723 | 25.89 | ug/L | | 98 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 526791 | 25.21 | ug/L | | 96 |
| 56) | tert-butylbenzene | 10.77 | 119 | 605953 | 24.73 | ug/L | | 99 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 569414 | 24.88 | ug/L | | 94 |
| 58) | sec-butylbenzene | 10.89 | 105 | 804322 | 23.51 | ug/L | | 98 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 646075 | 24.99 | ug/L | | 96 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 308547 | 23.45 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 302441 | 24.82 | ug/L | | 98 |
| 62) | n-butylbenzene | 11.21 | 91 | 582283 | 26.21 | ug/L | | 96 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 260884 | 24.22 | ug/L | | 96 |
| 64) | Hexachloroethane | 11.41 | 117 | 89297 | 19.94 | ug/L | # | 90 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10624 | 22.12 | ug/L | | 95 |
| 66) | 1,2,4-trichlorobenzene | 12.15 | 180 | 216487 | 28.49 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 158291 | 31.06 | ug/L | | 98 |
| 68) | naphthalene | 12.32 | 128 | 217462 | 29.40 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 186296 | 28.57 | ug/L | | 85 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB08.D Vial: 8
Acq On : 13 Feb 2017 9:15 am Operator: MGC
Sample : B[B1007-MS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:30 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB08.D Vial: 8
Acq On : 13 Feb 2017 9:15 am Operator: MGC
Sample : B[B1007-MS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:01 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 199906 | 10.00 | ug/L | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 270669 | 10.00 | ug/L | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 63602 | 10.00 | ug/L | 0.00 |

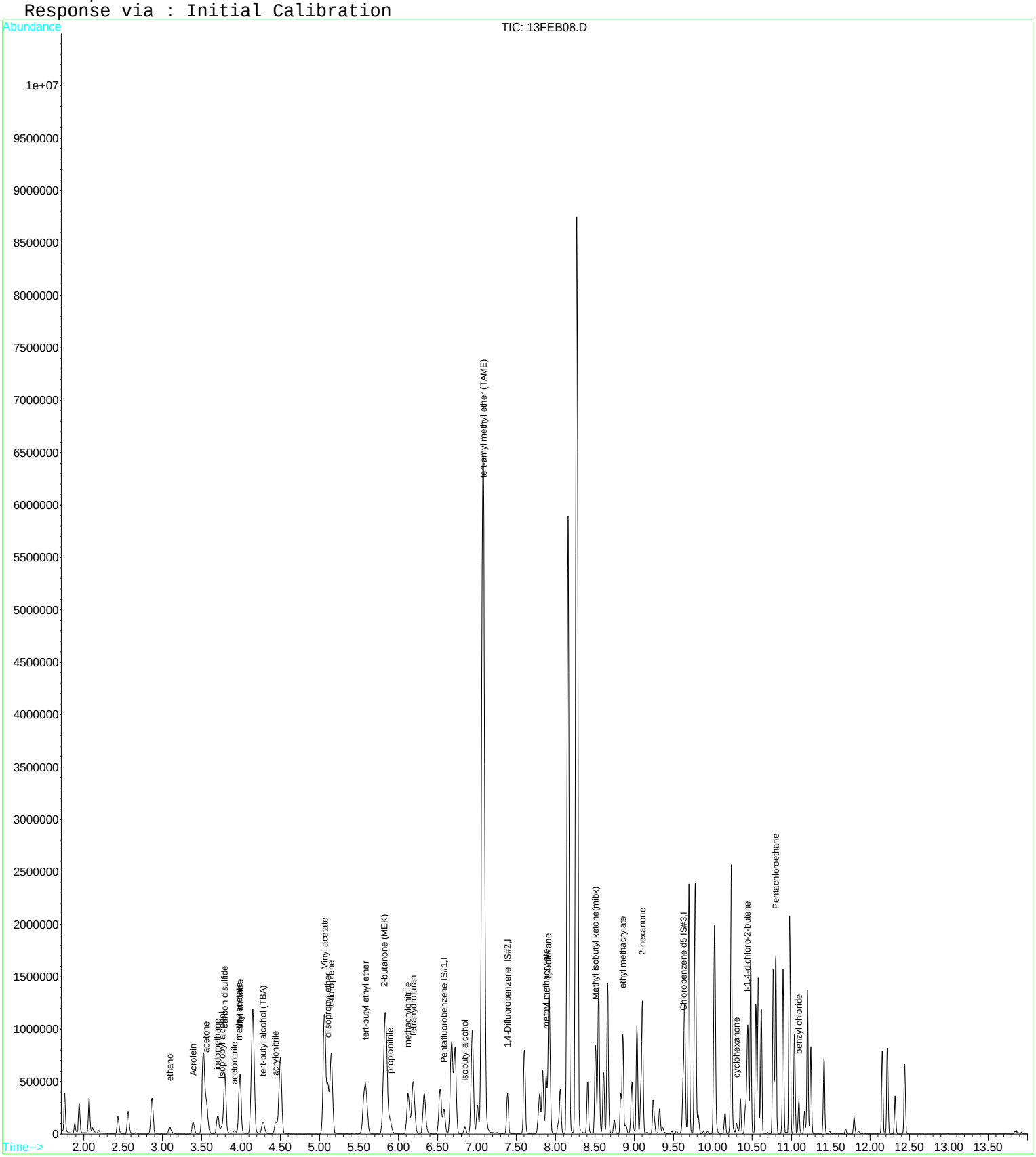
| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) ethanol | 3.10 | 45 | 101199 | 3279.81 | ug/L | 92 |
| 6) isopropyl alcohol | 3.76 | 45 | 111322 | 746.39 | ug/L | 71 |
| 7) Acrolein | 3.39 | 56 | 127382 | 319.78 | ug/L | 91 |
| 8) acetone | 3.56 | 43 | 292437 | 326.24 | ug/L | 95 |
| 9) tert-butyl alcohol (TBA) | 4.28 | 59 | 170030 | 664.25 | ug/L | 100 |
| 10) acetonitrile | 3.92 | 41 | 61407 | 186.08 | ug/L # | 87 |
| 11) methyl acetate | 3.97 | 43 | 68628 | 23.60 | ug/L | 98 |
| 12) allyl chloride | 3.99 | 41 | 709125 | 31.83 | ug/L | 98 |
| 13) iodomethane | 3.70 | 142 | 263493 | 22.54 | ug/L | 98 |
| 14) acrylonitrile | 4.44 | 53 | 104506 | 82.04 | ug/L | 97 |
| 15) carbon disulfide | 3.79 | 76 | 918275 | 34.16 | ug/L | 100 |
| 17) diisopropyl ether | 5.11 | 87 | 109610 | 17.27 | ug/L | 91 |
| 18) Vinyl acetate | 5.06 | 43 | 1699283 | 133.99 | ug/L | 99 |
| 19) chloroprene | 5.15 | 53 | 656401 | 32.80 | ug/L | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 367508 | 14.02 | ug/L | 100 |
| 21) 2-butanone (MEK) | 5.82 | 43 | 480209 | 273.06 | ug/L # | 81 |
| 22) propionitrile | 5.90 | 54 | 160102 | 348.07 | ug/L | 98 |
| 23) Isobutyl alcohol | 6.85 | 43 | 46668 | 357.62 | ug/L | 97 |
| 24) methacrylonitrile | 6.13 | 67 | 191024 | 154.79 | ug/L | 100 |
| 26) tetrahydrofuran | 6.20 | 42 | 289914 | 282.19 | ug/L | 100 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 182197 | 12.52 | ug/L # | 1 |
| 30) methyl methacrylate | 7.88 | 69 | 185550 | 82.20 | ug/L | 80 |
| 32) 1,4-dioxane | 7.90 | 88 | 31138 | 1823.19 | ug/L # | 1 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 546832 | 145.42 | ug/L | 99 |
| 34) ethyl methacrylate | 8.85 | 69 | 387232 | 80.56 | ug/L | 99 |
| 35) 2-hexanone | 9.11 | 43 | 694562 | 287.35 | ug/L | 99 |
| 38) cyclohexanone | 10.30 | 55 | 30547 | 107.73 | ug/L | 99 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 146705 | 148.67 | ug/L # | 50 |
| 41) Pentachloroethane | 10.80 | 167 | 60314 | 17.67 | ug/L | 85 |
| 42) benzyl chloride | 11.09 | 91 | 178432 | 32.41 | ug/L | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB08.D Vial: 8
Acq On : 13 Feb 2017 9:15 am Operator: MGC
Sample : B[B1007-MS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:01 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - Matrix Spike Duplicate**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB26.D Vial: 26
Acq On : 12 Feb 2017 2:43 pm Operator: MGC
Sample : B[B1006-MSD1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:57 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206072 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 278738 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65084 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 56060 | 9.19 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 91.90% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 313424 | 9.88 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 98.80% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 93798 | 10.45 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 104.50% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 249988 | 25.46 | ug/L | 98 |
| 3) Chloromethane | 1.95 | 50 | 321340 | 24.66 | ug/L | 98 |
| 4) Vinyl chloride | 2.07 | 62 | 351982 | 28.67 | ug/L | 98 |
| 5) Bromomethane | 2.44 | 94 | 145614 | 22.22 | ug/L | 96 |
| 6) Chloroethane | 2.57 | 64 | 192883 | 23.98 | ug/L | 100 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 305660 | 25.28 | ug/L | 99 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 210347 | 24.40 | ug/L | 98 |
| 9) 1,1-Dichloroethene | 3.51 | 61 | 408838 | 25.54 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 187246 | 23.43 | ug/L | 96 |
| 11) MTBE | 4.48 | 73 | 282732 | 21.83 | ug/L | 98 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 233226 | 25.14 | ug/L | 97 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 460315 | 21.67 | ug/L | 97 |
| 14) 2,2-Dichloropropane | 5.85 | 77 | 329179 | 24.72 | ug/L | 86 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 272494 | 28.33 | ug/L | 98 |
| 16) Bromochloromethane | 6.18 | 128 | 68835 | 21.59 | ug/L | 97 |
| 17) Chloroform | 6.33 | 83 | 353170 | 22.70 | ug/L | 98 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 320521 | 24.31 | ug/L | 94 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 313224 | 24.79 | ug/L | 100 |
| 20) Carbon tetrachloride | 6.72 | 119 | 248442 | 25.71 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 195463 | 21.64 | ug/L | 96 |
| 23) Benzene | 6.94 | 78 | 855804 | 21.98 | ug/L | 98 |
| 25) Trichloroethene | 7.60 | 130 | 240842 | 26.54 | ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.83 | 63 | 238685 | 23.00 | ug/L | 96 |
| 27) Dibromomethane | 7.91 | 93 | 68273 | 21.63 | ug/L | 97 |
| 28) Bromodichloromethane | 8.06 | 83 | 222349 | 24.23 | ug/L | 95 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 284493 | 23.39 | ug/L | 97 |
| 32) Toluene | 8.66 | 92 | 507579 | 23.35 | ug/L | 87 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 193552 | 23.13 | ug/L | 97 |
| 34) 1,1,2-Trichloroethane | 8.98 | 97 | 91097 | 21.32 | ug/L | 97 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 248007 | 26.07 | ug/L | 99 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 169592 | 22.81 | ug/L | 100 |
| 37) Dibromochloromethane | 9.24 | 129 | 116848 | 24.54 | ug/L | 99 |
| 38) 1,2-Dibromoethane | 9.32 | 107 | 88007 | 22.71 | ug/L | 99 |
| 40) Chlorobenzene | 9.64 | 112 | 513895 | 26.51 | ug/L | 96 |
| 41) 1,1,1,2-Tetrachloroethane | 9.69 | 131 | 149543 | 24.81 | ug/L | 98 |
| 42) Ethylbenzene | 9.70 | 106 | 287409 | 25.99 | ug/L | 87 |
| 43) P+m-Xylene | 9.77 | 106 | 663419 | 50.67 | ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 317082 | 25.10 | ug/L | 87 |
| 45) Styrene | 10.03 | 104 | 478054 | 25.33 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 54907 | 24.06 | ug/L | 97 |
| 47) Isopropylbenzene | 10.24 | 105 | 809345 | 23.97 | ug/L | 92 |
| 48) 1,1,2,2-Tetrachloroethane | 10.42 | 83 | 84101 | 23.24 | ug/L | 100 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 19610 | 27.64 | ug/L | 100 |
| 51) n-propylbenzene | 10.48 | 91 | 959222 | 24.73 | ug/L | 93 |
| 52) bromobenzene | 10.45 | 156 | 186743 | 24.33 | ug/L | 93 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB26.D Vial: 26
Acq On : 12 Feb 2017 2:43 pm Operator: MGC
Sample : B[B1006-MSD1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:57 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

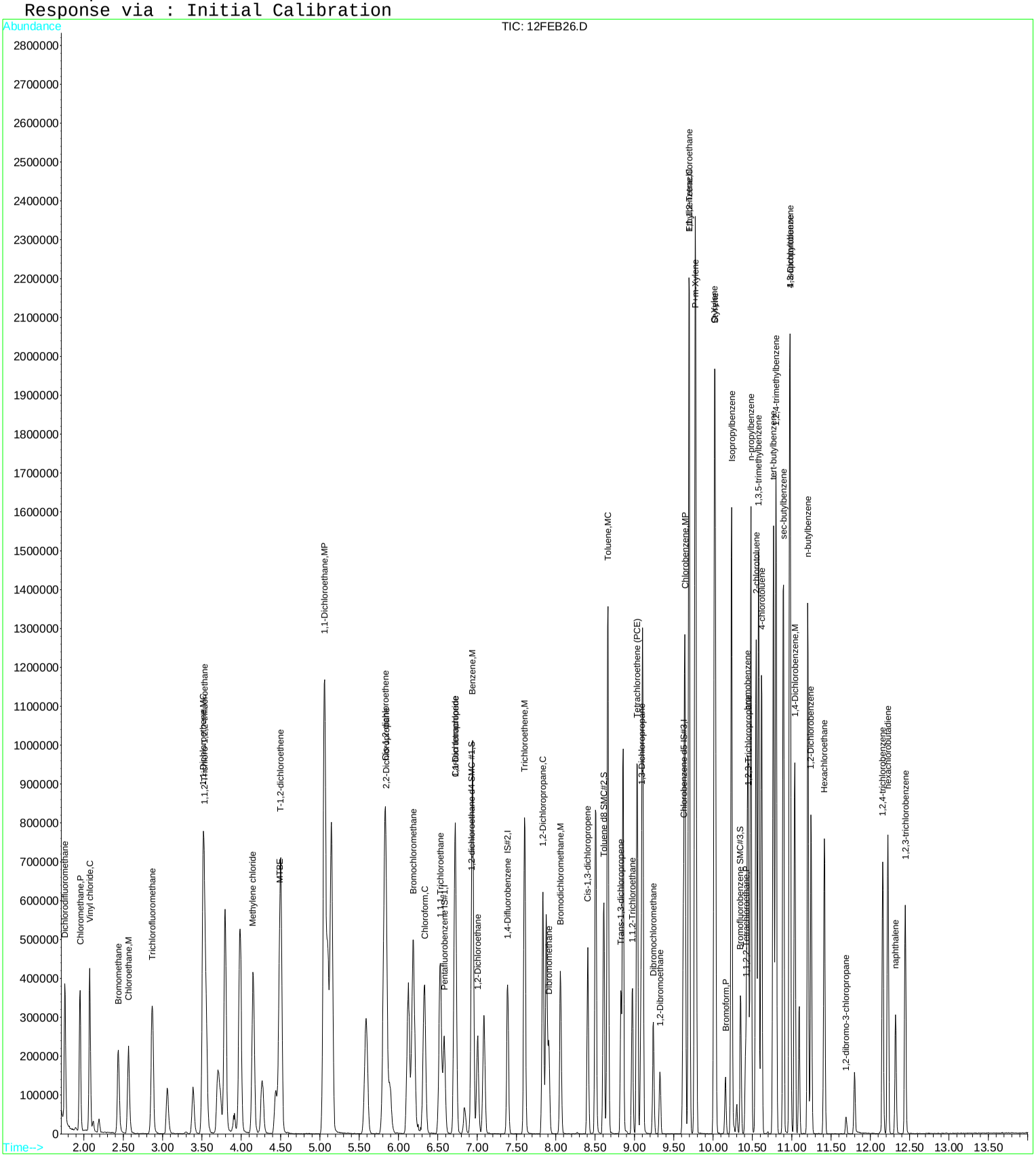
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 609491 | 23.59 | ug/L | | 92 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 619663 | 25.97 | ug/L | | 95 |
| 55) | 4-chlorotoluene | 10.61 | 91 | 541590 | 25.33 | ug/L | | 96 |
| 56) | tert-butylbenzene | 10.77 | 119 | 588629 | 23.48 | ug/L | | 100 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 556506 | 23.77 | ug/L | | 94 |
| 58) | sec-butylbenzene | 10.90 | 105 | 784283 | 22.40 | ug/L | | 95 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 638300 | 24.13 | ug/L | | 98 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 310303 | 23.05 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 308132 | 24.71 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.20 | 91 | 580468 | 25.53 | ug/L | | 95 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 273441 | 24.81 | ug/L | | 96 |
| 64) | Hexachloroethane | 11.41 | 117 | 100398 | 21.91 | ug/L | # | 92 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 9938 | 20.21 | ug/L | | 95 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 196608 | 25.28 | ug/L | | 97 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 149831 | 28.73 | ug/L | | 96 |
| 68) | naphthalene | 12.32 | 128 | 190947 | 25.23 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 164842 | 24.70 | ug/L | | 86 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB26.D Vial: 26
Acq On : 12 Feb 2017 2:43 pm Operator: MGC
Sample : B[B1006-MSD1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:57 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB26.D Vial: 26
Acq On : 12 Feb 2017 2:43 pm Operator: MGC
Sample : B[B1006-MSD1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:27 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 206072 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 278738 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65084 | 10.00 | ug/L | | 0.00 |

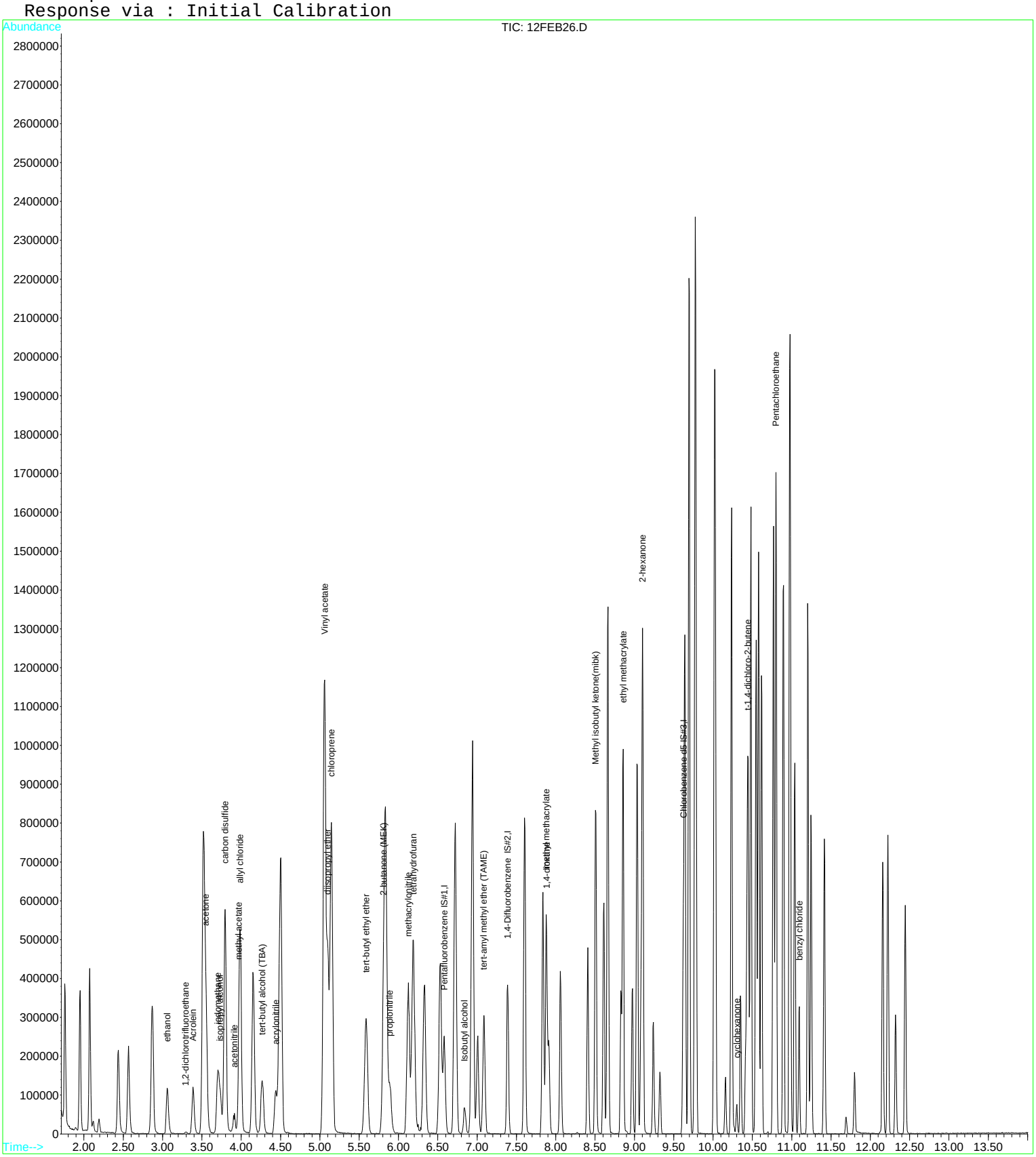
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.06 | 45 | 141057 | 4434.79 | ug/L | | 94 |
| 4) 1,2-dichlorotrifluoroethan | 3.29 | 67 | 3256 | 0.28 | ug/L | # | 88 |
| 6) isopropyl alcohol | 3.73 | 45 | 145883 | 974.86 | ug/L | # | 1 |
| 7) Acrolein | 3.39 | 56 | 130499 | 317.80 | ug/L | | 90 |
| 8) acetone | 3.55 | 43 | 269566 | 291.72 | ug/L | | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 197271 | 747.61 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 69017 | 204.32 | ug/L | # | 79 |
| 11) methyl acetate | 3.96 | 43 | 68022 | 22.69 | ug/L | | 99 |
| 12) allyl chloride | 3.99 | 41 | 730607 | 31.81 | ug/L | | 99 |
| 13) iodomethane | 3.70 | 142 | 231085 | 19.17 | ug/L | | 98 |
| 14) acrylonitrile | 4.44 | 53 | 102934 | 78.39 | ug/L | | 97 |
| 15) carbon disulfide | 3.80 | 76 | 932148 | 33.64 | ug/L | | 100 |
| 17) diisopropyl ether | 5.10 | 87 | 113528 | 17.35 | ug/L | | 88 |
| 18) Vinyl acetate | 5.06 | 43 | 1712747 | 131.01 | ug/L | | 100 |
| 19) chloroprene | 5.15 | 53 | 687188 | 33.32 | ug/L | | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 384877 | 14.25 | ug/L | | 99 |
| 21) 2-butanone (MEK) | 5.80 | 43 | 235309 | 129.80 | ug/L | | 97 |
| 22) propionitrile | 5.89 | 54 | 176540 | 372.32 | ug/L | | 98 |
| 23) Isobutyl alcohol | 6.84 | 43 | 52582 | 390.88 | ug/L | | 97 |
| 24) methacrylonitrile | 6.13 | 67 | 181385 | 142.58 | ug/L | | 97 |
| 26) tetrahydrofuran | 6.19 | 42 | 282070 | 266.34 | ug/L | | 98 |
| 28) tert-amyl methyl ether (TA | 7.08 | 73 | 212088 | 14.14 | ug/L | | 96 |
| 30) methyl methacrylate | 7.88 | 69 | 164520 | 70.77 | ug/L | | 97 |
| 32) 1,4-dioxane | 7.89 | 88 | 40367 | 2325.76 | ug/L | | 90 |
| 33) Methyl isobutyl ketone(mib | 8.50 | 43 | 545354 | 140.83 | ug/L | | 99 |
| 34) ethyl methacrylate | 8.86 | 69 | 372736 | 75.30 | ug/L | | 99 |
| 35) 2-hexanone | 9.10 | 43 | 708781 | 284.29 | ug/L | | 100 |
| 38) cyclohexanone | 10.30 | 55 | 27426 | 94.52 | ug/L | | 98 |
| 39) t-1,4-dichloro-2-butene | 10.44 | 75 | 165878 | 164.27 | ug/L | # | 52 |
| 41) Pentachloroethane | 10.80 | 167 | 64570 | 18.49 | ug/L | | 87 |
| 42) benzyl chloride | 11.10 | 91 | 187440 | 33.27 | ug/L | | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB26.D Vial: 26
Acq On : 12 Feb 2017 2:43 pm Operator: MGC
Sample : B[B1006-MSD1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:27 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB09.D Vial: 9
Acq On : 13 Feb 2017 9:39 am Operator: MGC
Sample : B[B1007-MSD1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:53 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201650 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279784 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66701 | 10.00 | ug/L | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 61486 | 10.31 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 103.10% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 311900 | 9.79 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.90% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 90981 | 9.89 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 98.90% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.75 | 85 | 246925 | 25.70 | ug/L | 99 |
| 3) Chloromethane | 1.94 | 50 | 266586 | 20.79 | ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 308645 | 25.69 | ug/L | 95 |
| 5) Bromomethane | 2.44 | 94 | 119674 | 18.66 | ug/L | 99 |
| 6) Chloroethane | 2.56 | 64 | 193622 | 24.60 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 305774 | 25.84 | ug/L | 100 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 210434 | 24.95 | ug/L | 99 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 414357 | 26.46 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 175836 | 22.37 | ug/L | 95 |
| 11) MTBE | 4.48 | 73 | 299985 | 23.67 | ug/L | 100 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 229759 | 25.30 | ug/L | 99 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 456734 | 21.97 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 328210 | 25.19 | ug/L | 94 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 221687 | 23.56 | ug/L | 97 |
| 16) Bromochloromethane | 6.19 | 128 | 75379 | 24.16 | ug/L | 96 |
| 17) Chloroform | 6.33 | 83 | 358235 | 23.53 | ug/L | 99 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 318632 | 24.70 | ug/L | 95 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 308120 | 24.92 | ug/L | 98 |
| 20) Carbon tetrachloride | 6.72 | 119 | 232698 | 24.61 | ug/L | 97 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 203593 | 23.04 | ug/L | 97 |
| 23) Benzene | 6.94 | 78 | 885365 | 23.24 | ug/L | 98 |
| 25) Trichloroethene | 7.61 | 130 | 233573 | 25.64 | ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 231469 | 22.22 | ug/L # | 85 |
| 27) Dibromomethane | 7.91 | 93 | 68783 | 21.71 | ug/L | 97 |
| 28) Bromodichloromethane | 8.06 | 83 | 225347 | 24.47 | ug/L | 97 |
| 29) 2-ceve | 8.27 | 63 | 9836 | 3.37 | ug/L # | 1 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 288705 | 23.65 | ug/L | 97 |
| 32) Toluene | 8.66 | 92 | 526186 | 24.12 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 195167 | 23.24 | ug/L | 98 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 101075 | 23.56 | ug/L | 97 |
| 35) Tetrachloroethene (PCE) | 9.03 | 166 | 250610 | 26.25 | ug/L | 100 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 178890 | 23.97 | ug/L | 98 |
| 37) Dibromochloromethane | 9.24 | 129 | 115028 | 24.07 | ug/L | 98 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 91225 | 23.46 | ug/L | 99 |
| 40) Chlorobenzene | 9.64 | 112 | 493638 | 24.85 | ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 143918 | 23.30 | ug/L | 98 |
| 42) Ethylbenzene | 9.70 | 106 | 287838 | 25.40 | ug/L | 89 |
| 43) P+m-Xylene | 9.78 | 106 | 669336 | 49.88 | ug/L | 86 |
| 44) O-Xylene | 10.02 | 106 | 311744 | 24.08 | ug/L | 84 |
| 45) Styrene | 10.03 | 104 | 486686 | 25.16 | ug/L | 100 |
| 46) Bromoform | 10.16 | 173 | 54065 | 23.11 | ug/L | 95 |
| 47) Isopropylbenzene | 10.23 | 105 | 1308426 | 37.81 | ug/L | 95 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 87870 | 23.70 | ug/L | 98 |
| 50) 1,2,3-Trichloropropane | 10.45 | 110 | 17982 | 24.54 | ug/L | 92 |
| 51) n-propylbenzene | 10.48 | 91 | 1005597 | 25.30 | ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB09.D Vial: 9
Acq On : 13 Feb 2017 9:39 am Operator: MGC
Sample : B[B1007-MSD1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:53 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

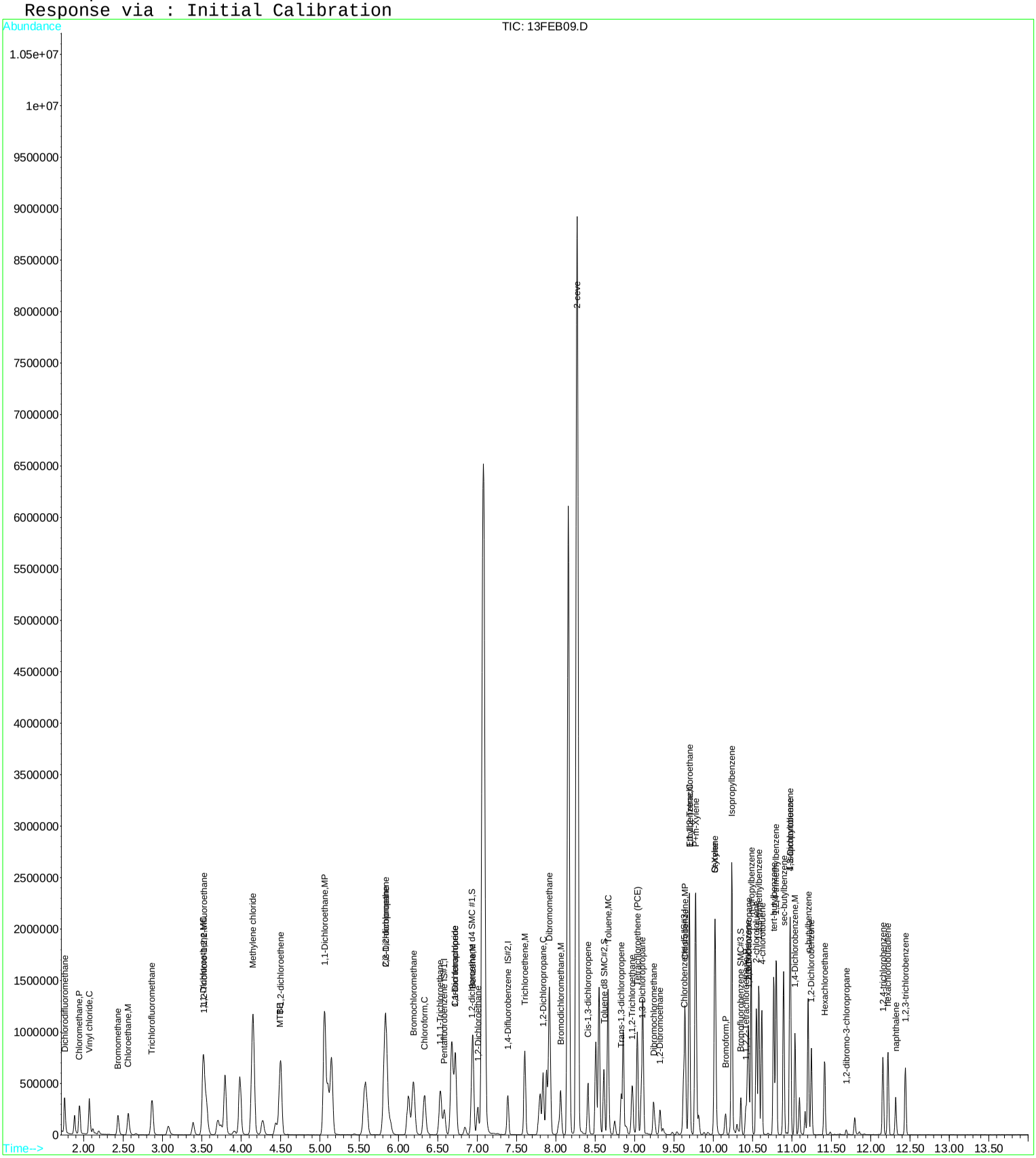
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.45 | 156 | 189291 | 24.06 | ug/L | | 96 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 600130 | 22.66 | ug/L | | 94 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 594559 | 24.31 | ug/L | | 97 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 534061 | 24.37 | ug/L | | 96 |
| 56) | tert-butylbenzene | 10.77 | 119 | 615687 | 23.96 | ug/L | | 98 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 576672 | 24.03 | ug/L | | 91 |
| 58) | sec-butylbenzene | 10.89 | 105 | 825328 | 23.00 | ug/L | | 97 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 649972 | 23.97 | ug/L | | 97 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 316255 | 22.92 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 305174 | 23.88 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 576589 | 24.74 | ug/L | | 96 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 267868 | 23.72 | ug/L | | 97 |
| 64) | Hexachloroethane | 11.41 | 117 | 93610 | 19.93 | ug/L | # | 90 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 10525 | 20.89 | ug/L | | 96 |
| 66) | 1,2,4-trichlorobenzene | 12.15 | 180 | 210738 | 26.44 | ug/L | | 98 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 150674 | 28.19 | ug/L | | 98 |
| 68) | naphthalene | 12.32 | 128 | 225910 | 29.13 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 183421 | 26.82 | ug/L | | 85 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB09.D Vial: 9
Acq On : 13 Feb 2017 9:39 am Operator: MGC
Sample : B[B1007-MSD1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:53 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB09.D Vial: 9
Acq On : 13 Feb 2017 9:39 am Operator: MGC
Sample : B[B1007-MSD1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:02 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 201650 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 279784 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 66701 | 10.00 | ug/L | | 0.00 |

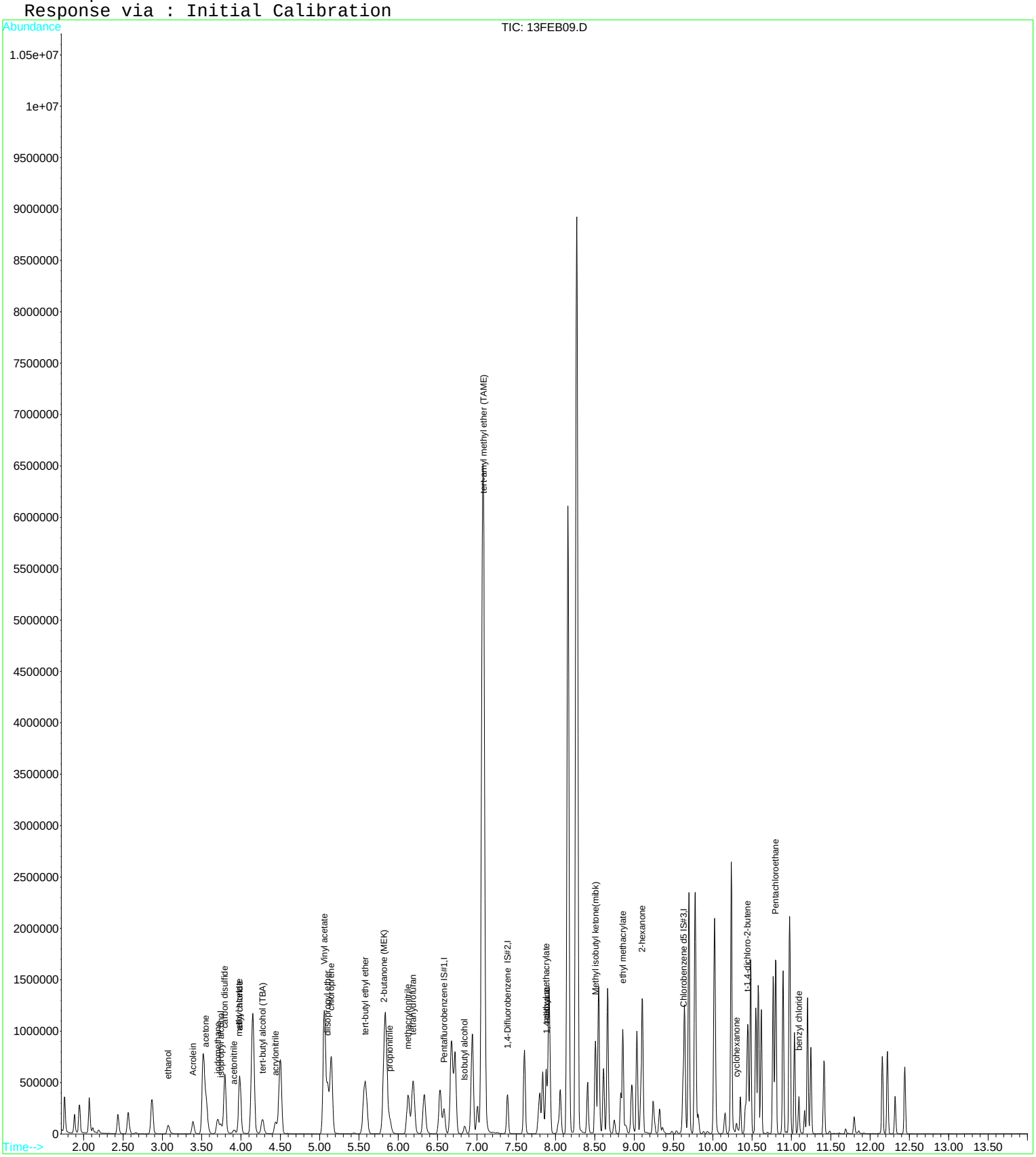
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.08 | 45 | 122412 | 3933.00 | ug/L | | 95 |
| 6) isopropyl alcohol | 3.74 | 45 | 141244 | 963.54 | ug/L | | 98 |
| 7) Acrolein | 3.39 | 56 | 133914 | 333.27 | ug/L | | 91 |
| 8) acetone | 3.56 | 43 | 315252 | 348.65 | ug/L | | 96 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 203213 | 787.01 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 66324 | 200.37 | ug/L | # | 83 |
| 11) methyl acetate | 3.97 | 43 | 71841 | 24.49 | ug/L | | 96 |
| 12) allyl chloride | 3.98 | 41 | 712057 | 31.69 | ug/L | | 99 |
| 13) iodomethane | 3.71 | 142 | 230120 | 19.51 | ug/L | | 98 |
| 14) acrylonitrile | 4.44 | 53 | 110750 | 86.19 | ug/L | | 96 |
| 15) carbon disulfide | 3.79 | 76 | 942082 | 34.74 | ug/L | | 100 |
| 17) diisopropyl ether | 5.10 | 87 | 110380 | 17.24 | ug/L | | 97 |
| 18) Vinyl acetate | 5.06 | 43 | 1802084 | 140.87 | ug/L | | 100 |
| 19) chloroprene | 5.15 | 53 | 656780 | 32.54 | ug/L | | 97 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 388052 | 14.68 | ug/L | | 100 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 525566 | 296.26 | ug/L | # | 82 |
| 22) propionitrile | 5.89 | 54 | 173374 | 373.66 | ug/L | | 97 |
| 23) Isobutyl alcohol | 6.84 | 43 | 55724 | 423.32 | ug/L | | 96 |
| 24) methacrylonitrile | 6.13 | 67 | 195945 | 157.41 | ug/L | | 99 |
| 26) tetrahydrofuran | 6.19 | 42 | 314997 | 303.96 | ug/L | | 99 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 194893 | 13.27 | ug/L | # | 1 |
| 30) methyl methacrylate | 7.88 | 69 | 200062 | 85.74 | ug/L | | 80 |
| 32) 1,4-dioxane | 7.89 | 88 | 37112 | 2120.29 | ug/L | # | 1 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 590112 | 151.82 | ug/L | | 99 |
| 34) ethyl methacrylate | 8.86 | 69 | 404205 | 81.35 | ug/L | | 99 |
| 35) 2-hexanone | 9.11 | 43 | 751370 | 303.23 | ug/L | | 100 |
| 38) cyclohexanone | 10.30 | 55 | 33868 | 113.90 | ug/L | | 97 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 155459 | 150.22 | ug/L | # | 48 |
| 41) Pentachloroethane | 10.80 | 167 | 61392 | 17.15 | ug/L | | 84 |
| 42) benzyl chloride | 11.09 | 91 | 191293 | 33.13 | ug/L | | 100 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB09.D Vial: 9
Acq On : 13 Feb 2017 9:39 am Operator: MGC
Sample : B[B1007-MSD1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 13:02 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - Lab Control Sample**

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB24.D Vial: 24
Acq On : 12 Feb 2017 1:57 pm Operator: MGC
Sample : B[B1006-BS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 203205 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 268538 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65605 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 59156 | 9.84 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 98.40% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 303544 | 9.93 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 99.30% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88470 | 9.78 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 97.80% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.75 | 85 | 264062 | 27.27 | ug/L | 98 |
| 3) Chloromethane | 1.94 | 50 | 285037 | 22.11 | ug/L | 99 |
| 4) Vinyl chloride | 2.07 | 62 | 316216 | 26.12 | ug/L | 93 |
| 5) Bromomethane | 2.44 | 94 | 119083 | 18.43 | ug/L | 99 |
| 6) Chloroethane | 2.56 | 64 | 181559 | 22.89 | ug/L | 100 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 308821 | 25.90 | ug/L | 98 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.53 | 101 | 206933 | 24.34 | ug/L | 99 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 408832 | 25.90 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 180314 | 22.82 | ug/L | 97 |
| 11) MTBE | 4.49 | 73 | 276426 | 21.64 | ug/L | 99 |
| 12) T-1,2-dichloroethene | 4.51 | 96 | 220227 | 24.07 | ug/L | 97 |
| 13) 1,1-Dichloroethane | 5.06 | 63 | 435542 | 20.79 | ug/L | 98 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 332917 | 25.35 | ug/L | 91 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 213812 | 22.55 | ug/L | 94 |
| 16) Bromochloromethane | 6.18 | 128 | 72356 | 23.01 | ug/L | 95 |
| 17) Chloroform | 6.33 | 83 | 353368 | 23.04 | ug/L | 97 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 321263 | 24.71 | ug/L | 96 |
| 19) 1,1-Dichloropropene | 6.72 | 75 | 311689 | 25.02 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.72 | 119 | 248088 | 26.04 | ug/L | 98 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 195662 | 21.97 | ug/L | 97 |
| 23) Benzene | 6.94 | 78 | 859923 | 22.40 | ug/L | 97 |
| 25) Trichloroethene | 7.61 | 130 | 228117 | 26.09 | ug/L | 98 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 228327 | 22.84 | ug/L | 96 |
| 27) Dibromomethane | 7.91 | 93 | 68500 | 22.53 | ug/L | 96 |
| 28) Bromodichloromethane | 8.06 | 83 | 222275 | 25.14 | ug/L | 96 |
| 29) 2-ceve | 8.28 | 63 | 225413 | 80.52 | ug/L | 100 |
| 30) Cis-1,3-dichloropropene | 8.40 | 75 | 277600 | 23.69 | ug/L | 98 |
| 32) Toluene | 8.66 | 92 | 516074 | 24.65 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 192541 | 23.89 | ug/L | 98 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 93589 | 22.73 | ug/L | 98 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 270891 | 29.56 | ug/L | 98 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 166508 | 23.25 | ug/L | 100 |
| 37) Dibromochloromethane | 9.24 | 129 | 112828 | 24.59 | ug/L | 97 |
| 38) 1,2-Dibromoethane | 9.33 | 107 | 86270 | 23.11 | ug/L | 98 |
| 40) Chlorobenzene | 9.64 | 112 | 494862 | 25.33 | ug/L | 96 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 142451 | 23.44 | ug/L | 99 |
| 42) Ethylbenzene | 9.70 | 106 | 281792 | 25.28 | ug/L | 88 |
| 43) P+m-Xylene | 9.78 | 106 | 637602 | 48.31 | ug/L | 85 |
| 44) O-Xylene | 10.02 | 106 | 305723 | 24.01 | ug/L | 87 |
| 45) Styrene | 10.03 | 104 | 461823 | 24.27 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 51011 | 22.17 | ug/L | 98 |
| 47) Isopropylbenzene | 10.23 | 105 | 764810 | 22.47 | ug/L | 94 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 79463 | 21.79 | ug/L | 100 |
| 50) 1,2,3-Trichloropropane | 10.45 | 110 | 16579 | 22.89 | ug/L | 98 |
| 51) n-propylbenzene | 10.48 | 91 | 938481 | 24.00 | ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB24.D Vial: 24
Acq On : 12 Feb 2017 1:57 pm Operator: MGC
Sample : B[B1006-BS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:11 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

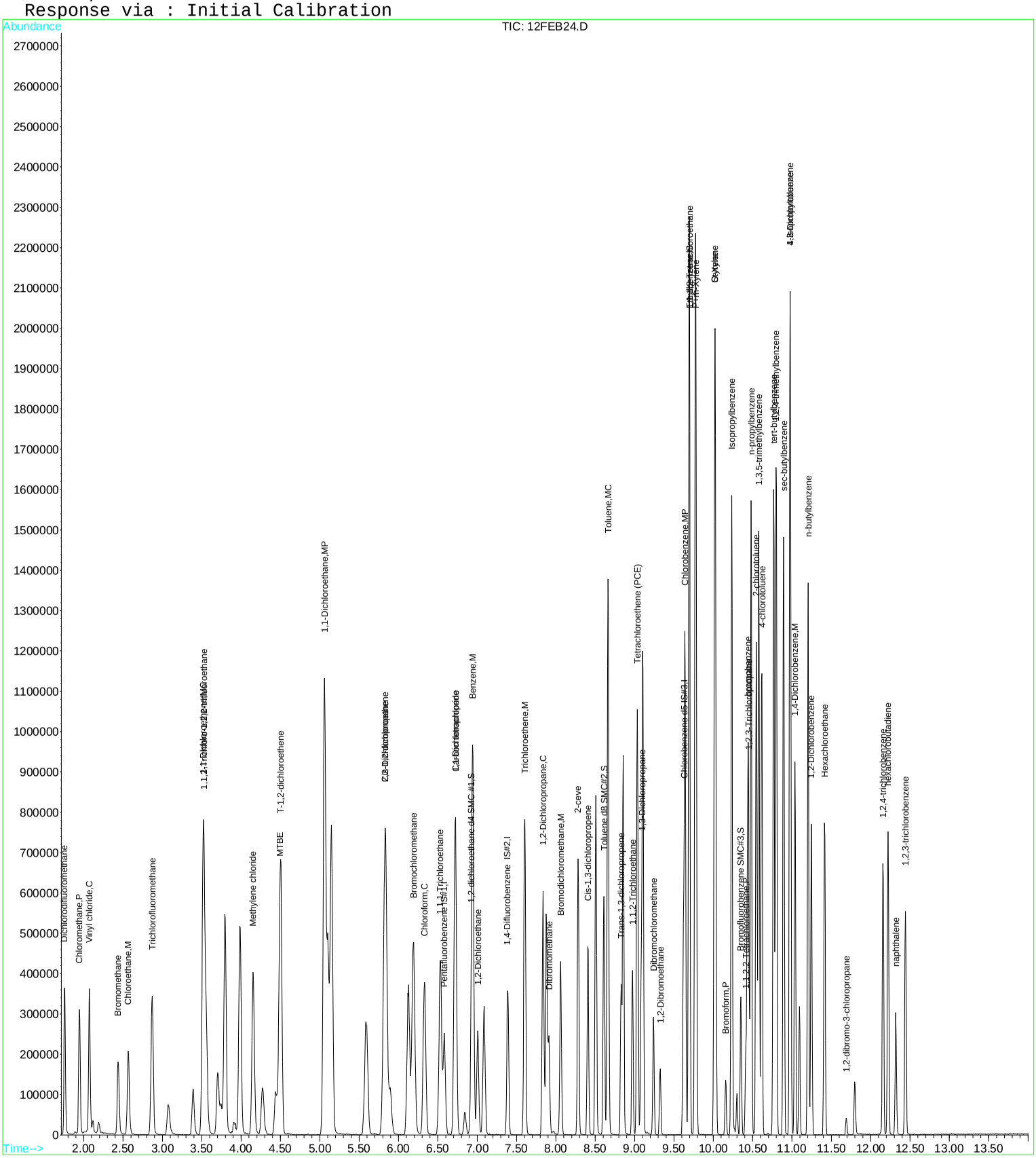
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.44 | 156 | 180720 | 23.36 | ug/L | | 94 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 595045 | 22.84 | ug/L | | 93 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 593889 | 24.69 | ug/L | | 97 |
| 55) | 4-chlorotoluene | 10.62 | 91 | 521444 | 24.19 | ug/L | | 96 |
| 56) | tert-butylbenzene | 10.77 | 119 | 601030 | 23.78 | ug/L | | 90 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 571864 | 24.23 | ug/L | | 91 |
| 58) | sec-butylbenzene | 10.89 | 105 | 777612 | 22.03 | ug/L | | 95 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 636841 | 23.88 | ug/L | | 99 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 307218 | 22.64 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 293687 | 23.36 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 577098 | 25.18 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 253820 | 22.85 | ug/L | | 97 |
| 64) | Hexachloroethane | 11.41 | 117 | 102024 | 22.09 | ug/L | # | 92 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 9974 | 20.12 | ug/L | | 92 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 192694 | 24.58 | ug/L | | 97 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 143805 | 27.36 | ug/L | | 97 |
| 68) | naphthalene | 12.32 | 128 | 181553 | 23.80 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.44 | 180 | 160637 | 23.88 | ug/L | | 87 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB24.D Vial: 24
Acq On : 12 Feb 2017 1:57 pm Operator: MGC
Sample : B[B1006-BS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 12 14:11 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB24.D Vial: 24
Acq On : 12 Feb 2017 1:57 pm Operator: MGC
Sample : B[B1006-BS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:25 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 203205 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 268538 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 65605 | 10.00 | ug/L | | 0.00 |

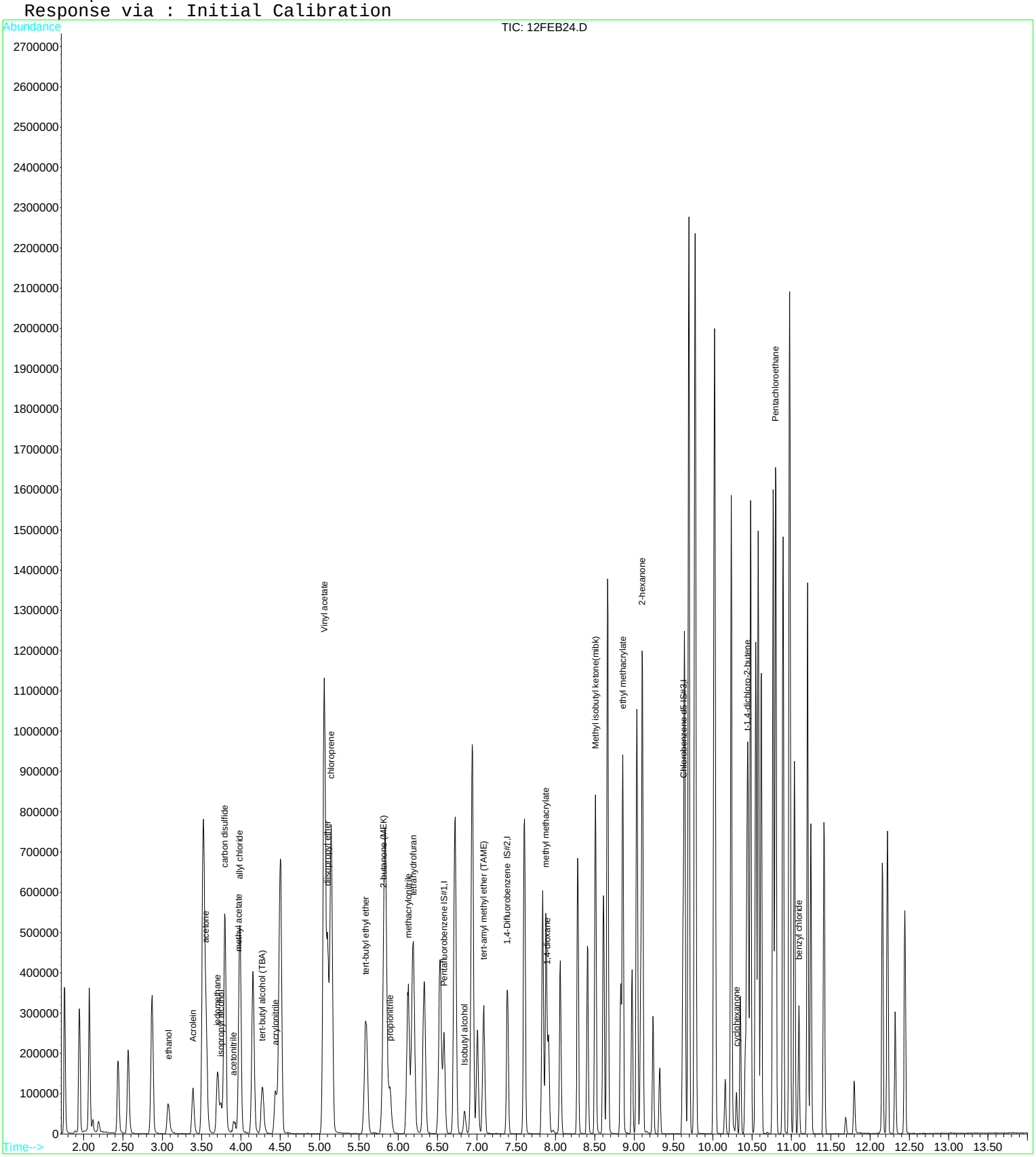
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.08 | 45 | 109180 | 3481.02 | ug/L | | 93 |
| 6) isopropyl alcohol | 3.75 | 45 | 115727 | 765.51 | ug/L | | 82 |
| 7) Acrolein | 3.39 | 56 | 122346 | 302.15 | ug/L | | 91 |
| 8) acetone | 3.56 | 43 | 256445 | 281.44 | ug/L | | 99 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 164026 | 630.39 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 58807 | 174.39 | ug/L | # | 73 |
| 11) methyl acetate | 3.97 | 43 | 64092 | 21.68 | ug/L | | 97 |
| 12) allyl chloride | 3.98 | 41 | 687827 | 30.37 | ug/L | | 98 |
| 13) iodomethane | 3.70 | 142 | 217984 | 18.34 | ug/L | | 99 |
| 14) acrylonitrile | 4.43 | 53 | 97403 | 75.23 | ug/L | | 98 |
| 15) carbon disulfide | 3.79 | 76 | 875500 | 32.04 | ug/L | | 100 |
| 17) diisopropyl ether | 5.10 | 87 | 107773 | 16.71 | ug/L | | 93 |
| 18) Vinyl acetate | 5.06 | 43 | 1624810 | 126.04 | ug/L | | 99 |
| 19) chloroprene | 5.15 | 53 | 657112 | 32.31 | ug/L | | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 374142 | 14.04 | ug/L | | 99 |
| 21) 2-butanone (MEK) | 5.81 | 43 | 231777 | 129.65 | ug/L | | 98 |
| 22) propionitrile | 5.89 | 54 | 163244 | 349.14 | ug/L | | 97 |
| 23) Isobutyl alcohol | 6.84 | 43 | 41922 | 316.03 | ug/L | | 99 |
| 24) methacrylonitrile | 6.13 | 67 | 179020 | 142.71 | ug/L | | 99 |
| 26) tetrahydrofuran | 6.19 | 42 | 284782 | 272.70 | ug/L | | 98 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 208476 | 14.09 | ug/L | | 99 |
| 30) methyl methacrylate | 7.88 | 69 | 165962 | 74.11 | ug/L | | 100 |
| 32) 1,4-dioxane | 7.90 | 88 | 31862 | 1884.10 | ug/L | | 98 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 516103 | 138.34 | ug/L | | 100 |
| 34) ethyl methacrylate | 8.86 | 69 | 355343 | 74.51 | ug/L | | 100 |
| 35) 2-hexanone | 9.10 | 43 | 677899 | 281.88 | ug/L | | 99 |
| 38) cyclohexanone | 10.30 | 55 | 37968 | 129.82 | ug/L | | 100 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 154024 | 151.32 | ug/L | # | 50 |
| 41) Pentachloroethane | 10.80 | 167 | 49657 | 14.11 | ug/L | # | 79 |
| 42) benzyl chloride | 11.09 | 91 | 173544 | 30.56 | ug/L | | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB12\12FEB24.D Vial: 24
Acq On : 12 Feb 2017 1:57 pm Operator: MGC
Sample : B[B1006-BS1 Inst : MS-V5
Misc : 1 VO-107-69120;69122;69123;69124;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:25 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB07.D Vial: 7
Acq On : 13 Feb 2017 8:52 am Operator: MGC
Sample : B[B1007-BS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:06 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208239 | 10.00 | ug/L | 0.00 |
| 24) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 281468 | 10.00 | ug/L | 0.00 |
| 39) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69754 | 10.00 | ug/L | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 21) 1,2-dichloroethane d4 SMC | 6.92 | 65 | 58810 | 9.55 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 75 - 125 Recovery = 95.50% | | | | | | |
| 31) Toluene d8 SMC#2 | 8.61 | 98 | 301901 | 9.42 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 94.20% | | | | | | |
| 49) Bromofluorobenzene SMC#3 | 10.35 | 95 | 88687 | 9.22 | ug/L | 0.00 |
| Spiked Amount 10.000 Range 80 - 120 Recovery = 92.20% | | | | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.76 | 85 | 263492 | 26.55 | ug/L | 98 |
| 3) Chloromethane | 1.95 | 50 | 313353 | 23.77 | ug/L | 97 |
| 4) Vinyl chloride | 2.07 | 62 | 330077 | 26.60 | ug/L | 97 |
| 5) Bromomethane | 2.44 | 94 | 95168 | 14.37 | ug/L | 93 |
| 6) Chloroethane | 2.56 | 64 | 194707 | 23.96 | ug/L | 99 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 312860 | 25.60 | ug/L | 97 |
| 8) 1,1,2-Trichloro-1,2,2-trif | 3.54 | 101 | 203510 | 23.36 | ug/L | 97 |
| 9) 1,1-Dichloroethene | 3.52 | 61 | 401789 | 24.84 | ug/L | 99 |
| 10) Methylene chloride | 4.15 | 84 | 185553 | 22.92 | ug/L | 96 |
| 11) MTBE | 4.49 | 73 | 286549 | 21.89 | ug/L | 99 |
| 12) T-1,2-dichloroethene | 4.50 | 96 | 224359 | 23.93 | ug/L | 98 |
| 13) 1,1-Dichloroethane | 5.05 | 63 | 441572 | 20.57 | ug/L | 97 |
| 14) 2,2-Dichloropropane | 5.84 | 77 | 340516 | 25.31 | ug/L | 91 |
| 15) Cis-1,2-dichloroethene | 5.83 | 96 | 220775 | 22.72 | ug/L | 96 |
| 16) Bromochloromethane | 6.18 | 128 | 74476 | 23.12 | ug/L | 96 |
| 17) Chloroform | 6.33 | 83 | 360712 | 22.95 | ug/L | 97 |
| 18) 1,1,1-Trichloroethane | 6.53 | 97 | 326102 | 24.48 | ug/L | 94 |
| 19) 1,1-Dichloropropene | 6.73 | 75 | 317826 | 24.89 | ug/L | 99 |
| 20) Carbon tetrachloride | 6.71 | 119 | 248488 | 25.45 | ug/L | 99 |
| 22) 1,2-Dichloroethane | 7.01 | 62 | 199528 | 21.87 | ug/L | 98 |
| 23) Benzene | 6.95 | 78 | 874176 | 22.22 | ug/L | 97 |
| 25) Trichloroethene | 7.60 | 130 | 236505 | 25.81 | ug/L | 99 |
| 26) 1,2-Dichloropropane | 7.84 | 63 | 235112 | 22.43 | ug/L | 96 |
| 27) Dibromomethane | 7.91 | 93 | 69139 | 21.69 | ug/L | 97 |
| 28) Bromodichloromethane | 8.06 | 83 | 222109 | 23.97 | ug/L | 98 |
| 29) 2-ceve | 8.28 | 63 | 223462 | 76.15 | ug/L | 99 |
| 30) Cis-1,3-dichloropropene | 8.41 | 75 | 277842 | 22.62 | ug/L | 99 |
| 32) Toluene | 8.66 | 92 | 517838 | 23.59 | ug/L | 90 |
| 33) Trans-1,3-dichloropropene | 8.83 | 75 | 186026 | 22.02 | ug/L | 96 |
| 34) 1,1,2-Trichloroethane | 8.97 | 97 | 99627 | 23.09 | ug/L | 97 |
| 35) Tetrachloroethene (PCE) | 9.04 | 166 | 268321 | 27.94 | ug/L | 98 |
| 36) 1,3-Dichloropropane | 9.09 | 76 | 169739 | 22.61 | ug/L | 98 |
| 37) Dibromochloromethane | 9.24 | 129 | 110687 | 23.02 | ug/L | 98 |
| 38) 1,2-Dibromoethane | 9.32 | 107 | 87107 | 22.26 | ug/L | 99 |
| 40) Chlorobenzene | 9.64 | 112 | 490697 | 23.62 | ug/L | 97 |
| 41) 1,1,1,2-Tetrachloroethane | 9.70 | 131 | 144321 | 22.34 | ug/L | 97 |
| 42) Ethylbenzene | 9.70 | 106 | 277020 | 23.37 | ug/L | 86 |
| 43) P+m-Xylene | 9.77 | 106 | 652840 | 46.52 | ug/L | 85 |
| 44) O-Xylene | 10.01 | 106 | 313319 | 23.14 | ug/L | 86 |
| 45) Styrene | 10.03 | 104 | 478254 | 23.64 | ug/L | 99 |
| 46) Bromoform | 10.16 | 173 | 50397 | 20.60 | ug/L | 97 |
| 47) Isopropylbenzene | 10.23 | 105 | 780482 | 21.56 | ug/L | 94 |
| 48) 1,1,2,2-Tetrachloroethane | 10.41 | 83 | 78475 | 20.24 | ug/L | 98 |
| 50) 1,2,3-Trichloropropane | 10.46 | 110 | 17356 | 22.51 | ug/L | 90 |
| 51) n-propylbenzene | 10.48 | 91 | 930115 | 22.37 | ug/L | 94 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB07.D Vial: 7
Acq On : 13 Feb 2017 8:52 am Operator: MGC
Sample : B[B1007-BS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:06 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration
DataAcq Meth : 82605

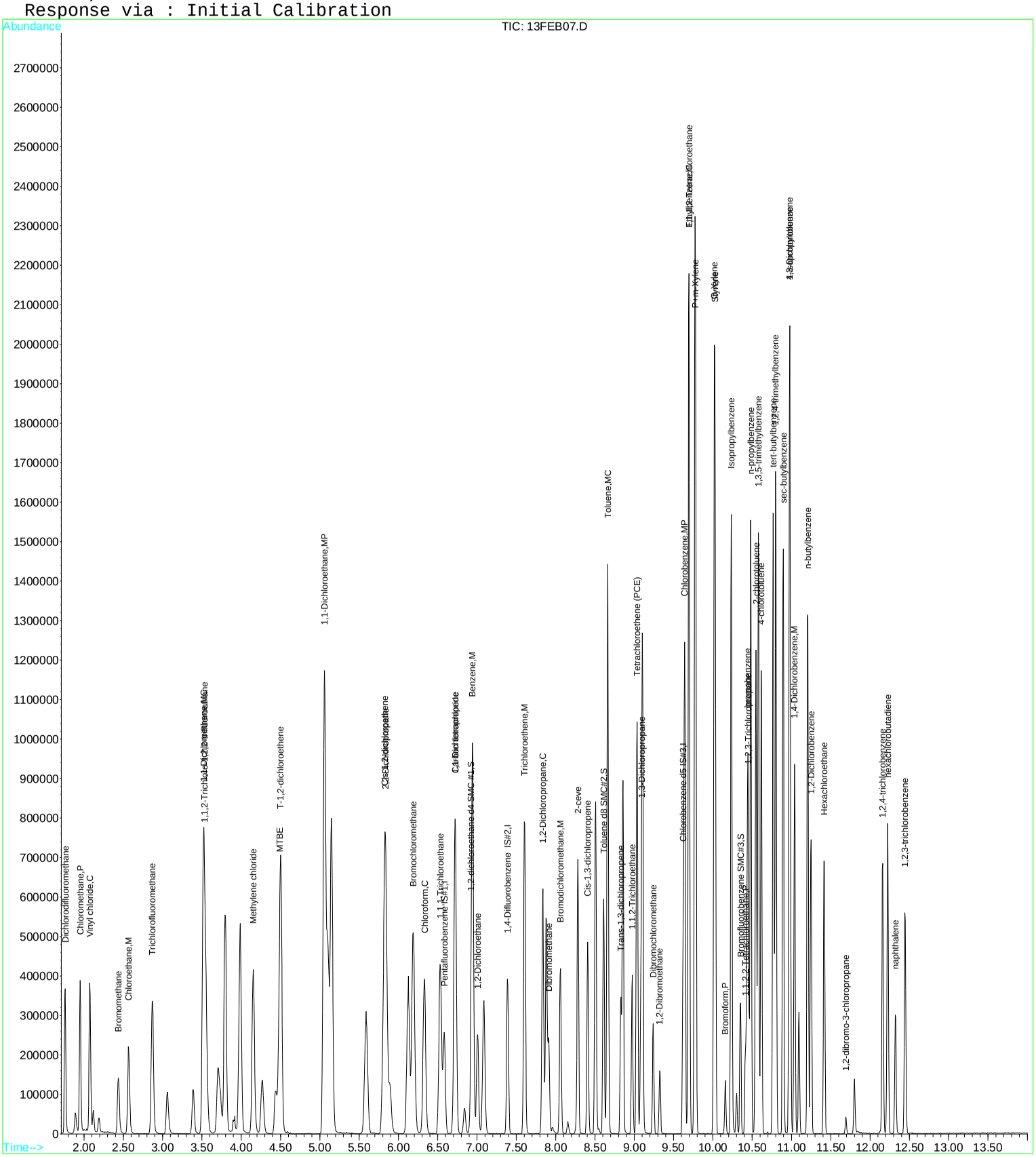
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 52) | bromobenzene | 10.44 | 156 | 185818 | 22.59 | ug/L | | 97 |
| 53) | 1,3,5-trimethylbenzene | 10.58 | 105 | 612152 | 22.10 | ug/L | | 92 |
| 54) | 2-chlorotoluene | 10.55 | 91 | 593705 | 23.22 | ug/L | | 97 |
| 55) | 4-chlorotoluene | 10.61 | 91 | 529093 | 23.09 | ug/L | | 97 |
| 56) | tert-butylbenzene | 10.77 | 119 | 601617 | 22.39 | ug/L | | 92 |
| 57) | 1,2,4-trimethylbenzene | 10.80 | 105 | 559936 | 22.31 | ug/L | | 94 |
| 58) | sec-butylbenzene | 10.90 | 105 | 792619 | 21.12 | ug/L | | 95 |
| 59) | 4-isopropyltoluene | 10.97 | 119 | 626141 | 22.08 | ug/L | | 97 |
| 60) | 1,3-Dichlorobenzene | 10.98 | 146 | 305564 | 21.18 | ug/L | | 99 |
| 61) | 1,4-Dichlorobenzene | 11.04 | 146 | 298446 | 22.33 | ug/L | | 97 |
| 62) | n-butylbenzene | 11.21 | 91 | 573633 | 23.54 | ug/L | | 94 |
| 63) | 1,2-Dichlorobenzene | 11.25 | 146 | 252815 | 21.40 | ug/L | | 97 |
| 64) | Hexachloroethane | 11.41 | 117 | 91942 | 18.72 | ug/L | # | 91 |
| 65) | 1,2-dibromo-3-chloropropan | 11.69 | 75 | 9127 | 17.29 | ug/L | | 89 |
| 66) | 1,2,4-trichlorobenzene | 12.16 | 180 | 197132 | 23.65 | ug/L | | 97 |
| 67) | hexachlorobutadiene | 12.22 | 225 | 146198 | 26.16 | ug/L | | 98 |
| 68) | naphthalene | 12.33 | 128 | 190080 | 23.44 | ug/L | | 100 |
| 69) | 1,2,3-trichlorobenzene | 12.45 | 180 | 167823 | 23.47 | ug/L | | 84 |

(#) = qualifier out of range (m) = manual integration

# Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB07.D Vial: 7
Acq On : 13 Feb 2017 8:52 am Operator: MGC
Sample : B[B1007-BS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 9:06 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201701\26-1700\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Feb 09 08:25:31 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB07.D Vial: 7
Acq On : 13 Feb 2017 8:52 am Operator: MGC
Sample : B[B1007-BS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:59 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration
DataAcq Meth : 82605

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene IS#1 | 6.58 | 168 | 208239 | 10.00 | ug/L | | 0.00 |
| 29) 1,4-Difluorobenzene IS#2 | 7.39 | 114 | 281468 | 10.00 | ug/L | | 0.00 |
| 36) Chlorobenzene d5 IS#3 | 9.62 | 119 | 69754 | 10.00 | ug/L | | 0.00 |

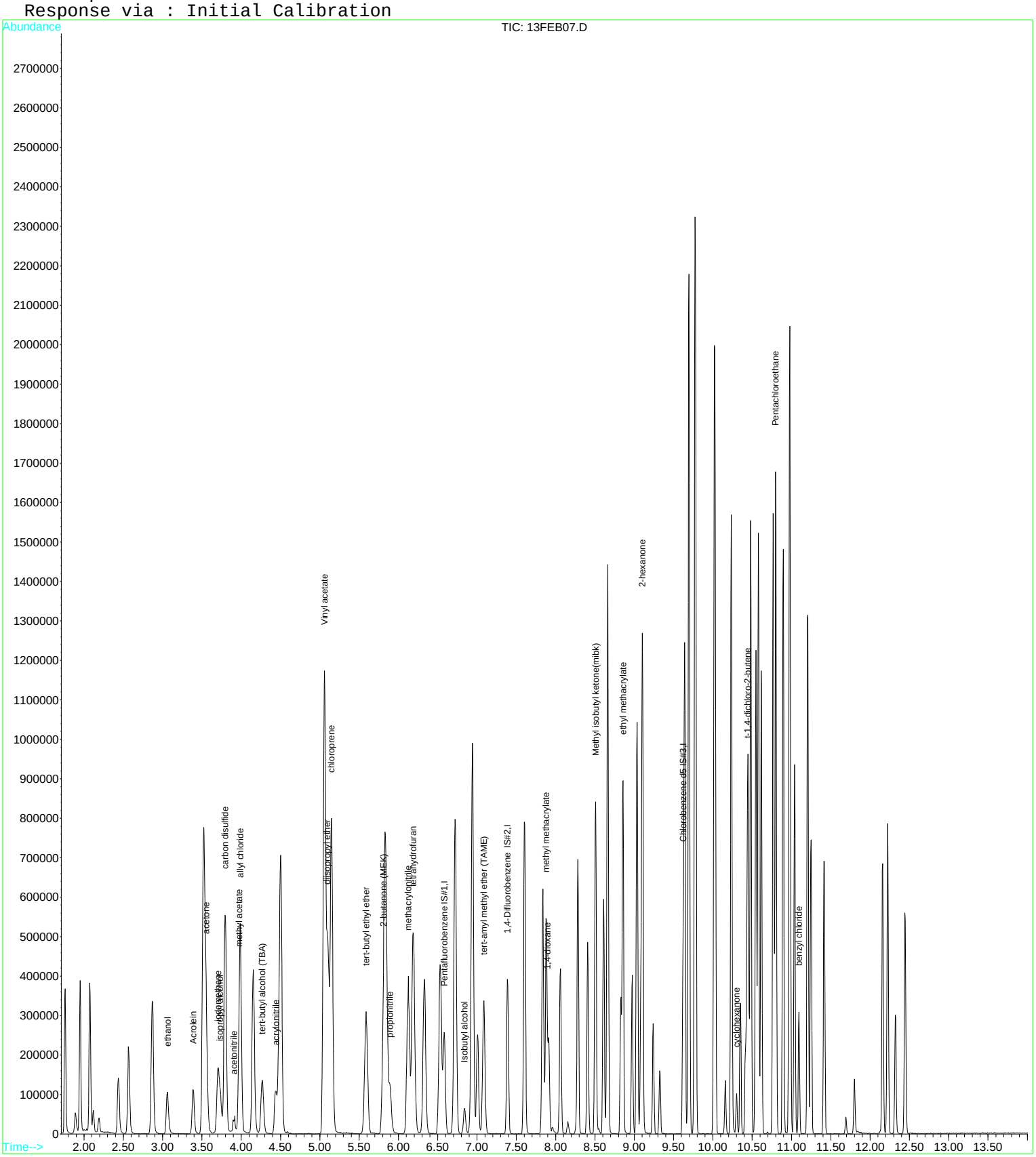
| Target Compounds | | | | | | | Qvalue |
|---|---|---|---|---|---|---|---|
| 2) ethanol | 3.06 | 45 | 132092 | 4109.72 | ug/L | | 94 |
| 6) isopropyl alcohol | 3.73 | 45 | 136688 | 896.93 | ug/L | # | 1 |
| 7) Acrolein | 3.38 | 56 | 123544 | 297.73 | ug/L | | 93 |
| 8) acetone | 3.56 | 43 | 265392 | 284.22 | ug/L | | 97 |
| 9) tert-butyl alcohol (TBA) | 4.27 | 59 | 193469 | 725.57 | ug/L | | 100 |
| 10) acetonitrile | 3.91 | 41 | 66489 | 194.05 | ug/L | # | 79 |
| 11) methyl acetate | 3.97 | 43 | 63990 | 21.13 | ug/L | | 96 |
| 12) allyl chloride | 3.98 | 41 | 690364 | 29.75 | ug/L | | 98 |
| 13) iodomethane | 3.70 | 142 | 232350 | 19.08 | ug/L | | 98 |
| 14) acrylonitrile | 4.43 | 53 | 102865 | 77.52 | ug/L | | 95 |
| 15) carbon disulfide | 3.79 | 76 | 910420 | 32.51 | ug/L | | 99 |
| 17) diisopropyl ether | 5.10 | 87 | 113738 | 17.20 | ug/L | | 90 |
| 18) Vinyl acetate | 5.06 | 43 | 1697000 | 128.46 | ug/L | | 100 |
| 19) chloroprene | 5.15 | 53 | 669318 | 32.11 | ug/L | | 99 |
| 20) tert-butyl ethyl ether | 5.59 | 59 | 374951 | 13.73 | ug/L | | 98 |
| 21) 2-butanone (MEK) | 5.80 | 43 | 238632 | 130.26 | ug/L | | 97 |
| 22) propionitrile | 5.90 | 54 | 173672 | 362.46 | ug/L | | 97 |
| 23) Isobutyl alcohol | 6.84 | 43 | 51950 | 382.16 | ug/L | | 93 |
| 24) methacrylonitrile | 6.13 | 67 | 185275 | 144.13 | ug/L | | 99 |
| 26) tetrahydrofuran | 6.19 | 42 | 298999 | 279.39 | ug/L | | 99 |
| 28) tert-amyl methyl ether (TA | 7.09 | 73 | 222141 | 14.65 | ug/L | | 97 |
| 30) methyl methacrylate | 7.88 | 69 | 173300 | 73.83 | ug/L | | 98 |
| 32) 1,4-dioxane | 7.90 | 88 | 39224 | 2233.52 | ug/L | | 92 |
| 33) Methyl isobutyl ketone(mib | 8.51 | 43 | 541724 | 138.53 | ug/L | | 99 |
| 34) ethyl methacrylate | 8.86 | 69 | 352058 | 70.43 | ug/L | | 99 |
| 35) 2-hexanone | 9.10 | 43 | 701709 | 277.78 | ug/L | | 99 |
| 38) cyclohexanone | 10.30 | 55 | 37999 | 122.19 | ug/L | | 99 |
| 39) t-1,4-dichloro-2-butene | 10.43 | 75 | 140462 | 129.79 | ug/L | # | 47 |
| 41) Pentachloroethane | 10.80 | 167 | 55888 | 14.93 | ug/L | # | 82 |
| 42) benzyl chloride | 11.10 | 91 | 168434 | 27.89 | ug/L | | 99 |

