**Pace Analytical Services, LLC**
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

September 10, 2021

David Scovel
BCA Consultants
7202 E. 87th Street
#110
Indianapolis, IN 46250

RE: Project: 21-253 Lawrence
Pace Project No.: 10577519

Dear David Scovel:

Enclosed are the analytical results for sample(s) received by the laboratory on September 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout
carolynne.trout@pacelabs.com
1(612)607-6351
Project Manager

Enclosures

cc: Cam Schipp, BCA Environmental Consultants

**REPORT OF LABORATORY ANALYSIS**

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# CERTIFICATIONS

| | |
|---|---|
| Project: | 21-253 Lawrence |
| Pace Project No.: | 10577519 |

**Pace Analytical Services, LLC - Minneapolis MN**

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).



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## SAMPLE SUMMARY

Project: 21-253 Lawrence
Pace Project No.: 10577519

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **10577519001** | **SS-1** | Air | 08/30/21 11:54 | 09/03/21 14:00 |
| **10577519002** | **SS-2** | Air | 08/30/21 11:42 | 09/03/21 14:00 |
| **10577519003** | **SS-3** | Air | 08/30/21 12:17 | 09/03/21 14:00 |
| **10577519004** | **SS-4** | Air | 08/30/21 11:00 | 09/03/21 14:00 |
| **10577519005** | **SS-5** | Air | 08/30/21 11:27 | 09/03/21 14:00 |
| **10577519006** | **SS-6** | Air | 08/30/21 11:14 | 09/03/21 14:00 |
| **10577519007** | **IA-1 DUP** | Air | 08/31/21 09:04 | 09/03/21 14:00 |
| **10577519008** | **IA-1** | Air | 08/31/21 09:04 | 09/03/21 14:00 |
| **10577519009** | **IA-2** | Air | 08/31/21 09:09 | 09/03/21 14:00 |
| **10577519010** | **IA-3** | Air | 08/31/21 09:02 | 09/03/21 14:00 |
| **10577519011** | **IA-4** | Air | 08/31/21 10:05 | 09/03/21 14:00 |
| **10577519012** | **IA-5** | Air | 08/31/21 09:11 | 09/03/21 14:00 |
| **10577519013** | **IA-6** | Air | 08/31/21 10:07 | 09/03/21 14:00 |
| **10577519014** | **UPWIND** | Air | 08/31/21 09:24 | 09/03/21 14:00 |
| **10577519015** | **DOWNWIND** | Air | 08/31/21 09:28 | 09/03/21 14:00 |
| **10577519016** | **Trip Blank** | Air | 08/31/21 00:00 | 09/03/21 14:00 |



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## SAMPLE ANALYTE COUNT

Project: 21-253 Lawrence
Pace Project No.: 10577519

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **10577519001** | **SS-1** | TO-15 | HMH | 3 |
| **10577519002** | **SS-2** | TO-15 | HMH | 3 |
| **10577519003** | **SS-3** | TO-15 | HMH | 3 |
| **10577519004** | **SS-4** | TO-15 | HMH | 3 |
| **10577519005** | **SS-5** | TO-15 | HMH | 3 |
| **10577519006** | **SS-6** | TO-15 | HMH | 3 |
| **10577519007** | **IA-1 DUP** | TO-15 | HMH | 3 |
| **10577519008** | **IA-1** | TO-15 | HMH | 3 |
| **10577519009** | **IA-2** | TO-15 | GT | 3 |
| **10577519010** | **IA-3** | TO-15 | GT | 3 |
| **10577519011** | **IA-4** | TO-15 | GT | 3 |
| **10577519012** | **IA-5** | TO-15 | GT | 3 |
| **10577519013** | **IA-6** | TO-15 | GT | 3 |
| **10577519014** | **UPWIND** | TO-15 | GT | 3 |
| **10577519015** | **DOWNWIND** | TO-15 | GT | 3 |
| **10577519016** | **Trip Blank** | TO-15 | GT | 3 |

PASI-M = Pace Analytical Services - Minneapolis



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: SS-1** **Lab ID: 10577519001** Collected: 08/30/21 11:54 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.4 | 2.1 | | 09/08/21 21:04 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 1.1 | 2.1 | | 09/08/21 21:04 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.55 | 2.1 | | 09/08/21 21:04 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: SS-2** **Lab ID: 10577519002** Collected: 08/30/21 11:42 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.4 | 2.1 | | 09/08/21 21:33 | 127-18-4 | |
| Trichloroethene | **3.1** | ug/m3 | 1.1 | 2.1 | | 09/08/21 21:33 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.55 | 2.1 | | 09/08/21 21:33 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: SS-3** **Lab ID: 10577519003** Collected: 08/30/21 12:17 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.2 | 1.74 | | 09/08/21 22:04 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 0.95 | 1.74 | | 09/08/21 22:04 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.45 | 1.74 | | 09/08/21 22:04 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: SS-4** **Lab ID: 10577519004** Collected: 08/30/21 11:00 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.3 | 1.94 | | 09/08/21 23:34 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 1.1 | 1.94 | | 09/08/21 23:34 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.50 | 1.94 | | 09/08/21 23:34 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: SS-5** **Lab ID: 10577519005** Collected: 08/30/21 11:27 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.4 | 2.1 | | 09/09/21 00:03 | 127-18-4 | |
| Trichloroethene | **2.5** | ug/m3 | 1.1 | 2.1 | | 09/09/21 00:03 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.55 | 2.1 | | 09/09/21 00:03 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: SS-6** **Lab ID: 10577519006** Collected: 08/30/21 11:14 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.4 | 2.1 | | 09/09/21 00:32 | 127-18-4 | |
| Trichloroethene | **18.3** | ug/m3 | 1.1 | 2.1 | | 09/09/21 00:32 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.55 | 2.1 | | 09/09/21 00:32 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: IA-1 DUP** **Lab ID: 10577519007** Collected: 08/31/21 09:04 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.1 | 1.61 | | 09/08/21 18:09 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 0.88 | 1.61 | | 09/08/21 18:09 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.42 | 1.61 | | 09/08/21 18:09 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: IA-1** **Lab ID: 10577519008** Collected: 08/31/21 09:04 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 0.96 | 1.39 | | 09/08/21 18:39 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 0.76 | 1.39 | | 09/08/21 18:39 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.36 | 1.39 | | 09/08/21 18:39 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: IA-2** **Lab ID: 10577519009** Collected: 08/31/21 09:09 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.1 | 1.61 | | 09/08/21 17:25 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 0.88 | 1.61 | | 09/08/21 17:25 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.42 | 1.61 | | 09/08/21 17:25 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: IA-3** **Lab ID: 10577519010** Collected: 08/31/21 09:02 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 0.92 | 1.34 | | 09/08/21 18:19 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 0.73 | 1.34 | | 09/08/21 18:19 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.35 | 1.34 | | 09/08/21 18:19 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: IA-4** **Lab ID: 10577519011** Collected: 08/31/21 10:05 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 2.0 | 2.88 | | 09/08/21 18:46 | 127-18-4 | |
| Trichloroethene | **4.6** | ug/m3 | 1.6 | 2.88 | | 09/08/21 18:46 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.75 | 2.88 | | 09/08/21 18:46 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: IA-5** **Lab ID: 10577519012** Collected: 08/31/21 09:11 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.1 | 1.58 | | 09/08/21 19:13 | 127-18-4 | |
| Trichloroethene | **7.6** | ug/m3 | 0.86 | 1.58 | | 09/08/21 19:13 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.41 | 1.58 | | 09/08/21 19:13 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: IA-6** **Lab ID: 10577519013** Collected: 08/31/21 10:07 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.3 | 1.83 | | 09/08/21 19:40 | 127-18-4 | |
| Trichloroethene | **16.9** | ug/m3 | 1.0 | 1.83 | | 09/08/21 19:40 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.48 | 1.83 | | 09/08/21 19:40 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: UPWIND** **Lab ID: 10577519014** Collected: 08/31/21 09:24 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.1 | 1.55 | | 09/08/21 20:07 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 0.85 | 1.55 | | 09/08/21 20:07 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.40 | 1.55 | | 09/08/21 20:07 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: DOWNWIND** **Lab ID: 10577519015** Collected: 08/31/21 09:28 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 1.1 | 1.55 | | 09/08/21 20:34 | 127-18-4 | |
| Trichloroethene | ND | ug/m3 | 0.85 | 1.55 | | 09/08/21 20:34 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.40 | 1.55 | | 09/08/21 20:34 | 75-01-4 | |



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# ANALYTICAL RESULTS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**Sample: Trip Blank** **Lab ID: 10577519016** Collected: 08/31/21 00:00 Received: 09/03/21 14:00 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO15 MSV AIR** | Analytical Method: TO-15 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Tetrachloroethene | ND | ug/m3 | 0.69 | 1 | | 09/08/21 16:31 | 127-18-4 | |
| Trichloroethene | **3.5** | ug/m3 | 0.55 | 1 | | 09/08/21 16:31 | 79-01-6 | |
| Vinyl chloride | ND | ug/m3 | 0.26 | 1 | | 09/08/21 16:31 | 75-01-4 | |



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# QUALITY CONTROL DATA

Project: 21-253 Lawrence
Pace Project No.: 10577519

QC Batch: 768868
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10577519001, 10577519002, 10577519003, 10577519004, 10577519005, 10577519006, 10577519007, 10577519008

METHOD BLANK: 4096963
Matrix: Air
Associated Lab Samples: 10577519001, 10577519002, 10577519003, 10577519004, 10577519005, 10577519006, 10577519007, 10577519008

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | ND | 0.34 | 09/08/21 11:21 | |
| Trichloroethene | ug/m3 | ND | 0.27 | 09/08/21 11:21 | |
| Vinyl chloride | ug/m3 | ND | 0.13 | 09/08/21 11:21 | |

LABORATORY CONTROL SAMPLE: 4096964

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | 73.4 | 80.1 | 109 | 70-130 | |
| Trichloroethene | ug/m3 | 58.4 | 65.1 | 111 | 70-130 | |
| Vinyl chloride | ug/m3 | 28 | 31.6 | 113 | 70-137 | |

SAMPLE DUPLICATE: 4098166

| Parameter | Units | 10577378001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | ND | ND | | 25 | |
| Trichloroethene | ug/m3 | ND | ND | | 25 | |
| Vinyl chloride | ug/m3 | ND | ND | | 25 | |

SAMPLE DUPLICATE: 4098167

| Parameter | Units | 10577378002 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | ND | ND | | 25 | |
| Trichloroethene | ug/m3 | ND | ND | | 25 | |
| Vinyl chloride | ug/m3 | ND | ND | | 25 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**



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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

# QUALITY CONTROL DATA

Project: 21-253 Lawrence
Pace Project No.: 10577519

QC Batch: 768869
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10577519009, 10577519010, 10577519011, 10577519012, 10577519013, 10577519014, 10577519015, 10577519016

METHOD BLANK: 4096970 Matrix: Air
Associated Lab Samples: 10577519009, 10577519010, 10577519011, 10577519012, 10577519013, 10577519014, 10577519015, 10577519016

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | ND | 0.34 | 09/08/21 09:05 | |
| Trichloroethene | ug/m3 | ND | 0.27 | 09/08/21 09:05 | |
| Vinyl chloride | ug/m3 | ND | 0.13 | 09/08/21 09:05 | |

LABORATORY CONTROL SAMPLE: 4096971

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | 73.4 | 70.8 | 96 | 70-130 | |
| Trichloroethene | ug/m3 | 58.4 | 56.4 | 96 | 70-130 | |
| Vinyl chloride | ug/m3 | 28 | 27.7 | 99 | 70-137 | |

SAMPLE DUPLICATE: 4098707

| Parameter | Units | 10577519009 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | ND | ND | | 25 | |
| Trichloroethene | ug/m3 | ND | ND | | 25 | |
| Vinyl chloride | ug/m3 | ND | ND | | 25 | |

SAMPLE DUPLICATE: 4098708

| Parameter | Units | 10577519016 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Tetrachloroethene | ug/m3 | ND | ND | | 25 | |
| Trichloroethene | ug/m3 | 3.5 | 3.6 | 3 | 25 | |
| Vinyl chloride | ug/m3 | ND | ND | | 25 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

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# QUALIFIERS

Project: 21-253 Lawrence
Pace Project No.: 10577519

**DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 21-253 Lawrence
Pace Project No.: 10577519

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **10577519001** | **SS-1** | TO-15 | 768868 | | |
| **10577519002** | **SS-2** | TO-15 | 768868 | | |
| **10577519003** | **SS-3** | TO-15 | 768868 | | |
| **10577519004** | **SS-4** | TO-15 | 768868 | | |
| **10577519005** | **SS-5** | TO-15 | 768868 | | |
| **10577519006** | **SS-6** | TO-15 | 768868 | | |
| **10577519007** | **IA-1 DUP** | TO-15 | 768868 | | |
| **10577519008** | **IA-1** | TO-15 | 768868 | | |
| **10577519009** | **IA-2** | TO-15 | 768869 | | |
| **10577519010** | **IA-3** | TO-15 | 768869 | | |
| **10577519011** | **IA-4** | TO-15 | 768869 | | |
| **10577519012** | **IA-5** | TO-15 | 768869 | | |
| **10577519013** | **IA-6** | TO-15 | 768869 | | |
| **10577519014** | **UPWIND** | TO-15 | 768869 | | |
| **10577519015** | **DOWNWIND** | TO-15 | 768869 | | |
| **10577519016** | **Trip Blank** | TO-15 | 768869 | | |



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# AIR: CHAIN-OF-CUSTODY / A

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant f

WO# : 10577519
10577519

51486

Page: 1 of 2

**Section A** Required Client Information:
Company: BCA Environmental
Address: 7702 E 87th St. #110 Indianapolis, IN 46256
Email To: DScovel, RManny
Phone: Fax:
Requested Due Date/TAT: STD

**Section B** Required Project Information:
Report To: DScovel
Copy To: RManny
Purchase Order No.:
Project Name: Lawrence
Project Number: 21-253

**Section C** Invoice Information:
Attention: S Jones
Company Name: BCA
Address: SAME
Pace Quote Reference: Lawrence EPA
Pace Project Manager/Sales Rep. R. BEDEL, L. Trout
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other____

Location of Sampling by State: IN

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level: II.___ III.___ IV.X Other____

Valid Media Codes

| MEDIA | CODE |
|---|---|
| Tedlar Bag | TB |
| 1 Liter Summa Can | 1LC |
| 6 Liter Summa Can | 6LC |
| Low Volume Puff | LVP |
| High Volume Puff | HVP |
| Other | PM10 |

| ITEM # | 'Section D Required Client Information AIR SAMPLE ID (Sample IDs MUST BE UNIQUE) | MEDIA CODE | PID Reading (Client only) | COLLECTED Composite Start DATE | Composite Start TIME | Composite End/Grab DATE | Composite End/Grab TIME | Canister Pressure (Initial Field - in Hg) | Canister Pressure (Final Field - in Hg) | Summa Can Number | Flow Control Number | PM10 | 3C - Fixed Gas (%) | TO-3 BTEX | TO-3M (Methane) | TO-14 | TO-15 Full List VOCs | TO-15 Short List BTEX | TO-15 Short List Chlorinated | TO-15 Short List (other) | Pace Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SS-1 | 1LC | 0 | 8.30.21 | 1149 | 8.30.21 | 1154 | -27 | -6 | 22600 | 1235 | | | | | | | | X | | 001 |
| 2 | SS-2 | 1LC | 0 | | 1137 | | 1142 | -26 | -5 | 37300 | 2770 | | | | | | | | X | | 002 |
| 3 | SS-3 | 1LC | 0 | | 1212 | | 1217 | -29 | 0 | 37006 | 2952 | | | | | | | | X | | 003 |
| 4 | SS-4 | 1LC | 0.3 | | 1055 | | 1100 | -29 | -5 | 37557 | 2749 | | | | | | | | X | | 004 |
| 5 | SS-5 | 1LC | 0.2 | | 1122 | | 1127 | -27 | -6 | 22466 | 2873 | | | | | | | | X | | 005 |
| 6 | SS-6 | 1LC | 0.2 | | 1108 | | 1114 | -29 | -5 | 25055 | 2785 | | | | | | | | X | | 006 |
| 7 | IA-1 DUP | 6LC | - | | 1040 | 8.31.21 | 0904 | -29 | -6 | 21588 | 2107 | | | | | | | | X | | 007 |
| 8 | IA-1 | 6LC | - | | 1040 | | 0904 | -30 | 0 | 09533 | 2103 | | | | | | | | X | | 008 |
| 9 | IA-2 | 6LC | - | | 1042 | | 0909 | -28 | -3 | 20551 | 2158 | | | | | | | | X | | 009 |
| 10 | IA-3 | 6LC | - | | 1039 | | 0902 | -30 | 0 | 20334 | 2052 | | | | | | | | X | | 010 |
| 11 | IA-4 | 6LC | - | | 1033 | | 1005 | -29 | -17 | 33444 | 2139 | | | | | | | | X | | 011 |
| 12 | IA-5 | 6LC | - | | 1035 | | 0911 | -30 | -5 | 3361 | 1992 | | | | | | | | X | | 012 |

Comments: Analyze for: PCE TCE VC

| RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|
| Rhod Manny / BCA | 8/31 | 1445 | [illegible] Pace | 9/3/21 | 14:00 |
| | | | | | |
| | | | | | |
| | | | | | |

SAMPLE CONDITIONS

| | | | |
|---|---|---|---|
| Temp in °C | Received on Ice Y/N | Custody Sealed Cooler Y/N | Samples Intact Y/N |
| | Y/N | Y/N | Y/N |
| | Y/N | Y/N | Y/N |
| | Y/N | Y/N | Y/N |

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Rodney Manny
SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 08/31/21

ORIGINAL



1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

FC046Rev.01, 03Feb2010

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# AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

51487

Page: 2 of 2

**Section A** Required Client Information:
Company: BCA Environmental
Address: 7202 E 87th St. #110 Indianapolis, IN
Email To: DScovel
Phone: Fax:
Requested Due Date/TAT: STD

**Section B** Required Project Information:
Report To: DScovel
Copy To: RManny
Purchase Order No.:
Project Name: Lawrence
Project Number: 21-253

**Section C** Invoice Information:
Attention: S. Jones
Company Name:
Address:
Pace Quote Reference: Lawrence EPA
Pace Project Manager/Sales Rep. R. BEDEL, C. TROUT
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other____

Location of Sampling by State: IN

Reporting Units: ug/m³___ mg/m³___ PPBV___ PPMV___ Other___

Report Level: II.___ III.___ IV.X Other____

Valid Media Codes: MEDIA / CODE: Tedlar Bag TB; 1 Liter Summa Can 1LC; 6 Liter Summa Can 6LC; Low Volume Puff LVP; High Volume Puff HVP; Other PM10

| ITEM # | 'Section D Required Client Information AIR SAMPLE ID (Sample IDs MUST BE UNIQUE) | MEDIA CODE | PID Reading (Client only) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE - END/GRAB DATE | COMPOSITE - END/GRAB TIME | Canister Pressure (Initial Field - in Hg) | Canister Pressure (Final Field - in Hg) | Summa Can Number | Flow Control Number | PM10 | 3C - Fixed Gas (%) | TO-3 BTEX | TO-3M (Methane) | TO-14 | TO-15 Full List VOCs | TO-15 Short List BTEX | TO-15 Short List Chlorinated | TO-15 Short List (other) | Pace Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IA-6 | 6LC | - | 8.30.21 | 1036 | 8.31.21 | 1007 | -30 | -10 | 2387 | 2167 | | | | | | | | | X | 013 |
| 2 | UPWIND | 6LC | - | ↓ | 1011 | ↓ | 0924 | -30 | -5 | 2369 | 2079 | | | | | | | | | X | 014 |
| 3 | DOWNWIND | 6LC | - | ↓ | 1009 | ↓ | 0928 | -30 | -6 | 0818 | 2083 | | | | | | | | | X | 015 |
| 4 | Trip Blank | 1LC | - | — | — | — | — | — | — | 3809 | — | | | | | | | | | X | 016 017 |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |

Comments: Analyze for: PCE, TCE, VC

| RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|
| [signature] | 8/31 | 1445 | [signature] Pace | 9/3/21 | 14:00 |

SAMPLE CONDITIONS: Temp in °C; Received on Ice Y/N; Custody Sealed Cooler Y/N; Samples Intact Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Rhodney Manny
SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY) 08/31/21

ORIGINAL



1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

FC046Rev.01, 03Feb2010

| Pace Analytical® | Document Name: **Sample Condition Upon Receipt (SCUR) - Air** | Document Revised: 24Mar2020 **Page 1 of 1** |
|---|---|---|
| | Document No.: **ENV-FRM-MIN4-0113 Rev.0** | Pace Analytical Services - |

**WO#: 10577519**
PM: CT1 Due Date: 09/13/21
CLIENT: BCA Consult

**Air Sample Condition Upon Receipt**

**Client Name:** BCA **Project #:**

**Courier:** [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Pace [ ] SpeeDee [ ] Commercial **See Exception**

**Tracking Number:** 9753 8445 1565, 2149, 2138, 2150, 1542

**Custody Seal on Cooler/Box Present?** [ ] Yes [X] No **Seals Intact?** [ ] Yes [X] No

**Packing Material:** [ ] Bubble Wrap [ ] Bubble Bags [X] Foam [ ] None [ ] Tin Can [ ] Other:_____ **Temp Blank rec:** [ ] Yes [ ] No

**Temp. (TO17 and TO13 samples only) (°C):** — **Corrected Temp (°C):** —

**Thermometer Used:** [ ] G87A9170600254 [ ] G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** —

**Date & Initials of Person Examining Contents:** RG 9/3/21

**Type of ice Received** [ ] Blue [ ] Wet [X] None

| | | | | **Comments:** |
|---|---|---|---|---|
| Chain of Custody Present? | [X] Yes | [ ] No | | 1. |
| Chain of Custody Filled Out? | [X] Yes | [ ] No | | 2. |
| Chain of Custody Relinquished? | [X] Yes | [ ] No | | 3. |
| Sampler Name and/or Signature on COC? | [X] Yes | [ ] No | [ ] N/A | 4. |
| Samples Arrived within Hold Time? | [X] Yes | [ ] No | | 5. |
| **Short Hold Time Analysis (<72 hr)?** | [ ] Yes | [X] No | | 6. |
| **Rush Turn Around Time Requested?** | [ ] Yes | [X] No | | 7. |
| Sufficient Volume? | [X] Yes | [ ] No | | 8. |
| Correct Containers Used? **(Tedlar bags not acceptable container for TO-14, TO-15 or APH)** -Pace Containers Used? | [X] Yes [X] Yes | [ ] No [ ] No | | 9. |
| Containers Intact? **(visual inspection/no leaks when pressurized)** | [X] Yes | [ ] No | | 10. |
| Media: Air Can Airbag Filter TDT Passive | | | | 11. Individually Certified Cans (Y) N (list which samples) Only T. Blank |
| Is sufficient information available to reconcile samples to the COC? | [X] Yes | [ ] No | | 12. |
| Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)** | [X] Yes | [ ] No | | 13. |

Gauge # [ ] 10AIR26 [X] 10AIR34 [ ] 10AIR35 [ ] 4097

| Canisters | | | | | Canisters | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sample Number | Can ID | Flow Controller | Initial Pressure | Final Pressure | Sample Number | Can ID | Flow Controller | Initial Pressure | Final Pressure |
| SS-1 | 2260 | 1235 | -6 | +10 | IA-2 | 2051 | 2158 | -5 | +5 |
| 2 | 3730 | 2770 | -6 | " | 3 | 2034 | 2052 | 0 | " |
| 3 | 3706 | 2952 | -1 | " | 4 | 3344 | 2139 | -16 | " |
| 4 | 3757 | 2749 | -4 | " | 5 | 3361 | 1992 | -4.5 | " |
| 5 | 3746 | 2873 | -6 | " | 6 | 2387 | 2167 | -8 | " |
| 6 | 2505 | 2785 | -6 | " | UP | 2369 | 2079 | -4 | " |
| IA Dup | 2158 | 2107 | -5 | +5 | DOWN | 818 | 2083 | -4 | " |
| IA-1 | 953 | 2103 | -1 | " | Trip Blank | 3809 | | +17 | |

**CLIENT NOTIFICATION/RESOLUTION** **Field Data Required?** [ ] Yes [ ] No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

**Project Manager Review:** Carolyne Hurst **Date:** 9/7/21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers)

# Fraction: TO15

# Instrument Run Log

Method: TO15

Instrument: 10AIRB  Tune/Internal Standard: 20-239-44-15  Surrogate Lot: N/A
Column: J&W DB-5 0.32mm  Cal Standard: 20-239-45-16/17  2nd Source Std.: 20-25-6-3  ISTD Lot: 20-239-44-15

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 23801.D | BFB | L/ | Tune | 1 | | TUNE | 8/26/21 07:09 | AJA | |
| 23802.D | CCV | G/ | CCal | 1 | | TO15_236_21 | 8/26/21 07:37 | AJA | |
| 23803.D | 0 | G/ | Sample | 1 | | TO15_238_21 | 8/26/21 09:17 | AJA | |
| 23804.D | CAL1 | G/ | Ical | 1 | | TO15_238_21 | 8/26/21 09:44 | AJA | |
| 23805.D | CAL2 | G/ | Ical | 1 | | TO15_238_21 | 8/26/21 10:11 | AJA | |
| 23806.D | CAL3 | G/ | Ical | 1 | | TO15_238_21 | 8/26/21 10:38 | AJA | |
| 23807.D | CAL4 | G/ | Ical | 1 | | TO15_238_21 | 8/26/21 11:06 | AJA | |
| 23808.D | CAL5 | G/ | Ical | 1 | | TO15_238_21 | 8/26/21 11:33 | AJA | |
| 23809.D | CAL6 | G/ | Ical | 1 | | TO15_238_21 | 8/26/21 12:02 | AJA | |
| 23810.D | CAL7 | G/ | Ical | 1 | | TO15_238_21 | 8/26/21 12:31 | AJA | |
| 23811.D | 0 | G/ | Sample | 1 | | TO15_238_21 | 8/26/21 12:58 | AJA | |
| 23812.D | ICV | G/ | LCS | 1 | | TO15_238_21 | 8/26/21 13:25 | AJA | |
| 23812_40077.D | 4084076 | G/40077 | LCS | 1 | | TO15_238_21 | 8/26/21 13:25 | AJA | |
| 23813.D | 0 | G/ | Sample | 1 | | TO15_238_21 | 8/26/21 14:17 | AJA | |
| 23814.D | 10578366010 | G/40189 | Sample | 1 | | TO15_238_21 | 8/26/21 14:45 | AJA | |
| 23814_40077.D | 4084075 | G/40077 | Blank | 1 | | TO15_238_21 | 8/26/21 14:45 | AJA | |
| 23815.D | 0 | G/ | Sample | 1 | | TO15_238_21 | 8/26/21 16:43 | AJA | |
| 23816.D | 10575681015 | G/40069 | Sample | 47 | | TO15_238_21 | 8/26/21 17:10 | AJA | |
| 23817.D | 60377921003 | G/40069 | Sample | 33.6 | | TO15_238_21 | 8/26/21 17:38 | AJA | |
| 23818.D | 10575640002 | G/40069 | Sample | 29.8 | | TO15_238_21 | 8/26/21 18:05 | AJA | |
| 23819.D | 10575640001 | G/40069 | Sample | 46.5 | | TO15_238_21 | 8/26/21 18:33 | AJA | |
| 23820.D | 10575627001 | G/40069 | Sample | 1900.8 | | TO15_238_21 | 8/26/21 19:00 | AJA | |
| 23821.D | 10575998003 | G/40077 | Sample | 1.9 | | TO15_238_21 | 8/26/21 19:29 | AJA | |
| 23822.D | 4086040 | G/40077 | Dupe | 1.9 | | TO15_238_21 | 8/26/21 20:00 | AJA | |
| 23823.D | 10575998008 | G/40077 | Sample | 1.71 | | TO15_238_21 | 8/26/21 20:29 | AJA | |
| 23824.D | 4086041 | G/40077 | Dupe | 1.71 | | TO15_238_21 | 8/26/21 20:59 | AJA | |
| 23825.D | 10575998016 | G/40077 | Sample | 1.9 | | TO15_238_21 | 8/26/21 21:28 | AJA | |
| 23826.D | 10575998017 | G/40077 | Sample | 2.06 | | TO15_238_21 | 8/26/21 21:57 | AJA | |
| 23827.D | 10575998019 | G/40077 | Sample | 1.98 | | TO15_238_21 | 8/26/21 22:27 | AJA | |
| 23828.D | 10575998020 | G/40077 | Sample | 1.98 | | TO15_238_21 | 8/26/21 22:56 | AJA | |
| 23829.D | 10575998004 | G/40077 | Sample | 1.98 | | TO15_238_21 | 8/26/21 23:25 | AJA | |
| 23830.D | 10575998009 | G/40077 | Sample | 1.77 | | TO15_238_21 | 8/26/21 23:54 | AJA | |
| 23831.D | 10575998011 | G/40077 | Sample | 1.71 | | TO15_238_21 | 8/27/21 00:23 | AJA | |
| 23832.D | 10575998014 | G/40077 | Sample | 1.83 | | TO15_238_21 | 8/27/21 00:52 | AJA | |
| 23833.D | 10575998002 | G/40077 | Sample | 1.71 | | TO15_238_21 | 8/27/21 01:22 | AJA | |
| 23834.D | 10575998001 | G/40077 | Sample | 2.19 | | TO15_238_21 | 8/27/21 01:51 | AJA | |
| 23835.D | 10575998007 | G/40077 | Sample | 1.83 | | TO15_238_21 | 8/27/21 02:20 | AJA | |
| 23836.D | 10575998010 | G/40077 | Sample | 1.77 | | TO15_238_21 | 8/27/21 02:49 | AJA | |
| 23837.D | 10575998015 | G/40077 | Sample | 1.98 | | TO15_238_21 | 8/27/21 03:18 | AJA | |
| 23838.D | 10575998018 | G/40077 | Sample | 1.87 | | TO15_238_21 | 8/27/21 03:48 | AJA | |
| 23839.D | 10575998005 | G/40077 | Sample | 1.8 | | TO15_238_21 | 8/27/21 04:17 | AJA | |
| 23840.D | 10575998012 | G/40077 | Sample | 1.71 | | TO15_238_21 | 8/27/21 04:46 | AJA | |
| 23841.D | 10575998013 | G/40077 | Sample | 1.8 | | TO15_238_21 | 8/27/21 05:16 | AJA | |
| 23842.D | 10575998006 | G/40077 | Sample | 57 | | TO15_238_21 | 8/27/21 05:43 | AJA | |

# Instrument Run Log

Method: TO15

Instrument: 10AIRB
Column: J&W DB-5 0.32mm

Tune/Internal Standard: 20-239-44-15
Cal Standard: 20-239-45-16/17
2nd Source Std.: 20-25-6-3

Surrogate Lot: N/A
ISTD Lot: 20-239-44-15

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|

Check Maintenance Items Performed:

| | | |
|---|---|---|
| Changed septum | Clipped column | Changed column - Lot # |
| Cleaned liner | Changed trap - Lot # | Other minor parts replaced |
| Replaced/Cleaned gold seal | Cleaned MS Source | No maintenance performed today |

Additional Comments:

File Path 1: U:\10AIRB.I\082621.B
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 09/22/2021 15:04
Reviewed By/Date:

# Instrument Run Log

Method: TO15

Instrument: 10AIRH  Tune/Internal Standard: 20-239-44-16  Surrogate Lot: N/A
Column: J&W DB-5 0.32mm  Cal Standard: 20-239-47-2/3  2nd Source Std.: 20-25-6-3  ISTD Lot: 20-239-44-16

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 25001.D | BFB | L/ | Tune | 1 | | TUNE | 9/07/21 06:51 | GT | |
| 25002.D | CCV | G/ | CCal | 1 | | TO15_243-21 | 9/07/21 07:17 | GT | |
| 25003.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/07/21 08:00 | GT | |
| 25004.D | CAL1 | G/ | Ical | 1 | | TO15_250-21 | 9/07/21 08:26 | GT | |
| 25005.D | CAL2 | G/ | Ical | 1 | | TO15_250-21 | 9/07/21 08:51 | GT | |
| 25006.D | CAL3 | G/ | Ical | 1 | | TO15_250-21 | 9/07/21 09:17 | GT | |
| 25007.D | CAL4 | G/ | Ical | 1 | | TO15_250-21 | 9/07/21 09:43 | GT | |
| 25008.D | CAL5 | G/ | Ical | 1 | | TO15_250-21 | 9/07/21 10:08 | GT | |
| 25009.D | CAL6 | G/ | Ical | 1 | | TO15_250-21 | 9/07/21 10:34 | GT | |
| 25010.D | CAL7 | G/ | Ical | 1 | | TO15_250-21 | 9/07/21 11:01 | GT | |
| 25011.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/07/21 11:26 | GT | |
| 25012.D | ICV | G/ | LCS | 1 | | TO15_250-21 | 9/07/21 11:51 | GT | |
| 25012_40148.D | 4095658 | G/40148 | LCS | 1 | | TO15_250-21 | 9/07/21 11:51 | GT | |
| 25012_40149.D | 4095664 | G/40149 | LCS | 1 | | TO15_250-21 | 9/07/21 11:51 | GT | |
| 25013.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/07/21 12:16 | GT | |
| 25014.D | 92561801020 | G/40251 | Sample | 0.5 | | TO15_250-21 | 9/07/21 12:44 | GT | |
| 25014_40148.D | 4095657 | G/40148 | Blank | 0.5 | | TO15_250-21 | 9/07/21 12:44 | GT | |
| 25014_40149.D | 4095663 | G/40149 | Blank | 0.5 | | TO15_250-21 | 9/07/21 12:44 | GT | |
| 25015.D | BC | G/ | Sample | 1 | | TO15_250-21 | 9/07/21 13:10 | GT | |
| 25016.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/07/21 16:20 | GT | |
| 25017.D | 60378968001 | G/40131 | Sample | 102.6 | | TO15_250-21 | 9/07/21 16:45 | GT | |
| 25018.D | 10576494009 | G/40148 | Sample | 1.44 | | TO15_250-21 | 9/07/21 17:12 | GT | |
| 25019.D | 10577272003 | G/40148 | Sample | 6.8 | | TO15_250-21 | 9/07/21 17:38 | GT | |
| 25020.D | 10577272003 | G/40148 | Sample | 27.2 | | TO15_250-21 | 9/07/21 18:03 | GT | |
| 25021.D | 10577272006 | G/40148 | Sample | 8.4 | | TO15_250-21 | 9/07/21 18:28 | GT | |
| 25022.D | 10577272006 | G/40148 | Sample | 33.6 | | TO15_250-21 | 9/07/21 18:53 | GT | |
| 25023.D | 30437884005 | G/40149 | Sample | 9.5 | | TO15_250-21 | 9/07/21 19:18 | GT | |
| 25024.D | 30437884006 | G/40149 | Sample | 9.5 | | TO15_250-21 | 9/07/21 19:44 | GT | |
| 25025.D | 30438619001 | G/40149 | Sample | 1.46 | | TO15_250-21 | 9/07/21 20:11 | GT | |
| 25026.D | 30438619002 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/07/21 20:38 | GT | |
| 25027.D | 4097598 | G/40149 | Dupe | 1.49 | | TO15_250-21 | 9/07/21 21:05 | GT | |
| 25028.D | 30438619003 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/07/21 21:32 | GT | |
| 25029.D | 30438619004 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/07/21 21:59 | GT | |
| 25030.D | 30438619005 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/07/21 22:25 | GT | |
| 25031.D | 30438619006 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/07/21 22:52 | GT | |
| 25032.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/07/21 23:17 | GT | |
| 25033.D | 30438619008 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/07/21 23:44 | GT | |
| 25034.D | 30438619009 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/08/21 00:11 | GT | |
| 25035.D | 30438619010 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/08/21 00:38 | GT | |
| 25036.D | 30438619011 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/08/21 01:05 | GT | |
| 25037.D | 30438619012 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/08/21 01:32 | GT | |
| 25038.D | 30438619007 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/08/21 01:58 | GT | |
| 25039.D | 30438619007 | G/40149 | Sample | 44.7 | | TO15_250-21 | 9/08/21 02:23 | GT | |
| 25040.D | 10576684001 | G/40149 | Sample | 1.52 | | TO15_250-21 | 9/08/21 02:50 | GT | |
| 25041.D | 10576684002 | G/40149 | Sample | 1.52 | | TO15_250-21 | 9/08/21 03:17 | GT | |
| 25042.D | 10576684003 | G/40149 | Sample | 1.49 | | TO15_250-21 | 9/08/21 03:44 | GT | |

# Instrument Run Log

Method: TO15

Instrument: 10AIRH
Column: J&W DB-5 0.32mm

Tune/Internal Standard: 20-239-44-16
Cal Standard: 20-239-47-2/3

2nd Source Std.: 20-25-6-3

Surrogate Lot: N/A
ISTD Lot: 20-239-44-16

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 25043.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/08/21 04:09 | GT | |

Check Maintenance Items Performed:

| | | |
|---|---|---|
| Changed septum | Clipped column | Changed column - Lot # |
| Cleaned liner | Changed trap - Lot # | Other minor parts replaced |
| Replaced/Cleaned gold seal | Cleaned MS Source | No maintenance performed today |

Additional Comments:

File Path 1: U:\10AIRH.I\090721.B
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 09/22/2021 14:54
Reviewed By/Date:

# Instrument Run Log

Method: TO15

Instrument: 10AIRB | Tune/Internal Standard: 20-239-44-15 | Surrogate Lot: N/A
Column: J&W DB-5 0.32mm | Cal Standard: 20-239-45-17 | 2nd Source Std.: 20-25-6-3 | ISTD Lot: 20-239-44-15

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 25101.D | BFB | L/ | Tune | 1 | | TUNE | 9/08/21 09:25 | HMH | |
| 25102.D | CCV | G/ | CCal | 1 | | TO15_238_21 | 9/08/21 09:52 | HMH | |
| 25102_40159.D | 4096964 | G/40159 | LCS | 1 | | TO15_238_21 | 9/08/21 09:52 | HMH | |
| 25103.D | 0 | G/ | Sample | 1 | | TO15_238_21 | 9/08/21 10:20 | HMH | |
| 25104.D | IC | G/ | Sample | 0.5 | | TO15_238_21 | 9/08/21 10:50 | HMH | |
| 25105.D | IC | G/ | Sample | 0.5 | | TO15_238_21 | 9/08/21 11:21 | HMH | |
| 25105_40159.D | 4096963 | G/40159 | Blank | 0.5 | | TO15_238_21 | 9/08/21 11:21 | HMH | |
| 25106.D | 10577270002 | G/40136 | Sample | 1.9 | | TO15_238_21 | 9/08/21 11:52 | HMH | |
| 25107.D | 10577270003 | G/40136 | Sample | 2.06 | | TO15_238_21 | 9/08/21 12:24 | HMH | |
| 25108.D | 92559019001 | G/40136 | Sample | 22.4 | | TO15_238_21 | 9/08/21 12:52 | HMH | |
| 25109.D | 4095235 | G/40136 | Dupe | 22.4 | | TO15_238_21 | 9/08/21 13:20 | HMH | |
| 25110.D | 92559019002 | G/40136 | Sample | 14.9 | | TO15_238_21 | 9/08/21 13:48 | HMH | |
| 25111.D | 0 | G/ | Sample | 1 | | TO15_238_21 | 9/08/21 15:12 | HMH | |
| 25112.D | 30437779004 | G/40159 | Sample | 1.58 | | TO15_238_21 | 9/08/21 15:42 | HMH | |
| 25113.D | 10577378002 | G/40159 | Sample | 1.64 | | TO15_238_21 | 9/08/21 16:11 | HMH | |
| 25114.D | 4098167 | G/40159 | Dupe | 1.64 | | TO15_238_21 | 9/08/21 16:41 | HMH | |
| 25115.D | 10577378001 | G/40159 | Sample | 1.58 | | TO15_238_21 | 9/08/21 17:10 | HMH | |
| 25116.D | 4098166 | G/40159 | Dupe | 1.58 | | TO15_238_21 | 9/08/21 17:40 | HMH | |
| 25117.D | 10577519007 | G/40159 | Sample | 1.61 | | TO15_238_21 | 9/08/21 18:09 | HMH | |
| 25118.D | 10577519008 | G/40159 | Sample | 1.39 | | TO15_238_21 | 9/08/21 18:39 | HMH | |
| 25119.D | 30437945001 | G/40159 | Sample | 1.46 | | TO15_238_21 | 9/08/21 19:08 | HMH | |
| 25120.D | 30437945003 | G/40159 | Sample | 1.64 | | TO15_238_21 | 9/08/21 19:38 | HMH | |
| 25121.D | 30437945004 | G/40159 | Sample | 1.68 | | TO15_238_21 | 9/08/21 20:07 | HMH | |
| 25122.D | 0 | G/40159 | Sample | 1 | | TO15_238_21 | 9/08/21 20:34 | HMH | |
| 25123.D | 10577519001 | G/40159 | Sample | 2.1 | | TO15_238_21 | 9/08/21 21:04 | HMH | |
| 25124.D | 10577519002 | G/40159 | Sample | 2.1 | | TO15_238_21 | 9/08/21 21:33 | HMH | |
| 25125.D | 10577519003 | G/40159 | Sample | 1.74 | | TO15_238_21 | 9/08/21 22:04 | HMH | |
| 25126.D | 30437779002 | G/40159 | Sample | 2.24 | | TO15_238_21 | 9/08/21 22:34 | HMH | |
| 25127.D | 30437779003 | G/40159 | Sample | 2.15 | | TO15_238_21 | 9/08/21 23:05 | HMH | |
| 25128.D | 10577519004 | G/40159 | Sample | 1.94 | | TO15_238_21 | 9/08/21 23:34 | HMH | |
| 25129.D | 10577519005 | G/40159 | Sample | 2.1 | | TO15_238_21 | 9/09/21 00:03 | HMH | |
| 25130.D | 10577519006 | G/40159 | Sample | 2.1 | | TO15_238_21 | 9/09/21 00:32 | HMH | |
| 25131.D | 10577378003 | G/40159 | Sample | 1.83 | | TO15_238_21 | 9/09/21 01:02 | HMH | |
| 25132.D | 10577378004 | G/40159 | Sample | 1.9 | | TO15_238_21 | 9/09/21 01:31 | HMH | |
| 25133.D | 10577378004 | G/40159 | Sample | 57 | | TO15_238_21 | 9/09/21 01:58 | HMH | |
| 25134.D | 30437779001 | G/40159 | Sample | 15513. | | TO15_238_21 | 9/09/21 02:25 | HMH | |
| 25135.D | 0 | G/ | Sample | 1 | | TO15_238_21 | 9/09/21 02:52 | HMH | |

# Instrument Run Log

Method: TO15

Instrument: 10AIRB
Column: J&W DB-5 0.32mm

Tune/Internal Standard: 20-239-44-15
Cal Standard: 20-239-45-17

2nd Source Std.: 20-25-6-3

Surrogate Lot: N/A
ISTD Lot: 20-239-44-15

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|

Check Maintenance Items Performed:

| | | |
|---|---|---|
| Changed septum | Clipped column | Changed column - Lot # |
| Cleaned liner | Changed trap - Lot # | Other minor parts replaced |
| Replaced/Cleaned gold seal | Cleaned MS Source | No maintenance performed today |

Additional Comments:

File Path 1: T:\10AIRB.I\090821.B
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 10/28/2021 10:20
Reviewed By/Date:

# Instrument Run Log

Method: TO15

Instrument: 10AIRH | Tune/Internal Standard: 20-239-44-16 | Surrogate Lot: N/A
Column: J&W DB-5 0.32mm | Cal Standard: 20-239-47-3 | 2nd Source Std.: 20-25-6-3 | ISTD Lot: 20-239-44-16

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 25101.D | BFB | L/ | Tune | 1 | | TUNE | 9/08/21 06:52 | GT | |
| 25102.D | CCV | G/ | CCal | 1 | | TO15_250-21 | 9/08/21 07:18 | GT | |
| 25102_40152.D | 4096714 | G/40152 | LCS | 1 | | TO15_250-21 | 9/08/21 07:18 | GT | |
| 25102_40160.D | 4096971 | G/40160 | LCS | 1 | | TO15_250-21 | 9/08/21 07:18 | GT | |
| 25103.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/08/21 08:37 | GT | |
| 25104.D | 10582471008 | G/40395 | Sample | 0.5 | | TO15_250-21 | 9/08/21 09:05 | GT | |
| 25104_40152.D | 4096713 | G/40152 | Blank | 0.5 | | TO15_250-21 | 9/08/21 09:05 | GT | |
| 25104_40160.D | 4096970 | G/40160 | Blank | 0.5 | | TO15_250-21 | 9/08/21 09:05 | GT | |
| 25105.D | 10582471002 | G/40395 | Sample | 0.5 | | TO15_250-21 | 9/08/21 09:33 | GT | |
| 25106.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/08/21 10:55 | GT | |
| 25107.D | 10577438039 | G/40152 | Sample | 3.1 | | TO15_250-21 | 9/08/21 11:22 | GT | |
| 25108.D | 10577253002 | G/40137 | Sample | 6566.4 | | TO15_250-21 | 9/08/21 11:47 | GT | |
| 25109.D | 10577190001 | G/40137 | Sample | 15820. | | TO15_250-21 | 9/08/21 12:12 | GT | |
| 25110.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/08/21 16:04 | GT | |
| 25111.D | 10577519016 | G/40160 | Sample | 1 | | TO15_250-21 | 9/08/21 16:31 | GT | |
| 25112.D | 4098708 | G/40160 | Dupe | 1 | | TO15_250-21 | 9/08/21 16:58 | GT | |
| 25113.D | 10577519009 | G/40160 | Sample | 1.61 | | TO15_250-21 | 9/08/21 17:25 | GT | |
| 25114.D | 4098707 | G/40160 | Dupe | 1.61 | | TO15_250-21 | 9/08/21 17:52 | GT | |
| 25115.D | 10577519010 | G/40160 | Sample | 1.34 | | TO15_250-21 | 9/08/21 18:19 | GT | |
| 25116.D | 10577519011 | G/40160 | Sample | 2.88 | | TO15_250-21 | 9/08/21 18:46 | GT | |
| 25117.D | 10577519012 | G/40160 | Sample | 1.58 | | TO15_250-21 | 9/08/21 19:13 | GT | |
| 25118.D | 10577519013 | G/40160 | Sample | 1.83 | | TO15_250-21 | 9/08/21 19:40 | GT | |
| 25119.D | 10577519014 | G/40160 | Sample | 1.55 | | TO15_250-21 | 9/08/21 20:07 | GT | |
| 25120.D | 10577519015 | G/40160 | Sample | 1.55 | | TO15_250-21 | 9/08/21 20:34 | GT | |
| 25121.D | 10577519015 | G/40160 | Sample | 46.5 | | TO15_250-21 | 9/08/21 20:59 | GT | |
| 25122.D | 10577521001 | G/40160 | Sample | 1.61 | | TO15_250-21 | 9/08/21 21:26 | GT | |
| 25123.D | 10577521003 | G/40160 | Sample | 1.64 | | TO15_250-21 | 9/08/21 21:53 | GT | |
| 25124.D | 10577521004 | G/40160 | Sample | 1.61 | | TO15_250-21 | 9/08/21 22:20 | GT | |
| 25125.D | 10577521005 | G/40160 | Sample | 1.68 | | TO15_250-21 | 9/08/21 22:47 | GT | |
| 25126.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/08/21 23:15 | GT | |
| 25127.D | 10577521006 | G/40160 | Sample | 1.49 | | TO15_250-21 | 9/08/21 23:42 | GT | |
| 25128.D | 10577521007 | G/40160 | Sample | 1.61 | | TO15_250-21 | 9/09/21 00:09 | GT | |
| 25129.D | 10577521008 | G/40160 | Sample | 1.55 | | TO15_250-21 | 9/09/21 00:36 | GT | |
| 25130.D | 10577521009 | G/40160 | Sample | 1.96 | | TO15_250-21 | 9/09/21 01:02 | GT | |
| 25131.D | 10577521011 | G/40160 | Sample | 1.55 | | TO15_250-21 | 9/09/21 01:29 | GT | |
| 25132.D | 10577521010 | G/40160 | Sample | 372 | | TO15_250-21 | 9/09/21 01:54 | GT | |
| 25133.D | 10577521002 | G/40160 | Sample | 744 | | TO15_250-21 | 9/09/21 02:19 | GT | |
| 25134.D | 0 | G/ | Sample | 1 | | TO15_250-21 | 9/09/21 02:44 | GT | |

# Instrument Run Log

Method: TO15

Instrument: 10AIRH
Column: J&W DB-5 0.32mm

Tune/Internal Standard: 20-239-44-16
Cal Standard: 20-239-47-3
2nd Source Std.: 20-25-6-3

Surrogate Lot: N/A
ISTD Lot: 20-239-44-16

| Path/File | Lab ID | Matrix/Batch | Type | DF | pH | Method | Date&Time | Oper. | Comments |
|---|---|---|---|---|---|---|---|---|---|

Check Maintenance Items Performed:

| | | |
|---|---|---|
| Changed septum | Clipped column | Changed column - Lot # |
| Cleaned liner | Changed trap - Lot # | Other minor parts replaced |
| Replaced/Cleaned gold seal | Cleaned MS Source | No maintenance performed today |

Additional Comments:

File Path 1: T:\10AIRH.I\090821.B
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 10/28/2021 10:28
Reviewed By/Date:

Report Date : 27-Aug-2021 09:39

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2021 09:44
End Cal Date : 26-AUG-2021 12:31
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Last Edit : 27-Aug-2021 09:34 10airB.i

Calibration File Names:
Level 01: all \\192.168.10.12\chem\10airB.i\082621.b\23804.D
Level 02: all \\192.168.10.12\chem\10airB.i\082621.b\23805.D
Level 03: all \\192.168.10.12\chem\10airB.i\082621.b\23806.D
Level 04: all \\192.168.10.12\chem\10airB.i\082621.b\23807.D
Level 05: all \\192.168.10.12\chem\10airB.i\082621.b\23808.D
Level 06: all \\192.168.10.12\chem\10airB.i\082621.b\23809.D
Level 07: all \\192.168.10.12\chem\10airB.i\082621.b\23810.D

| Compound (all.sb) | 0.1000000 Level 1 / 30.0000 Level 7 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 0.07725<br>0.10640 | 0.10117 | 0.09935 | 0.10365 | 0.11916 | 0.11083 | AVRG | | 0.10254 | | 12.66850 |
| 2 Propylene | 0.10357<br>0.10772 | 0.10698 | 0.10710 | 0.10951 | 0.12116 | 0.11234 | AVRG | | 0.10977 | | 5.18009 |
| 3 Chlorodifluoromethane | +++++<br>0.03777 | 0.02794 | 0.03379 | 0.03552 | 0.04123 | 0.03907 | AVRG | | 0.03589 | | 13.05946 |
| 4 Dichlorodifluoromethane | 0.39748<br>0.42943 | 0.42535 | 0.43489 | 0.43262 | 0.48145 | 0.45065 | AVRG | | 0.43598 | | 5.87247 |

Report Date : 27-Aug-2021 09:39

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2021 09:44
End Cal Date : 26-AUG-2021 12:31
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Last Edit : 27-Aug-2021 09:34 10airB.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 5 Chloromethane | 0.12944<br>0.15937 | 0.15354 | 0.15899 | 0.15929 | 0.18277 | 0.16863 | AVRG | | 0.15886 | | 10.15586 |
| 6 Dichlorotetrafluoroethane | 0.47941<br>0.50192 | 0.52780 | 0.52952 | 0.52107 | 0.58067 | 0.53105 | AVRG | | 0.52449 | | 5.92231 |
| 7 Vinyl chloride | 0.13372<br>0.17911 | 0.16126 | 0.16645 | 0.16563 | 0.19741 | 0.18461 | AVRG | | 0.16974 | | 11.95694 |
| 8 1,3-Butadiene | +++++<br>0.12895 | 0.10274 | 0.11502 | 0.11879 | 0.14321 | 0.13308 | AVRG | | 0.12363 | | 11.63789 |
| 9 Bromomethane | 0.14033<br>0.17919 | 0.16000 | 0.16925 | 0.17423 | 0.20029 | 0.18950 | AVRG | | 0.17326 | | 11.31677 |
| 10 Chloroethane | +++++<br>0.09393 | 0.07911 | 0.08846 | 0.08786 | 0.10474 | 0.09882 | AVRG | | 0.09215 | | 9.80452 |
| 11 Ethanol | 0.05448<br>0.05259 | 0.05545 | 0.05708 | 0.05618 | 0.05898 | 0.05617 | AVRG | | 0.05585 | | 3.59219 |

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INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2021 09:44
End Cal Date : 26-AUG-2021 12:31
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Last Edit : 27-Aug-2021 09:34 10airB.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 12 Vinyl Bromide | +++++ | 0.15717 | 0.17026 | 0.17555 | 0.20380 | 0.18907 | | | | | |
| | 0.17561 | | | | | | AVRG | | 0.17858 | | 9.00118 |
| 13 Isopentane | 0.18973 | 0.21627 | 0.22336 | 0.21421 | 0.17652 | 0.16709 | | | | | |
| | 0.16097 | | | | | | AVRG | | 0.19259 | | 13.22442 |
| 14 Freon 123 | 0.36923 | 0.41319 | 0.42726 | 0.42108 | 0.47401 | 0.44028 | | | | | |
| | 0.40654 | | | | | | AVRG | | 0.42166 | | 7.60403 |
| 15 Trichlorofluoromethane | 0.38093 | 0.42531 | 0.42252 | 0.42153 | 0.47787 | 0.44650 | | | | | |
| | 0.41968 | | | | | | AVRG | | 0.42776 | | 6.87742 |
| 16 Acrolein | 1832 | 4343 | 12428 | 26257 | 483942 | 946938 | | | | | |
| | 1510083 | | | | | | QUAD | -0.00190 | 0.07849 | -0.00119 | 0.99995 |
| 17 Acetone | 0.18922 | 0.19520 | 0.18865 | 0.19083 | 0.22338 | 0.20647 | | | | | |
| | 0.19771 | | | | | | AVRG | | 0.19878 | | 6.28207 |
| 18 Isopropyl Alcohol | 0.24388 | 0.24677 | 0.25254 | 0.25089 | 0.27153 | 0.25082 | | | | | |
| | 0.23769 | | | | | | AVRG | | 0.25059 | | 4.21196 |

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Last Edit : 27-Aug-2021 09:34 10airB.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | 30.0000 Level 7 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 1,1-Dichloroethene | 0.21599 | 0.25287 | 0.25516 | 0.25333 | 0.29598 | 0.28317 | 0.26779 | AVRG | | 0.26061 | | 9.83880 |
| 20 Acrylonitrile | 1245 | 5631 | 17532 | 37652 | 827579 | 1586311 | 2507909 | QUAD | -0.00458 | 0.13758 | -0.00250 | 0.99987 |
| 21 Freon 113 | 0.35093 | 0.39810 | 0.41363 | 0.41036 | 0.45177 | 0.41187 | 0.38221 | AVRG | | 0.40269 | | 7.71499 |
| 22 Methyl Acetate | 2962 | 7272 | 19031 | 39691 | 768251 | 1331184 | +++++ | QUAD | -0.00502 | 0.40083 | -0.05440 | 0.99984 |
| 23 Tert Butyl Alcohol (TBA) | 0.33642 | 0.34488 | 0.35484 | 0.35941 | 0.43234 | 0.38833 | 0.37112 | AVRG | | 0.36962 | | 8.78287 |
| 24 Allyl Chloride | +++++ | 0.07557 | 0.07835 | 0.08144 | 0.09838 | 0.08985 | 0.08292 | AVRG | | 0.08442 | | 9.91897 |
| 25 Methylene chloride | 0.14432 | 0.16001 | 0.16723 | 0.16500 | 0.18025 | 0.16493 | 0.14999 | AVRG | | 0.16168 | | 7.30876 |

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| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 26 Carbon Disulfide | 0.46354 | 0.52081 | 0.52610 | 0.52111 | 0.61151 | 0.57834 | | | | | |
| | 0.56038 | | | | | | AVRG | | 0.54026 | | 8.86495 |
| 27 trans-1,2-dichloroethene | +++++ | 0.17188 | 0.18342 | 0.18740 | 0.22931 | 0.21612 | | | | | |
| | 0.20703 | | | | | | AVRG | | 0.19919 | | 10.97213 |
| 28 Methyl Tert Butyl Ether | 0.43692 | 0.47713 | 0.49908 | 0.49454 | 0.57774 | 0.54289 | | | | | |
| | 0.52251 | | | | | | AVRG | | 0.50726 | | 9.01721 |
| 29 Vinyl Acetate | 3434 | 9047 | 24005 | 47066 | 900728 | 1872527 | | | | | |
| | 3234741 | | | | | | QUAD | -0.00284 | 0.32452 | 0.00252 | 0.99997 |
| 30 1,1-Dichloroethane | 0.27678 | 0.30040 | 0.30847 | 0.30283 | 0.35706 | 0.33769 | | | | | |
| | 0.33135 | | | | | | AVRG | | 0.31637 | | 8.56143 |
| 31 Methyl Ethyl Ketone | +++++ | +++++ | 0.08568 | 0.09223 | 0.11173 | 0.10722 | | | | | |
| | 0.10179 | | | | | | AVRG | | 0.09973 | | 10.72961 |
| 32 n-Hexane | 3646 | 8117 | 22747 | 46208 | 744793 | 1432439 | | | | | |
| | 2245282 | | | | | | QUAD | -0.00160 | 0.34872 | -0.01852 | 0.99995 |

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| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 33 Di-isopropyl Ether | 0.40489<br>0.48101 | 0.47094 | 0.50398 | 0.50432 | 0.55574 | 0.51007 | AVRG | | 0.49014 | | 9.42834 |
| 34 Ethyl Acetate | +++++<br>0.34273 | 0.26761 | 0.30432 | 0.29563 | 0.36094 | 0.35285 | AVRG | | 0.32068 | | 11.54471 |
| 35 cis-1,2-Dichloroethene | +++++<br>0.21816 | 0.17593 | 0.19326 | 0.19658 | 0.23727 | 0.22510 | AVRG | | 0.20772 | | 11.03694 |
| 36 Ethyl Tert-Butyl Ether | 0.44389<br>0.58161 | 0.50558 | 0.53030 | 0.52997 | 0.62832 | 0.59420 | AVRG | | 0.54484 | | 11.34453 |
| 37 Chloroform | 0.32194<br>0.40281 | 0.36598 | 0.37097 | 0.37079 | 0.44097 | 0.41113 | AVRG | | 0.38351 | | 10.01643 |
| 38 Tetrahydrofuran | +++++<br>0.17797 | 0.13015 | 0.14932 | 0.15335 | 0.18675 | 0.18261 | AVRG | | 0.16336 | | 13.77291 |
| 39 1,1,1-Trichloroethane | 0.32809<br>0.38869 | 0.35682 | 0.36255 | 0.35661 | 0.42571 | 0.39982 | AVRG | | 0.37404 | | 8.72649 |

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| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 40 1,2-Dichloroethane | +++++ | 0.15735 | 0.18271 | 0.18651 | 0.23027 | 0.21985 | | | | | |
| | 0.21870 | | | | | | AVRG | | 0.19923 | | 14.11848 |
| 41 Benzene | 0.55843 | 0.60895 | 0.61424 | 0.60902 | 0.70385 | 0.65279 | | | | | |
| | 0.61990 | | | | | | AVRG | | 0.62388 | | 7.18847 |
| 42 Carbon tetrachloride | 0.28629 | 0.32844 | 0.33296 | 0.32980 | 0.41513 | 0.39492 | | | | | |
| | 0.38282 | | | | | | AVRG | | 0.35291 | | 12.93321 |
| 43 Cyclohexane | 0.26421 | 0.27205 | 0.27125 | 0.27829 | 0.31454 | 0.29674 | | | | | |
| | 0.28126 | | | | | | AVRG | | 0.28262 | | 6.16049 |
| 44 Tert Amyl Methyl Ether | 27404 | 36148 | 61587 | 105833 | 1463177 | 2933563 | | | | | |
| | 4824795 | | | | | | QUAD | 0.00531 | 0.64948 | -0.01400 | 0.99998 |
| 46 2,2,4-Trimethylpentane | 0.80371 | 0.85233 | 0.86222 | 0.85679 | 0.98442 | 0.92156 | | | | | |
| | 0.88427 | | | | | | AVRG | | 0.88076 | | 6.56901 |
| 47 Heptane | 0.23207 | 0.25910 | 0.26856 | 0.26531 | 0.30746 | 0.29038 | | | | | |
| | 0.28045 | | | | | | AVRG | | 0.27190 | | 8.86262 |

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| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 48 Trichloroethene | 0.24882 | 0.27754 | 0.27960 | 0.27613 | 0.33892 | 0.32143 | | | | | |
| | 0.30995 | | | | | | AVRG | | 0.29320 | | 10.65760 |
| 49 Methyl methacrylate | 0.20836 | 0.20478 | 0.21973 | 0.22337 | 0.23759 | 0.22728 | | | | | |
| | 0.22009 | | | | | | AVRG | | 0.22017 | | 5.04597 |
| 50 1,2-Dichloropropane | 0.16355 | 0.19686 | 0.20267 | 0.20413 | 0.23170 | 0.21824 | | | | | |
| | 0.20739 | | | | | | AVRG | | 0.20350 | | 10.36408 |
| 51 1,4-Dioxane | +++++ | 0.12422 | 0.11930 | 0.13299 | 0.16676 | 0.15877 | | | | | |
| | 0.15049 | | | | | | AVRG | | 0.14209 | | 13.64319 |
| 52 Bromodichloromethane | 0.30974 | 0.36161 | 0.36287 | 0.36383 | 0.44079 | 0.42399 | | | | | |
| | 0.40991 | | | | | | AVRG | | 0.38182 | | 11.87307 |
| 53 Methylcyclohexane | 0.14254 | 0.15310 | 0.18139 | 0.18217 | 0.21134 | 0.19952 | | | | | |
| | 0.19286 | | | | | | AVRG | | 0.18042 | | 13.69190 |
| 54 Methyl Isobutyl Ketone | 3242 | 8764 | 23809 | 51420 | 904175 | 1823087 | | | | | |
| | 2994408 | | | | | | QUAD | -0.00315 | 0.40773 | -0.00969 | 0.99998 |

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| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 55 cis-1,3-Dichloropropene | +++++ | 0.25916 | 0.28891 | 0.28894 | 0.37708 | 0.36949 | | | | | |
| | 0.36097 | | | | | | AVRG | | 0.32409 | | 15.68308 |
| 56 trans-1,3-Dichloropropene | 1868 | 5335 | 16698 | 35890 | 718416 | 1470942 | | | | | |
| | 2479182 | | | | | | QUAD | -0.00329 | 0.31336 | -0.00253 | 0.99997 |
| 57 Toluene | 0.63446 | 0.68905 | 0.72578 | 0.72123 | 0.87494 | 0.83618 | | | | | |
| | 0.80069 | | | | | | AVRG | | 0.75462 | | 11.33981 |
| 58 1,1,2-Trichloroethane | 0.17963 | 0.22053 | 0.23631 | 0.23092 | 0.28163 | 0.26995 | | | | | |
| | 0.26123 | | | | | | AVRG | | 0.24003 | | 14.43288 |
| 59 Methyl Butyl Ketone | 806 | 4453 | 15137 | 36337 | 801007 | 1682927 | | | | | |
| | 2810606 | | | | | | QUAD | -0.00709 | 0.46939 | -0.00759 | 0.99996 |
| 60 n-Octane | 4585 | 10403 | 27523 | 56298 | 940930 | 1861162 | | | | | |
| | 3000028 | | | | | | QUAD | -0.00271 | 0.55210 | -0.02317 | 0.99998 |
| 61 Dibromochloromethane | 0.44371 | 0.49755 | 0.51752 | 0.50060 | 0.61421 | 0.58633 | | | | | |
| | 0.56089 | | | | | | AVRG | | 0.53154 | | 11.05590 |

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| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 62 Tetrachloroethene | 0.43184 | 0.50570 | 0.50505 | 0.48904 | 0.56708 | 0.53793 | | | | | |
| | 0.50671 | | | | | | AVRG | | 0.50619 | | 8.27973 |
| 63 1,2-Dibromoethane | 0.31666 | 0.38606 | 0.41378 | 0.41316 | 0.53528 | 0.51678 | | | | | |
| | 0.49755 | | | | | | AVRG | | 0.43990 | | 18.04711 |
| 65 Chlorobenzene | 0.66508 | 0.70674 | 0.72773 | 0.72344 | 0.86536 | 0.82979 | | | | | |
| | 0.79766 | | | | | | AVRG | | 0.75940 | | 9.55849 |
| 66 Ethyl Benzene | 11473 | 26082 | 67849 | 139949 | 2478309 | 4929122 | | | | | |
| | 8012860 | | | | | | QUAD | -0.00908 | 1.43614 | -0.05324 | 0.99998 |
| 67 m&p-Xylene | 0.74471 | 0.82181 | 0.86263 | 0.88625 | 1.05705 | 1.00960 | | | | | |
| | 0.95460 | | | | | | AVRG | | 0.90523 | | 12.04068 |
| 68 n-Nonane | 3563 | 9074 | 24559 | 53558 | 961218 | 1910453 | | | | | |
| | 3052187 | | | | | | QUAD | -0.00479 | 0.57047 | -0.02594 | 0.99999 |
| 69 Styrene | 4635 | 12563 | 36470 | 77787 | 1523479 | 3107129 | | | | | |
| | 5093025 | | | | | | QUAD | -0.00941 | 0.88703 | -0.02628 | 0.99998 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 70 o-Xylene | 0.78930 | 0.86551 | 0.92987 | 0.92416 | 1.08446 | 1.02932 | | | | | |
| | 0.97873 | | | | | | AVRG | | 0.94305 | | 10.50590 |
| 71 Bromoform | +++++ | 0.41744 | 0.44811 | 0.44879 | 0.57558 | 0.55499 | | | | | |
| | 0.53260 | | | | | | AVRG | | 0.49625 | | 13.31979 |
| 72 1,1,2,2-Tetrachloroethane | 6041 | 14186 | 36373 | 75913 | 1370201 | 2721338 | | | | | |
| | 4415822 | | | | | | QUAD | -0.00553 | 0.79778 | -0.03057 | 0.99997 |
| 73 Isopropylbenzene | 12606 | 29461 | 78334 | 160832 | 2895423 | 5722192 | | | | | |
| | 9258344 | | | | | | QUAD | -0.01120 | 1.70785 | -0.06987 | 0.99997 |
| 74 N-Propylbenzene | 11793 | 28293 | 81826 | 175141 | 3345577 | 6639821 | | | | | |
| | 10552137 | | | | | | QUAD | -0.01988 | 1.98885 | -0.09540 | 0.99998 |
| 75 2-Chlorotoluene | 0.86636 | 0.97225 | 0.90805 | 0.95276 | 1.12506 | 1.07446 | | | | | |
| | 0.99132 | | | | | | AVRG | | 0.98432 | | 9.16718 |
| 76 4-Ethyltoluene | 8757 | 22689 | 63387 | 139445 | 2718591 | 5460712 | | | | | |
| | 8938069 | | | | | | QUAD | -0.01542 | 1.59088 | -0.05267 | 0.99998 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 1,3,5-Trimethylbenzene | 0.98557<br>1.21032 | 1.08501 | 1.10126 | 1.13796 | 1.36227 | 1.29154 | AVRG | | 1.16770 | | 11.07343 |
| 78 n-Decane | 3477<br>4187424 | 10802 | 29904 | 65749 | 1328669 | 2614433 | QUAD | -0.00673 | 0.60485 | -0.02415 | 0.99995 |
| 79 Tert-Butyl Benzene | 1.04050<br>1.21040 | 1.07423 | 1.08805 | 1.13225 | 1.36530 | 1.27305 | AVRG | | 1.16911 | | 10.14888 |
| 80 1,2,4-Trimethylbenzene | 9195<br>7691463 | 22672 | 60178 | 129672 | 2397844 | 4745198 | QUAD | -0.01090 | 1.39594 | -0.05515 | 0.99996 |
| 81 Sec- Butylbenzene | 14610<br>10961627 | 35457 | 97683 | 202299 | 3593068 | 6978263 | QUAD | -0.01529 | 2.12534 | -0.11807 | 0.99997 |
| 82 1,3-Dichlorobenzene | 4019<br>4777115 | 9907 | 28092 | 60141 | 1382636 | 2880436 | QUAD | -0.01147 | 0.80455 | -0.01684 | 0.99995 |
| 83 Benzyl Chloride | 2182<br>4985892 | 5806 | 17391 | 43338 | 1323111 | 2977905 | QUAD | -0.01870 | 0.78480 | -0.00284 | 0.99958 |

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Method file : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Last Edit : 27-Aug-2021 09:34 10airB.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | 30.0000 Level 7 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84 1,4-Dichlorobenzene | 3854 | 7927 | 23388 | 50151 | 1241921 | 2640778 | 4412996 | QUAD | -0.01185 | 0.72429 | -0.00991 | 0.99991 |
| 85 p-Isopropyltoluene | 12012 | 30167 | 83245 | 175861 | 3289572 | 6383910 | 9916516 | QUAD | -0.01800 | 1.95934 | -0.11773 | 0.99997 |
| 86 1,2,3-Trimethylbenzene | 10586 | 24525 | 65818 | 138129 | 2499273 | 4905552 | 7763965 | QUAD | -0.01165 | 1.47641 | -0.07517 | 0.99998 |
| 87 1,2-Dichlorobenzene | 5135 | 11629 | 30778 | 66514 | 1419825 | 2866357 | 4665094 | QUAD | -0.00979 | 0.83096 | -0.02900 | 0.99997 |
| 88 N-Butylbenzene | 5592 | 15560 | 48981 | 112596 | 2514501 | 5038768 | 8003657 | QUAD | -0.02180 | 1.50604 | -0.07118 | 0.99996 |
| 89 1,2-Dibromo-3-Chloropropane | 2334 | 4221 | 11604 | 26597 | 724859 | 1563569 | 2468720 | QUAD | -0.00970 | 0.44793 | -0.01751 | 0.99950 |
| 90 1,2,4-Trichlorobenzene | 3375 | 3855 | 9954 | 23408 | 1173889 | 2772337 | +++++ | QUAD | -0.01277 | 0.26981 | 0.01567 | 0.99980 |

Report Date : 27-Aug-2021 09:39

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2021 09:44
End Cal Date : 26-AUG-2021 12:31
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Last Edit : 27-Aug-2021 09:34 10airB.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | 30.0000 Level 7 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 91 Naphthalene | 9770 | 8784 | 17494 | 38969 | 1665077 | 3770598 | +++++ | QUAD | -0.01675 | 0.76989 | 0.05130 | 0.99977 |
| 92 Hexachlorobutadiene | 5377 | 11470 | 28330 | 60217 | 1082033 | 1996910 | +++++ | QUAD | -0.00630 | 0.60330 | -0.05314 | 0.99993 |

Report Date : 27-Aug-2021 09:39

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2021 09:44
End Cal Date : 26-AUG-2021 12:31
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Last Edit : 27-Aug-2021 09:34 10airB.i

Average %RSD Results.

Calculated Average %RSD = 10.02897
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

| Curve | Formula | Units |
|---|---|---|
| Averaged Quad | Amt = Rsp/m1<br>Rsp = b + m1*Amt + m2*Amt^2 | Response Amount |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23804.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23804.D
Lab Smp Id: CAL1
Inj Date : 26-AUG-2021 09:44
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 08:53 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.762 | 3.727 | (0.533) | 1257 | 0.07140 | 0.0538(QM) |
| 2 Propylene | 41 | 3.772 | 3.733 | (0.535) | 1697 | 0.07190 | 0.0678(Q) |
| 3 Chlorodifluoromethane | 67 | Compound Not Detected. | | | | | |
| 4 Dichlorodifluoromethane | 85 | 3.801 | 3.775 | (0.539) | 6558 | 0.07240 | 0.0660 |
| 5 Chloromethane | 50 | 3.939 | 3.894 | (0.558) | 2112 | 0.07160 | 0.0583(QM) |
| 6 Dichlorotetrafluoroethane | 85 | 3.923 | 3.904 | (0.556) | 7298 | 0.06680 | 0.0611 |
| 7 Vinyl chloride | 62 | 4.032 | 3.997 | (0.572) | 2191 | 0.07190 | 0.0566(QM) |
| 8 1,3-Butadiene | 54 | 4.084 | 4.051 | (0.579) | 1287 | 0.07160 | 0.0457(a) |
| 9 Bromomethane | 94 | 4.254 | 4.222 | (0.603) | 2293 | 0.07170 | 0.0581 |
| 10 Chloroethane | 64 | 4.328 | 4.296 | (0.614) | 935 | 0.07170 | 0.0445(aQM) |
| 11 Ethanol | 45 | 4.473 | 4.408 | (0.634) | 5350 | 0.43090 | 0.420 |
| 12 Vinyl Bromide | 106 | 4.466 | 4.444 | (0.633) | 1930 | 0.07150 | 0.0474(a) |
| 13 Isopentane | 43 | 4.476 | 4.466 | (0.634) | 3178 | 0.07350 | 0.0724(Q) |
| 14 Freon 123 | 83 | 4.556 | 4.527 | (0.646) | 5991 | 0.07120 | 0.0623 |
| 15 Trichlorofluoromethane | 101 | 4.556 | 4.550 | (0.646) | 6285 | 0.07240 | 0.0645(M) |
| 16 Acrolein | 56 | 4.672 | 4.585 | (0.662) | 1832 | 0.20320 | 0.344(QM) |
| 17 Acetone | 43 | 4.714 | 4.624 | (0.668) | 15226 | 0.35310 | 0.336 |
| 18 Isopropyl Alcohol | 45 | 4.794 | 4.720 | (0.680) | 22075 | 0.39720 | 0.387(M) |
| 19 1,1-Dichloroethene | 61 | 4.875 | 4.855 | (0.691) | 3544 | 0.07200 | 0.0597 |
| 20 Acrylonitrile | 53 | 4.965 | 4.900 | (0.704) | 1245 | 0.19890 | 0.373(M) |
| 21 Freon 113 | 101 | 4.920 | 4.907 | (0.697) | 5726 | 0.07160 | 0.0624 |
| 22 Methyl Acetate | 43 | 5.000 | 4.929 | (0.709) | 2962 | 0.07160 | 0.158(QM) |
| 23 Tert Butyl Alcohol (TBA) | 59 | 5.116 | 4.987 | (0.725) | 5428 | 0.07080 | 0.144(QM) |
| 24 Allyl Chloride | 76 | 5.029 | 5.013 | (0.713) | 389 | 0.07090 | 0.0202(aQM) |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23804.D
Report Date: 27-Aug-2021 08:53

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 5.029 | 5.013 | (0.713) | 11814 | 0.35920 | 0.321 |
| | 26 Carbon Disulfide | 76 | 5.158 | 5.148 | (0.731) | 7648 | 0.07240 | 0.0621(M) |
| | 27 trans-1,2-dichloroethene | 96 | 5.386 | 5.373 | (0.763) | 2124 | 0.07210 | 0.0468(aQ) |
| | 28 Methyl Tert Butyl Ether | 73 | 5.482 | 5.373 | (0.777) | 7169 | 0.07200 | 0.0620(M) |
| | 29 Vinyl Acetate | 43 | 5.537 | 5.489 | (0.785) | 3434 | 0.08640 | 0.134(M) |
| | 30 1,1-Dichloroethane | 63 | 5.540 | 5.547 | (0.785) | 4491 | 0.07120 | 0.0623 |
| | 31 Methyl Ethyl Ketone | 72 | 5.797 | 5.707 | (0.822) | 622 | 0.07180 | 0.0274(aQM) |
| | 32 n-Hexane | 57 | 5.730 | 5.723 | (0.812) | 3646 | 0.07080 | 0.0919(Q) |
| | 33 Di-isopropyl Ether | 45 | 5.807 | 5.730 | (0.823) | 6505 | 0.07050 | 0.0582(M) |
| | 34 Ethyl Acetate | 43 | 5.971 | 5.900 | (0.846) | 3495 | 0.07080 | 0.0478(aQM) |
| | 35 cis-1,2-Dichloroethene | 96 | 5.913 | 5.920 | (0.838) | 2286 | 0.07180 | 0.0483(a) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 6.100 | 6.016 | (0.865) | 7253 | 0.07170 | 0.0584 |
| | 37 Chloroform | 83 | 6.135 | 6.145 | (0.870) | 5165 | 0.07040 | 0.0591 |
| | 38 Tetrahydrofuran | 42 | 6.357 | 6.238 | (0.901) | 1739 | 0.07130 | 0.0467(aQM) |
| | 39 1,1,1-Trichloroethane | 97 | 6.518 | 6.534 | (0.924) | 5331 | 0.07130 | 0.0625 |
| | 40 1,2-Dichloroethane | 62 | 6.624 | 6.624 | (0.939) | 2261 | 0.07200 | 0.0498(aQM) |
| | 41 Benzene | 78 | 6.813 | 6.820 | (0.966) | 9099 | 0.07150 | 0.0640(M) |
| | 42 Carbon tetrachloride | 117 | 6.830 | 6.839 | (0.968) | 4717 | 0.07230 | 0.0587 |
| | 43 Cyclohexane | 56 | 6.855 | 6.865 | (0.972) | 4293 | 0.07130 | 0.0667(Q) |
| | 44 Tert Amyl Methyl Ether | 73 | 7.051 | 6.993 | (1.000) | 27404 | 0.07170 | 0.103(Q) |
| * | 45 1,4-Difluorobenzene | 114 | 7.055 | 7.067 | (1.000) | 2278879 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 7.177 | 7.183 | (1.017) | 13114 | 0.07160 | 0.0653 |
| | 47 Heptane | 43 | 7.321 | 7.328 | (1.038) | 3776 | 0.07140 | 0.0609 |
| | 48 Trichloroethene | 130 | 7.453 | 7.460 | (1.057) | 4043 | 0.07130 | 0.0605 |
| | 49 Methyl methacrylate | 69 | 7.543 | 7.505 | (1.069) | 3395 | 0.07150 | 0.0677 |
| | 50 1,2-Dichloropropane | 63 | 7.508 | 7.511 | (1.064) | 2676 | 0.07180 | 0.0577(M) |
| | 51 1,4-Dioxane | 88 | 7.733 | 7.585 | (1.096) | 4458 | 0.17880 | 0.138(M) |
| | 52 Bromodichloromethane | 83 | 7.694 | 7.698 | (1.091) | 5054 | 0.07160 | 0.0581 |
| | 53 Methylcyclohexane | 98 | 8.006 | 8.013 | (1.135) | 2329 | 0.07170 | 0.0566 |
| | 54 Methyl Isobutyl Ketone | 43 | 8.193 | 8.103 | (1.161) | 3242 | 0.07190 | 0.112(M) |
| | 55 cis-1,3-Dichloropropene | 75 | 8.186 | 8.183 | (1.160) | 3483 | 0.07140 | 0.0472(aM) |
| | 56 trans-1,3-Dichloropropene | 75 | 8.682 | 8.685 | (1.231) | 1868 | 0.07300 | 0.131(QM) |
| | 57 Toluene | 91 | 8.804 | 8.810 | (1.248) | 10468 | 0.07240 | 0.0609 |
| | 58 1,1,2-Trichloroethane | 97 | 8.932 | 8.945 | (1.266) | 2931 | 0.07160 | 0.0536 |
| | 59 Methyl Butyl Ketone | 43 | 9.164 | 9.058 | (0.875) | 806 | 0.07160 | 0.161(QM) |
| | 60 n-Octane | 43 | 9.267 | 9.267 | (0.885) | 4585 | 0.07170 | 0.0991 |
| | 61 Dibromochloromethane | 129 | 9.546 | 9.556 | (0.912) | 5296 | 0.07170 | 0.0599 |
| | 62 Tetrachloroethene | 166 | 9.643 | 9.649 | (0.921) | 5104 | 0.07100 | 0.0606 |
| | 63 1,2-Dibromoethane | 107 | 9.778 | 9.781 | (0.934) | 3711 | 0.07040 | 0.0507 |
| * | 64 Chlorobenzene - d5 | 117 | 10.469 | 10.479 | (1.000) | 1664671 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 10.514 | 10.530 | (1.004) | 7916 | 0.07150 | 0.0626 |
| | 66 Ethyl Benzene | 91 | 10.762 | 10.765 | (1.028) | 11473 | 0.07230 | 0.111 |
| | 67 m&p-Xylene | 91 | 10.923 | 10.964 | (1.043) | 17864 | 0.14410 | 0.119(M) |
| | 68 n-Nonane | 43 | 11.315 | 11.318 | (1.081) | 3563 | 0.07180 | 0.122 |
| | 69 Styrene | 104 | 11.415 | 11.418 | (1.090) | 4635 | 0.07230 | 0.138 |
| | 70 o-Xylene | 91 | 11.447 | 11.456 | (1.093) | 9434 | 0.07180 | 0.0601 |
| | 71 Bromoform | 173 | 11.527 | 11.540 | (1.101) | 4578 | 0.07230 | 0.0554 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 11.894 | 11.903 | (1.136) | 6041 | 0.07200 | 0.115 |
| | 73 Isopropylbenzene | 105 | 12.058 | 12.064 | (1.152) | 12606 | 0.07120 | 0.110 |
| | 74 N-Propylbenzene | 91 | 12.685 | 12.688 | (1.212) | 11793 | 0.07200 | 0.136 |
| | 75 2-Chlorotoluene | 91 | 12.733 | 12.736 | (1.216) | 10456 | 0.07250 | 0.0638 |
| | 76 4-Ethyltoluene | 105 | 12.868 | 12.874 | (1.229) | 8757 | 0.07160 | 0.130(M) |
| | 77 1,3,5-Trimethylbenzene | 105 | 12.939 | 12.945 | (1.236) | 11747 | 0.07160 | 0.0604(M) |
| | 78 n-Decane | 57 | 13.267 | 13.267 | (1.880) | 3477 | 0.07240 | 0.137 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23804.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.376 | 13.382 | (1.278) | 12523 | 0.07230 | 0.0643 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.418 | 13.424 | (1.282) | 9195 | 0.07210 | 0.118 |
| 81 Sec- Butylbenzene | 105 | 13.675 | 13.681 | (1.306) | 14610 | 0.07240 | 0.113 |
| 82 1,3-Dichlorobenzene | 146 | 13.717 | 13.720 | (1.310) | 4019 | 0.07240 | 0.173 |
| 83 Benzyl Chloride | 91 | 13.787 | 13.787 | (1.317) | 2182 | 0.07290 | 0.255(QM) |
| 84 1,4-Dichlorobenzene | 146 | 13.852 | 13.852 | (1.323) | 3854 | 0.07230 | 0.196 |
| 85 p-Isopropyltoluene | 119 | 13.874 | 13.881 | (1.325) | 12012 | 0.07260 | 0.129 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.900 | 13.906 | (1.328) | 10586 | 0.07230 | 0.122 |
| 87 1,2-Dichlorobenzene | 146 | 14.160 | 14.170 | (1.353) | 5135 | 0.07220 | 0.155 |
| 88 N-Butylbenzene | 91 | 14.347 | 14.340 | (1.370) | 5592 | 0.07210 | 0.167(M) |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.887 | 14.890 | (1.422) | 2334 | 0.07270 | 0.248 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.996 | 15.974 | (1.528) | 3375 | 0.15660 | 0.547(QM) |
| 91 Naphthalene | 128 | 16.186 | 16.157 | (1.546) | 9770 | 0.08160 | 0.293(M) |
| 92 Hexachlorobutadiene | 225 | 16.283 | 16.282 | (1.555) | 5377 | 0.08160 | 0.158 |

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23804.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 23804.D
Lab Smp Id: CAL1
Analysis Type: VOA
Quant Type: ISTD
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

Calibration Date: 26-AUG-2021
Calibration Time: 11:33
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

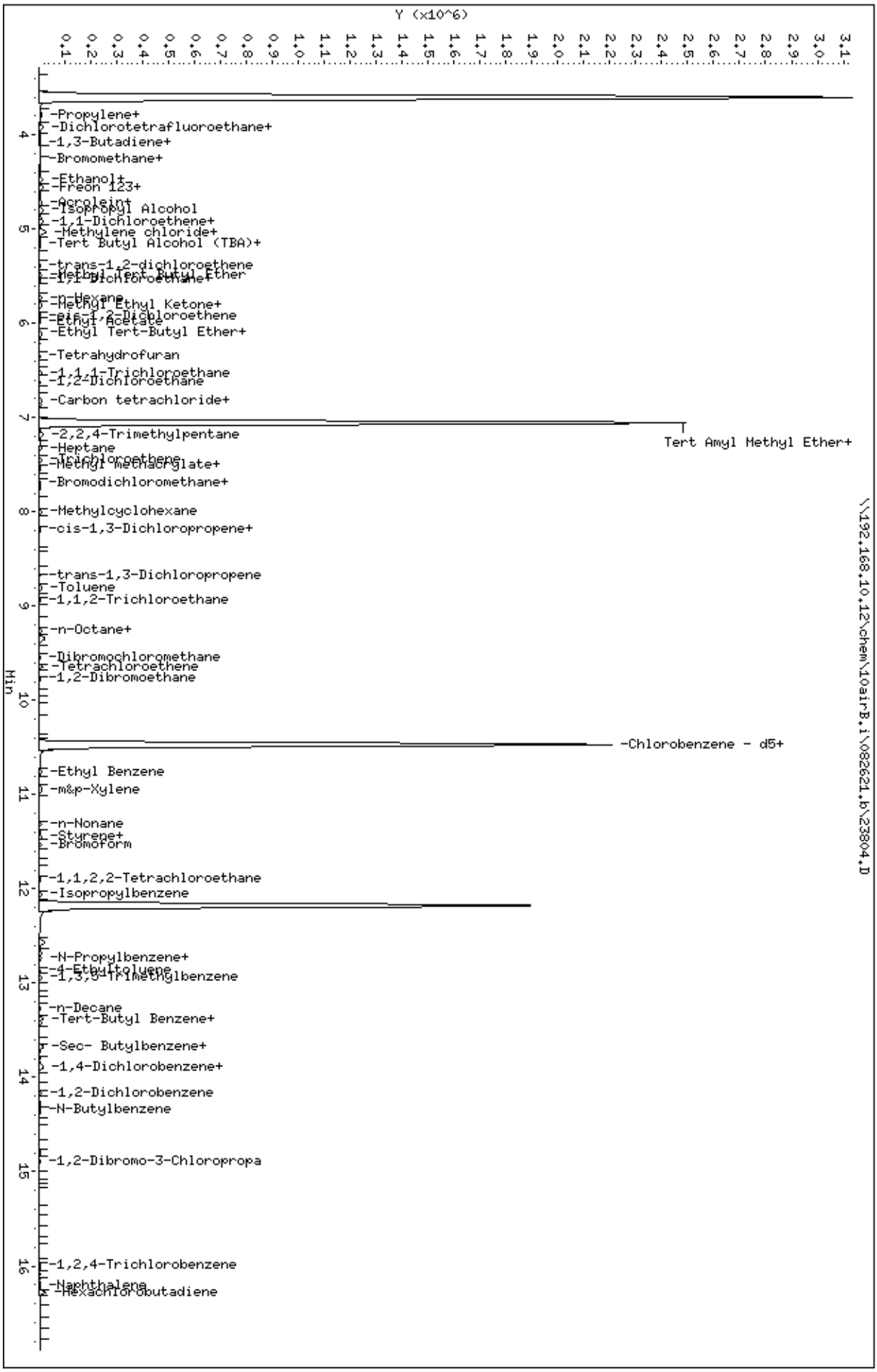
| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2278879 | 7.88 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1664671 | 0.60 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.06 | -0.05 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

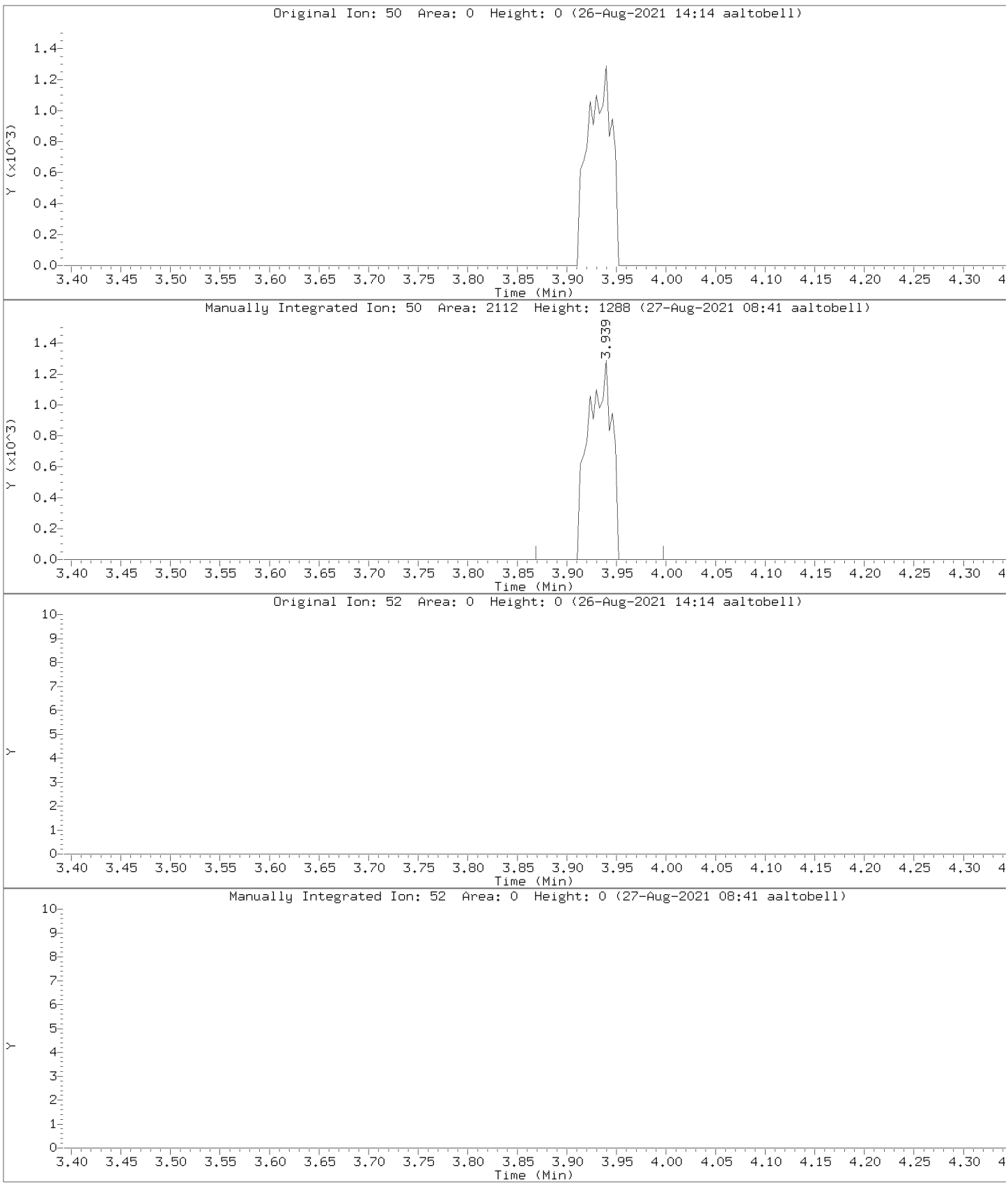
Data File: \\192.168.10.12\chem\10airB.i\082621.b\23804.D
Date : 26-AUG-2021 09:44
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32



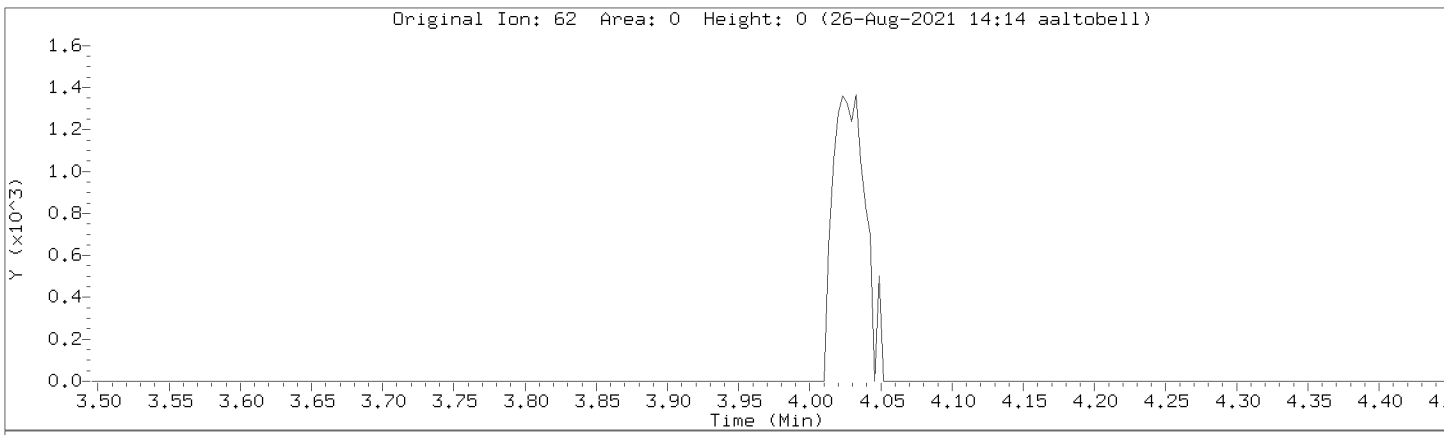
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

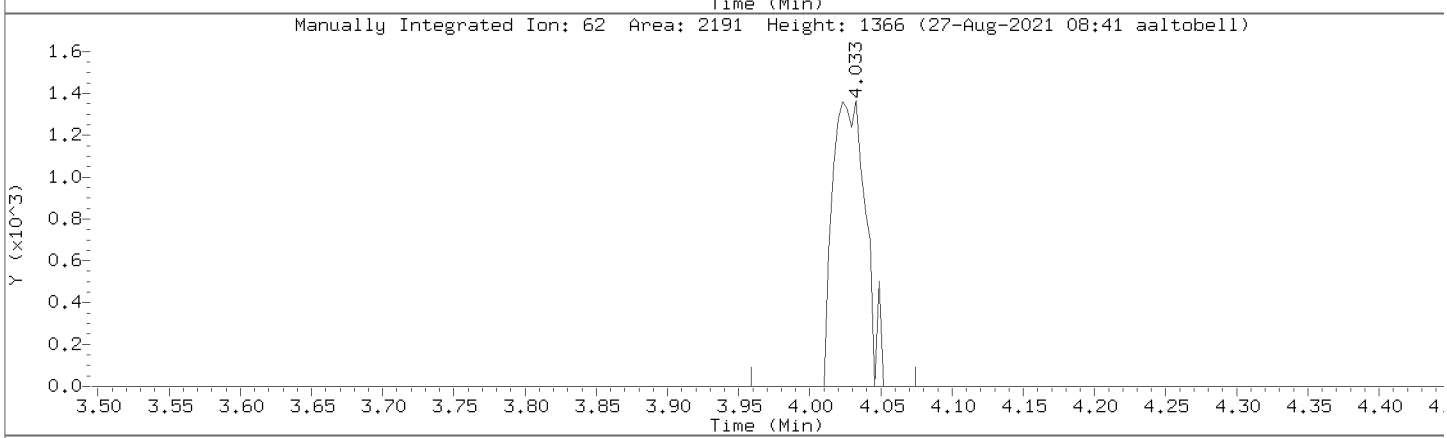
Compound: Chloromethane
CAS Number: 74-87-3

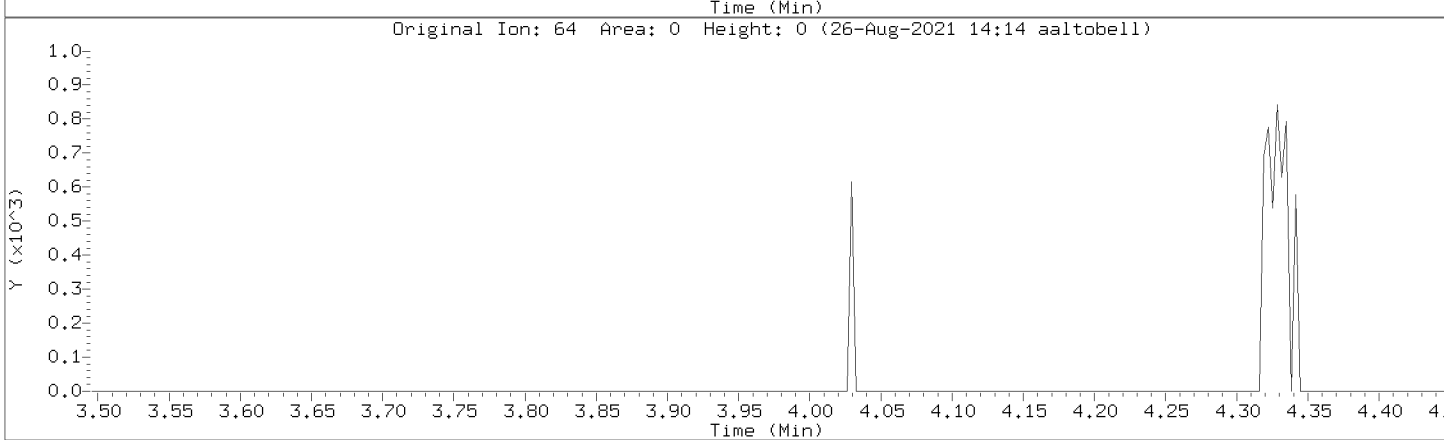


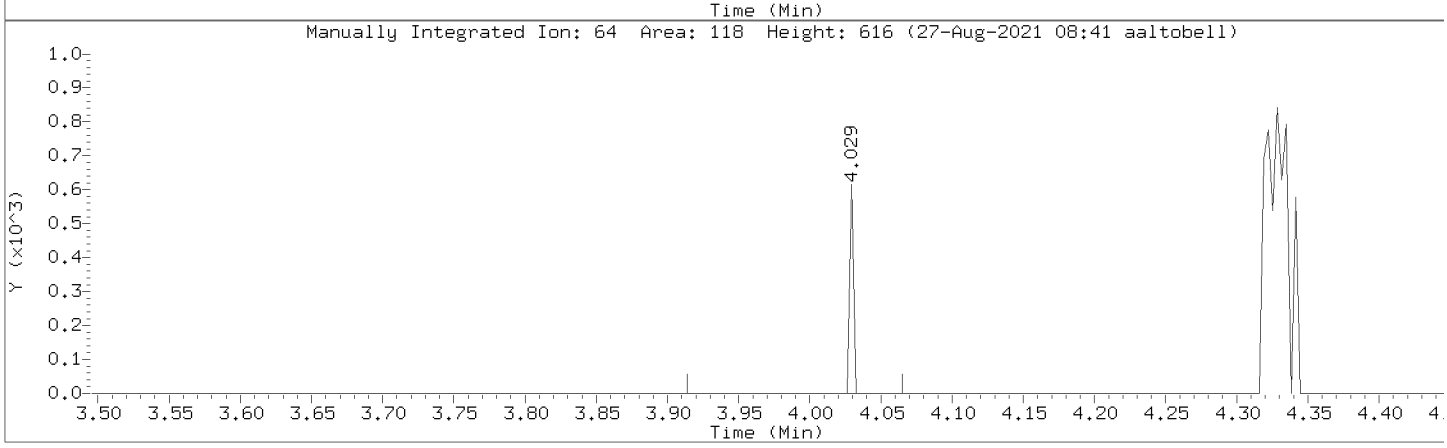
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Vinyl chloride
CAS Number: 75-01-4



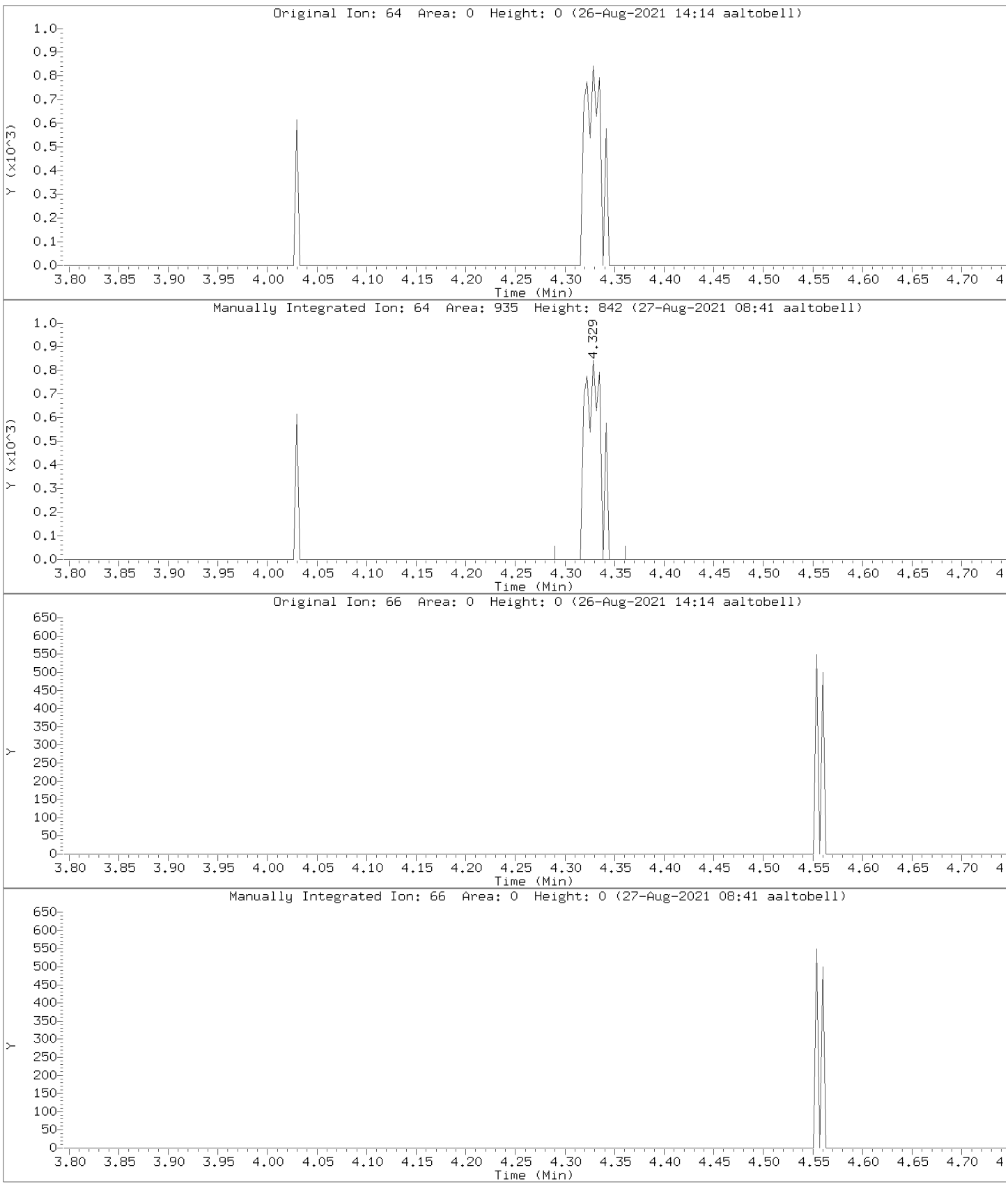



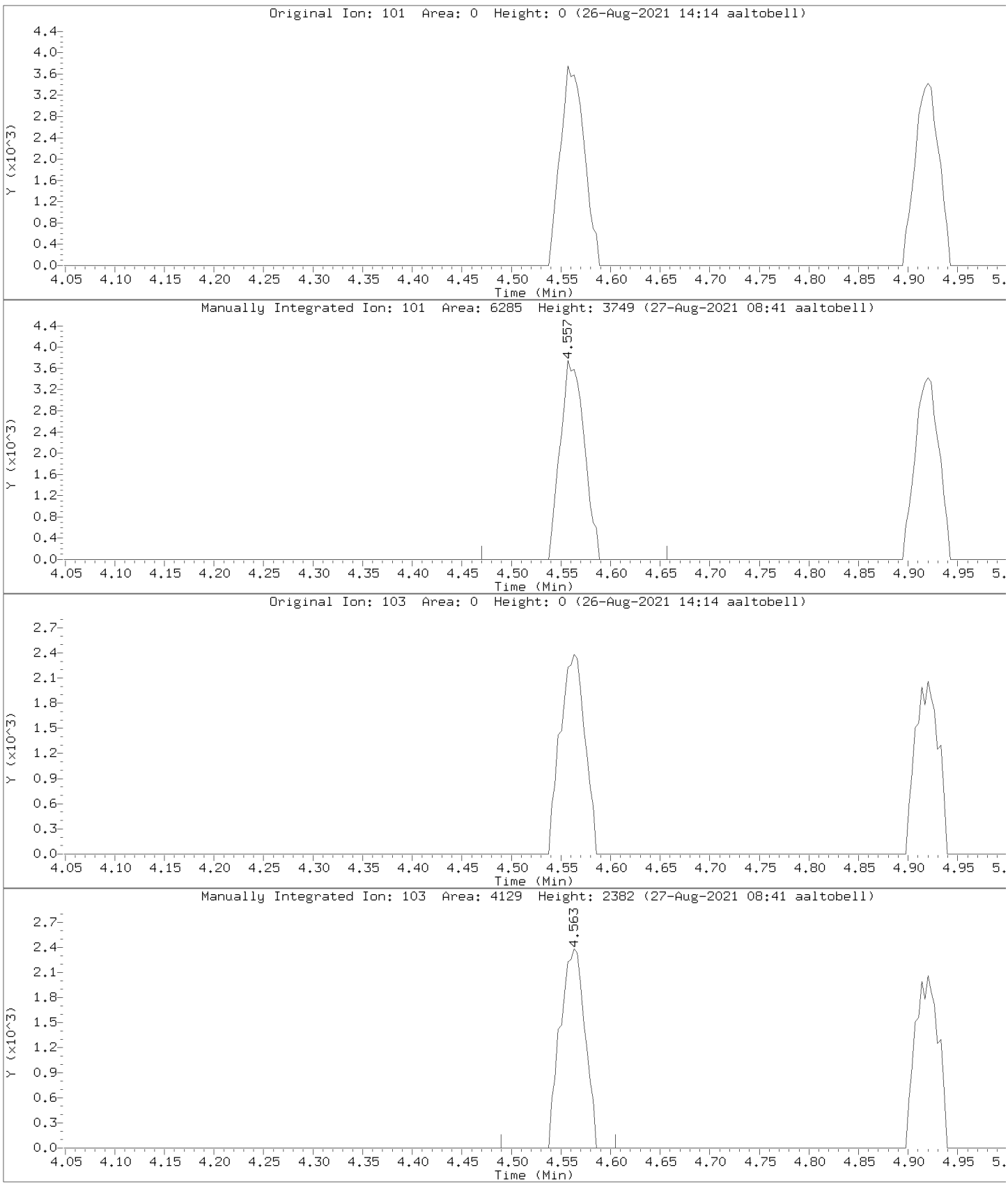
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Chloroethane
CAS Number: 75-00-3

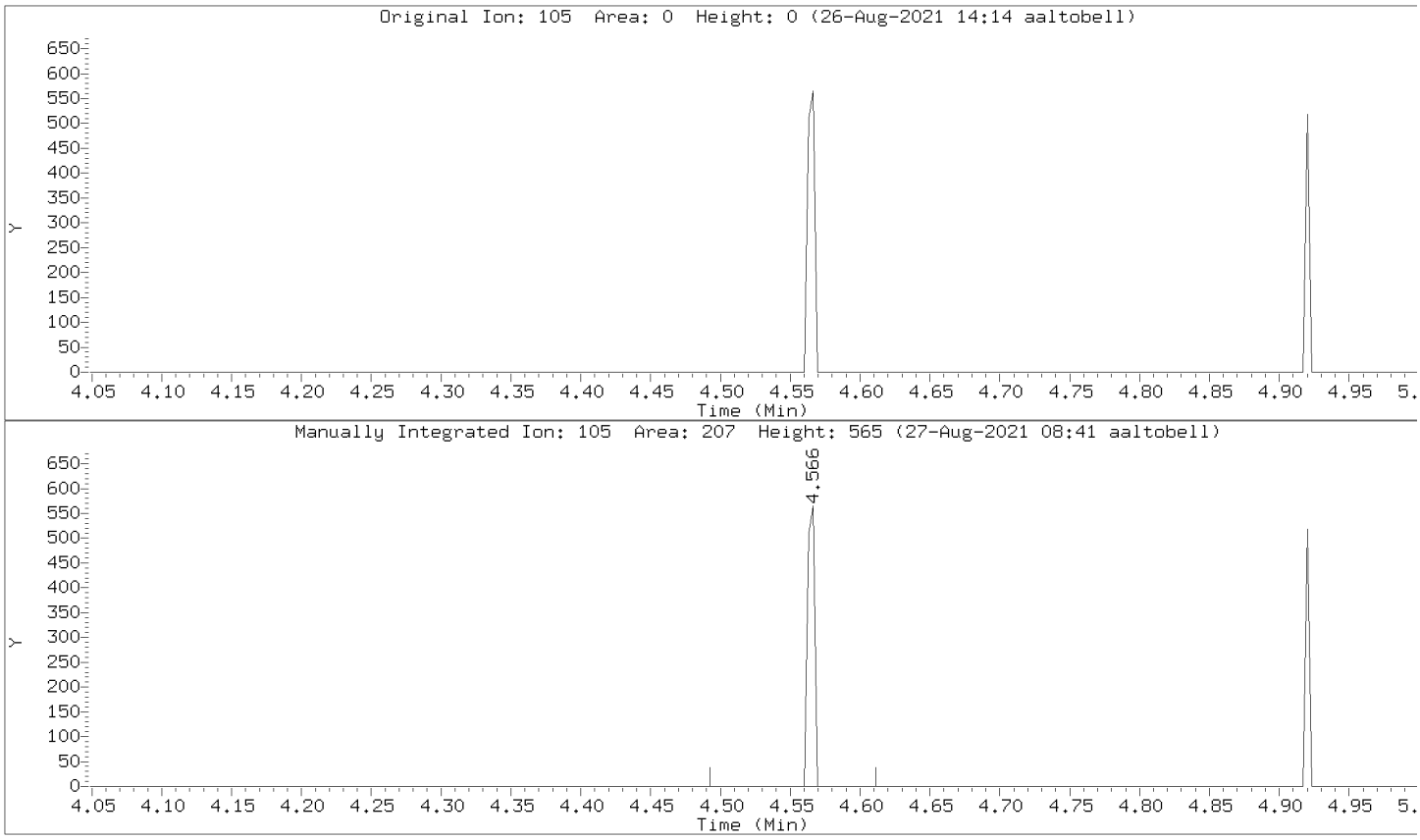


Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Trichlorofluoromethane
CAS Number: 75-69-4

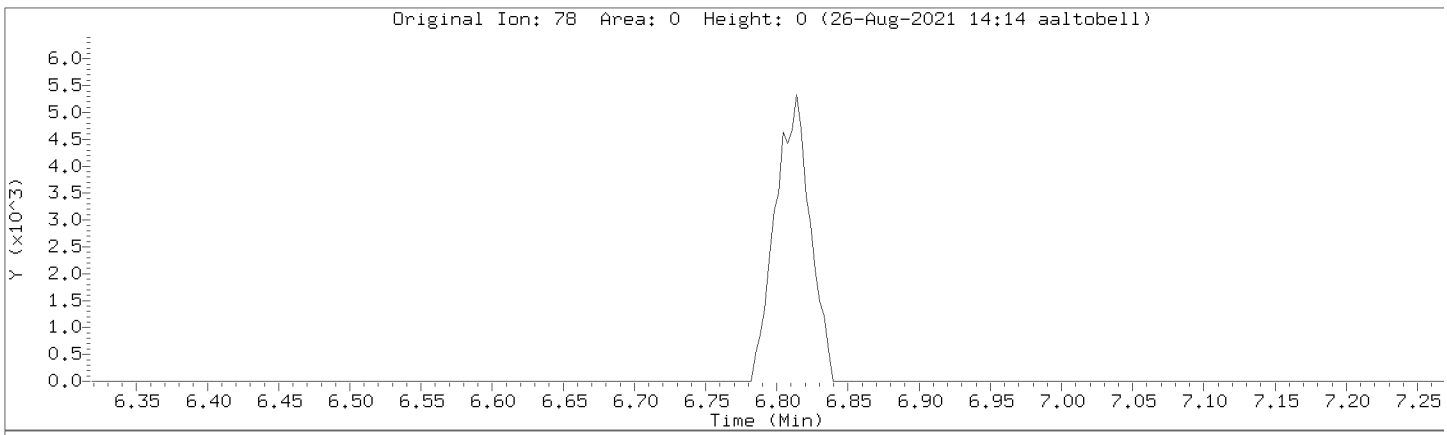


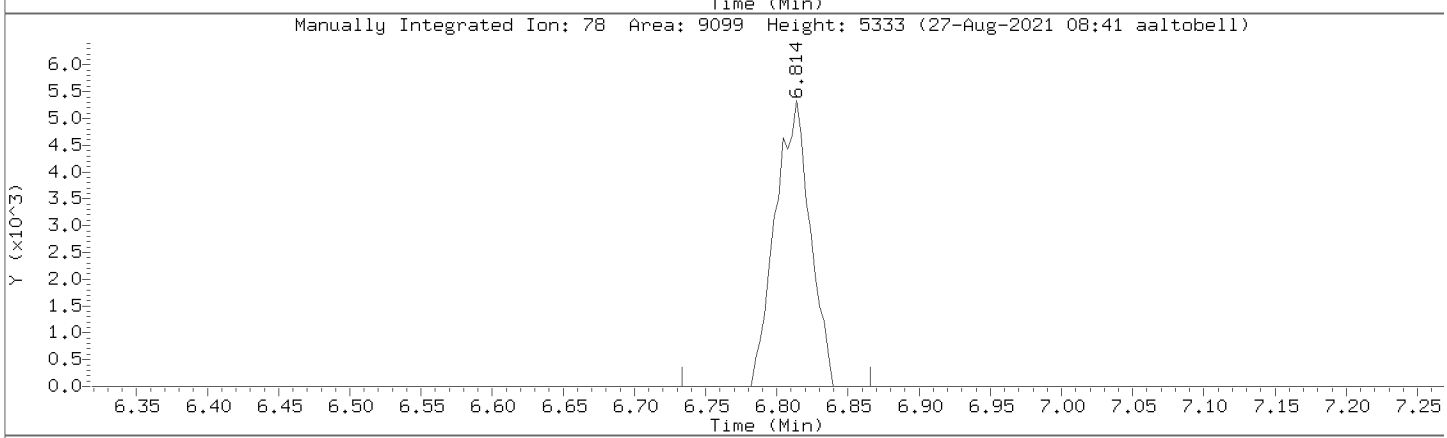
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

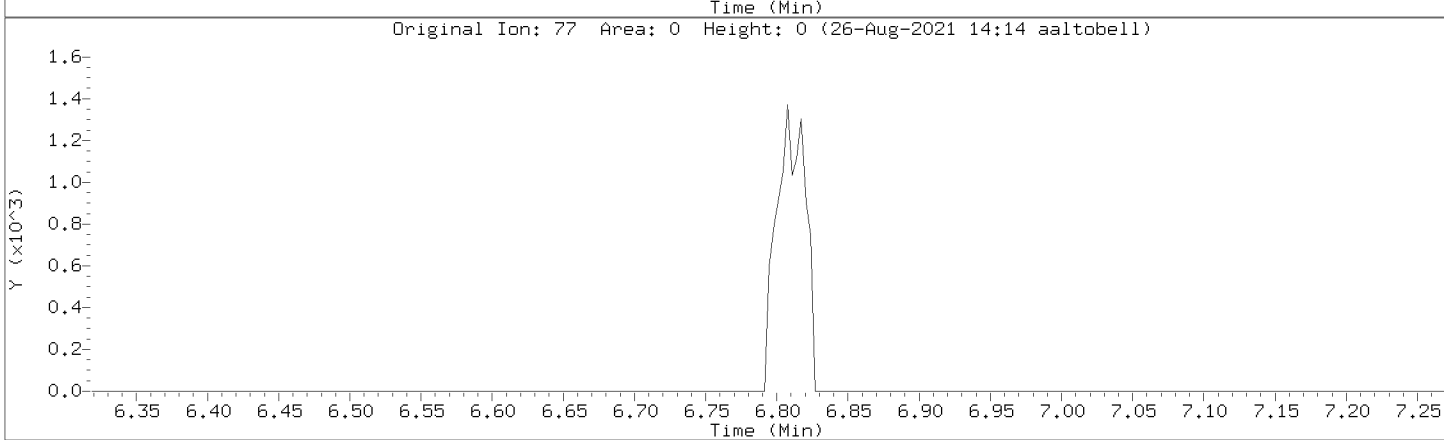


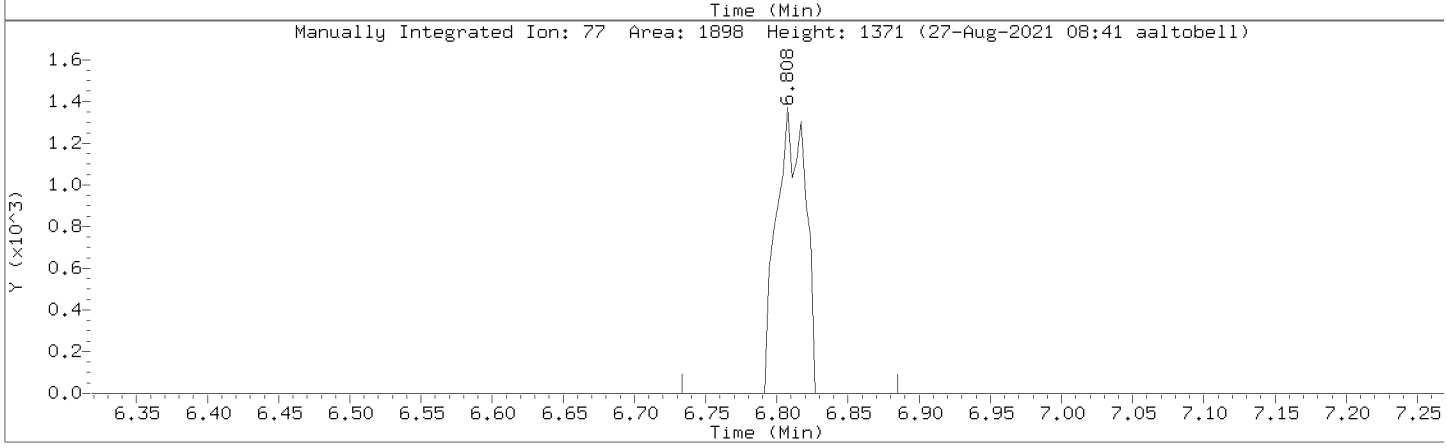
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Benzene
CAS Number: 71-43-2

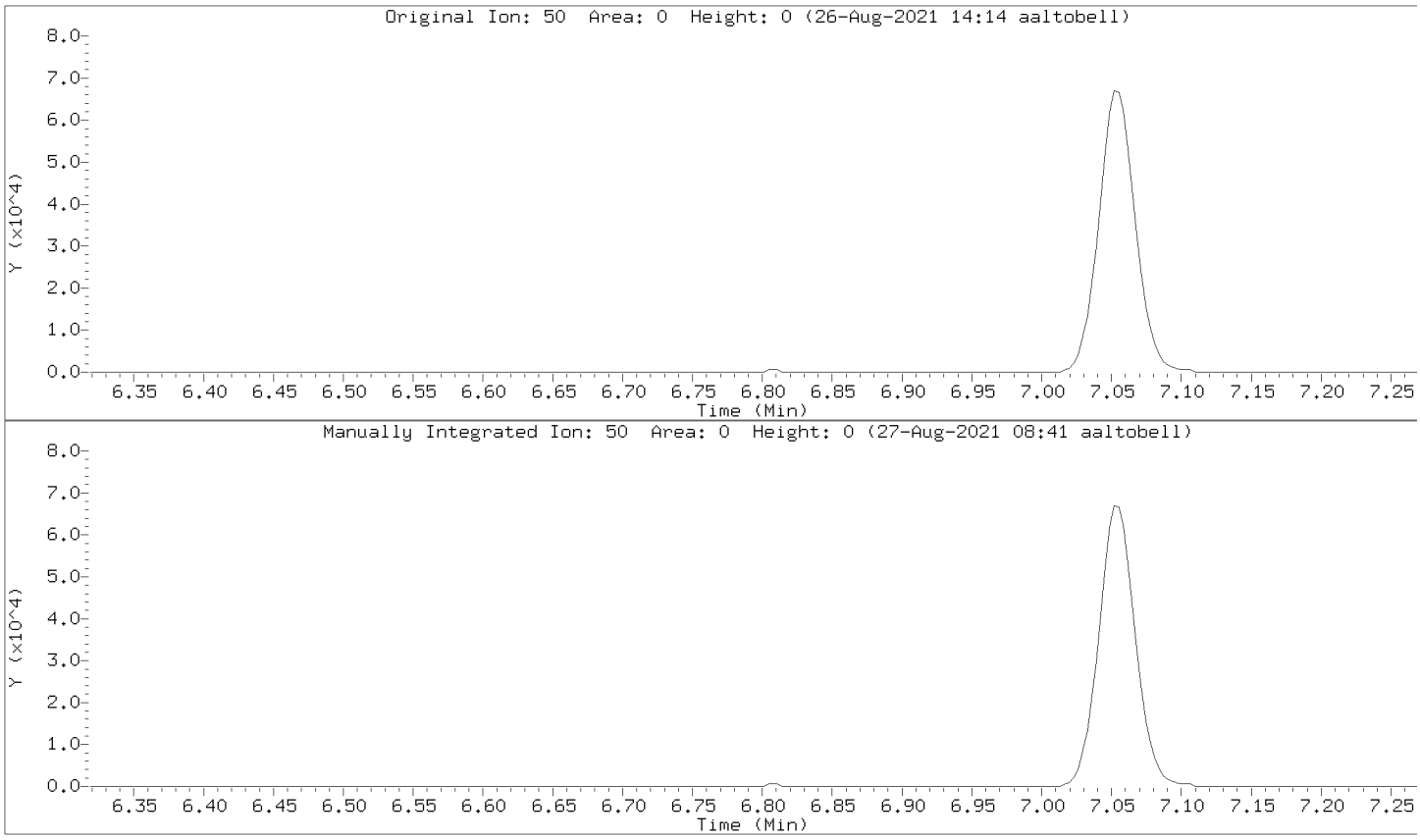


Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1



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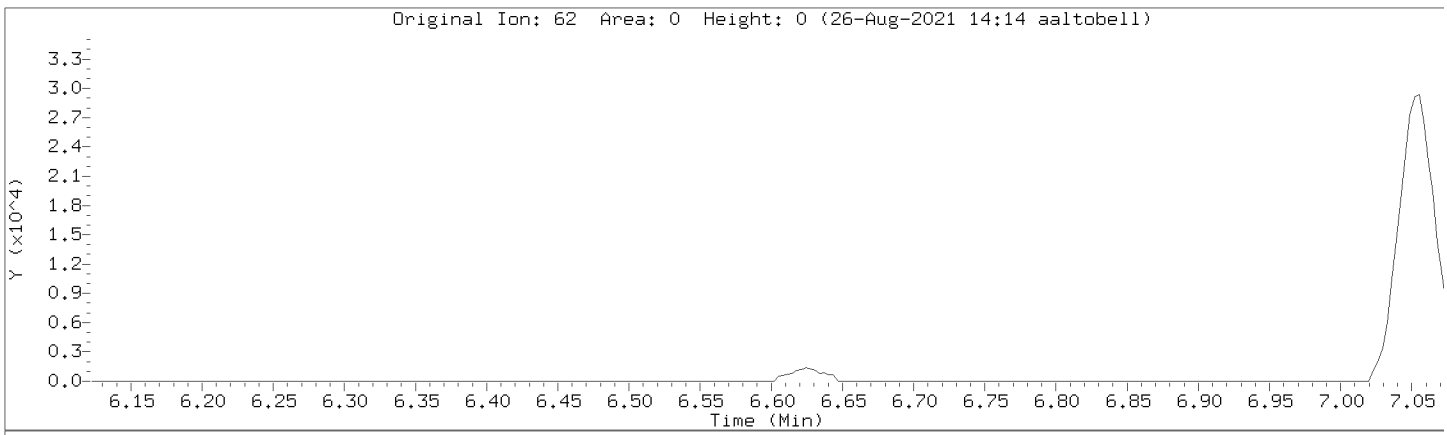
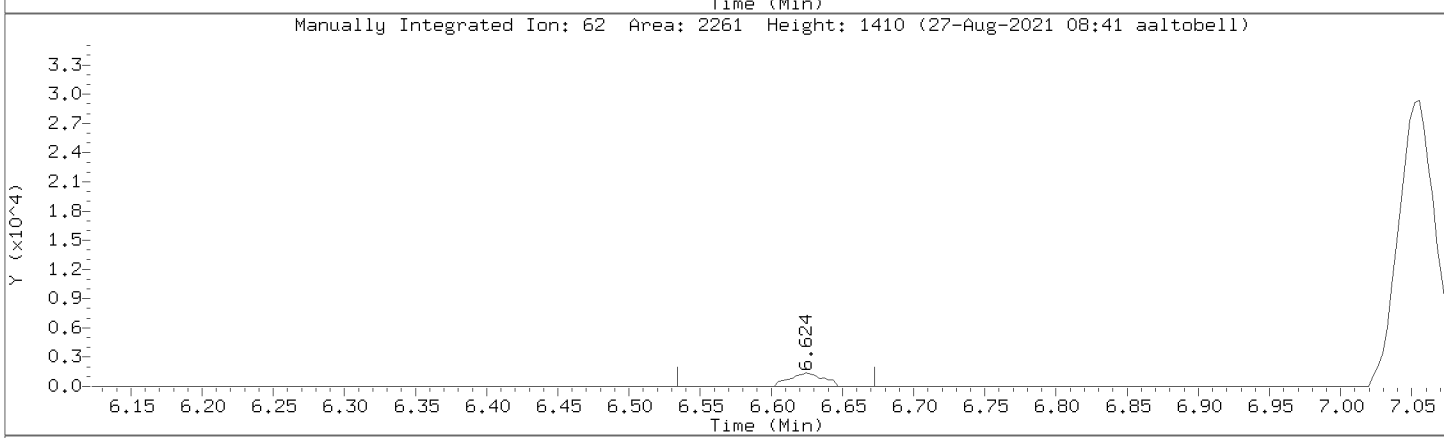
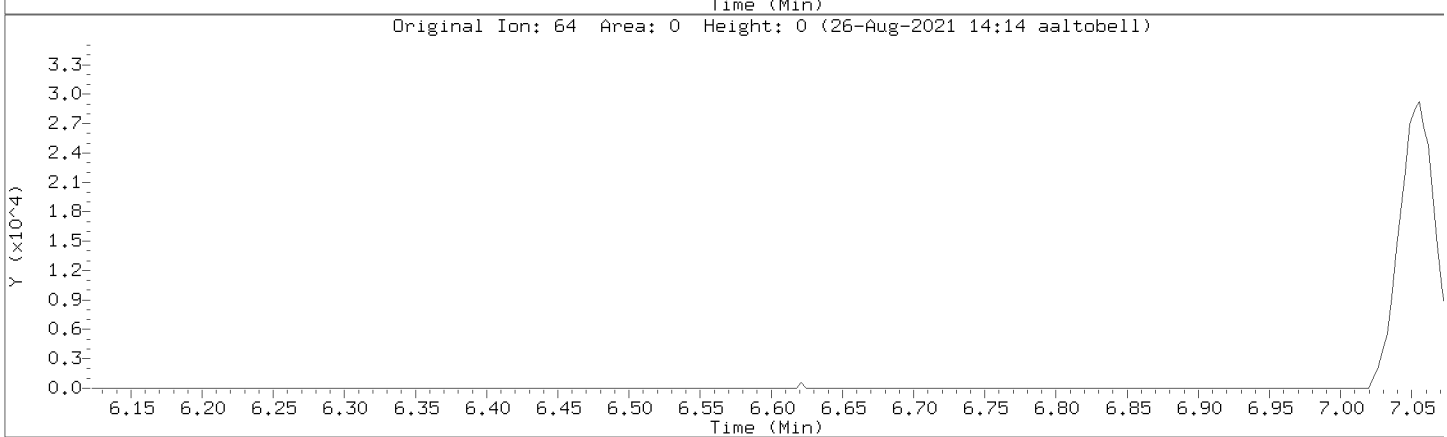
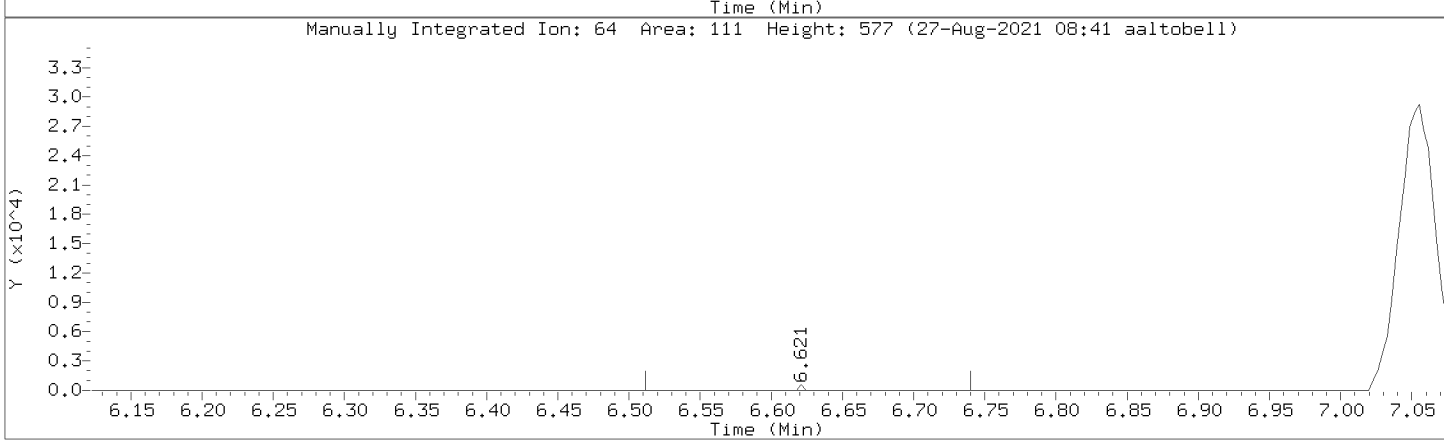
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: 1,2-Dichloroethane
CAS Number: 107-06-2



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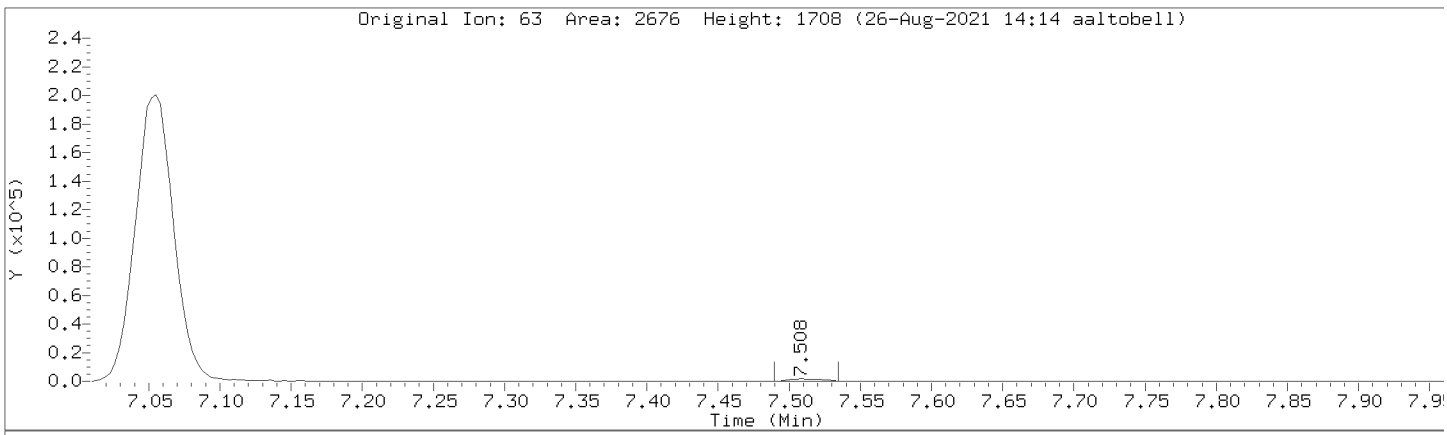
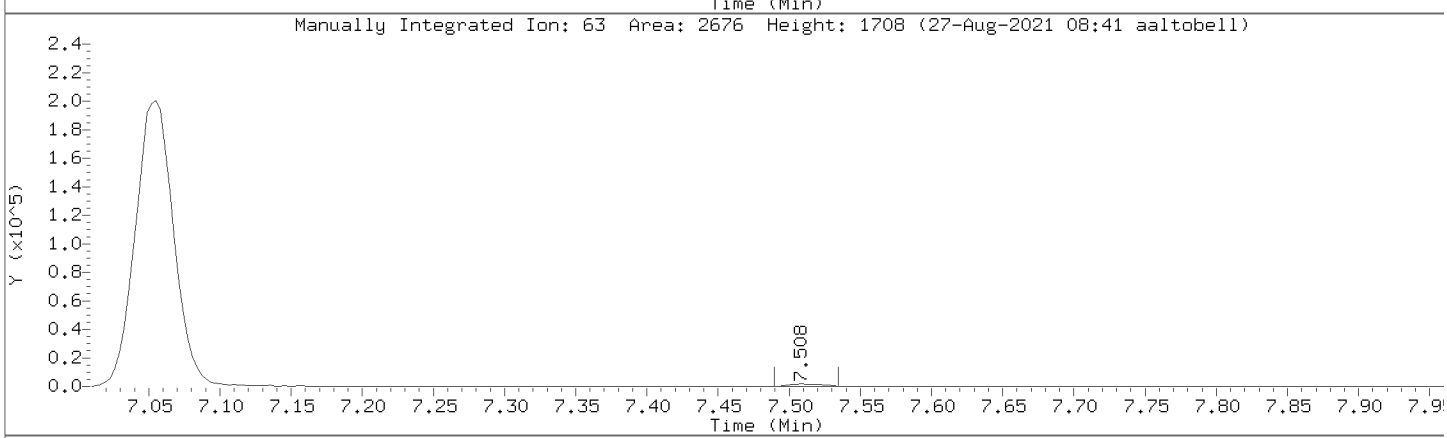
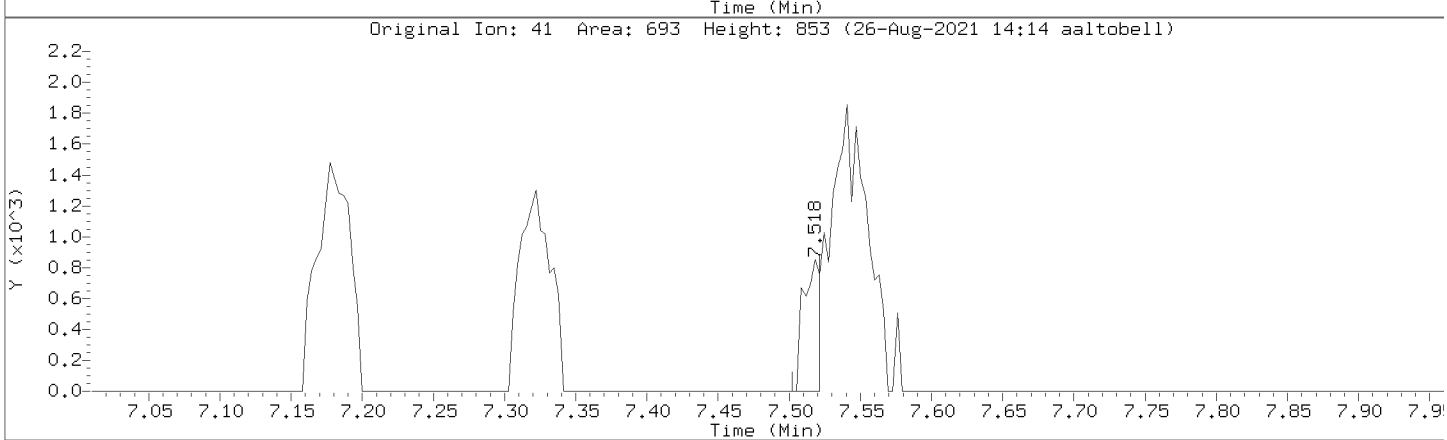
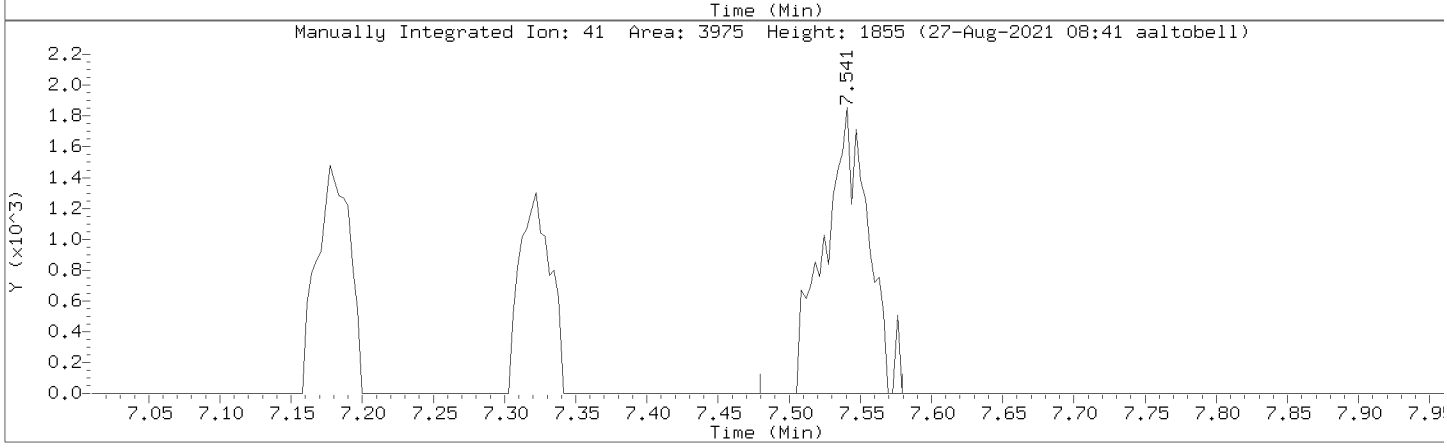
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5



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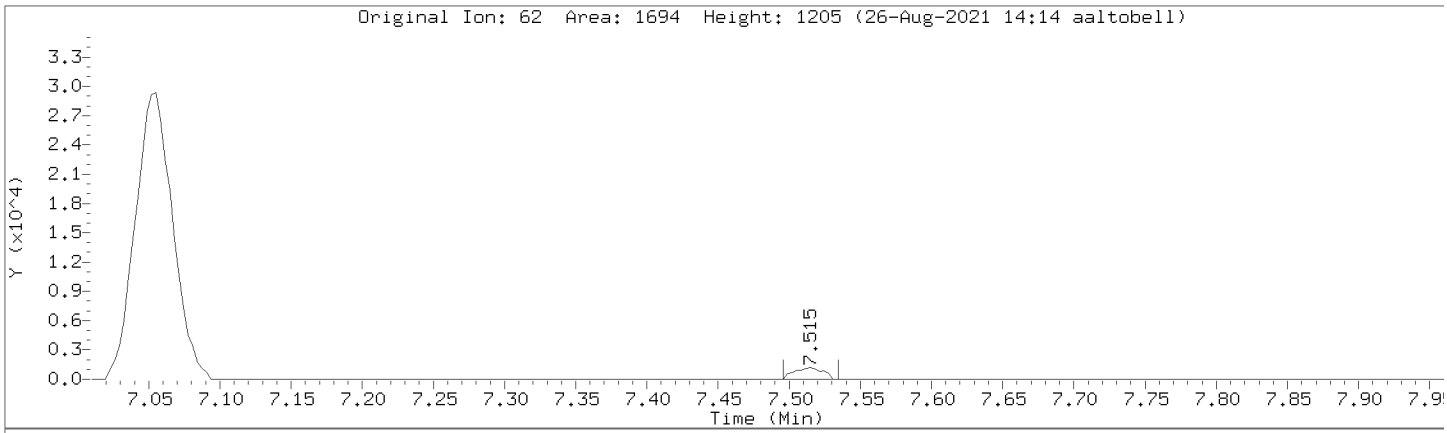
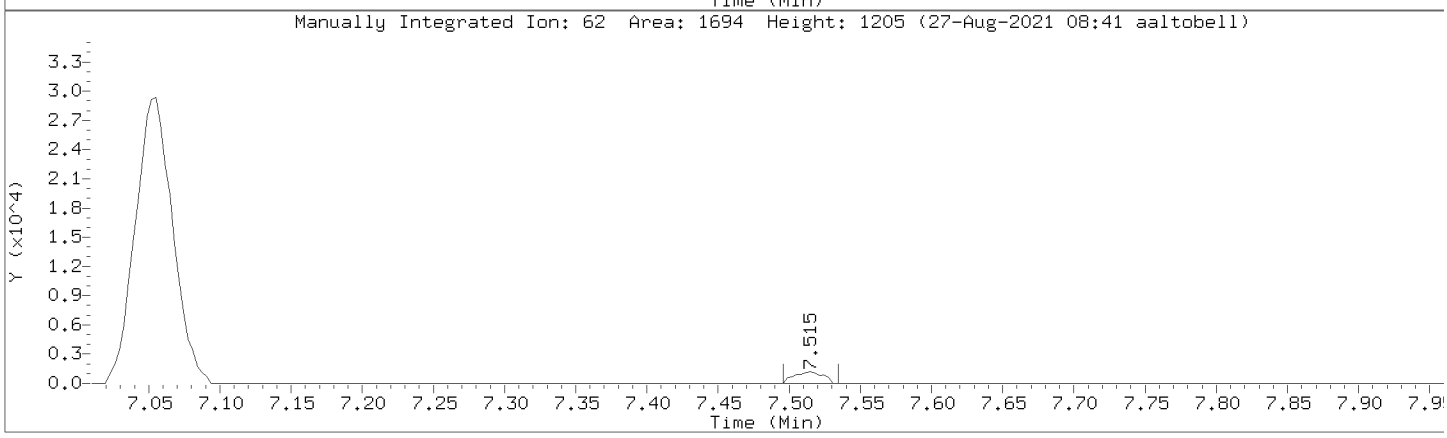
Lab Sample ID: CAL1



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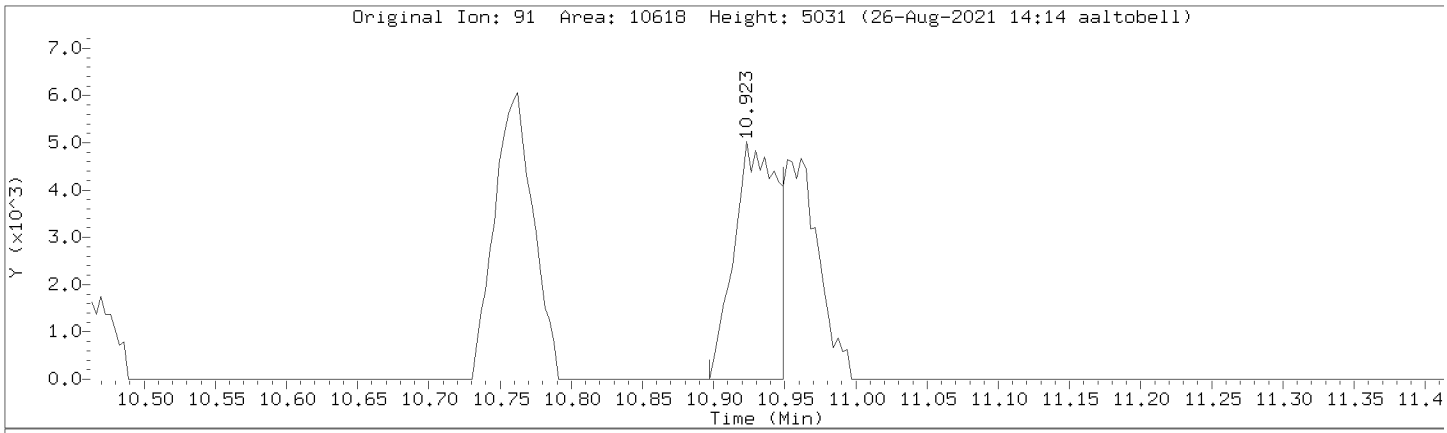
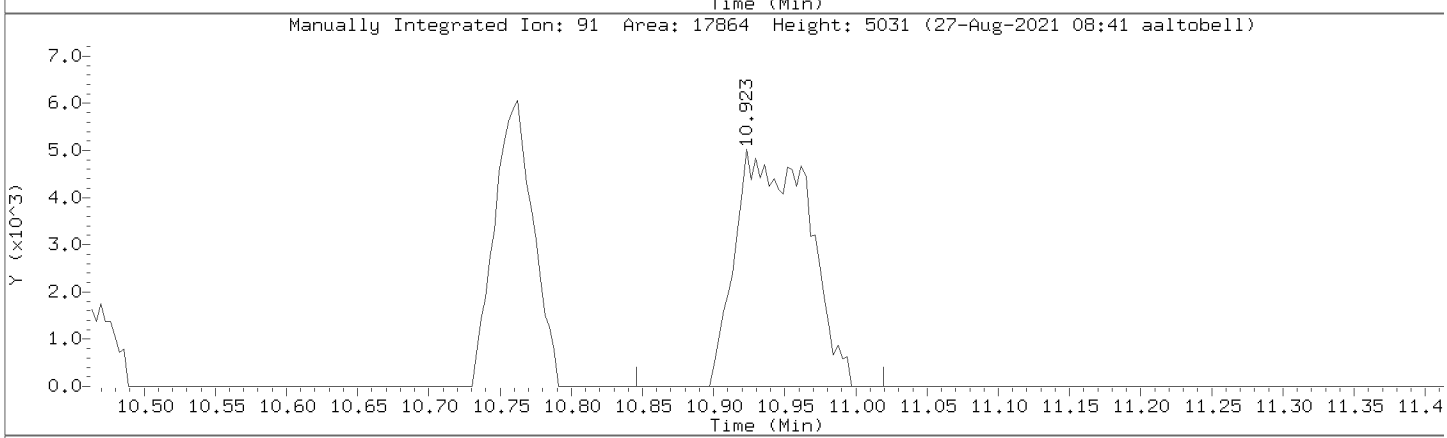
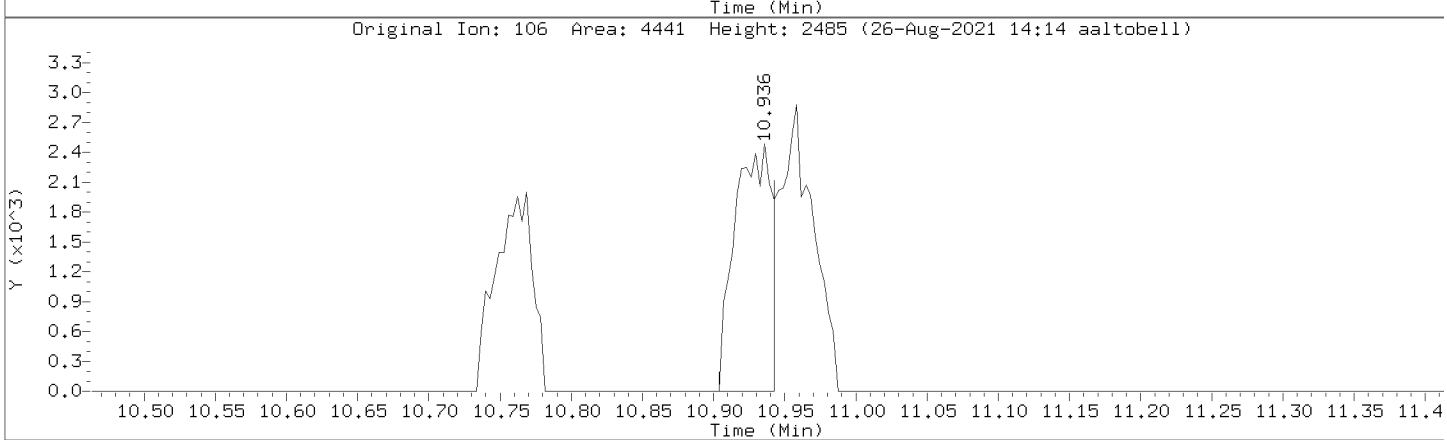
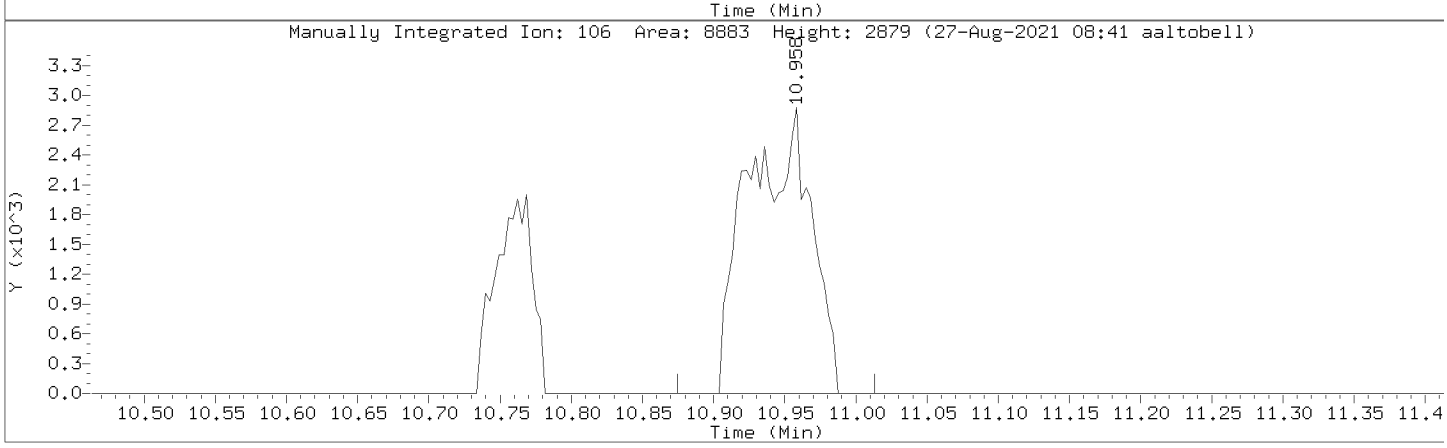
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: m&p-Xylene
CAS Number: 7816-60-0



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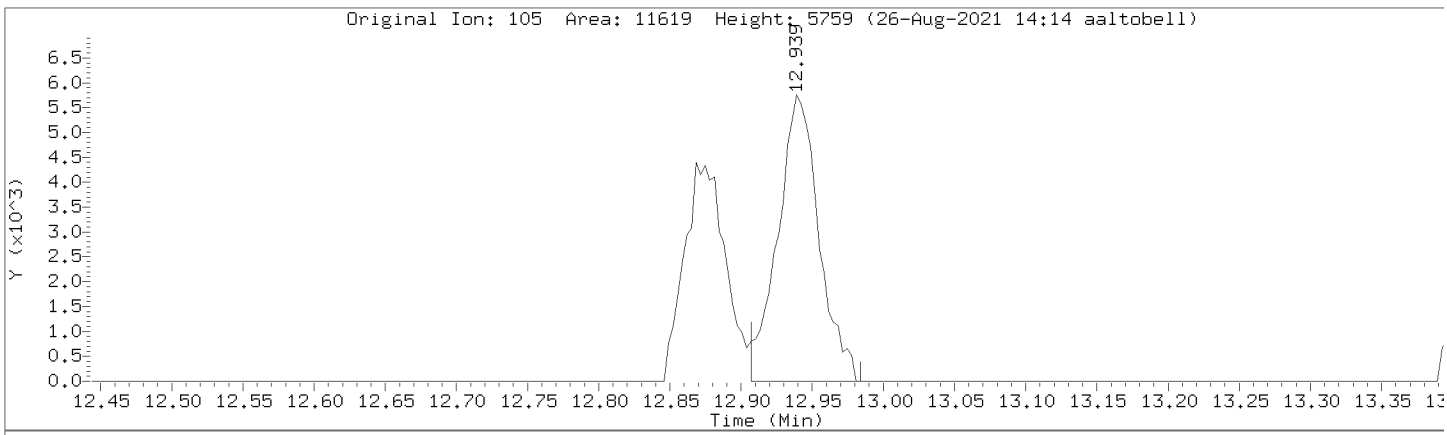
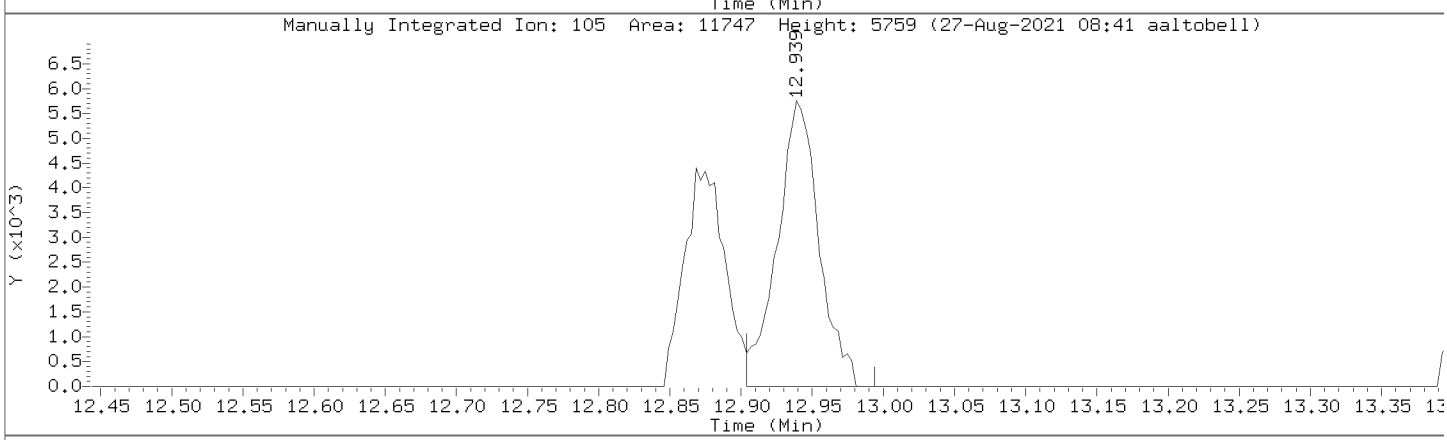
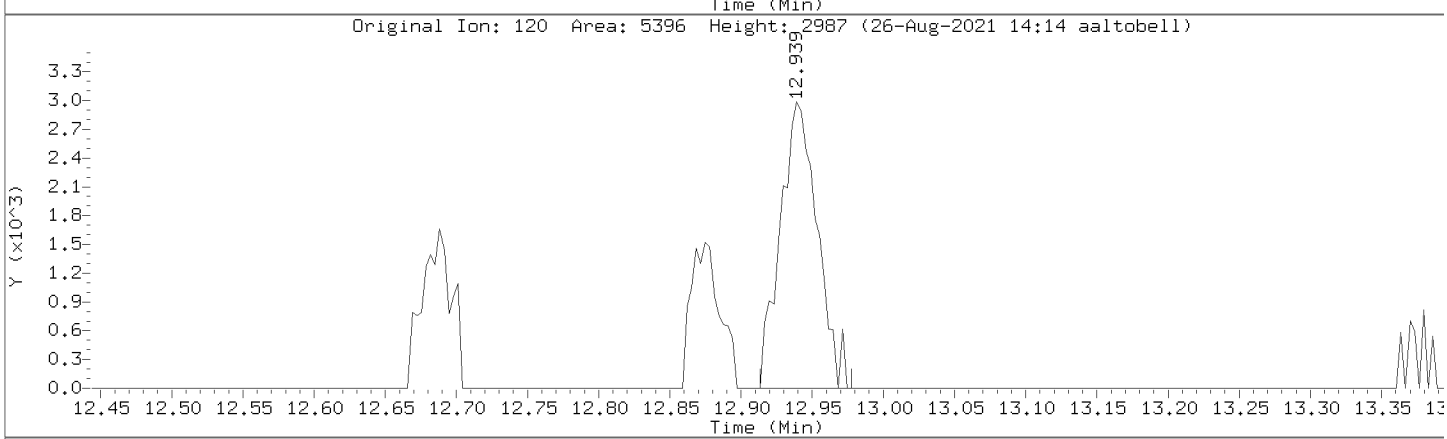
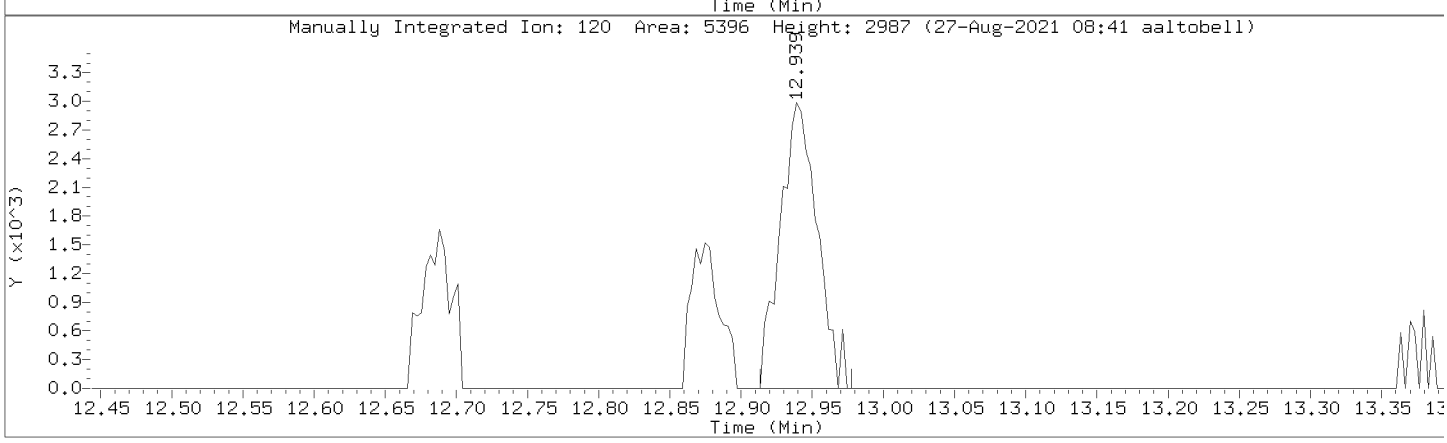
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: 1,3,5-Trimethylbenzene
CAS Number: 108-67-8



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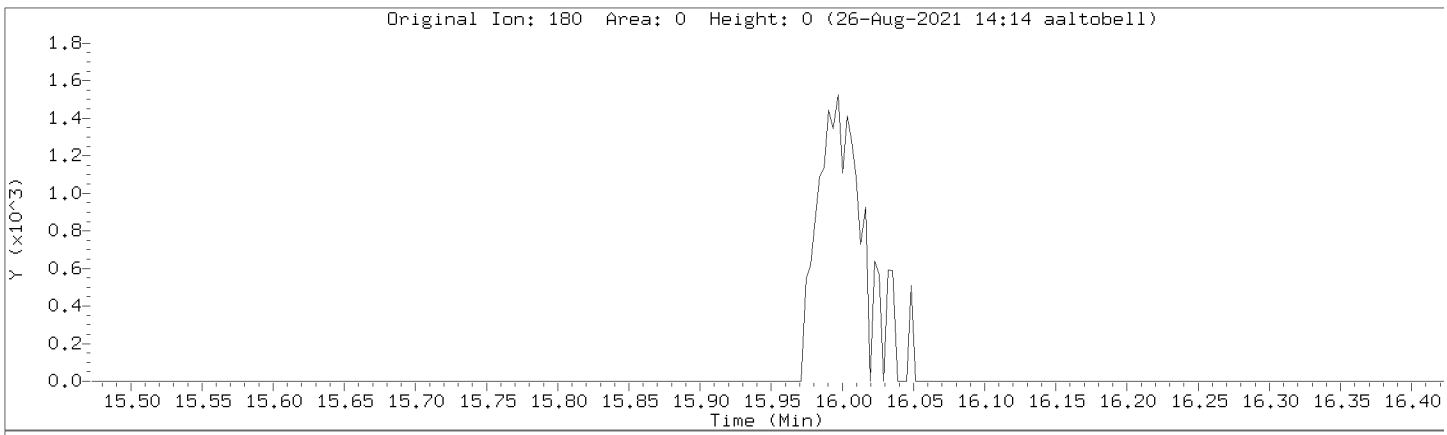
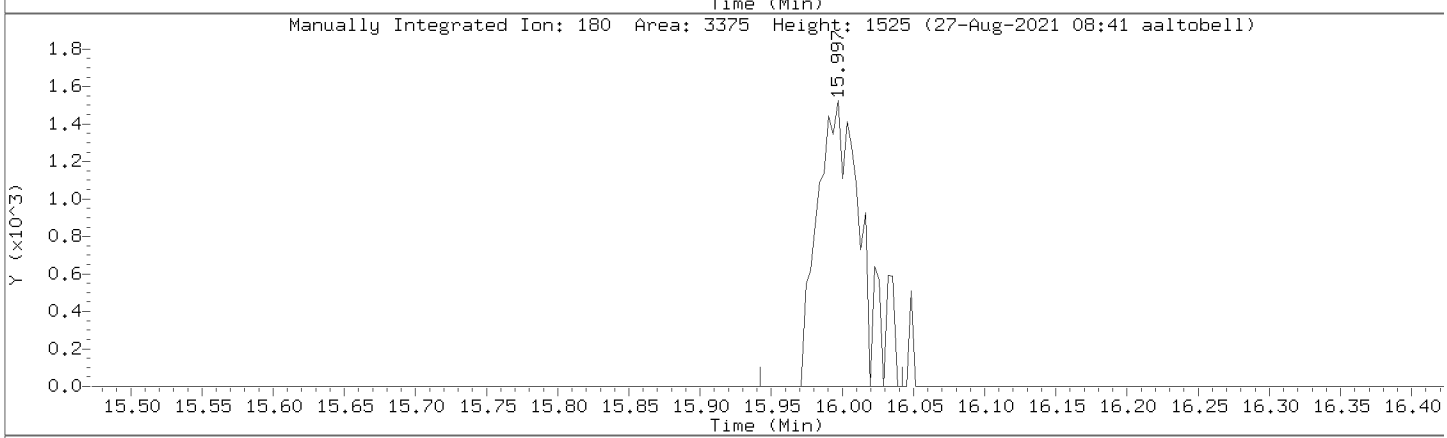
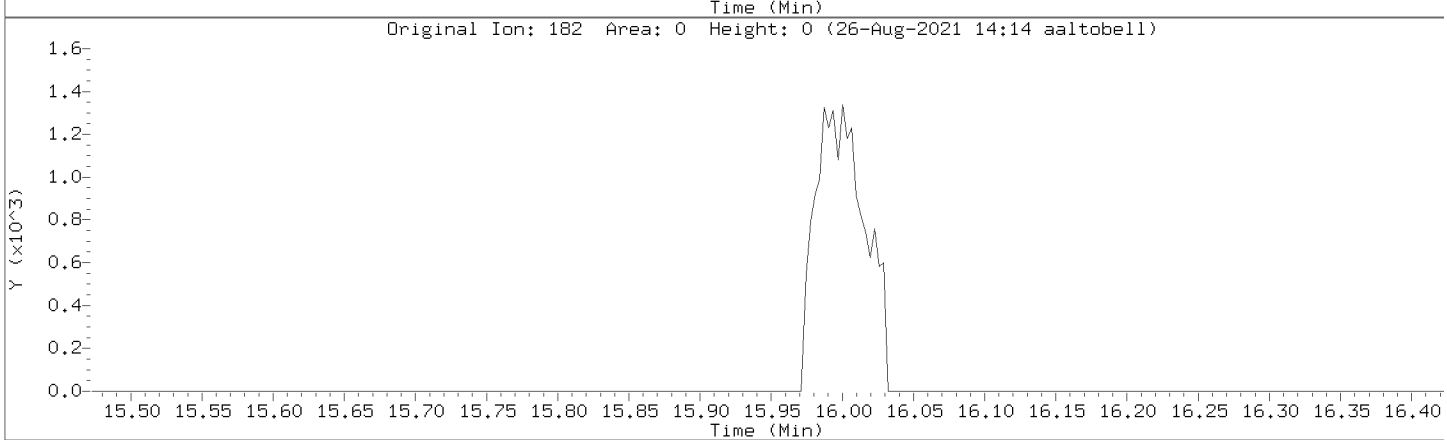
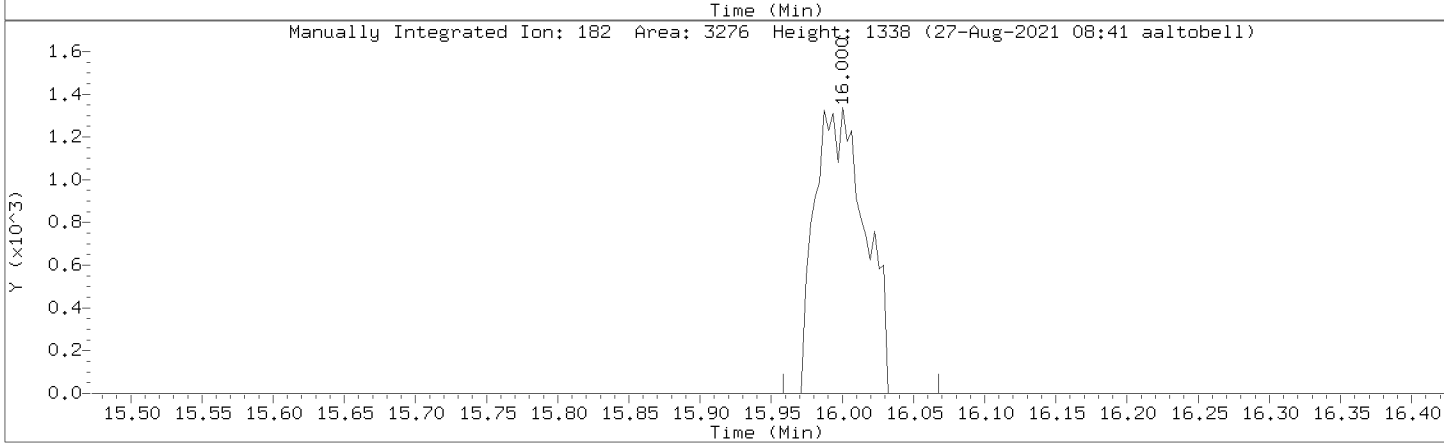
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6



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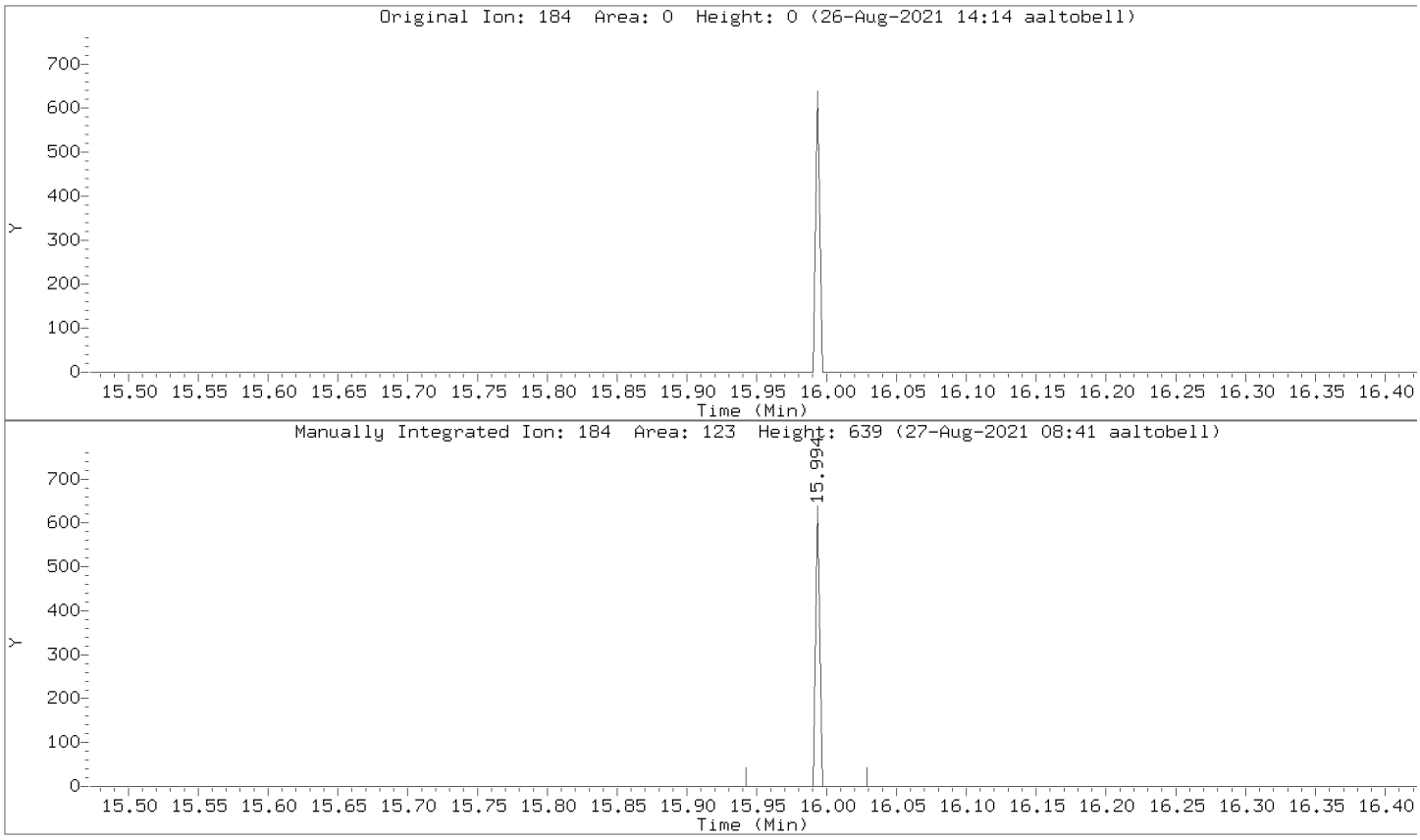
Lab Sample ID: CAL1



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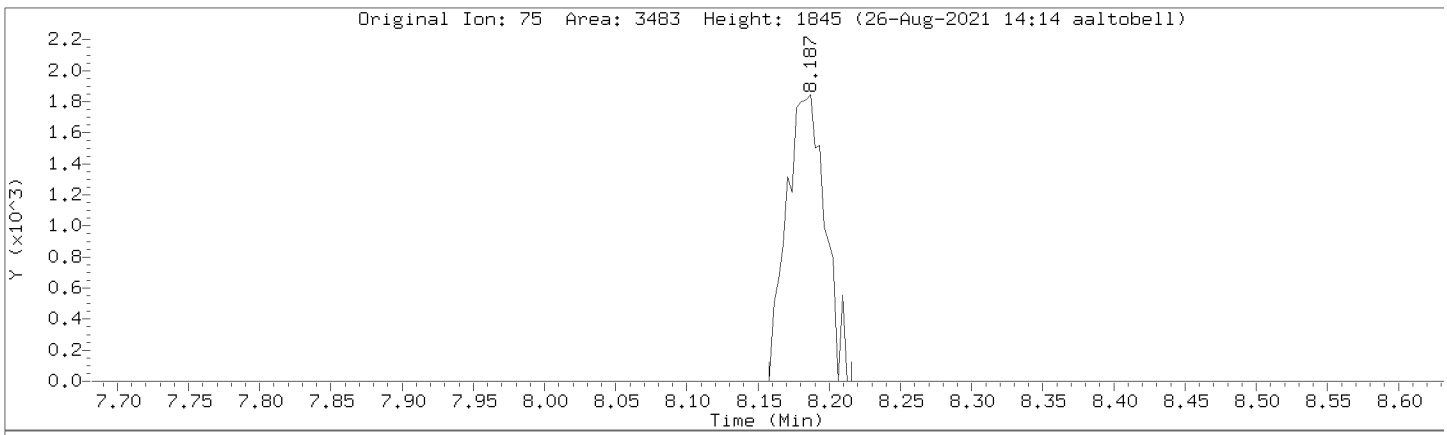
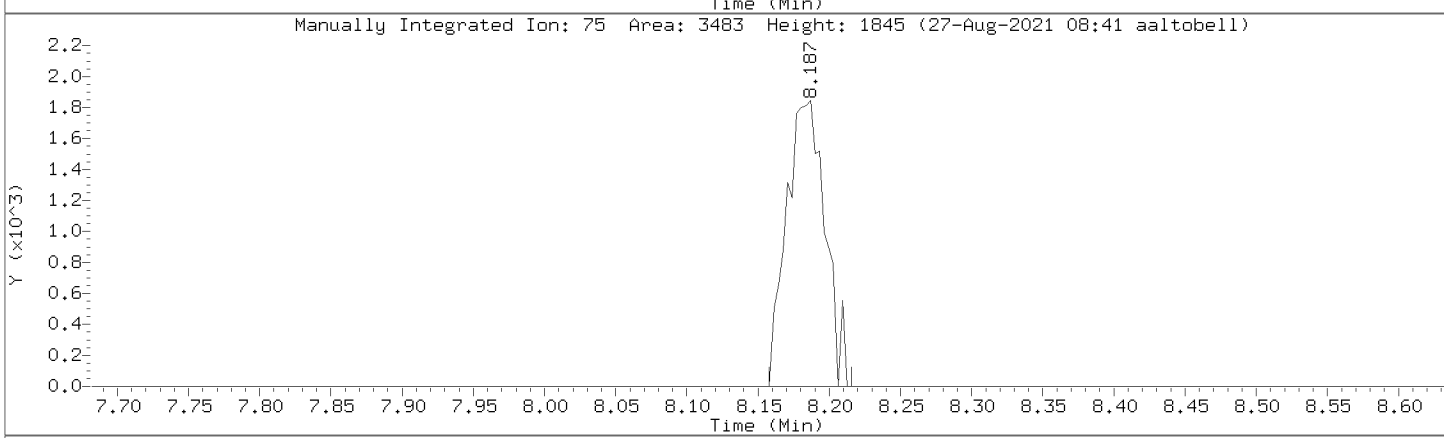
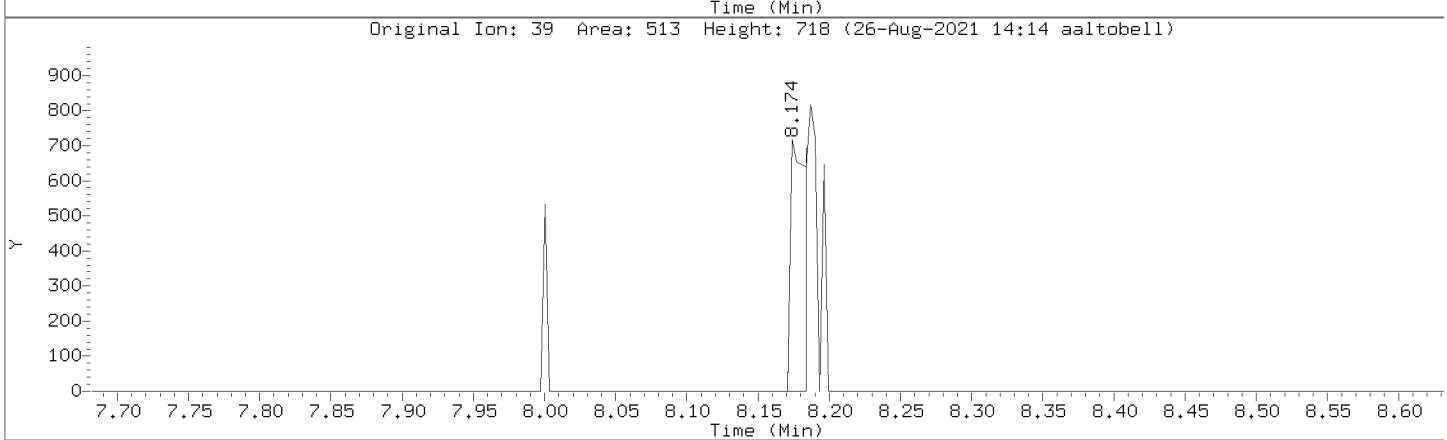
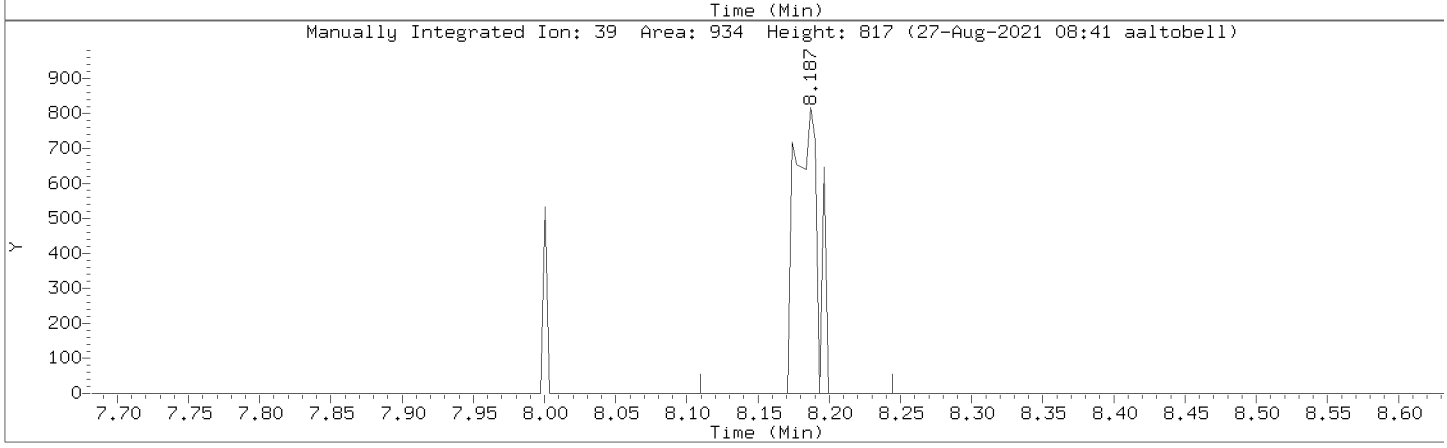
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: cis-1,3-Dichloropropene
CAS Number: 10061-01-5



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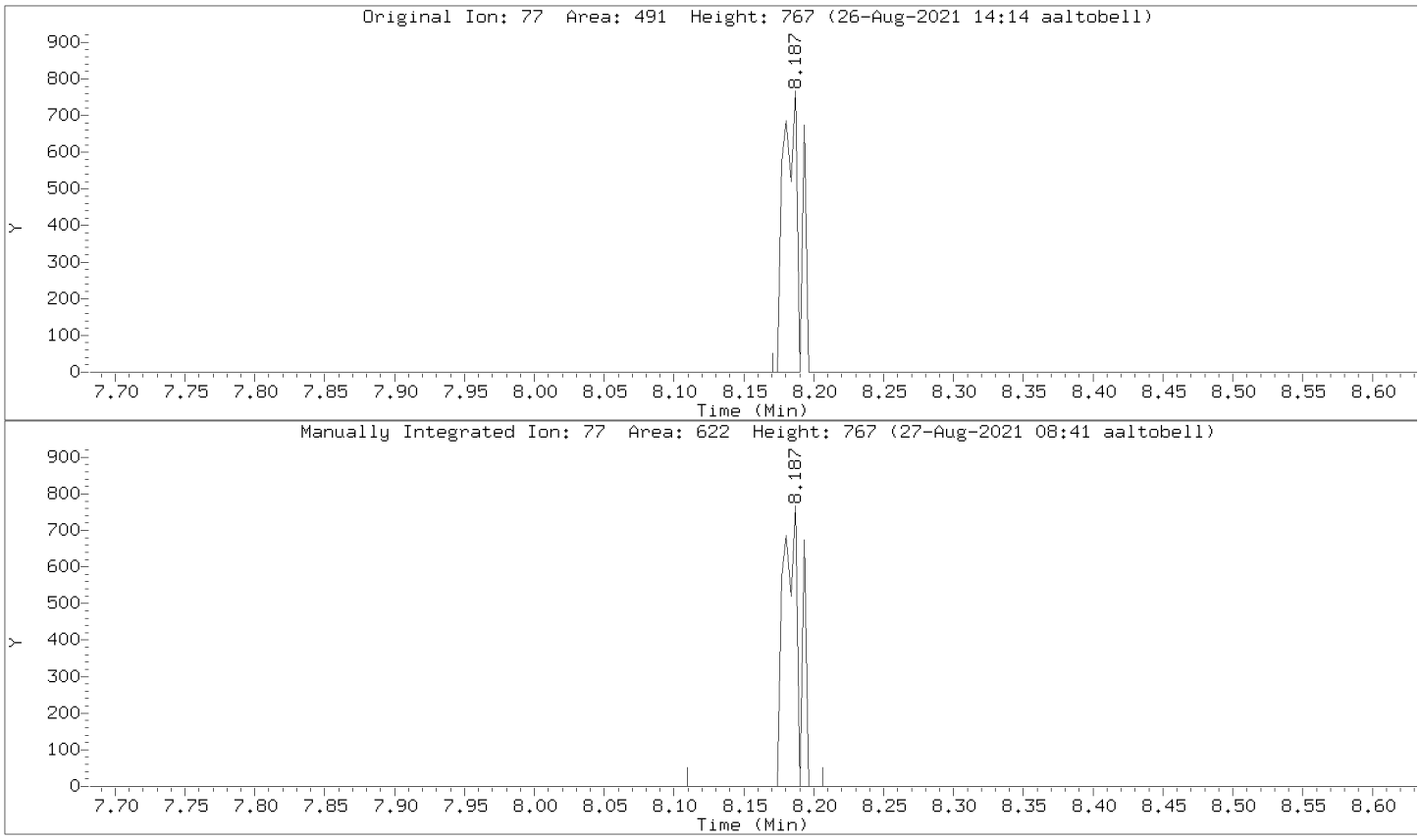
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1



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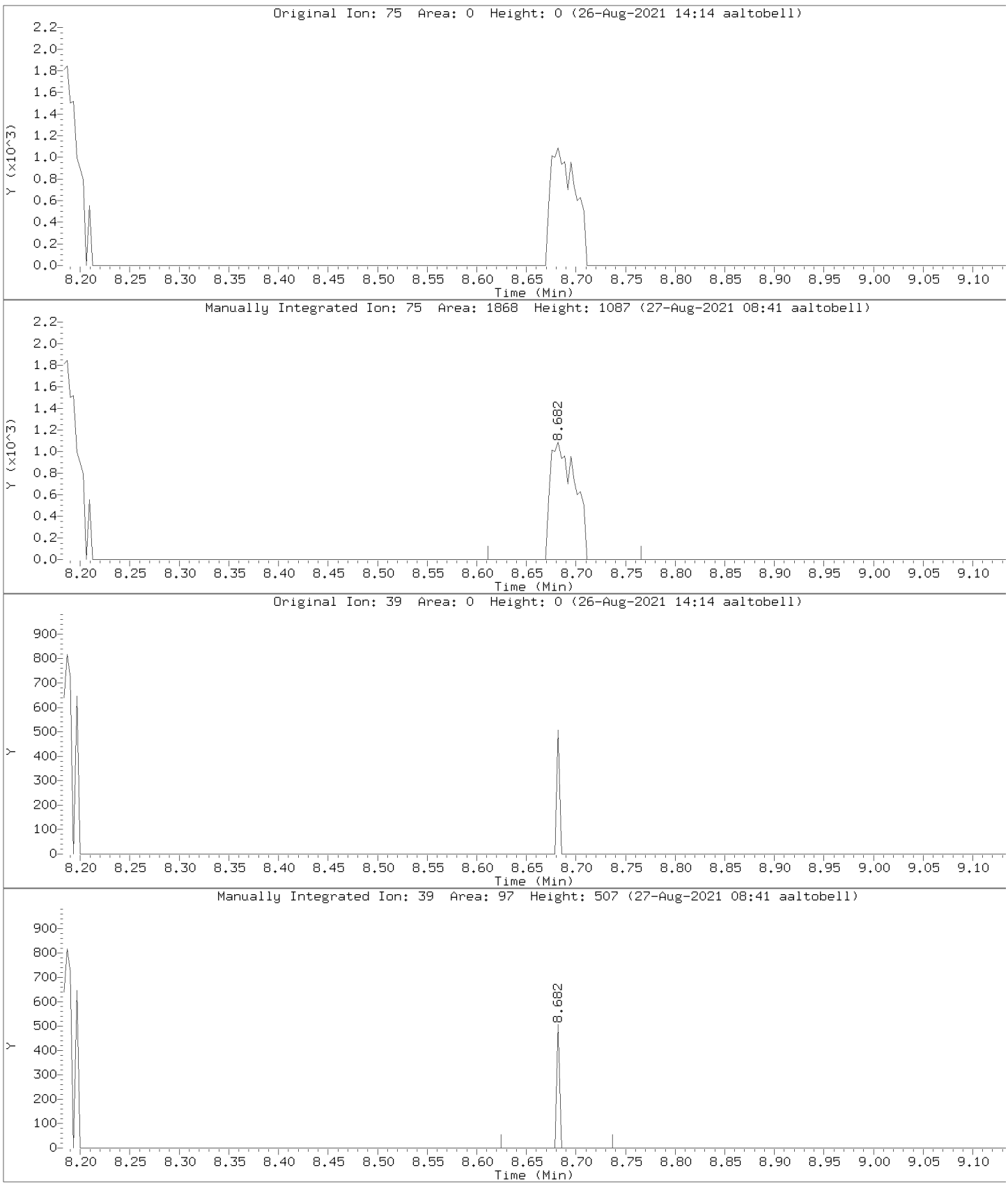
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: trans-1,3-Dichloropropene
CAS Number: 10061-02-6



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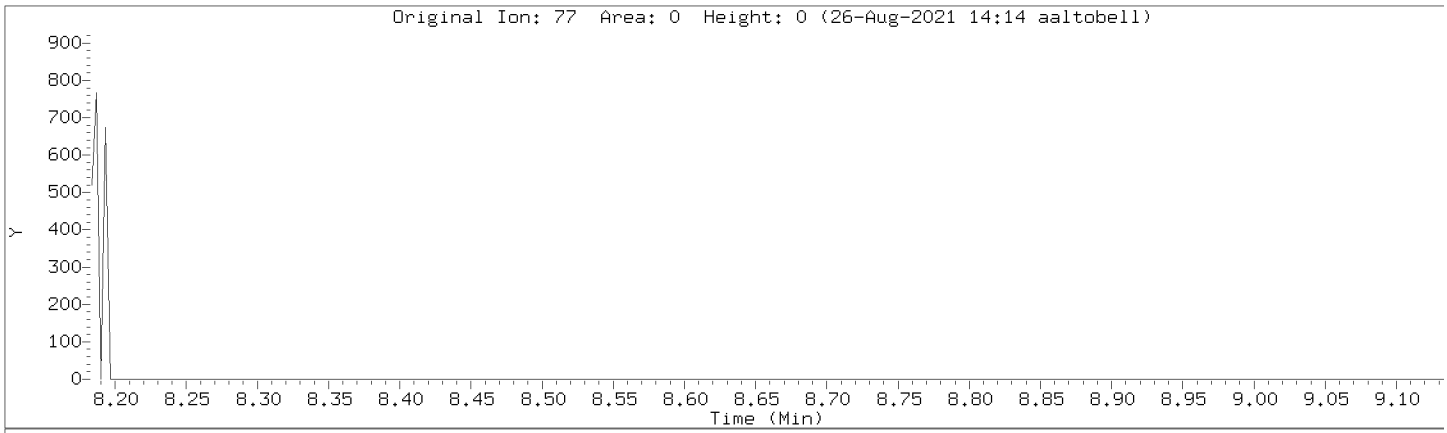


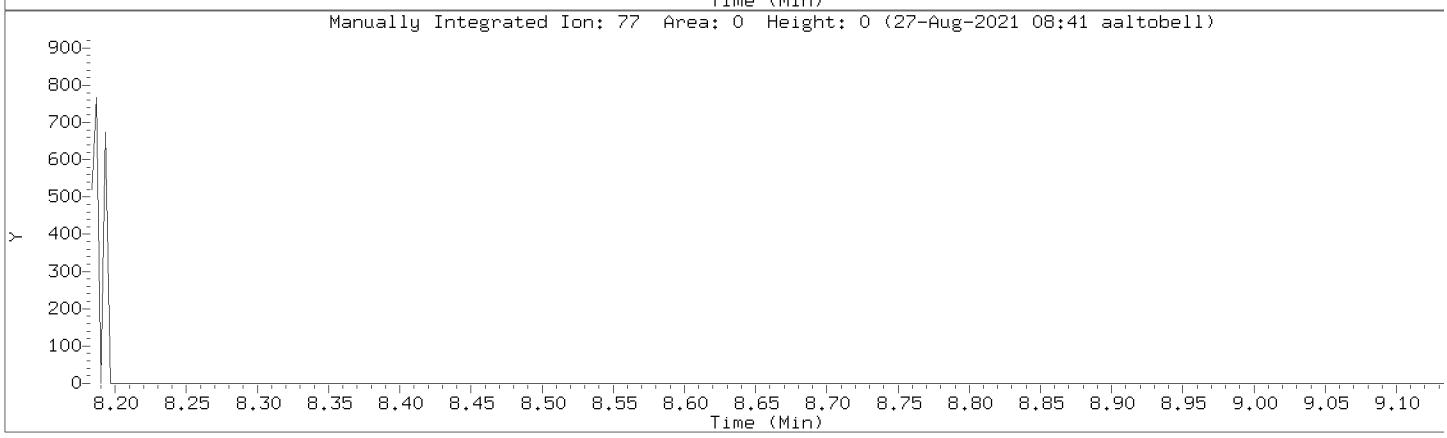

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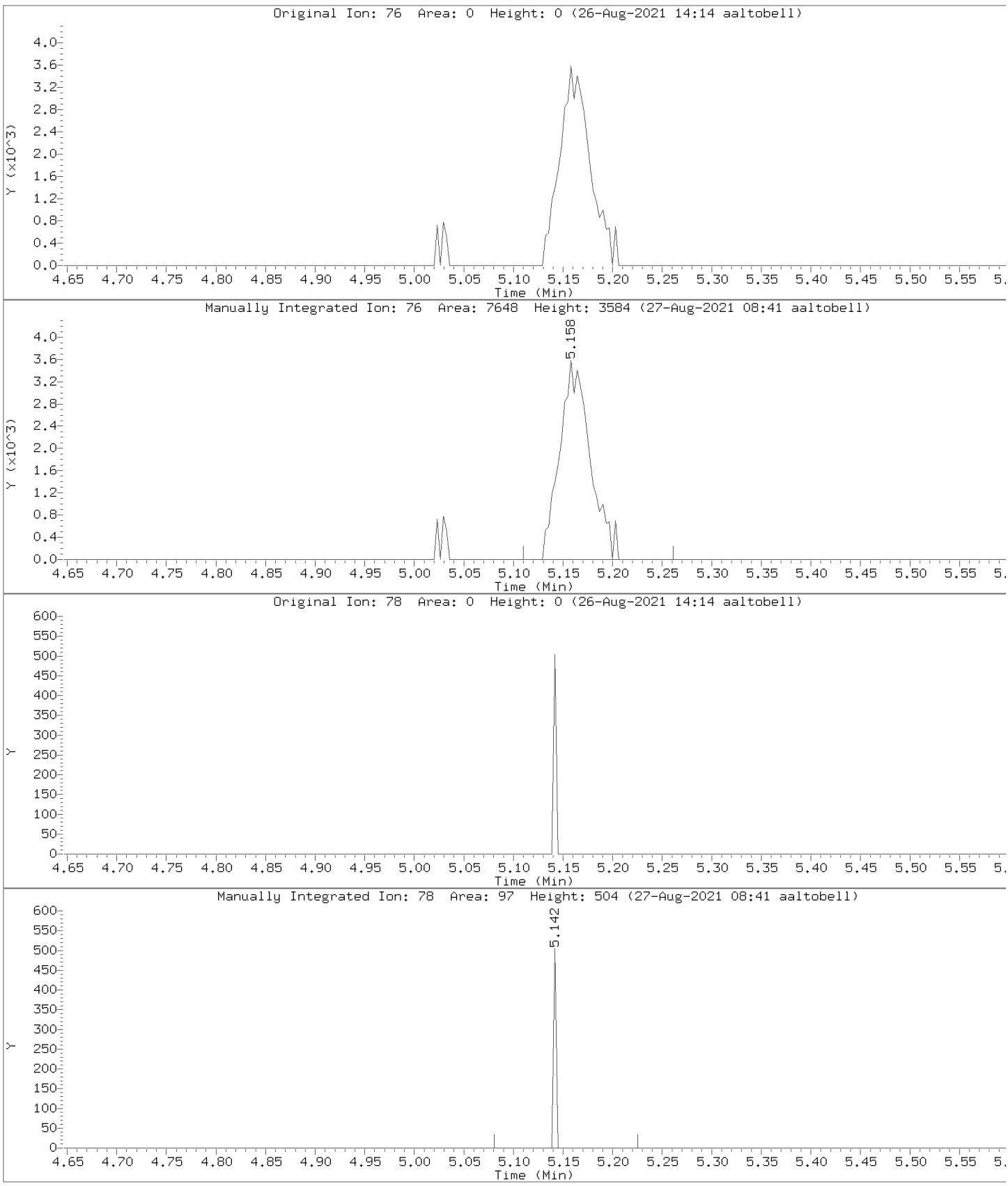
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Carbon Disulfide
CAS Number: 75-15-0



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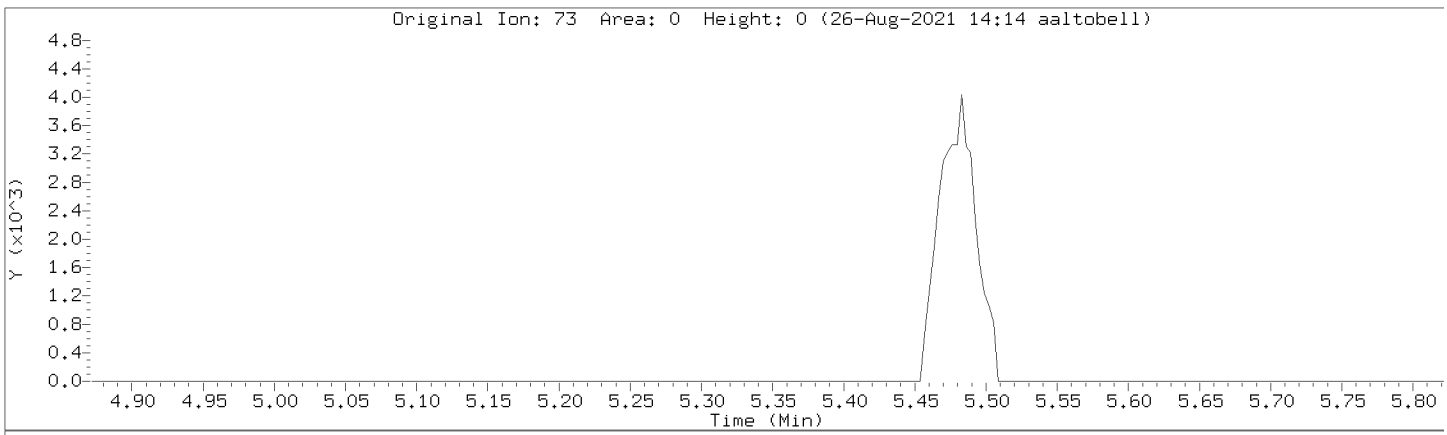
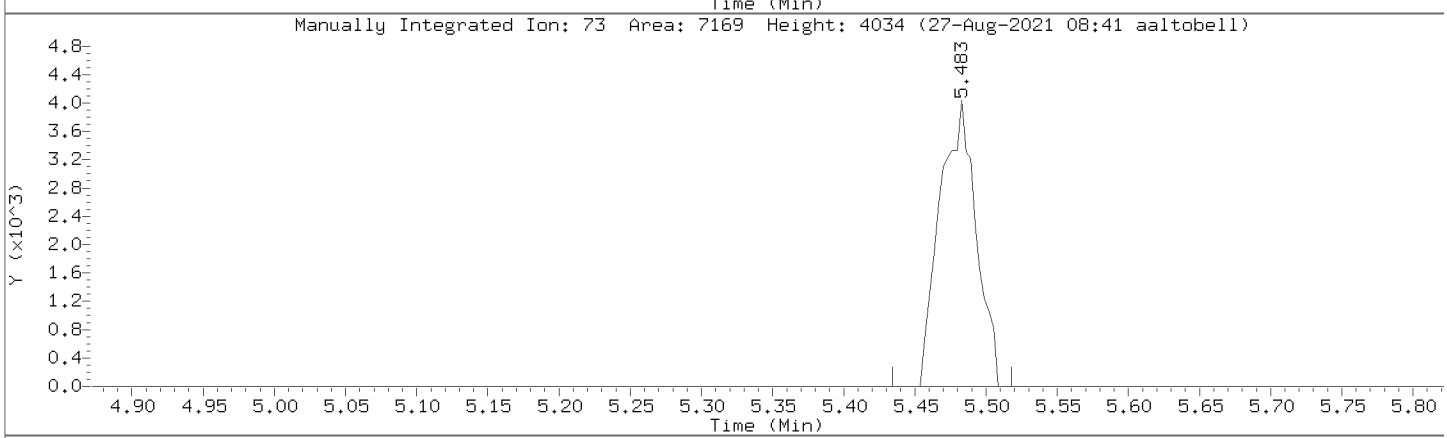
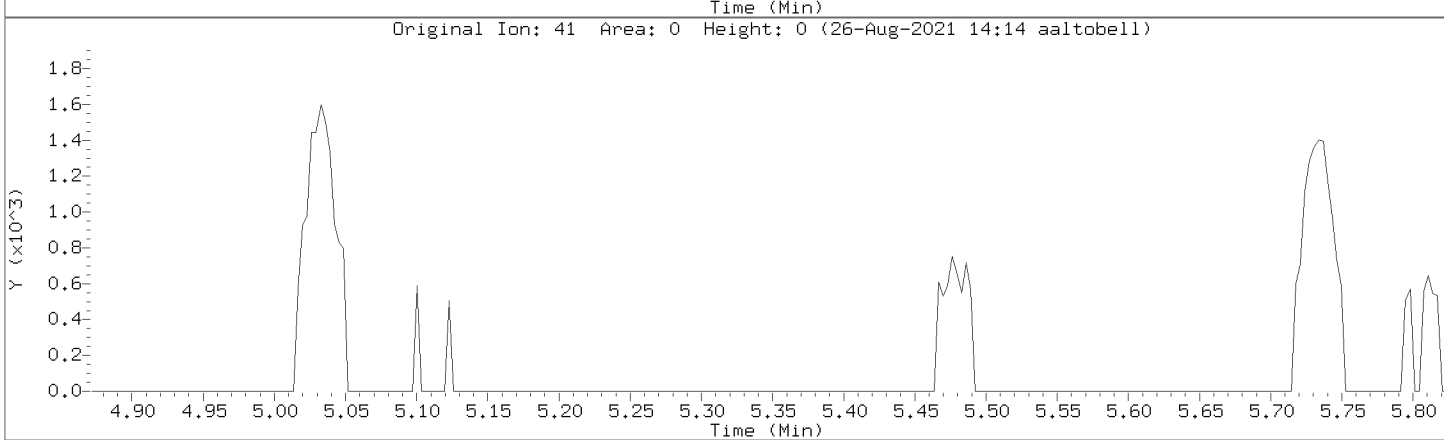
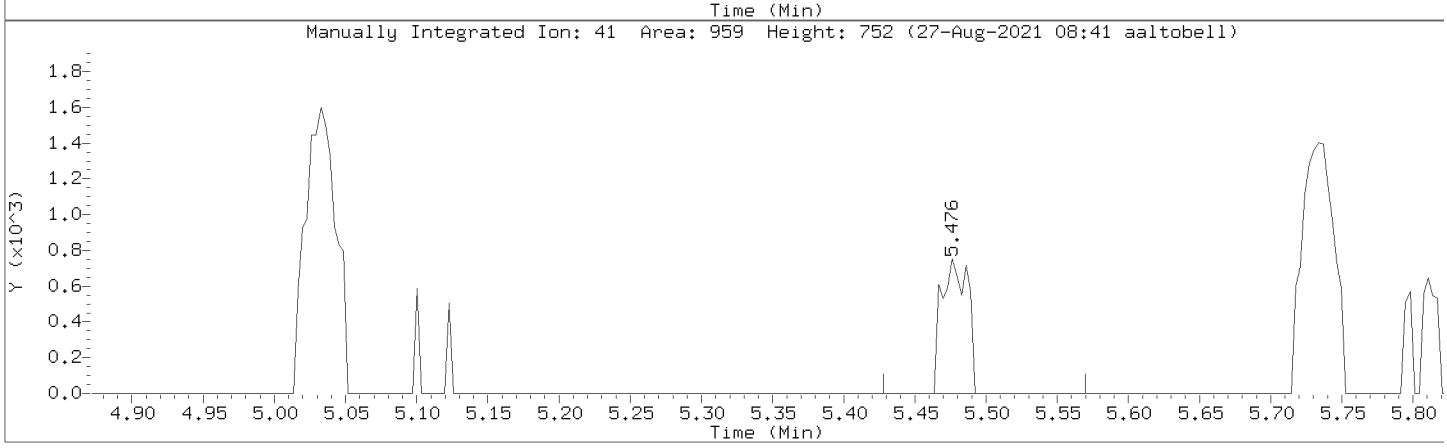
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Methyl Tert Butyl Ether
CAS Number: 1634-04-4



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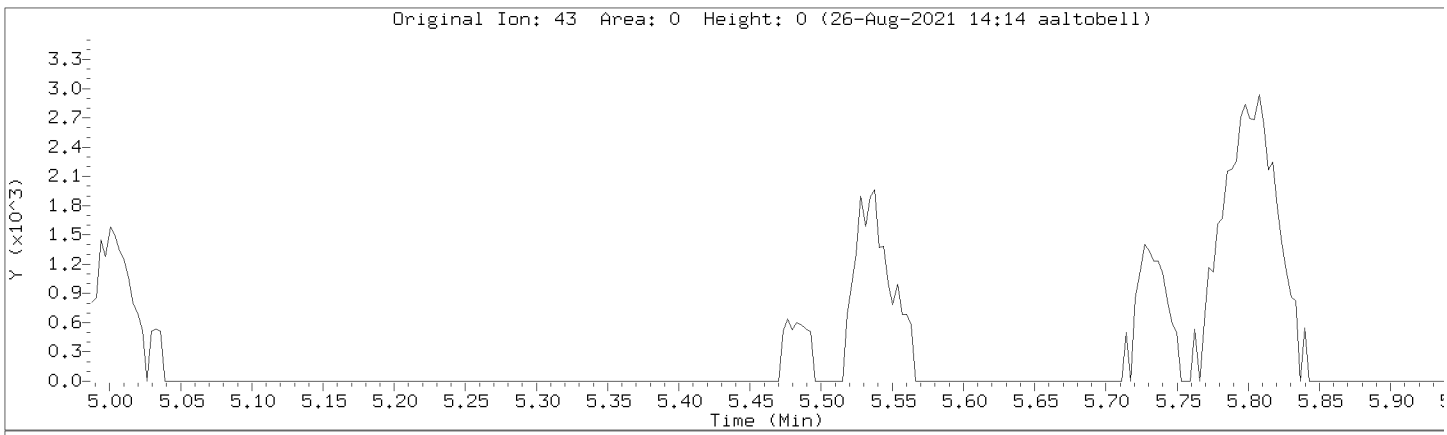
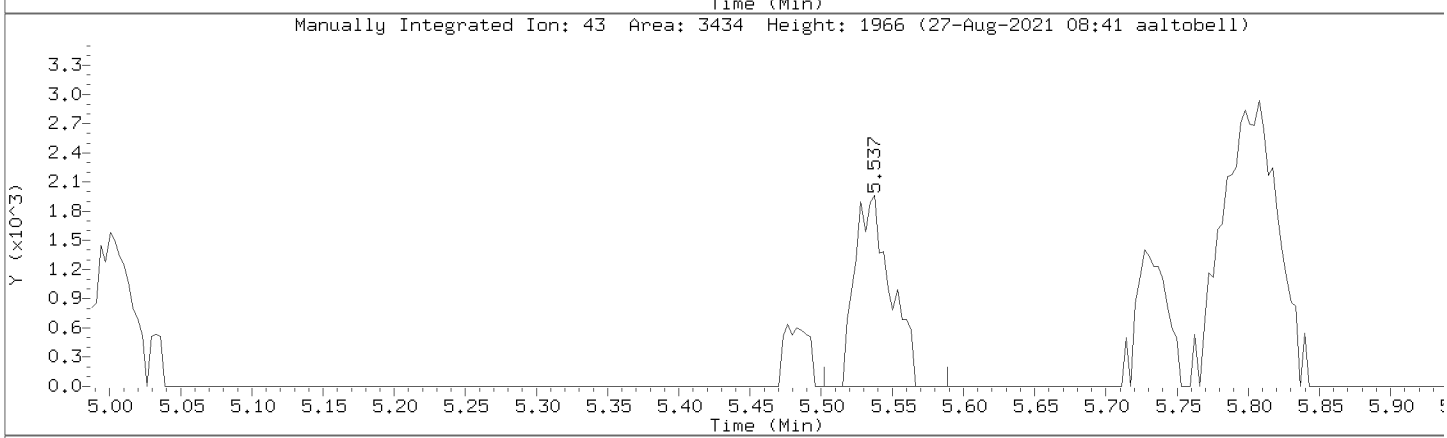
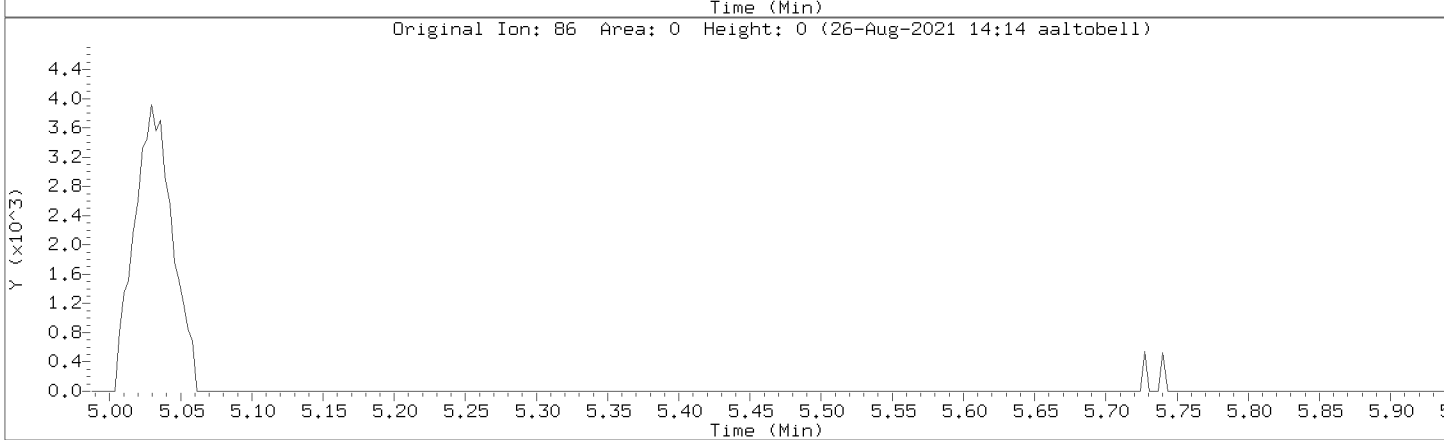
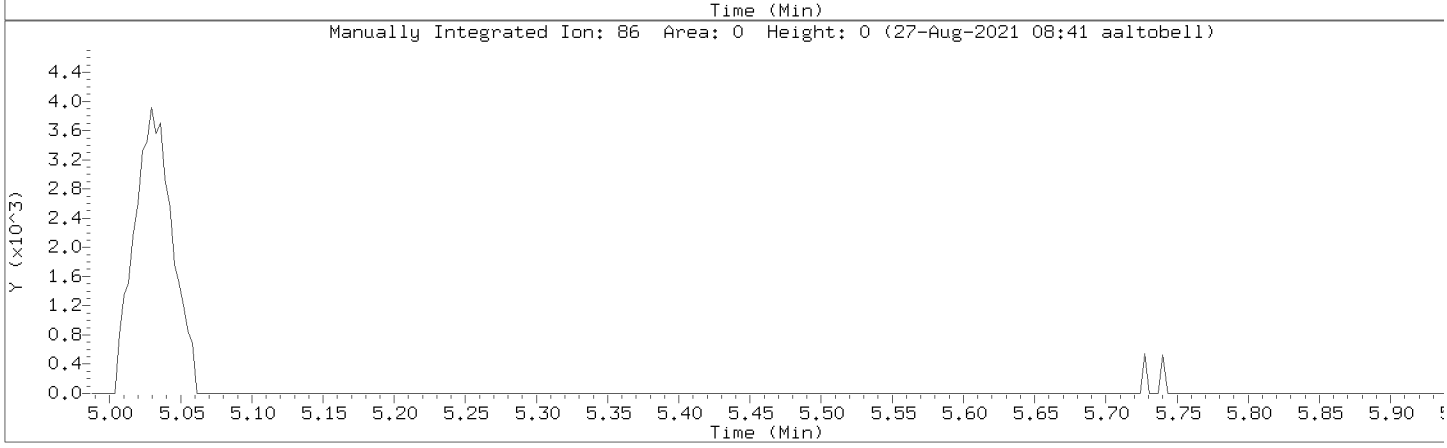
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Vinyl Acetate
CAS Number: 108-05-4



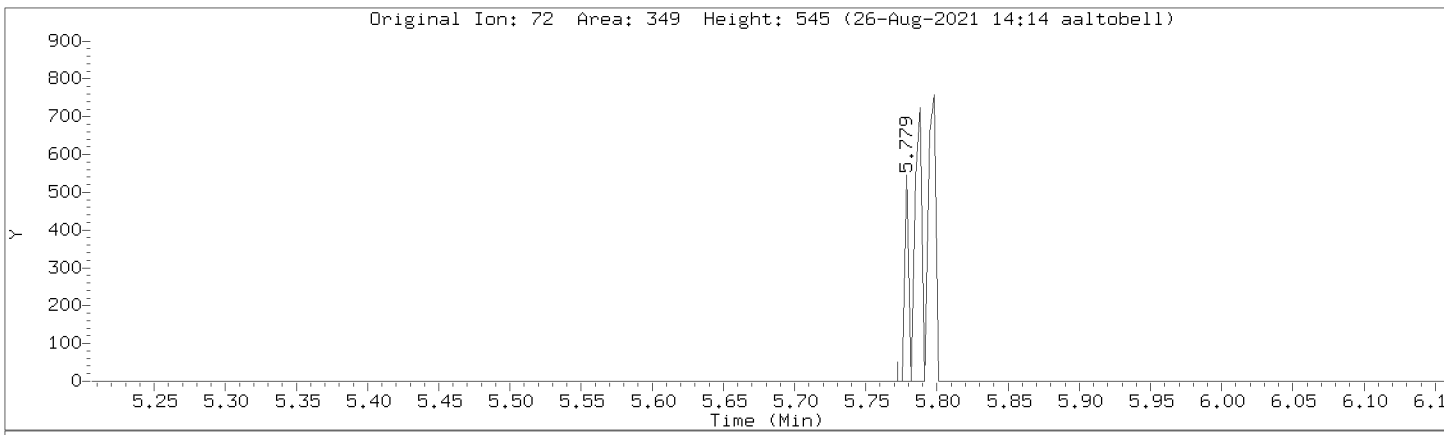



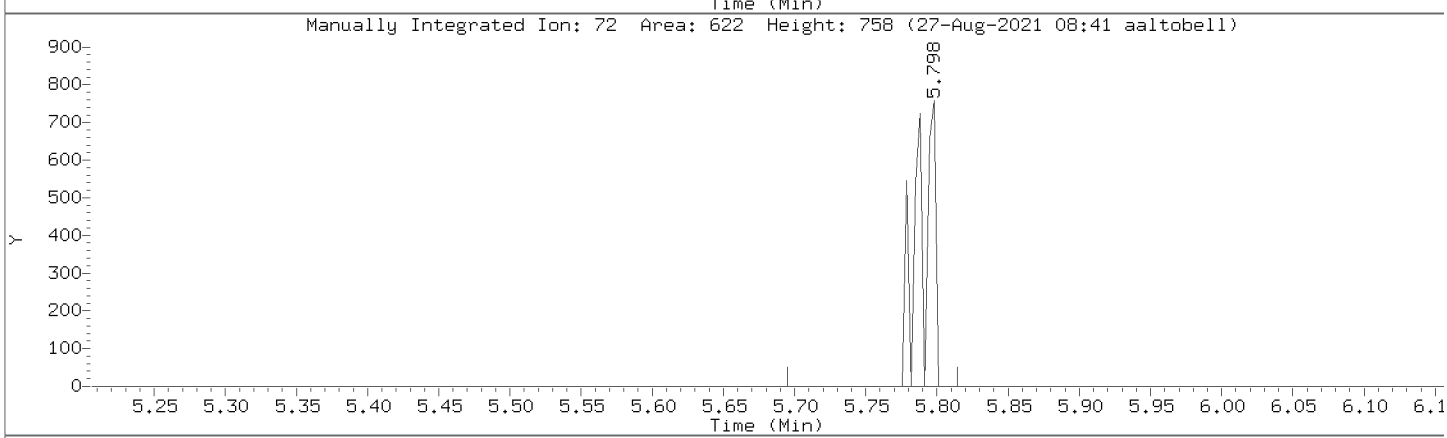



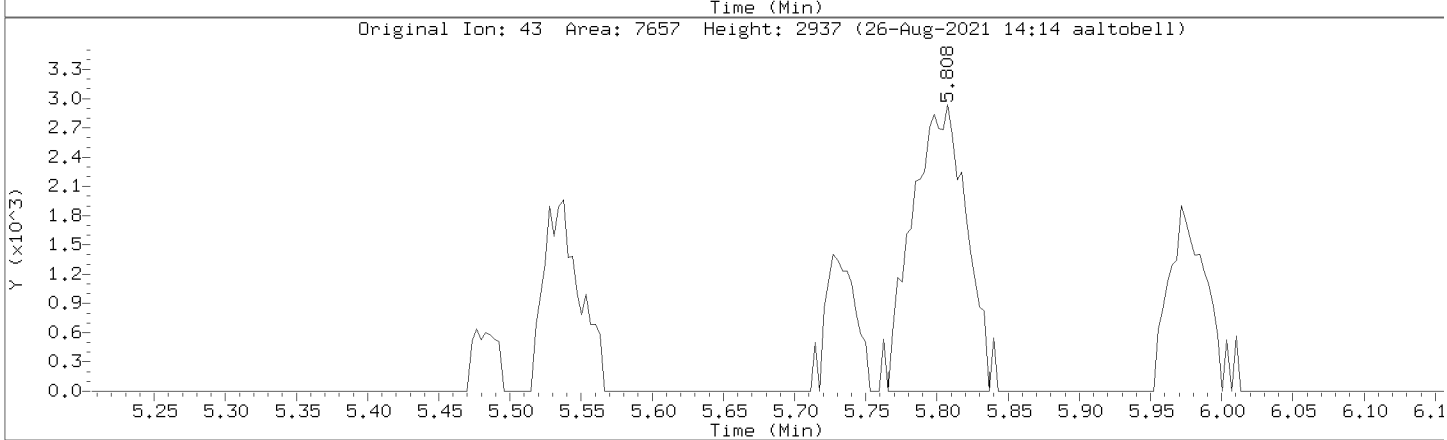



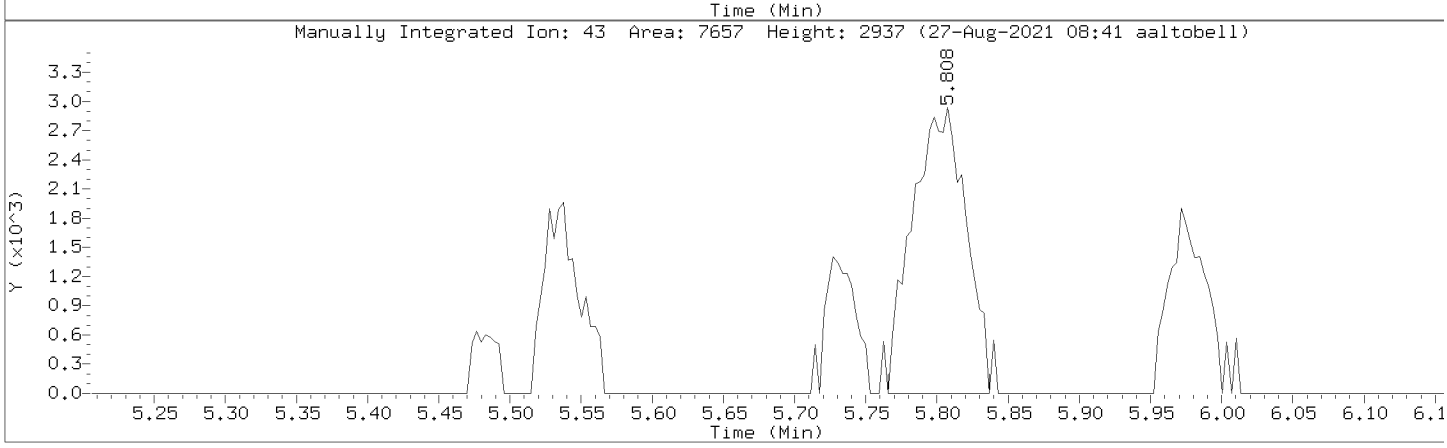
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3



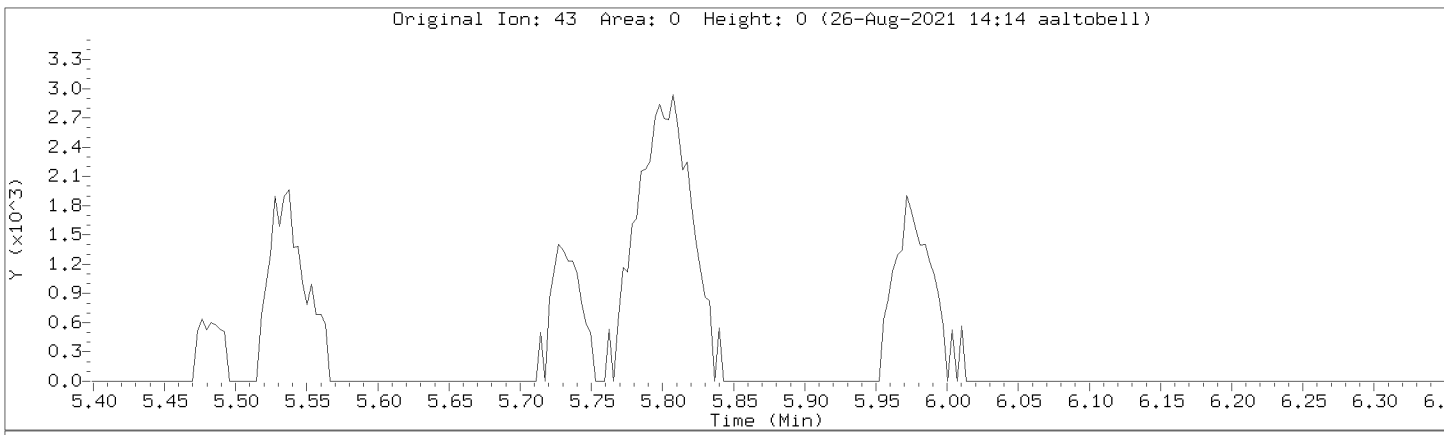



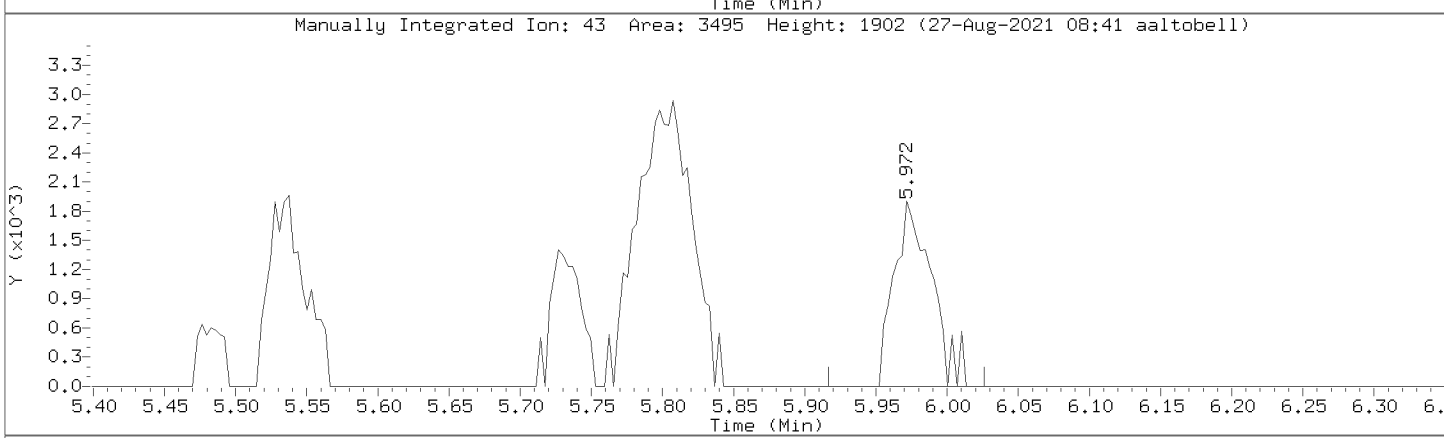



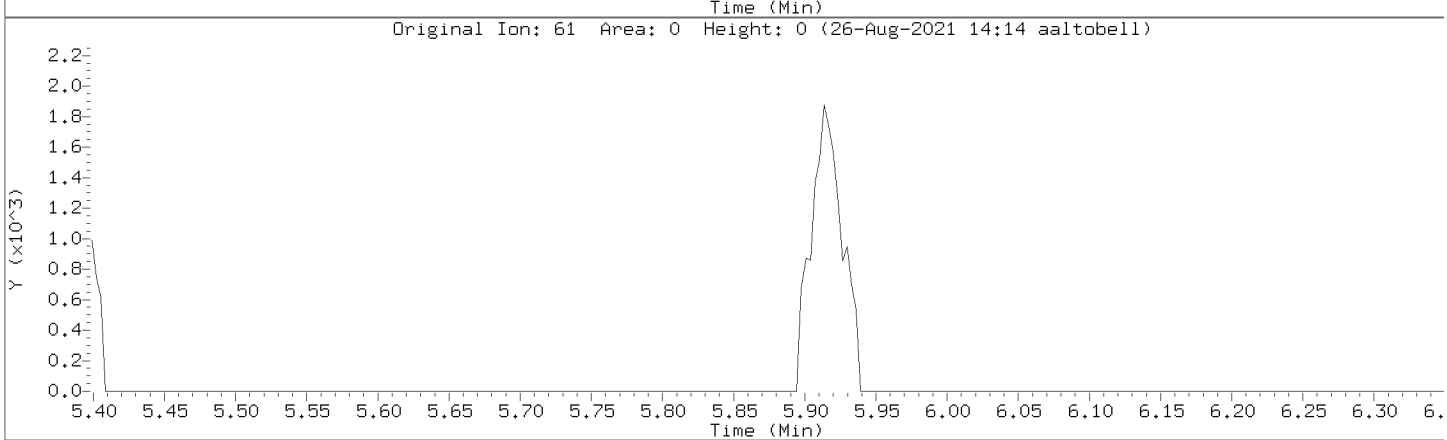



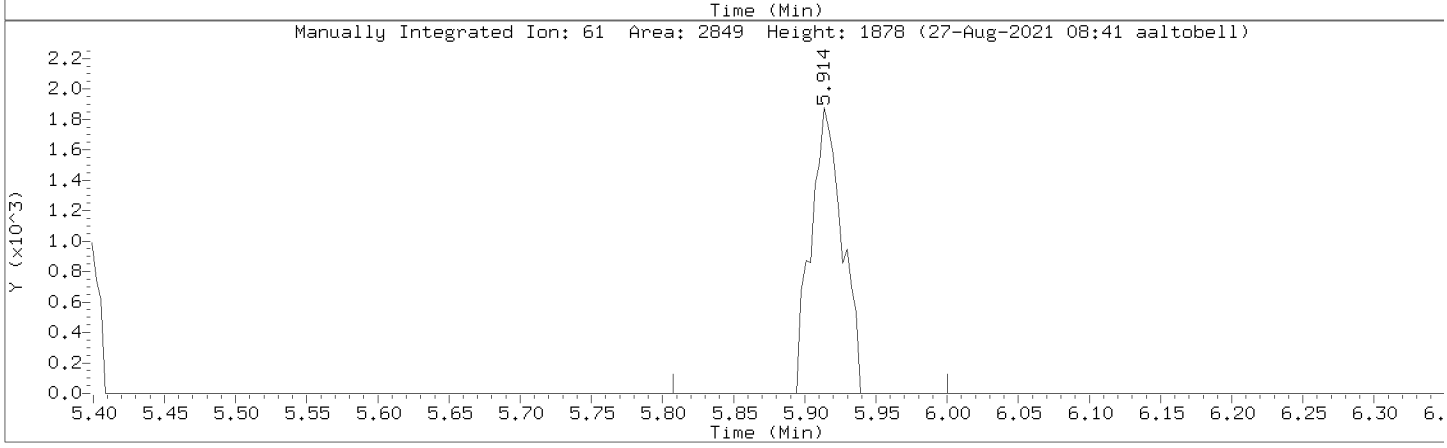
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Ethyl Acetate
CAS Number: 141-78-6



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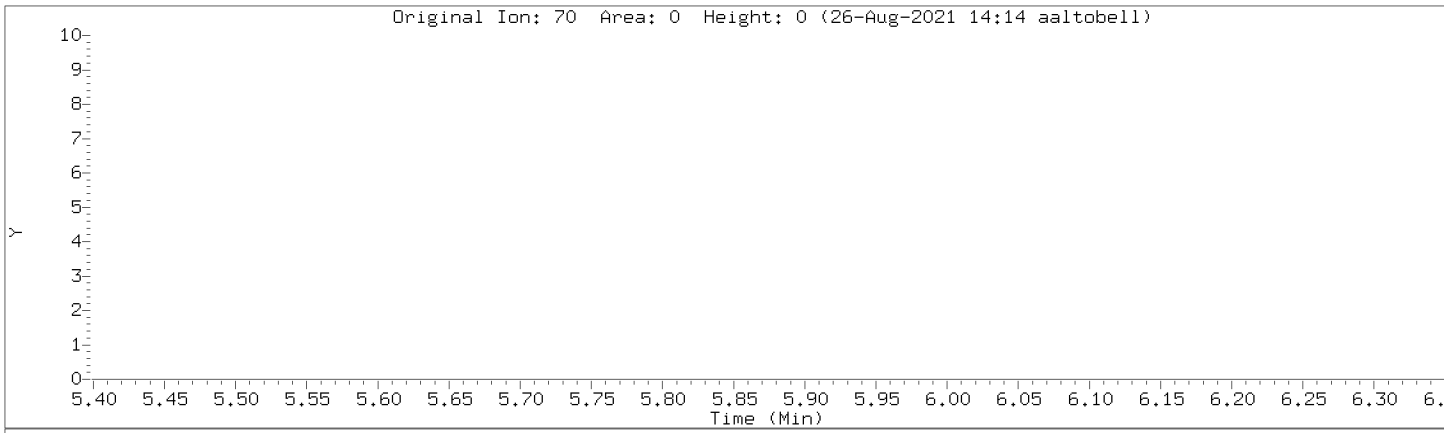
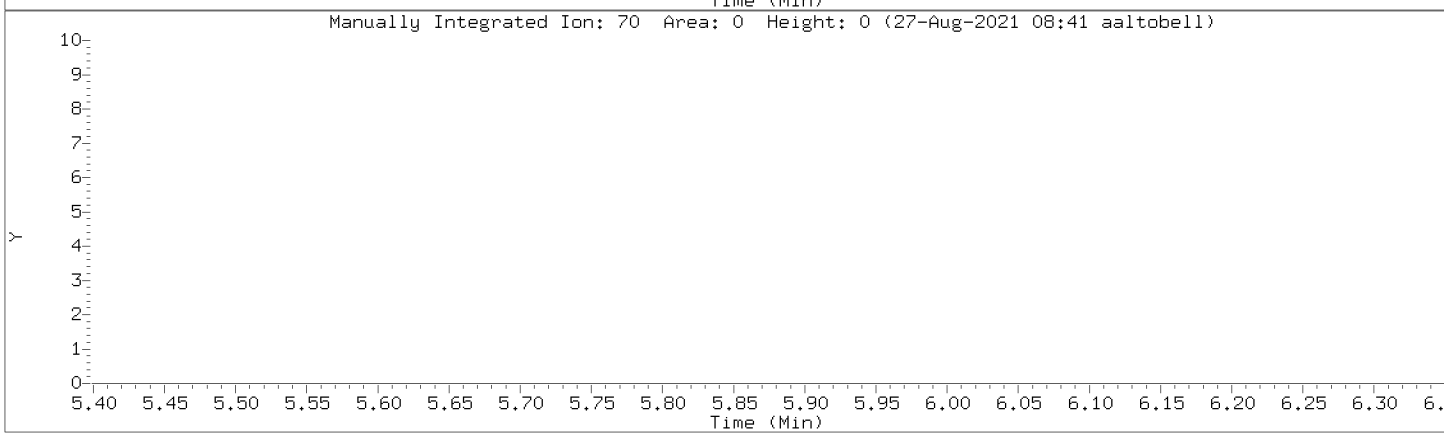
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1



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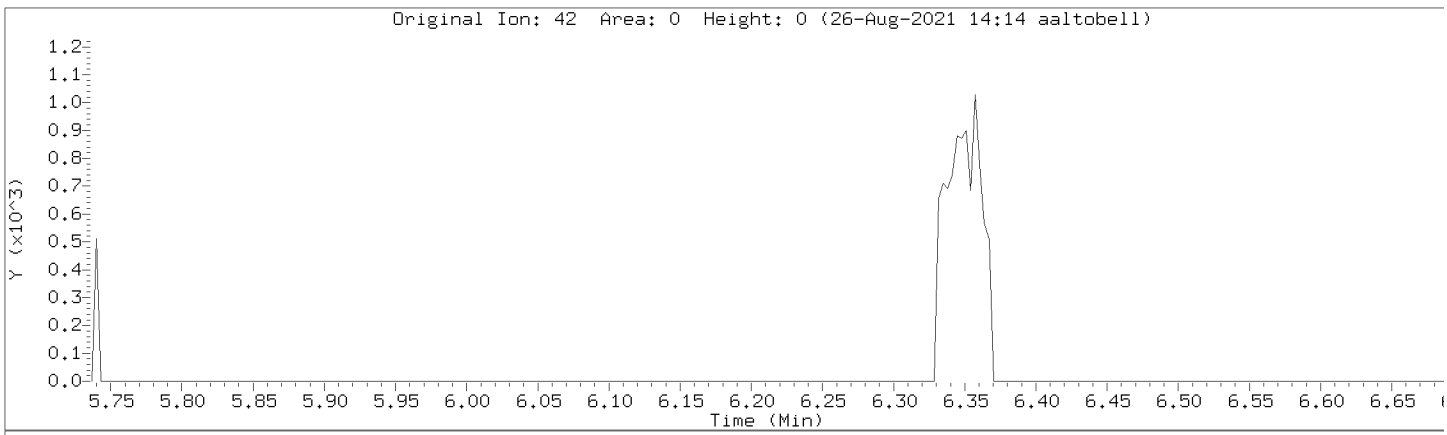
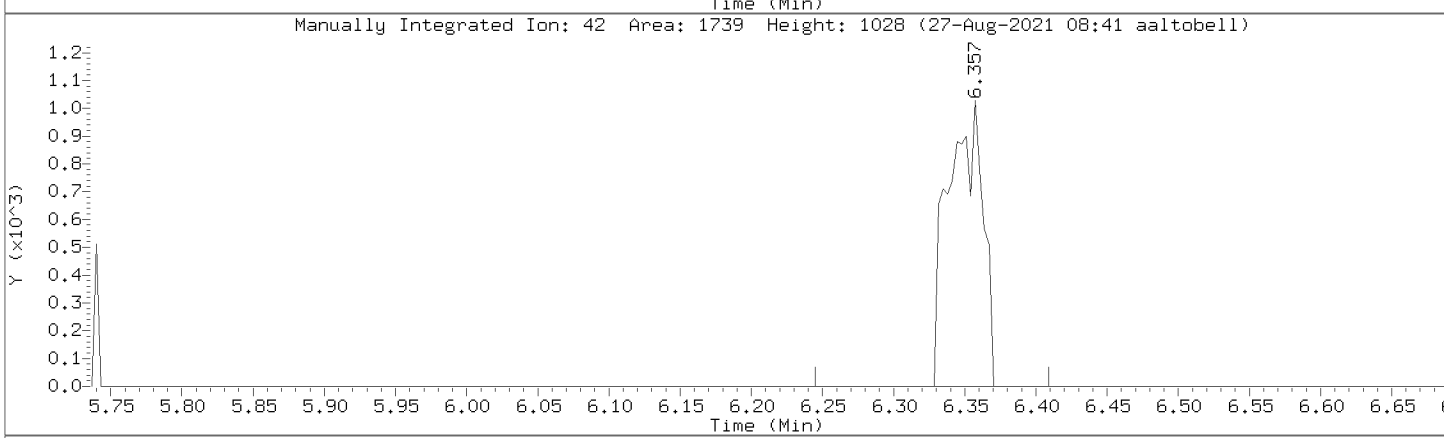
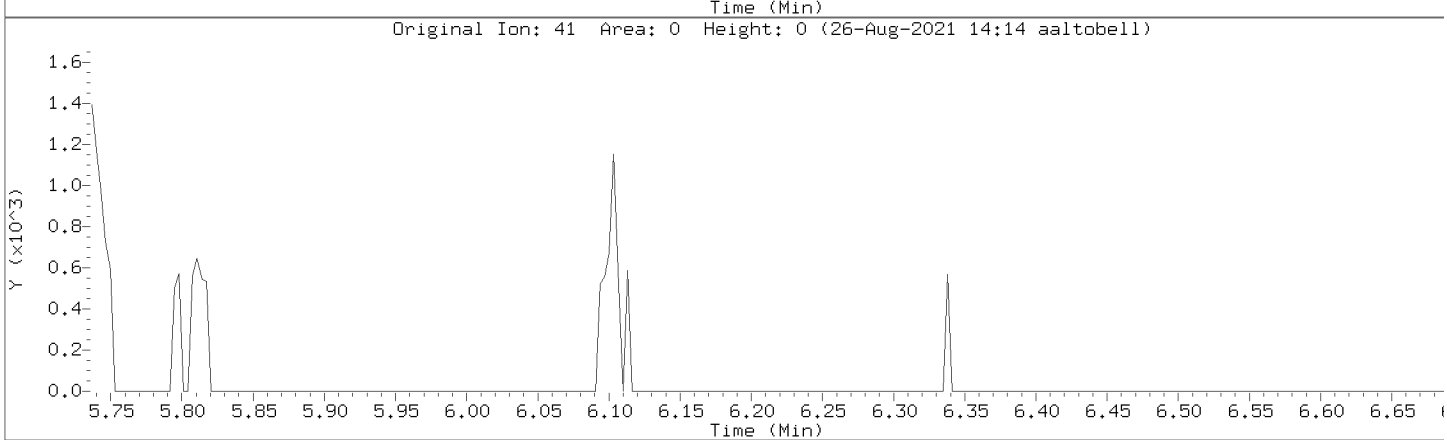
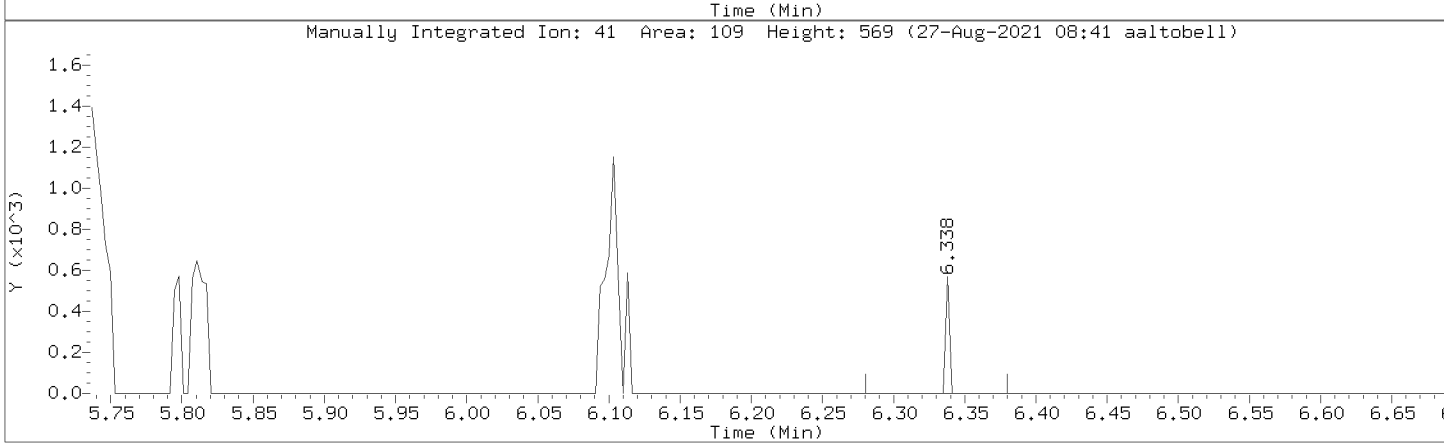
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Tetrahydrofuran
CAS Number: 109-99-9



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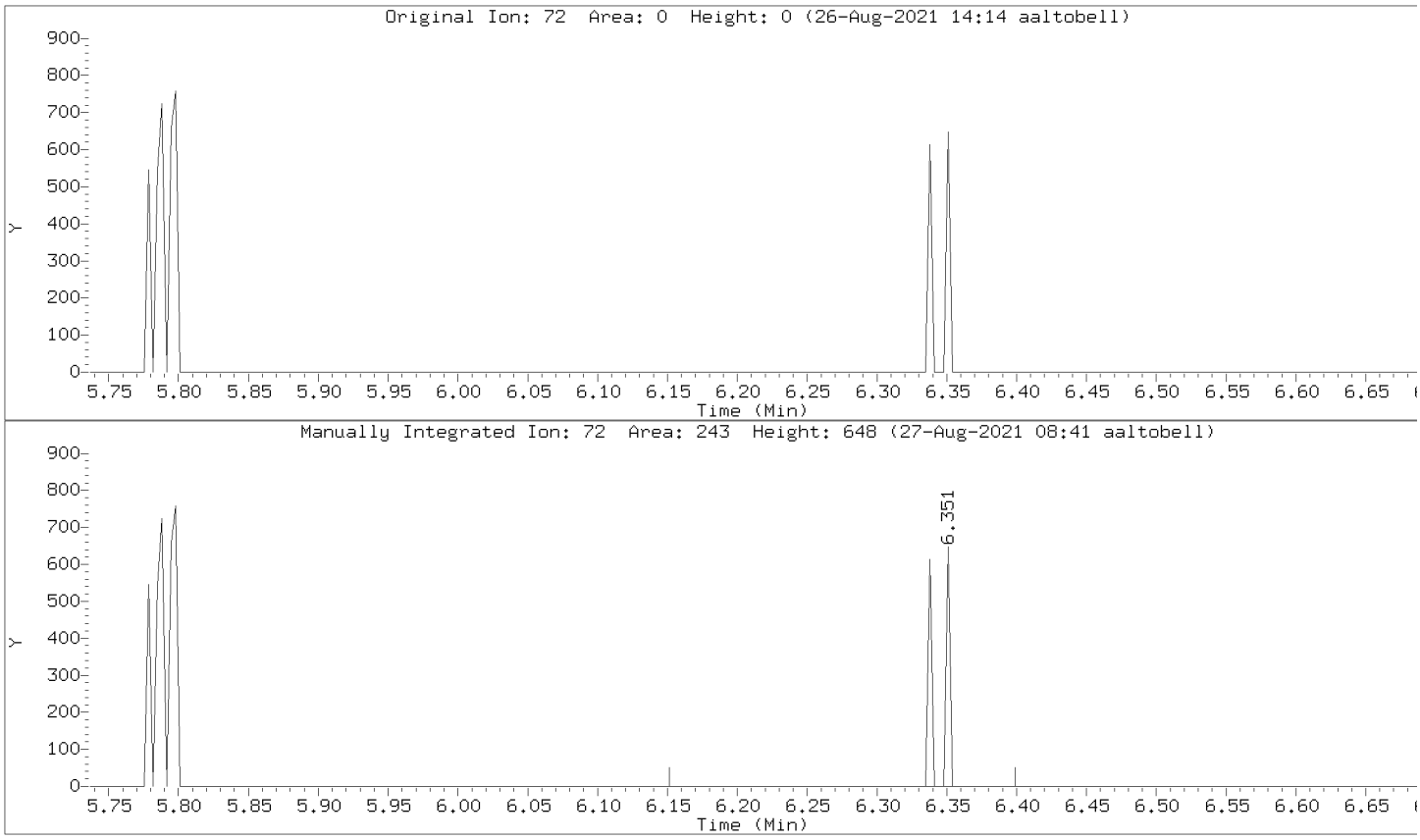