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\DATA\MS-V5\FEB2017\FEB13\13FEB07.D Vial: 7
Acq On : 13 Feb 2017 8:52 am Operator: MGC
Sample : B[B1007-BS1 Inst : MS-V5
Misc : 1 VO-107-69406;69354;69355;6935625ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 13 12:59 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201702\07-1017\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Feb 07 12:43:24 2017
Response via : Initial Calibration



**Raw Data - Batch Information**

**Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

**B[B1006**

**BC Laboratories**

Printed: 3/13/2017 4:27:00PM

Matrix: Water | Prepared using: Volatiles - GC/MS - EPA 5030 Water MS | SurrogateUsed: 6L13049

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703277-14 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703277-15 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703277-16 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703277-17 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-01 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-01RE1 B | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-02 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-03 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-04 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-04RE1 B | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-05 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-05RE1 B | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-06 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-07 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-08 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-09 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-10 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-10RE1 B | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-11 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-12 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-13 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-14 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-15 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-15RE1 B | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-16 A | gm8260w Full QC Navy | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |

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# PREPARATION BENCH SHEET

**B[B1006**

**BC Laboratories**

Printed: 3/13/2017 4:27:00PM

Matrix: Water | Prepared using: Volatiles - GC/MS - EPA 5030 Water MS | SurrogateUsed: 6L13049

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| B[B1006-BLK1 | QC | 2/12/2017 11:39AM | MGC | 25 | 25 | | | | 4 | |
| B[B1006-BS1 | QC | 2/12/2017 11:39AM | MGC | 25 | 25 | 7A23019 | | 12.5 | 4 | |
| B[B1006-MS1 | QC | 2/12/2017 11:39AM | MGC | 25 | 25 | 7A23019 | 1703480-14 | 12.5 | 4 | |
| B[B1006-MSD1 | QC | 2/12/2017 11:39AM | MGC | 25 | 25 | 7A23019 | 1703480-14 | 12.5 | 4 | |

| Surrogate Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 6L13049 | 8260 V5 WORK SURR. STD BATCH | Methanol VRL-15-5590 | 12/12/2016 by Miguel Chavez | 3/12/2017 |
| 7A23019 | 8260 V5 I SPIKE COMBO | meoh | 1/19/2017 by Miguel Chavez | 2/22/2017 |

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# PREPARATION BENCH SHEET

**B[B1007**

**BC Laboratories**

Printed: 3/13/2017 4:27:00PM

Matrix: Water | Prepared using: Volatiles - GC/MS - EPA 5030 Water MS | SurrogateUsed: 7B14014

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703480-17 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-18 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-19 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-20 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-21 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-22 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-22RE1 A | gm8260w Full QC Navy | 2/14/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-23 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-24 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-25 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-26 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-27 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-28 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-29 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-29RE1 A | gm8260w Full QC Navy | 2/14/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-30 A | gm8260w Full QC Navy | 2/14/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-31 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-32 A | gm8260w Full QC Navy | 2/14/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-33 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-33RE1 A | gm8260w Full QC Navy | 2/14/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-34 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-34RE1 A | gm8260w Full QC Navy | 2/14/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-35 A | gm8260w Full QC Navy | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| 1703480-36 A | gm8260w Full QC Navy | 2/14/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |
| B[B1007-BLK1 | QC | 2/13/2017 7:00AM | MGC | 25 | 25 | | | | 4 | |

# PREPARATION BENCH SHEET

**B[B1007**

**BC Laboratories**

Printed: 3/13/2017 4:27:00PM

Matrix: Water

Prepared using: Volatiles - GC/MS - EPA 5030 Water MS

SurrogateUsed: 7B14014

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| B[B1007-BS1 | QC | 2/13/2017 7:00AM | MGC | 25 | 25 | 7B14023 | | 12.5 | 4 | |
| B[B1007-MS1 | QC | 2/13/2017 7:00AM | MGC | 25 | 25 | 7B14023 | 1703480-17 | 12.5 | 4 | |
| B[B1007-MSD1 | QC | 2/13/2017 7:00AM | MGC | 25 | 25 | 7B14023 | 1703480-17 | 12.5 | 4 | |

| Surrogate Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 7B14014 | 8260 V5 WORK SURR. STD BATCH | Methanol VRL-15-5590 | 2/13/2017 by Miguel Chavez | 5/13/2017 |
| 7B14023 | 8260 V5 I SPIKE COMBO | meoh | 2/13/2017 by Miguel Chavez | 3/26/2017 |

**Raw Data - Sequence Information**

# ANALYSIS SEQUENCE

**1702048**

Instrument: MS-V5
Calibration ID: 1702011
Sequence Date: 01/26/2017
Printed: 3/13/2017 4:27:00PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702048-TUN1 | QC | | 1 | | 7A05057 | | |
| 1702048-CAL1 | QC | | 2 | | 7A26048 | | |
| 1702048-CAL2 | QC | | 3 | | 7A26049 | | |
| 1702048-CAL3 | QC | | 4 | | 7A26050 | | |
| 1702048-CAL4 | QC | | 5 | | 7A26051 | | |
| 1702048-CAL5 | QC | | 6 | | 7A26052 | | |
| 1702048-CAL6 | QC | | 7 | | 7A26053 | | |
| 1702048-TUN2 | QC | | 8 | | 7A05057 | | |
| 1702048-CAL7 | QC | | 9 | | 7B08028 | | |
| 1702048-CAL8 | QC | | 10 | | 7B08029 | | |
| 1702048-CAL9 | QC | | 11 | | 7B08030 | | |
| 1702048-CALA | QC | | 12 | | 7B08031 | | |
| 1702048-CALB | QC | | 13 | | 7B08032 | | |
| 1702048-CALC | QC | | 14 | | 7B08033 | | |
| 1702048-TUN3 | QC | | 15 | | 6J06023 | | |
| 1702048-CALD | QC | | 16 | | 6L13070 | | |
| 1702048-CALE | QC | | 17 | | 6L13071 | | |
| 1702048-CALF | QC | | 18 | | 6L13072 | | |
| 1702048-CALG | QC | | 19 | | 6L13073 | | |
| 1702048-CALH | QC | | 20 | | 6L13074 | | |
| 1702048-CALI | QC | | 21 | | 6L13075 | | |

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# ANALYSIS SEQUENCE

**1702423**

Instrument: MS-V5
Calibration ID: 1702011 Sequence Date: 02/12/2017 Printed: 3/13/2017 4:27:00PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702423-ICV1 | QC | | 1 | | 7A26054 | | |
| 1702423-ICB1 | QC | | 2 | | 6L13067 | | |
| 1702423-ICV2 | QC | | 3 | | 7B08034 | | |
| 1702423-ICB2 | QC | | 4 | | 6L13067 | | |
| 1702423-TUN1 | QC | | 5 | | 7A05056 | | |
| 1702423-CCV1 | QC | | 6 | | 7A23017 | | |
| 1702423-CCV2 | QC | | 7 | | 7A23018 | | |
| 1702423-CCV3 | QC | | 8 | | 6L14020 | | |
| 1702423-CCB1 | QC | | 9 | | 6L13067 | | |
| B[B0963-BLK1 | QC | | 10 | | | 6L13048 | |
| 1703197-22 | gm8260w Full QC Navy | A | 11 | | | 6L13048 | Full SAP LIST |
| 1703197-25 | gm8260w Full QC Navy | A | 12 | | | 6L13048 | Full SAP LIST |
| 1703277-01 | g8260w Full | A | 13 | | | 6L13048 | BatchQC |
| 1703277-01 | gm8260w Full QC Navy | A | 14 | | | 6L13048 | Full SAP LIST |
| 1703277-01 | gm8260w Full2 QC Navy | A | 15 | | | 6L13048 | BatchQC |
| 1703277-02 | gm8260w Full QC Navy | A | 16 | | | 6L13048 | Full SAP LIST |
| B[B0963-BS1 | QC | | 17 | | | 6L13048 | |
| B[B0963-MS1 | QC | | 18 | | | 6L13048 | |
| B[B0963-MSD1 | QC | | 19 | | | 6L13048 | |
| 1702783-13 | g8260w Full | A | 20 | | | 6L13048 | Full List + TPHG |
| 1702783-29 | g8260w Full | A | 21 | | | 6L13048 | Full List + TPHG |
| 1702783-23 | g8260w Full | A | 22 | | | 6L13048 | Full List + TPHG |
| 1702783-24 | g8260w Full | A | 23 | | | 6L13048 | Full List + TPHG |
| 1702783-25 | g8260w Full | A | 24 | | | 6L13048 | Full List + TPHG |
| B[B1006-BLK1 | QC | | 25 | | | 6L13048 | |
| 1703480-14 | gm8260w Full QC Navy | A | 26 | | | 6L13048 | Full SAP LIST |
| B[B1006-BS1 | QC | | 27 | | | 6L13048 | |
| B[B1006-MS1 | QC | | 28 | | | 6L13048 | |
| B[B1006-MSD1 | QC | | 29 | | | 6L13048 | |
| 1703197-35 | gm8260w Full2 QC Navy | A | 30 | | | 6L13048 | short list - Benzene & Ethylbenzen only |
| 1703197-05RE1 | gm8260w Full QC Navy | B | 31 | | | 6L13048 | Full SAP LIST |
| 1702423-TUN2 | QC | | 32 | | 7A05056 | | |
| 1702423-CCV4 | QC | | 33 | | 7A23017 | | |
| 1702423-CCV5 | QC | | 34 | | 7A23018 | | |
| 1702423-CCB2 | QC | | 35 | | 6L13067 | | |
| 1703277-12 | gm8260w Full QC Navy | A | 36 | | | 6L13048 | Full SAP LIST |
| 1703277-16 | gm8260w Full QC Navy | A | 37 | | | 6L13048 | Full SAP LIST |
| 1703277-17 | gm8260w Full QC Navy | A | 38 | | | 6L13048 | Full SAP LIST |

# ANALYSIS SEQUENCE

**1702423**

Instrument: MS-V5
Calibration ID: 1702011
Sequence Date: 02/12/2017
Printed: 3/13/2017 4:27:00PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1703277-03 | gm8260w Full QC Navy | A | 39 | | | 6L13048 | Full SAP LIST |
| 1703277-04 | gm8260w Full QC Navy | A | 40 | | | 6L13048 | Full SAP LIST |
| 1703277-05 | gm8260w Full QC Navy | A | 41 | | | 6L13048 | Full SAP LIST |
| 1703277-06 | gm8260w Full QC Navy | A | 42 | | | 6L13048 | Full SAP LIST |
| 1703277-07 | gm8260w Full QC Navy | A | 43 | | | 6L13048 | Full SAP LIST |
| 1703277-08 | gm8260w Full QC Navy | A | 44 | | | 6L13048 | Full SAP LIST |
| 1703277-09 | gm8260w Full QC Navy | A | 45 | | | 6L13048 | Full SAP LIST |
| 1703277-10 | gm8260w Full QC Navy | A | 46 | | | 6L13048 | Full SAP LIST |
| 1703277-11 | gm8260w Full QC Navy | A | 47 | | | 6L13048 | Full SAP LIST |
| 1703277-13 | gm8260w Full QC Navy | A | 48 | | | 6L13048 | Full SAP LIST |
| 1703277-14 | gm8260w Full QC Navy | A | 49 | | | 6L13048 | Full SAP LIST |
| 1703277-15 | gm8260w Full QC Navy | A | 50 | | | 6L13048 | Full SAP LIST |
| 1703197-10RE1 | gm8260w Full QC Navy | B | 51 | | | 6L13048 | Full SAP LIST |
| 1703197-11RE1 | gm8260w Full QC Navy | B | 52 | | | 6L13048 | Full SAP LIST |
| 1703197-21RE1 | gm8260w Full QC Navy | B | 53 | | | 6L13048 | Full SAP LIST |
| 1703480-01 | gm8260w Full QC Navy | A | 54 | | | 6L13048 | Full SAP LIST |
| 1703480-03 | gm8260w Full QC Navy | A | 55 | | | 6L13048 | Full SAP LIST |
| 1703480-04 | gm8260w Full QC Navy | A | 56 | | | 6L13048 | Full SAP LIST |
| 1703480-05 | gm8260w Full QC Navy | A | 57 | | | 6L13048 | Full SAP LIST |
| 1702423-TUN3 | QC | | 58 | | 7A05056 | | |
| 1702423-CCV6 | QC | | 59 | | 7A23017 | | |
| 1702423-CCV7 | QC | | 60 | | 7A23018 | | |
| 1702423-CCB3 | QC | | 61 | | 6L13067 | | |

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

## ANALYSIS SEQUENCE

**1702431**

Instrument: MS-V5
Calibration ID: 1702011 Sequence Date: 02/13/2017 Printed: 3/13/2017 4:27:00PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702431-ICV1 | QC | | 1 | | 7A26054 | | |
| 1702431-ICB1 | QC | | 2 | | 6L13067 | | |
| 1702431-ICV2 | QC | | 3 | | 7B08034 | | |
| 1702431-ICB2 | QC | | 4 | | 6L13067 | | |
| 1702431-TUN1 | QC | | 5 | | 7A05056 | | |
| 1702431-CCV1 | QC | | 6 | | 7B14020 | | |
| 1702431-CCV2 | QC | | 7 | | 7B14021 | | |
| 1702431-CCB1 | QC | | 8 | | 7B14015 | | |
| B[B1007-BLK1 | QC | | 9 | | | 7B14013 | |
| 1703480-17 | gm8260w Full QC Navy | A | 10 | | | 7B14013 | Full SAP LIST |
| B[B1007-BS1 | QC | | 11 | | | 7B14013 | |
| B[B1007-MS1 | QC | | 12 | | | 7B14013 | |
| B[B1007-MSD1 | QC | | 13 | | | 7B14013 | |
| 1703480-10 | gm8260w Full QC Navy | A | 14 | | | 7B14013 | Full SAP LIST |
| 1703480-13 | gm8260w Full QC Navy | A | 15 | | | 7B14013 | Full SAP LIST |
| 1703480-15 | gm8260w Full QC Navy | A | 16 | | | 7B14013 | Full SAP LIST |
| 1703480-19 | gm8260w Full QC Navy | A | 17 | | | 7B14013 | Full SAP LIST |
| 1703480-21 | gm8260w Full QC Navy | A | 18 | | | 7B14013 | Full SAP LIST |
| 1703480-22 | gm8260w Full QC Navy | A | 19 | | | 7B14013 | Full SAP LIST |
| 1703480-29 | gm8260w Full QC Navy | A | 20 | | | 7B14013 | Full SAP LIST |
| 1703480-31 | gm8260w Full QC Navy | A | 21 | | | 7B14013 | Full SAP LIST |
| 1703480-33 | gm8260w Full QC Navy | A | 22 | | | 7B14013 | Full SAP LIST |
| 1703480-34 | gm8260w Full QC Navy | A | 23 | | | 7B14013 | Full SAP LIST |
| 1703480-35 | gm8260w Full QC Navy | A | 24 | | | 7B14013 | Full SAP LIST |
| 1702431-TUN2 | QC | | 25 | | 7A05056 | | |
| 1702431-CCV3 | QC | | 26 | | 7B14020 | | |
| 1702431-CCV4 | QC | | 27 | | 7B14021 | | |
| 1702431-CCB2 | QC | | 28 | | 7B14015 | | |
| 1703480-23 | gm8260w Full QC Navy | A | 29 | | | 7B14013 | Full SAP LIST |
| 1703480-24 | gm8260w Full QC Navy | A | 30 | | | 7B14013 | Full SAP LIST |
| 1703480-25 | gm8260w Full QC Navy | A | 31 | | | 7B14013 | Full SAP LIST |
| 1703480-26 | gm8260w Full QC Navy | A | 32 | | | 7B14013 | Full SAP LIST |
| 1703480-27 | gm8260w Full QC Navy | A | 33 | | | 7B14013 | Full SAP LIST |
| 1703480-28 | gm8260w Full QC Navy | A | 34 | | | 7B14013 | Full SAP LIST |
| 1703480-02 | gm8260w Full QC Navy | A | 35 | | | 7B14013 | Full SAP LIST |
| 1703480-06 | gm8260w Full QC Navy | A | 36 | | | 7B14013 | Full SAP LIST |
| 1703480-07 | gm8260w Full QC Navy | A | 37 | | | 7B14013 | Full SAP LIST |
| 1703480-08 | gm8260w Full QC Navy | A | 38 | | | 7B14013 | Full SAP LIST |
| 1703480-09 | gm8260w Full QC Navy | A | 39 | | | 7B14013 | Full SAP LIST |

# ANALYSIS SEQUENCE

**1702431**

Instrument: MS-V5
Calibration ID: 1702011
Sequence Date: 02/13/2017
Printed: 3/13/2017 4:27:00PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1703480-11 | gm8260w Full QC Navy | A | 40 | | | 7B14013 | Full SAP LIST |
| 1703480-12 | gm8260w Full QC Navy | A | 41 | | | 7B14013 | Full SAP LIST |
| 1703480-16 | gm8260w Full QC Navy | A | 42 | | | 7B14013 | Full SAP LIST |
| 1703480-18 | gm8260w Full QC Navy | A | 43 | | | 7B14013 | Full SAP LIST |
| 1703480-20 | gm8260w Full QC Navy | A | 44 | | | 7B14013 | Full SAP LIST |
| 1703480-01RE1 | gm8260w Full QC Navy | B | 45 | | | 7B14013 | Full SAP LIST |
| 1703480-04RE1 | gm8260w Full QC Navy | B | 46 | | | 7B14013 | Full SAP LIST |
| 1703480-05RE1 | gm8260w Full QC Navy | B | 47 | | | 7B14013 | Full SAP LIST |
| 1703480-10RE1 | gm8260w Full QC Navy | B | 48 | | | 7B14013 | Full SAP LIST |
| 1703480-15RE1 | gm8260w Full QC Navy | B | 49 | | | 7B14013 | Full SAP LIST |
| 1703414-05 | g8260w Full | A | 50 | | | 7B14013 | customized list |
| 1703414-01 | g8260w Full | A | 51 | | | 7B14013 | customized list |
| 1703414-02 | g8260w Full | A | 52 | | | 7B14013 | customized list |
| 1703414-03 | g8260w Full | A | 53 | | | 7B14013 | customized list |
| 1702431-TUN3 | QC | | 54 | | 7A05056 | | |
| 1702431-CCV5 | QC | | 55 | | 7B14020 | | |
| 1702431-CCV6 | QC | | 56 | | 7B14021 | | |
| 1702431-CCB3 | QC | | 57 | | 7B14015 | | |

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

## ANALYSIS SEQUENCE

**1702527**

Instrument: MS-V5
Calibration ID: 1702011 Sequence Date: 02/14/2017 Printed: 3/13/2017 4:27:00PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702527-ICV1 | QC | | 1 | | 7A26054 | | |
| 1702527-ICB1 | QC | | 2 | | 6L13067 | | |
| 1702527-ICV2 | QC | | 3 | | 7B08034 | | |
| 1702527-ICB2 | QC | | 4 | | 6L13067 | | |
| 1702527-TUN1 | QC | | 5 | | 7A05056 | | |
| 1702527-CCV1 | QC | | 6 | | 7B14020 | | |
| 1702527-CCV2 | QC | | 7 | | 7B14021 | | |
| 1702527-CCB1 | QC | | 8 | | 7B14015 | | |
| B[B1156-BLK1 | QC | | 9 | | | 7B14013 | |
| 1703274-10 | g8260w Full | A | 10 | | | 7B14013 | BatchQC |
| 1703274-10 | gm8260w | A | 11 | | | 7B14013 | |
| 1703414-04 | g8260w Full | A | 12 | | | 7B14013 | customized list |
| 1703414-02RE1 | g8260w Full | B | 13 | | | 7B14013 | customized list |
| 1703414-03RE1 | g8260w Full | B | 14 | | | 7B14013 | customized list |
| B[B1156-BS1 | QC | | 15 | | | 7B14013 | |
| B[B1156-MS1 | QC | | 16 | | | 7B14013 | |
| B[B1156-MSD1 | QC | | 17 | | | 7B14013 | |
| 1703274-01 | gm8260w | A | 18 | | | 7B14013 | |
| 1703274-02 | gm8260w | A | 19 | | | 7B14013 | |
| 1703274-03 | gm8260w | A | 20 | | | 7B14013 | |
| 1703274-04 | gm8260w | A | 21 | | | 7B14013 | |
| 1703274-05 | gm8260w | A | 22 | | | 7B14013 | |
| 1703274-06 | gm8260w | A | 23 | | | 7B14013 | |
| 1703274-07 | gm8260w | A | 24 | | | 7B14013 | |
| 1703274-08 | gm8260w | A | 25 | | | 7B14013 | |
| 1703274-09 | gm8260w | A | 26 | | | 7B14013 | |
| 1703274-11 | gm8260w | A | 27 | | | 7B14013 | |
| 1703274-12 | gm8260w | A | 28 | | | 7B14013 | |
| 1702527-TUN2 | QC | | 29 | | 7A05057 | | |
| 1702527-CCV3 | QC | | 30 | | 7B14020 | | |
| 1702527-CCV4 | QC | | 31 | | 7B14021 | | |
| 1702527-CCB2 | QC | | 32 | | 7B14015 | | |
| 1703480-30 | gm8260w Full QC Navy | A | 33 | | | 7B14013 | Full SAP LIST |
| 1703480-32 | gm8260w Full QC Navy | A | 34 | | | 7B14013 | Full SAP LIST |
| 1703480-36 | gm8260w Full QC Navy | A | 35 | | | 7B14013 | Full SAP LIST |
| 1703480-22RE1 | gm8260w Full QC Navy | A | 36 | | | 7B14013 | Full SAP LIST |
| 1703480-29RE1 | gm8260w Full QC Navy | A | 37 | | | 7B14013 | Full SAP LIST |
| 1703480-33RE1 | gm8260w Full QC Navy | A | 38 | | | 7B14013 | Full SAP LIST |
| 1703480-34RE1 | gm8260w Full QC Navy | A | 39 | | | 7B14013 | Full SAP LIST |

# ANALYSIS SEQUENCE

**1702527**

Instrument: MS-V5
Calibration ID: 1702011
Sequence Date: 02/14/2017
Printed: 3/13/2017 4:27:00PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| B[B1157-BLK1 | QC | | 40 | | | 7B14013 | |
| 1703413-01 | g8260w Full2 | A | 41 | | | 7B14013 | BatchQC |
| 1703413-01 | g8260w Full | A | 42 | | | 7B14013 | BatchQC |
| 1703413-01 | g8260w Appendix 2 | A | 43 | | | 7B14013 | BatchQC |
| 1703413-01 | g8260w Appendix 1 | A | 44 | | | 7B14013 | |
| 1703413-02 | g8260w Appendix 1 | A | 45 | | | 7B14013 | |
| 1703413-03 | g8260w Appendix 1 | A | 46 | | | 7B14013 | |
| 1703413-04 | g8260w Appendix 1 | A | 47 | | | 7B14013 | |
| 1703413-05 | g8260w Appendix 1 | A | 48 | | | 7B14013 | |
| 1703413-06 | g8260w Appendix 1 | A | 49 | | | 7B14013 | |
| 1703177-01 | g8260w Full | A | 50 | | | 7B14013 | full scan,oxys |
| 1703177-02 | g8260w Full | A | 51 | | | 7B14013 | full scan,oxys |
| 1703177-03 | g8260w Full | A | 52 | | | 7B14013 | full scan,oxys |
| 1703177-04 | g8260w Full2 | A | 53 | | | 7B14013 | btex,oxys |
| 1703774-01 | g8260w Full | A | 54 | | | 7B14013 | Appendix II + oxygenates |
| 1703774-02 | g8260w Full | A | 55 | | | 7B14013 | Appendix II + oxygenates |
| 1703301-01 | g8260w Appendix 2 | A | 56 | | | 7B14013 | |
| B[B1157-BS1 | QC | | 57 | | | 7B14013 | |
| B[B1157-MS1 | QC | | 58 | | | 7B14013 | |
| B[B1157-MSD1 | QC | | 59 | | | 7B14013 | |
| 1702527-TUN3 | QC | | 60 | | 7A05057 | | |
| 1702527-CCV5 | QC | | 61 | | 7B14020 | | |
| 1702527-CCV6 | QC | | 62 | | 7B14021 | | |
| 1702527-CCB3 | QC | | 63 | | 7B14015 | | |

Reg ICC 1·26·17
X ICC 1·19·17

Directory: D:\DATA\MS-V5\JAN2017\JAN26

# Injection Log

| Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|
| 1 | 26jan01.d | 1. | IB | 1 | 26 Jan 2017 11:15 |
| 2 | 26jan02.d | 1. | 1701474-TUN1 | 1 VO-107-69044;50NG | 26 Jan 2017 11:38 |
| 3 | 26jan03.d | 1. | 1701474-TUN1 | 1 VO-107-69044;25NG | 26 Jan 2017 12:01 |
| 4 | 26jan04.d | 1. | IB | 1 | 26 Jan 2017 15:21 |
| 5 | 26jan05.d | 1. | 1701474-CAL1 | REG VO-107-69228;... | 26 Jan 2017 15:44 |
| 6 | 26jan06.d | 1. | 1701474-CAL1 | REG VO-107-69228;... | 26 Jan 2017 16:07 |
| 7 | 26jan07.d | 1. | 1701474-CAL2 | REG VO-107-69229;... | 26 Jan 2017 16:30 |
| 8 | 26jan08.d | 1. | 1701474-CAL3 | REG VO-107-69230;... | 26 Jan 2017 16:53 |
| 9 | 26jan09.d | 1. | 1701474-CAL4 | REG VO-107-69231;... | 26 Jan 2017 17:16 |
| 10 | 26jan10.d | 1. | 1701474-CAL5 | REG VO-107-69232;... | 26 Jan 2017 17:39 |
| 11 | 26jan11.d | 1. | 1701474-CAL6 | REG VO-107-69233;... | 26 Jan 2017 18:02 |
| 12 | 26jan12.d | 1. | IB | 1 | 26 Jan 2017 18:25 |
| 13 | 26jan13.d | 1. | 1701474-ICB | 1 ICB;25mL | 26 Jan 2017 18:48 |
| 14 | 26jan14.d | 1. | 1701474-CAL4 | REG VO-107-69231;... | 26 Jan 2017 19:12 |
| 15 | 26jan15.d | 1. | 1701474-ICV1 | REG VO-107-69234;... | 26 Jan 2017 19:35 |
| 16 | 26jan16.d | 1. | IB | 1 | 26 Jan 2017 19:59 |
| 17 | 26jan17.d | 1. | 1701474-ICB1 | 1 ICB;25mL;VRL-15... | 26 Jan 2017 20:23 |

IS/SURR Ref # VO-107-68854

BC LABORATORIES, INC.

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MS - V5
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# Injection Log

Directory: D:\DATA\MS-V5\FEB2017\FEB07

# CC: 01-26-17 02-07-17 R.+D. Ext.

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | 07feb01.d | 1. | 1702048-TUN1 | 1 VO-107-69044;25NG | 7 Feb 2017 06:23 |
| 2 | 2 | 07feb02.d | 1. | 1702048-CCV1 | 1 REG VO-107-6911... | 7 Feb 2017 06:47 |
| 3 | 3 | 07feb03.d | 1. | 1702048-CCV2 | 1 VO-107-69122;69... | 7 Feb 2017 07:10 |
| 4 | 4 | 07feb04.d | 1. | 1702048-LFB1 | 1 REG VO-107-6911... | 7 Feb 2017 07:34 |
| 5 | 5 | 07feb05.d | 1. | 1702048-TUN1 | 1 VO-107-69044;25NG | 7 Feb 2017 08:42 |
| 6 | 6 | 07feb06.d | 1. | 1702048-CAL7 | 1 VO-107-69296;25ML | 7 Feb 2017 09:07 |
| 7 | 7 | 07feb07.d | 1. | 1702048-CAL7 | 1 VO-107-69296;25ML | 7 Feb 2017 09:30 |
| 8 | 8 | 07feb08.d | 1. | 1702048-CAL8 | 1 VO-107-69297;25ML | 7 Feb 2017 09:53 |
| 9 | 9 | 07feb09.d | 1. | 1702048-CAL9 | 1 VO-107-69298;25ML | 7 Feb 2017 10:17 |
| 10 | 10 | 07feb10.d | 1. | 1702048-CALA | 1 VO-107-69299;25ML | 7 Feb 2017 10:40 |
| 11 | 11 | 07feb11.d | 1. | 1702048-CALB | 1 VO-107-69300;25ML | 7 Feb 2017 11:03 |
| 12 | 12 | 07feb12.d | 1. | 1702048-CALC | 1 VO-107-69301;25ML | 7 Feb 2017 11:27 |
| 13 | 13 | 07feb13.d | 1. | IB | 1 | 7 Feb 2017 11:50 |
| 14 | 14 | 07feb14.d | 1. | 1702048-ICB | 1 ICB;25ML | 7 Feb 2017 12:13 |
| 15 | 15 | 07feb15.d | 1. | 1702048-ICV2 | 1 VO-107-69302;25ML | 7 Feb 2017 12:46 |
| 16 | 16 | 07feb16.d | 1. | IB | 1 | 7 Feb 2017 13:09 |
| 17 | 17 | 07feb17.d | 1. | 1702048-ICB2 | 1 ICB2;25ML | 7 Feb 2017 13:33 |
| 18 | 18 | 07feb18.d | 1. | 1702104-TUN1 | 1 VO-107-69044;25NG | 7 Feb 2017 14:43 |
| 19 | 19 | 07feb19.d | 1. | 1702104-CCV1 | 1 REG VO-107-6911... | 7 Feb 2017 15:10 |
| 20 | 20 | 07feb20.d | 1. | 1702104-CCV2 | 1 VO-107-69122;69... | 7 Feb 2017 15:33 |
| 21 | 21 | 07feb21.d | 1. | 1702104-LFB1 | 1 REG VO-107-6911... | 7 Feb 2017 15:56 |
| 22 | 22 | 07feb22.d | 1. | 1702104-CCB1 | 1 CCB1;25ML | 7 Feb 2017 16:19 |
| 23 | 23 | 07feb23.d | 1. | B[B0572-BLK1 | 1 PB1;VRL-15-5640... | 7 Feb 2017 16:43 |
| 24 | 24 | 07feb24.d | 1. | 1702880-07 | 1 Unspiked;25ML;pH=1 | 7 Feb 2017 17:06 |
| 25 | 25 | 07feb25.d | 1. | B[B0572-BS1 | 1 VO-107-69120;25ML | 7 Feb 2017 17:29 |
| 26 | 26 | 07feb26.d | 1. | B[B0572-MS1 | 1 VO-107-69120;25ML | 7 Feb 2017 17:53 |
| 27 | 27 | 07feb27.d | 1. | B[B0572-MSD1 | 1 VO-107-69120;25ML | 7 Feb 2017 18:17 |
| 28 | 28 | 07feb28.d | 1. | IB | 1 | 7 Feb 2017 18:40 |
| 29 | 29 | 07feb29.d | 1. | IB | 1 | 7 Feb 2017 19:04 |
| 30 | 30 | 07feb30.d | 1. | 1702880-01 | 1 ;25ML;pH=1 | 7 Feb 2017 19:27 |
| 31 | 31 | 07feb31.d | 1. | 1702880-02 | 1 ;25ML;pH=1 | 7 Feb 2017 19:51 |
| 32 | 32 | 07feb32.d | 1. | 1702880-03 | 1 ;25ML;pH=1 | 7 Feb 2017 20:14 |
| 33 | 33 | 07feb33.d | 1. | 1702880-04 | 1 ;25ML;pH=1 | 7 Feb 2017 20:37 |
| 34 | 34 | 07feb34.d | 1. | 1702880-05 | 1 ;25ML;pH=1 | 7 Feb 2017 21:01 |
| 35 | 35 | 07feb35.d | 1. | 1702880-06 | 1 ;25ML;pH=1 | 7 Feb 2017 21:24 |
| 36 | 36 | 07feb36.d | 1. | 1702880-08 | 1 ;25ML;pH=1 | 7 Feb 2017 21:48 |
| 37 | 37 | 07feb37.d | 1. | 1702880-09 | 1 ;25ML;pH=1 | 7 Feb 2017 22:12 |
| 38 | 38 | 07feb38.d | 1. | 1702880-10 | 1 ;25ML;pH=1 | 7 Feb 2017 22:35 |
| 39 | 39 | 07feb39.d | 1. | 1703056-01 | 1 ;25ML;pH=1 | 7 Feb 2017 22:58 |
| 40 | 40 | 07feb40.d | 1. | 1703056-02 | 1 ;25ML;pH=1 | 7 Feb 2017 23:22 |
| 41 | 41 | 07feb41.d | 1. | 1703056-03 | 1 ;25ML;pH=1 | 7 Feb 2017 23:45 |
| 42 | 42 | 07feb42.d | 1. | 1703056-04 | 1 ;25ML;pH=1 | 8 Feb 2017 00:09 |
| 43 | 43 | 07feb43.d | 1. | 1703056-05 | 1 ;25ML;pH=1 | 8 Feb 2017 00:32 |
| 44 | 44 | 07feb44.d | 1. | 1703056-06 | 1 ;25ML;pH=1 | 8 Feb 2017 00:55 |
| 45 | 45 | 07feb45.d | 1. | 1703056-07 | 1 ;25ML;pH=1 | 8 Feb 2017 01:19 |
| 46 | 46 | 07feb46.d | 1. | 1703056-08 | 1 ;25ML;pH=1 | 8 Feb 2017 01:42 |
| 47 | 47 | 07feb47.d | 1. | 1703056-09 | 1 ;25ML;pH=1 | 8 Feb 2017 02:06 |
| 48 | 48 | 07feb48.d | 1. | IB | 1 | 8 Feb 2017 02:29 |
| 49 | 49 | 07feb49.d | 1. | 1702104-TUN2 | 1 VO-107-69044;25NG | 8 Feb 2017 02:52 |
| 50 | 50 | 07feb50.d | 1. | 1702104-CCV3 | 1 REG VO-107-6911... | 8 Feb 2017 03:15 |
| 51 | 51 | 07feb51.d | 1. | 1702104-CCV4 | 1 VO-107-69122;69... | 8 Feb 2017 03:39 |
| 52 | 52 | 07feb52.d | 1. | 1702104-LFB2 | 1 REG VO-107-6911... | 8 Feb 2017 04:02 |
| 53 | 53 | 07feb53.d | 1. | 1702104-CCB2 | 1 CCB2;25ML | 8 Feb 2017 04:25 |

not used

not used

IS/surr. ref # W-107-69854

BC LABORATORIES, INC.

**GC MS Instrument**
**MS - V5**
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ICC: Reg 1-26-17
CKRAS 2-7-17

# Injection Log

Directory: D:\DATA\MS-V5\FEB2017\FEB14

| Line | Vial | FileName | Multiplier | SampleName | Misc Info | Injected |
|---|---|---|---|---|---|---|
| 1 | 1 | 14feb01.d | 1. | 1702527-TUN1 | 1 VO-107-69044;25NG | 14 Feb 2017 06:06 |
| 2 | 2 | 14feb02.d | 1. | 1702527-CCV1 | 1 REG VO-107-6940... | 14 Feb 2017 06:30 |
| 3 | 3 | 14feb03.d | 1. | 1702527-CCV2 | 1 VO-107-69354;69... | 14 Feb 2017 06:54 |
| 4 | 4 | 14feb04.d | 1. | 1702527-CCB1 | 1 CCB1;25ML | 14 Feb 2017 07:17 |
| 5 | 5 | 14feb05.d | 1. | B[B1156-BLK1 | 1 PB1;VRL-15-5643... | 14 Feb 2017 07:40 |
| 6 | 6 | 14feb06.d | 1. | 1703274-10 | 1 Unspiked;25ML;pH=1 | 14 Feb 2017 08:03 |
| 7 | 7 | 14feb07.d | 1. | 1703414-04 | 1 ;25ML;pH=1 | 14 Feb 2017 08:26 |
| 8 | 8 | 14feb08.d | 1. | 1703414-02RE1 11 DCE, cis, TCE | 25 ;2ML/50ML;pH=1 | 14 Feb 2017 08:50 |
| 9 | 9 | 14feb09.d | 1. | 1703414-03RE1 11 DCE, cis, TCE | 25 ;2ML/50ML;pH=1 | 14 Feb 2017 09:13 |
| 10 | 10 | 14feb10.d | 1. | B[B1156-BS1 | 1 VO-107-69406;25ML | 14 Feb 2017 09:36 |
| 11 | 11 | 14feb11.d | 1. | B[B1156-MS1 | 1 VO-107-69406;25ML | 14 Feb 2017 09:59 |
| 12 | 12 | 14feb12.d | 1. | B[B1156-MSD1 | 1 VO-107-69406;25ML | 14 Feb 2017 10:22 |
| 13 | 13 | 14feb13.d | 1. | IB | 1 | 14 Feb 2017 10:46 |
| 14 | 14 | 14feb14.d | 1. | IB | 1 | 14 Feb 2017 11:09 |
| 15 | 15 | 14feb15.d | 1. | 1703274-01 | 1 ;25ML;pH=1 | 14 Feb 2017 11:32 |
| 16 | 16 | 14feb16.d | 1. | 1703274-02 | 1 ;25ML;pH=1 | 14 Feb 2017 11:55 |
| 17 | 17 | 14feb17.d | 1. | 1703274-03 | 1 ;25ML;pH=1 | 14 Feb 2017 12:19 |
| 18 | 18 | 14feb18.d | 1. | 1703274-04 | 1 ;25ML;pH=1 | 14 Feb 2017 12:42 |
| 19 | 19 | 14feb19.d | 1. | 1703274-05 | 1 ;25ML;pH=1 | 14 Feb 2017 13:05 |
| 20 | 20 | 14feb20.d | 1. | 1703274-06 | 1 ;25ML;pH=1 | 14 Feb 2017 13:28 |
| 21 | 21 | 14feb21.d | 1. | 1703274-07 | 1 ;25ML;pH=1 | 14 Feb 2017 13:51 |
| 22 | 22 | 14feb22.d | 1. | 1703274-08 | 1 ;25ML;pH=1 | 14 Feb 2017 14:15 |
| 23 | 23 | 14feb23.d | 1. | 1703274-09 | 1 ;25ML;pH=1 | 14 Feb 2017 14:38 |
| 24 | 24 | 14feb24.d | 1. | 1703274-10 not used | 1 ;25ML;pH=1 | 14 Feb 2017 15:01 |
| 25 | 25 | 14feb25.d | 1. | 1703274-11 | 1 ;25ML;pH=1 | 14 Feb 2017 15:24 |
| 26 | 26 | 14feb26.d | 1. | 1703274-12 | 1 ;25ML;pH=1 | 14 Feb 2017 15:47 |
| 27 | 27 | 14feb27.d | 1. | IB | 1 | 14 Feb 2017 16:10 |
| 28 | 28 | 14feb28.d | 1. | 1702527-TUN2 | 1 VO-107-69044;25NG | 14 Feb 2017 16:33 |
| 29 | 29 | 14feb29.d | 1. | 1702527-CCV3 | 1 REG VO-107-6940... | 14 Feb 2017 16:57 |
| 30 | 30 | 14feb30.d | 1. | 1702527-CCV4 | 1 VO-107-69354;69... | 14 Feb 2017 17:20 |
| 31 | 31 | 14feb31.d | 1. | 1702527-CCB2 | 1 CCB2;25ML | 14 Feb 2017 17:43 |
| 32 | 32 | 14feb32.d | 1. | 1703480-30 | 1 ;25ML;pH=1 | 14 Feb 2017 18:06 |
| 33 | 33 | 14feb33.d | 1. | 1703480-32 | 1 ;25ML;pH=1 | 14 Feb 2017 18:29 |
| 34 | 34 | 14feb34.d | 1. | 1703480-36 | 1 ;25ML;pH=1 | 14 Feb 2017 18:52 |
| 35 | 35 | 14feb35.d | 1. | 1703480-22RE1 cis12DCE, TCE | 10 ;5ML/50ML;pH=1 | 14 Feb 2017 19:16 |
| 36 | 36 | 14feb36.d | 1. | 1703480-29RE1 TCE | 100 ;0.5ML/50ML;pH=1 | 14 Feb 2017 19:39 |
| 37 | 37 | 14feb37.d | 1. | 1703480-33RE1 11 DCE | 10 ;5ML/50ML;pH=1 | 14 Feb 2017 20:02 |
| 38 | 38 | 14feb38.d | 1. | 1703480-34RE1 cis12DCE | 10 ;5ML/50ML;pH=1 | 14 Feb 2017 20:25 |
| 39 | 39 | 14feb39.d | 1. | B[B1157-BLK1 | 1 PB1;VRL-15-5643... | 14 Feb 2017 20:48 |
| 40 | 40 | 14feb40.d | 1. | 1703413-01 | 1 Unspiked;25ML;pH=1 | 14 Feb 2017 21:12 |
| 41 | 41 | 14feb41.d | 1. | 1703413-02 | 1 ;25ML;pH=1 | 14 Feb 2017 21:35 |
| 42 | 42 | 14feb42.d | 1. | 1703413-03 | 1 ;25ML;pH=1 | 14 Feb 2017 21:58 |
| 43 | 43 | 14feb43.d | 1. | 1703413-04 | 1 ;25ML;pH=1 | 14 Feb 2017 22:21 |
| 44 | 44 | 14feb44.d | 1. | 1703413-05 | 1 ;25ML;pH=1 | 14 Feb 2017 22:43 |
| 45 | 45 | 14feb45.d | 1. | 1703413-06 | 1 ;25ML;pH=1 | 14 Feb 2017 23:06 |
| 46 | 46 | 14feb46.d | 1. | 1703177-01 | 1 ;25ML;pH=1 | 14 Feb 2017 23:29 |
| 47 | 47 | 14feb47.d | 1. | 1703177-02 | 1 ;25ML;pH=1 | 14 Feb 2017 23:52 |
| 48 | 48 | 14feb48.d | 1. | 1703177-03 | 1 ;25ML;pH=1 | 15 Feb 2017 00:15 |
| 49 | 49 | 14feb49.d | 1. | 1703177-04 | 1 ;25ML;pH=1 | 15 Feb 2017 00:38 |
| 50 | 50 | 14feb50.d | 1. | 1703765-01 not used | 1 ;25ML;pH=1 | 15 Feb 2017 01:01 |
| 51 | 51 | 14feb51.d | 1. | 1703774-01 | 1 ;25ML;pH=1 | 15 Feb 2017 01:24 |
| 52 | 52 | 14feb52.d | 1. | 1703774-02 | 1 ;25ML;pH=1 | 15 Feb 2017 01:47 |
| 53 | 53 | 14feb53.d | 1. | 1703301-01 | 1 ;25ML;pH=1 | 15 Feb 2017 02:09 |
| 54 | 54 | 14feb54.d | 1. | B[B1157-BS1 | 1 VO-107-69406;25ML | 15 Feb 2017 02:32 |
| 55 | 55 | 14feb55.d | 1. | B[B1157-MS1 | 1 VO-107-69406;25ML | 15 Feb 2017 02:55 |
| 56 | 56 | 14feb56.d | 1. | B[B1157-MSD1 | 1 VO-107-69406;25ML | 15 Feb 2017 03:18 |
| 57 | 57 | 14feb57.d | 1. | IB | 1 | 15 Feb 2017 03:41 |
| 58 | 58 | 14feb58.d | 1. | 1702527-TUN3 | 1 VO-107-69044;25NG | 15 Feb 2017 04:04 |
| 59 | 59 | 14feb59.d | 1. | 1702527-CCV5 | 1 REG VO-107-6940... | 15 Feb 2017 04:27 |
| 60 | 60 | 14feb60.d | 1. | 1702527-CCV6 | 1 VO-107-69354;69... | 15 Feb 2017 04:49 |
| | 61 | 14feb61.d | 1. | 1702527-CCB3 | 1 CCB3;25ML | 15 Feb 2017 05:12 |

Ensure Ref# VO-107-69404

BC LABORATORIES, INC.

**GC MS Instrument**
**MS - V5**
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AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:27:00PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

## Notes and Definitions

| | |
|---|---|
| B | Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank. |
| D | The reported value is from a dilution. |
| E | The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration. |
| J | The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL. |
| U | The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client. |

BC LABORATORIES, INC.

**Work Order Number: 1703480**

# Laboratory Documentation Requirements
# For Data Validation of
# Wet Chemistry Analysis

**Prepared By**

**BC Laboratories**

**For AMEC Environmental & Infrastructure**

**5023146096**

All pages have been paginated and results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

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## Case Narrative

**Analyses Requested**: **Gen-Chem.**
**Submission #: 17-03480**

Method 160.1
Instrument ID: Manual
Sample Volume(s): 100ml/100ml

Method 300.0
Instrument ID: IC-5
Sample Volume(s): 20ml/20ml

Method 310.1
Instrument ID: MET-1
Sample Volume(s): 50ml/50ml

Method 353.2
Instrument ID: Kone-1
Volume(s): 20ml/20ml

Method 415.1
Instrument ID: TOC2
Sample Volume(s): 100ml/100ml

Method SM4500SD
Instrument ID: SPEC06
Volume(s):25ml/25ml

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

**Holding Time**: All analyses and preparations took place within holding times.

**Calibration:** Initial calibration criteria were met. Frequency and accuracy criteria for initial and continuing calibration verifications were met.

**Blanks**: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

**Laboratory Control Sample:** Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

**Matrix Spikes and Duplicates:** Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements were met, except EPA Method 415.1 Batch ID B[B0811-Dup1 the sample Relative Percent Difference (RPD) for Non-Volatile Organic Carbon (TOC) was outside QC limits.

# CHAIN OF CUSTODY

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

DATE: 2/7/2017
COC #: COC170207
PAGE: 1 OF 3

17-03480

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023146096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Oness | Project Phase: | .03 **** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases- (RSK175) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27EW-17_170207 | 02/07/17 08:50 -1 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 2 | 27EW-18_170207 | 02/07/17 09:55 -2 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 3 | 39B-MW1_170207 | 02/07/17 08:42 -3 | WG | N | N | X | | | | | | | | | | | | |
| 4 | IR11-OU2B-MW02_170207 | 02/07/17 10:05 -4 | WG | N | N | X | | | | | | | | | | | | |
| 5 | IR11-OU2B-MW03_170207 | 02/07/17 09:00 -5 | WG | N | N | X | | | | | | | | | | | | |
| 6 | M11-02_170207 | 02/07/17 08:20 -6 | WG | N | N | X | | | | | | | | | | | | |
| 7 | OU2B-MW02_170207 | 02/07/17 10:12 -7 | WG | N | N | X | | | | | | | | | | | | |
| 8 | OU2B-MW04_170207 | 02/07/17 09:32 -8 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW05A_170207 | 02/07/17 08:37 -9 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW05C_170207 | 02/07/17 10:22 -10 | WG | N | N | X | | | | | | | | | | | | |
| 11 | S21-TT-MW05D_170207 | 02/07/17 09:44 -11 | WG | N | N | X | | | | | | | | | | | | |
| 12 | S21-TT-MW05E_170207 | 02/07/17 09:12 -12 | WG | N | N | X | | | | | | | | | | | | |

CHK BY: KJ
DISTRIBUTION: SUB-OUT
SHORT HOLDING TIME: Cr+6 NO NO OP SS

| | | |
|---|---|---|
| Sampler's Signature: | Date: 2/7/17 | Time: 14:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 14:45 |
| Received By: | Date: 2/7/17 | Time: 14:45 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 1830 |
| Received By: | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | Date: 2/7 | Time: 2200 |

For Lab Use: DO Cl2 BOD MBAS COT

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____
Cooler Temperature at receipt: _____ °C

Comments:
X=Analyze H=Hold Analysis Request
Report DL/LOD/LOQ with Navy NIRIS valid values
VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg
NUMBER OF COOLERS SENT:

**Chain of Custody and Cooler Receipt Form for 1703480 Page 2 of 9**

# CHAIN OF CUSTODY

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

17-03480

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

DATE: 2/7/2017
COC #: COC170207
PAGE: 2 OF 3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023140096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Olness | Project Phase: | 03.**** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis

| No. | Sample ID | Date & Time Sampled | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases- (RSK175) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27EW-13_170207 | 02/07/17 11:05 -13 | WG | N | N | X | X | X | X | X | | X | | | | | | |
| 2 | 27MW01_170207 | 02/07/17 11:55 -14 | WG | N | Y | X | | | | | | | | | | | | |
| 3 | IR11-OU2B-MW01_170207 | 02/07/17 11:25 -15 | WG | N | N | X | X | X | X | X | X | | | | | | | |
| 4 | M07B-01_170207 | 02/07/17 11:25 -16 | WG | N | N | X | | | | | | | | | | | | |
| 5 | OU2B-MW01_170207 | 02/07/17 10:44 -17 | WG | N | Y | X | | | | | | | | | | | | |
| 6 | S11-TT-MW01C_170207 | 02/07/17 13:09 -18 | WG | N | N | X | | | | | | | | | | | | |
| 7 | S11-TT-MW01D_170207 | 02/07/17 12:34 -19 | WG | N | N | X | | | | | | | | | | | | |
| 8 | S11-TT-MW01E_170207 | 02/07/17 11:59 -20 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW01E_170207 | 02/07/17 12:50 -21 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW05B_170207 | 02/07/17 10:52 -22 | WG | N | N | X | | | | | | | | | | | | |
| 11 | TB14_170207 | 02/07/17 12:00 -23 | WQ | TB | N | X | | | | | | | | | | | | |
| 12 | TB15_170207 | 02/07/17 12:15 -24 | WQ | TB | N | X | | | | | | | | | | | | |

| | | |
|---|---|---|
| Sampler's Signature: | Date: 2/7/17 | Time: 16:65 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 16:65 |
| Received By: | Date: 2/7/17 | Time: 16:65 |
| Relinquished By/Affiliation: | Date: 2-7-17 | Time: 1830 |
| Received By: | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | Date: 2/7 | Time: 2200 |

For Lab Use

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| WSDOT contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | °C |

Comments:
X=Analyze H=Hold Analysis Request

Report DL/LOD/LOQ with Navy NIRIS valid values

VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg

NUMBER OF COOLERS SENT:

# CHAIN OF CUSTODY

MMEC Group
9177 Sky Park Court
San Diego, CA
(858) 278-3600

17-03480

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn:
Lab Phone#

DATE: 2/7/2017
COC #: COC170207
PAGE: 3 OF 3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Name: | Alameda Basewide | Project Contact: | Marina Mitchell | Bill To: | Amec Foster Wheeler | Disposal Instructions: | LAB |
| Project Number: | 5023146096 | Phone Number: | (503) 639-3400 | | 9210 Sky Park Court, Suite 200 | Shipment Method: | FEDEX |
| Project Manager: | Kevin Otness | Project Phase: | .03.**** | | San Diego, CA 92123 | Waybill Number: | N/A |

Sample Information / Methods for Analysis / RUSH

| No. | Sample ID | Date & Time Sampled | | Matrix | Sample Type | MS/MSD | VOCs (EPA 8260B) | Diss. Gases - (RSKI75) | Anions- (EPA 300.0) | Alkalinity (EPA 310.2) | Sulfide (EPA 376.2) | TDS (EPA 160.1) | TOC (EPA 415.1) | 24 Hour | 48 Hour | 72 Hour | 5 Days | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EB26_170207 | 02/07/17 14:00 | 25 | WQ | EB | N | X | | | | | | | | | | | | |
| 2 | EB27_170207 | 02/07/17 14:10 | 26 | WQ | EB | N | X | | | | | | | | | | | | |
| 3 | EB28_170207 | 02/07/17 14:20 | 27 | WQ | EB | N | X | | | | | | | | | | | | |
| 4 | EB29_170207 | 02/07/17 14:30 | 28 | WQ | EB | N | X | | | | | | | | | | | | |
| 5 | IR11-OU2B-MW04_170207 | 02/07/17 13:30 | 29 | WG | N | N | X | | | | | | | | | | | | |
| 6 | M11-01_170207 | 02/07/17 14:00 | 30 | WG | N | N | X | X | X | X | X | X | | | | | | | |
| 7 | S11-TT-MW01A_170207 | 02/07/17 14:11 | 31 | WG | N | N | X | | | | | | | | | | | | |
| 8 | S11-TT-MW01B_170207 | 02/07/17 13:48 | 32 | WG | N | N | X | | | | | | | | | | | | |
| 9 | S21-TT-MW01A_170207 | 02/07/17 13:51 | 33 | WG | N | N | X | | | | | | | | | | | | |
| 10 | S21-TT-MW01B_170207 | 02/07/17 13:55 | 34 | WG | N | N | X | | | | | | | | | | | | |
| 11 | S21-TT-MW01C_170207 | 02/07/17 13:23 | 35 | WG | N | N | X | | | | | | | | | | | | |
| 12 | S21-TT-MW01D_170207 | 02/07/17 13:25 | 36 | WG | N | N | X | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Sampler's Signature: | | Date: 2/7/17 | Time: 16:45 |
| Relinquished By/Affiliation: | | Date: 2/7/17 | Time: 16:45 |
| Received By: | | Date: 2/7/17 | Time: 16:45 |
| Relinquished By/Affiliation: | | Date: 2-7-17 | Time: 1830 |
| Received By: | | Date: 2/7/17 | Time: 18:30 |
| Relinquished By/Affiliation: | | Date: 2/7/17 | Time: 2200 |
| Received By (LAB): | | Date: 2/7 | Time: 2200 |

For Lab Use

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| WSDOT contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | ____ °C |

Comments:
X=Analyze H=Hold Analysis Request

Report DL/LOD/LOQ with Navy NIRIS valid values

VOC short list is Benzene & Ethylbenzene only
Major Cations are Na, K, Ca, Mg

NUMBER OF COOLERS SENT:

**Chain of Custody and Cooler Receipt Form for 1703480 Page 4 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 86

Submission #: 17-03480

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☐ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2200

Temperature: ( A ) 0.8 °C / ( C ) 1.1 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 15 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | G | G | G | | | | | | | |
| ~~8oz Cr+6~~ 8oz. unpres | | | | G→+ | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | H | H | H | J | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | I | I | I | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL | | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDL Date/Time: 2-8-17 Rev 21 05/23/2016
A = Actual / C = Corrected
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BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 Of 6

Submission #: 17-03480

| SHIPPING INFORMATION | SHIPPING CONTAINER | FREE LIQUID |
|---|---|---|
| Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐<br>BC Lab Field Service ☒ Other ☐ (Specify)_____ | Ice Chest ☒ None ☐ Box ☐<br>Other ☐ (Specify)_____ | YES ☐ NO ☐<br>W / S |

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

| COC Received | | |
|---|---|---|
| ☒ YES ☐ NO | Emissivity: 0.97 Container: VOA Thermometer ID: 207<br>Temperature: ( A ) 1.7 °C / ( C ) 1.9 °C | Date/Time 2/7 2209<br>Analyst Init GSP |

| SAMPLE CONTAINERS | SAMPLE NUMBERS 30 | 31 | 32 | 34 | 36 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | G=I | | | | | | | | | |
| 2oz Cr+6 | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | J | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | K | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PIA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL ~~TRAVEL BLANK~~ 096 | ABC | ABC | ABC | ABC | ABC | | | | | |
| 40ml VOA VIAL 098 | DEF | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:

Sample Numbering Completed By: JM Date/Time: 2-8-17 Rev 21 05/23/2016

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BC LABORATORIES INC. COOLER RECEIPT FORM Page 38 Of 55

Submission #: 17-0348 R

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VBA Thermometer ID: 207 Date/Time 2/7 2209
Temperature: (A) 1.7 °C / (C) 1.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 4 | 5 | 24 | 26 | 27 | 28 | 29 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL ~~TRAVEL BLANK~~ 096 | ABC | ABC | ABC | A-21 | ABC | 10% 2814 | ABC | ABC | ABC | ABC |
| 40ml VOA VIAL 098 | DEF | DEF | DEF | | DEF | ~~AB~~ | | | | |
| QT EPA 1664 40ml vial 094 | | | | | | AB | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDL Date/Time: 2-8-17 Rev 21 05/23/2016
A = Actual / C = Corrected (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

**Chain of Custody and Cooler Receipt Form for 1703480 Page 7 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 4 Of 6

Submission #: 17-03480

**SHIPPING INFORMATION**
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

**SHIPPING CONTAINER**
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

**FREE LIQUID**
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

**COC Received**
☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209
Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL 0416 | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC | ABC |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:
Sample Numbering Completed By: JDC Date/Time: 2-8-17 Rev 21 05/23/2016
A = Actual / C = Corrected (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

**Chain of Custody and Cooler Receipt Form for 1703480 Page 8 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 54 Of 56

Submission #: 17-03480 KG 3/17

| SHIPPING INFORMATION | SHIPPING CONTAINER | FREE LIQUID |
|---|---|---|
| Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐ | Ice Chest ☒ None ☐ Box ☐ | YES ☐ NO ☐ |
| BC Lab Field Service ☒ Other ☐ (Specify)_____ | Other ☐ (Specify)_____ | W / S |

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209

Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 25 | 33 |
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PtA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL 016 | ABC | ABC | ABC | ABC | ABC | ABC | ABC | A 28 17 AB | ABC | ABC |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:

Sample Numbering Completed By: JDL Date/Time: 2-8-17

A = Actual / C = Corrected

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**Chain of Custody and Cooler Receipt Form for 1703480 Page 9 of 9**

BC LABORATORIES INC. COOLER RECEIPT FORM Page 65 Of 66

Submission #: 17-03480

| SHIPPING INFORMATION | SHIPPING CONTAINER | FREE LIQUID |
|---|---|---|
| Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐ | Ice Chest ☒ None ☐ Box ☐ | YES ☐ NO ☐ |
| BC Lab Field Service ☒ Other ☐ (Specify)_____ | Other ☐ (Specify)_____ | W / S |

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☐ No ☐ All samples containers intact? Yes ☐ No ☐ Description(s) match COC? Yes ☐ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 207 Date/Time 2/7 2209

Temperature: (A) 2.7 °C / (C) 2.9 °C Analyst Init GSP

| SAMPLE CONTAINERS | SAMPLE NUMBERS 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| QT PE UNPRES | | | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz $Cr^{+6}$ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz. NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PIA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL | ABC | | | | | | | | | |
| QT EPA 1664 | | | | | | | | | | |
| PT ODOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608/8080 | | | | | | | | | | |
| QT EPA 515.1/8150 | | | | | | | | | | |
| QT EPA 525 | | | | | | | | | | |
| QT EPA 525 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 548 | | | | | | | | | | |
| QT EPA 549 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270 | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments:

Sample Numbering Completed By: JDL Date/Time: 2 8 17

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AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

**SDG:** **17-03480**
**Class:** **WET**
**Method:** **EPA-160.1**

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## EPA-160.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| IR11-OU2B-MW01_170207 | 1703480-15 |
| M11-01_170207 | 1703480-30 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 03-13-2017
Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-160.1

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** MANUAL

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Total Dissolved Solids @ 180 C | 10 | 10 | 10 | mg/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-160.1

**IR11-OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-15
File ID:
Sampled: 02/07/17 11:25
Prepared: 02/13/17 09:00
Analyzed: 02/13/17 09:00
Solids: 0.00
Preparation: No Prep
Initial/Final: 100 ml / 100 ml
Batch: B[B1037
Sequence: 1702644
Calibration: UNASSIGNED
Instrument: MANUAL

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Total Dissolved Solids @ 180 C | 57000 | 1000 | 1000 | 1000 | 100 | D | EPA-160.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-160.1

**M11-01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-30
File ID:
Sampled: 02/07/17 14:00
Prepared: 02/13/17 09:00
Analyzed: 02/13/17 09:00
Solids: 0.00
Preparation: No Prep
Initial/Final: 100 ml / 100 ml
Batch: B[B1037
Sequence: 1702644
Calibration: UNASSIGNED
Instrument: MANUAL

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Total Dissolved Solids @ 180 C | 520 | 33 | 33 | 33 | 3.33 | D | EPA-160.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-160.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B1037
Batch Matrix: Water
Preparation: No Prep

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| IR11-OU2B-MW01_170207 | 1703480-15 | | 02/13/17 09:00 | |
| M11-01_170207 | 1703480-30 | | 02/13/17 09:00 | |
| Blank | B[B1037-BLK1 | | 02/13/17 09:00 | |
| LCS | B[B1037-BS1 | | 02/13/17 09:00 | |
| Duplicate | B[B1037-DUP1 | | 02/13/17 09:00 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-160.1

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1037-BLK1 | File ID: | |
| Prepared: | 02/13/17 09:00 | Preparation: | No Prep | Initial/Final: | 100 ml / 100 ml |
| Analyzed: | 02/13/17 09:00 | Instrument: | MANUAL | | |
| Batch: | B[B1037 | Sequence: | 1702644 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| --- | Total Dissolved Solids @ 180 C | 6.7 | 6.7 | 6.7 | 6.7 | UD |

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Project Manager: Kelli Miller

**Duplicate**

# DUPLICATES

## EPA-160.1

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B1037
Preparation: No Prep
Source Sample Name: Duplicate

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B1037-DUP1
Lab Source ID: 1703560-10
Initial/Final: 100 ml / 100 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids @ 180 C | 10 | 1850.0 | | 1880.0 | | 1.61 | | EPA-160.1 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-160.1

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Matrix: | Water | | |
| Batch: | B[B1037 | Laboratory ID: | B[B1037-BS1 |
| Preparation: | No Prep | Initial/Final: | 20 ml / 20 ml |

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Total Dissolved Solids @ 180 C | 586.00 | 550.00 | 93.9 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-160.1

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702644 | Instrument: | MANUAL |
| Matrix: | Water | Calibration: | UNASSIGNED |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Blank | B[B1037-BLK1 | | 02/13/17 09:00 |
| LCS | B[B1037-BS1 | | 02/13/17 09:00 |
| Duplicate | B[B1037-DUP1 | | 02/13/17 09:00 |
| IR11-OU2B-MW01_170207 | 1703480-15 | | 02/13/17 09:00 |
| M11-01_170207 | 1703480-30 | | 02/13/17 09:00 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## EPA-160.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/13/17 09:00 | 6.00 | 7.00 | 02/13/17 09:00 | 6.00 | 7.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/13/17 09:00 | 6.00 | 7.00 | 02/13/17 09:00 | 6.00 | 7.00 | |

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

**Raw Data From Instrument MANUAL**

**Raw Data - Batch Information**

**Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

**B[B1037**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - No Prep | (No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703480-15 G | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703480-30 G | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-01 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-04 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-05 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-06 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-07 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-08 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-09 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| 1703560-10 D | i160.1w TDS | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| B[B1037-BLK1 | QC | 2/13/2017 9:00AM | CAD | 100 | 100 | | | | | |
| B[B1037-BS1 | QC | 2/13/2017 9:00AM | CAD | 20 | 20 | 7B09024 | | 20000 | | |
| B[B1037-DUP1 | QC | 2/13/2017 9:00AM | CAD | 100 | 100 | | 1703560-10 | | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 7B09024 | TDS LCSW WORKING | H20 (DI) | 2/8/2017 by Carla De la Torre | 8/8/2017 |

**Raw Data - Sequence Information**

# ANALYSIS SEQUENCE

**1702644**

Instrument: MANUAL
Calibration ID:
Sequence Date: 02/13/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| B[B1037-BLK1 | QC | | 1 | | | | |
| B[B1038-BLK1 | QC | | 2 | | | | |
| B[B1037-BS1 | QC | | 3 | | | | |
| 1703560-10 | i160.1w TDS | D | 4 | | | | |
| B[B1037-DUP1 | QC | | 5 | | | | |
| 1703560-01 | i160.1w TDS | D | 6 | | | | |
| 1703560-04 | i160.1w TDS | D | 7 | | | | |
| 1703560-05 | i160.1w TDS | D | 8 | | | | |
| 1703560-06 | i160.1w TDS | D | 9 | | | | |
| 1703560-07 | i160.1w TDS | D | 10 | | | | |
| 1703560-08 | i160.1w TDS | D | 11 | | | | |
| 1703560-09 | i160.1w TDS | D | 12 | | | | |
| 1703480-15 | i160.1w TDS | G | 13 | | | | |
| 1703480-30 | i160.1w TDS | G | 14 | | | | |
| B[B1038-BS1 | QC | | 15 | | | | |
| 1703515-01 | i160.1w TDS | A | 16 | | | | |
| 1703515-01 | iSM2540Cw TDS | A | 16 | | | | BatchQC |
| B[B1038-DUP1 | QC | | 17 | | | | |
| 1703506-01 | i160.1w TDS | A | 18 | | | | |
| 1703559-01 | i160.1w TDS | A | 19 | | | | |
| 1703567-01 | i160.1w TDS | D | 20 | | | | |
| 1703567-02 | i160.1w TDS | D | 21 | | | | |
| 1703567-03 | i160.1w TDS | D | 22 | | | | |
| 1703567-04 | i160.1w TDS | D | 23 | | | | |
| 1703567-05 | i160.1w TDS | D | 24 | | | | |
| 1703567-06 | i160.1w TDS | D | 25 | | | | |
| 1703578-01 | iSM2540Cw TDS | A | 26 | | | | |

BC LABORATORIES, INC.

# Solids Logbook

☑ W-TDS-ALL ☐ W-TOTAL-SOLIDS-ALL ☐ VOLATILES

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date: 02-13-17 | Analyst: CAD | QC #1 RPD | Reviewed by: | LCSW ID: BSW 020917 | Batch # BCB 1037 | Oven Temp. 180 |
| Run# 01 | Time: 9:00 | PQL: 10 mg/l | QC #2 RPD | Date Reviewed: | Comments: | Batch # BCB 1038 | Oven # 16 |
| | | Balance # 25 | | TDS | | Sequence # 1702644 | TH# 202 |

| Samp. # | Lab ID # | EC | mls | Beg. wt. #1 | #2 | Final Wt. #1 | #2 | #3 | #4 |
|---|---|---|---|---|---|---|---|---|---|
| Prep A1 | BLK | | 150 | 1.8751 | | 1.8749 | 1.8750 | | |
| LCSW A2 | BS1 | | 30 | 1.8343 | | 1.8456 | 1.8453 | | |
| 1. A3 | 3560 - 10 D | 2567 | 10 | 1.8429 | | 1.8616 | 1.8614 | | |
| 1. Dup A4 | Dup | 2567 | 10 | 1.8385 | | 1.8575 | 1.8573 | | |
| 2. A5 | 3560 - 01 D | > 500000 | (1:10) 1 | 1.8338 | | 1.8708 | 1.8710 | | |
| 3. A6 | 04 D | | | 1.8380 | | 1.8816 | 1.8813 | | |
| 4. A7 | 05 D | | | 1.8343 | | 1.8763 | 1.8760 | | |
| 5. A8 | 06 D | | | 1.8267 | | 1.8607 | 1.8607 | | |
| 6. A9 | 07 D | | | 1.8361 | | 1.8620 | 1.8621 | | |
| 7. A10 | 08 D | | | 1.8378 | | 1.8558 | 1.8562 | | |
| 8. A11 | 09 D | | | 1.8254 | | 1.8661 | 1.8664 | | |
| 9. A12 | 3480 - 15 G | 71100 | 1 | 1.8085 | | 1.8659 | 1.8657 | 180 | 1.8612 |
| 10. A13 | 30 G | 889 | 30 | 1.8455 | | 1.8611 | 1.8610 | | |
| LCSW A14 | BS2 | | 30 | 1.8340 | | 1.8448 | 1.8451 | | |
| 11. A15 | 3515 - 01 A | 1156 | 30 | 1.8289 | | 1.8440 | 1.8442 | | |
| 11. Dup A16 | Dup | 1156 | 30 | 1.8176 | | 1.8324 | 1.8326 | | |
| 12. A17 | 3506 - 01 A | 770 | 30 | 1.8319 | | 1.8473 | 1.8475 | | |
| 13. A18 | 3559 - 01 A | 640 | 50 | 1.8151 | | 1.8347 | 1.8347 | | |
| 14. A19 | 3567 - 01 D | 693 | 50 | 1.8352 | | 1.8572 | 1.8573 | | |
| 15. A20 | 02 D | 884 | 30 | 1.8327 | | 1.8496 | 1.8499 | | |
| 16. A21 | 03 D | 846 | 30 | 1.8374 | | 1.8550 | 1.8550 | | |
| 17. A22 | 04 D | 857 | 30 | 1.8462 | | 1.8641 | 1.8637 | | |
| 18. A23 | 05 D | 824 | 30 | 1.8398 | | 1.8469 | 1.8468 | | |
| 19. A24 | 06 D | 842 | 30 | 1.8420 | | 1.8605 | 1.8600 | | |
| 20. A25 | 3578 - 01 A | 212 | 100 | 89.4674 | | 89.4785 | 89.4787 | | |

BC LABORATORIES, INC

# BALANCE LOGBOOK

| | | | |
|---|---|---|---|
| **Balance # 25** | PDL # 10 | Type: Analytical # 8 | Troemner Serial # 4000014590/27365 |
| Made: Mettler Toledo | | | Model: AB204-S |
| Serial:1128300138 | | | Month: February / Year: 2017 |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.1005g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1004g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1003g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1002g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1001g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1000g | X | | X | | X | X | | | | | | | | | X | | | | | | | X | | | | | | | | | |
| 0.0999g | | X | | X | | | X | | | X | X | X | | X | | X | | X | X | X | | | | | | | | | | | |
| 0.0998g | | | | | | | | | X | | | | | | | | X | | | | X | | | | | | | | | | |
| 0.0997g | | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0996g | | | | | | | | | | | | | X | | | | | | | | | | | | | | | | | | |
| 0.0995g | | | | | | | | | | | | | | | | | | | | | | | X | X | | | | | | | |
| 200.0013g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0012g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0011g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0010g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0009g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0008g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0007g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0006g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0005g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0004g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0003g | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 200.0002g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0001g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200.0000g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9999g | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9998g | | | | | | | | | | X | X | X | | | | | | | | | | | | | | | | | | | |
| 199.9997g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9996g | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9995g | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 199.9994g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9993g | | | X | | | | | | | | | | X | | | | | | | | | | | | | | | | | | |
| 199.9992g | | | | | | | | | | | | | | | | | X | | | | | | | | | | | | | | |
| 199.9991g | | | | | | | | X | | | | | | | | | | | | | X | | | | | | | | | | |
| 199.9990g | X | X | | X | X | | | | | | | | | X | X | X | | X | X | X | | | X | X | | | | | | | |
| 199.9989g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9988g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9987g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199.9986g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INIT | CLY | CLY | CLY | M | M | SSM | SSM | SSM | SSM | SSM | [illegible] | [illegible] | CLY | CLY | CLY | CLY | CLY | M | M | JC | SSM | SSM | SSM | SSM | | | | | | | |

UPPER CONTROL LIMIT: 0.1005g LOWER CONTROL LIMIT: 0.0995 g Note: Used 100mg = 0.1g (Acceptance Limit between 0.1005g and 0.0995g)

UPPER CONTROL LIMIT: 200.0005g LOWER CONTROL LIMIT: 199.9995g

S:WPDOCS\WordPerfect\LAB_DOCS\LOGBOOK\BALNCL25LG Page ___ of 12 Note: **This balance is monitor on weekends. Check list on back of logbook.**

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

**SDG:** **17-03480**
**Class:** **WET**
**Method:** **EPA-300.0**

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## EPA-300.0

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| 27EW-17_170207 | 1703480-01 |
| 27EW-17_170207 | 1703480-01RE1 |
| 27EW-18_170207 | 1703480-02 |
| 27EW-13_170207 | 1703480-13 |
| 27EW-13_170207 | 1703480-13RE1 |
| IR11-OU2B-MW01_170207 | 1703480-15 |
| IR11-OU2B-MW01_170207 | 1703480-15RE1 |
| M11-01_170207 | 1703480-30 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 03-13-2017
Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-300.0

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** IC5

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Chloride | 0.092 | 0.1 | 0.5 | mg/L |
| Nitrate as NO3 | 0.096 | 0.23 | 0.44 | mg/L |
| Nitrate as N | 0.022 | 0.05 | 0.1 | mg/L |
| Sulfate | 0.14 | 0.2 | 1 | mg/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01
File ID: E020817A.seq-05
Sampled: 02/07/17 08:50
Prepared: 02/08/17 20:00
Analyzed: 02/08/17 21:49
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 16887-00-6 | Chloride | 9.8 | 0.092 | 0.10 | 0.50 | 1 | | EPA-300.0 |
| 14797-55-8 | Nitrate as N | 0.050 | 0.022 | 0.050 | 0.10 | 1 | U | EPA-300.0 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01RE1
File ID: E020817A.seq-40
Sampled: 02/07/17 08:50
Prepared: 02/08/17 20:00
Analyzed: 02/09/17 07:58
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14808-79-8 | Sulfate | 630 | 0.28 | 0.40 | 2.0 | 2 | D | EPA-300.0 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-02
File ID: E020817A.seq-09
Sampled: 02/07/17 09:55
Prepared: 02/08/17 20:00
Analyzed: 02/08/17 22:58
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 16887-00-6 | Chloride | 17 | 0.092 | 0.10 | 0.50 | 1 | | EPA-300.0 |
| 14797-55-8 | Nitrate as N | 0.19 | 0.022 | 0.050 | 0.10 | 1 | | EPA-300.0 |
| 14808-79-8 | Sulfate | 170 | 0.14 | 0.20 | 1.0 | 1 | | EPA-300.0 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**27EW-13_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-13
File ID: E020817A.seq-10
Sampled: 02/07/17 11:05
Prepared: 02/08/17 20:00
Analyzed: 02/08/17 23:16
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 16887-00-6 | Chloride | 35 | 0.18 | 0.20 | 1.0 | 2 | D | EPA-300.0 |
| 14797-55-8 | Nitrate as N | 0.10 | 0.044 | 0.10 | 0.20 | 2 | UD | EPA-300.0 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**27EW-13_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-13RE1
File ID: E020817A.seq-48
Sampled: 02/07/17 11:05
Prepared: 02/08/17 20:00
Analyzed: 02/09/17 10:17
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14808-79-8 | Sulfate | 1200 | 0.70 | 1.0 | 5.0 | 5 | D | EPA-300.0 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**IR11-OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-15
File ID: E020817A.seq-11
Sampled: 02/07/17 11:25
Prepared: 02/08/17 20:00
Analyzed: 02/08/17 23:33
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14797-55-8 | Nitrate as N | 5.0 | 2.2 | 5.0 | 10 | 100 | UD | EPA-300.0 |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

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Project: Alameda
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Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**IR11-OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-15RE1
File ID: E020817A.seq-49
Sampled: 02/07/17 11:25
Prepared: 02/08/17 20:00
Analyzed: 02/09/17 10:34
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 16887-00-6 | Chloride | 30000 | 18 | 20 | 100 | 200 | D | EPA-300.0 |
| 14808-79-8 | Sulfate | 3800 | 28 | 40 | 200 | 200 | D | EPA-300.0 |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-300.0

**M11-01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-30
File ID: E020817A.seq-12
Sampled: 02/07/17 14:00
Prepared: 02/08/17 20:00
Analyzed: 02/08/17 23:51
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0736
Sequence: 1702402
Calibration: UNASSIGNED
Instrument: IC5

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 16887-00-6 | Chloride | 39 | 0.092 | 0.10 | 0.50 | 1 | | EPA-300.0 |
| 14797-55-8 | Nitrate as N | 1.8 | 0.022 | 0.050 | 0.10 | 1 | | EPA-300.0 |
| 14808-79-8 | Sulfate | 40 | 0.14 | 0.20 | 1.0 | 1 | | EPA-300.0 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-300.0

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B0736
Batch Matrix: Water
Preparation: No Prep

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-17_170207 | 1703480-01 | E020817A.seq-05 | 02/08/17 20:00 | |
| 27EW-17_170207 | 1703480-01RE1 | E020817A.seq-40 | 02/08/17 20:00 | Added 2/9/2017 by TMS |
| 27EW-18_170207 | 1703480-02 | E020817A.seq-09 | 02/08/17 20:00 | |
| 27EW-13_170207 | 1703480-13 | E020817A.seq-10 | 02/08/17 20:00 | |
| 27EW-13_170207 | 1703480-13RE1 | E020817A.seq-48 | 02/08/17 20:00 | Added 2/9/2017 by TMS |
| IR11-OU2B-MW01_170207 | 1703480-15 | E020817A.seq-11 | 02/08/17 20:00 | |
| IR11-OU2B-MW01_170207 | 1703480-15RE1 | E020817A.seq-49 | 02/08/17 20:00 | Added 2/9/2017 by TMS |
| M11-01_170207 | 1703480-30 | E020817A.seq-12 | 02/08/17 20:00 | |
| Blank | B[B0736-BLK1 | E020817A.seq-03 | 02/08/17 20:00 | |
| LCS | B[B0736-BS1 | E020817A.seq-04 | 02/08/17 20:00 | |
| 27EW-17_170207 | B[B0736-DUP1 | E020817A.seq-41 | 02/08/17 20:00 | |
| 27EW-17_170207 | B[B0736-MS1 | E020817A.seq-42 | 02/08/17 20:00 | |
| 27EW-17_170207 | B[B0736-MSD1 | E020817A.seq-43 | 02/08/17 20:00 | |

AMEC Environmental & Infrastructure
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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-300.0

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B0736-BLK1 | File ID: | E020817A.seq-03 |
| Prepared: | 02/08/17 20:00 | Preparation: | No Prep | Initial/Final: | 20 ml / 20 ml |
| Analyzed: | 02/08/17 21:14 | Instrument: | IC5 | | |
| Batch: | B[B0736 | Sequence: | 1702402 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 16887-00-6 | Chloride | 0.10 | 0.092 | 0.10 | 0.50 | U |
| 14797-55-8 | Nitrate as N | 0.050 | 0.022 | 0.050 | 0.10 | U |
| 14808-79-8 | Sulfate | 0.20 | 0.14 | 0.20 | 1.0 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
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Project Manager: Kelli Miller

**27EW-17_170207**

# DUPLICATES
## EPA-300.0

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B0736
Preparation: No Prep
Source Sample Name: 27EW-17_170207

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B0736-DUP1
Lab Source ID: 1703480-01RE1
Initial/Final: 20 ml / 20 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Chloride | 10 | 9.5120 | | 9.4700 | | 0.443 | | EPA-300.0 |
| Nitrate as NO3 | 10 | ND | | ND | | | | EPA-300.0 |
| Nitrate as N | 10 | ND | | ND | | | | EPA-300.0 |
| Sulfate | 10 | 634.39 | | 634.99 | | 0.0933 | | EPA-300.0 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-300.0

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0736
Laboratory ID: B[B0736-MS1
Preparation: No Prep
Initial/Final: 19.8 ml / 20 ml
Source Sample Number: 1703480-01RE1

| COMPOUND | SPIKE ADDED (mg/L) | SAMPLE CONCENTRATION (mg/L) | MS CONCENTRATION (mg/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Chloride | 101.01 | 9.5120 | 115.82 | 105 | 80 - 120 |
| Nitrate as NO3 | 44.715 | ND | 45.189 | 101 | 80 - 120 |
| Nitrate as N | 10.101 | ND | 10.208 | 101 | 80 - 120 |
| Sulfate | 202.02 | 634.39 | 823.80 | 93.8 | 80 - 120 |

| COMPOUND | SPIKE ADDED (mg/L) | MSD CONCENTRATION (mg/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Chloride | 101.01 | 116.24 | 106 | 0.360 | 10 | 80 - 120 |
| Nitrate as NO3 | 44.715 | 45.270 | 101 | 0.178 | 10 | 80 - 120 |
| Nitrate as N | 10.101 | 10.226 | 101 | 0.178 | 10 | 80 - 120 |
| Sulfate | 202.02 | 824.70 | 94.2 | 0.109 | 10 | 80 - 120 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-300.0

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0736
Laboratory ID: B[B0736-BS1
Preparation: No Prep
Initial/Final: 20 ml / 20 ml

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Chloride | 50.000 | 50.755 | 102 | 90 - 110 |
| Nitrate as NO3 | 22.134 | 22.214 | 100 | 90 - 110 |
| Nitrate as N | 5.0000 | 5.0180 | 100 | 90 - 110 |
| Sulfate | 100.00 | 101.35 | 101 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-300.0

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702402
Instrument: IC5
Matrix: Water
Calibration: UNASSIGNED

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Initial Cal Check | 1702402-ICV1 | E020817A.seq-01 | 02/08/17 20:39 |
| Initial Cal Blank | 1702402-ICB1 | E020817A.seq-02 | 02/08/17 20:57 |
| Blank | B[B0736-BLK1 | E020817A.seq-03 | 02/08/17 21:14 |
| LCS | B[B0736-BS1 | E020817A.seq-04 | 02/08/17 21:31 |
| 27EW-17_170207 | 1703480-01 | E020817A.seq-05 | 02/08/17 21:49 |
| 27EW-18_170207 | 1703480-02 | E020817A.seq-09 | 02/08/17 22:58 |
| 27EW-13_170207 | 1703480-13 | E020817A.seq-10 | 02/08/17 23:16 |
| IR11-OU2B-MW01_170207 | 1703480-15 | E020817A.seq-11 | 02/08/17 23:33 |
| M11-01_170207 | 1703480-30 | E020817A.seq-12 | 02/08/17 23:51 |
| Calibration Check | 1702402-CCV1 | E020817A.seq-13 | 02/09/17 00:08 |
| Calibration Blank | 1702402-CCB1 | E020817A.seq-14 | 02/09/17 00:25 |
| Calibration Check | 1702402-CCV2 | E020817A.seq-20 | 02/09/17 02:10 |
| Calibration Blank | 1702402-CCB2 | E020817A.seq-21 | 02/09/17 02:27 |
| Calibration Check | 1702402-CCV3 | E020817A.seq-32 | 02/09/17 05:39 |
| Calibration Blank | 1702402-CCB3 | E020817A.seq-33 | 02/09/17 05:56 |
| 27EW-17_170207 | 1703480-01RE1 | E020817A.seq-40 | 02/09/17 07:58 |
| 27EW-17_170207 | B[B0736-DUP1 | E020817A.seq-41 | 02/09/17 08:15 |
| 27EW-17_170207 | B[B0736-MS1 | E020817A.seq-42 | 02/09/17 08:33 |
| 27EW-17_170207 | B[B0736-MSD1 | E020817A.seq-43 | 02/09/17 08:50 |
| Calibration Check | 1702402-CCV4 | E020817A.seq-44 | 02/09/17 09:07 |
| Calibration Blank | 1702402-CCB4 | E020817A.seq-45 | 02/09/17 09:25 |
| 27EW-13_170207 | 1703480-13RE1 | E020817A.seq-48 | 02/09/17 10:17 |
| IR11-OU2B-MW01_170207 | 1703480-15RE1 | E020817A.seq-49 | 02/09/17 10:34 |
| Calibration Check | 1702402-CCV5 | E020817A.seq-56 | 02/09/17 12:36 |
| Calibration Blank | 1702402-CCB5 | E020817A.seq-57 | 02/09/17 12:54 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# BLANKS
## EPA-300.0

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: IC5
Project: Alameda
Sequence: 1702402
Calibration: UNASSIGNED

| Lab Sample ID | Analyte | Found | DL | LOD | LOQ | Units | C | Method |
|---|---|---|---|---|---|---|---|---|
| 1702402-ICB1 | Chloride | 0.0000 | 0.092 | | 0.50 | mg/L | U | EPA-300.0 |
| | Nitrate as NO3 | 0.0000 | 0.096 | | 0.44 | mg/L | U | EPA-300.0 |
| | Nitrate as N | 0.0000 | 0.022 | | 0.10 | mg/L | U | EPA-300.0 |
| | Sulfate | 0.0000 | 0.14 | | 1.0 | mg/L | U | EPA-300.0 |
| 1702402-CCB1 | Chloride | 0.0000 | 0.092 | | 0.50 | mg/L | U | EPA-300.0 |
| | Nitrate as NO3 | 0.0000 | 0.096 | | 0.44 | mg/L | U | EPA-300.0 |
| | Nitrate as N | 0.0000 | 0.022 | | 0.10 | mg/L | U | EPA-300.0 |
| | Sulfate | 0.0000 | 0.14 | | 1.0 | mg/L | U | EPA-300.0 |
| 1702402-CCB2 | Chloride | 0.0000 | 0.092 | | 0.50 | mg/L | U | EPA-300.0 |
| | Nitrate as NO3 | 0.0000 | 0.096 | | 0.44 | mg/L | U | EPA-300.0 |
| | Nitrate as N | 0.0000 | 0.022 | | 0.10 | mg/L | U | EPA-300.0 |
| | Sulfate | 0.0000 | 0.14 | | 1.0 | mg/L | U | EPA-300.0 |
| 1702402-CCB3 | Chloride | 0.0000 | 0.092 | | 0.50 | mg/L | U | EPA-300.0 |
| | Nitrate as NO3 | 0.0000 | 0.096 | | 0.44 | mg/L | U | EPA-300.0 |
| | Nitrate as N | 0.0000 | 0.022 | | 0.10 | mg/L | U | EPA-300.0 |
| | Sulfate | 0.0000 | 0.14 | | 1.0 | mg/L | U | EPA-300.0 |
| 1702402-CCB4 | Chloride | 0.0000 | 0.092 | | 0.50 | mg/L | U | EPA-300.0 |
| | Nitrate as NO3 | 0.0000 | 0.096 | | 0.44 | mg/L | U | EPA-300.0 |
| | Nitrate as N | 0.0000 | 0.022 | | 0.10 | mg/L | U | EPA-300.0 |
| | Sulfate | 0.0000 | 0.14 | | 1.0 | mg/L | U | EPA-300.0 |
| 1702402-CCB5 | Chloride | 0.0000 | 0.092 | | 0.50 | mg/L | U | EPA-300.0 |
| | Nitrate as NO3 | 0.0000 | 0.096 | | 0.44 | mg/L | U | EPA-300.0 |
| | Nitrate as N | 0.0000 | 0.022 | | 0.10 | mg/L | U | EPA-300.0 |
| | Sulfate | 0.0000 | 0.14 | | 1.0 | mg/L | U | EPA-300.0 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL AND CONTINUING CALIBRATION CHECK

## EPA-300.0

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: IC5
Control Limt: +/- 10.00%

SDG: 17-03480
Project: Alameda
Calibration: UNASSIGNED
Sequence: 1702402

| Lab Sample ID | Analyte | True | Found | %R | Units | Method |
|---|---|---|---|---|---|---|
| 1702402-ICV1 | Chloride | 50.000 | 50.190 | 100 | mg/L | EPA-300.0 |
| | Nitrate as NO3 | 22.134 | 21.802 | 98.5 | mg/L | EPA-300.0 |
| | Nitrate as N | 5.0000 | 4.9250 | 98.5 | mg/L | EPA-300.0 |
| | Sulfate | 100.00 | 99.685 | 99.7 | mg/L | EPA-300.0 |
| 1702402-CCV1 | Chloride | 50.000 | 50.262 | 101 | mg/L | EPA-300.0 |
| | Nitrate as NO3 | 22.134 | 22.037 | 99.6 | mg/L | EPA-300.0 |
| | Nitrate as N | 5.0000 | 4.9780 | 99.6 | mg/L | EPA-300.0 |
| | Sulfate | 100.00 | 100.21 | 100 | mg/L | EPA-300.0 |
| 1702402-CCV2 | Chloride | 50.000 | 50.026 | 100 | mg/L | EPA-300.0 |
| | Nitrate as NO3 | 22.134 | 21.877 | 98.8 | mg/L | EPA-300.0 |
| | Nitrate as N | 5.0000 | 4.9420 | 98.8 | mg/L | EPA-300.0 |
| | Sulfate | 100.00 | 99.789 | 99.8 | mg/L | EPA-300.0 |
| 1702402-CCV3 | Chloride | 50.000 | 51.338 | 103 | mg/L | EPA-300.0 |
| | Nitrate as NO3 | 22.134 | 22.329 | 101 | mg/L | EPA-300.0 |
| | Nitrate as N | 5.0000 | 5.0440 | 101 | mg/L | EPA-300.0 |
| | Sulfate | 100.00 | 101.00 | 101 | mg/L | EPA-300.0 |
| 1702402-CCV4 | Chloride | 50.000 | 50.184 | 100 | mg/L | EPA-300.0 |
| | Nitrate as NO3 | 22.134 | 21.948 | 99.2 | mg/L | EPA-300.0 |
| | Nitrate as N | 5.0000 | 4.9580 | 99.2 | mg/L | EPA-300.0 |
| | Sulfate | 100.00 | 100.23 | 100 | mg/L | EPA-300.0 |
| 1702402-CCV5 | Chloride | 50.000 | 50.739 | 101 | mg/L | EPA-300.0 |
| | Nitrate as NO3 | 22.134 | 22.059 | 99.7 | mg/L | EPA-300.0 |
| | Nitrate as N | 5.0000 | 4.9830 | 99.7 | mg/L | EPA-300.0 |
| | Sulfate | 100.00 | 100.78 | 101 | mg/L | EPA-300.0 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## EPA-300.0

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/08/17 20:00 | 1.00 | 28.00 | 02/08/17 21:49 | 1.00 | 28.00 | |
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/08/17 20:00 | 1.54 | 2.00 | 02/08/17 21:49 | 1.54 | 2.00 | |
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/08/17 20:00 | 2.00 | 28.00 | 02/09/17 07:58 | 2.00 | 28.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/08/17 20:00 | 1.00 | 28.00 | 02/08/17 22:58 | 1.00 | 28.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/08/17 20:00 | 1.54 | 2.00 | 02/08/17 22:58 | 1.54 | 2.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/08/17 20:00 | 1.00 | 28.00 | 02/08/17 23:16 | 1.00 | 28.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/08/17 20:00 | 1.51 | 2.00 | 02/08/17 23:16 | 1.51 | 2.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/08/17 20:00 | 2.00 | 28.00 | 02/09/17 10:17 | 2.00 | 28.00 | |
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/08/17 20:00 | 1.51 | 2.00 | 02/08/17 23:33 | 1.51 | 2.00 | |
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/08/17 20:00 | 2.00 | 28.00 | 02/09/17 10:34 | 2.00 | 28.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/08/17 20:00 | 1.00 | 28.00 | 02/08/17 23:51 | 1.00 | 28.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/08/17 20:00 | 1.41 | 2.00 | 02/08/17 23:51 | 1.41 | 2.00 | |

* Holding time not met

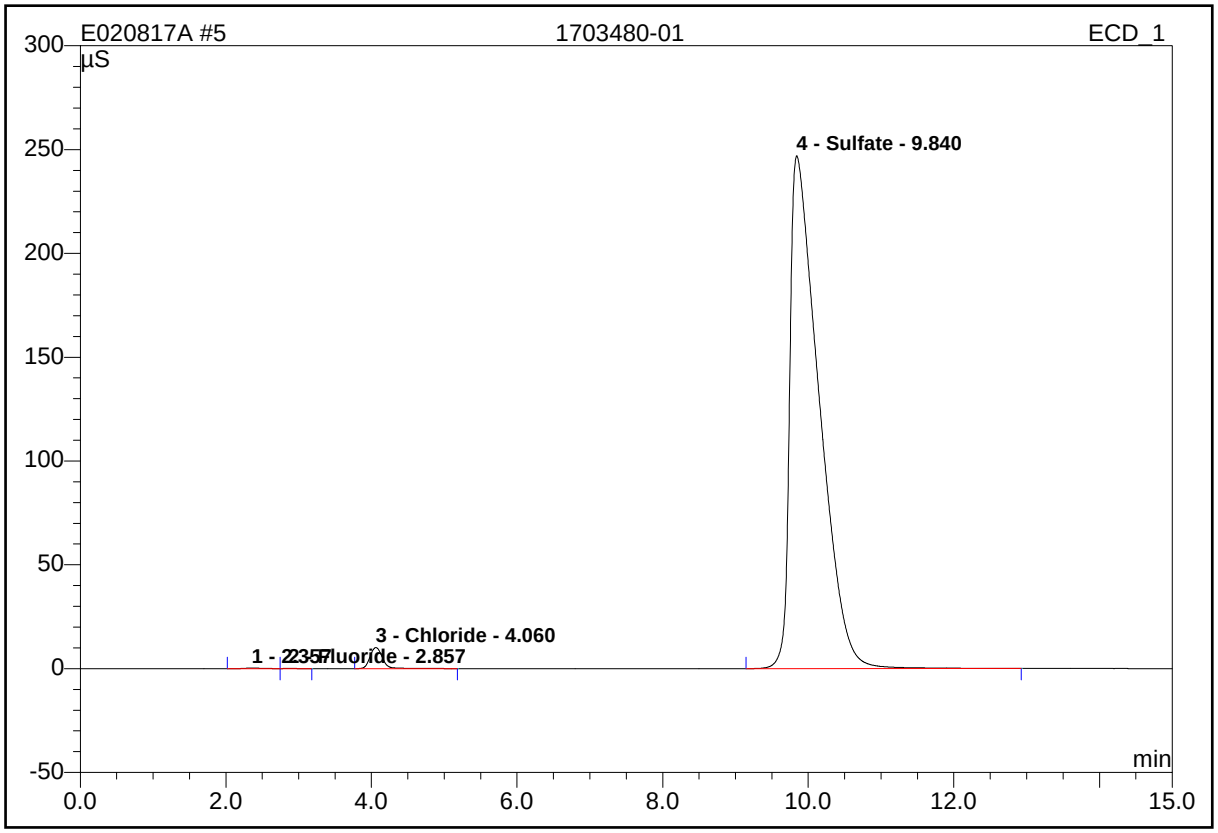
Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

## Raw Data From Instrument IC5

**Raw Data - Samples**

# 5 1703480-01

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-01** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 21:49** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.36 | n.a. | 0.286 | 0.075 | 0.06 | n.a. | BM |
| 2 | 2.86 | Fluoride | 0.171 | 0.024 | 0.02 | 0.102 | MB |
| 3 | 4.06 | Chloride | 10.186 | 2.021 | 1.73 | 9.753 | BMB |
| 4 | 9.84 | Sulfate | 246.963 | 114.717 | 98.19 | 581.436 | BMB |
| **Total:** | | | 257.607 | 116.837 | 100.00 | 591.291 | |

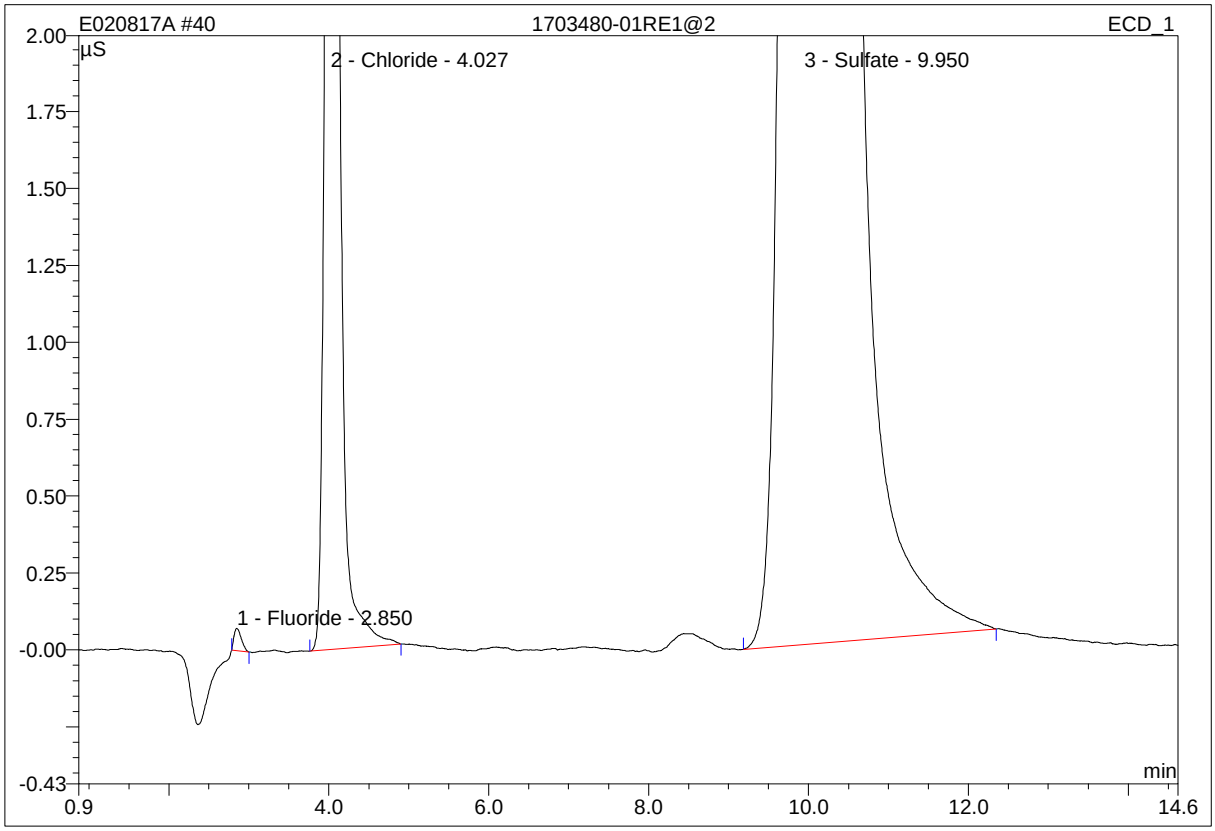
modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main

R = Rider
BMB = This peak type is for resolved peaks.

# 40 1703480-01RE1@2

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-01RE1@2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **21** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 7:58** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.85 | Fluoride | 0.072 | 0.008 | 0.01 | 0.033 | BMB |
| 2 | 4.03 | Chloride | 5.277 | 0.970 | 1.74 | 4.756 | BMB |
| 3 | 9.95 | Sulfate | 133.931 | 54.813 | 98.25 | 317.197 | BMB |
| **Total:** | | | 139.281 | 55.791 | 100.00 | 321.985 | |

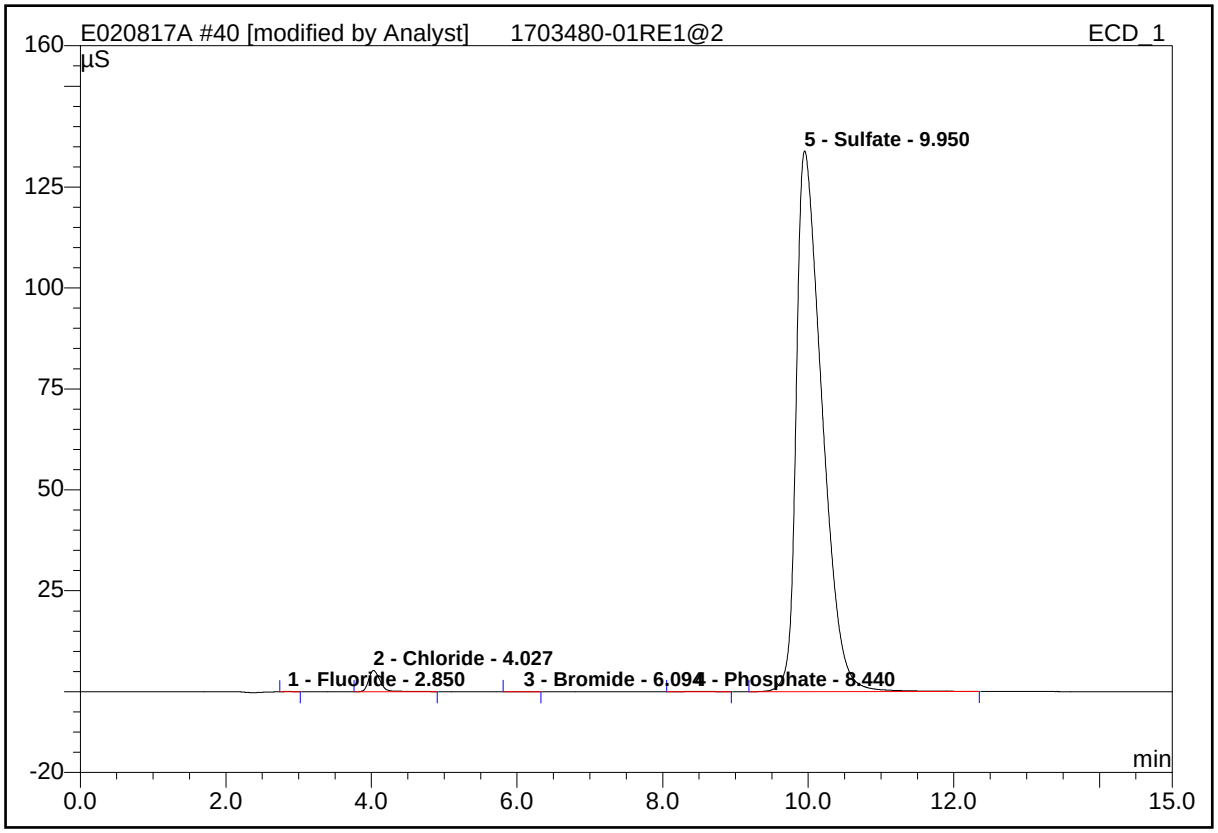
modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main

R= Rider
BMB = This peak type is for resolved peaks.

# 40 1703480-01RE1@2

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-01RE1@2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **21** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 7:58** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.85 | Fluoride | 0.092 | 0.011 | 0.02 | 0.048 | BMB* |
| 2 | 4.03 | Chloride | 5.277 | 0.970 | 1.74 | 4.756 | BMB |
| 3 | 6.09 | Bromide | 0.011 | 0.003 | 0.01 | 0.047 | BMB* |
| 4 | 8.44 | Phosphate | 0.056 | 0.025 | 0.05 | 0.136 | BMB* |
| 5 | 9.95 | Sulfate | 133.931 | 54.813 | 98.19 | 317.197 | BMB |
| **Total:** | | | 139.368 | 55.824 | 100.00 | 322.184 | |

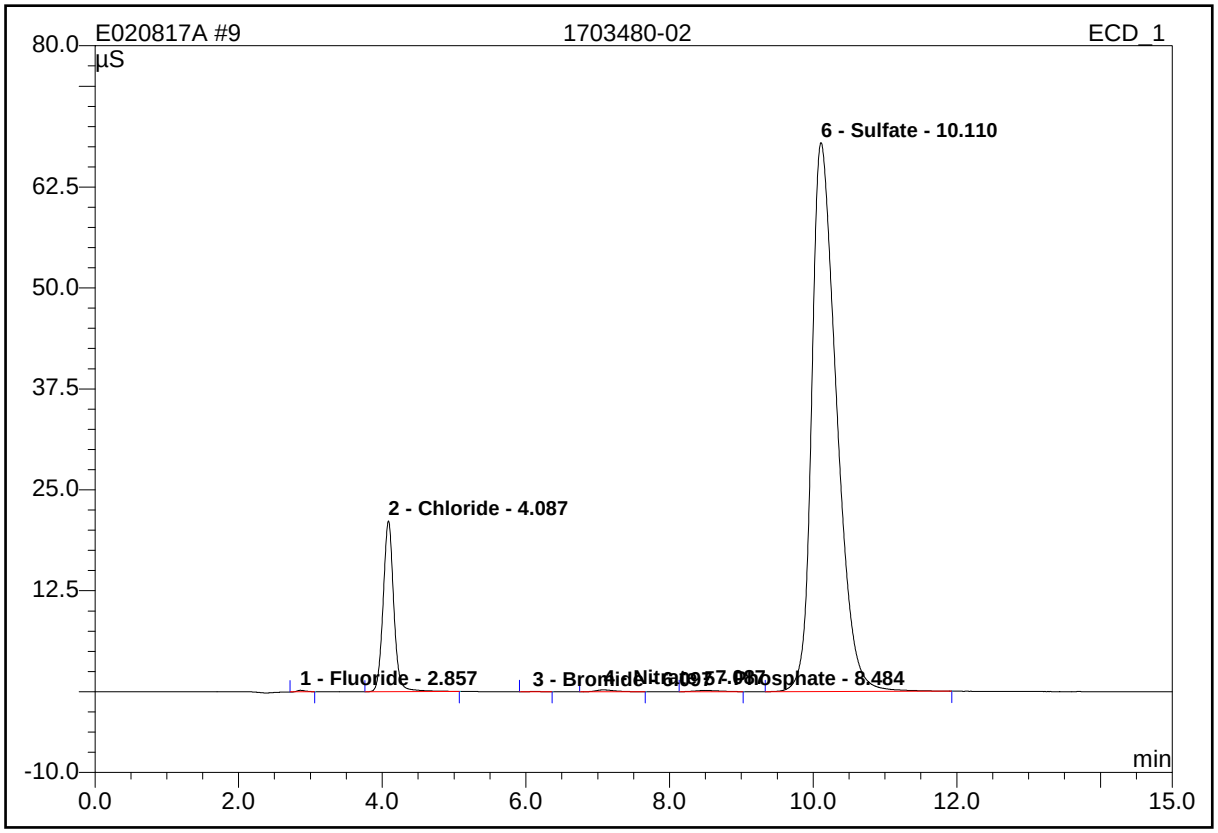
modified on: 02.09.17 09:16 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 9 1703480-02

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-02** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 22:58** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.86 | Fluoride | 0.174 | 0.020 | 0.06 | 0.084 | MB |
| 2 | 4.09 | Chloride | 21.155 | 3.640 | 11.74 | 17.357 | BMB |
| 3 | 6.10 | Bromide | 0.023 | 0.005 | 0.02 | 0.075 | BMB |
| 4 | 7.09 | Nitrate | 0.229 | 0.068 | 0.22 | 0.189 | BMB |
| 5 | 8.48 | Phosphate | 0.145 | 0.061 | 0.20 | 0.362 | BMB |
| 6 | 10.11 | Sulfate | 67.979 | 27.206 | 87.76 | 170.915 | BMB |
| **Total:** | | | 89.706 | 31.000 | 100.00 | 188.982 | |

modified on: n.a. By: OLH/EMW/JSW

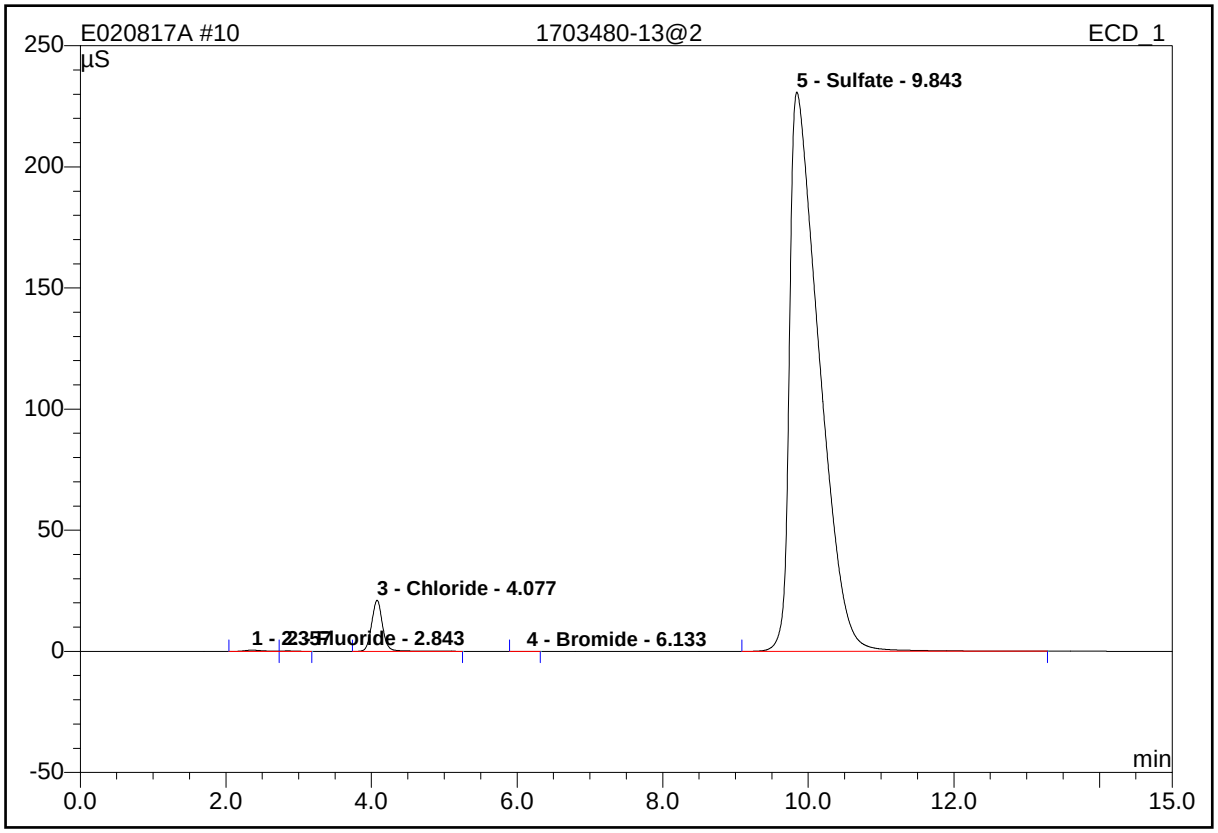
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 10 1703480-13@2

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-13@2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 23:16** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.36 | n.a. | 0.463 | 0.128 | 0.11 | n.a. | BM |
| 2 | 2.84 | Fluoride | 0.182 | 0.029 | 0.03 | 0.124 | MB |
| 3 | 4.08 | Chloride | 21.078 | 3.674 | 3.28 | 17.514 | BMB |
| 4 | 6.13 | Bromide | 0.026 | 0.005 | 0.00 | 0.078 | BMB |
| 5 | 9.84 | Sulfate | 230.880 | 108.200 | 96.58 | 555.233 | BMB |
| **Total:** | | | 252.629 | 112.037 | 100.00 | 572.948 | |

modified on: n.a. By: OLH/EMW/JSW

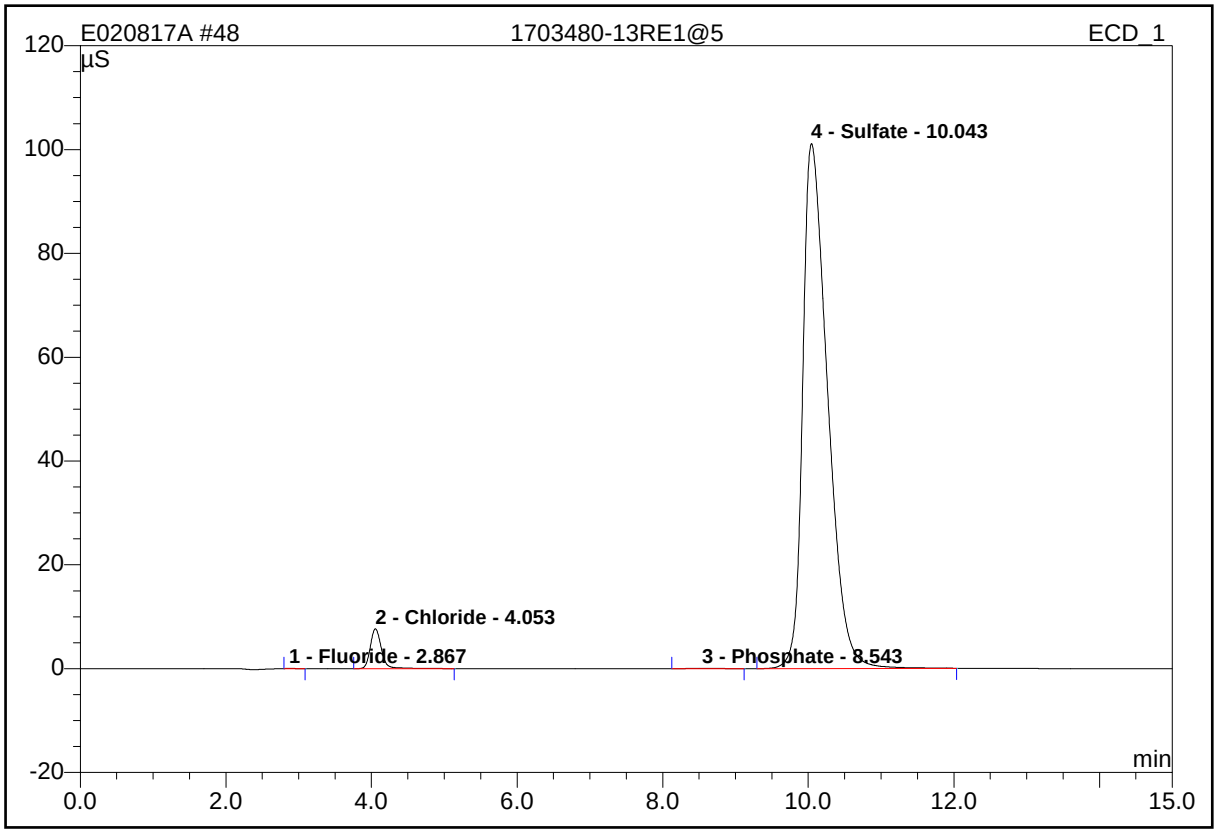
* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 48 1703480-13RE1@5

## 1105

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-13RE1@5** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **22** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 10:17** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.87 | Fluoride | 0.058 | 0.007 | 0.02 | 0.029 | BMB |
| 2 | 4.05 | Chloride | 7.685 | 1.366 | 3.30 | 6.644 | BMB |
| 3 | 8.54 | Phosphate | 0.065 | 0.031 | 0.07 | 0.169 | BMB |
| 4 | 10.04 | Sulfate | 101.129 | 40.000 | 96.61 | 241.323 | BMB |
| **Total:** | | | 108.937 | 41.403 | 100.00 | 248.166 | |

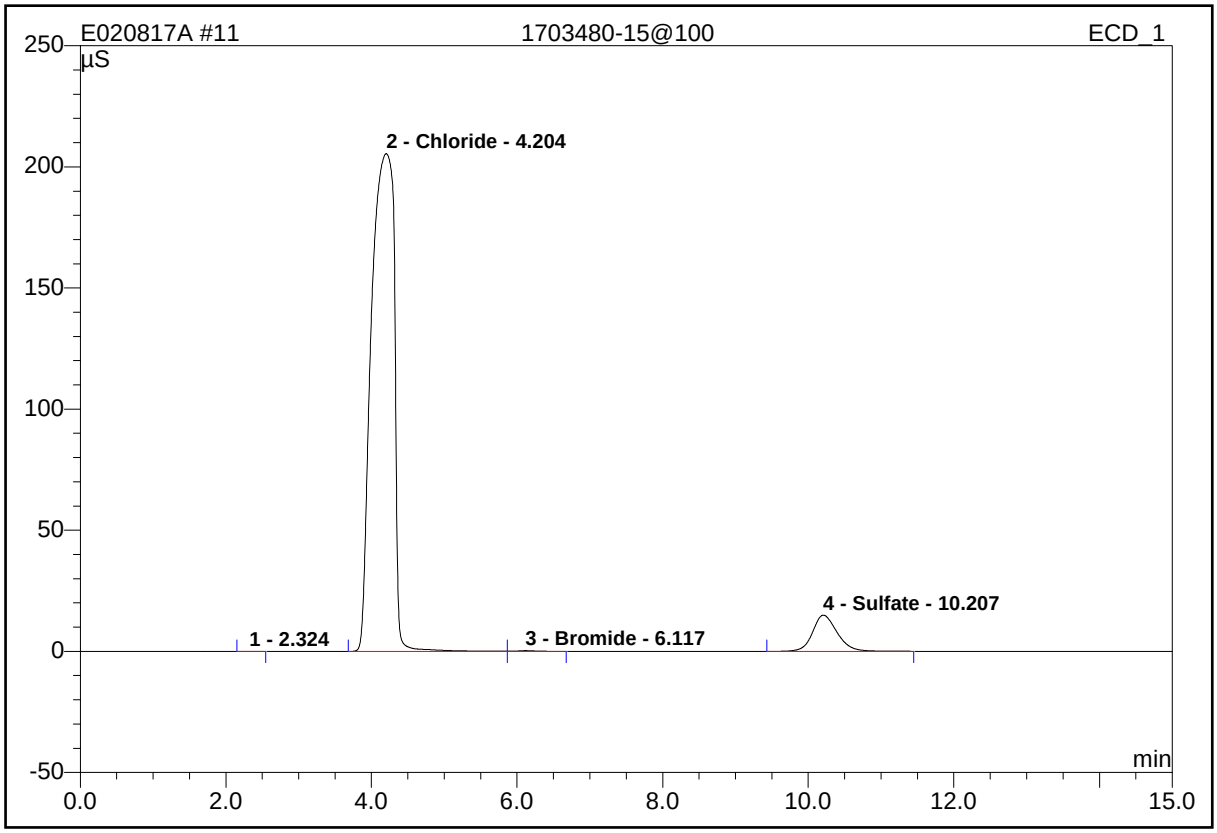
modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main

R = Rider
BMB = This peak type is for resolved peaks.

# 11 1703480-15@100

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-15@100** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 23:33** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.32 | n.a. | 0.031 | 0.006 | 0.01 | n.a. | BMB |
| 2 | 4.20 | Chloride | 205.457 | 74.916 | 92.68 | 278.887 | BM |
| 3 | 6.12 | Bromide | 0.289 | 0.081 | 0.10 | 1.212 | MB |
| 4 | 10.21 | Sulfate | 14.936 | 5.828 | 7.21 | 39.814 | BMB |
| **Total:** | | | 220.712 | 80.830 | 100.00 | 319.913 | |

modified on: n.a. By: OLH/EMW/JSW

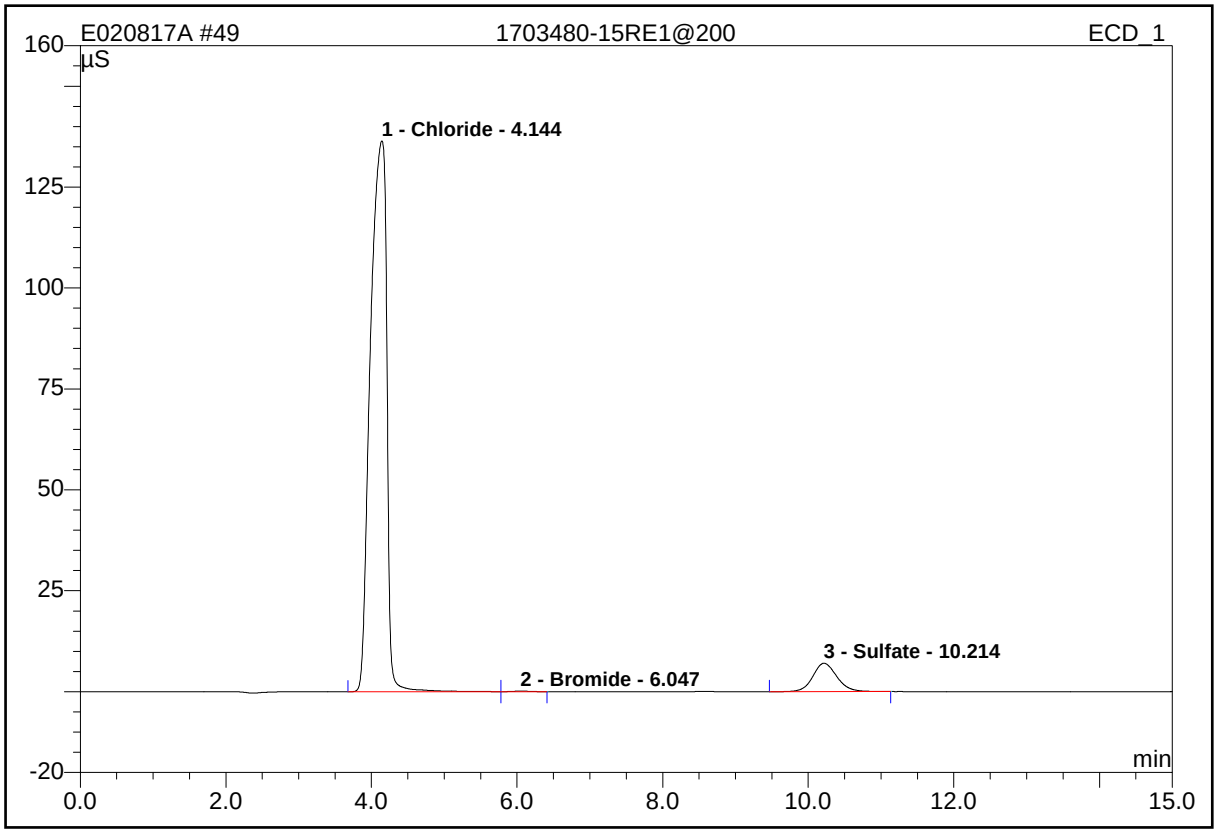
* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main

R = Rider
BMB = This peak type is for resolved peaks.

# 49 1703480-15RE1@200

## 1125

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-15RE1@200** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **22** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 10:34** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.14 | Chloride | 136.457 | 35.585 | 92.83 | 148.453 | BM |
| 2 | 6.05 | Bromide | 0.145 | 0.038 | 0.10 | 0.564 | MB |
| 3 | 10.21 | Sulfate | 7.047 | 2.711 | 7.07 | 18.893 | BMB |
| **Total:** | | | 143.648 | 38.333 | 100.00 | 167.910 | |

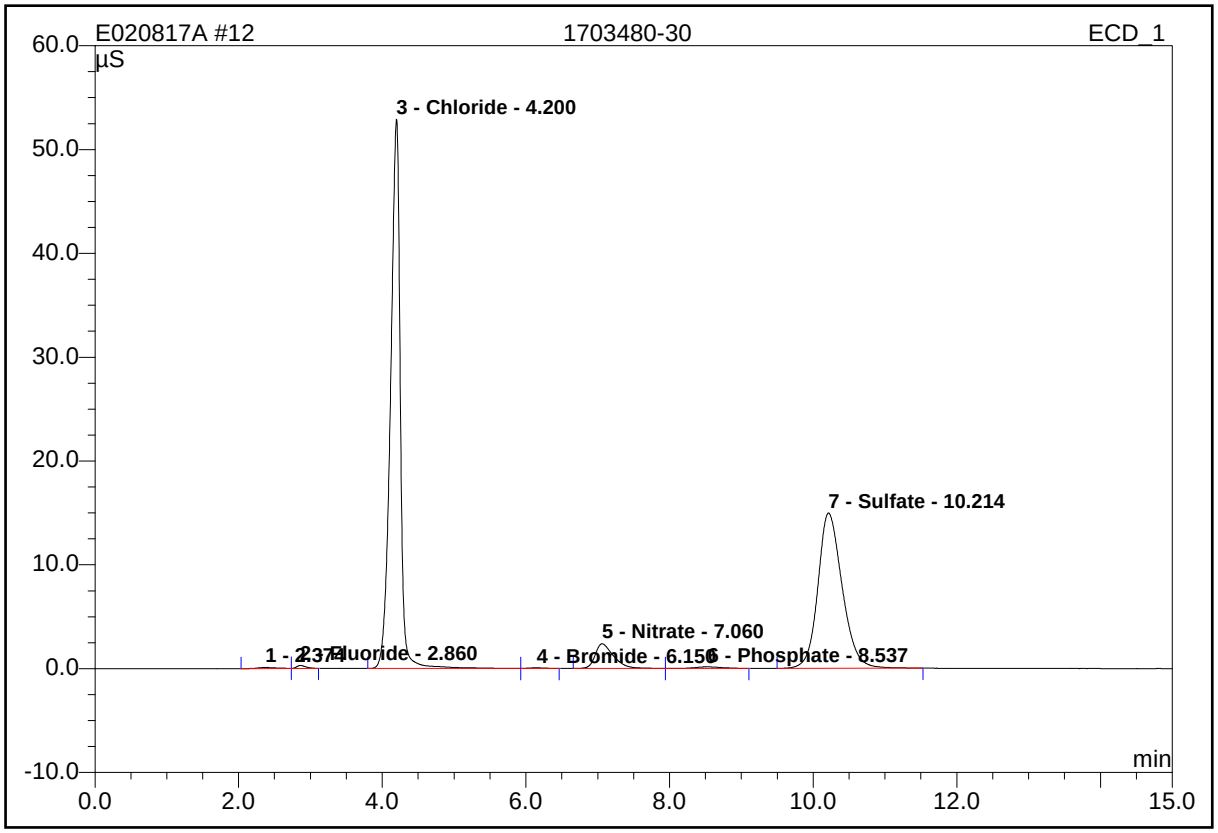
modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider

BMB = This peak type is for resolved peaks.

# 12 1703480-30

| | | | |
|---|---|---|---|
| *Sample Name:* | **1703480-30** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 23:51** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.37 | n.a. | 0.107 | 0.031 | 0.21 | n.a. | BM |
| 2 | 2.86 | Fluoride | 0.283 | 0.041 | 0.27 | 0.173 | MB |
| 3 | 4.20 | Chloride | 52.925 | 8.305 | 55.17 | 38.620 | BM |
| 4 | 6.15 | Bromide | 0.065 | 0.018 | 0.12 | 0.262 | MB |
| 5 | 7.06 | Nitrate | 2.381 | 0.709 | 4.71 | 1.761 | BM |
| 6 | 8.54 | Phosphate | 0.153 | 0.068 | 0.45 | 0.403 | MB |
| 7 | 10.21 | Sulfate | 14.970 | 5.882 | 39.07 | 40.173 | BMB |
| **Total:** | | | 70.884 | 15.054 | 100.00 | 81.394 | |

modified on: n.a. By: OLH/EMW/JSW

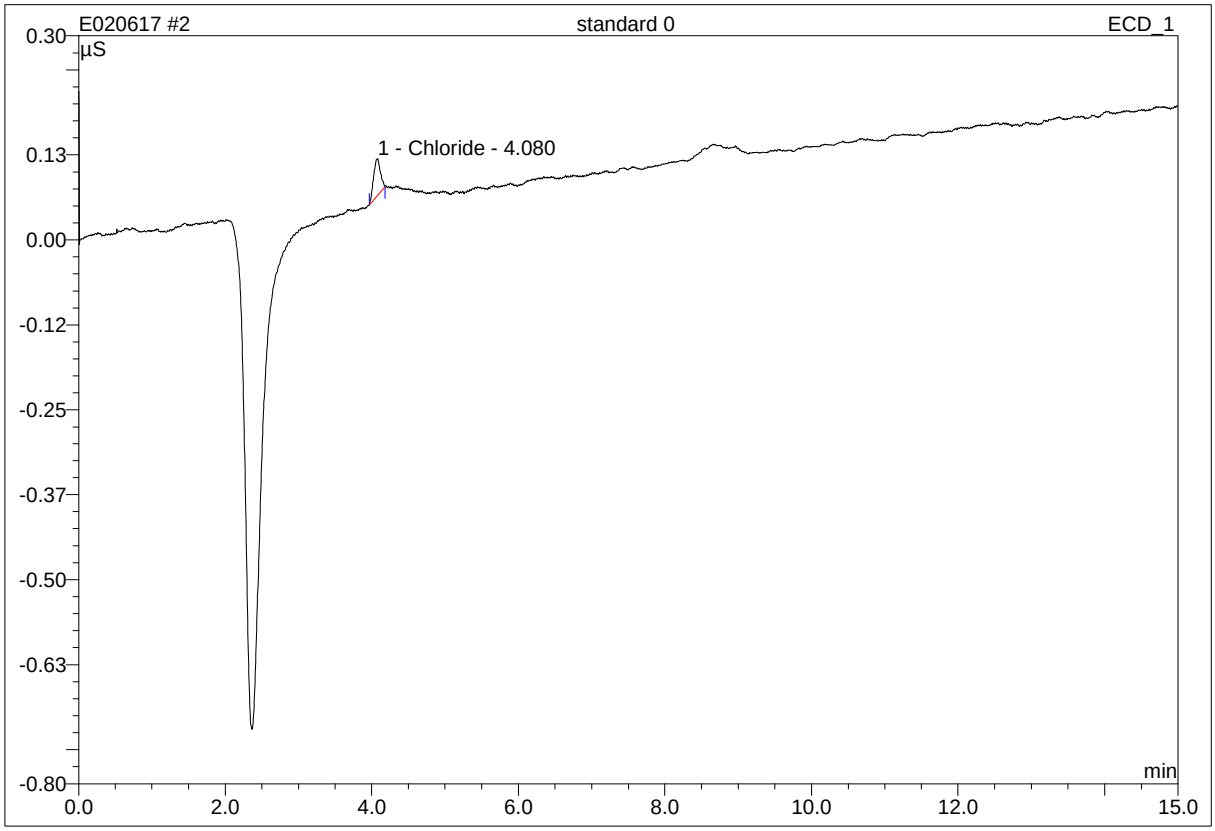
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - Calibration Standards**

# 2 standard 0

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 0** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 12:11** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



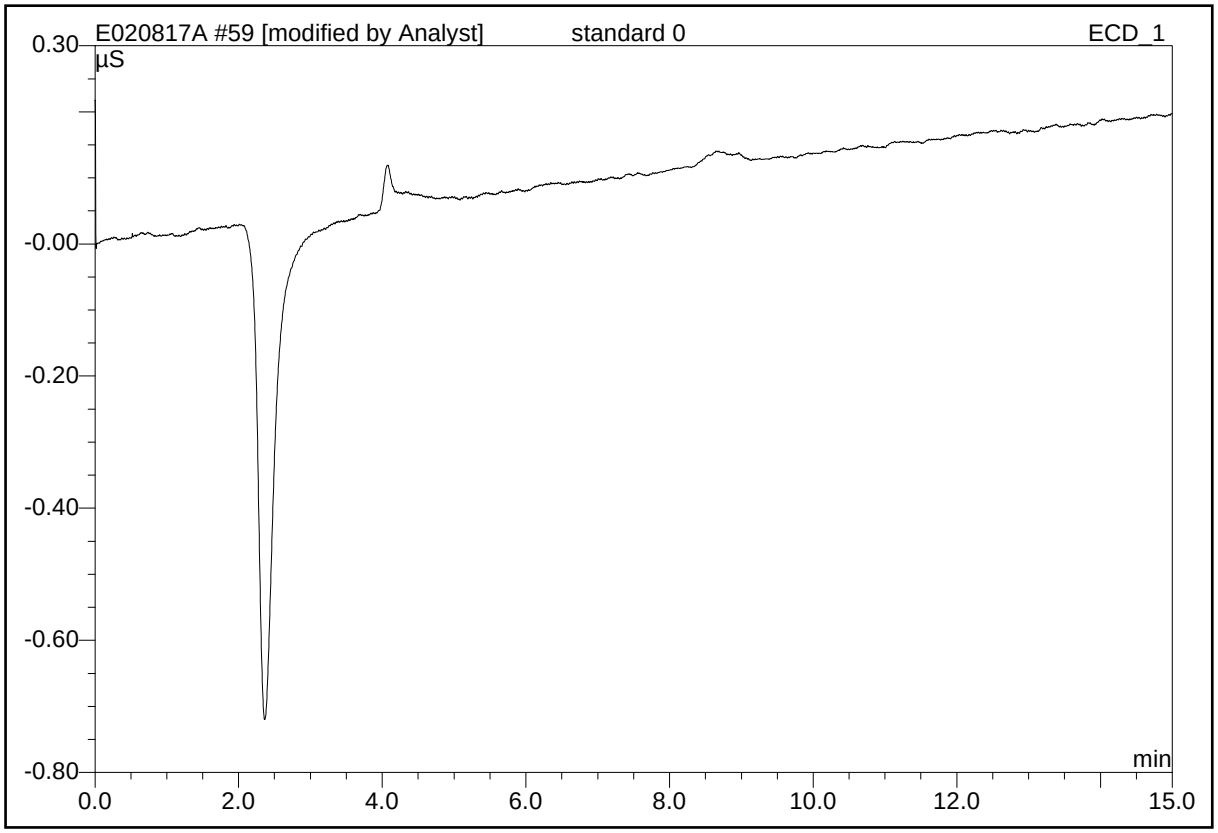

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.08 | Chloride | 0.054 | 0.006 | 100.00 | 0.200 | BMB |
| **Total:** | | | 0.054 | 0.006 | 100.00 | 0.200 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 59 standard 0

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 0** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 12:11** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



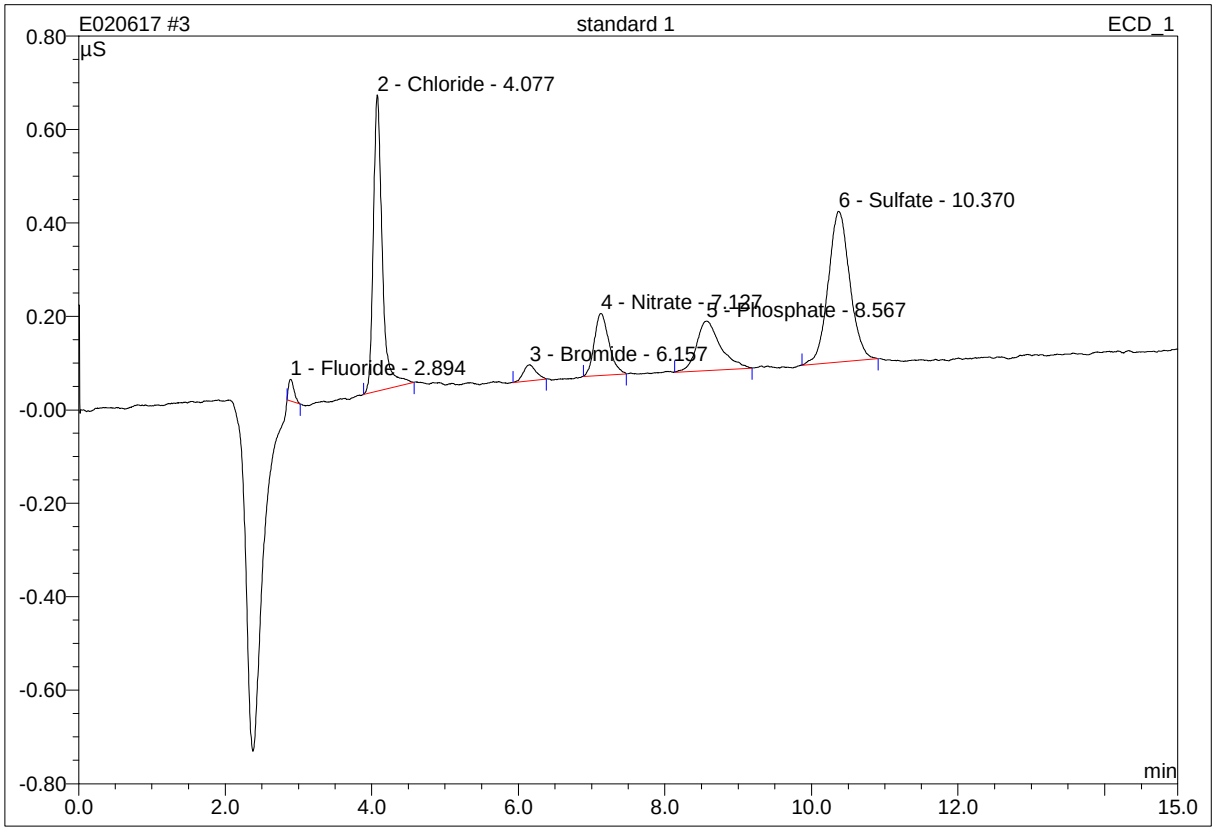

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

modified on: 02.06.17 15:03 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 3 standard 1

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 12:28** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.89 | Fluoride | 0.047 | 0.004 | 1.43 | 0.042 | BMB |
| 2 | 4.08 | Chloride | 0.634 | 0.090 | 31.96 | 0.539 | BMB |
| 3 | 6.16 | Bromide | 0.034 | 0.007 | 2.44 | 0.107 | BMB |
| 4 | 7.13 | Nitrate | 0.132 | 0.031 | 10.92 | 0.097 | BMB |
| 5 | 8.57 | Phosphate | 0.106 | 0.040 | 14.16 | 0.226 | BMB |
| 6 | 10.37 | Sulfate | 0.322 | 0.110 | 39.10 | 1.013 | BMB |
| **Total:** | | | 1.275 | 0.281 | 100.00 | 2.025 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

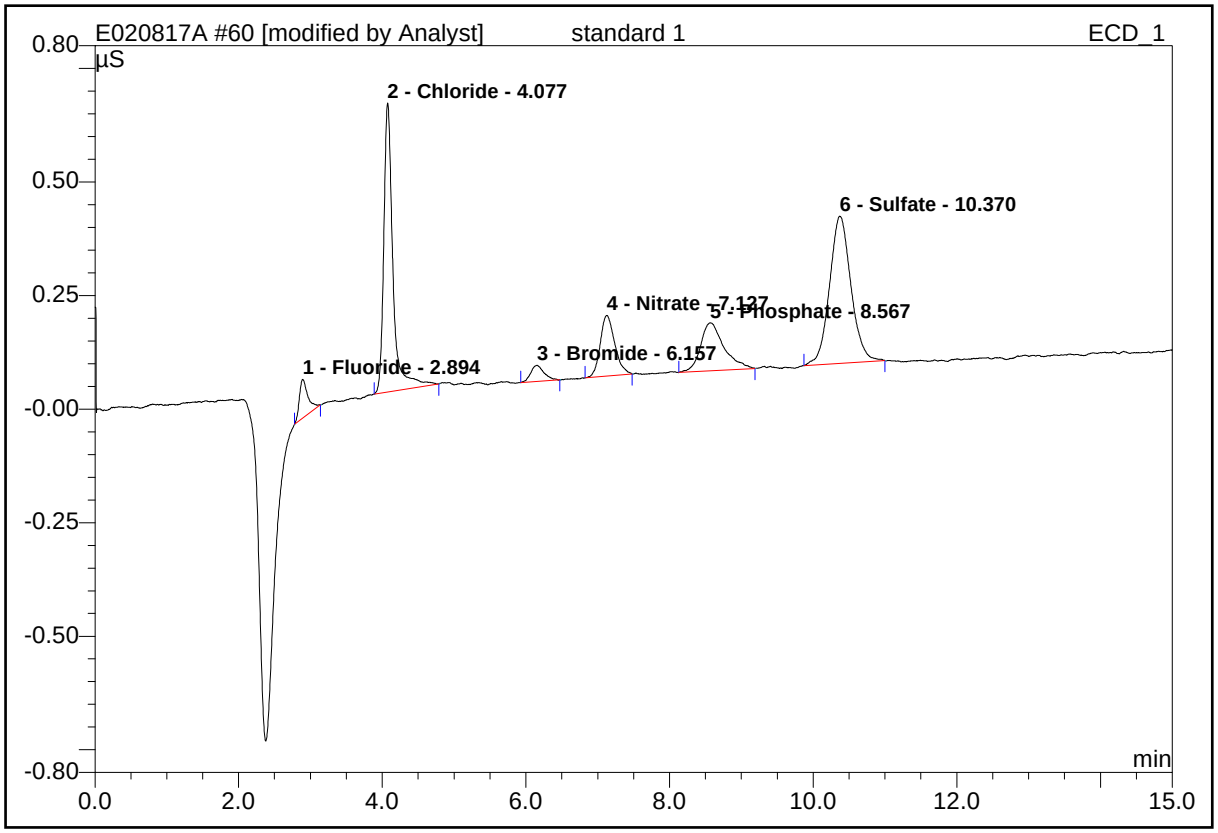
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

close up/Integration

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 60 standard 1

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 12:28** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.89 | Fluoride | 0.085 | 0.012 | 3.94 | 0.049 | BMB* |
| 2 | 4.08 | Chloride | 0.636 | 0.094 | 31.74 | 0.545 | BMB* |
| 3 | 6.16 | Bromide | 0.036 | 0.008 | 2.56 | 0.111 | BMB* |
| 4 | 7.13 | Nitrate | 0.133 | 0.031 | 10.53 | 0.097 | BMB* |
| 5 | 8.57 | Phosphate | 0.106 | 0.040 | 13.44 | 0.226 | BMB |
| 6 | 10.37 | Sulfate | 0.324 | 0.112 | 37.79 | 1.020 | BMB* |
| **Total:** | | | 1.320 | 0.296 | 100.00 | 2.049 | |

modified on: 02.06.17 15:05 By: OLH/EMW/JSW

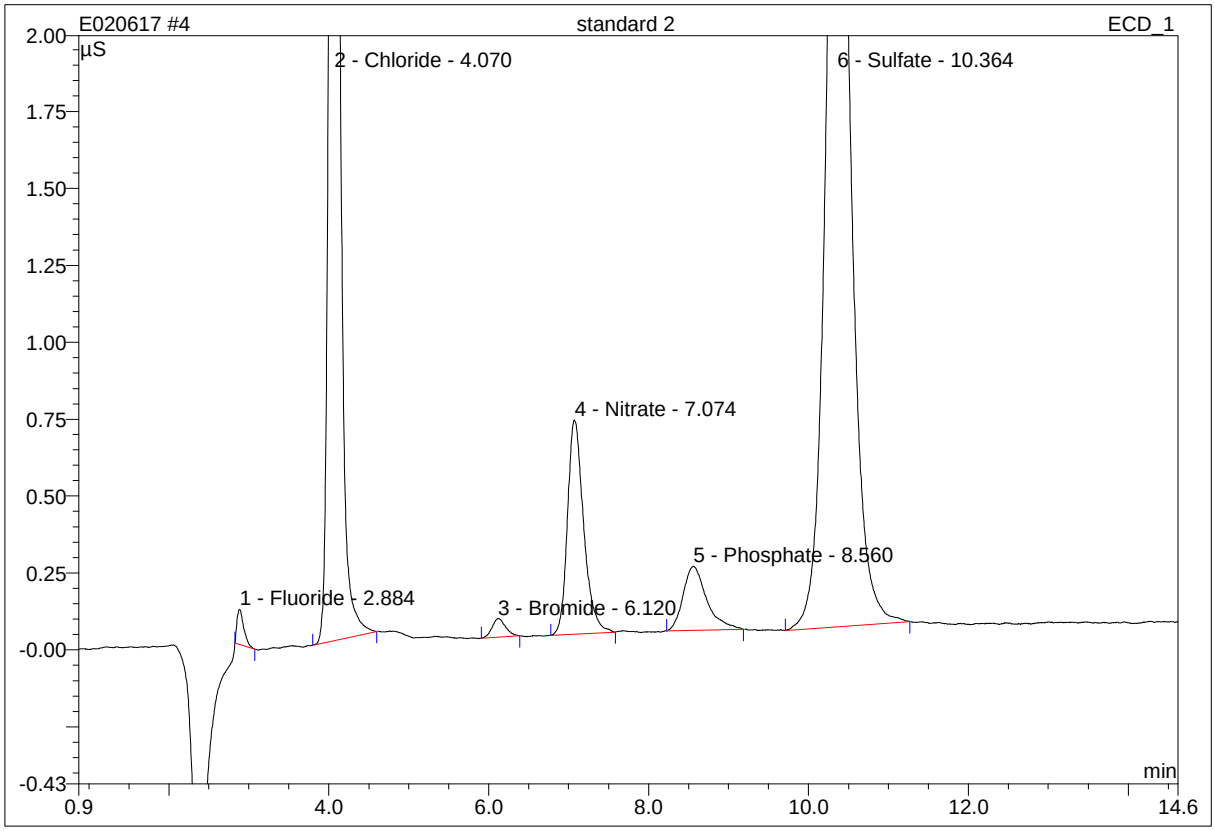
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 4 standard 2

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 12:46** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.88 | Fluoride | 0.114 | 0.011 | 0.53 | 0.063 | BMB |
| 2 | 4.07 | Chloride | 5.702 | 0.764 | 35.90 | 3.778 | BMB |
| 3 | 6.12 | Bromide | 0.061 | 0.012 | 0.56 | 0.179 | BMB |
| 4 | 7.07 | Nitrate | 0.697 | 0.163 | 7.66 | 0.428 | BMB |
| 5 | 8.56 | Phosphate | 0.208 | 0.071 | 3.34 | 0.422 | BMB |
| 6 | 10.36 | Sulfate | 3.180 | 1.107 | 52.01 | 7.921 | BMB |
| **Total:** | | | 9.961 | 2.127 | 100.00 | 12.791 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