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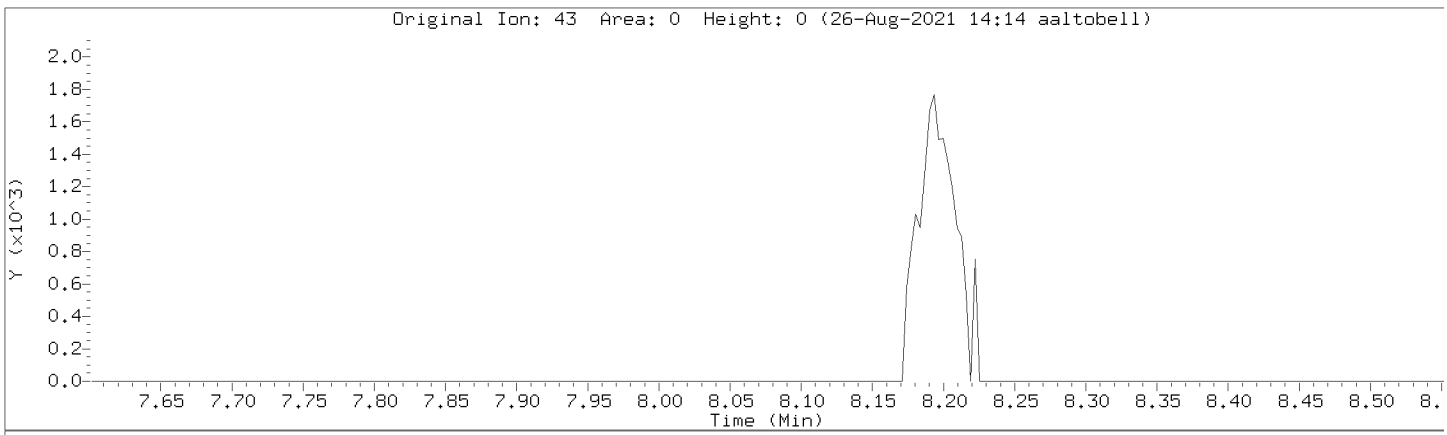
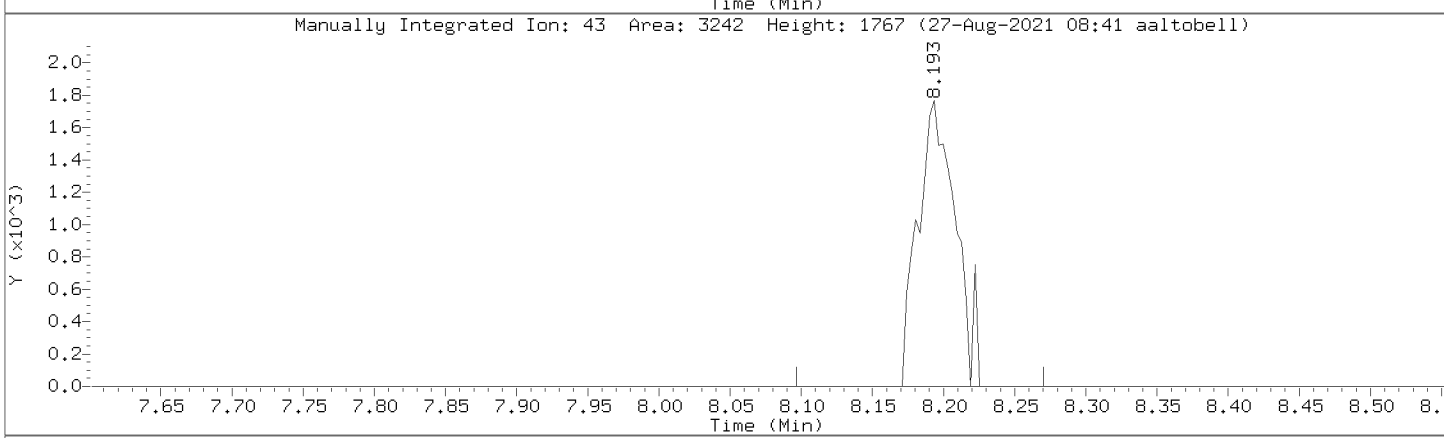
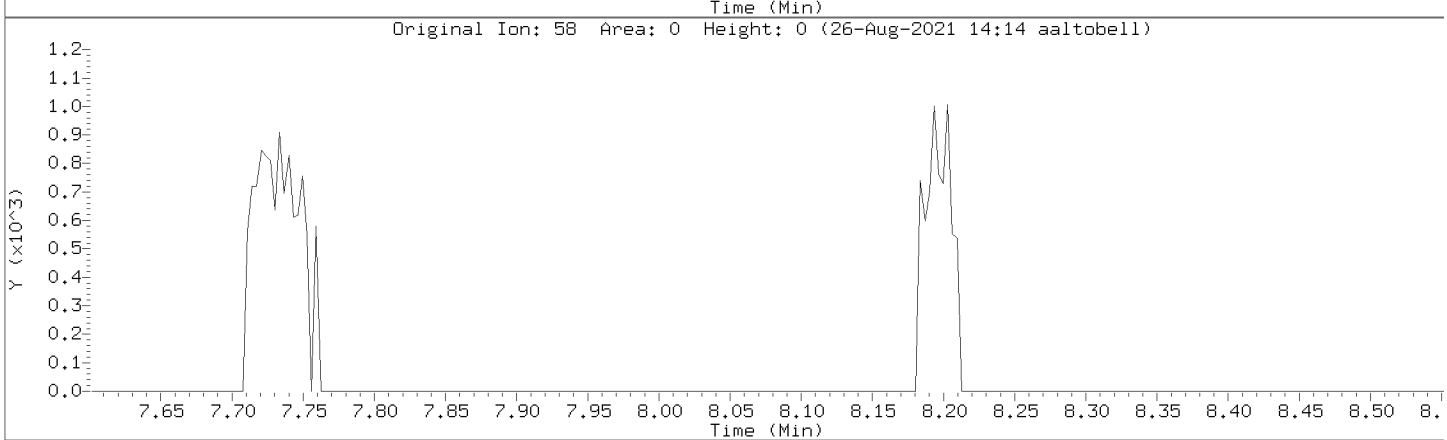
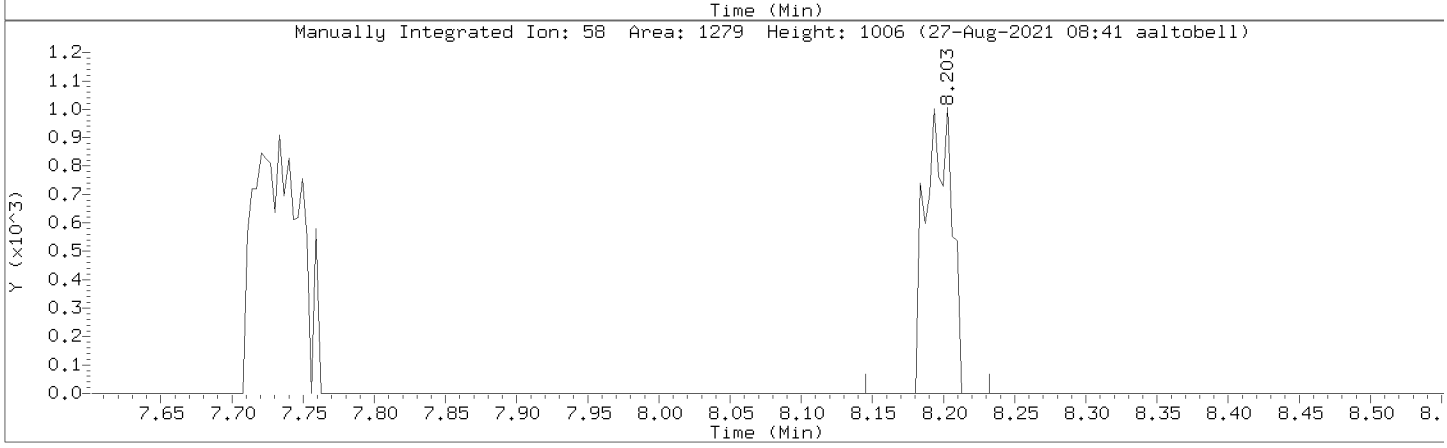
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Methyl Isobutyl Ketone
CAS Number: 108-10-1



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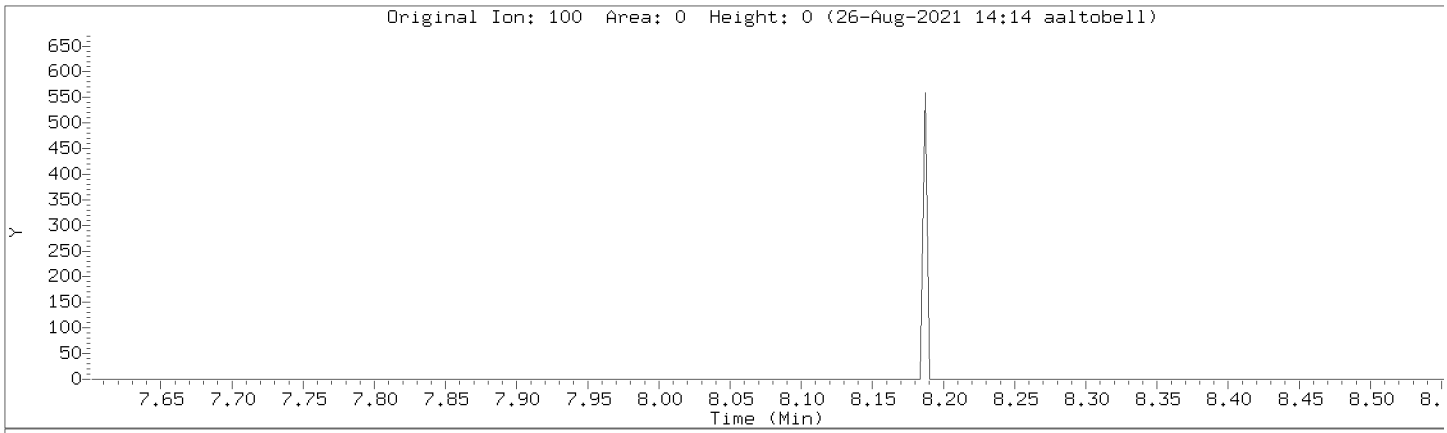


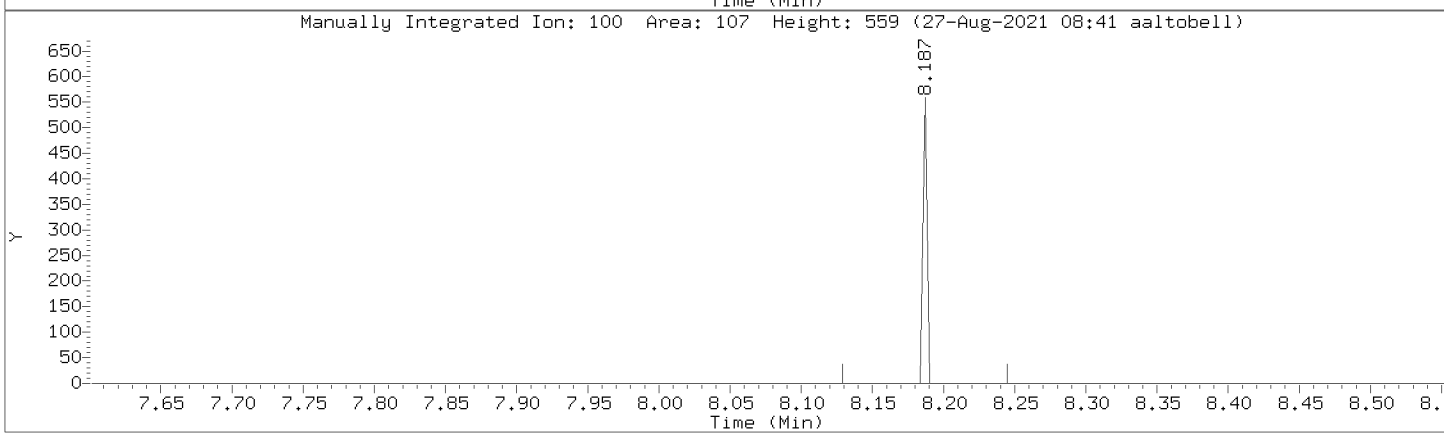

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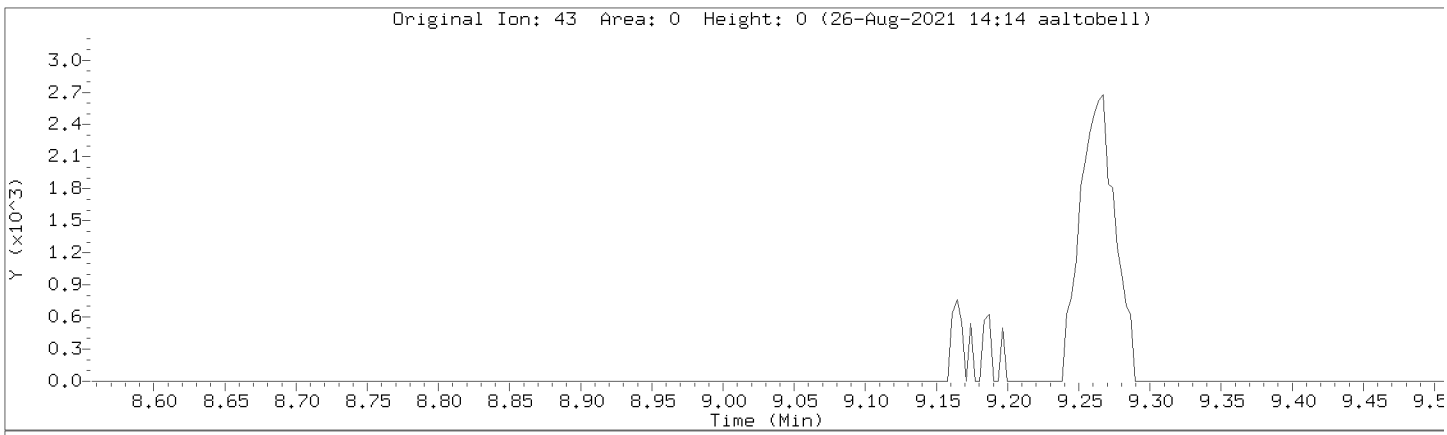
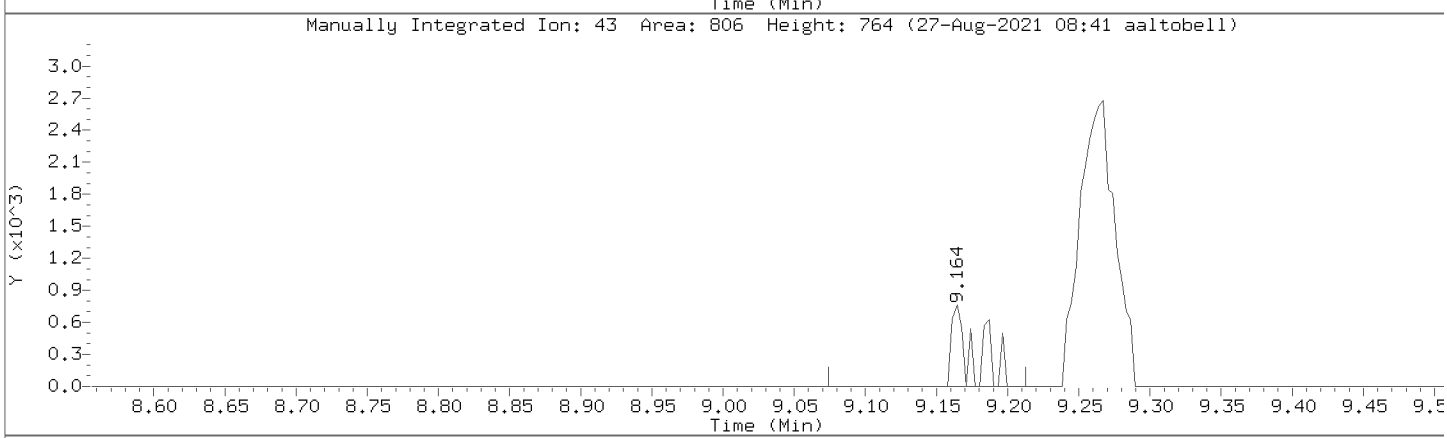
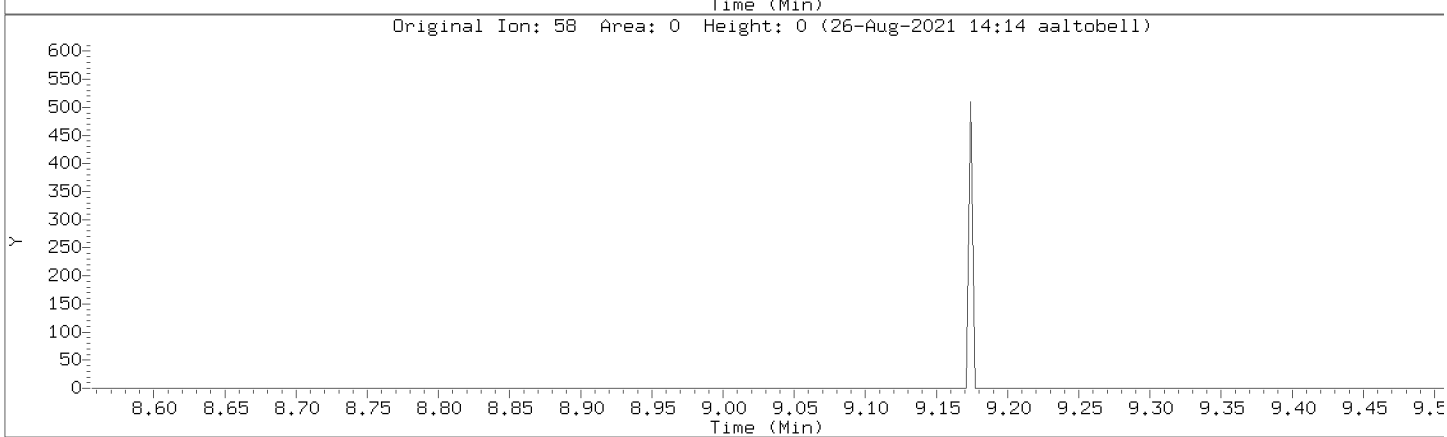
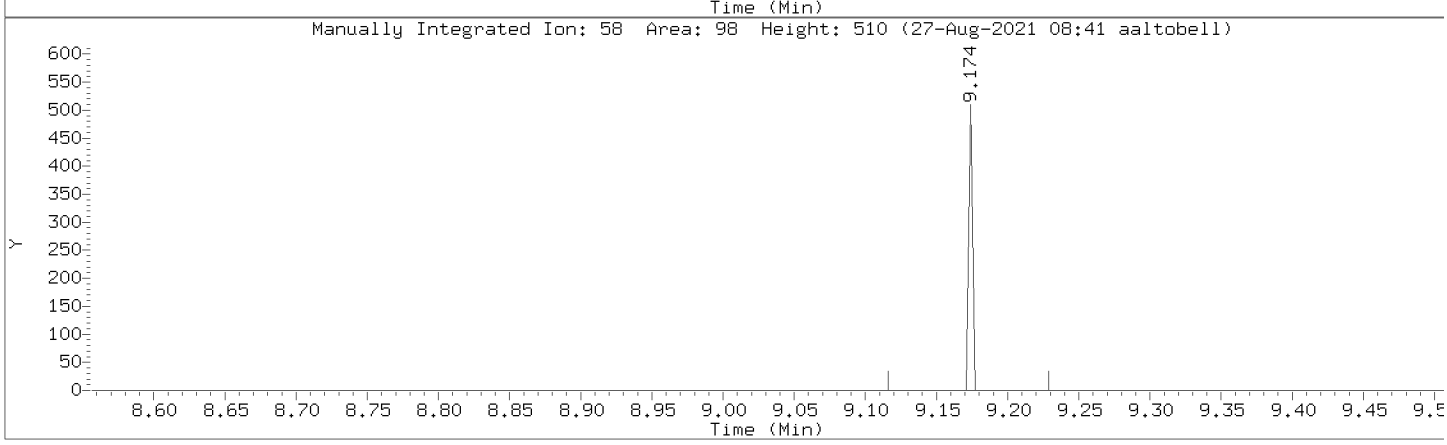
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Methyl Butyl Ketone
CAS Number: 591-78-6



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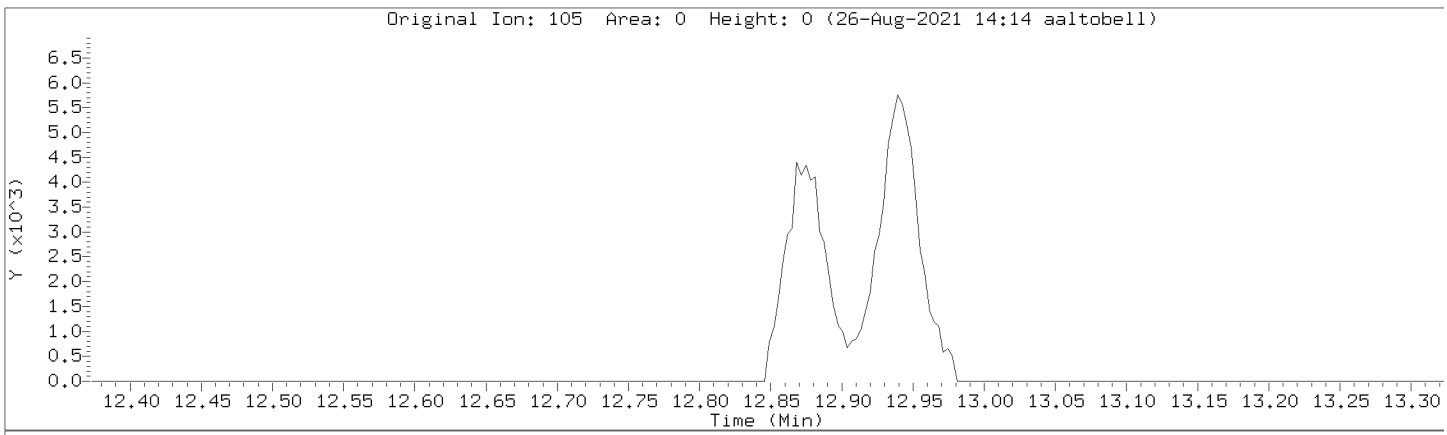
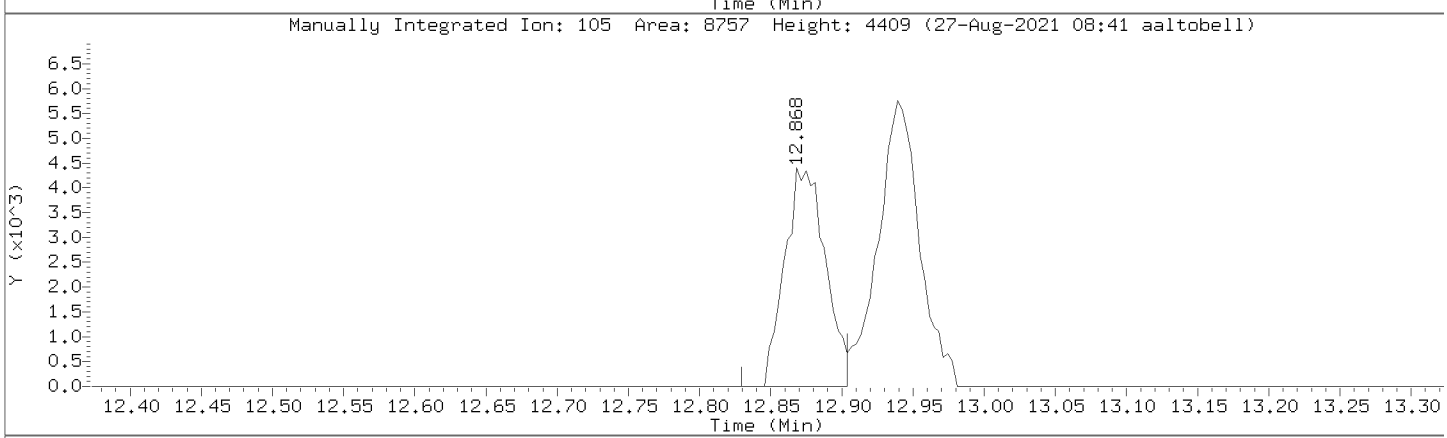
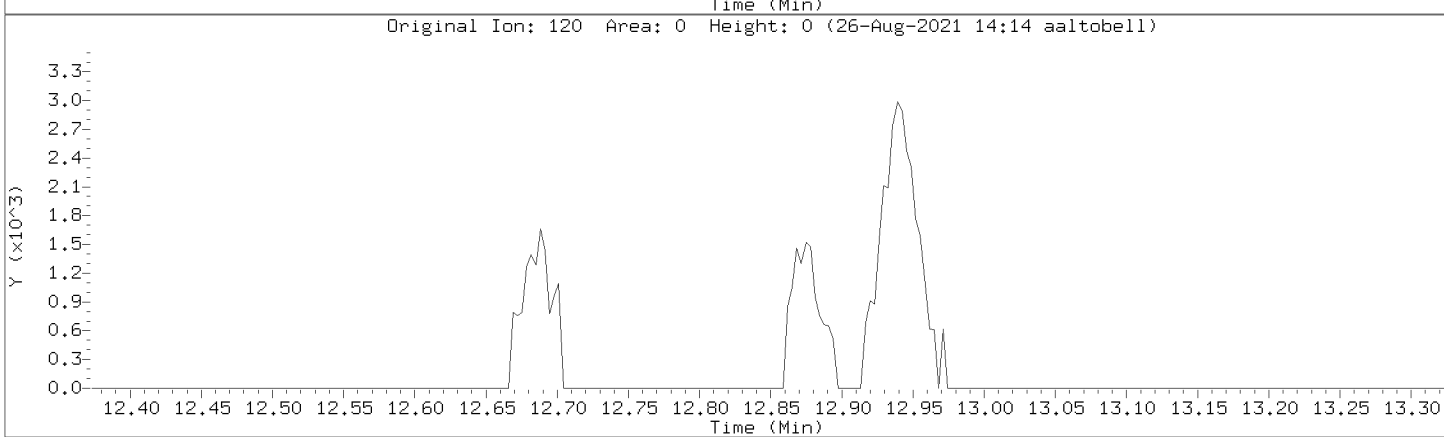
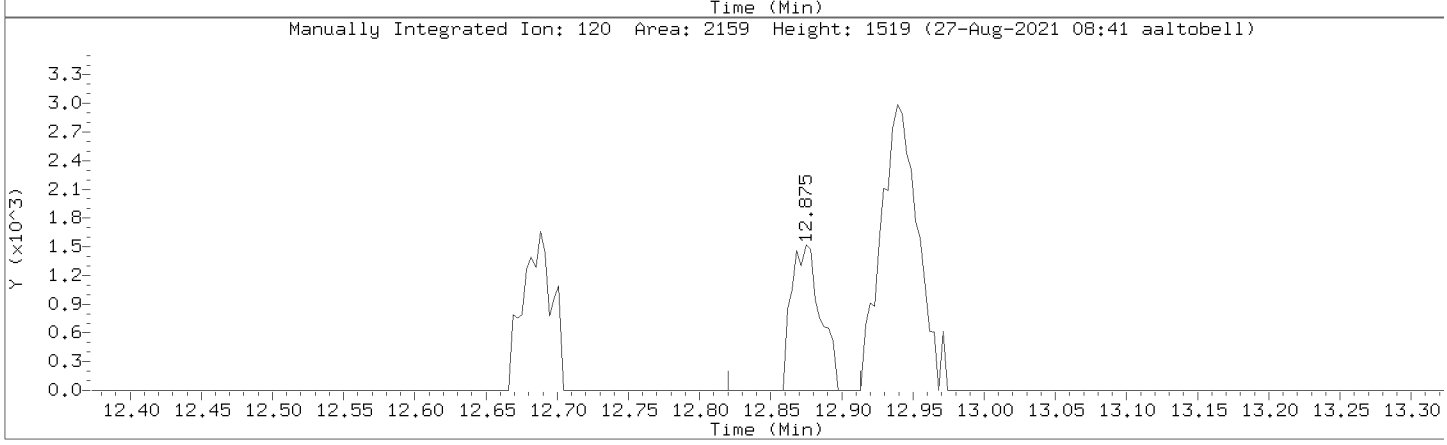
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: 4-Ethyltoluene
CAS Number: 622-96-8



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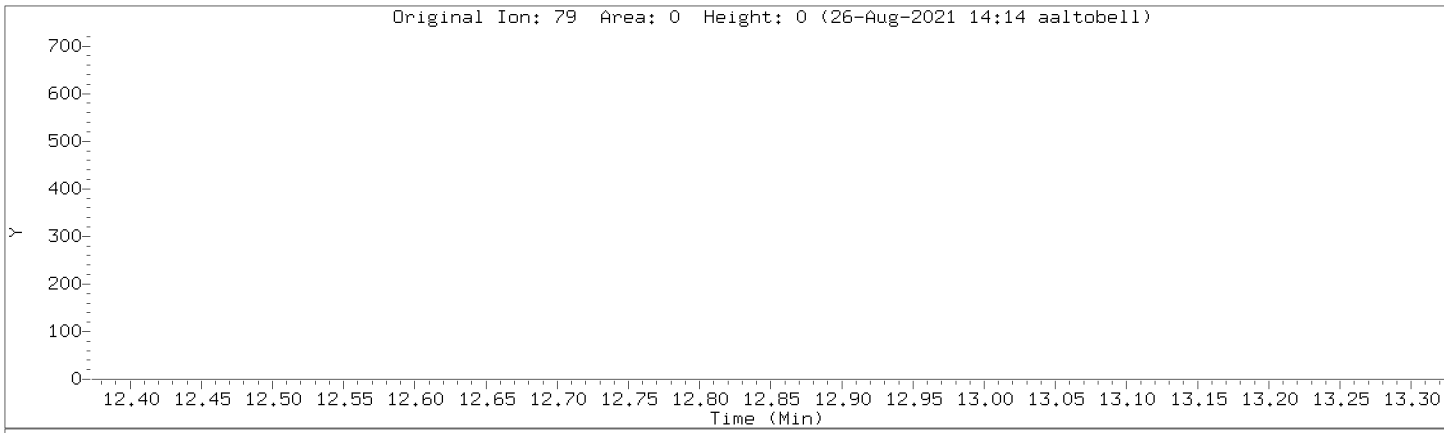


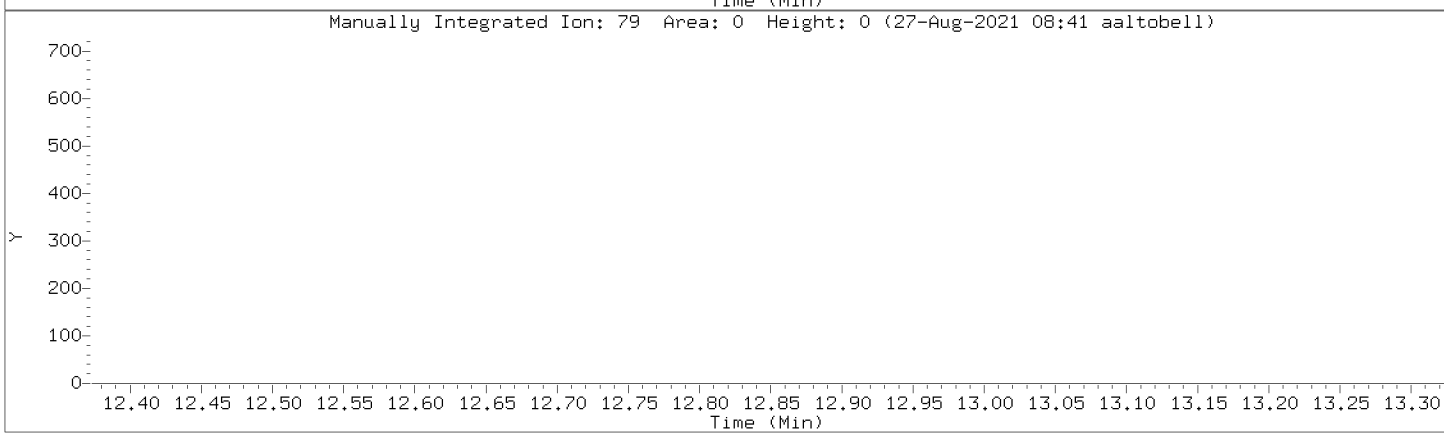

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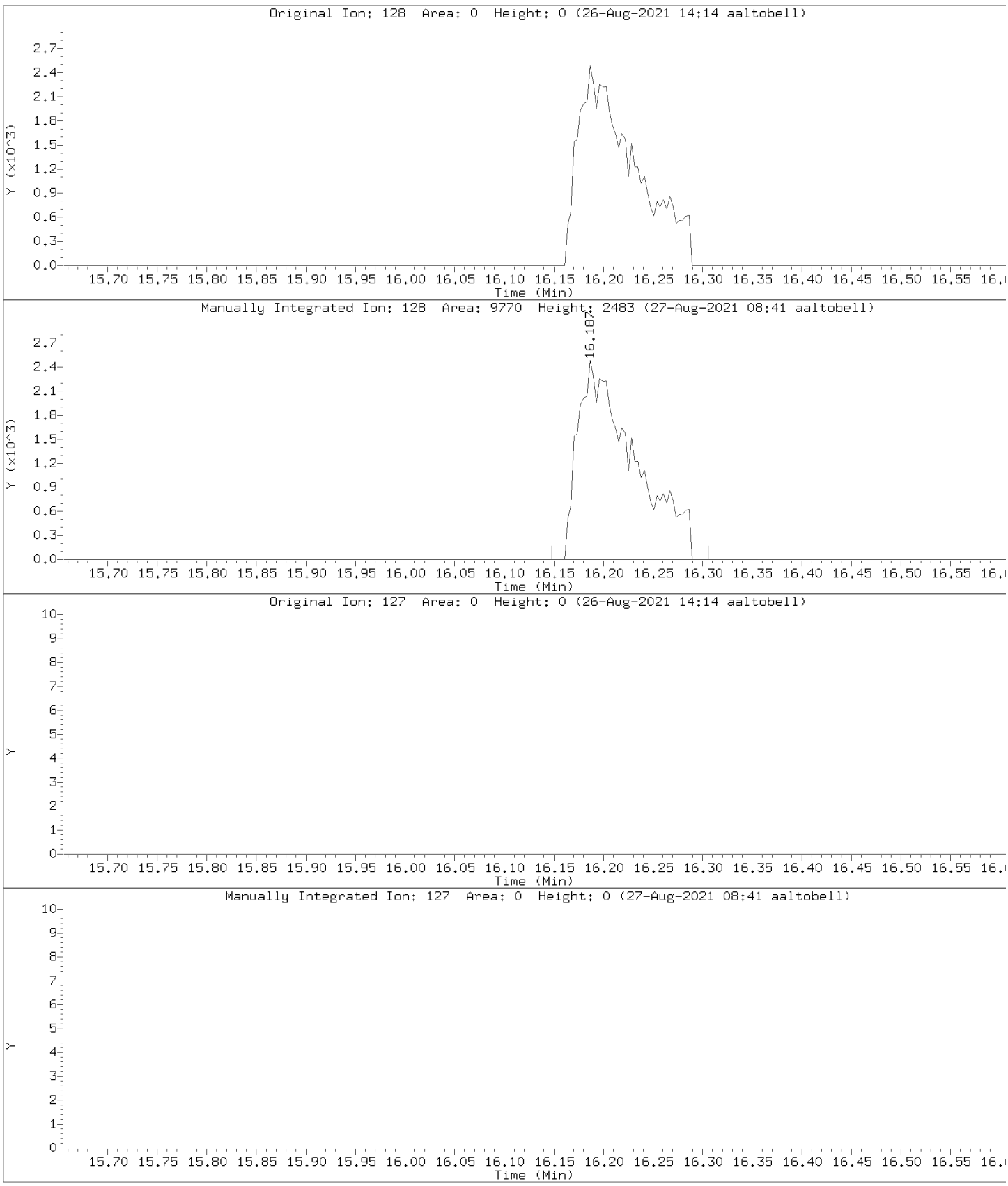
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Naphthalene
CAS Number: 91-20-3



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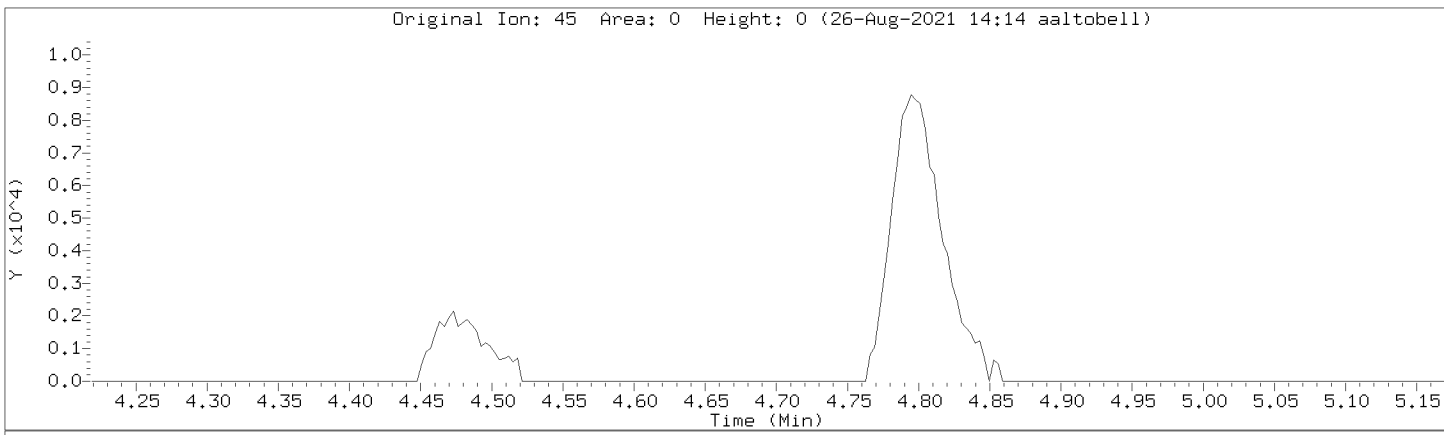
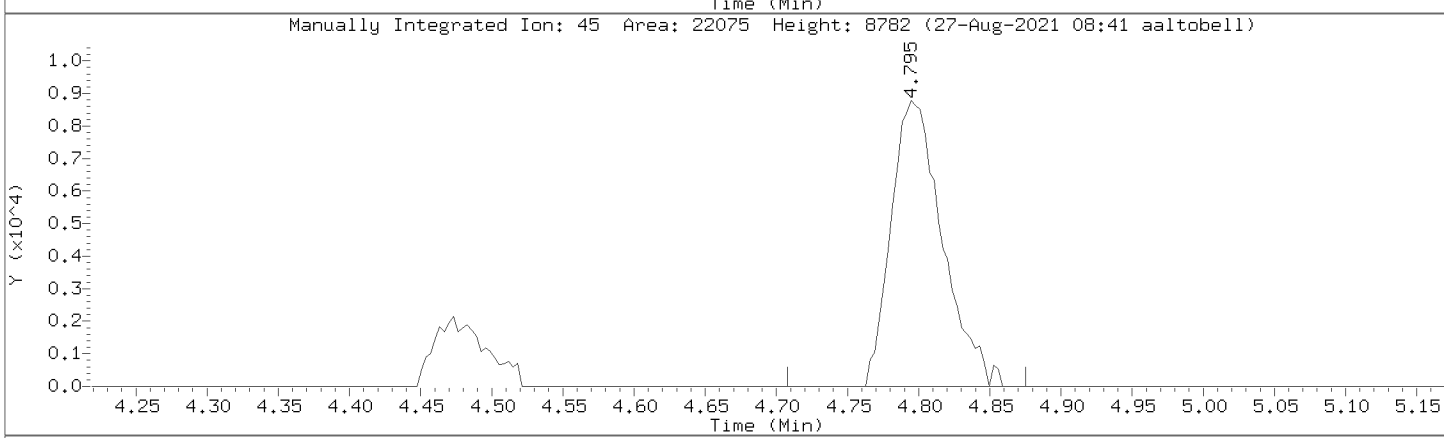
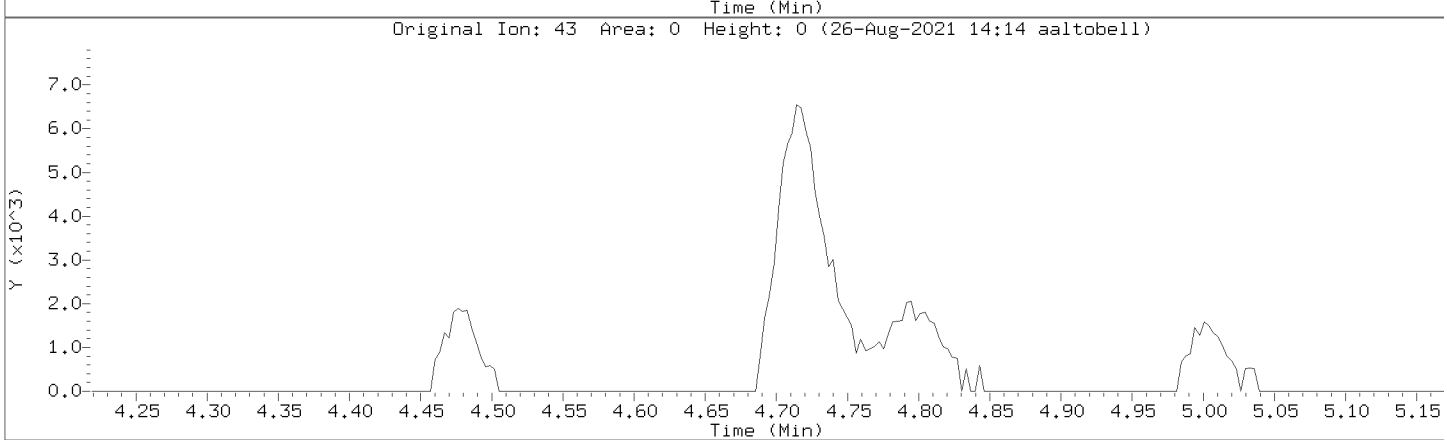
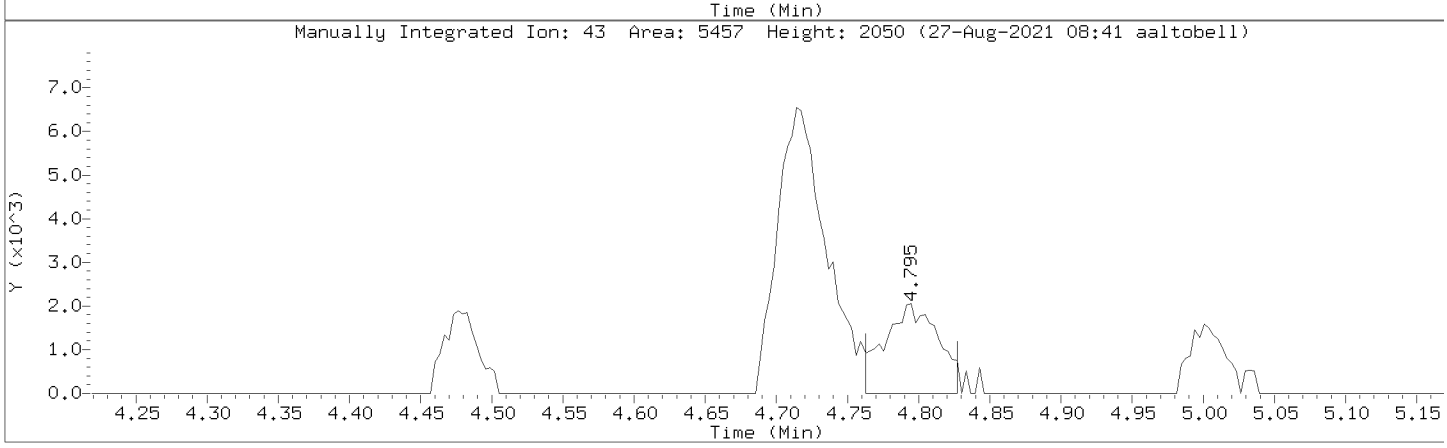
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Isopropyl Alcohol
CAS Number: 67-63-0



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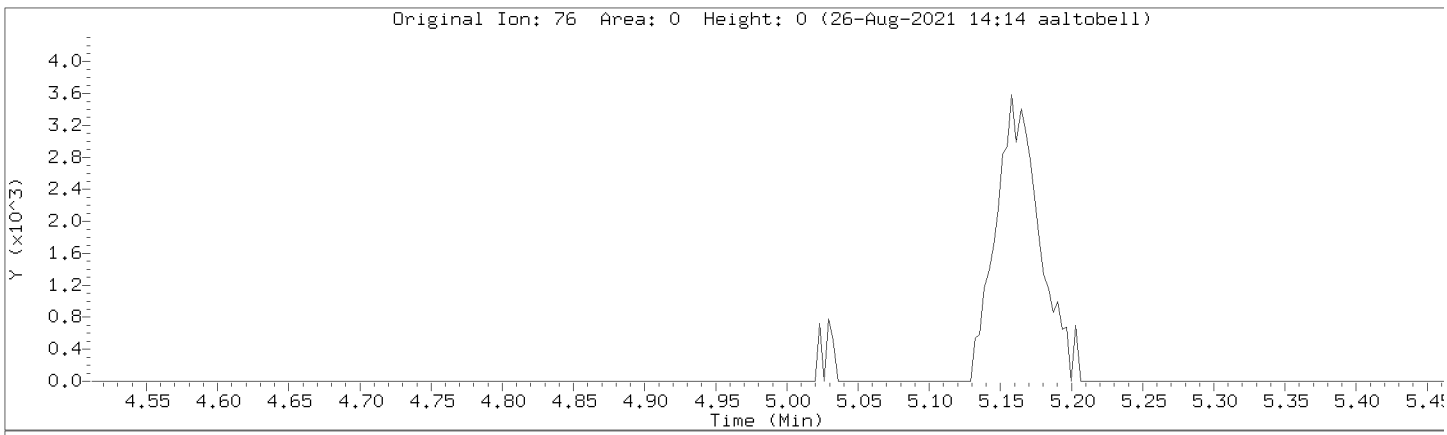
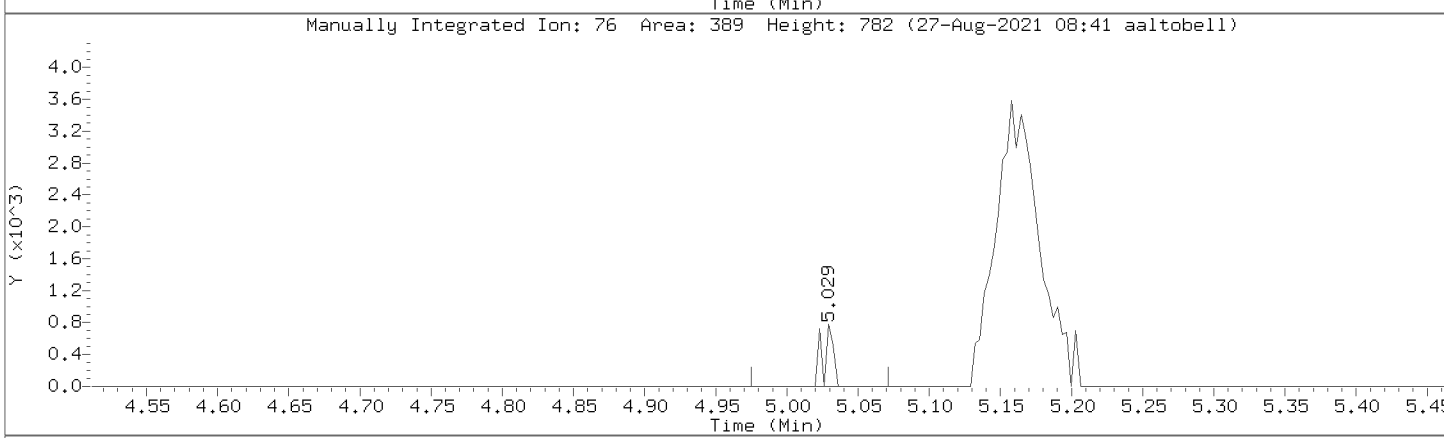
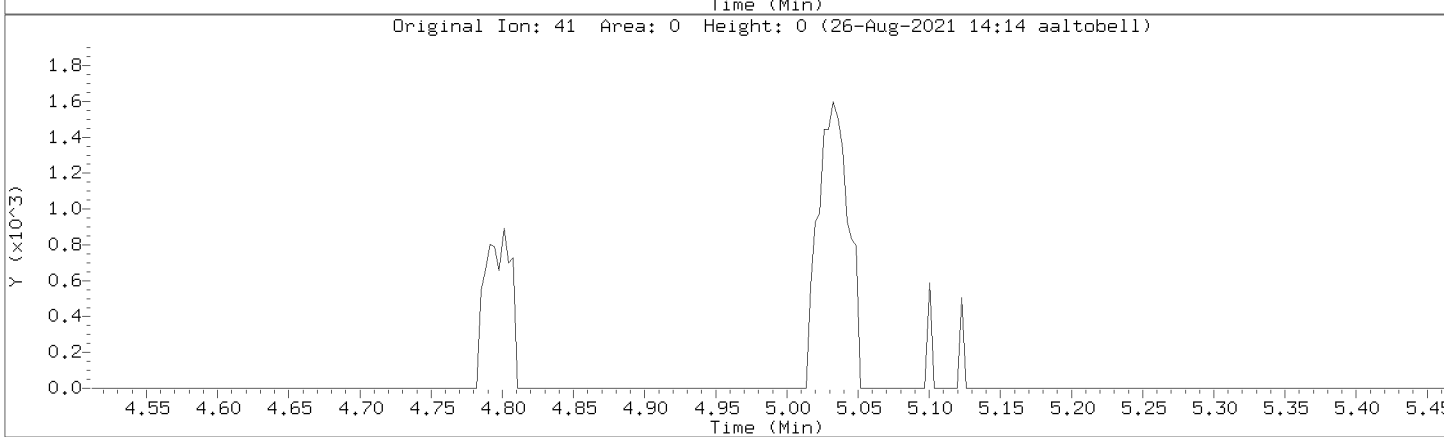
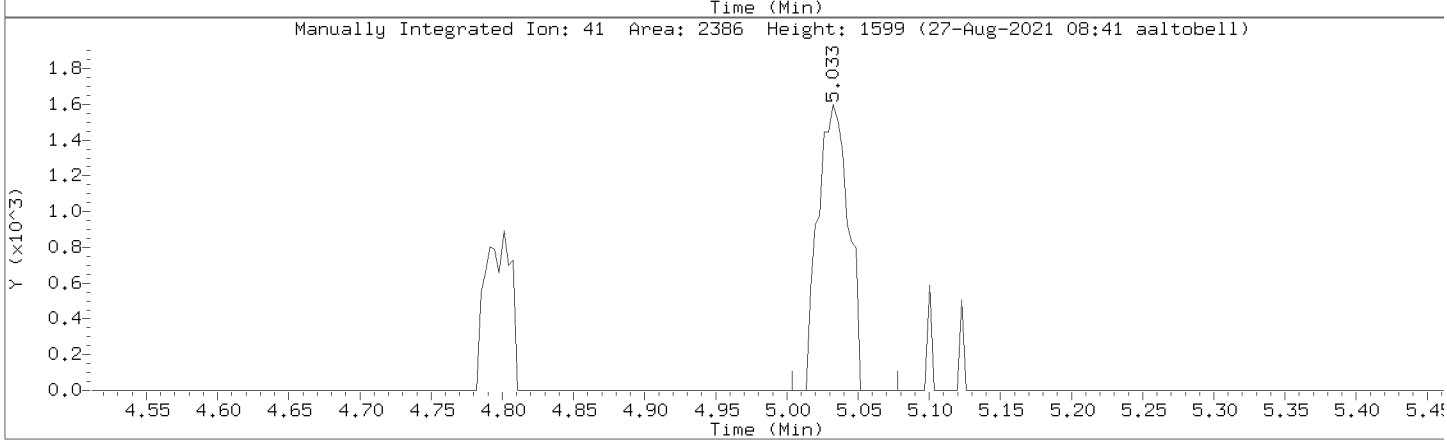
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Allyl Chloride
CAS Number: 107-05-1



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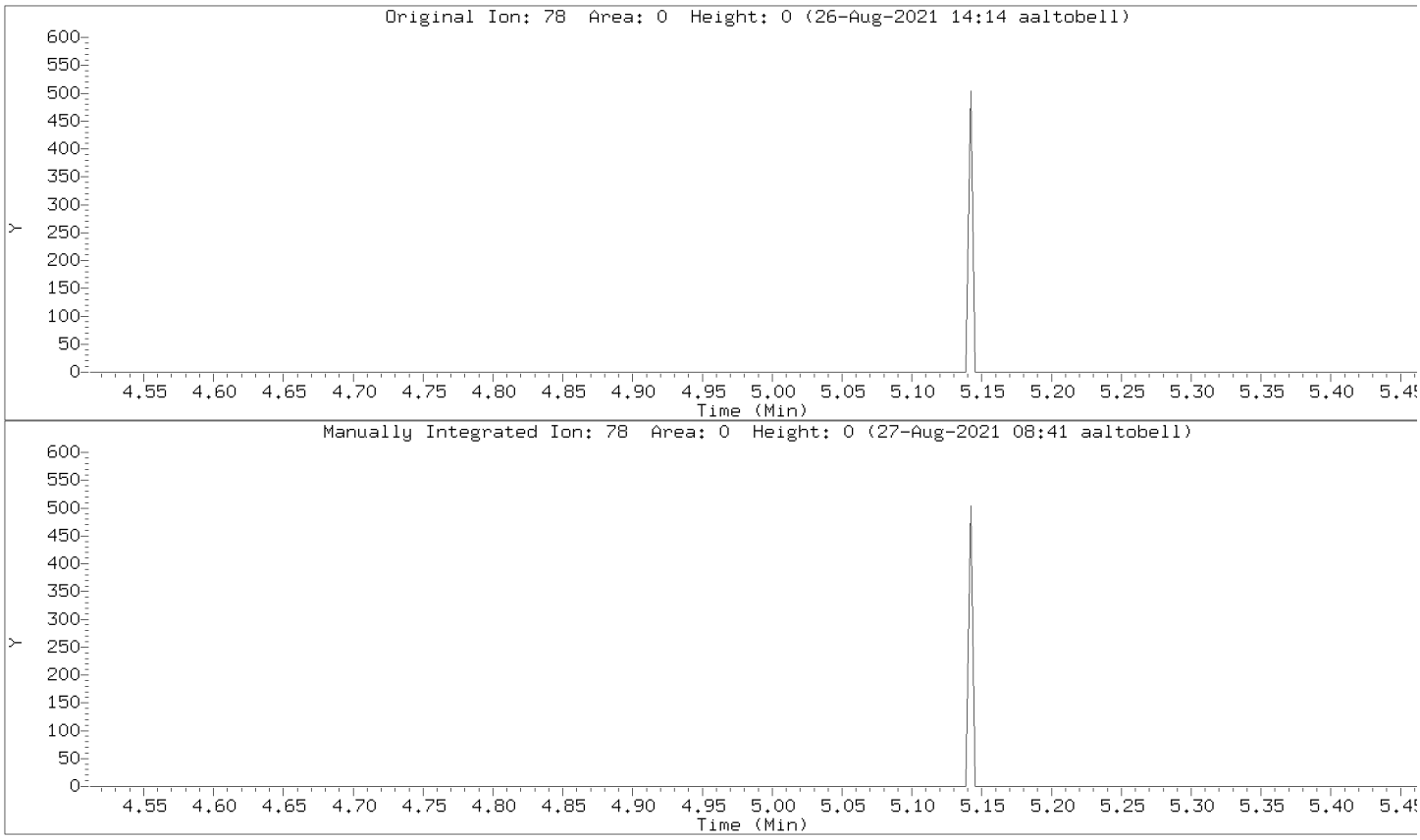
Instrument: 10airB.i
Lab Sample ID: CAL1



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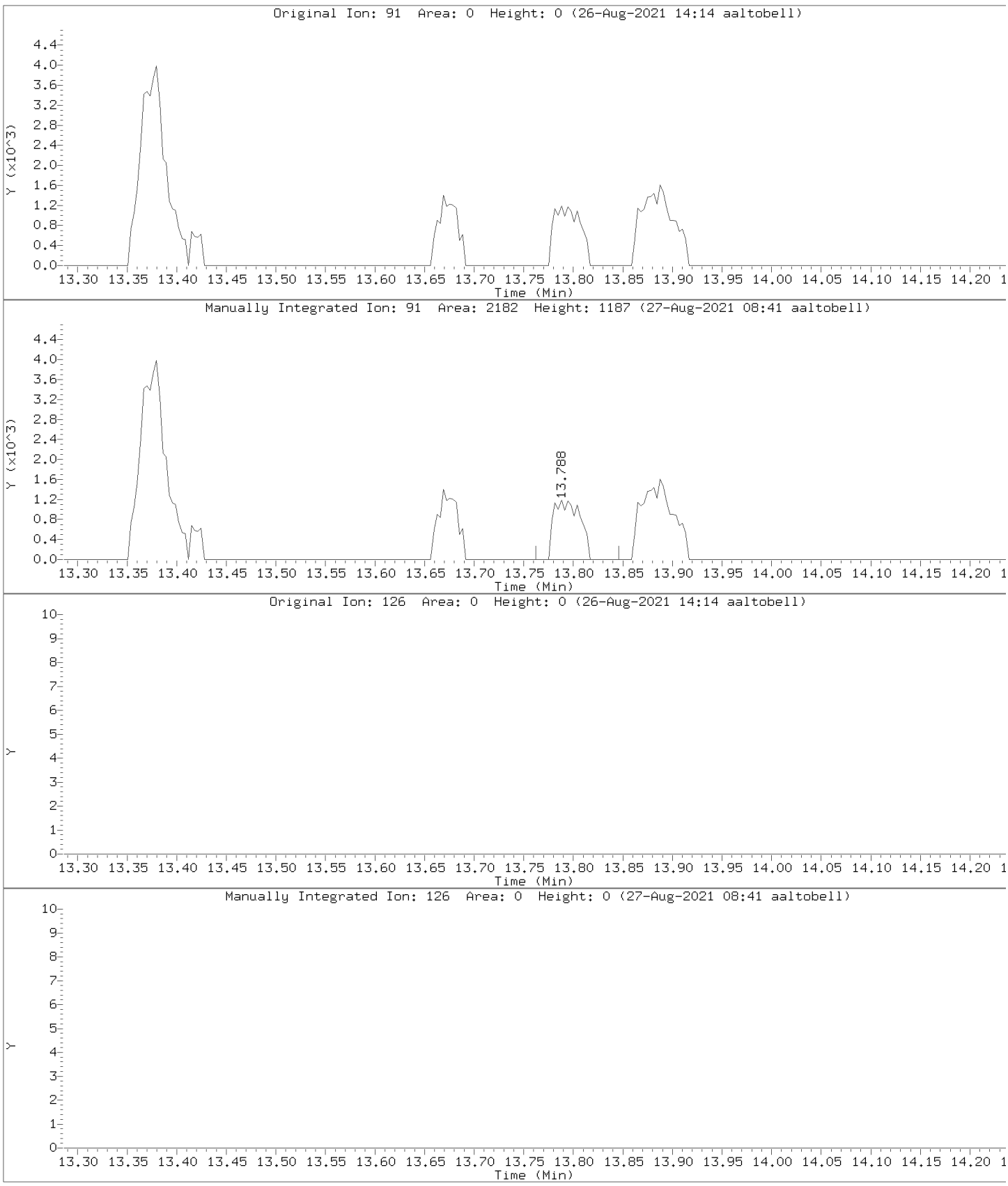
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Benzyl Chloride
CAS Number: 100-44-7



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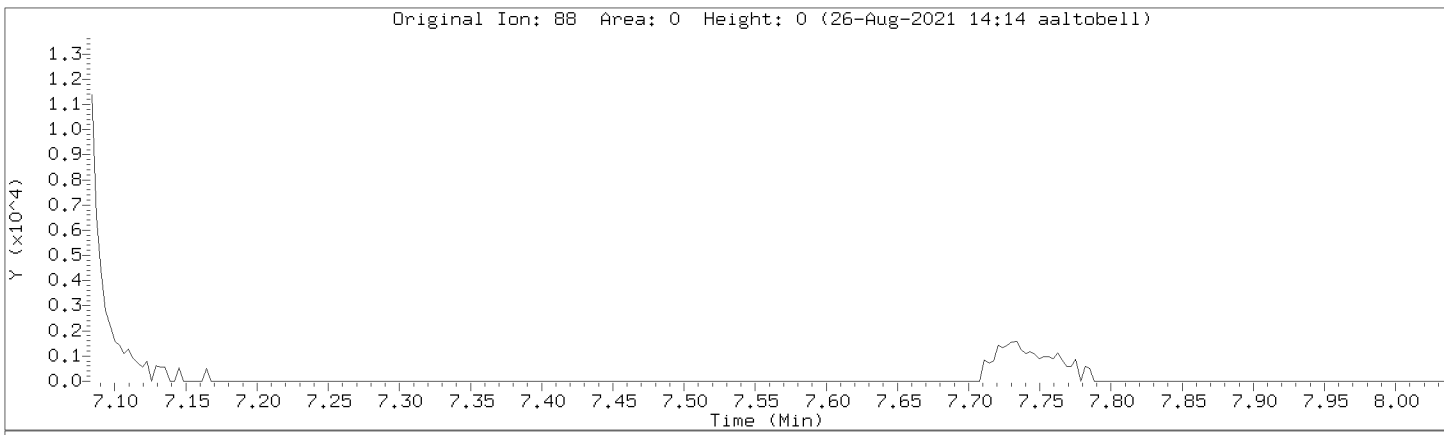
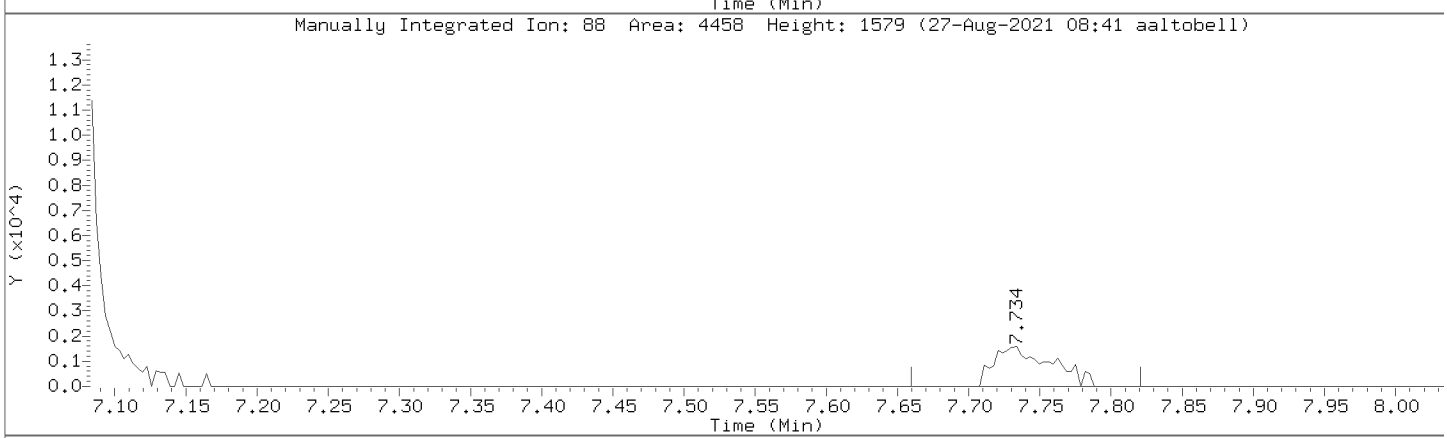
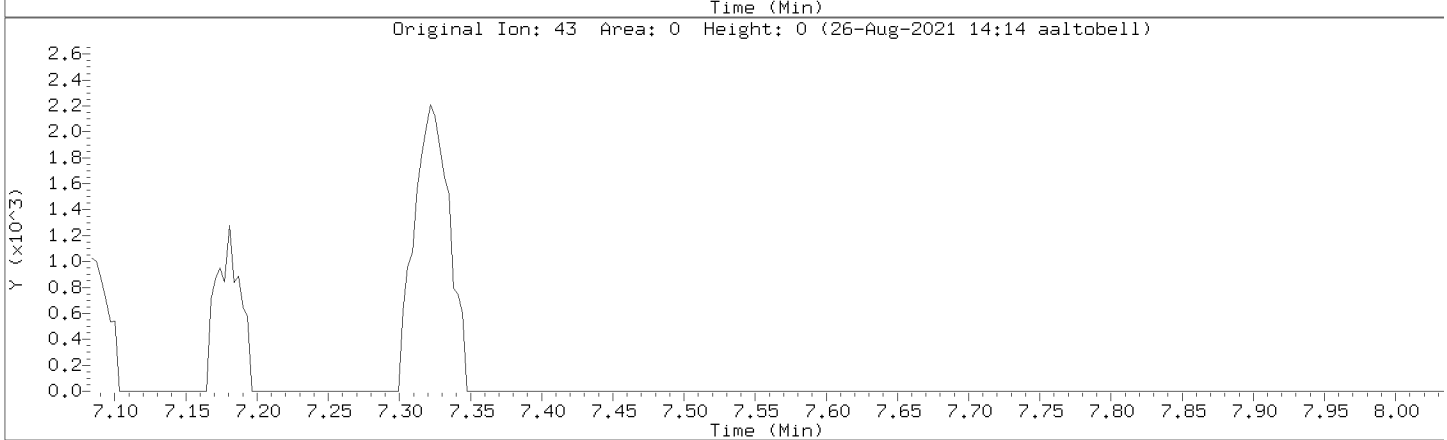
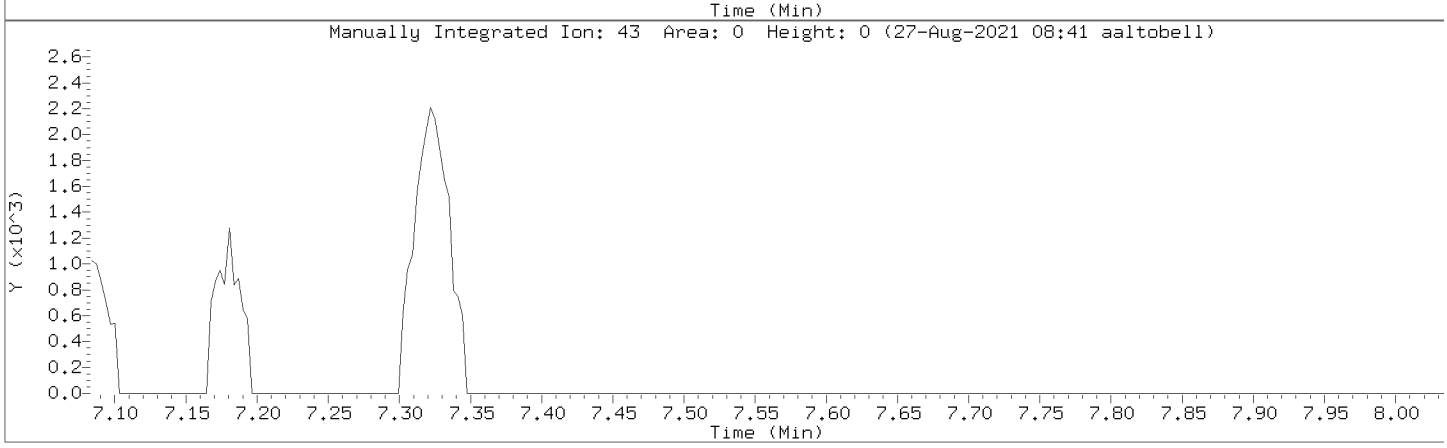
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: 1,4-Dioxane
CAS Number: 123-91-1



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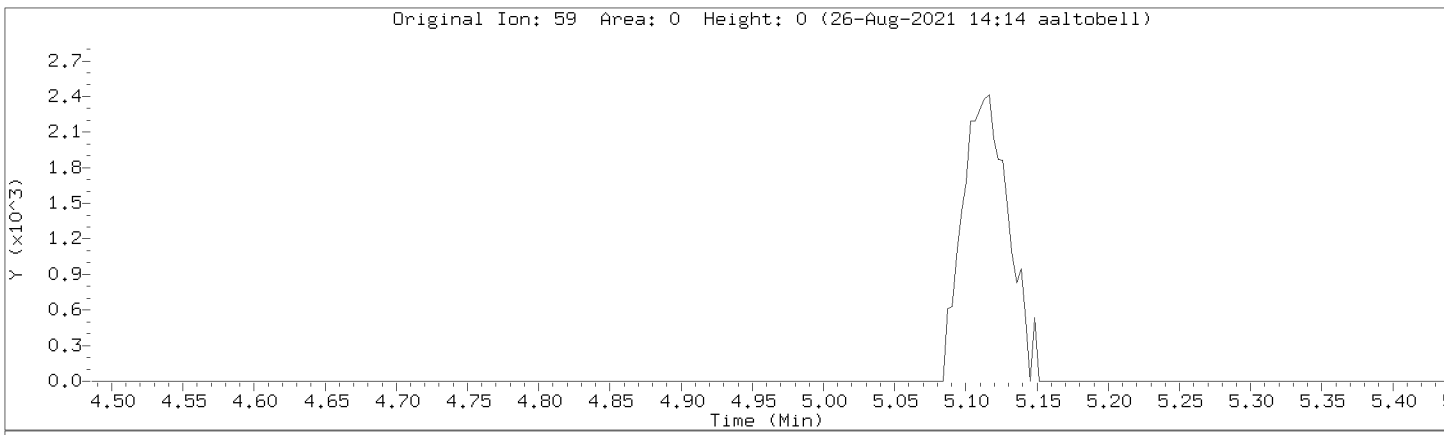
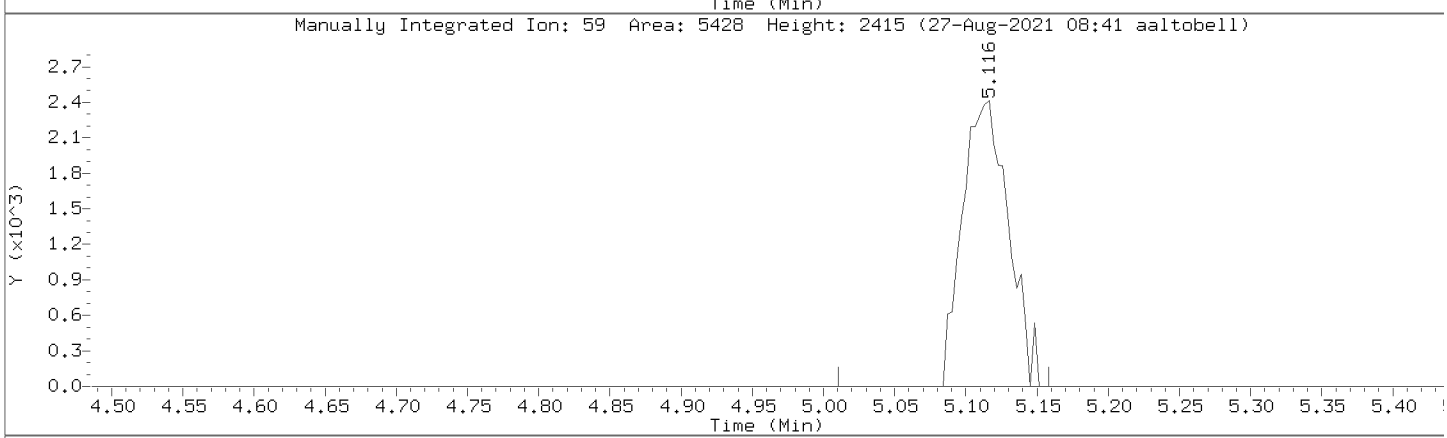
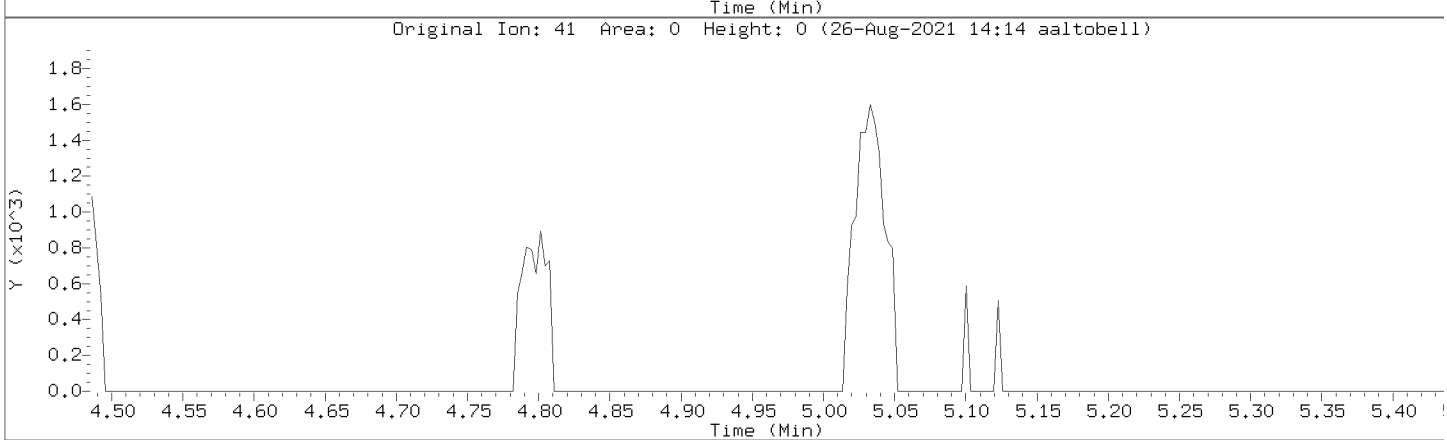
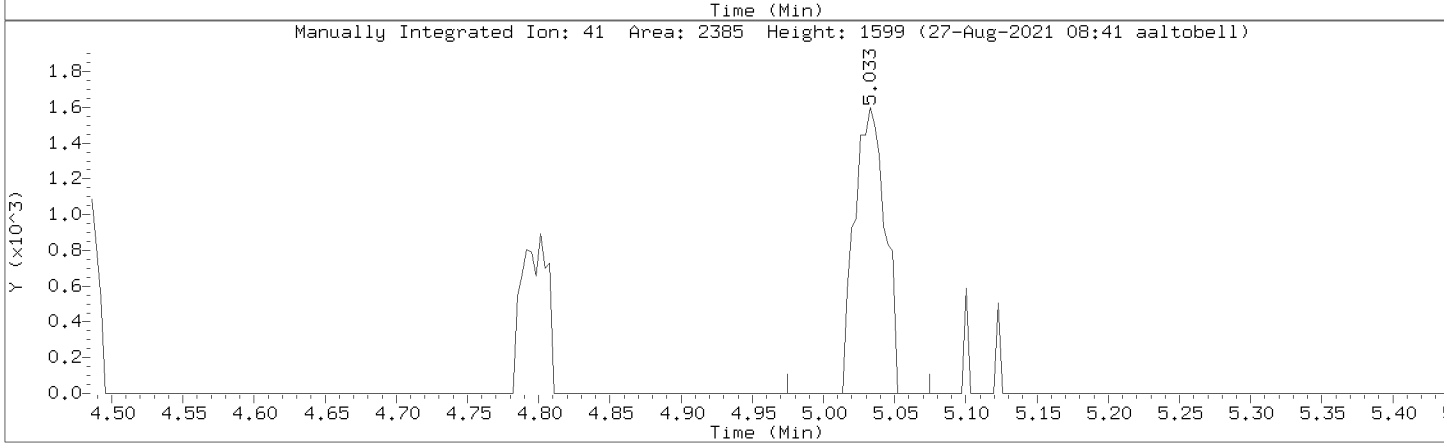
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Tert Butyl Alcohol (TBA)
CAS Number: 75-65-0



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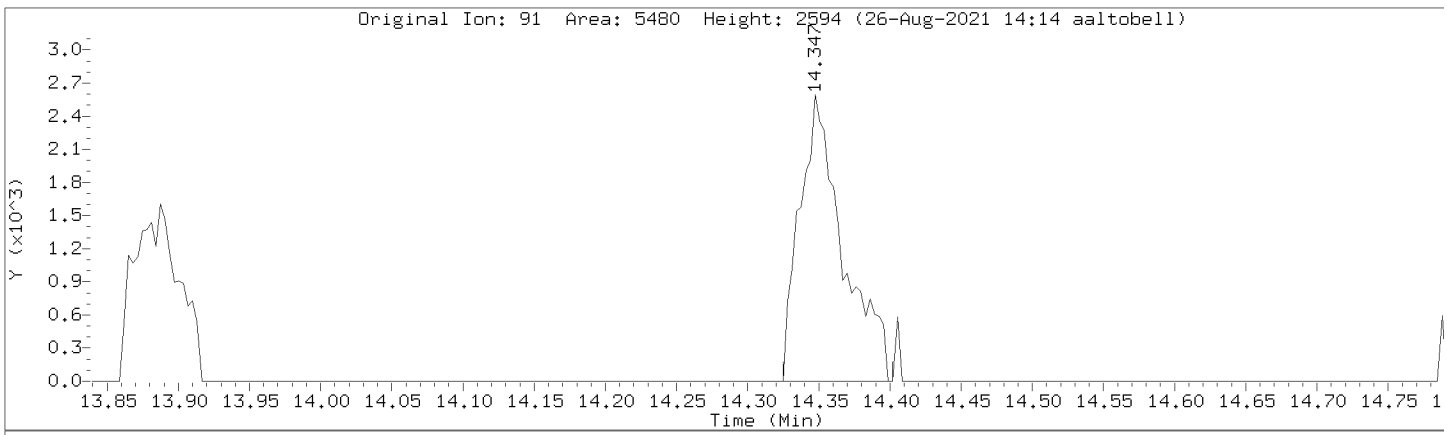
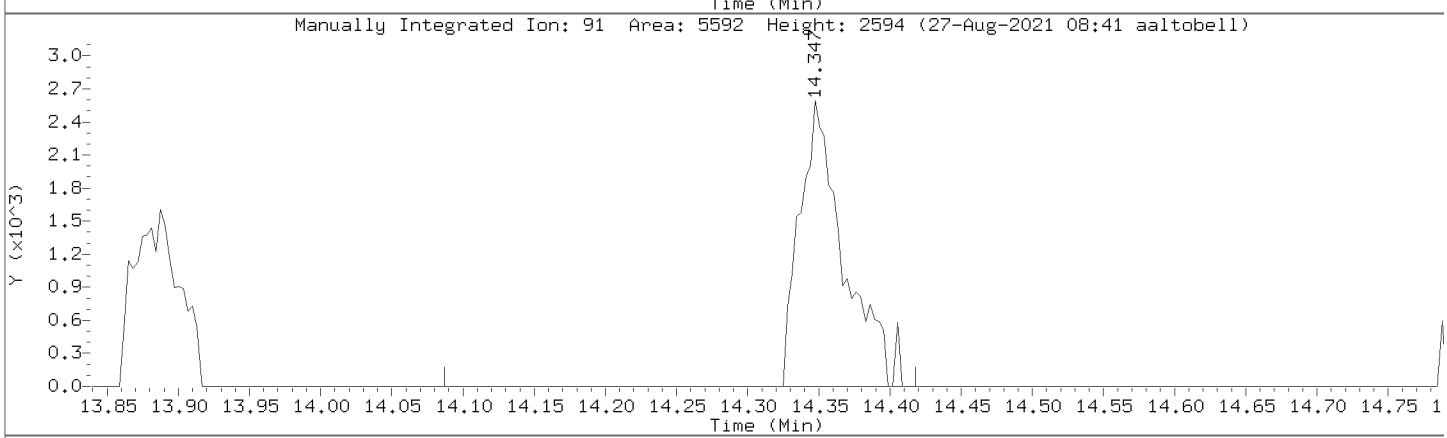
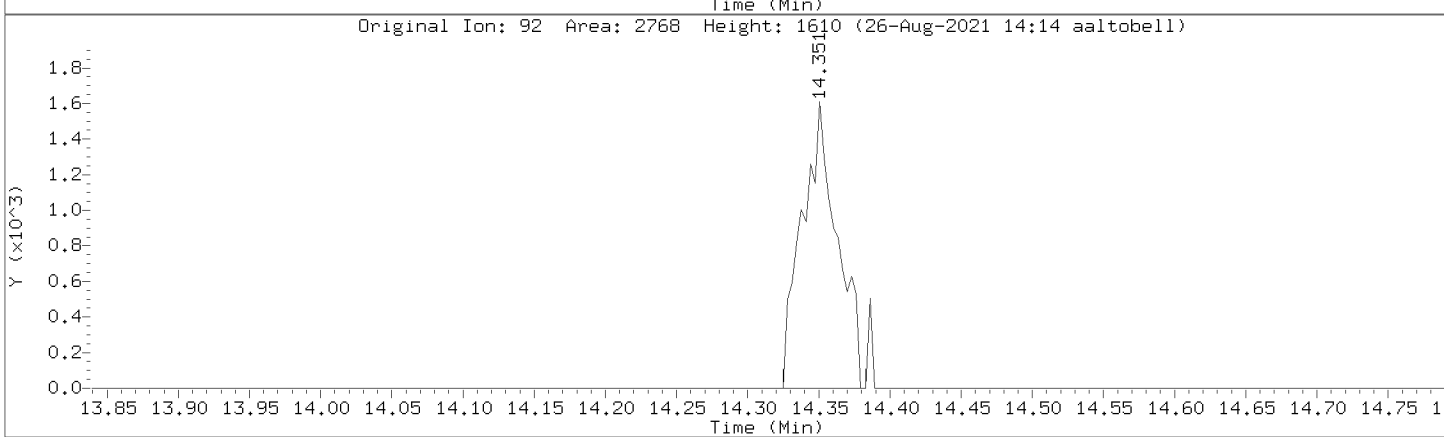
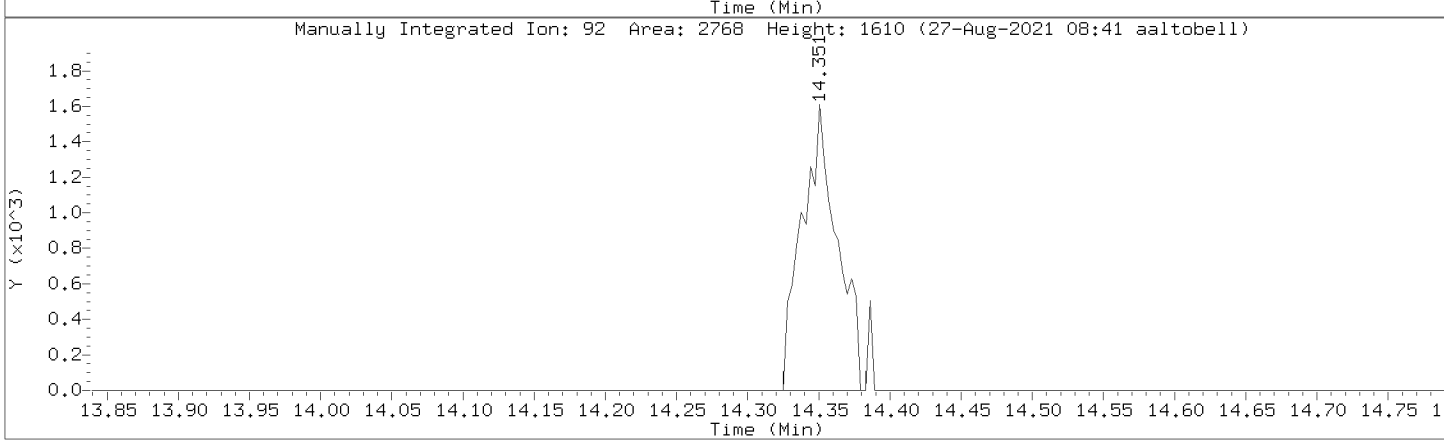
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: N-Butylbenzene
CAS Number: 104-51-8



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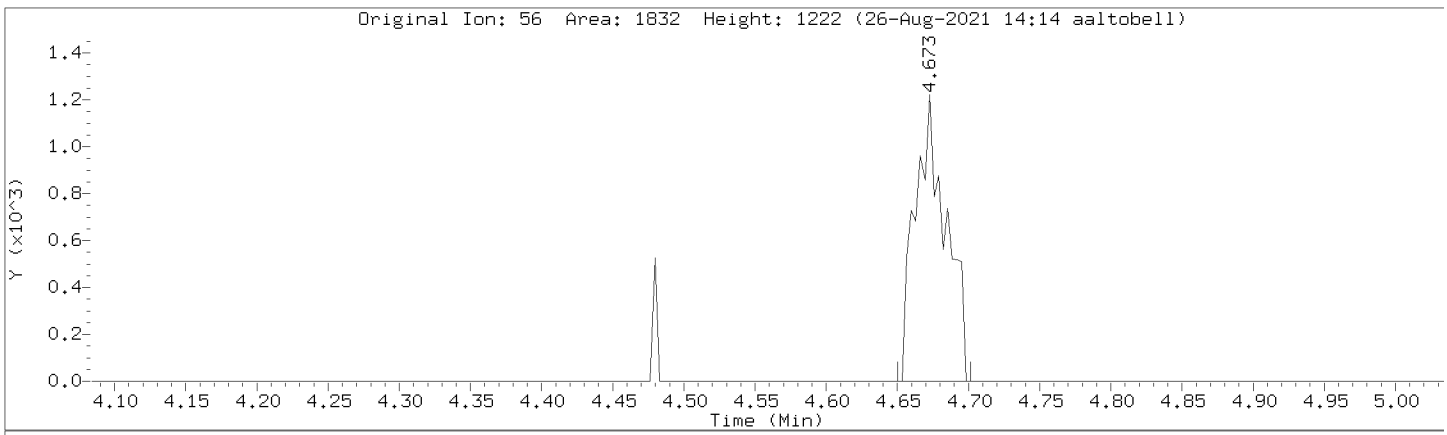
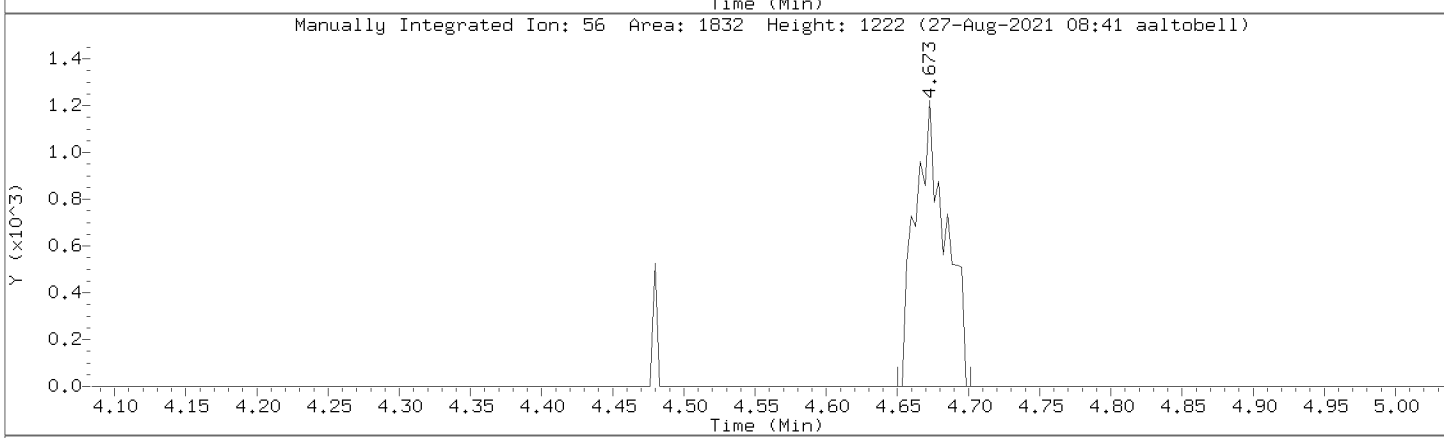
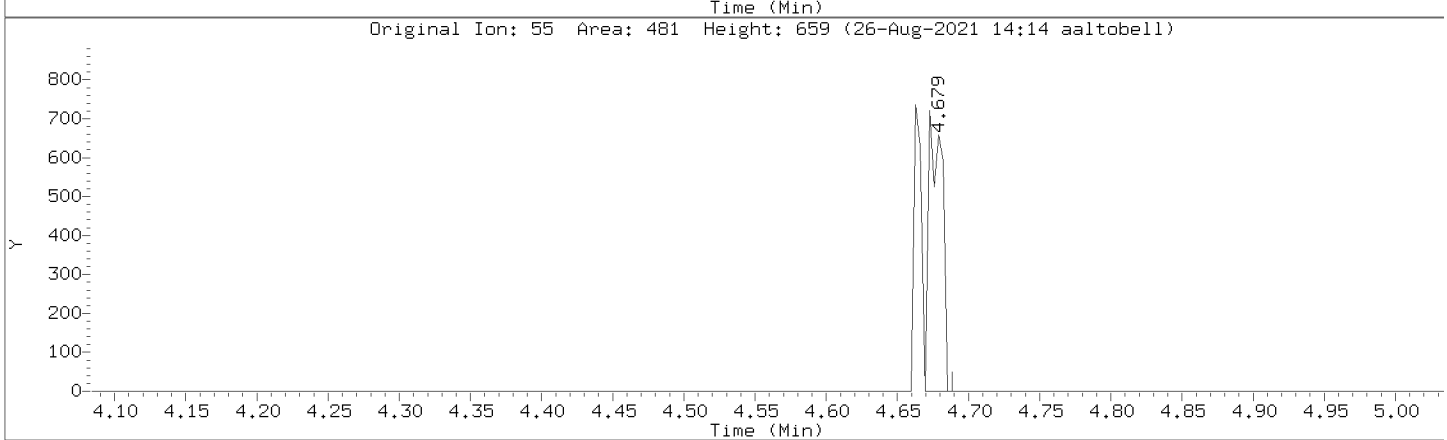
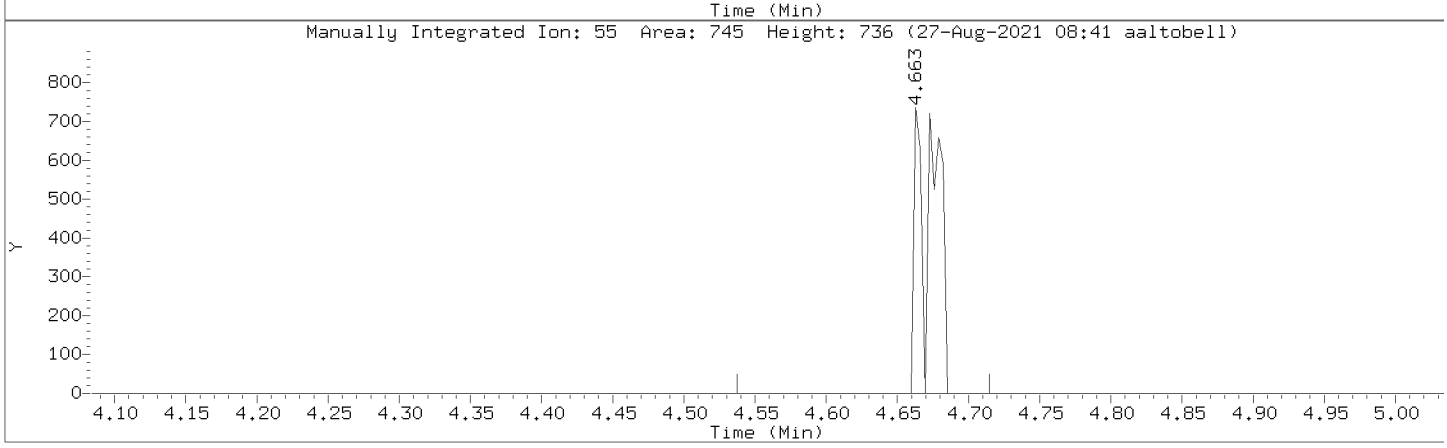
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Acrolein
CAS Number: 107-02-08



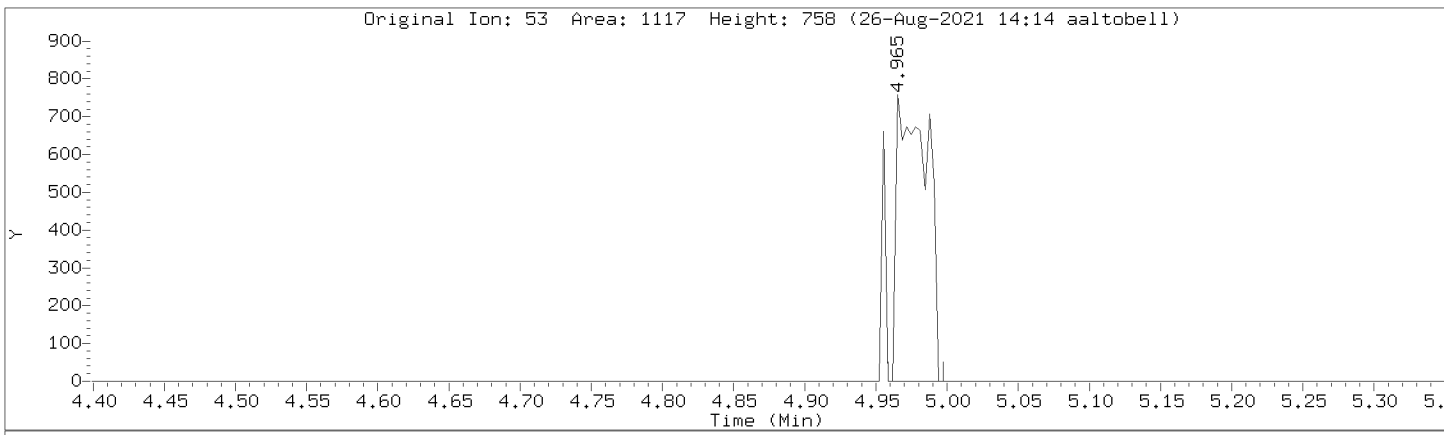



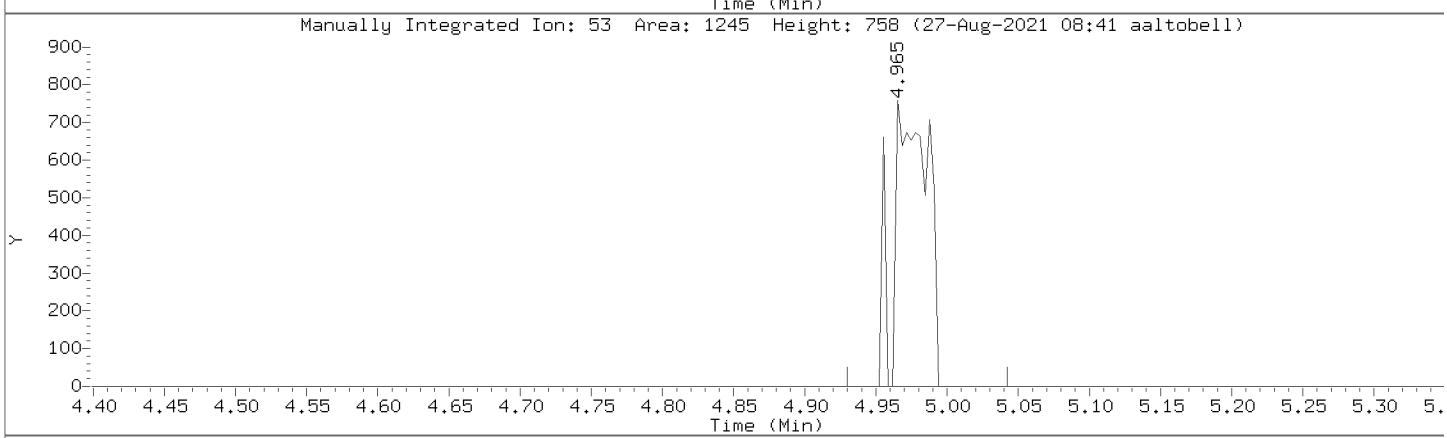



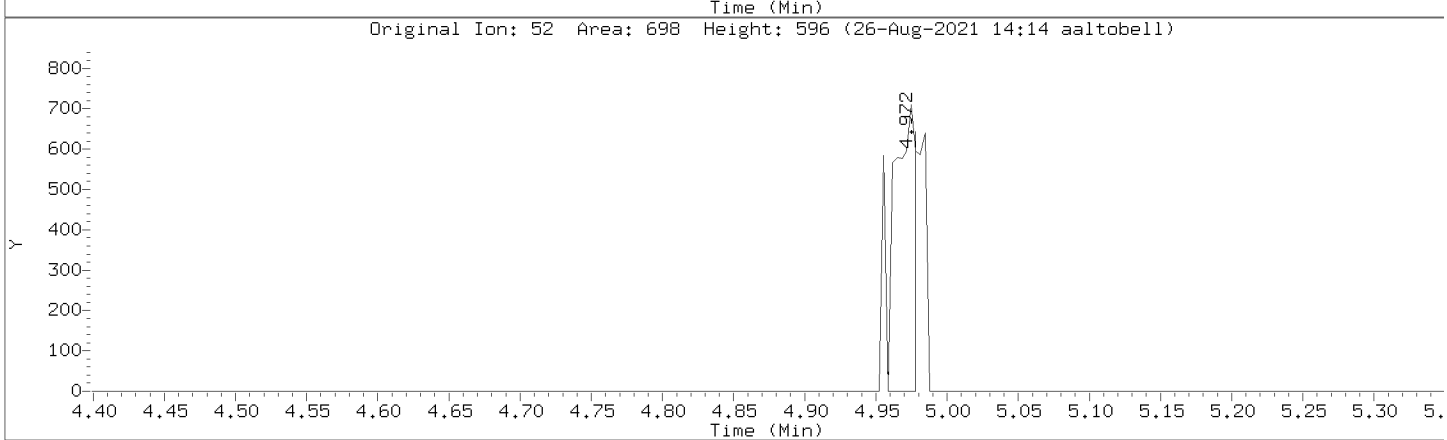



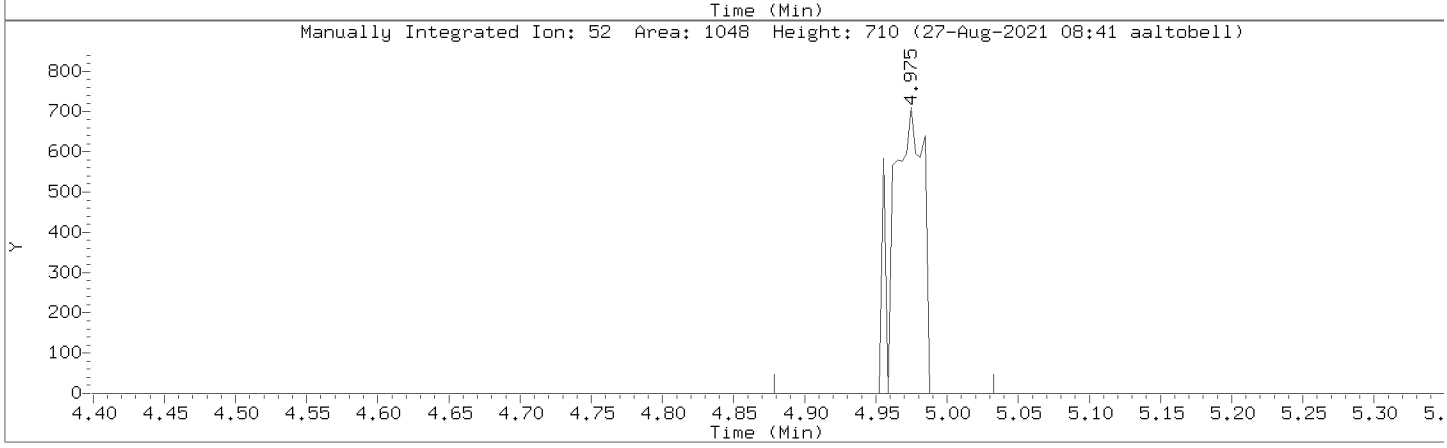
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Acrylonitrile
CAS Number: 107-13-1



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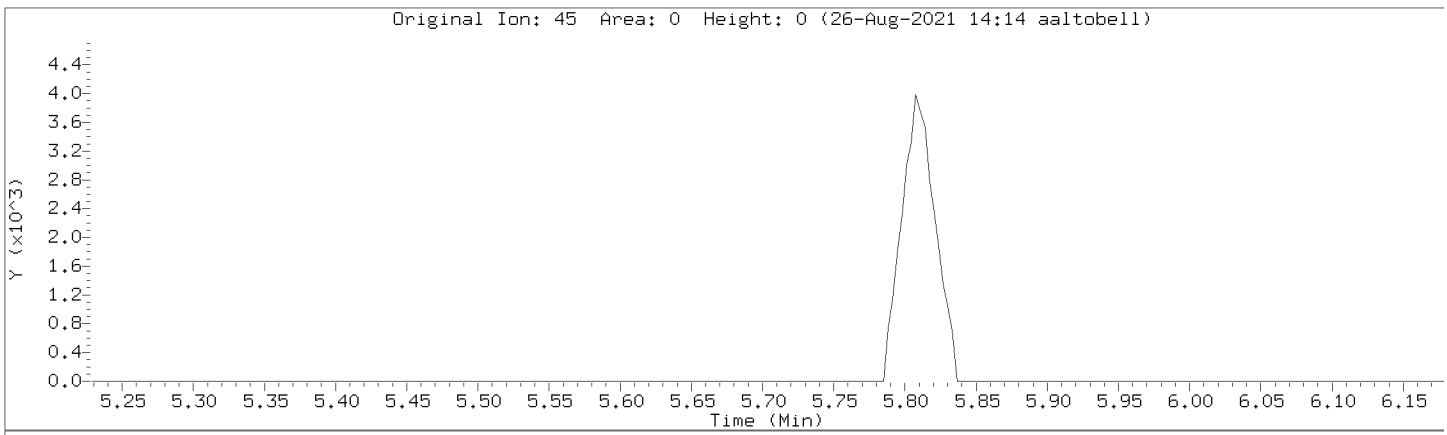
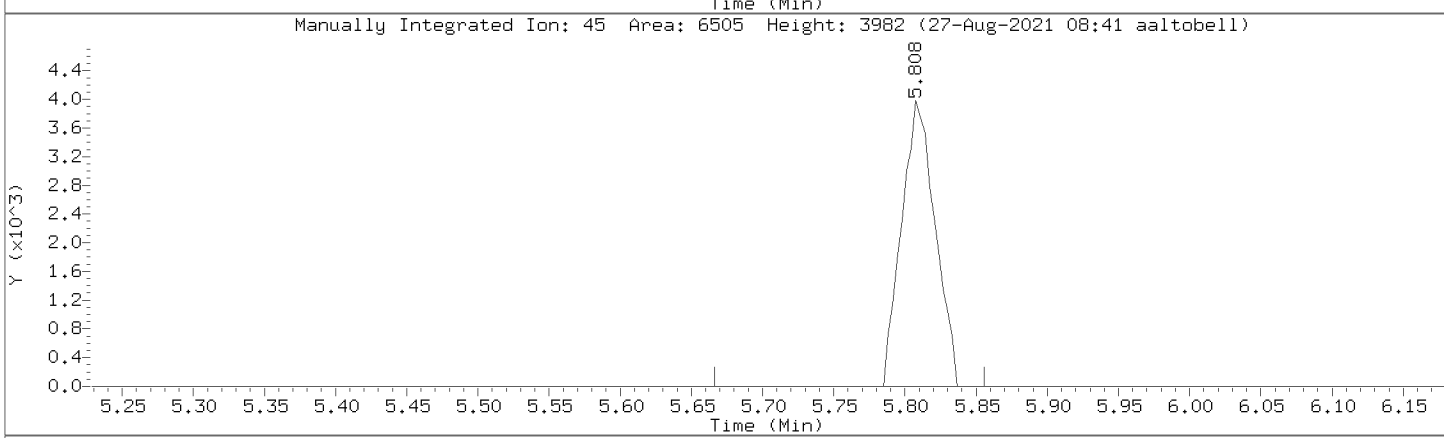
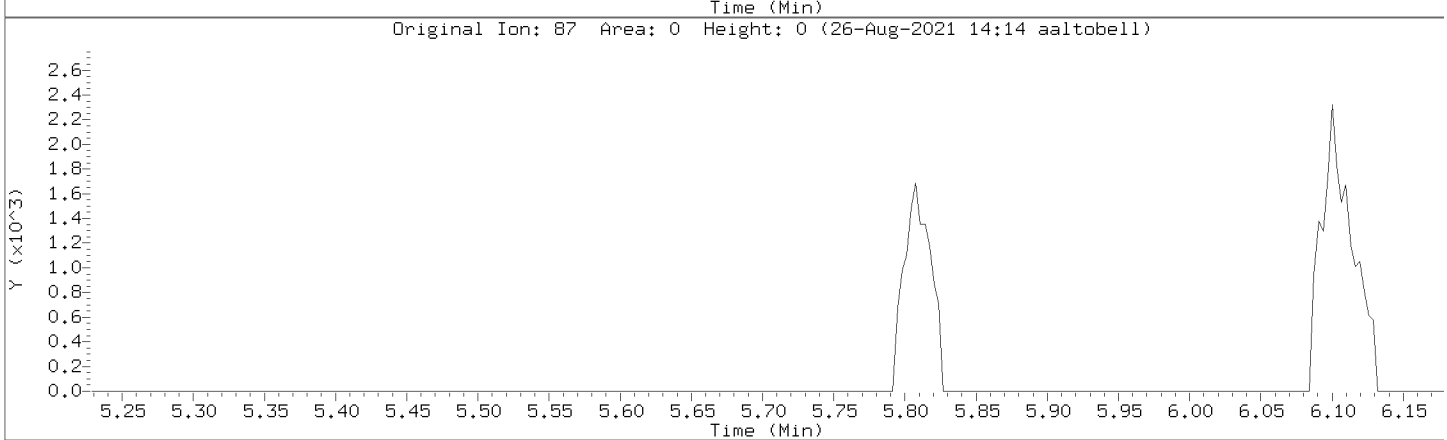
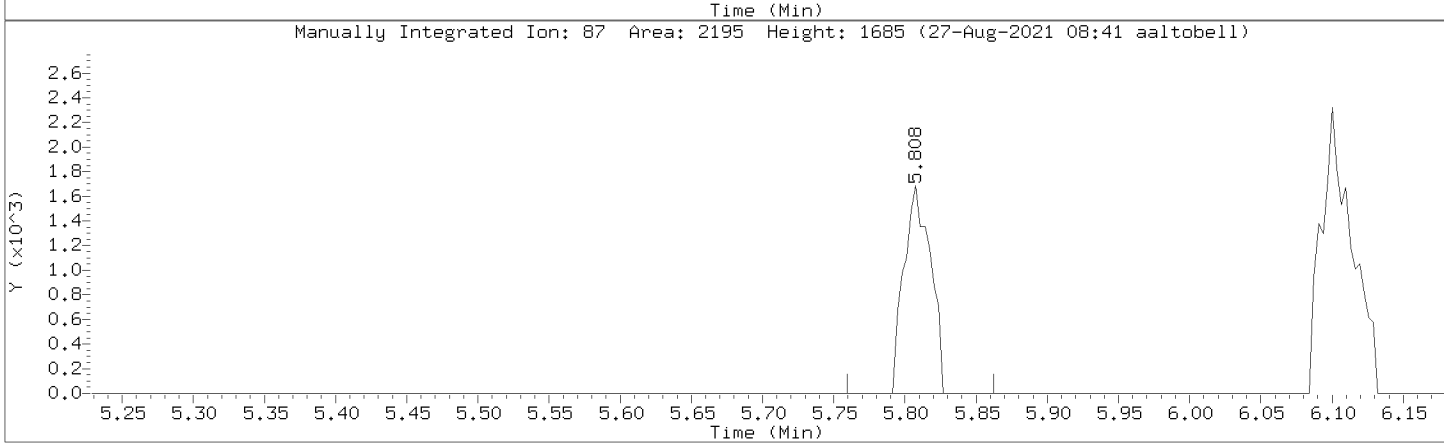
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Di-isopropyl Ether
CAS Number: 108-20-3



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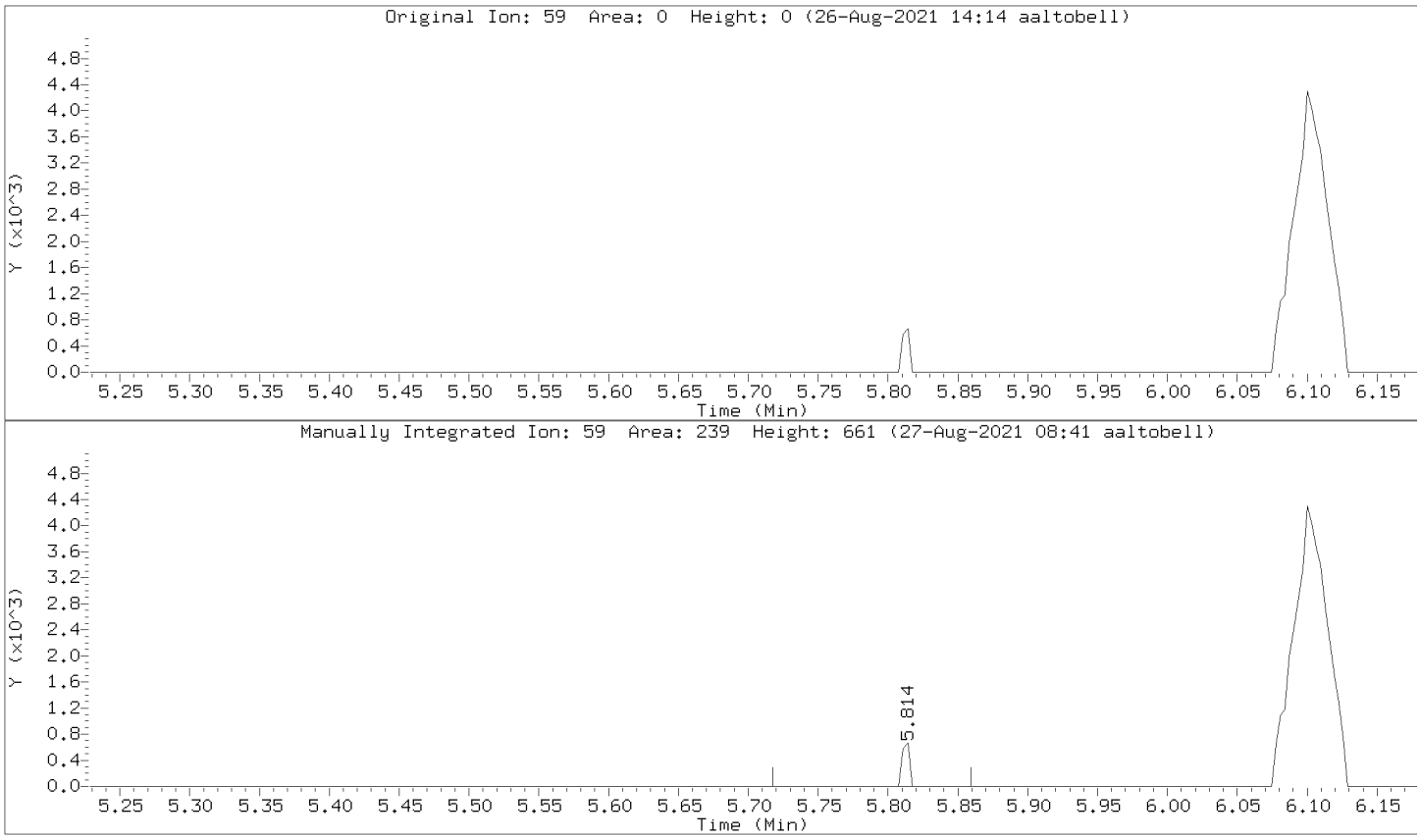
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1



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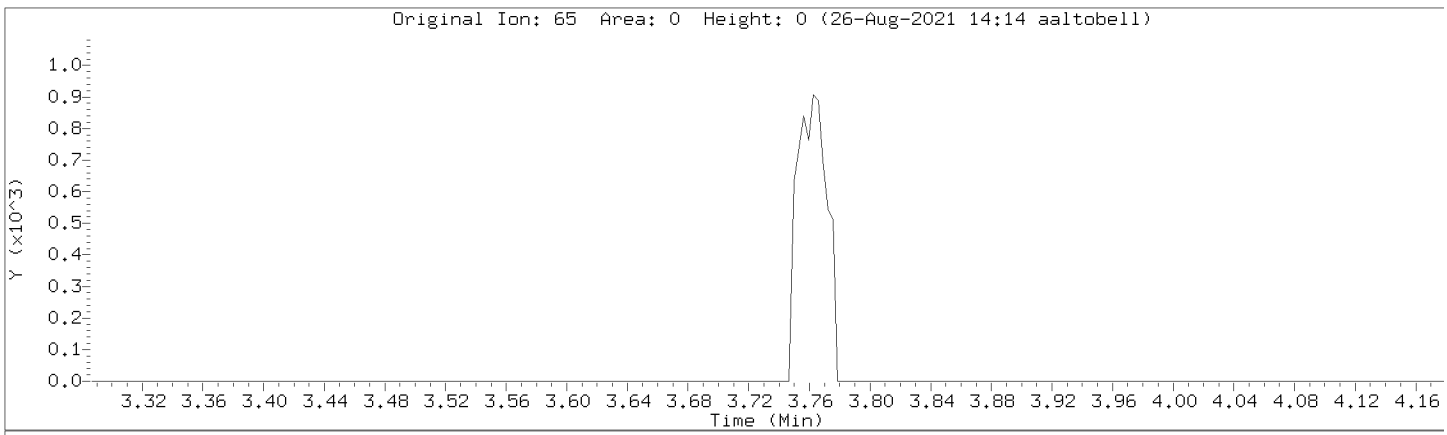
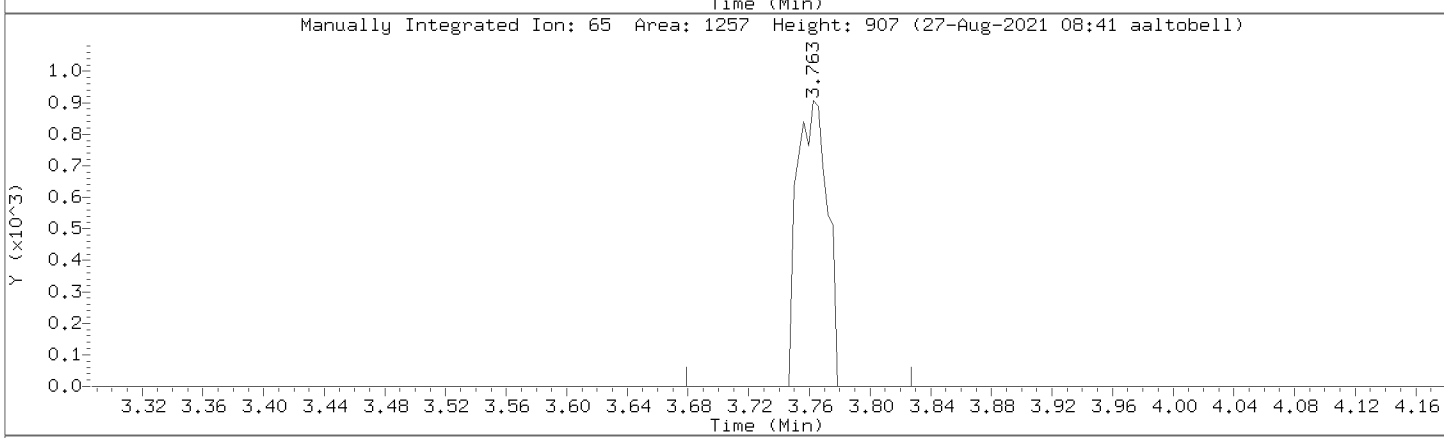
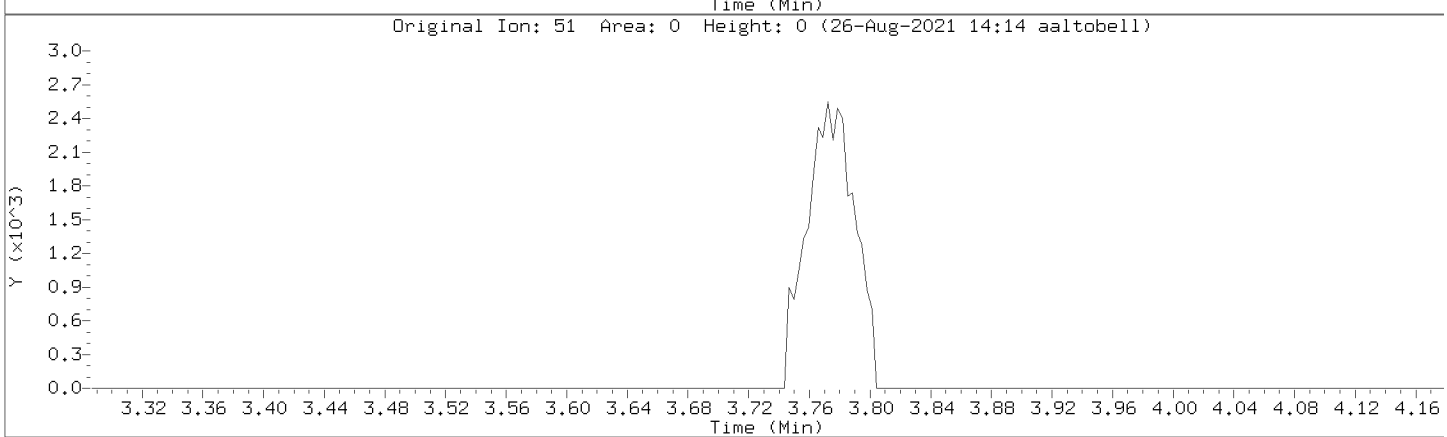
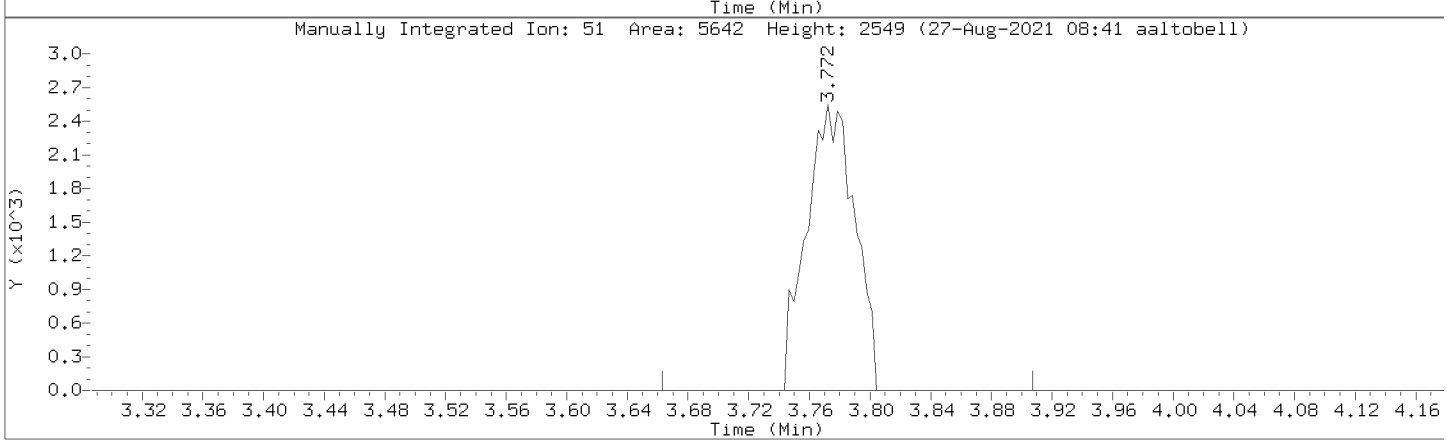
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6



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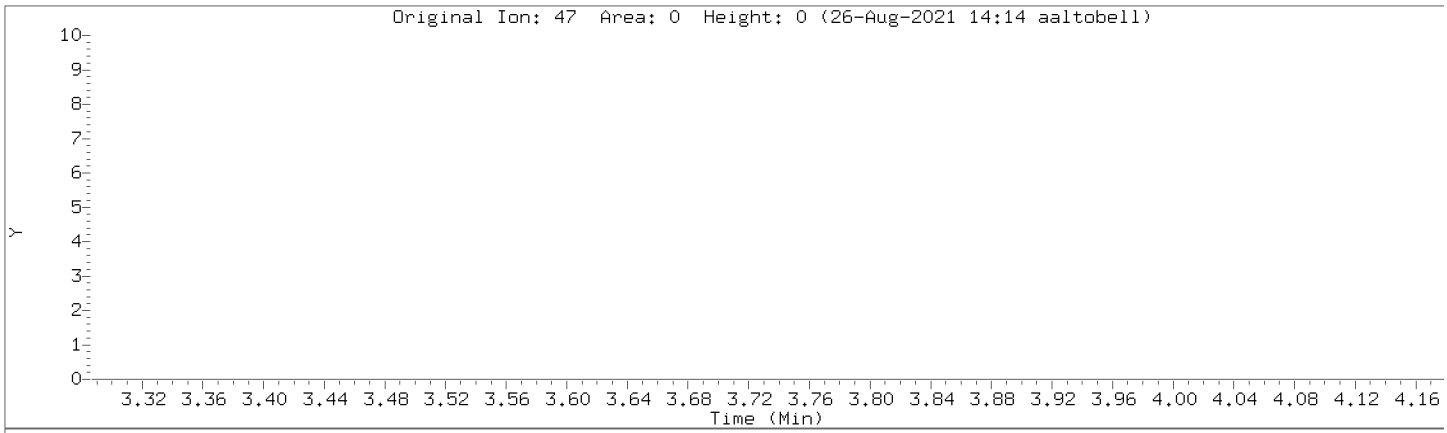
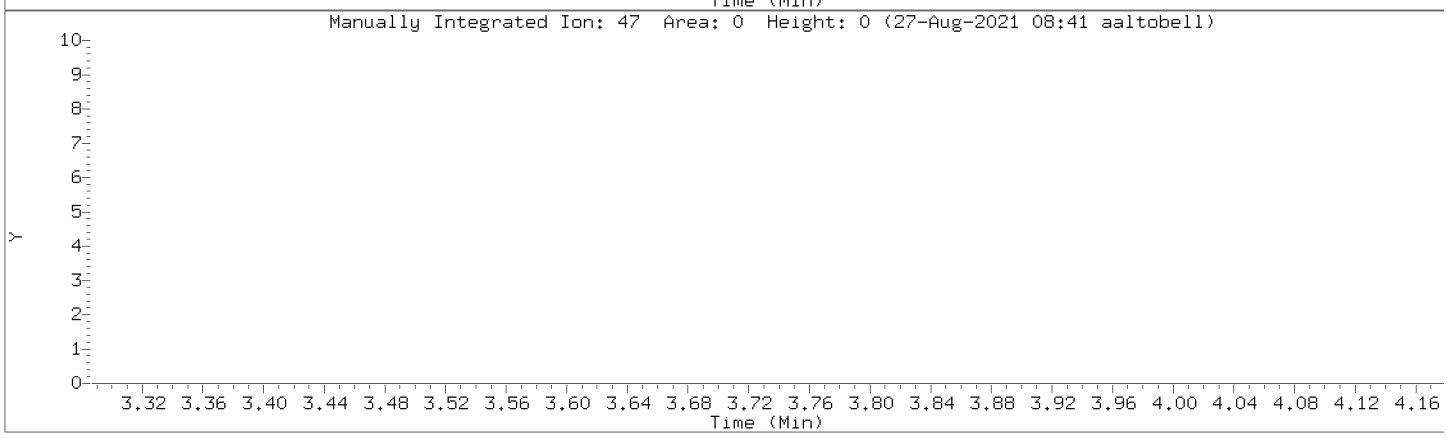
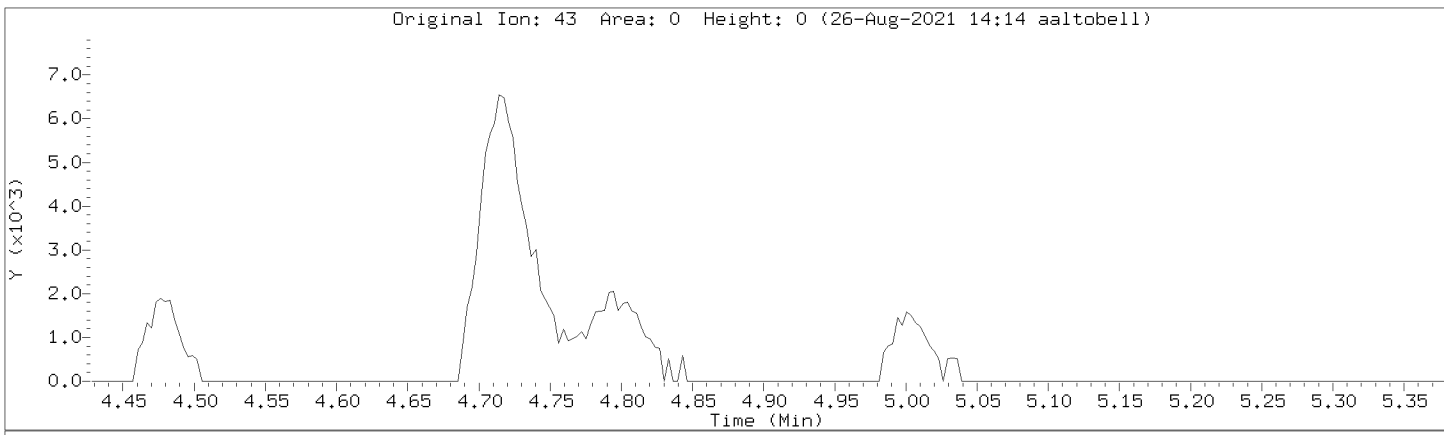
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

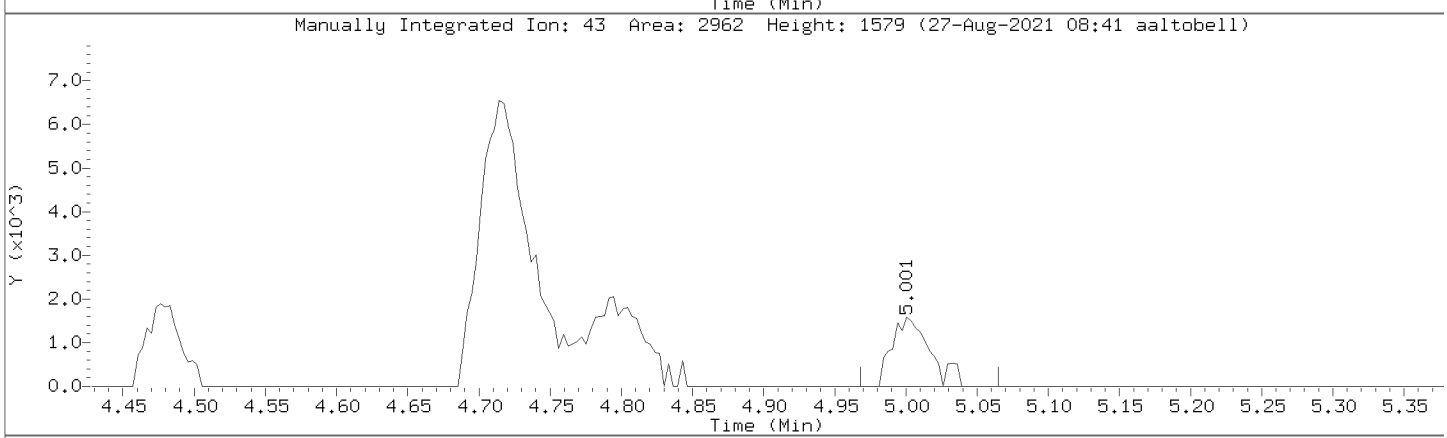


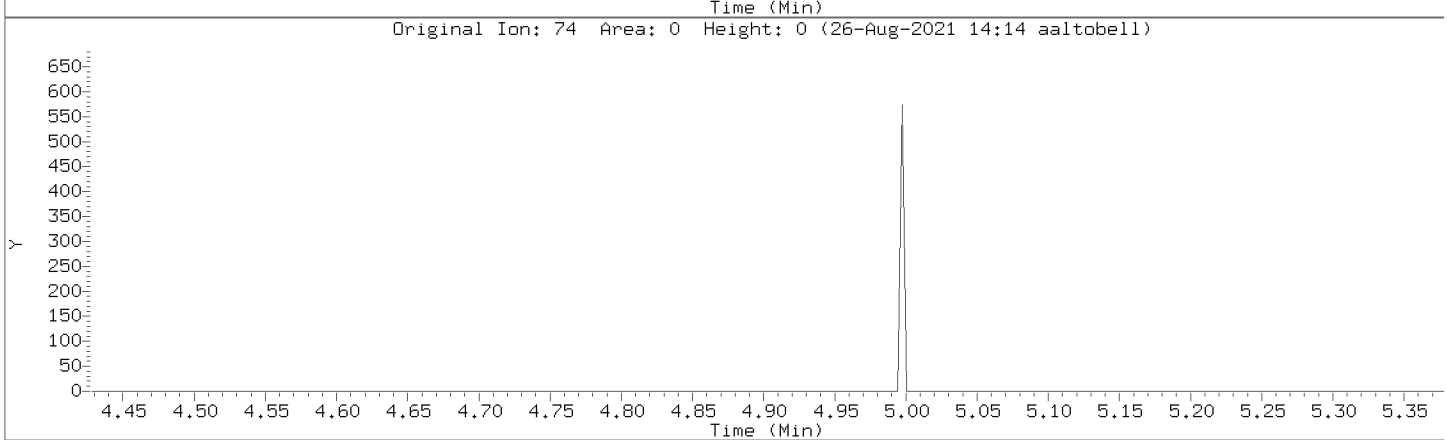



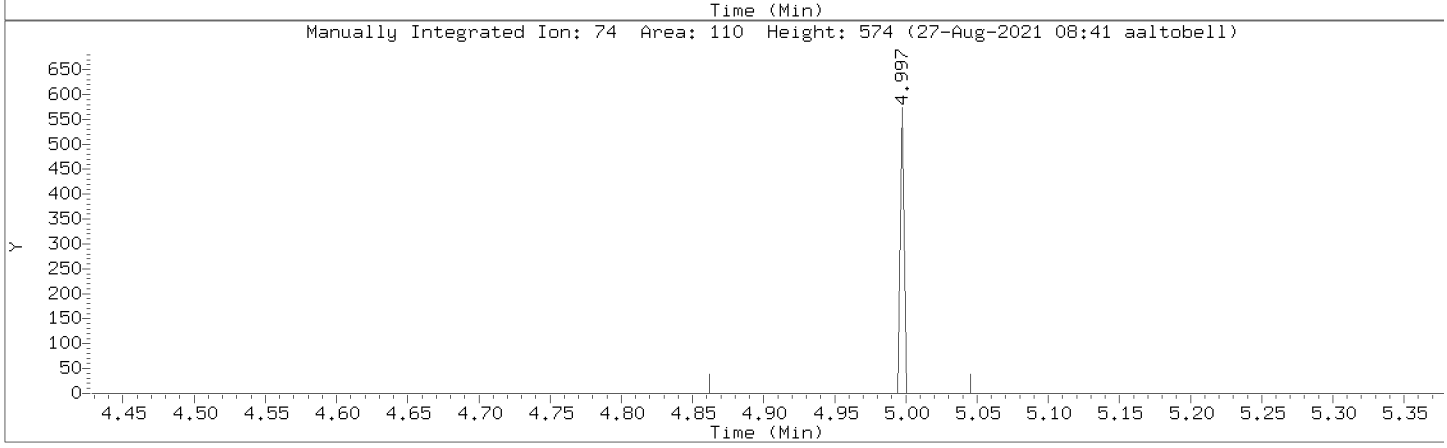
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1

Compound: Methyl Acetate
CAS Number: 79-20-9

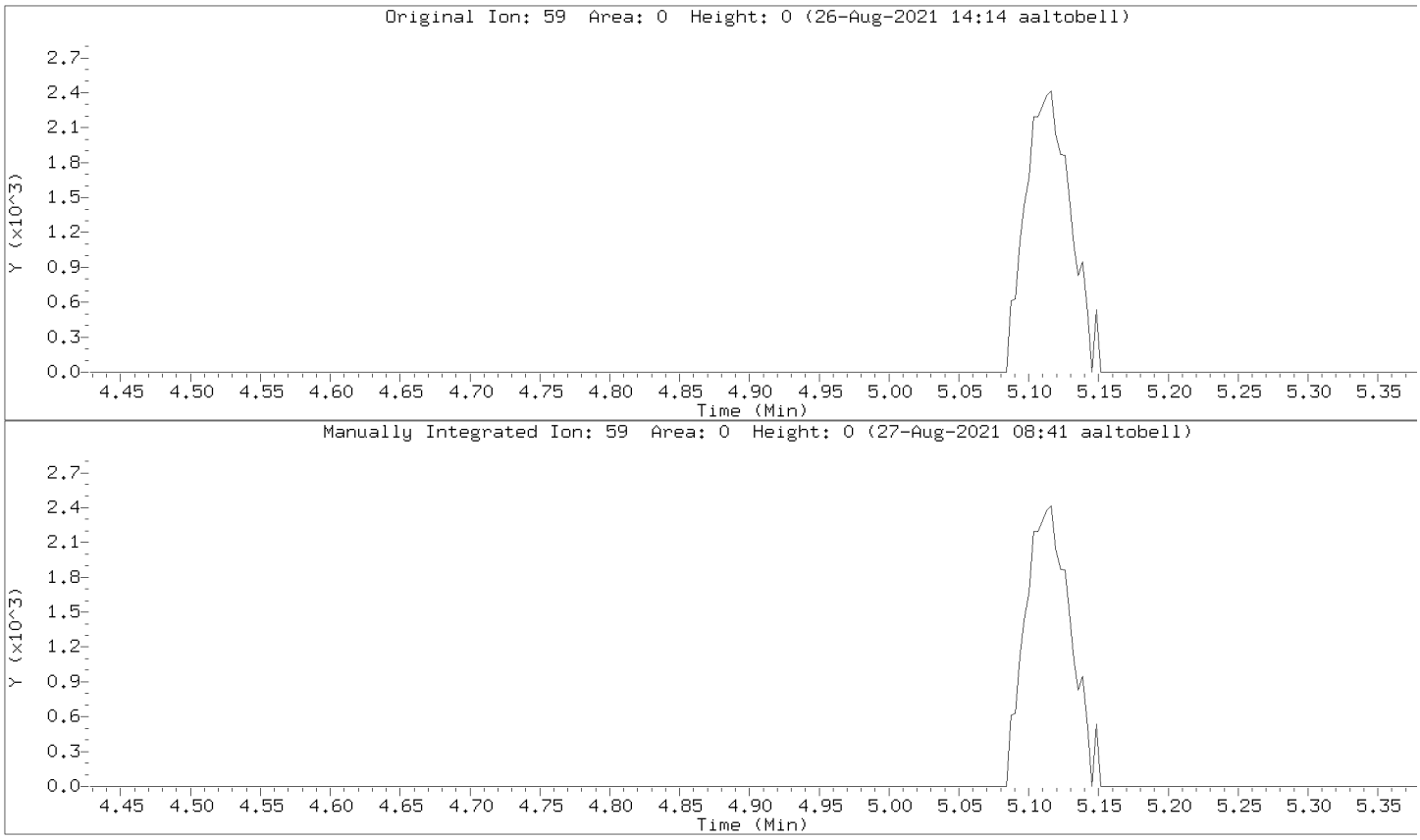


Data File: \\192.168.10.12\chem\10airB.i\082621.b/23804.D
Injection Date: 26-AUG-2021 09:44
Instrument: 10airB.i
Lab Sample ID: CAL1



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23805.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23805.D
Lab Smp Id: CAL2
Inj Date : 26-AUG-2021 10:11
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 08:53 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.756 | 3.727 | (0.532) | 3260 | 0.14280 | 0.141(M) |
| 2 Propylene | 41 | 3.775 | 3.733 | (0.535) | 3469 | 0.14370 | 0.140 |
| 3 Chlorodifluoromethane | 67 | 3.772 | 3.740 | (0.535) | 901 | 0.14290 | 0.111(QM) |
| 4 Dichlorodifluoromethane | 85 | 3.794 | 3.775 | (0.538) | 13908 | 0.14490 | 0.141 |
| 5 Chloromethane | 50 | 3.920 | 3.894 | (0.556) | 4965 | 0.14330 | 0.139 |
| 6 Dichlorotetrafluoroethane | 85 | 3.920 | 3.904 | (0.556) | 15912 | 0.13360 | 0.134 |
| 7 Vinyl chloride | 62 | 4.023 | 3.997 | (0.570) | 5229 | 0.14370 | 0.137 |
| 8 1,3-Butadiene | 54 | 4.074 | 4.051 | (0.578) | 3320 | 0.14320 | 0.119 |
| 9 Bromomethane | 94 | 4.244 | 4.222 | (0.602) | 5181 | 0.14350 | 0.133 |
| 10 Chloroethane | 64 | 4.318 | 4.296 | (0.612) | 2560 | 0.14340 | 0.123 |
| 11 Ethanol | 45 | 4.457 | 4.408 | (0.632) | 10783 | 0.86180 | 0.856 |
| 12 Vinyl Bromide | 106 | 4.457 | 4.444 | (0.632) | 5068 | 0.14290 | 0.126 |
| 13 Isopentane | 43 | 4.473 | 4.466 | (0.634) | 7174 | 0.14700 | 0.165(Q) |
| 14 Freon 123 | 83 | 4.547 | 4.527 | (0.645) | 13268 | 0.14230 | 0.139 |
| 15 Trichlorofluoromethane | 101 | 4.556 | 4.550 | (0.646) | 13897 | 0.14480 | 0.144 |
| 16 Acrolein | 56 | 4.656 | 4.585 | (0.660) | 4343 | 0.40650 | 0.487 |
| 17 Acetone | 43 | 4.701 | 4.624 | (0.666) | 31103 | 0.70610 | 0.693 |
| 18 Isopropyl Alcohol | 45 | 4.778 | 4.720 | (0.677) | 44230 | 0.79430 | 0.782 |
| 19 1,1-Dichloroethene | 61 | 4.865 | 4.855 | (0.690) | 8217 | 0.14400 | 0.140 |
| 20 Acrylonitrile | 53 | 4.965 | 4.900 | (0.704) | 5631 | 0.39790 | 0.515(M) |
| 21 Freon 113 | 101 | 4.913 | 4.907 | (0.696) | 12855 | 0.14310 | 0.141 |
| 22 Methyl Acetate | 43 | 4.990 | 4.929 | (0.707) | 7272 | 0.14330 | 0.206(QM) |
| 23 Tert Butyl Alcohol (TBA) | 59 | 5.087 | 4.987 | (0.721) | 11012 | 0.14150 | 0.201(QM) |
| 24 Allyl Chloride | 76 | 5.032 | 5.013 | (0.713) | 2418 | 0.14180 | 0.127 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23805.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 5.026 | 5.013 | (0.712) | 25940 | 0.71840 | 0.711 |
| 26 Carbon Disulfide | 76 | 5.154 | 5.148 | (0.731) | 17029 | 0.14490 | 0.140(M) |
| 27 trans-1,2-dichloroethene | 96 | 5.379 | 5.373 | (0.763) | 5593 | 0.14420 | 0.124 |
| 28 Methyl Tert Butyl Ether | 73 | 5.463 | 5.373 | (0.774) | 15504 | 0.14400 | 0.135 |
| 29 Vinyl Acetate | 43 | 5.531 | 5.489 | (0.784) | 9047 | 0.17270 | 0.211(M) |
| 30 1,1-Dichloroethane | 63 | 5.540 | 5.547 | (0.785) | 9653 | 0.14240 | 0.135 |
| 31 Methyl Ethyl Ketone | 72 | 5.768 | 5.707 | (0.818) | 2319 | 0.14360 | 0.103(Q) |
| 32 n-Hexane | 57 | 5.730 | 5.723 | (0.812) | 8117 | 0.14150 | 0.149(Q) |
| 33 Di-isopropyl Ether | 45 | 5.788 | 5.730 | (0.820) | 14984 | 0.14100 | 0.135 |
| 34 Ethyl Acetate | 43 | 5.955 | 5.900 | (0.844) | 8551 | 0.14160 | 0.118(Q) |
| 35 cis-1,2-Dichloroethene | 96 | 5.910 | 5.920 | (0.838) | 5701 | 0.14360 | 0.122 |
| 36 Ethyl Tert-Butyl Ether | 59 | 6.084 | 6.016 | (0.862) | 16360 | 0.14340 | 0.133 |
| 37 Chloroform | 83 | 6.129 | 6.145 | (0.869) | 11628 | 0.14080 | 0.134 |
| 38 Tetrahydrofuran | 42 | 6.325 | 6.238 | (0.897) | 4188 | 0.14260 | 0.114 |
| 39 1,1,1-Trichloroethane | 97 | 6.518 | 6.534 | (0.924) | 11490 | 0.14270 | 0.136 |
| 40 1,2-Dichloroethane | 62 | 6.614 | 6.624 | (0.938) | 5113 | 0.14400 | 0.114 |
| 41 Benzene | 78 | 6.810 | 6.820 | (0.965) | 19650 | 0.14300 | 0.140 |
| 42 Carbon tetrachloride | 117 | 6.826 | 6.839 | (0.968) | 10717 | 0.14460 | 0.135 |
| 43 Cyclohexane | 56 | 6.858 | 6.865 | (0.972) | 8754 | 0.14260 | 0.137 |
| 44 Tert Amyl Methyl Ether | 73 | 7.058 | 6.993 | (1.000) | 36148 | 0.14340 | 0.165(Q) |
| * 45 1,4-Difluorobenzene | 114 | 7.055 | 7.067 | (1.000) | 2256553 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 7.177 | 7.183 | (1.017) | 27542 | 0.14320 | 0.139 |
| 47 Heptane | 43 | 7.318 | 7.328 | (1.037) | 8349 | 0.14280 | 0.136 |
| 48 Trichloroethene | 130 | 7.453 | 7.460 | (1.057) | 8937 | 0.14270 | 0.135 |
| 49 Methyl methacrylate | 69 | 7.534 | 7.505 | (1.068) | 6608 | 0.14300 | 0.133 |
| 50 1,2-Dichloropropane | 63 | 7.508 | 7.511 | (1.064) | 6379 | 0.14360 | 0.139 |
| 51 1,4-Dioxane | 88 | 7.698 | 7.585 | (1.091) | 10021 | 0.35750 | 0.313(M) |
| 52 Bromodichloromethane | 83 | 7.688 | 7.698 | (1.090) | 11685 | 0.14320 | 0.136 |
| 53 Methylcyclohexane | 98 | 8.003 | 8.013 | (1.134) | 4954 | 0.14340 | 0.122(Q) |
| 54 Methyl Isobutyl Ketone | 43 | 8.177 | 8.103 | (1.159) | 8764 | 0.14370 | 0.173 |
| 55 cis-1,3-Dichloropropene | 75 | 8.183 | 8.183 | (1.160) | 8351 | 0.14280 | 0.114 |
| 56 trans-1,3-Dichloropropene | 75 | 8.678 | 8.685 | (1.230) | 5335 | 0.14600 | 0.181 |
| 57 Toluene | 91 | 8.807 | 8.810 | (1.248) | 22499 | 0.14470 | 0.132 |
| 58 1,1,2-Trichloroethane | 97 | 8.936 | 8.945 | (1.267) | 7131 | 0.14330 | 0.132 |
| 59 Methyl Butyl Ketone | 43 | 9.148 | 9.058 | (0.874) | 4453 | 0.14330 | 0.208(M) |
| 60 n-Octane | 43 | 9.257 | 9.267 | (0.884) | 10403 | 0.14340 | 0.161 |
| 61 Dibromochloromethane | 129 | 9.537 | 9.556 | (0.911) | 12000 | 0.14350 | 0.134 |
| 62 Tetrachloroethene | 166 | 9.643 | 9.649 | (0.921) | 12069 | 0.14200 | 0.142 |
| 63 1,2-Dibromoethane | 107 | 9.778 | 9.781 | (0.934) | 9136 | 0.14080 | 0.124 |
| * 64 Chlorobenzene - d5 | 117 | 10.469 | 10.479 | (1.000) | 1680711 | 10.0000 | |
| 65 Chlorobenzene | 112 | 10.521 | 10.530 | (1.005) | 16974 | 0.14290 | 0.133 |
| 66 Ethyl Benzene | 91 | 10.759 | 10.765 | (1.028) | 26082 | 0.14450 | 0.171 |
| 67 m&p-Xylene | 91 | 10.955 | 10.964 | (1.046) | 39807 | 0.28820 | 0.262(M) |
| 68 n-Nonane | 43 | 11.315 | 11.318 | (1.081) | 9074 | 0.14360 | 0.179 |
| 69 Styrene | 104 | 11.408 | 11.418 | (1.090) | 12563 | 0.14460 | 0.190(Q) |
| 70 o-Xylene | 91 | 11.443 | 11.456 | (1.093) | 20889 | 0.14360 | 0.132 |
| 71 Bromoform | 173 | 11.533 | 11.540 | (1.102) | 10138 | 0.14450 | 0.122 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 11.894 | 11.903 | (1.136) | 14186 | 0.14410 | 0.175 |
| 73 Isopropylbenzene | 105 | 12.061 | 12.064 | (1.152) | 29461 | 0.14230 | 0.168 |
| 74 N-Propylbenzene | 91 | 12.688 | 12.688 | (1.212) | 28293 | 0.14410 | 0.185 |
| 75 2-Chlorotoluene | 91 | 12.730 | 12.736 | (1.216) | 23694 | 0.14500 | 0.143(QM) |
| 76 4-Ethyltoluene | 105 | 12.868 | 12.874 | (1.229) | 22689 | 0.14320 | 0.182 |
| 77 1,3,5-Trimethylbenzene | 105 | 12.935 | 12.945 | (1.236) | 26132 | 0.14330 | 0.133 |
| 78 n-Decane | 57 | 13.267 | 13.267 | (1.880) | 10802 | 0.14490 | 0.191 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23805.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.373 | 13.382 | (1.277) | 26089 | 0.14450 | 0.133(M) |
| 80 1,2,4-Trimethylbenzene | 105 | 13.414 | 13.424 | (1.281) | 22672 | 0.14420 | 0.175 |
| 81 Sec- Butylbenzene | 105 | 13.672 | 13.681 | (1.306) | 35457 | 0.14470 | 0.171 |
| 82 1,3-Dichlorobenzene | 146 | 13.710 | 13.720 | (1.310) | 9907 | 0.14470 | 0.216 |
| 83 Benzyl Chloride | 91 | 13.781 | 13.787 | (1.316) | 5806 | 0.14590 | 0.282 |
| 84 1,4-Dichlorobenzene | 146 | 13.845 | 13.852 | (1.322) | 7927 | 0.14460 | 0.229 |
| 85 p-Isopropyltoluene | 119 | 13.874 | 13.881 | (1.325) | 30167 | 0.14520 | 0.184 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.897 | 13.906 | (1.327) | 24525 | 0.14460 | 0.178 |
| 87 1,2-Dichlorobenzene | 146 | 14.167 | 14.170 | (1.353) | 11629 | 0.14440 | 0.201 |
| 88 N-Butylbenzene | 91 | 14.340 | 14.340 | (1.370) | 15560 | 0.14420 | 0.206 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.890 | 14.890 | (1.422) | 4221 | 0.14540 | 0.273 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.993 | 15.974 | (1.528) | 3855 | 0.31320 | 0.556(QM) |
| 91 Naphthalene | 128 | 16.196 | 16.157 | (1.547) | 8784 | 0.16330 | 0.285(M) |
| 92 Hexachlorobutadiene | 225 | 16.282 | 16.282 | (1.555) | 11470 | 0.16330 | 0.218 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23805.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

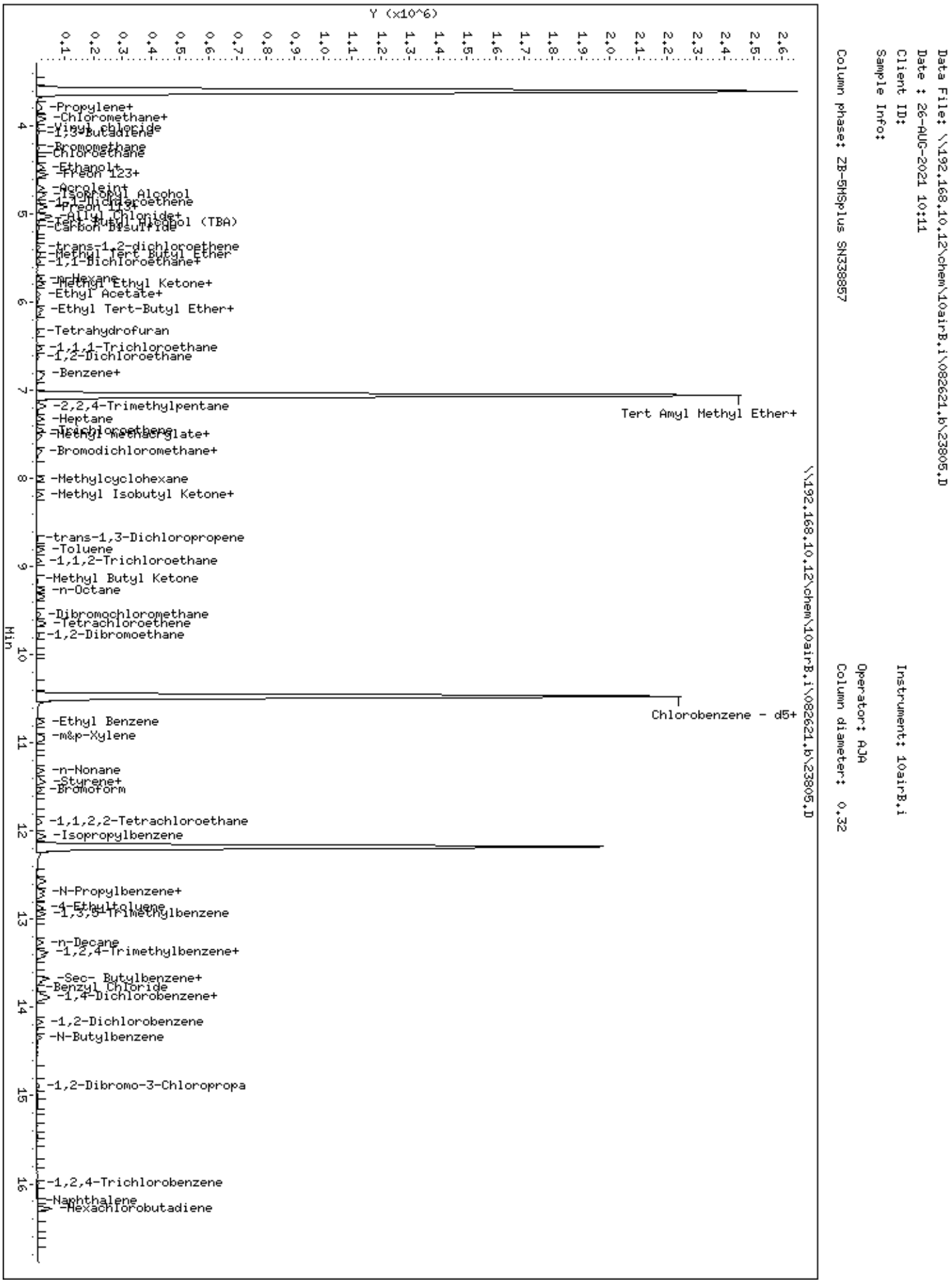
Instrument ID: 10airB.i
Calibration Date: 26-AUG-2021
Lab File ID: 23805.D
Calibration Time: 11:33
Lab Smp Id: CAL2
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2256553 | 6.83 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1680711 | 1.56 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.06 | -0.05 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.


Data File: \\192.168.10.12\chem\10airB.i\082621.b\23805.D
Date : 26-AUG-2021 10:11
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32
Y (x10^6)
Min
-Propylene+
-Chloromethane+
-Vinyl Chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol+
-Freon 123+
-Acrolein+
-Isopropyl Alcohol
-1,1-Dichloroethene
-Freon 113+
-Allyl Chloride+
-Tert-Butyl Alcohol (TBA)
-Carbon Disulfide
-trans-1,2-dichloroethene
-Methyl Tert Butyl Ether
-1,1-Dichloroethane+
-n-Hexane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether+
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl Methacrylate+
-Bromodichloromethane+
Tert Amyl Methyl Ether+
-Methylcyclohexane
-Methyl Isobutyl Ketone+
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-1,2,4-Trimethylbenzene+
-Sec- Butylbenzene+
-Benzyl Chloride
-1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
\\192.168.10.12\chem\10airB.i\082621.b\23805.D

Data File: \\192.168.10.12\chem\10airB.i\082621.b/23805.D
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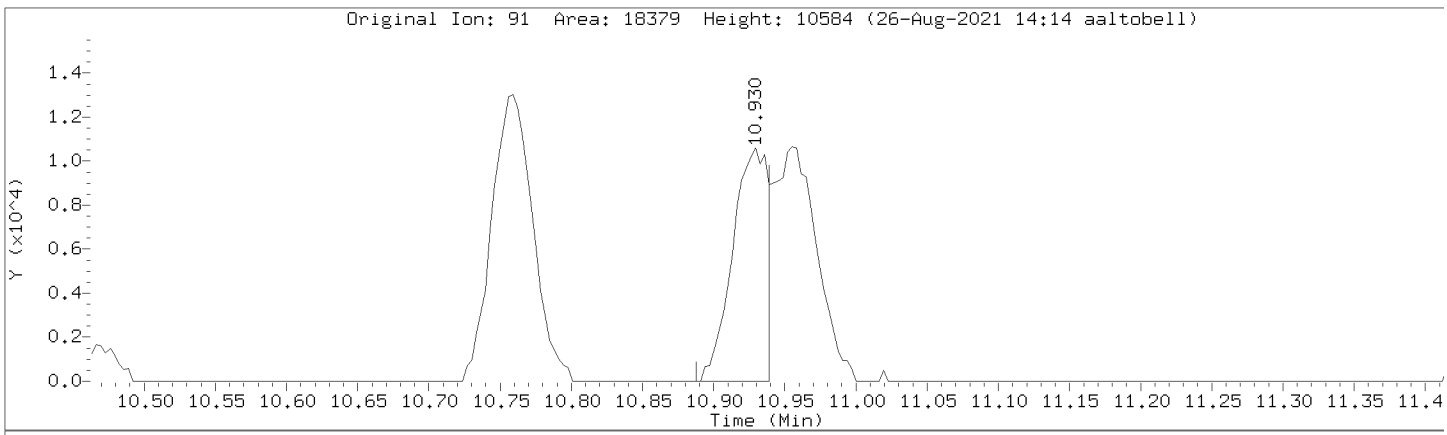
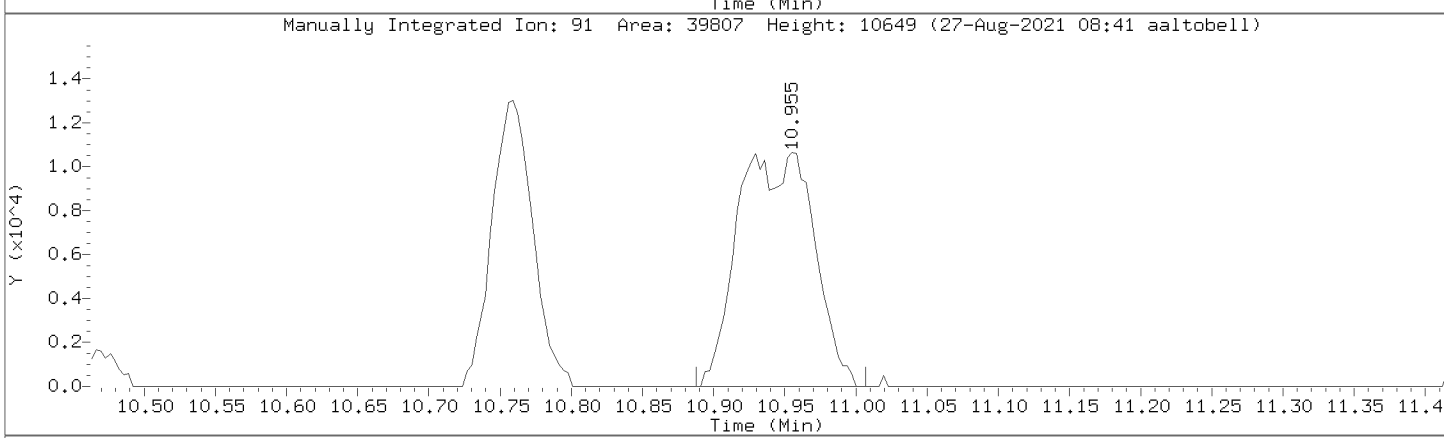
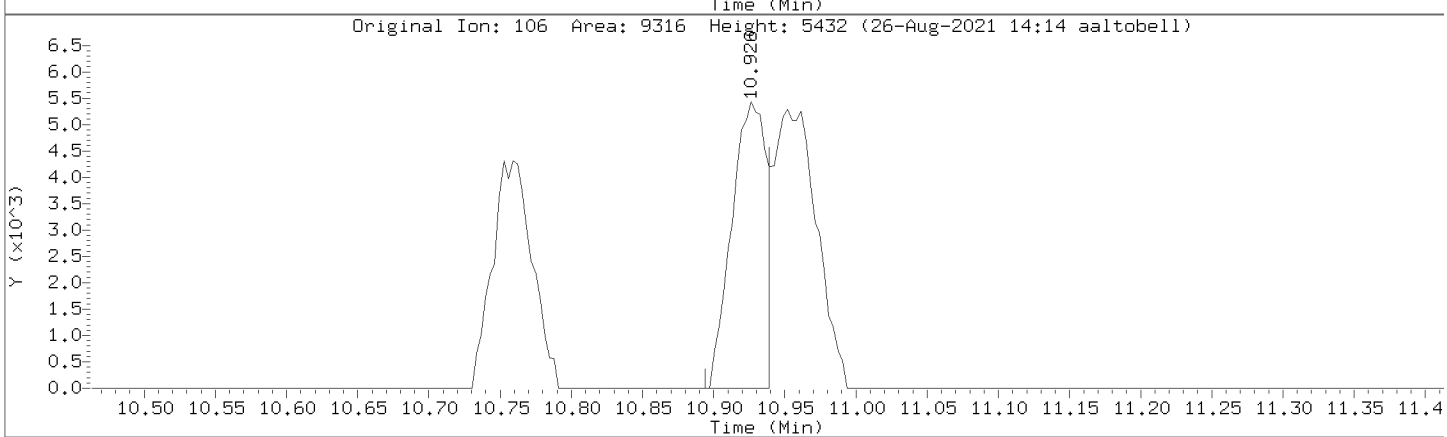
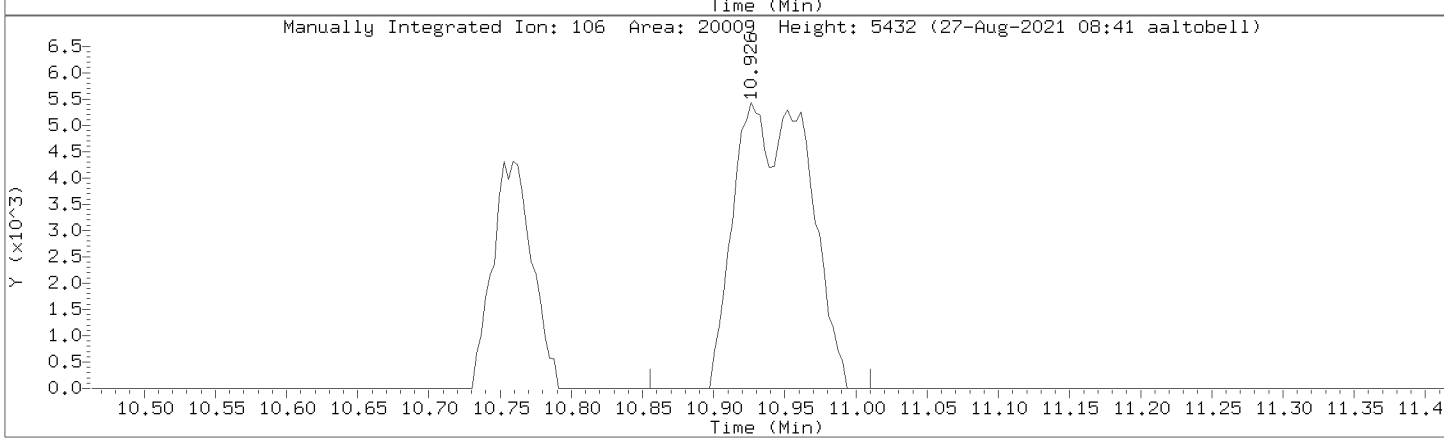
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: m&p-Xylene
CAS Number: 7816-60-0



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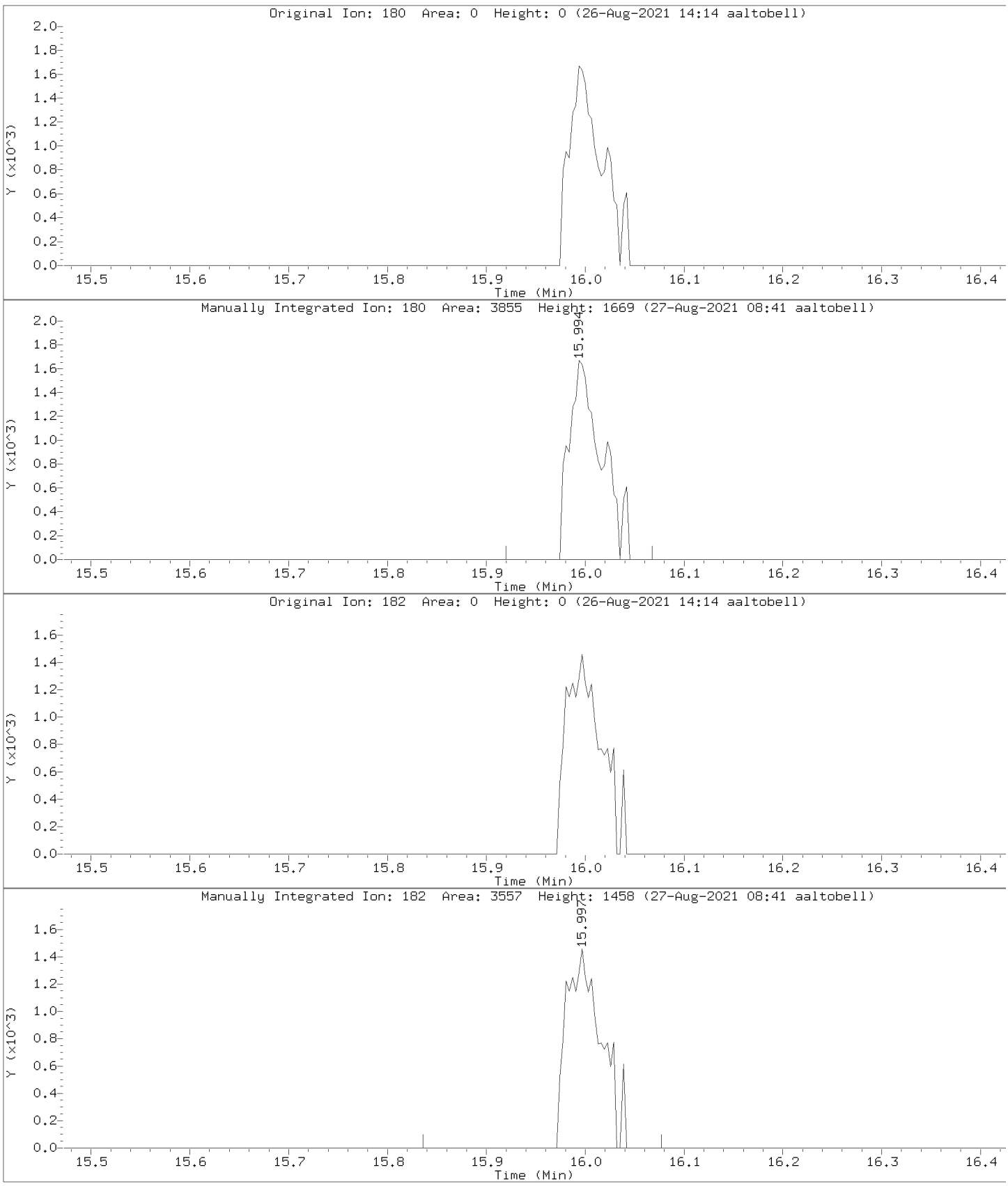
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6



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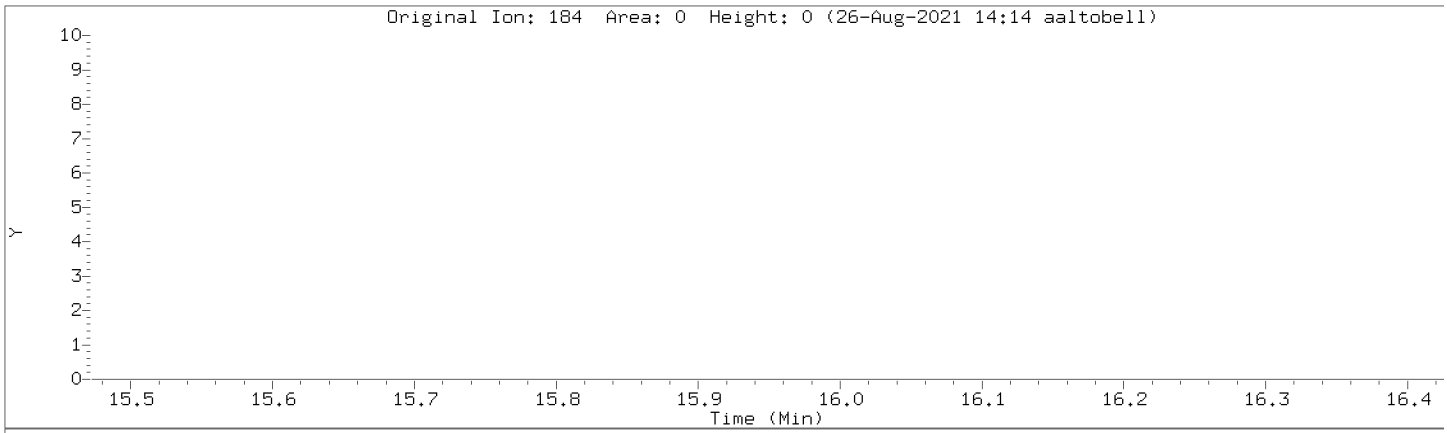
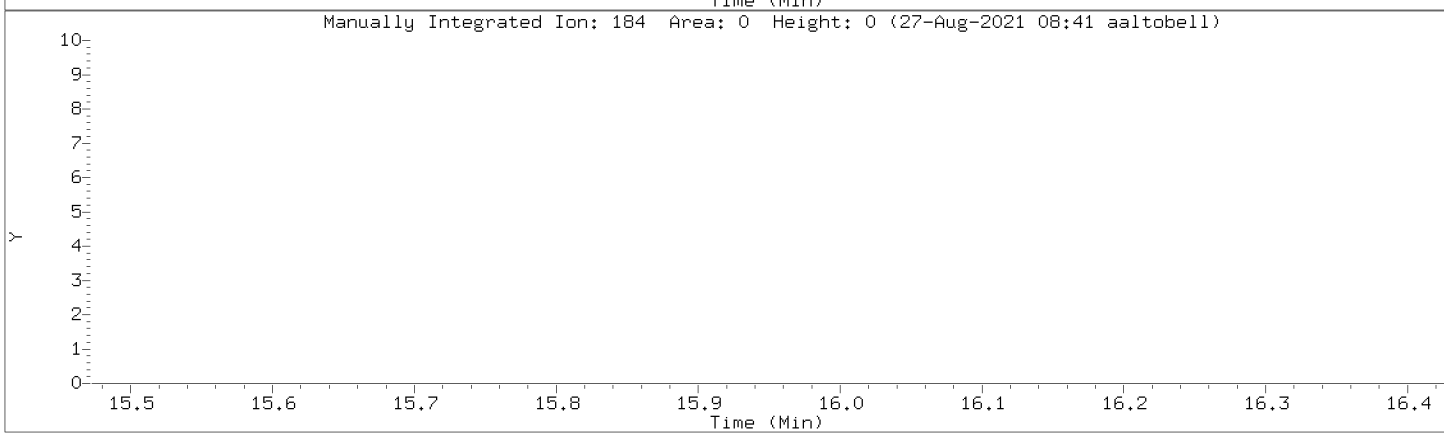
Lab Sample ID: CAL2



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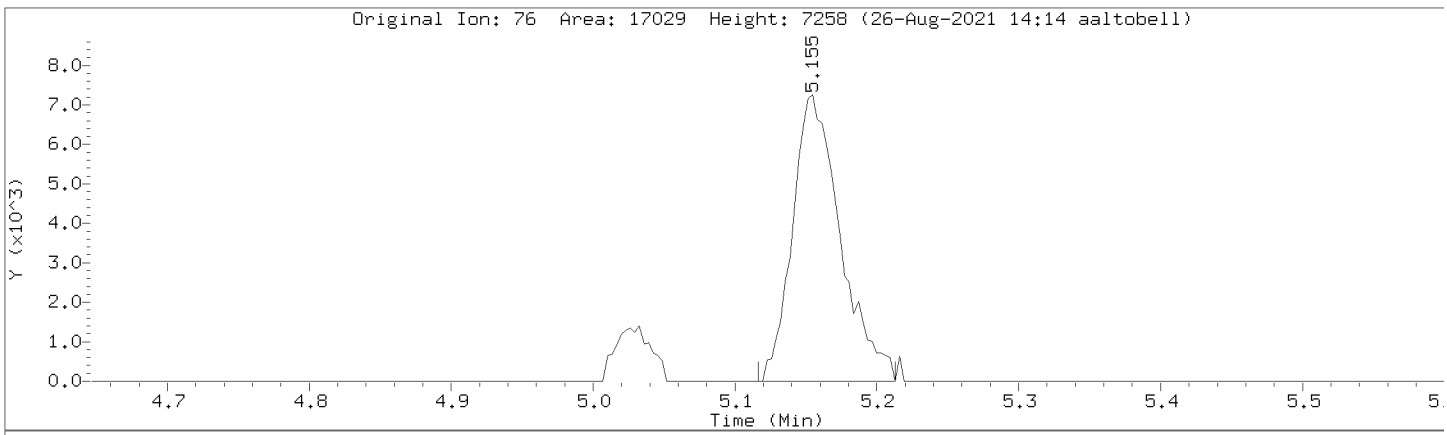
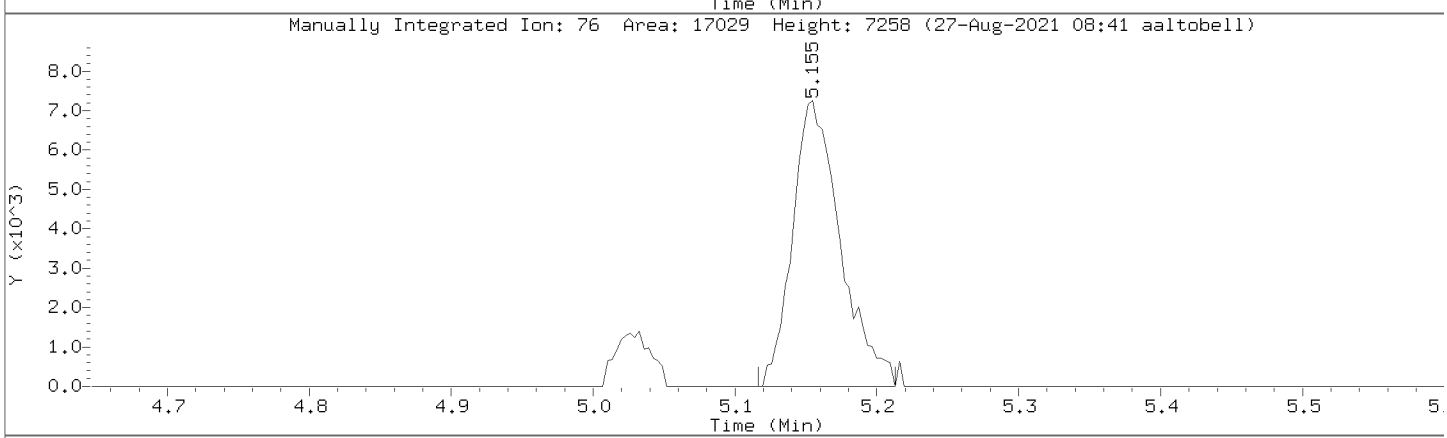
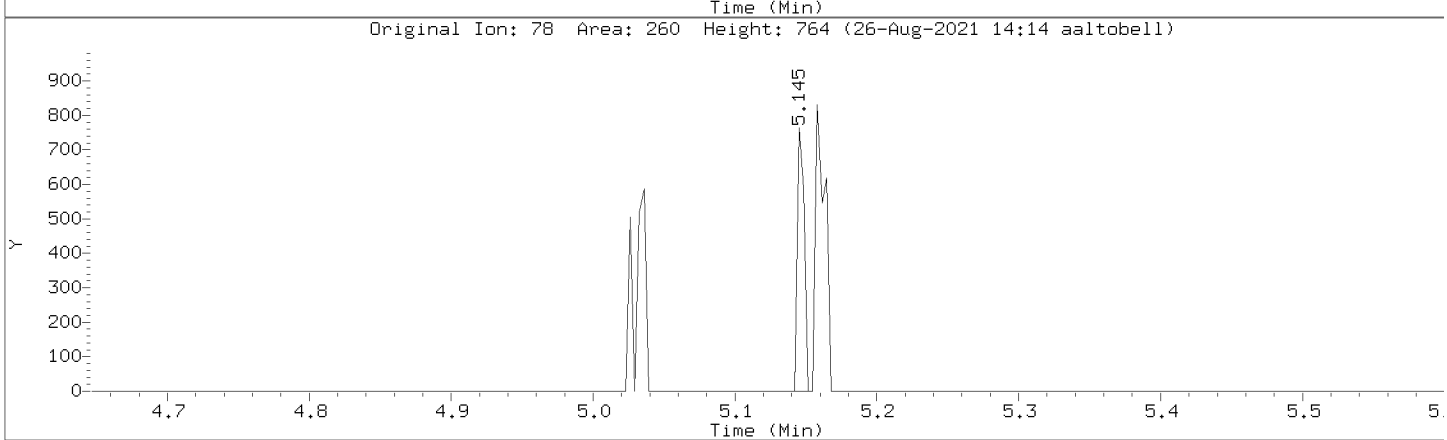
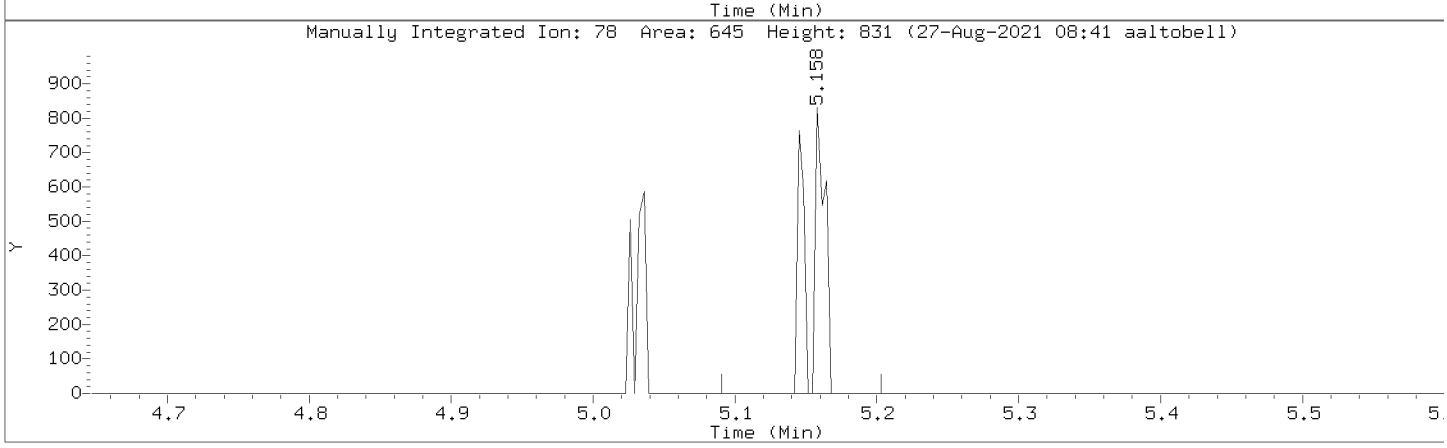
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Carbon Disulfide
CAS Number: 75-15-0



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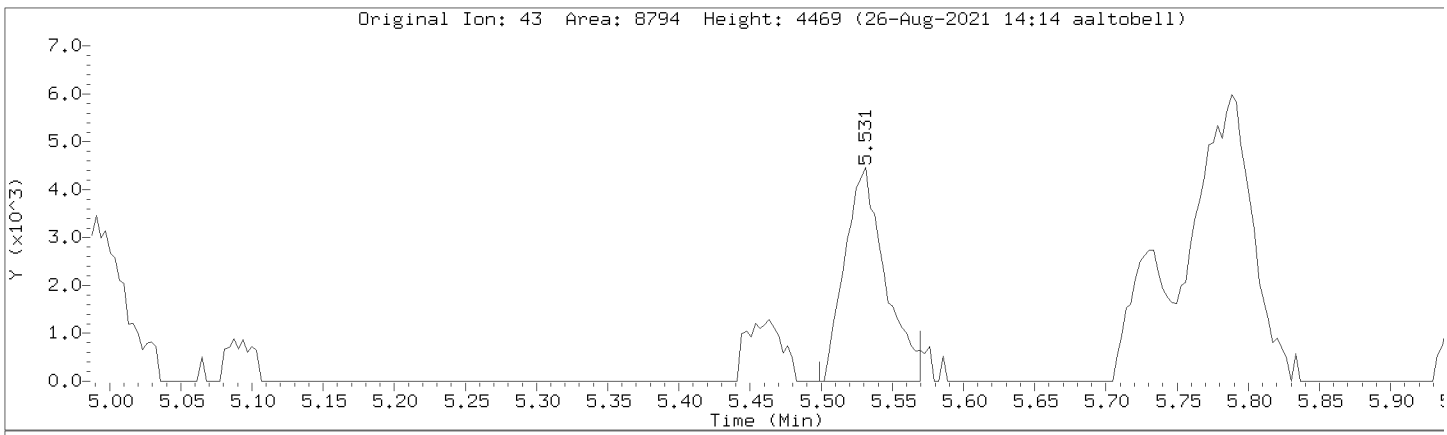
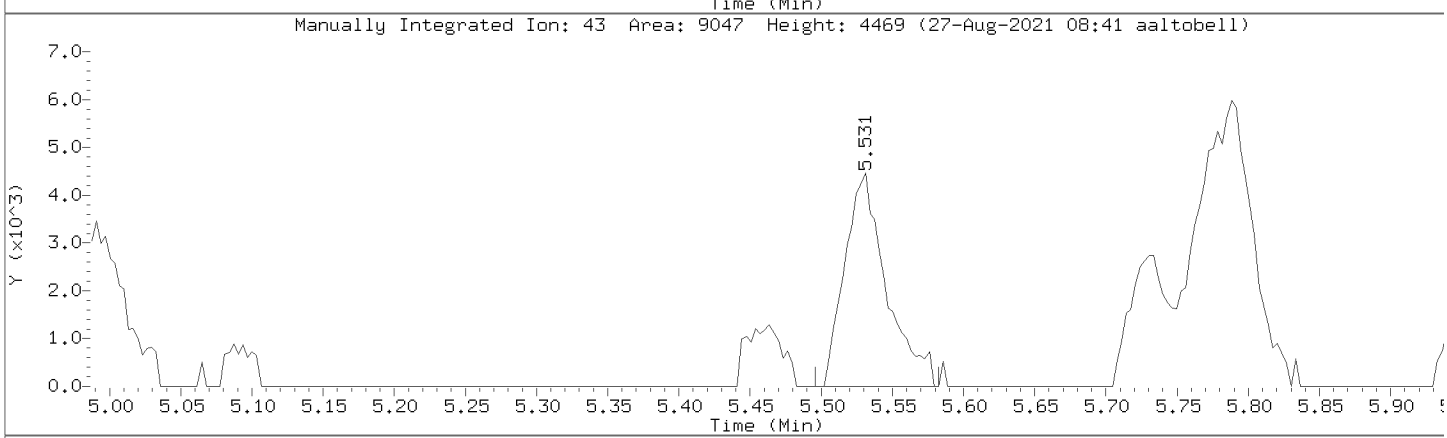
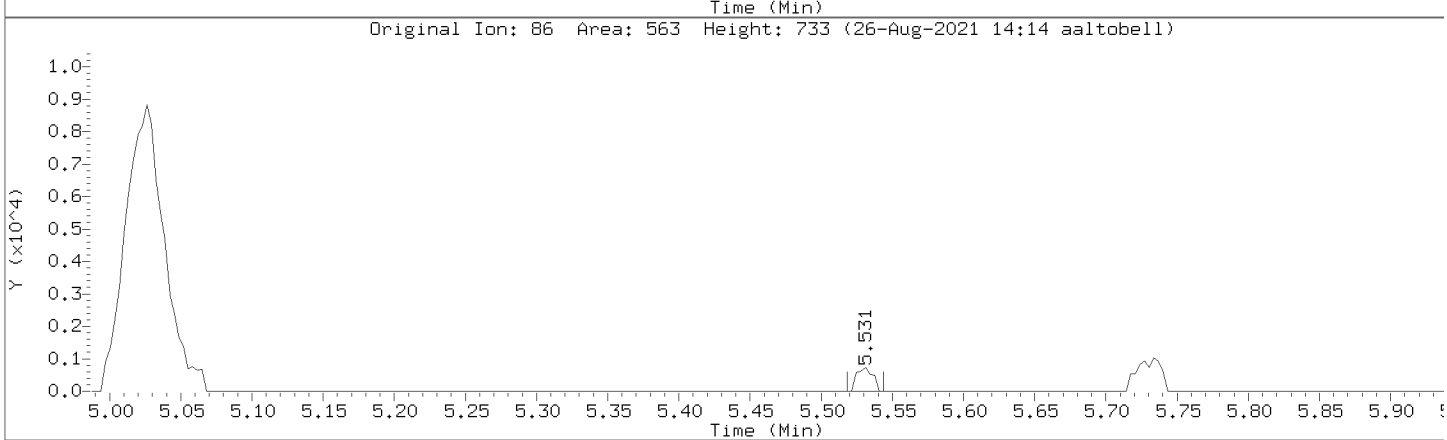
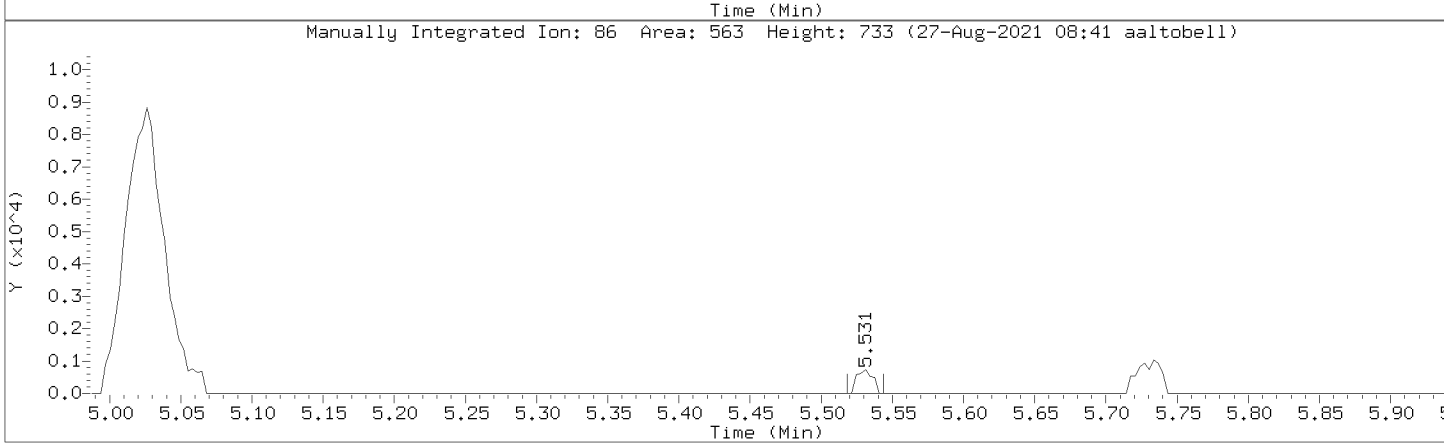
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Vinyl Acetate
CAS Number: 108-05-4



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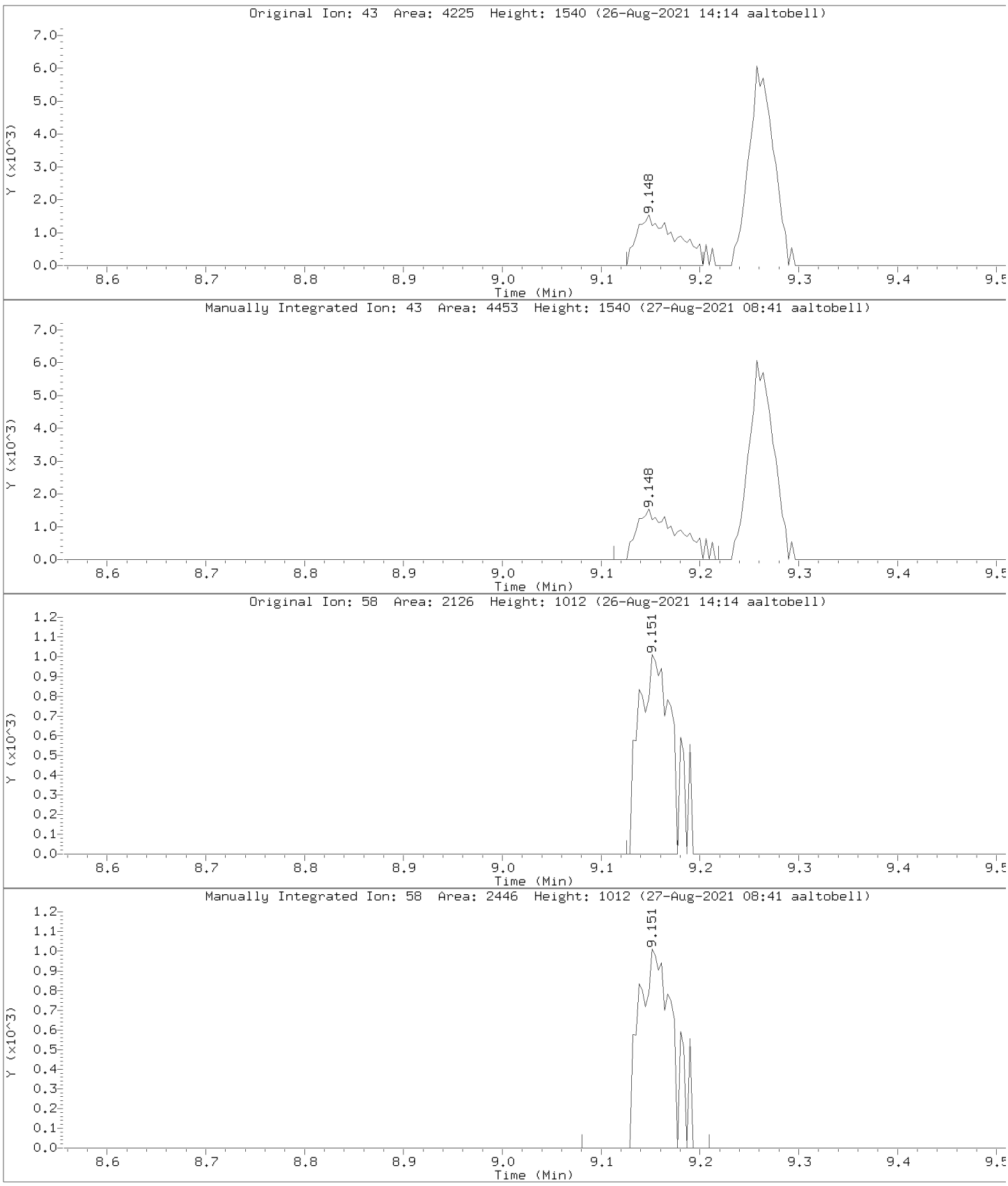
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Methyl Butyl Ketone
CAS Number: 591-78-6



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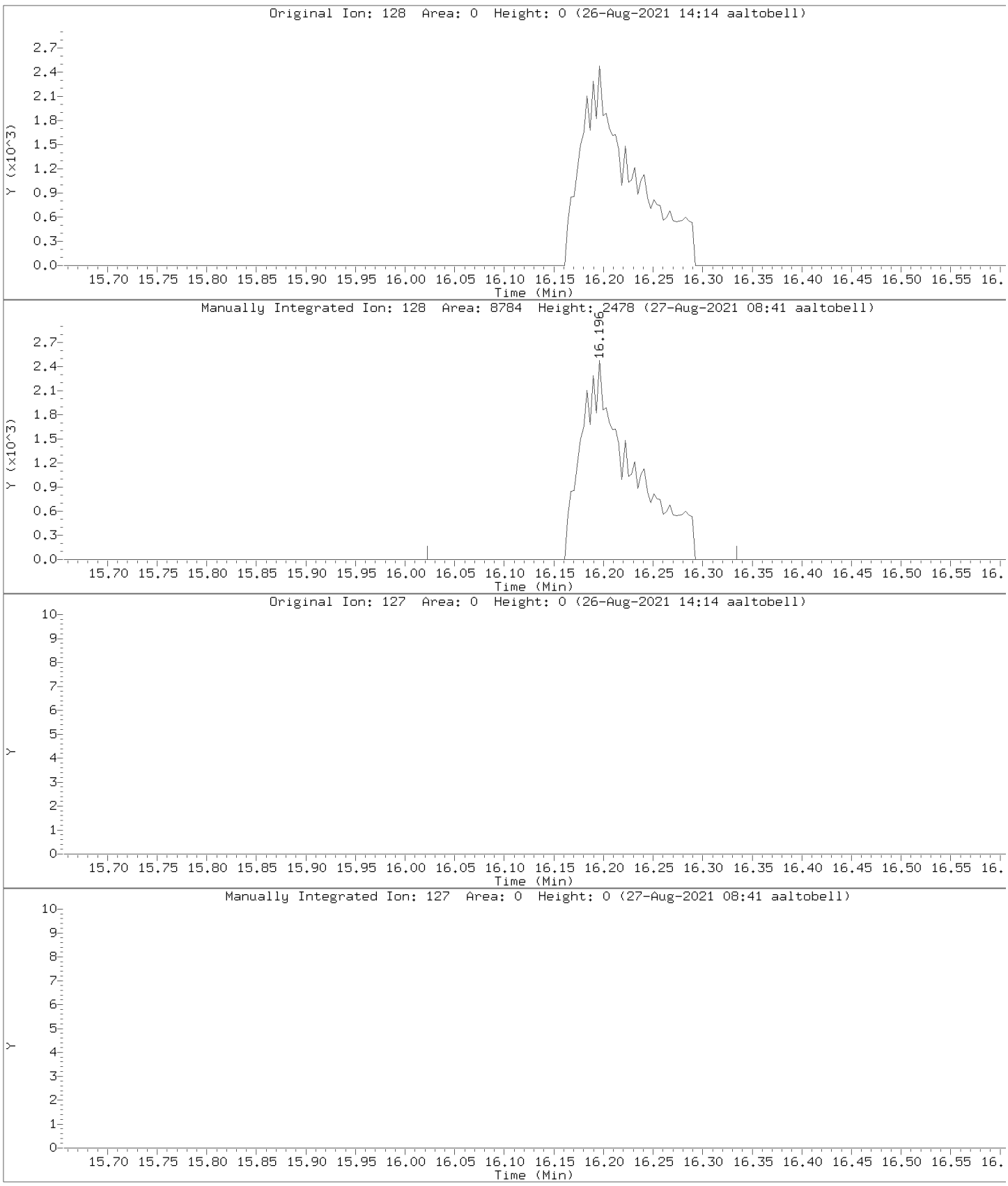
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Naphthalene
CAS Number: 91-20-3



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Injection Date: 26-AUG-2021 10:11
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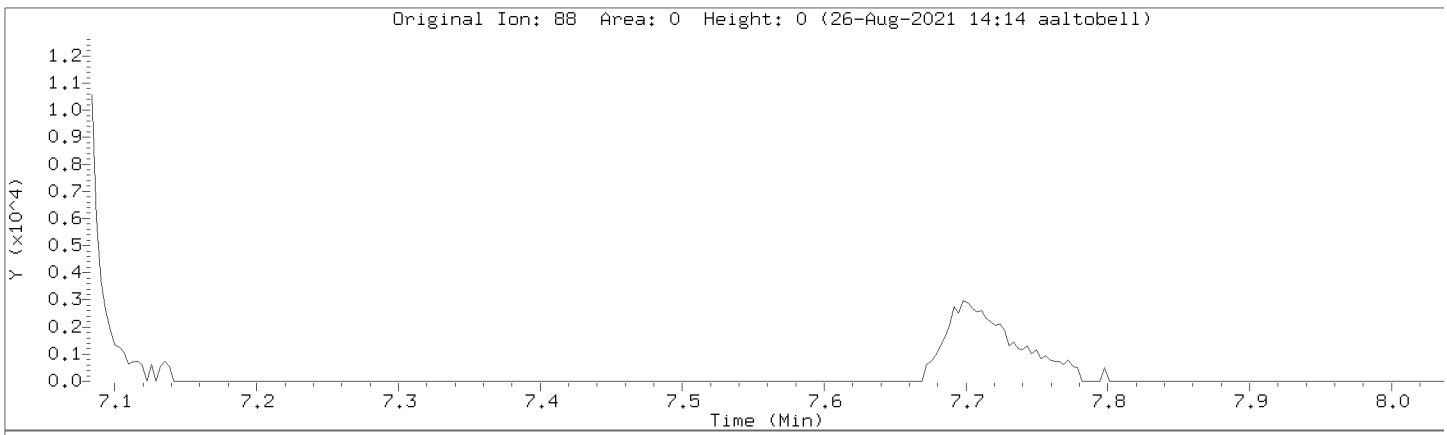
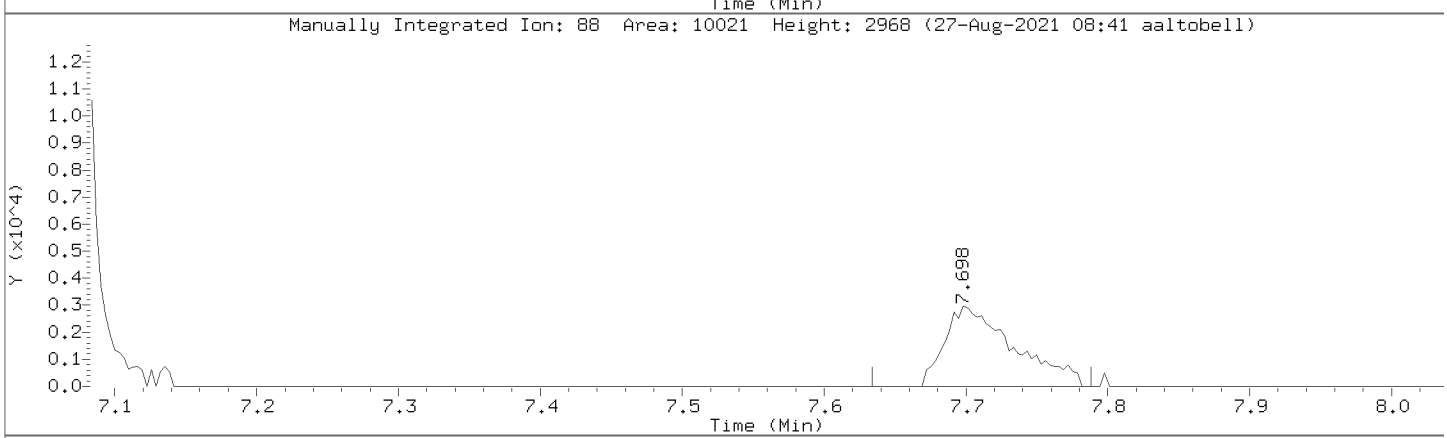
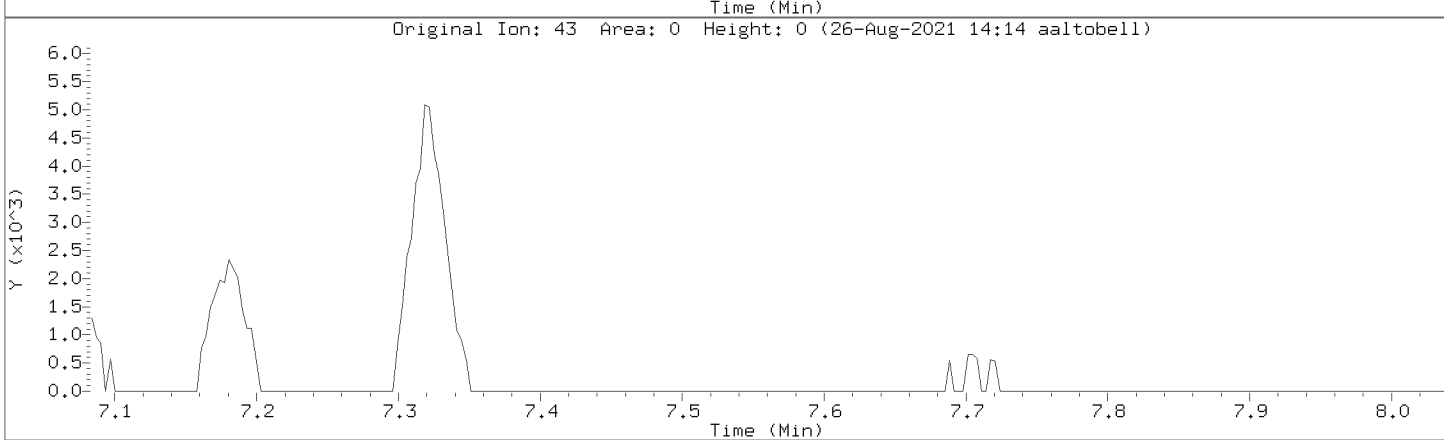
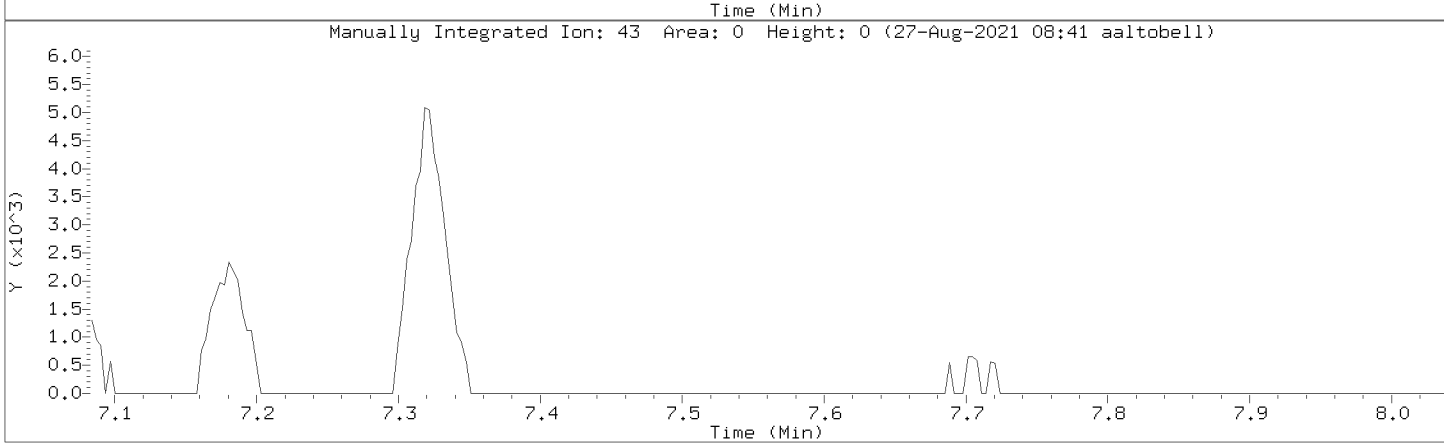
Lab Sample ID: CAL2

Compound: 1,4-Dioxane
CAS Number: 123-91-1



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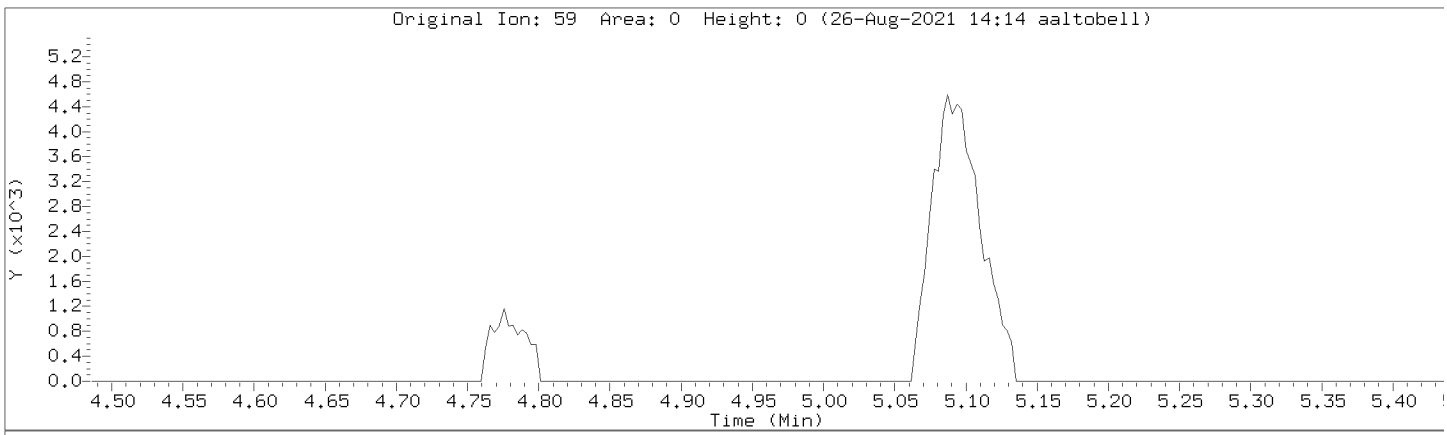
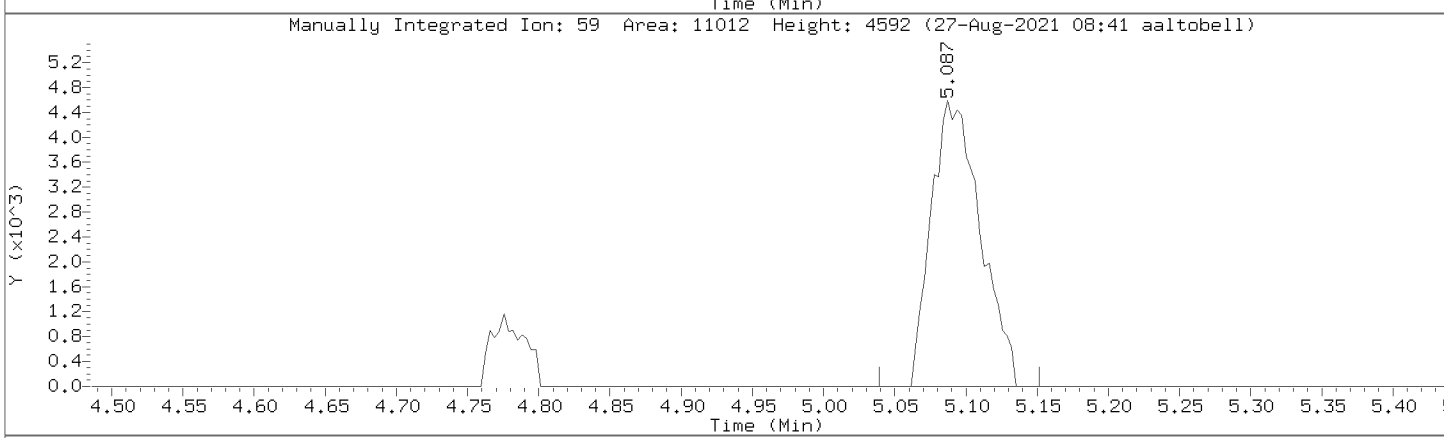
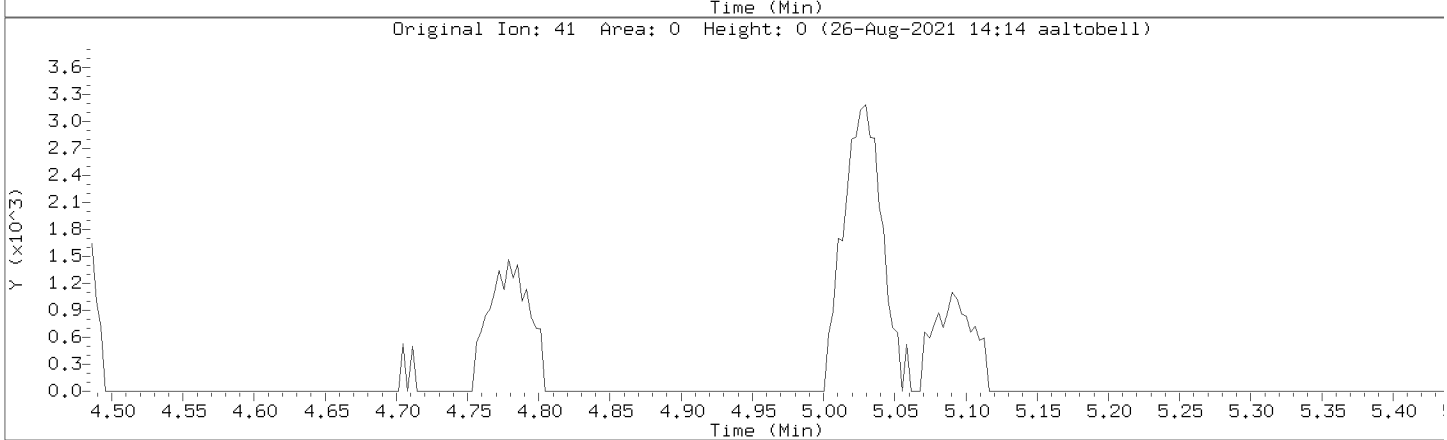
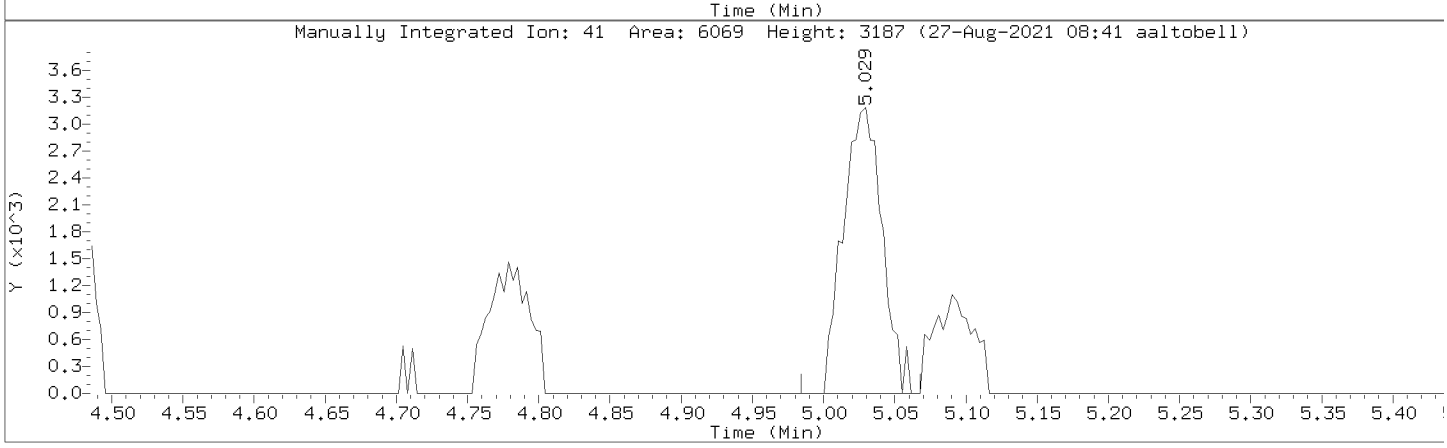
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Tert Butyl Alcohol (TBA)
CAS Number: 75-65-0



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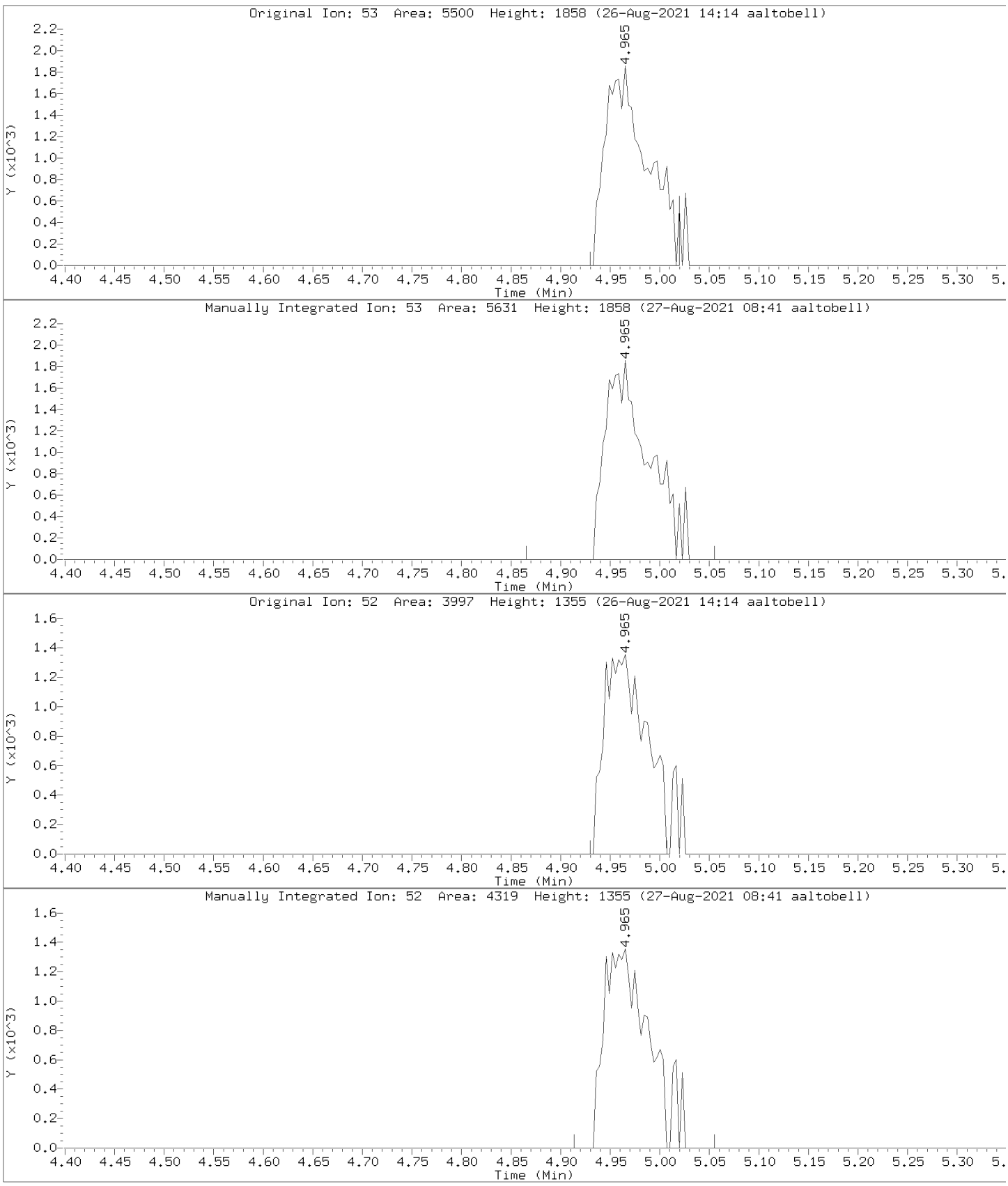
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Acrylonitrile
CAS Number: 107-13-1



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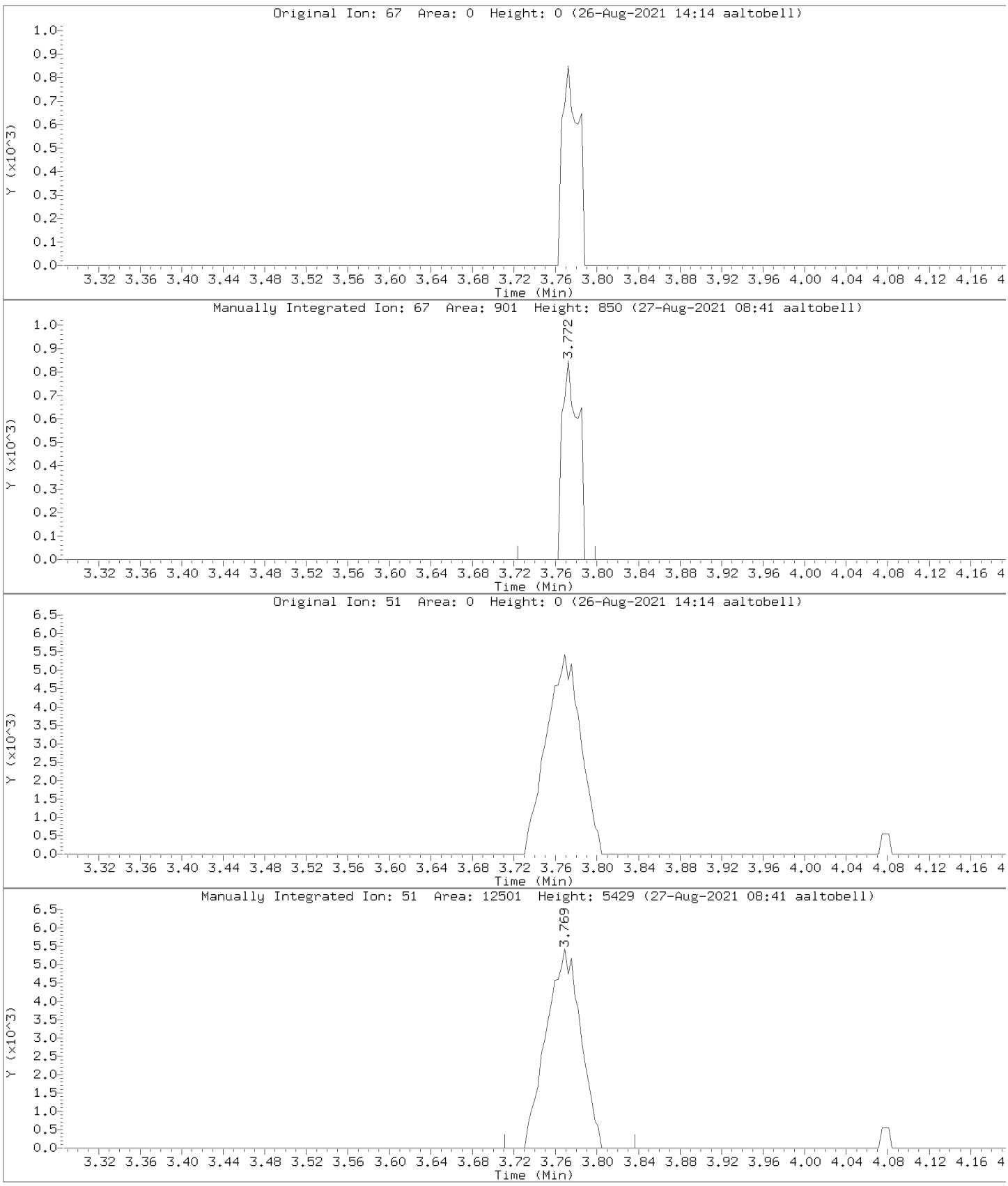
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Chlorodifluoromethane
CAS Number: 76-13-1



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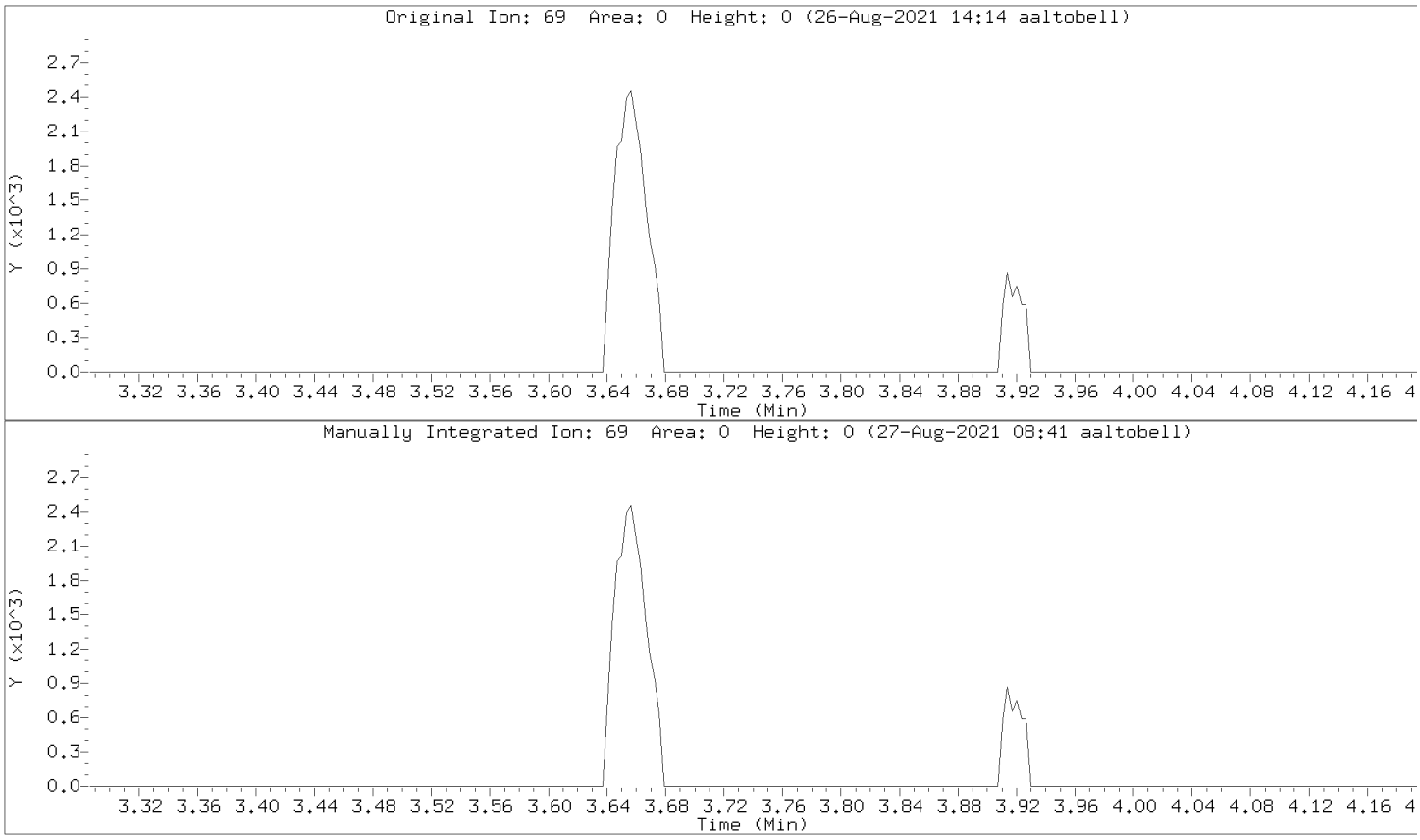

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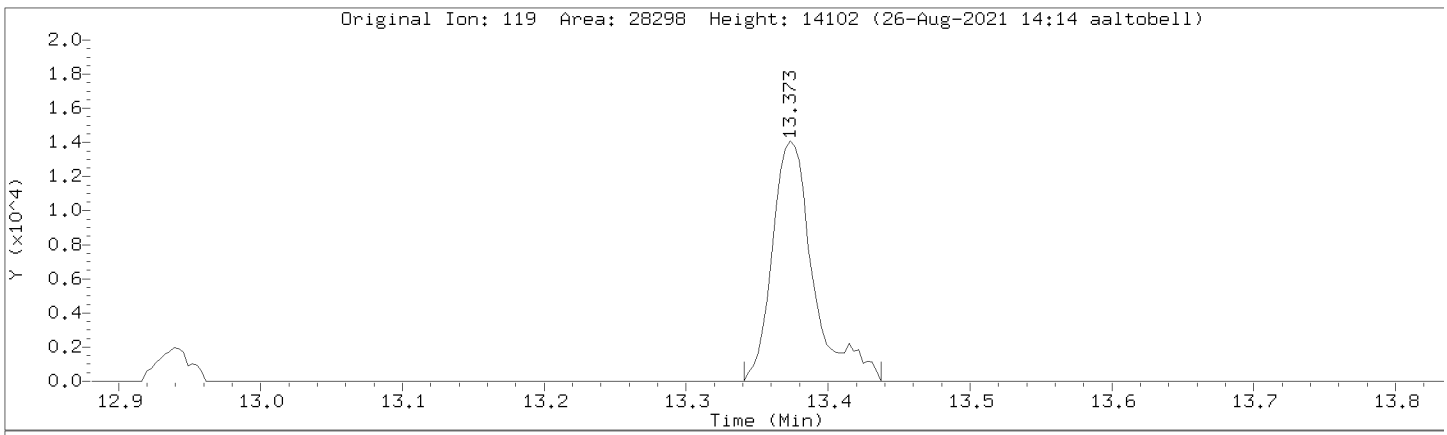
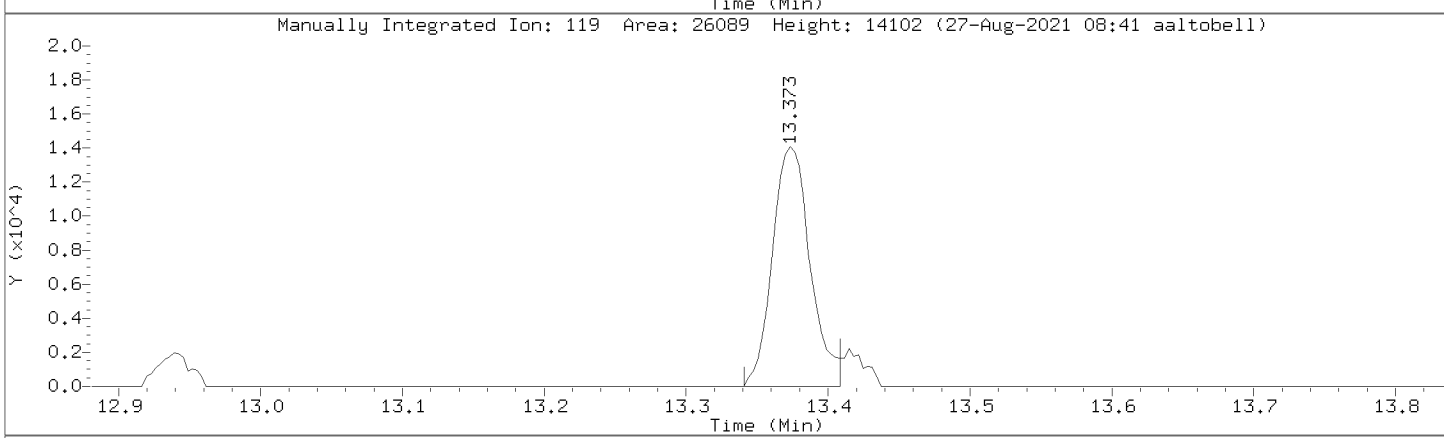
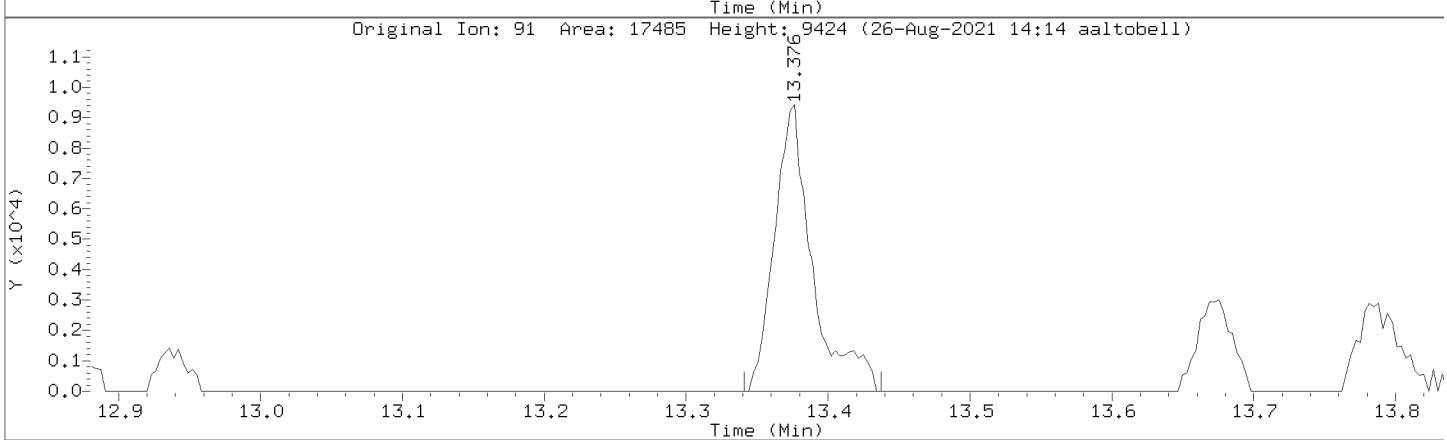
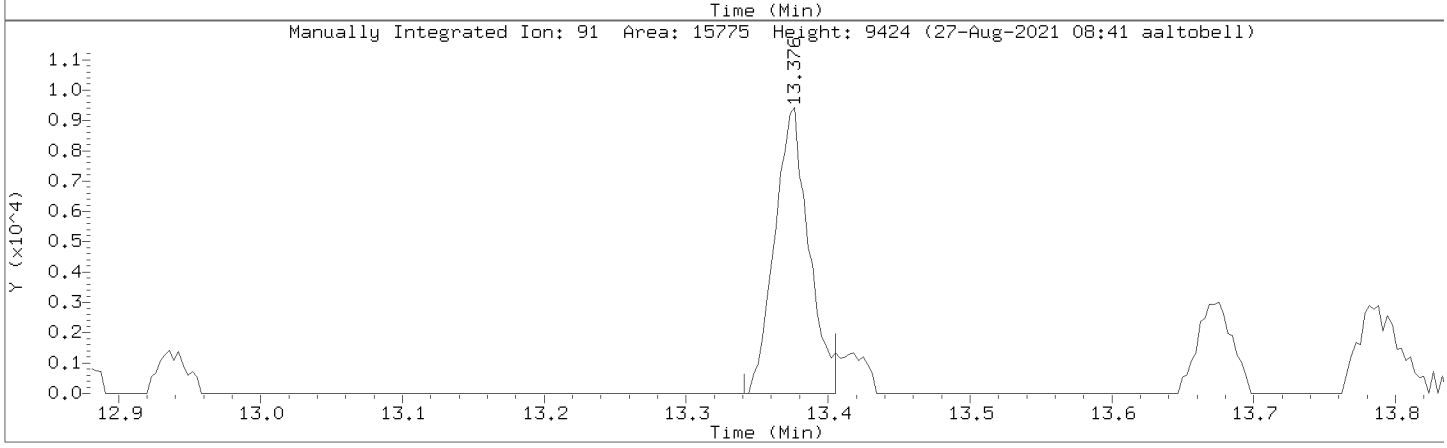
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Tert-Butyl Benzene
CAS Number: 98-06-6



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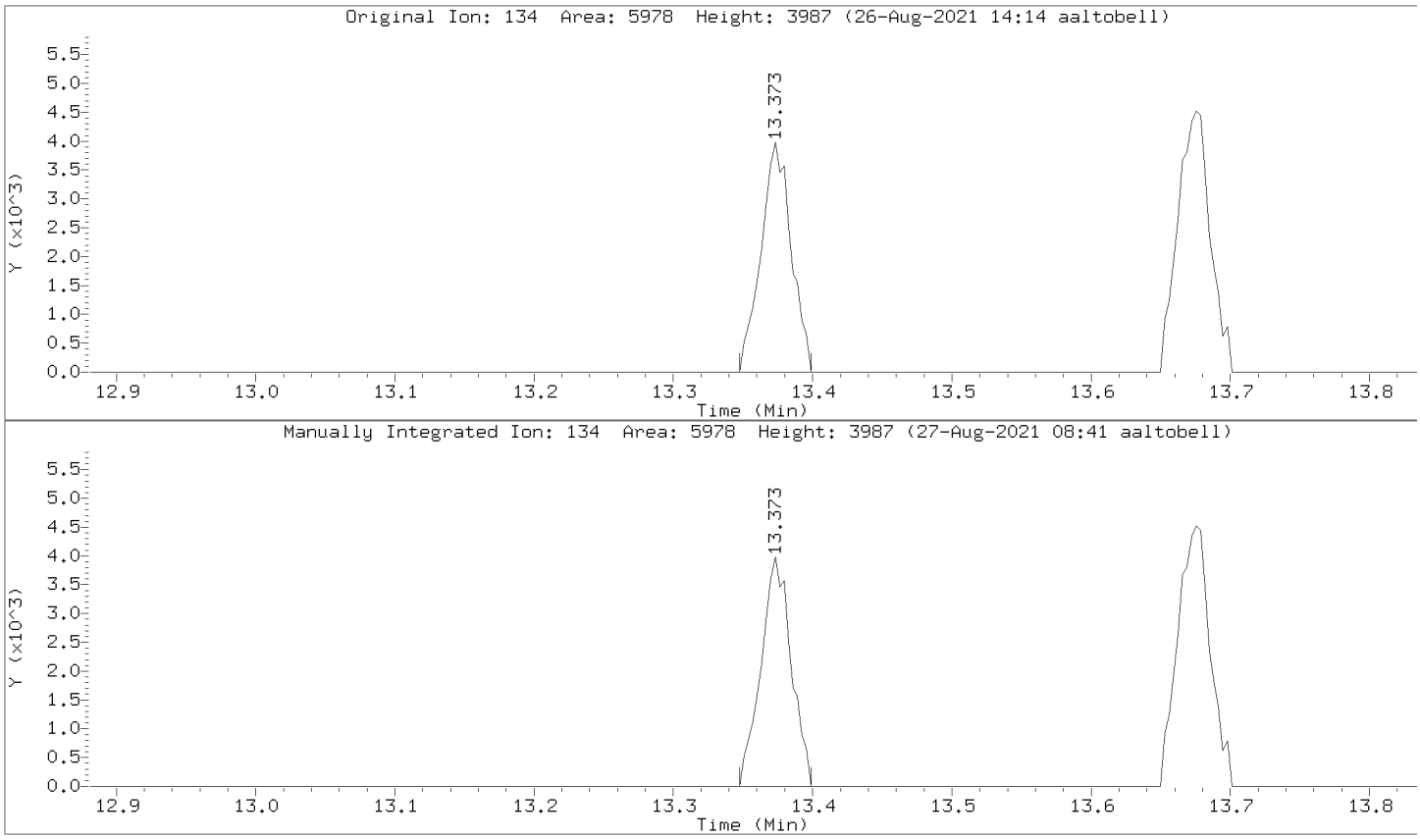

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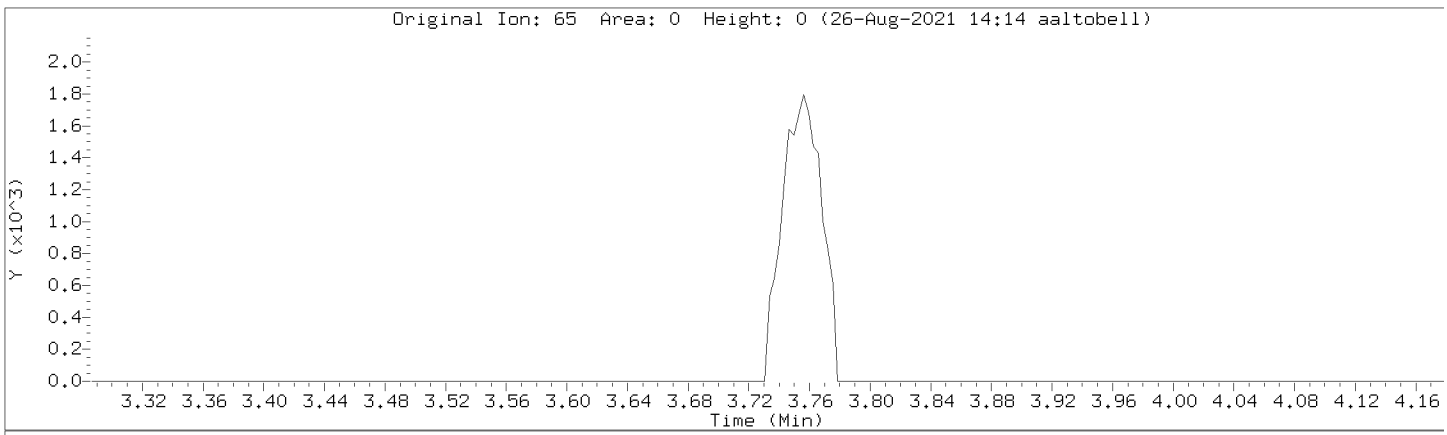
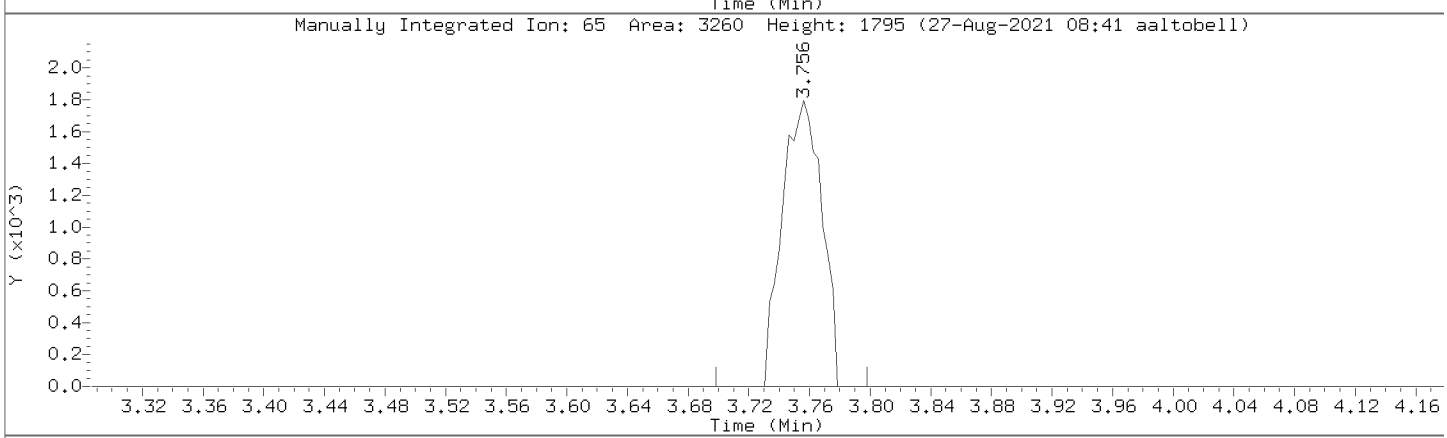
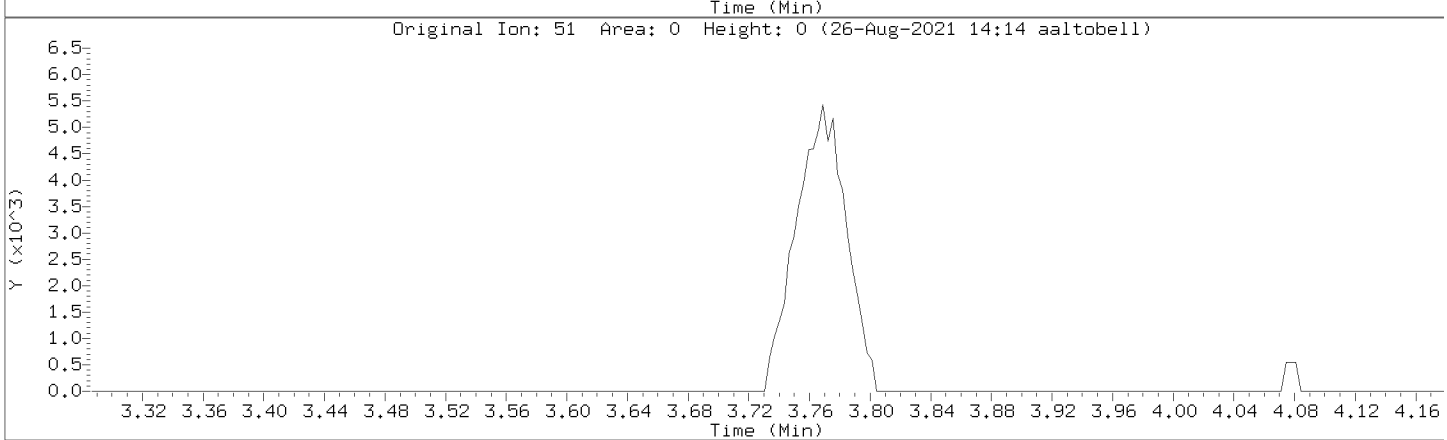
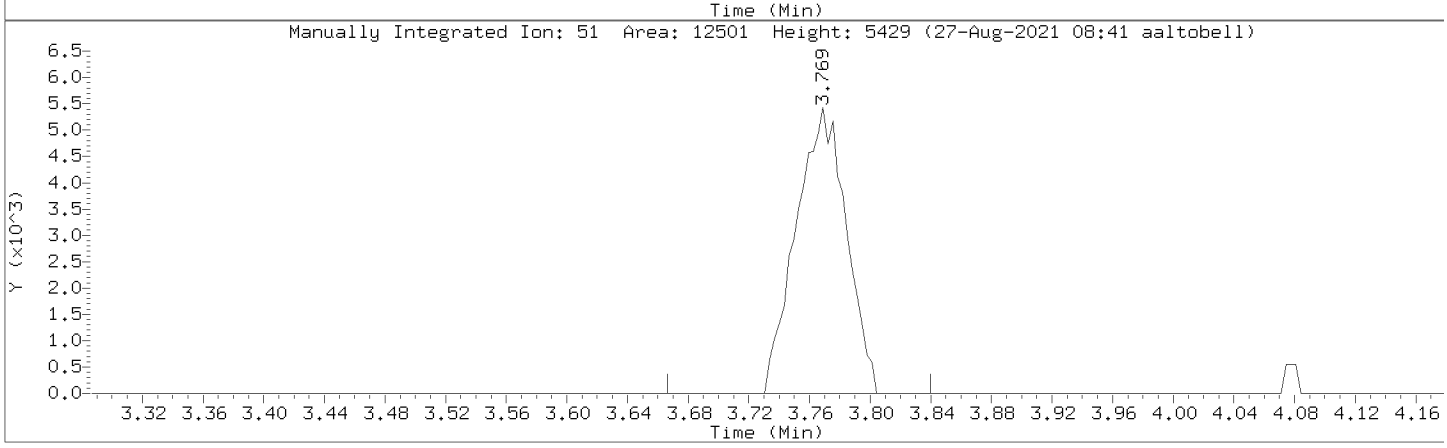
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6



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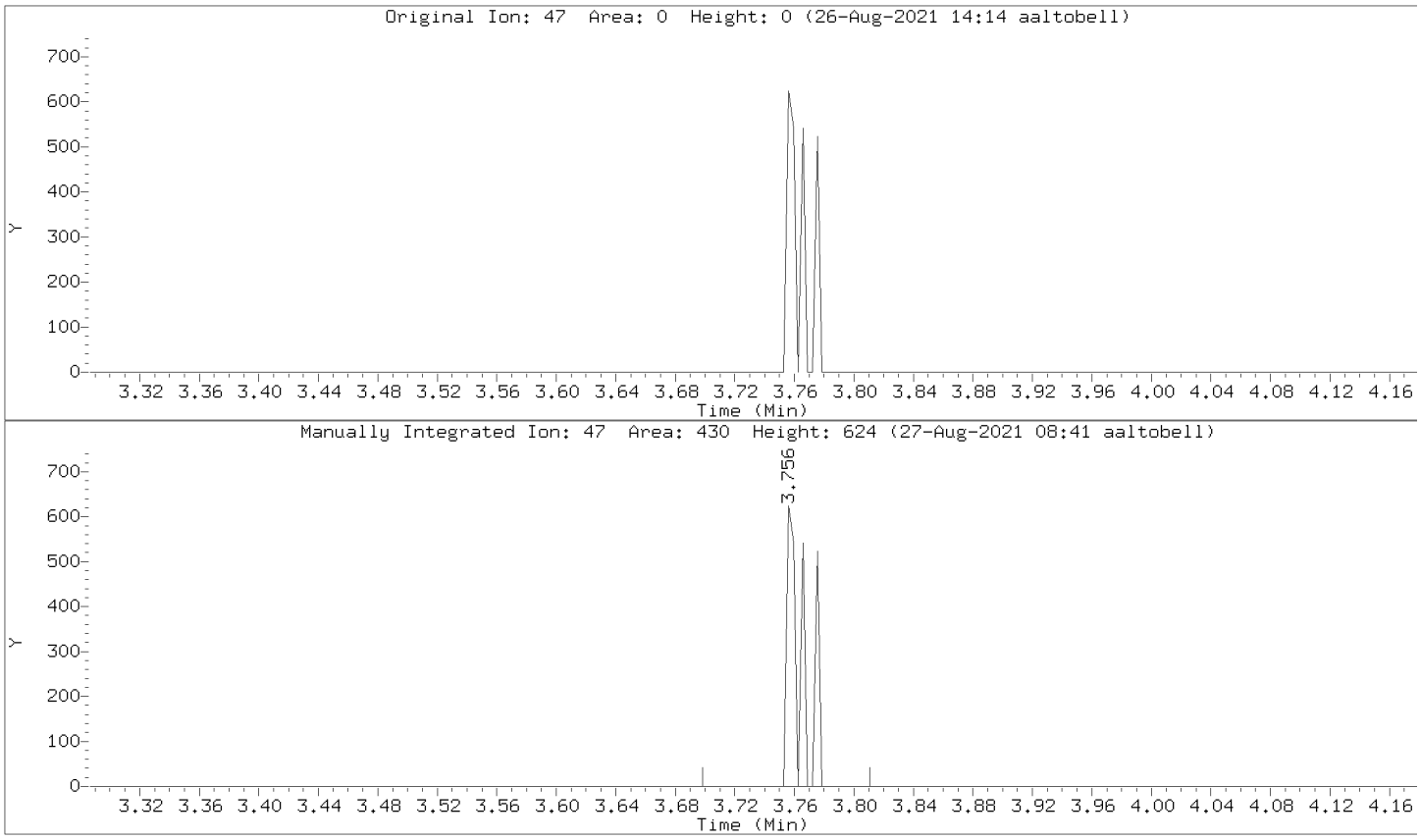
Lab Sample ID: CAL2