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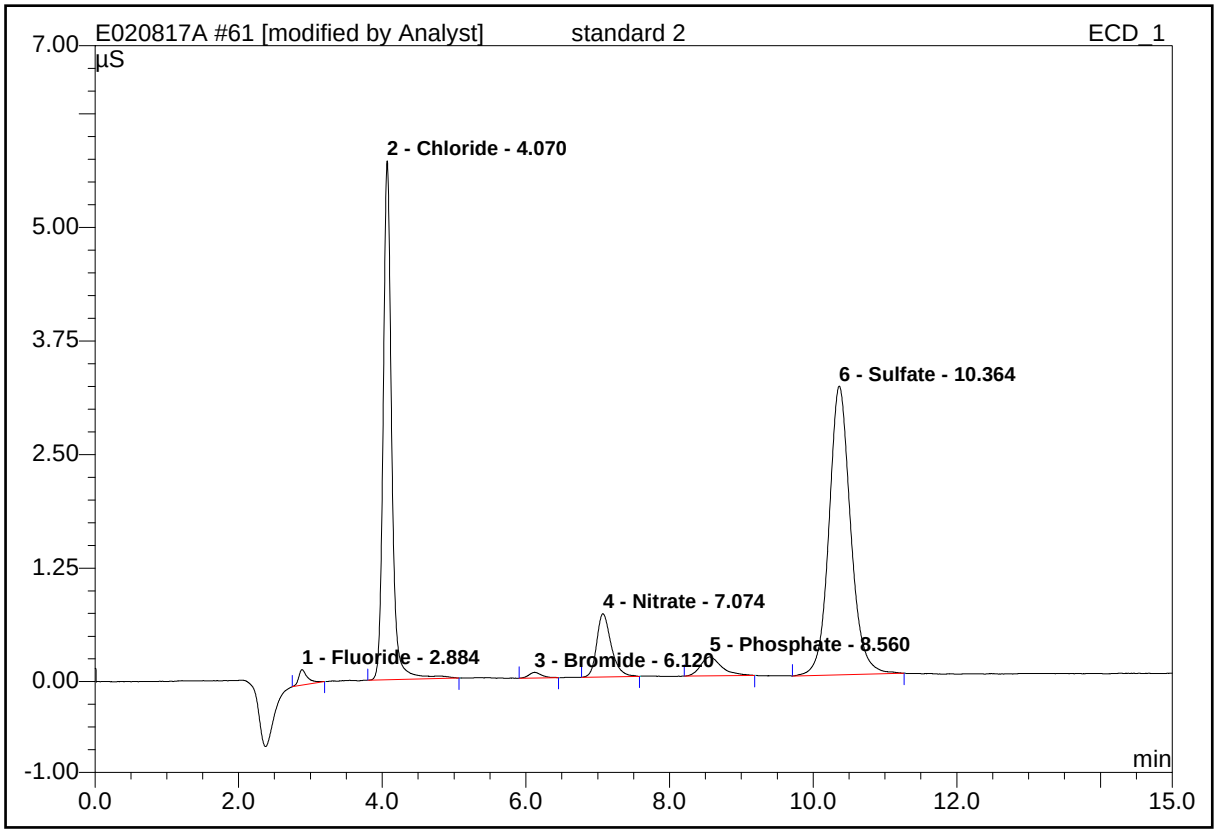
close up/Integration
Version 6.80 SR15 Build 4656 (243203)

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 61 standard 2

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 12:46** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.88 | Fluoride | 0.170 | 0.024 | 1.11 | 0.101 | BMB* |
| 2 | 4.07 | Chloride | 5.712 | 0.785 | 36.30 | 3.868 | BMB* |
| 3 | 6.12 | Bromide | 0.062 | 0.013 | 0.59 | 0.190 | BMB* |
| 4 | 7.07 | Nitrate | 0.697 | 0.163 | 7.54 | 0.427 | BMB |
| 5 | 8.56 | Phosphate | 0.208 | 0.071 | 3.29 | 0.423 | BMB* |
| 6 | 10.36 | Sulfate | 3.180 | 1.107 | 51.17 | 7.908 | BMB |
| **Total:** | | | 10.029 | 2.162 | 100.00 | 12.917 | |

modified on: 02.06.17 15:04 By: OLH/EMW/JSW

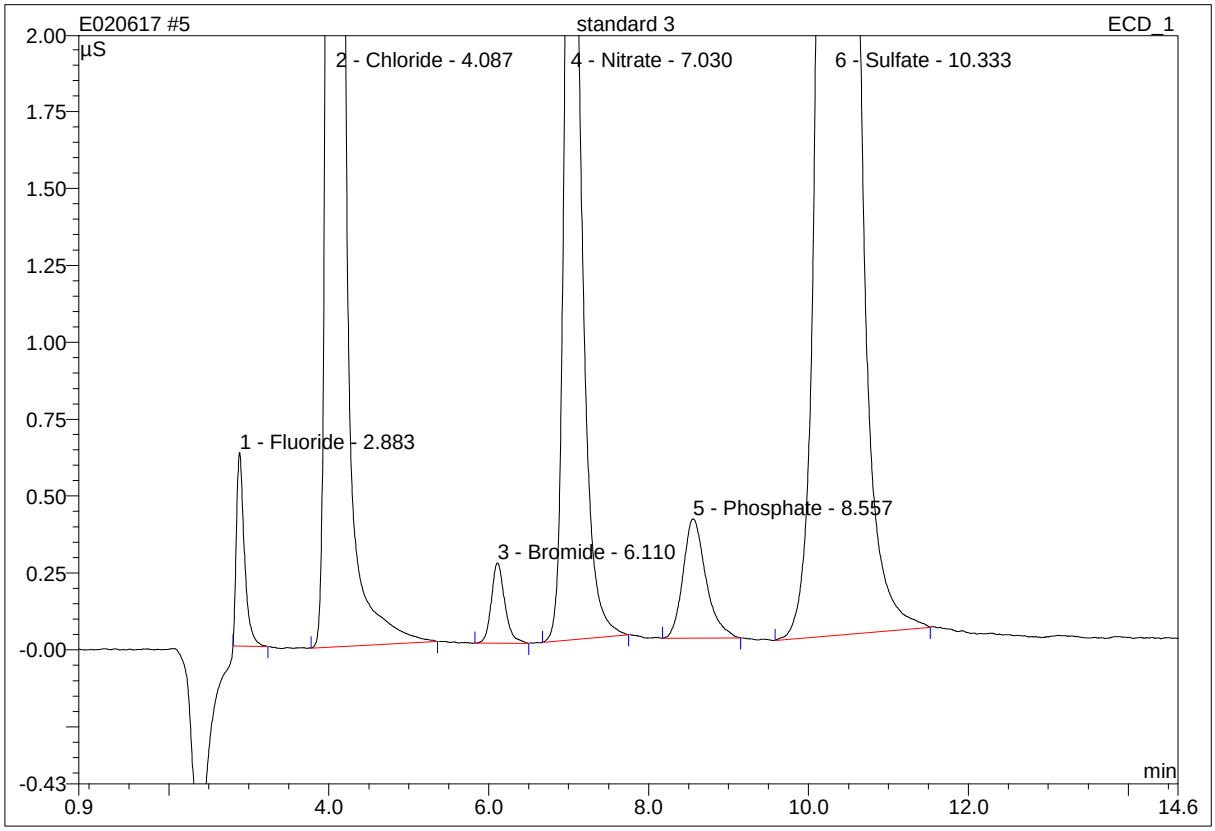
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 5 standard 3

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 3** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:03** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.88 | Fluoride | 0.629 | 0.073 | 0.73 | 0.335 | BMB |
| 2 | 4.09 | Chloride | 26.607 | 3.759 | 37.56 | 17.924 | BMB |
| 3 | 6.11 | Bromide | 0.260 | 0.051 | 0.51 | 0.755 | BMB |
| 4 | 7.03 | Nitrate | 3.260 | 0.764 | 7.63 | 1.896 | BMB |
| 5 | 8.56 | Phosphate | 0.388 | 0.128 | 1.28 | 0.783 | BMB |
| 6 | 10.33 | Sulfate | 15.505 | 5.232 | 52.28 | 35.908 | BMB |
| **Total:** | | | 46.649 | 10.007 | 100.00 | 57.602 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

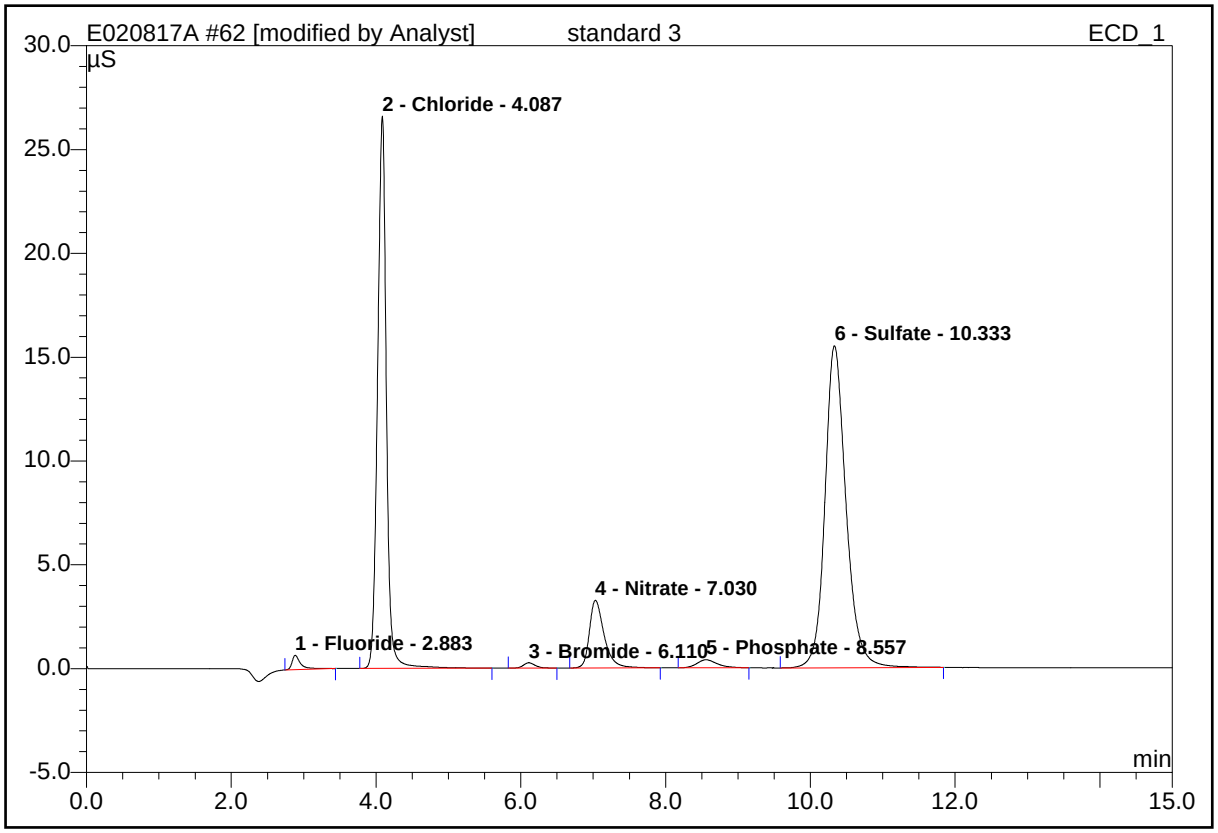
close up/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 62 standard 3

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 3** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:03** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.88 | Fluoride | 0.688 | 0.096 | 0.96 | 0.405 | BMB* |
| 2 | 4.09 | Chloride | 26.608 | 3.765 | 37.41 | 17.936 | BMB* |
| 3 | 6.11 | Bromide | 0.260 | 0.051 | 0.51 | 0.762 | BMB |
| 4 | 7.03 | Nitrate | 3.264 | 0.771 | 7.67 | 1.911 | BMB* |
| 5 | 8.56 | Phosphate | 0.388 | 0.128 | 1.28 | 0.784 | BMB |
| 6 | 10.33 | Sulfate | 15.512 | 5.251 | 52.18 | 35.981 | BMB* |
| **Total:** | | | 46.719 | 10.063 | 100.00 | 57.779 | |

modified on: 02.06.17 15:04 By: OLH/EMW/JSW

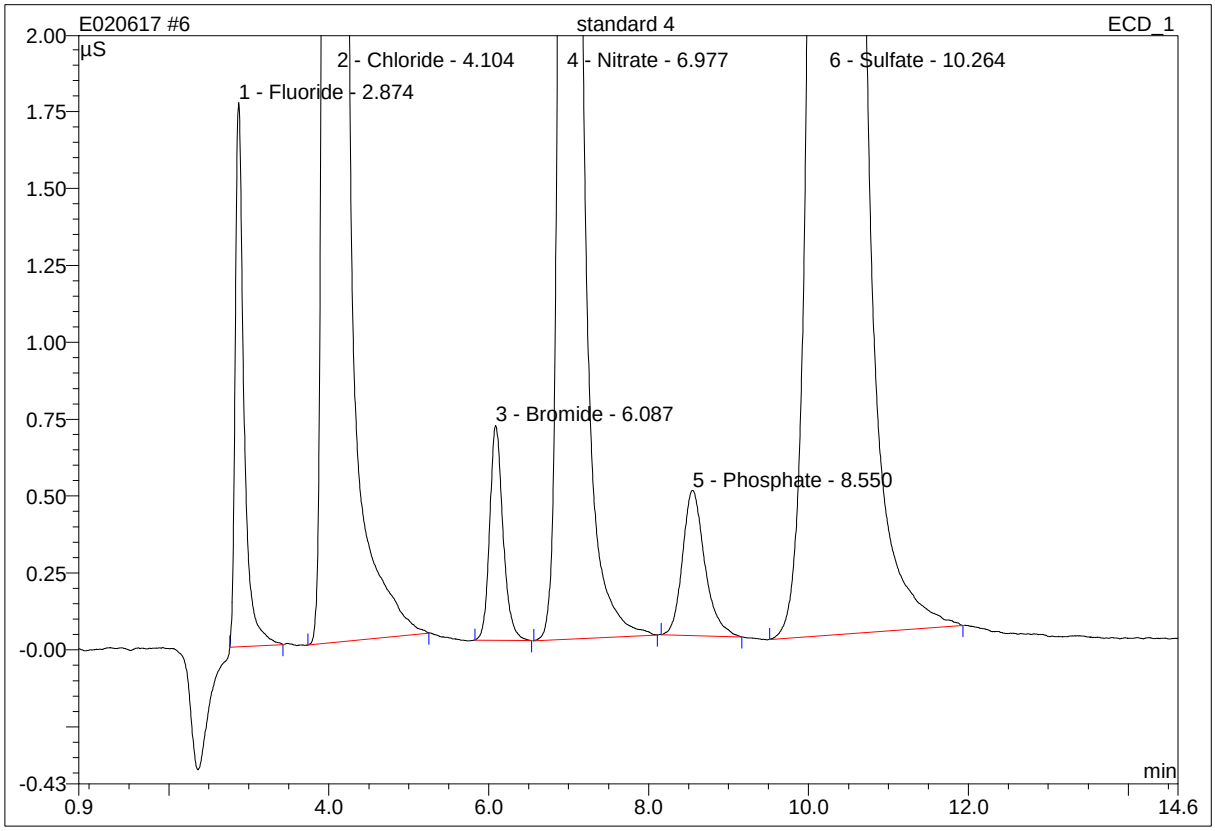
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 6 standard 4

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 4** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:20** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.87 | Fluoride | 1.768 | 0.225 | 0.76 | 0.955 | BMB |
| 2 | 4.10 | Chloride | 66.932 | 11.293 | 38.15 | 51.791 | BMB |
| 3 | 6.09 | Bromide | 0.699 | 0.135 | 0.46 | 1.990 | BMB |
| 4 | 6.98 | Nitrate | 9.256 | 2.166 | 7.32 | 5.105 | BMB |
| 5 | 8.55 | Phosphate | 0.471 | 0.152 | 0.51 | 0.932 | BMB |
| 6 | 10.26 | Sulfate | 46.106 | 15.628 | 52.80 | 102.415 | BMB |
| **Total:** | | | 125.232 | 29.600 | 100.00 | 163.188 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

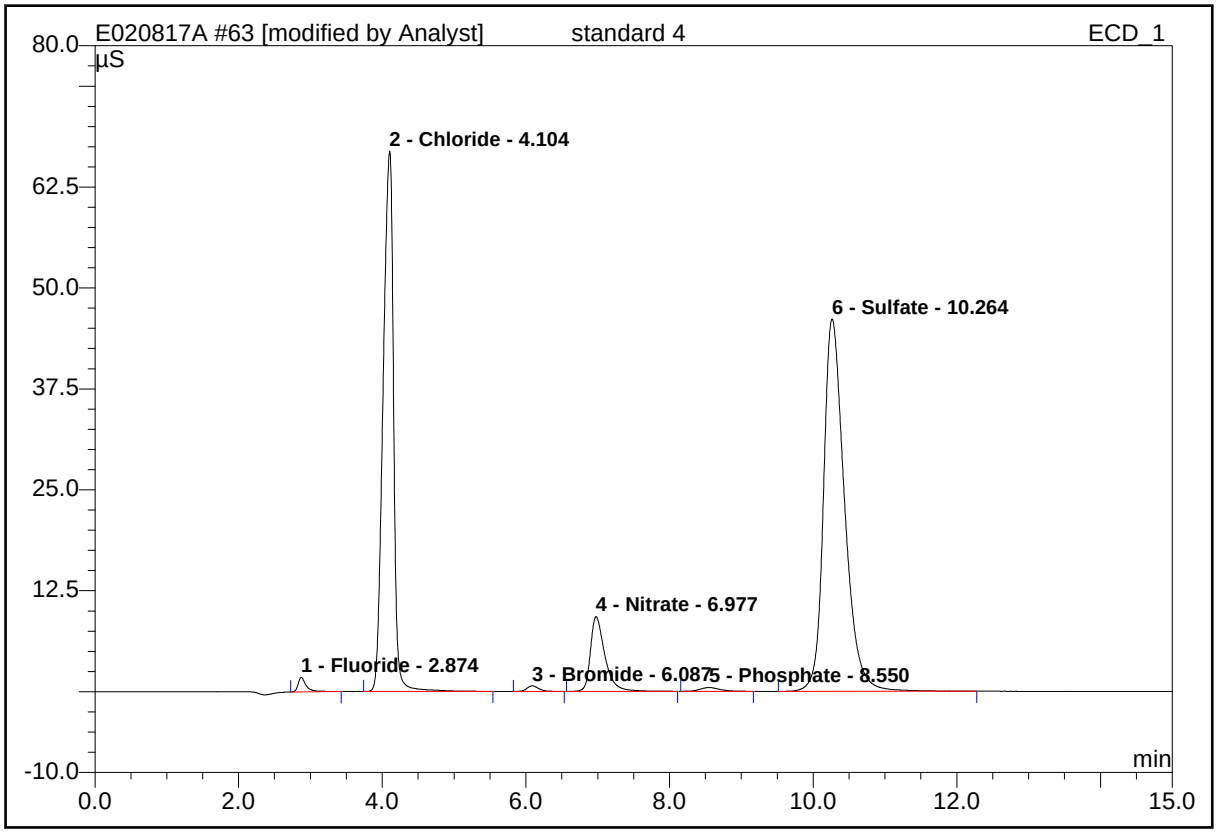
close up/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 63 standard 4

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 4** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:20** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.87 | Fluoride | 1.800 | 0.238 | 0.80 | 0.992 | BMB* |
| 2 | 4.10 | Chloride | 66.937 | 11.312 | 38.14 | 51.869 | BMB* |
| 3 | 6.09 | Bromide | 0.699 | 0.135 | 0.46 | 2.018 | BMB |
| 4 | 6.98 | Nitrate | 9.256 | 2.166 | 7.30 | 5.109 | BMB |
| 5 | 8.55 | Phosphate | 0.471 | 0.152 | 0.51 | 0.934 | BMB |
| 6 | 10.26 | Sulfate | 46.113 | 15.659 | 52.79 | 102.533 | BMB* |
| **Total:** | | | 125.275 | 29.663 | 100.00 | 163.455 | |

modified on: 02.06.17 15:04 By: OLH/EMW/JSW

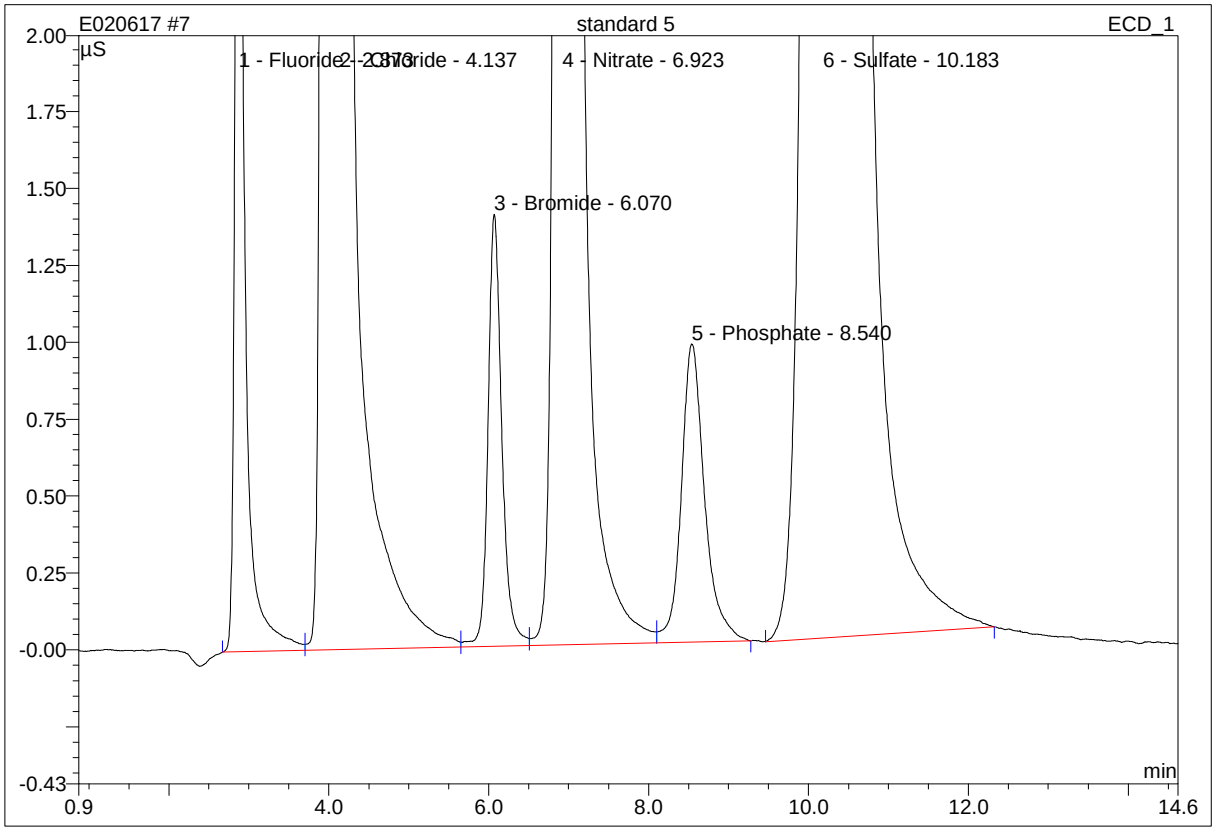
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 7 standard 5

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 5** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:38** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.87 | Fluoride | 3.627 | 0.499 | 0.80 | 2.007 | BM |
| 2 | 4.14 | Chloride | 108.428 | 23.522 | 37.54 | 102.424 | M |
| 3 | 6.07 | Bromide | 1.404 | 0.282 | 0.45 | 4.091 | M |
| 4 | 6.92 | Nitrate | 19.731 | 4.582 | 7.31 | 10.109 | M |
| 5 | 8.54 | Phosphate | 0.969 | 0.327 | 0.52 | 2.040 | MB |
| 6 | 10.18 | Sulfate | 92.918 | 33.439 | 53.37 | 205.872 | BMB |
| **Total:** | | | 227.079 | 62.651 | 100.00 | 326.544 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

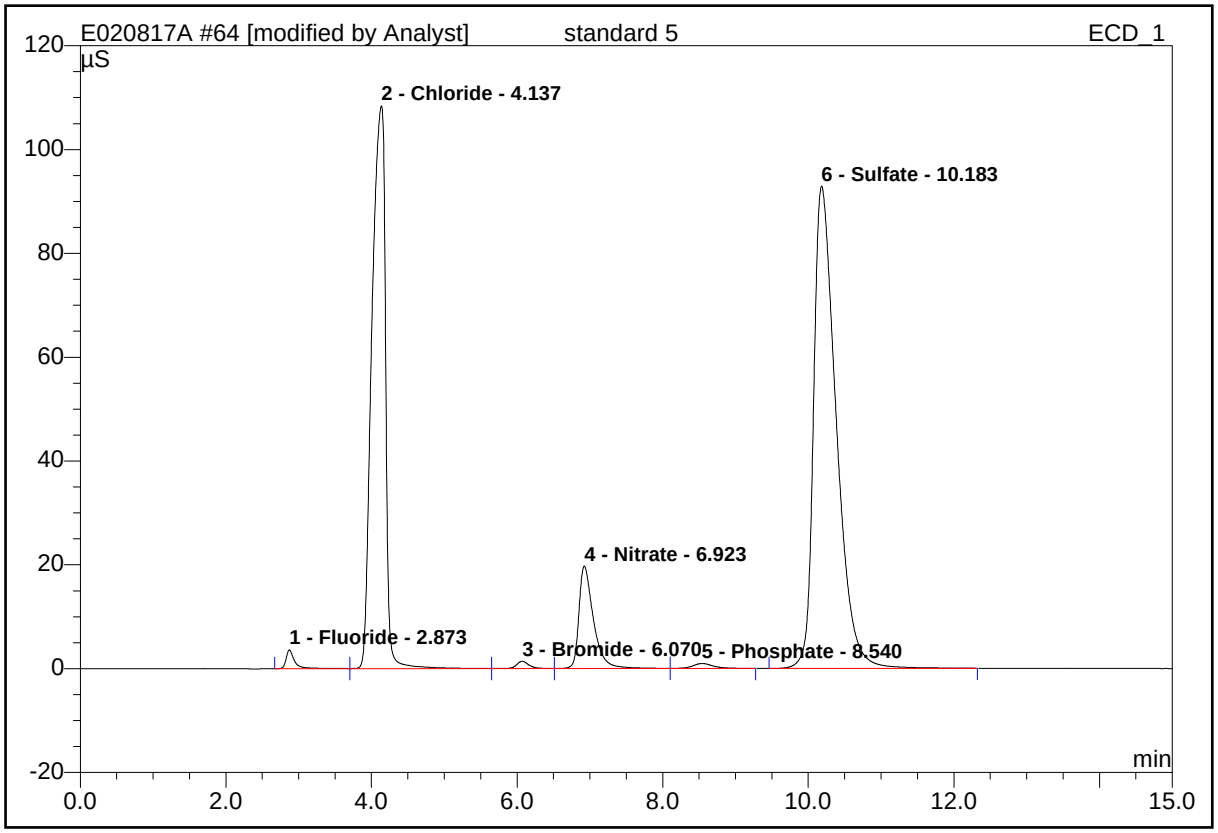
close up/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 64 standard 5

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 5** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:38** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.87 | Fluoride | 3.624 | 0.489 | 0.78 | 2.003 | BMb* |
| 2 | 4.14 | Chloride | 108.411 | 23.491 | 37.53 | 102.381 | bM * |
| 3 | 6.07 | Bromide | 1.393 | 0.273 | 0.44 | 4.038 | M * |
| 4 | 6.92 | Nitrate | 19.723 | 4.571 | 7.30 | 10.102 | M * |
| 5 | 8.54 | Phosphate | 0.967 | 0.325 | 0.52 | 2.034 | MB* |
| 6 | 10.18 | Sulfate | 92.918 | 33.439 | 53.43 | 205.849 | BMB |
| **Total:** | | | 227.036 | 62.588 | 100.00 | 326.407 | |

modified on: 02.06.17 15:05 By: OLH/EMW/JSW

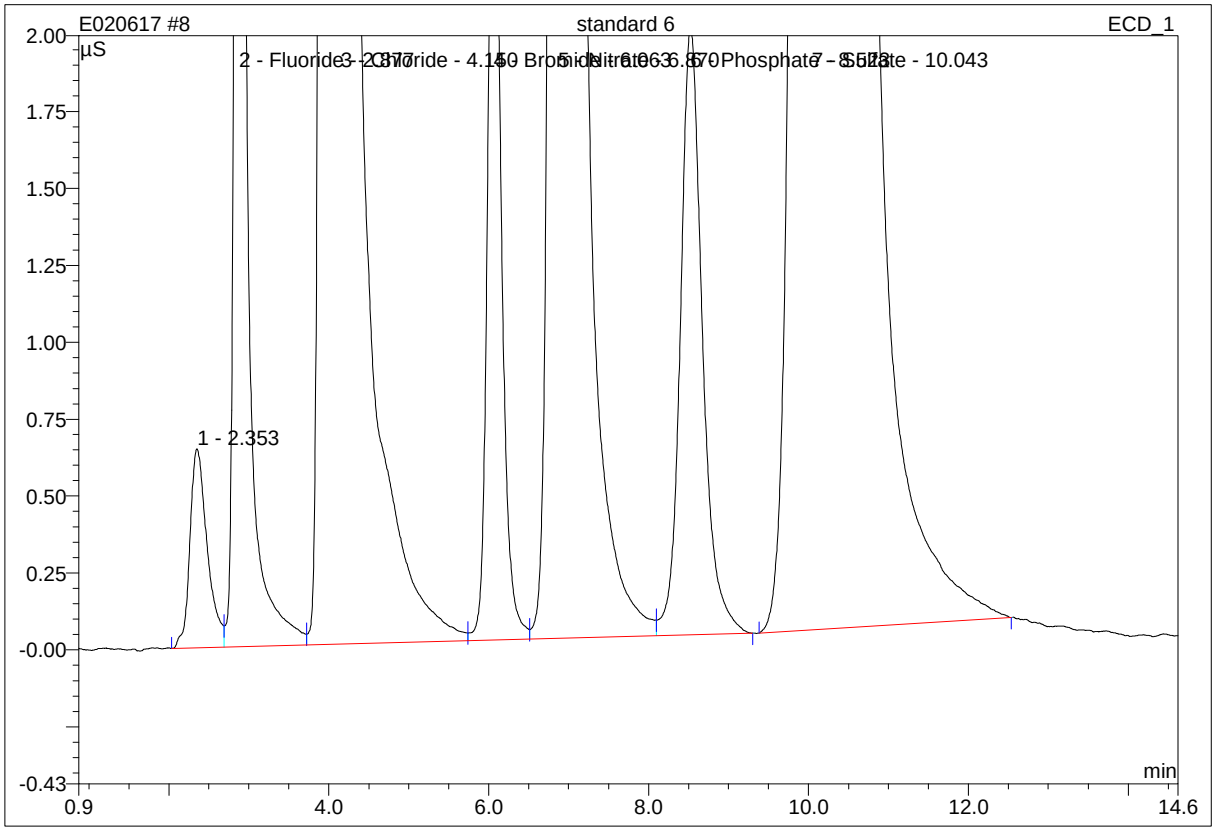
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 8 standard 6

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 6** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **19** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:55** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.35 | n.a. | 0.646 | 0.163 | 0.12 | n.a. | BM |
| 2 | 2.88 | Fluoride | 7.402 | 1.050 | 0.78 | 4.007 | M |
| 3 | 4.15 | Chloride | 167.108 | 49.935 | 37.24 | 198.806 | M |
| 4 | 6.06 | Bromide | 2.897 | 0.564 | 0.42 | 7.992 | M |
| 5 | 6.87 | Nitrate | 43.322 | 10.151 | 7.57 | 19.947 | M |
| 6 | 8.52 | Phosphate | 1.971 | 0.632 | 0.47 | 4.001 | MB |
| 7 | 10.04 | Sulfate | 176.196 | 71.599 | 53.39 | 397.394 | BMB |
| **Total:** | | | 399.543 | 134.094 | 100.00 | 632.147 | |

modified on: n.a. By: OLH/EMW/JSW

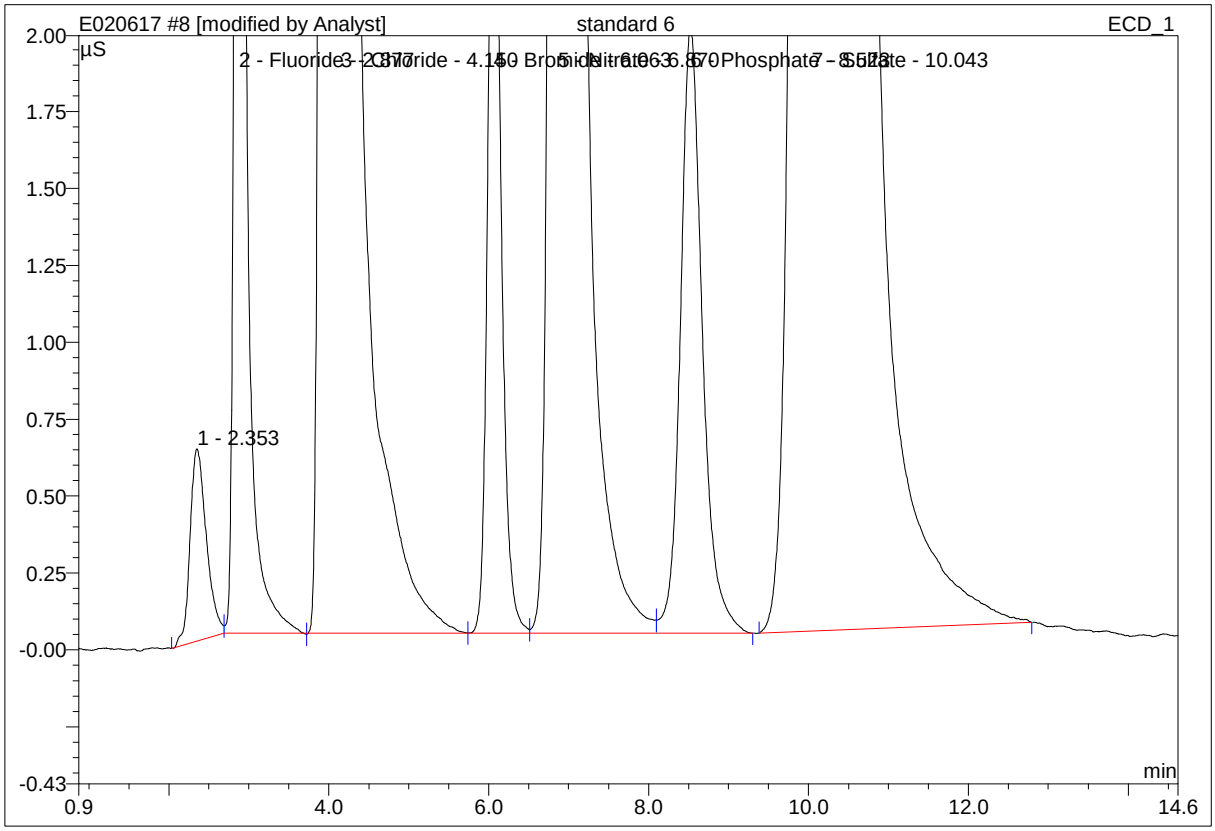
close up/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 8 standard 6

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 6** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **19** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:55** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



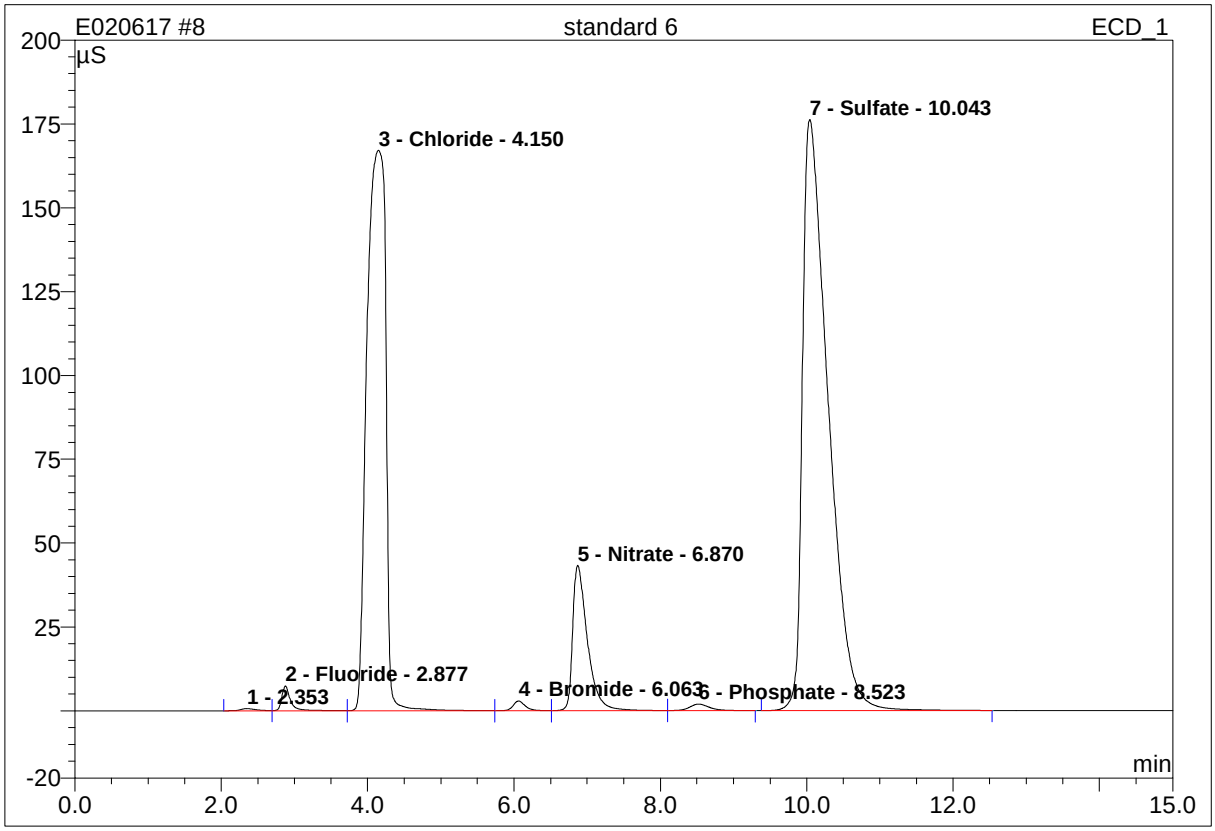

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.35 | n.a. | 0.624 | 0.148 | 0.11 | n.a. | BM * |
| 2 | 2.88 | Fluoride | 7.358 | 1.007 | 0.75 | 4.000 | M * |
| 3 | 4.15 | Chloride | 167.073 | 49.872 | 37.23 | 198.792 | M * |
| 4 | 6.06 | Bromide | 2.875 | 0.547 | 0.41 | 7.981 | M * |
| 5 | 6.87 | Nitrate | 43.305 | 10.129 | 7.56 | 19.945 | M * |
| 6 | 8.52 | Phosphate | 1.966 | 0.627 | 0.47 | 3.999 | MB* |
| 7 | 10.04 | Sulfate | 176.200 | 71.631 | 53.47 | 397.403 | BMB* |
| **Total:** | | | 399.402 | 133.961 | 100.00 | 632.121 | |

modified on: 02.06.17 15:05 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 8 standard 6

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 6** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **19** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:55** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.35 | n.a. | 0.646 | 0.163 | 0.12 | n.a. | BM |
| 2 | 2.88 | Fluoride | 7.402 | 1.050 | 0.78 | 3.962 | M |
| 3 | 4.15 | Chloride | 167.108 | 49.935 | 37.24 | 198.793 | M |
| 4 | 6.06 | Bromide | 2.897 | 0.564 | 0.42 | 7.961 | M |
| 5 | 6.87 | Nitrate | 43.322 | 10.151 | 7.57 | 19.940 | M |
| 6 | 8.52 | Phosphate | 1.971 | 0.632 | 0.47 | 3.997 | MB |
| 7 | 10.04 | Sulfate | 176.196 | 71.599 | 53.39 | 397.354 | BMB |
| **Total:** | | | 399.543 | 134.094 | 100.00 | 632.006 | |

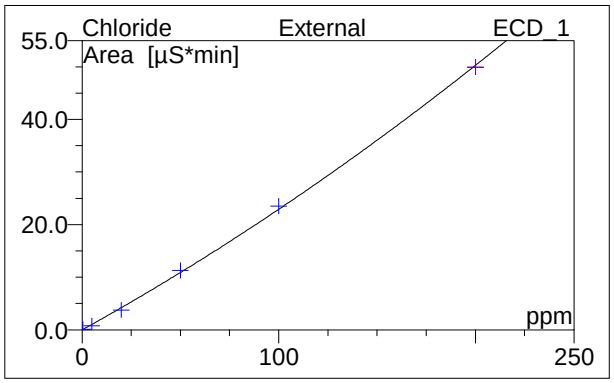
modified on: n.a. By: OLH/EMW/JSW

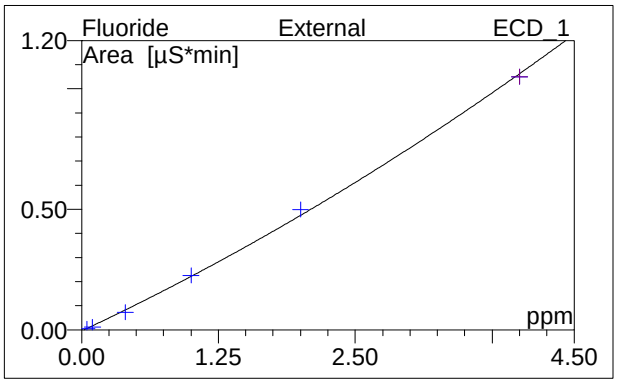
* = Manual integrations due to peak, rider, or baseline errors.

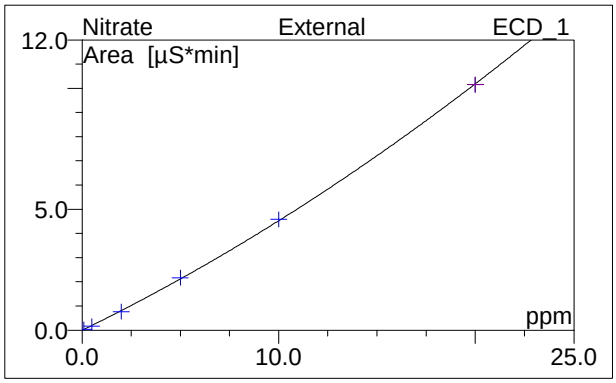
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

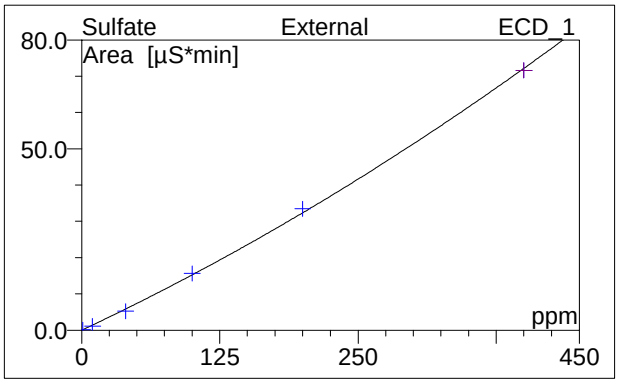
# 8 standard 6

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 6** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **19** | *Channel:* | **ECD_1** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:55** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



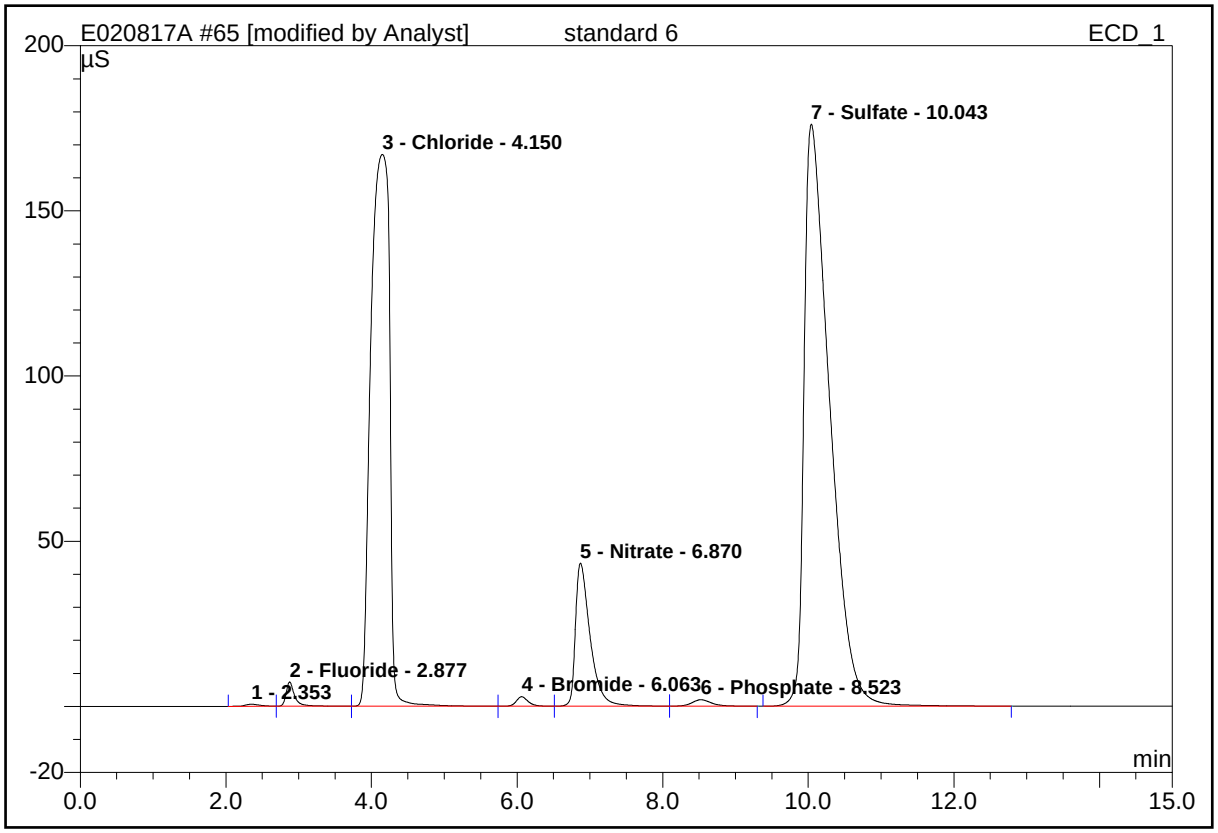




| No. | Ret.Time min | Peak Name | Cal.Type | Points | Coeff.Det. % | Offset | Slope | Curve |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.35 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 2 | 2.88 | Fluoride | XA0QOff | 6 | 99.6835 | -0.0049 | 0.2126 | 0.0135 |
| 3 | 4.15 | Chloride | XA0QOff | 7 | 99.8526 | -0.0356 | 0.2073 | 0.0002 |
| 4 | 6.06 | Bromide | XA0QOff | 6 | 99.9545 | -0.0003 | 0.0669 | 0.0005 |
| 5 | 6.87 | Nitrate | XA0QOff | 6 | 99.9500 | -0.0077 | 0.3961 | 0.0057 |
| 6 | 8.52 | Phosphate | XA0QOff | 6 | 99.7808 | 0.0037 | 0.1598 | -0.0007 |
| 7 | 10.04 | Sulfate | XA0QOff | 6 | 99.8682 | -0.0355 | 0.1433 | 0.0001 |
| **Average:** | | | | | 99.8482 | -0.0134 | 0.1977 | 0.0032 |

# 65 standard 6

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 6** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **19** | *Channel:* | **IC5** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:55** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.35 | n.a. | 0.624 | 0.148 | 0.11 | n.a. | BM * |
| 2 | 2.88 | Fluoride | 7.358 | 1.007 | 0.75 | 4.000 | M * |
| 3 | 4.15 | Chloride | 167.073 | 49.872 | 37.23 | 198.792 | M * |
| 4 | 6.06 | Bromide | 2.875 | 0.547 | 0.41 | 7.981 | M * |
| 5 | 6.87 | Nitrate | 43.305 | 10.129 | 7.56 | 19.945 | M * |
| 6 | 8.52 | Phosphate | 1.966 | 0.627 | 0.47 | 3.999 | MB* |
| 7 | 10.04 | Sulfate | 176.200 | 71.631 | 53.47 | 397.403 | BMB* |
| **Total:** | | | 399.402 | 133.961 | 100.00 | 632.121 | |

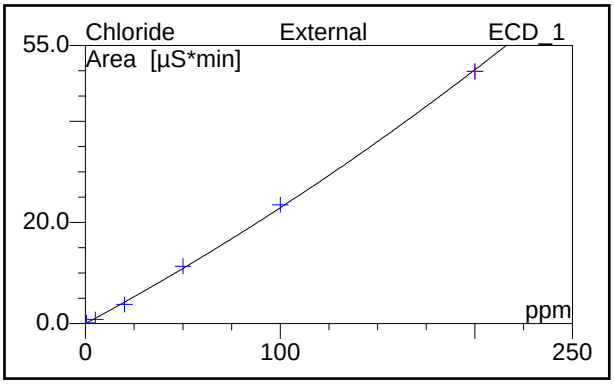
modified on: 02.06.17 15:05 By: OLH/EMW/JSW

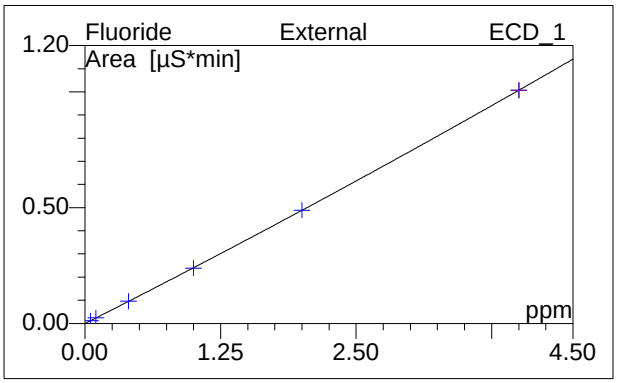
* = Manual integrations due to peak, rider, or baseline errors.

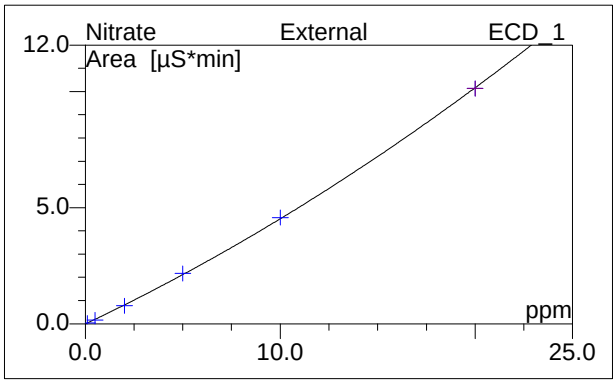
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

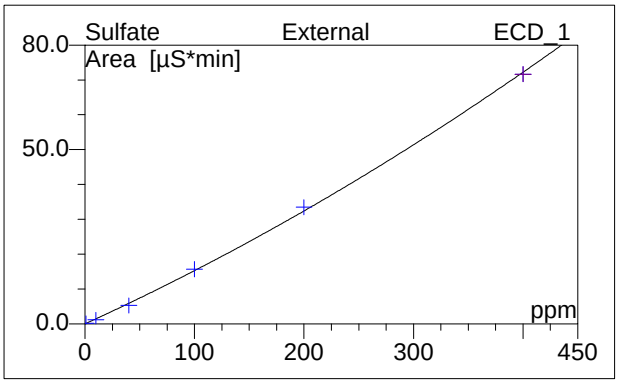
# 65 standard 6

| | | | |
|---|---|---|---|
| *Sample Name:* | **standard 6** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **19** | *Channel:* | **ECD_1** |
| *Sample Type:* | **standard** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/6/2017 13:55** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



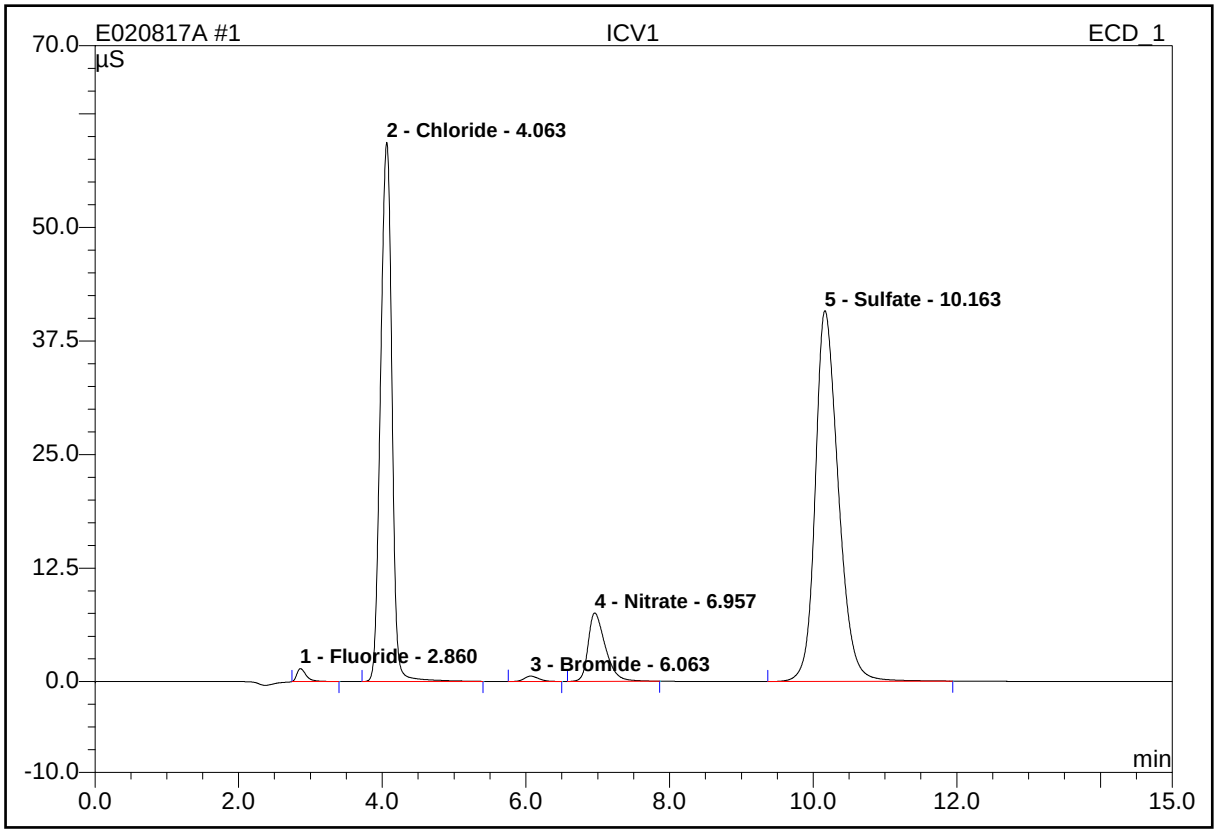




| No. | Ret.Time min | Peak Name | Cal.Type | Points | Coeff.Det. % | Offset | Slope | Curve |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.35 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 2 | 2.88 | Fluoride | XA0QOff | 6 | 99.9980 | 0.0000 | 0.2366 | 0.0038 |
| 3 | 4.15 | Chloride | XA0QOff | 6 | 99.8577 | -0.0190 | 0.2070 | 0.0002 |
| 4 | 6.06 | Bromide | XA0QOff | 6 | 99.9702 | 0.0002 | 0.0663 | 0.0003 |
| 5 | 6.87 | Nitrate | XA0QOff | 6 | 99.9541 | -0.0075 | 0.3969 | 0.0056 |
| 6 | 8.52 | Phosphate | XA0QOff | 6 | 99.7856 | 0.0038 | 0.1598 | -0.0010 |
| 7 | 10.04 | Sulfate | XA0QOff | 6 | 99.8703 | -0.0347 | 0.1436 | 0.0001 |
| **Average:** | | | | | 99.9060 | -0.0095 | 0.2017 | 0.0015 |

**Raw Data - ICV**

# 1 ICV1

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICV1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 20:39** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.86 | Fluoride | 1.432 | 0.218 | 0.76 | 0.910 | BMB |
| 2 | 4.06 | Chloride | 59.348 | 10.927 | 38.26 | 50.190 | BMB |
| 3 | 6.06 | Bromide | 0.587 | 0.138 | 0.48 | 2.059 | BMB |
| 4 | 6.96 | Nitrate | 7.535 | 2.083 | 7.29 | 4.925 | BMB |
| 5 | 10.16 | Sulfate | 40.810 | 15.196 | 53.20 | 99.685 | BMB |
| **Total:** | | | 109.712 | 28.562 | 100.00 | 157.768 | |

modified on: n.a. By: OLH/EMW/JSW

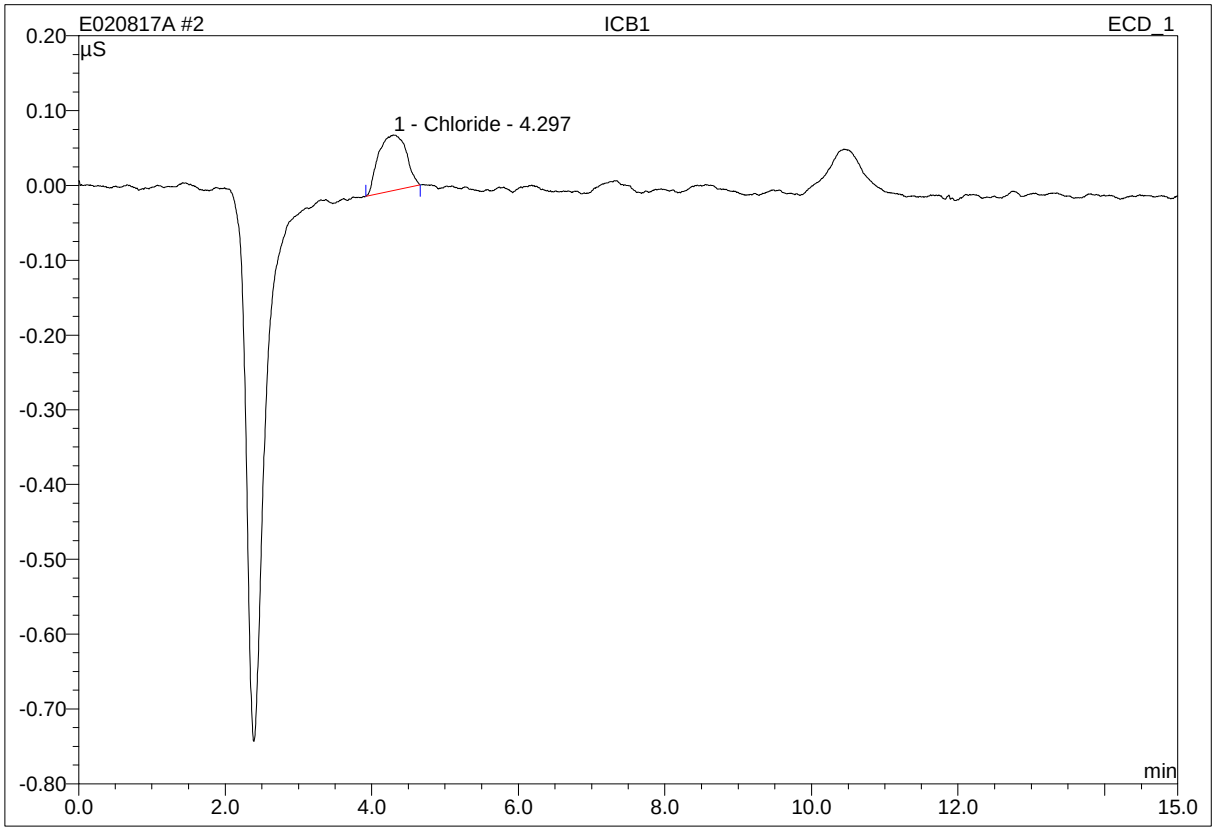
* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - ICB**

# 2 ICB1

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICB1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 20:57** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



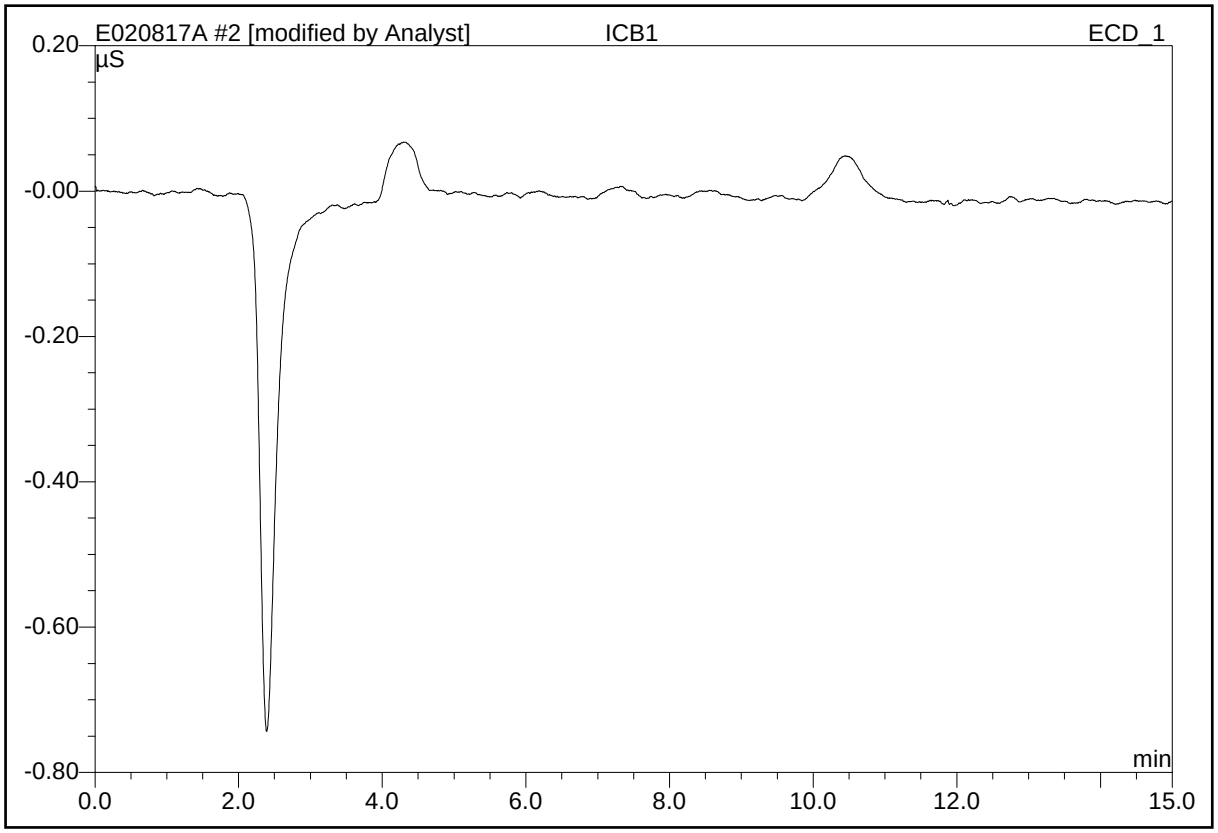

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.30 | Chloride | 0.074 | 0.033 | 100.00 | 0.250 | BMB |
| **Total:** | | | 0.074 | 0.033 | 100.00 | 0.250 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 2 ICB1

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICB1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 20:57** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

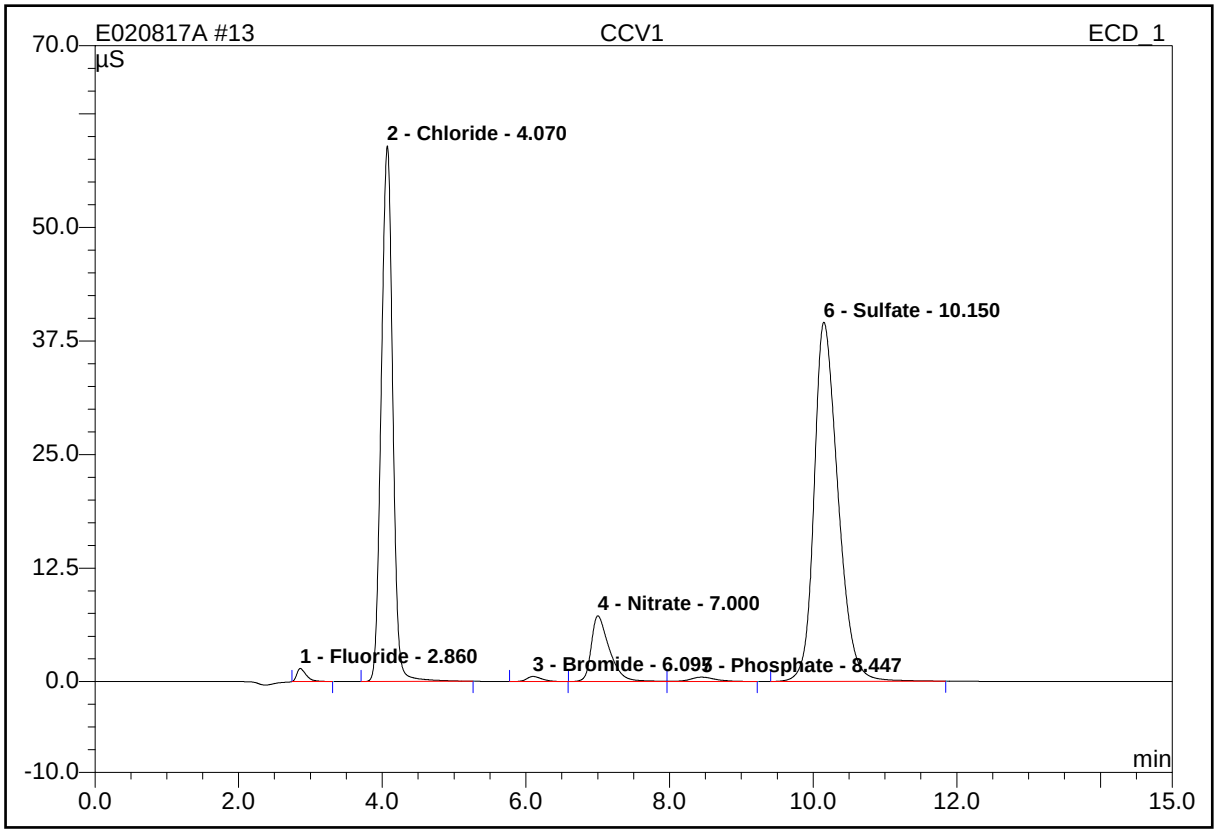
modified on: 02.08.17 21:36 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - CCV**

# 13 CCV1

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 0:08** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.86 | Fluoride | 1.442 | 0.219 | 0.76 | 0.914 | BMB |
| 2 | 4.07 | Chloride | 58.967 | 10.943 | 37.88 | 50.262 | BMB |
| 3 | 6.10 | Bromide | 0.558 | 0.136 | 0.47 | 2.035 | BMB |
| 4 | 7.00 | Nitrate | 7.228 | 2.106 | 7.29 | 4.978 | BM |
| 5 | 8.45 | Phosphate | 0.485 | 0.201 | 0.69 | 1.242 | MB |
| 6 | 10.15 | Sulfate | 39.533 | 15.282 | 52.90 | 100.212 | BMB |
| **Total:** | | | 108.213 | 28.888 | 100.00 | 159.641 | |

modified on: n.a. By: OLH/EMW/JSW

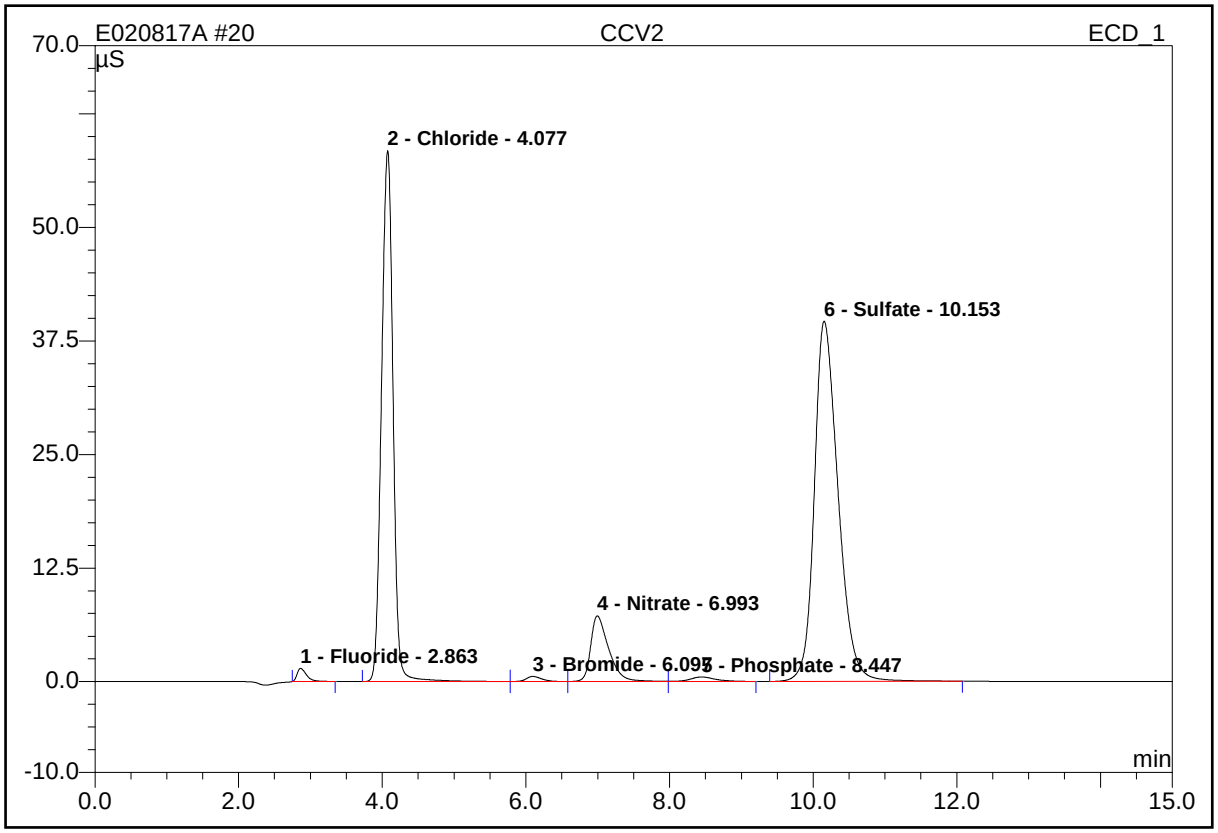
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 20 CCV2

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 2:10** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.86 | Fluoride | 1.462 | 0.225 | 0.78 | 0.938 | BMB |
| 2 | 4.08 | Chloride | 58.444 | 10.889 | 37.87 | 50.026 | BM |
| 3 | 6.10 | Bromide | 0.562 | 0.139 | 0.48 | 2.080 | M |
| 4 | 6.99 | Nitrate | 7.221 | 2.090 | 7.27 | 4.942 | M |
| 5 | 8.45 | Phosphate | 0.493 | 0.201 | 0.70 | 1.242 | MB |
| 6 | 10.15 | Sulfate | 39.648 | 15.213 | 52.90 | 99.789 | BMB |
| **Total:** | | | 107.831 | 28.758 | 100.00 | 159.016 | |

modified on: n.a. By: OLH/EMW/JSW

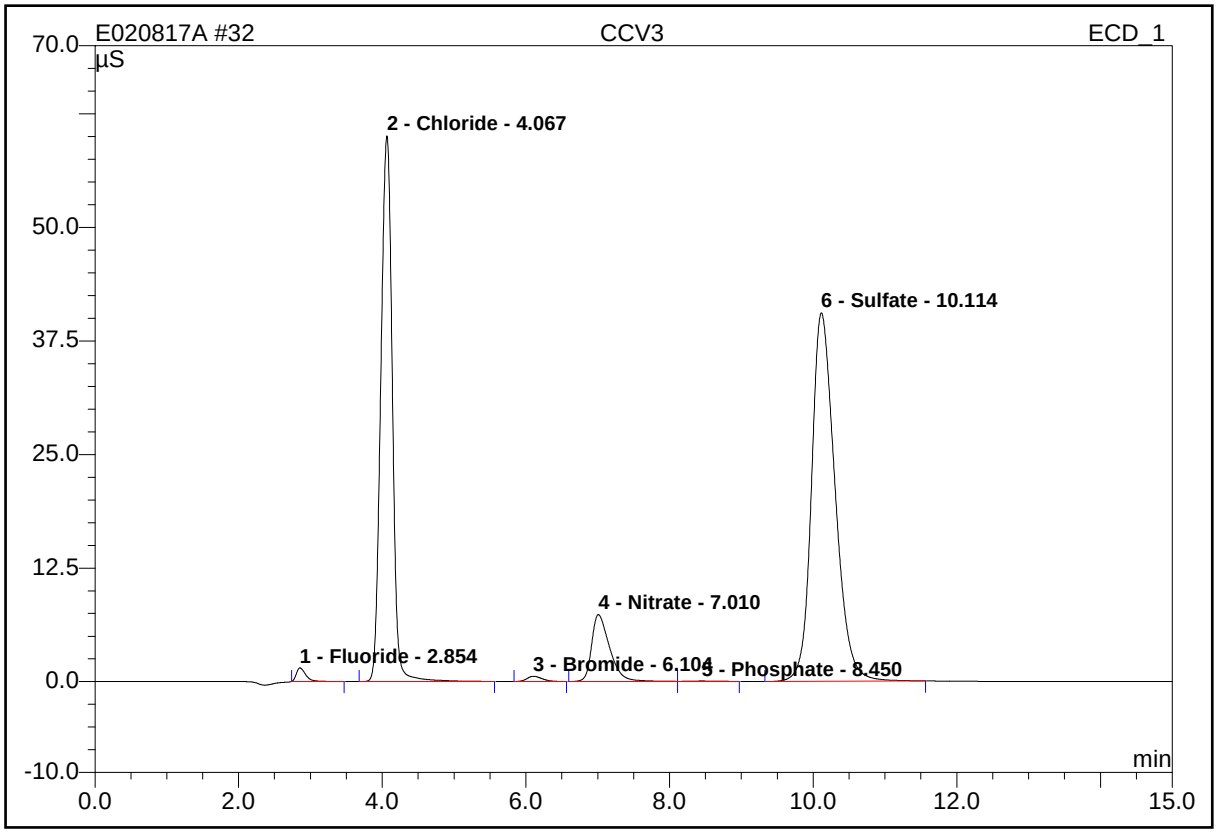
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 32 CCV3

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV3** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **20** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 5:39** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.85 | Fluoride | 1.501 | 0.229 | 0.79 | 0.955 | BMB |
| 2 | 4.07 | Chloride | 60.067 | 11.190 | 38.41 | 51.338 | BMB |
| 3 | 6.10 | Bromide | 0.573 | 0.139 | 0.48 | 2.074 | BMB |
| 4 | 7.01 | Nitrate | 7.359 | 2.136 | 7.33 | 5.044 | BM |
| 5 | 8.45 | Phosphate | 0.051 | 0.025 | 0.09 | 0.132 | MB |
| 6 | 10.11 | Sulfate | 40.572 | 15.410 | 52.90 | 101.003 | BMB |
| **Total:** | | | 110.123 | 29.130 | 100.00 | 160.547 | |

modified on: n.a. By: OLH/EMW/JSW

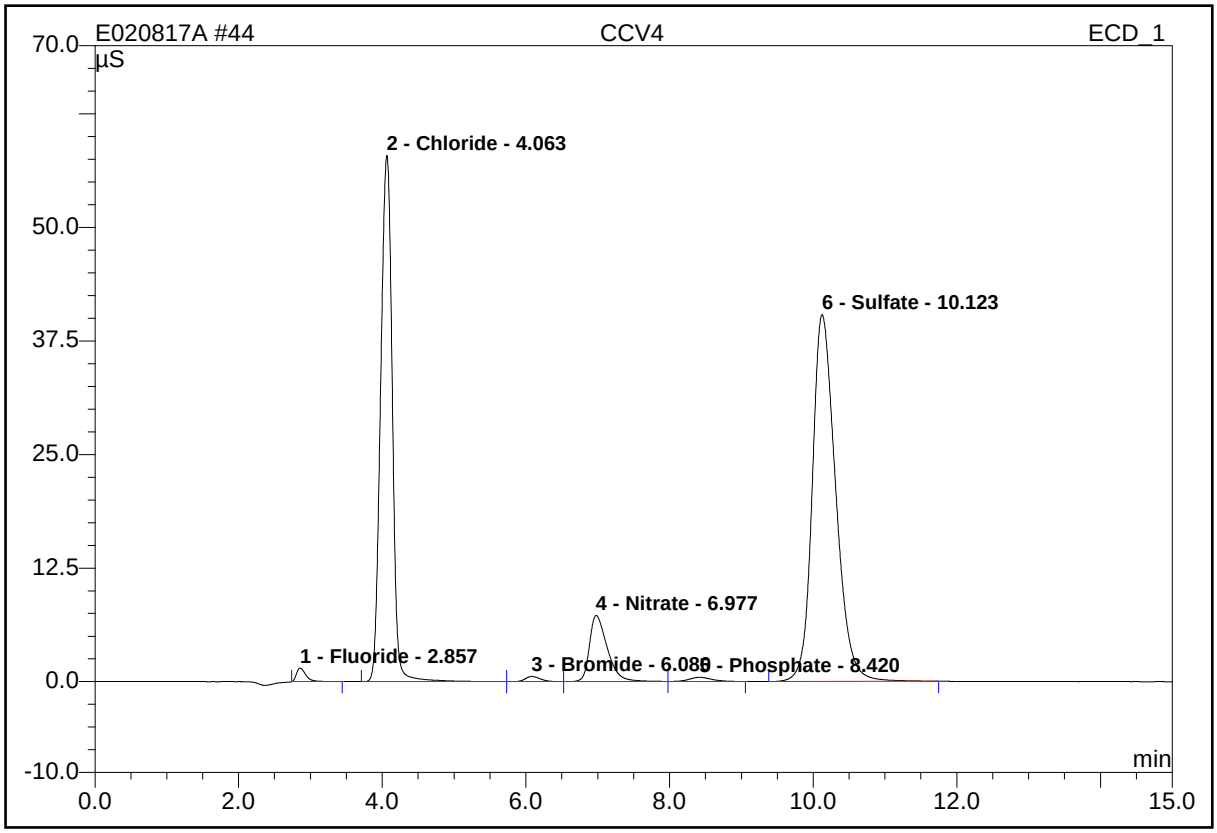
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 44 CCV4

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV4** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **20** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 9:07** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.86 | Fluoride | 1.486 | 0.226 | 0.78 | 0.941 | BMB |
| 2 | 4.06 | Chloride | 57.933 | 10.925 | 37.87 | 50.184 | BM |
| 3 | 6.08 | Bromide | 0.563 | 0.138 | 0.48 | 2.055 | M |
| 4 | 6.98 | Nitrate | 7.281 | 2.097 | 7.27 | 4.958 | M |
| 5 | 8.42 | Phosphate | 0.465 | 0.176 | 0.61 | 1.087 | MB |
| 6 | 10.12 | Sulfate | 40.393 | 15.285 | 52.99 | 100.234 | BMB |
| **Total:** | | | 108.120 | 28.848 | 100.00 | 159.457 | |

modified on: n.a. By: OLH/EMW/JSW

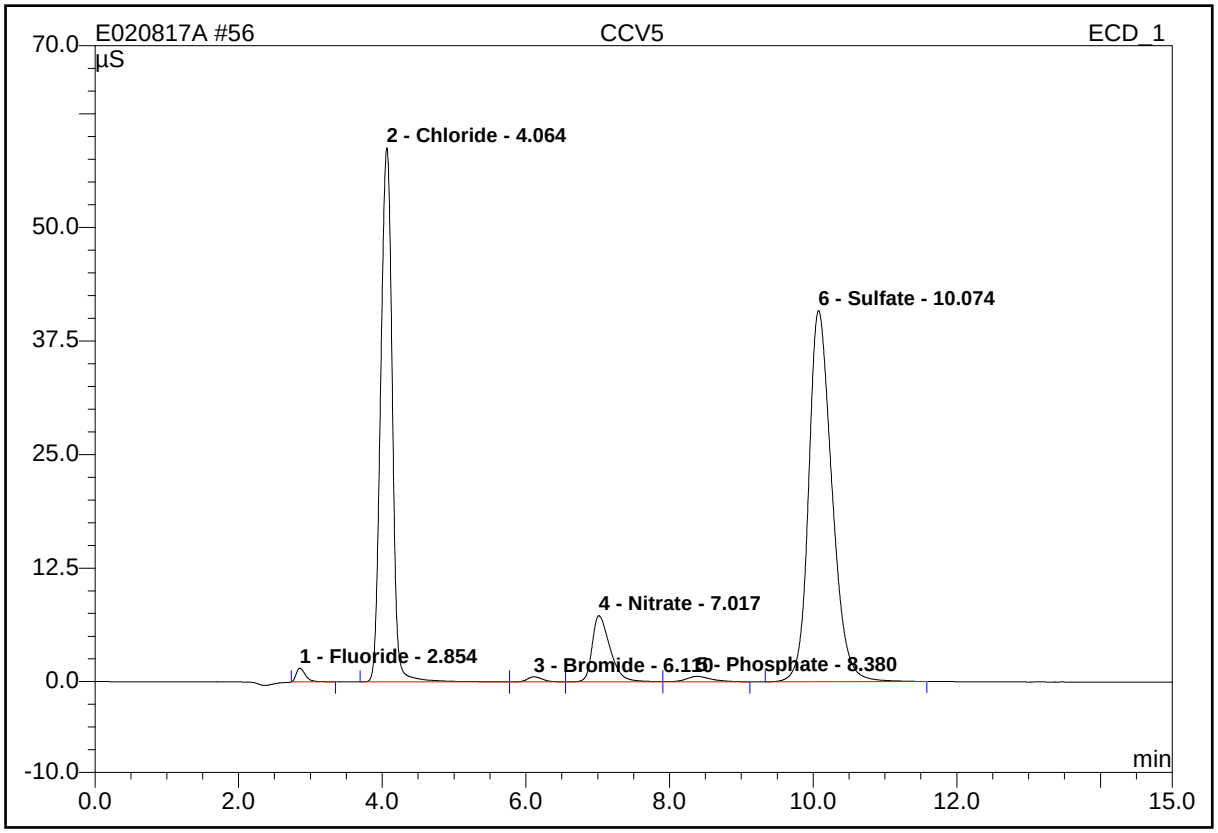
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 56 CCV5

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV5** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **23** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 12:36** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.85 | Fluoride | 1.506 | 0.227 | 0.78 | 0.944 | BMB |
| 2 | 4.06 | Chloride | 58.818 | 11.053 | 37.91 | 50.739 | BM |
| 3 | 6.11 | Bromide | 0.563 | 0.138 | 0.47 | 2.064 | M |
| 4 | 7.02 | Nitrate | 7.288 | 2.109 | 7.23 | 4.983 | M |
| 5 | 8.38 | Phosphate | 0.608 | 0.253 | 0.87 | 1.573 | MB |
| 6 | 10.07 | Sulfate | 40.870 | 15.373 | 52.73 | 100.776 | BMB |
| **Total:** | | | 109.651 | 29.152 | 100.00 | 161.079 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

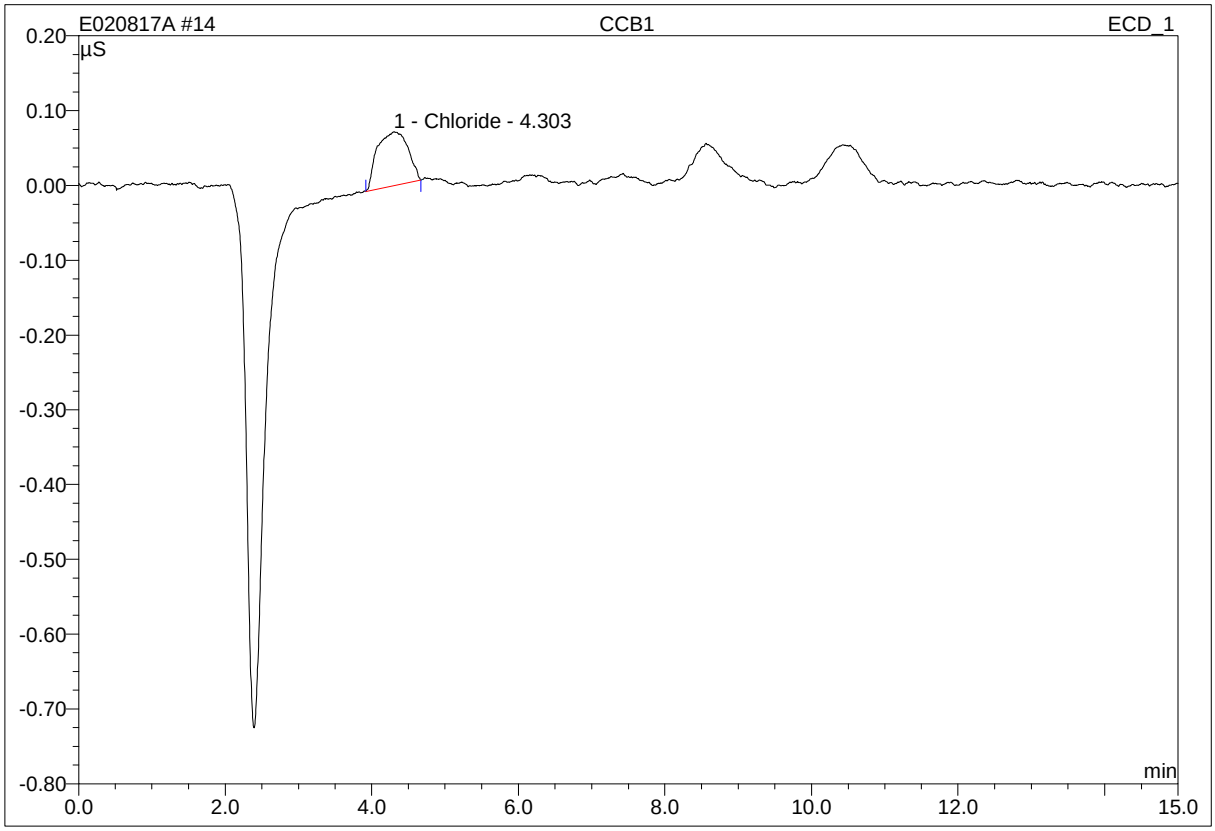
B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - CCB**

# 14 CCB1

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 0:25** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



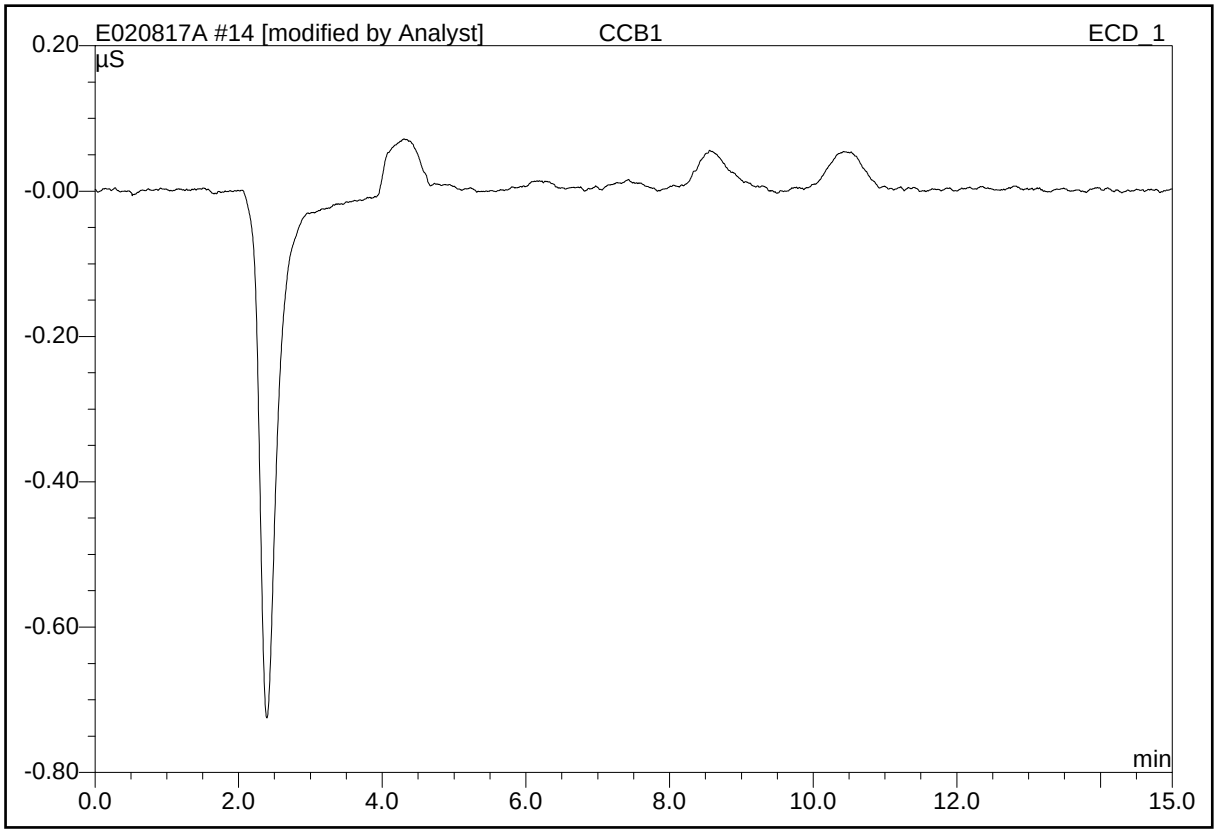

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.30 | Chloride | 0.072 | 0.035 | 100.00 | 0.260 | BMB |
| **Total:** | | | 0.072 | 0.035 | 100.00 | 0.260 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 14 CCB1

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 0:25** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



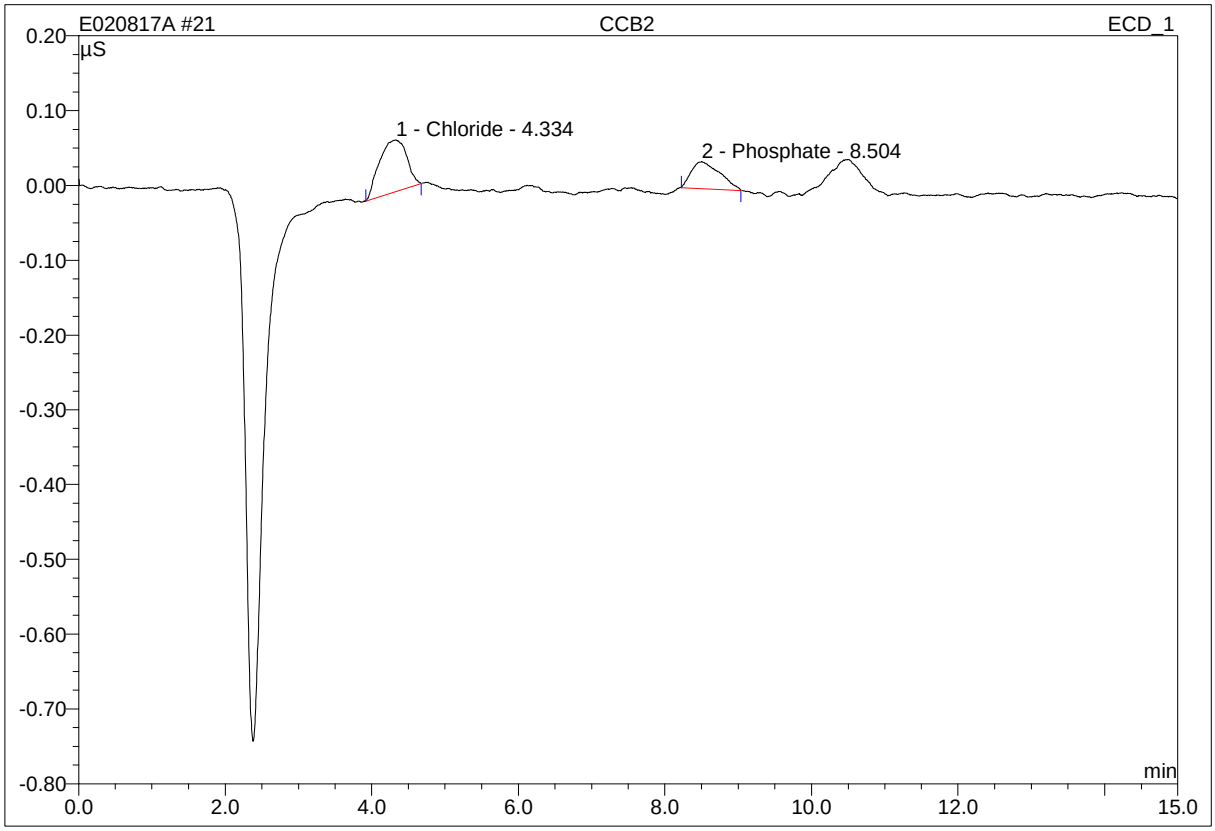

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

modified on: 02.09.17 07:57 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 21 CCB2

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 2:27** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.33 | Chloride | 0.069 | 0.030 | 64.95 | 0.238 | BMB |
| 2 | 8.50 | Phosphate | 0.036 | 0.016 | 35.05 | 0.079 | BMB |
| **Total:** | | | 0.105 | 0.047 | 100.00 | 0.316 | |

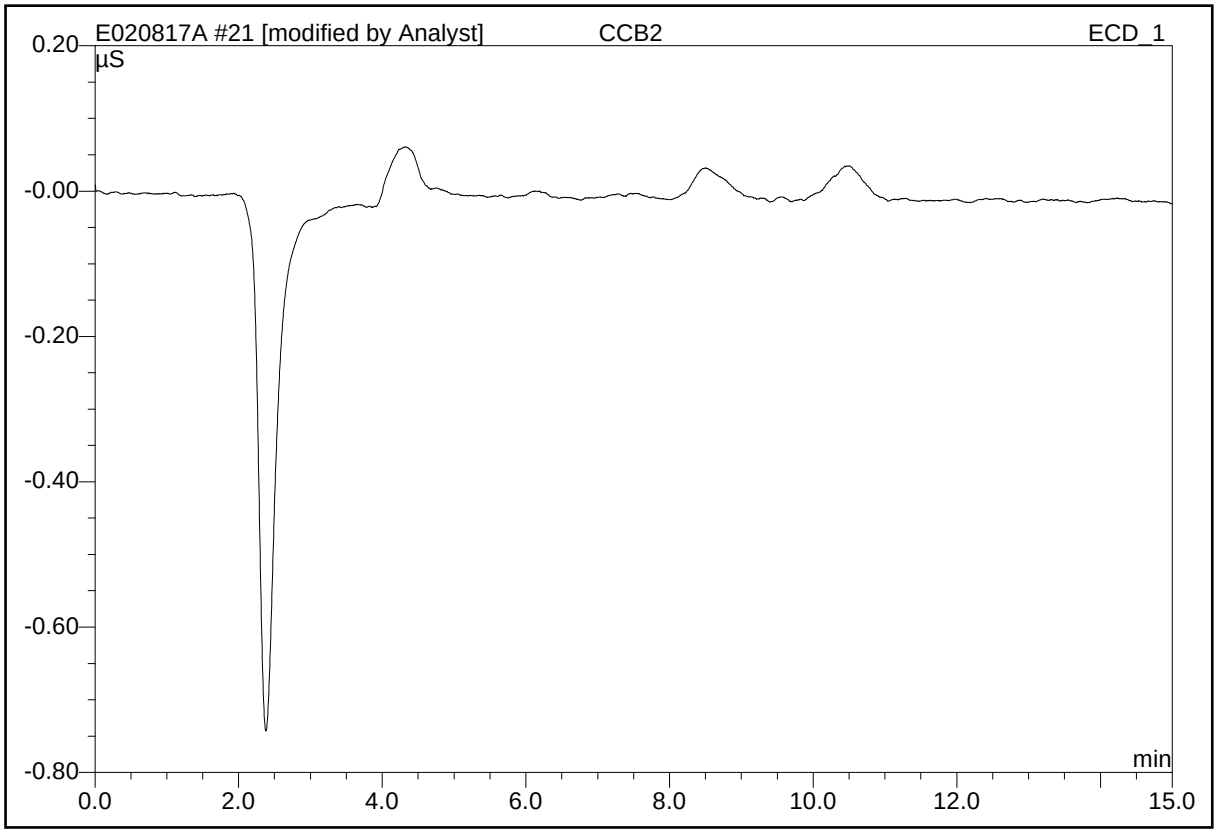
modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider

BMB = This peak type is for resolved peaks.

# 21 CCB2

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 2:27** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



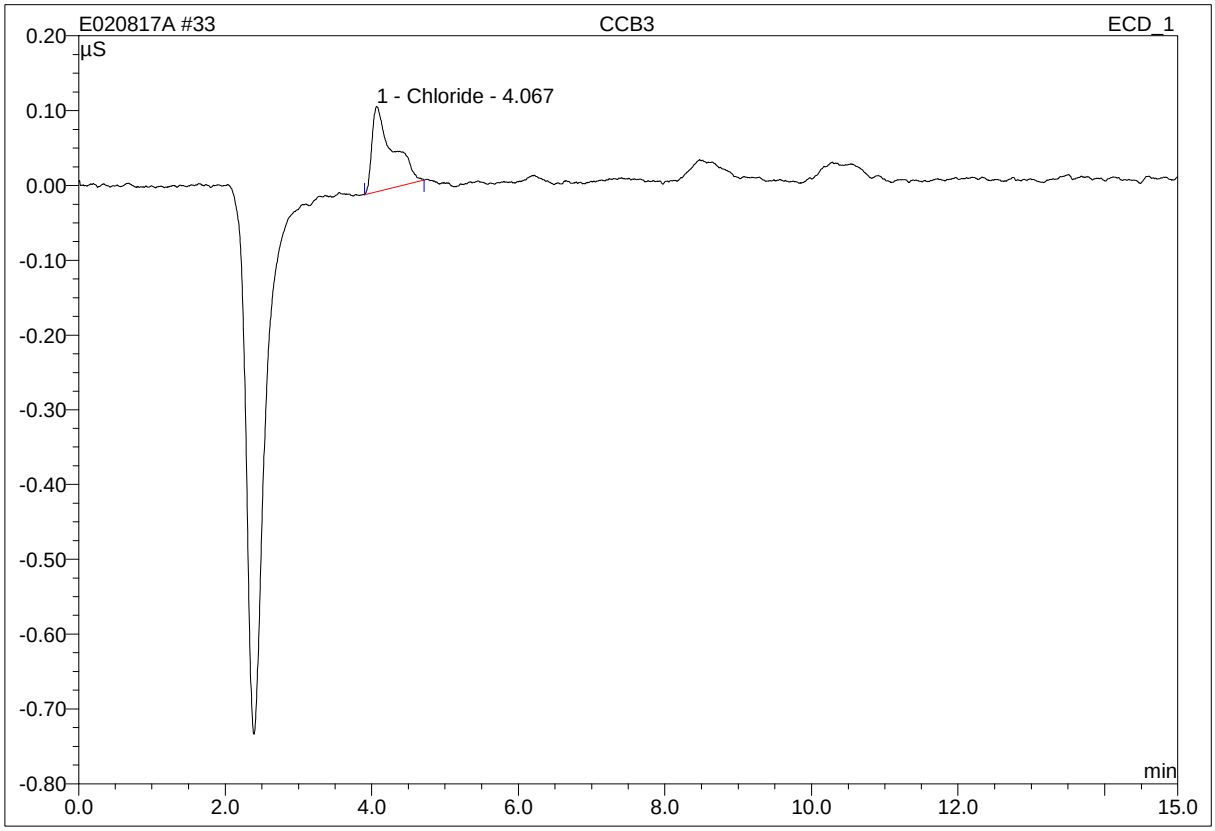

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

modified on: 02.09.17 07:58 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 33 CCB3

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB3** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **20** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 5:56** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



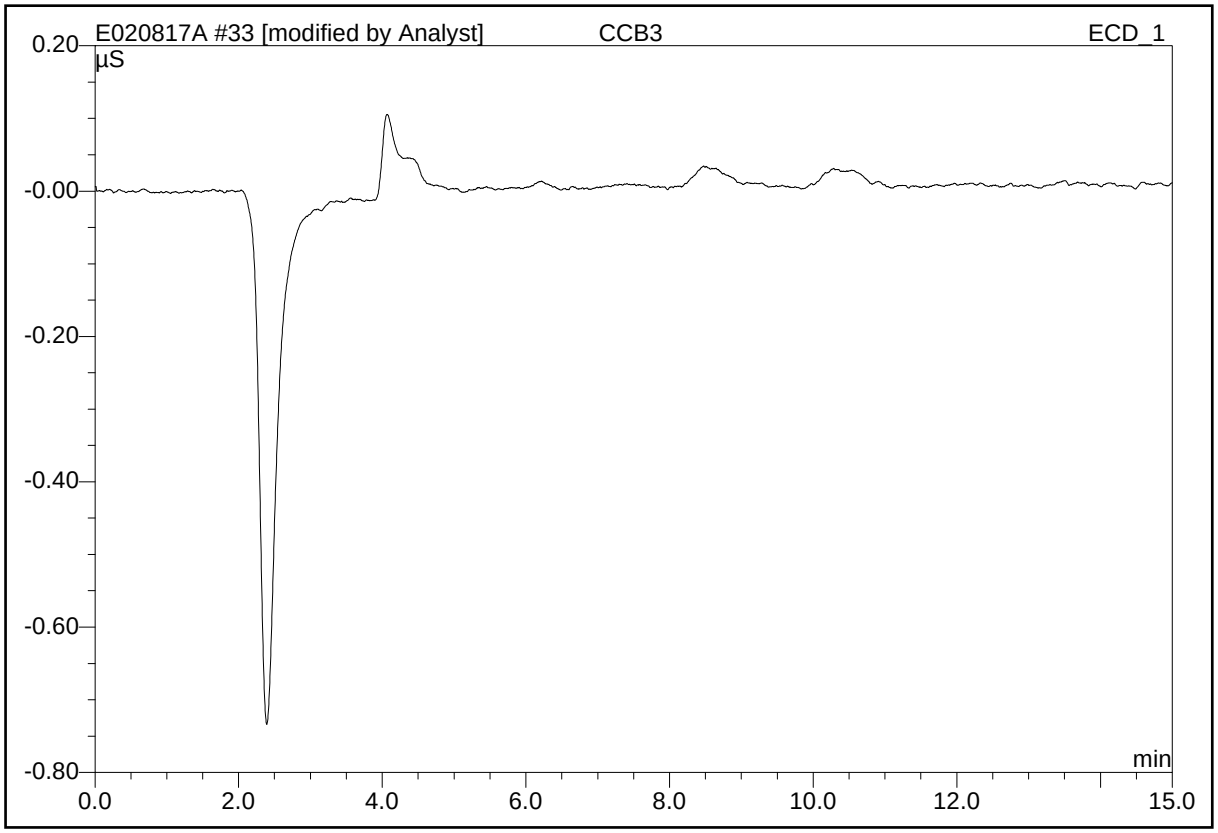

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.07 | Chloride | 0.114 | 0.037 | 100.00 | 0.270 | BMB |
| **Total:** | | | 0.114 | 0.037 | 100.00 | 0.270 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 33 CCB3

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB3** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **20** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 5:56** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



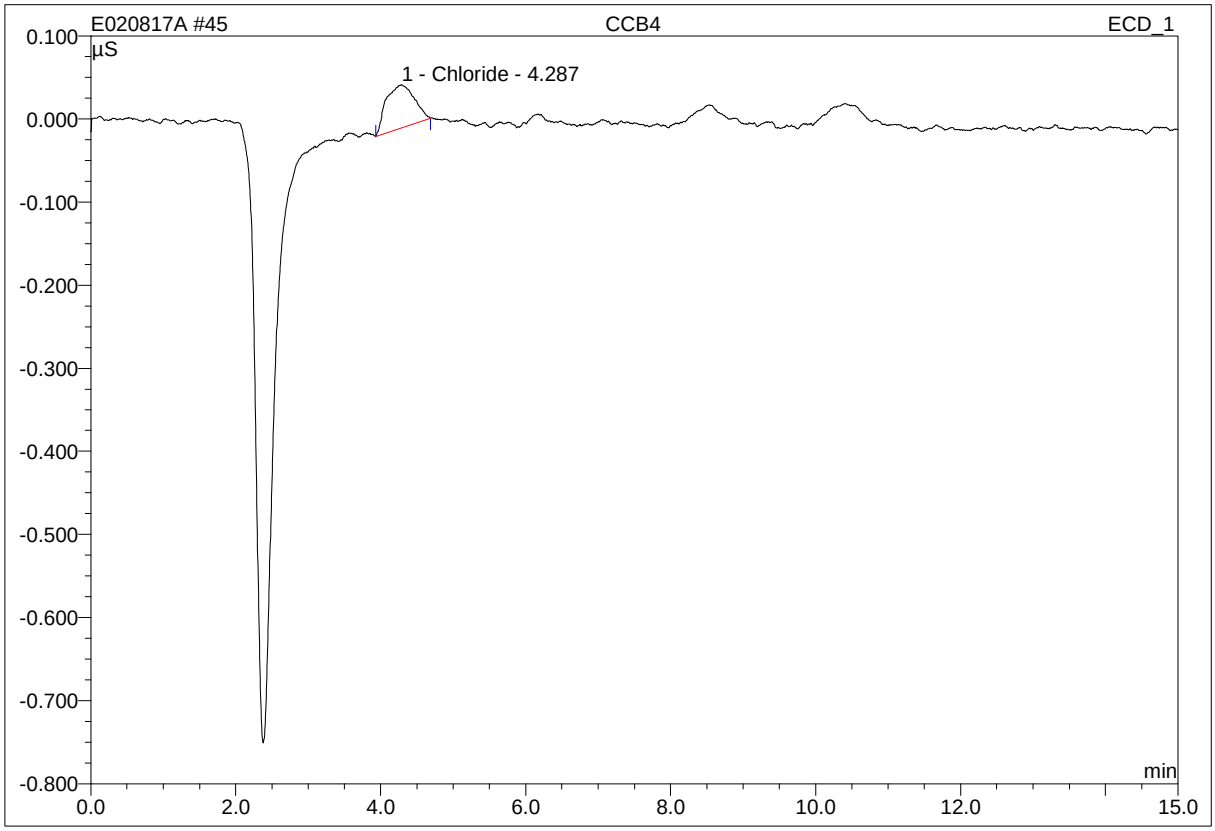

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

modified on: 02.09.17 08:03 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 45 CCB4

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB4** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **20** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 9:25** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



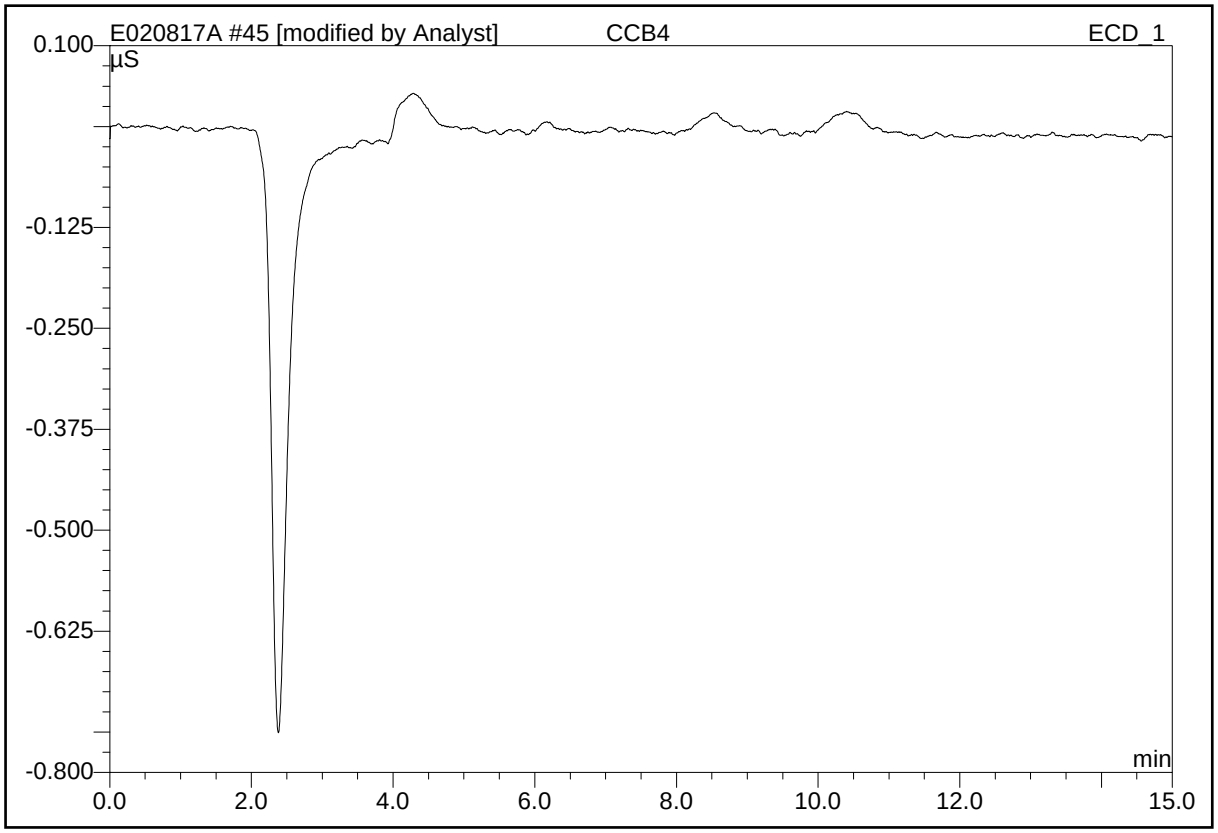

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.29 | Chloride | 0.052 | 0.024 | 100.00 | 0.206 | BMB |
| **Total:** | | | 0.052 | 0.024 | 100.00 | 0.206 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 45 CCB4

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB4** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **20** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 9:25** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



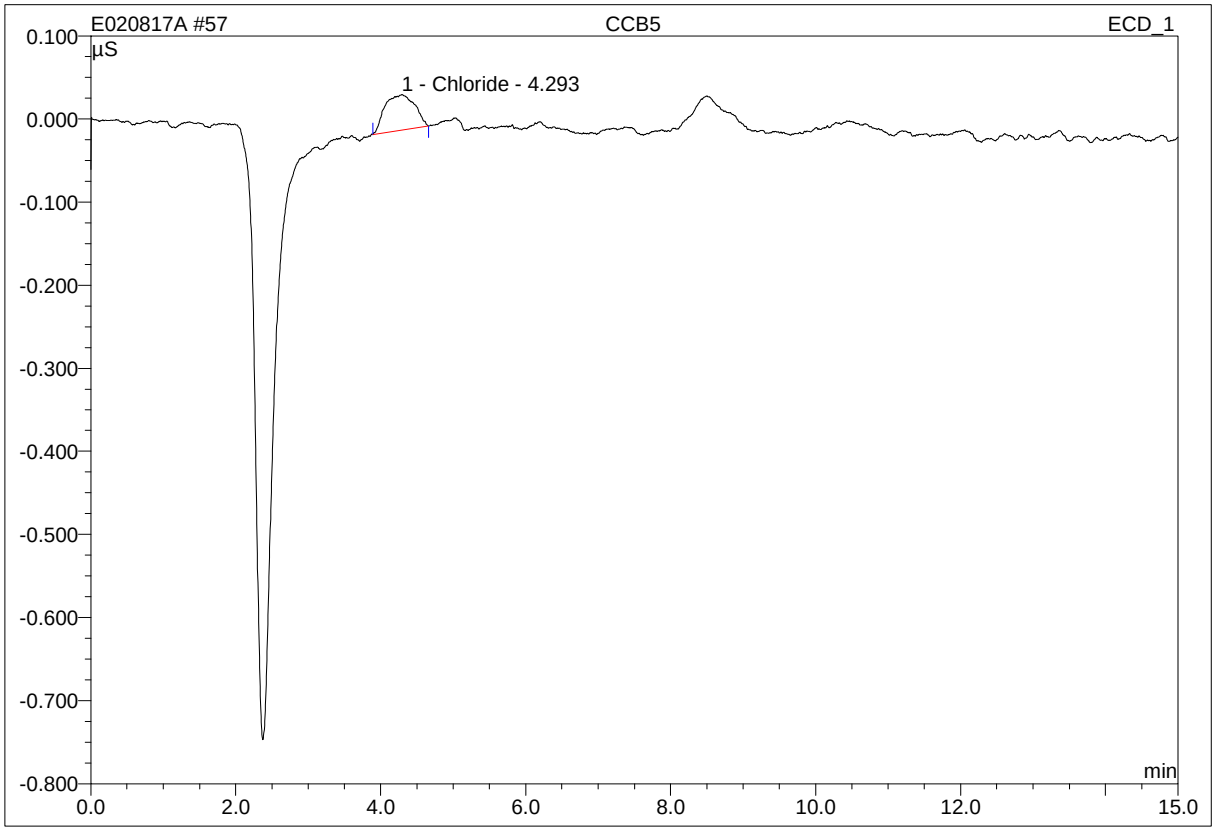

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

modified on: 02.09.17 11:20 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

# 57 CCB5

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB5** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **22** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 12:54** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |



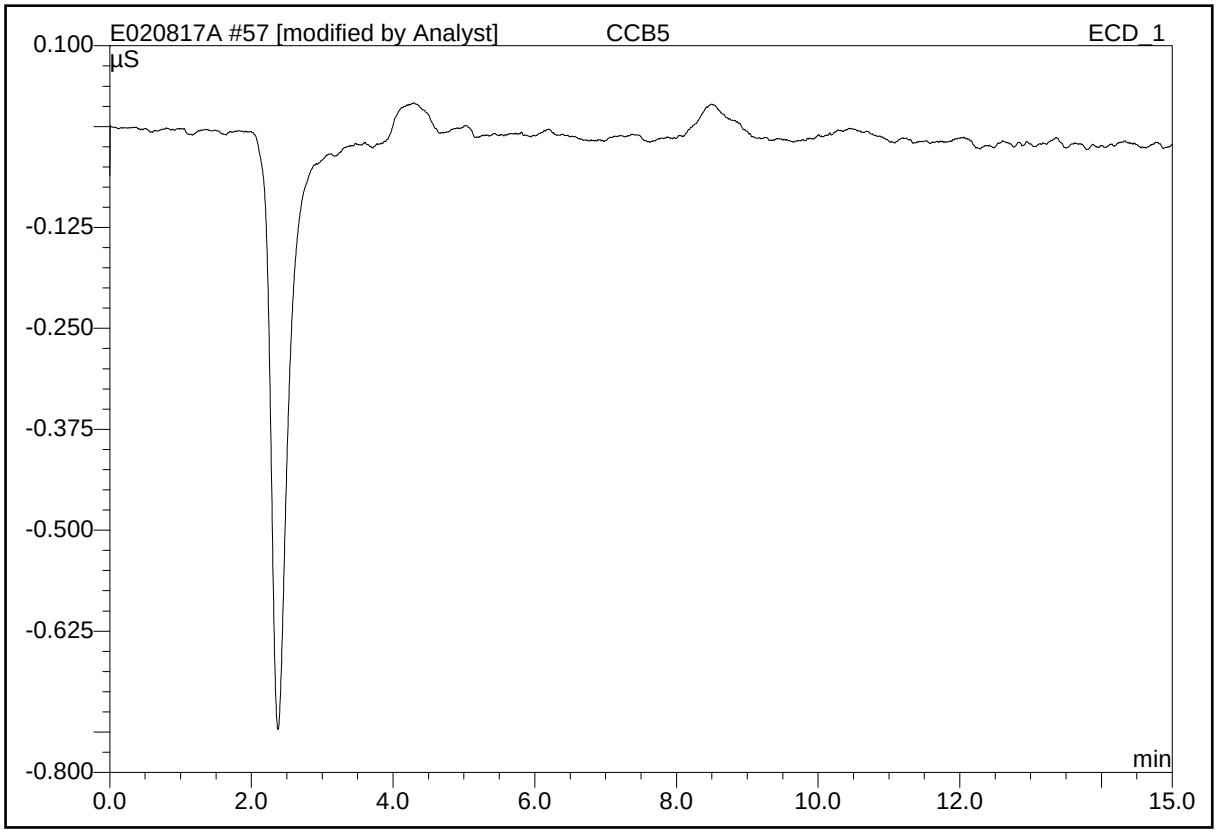

| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 4.29 | Chloride | 0.043 | 0.020 | 100.00 | 0.191 | BMB |
| **Total:** | | | 0.043 | 0.020 | 100.00 | 0.191 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 57 CCB5

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB5** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **22** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 12:54** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

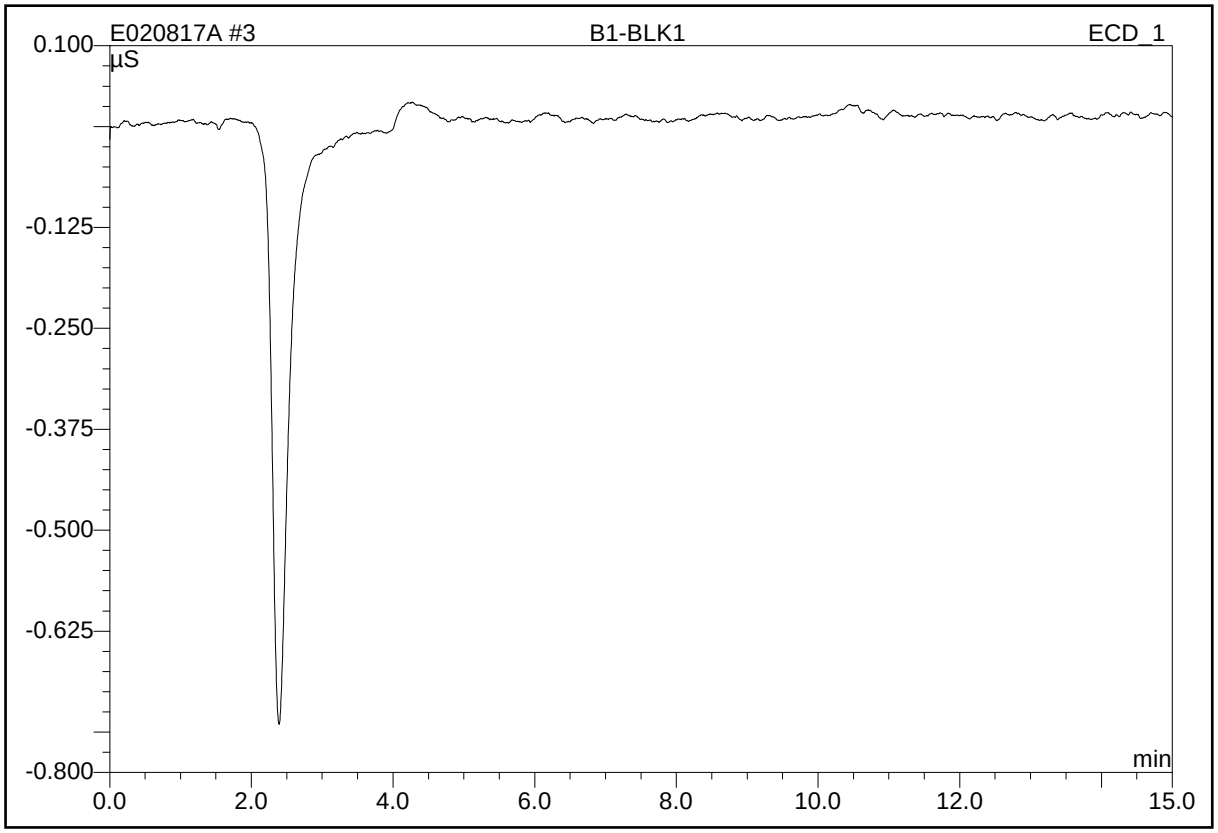
modified on: 02.09.17 15:55 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - Method Blank**

# 3 B1-BLK1

| | | | |
|---|---|---|---|
| *Sample Name:* | **B1-BLK1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **17** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 21:14** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| **Total:** | | | 0.000 | 0.000 | 0.00 | 0.000 | |

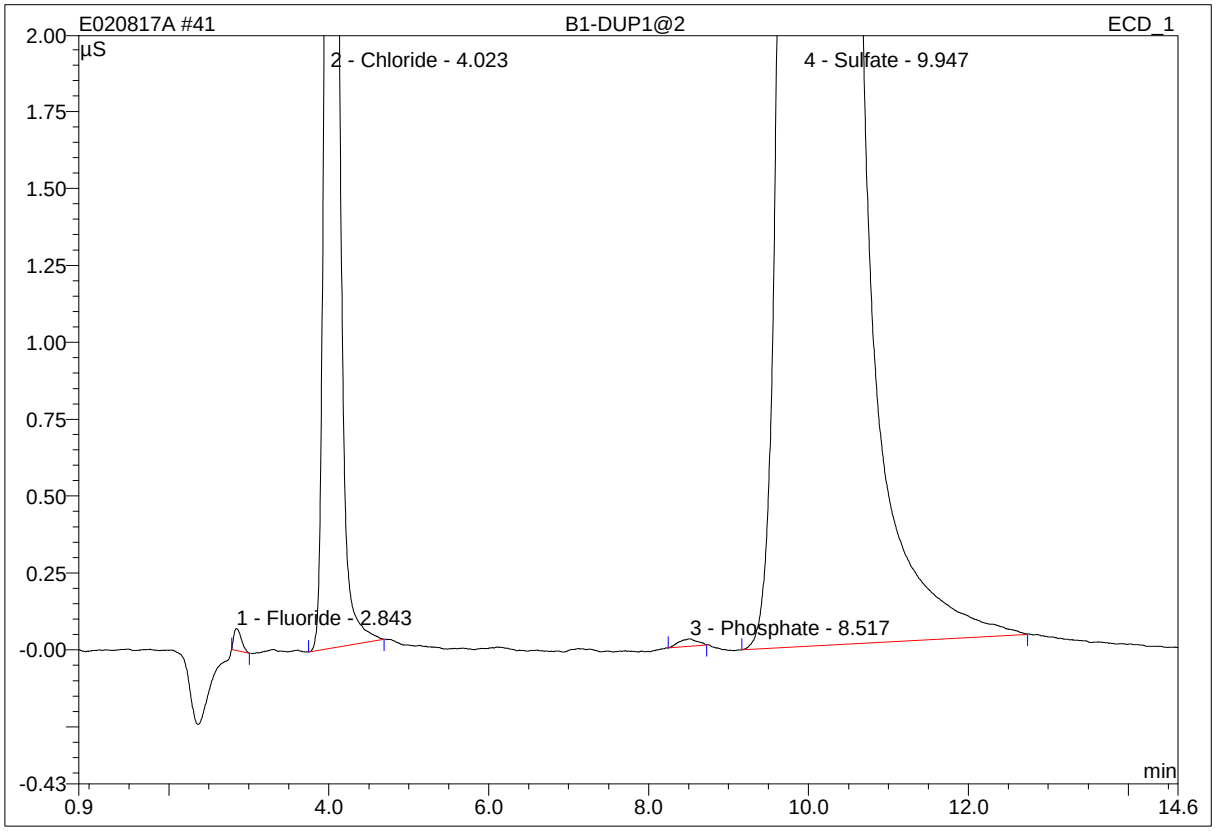
modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - Duplicate**

# 41 B1-DUP1@2

| | | | |
|---|---|---|---|
| *Sample Name:* | **B1-DUP1@2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **21** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 8:15** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.84 | Fluoride | 0.070 | 0.008 | 0.01 | 0.033 | BMB |
| 2 | 4.02 | Chloride | 5.278 | 0.949 | 1.70 | 4.651 | BMB |
| 3 | 8.52 | Phosphate | 0.024 | 0.007 | 0.01 | 0.018 | BMB |
| 4 | 9.95 | Sulfate | 134.060 | 54.873 | 98.28 | 317.493 | BMB |
| **Total:** | | | 139.433 | 55.836 | 100.00 | 322.195 | |

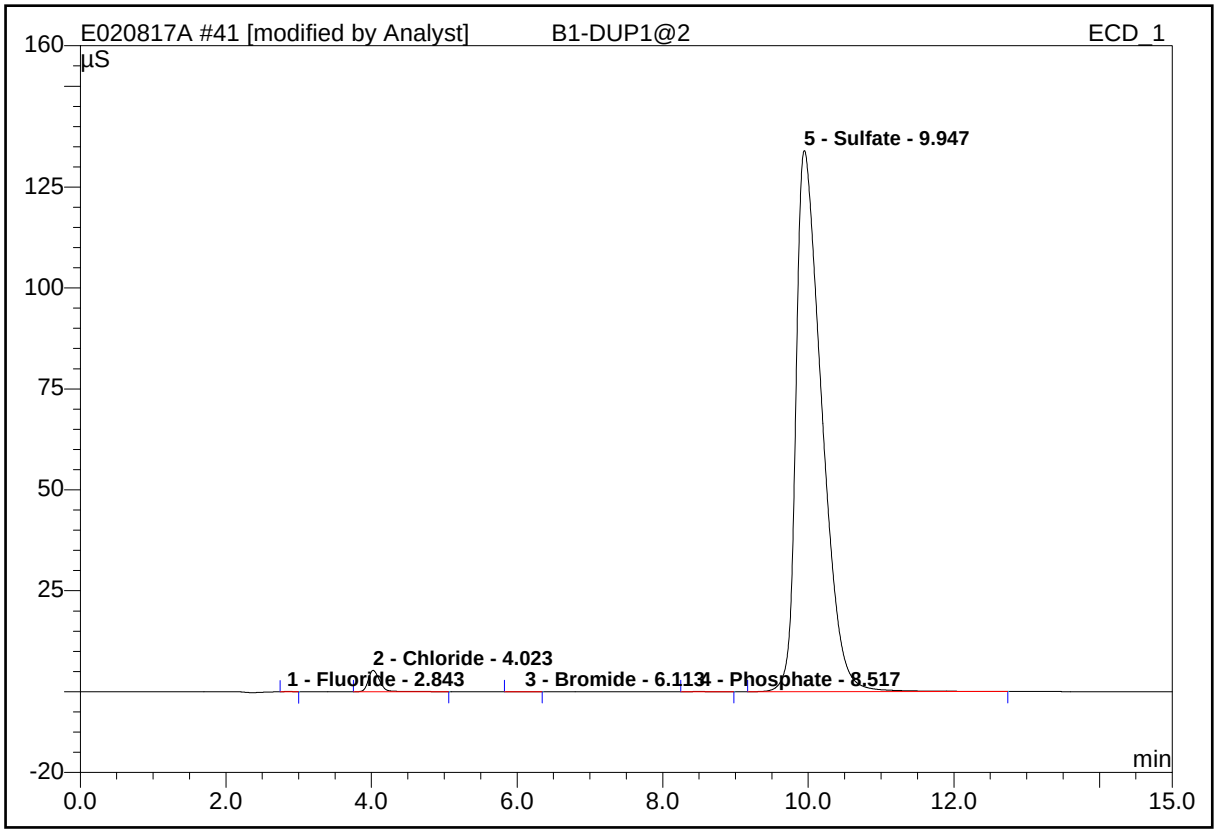
modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R= Rider
BMB = This peak type is for resolved peaks.

# 41 B1-DUP1@2

| | | | |
|---|---|---|---|
| *Sample Name:* | **B1-DUP1@2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **21** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 8:15** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.84 | Fluoride | 0.092 | 0.011 | 0.02 | 0.048 | BMB* |
| 2 | 4.02 | Chloride | 5.286 | 0.966 | 1.73 | 4.735 | BMB* |
| 3 | 6.11 | Bromide | 0.011 | 0.003 | 0.01 | 0.045 | BMB* |
| 4 | 8.52 | Phosphate | 0.032 | 0.012 | 0.02 | 0.050 | BMB* |
| 5 | 9.95 | Sulfate | 134.060 | 54.873 | 98.22 | 317.493 | BMB |
| **Total:** | | | 139.482 | 55.865 | 100.00 | 322.370 | |

modified on: 02.09.17 09:17 By: OLH/EMW/JSW

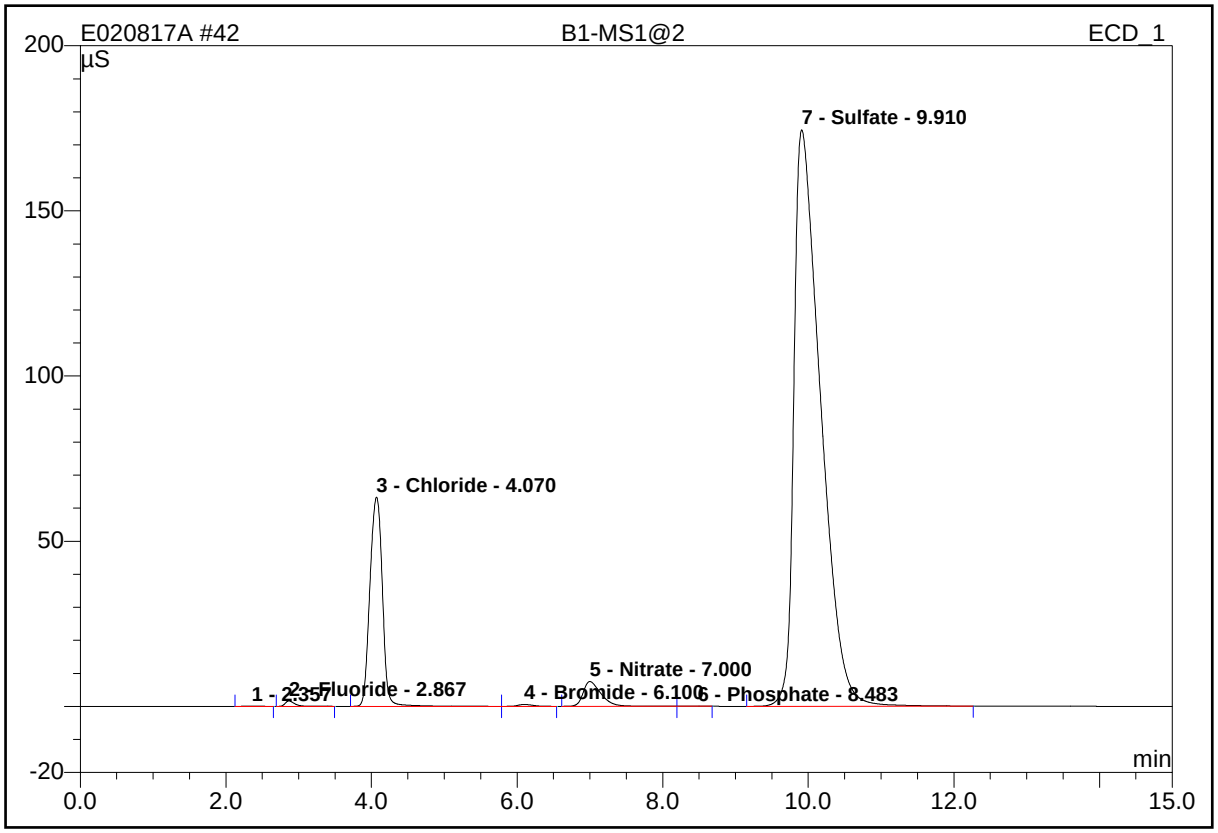
* = Manual integrations due to peak, rider, or baseline errors.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - Matrix Spike**

# 42 B1-MS1@2

| | | | |
|---|---|---|---|
| *Sample Name:* | **B1-MS1@2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **21** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 8:33** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.36 | n.a. | 0.088 | 0.019 | 0.02 | n.a. | BMB |
| 2 | 2.87 | Fluoride | 1.647 | 0.257 | 0.29 | 1.068 | BMB |
| 3 | 4.07 | Chloride | 63.379 | 12.575 | 14.13 | 57.332 | BM |
| 4 | 6.10 | Bromide | 0.576 | 0.137 | 0.15 | 2.048 | MB |
| 5 | 7.00 | Nitrate | 7.503 | 2.140 | 2.40 | 5.053 | BM |
| 6 | 8.48 | Phosphate | 0.014 | 0.004 | 0.00 | -0.001 | MB |
| 7 | 9.91 | Sulfate | 174.540 | 73.894 | 83.00 | 407.782 | BMB |
| **Total:** | | | 247.747 | 89.026 | 100.00 | 473.280 | |

modified on: n.a. By: OLH/EMW/JSW

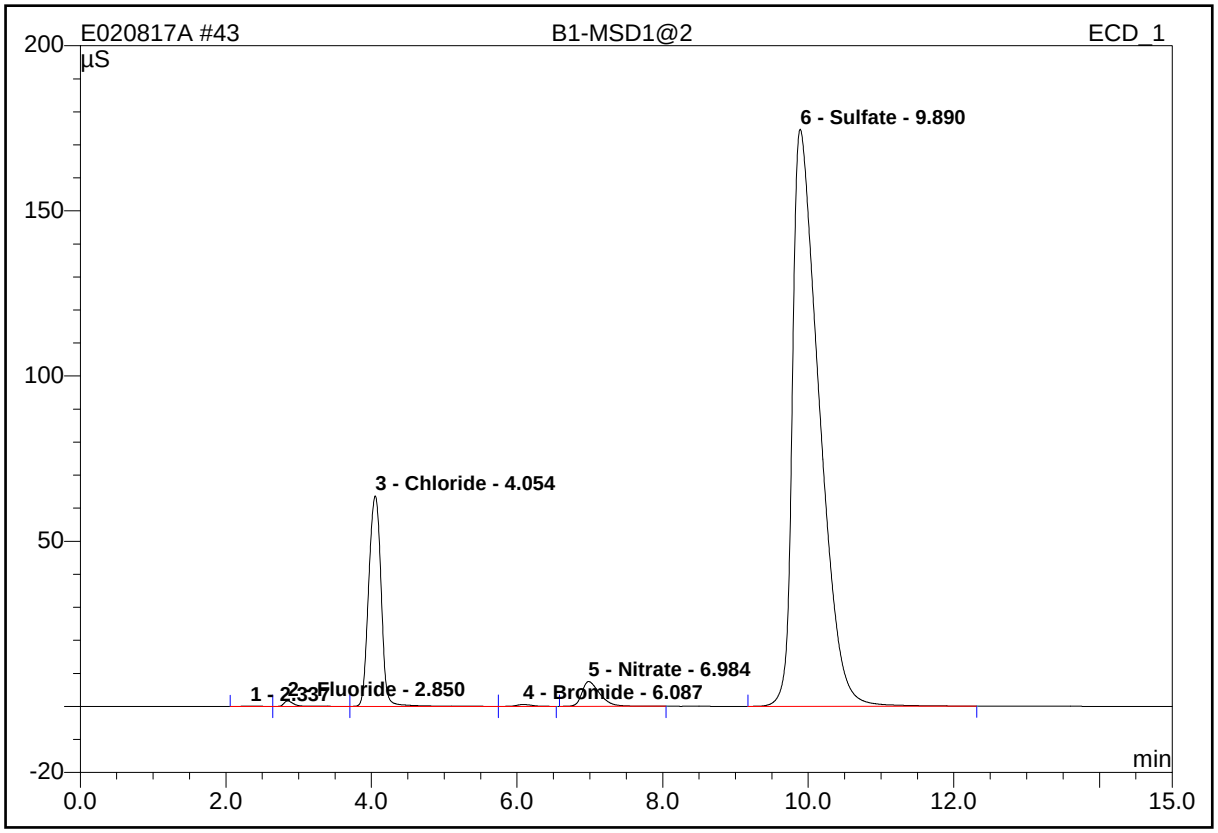
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - Matrix Spike Duplicate**

# 43 B1-MSD1@2

| | | | |
|---|---|---|---|
| *Sample Name:* | **B1-MSD1@2** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **21** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/9/2017 8:50** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.34 | n.a. | 0.103 | 0.023 | 0.03 | n.a. | BM |
| 2 | 2.85 | Fluoride | 1.655 | 0.268 | 0.30 | 1.112 | M |
| 3 | 4.05 | Chloride | 63.703 | 12.623 | 14.15 | 57.539 | M |
| 4 | 6.09 | Bromide | 0.578 | 0.140 | 0.16 | 2.084 | MB |
| 5 | 6.98 | Nitrate | 7.513 | 2.144 | 2.40 | 5.062 | BMB |
| 6 | 9.89 | Sulfate | 174.704 | 73.991 | 82.96 | 408.226 | BMB |
| **Total:** | | | 248.256 | 89.189 | 100.00 | 474.022 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

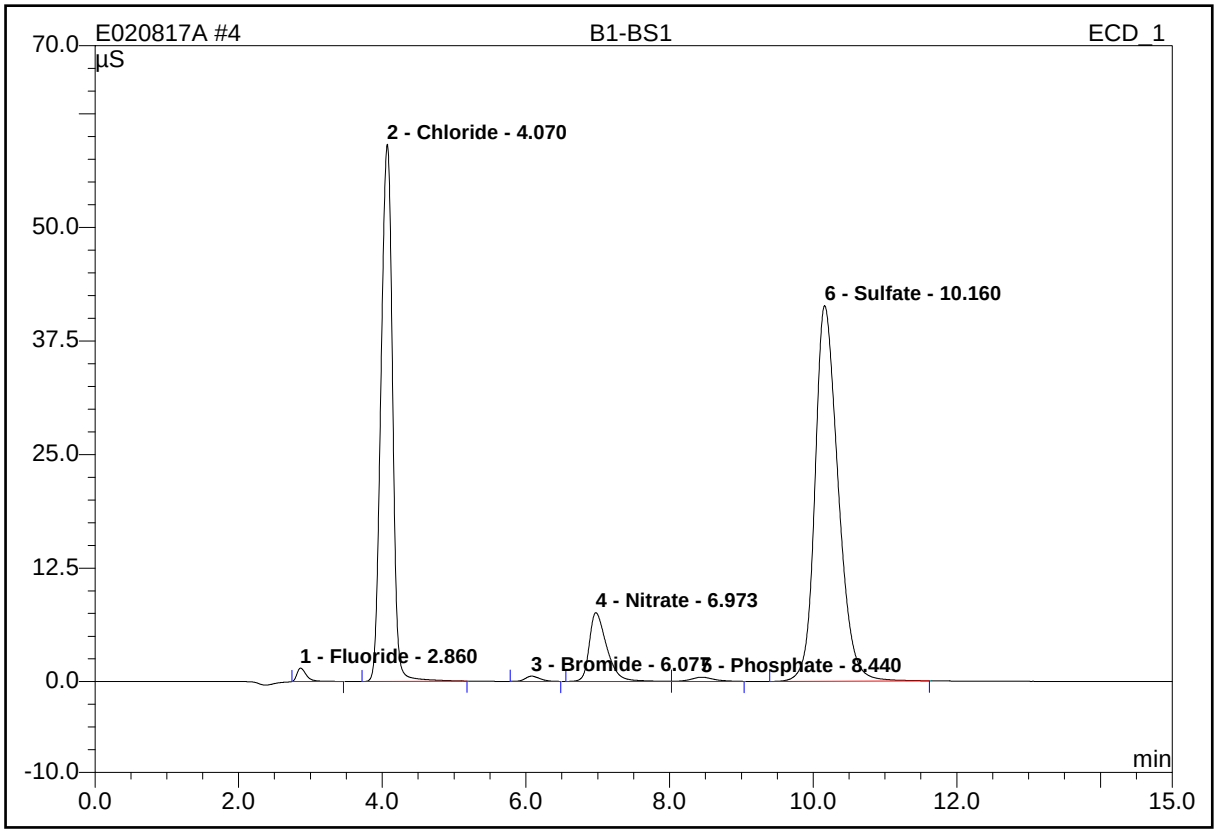
B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - Lab Control Sample**

# 4 B1-BS1

| | | | |
|---|---|---|---|
| *Sample Name:* | **B1-BS1** | *Injection Volume:* | **20.0** |
| *Vial Number:* | **18** | *Channel:* | **IC5** |
| *Sample Type:* | **unknown** | *Wavelength:* | **n.a.** |
| *Control Program:* | **IC5** | *Bandwidth:* | **n.a.** |
| *Quantif. Method:* | **IC5 ANION** | *Dilution Factor:* | **1.0000** |
| *Recording Time:* | **2/8/2017 21:31** | *Sample Weight:* | **1.0000** |
| *Run Time (min):* | **15.00** | *Sample Amount:* | **1.0000** |




| No. | Ret.Time min | Peak Name | Height µS | Area µS*min | Rel.Area % | Amount ppm | Type |
|---|---|---|---|---|---|---|---|
| 1 | 2.86 | Fluoride | 1.476 | 0.227 | 0.78 | 0.944 | BMB |
| 2 | 4.07 | Chloride | 59.131 | 11.056 | 37.90 | 50.755 | BMB |
| 3 | 6.08 | Bromide | 0.572 | 0.133 | 0.46 | 1.984 | BMB |
| 4 | 6.97 | Nitrate | 7.566 | 2.124 | 7.28 | 5.018 | BM |
| 5 | 8.44 | Phosphate | 0.451 | 0.164 | 0.56 | 1.008 | MB |
| 6 | 10.16 | Sulfate | 41.355 | 15.467 | 53.02 | 101.352 | BMB |
| **Total:** | | | 110.551 | 29.171 | 100.00 | 161.060 | |

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

**Raw Data - Batch Information**

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

**B[B0736**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - No Prep | (No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1702602-01 A | i300.0w Fluoride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1702602-02 A | i300.0w Fluoride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-01 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-01 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-01 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-01RE1 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-01RE1 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-01RE1 G | i300.0w Fluoride | 2/8/2017 8:00PM | | 20 | 20 | | | | | |
| 1703480-01RE1 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-02 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-02 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-02 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-13 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-13 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-13 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-13RE1 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-13RE1 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-13RE1 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-15 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-15 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-15 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-15RE1 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-15RE1 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-15RE1 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-30 G | i300.0w Sulfate | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-30 G | i300.0w Chloride | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703480-30 G | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703485-01 A | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703485-02 A | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| 1703486-01 A | i300.0w Nitrate as N | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| B[B0736-BLK1 | QC | 2/8/2017 8:00PM | EMW | 20 | 20 | | | | | |
| B[B0736-BS1 | QC | 2/8/2017 8:00PM | EMW | 20 | 20 | 6K21037 | | 200 | | |
| B[B0736-DUP1 | QC | 2/8/2017 8:00PM | EMW | 20 | 20 | | 1703480-01RE1 | | | |
| B[B0736-MS1 | QC | 2/8/2017 8:00PM | EMW | 19.8 | 20 | 6K21037 | 1703480-01RE1 | 400 | | |
| B[B0736-MSD1 | QC | 2/8/2017 8:00PM | EMW | 19.8 | 20 | 6K21037 | 1703480-01RE1 | 400 | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 6K21037 | 300.0 HSSS-SPIKE | DI WATER | 11/14/2016 by Emily Wells | 5/14/2017 |

**Raw Data - Sequence Information**

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# ANALYSIS SEQUENCE

**1702402**

Instrument: IC5
Calibration ID:
Sequence Date: 02/08/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702402-ICV1 | QC | | 1 | | 7B07048 | | |
| 1702402-ICB1 | QC | | 2 | | | | |
| B[B0736-BLK1 | QC | | 3 | | | | |
| B[B0736-BS1 | QC | | 4 | | | | |
| 1703480-01 | i300.0w Chloride | G | 5 | | | | |
| 1703480-01 | i300.0w Nitrate as N | G | 5 | | | | |
| 1703480-01 | i300.0w Sulfate | G | 5 | | | | |
| 1703480-02 | i300.0w Chloride | G | 6 | | | | |
| 1703480-02 | i300.0w Nitrate as N | G | 6 | | | | |
| 1703480-02 | i300.0w Sulfate | G | 6 | | | | |
| 1703480-13 | i300.0w Chloride | G | 7 | | | | |
| 1703480-13 | i300.0w Nitrate as N | G | 7 | | | | |
| 1703480-13 | i300.0w Sulfate | G | 7 | | | | |
| 1703480-15 | i300.0w Chloride | G | 8 | | | | |
| 1703480-15 | i300.0w Nitrate as N | G | 8 | | | | |
| 1703480-15 | i300.0w Sulfate | G | 8 | | | | |
| 1703480-30 | i300.0w Chloride | G | 9 | | | | |
| 1703480-30 | i300.0w Nitrate as N | G | 9 | | | | |
| 1703480-30 | i300.0w Sulfate | G | 9 | | | | |
| 1702402-CCV1 | QC | | 10 | | 7B07047 | | |
| 1702402-CCB1 | QC | | 11 | | | | |
| 1703485-01 | i300.0w Nitrate as N | A | 12 | | | | |
| 1703485-02 | i300.0w Nitrate as N | A | 13 | | | | |
| 1703486-01 | i300.0w Nitrate as N | A | 14 | | | | |
| 1703523-01 | i300.0w Chloride | A | 15 | | | | |
| 1702402-CCV2 | QC | | 16 | | 7B07047 | | |
| 1702402-CCB2 | QC | | 17 | | | | |
| B[B0737-BLK1 | QC | | 18 | | | | |
| 1703462-02 | i300.0w Nitrate as N | A | 19 | | | | |
| 1703463-02 | i300.0w Nitrate as N | A | 20 | | | | |
| 1703460-01 | i300.0w Chloride | A | 21 | | | | |
| 1703460-01 | i300.0w Nitrate as N | A | 21 | | | | |
| 1703455-01 | i300.0w Chloride | D | 22 | | | | BatchQC |
| 1703455-01 | i300.0w Nitrate as N | D | 22 | | | | |
| B[B0737-DUP1 | QC | | 23 | | | | |
| B[B0737-MS1 | QC | | 24 | | | | |
| B[B0737-MSD1 | QC | | 25 | | | | |
| 1703455-02 | i300.0w Nitrate as N | D | 26 | | | | |
| 1702402-CCV3 | QC | | 27 | | 7B07047 | | |

# ANALYSIS SEQUENCE

**1702402**

Instrument: IC5
Calibration ID:
Sequence Date: 02/08/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702402-CCB3 | QC | | 28 | | | | |
| 1703465-02 | i300.0w Chloride | A | 29 | | | | |
| 1703465-02 | i300.0w Nitrate as N | A | 29 | | | | |
| 1703465-03 | i300.0w Chloride | A | 30 | | | | |
| 1703465-03 | i300.0w Nitrate as N | A | 30 | | | | |
| 1703472-01 | i300.0w Nitrate as N | A | 31 | | | | |
| 1703472-03 | i300.0w Nitrate as N | A | 32 | | | | |
| B[B0737-BS1 | QC | | 33 | | | | |
| 1703480-01RE1 | i300.0w Chloride | G | 34 | | | | Added 2/9/2017 by TMS |
| 1703480-01RE1 | i300.0w Fluoride | G | 34 | | | | BatchQC |
| 1703480-01RE1 | i300.0w Nitrate as N | G | 34 | | | | Added 2/9/2017 by TMS |
| 1703480-01RE1 | i300.0w Sulfate | G | 34 | | | | Added 2/9/2017 by TMS |
| B[B0736-DUP1 | QC | | 35 | | | | |
| B[B0736-MS1 | QC | | 36 | | | | |
| B[B0736-MSD1 | QC | | 37 | | | | |
| 1702402-CCV4 | QC | | 38 | | 7B07047 | | |
| 1702402-CCB4 | QC | | 39 | | | | |
| 1703462-02RE1 | i300.0w Nitrate as N | A | 40 | | | | Added 2/10/2017 by OLH |
| 1703460-01RE1 | i300.0w Chloride | A | 41 | | | | Added 2/10/2017 by OLH |
| 1703460-01RE1 | i300.0w Nitrate as N | A | 41 | | | | Added 2/10/2017 by OLH |
| 1703480-13RE1 | i300.0w Chloride | G | 42 | | | | Added 2/9/2017 by TMS |
| 1703480-13RE1 | i300.0w Nitrate as N | G | 42 | | | | Added 2/9/2017 by TMS |
| 1703480-13RE1 | i300.0w Sulfate | G | 42 | | | | Added 2/9/2017 by TMS |
| 1703480-15RE1 | i300.0w Chloride | G | 43 | | | | Added 2/9/2017 by TMS |
| 1703480-15RE1 | i300.0w Nitrate as N | G | 43 | | | | Added 2/9/2017 by TMS |
| 1703480-15RE1 | i300.0w Sulfate | G | 43 | | | | Added 2/9/2017 by TMS |
| 1703523-01RE1 | i300.0w Chloride | A | 44 | | | | Added 2/10/2017 by OLH |
| 1702602-01 | i300.0w Fluoride | A | 45 | | | | |
| 1702602-02 | i300.0w Fluoride | A | 46 | | | | |
| 1703523-01RE2 | i300.0w Chloride | A | 47 | | | | Added 2/10/2017 by OLH |
| 1702402-CCV5 | QC | | 48 | | 7B07047 | | |
| 1702402-CCB5 | QC | | 49 | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