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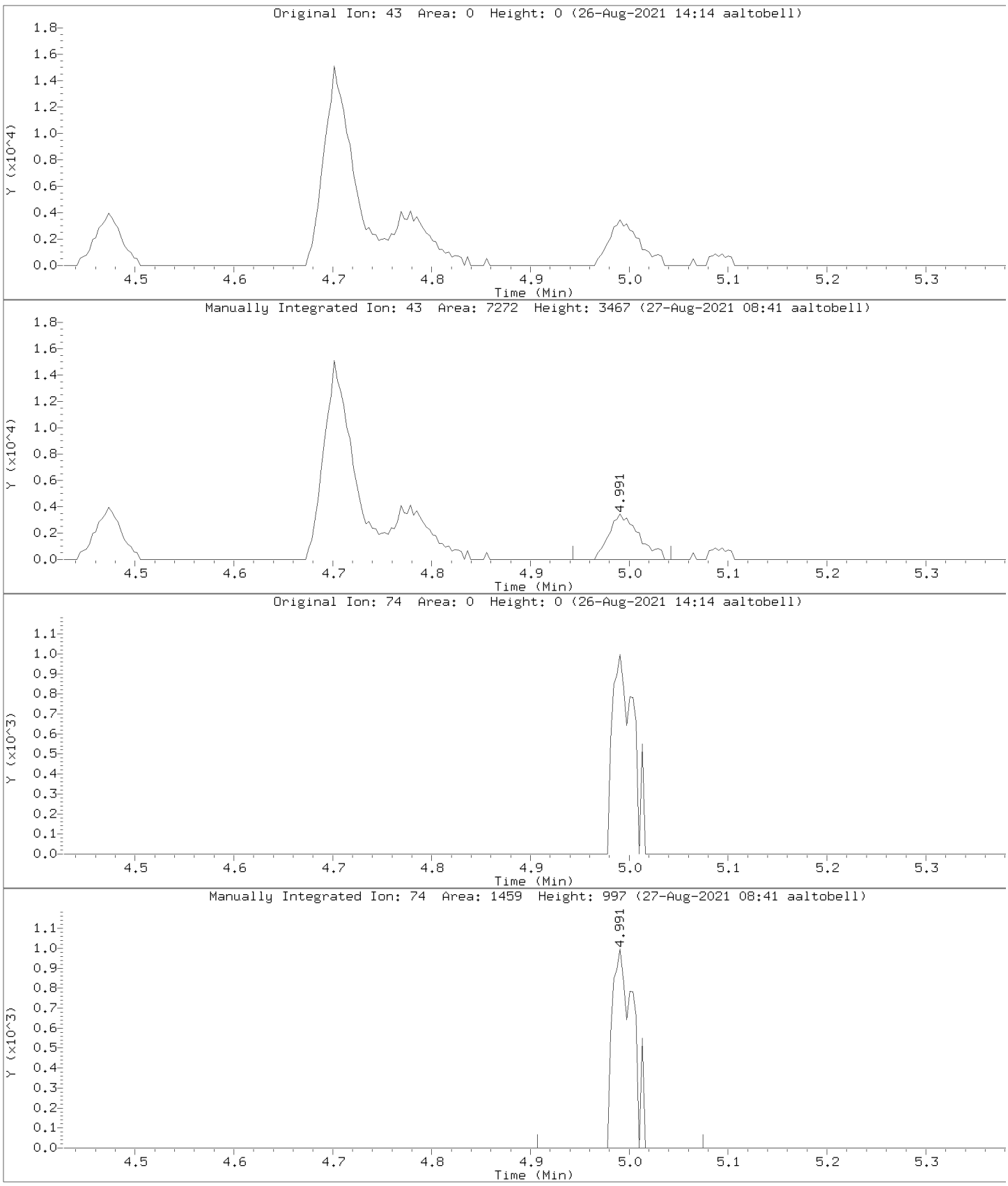
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: Methyl Acetate
CAS Number: 79-20-9



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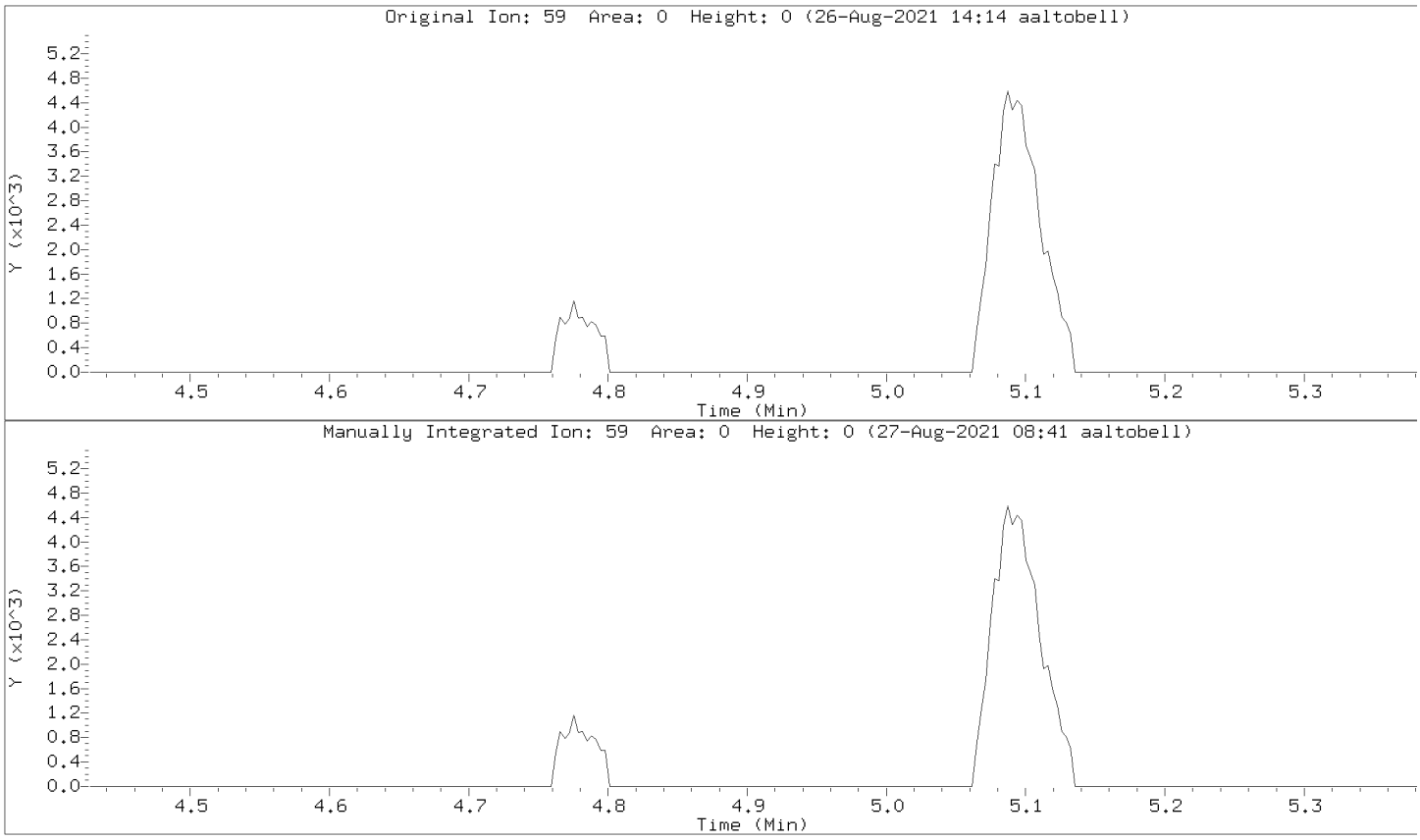
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2



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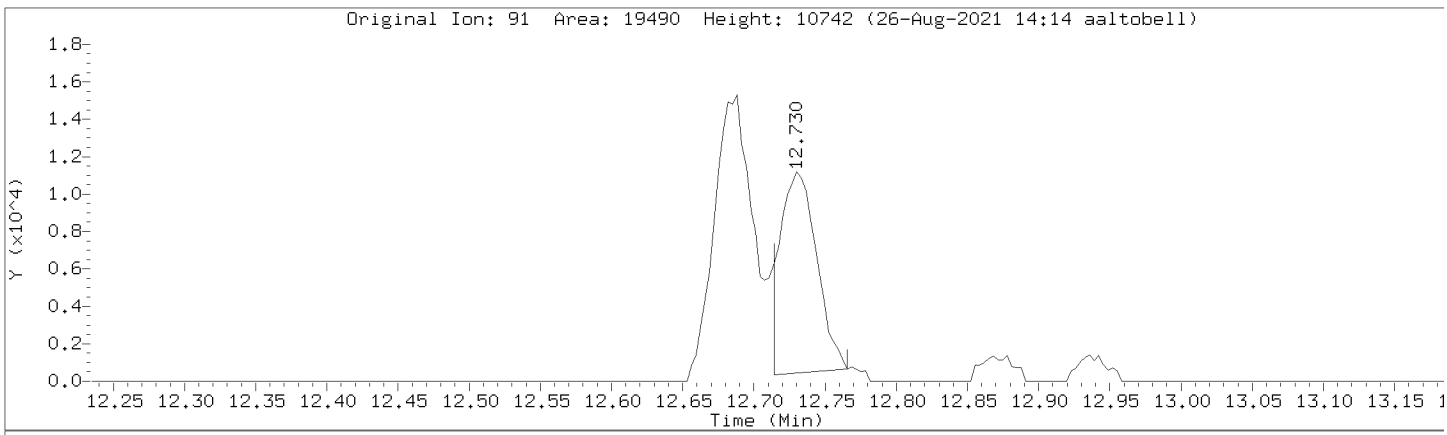
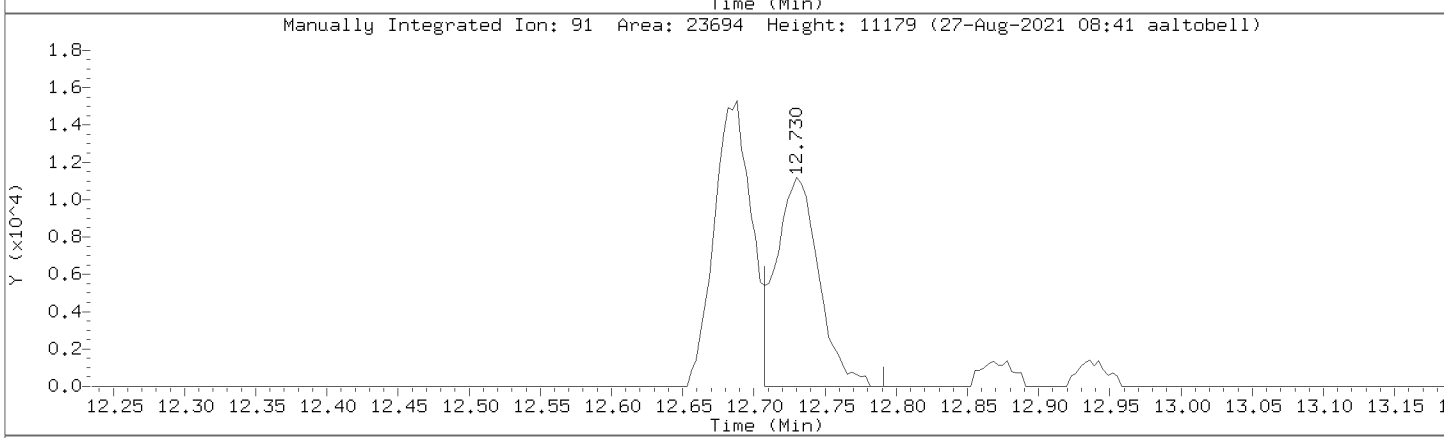
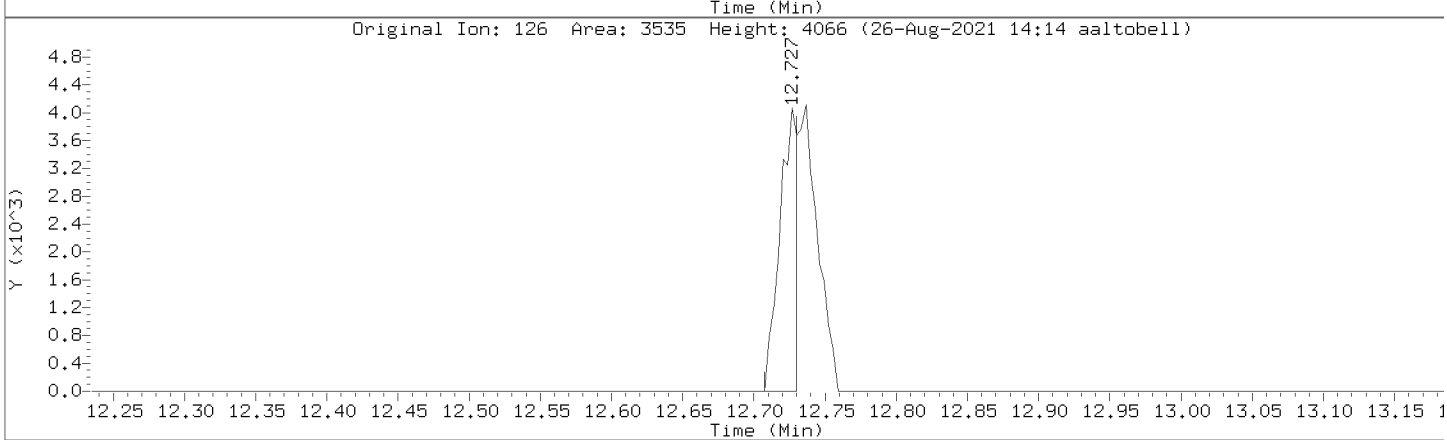
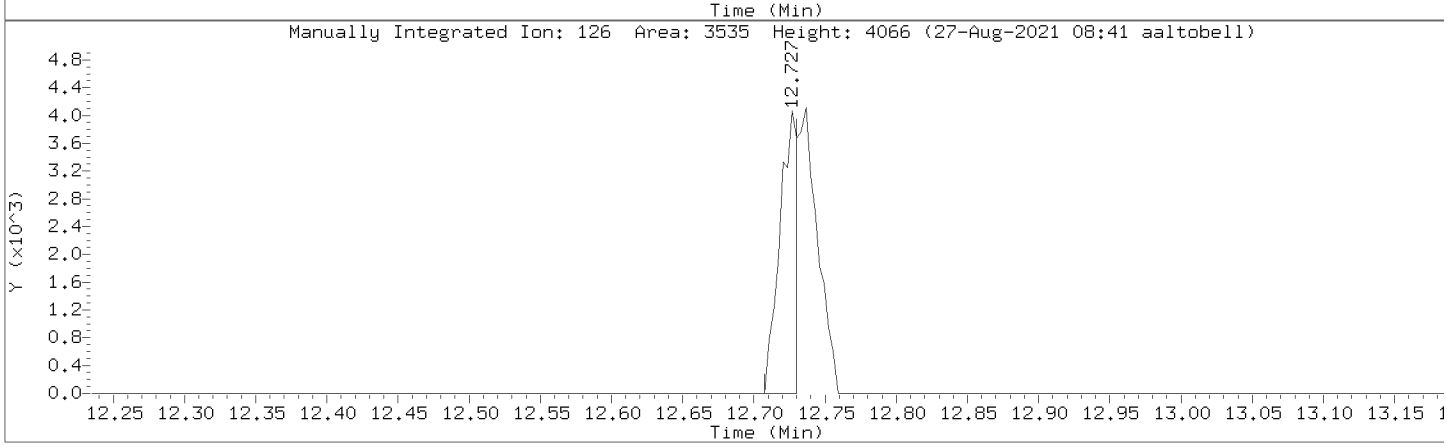
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

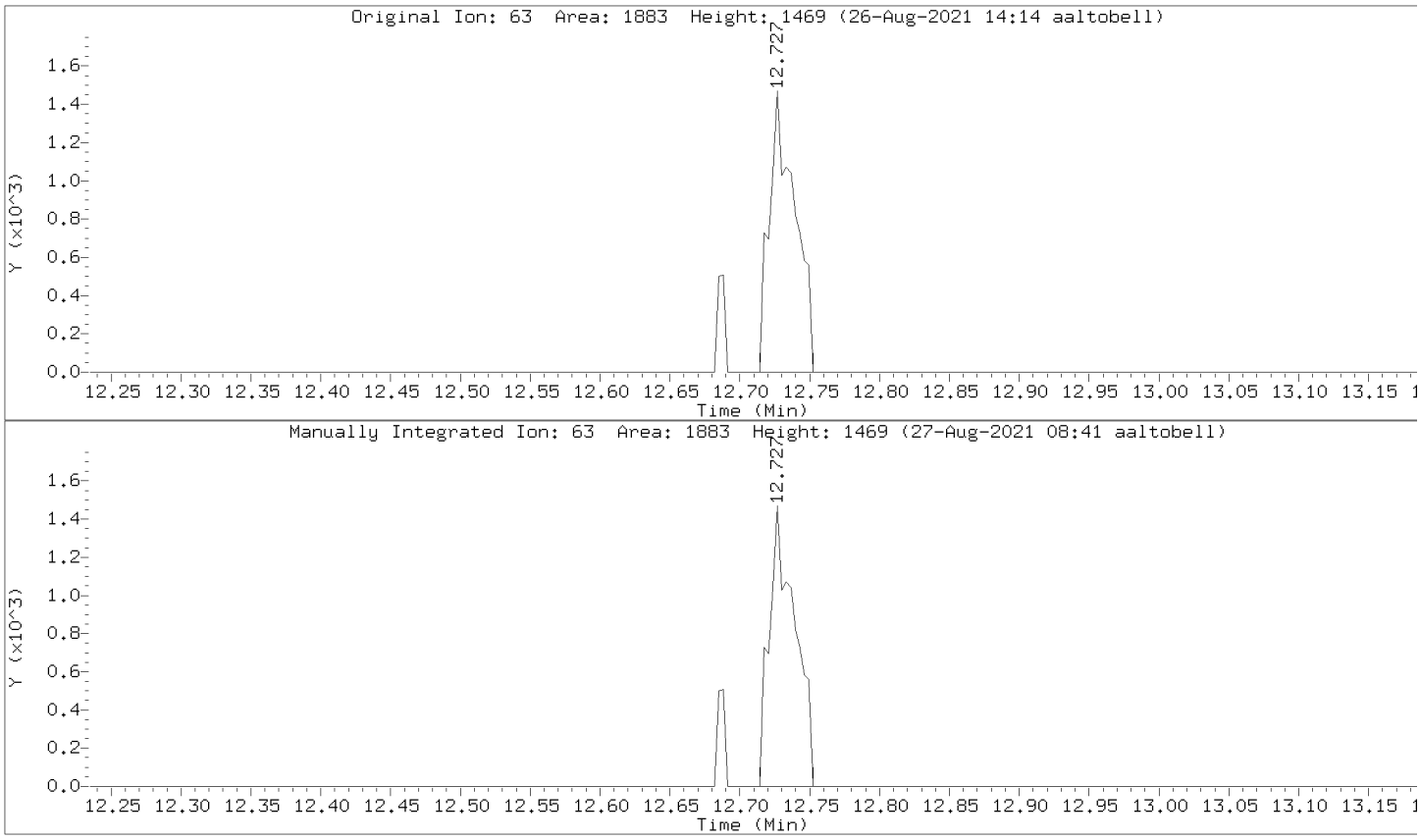


Data File: \\192.168.10.12\chem\10airB.i\082621.b/23805.D
Injection Date: 26-AUG-2021 10:11
Instrument: 10airB.i
Lab Sample ID: CAL2



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23806.D
Report Date: 27-Aug-2021 09:35

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23806.D
Lab Smp Id: CAL3
Inj Date : 26-AUG-2021 10:38
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 09:34 10airB.i Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.749 | 3.727 | (0.532) | 7874 | 0.35710 | 0.346(Q) |
| 2 Propylene | 41 | 3.769 | 3.733 | (0.534) | 8541 | 0.35930 | 0.351 |
| 3 Chlorodifluoromethane | 67 | 3.775 | 3.740 | (0.535) | 2680 | 0.35730 | 0.336(Q) |
| 4 Dichlorodifluoromethane | 85 | 3.798 | 3.775 | (0.539) | 34961 | 0.36220 | 0.361 |
| 5 Chloromethane | 50 | 3.917 | 3.894 | (0.555) | 12640 | 0.35820 | 0.358 |
| 6 Dichlorotetrafluoroethane | 85 | 3.917 | 3.904 | (0.555) | 39254 | 0.33400 | 0.337 |
| 7 Vinyl chloride | 62 | 4.016 | 3.997 | (0.570) | 13274 | 0.35930 | 0.352 |
| 8 1,3-Butadiene | 54 | 4.071 | 4.051 | (0.577) | 9139 | 0.35800 | 0.333 |
| 9 Bromomethane | 94 | 4.241 | 4.222 | (0.602) | 13475 | 0.35870 | 0.350 |
| 10 Chloroethane | 64 | 4.315 | 4.296 | (0.612) | 7037 | 0.35840 | 0.344 |
| 11 Ethanol | 45 | 4.444 | 4.408 | (0.630) | 27292 | 2.15440 | 2.20 |
| 12 Vinyl Bromide | 106 | 4.450 | 4.444 | (0.631) | 13502 | 0.35730 | 0.341 |
| 13 Isopentane | 43 | 4.466 | 4.466 | (0.633) | 18224 | 0.36760 | 0.426(Q) |
| 14 Freon 123 | 83 | 4.544 | 4.527 | (0.644) | 33741 | 0.35580 | 0.361 |
| 15 Trichlorofluoromethane | 101 | 4.553 | 4.550 | (0.646) | 33948 | 0.36200 | 0.358 |
| 16 Acrolein | 56 | 4.650 | 4.585 | (0.659) | 12428 | 1.01620 | 0.956(M) |
| 17 Acetone | 43 | 4.692 | 4.624 | (0.665) | 73916 | 1.76530 | 1.68 |
| 18 Isopropyl Alcohol | 45 | 4.765 | 4.720 | (0.676) | 111307 | 1.98580 | 2.00 |
| 19 1,1-Dichloroethene | 61 | 4.862 | 4.855 | (0.690) | 20388 | 0.36000 | 0.352 |
| 20 Acrylonitrile | 53 | 4.946 | 4.900 | (0.701) | 17532 | 0.99470 | 0.909(Q) |
| 21 Freon 113 | 101 | 4.910 | 4.907 | (0.696) | 32848 | 0.35780 | 0.368 |
| 22 Methyl Acetate | 43 | 4.978 | 4.929 | (0.706) | 19031 | 0.35820 | 0.341(Q) |
| 23 Tert Butyl Alcohol (TBA) | 59 | 5.071 | 4.987 | (0.719) | 27864 | 0.35380 | 0.340(QM) |
| 24 Allyl Chloride | 76 | 5.019 | 5.013 | (0.712) | 6163 | 0.35440 | 0.329 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23806.D
Report Date: 27-Aug-2021 09:35

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 5.016 | 5.013 | (0.711) | 66661 | 1.79600 | 1.86 |
| | 26 Carbon Disulfide | 76 | 5.151 | 5.148 | (0.731) | 42294 | 0.36220 | 0.353 |
| | 27 trans-1,2-dichloroethene | 96 | 5.373 | 5.373 | (0.762) | 14672 | 0.36040 | 0.332 |
| | 28 Methyl Tert Butyl Ether | 73 | 5.441 | 5.373 | (0.772) | 39878 | 0.36000 | 0.354 |
| | 29 Vinyl Acetate | 43 | 5.515 | 5.489 | (0.782) | 24005 | 0.43180 | 0.421 |
| | 30 1,1-Dichloroethane | 63 | 5.540 | 5.547 | (0.786) | 24374 | 0.35600 | 0.347 |
| | 31 Methyl Ethyl Ketone | 72 | 5.753 | 5.707 | (0.816) | 6825 | 0.35890 | 0.308(Q) |
| | 32 n-Hexane | 57 | 5.730 | 5.723 | (0.813) | 22747 | 0.35380 | 0.341(Q) |
| | 33 Di-isopropyl Ether | 45 | 5.772 | 5.730 | (0.819) | 39419 | 0.35240 | 0.362 |
| | 34 Ethyl Acetate | 43 | 5.942 | 5.900 | (0.843) | 23911 | 0.35400 | 0.336(Q) |
| | 35 cis-1,2-Dichloroethene | 96 | 5.910 | 5.920 | (0.838) | 15403 | 0.35910 | 0.334(Q) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 6.064 | 6.016 | (0.860) | 42184 | 0.35840 | 0.349 |
| | 37 Chloroform | 83 | 6.129 | 6.145 | (0.869) | 28983 | 0.35200 | 0.340 |
| | 38 Tetrahydrofuran | 42 | 6.309 | 6.238 | (0.895) | 11812 | 0.35640 | 0.326 |
| | 39 1,1,1-Trichloroethane | 97 | 6.521 | 6.534 | (0.925) | 28703 | 0.35670 | 0.346 |
| | 40 1,2-Dichloroethane | 62 | 6.617 | 6.624 | (0.938) | 14599 | 0.36000 | 0.330 |
| | 41 Benzene | 78 | 6.807 | 6.820 | (0.965) | 48752 | 0.35760 | 0.352 |
| | 42 Carbon tetrachloride | 117 | 6.826 | 6.839 | (0.968) | 26723 | 0.36160 | 0.341 |
| | 43 Cyclohexane | 56 | 6.859 | 6.865 | (0.973) | 21457 | 0.35640 | 0.342 |
| | 44 Tert Amyl Methyl Ether | 73 | 7.055 | 6.993 | (1.000) | 61587 | 0.35840 | 0.346 |
| * | 45 1,4-Difluorobenzene | 114 | 7.052 | 7.067 | (1.000) | 2219516 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 7.180 | 7.183 | (1.018) | 68511 | 0.35800 | 0.350 |
| | 47 Heptane | 43 | 7.322 | 7.328 | (1.038) | 21286 | 0.35710 | 0.353 |
| | 48 Trichloroethene | 130 | 7.447 | 7.460 | (1.056) | 22136 | 0.35670 | 0.340 |
| | 49 Methyl methacrylate | 69 | 7.524 | 7.505 | (1.067) | 17440 | 0.35760 | 0.357 |
| | 50 1,2-Dichloropropane | 63 | 7.502 | 7.511 | (1.064) | 16153 | 0.35910 | 0.358 |
| | 51 1,4-Dioxane | 88 | 7.675 | 7.585 | (1.088) | 23666 | 0.89380 | 0.750 |
| | 52 Bromodichloromethane | 83 | 7.688 | 7.698 | (1.090) | 28833 | 0.35800 | 0.340 |
| | 53 Methylcyclohexane | 98 | 8.003 | 8.013 | (1.135) | 14429 | 0.35840 | 0.360 |
| | 54 Methyl Isobutyl Ketone | 43 | 8.164 | 8.103 | (1.158) | 23809 | 0.35930 | 0.341 |
| | 55 cis-1,3-Dichloropropene | 75 | 8.180 | 8.183 | (1.160) | 22886 | 0.35690 | 0.318 |
| | 56 trans-1,3-Dichloropropene | 75 | 8.675 | 8.685 | (1.230) | 16698 | 0.36510 | 0.345 |
| | 57 Toluene | 91 | 8.807 | 8.810 | (1.249) | 58282 | 0.36180 | 0.348 |
| | 58 1,1,2-Trichloroethane | 97 | 8.936 | 8.945 | (1.267) | 18787 | 0.35820 | 0.353 |
| | 59 Methyl Butyl Ketone | 43 | 9.138 | 9.058 | (0.873) | 15137 | 0.35820 | 0.344(M) |
| | 60 n-Octane | 43 | 9.264 | 9.267 | (0.885) | 27523 | 0.35840 | 0.348 |
| | 61 Dibromochloromethane | 129 | 9.540 | 9.556 | (0.911) | 31048 | 0.35870 | 0.349 |
| | 62 Tetrachloroethene | 166 | 9.643 | 9.649 | (0.921) | 29979 | 0.35490 | 0.354 |
| | 63 1,2-Dibromoethane | 107 | 9.775 | 9.781 | (0.934) | 24361 | 0.35200 | 0.331 |
| * | 64 Chlorobenzene - d5 | 117 | 10.469 | 10.479 | (1.000) | 1672547 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 10.514 | 10.530 | (1.004) | 43489 | 0.35730 | 0.342 |
| | 66 Ethyl Benzene | 91 | 10.756 | 10.765 | (1.027) | 67849 | 0.36130 | 0.346 |
| | 67 m&p-Xylene | 91 | 10.926 | 10.964 | (1.044) | 103938 | 0.72040 | 0.686(M) |
| | 68 n-Nonane | 43 | 11.309 | 11.318 | (1.080) | 24559 | 0.35890 | 0.342 |
| | 69 Styrene | 104 | 11.408 | 11.418 | (1.090) | 36470 | 0.36160 | 0.352 |
| | 70 o-Xylene | 91 | 11.447 | 11.456 | (1.093) | 55849 | 0.35910 | 0.354 |
| | 71 Bromoform | 173 | 11.530 | 11.540 | (1.101) | 27079 | 0.36130 | 0.326 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 11.891 | 11.903 | (1.136) | 36373 | 0.36020 | 0.342 |
| | 73 Isopropylbenzene | 105 | 12.061 | 12.064 | (1.152) | 78334 | 0.35580 | 0.340 |
| | 74 N-Propylbenzene | 91 | 12.685 | 12.688 | (1.212) | 81826 | 0.36020 | 0.347 |
| | 75 2-Chlorotoluene | 91 | 12.730 | 12.736 | (1.216) | 55040 | 0.36240 | 0.334 |
| | 76 4-Ethyltoluene | 105 | 12.868 | 12.874 | (1.229) | 63387 | 0.35800 | 0.336 |
| | 77 1,3,5-Trimethylbenzene | 105 | 12.936 | 12.945 | (1.236) | 65977 | 0.35820 | 0.338 |
| | 78 n-Decane | 57 | 13.260 | 13.267 | (1.880) | 29904 | 0.36220 | 0.334 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23806.D
Report Date: 27-Aug-2021 09:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.370 | 13.382 | (1.277) | 65750 | 0.36130 | 0.336 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.415 | 13.424 | (1.281) | 60178 | 0.36040 | 0.336 |
| 81 Sec- Butylbenzene | 105 | 13.672 | 13.681 | (1.306) | 97683 | 0.36180 | 0.347 |
| 82 1,3-Dichlorobenzene | 146 | 13.714 | 13.720 | (1.310) | 28092 | 0.36180 | 0.352 |
| 83 Benzyl Chloride | 91 | 13.784 | 13.787 | (1.317) | 17391 | 0.36470 | 0.371 |
| 84 1,4-Dichlorobenzene | 146 | 13.842 | 13.852 | (1.322) | 23388 | 0.36160 | 0.357 |
| 85 p-Isopropyltoluene | 119 | 13.871 | 13.881 | (1.325) | 83245 | 0.36310 | 0.347 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.894 | 13.906 | (1.327) | 65818 | 0.36160 | 0.346 |
| 87 1,2-Dichlorobenzene | 146 | 14.161 | 14.170 | (1.353) | 30778 | 0.36110 | 0.340 |
| 88 N-Butylbenzene | 91 | 14.337 | 14.340 | (1.369) | 48981 | 0.36040 | 0.340 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.887 | 14.890 | (1.422) | 11604 | 0.36360 | 0.372 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.987 | 15.974 | (1.527) | 9954 | 0.78290 | 0.691 |
| 91 Naphthalene | 128 | 16.173 | 16.157 | (1.545) | 17494 | 0.40820 | 0.353(M) |
| 92 Hexachlorobutadiene | 225 | 16.279 | 16.282 | (1.555) | 28330 | 0.40820 | 0.386 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23806.D
Report Date: 27-Aug-2021 09:35

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 23806.D
Lab Smp Id: CAL3
Analysis Type: VOA
Quant Type: ISTD
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

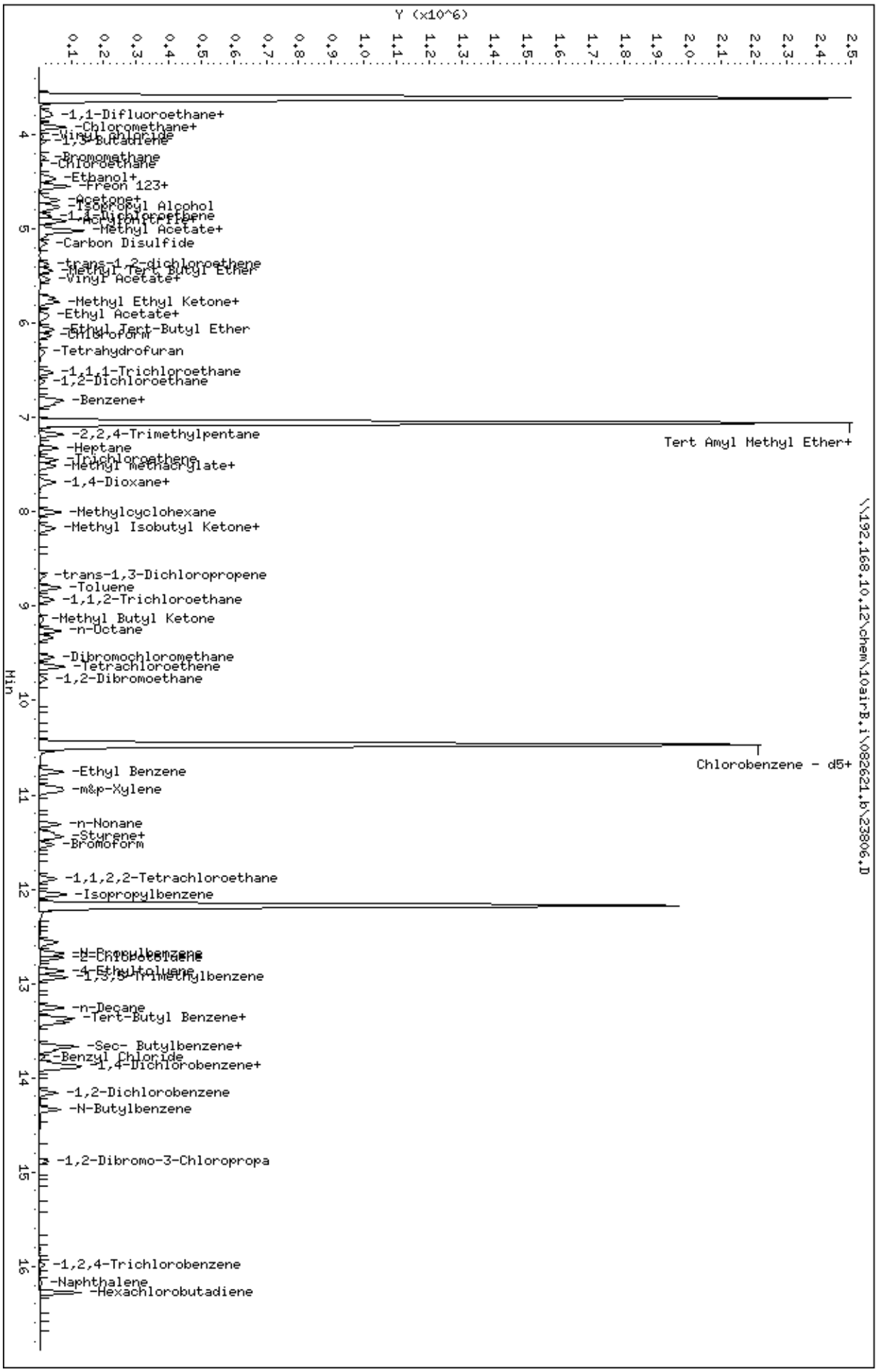
Calibration Date: 26-AUG-2021
Calibration Time: 11:33
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2219516 | 5.07 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1672547 | 1.07 |

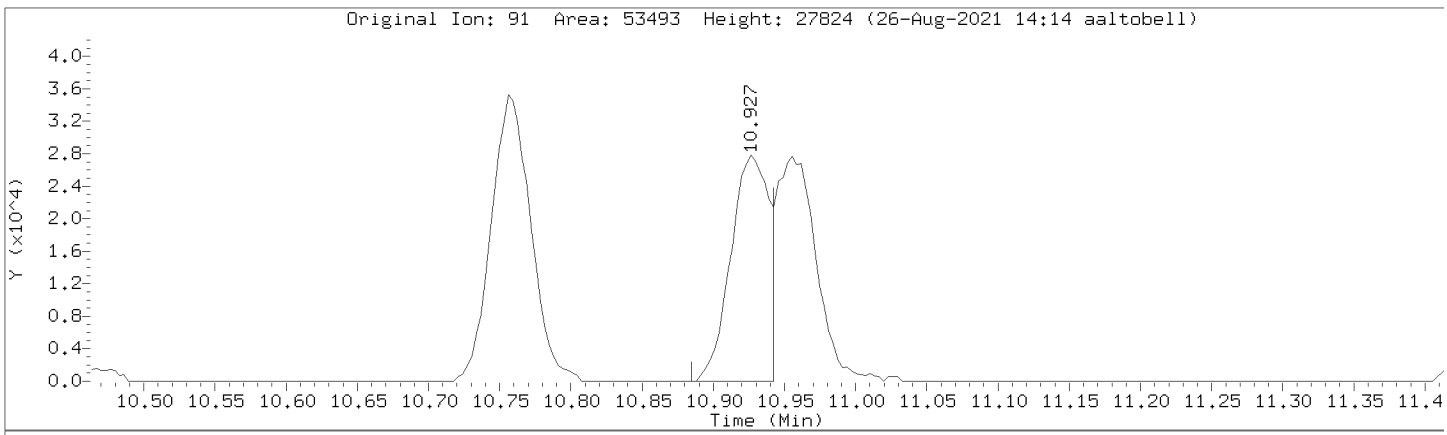
| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.09 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.00 |

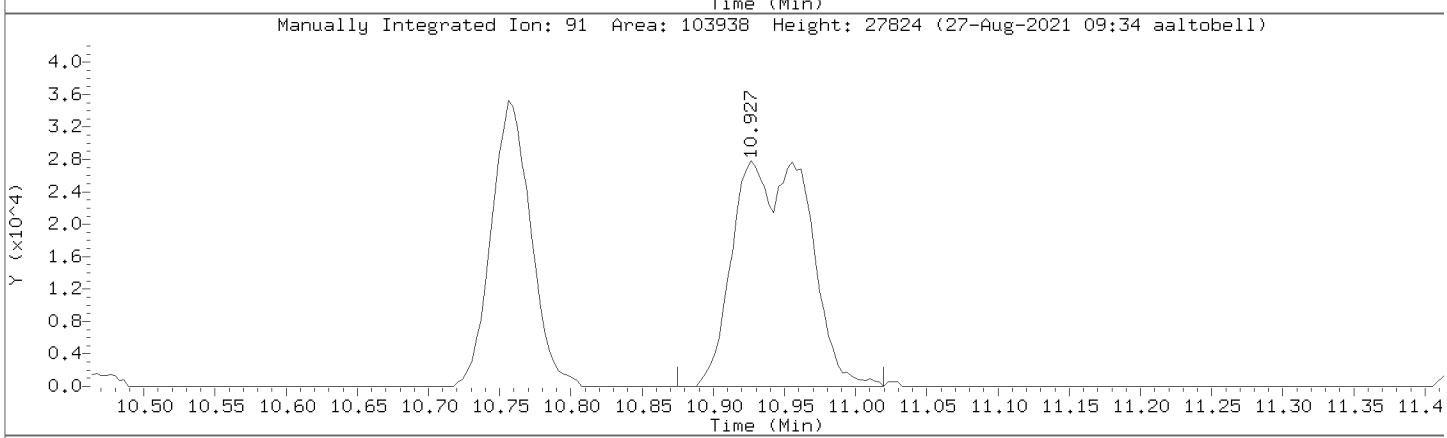
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

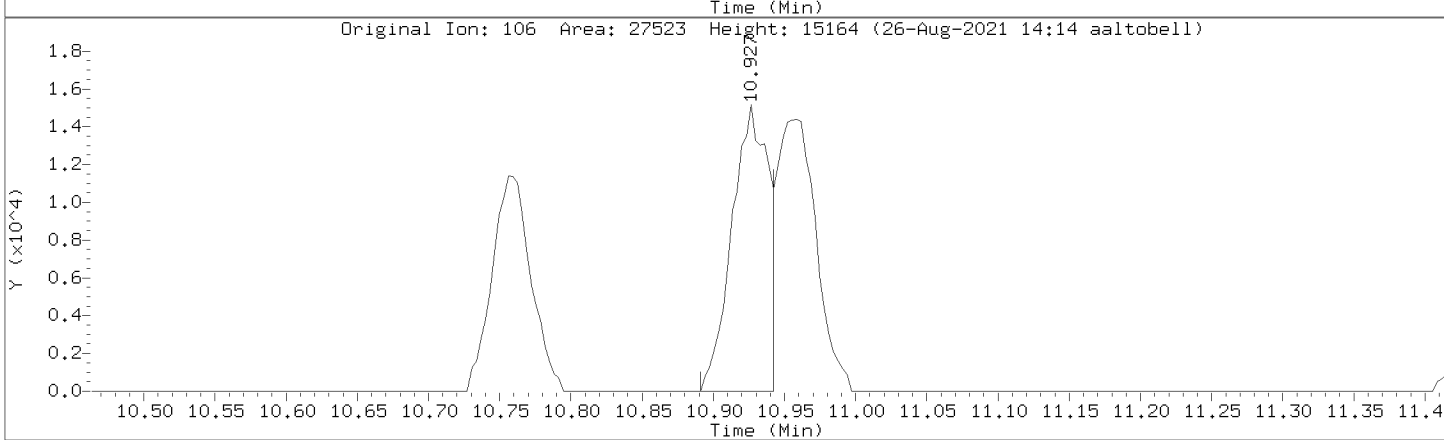

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23806.D
Date : 26-AUG-2021 10:38
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32
Y (x10^6)
Min
-1,1-Difluoroethane+
-Chloromethane+
-Vinyl Chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol+
-Freon 123+
-Acetone+
-Isopropyl Alcohol
-1,1-Dichloroethene
-Methyl Acetate+
-Carbon Disulfide
-trans-1,2-dichloroethene
-Methyl Tert Butyl Ether
-Vinyl Acetate+
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-2,2,4-Trimethylpentane
Tert Amyl Methyl Ether+
-Heptane
-Trichloroethene
-Methyl methacrylate+
-1,4-Dioxane+
-Methylcyclohexane
-Methyl Isobutyl Ketone+
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene
-2-Chlorotoluene
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-Tert-Butyl Benzene+
-Sec- Butylbenzene+
-Benzyl Chloride
-1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
\\192.168.10.12\chem\10airB.i\082621.b\23806.D

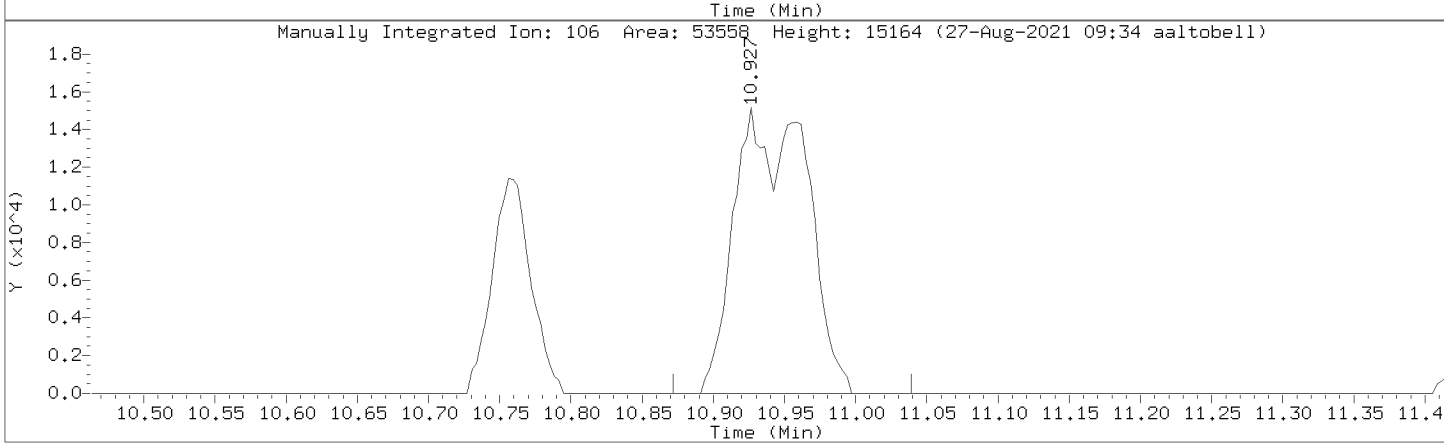
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23806.D
Injection Date: 26-AUG-2021 10:38
Instrument: 10airB.i
Lab Sample ID: CAL3

Compound: m&p-Xylene
CAS Number: 7816-60-0



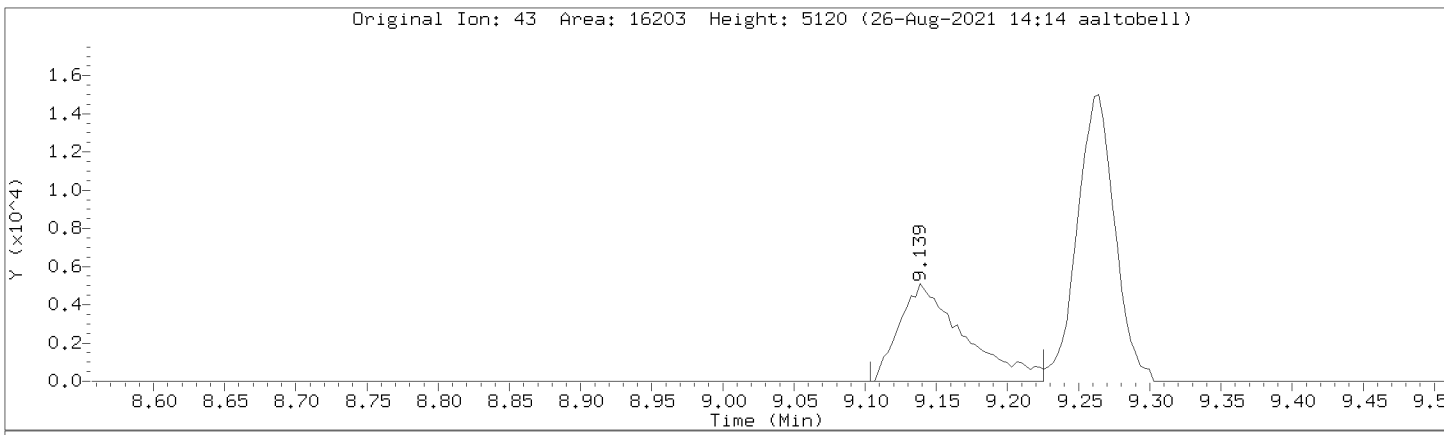



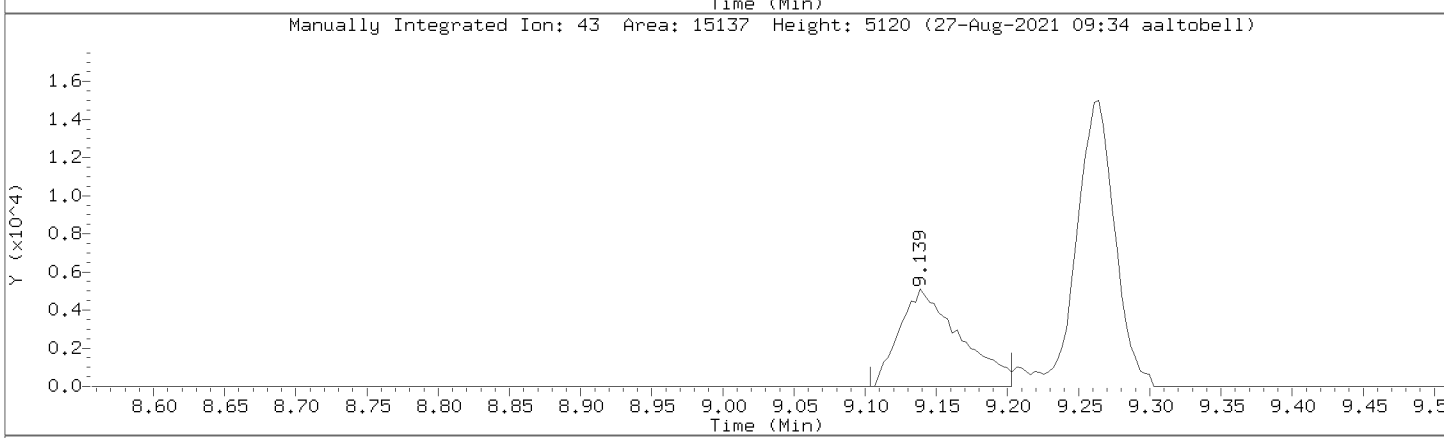



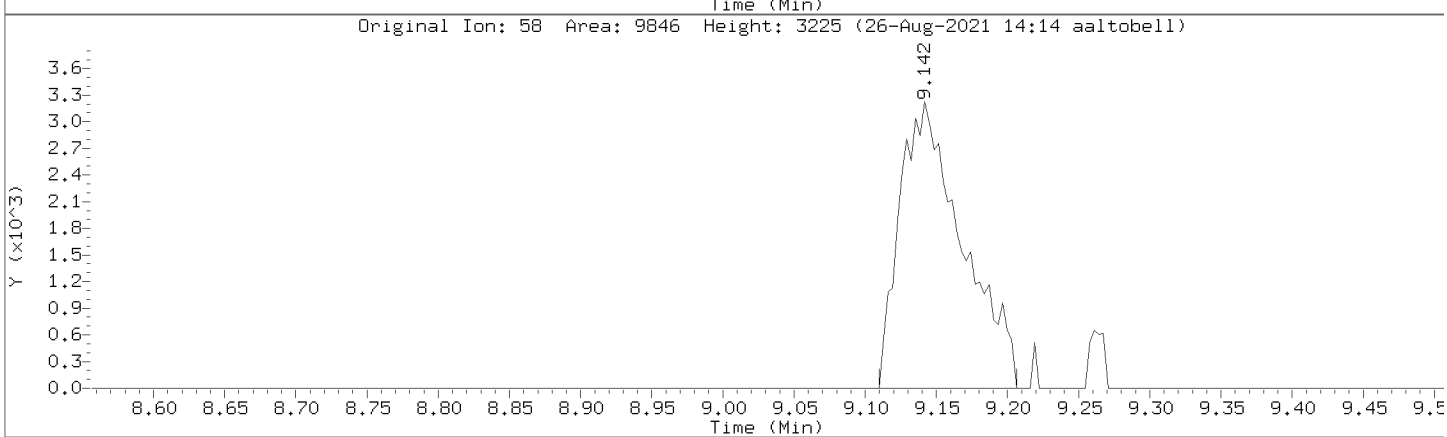



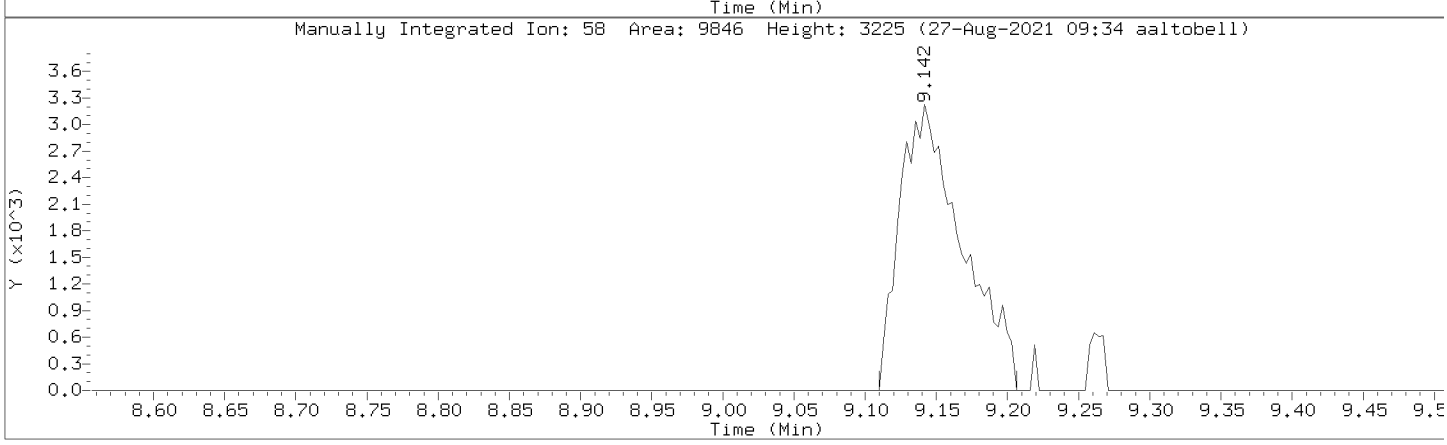
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23806.D
Injection Date: 26-AUG-2021 10:38
Instrument: 10airB.i
Lab Sample ID: CAL3

Compound: Methyl Butyl Ketone
CAS Number: 591-78-6



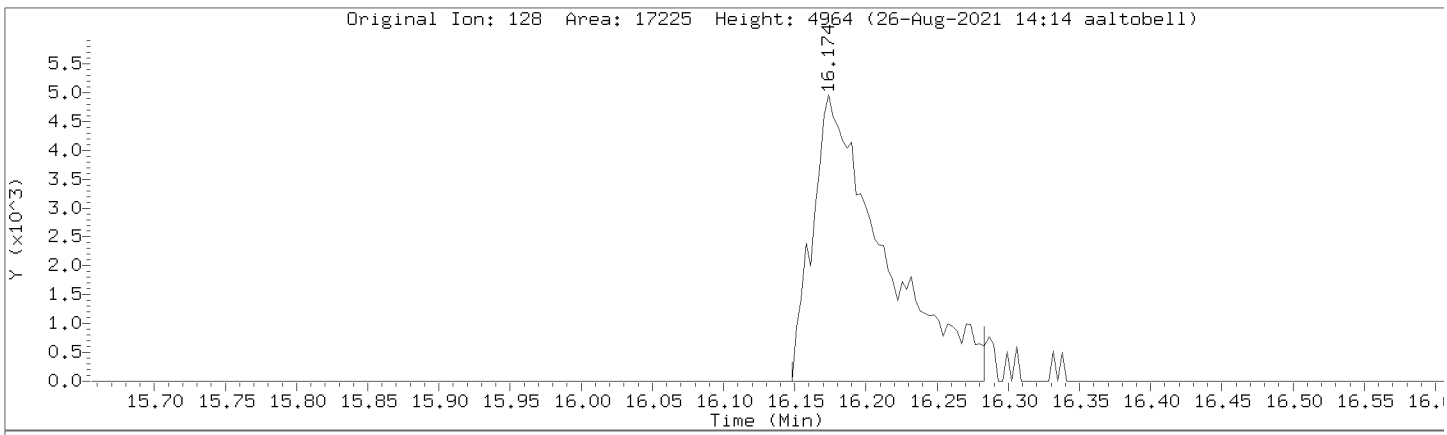



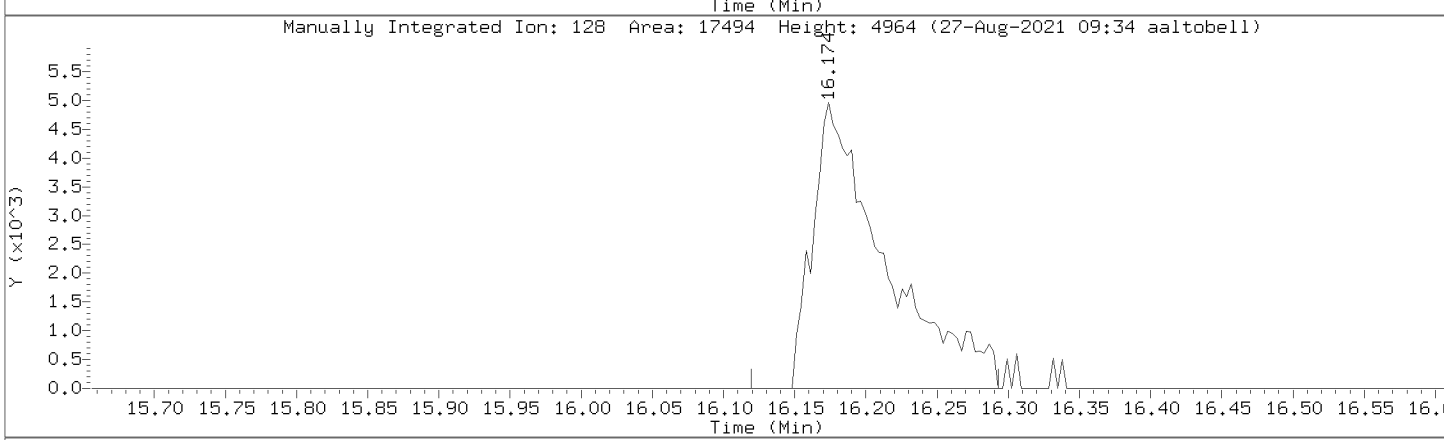



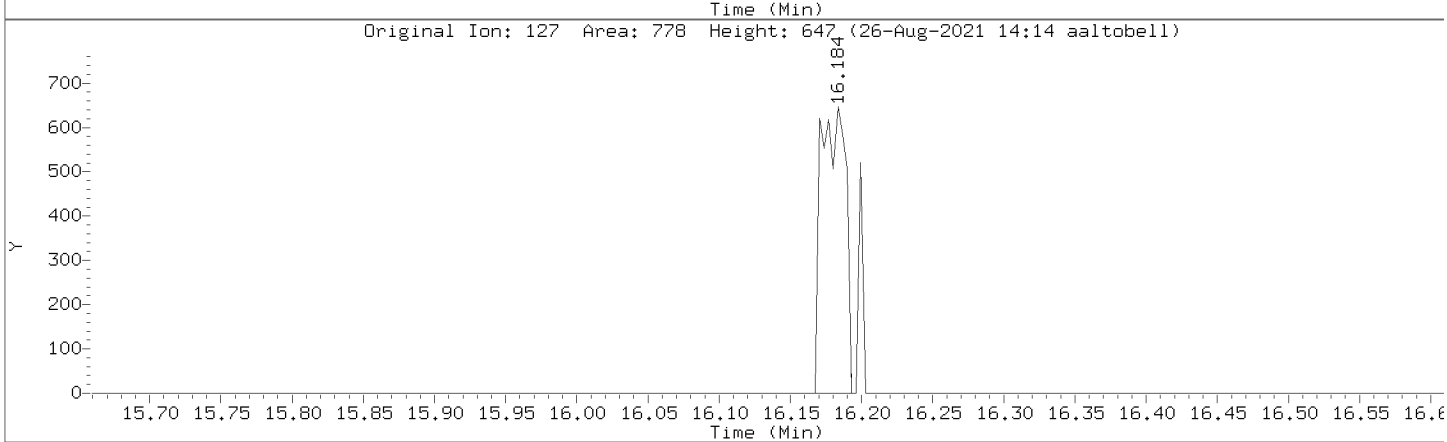



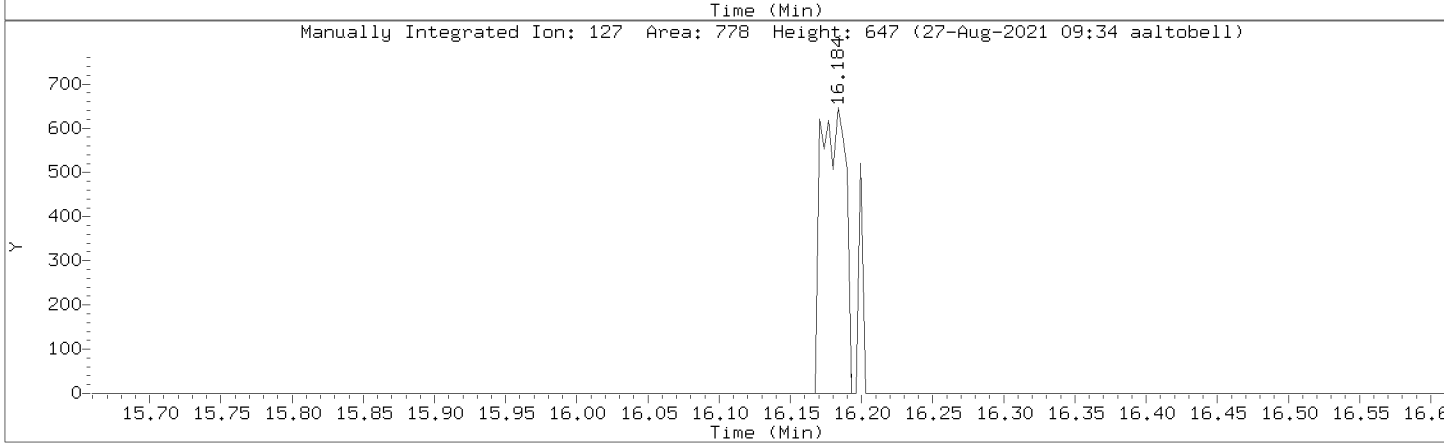
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23806.D
Injection Date: 26-AUG-2021 10:38
Instrument: 10airB.i
Lab Sample ID: CAL3

Compound: Naphthalene
CAS Number: 91-20-3



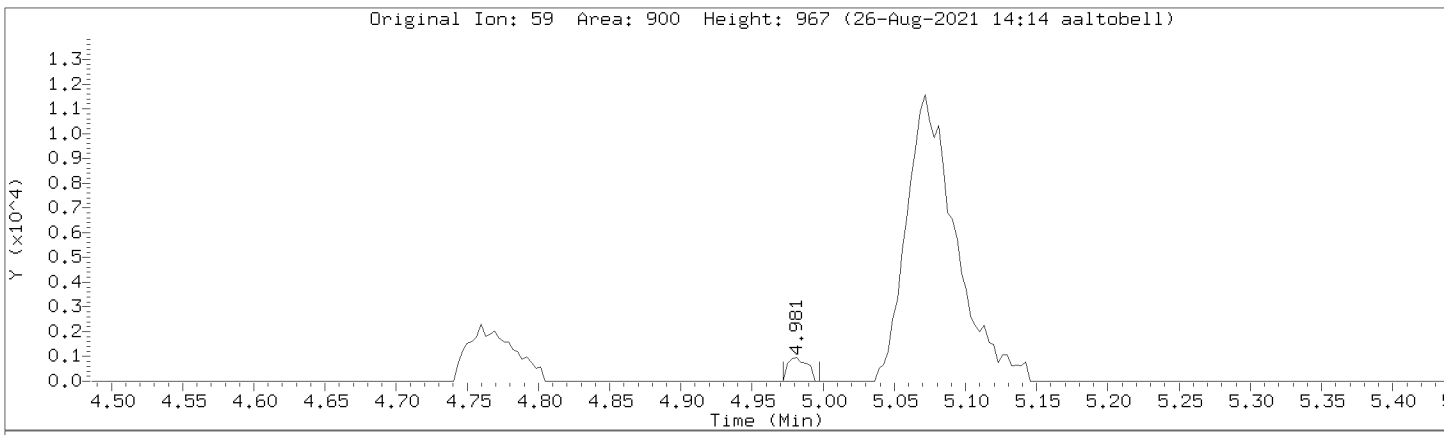



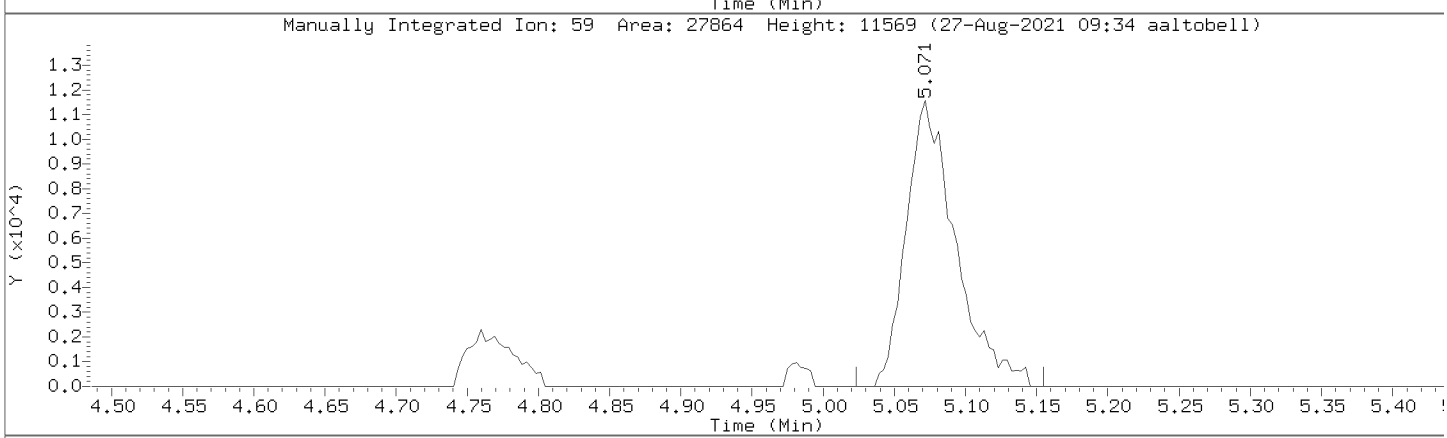



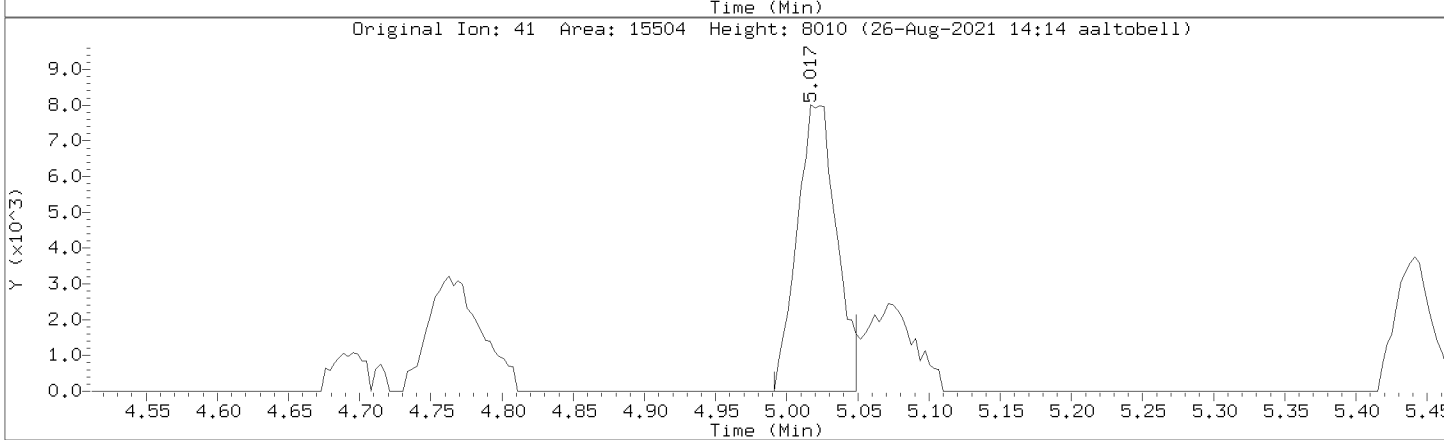



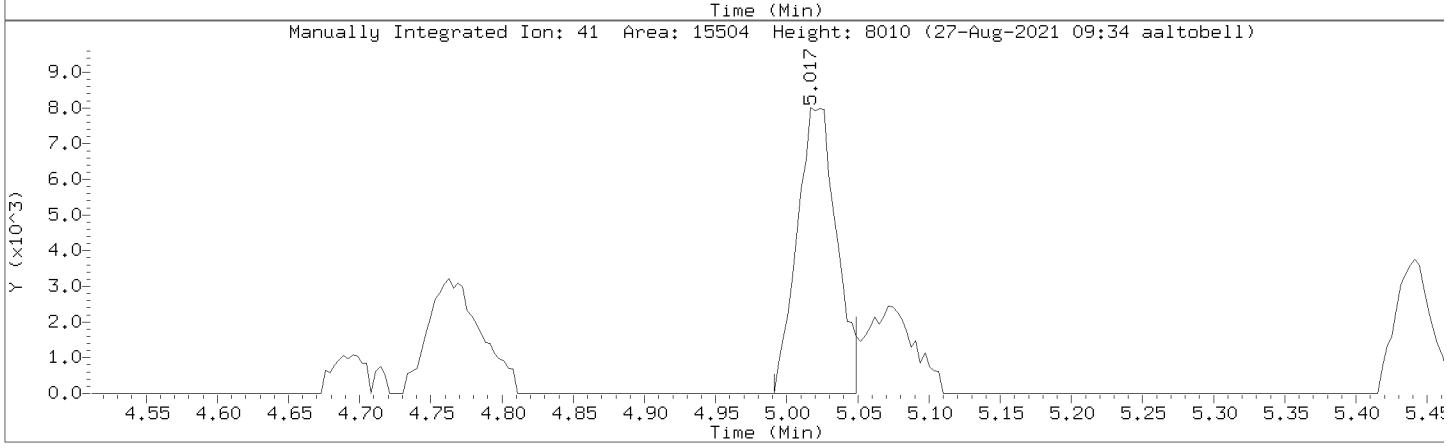
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23806.D
Injection Date: 26-AUG-2021 10:38
Instrument: 10airB.i
Lab Sample ID: CAL3

Compound: Tert Butyl Alcohol (TBA)
CAS Number: 75-65-0



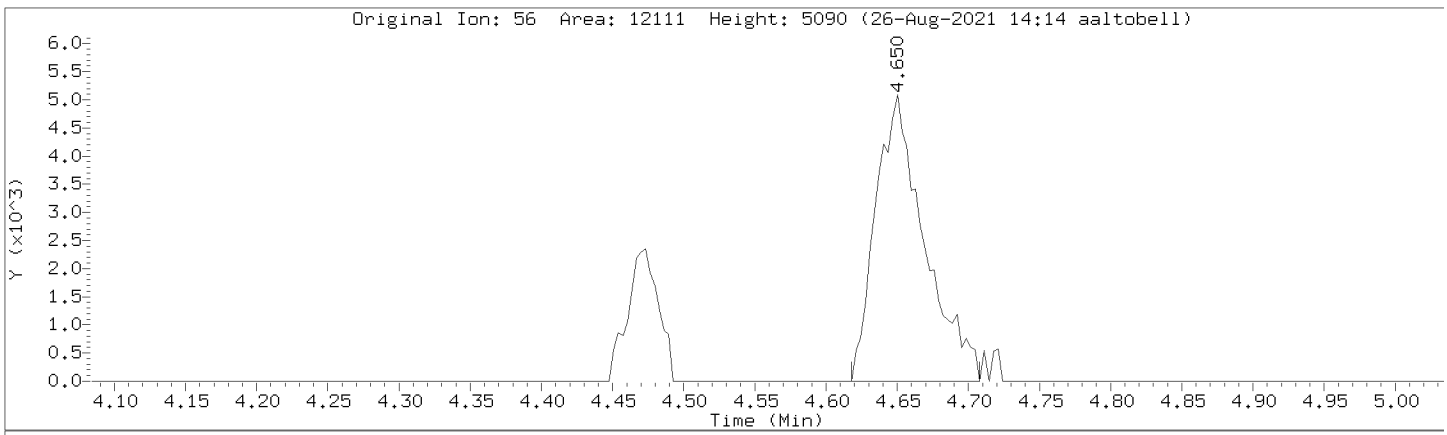



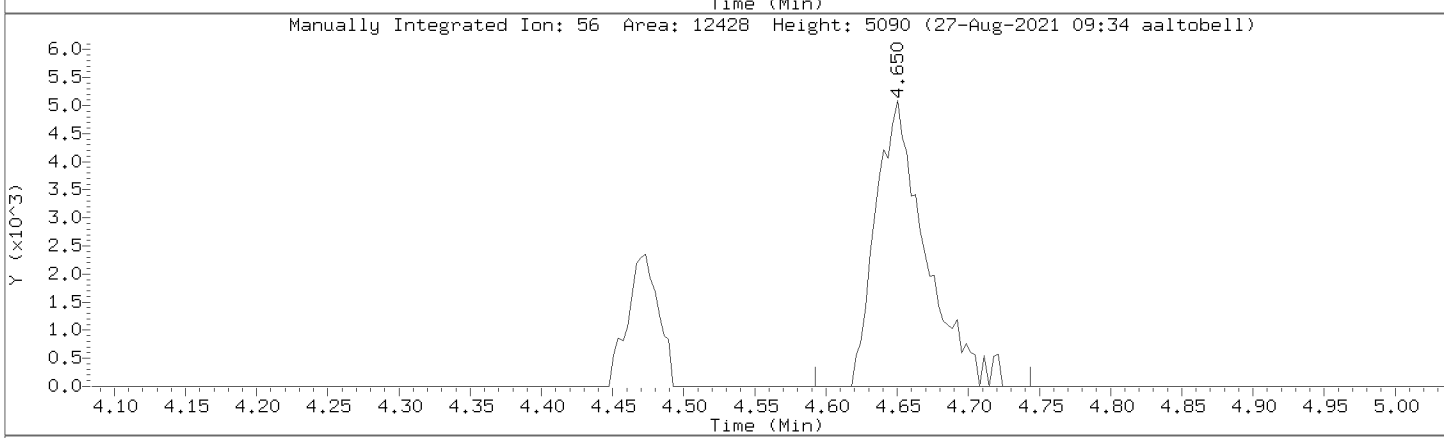



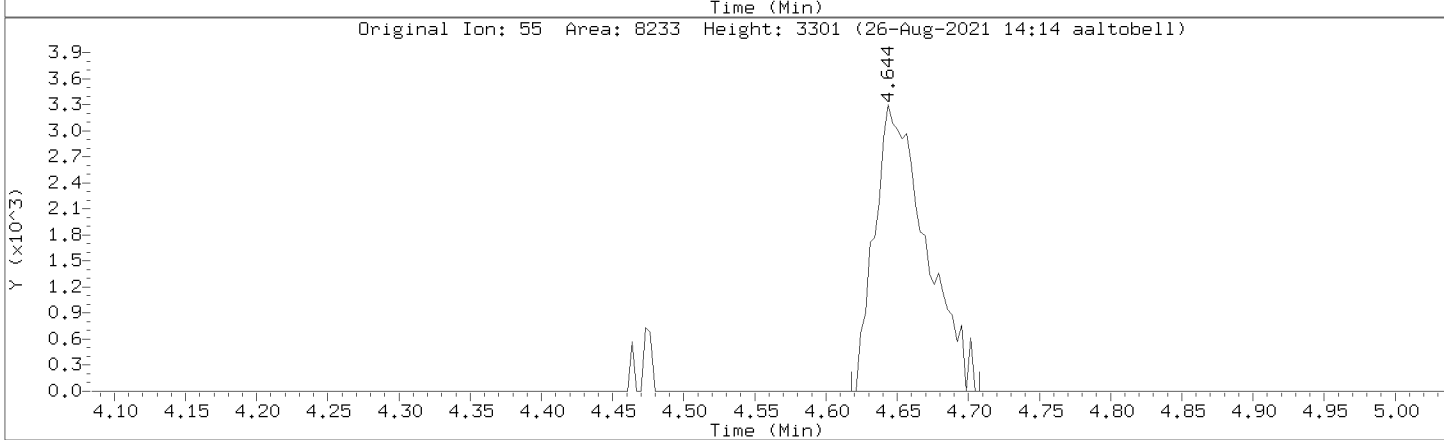



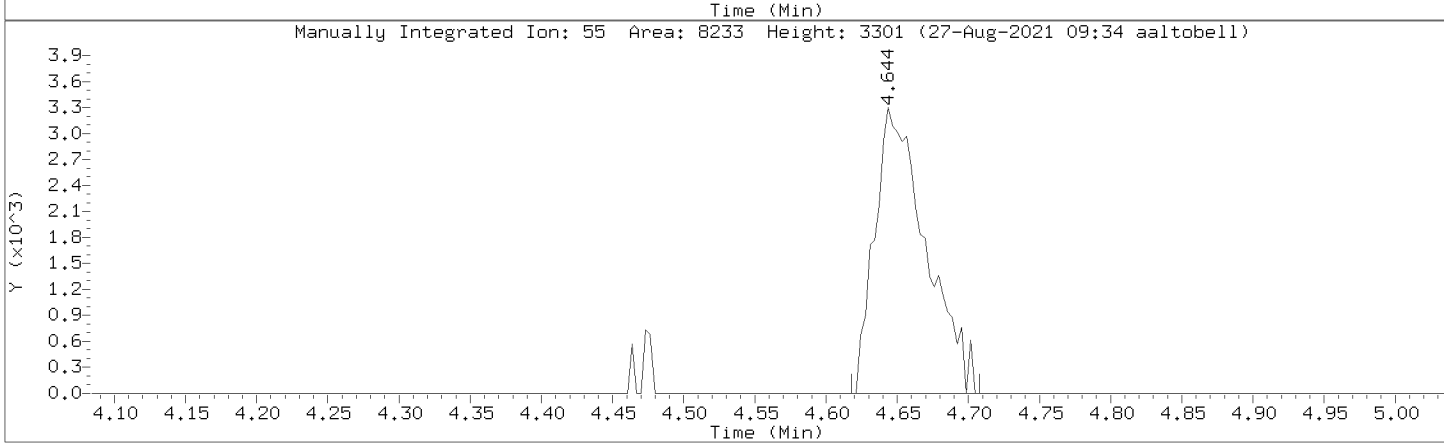
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23806.D
Injection Date: 26-AUG-2021 10:38
Instrument: 10airB.i
Lab Sample ID: CAL3

Compound: Acrolein
CAS Number: 107-02-08



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23807.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23807.D
Lab Smp Id: CAL4
Inj Date : 26-AUG-2021 11:06
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 08:53 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.711 | 3.727 | (0.527) | 16655 | 0.71420 | 0.722 |
| 2 Propylene | 41 | 3.733 | 3.733 | (0.530) | 17708 | 0.71870 | 0.717 |
| 3 Chlorodifluoromethane | 67 | 3.740 | 3.740 | (0.531) | 5712 | 0.71470 | 0.707(Q) |
| 4 Dichlorodifluoromethane | 85 | 3.759 | 3.775 | (0.534) | 70510 | 0.72440 | 0.719 |
| 5 Chloromethane | 50 | 3.888 | 3.894 | (0.552) | 25675 | 0.71640 | 0.718 |
| 6 Dichlorotetrafluoroethane | 85 | 3.888 | 3.904 | (0.552) | 78313 | 0.66800 | 0.664 |
| 7 Vinyl chloride | 62 | 3.987 | 3.997 | (0.566) | 26783 | 0.71870 | 0.701 |
| 8 1,3-Butadiene | 54 | 4.039 | 4.051 | (0.573) | 19136 | 0.71600 | 0.688 |
| 9 Bromomethane | 94 | 4.209 | 4.222 | (0.597) | 28118 | 0.71730 | 0.721 |
| 10 Chloroethane | 64 | 4.290 | 4.296 | (0.609) | 14171 | 0.71690 | 0.683 |
| 11 Ethanol | 45 | 4.418 | 4.408 | (0.627) | 54469 | 4.30890 | 4.33 |
| 12 Vinyl Bromide | 106 | 4.428 | 4.444 | (0.629) | 28229 | 0.71470 | 0.703 |
| 13 Isopentane | 43 | 4.450 | 4.466 | (0.632) | 35428 | 0.73510 | 0.818(Q) |
| 14 Freon 123 | 83 | 4.524 | 4.527 | (0.642) | 67416 | 0.71160 | 0.711 |
| 15 Trichlorofluoromethane | 101 | 4.531 | 4.550 | (0.643) | 68664 | 0.72400 | 0.713 |
| 16 Acrolein | 56 | 4.618 | 4.585 | (0.655) | 26257 | 2.03240 | 1.73 |
| 17 Acetone | 43 | 4.659 | 4.624 | (0.661) | 151589 | 3.53070 | 3.39 |
| 18 Isopropyl Alcohol | 45 | 4.730 | 4.720 | (0.671) | 224188 | 3.97160 | 3.98 |
| 19 1,1-Dichloroethene | 61 | 4.843 | 4.855 | (0.687) | 41037 | 0.72000 | 0.700 |
| 20 Acrylonitrile | 53 | 4.907 | 4.900 | (0.697) | 37652 | 1.98930 | 1.55(M) |
| 21 Freon 113 | 101 | 4.894 | 4.907 | (0.695) | 66069 | 0.71560 | 0.729 |
| 22 Methyl Acetate | 43 | 4.952 | 4.929 | (0.703) | 39691 | 0.71640 | 0.570(Q) |
| 23 Tert Butyl Alcohol (TBA) | 59 | 5.029 | 4.987 | (0.714) | 57220 | 0.70760 | 0.671(Q) |
| 24 Allyl Chloride | 76 | 5.000 | 5.013 | (0.710) | 12990 | 0.70890 | 0.684(Q) |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23807.D
Report Date: 27-Aug-2021 08:53

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 4.997 | 5.013 | (0.709) | 133351 | 3.59200 | 3.67 |
| | 26 Carbon Disulfide | 76 | 5.132 | 5.148 | (0.728) | 84933 | 0.72440 | 0.699 |
| | 27 trans-1,2-dichloroethene | 96 | 5.354 | 5.373 | (0.760) | 30396 | 0.72090 | 0.678 |
| | 28 Methyl Tert Butyl Ether | 73 | 5.415 | 5.373 | (0.769) | 80113 | 0.72000 | 0.702 |
| | 29 Vinyl Acetate | 43 | 5.495 | 5.489 | (0.780) | 47066 | 0.86360 | 0.732(M) |
| | 30 1,1-Dichloroethane | 63 | 5.524 | 5.547 | (0.784) | 48511 | 0.71200 | 0.682 |
| | 31 Methyl Ethyl Ketone | 72 | 5.727 | 5.707 | (0.813) | 14895 | 0.71780 | 0.664(Q) |
| | 32 n-Hexane | 57 | 5.714 | 5.723 | (0.811) | 46208 | 0.70760 | 0.637(Q) |
| | 33 Di-isopropyl Ether | 45 | 5.753 | 5.730 | (0.817) | 79983 | 0.70490 | 0.725 |
| | 34 Ethyl Acetate | 43 | 5.923 | 5.900 | (0.841) | 47092 | 0.70800 | 0.653(QM) |
| | 35 cis-1,2-Dichloroethene | 96 | 5.897 | 5.920 | (0.837) | 31765 | 0.71820 | 0.680(Q) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 6.039 | 6.016 | (0.857) | 85482 | 0.71690 | 0.697 |
| | 37 Chloroform | 83 | 6.119 | 6.145 | (0.869) | 58731 | 0.70400 | 0.681 |
| | 38 Tetrahydrofuran | 42 | 6.283 | 6.238 | (0.892) | 24597 | 0.71290 | 0.669 |
| | 39 1,1,1-Trichloroethane | 97 | 6.511 | 6.534 | (0.924) | 57231 | 0.71330 | 0.680 |
| | 40 1,2-Dichloroethane | 62 | 6.608 | 6.624 | (0.938) | 30214 | 0.72000 | 0.674 |
| | 41 Benzene | 78 | 6.801 | 6.820 | (0.965) | 97985 | 0.71510 | 0.698 |
| | 42 Carbon tetrachloride | 117 | 6.817 | 6.839 | (0.968) | 53656 | 0.72310 | 0.676 |
| | 43 Cyclohexane | 56 | 6.849 | 6.865 | (0.972) | 44636 | 0.71290 | 0.702 |
| | 44 Tert Amyl Methyl Ether | 73 | 7.029 | 6.993 | (0.998) | 105833 | 0.71690 | 0.643 |
| * | 45 1,4-Difluorobenzene | 114 | 7.045 | 7.067 | (1.000) | 2249908 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 7.174 | 7.183 | (1.018) | 138024 | 0.71600 | 0.697 |
| | 47 Heptane | 43 | 7.312 | 7.328 | (1.038) | 42633 | 0.71420 | 0.697 |
| | 48 Trichloroethene | 130 | 7.444 | 7.460 | (1.057) | 44315 | 0.71330 | 0.672 |
| | 49 Methyl methacrylate | 69 | 7.508 | 7.505 | (1.066) | 35938 | 0.71510 | 0.725 |
| | 50 1,2-Dichloropropane | 63 | 7.498 | 7.511 | (1.064) | 32985 | 0.71820 | 0.720 |
| | 51 1,4-Dioxane | 88 | 7.634 | 7.585 | (1.083) | 53489 | 1.78760 | 1.67 |
| | 52 Bromodichloromethane | 83 | 7.679 | 7.698 | (1.090) | 58610 | 0.71600 | 0.682 |
| | 53 Methylcyclohexane | 98 | 7.997 | 8.013 | (1.135) | 29384 | 0.71690 | 0.724 |
| | 54 Methyl Isobutyl Ketone | 43 | 8.138 | 8.103 | (1.155) | 51420 | 0.71870 | 0.639 |
| | 55 cis-1,3-Dichloropropene | 75 | 8.170 | 8.183 | (1.160) | 46404 | 0.71380 | 0.636 |
| | 56 trans-1,3-Dichloropropene | 75 | 8.675 | 8.685 | (1.231) | 35890 | 0.73020 | 0.614 |
| | 57 Toluene | 91 | 8.797 | 8.810 | (1.249) | 117419 | 0.72360 | 0.692 |
| | 58 1,1,2-Trichloroethane | 97 | 8.929 | 8.945 | (1.267) | 37220 | 0.71640 | 0.689 |
| | 59 Methyl Butyl Ketone | 43 | 9.113 | 9.058 | (0.871) | 36337 | 0.71640 | 0.606 |
| | 60 n-Octane | 43 | 9.260 | 9.267 | (0.885) | 56298 | 0.71690 | 0.649 |
| | 61 Dibromochloromethane | 129 | 9.537 | 9.556 | (0.911) | 61171 | 0.71730 | 0.676 |
| | 62 Tetrachloroethene | 166 | 9.633 | 9.649 | (0.920) | 59133 | 0.70980 | 0.686 |
| | 63 1,2-Dibromoethane | 107 | 9.768 | 9.781 | (0.933) | 49550 | 0.70400 | 0.661 |
| * | 64 Chlorobenzene - d5 | 117 | 10.466 | 10.479 | (1.000) | 1703542 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 10.514 | 10.530 | (1.005) | 88080 | 0.71470 | 0.681 |
| | 66 Ethyl Benzene | 91 | 10.756 | 10.765 | (1.028) | 139949 | 0.72270 | 0.637 |
| | 67 m&p-Xylene | 91 | 10.923 | 10.964 | (1.044) | 217541 | 1.44090 | 1.41(M) |
| | 68 n-Nonane | 43 | 11.309 | 11.318 | (1.080) | 53558 | 0.71780 | 0.637 |
| | 69 Styrene | 104 | 11.402 | 11.418 | (1.089) | 77787 | 0.72310 | 0.622 |
| | 70 o-Xylene | 91 | 11.444 | 11.456 | (1.093) | 113070 | 0.71820 | 0.704 |
| | 71 Bromoform | 173 | 11.524 | 11.540 | (1.101) | 55253 | 0.72270 | 0.654 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 11.887 | 11.903 | (1.136) | 75913 | 0.72040 | 0.629 |
| | 73 Isopropylbenzene | 105 | 12.055 | 12.064 | (1.152) | 160832 | 0.71160 | 0.620 |
| | 74 N-Propylbenzene | 91 | 12.678 | 12.688 | (1.211) | 175141 | 0.72040 | 0.619(M) |
| | 75 2-Chlorotoluene | 91 | 12.727 | 12.736 | (1.216) | 117656 | 0.72490 | 0.702(M) |
| | 76 4-Ethyltoluene | 105 | 12.865 | 12.874 | (1.229) | 139445 | 0.71600 | 0.613 |
| | 77 1,3,5-Trimethylbenzene | 105 | 12.932 | 12.945 | (1.236) | 138879 | 0.71640 | 0.698 |
| | 78 n-Decane | 57 | 13.257 | 13.267 | (1.882) | 65749 | 0.72440 | 0.596 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23807.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.370 | 13.382 | (1.277) | 139397 | 0.72270 | 0.700 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.411 | 13.424 | (1.281) | 129672 | 0.72090 | 0.625 |
| 81 Sec- Butylbenzene | 105 | 13.669 | 13.681 | (1.306) | 202299 | 0.72360 | 0.633 |
| 82 1,3-Dichlorobenzene | 146 | 13.710 | 13.720 | (1.310) | 60141 | 0.72360 | 0.582 |
| 83 Benzyl Chloride | 91 | 13.778 | 13.787 | (1.316) | 43338 | 0.72930 | 0.563(M) |
| 84 1,4-Dichlorobenzene | 146 | 13.842 | 13.852 | (1.323) | 50151 | 0.72310 | 0.571 |
| 85 p-Isopropyltoluene | 119 | 13.868 | 13.881 | (1.325) | 175861 | 0.72620 | 0.621 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.894 | 13.906 | (1.327) | 138129 | 0.72310 | 0.630 |
| 87 1,2-Dichlorobenzene | 146 | 14.157 | 14.170 | (1.353) | 66514 | 0.72220 | 0.589 |
| 88 N-Butylbenzene | 91 | 14.334 | 14.340 | (1.370) | 112596 | 0.72090 | 0.585 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.881 | 14.890 | (1.422) | 26597 | 0.72710 | 0.566 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.974 | 15.974 | (1.526) | 23408 | 1.56580 | 0.977(M) |
| 91 Naphthalene | 128 | 16.170 | 16.157 | (1.545) | 38969 | 0.81640 | 0.513(M) |
| 92 Hexachlorobutadiene | 225 | 16.276 | 16.282 | (1.555) | 60217 | 0.81640 | 0.695 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23807.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 23807.D
Lab Smp Id: CAL4
Analysis Type: VOA
Quant Type: ISTD
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

Calibration Date: 26-AUG-2021
Calibration Time: 11:33

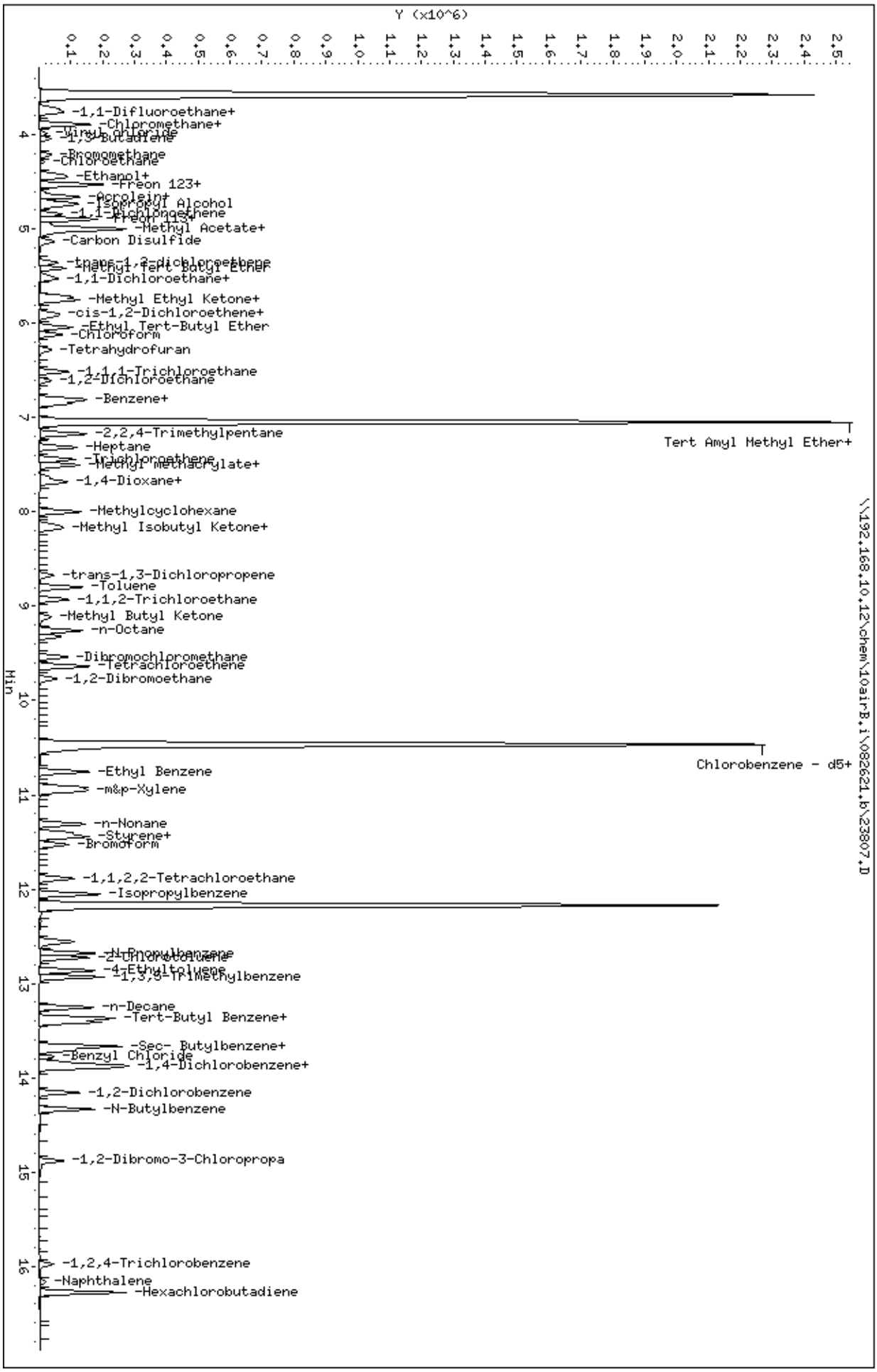
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2249908 | 6.51 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1703542 | 2.94 |

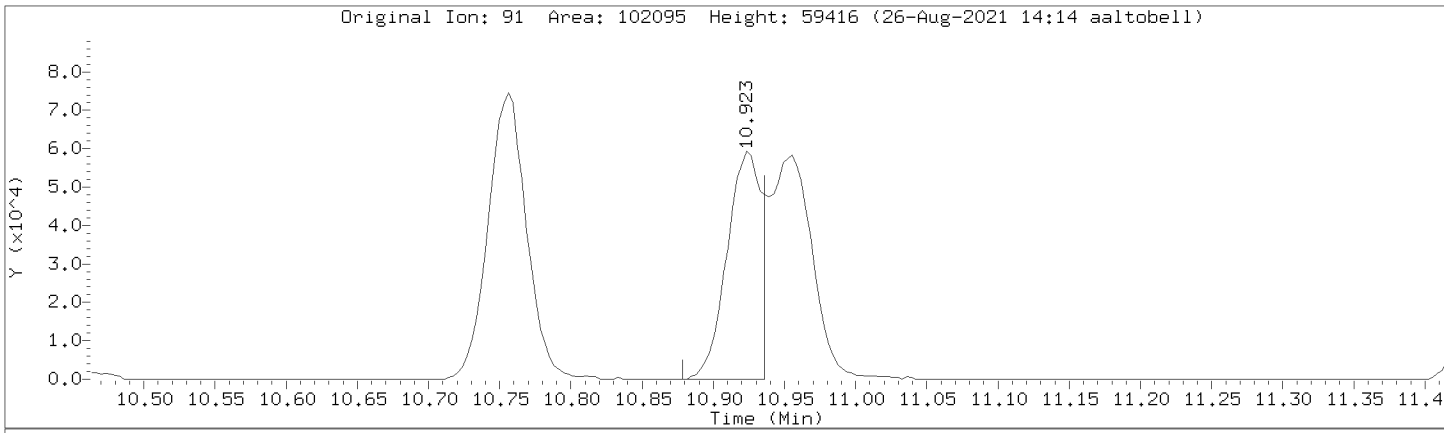
| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.18 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.03 |

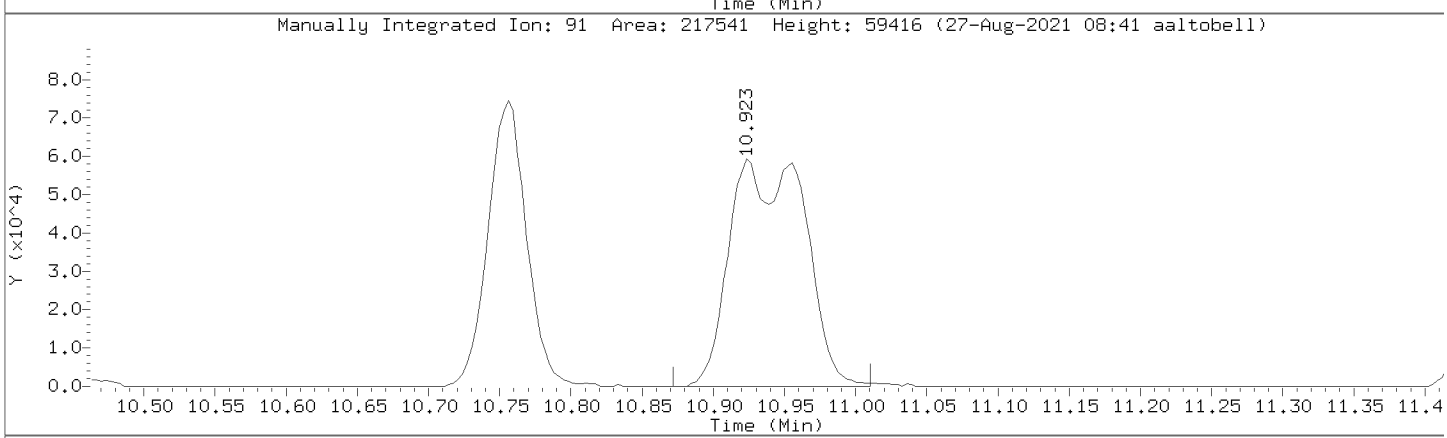
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

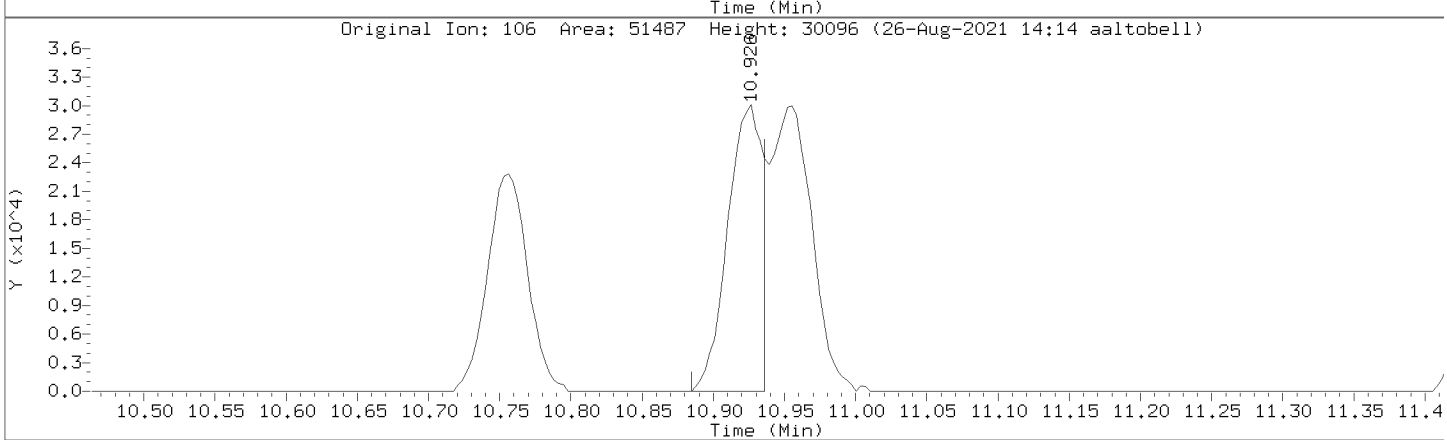

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23807.D
Date : 26-AUG-2021 11:06
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32
Y (x10^6)
Min
-1,1-Difluoroethane+
-Chloromethane+
-Vinyl chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol+
-Freon 123+
-Acrolein+
-Isopropyl Alcohol
-1,1-Dichloroethene
-Freon 113+
-Methyl Acetate+
-Carbon Disulfide
-trans-1,2-dichloroethene
-Methyl Tert-Butyl Ether
-1,1-Dichloroethane+
-Methyl Ethyl Ketone+
-cis-1,2-Dichloroethene+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-2,2,4-Trimethylpentane
Tert Amyl Methyl Ether+
-Heptane
-Trichloroethene
-Methyl methacrylate+
-1,4-Dioxane+
-Methylcyclohexane
-Methyl Isobutyl Ketone+
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-n-Propylbenzene
-2-Chlorotoluene
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-Tert-Butyl Benzene+
-Sec- Butylbenzene+
-Benzyl Chloride
-1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
\\192.168.10.12\chem\10airB.i\082621.b\23807.D

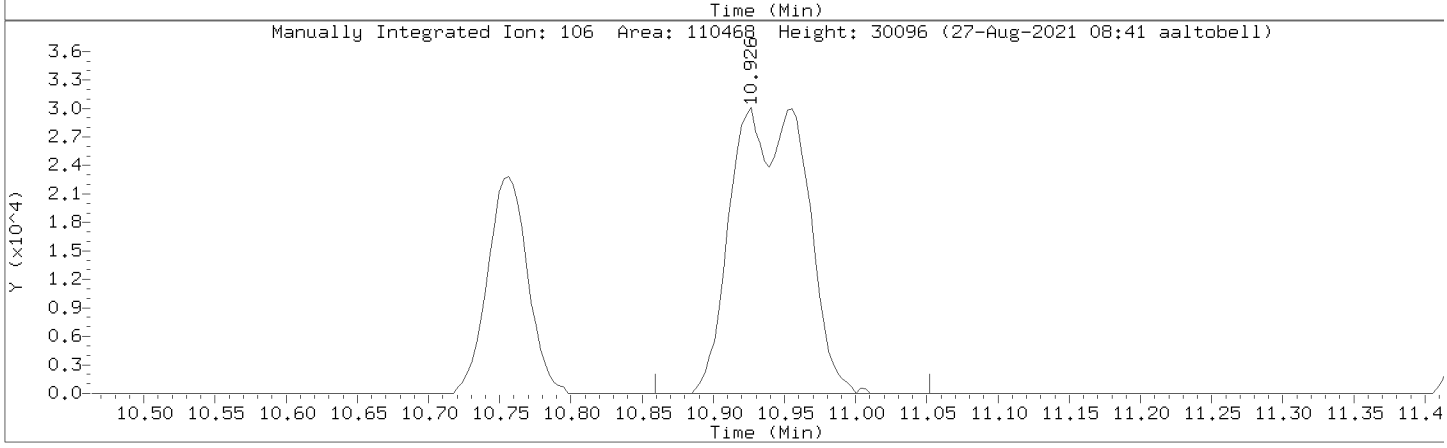
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23807.D
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: m&p-Xylene
CAS Number: 7816-60-0



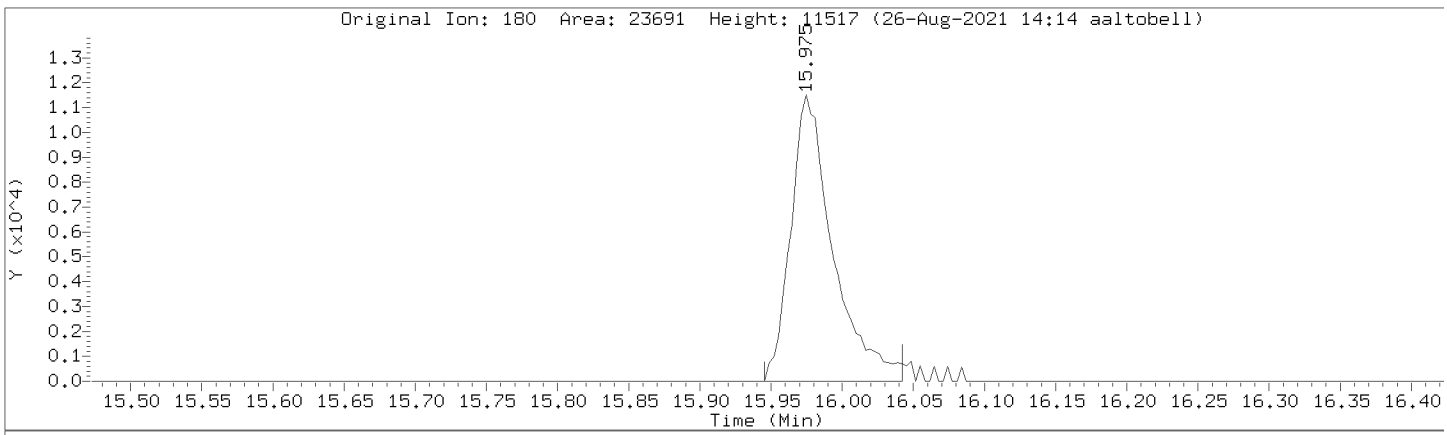



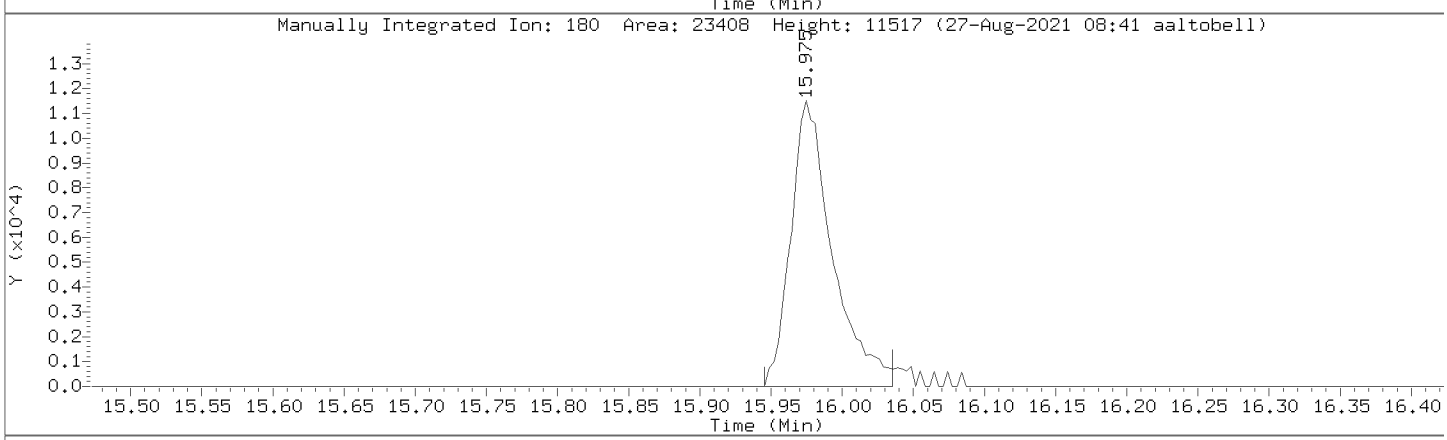



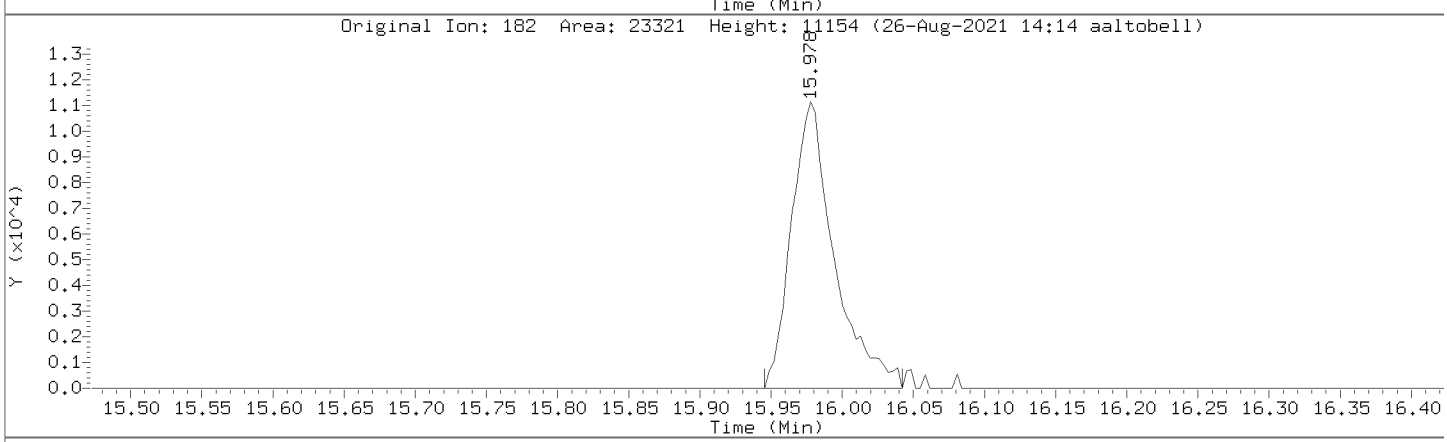



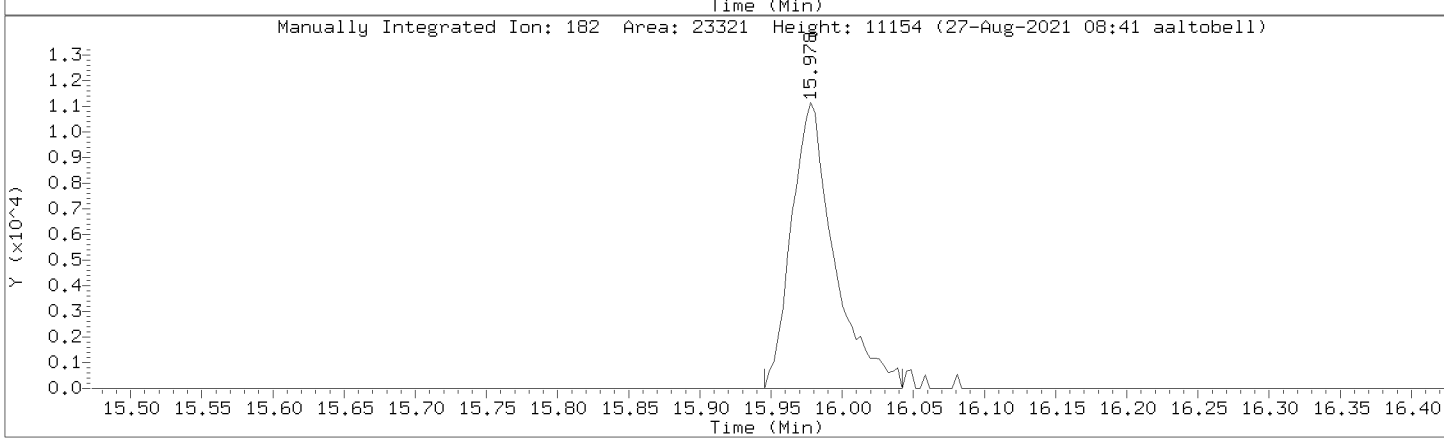
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23807.D
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6

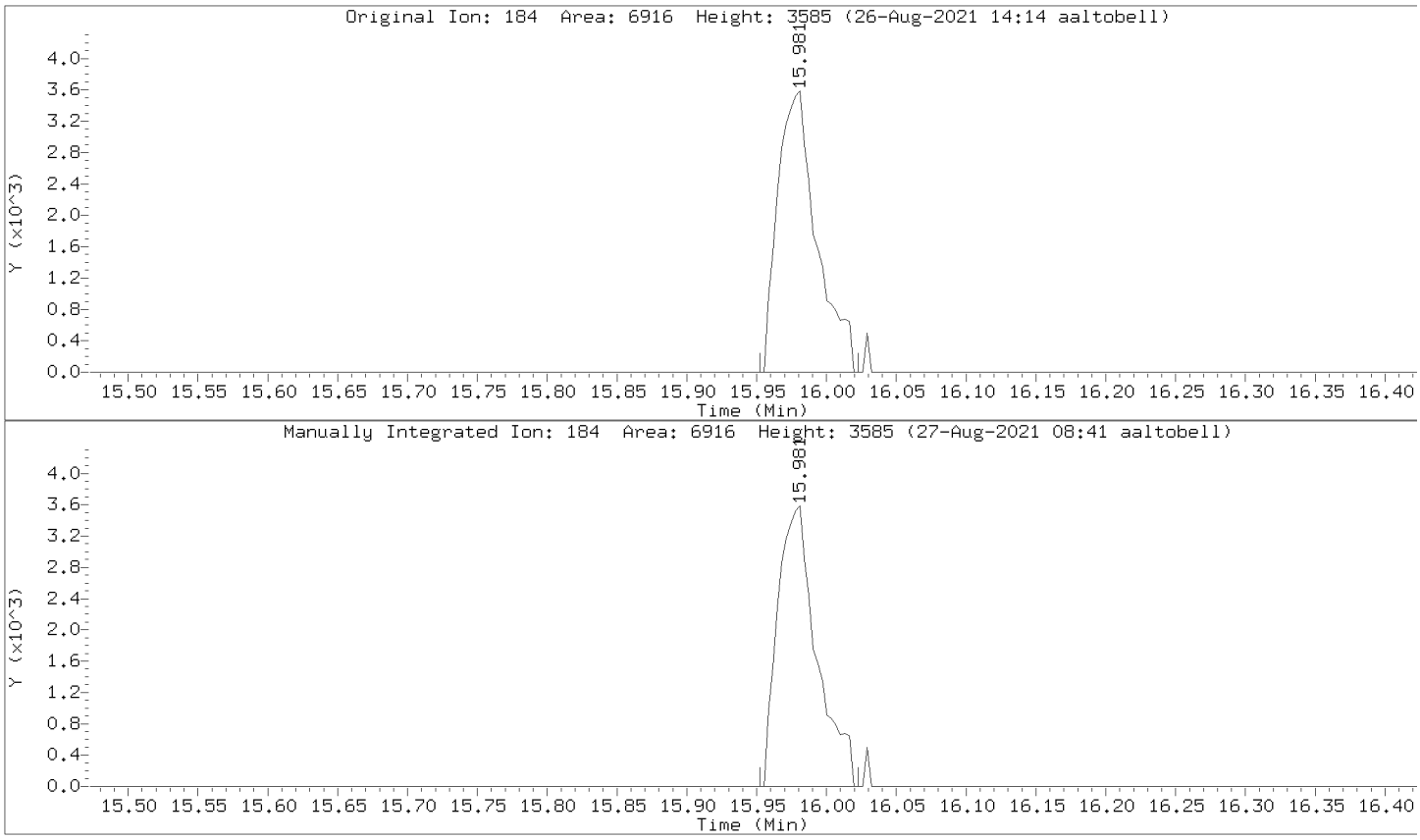


Data File: \\192.168.10.12\chem\10airB.i\082621.b/23807.D
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4



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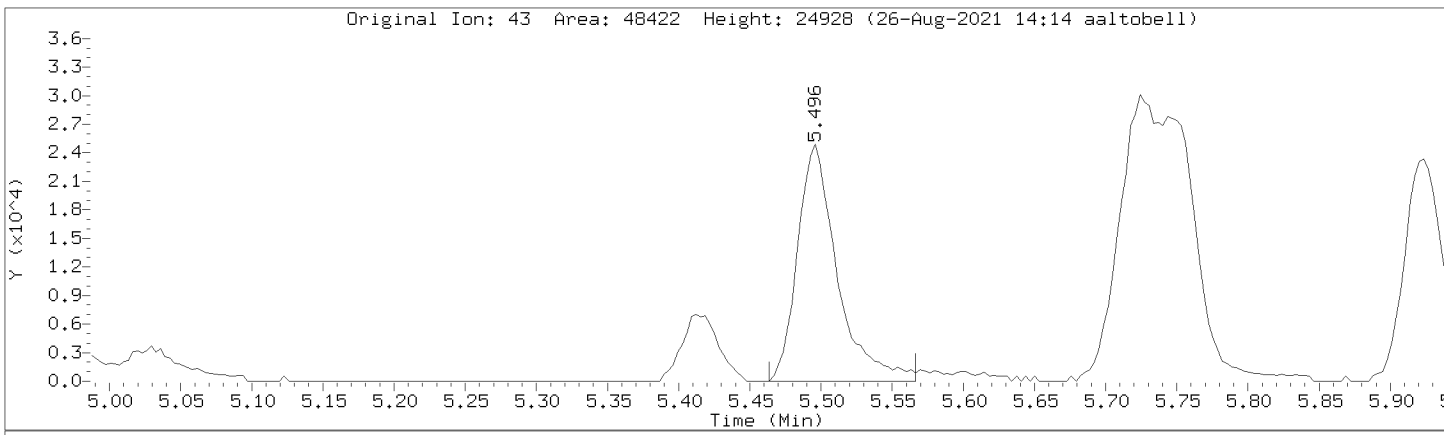
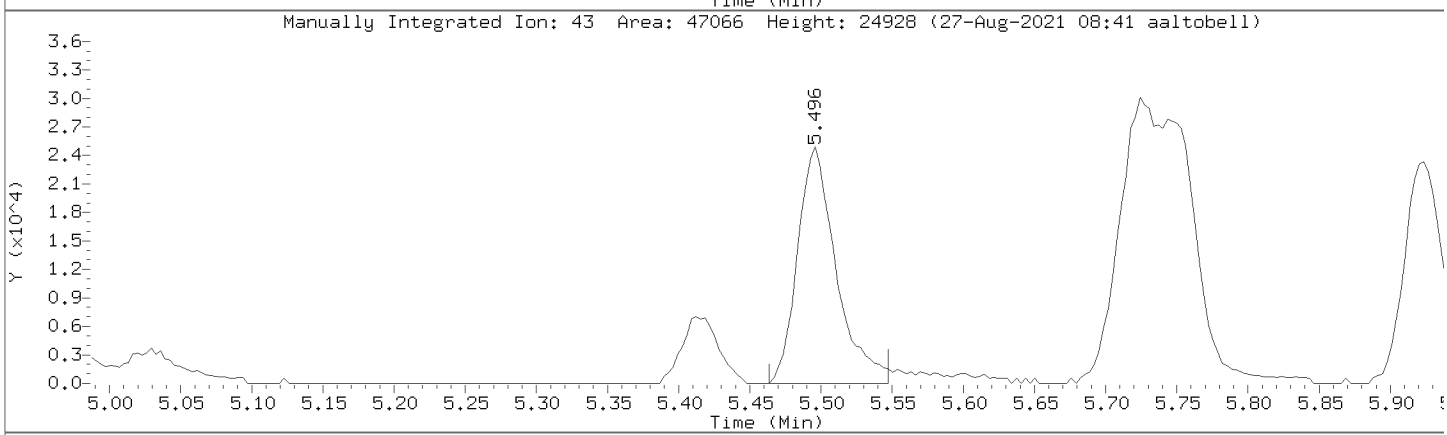
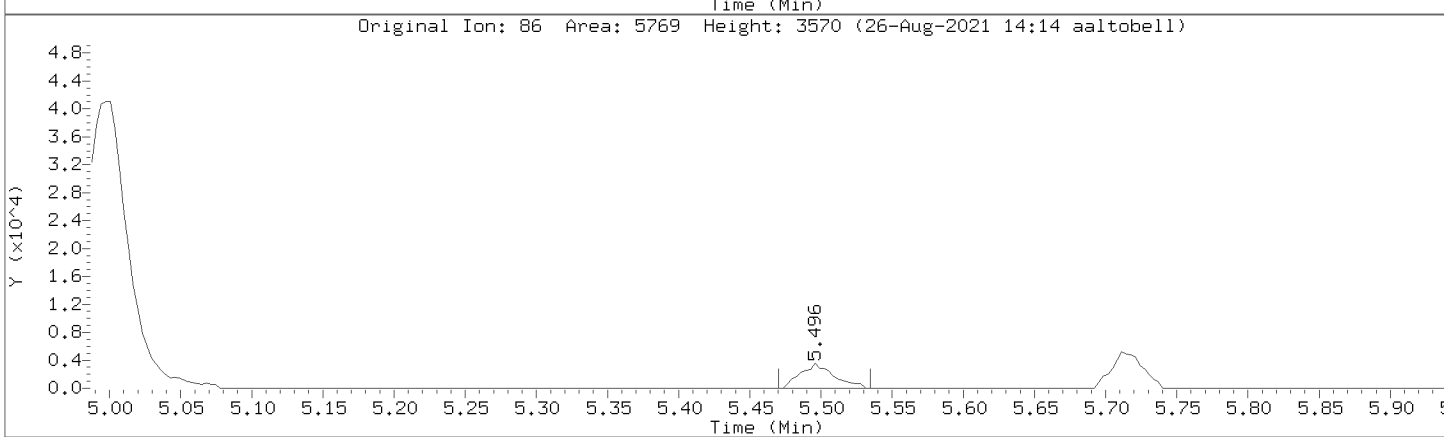
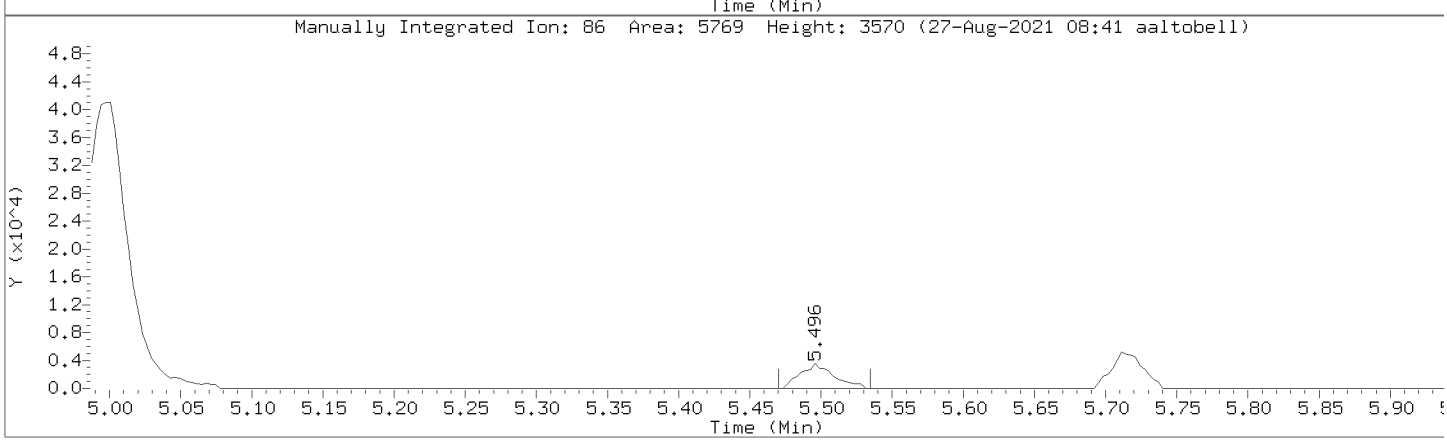
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: Vinyl Acetate
CAS Number: 108-05-4



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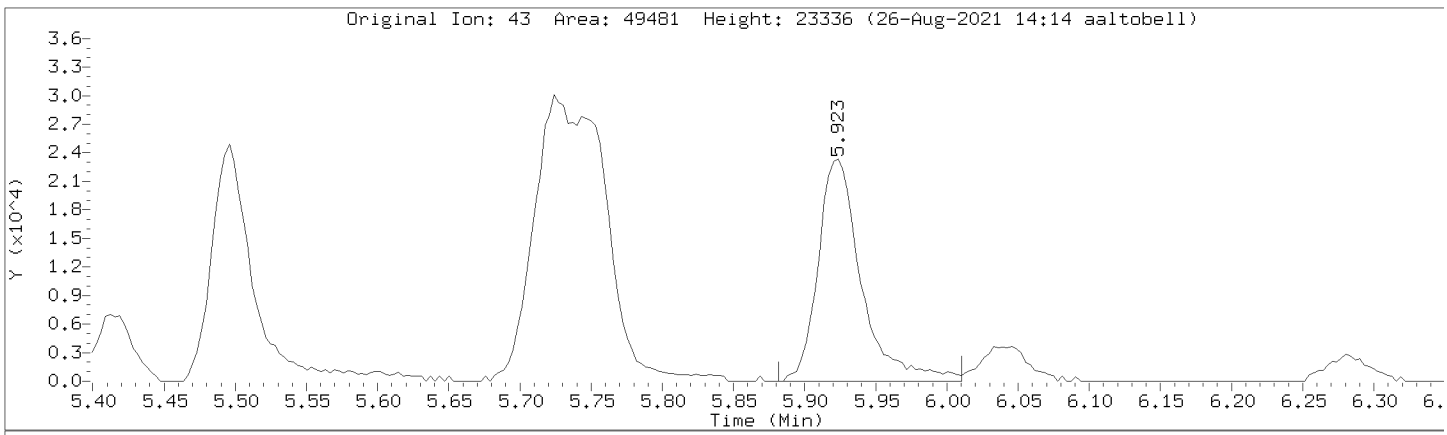
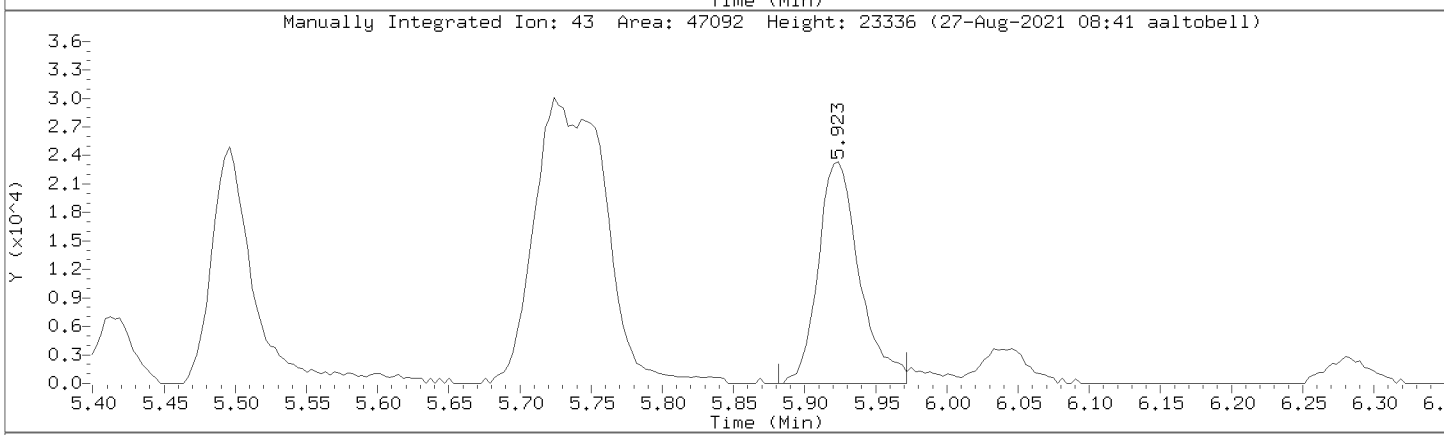
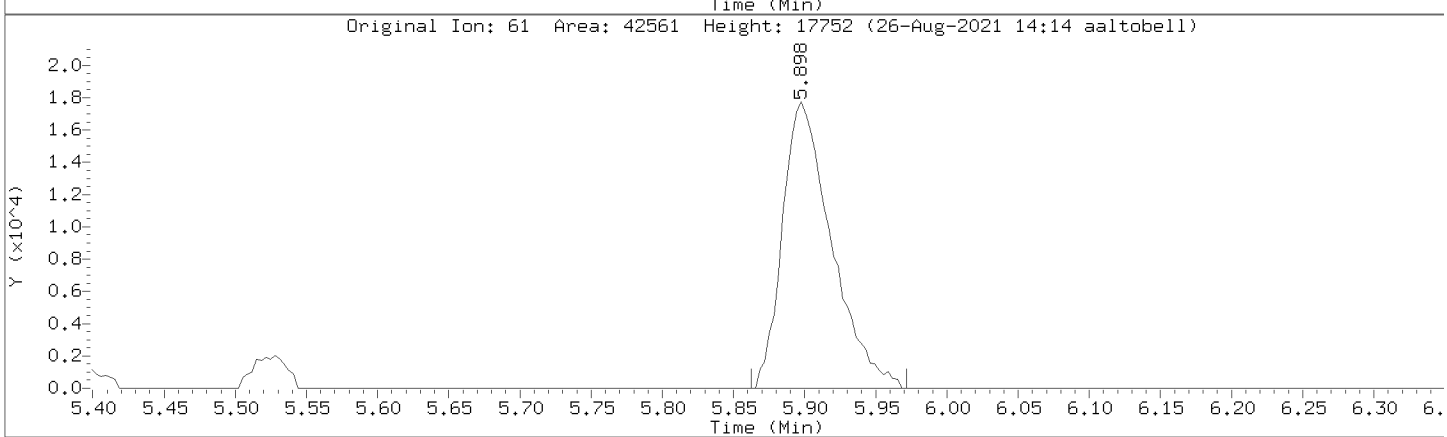
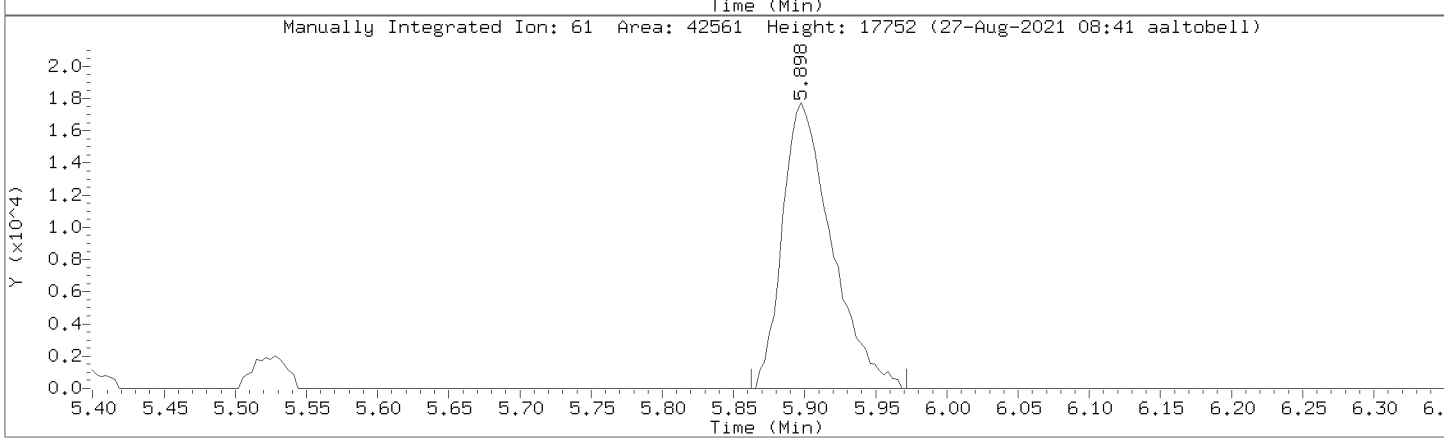
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: Ethyl Acetate
CAS Number: 141-78-6



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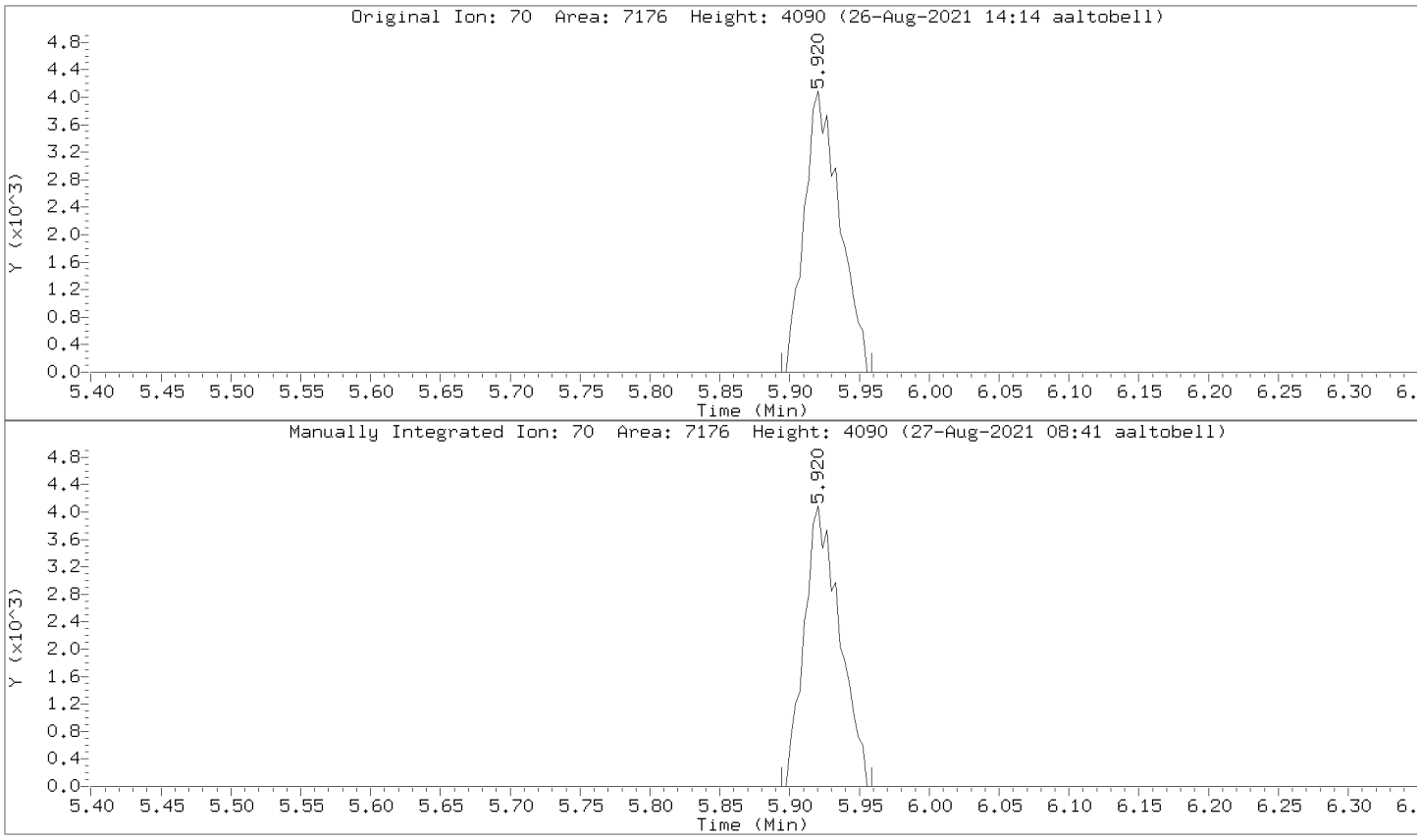
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4



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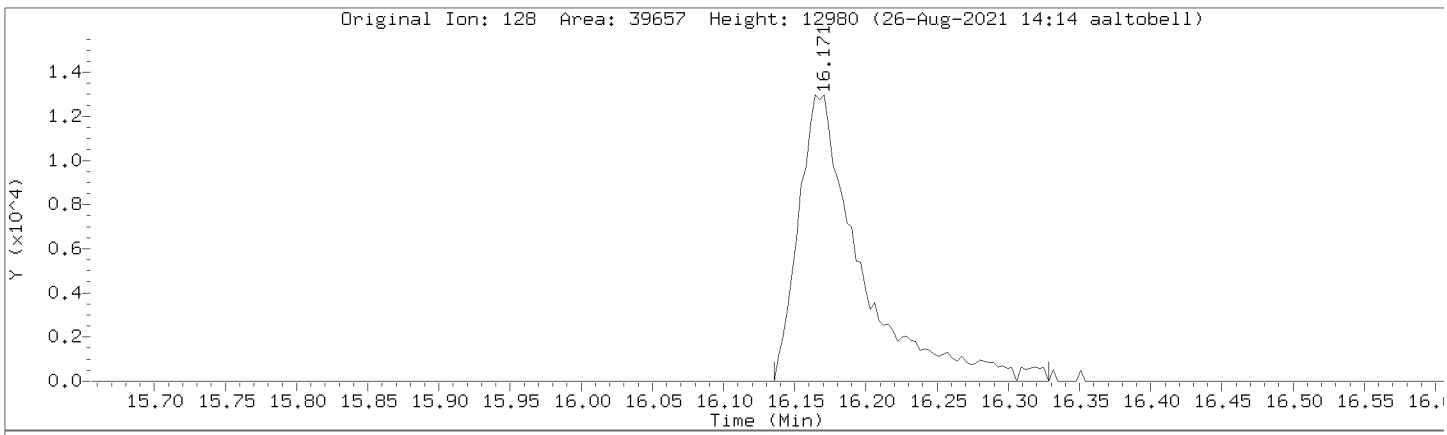
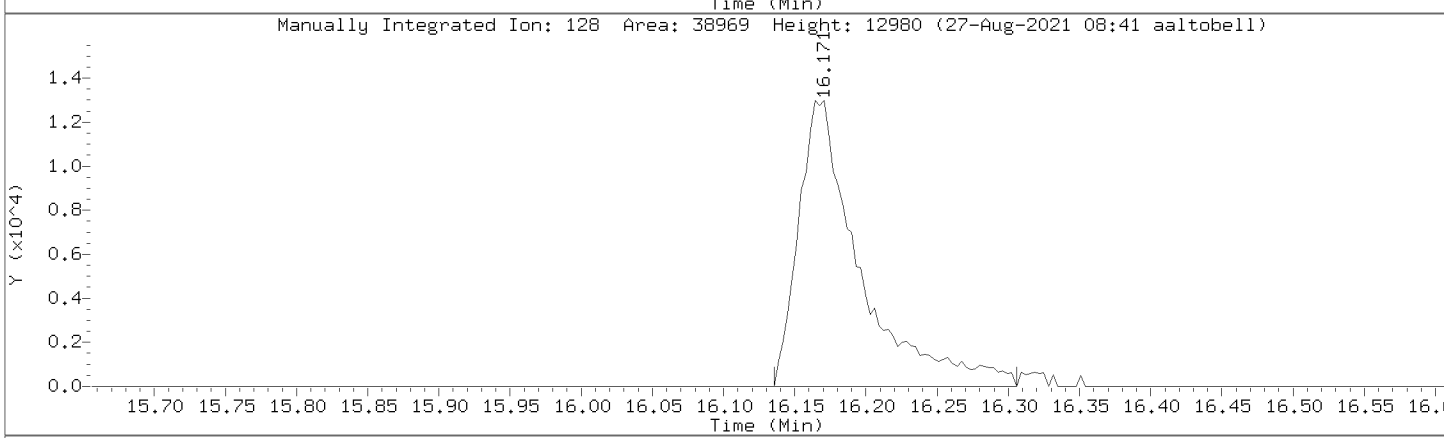
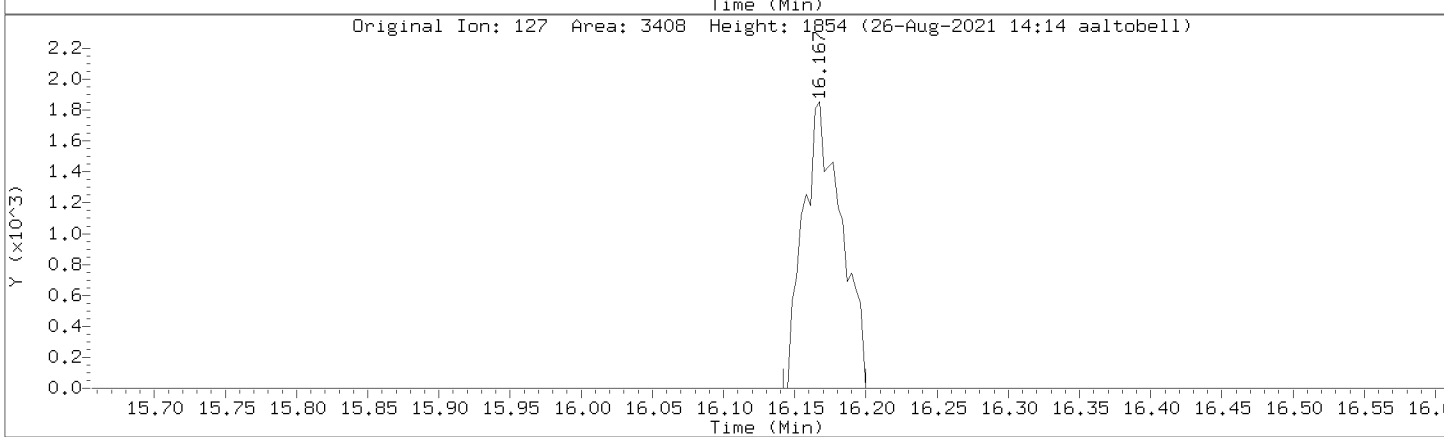
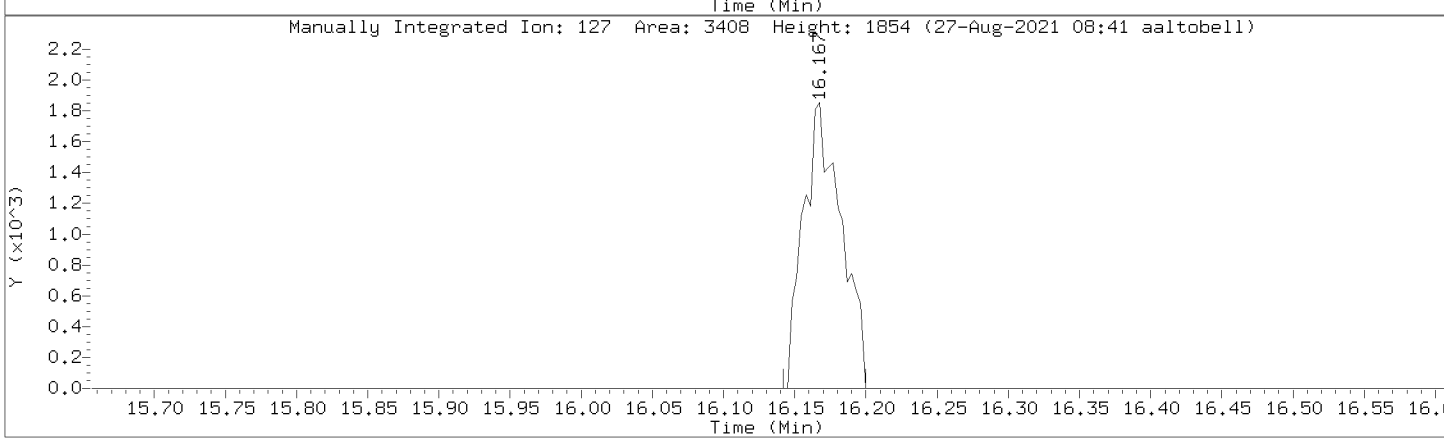
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: Naphthalene
CAS Number: 91-20-3



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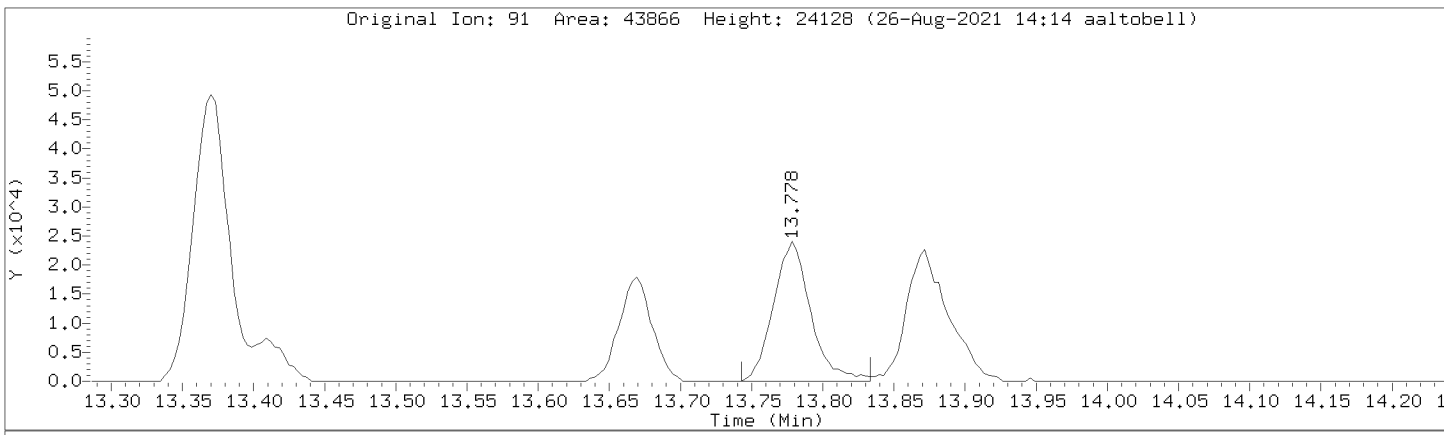
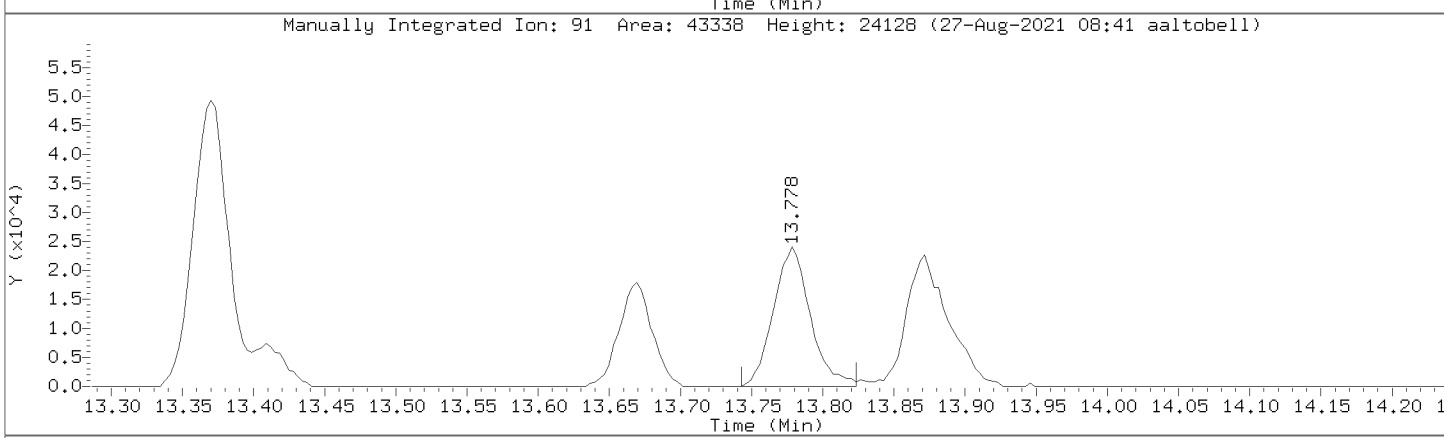
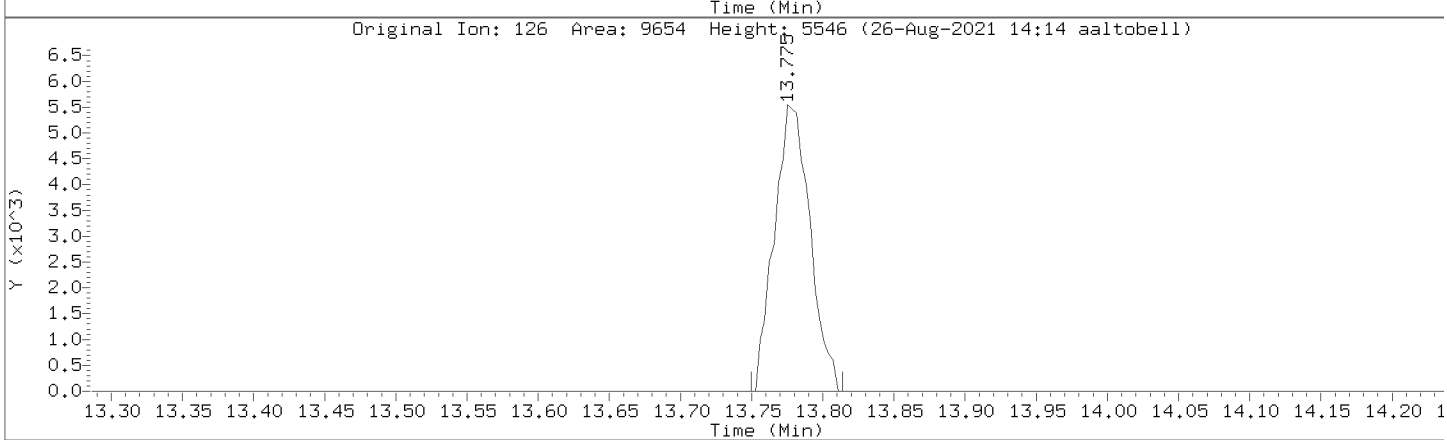
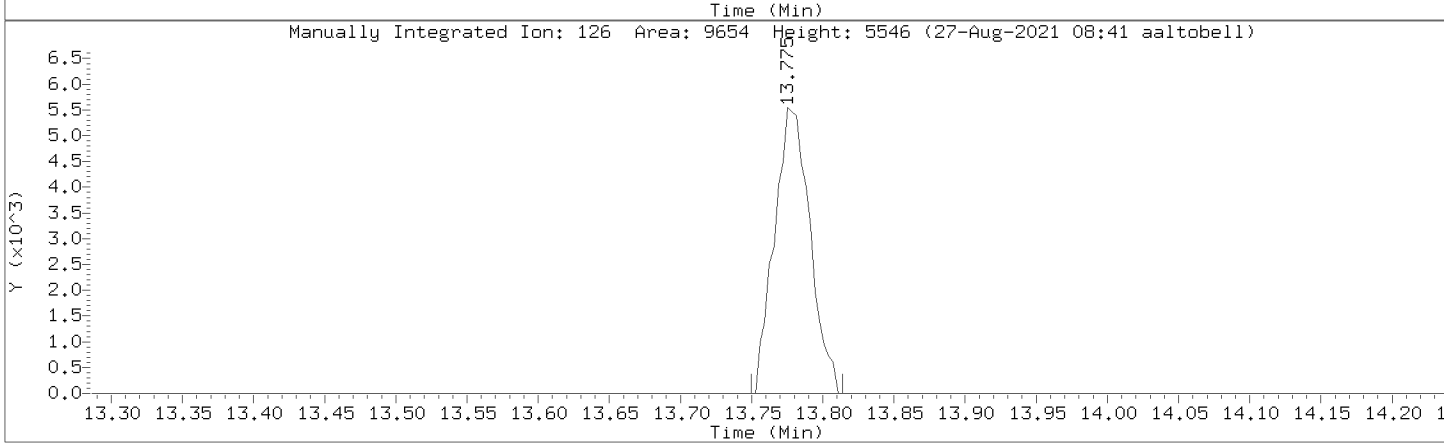
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: Benzyl Chloride
CAS Number: 100-44-7



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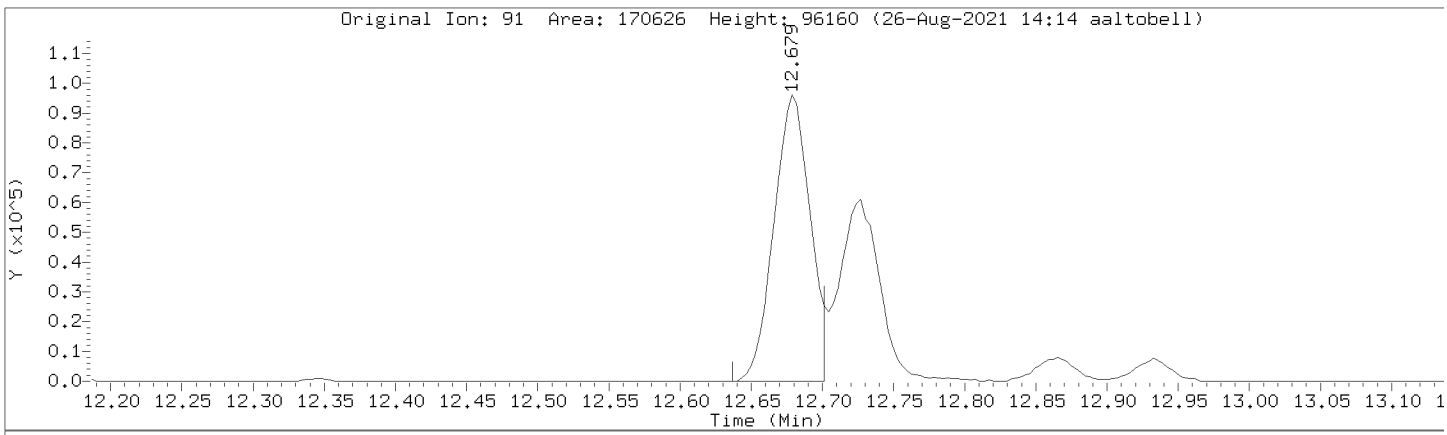
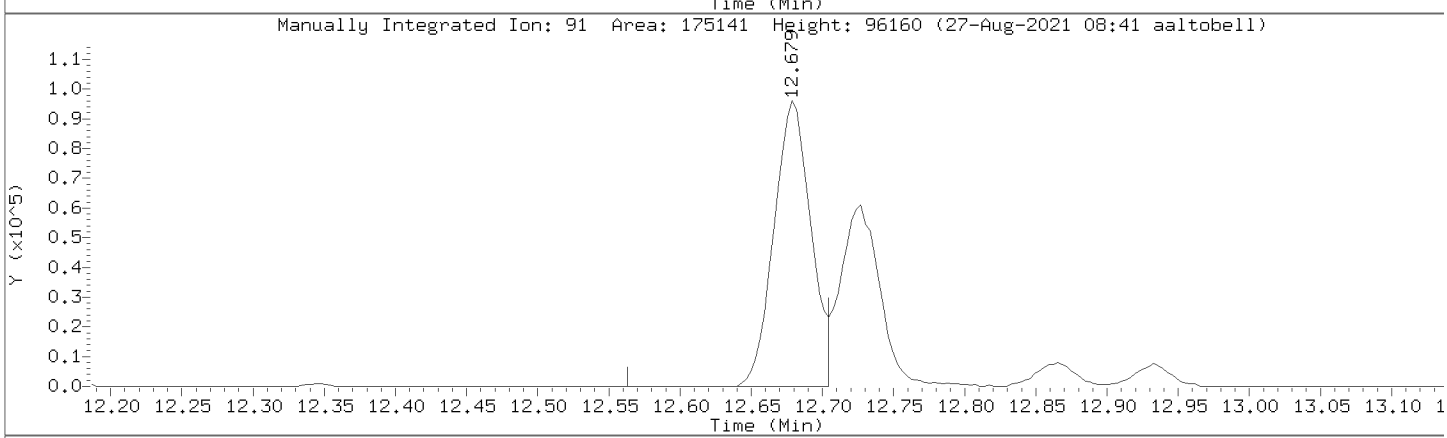
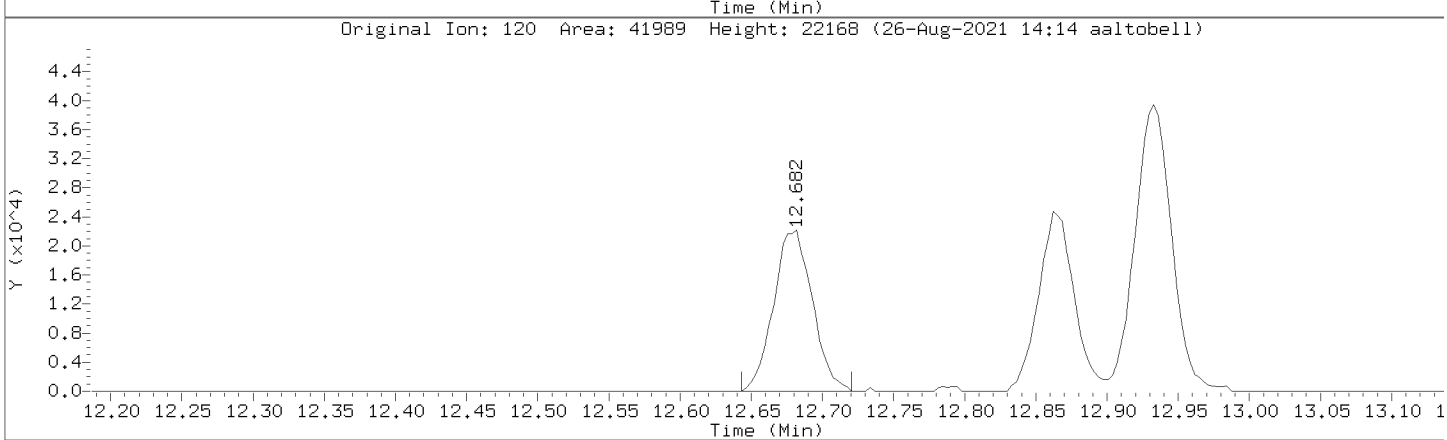
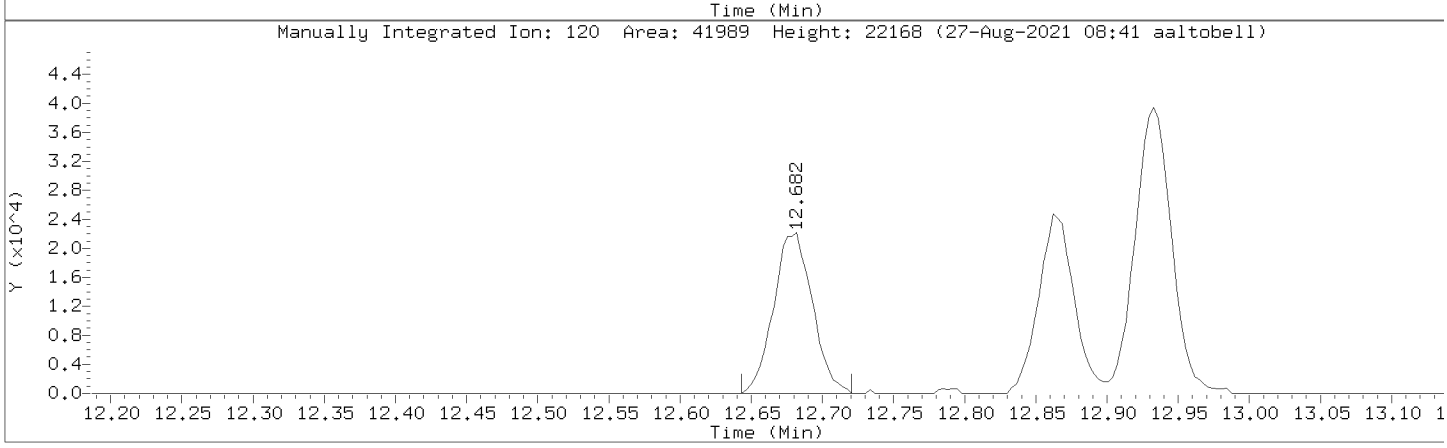
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: N-Propylbenzene
CAS Number: 103-65-1



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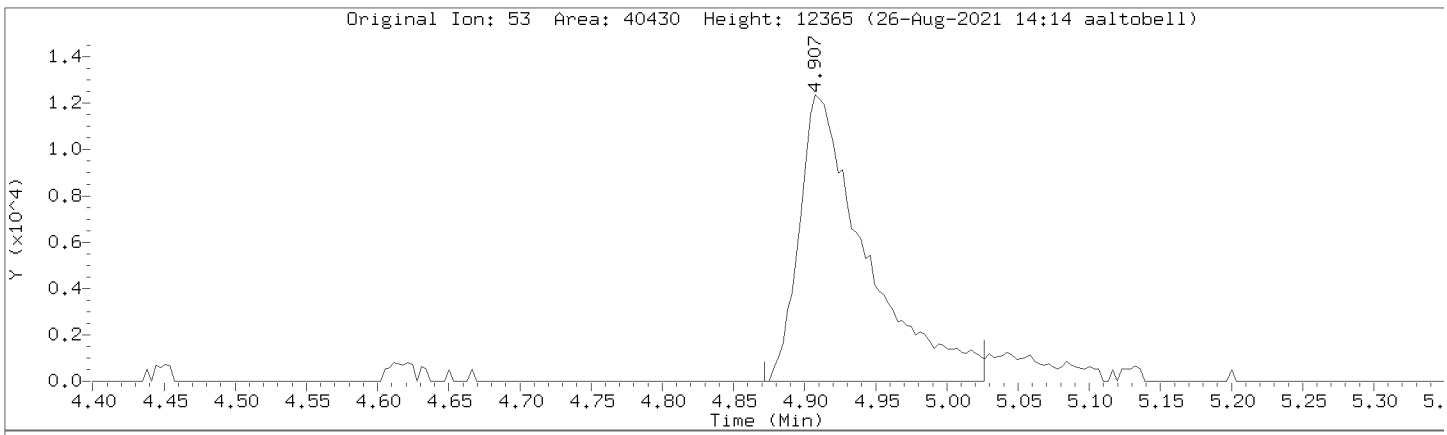
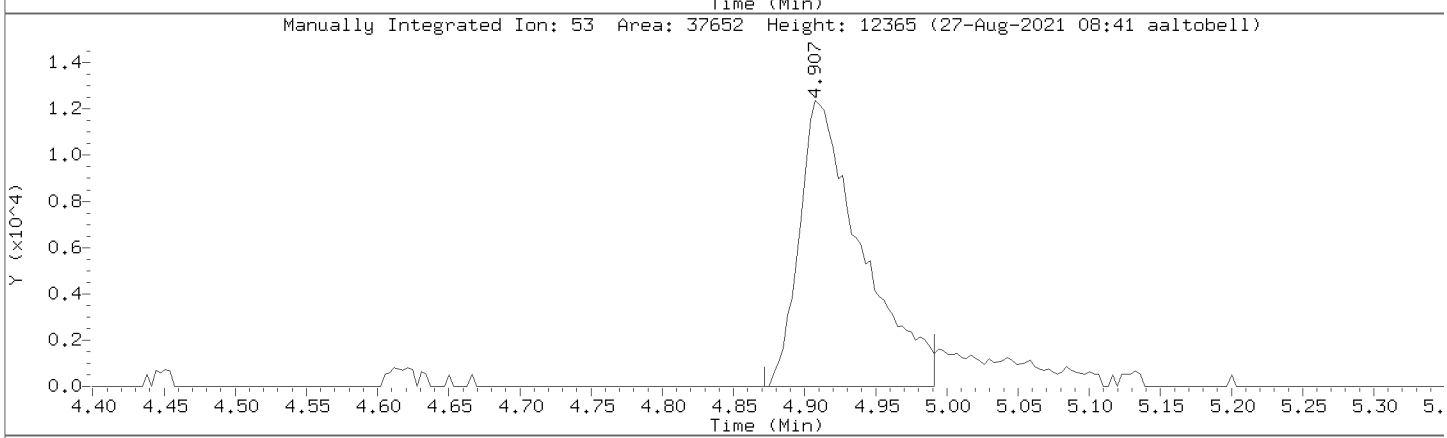
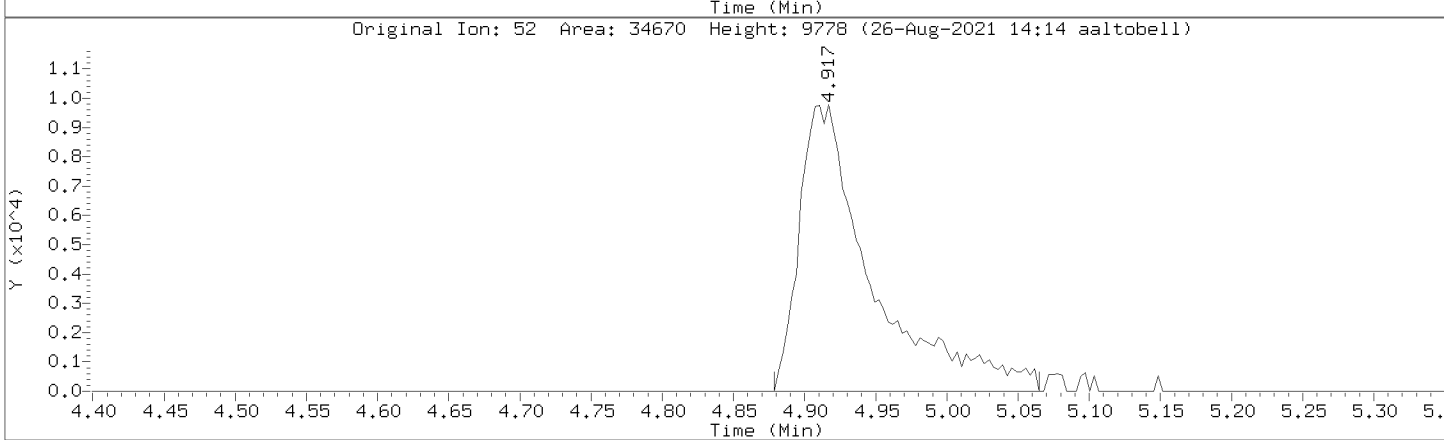
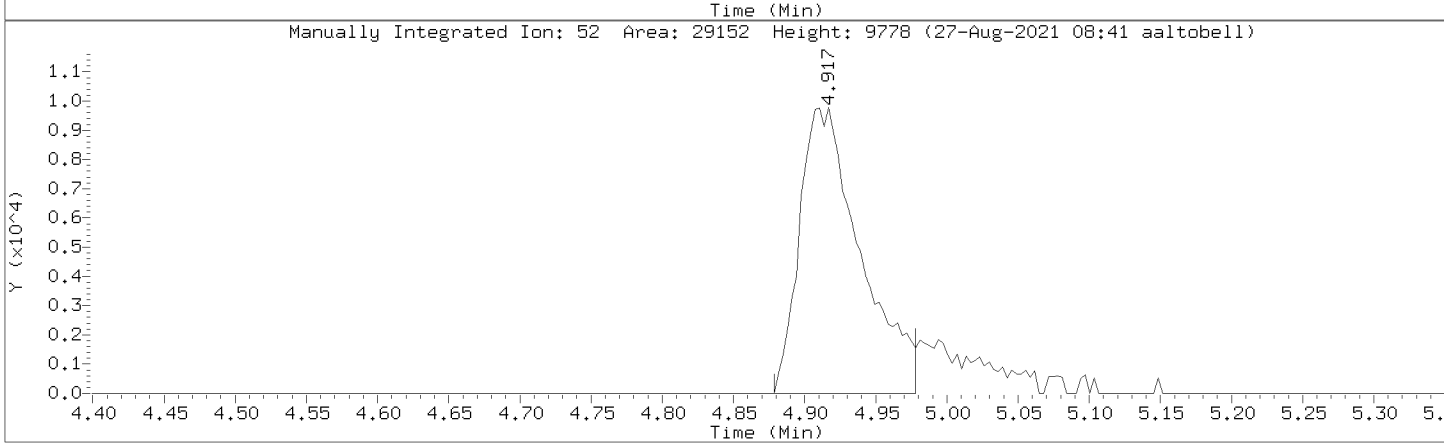
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: Acrylonitrile
CAS Number: 107-13-1



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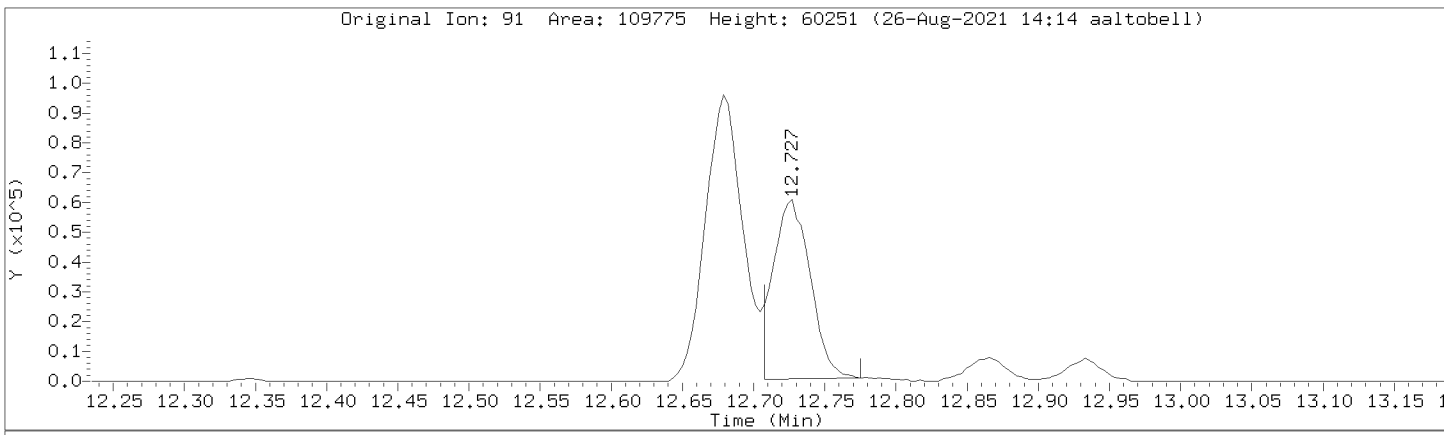
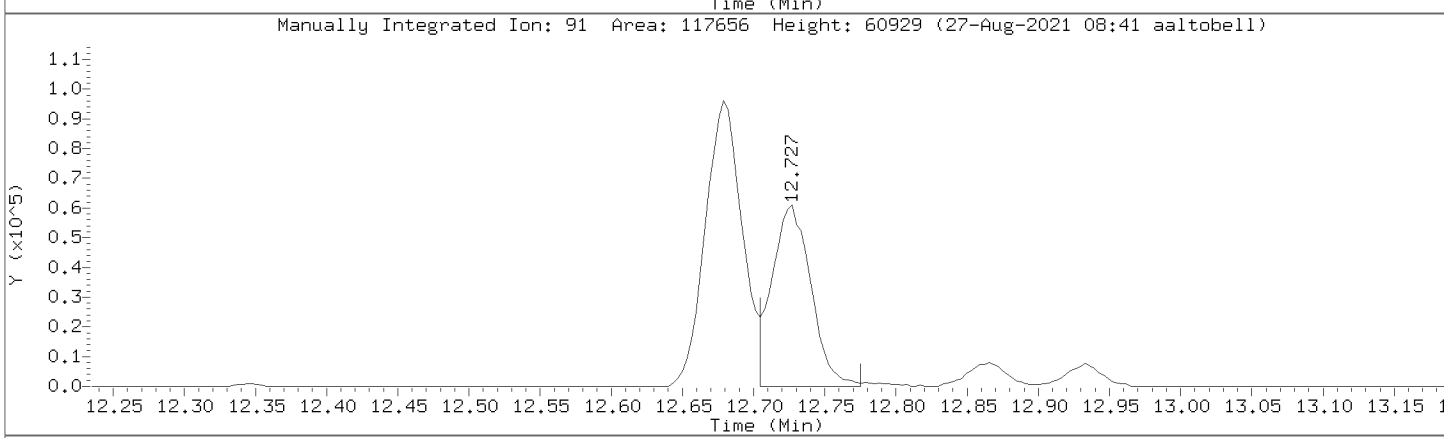
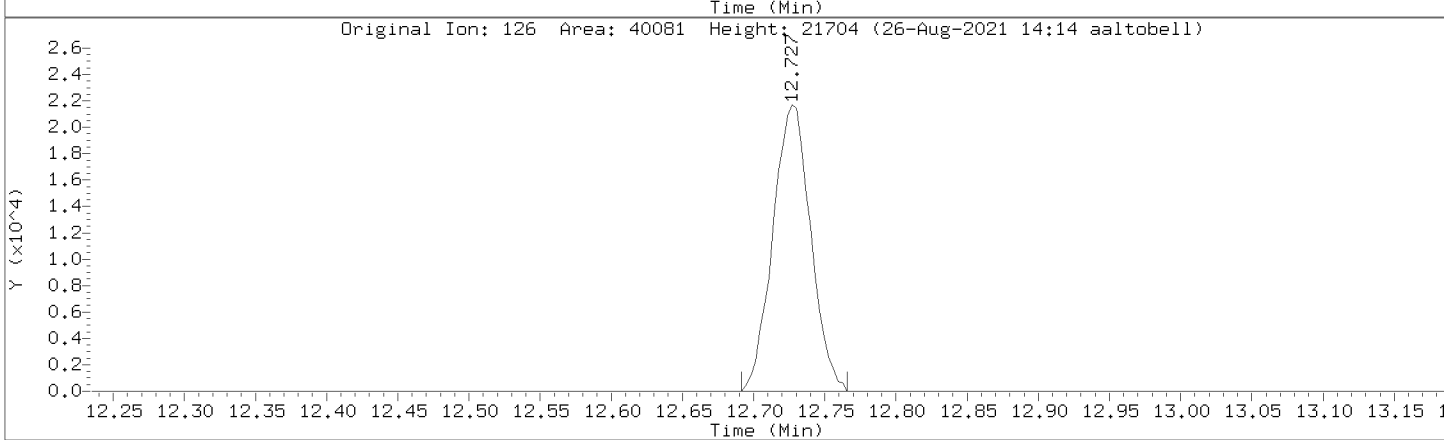
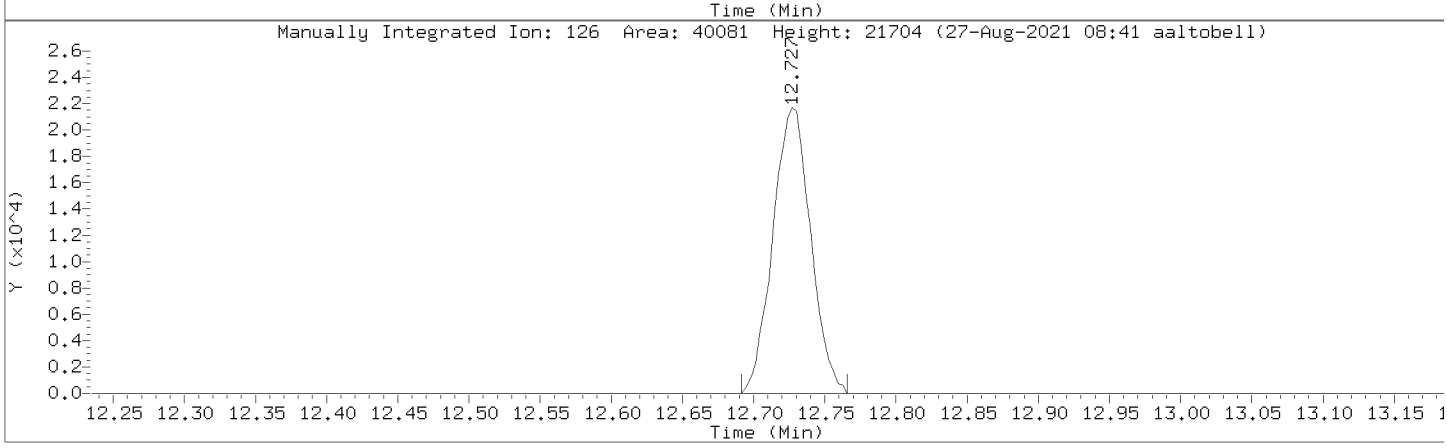
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4

Compound: 2-Chlorotoluene
CAS Number: 95-49-8



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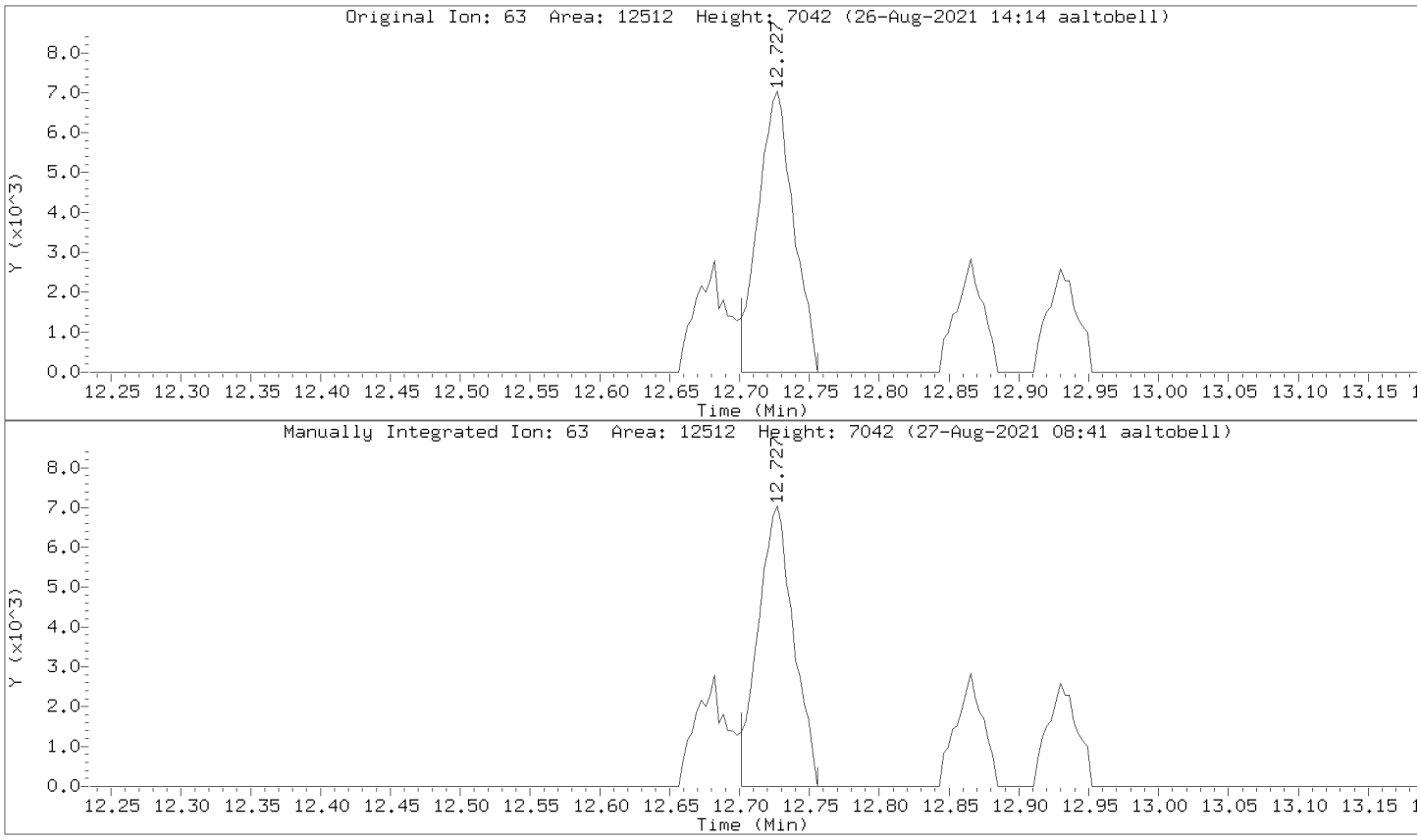
Injection Date: 26-AUG-2021 11:06
Instrument: 10airB.i
Lab Sample ID: CAL4



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23808.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23808.D
Lab Smp Id: CAL5
Inj Date : 26-AUG-2021 11:33
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 08:53 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.721 | 3.727 | (0.527) | 269577 | 10.7100 | 12.4 |
| 2 Propylene | 41 | 3.737 | 3.733 | (0.529) | 275900 | 10.7800 | 11.9 |
| 3 Chlorodifluoromethane | 67 | 3.743 | 3.740 | (0.530) | 93353 | 10.7200 | 12.3 |
| 4 Dichlorodifluoromethane | 85 | 3.772 | 3.775 | (0.534) | 1105464 | 10.8700 | 12.0 |
| 5 Chloromethane | 50 | 3.894 | 3.894 | (0.552) | 415041 | 10.7500 | 12.4 |
| 6 Dichlorotetrafluoroethane | 85 | 3.901 | 3.904 | (0.553) | 1229044 | 10.0200 | 11.1 |
| 7 Vinyl chloride | 62 | 3.994 | 3.997 | (0.566) | 449519 | 10.7800 | 12.5 |
| 8 1,3-Butadiene | 54 | 4.048 | 4.051 | (0.574) | 324908 | 10.7400 | 12.4 |
| 9 Bromomethane | 94 | 4.219 | 4.222 | (0.598) | 455240 | 10.7600 | 12.4 |
| 10 Chloroethane | 64 | 4.290 | 4.296 | (0.608) | 237847 | 10.7500 | 12.2 |
| 11 Ethanol | 45 | 4.389 | 4.408 | (0.622) | 805158 | 64.6300 | 68.3 |
| 12 Vinyl Bromide | 106 | 4.438 | 4.444 | (0.629) | 461489 | 10.7200 | 12.2 |
| 13 Isopentane | 43 | 4.463 | 4.466 | (0.632) | 411270 | 11.0300 | 10.1 |
| 14 Freon 123 | 83 | 4.528 | 4.527 | (0.641) | 1068365 | 10.6700 | 12.0 |
| 15 Trichlorofluoromethane | 101 | 4.547 | 4.550 | (0.644) | 1096246 | 10.8600 | 12.1 |
| 16 Acrolein | 56 | 4.582 | 4.585 | (0.649) | 483942 | 30.4900 | 30.9 |
| 17 Acetone | 43 | 4.618 | 4.624 | (0.654) | 2499001 | 52.9600 | 59.5 |
| 18 Isopropyl Alcohol | 45 | 4.692 | 4.720 | (0.665) | 3416751 | 59.5700 | 64.5 |
| 19 1,1-Dichloroethene | 61 | 4.852 | 4.855 | (0.688) | 675238 | 10.8000 | 12.3 |
| 20 Acrylonitrile | 53 | 4.891 | 4.900 | (0.693) | 827579 | 29.8400 | 30.5 |
| 21 Freon 113 | 101 | 4.904 | 4.907 | (0.695) | 1023959 | 10.7300 | 12.0 |
| 22 Methyl Acetate | 43 | 4.923 | 4.929 | (0.698) | 768251 | 10.7500 | 10.8 |
| 23 Tert Butyl Alcohol (TBA) | 59 | 4.962 | 4.987 | (0.703) | 968966 | 10.6100 | 11.1 |
| 24 Allyl Chloride | 76 | 5.010 | 5.013 | (0.710) | 220895 | 10.6300 | 12.4 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23808.D
Report Date: 27-Aug-2021 08:53

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 5.010 | 5.013 | (0.710) | 2051473 | 53.8800 | 60.1 |
| | 26 Carbon Disulfide | 76 | 5.145 | 5.148 | (0.729) | 1404107 | 10.8700 | 12.3 |
| | 27 trans-1,2-dichloroethene | 96 | 5.367 | 5.373 | (0.760) | 523615 | 10.8100 | 12.4 |
| | 28 Methyl Tert Butyl Ether | 73 | 5.373 | 5.373 | (0.761) | 1318031 | 10.8000 | 12.3 |
| | 29 Vinyl Acetate | 43 | 5.483 | 5.489 | (0.777) | 900728 | 12.9500 | 13.1 |
| | 30 1,1-Dichloroethane | 63 | 5.537 | 5.547 | (0.785) | 805519 | 10.6800 | 12.1 |
| | 31 Methyl Ethyl Ketone | 72 | 5.698 | 5.707 | (0.807) | 254184 | 10.7700 | 12.1 |
| | 32 n-Hexane | 57 | 5.720 | 5.723 | (0.811) | 744793 | 10.6100 | 10.8 |
| | 33 Di-isopropyl Ether | 45 | 5.727 | 5.730 | (0.811) | 1240837 | 10.5700 | 12.0 |
| | 34 Ethyl Acetate | 43 | 5.894 | 5.900 | (0.835) | 809703 | 10.6200 | 12.0(M) |
| | 35 cis-1,2-Dichloroethene | 96 | 5.910 | 5.920 | (0.837) | 539797 | 10.7700 | 12.3(M) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 6.010 | 6.016 | (0.851) | 1426790 | 10.7500 | 12.4 |
| | 37 Chloroform | 83 | 6.135 | 6.145 | (0.869) | 983652 | 10.5600 | 12.1 |
| | 38 Tetrahydrofuran | 42 | 6.238 | 6.238 | (0.884) | 421700 | 10.6900 | 12.2 |
| | 39 1,1,1-Trichloroethane | 97 | 6.524 | 6.534 | (0.924) | 962200 | 10.7000 | 12.2 |
| | 40 1,2-Dichloroethane | 62 | 6.614 | 6.624 | (0.937) | 525327 | 10.8000 | 12.5 |
| | 41 Benzene | 78 | 6.810 | 6.820 | (0.965) | 1595322 | 10.7300 | 12.1 |
| | 42 Carbon tetrachloride | 117 | 6.830 | 6.839 | (0.968) | 951445 | 10.8500 | 12.8 |
| | 43 Cyclohexane | 56 | 6.859 | 6.865 | (0.972) | 710264 | 10.6900 | 11.9(M) |
| | 44 Tert Amyl Methyl Ether | 73 | 6.987 | 6.993 | (0.990) | 1463177 | 10.7500 | 10.8 |
| * | 45 1,4-Difluorobenzene | 114 | 7.058 | 7.067 | (1.000) | 2112359 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 7.177 | 7.183 | (1.017) | 2233321 | 10.7400 | 12.0 |
| | 47 Heptane | 43 | 7.322 | 7.328 | (1.037) | 695574 | 10.7100 | 12.1 |
| | 48 Trichloroethene | 130 | 7.450 | 7.460 | (1.056) | 766036 | 10.7000 | 12.4 |
| | 49 Methyl methacrylate | 69 | 7.495 | 7.505 | (1.062) | 538501 | 10.7300 | 11.6 |
| | 50 1,2-Dichloropropane | 63 | 7.505 | 7.511 | (1.063) | 527117 | 10.7700 | 12.3 |
| | 51 1,4-Dioxane | 88 | 7.576 | 7.585 | (1.073) | 944389 | 26.8100 | 31.5 |
| | 52 Bromodichloromethane | 83 | 7.688 | 7.698 | (1.089) | 1000000 | 10.7400 | 12.4 |
| | 53 Methylcyclohexane | 98 | 8.007 | 8.013 | (1.134) | 479910 | 10.7500 | 12.6 |
| | 54 Methyl Isobutyl Ketone | 43 | 8.100 | 8.103 | (1.148) | 904175 | 10.7800 | 10.9 |
| | 55 cis-1,3-Dichloropropene | 75 | 8.174 | 8.183 | (1.158) | 853071 | 10.7100 | 12.5 |
| | 56 trans-1,3-Dichloropropene | 75 | 8.675 | 8.685 | (1.229) | 718416 | 10.9500 | 11.1 |
| | 57 Toluene | 91 | 8.801 | 8.810 | (1.247) | 2005289 | 10.8500 | 12.6 |
| | 58 1,1,2-Trichloroethane | 97 | 8.933 | 8.945 | (1.266) | 639528 | 10.7500 | 12.6 |
| | 59 Methyl Butyl Ketone | 43 | 9.058 | 9.058 | (0.865) | 801007 | 10.7500 | 10.6 |
| | 60 n-Octane | 43 | 9.260 | 9.267 | (0.885) | 940930 | 10.7500 | 10.8 |
| | 61 Dibromochloromethane | 129 | 9.543 | 9.556 | (0.912) | 1093656 | 10.7600 | 12.4 |
| | 62 Tetrachloroethene | 166 | 9.643 | 9.649 | (0.921) | 999416 | 10.6500 | 11.9 |
| | 63 1,2-Dibromoethane | 107 | 9.775 | 9.781 | (0.934) | 935391 | 10.5600 | 12.8 |
| * | 64 Chlorobenzene - d5 | 117 | 10.469 | 10.479 | (1.000) | 1654814 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 10.521 | 10.530 | (1.005) | 1535121 | 10.7200 | 12.2 |
| | 66 Ethyl Benzene | 91 | 10.756 | 10.765 | (1.027) | 2478309 | 10.8400 | 10.9 |
| | 67 m&p-Xylene | 91 | 10.958 | 10.964 | (1.047) | 3780065 | 21.6100 | 25.2(M) |
| | 68 n-Nonane | 43 | 11.312 | 11.318 | (1.080) | 961218 | 10.7700 | 10.8 |
| | 69 Styrene | 104 | 11.408 | 11.418 | (1.090) | 1523479 | 10.8500 | 10.8 |
| | 70 o-Xylene | 91 | 11.447 | 11.456 | (1.093) | 1932771 | 10.7700 | 12.4 |
| | 71 Bromoform | 173 | 11.534 | 11.540 | (1.102) | 1032491 | 10.8400 | 12.6 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 11.891 | 11.903 | (1.136) | 1370201 | 10.8100 | 10.9 |
| | 73 Isopropylbenzene | 105 | 12.058 | 12.064 | (1.152) | 2895423 | 10.6700 | 10.8 |
| | 74 N-Propylbenzene | 91 | 12.682 | 12.688 | (1.211) | 3345577 | 10.8100 | 10.8(M) |
| | 75 2-Chlorotoluene | 91 | 12.727 | 12.736 | (1.216) | 2023739 | 10.8700 | 12.4(M) |
| | 76 4-Ethyltoluene | 105 | 12.865 | 12.874 | (1.229) | 2718591 | 10.7400 | 10.8 |
| | 77 1,3,5-Trimethylbenzene | 105 | 12.936 | 12.945 | (1.236) | 2423370 | 10.7500 | 12.5 |
| | 78 n-Decane | 57 | 13.257 | 13.267 | (1.878) | 1328669 | 10.8700 | 11.0 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23808.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.373 | 13.382 | (1.277) | 2449093 | 10.8400 | 12.7 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.411 | 13.424 | (1.281) | 2397844 | 10.8100 | 10.9 |
| 81 Sec- Butylbenzene | 105 | 13.672 | 13.681 | (1.306) | 3593068 | 10.8500 | 11.0 |
| 82 1,3-Dichlorobenzene | 146 | 13.710 | 13.720 | (1.310) | 1382636 | 10.8500 | 10.8 |
| 83 Benzyl Chloride | 91 | 13.778 | 13.787 | (1.316) | 1323111 | 10.9400 | 10.5 |
| 84 1,4-Dichlorobenzene | 146 | 13.842 | 13.852 | (1.322) | 1241921 | 10.8500 | 10.7 |
| 85 p-Isopropyltoluene | 119 | 13.871 | 13.881 | (1.325) | 3289572 | 10.8900 | 11.0 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.897 | 13.906 | (1.327) | 2499273 | 10.8500 | 10.9 |
| 87 1,2-Dichlorobenzene | 146 | 14.161 | 14.170 | (1.353) | 1419825 | 10.8300 | 10.9 |
| 88 N-Butylbenzene | 91 | 14.334 | 14.340 | (1.369) | 2514501 | 10.8100 | 10.8 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.881 | 14.890 | (1.421) | 724859 | 10.9100 | 10.4 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.971 | 15.974 | (1.525) | 1173889 | 23.4900 | 23.5 |
| 91 Naphthalene | 128 | 16.154 | 16.157 | (1.543) | 1665077 | 12.2500 | 12.3 |
| 92 Hexachlorobutadiene | 225 | 16.279 | 16.282 | (1.555) | 1082033 | 12.2500 | 12.3 |

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23808.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 23808.D
Lab Smp Id: CAL5
Analysis Type: VOA
Quant Type: ISTD
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

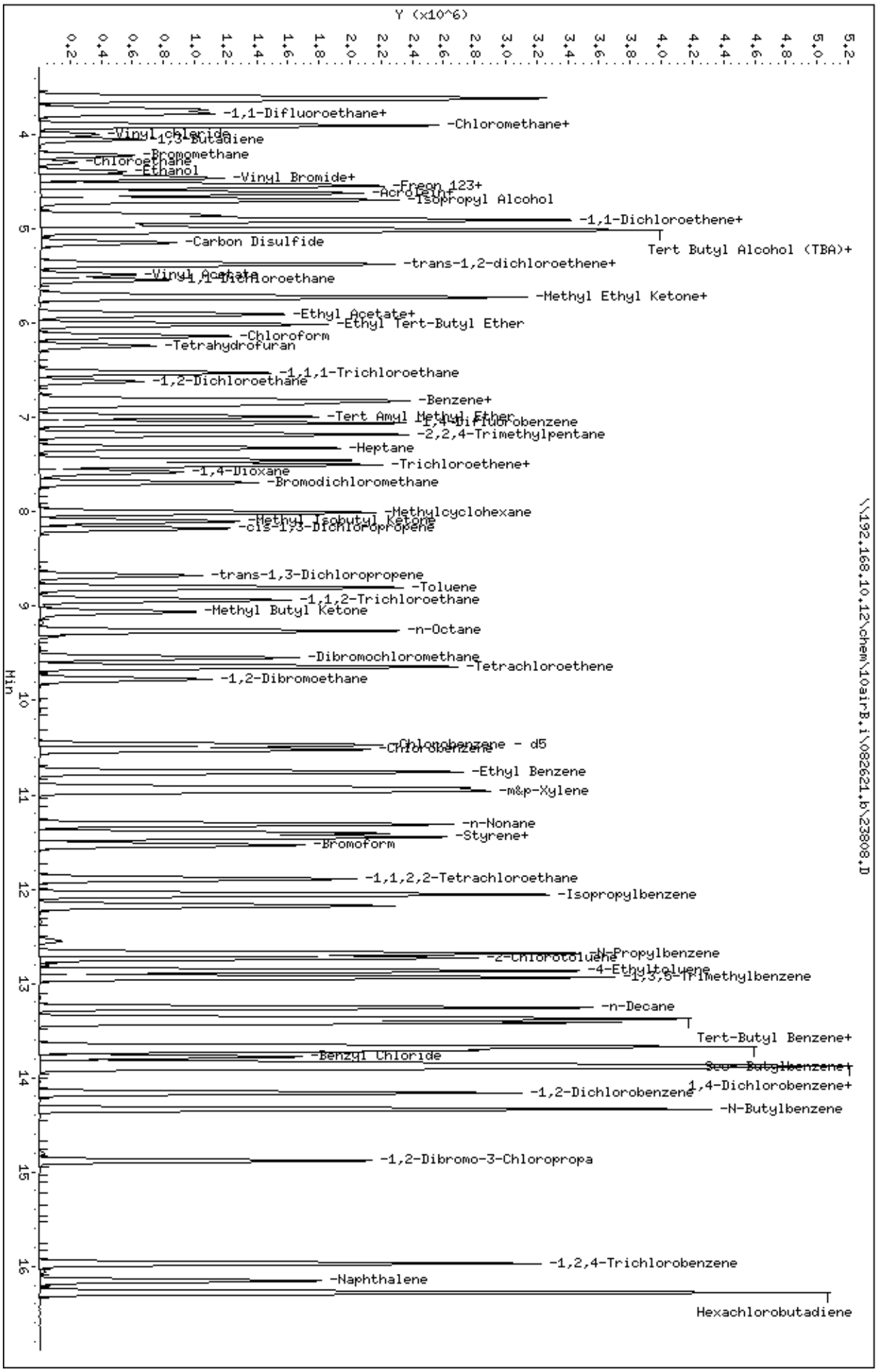
Calibration Date: 26-AUG-2021
Calibration Time: 11:33
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2112359 | 0.00 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1654814 | 0.00 |

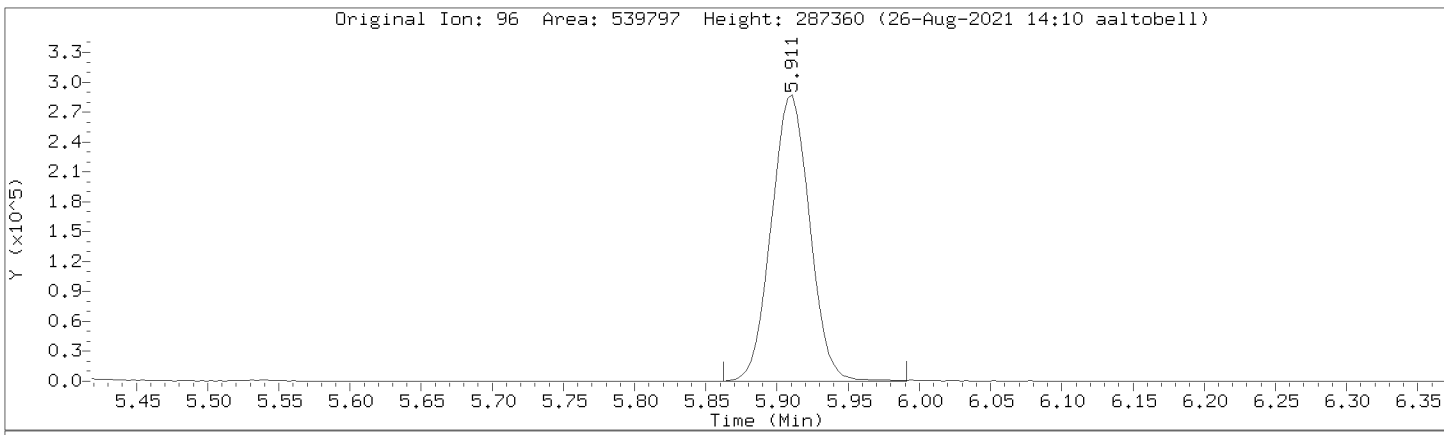
| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.06 | 0.00 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | 0.00 |

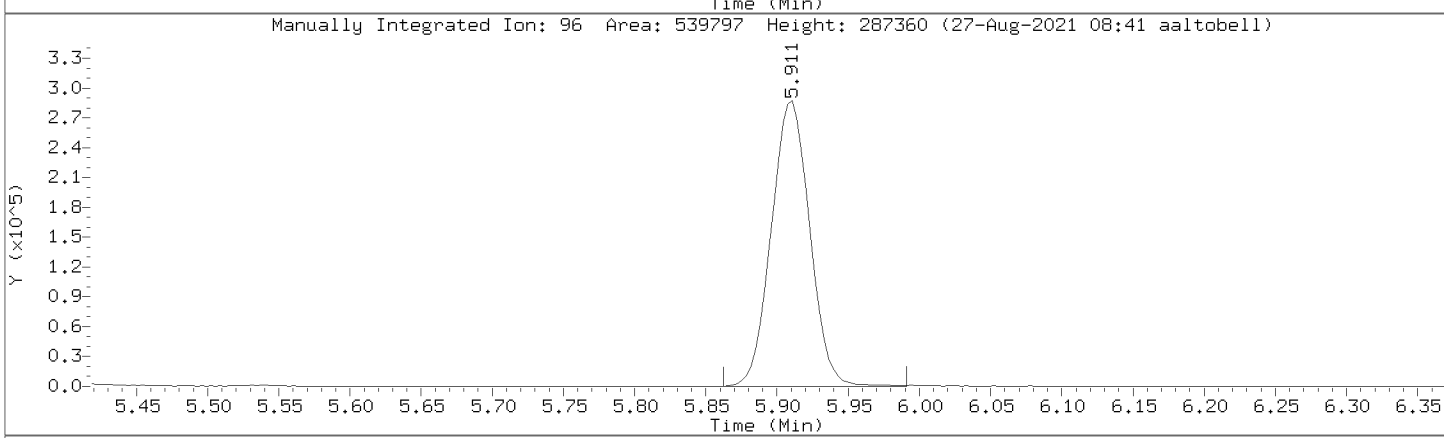
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

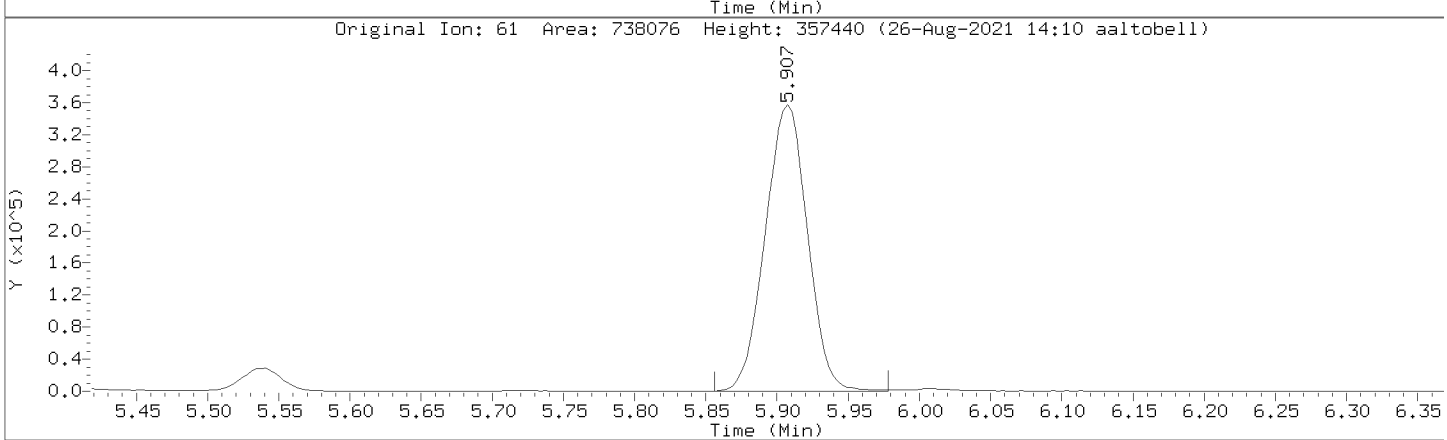

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23808.D
Date : 26-AUG-2021 11:33
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32
Y (x10^6)
Min
-1,1-Difluoroethane+
-Chloromethane+
-Vinyl chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol
-Vinyl Bromide+
-Freon 123+
-Acrolein+
-Isopropyl Alcohol
-1,1-Dichloroethene+
-Carbon Disulfide
Tert Butyl Alcohol (TBA)+
-trans-1,2-dichloroethene+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5
-Chlorobenzene
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene
-2-Chlorotoluene
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
Tert-Butyl Benzene+
-Benzyl Chloride
Sec-Butylbenzene+
1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
Hexachlorobutadiene
\\192.168.10.12\chem\10airB.i\082621.b\23808.D

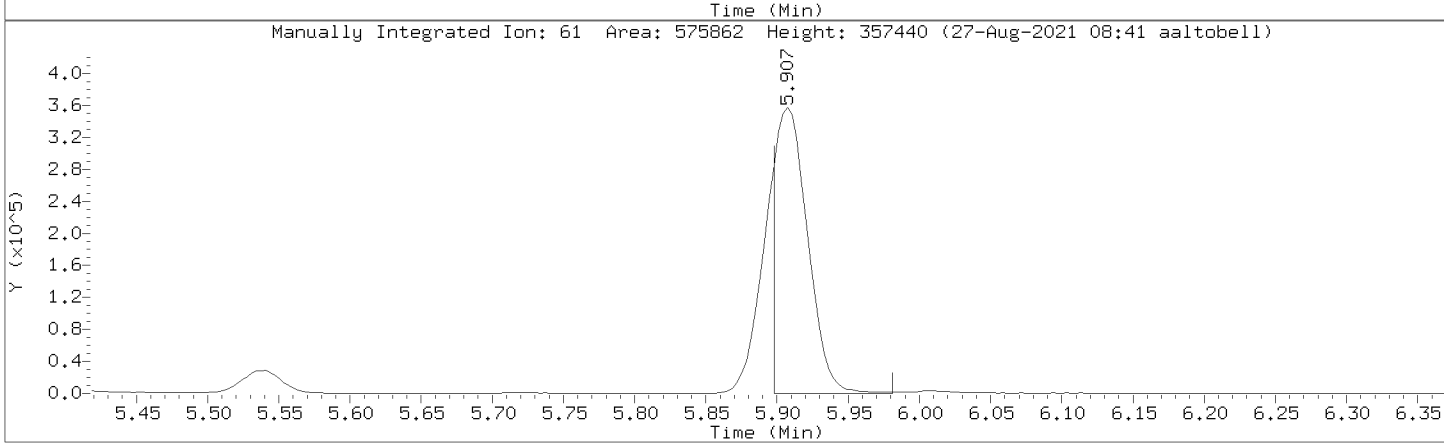
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23808.D
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



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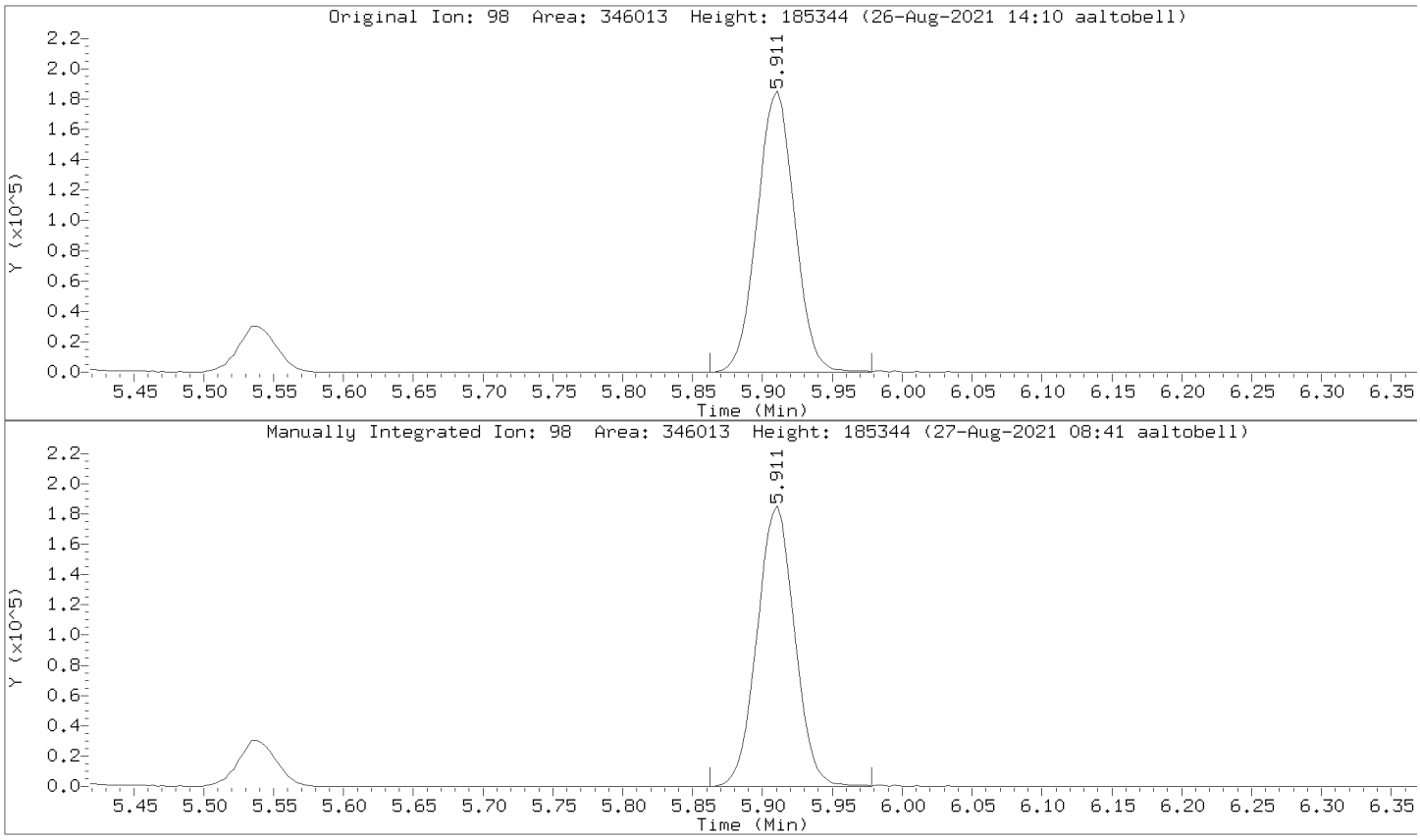
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5



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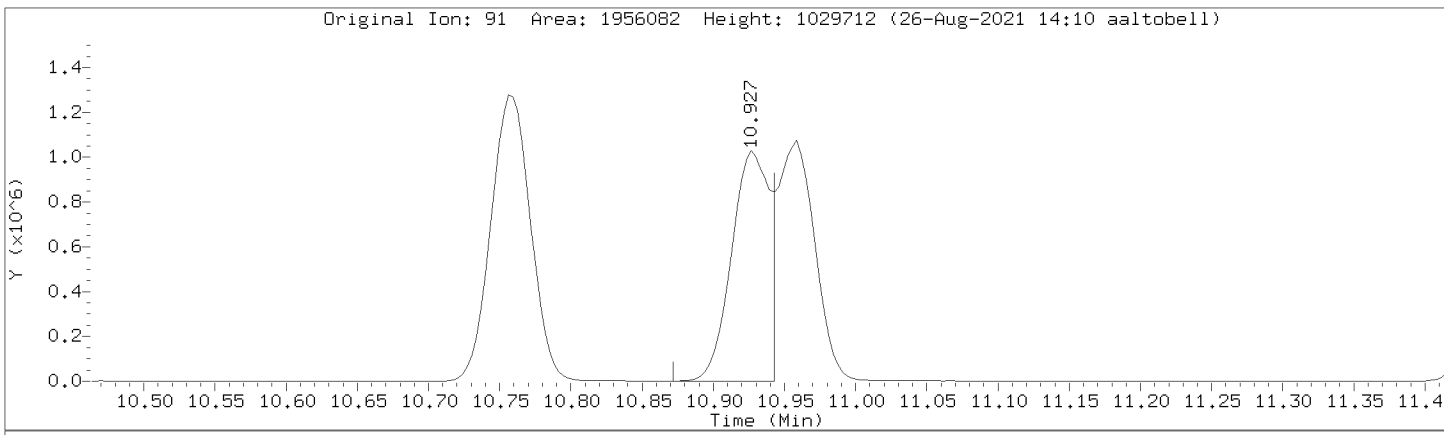
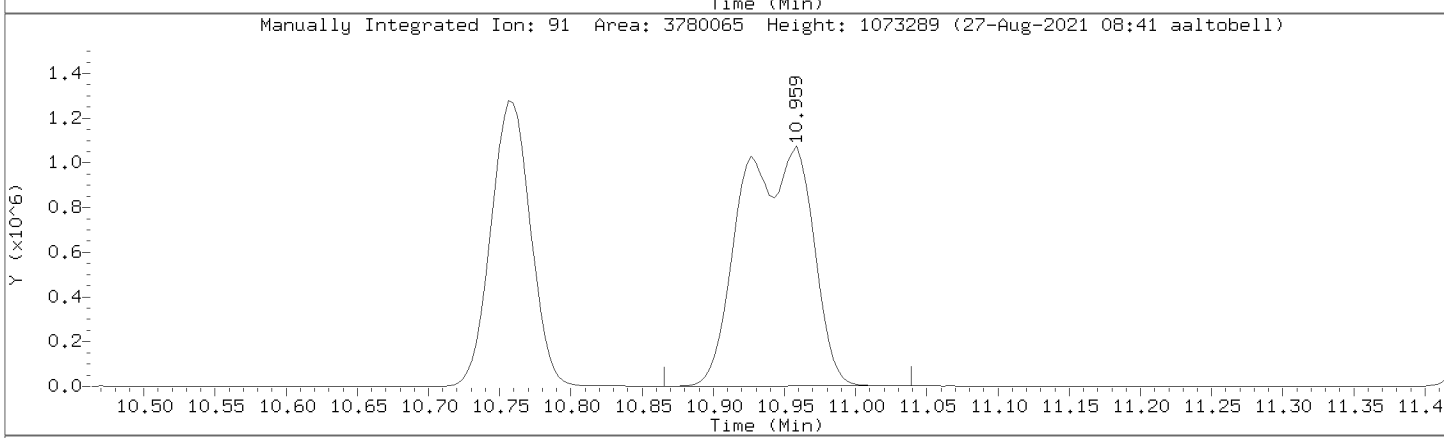
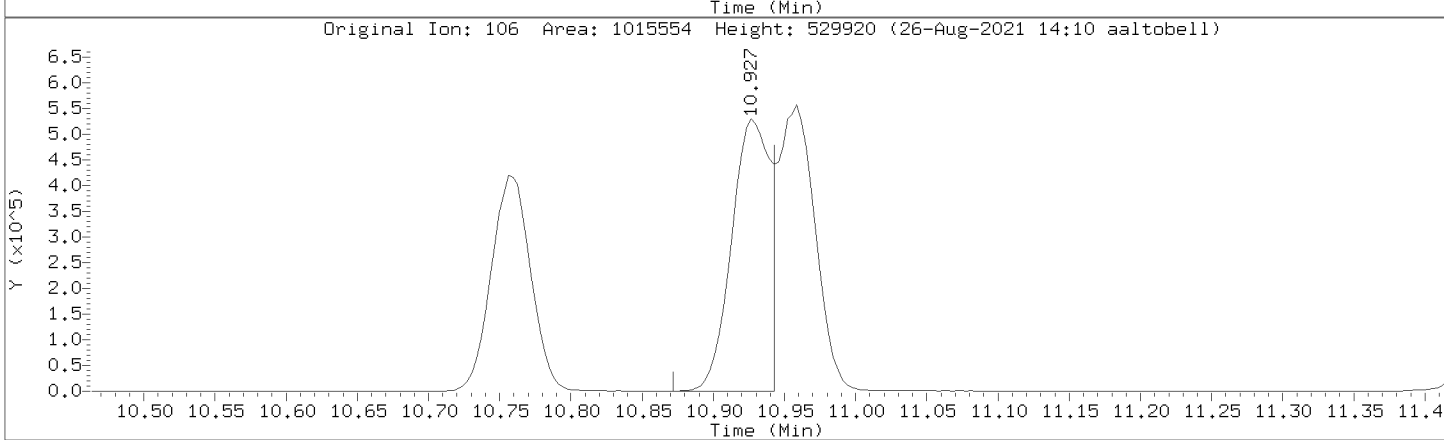
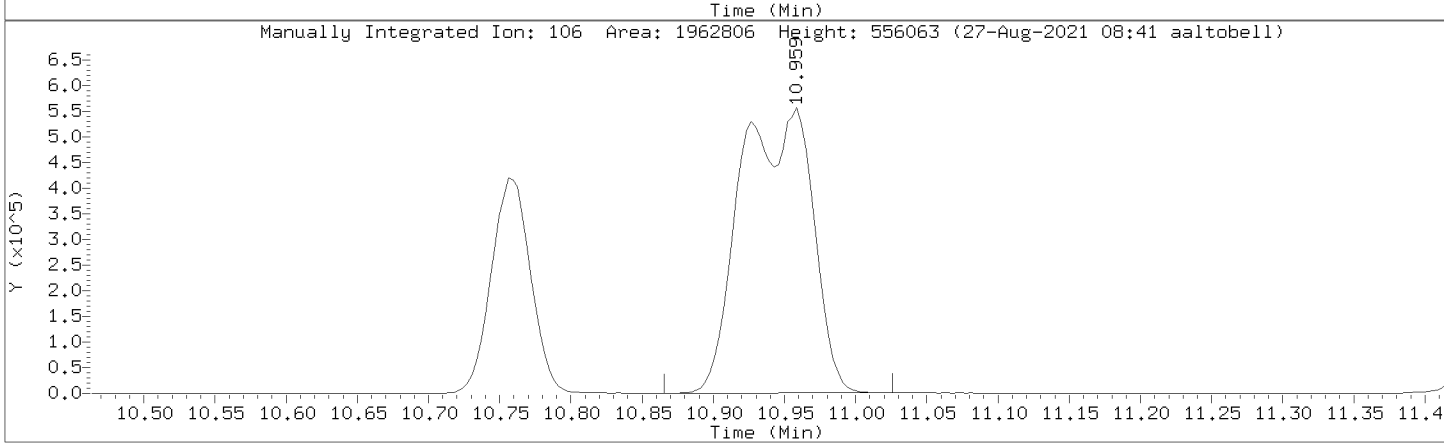
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5

Compound: m&p-Xylene
CAS Number: 7816-60-0



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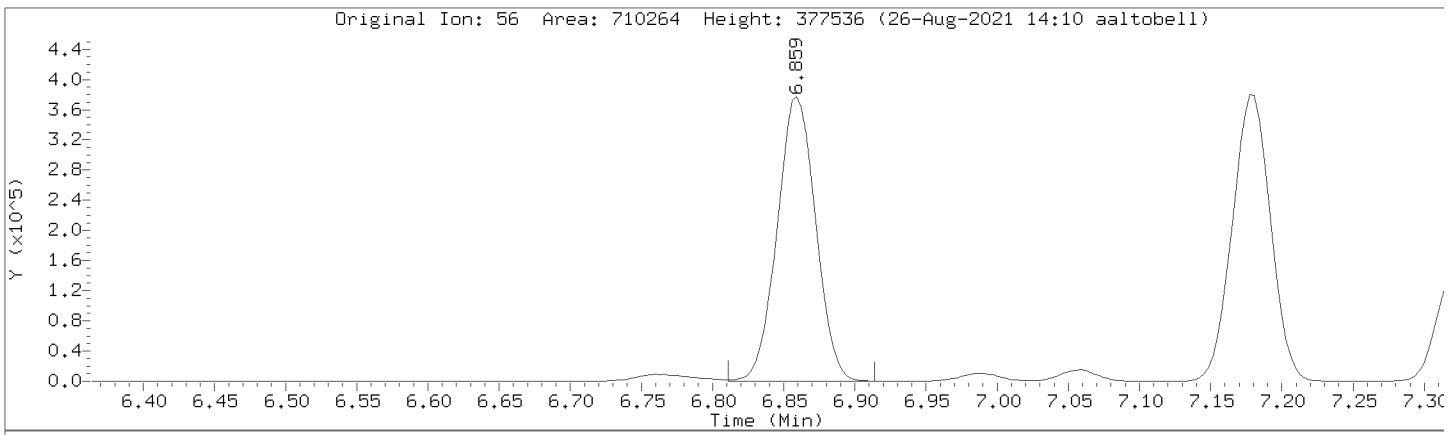
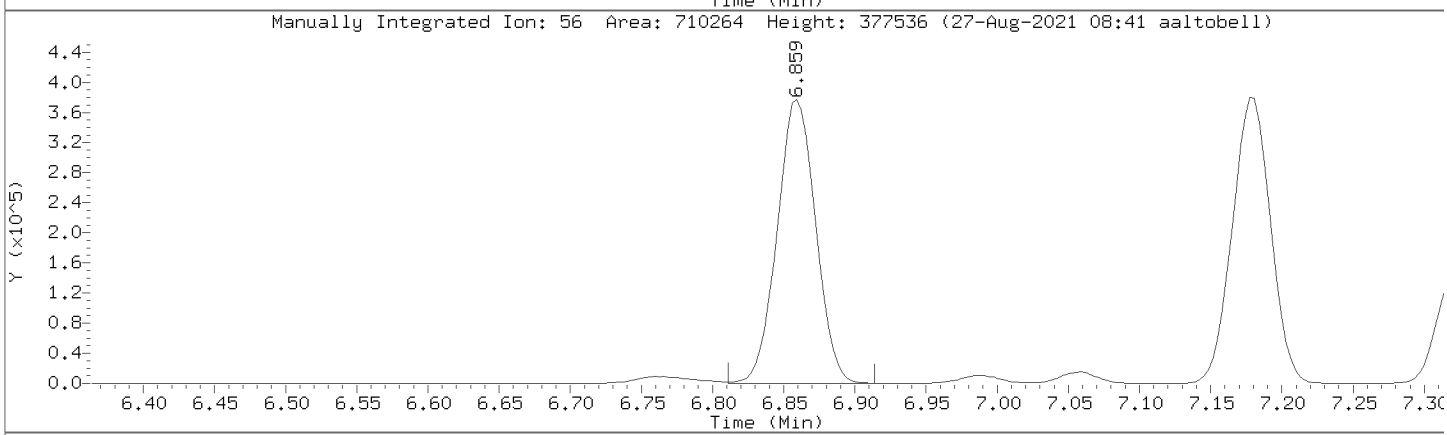
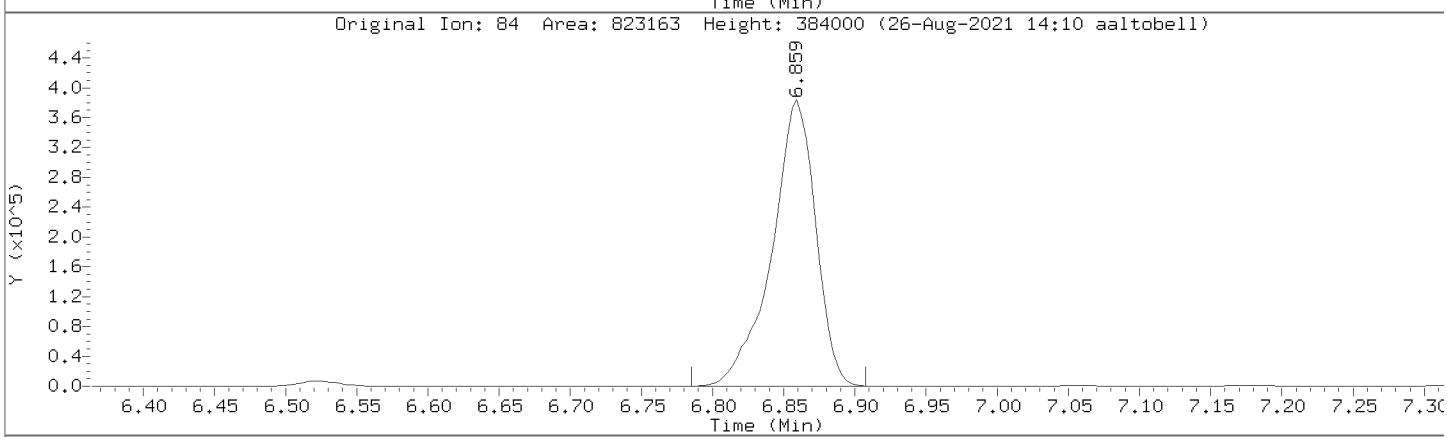
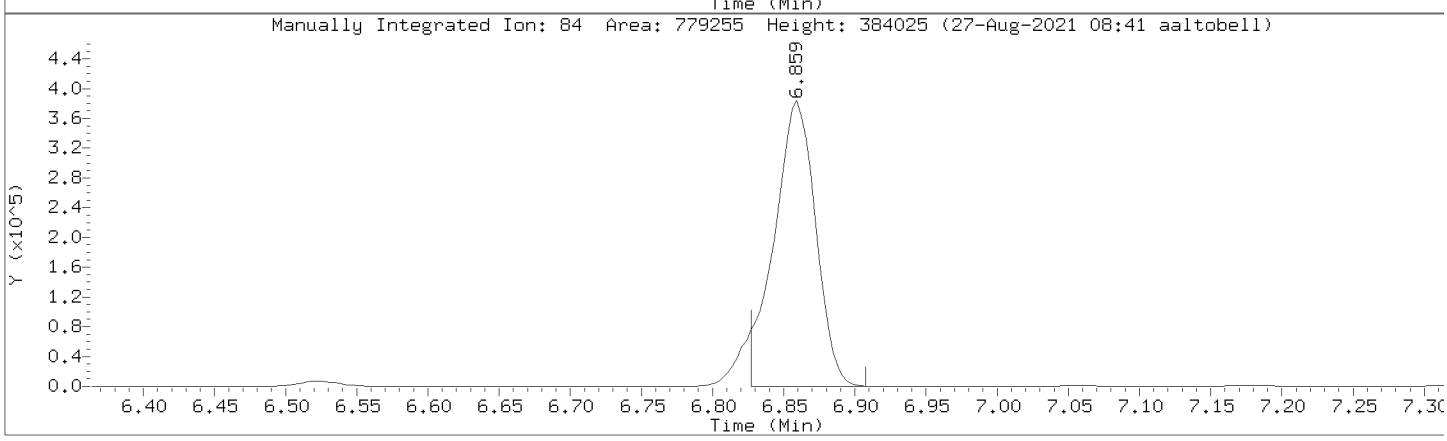
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5

Compound: Cyclohexane
CAS Number: 110-82-7



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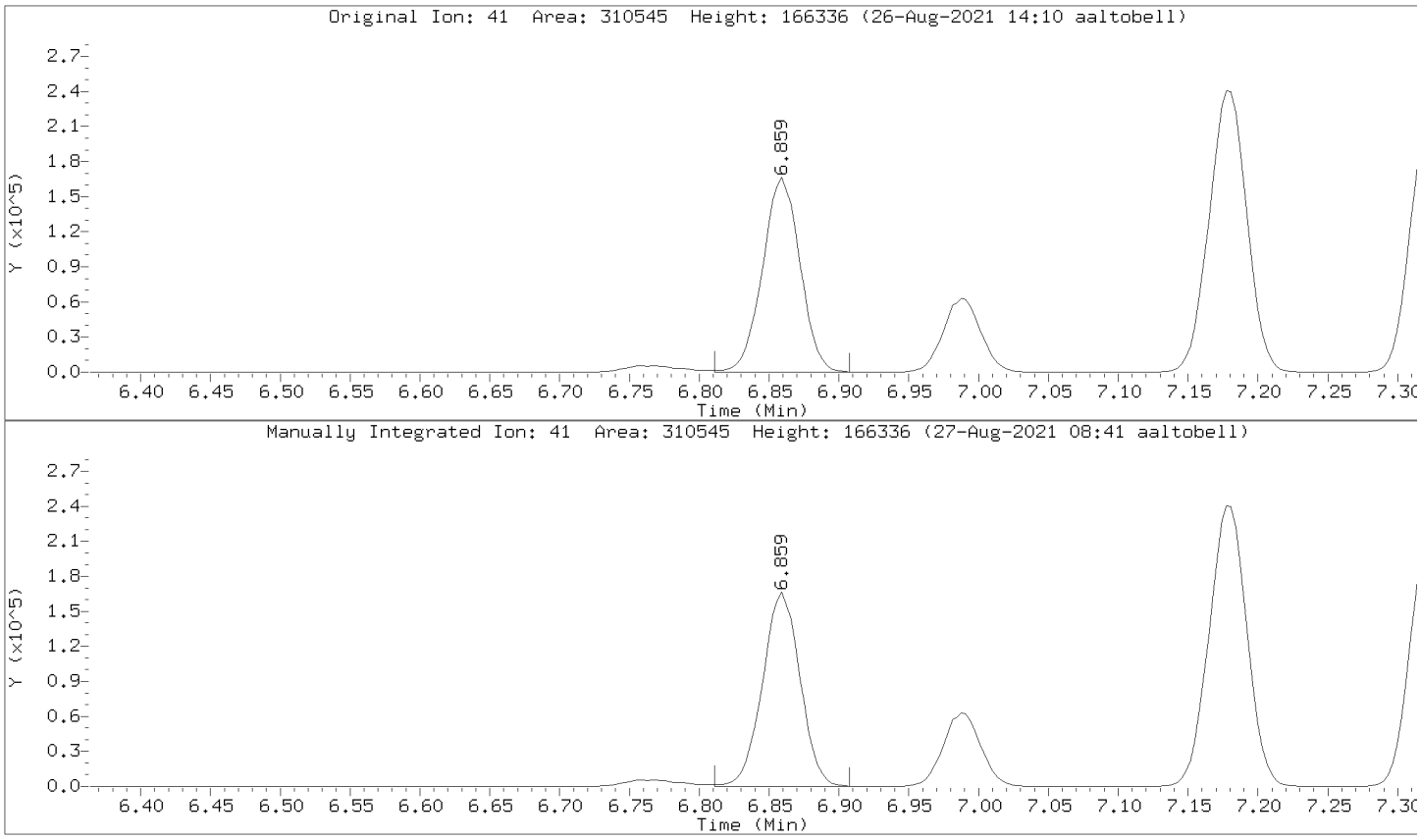
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5



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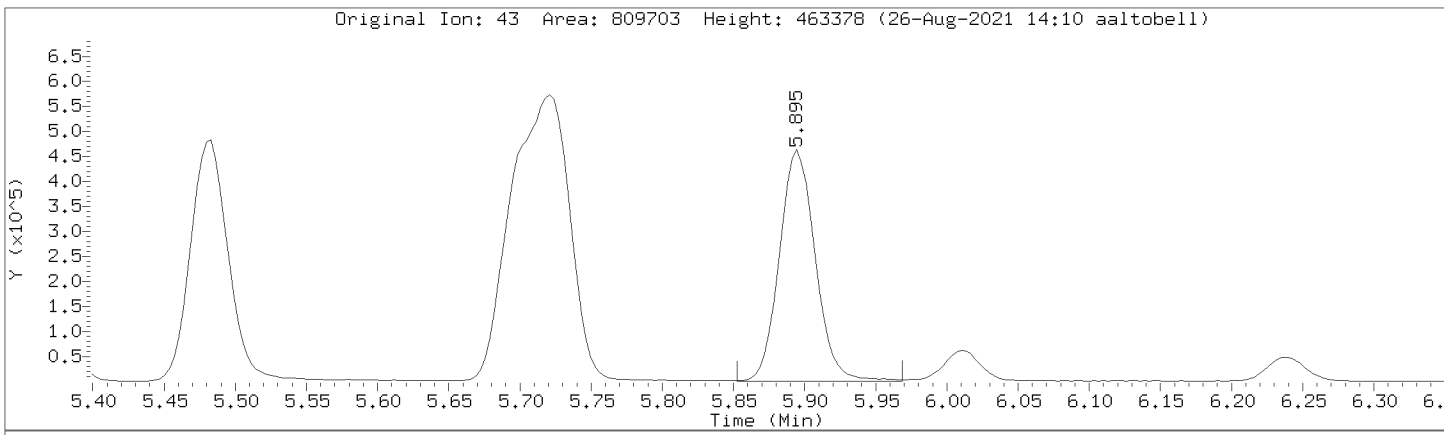
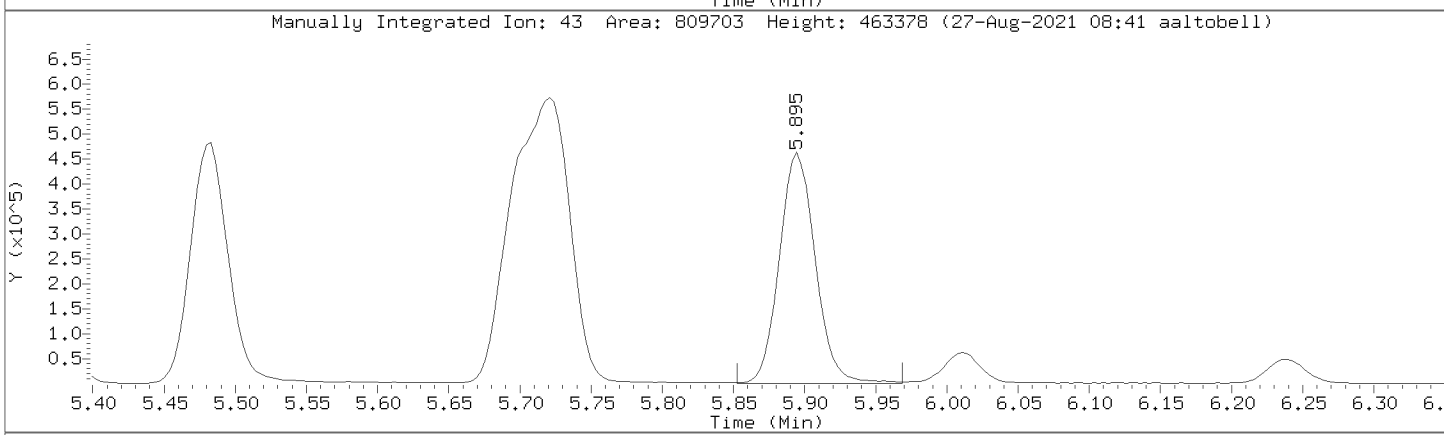
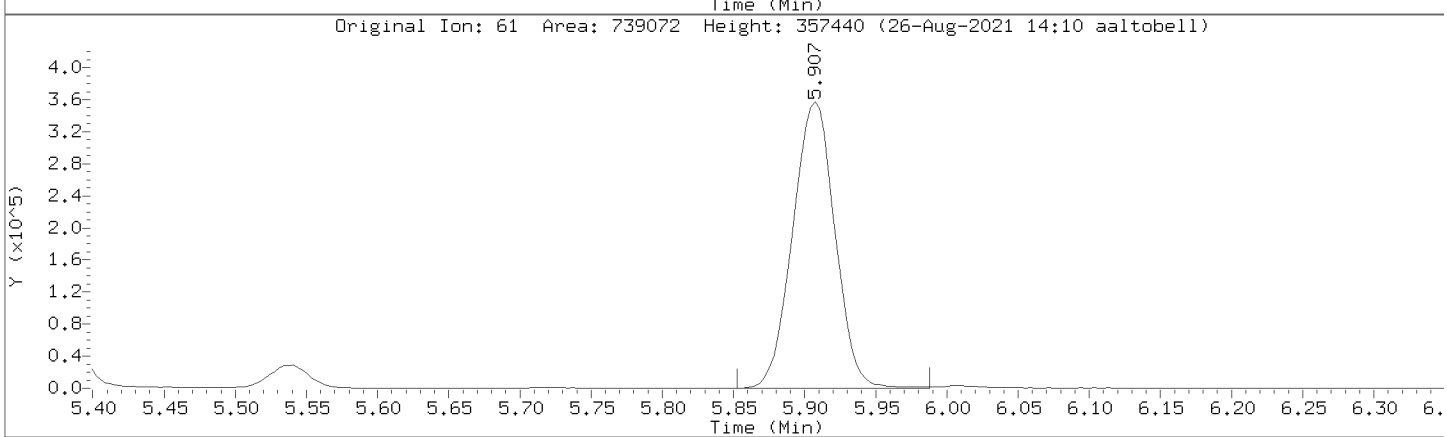
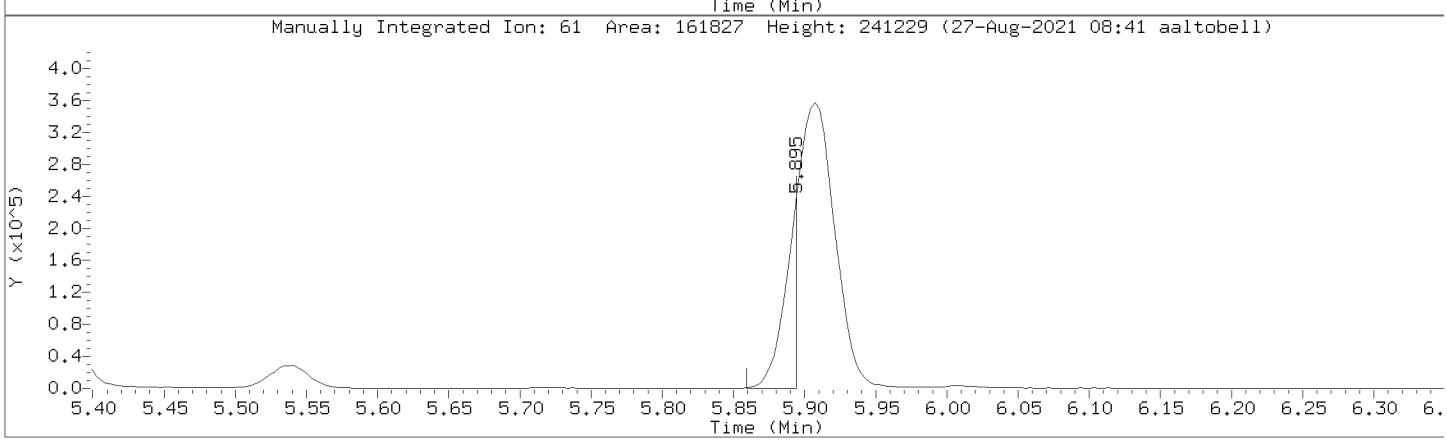
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5

Compound: Ethyl Acetate
CAS Number: 141-78-6



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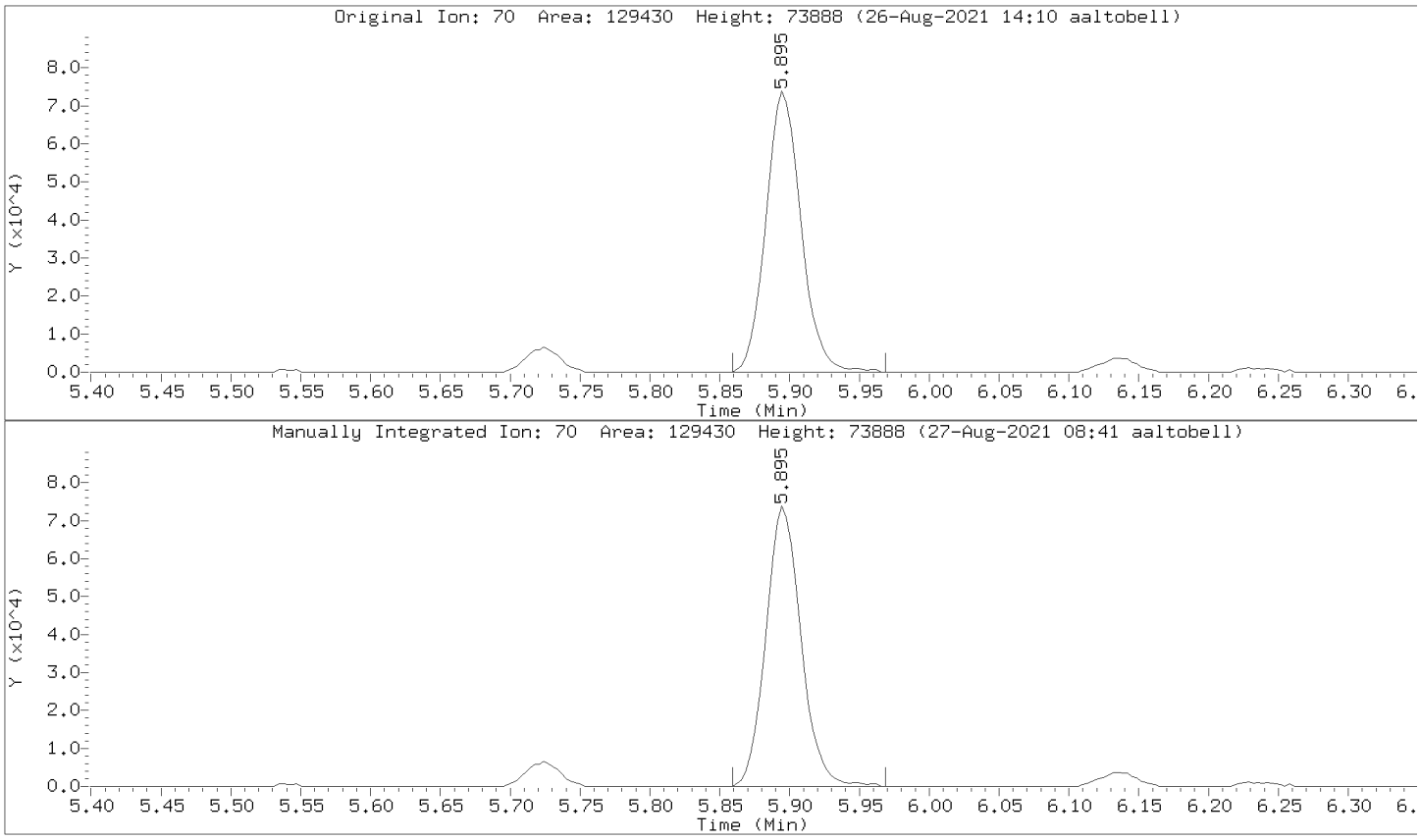
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5



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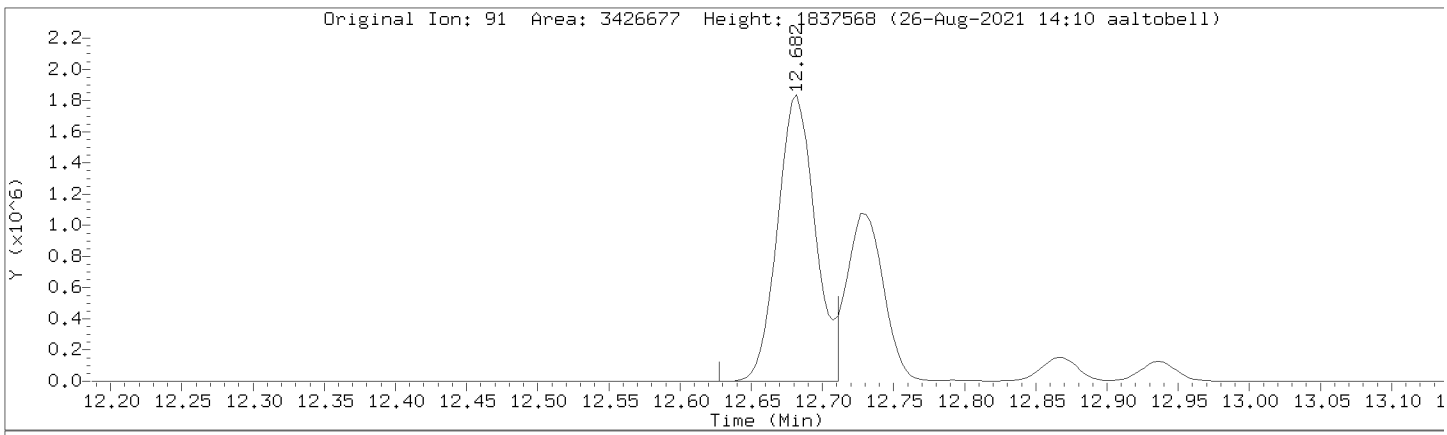
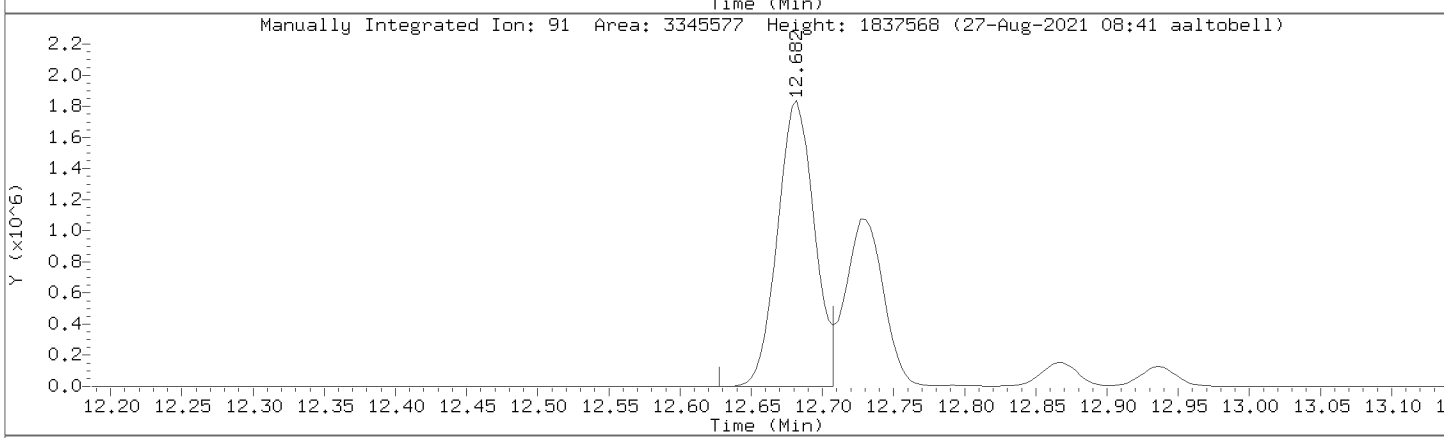
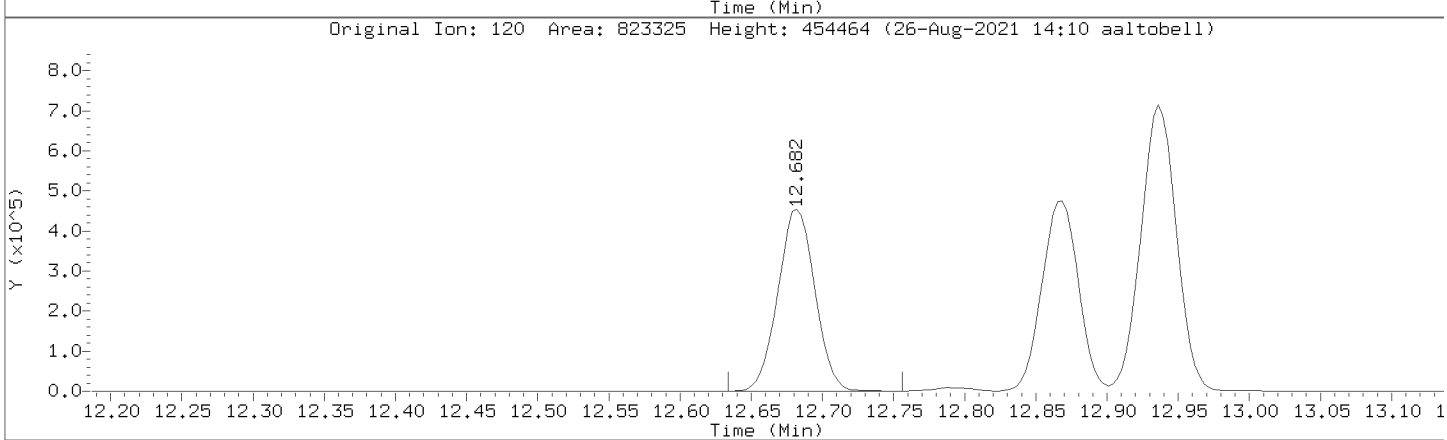
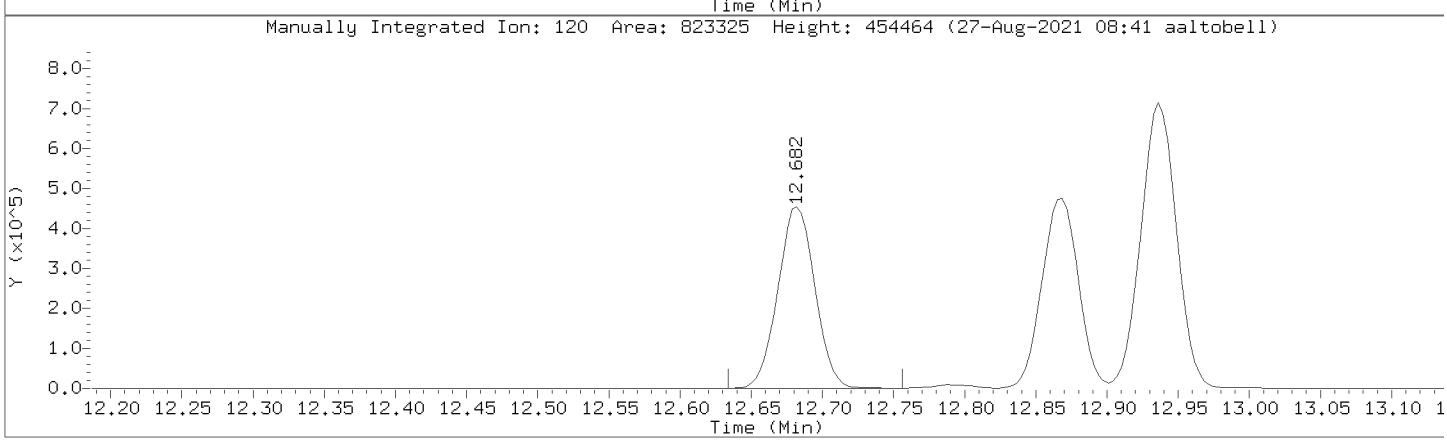
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5

Compound: N-Propylbenzene
CAS Number: 103-65-1



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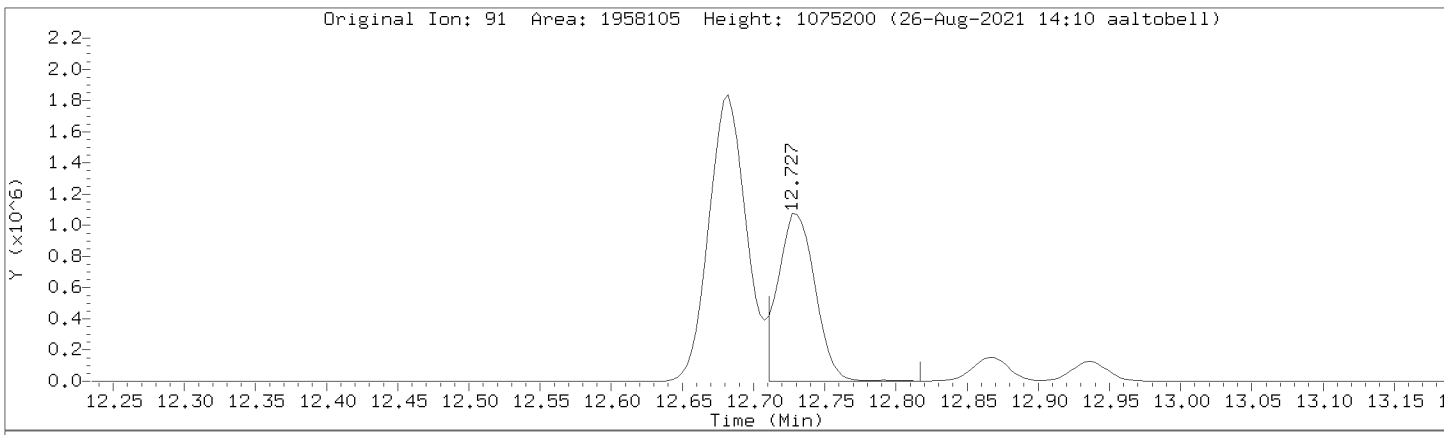
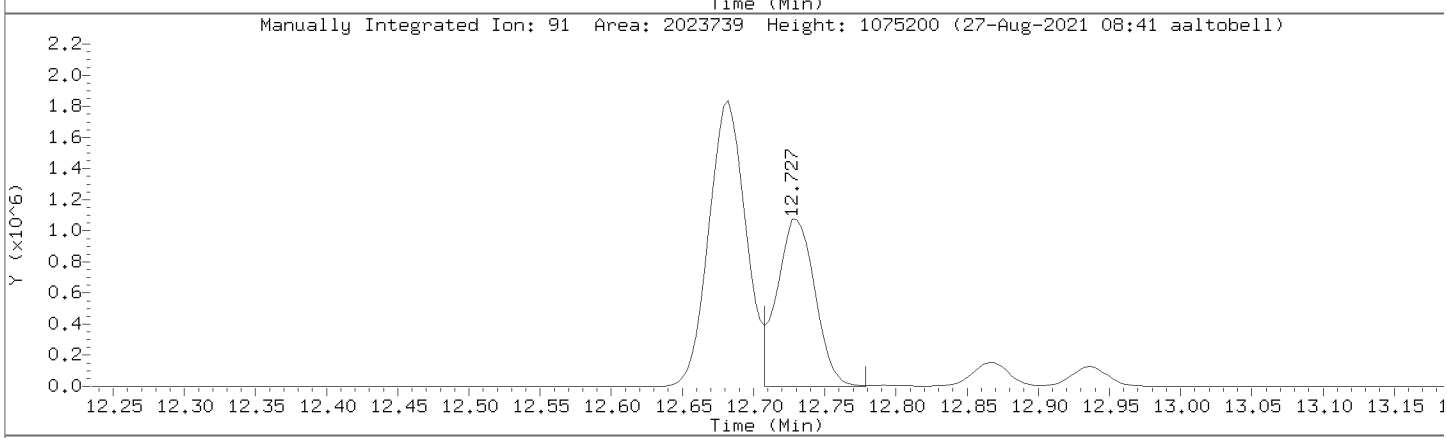
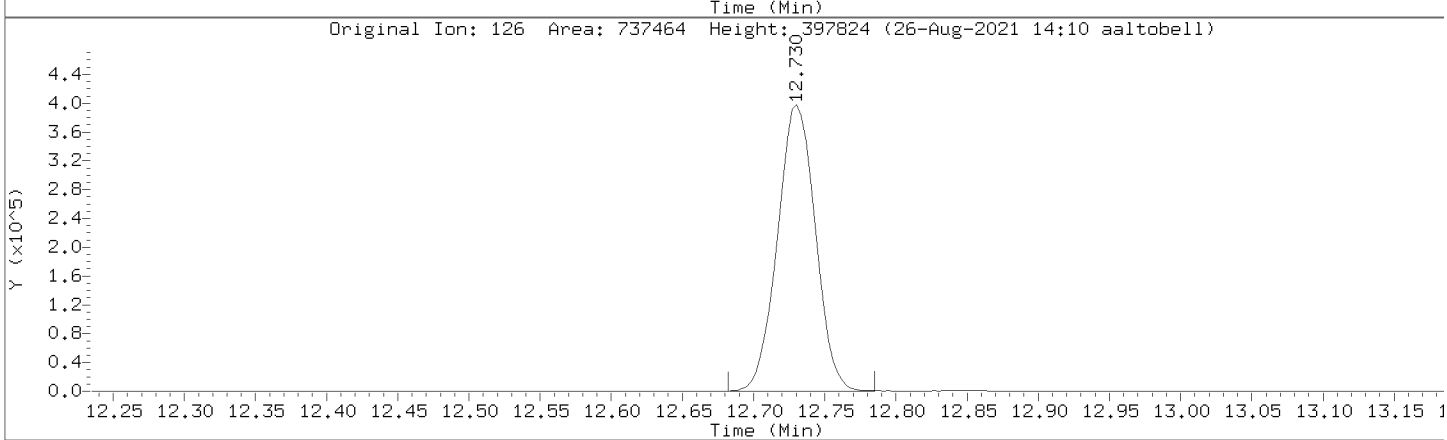
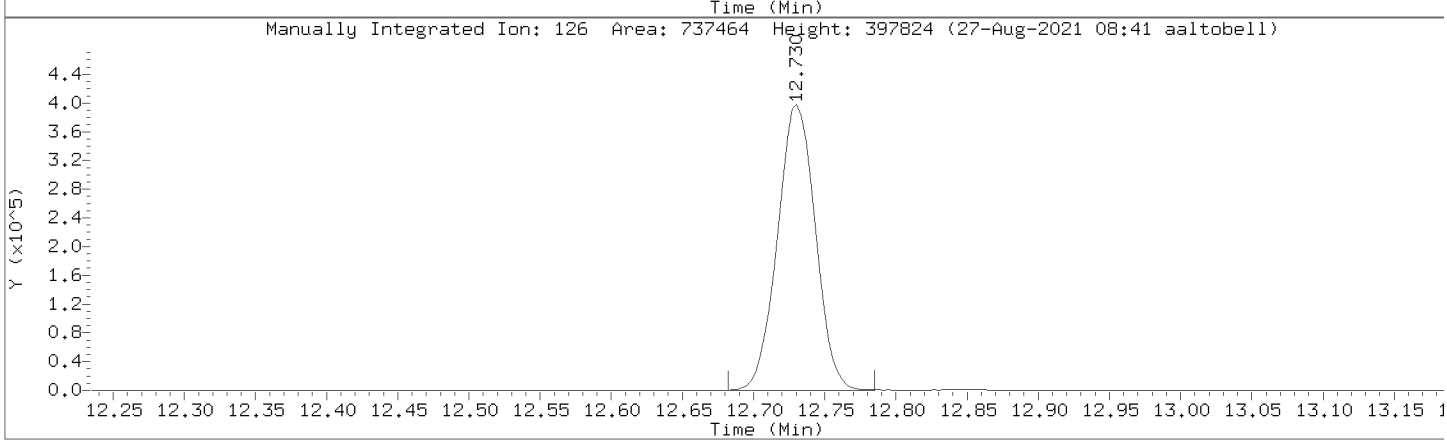
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5

Compound: 2-Chlorotoluene
CAS Number: 95-49-8



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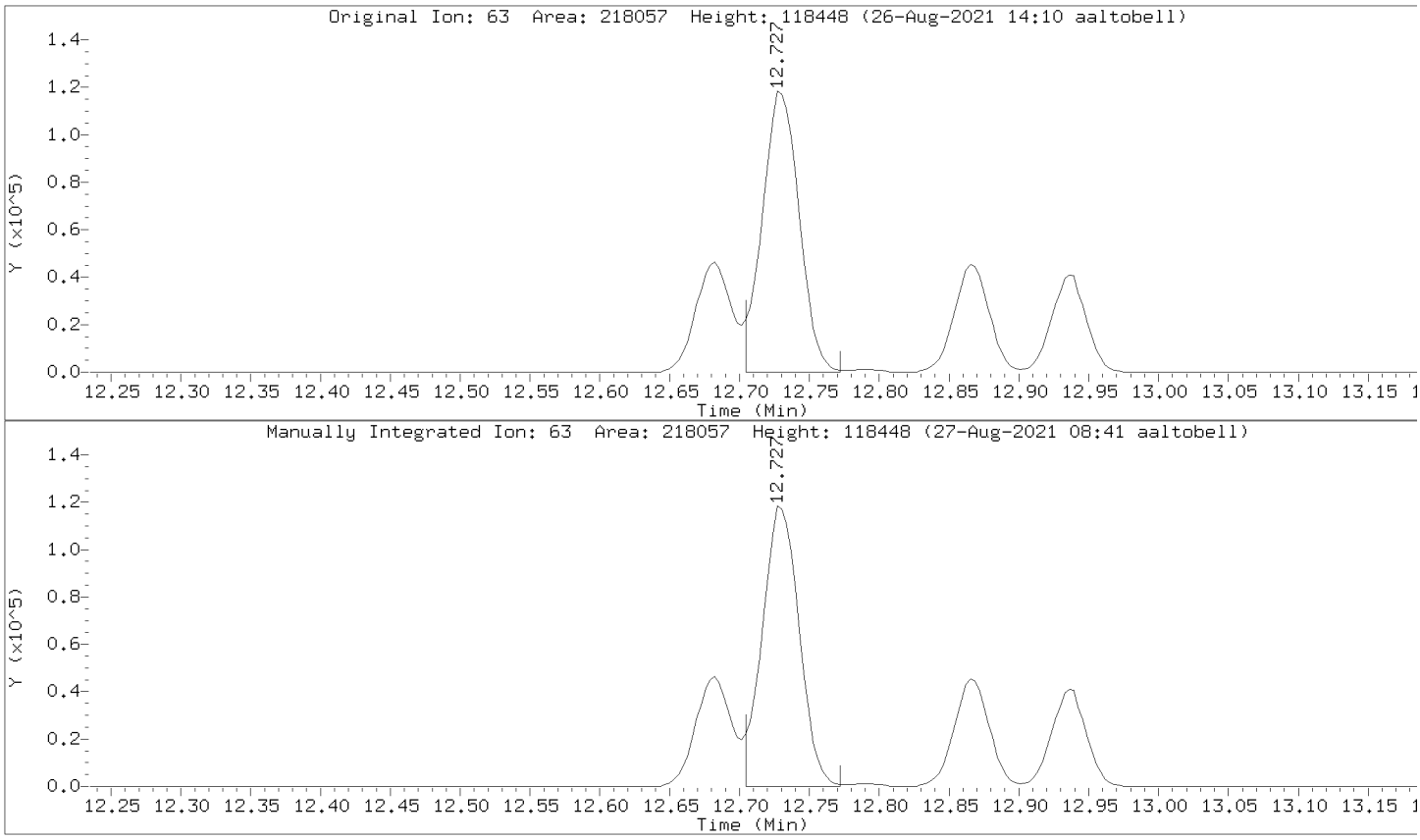
Injection Date: 26-AUG-2021 11:33
Instrument: 10airB.i
Lab Sample ID: CAL5



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23809.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23809.D
Lab Smp Id: CAL6
Inj Date : 26-AUG-2021 12:02
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 08:53 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.724 | 3.727 | (0.527) | 522602 | 21.4300 | 23.2 |
| 2 Propylene | 41 | 3.733 | 3.733 | (0.529) | 532945 | 21.5600 | 22.1 |
| 3 Chlorodifluoromethane | 67 | 3.740 | 3.740 | (0.530) | 184323 | 21.4400 | 23.3 |
| 4 Dichlorodifluoromethane | 85 | 3.775 | 3.775 | (0.535) | 2154682 | 21.7300 | 22.5 |
| 5 Chloromethane | 50 | 3.894 | 3.894 | (0.551) | 797373 | 21.4900 | 22.8 |
| 6 Dichlorotetrafluoroethane | 85 | 3.901 | 3.904 | (0.552) | 2341648 | 20.0400 | 20.3 |
| 7 Vinyl chloride | 62 | 3.994 | 3.997 | (0.566) | 875755 | 21.5600 | 23.4 |
| 8 1,3-Butadiene | 54 | 4.048 | 4.051 | (0.573) | 628980 | 21.4800 | 23.1 |
| 9 Bromomethane | 94 | 4.219 | 4.222 | (0.597) | 897315 | 21.5200 | 23.5 |
| 10 Chloroethane | 64 | 4.290 | 4.296 | (0.608) | 467694 | 21.5100 | 23.1 |
| 11 Ethanol | 45 | 4.399 | 4.408 | (0.623) | 1597650 | 129.270 | 130 |
| 12 Vinyl Bromide | 106 | 4.437 | 4.444 | (0.628) | 891954 | 21.4400 | 22.7 |
| 13 Isopentane | 43 | 4.463 | 4.466 | (0.632) | 810653 | 22.0500 | 19.1 |
| 14 Freon 123 | 83 | 4.524 | 4.527 | (0.641) | 2068300 | 21.3500 | 22.3 |
| 15 Trichlorofluoromethane | 101 | 4.547 | 4.550 | (0.644) | 2133884 | 21.7200 | 22.7 |
| 16 Acrolein | 56 | 4.585 | 4.585 | (0.649) | 946938 | 60.9700 | 60.6 |
| 17 Acetone | 43 | 4.621 | 4.624 | (0.654) | 4812014 | 105.920 | 110 |
| 18 Isopropyl Alcohol | 45 | 4.704 | 4.720 | (0.666) | 6575793 | 119.150 | 119 |
| 19 1,1-Dichloroethene | 61 | 4.852 | 4.855 | (0.687) | 1345812 | 21.6000 | 23.5 |
| 20 Acrylonitrile | 53 | 4.894 | 4.900 | (0.693) | 1586311 | 59.6800 | 59.1 |
| 21 Freon 113 | 101 | 4.904 | 4.907 | (0.694) | 1945732 | 21.4700 | 22.0 |
| 22 Methyl Acetate | 43 | 4.926 | 4.929 | (0.698) | 1331184 | 21.4900 | 21.5(QM) |
| 23 Tert Butyl Alcohol (TBA) | 59 | 4.974 | 4.987 | (0.704) | 1814010 | 21.2300 | 20.8(Q) |
| 24 Allyl Chloride | 76 | 5.010 | 5.013 | (0.710) | 420510 | 21.2700 | 22.6(Q) |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23809.D
Report Date: 27-Aug-2021 08:53

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 5.010 | 5.013 | (0.710) | 3910525 | 107.760 | 110 |
| | 26 Carbon Disulfide | 76 | 5.145 | 5.148 | (0.729) | 2765222 | 21.7300 | 23.3 |
| | 27 trans-1,2-dichloroethene | 96 | 5.370 | 5.373 | (0.760) | 1028563 | 21.6300 | 23.5 |
| | 28 Methyl Tert Butyl Ether | 73 | 5.373 | 5.373 | (0.761) | 2580177 | 21.6000 | 23.1 |
| | 29 Vinyl Acetate | 43 | 5.486 | 5.489 | (0.777) | 1872527 | 25.9100 | 25.8 |
| | 30 1,1-Dichloroethane | 63 | 5.544 | 5.547 | (0.785) | 1587091 | 21.3600 | 22.8 |
| | 31 Methyl Ethyl Ketone | 72 | 5.701 | 5.707 | (0.807) | 507936 | 21.5300 | 23.1 |
| | 32 n-Hexane | 57 | 5.720 | 5.723 | (0.810) | 1432439 | 21.2300 | 21.1 |
| | 33 Di-isopropyl Ether | 45 | 5.727 | 5.730 | (0.811) | 2373730 | 21.1500 | 22.0 |
| | 34 Ethyl Acetate | 43 | 5.897 | 5.900 | (0.835) | 1649048 | 21.2400 | 23.4(Q) |
| | 35 cis-1,2-Dichloroethene | 96 | 5.913 | 5.920 | (0.837) | 1067337 | 21.5500 | 23.4(Q) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 6.013 | 6.016 | (0.852) | 2812297 | 21.5100 | 23.5 |
| | 37 Chloroform | 83 | 6.142 | 6.145 | (0.870) | 1910550 | 21.1200 | 22.6 |
| | 38 Tetrahydrofuran | 42 | 6.238 | 6.238 | (0.883) | 859453 | 21.3900 | 23.9 |
| | 39 1,1,1-Trichloroethane | 97 | 6.527 | 6.534 | (0.924) | 1882644 | 21.4000 | 22.9 |
| | 40 1,2-Dichloroethane | 62 | 6.621 | 6.624 | (0.938) | 1044866 | 21.6000 | 23.8 |
| | 41 Benzene | 78 | 6.817 | 6.820 | (0.965) | 3080957 | 21.4500 | 22.4 |
| | 42 Carbon tetrachloride | 117 | 6.836 | 6.839 | (0.968) | 1884758 | 21.6900 | 24.3 |
| | 43 Cyclohexane | 56 | 6.862 | 6.865 | (0.972) | 1396606 | 21.3900 | 22.5 |
| | 44 Tert Amyl Methyl Ether | 73 | 6.990 | 6.993 | (0.990) | 2933563 | 21.5100 | 21.4(H) |
| * | 45 1,4-Difluorobenzene | 114 | 7.061 | 7.067 | (1.000) | 2200326 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 7.183 | 7.183 | (1.017) | 4355586 | 21.4800 | 22.5 |
| | 47 Heptane | 43 | 7.325 | 7.328 | (1.037) | 1369239 | 21.4300 | 22.9 |
| | 48 Trichloroethene | 130 | 7.457 | 7.460 | (1.056) | 1513516 | 21.4000 | 23.5 |
| | 49 Methyl methacrylate | 69 | 7.498 | 7.505 | (1.062) | 1072678 | 21.4500 | 22.1 |
| | 50 1,2-Dichloropropane | 63 | 7.508 | 7.511 | (1.063) | 1034821 | 21.5500 | 23.1 |
| | 51 1,4-Dioxane | 88 | 7.579 | 7.585 | (1.073) | 1873557 | 53.6300 | 59.9 |
| | 52 Bromodichloromethane | 83 | 7.695 | 7.698 | (1.090) | 2003895 | 21.4800 | 23.9 |
| | 53 Methylcyclohexane | 98 | 8.010 | 8.013 | (1.134) | 944295 | 21.5100 | 23.8 |
| | 54 Methyl Isobutyl Ketone | 43 | 8.100 | 8.103 | (1.147) | 1823087 | 21.5600 | 21.5 |
| | 55 cis-1,3-Dichloropropene | 75 | 8.180 | 8.183 | (1.158) | 1740618 | 21.4100 | 24.4 |
| | 56 trans-1,3-Dichloropropene | 75 | 8.678 | 8.685 | (1.229) | 1470942 | 21.9100 | 21.8 |
| | 57 Toluene | 91 | 8.804 | 8.810 | (1.247) | 3994337 | 21.7100 | 24.1 |
| | 58 1,1,2-Trichloroethane | 97 | 8.939 | 8.945 | (1.266) | 1276466 | 21.4900 | 24.2 |
| | 59 Methyl Butyl Ketone | 43 | 9.058 | 9.058 | (0.865) | 1682927 | 21.4900 | 21.6 |
| | 60 n-Octane | 43 | 9.264 | 9.267 | (0.884) | 1861162 | 21.5100 | 21.4 |
| | 61 Dibromochloromethane | 129 | 9.550 | 9.556 | (0.912) | 2186757 | 21.5200 | 23.7 |
| | 62 Tetrachloroethene | 166 | 9.643 | 9.649 | (0.920) | 1984800 | 21.2900 | 22.6 |
| | 63 1,2-Dibromoethane | 107 | 9.778 | 9.781 | (0.933) | 1891547 | 21.1200 | 24.8 |
| * | 64 Chlorobenzene - d5 | 117 | 10.476 | 10.479 | (1.000) | 1733067 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 10.524 | 10.530 | (1.005) | 3083243 | 21.4400 | 23.4 |
| | 66 Ethyl Benzene | 91 | 10.762 | 10.765 | (1.027) | 4929122 | 21.6800 | 21.6 |
| | 67 m&p-Xylene | 91 | 10.961 | 10.964 | (1.046) | 7563988 | 43.2300 | 48.2(M) |
| | 68 n-Nonane | 43 | 11.315 | 11.318 | (1.080) | 1910453 | 21.5300 | 21.5 |
| | 69 Styrene | 104 | 11.411 | 11.418 | (1.089) | 3107129 | 21.6900 | 21.7 |
| | 70 o-Xylene | 91 | 11.453 | 11.456 | (1.093) | 3844273 | 21.5500 | 23.5 |
| | 71 Bromoform | 173 | 11.537 | 11.540 | (1.101) | 2085244 | 21.6800 | 24.2 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 11.897 | 11.903 | (1.136) | 2721338 | 21.6100 | 21.5 |
| | 73 Isopropylbenzene | 105 | 12.061 | 12.064 | (1.151) | 5722192 | 21.3500 | 21.2 |
| | 74 N-Propylbenzene | 91 | 12.685 | 12.688 | (1.211) | 6639821 | 21.6100 | 21.6(M) |
| | 75 2-Chlorotoluene | 91 | 12.733 | 12.736 | (1.215) | 4050078 | 21.7500 | 23.7(M) |
| | 76 4-Ethyltoluene | 105 | 12.871 | 12.874 | (1.229) | 5460712 | 21.4800 | 21.4 |
| | 77 1,3,5-Trimethylbenzene | 105 | 12.942 | 12.945 | (1.235) | 4810151 | 21.4900 | 23.8 |
| | 78 n-Decane | 57 | 13.260 | 13.267 | (1.878) | 2614433 | 21.7300 | 21.6 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23809.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.379 | 13.382 | (1.277) | 4783208 | 21.6800 | 23.6 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.421 | 13.424 | (1.281) | 4745198 | 21.6300 | 21.5 |
| 81 Sec- Butylbenzene | 105 | 13.675 | 13.681 | (1.305) | 6978263 | 21.7100 | 21.6 |
| 82 1,3-Dichlorobenzene | 146 | 13.714 | 13.720 | (1.309) | 2880436 | 21.7100 | 21.8 |
| 83 Benzyl Chloride | 91 | 13.781 | 13.787 | (1.315) | 2977905 | 21.8800 | 22.3 |
| 84 1,4-Dichlorobenzene | 146 | 13.845 | 13.852 | (1.322) | 2640778 | 21.6900 | 21.9 |
| 85 p-Isopropyltoluene | 119 | 13.878 | 13.881 | (1.325) | 6383910 | 21.7900 | 21.7 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.900 | 13.906 | (1.327) | 4905552 | 21.6900 | 21.6 |
| 87 1,2-Dichlorobenzene | 146 | 14.164 | 14.170 | (1.352) | 2866357 | 21.6700 | 21.7 |
| 88 N-Butylbenzene | 91 | 14.337 | 14.340 | (1.369) | 5038768 | 21.6300 | 21.7 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.887 | 14.890 | (1.421) | 1563569 | 21.8100 | 22.3 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.974 | 15.974 | (1.525) | 2772337 | 46.9700 | 47.0 |
| 91 Naphthalene | 128 | 16.157 | 16.157 | (1.542) | 3770598 | 24.4900 | 24.5 |
| 92 Hexachlorobutadiene | 225 | 16.283 | 16.282 | (1.554) | 1996910 | 24.4900 | 24.5 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23809.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

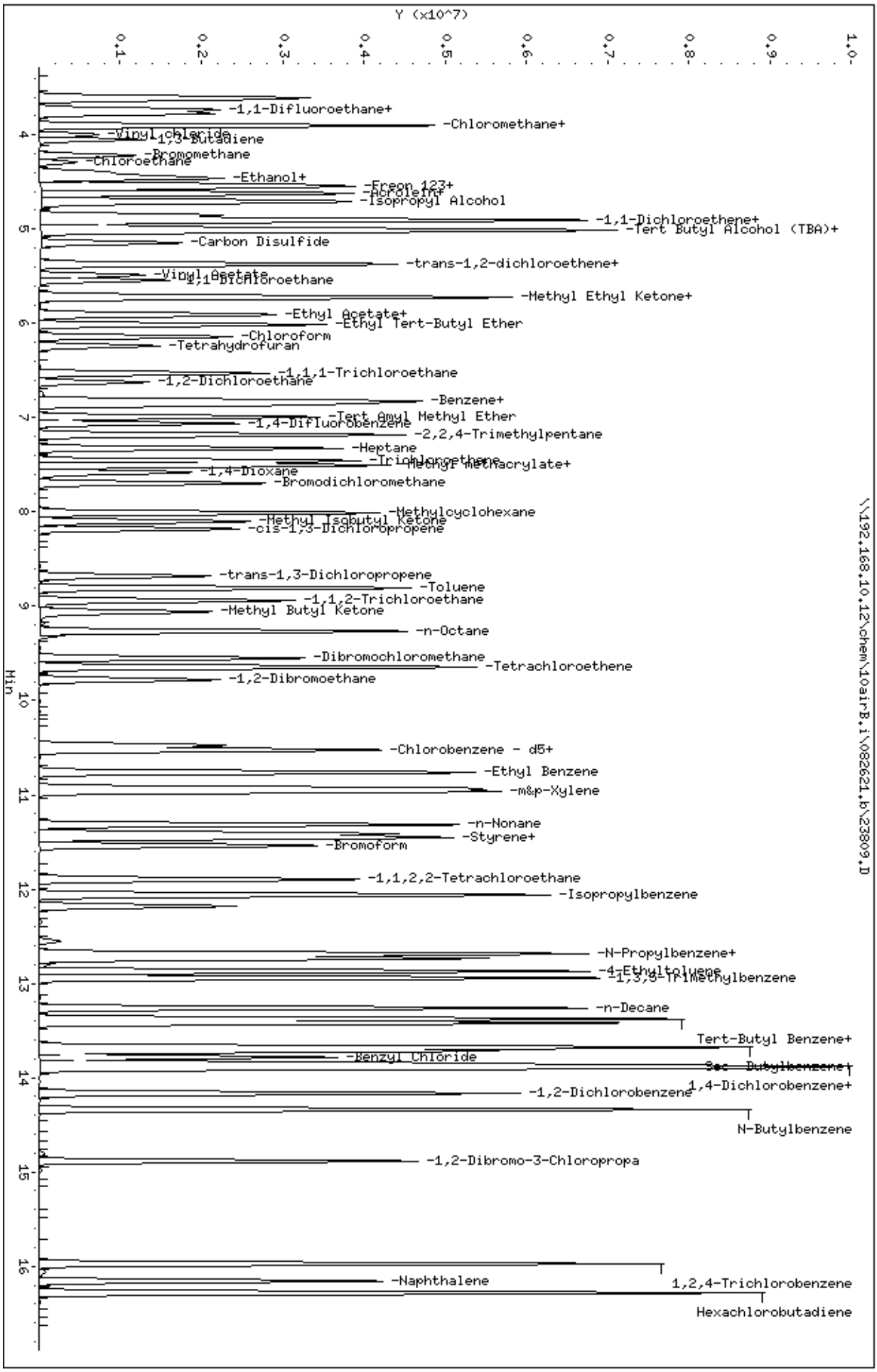
Instrument ID: 10airB.i
Calibration Date: 26-AUG-2021
Lab File ID: 23809.D
Calibration Time: 11:33
Lab Smp Id: CAL6
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2200326 | 4.16 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1733067 | 4.73 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.06 | 0.04 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.48 | 0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.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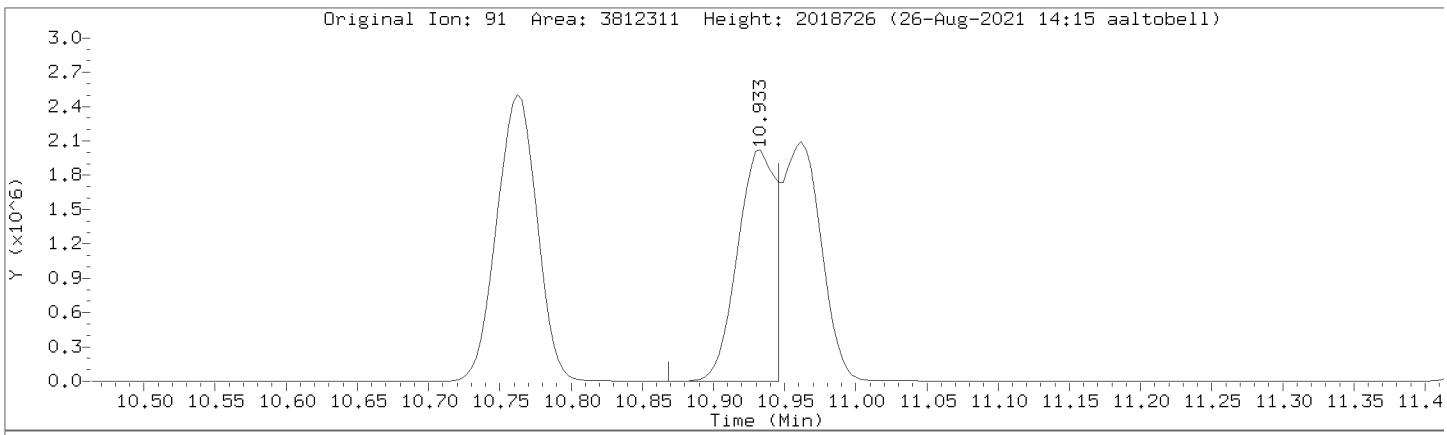
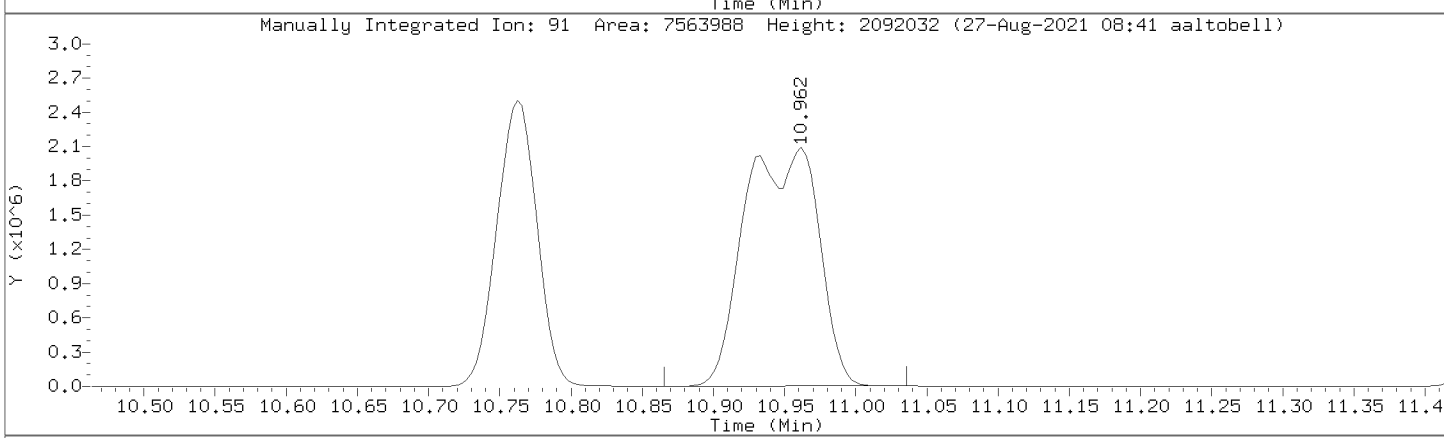
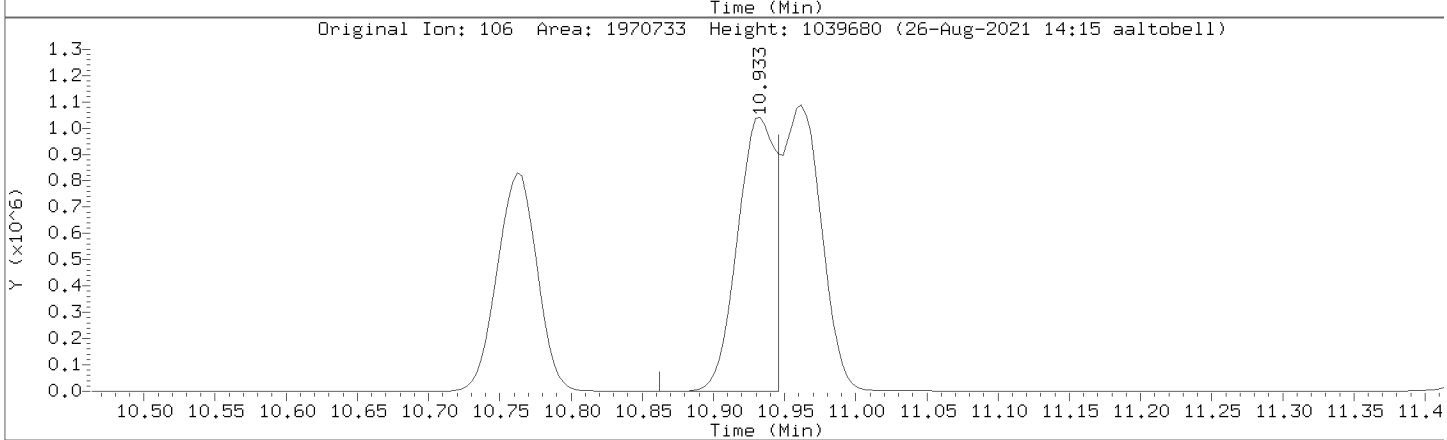
Date : 26-AUG-2021 12:02
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32
Y (x10^7)
Min
-1,1-Difluoroethane+
-Chloromethane+
-Vinyl chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol+
-Freon 123+
-Acrolein+
-Isopropyl Alcohol
-1,1-Dichloroethene+
-Tert Butyl Alcohol (TBA)+
-Carbon Disulfide
-trans-1,2-dichloroethene+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl methacrylate+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
Tert-Butyl Benzene+
-Benzyl Chloride
Sec-Butylbenzene+
1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-Naphthalene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
\\192.168.10.12\chem\10airB.i\082621.b\23809.D

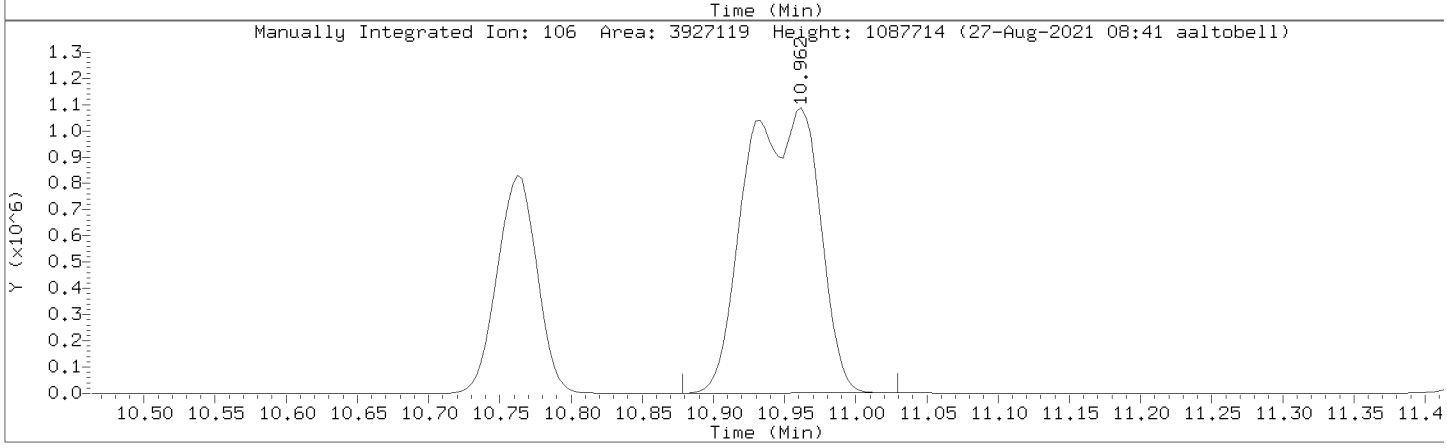
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23809.D
Injection Date: 26-AUG-2021 12:02
Instrument: 10airB.i
Lab Sample ID: CAL6

Compound: m&p-Xylene
CAS Number: 7816-60-0



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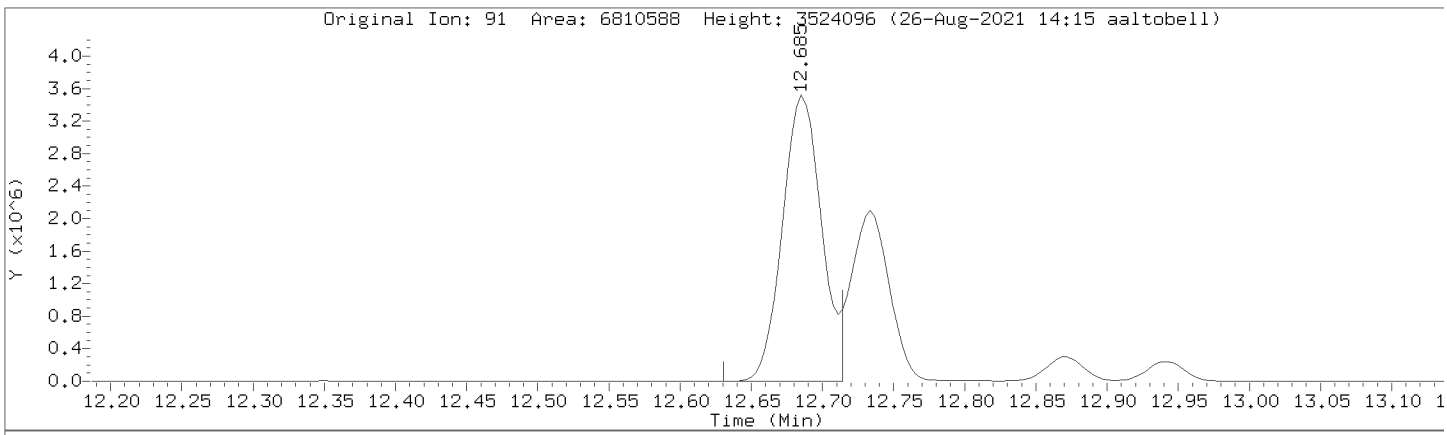
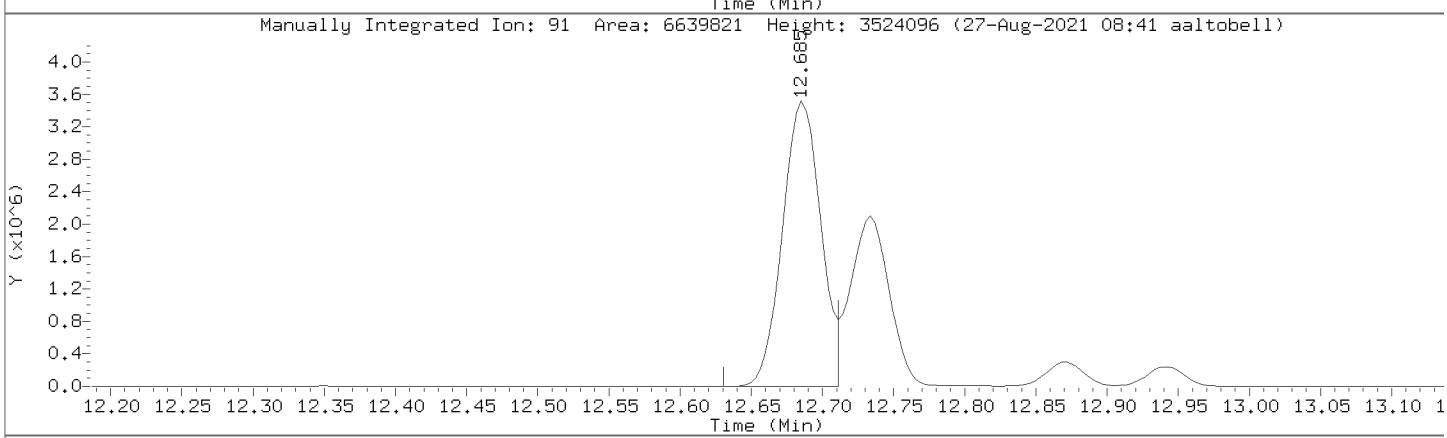
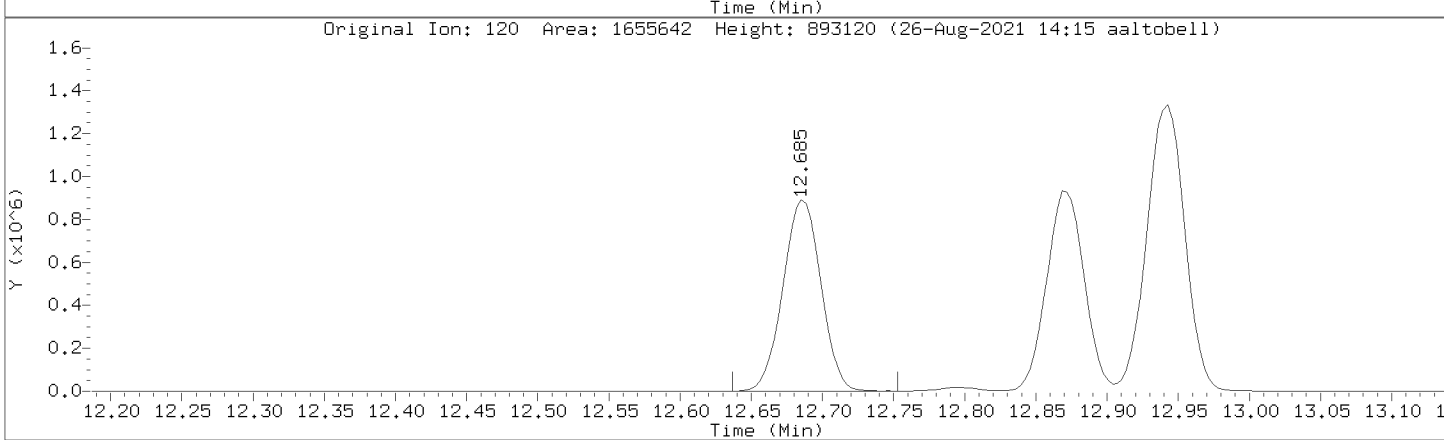
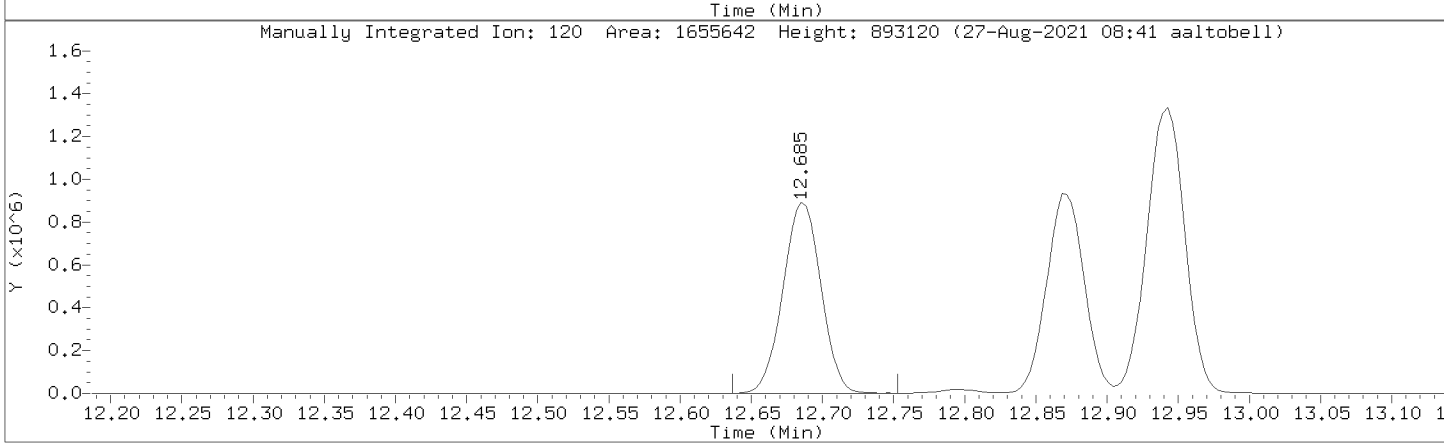
Instrument: 10airB.i
Lab Sample ID: CAL6

Compound: N-Propylbenzene
CAS Number: 103-65-1



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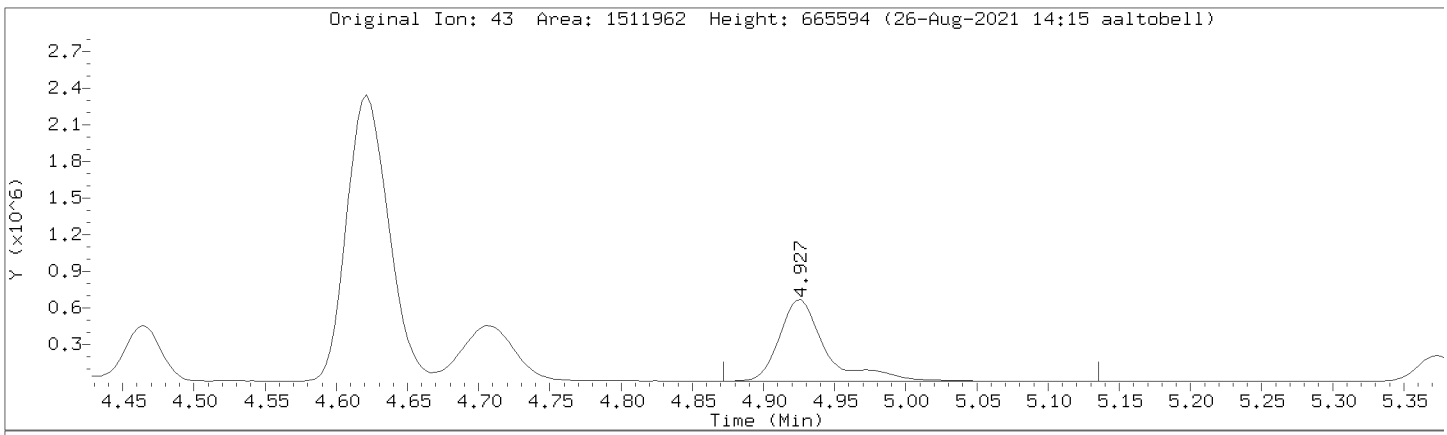
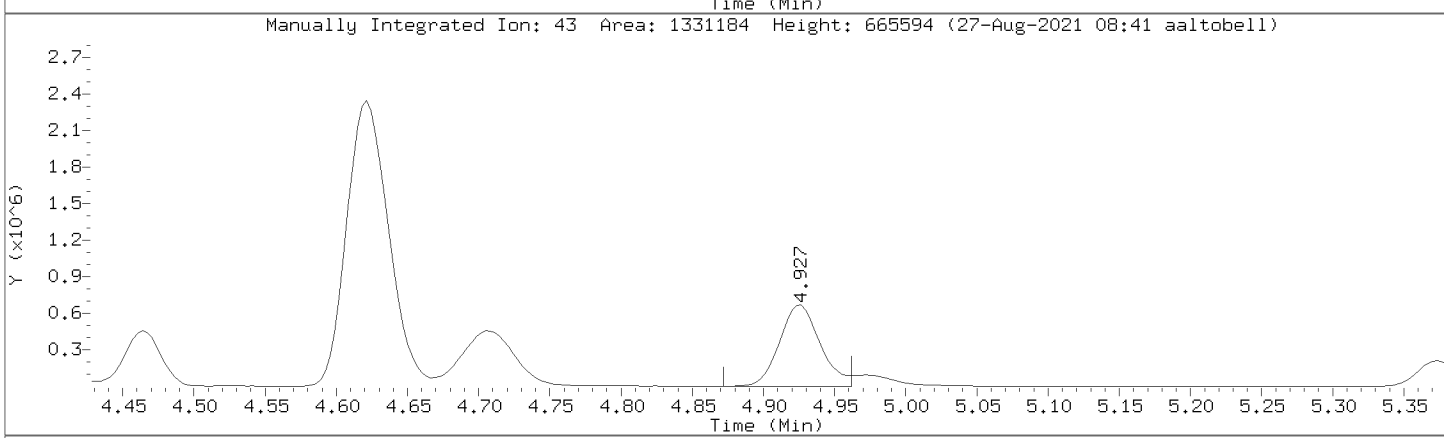
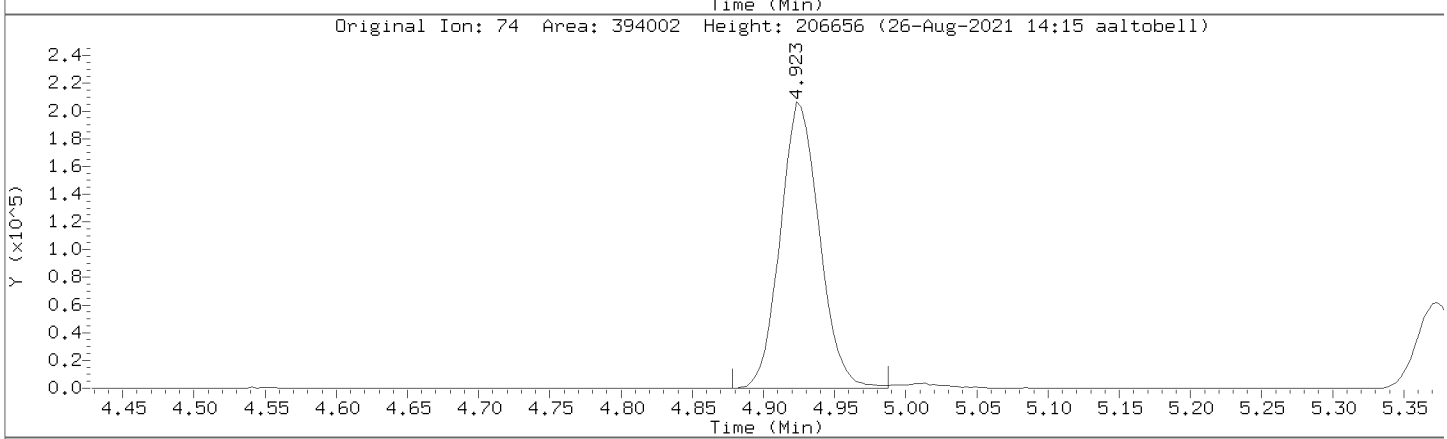
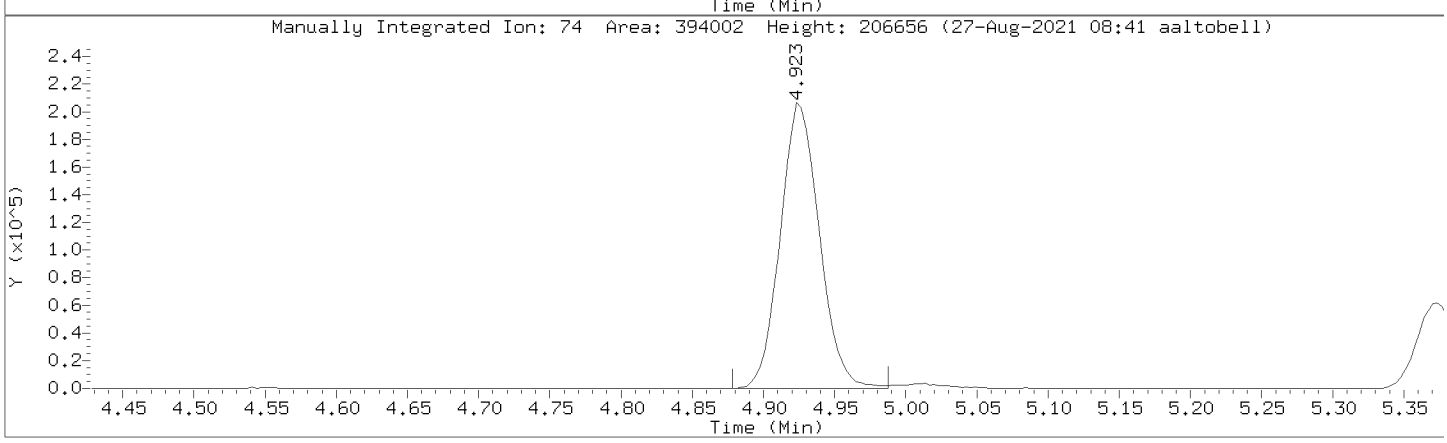
Injection Date: 26-AUG-2021 12:02
Instrument: 10airB.i
Lab Sample ID: CAL6

Compound: Methyl Acetate
CAS Number: 79-20-9



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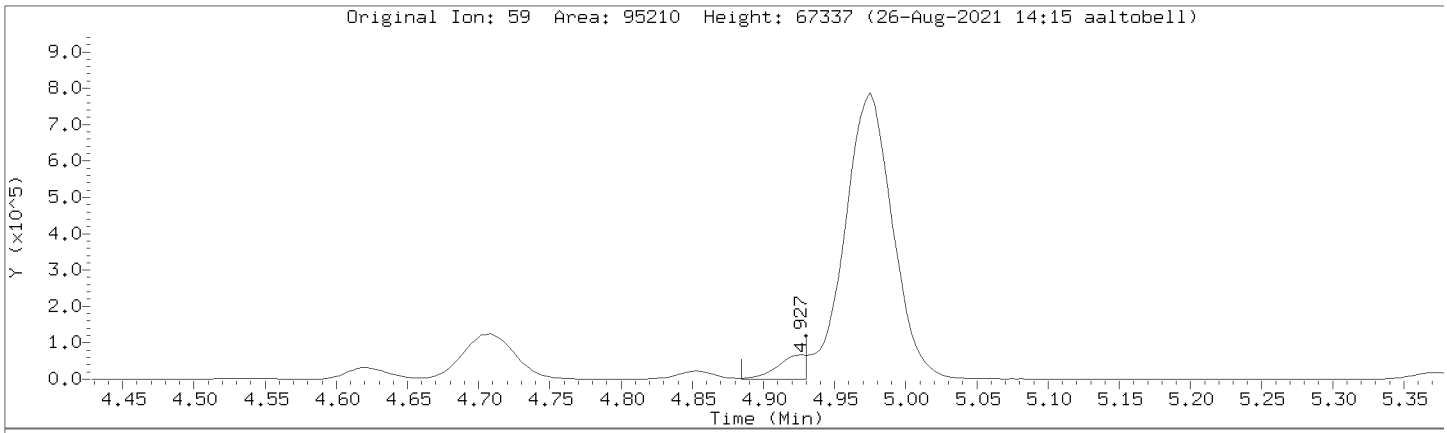
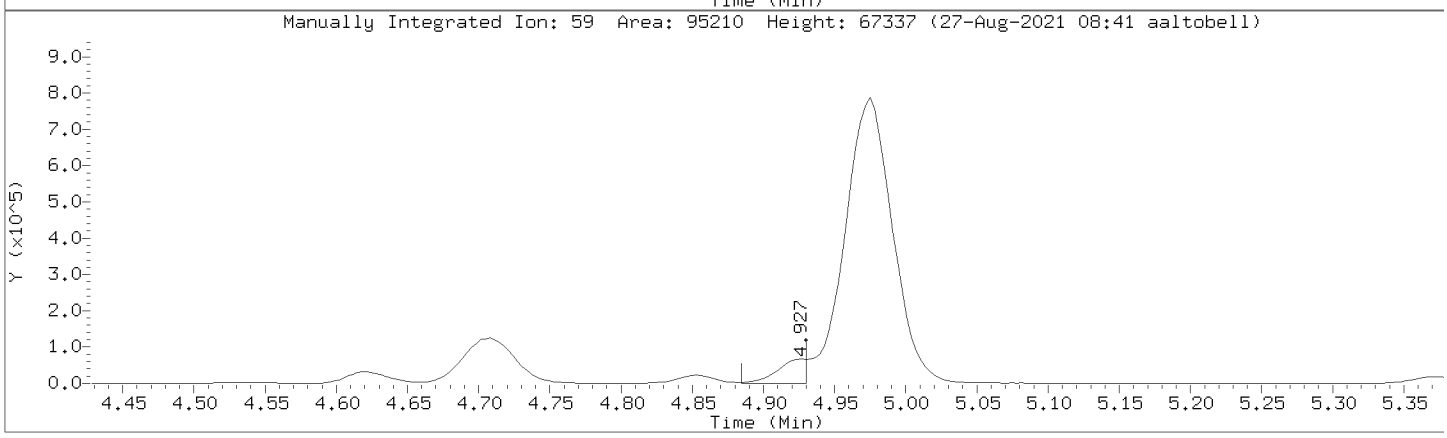
Injection Date: 26-AUG-2021 12:02
Instrument: 10airB.i
Lab Sample ID: CAL6



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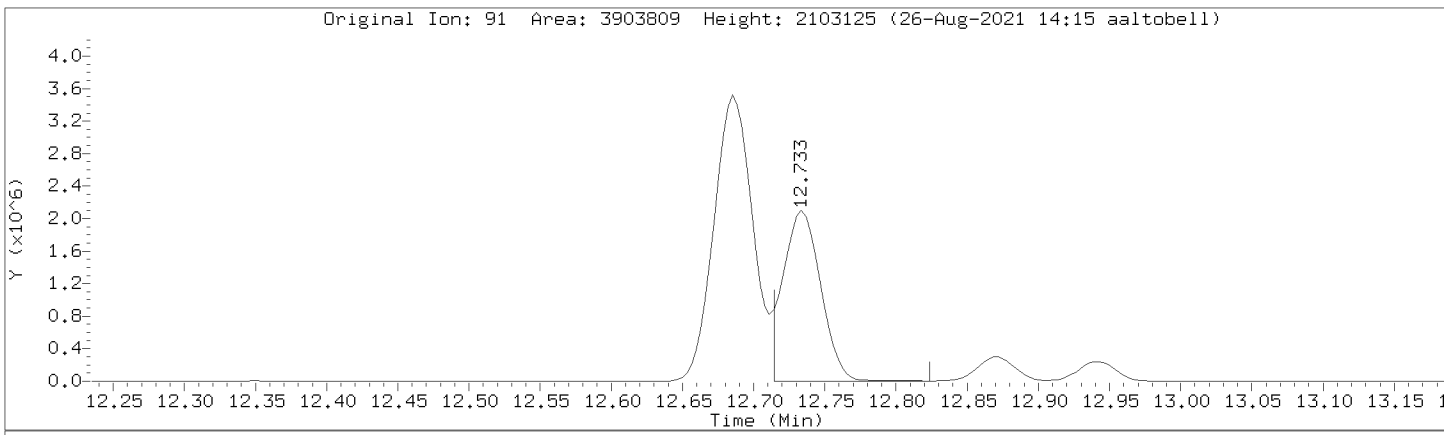
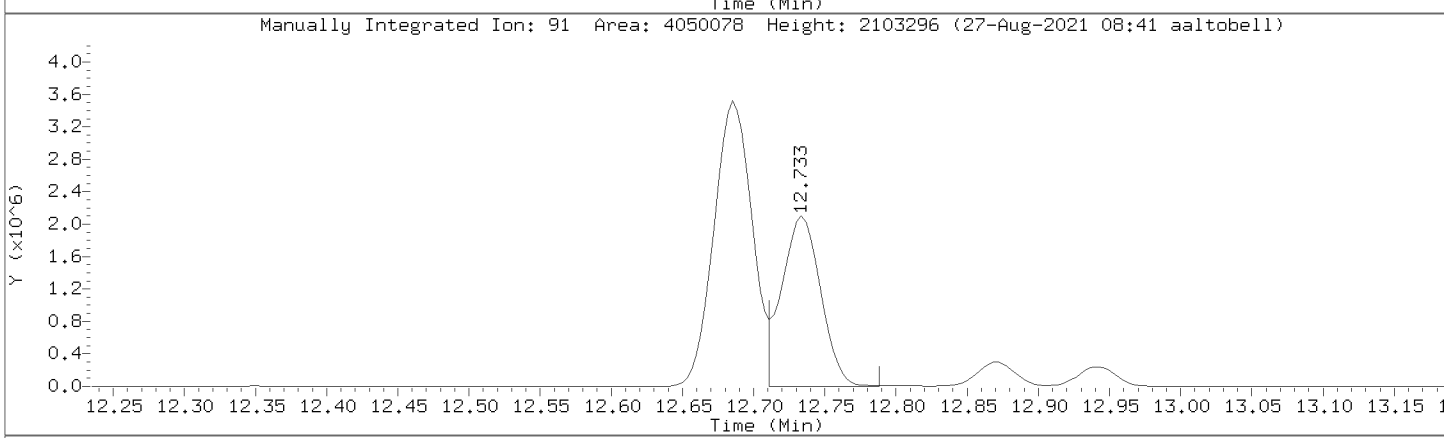
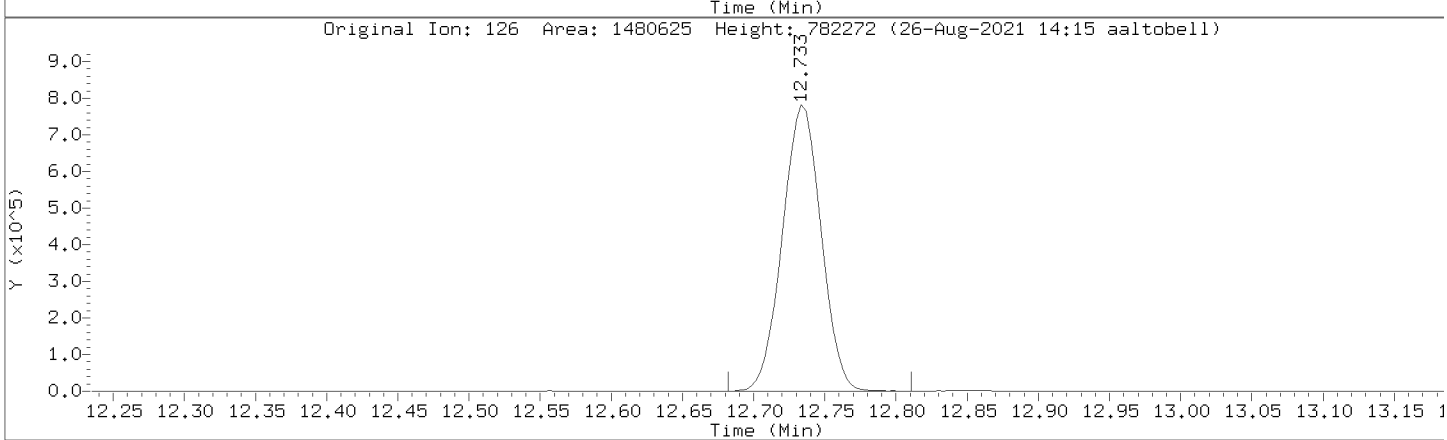
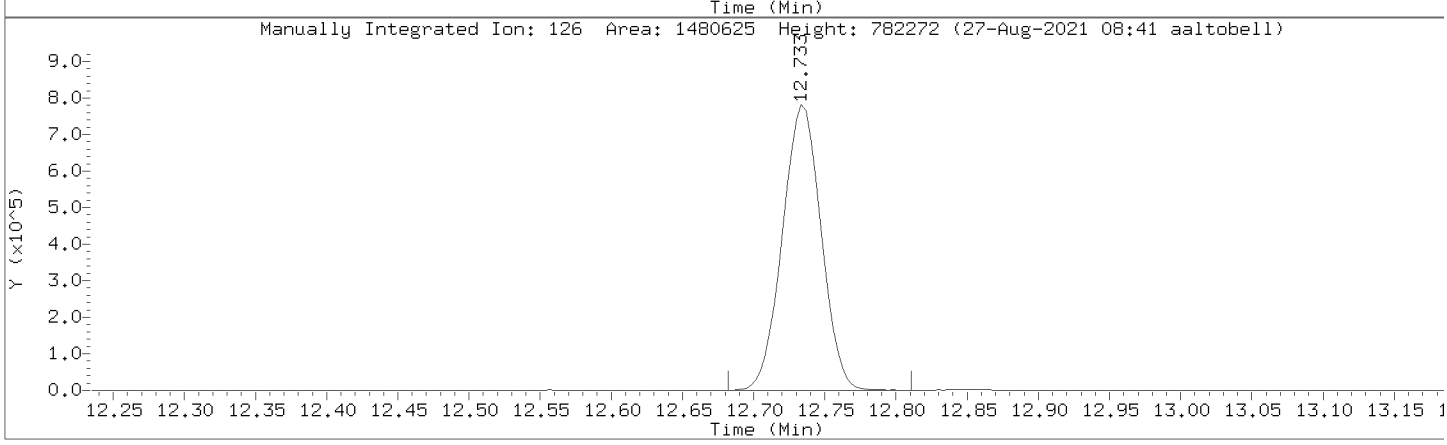
Injection Date: 26-AUG-2021 12:02
Instrument: 10airB.i
Lab Sample ID: CAL6

Compound: 2-Chlorotoluene
CAS Number: 95-49-8



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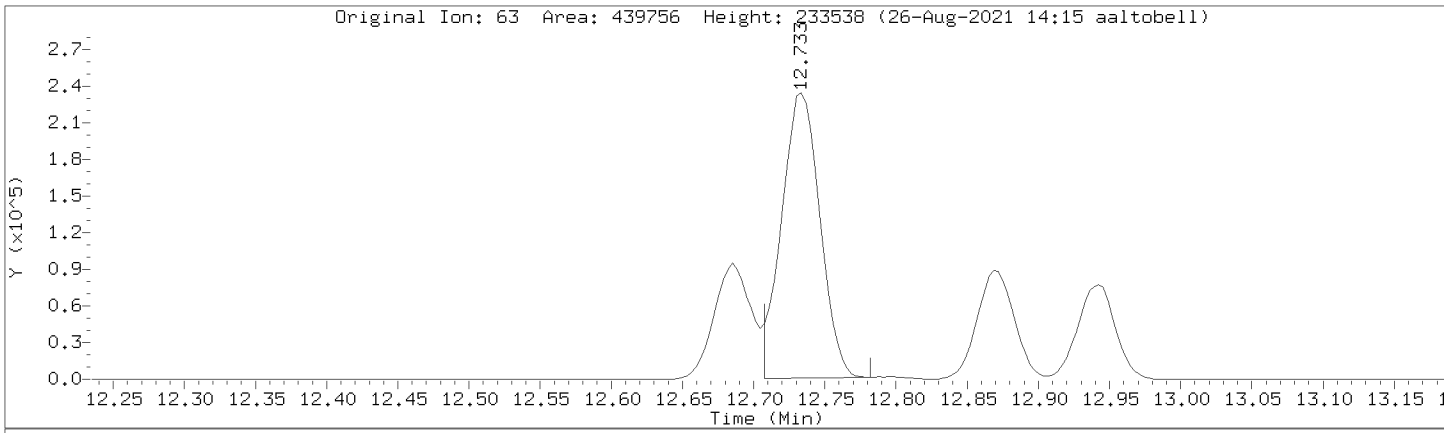
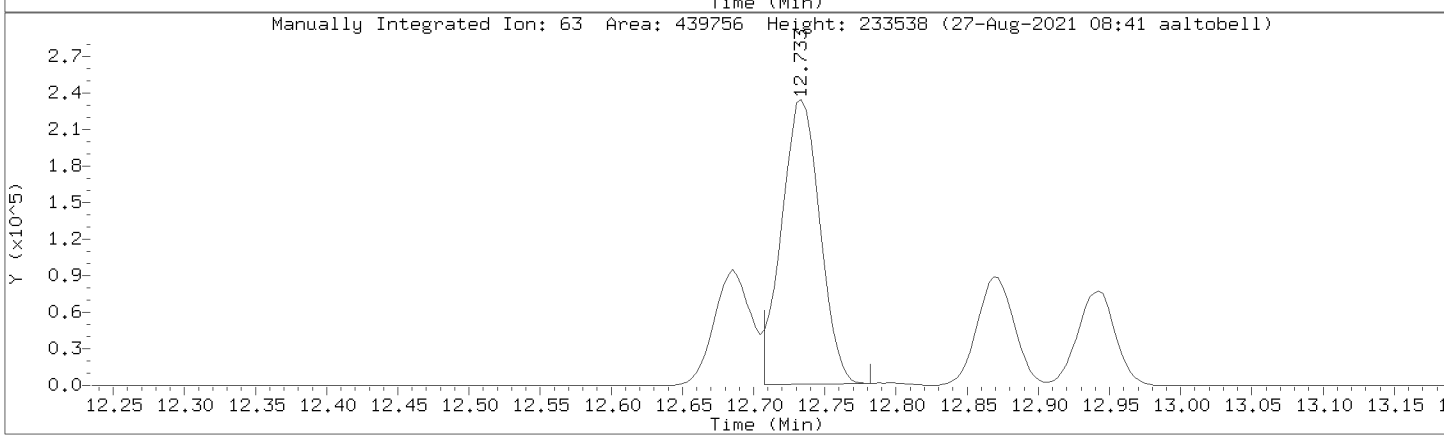
Injection Date: 26-AUG-2021 12:02
Instrument: 10airB.i
Lab Sample ID: CAL6



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23810.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23810.D
Lab Smp Id: CAL7
Inj Date : 26-AUG-2021 12:31
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 08:53 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 10 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.727 | 3.727 | (0.527) | 849909 | 35.3500 | 36.7(A) |
| 2 Propylene | 41 | 3.733 | 3.733 | (0.528) | 865870 | 35.5700 | 34.9 |
| 3 Chlorodifluoromethane | 67 | 3.740 | 3.740 | (0.529) | 301937 | 35.3800 | 37.2(AQ) |
| 4 Dichlorodifluoromethane | 85 | 3.775 | 3.775 | (0.534) | 3479821 | 35.8600 | 35.3 |
| 5 Chloromethane | 50 | 3.894 | 3.894 | (0.551) | 1277035 | 35.4600 | 35.6(A) |
| 6 Dichlorotetrafluoroethane | 85 | 3.904 | 3.904 | (0.552) | 3750814 | 33.0700 | 31.6 |
| 7 Vinyl chloride | 62 | 3.997 | 3.997 | (0.566) | 1439684 | 35.5700 | 37.5(A) |
| 8 1,3-Butadiene | 54 | 4.051 | 4.051 | (0.573) | 1032647 | 35.4400 | 37.0(A) |
| 9 Bromomethane | 94 | 4.222 | 4.222 | (0.597) | 1437889 | 35.5100 | 36.7(A) |
| 10 Chloroethane | 64 | 4.296 | 4.296 | (0.608) | 753255 | 35.4900 | 36.2(A) |
| 11 Ethanol | 45 | 4.408 | 4.408 | (0.624) | 2534724 | 213.290 | 201 |
| 12 Vinyl Bromide | 106 | 4.444 | 4.444 | (0.629) | 1403954 | 35.3800 | 34.8 |
| 13 Isopentane | 43 | 4.466 | 4.466 | (0.632) | 1323646 | 36.3900 | 30.4 |
| 14 Freon 123 | 83 | 4.527 | 4.527 | (0.641) | 3235493 | 35.2200 | 34.0 |
| 15 Trichlorofluoromethane | 101 | 4.550 | 4.550 | (0.644) | 3398942 | 35.8400 | 35.2 |
| 16 Acrolein | 56 | 4.585 | 4.585 | (0.649) | 1510083 | 100.610 | 101(A) |
| 17 Acetone | 43 | 4.624 | 4.624 | (0.654) | 7807982 | 174.770 | 174 |
| 18 Isopropyl Alcohol | 45 | 4.720 | 4.720 | (0.668) | 10559261 | 196.590 | 186 |
| 19 1,1-Dichloroethene | 61 | 4.855 | 4.855 | (0.687) | 2156665 | 35.6400 | 36.6(A) |
| 20 Acrylonitrile | 53 | 4.900 | 4.900 | (0.693) | 2507909 | 98.4700 | 98.7(A) |
| 21 Freon 113 | 101 | 4.907 | 4.907 | (0.694) | 3059179 | 35.4200 | 33.6 |
| 22 Methyl Acetate | 43 | 4.929 | 4.929 | (0.697) | 2175945 | 35.4600 | (aQ) |
| 23 Tert Butyl Alcohol (TBA) | 59 | 4.987 | 4.987 | (0.706) | 2936834 | 35.0200 | 35.2(AQ) |
| 24 Allyl Chloride | 76 | 5.013 | 5.013 | (0.709) | 657472 | 35.0900 | 34.5(Q) |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23810.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 5.013 | 5.013 | (0.709) | 6026253 | 177.800 | 165 |
| 26 Carbon Disulfide | 76 | 5.148 | 5.148 | (0.728) | 4540971 | 35.8600 | 37.2(A) |
| 27 trans-1,2-dichloroethene | 96 | 5.373 | 5.373 | (0.760) | 1669245 | 35.6800 | 37.1(A) |
| 28 Methyl Tert Butyl Ether | 73 | 5.373 | 5.373 | (0.760) | 4208090 | 35.6400 | 36.7(A) |
| 29 Vinyl Acetate | 43 | 5.489 | 5.489 | (0.777) | 3234741 | 42.7500 | 42.8(A) |
| 30 1,1-Dichloroethane | 63 | 5.547 | 5.547 | (0.785) | 2638614 | 35.2400 | 36.9(A) |
| 31 Methyl Ethyl Ketone | 72 | 5.707 | 5.707 | (0.808) | 817211 | 35.5300 | 36.3(AQ) |
| 32 n-Hexane | 57 | 5.723 | 5.723 | (0.810) | 2245282 | 35.0200 | 35.1(A) |
| 33 Di-isopropyl Ether | 45 | 5.730 | 5.730 | (0.811) | 3792326 | 34.8900 | 34.2 |
| 34 Ethyl Acetate | 43 | 5.900 | 5.900 | (0.835) | 2714526 | 35.0500 | 37.5(AQ) |
| 35 cis-1,2-Dichloroethene | 96 | 5.920 | 5.920 | (0.838) | 1752538 | 35.5500 | 37.3(AQ) |
| 36 Ethyl Tert-Butyl Ether | 59 | 6.016 | 6.016 | (0.851) | 4664312 | 35.4900 | 37.9(A) |
| 37 Chloroform | 83 | 6.145 | 6.145 | (0.869) | 3172163 | 34.8500 | 36.6(A) |
| 38 Tetrahydrofuran | 42 | 6.238 | 6.238 | (0.883) | 1419185 | 35.2900 | 38.4(A) |
| 39 1,1,1-Trichloroethane | 97 | 6.534 | 6.534 | (0.924) | 3101360 | 35.3100 | 36.7(A) |
| 40 1,2-Dichloroethane | 62 | 6.624 | 6.624 | (0.937) | 1761302 | 35.6400 | 39.1(A) |
| 41 Benzene | 78 | 6.820 | 6.820 | (0.965) | 4958831 | 35.4000 | 35.2 |
| 42 Carbon tetrachloride | 117 | 6.839 | 6.839 | (0.968) | 3096040 | 35.7900 | 38.8(A) |
| 43 Cyclohexane | 56 | 6.865 | 6.865 | (0.971) | 2242884 | 35.2900 | 35.1 |
| 44 Tert Amyl Methyl Ether | 73 | 6.993 | 6.993 | (0.990) | 4824795 | 35.4900 | 35.5(AH) |
| * 45 1,4-Difluorobenzene | 114 | 7.067 | 7.067 | (1.000) | 2259710 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 7.183 | 7.183 | (1.016) | 7081608 | 35.4400 | 35.6(A) |
| 47 Heptane | 43 | 7.328 | 7.328 | (1.037) | 2240257 | 35.3500 | 36.5(A) |
| 48 Trichloroethene | 130 | 7.460 | 7.460 | (1.055) | 2473089 | 35.3100 | 37.3(A) |
| 49 Methyl methacrylate | 69 | 7.505 | 7.505 | (1.062) | 1760592 | 35.4000 | 35.4 |
| 50 1,2-Dichloropropane | 63 | 7.511 | 7.511 | (1.063) | 1666056 | 35.5500 | 36.2(A) |
| 51 1,4-Dioxane | 88 | 7.585 | 7.585 | (1.073) | 3008809 | 88.4800 | 93.7(A) |
| 52 Bromodichloromethane | 83 | 7.698 | 7.698 | (1.089) | 3282733 | 35.4400 | 38.0(A) |
| 53 Methylcyclohexane | 98 | 8.013 | 8.013 | (1.134) | 1546659 | 35.4900 | 37.9(A) |
| 54 Methyl Isobutyl Ketone | 43 | 8.103 | 8.103 | (1.146) | 2994408 | 35.5700 | 35.6(A) |
| 55 cis-1,3-Dichloropropene | 75 | 8.183 | 8.183 | (1.158) | 2881792 | 35.3300 | 39.3(A) |
| 56 trans-1,3-Dichloropropene | 75 | 8.685 | 8.685 | (1.229) | 2479182 | 36.1500 | 36.2(A) |
| 57 Toluene | 91 | 8.810 | 8.810 | (1.247) | 6480990 | 35.8200 | 38.0(A) |
| 58 1,1,2-Trichloroethane | 97 | 8.945 | 8.945 | (1.266) | 2093187 | 35.4600 | 38.6(A) |
| 59 Methyl Butyl Ketone | 43 | 9.058 | 9.058 | (0.864) | 2810606 | 35.4600 | 35.4 |
| 60 n-Octane | 43 | 9.267 | 9.267 | (0.884) | 3000028 | 35.4900 | 35.5(A) |
| 61 Dibromochloromethane | 129 | 9.556 | 9.556 | (0.912) | 3586887 | 35.5100 | 37.5(A) |
| 62 Tetrachloroethene | 166 | 9.649 | 9.649 | (0.921) | 3205738 | 35.1300 | 35.2(A) |
| 63 1,2-Dibromoethane | 107 | 9.781 | 9.781 | (0.933) | 3122693 | 34.8500 | 39.4(A) |
| * 64 Chlorobenzene - d5 | 117 | 10.479 | 10.479 | (1.000) | 1800907 | 10.0000 | |
| 65 Chlorobenzene | 112 | 10.530 | 10.530 | (1.005) | 5082356 | 35.3800 | 37.2(A) |
| 66 Ethyl Benzene | 91 | 10.765 | 10.765 | (1.027) | 8012860 | 35.7700 | 35.8(A) |
| 67 m&p-Xylene | 91 | 10.964 | 10.964 | (1.046) | 12260955 | 71.3200 | 75.2(AM) |
| 68 n-Nonane | 43 | 11.318 | 11.318 | (1.080) | 3052187 | 35.5300 | 35.5(A) |
| 69 Styrene | 104 | 11.418 | 11.418 | (1.090) | 5093025 | 35.7900 | 35.8 |
| 70 o-Xylene | 91 | 11.456 | 11.456 | (1.093) | 6266059 | 35.5500 | 36.9(A) |
| 71 Bromoform | 173 | 11.540 | 11.540 | (1.101) | 3430913 | 35.7700 | 38.4(A) |
| 72 1,1,2,2-Tetrachloroethane | 83 | 11.903 | 11.903 | (1.136) | 4415822 | 35.6600 | 35.7(A) |
| 73 Isopropylbenzene | 105 | 12.064 | 12.064 | (1.151) | 9258344 | 35.2200 | 35.3(A) |
| 74 N-Propylbenzene | 91 | 12.688 | 12.688 | (1.211) | 10552137 | 35.6600 | 35.7(A) |
| 75 2-Chlorotoluene | 91 | 12.736 | 12.736 | (1.215) | 6405586 | 35.8800 | 36.1(AM) |
| 76 4-Ethyltoluene | 105 | 12.874 | 12.874 | (1.229) | 8938069 | 35.4400 | 35.5(A) |
| 77 1,3,5-Trimethylbenzene | 105 | 12.945 | 12.945 | (1.235) | 7729151 | 35.4600 | 36.8(A) |
| 78 n-Decane | 57 | 13.267 | 13.267 | (1.877) | 4187424 | 35.8600 | 35.9(A) |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23810.D
Report Date: 27-Aug-2021 08:53

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.382 | 13.382 | (1.277) | 7797201 | 35.7700 | 37.0(AM) |
| 80 1,2,4-Trimethylbenzene | 105 | 13.424 | 13.424 | (1.281) | 7691463 | 35.6800 | 35.7(A) |
| 81 Sec- Butylbenzene | 105 | 13.681 | 13.681 | (1.306) | 10961627 | 35.8200 | 35.9(A) |
| 82 1,3-Dichlorobenzene | 146 | 13.720 | 13.720 | (1.309) | 4777115 | 35.8200 | 35.8 |
| 83 Benzyl Chloride | 91 | 13.787 | 13.787 | (1.316) | 4985892 | 36.1000 | 36.0 |
| 84 1,4-Dichlorobenzene | 146 | 13.852 | 13.852 | (1.322) | 4412996 | 35.7900 | 35.7 |
| 85 p-Isopropyltoluene | 119 | 13.881 | 13.881 | (1.325) | 9916516 | 35.9500 | 36.0(A) |
| 86 1,2,3-Trimethylbenzene | 105 | 13.906 | 13.906 | (1.327) | 7763965 | 35.7900 | 35.8(A) |
| 87 1,2-Dichlorobenzene | 146 | 14.170 | 14.170 | (1.352) | 4665094 | 35.7500 | 35.8(A) |
| 88 N-Butylbenzene | 91 | 14.340 | 14.340 | (1.368) | 8003657 | 35.6800 | 35.7 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.890 | 14.890 | (1.421) | 2468720 | 35.9900 | 35.8 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.974 | 15.974 | (1.524) | 1523059 | 77.5100 | 27.4 |
| 91 Naphthalene | 128 | 16.157 | 16.157 | (1.542) | 1305801 | 40.4100 | 9.09 |
| 92 Hexachlorobutadiene | 225 | 16.282 | 16.282 | (1.554) | 951479 | 40.4100 | 9.69 |

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23810.D
Report Date: 27-Aug-2021 08:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 23810.D
Lab Smp Id: CAL7
Analysis Type: VOA
Quant Type: ISTD
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

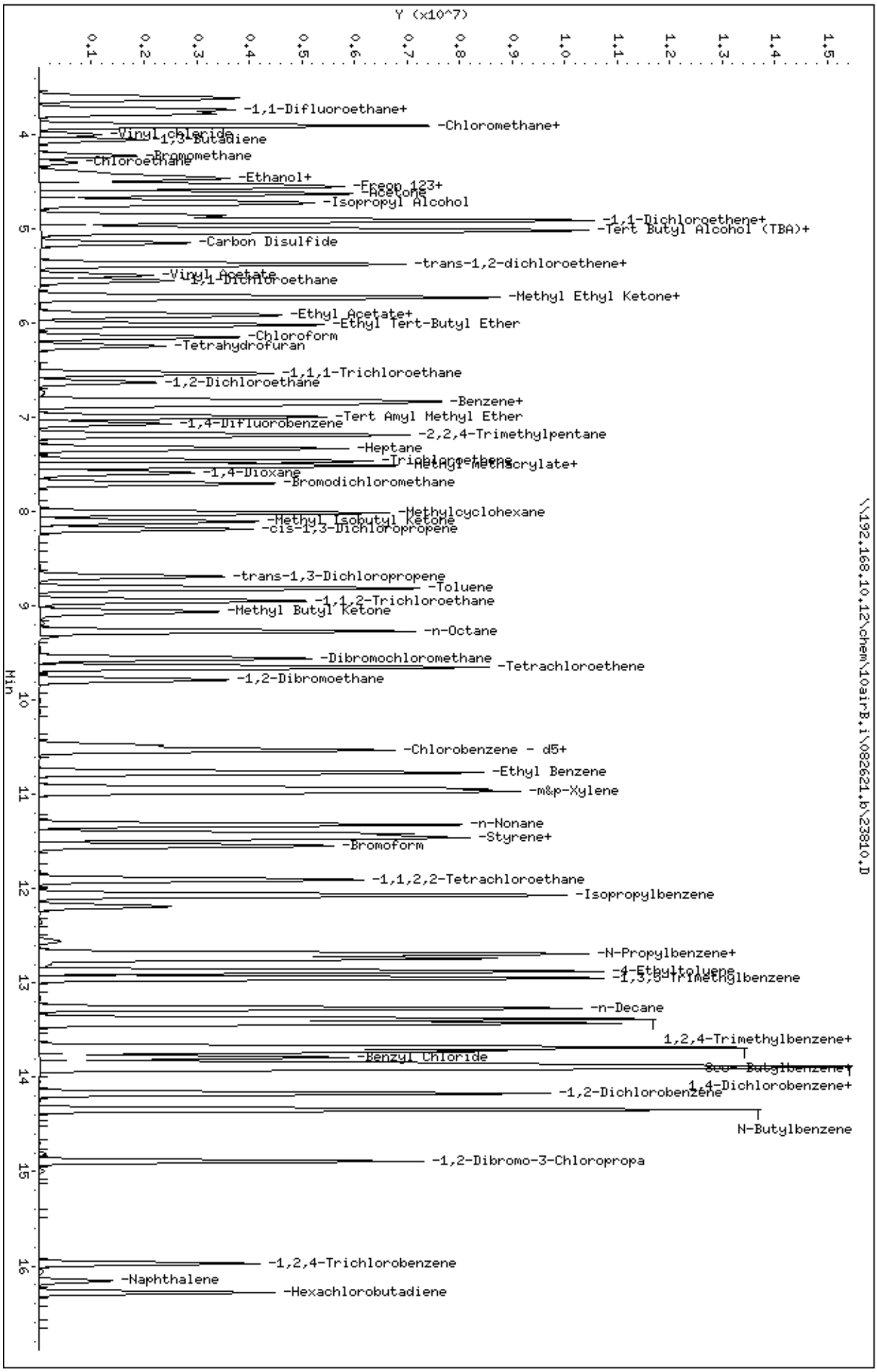
Calibration Date: 26-AUG-2021
Calibration Time: 11:33
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2259710 | 6.98 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1800907 | 8.83 |

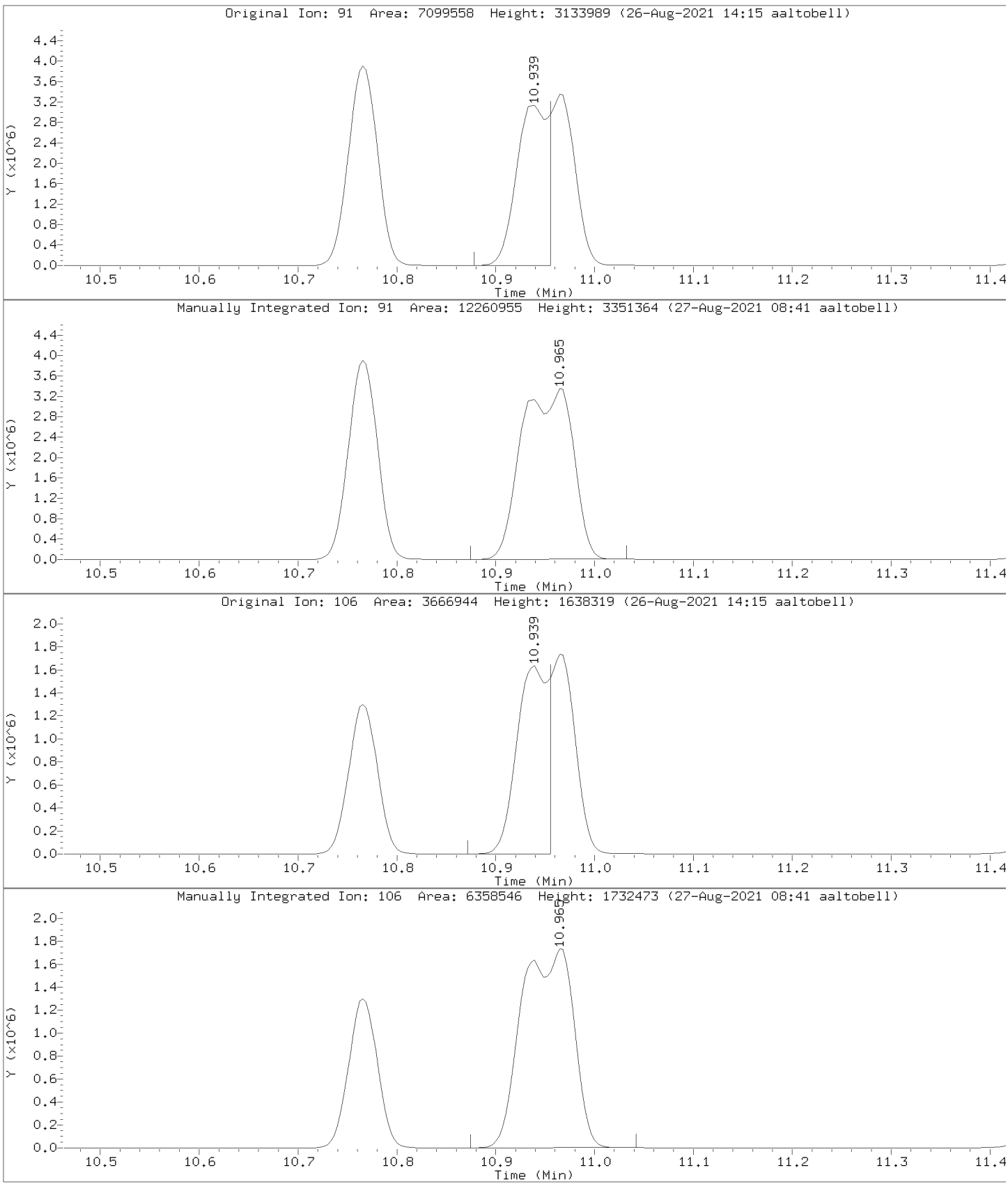
| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.07 | 0.13 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.48 | 0.09 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.


Data File: \\192.168.10.12\chem\10airB.i\082621.b\23810.D
Date : 26-AUG-2021 12:31
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32
Y (x10^7)
Min
-1,1-Difluoroethane+
-Chloromethane+
-Vinyl chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol+
-Freon 123+
-Acetone
-Isopropyl Alcohol
-1,1-Dichloroethene+
-Tert Butyl Alcohol (TBA)+
-Carbon Disulfide
-trans-1,2-dichloroethene+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl Methacrylate+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
1,2,4-Trimethylbenzene+
-Benzyl Chloride
Sec-Butylbenzene+
1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
\\192.168.10.12\chem\10airB.i\082621.b\23810.D

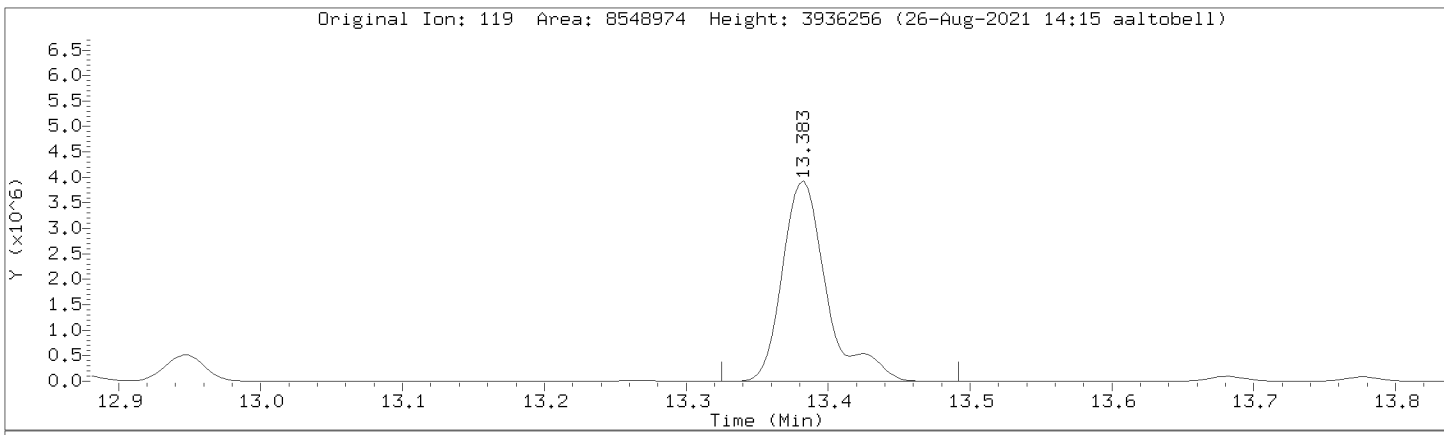
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23810.D
Injection Date: 26-AUG-2021 12:31
Instrument: 10airB.i
Lab Sample ID: CAL7

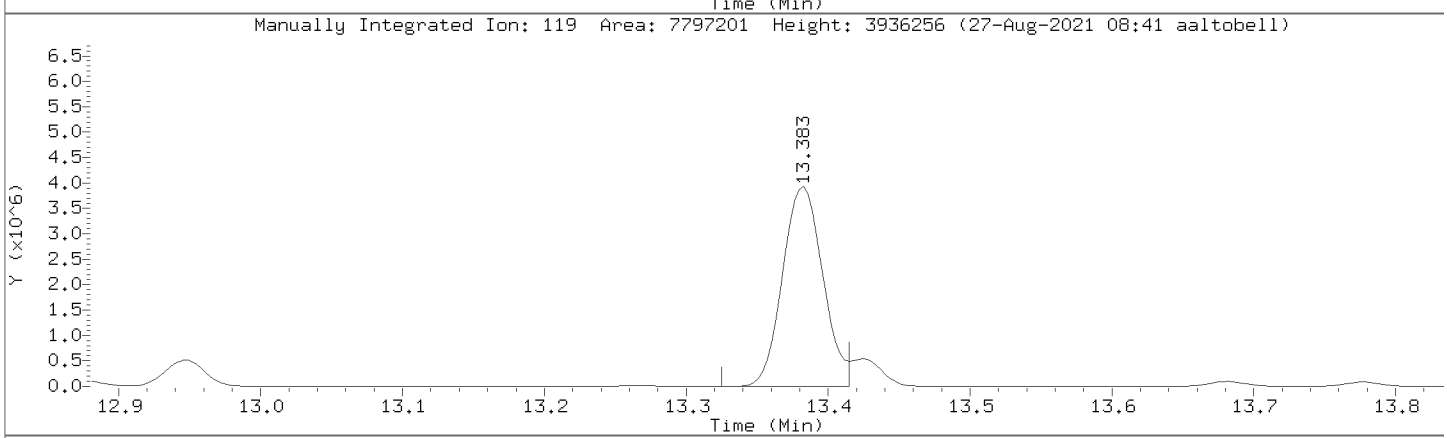
Compound: m&p-Xylene
CAS Number: 7816-60-0

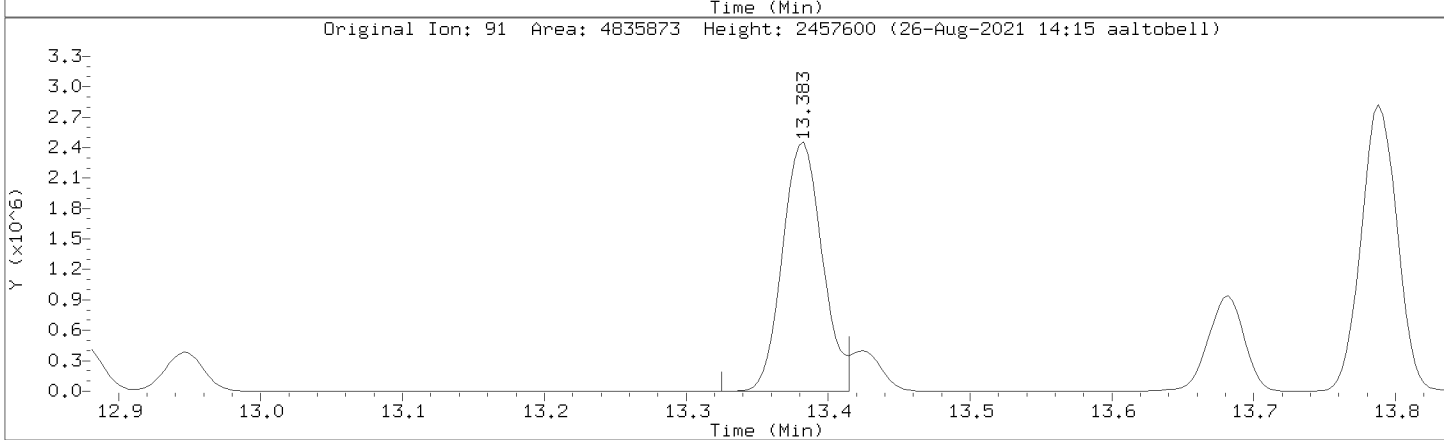


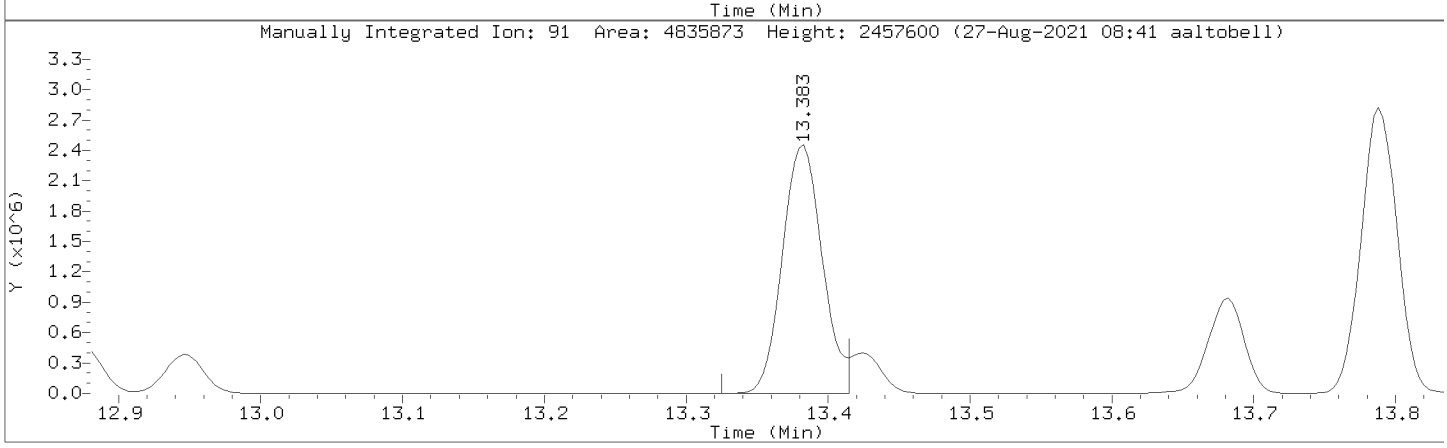
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23810.D
Injection Date: 26-AUG-2021 12:31
Instrument: 10airB.i
Lab Sample ID: CAL7

Compound: Tert-Butyl Benzene
CAS Number: 98-06-6



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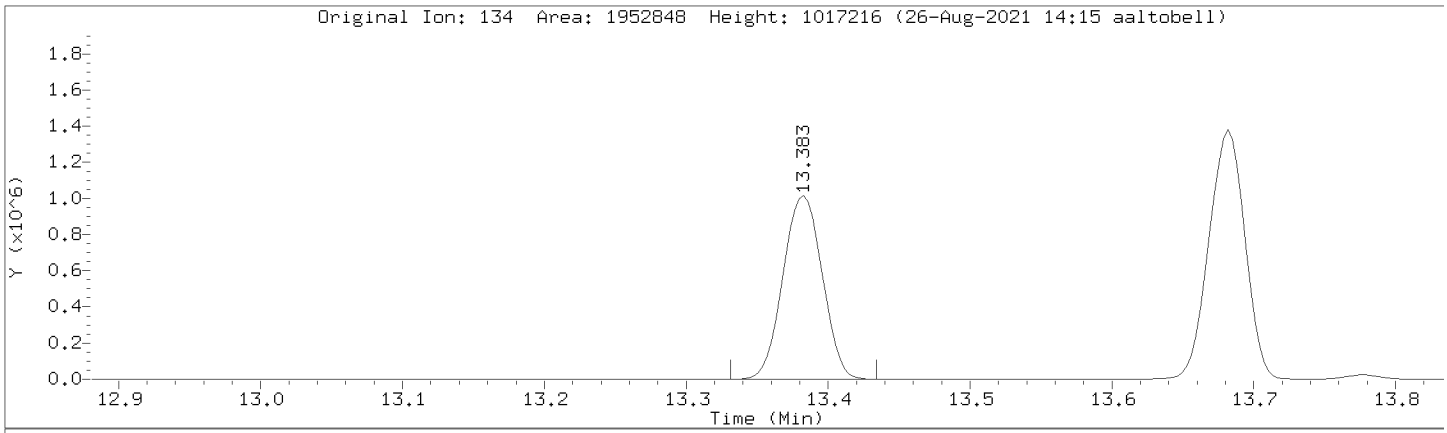
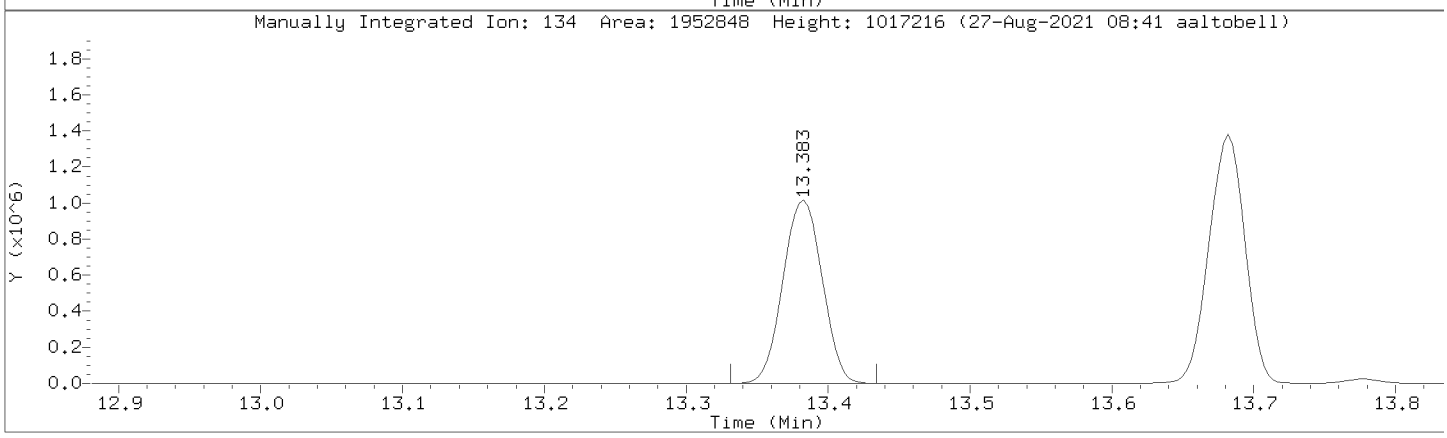
Injection Date: 26-AUG-2021 12:31
Instrument: 10airB.i
Lab Sample ID: CAL7



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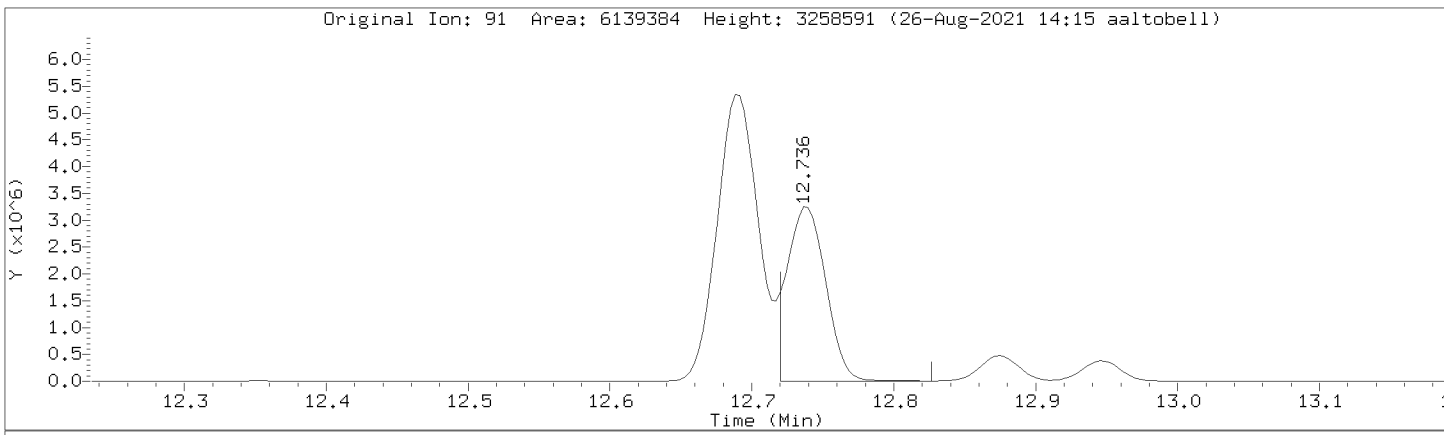
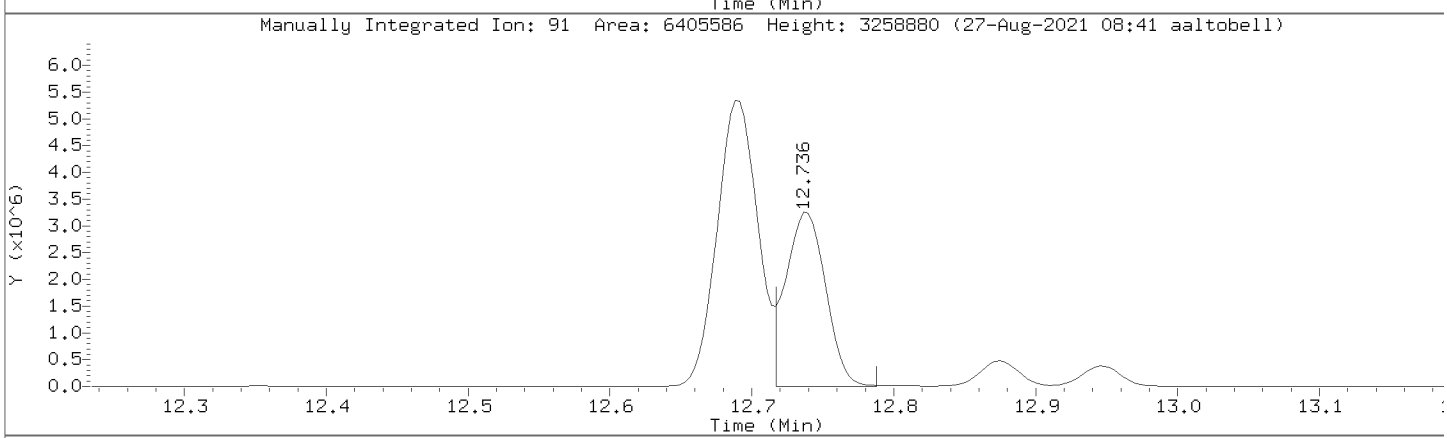
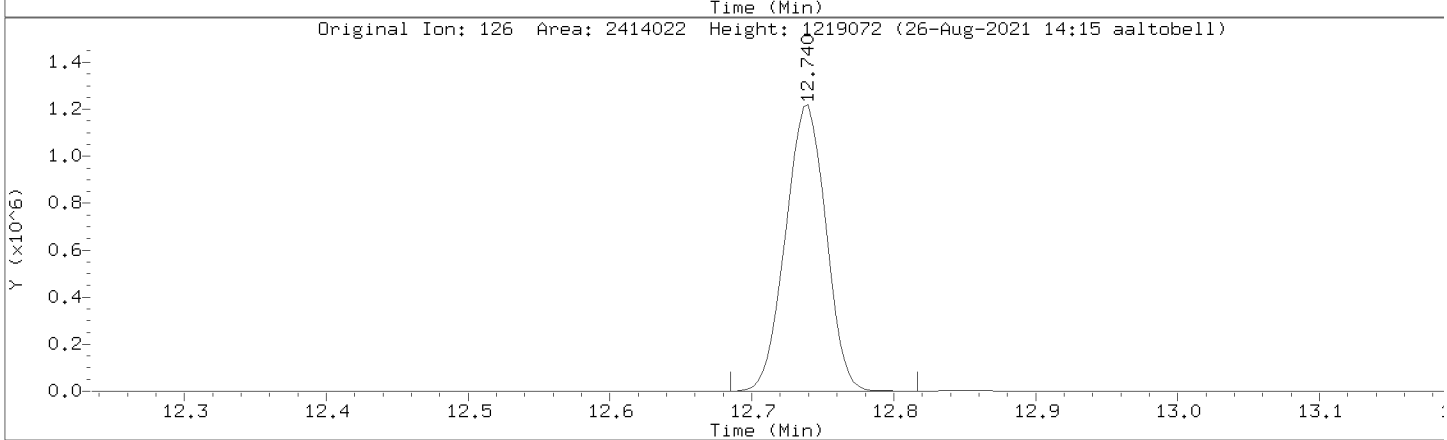
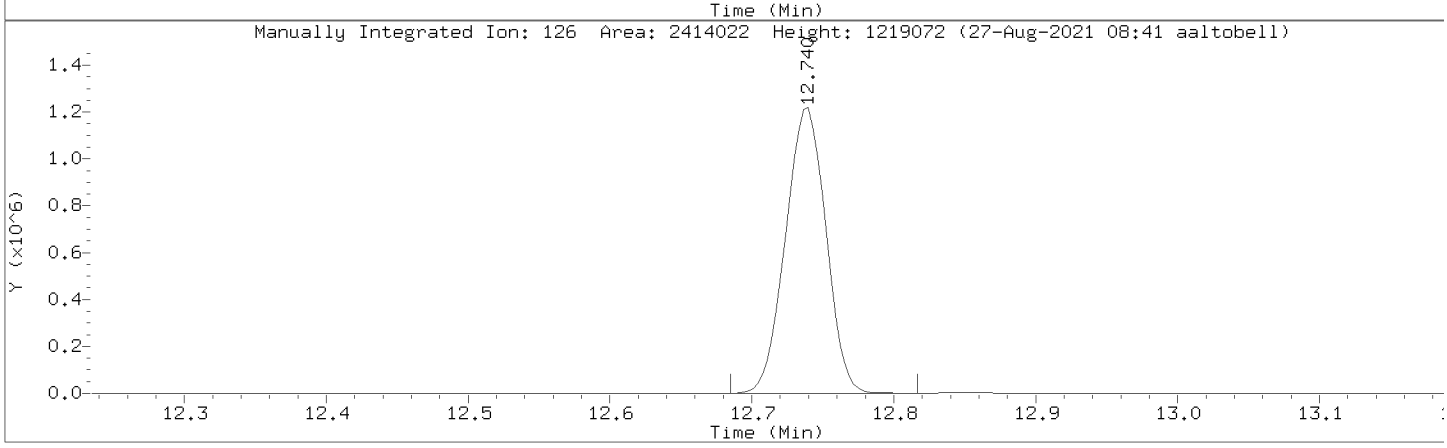
Injection Date: 26-AUG-2021 12:31
Instrument: 10airB.i
Lab Sample ID: CAL7

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

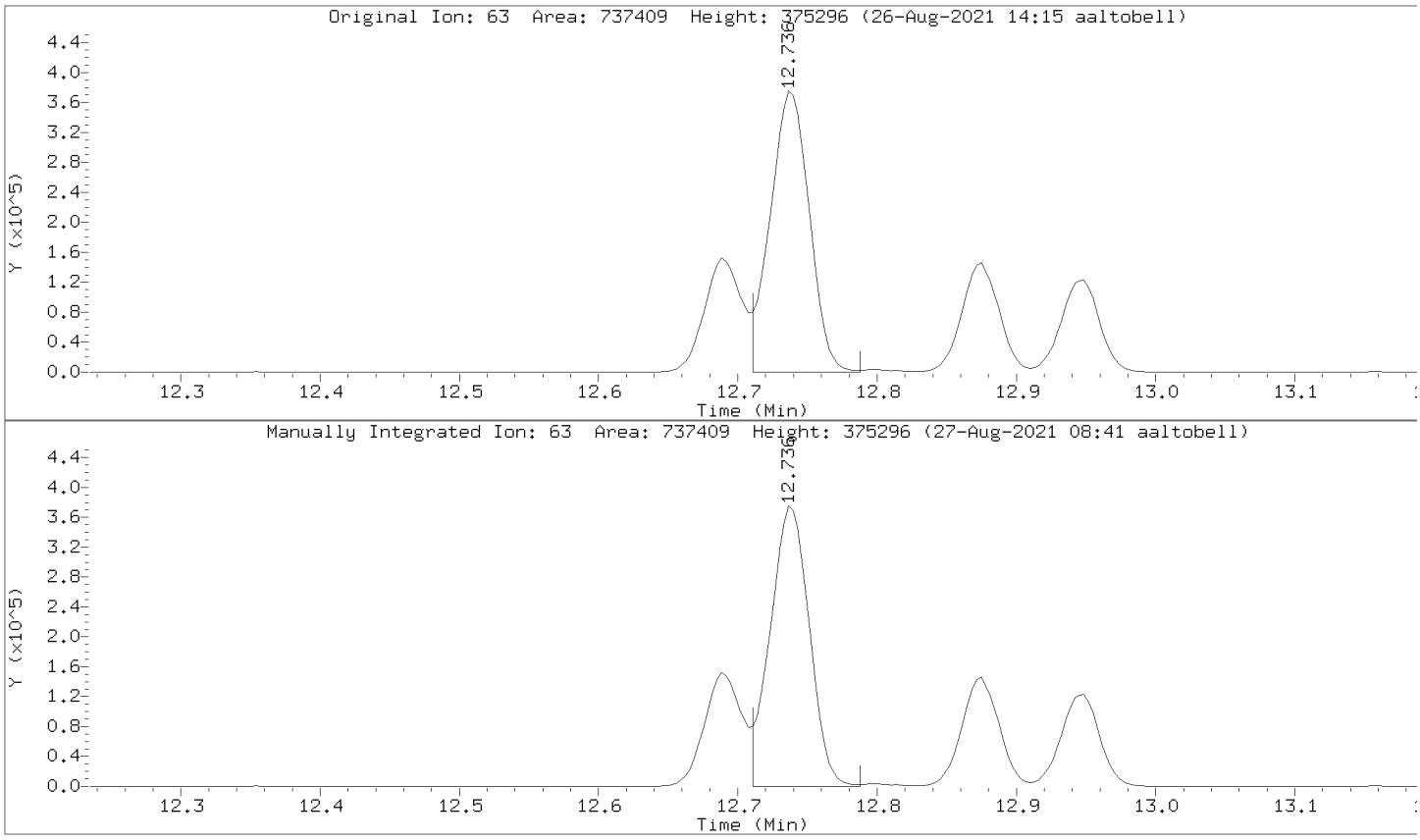


Data File: \\192.168.10.12\chem\10airB.i\082621.b/23810.D
Injection Date: 26-AUG-2021 12:31
Instrument: 10airB.i
Lab Sample ID: CAL7



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 082621.b
Sample Matrix: Gas
Fraction: VOA
Lab Smp Id: ICV
Level: LOW
Operator: AJA
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2021ICV.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

| SPIKE COMPOUND | CONC ADDED ppbv | CONC RECOVERED ppbv | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 1 1,1-Difluoroethane | 10.1 | 11.4 | 112.33 | 60-140 |
| 2 Propylene | 10.2 | 11.0 | 107.84 | 60-140 |
| 3 Chlorodifluorometh | 10.2 | 11.3 | 111.76 | 60-140 |
| 4 Dichlorodifluorome | 10.2 | 11.0 | 107.59 | 60-140 |
| 5 Chloromethane | 10.0 | 11.5 | 114.51 | 60-140 |
| 6 Dichlorotetrafluor | 9.17 | 10.1 | 110.50 | 60-140 |
| 7 Vinyl chloride | 10.2 | 11.5 | 112.37 | 60-140 |
| 8 1,3-Butadiene | 10.2 | 11.2 | 109.98 | 60-140 |
| 9 Bromomethane | 10.1 | 11.1 | 110.17 | 60-140 |
| 10 Chloroethane | 10.0 | 10.9 | 109.07 | 60-140 |
| 11 Ethanol | 10.0 | 12.2 | 121.94 | 60-140 |
| 12 Vinyl Bromide | 10.3 | 11.1 | 107.64 | 60-140 |
| 13 Isopentane | 10.3 | 9.08 | 88.28 | 60-140 |
| 14 Freon 123 | 9.40 | 10.8 | 114.41 | 60-140 |
| 15 Trichlorofluoromet | 9.90 | 10.8 | 108.85 | 60-140 |
| 16 Acrolein | 10.4 | 10.1 | 96.55 | 60-140 |
| 17 Acetone | 10.2 | 11.2 | 109.48 | 60-140 |
| 18 Isopropyl Alcohol | 11.0 | 12.4 | 113.54 | 60-140 |
| 19 1,1-Dichloroethene | 10.3 | 11.2 | 108.56 | 60-140 |
| 20 Acrylonitrile | 10.1 | 10.3 | 101.75 | 60-140 |
| 21 Freon 113 | 10.0 | 11.0 | 109.78 | 60-140 |
| 22 Methyl Acetate | 10.9 | 9.79 | 90.25 | 60-140 |
| 23 Tert Butyl Alcohol | 11.0 | 11.8 | 106.96 | 60-140 |
| 25 Methylene chloride | 10.7 | 12.4 | 115.53 | 60-140 |
| 24 Allyl Chloride | 10.5 | 11.7 | 111.52 | 60-140 |
| 26 Carbon Disulfide | 10.6 | 11.1 | 105.24 | 60-140 |
| 27 trans-1,2-dichloro | 10.1 | 11.1 | 109.49 | 60-140 |
| 28 Methyl Tert Butyl | 10.1 | 11.4 | 113.06 | 60-140 |
| 29 Vinyl Acetate | 10.6 | 12.1 | 113.43 | 60-140 |
| 30 1,1-Dichloroethane | 10.2 | 11.1 | 108.26 | 60-140 |
| 31 Methyl Ethyl Keton | 10.8 | 11.0 | 102.17 | 60-140 |
| 32 n-Hexane | 9.81 | 10.1 | 102.50 | 60-140 |
| 33 Di-isopropyl Ether | 9.87 | 11.4 | 115.90 | 60-140 |
| 34 Ethyl Acetate | 9.80 | 11.2 | 114.59 | 60-140 |
| 35 cis-1,2-Dichloroet | 10.2 | 11.5 | 112.48 | 60-140 |
| 36 Ethyl Tert-Butyl E | 10.0 | 11.7 | 116.44 | 60-140 |
| 37 Chloroform | 9.77 | 11.0 | 112.39 | 60-140 |
| 38 Tetrahydrofuran | 10.0 | 11.3 | 112.32 | 60-140 |
| 39 1,1,1-Trichloroeth | 9.95 | 11.3 | 113.19 | 60-140 |
| 40 1,2-Dichloroethane | 10.2 | 11.6 | 113.74 | 60-140 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

| SPIKE COMPOUND | CONC ADDED ppbv | CONC RECOVERED ppbv | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 41 Benzene | 10.1 | 11.3 | 111.54 | 60-140 |
| 42 Carbon tetrachlori | 10.2 | 11.5 | 113.05 | 60-140 |
| 43 Cyclohexane | 10.1 | 11.3 | 112.51 | 60-140 |
| 44 Tert Amyl Methyl E | 10.1 | 10.3 | 101.51 | 60-140 |
| 46 2,2,4-Trimethylpen | 10.3 | 11.4 | 110.50 | 60-140 |
| 47 Heptane | 10.0 | 11.5 | 114.45 | 60-140 |
| 48 Trichloroethene | 10.2 | 11.4 | 111.80 | 60-140 |
| 49 Methyl methacrylat | 10.3 | 11.4 | 111.33 | 60-140 |
| 50 1,2-Dichloropropan | 10.0 | 11.5 | 114.48 | 60-140 |
| 51 1,4-Dioxane | 10.3 | 12.0 | 116.97 | 60-140 |
| 52 Bromodichlorometha | 10.2 | 11.6 | 113.00 | 60-140 |
| 53 Methylcyclohexane | 10.4 | 11.5 | 110.97 | 60-140 |
| 54 Methyl Isobutyl Ke | 10.2 | 10.4 | 102.26 | 60-140 |
| 55 cis-1,3-Dichloropr | 10.2 | 12.3 | 120.96 | 60-140 |
| 56 trans-1,3-Dichloro | 10.5 | 10.3 | 98.16 | 60-140 |
| 57 Toluene | 10.3 | 11.8 | 114.86 | 60-140 |
| 58 1,1,2-Trichloroeth | 10.2 | 11.9 | 117.57 | 60-140 |
| 59 Methyl Butyl Keton | 9.95 | 10.4 | 104.99 | 60-140 |
| 60 n-Octane | 9.92 | 10.3 | 104.20 | 60-140 |
| 61 Dibromochlorometha | 10.1 | 11.1 | 110.54 | 60-140 |
| 62 Tetrachloroethene | 10.1 | 11.2 | 110.19 | 60-140 |
| 63 1,2-Dibromoethane | 10.3 | 12.3 | 119.61 | 60-140 |
| 65 Chlorobenzene | 10.3 | 11.5 | 111.81 | 60-140 |
| 66 Ethyl Benzene | 10.3 | 10.3 | 99.67 | 60-140 |
| 67 m&p-Xylene | 10.4 | 12.1 | 116.07 | 60-140 |
| 68 n-Nonane | 10.2 | 10.6 | 103.72 | 60-140 |
| 69 Styrene | 10.5 | 10.1 | 96.66 | 60-140 |
| 70 o-Xylene | 10.4 | 11.8 | 113.24 | 60-140 |
| 71 Bromoform | 10.5 | 11.4 | 109.38 | 60-140 |
| 72 1,1,2,2-Tetrachlor | 10.4 | 10.5 | 101.33 | 60-140 |
| 73 Isopropylbenzene | 10.1 | 10.4 | 102.61 | 60-140 |
| 74 N-Propylbenzene | 10.3 | 10.4 | 100.35 | 60-140 |
| 75 2-Chlorotoluene | 10.4 | 11.6 | 111.53 | 60-140 |
| 76 4-Ethyltoluene | 10.3 | 10.4 | 100.22 | 60-140 |
| 77 1,3,5-Trimethylben | 10.3 | 12.0 | 116.35 | 60-140 |
| 78 n-Decane | 10.5 | 10.6 | 101.64 | 60-140 |
| 79 Tert-Butyl Benzene | 10.5 | 12.1 | 115.43 | 60-140 |
| 80 1,2,4-Trimethylben | 10.4 | 10.4 | 100.56 | 60-140 |
| 81 Sec- Butylbenzene | 10.9 | 10.4 | 95.13 | 60-140 |
| 82 1,3-Dichlorobenzen | 10.3 | 10.5 | 101.56 | 60-140 |
| 83 Benzyl Chloride | 10.9 | 9.86 | 90.55 | 60-140 |
| 84 1,4-Dichlorobenzen | 10.7 | 10.8 | 100.56 | 60-140 |
| 85 p-Isopropyltoluene | 10.9 | 10.5 | 96.06 | 60-140 |
| 86 1,2,3-Trimethylben | 10.9 | 10.4 | 95.41 | 60-140 |
| 87 1,2-Dichlorobenzen | 10.8 | 10.6 | 98.03 | 60-140 |
| 88 N-Butylbenzene | 10.9 | 10.5 | 96.68 | 60-140 |
| 89 1,2-Dibromo-3-Chlo | 10.4 | 9.95 | 95.98 | 60-140 |
| 90 1,2,4-Trichloroben | 10.9 | 12.9 | 118.50 | 60-140 |
| 91 Naphthalene | 10.9 | 12.2 | 112.15 | 60-140 |
| 92 Hexachlorobutadien | 10.8 | 10.6 | 98.23 | 60-140 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Lab Smp Id: ICV
Inj Date : 26-AUG-2021 13:25
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 10:14 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.704 | 3.727 | (0.525) | 267556 | 11.3898 | 11.4 |
| 2 Propylene | 41 | 3.720 | 3.733 | (0.528) | 277411 | 11.0319 | 11.0 |
| 3 Chlorodifluoromethane | 67 | 3.723 | 3.740 | (0.528) | 93257 | 11.3437 | 11.3 |
| 4 Dichlorodifluoromethane | 85 | 3.756 | 3.775 | (0.533) | 1097163 | 10.9853 | 11.0 |
| 5 Chloromethane | 50 | 3.875 | 3.894 | (0.549) | 418381 | 11.4964 | 11.5 |
| 6 Dichlorotetrafluoroethane | 85 | 3.884 | 3.904 | (0.551) | 1217440 | 10.1325 | 10.1 |
| 7 Vinyl chloride | 62 | 3.977 | 3.997 | (0.564) | 446546 | 11.4839 | 11.5 |
| 8 1,3-Butadiene | 54 | 4.032 | 4.051 | (0.572) | 318324 | 11.2396 | 11.2 |
| 9 Bromomethane | 94 | 4.203 | 4.222 | (0.596) | 442063 | 11.1379 | 11.1 |
| 10 Chloroethane | 64 | 4.273 | 4.296 | (0.606) | 230713 | 10.9288 | 10.9 |
| 11 Ethanol | 45 | 4.383 | 4.408 | (0.622) | 156160 | 12.2062 | 12.2 |
| 12 Vinyl Bromide | 106 | 4.421 | 4.444 | (0.627) | 454887 | 11.1196 | 11.1 |
| 13 Isopentane | 43 | 4.450 | 4.466 | (0.631) | 400768 | 9.08373 | 9.08 |
| 14 Freon 123 | 83 | 4.511 | 4.527 | (0.640) | 1038777 | 10.7541 | 10.8 |
| 15 Trichlorofluoromethane | 101 | 4.531 | 4.550 | (0.643) | 1055998 | 10.7763 | 10.8 |
| 16 Acrolein | 56 | 4.572 | 4.585 | (0.648) | 173633 | 10.0507 | 10.1 |
| 17 Acetone | 43 | 4.611 | 4.624 | (0.654) | 508034 | 11.1565 | 11.2 |
| 18 Isopropyl Alcohol | 45 | 4.682 | 4.720 | (0.664) | 714326 | 12.4436 | 12.4 |
| 19 1,1-Dichloroethene | 61 | 4.836 | 4.855 | (0.686) | 668209 | 11.1925 | 11.2 |
| 20 Acrylonitrile | 53 | 4.878 | 4.900 | (0.692) | 307345 | 10.2768 | 10.3 |
| 21 Freon 113 | 101 | 4.891 | 4.907 | (0.694) | 1012752 | 10.9783 | 11.0 |
| 22 Methyl Acetate | 43 | 4.910 | 4.929 | (0.696) | 768133 | 9.79163 | 9.79 |
| 23 Tert Butyl Alcohol (TBA) | 59 | 4.952 | 4.987 | (0.702) | 995338 | 11.7551 | 11.8 |
| 24 Allyl Chloride | 76 | 4.990 | 5.013 | (0.708) | 226867 | 11.7314 | 11.7 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 4.994 | 5.013 | (0.708) | 458699 | 12.3848 | 12.4 |
| 26 Carbon Disulfide | 76 | 5.129 | 5.148 | (0.727) | 1374073 | 11.1025 | 11.1 |
| 27 trans-1,2-dichloroethene | 96 | 5.354 | 5.373 | (0.759) | 506121 | 11.0914 | 11.1 |
| 28 Methyl Tert Butyl Ether | 73 | 5.366 | 5.373 | (0.761) | 1321739 | 11.3743 | 11.4 |
| 29 Vinyl Acetate | 43 | 5.469 | 5.489 | (0.776) | 899155 | 12.0692 | 12.1 |
| 30 1,1-Dichloroethane | 63 | 5.521 | 5.547 | (0.783) | 802622 | 11.0746 | 11.1 |
| 31 Methyl Ethyl Ketone | 72 | 5.691 | 5.707 | (0.807) | 252321 | 11.0444 | 11.0 |
| 32 n-Hexane | 57 | 5.711 | 5.723 | (0.810) | 756679 | 10.0550 | 10.1 |
| 33 Di-isopropyl Ether | 45 | 5.717 | 5.730 | (0.811) | 1284384 | 11.4390 | 11.4 |
| 34 Ethyl Acetate | 43 | 5.887 | 5.900 | (0.835) | 824964 | 11.2298 | 11.2(Q) |
| 35 cis-1,2-Dichloroethene | 96 | 5.897 | 5.920 | (0.836) | 544862 | 11.4505 | 11.5(Q) |
| 36 Ethyl Tert-Butyl Ether | 59 | 6.003 | 6.016 | (0.851) | 1454828 | 11.6561 | 11.7 |
| 37 Chloroform | 83 | 6.125 | 6.145 | (0.869) | 964724 | 10.9807 | 11.0 |
| 38 Tetrahydrofuran | 42 | 6.235 | 6.238 | (0.884) | 422016 | 11.2771 | 11.3 |
| 39 1,1,1-Trichloroethane | 97 | 6.514 | 6.534 | (0.924) | 965024 | 11.2623 | 11.3 |
| 40 1,2-Dichloroethane | 62 | 6.608 | 6.624 | (0.937) | 531558 | 11.6467 | 11.6 |
| 41 Benzene | 78 | 6.804 | 6.820 | (0.965) | 1613316 | 11.2883 | 11.3 |
| 42 Carbon tetrachloride | 117 | 6.823 | 6.839 | (0.968) | 928554 | 11.4856 | 11.5 |
| 43 Cyclohexane | 56 | 6.852 | 6.865 | (0.972) | 733534 | 11.3300 | 11.3 |
| 44 Tert Amyl Methyl Ether | 73 | 6.984 | 6.993 | (0.990) | 1506808 | 10.2732 | 10.3 |
| * 45 1,4-Difluorobenzene | 114 | 7.051 | 7.067 | (1.000) | 2290818 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 7.173 | 7.183 | (1.017) | 2298678 | 11.3928 | 11.4 |
| 47 Heptane | 43 | 7.315 | 7.328 | (1.037) | 713572 | 11.4559 | 11.5 |
| 48 Trichloroethene | 130 | 7.447 | 7.460 | (1.056) | 765172 | 11.3922 | 11.4 |
| 49 Methyl methacrylate | 69 | 7.492 | 7.505 | (1.062) | 575557 | 11.4114 | 11.4 |
| 50 1,2-Dichloropropane | 63 | 7.501 | 7.511 | (1.064) | 535286 | 11.4821 | 11.5 |
| 51 1,4-Dioxane | 88 | 7.579 | 7.585 | (1.075) | 390642 | 12.0014 | 12.0 |
| 52 Bromodichloromethane | 83 | 7.685 | 7.698 | (1.090) | 1012131 | 11.5715 | 11.6 |
| 53 Methylcyclohexane | 98 | 8.003 | 8.013 | (1.135) | 476056 | 11.5184 | 11.5 |
| 54 Methyl Isobutyl Ketone | 43 | 8.096 | 8.103 | (1.148) | 940153 | 10.3999 | 10.4 |
| 55 cis-1,3-Dichloropropene | 75 | 8.170 | 8.183 | (1.159) | 913283 | 12.3012 | 12.3 |
| 56 trans-1,3-Dichloropropene | 75 | 8.672 | 8.685 | (1.230) | 723390 | 10.2674 | 10.3 |
| 57 Toluene | 91 | 8.800 | 8.810 | (1.248) | 2043177 | 11.8192 | 11.8 |
| 58 1,1,2-Trichloroethane | 97 | 8.932 | 8.945 | (1.267) | 656175 | 11.9335 | 11.9 |
| 59 Methyl Butyl Ketone | 43 | 9.058 | 9.058 | (0.865) | 852865 | 10.4467 | 10.4 |
| 60 n-Octane | 43 | 9.260 | 9.267 | (0.885) | 975438 | 10.3371 | 10.3 |
| 61 Dibromochloromethane | 129 | 9.540 | 9.556 | (0.911) | 1063487 | 11.1426 | 11.1 |
| 62 Tetrachloroethene | 166 | 9.640 | 9.649 | (0.921) | 1014545 | 11.1622 | 11.2 |
| 63 1,2-Dibromoethane | 107 | 9.771 | 9.781 | (0.933) | 972133 | 12.3075 | 12.3 |
| * 64 Chlorobenzene - d5 | 117 | 10.469 | 10.479 | (1.000) | 1795588 | 10.0000 | |
| 65 Chlorobenzene | 112 | 10.521 | 10.530 | (1.005) | 1573440 | 11.5392 | 11.5 |
| 66 Ethyl Benzene | 91 | 10.759 | 10.765 | (1.028) | 2537486 | 10.2964 | 10.3 |
| 67 m&p-Xylene | 91 | 10.926 | 10.964 | (1.044) | 1962043 | 12.0709 | 12.1(M) |
| 68 n-Nonane | 43 | 11.312 | 11.318 | (1.080) | 1022003 | 10.5693 | 10.6 |
| 69 Styrene | 104 | 11.408 | 11.418 | (1.090) | 1543844 | 10.1014 | 10.1 |
| 70 o-Xylene | 91 | 11.447 | 11.456 | (1.093) | 1998064 | 11.7996 | 11.8 |
| 71 Bromoform | 173 | 11.533 | 11.540 | (1.102) | 1018537 | 11.4306 | 11.4 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 11.900 | 11.903 | (1.137) | 1437399 | 10.5283 | 10.5 |
| 73 Isopropylbenzene | 105 | 12.067 | 12.064 | (1.153) | 3025995 | 10.3734 | 10.4 |
| 74 N-Propylbenzene | 91 | 12.691 | 12.688 | (1.212) | 3482254 | 10.3665 | 10.4(M) |
| 75 2-Chlorotoluene | 91 | 12.739 | 12.736 | (1.217) | 2055996 | 11.6326 | 11.6(M) |
| 76 4-Ethyltoluene | 105 | 12.874 | 12.874 | (1.230) | 2831048 | 10.3632 | 10.4 |
| 77 1,3,5-Trimethylbenzene | 105 | 12.945 | 12.945 | (1.236) | 2507805 | 11.9606 | 12.0 |
| 78 n-Decane | 57 | 13.267 | 13.267 | (1.881) | 1396453 | 10.6418 | 10.6 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.379 | 13.382 | (1.278) | 2541972 | 12.1090 | 12.1 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.421 | 13.424 | (1.282) | 2488840 | 10.4379 | 10.4 |
| 81 Sec- Butylbenzene | 105 | 13.678 | 13.681 | (1.306) | 3708072 | 10.3880 | 10.4 |
| 82 1,3-Dichlorobenzene | 146 | 13.717 | 13.720 | (1.310) | 1458947 | 10.4711 | 10.5 |
| 83 Benzyl Chloride | 91 | 13.784 | 13.787 | (1.317) | 1351118 | 9.86138 | 9.86 |
| 84 1,4-Dichlorobenzene | 146 | 13.848 | 13.852 | (1.323) | 1359966 | 10.7796 | 10.8 |
| 85 p-Isopropyltoluene | 119 | 13.877 | 13.881 | (1.326) | 3425515 | 10.4897 | 10.5 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.900 | 13.906 | (1.328) | 2594623 | 10.4188 | 10.4 |
| 87 1,2-Dichlorobenzene | 146 | 14.167 | 14.170 | (1.353) | 1502401 | 10.5776 | 10.6 |
| 88 N-Butylbenzene | 91 | 14.337 | 14.340 | (1.369) | 2659352 | 10.4999 | 10.5 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.881 | 14.890 | (1.421) | 751989 | 9.95324 | 9.95 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.922 | 15.974 | (1.521) | 647754 | 12.8805 | 12.9 |
| 91 Naphthalene | 128 | 16.099 | 16.157 | (1.538) | 1797416 | 12.2240 | 12.2 |
| 92 Hexachlorobutadiene | 225 | 16.218 | 16.282 | (1.549) | 1031398 | 10.6187 | 10.6 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Lab Smp Id: ICV
Inj Date : 26-AUG-2021 13:25
Operator : AJA Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Meth Date : 27-Aug-2021 10:14 aaltobell Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.052 | 4632836 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.470 | 4527546 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | | |
|---|---|---|---|---|---|---|---|---|
| | RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | | CAS #: | | |
| | 3.592 | 8032819 | 17.3388778 | 17.3 | 0 | | 0 | 45 |
| Benzene, 1-bromo-3-fluoro- | | | | | | CAS #: 1073-06-9 | | |
| | 12.187 | 4978049 | 10.9950252 | 11.0 | 97 | NIST05.L | 39151 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 23812.D
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: AJA
Method File: \\192.168.10.12\chem\10airB.i\082621.b\TO15_238_21.m
Misc Info:

Calibration Date: 26-AUG-2021
Calibration Time: 11:33

Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2290818 | 8.45 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1795588 | 8.51 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.09 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Report Date: 27-Aug-2021 16:45

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: ICV
Operator : AJA
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 26-AUG-2021 13:25

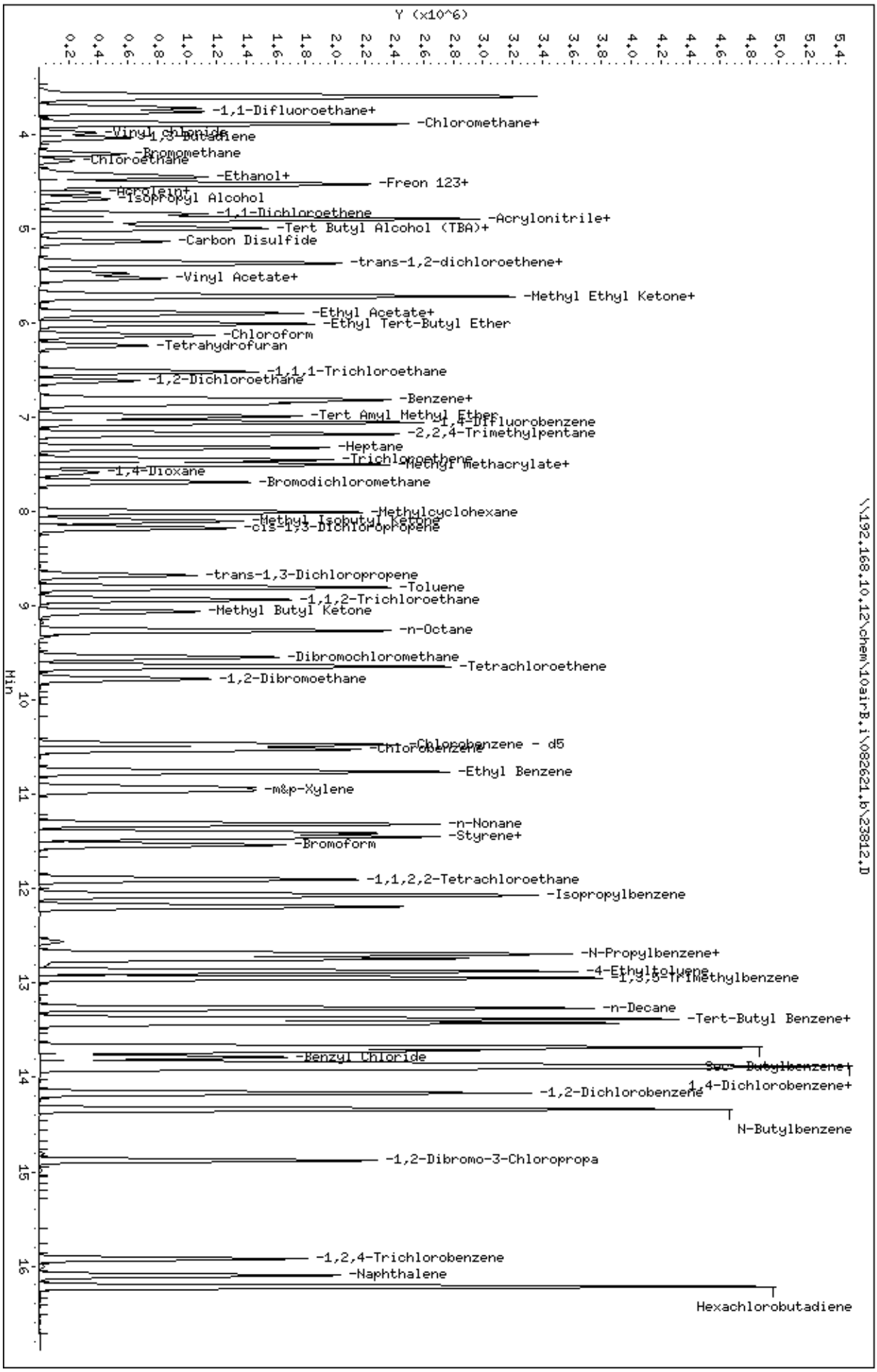
Client SDG: 082621.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.592 | 17.3 | _J__ |
| 2. 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 12.187 | 11.0 | NJ__ |


Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D
Date : 26-AUG-2021 13:25
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: AJA
Column diameter: 0.32
\\192.168.10.12\chem\10airB.i\082621.b\23812.D
Y (x10^6)
Min
-1,1-Difluoroethane+
-Chloromethane+
-Vinyl chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol+
-Freon 123+
-Acrolein+
-Isopropyl Alcohol
-1,1-Dichloroethene
-Acrylonitrile+
-Tert Butyl Alcohol (TBA)+
-Carbon Disulfide
-trans-1,2-dichloroethene+
-Vinyl Acetate+
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl Methacrylate+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5
-Chlorobenzene
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-Tert-Butyl Benzene+
-Benzyl Chloride
Sec-Butylbenzene+
1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
Hexachlorobutadiene

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D

Date : 26-AUG-2021 13:25

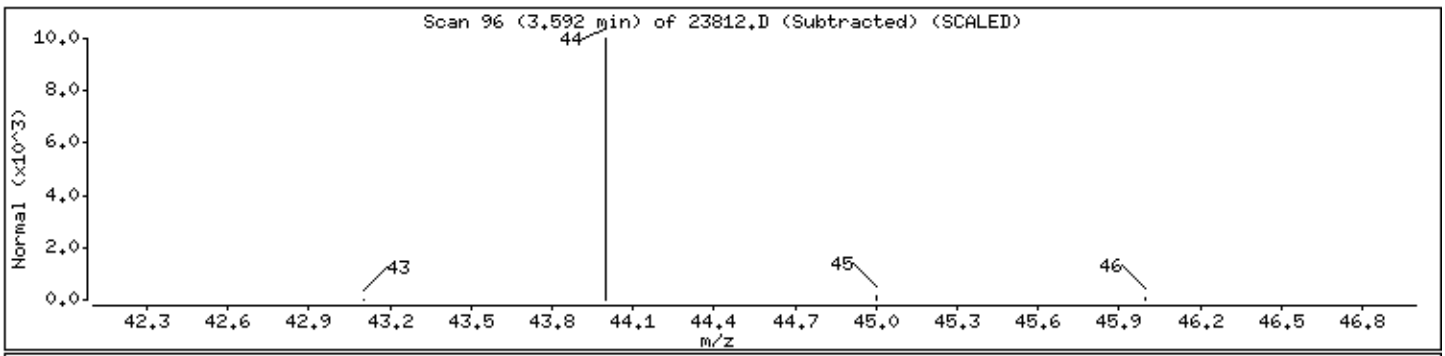
Client ID: Instrument: 10airB.i

Sample Info:

Operator: AJA

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23812.D

Date : 26-AUG-2021 13:25

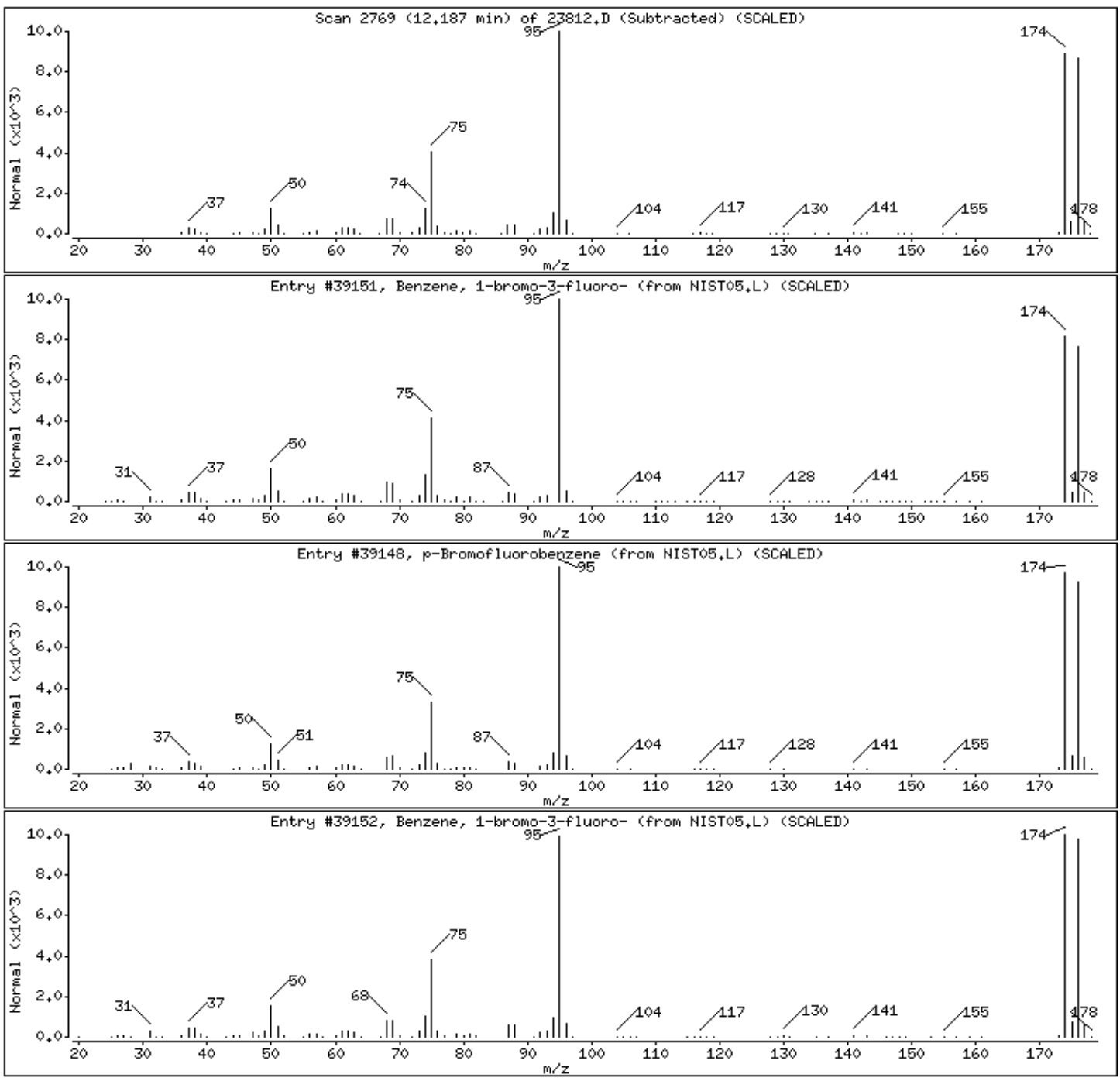
Client ID: Instrument: 10airB.i

Sample Info:

Operator: AJA

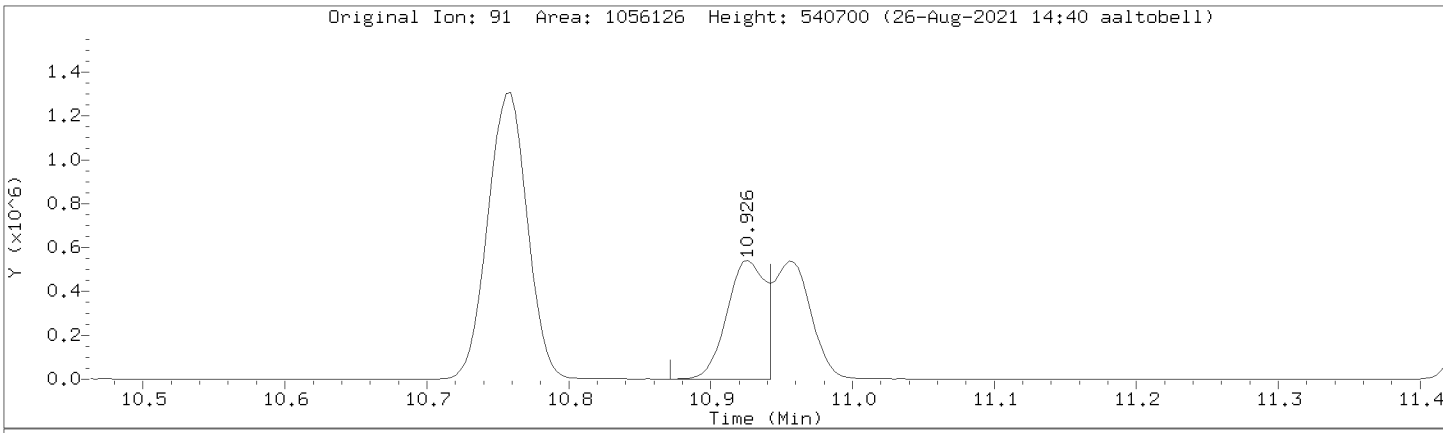
Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

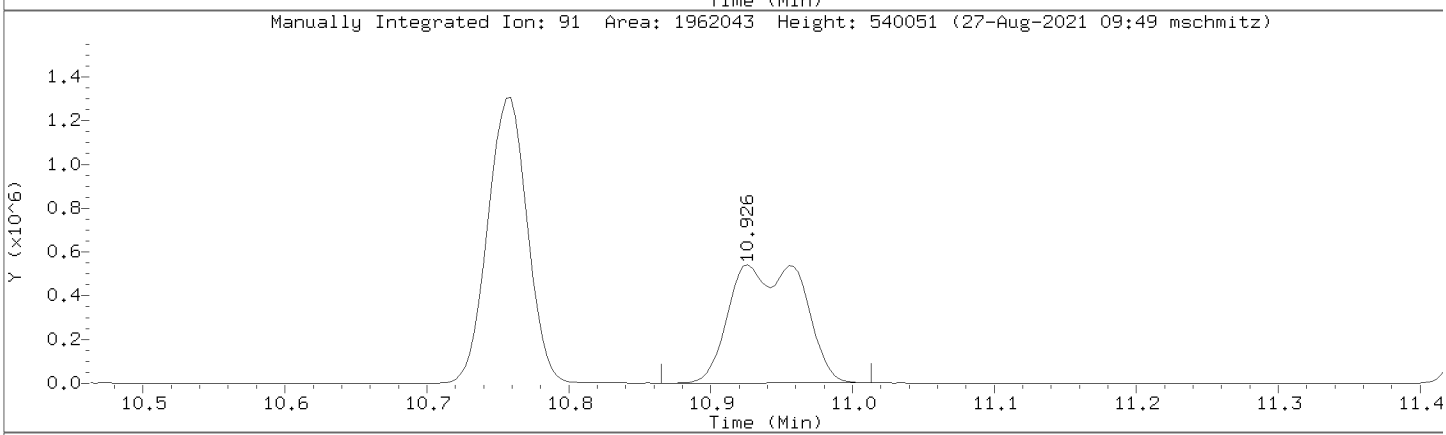
| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 97 | C6H4BrF | 174 |
| p-Bromofluorobenzene | 460-00-4 | NIST05.L | 39148 | 97 | C6H4BrF | 174 |
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39152 | 94 | C6H4BrF | 174 |

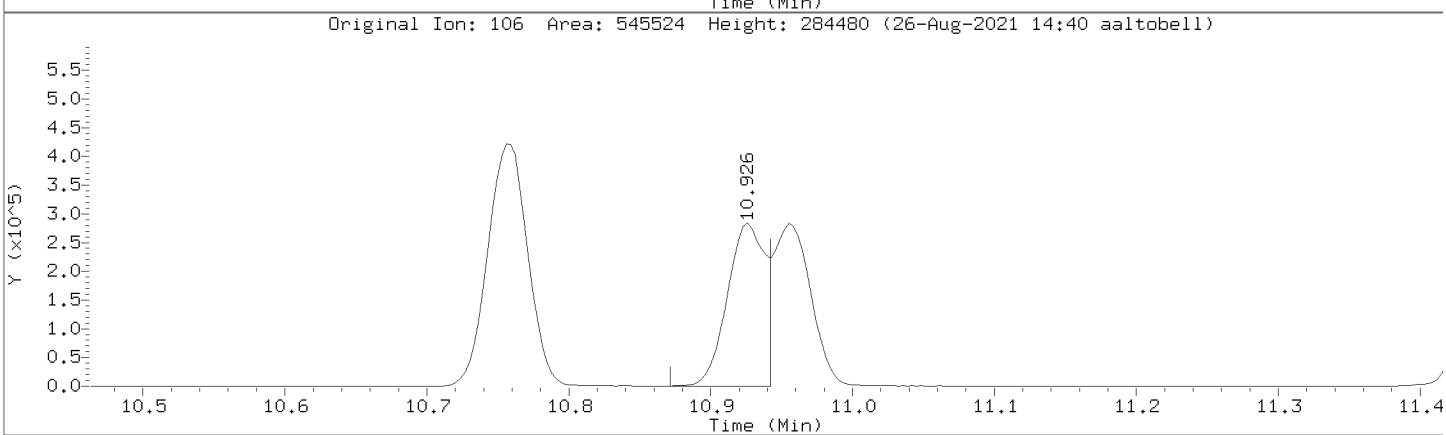


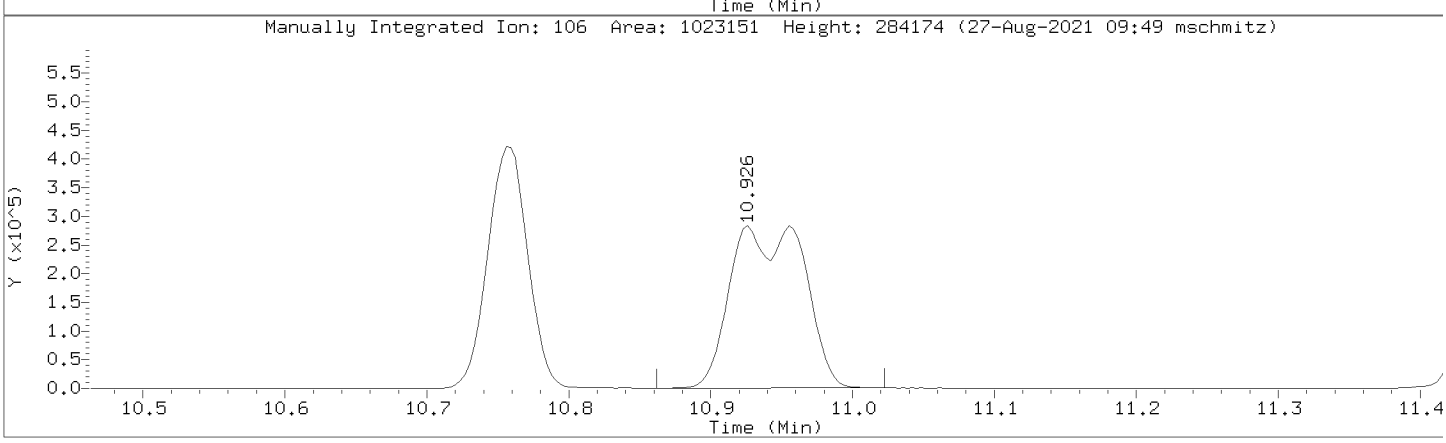
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23812.D
Injection Date: 26-AUG-2021 13:25
Instrument: 10airB.i
Lab Sample ID: ICV

Compound: m&p-Xylene
CAS Number: 7816-60-0



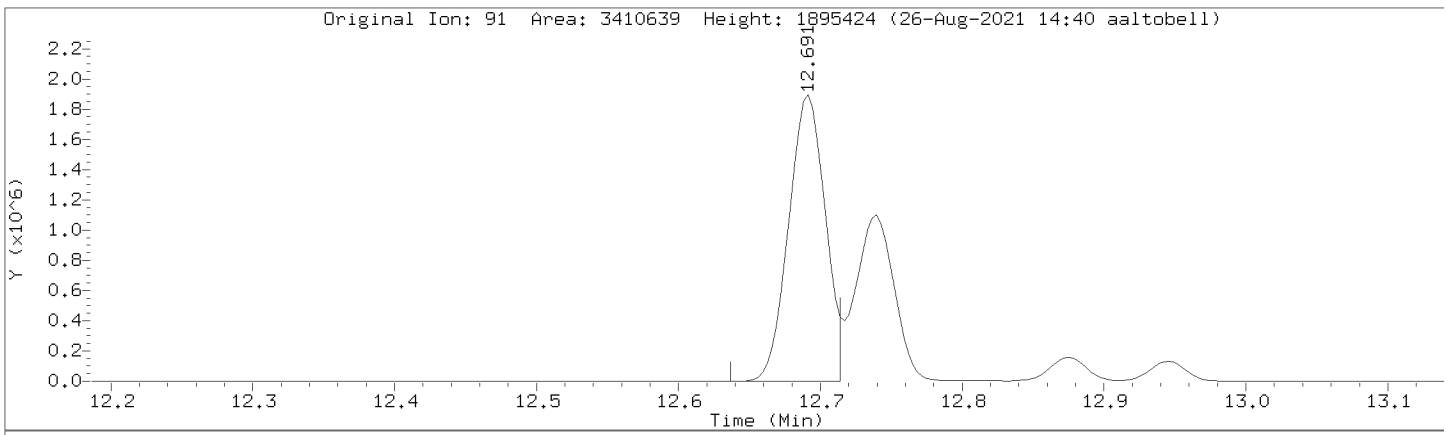



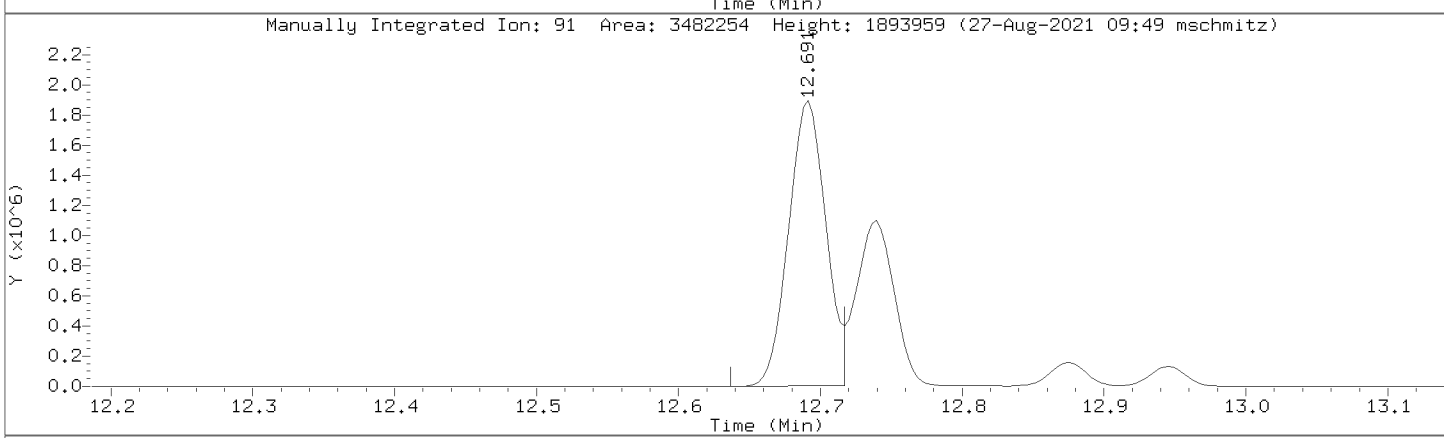



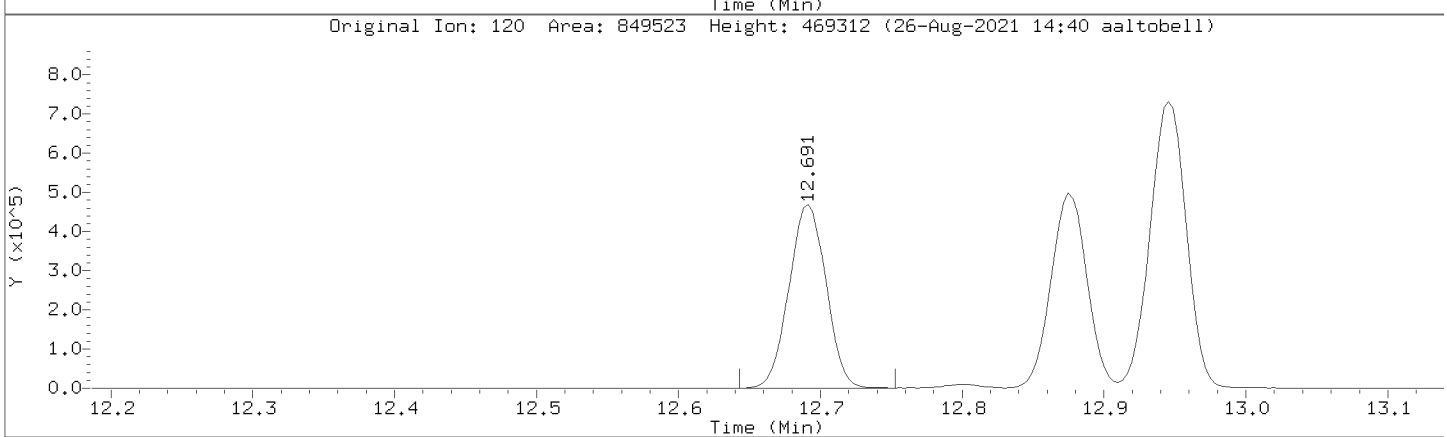



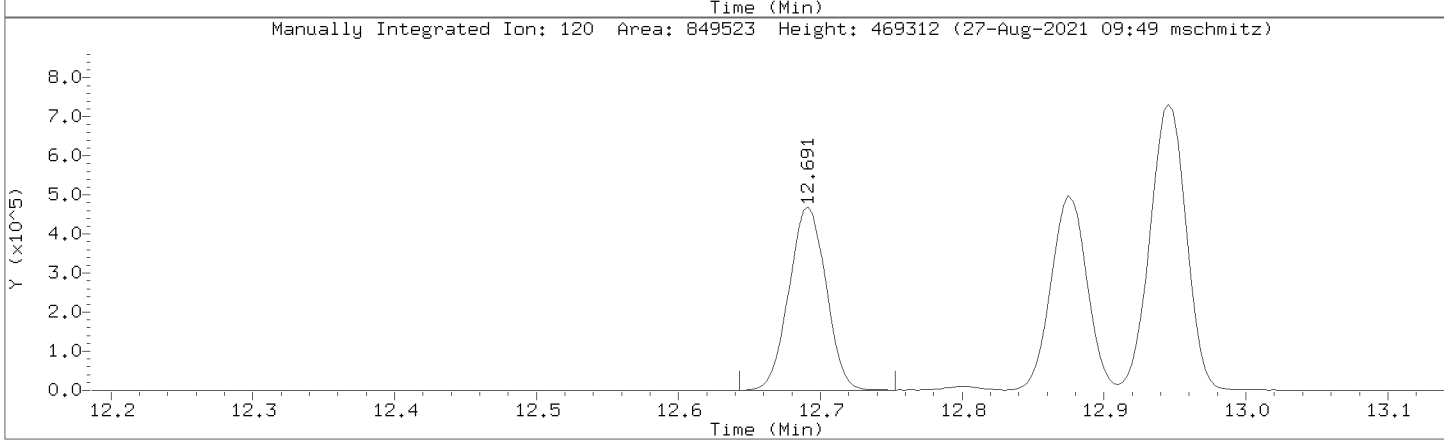
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23812.D
Injection Date: 26-AUG-2021 13:25
Instrument: 10airB.i
Lab Sample ID: ICV

Compound: N-Propylbenzene
CAS Number: 103-65-1



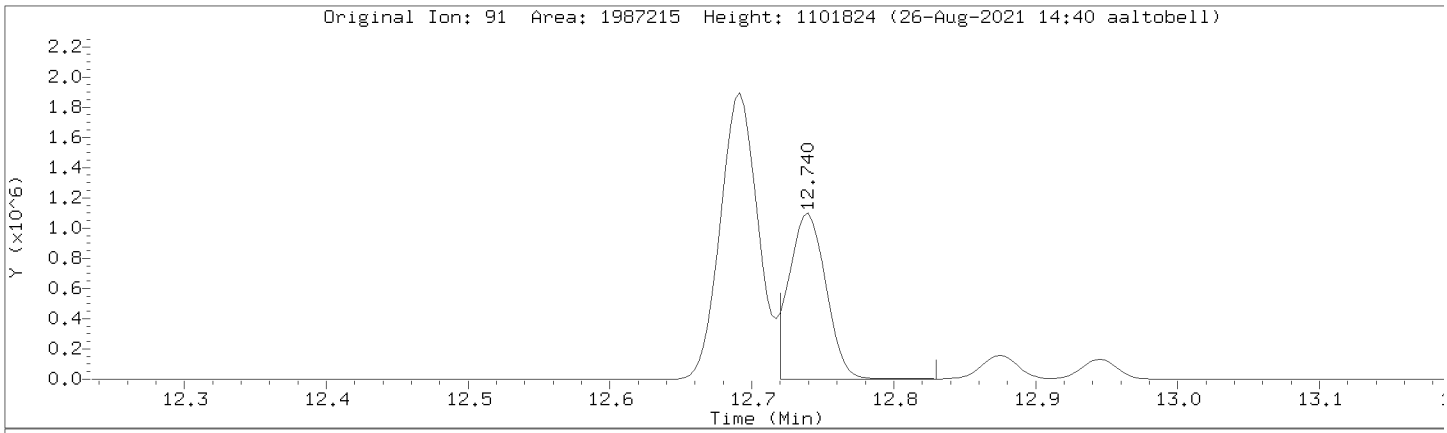



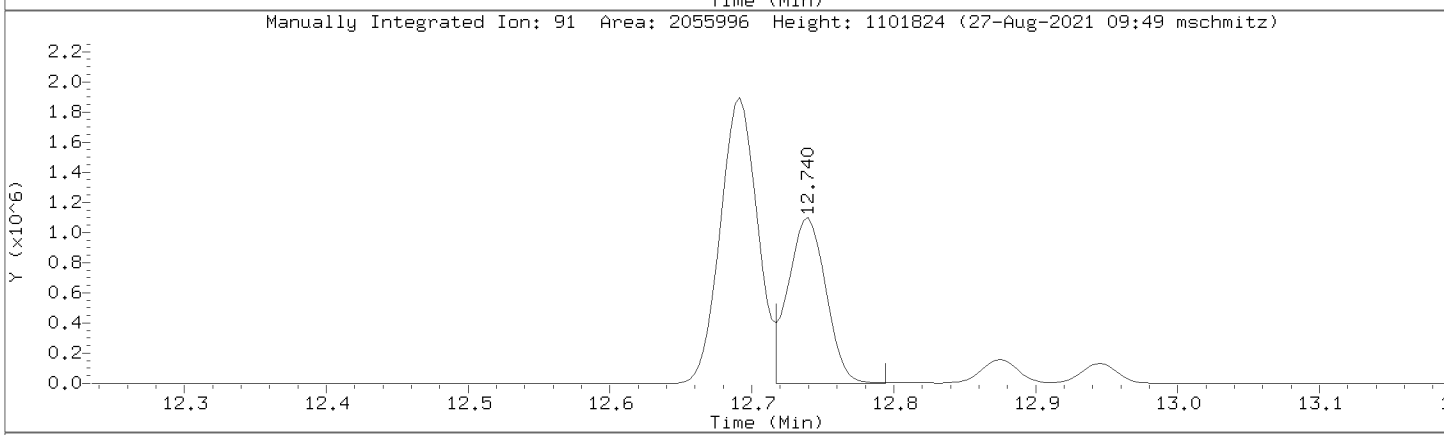



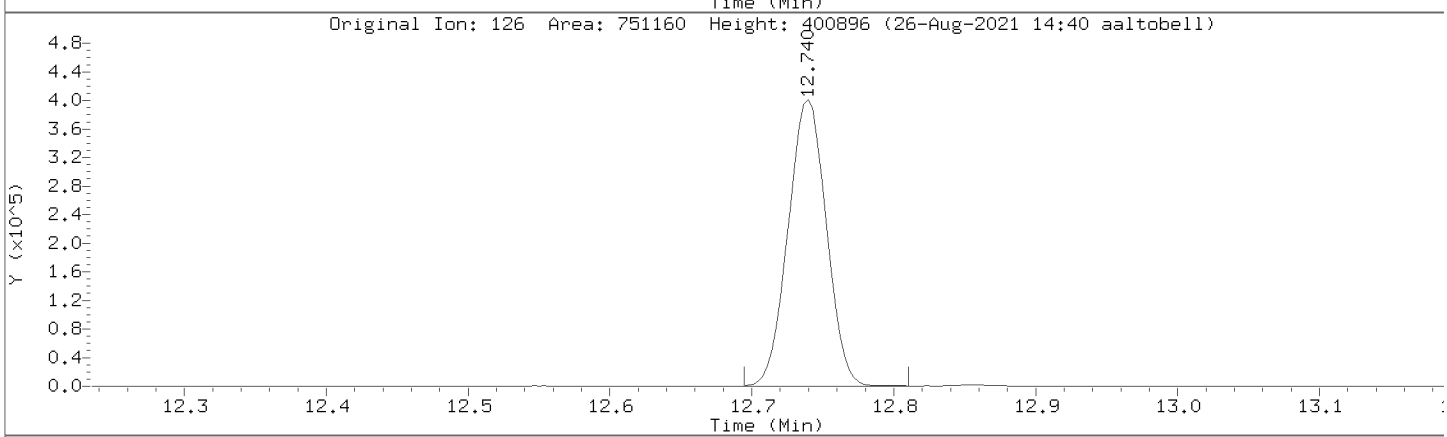



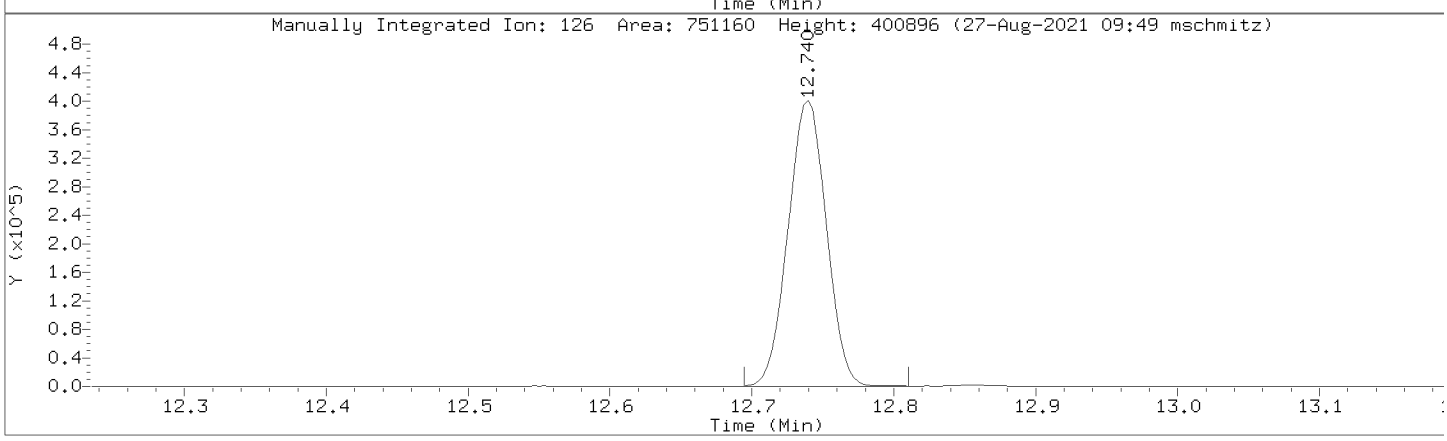
Data File: \\192.168.10.12\chem\10airB.i\082621.b/23812.D
Injection Date: 26-AUG-2021 13:25
Instrument: 10airB.i
Lab Sample ID: ICV

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

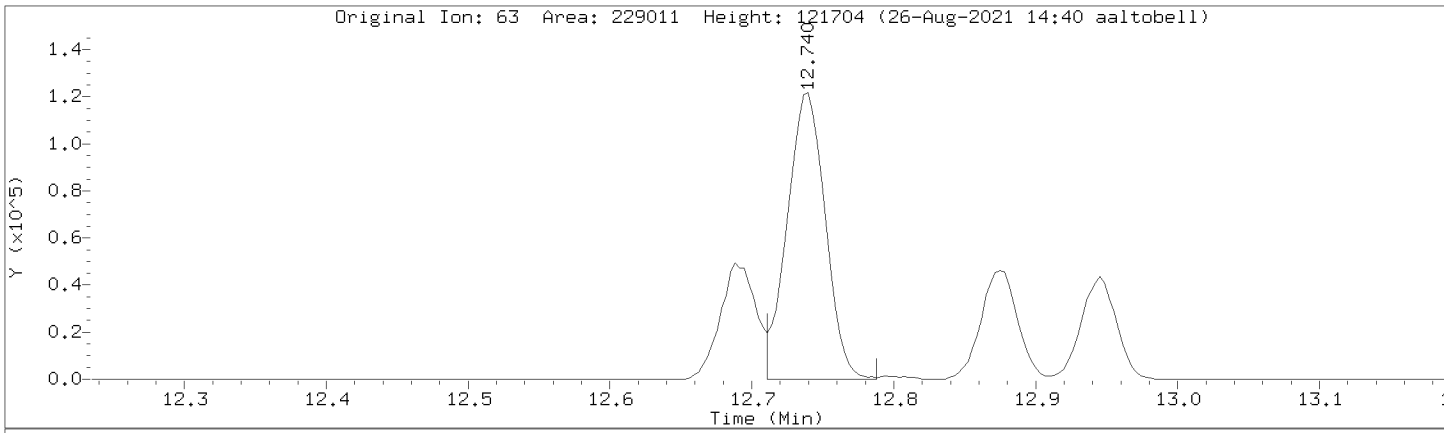


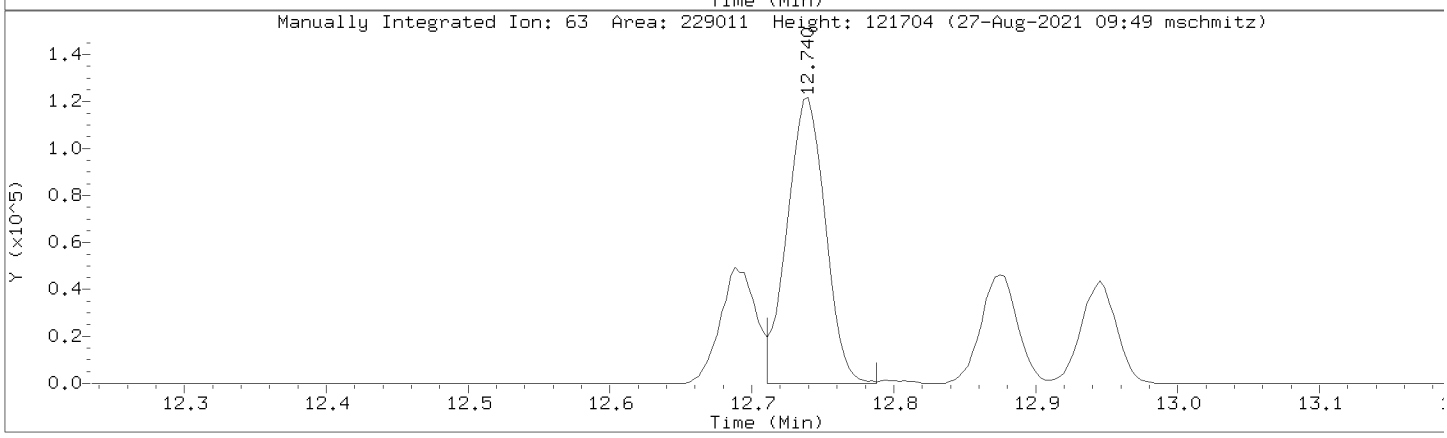



Data File: \\192.168.10.12\chem\10airB.i\082621.b/23812.D
Injection Date: 26-AUG-2021 13:25
Instrument: 10airB.i
Lab Sample ID: ICV



Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

Calibration File Names:
Level 01: all \\192.168.10.12\chem\10airH.i\090721.b\25004.D
Level 02: all \\192.168.10.12\chem\10airH.i\090721.b\25005.D
Level 03: all \\192.168.10.12\chem\10airH.i\090721.b\25006.D
Level 04: all \\192.168.10.12\chem\10airH.i\090721.b\25007.D
Level 05: all \\192.168.10.12\chem\10airH.i\090721.b\25008.D
Level 06: all \\192.168.10.12\chem\10airH.i\090721.b\25009.D
Level 07: all \\192.168.10.12\chem\10airH.i\090721.b\25010.D

| Compound (all.sb) | 0.1000000 Level 1 / 30.0000 Level 7 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 1878<br>451064 | 3318 | 7170 | 13446 | 148449 | 279672 | QUAD | 0.00370 | 0.32354 | -0.01946 | 0.99993 |
| 2 Chlorodifluoromethane | 121<br>174944 | 695 | 2120 | 3598 | 56725 | 108518 | QUAD | -0.00060 | 0.12623 | -0.00760 | 0.99988 |
| 3 Propylene | 0.67633<br>0.32312 | 0.55578 | 0.50073 | 0.45237 | 0.42685 | 0.38205 | AVRG | | 0.47389 | | 24.70740 |
| 4 Dichlorodifluoromethane | 1.59923<br>0.81731 | 1.36459 | 1.23471 | 1.08954 | 1.02828 | 0.95463 | AVRG | | 1.15547 | | 22.95606 |

Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 5 Dichlorotetrafluoroethane | 1.56702 | 1.37241 | 1.22830 | 1.11314 | 1.04454 | 1.00677 | | | | | |
| | 0.83060 | | | | | | AVRG | | 1.16611 | | 21.08412 |
| 6 Chloromethane | 0.80953 | 0.69977 | 0.64532 | 0.59370 | 0.52811 | 0.51282 | | | | | |
| | 0.41456 | | | | | | AVRG | | 0.60054 | | 21.82827 |
| 7 Vinyl chloride | 0.58903 | 0.53739 | 0.45653 | 0.44161 | 0.42793 | 0.43623 | | | | | |
| | 0.38078 | | | | | | AVRG | | 0.46707 | | 15.26691 |
| 8 1,3-Butadiene | 0.40053 | 0.35458 | 0.32920 | 0.31723 | 0.30667 | 0.31999 | | | | | |
| | 0.27842 | | | | | | AVRG | | 0.32952 | | 11.78316 |
| 9 Bromomethane | 0.43186 | 0.42162 | 0.35755 | 0.32780 | 0.31355 | 0.32072 | | | | | |
| | 0.28633 | | | | | | AVRG | | 0.35135 | | 15.85024 |
| 10 Chloroethane | 0.15719 | 0.22176 | 0.22088 | 0.18913 | 0.18035 | 0.19195 | | | | | |
| | 0.17211 | | | | | | AVRG | | 0.19048 | | 12.59723 |
| 11 Ethanol | 0.18222 | 0.16039 | 0.14473 | 0.11570 | 0.11064 | 0.10657 | | | | | |
| | 0.07425 | | | | | | AVRG | | 0.12779 | | 28.70009 |

Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 12 Vinyl Bromide | 0.36715 | 0.34783 | 0.32719 | 0.30734 | 0.30154 | 0.30944 | | | | | |
| | 0.27384 | | | | | | AVRG | | 0.31919 | | 9.73039 |
| 13 Isopentane | 0.55621 | 0.45715 | 0.41535 | 0.37297 | 0.33944 | 0.34933 | | | | | |
| | 0.29935 | | | | | | AVRG | | 0.39854 | | 21.72572 |
| 14 Freon 123 | 1.01825 | 0.90463 | 0.82688 | 0.73983 | 0.68524 | 0.68046 | | | | | |
| | 0.59922 | | | | | | AVRG | | 0.77921 | | 18.72043 |
| 15 Trichlorofluoromethane | 1.35493 | 1.26343 | 1.10482 | 0.99013 | 0.90560 | 0.86152 | | | | | |
| | 0.72032 | | | | | | AVRG | | 1.02868 | | 21.98966 |
| 16 Acrolein | 0.20153 | 0.15130 | 0.15177 | 0.14581 | 0.13555 | 0.13719 | | | | | |
| | 0.11334 | | | | | | AVRG | | 0.14807 | | 18.22346 |
| 17 Acetone | 15407 | 25129 | 55512 | 102078 | 1160894 | +++++ | | | | | |
| | +++++ | | | | | | LINR | 0.03666 | 0.47008 | | 0.99977 |
| 18 Isopropyl Alcohol | 0.91433 | 0.75587 | 0.68935 | 0.62959 | 0.49185 | 0.44317 | | | | | |
| | +++++ | | | | | | AVRG | | 0.65403 | | 26.54781 |

Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 19 1,1-Dichloroethene | 1.01666 | 0.89126 | 0.78603 | 0.72135 | 0.67515 | 0.67549 | | | | | |
| | 0.57446 | | | | | | AVRG | | 0.76291 | | 19.58693 |
| 20 Acrylonitrile | 0.41401 | 0.38363 | 0.33300 | 0.31214 | 0.28979 | 0.29785 | | | | | |
| | 0.24329 | | | | | | AVRG | | 0.32481 | | 17.88227 |
| 21 Tert Butyl Alcohol (TBA) | 1.71711 | 1.43714 | 1.30348 | 1.15813 | 1.02358 | 0.96082 | | | | | |
| | 0.78870 | | | | | | AVRG | | 1.19842 | | 26.24534 |
| 22 Methyl Acetate | 1.67608 | 1.41766 | 1.20817 | 1.07717 | 0.88997 | 0.79397 | | | | | |
| | +++++ | | | | | | AVRG | | 1.17717 | | 28.09858 |
| 23 Freon 113 | 1.17974 | 1.06640 | 0.93543 | 0.81346 | 0.76930 | 0.72906 | | | | | |
| | 0.62515 | | | | | | AVRG | | 0.87408 | | 22.48862 |
| 24 Allyl Chloride | 0.19385 | 0.18266 | 0.18391 | 0.15485 | 0.16407 | 0.15362 | | | | | |
| | 0.13354 | | | | | | AVRG | | 0.16664 | | 12.74350 |
| 25 Methylene chloride | 15676 | 27810 | 59568 | 110896 | 1319116 | 2033727 | | | | | |
| | 2677906 | | | | | | QUAD | 0.03249 | 0.60058 | -0.01699 | 0.99949 |

Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 26 Carbon Disulfide | 1.56378 | 1.35091 | 1.18691 | 1.06744 | 1.04629 | 0.97373 | | | | | |
| | 0.86968 | | | | | | AVRG | | 1.15125 | | 20.68183 |
| 27 Methyl Tert Butyl Ether | 1.39065 | 1.25415 | 1.08804 | 0.98631 | 0.99639 | 0.95468 | | | | | |
| | 0.85614 | | | | | | AVRG | | 1.07520 | | 17.33028 |
| 28 trans-1,2-dichloroethene | 0.56733 | 0.50204 | 0.41608 | 0.38565 | 0.36545 | 0.35926 | | | | | |
| | 0.32701 | | | | | | AVRG | | 0.41755 | | 20.71875 |
| 29 Vinyl Acetate | 1.40329 | 1.23660 | 1.04624 | 0.90485 | 0.82066 | 0.77154 | | | | | |
| | 0.67345 | | | | | | AVRG | | 0.97952 | | 26.94221 |
| 30 1,1-Dichloroethane | 1.26437 | 1.08748 | 0.99321 | 0.87786 | 0.85366 | 0.80423 | | | | | |
| | 0.71208 | | | | | | AVRG | | 0.94184 | | 19.93290 |
| 31 Methyl Ethyl Ketone | 0.15014 | 0.20797 | 0.20614 | 0.20289 | 0.18594 | 0.18258 | | | | | |
| | 0.17170 | | | | | | AVRG | | 0.18677 | | 11.29763 |
| 32 Di-isopropyl Ether | 2.49626 | 2.27927 | 2.04724 | 1.80367 | 1.65507 | 1.39683 | | | | | |
| | 1.10996 | | | | | | AVRG | | 1.82690 | | 26.72482 |

Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 33 n-Hexane | 1.25108<br>0.59653 | 1.12530 | 0.94470 | 0.83704 | 0.78262 | 0.71744 | AVRG | | 0.89353 | | 25.80083 |
| 34 Ethyl Acetate | 1.65383<br>0.87138 | 1.42213 | 1.29641 | 1.20102 | 1.14510 | 1.03108 | AVRG | | 1.23156 | | 20.89045 |
| 35 cis-1,2-Dichloroethene | 0.56743<br>0.34078 | 0.51841 | 0.42628 | 0.39033 | 0.38080 | 0.36972 | AVRG | | 0.42768 | | 19.62501 |
| 36 Ethyl Tert-Butyl Ether | 2.22081<br>1.20737 | 1.91452 | 1.69780 | 1.51831 | 1.52304 | 1.40138 | AVRG | | 1.64046 | | 20.65169 |
| 37 Chloroform | 1.24526<br>0.72116 | 1.06392 | 0.97205 | 0.87614 | 0.85042 | 0.80673 | AVRG | | 0.93367 | | 18.91046 |
| 38 Tetrahydrofuran | 0.64603<br>0.47189 | 0.65128 | 0.61142 | 0.55241 | 0.58407 | 0.53970 | AVRG | | 0.57954 | | 11.02978 |
| 39 1,1,1-Trichloroethane | 1.19387<br>0.71949 | 1.01352 | 0.91680 | 0.82045 | 0.83184 | 0.80273 | AVRG | | 0.89981 | | 17.72049 |

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 40 1,2-Dichloroethane | 0.90776 | 0.81849 | 0.72420 | 0.65548 | 0.65957 | 0.62875 | | | | | |
| | 0.56124 | | | | | | AVRG | | 0.70793 | | 16.84259 |
| 41 Benzene | 5423 | 9131 | 19651 | 36058 | 536285 | 1014785 | | | | | |
| | +++++ | | | | | | QUAD | 0.00331 | 1.13344 | -0.04657 | 0.99999 |
| 42 Carbon tetrachloride | 1.03213 | 0.98681 | 0.70777 | 0.62964 | 0.70932 | 0.71343 | | | | | |
| | 0.63160 | | | | | | AVRG | | 0.77296 | | 21.47130 |
| 43 Cyclohexane | 1.16278 | 0.99106 | 0.88703 | 0.79984 | 0.81829 | 0.76656 | | | | | |
| | 0.66674 | | | | | | AVRG | | 0.87033 | | 18.77907 |
| 44 Tert Amyl Methyl Ether | 1.33594 | 1.16218 | 1.04408 | 0.96738 | 1.06591 | 1.03729 | | | | | |
| | 0.94160 | | | | | | AVRG | | 1.07920 | | 12.39742 |
| 46 2,2,4-Trimethylpentane | 3.76312 | 3.20189 | 2.82423 | 2.52463 | 2.42638 | 2.18343 | | | | | |
| | 1.80980 | | | | | | AVRG | | 2.67621 | | 24.40059 |
| 47 Heptane | 1.36541 | 1.16371 | 1.08173 | 0.96733 | 0.91420 | 0.82696 | | | | | |
| | 0.70191 | | | | | | AVRG | | 1.00304 | | 22.07544 |

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 48 Trichloroethene | 0.64799 | 0.59081 | 0.55803 | 0.49793 | 0.51586 | 0.50784 | | | | | |
| | 0.46713 | | | | | | AVRG | | 0.54080 | | 11.51337 |
| 49 Methyl methacrylate | 0.58515 | 0.48108 | 0.43324 | 0.42037 | 0.40354 | 0.39622 | | | | | |
| | 0.35976 | | | | | | AVRG | | 0.43991 | | 16.82556 |
| 50 1,2-Dichloropropane | 0.74487 | 0.65151 | 0.60154 | 0.55295 | 0.54342 | 0.51306 | | | | | |
| | 0.45252 | | | | | | AVRG | | 0.57998 | | 16.59193 |
| 51 1,4-Dioxane | 0.32143 | 0.29623 | 0.26599 | 0.19310 | 0.25819 | 0.21904 | | | | | |
| | +++++ | | | | | | AVRG | | 0.25900 | | 18.33327 |
| 52 Bromodichloromethane | 1.19082 | 1.07504 | 0.91005 | 0.81507 | 0.85801 | 0.82985 | | | | | |
| | 0.73838 | | | | | | AVRG | | 0.91675 | | 17.44028 |
| 53 Methylcyclohexane | 738 | 1526 | 4446 | 8728 | 146480 | 286810 | | | | | |
| | 482602 | | | | | | QUAD | -0.00199 | 0.31659 | -0.01222 | 0.99993 |
| 54 Methyl Isobutyl Ketone | 1.40005 | 1.23822 | 1.23284 | 1.17334 | 1.23036 | 1.12756 | | | | | |
| | 0.95055 | | | | | | AVRG | | 1.19327 | | 11.41627 |

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 55 cis-1,3-Dichloropropene | 0.72976 | 0.74975 | 0.66191 | 0.59243 | 0.65902 | 0.65273 | | | | | |
| | 0.59408 | | | | | | AVRG | | 0.66281 | | 9.10179 |
| 56 trans-1,3-Dichloropropene | 0.53093 | 0.56435 | 0.52455 | 0.48389 | 0.56936 | 0.55760 | | | | | |
| | 0.50847 | | | | | | AVRG | | 0.53416 | | 5.91485 |
| 57 Toluene | 1.72299 | 1.47399 | 1.31925 | 1.21779 | 1.26113 | 1.21750 | | | | | |
| | 1.08099 | | | | | | AVRG | | 1.32766 | | 15.89623 |
| 58 1,1,2-Trichloroethane | 0.55500 | 0.52681 | 0.48226 | 0.44744 | 0.46246 | 0.45790 | | | | | |
| | 0.41920 | | | | | | AVRG | | 0.47872 | | 9.85821 |
| 59 Methyl Butyl Ketone | 1.50179 | 1.09781 | 1.20450 | 1.20569 | 1.30901 | 1.24907 | | | | | |
| | 1.09654 | | | | | | AVRG | | 1.23777 | | 11.26148 |
| 60 n-Octane | 1.81868 | 1.60640 | 1.53294 | 1.44554 | 1.43825 | 1.29468 | | | | | |
| | 1.09797 | | | | | | AVRG | | 1.46207 | | 15.65802 |
| 61 Dibromochloromethane | 1.37161 | 1.13239 | 1.04913 | 0.91858 | 0.99127 | 0.96504 | | | | | |
| | 0.88393 | | | | | | AVRG | | 1.04457 | | 15.90120 |

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
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Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 62 Tetrachloroethene | 0.96763 | 0.89014 | 0.81796 | 0.72211 | 0.73169 | 0.72506 | | | | | |
| | 0.66838 | | | | | | AVRG | | 0.78900 | | 13.62838 |
| 63 1,2-Dibromoethane | 1.05472 | 1.00951 | 0.90031 | 0.83932 | 0.89012 | 0.87533 | | | | | |
| | 0.79251 | | | | | | AVRG | | 0.90883 | | 10.17708 |
| 65 Chlorobenzene | 1.67501 | 1.41044 | 1.31644 | 1.15779 | 1.18560 | 1.15848 | | | | | |
| | 1.05578 | | | | | | AVRG | | 1.27993 | | 16.36565 |
| 66 Ethyl Benzene | 2.39166 | 2.18460 | 1.95889 | 1.81203 | 1.93157 | 1.83768 | | | | | |
| | 1.63488 | | | | | | AVRG | | 1.96447 | | 12.81070 |
| 67 m&p-Xylene | 1.80622 | 1.60787 | 1.51554 | 1.41661 | 1.50692 | 1.44583 | | | | | |
| | 1.29354 | | | | | | AVRG | | 1.51322 | | 10.68945 |
| 68 n-Nonane | 1.54011 | 1.44063 | 1.41249 | 1.38087 | 1.46832 | 1.32941 | | | | | |
| | 1.11897 | | | | | | AVRG | | 1.38440 | | 9.72369 |
| 69 Styrene | 1927 | 4371 | 11601 | 24825 | 477067 | 947438 | | | | | |
| | +++++ | | | | | | QUAD | -0.00751 | 1.14132 | -0.01262 | 0.99998 |

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 70 o-Xylene | 1.92544 | 1.67553 | 1.63720 | 1.50913 | 1.55962 | 1.48470 | | | | | |
| | 1.32672 | | | | | | AVRG | | 1.58833 | | 11.77609 |
| 71 Bromoform | 0.77819 | 0.71514 | 0.72927 | 0.67877 | 0.85985 | 0.81994 | | | | | |
| | 0.75492 | | | | | | AVRG | | 0.76230 | | 8.19892 |
| 72 1,1,2,2-Tetrachloroethane | 1.48295 | 1.34222 | 1.24867 | 1.13808 | 1.23921 | 1.19736 | | | | | |
| | 1.11060 | | | | | | AVRG | | 1.25130 | | 10.19316 |
| 73 Isopropylbenzene | 2.43269 | 2.11785 | 2.02381 | 1.86604 | 2.15328 | 2.05815 | | | | | |
| | 1.83883 | | | | | | AVRG | | 2.07009 | | 9.62272 |
| 74 N-Propylbenzene | 2.84522 | 2.52871 | 2.47211 | 2.29426 | 2.55539 | 2.46556 | | | | | |
| | 2.22840 | | | | | | AVRG | | 2.48424 | | 8.04044 |
| 75 2-Chlorotoluene | 1.98902 | 1.83626 | 1.66132 | 1.52773 | 1.65731 | 1.54235 | | | | | |
| | 1.38777 | | | | | | AVRG | | 1.65739 | | 12.18548 |
| 76 4-Ethyltoluene | 4492 | 8630 | 21837 | 45669 | 862106 | 1705783 | | | | | |
| | 2756283 | | | | | | QUAD | -0.02204 | 2.24989 | -0.11502 | 0.99980 |

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 07-SEP-2021 11:01
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Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 77 1,3,5-Trimethylbenzene | 4301 | 8456 | 20649 | 41845 | 745180 | 1506929 | | | | | |
| | +++++ | | | | | | QUAD | -0.00461 | 1.75839 | 0.01228 | 0.99999 |
| 78 n-Decane | 2514 | 5585 | 16816 | 36810 | 704458 | 1388573 | | | | | |
| | 2080039 | | | | | | QUAD | -0.02793 | 1.67410 | -0.13907 | 0.99900 |
| 79 Tert-Butyl Benzene | 1.80761 | 1.69686 | 1.66080 | 1.54405 | 1.71871 | 1.71867 | | | | | |
| | 1.49580 | | | | | | AVRG | | 1.66321 | | 6.51135 |
| 80 1,2,4-Trimethylbenzene | 1.46800 | 1.42252 | 1.53838 | 1.49585 | 1.75543 | 1.76706 | | | | | |
| | 1.51401 | | | | | | AVRG | | 1.56589 | | 8.83668 |
| 81 Sec- Butylbenzene | 2.38755 | 2.21855 | 2.34398 | 2.23233 | 2.55504 | 2.48895 | | | | | |
| | 2.06548 | | | | | | AVRG | | 2.32741 | | 7.25984 |
| 82 1,3-Dichlorobenzene | 2319 | 4357 | 11460 | 23338 | 455846 | 955463 | | | | | |
| | 1489754 | | | | | | QUAD | -0.01954 | 1.24824 | -0.07189 | 0.99880 |
| 83 Benzyl Chloride | 672 | 2278 | 7227 | 16856 | 480028 | 1082051 | | | | | |
| | 1882911 | | | | | | LINR | -0.03281 | 1.24073 | | 0.99912 |

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
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Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 84 1,4-Dichlorobenzene | 1988 | 3473 | 9889 | 20111 | 433874 | 920951 | | | | | |
| | 1439194 | | | | | | QUAD | -0.02224 | 1.19593 | -0.06612 | 0.99860 |
| 85 p-Isopropyltoluene | 4303 | 9141 | 24964 | 52297 | 975015 | 1879094 | | | | | |
| | 2854676 | | | | | | QUAD | -0.02989 | 2.61072 | -0.20206 | 0.99967 |
| 86 1,2,3-Trimethylbenzene | 1.60744 | 1.65363 | 1.70254 | 1.64314 | 1.84357 | 1.78703 | | | | | |
| | 1.54519 | | | | | | AVRG | | 1.68322 | | 6.14252 |
| 87 1,2-Dichlorobenzene | 2388 | 4527 | 11816 | 22946 | 462111 | 941672 | | | | | |
| | 1475721 | | | | | | QUAD | -0.01731 | 1.24555 | -0.07387 | 0.99927 |
| 88 N-Butylbenzene | 2243 | 4520 | 16406 | 38306 | 830796 | 1609330 | | | | | |
| | 2516941 | | | | | | QUAD | -0.03371 | 2.20419 | -0.14837 | 0.99979 |
| 89 1,2-Dibromo-3-Chloropropane | 597 | 1299 | 4423 | 9419 | 266502 | 540265 | | | | | |
| | 906977 | | | | | | QUAD | -0.01260 | 0.67369 | -0.02095 | 0.99981 |
| 90 1,2,4-Trichlorobenzene | 1451 | 937 | 4670 | 12942 | 461975 | 1042439 | | | | | |
| | 1746567 | | | | | | QUAD | -0.03559 | 0.57188 | -0.00430 | 0.99862 |

Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

| Compound (all.sb) | 0.1000000 Level 1 | 0.2000000 Level 2 | 0.5000000 Level 3 | 1.0000 Level 4 | 10.0000 Level 5 | 20.0000 Level 6 | Curve | Coefficients b | m1 | m2 | %RSD or R^2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30.0000 Level 7 | | | | | | | | | | |
| 91 Naphthalene | 4510 +++++ | 1739 | 5969 | 15727 | 578034 | 1339860 | QUAD | -0.01835 | 1.03336 | 0.14912 | 0.99987 |
| 92 Hexachlorobutadiene | 0.54134 0.59655 | 0.51280 | 0.53937 | 0.51551 | 0.63256 | 0.64110 | AVRG | | 0.56846 | | 9.54326 |

Report Date : 07-Sep-2021 13:58

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-SEP-2021 08:26
End Cal Date : 07-SEP-2021 11:01
Quant Method : ISTD
Target Version : RC10A
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Last Edit : 07-Sep-2021 13:41 10airH.i

Average %RSD Results.

Calculated Average %RSD = 16.34363
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

| Curve | Formula | Units |
|---|---|---|
| Averaged | Amt = Rsp/m1 | Response |
| Linear | Amt = b + m1*Rsp | Amount |
| Quad | Rsp = b + m1*Amt + m2*Amt^2 | Amount |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25004.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25004.D
Lab Smp Id: CAL1
Inj Date : 07-SEP-2021 08:26
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 07-Sep-2021 14:02 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,1-Difluoroethane | 65 | 2.945 | 2.948 | (0.542) | 1878 | 0.07140 | 0.0211(aQ) |
| 2 | Chlorodifluoromethane | 67 | 2.958 | 2.961 | (0.545) | 121 | 0.07150 | 0.0699(QM) |
| 3 | Propylene | 41 | 2.964 | 2.967 | (0.546) | 2084 | 0.07190 | 0.103 |
| 4 | Dichlorodifluoromethane | 85 | 2.983 | 2.986 | (0.549) | 4962 | 0.07240 | 0.100 |
| 5 | Dichlorotetrafluoroethane | 85 | 3.054 | 3.057 | (0.562) | 4486 | 0.06680 | 0.0898 |
| 6 | Chloromethane | 50 | 3.057 | 3.064 | (0.563) | 2484 | 0.07160 | 0.0965(M) |
| 7 | Vinyl chloride | 62 | 3.125 | 3.131 | (0.575) | 1815 | 0.07190 | 0.0907(M) |
| 8 | 1,3-Butadiene | 54 | 3.157 | 3.163 | (0.581) | 1229 | 0.07160 | 0.0870 |
| 9 | Bromomethane | 94 | 3.273 | 3.279 | (0.603) | 1327 | 0.07170 | 0.0881 |
| 10 | Chloroethane | 64 | 3.318 | 3.324 | (0.611) | 483 | 0.07170 | 0.0592(QM) |
| 11 | Ethanol | 45 | 3.337 | 3.343 | (0.615) | 3365 | 0.43090 | 0.614 |
| 12 | Vinyl Bromide | 106 | 3.424 | 3.427 | (0.631) | 1125 | 0.07150 | 0.0822 |
| 13 | Isopentane | 43 | 3.434 | 3.440 | (0.632) | 1752 | 0.07350 | 0.103 |
| 14 | Freon 123 | 83 | 3.472 | 3.478 | (0.639) | 3107 | 0.07120 | 0.0930 |
| 15 | Trichlorofluoromethane | 101 | 3.495 | 3.501 | (0.644) | 4204 | 0.07240 | 0.0954(M) |
| 16 | Acrolein | 56 | 3.501 | 3.504 | (0.645) | 1755 | 0.20320 | 0.277 |
| 17 | Acetone | 43 | 3.530 | 3.527 | (0.650) | 15407 | 0.35310 | (aM) |
| 18 | Isopropyl Alcohol | 45 | 3.556 | 3.559 | (0.655) | 15564 | 0.39720 | 0.555 |
| 19 | 1,1-Dichloroethene | 61 | 3.707 | 3.713 | (0.683) | 3137 | 0.07200 | 0.0959 |
| 20 | Acrylonitrile | 53 | 3.720 | 3.726 | (0.685) | 3529 | 0.19890 | 0.254 |
| 21 | Tert Butyl Alcohol (TBA) | 59 | 3.755 | 3.752 | (0.692) | 5210 | 0.07080 | 0.101 |
| 22 | Methyl Acetate | 43 | 3.749 | 3.749 | (0.690) | 5143 | 0.07160 | 0.102(M) |
| 23 | Freon 113 | 101 | 3.739 | 3.745 | (0.689) | 3620 | 0.07160 | 0.0966 |
| 24 | Allyl Chloride | 76 | 3.816 | 3.822 | (0.703) | 589 | 0.07090 | 0.0825(QM) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25004.D
Report Date: 07-Sep-2021 14:12

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 3.819 | 3.826 | (0.703) | 15676 | 0.35920 | 0.0681 |
| | 26 Carbon Disulfide | 76 | 3.922 | 3.929 | (0.722) | 4852 | 0.07240 | 0.0983(M) |
| | 27 Methyl Tert Butyl Ether | 73 | 4.083 | 4.076 | (0.752) | 4291 | 0.07200 | 0.0931 |
| | 28 trans-1,2-dichloroethene | 96 | 4.083 | 4.093 | (0.752) | 1753 | 0.07210 | 0.0980 |
| | 29 Vinyl Acetate | 43 | 4.160 | 4.166 | (0.766) | 5196 | 0.08640 | 0.124(M) |
| | 30 1,1-Dichloroethane | 63 | 4.205 | 4.215 | (0.774) | 3858 | 0.07120 | 0.0956 |
| | 31 Methyl Ethyl Ketone | 72 | 4.331 | 4.327 | (0.798) | 462 | 0.07180 | 0.0577(QM) |
| | 32 Di-isopropyl Ether | 45 | 4.350 | 4.347 | (0.801) | 7542 | 0.07050 | 0.0963(M) |
| | 33 n-Hexane | 57 | 4.350 | 4.356 | (0.801) | 3796 | 0.07080 | 0.0991(Q) |
| | 34 Ethyl Acetate | 43 | 4.485 | 4.482 | (0.826) | 5018 | 0.07080 | 0.0951(QM) |
| | 35 cis-1,2-Dichloroethene | 96 | 4.491 | 4.504 | (0.827) | 1746 | 0.07180 | 0.0953(Q) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 4.575 | 4.572 | (0.843) | 6824 | 0.07170 | 0.0971 |
| | 37 Chloroform | 83 | 4.671 | 4.684 | (0.860) | 3757 | 0.07040 | 0.0939 |
| | 38 Tetrahydrofuran | 42 | 4.755 | 4.745 | (0.876) | 1974 | 0.07130 | 0.0795(QM) |
| | 39 1,1,1-Trichloroethane | 97 | 4.983 | 4.993 | (0.918) | 3648 | 0.07130 | 0.0946 |
| | 40 1,2-Dichloroethane | 62 | 5.064 | 5.073 | (0.933) | 2801 | 0.07200 | 0.0923 |
| | 41 Benzene | 78 | 5.215 | 5.228 | (0.960) | 5423 | 0.07150 | 0.0825 |
| | 42 Carbon tetrachloride | 117 | 5.234 | 5.244 | (0.964) | 3198 | 0.07230 | 0.0965 |
| | 43 Cyclohexane | 56 | 5.257 | 5.266 | (0.968) | 3553 | 0.07130 | 0.0953 |
| | 44 Tert Amyl Methyl Ether | 73 | 5.369 | 5.363 | (0.989) | 4105 | 0.07170 | 0.0888 |
| * | 45 1,4-Difluorobenzene | 114 | 5.430 | 5.440 | (1.000) | 428556 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 5.523 | 5.530 | (1.017) | 11547 | 0.07160 | 0.101 |
| | 47 Heptane | 43 | 5.652 | 5.658 | (1.041) | 4178 | 0.07140 | 0.0972 |
| | 48 Trichloroethene | 130 | 5.758 | 5.768 | (1.060) | 1980 | 0.07130 | 0.0854 |
| | 49 Methyl methacrylate | 69 | 5.803 | 5.806 | (1.069) | 1793 | 0.07150 | 0.0951(Q) |
| | 50 1,2-Dichloropropane | 63 | 5.803 | 5.813 | (1.069) | 2292 | 0.07180 | 0.0922(Q) |
| | 51 1,4-Dioxane | 88 | 5.868 | 5.858 | (1.081) | 2463 | 0.17880 | 0.222(M) |
| | 52 Bromodichloromethane | 83 | 5.961 | 5.970 | (1.098) | 3654 | 0.07160 | 0.0930 |
| | 53 Methylcyclohexane | 98 | 6.224 | 6.234 | (1.146) | 738 | 0.07170 | 0.117(Q) |
| | 54 Methyl Isobutyl Ketone | 43 | 6.321 | 6.308 | (1.164) | 4314 | 0.07190 | 0.0844(M) |
| | 55 cis-1,3-Dichloropropene | 75 | 6.385 | 6.395 | (1.176) | 2233 | 0.07140 | 0.0786(M) |
| | 56 trans-1,3-Dichloropropene | 75 | 6.826 | 6.835 | (1.257) | 1661 | 0.07300 | 0.0726(QM) |
| | 57 Toluene | 91 | 6.929 | 6.932 | (1.276) | 5346 | 0.07240 | 0.0940 |
| | 58 1,1,2-Trichloroethane | 97 | 7.054 | 7.060 | (1.299) | 1703 | 0.07160 | 0.0830 |
| | 59 Methyl Butyl Ketone | 43 | 7.160 | 7.150 | (0.852) | 3700 | 0.07160 | 0.0869 |
| | 60 n-Octane | 43 | 7.347 | 7.350 | (0.874) | 4487 | 0.07170 | 0.0892 |
| | 61 Dibromochloromethane | 129 | 7.588 | 7.591 | (0.902) | 3384 | 0.07170 | 0.0941 |
| | 62 Tetrachloroethene | 166 | 7.668 | 7.671 | (0.912) | 2364 | 0.07100 | 0.0871 |
| | 63 1,2-Dibromoethane | 107 | 7.787 | 7.793 | (0.926) | 2555 | 0.07040 | 0.0817 |
| * | 64 Chlorobenzene - d5 | 117 | 8.408 | 8.411 | (1.000) | 344096 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 8.449 | 8.456 | (1.005) | 4121 | 0.07150 | 0.0936 |
| | 66 Ethyl Benzene | 91 | 8.668 | 8.674 | (1.031) | 5950 | 0.07230 | 0.0880 |
| | 67 m&p-Xylene | 91 | 8.851 | 8.858 | (1.053) | 8956 | 0.14410 | 0.172(M) |
| | 68 n-Nonane | 43 | 9.186 | 9.192 | (1.093) | 3805 | 0.07180 | 0.0799 |
| | 69 Styrene | 104 | 9.256 | 9.260 | (1.101) | 1927 | 0.07230 | 0.115(QM) |
| | 70 o-Xylene | 91 | 9.292 | 9.295 | (1.105) | 4757 | 0.07180 | 0.0870 |
| | 71 Bromoform | 173 | 9.363 | 9.369 | (1.114) | 1936 | 0.07230 | 0.0738(Q) |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 9.703 | 9.710 | (1.154) | 3674 | 0.07200 | 0.0853 |
| | 73 Isopropylbenzene | 105 | 9.835 | 9.842 | (1.170) | 5960 | 0.07120 | 0.0837 |
| | 74 N-Propylbenzene | 91 | 10.404 | 10.407 | (1.237) | 7049 | 0.07200 | 0.0825(M) |
| | 75 2-Chlorotoluene | 91 | 10.446 | 10.449 | (1.242) | 4962 | 0.07250 | 0.0870 |
| | 76 4-Ethyltoluene | 105 | 10.588 | 10.591 | (1.259) | 4492 | 0.07160 | 0.156(M) |
| | 77 1,3,5-Trimethylbenzene | 105 | 10.662 | 10.665 | (1.268) | 4301 | 0.07160 | 0.0973 |
| | 78 n-Decane | 57 | 11.009 | 11.015 | (2.027) | 2514 | 0.07240 | 0.202(QM) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25004.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.105 | 11.112 | (1.321) | 4497 | 0.07230 | 0.0786 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.157 | 11.157 | (1.327) | 3642 | 0.07210 | 0.0676 |
| 81 Sec- Butylbenzene | 105 | 11.411 | 11.417 | (1.357) | 5948 | 0.07240 | 0.0743 |
| 82 1,3-Dichlorobenzene | 146 | 11.446 | 11.452 | (1.361) | 2319 | 0.07240 | 0.211 |
| 83 Benzyl Chloride | 91 | 11.520 | 11.526 | (1.370) | 672 | 0.07290 | 0.280(QM) |
| 84 1,4-Dichlorobenzene | 146 | 11.581 | 11.587 | (1.377) | 1988 | 0.07230 | 0.235(QM) |
| 85 p-Isopropyltoluene | 119 | 11.620 | 11.623 | (1.382) | 4303 | 0.07260 | 0.163 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.633 | 11.639 | (1.384) | 3999 | 0.07230 | 0.0690 |
| 87 1,2-Dichlorobenzene | 146 | 11.890 | 11.893 | (1.414) | 2388 | 0.07220 | 0.195 |
| 88 N-Butylbenzene | 91 | 12.067 | 12.073 | (1.435) | 2243 | 0.07210 | 0.183 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.591 | 12.591 | (1.498) | 597 | 0.07270 | 0.213(QM) |
| 90 1,2,4-Trichlorobenzene | 180 | 13.539 | 13.539 | (1.610) | 1451 | 0.15660 | 0.696(QM) |
| 91 Naphthalene | 128 | 13.678 | 13.675 | (1.627) | 4510 | 0.08160 | 0.303(M) |
| 92 Hexachlorobutadiene | 225 | 13.784 | 13.787 | (1.639) | 1520 | 0.08160 | 0.0777 |

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25004.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25004.D
Calibration Time: 10:08
Lab Smp Id: CAL1
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

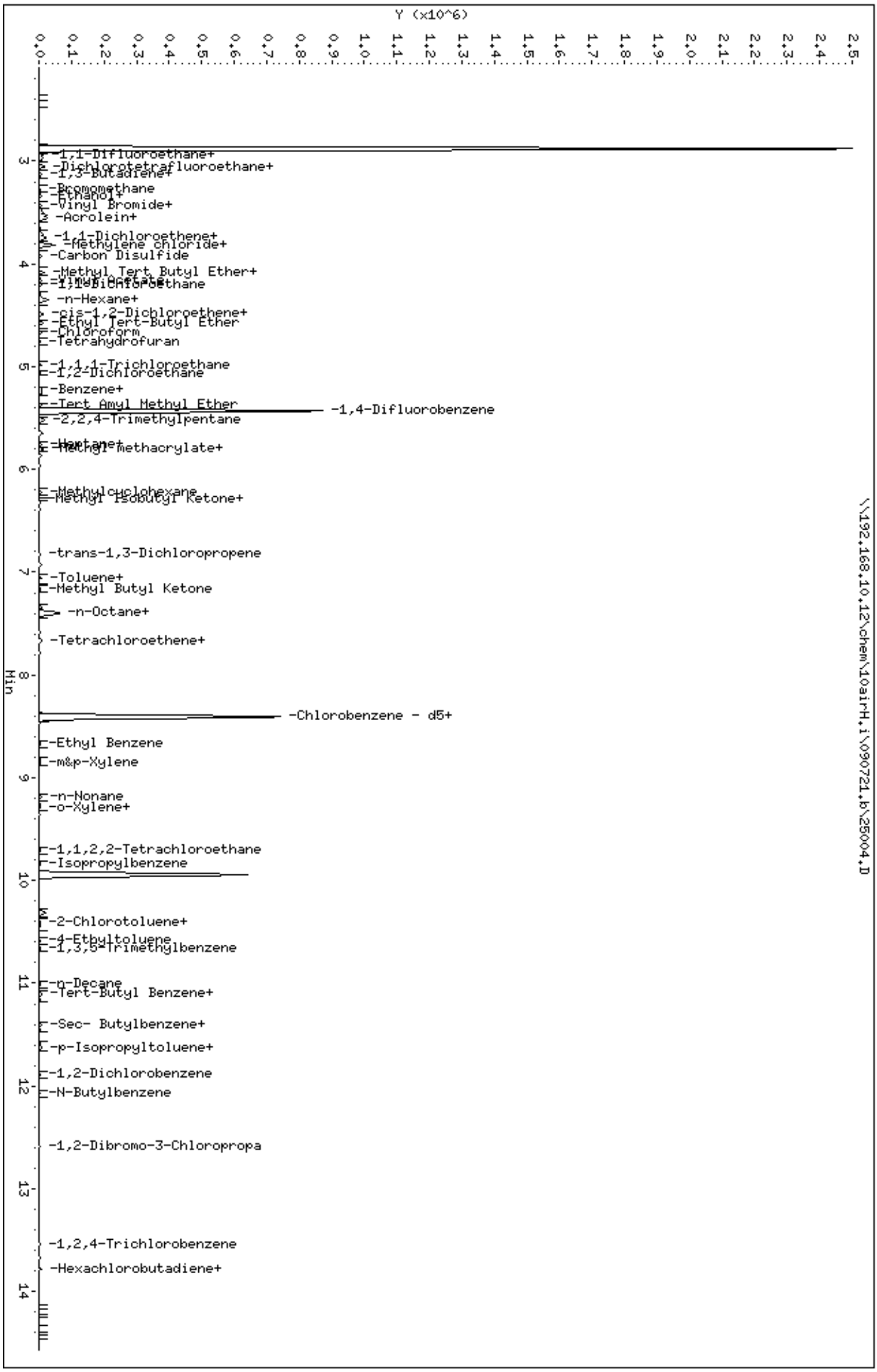
| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 428556 | -6.80 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 344096 | -12.23 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.06 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25004.D
Date : 07-SEP-2021 08:26
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i
Operator: GT
Column diameter: 0.32



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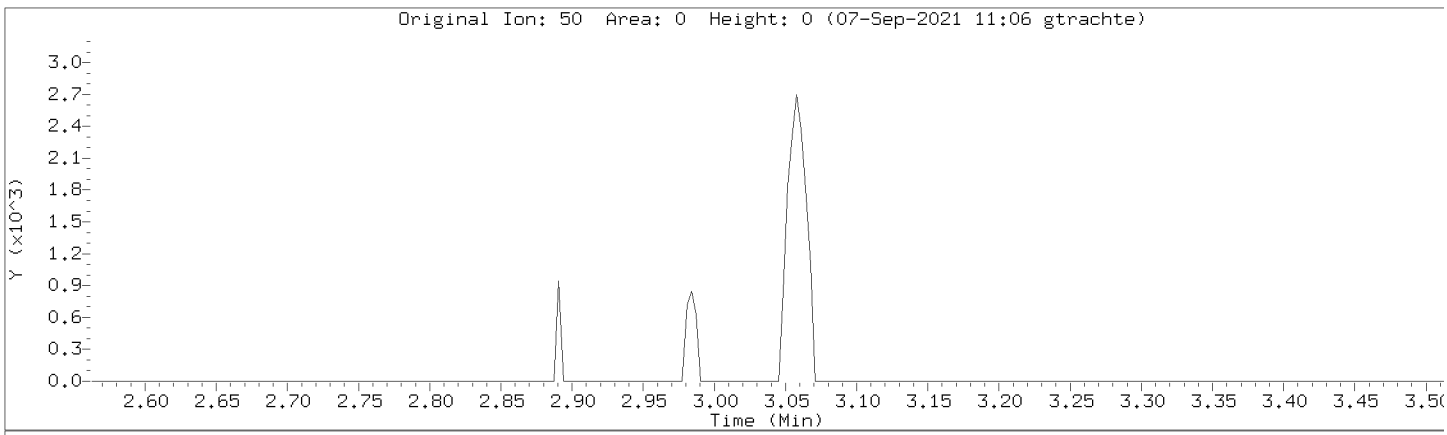
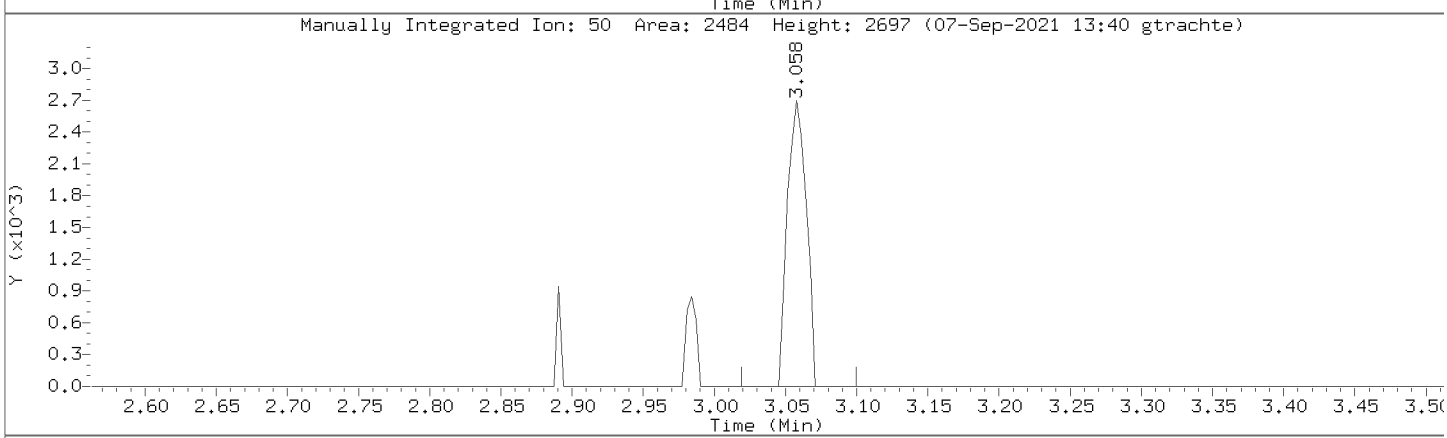
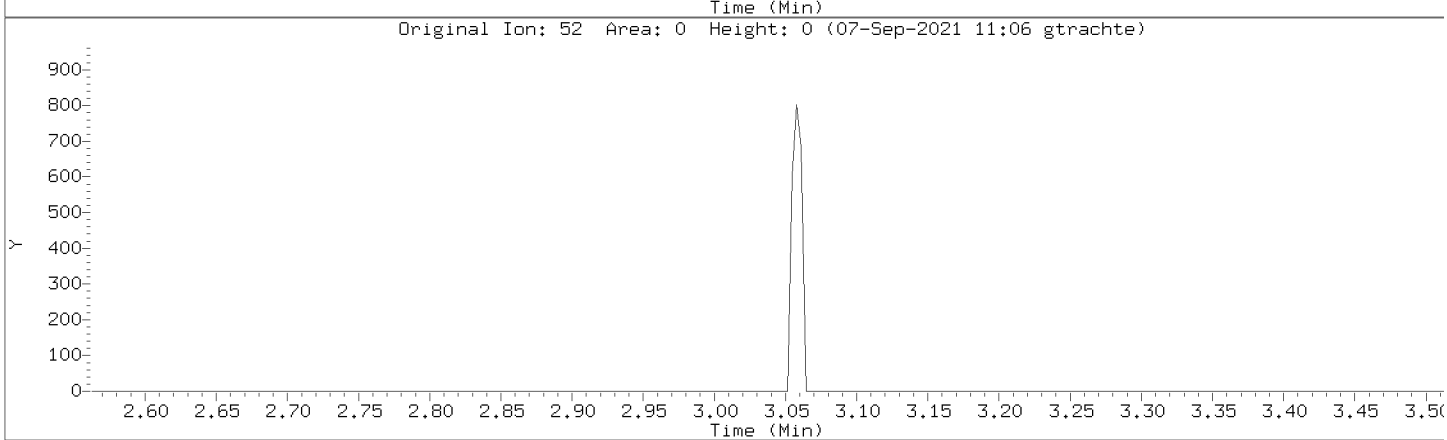
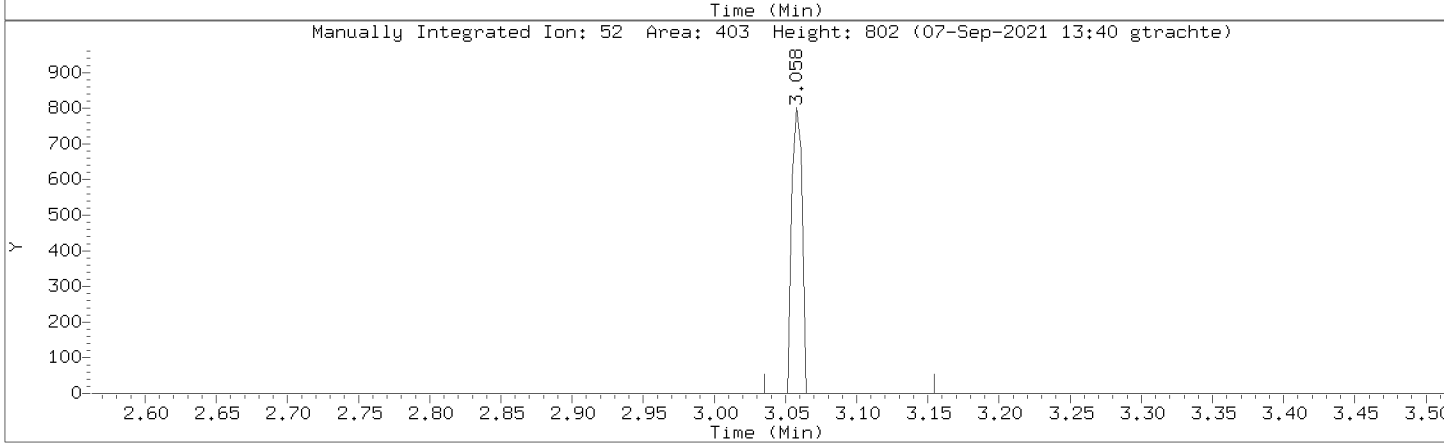
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Chloromethane
CAS Number: 74-87-3



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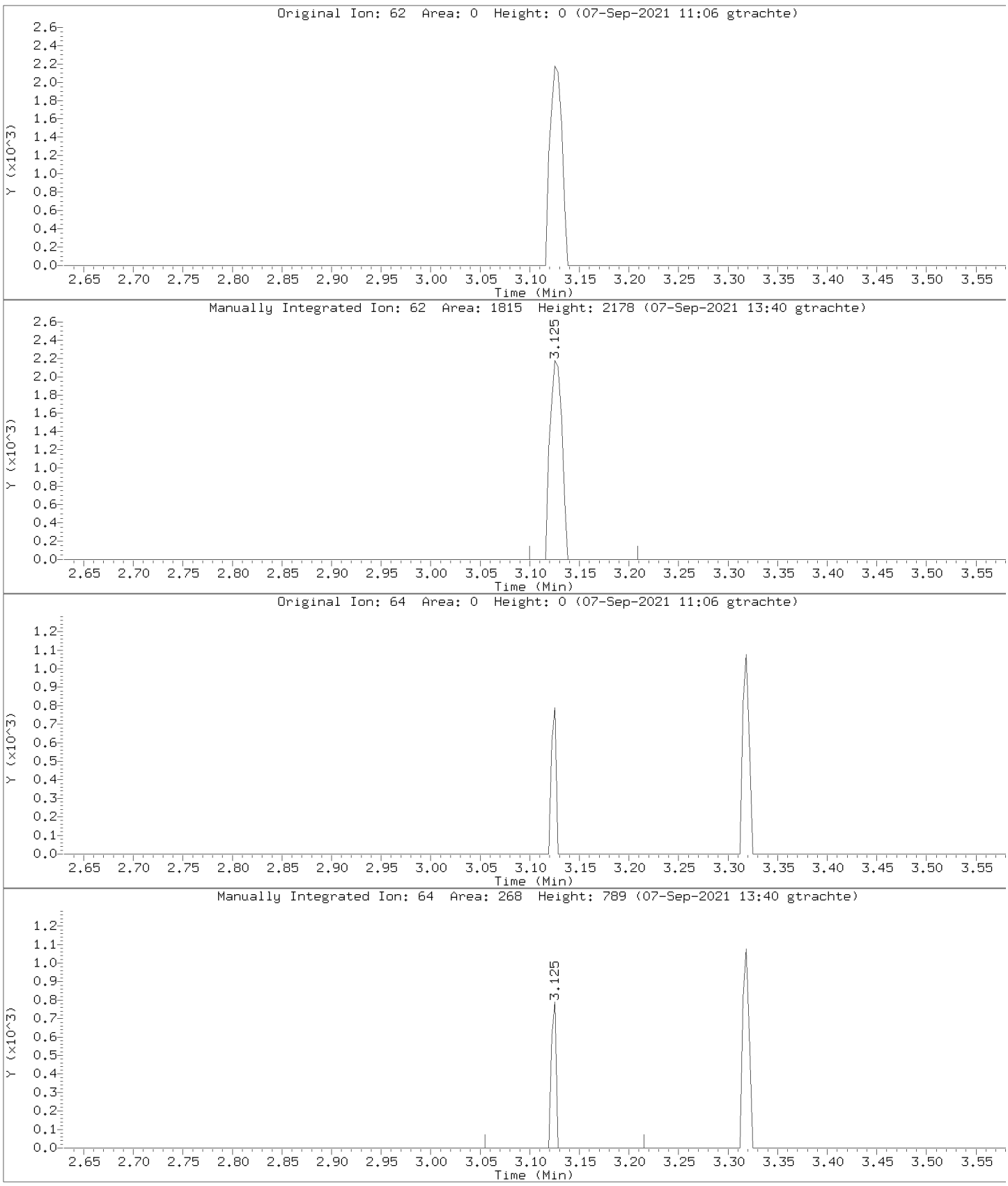
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Vinyl chloride
CAS Number: 75-01-4



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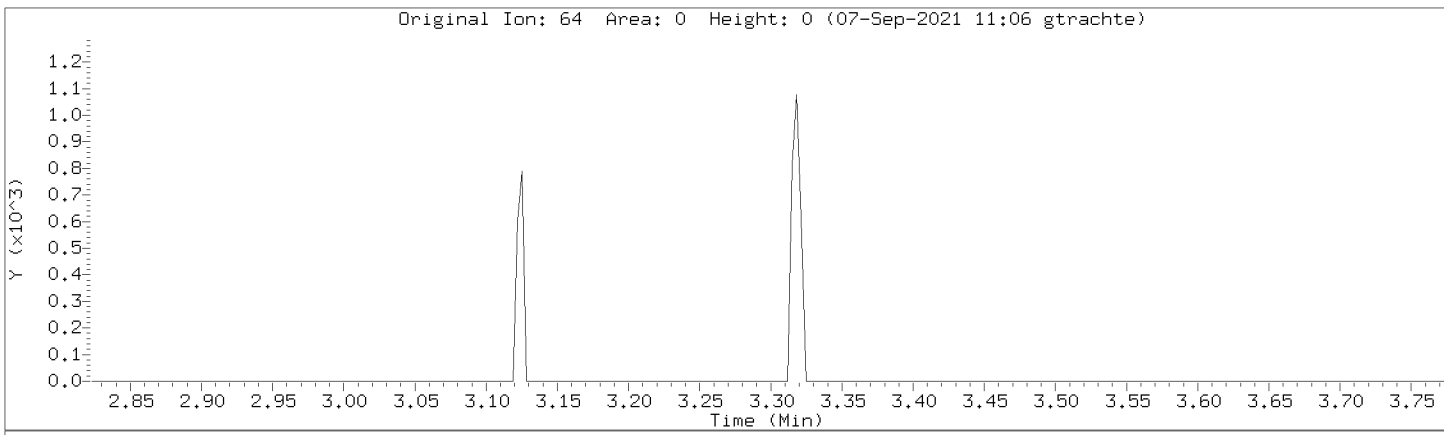
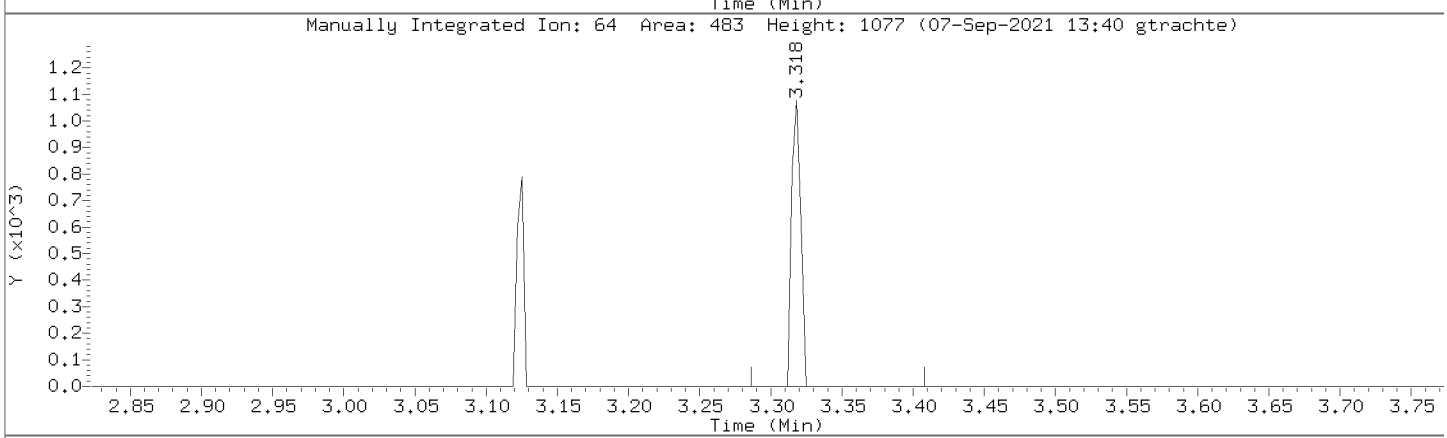
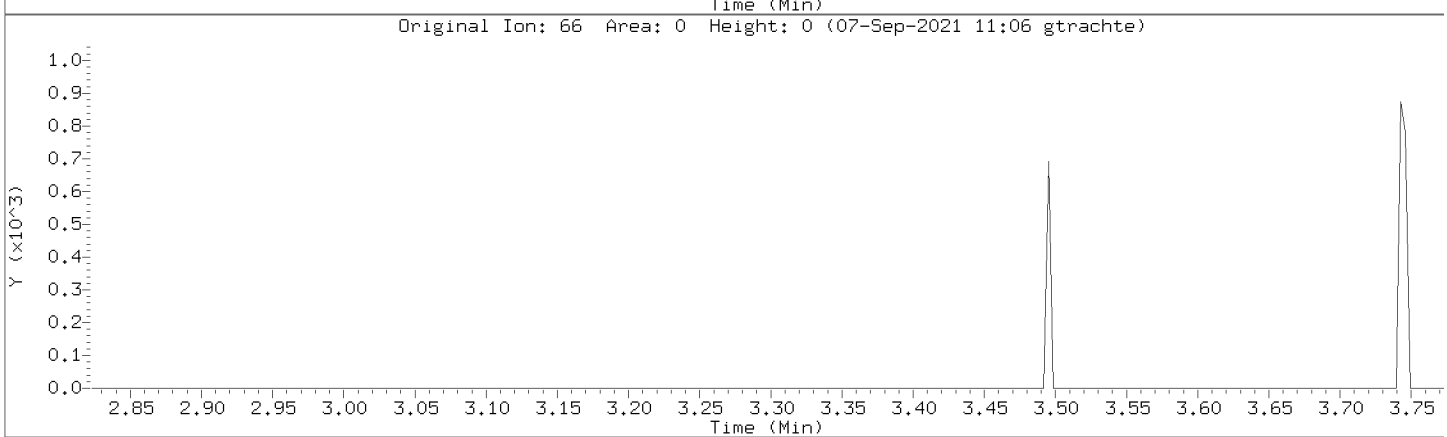
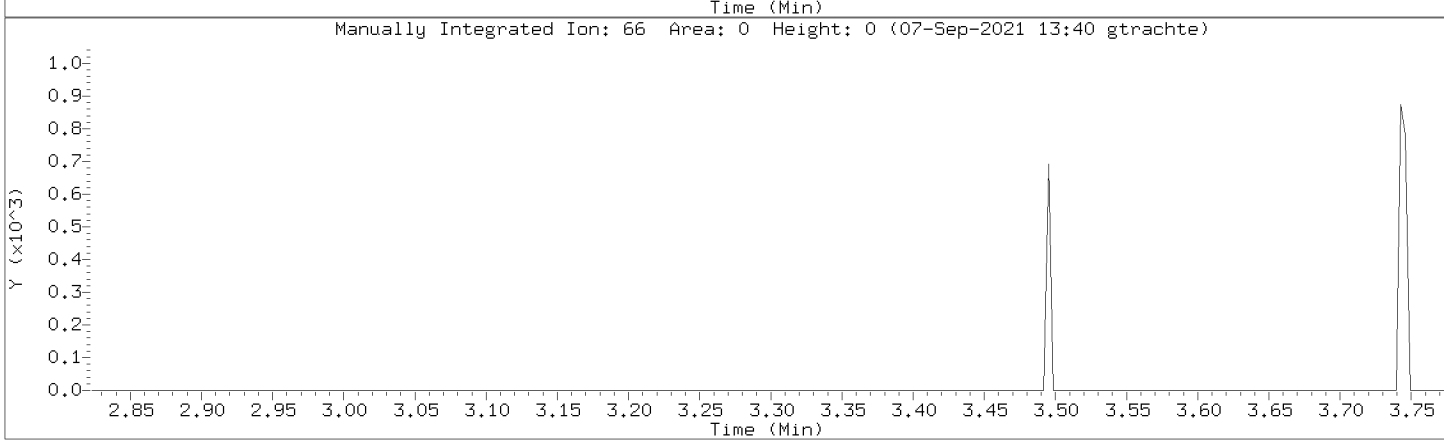
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Chloroethane
CAS Number: 75-00-3



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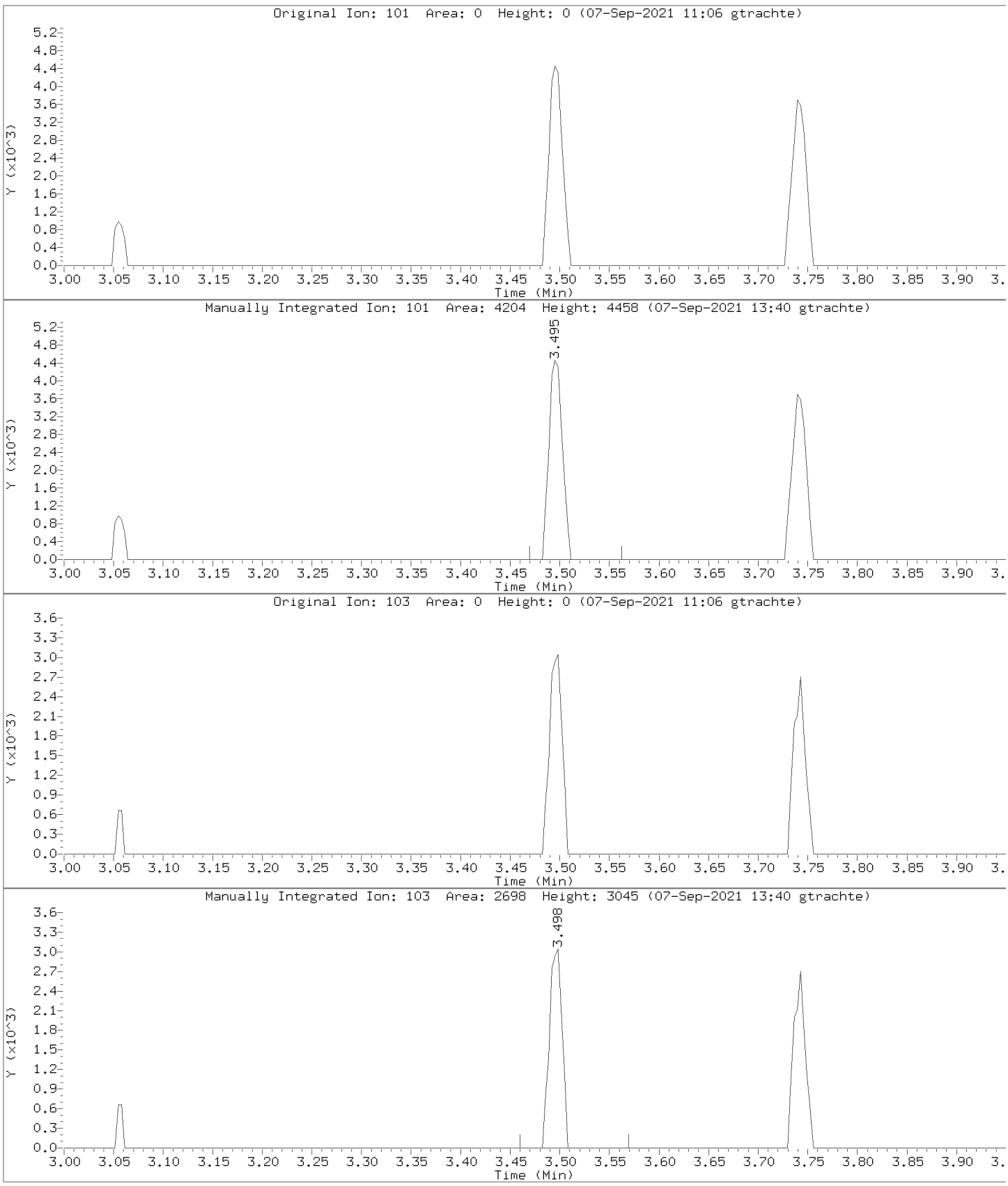
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Trichlorofluoromethane
CAS Number: 75-69-4