**SDG:** **17-03480**
**Class:** **WET**
**Method:** **EPA-310.1**

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## EPA-310.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| 27EW-17_170207 | 1703480-01 |
| 27EW-18_170207 | 1703480-02 |
| 27EW-13_170207 | 1703480-13 |
| IR11-OU2B-MW01_170207 | 1703480-15 |
| M11-01_170207 | 1703480-30 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 03-13-2017
Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-310.1

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** MET-1

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Total Alkalinity as CaCO3 | 4.1 | 4.1 | 4.1 | mg/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-310.1

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01
File ID: Tiamo020917-045
Sampled: 02/07/17 08:50
Prepared: 02/09/17 08:00
Analyzed: 02/09/17 15:23
Solids: 0.00
Preparation: No Prep
Initial/Final: 50 ml / 50 ml
Batch: B[B0829
Sequence: 1702383
Calibration: UNASSIGNED
Instrument: MET-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 29 | 8.2 | 8.2 | 8.2 | 2 | D | EPA-310.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-310.1

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-02
File ID: Tiamo020917-046
Sampled: 02/07/17 09:55
Prepared: 02/09/17 08:00
Analyzed: 02/09/17 15:29
Solids: 0.00
Preparation: No Prep
Initial/Final: 50 ml / 50 ml
Batch: B[B0829
Sequence: 1702383
Calibration: UNASSIGNED
Instrument: MET-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 120 | 4.1 | 4.1 | 4.1 | 1 | | EPA-310.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-310.1

**27EW-13_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-13
File ID: Tiamo021417-015
Sampled: 02/07/17 11:05
Prepared: 02/14/17 08:20
Analyzed: 02/14/17 11:20
Solids: 0.00
Preparation: No Prep
Initial/Final: 50 ml / 50 ml
Batch: B[B1240
Sequence: 1702673
Calibration: UNASSIGNED
Instrument: MET-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 330 | 8.2 | 8.2 | 8.2 | 2 | D | EPA-310.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-310.1

**IR11-OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-15
File ID: Tiamo020917-047
Sampled: 02/07/17 11:25
Prepared: 02/09/17 08:00
Analyzed: 02/09/17 15:35
Solids: 0.00
Preparation: No Prep
Initial/Final: 50 ml / 50 ml
Batch: B[B0829
Sequence: 1702383
Calibration: UNASSIGNED
Instrument: MET-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 220 | 8.2 | 8.2 | 8.2 | 2 | D | EPA-310.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-310.1

**M11-01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-30
File ID: Tiamo020917-057
Sampled: 02/07/17 14:00
Prepared: 02/09/17 08:00
Analyzed: 02/09/17 16:31
Solids: 0.00
Preparation: No Prep
Initial/Final: 50 ml / 50 ml
Batch: B[B0830
Sequence: 1702383
Calibration: UNASSIGNED
Instrument: MET-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 370 | 4.1 | 4.1 | 4.1 | 1 | | EPA-310.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-310.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B0829
Batch Matrix: Water
Preparation: No Prep

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-17_170207 | 1703480-01 | Tiamo020917-045 | 02/09/17 08:00 | |
| 27EW-18_170207 | 1703480-02 | Tiamo020917-046 | 02/09/17 08:00 | |
| IR11-OU2B-MW01_170207 | 1703480-15 | Tiamo020917-047 | 02/09/17 08:00 | |
| Blank | B[B0829-BLK1 | Tiamo020917-032 | 02/09/17 08:00 | |
| LCS | B[B0829-BS3 | Tiamo020917-031 | 02/09/17 08:00 | |
| Duplicate | B[B0829-DUP1 | Tiamo020917-034 | 02/09/17 08:00 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-310.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B0830
Batch Matrix: Water
Preparation: No Prep

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| M11-01_170207 | 1703480-30 | Tiamo020917-057 | 02/09/17 08:00 | |
| Blank | B[B0830-BLK1 | Tiamo020917-051 | 02/09/17 08:00 | |
| LCS | B[B0830-BS3 | Tiamo020917-050 | 02/09/17 08:00 | |
| Duplicate | B[B0830-DUP1 | Tiamo020917-053 | 02/09/17 08:00 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-310.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B1240
Batch Matrix: Water
Preparation: No Prep

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-13_170207 | 1703480-13 | Tiamo021417-015 | 02/14/17 08:20 | |
| Blank | B[B1240-BLK1 | Tiamo021417-007 | 02/14/17 08:20 | |
| LCS | B[B1240-BS3 | Tiamo021417-008 | 02/14/17 08:20 | |
| Duplicate | B[B1240-DUP1 | Tiamo021417-011 | 02/14/17 08:20 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-310.1

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B0829-BLK1 | File ID: | Tiamo020917-032 |
| Prepared: | 02/09/17 08:00 | Preparation: | No Prep | Initial/Final: | 50 ml / 50 ml |
| Analyzed: | 02/09/17 14:21 | Instrument: | MET-1 | | |
| Batch: | B[B0829 | Sequence: | 1702383 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 4.1 | 4.1 | 4.1 | 4.1 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-310.1

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B0830-BLK1 | File ID: | Tiamo020917-051 |
| Prepared: | 02/09/17 08:00 | Preparation: | No Prep | Initial/Final: | 50 ml / 50 ml |
| Analyzed: | 02/09/17 16:02 | Instrument: | MET-1 | | |
| Batch: | B[B0830 | Sequence: | 1702383 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 4.1 | 4.1 | 4.1 | 4.1 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-310.1

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B1240-BLK1 | File ID: | Tiamo021417-007 |
| Prepared: | 02/14/17 08:20 | Preparation: | No Prep | Initial/Final: | 50 ml / 50 ml |
| Analyzed: | 02/14/17 09:02 | Instrument: | MET-1 | | |
| Batch: | B[B1240 | Sequence: | 1702673 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| --- | Total Alkalinity as CaCO3 | 4.1 | 4.1 | 4.1 | 4.1 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**Duplicate**

# DUPLICATES

## EPA-310.1

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B0829
Preparation: No Prep
Source Sample Name: Duplicate

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B0829-DUP1
Lab Source ID: 1703465-01
Initial/Final: 50 ml / 50 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Total Alkalinity as CaCO3 | 10 | 40.160 | | 40.010 | | 0.374 | | EPA-310.1 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**Duplicate**

# DUPLICATES

## EPA-310.1

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B0830
Preparation: No Prep
Source Sample Name: Duplicate

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B0830-DUP1
Lab Source ID: 1703512-01
Initial/Final: 50 ml / 50 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Total Alkalinity as CaCO3 | 10 | 297.27 | | 295.14 | | 0.719 | | EPA-310.1 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**Duplicate**

# DUPLICATES

## EPA-310.1

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B1240
Preparation: No Prep
Source Sample Name: Duplicate

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B1240-DUP1
Lab Source ID: 1703860-01
Initial/Final: 50 ml / 50 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Total Alkalinity as CaCO3 | 10 | 720.50 | | 717.46 | | 0.423 | | EPA-310.1 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-310.1

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Matrix: | Water | | |
| Batch: | B[B0829 | Laboratory ID: | B[B0829-BS3 |
| Preparation: | No Prep | Initial/Final: | 50 ml / 50 ml |

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Total Alkalinity as CaCO3 | 100.00 | 99.800 | 99.8 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-310.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0830
Laboratory ID: B[B0830-BS3
Preparation: No Prep
Initial/Final: 50 ml / 50 ml

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Total Alkalinity as CaCO3 | 100.00 | 100.56 | 101 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-310.1

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Matrix: | Water | | |
| Batch: | B[B1240 | Laboratory ID: | B[B1240-BS3 |
| Preparation: | No Prep | Initial/Final: | 50 ml / 50 ml |

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Total Alkalinity as CaCO3 | 100.00 | 99.340 | 99.3 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-310.1

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702383 | Instrument: | MET-1 |
| Matrix: | Water | Calibration: | UNASSIGNED |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| LCS | B[B0829-BS3 | Tiamo020917-031 | 02/09/17 14:14 |
| Blank | B[B0829-BLK1 | Tiamo020917-032 | 02/09/17 14:21 |
| Duplicate | B[B0829-DUP1 | Tiamo020917-034 | 02/09/17 14:32 |
| 27EW-17_170207 | 1703480-01 | Tiamo020917-045 | 02/09/17 15:23 |
| 27EW-18_170207 | 1703480-02 | Tiamo020917-046 | 02/09/17 15:29 |
| IR11-OU2B-MW01_170207 | 1703480-15 | Tiamo020917-047 | 02/09/17 15:35 |
| LCS | B[B0830-BS3 | Tiamo020917-050 | 02/09/17 15:54 |
| Blank | B[B0830-BLK1 | Tiamo020917-051 | 02/09/17 16:02 |
| Duplicate | B[B0830-DUP1 | Tiamo020917-053 | 02/09/17 16:14 |
| M11-01_170207 | 1703480-30 | Tiamo020917-057 | 02/09/17 16:31 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-310.1

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702673 | Instrument: | MET-1 |
| Matrix: | Water | Calibration: | UNASSIGNED |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Blank | B[B1240-BLK1 | Tiamo021417-007 | 02/14/17 09:02 |
| LCS | B[B1240-BS3 | Tiamo021417-008 | 02/14/17 09:49 |
| Duplicate | B[B1240-DUP1 | Tiamo021417-011 | 02/14/17 11:03 |
| 27EW-13_170207 | 1703480-13 | Tiamo021417-015 | 02/14/17 11:20 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## EPA-310.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/09/17 08:00 | 2.00 | 14.00 | 02/09/17 15:23 | 2.00 | 14.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/09/17 08:00 | 2.00 | 14.00 | 02/09/17 15:29 | 2.00 | 14.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/14/17 08:20 | 7.00 | 14.00 | 02/14/17 11:20 | 7.00 | 14.00 | |
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/09/17 08:00 | 2.00 | 14.00 | 02/09/17 15:35 | 2.00 | 14.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/09/17 08:00 | 2.00 | 14.00 | 02/09/17 16:31 | 2.00 | 14.00 | |

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

**Raw Data From Instrument MET-1**

**Raw Data - Analytical Runs**

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . | 2017-02-09 11:03:16 | | | | | Method . | BCL-CAL Cond . . . . . | |
| **EC Calibration** | | (22.5 ºC) 1409 | | | | | | | |
| | Determination start . . . . . | 2017-02-09 11:07:21 | | | | | Method . | BCL-Cond . . . . . | |
| **ICV1@COND** | | (22.2 ºC) 997.60 | | | | | | | |
| | Determination start . . . . . | 2017-02-09 11:08:59 | | | | | Method . | BCL-Cond . . . . . | |
| **B1-BS1@COND** | | (22.4 ºC) 303.10 | | | | | | | |
| | Determination start . . . . . | 2017-02-09 11:10:37 | | | | | Method . | BCL-CAL-pH-5 BUFFERS . . . . . | |
| **pH Calibration** | | | | | | | | | |
| | Determination start . . . . . | 2017-02-09 11:27:21 | (23.5 ºC) | | | | Method . | BCL-pH . . . . . | |
| **B1-BS2@pH** | | | 7.05 | | | | | | |
| | Determination start . . . . . | 2017-02-09 11:30:33 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| **B1-BS3@Alk** | 50 | (22.2 ºC) 253.90 | (23.3 ºC) 10.52 | 0.620 | 1.320 | 0.00 | 94.32 | 6.09 | 100.41 |
| | Determination start . . . . . | 2017-02-09 11:37:03 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk-BLK1 . . . . . | |
| **B1-BLK1@Alk** | 50 | (22.2 ºC) 1.30 | (23.4 ºC) 5.57 | 0.000 | 0.036 | 0.00 | 0.00 | 2.74 | 2.74 |
| | Determination start . . . . . | 2017-02-09 11:42:51 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk-BLK1 . . . . . | |
| **AUDIT** | 50 | (22.3 ºC) 231.20 | (23.5 ºC) 10.21 | 0.232 | 0.514 | 0.00 | 35.29 | 3.80 | 39.10 |
| | Determination start . . . . . | 2017-02-09 11:50:14 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk-BLK1 . . . . . | |
| **AUDIT** | 50 | (22.5 ºC) 230.10 | (23.6 ºC) 10.20 | 0.232 | 0.516 | 0.00 | 35.29 | 3.96 | 39.25 |
| | | . . . 2017-02-09 11:57:35 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.2 ºC) | (23.5 ºC) | | | | | | |
| **1701953-38@A** | 50 | 211.80 | 10.38 | 0.314 | 0.638 | 0.00 | 47.77 | 0.76 | 48.53 |
| | Determination start . . . . . | 2017-02-09 12:04:46 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.2 ºC) | (23.5 ºC) | | | | | | |
| **1701953-38@A** | 50 | 211.20 | 10.37 | 0.304 | 0.638 | 0.00 | 46.25 | 2.28 | 48.53 |
| | Determination start . . . . . | 2017-02-09 12:12:24 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.2 ºC) | (23.5 ºC) | | | | | | |
| **B1-DUP1** | 50 | 211.00 | 10.34 | 0.306 | 0.636 | 0.00 | 46.55 | 1.83 | 48.38 |
| | Determination start . . . . . | 2017-02-09 12:19:36 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.2 ºC) | (23.5 ºC) | | | | | | |
| **1701953-37@A** | 50 | 447.50 | 10.19 | 0.312 | 0.660 | 0.00 | 47.47 | 2.74 | 50.20 |
| | Determination start . . . . . | 2017-02-09 12:27:21 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.6 ºC) | (23.7 ºC) | | | | | | |
| **1701953-38@A** | 50 | 211.00 | 10.33 | 0.302 | 0.640 | 0.00 | 45.94 | 2.74 | 48.68 |
| | Determination start . . . . . | 2017-02-09 12:33:29 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.5 ºC) | (23.6 ºC) | | | | | | |
| **B1-DUP1** | 50 | 208.30 | 10.32 | 0.294 | 0.636 | 0.00 | 44.73 | 3.65 | 48.38 |
| | Determination start . . . . . | 2017-02-09 12:40:59 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.2 ºC) | (23.6 ºC) | | | | | | |
| **1701953-37@A** | 50 | 448.00 | 10.15 | 0.312 | 0.668 | 0.00 | 47.47 | 3.35 | 50.81 |
| | Determination start . . . . . | 2017-02-09 12:48:20 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.1 ºC) | (23.5 ºC) | | | | | | |
| **1701953-37@A** | 50 | 448.60 | 10.13 | 0.302 | 0.666 | 0.00 | 45.94 | 4.72 | 50.66 |
| | Determination start . . . . . | 2017-02-09 12:55:47 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (22.1 ºC) | (23.5 ºC) | | | | | | |
| **1702346-52@A** | 50 | 298.40 | 10.45 | 0.490 | 1.044 | 0.00 | 74.54 | 4.87 | 79.41 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-09 13:03:57 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk-BLK1. . . . . | | |
| | | (22.2 ºC) | (23.5 ºC) | | | | | | |
| **1702346-52@A** | 50 | 297.80 | 10.43 | 0.482 | 1.046 | 0.00 | 73.33 | 6.24 | 79.57 |
| | Determination start . . . . . 2017-02-09 13:12:08 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk-BLK1. . . . . | | |
| | | (22.1 ºC) | (23.5 ºC) | | | | | | |
| **1702346-52@A** | 50 | 295.20 | 10.41 | 0.472 | 1.044 | 0.00 | 71.81 | 7.61 | 79.41 |
| | Determination start . . . . . 2017-02-09 13:20:22 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (21.2 ºC) | (23.0 ºC) | | | | | | |
| **1703452-02@D** | 50 | 393.00 | 7.24 | 0.000 | 1.288 | 0.00 | 0.00 | 97.97 | 97.97 |
| | Determination start . . . . . 2017-02-09 13:26:36 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (21.3 ºC) | (23.0 ºC) | | | | | | |
| **1703452-03@D** | 50 | 392.70 | 7.22 | 0.000 | 1.318 | 0.00 | 0.00 | 100.26 | 100.26 |
| | Determination start . . . . . 2017-02-09 13:33:00 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (21.6 ºC) | (23.2 ºC) | | | | | | |
| **1703453-01@D** | 50 | 403.80 | 7.09 | 0.000 | 1.110 | 0.00 | 0.00 | 84.43 | 84.43 |
| | Determination start . . . . . 2017-02-09 13:39:17 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (21.9 ºC) | (23.3 ºC) | | | | | | |
| **1703453-02@D** | 50 | 522.90 | 6.73 | 0.000 | 0.728 | 0.00 | 0.00 | 55.38 | 55.38 |
| | Determination start . . . . . 2017-02-09 13:45:10 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (22.0 ºC) | (23.5 ºC) | | | | | | |
| **1703453-03@D** | 50 | 479.00 | 6.69 | 0.000 | 1.328 | 0.00 | 0.00 | 101.02 | 101.02 |
| | Determination start . . . . . 2017-02-09 13:52:17 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (22.1 ºC) | (23.8 ºC) | | | | | | |
| **1703457-01@E** | 25 | 1692.50 | 6.97 | 0.000 | 2.904 | 0.00 | 0.00 | 441.79 | 441.79 |
| | Determination start . . . . . 2017-02-09 13:59:41 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (22.3 ºC) | (23.9 ºC) | | | | | | |
| **1703457-02@E** | 25 | 1916.70 | 6.83 | 0.000 | 4.690 | 0.00 | 0.00 | 713.50 | 713.50 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-09 14:07:17 | | | | | | Method. BCL-Cond . . . . . | | |
| **BLK** | | (23.2 ºC) 4.10 | | | | | | | |
| | Determination start . . . . . 2017-02-09 14:08:57 | | | | | | Method. BCL-Cond . . . . . | | |
| **B2-BS1@COND** | | (22.6 ºC) 306.10 | | | | | | | |
| | Determination start . . . . . 2017-02-09 14:10:44 | | | | | | Method. BCL-pH . . . . . | | |
| **B2-BS2@PH** | | | (24.2 ºC) 7.03 | | | | | | |
| | Determination start . . . . . 2017-02-09 14:14:15 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **B2-BS3@ALK** | 50 | (22.9 ºC) 230.10 | (24.1 ºC) 10.27 | 0.504 | 1.312 | 0.00 | 76.67 | 23.12 | 99.80 |
| | Determination start . . . . . 2017-02-09 14:21:10 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk-BLK1 . . . . . | | |
| **B2-BLK1** | 50 | (22.9 ºC) 1.60 | (24.1 ºC) 5.44 | 0.000 | 0.036 | 0.00 | 0.00 | 2.74 | 2.74 |
| | Determination start . . . . . 2017-02-09 14:26:51 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **1703465-01@A** | 50 | (22.9 ºC) 583.40 | (24.0 ºC) 7.20 | 0.000 | 0.528 | 0.00 | 0.00 | 40.16 | 40.16 |
| | Determination start . . . . . 2017-02-09 14:32:37 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **B2-DUP1** | 50 | (22.8 ºC) 584.90 | (24.0 ºC) 7.21 | 0.000 | 0.526 | 0.00 | 0.00 | 40.01 | 40.01 |
| | Determination start . . . . . 2017-02-09 14:38:36 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **1703459-01@A** | 50 | (22.7 ºC) 270.00 | (23.9 ºC) 7.71 | 0.000 | 0.636 | 0.00 | 0.00 | 48.38 | 48.38 |
| | Determination start . . . . . 2017-02-09 14:44:33 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **1703463-02@A** | 50 | (22.0 ºC) 957.30 | (23.5 ºC) 7.91 | 0.000 | 3.696 | 0.00 | 0.00 | 281.14 | 281.14 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-09 14:51:39 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (22.0 ºC) | (23.7 ºC) | | | | | | |
| **1703465-02@A** | 25 | 1126.20 | 7.46 | 0.000 | 1.328 | 0.00 | 0.00 | 202.03 | 202.03 |
| | Determination start . . . . . 2017-02-09 14:58:08 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (23.0 ºC) | | | | | | | |
| **BLK** | | 3.20 | | | | | | | |
| | Determination start . . . . . 2017-02-09 14:59:51 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (22.5 ºC) | (23.8 ºC) | | | | | | |
| **1703465-03@A** | 50 | 928.50 | 7.62 | 0.000 | 0.710 | 0.00 | 0.00 | 54.01 | 54.01 |
| | Determination start . . . . . 2017-02-09 15:05:44 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (23.0 ºC) | | | | | | | |
| **BLK** | | 2.70 | | | | | | | |
| | Determination start . . . . . 2017-02-09 15:07:25 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (22.4 ºC) | (23.8 ºC) | | | | | | |
| **1703470-01@A** | 50 | 306.20 | 7.96 | 0.000 | 1.514 | 0.00 | 0.00 | 115.16 | 115.16 |
| | Determination start . . . . . 2017-02-09 15:13:43 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (23.0 ºC) | | | | | | | |
| **BLK** | | 2.00 | | | | | | | |
| | Determination start . . . . . 2017-02-09 15:15:25 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (22.2 ºC) | (23.7 ºC) | | | | | | |
| **1703470-02@A** | 50 | 403.00 | 7.81 | 0.000 | 2.104 | 0.00 | 0.00 | 160.04 | 160.04 |
| | Determination start . . . . . 2017-02-09 15:22:13 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (22.9 ºC) | | | | | | | |
| **BLK** | | 2.00 | | | | | | | |
| | Determination start . . . . . 2017-02-09 15:23:56 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (21.8 ºC) | (23.8 ºC) | | | | | | |
| **1703480-01@G** | 25 | 1332.90 | 6.10 | 0.000 | 0.190 | 0.00 | 0.00 | 28.91 | 28.91 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-09 15:29:23 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.6 ºC) | (23.3 ºC) | | | | | | |
| **1703480-02@G** | 50 | 659.60 | 7.31 | 0.000 | 1.540 | 0.00 | 0.00 | 117.14 | 117.14 |
| | Determination start . . . . . 2017-02-09 15:35:46 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.7 ºC) | (23.6 ºC) | | | | | | |
| **1703480-15@G** | 25 | 70713.30 | 7.05 | 0.000 | 1.440 | 0.00 | 0.00 | 219.07 | 219.07 |
| | Determination start . . . . . 2017-02-09 15:42:52 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.8 ºC) | | | | | | | |
| **B3-BS1@COND** | | 322.90 | | | | | | | |
| | Determination start . . . . . 2017-02-09 15:44:44 | | | | | | Method. | BCL-pH . . . . . | |
| | | | (23.6 ºC) | | | | | | |
| **B3-BS2@PH** | | | 7.03 | | | | | | |
| | Determination start . . . . . 2017-02-09 15:54:33 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.8 ºC) | (23.6 ºC) | | | | | | |
| **B3-BS3@ALK** | 50 | 225.80 | 10.18 | 0.464 | 1.322 | 0.00 | 70.59 | 29.97 | 100.56 |
| | Determination start . . . . . 2017-02-09 16:02:53 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1 . . . . . | |
| | | (21.8 ºC) | (23.4 ºC) | | | | | | |
| **B3-BLK1** | 50 | 1.90 | 5.40 | 0.000 | 0.032 | 0.00 | 0.00 | 2.43 | 2.43 |
| | Determination start . . . . . 2017-02-09 16:08:31 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.8 ºC) | (23.6 ºC) | | | | | | |
| **1703512-01@B** | 25 | 1277.40 | 8.00 | 0.000 | 1.954 | 0.00 | 0.00 | 297.27 | 297.27 |
| | Determination start . . . . . 2017-02-09 16:14:47 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.0 ºC) | (23.8 ºC) | | | | | | |
| **B3-DUP1** | 25 | 1275.80 | 8.01 | 0.000 | 1.940 | 0.00 | 0.00 | 295.14 | 295.14 |
| | Determination start . . . . . 2017-02-09 16:20:51 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.4 ºC) | | | | | | | |
| **BLK** | | 2.10 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-09 16:22:33 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.8 ºC) | (23.4 ºC) | | | | | | |
| **1703092-01@ARE1** | 50 | 943.20 | 7.18 | 0.000 | 1.710 | 0.00 | 0.00 | 130.07 | 130.07 |
| | Determination start . . . . . 2017-02-09 16:29:27 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.3 ºC) | | | | | | | |
| **BLK** | | 1.80 | | | | | | | |
| | Determination start . . . . . 2017-02-09 16:31:08 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.4 ºC) | (23.7 ºC) | | | | | | |
| **1703480-30@G** | 50 | 883.50 | 7.92 | 0.000 | 4.864 | 0.00 | 0.00 | 369.99 | 369.99 |
| | Determination start . . . . . 2017-02-09 16:38:45 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.3 ºC) | | | | | | | |
| **BLK** | | 2.00 | | | | | | | |
| | Determination start . . . . . 2017-02-09 16:40:26 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.3 ºC) | (23.9 ºC) | | | | | | |
| **1703573-02@A** | 25 | 2260.20 | 7.86 | 0.000 | 3.788 | 0.00 | 0.00 | 576.28 | 576.28 |
| | Determination start . . . . . 2017-02-09 16:47:43 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.3 ºC) | | | | | | | |
| **BLK** | | 6.90 | | | | | | | |
| | Determination start . . . . . 2017-02-09 16:49:44 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.2 ºC) | (22.5 ºC) | | | | | | |
| **1703335-01@A** | 50 | 63.70 | 7.33 | 0.000 | 0.304 | 0.00 | 0.00 | 23.12 | 23.12 |
| | Determination start . . . . . 2017-02-09 16:55:59 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.4 ºC) | (22.5 ºC) | | | | | | |
| **1703514-01@A** | 50 | 908.80 | 7.32 | 0.000 | 2.726 | 0.00 | 0.00 | 207.36 | 207.36 |
| | Determination start . . . . . 2017-02-09 17:03:23 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.2 ºC) | | | | | | | |
| **BLK** | | 2.60 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-09 17:05:05 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.7 ºC) | (22.7 ºC) | | | | | | |
| **1703514-02@A** | 50 | 788.50 | 7.84 | 0.000 | 1.980 | 0.00 | 0.00 | 150.61 | 150.61 |
| | Determination start . . . . . 2017-02-09 17:11:46 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.3 ºC) | | | | | | | |
| **BLK** | | 2.30 | | | | | | | |
| | Determination start . . . . . 2017-02-09 17:13:28 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.9 ºC) | (23.2 ºC) | | | | | | |
| **1703515-01@A** | 25 | 1155.60 | 7.97 | 0.000 | 1.988 | 0.00 | 0.00 | 302.44 | 302.44 |
| | Determination start . . . . . 2017-02-09 17:19:42 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.4 ºC) | | | | | | | |
| **BLK** | | 3.00 | | | | | | | |
| | Determination start . . . . . 2017-02-09 17:21:25 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.3 ºC) | (23.0 ºC) | | | | | | |
| **1703520-01@A** | 50 | 103.40 | 7.45 | 0.000 | 0.580 | 0.00 | 0.00 | 44.12 | 44.12 |
| | Determination start . . . . . 2017-02-09 17:27:19 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.3 ºC) | | | | | | | |
| **BLK** | | 1.50 | | | | | | | |
| | Determination start . . . . . 2017-02-09 17:29:01 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.5 ºC) | (23.2 ºC) | | | | | | |
| **1703520-02@A** | 50 | 100.60 | 7.44 | 0.000 | 0.564 | 0.00 | 0.00 | 42.90 | 42.90 |
| | Determination start . . . . . 2017-02-09 17:34:59 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.4 ºC) | | | | | | | |
| **BLK** | | 1.60 | | | | | | | |
| | Determination start . . . . . 2017-02-09 17:36:38 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.7 ºC) | | | | | | | |
| **B4-BS1@COND** | | 308.40 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-09 17:38:13 | | | | | | Method . BCL-pH . . . . . | | |
| **B4-BS2@PH** | | | (23.5 ºC) 7.03 | | | | | | |
| | Determination start . . . . . 2017-02-09 17:41:32 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| **B4-BS3@ALK** | 50 | (21.9 ºC) 229.80 | (23.4 ºC) 10.29 | 0.512 | 1.314 | 0.00 | 77.89 | 22.06 | 99.95 |
| | Determination start . . . . . 2017-02-09 17:48:14 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk-BLK1. . . . . | | |
| **B4-BLK1** | 50 | (21.8 ºC) 1.70 | (23.3 ºC) 5.54 | 0.000 | 0.038 | 0.00 | 0.00 | 2.89 | 2.89 |
| | Determination start . . . . . 2017-02-09 17:53:50 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| **1703521-01@A** | 50 | (21.7 ºC) 998.70 | (23.2 ºC) 7.57 | 0.000 | 6.996 | 0.00 | 0.00 | 532.16 | 532.16 |
| | Determination start . . . . . 2017-02-09 18:02:33 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| **B4-DUP1** | 50 | (21.8 ºC) 998.60 | (23.3 ºC) 7.56 | 0.000 | 6.964 | 0.00 | 0.00 | 529.73 | 529.73 |
| | Determination start . . . . . 2017-02-09 18:10:41 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| **1703520-03@A** | 50 | (21.9 ºC) 61.90 | (23.4 ºC) 7.17 | 0.000 | 0.346 | 0.00 | 0.00 | 26.32 | 26.32 |
| | Determination start . . . . . 2017-02-09 18:16:55 | | | | | | Method . BCL-Cond . . . . . | | |
| **BLK** | | (22.5 ºC) 1.70 | | | | | | | |
| | Determination start . . . . . 2017-02-09 18:18:37 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| **1703520-04@A** | 50 | (21.9 ºC) 82.10 | (23.4 ºC) 7.58 | 0.000 | 0.518 | 0.00 | 0.00 | 39.40 | 39.40 |
| | Determination start . . . . . 2017-02-09 18:24:39 | | | | | | Method . BCL-Cond . . . . . | | |
| **BLK** | | (22.5 ºC) 1.80 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-09 18:26:21 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.7 ºC) | (23.5 ºC) | | | | | | |
| **1703521-02@A** | 25 | 1269.10 | 7.58 | 0.000 | 3.926 | 0.00 | 0.00 | 597.27 | 597.27 |
| | Determination start . . . . . 2017-02-09 18:33:43 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.8 ºC) | (23.3 ºC) | | | | | | |
| **1703521-03@A** | 50 | 348.00 | 7.72 | 0.000 | 2.378 | 0.00 | 0.00 | 180.89 | 180.89 |
| | Determination start . . . . . 2017-02-09 18:40:37 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.9 ºC) | (23.4 ºC) | | | | | | |
| **1703521-04@A** | 50 | 242.80 | 7.64 | 0.000 | 1.638 | 0.00 | 0.00 | 124.60 | 124.60 |
| | Determination start . . . . . 2017-02-09 18:46:58 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.9 ºC) | (23.4 ºC) | | | | | | |
| **1703521-05@A** | 50 | 226.10 | 7.72 | 0.000 | 1.518 | 0.00 | 0.00 | 115.47 | 115.47 |
| | Determination start . . . . . 2017-02-09 18:53:13 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.2 ºC) | (23.7 ºC) | | | | | | |
| **1703554-01@J** | 25 | 44698.10 | 7.57 | 0.000 | 18.588 | 0.00 | 0.00 | 2827.84 | 2827.84 |
| | Determination start . . . . . 2017-02-09 19:05:08 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.6 ºC) | | | | | | | |
| **BLK** | | 26.70 | | | | | | | |
| | Determination start . . . . . 2017-02-09 19:07:08 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.1 ºC) | (23.7 ºC) | | | | | | |
| **1703555-01@J** | 25 | 40199.50 | 7.71 | 0.000 | 18.832 | 0.00 | 0.00 | 2864.96 | 2864.96 |
| | Determination start . . . . . 2017-02-09 19:19:09 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (22.6 ºC) | | | | | | | |
| **BLK** | | 27.30 | | | | | | | |
| | Determination start . . . . . 2017-02-09 19:21:06 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.1 ºC) | (23.7 ºC) | | | | | | |
| **1703556-01@J** | 25 | 39503.60 | 7.59 | 0.000 | 16.076 | 0.00 | 0.00 | 2445.68 | 2445.68 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-09 19:32:04 | | | | | | Method. BCL-Cond . . . . . | | |
| **BLK** | | (22.5 ºC) 39.70 | | | | | | | |
| | Determination start . . . . . 2017-02-09 19:34:01 | | | | | | Method. BCL-Cond . . . . . | | |
| **B5-BS1@COND** | | (22.0 ºC) 314.20 | | | | | | | |
| | Determination start . . . . . 2017-02-09 19:35:59 | | | | | | Method. BCL-pH . . . . . | | |
| **B5-BS2@PH** | | | (23.7 ºC) 7.03 | | | | | | |
| | Determination start . . . . . 2017-02-09 19:39:20 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **B5-BS3@ALK** | 50 | (21.9 ºC) 229.20 | (23.3 ºC) 10.15 | 0.444 | 1.326 | 0.00 | 67.55 | 33.32 | 100.86 |
| | Determination start . . . . . 2017-02-09 19:46:17 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk-BLK1 . . . . . | | |
| **B5-BLK1** | 50 | (21.9 ºC) 2.80 | (23.3 ºC) 5.74 | 0.000 | 0.040 | 0.00 | 0.00 | 3.04 | 3.04 |
| | Determination start . . . . . 2017-02-09 19:51:57 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **1703559-01@A** | 50 | (21.8 ºC) 580.10 | (23.3 ºC) 9.45 | 0.488 | 2.640 | 0.00 | 74.24 | 126.57 | 200.81 |
| | Determination start . . . . . 2017-02-09 19:59:24 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **B5-DUP1** | 50 | (21.9 ºC) 579.90 | (23.3 ºC) 9.45 | 0.490 | 2.646 | 0.00 | 74.54 | 126.73 | 201.27 |
| | Determination start . . . . . 2017-02-09 20:06:50 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| **1703557-01@J** | 25 | (22.1 ºC) 37607.60 | (23.5 ºC) 7.71 | 0.000 | 17.920 | 0.00 | 0.00 | 2726.21 | 2726.21 |
| | Determination start . . . . . 2017-02-09 20:17:56 | | | | | | Method. BCL-Cond . . . . . | | |
| **BLK** | | (22.5 ºC) 34.80 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . | 2017-02-09 20:19:52 | | | | | Method. | BCL-pH . . . . . | |
| **1703560-01@D** | | (23.8 ºC) | 9.13 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:23:15 | | | | | Method. | BCL-Cond . . . . . | |
| **BLK** | | (22.4 ºC) | 76.20 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:25:10 | | | | | Method. | BCL-pH . . . . . | |
| **1703560-02@D** | | (23.6 ºC) | 9.35 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:28:32 | | | | | Method. | BCL-Cond . . . . . | |
| **BLK** | | (22.4 ºC) | 116.00 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:30:27 | | | | | Method. | BCL-pH . . . . . | |
| **1703560-03@D** | | (23.4 ºC) | 9.19 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:33:48 | | | | | Method. | BCL-Cond . . . . . | |
| **BLK** | | (22.3 ºC) | 69.90 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:35:44 | | | | | Method. | BCL-pH . . . . . | |
| **1703560-04@D** | | (23.5 ºC) | 9.24 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:39:08 | | | | | Method. | BCL-Cond . . . . . | |
| **BLK** | | (22.3 ºC) | 144.00 | | | | | | |
| | Determination start . . . . . | 2017-02-09 20:41:04 | | | | | Method. | BCL-pH . . . . . | |
| **1703560-05@D** | | (23.4 ºC) | 8.53 | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-09 20:44:25 | | | | | | Method. BCL-Cond . . . . . | | |
| BLK | | (22.3 ºC) 128.40 | | | | | | | |
| | Determination start . . . . . 2017-02-09 20:46:22 | | | | | | Method. BCL-pH . . . . . | | |
| 1703560-06@D | | (23.3 ºC) 8.88 | | | | | | | |
| | Determination start . . . . . 2017-02-09 20:49:41 | | | | | | Method. BCL-Cond . . . . . | | |
| BLK | | (22.2 ºC) 154.20 | | | | | | | |
| | Determination start . . . . . 2017-02-09 20:51:36 | | | | | | Method. BCL-pH . . . . . | | |
| 1703560-07@D | | (23.2 ºC) 8.27 | | | | | | | |
| | Determination start . . . . . 2017-02-09 20:54:56 | | | | | | Method. BCL-Cond . . . . . | | |
| BLK | | (22.2 ºC) 160.20 | | | | | | | |
| | Determination start . . . . . 2017-02-09 20:56:51 | | | | | | Method. BCL-pH . . . . . | | |
| 1703560-08@D | | (23.2 ºC) 8.09 | | | | | | | |
| | Determination start . . . . . 2017-02-09 21:00:12 | | | | | | Method. BCL-Cond . . . . . | | |
| BLK | | (22.2 ºC) 208.30 | | | | | | | |
| | Determination start . . . . . 2017-02-09 21:02:09 | | | | | | Method. BCL-Cond . . . . . | | |
| 303 | | (21.5 ºC) 339.50 | | | | | | | |
| | Determination start . . . . . 2017-02-09 21:04:03 | | | | | | Method. BCL-pH . . . . . | | |
| 7.00 | | (23.2 ºC) 7.03 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-09 21:07:25 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| **ALK** | 50 | (21.7 ºC) 254.40 | (23.1 ºC) 10.17 | 0.466 | 1.352 | 0.00 | 70.89 | 31.95 | 102.84 |
| | Determination start . . . . . 2017-02-09 21:14:35 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| **BLK** | 50 | (21.6 ºC) 102.80 | (23.0 ºC) 6.18 | 0.000 | 0.046 | 0.00 | 0.00 | 3.50 | 3.50 |
| | Determination start . . . . . 2017-02-09 21:20:28 | | | | | | Method. | BCL-Cond . . . . . | |
| **10000** | | (21.5 ºC) 10059.40 | | | | | | | |
| | Determination start . . . . . 2017-02-09 21:22:27 | | | | | | Method. | BCL-Cond . . . . . | |
| **303** | | (21.7 ºC) 341.70 | | | | | | | |
| | Determination start . . . . . 2017-02-09 21:24:21 | | | | | | Method. | BCL-Cond . . . . . | |
| **303** | | (21.5 ºC) 353.90 | | | | | | | |
| | Determination start . . . . . 2017-02-09 21:26:29 | | | | | | Method. | BCL-pH . . . . . | |
| **7.00** | | | (23.2 ºC) 7.03 | | | | | | |
| | Determination start . . . . . 2017-02-09 21:29:44 | | | | | | Method. | BCL-pH . . . . . | |
| **7.00** | | | (23.1 ºC) 7.04 | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . | 2017-02-14 08:28:33 | | | | | Method . | BCL-CAL Cond . . . . . | |
| | | (20.5 ºC) | | | | | | | |
| **EC Calibration** | | 1409 | | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:33:02 | | | | | Method . | BCL-Cond . . . . . | |
| | | (20.2 ºC) | | | | | | | |
| **ICV1@COND** | | 992.50 | | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:35:00 | | | | | Method . | BCL-Cond . . . . . | |
| | | (20.1 ºC) | | | | | | | |
| **B1-BS1@COND** | | 307.90 | | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:36:37 | | | | | Method . | BCL-CAL-pH-5 BUFFERS . . . . . | |
| **pH Calibration** | | | | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:52:48 | | | | | Method . | BCL-pH . . . . . | |
| | | | (21.3 ºC) | | | | | | |
| **B1-BS2@pH** | | | 7.05 | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:55:58 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (19.4 ºC) | (20.7 ºC) | | | | | | |
| **B1-BS3@Alk** | 50 | 327.50 | 10.34 | 0.504 | 1.548 | 0.00 | 76.67 | 41.08 | 117.75 |
| | Determination start . . . . . | 2017-02-14 09:02:55 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk-BLK1 . . . . . | |
| | | (19.1 ºC) | (20.5 ºC) | | | | | | |
| **B1-BLK1@Alk** | 50 | 1.00 | 5.75 | 0.000 | 0.038 | 0.00 | 0.00 | 2.89 | 2.89 |
| | Determination start . . . . . | 2017-02-14 09:49:23 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (20.2 ºC) | (21.1 ºC) | | | | | | |
| **B1-BS3@ALK** | 50 | 248.00 | 10.58 | 0.636 | 1.306 | 0.00 | 96.76 | 2.59 | 99.34 |
| | Determination start . . . . . | 2017-02-14 10:46:13 | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (16.4 ºC) | (19.8 ºC) | | | | | | |
| **1703860-01@D** | 25 | 3194.20 | 7.76 | 0.000 | 4.716 | 0.00 | 0.00 | 717.46 | 717.46 |
| | | . . . 2017-02-14 10:55:55 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (16.5 ºC) | (19.8 ºC) | | | | | | |
| **1703860-01@D** | 25 | 3201.50 | 7.72 | 0.000 | 4.736 | 0.00 | 0.00 | 720.50 | 720.50 |
| | Determination start . . . . . 2017-02-14 11:03:34 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (17.1 ºC) | (20.0 ºC) | | | | | | |
| **B1-DUP1** | 25 | 3204.00 | 7.73 | 0.000 | 4.716 | 0.00 | 0.00 | 717.46 | 717.46 |
| | Determination start . . . . . 2017-02-14 11:11:04 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (19.8 ºC) | | | | | | | |
| **BLK** | | 3.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 11:12:46 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (18.8 ºC) | (20.5 ºC) | | | | | | |
| **1702402-01@AFRE1** | 50 | 101.80 | 6.73 | 0.000 | 0.104 | 0.00 | 0.00 | 7.91 | 7.91 |
| | Determination start . . . . . 2017-02-14 11:18:24 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (19.9 ºC) | | | | | | | |
| **BLK** | | 2.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 11:20:06 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (17.5 ºC) | (20.3 ºC) | | | | | | |
| **1703480-13@G** | 25 | 2716.30 | 7.30 | 0.000 | 2.184 | 0.00 | 0.00 | 332.26 | 332.26 |
| | Determination start . . . . . 2017-02-14 11:26:41 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (19.9 ºC) | | | | | | | |
| **BLK** | | 3.50 | | | | | | | |
| | Determination start . . . . . 2017-02-14 11:28:24 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (17.7 ºC) | (19.9 ºC) | | | | | | |
| **1703852-01@F** | 50 | 326.60 | 8.20 | 0.000 | 1.938 | 0.00 | 0.00 | 147.42 | 147.42 |
| | Determination start . . . . . 2017-02-14 11:35:08 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (20.0 ºC) | | | | | | | |
| **BLK** | | 2.90 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 11:36:51 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (17.5 ºC) | (19.8 ºC) | | | | | | |
| **1703858-01@D** | 50 | 343.20 | 8.07 | 0.000 | 1.552 | 0.00 | 0.00 | 118.05 | 118.05 |
| | Determination start . . . . . 2017-02-14 11:43:28 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (20.1 ºC) | | | | | | | |
| **BLK** | | 3.10 | | | | | | | |
| | Determination start . . . . . 2017-02-14 11:45:11 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (17.7 ºC) | (19.9 ºC) | | | | | | |
| **1703858-02@D** | 50 | 163.10 | 7.93 | 0.000 | 0.750 | 0.00 | 0.00 | 57.05 | 57.05 |
| | Determination start . . . . . 2017-02-14 11:51:20 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (20.2 ºC) | | | | | | | |
| **BLK** | | 2.80 | | | | | | | |
| | Determination start . . . . . 2017-02-14 11:53:02 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (17.8 ºC) | (20.0 ºC) | | | | | | |
| **1703859-01@D** | 50 | 456.90 | 7.61 | 0.000 | 1.432 | 0.00 | 0.00 | 108.93 | 108.93 |
| | Determination start . . . . . 2017-02-14 11:59:46 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (20.3 ºC) | | | | | | | |
| **BLK** | | 2.90 | | | | | | | |
| | Determination start . . . . . 2017-02-14 12:01:30 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (18.1 ºC) | (20.2 ºC) | | | | | | |
| **1703859-02@D** | 50 | 601.50 | 7.62 | 0.000 | 1.540 | 0.00 | 0.00 | 117.14 | 117.14 |
| | Determination start . . . . . 2017-02-14 12:08:19 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (20.4 ºC) | | | | | | | |
| **BLK** | | 2.90 | | | | | | | |
| | Determination start . . . . . 2017-02-14 12:10:02 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (18.4 ºC) | (20.9 ºC) | | | | | | |
| **1703859-03@D** | 25 | 5078.80 | 7.13 | 0.000 | 10.764 | 0.00 | 0.00 | 1637.55 | 1637.55 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 12:19:12 | | | | | | Method. BCL-Cond . . . . . | | |
| BLK | | (20.5 ºC) 3.80 | | | | | | | |
| | Determination start . . . . . 2017-02-14 12:20:53 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| 1703860-02@D | 25 | (18.8 ºC) 3169.10 | (21.2 ºC) 7.46 | 0.000 | 5.094 | 0.00 | 0.00 | 774.96 | 774.96 |
| | Determination start . . . . . 2017-02-14 12:28:44 | | | | | | Method. BCL-Cond . . . . . | | |
| BLK | | (20.7 ºC) 3.50 | | | | | | | |
| | Determination start . . . . . 2017-02-14 12:30:23 | | | | | | Method. BCL-Cond . . . . . | | |
| B2-BS1@COND | | (19.4 ºC) 310.50 | | | | | | | |
| | Determination start . . . . . 2017-02-14 12:32:18 | | | | | | Method. BCL-pH . . . . . | | |
| B2-BS2@PH | | | (21.5 ºC) 7.04 | | | | | | |
| | Determination start . . . . . 2017-02-14 12:35:40 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| B2-BS3@ALK | 50 | (19.7 ºC) 225.50 | (21.3 ºC) 10.28 | 0.496 | 1.332 | 0.00 | 75.46 | 25.86 | 101.32 |
| | Determination start . . . . . 2017-02-14 12:42:45 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk-BLK1 . . . . . | | |
| B2-BLK1 | 50 | (19.9 ºC) 0.90 | (21.3 ºC) 5.43 | 0.000 | 0.038 | 0.00 | 0.00 | 2.89 | 2.89 |
| | Determination start . . . . . 2017-02-14 12:48:30 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| 1703860-03@D | 25 | (19.5 ºC) 8447.20 | (21.5 ºC) 7.25 | 0.000 | 5.094 | 0.00 | 0.00 | 774.96 | 774.96 |
| | Determination start . . . . . 2017-02-14 12:56:34 | | | | Titer . . . . . | 0.076 | Method. BCL-Cond-pH-Alk . . . . . | | |
| B2-DUP1 | 25 | (19.7 ºC) 8446.80 | (21.6 ºC) 7.24 | 0.000 | 5.116 | 0.00 | 0.00 | 778.31 | 778.31 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 13:04:55 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.8 ºC) | (21.7 ºC) | | | | | | |
| **1703860-04@D** | 25 | 13570.00 | 7.49 | 0.000 | 2.498 | 0.00 | 0.00 | 380.03 | 380.03 |
| | Determination start . . . . . 2017-02-14 13:12:20 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.0 ºC) | (21.8 ºC) | | | | | | |
| **1703860-05@D** | 25 | 2585.30 | 7.73 | 0.000 | 4.246 | 0.00 | 0.00 | 645.95 | 645.95 |
| | Determination start . . . . . 2017-02-14 13:20:03 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.2 ºC) | (21.9 ºC) | | | | | | |
| **1703860-06@D** | 25 | 3136.20 | 7.85 | 0.000 | 3.664 | 0.00 | 0.00 | 557.41 | 557.41 |
| | Determination start . . . . . 2017-02-14 13:27:21 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.4 ºC) | (22.0 ºC) | | | | | | |
| **1703860-07@D** | 25 | 11205.50 | 7.54 | 0.000 | 2.454 | 0.00 | 0.00 | 373.33 | 373.33 |
| | Determination start . . . . . 2017-02-14 13:34:16 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.7 ºC) | (22.2 ºC) | | | | | | |
| **1703860-08@D** | 25 | 34376.00 | 7.46 | 0.000 | 2.958 | 0.00 | 0.00 | 450.01 | 450.01 |
| | Determination start . . . . . 2017-02-14 13:41:59 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.2 ºC) | (21.7 ºC) | | | | | | |
| **1073868-02@A** | 50 | 448.80 | 8.32 | 0.022 | 1.034 | 0.00 | 3.35 | 75.31 | 78.65 |
| | Determination start . . . . . 2017-02-14 13:47:58 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.9 ºC) | | | | | | | |
| **BLK** | | 0.90 | | | | | | | |
| | Determination start . . . . . 2017-02-14 13:50:40 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (15.6 ºC) | (20.2 ºC) | | | | | | |
| **1703860-05@A** | 25 | 2555.90 | 7.52 | 0.000 | 4.190 | 0.00 | 0.00 | 637.44 | 637.44 |
| | Determination start . . . . . 2017-02-14 13:59:42 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.9 ºC) | | | | | | | |
| **BLK** | | 1.40 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 14:01:25 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (14.5 ºC) | (18.5 ºC) | | | | | | |
| **1703868-01@ARE1** | 50 | 431.60 | 8.46 | 0.048 | 1.048 | 0.00 | 7.30 | 72.42 | 79.72 |
| | Determination start . . . . . 2017-02-14 14:07:41 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.8 ºC) | | | | | | | |
| **BLK** | | 1.30 | | | | | | | |
| | Determination start . . . . . 2017-02-14 14:09:24 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.7 ºC) | (21.9 ºC) | | | | | | |
| **1703877-01@BRE1** | 50 | 11.90 | 6.70 | 0.000 | 0.086 | 0.00 | 0.00 | 6.54 | 6.54 |
| | Determination start . . . . . 2017-02-14 14:14:44 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.6 ºC) | (22.0 ºC) | | | | | | |
| **1703929-01@A** | 50 | 47.70 | 7.50 | 0.000 | 0.250 | 0.00 | 0.00 | 19.02 | 19.02 |
| | Determination start . . . . . 2017-02-14 14:20:46 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.6 ºC) | (21.9 ºC) | | | | | | |
| **1703929-02@A** | 50 | 48.30 | 7.50 | 0.000 | 0.254 | 0.00 | 0.00 | 19.32 | 19.32 |
| | Determination start . . . . . 2017-02-14 14:26:51 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (20.7 ºC) | | | | | | | |
| **B3-BS1@COND** | | 311.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 14:28:32 | | | | | | Method. | BCL-pH . . . . . | |
| | | | (22.2 ºC) | | | | | | |
| **B3-BS2@PH** | | | 7.04 | | | | | | |
| | Determination start . . . . . 2017-02-14 14:31:55 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.2 ºC) | (21.7 ºC) | | | | | | |
| **B3-BS3@ALK** | 50 | 215.70 | 10.13 | 0.424 | 1.320 | 0.00 | 64.50 | 35.90 | 100.41 |
| | Determination start . . . . . 2017-02-14 14:38:56 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (20.2 ºC) | (21.7 ºC) | | | | | | |
| **B3-BLK1** | 50 | 1.10 | 5.58 | 0.000 | 0.038 | 0.00 | 0.00 | 2.89 | 2.89 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 14:44:33 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.4 ºC) | (21.9 ºC) | | | | | | |
| **1703929-03@A** | 50 | 68.60 | 7.73 | 0.000 | 0.380 | 0.00 | 0.00 | 28.91 | 28.91 |
| | Determination start . . . . . 2017-02-14 14:50:46 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.9 ºC) | (22.1 ºC) | | | | | | |
| **B3-DUP1** | 50 | 68.90 | 7.81 | 0.000 | 0.386 | 0.00 | 0.00 | 29.36 | 29.36 |
| | Determination start . . . . . 2017-02-14 14:56:59 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.2 ºC) | (22.3 ºC) | | | | | | |
| **1703929-04@A** | 50 | 237.50 | 7.79 | 0.000 | 0.604 | 0.00 | 0.00 | 45.94 | 45.94 |
| | Determination start . . . . . 2017-02-14 15:02:52 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.2 ºC) | (22.3 ºC) | | | | | | |
| **1703929-05@A** | 50 | 47.10 | 7.56 | 0.000 | 0.238 | 0.00 | 0.00 | 18.10 | 18.10 |
| | Determination start . . . . . 2017-02-14 15:08:45 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.0 ºC) | (22.2 ºC) | | | | | | |
| **1703929-06@A** | 50 | 47.20 | 7.48 | 0.000 | 0.236 | 0.00 | 0.00 | 17.95 | 17.95 |
| | Determination start . . . . . 2017-02-14 15:14:48 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.6 ºC) | (21.9 ºC) | | | | | | |
| **1703929-07@A** | 50 | 47.20 | 7.48 | 0.000 | 0.236 | 0.00 | 0.00 | 17.95 | 17.95 |
| | Determination start . . . . . 2017-02-14 15:20:53 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.7 ºC) | (21.9 ºC) | | | | | | |
| **1703929-08@A** | 50 | 178.00 | 7.94 | 0.000 | 0.766 | 0.00 | 0.00 | 58.27 | 58.27 |
| | Determination start . . . . . 2017-02-14 15:27:12 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.1 ºC) | (22.4 ºC) | | | | | | |
| **1703971-01@A** | 25 | 1957.70 | 8.00 | 0.000 | 1.570 | 0.00 | 0.00 | 238.85 | 238.85 |
| | Determination start . . . . . 2017-02-14 15:33:20 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.1 ºC) | (22.5 ºC) | | | | | | |
| **1703971-02@A** | 25 | 1436.90 | 8.08 | 0.000 | 1.636 | 0.00 | 0.00 | 248.89 | 248.89 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-14 15:39:44 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.2 ºC) | (22.6 ºC) | | | | | | |
| **1703971-03@A** | 25 | 1414.30 | 8.12 | 0.000 | 1.790 | 0.00 | 0.00 | 272.32 | 272.32 |
| | Determination start . . . . . 2017-02-14 15:46:12 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.5 ºC) | (22.5 ºC) | | | | | | |
| **1703971-04@A** | 50 | 1.20 | 5.82 | 0.000 | 0.044 | 0.00 | 0.00 | 3.35 | 3.35 |
| | Determination start . . . . . 2017-02-14 15:51:34 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.8 ºC) | | | | | | | |
| **B4-BS1@COND** | | 312.50 | | | | | | | |
| | Determination start . . . . . 2017-02-14 15:53:25 | | | | | | Method. | BCL-pH . . . . . | |
| | | | (22.8 ºC) | | | | | | |
| **B4-BS2@PH** | | | 7.04 | | | | | | |
| | Determination start . . . . . 2017-02-14 15:56:49 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (22.0 ºC) | (22.7 ºC) | | | | | | |
| **B4-BS3@ALK** | 50 | 232.40 | 10.36 | 0.540 | 1.304 | 0.00 | 82.15 | 17.04 | 99.19 |
| | Determination start . . . . . 2017-02-14 16:03:35 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1 . . . . . | |
| | | (21.8 ºC) | (22.7 ºC) | | | | | | |
| **B4-BLK1** | 50 | 1.40 | 5.51 | 0.000 | 0.036 | 0.00 | 0.00 | 2.74 | 2.74 |
| | Determination start . . . . . 2017-02-14 16:09:11 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.7 ºC) | (22.7 ºC) | | | | | | |
| **1703971-05@A** | 25 | 1181.80 | 7.95 | 0.000 | 1.632 | 0.00 | 0.00 | 248.28 | 248.28 |
| | Determination start . . . . . 2017-02-14 16:15:39 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.5 ºC) | (22.6 ºC) | | | | | | |
| **B4-DUP1** | 25 | 1183.00 | 7.95 | 0.000 | 1.640 | 0.00 | 0.00 | 249.50 | 249.50 |
| | Determination start . . . . . 2017-02-14 16:22:00 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (21.4 ºC) | (22.5 ºC) | | | | | | |
| **1702632-01@ARE1** | 50 | 295.70 | 8.79 | 0.076 | 1.162 | 0.00 | 11.56 | 76.83 | 88.39 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 16:29:06 | | | | | | Method. | BCL-Cond . . . . . | |
| BLK | | (22.3 ºC) 0.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 16:30:50 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| 1702632-02@ARE1 | 50 | (21.5 ºC) 479.10 | (22.5 ºC) 8.20 | 0.000 | 2.166 | 0.00 | 0.00 | 164.76 | 164.76 |
| | Determination start . . . . . 2017-02-14 16:37:27 | | | | | | Method. | BCL-Cond . . . . . | |
| BLK | | (22.1 ºC) 0.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 16:39:09 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| 1702632-03@ARE1 | 50 | (21.0 ºC) 507.20 | (22.1 ºC) 8.08 | 0.000 | 2.444 | 0.00 | 0.00 | 185.91 | 185.91 |
| | Determination start . . . . . 2017-02-14 16:46:01 | | | | | | Method. | BCL-Cond . . . . . | |
| BLK | | (22.0 ºC) 0.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 16:47:42 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| 1703246-01@DRE1 | 50 | (20.4 ºC) 535.40 | (21.8 ºC) 7.98 | 0.000 | 1.508 | 0.00 | 0.00 | 114.71 | 114.71 |
| | Determination start . . . . . 2017-02-14 16:54:05 | | | | | | Method. | BCL-Cond . . . . . | |
| BLK | | (21.8 ºC) 0.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 16:55:47 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| 1703246-02@DRE1 | 50 | (20.1 ºC) 567.50 | (21.6 ºC) 8.04 | 0.000 | 0.964 | 0.00 | 0.00 | 73.33 | 73.33 |
| | Determination start . . . . . 2017-02-14 17:01:58 | | | | | | Method. | BCL-Cond . . . . . | |
| BLK | | (21.7 ºC) 0.60 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-14 17:03:40 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (19.9 ºC) | (21.8 ºC) | | | | | | |
| **1703249-05@DRE1** | 25 | 6261.80 | 7.80 | 0.000 | 5.808 | 0.00 | 0.00 | 883.59 | 883.59 |
| | Determination start . . . . . 2017-02-14 17:11:53 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (21.5 ºC) | | | | | | | |
| **BLK** | | 1.90 | | | | | | | |
| | Determination start . . . . . 2017-02-14 17:13:35 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (19.4 ºC) | (21.7 ºC) | | | | | | |
| **1703249-06@DRE1** | 25 | 6305.00 | 7.77 | 0.000 | 5.418 | 0.00 | 0.00 | 824.25 | 824.25 |
| | Determination start . . . . . 2017-02-14 17:21:50 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (21.4 ºC) | | | | | | | |
| **BLK** | | 2.00 | | | | | | | |
| | Determination start . . . . . 2017-02-14 17:23:31 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (16.0 ºC) | (20.3 ºC) | | | | | | |
| **1703849-03@D** | 25 | 1084.40 | 9.21 | 0.202 | 1.214 | 0.00 | 61.46 | 123.23 | 184.69 |
| | Determination start . . . . . 2017-02-14 17:29:54 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (16.2 ºC) | (19.4 ºC) | | | | | | |
| **1703851-01@D** | 50 | 358.80 | 8.57 | 0.044 | 0.638 | 0.00 | 6.69 | 41.84 | 48.53 |
| | Determination start . . . . . 2017-02-14 17:36:53 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (19.5 ºC) | | | | | | | |
| **B5-BS1@COND** | | 313.10 | | | | | | | |
| | Determination start . . . . . 2017-02-14 17:38:43 | | | | | | Method. BCL-pH . . . . . | | |
| | | | (21.6 ºC) | | | | | | |
| **B5-BS2@PH** | | | 7.04 | | | | | | |
| | Determination start . . . . . 2017-02-14 17:42:03 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (19.8 ºC) | (21.4 ºC) | | | | | | |
| **B5-BS3@ALK** | 50 | 217.40 | 10.27 | 0.472 | 1.274 | 0.00 | 71.81 | 25.10 | 96.91 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-14 17:48:52 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk-BLK1. . . . . | | |
| | | (19.6 ºC) | (21.2 ºC) | | | | | | |
| **B5-BLK1** | 50 | 0.90 | 5.47 | 0.000 | 0.036 | 0.00 | 0.00 | 2.74 | 2.74 |
| | Determination start . . . . . 2017-02-14 17:54:33 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (17.9 ºC) | (20.3 ºC) | | | | | | |
| **1703851-02@D** | 50 | 543.10 | 7.14 | 0.000 | 1.686 | 0.00 | 0.00 | 128.25 | 128.25 |
| | Determination start . . . . . 2017-02-14 18:01:20 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (17.9 ºC) | (20.3 ºC) | | | | | | |
| **B5-DUP1** | 50 | 543.90 | 7.15 | 0.000 | 1.712 | 0.00 | 0.00 | 130.23 | 130.23 |
| | Determination start . . . . . 2017-02-14 18:08:09 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (18.5 ºC) | (20.6 ºC) | | | | | | |
| **1703851-03@D** | 50 | 835.10 | 7.60 | 0.000 | 2.230 | 0.00 | 0.00 | 169.63 | 169.63 |
| | Determination start . . . . . 2017-02-14 18:15:24 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (18.9 ºC) | (21.2 ºC) | | | | | | |
| **1703851-04@D** | 25 | 1154.00 | 7.56 | 0.000 | 1.772 | 0.00 | 0.00 | 269.58 | 269.58 |
| | Determination start . . . . . 2017-02-14 18:22:12 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (21.3 ºC) | | | | | | | |
| **BLK** | | 1.10 | | | | | | | |
| | Determination start . . . . . 2017-02-14 18:23:53 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (19.4 ºC) | (21.2 ºC) | | | | | | |
| **1703851-05@D** | 50 | 516.10 | 7.83 | 0.000 | 1.974 | 0.00 | 0.00 | 150.15 | 150.15 |
| | Determination start . . . . . 2017-02-14 18:30:35 | | | | Titer . . . . . 0.076 | | Method. BCL-Cond-pH-Alk . . . . . | | |
| | | (19.6 ºC) | (21.2 ºC) | | | | | | |
| **1703851-06@D** | 50 | 685.20 | 7.19 | 0.000 | 3.234 | 0.00 | 0.00 | 246.00 | 246.00 |
| | Determination start . . . . . 2017-02-14 18:38:22 | | | | | | Method. BCL-Cond . . . . . | | |
| | | (21.3 ºC) | | | | | | | |
| **BLK** | | 1.10 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 18:40:03 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.7 ºC) | (21.3 ºC) | | | | | | |
| **1703851-07@D** | 50 | 750.80 | 7.26 | 0.000 | 2.028 | 0.00 | 0.00 | 154.26 | 154.26 |
| | Determination start . . . . . 2017-02-14 18:46:56 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.8 ºC) | (21.4 ºC) | | | | | | |
| **1703851-08@D** | 50 | 737.30 | 7.16 | 0.000 | 1.760 | 0.00 | 0.00 | 133.88 | 133.88 |
| | Determination start . . . . . 2017-02-14 18:53:45 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.8 ºC) | (21.4 ºC) | | | | | | |
| **1703851-09@D** | 50 | 644.20 | 7.46 | 0.000 | 3.030 | 0.00 | 0.00 | 230.48 | 230.48 |
| | Determination start . . . . . 2017-02-14 19:01:12 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.8 ºC) | (21.3 ºC) | | | | | | |
| **1703851-10@D** | 50 | 653.60 | 7.23 | 0.000 | 3.072 | 0.00 | 0.00 | 233.68 | 233.68 |
| | Determination start . . . . . 2017-02-14 19:08:25 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.2 ºC) | | | | | | | |
| **BLK** | | 1.10 | | | | | | | |
| | Determination start . . . . . 2017-02-14 19:10:06 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.5 ºC) | (21.5 ºC) | | | | | | |
| **1703930-01@A** | 25 | 1768.30 | 6.63 | 0.000 | 0.168 | 0.00 | 0.00 | 25.56 | 25.56 |
| | Determination start . . . . . 2017-02-14 19:15:18 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (19.8 ºC) | | | | | | | |
| **B6-BS1@COND** | | 314.30 | | | | | | | |
| | Determination start . . . . . 2017-02-14 19:16:56 | | | | | | Method. | BCL-pH . . . . . | |
| | | | (21.6 ºC) | | | | | | |
| **B6-BS2@PH** | | | 7.04 | | | | | | |
| | Determination start . . . . . 2017-02-14 19:20:16 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.1 ºC) | (21.5 ºC) | | | | | | |
| **B6-BS3@ALK** | 50 | 220.30 | 10.23 | 0.466 | 1.310 | 0.00 | 70.89 | 28.75 | 99.65 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 19:27:10 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| | | (20.1 ºC) | (21.5 ºC) | | | | | | |
| **B6-BLK1** | 50 | 1.00 | 5.41 | 0.000 | 0.034 | 0.00 | 0.00 | 2.59 | 2.59 |
| | Determination start . . . . . 2017-02-14 19:32:44 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.8 ºC) | (21.3 ºC) | | | | | | |
| **1703937-01@D** | 50 | 751.70 | 7.26 | 0.000 | 5.024 | 0.00 | 0.00 | 382.16 | 382.16 |
| | Determination start . . . . . 2017-02-14 19:41:03 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.0 ºC) | (21.4 ºC) | | | | | | |
| **B6-DUP1** | 50 | 752.10 | 7.27 | 0.000 | 5.026 | 0.00 | 0.00 | 382.31 | 382.31 |
| | Determination start . . . . . 2017-02-14 19:48:55 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.0 ºC) | (21.4 ºC) | | | | | | |
| **1703937-02@D** | 50 | 387.70 | 7.68 | 0.000 | 2.156 | 0.00 | 0.00 | 164.00 | 164.00 |
| | Determination start . . . . . 2017-02-14 19:55:45 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.0 ºC) | (21.4 ºC) | | | | | | |
| **1703937-03@D** | 50 | 401.70 | 8.07 | 0.000 | 1.590 | 0.00 | 0.00 | 120.95 | 120.95 |
| | Determination start . . . . . 2017-02-14 20:02:10 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.1 ºC) | (21.7 ºC) | | | | | | |
| **1703938-01@A** | 25 | 2872.80 | 7.01 | 0.000 | 3.136 | 0.00 | 0.00 | 477.09 | 477.09 |
| | Determination start . . . . . 2017-02-14 20:09:25 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.2 ºC) | | | | | | | |
| **BLK** | | 1.50 | | | | | | | |
| | Determination start . . . . . 2017-02-14 20:11:07 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.2 ºC) | (21.6 ºC) | | | | | | |
| **1703941-01@A** | 50 | 154.40 | 6.92 | 0.000 | 0.908 | 0.00 | 0.00 | 69.07 | 69.07 |
| | Determination start . . . . . 2017-02-14 20:17:20 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.0 ºC) | (21.5 ºC) | | | | | | |
| **1703942-01@A** | 50 | 163.60 | 6.82 | 0.000 | 0.896 | 0.00 | 0.00 | 68.16 | 68.16 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 20:23:35 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (19.9 ºC) | (21.4 ºC) | | | | | | |
| **1703946-01@D** | 50 | 111.90 | 7.58 | 0.000 | 0.298 | 0.00 | 0.00 | 22.67 | 22.67 |
| | Determination start . . . . . 2017-02-14 20:29:13 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.2 ºC) | | | | | | | |
| **BLK** | | 1.20 | | | | | | | |
| | Determination start . . . . . 2017-02-14 20:30:54 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.0 ºC) | (21.5 ºC) | | | | | | |
| **1703946-02@D** | 50 | 144.30 | 8.24 | 0.000 | 0.580 | 0.00 | 0.00 | 44.12 | 44.12 |
| | Determination start . . . . . 2017-02-14 20:37:21 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.3 ºC) | | | | | | | |
| **BLK** | | 1.20 | | | | | | | |
| | Determination start . . . . . 2017-02-14 20:39:02 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.1 ºC) | (21.8 ºC) | | | | | | |
| **1703950-01@A** | 25 | 1154.70 | 8.01 | 0.000 | 2.078 | 0.00 | 0.00 | 316.13 | 316.13 |
| | Determination start . . . . . 2017-02-14 20:45:29 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.3 ºC) | | | | | | | |
| **BLK** | | 1.40 | | | | | | | |
| | Determination start . . . . . 2017-02-14 20:47:12 | | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| | | (20.2 ºC) | (21.9 ºC) | | | | | | |
| **1703950-02@A** | 25 | 1283.50 | 7.73 | 0.000 | 2.974 | 0.00 | 0.00 | 452.44 | 452.44 |
| | Determination start . . . . . 2017-02-14 20:54:11 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (21.4 ºC) | | | | | | | |
| **BLK** | | 1.40 | | | | | | | |
| | Determination start . . . . . 2017-02-14 20:55:49 | | | | | | Method. | BCL-Cond . . . . . | |
| | | (20.3 ºC) | | | | | | | |
| **B7-BS1@COND** | | 313.80 | | | | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . . . 2017-02-14 20:57:34 | | | | | | Method . BCL-pH . . . . . | | |
| B7-BS2@PH | | | (22.0 ºC) 7.04 | | | | | | |
| | Determination start . . . . . 2017-02-14 21:00:51 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| B7-BS3@ALK | 50 | (20.4 ºC) 216.50 | (21.7 ºC) 10.19 | 0.450 | 1.298 | 0.00 | 68.46 | 30.27 | 98.73 |
| | Determination start . . . . . 2017-02-14 21:07:45 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk-BLK1. . . . . | | |
| B7-BLK1 | 50 | (20.4 ºC) 1.20 | (21.7 ºC) 5.20 | 0.000 | 0.030 | 0.00 | 0.00 | 2.28 | 2.28 |
| | Determination start . . . . . 2017-02-14 21:13:25 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| 1703969-01@A | 25 | (20.4 ºC) 1031.90 | (21.9 ºC) 7.96 | 0.000 | 1.662 | 0.00 | 0.00 | 252.84 | 252.84 |
| | Determination start . . . . . 2017-02-14 21:19:33 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| B7-DUP1 | 25 | (20.6 ºC) 1033.00 | (22.0 ºC) 7.97 | 0.000 | 1.664 | 0.00 | 0.00 | 253.15 | 253.15 |
| | Determination start . . . . . 2017-02-14 21:25:24 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| 1703969-02@A | 50 | (20.5 ºC) 865.60 | (21.8 ºC) 7.97 | 0.000 | 3.104 | 0.00 | 0.00 | 236.11 | 236.11 |
| | Determination start . . . . . 2017-02-14 21:32:10 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| 1703969-03@A | 50 | (20.6 ºC) 697.30 | (21.8 ºC) 7.93 | 0.000 | 4.166 | 0.00 | 0.00 | 316.89 | 316.89 |
| | Determination start . . . . . 2017-02-14 21:39:28 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| 1703969-04@A | 25 | (20.5 ºC) 1214.40 | (22.0 ºC) 7.84 | 0.000 | 3.918 | 0.00 | 0.00 | 596.06 | 596.06 |
| | Determination start . . . . . 2017-02-14 21:46:40 | | | | Titer . . . . . | 0.076 | Method . BCL-Cond-pH-Alk . . . . . | | |
| 1703969-05@A | 50 | (20.6 ºC) 916.10 | (21.9 ºC) 7.99 | 0.000 | 5.988 | 0.00 | 0.00 | 455.48 | 455.48 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-14 21:54:34 | | | | | | Method. BCL-Cond . . . . . | | |
| **10000** | | (20.6 ºC) 10156.80 | | | | | | | |
| | Determination start . . . . . 2017-02-14 21:56:28 | | | | | | Method. BCL-Cond . . . . . | | |
| **303** | | (20.5 ºC) 316.10 | | | | | | | |
| | Determination start . . . . . 2017-02-14 21:58:15 | | | | | | Method. BCL-Cond . . . . . | | |
| **303** | | (20.5 ºC) 316.30 | | | | | | | |
| | Determination start . . . . . 2017-02-14 21:59:51 | | | | | | Method. BCL-Cond . . . . . | | |
| **303** | | (20.5 ºC) 314.60 | | | | | | | |
| | Determination start . . . . . 2017-02-14 22:01:34 | | | | | | Method. BCL-pH . . . . . | | |
| **7.00** | | (22.1 ºC) 7.04 | | | | | | | |
| | Determination start . . . . . 2017-02-14 22:04:45 | | | | | | Method. BCL-pH . . . . . | | |
| **7.00** | | (22.0 ºC) 7.04 | | | | | | | |
| | Determination start . . . . . 2017-02-14 22:07:49 | | | | | | Method. BCL-pH . . . . . | | |
| **7.00** | | (21.9 ºC) 7.04 | | | | | | | |

**Raw Data - Batch Information**

**Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

**B[B0829**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - No Prep | (No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703459-01 A | iSM2320Bw Tot Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703463-02 A | i120.1w EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703465-01 A | i120.1w EC | 2/9/2017 8:00AM | | 50 | 50 | | | | | |
| 1703465-01 A | i310.1w Tot Alk as CaCO3 | 2/9/2017 8:00AM | | 50 | 50 | | | | | |
| 1703465-01 A | iSM2320Bw Tot Alk as CaCO3 | 2/9/2017 8:00AM | | 50 | 50 | | | | | |
| 1703465-01 A | ISM2510Bw EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703465-01 A | iSM4500HBw pH | 2/9/2017 8:00AM | | 50 | 50 | | | | | |
| 1703465-02 A | ISM2510Bw EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703465-03 A | ISM2510Bw EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703470-01 A | iSM4500HBw pH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703470-02 A | iSM4500HBw pH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703480-01 G | i310.1w Tot Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703480-02 G | i310.1w Tot Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703480-15 G | i310.1w Tot Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| B[B0829-BLK1 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| B[B0829-BS1 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | 6K28023 | | 50000 | | |
| B[B0829-BS2 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | 6L08060 | | 50000 | | |
| B[B0829-BS3 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | 6K28094 | | 5000 | | |
| B[B0829-DUP1 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | | 1703465-01 | | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 6K28023 | EC LCSW WORKING | H2O (DI) | 11/15/2016 by Rosa Ledesma | 6/15/2017 |
| 6K28094 | ALK NA2CO3 | H2O | 9/20/2016 by Rosa Ledesma | 3/20/2017 |
| 6L08060 | pH 7 LCSW Check | H20 | 12/8/2016 by ** Vendor ** | 7/31/2018 |

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

**B[B0830**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - No Prep | (No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703335-01 A | iSM2320Bw CO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703335-01 A | iSM2320Bw HCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703335-01 A | iSM2320Bw OH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703335-01 A | ISM2510Bw EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703335-01 A | i150.1w pH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703480-30 G | i310.1w Tot Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i310.1w CO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | ISM2510Bw EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | iSM2320Bw OH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | iSM2320Bw HCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | iSM2320Bw CO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i310.1w Tot Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i310.1w OH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i310.1w HCO3 Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i310.1w CO3 Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | iSM4500HBw pH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i150.1w pH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i120.1w EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703512-01 A | i310.1w HCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703514-01 A | i120.1w EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703514-02 A | i120.1w EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703515-01 A | i120.1w EC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703515-01 A | i150.1w pH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703515-01 A | i310.1w CO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703515-01 A | i310.1w HCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703515-01 A | i310.1w OH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703520-01 A | i310.1w CO3 Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703520-01 A | i310.1w HCO3 Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703520-02 A | i310.1w CO3 Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703520-02 A | i310.1w HCO3 Alk as CaCO3 | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| 1703573-02 A | i150.1w pH | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| B[B0830-BLK1 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | | | | | |
| B[B0830-BS1 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | 6K28023 | | 50000 | | |
| B[B0830-BS2 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | 6L08060 | | 50000 | | |
| B[B0830-BS3 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | 6K28094 | | 5000 | | |
| B[B0830-DUP1 | QC | 2/9/2017 8:00AM | RML | 50 | 50 | | 1703512-01 | | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|

# PREPARATION BENCH SHEET

**B[B0830**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - No Prep | (No Surrogate)

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 6K28023 | EC LCSW WORKING | H2O (DI) | 11/15/2016 by Rosa Ledesma | 6/15/2017 |
| 6K28094 | ALK NA2CO3 | H2O | 9/20/2016 by Rosa Ledesma | 3/20/2017 |
| 6L08060 | pH 7 LCSW Check | H20 | 12/8/2016 by ** Vendor ** | 7/31/2018 |

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

**B[B1240**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - No Prep | (No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703480-13 G | i310.1w Tot Alk as CaCO3 | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703852-01 D | i310.1w CO3 | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703852-01 D | i310.1w HCO3 | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703858-01 D | i120.1w EC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703858-01 D | i150.1w pH | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703858-02 D | i120.1w EC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703858-02 D | i150.1w pH | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703859-01 D | i120.1w EC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703859-01 D | i150.1w pH | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703859-02 D | i120.1w EC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703859-02 D | i150.1w pH | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703859-03 D | i150.1w pH | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703859-03 D | i120.1w EC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703860-01 D | i150.1w pH | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703860-01 D | i310.1w CO3 | 2/14/2017 8:20AM | | 50 | 50 | | | | | |
| 1703860-01 D | i310.1w HCO3 | 2/14/2017 8:20AM | | 50 | 50 | | | | | |
| 1703860-01 D | i310.1w Tot Alk as CaCO3 | 2/14/2017 8:20AM | | 50 | 50 | | | | | |
| 1703860-01 D | i120.1w EC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703860-02 D | i120.1w EC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| 1703860-02 D | i150.1w pH | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| B[B1240-BLK1 | QC | 2/14/2017 8:20AM | RML | 50 | 50 | | | | | |
| B[B1240-BS1 | QC | 2/14/2017 8:20AM | RML | 50 | 50 | 6K28023 | | 50000 | | |
| B[B1240-BS2 | QC | 2/14/2017 8:20AM | RML | 50 | 50 | 6L08060 | | 50000 | | |
| B[B1240-BS3 | QC | 2/14/2017 8:20AM | RML | 50 | 50 | 6K28094 | | 5000 | | |
| B[B1240-DUP1 | QC | 2/14/2017 8:20AM | RML | 50 | 50 | | 1703860-01 | | | |

# PREPARATION BENCH SHEET

**B[B1240**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 6K28023 | EC LCSW WORKING | H2O (DI) | 11/15/2016 by Rosa Ledesma | 6/15/2017 |
| 6K28094 | ALK NA2CO3 | H2O | 9/20/2016 by Rosa Ledesma | 3/20/2017 |
| 6L08060 | pH 7 LCSW Check | H20 | 12/8/2016 by ** Vendor ** | 7/31/2018 |

**Raw Data - Sequence Information**

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

## ANALYSIS SEQUENCE

**1702383**

Instrument: MET-1
Calibration ID:
Sequence Date: 02/09/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702383-ICV1 | QC | | 1 | | 7B07020 | | |
| B[B0828-BS1 | QC | | 2 | | | | |
| B[B0828-BS2 | QC | | 3 | | | | |
| B[B0828-BS3 | QC | | 4 | | | | |
| B[B0828-BLK1 | QC | | 5 | | | | |
| 1701953-38RE1 | i310.1w Tot Alk as CaCO3 | A | 6 | | | | Added 2/10/2017 by RML |
| 1701953-38RE2 | i310.1w Tot Alk as CaCO3 | A | 7 | | | | Added 2/10/2017 by RML |
| 1701953-37 | i150.1w pH | A | 8 | | | | |
| 1701953-37 | iSM2320Bw CO3 | A | 8 | | | | |
| 1701953-37 | iSM2320Bw HCO3 | A | 8 | | | | |
| 1701953-37 | iSM2320Bw OH | A | 8 | | | | |
| 1701953-38 | i150.1w pH | A | 9 | | | | BatchQC |
| 1701953-38 | i310.1w Tot Alk as CaCO3 | A | 9 | | | | |
| 1701953-38 | iSM2320Bw CO3 | A | 9 | | | | BatchQC |
| 1701953-38 | iSM2320Bw HCO3 | A | 9 | | | | BatchQC |
| 1701953-38 | iSM2320Bw OH | A | 9 | | | | BatchQC |
| 1701953-38 | iSM2320Bw Tot Alk as CaCO3 | A | 9 | | | | BatchQC |
| B[B0828-DUP1 | QC | | 10 | | | | |
| 1701953-37RE1 | i150.1w pH | A | 11 | | | | Added 2/10/2017 by RML |
| 1701953-37RE1 | iSM2320Bw CO3 | A | 11 | | | | Added 2/10/2017 by RML |
| 1701953-37RE1 | iSM2320Bw HCO3 | A | 11 | | | | Added 2/10/2017 by RML |
| 1701953-37RE1 | iSM2320Bw OH | A | 11 | | | | Added 2/10/2017 by RML |
| 1701953-37RE2 | i150.1w pH | A | 12 | | | | Added 2/10/2017 by RML |
| 1701953-37RE2 | iSM2320Bw CO3 | A | 12 | | | | Added 2/10/2017 by RML |
| 1701953-37RE2 | iSM2320Bw HCO3 | A | 12 | | | | Added 2/10/2017 by RML |
| 1701953-37RE2 | iSM2320Bw OH | A | 12 | | | | Added 2/10/2017 by RML |
| 1702346-52 | iSM2320Bw Tot Alk as CaCO3 | A | 13 | | | | |
| 1702346-52RE1 | iSM2320Bw Tot Alk as CaCO3 | A | 14 | | | | Added 2/10/2017 by RML |
| 1702346-52RE2 | iSM2320Bw Tot Alk as CaCO3 | A | 15 | | | | Added 2/10/2017 by RML |
| 1703452-02 | iSM2320Bw Tot Alk as CaCO3 | D | 16 | | | | |
| 1703452-03 | iSM2320Bw Tot Alk as CaCO3 | D | 17 | | | | |
| 1703453-01 | iSM2320Bw Tot Alk as CaCO3 | D | 18 | | | | |
| 1703453-02 | iSM2320Bw Tot Alk as CaCO3 | D | 19 | | | | |
| 1703453-03 | iSM2320Bw Tot Alk as CaCO3 | D | 20 | | | | |
| 1703457-01 | i310.1w Tot Alk as CaCO3 | D | 21 | | | | |
| 1703457-02 | i310.1w Tot Alk as CaCO3 | D | 22 | | | | |
| B[B0829-BS1 | QC | | 23 | | | | |
| B[B0829-BS2 | QC | | 24 | | | | |
| B[B0829-BS3 | QC | | 25 | | | | |

# ANALYSIS SEQUENCE

**1702383**

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|---|---|---|---|---|---|---|---|
| B[B0829-BLK1 | QC | | 26 | | | | |
| 1703465-01 | i120.1w EC | A | 27 | | | | BatchQC |
| 1703465-01 | i310.1w Tot Alk as CaCO3 | A | 27 | | | | BatchQC |
| 1703465-01 | iSM2320Bw Tot Alk as CaCO3 | A | 27 | | | | BatchQC |
| 1703465-01 | ISM2510Bw EC | A | 27 | | | | |
| 1703465-01 | iSM4500HBw pH | A | 27 | | | | BatchQC |
| B[B0829-DUP1 | QC | | 28 | | | | |
| 1703459-01 | iSM2320Bw Tot Alk as CaCO3 | A | 29 | | | | |
| 1703463-02 | i120.1w EC | A | 30 | | | | |
| 1703465-02 | ISM2510Bw EC | A | 31 | | | | |
| 1703465-03 | ISM2510Bw EC | A | 32 | | | | |
| 1703470-01 | iSM4500HBw pH | A | 33 | | | | |
| 1703470-02 | iSM4500HBw pH | A | 34 | | | | |
| 1703480-01 | i310.1w Tot Alk as CaCO3 | G | 35 | | | | |
| 1703480-02 | i310.1w Tot Alk as CaCO3 | G | 36 | | | | |
| 1703480-15 | i310.1w Tot Alk as CaCO3 | G | 37 | | | | |
| B[B0830-BS1 | QC | | 38 | | | | |
| B[B0830-BS2 | QC | | 39 | | | | |
| B[B0830-BS3 | QC | | 40 | | | | |
| B[B0830-BLK1 | QC | | 41 | | | | |
| 1703512-01 | i120.1w EC | A | 42 | | | | BatchQC |
| 1703512-01 | i150.1w pH | A | 42 | | | | BatchQC |
| 1703512-01 | i310.1w CO3 | A | 42 | | | | BatchQC |
| 1703512-01 | i310.1w CO3 Alk as CaCO3 | A | 42 | | | | BatchQC |
| 1703512-01 | i310.1w HCO3 | A | 42 | | | | BatchQC |
| 1703512-01 | i310.1w HCO3 Alk as CaCO3 | A | 42 | | | | BatchQC |
| 1703512-01 | i310.1w OH | A | 42 | | | | BatchQC |
| 1703512-01 | i310.1w Tot Alk as CaCO3 | A | 42 | | | | BatchQC |
| 1703512-01 | iSM2320Bw CO3 | A | 42 | | | | BatchQC |
| 1703512-01 | iSM2320Bw HCO3 | A | 42 | | | | BatchQC |
| 1703512-01 | iSM2320Bw OH | A | 42 | | | | BatchQC |
| 1703512-01 | ISM2510Bw EC | A | 42 | | | | |
| 1703512-01 | iSM4500HBw pH | A | 42 | | | | |
| B[B0830-DUP1 | QC | | 43 | | | | |
| 1703480-30 | i310.1w Tot Alk as CaCO3 | G | 44 | | | | |
| 1703573-02 | i150.1w pH | A | 45 | | | | |
| 1703335-01 | i150.1w pH | A | 46 | | | | |
| 1703335-01 | iSM2320Bw CO3 | A | 46 | | | | |
| 1703335-01 | iSM2320Bw HCO3 | A | 46 | | | | |

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| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1703335-01 | iSM2320Bw OH | A | 46 | | | | |
| 1703335-01 | ISM2510Bw EC | A | 46 | | | | |
| 1703514-01 | i120.1w EC | A | 47 | | | | |
| 1703514-02 | i120.1w EC | A | 48 | | | | |
| 1703515-01 | i120.1w EC | A | 49 | | | | |
| 1703515-01 | i150.1w pH | A | 49 | | | | |
| 1703515-01 | i310.1w CO3 | A | 49 | | | | |
| 1703515-01 | i310.1w HCO3 | A | 49 | | | | |
| 1703515-01 | i310.1w OH | A | 49 | | | | |
| 1703520-01 | i310.1w CO3 Alk as CaCO3 | A | 50 | | | | |
| 1703520-01 | i310.1w HCO3 Alk as CaCO3 | A | 50 | | | | |
| 1703520-02 | i310.1w CO3 Alk as CaCO3 | A | 51 | | | | |
| 1703520-02 | i310.1w HCO3 Alk as CaCO3 | A | 51 | | | | |
| B[B0831-BS1 | QC | | 52 | | | | |
| B[B0831-BS2 | QC | | 53 | | | | |
| B[B0831-BS3 | QC | | 54 | | | | |
| B[B0831-BLK1 | QC | | 55 | | | | |
| 1703521-01 | i150.1w pH | A | 56 | | | | BatchQC |
| 1703521-01 | i310.1w CO3 | A | 56 | | | | |
| 1703521-01 | i310.1w CO3 Alk as CaCO3 | A | 56 | | | | BatchQC |
| 1703521-01 | i310.1w HCO3 | A | 56 | | | | |
| 1703521-01 | i310.1w HCO3 Alk as CaCO3 | A | 56 | | | | BatchQC |
| 1703521-01 | iSM2320Bw CO3 Alk as CaCO3 | A | 56 | | | | BatchQC |
| 1703521-01 | iSM2320Bw HCO3 Alk as CaC( | A | 56 | | | | BatchQC |
| 1703521-01 | iSM2320Bw OH Alk as CaCO3 | A | 56 | | | | BatchQC |
| 1703521-01 | iSM2320Bw Tot Alk as CaCO3 | A | 56 | | | | BatchQC |
| B[B0831-DUP1 | QC | | 57 | | | | |
| 1703520-03 | i310.1w CO3 Alk as CaCO3 | A | 58 | | | | |
| 1703520-03 | i310.1w HCO3 Alk as CaCO3 | A | 58 | | | | |
| 1703520-04 | i310.1w CO3 Alk as CaCO3 | A | 59 | | | | |
| 1703520-04 | i310.1w HCO3 Alk as CaCO3 | A | 59 | | | | |
| 1703521-02 | i310.1w CO3 | A | 60 | | | | |
| 1703521-02 | i310.1w HCO3 | A | 60 | | | | |
| 1703521-03 | i310.1w CO3 | A | 61 | | | | |
| 1703521-03 | i310.1w HCO3 | A | 61 | | | | |
| 1703521-04 | i310.1w CO3 | A | 62 | | | | |
| 1703521-04 | i310.1w HCO3 | A | 62 | | | | |
| 1703521-05 | i310.1w CO3 | A | 63 | | | | |
| 1703521-05 | i310.1w HCO3 | A | 63 | | | | |

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|---|---|---|---|---|---|---|---|
| 1703554-01 | i150.1w pH | J | 64 | | | | |
| 1703554-01 | iSM2320Bw CO3 Alk as CaCO3 | J | 64 | | | | |
| 1703554-01 | iSM2320Bw HCO3 Alk as CaC( | J | 64 | | | | |
| 1703554-01 | iSM2320Bw OH Alk as CaCO3 | J | 64 | | | | |
| 1703554-01 | iSM2320Bw Tot Alk as CaCO3 | J | 64 | | | | |
| 1703555-01 | i150.1w pH | J | 65 | | | | |
| 1703555-01 | iSM2320Bw CO3 Alk as CaCO3 | J | 65 | | | | |
| 1703555-01 | iSM2320Bw HCO3 Alk as CaC( | J | 65 | | | | |
| 1703555-01 | iSM2320Bw OH Alk as CaCO3 | J | 65 | | | | |
| 1703555-01 | iSM2320Bw Tot Alk as CaCO3 | J | 65 | | | | |
| 1703556-01 | i150.1w pH | J | 66 | | | | |
| 1703556-01 | iSM2320Bw CO3 Alk as CaCO3 | J | 66 | | | | |
| 1703556-01 | iSM2320Bw HCO3 Alk as CaC( | J | 66 | | | | |
| 1703556-01 | iSM2320Bw OH Alk as CaCO3 | J | 66 | | | | |
| 1703556-01 | iSM2320Bw Tot Alk as CaCO3 | J | 66 | | | | |
| B[B0844-BS1 | QC | | 67 | | | | |
| B[B0844-BS2 | QC | | 68 | | | | |
| B[B0844-BS3 | QC | | 69 | | | | |
| B[B0844-BLK1 | QC | | 70 | | | | |
| 1703559-01 | i120.1w EC | A | 71 | | | | |
| 1703559-01 | i150.1w pH | A | 71 | | | | BatchQC |
| 1703559-01 | iSM2320Bw CO3 Alk as CaCO3 | A | 71 | | | | BatchQC |
| 1703559-01 | iSM2320Bw HCO3 Alk as CaC( | A | 71 | | | | BatchQC |
| 1703559-01 | iSM2320Bw OH Alk as CaCO3 | A | 71 | | | | BatchQC |
| 1703559-01 | iSM2320Bw Tot Alk as CaCO3 | A | 71 | | | | BatchQC |
| B[B0844-DUP1 | QC | | 72 | | | | |
| 1703557-01 | i150.1w pH | J | 73 | | | | |
| 1703557-01 | iSM2320Bw CO3 Alk as CaCO3 | J | 73 | | | | |
| 1703557-01 | iSM2320Bw HCO3 Alk as CaC( | J | 73 | | | | |
| 1703557-01 | iSM2320Bw OH Alk as CaCO3 | J | 73 | | | | |
| 1703557-01 | iSM2320Bw Tot Alk as CaCO3 | J | 73 | | | | |
| 1703560-01 | i150.1w pH | D | 74 | | | | |
| 1703560-02 | i150.1w pH | D | 75 | | | | |
| 1703560-03 | i150.1w pH | D | 76 | | | | |
| 1703560-04 | i150.1w pH | D | 77 | | | | |
| 1703560-05 | i150.1w pH | D | 78 | | | | |
| 1703560-06 | i150.1w pH | D | 79 | | | | |
| 1703560-07 | i150.1w pH | D | 80 | | | | |
| 1703560-08 | i150.1w pH | D | 81 | | | | |

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## ANALYSIS SEQUENCE

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| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702673-ICV1 | QC | | 1 | | 7B07020 | | |
| B[B1240-BS1 | QC | | 2 | | | | |
| B[B1240-BS2 | QC | | 3 | | | | |
| B[B1240-BLK1 | QC | | 4 | | | | |
| B[B1240-BS3 | QC | | 5 | | | | |
| 1703860-01 | i120.1w EC | D | 6 | | | | |
| 1703860-01 | i150.1w pH | D | 6 | | | | |
| 1703860-01 | i310.1w CO3 | D | 6 | | | | BatchQC |
| 1703860-01 | i310.1w HCO3 | D | 6 | | | | BatchQC |
| 1703860-01 | i310.1w Tot Alk as CaCO3 | D | 6 | | | | BatchQC |
| B[B1240-DUP1 | QC | | 7 | | | | |
| 1703480-13 | i310.1w Tot Alk as CaCO3 | G | 8 | | | | |
| 1703852-01 | i310.1w CO3 | D | 9 | | | | |
| 1703852-01 | i310.1w HCO3 | D | 9 | | | | |
| 1703858-01 | i120.1w EC | D | 10 | | | | |
| 1703858-01 | i150.1w pH | D | 10 | | | | |
| 1703858-02 | i120.1w EC | D | 11 | | | | |
| 1703858-02 | i150.1w pH | D | 11 | | | | |
| 1703859-01 | i120.1w EC | D | 12 | | | | |
| 1703859-01 | i150.1w pH | D | 12 | | | | |
| 1703859-02 | i120.1w EC | D | 13 | | | | |
| 1703859-02 | i150.1w pH | D | 13 | | | | |
| 1703859-03 | i120.1w EC | D | 14 | | | | |
| 1703859-03 | i150.1w pH | D | 14 | | | | |
| 1703860-02 | i120.1w EC | D | 15 | | | | |
| 1703860-02 | i150.1w pH | D | 15 | | | | |
| B[B1241-BS1 | QC | | 16 | | | | |
| B[B1241-BS2 | QC | | 17 | | | | |
| B[B1241-BS3 | QC | | 18 | | | | |
| B[B1241-BLK1 | QC | | 19 | | | | |
| 1703860-03 | i120.1w EC | D | 20 | | | | |
| 1703860-03 | i150.1w pH | D | 20 | | | | |
| 1703860-03 | i310.1w CO3 | D | 20 | | | | BatchQC |
| 1703860-03 | i310.1w HCO3 | D | 20 | | | | BatchQC |
| 1703860-03 | i310.1w OH | D | 20 | | | | BatchQC |
| B[B1241-DUP1 | QC | | 21 | | | | |
| 1703860-04 | i120.1w EC | D | 22 | | | | |
| 1703860-04 | i150.1w pH | D | 22 | | | | |
| 1703860-06 | i120.1w EC | D | 23 | | | | |

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| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1703860-06 | i150.1w pH | D | 23 | | | | |
| 1703860-07 | i120.1w EC | D | 24 | | | | |
| 1703860-07 | i150.1w pH | D | 24 | | | | |
| 1703860-08 | i120.1w EC | D | 25 | | | | |
| 1703860-08 | i150.1w pH | D | 25 | | | | |
| 1703868-02 | i150.1w pH | A | 26 | | | | |
| 1703860-05 | i120.1w EC | D | 27 | | | | |
| 1703860-05 | i150.1w pH | D | 27 | | | | |
| 1703877-01 | i150.1w pH | B | 28 | | | | RUSH 6 DAY |
| 1703929-01 | i120.1w EC | A | 29 | | | | |
| 1703929-01 | i150.1w pH | A | 29 | | | | |
| 1703929-01 | i310.1w CO3 | A | 29 | | | | |
| 1703929-01 | i310.1w HCO3 | A | 29 | | | | |
| 1703929-01 | i310.1w OH | A | 29 | | | | |
| 1703929-02 | i120.1w EC | A | 30 | | | | |
| 1703929-02 | i150.1w pH | A | 30 | | | | |
| 1703929-02 | i310.1w CO3 | A | 30 | | | | |
| 1703929-02 | i310.1w HCO3 | A | 30 | | | | |
| 1703929-02 | i310.1w OH | A | 30 | | | | |
| B[B1242-BS1 | QC | | 31 | | | | |
| B[B1242-BS2 | QC | | 32 | | | | |
| B[B1242-BS3 | QC | | 33 | | | | |
| B[B1242-BLK1 | QC | | 34 | | | | |
| 1703929-03 | i120.1w EC | A | 35 | | | | |
| 1703929-03 | i150.1w pH | A | 35 | | | | |
| 1703929-03 | i310.1w CO3 | A | 35 | | | | |
| 1703929-03 | i310.1w HCO3 | A | 35 | | | | |
| 1703929-03 | i310.1w OH | A | 35 | | | | |
| 1703929-03 | i310.1w Tot Alk as CaCO3 PQL: | A | 35 | | | | BatchQC |
| B[B1242-DUP1 | QC | | 36 | | | | |
| 1703929-04 | i120.1w EC | A | 37 | | | | |
| 1703929-04 | i150.1w pH | A | 37 | | | | |
| 1703929-04 | i310.1w CO3 | A | 37 | | | | |
| 1703929-04 | i310.1w HCO3 | A | 37 | | | | |
| 1703929-04 | i310.1w OH | A | 37 | | | | |
| 1703929-05 | i120.1w EC | B | 38 | | | | |
| 1703929-05 | i150.1w pH | B | 38 | | | | |
| 1703929-05 | i310.1w CO3 | B | 38 | | | | |
| 1703929-05 | i310.1w HCO3 | B | 38 | | | | |

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|---|---|---|---|---|---|---|---|
| 1703929-05 | i310.1w OH | B | 38 | | | | |
| 1703929-06 | i120.1w EC | B | 39 | | | | |
| 1703929-06 | i150.1w pH | B | 39 | | | | |
| 1703929-06 | i310.1w CO3 | B | 39 | | | | |
| 1703929-06 | i310.1w HCO3 | B | 39 | | | | |
| 1703929-06 | i310.1w OH | B | 39 | | | | |
| 1703929-07 | i120.1w EC | B | 40 | | | | |
| 1703929-07 | i150.1w pH | B | 40 | | | | |
| 1703929-07 | i310.1w CO3 | B | 40 | | | | |
| 1703929-07 | i310.1w HCO3 | B | 40 | | | | |
| 1703929-07 | i310.1w OH | B | 40 | | | | |
| 1703929-08 | i120.1w EC | B | 41 | | | | |
| 1703929-08 | i150.1w pH | B | 41 | | | | |
| 1703929-08 | i310.1w CO3 | B | 41 | | | | |
| 1703929-08 | i310.1w HCO3 | B | 41 | | | | |
| 1703929-08 | i310.1w OH | B | 41 | | | | |
| 1703971-01 | i120.1w EC | B | 42 | | | | |
| 1703971-01 | i150.1w pH | B | 42 | | | | |
| 1703971-01 | i310.1w Tot Alk as CaCO3 PQL: | B | 42 | | | | |
| 1703971-02 | i120.1w EC | A | 43 | | | | |
| 1703971-02 | i150.1w pH | A | 43 | | | | |
| 1703971-02 | i310.1w Tot Alk as CaCO3 PQL: | A | 43 | | | | |
| 1703971-03 | i120.1w EC | A | 44 | | | | |
| 1703971-03 | i150.1w pH | A | 44 | | | | |
| 1703971-03 | i310.1w Tot Alk as CaCO3 PQL: | A | 44 | | | | |
| 1703971-04 | i120.1w EC | A | 45 | | | | |
| 1703971-04 | i150.1w pH | A | 45 | | | | |
| 1703971-04 | i310.1w Tot Alk as CaCO3 PQL: | A | 45 | | | | |
| B[B1243-BS1 | QC | | 46 | | | | |
| B[B1243-BS2 | QC | | 47 | | | | |
| B[B1243-BS3 | QC | | 48 | | | | |
| B[B1243-BLK1 | QC | | 49 | | | | |
| 1703971-05 | i120.1w EC | A | 50 | | | | |
| 1703971-05 | i150.1w pH | A | 50 | | | | |
| 1703971-05 | i310.1w CO3 | A | 50 | | | | BatchQC |
| 1703971-05 | i310.1w HCO3 | A | 50 | | | | BatchQC |
| 1703971-05 | i310.1w Tot Alk as CaCO3 PQL: | A | 50 | | | | |
| B[B1243-DUP1 | QC | | 51 | | | | |
| 1703849-03 | i310.1w CO3 | D | 52 | | | | |

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|---|---|---|---|---|---|---|---|
| 1703849-03 | i310.1w HCO3 | D | 52 | | | | |
| 1703851-01 | i310.1w CO3 | D | 53 | | | | |
| 1703851-01 | i310.1w HCO3 | D | 53 | | | | |
| B[B1244-BS1 | QC | | 54 | | | | |
| B[B1244-BS2 | QC | | 55 | | | | |
| B[B1244-BS3 | QC | | 56 | | | | |
| B[B1244-BLK1 | QC | | 57 | | | | |
| 1703851-02 | i120.1w EC | D | 58 | | | | BatchQC |
| 1703851-02 | i150.1w pH | D | 58 | | | | BatchQC |
| 1703851-02 | i310.1w CO3 | D | 58 | | | | |
| 1703851-02 | i310.1w HCO3 | D | 58 | | | | |
| B[B1244-DUP1 | QC | | 59 | | | | |
| 1703851-03 | i310.1w CO3 | D | 60 | | | | |
| 1703851-03 | i310.1w HCO3 | D | 60 | | | | |
| 1703851-04 | i310.1w CO3 | D | 61 | | | | |
| 1703851-04 | i310.1w HCO3 | D | 61 | | | | |
| 1703851-05 | i310.1w CO3 | D | 62 | | | | |
| 1703851-05 | i310.1w HCO3 | D | 62 | | | | |
| 1703851-06 | i310.1w CO3 | D | 63 | | | | |
| 1703851-06 | i310.1w HCO3 | D | 63 | | | | |
| 1703851-07 | i310.1w CO3 | D | 64 | | | | |
| 1703851-07 | i310.1w HCO3 | D | 64 | | | | |
| 1703851-08 | i310.1w CO3 | D | 65 | | | | |
| 1703851-08 | i310.1w HCO3 | D | 65 | | | | |
| 1703851-09 | i310.1w CO3 | D | 66 | | | | |
| 1703851-09 | i310.1w HCO3 | D | 66 | | | | |
| 1703851-10 | i310.1w CO3 | D | 67 | | | | |
| 1703851-10 | i310.1w HCO3 | D | 67 | | | | |
| 1703930-01 | i120.1w EC | A | 68 | | | | |
| 1703930-01 | i150.1w pH | A | 68 | | | | |
| B[B1245-BS1 | QC | | 69 | | | | |
| B[B1245-BS2 | QC | | 70 | | | | |
| B[B1245-BS3 | QC | | 71 | | | | |
| B[B1245-BLK1 | QC | | 72 | | | | |
| 1703937-01 | i120.1w EC | D | 73 | | | | BatchQC |
| 1703937-01 | i150.1w pH | D | 73 | | | | BatchQC |
| 1703937-01 | i310.1w CO3 | D | 73 | | | | |
| 1703937-01 | i310.1w CO3 Alk as CaCO3 | D | 73 | | | | BatchQC |
| 1703937-01 | i310.1w HCO3 | D | 73 | | | | |

**Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

## ANALYSIS SEQUENCE

**1702673**

Instrument: MET-1
Calibration ID:
Sequence Date: 02/14/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1703937-01 | i310.1w HCO3 Alk as CaCO3 | D | 73 | | | | BatchQC |
| 1703937-01 | i310.1w OH Alk as CaCO3 | D | 73 | | | | BatchQC |
| 1703937-01 | i310.1w Tot Alk as CaCO3 | D | 73 | | | | |
| 1703937-01 | iSM2320Bw CO3 | D | 73 | | | | BatchQC |
| 1703937-01 | iSM2320Bw HCO3 | D | 73 | | | | BatchQC |
| 1703937-01 | iSM2320Bw OH | D | 73 | | | | BatchQC |
| 1703937-01 | ISM2510Bw EC | D | 73 | | | | BatchQC |
| 1703937-01 | iSM4500HBw pH | D | 73 | | | | BatchQC |
| B[B1245-DUP1 | QC | | 74 | | | | |
| 1703937-02 | i310.1w CO3 | D | 75 | | | | |
| 1703937-02 | i310.1w HCO3 | D | 75 | | | | |
| 1703937-02 | i310.1w Tot Alk as CaCO3 | D | 75 | | | | |
| 1703937-03 | i310.1w CO3 | D | 76 | | | | |
| 1703937-03 | i310.1w HCO3 | D | 76 | | | | |
| 1703937-03 | i310.1w Tot Alk as CaCO3 | D | 76 | | | | |
| 1703938-01 | i150.1w pH | A | 77 | | | | |
| 1703938-01 | iSM2320Bw CO3 | A | 77 | | | | |
| 1703938-01 | iSM2320Bw HCO3 | A | 77 | | | | |
| 1703938-01 | iSM2320Bw OH | A | 77 | | | | |
| 1703938-01 | ISM2510Bw EC | A | 77 | | | | |
| 1703941-01 | i150.1w pH | A | 78 | | | | |
| 1703941-01 | i310.1w CO3 Alk as CaCO3 | A | 78 | | | | |
| 1703941-01 | i310.1w HCO3 Alk as CaCO3 | A | 78 | | | | |
| 1703941-01 | i310.1w OH Alk as CaCO3 | A | 78 | | | | |
| 1703941-01 | ISM2510Bw EC | A | 78 | | | | |
| 1703942-01 | i150.1w pH | A | 79 | | | | |
| 1703942-01 | i310.1w CO3 Alk as CaCO3 | A | 79 | | | | |
| 1703942-01 | i310.1w HCO3 Alk as CaCO3 | A | 79 | | | | |
| 1703942-01 | i310.1w OH Alk as CaCO3 | A | 79 | | | | |
| 1703942-01 | ISM2510Bw EC | A | 79 | | | | |
| 1703946-01 | iSM4500HBw pH | D | 80 | | | | |
| 1703946-02 | iSM4500HBw pH | D | 81 | | | | |
| 1703950-01 | i120.1w EC | A | 82 | | | | |
| 1703950-01 | i150.1w pH | A | 82 | | | | |
| 1703950-01 | i310.1w CO3 Alk as CaCO3 | A | 82 | | | | |
| 1703950-01 | i310.1w HCO3 Alk as CaCO3 | A | 82 | | | | |
| 1703950-01 | i310.1w Tot Alk as CaCO3 | A | 82 | | | | |
| 1703950-02 | i120.1w EC | A | 83 | | | | |
| 1703950-02 | i150.1w pH | A | 83 | | | | |

# ANALYSIS SEQUENCE

**1702673**

Instrument: MET-1
Calibration ID:
Sequence Date: 02/14/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1703950-02 | i310.1w CO3 Alk as CaCO3 | A | 83 | | | | |
| 1703950-02 | i310.1w HCO3 Alk as CaCO3 | A | 83 | | | | |
| 1703950-02 | i310.1w Tot Alk as CaCO3 | A | 83 | | | | |
| B[B1281-BS3 | QC | | 84 | | | | |
| B[B1281-BLK1 | QC | | 85 | | | | |
| 1703969-01 | i310.1w CO3 | D | 86 | | | | |
| 1703969-01 | i310.1w HCO3 | D | 86 | | | | |
| B[B1281-DUP1 | QC | | 87 | | | | |
| 1703969-02 | i310.1w CO3 | D | 88 | | | | |
| 1703969-02 | i310.1w HCO3 | D | 88 | | | | |
| 1703969-03 | i310.1w CO3 | D | 89 | | | | |
| 1703969-03 | i310.1w HCO3 | D | 89 | | | | |
| 1703969-04 | i310.1w CO3 | D | 90 | | | | |
| 1703969-04 | i310.1w HCO3 | D | 90 | | | | |
| 1703969-05 | i310.1w CO3 | D | 91 | | | | |
| 1703969-05 | i310.1w HCO3 | D | 91 | | | | |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Alkalinity as CaCO3, mg/l | | |
| | Determination start . . . . . | 2017-02-14 08:33:02 | | | | | Method. | BCL-Cond . . . . . | |
| ICV1@COND | | (20.2 °C) 992.50 | | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:35:00 | | | | | Method. | BCL-Cond . . . . . | |
| B1-BS1@COND | | (20.1 °C) 307.90 | | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:52:48 | | | | | Method. | BCL-pH . . . . . | |
| B1-BS2@pH | | | (21.3 °C) 7.05 | | | | | | |
| | Determination start . . . . . | 2017-02-14 08:55:58 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| B1-BS3@Alk | 50 | (19.4 °C) 327.50 | (20.7 °C) 10.34 | 0.504 | 1.548 | 0.00 | 76.67 | 41.08 | 117.75 |
| | Determination start . . . . . | 2017-02-14 09:02:55 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk-BLK1. . . . . | |
| B1-BLK1@Alk | 50 | (19.1 °C) 1.00 | (20.5 °C) 5.75 | 0.000 | 0.038 | 0.00 | 0.00 | 2.89 | 2.89 |
| | Determination start . . . . . | 2017-02-14 09:49:23 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| B1-BS3@ALK | 50 | (20.2 °C) 248.00 | (21.1 °C) 10.58 | 0.636 | 1.306 | 0.00 | 96.76 | 2.59 | 99.34 |
| | Determination start . . . . . | 2017-02-14 10:46:13 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| 1703860-01@D | 25 | (16.4 °C) 3194.20 | (19.8 °C) 7.76 | 0.000 | 4.716 | 0.00 | 0.00 | 717.46 | 717.46 |
| | Determination start . . . . . | 2017-02-14 10:55:55 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| 1703860-01@D | 25 | (16.5 °C) 3201.50 | (19.8 °C) 7.72 | 0.000 | 4.736 | 0.00 | 0.00 | 720.50 | 720.50 |
| | Determination start . . . . . | 2017-02-14 11:03:34 | | | Titer . . . . . | 0.076 | Method. | BCL-Cond-pH-Alk . . . . . | |
| B1-DUP1 | 25 | (17.1 °C) 3204.00 | (20.0 °C) 7.73 | 0.000 | 4.716 | 0.00 | 0.00 | 717.46 | 717.46 |

. . . 2017-02-14 11:12:46

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Alkalinity as CaCO3, mg/l | | | |
| | Determination start . . . | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (18.8 °C) | (20.5 °C) | | | | | | |
| 1702402-01@AFRE1 | 50 | 101.80 | 6.73 | 0.000 | 0.104 | 0.00 | 0.00 | 7.91 | 7.91 |
| | Determination start . . . . . 2017-02-14 11:20:06 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (17.5 °C) | (20.3 °C) | | | | | | |
| 1703480-13@G | 25 | 2716.30 | 7.30 | 0.000 | 2.184 | 0.00 | 0.00 | 332.26 | 332.26 |
| | Determination start . . . . . 2017-02-14 11:28:24 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (17.7 °C) | (19.9 °C) | | | | | | |
| 1703852-01@F | 50 | 326.60 | 8.20 | 0.000 | 1.938 | 0.00 | 0.00 | 147.42 | 147.42 |
| | Determination start . . . . . 2017-02-14 11:36:51 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (17.5 °C) | (19.8 °C) | | | | | | |
| 1703858-01@D | 50 | 343.20 | 8.07 | 0.000 | 1.552 | 0.00 | 0.00 | 118.05 | 118.05 |
| | Determination start . . . . . 2017-02-14 11:45:11 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (17.7 °C) | (19.9 °C) | | | | | | |
| 1703858-02@D | 50 | 163.10 | 7.93 | 0.000 | 0.750 | 0.00 | 0.00 | 57.05 | 57.05 |
| | Determination start . . . . . 2017-02-14 11:53:02 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (17.8 °C) | (20.0 °C) | | | | | | |
| 1703859-01@D | 50 | 456.90 | 7.61 | 0.000 | 1.432 | 0.00 | 0.00 | 108.93 | 108.93 |
| | Determination start . . . . . 2017-02-14 12:01:30 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (18.1 °C) | (20.2 °C) | | | | | | |
| 1703859-02@D | 50 | 601.50 | 7.62 | 0.000 | 1.540 | 0.00 | 0.00 | 117.14 | 117.14 |
| | Determination start . . . . . 2017-02-14 12:10:02 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (18.4 °C) | (20.9 °C) | | | | | | |
| 1703859-03@D | 25 | 5078.80 | 7.13 | 0.000 | 10.764 | 0.00 | 0.00 | 1637.55 | 1637.55 |
| | Determination start . . . . . 2017-02-14 12:20:53 | | | | Titer . . . . . | 0.076 | Method . | BCL-Cond-pH-Alk . . . . . | |
| | | (18.8 °C) | (21.2 °C) | | | | | | |
| 1703860-02@D | 25 | 3169.10 | 7.46 | 0.000 | 5.094 | 0.00 | 0.00 | 774.96 | 774.96 |

| Sample ID | Sample Vol., ml | Cond., µmhos/cm | pH | P, ml | T, ml | Alkalinity as CaCO3, mg/l Hydroxide | Carbonate | Bicarbonate | Total Alk |
|---|---|---|---|---|---|---|---|---|---|
| | Determination start . . . . . 2017-02-14 12:30:23 | | | | | | Method . BCL-Cond . . . . . | | |
| B2-BS1@COND | | (19.4 °C) 310.50 | | | | | | | |
| | Determination start . . . . . 2017-02-14 12:32:18 | | | | | | Method . BCL-pH . . . . . | | |
| B2-BS2@PH | | (21.5 °C) 7.04 | | | | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

| | |
|---|---|
| Reported: | 3/13/2017 4:42:23PM |
| Project: | Alameda |
| Project Number: | 5023146096 |
| Project Manager: | Kelli Miller |

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

| | |
|---|---|
| **SDG:** | **17-03480** |
| **Class:** | **WET** |
| **Method:** | **EPA-353.2** |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## EPA-353.2

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| 27EW-17_170207 | 1703480-01 |
| 27EW-18_170207 | 1703480-02 |
| 27EW-13_170207 | 1703480-13 |
| IR11-OU2B-MW01_170207 | 1703480-15 |
| M11-01_170207 | 1703480-30 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 03-13-2017
Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-353.2

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** KONE-1

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Nitrite as N | 0.01 | 0.03 | 0.05 | mg/L |
| Nitrite as NO2 | 0.04 | 0.1 | 0.17 | mg/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-353.2

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01
File ID: 170208 1539 NO2-021
Sampled: 02/07/17 08:50
Prepared: 02/08/17 15:39
Analyzed: 02/08/17 15:39
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0753
Sequence: 1702491
Calibration: UNASSIGNED
Instrument: KONE-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | 0.062 | 0.010 | 0.030 | 0.050 | 1 | | EPA-353.2 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-353.2

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-02
File ID: 170208 1539 NO2-030
Sampled: 02/07/17 09:55
Prepared: 02/08/17 15:39
Analyzed: 02/08/17 15:51
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0753
Sequence: 1702491
Calibration: UNASSIGNED
Instrument: KONE-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | 0.030 | 0.010 | 0.030 | 0.050 | 1 | U | EPA-353.2 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-353.2

**27EW-13_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-13
File ID: 170208 1539 NO2-023
Sampled: 02/07/17 11:05
Prepared: 02/08/17 15:39
Analyzed: 02/08/17 15:39
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0753
Sequence: 1702491
Calibration: UNASSIGNED
Instrument: KONE-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | 0.030 | 0.010 | 0.030 | 0.050 | 1 | U | EPA-353.2 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-353.2

**IR11-OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-15
File ID: 170208 1539 NO2-024
Sampled: 02/07/17 11:25
Prepared: 02/08/17 15:39
Analyzed: 02/08/17 15:39
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0753
Sequence: 1702491
Calibration: UNASSIGNED
Instrument: KONE-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | 0.030 | 0.010 | 0.030 | 0.050 | 1 | U | EPA-353.2 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-353.2

**M11-01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-30
File ID: 170208 1539 NO2-025
Sampled: 02/07/17 14:00
Prepared: 02/08/17 15:39
Analyzed: 02/08/17 15:39
Solids: 0.00
Preparation: No Prep
Initial/Final: 20 ml / 20 ml
Batch: B[B0753
Sequence: 1702491
Calibration: UNASSIGNED
Instrument: KONE-1

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | 0.030 | 0.010 | 0.030 | 0.050 | 1 | U | EPA-353.2 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-353.2

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B0753
Batch Matrix: Water
Preparation: No Prep

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-17_170207 | 1703480-01 | 170208 1539 NO2-021 | 02/08/17 15:39 | |
| 27EW-18_170207 | 1703480-02 | 170208 1539 NO2-030 | 02/08/17 15:39 | |
| 27EW-13_170207 | 1703480-13 | 170208 1539 NO2-023 | 02/08/17 15:39 | |
| IR11-OU2B-MW01_170207 | 1703480-15 | 170208 1539 NO2-024 | 02/08/17 15:39 | |
| M11-01_170207 | 1703480-30 | 170208 1539 NO2-025 | 02/08/17 15:39 | |
| Blank | B[B0753-BLK1 | 170208 1539 NO2-020 | 02/08/17 15:39 | |
| LCS | B[B0753-BS1 | 170208 1539 NO2-019 | 02/08/17 15:39 | |
| 27EW-18_170207 | B[B0753-DUP1 | 170208 1539 NO2-031 | 02/08/17 15:39 | |
| 27EW-18_170207 | B[B0753-MS1 | 170208 1539 NO2-032 | 02/08/17 15:39 | |
| 27EW-18_170207 | B[B0753-MSD1 | 170208 1539 NO2-033 | 02/08/17 15:39 | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-353.2

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B0753-BLK1 | File ID: | 170208 1539 NO2-020 |
| Prepared: | 02/08/17 15:39 | Preparation: | No Prep | Initial/Final: | 20 ml / 20 ml |
| Analyzed: | 02/08/17 15:39 | Instrument: | KONE-1 | | |
| Batch: | B[B0753 | Sequence: | 1702491 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | 0.030 | 0.010 | 0.030 | 0.050 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**27EW-18_170207**

# DUPLICATES
## EPA-353.2

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B0753
Preparation: No Prep
Source Sample Name: 27EW-18_170207

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B0753-DUP1
Lab Source ID: 1703480-02
Initial/Final: 20 ml / 20 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Nitrite as N | 10 | ND | | ND | | | | EPA-353.2 |
| Nitrite as NO2 | 10 | ND | | ND | | | | EPA-353.2 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-353.2

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0753
Laboratory ID: B[B0753-MS1
Preparation: No Prep
Initial/Final: 19 ml / 20 ml
Source Sample Number: 1703480-02

| COMPOUND | SPIKE ADDED (mg/L) | SAMPLE CONCENTRATION (mg/L) | MS CONCENTRATION (mg/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Nitrite as N | 0.52632 | ND | 0.52165 | 99.1 | 90 - 110 |
| Nitrite as NO2 | 1.7289 | ND | 1.7133 | 99.1 | 90 - 110 |

| COMPOUND | SPIKE ADDED (mg/L) | MSD CONCENTRATION (mg/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Nitrite as N | 0.52632 | 0.51855 | 98.5 | 0.594 | 10 | 90 - 110 |
| Nitrite as NO2 | 1.7289 | 1.7032 | 98.5 | 0.594 | 10 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-353.2

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0753
Laboratory ID: B[B0753-BS1
Preparation: No Prep
Initial/Final: 20 ml / 20 ml

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Nitrite as N | 0.50000 | 0.48582 | 97.2 | 90 - 110 |
| Nitrite as NO2 | 1.6425 | 1.5957 | 97.1 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-353.2

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702491 | Instrument: | KONE-1 |
| Matrix: | Water | Calibration: | UNASSIGNED |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1702491-CCV1 | 170208 1539 NO2-017 | 02/08/17 15:39 |
| Calibration Blank | 1702491-CCB1 | 170208 1539 NO2-018 | 02/08/17 15:39 |
| LCS | B[B0753-BS1 | 170208 1539 NO2-019 | 02/08/17 15:39 |
| Blank | B[B0753-BLK1 | 170208 1539 NO2-020 | 02/08/17 15:39 |
| 27EW-17_170207 | 1703480-01 | 170208 1539 NO2-021 | 02/08/17 15:39 |
| 27EW-13_170207 | 1703480-13 | 170208 1539 NO2-023 | 02/08/17 15:39 |
| IR11-OU2B-MW01_170207 | 1703480-15 | 170208 1539 NO2-024 | 02/08/17 15:39 |
| M11-01_170207 | 1703480-30 | 170208 1539 NO2-025 | 02/08/17 15:39 |
| Calibration Check | 1702491-CCV2 | 170208 1539 NO2-026 | 02/08/17 15:40 |
| Calibration Blank | 1702491-CCB2 | 170208 1539 NO2-027 | 02/08/17 15:40 |
| Calibration Check | 1702491-CCV3 | 170208 1539 NO2-028 | 02/08/17 15:51 |
| Calibration Blank | 1702491-CCB3 | 170208 1539 NO2-029 | 02/08/17 15:51 |
| 27EW-18_170207 | 1703480-02 | 170208 1539 NO2-030 | 02/08/17 15:51 |
| 27EW-18_170207 | B[B0753-DUP1 | 170208 1539 NO2-031 | 02/08/17 15:51 |
| 27EW-18_170207 | B[B0753-MS1 | 170208 1539 NO2-032 | 02/08/17 15:51 |
| 27EW-18_170207 | B[B0753-MSD1 | 170208 1539 NO2-033 | 02/08/17 15:51 |
| Calibration Check | 1702491-CCV4 | 170208 1539 NO2-034 | 02/08/17 15:53 |
| Calibration Blank | 1702491-CCB4 | 170208 1539 NO2-035 | 02/08/17 15:53 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# BLANKS
## EPA-353.2

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: KONE-1
Project: Alameda
Sequence: 1702491
Calibration: UNASSIGNED

| Lab Sample ID | Analyte | Found | DL | LOD | LOQ | Units | C | Method |
|---|---|---|---|---|---|---|---|---|
| 1702491-CCB1 | Nitrite as N | 0.0051240 | 0.010 | | 0.050 | mg/L | U | EPA-353.2 |
| | Nitrite as NO2 | 0.016830 | 0.040 | | 0.17 | mg/L | U | EPA-353.2 |
| 1702491-CCB2 | Nitrite as N | 0.0054020 | 0.010 | | 0.050 | mg/L | U | EPA-353.2 |
| | Nitrite as NO2 | 0.017743 | 0.040 | | 0.17 | mg/L | U | EPA-353.2 |
| 1702491-CCB3 | Nitrite as N | 0.0055920 | 0.010 | | 0.050 | mg/L | U | EPA-353.2 |
| | Nitrite as NO2 | 0.018367 | 0.040 | | 0.17 | mg/L | U | EPA-353.2 |
| 1702491-CCB4 | Nitrite as N | 0.0051130 | 0.010 | | 0.050 | mg/L | U | EPA-353.2 |
| | Nitrite as NO2 | 0.016794 | 0.040 | | 0.17 | mg/L | U | EPA-353.2 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL AND CONTINUING CALIBRATION CHECK

## EPA-353.2

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: KONE-1
Control Limt: +/- 10.00%

SDG: 17-03480
Project: Alameda
Calibration: UNASSIGNED
Sequence: 1702491

| Lab Sample ID | Analyte | True | Found | %R | Units | Method |
|---|---|---|---|---|---|---|
| 1702491-CCV1 | Nitrite as N | 0.50000 | 0.50712 | 101 | mg/L | EPA-353.2 |
| | Nitrite as NO2 | 1.6425 | 1.6656 | 101 | mg/L | EPA-353.2 |
| 1702491-CCV2 | Nitrite as N | 0.50000 | 0.50515 | 101 | mg/L | EPA-353.2 |
| | Nitrite as NO2 | 1.6425 | 1.6592 | 101 | mg/L | EPA-353.2 |
| 1702491-CCV3 | Nitrite as N | 0.50000 | 0.50403 | 101 | mg/L | EPA-353.2 |
| | Nitrite as NO2 | 1.6425 | 1.6555 | 101 | mg/L | EPA-353.2 |
| 1702491-CCV4 | Nitrite as N | 0.50000 | 0.50615 | 101 | mg/L | EPA-353.2 |
| | Nitrite as NO2 | 1.6425 | 1.6625 | 101 | mg/L | EPA-353.2 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## EPA-353.2

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/08/17 15:39 | 1.28 | 2.00 | 02/08/17 15:39 | 1.28 | 2.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/08/17 15:39 | 1.25 | 2.00 | 02/08/17 15:51 | 1.25 | 2.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/08/17 15:39 | 1.19 | 2.00 | 02/08/17 15:39 | 1.19 | 2.00 | |
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/08/17 15:39 | 1.18 | 2.00 | 02/08/17 15:39 | 1.18 | 2.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/08/17 15:39 | 1.07 | 2.00 | 02/08/17 15:39 | 1.07 | 2.00 | |

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

## Raw Data From Instrument KONE-1

**Raw Data - Analytical Runs**

Laboratory
Analyzer User

08.02.2017 15:53

Test: NO2

| Sample Id | Result | Dil. 1 + | Response | Errors |
|---|---|---|---|---|
| CCV-NO2 | 0.50712 | 0.0 | 0.277 | |
| CCB-NO2 | 0.00512 | 0.0 | 0.006 | |
| B2N-BS1 | 0.48582 | 0.0 | 0.266 | |
| B2N-BLK1 | 0.00584 | 0.0 | 0.006 | |
| 1703480-01 | 0.06224 | 0.0 | 0.037 | |
| 1703480-02 | 0.00793 | 0.0 | 0.008 | |
| 1703480-13 | 0.01270 | 0.0 | 0.010 | |
| 1703480-15 | 0.00726 | 0.0 | 0.007 | |
| 1703480-30 | 0.00717 | 0.0 | 0.007 | |
| CCV-NO2 | 0.50515 | 0.0 | 0.276 | |
| CCB-NO2 | 0.00540 | 0.0 | 0.006 | |
| CCV-NO2 | 0.50403 | 0.0 | 0.276 | |
| CCB-NO2 | 0.00559 | 0.0 | 0.006 | |
| 1703480-02 | 0.00671 | 0.0 | 0.007 | |
| B2N-DUP1 | 0.00679 | 0.0 | 0.007 | |
| B2N-MS1 | 0.49556 | 0.0 | 0.271 | |
| B2N-MSD1 | 0.49263 | 0.0 | 0.270 | |
| CCV-NO2 | 0.50615 | 0.0 | 0.277 | |
| CCB-NO2 | 0.00511 | 0.0 | 0.006 | |

| | |
|---|---|
| N | 11 |
| Mean | 0.14461 |
| SD | 0.223292 |
| CV% | 154.41 |

Laboratory
Analyzer User

Date : 08.02.2017
Time : 15:53

Test : NO2
Unit : mg/l

| Sample | Result | Date and Time | Note | Dilut |
|---|---|---|---|---|
| CCV-NO2 | 0.50712 | 08.02.2017 15:39 | | |
| CCB-NO2 | 0.00512 | 08.02.2017 15:39 | | |
| B2N-BS1 | 0.48582 | 08.02.2017 15:39 | | |
| B2N-BLK1 | 0.00584 | 08.02.2017 15:39 | | |
| 1703480-01 | 0.06224 | 08.02.2017 15:39 | | |
| 1703480-02 | 0.00793 | 08.02.2017 15:39 | | |
| 1703480-13 | 0.01270 | 08.02.2017 15:39 | | |
| 1703480-15 | 0.00726 | 08.02.2017 15:39 | | |
| 1703480-30 | 0.00717 | 08.02.2017 15:39 | | |
| CCV-NO2 | 0.50515 | 08.02.2017 15:40 | | |
| CCB-NO2 | 0.00540 | 08.02.2017 15:40 | | |
| CCV-NO2 | 0.50403 | 08.02.2017 15:51 | | |
| CCB-NO2 | 0.00559 | 08.02.2017 15:51 | | |
| 1703480-02 | 0.00671 | 08.02.2017 15:51 | | |
| B2N-DUP1 | 0.00679 | 08.02.2017 15:51 | | |
| B2N-MS1 | 0.49556 | 08.02.2017 15:51 | | |
| B2N-MSD1 | 0.49263 | 08.02.2017 15:51 | | |
| CCV-NO2 | 0.50615 | 08.02.2017 15:53 | | |
| CCB-NO2 | 0.00511 | 08.02.2017 15:53 | | |

**Raw Data - Calibration Summary**

Laboratory
Analyzer User

01.02.2017 09:00

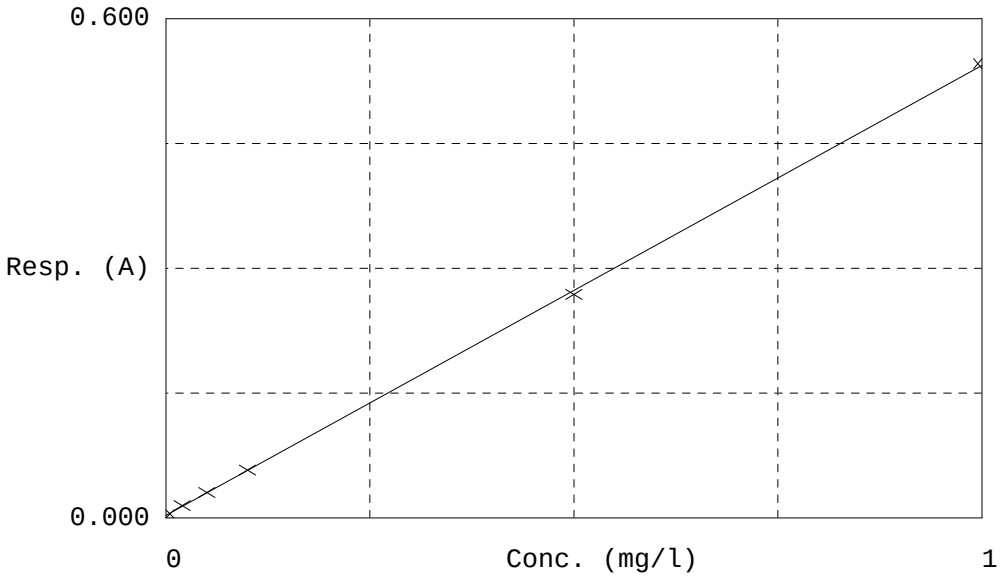
Test NO2

Accepted 01.02.2017 08:54

Factor 1.84952
Bias 0.00325

Coeff. of det. 0.999876

Errors




| | Calibrator | Response | Calc. con. | Conc. | Errors |
|---|---|---|---|---|---|
| 1 | NO2-0 | 0.00393 | 0.00126 | 0.00000 | |
| 2 | NO2-0.02 | 0.01508 | 0.02188 | 0.02000 | |
| 3 | NO2-0.05 | 0.03072 | 0.05081 | 0.05000 | |
| 4 | NO2-0.10 | 0.05760 | 0.10052 | 0.10000 | |
| 5 | NO2-0.50 | 0.26889 | 0.49131 | 0.50000 | |
| 6 | NO2-1.00 | 0.54620 | 1.00421 | 1.00000 | |
| 7 | ICB-NO2(control | 0.00553 | 0.00422 | 0.00000 | |
| 8 | ICV-NO2(control | 0.26982 | 0.49303 | 0.50000 | |

NO2 Laboratory
Analyzer User
Date : 01.02.2017
Time : 09:00

Last change date 04.02.2016 12:17
Tick length (sec) 7.0

| | | | | | |
|---|---|---|---|---|---|
| Full name | Nitrite as N | | | | |
| Online Name | | Test In Use | YES | | |
| Test type | Photometric | | LOW | HIGH | |
| | | Test limit | * | 5.00000 mg/l | |
| Result unit | mg/l | Initial absorbance | -0.050 | * | A |
| Number of Decim. | 5 | Dilution limit | * | 1.000000 mg/l | |
| | | Secondary dil 1+ | 0.0 | 4.0 | |
| | | Critical limit | * | * | mg/l |
| | | Reflex test limit | * | * | mg/l |
| | | Reflex test | | | |

| | | | | | |
|---|---|---|---|---|---|
| Acceptance | Manual | Reference class | LOW | HIGH | In Use |
| Dilution 1+ | 0.0 | | | | |
| Sample type | Water | Correction factor | 1.00 | | |
| | Raw water | Correction bias | 0.00 | mg/l | |
| | Sewage | | | | |
| Calibration type | Linear | | | | |
| Curve direction | Ascending | | | | |
| Repeat time (d) | 0 | Abs error (mA) | * | | |
| Points/cal. | Single | Rel error (%) | * | | |
| Acceptance | Manual | | | | |
| Response limit (mA) | MIN | MAX | | | |
| | * | * | | | |
| Bias correction in use | NO | | | | |
| Cd reduction | NO | | | | |
| Type of Calibrators | Separate | | | | |
| Calibrator | Conc. | Dil. ratio | | | |
| NO2-0 | 0.000 | 1+0.0 | | | |
| NO2-0.02 | 0.020 | 1+0.0 | | | |
| NO2-0.05 | 0.050 | 1+0.0 | | | |
| NO2-0.10 | 0.100 | 1+0.0 | | | |
| NO2-0.50 | 0.500 | 1+0.0 | | | |
| NO2-1.00 | 1.000 | 1+0.0 | | | |
| Manual QC in Use | YES | Routine QC in Use | YES | | |
| Acceptance | Manual | Interval Requests | 10 | | |
| | | Additional condition | NO | | |

| Control | Mean | SD | Control | Mean | SD |
|---|---|---|---|---|---|
| ICB-NO2 | 0.00 | 0.01 | CCB-NO2 | 0.00 | 0.01 |
| ICV-NO2 | 0.50 | 0.05 | CCV-NO2 | 0.50 | 0.05 |

| | | | |
|---|---|---|---|
| Rules in Use | 1:1.0*SD | Rules in Use | 1:1.0*SD |
| Blank | YES | | |
| | | Normal cuvette | |
| Sample | | Volume (ul) | 32 |
| Disp. with | Extra | Add. Volume (ul) | 30 |
| Dilution with | Water | Wash reagent | None |

NO2 Laboratory
Analyzer User
Date : 01.02.2017
Time : 09:00

| | | | |
|---|---|---|---|
| Reagent | NO2 Buffer | Volume (ul) | 120 |
| Disp. with | Extra | Add. Volume (ul) | 30 |
| Wash reagent | None | | |
| Syringe speed | Normal | | |
| Measurement | End point | Blank | |
| Resp. Min(A) | * | Resp. Max(A) | * |
| Reagent | NO2 color | Volume (ul) | 32 |
| Disp. with | Extra | Add. Volume (ul) | 30 |
| Wash reagent | None | | |
| Syringe speed | Normal | | |
| Incubation | | Time (sec) | 360 |
| Measurement | End point | | |
| Wavelength (nm) | 540 nm | Side wavel. (nm) | None |
| Meas. type | Fixed timing | | |

**Raw Data - Batch Information**

# PREPARATION BENCH SHEET

**B[B0753**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703480-01 G | i353.2wm NO2 as N | 2/8/2017 3:39PM | RCC | 20 | 20 | | | | | |
| 1703480-02 G | i353.2wm NO2 as N | 2/8/2017 3:39PM | RCC | 20 | 20 | | | | | |
| 1703480-13 G | i353.2wm NO2 as N | 2/8/2017 3:39PM | RCC | 20 | 20 | | | | | |
| 1703480-15 G | i353.2wm NO2 as N | 2/8/2017 3:39PM | RCC | 20 | 20 | | | | | |
| 1703480-30 G | i353.2wm NO2 as N | 2/8/2017 3:39PM | RCC | 20 | 20 | | | | | |
| B[B0753-BLK1 | QC | 2/8/2017 3:39PM | RCC | 20 | 20 | | | | | |
| B[B0753-BS1 | QC | 2/8/2017 3:39PM | RCC | 20 | 20 | 7A26039 | | 1000 | | |
| B[B0753-DUP1 | QC | 2/8/2017 3:39PM | RCC | 20 | 20 | | 1703480-02 | | | |
| B[B0753-MS1 | QC | 2/8/2017 3:39PM | RCC | 19 | 20 | 7A26039 | 1703480-02 | 1000 | | |
| B[B0753-MSD1 | QC | 2/8/2017 3:39PM | RCC | 19 | 20 | 7A26039 | 1703480-02 | 1000 | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 7A26039 | PO4/NO2 SPIKE | DI WATER | 1/24/2017 by Roxanne Cantorna | 6/24/2017 |

**Raw Data - Sequence Information**

# ANALYSIS SEQUENCE

**1702491**

Instrument: KONE-1
Calibration ID:
Sequence Date: 02/08/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702491-CCV1 | QC | | 1 | | 7A26034 | | |
| 1702491-CCB1 | QC | | 2 | | | | |
| B[B0753-BS1 | QC | | 3 | | | | |
| B[B0753-BLK1 | QC | | 4 | | | | |
| 1703480-01 | i353.2wm NO2 as N | G | 5 | | | | |
| 1703480-13 | i353.2wm NO2 as N | G | 6 | | | | |
| 1703480-15 | i353.2wm NO2 as N | G | 7 | | | | |
| 1703480-30 | i353.2wm NO2 as N | G | 8 | | | | |
| 1702491-CCV2 | QC | | 9 | | 7A26034 | | |
| 1702491-CCB2 | QC | | 10 | | | | |
| 1702491-CCV3 | QC | | 11 | | 7A26034 | | |
| 1702491-CCB3 | QC | | 12 | | | | |
| 1703480-02 | i353.2wm NO2 as N | G | 13 | | | | |
| B[B0753-DUP1 | QC | | 14 | | | | |
| B[B0753-MS1 | QC | | 15 | | | | |
| B[B0753-MSD1 | QC | | 16 | | | | |
| 1702491-CCV4 | QC | | 17 | | 7A26034 | | |
| 1702491-CCB4 | QC | | 18 | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

| | |
|---|---|
| Reported: | 3/13/2017 4:42:23PM |
| Project: | Alameda |
| Project Number: | 5023146096 |
| Project Manager: | Kelli Miller |

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

| | |
|---|---|
| **SDG:** | **17-03480** |
| **Class:** | **WET** |
| **Method:** | **EPA-415.1** |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## EPA-415.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| 27EW-17_170207 | 1703480-01 |
| 27EW-18_170207 | 1703480-02 |
| 27EW-13_170207 | 1703480-13 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 03-13-2017
Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## EPA-415.1

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** TOC2

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Non-Volatile Organic Carbon | 0.3 | 0.3 | 1 | mg/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-415.1

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01
File ID: 20170209_0831-048
Sampled: 02/07/17 08:50
Prepared: 02/09/17 07:10
Analyzed: 02/09/17 20:10
Solids: 0.00
Preparation: General Preparation
Initial/Final: 100 ml / 100 ml
Batch: B[B0811
Sequence: 1702388
Calibration: UNASSIGNED
Instrument: TOC2

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Non-Volatile Organic Carbon | 3.3 | 0.30 | 0.30 | 1.0 | 1 | | EPA-415.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
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Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-415.1

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-02
File ID: 20170210_0730-010
Sampled: 02/07/17 09:55
Prepared: 02/09/17 07:10
Analyzed: 02/10/17 09:44
Solids: 0.00
Preparation: General Preparation
Initial/Final: 100 ml / 100 ml
Batch: B[B0811
Sequence: 1702388
Calibration: UNASSIGNED
Instrument: TOC2

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Non-Volatile Organic Carbon | 2.0 | 0.30 | 0.30 | 1.0 | 1 | | EPA-415.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## EPA-415.1

**27EW-13_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-13
File ID: 20170210_0730-011
Sampled: 02/07/17 11:05
Prepared: 02/09/17 07:10
Analyzed: 02/10/17 09:58
Solids: 0.00
Preparation: General Preparation
Initial/Final: 100 ml / 100 ml
Batch: B[B0811
Sequence: 1702388
Calibration: UNASSIGNED
Instrument: TOC2

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| --- | Non-Volatile Organic Carbon | 3.0 | 0.30 | 0.30 | 1.0 | 1 | | EPA-415.1 |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
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Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## EPA-415.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B0811
Batch Matrix: Water
Preparation: General Preparation

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-17_170207 | 1703480-01 | 20170209_0831-048 | 02/09/17 07:10 | |
| 27EW-18_170207 | 1703480-02 | 20170210_0730-010 | 02/09/17 07:10 | |
| 27EW-13_170207 | 1703480-13 | 20170210_0730-011 | 02/09/17 07:10 | |
| Blank | B[B0811-BLK1 | 20170209_0831-046 | 02/09/17 07:10 | |
| LCS | B[B0811-BS1 | 20170209_0831-047 | 02/09/17 07:10 | |
| 27EW-17_170207 | B[B0811-DUP1 | 20170209_0831-050 | 02/09/17 07:10 | |
| 27EW-17_170207 | B[B0811-MS1 | 20170210_0730-008 | 02/09/17 07:10 | |
| 27EW-17_170207 | B[B0811-MSD1 | 20170210_0730-009 | 02/09/17 07:10 | |

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Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## EPA-415.1

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B0811-BLK1 | File ID: | 20170209_0831-046 |
| Prepared: | 02/09/17 07:10 | Preparation: | General Preparation | Initial/Final: | 100 ml / 100 ml |
| Analyzed: | 02/09/17 19:41 | Instrument: | TOC2 | | |
| Batch: | B[B0811 | Sequence: | 1702388 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| --- | Non-Volatile Organic Carbon | 0.30 | 0.30 | 0.30 | 1.0 | U |

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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**27EW-17_170207**

# DUPLICATES

## EPA-415.1

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B0811
Preparation: General Preparation
Source Sample Name: 27EW-17_170207

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B0811-DUP1
Lab Source ID: 1703480-01
Initial/Final: 100 ml / 100 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Non-Volatile Organic Carbon | 10 | 3.3410 | | 3.9170 | | 15.9 | * | EPA-415.1 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## EPA-415.1

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0811
Laboratory ID: B[B0811-MS1
Preparation: General Preparation
Initial/Final: 99.5 ml / 100 ml
Source Sample Number: 1703480-01

| COMPOUND | SPIKE ADDED (mg/L) | SAMPLE CONCENTRATION (mg/L) | MS CONCENTRATION (mg/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Non-Volatile Organic Carbon | 5.0251 | 3.3410 | 8.9136 | 111 | 80 - 120 |

| COMPOUND | SPIKE ADDED (mg/L) | MSD CONCENTRATION (mg/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Non-Volatile Organic Carbon | 5.0251 | 8.9276 | 111 | 0.158 | 10 | 80 - 120 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## EPA-415.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0811
Laboratory ID: B[B0811-BS1
Preparation: General Preparation
Initial/Final: 100 ml / 100 ml

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Non-Volatile Organic Carbon | 5.0000 | 5.0670 | 101 | 85 - 115 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-415.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Sequence: 1702388
Instrument: TOC2
Matrix: Water
Calibration: UNASSIGNED

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Initial Cal Check | 1702388-ICV1 | 20170209_0831-003 | 02/09/17 09:24 |
| Initial Cal Blank | 1702388-ICB1 | 20170209_0831-004 | 02/09/17 09:38 |
| MRL Check | 1702388-CRL1 | 20170209_0831-005 | 02/09/17 09:52 |
| Calibration Check | 1702388-CCV1 | 20170209_0831-015 | 02/09/17 12:15 |
| Calibration Blank | 1702388-CCB1 | 20170209_0831-016 | 02/09/17 12:29 |
| Calibration Check | 1702388-CCV2 | 20170209_0831-027 | 02/09/17 15:09 |
| Calibration Blank | 1702388-CCB2 | 20170209_0831-028 | 02/09/17 15:23 |
| Calibration Check | 1702388-CCV3 | 20170209_0831-039 | 02/09/17 18:01 |
| Calibration Blank | 1702388-CCB3 | 20170209_0831-040 | 02/09/17 18:15 |
| Calibration Check | 1702388-CCV4 | 20170209_0831-044 | 02/09/17 19:13 |
| Calibration Blank | 1702388-CCB4 | 20170209_0831-045 | 02/09/17 19:27 |
| Blank | B[B0811-BLK1 | 20170209_0831-046 | 02/09/17 19:41 |
| LCS | B[B0811-BS1 | 20170209_0831-047 | 02/09/17 19:55 |
| 27EW-17_170207 | 1703480-01 | 20170209_0831-048 | 02/09/17 20:10 |
| 27EW-17_170207 | B[B0811-DUP1 | 20170209_0831-050 | 02/09/17 20:38 |
| Calibration Check | 1702388-CCV5 | 20170209_0831-056 | 02/09/17 22:04 |
| Calibration Blank | 1702388-CCB5 | 20170209_0831-057 | 02/09/17 22:19 |
| Calibration Check | 1702388-CCV7 | 20170210_0730-001 | 02/10/17 07:36 |
| Calibration Blank | 1702388-CCB7 | 20170210_0730-002 | 02/10/17 07:50 |
| 27EW-17_170207 | B[B0811-MS1 | 20170210_0730-008 | 02/10/17 09:15 |
| 27EW-17_170207 | B[B0811-MSD1 | 20170210_0730-009 | 02/10/17 09:29 |
| 27EW-18_170207 | 1703480-02 | 20170210_0730-010 | 02/10/17 09:44 |
| 27EW-13_170207 | 1703480-13 | 20170210_0730-011 | 02/10/17 09:58 |
| Calibration Check | 1702388-CCV8 | 20170210_0730-013 | 02/10/17 10:26 |
| Calibration Blank | 1702388-CCB8 | 20170210_0730-014 | 02/10/17 10:40 |
| Calibration Check | 1702388-CCV9 | 20170210_0730-020 | 02/10/17 12:06 |

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Project: Alameda
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Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## EPA-415.1

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702388 | Instrument: | TOC2 |
| Matrix: | Water | Calibration: | UNASSIGNED |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Blank | 1702388-CCB9 | 20170210_0730-021 | 02/10/17 12:20 |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# BLANKS
## EPA-415.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: TOC2
Project: Alameda
Sequence: 1702388
Calibration: UNASSIGNED

| Lab Sample ID | Analyte | Found | DL | LOD | LOQ | Units | C | Method |
|---|---|---|---|---|---|---|---|---|
| 1702388-ICB1 | Non-Volatile Organic Carbon | 0.0000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB1 | Non-Volatile Organic Carbon | 0.018000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB2 | Non-Volatile Organic Carbon | 0.0070000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB3 | Non-Volatile Organic Carbon | 0.012000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB4 | Non-Volatile Organic Carbon | 0.080000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB5 | Non-Volatile Organic Carbon | 0.034000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB7 | Non-Volatile Organic Carbon | 0.040000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB8 | Non-Volatile Organic Carbon | 0.072000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |
| 1702388-CCB9 | Non-Volatile Organic Carbon | 0.0060000 | 0.30 | | 1.0 | mg/L | U | EPA-415.1 |

AMEC Environmental & Infrastructure
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Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL AND CONTINUING CALIBRATION CHECK

## EPA-415.1

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: TOC2
Control Limt: +/- 10.00%