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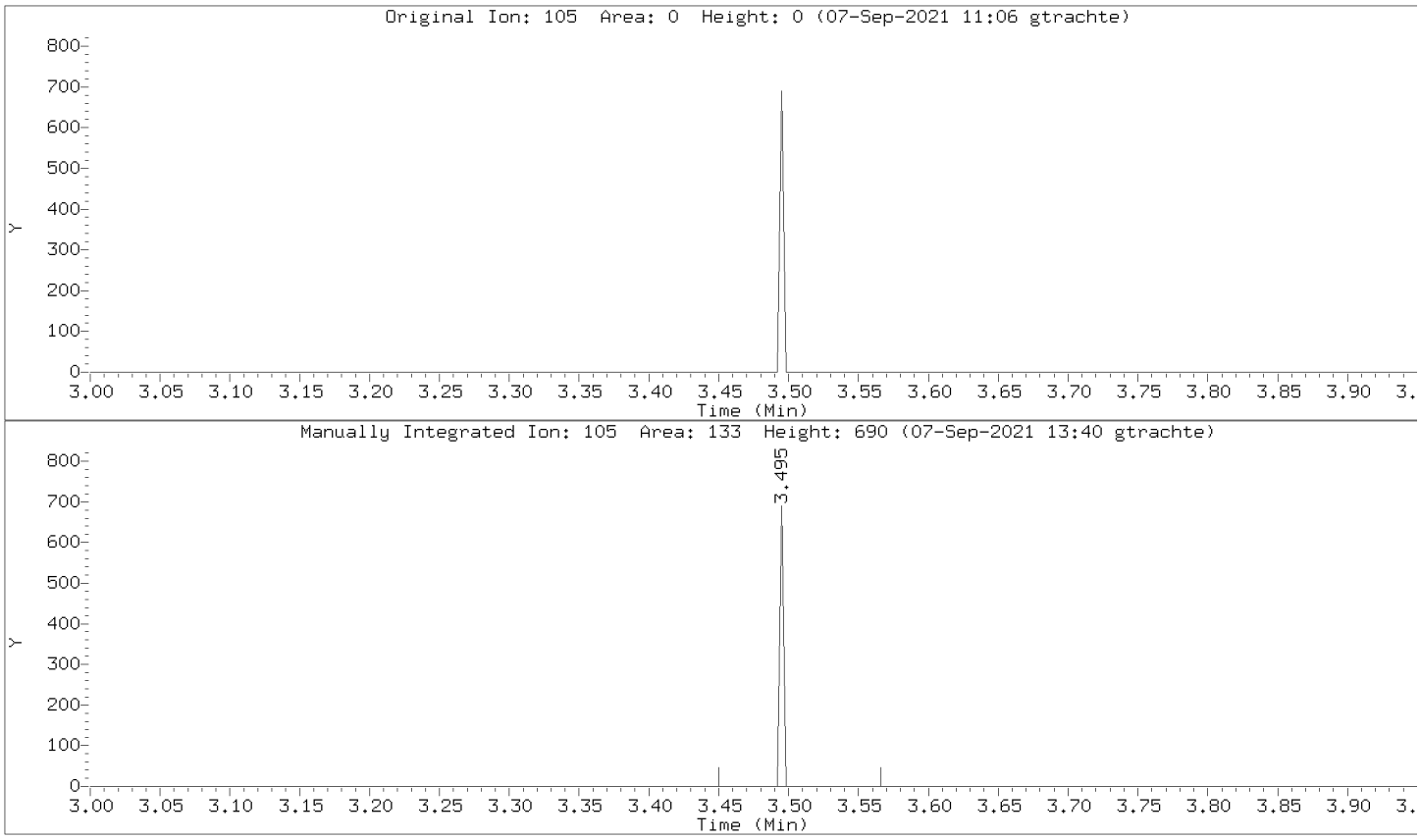

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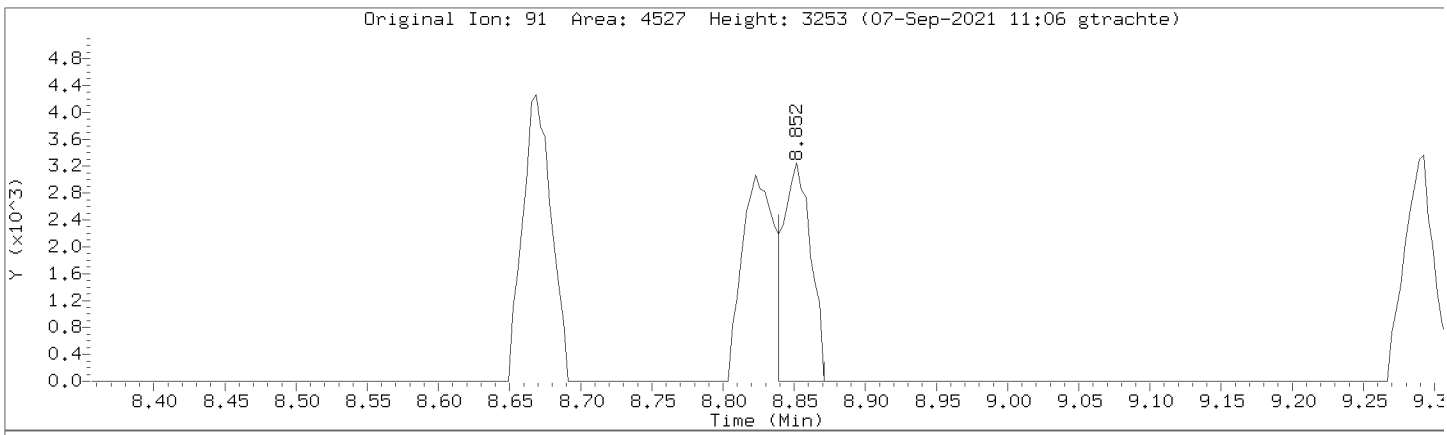
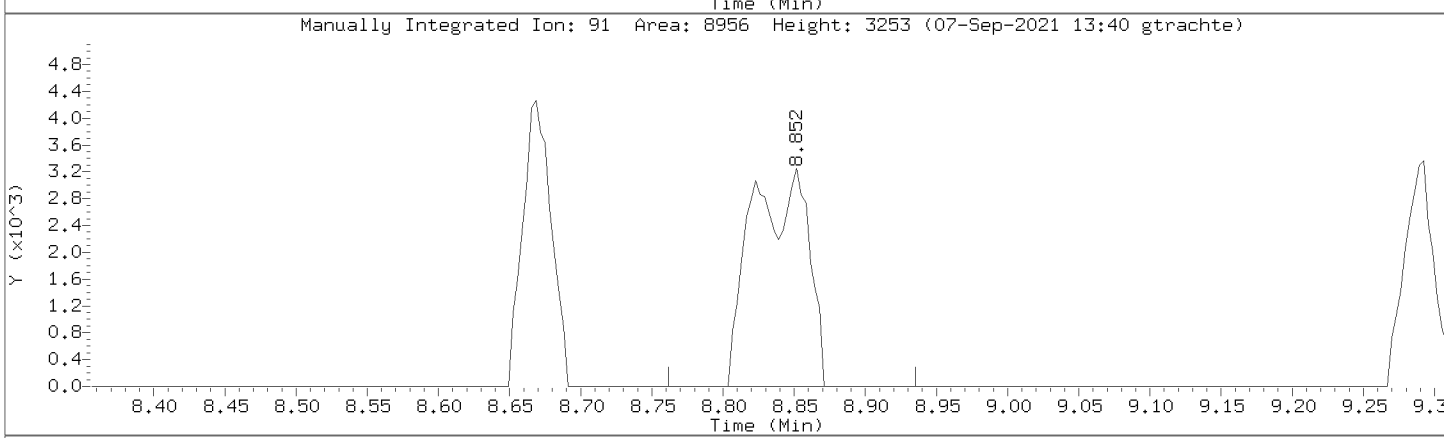
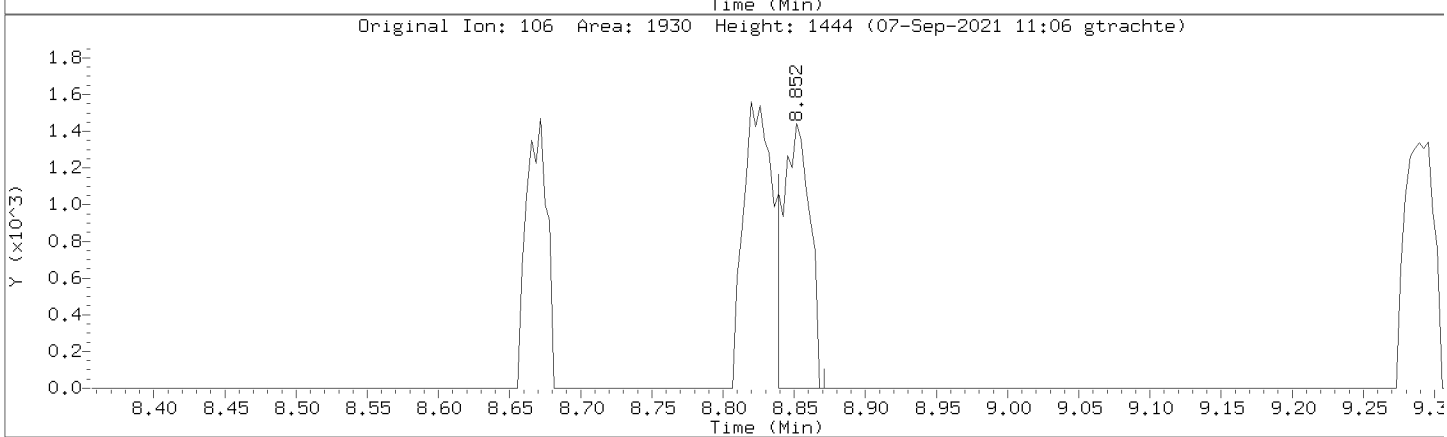
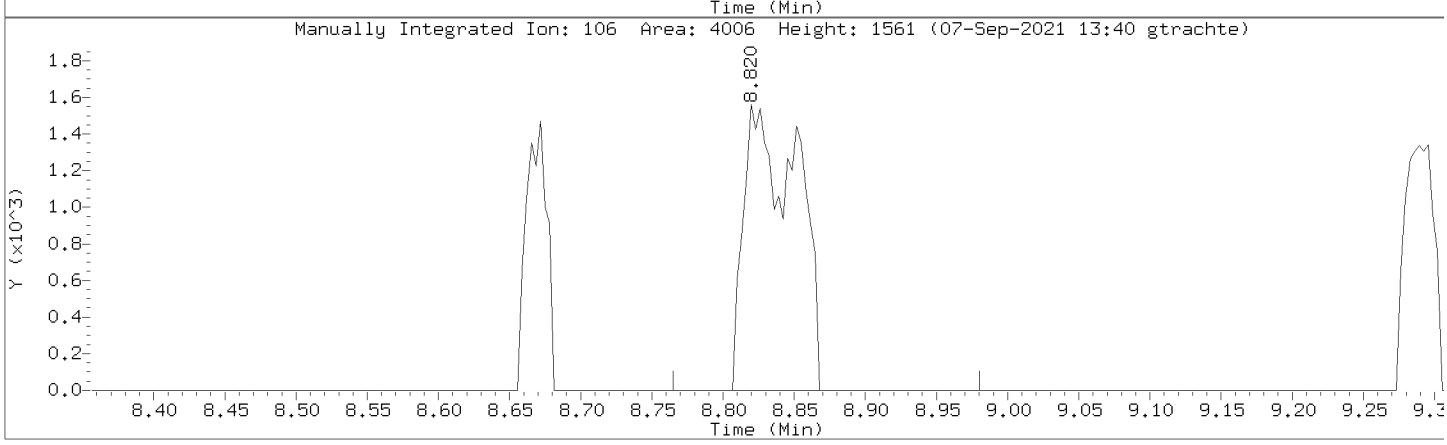
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: m&p-Xylene
CAS Number: 7816-60-0



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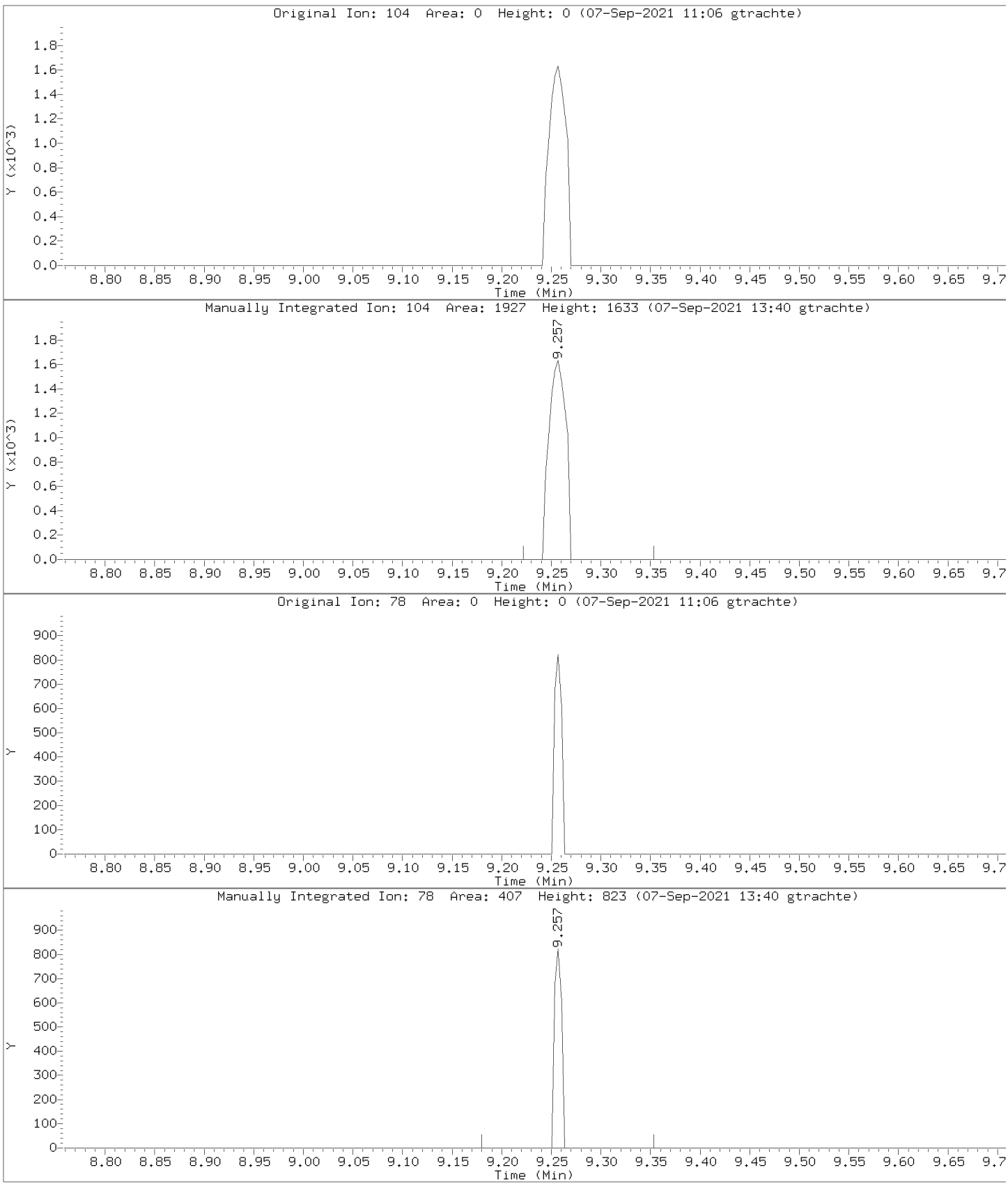
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Styrene
CAS Number: 100-42-5



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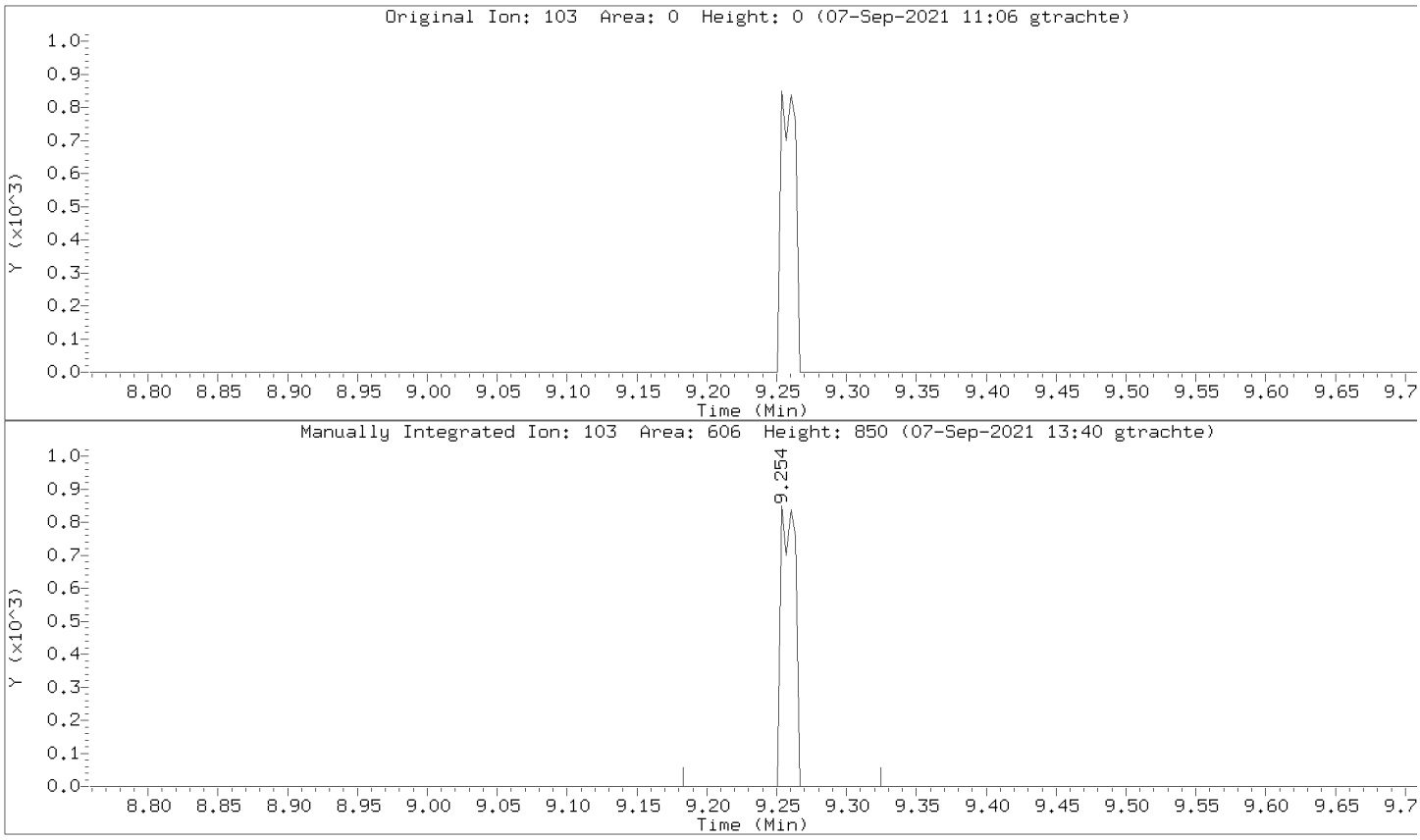
Lab Sample ID: CAL1



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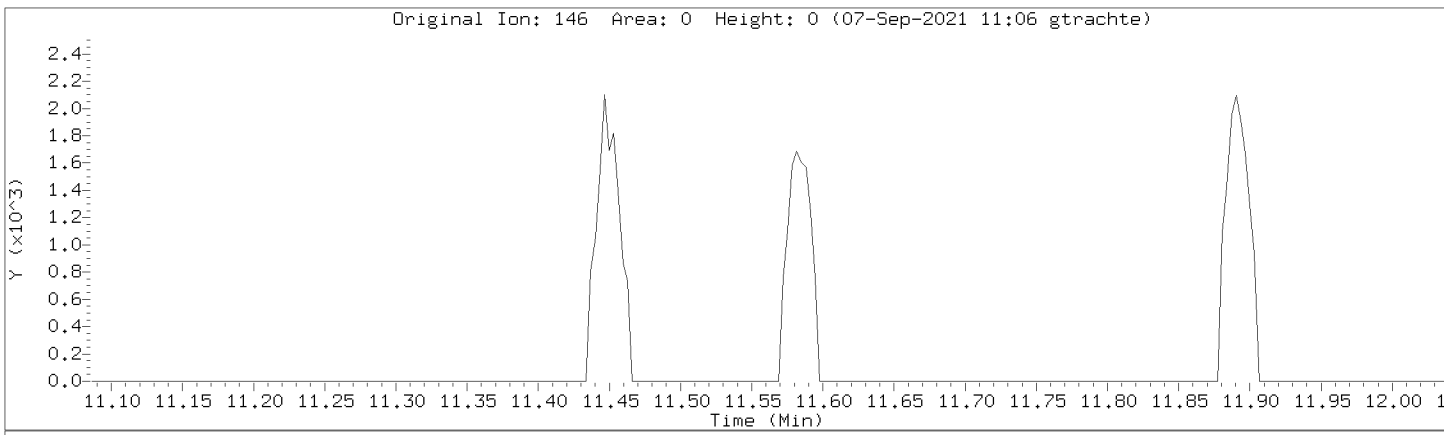
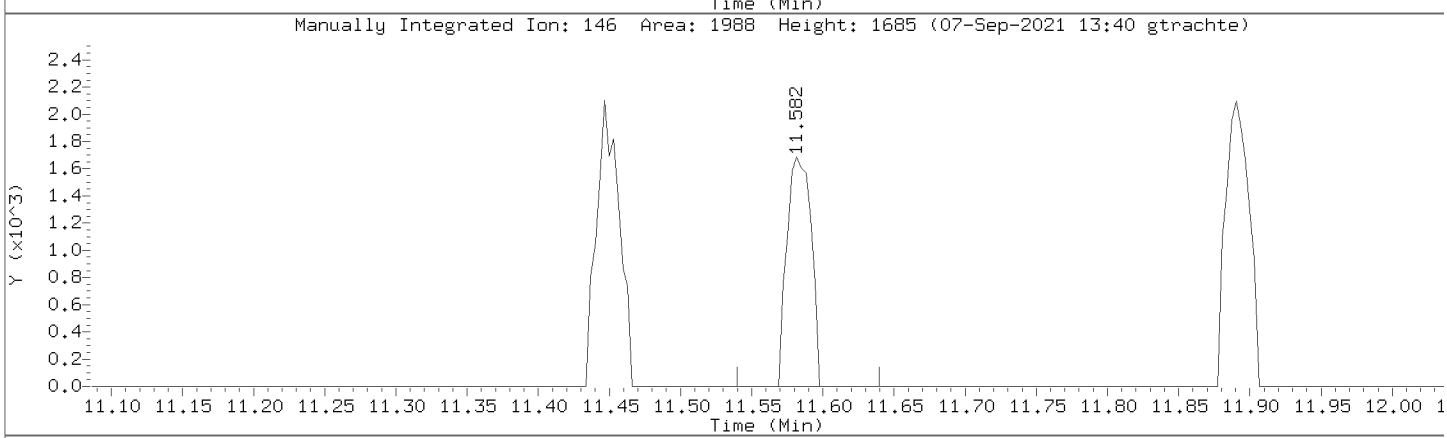
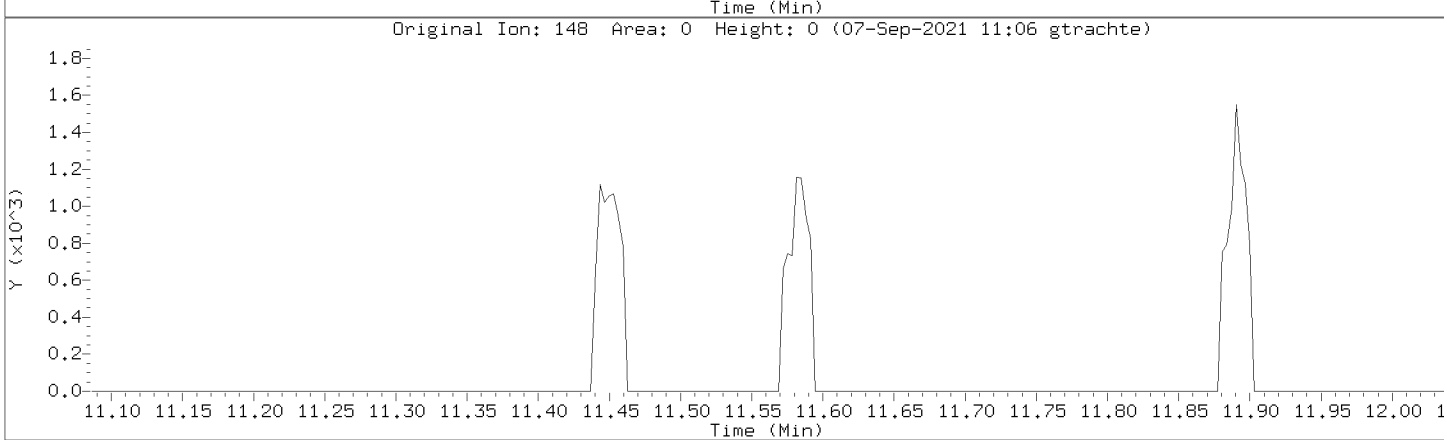
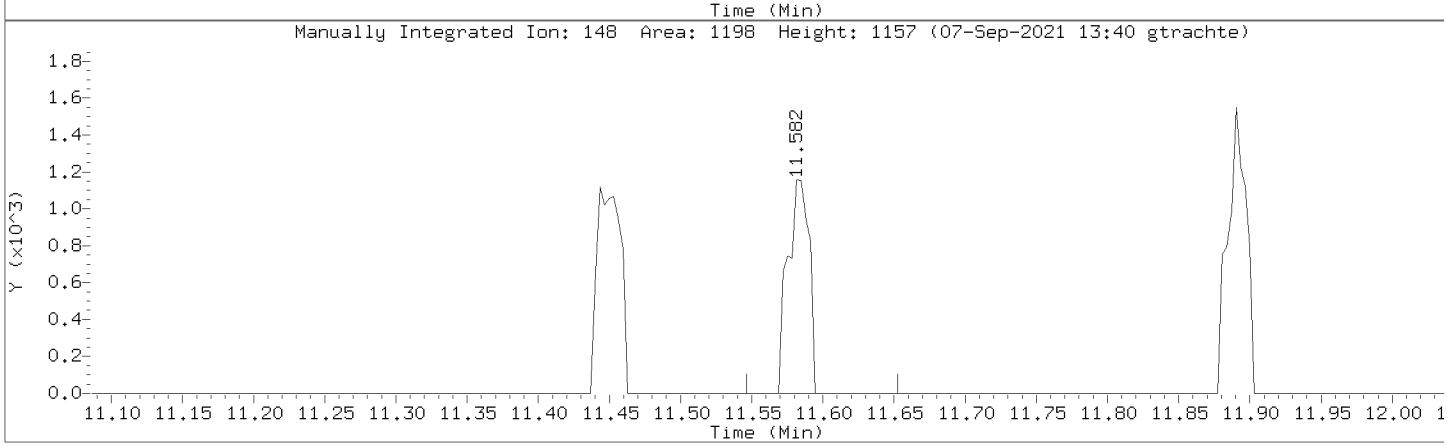
Lab Sample ID: CAL1

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



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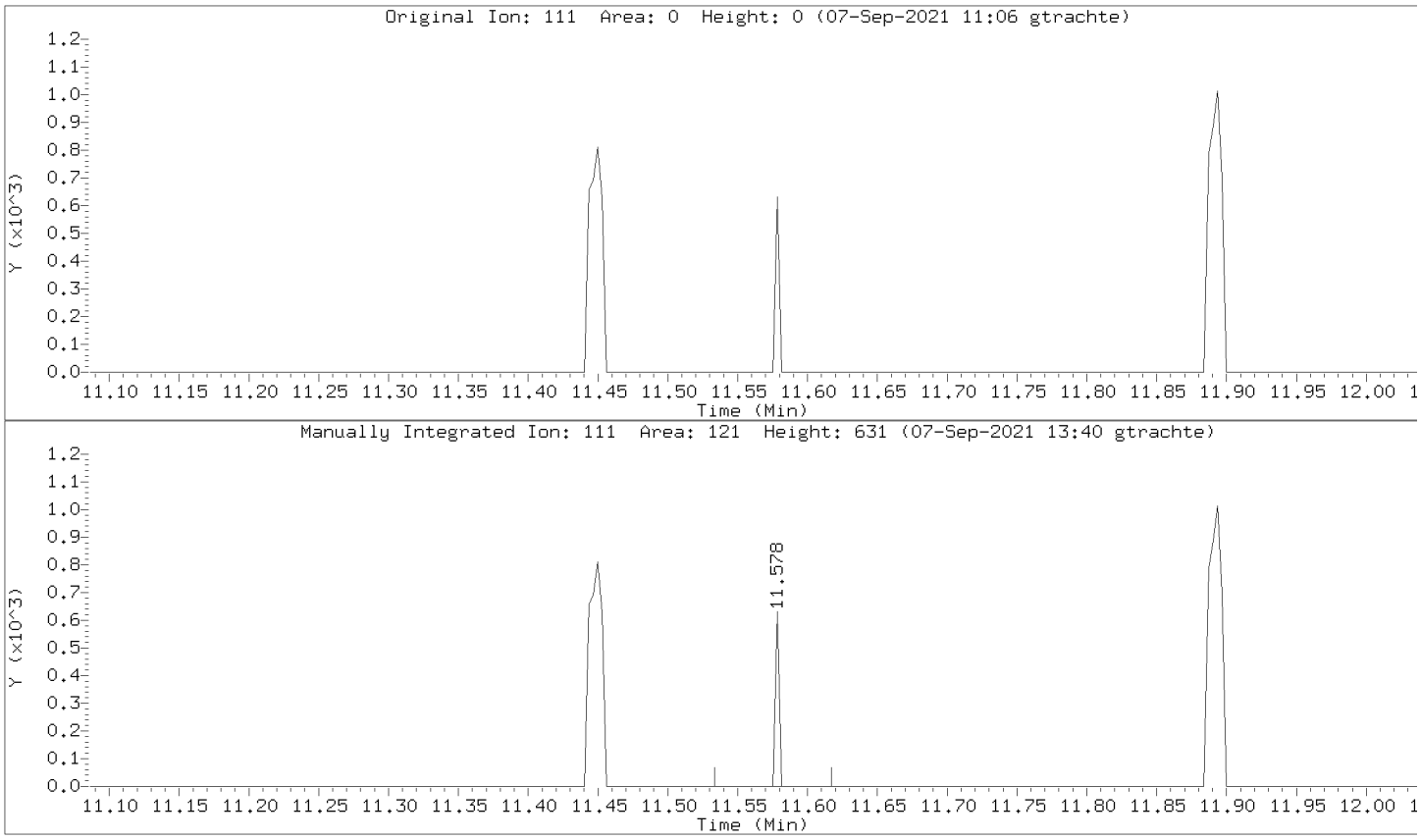
Instrument: 10airH.i
Lab Sample ID: CAL1



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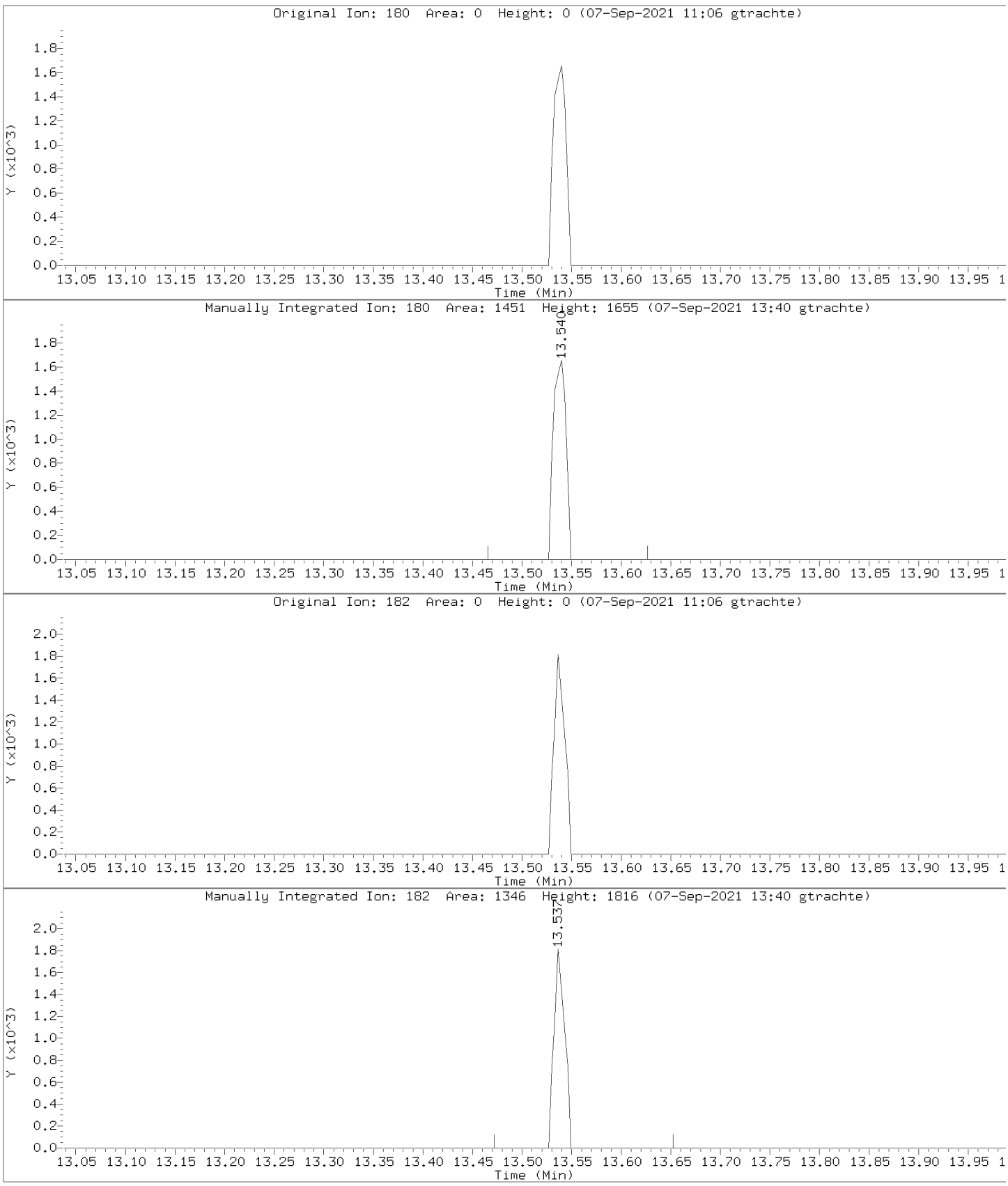
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6



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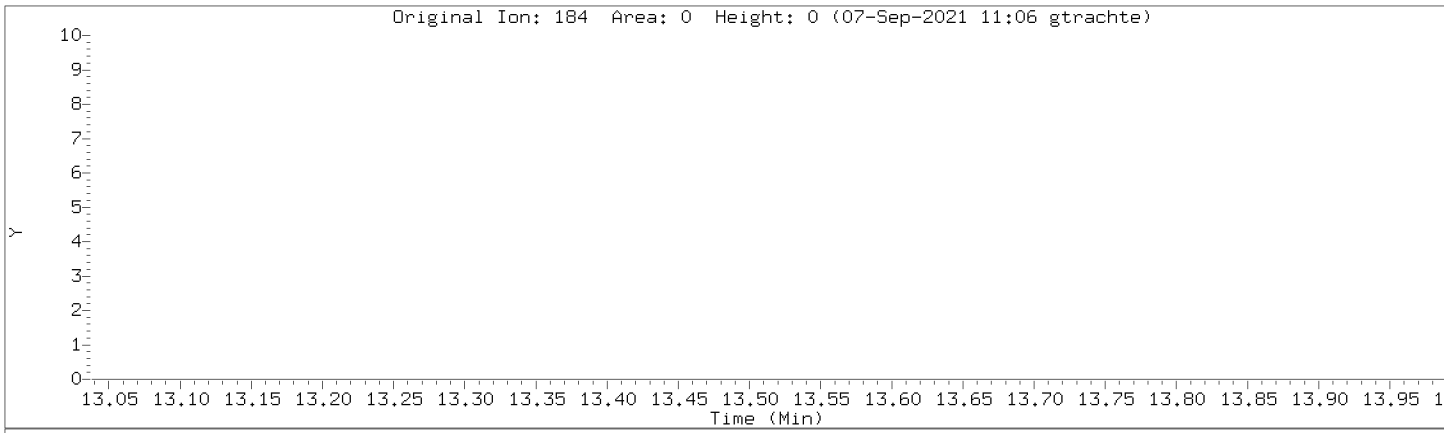
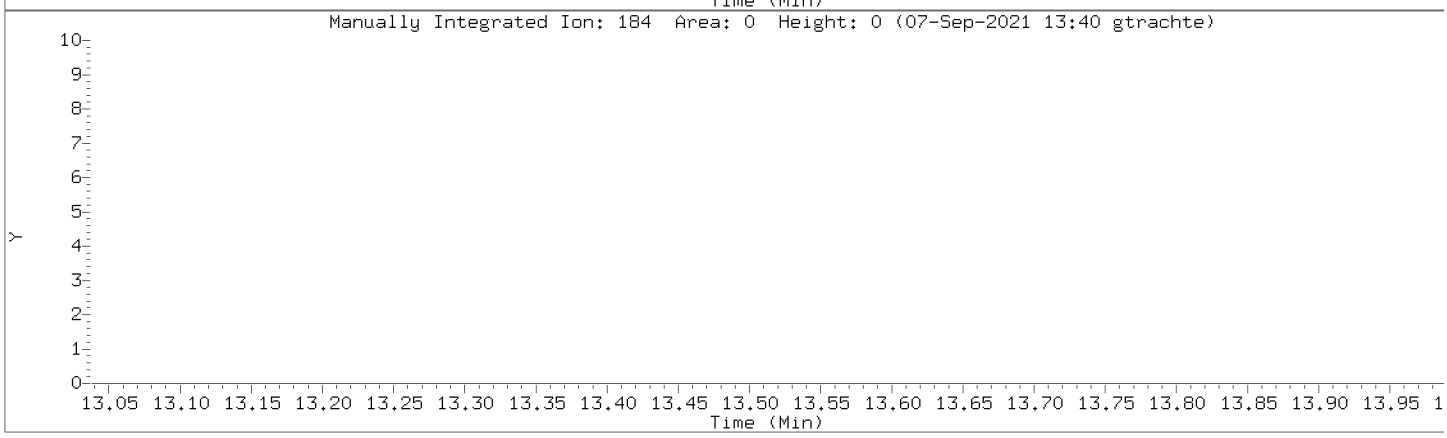
Instrument: 10airH.i
Lab Sample ID: CAL1



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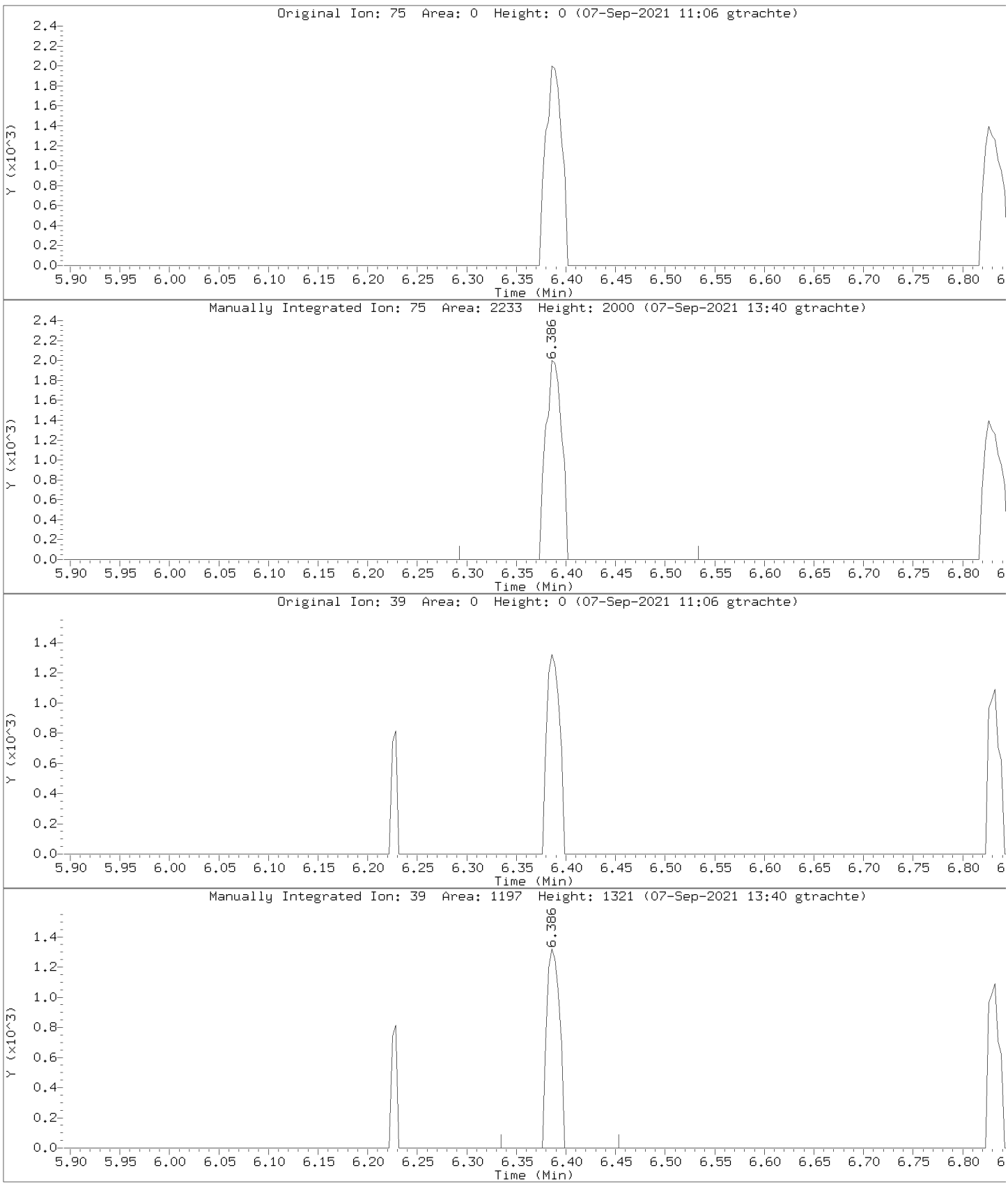
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: cis-1,3-Dichloropropene
CAS Number: 10061-01-5



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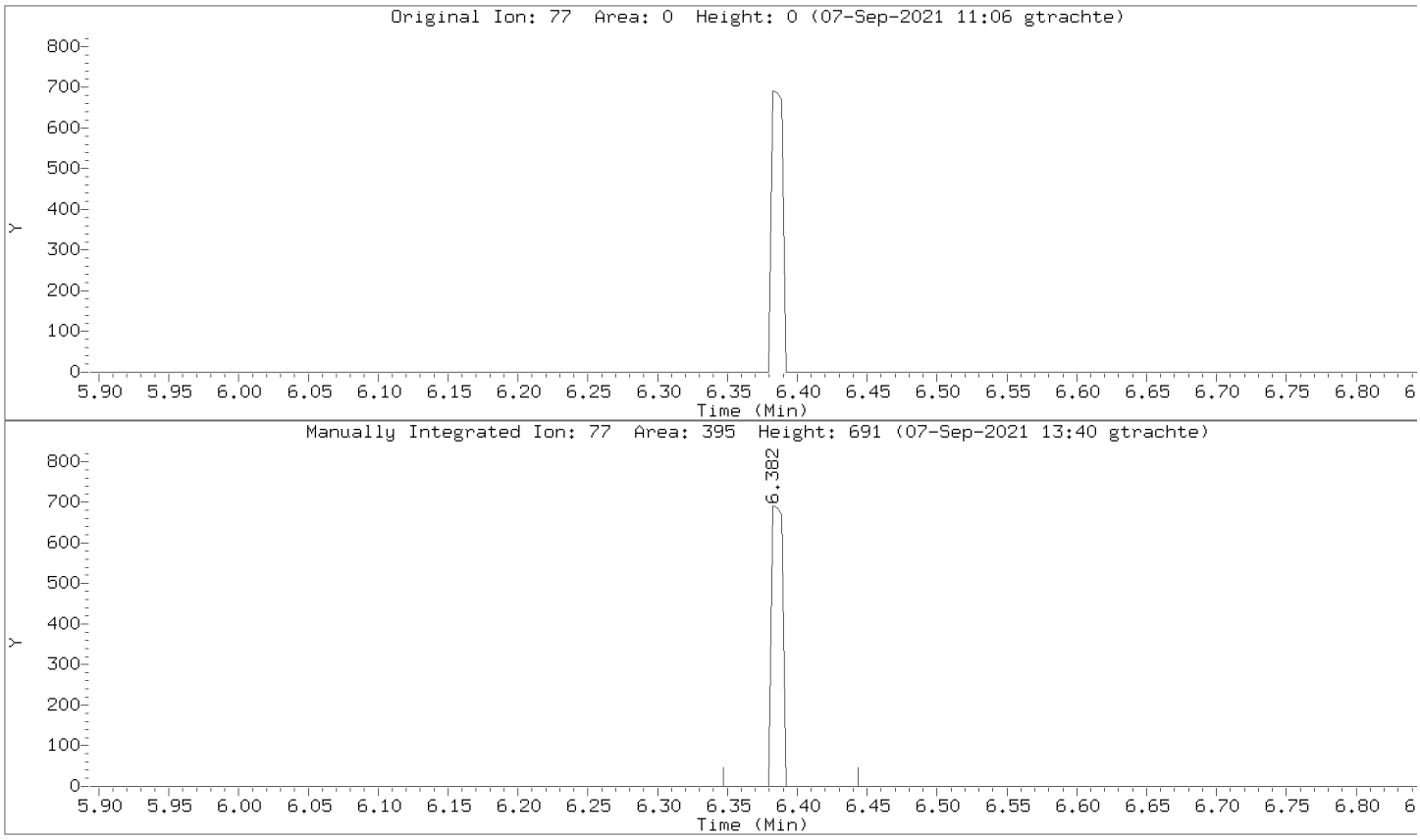
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1



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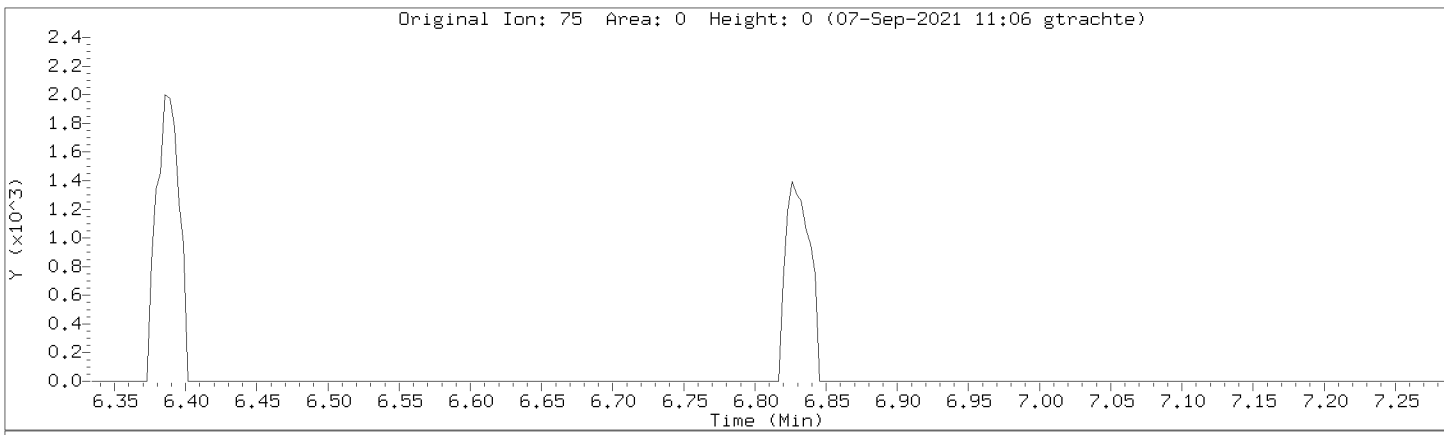
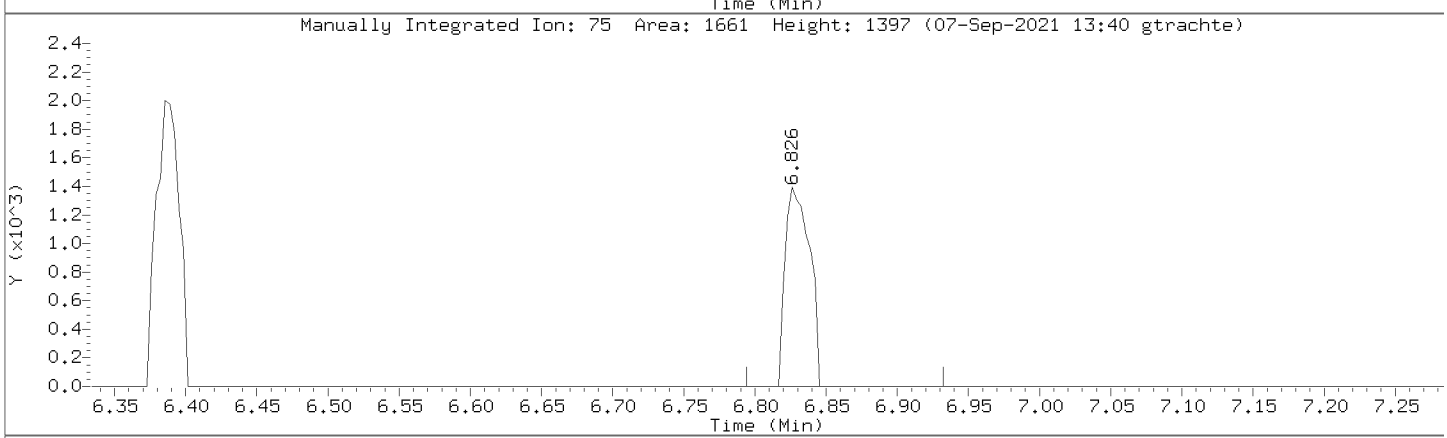
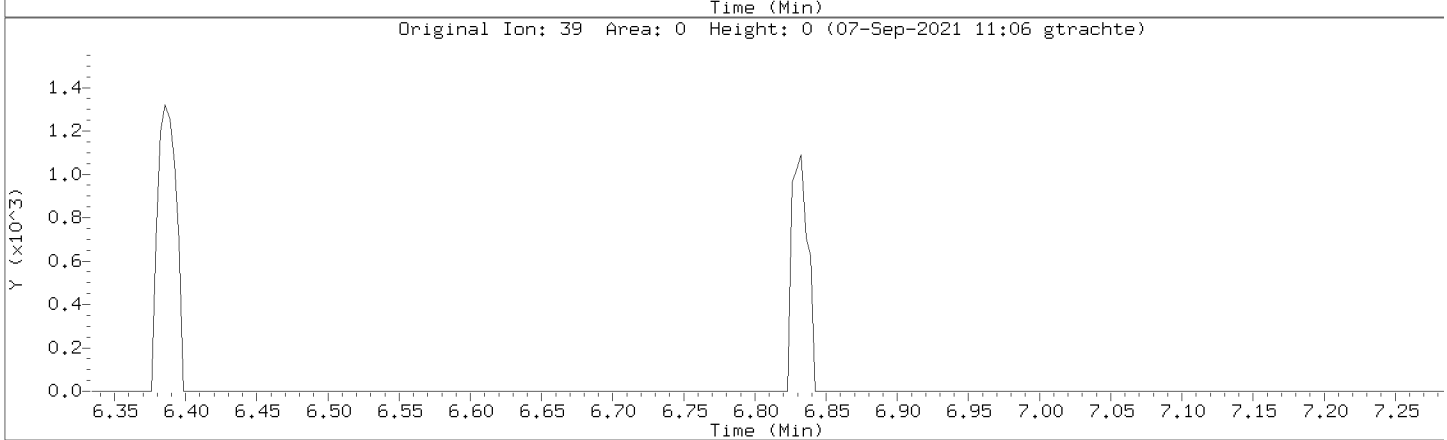
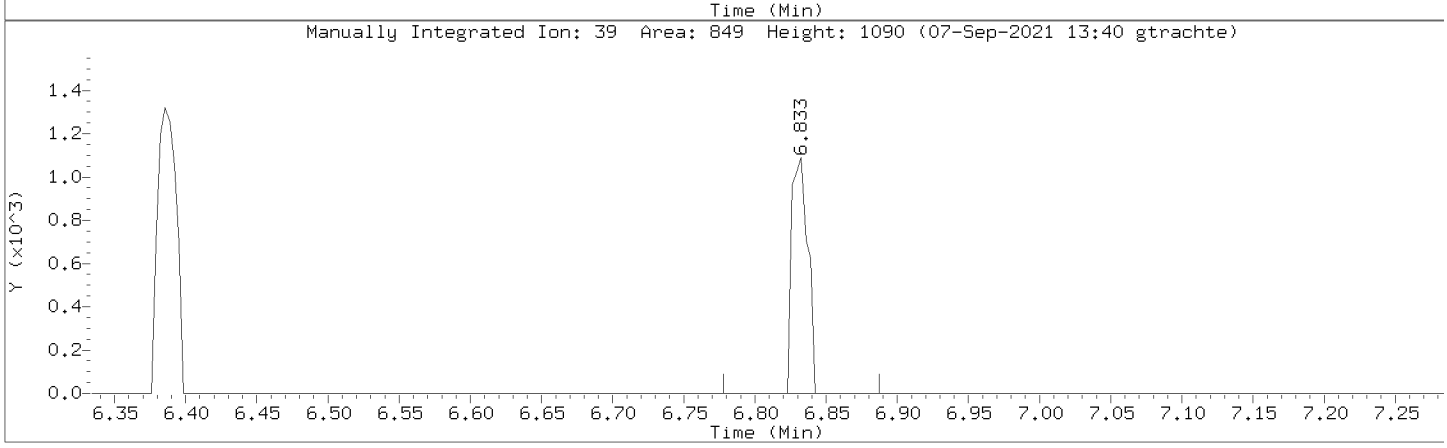
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: trans-1,3-Dichloropropene
CAS Number: 10061-02-6



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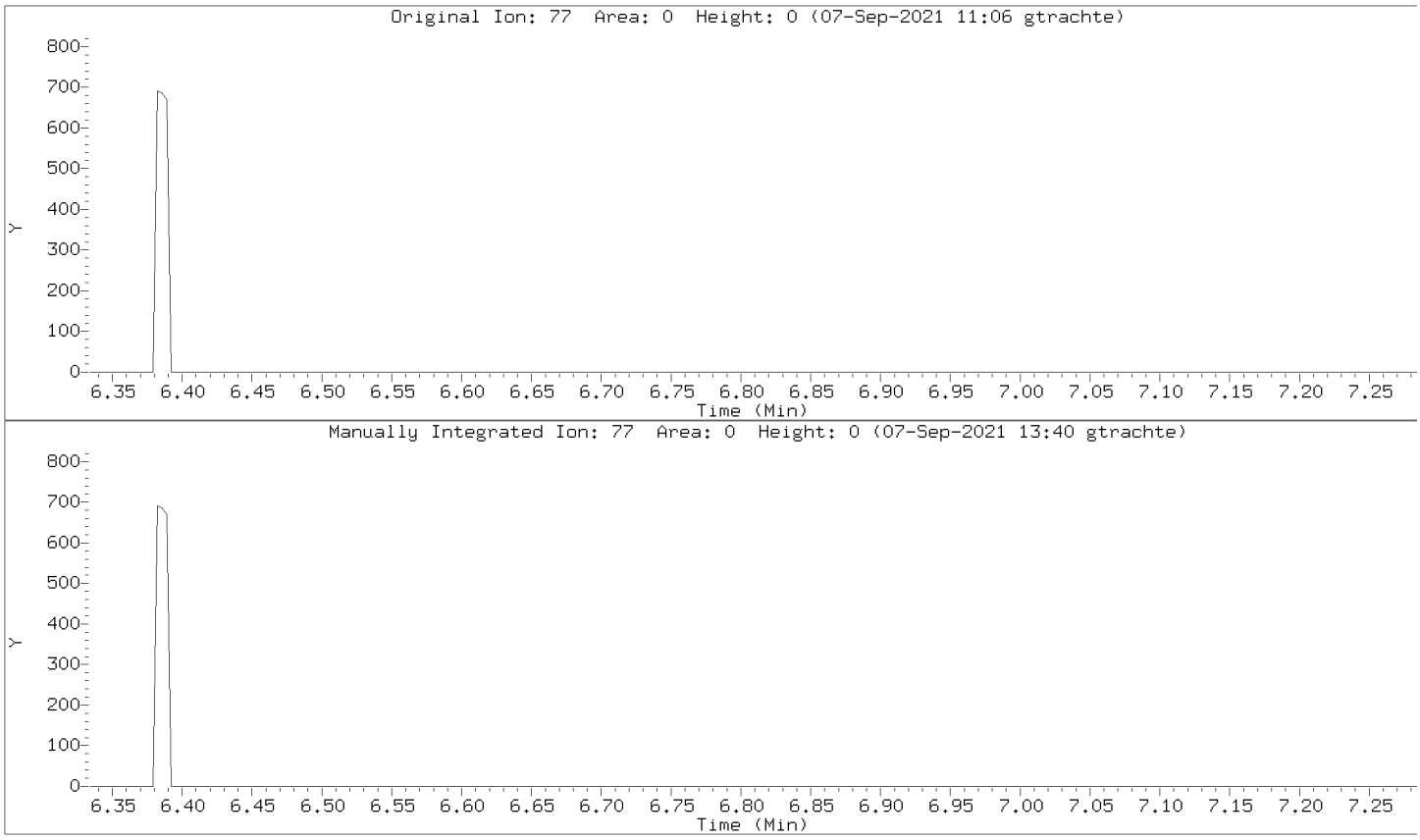

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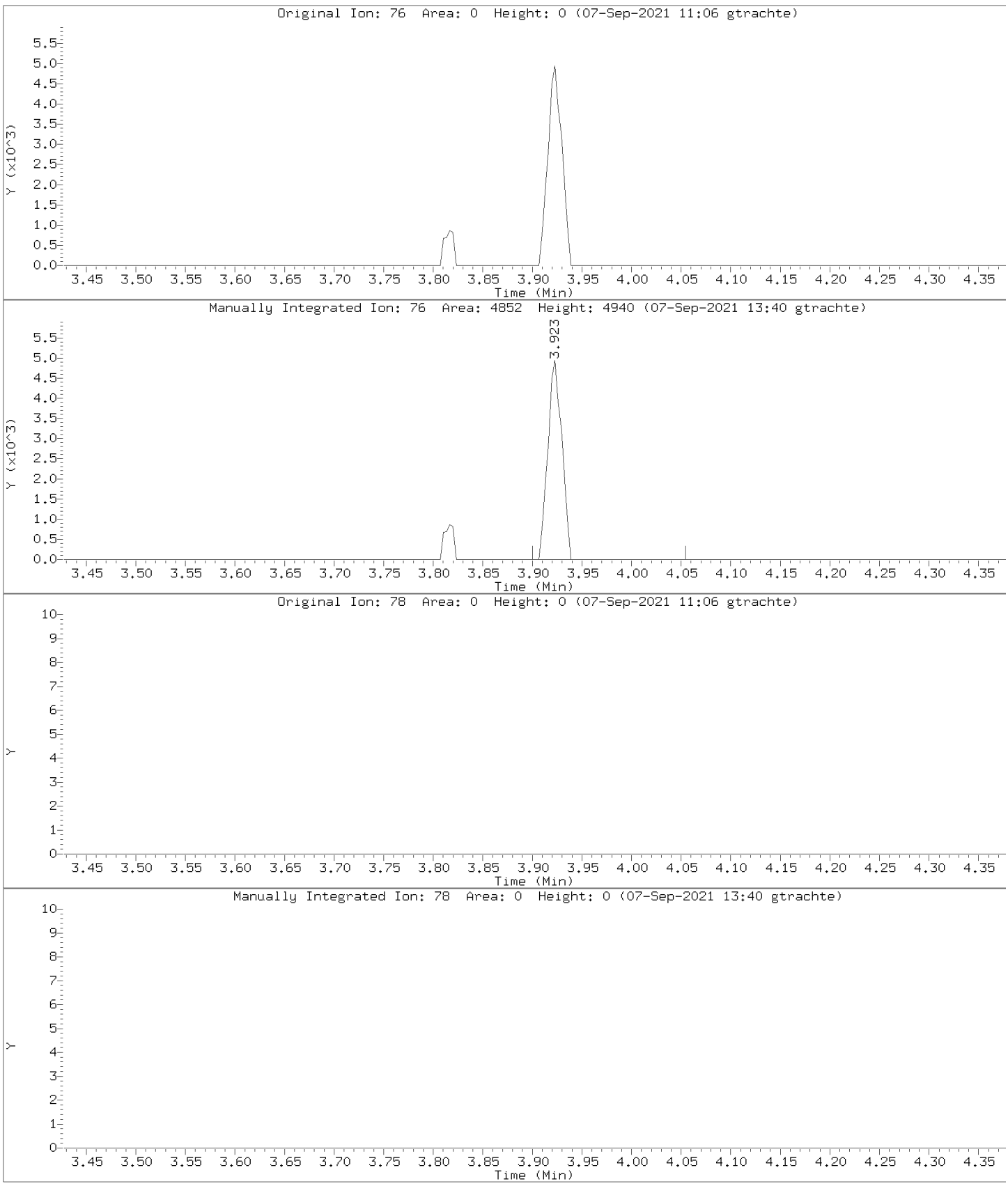
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Carbon Disulfide
CAS Number: 75-15-0



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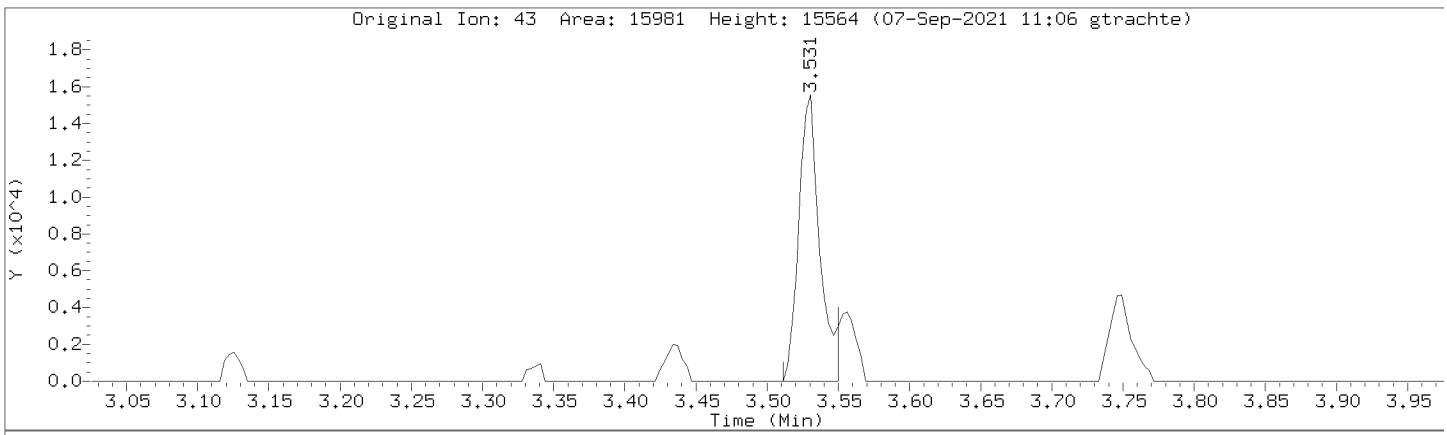
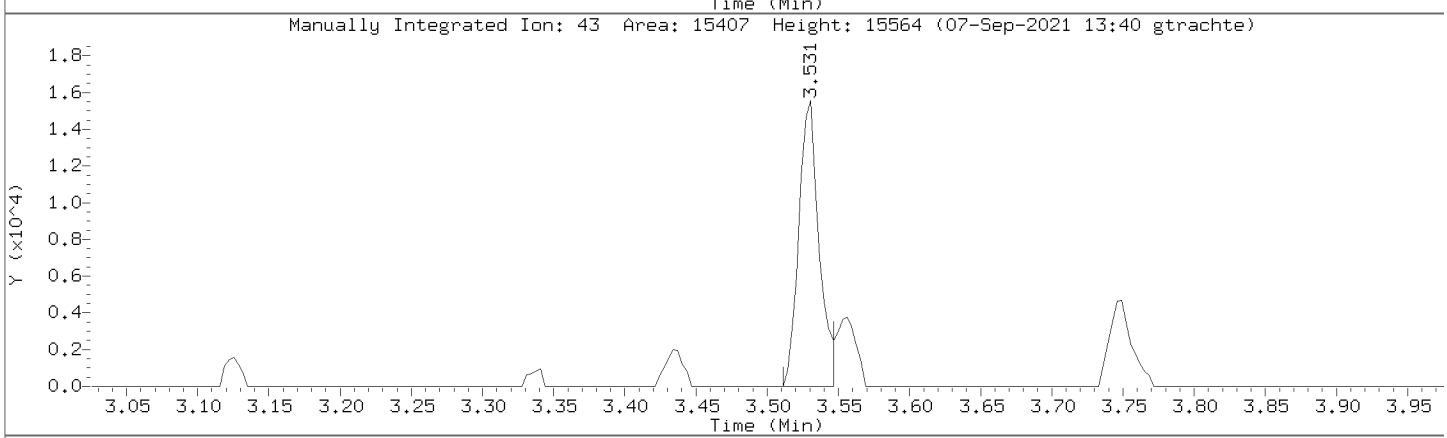
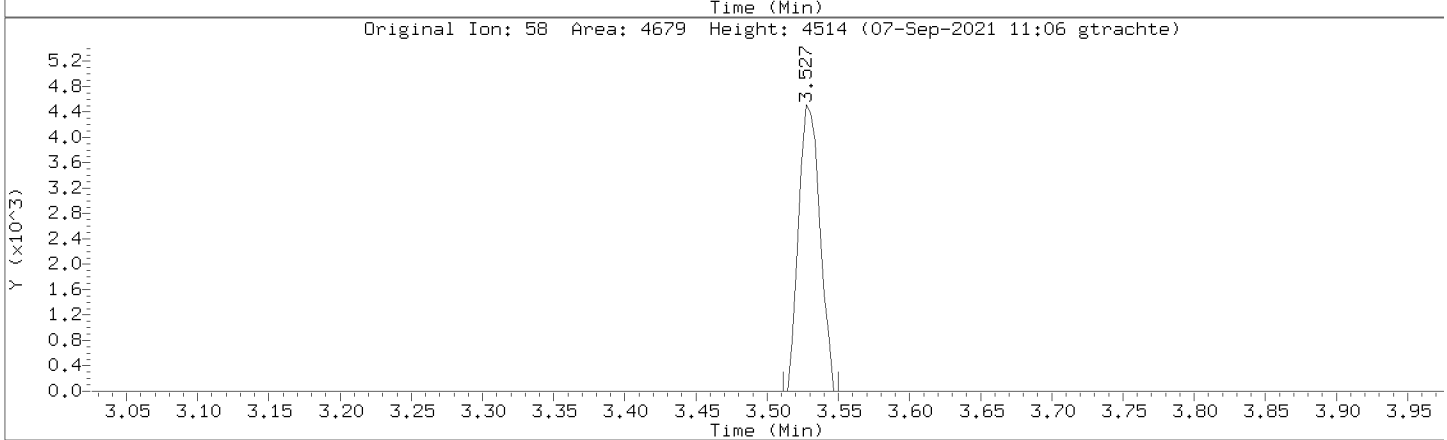
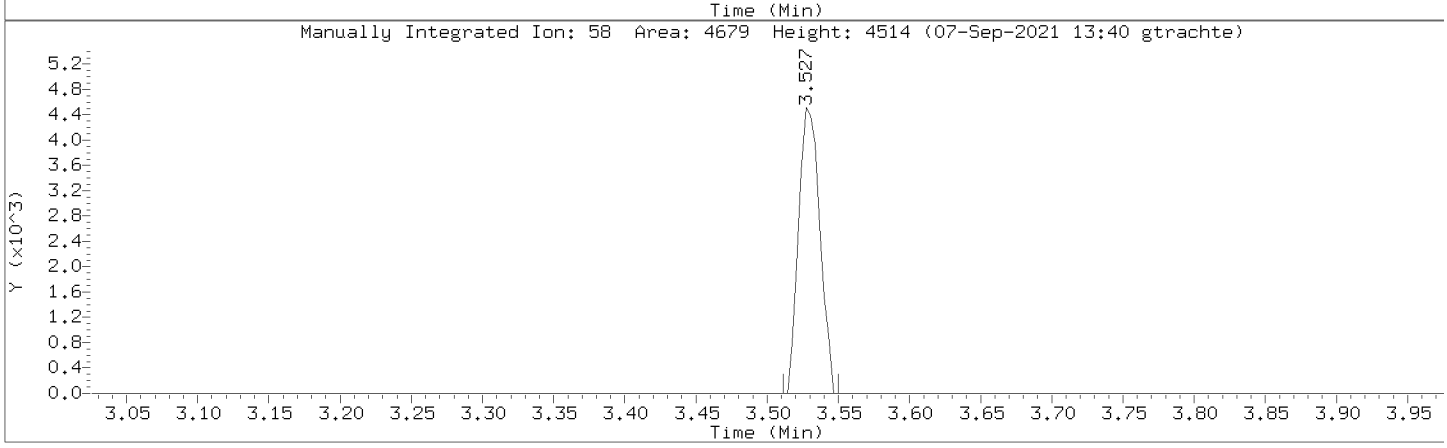
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Acetone
CAS Number: 67-64-1



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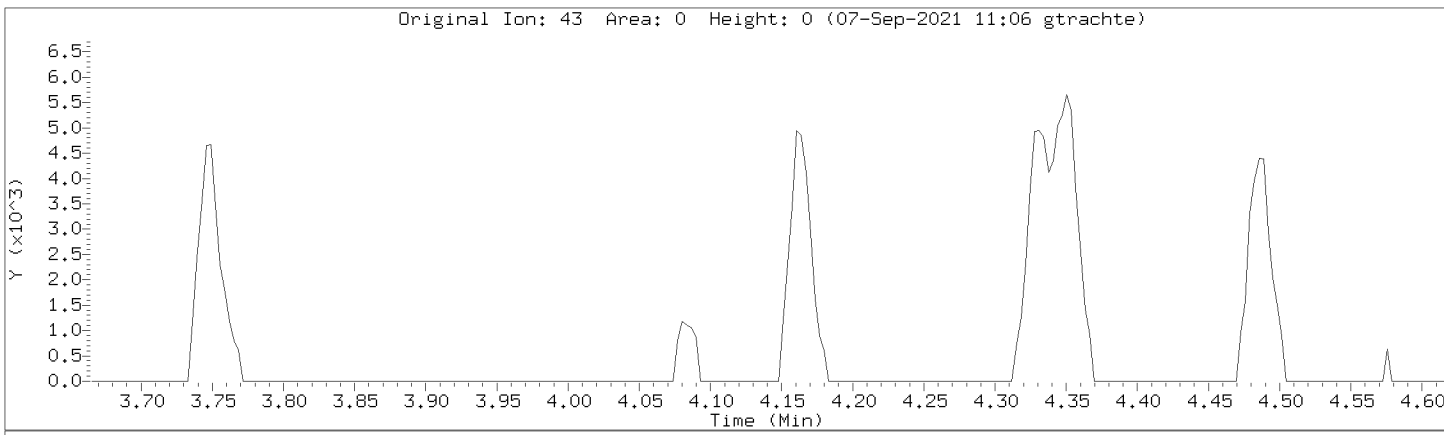
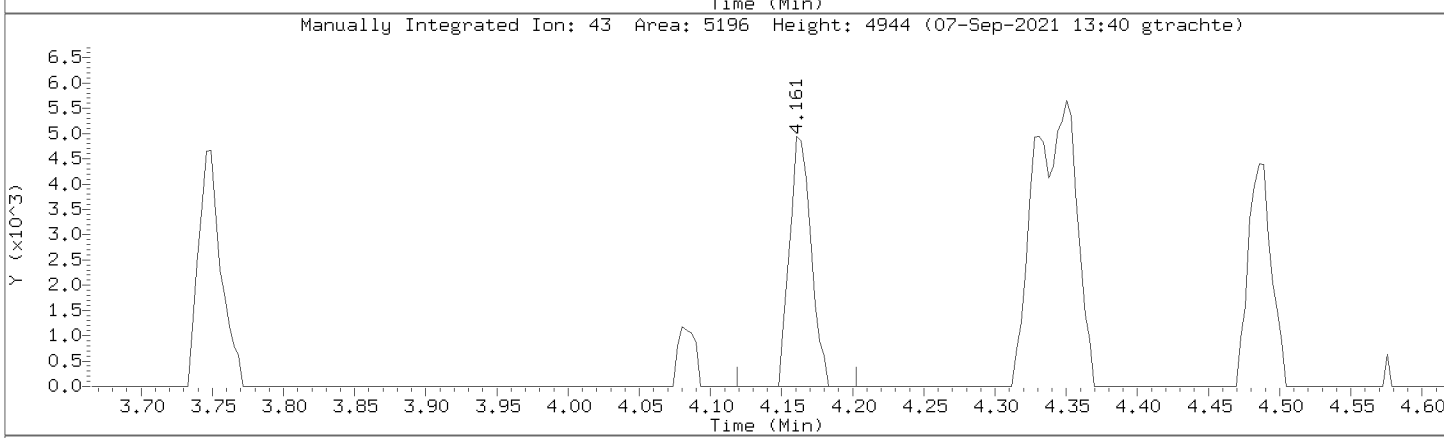
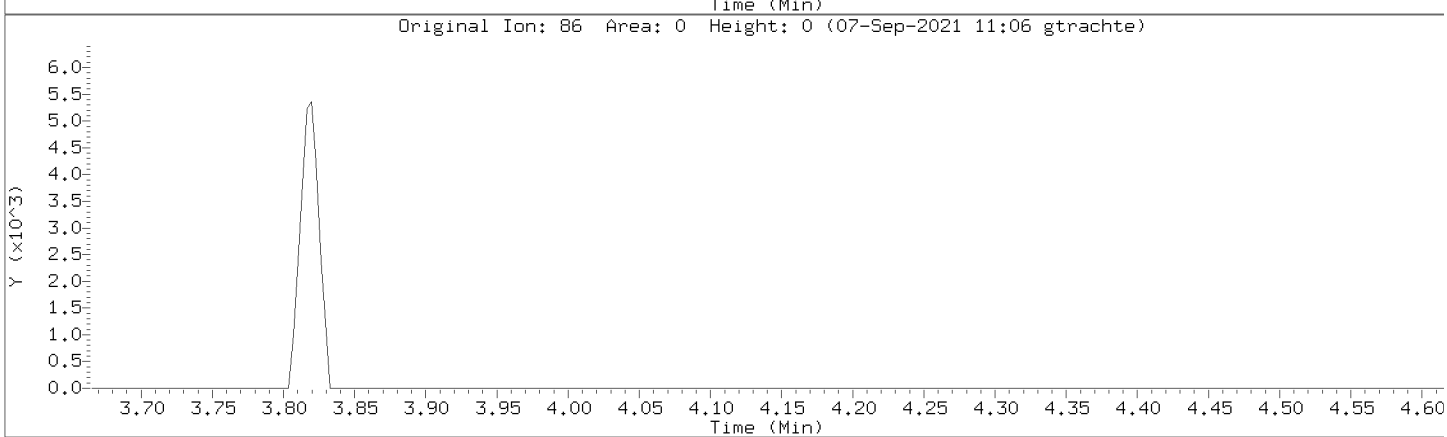
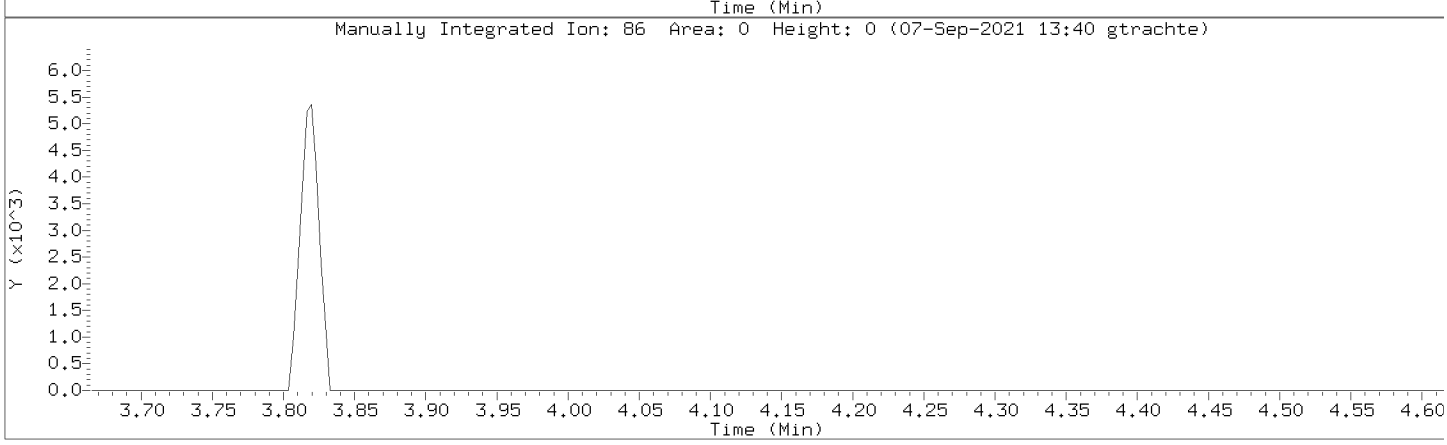
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Vinyl Acetate
CAS Number: 108-05-4



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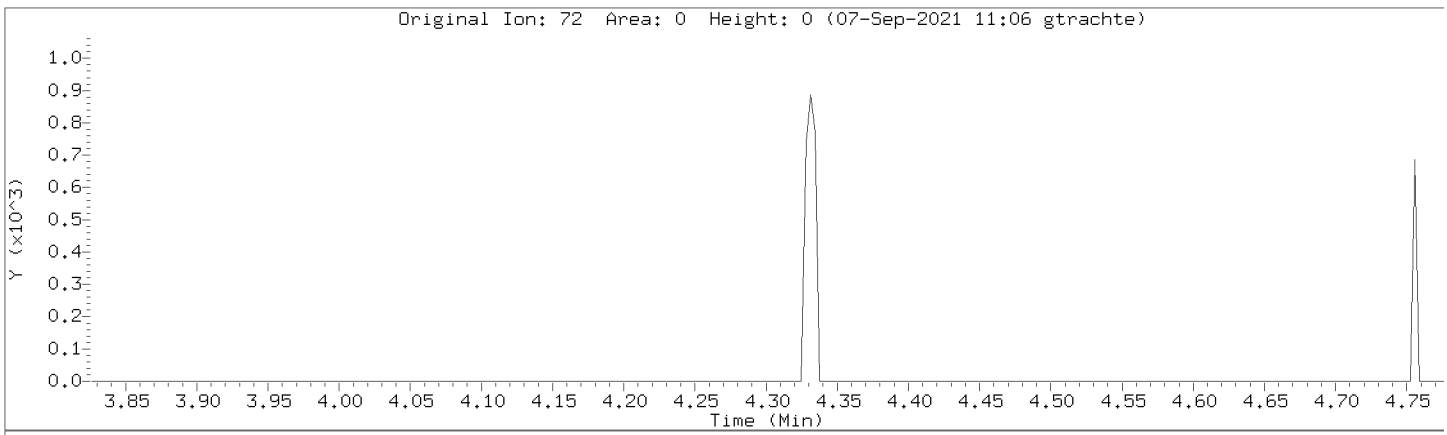
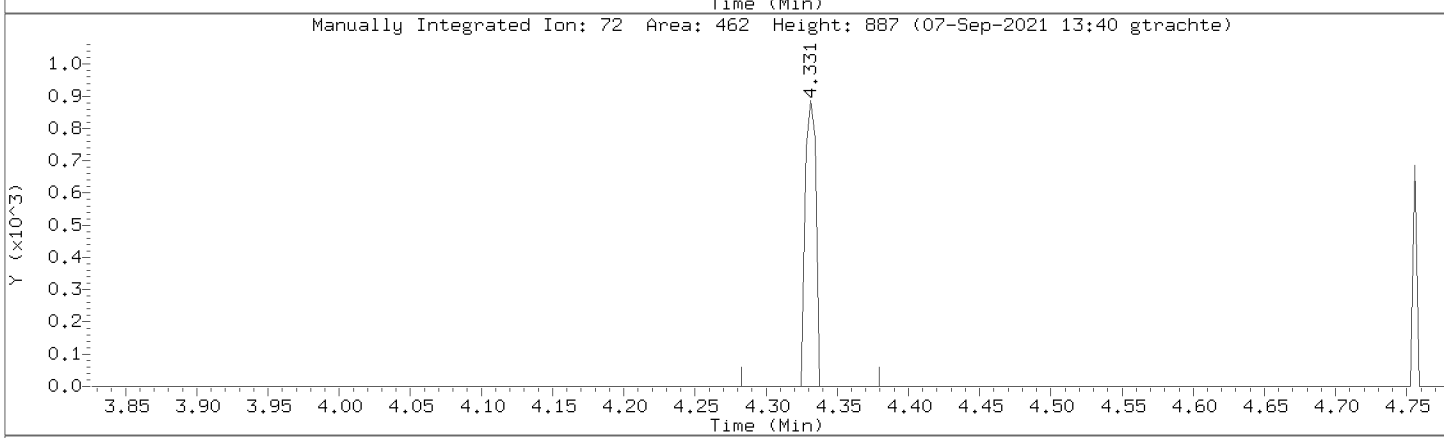
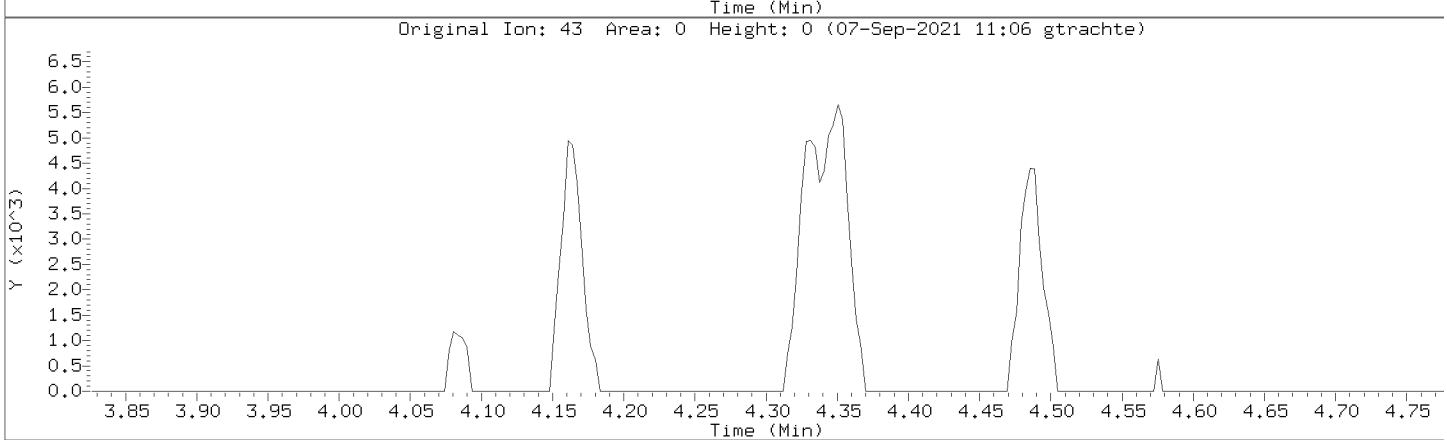
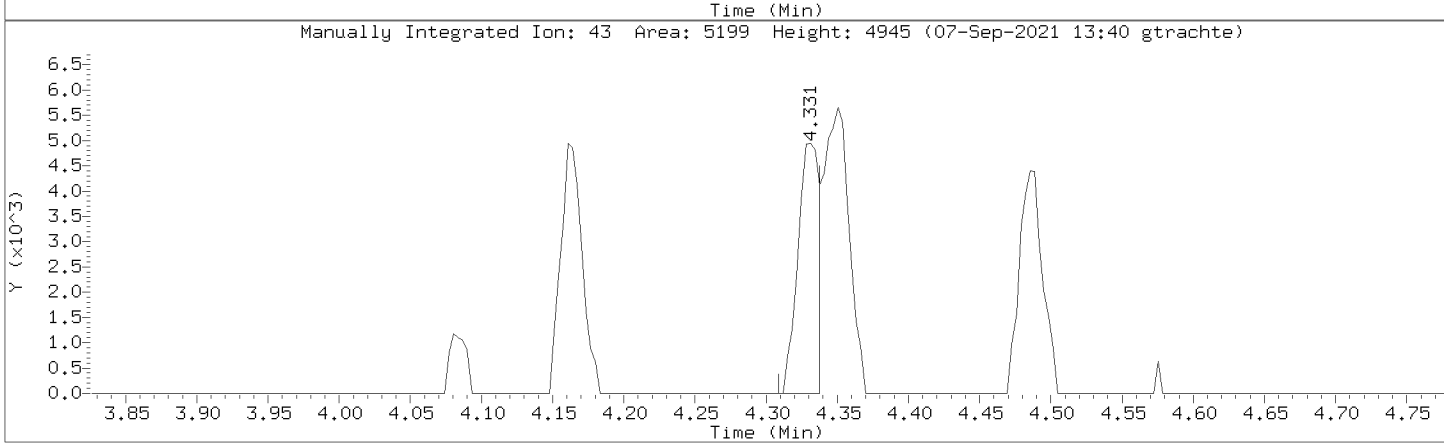
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3



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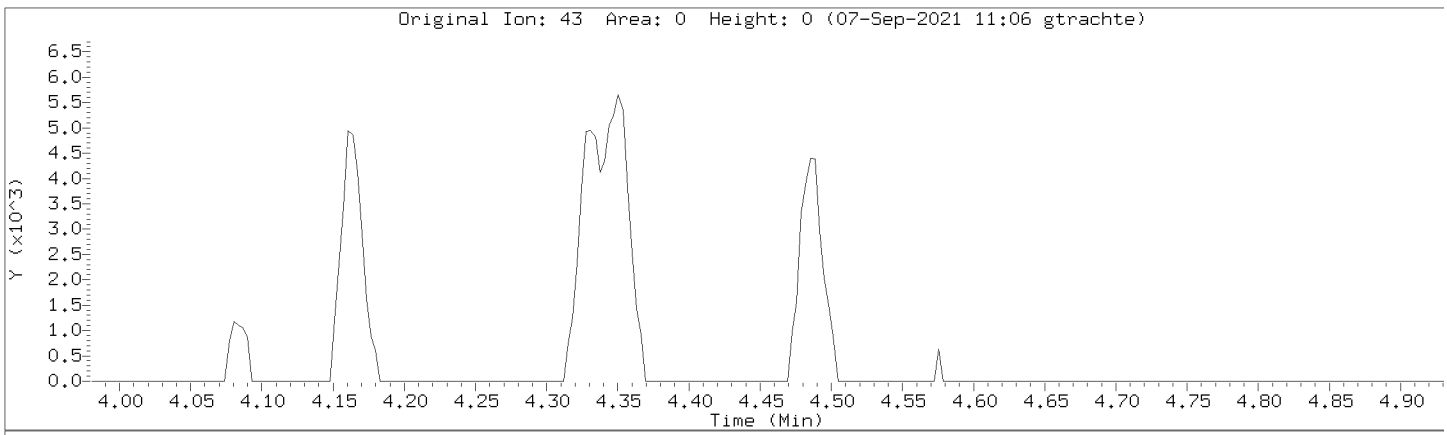
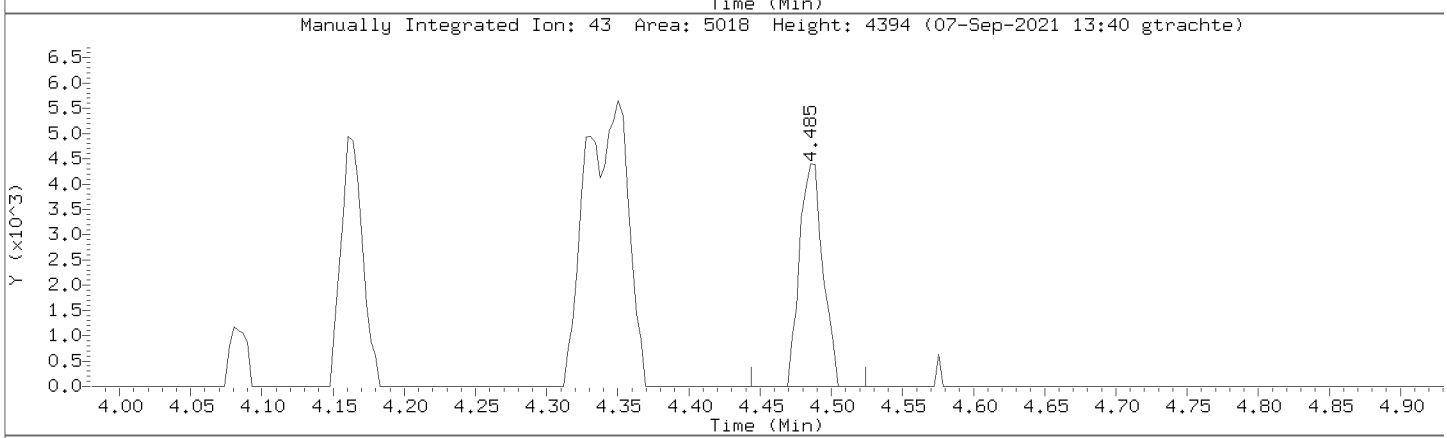
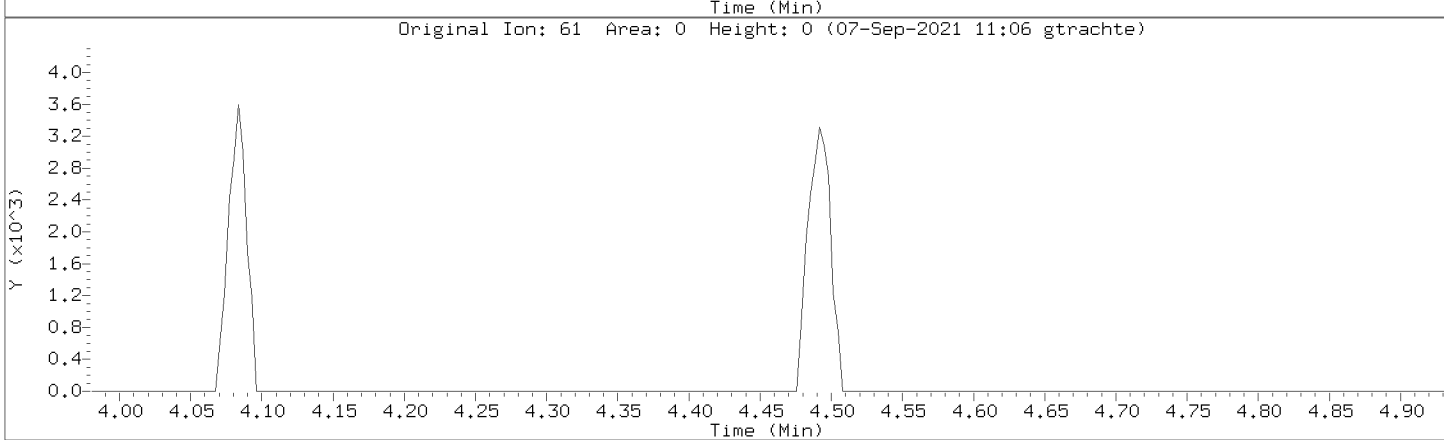
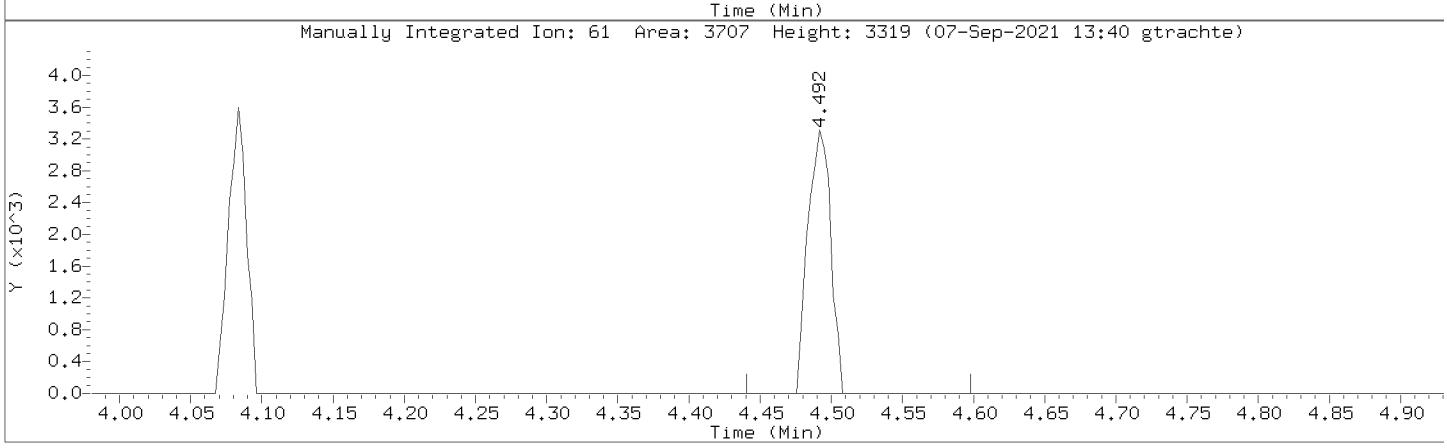
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Ethyl Acetate
CAS Number: 141-78-6



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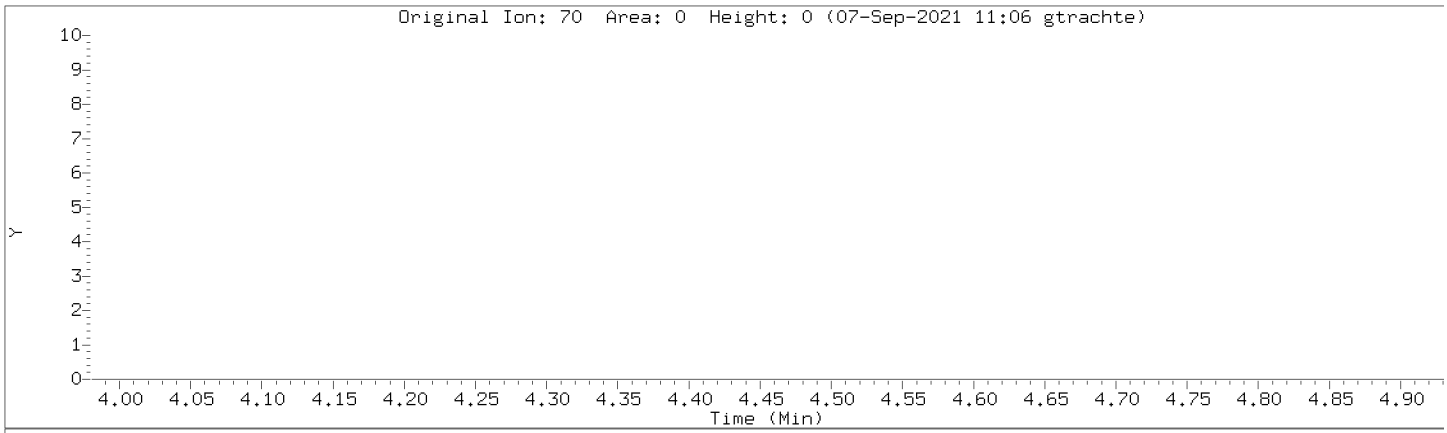


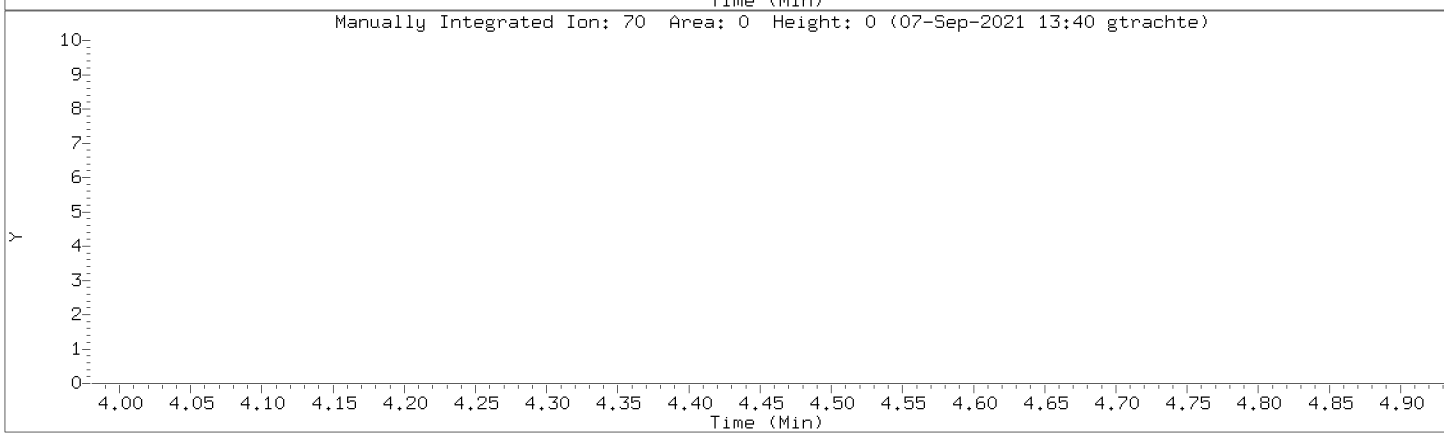

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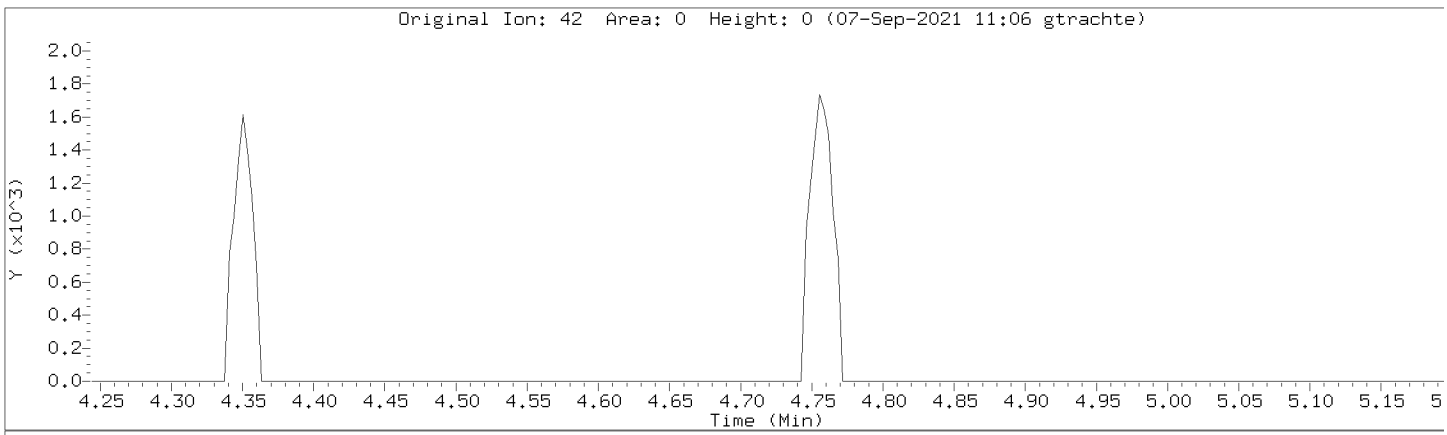
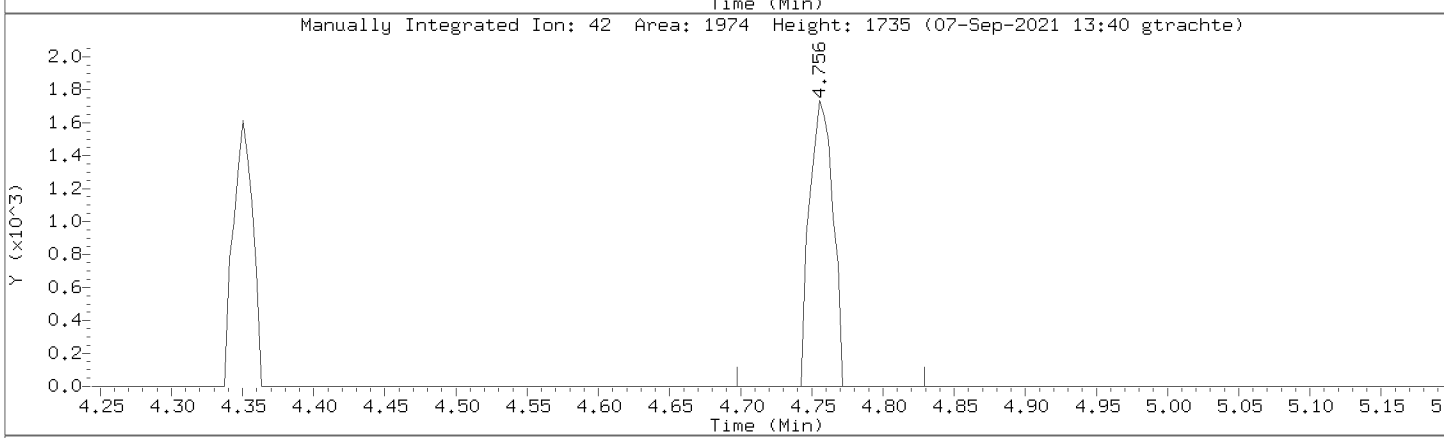
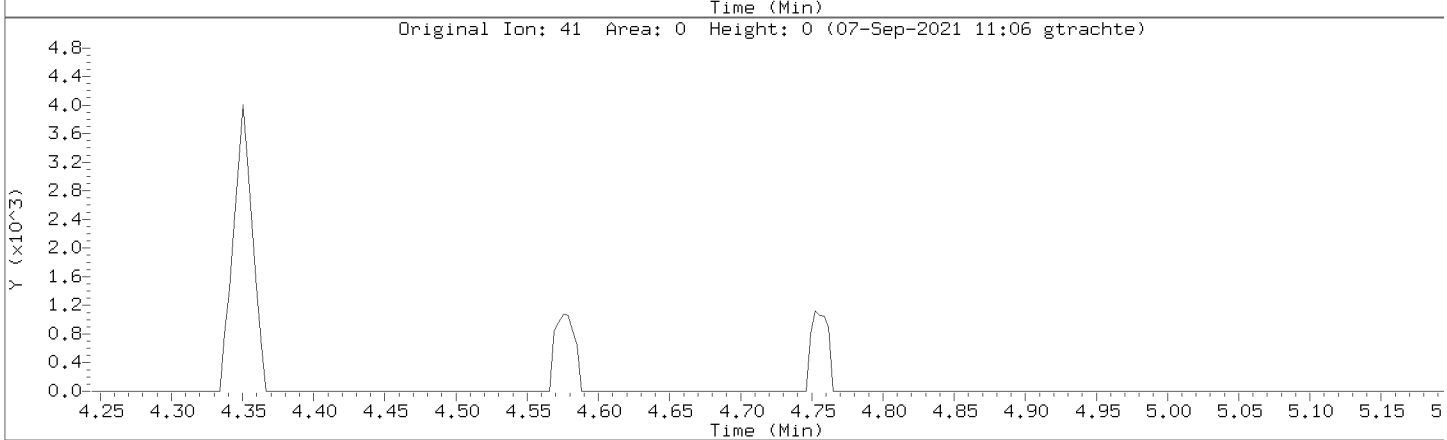
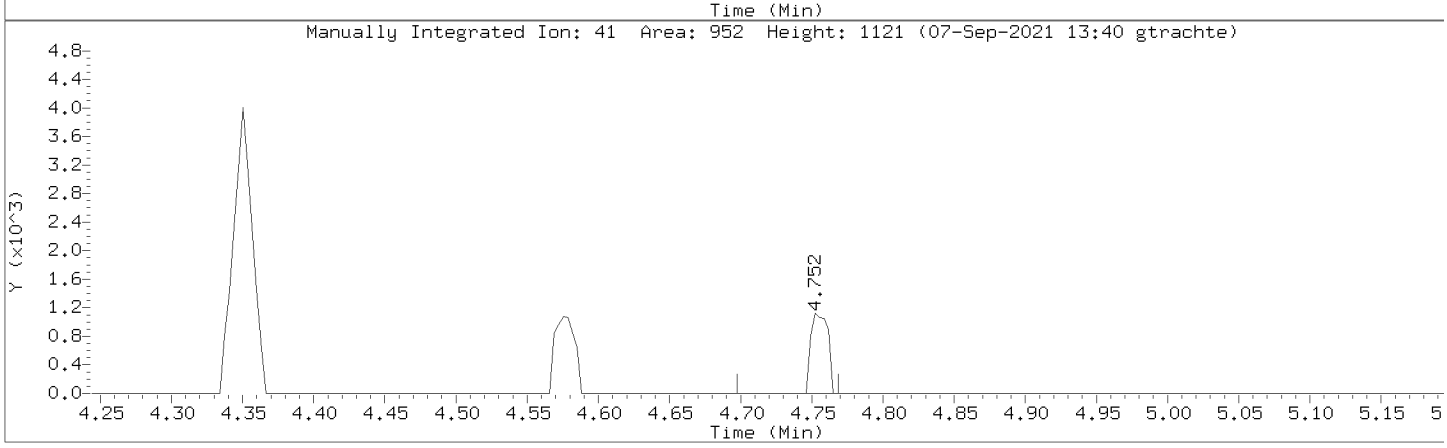
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Tetrahydrofuran
CAS Number: 109-99-9



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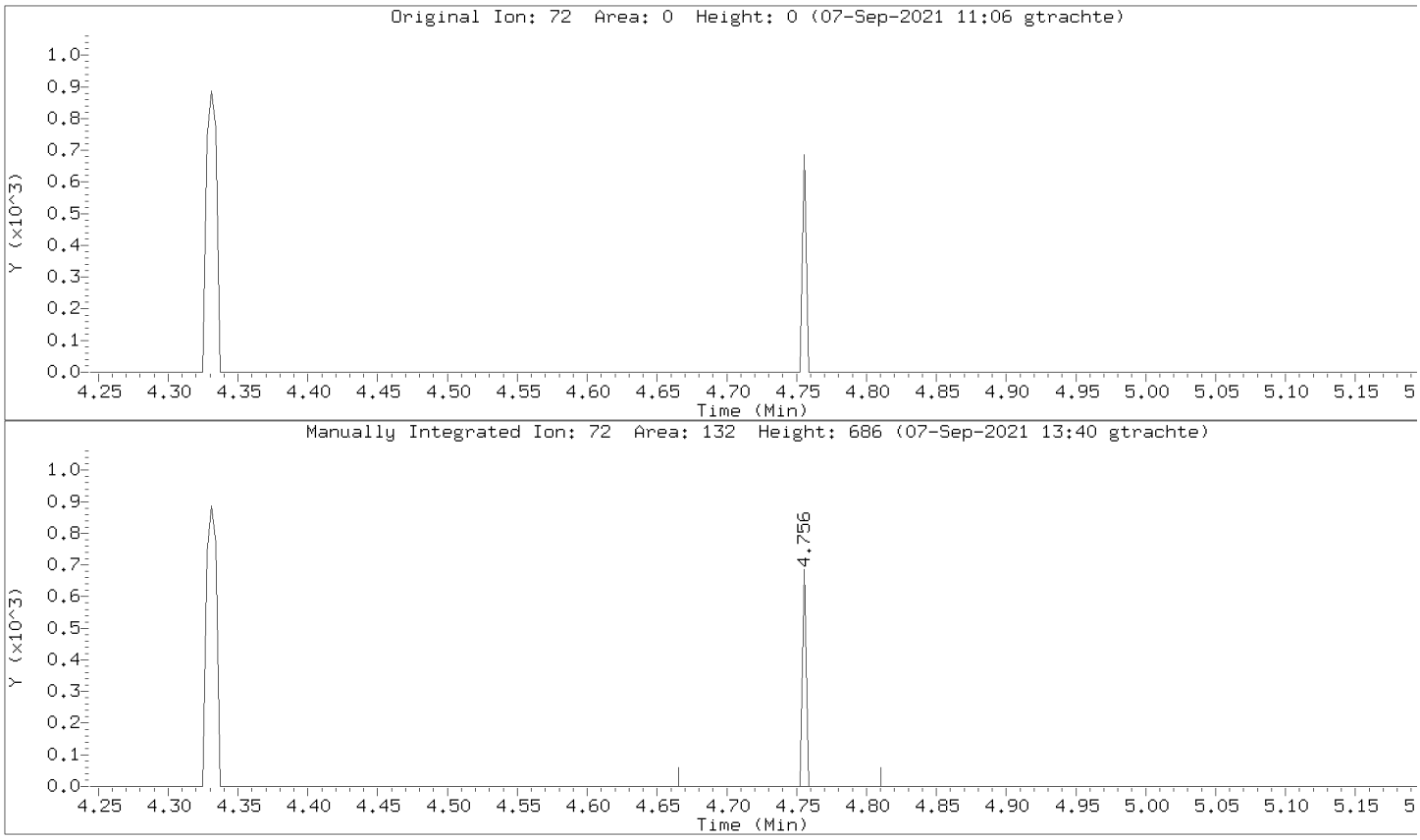
Instrument: 10airH.i
Lab Sample ID: CAL1



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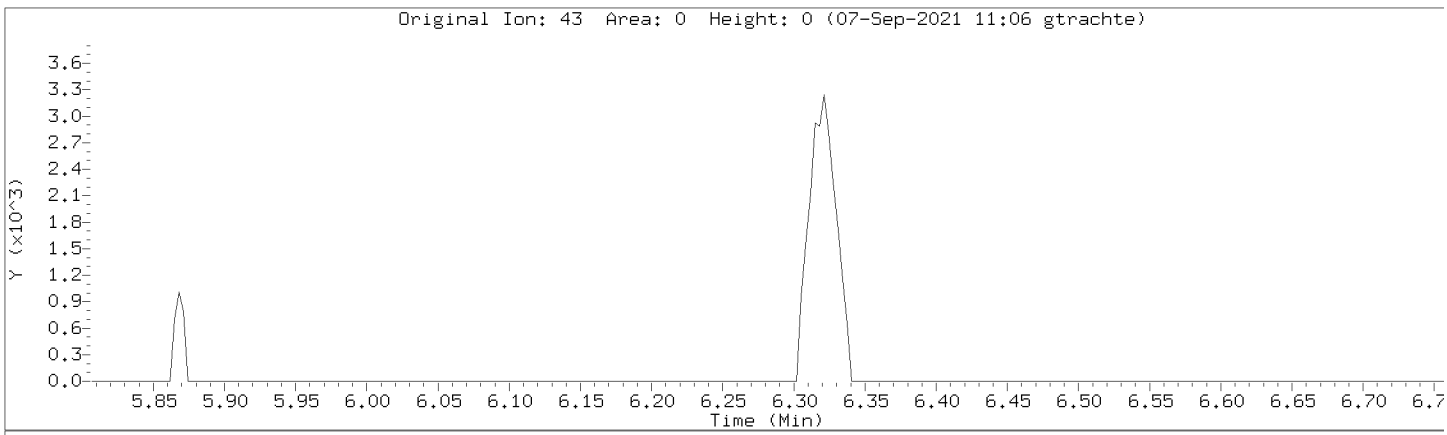
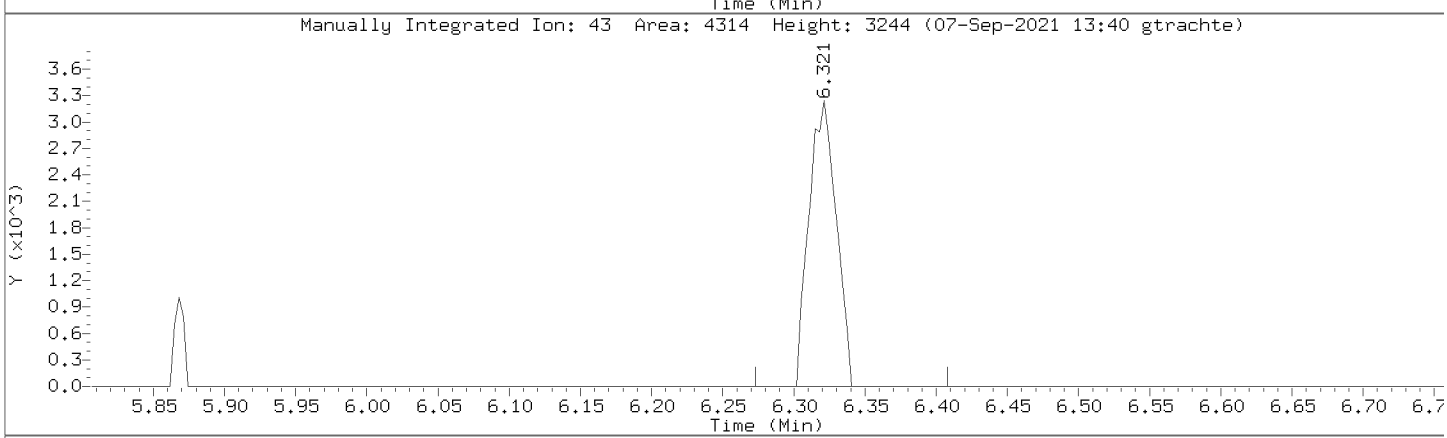
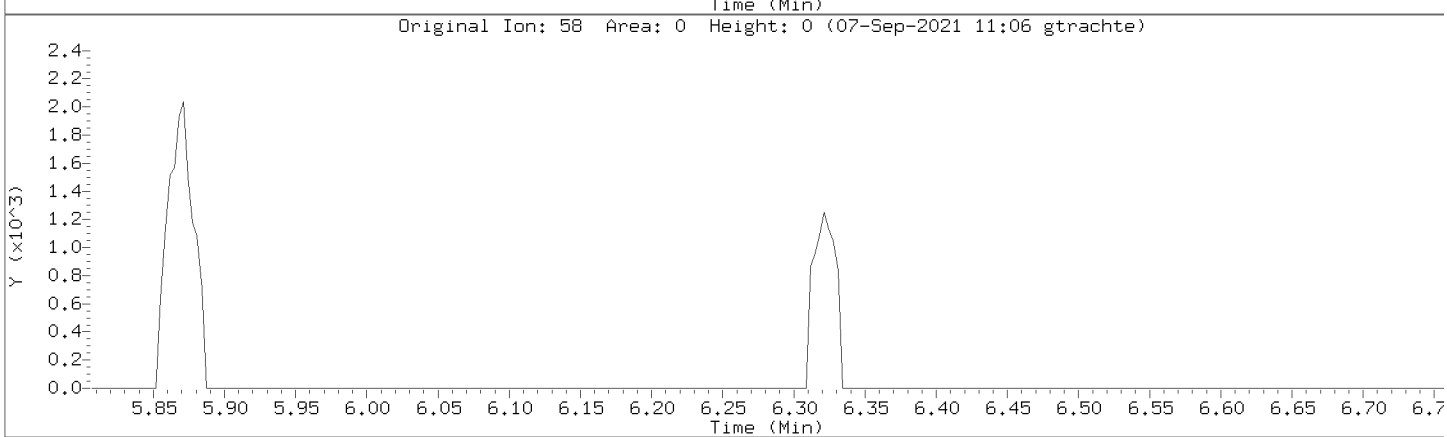
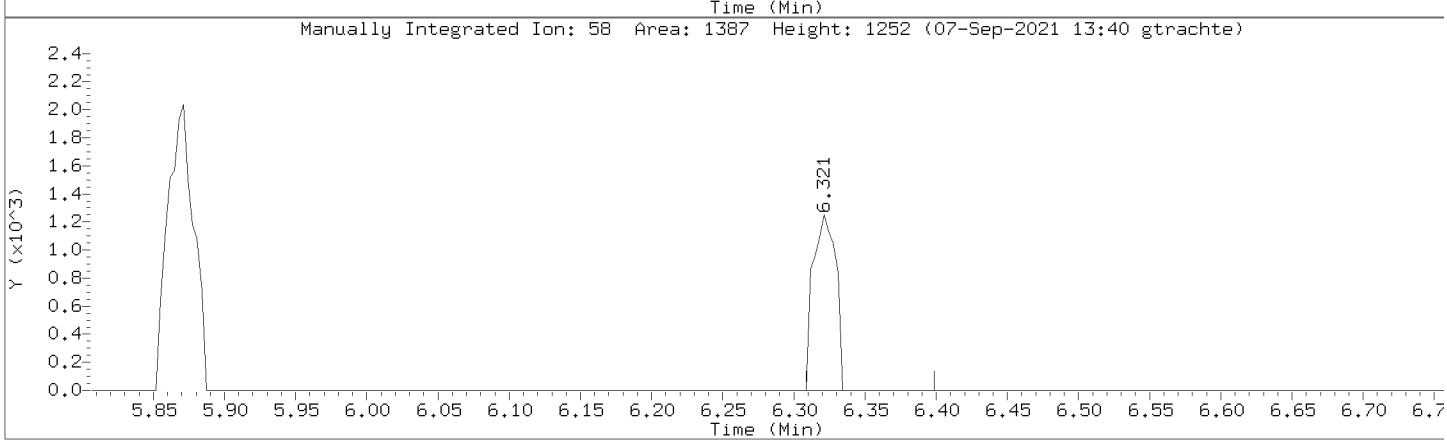
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Methyl Isobutyl Ketone
CAS Number: 108-10-1



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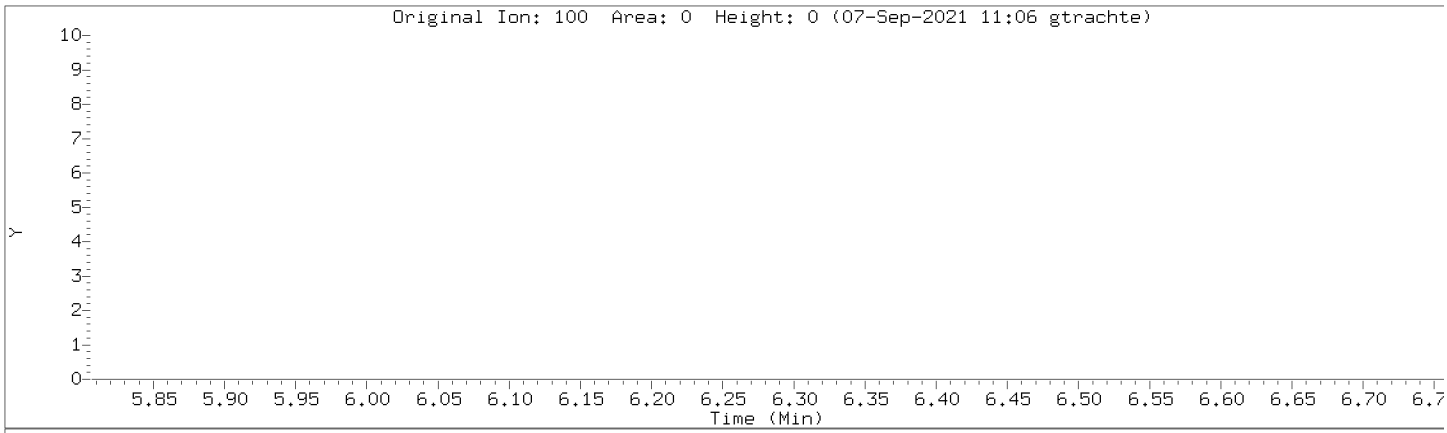
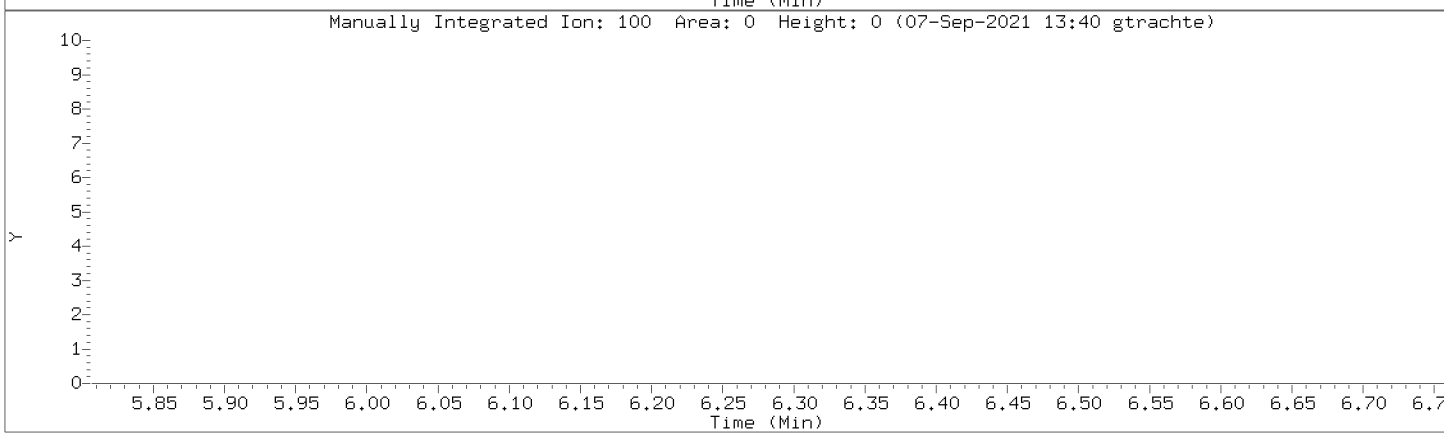
Lab Sample ID: CAL1



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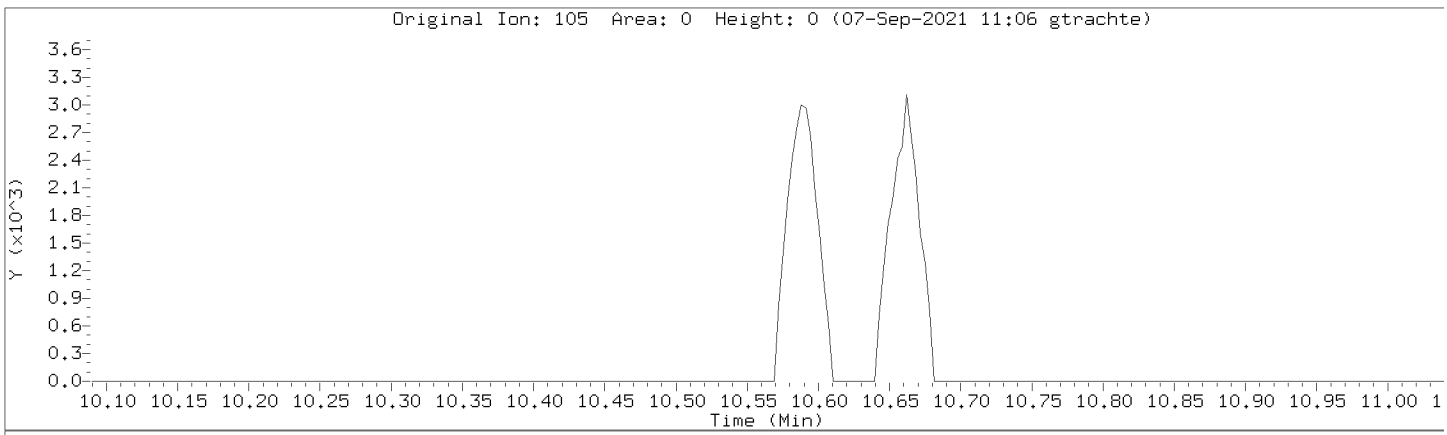
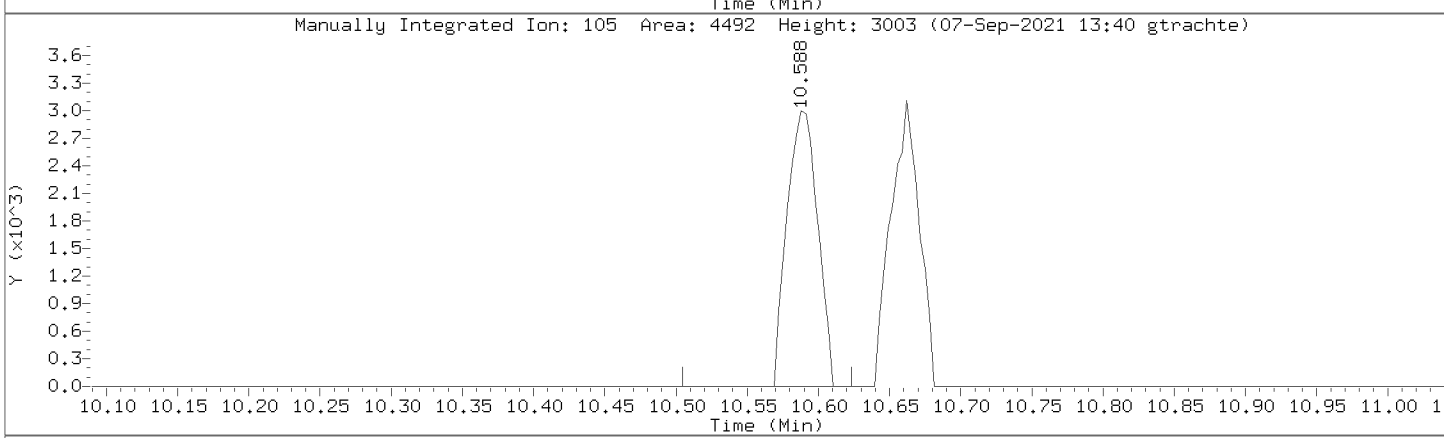
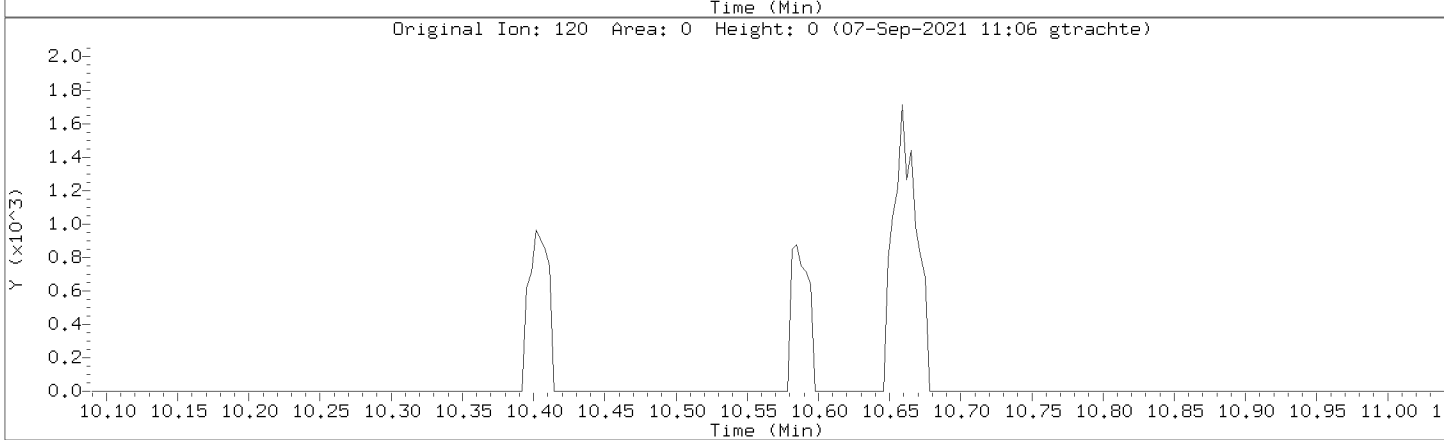
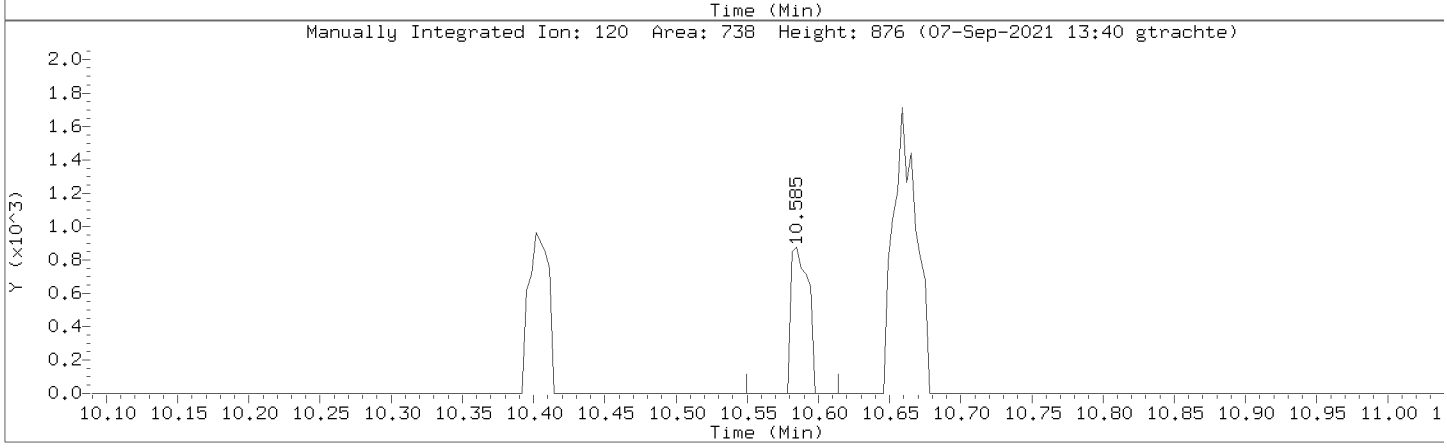
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: 4-Ethyltoluene
CAS Number: 622-96-8



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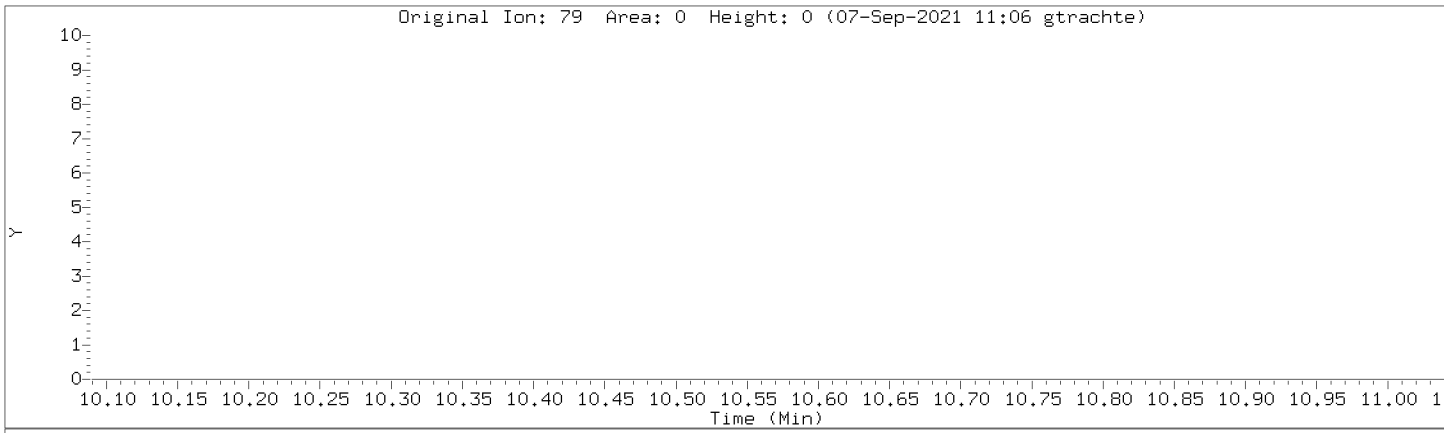
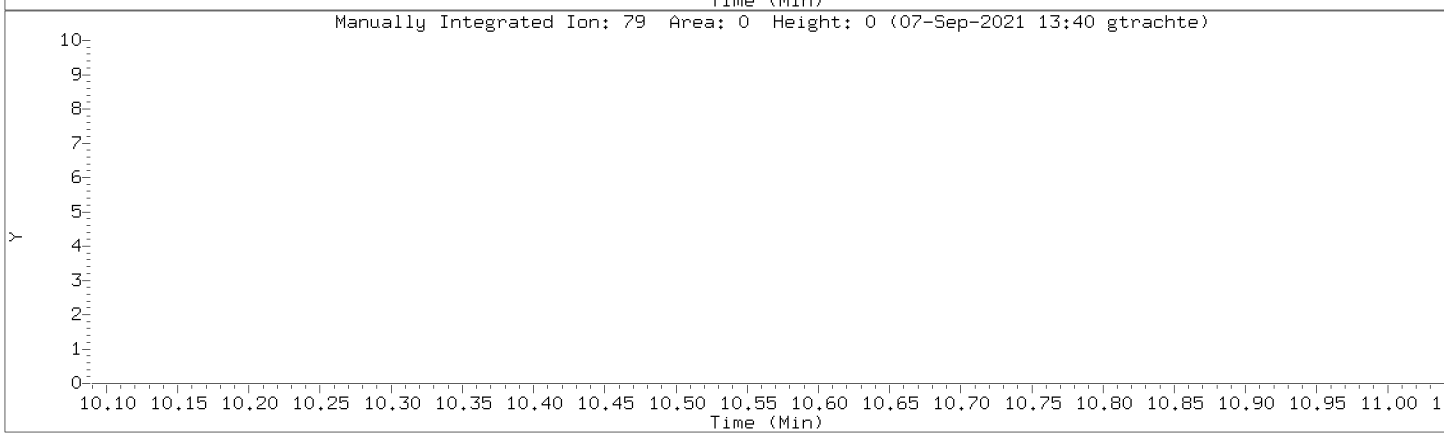
Lab Sample ID: CAL1



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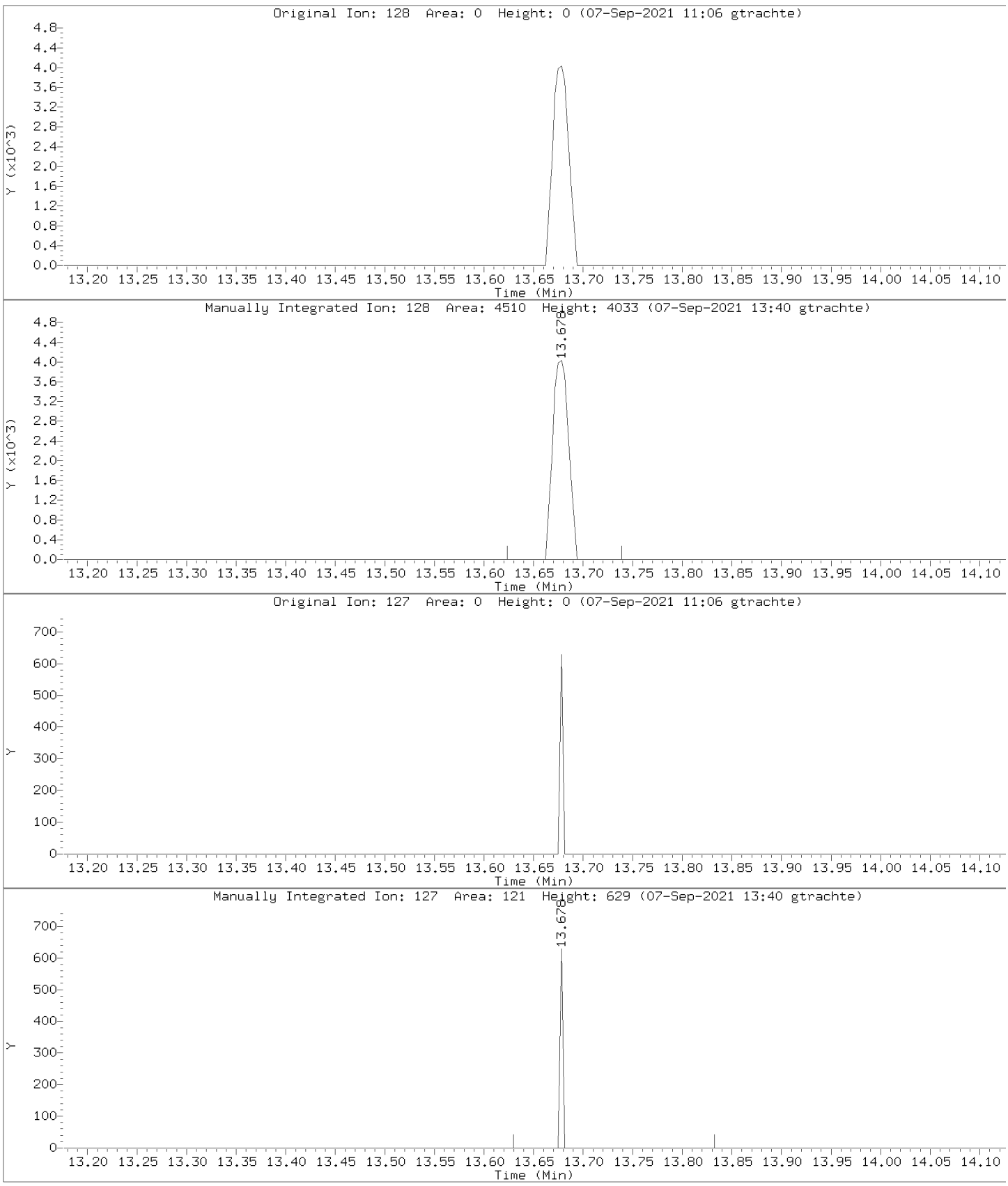
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Naphthalene
CAS Number: 91-20-3



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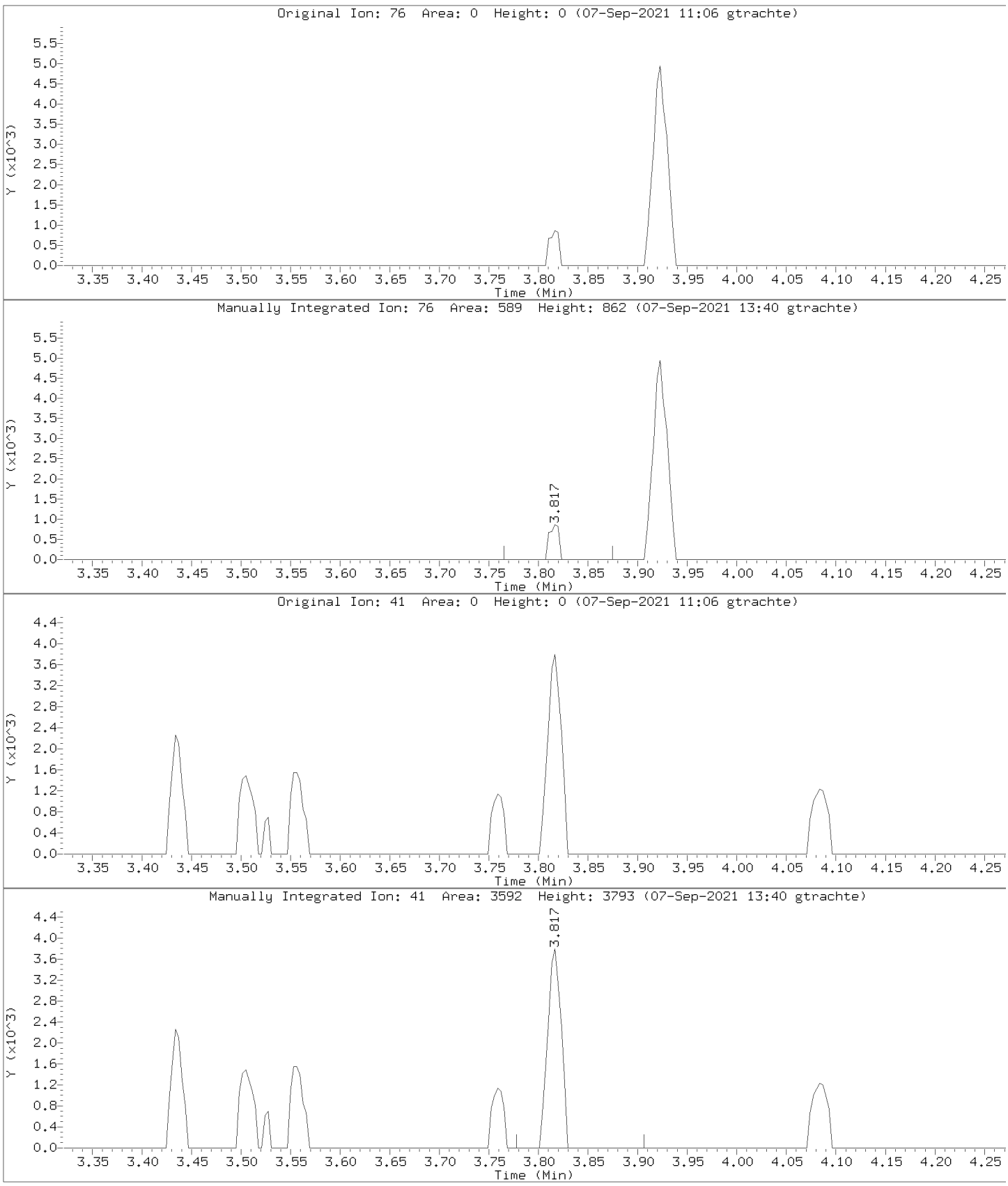
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Allyl Chloride
CAS Number: 107-05-1



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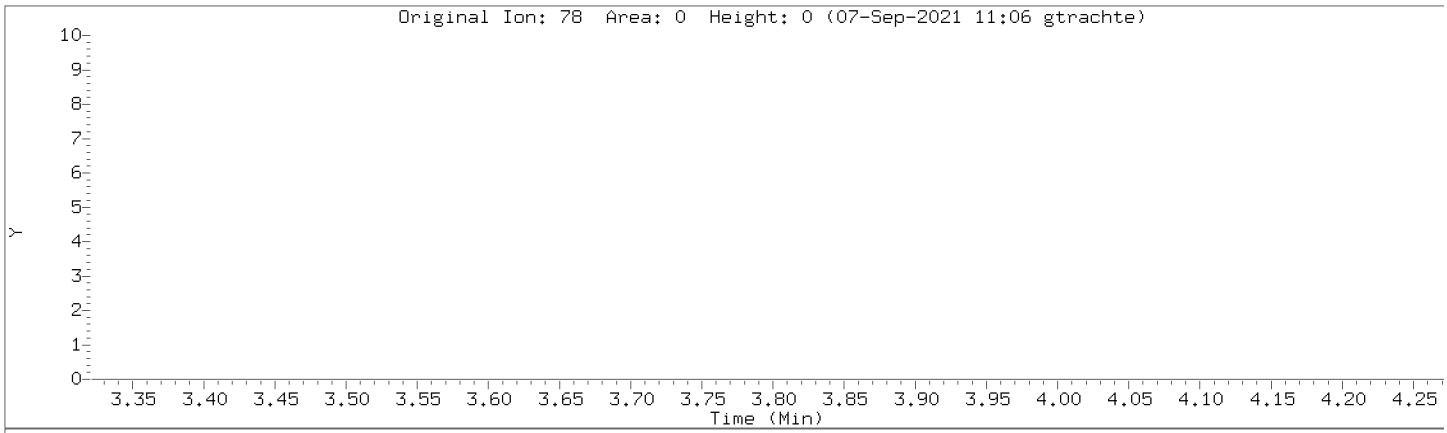


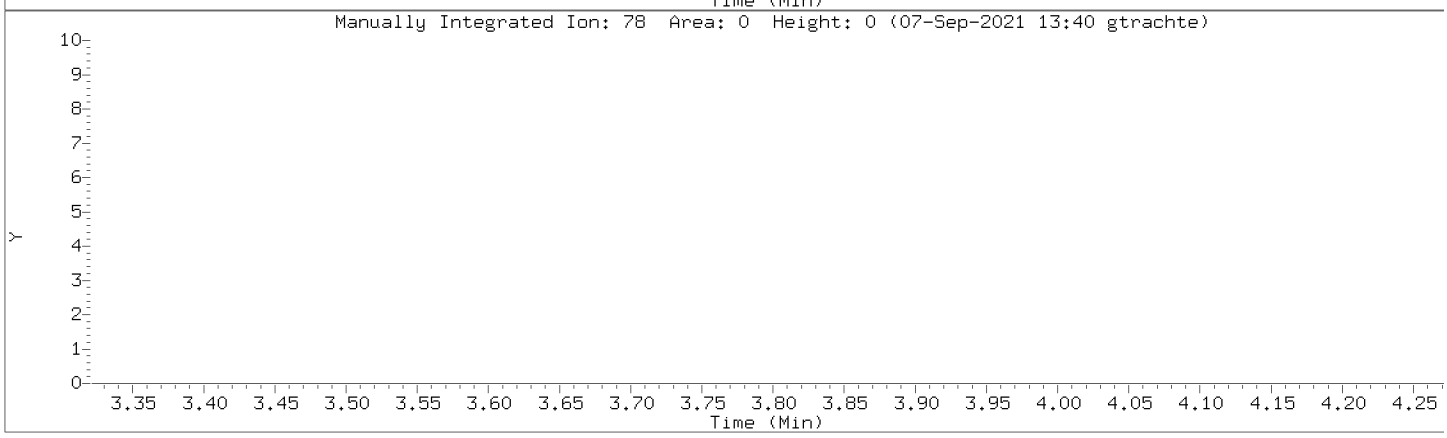

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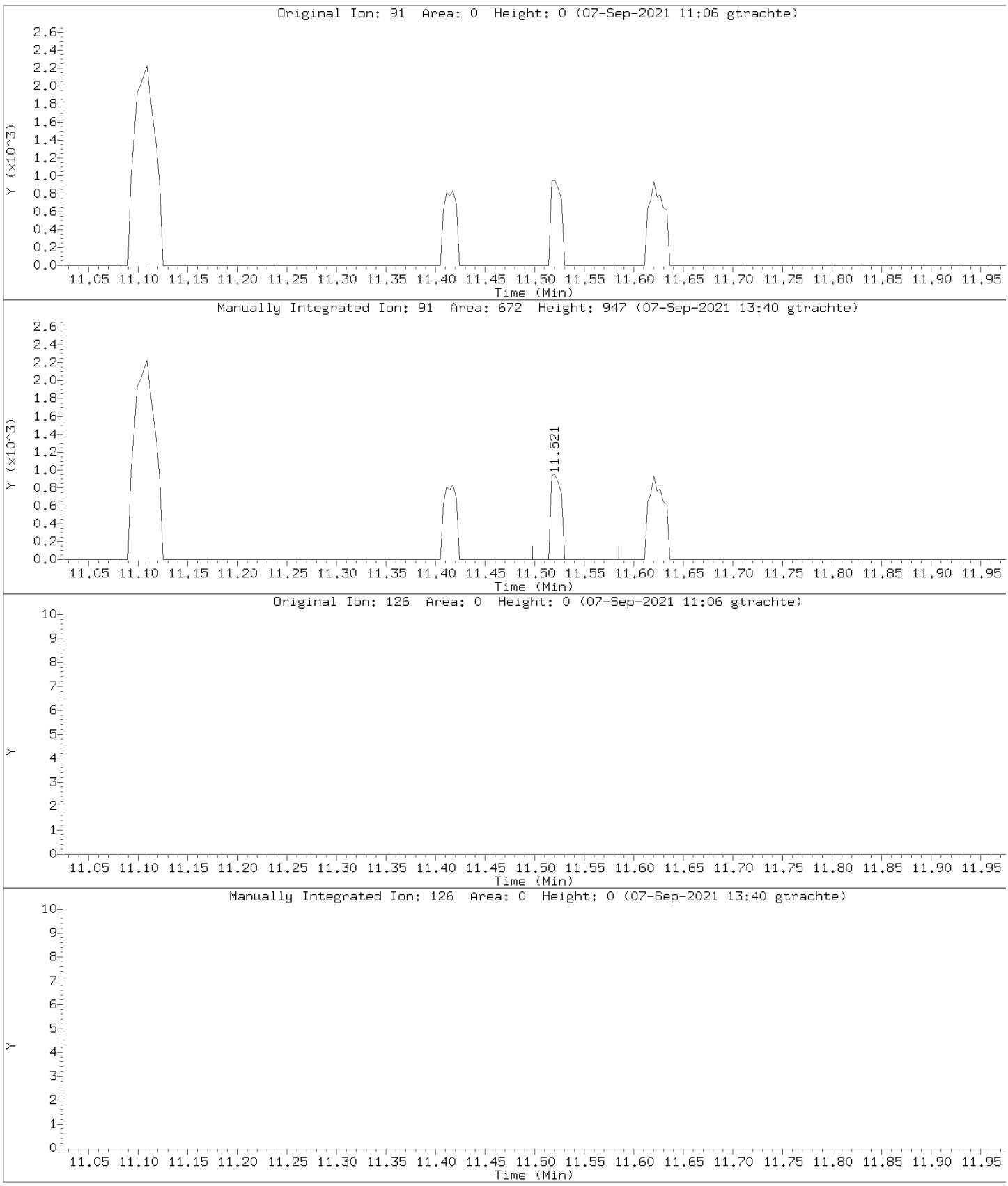
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Benzyl Chloride
CAS Number: 100-44-7



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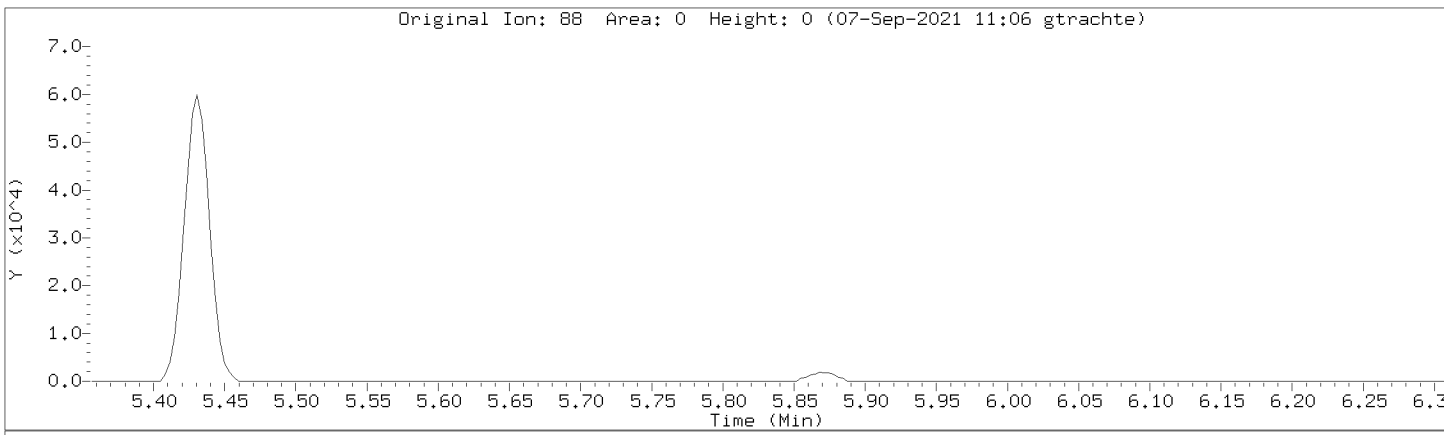
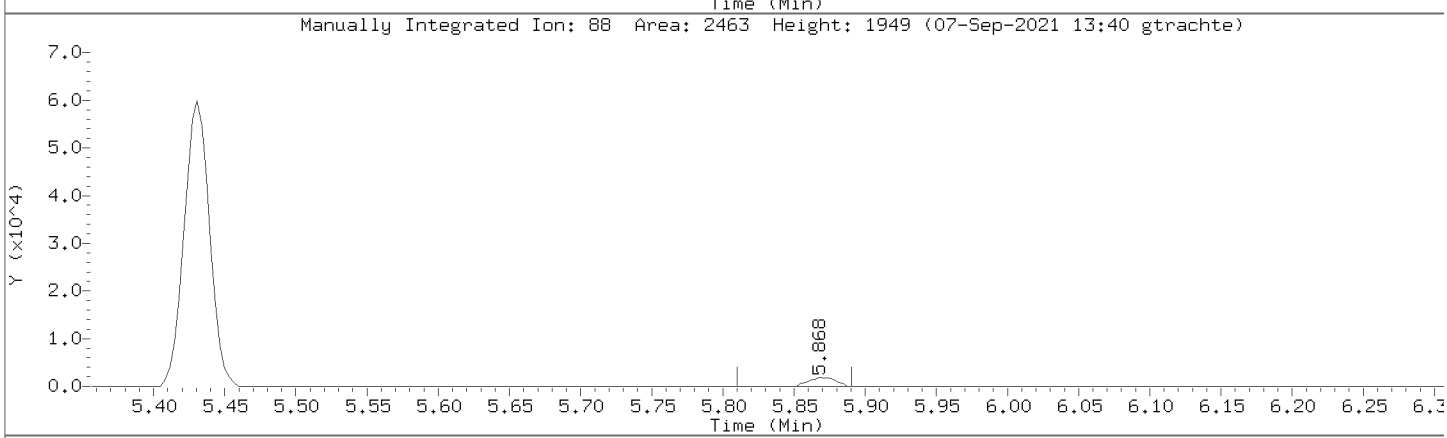
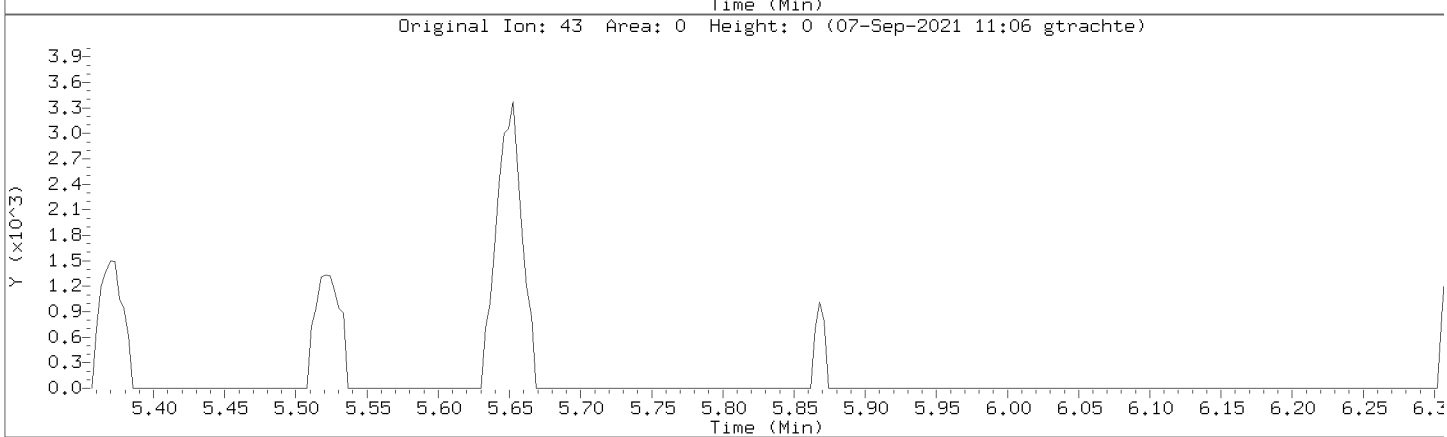
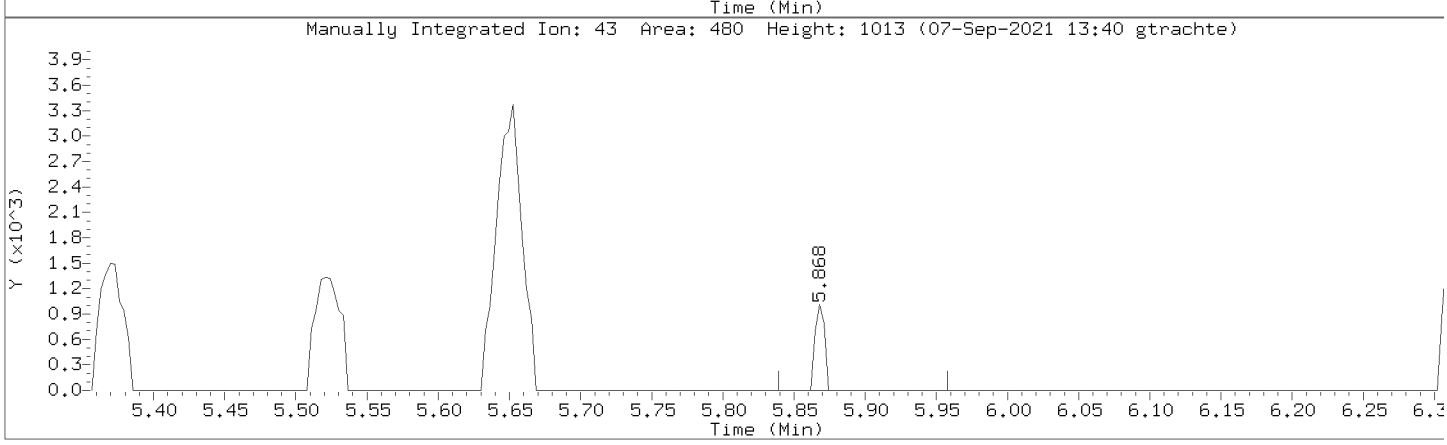
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: 1,4-Dioxane
CAS Number: 123-91-1



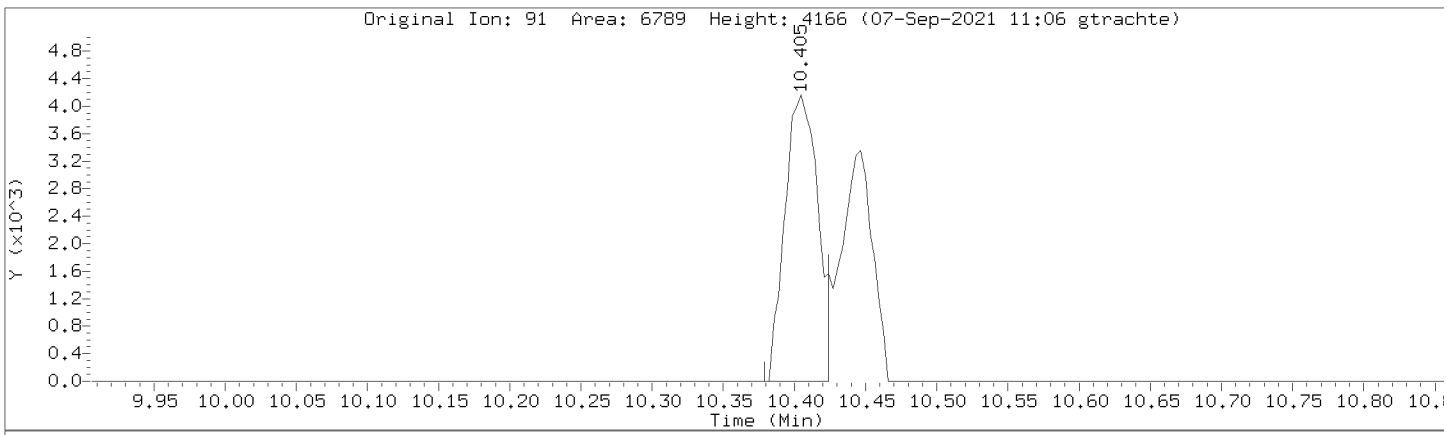



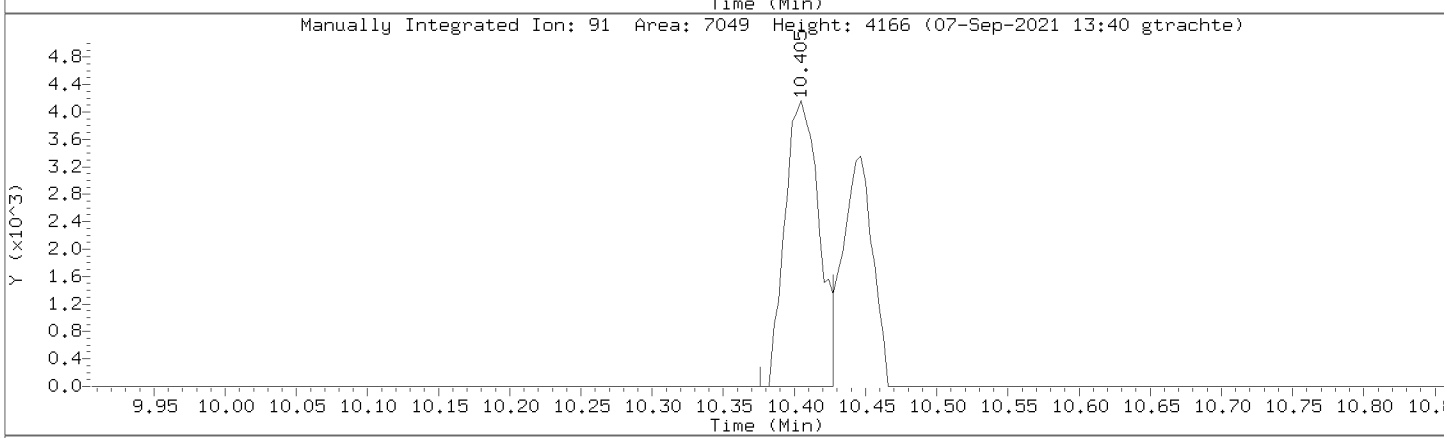



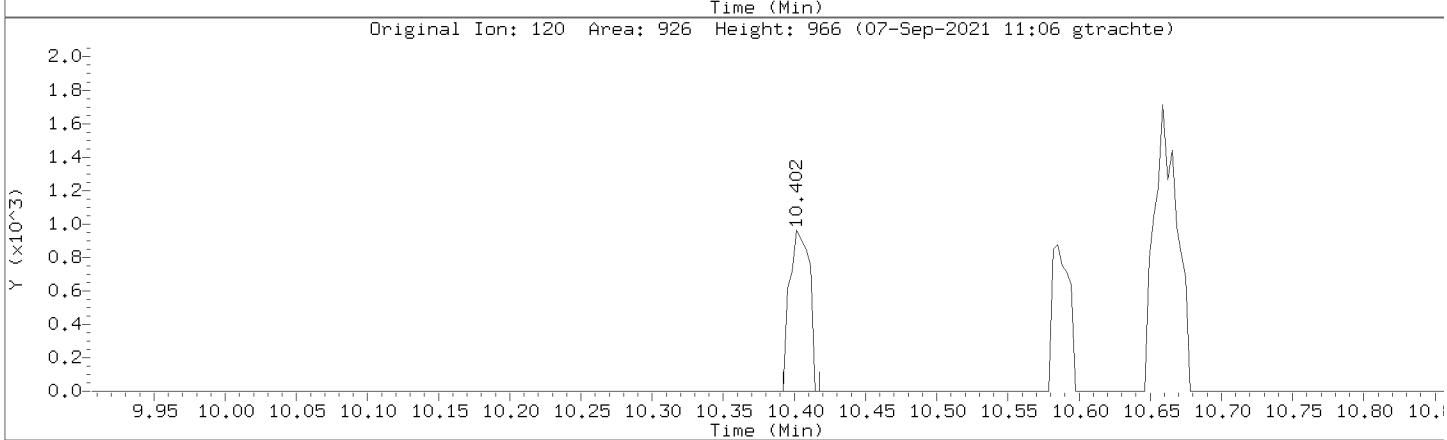



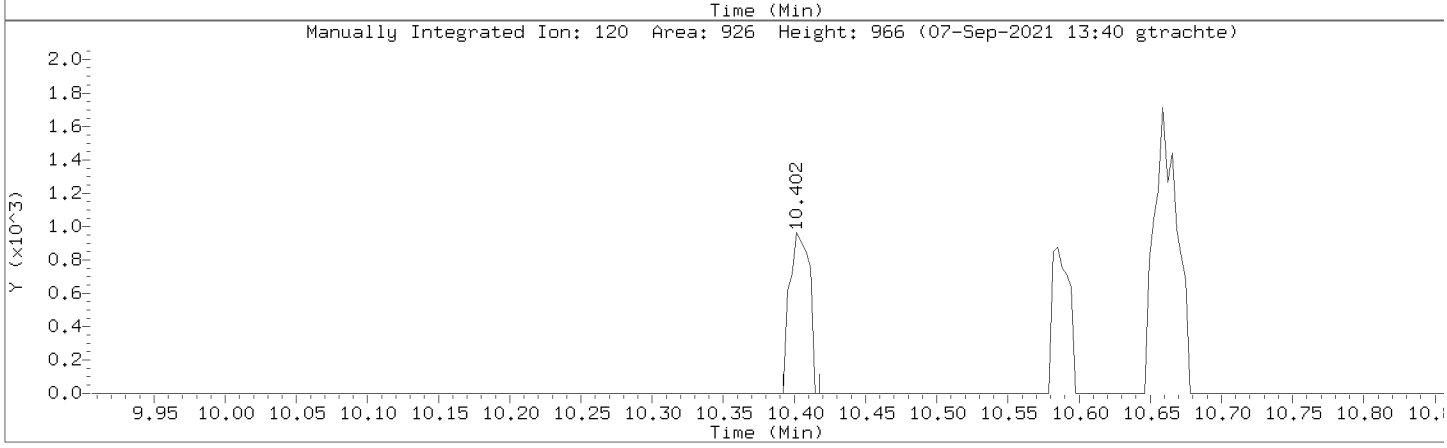
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25004.D
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: N-Propylbenzene
CAS Number: 103-65-1



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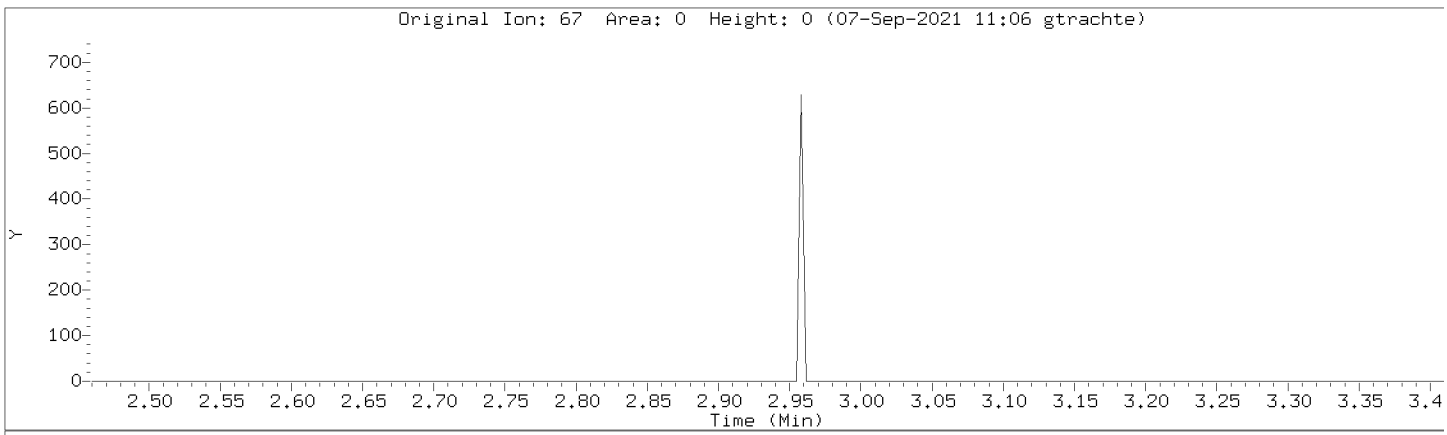
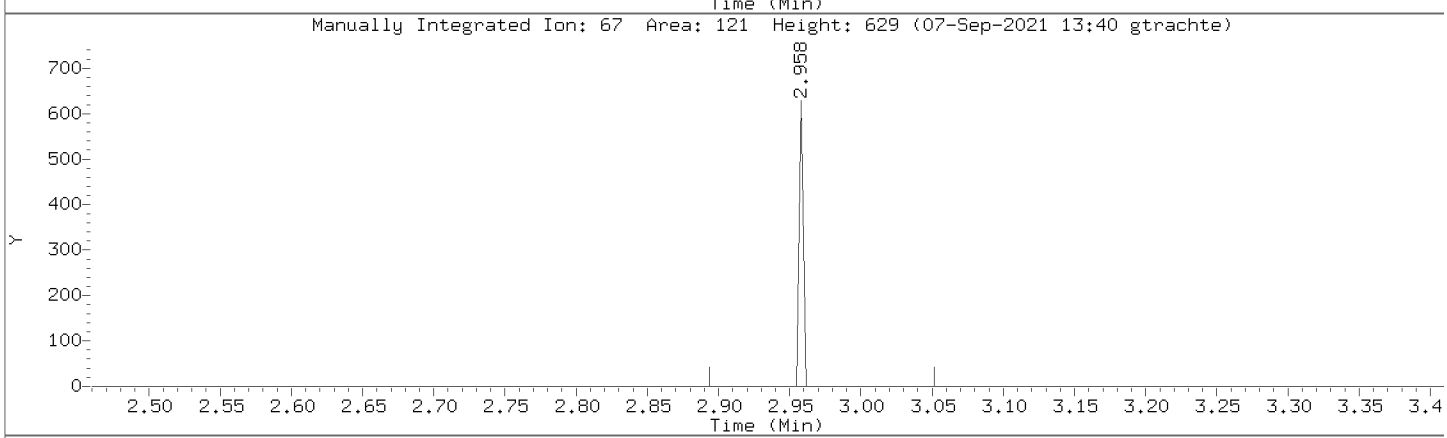
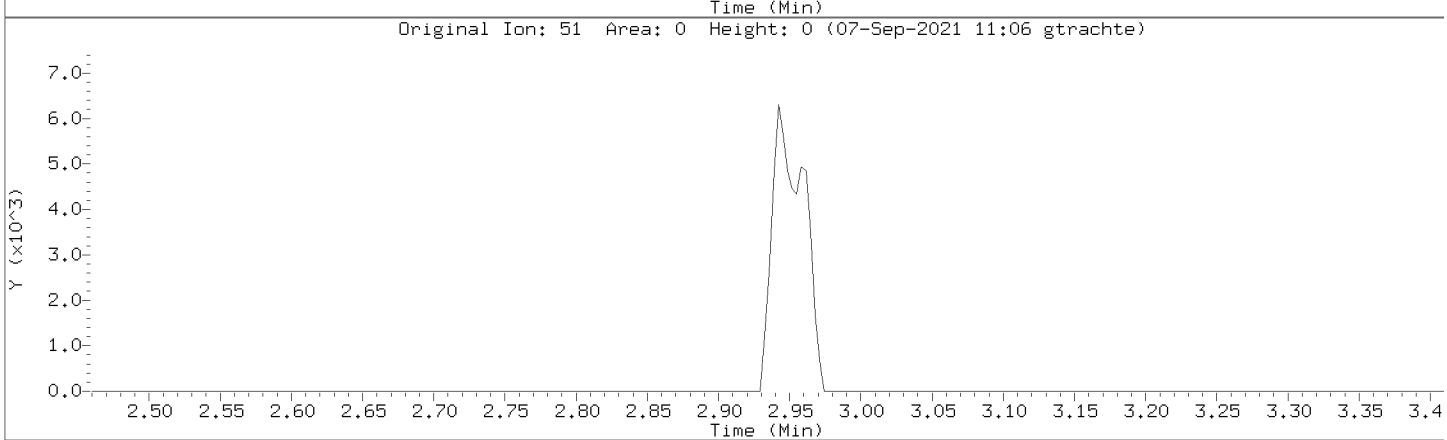
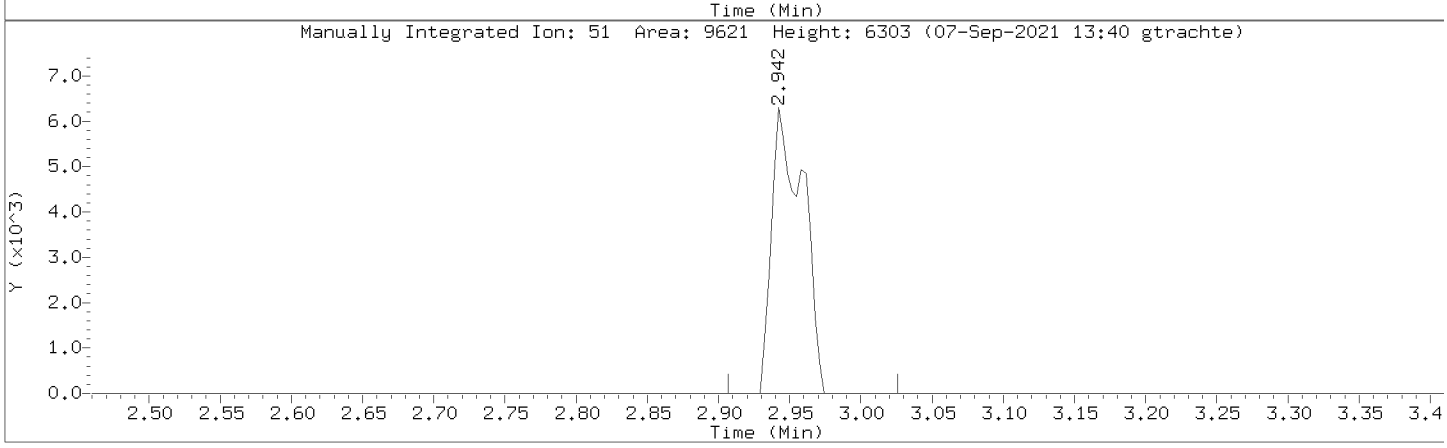
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Chlorodifluoromethane
CAS Number: 76-13-1



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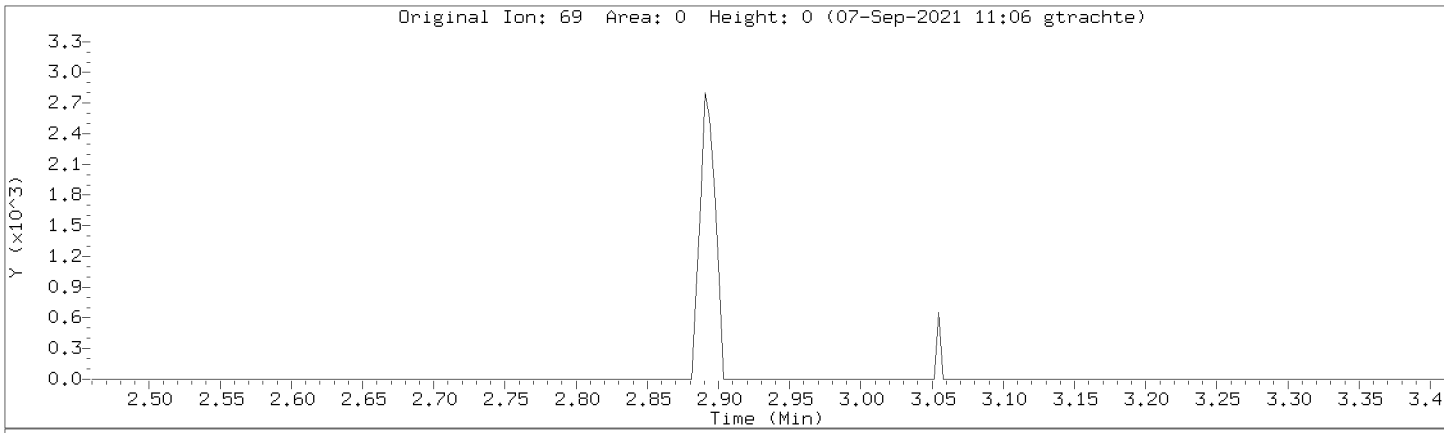
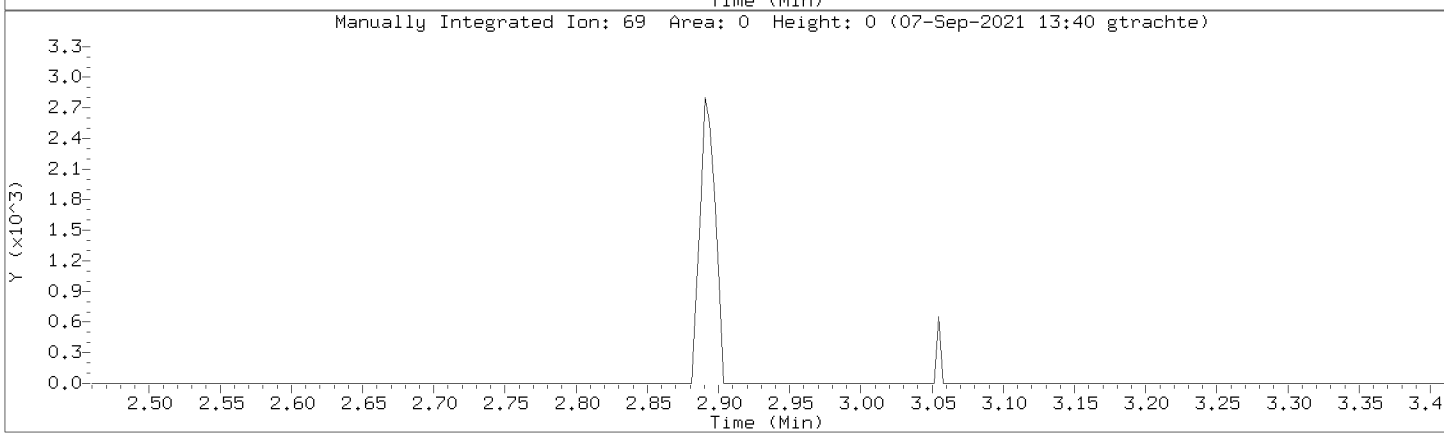
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1



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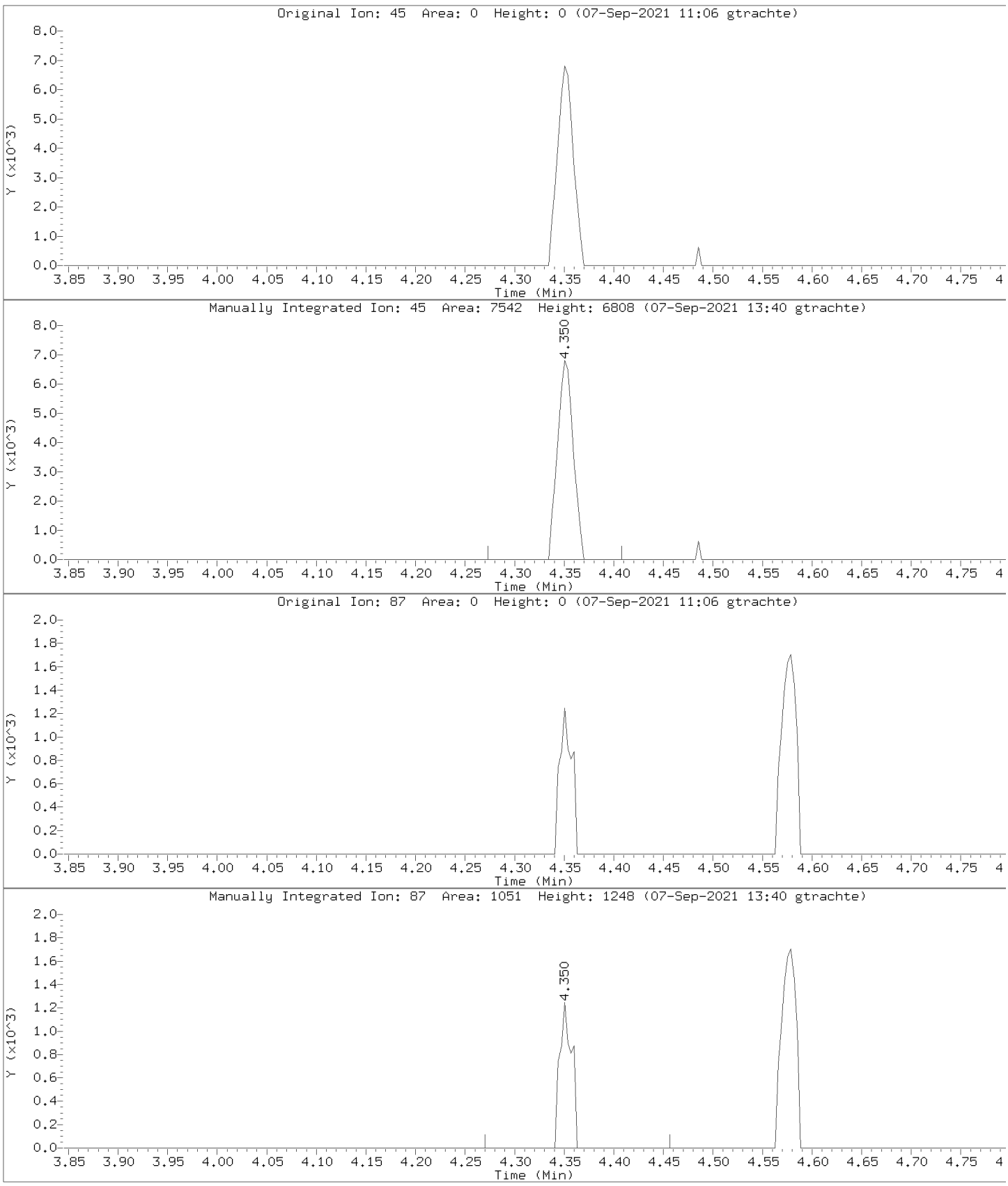
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Di-isopropyl Ether
CAS Number: 108-20-3



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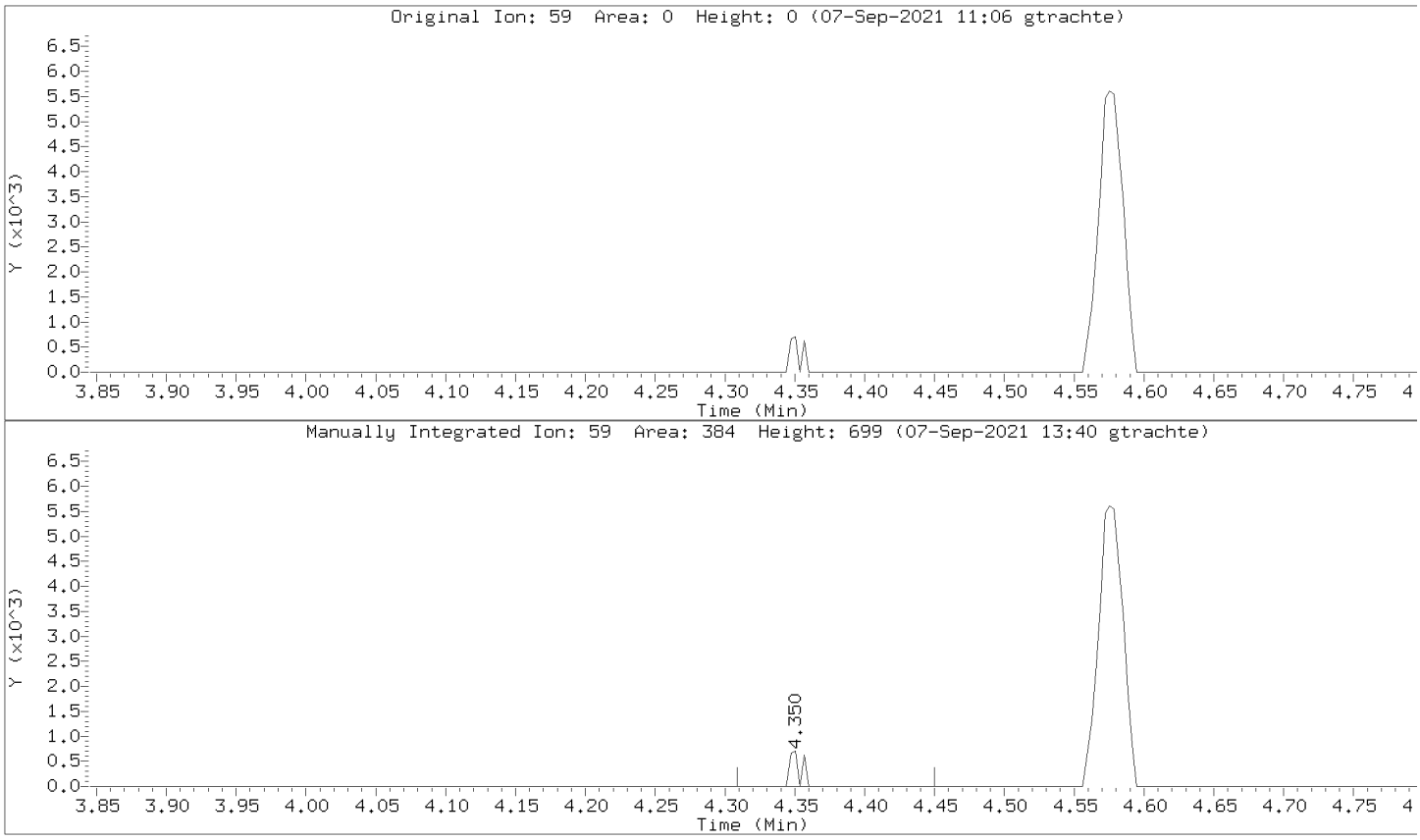
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1



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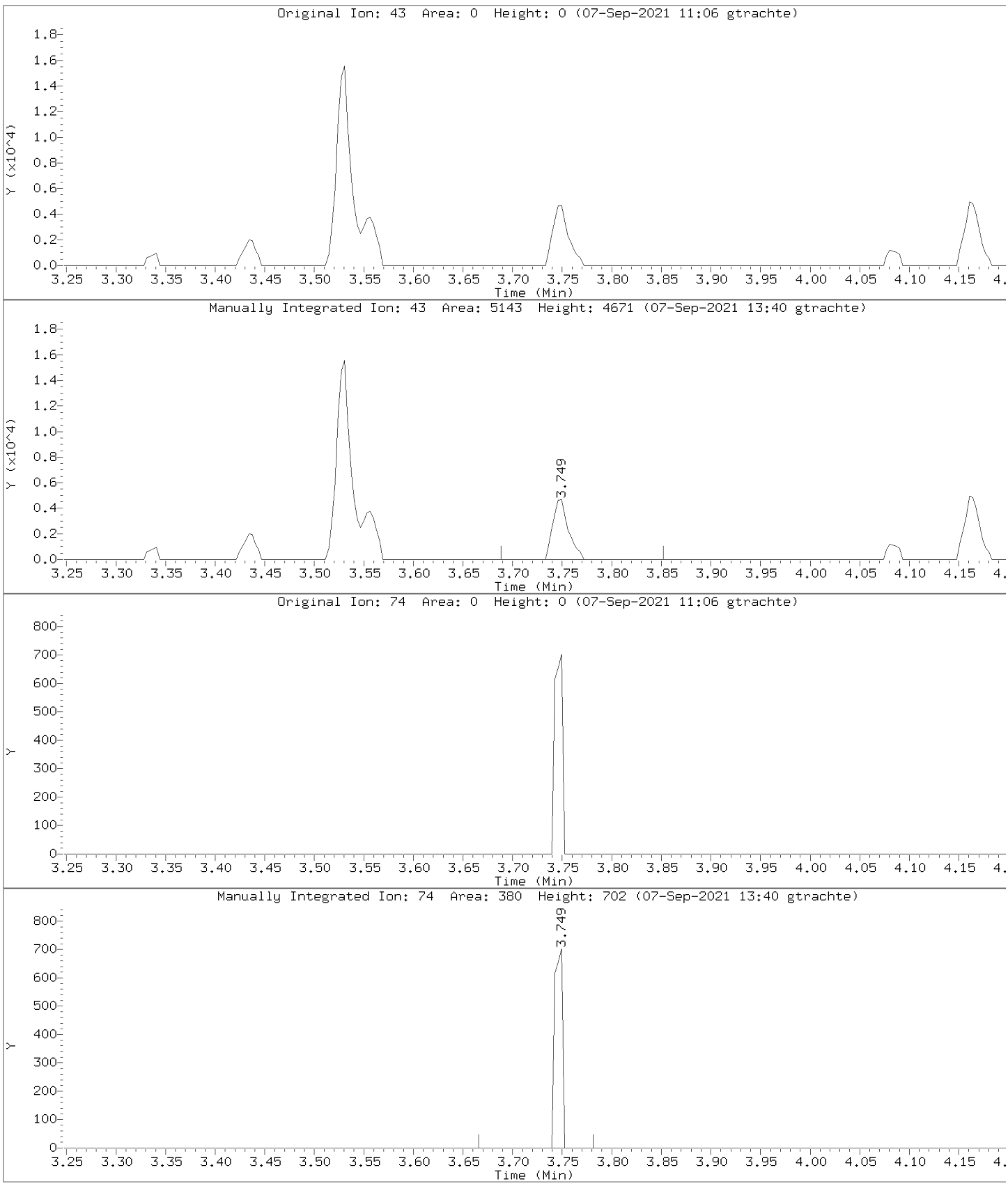
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: Methyl Acetate
CAS Number: 79-20-9



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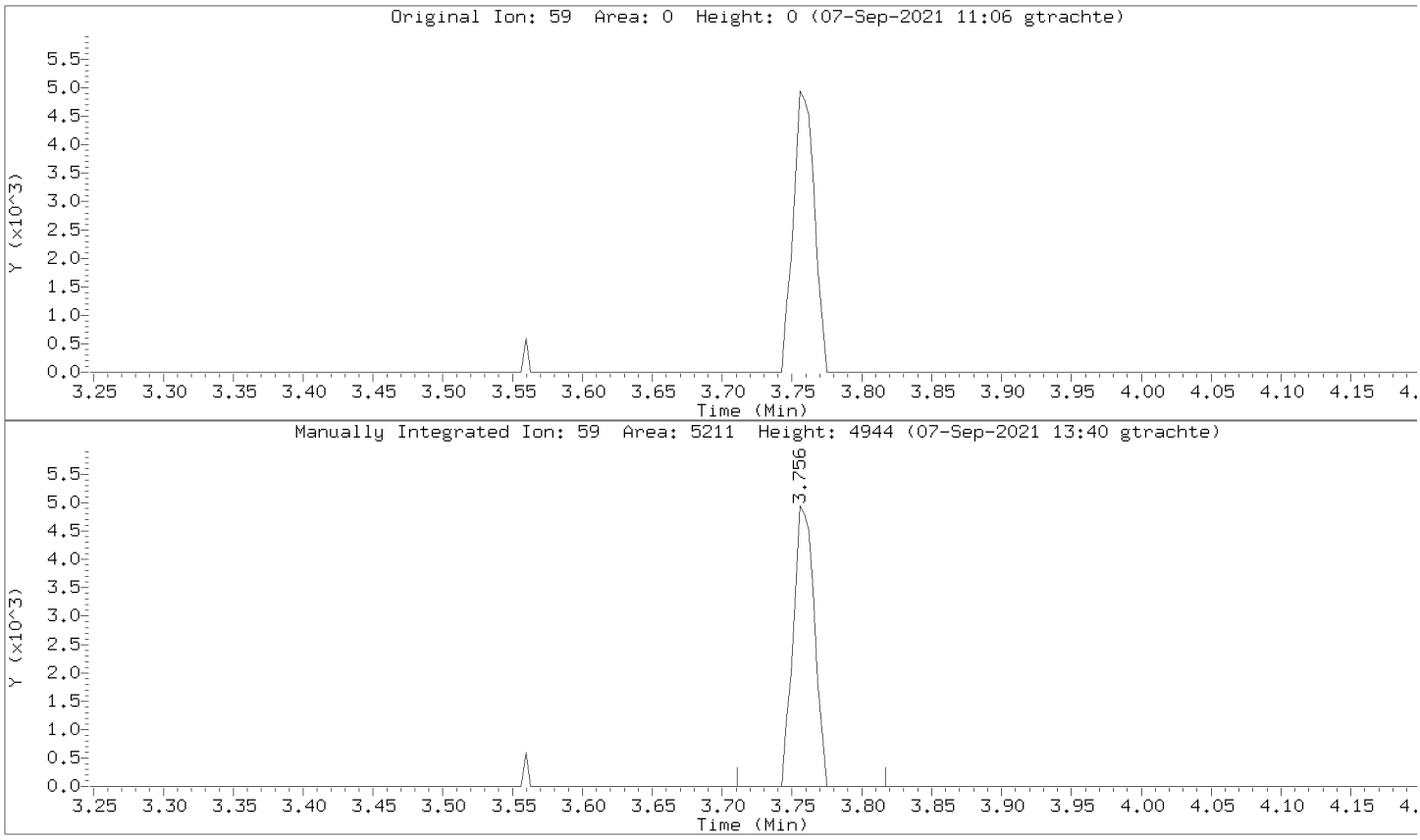
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1



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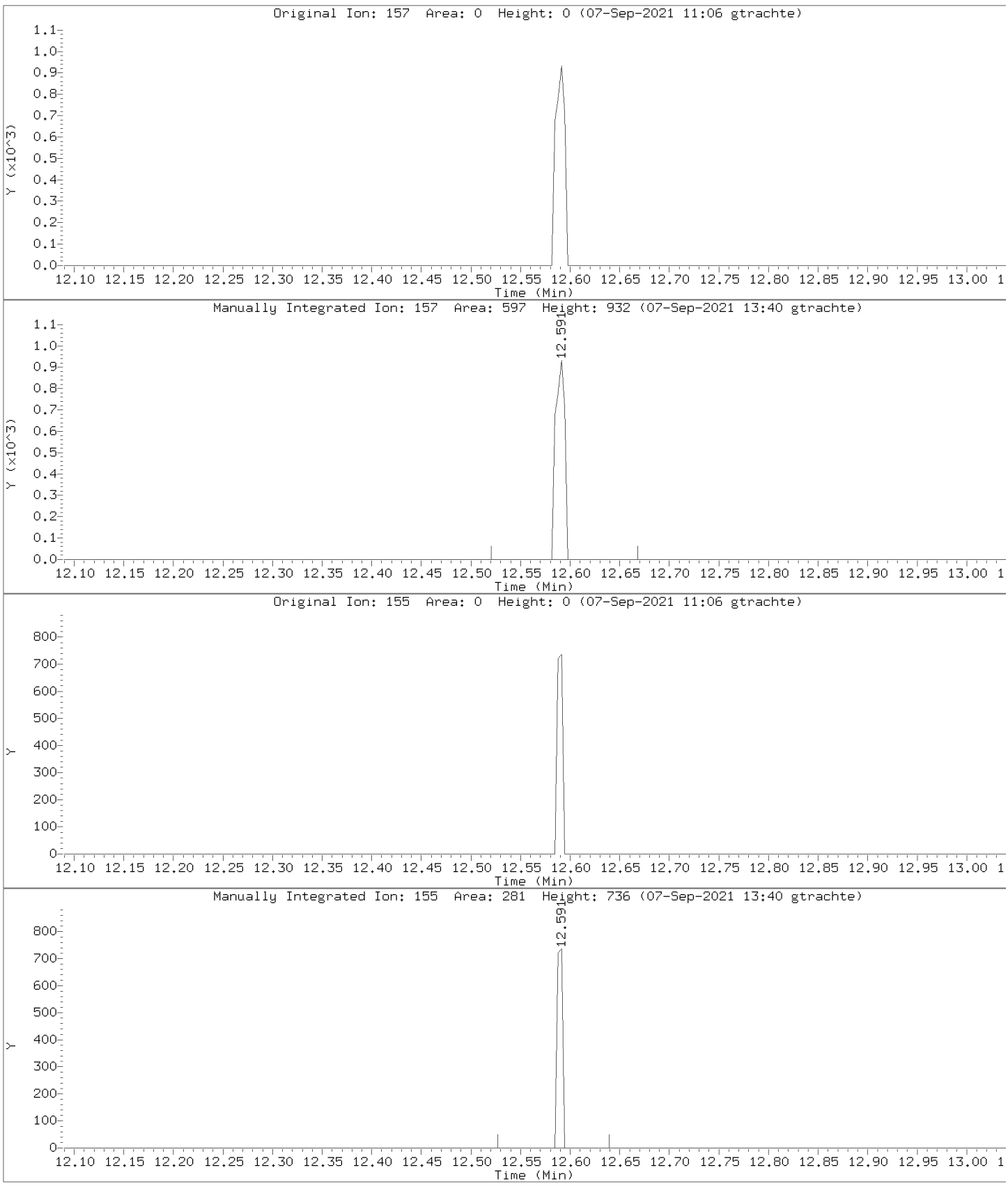
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8



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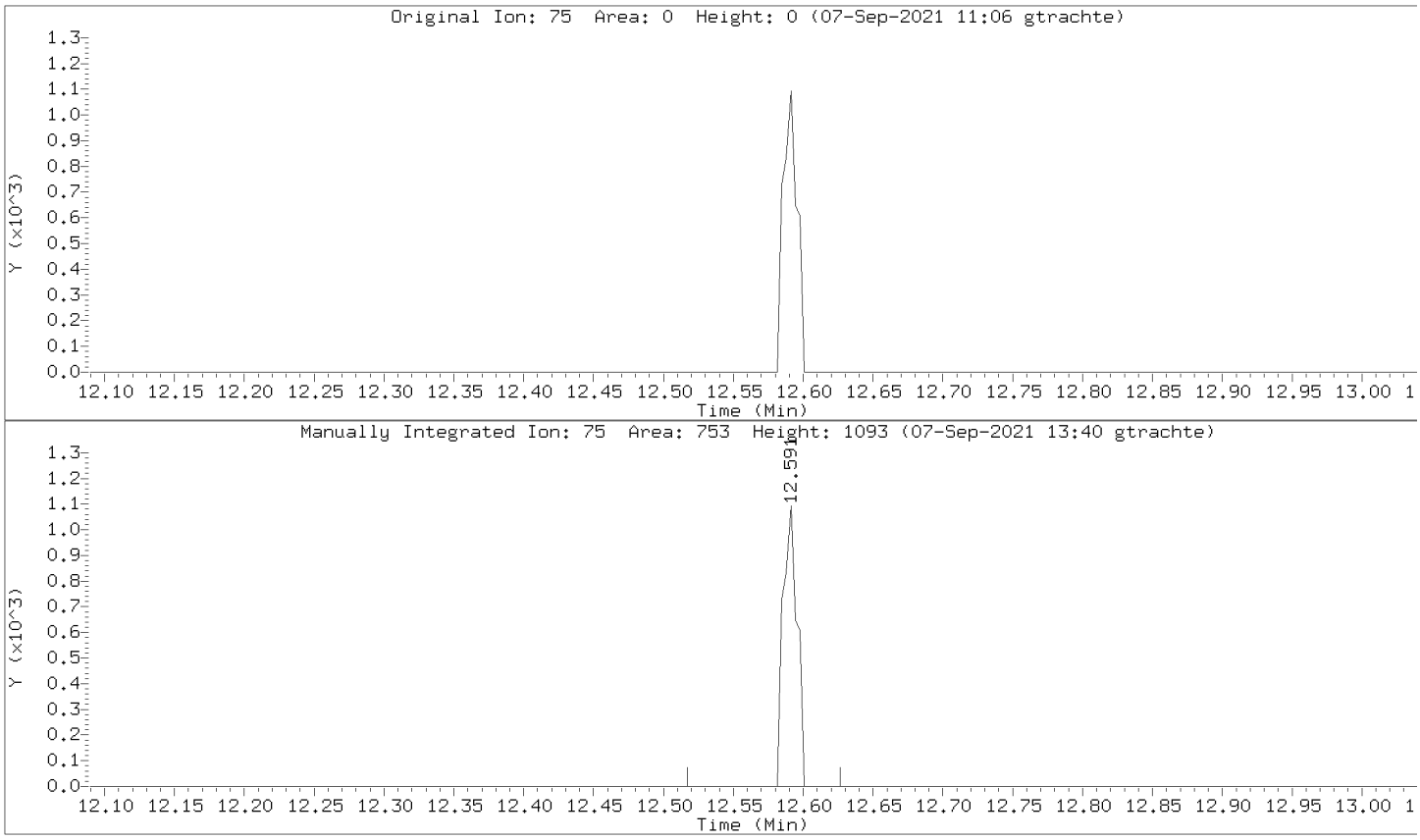
Instrument: 10airH.i
Lab Sample ID: CAL1



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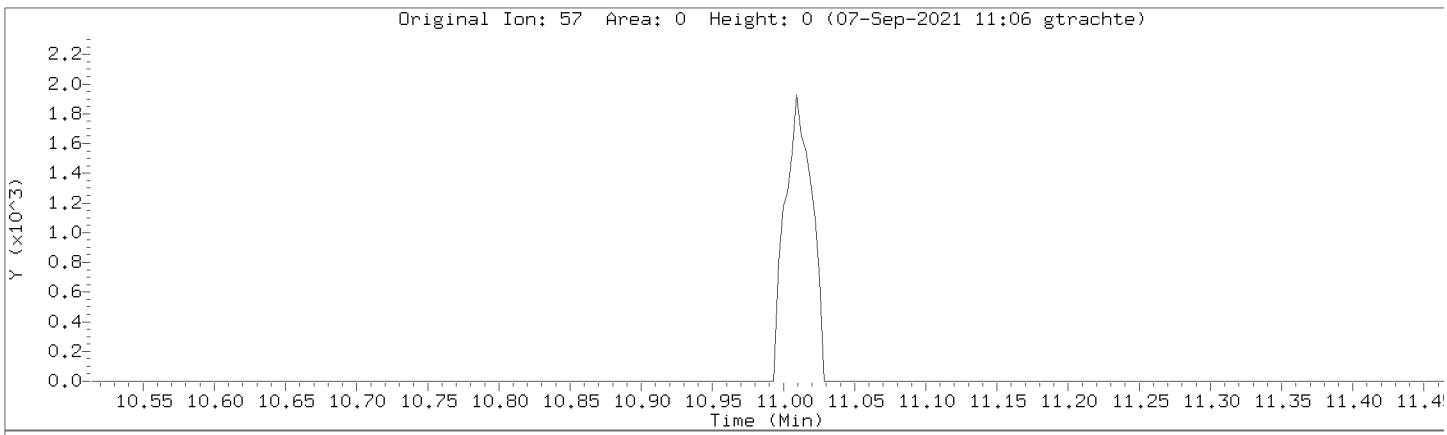
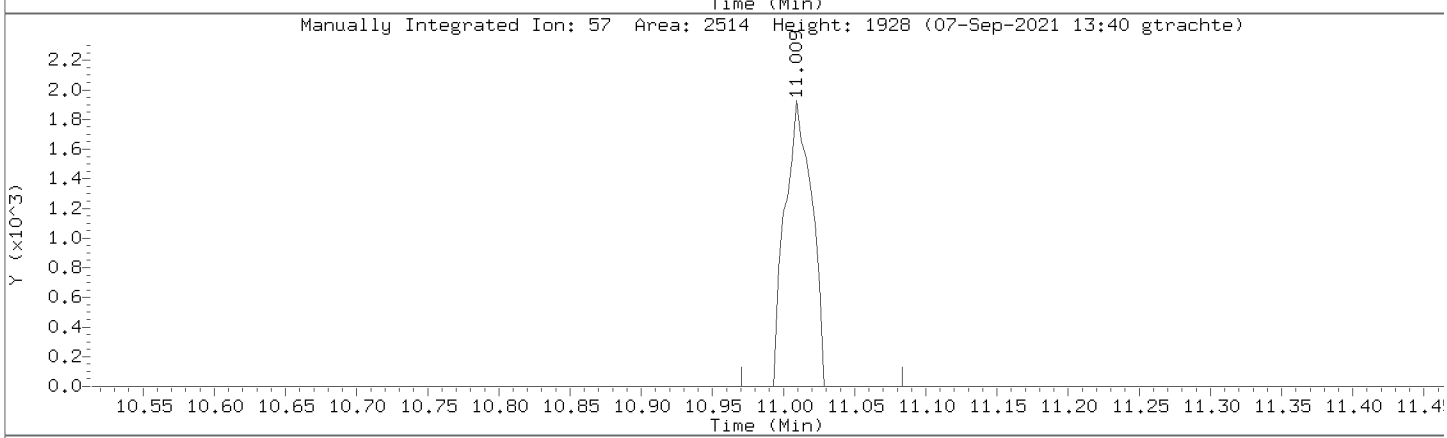
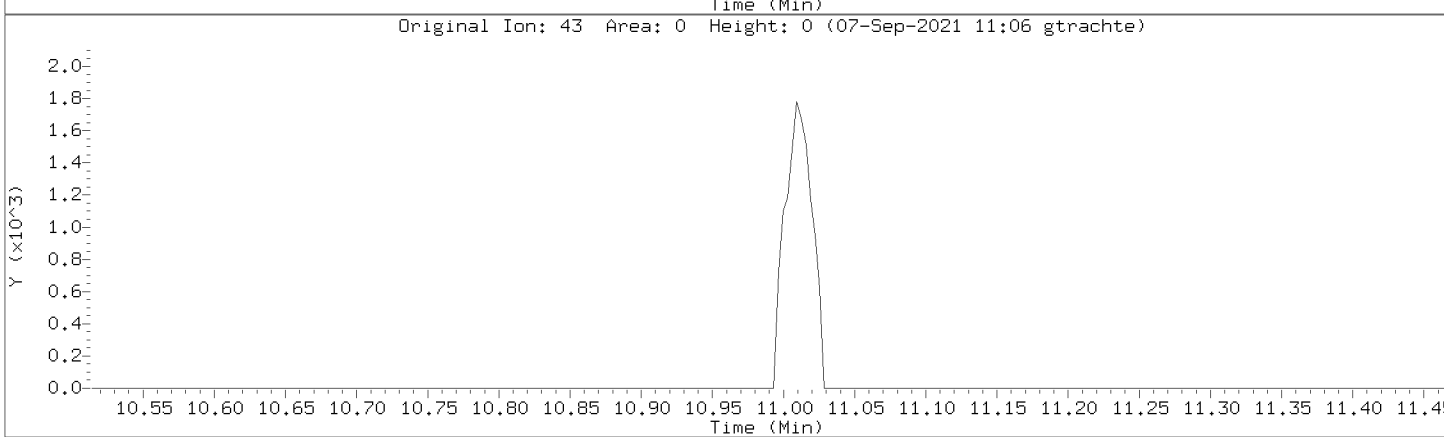
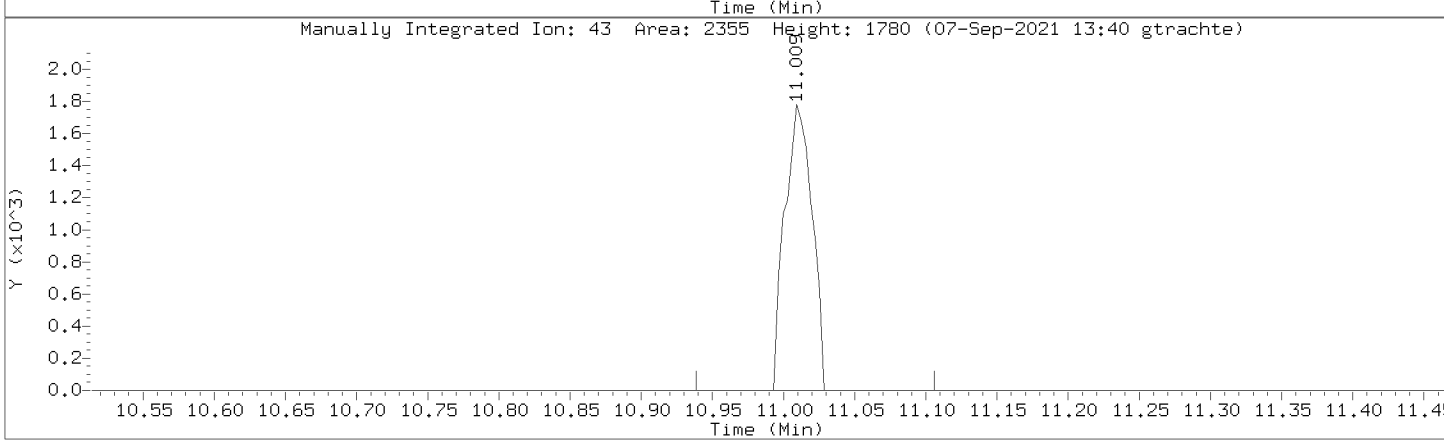
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1

Compound: n-Decane
CAS Number: 124-18-5



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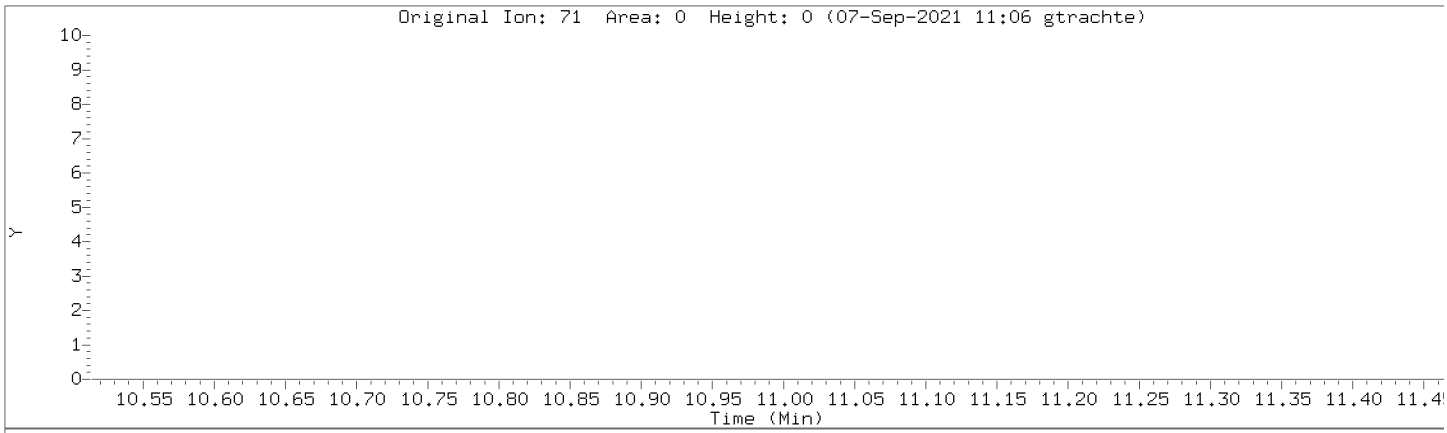
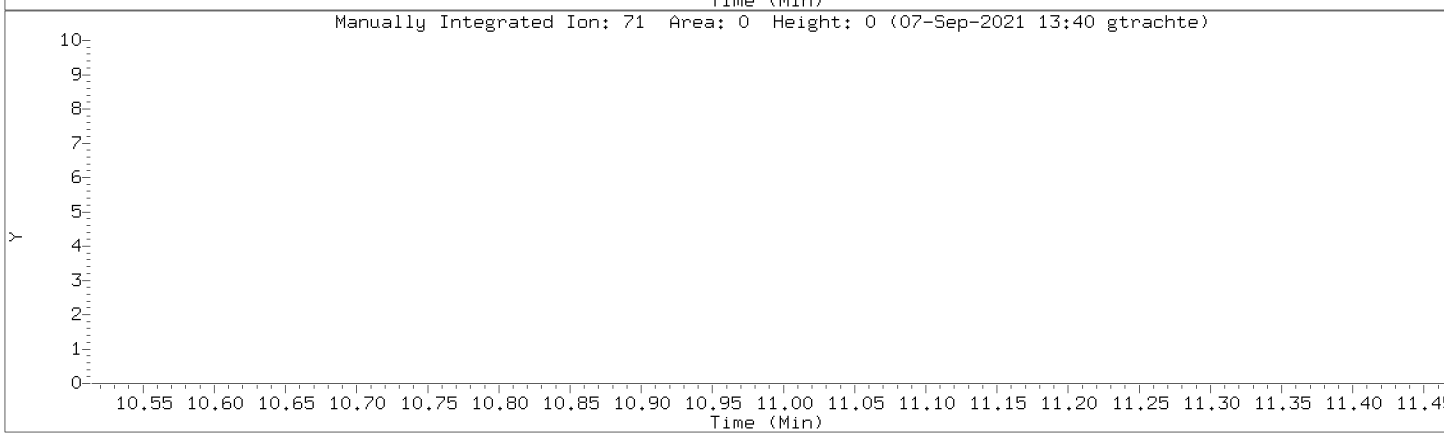
Injection Date: 07-SEP-2021 08:26
Instrument: 10airH.i
Lab Sample ID: CAL1



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25005.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25005.D
Lab Smp Id: CAL2
Inj Date : 07-SEP-2021 08:51
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 07-Sep-2021 14:02 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.942 | 2.948 | (0.542) | 3318 | 0.14280 | 0.119(Q) |
| 2 Chlorodifluoromethane | 67 | 2.958 | 2.961 | (0.545) | 695 | 0.14290 | 0.173(QM) |
| 3 Propylene | 41 | 2.964 | 2.967 | (0.546) | 3506 | 0.14370 | 0.169 |
| 4 Dichlorodifluoromethane | 85 | 2.984 | 2.986 | (0.549) | 8680 | 0.14490 | 0.171 |
| 5 Dichlorotetrafluoroethane | 85 | 3.051 | 3.057 | (0.562) | 8049 | 0.13360 | 0.157 |
| 6 Chloromethane | 50 | 3.057 | 3.064 | (0.563) | 4402 | 0.14330 | 0.167 |
| 7 Vinyl chloride | 62 | 3.125 | 3.131 | (0.576) | 3390 | 0.14370 | 0.165 |
| 8 1,3-Butadiene | 54 | 3.157 | 3.163 | (0.581) | 2229 | 0.14320 | 0.154 |
| 9 Bromomethane | 94 | 3.273 | 3.279 | (0.603) | 2656 | 0.14350 | 0.172 |
| 10 Chloroethane | 64 | 3.318 | 3.324 | (0.611) | 1396 | 0.14340 | 0.167(QM) |
| 11 Ethanol | 45 | 3.334 | 3.343 | (0.614) | 6068 | 0.86180 | 1.08 |
| 12 Vinyl Bromide | 106 | 3.421 | 3.427 | (0.630) | 2182 | 0.14290 | 0.156 |
| 13 Isopentane | 43 | 3.434 | 3.440 | (0.632) | 2950 | 0.14700 | 0.169 |
| 14 Freon 123 | 83 | 3.469 | 3.478 | (0.639) | 5651 | 0.14230 | 0.165 |
| 15 Trichlorofluoromethane | 101 | 3.495 | 3.501 | (0.644) | 8031 | 0.14480 | 0.178 |
| 16 Acrolein | 56 | 3.501 | 3.504 | (0.645) | 2700 | 0.40650 | 0.415 |
| 17 Acetone | 43 | 3.524 | 3.527 | (0.649) | 25129 | 0.70610 | 0.438 |
| 18 Isopropyl Alcohol | 45 | 3.553 | 3.559 | (0.654) | 26356 | 0.79430 | 0.918(Q) |
| 19 1,1-Dichloroethene | 61 | 3.707 | 3.713 | (0.683) | 5634 | 0.14400 | 0.168 |
| 20 Acrylonitrile | 53 | 3.717 | 3.726 | (0.684) | 6701 | 0.39790 | 0.470(M) |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.752 | 3.752 | (0.691) | 8927 | 0.14150 | 0.170 |
| 22 Methyl Acetate | 43 | 3.742 | 3.749 | (0.689) | 8918 | 0.14330 | 0.173 |
| 23 Freon 113 | 101 | 3.739 | 3.745 | (0.689) | 6699 | 0.14310 | 0.175 |
| 24 Allyl Chloride | 76 | 3.813 | 3.822 | (0.702) | 1137 | 0.14180 | 0.155(QM) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25005.D
Report Date: 07-Sep-2021 14:12

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 3.816 | 3.826 | (0.703) | 27810 | 0.71840 | 0.515 |
| | 26 Carbon Disulfide | 76 | 3.919 | 3.929 | (0.722) | 8593 | 0.14490 | 0.170(M) |
| | 27 Methyl Tert Butyl Ether | 73 | 4.080 | 4.076 | (0.751) | 7928 | 0.14400 | 0.168 |
| | 28 trans-1,2-dichloroethene | 96 | 4.083 | 4.093 | (0.752) | 3178 | 0.14420 | 0.173 |
| | 29 Vinyl Acetate | 43 | 4.160 | 4.166 | (0.766) | 9375 | 0.17270 | 0.218(M) |
| | 30 1,1-Dichloroethane | 63 | 4.205 | 4.215 | (0.774) | 6798 | 0.14240 | 0.164 |
| | 31 Methyl Ethyl Ketone | 72 | 4.328 | 4.327 | (0.797) | 1311 | 0.14360 | 0.160(Q) |
| | 32 Di-isopropyl Ether | 45 | 4.347 | 4.347 | (0.800) | 14108 | 0.14100 | 0.176 |
| | 33 n-Hexane | 57 | 4.347 | 4.356 | (0.800) | 6990 | 0.14150 | 0.178 |
| | 34 Ethyl Acetate | 43 | 4.482 | 4.482 | (0.825) | 8840 | 0.14160 | 0.164(QM) |
| | 35 cis-1,2-Dichloroethene | 96 | 4.492 | 4.504 | (0.827) | 3268 | 0.14360 | 0.174 |
| | 36 Ethyl Tert-Butyl Ether | 59 | 4.572 | 4.572 | (0.842) | 12052 | 0.14340 | 0.167 |
| | 37 Chloroform | 83 | 4.672 | 4.684 | (0.860) | 6576 | 0.14080 | 0.160 |
| | 38 Tetrahydrofuran | 42 | 4.752 | 4.745 | (0.875) | 4077 | 0.14260 | 0.160 |
| | 39 1,1,1-Trichloroethane | 97 | 4.980 | 4.993 | (0.917) | 6349 | 0.14270 | 0.161 |
| | 40 1,2-Dichloroethane | 62 | 5.061 | 5.073 | (0.932) | 5174 | 0.14400 | 0.166 |
| | 41 Benzene | 78 | 5.215 | 5.228 | (0.960) | 9131 | 0.14300 | 0.154 |
| | 42 Carbon tetrachloride | 117 | 5.231 | 5.244 | (0.963) | 6264 | 0.14460 | 0.185 |
| | 43 Cyclohexane | 56 | 5.257 | 5.266 | (0.968) | 6204 | 0.14260 | 0.162(M) |
| | 44 Tert Amyl Methyl Ether | 73 | 5.366 | 5.363 | (0.988) | 7316 | 0.14340 | 0.154 |
| * | 45 1,4-Difluorobenzene | 114 | 5.430 | 5.440 | (1.000) | 438986 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 5.520 | 5.530 | (1.017) | 20128 | 0.14320 | 0.171 |
| | 47 Heptane | 43 | 5.649 | 5.658 | (1.040) | 7295 | 0.14280 | 0.166 |
| | 48 Trichloroethene | 130 | 5.755 | 5.768 | (1.060) | 3701 | 0.14270 | 0.156 |
| | 49 Methyl methacrylate | 69 | 5.803 | 5.806 | (1.069) | 3020 | 0.14300 | 0.156(Q) |
| | 50 1,2-Dichloropropane | 63 | 5.803 | 5.813 | (1.069) | 4107 | 0.14360 | 0.161 |
| | 51 1,4-Dioxane | 88 | 5.868 | 5.858 | (1.081) | 4649 | 0.35750 | 0.409 |
| | 52 Bromodichloromethane | 83 | 5.961 | 5.970 | (1.098) | 6758 | 0.14320 | 0.168 |
| | 53 Methylcyclohexane | 98 | 6.228 | 6.234 | (1.147) | 1526 | 0.14340 | 0.173(Q) |
| | 54 Methyl Isobutyl Ketone | 43 | 6.318 | 6.308 | (1.163) | 7811 | 0.14370 | 0.149(M) |
| | 55 cis-1,3-Dichloropropene | 75 | 6.385 | 6.395 | (1.176) | 4700 | 0.14280 | 0.162 |
| | 56 trans-1,3-Dichloropropene | 75 | 6.826 | 6.835 | (1.257) | 3617 | 0.14600 | 0.154 |
| | 57 Toluene | 91 | 6.929 | 6.932 | (1.276) | 9363 | 0.14470 | 0.161 |
| | 58 1,1,2-Trichloroethane | 97 | 7.051 | 7.060 | (1.298) | 3314 | 0.14330 | 0.158 |
| | 59 Methyl Butyl Ketone | 43 | 7.160 | 7.150 | (0.852) | 5587 | 0.14330 | 0.127 |
| | 60 n-Octane | 43 | 7.347 | 7.350 | (0.874) | 8181 | 0.14340 | 0.158 |
| | 61 Dibromochloromethane | 129 | 7.581 | 7.591 | (0.902) | 5771 | 0.14350 | 0.156 |
| | 62 Tetrachloroethene | 166 | 7.668 | 7.671 | (0.912) | 4489 | 0.14200 | 0.160 |
| | 63 1,2-Dibromoethane | 107 | 7.784 | 7.793 | (0.926) | 5048 | 0.14080 | 0.156 |
| * | 64 Chlorobenzene - d5 | 117 | 8.408 | 8.411 | (1.000) | 355144 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 8.450 | 8.456 | (1.005) | 7158 | 0.14290 | 0.157 |
| | 66 Ethyl Benzene | 91 | 8.668 | 8.674 | (1.031) | 11211 | 0.14450 | 0.161 |
| | 67 m&p-Xylene | 91 | 8.851 | 8.858 | (1.053) | 16457 | 0.28820 | 0.306(M) |
| | 68 n-Nonane | 43 | 9.186 | 9.192 | (1.093) | 7347 | 0.14360 | 0.149 |
| | 69 Styrene | 104 | 9.253 | 9.260 | (1.101) | 4371 | 0.14460 | 0.174 |
| | 70 o-Xylene | 91 | 9.286 | 9.295 | (1.104) | 8545 | 0.14360 | 0.151 |
| | 71 Bromoform | 173 | 9.359 | 9.369 | (1.113) | 3670 | 0.14450 | 0.136 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 9.704 | 9.710 | (1.154) | 6869 | 0.14410 | 0.155 |
| | 73 Isopropylbenzene | 105 | 9.839 | 9.842 | (1.170) | 10703 | 0.14230 | 0.146 |
| | 74 N-Propylbenzene | 91 | 10.404 | 10.407 | (1.237) | 12941 | 0.14410 | 0.147 |
| | 75 2-Chlorotoluene | 91 | 10.443 | 10.449 | (1.242) | 9456 | 0.14500 | 0.161 |
| | 76 4-Ethyltoluene | 105 | 10.588 | 10.591 | (1.259) | 8630 | 0.14320 | 0.206(M) |
| | 77 1,3,5-Trimethylbenzene | 105 | 10.658 | 10.665 | (1.268) | 8456 | 0.14330 | 0.162 |
| | 78 n-Decane | 57 | 11.012 | 11.015 | (2.028) | 5585 | 0.14490 | 0.243 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25005.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.105 | 11.112 | (1.321) | 8708 | 0.14450 | 0.147 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.157 | 11.157 | (1.327) | 7285 | 0.14420 | 0.131 |
| 81 Sec- Butylbenzene | 105 | 11.414 | 11.417 | (1.358) | 11401 | 0.14470 | 0.138 |
| 82 1,3-Dichlorobenzene | 146 | 11.449 | 11.452 | (1.362) | 4357 | 0.14470 | 0.255 |
| 83 Benzyl Chloride | 91 | 11.517 | 11.526 | (1.370) | 2278 | 0.14590 | 0.316(QM) |
| 84 1,4-Dichlorobenzene | 146 | 11.581 | 11.587 | (1.377) | 3473 | 0.14460 | 0.268 |
| 85 p-Isopropyltoluene | 119 | 11.617 | 11.623 | (1.382) | 9141 | 0.14520 | 0.213 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.636 | 11.639 | (1.384) | 8492 | 0.14460 | 0.142 |
| 87 1,2-Dichlorobenzene | 146 | 11.890 | 11.893 | (1.414) | 4527 | 0.14440 | 0.242 |
| 88 N-Butylbenzene | 91 | 12.070 | 12.073 | (1.436) | 4520 | 0.14420 | 0.211 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.588 | 12.591 | (1.497) | 1299 | 0.14540 | 0.242(Q) |
| 90 1,2,4-Trichlorobenzene | 180 | 13.536 | 13.539 | (1.610) | 937 | 0.31320 | 0.669(QM) |
| 91 Naphthalene | 128 | 13.678 | 13.675 | (1.627) | 1739 | 0.16330 | 0.224(M) |
| 92 Hexachlorobutadiene | 225 | 13.787 | 13.787 | (1.640) | 2974 | 0.16330 | 0.147 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25005.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

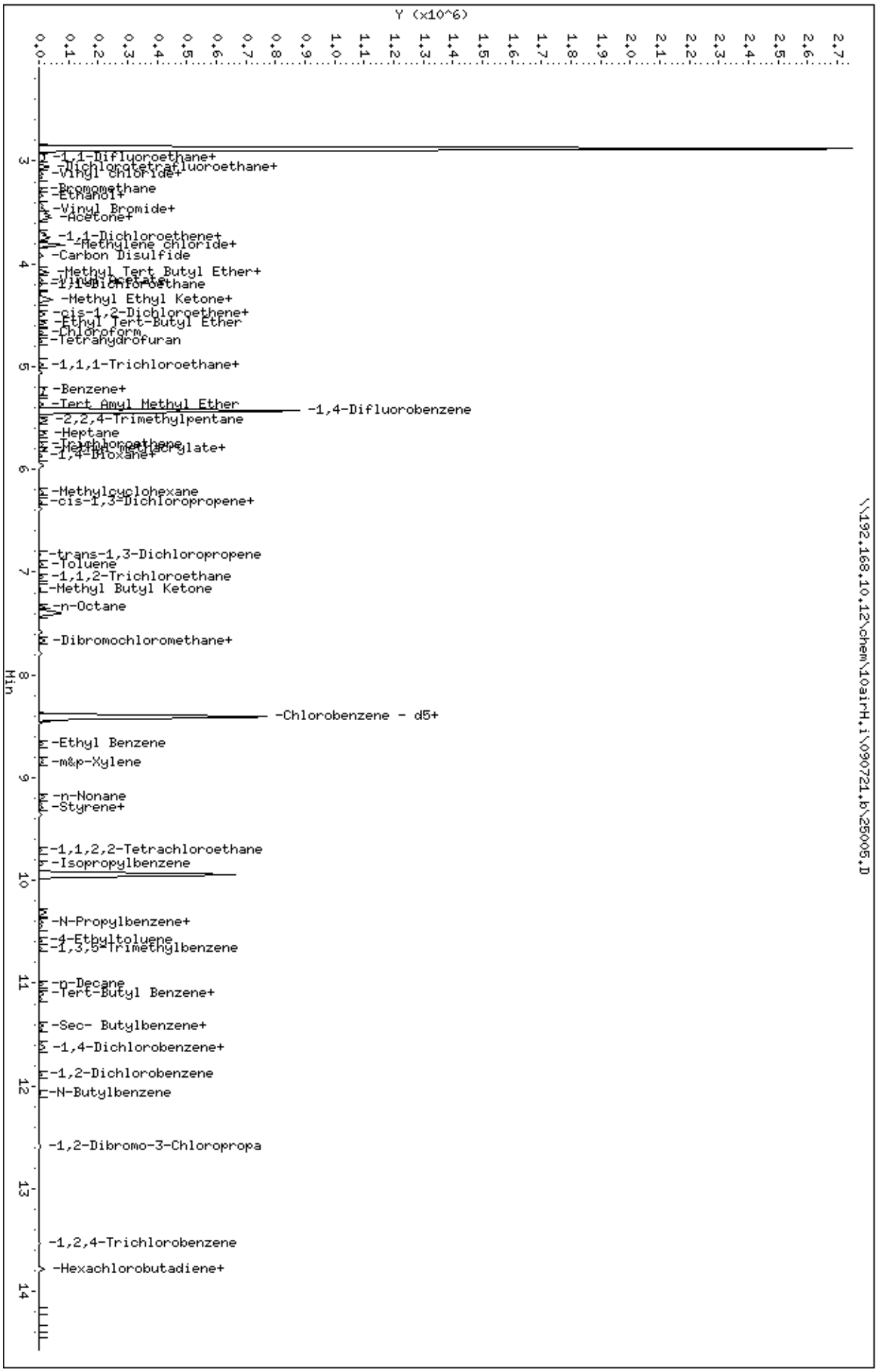
Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25005.D
Calibration Time: 10:08
Lab Smp Id: CAL2
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 438986 | -4.53 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 355144 | -9.41 |

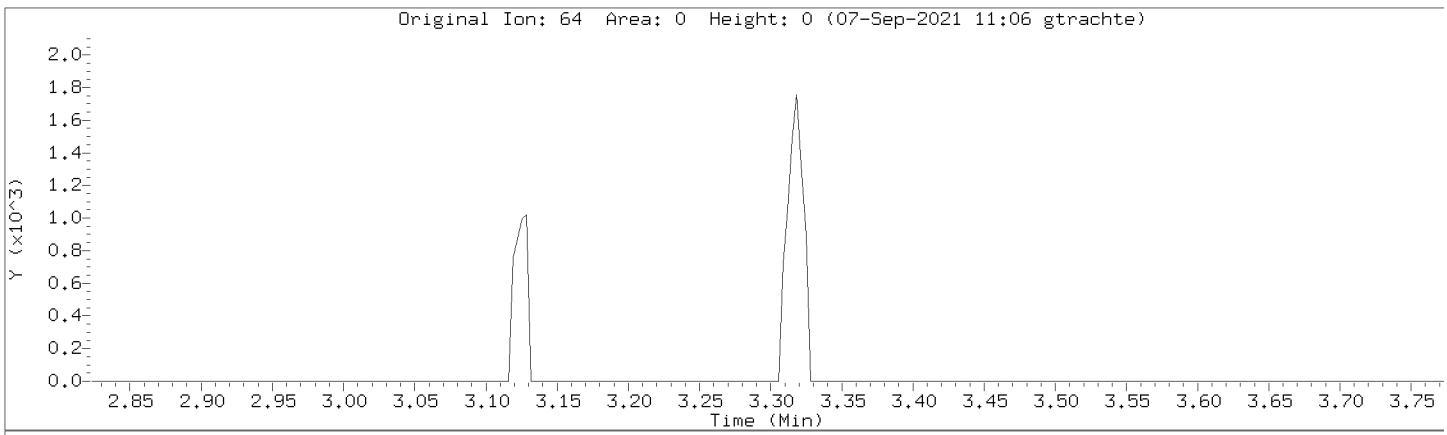
| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.05 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.00 |

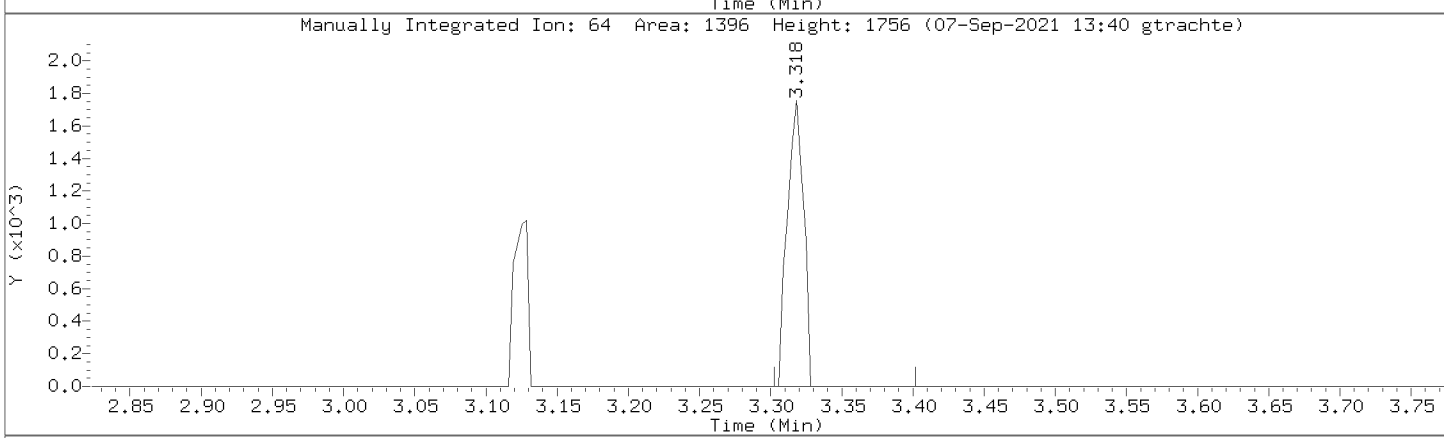
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

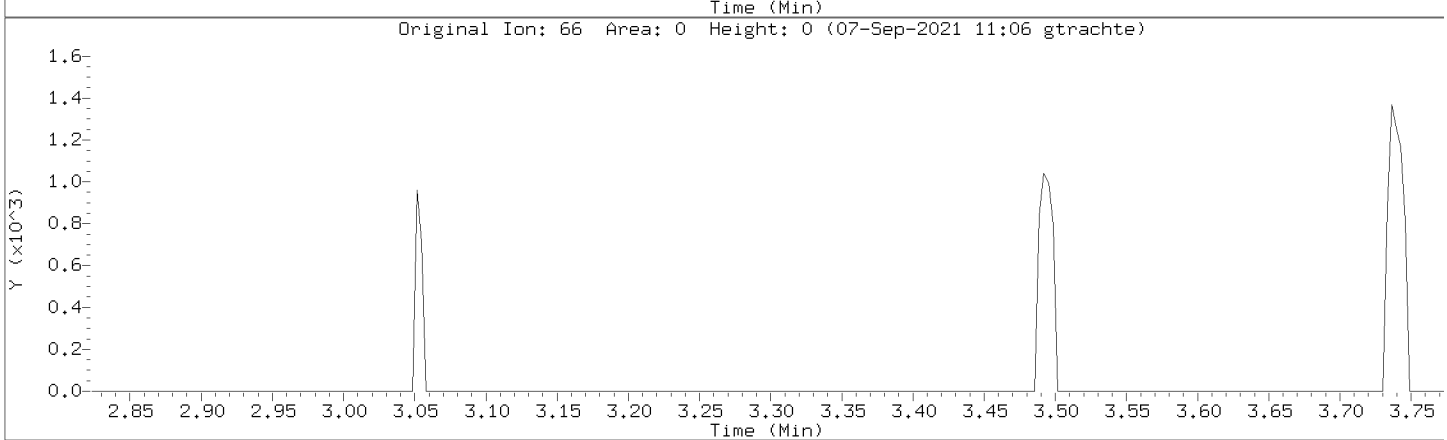

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25005.D
Date : 07-SEP-2021 08:51
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airH.i
Operator: GT
Column diameter: 0.32
\\192.168.10.12\chem\10airH.i\090721.b\25005.D
Y (x10^6)
Min
-1,1-Difluoroethane+
-Dichlorotetrafluoroethane+
-Vinyl Chloride+
-Bromomethane
-Ethanol+
-Vinyl Bromide+
-Acetone+
-1,1-Dichloroethene+
-Methylene Chloride+
-Carbon Disulfide
-Methyl Tert Butyl Ether+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-cis-1,2-Dichloroethene+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane+
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl Methacrylate+
-1,4-Dioxane+
-Methylcyclohexane
-cis-1,3-Dichloropropene+
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane+
-Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-Tert-Butyl Benzene+
-Sec- Butylbenzene+
-1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+

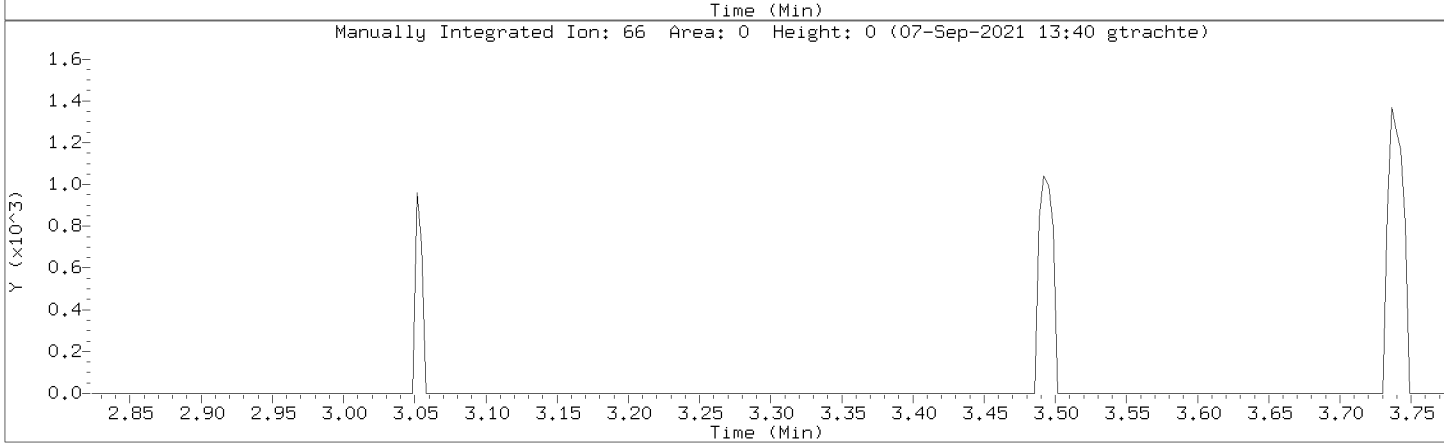
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25005.D
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Chloroethane
CAS Number: 75-00-3



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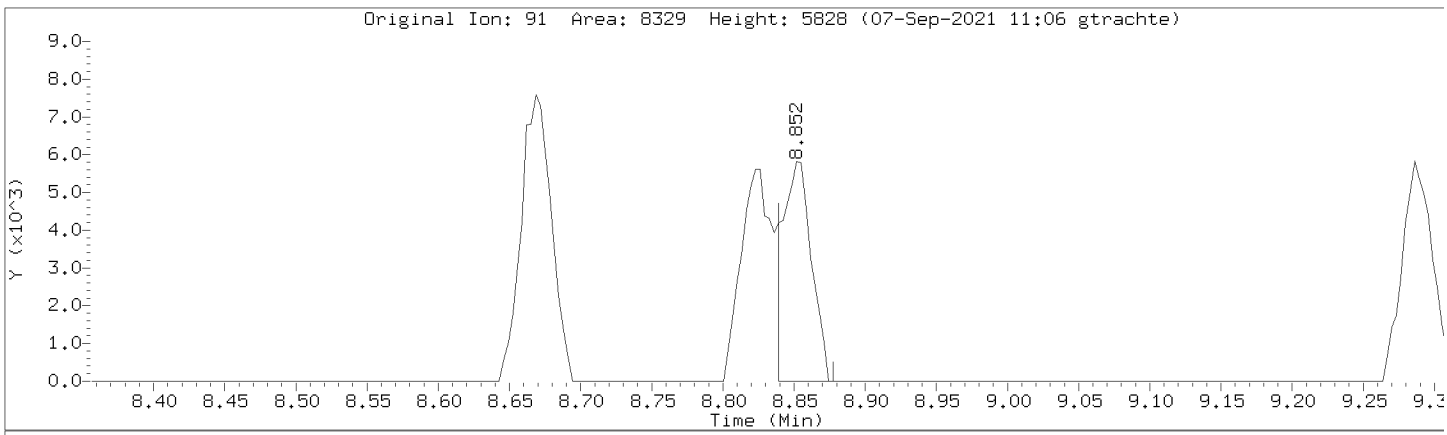
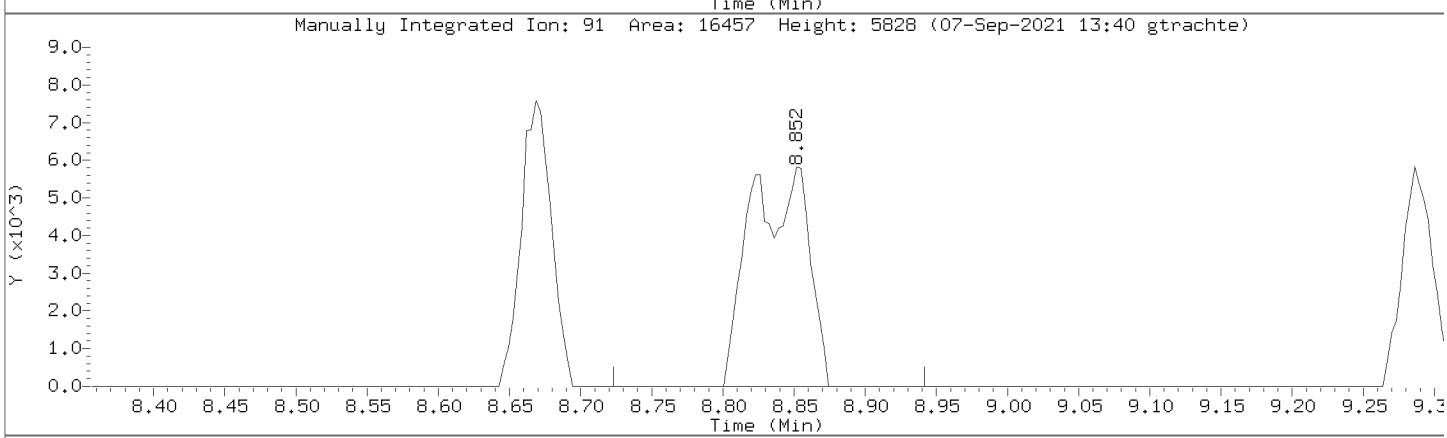
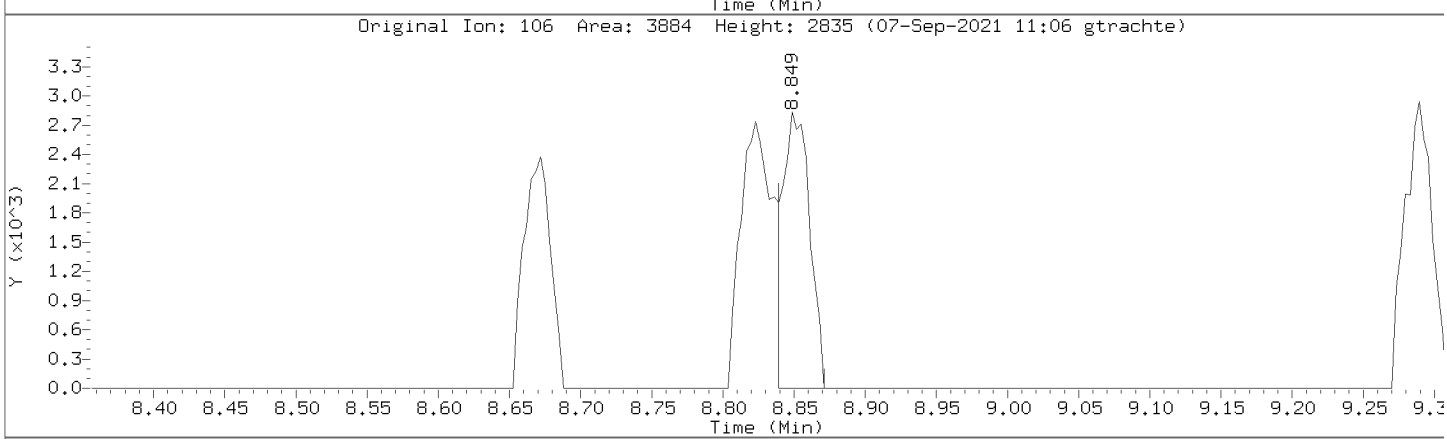
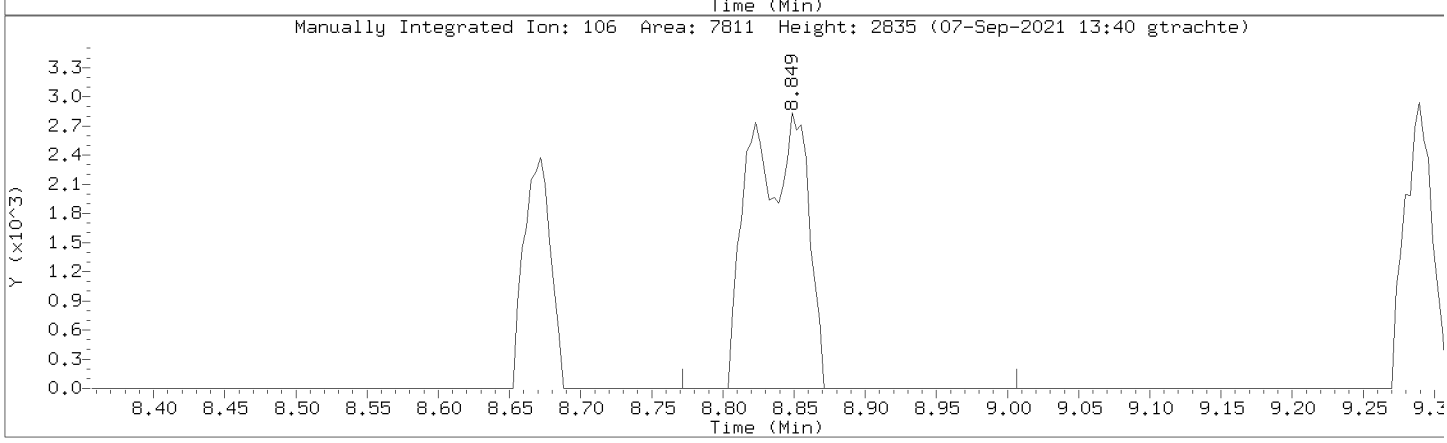
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: m&p-Xylene
CAS Number: 7816-60-0



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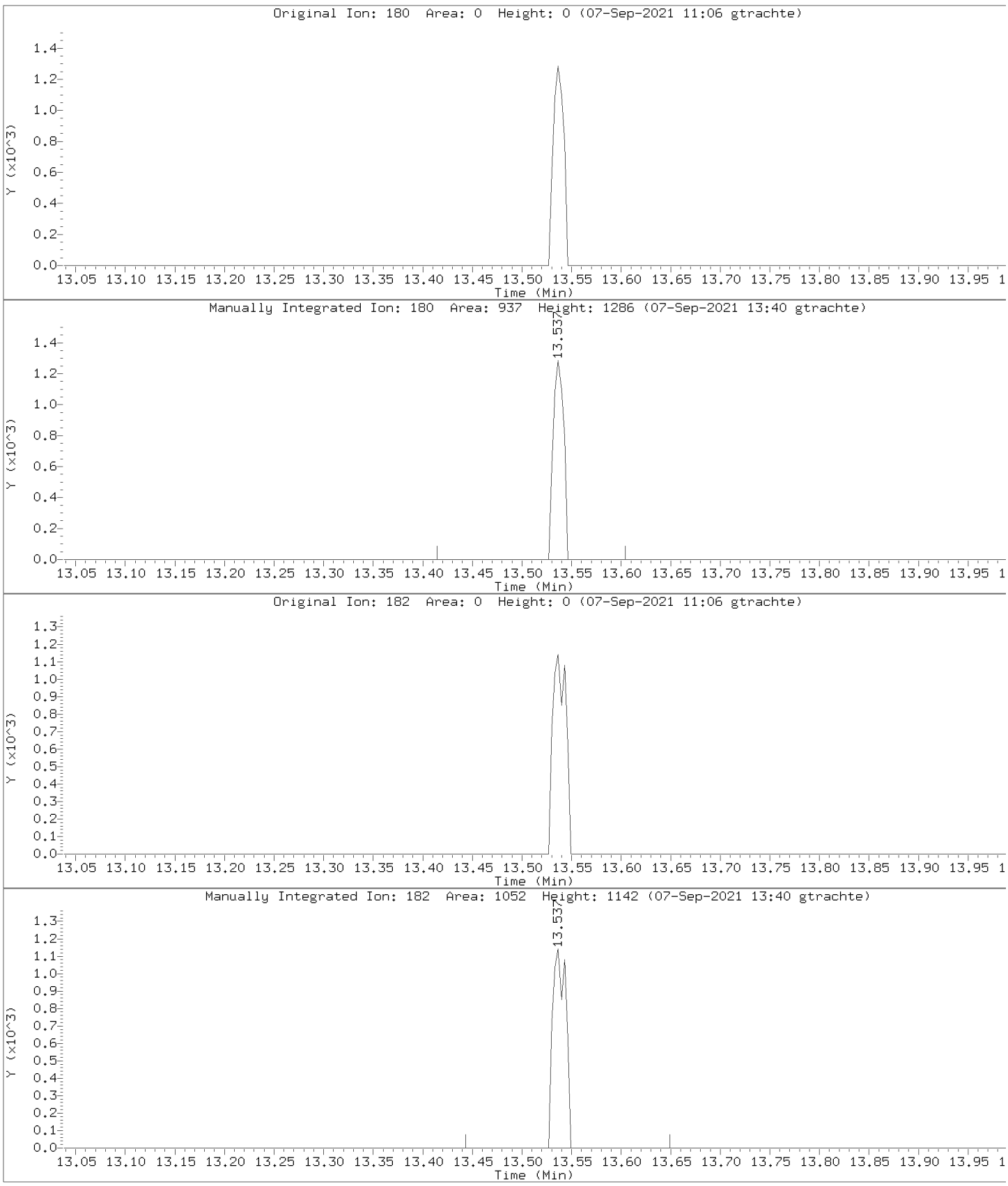
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6



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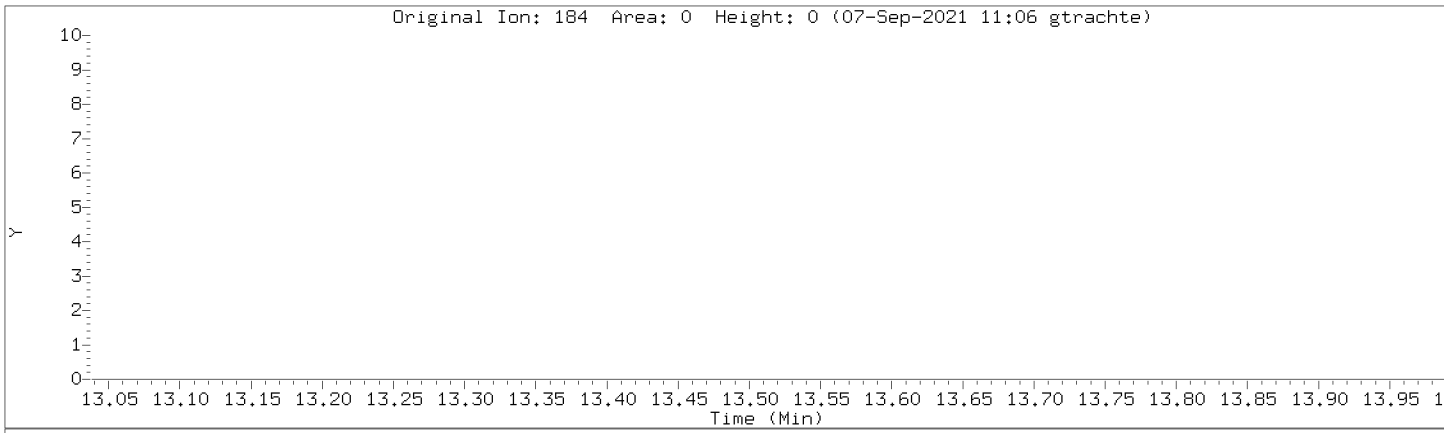
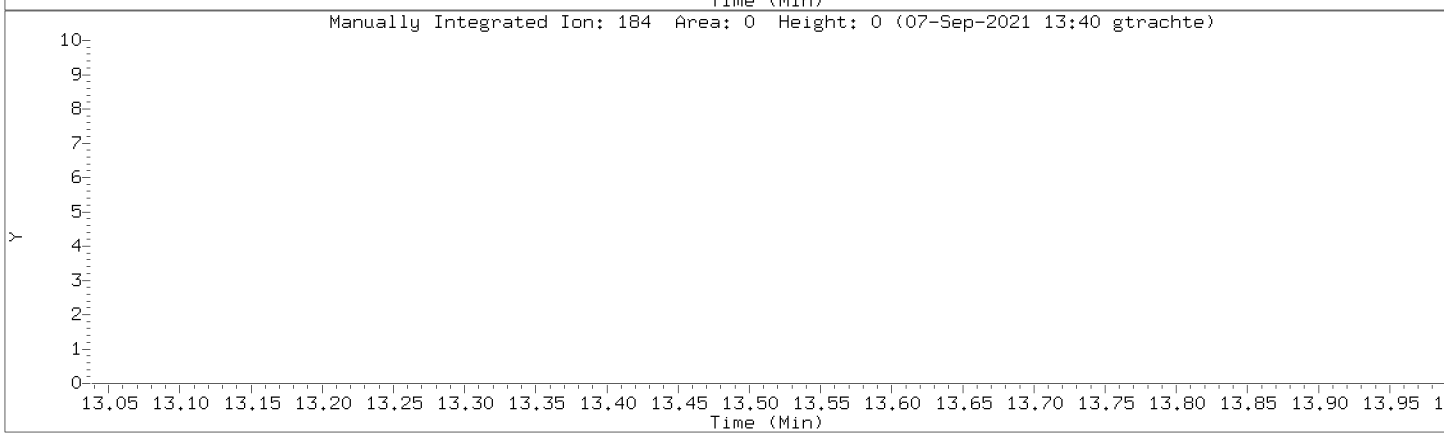
Instrument: 10airH.i
Lab Sample ID: CAL2



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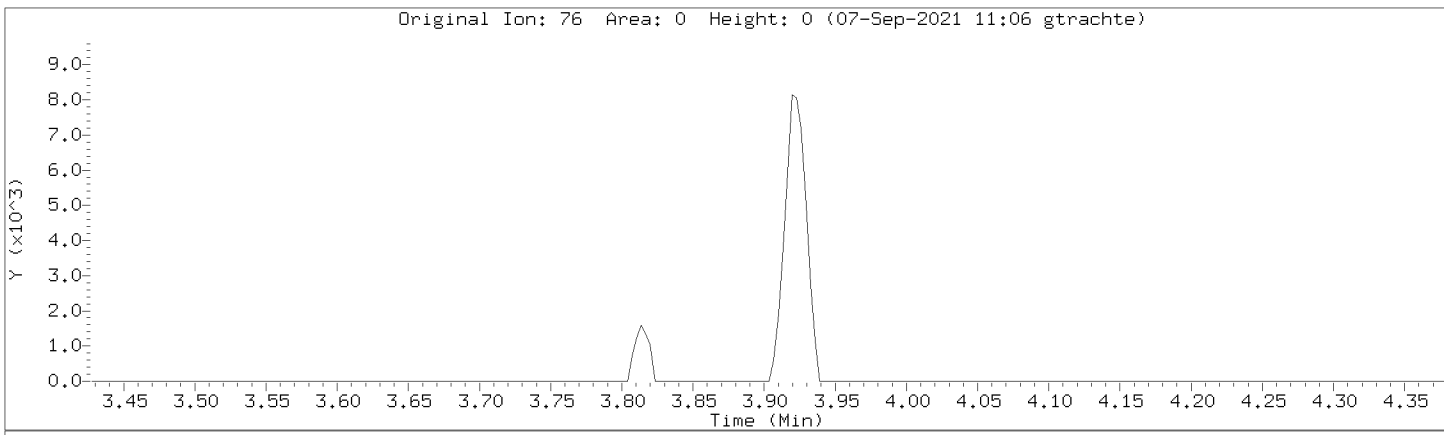
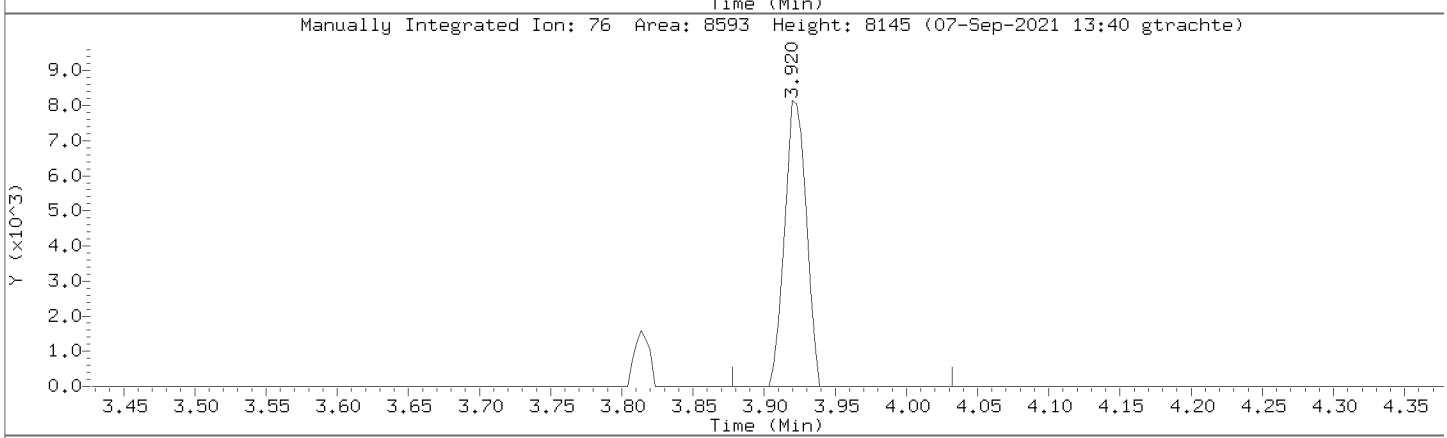
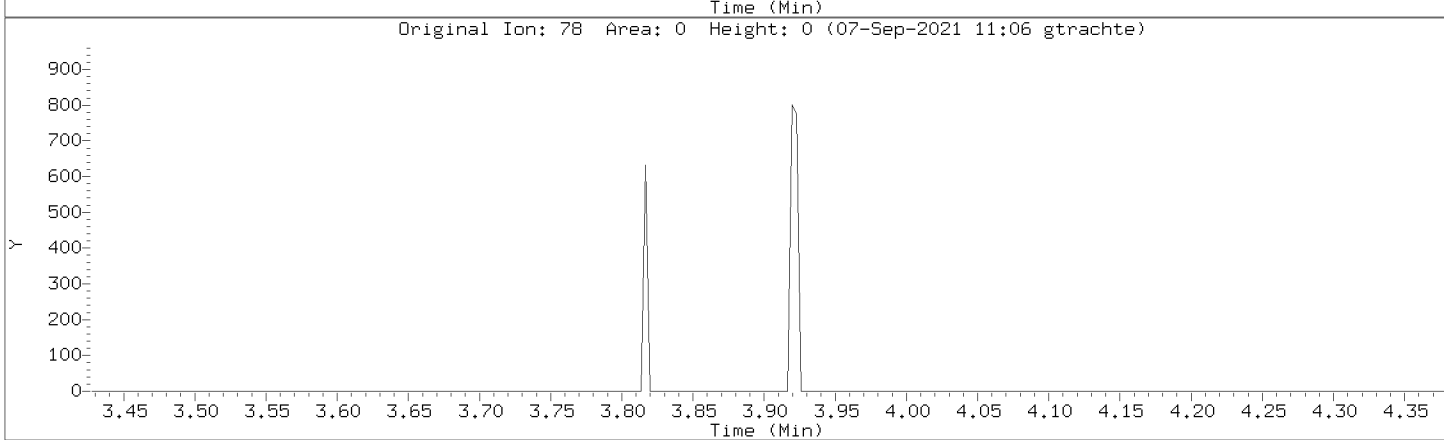
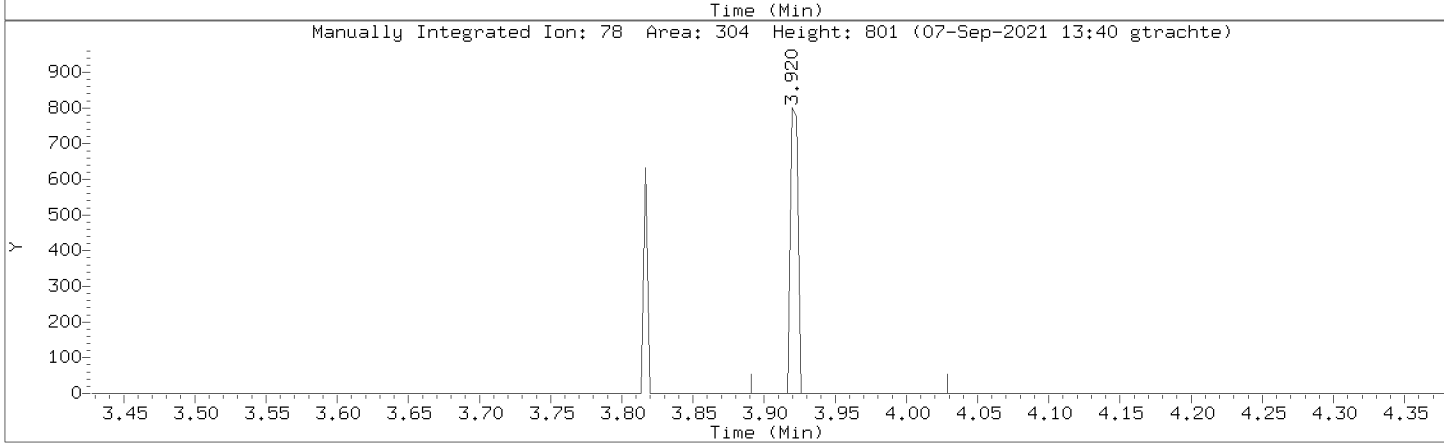
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Carbon Disulfide
CAS Number: 75-15-0



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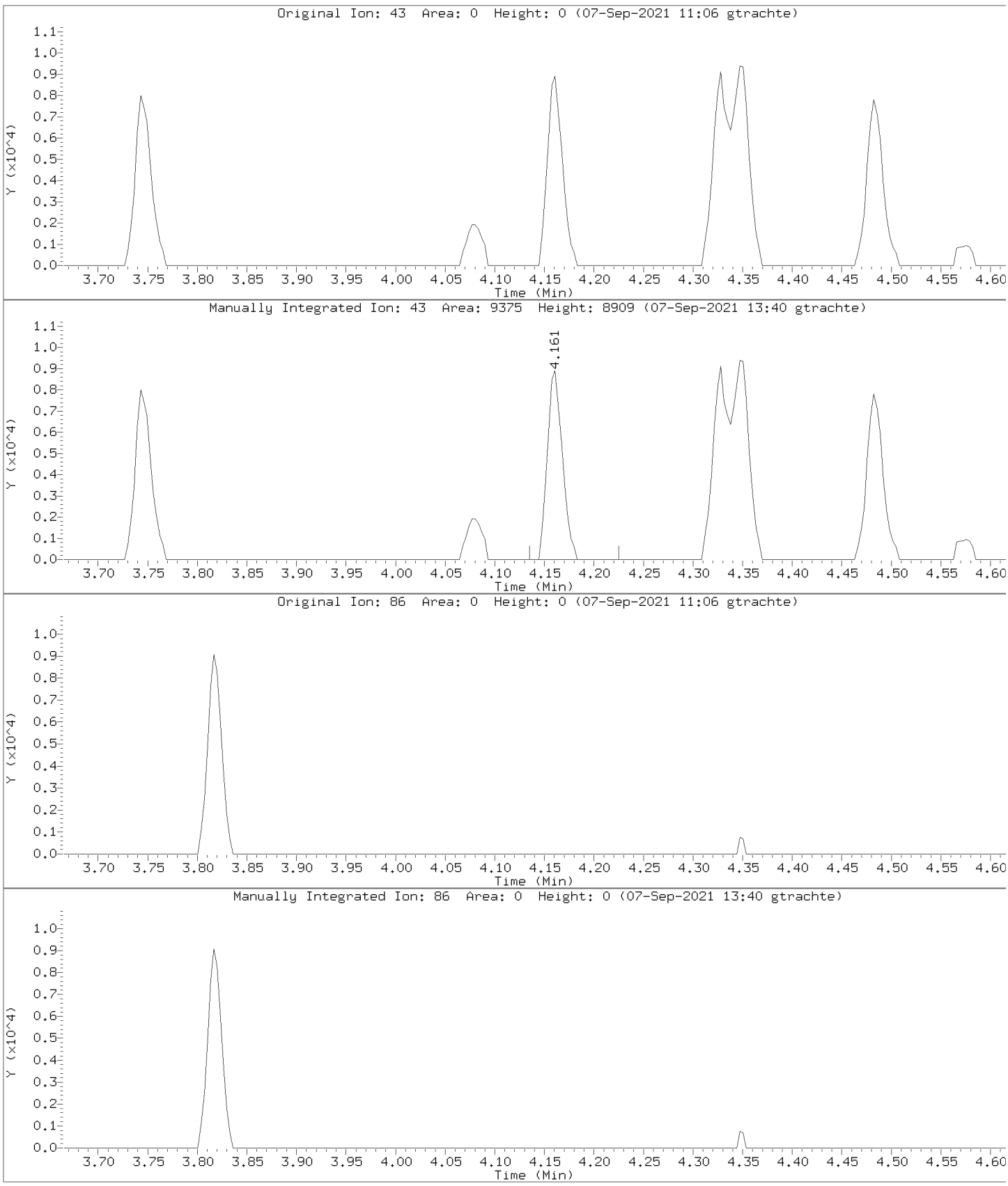
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Vinyl Acetate
CAS Number: 108-05-4



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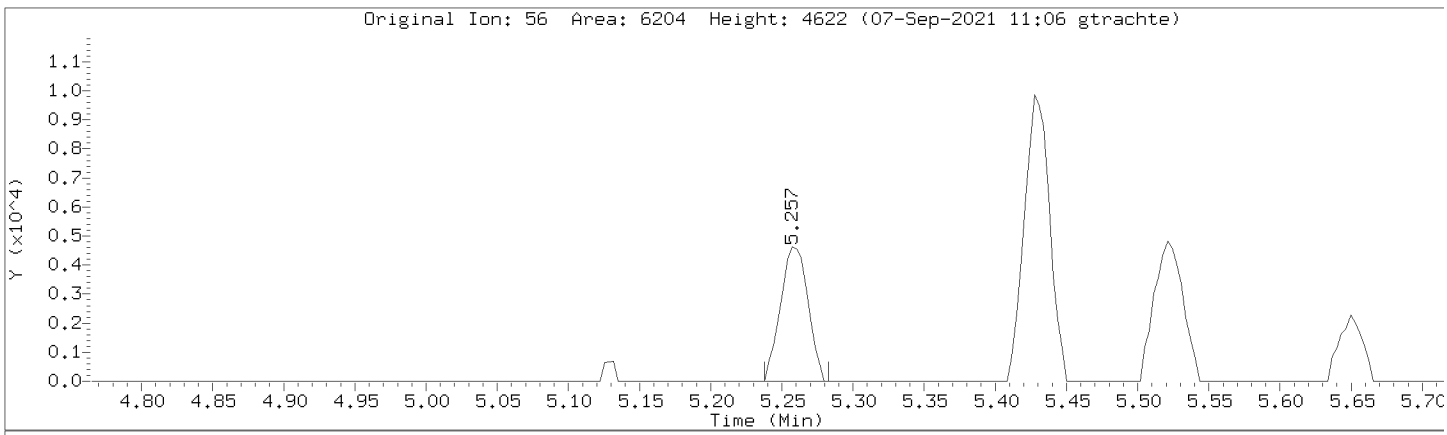
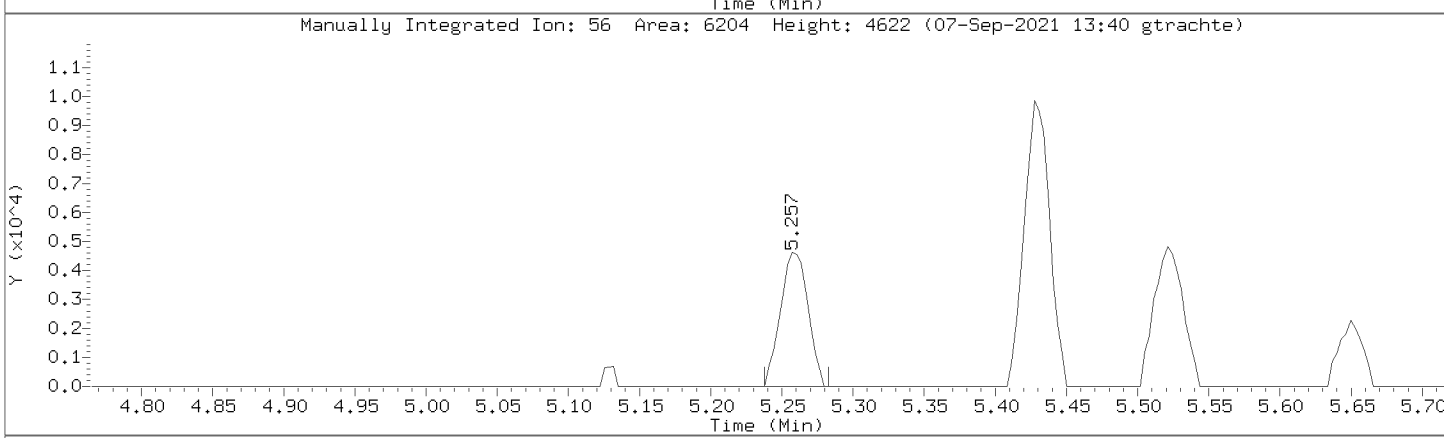
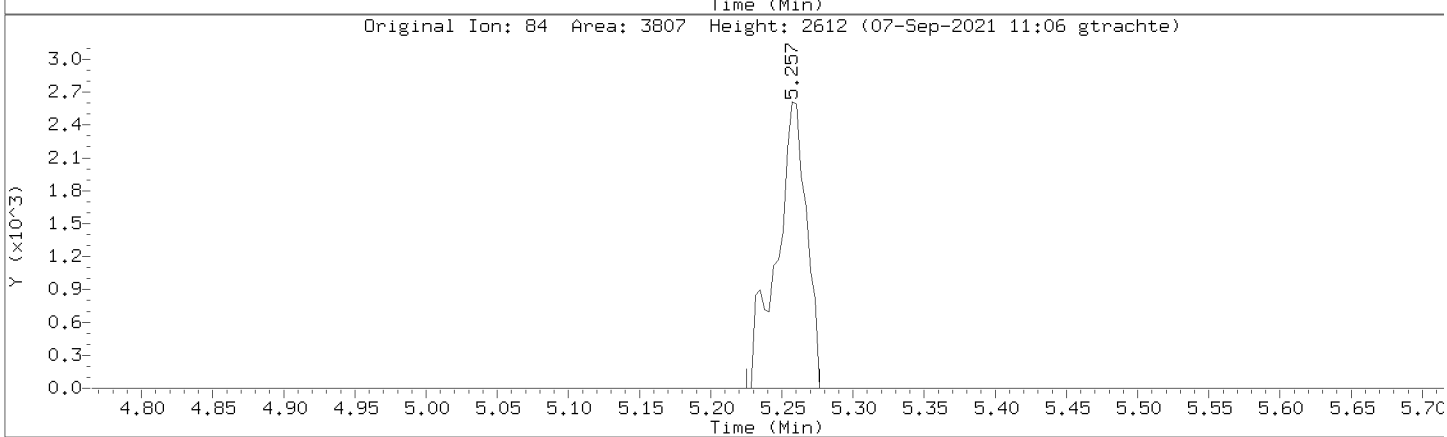
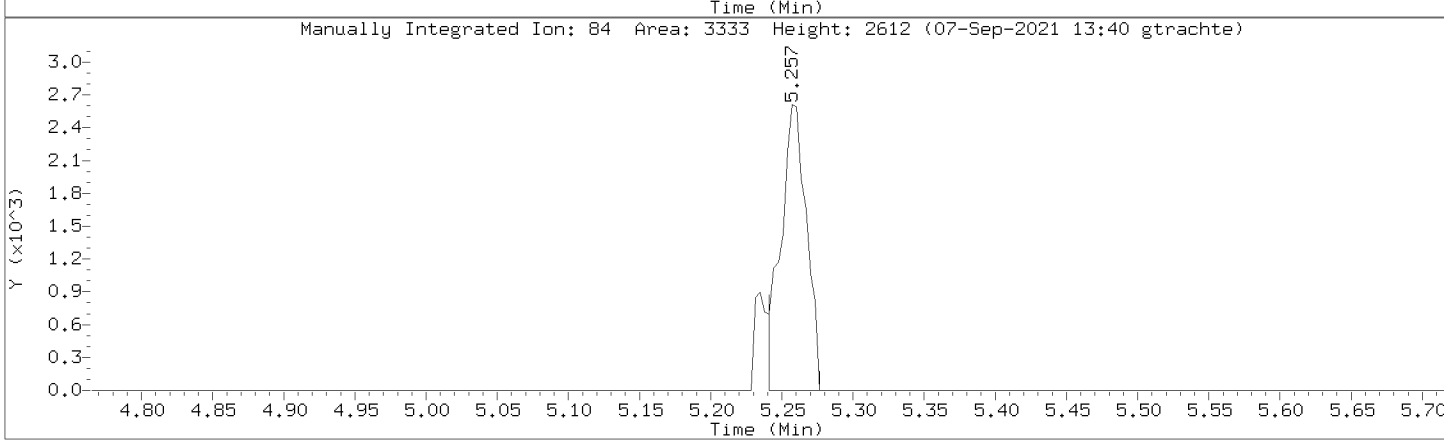
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Cyclohexane
CAS Number: 110-82-7



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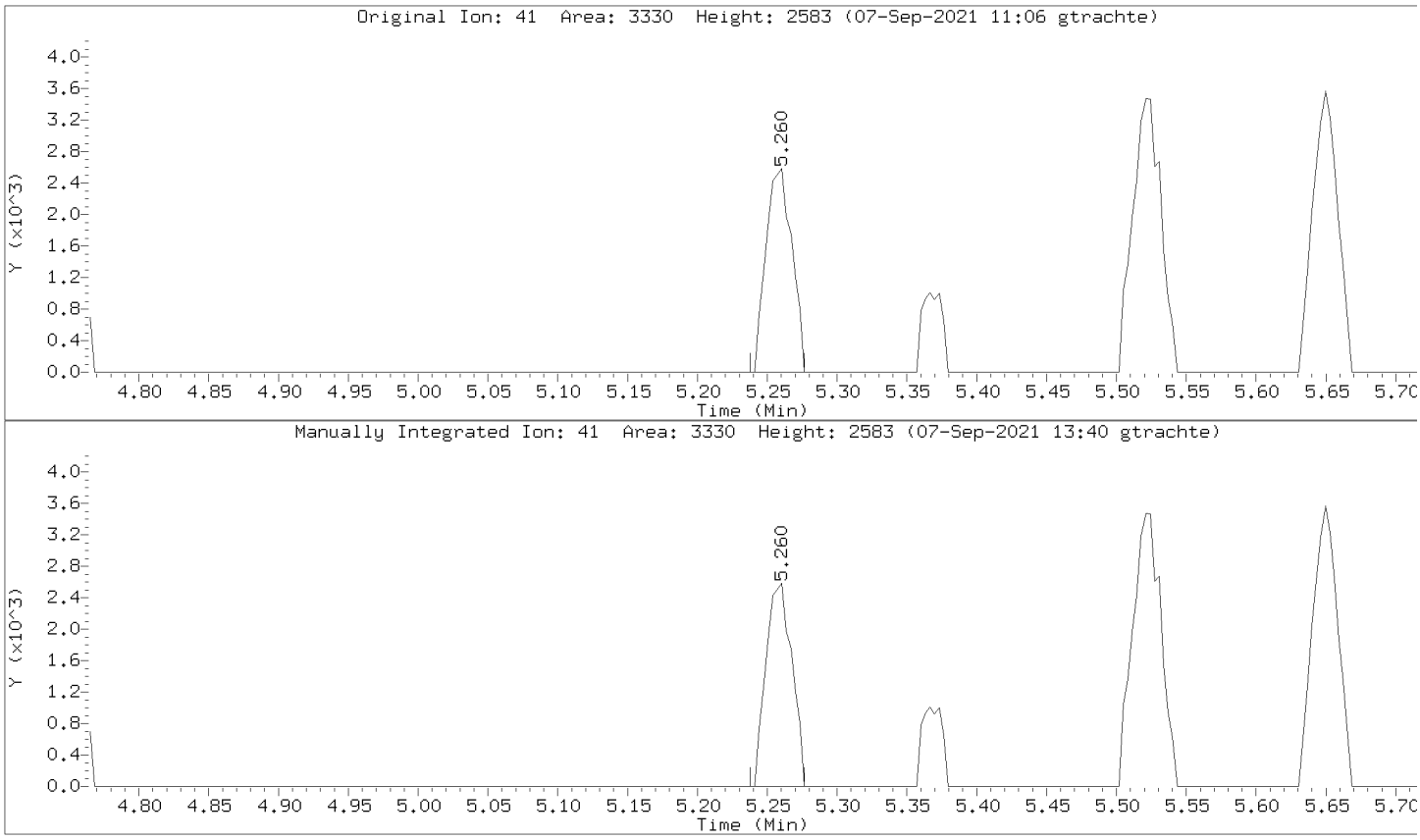
Lab Sample ID: CAL2



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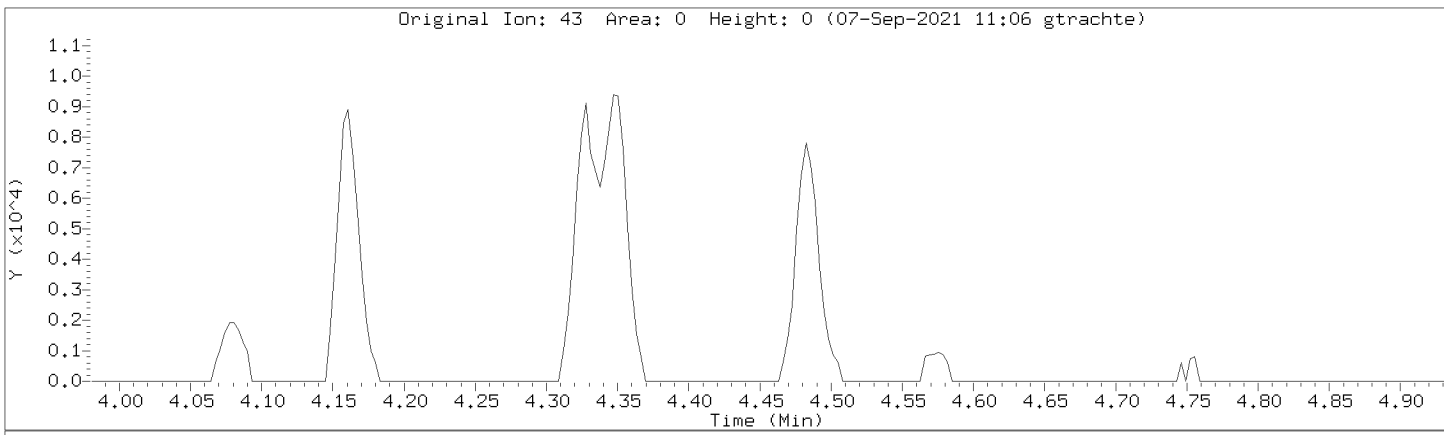
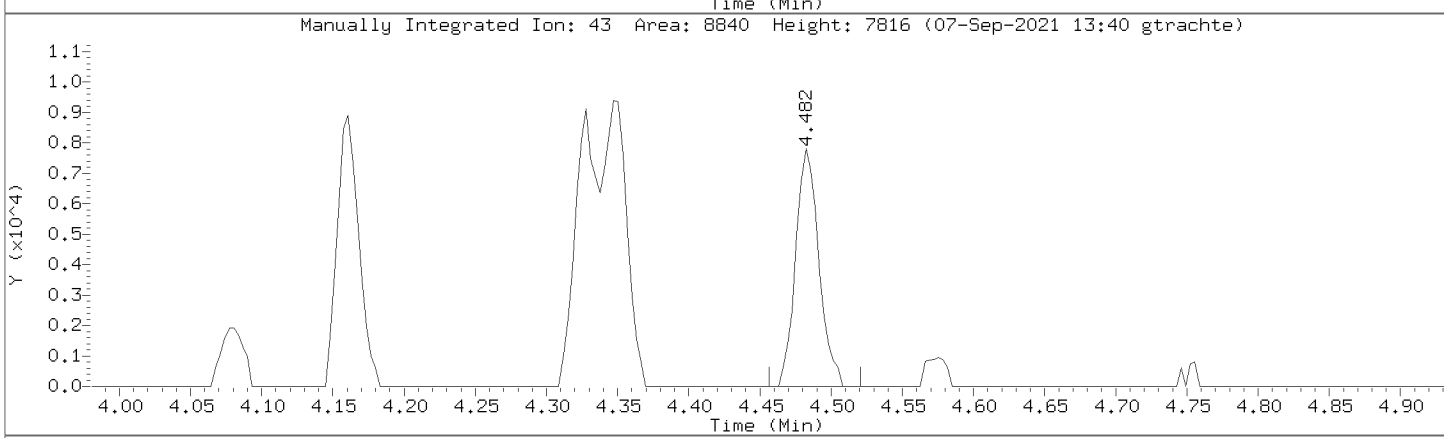
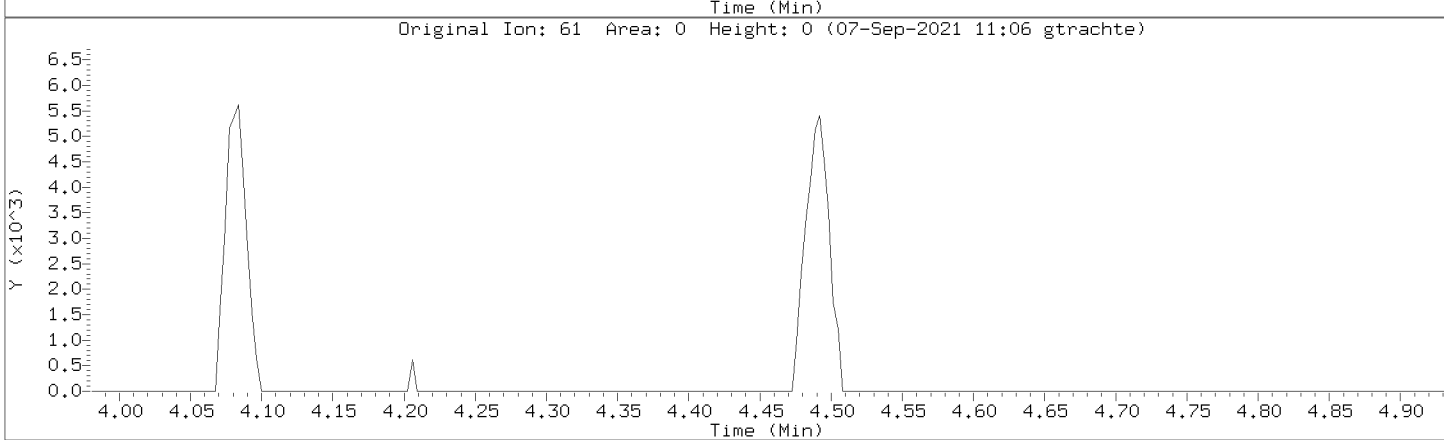
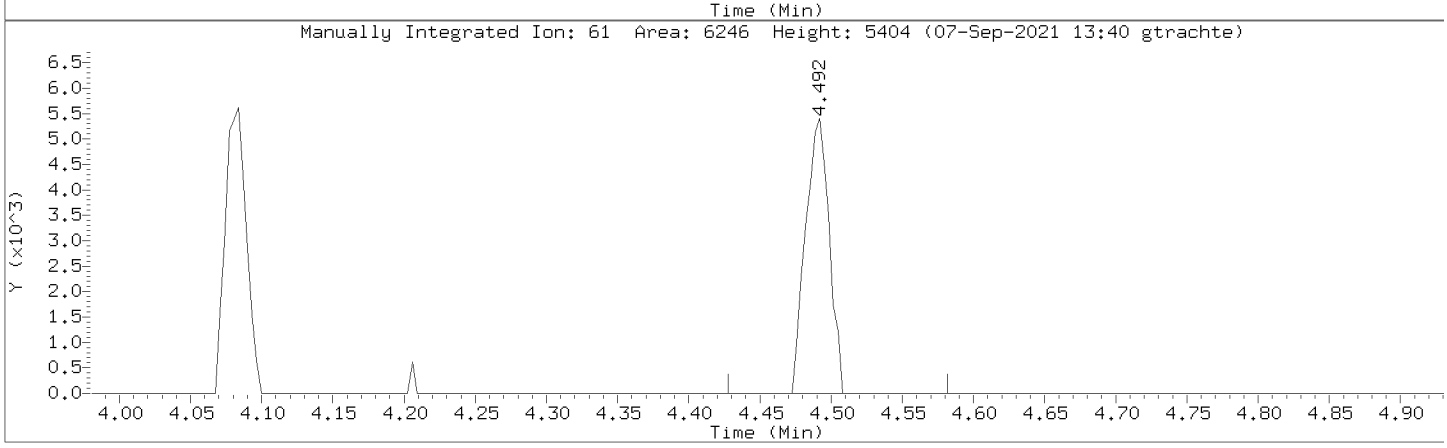
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Ethyl Acetate
CAS Number: 141-78-6



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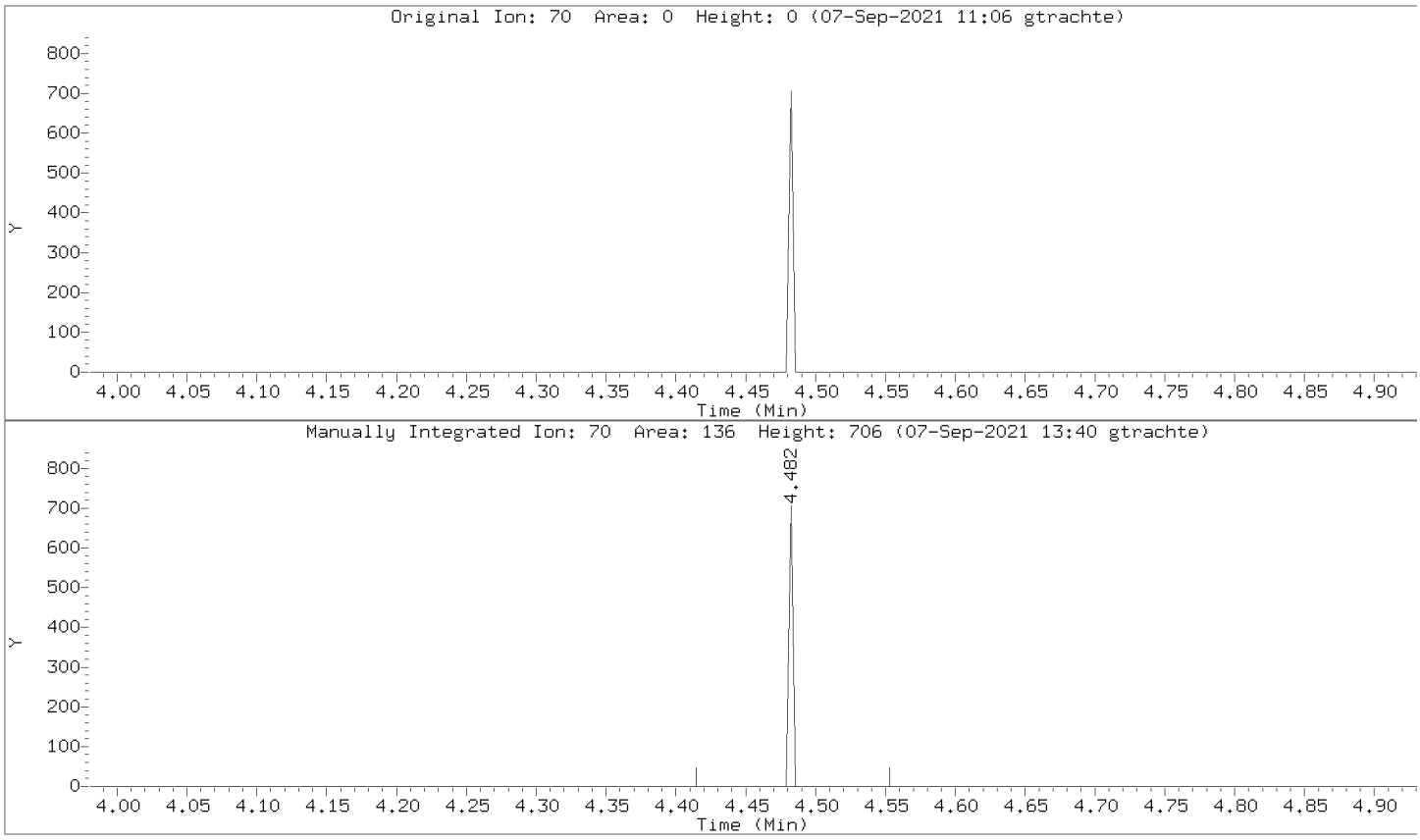
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2



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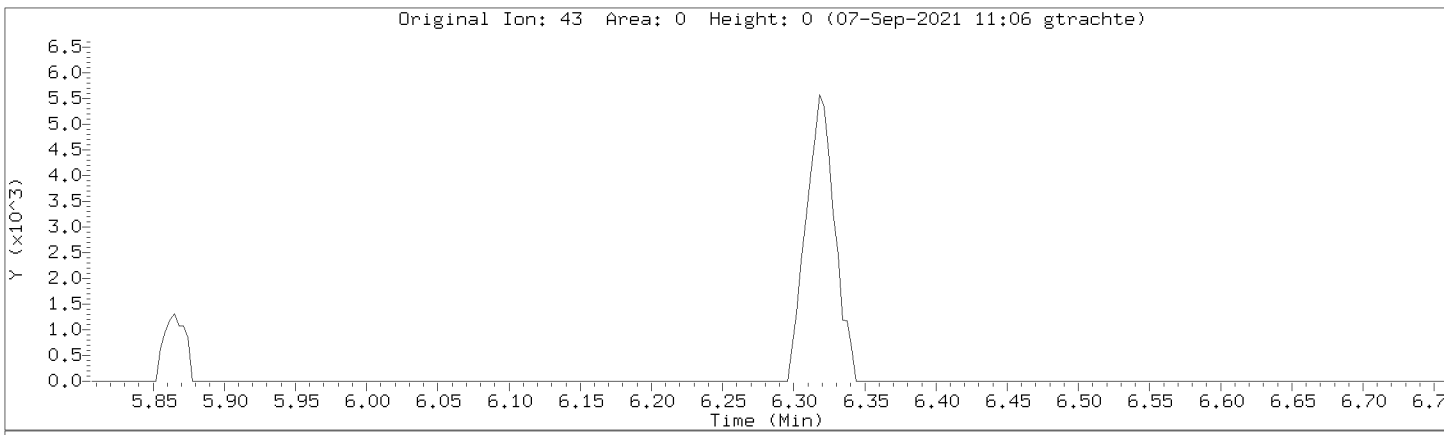
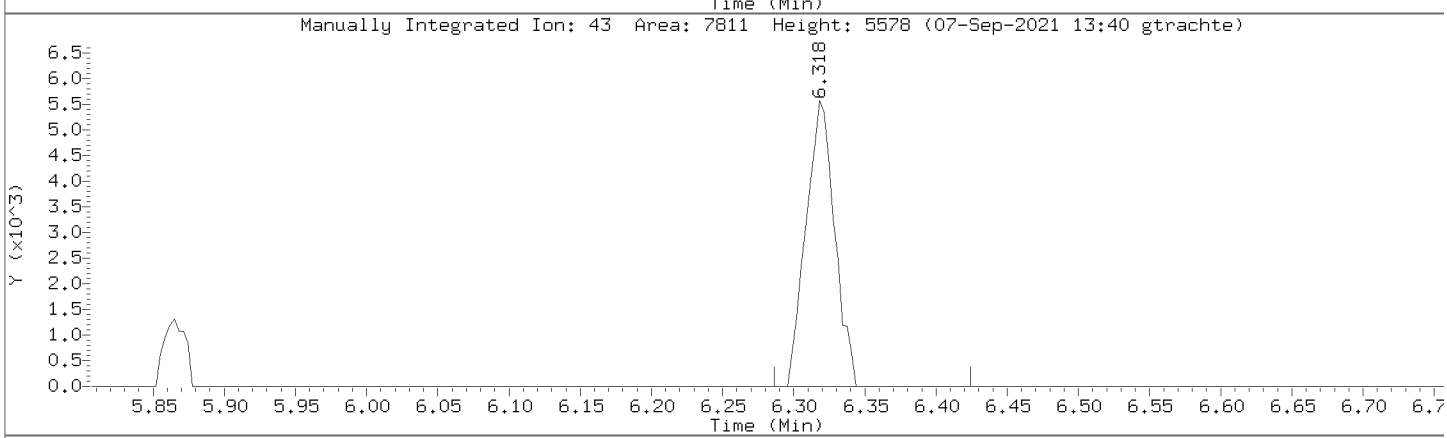
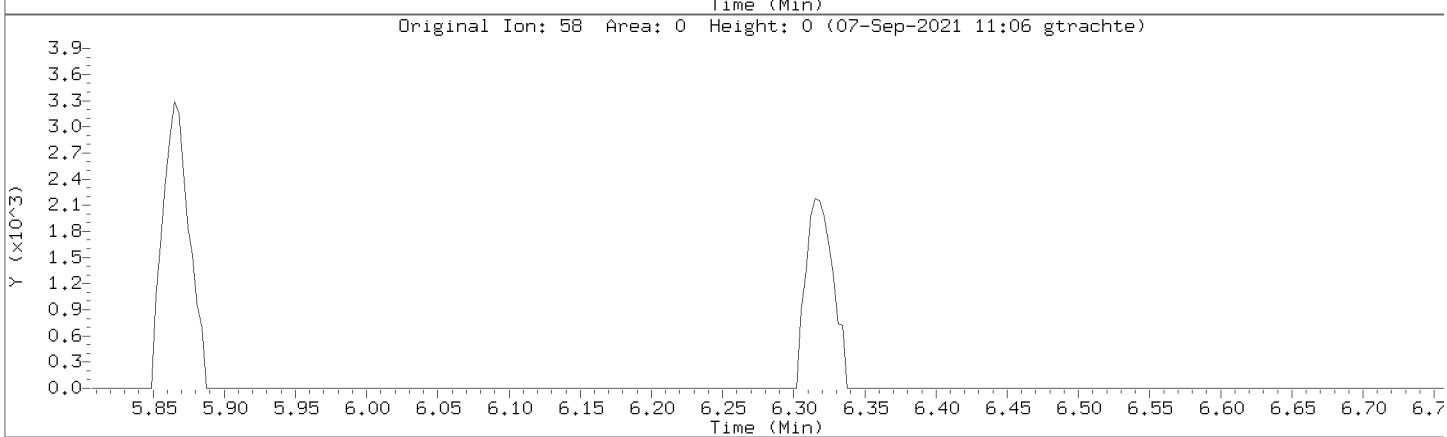
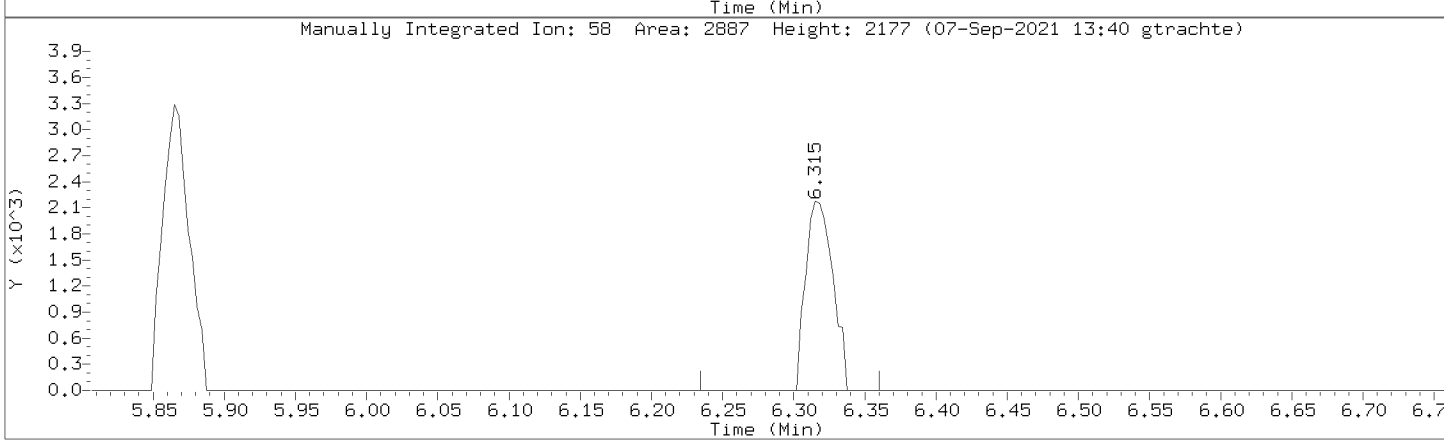
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Methyl Isobutyl Ketone
CAS Number: 108-10-1



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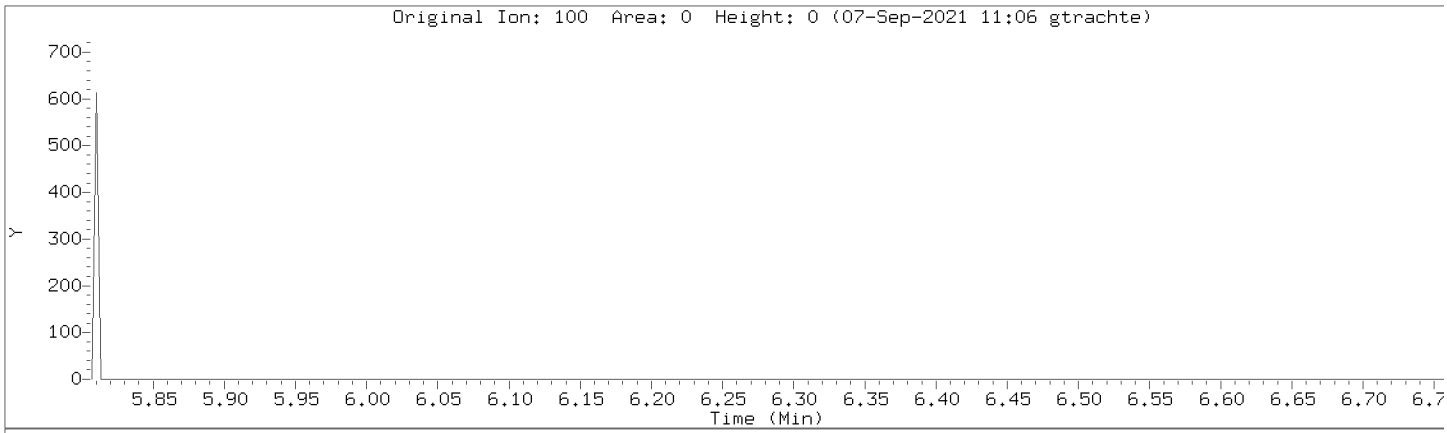
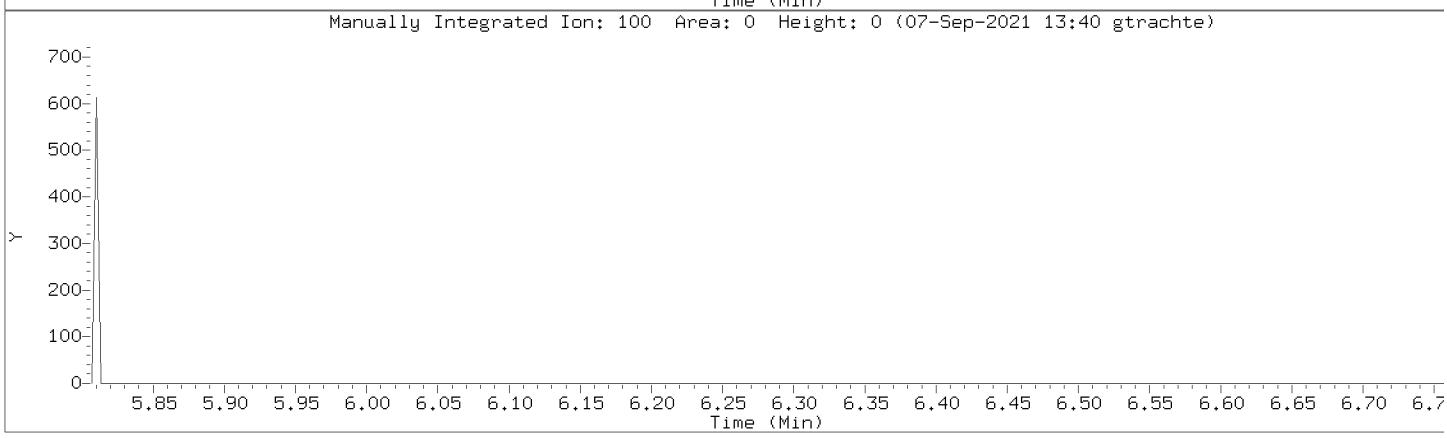
Instrument: 10airH.i
Lab Sample ID: CAL2



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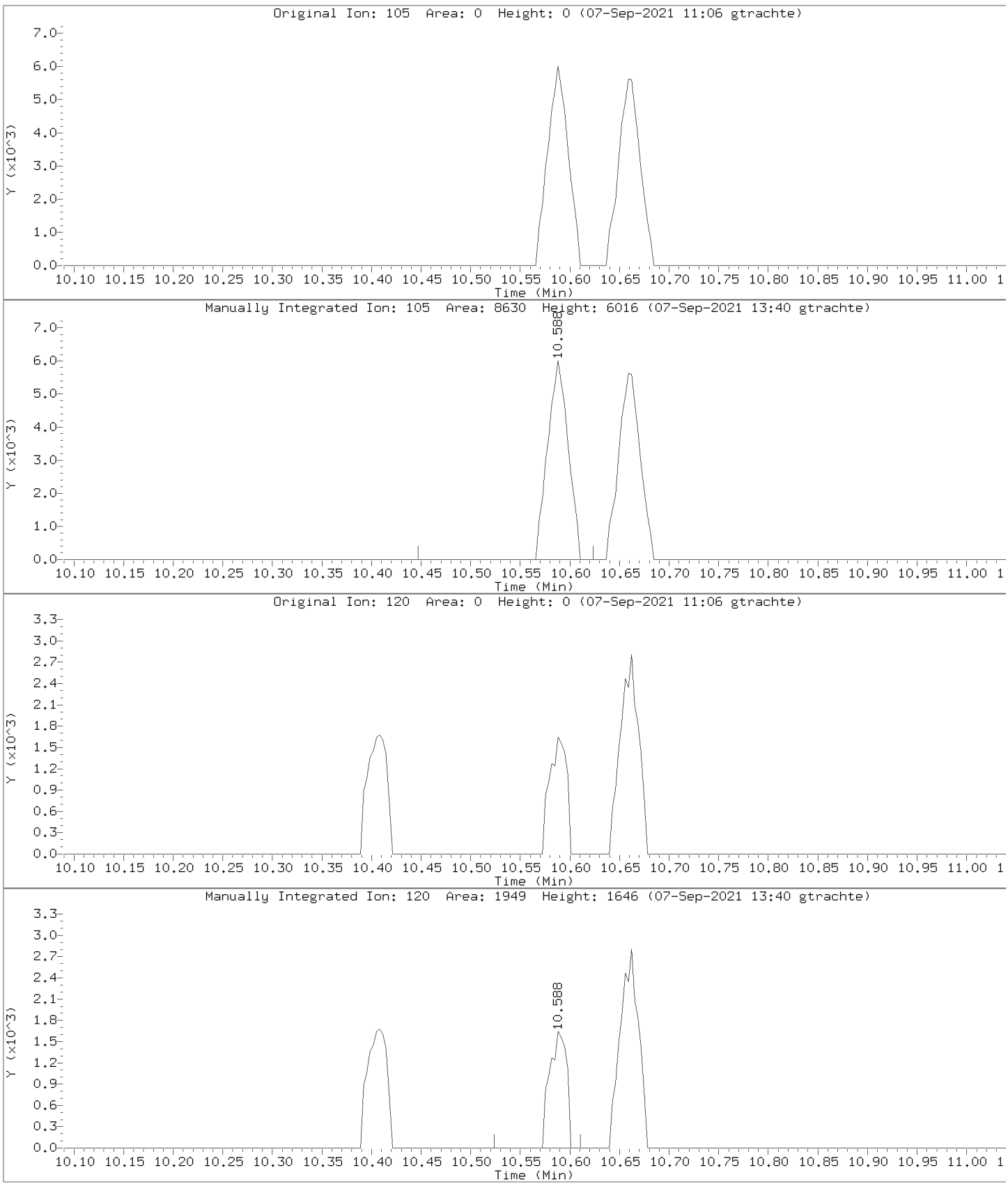
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: 4-Ethyltoluene
CAS Number: 622-96-8



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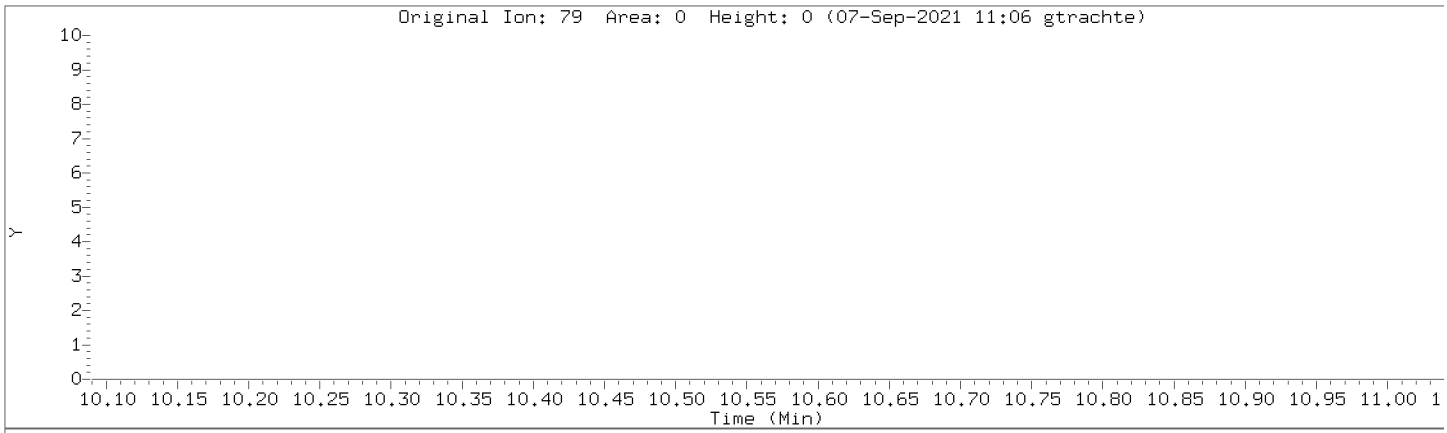


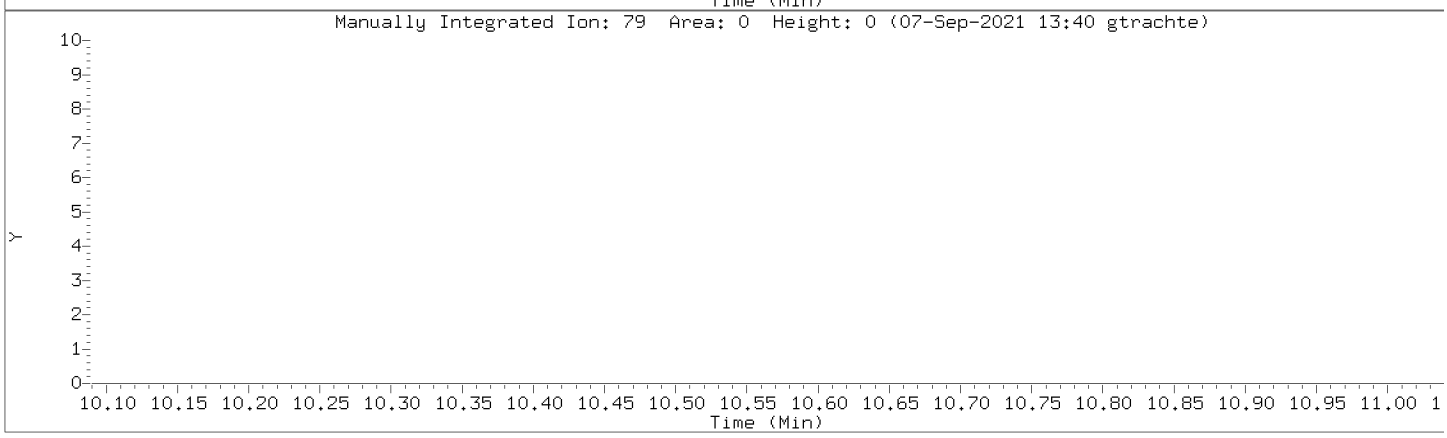

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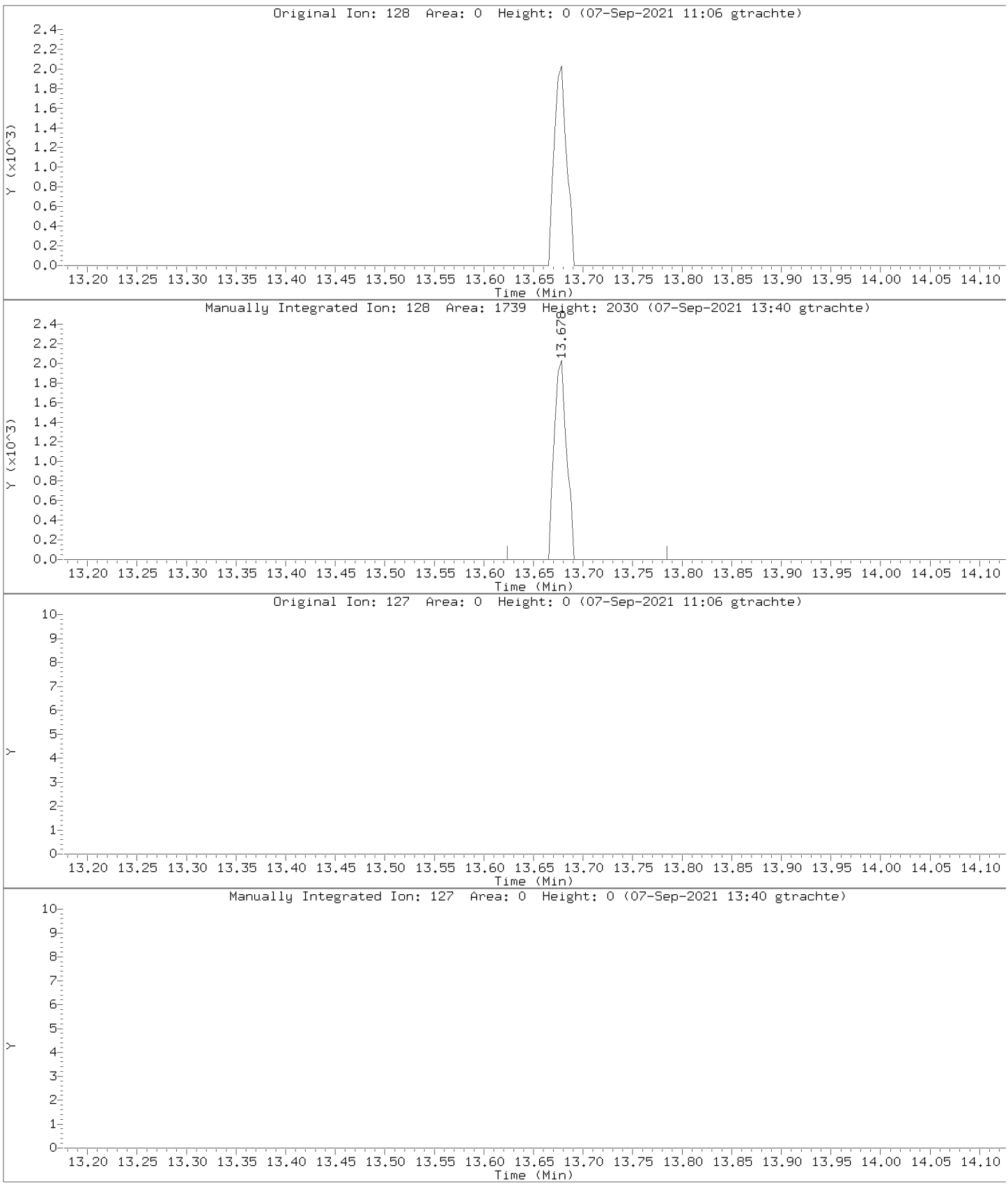
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Naphthalene
CAS Number: 91-20-3



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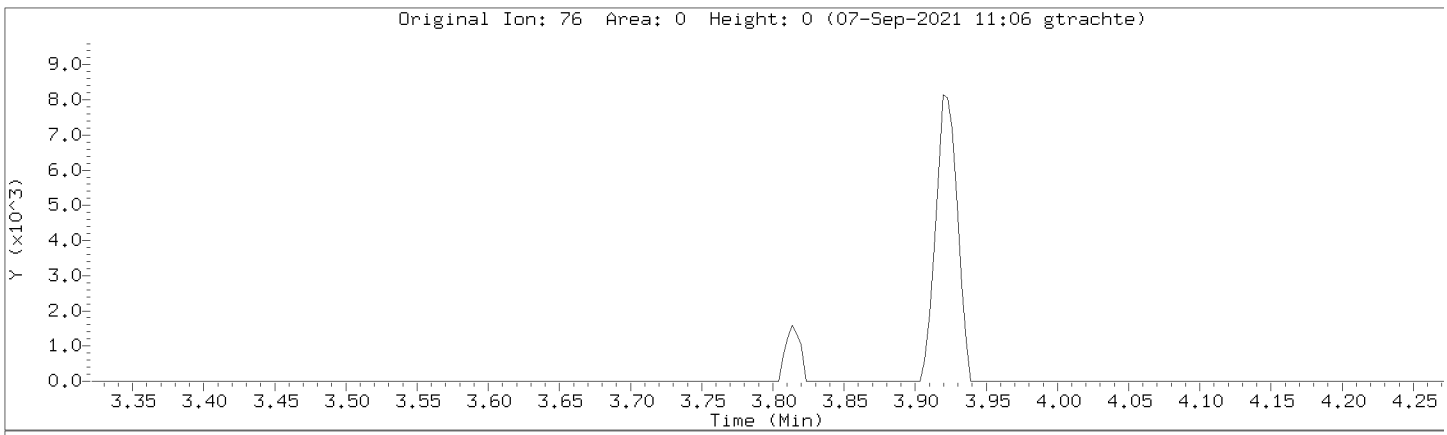
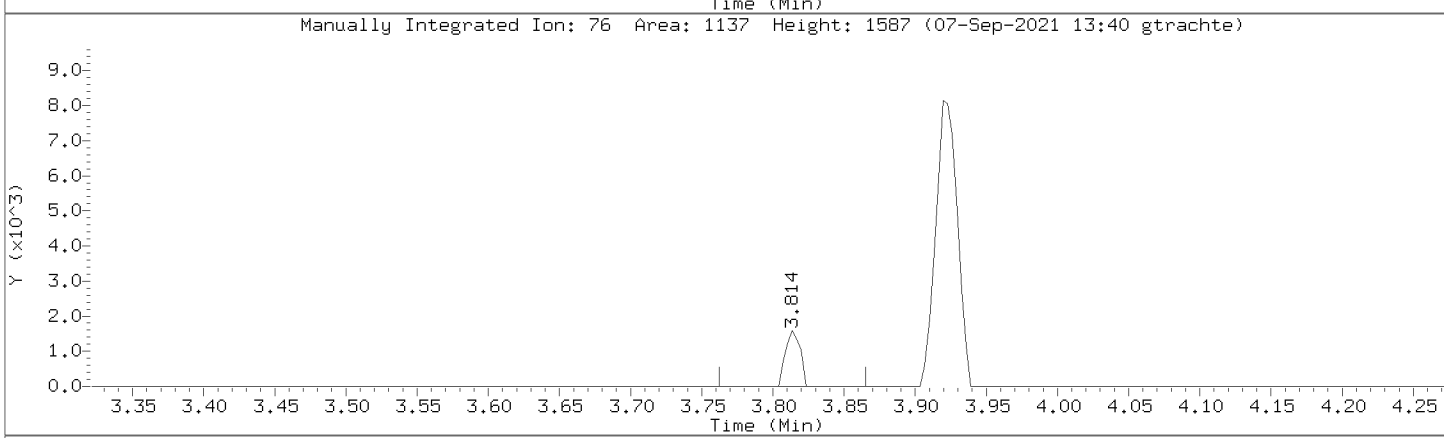
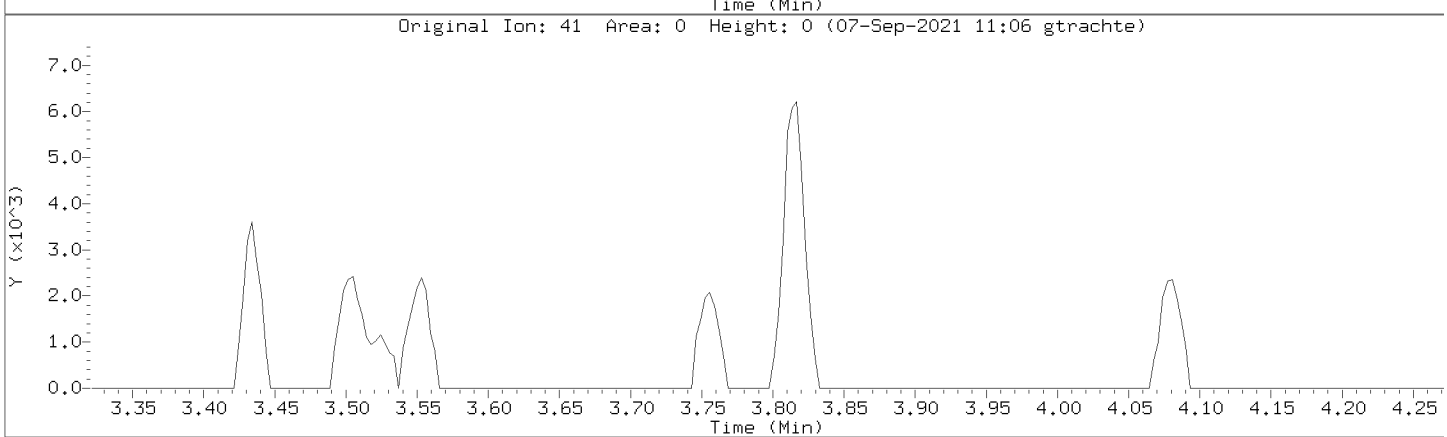
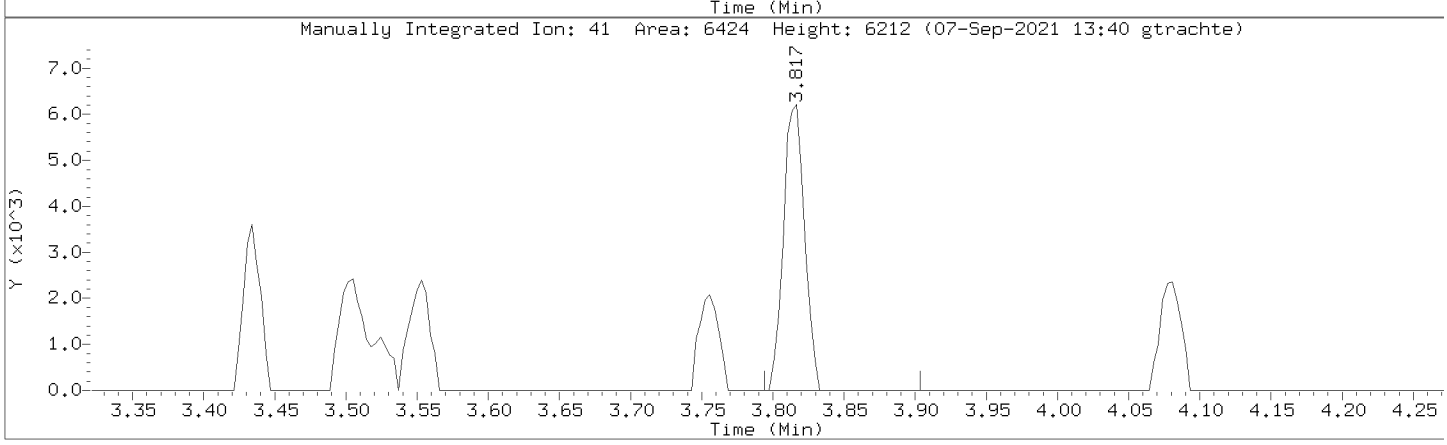
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Allyl Chloride
CAS Number: 107-05-1



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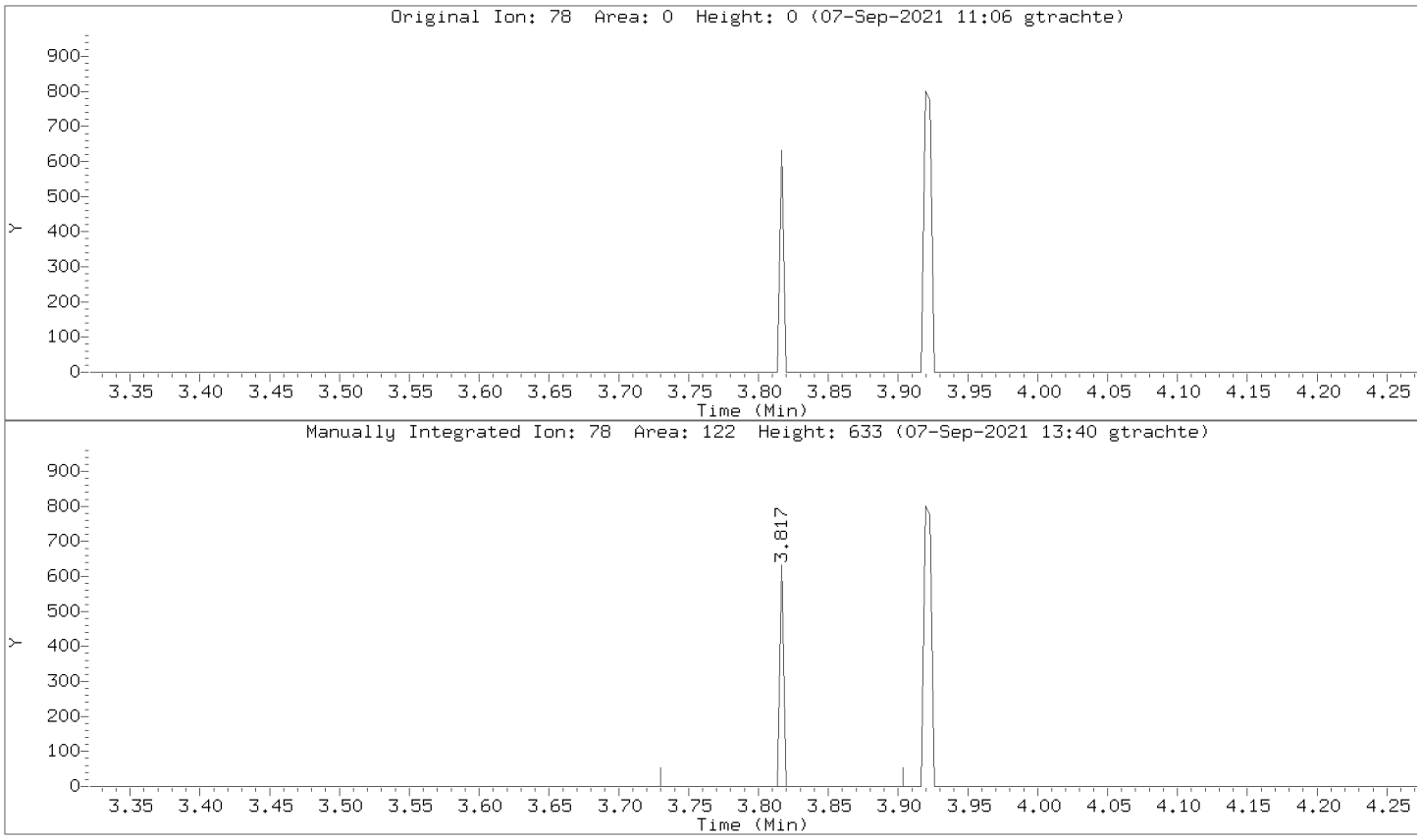
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2



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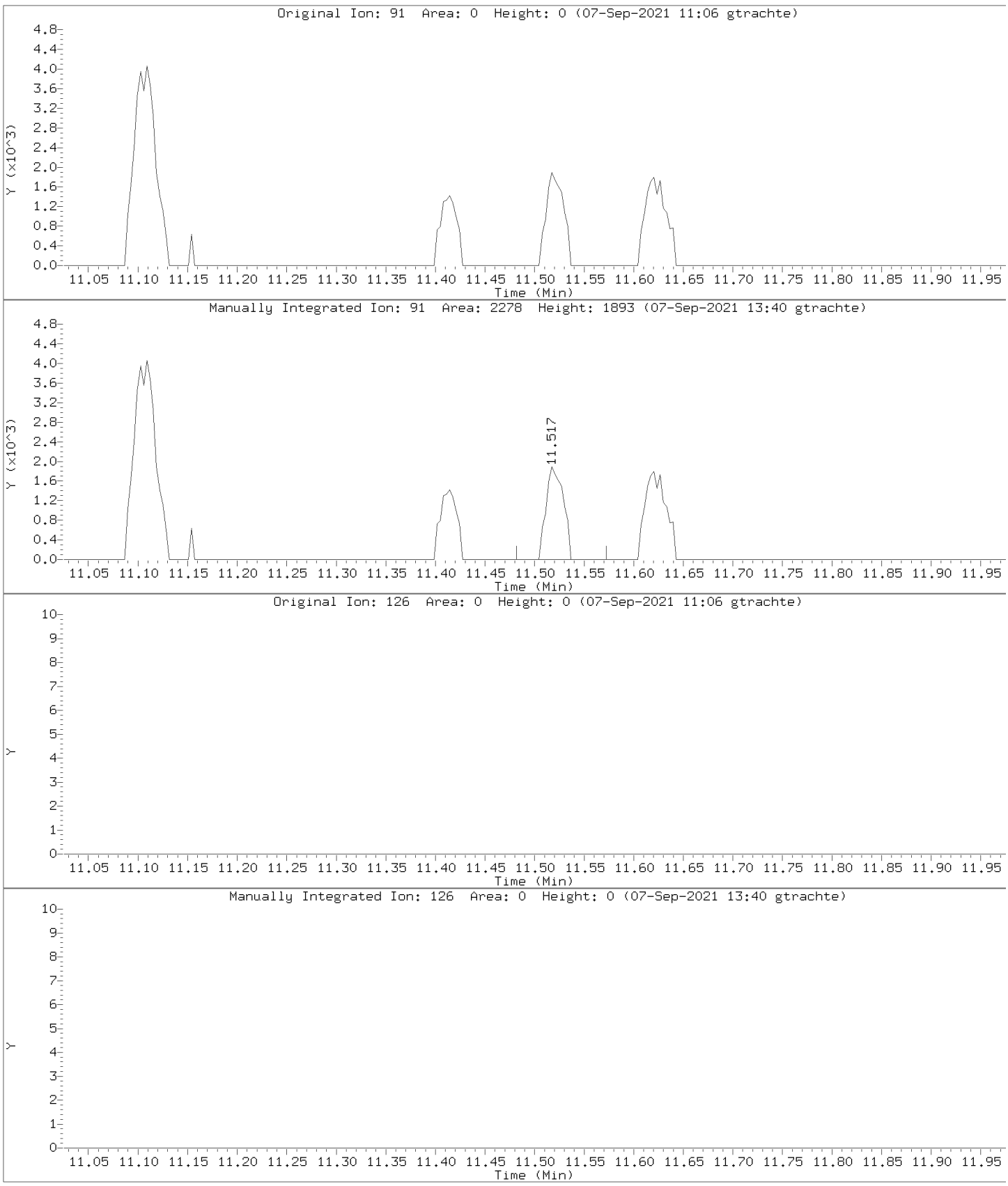
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Benzyl Chloride
CAS Number: 100-44-7



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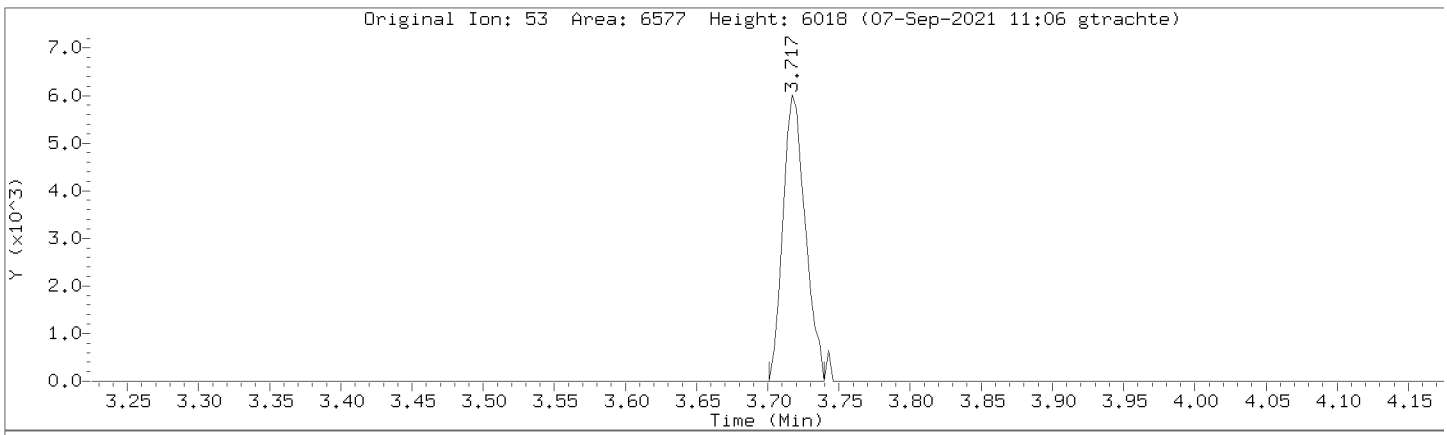
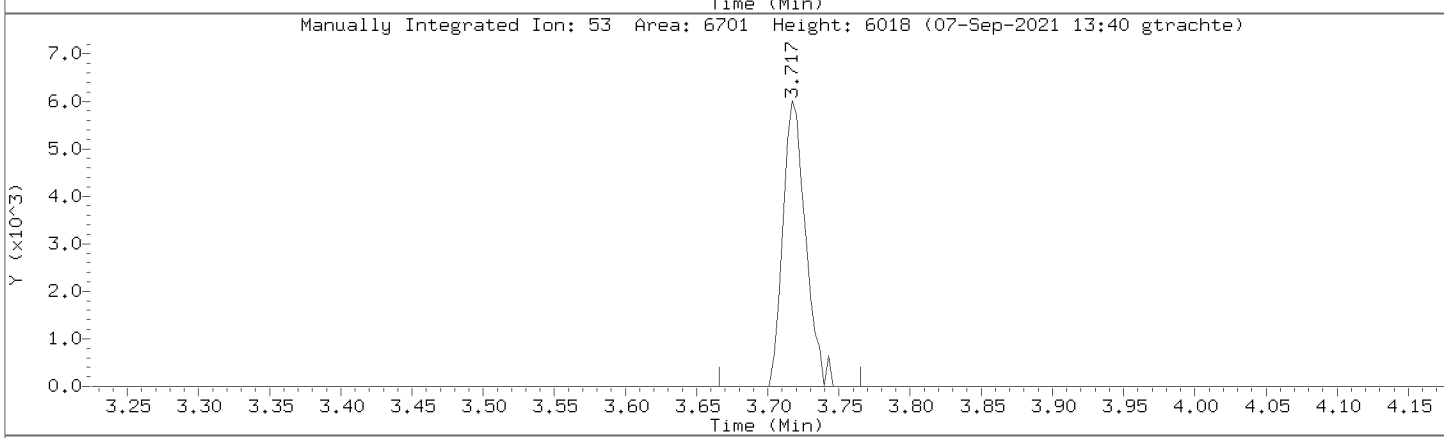
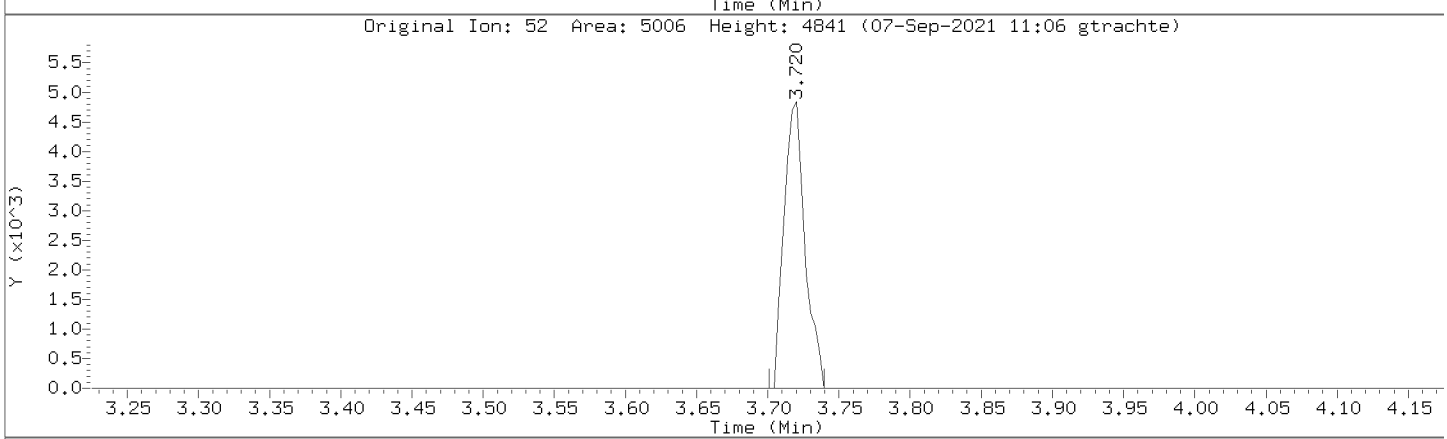
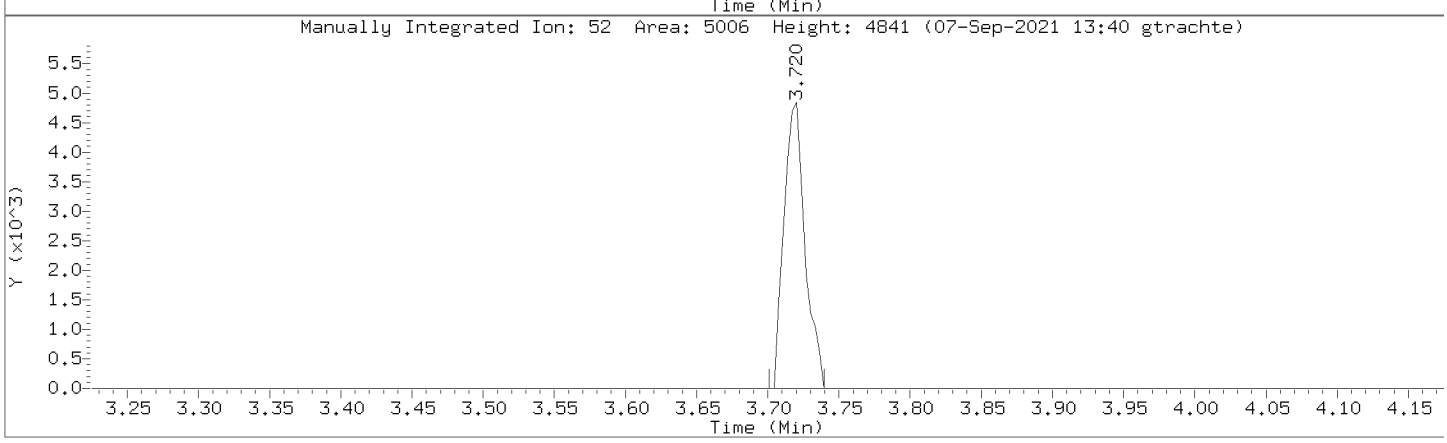
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Acrylonitrile
CAS Number: 107-13-1



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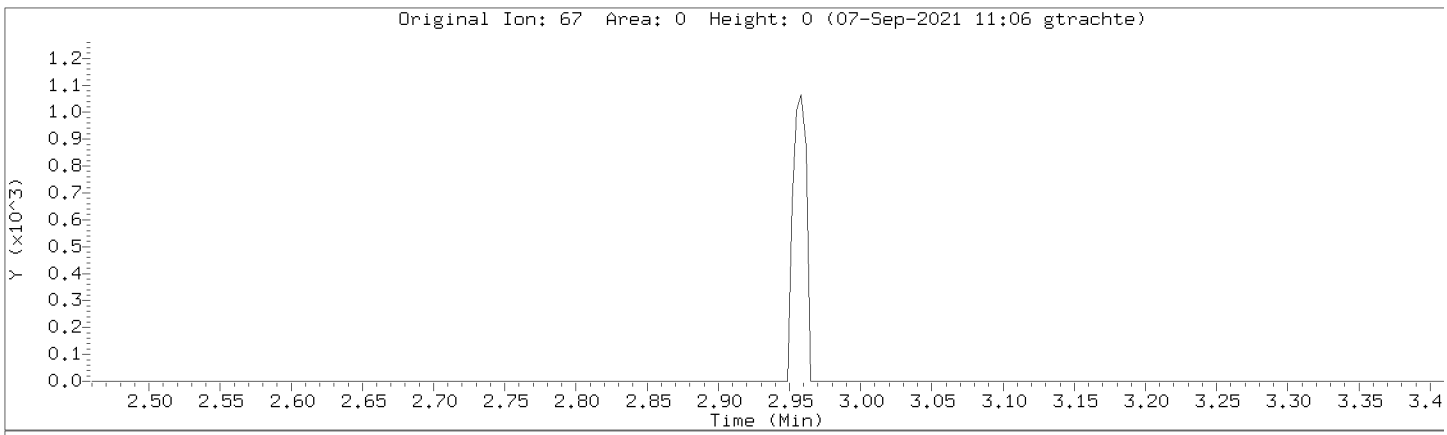
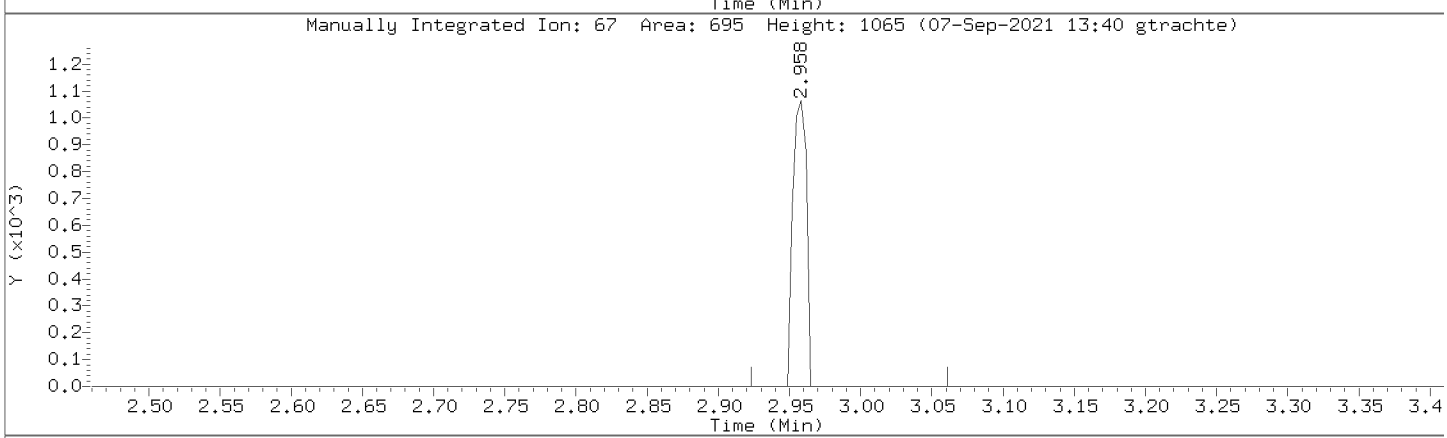
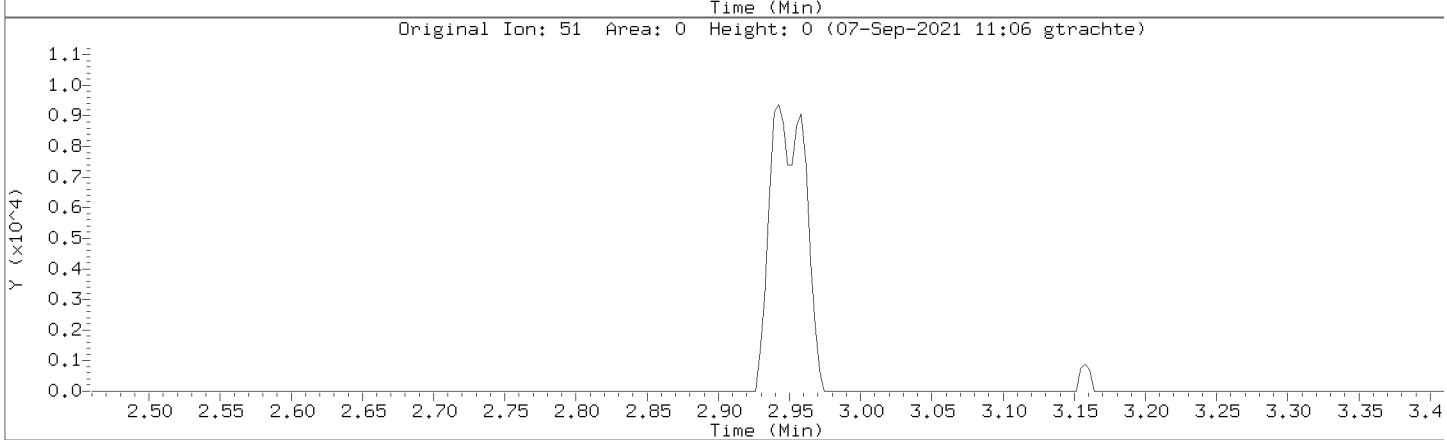
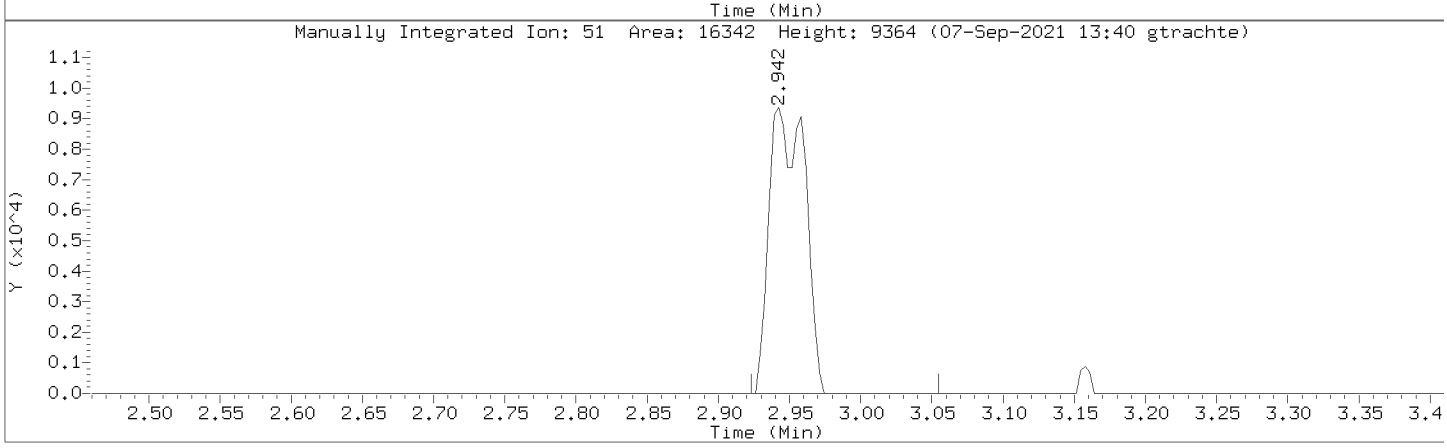
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2

Compound: Chlorodifluoromethane
CAS Number: 76-13-1



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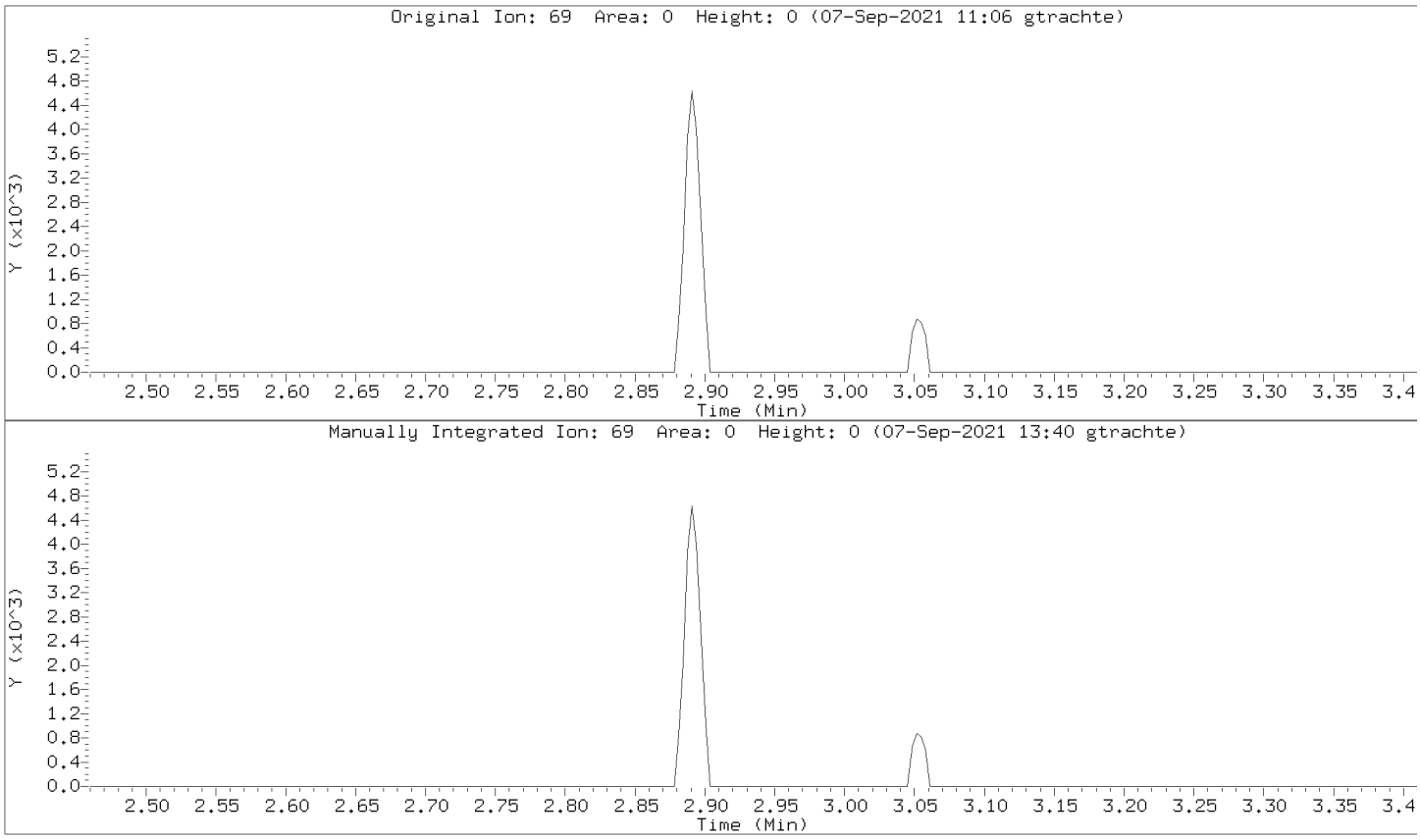
Injection Date: 07-SEP-2021 08:51
Instrument: 10airH.i
Lab Sample ID: CAL2



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25006.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25006.D
Lab Smp Id: CAL3
Inj Date : 07-SEP-2021 09:17
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 07-Sep-2021 14:02 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.942 | 2.948 | (0.542) | 7170 | 0.35710 | 0.399(Q) |
| 2 Chlorodifluoromethane | 67 | 2.958 | 2.961 | (0.545) | 2120 | 0.35730 | 0.437(QM) |
| 3 Propylene | 41 | 2.961 | 2.967 | (0.545) | 7784 | 0.35930 | 0.380 |
| 4 Dichlorodifluoromethane | 85 | 2.980 | 2.986 | (0.549) | 19349 | 0.36220 | 0.387 |
| 5 Dichlorotetrafluoroethane | 85 | 3.051 | 3.057 | (0.562) | 17750 | 0.33400 | 0.352 |
| 6 Chloromethane | 50 | 3.054 | 3.064 | (0.562) | 10001 | 0.35820 | 0.385 |
| 7 Vinyl chloride | 62 | 3.125 | 3.131 | (0.575) | 7097 | 0.35930 | 0.351 |
| 8 1,3-Butadiene | 54 | 3.157 | 3.163 | (0.581) | 5099 | 0.35800 | 0.358 |
| 9 Bromomethane | 94 | 3.273 | 3.279 | (0.603) | 5549 | 0.35870 | 0.365 |
| 10 Chloroethane | 64 | 3.315 | 3.324 | (0.610) | 3425 | 0.35840 | 0.416 |
| 11 Ethanol | 45 | 3.331 | 3.343 | (0.613) | 13491 | 2.15440 | 2.44 |
| 12 Vinyl Bromide | 106 | 3.421 | 3.427 | (0.630) | 5058 | 0.35730 | 0.366 |
| 13 Isopentane | 43 | 3.430 | 3.440 | (0.632) | 6606 | 0.36760 | 0.383 |
| 14 Freon 123 | 83 | 3.469 | 3.478 | (0.639) | 12729 | 0.35580 | 0.378 |
| 15 Trichlorofluoromethane | 101 | 3.495 | 3.501 | (0.644) | 17304 | 0.36200 | 0.389 |
| 16 Acrolein | 56 | 3.498 | 3.504 | (0.644) | 6673 | 1.01620 | 1.04 |
| 17 Acetone | 43 | 3.523 | 3.527 | (0.649) | 55512 | 1.76530 | 1.95 |
| 18 Isopropyl Alcohol | 45 | 3.549 | 3.559 | (0.654) | 59227 | 1.98580 | 2.09 |
| 19 1,1-Dichloroethene | 61 | 3.707 | 3.713 | (0.683) | 12243 | 0.36000 | 0.371 |
| 20 Acrylonitrile | 53 | 3.716 | 3.726 | (0.684) | 14331 | 0.99470 | 1.02 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.749 | 3.752 | (0.690) | 19953 | 0.35380 | 0.385 |
| 22 Methyl Acetate | 43 | 3.742 | 3.749 | (0.689) | 18724 | 0.35820 | 0.368 |
| 23 Freon 113 | 101 | 3.739 | 3.745 | (0.689) | 14481 | 0.35780 | 0.383 |
| 24 Allyl Chloride | 76 | 3.813 | 3.822 | (0.702) | 2820 | 0.35440 | 0.391(Q) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25006.D
Report Date: 07-Sep-2021 14:12

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 3.816 | 3.826 | (0.703) | 59568 | 1.79600 | 1.76 |
| | 26 Carbon Disulfide | 76 | 3.922 | 3.929 | (0.722) | 18600 | 0.36220 | 0.373 |
| | 27 Methyl Tert Butyl Ether | 73 | 4.077 | 4.076 | (0.751) | 16947 | 0.36000 | 0.364 |
| | 28 trans-1,2-dichloroethene | 96 | 4.080 | 4.093 | (0.751) | 6488 | 0.36040 | 0.359 |
| | 29 Vinyl Acetate | 43 | 4.160 | 4.166 | (0.766) | 19546 | 0.43180 | 0.461 |
| | 30 1,1-Dichloroethane | 63 | 4.205 | 4.215 | (0.774) | 15298 | 0.35600 | 0.375 |
| | 31 Methyl Ethyl Ketone | 72 | 4.324 | 4.327 | (0.796) | 3201 | 0.35890 | 0.396(Q) |
| | 32 Di-isopropyl Ether | 45 | 4.343 | 4.347 | (0.800) | 31214 | 0.35240 | 0.395 |
| | 33 n-Hexane | 57 | 4.350 | 4.356 | (0.801) | 14461 | 0.35380 | 0.374(M) |
| | 34 Ethyl Acetate | 43 | 4.478 | 4.482 | (0.825) | 19856 | 0.35400 | 0.373(Q) |
| | 35 cis-1,2-Dichloroethene | 96 | 4.491 | 4.504 | (0.827) | 6623 | 0.35910 | 0.358(Q) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 4.568 | 4.572 | (0.841) | 26327 | 0.35840 | 0.371 |
| | 37 Chloroform | 83 | 4.671 | 4.684 | (0.860) | 14804 | 0.35200 | 0.366 |
| | 38 Tetrahydrofuran | 42 | 4.752 | 4.745 | (0.875) | 9428 | 0.35640 | 0.376 |
| | 39 1,1,1-Trichloroethane | 97 | 4.983 | 4.993 | (0.918) | 14149 | 0.35670 | 0.363 |
| | 40 1,2-Dichloroethane | 62 | 5.060 | 5.073 | (0.932) | 11280 | 0.36000 | 0.368 |
| | 41 Benzene | 78 | 5.218 | 5.228 | (0.961) | 19651 | 0.35760 | 0.372 |
| | 42 Carbon tetrachloride | 117 | 5.231 | 5.244 | (0.963) | 11073 | 0.36160 | 0.331 |
| | 43 Cyclohexane | 56 | 5.257 | 5.266 | (0.968) | 13678 | 0.35640 | 0.363(M) |
| | 44 Tert Amyl Methyl Ether | 73 | 5.366 | 5.363 | (0.988) | 16190 | 0.35840 | 0.347 |
| * | 45 1,4-Difluorobenzene | 114 | 5.430 | 5.440 | (1.000) | 432659 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 5.520 | 5.530 | (1.017) | 43745 | 0.35800 | 0.378 |
| | 47 Heptane | 43 | 5.649 | 5.658 | (1.040) | 16713 | 0.35710 | 0.385 |
| | 48 Trichloroethene | 130 | 5.758 | 5.768 | (1.060) | 8612 | 0.35670 | 0.368 |
| | 49 Methyl methacrylate | 69 | 5.803 | 5.806 | (1.069) | 6703 | 0.35760 | 0.352(Q) |
| | 50 1,2-Dichloropropane | 63 | 5.803 | 5.813 | (1.069) | 9346 | 0.35910 | 0.372 |
| | 51 1,4-Dioxane | 88 | 5.858 | 5.858 | (1.079) | 10286 | 0.89380 | 0.918 |
| | 52 Bromodichloromethane | 83 | 5.961 | 5.970 | (1.098) | 14096 | 0.35800 | 0.355 |
| | 53 Methylcyclohexane | 98 | 6.224 | 6.234 | (1.146) | 4446 | 0.35840 | 0.388(Q) |
| | 54 Methyl Isobutyl Ketone | 43 | 6.314 | 6.308 | (1.163) | 19165 | 0.35930 | 0.371 |
| | 55 cis-1,3-Dichloropropene | 75 | 6.385 | 6.395 | (1.176) | 10221 | 0.35690 | 0.356 |
| | 56 trans-1,3-Dichloropropene | 75 | 6.829 | 6.835 | (1.258) | 8286 | 0.36510 | 0.359 |
| | 57 Toluene | 91 | 6.925 | 6.932 | (1.275) | 20651 | 0.36180 | 0.360 |
| | 58 1,1,2-Trichloroethane | 97 | 7.054 | 7.060 | (1.299) | 7474 | 0.35820 | 0.361 |
| | 59 Methyl Butyl Ketone | 43 | 7.157 | 7.150 | (0.851) | 15191 | 0.35820 | 0.349(M) |
| | 60 n-Octane | 43 | 7.343 | 7.350 | (0.873) | 19344 | 0.35840 | 0.376 |
| | 61 Dibromochloromethane | 129 | 7.584 | 7.591 | (0.902) | 13250 | 0.35870 | 0.360 |
| | 62 Tetrachloroethene | 166 | 7.665 | 7.671 | (0.912) | 10221 | 0.35490 | 0.368 |
| | 63 1,2-Dibromoethane | 107 | 7.784 | 7.793 | (0.926) | 11158 | 0.35200 | 0.349 |
| * | 64 Chlorobenzene - d5 | 117 | 8.408 | 8.411 | (1.000) | 352090 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 8.449 | 8.456 | (1.005) | 16561 | 0.35730 | 0.367 |
| | 66 Ethyl Benzene | 91 | 8.668 | 8.674 | (1.031) | 24919 | 0.36130 | 0.360 |
| | 67 m&p-Xylene | 91 | 8.851 | 8.858 | (1.053) | 38441 | 0.72040 | 0.722(M) |
| | 68 n-Nonane | 43 | 9.186 | 9.192 | (1.093) | 17849 | 0.35890 | 0.366 |
| | 69 Styrene | 104 | 9.256 | 9.260 | (1.101) | 11601 | 0.36160 | 0.355(M) |
| | 70 o-Xylene | 91 | 9.289 | 9.295 | (1.105) | 20700 | 0.35910 | 0.370 |
| | 71 Bromoform | 173 | 9.362 | 9.369 | (1.114) | 9277 | 0.36130 | 0.346 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 9.700 | 9.710 | (1.154) | 15836 | 0.36020 | 0.359 |
| | 73 Isopropylbenzene | 105 | 9.835 | 9.842 | (1.170) | 25353 | 0.35580 | 0.348 |
| | 74 N-Propylbenzene | 91 | 10.404 | 10.407 | (1.237) | 31352 | 0.36020 | 0.358(M) |
| | 75 2-Chlorotoluene | 91 | 10.443 | 10.449 | (1.242) | 21198 | 0.36240 | 0.363 |
| | 76 4-Ethyltoluene | 105 | 10.588 | 10.591 | (1.259) | 21837 | 0.35800 | 0.374 |
| | 77 1,3,5-Trimethylbenzene | 105 | 10.661 | 10.665 | (1.268) | 20649 | 0.35820 | 0.360 |
| | 78 n-Decane | 57 | 11.009 | 11.015 | (2.027) | 16816 | 0.36220 | 0.400 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25006.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.105 | 11.112 | (1.321) | 21127 | 0.36130 | 0.361 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.150 | 11.157 | (1.326) | 19521 | 0.36040 | 0.354 |
| 81 Sec- Butylbenzene | 105 | 11.414 | 11.417 | (1.358) | 29859 | 0.36180 | 0.364 |
| 82 1,3-Dichlorobenzene | 146 | 11.449 | 11.452 | (1.362) | 11460 | 0.36180 | 0.418 |
| 83 Benzyl Chloride | 91 | 11.523 | 11.526 | (1.371) | 7227 | 0.36470 | 0.430 |
| 84 1,4-Dichlorobenzene | 146 | 11.581 | 11.587 | (1.377) | 9889 | 0.36160 | 0.422 |
| 85 p-Isopropyltoluene | 119 | 11.620 | 11.623 | (1.382) | 24964 | 0.36310 | 0.387 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.632 | 11.639 | (1.384) | 21676 | 0.36160 | 0.366 |
| 87 1,2-Dichlorobenzene | 146 | 11.890 | 11.893 | (1.414) | 11816 | 0.36110 | 0.409 |
| 88 N-Butylbenzene | 91 | 12.070 | 12.073 | (1.436) | 16406 | 0.36040 | 0.365 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.587 | 12.591 | (1.497) | 4423 | 0.36360 | 0.374 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.536 | 13.539 | (1.610) | 4670 | 0.78290 | 0.855 |
| 91 Naphthalene | 128 | 13.677 | 13.675 | (1.627) | 5969 | 0.40820 | 0.340(M) |
| 92 Hexachlorobutadiene | 225 | 13.784 | 13.787 | (1.639) | 7752 | 0.40820 | 0.387 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25006.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25006.D
Calibration Time: 10:08
Lab Smp Id: CAL3
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 432659 | -5.91 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 352090 | -10.19 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.06 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

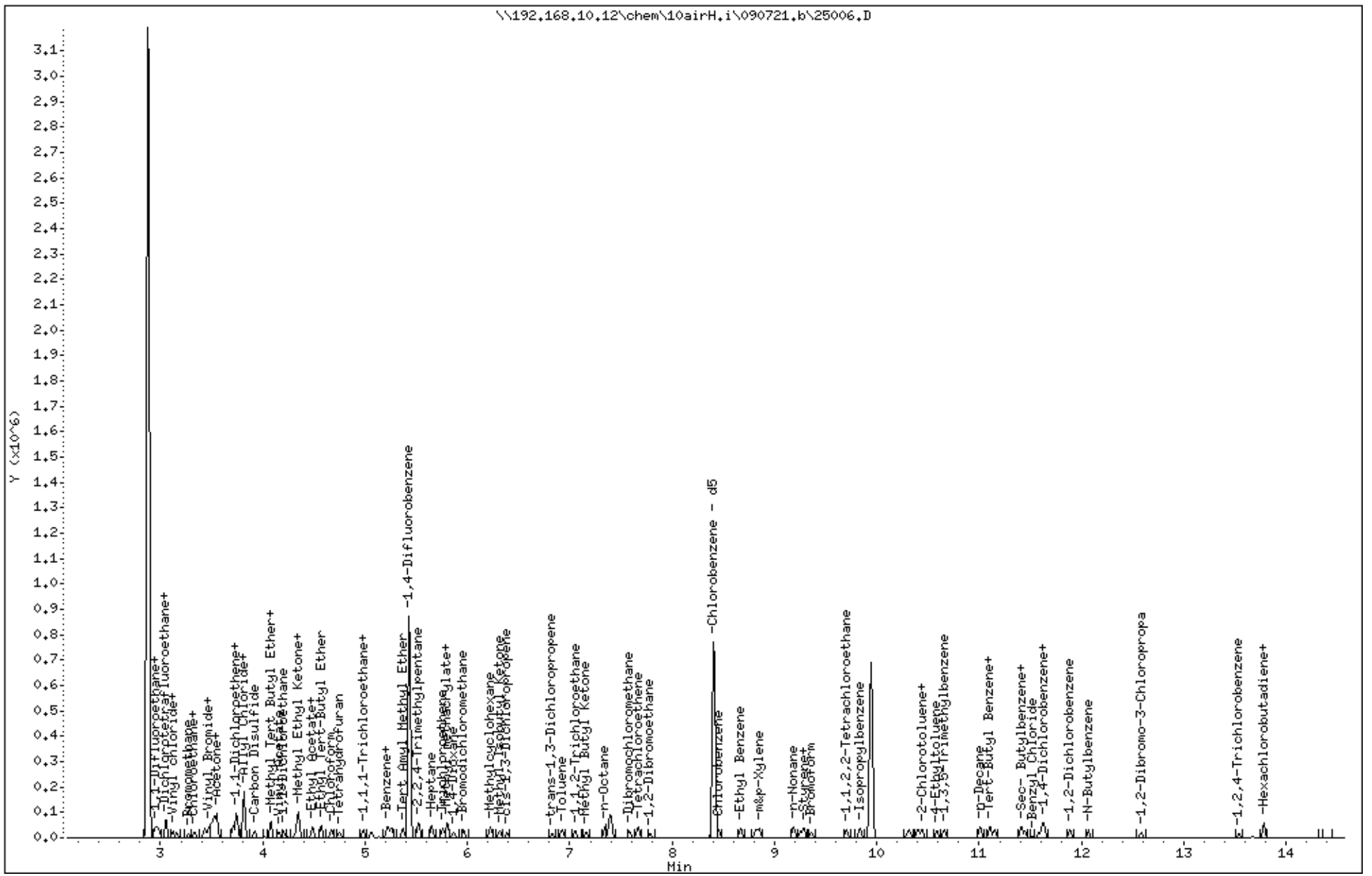
Data File: \\192.168.10.12\chem\10airH.i\090721.b\25006.D
Date : 07-SEP-2021 09:17
Client ID:
Sample Info:

Instrument: 10airH.i

Operator: GT

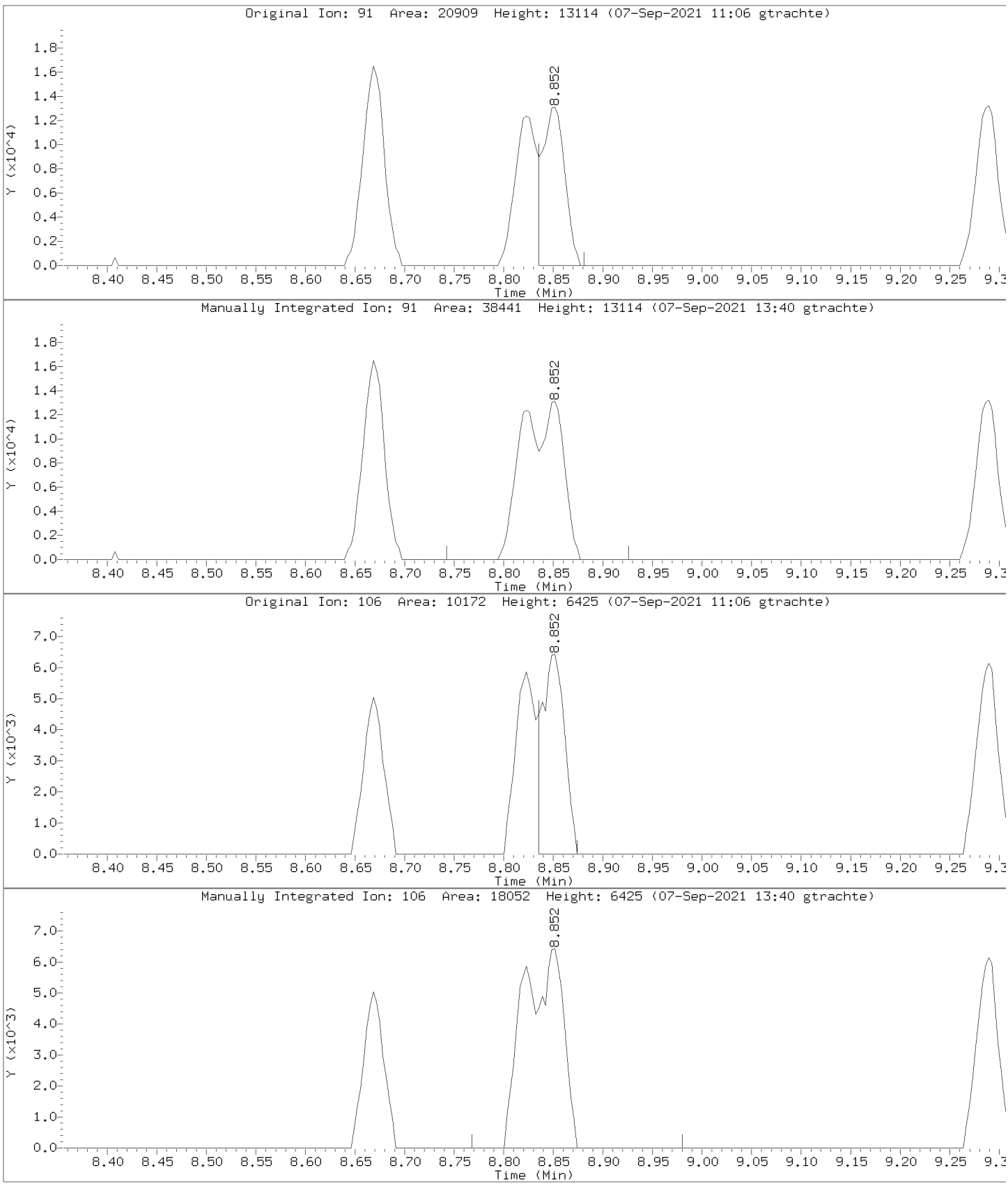
Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



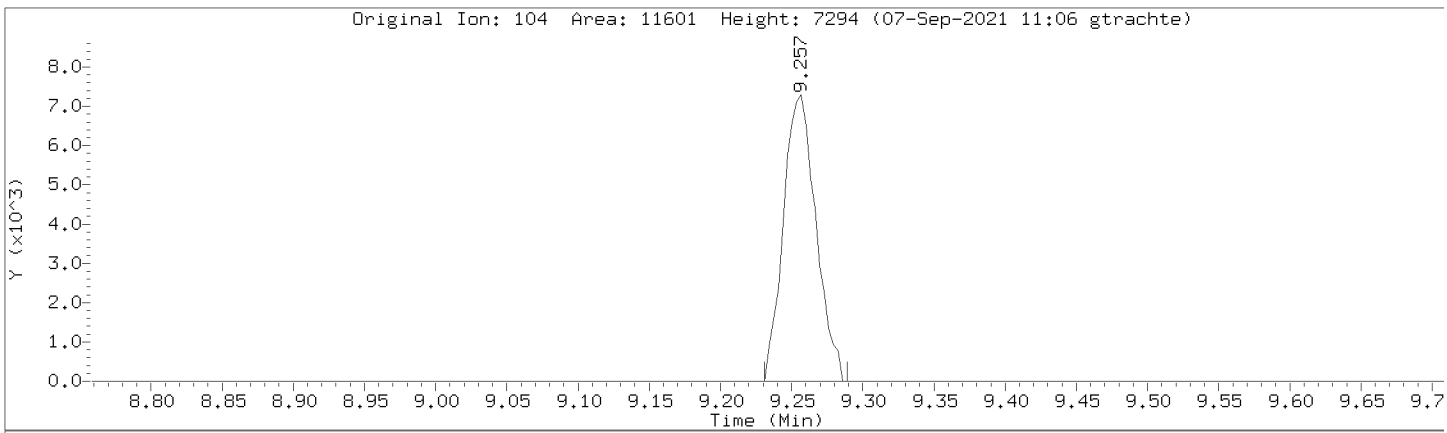
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25006.D
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

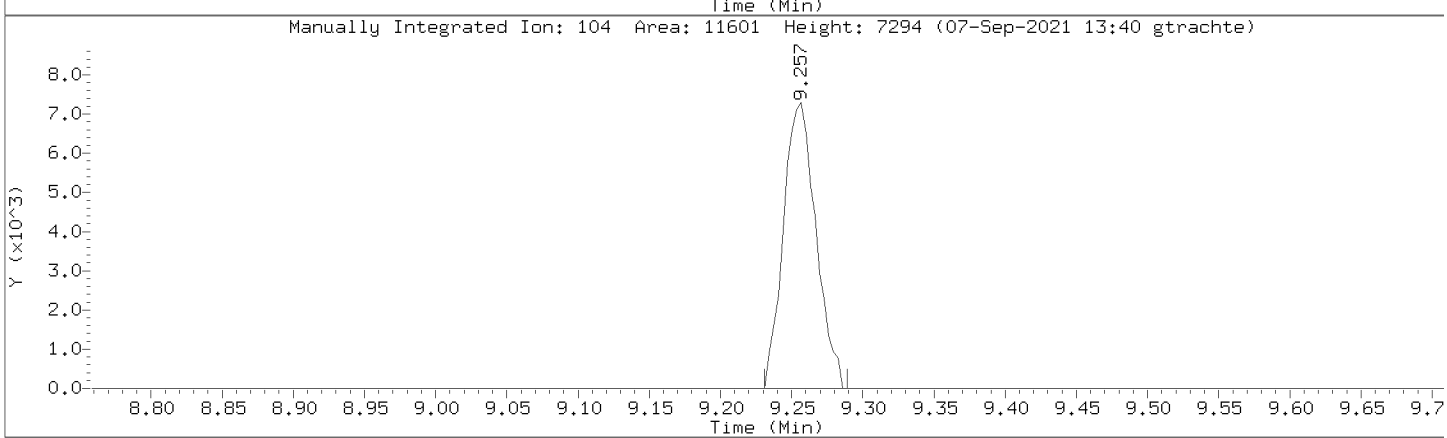
Compound: m&p-Xylene
CAS Number: 7816-60-0

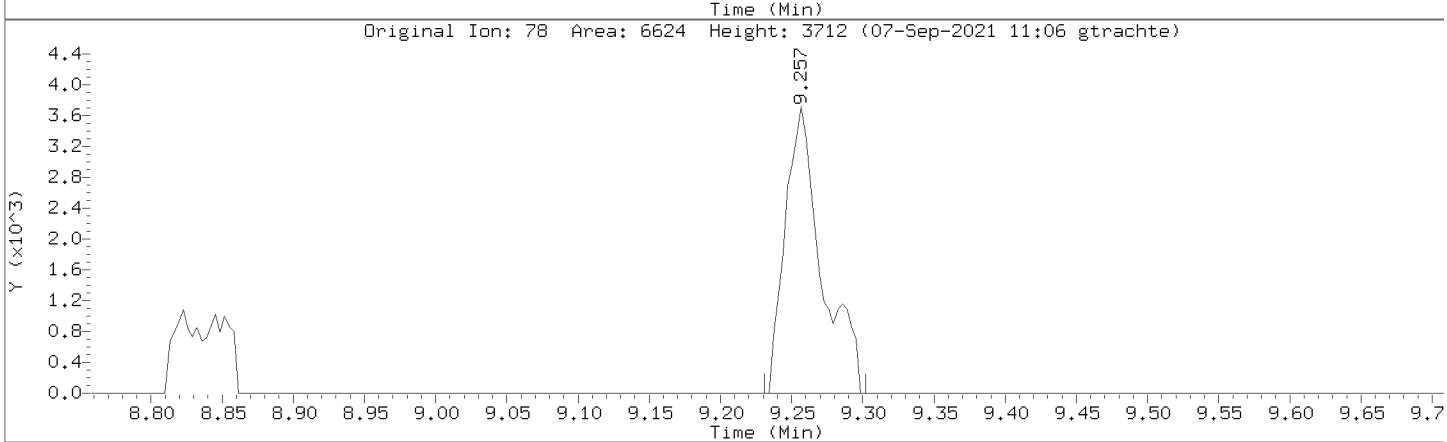


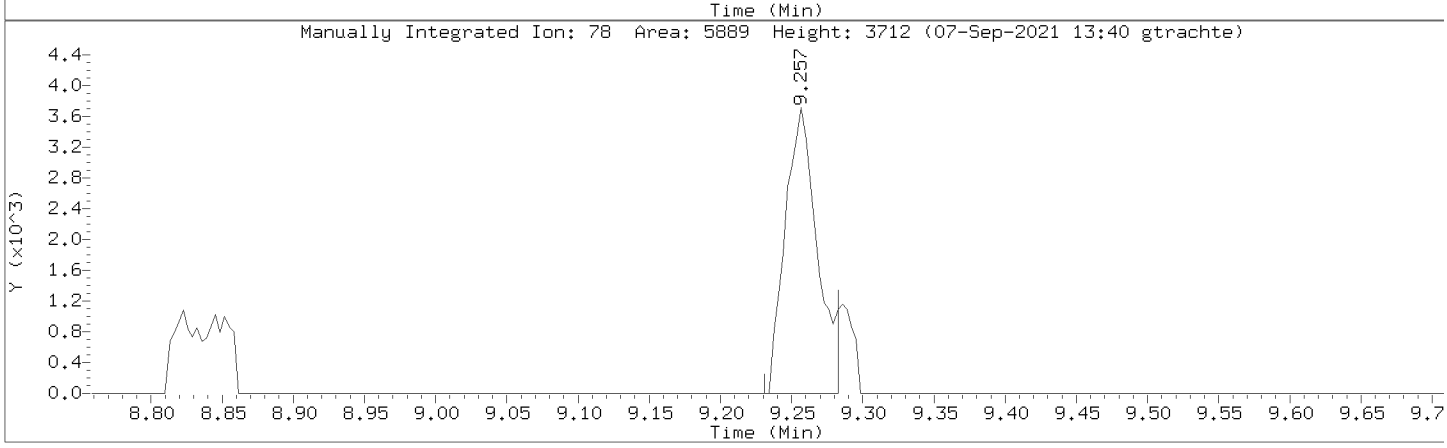
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25006.D
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: Styrene
CAS Number: 100-42-5

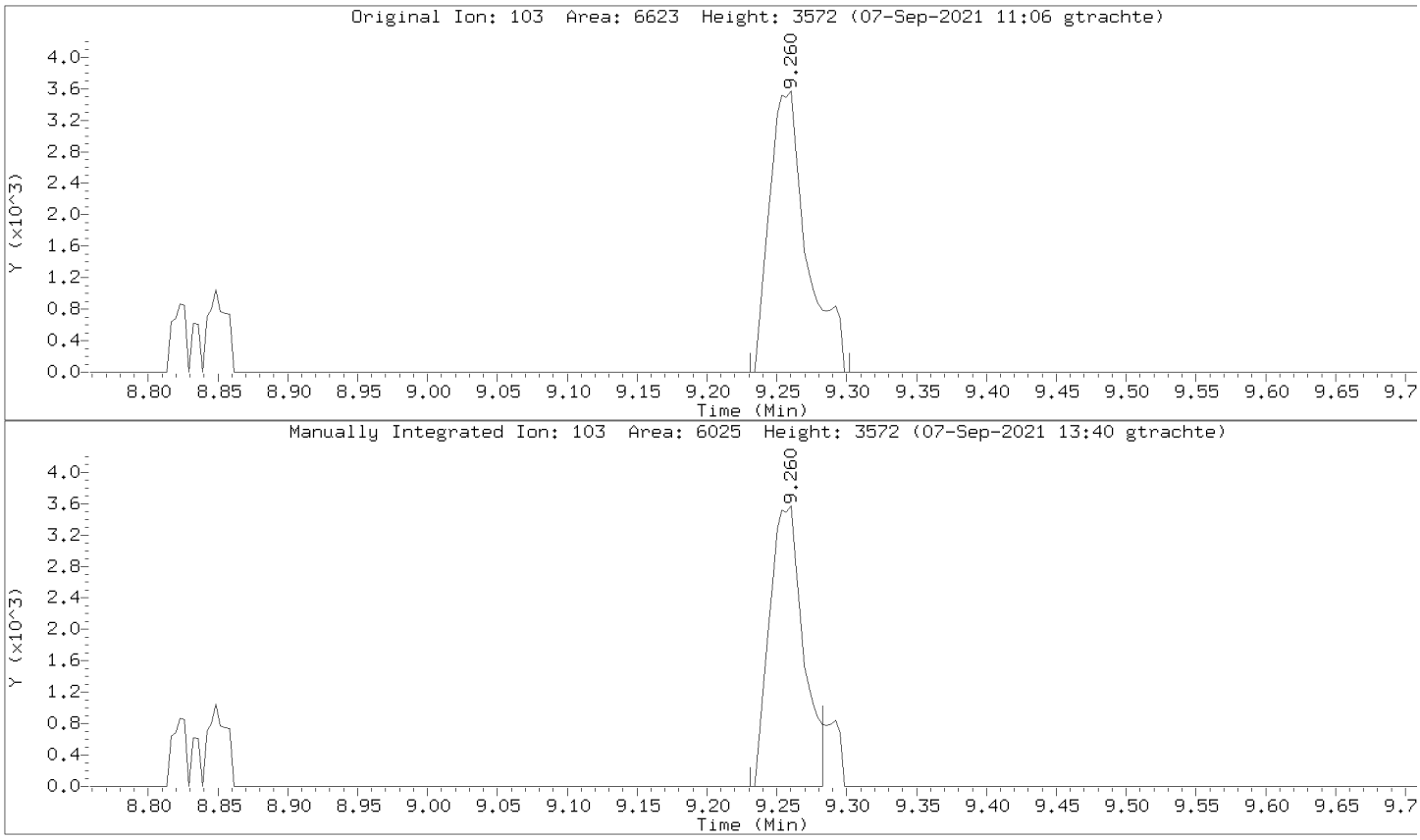


Data File: \\192.168.10.12\chem\10airH.i\090721.b/25006.D
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3



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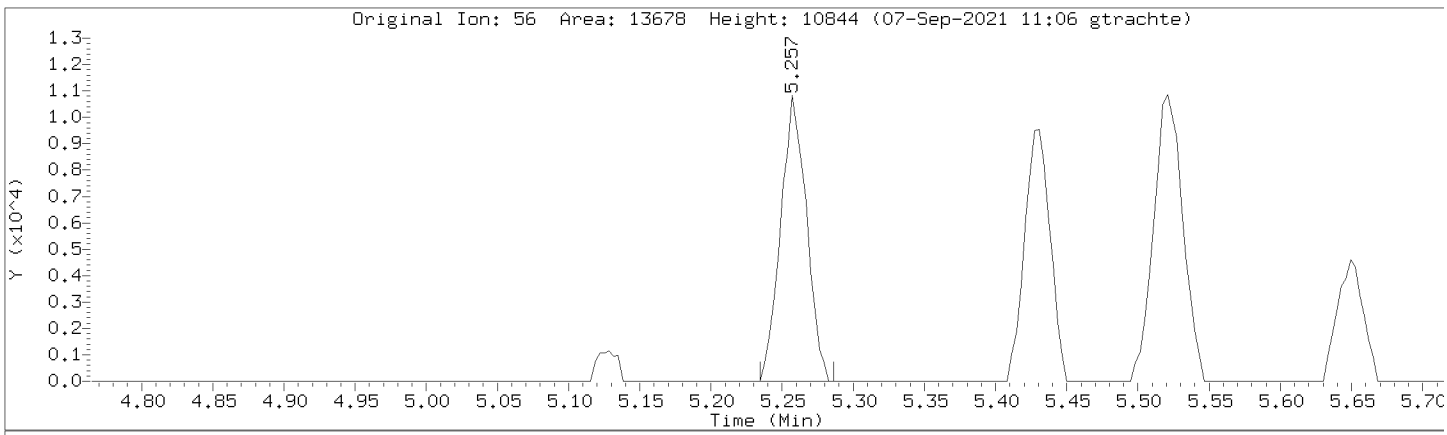
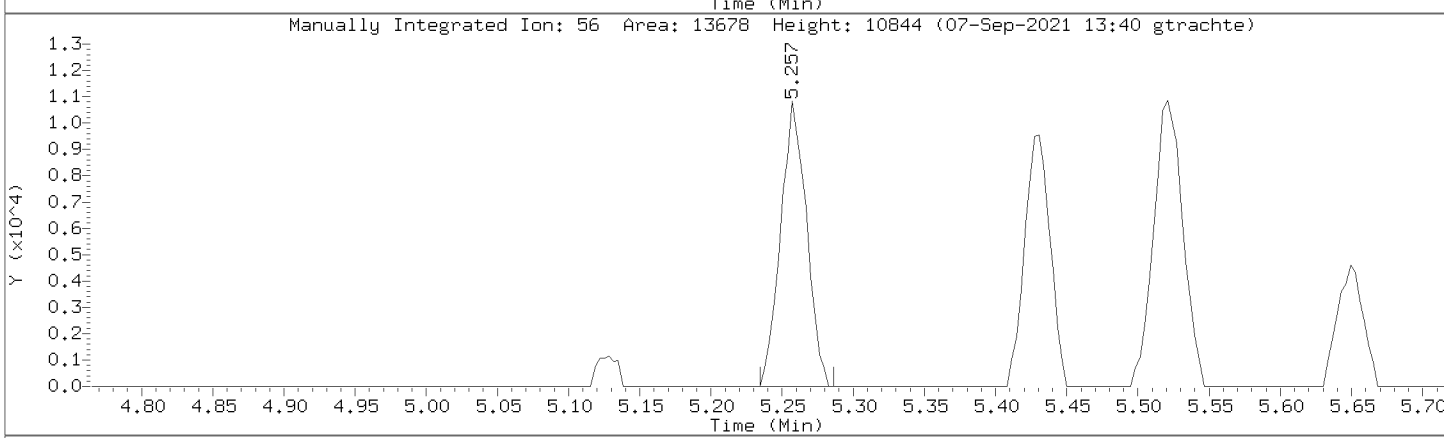
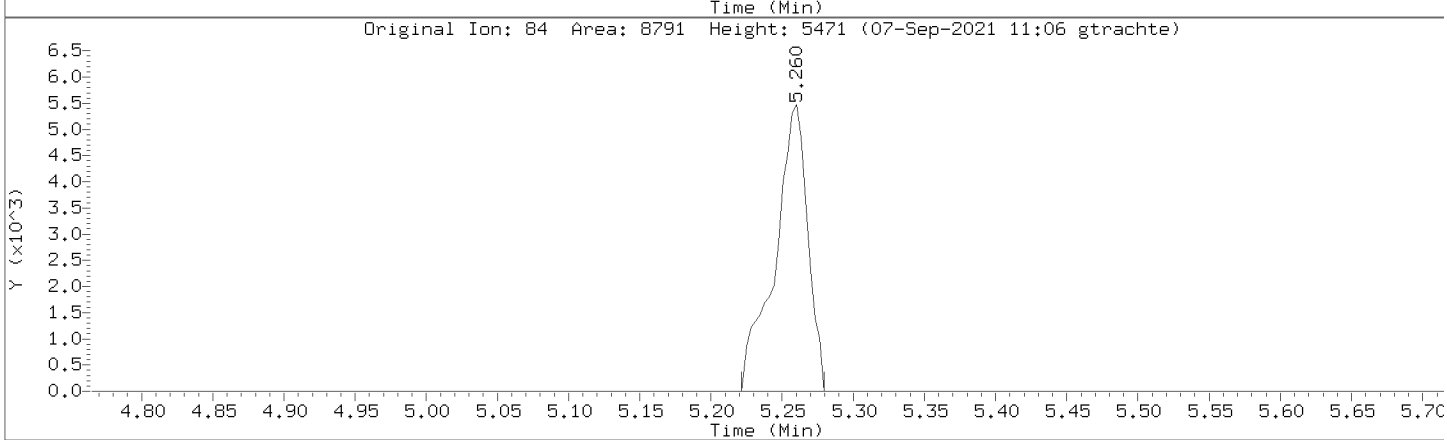
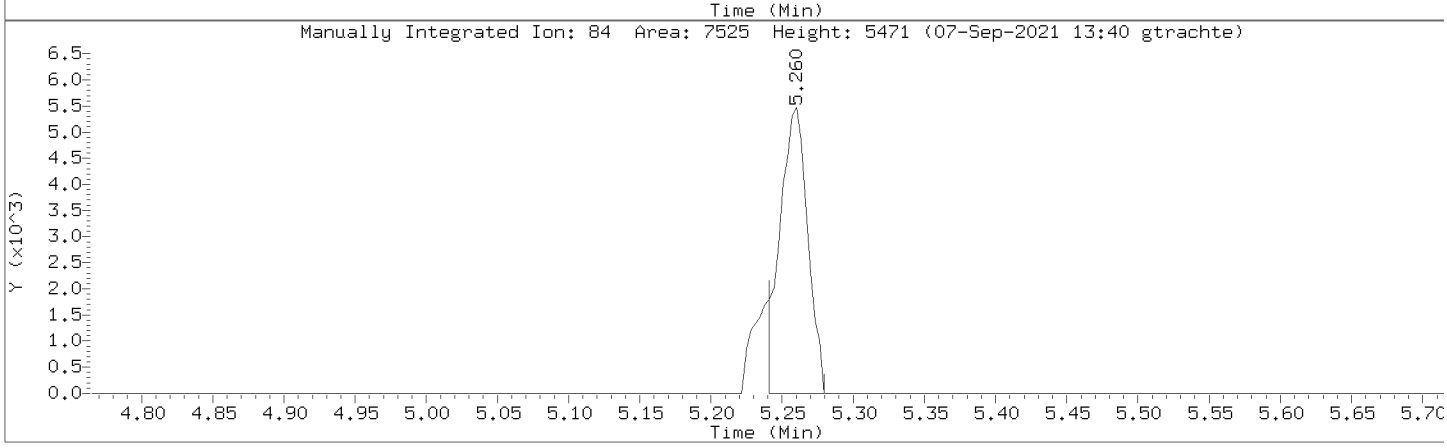
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: Cyclohexane
CAS Number: 110-82-7



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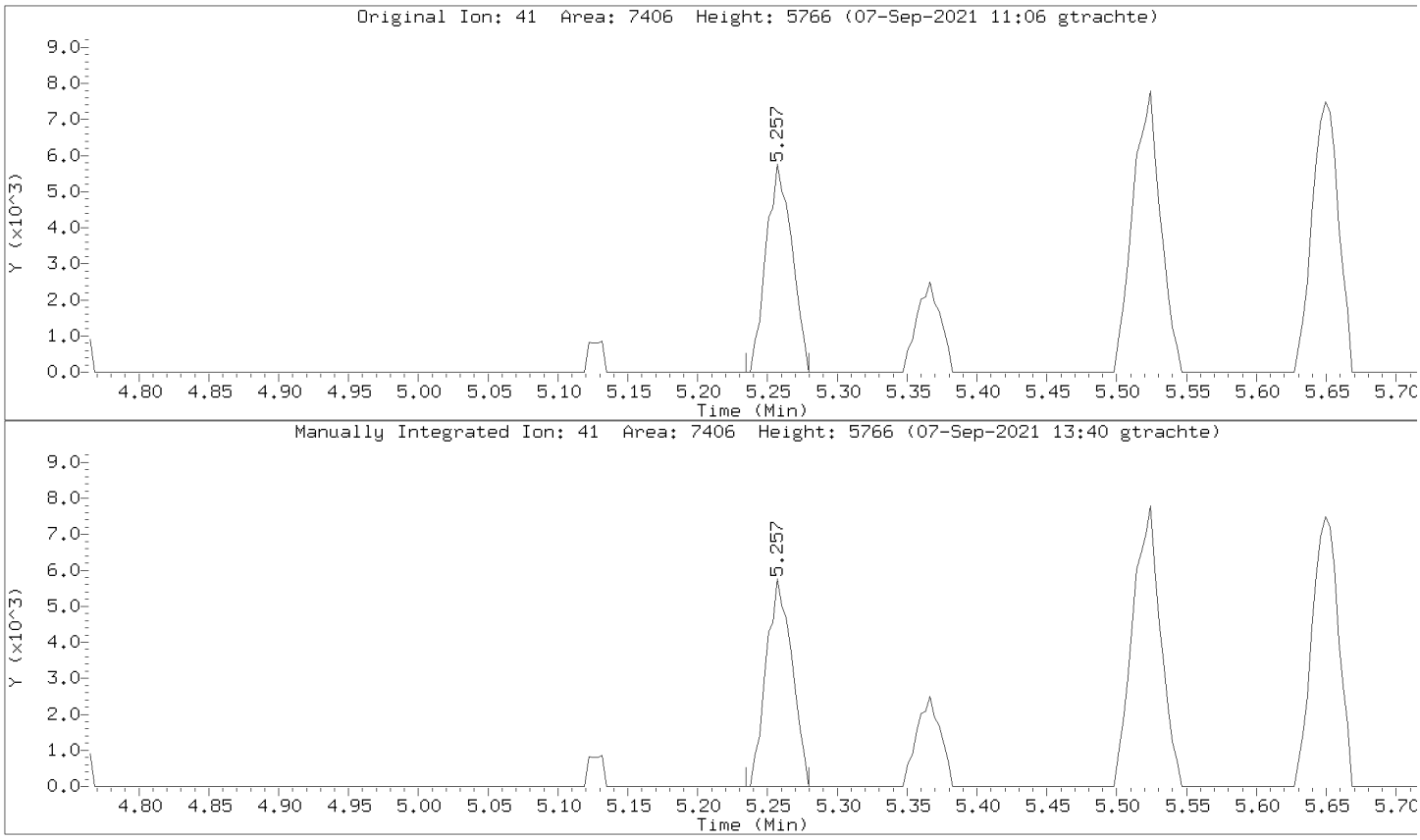
Lab Sample ID: CAL3



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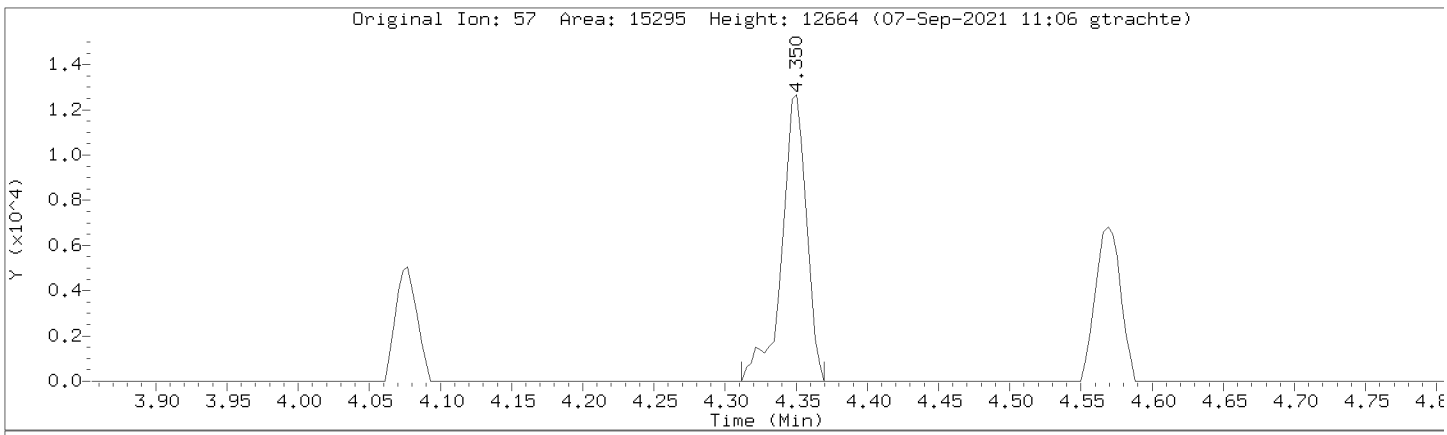
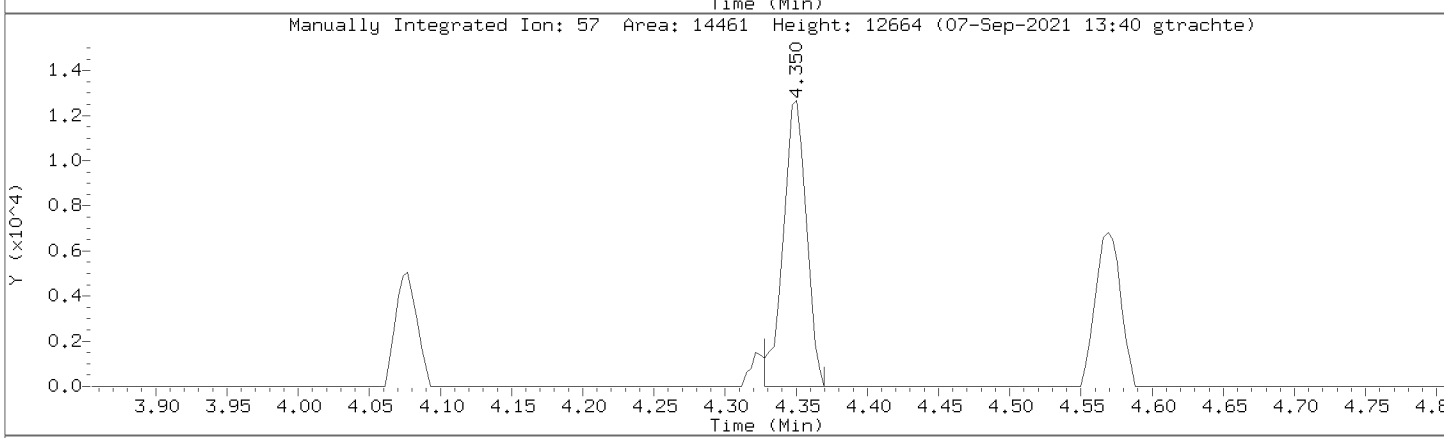
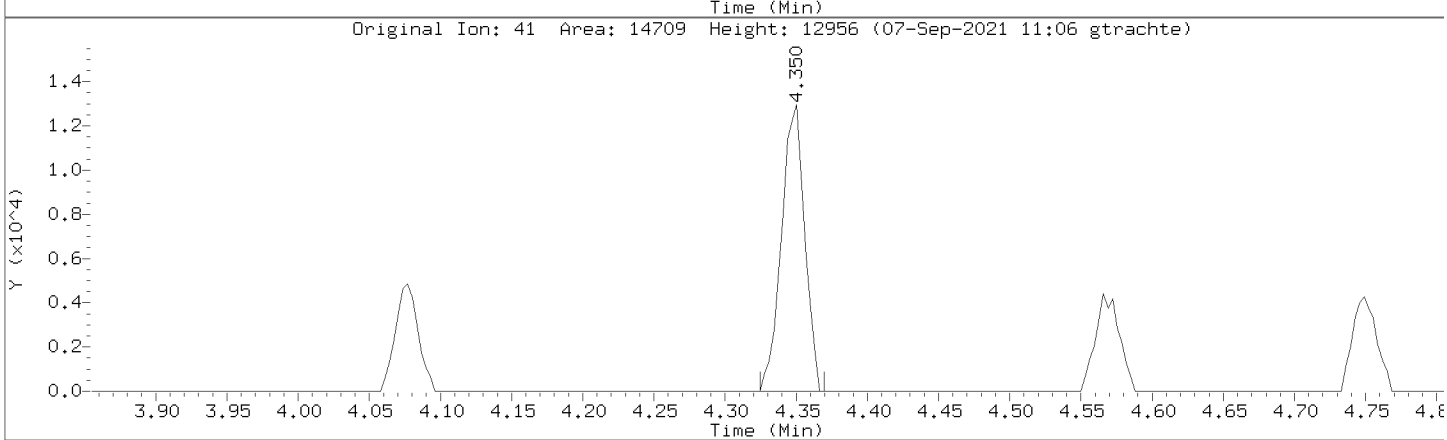
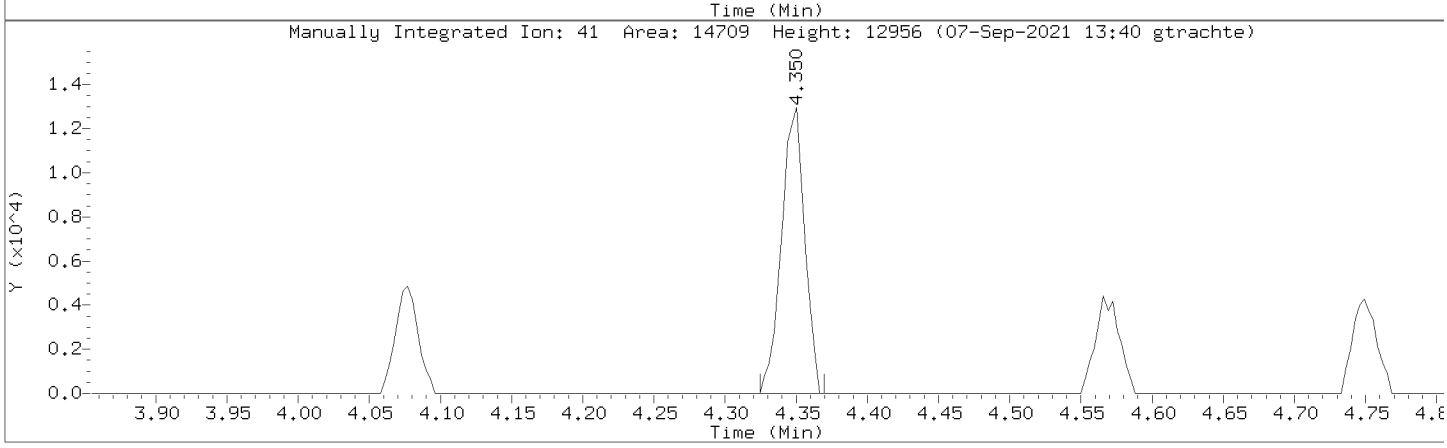
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: n-Hexane
CAS Number: 110-54-3



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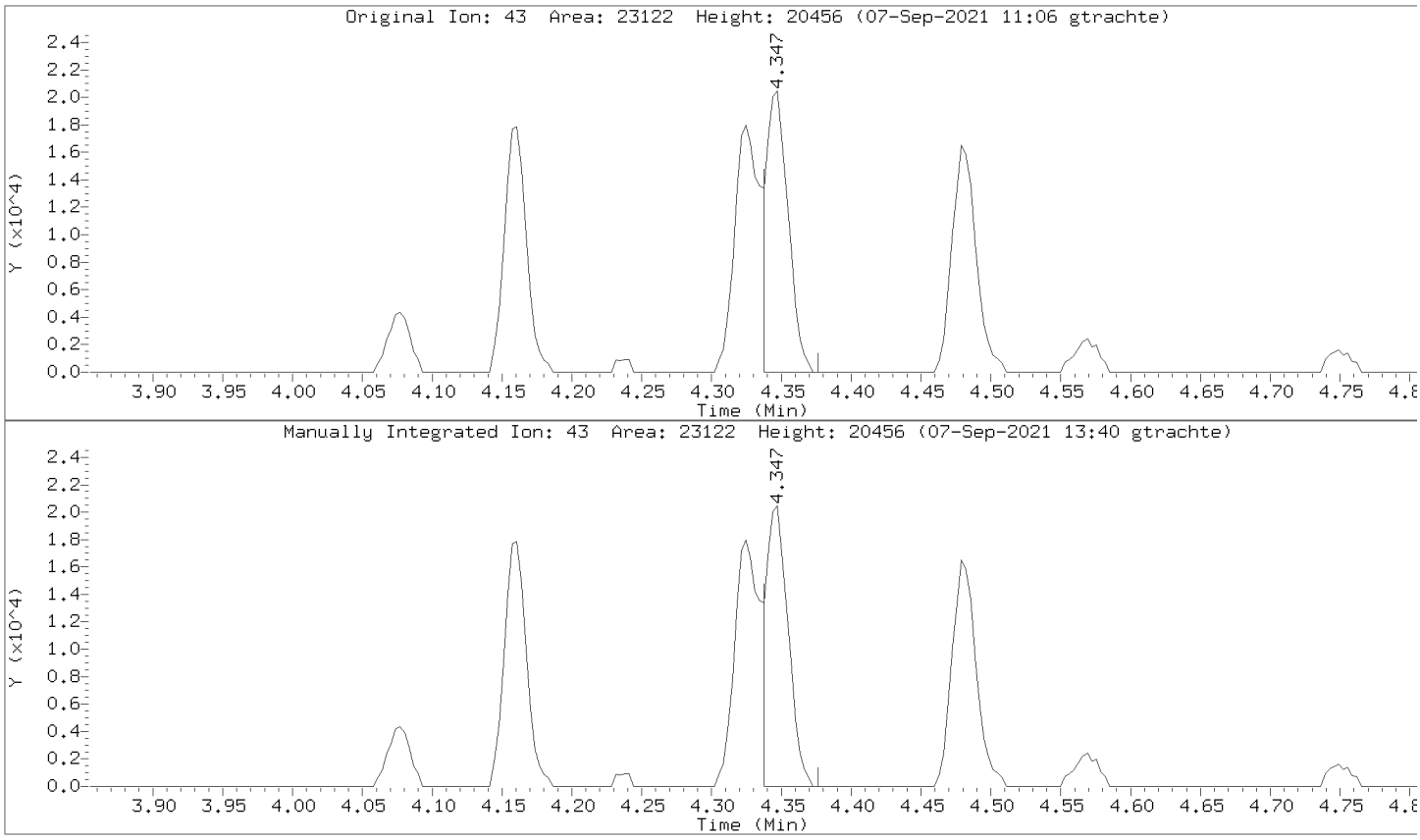
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3



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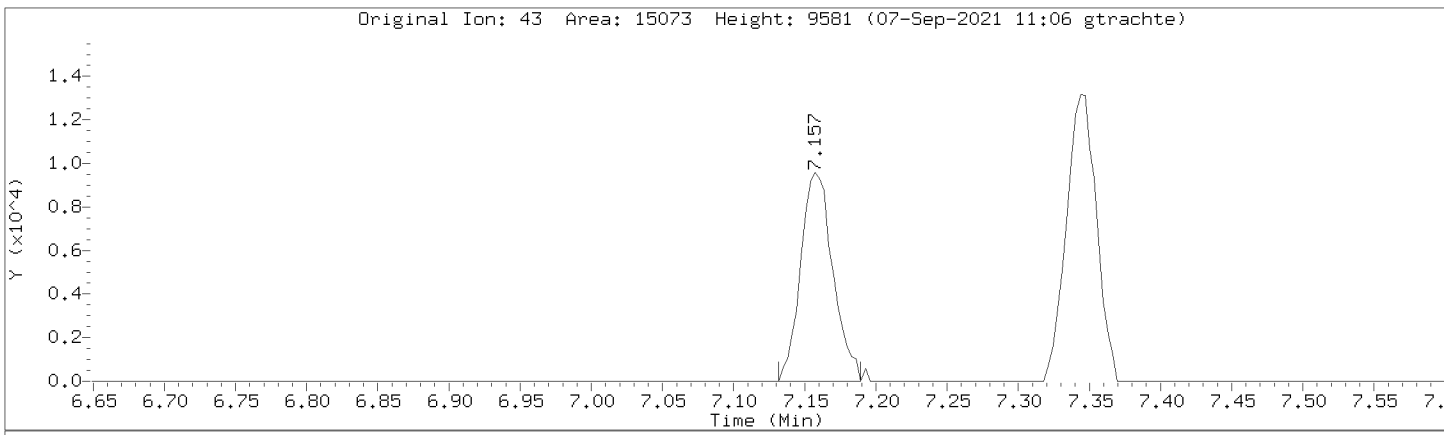
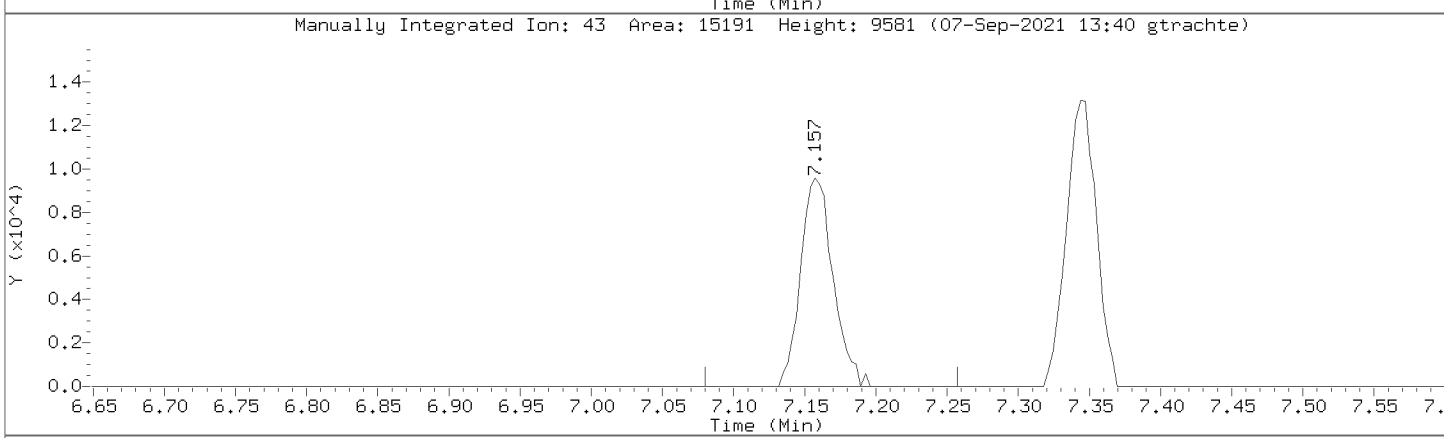
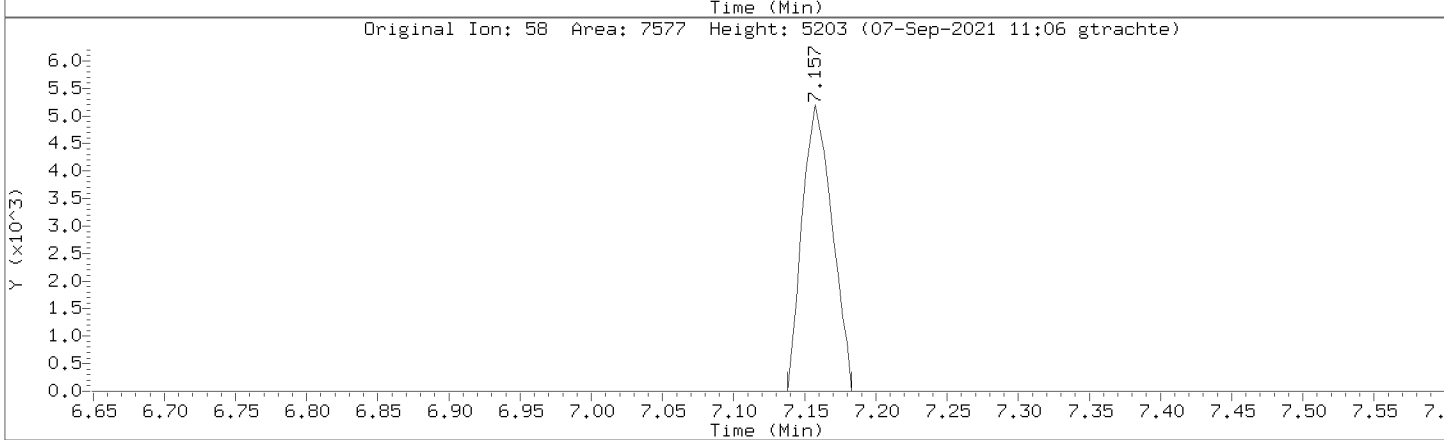
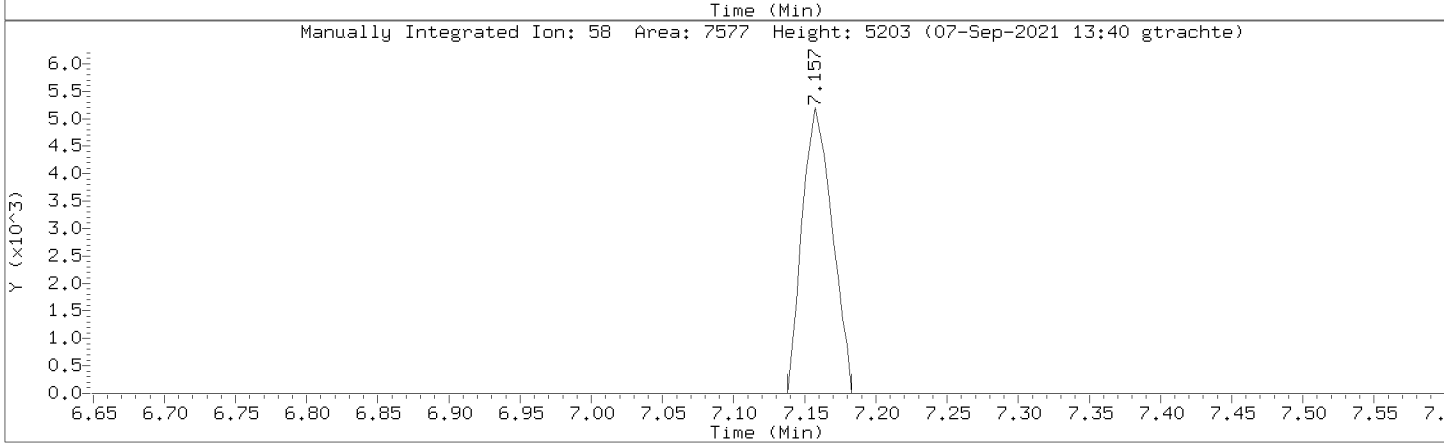
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: Methyl Butyl Ketone
CAS Number: 591-78-6



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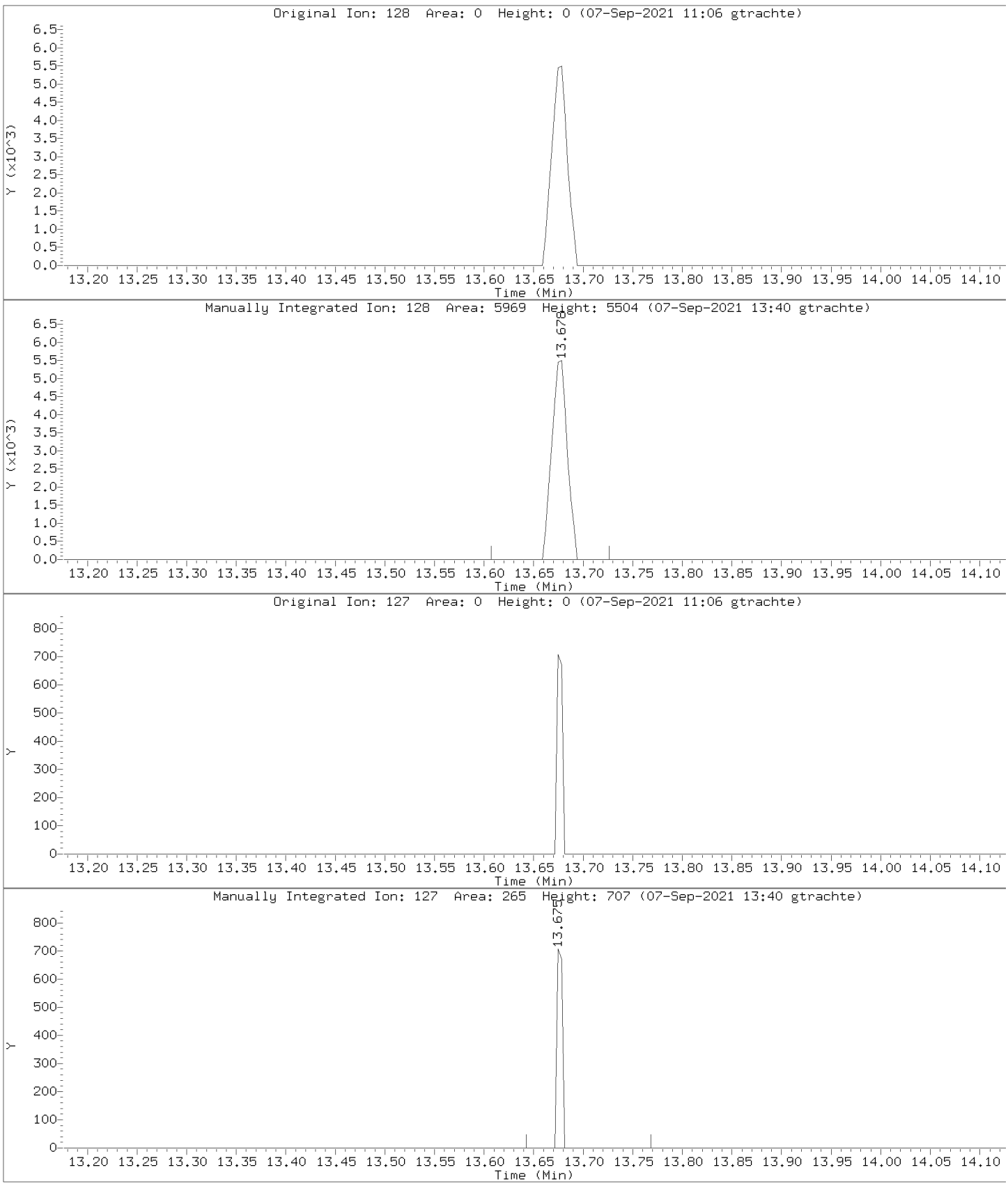
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: Naphthalene
CAS Number: 91-20-3



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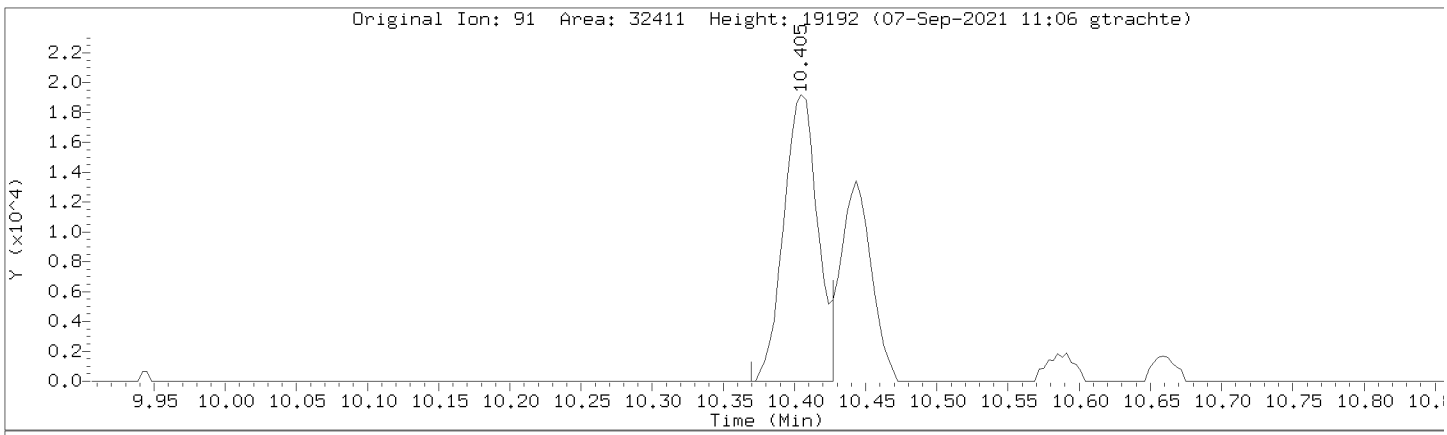
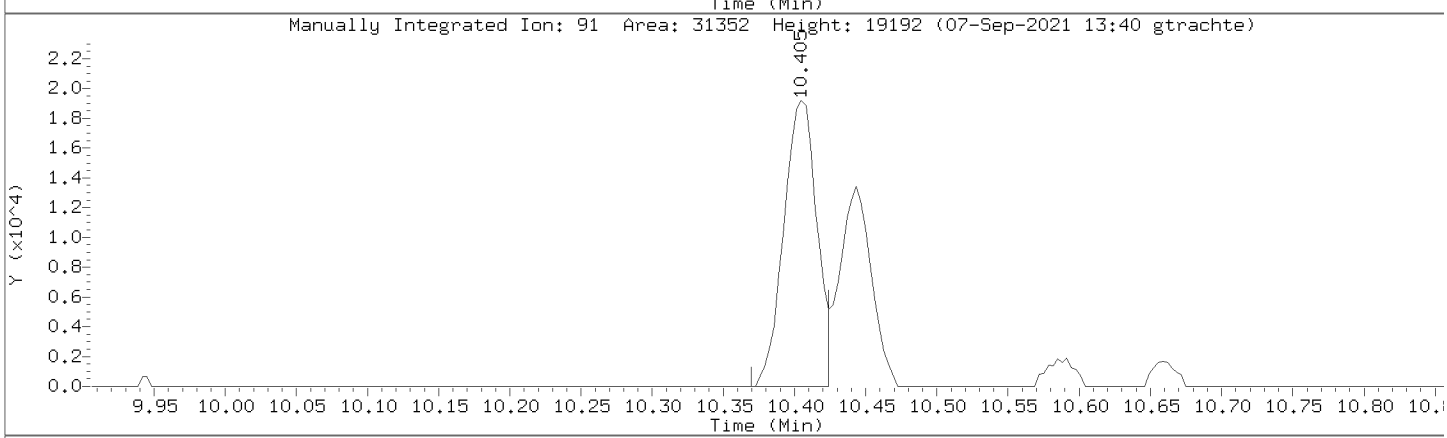
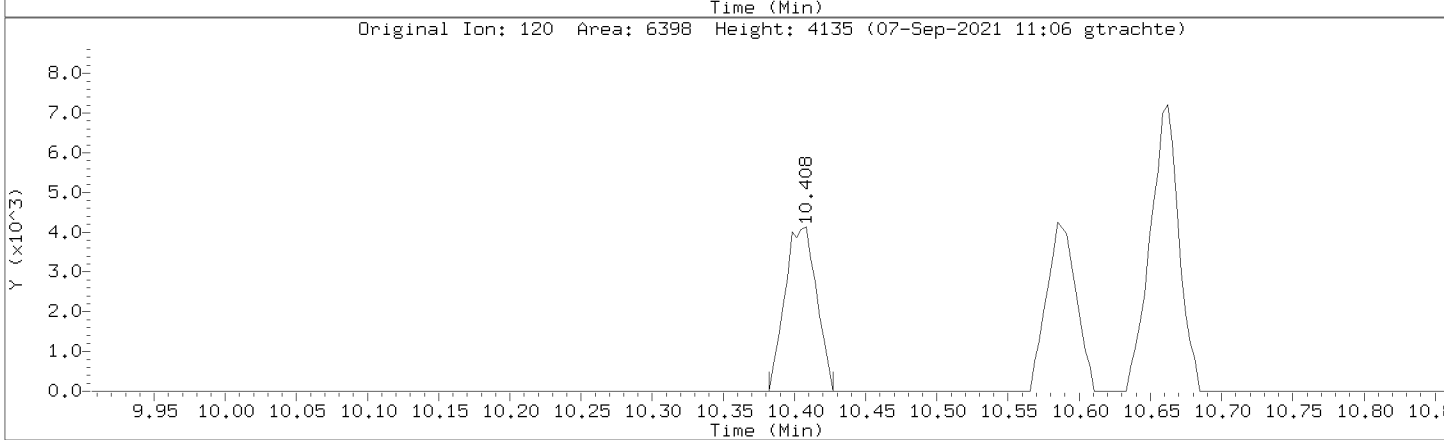
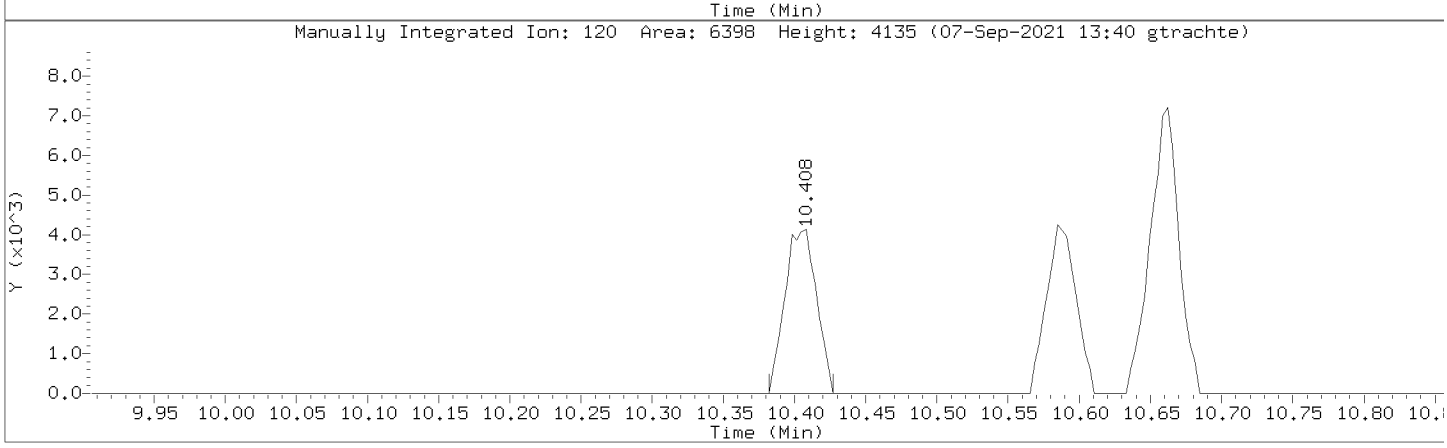
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: N-Propylbenzene
CAS Number: 103-65-1



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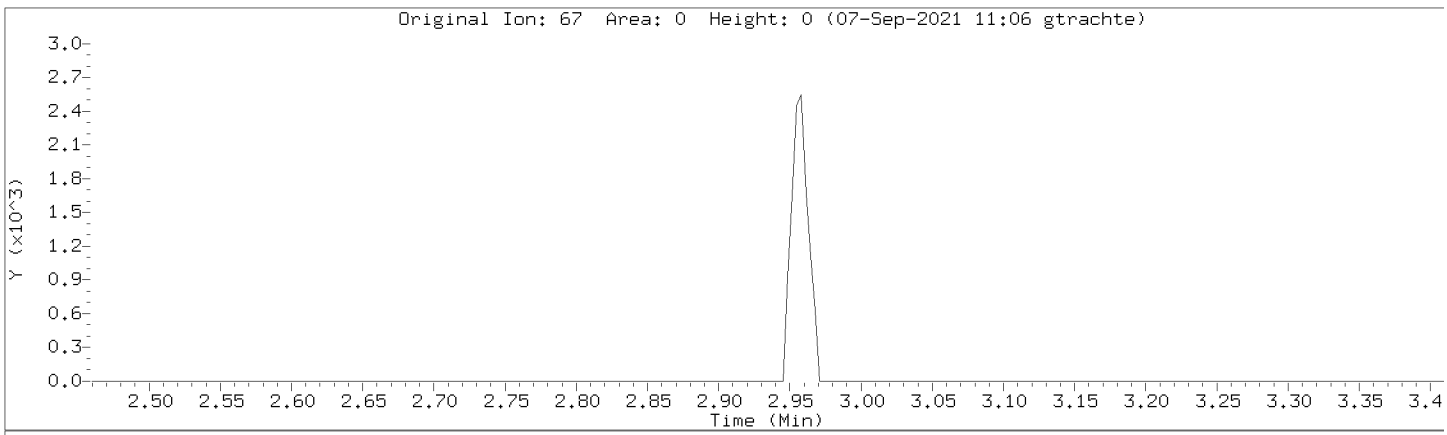
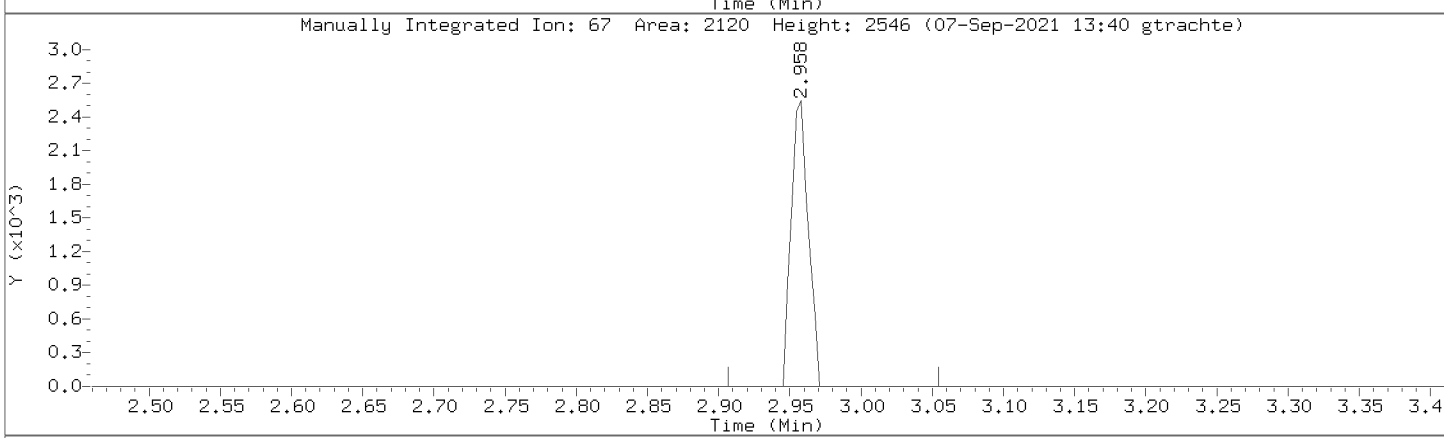
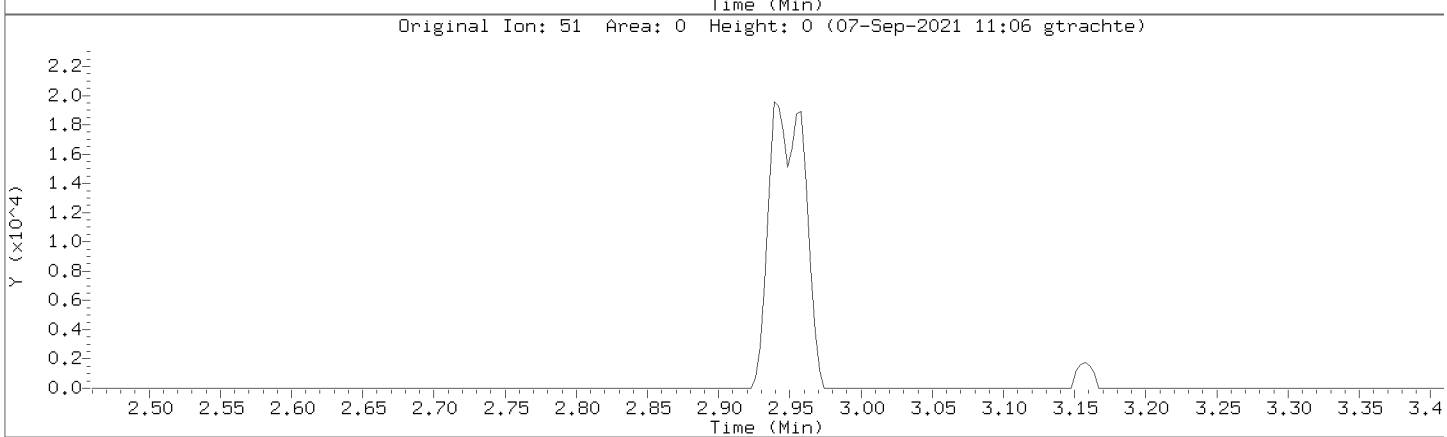
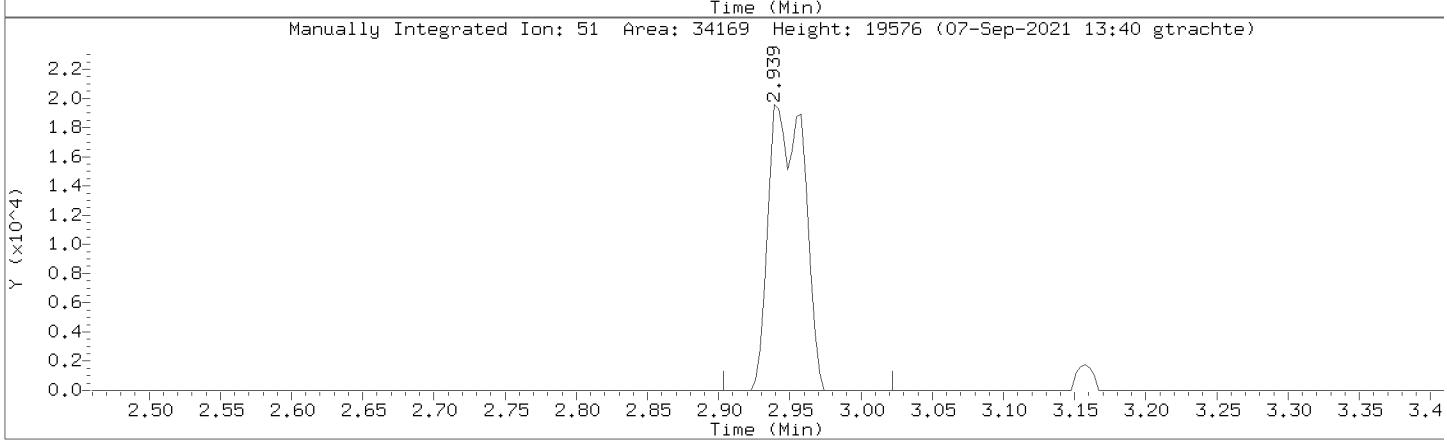
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3

Compound: Chlorodifluoromethane
CAS Number: 76-13-1

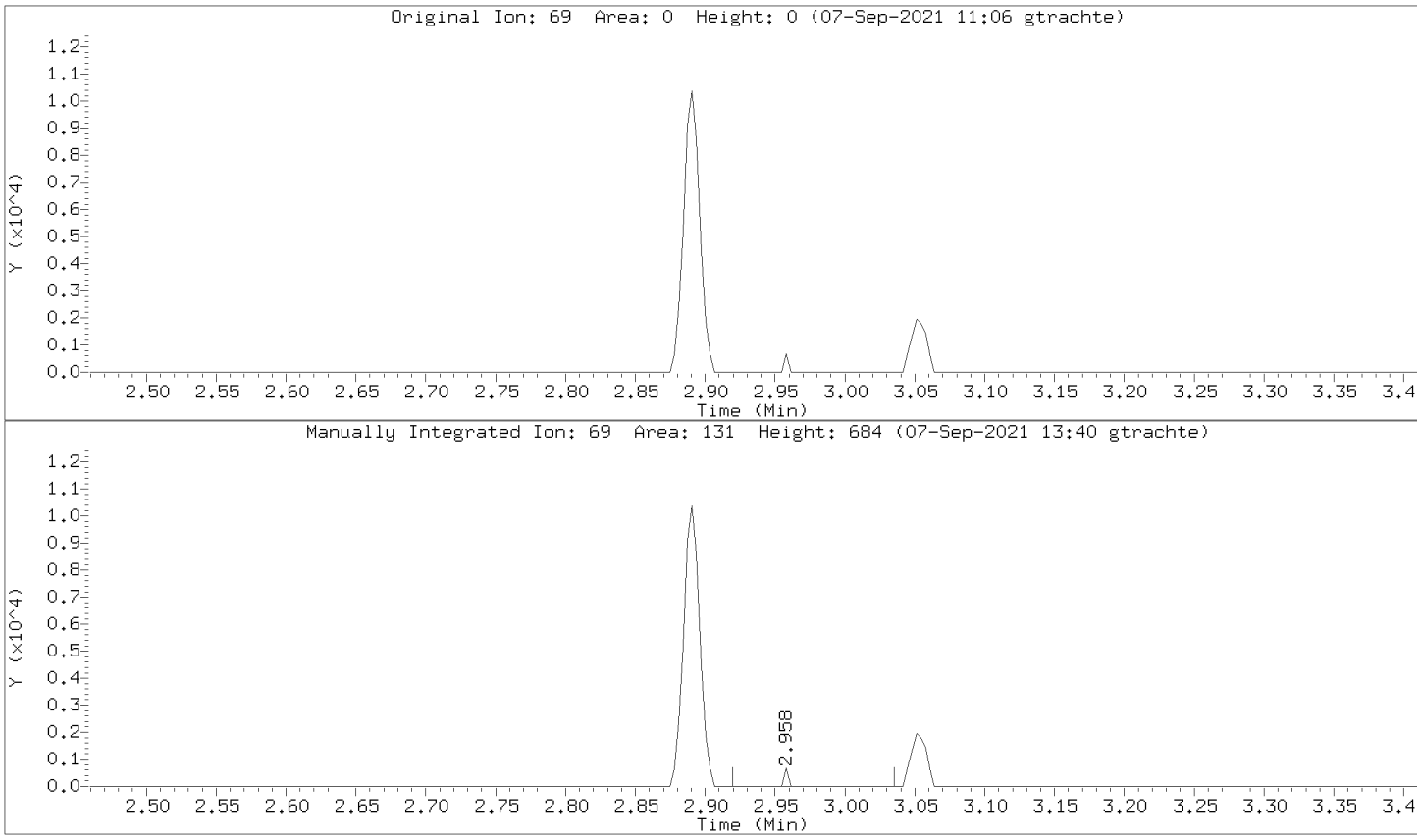


Data File: \\192.168.10.12\chem\10airH.i\090721.b/25006.D
Injection Date: 07-SEP-2021 09:17
Instrument: 10airH.i
Lab Sample ID: CAL3



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25007.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25007.D
Lab Smp Id: CAL4
Inj Date : 07-SEP-2021 09:43
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 07-Sep-2021 14:02 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.942 | 2.948 | (0.542) | 13446 | 0.71420 | 0.807 |
| 2 Chlorodifluoromethane | 67 | 2.958 | 2.961 | (0.545) | 3598 | 0.71470 | 0.680(Q) |
| 3 Propylene | 41 | 2.964 | 2.967 | (0.546) | 14723 | 0.71870 | 0.686 |
| 4 Dichlorodifluoromethane | 85 | 2.983 | 2.986 | (0.549) | 35742 | 0.72440 | 0.683 |
| 5 Dichlorotetrafluoroethane | 85 | 3.054 | 3.057 | (0.562) | 33673 | 0.66800 | 0.638 |
| 6 Chloromethane | 50 | 3.057 | 3.064 | (0.563) | 19261 | 0.71640 | 0.708 |
| 7 Vinyl chloride | 62 | 3.125 | 3.131 | (0.575) | 14373 | 0.71870 | 0.680 |
| 8 1,3-Butadiene | 54 | 3.157 | 3.163 | (0.581) | 10286 | 0.71600 | 0.689 |
| 9 Bromomethane | 94 | 3.273 | 3.279 | (0.603) | 10648 | 0.71730 | 0.669 |
| 10 Chloroethane | 64 | 3.318 | 3.324 | (0.611) | 6140 | 0.71690 | 0.712 |
| 11 Ethanol | 45 | 3.331 | 3.343 | (0.613) | 22577 | 4.30890 | 3.90 |
| 12 Vinyl Bromide | 106 | 3.421 | 3.427 | (0.630) | 9947 | 0.71470 | 0.688 |
| 13 Isopentane | 43 | 3.433 | 3.440 | (0.632) | 12416 | 0.73510 | 0.688 |
| 14 Freon 123 | 83 | 3.472 | 3.478 | (0.639) | 23841 | 0.71160 | 0.676 |
| 15 Trichlorofluoromethane | 101 | 3.495 | 3.501 | (0.644) | 32463 | 0.72400 | 0.697 |
| 16 Acrolein | 56 | 3.498 | 3.504 | (0.644) | 13420 | 2.03240 | 2.00 |
| 17 Acetone | 43 | 3.520 | 3.527 | (0.648) | 102078 | 3.53070 | 4.02 |
| 18 Isopropyl Alcohol | 45 | 3.546 | 3.559 | (0.653) | 113234 | 3.97160 | 3.82 |
| 19 1,1-Dichloroethene | 61 | 3.707 | 3.713 | (0.683) | 23520 | 0.72000 | 0.681 |
| 20 Acrylonitrile | 53 | 3.716 | 3.726 | (0.684) | 28119 | 1.98930 | 1.91 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.745 | 3.752 | (0.690) | 37111 | 0.70760 | 0.684 |
| 22 Methyl Acetate | 43 | 3.739 | 3.749 | (0.689) | 34946 | 0.71640 | 0.656 |
| 23 Freon 113 | 101 | 3.739 | 3.745 | (0.689) | 26361 | 0.71560 | 0.666 |
| 24 Allyl Chloride | 76 | 3.816 | 3.822 | (0.703) | 4971 | 0.70890 | 0.659(Q) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25007.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 3.816 | 3.826 | (0.703) | 110896 | 3.59200 | 3.57 |
| 26 Carbon Disulfide | 76 | 3.922 | 3.929 | (0.722) | 35017 | 0.72440 | 0.672 |
| 27 Methyl Tert Butyl Ether | 73 | 4.073 | 4.076 | (0.750) | 32159 | 0.72000 | 0.660 |
| 28 trans-1,2-dichloroethene | 96 | 4.083 | 4.093 | (0.752) | 12590 | 0.72090 | 0.666 |
| 29 Vinyl Acetate | 43 | 4.157 | 4.166 | (0.766) | 35387 | 0.86360 | 0.798 |
| 30 1,1-Dichloroethane | 63 | 4.205 | 4.215 | (0.774) | 28305 | 0.71200 | 0.664 |
| 31 Methyl Ethyl Ketone | 72 | 4.321 | 4.327 | (0.796) | 6595 | 0.71780 | 0.780 |
| 32 Di-isopropyl Ether | 45 | 4.343 | 4.347 | (0.800) | 57576 | 0.70490 | 0.696 |
| 33 n-Hexane | 57 | 4.350 | 4.356 | (0.801) | 26822 | 0.70760 | 0.663(Q) |
| 34 Ethyl Acetate | 43 | 4.478 | 4.482 | (0.825) | 38507 | 0.70800 | 0.690(Q) |
| 35 cis-1,2-Dichloroethene | 96 | 4.491 | 4.504 | (0.827) | 12695 | 0.71820 | 0.655(Q) |
| 36 Ethyl Tert-Butyl Ether | 59 | 4.568 | 4.572 | (0.841) | 49292 | 0.71690 | 0.664 |
| 37 Chloroform | 83 | 4.671 | 4.684 | (0.860) | 27932 | 0.70400 | 0.661 |
| 38 Tetrahydrofuran | 42 | 4.745 | 4.745 | (0.874) | 17834 | 0.71290 | 0.680 |
| 39 1,1,1-Trichloroethane | 97 | 4.980 | 4.993 | (0.917) | 26502 | 0.71330 | 0.650 |
| 40 1,2-Dichloroethane | 62 | 5.060 | 5.073 | (0.932) | 21372 | 0.72000 | 0.667 |
| 41 Benzene | 78 | 5.215 | 5.228 | (0.960) | 36058 | 0.71510 | 0.675 |
| 42 Carbon tetrachloride | 117 | 5.231 | 5.244 | (0.963) | 20618 | 0.72310 | 0.589 |
| 43 Cyclohexane | 56 | 5.257 | 5.266 | (0.968) | 25822 | 0.71290 | 0.655(M) |
| 44 Tert Amyl Methyl Ether | 73 | 5.363 | 5.363 | (0.988) | 31406 | 0.71690 | 0.643 |
| * 45 1,4-Difluorobenzene | 114 | 5.430 | 5.440 | (1.000) | 452852 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 5.520 | 5.530 | (1.017) | 81859 | 0.71600 | 0.675 |
| 47 Heptane | 43 | 5.649 | 5.658 | (1.040) | 31286 | 0.71420 | 0.689 |
| 48 Trichloroethene | 130 | 5.761 | 5.768 | (1.061) | 16084 | 0.71330 | 0.657 |
| 49 Methyl methacrylate | 69 | 5.800 | 5.806 | (1.068) | 13613 | 0.71510 | 0.683 |
| 50 1,2-Dichloropropane | 63 | 5.803 | 5.813 | (1.069) | 17984 | 0.71820 | 0.685 |
| 51 1,4-Dioxane | 88 | 5.861 | 5.858 | (1.079) | 15632 | 1.78760 | 1.33 |
| 52 Bromodichloromethane | 83 | 5.961 | 5.970 | (1.098) | 26428 | 0.71600 | 0.637 |
| 53 Methylcyclohexane | 98 | 6.228 | 6.234 | (1.147) | 8728 | 0.71690 | 0.673(Q) |
| 54 Methyl Isobutyl Ketone | 43 | 6.311 | 6.308 | (1.162) | 38188 | 0.71870 | 0.707 |
| 55 cis-1,3-Dichloropropene | 75 | 6.385 | 6.395 | (1.176) | 19150 | 0.71380 | 0.638 |
| 56 trans-1,3-Dichloropropene | 75 | 6.829 | 6.835 | (1.258) | 16001 | 0.73020 | 0.661 |
| 57 Toluene | 91 | 6.925 | 6.932 | (1.275) | 39905 | 0.72360 | 0.664 |
| 58 1,1,2-Trichloroethane | 97 | 7.051 | 7.060 | (1.298) | 14516 | 0.71640 | 0.670 |
| 59 Methyl Butyl Ketone | 43 | 7.157 | 7.150 | (0.851) | 32066 | 0.71640 | 0.698 |
| 60 n-Octane | 43 | 7.347 | 7.350 | (0.874) | 38472 | 0.71690 | 0.709 |
| 61 Dibromochloromethane | 129 | 7.584 | 7.591 | (0.902) | 24461 | 0.71730 | 0.631 |
| 62 Tetrachloroethene | 166 | 7.665 | 7.671 | (0.912) | 19028 | 0.70980 | 0.650 |
| 63 1,2-Dibromoethane | 107 | 7.787 | 7.793 | (0.926) | 21936 | 0.70400 | 0.650 |
| * 64 Chlorobenzene - d5 | 117 | 8.408 | 8.411 | (1.000) | 371240 | 10.0000 | |
| 65 Chlorobenzene | 112 | 8.449 | 8.456 | (1.005) | 30719 | 0.71470 | 0.646 |
| 66 Ethyl Benzene | 91 | 8.668 | 8.674 | (1.031) | 48616 | 0.72270 | 0.667 |
| 67 m&p-Xylene | 91 | 8.851 | 8.858 | (1.053) | 75777 | 1.44090 | 1.35(M) |
| 68 n-Nonane | 43 | 9.189 | 9.192 | (1.093) | 36797 | 0.71780 | 0.716 |
| 69 Styrene | 104 | 9.253 | 9.260 | (1.101) | 24825 | 0.72310 | 0.652(M) |
| 70 o-Xylene | 91 | 9.289 | 9.295 | (1.105) | 40237 | 0.71820 | 0.682 |
| 71 Bromoform | 173 | 9.363 | 9.369 | (1.114) | 18211 | 0.72270 | 0.644 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 9.703 | 9.710 | (1.154) | 30437 | 0.72040 | 0.655 |
| 73 Isopropylbenzene | 105 | 9.835 | 9.842 | (1.170) | 49296 | 0.71160 | 0.641 |
| 74 N-Propylbenzene | 91 | 10.401 | 10.407 | (1.237) | 61358 | 0.72040 | 0.665 |
| 75 2-Chlorotoluene | 91 | 10.443 | 10.449 | (1.242) | 41113 | 0.72490 | 0.668(M) |
| 76 4-Ethyltoluene | 105 | 10.588 | 10.591 | (1.259) | 45669 | 0.71600 | 0.647 |
| 77 1,3,5-Trimethylbenzene | 105 | 10.658 | 10.665 | (1.268) | 41845 | 0.71640 | 0.667 |
| 78 n-Decane | 57 | 11.009 | 11.015 | (2.027) | 36810 | 0.72440 | 0.656 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25007.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.105 | 11.112 | (1.321) | 41426 | 0.72270 | 0.671 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.153 | 11.157 | (1.327) | 40033 | 0.72090 | 0.689 |
| 81 Sec- Butylbenzene | 105 | 11.414 | 11.417 | (1.358) | 59967 | 0.72360 | 0.694 |
| 82 1,3-Dichlorobenzene | 146 | 11.446 | 11.452 | (1.361) | 23338 | 0.72360 | 0.663 |
| 83 Benzyl Chloride | 91 | 11.520 | 11.526 | (1.370) | 16856 | 0.72930 | 0.630 |
| 84 1,4-Dichlorobenzene | 146 | 11.581 | 11.587 | (1.377) | 20111 | 0.72310 | 0.641 |
| 85 p-Isopropyltoluene | 119 | 11.616 | 11.623 | (1.382) | 52297 | 0.72620 | 0.657 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.636 | 11.639 | (1.384) | 44109 | 0.72310 | 0.706 |
| 87 1,2-Dichlorobenzene | 146 | 11.887 | 11.893 | (1.414) | 22946 | 0.72220 | 0.638 |
| 88 N-Butylbenzene | 91 | 12.070 | 12.073 | (1.436) | 38306 | 0.72090 | 0.624 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.587 | 12.591 | (1.497) | 9419 | 0.72710 | 0.565 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.536 | 13.539 | (1.610) | 12942 | 1.56580 | 1.23 |
| 91 Naphthalene | 128 | 13.674 | 13.675 | (1.626) | 15727 | 0.81640 | 0.583 |
| 92 Hexachlorobutadiene | 225 | 13.784 | 13.787 | (1.639) | 15624 | 0.81640 | 0.740 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25007.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25007.D
Calibration Time: 10:08
Lab Smp Id: CAL4
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 452852 | -1.52 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 371240 | -5.30 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.06 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

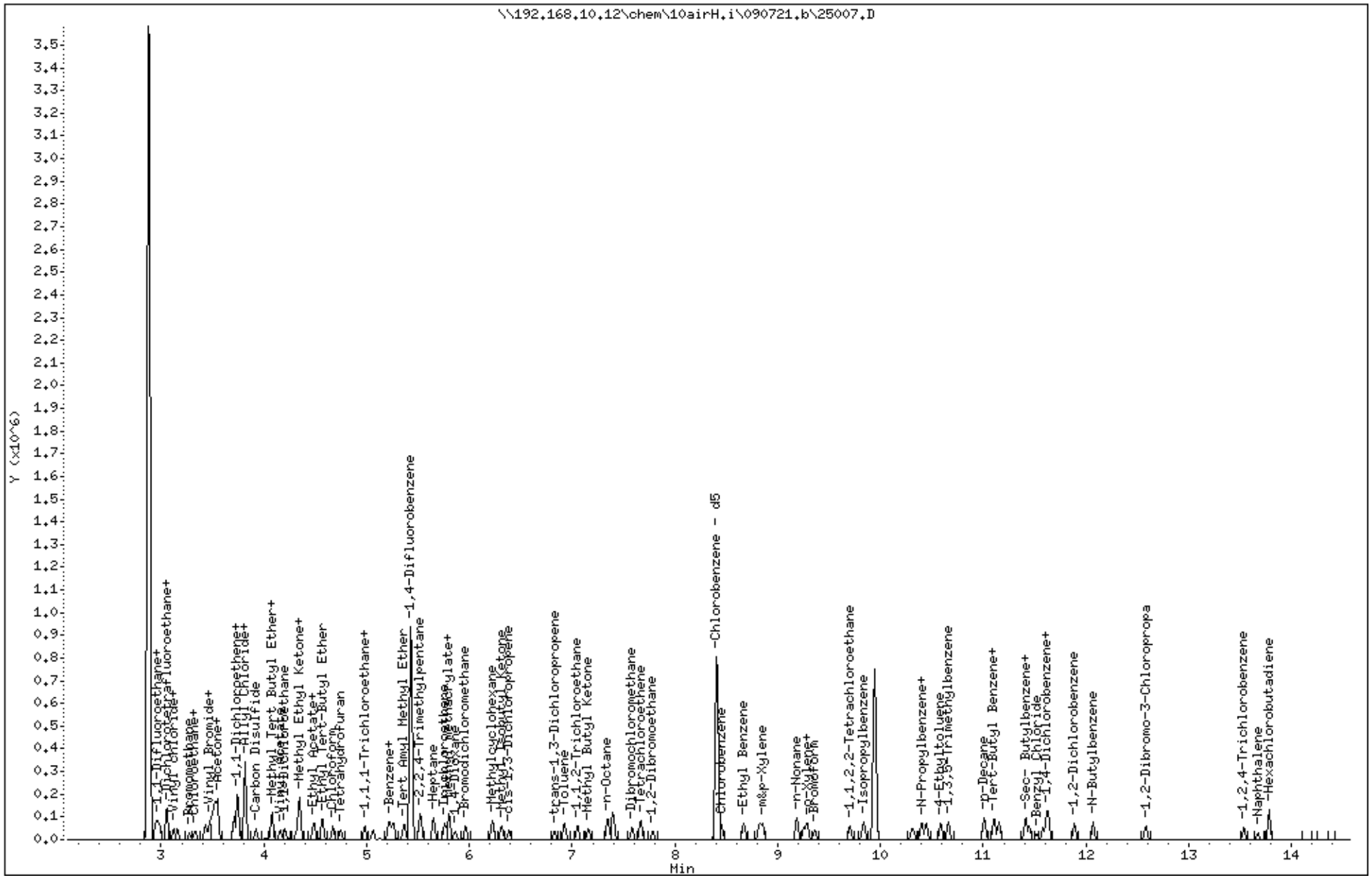
Data File: \\192.168.10.12\chem\10airH.i\090721.b\25007.D
Date : 07-SEP-2021 09:43
Client ID:
Sample Info:

Instrument: 10airH.i

Operator: GT

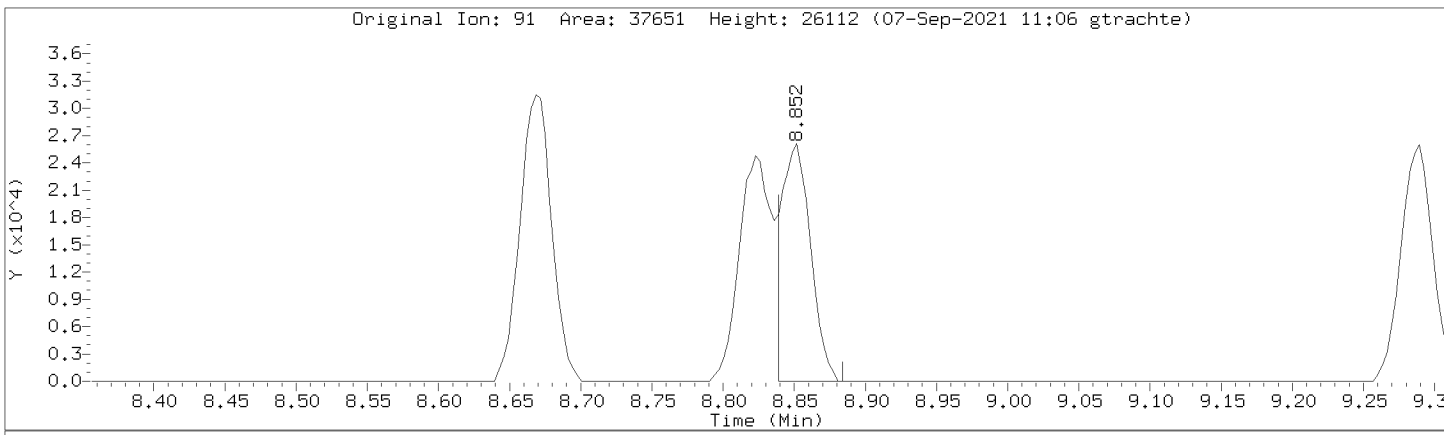
Column phase: ZB-5MSplus SN338857

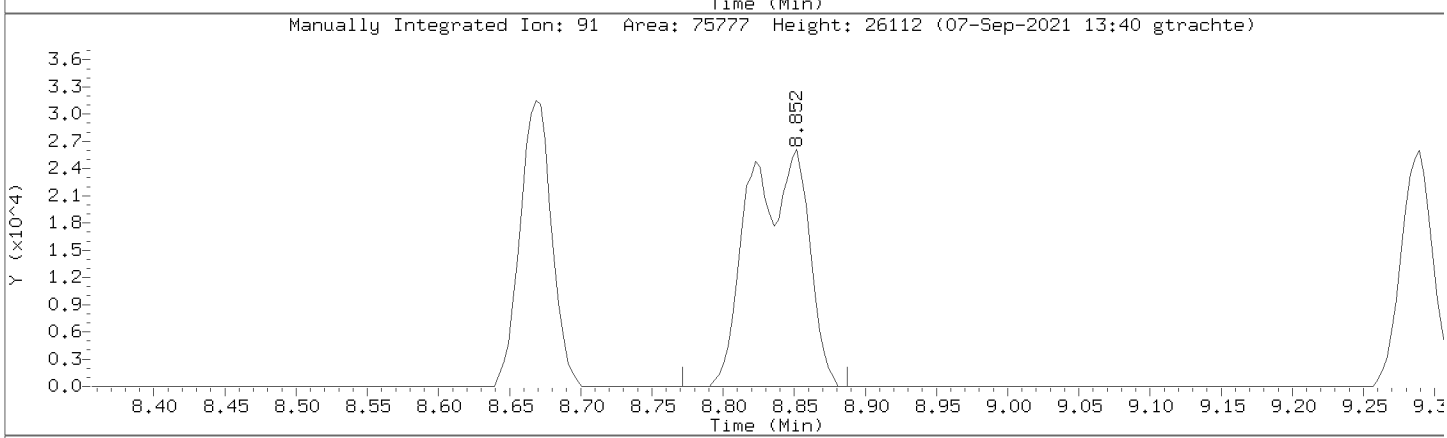
Column diameter: 0.32

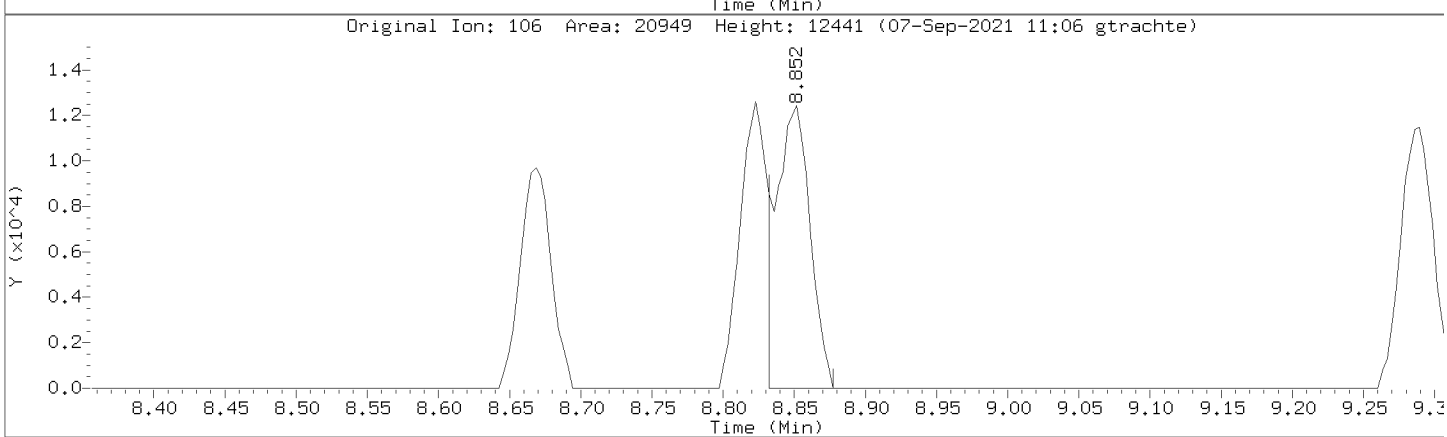


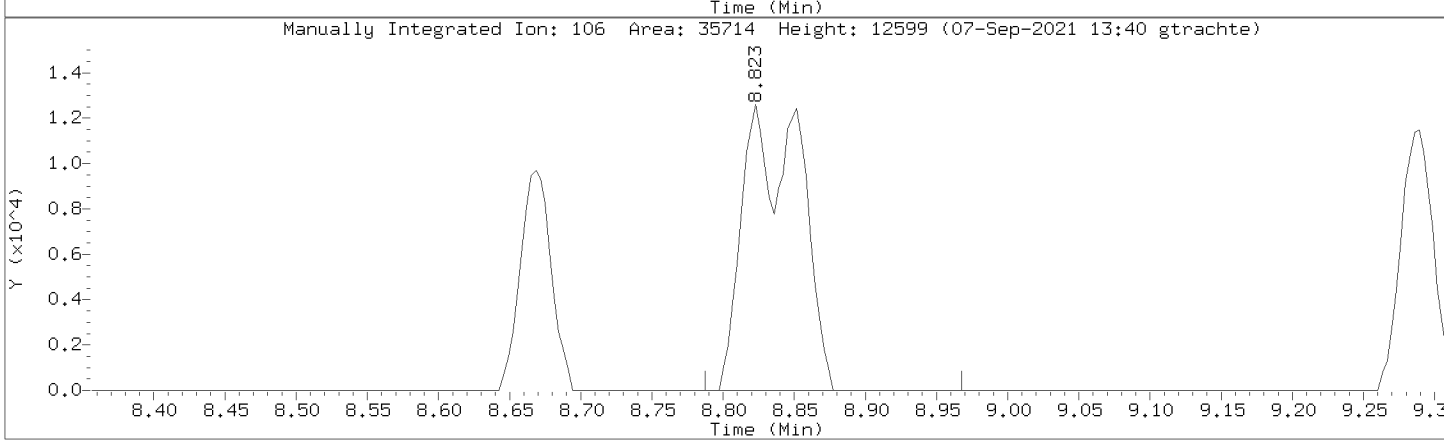
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25007.D
Injection Date: 07-SEP-2021 09:43
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: m&p-Xylene
CAS Number: 7816-60-0



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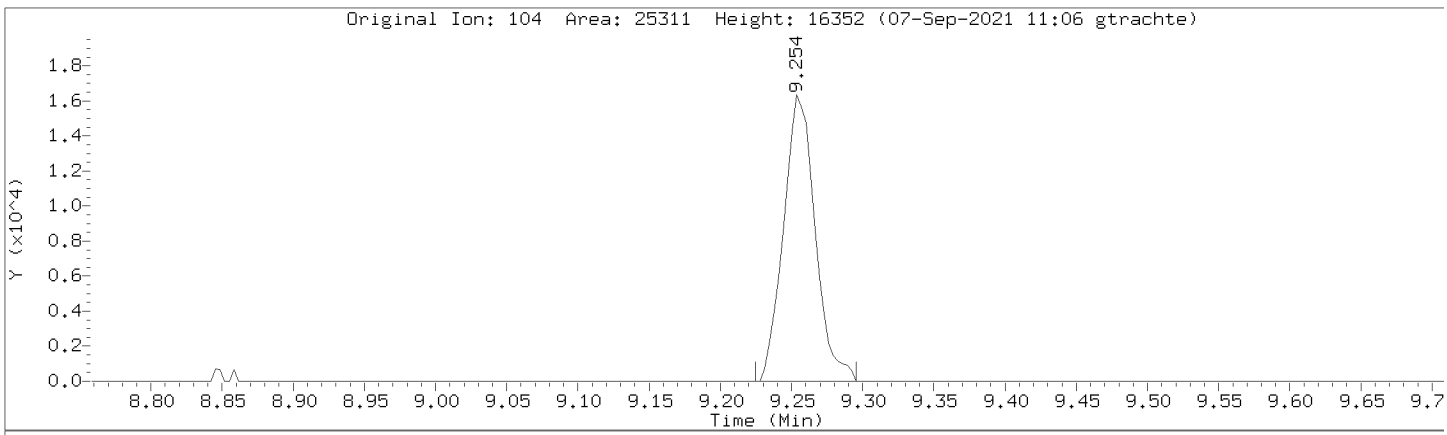
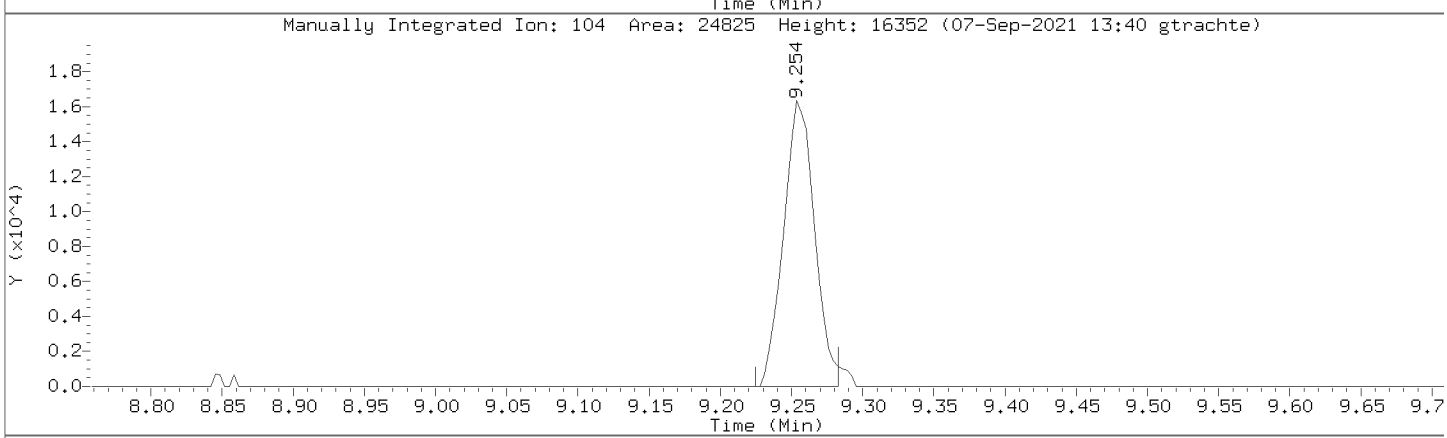
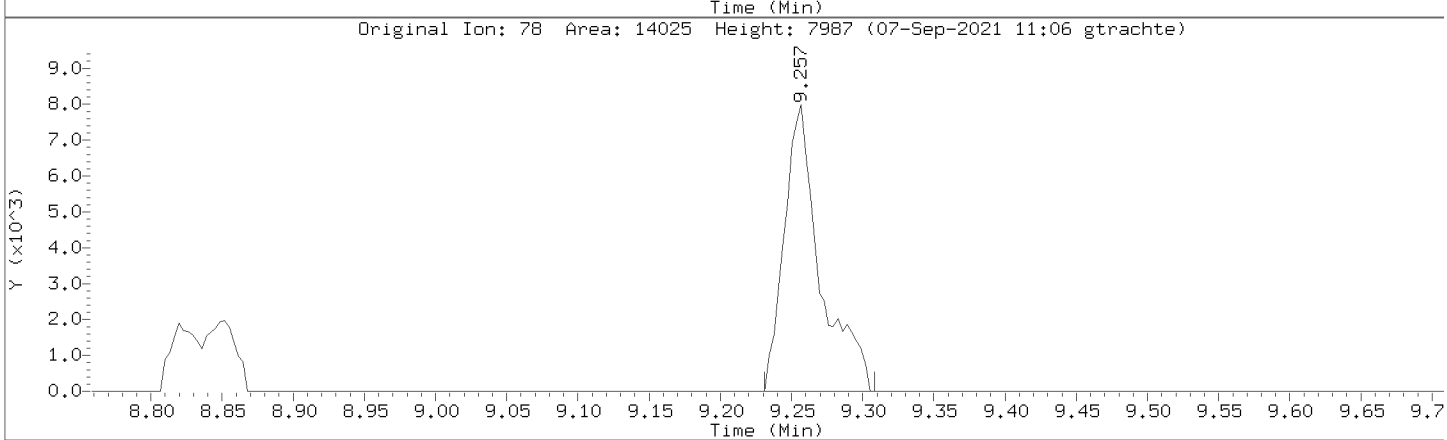
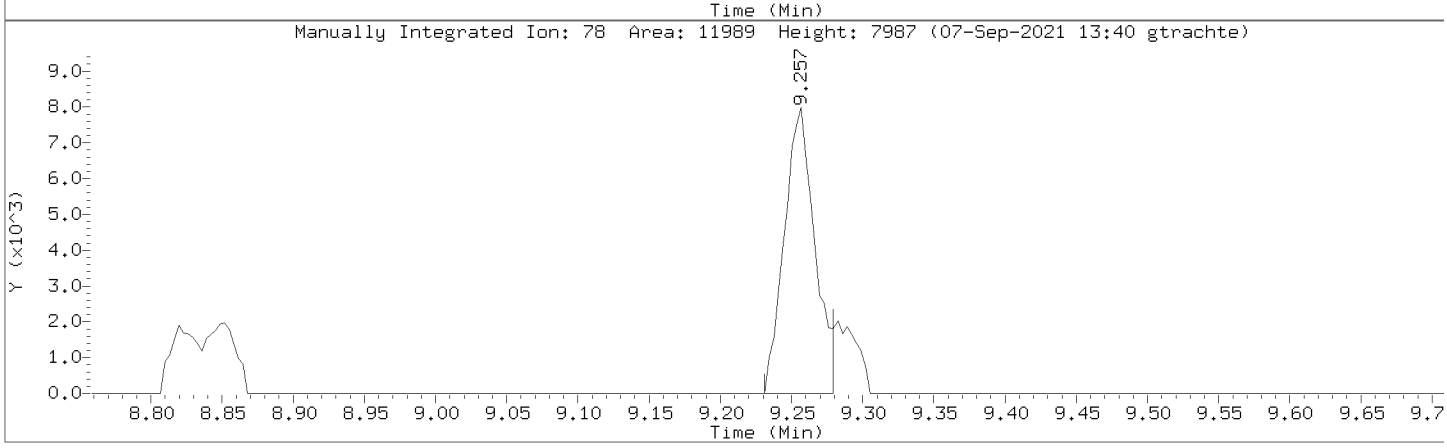
Injection Date: 07-SEP-2021 09:43
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: Styrene
CAS Number: 100-42-5

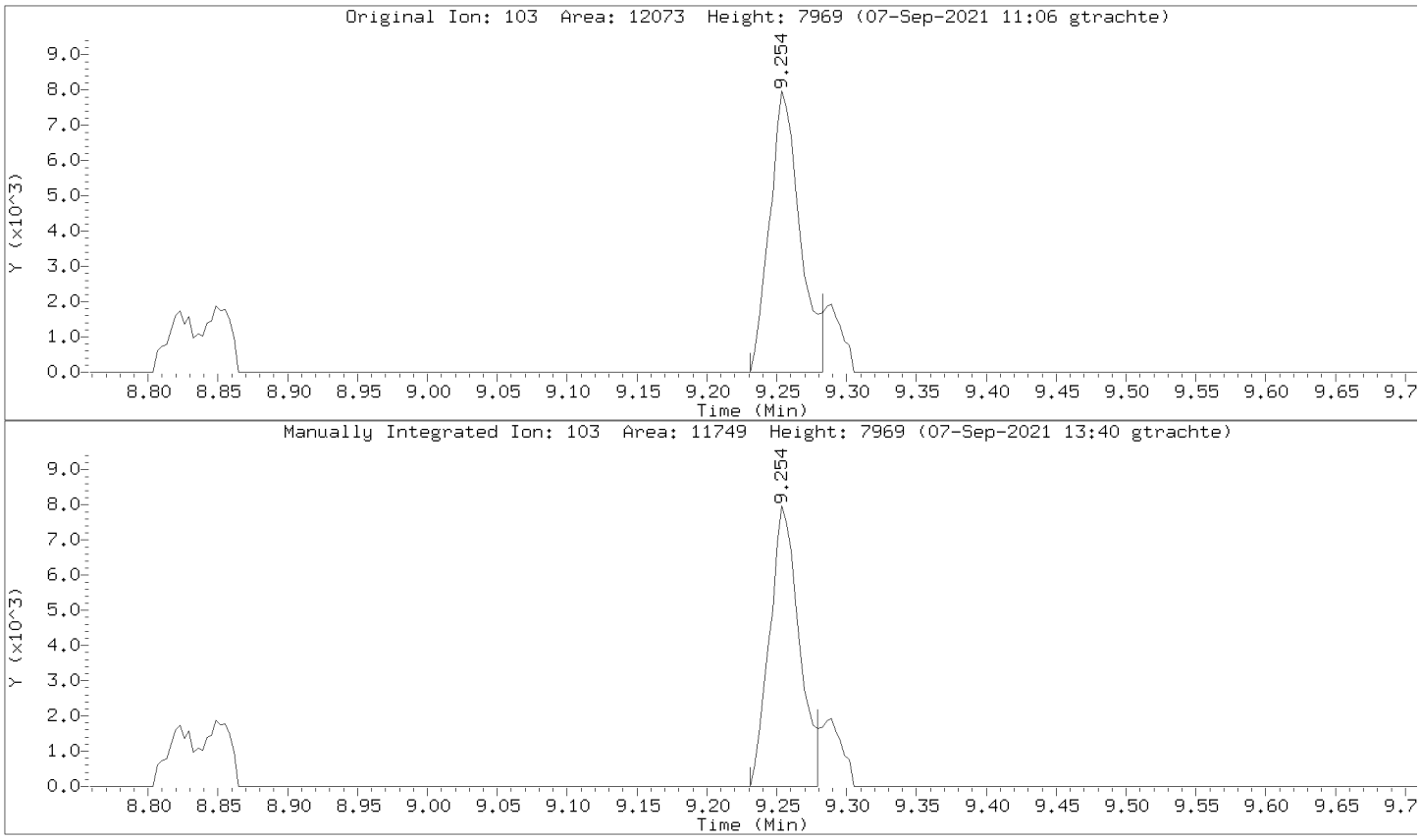


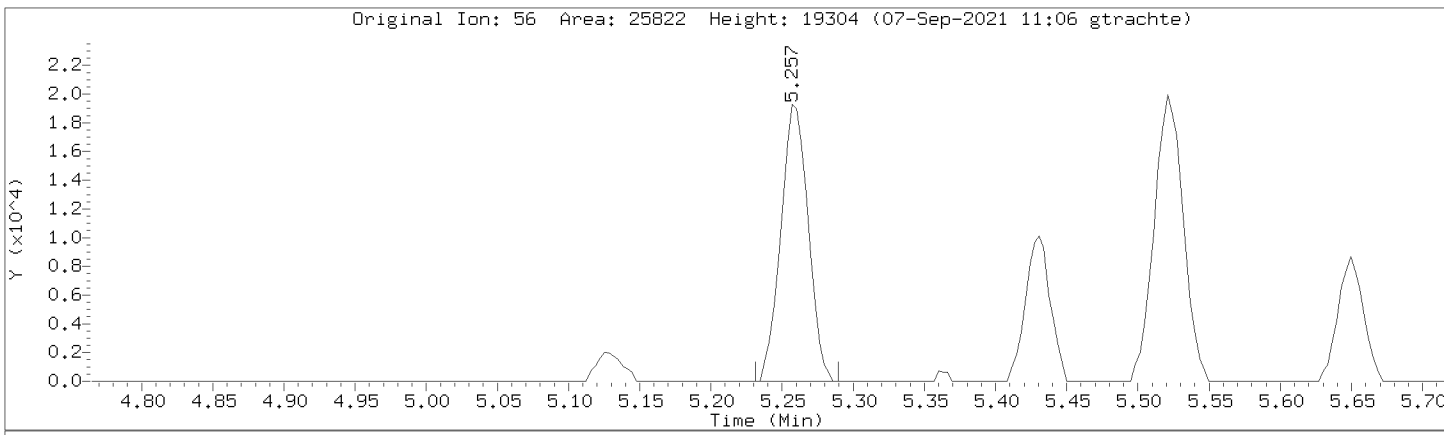



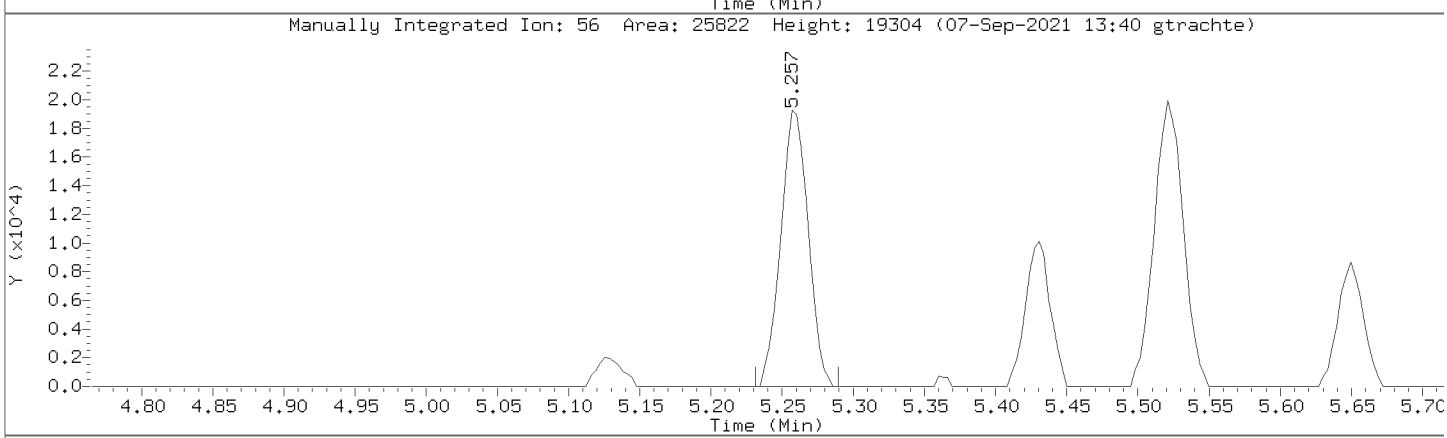
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25007.D
Injection Date: 07-SEP-2021 09:43
Instrument: 10airH.i
Lab Sample ID: CAL4

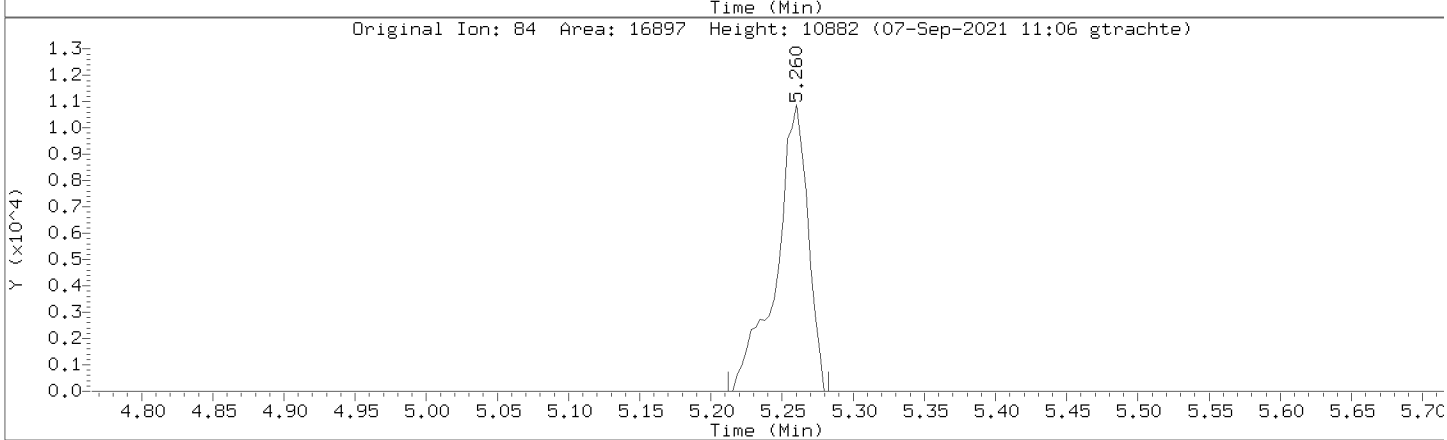


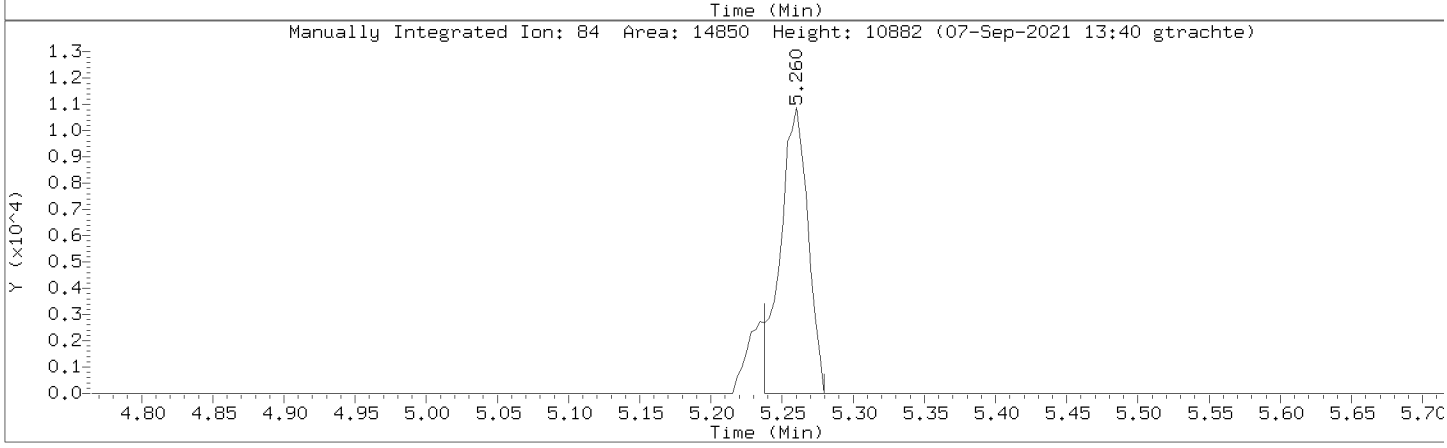
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25007.D
Injection Date: 07-SEP-2021 09:43
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: Cyclohexane
CAS Number: 110-82-7



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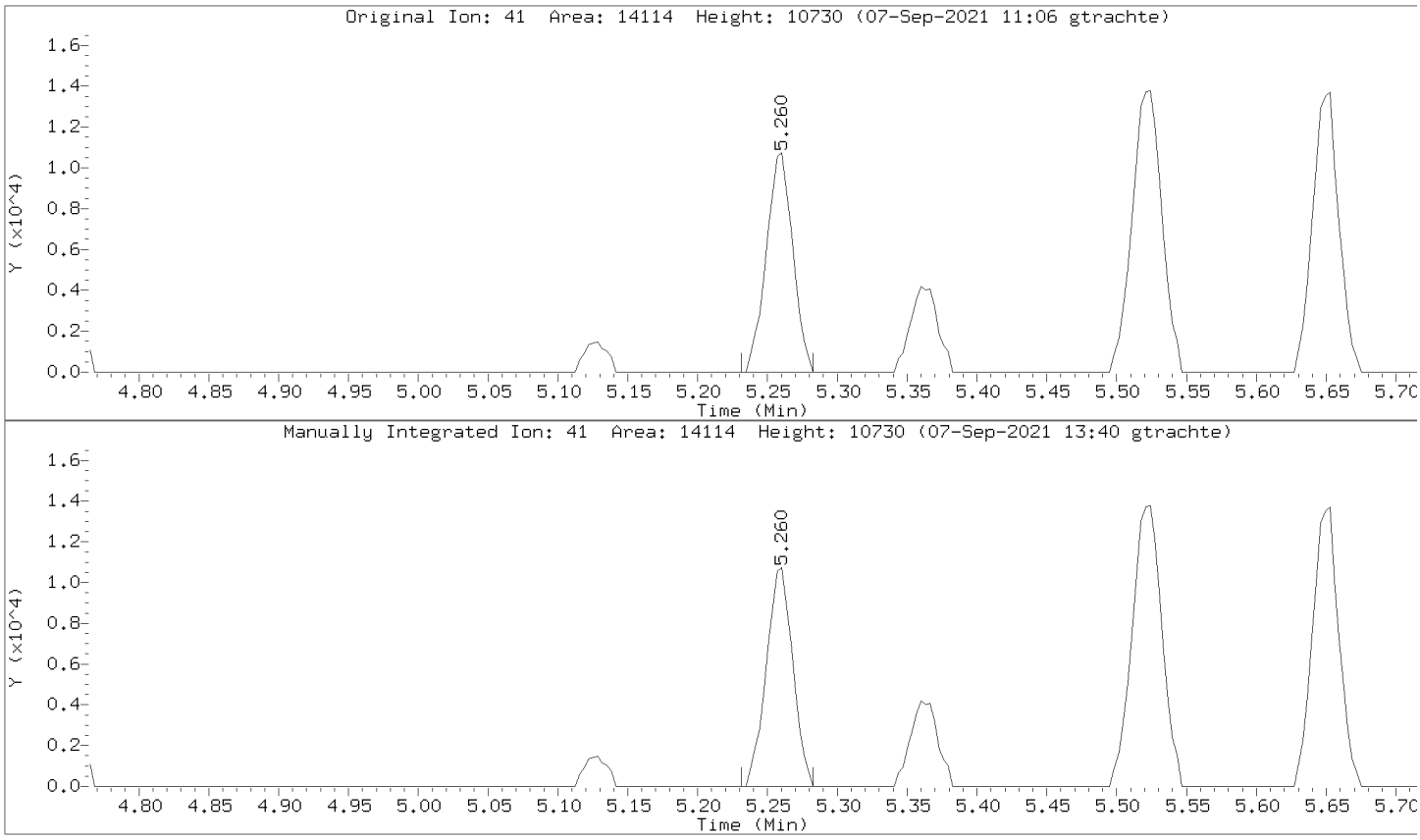
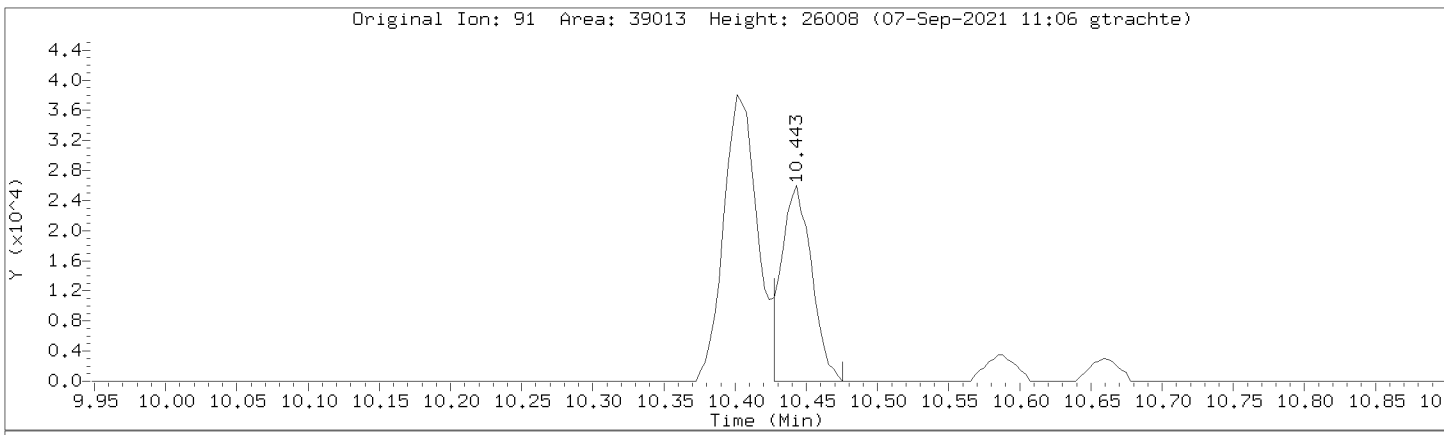
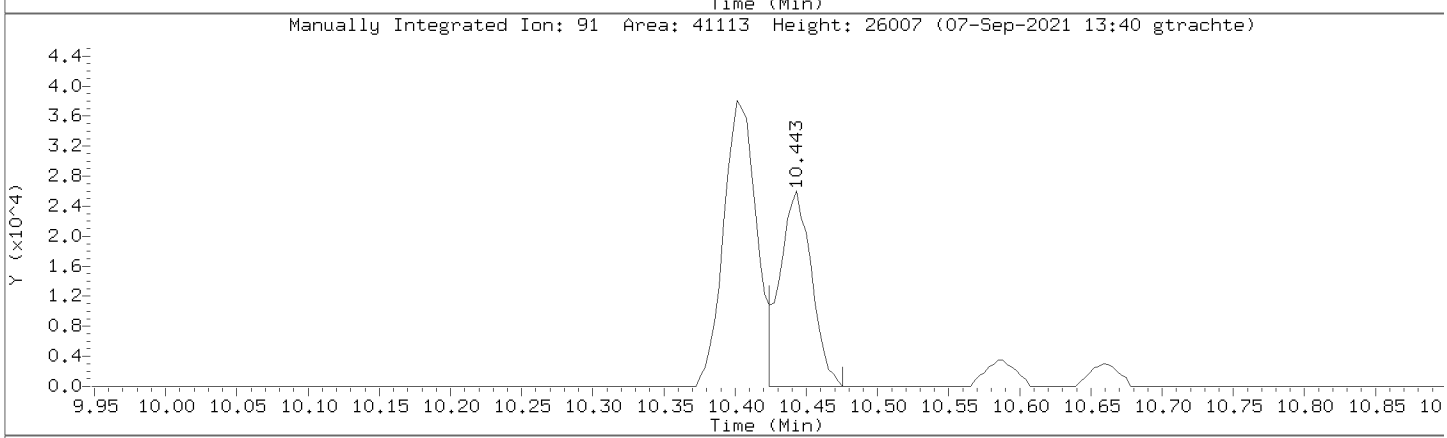
Injection Date: 07-SEP-2021 09:43
Instrument: 10airH.i
Lab Sample ID: CAL4