SDG: 17-03480
Project: Alameda
Calibration: UNASSIGNED
Sequence: 1702388

| Lab Sample ID | Analyte | True | Found | %R | Units | Method |
|---|---|---|---|---|---|---|
| 1702388-ICV1 | Non-Volatile Organic Carbon | 5.0000 | 4.9020 | 98.0 | mg/L | EPA-415.1 |
| 1702388-CCV1 | Non-Volatile Organic Carbon | 5.0000 | 5.0810 | 102 | mg/L | EPA-415.1 |
| 1702388-CCV2 | Non-Volatile Organic Carbon | 5.0000 | 5.0240 | 100 | mg/L | EPA-415.1 |
| 1702388-CCV3 | Non-Volatile Organic Carbon | 5.0000 | 5.0520 | 101 | mg/L | EPA-415.1 |
| 1702388-CCV4 | Non-Volatile Organic Carbon | 5.0000 | 5.2020 | 104 | mg/L | EPA-415.1 |
| 1702388-CCV5 | Non-Volatile Organic Carbon | 5.0000 | 5.0740 | 101 | mg/L | EPA-415.1 |
| 1702388-CCV7 | Non-Volatile Organic Carbon | 5.0000 | 5.1190 | 102 | mg/L | EPA-415.1 |
| 1702388-CCV8 | Non-Volatile Organic Carbon | 5.0000 | 5.1250 | 102 | mg/L | EPA-415.1 |
| 1702388-CCV9 | Non-Volatile Organic Carbon | 5.0000 | 5.0100 | 100 | mg/L | EPA-415.1 |

* Values outside of QC limits

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## EPA-415.1

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/09/17 07:10 | 2.00 | 28.00 | 02/09/17 20:10 | 2.00 | 28.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/09/17 07:10 | 3.00 | 28.00 | 02/10/17 09:44 | 3.00 | 28.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/09/17 07:10 | 3.00 | 28.00 | 02/10/17 09:58 | 3.00 | 28.00 | |

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

## Raw Data From Instrument TOC2

**Raw Data - Analytical Runs**

# BC Laboratories

**Sample Results**

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:31 am | | | 3,702 | 0.000 | |
| 2 | 8:39 am | | | 5,119 | 0.000 | |
| 3 | 8:47 am | | | 2,768 | 0.000 | |
| | | **Clean Up** | **Avg.** | 3,863 | **0.000** | |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:58 am | | | 3,964 | 0.000 | |
| 2 | 9:04 am | | | 3,379 | 0.000 | |
| | | **QC Blank** | **Avg.** | 3,672 | **0.000** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:18 am | | | 101,802 | 4.874 | |
| 2 | 9:24 am | | | 102,918 | 4.929 | |
| | | **ICV1** | **Avg.** | 102,360 | **4.901** | 1.12 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:32 am | | | 3,135 | 0.000 | |
| 2 | 9:38 am | | | 2,744 | 0.000 | |
| | | **ICB1** | **Avg.** | 2,940 | **0.000** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:46 am | | | 11,395 | 0.384 | |
| 2 | 9:52 am | | | 11,284 | 0.378 | |
| | | **CRL1** | **Avg.** | 11,339 | **0.381** | 1.57 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:00 am | | | 2,625 | 0.000 | |
| 2 | 10:06 am | | | 2,584 | 0.000 | |
| | | **B[B0744-BLK1** | **Avg.** | 2,605 | **0.000** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:15 am | | | 102,960 | 4.931 | |
| 2 | 10:21 am | | | 104,549 | 5.010 | |
| | | **B[B0744-BS1** | **Avg.** | 103,755 | **4.971** | 1.59 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:29 am | | | 26,950 | 1.252 | |
| 2 | 10:35 am | | | 25,668 | 1.188 | |
| | | **1703520-03@10C** | **Avg.** | 26,309 | **1.220** | 5.25 |

# BC Laboratories

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 10:44 am | | 25,494 | 1.180 | |
| 2 | 10:49 am | | 23,614 | 1.086 | |
| | | **B[B0744-ICC@10C** **Avg.** | 24,554 | **1.133** | 8.30 |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 10:58 am | | 28,228 | 1.315 | |
| 2 | 11:04 am | | 25,861 | 1.198 | |
| | | **B[B0744-DUP1@10C** **Avg.** | 27,045 | **1.257** | 9.31 |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 11:12 am | | 130,193 | 6.380 | |
| 2 | 11:18 am | | 128,864 | 6.314 | |
| | | **B[B0744-MS1@10C** **Avg.** | 129,528 | **6.347** | 1.04 |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 11:26 am | | 130,669 | 6.403 | |
| 2 | 11:32 am | | 129,607 | 6.351 | |
| | | **B[B0744-MSD1@10C** **Avg.** | 130,138 | **6.377** | 0.82 |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 11:40 am | | 115,995 | 5.674 | |
| 2 | 11:46 am | | 112,574 | 5.505 | |
| | | **1703520-01@2C** **Avg.** | 114,284 | **5.590** | 3.02 |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 11:55 am | | 54,180 | 2.604 | |
| 2 | 12:01 pm | | 51,297 | 2.461 | |
| | | **1703520-02@5C** **Avg.** | 52,739 | **2.533** | 5.65 |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 12:09 pm | | 106,520 | 5.108 | |
| 2 | 12:15 pm | | 105,428 | 5.054 | |
| | | **CCV1** **Avg.** | 105,974 | **5.081** | 1.06 |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 12:23 pm | | 4,398 | 0.036 | |
| 2 | 12:28 pm | | 2,783 | 0.000 | |
| | | **CCB1** **Avg.** | 3,590 | **0.018** | < PQL |

| Rep # | Time | Date: 02/09/2017 | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|
| 1 | 12:37 pm | | 45,157 | 2.156 | |
| 2 | 12:44 pm | | 42,623 | 2.030 | |
| | | **1703520-04@5C** **Avg.** | 43,890 | **2.093** | 6.02 |

# BC Laboratories

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 12:54 pm | | | 118,063 | 5.777 | |
| 2 | 1:00 pm | | | 116,648 | 5.707 | |
| | | **1703459-01@B** | **Avg.** | 117,356 | **5.742** | 1.22 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 1:09 pm | | | 54,455 | 2.617 | |
| 2 | 1:14 pm | | | 52,343 | 2.513 | |
| | | **1703459-02@A** | **Avg.** | 53,399 | **2.565** | 4.05 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 1:23 pm | | | 11,200 | 0.470 | |
| 2 | 1:29 pm | | | 9,359 | 0.378 | |
| | | **1703569-02@L** | **Avg.** | 10,280 | **0.424** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 1:37 pm | | | 116,781 | 5.714 | |
| 2 | 1:43 pm | | | 116,609 | 5.705 | |
| | | **1703569-03@2L** | **Avg.** | 116,695 | **5.710** | 0.16 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 1:52 pm | | | 97,853 | 4.773 | |
| 2 | 1:57 pm | | | 97,145 | 4.738 | |
| | | **1703569-04@2L** | **Avg.** | 97,499 | **4.756** | 0.74 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 2:06 pm | | | 11,782 | 0.499 | |
| 2 | 2:12 pm | | | 10,968 | 0.458 | |
| | | **1703591-01@A** | **Avg.** | 11,375 | **0.479** | 8.57 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 2:20 pm | | | 3,853 | 0.009 | |
| 2 | 2:25 pm | | | 3,283 | 0.000 | |
| | | **B[B0745-BLK1** | **Avg.** | 3,568 | **0.005** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 2:34 pm | | | 104,396 | 5.003 | |
| 2 | 2:40 pm | | | 105,957 | 5.080 | |
| | | **B[B0745-BS1** | **Avg.** | 105,176 | **5.041** | 1.53 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 2:49 pm | | | 14,568 | 0.637 | |
| 2 | 2:55 pm | | | 14,018 | 0.610 | |
| | | **1703568-03@L** | **Avg.** | 14,293 | **0.624** | 4.33 |

# BC Laboratories

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 3:03 pm | | | 103,693 | 4.968 | |
| 2 | 3:09 pm | | | 105,945 | 5.080 | |
| | | **CCV2** | **Avg.** | 104,819 | **5.024** | 2.23 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 3:17 pm | | | 3,952 | 0.013 | |
| 2 | 3:23 pm | | | 3,516 | 0.000 | |
| | | **CCB2** | **Avg.** | 3,734 | **0.007** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 3:32 pm | | | 14,443 | 0.631 | |
| 2 | 3:38 pm | | | 14,478 | 0.633 | |
| | | **B[B0745-ICC@L** | **Avg.** | 14,461 | **0.632** | 0.32 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 3:46 pm | | | 14,384 | 0.628 | |
| 2 | 3:52 pm | | | 14,071 | 0.612 | |
| | | **B[B0745-DUP1@L** | **Avg.** | 14,228 | **0.620** | 2.58 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 4:00 pm | | | 114,625 | 5.606 | |
| 2 | 4:06 pm | | | 116,608 | 5.705 | |
| | | **B[B0745-MS1@L** | **Avg.** | 115,616 | **5.655** | 1.75 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 4:15 pm | | | 113,965 | 5.574 | |
| 2 | 4:21 pm | | | 115,303 | 5.640 | |
| | | **B[B0745-MSD1@L** | **Avg.** | 114,634 | **5.607** | 1.18 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 4:29 pm | | | 209,678 | 10.327 | |
| 2 | 4:35 pm | | | 211,309 | 10.408 | |
| | | **1703568-02@L** | **Avg.** | 210,493 | **10.368** | 0.78 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 4:43 pm | | | 32,818 | 1.543 | |
| 2 | 4:49 pm | | | 32,078 | 1.507 | |
| | | **1703568-04@L** | **Avg.** | 32,448 | **1.525** | 2.36 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 4:58 pm | | | 25,015 | 1.156 | |
| 2 | 5:03 pm | | | 23,960 | 1.103 | |
| | | **1703568-05@L** | **Avg.** | 24,488 | **1.130** | 4.69 |

# BC Laboratories

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 5:12 pm | | | 651,894 | 32.291 | |
| 2 | 5:18 pm | | | 654,802 | 32.435 | |
| | | **1703568-06@L** | **Avg.** | 653,348 | **32.363** | 0.44 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 5:26 pm | | | 18,716 | 0.843 | |
| 2 | 5:32 pm | | | 17,720 | 0.794 | |
| | | **1703568-07@L** | **Avg.** | 18,218 | **0.818** | 5.99 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 5:40 pm | | | 11,529 | 0.485 | |
| 2 | 5:46 pm | | | 11,009 | 0.460 | |
| | | **1703568-08@L** | **Avg.** | 11,269 | **0.473** | 5.29 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 5:55 pm | | | 104,741 | 5.020 | |
| 2 | 6:01 pm | | | 106,035 | 5.084 | |
| | | **CCV3** | **Avg.** | 105,388 | **5.052** | 1.27 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 6:09 pm | | | 4,156 | 0.024 | |
| 2 | 6:15 pm | | | 3,595 | 0.000 | |
| | | **CCB3** | **Avg.** | 3,876 | **0.012** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 6:24 pm | | | 27,189 | 1.264 | |
| 2 | 6:30 pm | | | 26,936 | 1.251 | |
| | | **1703568-09@L** | **Avg.** | 27,062 | **1.258** | 1.03 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 6:38 pm | | | 212,121 | 10.449 | |
| 2 | 6:44 pm | | | 194,144 | 9.556 | |
| | | **1703411-01@2B** | **Avg.** | 203,133 | **10.003** | 8.93 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 6:52 pm | | | 245,747 | 12.119 | |
| 2 | 6:58 pm | | | 234,114 | 11.541 | |
| | | **1703411-02@2B** | **Avg.** | 239,931 | **11.830** | 4.89 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 7:07 pm | | | 108,459 | 5.204 | |
| 2 | 7:12 pm | | | 108,389 | 5.200 | |
| | | **CCV4** | **Avg.** | 108,424 | **5.202** | 0.08 |

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| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 7:20 pm | | | 5,438 | 0.088 | |
| 2 | 7:27 pm | | | 5,099 | 0.071 | |
| | | **CCB4** | **Avg.** | 5,268 | **0.080** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 7:35 pm | | | 4,446 | 0.039 | |
| 2 | 7:40 pm | | | 3,725 | 0.003 | |
| | | **B[B0811-BLK1** | **Avg.** | 4,086 | **0.021** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 7:49 pm | | | 104,867 | 5.026 | |
| 2 | 7:55 pm | | | 106,537 | 5.109 | |
| | | **B[B0811-BS1** | **Avg.** | 105,702 | **5.068** | 1.64 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:04 pm | | | 70,247 | 3.402 | |
| 2 | 8:10 pm | | | 67,813 | 3.281 | |
| | | **1703480-01@I** | **Avg.** | 69,030 | **3.341** | 3.62 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:18 pm | | | 75,690 | 3.673 | |
| 2 | 8:24 pm | | | 63,459 | 3.065 | |
| | | **B[B0811-ICC@I** | **Avg.** | 69,575 | **3.369** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:32 pm | | | 87,092 | 4.239 | |
| 2 | 8:38 pm | | | 74,134 | 3.595 | |
| | | **B[B0811-DUP1@I** | **Avg.** | 80,613 | **3.917** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:47 pm | | | 191,780 | 9.439 | |
| 2 | 8:53 pm | | | 179,675 | 8.837 | |
| | | **1703480-02@I** | **Avg.** | 185,728 | **9.138** | 6.59 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:01 pm | | | 188,687 | 9.285 | |
| 2 | 9:07 pm | | | 177,304 | 8.720 | |
| | | **1703480-13@I** | **Avg.** | 182,996 | **9.003** | 6.28 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:15 pm | | | 41,527 | 1.976 | |
| 2 | 9:21 pm | | | 40,865 | 1.942 | |
| | | **1703412-02@500M** | **Avg.** | 41,196 | **1.959** | 1.74 |

# BC Laboratories

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:30 pm | | | 60,699 | 2.928 | |
| 2 | 9:36 pm | | | 60,889 | 2.938 | |
| | | **1703603-03@O** | **Avg.** | 60,794 | **2.933** | 0.34 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:44 pm | | | 62,293 | 3.007 | |
| 2 | 9:50 pm | | | 62,684 | 3.027 | |
| | | **1703603-04@O** | **Avg.** | 62,489 | **3.017** | 0.66 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:58 pm | | | 105,311 | 5.048 | |
| 2 | 10:04 pm | | | 106,344 | 5.099 | |
| | | **CCV5** | **Avg.** | 105,828 | **5.074** | 1.01 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:12 pm | | | 4,708 | 0.052 | |
| 2 | 10:18 pm | | | 3,971 | 0.015 | |
| | | **CCB5** | **Avg.** | 4,340 | **0.034** | < PQL |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:27 pm | | | 38,055 | 1.803 | |
| 2 | 10:33 pm | | | 38,098 | 1.806 | |
| | | **1703603-05@O** | **Avg.** | 38,077 | **1.804** | 0.17 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:42 pm | | | 23,978 | 1.104 | |
| 2 | 10:47 pm | | | 23,472 | 1.079 | |
| | | **1703603-06@O** | **Avg.** | 23,725 | **1.092** | 2.29 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:56 pm | | | 28,176 | 1.313 | |
| 2 | 11:02 pm | | | 28,054 | 1.307 | |
| | | **1703603-07@O** | **Avg.** | 28,115 | **1.310** | 0.46 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 11:10 pm | | | 21,934 | 0.907 | |
| 2 | 11:16 pm | | | 21,509 | 0.886 | |
| | | **CCV6** | **Avg.** | 21,721 | **0.897** | 2.34 |

| Rep # | Time | Date: 02/09/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 11:25 pm | | | 29,429 | 1.279 | |
| 2 | 11:31 pm | | | 28,375 | 1.226 | |
| | | **CCB6** | **Avg.** | 28,902 | **1.253** | 4.23 |

# BC Laboratories

**Sample Results**

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 7:30 am | | | 107,205 | 5.142 | |
| 2 | 7:36 am | | | 106,249 | 5.095 | |
| | | **CCV7** | **Avg.** | 106,727 | **5.119** | 0.92 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 7:44 am | | | 4,082 | 0.020 | |
| 2 | 7:50 am | | | 4,857 | 0.059 | |
| | | **CCB7** | **Avg.** | 4,469 | **0.040** | < PQL |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 7:58 am | | | 109,944 | 5.374 | |
| 2 | 8:04 am | | | 107,397 | 5.247 | |
| | | **1703568-02@2L** | **Avg.** | 108,671 | **5.310** | 2.39 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:13 am | | | 71,745 | 3.477 | |
| 2 | 8:19 am | | | 71,098 | 3.445 | |
| | | **1703568-06@10L** | **Avg.** | 71,421 | **3.461** | 0.92 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:27 am | | | 16,433 | 0.730 | |
| 2 | 8:33 am | | | 16,849 | 0.750 | |
| | | **1703568-07@L** | **Avg.** | 16,641 | **0.740** | 2.70 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:41 am | | | 71,843 | 3.482 | |
| 2 | 8:47 am | | | 77,586 | 3.767 | |
| | | **1703411-01@5B** | **Avg.** | 74,714 | **3.624** | 7.86 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 8:55 am | | | 96,368 | 4.700 | |
| 2 | 9:01 am | | | 97,698 | 4.766 | |
| | | **1703411-02@5B** | **Avg.** | 97,033 | **4.733** | 1.39 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:09 am | | | 180,458 | 8.876 | |
| 2 | 9:15 am | | | 180,151 | 8.861 | |
| | | **B[B0811-MS1@I** | **Avg.** | 180,305 | **8.869** | 0.17 |

# BC Laboratories

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:23 am | | | 180,592 | 8.883 | |
| 2 | 9:29 am | | | 180,590 | 8.883 | |
| | | **B[B0811-MSD1@I** | **Avg.** | 180,591 | **8.883** | 0.00 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:38 am | | | 41,280 | 1.964 | |
| 2 | 9:44 am | | | 41,437 | 1.971 | |
| | | **1703480-02@I** | **Avg.** | 41,358 | **1.968** | 0.36 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 9:52 am | | | 61,280 | 2.956 | |
| 2 | 9:58 am | | | 61,078 | 2.947 | |
| | | **1703480-13@I** | **Avg.** | 61,179 | **2.951** | 0.30 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:06 am | | | 62,886 | 3.037 | |
| 2 | 10:12 am | | | 61,243 | 2.955 | |
| | | **1703412-02@500M** | **Avg.** | 62,064 | **2.996** | 2.74 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:20 am | | | 107,678 | 5.166 | |
| 2 | 10:26 am | | | 106,033 | 5.083 | |
| | | **CCV8** | **Avg.** | 106,856 | **5.125** | 1.62 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:34 am | | | 4,785 | 0.055 | |
| 2 | 10:40 am | | | 5,437 | 0.088 | |
| | | **CCB8** | **Avg.** | 5,111 | **0.072** | < PQL |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 10:49 am | | | 38,316 | 1.816 | |
| 2 | 10:55 am | | | 37,293 | 1.766 | |
| | | **1703603-03@10O** | **Avg.** | 37,805 | **1.791** | 2.79 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 11:03 am | | | 23,710 | 1.090 | |
| 2 | 11:09 am | | | 23,532 | 1.082 | |
| | | **1703603-04@10O** | **Avg.** | 23,621 | **1.086** | 0.74 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 11:17 am | | | 28,393 | 1.324 | |
| 2 | 11:23 am | | | 27,898 | 1.298 | |
| | | **1703603-05@10O** | **Avg.** | 28,145 | **1.311** | 1.98 |

# BC Laboratories

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 11:31 am | | | 21,140 | 0.963 | |
| 2 | 11:37 am | | | 21,741 | 0.993 | |
| | | **1703603-06@10O** | **Avg.** | 21,441 | **0.978** | 3.07 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 11:46 am | | | 29,116 | 1.360 | |
| 2 | 11:52 am | | | 29,367 | 1.372 | |
| | | **1703603-07@10O** | **Avg.** | 29,241 | **1.366** | 0.88 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 12:00 pm | | | 105,412 | 5.053 | |
| 2 | 12:06 pm | | | 103,679 | 4.967 | |
| | | **CCV9** | **Avg.** | 104,545 | **5.010** | 1.72 |

| Rep # | Time | Date: 02/10/2017 | | TOC Area (cts) | TOC Conc (PPM) | % RPD. |
|---|---|---|---|---|---|---|
| 1 | 12:14 pm | | | 3,333 | 0.000 | |
| 2 | 12:20 pm | | | 3,913 | 0.012 | |
| | | **CCB9** | **Avg.** | 3,623 | **0.006** | < PQL |

**Raw Data - Calibration Summary**

O·I·CORPORATION

**Date Prepared:** 02/03/2017 **By:**

**Date Approved:** **By:**

TOC

**OI Corporation**
**College Station, TX 77845 USA**

**No Customer**
**None, None - None**

**Sample Results Summary**

| Spl # | Vial # | Sample ID | Num Rep | Act Rep | Method | Type | Dil | Customer ID | Mode | Avg. Area (cts) | Avg. Mass (ug) | Avg. Conc (PPM) | Std. Dev | % RSD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | - | Clean Up | 6 | 6 | DefaultCleanUpMethod | Clean Up | 1 : 1 | 00000000 | TIC | 391 | 0.000 | 0.000 | 105 | 26.81 | |
| | | | | | | | | | TOC | 4,296 | 0.000 | 0.000 | 774 | 18.01 | |
| 3 | 1 | TOC-RW | 4 | 4 | 170202 - 5 mls - Feb 02, 2017; 12-32-00 PM | Standard | 1 : 1 | 00000000 | TOC | 3,437 | 0.000 | 0.000 | 37 | 1.09 | |
| 4 | 2 | TOC-Std#1-1.000 PPM | 4 | 4 | 170202 - 5 mls - Feb 02, 2017; 12-32-00 PM | Standard | 1 : 1 | 00000000 | TOC | 23,927 | 5.000 | 1.000 | 359 | 1.50 | |
| 5 | 3 | TOC-Std#2-5.000 PPM | 4 | 4 | 170202 - 5 mls - Feb 02, 2017; 12-32-00 PM | Standard | 1 : 1 | 00000000 | TOC | 104,376 | 25.000 | 5.000 | 1,072 | 1.03 | |
| 6 | 4 | TOC-Std#3-10.000 PPM | 4 | 4 | 170202 - 5 mls - Feb 02, 2017; 12-32-00 PM | Standard | 1 : 1 | 00000000 | TOC | 204,913 | 50.000 | 10.000 | 3,090 | 1.51 | |

O·I·CORPORATION

**Date Prepared:** 02/03/2017 **By:**

**Date Approved:** **By:**

TOC

**OI Corporation**
**College Station, TX 77845 USA**

**No Customer**
**None, None - None**

**Sample Results**

**Spl #:** 1 **Sample ID :** Clean Up **Type :** Clean Up **Date:** 02/02/2017 **Status:** Passed
**Vial #:** - **Method :** DefaultCleanUpMethod **Dilution** 1 : 1 **Customer ID:** 00000000

| Rep # | Time | TIC Area (cts) | TIC Mass (ugC) | TIC Conc (PPM) | TOC Area (cts) | TOC Mass (ugC) | TOC Conc (PPM) |
|---|---|---|---|---|---|---|---|
| 1 | 12:44 pm | 580 | 0.000 | 0.000 | 5,241 | 0.000 | 0.000 |
| 2 | 12:52 pm | 276 | 0.000 | 0.000 | 5,339 | 0.000 | 0.000 |
| 3 | 1:00 pm | 377 | 0.000 | 0.000 | 3,785 | 0.000 | 0.000 |
| 4 | 1:07 pm | 392 | 0.000 | 0.000 | 3,861 | 0.000 | 0.000 |
| 5 | 1:15 pm | 317 | 0.000 | 0.000 | 3,681 | 0.000 | 0.000 |
| 6 | 1:23 pm | 405 | 0.000 | 0.000 | 3,868 | 0.000 | 0.000 |
| | **Avg.** | 391 | 0.000 | 0.000 | 4,296 | 0.000 | 0.000 |
| | **Std.Dev.** | 105 | | | 774 | | |
| | **% RSD.** | 26.81 | | | 18.01 | | |

**Spl #:** 3 **Sample ID :** TOC-RW **Type :** Standard **Date:** 02/02/2017 **Status:** Passed
**Vial #:** 1 **Method :** 170202 - 5 mls - Feb 02, 2017 **Dilution** 1 : 1 **Customer ID:** 00000000

| Rep # | Time | TIC Area (cts) | TIC Mass (ugC) | TIC Conc (PPM) | TOC Area (cts) | TOC Mass (ugC) | TOC Conc (PPM) |
|---|---|---|---|---|---|---|---|
| 1 | 1:52 pm | - | - | - | 3,450 | 0.000 | 0.000 |
| 2 | 1:57 pm | - | - | - | 3,484 | 0.000 | 0.000 |
| 3 | 2:03 pm | - | - | - | 3,405 | 0.000 | 0.000 |
| 4 | 2:09 pm | - | - | - | 3,409 | 0.000 | 0.000 |
| | **Avg.** | - | - | - | 3,437 | 0.000 | 0.000 |
| | **Std.Dev.** | | | | 37 | | |
| | **% RSD.** | | | | 1.09 | | |

O·I·CORPORATION

**Date Prepared:** 02/03/2017 **By:**

**Date Approved:** **By:**

TOC

**OI Corporation**
**College Station, TX 77845 USA**

**No Customer**
**None, None - None**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Spl #:** | 4 | **Sample ID :** | TOC-Std#1-1.000 PPM | **Type :** | Standard | **Date:** | 02/02/2017 | **Status:** | Passed |
| **Vial #:** | 2 | **Method :** | 170202 - 5 mls - Feb 02, 2017 | **Dilution** | 1 : 1 | **Customer ID:** | 00000000 | | |

| Rep # | Time | TIC Area (cts) | TIC Mass (ugC) | TIC Conc (PPM) | TOC Area (cts) | TOC Mass (ugC) | TOC Conc (PPM) |
|---|---|---|---|---|---|---|---|
| 1 | 2:18 pm | - | - | - | 24,253 | 5.000 | 1.000 |
| 2 | 2:23 pm | - | - | - | 23,431 | 5.000 | 1.000 |
| 3 | 2:30 pm | - | - | - | 24,113 | 5.000 | 1.000 |
| 4 | 2:35 pm | - | - | - | 23,912 | 5.000 | 1.000 |
| | **Avg.** | - | - | - | 23,927 | 5.000 | 1.000 |
| | **Std.Dev.** | | | | 359 | | |
| | **% RSD.** | | | | 1.50 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Spl #:** | 5 | **Sample ID :** | TOC-Std#2-5.000 PPM | **Type :** | Standard | **Date:** | 02/02/2017 | **Status:** | Passed |
| **Vial #:** | 3 | **Method :** | 170202 - 5 mls - Feb 02, 2017 | **Dilution** | 1 : 1 | **Customer ID:** | 00000000 | | |

| Rep # | Time | TIC Area (cts) | TIC Mass (ugC) | TIC Conc (PPM) | TOC Area (cts) | TOC Mass (ugC) | TOC Conc (PPM) |
|---|---|---|---|---|---|---|---|
| 1 | 2:44 pm | - | - | - | 105,158 | 25.000 | 5.000 |
| 2 | 2:49 pm | - | - | - | 103,461 | 25.000 | 5.000 |
| 3 | 2:56 pm | - | - | - | 105,440 | 25.000 | 5.000 |
| 4 | 3:01 pm | - | - | - | 103,446 | 25.000 | 5.000 |
| | **Avg.** | - | - | - | 104,376 | 25.000 | 5.000 |
| | **Std.Dev.** | | | | 1,072 | | |
| | **% RSD.** | | | | 1.03 | | |

O·I·CORPORATION

**Date Prepared:** 02/03/2017 **By:**

**Date Approved:** **By:**

TOC

**OI Corporation**
**College Station, TX 77845 USA**

**No Customer**
**None, None - None**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Spl #:** | 6 | **Sample ID :** | TOC-Std#3-10.000 PPM | **Type :** | Standard | **Date:** | 02/02/2017 | **Status:** | Passed |
| **Vial #:** | 4 | **Method :** | 170202 - 5 mls - Feb 02, 2017 | **Dilution** | 1 : 1 | **Customer ID:** | 00000000 | | |

| Rep # | Time | TIC Area (cts) | TIC Mass (ugC) | TIC Conc (PPM) | TOC Area (cts) | TOC Mass (ugC) | TOC Conc (PPM) |
|---|---|---|---|---|---|---|---|
| 1 | 3:10 pm | - | - | - | 207,672 | 50.000 | 10.000 |
| 2 | 3:15 pm | - | - | - | 202,531 | 50.000 | 10.000 |
| 3 | 3:22 pm | - | - | - | 207,489 | 50.000 | 10.000 |
| 4 | 3:27 pm | - | - | - | 201,960 | 50.000 | 10.000 |
| | **Avg.** | - | - | - | 204,913 | 50.000 | 10.000 |
| | **Std.Dev.** | | | | 3,090 | | |
| | **% RSD.** | | | | 1.51 | | |

O·I·CORPORATION

**Date Prepared:** 02/03/2017 **By:**

**Date Approved:** **By:**

TOC

**OI Corporation**
**College Station, TX 77845 USA**

**No Customer**
**None, None - None**

## Method Summary

**Method Details**

| | |
|---|---|
| Method Name: | 170202 - 5 mls - Feb 02, 2017 |
| Date Created: | 02/02/2017 |
| Time Created: | 12:32 |
| Created By: | ALW |

**Pre-Processing**

| | |
|---|---|
| Sample Dilution: | Disabled |
| Dilution Mode: | Automatic |
| Dilution Factor: | 1 : 1 |
| Sample Stirring in A/S: | Enabled |

**Times**

| | React | Detect |
|---|---|---|
| TIC | 01:30 | 03:00 |
| TOC | 02:00 | 03:15 |

**Temp**

| | React | Detect |
|---|---|---|
| TIC | 70 | 70 |
| TOC | 98 | 98 |

**Analysis Mode:** NPOC Only

| | |
|---|---|
| Sparging Mode: | Internal |
| Pre-Acid Volume (mL): | 1.000 |
| Sparge Time (mm:ss): | 02:00 |

**Outlier Removal Criteria**

| | |
|---|---|
| Additional Replicates: | 0 |
| Max. % RSD. | 3.00 |

**Peak Detection Parameters**

| | |
|---|---|
| Signal-to-Noise Ratio: | 3 |
| Minimum Peak Width (min:sec): | 00:30 |
| Peak Resolution to BaseLine(%): | 99 |

**Volumes**

| | |
|---|---|
| Sample Volume (mL): | 5.000 |
| Acid Volume (mL): | 0.500 |
| Persulfate Volume(mL): | 1.000 |

**Rinses**

| | |
|---|---|
| Rinse Volume (mL): | 10.000 |
| Rinses Per Sample: | 1 |
| Rinses Per Replicate: | 0 |

**Other**

| | |
|---|---|
| SysPressure: | 20.00 |

## Calibration Summary

**Calibration Generation**

| | |
|---|---|
| Generation Mode: | Manual |
| # of Stds: | 5 |
| Dilution Factor: | 10 : 1 |
| Dilution Volume (mL): | 1.000 |
| Add Zero as Std #1: | No |

**Calibration Pass/Fail Criteria**

| Parameter | Low | High | Failure |
|---|---|---|---|
| RF (ugC/K-cts) | - | - | - |
| R2 | 0.995 | 1.000 | Abort |
| Offset (area) (cts) | - | - | - |
| Offset (mass) (ugC) | - | - | - |

**Calibration Mode**

| | |
|---|---|
| Primary Mode: | TOC |
| User for ALL Modes: | Enabled |

**Checks, QC's and Actions**

| Type | Target (PPM) | Tolerance (+/- %) | 1st Failure | 2nd Failure |
|---|---|---|---|---|
| CK Std | n/a | 10,000.00 | Continue | Continue |
| QC #1 | 5.000 | 10,000.00 | Continue | Continue |
| QC #2 | 5.000 | 15,000.00 | Continue | Continue |
| QC #3 | 1.000 | 50,000.00 | Continue | Continue |
| QC #4 | 0.001 | 100,000.00 | Continue | Continue |
| SST | 0.000 | 0.00 | Continue | Continue |

O·I·CORPORATION

**Date Prepared:** 02/03/2017 **By:**

**Date Approved:** **By:**

TOC

**OI Corporation**
**College Station, TX 77845 USA**

**No Customer**
**None, None - None**

**Calibration Details**

| | | |
|---|---|---|
| Calibration Mode: | TOC | |
| Date Calibrated: | 02/02/2017 | |
| Time Calibrated: | 3:27 pm | |
| Calibrated By: | ALW | |
| RF (ugC/k-cts): | | 0.2483 |
| R2: | | 0.9997 |
| Offset (area)(cts): | | 3626 |
| Offset (mass)(ugC): | | -0.901 |
| Reagent Blank (cts): | | 1,744 |

**Calibration Settings**

| | |
|---|---|
| Stock Conc. For Dilutions: (PPM) | 1,000.000 |
| # of Reagent Blanks: | 2 |
| Total Flowrate w/EFC: | 50 ml/min |
| Check Standards: | Subtract Offset |
| Regression type: | Unweighted |

**Raw Data - Batch Information**

# PREPARATION BENCH SHEET

**B[B0811**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - General Preparation | (No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703412-02 M | iSM5310Cw NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703480-01 I | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703480-01 I | iSM5310Cw NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703480-02 I | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703480-13 I | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703603-03 O | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703603-04 O | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703603-05 O | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703603-06 O | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| 1703603-07 O | i415.1w NVOC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| B[B0811-BLK1 | QC | 2/9/2017 7:10AM | ALW | 100 | 100 | | | | | |
| B[B0811-BS1 | QC | 2/9/2017 7:10AM | ALW | 100 | 100 | 6B29001 | | 500 | | |
| B[B0811-DUP1 | QC | 2/9/2017 7:10AM | ALW | 100 | 100 | | 1703480-01 | | | |
| B[B0811-MS1 | QC | 2/9/2017 7:10AM | ALW | 99.5 | 100 | 6B29001 | 1703480-01 | 500 | | |
| B[B0811-MSD1 | QC | 2/9/2017 7:10AM | ALW | 99.5 | 100 | 6B29001 | 1703480-01 | 500 | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 6B29001 | TOC KHP 1000 /SPIKE | 0.5% H2SO4 | 2/29/2016 by Anthony Walker | 2/28/2017 |

**Raw Data - Sequence Information**

**BC Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

## ANALYSIS SEQUENCE

**1702388**

Instrument: TOC2
Calibration ID:
Sequence Date: 02/09/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702388-ICV1 | QC | | 1 | | 7A27001 | | |
| 1702388-ICB1 | QC | | 2 | | | | |
| 1702388-CRL1 | QC | | 3 | | 7A18036 | | |
| B[B0744-BLK1 | QC | | 4 | | | | |
| B[B0744-BS1 | QC | | 5 | | | | |
| 1703520-03 | i415.1w NVOC | C | 6 | | | | |
| 1703520-03 | iSM5310Cw NVOC | C | 6 | | | | BatchQC |
| B[B0744-DUP1 | QC | | 7 | | | | |
| B[B0744-MS1 | QC | | 8 | | | | |
| B[B0744-MSD1 | QC | | 9 | | | | |
| 1703520-01 | i415.1w NVOC | C | 10 | | | | |
| 1703520-02 | i415.1w NVOC | C | 11 | | | | |
| 1702388-CCV1 | QC | | 12 | | 7B06032 | | |
| 1702388-CCB1 | QC | | 13 | | | | |
| 1703520-04 | i415.1w NVOC | C | 14 | | | | |
| 1703459-01 | iSM5310Cw NVOC | B | 15 | | | | |
| 1703459-02 | iSM5310Cw NVOC | A | 16 | | | | |
| 1703569-02 | i415.1w NVOC | L | 17 | | | | |
| 1703569-03 | i415.1w NVOC | L | 18 | | | | |
| 1703569-04 | i415.1w NVOC | L | 19 | | | | |
| 1703591-01 | i415.1w NVOC | A | 20 | | | | |
| B[B0745-BLK1 | QC | | 21 | | | | |
| B[B0745-BS1 | QC | | 22 | | | | |
| 1703568-03 | i415.1w NVOC | L | 23 | | | | |
| 1703568-03 | iSM5310Cw NVOC | L | 23 | | | | BatchQC |
| 1702388-CCV2 | QC | | 24 | | 7B06032 | | |
| 1702388-CCB2 | QC | | 25 | | | | |
| B[B0745-DUP1 | QC | | 26 | | | | |
| B[B0745-MS1 | QC | | 27 | | | | |
| B[B0745-MSD1 | QC | | 28 | | | | |
| 1703568-04 | i415.1w NVOC | L | 29 | | | | |
| 1703568-05 | i415.1w NVOC | L | 30 | | | | |
| 1703568-08 | i415.1w NVOC | L | 31 | | | | |
| 1702388-CCV3 | QC | | 32 | | 7B06032 | | |
| 1702388-CCB3 | QC | | 33 | | | | |
| 1703568-09 | i415.1w NVOC | L | 34 | | | | |
| 1702388-CCV4 | QC | | 35 | | 7B06032 | | |
| 1702388-CCB4 | QC | | 36 | | | | |
| B[B0811-BLK1 | QC | | 37 | | | | |

# ANALYSIS SEQUENCE

**1702388**

Instrument: TOC2
Calibration ID:
Sequence Date: 02/09/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| B[B0811-BS1 | QC | | 38 | | | | |
| 1703480-01 | i415.1w NVOC | I | 39 | | | | |
| 1703480-01 | iSM5310Cw NVOC | I | 39 | | | | BatchQC |
| B[B0811-DUP1 | QC | | 40 | | | | |
| 1702388-CCV5 | QC | | 41 | | 7B06032 | | |
| 1702388-CCB5 | QC | | 42 | | | | |
| 1702388-CCV7 | QC | | 43 | | 7B06032 | | |
| 1702388-CCB7 | QC | | 44 | | | | |
| 1703568-02 | i415.1w NVOC | L | 45 | | | | |
| 1703568-06 | i415.1w NVOC | L | 46 | | | | |
| 1703568-07 | i415.1w NVOC | L | 47 | | | | |
| 1703411-01 | iSM5310Cw NVOC | B | 48 | | | | |
| 1703411-02 | iSM5310Cw NVOC | B | 49 | | | | |
| B[B0811-MS1 | QC | | 50 | | | | |
| B[B0811-MSD1 | QC | | 51 | | | | |
| 1703480-02 | i415.1w NVOC | I | 52 | | | | |
| 1703480-13 | i415.1w NVOC | I | 53 | | | | |
| 1703412-02 | iSM5310Cw NVOC | M | 54 | | | | |
| 1702388-CCV8 | QC | | 55 | | 7B06032 | | |
| 1702388-CCB8 | QC | | 56 | | | | |
| 1703603-03 | i415.1w NVOC | O | 57 | | | | |
| 1703603-04 | i415.1w NVOC | O | 58 | | | | |
| 1703603-05 | i415.1w NVOC | O | 59 | | | | |
| 1703603-06 | i415.1w NVOC | O | 60 | | | | |
| 1703603-07 | i415.1w NVOC | O | 61 | | | | |
| 1702388-CCV9 | QC | | 62 | | 7B06032 | | |
| 1702388-CCB9 | QC | | 63 | | | | |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

**BC Laboratories**
**4100 Atlas Court**
**Bakersfield, CA 93308**
**Phone: 661-327-4911**

**SDG:** **17-03480**
**Class:** **WET**
**Method:** **SM-4500SD**

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSES DATA PACKAGE COVER PAGE

## SM-4500SD

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Client Sample Id: | Lab Sample Id: |
|---|---|
| 27EW-17_170207 | 1703480-01 |
| 27EW-18_170207 | 1703480-02 |
| 27EW-13_170207 | 1703480-13 |
| IR11-OU2B-MW01_170207 | 1703480-15 |
| M11-01_170207 | 1703480-30 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron
Name: Sara Guron

Date: 03-13-2017
Title: QA/QC Manager

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD DETECTION AND REPORTING LIMITS

## SM-4500SD

**Laboratory:** BC Laboratories
**SDG:** 17-03480
**Client:** AMEC Environmental & Infrastructure $AMCN
**Project:** Alameda
**Matrix:** Water
**Instrument:** SPEC06

| Analyte | DL | LOD | LOQ | Units |
|---|---|---|---|---|
| Total Sulfide | 0.05 | 0.1 | 0.1 | mg/L |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## SM-4500SD

**27EW-17_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-01
File ID:
Sampled: 02/07/17 08:50
Prepared: 02/10/17 10:15
Analyzed: 02/10/17 10:15
Solids: 0.00
Preparation: No Prep
Initial/Final: 25 ml / 25 ml
Batch: B[B0994
Sequence: 1702406
Calibration: UNASSIGNED
Instrument: SPEC06

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 18496-25-8 | Total Sulfide | 0.20 | 0.10 | 0.20 | 0.20 | 2 | UD | SM-4500SD |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## SM-4500SD

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-02
File ID:
Sampled: 02/07/17 09:55
Prepared: 02/10/17 10:15
Analyzed: 02/10/17 10:15
Solids: 0.00
Preparation: No Prep
Initial/Final: 25 ml / 25 ml
Batch: B[B0994
Sequence: 1702406
Calibration: UNASSIGNED
Instrument: SPEC06

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 18496-25-8 | Total Sulfide | 0.10 | 0.050 | 0.10 | 0.10 | 1 | U | SM-4500SD |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## SM-4500SD

**27EW-13_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-13
File ID:
Sampled: 02/07/17 11:05
Prepared: 02/10/17 10:15
Analyzed: 02/10/17 10:15
Solids: 0.00
Preparation: No Prep
Initial/Final: 25 ml / 25 ml
Batch: B[B0994
Sequence: 1702406
Calibration: UNASSIGNED
Instrument: SPEC06

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 18496-25-8 | Total Sulfide | 0.10 | 0.050 | 0.10 | 0.10 | 1 | U | SM-4500SD |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## SM-4500SD

**IR11-OU2B-MW01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-15
File ID:
Sampled: 02/07/17 11:25
Prepared: 02/10/17 10:15
Analyzed: 02/10/17 10:15
Solids: 0.00
Preparation: No Prep
Initial/Final: 25 ml / 25 ml
Batch: B[B0994
Sequence: 1702406
Calibration: UNASSIGNED
Instrument: SPEC06

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 18496-25-8 | Total Sulfide | 0.50 | 0.25 | 0.50 | 0.50 | 5 | UD | SM-4500SD |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INORGANIC ANALYSIS DATA SHEET
## SM-4500SD

**M11-01_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Laboratory ID: 1703480-30
File ID:
Sampled: 02/07/17 14:00
Prepared: 02/10/17 10:15
Analyzed: 02/10/17 10:15
Solids: 0.00
Preparation: No Prep
Initial/Final: 25 ml / 25 ml
Batch: B[B0994
Sequence: 1702406
Calibration: UNASSIGNED
Instrument: SPEC06

| CAS NO. | Analyte | Concentration (mg/L) | DL | LOD | LOQ | Dilution Factor | Q | Method |
|---|---|---|---|---|---|---|---|---|
| 18496-25-8 | Total Sulfide | 0.10 | 0.050 | 0.10 | 0.10 | 1 | U | SM-4500SD |

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San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# PREPARATION BATCH SUMMARY

## SM-4500SD

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Batch: B[B0994
Batch Matrix: Water
Preparation: No Prep

| SAMPLE NAME | LAB SAMPLE ID | LAB FILE ID | DATE PREPARED | OBSERVATIONS |
|---|---|---|---|---|
| 27EW-17_170207 | 1703480-01 | | 02/10/17 10:15 | |
| 27EW-18_170207 | 1703480-02 | | 02/10/17 10:15 | |
| 27EW-13_170207 | 1703480-13 | | 02/10/17 10:15 | |
| IR11-OU2B-MW01_170207 | 1703480-15 | | 02/10/17 10:15 | |
| M11-01_170207 | 1703480-30 | | 02/10/17 10:15 | |
| Blank | B[B0994-BLK1 | | 02/10/17 10:15 | |
| LCS | B[B0994-BS1 | | 02/10/17 10:15 | |
| 27EW-18_170207 | B[B0994-DUP1 | | 02/10/17 10:15 | |
| 27EW-18_170207 | B[B0994-MS1 | | 02/10/17 10:15 | |
| 27EW-18_170207 | B[B0994-MSD1 | | 02/10/17 10:15 | |

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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# METHOD BLANK DATA SHEET
## SM-4500SD

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | BC Laboratories | | | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | | | Project: | Alameda |
| Matrix: | Water | Laboratory ID: | B[B0994-BLK1 | File ID: | |
| Prepared: | 02/10/17 10:15 | Preparation: | No Prep | Initial/Final: | 25 ml / 25 ml |
| Analyzed: | 02/10/17 10:15 | Instrument: | SPEC06 | | |
| Batch: | B[B0994 | Sequence: | 1702406 | Calibration: | UNASSIGNED |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 18496-25-8 | Total Sulfide | 0.10 | 0.050 | 0.10 | 0.10 | U |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
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Project Manager: Kelli Miller

**27EW-18_170207**

# DUPLICATES
## SM-4500SD

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Matrix: Water
Batch: B[B0994
Preparation: No Prep
Source Sample Name: 27EW-18_170207

SDG: 17-03480
Project: Alameda
Laboratory ID: B[B0994-DUP1
Lab Source ID: 1703480-02
Initial/Final: 25 ml / 25 ml
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | C | DUPLICATE CONCENTRATION (mg/L) | C | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|---|---|
| Total Sulfide | 10 | ND | | ND | | | | SM-4500SD |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## SM-4500SD

**27EW-18_170207**

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda
Matrix: Water
Batch: B[B0994
Laboratory ID: B[B0994-MS1
Preparation: No Prep
Initial/Final: 25 ml / 25 ml
Source Sample Number: 1703480-02

| COMPOUND | SPIKE ADDED (mg/L) | SAMPLE CONCENTRATION (mg/L) | MS CONCENTRATION (mg/L) | MS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Total Sulfide | 0.50000 | ND | 0.46434 | 92.9 | 80 - 120 |

| COMPOUND | SPIKE ADDED (mg/L) | MSD CONCENTRATION (mg/L) | MSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Total Sulfide | 0.50000 | 0.46756 | 93.5 | 0.691 | 10 | 80 - 120 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# LCS RECOVERY
## SM-4500SD

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Matrix: | Water | | |
| Batch: | B[B0994 | Laboratory ID: | B[B0994-BS1 |
| Preparation: | No Prep | Initial/Final: | 25 ml / 25 ml |

| COMPOUND | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. # | QC LIMITS REC. |
|---|---|---|---|---|
| Total Sulfide | 0.50000 | 0.52082 | 104 | 90 - 110 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# ANALYSIS BATCH (SEQUENCE) SUMMARY

## SM-4500SD

| | | | |
|---|---|---|---|
| Laboratory: | BC Laboratories | SDG: | 17-03480 |
| Client: | AMEC Environmental & Infrastructure $AMCN | Project: | Alameda |
| Sequence: | 1702406 | Instrument: | SPEC06 |
| Matrix: | Water | Calibration: | UNASSIGNED |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Initial Cal Check | 1702406-ICV1 | | 02/10/17 10:15 |
| Initial Cal Blank | 1702406-ICB1 | | 02/10/17 10:15 |
| LCS | B[B0994-BS1 | | 02/10/17 10:15 |
| Blank | B[B0994-BLK1 | | 02/10/17 10:15 |
| 27EW-18_170207 | 1703480-02 | | 02/10/17 10:15 |
| 27EW-18_170207 | B[B0994-DUP1 | | 02/10/17 10:15 |
| 27EW-18_170207 | B[B0994-MS1 | | 02/10/17 10:15 |
| 27EW-18_170207 | B[B0994-MSD1 | | 02/10/17 10:15 |
| 27EW-17_170207 | 1703480-01 | | 02/10/17 10:15 |
| 27EW-13_170207 | 1703480-13 | | 02/10/17 10:15 |
| IR11-OU2B-MW01_170207 | 1703480-15 | | 02/10/17 10:15 |
| M11-01_170207 | 1703480-30 | | 02/10/17 10:15 |
| Calibration Check | 1702406-CCV1 | | 02/10/17 10:15 |
| Calibration Blank | 1702406-CCB1 | | 02/10/17 10:15 |
| Calibration Check | 1702406-CCV2 | | 02/10/17 10:15 |
| Calibration Blank | 1702406-CCB2 | | 02/10/17 10:15 |
| Calibration Check | 1702406-CCV3 | | 02/10/17 10:15 |
| Calibration Blank | 1702406-CCB3 | | 02/10/17 10:15 |

AMEC Environmental & Infrastructure
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San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# BLANKS
## SM-4500SD

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: SPEC06
Project: Alameda
Sequence: 1702406
Calibration: UNASSIGNED

| Lab Sample ID | Analyte | Found | DL | LOD | LOQ | Units | C | Method |
|---|---|---|---|---|---|---|---|---|
| 1702406-CCB1 | Total Sulfide | 0.0000 | 0.050 | | 0.10 | mg/L | U | SM-4500SD |
| 1702406-CCB2 | Total Sulfide | 0.0000 | 0.050 | | 0.10 | mg/L | U | SM-4500SD |
| 1702406-CCB3 | Total Sulfide | 0.0000 | 0.050 | | 0.10 | mg/L | U | SM-4500SD |
| 1702406-ICB1 | Total Sulfide | 0.0000 | 0.050 | | 0.10 | mg/L | U | SM-4500SD |

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# INITIAL AND CONTINUING CALIBRATION CHECK

## SM-4500SD

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure $AMCN
Instrument ID: SPEC06
Control Limt: +/- %

SDG: 17-03480
Project: Alameda
Calibration: UNASSIGNED
Sequence: 1702406

| Lab Sample ID | Analyte | True | Found | %R | Units | Method |
|---|---|---|---|---|---|---|
| 1702406-CCV1 | Total Sulfide | 0.50000 | 0.52082 | 104 | mg/L | SM-4500SD |
| 1702406-CCV2 | Total Sulfide | 0.50000 | 0.52082 | 104 | mg/L | SM-4500SD |
| 1702406-CCV3 | Total Sulfide | 0.50000 | 0.52082 | 104 | mg/L | SM-4500SD |
| 1702406-ICV1 | Total Sulfide | 0.50000 | 0.50952 | 102 | mg/L | SM-4500SD |

* Values outside of QC limits

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

# HOLDING TIME SUMMARY
## SM-4500SD

Laboratory: BC Laboratories
SDG: 17-03480
Client: AMEC Environmental & Infrastructure $AMCN
Project: Alameda

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| 27EW-17_170207 | 02/07/17 08:50 | 02/07/17 22:00 | 02/10/17 10:15 | 3.00 | 7.00 | 02/10/17 10:15 | 3.00 | 7.00 | |
| 27EW-18_170207 | 02/07/17 09:55 | 02/07/17 22:00 | 02/10/17 10:15 | 3.00 | 7.00 | 02/10/17 10:15 | 3.00 | 7.00 | |
| 27EW-13_170207 | 02/07/17 11:05 | 02/07/17 22:00 | 02/10/17 10:15 | 3.00 | 7.00 | 02/10/17 10:15 | 3.00 | 7.00 | |
| IR11-OU2B-MW01_170207 | 02/07/17 11:25 | 02/07/17 22:00 | 02/10/17 10:15 | 3.00 | 7.00 | 02/10/17 10:15 | 3.00 | 7.00 | |
| M11-01_170207 | 02/07/17 14:00 | 02/07/17 22:00 | 02/10/17 10:15 | 3.00 | 7.00 | 02/10/17 10:15 | 3.00 | 7.00 | |

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.

**Raw Data From Instrument SPEC06**

**Raw Data - Batch Information**

**Laboratories, Inc.**
Environmental Testing Laboratory Since 1949

# PREPARATION BENCH SHEET

**B[B0994**

**BC Laboratories**

Printed: 3/13/2017 4:42:23PM

Matrix: Water | Prepared using: Wet Chem - No Prep | (No Surrogate)

| Lab Number | Analysis | Prepared | By | Initial (ml) | Final (ml) | Spike ID | Source ID | ul Spike | ul Surrogate | % Solids |
|---|---|---|---|---|---|---|---|---|---|---|
| 1703480-01 H | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703480-02 H | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703480-13 H | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703480-15 J | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703480-30 K | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703603-03 N | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703603-04 N | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703603-05 N | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703603-06 N | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| 1703603-07 N | iSM4500SDw Total Sulfide | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| B[B0994-BLK1 | QC | 2/10/2017 10:15AM | DIW | 25 | 25 | | | | | |
| B[B0994-BS1 | QC | 2/10/2017 10:15AM | DIW | 25 | 25 | 6L29006 | | 2500 | | |
| B[B0994-DUP1 | QC | 2/10/2017 10:15AM | DIW | 25 | 25 | | 1703480-02 | | | |
| B[B0994-MS1 | QC | 2/10/2017 10:15AM | DIW | 25 | 25 | 6L29006 | 1703480-02 | 2500 | | |
| B[B0994-MSD1 | QC | 2/10/2017 10:15AM | DIW | 25 | 25 | 6L29006 | 1703480-02 | 2500 | | |

| Spike Mixes | Description | Solvent | Prepared | Expires |
|---|---|---|---|---|
| 6L29006 | SULFIDE 5.0 WORK | H2O | 12/29/2016 by Daniel Wencesla | 6/29/2017 |

**Raw Data - Sequence Information**

# ANALYSIS SEQUENCE

**1702406**

Instrument: SPEC06
Calibration ID:
Sequence Date: 02/10/2017
Printed: 3/13/2017 4:42:23PM

| Lab Number | Analysis | Container | Order | Position | STD ID | ISTD ID | Comments |
|---|---|---|---|---|---|---|---|
| 1702406-ICV1 | QC | | 1 | | 7A30038 | | |
| 1702406-ICB1 | QC | | 2 | | | | |
| B[B0994-BS1 | QC | | 3 | | | | |
| B[B0995-BS1 | QC | | 4 | | | | |
| B[B0994-BLK1 | QC | | 5 | | | | |
| B[B0995-BLK1 | QC | | 6 | | | | |
| 1703480-02 | iSM4500SDw Total Sulfide | H | 7 | | | | |
| B[B0994-DUP1 | QC | | 8 | | | | |
| B[B0994-MS1 | QC | | 9 | | | | |
| B[B0994-MSD1 | QC | | 10 | | | | |
| 1703480-01 | iSM4500SDw Total Sulfide | H | 11 | | | | |
| 1703480-13 | iSM4500SDw Total Sulfide | H | 12 | | | | |
| 1703480-15 | iSM4500SDw Total Sulfide | J | 13 | | | | |
| 1703480-30 | iSM4500SDw Total Sulfide | K | 14 | | | | |
| 1702406-CCV1 | QC | | 15 | | 7A30040 | | |
| 1702406-CCB1 | QC | | 16 | | | | |
| 1703603-03 | iSM4500SDw Total Sulfide | N | 17 | | | | |
| 1703603-04 | iSM4500SDw Total Sulfide | N | 18 | | | | |
| 1703603-05 | iSM4500SDw Total Sulfide | N | 19 | | | | |
| 1703603-06 | iSM4500SDw Total Sulfide | N | 20 | | | | |
| 1703603-07 | iSM4500SDw Total Sulfide | N | 21 | | | | |
| 1703451-01 | iSM4500SDw Total Sulfide | K | 22 | | | | |
| B[B0995-DUP1 | QC | | 23 | | | | |
| B[B0995-MS1 | QC | | 24 | | | | |
| B[B0995-MSD1 | QC | | 25 | | | | |
| 1703451-02 | iSM4500SDw Total Sulfide | K | 26 | | | | |
| 1702406-CCV2 | QC | | 27 | | 7A30040 | | |
| 1702406-CCB2 | QC | | 28 | | | | |
| 1703570-04 | iSM4500SDw Total Sulfide | F | 29 | | | | Report Method SM 4500-S2-D |
| 1703583-05 | iSM4500SDw Total Sulfide | C | 30 | | | | |
| 1703583-06 | iSM4500SDw Total Sulfide | C | 31 | | | | |
| 1703583-07 | iSM4500SDw Total Sulfide | C | 32 | | | | |
| 1703412-02 | iSM4500SDw Total Sulfide | K | 33 | | | | |
| 1703647-01 | iSM4500SDw Total Sulfide | A | 34 | | | | |
| 1702406-CCV3 | QC | | 35 | | 7A30040 | | |
| 1702406-CCB3 | QC | | 36 | | | | |

# Data Review Report

| Sequence and Sample # | Sample Name | Batch # | Analysed |
|---|---|---|---|
| 1702406 | | | |
| 1 | 1702406-ICV1 | 1702406 | 2/10/2017 10:15:00AM |
| 2 | 1702406-ICB1 | 1702406 | 2/10/2017 10:15:00AM |
| 3 | B[B0994-BS1 | B[B0994 | 2/10/2017 10:15:00AM |
| 4 | B[B0995-BS1 | B[B0995 | 2/10/2017 10:15:00AM |
| 5 | B[B0994-BLK1 | B[B0994 | 2/10/2017 10:15:00AM |
| 6 | B[B0995-BLK1 | B[B0995 | 2/10/2017 10:15:00AM |
| 7 | 1703480-02 | B[B0994 | 2/10/2017 10:15:00AM |
| 8 | B[B0994-DUP1 | B[B0994 | 2/10/2017 10:15:00AM |
| 9 | B[B0994-MS1 | B[B0994 | 2/10/2017 10:15:00AM |
| 10 | B[B0994-MSD1 | B[B0994 | 2/10/2017 10:15:00AM |
| 11 | 1703480-01 | B[B0994 | 2/10/2017 10:15:00AM |
| 12 | 1703480-13 | B[B0994 | 2/10/2017 10:15:00AM |
| 13 | 1703480-15 | B[B0994 | 2/10/2017 10:15:00AM |
| 14 | 1703480-30 | B[B0994 | 2/10/2017 10:15:00AM |
| 15 | 1702406-CCV1 | 1702406 | 2/10/2017 10:15:00AM |
| 16 | 1702406-CCB1 | 1702406 | 2/10/2017 10:15:00AM |
| 17 | 1703603-03 | B[B0994 | 2/10/2017 10:15:00AM |
| 18 | 1703603-04 | B[B0994 | 2/10/2017 10:15:00AM |
| 19 | 1703603-05 | B[B0994 | 2/10/2017 10:15:00AM |
| 20 | 1703603-06 | B[B0994 | 2/10/2017 10:15:00AM |
| 21 | 1703603-07 | B[B0994 | 2/10/2017 10:15:00AM |
| 22 | 1703451-01 | B[B0995 | 2/10/2017 10:15:00AM |
| 23 | B[B0995-DUP1 | B[B0995 | 2/10/2017 10:15:00AM |
| 24 | B[B0995-MS1 | B[B0995 | 2/10/2017 10:15:00AM |
| 25 | B[B0995-MSD1 | B[B0995 | 2/10/2017 10:15:00AM |
| 26 | 1703451-02 | B[B0995 | 2/10/2017 10:15:00AM |
| 27 | 1702406-CCV2 | 1702406 | 2/10/2017 10:15:00AM |
| 28 | 1702406-CCB2 | 1702406 | 2/10/2017 10:15:00AM |
| 29 | 1703570-04 | B[B0995 | 2/10/2017 10:15:00AM |
| 30 | 1703583-05 | B[B0995 | 2/10/2017 10:15:00AM |
| 31 | 1703583-06 | B[B0995 | 2/10/2017 10:15:00AM |
| 32 | 1703583-07 | B[B0995 | 2/10/2017 10:15:00AM |
| 33 | 1703412-02 | B[B0995 | 2/10/2017 10:15:00AM |
| 34 | 1703647-01 | B[B0995 | 2/10/2017 10:15:00AM |
| 35 | 1702406-CCV3 | 1702406 | 2/10/2017 10:15:00AM |
| 36 | 1702406-CCB3 | 1702406 | 2/10/2017 10:15:00AM |

2/13/17 9:03 **Sequence #: 1702406**

| | Result | Qualifier | Units | Dil | MDL | MRL | Rpt | Recovery & RPD |
|---|---|---|---|---|---|---|---|---|
| **Sequence # 1702406** | | | | | | | | |
| **Sample ID: 1702406-ICV1** | Sequence Sample # 1 | | | | | | | |
| iSM4500SDw Total Sulfide | 0.50952 | | mg/L | 1.00 | | | Y | 102 |
| **Sample ID: 1702406-ICB1** | Sequence Sample # 2 | | | | | | | |
| iSM4500SDw Total Sulfide | 0.0000 | | mg/L | 1.00 | | | Y | |
| **Sample ID: B[B0994-BS1** | Sequence Sample # 3 | | Batch # B[B0994 | | | | | |
| iSM4500SDw Total Sulfide | 0.52082 | | mg/L | 1.00 | 0.050 | 0.10 | Y | 104 |
| **Sample ID: B[B0995-BS1** | Sequence Sample # 4 | | Batch # B[B0995 | | | | | |
| iSM4500SDw Total Sulfide | 0.52082 | | mg/L | 1.00 | 0.050 | 0.10 | Y | 104 |
| **Sample ID: B[B0994-BLK1** | Sequence Sample # 5 | | Batch # B[B0994 | | | | | |
| iSM4500SDw Total Sulfide | 0.0000 | | mg/L | 1.00 | 0.050 | 0.10 | Y | |
| **Sample ID: B[B0995-BLK1** | Sequence Sample # 6 | | Batch # B[B0995 | | | | | |
| iSM4500SDw Total Sulfide | 0.0000 | | mg/L | 1.00 | 0.050 | 0.10 | Y | |
| **Sample ID: 1703480-02** | Sequence Sample # 7 | | Batch # B[B0994 | | | | | |

| Sample ID | Result | Qualifier | Units | Dil | MDL | MRL | Rpt | Recovery & RPD | |
|---|---|---|---|---|---|---|---|---|---|
| **Sample ID: 1703480-02** | Sequence Sample # 7 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.0029 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: B[B0994-DUP1** | Sequence Sample # 8 | | Batch # B[B0994 | | Source ID: 1703480-02 | | | | |
| SM4500SDw Total Sulfide | 0.0029400 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: B[B0994-MS1** | Sequence Sample # 9 | | Batch # B[B0994 | | Source ID: 1703480-02 | | | | |
| SM4500SDw Total Sulfide | 0.46434 | | mg/L | 1.00 | 0.050 | 0.10 | Y | 92.9 | |
| **Sample ID: B[B0994-MSD1** | Sequence Sample # 10 | | Batch # B[B0994 | | Source ID: 1703480-02 | | | | |
| SM4500SDw Total Sulfide | 0.46756 | | mg/L | 1.00 | 0.050 | 0.10 | Y | 93.5 | 0.691 |
| **Sample ID: 1703480-01** | Sequence Sample # 11 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.0 | A07 | mg/L | 2.00 | 0.10 | 0.20 | Y | | |
| **Sample ID: 1703480-13** | Sequence Sample # 12 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.035 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703480-15** | Sequence Sample # 13 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.059 | A07 | mg/L | 5.00 | 0.25 | 0.50 | Y | | |
| **Sample ID: 1703480-30** | Sequence Sample # 14 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.024 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1702406-CCV1** | Sequence Sample # 15 | | | | | | | | |
| SM4500SDw Total Sulfide | 0.52082 | | mg/L | 1.00 | | | Y | 104 | |
| **Sample ID: 1702406-CCB1** | Sequence Sample # 16 | | | | | | | | |
| SM4500SDw Total Sulfide | 0.0000 | | mg/L | 1.00 | | | Y | | |
| **Sample ID: 1703603-03** | Sequence Sample # 17 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.019 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703603-04** | Sequence Sample # 18 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.0 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703603-05** | Sequence Sample # 19 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.026 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703603-06** | Sequence Sample # 20 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.037 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703603-07** | Sequence Sample # 21 | | Batch # B[B0994 | | | | | | |
| SM4500SDw Total Sulfide | 0.0044 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703451-01** | Sequence Sample # 22 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.0029 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: B[B0995-DUP1** | Sequence Sample # 23 | | Batch # B[B0995 | | Source ID: 1703451-01 | | | | |
| SM4500SDw Total Sulfide | 0.0029400 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: B[B0995-MS1** | Sequence Sample # 24 | | Batch # B[B0995 | | Source ID: 1703451-01 | | | | |
| SM4500SDw Total Sulfide | 0.46918 | | mg/L | 1.00 | 0.050 | 0.10 | Y | 93.8 | |
| **Sample ID: B[B0995-MSD1** | Sequence Sample # 25 | | Batch # B[B0995 | | Source ID: 1703451-01 | | | | |
| SM4500SDw Total Sulfide | 0.47402 | | mg/L | 1.00 | 0.050 | 0.10 | Y | 94.8 | 1.03 |
| **Sample ID: 1703451-02** | Sequence Sample # 26 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.0044 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1702406-CCV2** | Sequence Sample # 27 | | | | | | | | |
| SM4500SDw Total Sulfide | 0.52082 | | mg/L | 1.00 | | | Y | 104 | |
| **Sample ID: 1702406-CCB2** | Sequence Sample # 28 | | | | | | | | |
| SM4500SDw Total Sulfide | 0.0000 | | mg/L | 1.00 | | | Y | | |
| **Sample ID: 1703570-04** | Sequence Sample # 29 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.034 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703583-05** | Sequence Sample # 30 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.0088 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703583-06** | Sequence Sample # 31 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.0074 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703583-07** | Sequence Sample # 32 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.0029 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |
| **Sample ID: 1703412-02** | Sequence Sample # 33 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.16 | A07 | mg/L | 5.00 | 0.25 | 0.50 | Y | | |
| **Sample ID: 1703647-01** | Sequence Sample # 34 | | Batch # B[B0995 | | | | | | |
| SM4500SDw Total Sulfide | 0.0088 | | mg/L | 1.00 | 0.050 | 0.10 | Y | | |

| Sequence #: 1702406 | Result | Qualifier | Units | Dil | MDL | MRL | Rpt | Recovery & RPD |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: 1702406-CCV3** | Sequence Sample # 35 | | | | | | | |
| iSM4500SDw Total Sulfide | 0.52082 | | mg/L | 1.00 | | | Y | 104 |
| **Sample ID: 1702406-CCB3** | Sequence Sample # 36 | | | | | | | |
| iSM4500SDw Total Sulfide | 0.0000 | | mg/L | 1.00 | | | Y | |

## Recovery and RPD Out of Control Report

| Sample ID | Analyte | Rpt | Qual. | % Rec | RPD | Limits |
|---|---|---|---|---|---|---|

## Hold Time Out of Control Report

| Analyte | Sample ID | Sample Date | Prep Date | Prep Expires | Date Analyzed | Analysis Exp. | SO5 Fl |
|---|---|---|---|---|---|---|---|

Method ID: i376.2 Sulfide
Instrument: SPEC06
Run Date: 02/10/2017
Run Number: 1
Full XLS File Name: W:\EDS\bcElm\ChartReader\Sulfide\SULFIDE 02-10-17 #01.xls

Mult Factor: 1
IR Blank Subtraction: 0
Digits Past Decimal (IR): 5
Use PTP Below Std1: Y
Use PTP Below Std2: N

**Standards**

| Conc | Reading |
|---|---|
| 0 | 0.000 |
| 0.05 | 0.034 |
| 0.1 | 0.069 |
| 0.2 | 0.133 |
| 0.5 | 0.329 |
| 1.0 | 0.619 |

Correlation Coefficient: 0.999515206264385

| Lab Number | Chart Reading | Instrument Reading | Dilution | Run Date | Run Time | Instrument | Analyst |
|---|---|---|---|---|---|---|---|
| 1702406-ICV1 | 0.322 | 0.50952 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1702406-ICB1 | 0.000 | 0.00000 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0994-BS1 | 0.329 | 0.52082 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0995-BS1 | 0.329 | 0.52082 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0994-BLK1 | 0.000 | 0.00000 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0995-BLK1 | 0.000 | 0.00000 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703480-02 | 0.002 | 0.00294 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0994-DUP1 | 0.002 | 0.00294 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0994-MS1 | 0.294 | 0.46434 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0994-MSD1 | 0.296 | 0.46756 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703480-01 | 0.000 | 0.00000 | 2 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703480-13 | 0.024 | 0.03529 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703480-15 | 0.008 | 0.01176 | 5 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703480-30 | 0.016 | 0.02353 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1702406-CCV1 | 0.329 | 0.52082 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1702406-CCB1 | 0.000 | 0.00000 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703603-03 | 0.013 | 0.01912 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |

Method ID: i376.2 Sulfide
Instrument: SPEC06
Run Date: 02/10/2017
Run Number: 1
Full XLS File Name: W:\EDS\bcElm\ChartReader\Sulfide\SULFIDE 02-10-17 #01.xls

Mult Factor: 1
IR Blank Subtraction: 0
Digits Past Decimal (IR): 5
Use PTP Below Std1: Y
Use PTP Below Std2: N

| Lab Number | Chart Reading | Instrument Reading | Dilution | Run Date | Run Time | Instrument | Analyst |
|---|---|---|---|---|---|---|---|
| 1703603-04 | 0.000 | 0.00000 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703603-05 | 0.018 | 0.02647 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703603-06 | 0.025 | 0.03676 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703603-07 | 0.003 | 0.00441 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703451-01 | 0.002 | 0.00294 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0995-DUP1 | 0.002 | 0.00294 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0995-MS1 | 0.297 | 0.46918 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| B[B0995-MSD1 | 0.300 | 0.47402 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703451-02 | 0.003 | 0.00441 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1702406-CCV2 | 0.329 | 0.52082 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1702406-CCB2 | 0.000 | 0.00000 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703570-04 | 0.023 | 0.03382 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703583-05 | 0.006 | 0.00882 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703583-06 | 0.005 | 0.00735 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703583-07 | 0.002 | 0.00294 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703412-02 | 0.022 | 0.03235 | 5 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1703647-01 | 0.006 | 0.00882 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1702406-CCV3 | 0.329 | 0.52082 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |
| 1702406-CCB3 | 0.000 | 0.00000 | 1 | 02/10/2017 | 10:15 | SPEC06 | DIW |

# WET CHEMISTRY RUNLOG

## BC LABORATORIES, INC.

Reveiwed by: Date :

Run ID # (01)

❑ W-Hz-Sulfide-376.1 _____

❑ W-Hz-Sulfide-376.2 Sulfide

| CONC | RESPONSE | IDENTIFICATION # |
|---|---|---|
| 0.05 | 0.034 | S- 021017 0.05 |
| 0.1 | 0.069 | S- 0.1 |
| 0.2 | 0.133 | S- 0.2 |
| 0.5 | 0.329 | S- 0.5 |
| 1.0 | 0.619 | S- 1.0 |

| | | | |
|---|---|---|---|
| Analyte: | Sulfide | ml Spike: | 2.5 mls |
| Method: | 376.2 | Conc Spike: | 5 mg/L |
| Analyst: | RLW | ml Sample: | 22.5 mls |
| Date: | 02/10/17 | Spike ID #: | S- 013017 5- |
| Time: | 10:15 | BS1 ID #: | S- 5- |
| Corr Coef: | 0.999 | ICV #: | S- 5- |

Comments:

| | Lab ID # | Dil | Abs/tit | Result | P/R | | Lab ID # | Dil | Abs/tit | Result | P/R |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ICV | | 0.322 | | | 21 | Dup. | | 0.002 | | |
| 2 | ICB | | 0.000 | | | 22 | MS | | 0.297 | | |
| 3 | BS1 | | 0.329 | | | 23 | MSD | | 0.300 | | |
| 4 | BLK1 | | 0.000 | | | 24 | 03451-2K | | 0.003 | | ✓ |
| 5 | 03480-2H | | 0.002 | | ✓ | 25 | CCN2 | | 0.329 | | |
| 6 | Dup | | 0.002 | | | 26 | CCB2 | | 0.000 | | |
| 7 | MS | | 0.294 | | | 27 | 03570-4F | | 0.023 | | ✓ |
| 8 | MSD | | 0.296 | | | 28 | 03583-5C | | 0.006 | | ✓ |
| 9 | 03480-1 H | (T) X2 | 0.045 | 0.000 | ✓ | 29 | -6C | | 0.005 | | ✓ |
| 10 | -13 H | | 0.024 | | ✓ | 30 | -7C | (T) | 0.046 | 0.002 | ✓ |
| 11 | -15 J | (T) X5 | 0.082 | 0.008 | ✓ | 31 | 03412-2K | (T) X5 | 0.023 | 0.022 | ✓ |
| 12 | -30 K | | 0.016 | | ✓ | 32 | 03467-1A | | 0.006 | | ✓ |
| 13 | CCN1 | | 0.329 | | | 33 | CCN3 | | 0.329 | | |
| 14 | CCB1 | | 0.000 | | | 34 | CCB3 | | 0.000 | | |
| 15 | 03603-3 N | | 0.013 | | ✓ | 35 | Blank Subtract | | | | |
| 16 | -4 N | (T) | 0.171 | 0.000 | ✓ | 36 | 3480-1 | X2 | 0.045 | | |
| 17 | -5 N | (T) | 0.092 | 0.018 | ✓ | 37 | -15 | X5 | 0.074 | | |
| 18 | -6 N | | 0.025 | | ✓ | 38 | 3603-4 | | 0.172 | | |
| 19 | -7 N | (T) | 0.045 | 0.003 | ✓ | 39 | -5 | | 0.074 | | |
| 20 | 03451-1 K | | 0.062 | | ✓ | 40 | -7 | | 0.042 | | |

Batch # BCB0994 Batch # BCB 0995 Sequence # 1702406

3583-7 = 0.044

3412-2 X5 = 0.001

[S:\MyDOCS\WordPerfect\LAB_DOCS\LOGBOOKS\WCSLOG]

AMEC Environmental & Infrastructure
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 3/13/2017 4:42:23PM
Project: Alameda
Project Number: 5023146096
Project Manager: Kelli Miller

## Notes and Definitions

| | |
|---|---|
| B | Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank. |
| D | The reported value is from a dilution. |
| E | The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration. |
| J | The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL. |
| U | The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client. |