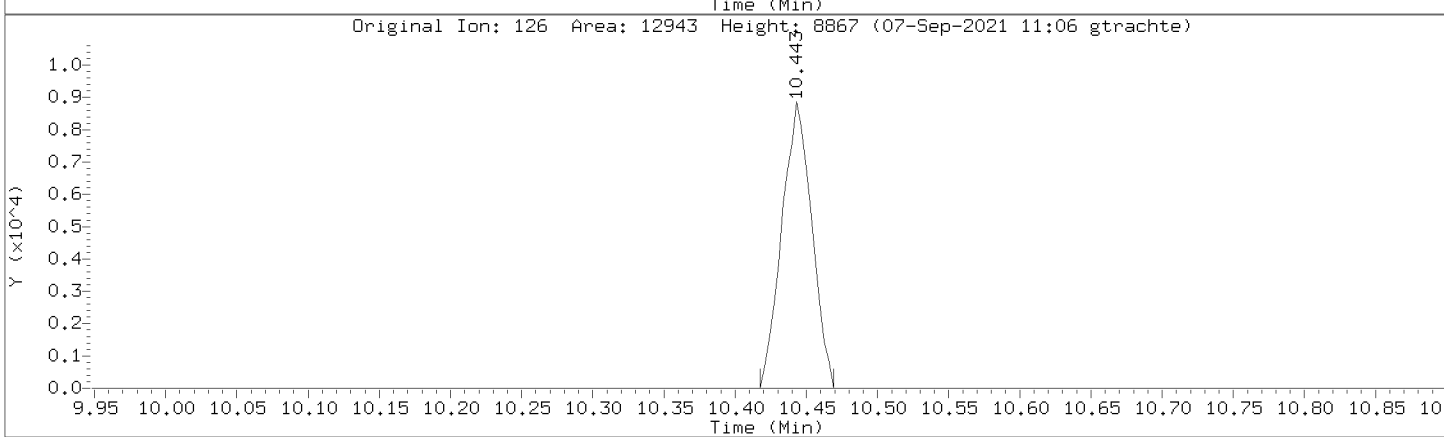


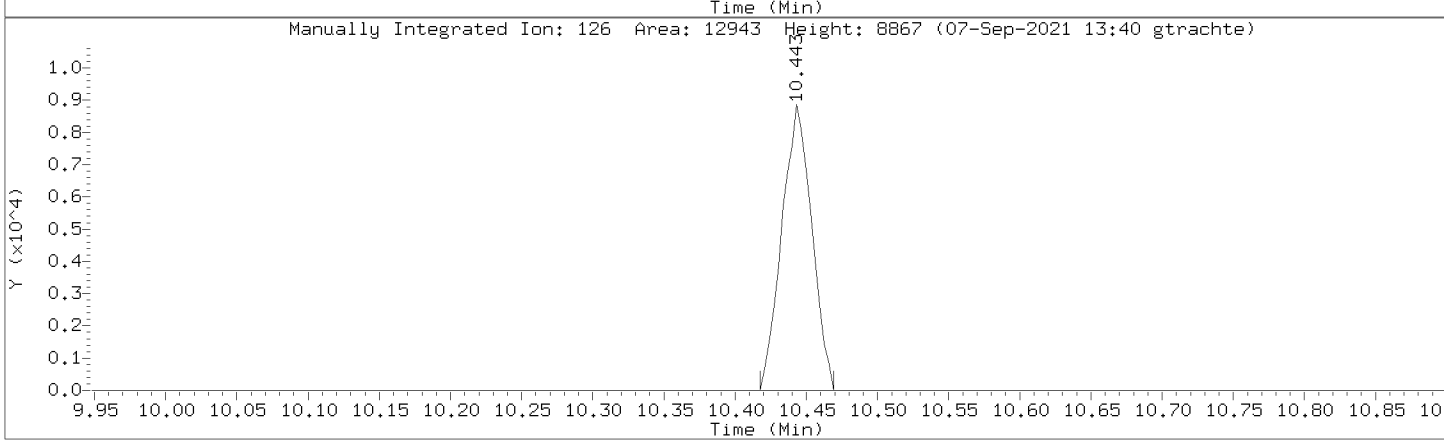
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25007.D
Injection Date: 07-SEP-2021 09:43
Instrument: 10airH.i
Lab Sample ID: CAL4

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

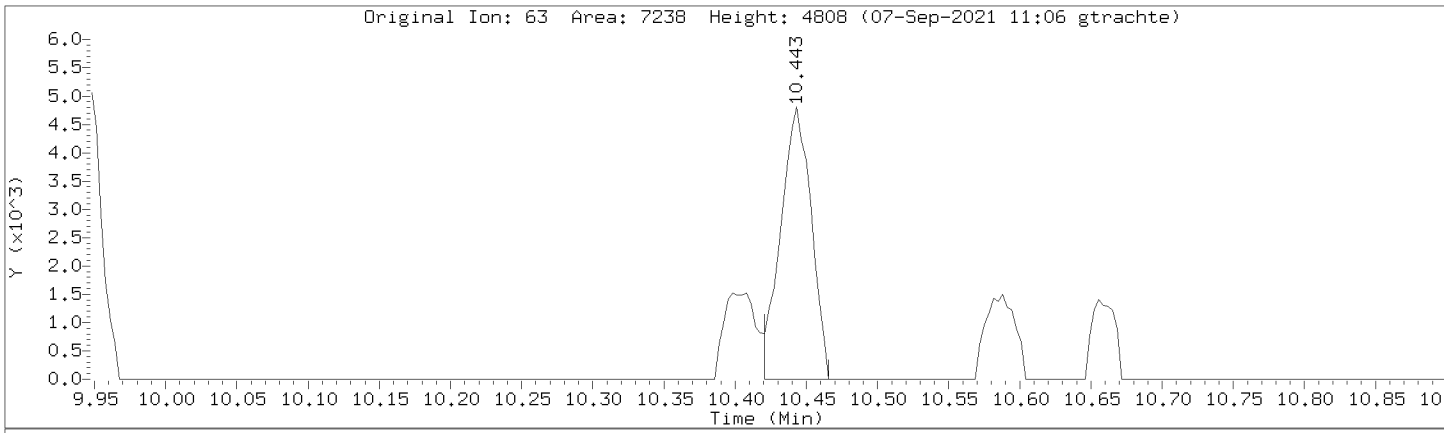


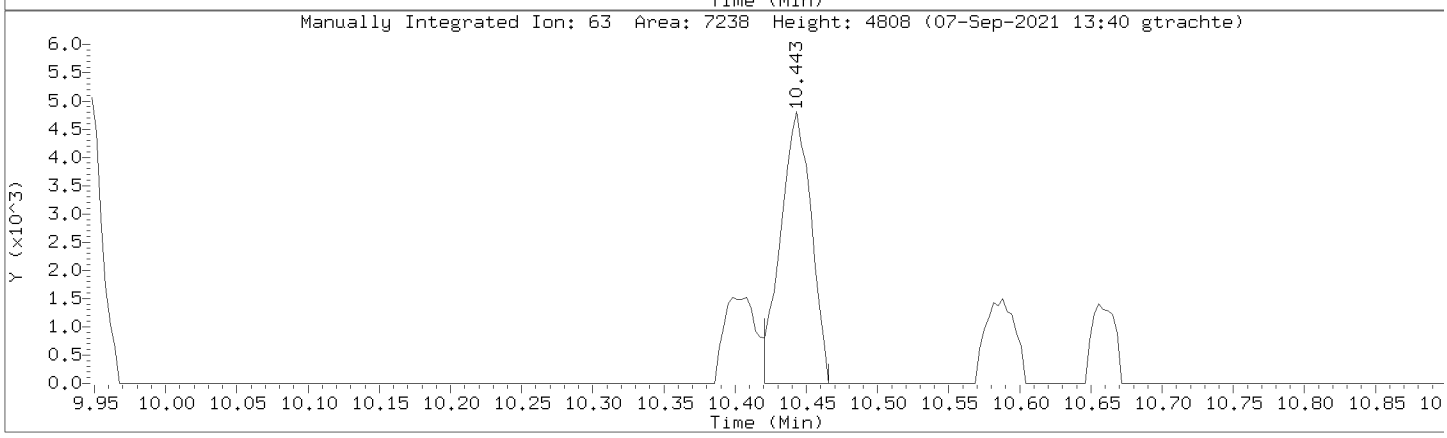



Data File: \\192.168.10.12\chem\10airH.i\090721.b/25007.D
Injection Date: 07-SEP-2021 09:43
Instrument: 10airH.i
Lab Sample ID: CAL4



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25008.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25008.D
Lab Smp Id: CAL5
Inj Date : 07-SEP-2021 10:08
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 07-Sep-2021 14:02 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.941 | 2.948 | (0.541) | 148449 | 10.7100 | 10.5(M) |
| 2 Chlorodifluoromethane | 67 | 2.958 | 2.961 | (0.544) | 56725 | 10.7200 | 10.5(M) |
| 3 Propylene | 41 | 2.961 | 2.967 | (0.545) | 211584 | 10.7800 | 9.71 |
| 4 Dichlorodifluoromethane | 85 | 2.983 | 2.986 | (0.549) | 513960 | 10.8700 | 9.67 |
| 5 Dichlorotetrafluoroethane | 85 | 3.051 | 3.057 | (0.562) | 481264 | 10.0200 | 8.98 |
| 6 Chloromethane | 50 | 3.057 | 3.064 | (0.563) | 261048 | 10.7500 | 9.45 |
| 7 Vinyl chloride | 62 | 3.125 | 3.131 | (0.575) | 212122 | 10.7800 | 9.88 |
| 8 1,3-Butadiene | 54 | 3.157 | 3.163 | (0.581) | 151449 | 10.7400 | 10.0 |
| 9 Bromomethane | 94 | 3.273 | 3.279 | (0.602) | 155135 | 10.7600 | 9.60 |
| 10 Chloroethane | 64 | 3.318 | 3.324 | (0.611) | 89150 | 10.7500 | 10.2 |
| 11 Ethanol | 45 | 3.327 | 3.343 | (0.612) | 328795 | 64.6300 | 56.0 |
| 12 Vinyl Bromide | 106 | 3.421 | 3.427 | (0.630) | 148637 | 10.7200 | 10.1 |
| 13 Isopentane | 43 | 3.433 | 3.440 | (0.632) | 172160 | 11.0300 | 9.39 |
| 14 Freon 123 | 83 | 3.472 | 3.478 | (0.639) | 336197 | 10.6700 | 9.38 |
| 15 Trichlorofluoromethane | 101 | 3.495 | 3.501 | (0.643) | 452227 | 10.8600 | 9.56 |
| 16 Acrolein | 56 | 3.498 | 3.504 | (0.644) | 190039 | 30.4900 | 27.9 |
| 17 Acetone | 43 | 3.517 | 3.527 | (0.647) | 1160894 | 52.9600 | 52.9(M) |
| 18 Isopropyl Alcohol | 45 | 3.543 | 3.559 | (0.652) | 1347268 | 59.5700 | 44.8 |
| 19 1,1-Dichloroethene | 61 | 3.707 | 3.713 | (0.682) | 335286 | 10.8000 | 9.56 |
| 20 Acrylonitrile | 53 | 3.716 | 3.726 | (0.684) | 397617 | 29.8400 | 26.6 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.736 | 3.752 | (0.688) | 499377 | 10.6100 | 9.06 |
| 22 Methyl Acetate | 43 | 3.739 | 3.749 | (0.688) | 439920 | 10.7500 | 8.13 |
| 23 Freon 113 | 101 | 3.739 | 3.745 | (0.688) | 379566 | 10.7300 | 9.44 |
| 24 Allyl Chloride | 76 | 3.816 | 3.822 | (0.702) | 80195 | 10.6300 | 10.5 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25008.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 3.819 | 3.826 | (0.703) | 1319116 | 53.8800 | 56.1 |
| 26 Carbon Disulfide | 76 | 3.922 | 3.929 | (0.722) | 522961 | 10.8700 | 9.88 |
| 27 Methyl Tert Butyl Ether | 73 | 4.070 | 4.076 | (0.749) | 494817 | 10.8000 | 10.0 |
| 28 trans-1,2-dichloroethene | 96 | 4.083 | 4.093 | (0.751) | 181651 | 10.8100 | 9.46 |
| 29 Vinyl Acetate | 43 | 4.157 | 4.166 | (0.765) | 488680 | 12.9500 | 10.8 |
| 30 1,1-Dichloroethane | 63 | 4.208 | 4.215 | (0.775) | 419223 | 10.6800 | 9.68 |
| 31 Methyl Ethyl Ketone | 72 | 4.318 | 4.327 | (0.795) | 92085 | 10.7700 | 10.7 |
| 32 Di-isopropyl Ether | 45 | 4.340 | 4.347 | (0.799) | 804419 | 10.5700 | 9.58 |
| 33 n-Hexane | 57 | 4.350 | 4.356 | (0.801) | 381817 | 10.6100 | 9.29 |
| 34 Ethyl Acetate | 43 | 4.475 | 4.482 | (0.824) | 559189 | 10.6200 | 9.87(M) |
| 35 cis-1,2-Dichloroethene | 96 | 4.494 | 4.504 | (0.827) | 188584 | 10.7700 | 9.59(M) |
| 36 Ethyl Tert-Butyl Ether | 59 | 4.562 | 4.572 | (0.840) | 752854 | 10.7500 | 9.98 |
| 37 Chloroform | 83 | 4.675 | 4.684 | (0.860) | 412938 | 10.5600 | 9.62 |
| 38 Tetrahydrofuran | 42 | 4.739 | 4.745 | (0.872) | 287099 | 10.6900 | 10.8 |
| 39 1,1,1-Trichloroethane | 97 | 4.983 | 4.993 | (0.917) | 409272 | 10.7000 | 9.89 |
| 40 1,2-Dichloroethane | 62 | 5.064 | 5.073 | (0.932) | 327549 | 10.8000 | 10.1 |
| 41 Benzene | 78 | 5.218 | 5.228 | (0.960) | 536285 | 10.7300 | 10.7 |
| 42 Carbon tetrachloride | 117 | 5.234 | 5.244 | (0.963) | 353883 | 10.8500 | 9.96 |
| 43 Cyclohexane | 56 | 5.260 | 5.266 | (0.968) | 402228 | 10.6900 | 10.1(M) |
| 44 Tert Amyl Methyl Ether | 73 | 5.356 | 5.363 | (0.986) | 526889 | 10.7500 | 10.6 |
| * 45 1,4-Difluorobenzene | 114 | 5.433 | 5.440 | (1.000) | 459822 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 5.523 | 5.530 | (1.017) | 1198263 | 10.7400 | 9.74 |
| 47 Heptane | 43 | 5.652 | 5.658 | (1.040) | 450214 | 10.7100 | 9.76 |
| 48 Trichloroethene | 130 | 5.761 | 5.768 | (1.060) | 253810 | 10.7000 | 10.2 |
| 49 Methyl methacrylate | 69 | 5.800 | 5.806 | (1.067) | 199104 | 10.7300 | 9.84 |
| 50 1,2-Dichloropropane | 63 | 5.803 | 5.813 | (1.068) | 269116 | 10.7700 | 10.1 |
| 51 1,4-Dioxane | 88 | 5.848 | 5.858 | (1.076) | 318292 | 26.8100 | 26.7 |
| 52 Bromodichloromethane | 83 | 5.967 | 5.970 | (1.098) | 423727 | 10.7400 | 10.1 |
| 53 Methylcyclohexane | 98 | 6.228 | 6.234 | (1.146) | 146480 | 10.7500 | 10.6 |
| 54 Methyl Isobutyl Ketone | 43 | 6.305 | 6.308 | (1.160) | 609876 | 10.7800 | 11.1 |
| 55 cis-1,3-Dichloropropene | 75 | 6.385 | 6.395 | (1.175) | 324548 | 10.7100 | 10.6 |
| 56 trans-1,3-Dichloropropene | 75 | 6.829 | 6.835 | (1.257) | 286675 | 10.9500 | 11.7 |
| 57 Toluene | 91 | 6.925 | 6.932 | (1.275) | 629184 | 10.8500 | 10.3 |
| 58 1,1,2-Trichloroethane | 97 | 7.054 | 7.060 | (1.298) | 228596 | 10.7500 | 10.4 |
| 59 Methyl Butyl Ketone | 43 | 7.147 | 7.150 | (0.850) | 551661 | 10.7500 | 11.4 |
| 60 n-Octane | 43 | 7.343 | 7.350 | (0.873) | 606128 | 10.7500 | 10.6 |
| 61 Dibromochloromethane | 129 | 7.588 | 7.591 | (0.902) | 418144 | 10.7600 | 10.2 |
| 62 Tetrachloroethene | 166 | 7.668 | 7.671 | (0.912) | 305492 | 10.6500 | 9.88 |
| 63 1,2-Dibromoethane | 107 | 7.787 | 7.793 | (0.926) | 368498 | 10.5600 | 10.3 |
| * 64 Chlorobenzene - d5 | 117 | 8.407 | 8.411 | (1.000) | 392032 | 10.0000 | |
| 65 Chlorobenzene | 112 | 8.453 | 8.456 | (1.005) | 498259 | 10.7200 | 9.93 |
| 66 Ethyl Benzene | 91 | 8.668 | 8.674 | (1.031) | 820846 | 10.8400 | 10.7 |
| 67 m&p-Xylene | 91 | 8.851 | 8.858 | (1.053) | 1276634 | 21.6100 | 21.5(M) |
| 68 n-Nonane | 43 | 9.189 | 9.192 | (1.093) | 619950 | 10.7700 | 11.4 |
| 69 Styrene | 104 | 9.256 | 9.260 | (1.101) | 477067 | 10.8500 | 10.9(M) |
| 70 o-Xylene | 91 | 9.288 | 9.295 | (1.105) | 658502 | 10.7700 | 10.6 |
| 71 Bromoform | 173 | 9.362 | 9.369 | (1.114) | 365404 | 10.8400 | 12.2 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 9.703 | 9.710 | (1.154) | 525159 | 10.8100 | 10.7 |
| 73 Isopropylbenzene | 105 | 9.838 | 9.842 | (1.170) | 900711 | 10.6700 | 11.1 |
| 74 N-Propylbenzene | 91 | 10.404 | 10.407 | (1.237) | 1082942 | 10.8100 | 11.1 |
| 75 2-Chlorotoluene | 91 | 10.443 | 10.449 | (1.242) | 706245 | 10.8700 | 10.9(M) |
| 76 4-Ethyltoluene | 105 | 10.587 | 10.591 | (1.259) | 862106 | 10.7400 | 10.4 |
| 77 1,3,5-Trimethylbenzene | 105 | 10.658 | 10.665 | (1.268) | 745180 | 10.7500 | 10.8 |
| 78 n-Decane | 57 | 11.009 | 11.015 | (2.026) | 704458 | 10.8700 | 10.2 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25008.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.108 | 11.112 | (1.321) | 730388 | 10.8400 | 11.2 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.153 | 11.157 | (1.327) | 743926 | 10.8100 | 12.1 |
| 81 Sec- Butylbenzene | 105 | 11.414 | 11.417 | (1.358) | 1086798 | 10.8500 | 11.9 |
| 82 1,3-Dichlorobenzene | 146 | 11.449 | 11.452 | (1.362) | 455846 | 10.8500 | 10.1 |
| 83 Benzyl Chloride | 91 | 11.520 | 11.526 | (1.370) | 480028 | 10.9400 | 10.1 |
| 84 1,4-Dichlorobenzene | 146 | 11.581 | 11.587 | (1.377) | 433874 | 10.8500 | 9.99 |
| 85 p-Isopropyltoluene | 119 | 11.620 | 11.623 | (1.382) | 975015 | 10.8900 | 10.5 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.636 | 11.639 | (1.384) | 784173 | 10.8500 | 11.9 |
| 87 1,2-Dichlorobenzene | 146 | 11.890 | 11.893 | (1.414) | 462111 | 10.8300 | 10.2 |
| 88 N-Butylbenzene | 91 | 12.070 | 12.073 | (1.436) | 830796 | 10.8100 | 10.5 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.587 | 12.591 | (1.497) | 266502 | 10.9100 | 10.6 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.536 | 13.539 | (1.610) | 461975 | 23.4900 | 21.6 |
| 91 Naphthalene | 128 | 13.674 | 13.675 | (1.626) | 578034 | 12.2500 | 12.3 |
| 92 Hexachlorobutadiene | 225 | 13.783 | 13.787 | (1.639) | 303781 | 12.2500 | 13.6 |

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25008.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

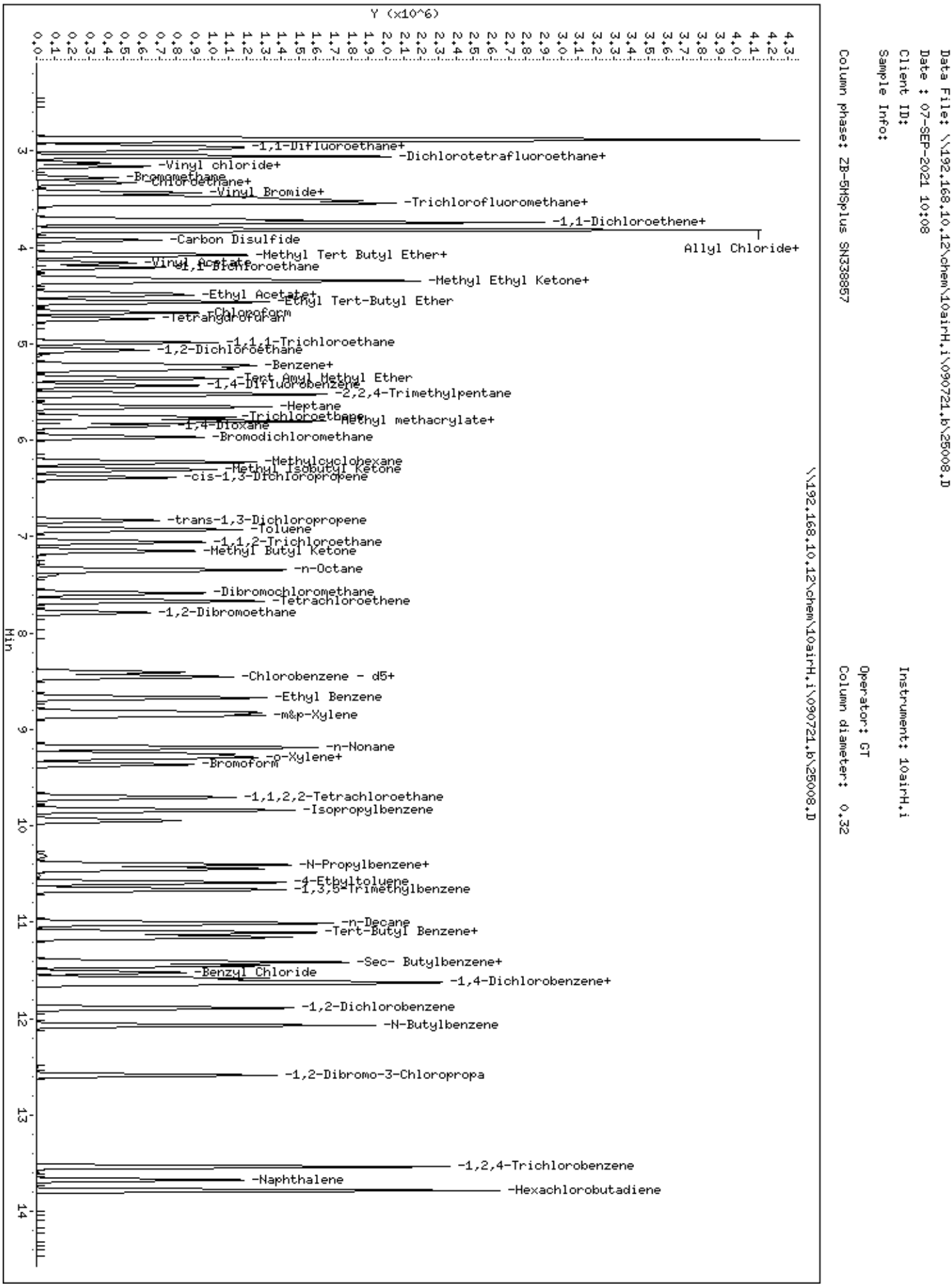
Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25008.D
Calibration Time: 10:08
Lab Smp Id: CAL5
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 459822 | 0.00 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 392032 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | 0.00 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.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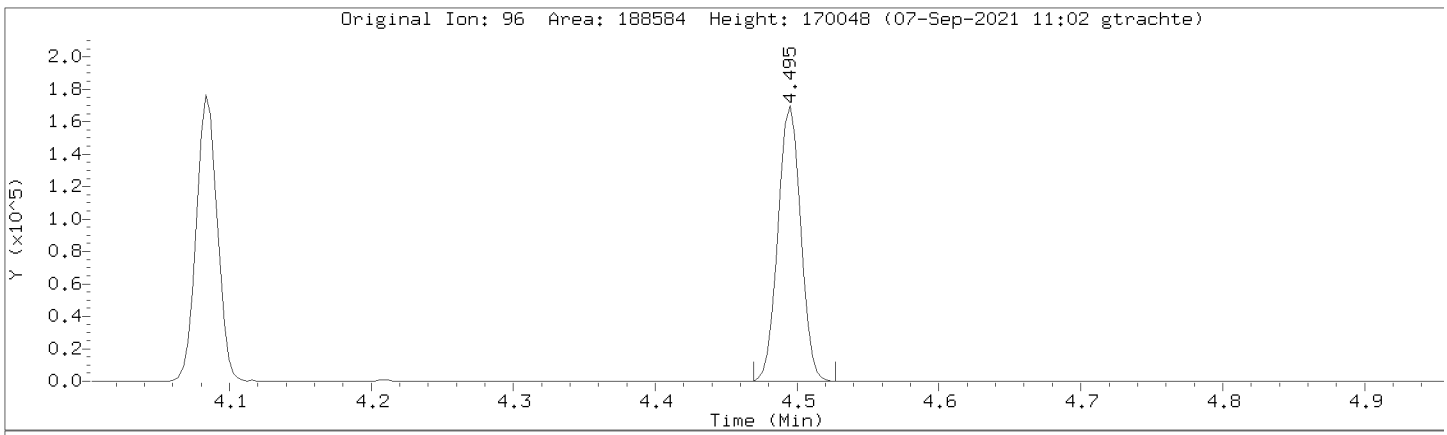
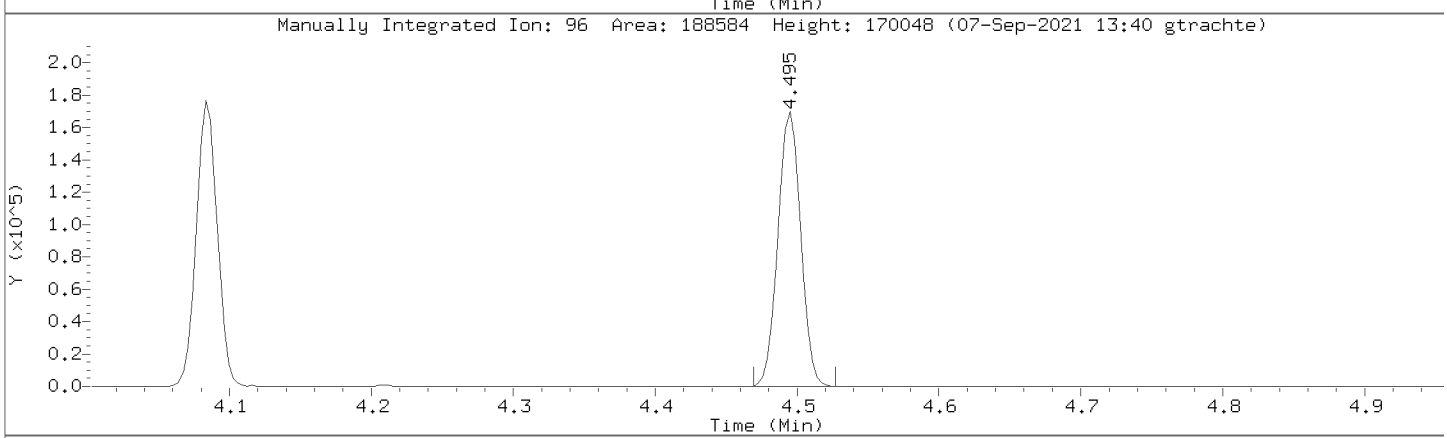
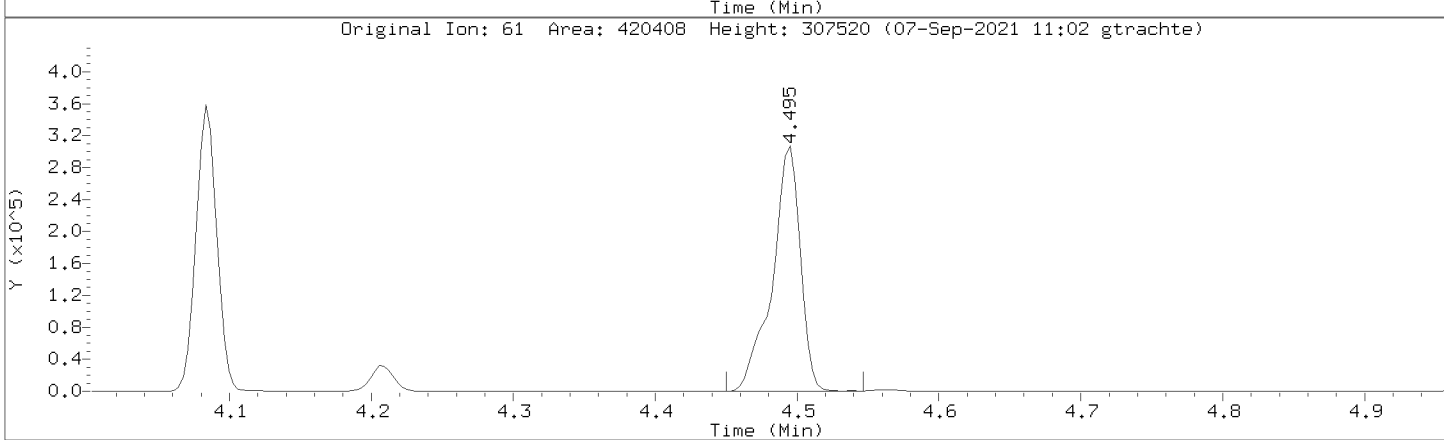
Date : 07-SEP-2021 10:08
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airH.i
Operator: GT
Column diameter: 0.32
\\192.168.10.12\chem\10airH.i\090721.b\25008.D
Y (x10^6)
Min
-1,1-Difluoroethane+
-Dichlorotetrafluoroethane+
-Vinyl chloride+
-Bromomethane
-Chloroethane+
-Vinyl Bromide+
-Trichlorofluoromethane+
-1,1-Dichloroethene+
Allyl Chloride+
-Carbon Disulfide
-Methyl Tert Butyl Ether+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl methacrylate+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-o-Xylene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-Tert-Butyl Benzene+
-Sec- Butylbenzene+
-Benzyl Chloride
-1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene

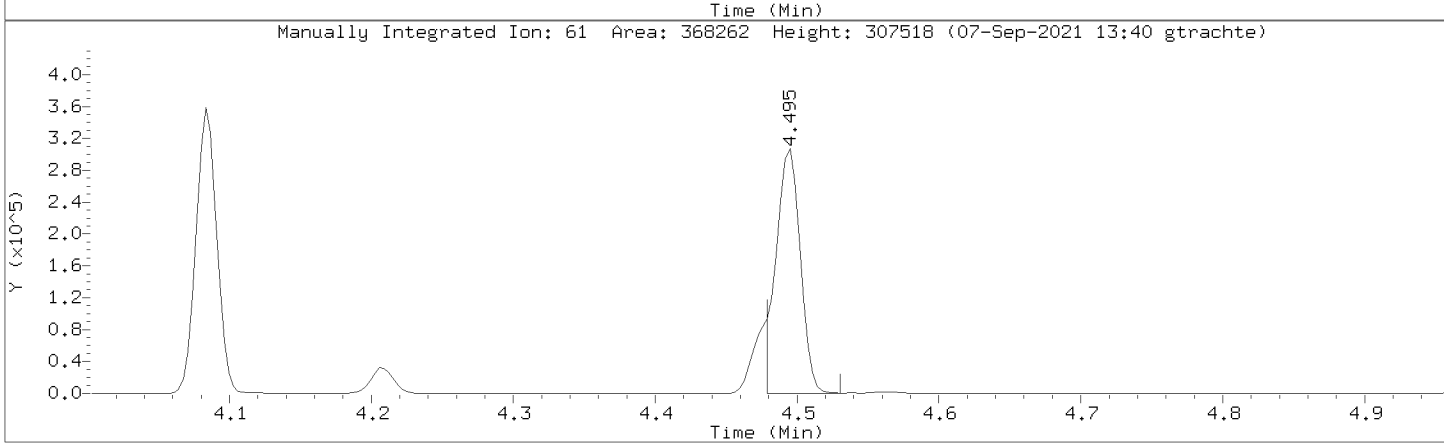
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25008.D
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



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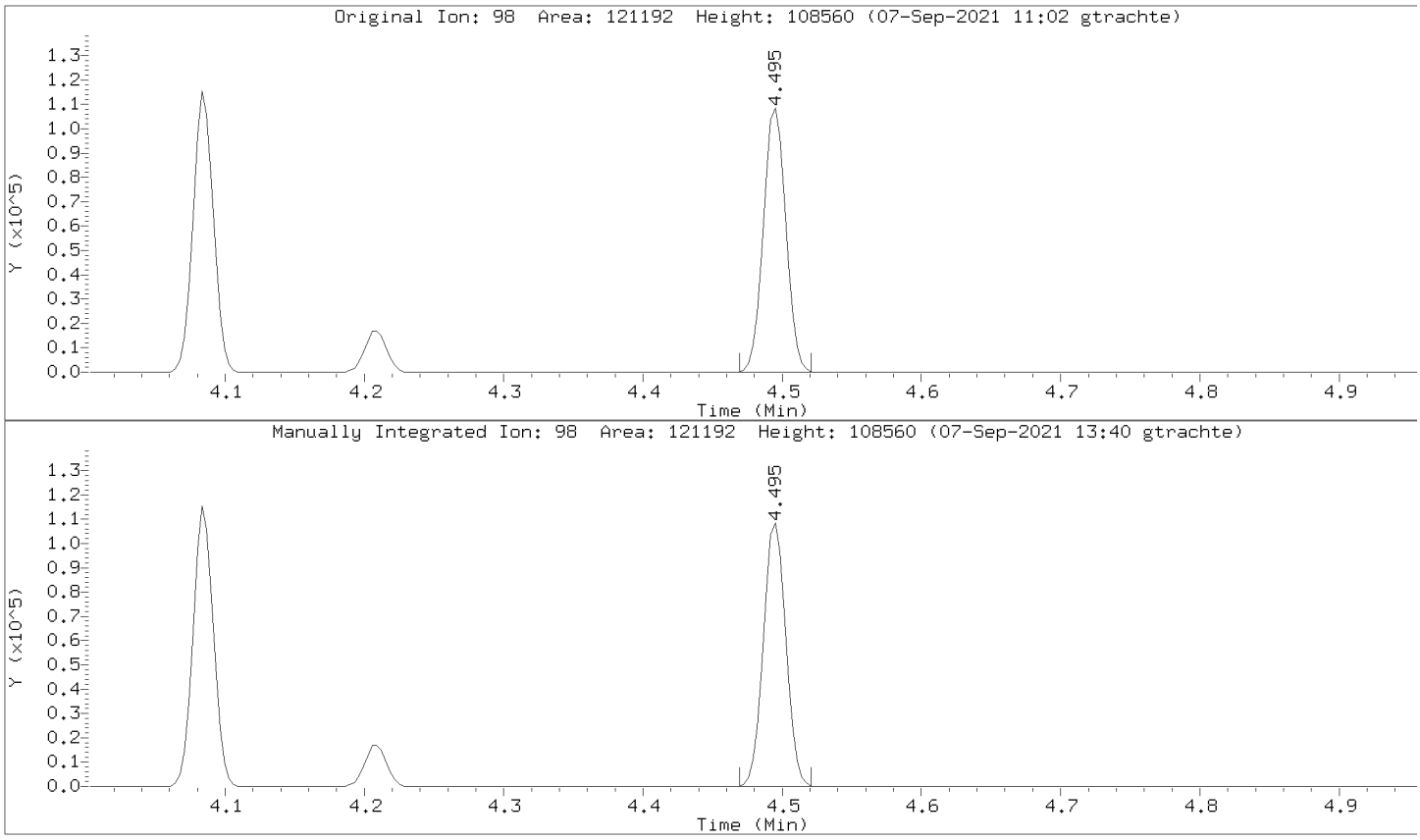
Instrument: 10airH.i
Lab Sample ID: CAL5



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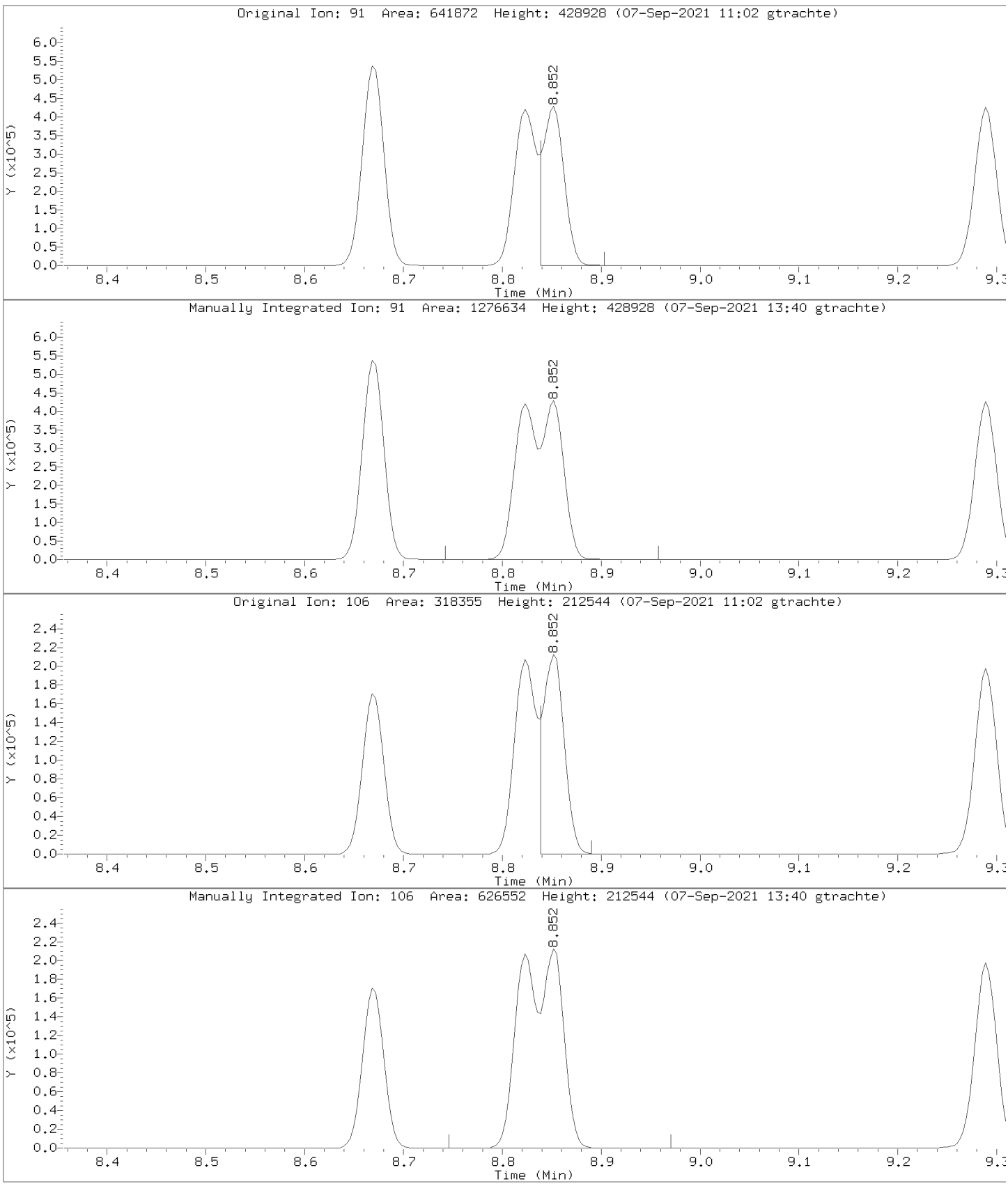
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: m&p-Xylene
CAS Number: 7816-60-0



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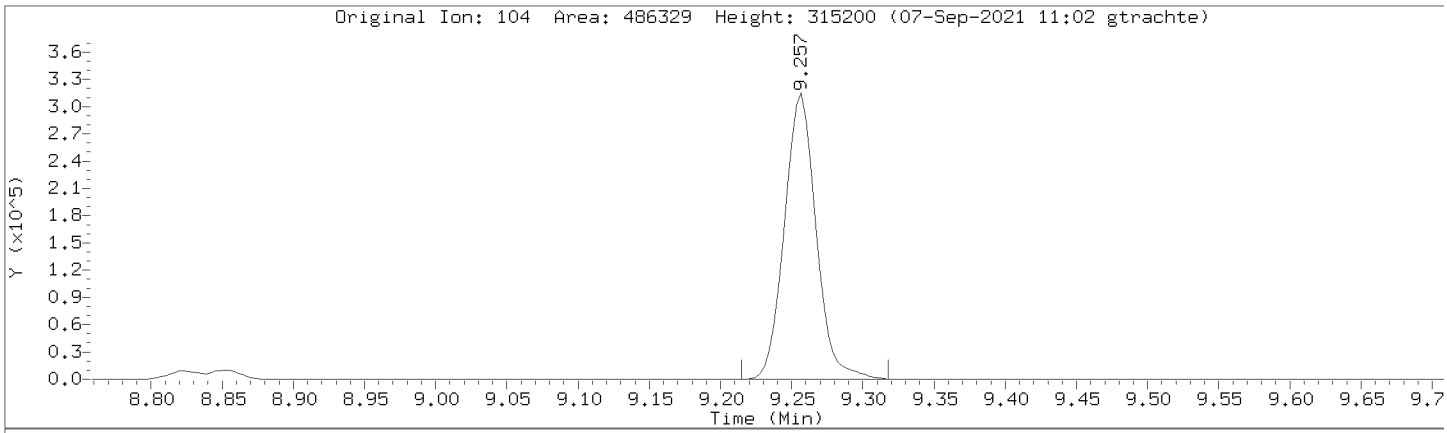
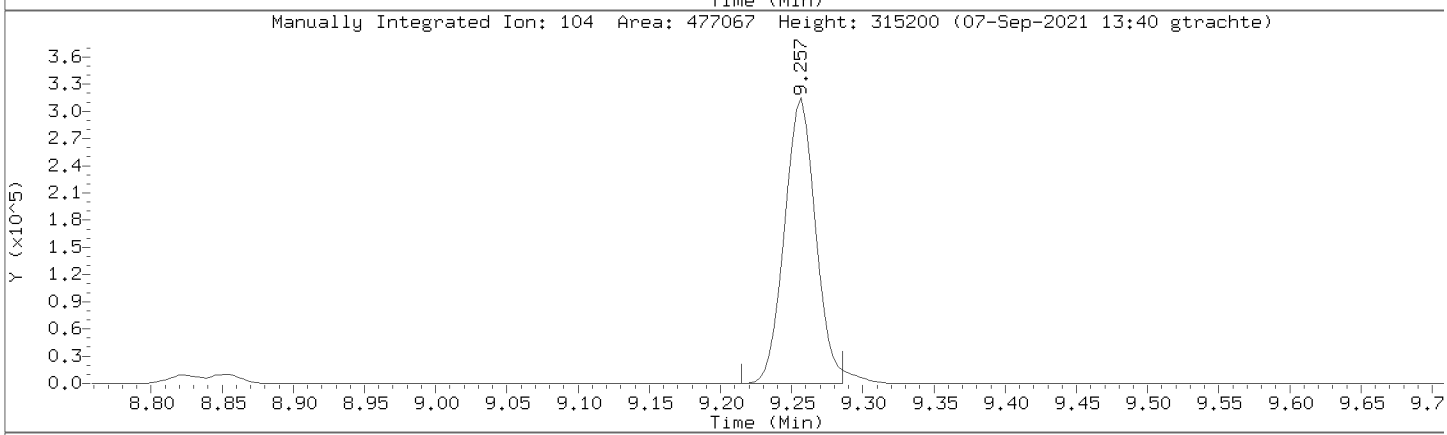
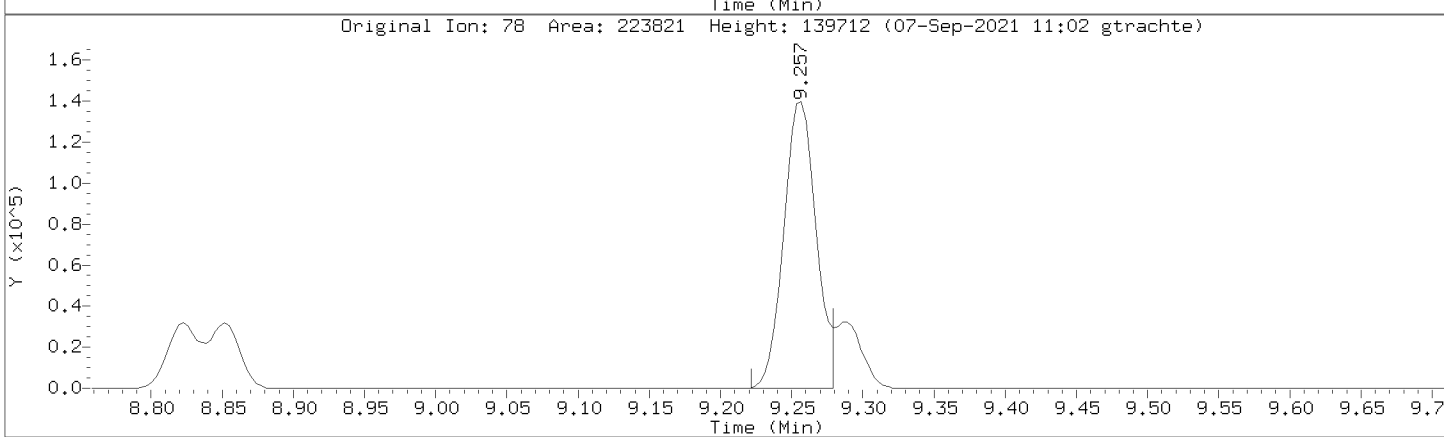
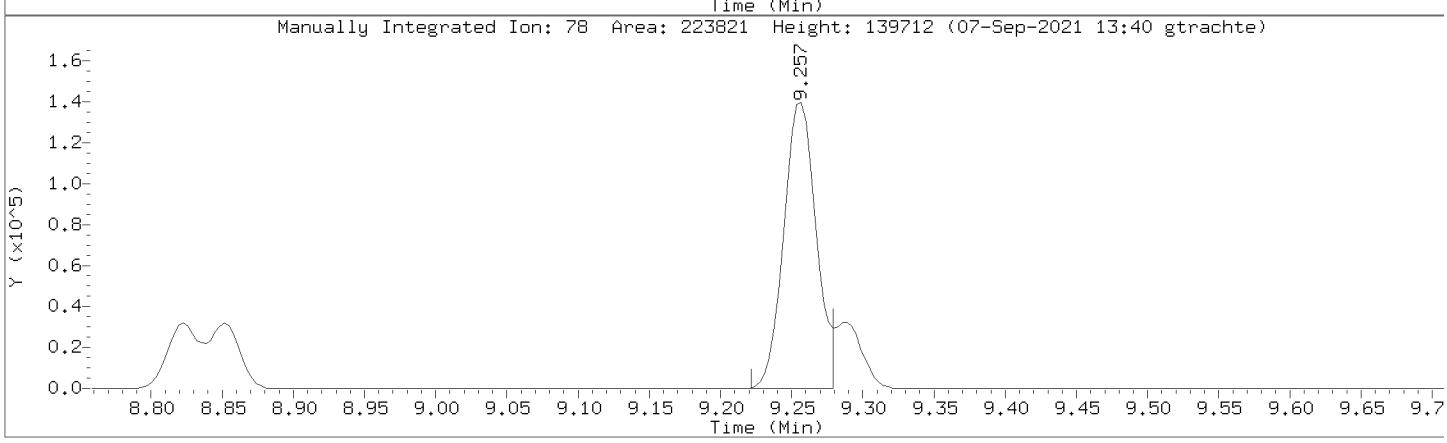
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: Styrene
CAS Number: 100-42-5



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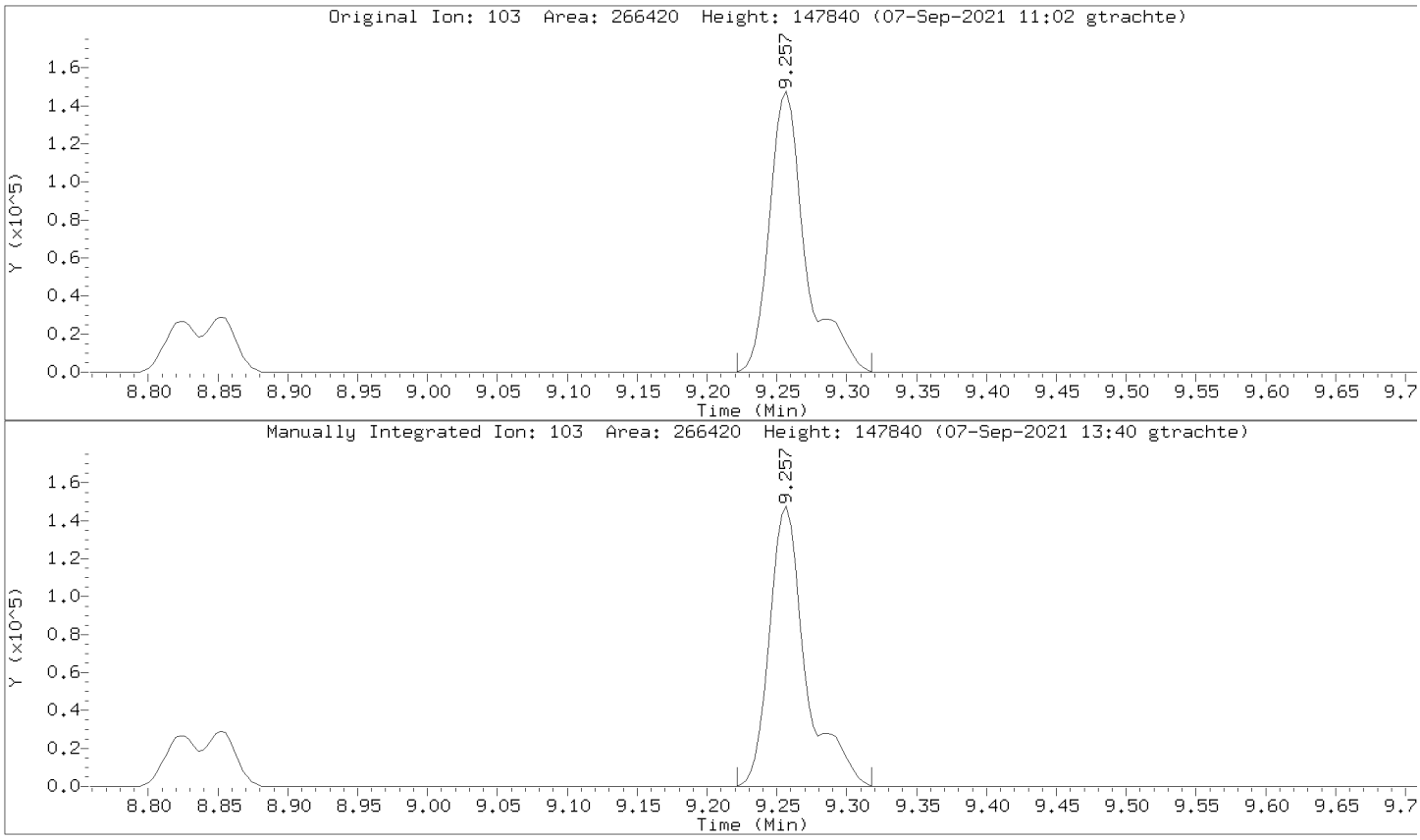
Lab Sample ID: CAL5



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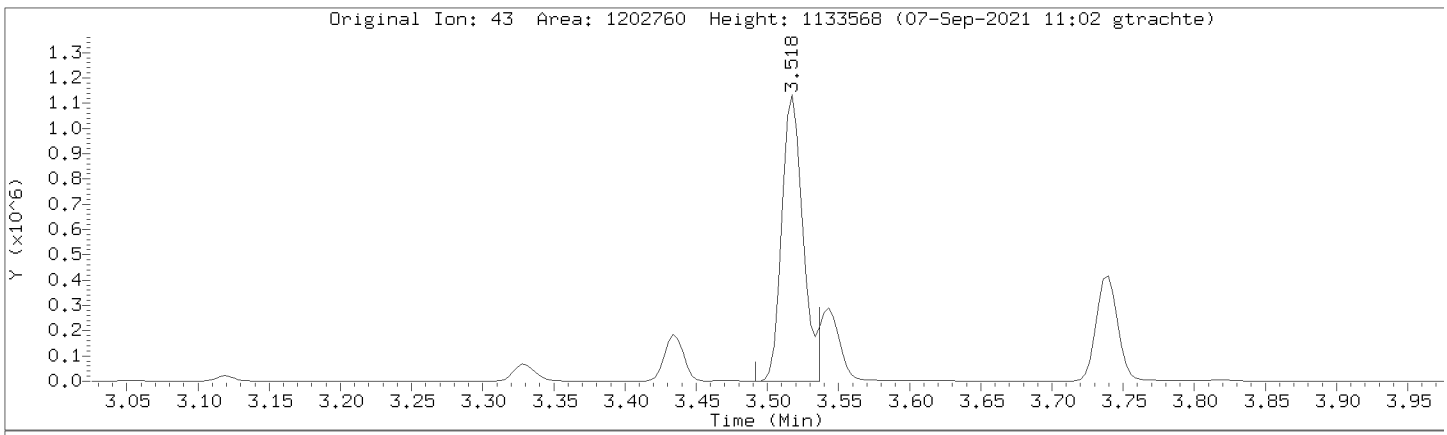
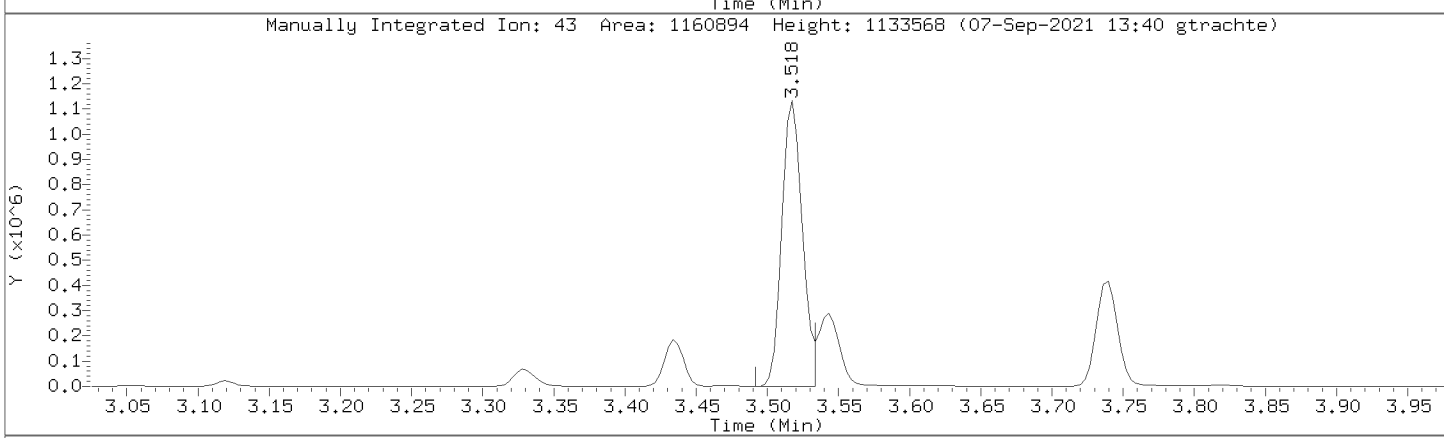
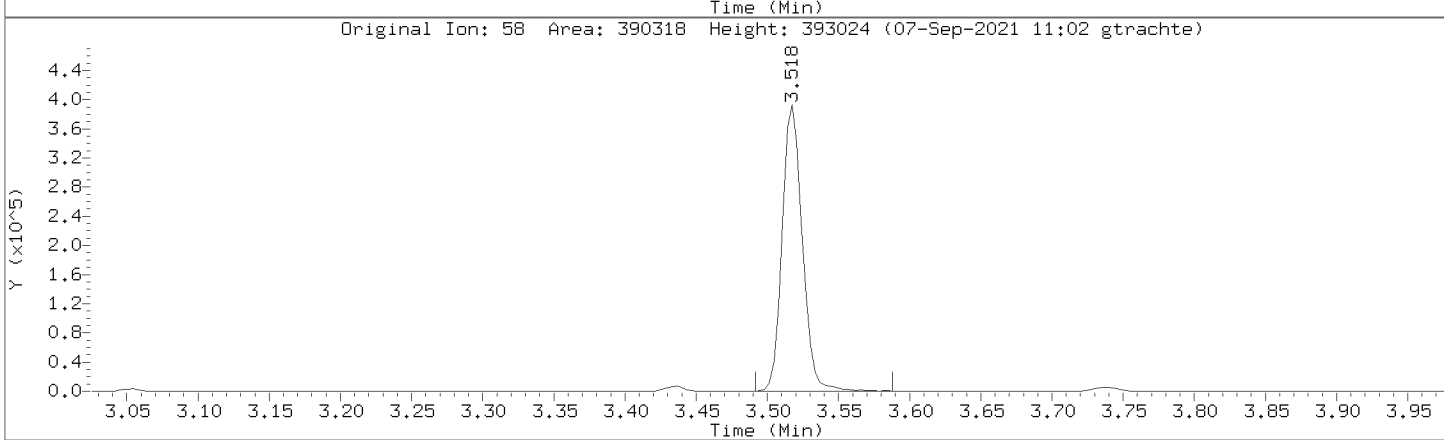
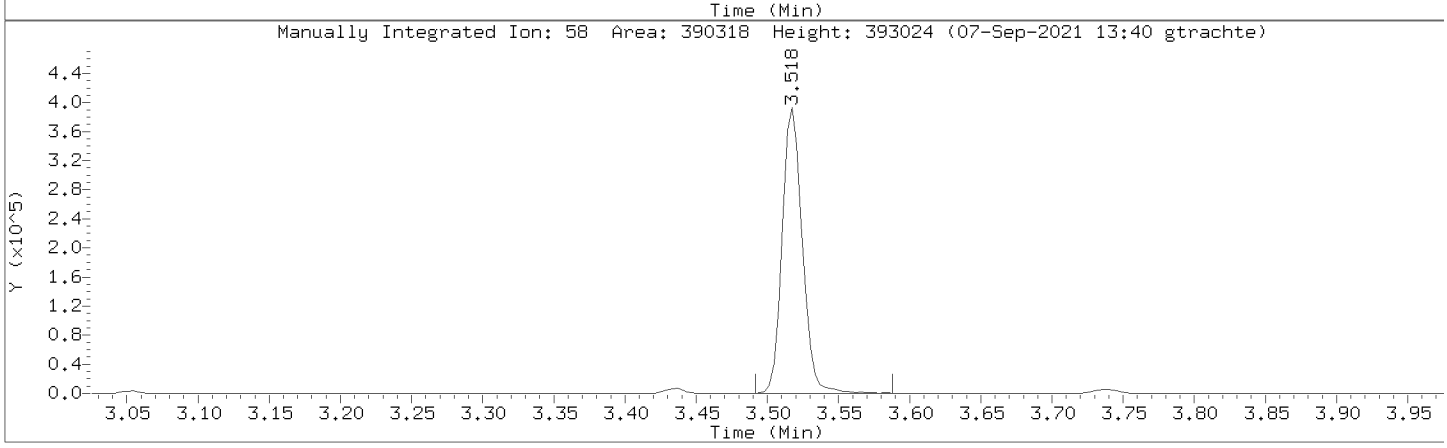
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: Acetone
CAS Number: 67-64-1



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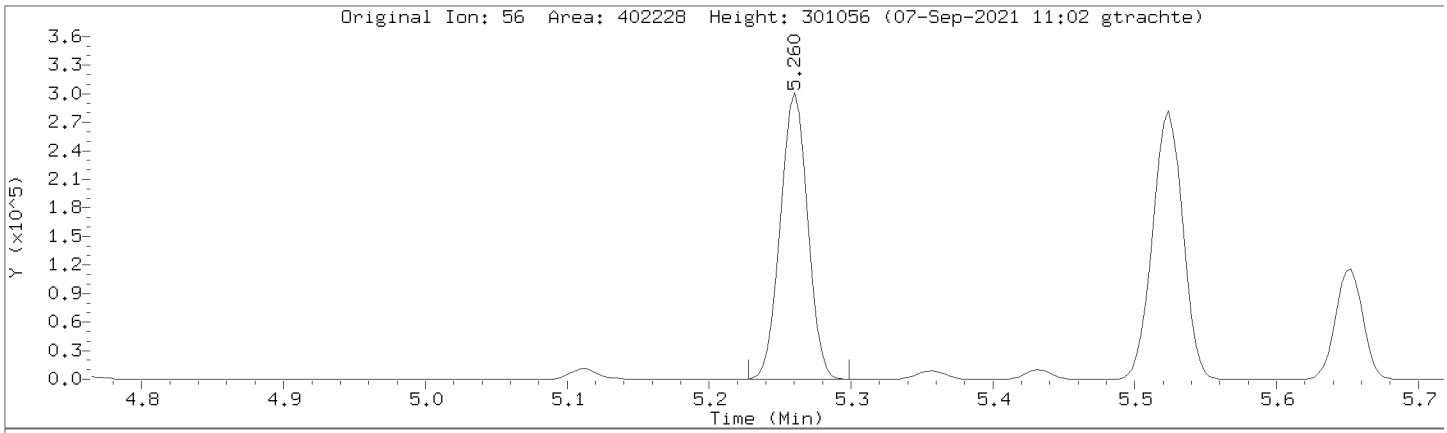
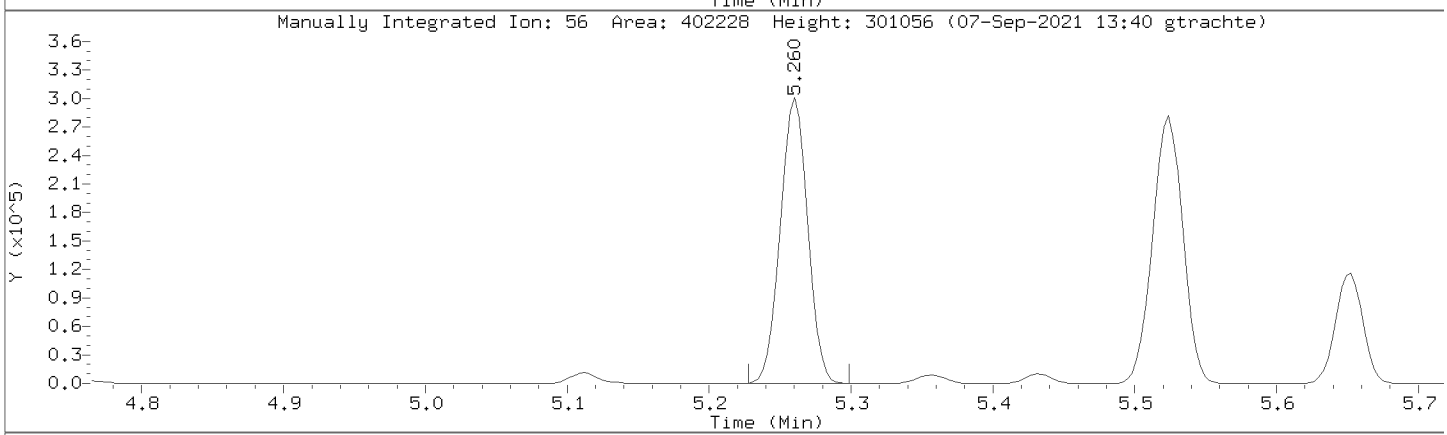
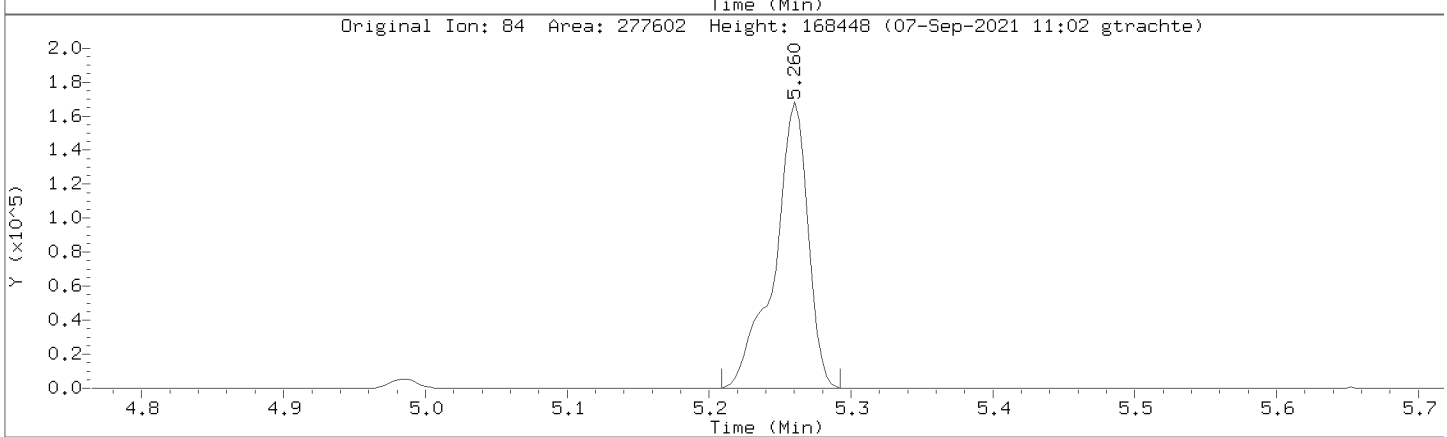
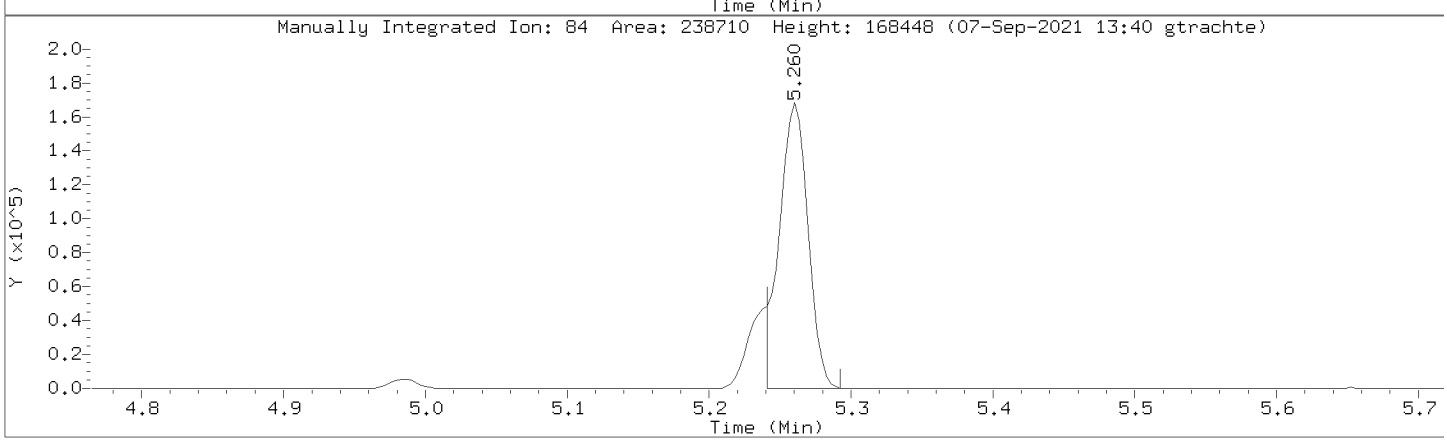
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: Cyclohexane
CAS Number: 110-82-7



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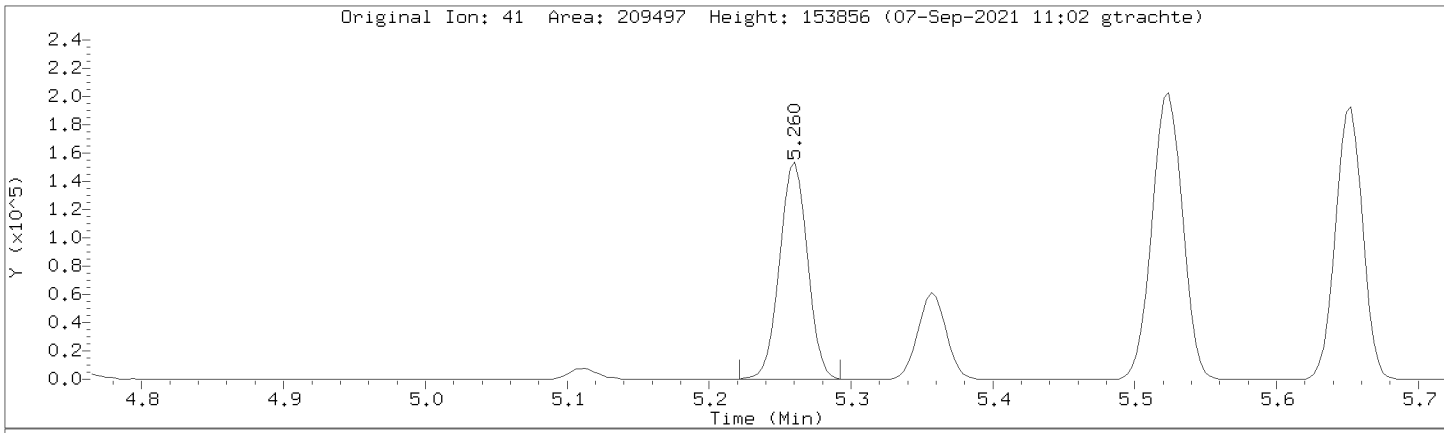


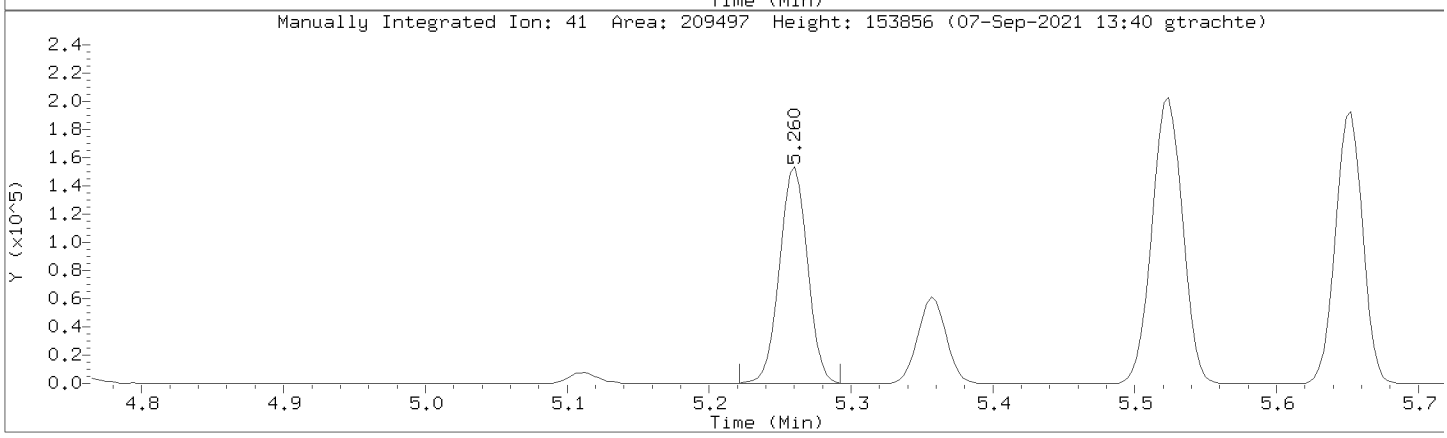

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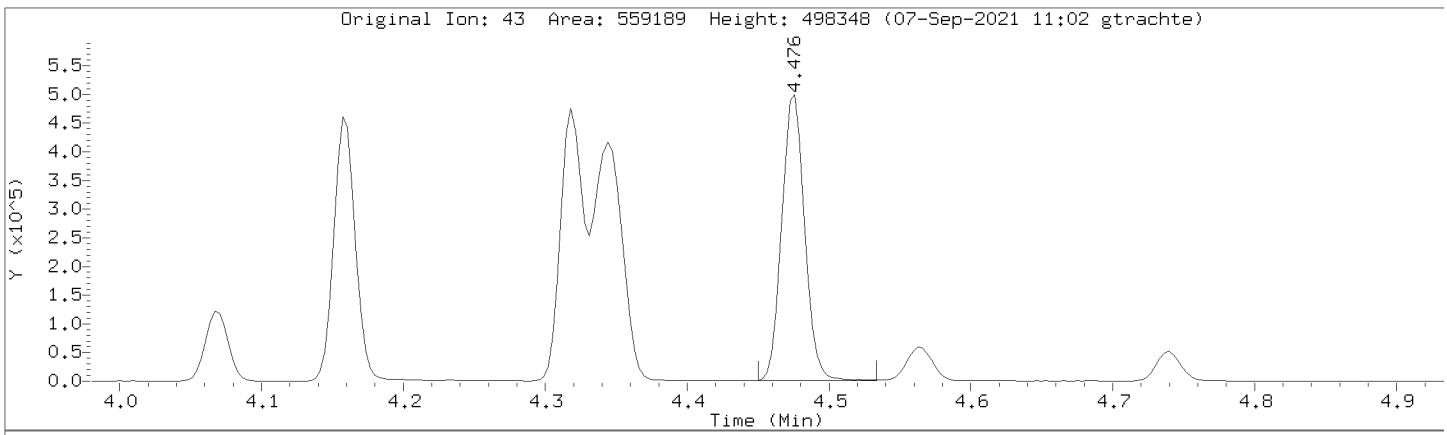
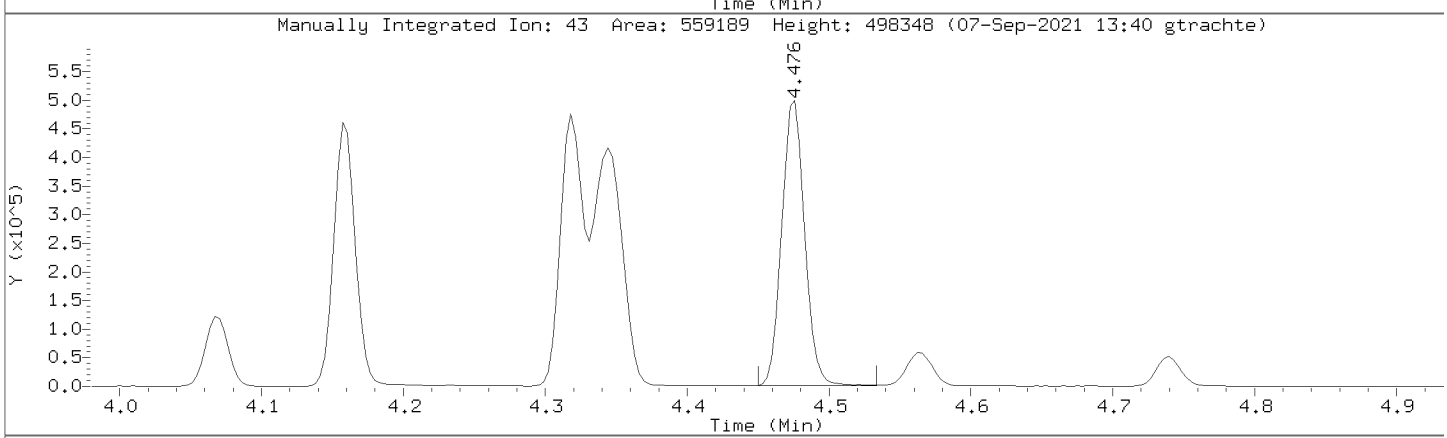
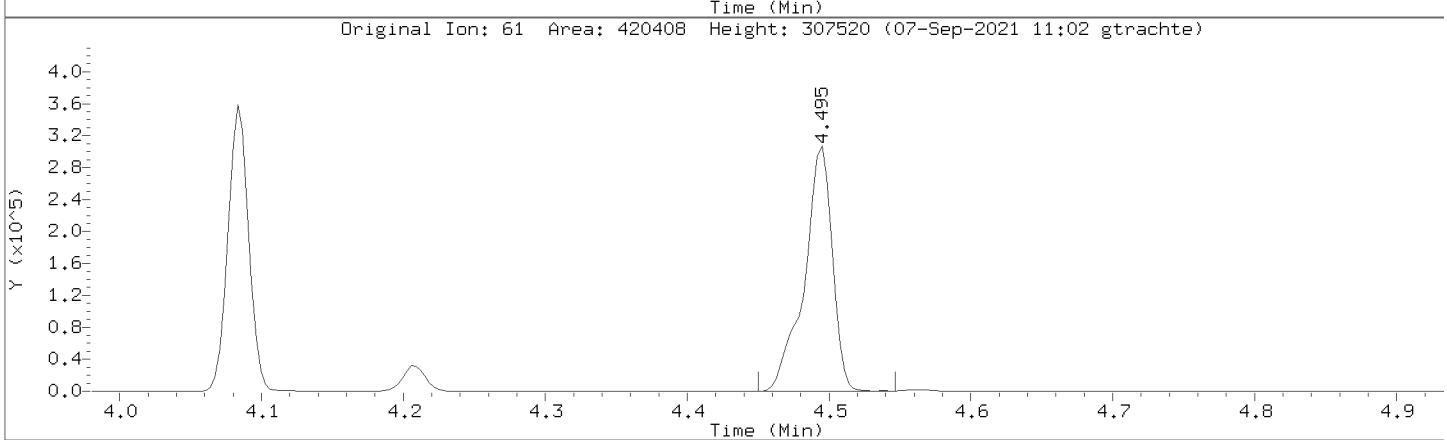
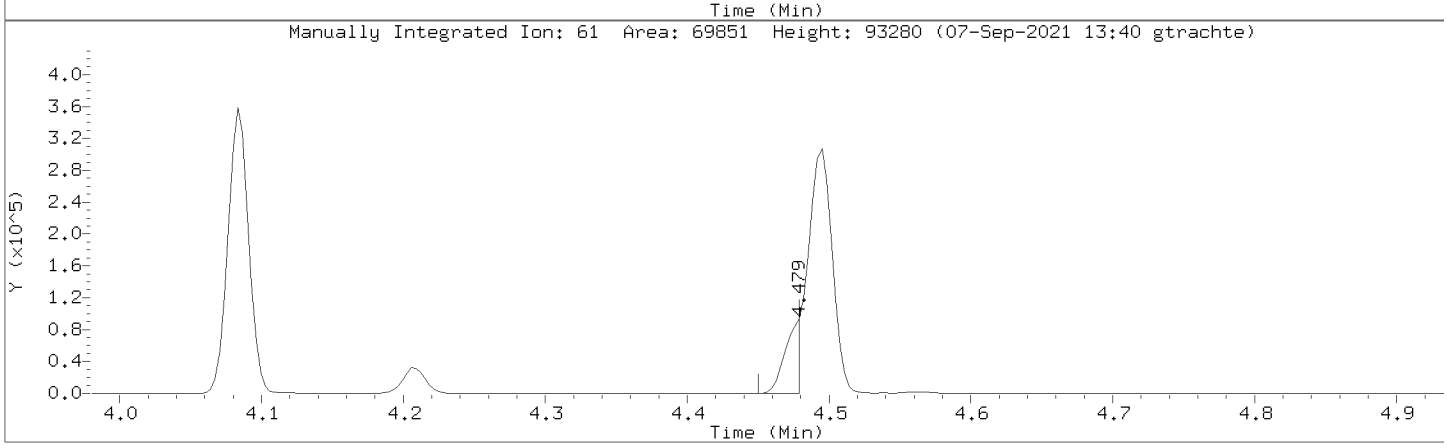
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: Ethyl Acetate
CAS Number: 141-78-6



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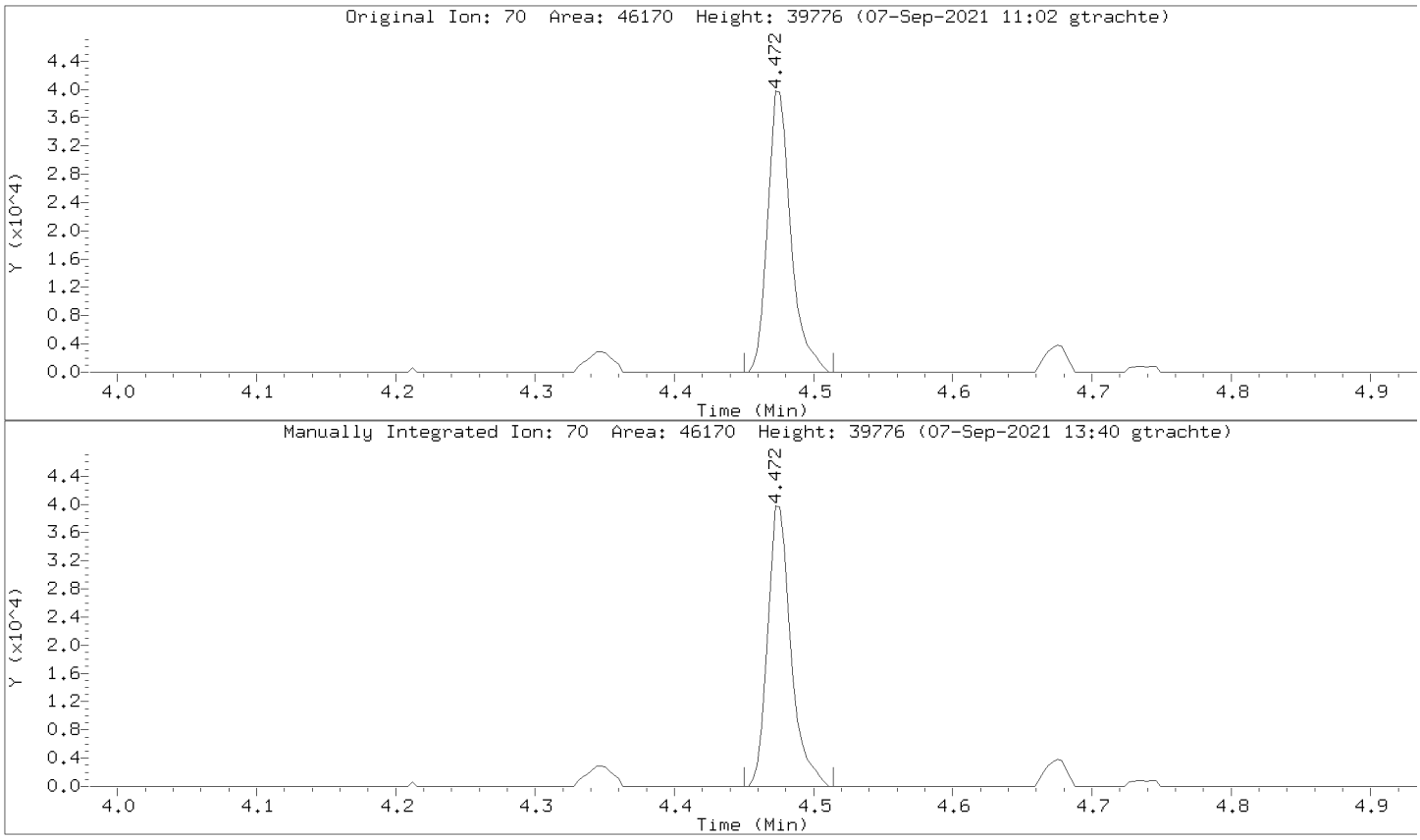
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5



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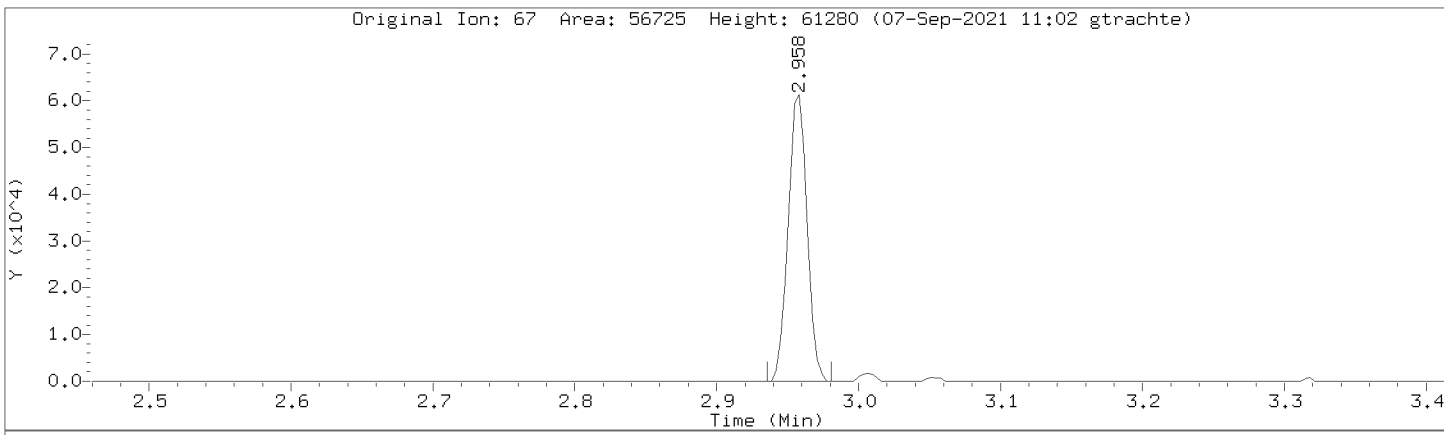
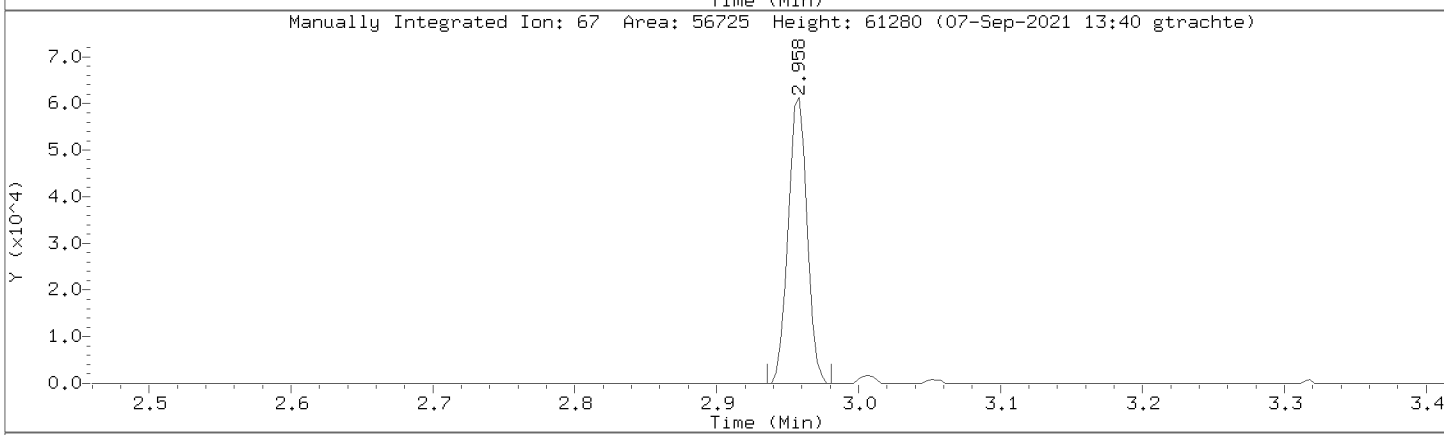
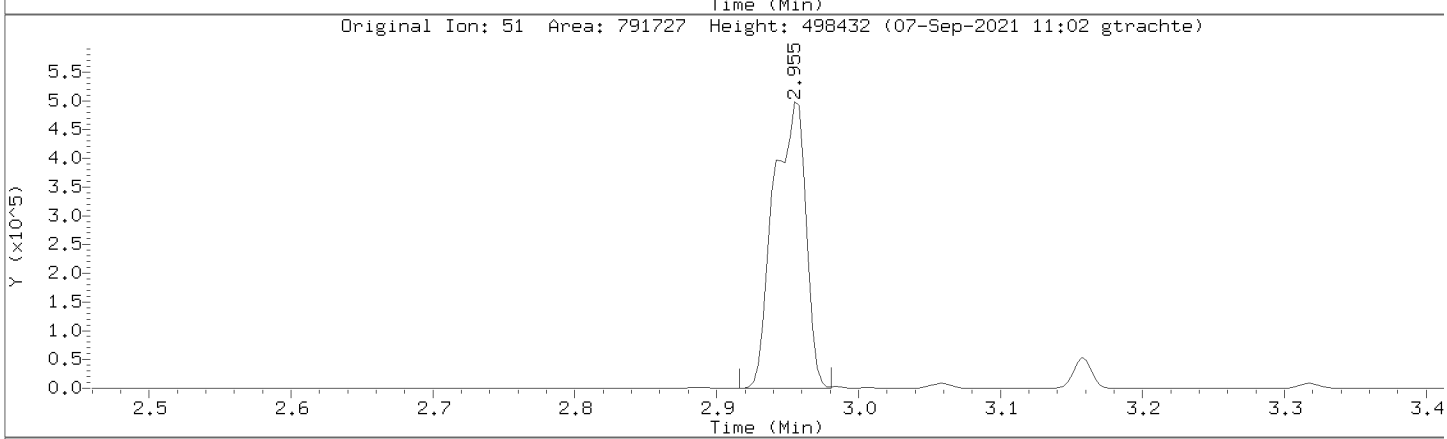
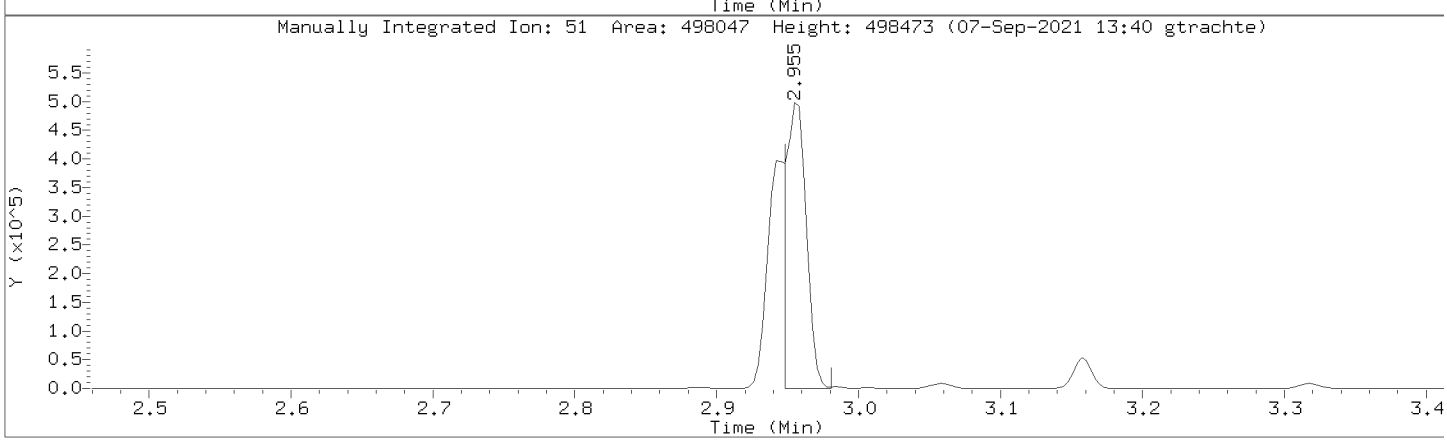
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: Chlorodifluoromethane
CAS Number: 76-13-1



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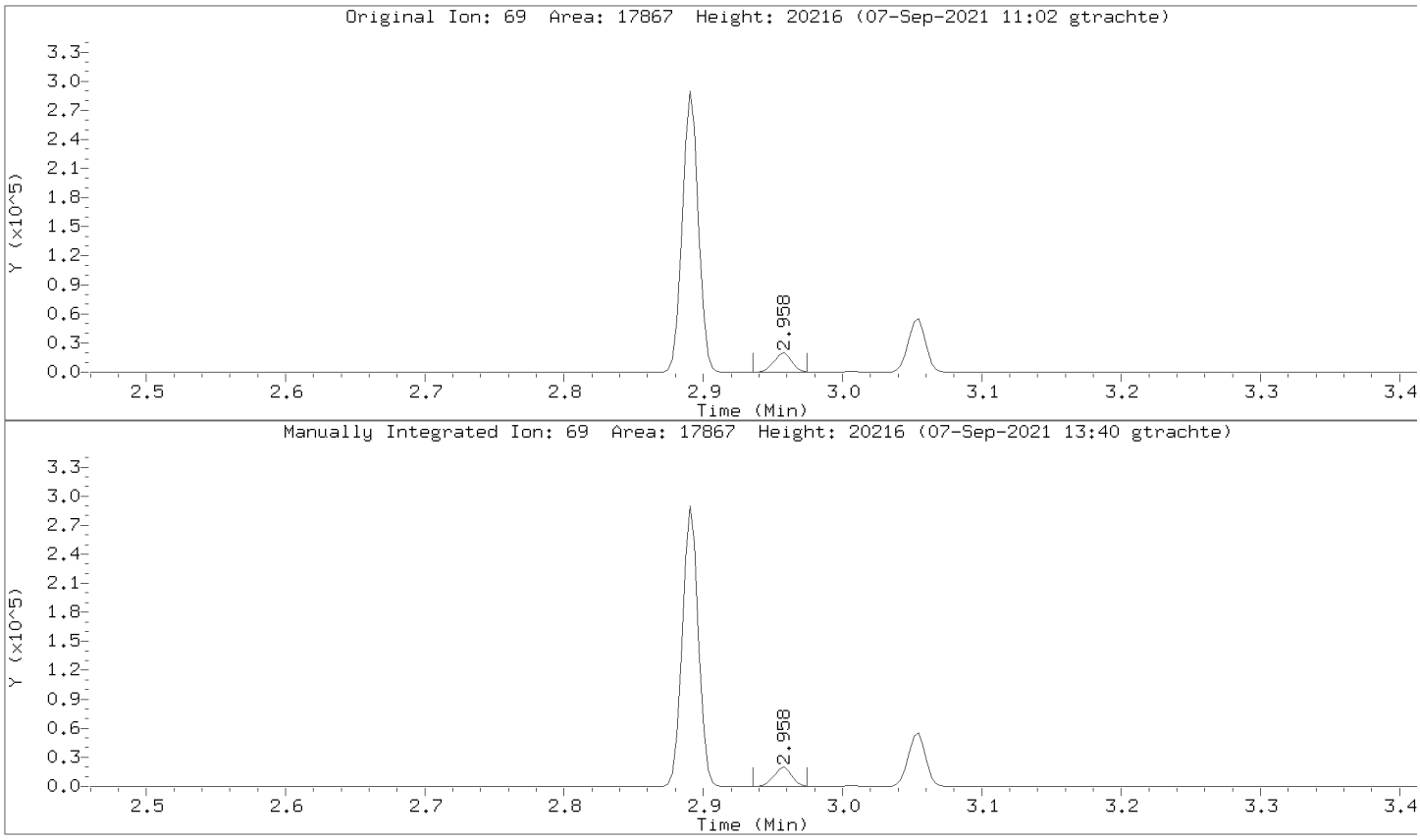
Instrument: 10airH.i
Lab Sample ID: CAL5



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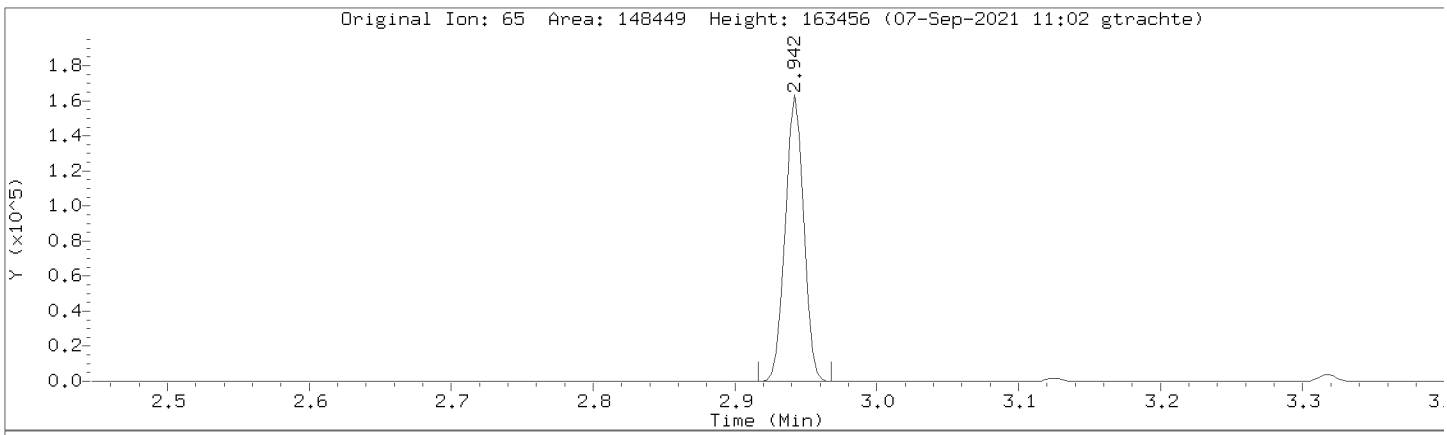
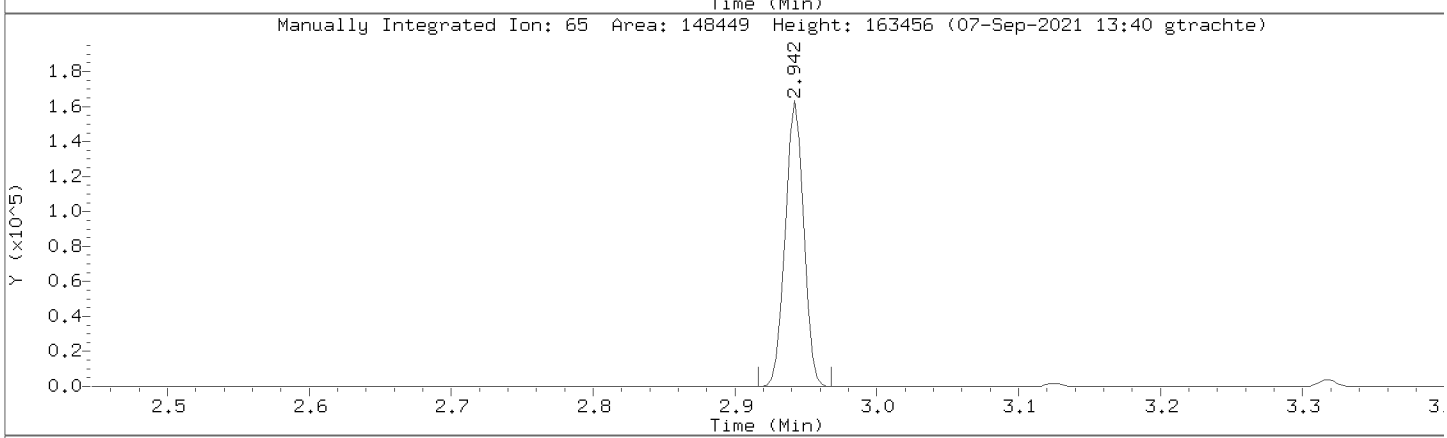
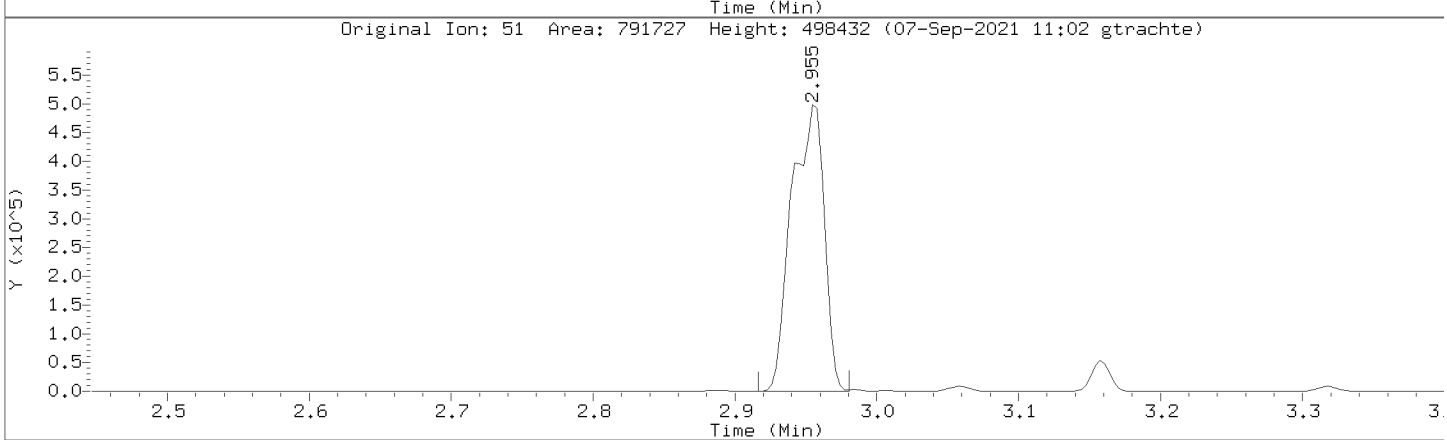
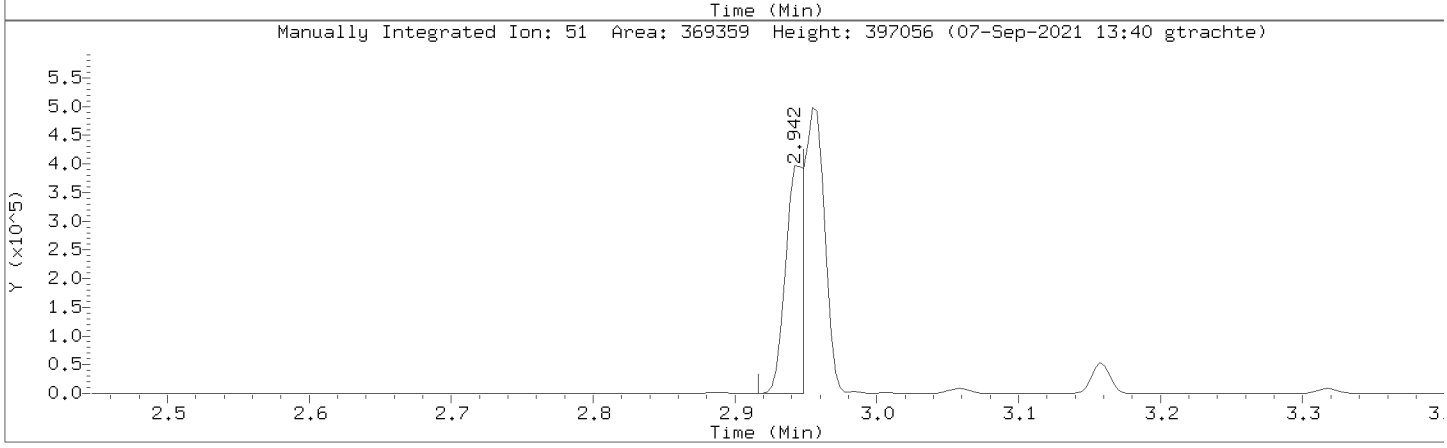
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6



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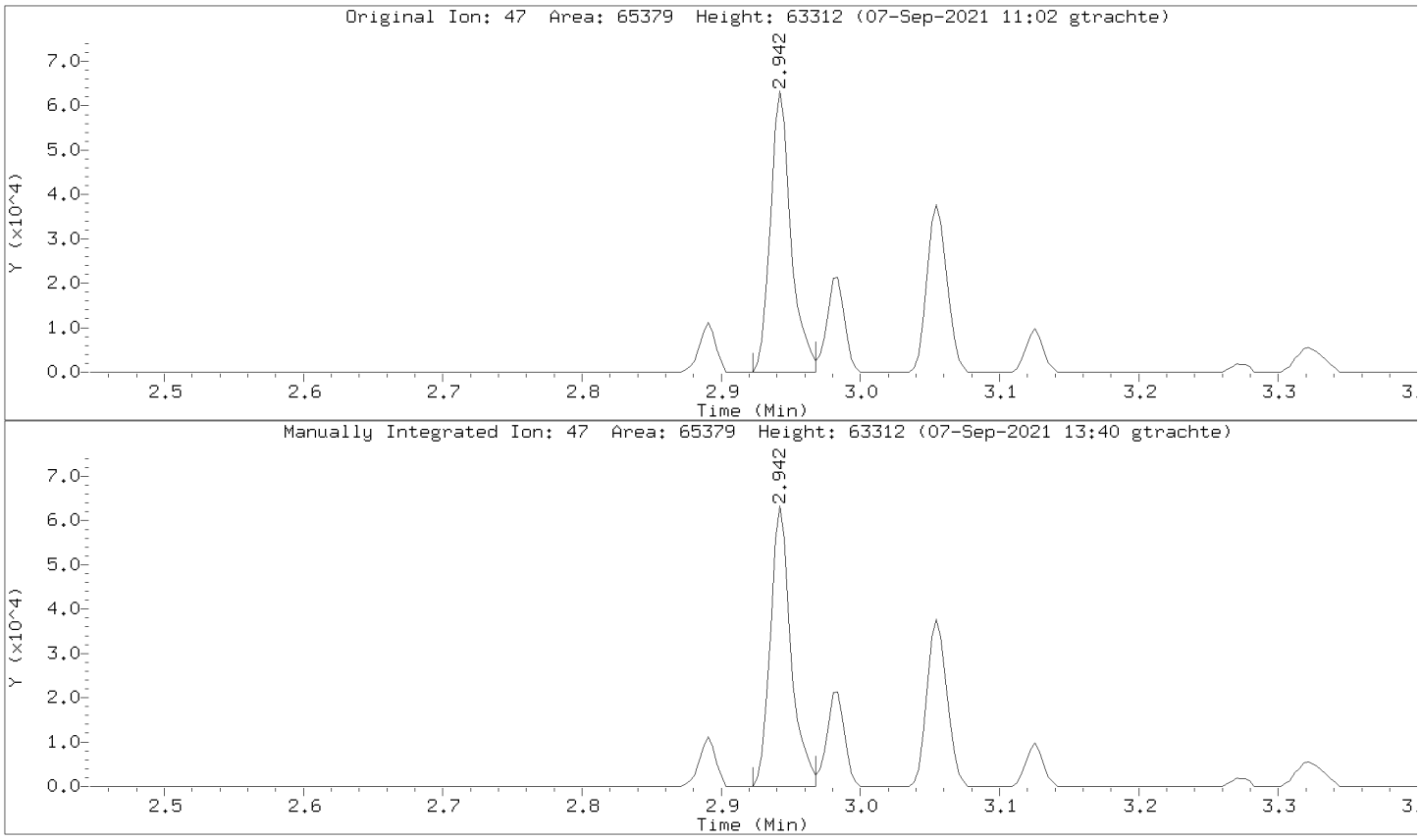
Lab Sample ID: CAL5



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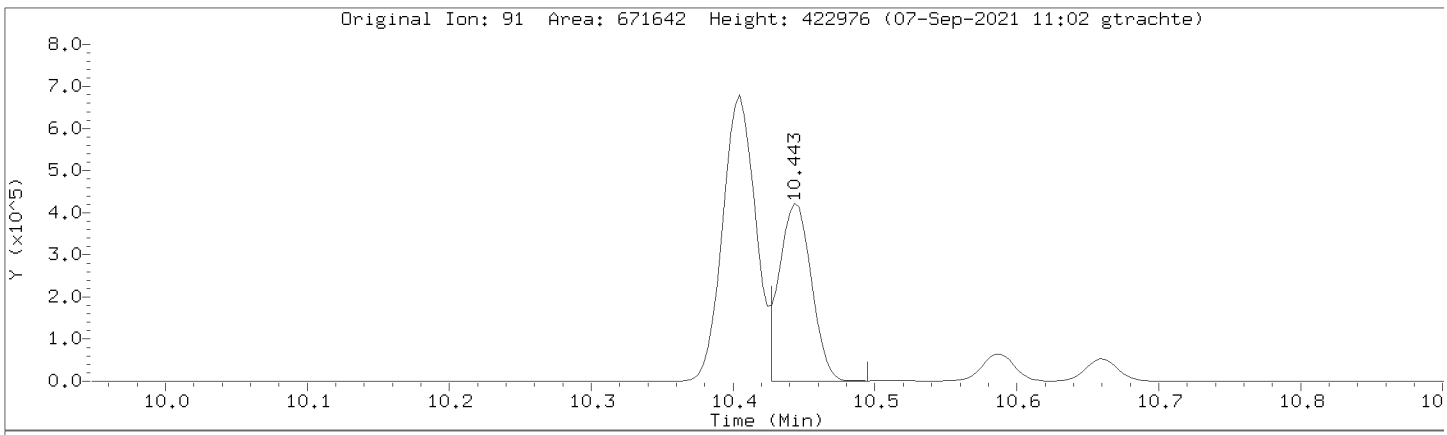
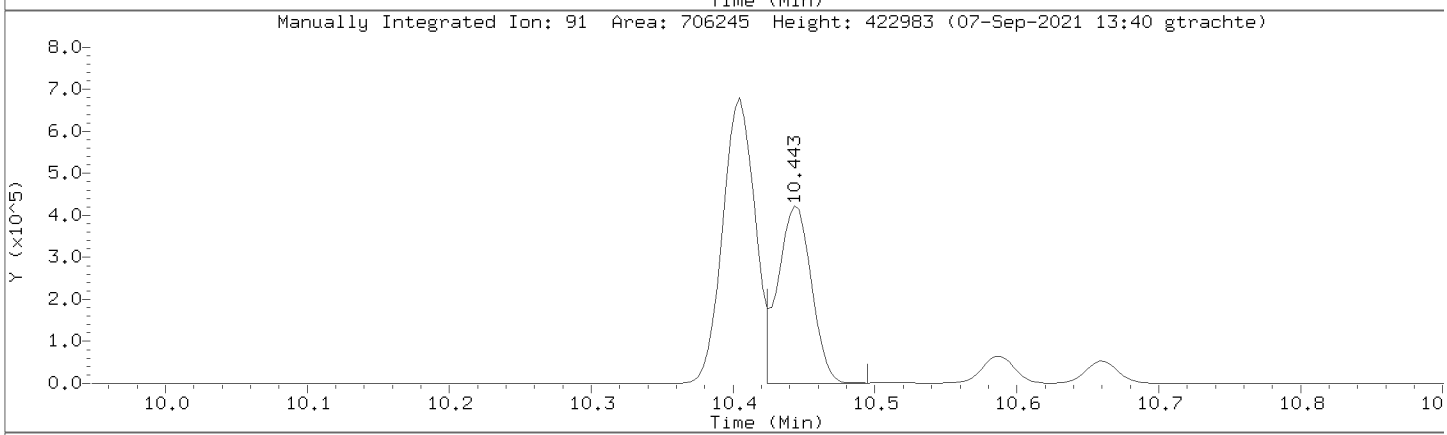
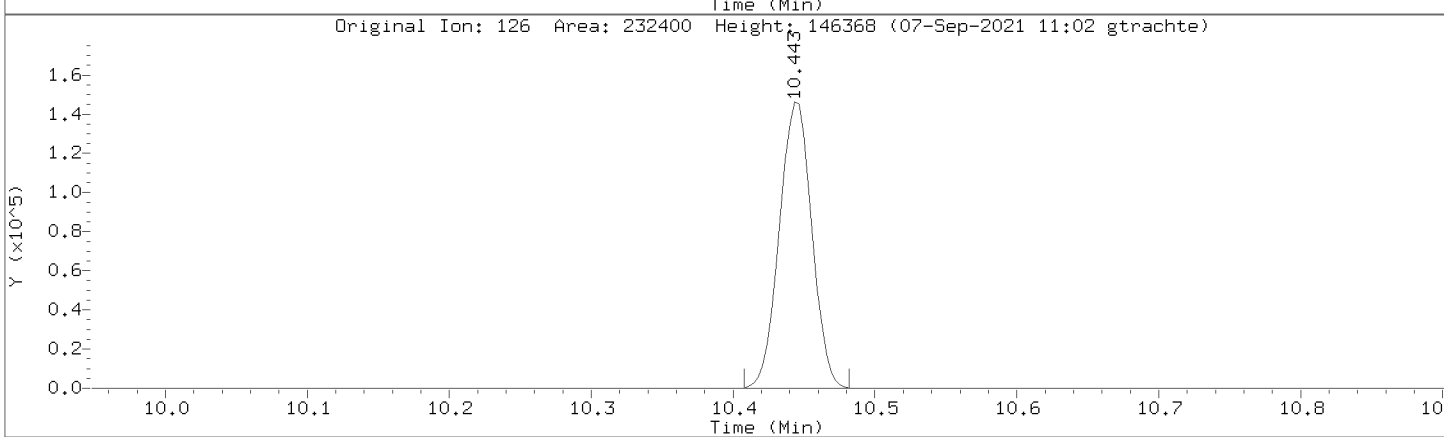
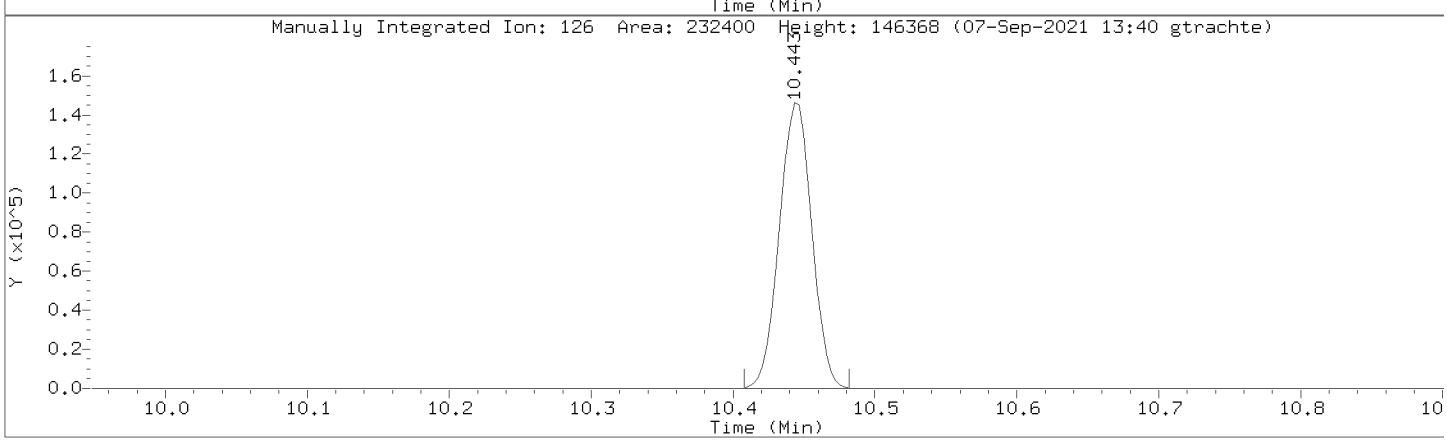
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5

Compound: 2-Chlorotoluene
CAS Number: 95-49-8



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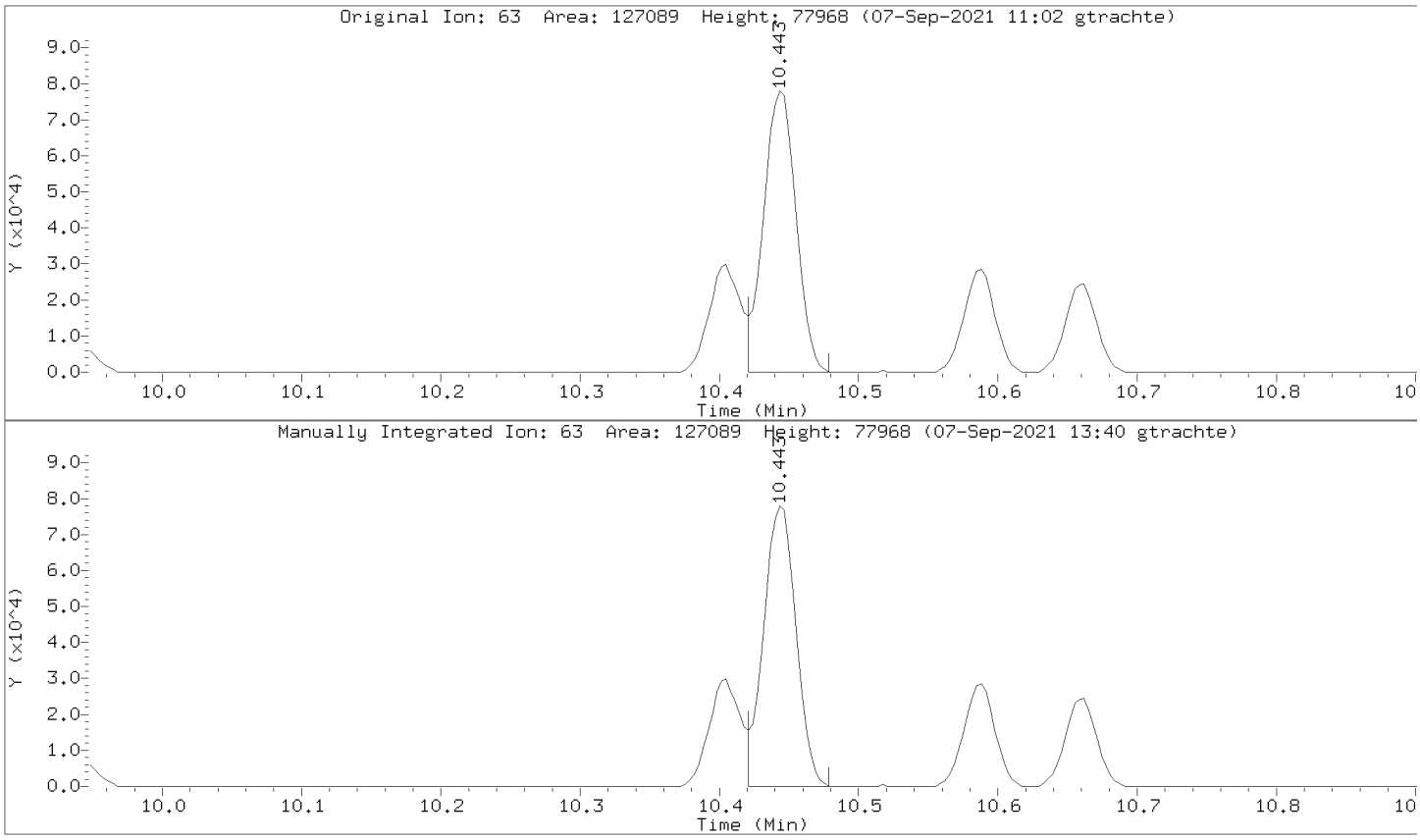
Injection Date: 07-SEP-2021 10:08
Instrument: 10airH.i
Lab Sample ID: CAL5



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25009.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25009.D
Lab Smp Id: CAL6
Inj Date : 07-SEP-2021 10:34
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 07-Sep-2021 14:02 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.942 | 2.948 | (0.541) | 279672 | 21.4300 | 21.6(QM) |
| 2 Chlorodifluoromethane | 67 | 2.958 | 2.961 | (0.544) | 108518 | 21.4400 | 21.7(QM) |
| 3 Propylene | 41 | 2.961 | 2.967 | (0.545) | 376494 | 21.5600 | 17.4 |
| 4 Dichlorodifluoromethane | 85 | 2.983 | 2.986 | (0.549) | 948169 | 21.7300 | 18.0 |
| 5 Dichlorotetrafluoroethane | 85 | 3.054 | 3.057 | (0.562) | 922193 | 20.0400 | 17.3 |
| 6 Chloromethane | 50 | 3.057 | 3.064 | (0.562) | 503723 | 21.4900 | 18.4 |
| 7 Vinyl chloride | 62 | 3.125 | 3.131 | (0.575) | 429890 | 21.5600 | 20.1 |
| 8 1,3-Butadiene | 54 | 3.160 | 3.163 | (0.581) | 314167 | 21.4800 | 20.9 |
| 9 Bromomethane | 94 | 3.276 | 3.279 | (0.603) | 315475 | 21.5200 | 19.6 |
| 10 Chloroethane | 64 | 3.318 | 3.324 | (0.610) | 188721 | 21.5100 | 21.7 |
| 11 Ethanol | 45 | 3.337 | 3.343 | (0.614) | 629708 | 129.270 | 108 |
| 12 Vinyl Bromide | 106 | 3.424 | 3.427 | (0.630) | 303247 | 21.4400 | 20.8 |
| 13 Isopentane | 43 | 3.437 | 3.440 | (0.632) | 352074 | 22.0500 | 19.3 |
| 14 Freon 123 | 83 | 3.475 | 3.478 | (0.639) | 664038 | 21.3500 | 18.6 |
| 15 Trichlorofluoromethane | 101 | 3.498 | 3.501 | (0.643) | 855298 | 21.7200 | 18.2 |
| 16 Acrolein | 56 | 3.501 | 3.504 | (0.644) | 382322 | 60.9700 | 56.5 |
| 17 Acetone | 43 | 3.520 | 3.527 | (0.648) | 2075731 | 105.920 | 95.8 |
| 18 Isopropyl Alcohol | 45 | 3.553 | 3.559 | (0.653) | 2413547 | 119.150 | 80.7 |
| 19 1,1-Dichloroethene | 61 | 3.710 | 3.713 | (0.682) | 666906 | 21.6000 | 19.1 |
| 20 Acrylonitrile | 53 | 3.720 | 3.726 | (0.684) | 812498 | 59.6800 | 54.7 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.745 | 3.752 | (0.689) | 932365 | 21.2300 | 17.0 |
| 22 Methyl Acetate | 43 | 3.742 | 3.749 | (0.688) | 779886 | 21.4900 | 14.5 |
| 23 Freon 113 | 101 | 3.742 | 3.745 | (0.688) | 715464 | 21.4700 | 17.9 |
| 24 Allyl Chloride | 76 | 3.819 | 3.822 | (0.703) | 149348 | 21.2700 | 19.6(Q) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25009.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 3.819 | 3.826 | (0.703) | 2033727 | 107.760 | 104 |
| 26 Carbon Disulfide | 76 | 3.926 | 3.929 | (0.722) | 967147 | 21.7300 | 18.4 |
| 27 Methyl Tert Butyl Ether | 73 | 4.070 | 4.076 | (0.749) | 942544 | 21.6000 | 19.2 |
| 28 trans-1,2-dichloroethene | 96 | 4.086 | 4.093 | (0.752) | 355189 | 21.6300 | 18.6 |
| 29 Vinyl Acetate | 43 | 4.163 | 4.166 | (0.766) | 913731 | 25.9100 | 20.4 |
| 30 1,1-Dichloroethane | 63 | 4.212 | 4.215 | (0.775) | 785186 | 21.3600 | 18.2 |
| 31 Methyl Ethyl Ketone | 72 | 4.324 | 4.327 | (0.795) | 179677 | 21.5300 | 21.0 |
| 32 Di-isopropyl Ether | 45 | 4.344 | 4.347 | (0.799) | 1350354 | 21.1500 | 16.2 |
| 33 n-Hexane | 57 | 4.353 | 4.356 | (0.801) | 696187 | 21.2300 | 17.0 |
| 34 Ethyl Acetate | 43 | 4.479 | 4.482 | (0.824) | 1001012 | 21.2400 | 17.8(M) |
| 35 cis-1,2-Dichloroethene | 96 | 4.498 | 4.504 | (0.827) | 364179 | 21.5500 | 18.6(M) |
| 36 Ethyl Tert-Butyl Ether | 59 | 4.569 | 4.572 | (0.840) | 1377805 | 21.5100 | 18.4 |
| 37 Chloroform | 83 | 4.678 | 4.684 | (0.860) | 778783 | 21.1200 | 18.2 |
| 38 Tetrahydrofuran | 42 | 4.742 | 4.745 | (0.872) | 527665 | 21.3900 | 19.9 |
| 39 1,1,1-Trichloroethane | 97 | 4.987 | 4.993 | (0.917) | 785188 | 21.4000 | 19.1 |
| 40 1,2-Dichloroethane | 62 | 5.067 | 5.073 | (0.932) | 620764 | 21.6000 | 19.2 |
| 41 Benzene | 78 | 5.221 | 5.228 | (0.960) | 1014785 | 21.4500 | 21.4 |
| 42 Carbon tetrachloride | 117 | 5.237 | 5.244 | (0.963) | 707303 | 21.6900 | 20.0 |
| 43 Cyclohexane | 56 | 5.263 | 5.266 | (0.968) | 749465 | 21.3900 | 18.8(M) |
| 44 Tert Amyl Methyl Ether | 73 | 5.360 | 5.363 | (0.986) | 1019846 | 21.5100 | 20.7 |
| * 45 1,4-Difluorobenzene | 114 | 5.437 | 5.440 | (1.000) | 457080 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 5.527 | 5.530 | (1.017) | 2143704 | 21.4800 | 17.5 |
| 47 Heptane | 43 | 5.655 | 5.658 | (1.040) | 810026 | 21.4300 | 17.7 |
| 48 Trichloroethene | 130 | 5.765 | 5.768 | (1.060) | 496746 | 21.4000 | 20.1 |
| 49 Methyl methacrylate | 69 | 5.803 | 5.806 | (1.067) | 388473 | 21.4500 | 19.3 |
| 50 1,2-Dichloropropane | 63 | 5.810 | 5.813 | (1.069) | 505369 | 21.5500 | 19.1 |
| 51 1,4-Dioxane | 88 | 5.855 | 5.858 | (1.077) | 536931 | 53.6300 | 45.4 |
| 52 Bromodichloromethane | 83 | 5.967 | 5.970 | (1.098) | 814750 | 21.4800 | 19.4 |
| 53 Methylcyclohexane | 98 | 6.228 | 6.234 | (1.145) | 286810 | 21.5100 | 21.7 |
| 54 Methyl Isobutyl Ketone | 43 | 6.305 | 6.308 | (1.160) | 1111170 | 21.5600 | 20.4 |
| 55 cis-1,3-Dichloropropene | 75 | 6.392 | 6.395 | (1.176) | 638767 | 21.4100 | 21.1 |
| 56 trans-1,3-Dichloropropene | 75 | 6.832 | 6.835 | (1.257) | 558420 | 21.9100 | 22.9 |
| 57 Toluene | 91 | 6.929 | 6.932 | (1.274) | 1208149 | 21.7100 | 19.9 |
| 58 1,1,2-Trichloroethane | 97 | 7.057 | 7.060 | (1.298) | 449777 | 21.4900 | 20.6 |
| 59 Methyl Butyl Ketone | 43 | 7.147 | 7.150 | (0.850) | 1055951 | 21.4900 | 21.7 |
| 60 n-Octane | 43 | 7.347 | 7.350 | (0.873) | 1095530 | 21.5100 | 19.0 |
| 61 Dibromochloromethane | 129 | 7.591 | 7.591 | (0.903) | 816972 | 21.5200 | 19.9 |
| 62 Tetrachloroethene | 166 | 7.668 | 7.671 | (0.912) | 607256 | 21.2900 | 19.6 |
| 63 1,2-Dibromoethane | 107 | 7.790 | 7.793 | (0.926) | 727255 | 21.1200 | 20.3 |
| * 64 Chlorobenzene - d5 | 117 | 8.411 | 8.411 | (1.000) | 393387 | 10.0000 | |
| 65 Chlorobenzene | 112 | 8.456 | 8.456 | (1.005) | 977083 | 21.4400 | 19.4 |
| 66 Ethyl Benzene | 91 | 8.671 | 8.674 | (1.031) | 1567289 | 21.6800 | 20.3 |
| 67 m&p-Xylene | 91 | 8.855 | 8.858 | (1.053) | 2458789 | 43.2300 | 41.3(M) |
| 68 n-Nonane | 43 | 9.189 | 9.192 | (1.093) | 1125958 | 21.5300 | 20.7 |
| 69 Styrene | 104 | 9.257 | 9.260 | (1.101) | 947438 | 21.6900 | 21.7(M) |
| 70 o-Xylene | 91 | 9.292 | 9.295 | (1.105) | 1258653 | 21.5500 | 20.1 |
| 71 Bromoform | 173 | 9.366 | 9.369 | (1.114) | 699293 | 21.6800 | 23.3 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 9.707 | 9.710 | (1.154) | 1017884 | 21.6100 | 20.7 |
| 73 Isopropylbenzene | 105 | 9.838 | 9.842 | (1.170) | 1728603 | 21.3500 | 21.2 |
| 74 N-Propylbenzene | 91 | 10.404 | 10.407 | (1.237) | 2095996 | 21.6100 | 21.4 |
| 75 2-Chlorotoluene | 91 | 10.446 | 10.449 | (1.242) | 1319660 | 21.7500 | 20.2(M) |
| 76 4-Ethyltoluene | 105 | 10.588 | 10.591 | (1.259) | 1705783 | 21.4800 | 21.8 |
| 77 1,3,5-Trimethylbenzene | 105 | 10.662 | 10.665 | (1.268) | 1506929 | 21.4900 | 21.5 |
| 78 n-Decane | 57 | 11.012 | 11.015 | (2.025) | 1388573 | 21.7300 | 22.5 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25009.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.109 | 11.112 | (1.321) | 1465786 | 21.6800 | 22.4 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.154 | 11.157 | (1.326) | 1503582 | 21.6300 | 24.4 |
| 81 Sec- Butylbenzene | 105 | 11.417 | 11.417 | (1.357) | 2125668 | 21.7100 | 23.2 |
| 82 1,3-Dichlorobenzene | 146 | 11.449 | 11.452 | (1.361) | 955463 | 21.7100 | 22.5 |
| 83 Benzyl Chloride | 91 | 11.523 | 11.526 | (1.370) | 1082051 | 21.8800 | 22.4 |
| 84 1,4-Dichlorobenzene | 146 | 11.584 | 11.587 | (1.377) | 920951 | 21.6900 | 22.6 |
| 85 p-Isopropyltoluene | 119 | 11.620 | 11.623 | (1.381) | 1879094 | 21.7900 | 22.2 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.636 | 11.639 | (1.383) | 1524791 | 21.6900 | 23.0 |
| 87 1,2-Dichlorobenzene | 146 | 11.890 | 11.893 | (1.414) | 941672 | 21.6700 | 22.3 |
| 88 N-Butylbenzene | 91 | 12.070 | 12.073 | (1.435) | 1609330 | 21.6300 | 22.0 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.591 | 12.591 | (1.497) | 540265 | 21.8100 | 22.1 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.536 | 13.539 | (1.609) | 1042439 | 46.9700 | 48.7 |
| 91 Naphthalene | 128 | 13.674 | 13.675 | (1.626) | 1339860 | 24.4900 | 24.5 |
| 92 Hexachlorobutadiene | 225 | 13.784 | 13.787 | (1.639) | 617640 | 24.4900 | 27.6 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25009.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

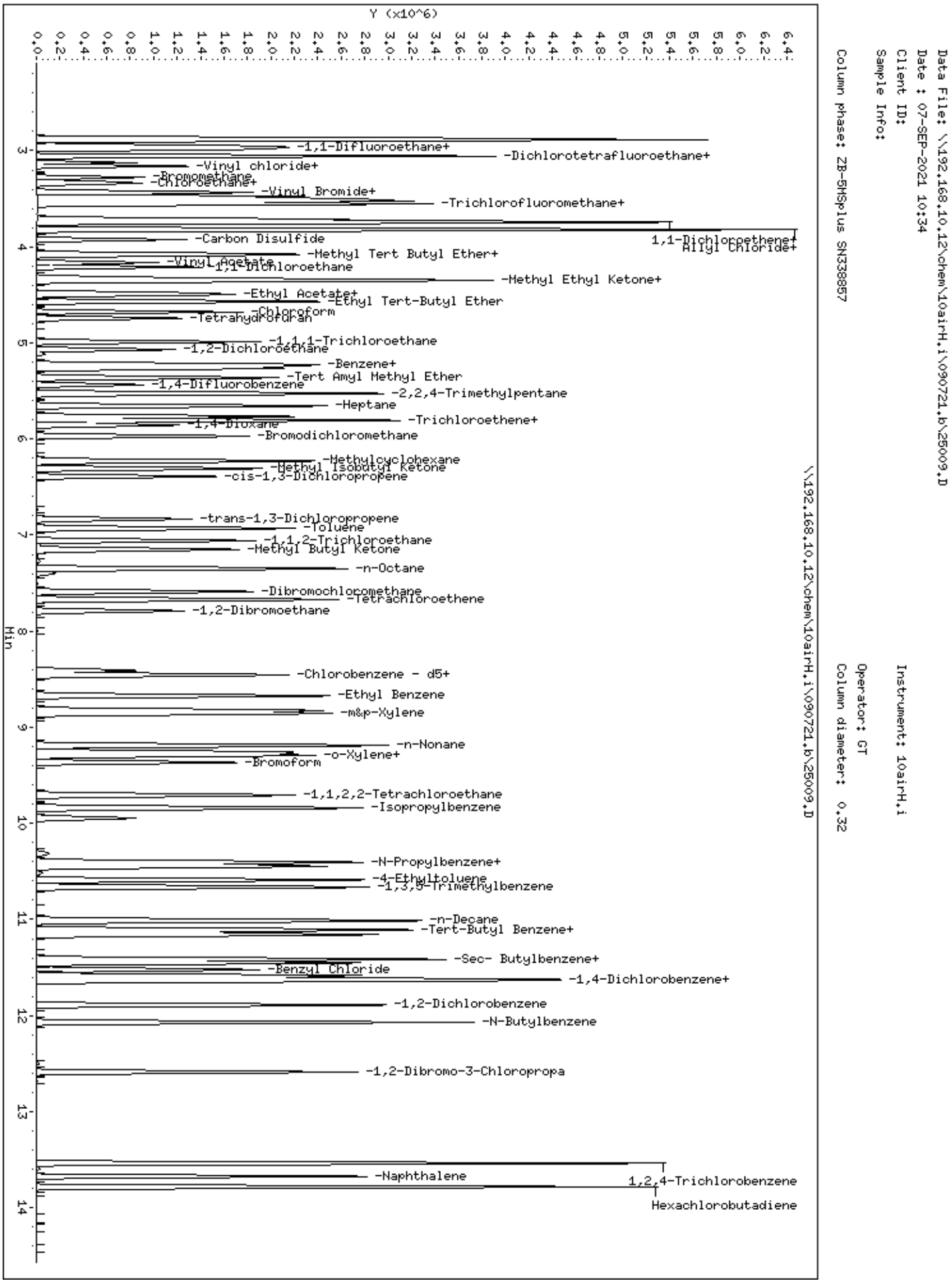
Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25009.D
Calibration Time: 10:08
Lab Smp Id: CAL6
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 457080 | -0.60 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 393387 | 0.35 |

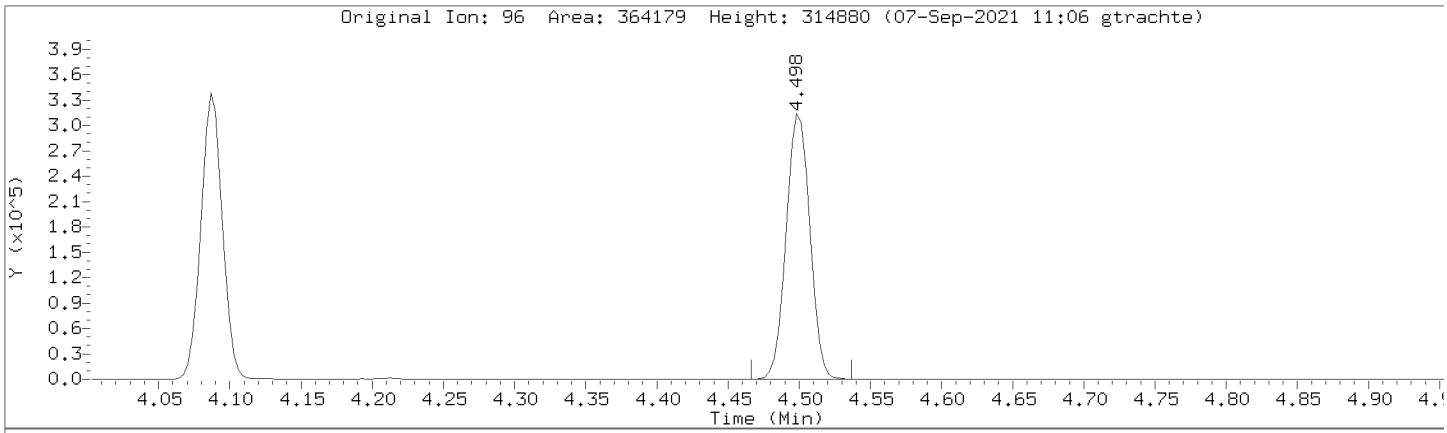
| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.44 | 0.06 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.04 |

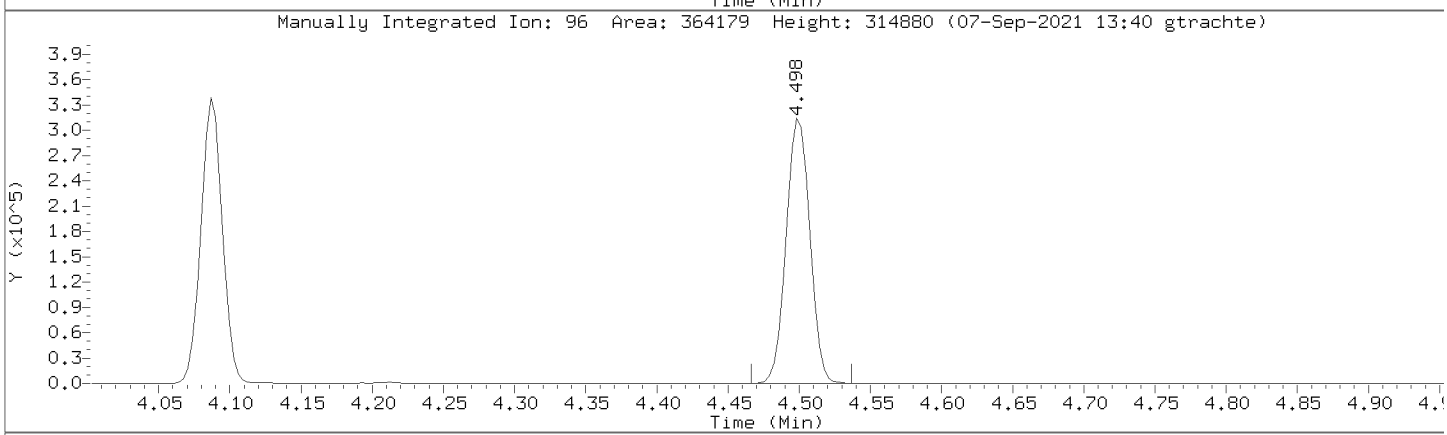
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

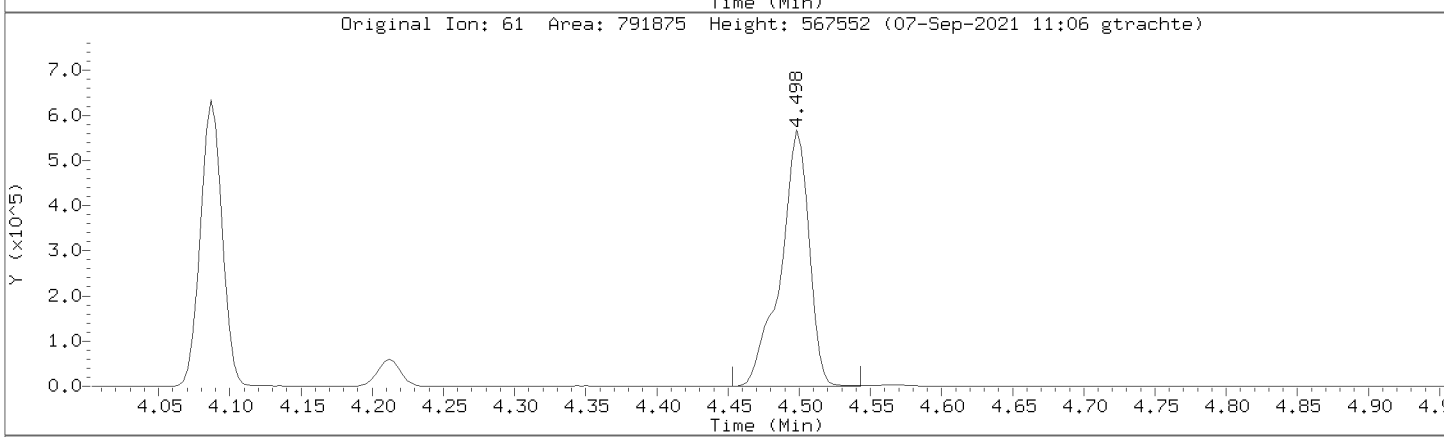

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25009.D
Date : 07-SEP-2021 10:34
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airH.i
Operator: GT
Column diameter: 0.32
\\192.168.10.12\chem\10airH.i\090721.b\25009.D
Y (x10^6)
Min
-1,1-Difluoroethane+
-Dichlorotetrafluoroethane+
-Vinyl chloride+
-Bromomethane
-Chloroethane+
-Vinyl Bromide+
-Trichlorofluoromethane+
-Carbon Disulfide
1,1-Dichloroethene+
Allyl Chloride+
-Methyl Tert Butyl Ether+
-Vinyl Acetate
1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-o-Xylene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-Tert-Butyl Benzene+
-Sec- Butylbenzene+
-Benzyl Chloride
-1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-Naphthalene
1,2,4-Trichlorobenzene
Hexachlorobutadiene

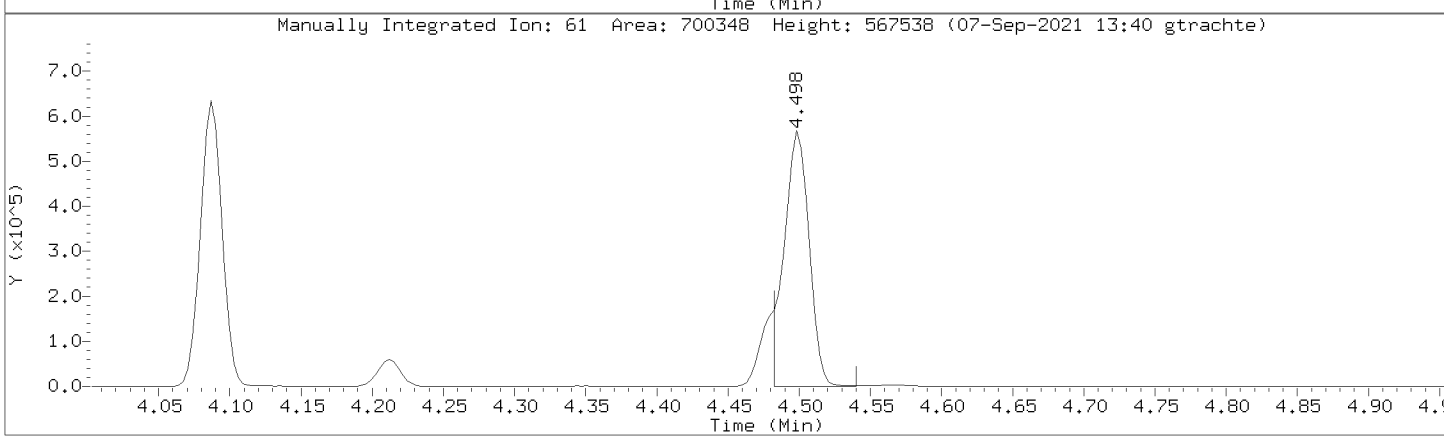
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25009.D
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2

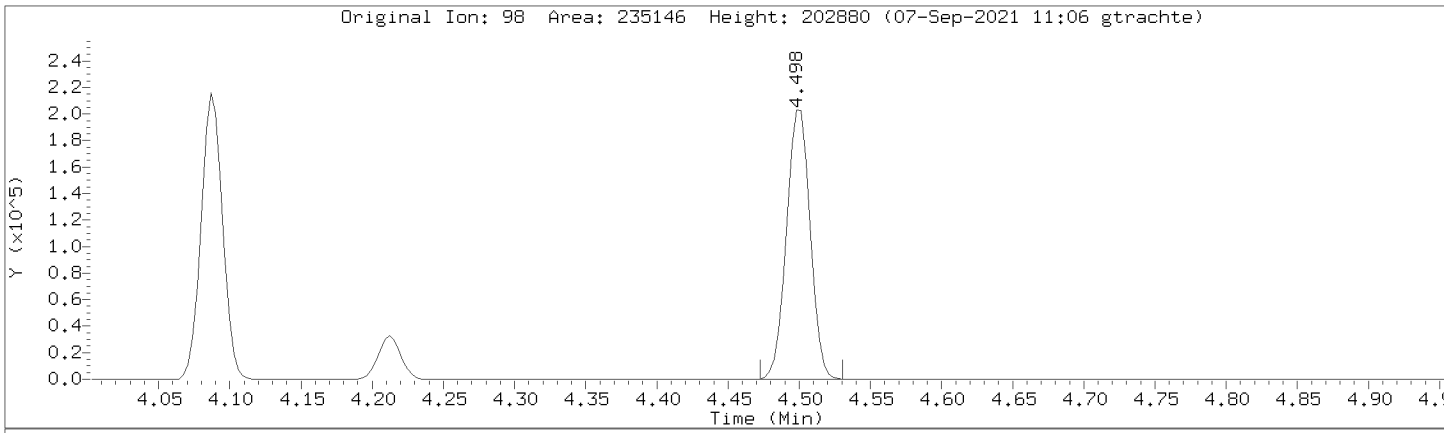


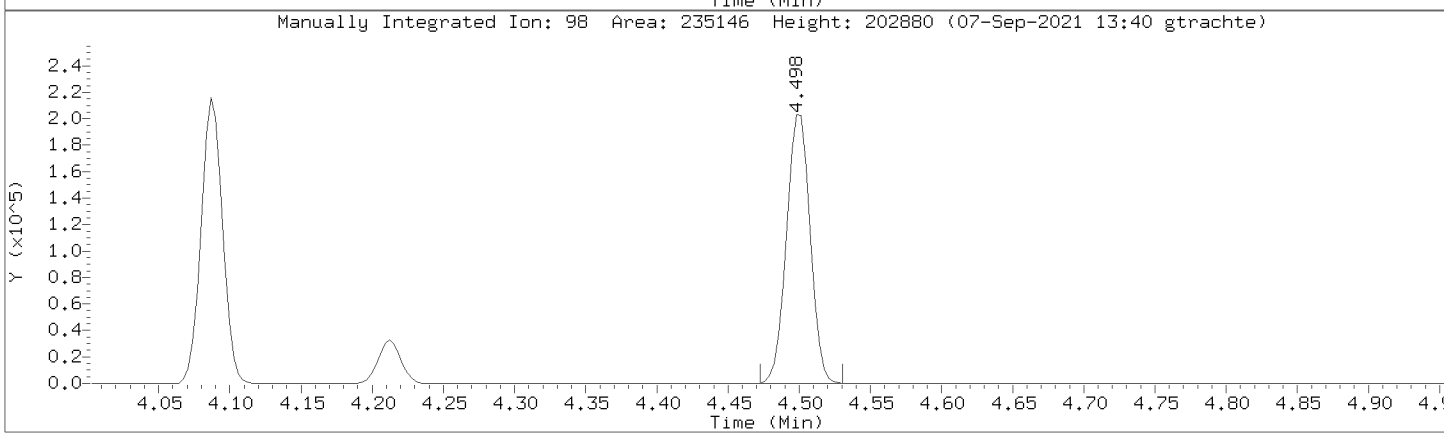



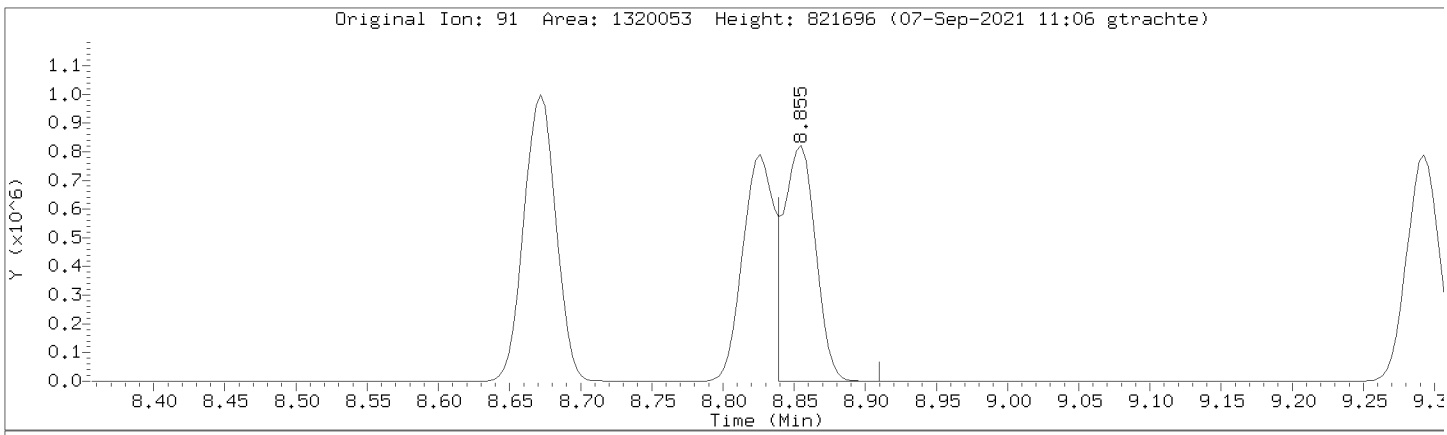
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25009.D
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

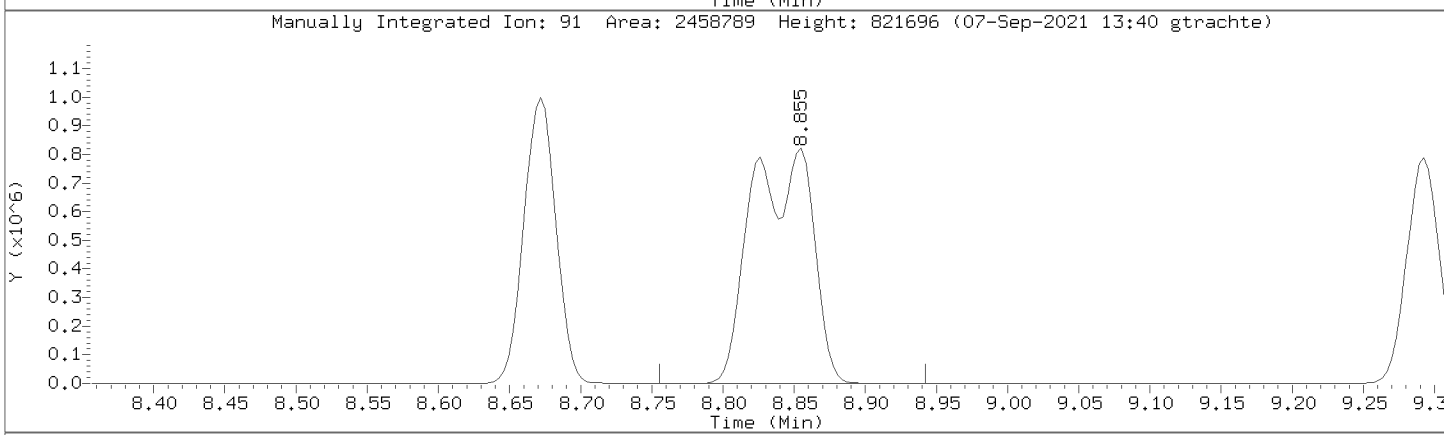


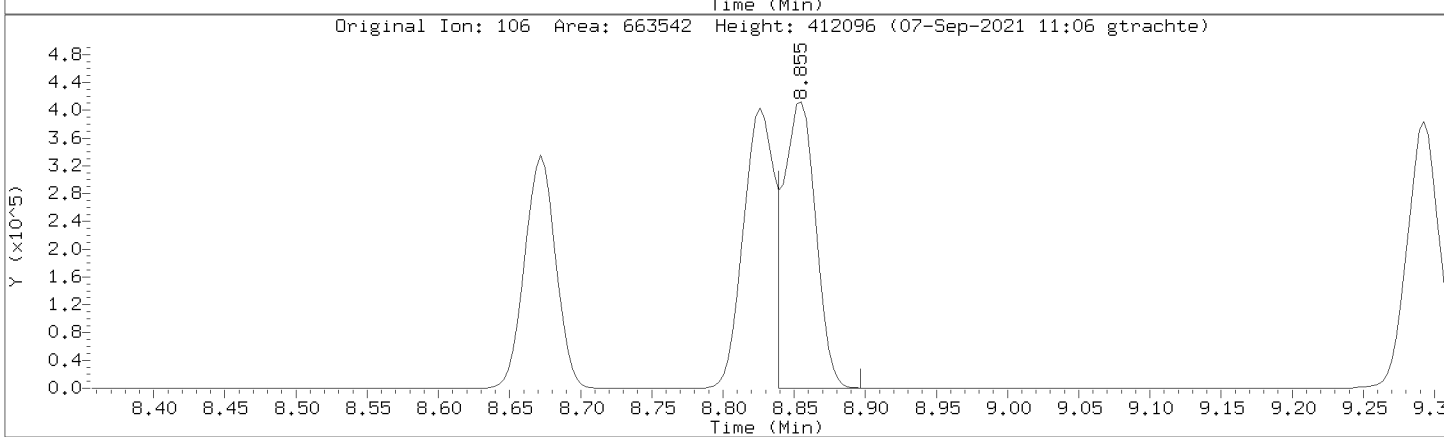



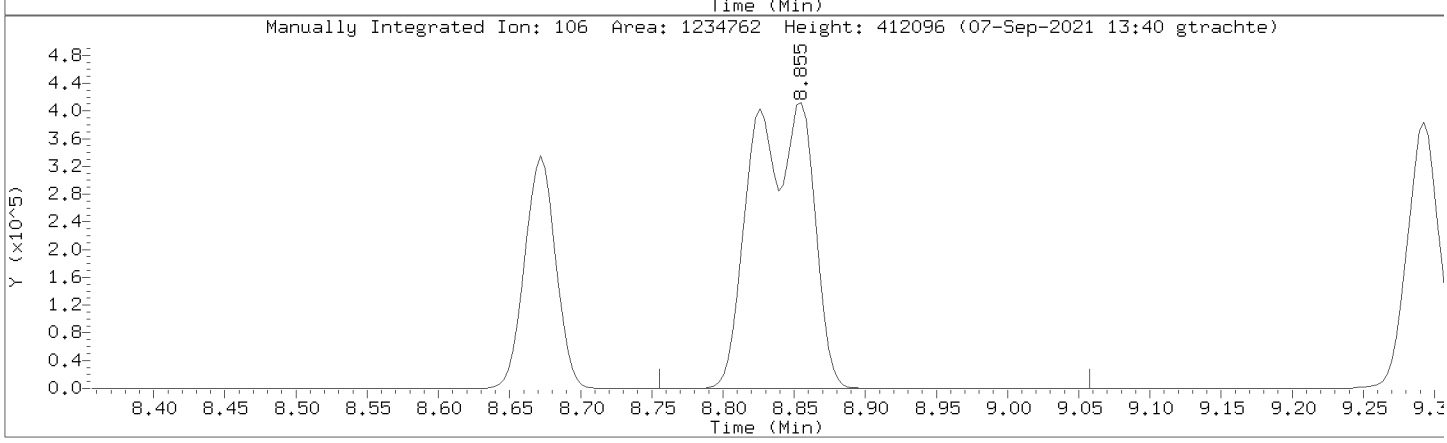
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25009.D
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: m&p-Xylene
CAS Number: 7816-60-0



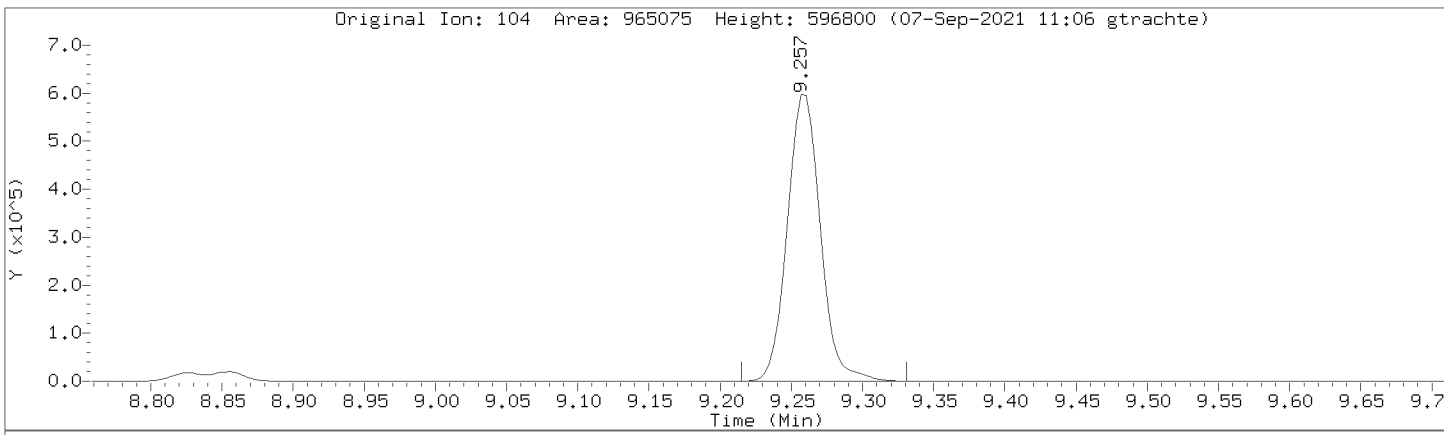



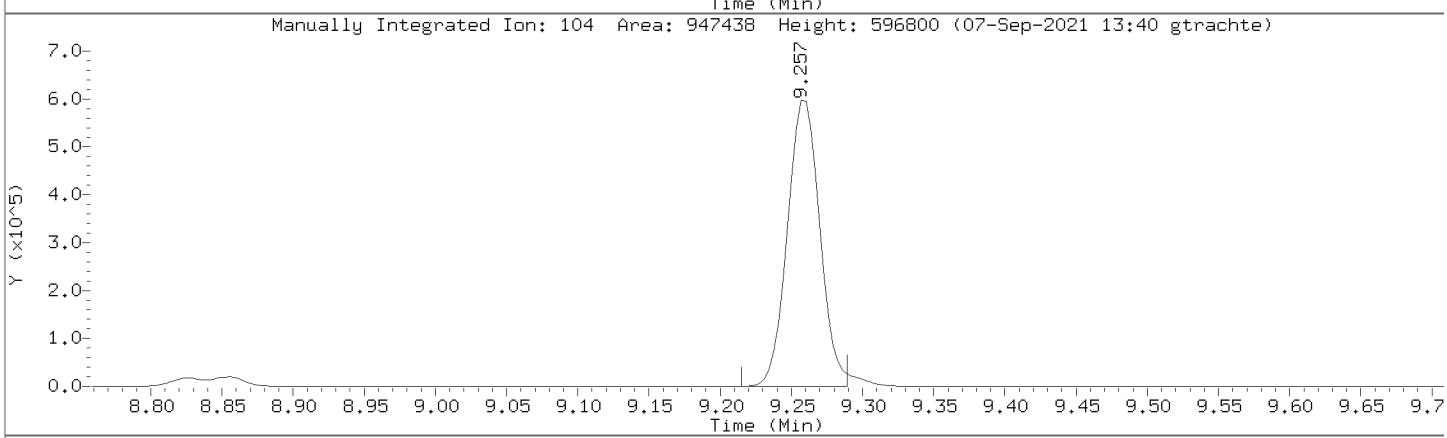



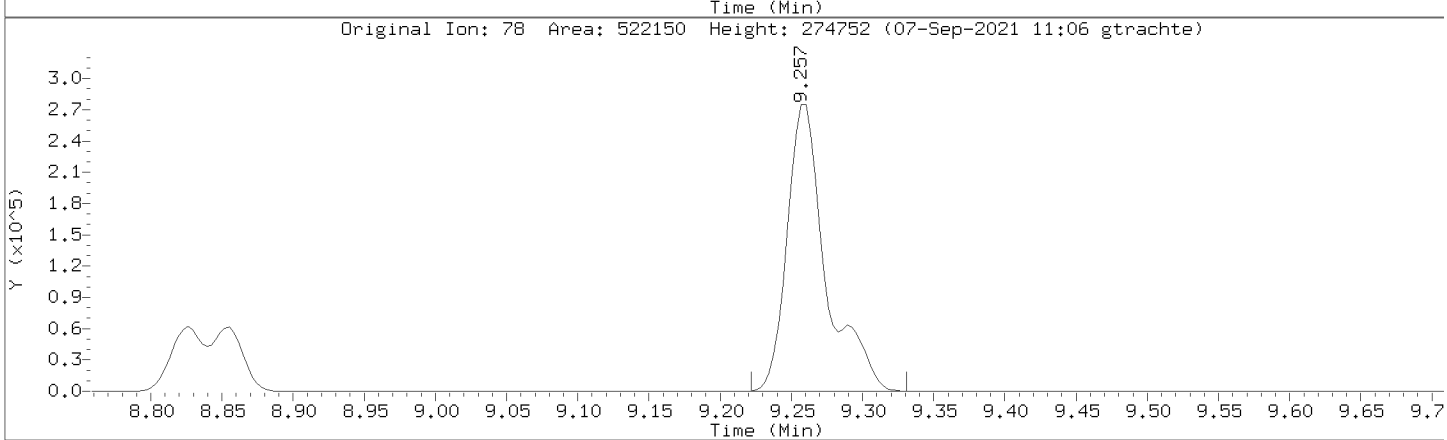



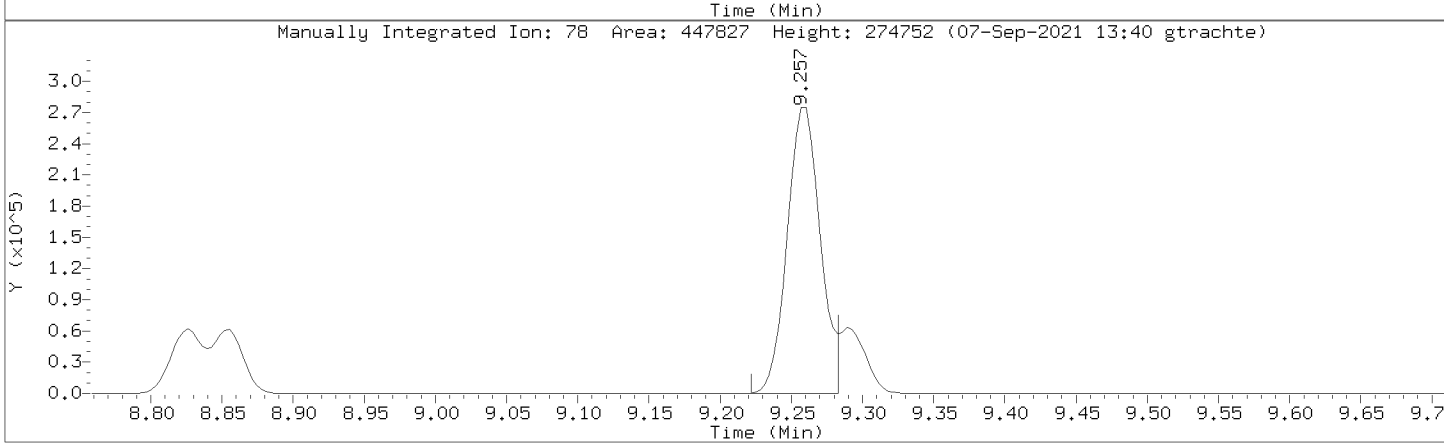
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25009.D
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: Styrene
CAS Number: 100-42-5

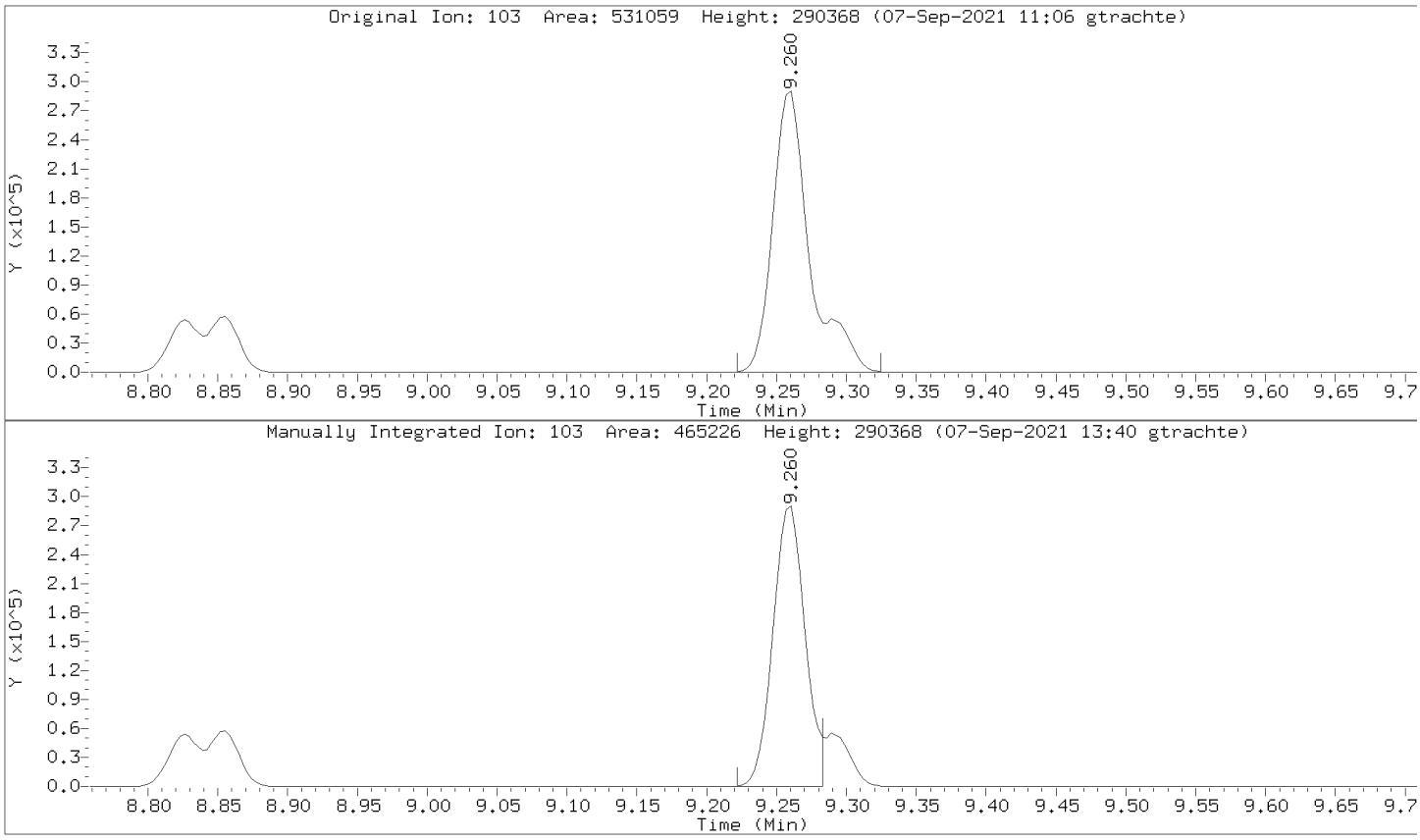


Data File: \\192.168.10.12\chem\10airH.i\090721.b/25009.D
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6



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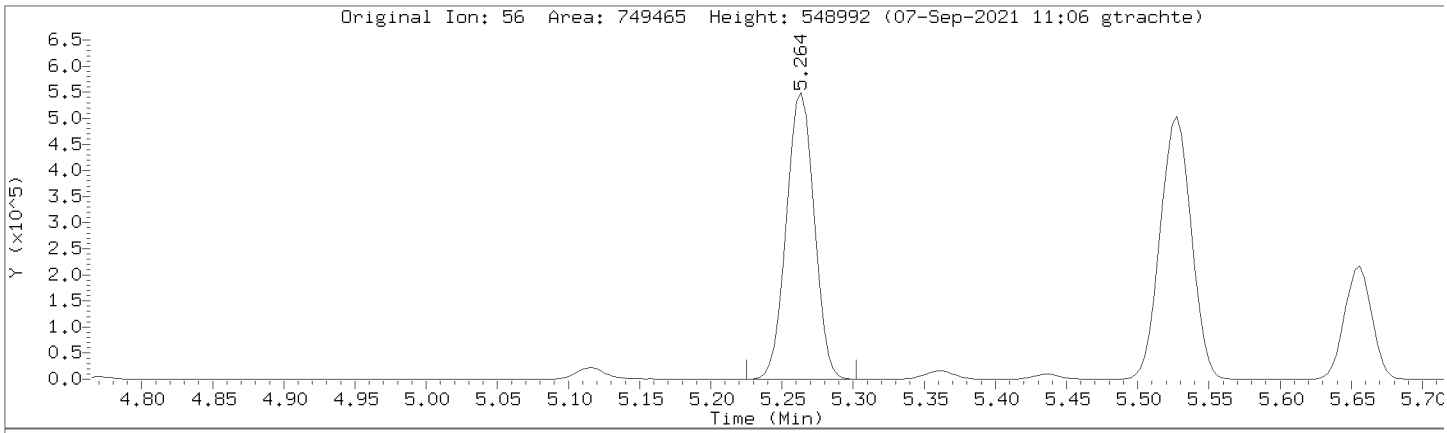
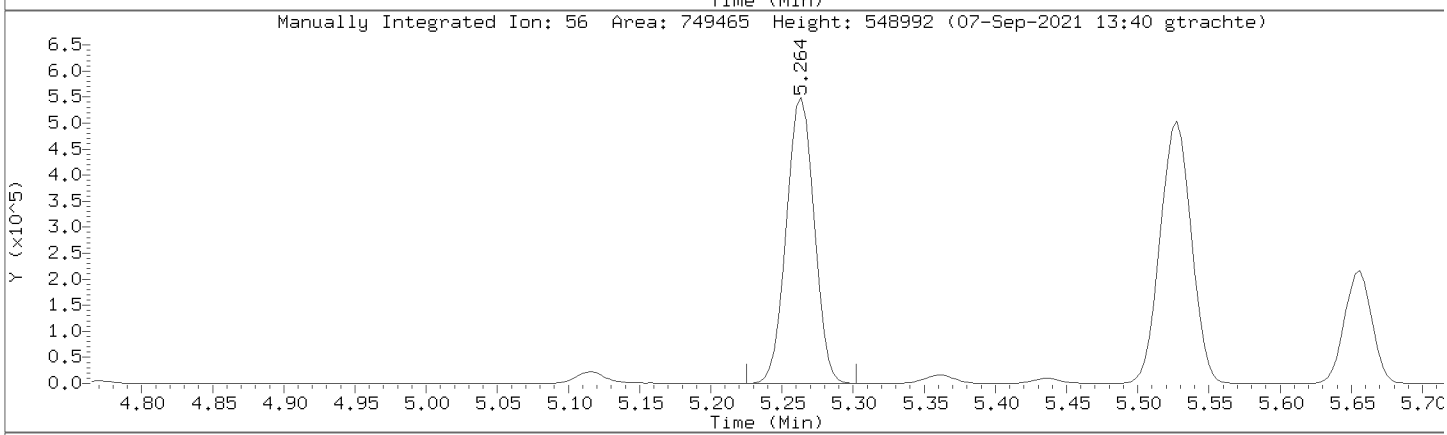
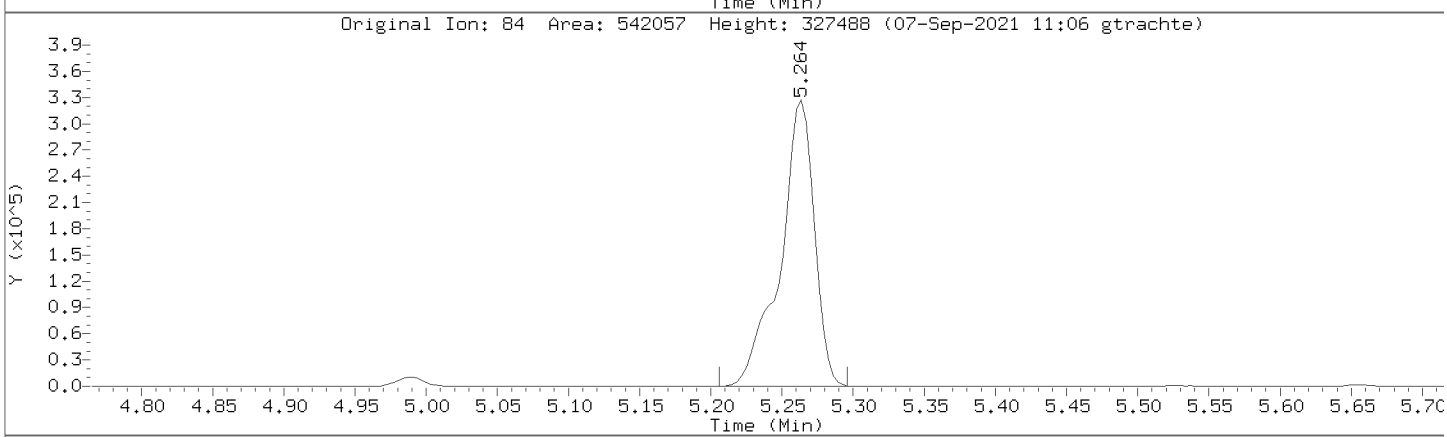
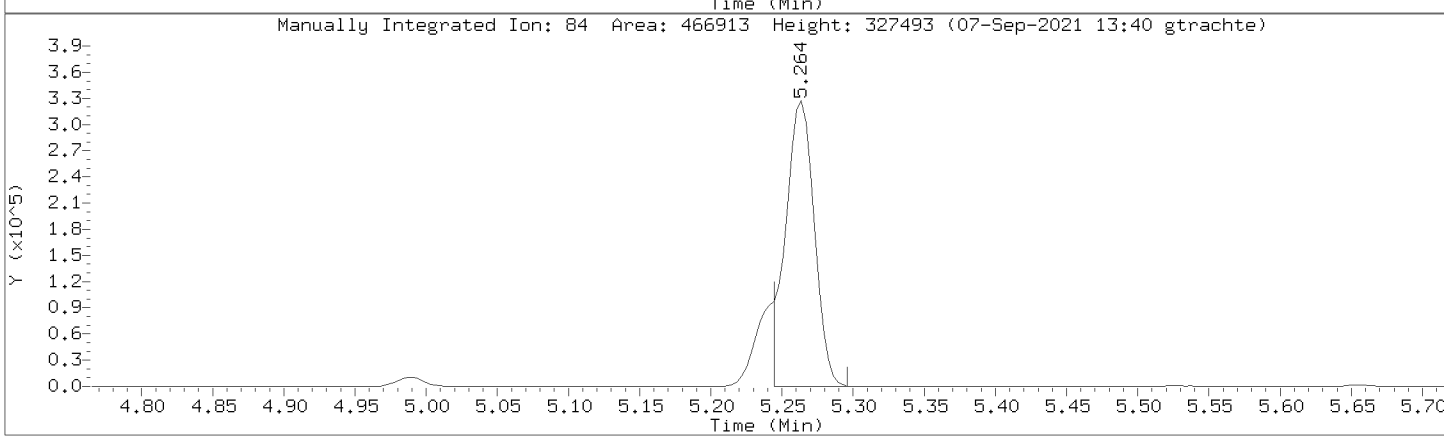
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: Cyclohexane
CAS Number: 110-82-7



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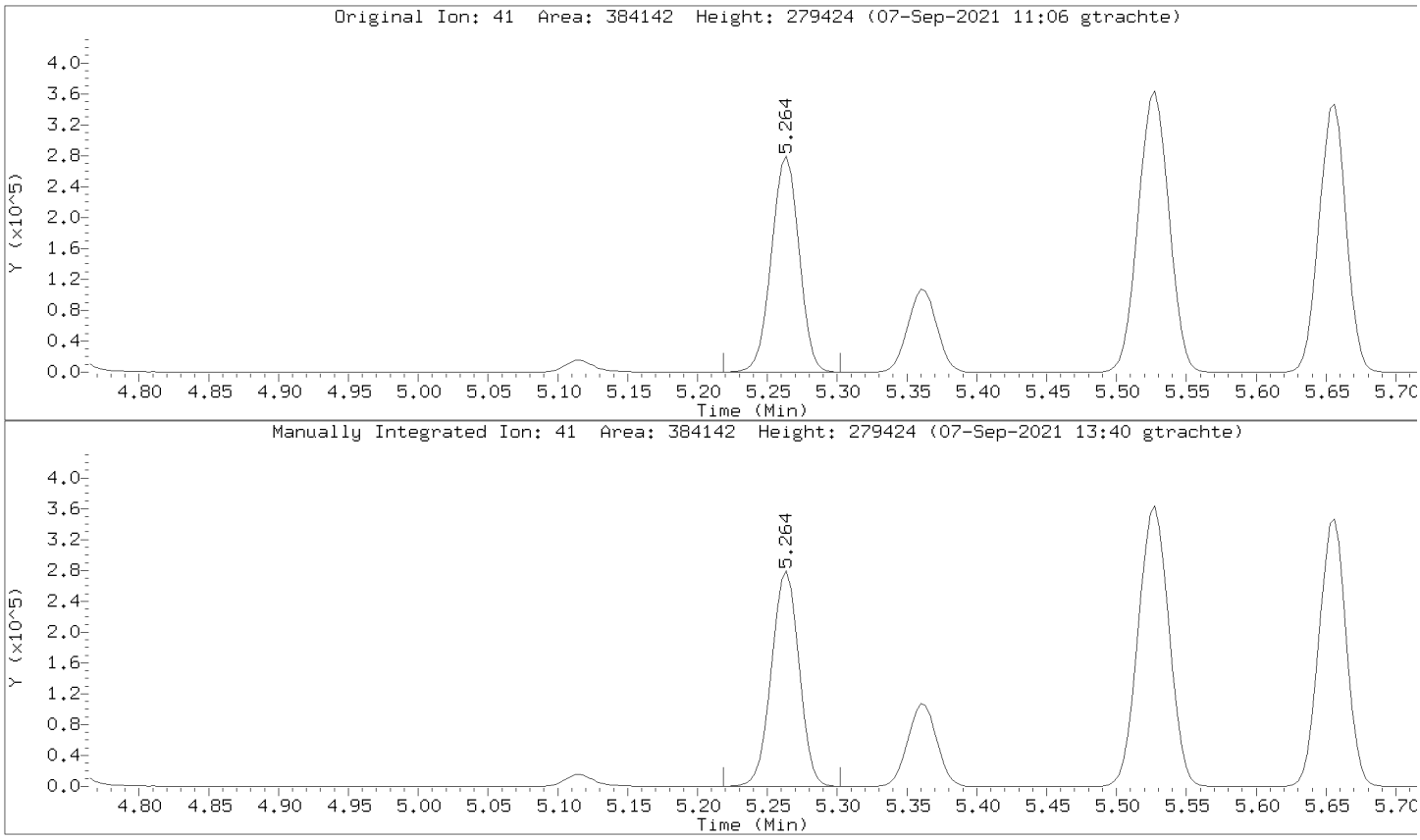
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6



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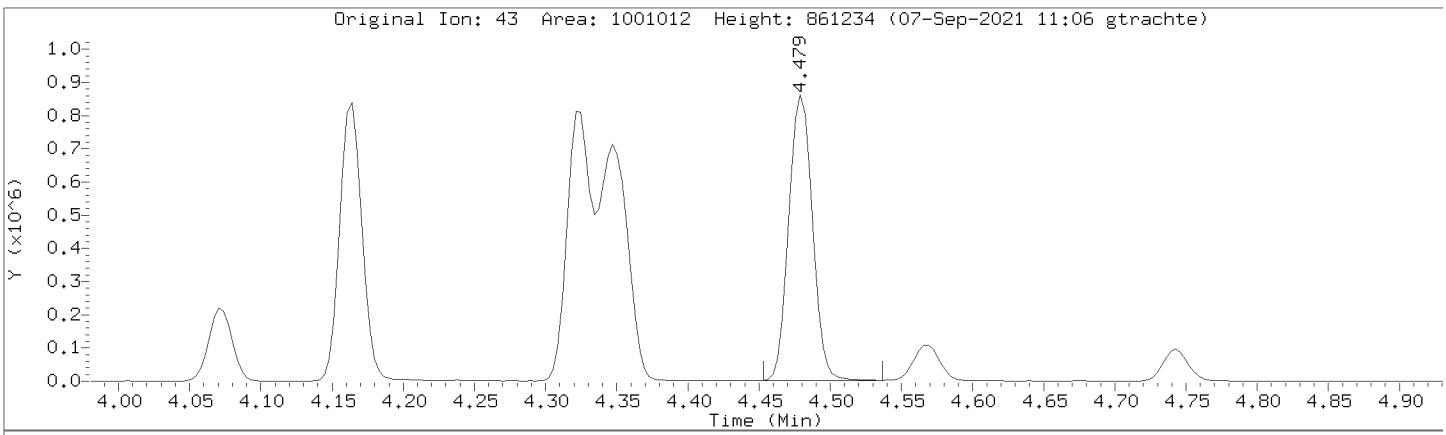
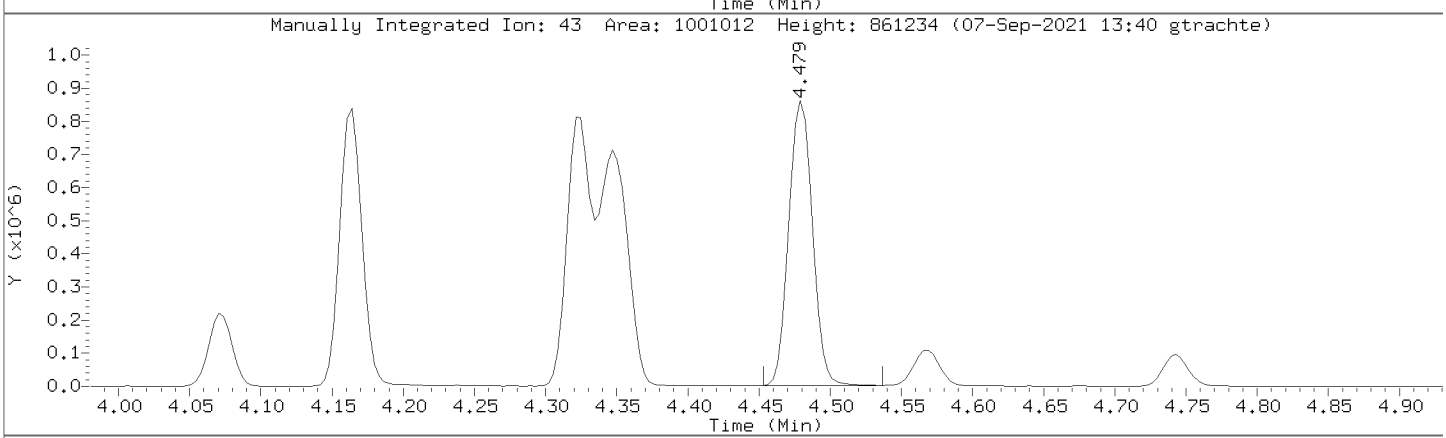
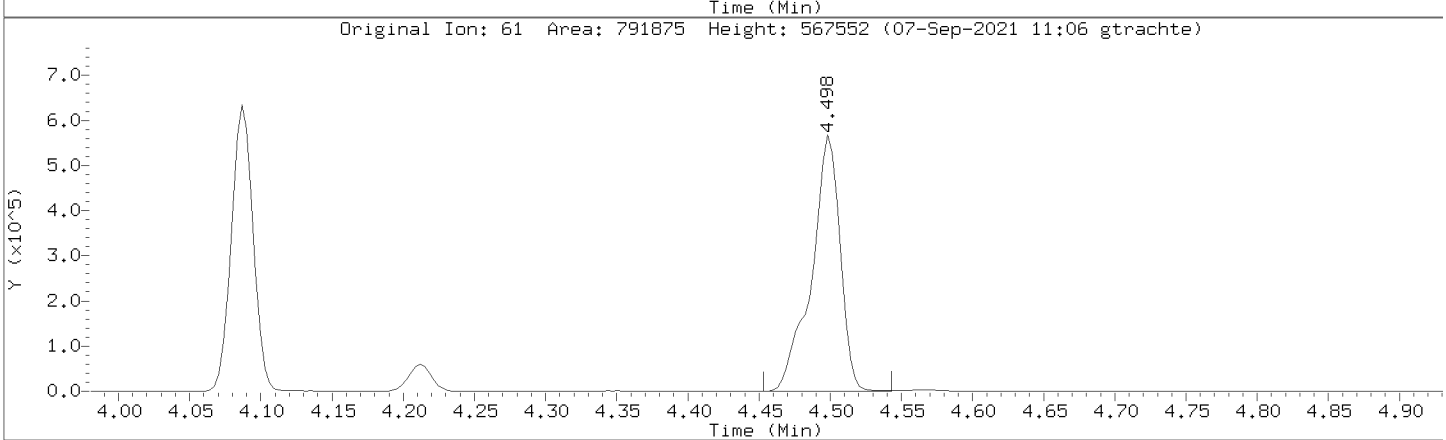
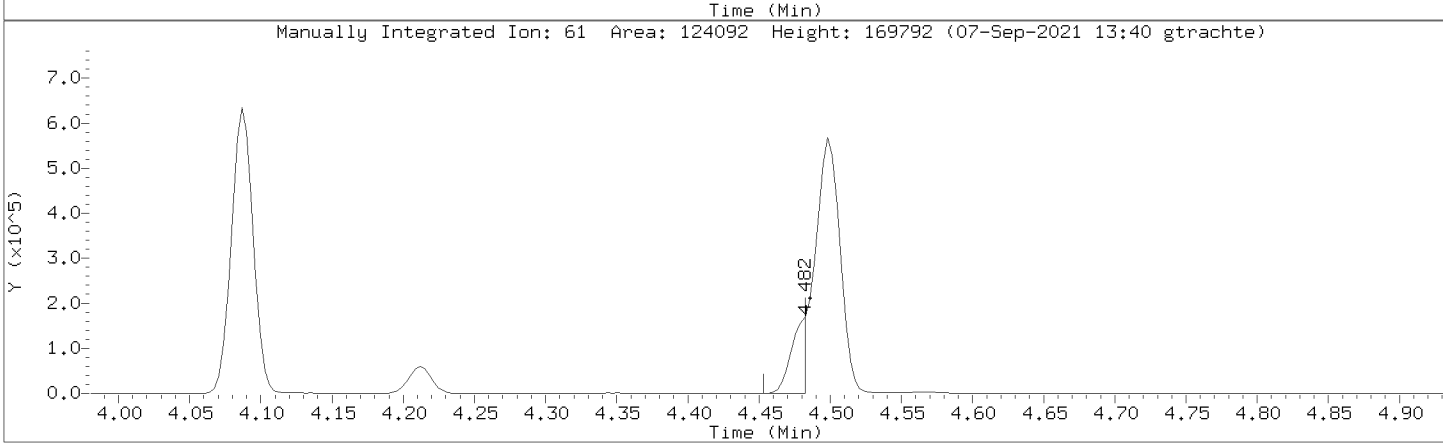
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: Ethyl Acetate
CAS Number: 141-78-6



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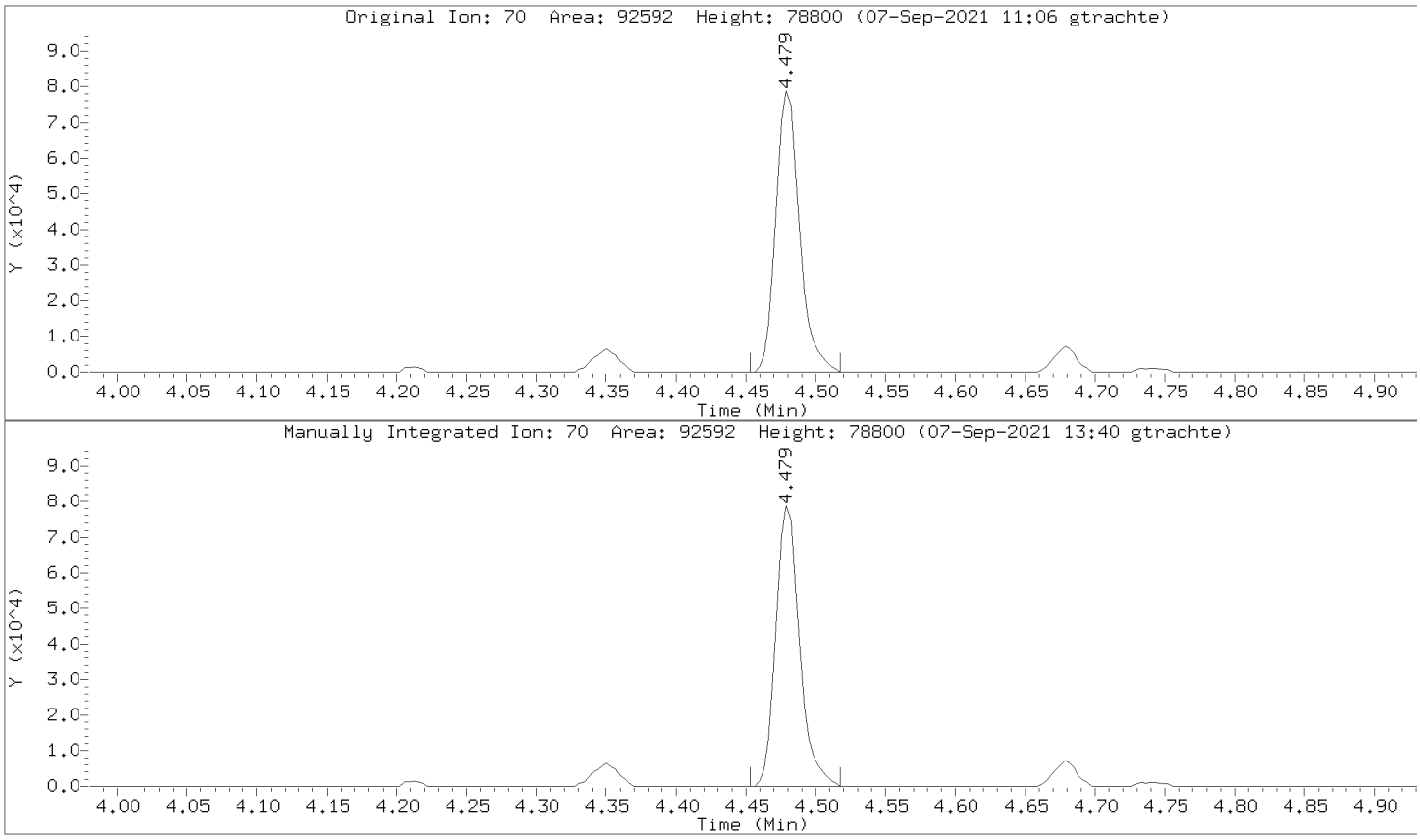
Instrument: 10airH.i
Lab Sample ID: CAL6



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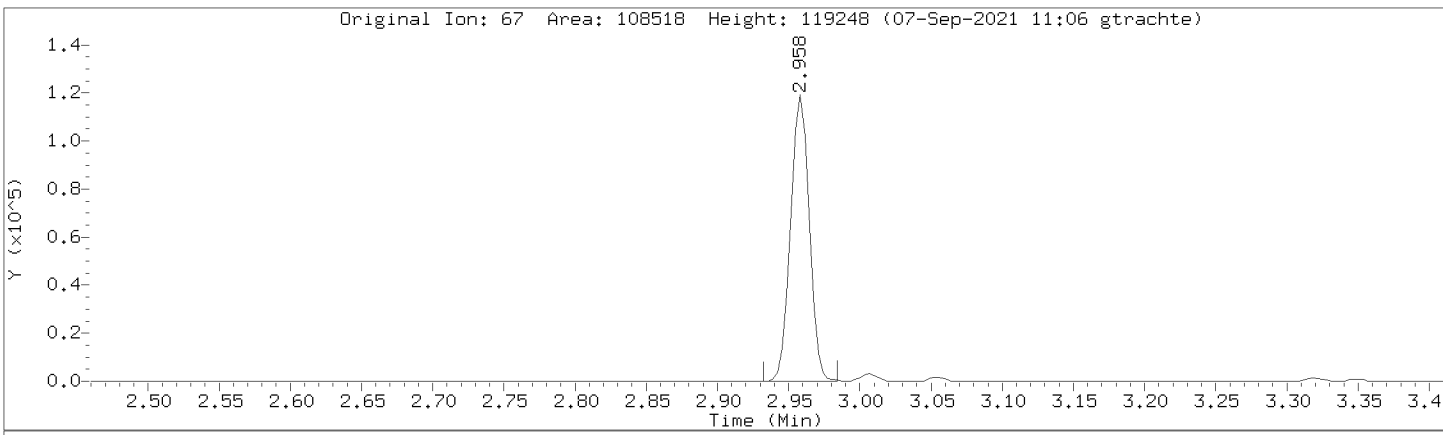
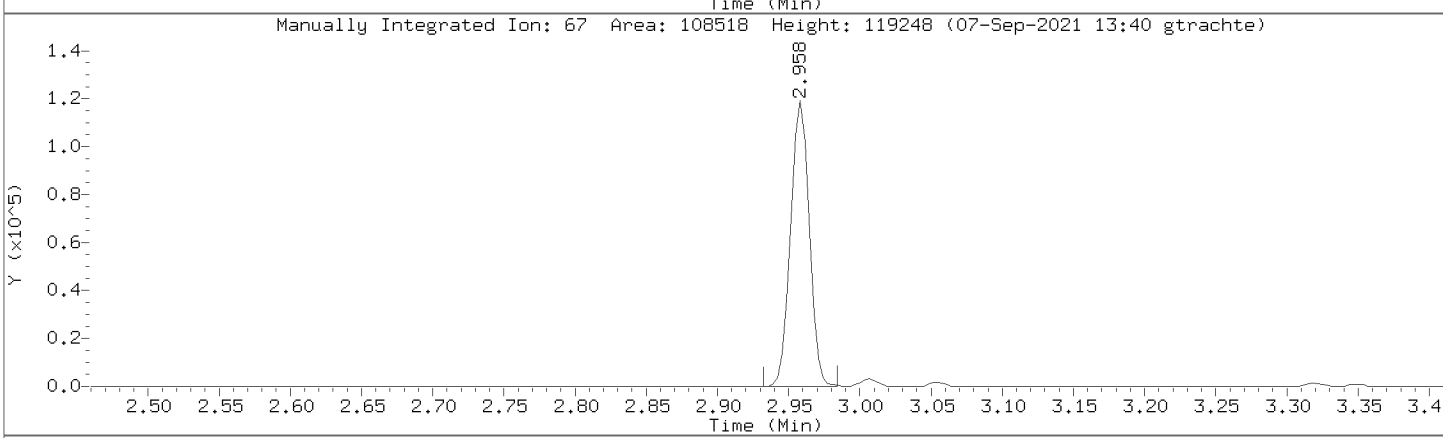
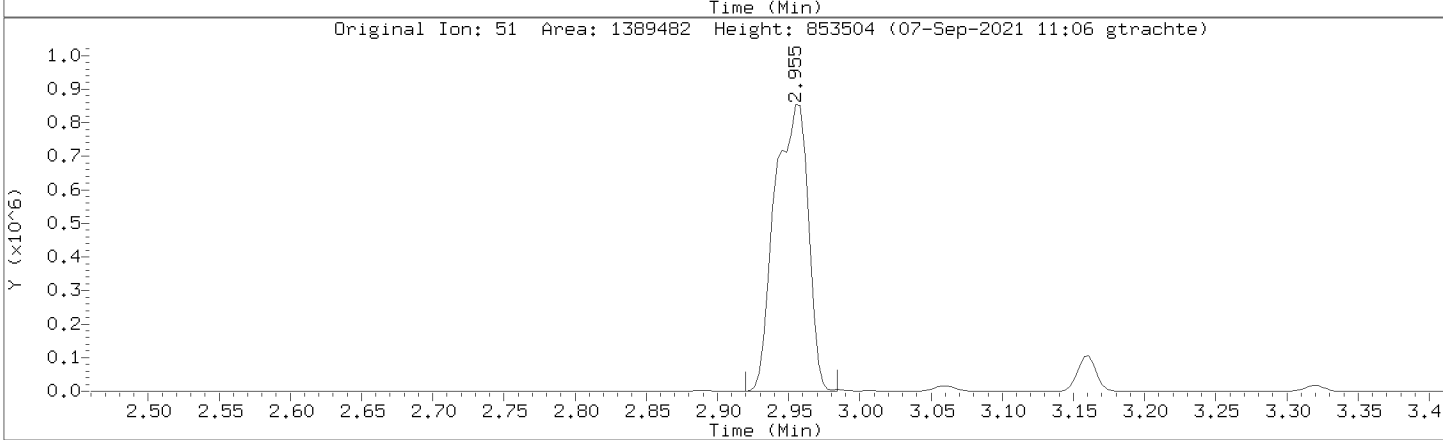
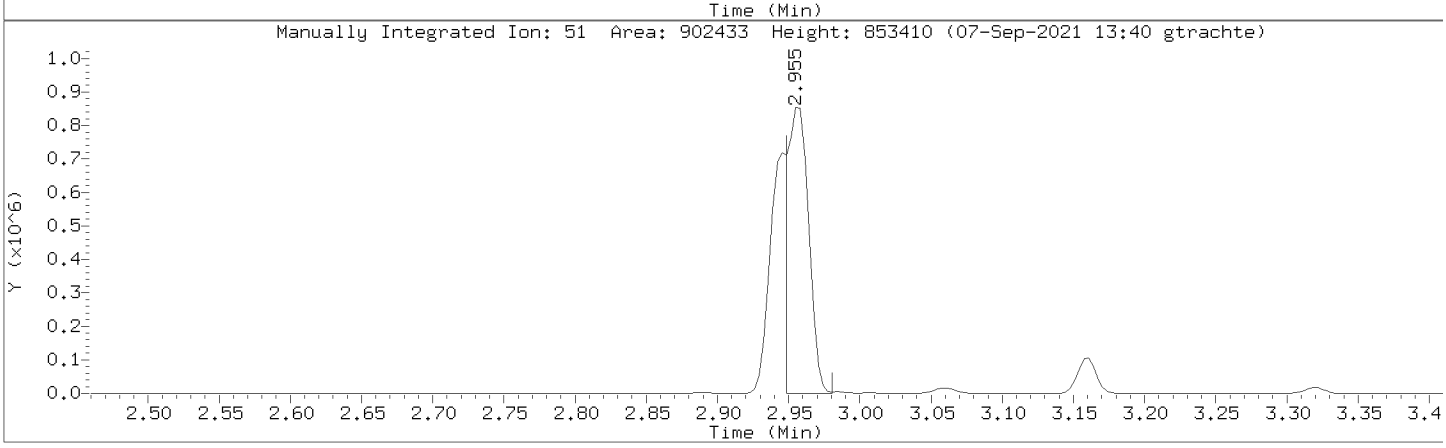
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: Chlorodifluoromethane
CAS Number: 76-13-1



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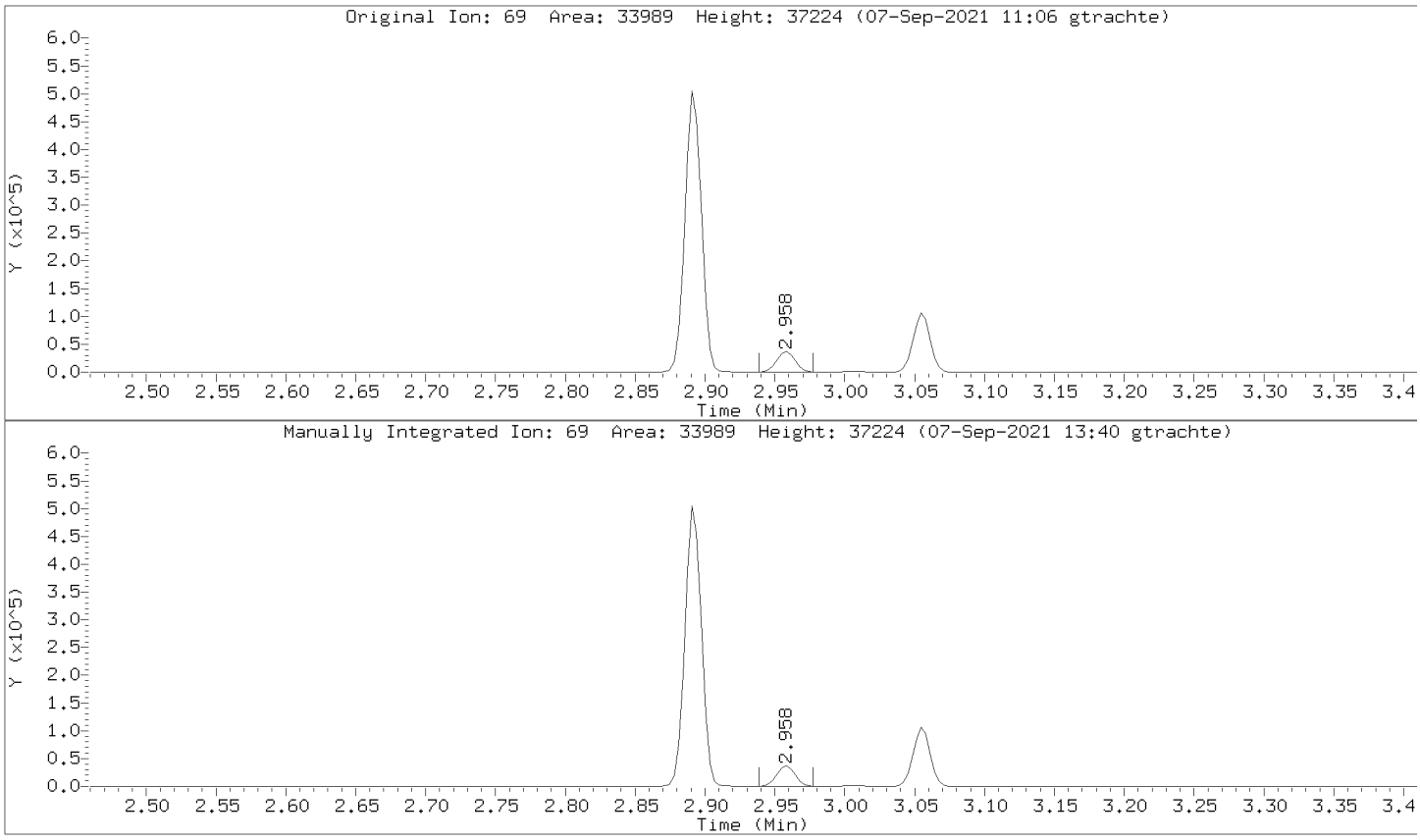
Lab Sample ID: CAL6



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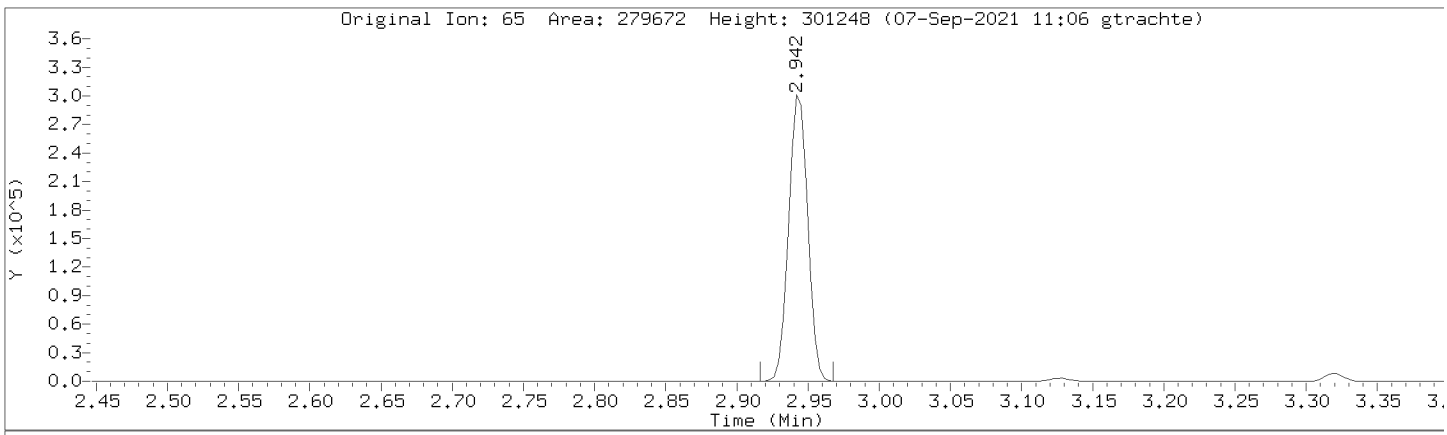
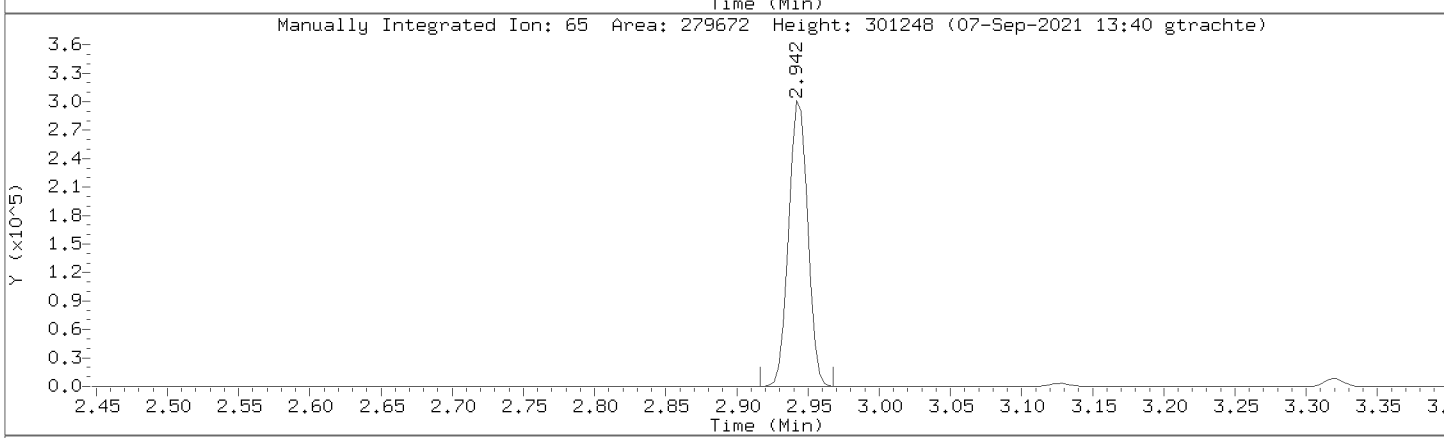
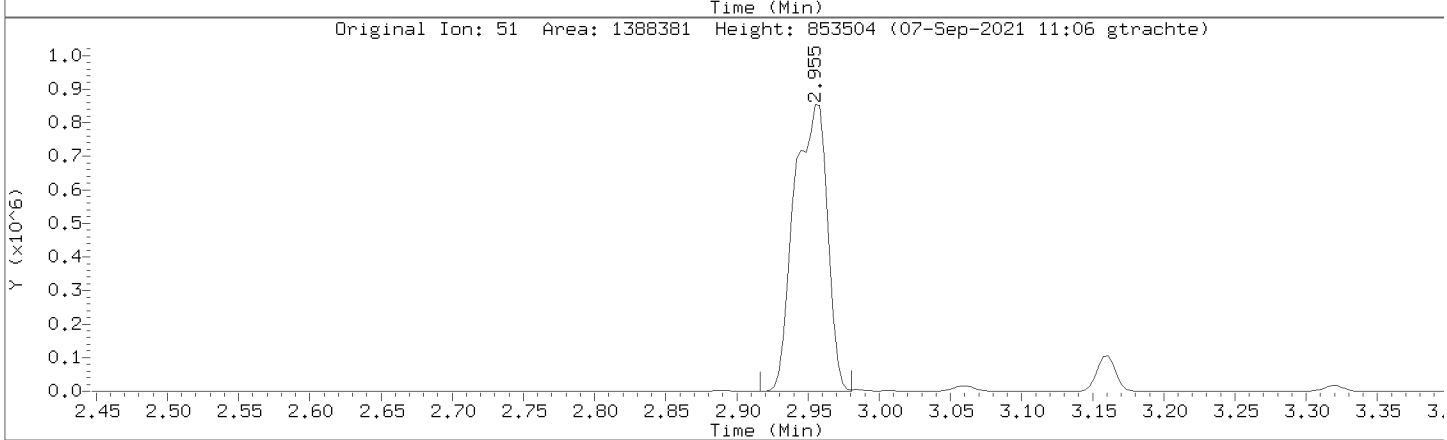
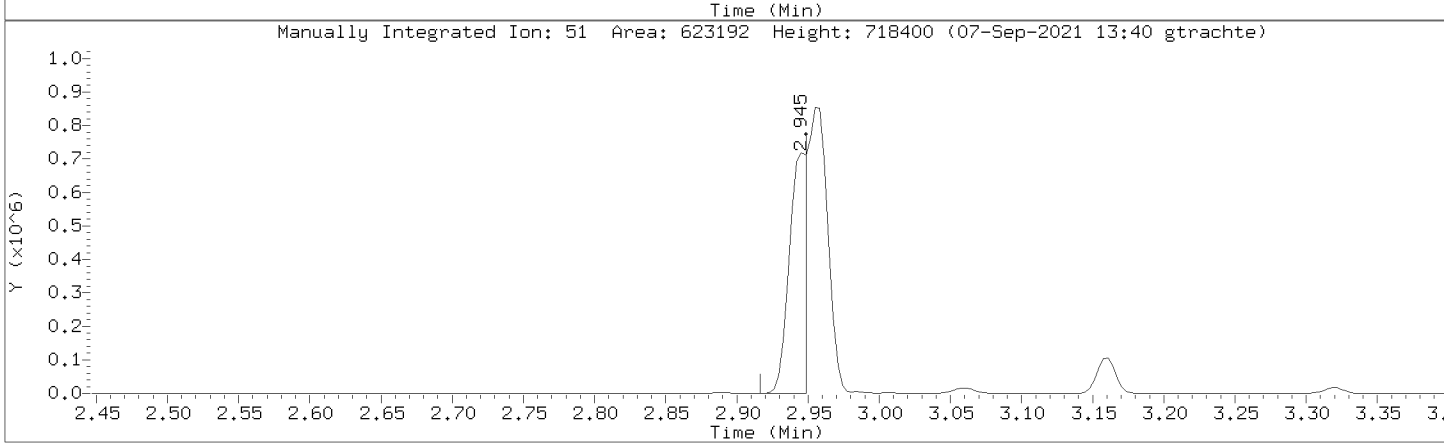
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6



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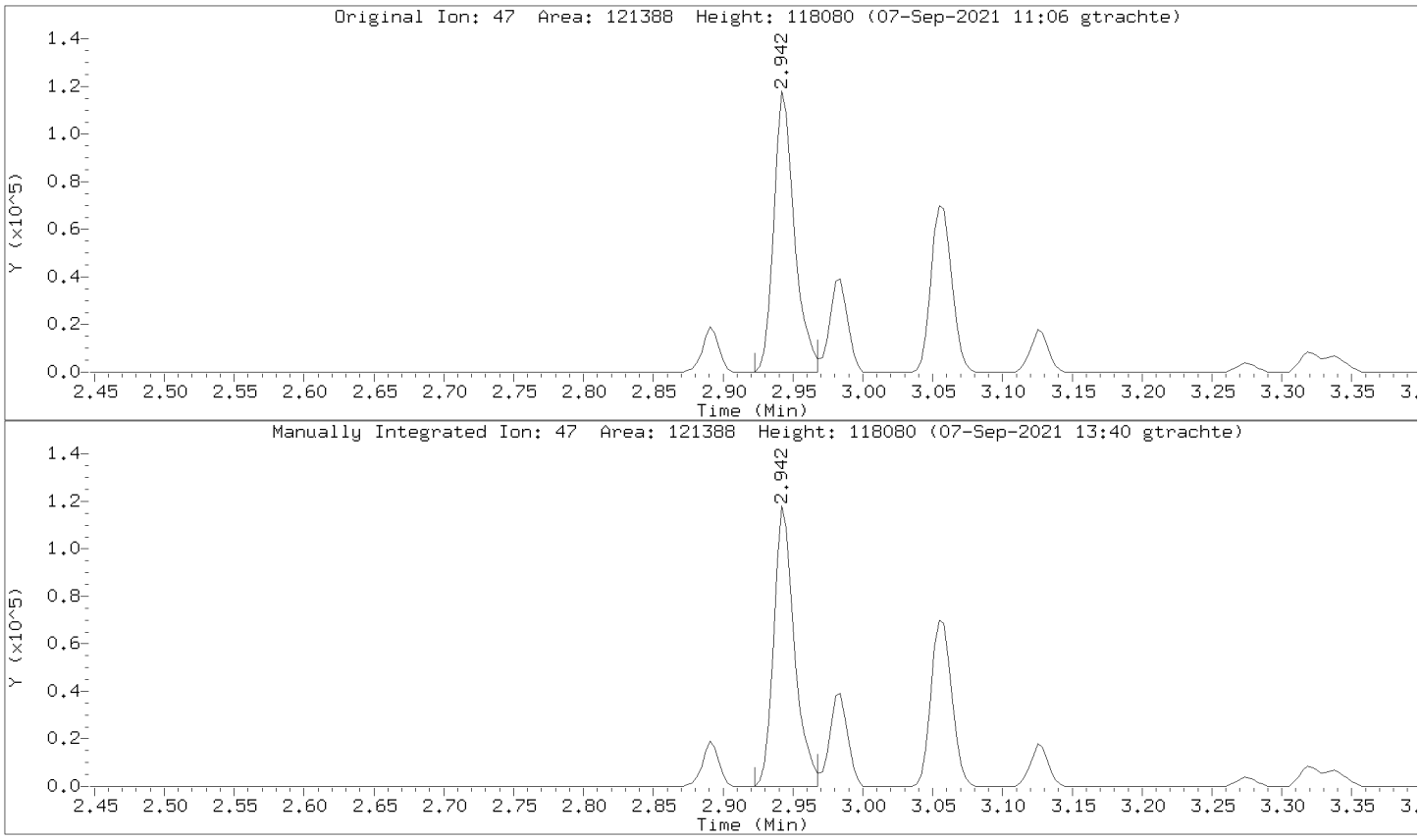
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6



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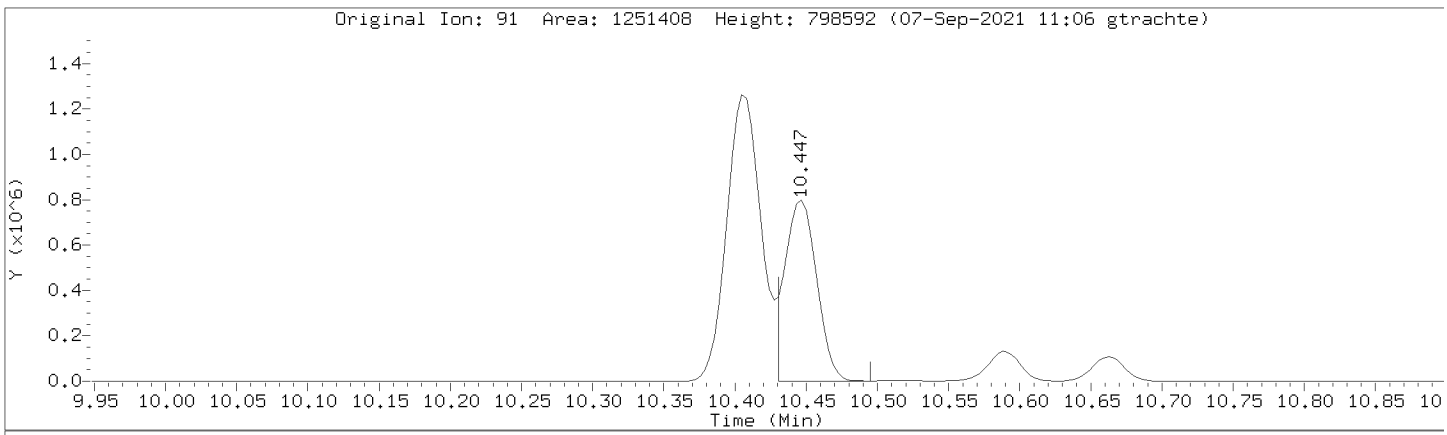
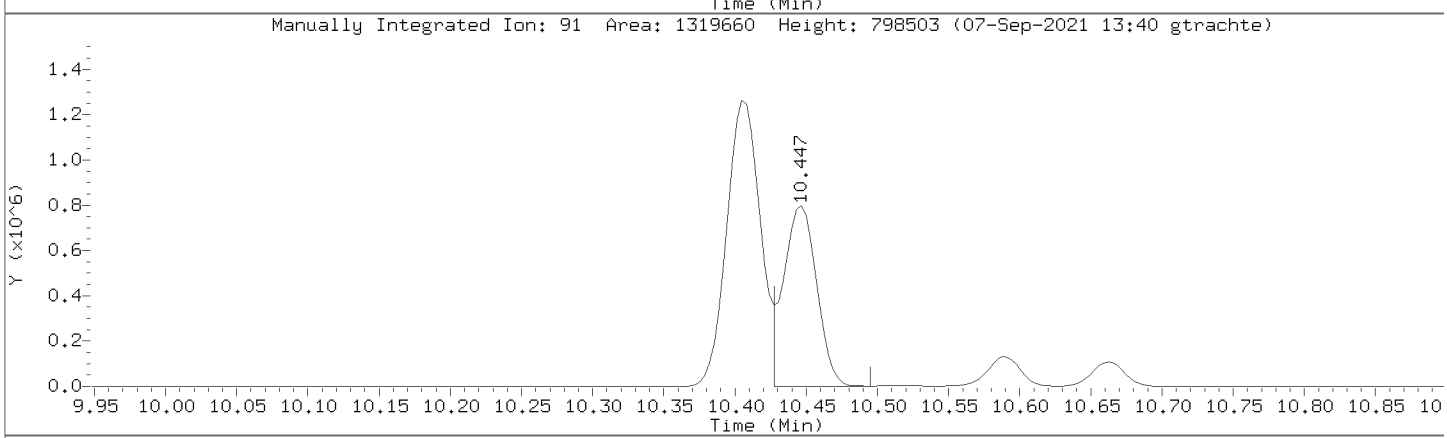
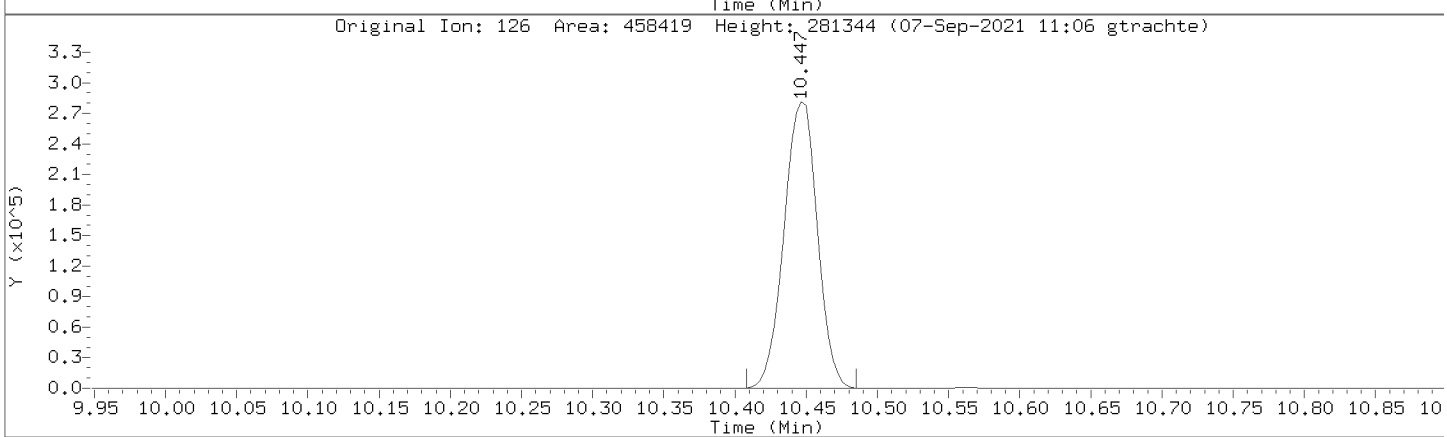
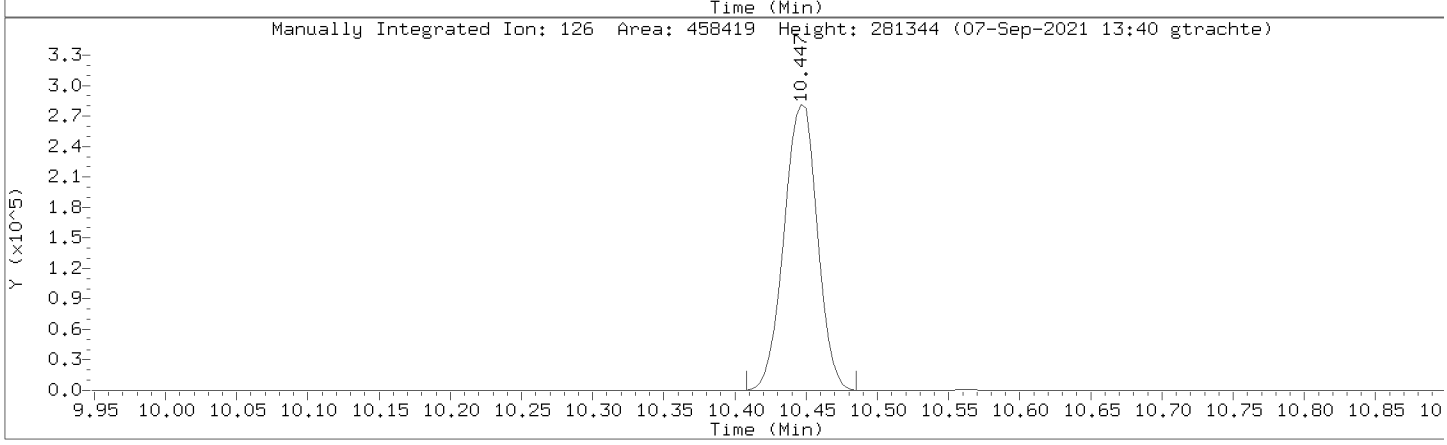
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

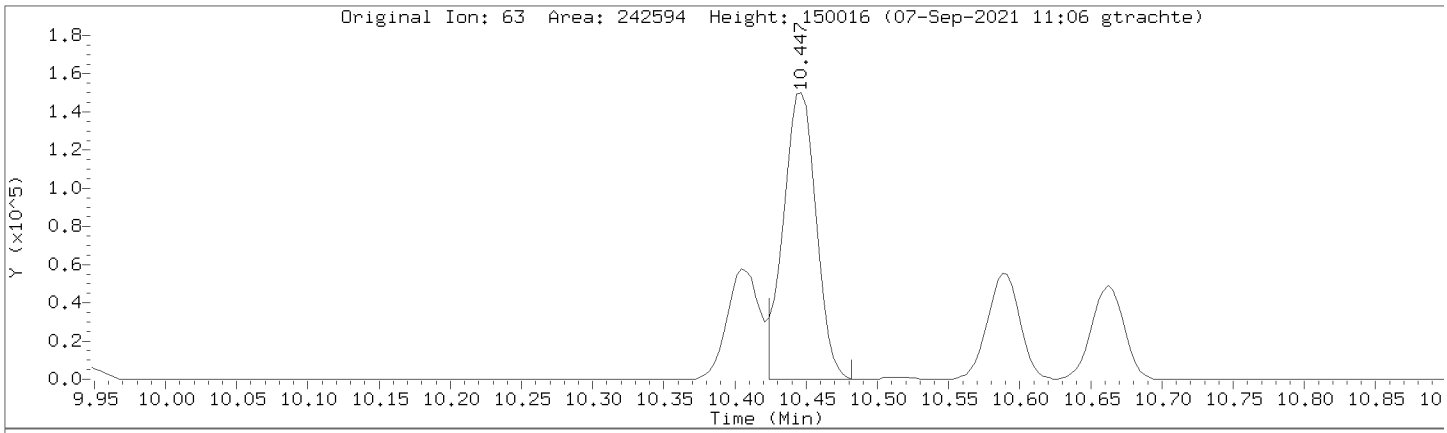


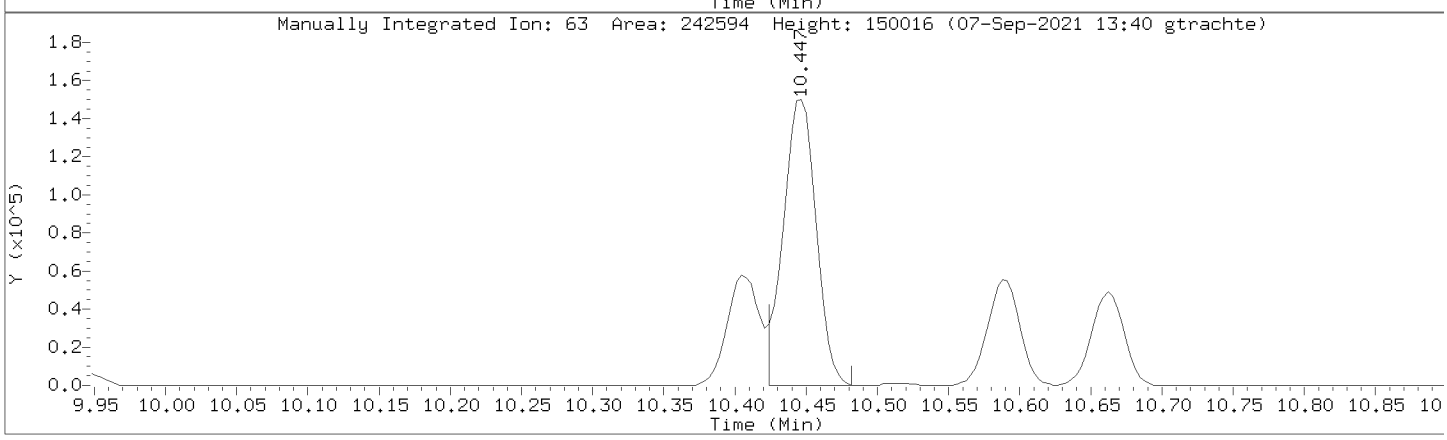



Data File: \\192.168.10.12\chem\10airH.i\090721.b/25009.D
Injection Date: 07-SEP-2021 10:34
Instrument: 10airH.i
Lab Sample ID: CAL6



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25010.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25010.D
Lab Smp Id: CAL7
Inj Date : 07-SEP-2021 11:01
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 07-Sep-2021 14:02 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 10 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.948 | 2.948 | (0.542) | 451064 | 35.3500 | 35.3(QM) |
| 2 Chlorodifluoromethane | 67 | 2.961 | 2.961 | (0.544) | 174944 | 35.3800 | 35.3(QM) |
| 3 Propylene | 41 | 2.967 | 2.967 | (0.545) | 574012 | 35.5700 | 24.3 |
| 4 Dichlorodifluoromethane | 85 | 2.986 | 2.986 | (0.549) | 1463781 | 35.8600 | 25.4 |
| 5 Dichlorotetrafluoroethane | 85 | 3.057 | 3.057 | (0.562) | 1371854 | 33.0700 | 23.6 |
| 6 Chloromethane | 50 | 3.064 | 3.064 | (0.563) | 734181 | 35.4600 | 24.5 |
| 7 Vinyl chloride | 62 | 3.131 | 3.131 | (0.576) | 676447 | 35.5700 | 29.0 |
| 8 1,3-Butadiene | 54 | 3.163 | 3.163 | (0.582) | 492801 | 35.4400 | 29.9 |
| 9 Bromomethane | 94 | 3.279 | 3.279 | (0.603) | 507804 | 35.5100 | 28.9 |
| 10 Chloroethane | 64 | 3.324 | 3.324 | (0.611) | 305068 | 35.4900 | 32.1 |
| 11 Ethanol | 45 | 3.343 | 3.343 | (0.615) | 790909 | 213.290 | 124 |
| 12 Vinyl Bromide | 106 | 3.427 | 3.427 | (0.630) | 483882 | 35.3800 | 30.4 |
| 13 Isopentane | 43 | 3.440 | 3.440 | (0.632) | 544057 | 36.3900 | 27.3 |
| 14 Freon 123 | 83 | 3.478 | 3.478 | (0.639) | 1054031 | 35.2200 | 27.1 |
| 15 Trichlorofluoromethane | 101 | 3.501 | 3.501 | (0.644) | 1289353 | 35.8400 | 25.1 |
| 16 Acrolein | 56 | 3.504 | 3.504 | (0.644) | 569525 | 100.610 | 77.0 |
| 17 Acetone | 43 | 3.527 | 3.527 | (0.648) | 2849644 | 174.770 | 121(A) |
| 18 Isopropyl Alcohol | 45 | 3.559 | 3.559 | (0.654) | 3211447 | 196.590 | 98.3 |
| 19 1,1-Dichloroethene | 61 | 3.713 | 3.713 | (0.683) | 1022536 | 35.6400 | 26.8 |
| 20 Acrylonitrile | 53 | 3.726 | 3.726 | (0.685) | 1196498 | 98.4700 | 73.8 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.752 | 3.752 | (0.690) | 1379448 | 35.0200 | 23.0 |
| 22 Methyl Acetate | 43 | 3.748 | 3.749 | (0.689) | 1122406 | 35.4600 | 19.1 |
| 23 Freon 113 | 101 | 3.745 | 3.745 | (0.689) | 1105883 | 35.4200 | 25.3 |
| 24 Allyl Chloride | 76 | 3.822 | 3.822 | (0.703) | 234037 | 35.0900 | 28.1(Q) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25010.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 3.826 | 3.826 | (0.703) | 2677906 | 177.800 | (a) |
| 26 Carbon Disulfide | 76 | 3.929 | 3.929 | (0.722) | 1557579 | 35.8600 | 27.1 |
| 27 Methyl Tert Butyl Ether | 73 | 4.076 | 4.076 | (0.749) | 1523925 | 35.6400 | 28.4 |
| 28 trans-1,2-dichloroethene | 96 | 4.093 | 4.093 | (0.752) | 582721 | 35.6800 | 27.9 |
| 29 Vinyl Acetate | 43 | 4.166 | 4.166 | (0.766) | 1437866 | 42.7500 | 29.4 |
| 30 1,1-Dichloroethane | 63 | 4.215 | 4.215 | (0.775) | 1253276 | 35.2400 | 26.6 |
| 31 Methyl Ethyl Ketone | 72 | 4.327 | 4.327 | (0.795) | 304673 | 35.5300 | 32.7(Q) |
| 32 Di-isopropyl Ether | 45 | 4.347 | 4.347 | (0.799) | 1934146 | 34.8900 | 21.2 |
| 33 n-Hexane | 57 | 4.356 | 4.356 | (0.801) | 1043354 | 35.0200 | 23.4(Q) |
| 34 Ethyl Acetate | 43 | 4.482 | 4.482 | (0.824) | 1525379 | 35.0500 | 24.8(M) |
| 35 cis-1,2-Dichloroethene | 96 | 4.504 | 4.504 | (0.828) | 605057 | 35.5500 | 28.3(M) |
| 36 Ethyl Tert-Butyl Ether | 59 | 4.572 | 4.572 | (0.840) | 2140054 | 35.4900 | 26.1 |
| 37 Chloroform | 83 | 4.684 | 4.684 | (0.861) | 1255202 | 34.8500 | 26.9 |
| 38 Tetrahydrofuran | 42 | 4.745 | 4.745 | (0.872) | 831704 | 35.2900 | 28.7 |
| 39 1,1,1-Trichloroethane | 97 | 4.993 | 4.993 | (0.918) | 1268832 | 35.3100 | 28.2 |
| 40 1,2-Dichloroethane | 62 | 5.073 | 5.073 | (0.933) | 998996 | 35.6400 | 28.3 |
| 41 Benzene | 78 | 5.228 | 5.228 | (0.961) | 1622366 | 35.4000 | 33.1 |
| 42 Carbon tetrachloride | 117 | 5.244 | 5.244 | (0.964) | 1128981 | 35.7900 | 29.2(A) |
| 43 Cyclohexane | 56 | 5.266 | 5.266 | (0.968) | 1175140 | 35.2900 | 27.0(M) |
| 44 Tert Amyl Methyl Ether | 73 | 5.363 | 5.363 | (0.986) | 1668990 | 35.4900 | 31.0 |
| * 45 1,4-Difluorobenzene | 114 | 5.440 | 5.440 | (1.000) | 499436 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 5.530 | 5.530 | (1.017) | 3203340 | 35.4400 | 24.0 |
| 47 Heptane | 43 | 5.658 | 5.658 | (1.040) | 1239222 | 35.3500 | 24.7 |
| 48 Trichloroethene | 130 | 5.768 | 5.768 | (1.060) | 823782 | 35.3100 | 30.5 |
| 49 Methyl methacrylate | 69 | 5.806 | 5.806 | (1.067) | 636054 | 35.4000 | 29.0(Q) |
| 50 1,2-Dichloropropane | 63 | 5.813 | 5.813 | (1.069) | 803455 | 35.5500 | 27.7 |
| 51 1,4-Dioxane | 88 | 5.858 | 5.858 | (1.077) | 592937 | 88.4800 | 45.8 |
| 52 Bromodichloromethane | 83 | 5.970 | 5.970 | (1.098) | 1306930 | 35.4400 | 28.5 |
| 53 Methylcyclohexane | 98 | 6.234 | 6.234 | (1.146) | 482602 | 35.4900 | 35.4(Q) |
| 54 Methyl Isobutyl Ketone | 43 | 6.308 | 6.308 | (1.160) | 1688650 | 35.5700 | 28.3 |
| 55 cis-1,3-Dichloropropene | 75 | 6.395 | 6.395 | (1.176) | 1048255 | 35.3300 | 31.7 |
| 56 trans-1,3-Dichloropropene | 75 | 6.835 | 6.835 | (1.257) | 918017 | 36.1500 | 34.4 |
| 57 Toluene | 91 | 6.932 | 6.932 | (1.274) | 1933876 | 35.8200 | 29.2 |
| 58 1,1,2-Trichloroethane | 97 | 7.060 | 7.060 | (1.298) | 742402 | 35.4600 | 31.1 |
| 59 Methyl Butyl Ketone | 43 | 7.150 | 7.150 | (0.850) | 1650830 | 35.4600 | 31.4 |
| 60 n-Octane | 43 | 7.350 | 7.350 | (0.874) | 1654381 | 35.4900 | 26.7 |
| 61 Dibromochloromethane | 129 | 7.591 | 7.591 | (0.903) | 1332633 | 35.5100 | 30.0 |
| 62 Tetrachloroethene | 166 | 7.671 | 7.671 | (0.912) | 996872 | 35.1300 | 29.8 |
| 63 1,2-Dibromoethane | 107 | 7.793 | 7.793 | (0.927) | 1172587 | 34.8500 | 30.4 |
| * 64 Chlorobenzene - d5 | 117 | 8.411 | 8.411 | (1.000) | 424561 | 10.0000 | |
| 65 Chlorobenzene | 112 | 8.456 | 8.456 | (1.005) | 1585883 | 35.3800 | 29.2 |
| 66 Ethyl Benzene | 91 | 8.674 | 8.674 | (1.031) | 2482813 | 35.7700 | 29.8 |
| 67 m&p-Xylene | 91 | 8.858 | 8.858 | (1.053) | 3916809 | 71.3200 | 61.0(M) |
| 68 n-Nonane | 43 | 9.192 | 9.192 | (1.093) | 1687927 | 35.5300 | 28.7 |
| 69 Styrene | 104 | 9.260 | 9.260 | (1.101) | 1556323 | 35.7900 | 33.4(M) |
| 70 o-Xylene | 91 | 9.295 | 9.295 | (1.105) | 2002431 | 35.5500 | 29.7 |
| 71 Bromoform | 173 | 9.369 | 9.369 | (1.114) | 1146457 | 35.7700 | 35.4 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 9.710 | 9.710 | (1.154) | 1681424 | 35.6600 | 31.7 |
| 73 Isopropylbenzene | 105 | 9.842 | 9.842 | (1.170) | 2749607 | 35.2200 | 31.3 |
| 74 N-Propylbenzene | 91 | 10.407 | 10.407 | (1.237) | 3373770 | 35.6600 | 32.0(M) |
| 75 2-Chlorotoluene | 91 | 10.449 | 10.449 | (1.242) | 2114025 | 35.8800 | 30.0(M) |
| 76 4-Ethyltoluene | 105 | 10.591 | 10.591 | (1.259) | 2756283 | 35.4400 | 35.3 |
| 77 1,3,5-Trimethylbenzene | 105 | 10.665 | 10.665 | (1.268) | 2365451 | 35.4600 | 31.0 |
| 78 n-Decane | 57 | 11.015 | 11.015 | (2.025) | 2080039 | 35.8600 | 35.5 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25010.D
Report Date: 07-Sep-2021 14:12

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.112 | 11.112 | (1.321) | 2271610 | 35.7700 | 32.2(M) |
| 80 1,2,4-Trimethylbenzene | 105 | 11.157 | 11.157 | (1.326) | 2293478 | 35.6800 | 34.5 |
| 81 Sec- Butylbenzene | 105 | 11.417 | 11.417 | (1.357) | 3141134 | 35.8200 | 31.8 |
| 82 1,3-Dichlorobenzene | 146 | 11.452 | 11.452 | (1.362) | 1489754 | 35.8200 | 35.5 |
| 83 Benzyl Chloride | 91 | 11.526 | 11.526 | (1.370) | 1882911 | 36.1000 | 36.0 |
| 84 1,4-Dichlorobenzene | 146 | 11.587 | 11.587 | (1.378) | 1439194 | 35.7900 | 35.5 |
| 85 p-Isopropyltoluene | 119 | 11.623 | 11.623 | (1.382) | 2854676 | 35.9500 | 35.8 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.639 | 11.639 | (1.384) | 2347927 | 35.7900 | 32.9 |
| 87 1,2-Dichlorobenzene | 146 | 11.893 | 11.893 | (1.414) | 1475721 | 35.7500 | 35.5 |
| 88 N-Butylbenzene | 91 | 12.073 | 12.073 | (1.435) | 2516941 | 35.6800 | 35.6 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.591 | 12.591 | (1.497) | 906977 | 35.9900 | 35.9 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.539 | 13.539 | (1.610) | 1746567 | 77.5100 | 77.0 |
| 91 Naphthalene | 128 | 13.674 | 13.675 | (1.626) | 2264878 | 40.4100 | 34.6(A) |
| 92 Hexachlorobutadiene | 225 | 13.787 | 13.787 | (1.639) | 1023480 | 40.4100 | 42.4(A) |

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25010.D
Report Date: 07-Sep-2021 14:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

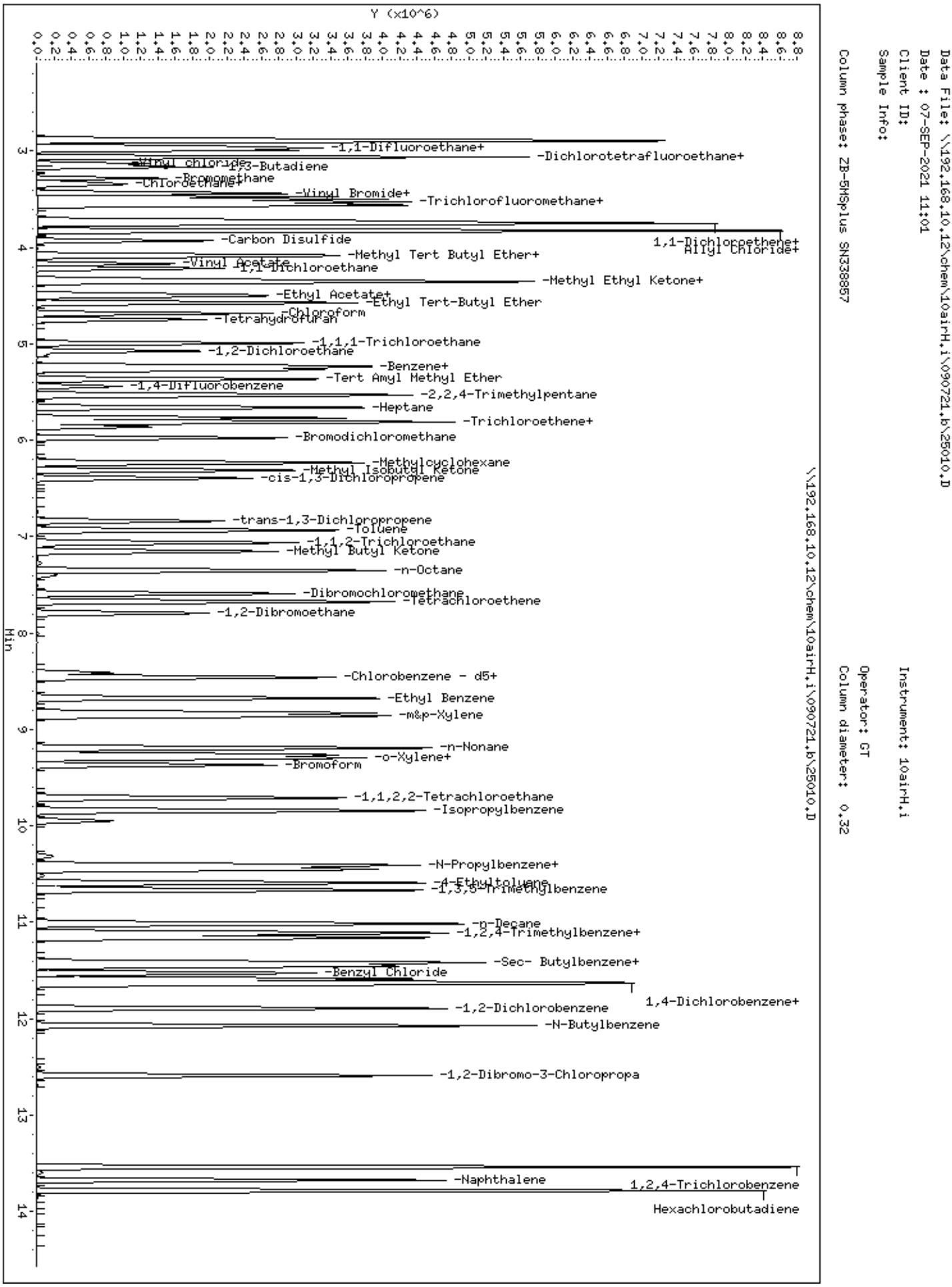
Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25010.D
Calibration Time: 10:08
Lab Smp Id: CAL7
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 499436 | 8.62 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 424561 | 8.30 |

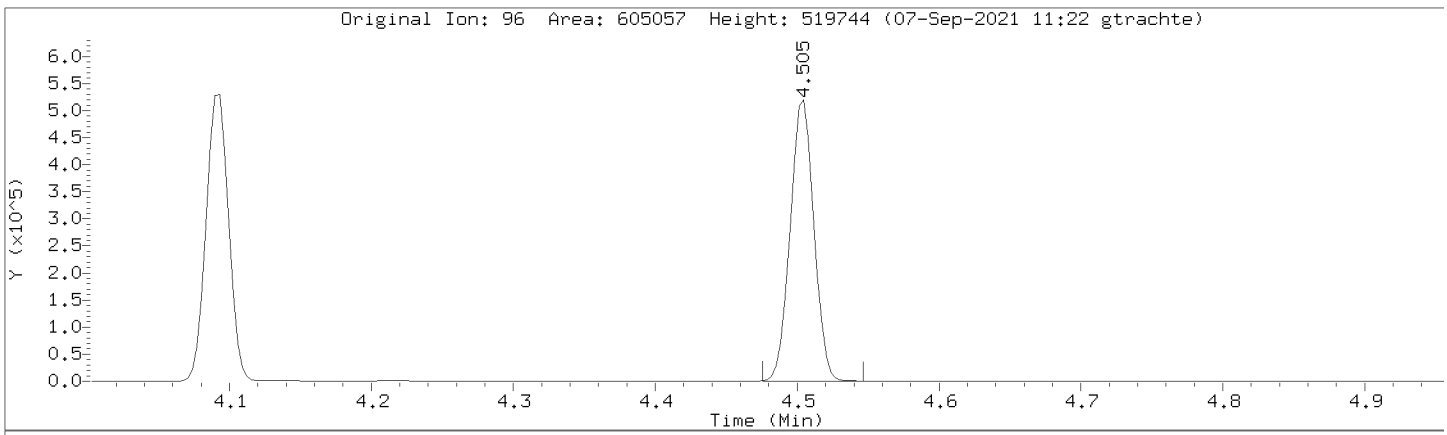
| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.44 | 0.12 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.04 |

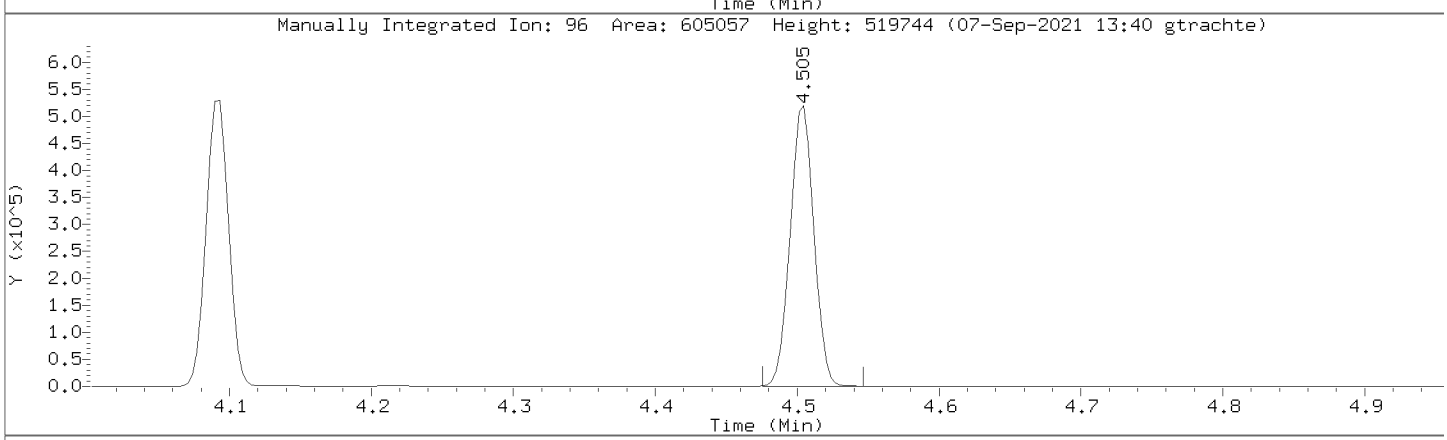
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

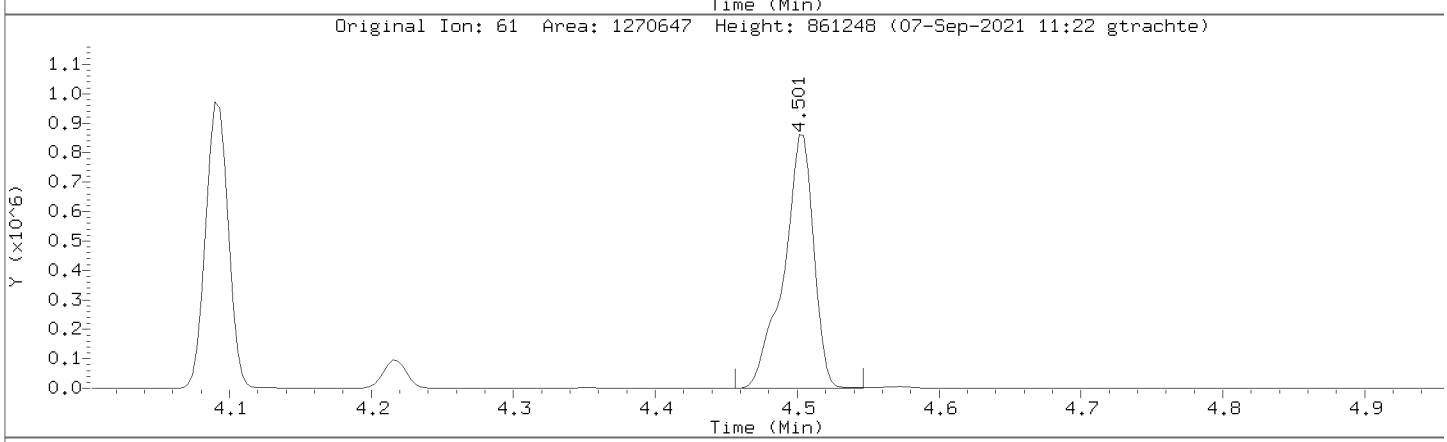

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25010.D
Date : 07-SEP-2021 11:01
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airH.i
Operator: GT
Column diameter: 0.32
Y (x10^6)
Min
-1,1-Difluoroethane+
-Dichlorotetrafluoroethane+
-Vinyl chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane+
-Vinyl Bromide+
-Trichlorofluoromethane+
-Carbon Disulfide
1,1-Dichloroethene+
Allyl Chloride+
-Methyl Tert Butyl Ether+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene+
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-o-Xylene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-1,2,4-Trimethylbenzene+
-Sec- Butylbenzene+
-Benzyl Chloride
1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-Naphthalene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
\\192.168.10.12\chem\10airH.i\090721.b\25010.D

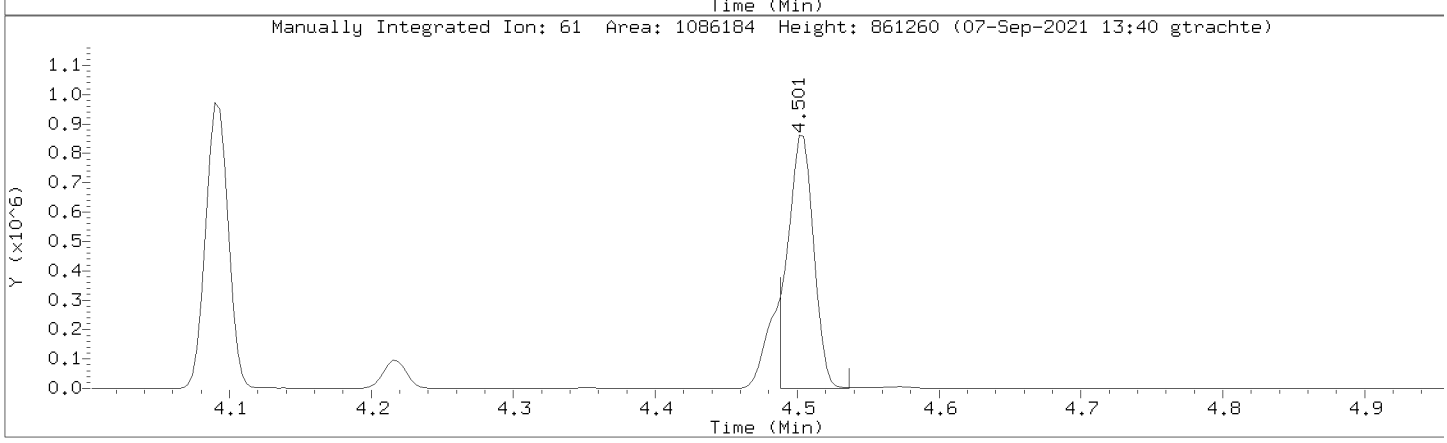
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25010.D
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



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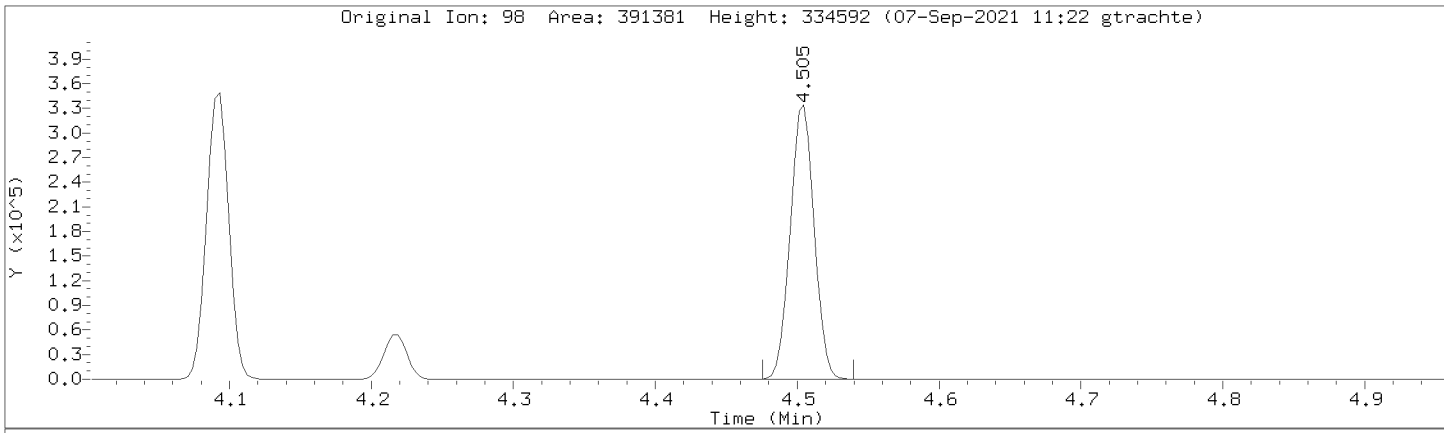


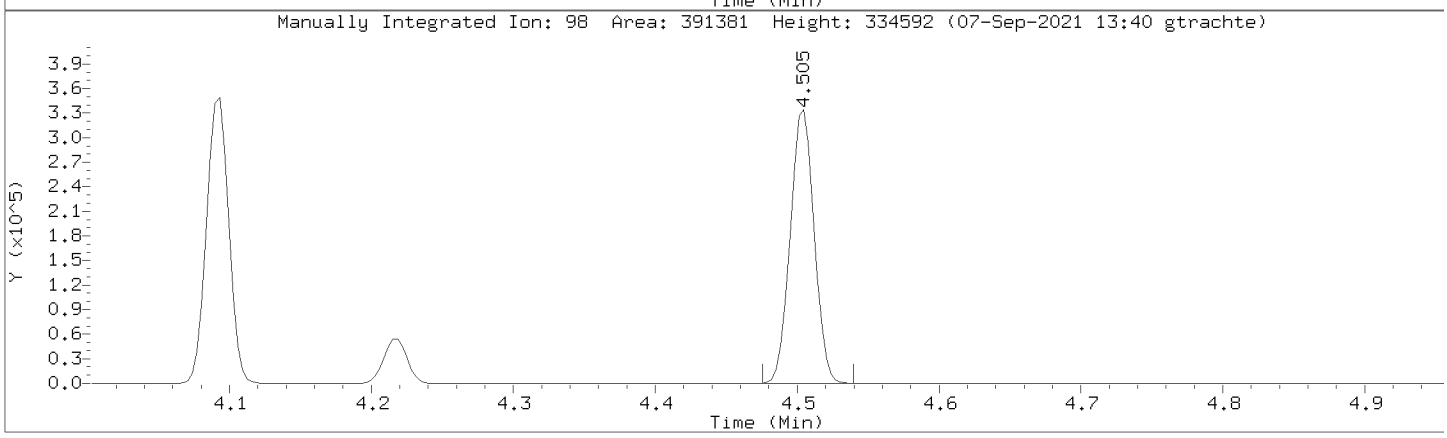

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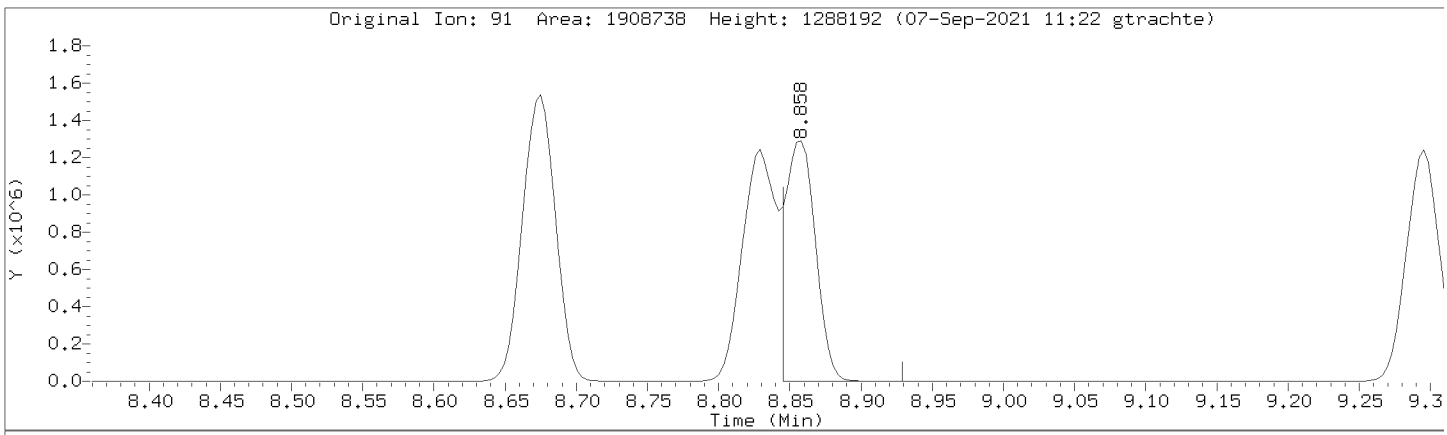
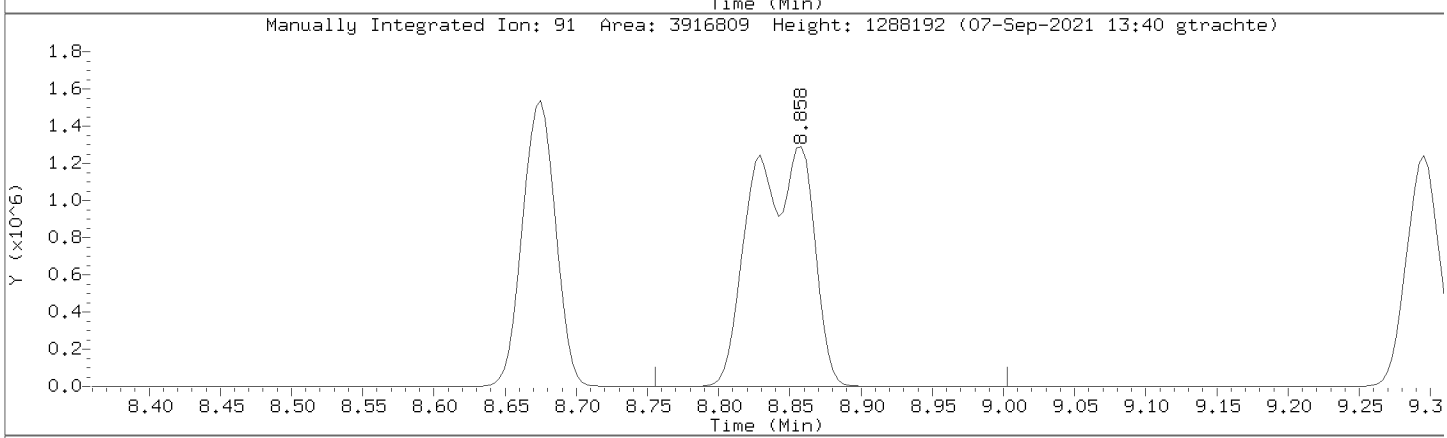
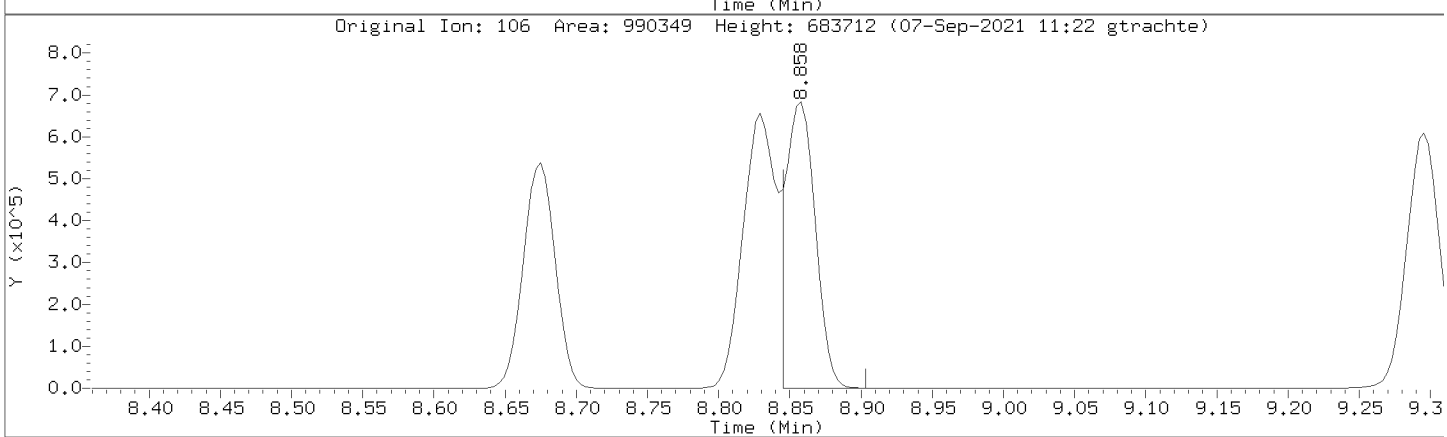
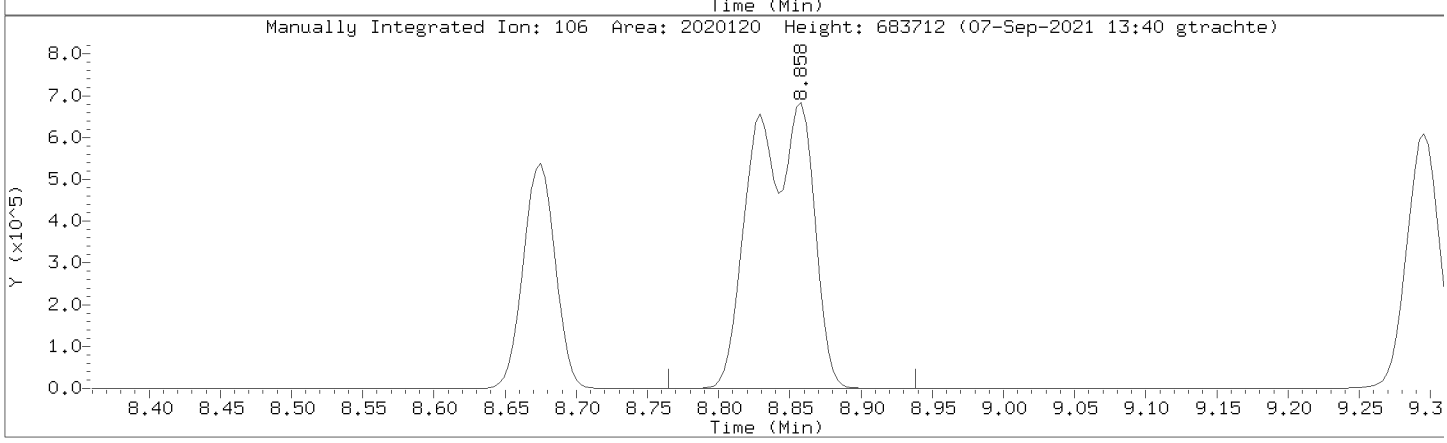
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: m&p-Xylene
CAS Number: 7816-60-0



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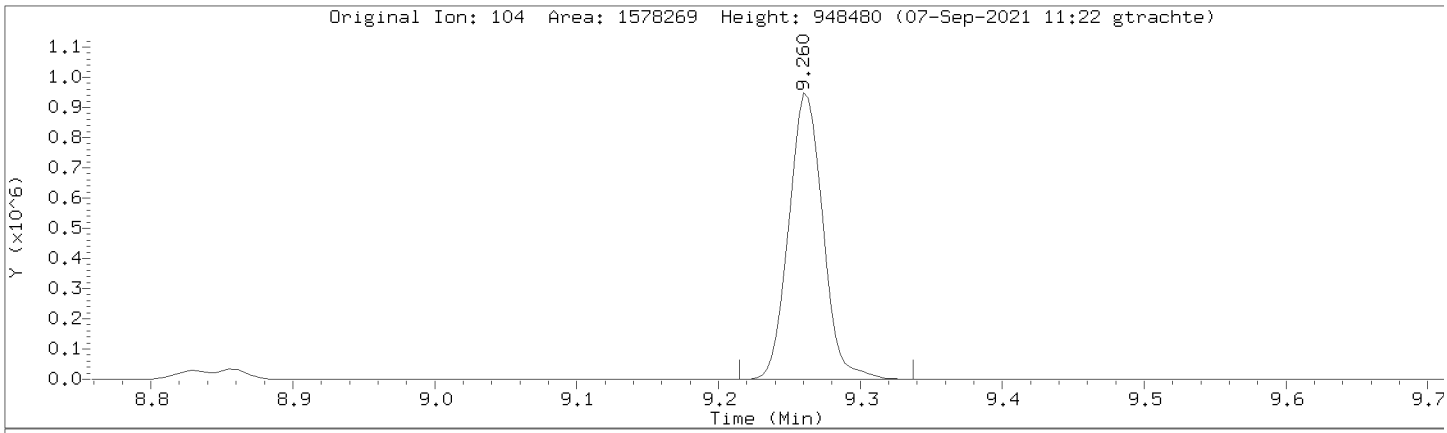
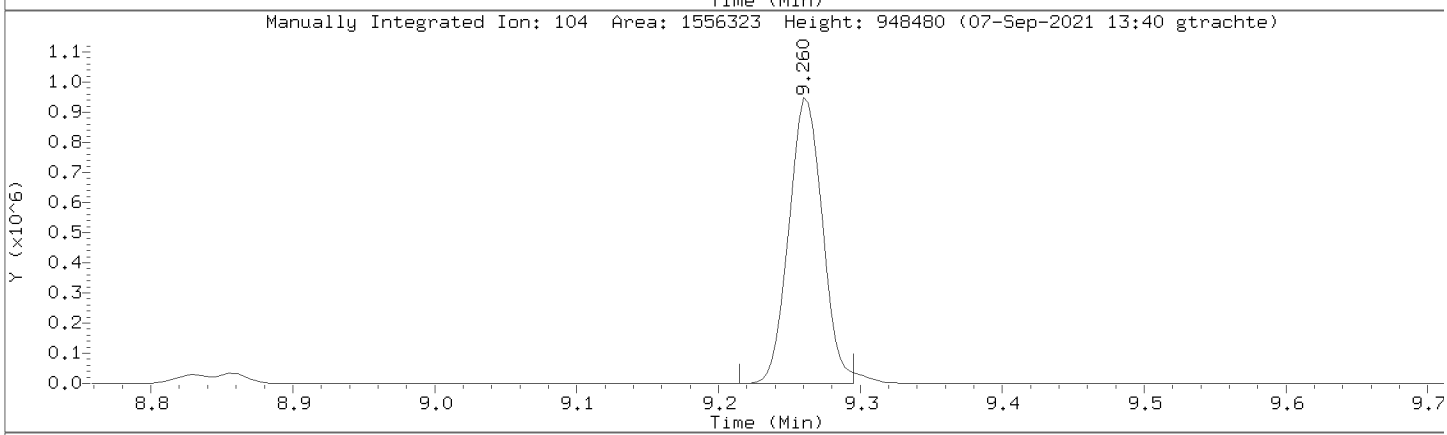
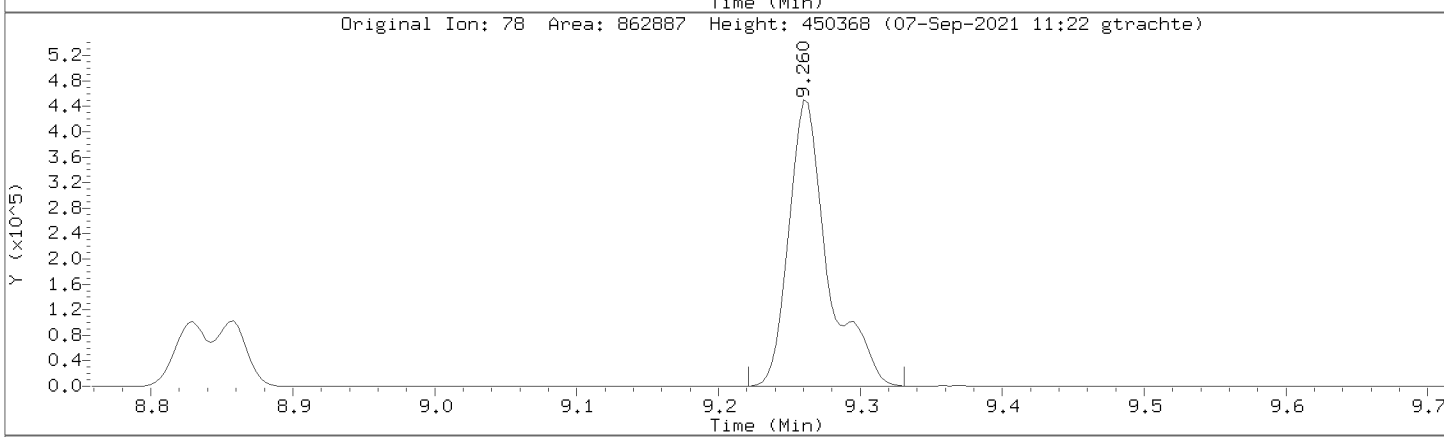
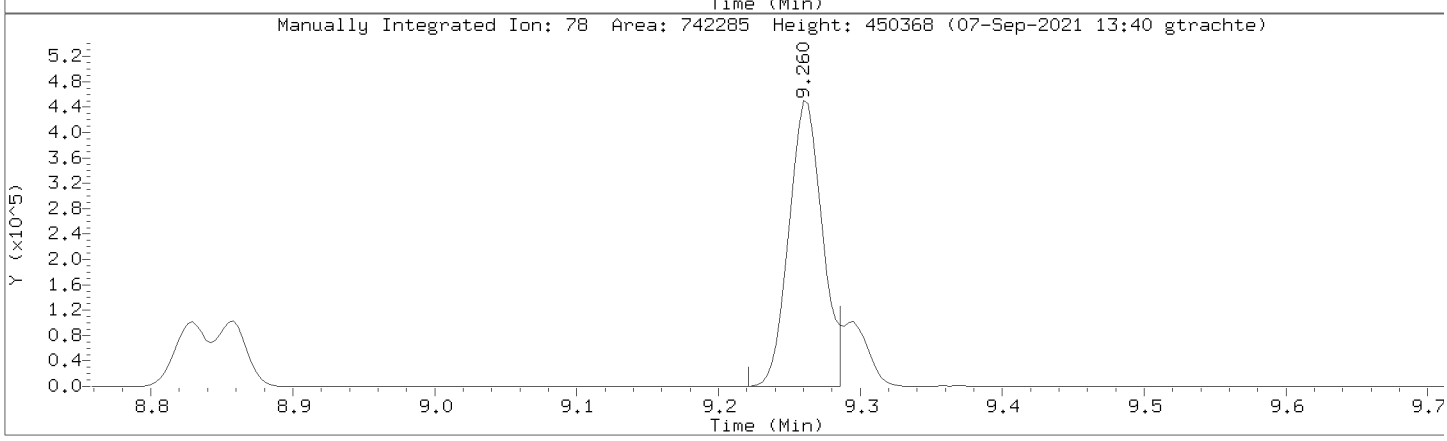
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: Styrene
CAS Number: 100-42-5



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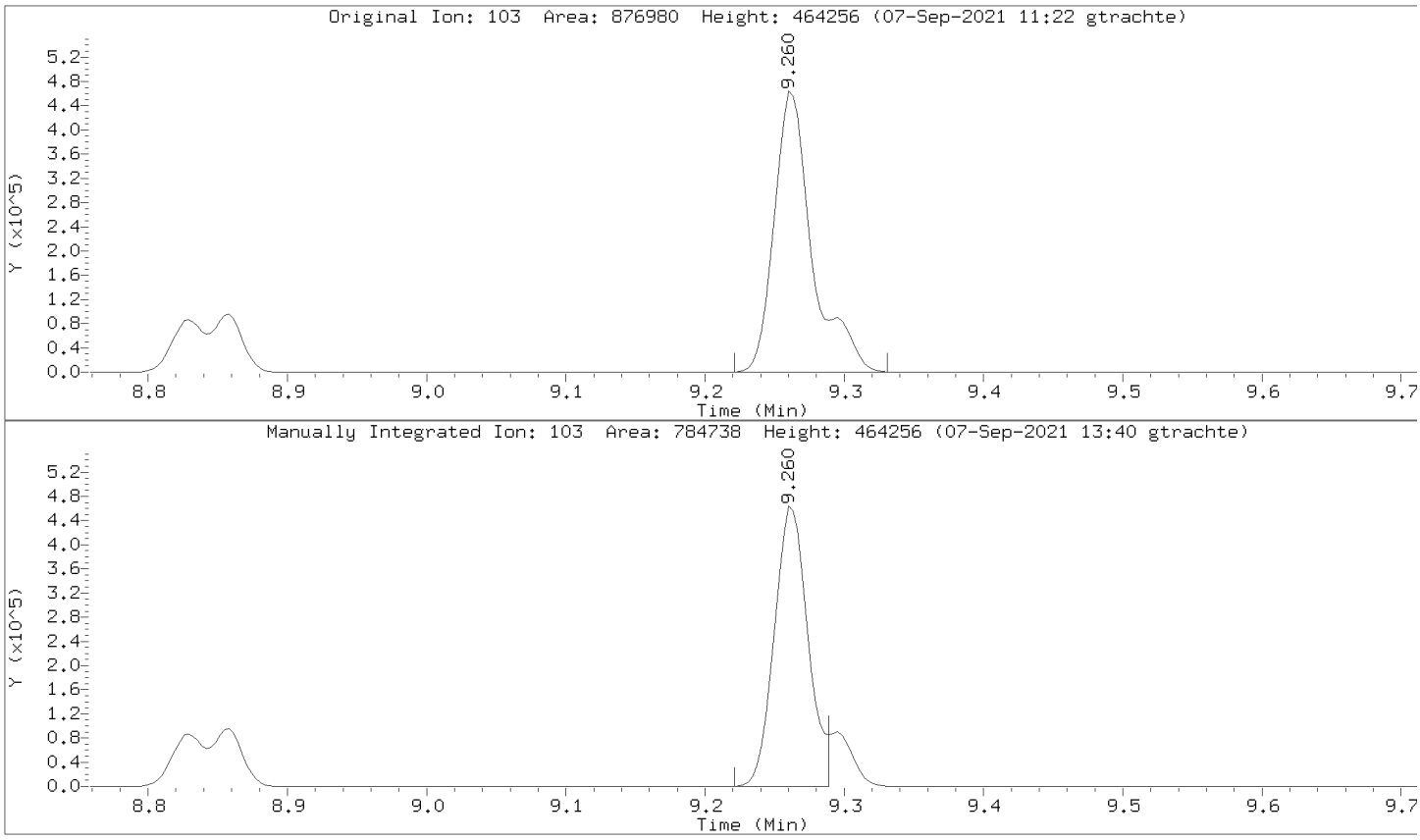

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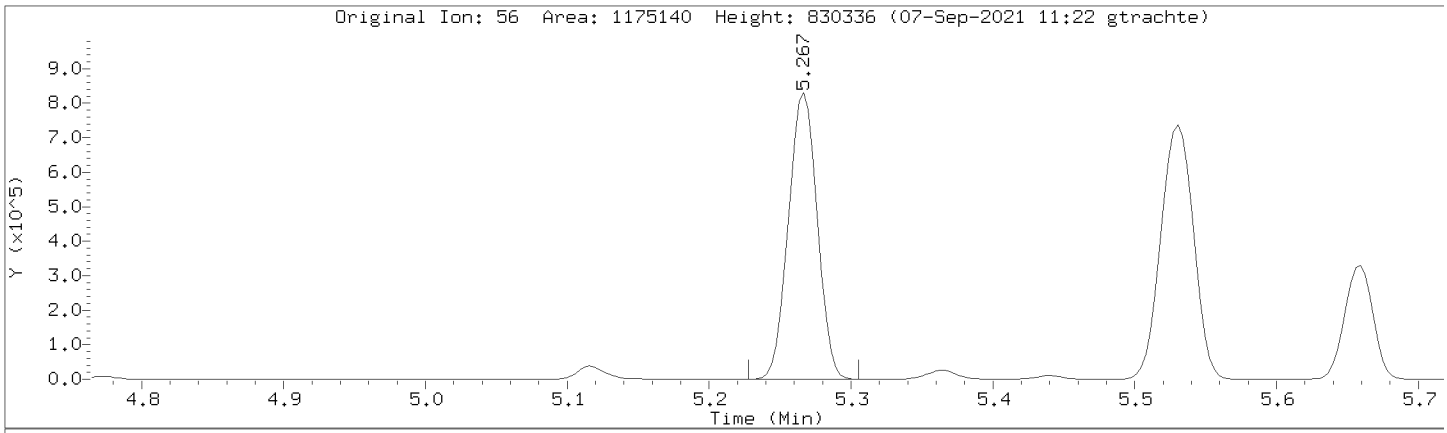
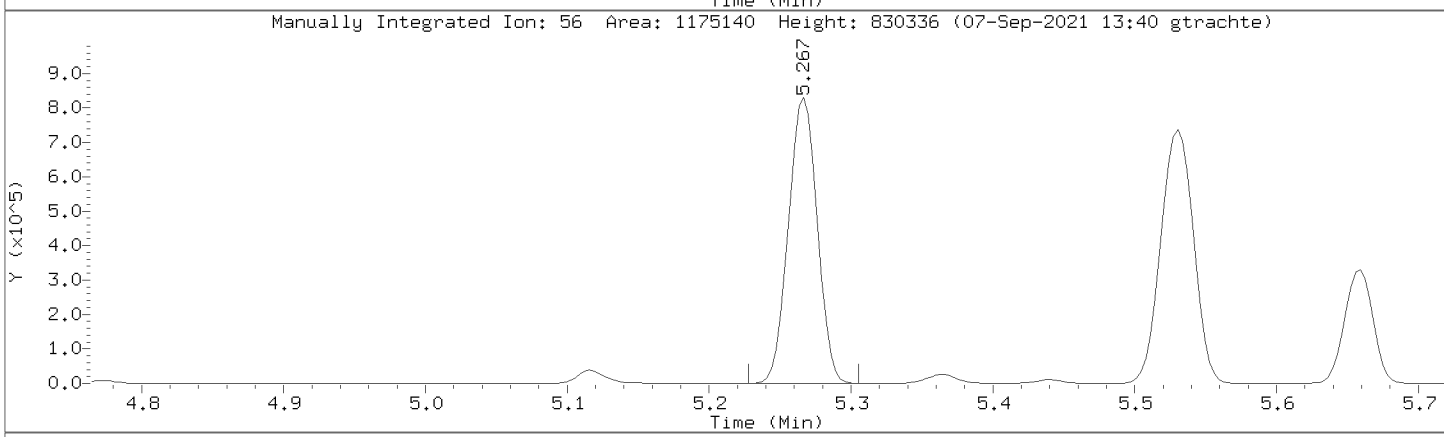
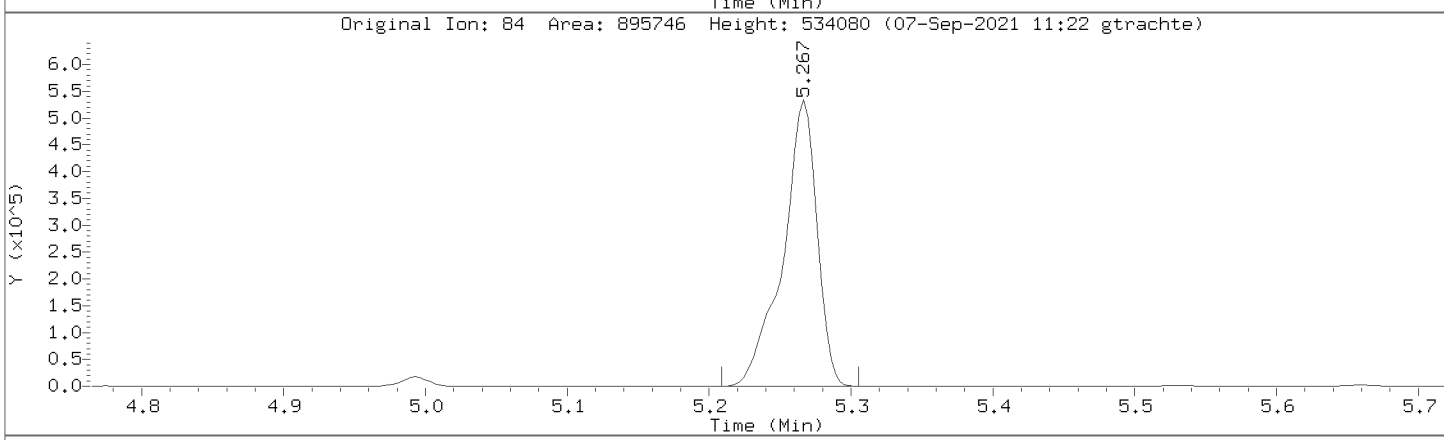
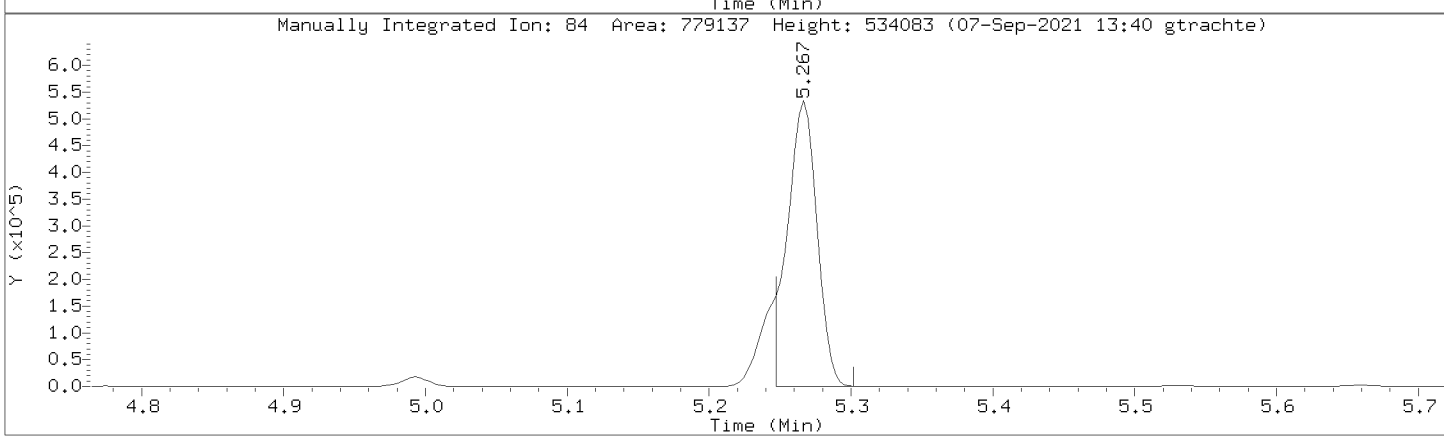
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: Cyclohexane
CAS Number: 110-82-7



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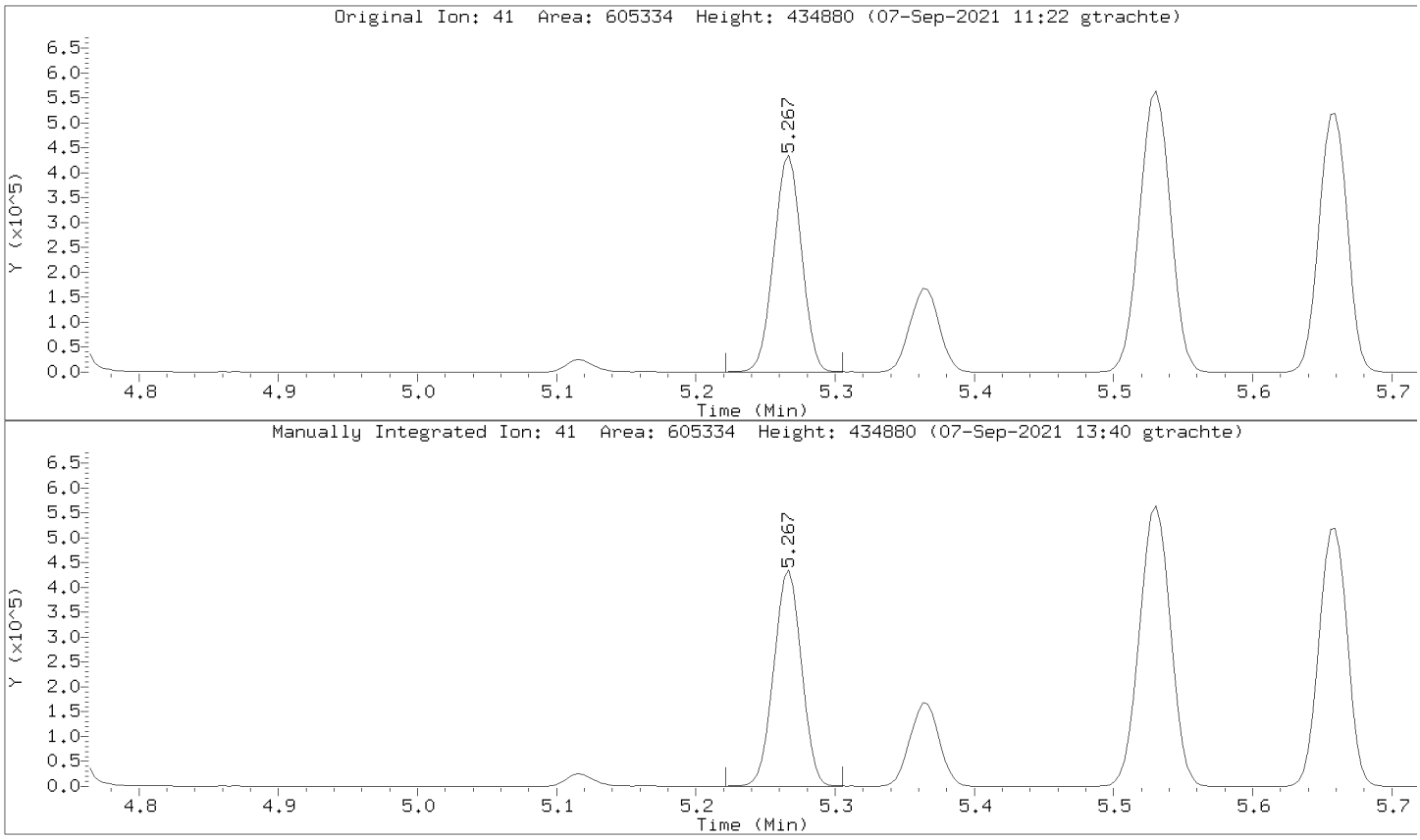

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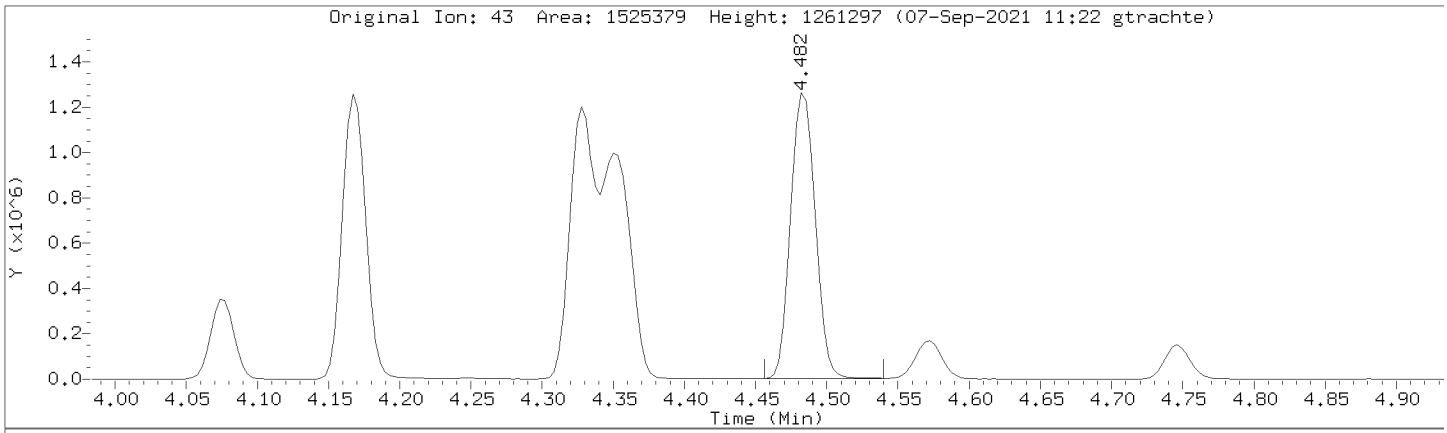
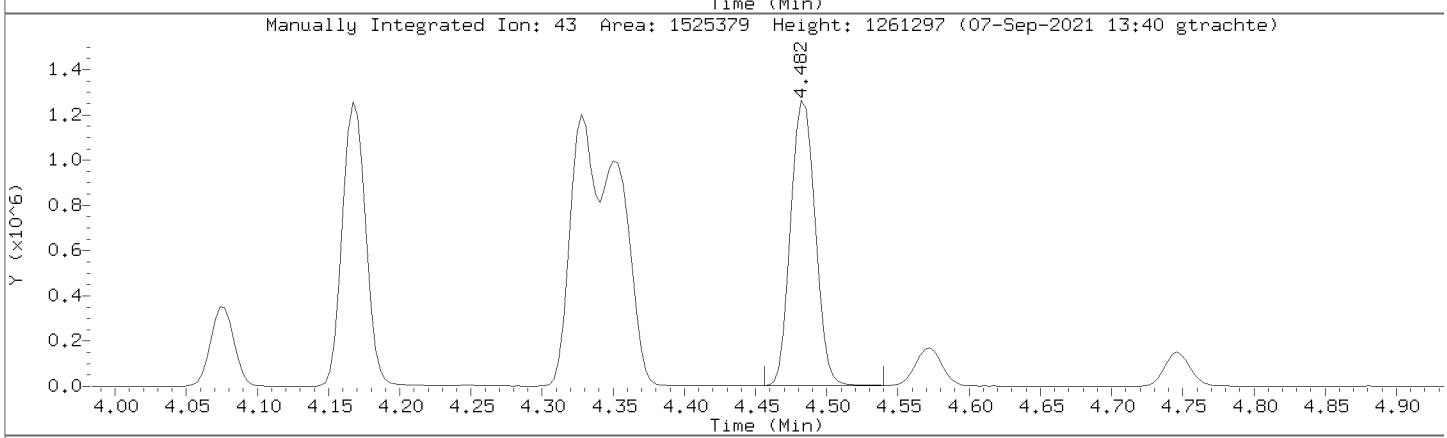
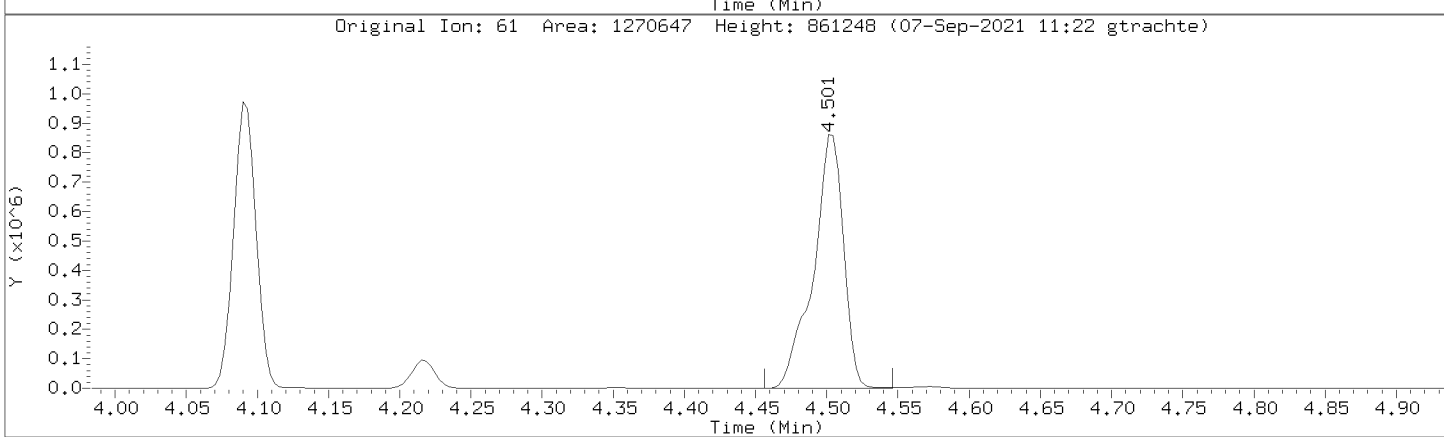
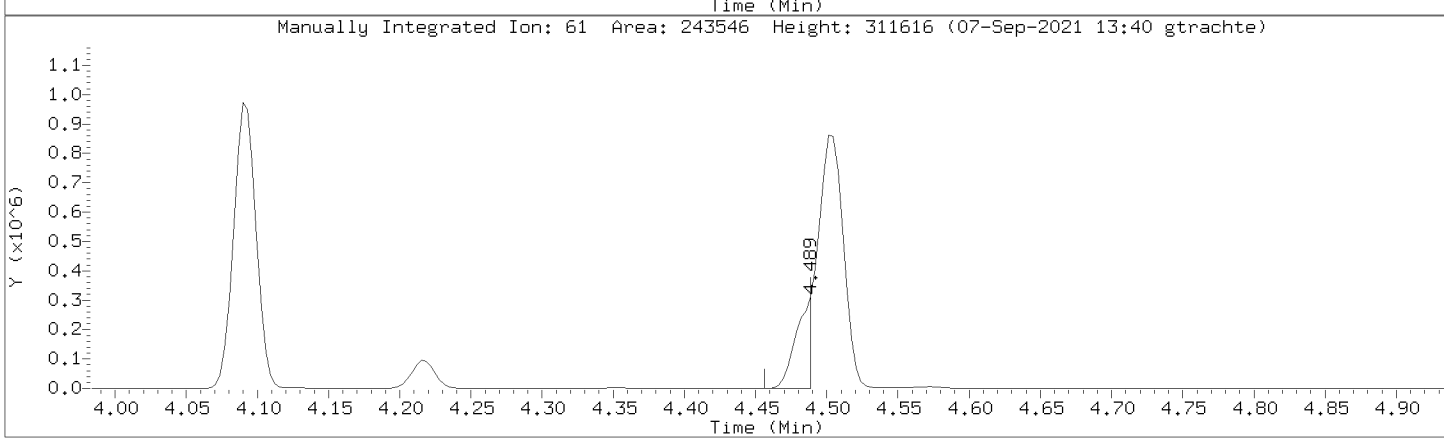
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: Ethyl Acetate
CAS Number: 141-78-6



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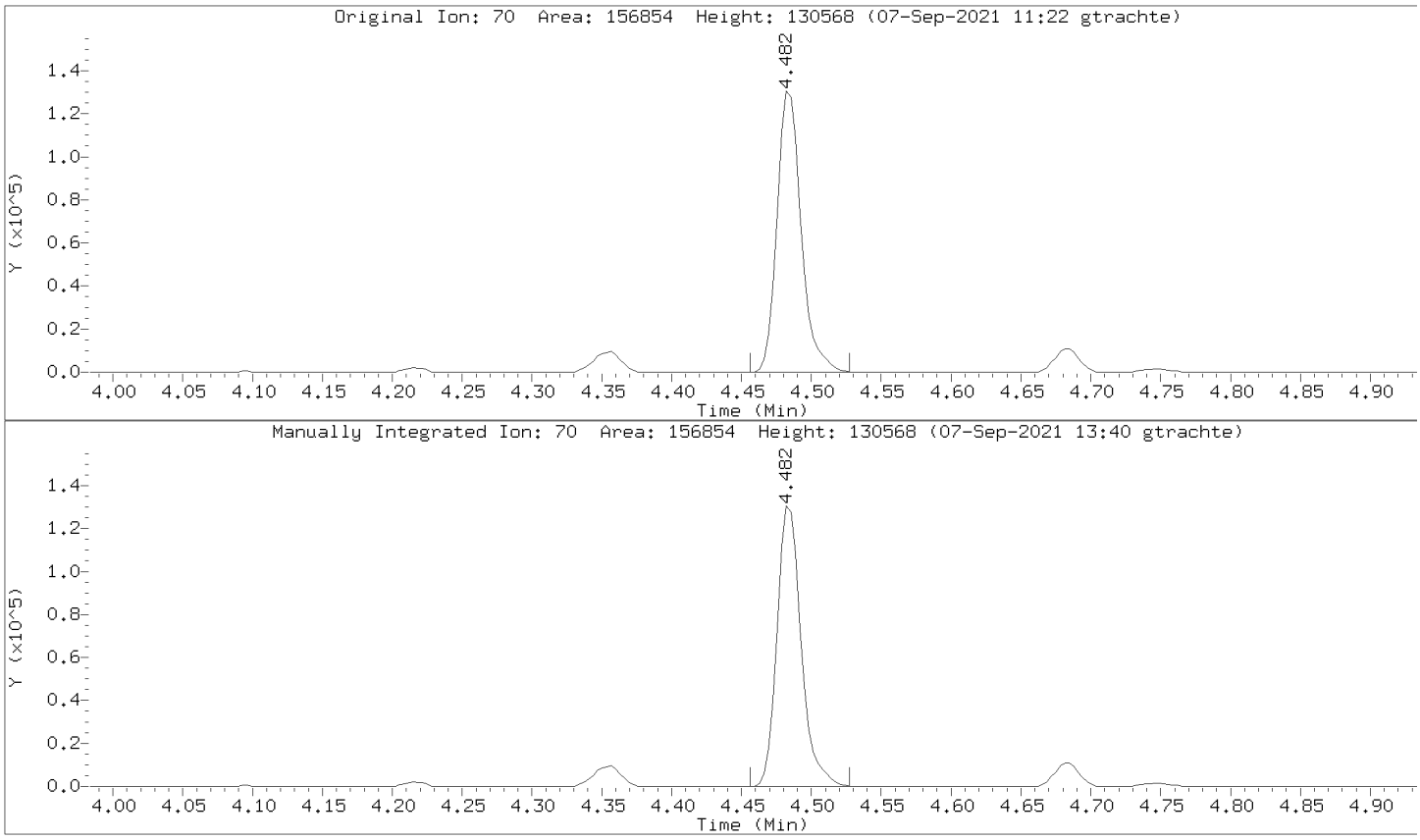
Instrument: 10airH.i
Lab Sample ID: CAL7



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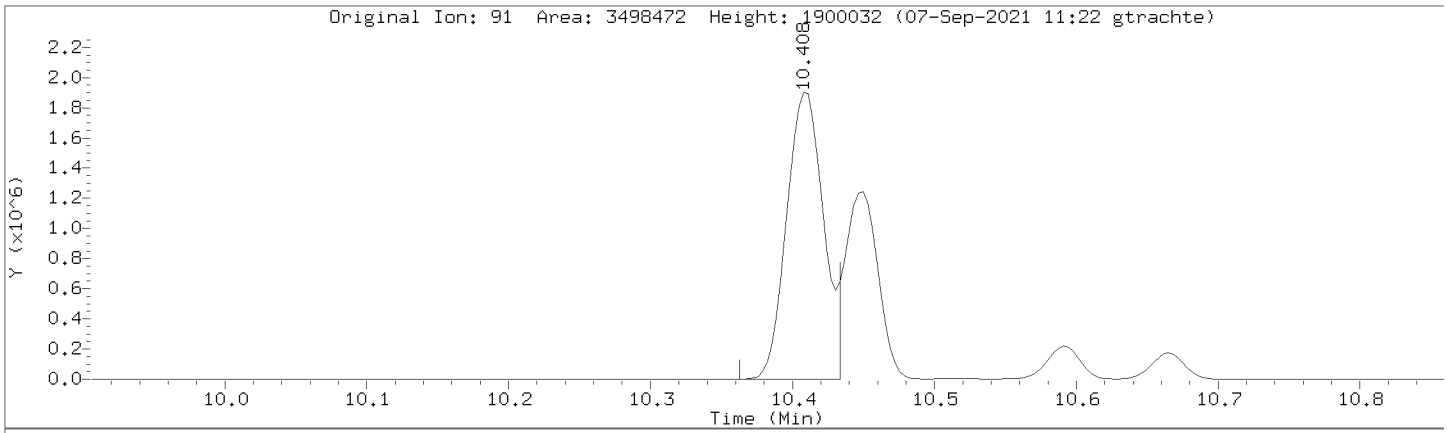
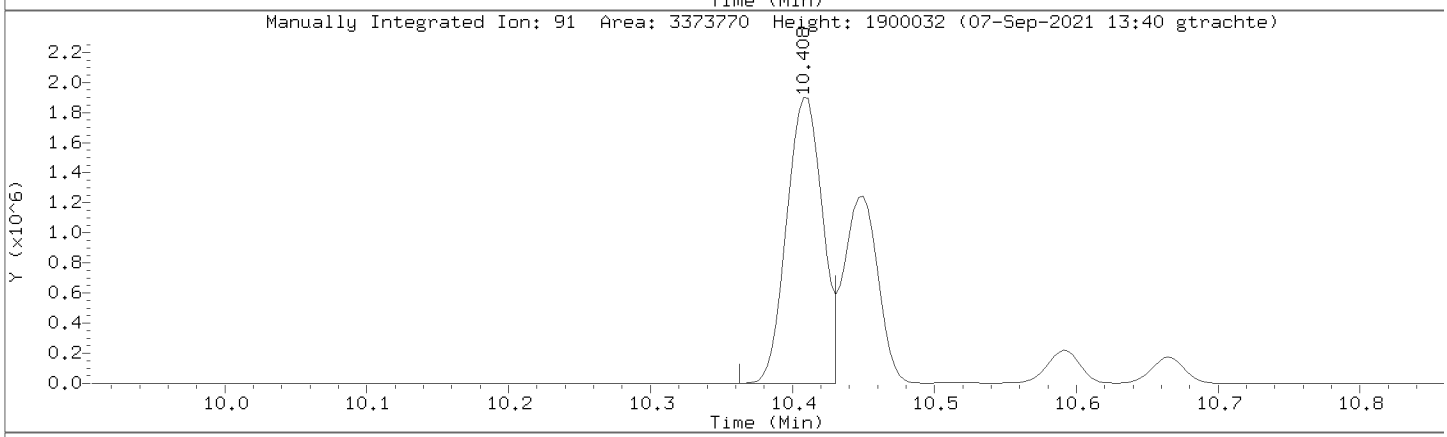
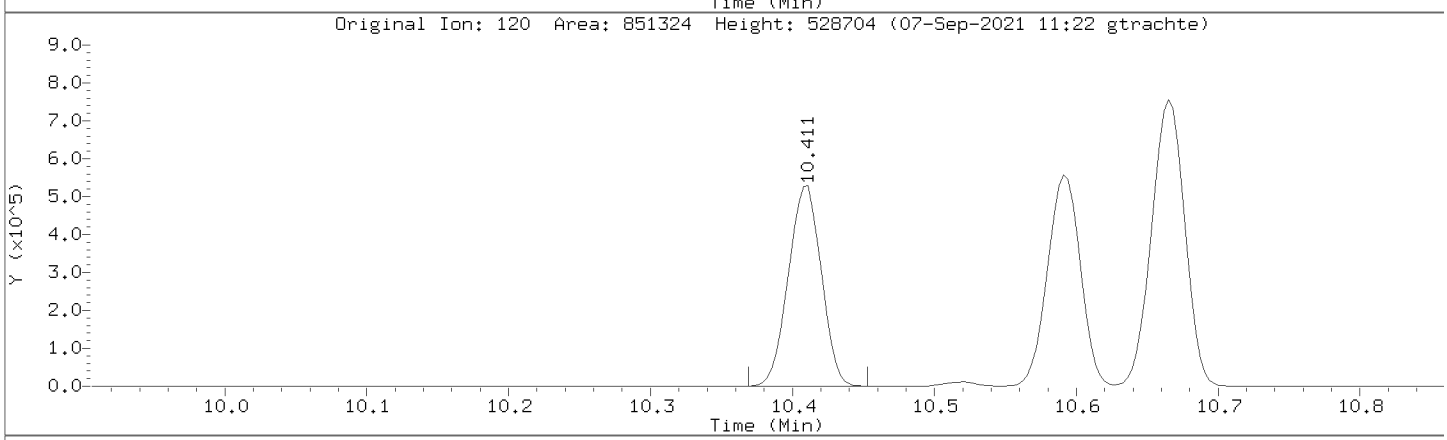
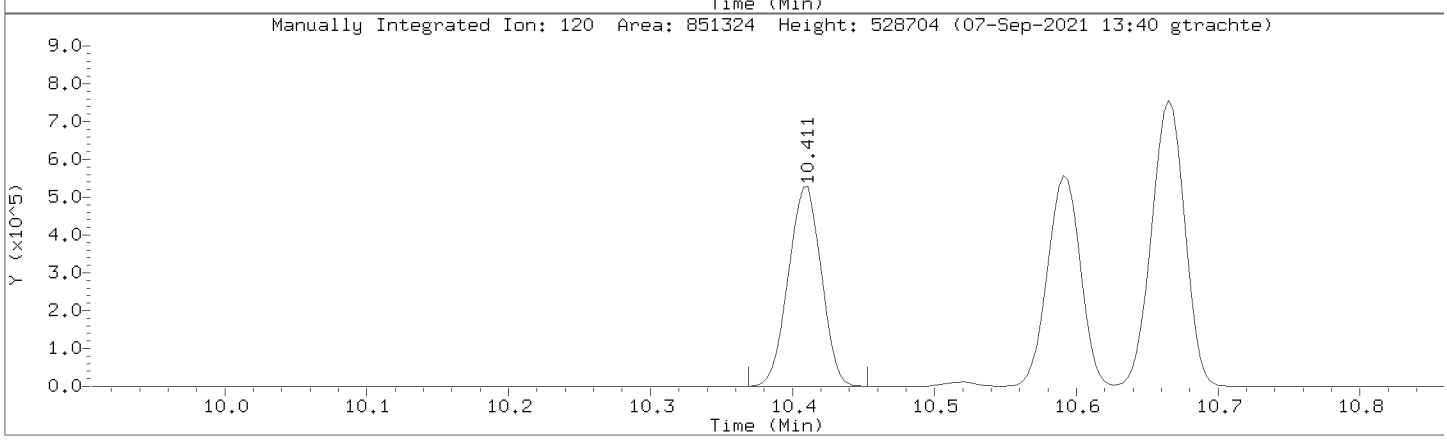
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: N-Propylbenzene
CAS Number: 103-65-1



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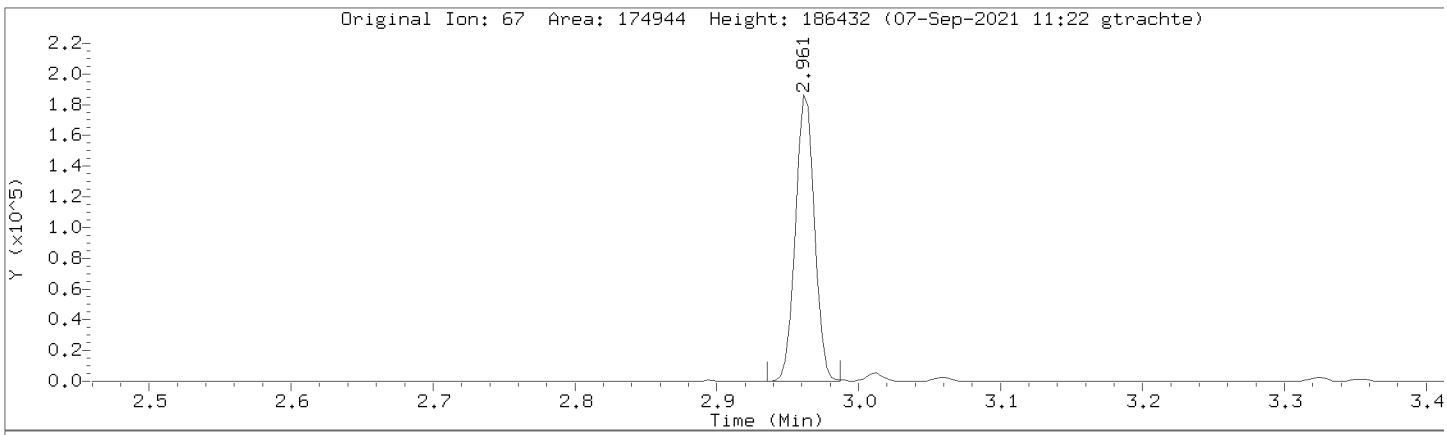
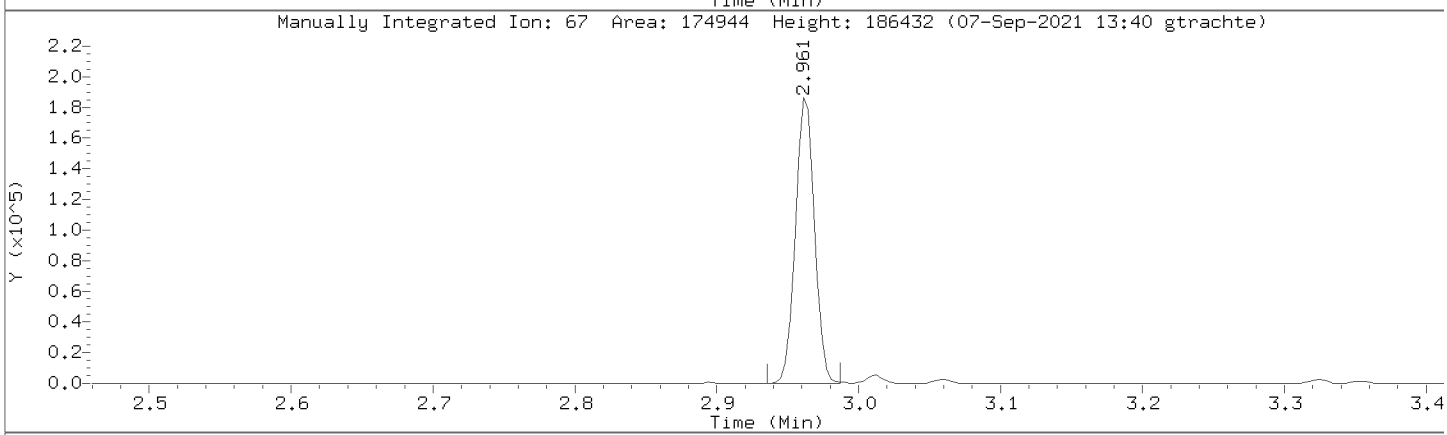
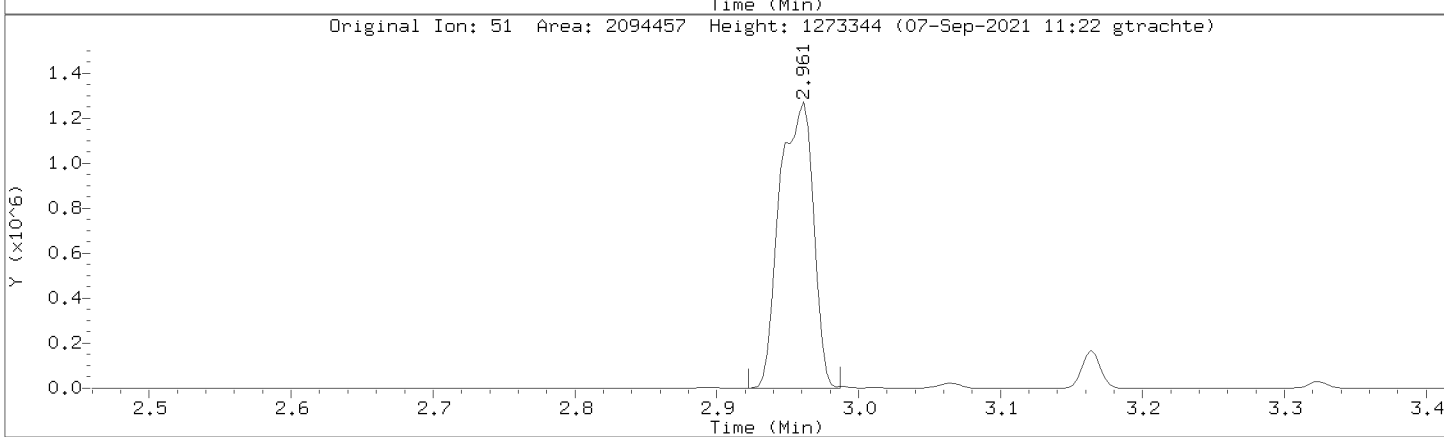
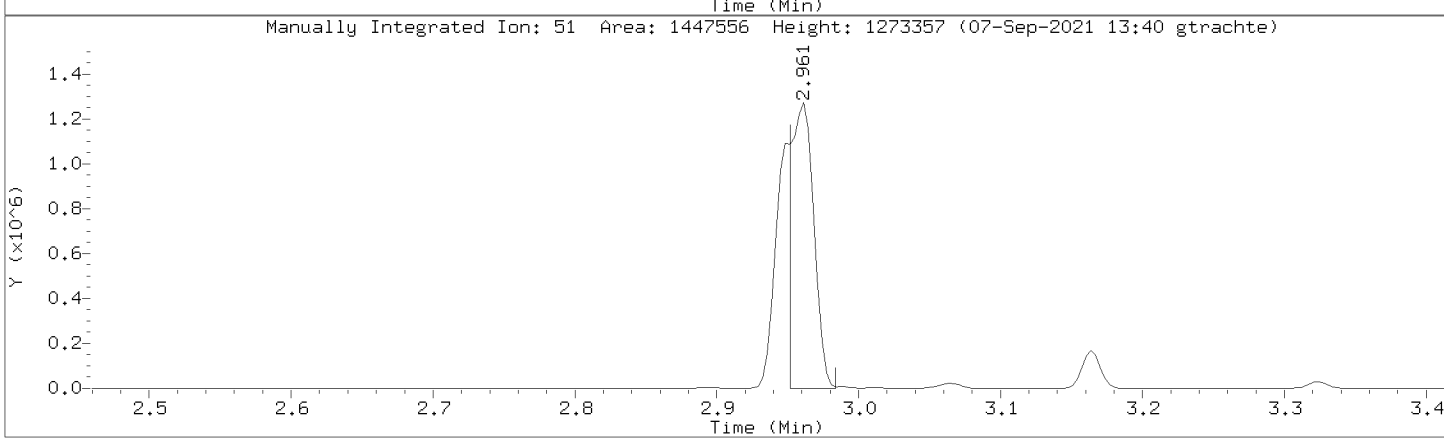
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: Chlorodifluoromethane
CAS Number: 76-13-1



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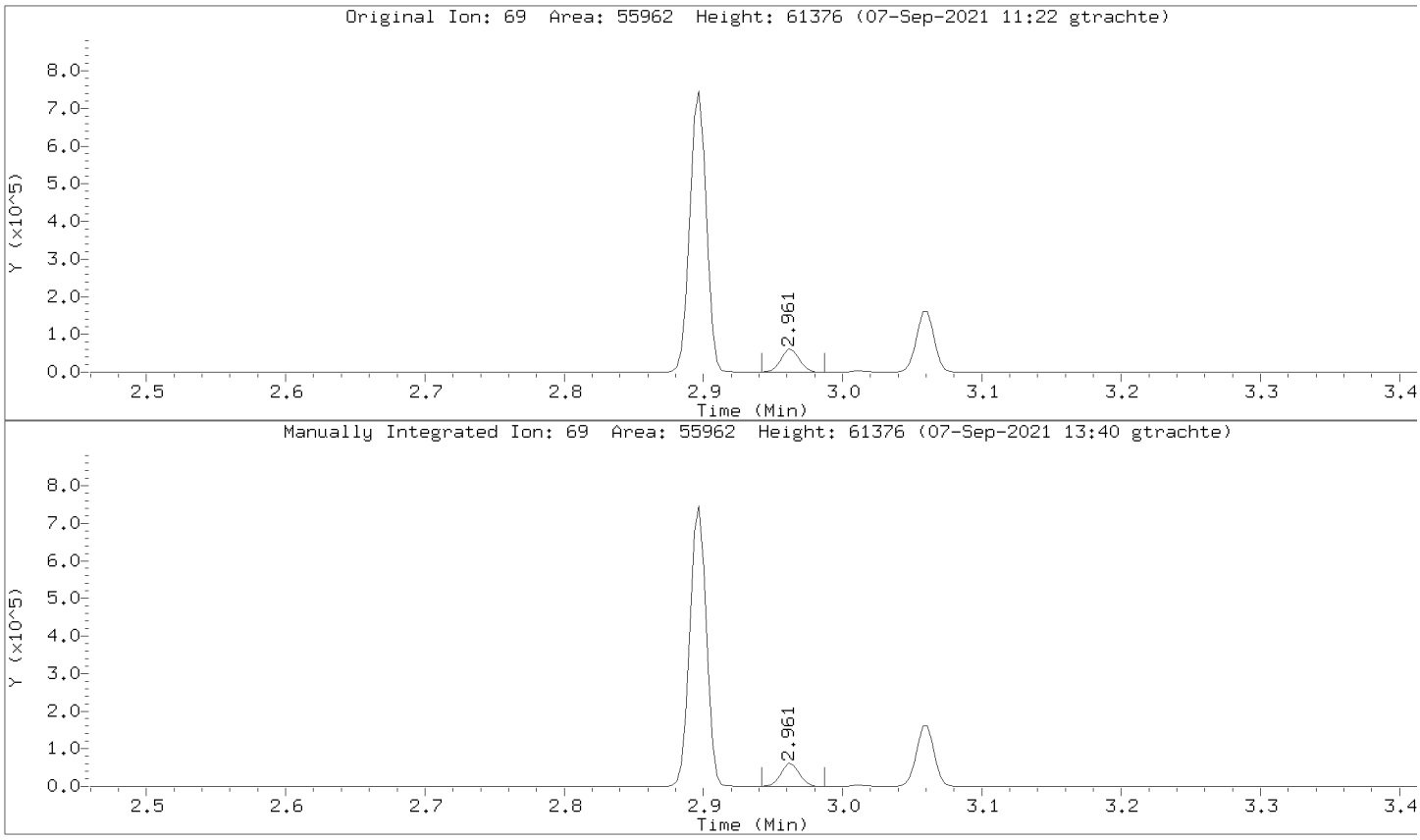
Instrument: 10airH.i
Lab Sample ID: CAL7



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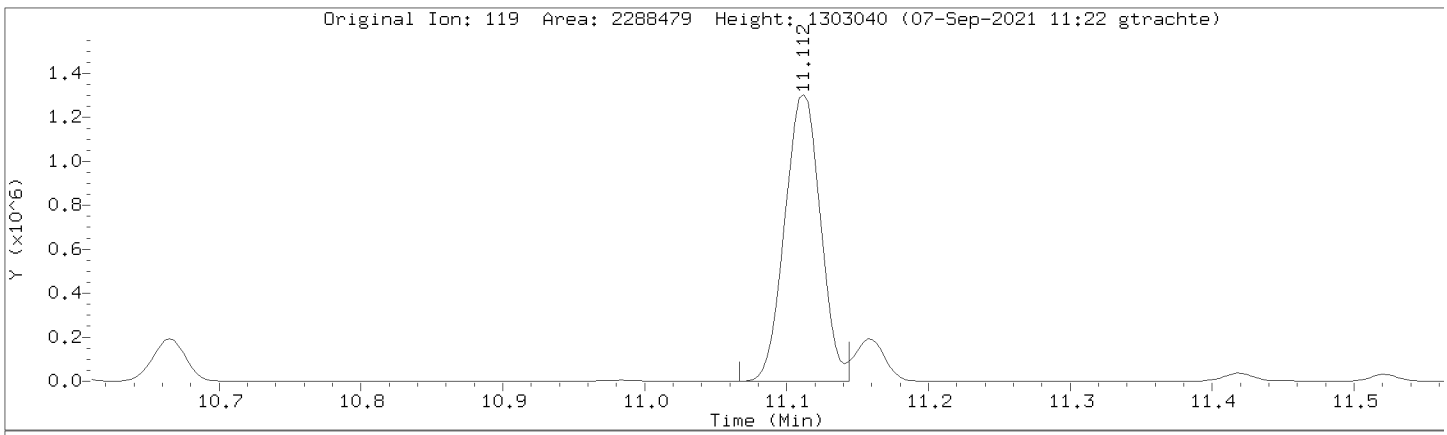
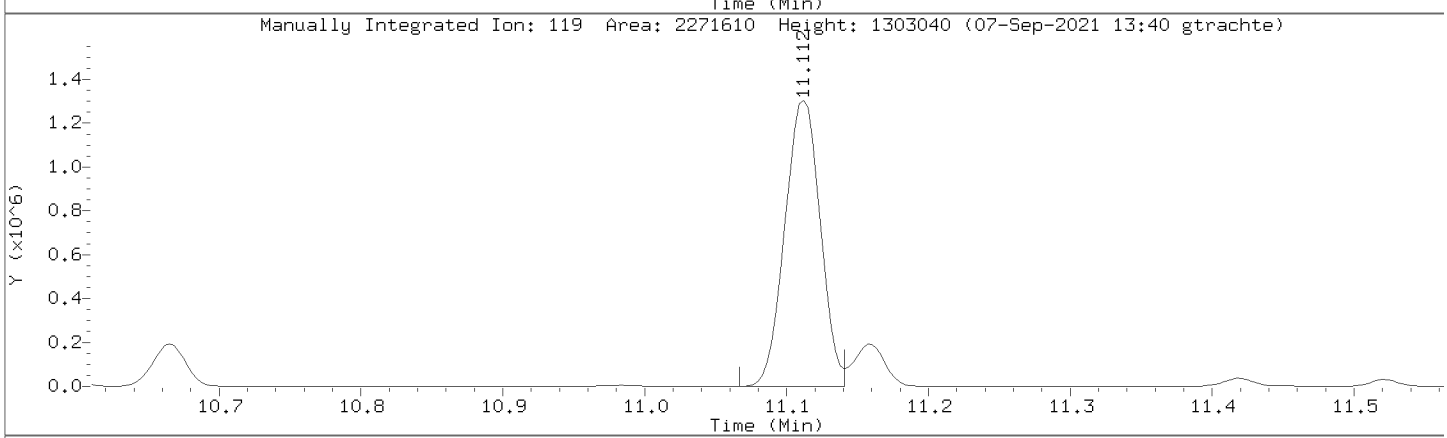
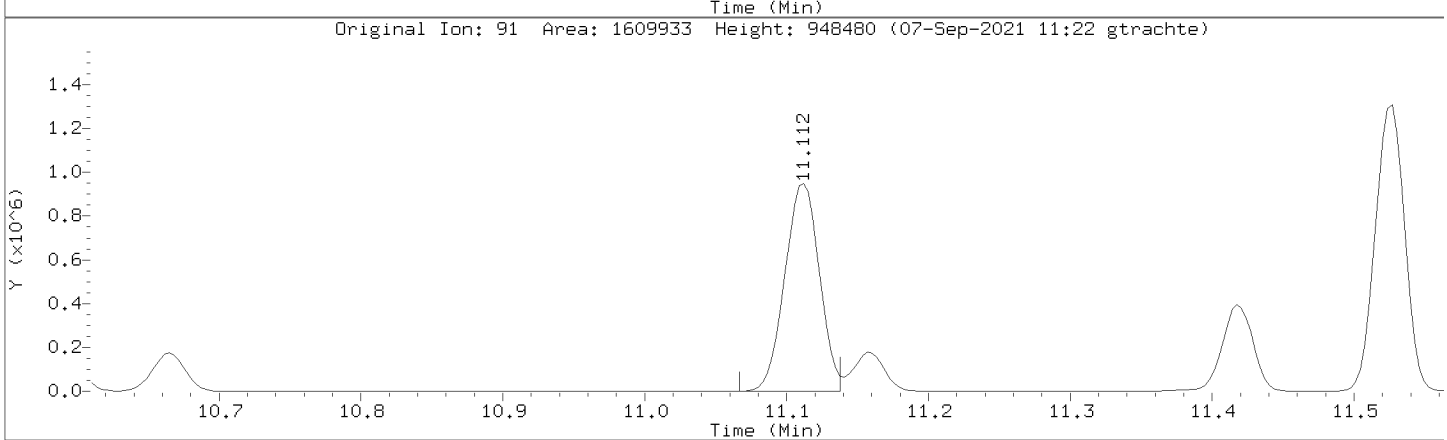
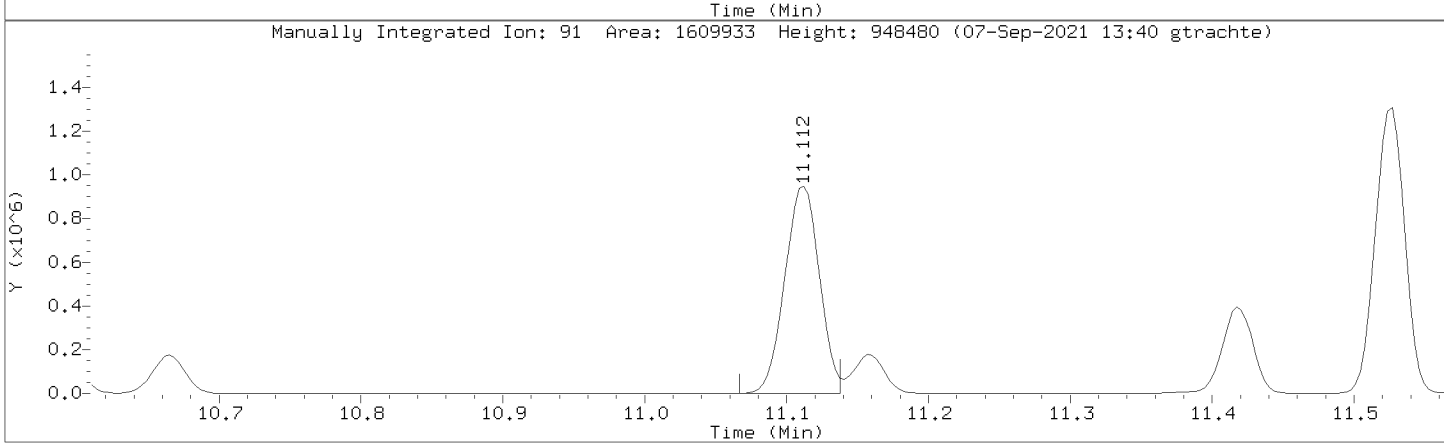
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: Tert-Butyl Benzene
CAS Number: 98-06-6

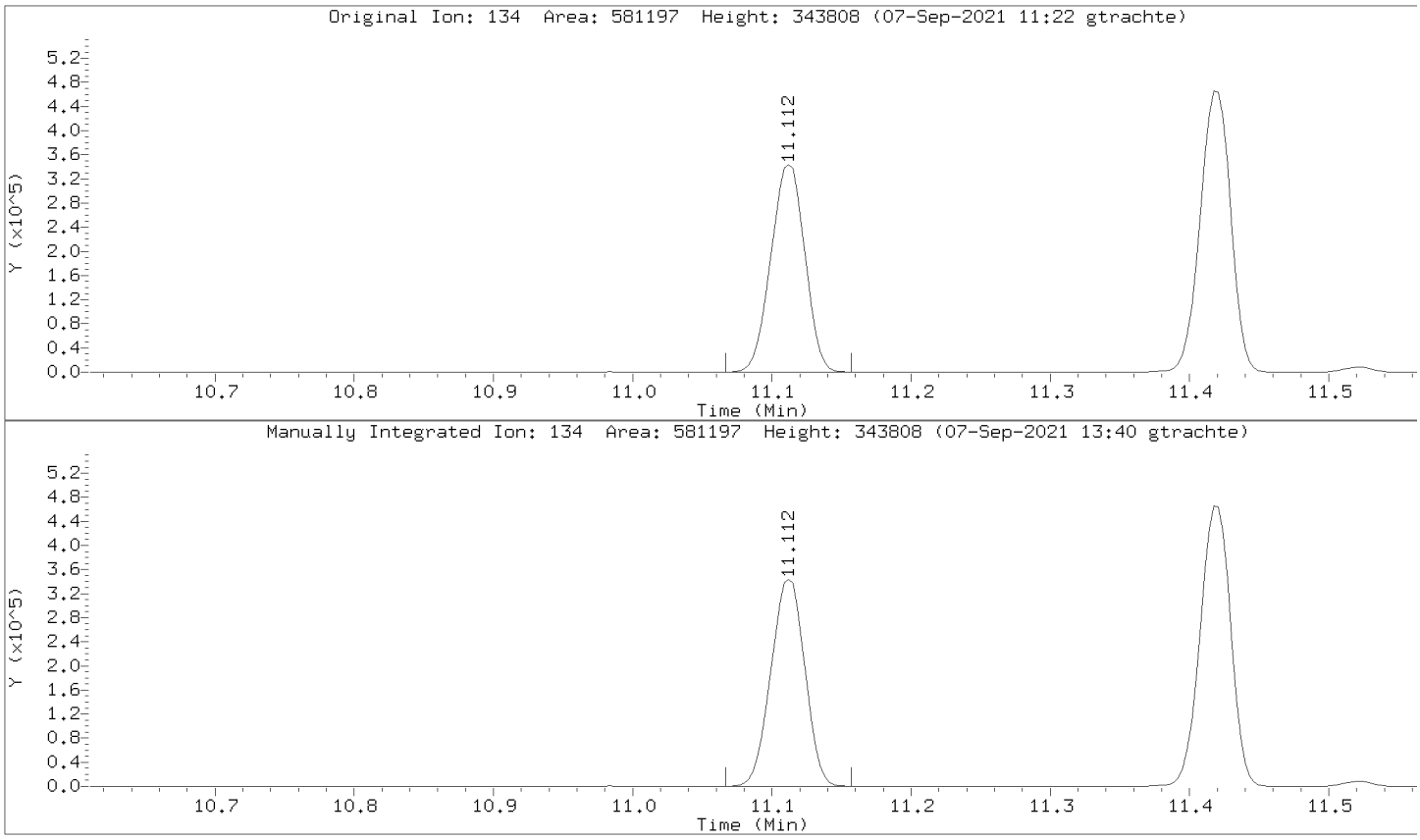


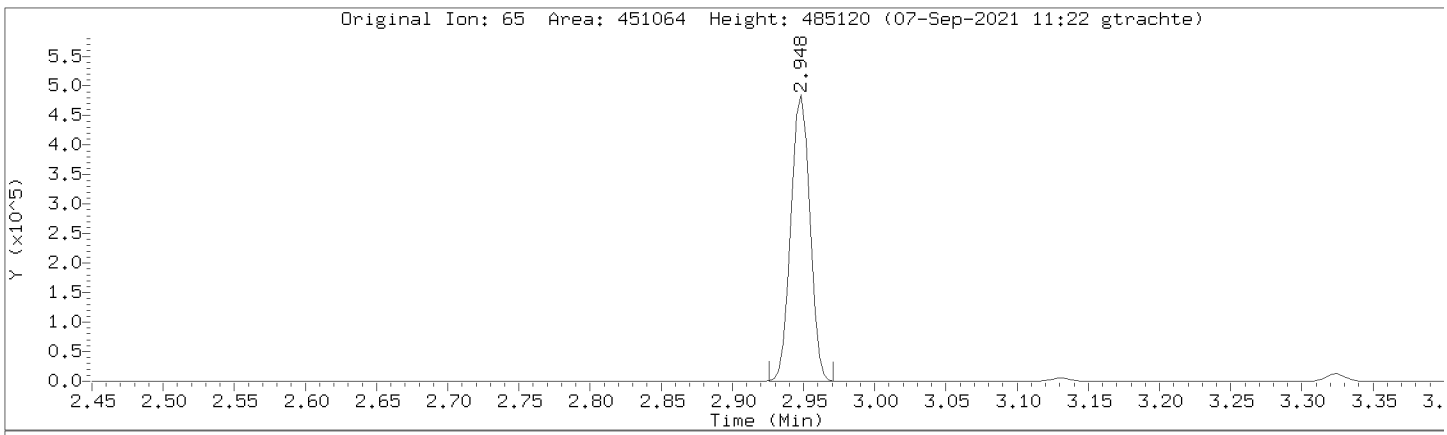



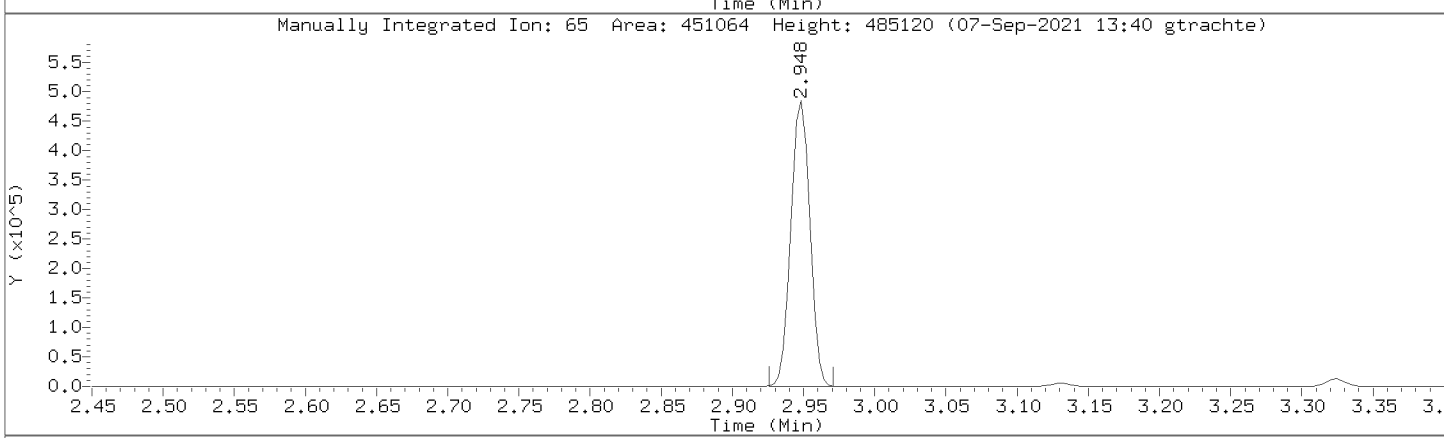
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25010.D
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

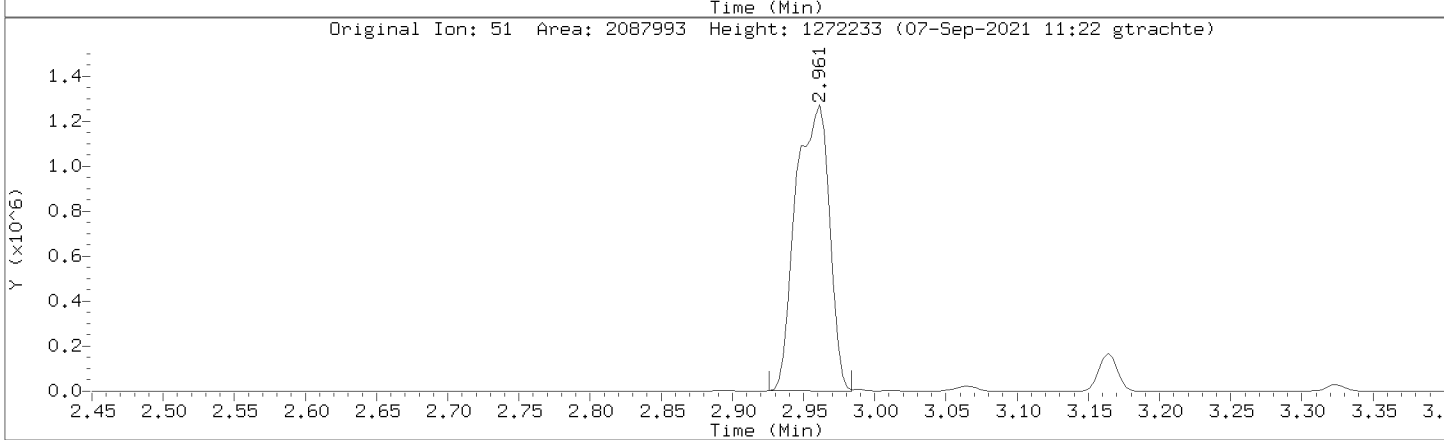


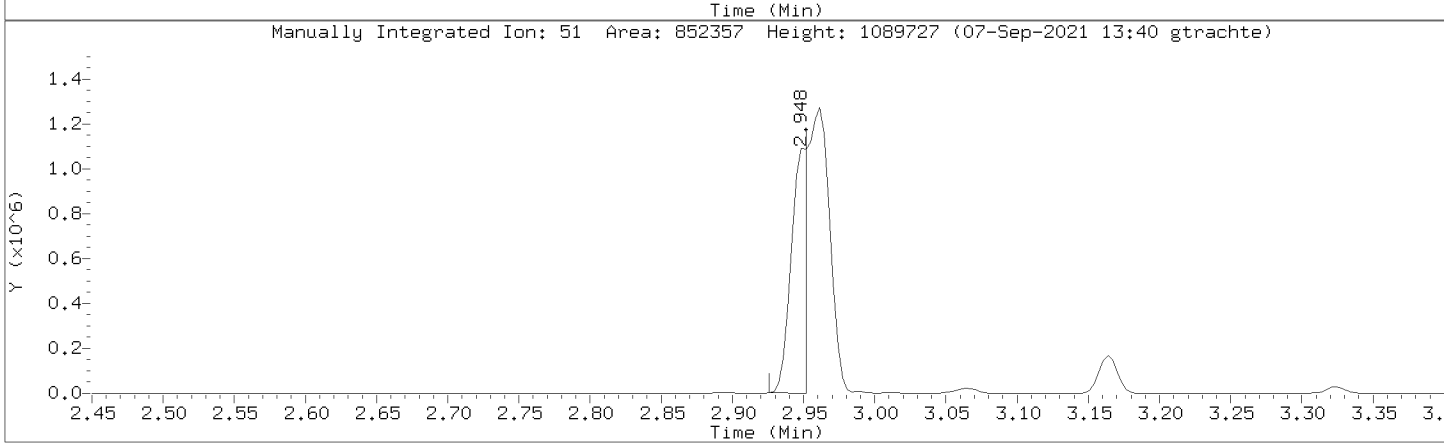
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25010.D
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6

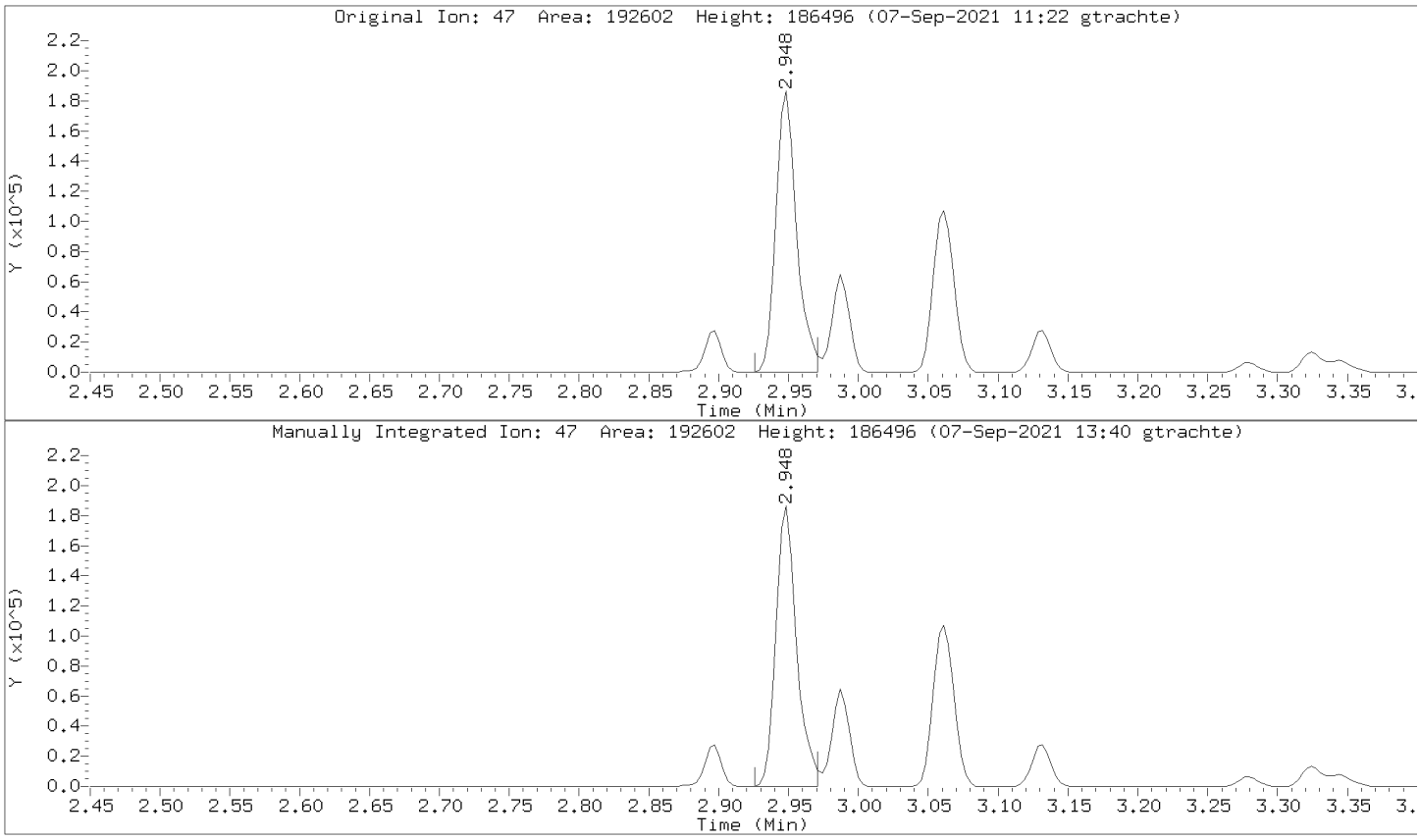


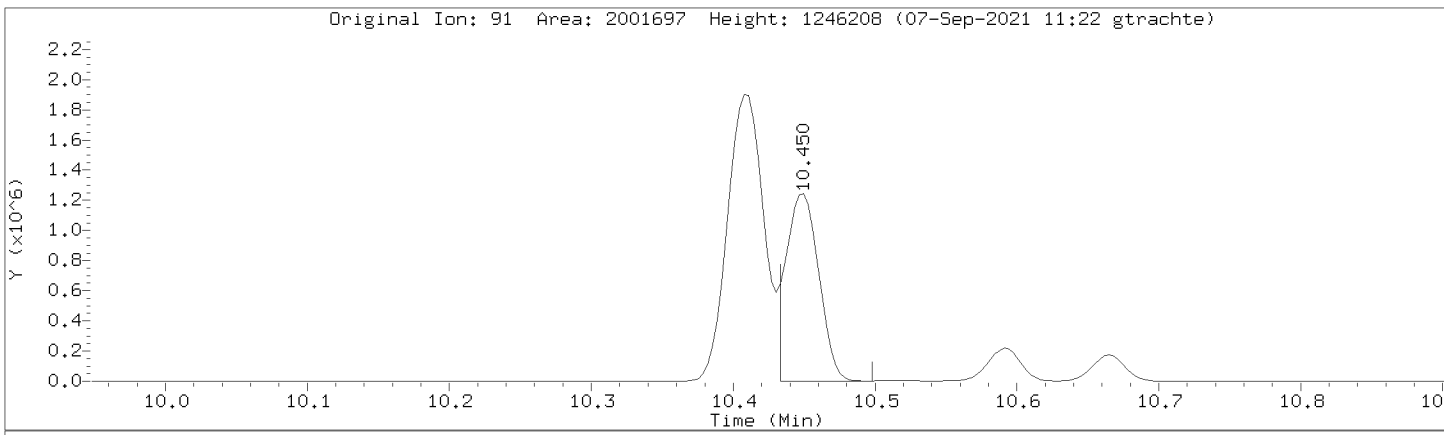



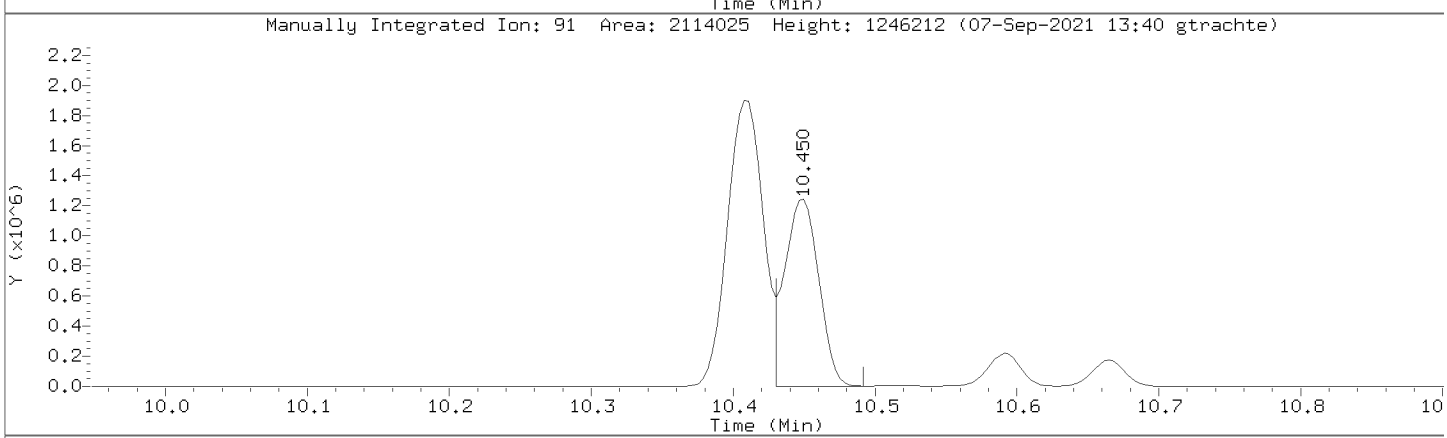
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25010.D
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

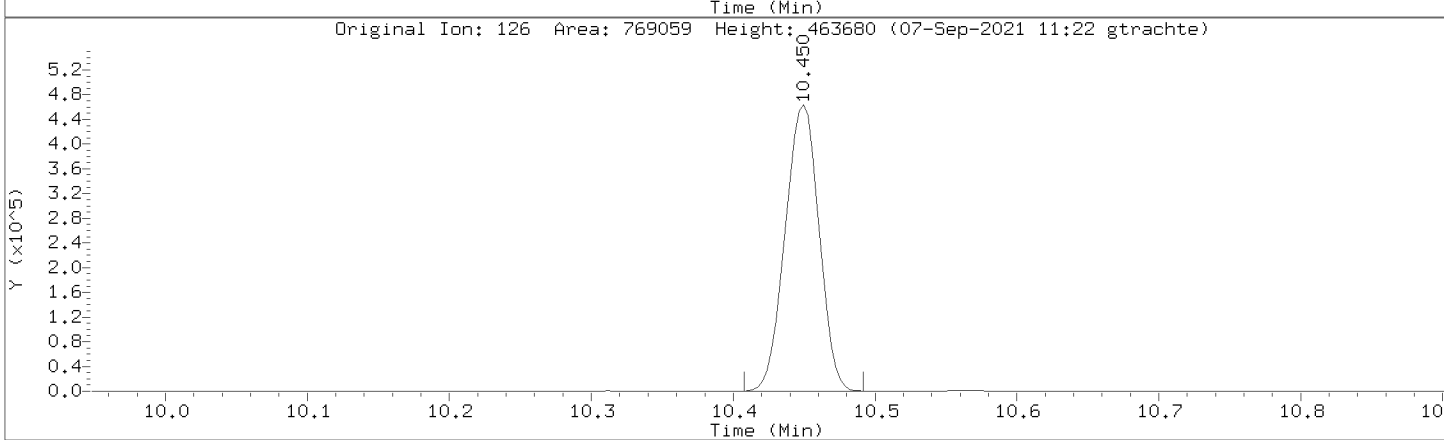


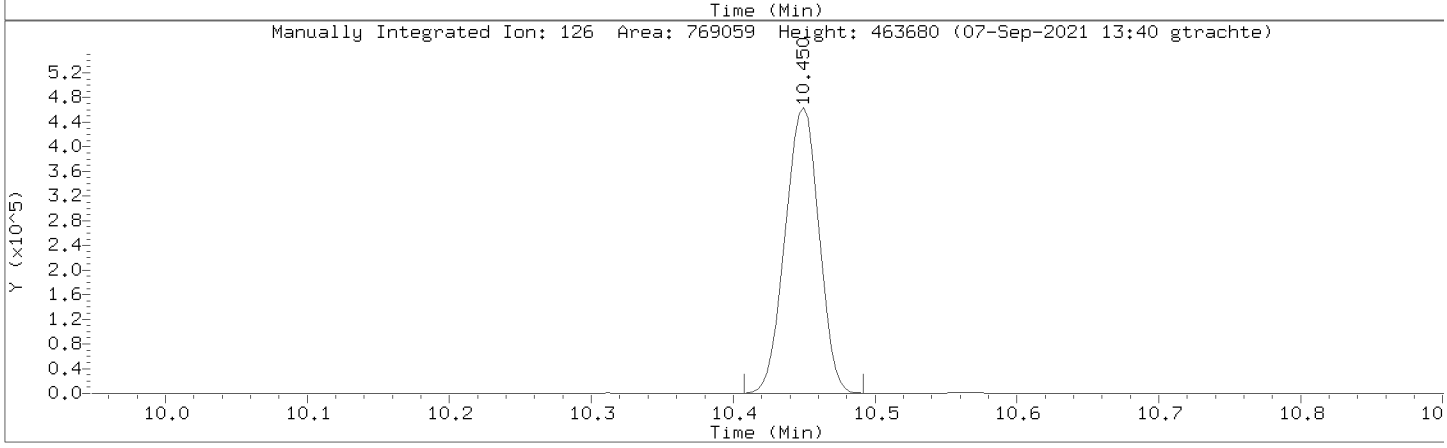
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25010.D
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

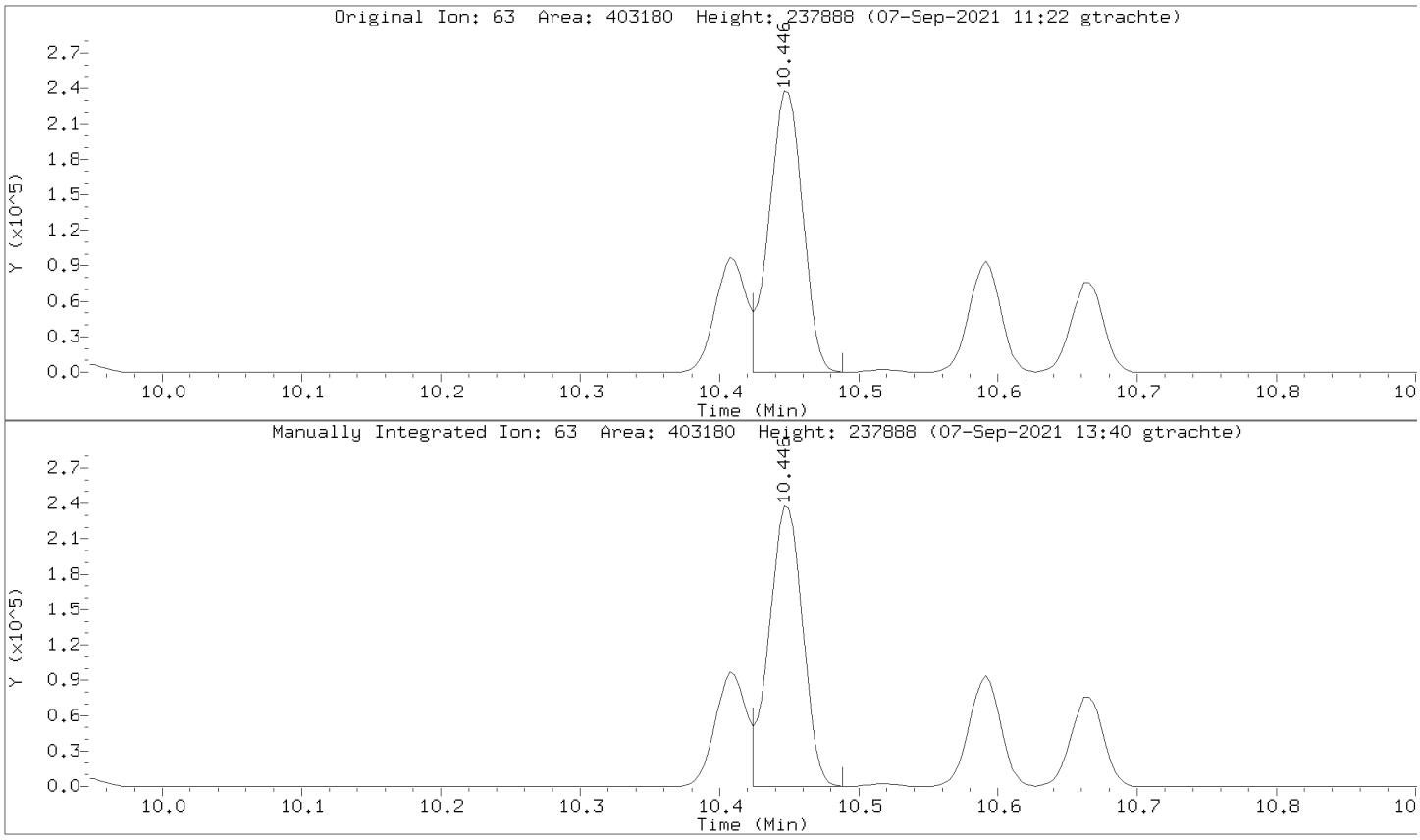


Data File: \\192.168.10.12\chem\10airH.i\090721.b/25010.D
Injection Date: 07-SEP-2021 11:01
Instrument: 10airH.i
Lab Sample ID: CAL7



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 090721.b
Sample Matrix: Gas
Fraction: VOA
Lab Smp Id: ICV
Level: LOW
Operator: GT
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2021ICV.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

| SPIKE COMPOUND | CONC ADDED ppbv | CONC RECOVERED ppbv | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 1 1,1-Difluoroethane | 10.1 | 10.0 | 98.71 | 60-140 |
| 2 Chlorodifluorometh | 10.2 | 10.3 | 101.83 | 60-140 |
| 3 Propylene | 10.2 | 8.84 | 86.39 | 60-140 |
| 4 Dichlorodifluorome | 10.2 | 9.65 | 94.48 | 60-140 |
| 5 Dichlorotetrafluor | 9.17 | 9.20 | 100.28 | 60-140 |
| 6 Chloromethane | 10.0 | 9.39 | 93.53 | 60-140 |
| 7 Vinyl chloride | 10.2 | 10.4 | 101.66 | 60-140 |
| 8 1,3-Butadiene | 10.2 | 10.5 | 103.10 | 60-140 |
| 9 Bromomethane | 10.1 | 10.3 | 101.71 | 60-140 |
| 10 Chloroethane | 10.0 | 11.3 | 112.46 | 60-140 |
| 11 Ethanol | 10.0 | 12.8 | 128.07 | 60-140 |
| 12 Vinyl Bromide | 10.3 | 11.1 | 107.72 | 60-140 |
| 13 Isopentane | 10.3 | 10.1 | 97.81 | 60-140 |
| 14 Freon 123 | 9.40 | 10.2 | 108.40 | 60-140 |
| 16 Acrolein | 10.4 | 11.4 | 109.78 | 60-140 |
| 15 Trichlorofluoromet | 9.90 | 9.58 | 96.81 | 60-140 |
| 17 Acetone | 10.2 | 12.1 | 118.75 | 60-140 |
| 18 Isopropyl Alcohol | 11.0 | 11.3 | 103.37 | 60-140 |
| 19 1,1-Dichloroethene | 10.3 | 9.87 | 95.69 | 60-140 |
| 20 Acrylonitrile | 10.1 | 10.8 | 107.09 | 60-140 |
| 21 Tert Butyl Alcohol | 11.0 | 9.16 | 83.33 | 60-140 |
| 22 Methyl Acetate | 10.9 | 8.08 | 74.49 | 60-140 |
| 23 Freon 113 | 10.0 | 9.96 | 99.58 | 60-140 |
| 25 Methylene chloride | 10.7 | 11.2 | 104.18 | 60-140 |
| 24 Allyl Chloride | 10.5 | 11.6 | 110.35 | 60-140 |
| 26 Carbon Disulfide | 10.6 | 10.4 | 98.16 | 60-140 |
| 27 Methyl Tert Butyl | 10.1 | 10.5 | 103.97 | 60-140 |
| 28 trans-1,2-dichloro | 10.1 | 9.96 | 98.32 | 60-140 |
| 29 Vinyl Acetate | 10.6 | 11.4 | 107.32 | 60-140 |
| 30 1,1-Dichloroethane | 10.2 | 9.76 | 95.45 | 60-140 |
| 31 Methyl Ethyl Keton | 10.8 | 11.3 | 104.24 | 60-140 |
| 32 Di-isopropyl Ether | 9.87 | 8.97 | 90.91 | 60-140 |
| 33 n-Hexane | 9.81 | 9.15 | 93.32 | 60-140 |
| 34 Ethyl Acetate | 9.80 | 9.37 | 95.60 | 60-140 |
| 35 cis-1,2-Dichloroet | 10.2 | 10.3 | 100.71 | 60-140 |
| 36 Ethyl Tert-Butyl E | 10.0 | 10.1 | 100.43 | 60-140 |
| 37 Chloroform | 9.77 | 9.68 | 99.06 | 60-140 |
| 38 Tetrahydrofuran | 10.0 | 9.90 | 98.62 | 60-140 |
| 39 1,1,1-Trichloroeth | 9.95 | 10.2 | 102.66 | 60-140 |
| 40 1,2-Dichloroethane | 10.2 | 10.0 | 98.06 | 60-140 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

| SPIKE COMPOUND | CONC ADDED ppbv | CONC RECOVERED ppbv | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 41 Benzene | 10.1 | 11.4 | 112.21 | 60-140 |
| 42 Carbon tetrachlori | 10.2 | 11.5 | 113.36 | 60-140 |
| 43 Cyclohexane | 10.1 | 10.0 | 99.44 | 60-140 |
| 44 Tert Amyl Methyl E | 10.1 | 11.3 | 112.07 | 60-140 |
| 46 2,2,4-Trimethylpen | 10.3 | 9.78 | 94.88 | 60-140 |
| 47 Heptane | 10.0 | 9.27 | 92.65 | 60-140 |
| 48 Trichloroethene | 10.2 | 11.0 | 107.54 | 60-140 |
| 49 Methyl methacrylat | 10.3 | 10.9 | 106.47 | 60-140 |
| 50 1,2-Dichloropropan | 10.0 | 10.3 | 102.69 | 60-140 |
| 51 1,4-Dioxane | 10.3 | 11.5 | 112.51 | 60-140 |
| 52 Bromodichlorometha | 10.2 | 10.7 | 104.01 | 60-140 |
| 53 Methylcyclohexane | 10.4 | 11.4 | 109.42 | 60-140 |
| 54 Methyl Isobutyl Ke | 10.2 | 10.6 | 104.58 | 60-140 |
| 55 cis-1,3-Dichloropr | 10.2 | 12.1 | 118.52 | 60-140 |
| 56 trans-1,3-Dichloro | 10.5 | 12.4 | 118.45 | 60-140 |
| 57 Toluene | 10.3 | 11.1 | 107.56 | 60-140 |
| 58 1,1,2-Trichloroeth | 10.2 | 11.2 | 110.59 | 60-140 |
| 59 Methyl Butyl Keton | 9.95 | 11.2 | 112.89 | 60-140 |
| 60 n-Octane | 9.92 | 10.4 | 104.74 | 60-140 |
| 61 Dibromochlorometha | 10.1 | 11.1 | 110.40 | 60-140 |
| 62 Tetrachloroethene | 10.1 | 11.0 | 108.46 | 60-140 |
| 63 1,2-Dibromoethane | 10.3 | 11.3 | 109.54 | 60-140 |
| 65 Chlorobenzene | 10.3 | 11.0 | 106.60 | 60-140 |
| 66 Ethyl Benzene | 10.3 | 11.5 | 111.56 | 60-140 |
| 67 m&p-Xylene | 10.4 | 12.0 | 115.01 | 60-140 |
| 68 n-Nonane | 10.2 | 11.5 | 112.67 | 60-140 |
| 69 Styrene | 10.5 | 11.7 | 111.79 | 60-140 |
| 70 o-Xylene | 10.4 | 11.3 | 108.26 | 60-140 |
| 71 Bromoform | 10.5 | 13.6 | 129.80 | 60-140 |
| 72 1,1,2,2-Tetrachlor | 10.4 | 11.6 | 111.27 | 60-140 |
| 73 Isopropylbenzene | 10.1 | 12.2 | 120.41 | 60-140 |
| 74 N-Propylbenzene | 10.3 | 12.2 | 118.44 | 60-140 |
| 75 2-Chlorotoluene | 10.4 | 11.0 | 105.75 | 60-140 |
| 76 4-Ethyltoluene | 10.3 | 11.4 | 110.18 | 60-140 |
| 77 1,3,5-Trimethylben | 10.3 | 11.8 | 115.08 | 60-140 |
| 78 n-Decane | 10.5 | 10.9 | 104.27 | 60-140 |
| 79 Tert-Butyl Benzene | 10.5 | 12.2 | 116.50 | 60-140 |
| 80 1,2,4-Trimethylben | 10.4 | 13.5 | 129.63 | 60-140 |
| 81 Sec- Butylbenzene | 10.9 | 13.3 | 121.63 | 60-140 |
| 82 1,3-Dichlorobenzen | 10.3 | 11.6 | 112.86 | 60-140 |
| 83 Benzyl Chloride | 10.9 | 11.3 | 103.39 | 60-140 |
| 84 1,4-Dichlorobenzen | 10.7 | 11.9 | 111.03 | 60-140 |
| 85 p-Isopropyltoluene | 10.9 | 12.3 | 112.86 | 60-140 |
| 86 1,2,3-Trimethylben | 10.9 | 13.7 | 125.23 | 60-140 |
| 87 1,2-Dichlorobenzen | 10.8 | 12.2 | 113.42 | 60-140 |
| 88 N-Butylbenzene | 10.9 | 11.7 | 107.69 | 60-140 |
| 89 1,2-Dibromo-3-Chlo | 10.4 | 11.0 | 106.35 | 60-140 |
| 90 1,2,4-Trichloroben | 10.9 | 12.3 | 113.25 | 60-140 |
| 91 Naphthalene | 10.9 | 13.7 | 125.87 | 60-140 |
| 92 Hexachlorobutadien | 10.8 | 13.8 | 127.83 | 60-140 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Lab Smp Id: ICV
Inj Date : 07-SEP-2021 11:51
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 08-Sep-2021 10:19 10airH.i Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.942 | 2.948 | (0.541) | 153886 | 10.0096 | 10.0(QM) |
| 2 Chlorodifluoromethane | 67 | 2.958 | 2.961 | (0.544) | 60818 | 10.3355 | 10.3(M) |
| 3 Propylene | 41 | 2.964 | 2.967 | (0.546) | 209206 | 8.83741 | 8.84 |
| 4 Dichlorodifluoromethane | 85 | 2.983 | 2.986 | (0.549) | 556786 | 9.64623 | 9.65 |
| 5 Dichlorotetrafluoroethane | 85 | 3.054 | 3.057 | (0.562) | 535692 | 9.19605 | 9.20 |
| 6 Chloromethane | 50 | 3.057 | 3.064 | (0.563) | 281704 | 9.39025 | 9.39 |
| 7 Vinyl chloride | 62 | 3.125 | 3.131 | (0.575) | 242415 | 10.3897 | 10.4 |
| 8 1,3-Butadiene | 54 | 3.160 | 3.163 | (0.582) | 173444 | 10.5368 | 10.5 |
| 9 Bromomethane | 94 | 3.276 | 3.279 | (0.603) | 180470 | 10.2824 | 10.3 |
| 10 Chloroethane | 64 | 3.318 | 3.324 | (0.611) | 107220 | 11.2681 | 11.3 |
| 11 Ethanol | 45 | 3.334 | 3.343 | (0.614) | 81837 | 12.8200 | 12.8 |
| 12 Vinyl Bromide | 106 | 3.424 | 3.427 | (0.630) | 177434 | 11.1279 | 11.1 |
| 13 Isopentane | 43 | 3.437 | 3.440 | (0.633) | 200367 | 10.0642 | 10.1 |
| 14 Freon 123 | 83 | 3.472 | 3.478 | (0.639) | 396640 | 10.1898 | 10.2 |
| 15 Trichlorofluoromethane | 101 | 3.498 | 3.501 | (0.644) | 492506 | 9.58427 | 9.58 |
| 16 Acrolein | 56 | 3.498 | 3.504 | (0.644) | 84532 | 11.4282 | 11.4 |
| 17 Acetone | 43 | 3.520 | 3.527 | (0.648) | 302465 | 12.1007 | 12.1(M) |
| 18 Isopropyl Alcohol | 45 | 3.546 | 3.559 | (0.653) | 370160 | 11.3298 | 11.3 |
| 19 1,1-Dichloroethene | 61 | 3.710 | 3.713 | (0.683) | 375976 | 9.86532 | 9.87 |
| 20 Acrylonitrile | 53 | 3.716 | 3.726 | (0.684) | 175494 | 10.8157 | 10.8 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.739 | 3.752 | (0.688) | 548231 | 9.15758 | 9.16 |
| 22 Methyl Acetate | 43 | 3.739 | 3.748 | (0.688) | 475265 | 8.08209 | 8.08 |
| 23 Freon 113 | 101 | 3.742 | 3.745 | (0.689) | 434799 | 9.95785 | 9.96 |
| 24 Allyl Chloride | 76 | 3.816 | 3.822 | (0.702) | 96637 | 11.6088 | 11.6(Q) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|---|
| | 25 Methylene chloride | 49 | 3.819 | 3.826 | (0.703) | 340713 | 11.1684 | 11.2 |
| | 26 Carbon Disulfide | 76 | 3.925 | 3.929 | (0.722) | 595571 | 10.3560 | 10.4 |
| | 27 Methyl Tert Butyl Ether | 73 | 4.070 | 4.076 | (0.749) | 561756 | 10.4589 | 10.5 |
| | 28 trans-1,2-dichloroethene | 96 | 4.086 | 4.093 | (0.752) | 207754 | 9.96030 | 9.96 |
| | 29 Vinyl Acetate | 43 | 4.160 | 4.166 | (0.766) | 558753 | 11.4192 | 11.4 |
| | 30 1,1-Dichloroethane | 63 | 4.208 | 4.215 | (0.775) | 459424 | 9.76480 | 9.76 |
| | 31 Methyl Ethyl Ketone | 72 | 4.321 | 4.327 | (0.795) | 105135 | 11.2688 | 11.3 |
| | 32 Di-isopropyl Ether | 45 | 4.343 | 4.347 | (0.799) | 818830 | 8.97234 | 8.97 |
| | 33 n-Hexane | 57 | 4.353 | 4.356 | (0.801) | 408635 | 9.15489 | 9.15 |
| | 34 Ethyl Acetate | 43 | 4.475 | 4.482 | (0.824) | 576416 | 9.36928 | 9.37(M) |
| | 35 cis-1,2-Dichloroethene | 96 | 4.495 | 4.504 | (0.827) | 219044 | 10.2527 | 10.3(M) |
| | 36 Ethyl Tert-Butyl Ether | 59 | 4.565 | 4.572 | (0.840) | 823810 | 10.0528 | 10.1 |
| | 37 Chloroform | 83 | 4.675 | 4.684 | (0.860) | 451405 | 9.67833 | 9.68 |
| | 38 Tetrahydrofuran | 42 | 4.742 | 4.745 | (0.873) | 286656 | 9.90154 | 9.90 |
| | 39 1,1,1-Trichloroethane | 97 | 4.986 | 4.993 | (0.918) | 459163 | 10.2151 | 10.2 |
| | 40 1,2-Dichloroethane | 62 | 5.067 | 5.073 | (0.933) | 355112 | 10.0416 | 10.0 |
| | 41 Benzene | 78 | 5.221 | 5.228 | (0.961) | 614623 | 11.3559 | 11.4 |
| | 42 Carbon tetrachloride | 117 | 5.237 | 5.244 | (0.964) | 444709 | 11.5172 | 11.5 |
| | 43 Cyclohexane | 56 | 5.260 | 5.266 | (0.968) | 435350 | 10.0134 | 10.0(M) |
| | 44 Tert Amyl Methyl Ether | 73 | 5.359 | 5.363 | (0.986) | 611401 | 11.3410 | 11.3 |
| * | 45 1,4-Difluorobenzene | 114 | 5.433 | 5.440 | (1.000) | 499543 | 10.0000 | |
| | 46 2,2,4-Trimethylpentane | 57 | 5.527 | 5.530 | (1.017) | 1307767 | 9.78222 | 9.78 |
| | 47 Heptane | 43 | 5.652 | 5.658 | (1.040) | 464703 | 9.27441 | 9.27 |
| | 48 Trichloroethene | 130 | 5.761 | 5.768 | (1.060) | 296044 | 10.9584 | 11.0 |
| | 49 Methyl methacrylate | 69 | 5.800 | 5.806 | (1.067) | 239815 | 10.9129 | 10.9(Q) |
| | 50 1,2-Dichloropropane | 63 | 5.806 | 5.813 | (1.069) | 298411 | 10.2998 | 10.3 |
| | 51 1,4-Dioxane | 88 | 5.851 | 5.858 | (1.077) | 149348 | 11.5434 | 11.5 |
| | 52 Bromodichloromethane | 83 | 5.967 | 5.970 | (1.098) | 487748 | 10.6506 | 10.7 |
| | 53 Methylcyclohexane | 98 | 6.228 | 6.234 | (1.146) | 170756 | 11.3582 | 11.4(Q) |
| | 54 Methyl Isobutyl Ketone | 43 | 6.308 | 6.308 | (1.161) | 633967 | 10.6354 | 10.6 |
| | 55 cis-1,3-Dichloropropene | 75 | 6.388 | 6.395 | (1.176) | 399093 | 12.0534 | 12.1 |
| | 56 trans-1,3-Dichloropropene | 75 | 6.832 | 6.835 | (1.257) | 330595 | 12.3893 | 12.4 |
| | 57 Toluene | 91 | 6.928 | 6.932 | (1.275) | 734065 | 11.0681 | 11.1 |
| | 58 1,1,2-Trichloroethane | 97 | 7.057 | 7.060 | (1.299) | 268438 | 11.2250 | 11.2 |
| | 59 Methyl Butyl Ketone | 43 | 7.150 | 7.150 | (0.850) | 585203 | 11.2325 | 11.2 |
| | 60 n-Octane | 43 | 7.346 | 7.350 | (0.874) | 639385 | 10.3898 | 10.4 |
| | 61 Dibromochloromethane | 129 | 7.588 | 7.591 | (0.902) | 489265 | 11.1281 | 11.1 |
| | 62 Tetrachloroethene | 166 | 7.668 | 7.671 | (0.912) | 364878 | 10.9871 | 11.0 |
| | 63 1,2-Dibromoethane | 107 | 7.787 | 7.793 | (0.926) | 431197 | 11.2721 | 11.3 |
| * | 64 Chlorobenzene - d5 | 117 | 8.408 | 8.411 | (1.000) | 420909 | 10.0000 | |
| | 65 Chlorobenzene | 112 | 8.453 | 8.456 | (1.005) | 592658 | 11.0009 | 11.0 |
| | 66 Ethyl Benzene | 91 | 8.671 | 8.674 | (1.031) | 952909 | 11.5244 | 11.5 |
| | 67 m&p-Xylene | 91 | 8.822 | 8.858 | (1.049) | 761826 | 11.9610 | 12.0(M) |
| | 68 n-Nonane | 43 | 9.189 | 9.192 | (1.093) | 668992 | 11.4808 | 11.5 |
| | 69 Styrene | 104 | 9.256 | 9.260 | (1.101) | 550809 | 11.6825 | 11.7(M) |
| | 70 o-Xylene | 91 | 9.289 | 9.295 | (1.105) | 754159 | 11.2806 | 11.3 |
| | 71 Bromoform | 173 | 9.362 | 9.369 | (1.114) | 435200 | 13.5637 | 13.6 |
| | 72 1,1,2,2-Tetrachloroethane | 83 | 9.707 | 9.710 | (1.154) | 608912 | 11.5613 | 11.6 |
| | 73 Isopropylbenzene | 105 | 9.838 | 9.842 | (1.170) | 1060719 | 12.1737 | 12.2 |
| | 74 N-Propylbenzene | 91 | 10.404 | 10.407 | (1.237) | 1279342 | 12.2350 | 12.2 |
| | 75 2-Chlorotoluene | 91 | 10.443 | 10.449 | (1.242) | 769413 | 11.0292 | 11.0 |
| | 76 4-Ethyltoluene | 105 | 10.588 | 10.591 | (1.259) | 1006800 | 11.3930 | 11.4 |
| | 77 1,3,5-Trimethylbenzene | 105 | 10.661 | 10.665 | (1.268) | 880902 | 11.8306 | 11.8 |
| | 78 n-Decane | 57 | 11.012 | 11.015 | (2.027) | 816207 | 10.9167 | 10.9 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.108 | 11.112 | (1.321) | 855539 | 12.2209 | 12.2 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.153 | 11.157 | (1.327) | 886831 | 13.4552 | 13.5 |
| 81 Sec- Butylbenzene | 105 | 11.414 | 11.417 | (1.358) | 1301108 | 13.2816 | 13.3 |
| 82 1,3-Dichlorobenzene | 146 | 11.449 | 11.452 | (1.362) | 562159 | 11.6360 | 11.6 |
| 83 Benzyl Chloride | 91 | 11.520 | 11.526 | (1.370) | 574209 | 11.2597 | 11.3 |
| 84 1,4-Dichlorobenzene | 146 | 11.584 | 11.587 | (1.378) | 550364 | 11.9026 | 11.9 |
| 85 p-Isopropyltoluene | 119 | 11.620 | 11.623 | (1.382) | 1212571 | 12.3247 | 12.3 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.636 | 11.639 | (1.384) | 968824 | 13.6746 | 13.7 |
| 87 1,2-Dichlorobenzene | 146 | 11.890 | 11.893 | (1.414) | 587724 | 12.2377 | 12.2 |
| 88 N-Butylbenzene | 91 | 12.070 | 12.073 | (1.436) | 985389 | 11.6947 | 11.7 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.587 | 12.591 | (1.497) | 296683 | 11.0280 | 11.0 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.536 | 13.539 | (1.610) | 278595 | 12.3101 | 12.3 |
| 91 Naphthalene | 128 | 13.674 | 13.674 | (1.626) | 707144 | 13.7194 | 13.7 |
| 92 Hexachlorobutadiene | 225 | 13.784 | 13.787 | (1.639) | 330634 | 13.8184 | 13.8 |

QC Flag Legend

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

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Lab Smp Id: ICV
Inj Date : 07-SEP-2021 11:51
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Meth Date : 08-Sep-2021 10:19 10airH.i Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 5.434 | 1229227 | 10.000 |
| * 64 Chlorobenzene - d5 | 8.408 | 3268847 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 2.878 | 3802545 | 30.9344157 | 30.9 | 0 | | 0 | 45 |
| Benzene, 1-bromo-3-fluoro- | | | | | CAS #: 1073-06-9 | | |
| 9.945 | 1311759 | 4.01290924 | 4.01 | 98 | NIST05.L | 39151 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25012.D
Calibration Time: 10:08
Lab Smp Id: ICV
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090721.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 499543 | 8.64 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 420909 | 7.37 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | 0.00 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.41 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Report Date: 09-Sep-2021 06:57

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: ICV
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 07-SEP-2021 11:51

Client SDG: 090721.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

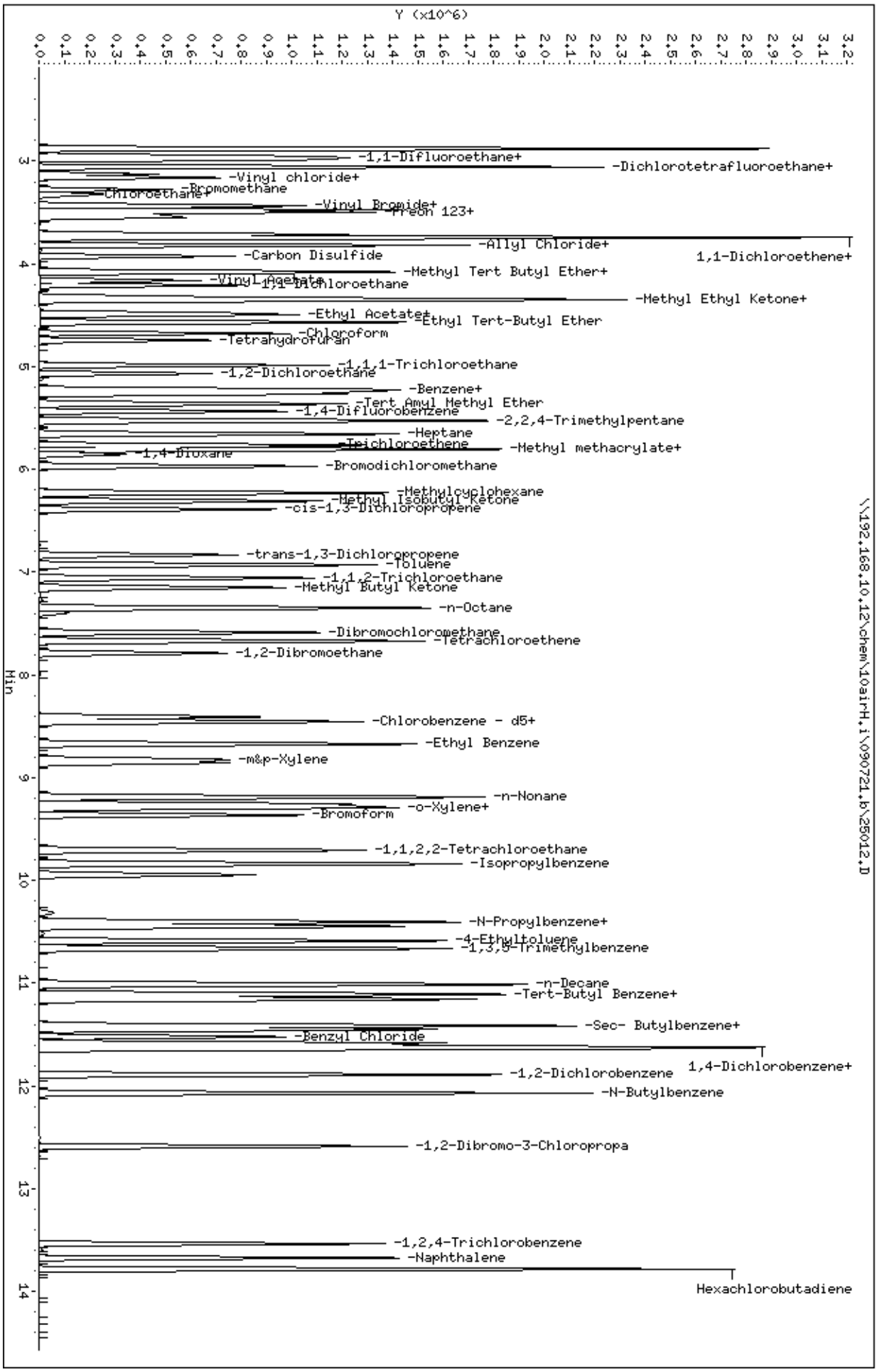
Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 2.878 | 30.9 | _J__ |
| 2. 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 9.945 | 4.01 | NJ__ |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D
Date : 07-SEP-2021 11:51
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i
Operator: GT
Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D

Date : 07-SEP-2021 11:51

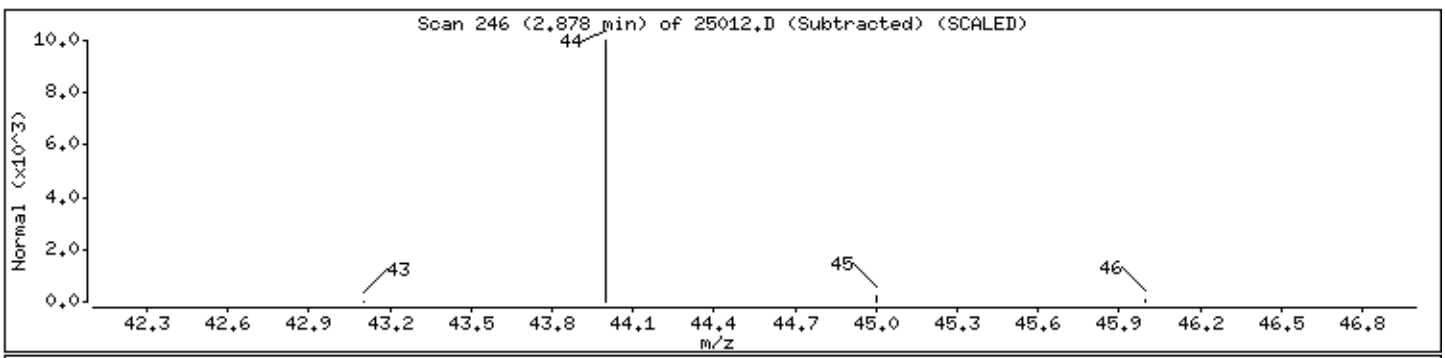
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25012.D

Date : 07-SEP-2021 11:51

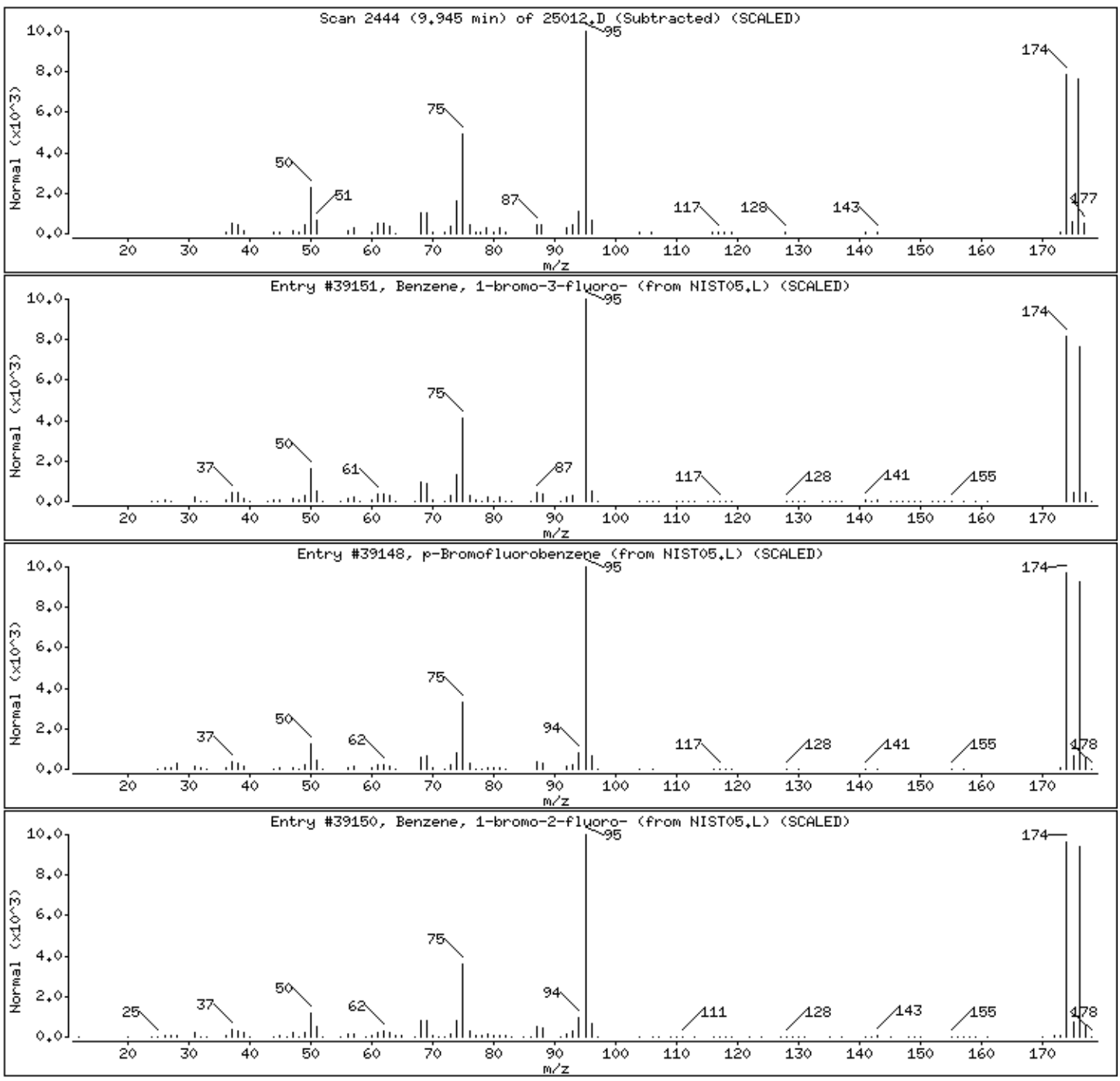
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

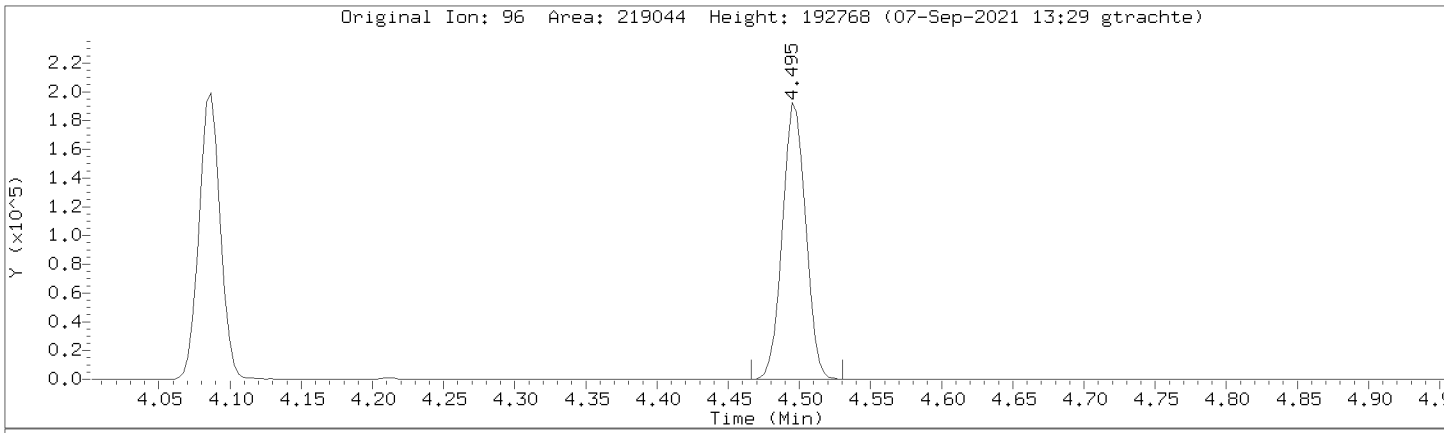
Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

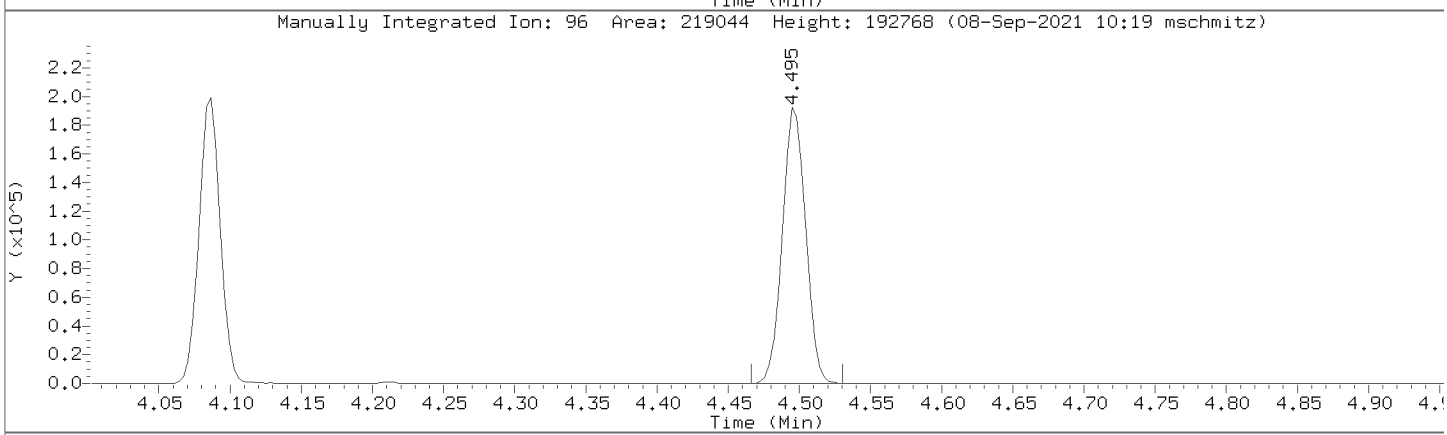
| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 98 | C6H4BrF | 174 |
| p-Bromofluorobenzene | 460-00-4 | NIST05.L | 39148 | 95 | C6H4BrF | 174 |
| Benzene, 1-bromo-2-fluoro- | 1072-85-1 | NIST05.L | 39150 | 94 | C6H4BrF | 174 |

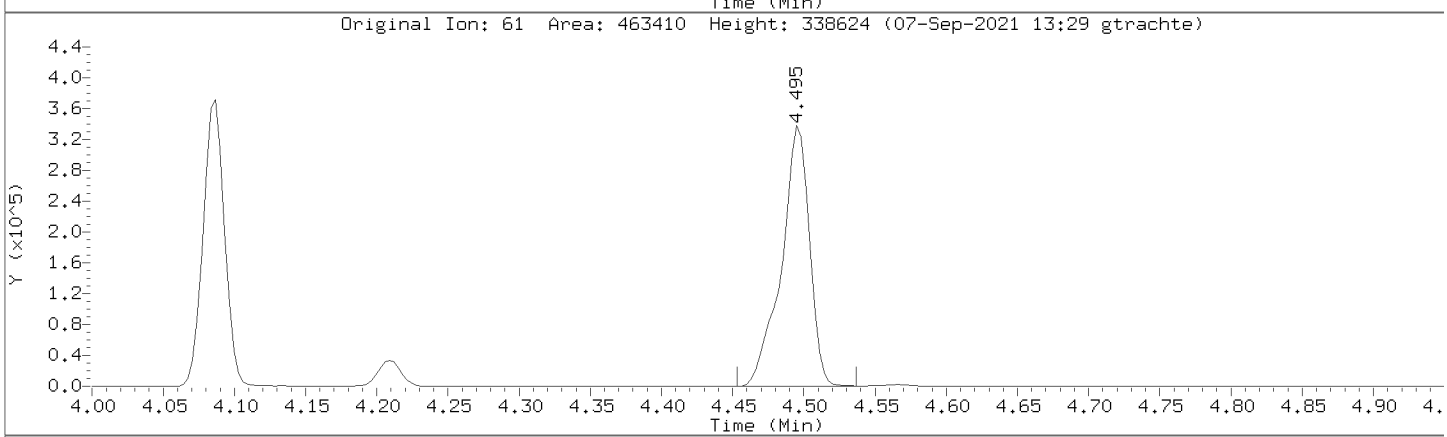


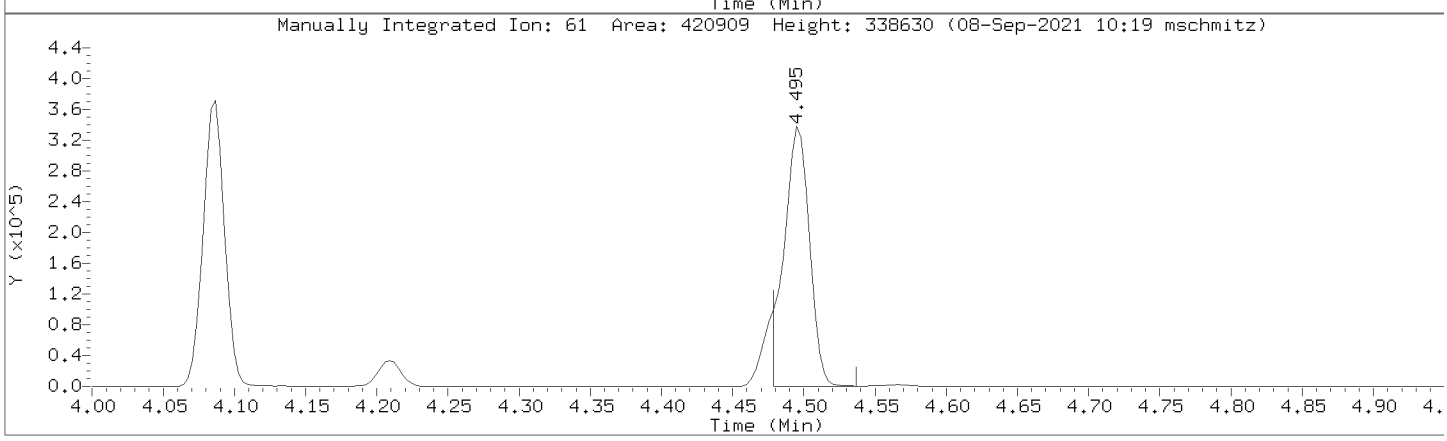
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



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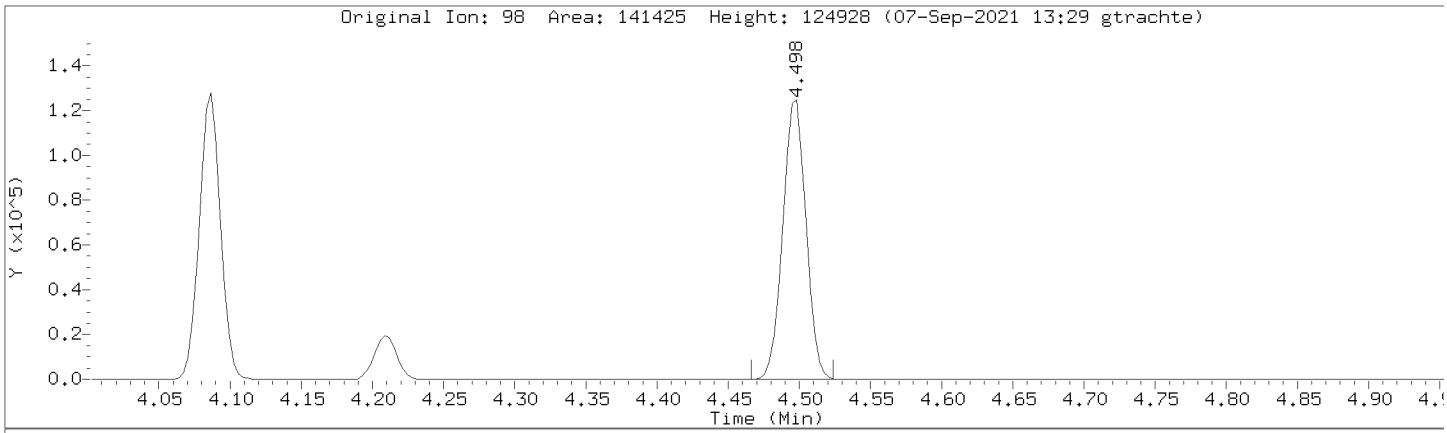
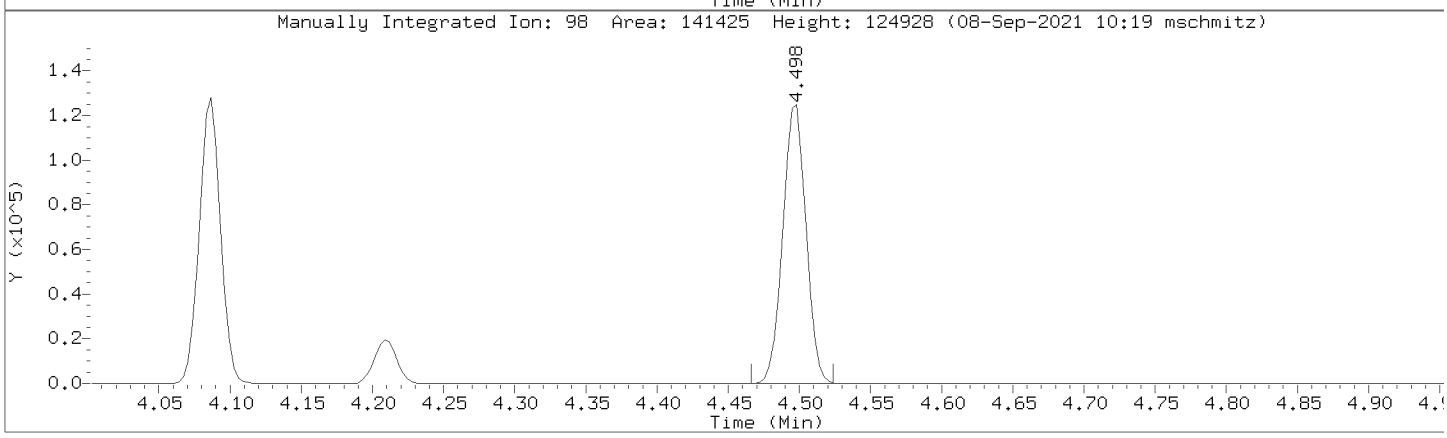
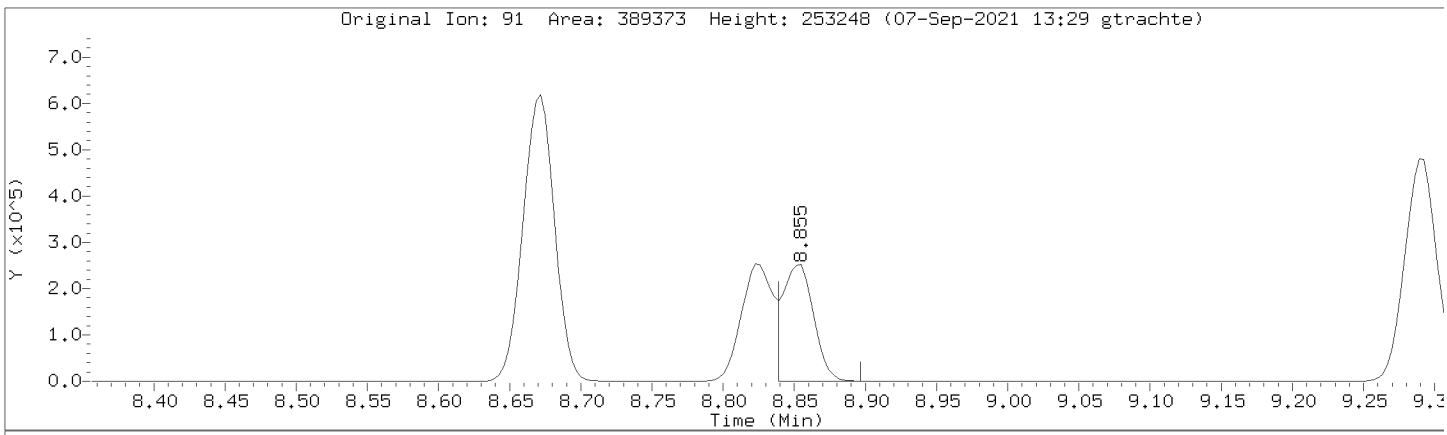
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

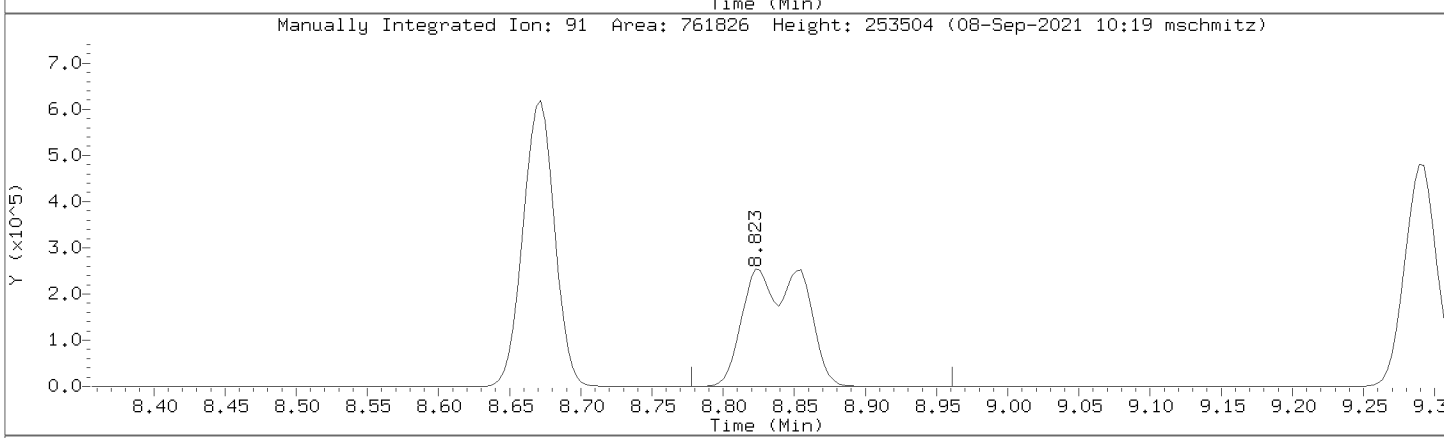


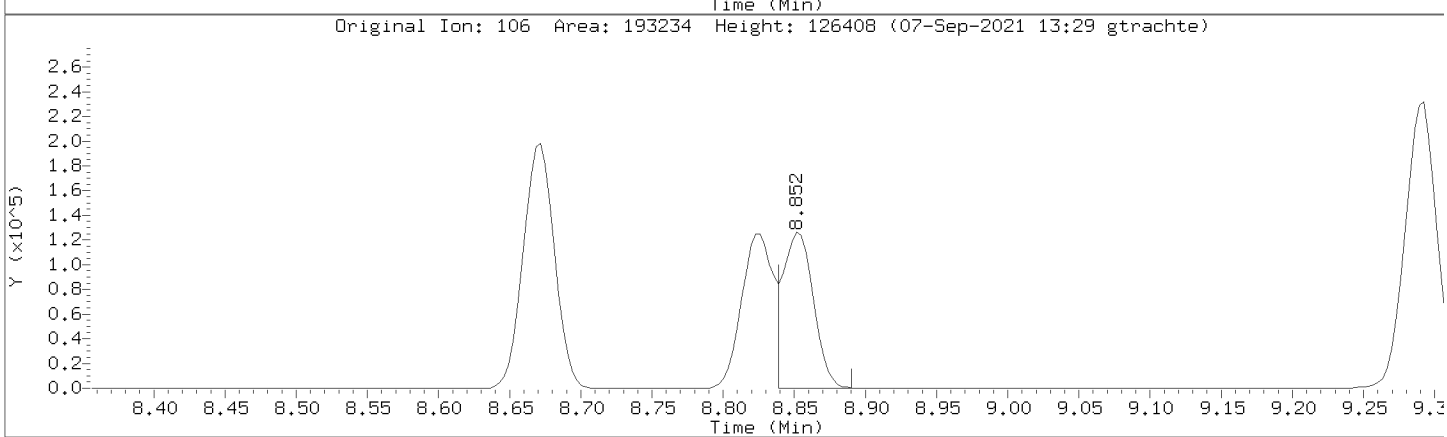



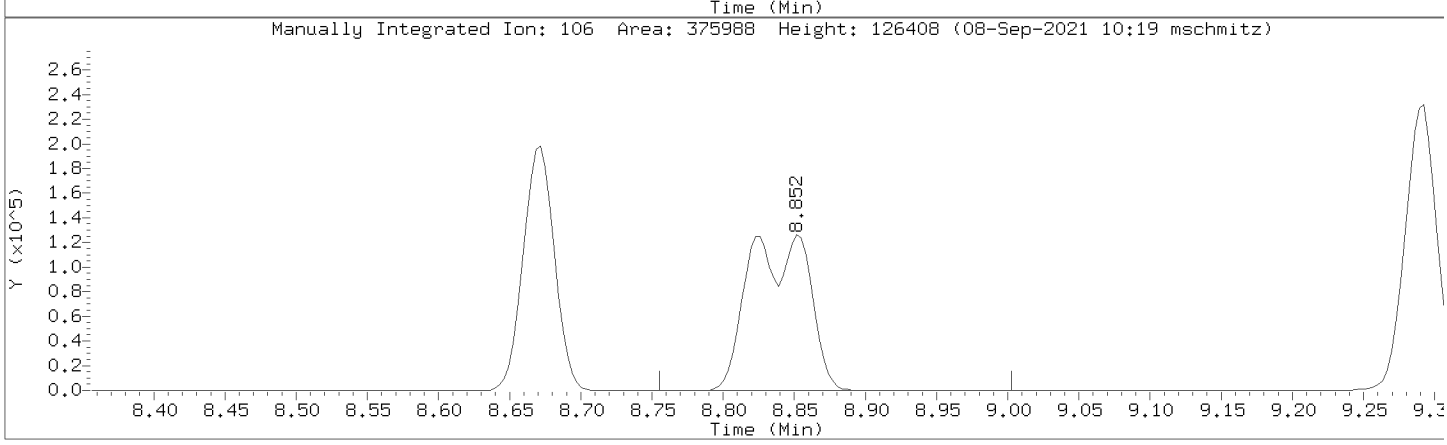
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: m&p-Xylene
CAS Number: 7816-60-0



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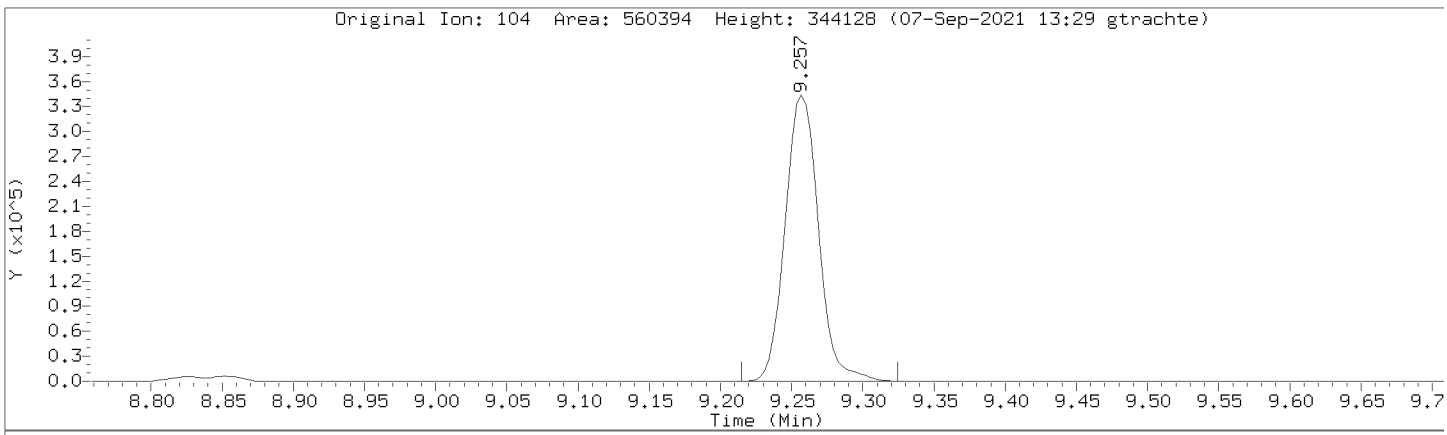
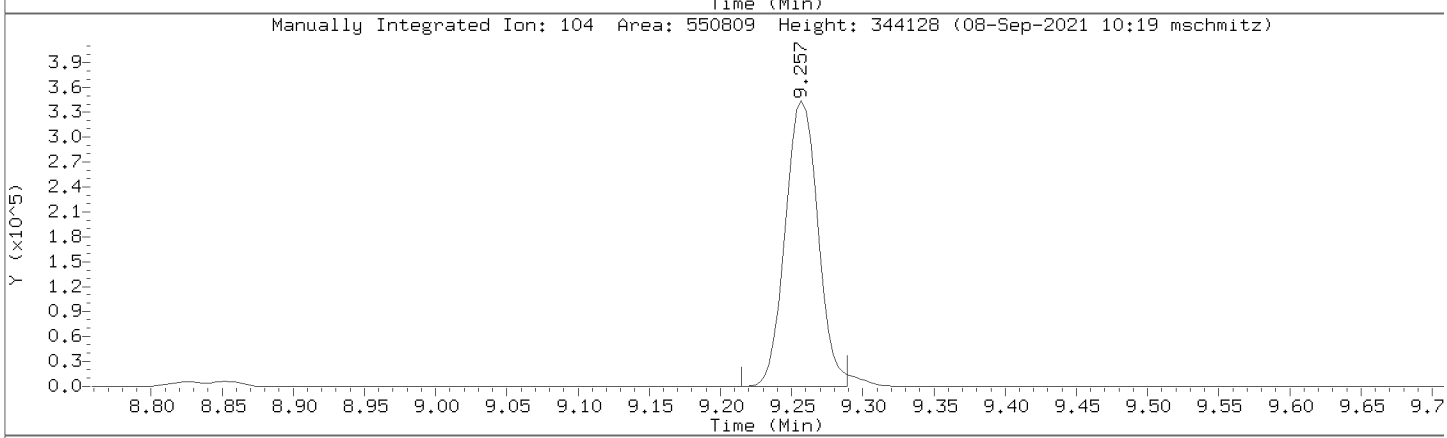
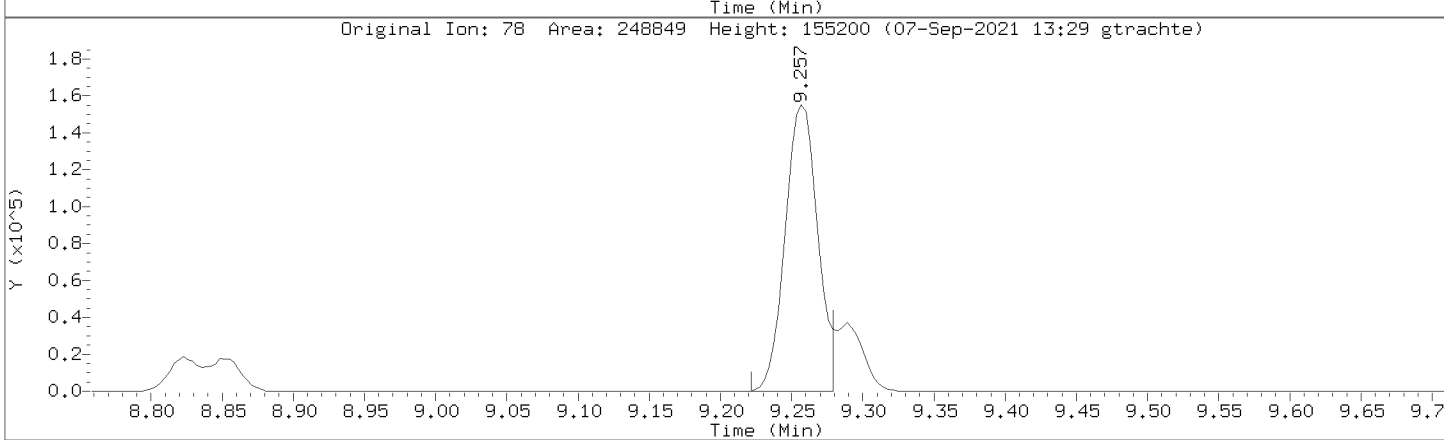
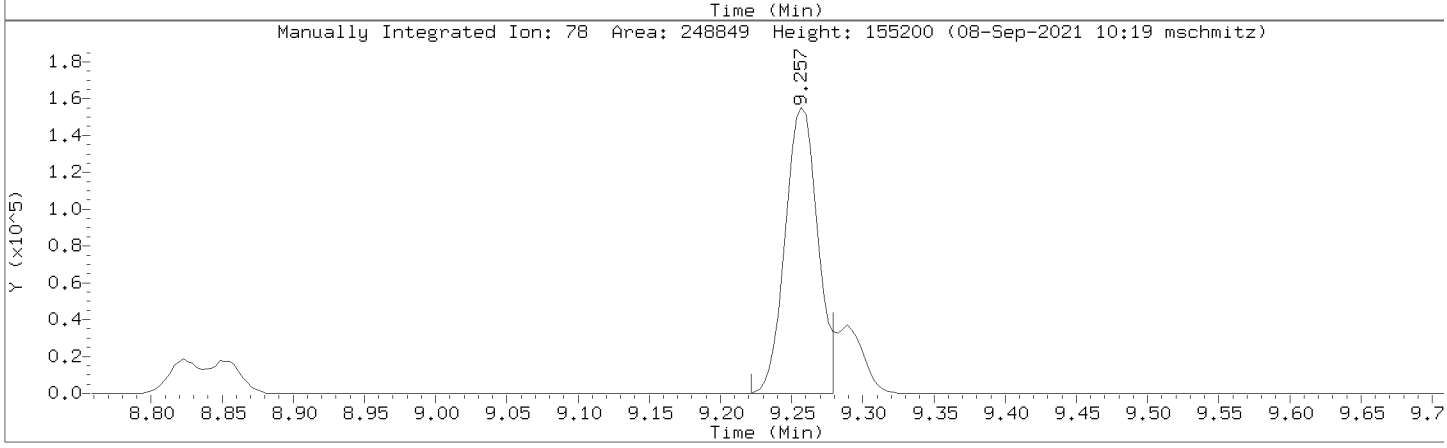
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: Styrene
CAS Number: 100-42-5



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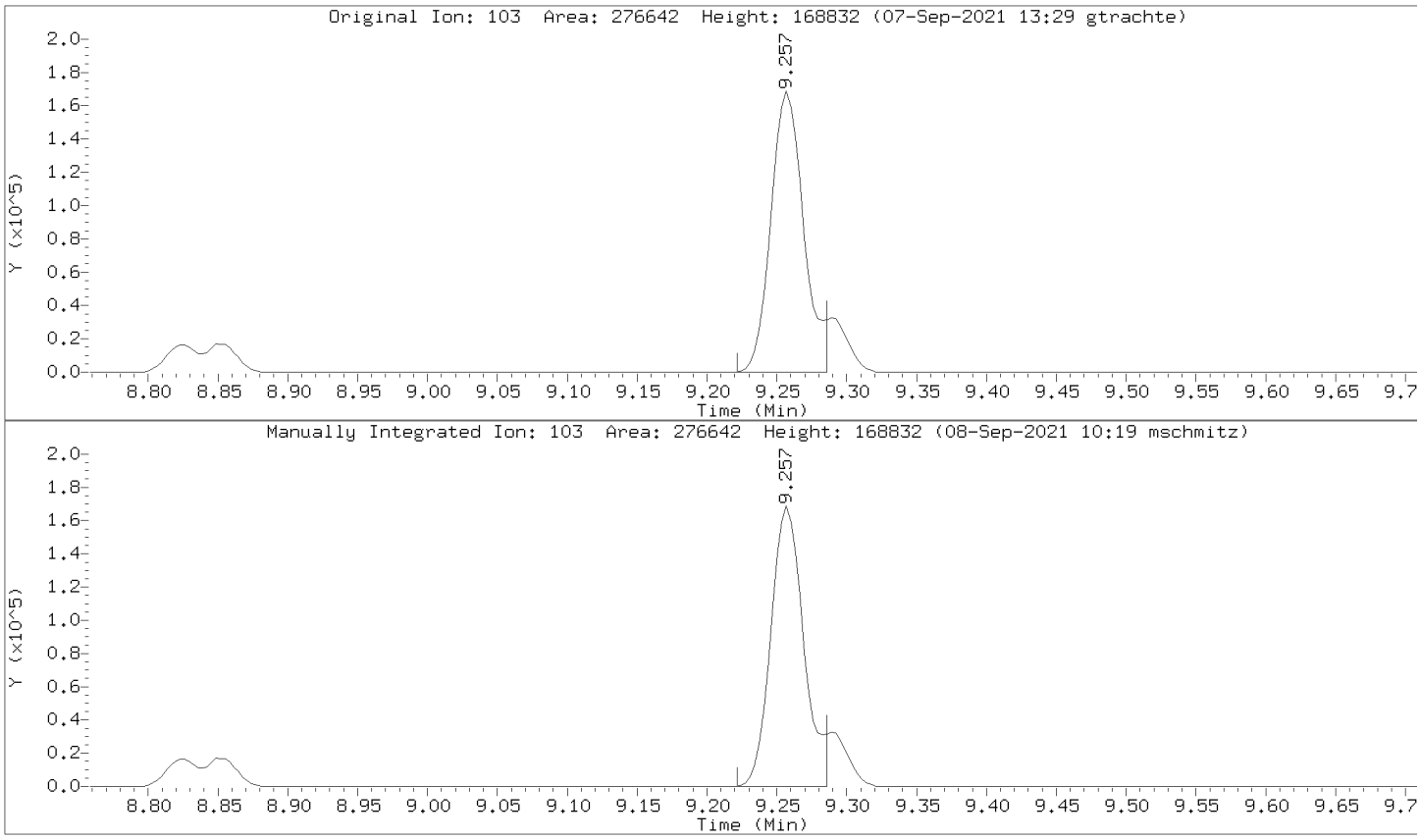
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV



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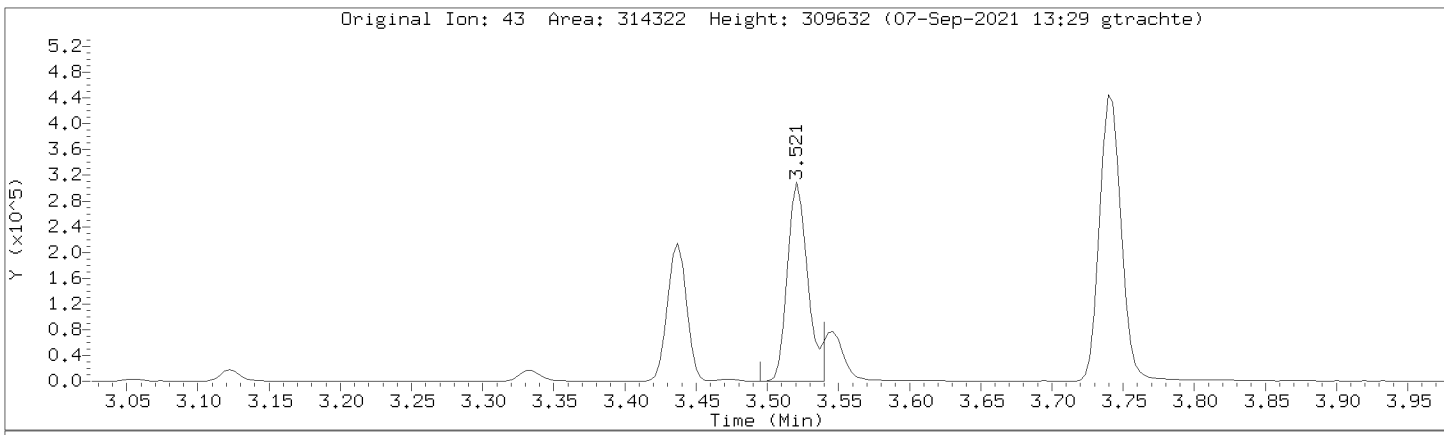
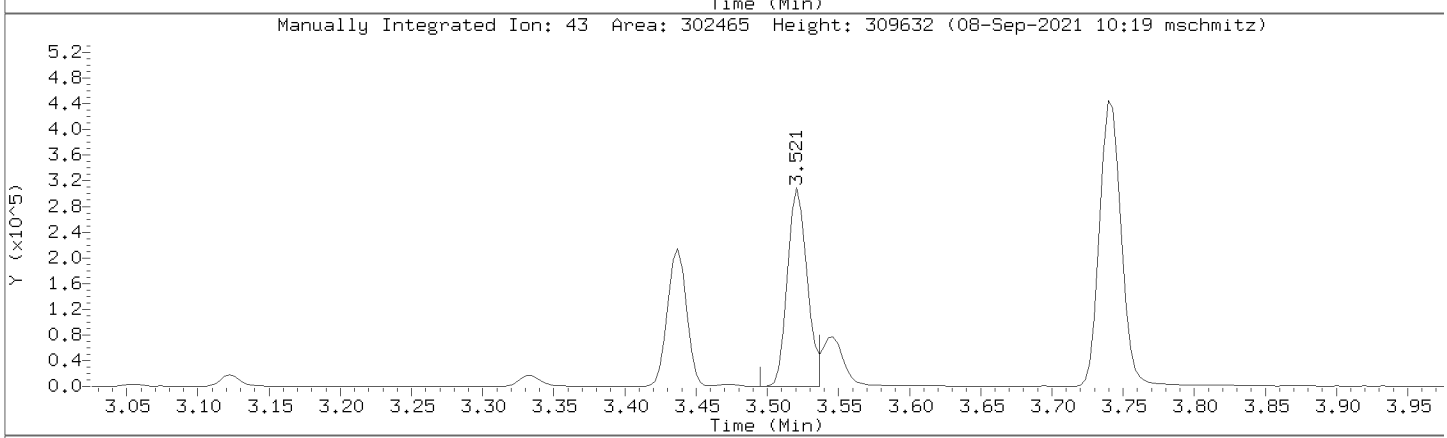
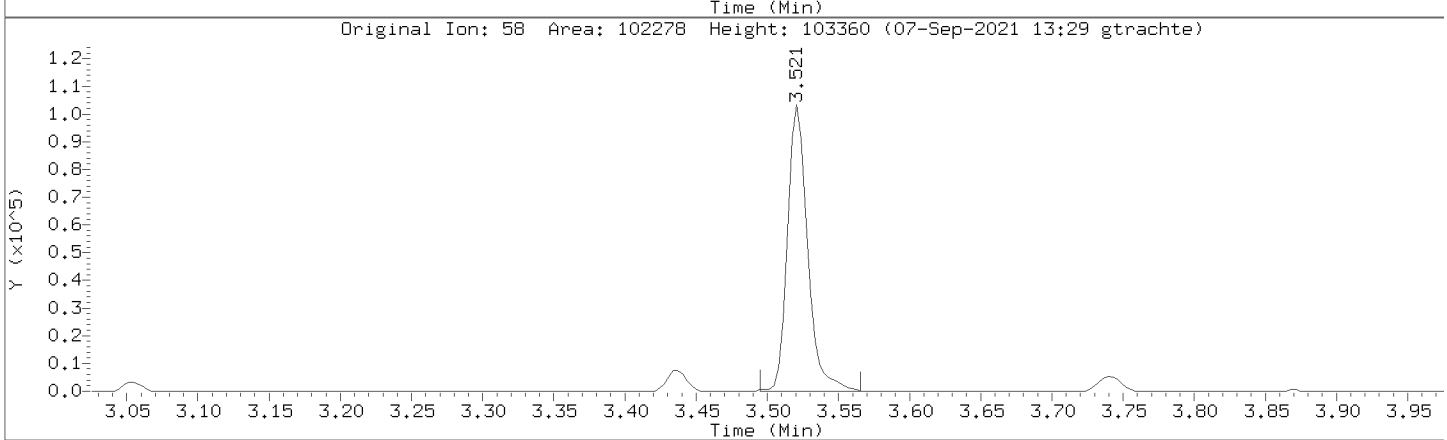
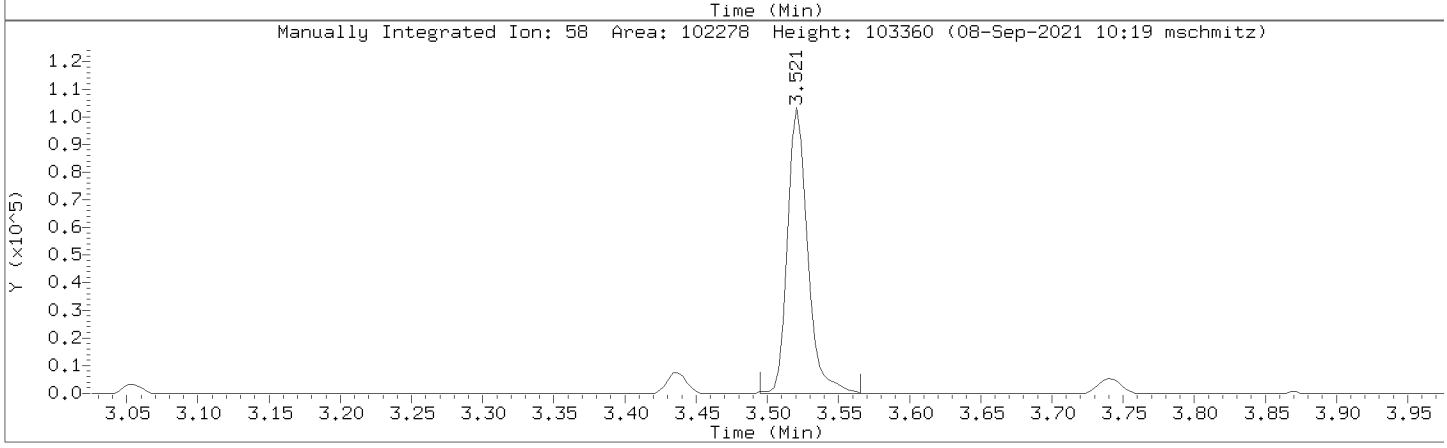
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: Acetone
CAS Number: 67-64-1



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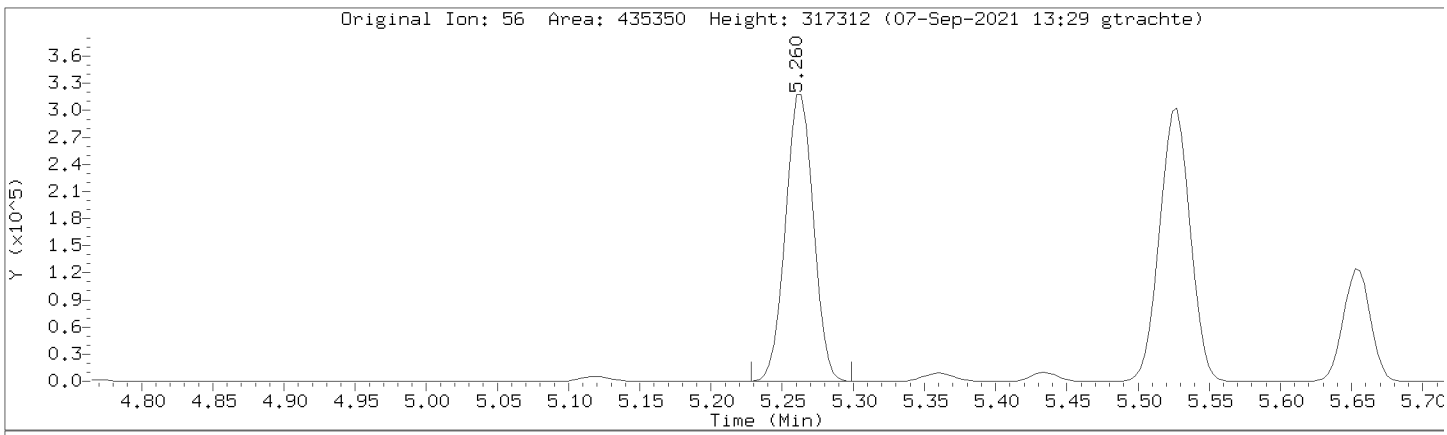
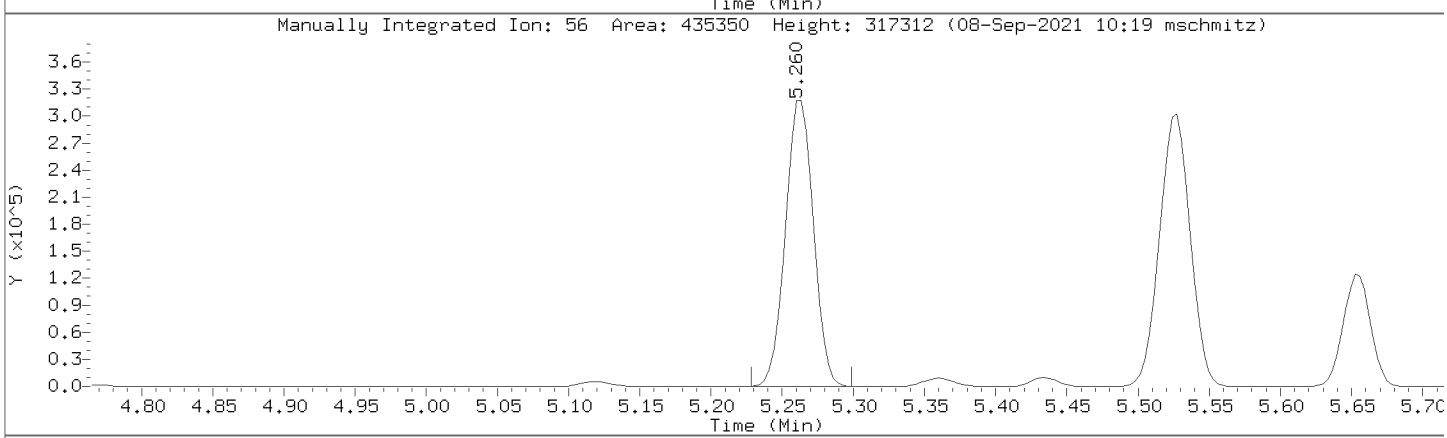
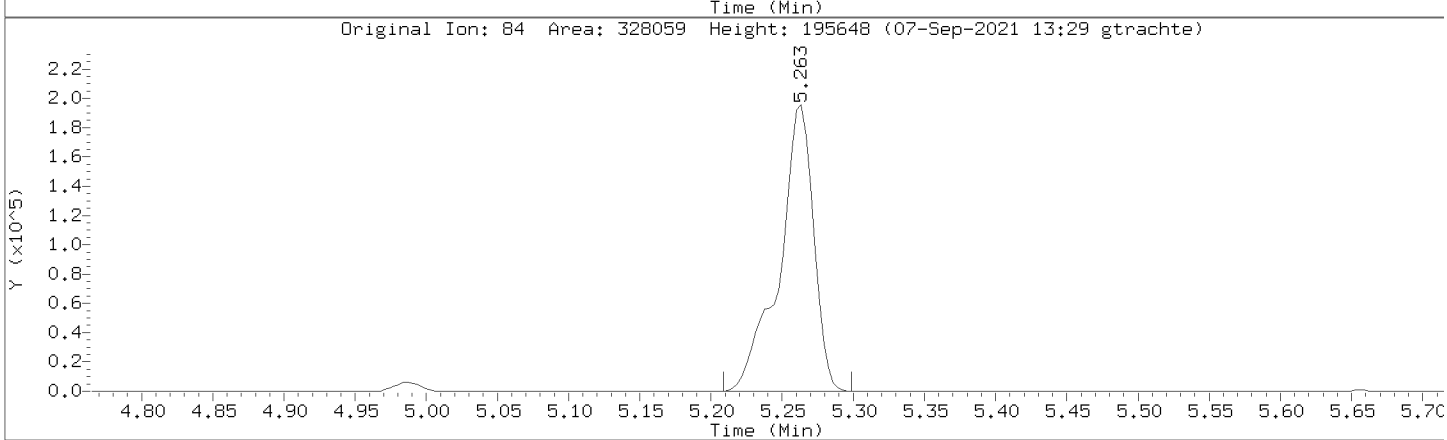
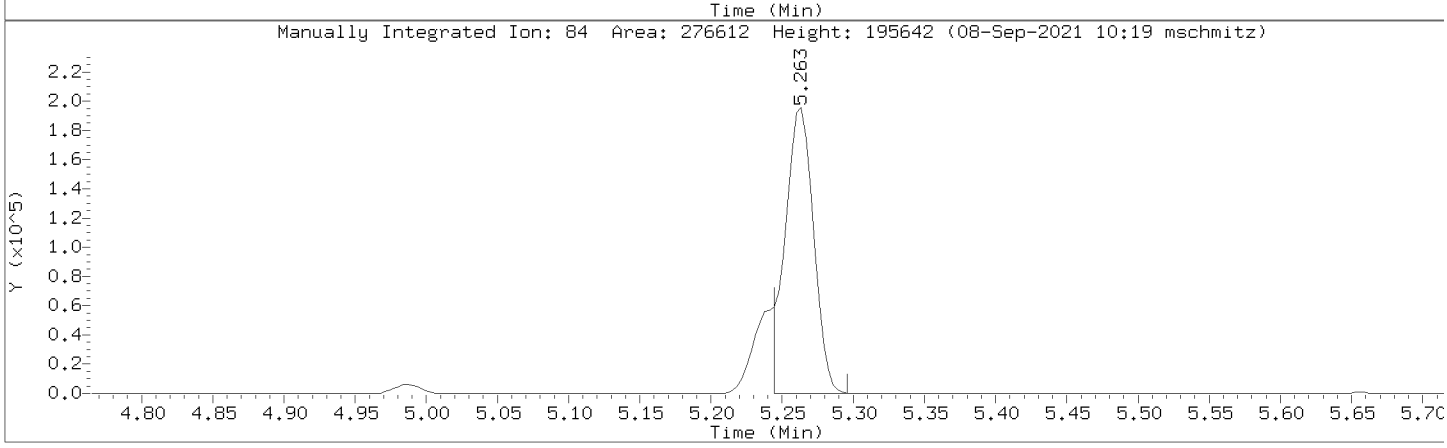
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: Cyclohexane
CAS Number: 110-82-7

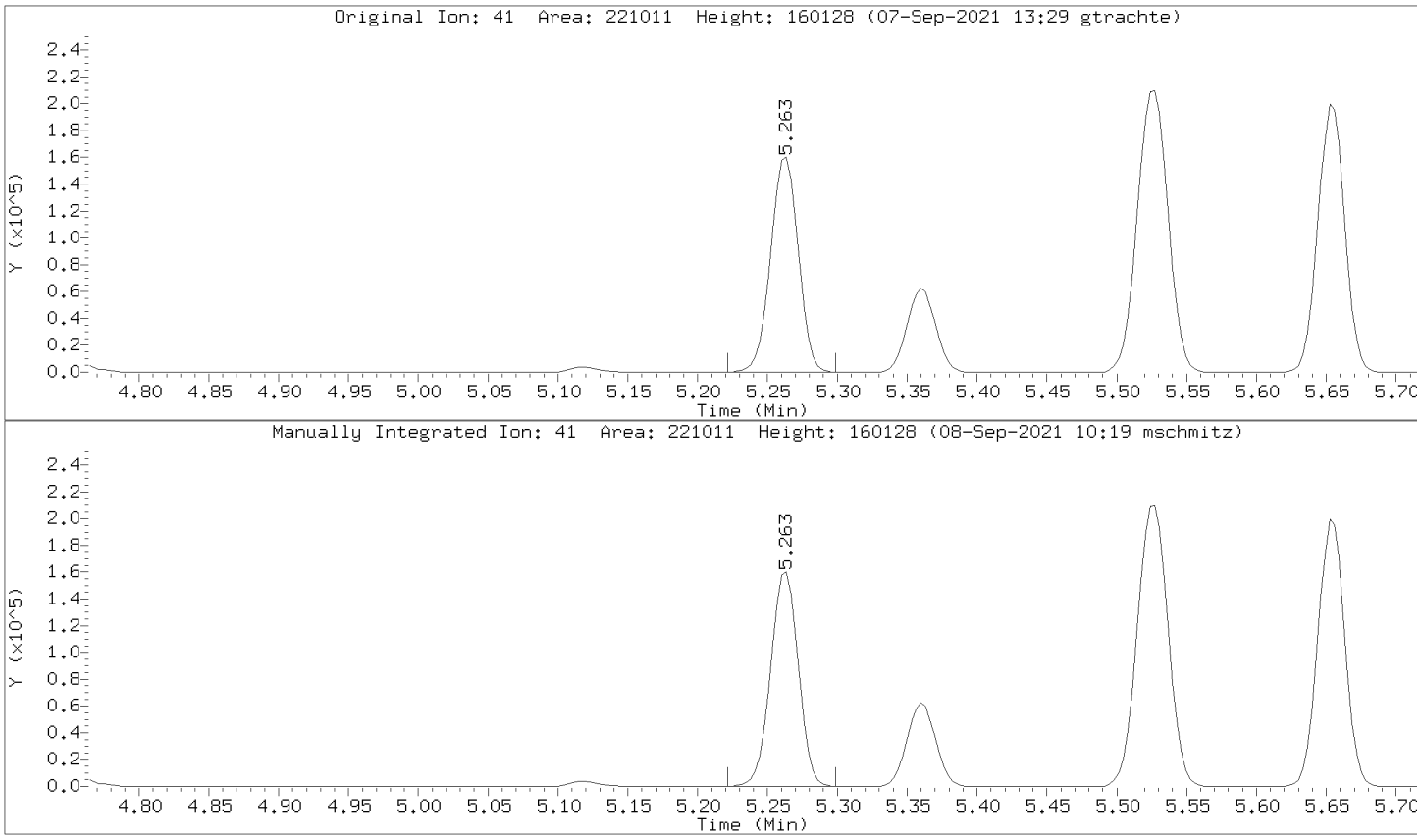


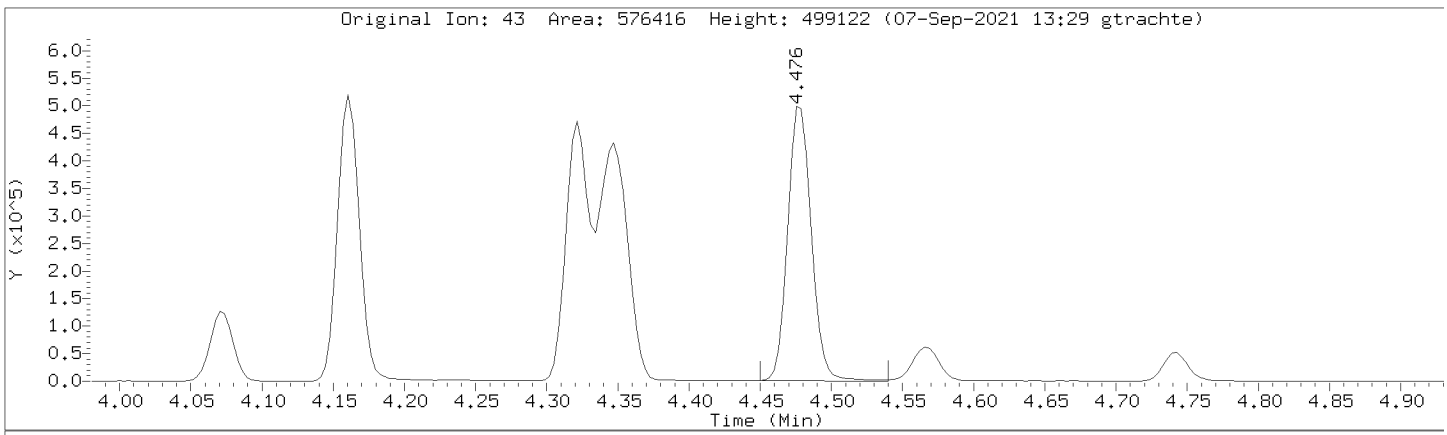



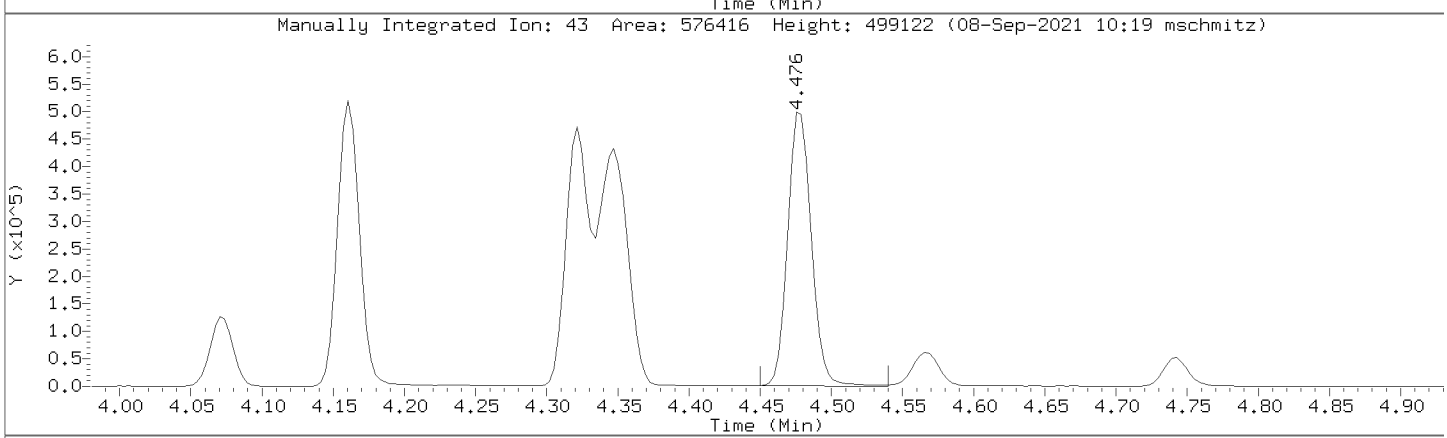
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

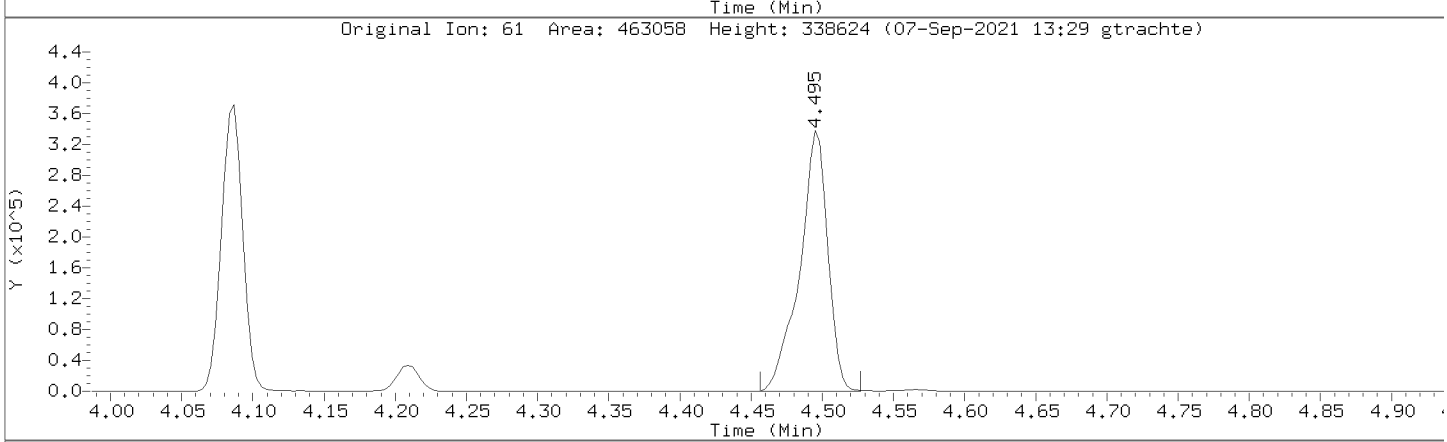


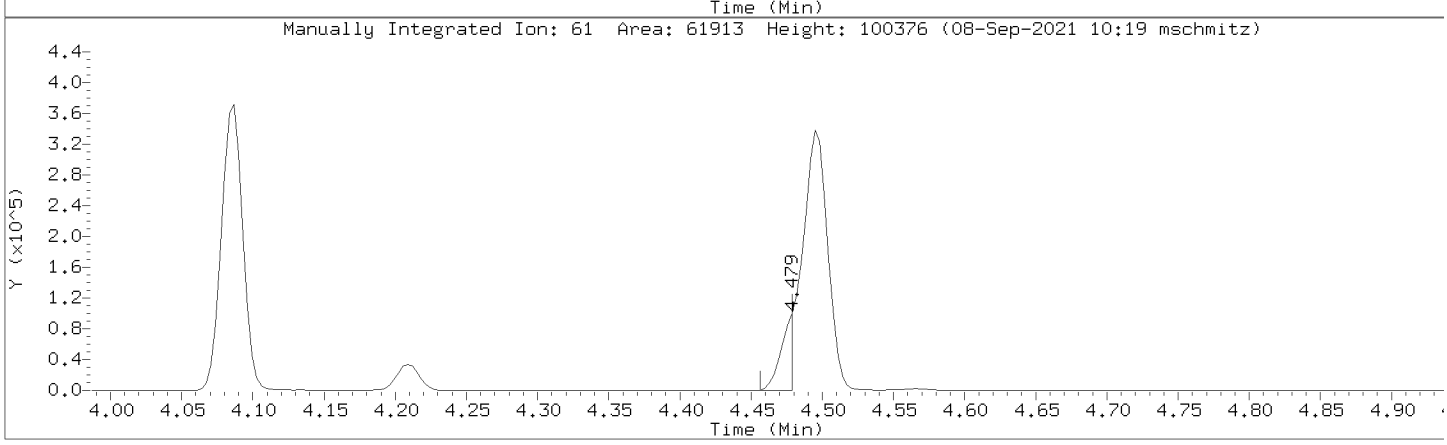
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: Ethyl Acetate
CAS Number: 141-78-6

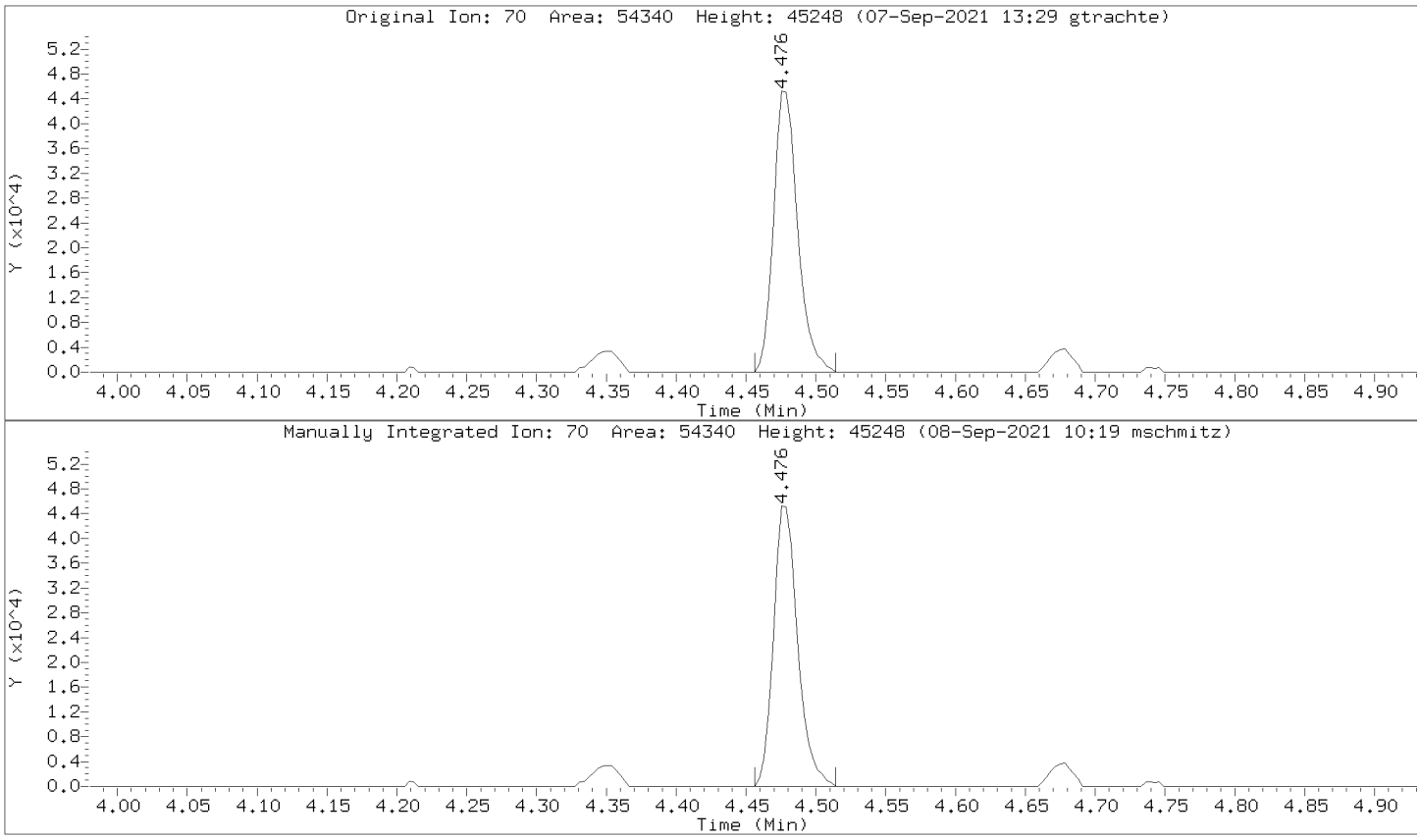


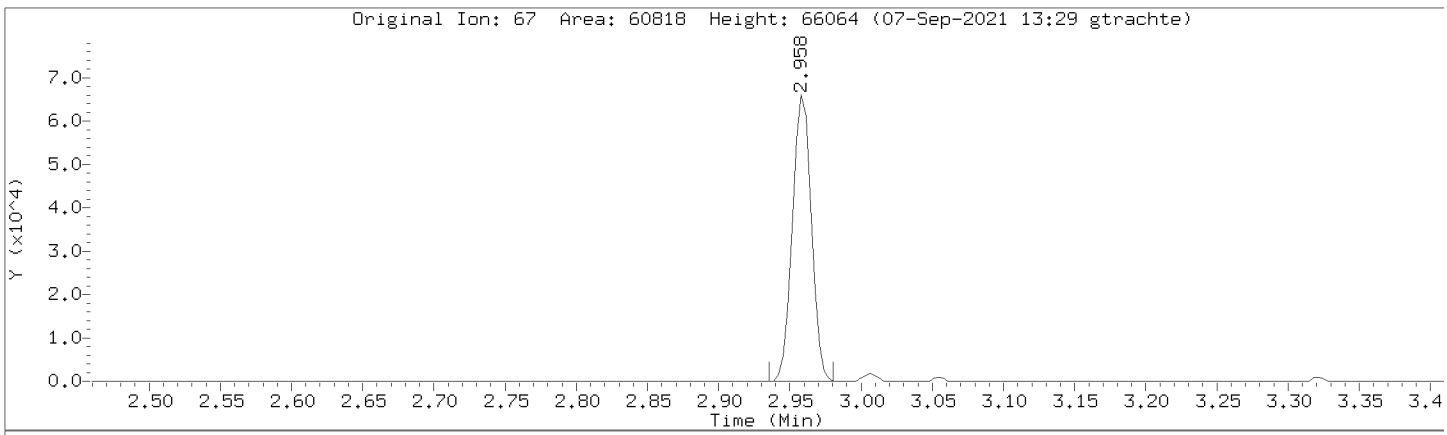



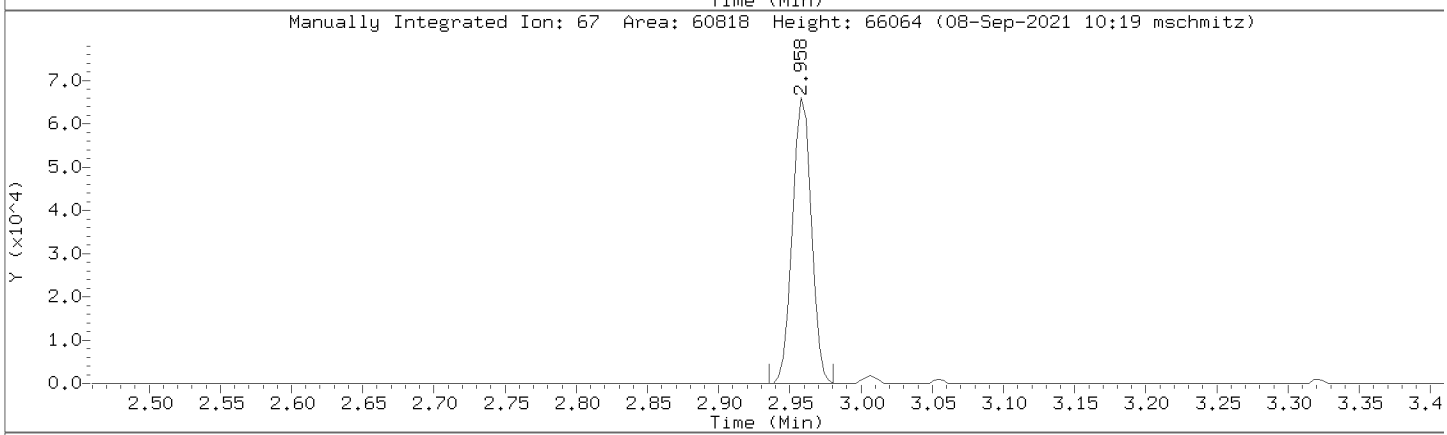
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

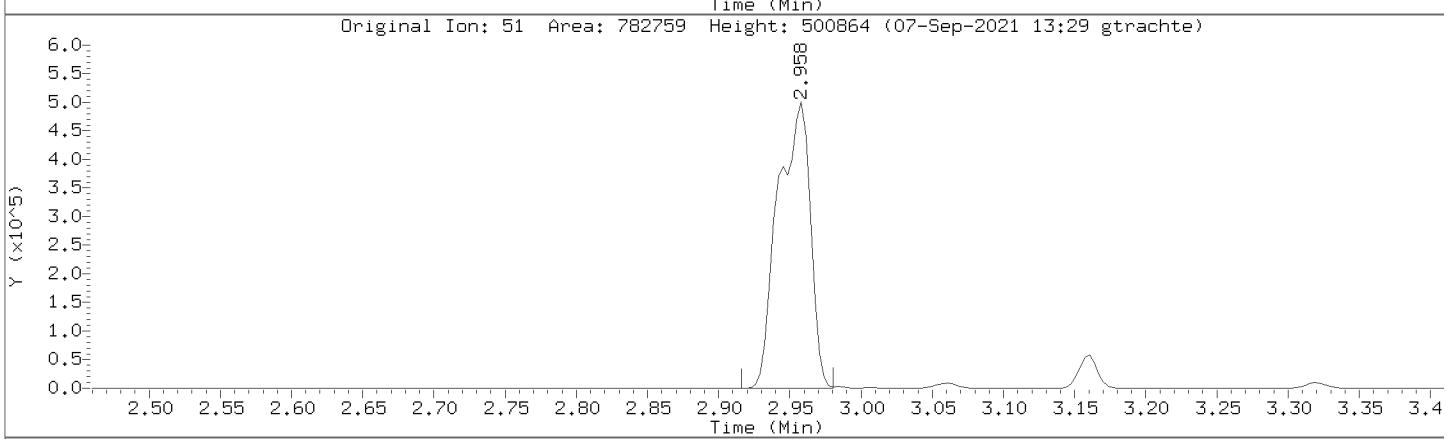


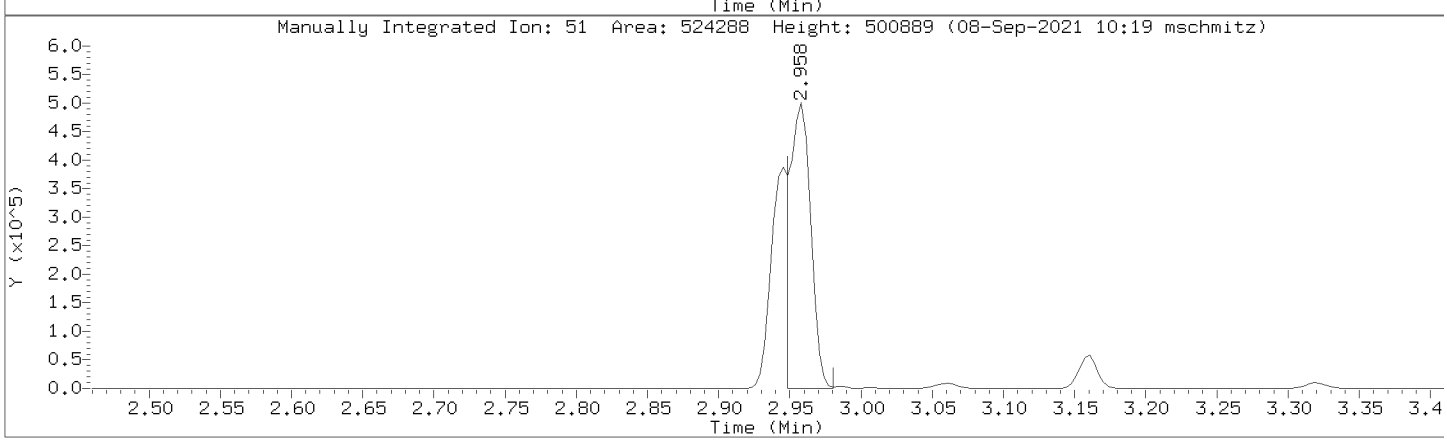
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: Chlorodifluoromethane
CAS Number: 76-13-1

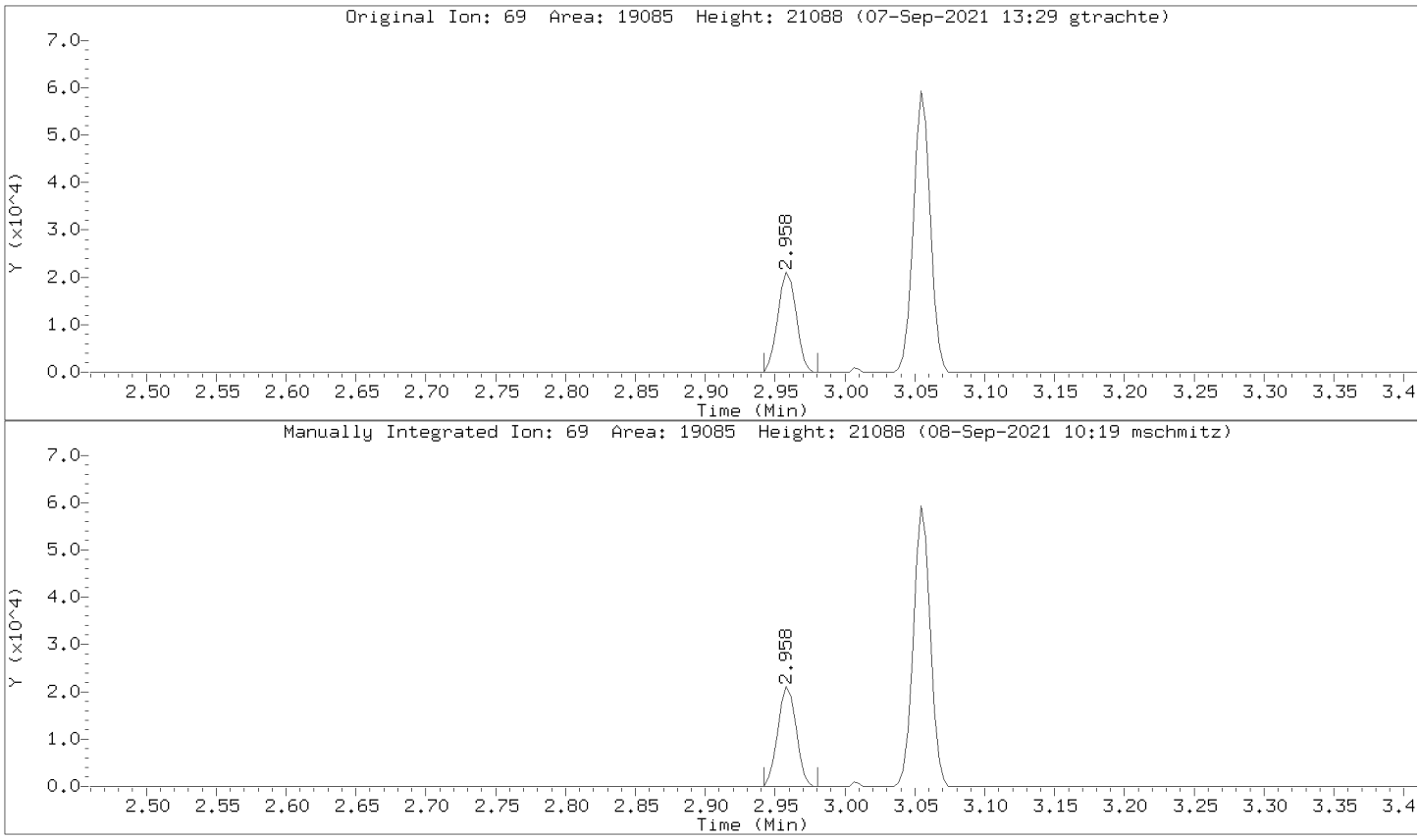


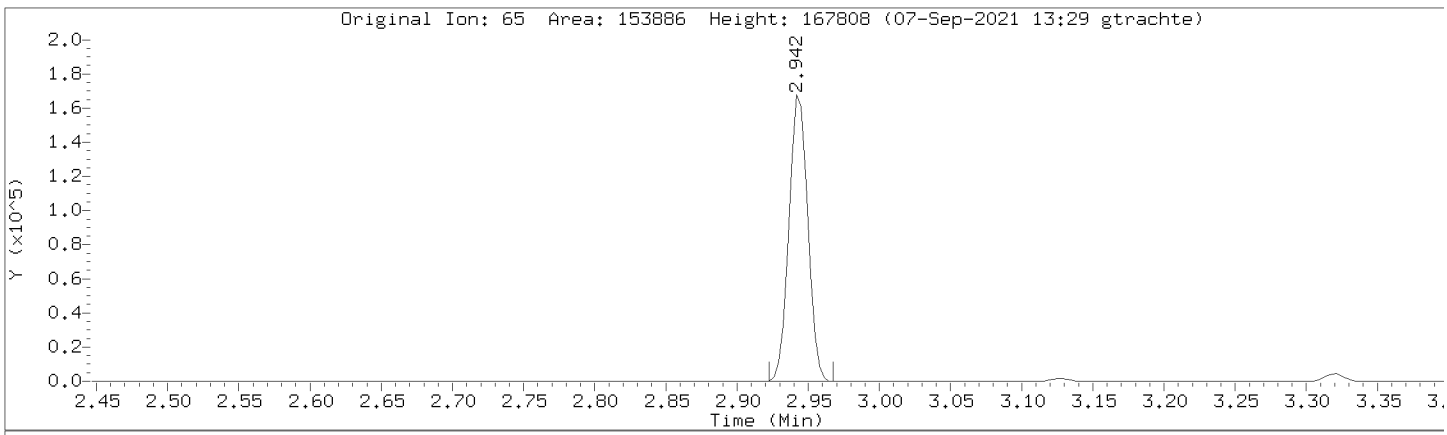



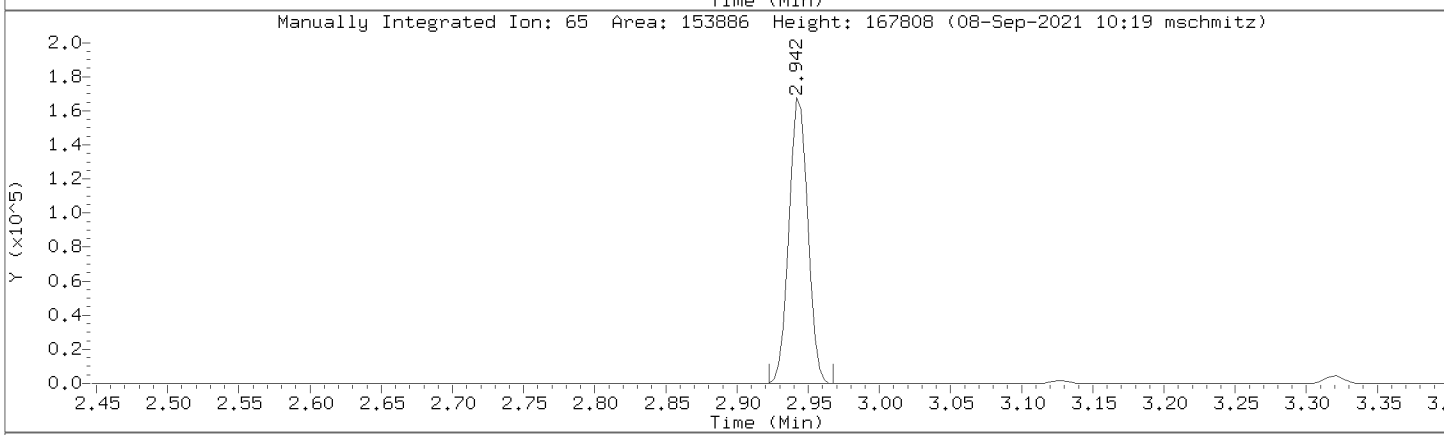
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

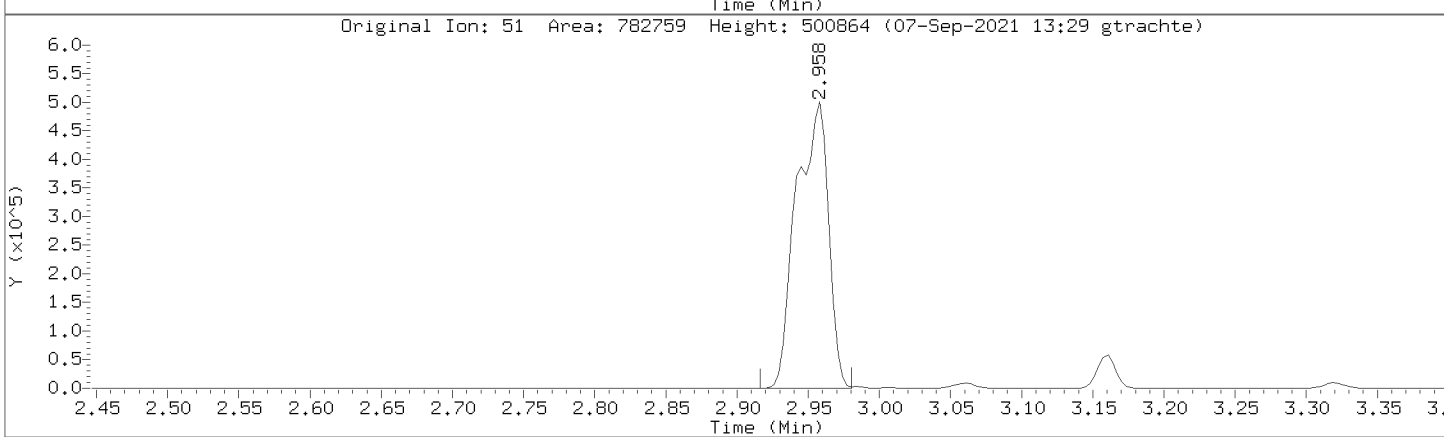


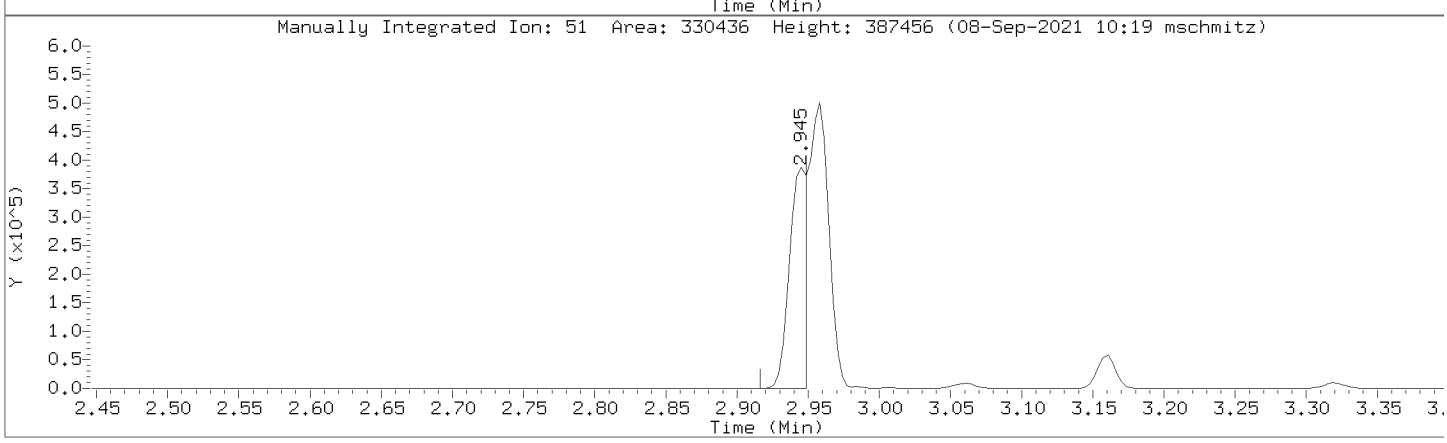
Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6

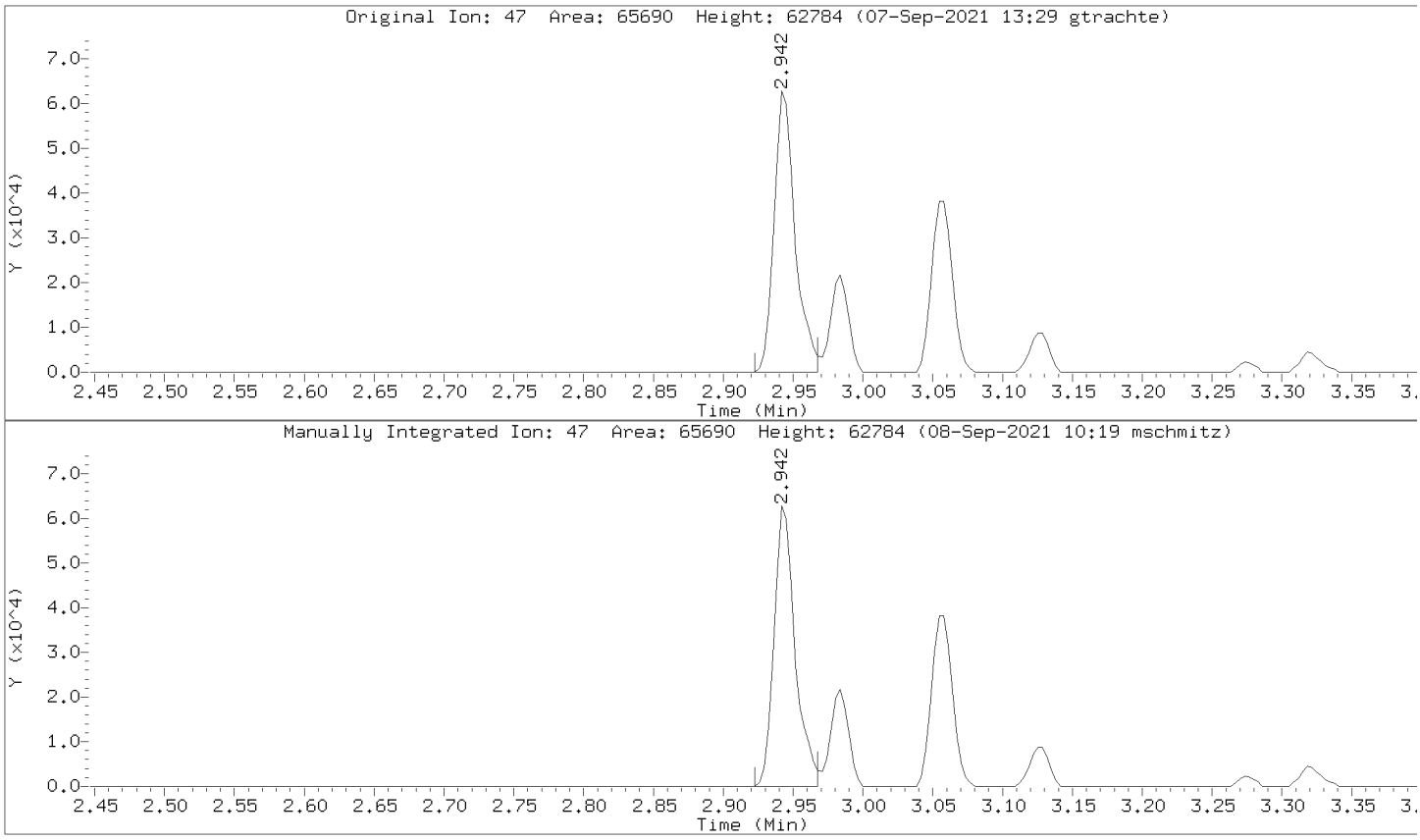


Data File: \\192.168.10.12\chem\10airH.i\090721.b/25012.D
Injection Date: 07-SEP-2021 11:51
Instrument: 10airH.i
Lab Sample ID: ICV



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23801.D



Date : 26-AUG-2021 07:09

Client ID: BFB

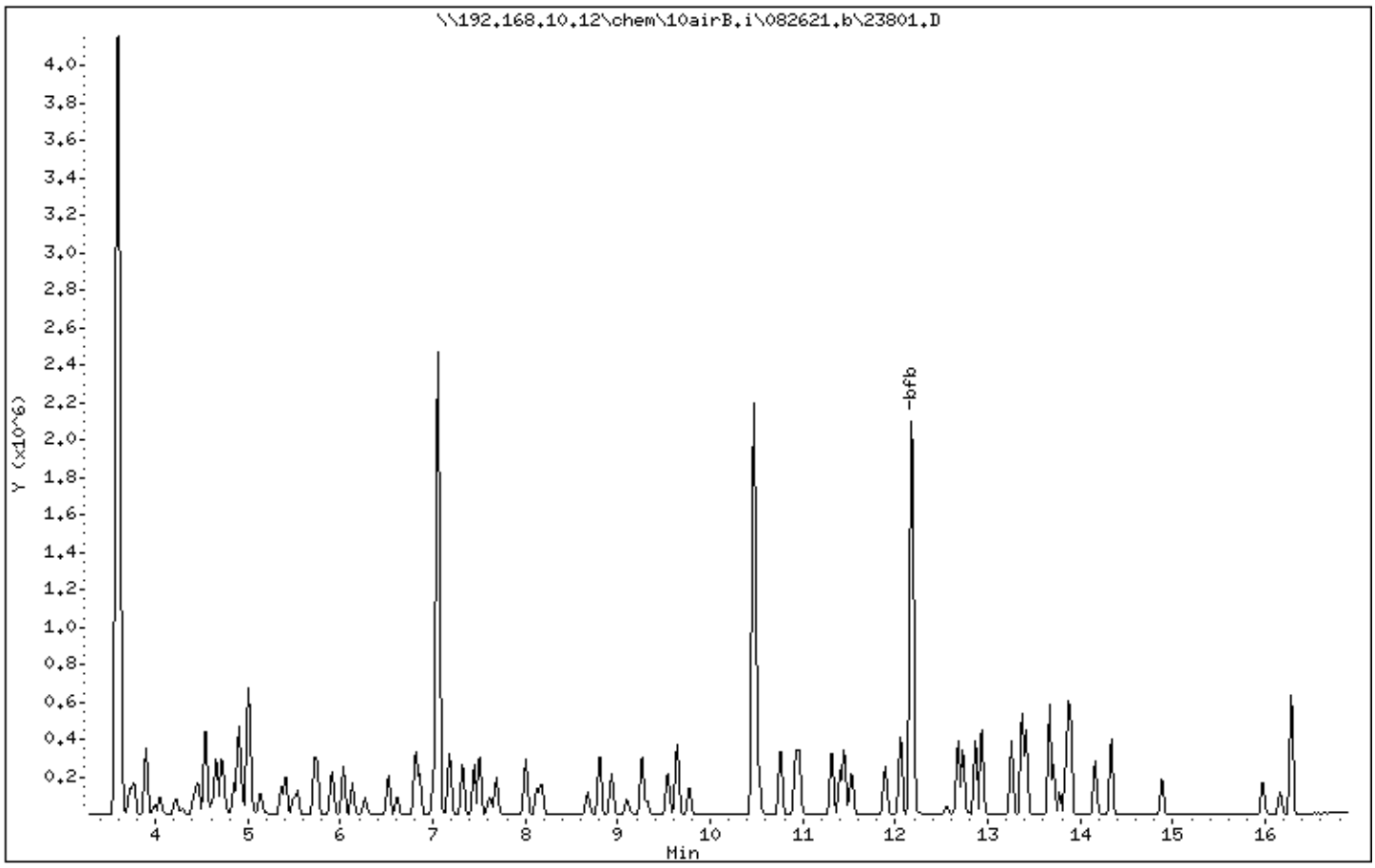
Instrument: 10airB.i

Sample Info:

Operator: AJA

Column phase: J&W DB-5

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\082621.b\23801.D



Date : 26-AUG-2021 07:09

Client ID: BFB

Instrument: 10airB.i

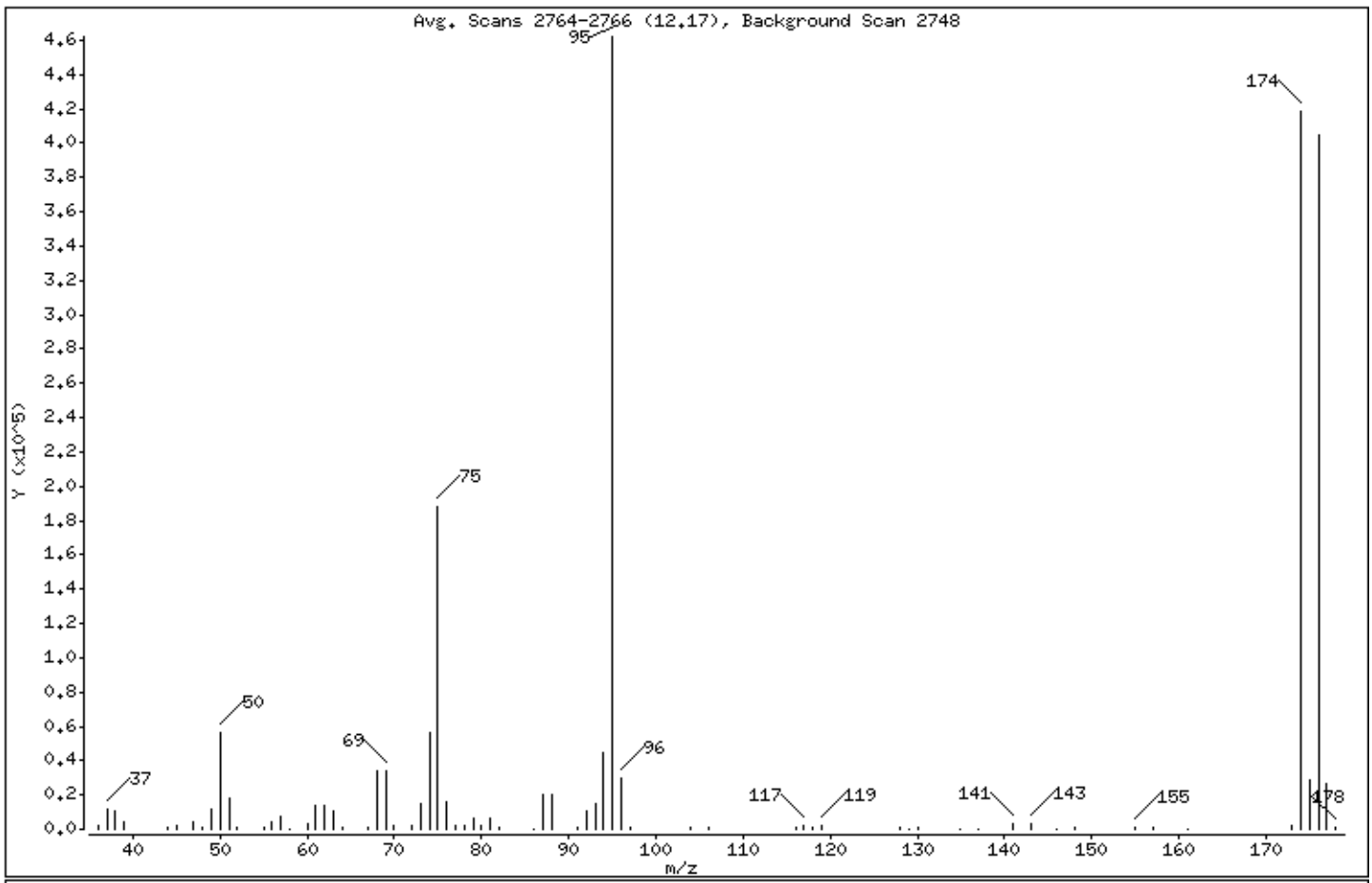
Sample Info:

Operator: AJA

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 12.20 |
| 75 | 30.00 - 66.00% of mass 95 | 40.71 |
| 96 | 5.00 - 9.00% of mass 95 | 6.44 |
| 173 | Less than 2.00% of mass 174 | 0.54 ( 0.59) |
| 174 | 50.00 - 120.00% of mass 95 | 90.51 |
| 175 | 4.00 - 9.00% of mass 174 | 6.17 ( 6.82) |
| 176 | 93.00 - 101.00% of mass 174 | 87.60 ( 96.79) |
| 177 | 5.00 - 9.00% of mass 176 | 5.72 ( 6.53) |

Data File: \\192.168.10.12\chem\10airB.i\082621.b\23801.D

Date : 26-AUG-2021 07:09

Client ID: BFB

Instrument: 10airB.i

Sample Info:

Operator: AJA

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 23801.D
Spectrum: Avg. Scans 2764-2766 (12.17), Background Scan 2748
Location of Maximum: 95.00
Number of points: 70

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 2147 | 62.00 | 14318 | 86.00 | 250 | 130.00 | 1293 |
| 37.00 | 11807 | 63.00 | 10409 | 87.00 | 20664 | 135.00 | 424 |
| 38.00 | 10491 | 64.00 | 970 | 88.00 | 20384 | 137.00 | 397 |
| 39.00 | 3926 | 67.00 | 845 | 91.00 | 1248 | 141.00 | 2667 |
| 44.00 | 1317 | 68.00 | 33792 | 92.00 | 10105 | 143.00 | 3031 |
| 45.00 | 2371 | 69.00 | 33888 | 93.00 | 15346 | 146.00 | 415 |
| 47.00 | 4507 | 70.00 | 2482 | 94.00 | 44680 | 148.00 | 923 |
| 48.00 | 1518 | 72.00 | 1985 | 95.00 | 462016 | 155.00 | 902 |
| 49.00 | 11596 | 73.00 | 14468 | 96.00 | 29768 | 157.00 | 691 |
| 50.00 | 56384 | 74.00 | 56344 | 97.00 | 836 | 161.00 | 172 |
| 51.00 | 17640 | 75.00 | 188096 | 104.00 | 1257 | 173.00 | 2481 |
| 52.00 | 818 | 76.00 | 15801 | 106.00 | 1336 | 174.00 | 418176 |
| 55.00 | 918 | 77.00 | 2507 | 116.00 | 1113 | 175.00 | 28528 |
| 56.00 | 4140 | 78.00 | 1676 | 117.00 | 2141 | 176.00 | 404736 |
| 57.00 | 7882 | 79.00 | 6615 | 118.00 | 1009 | 177.00 | 26448 |
| 58.00 | 396 | 80.00 | 2026 | 119.00 | 1679 | 178.00 | 652 |
| 60.00 | 2867 | 81.00 | 6608 | 128.00 | 1225 | | |
| 61.00 | 14214 | 82.00 | 1275 | 129.00 | 408 | | |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25001.D



Date : 07-SEP-2021 06:51

Client ID: BFB

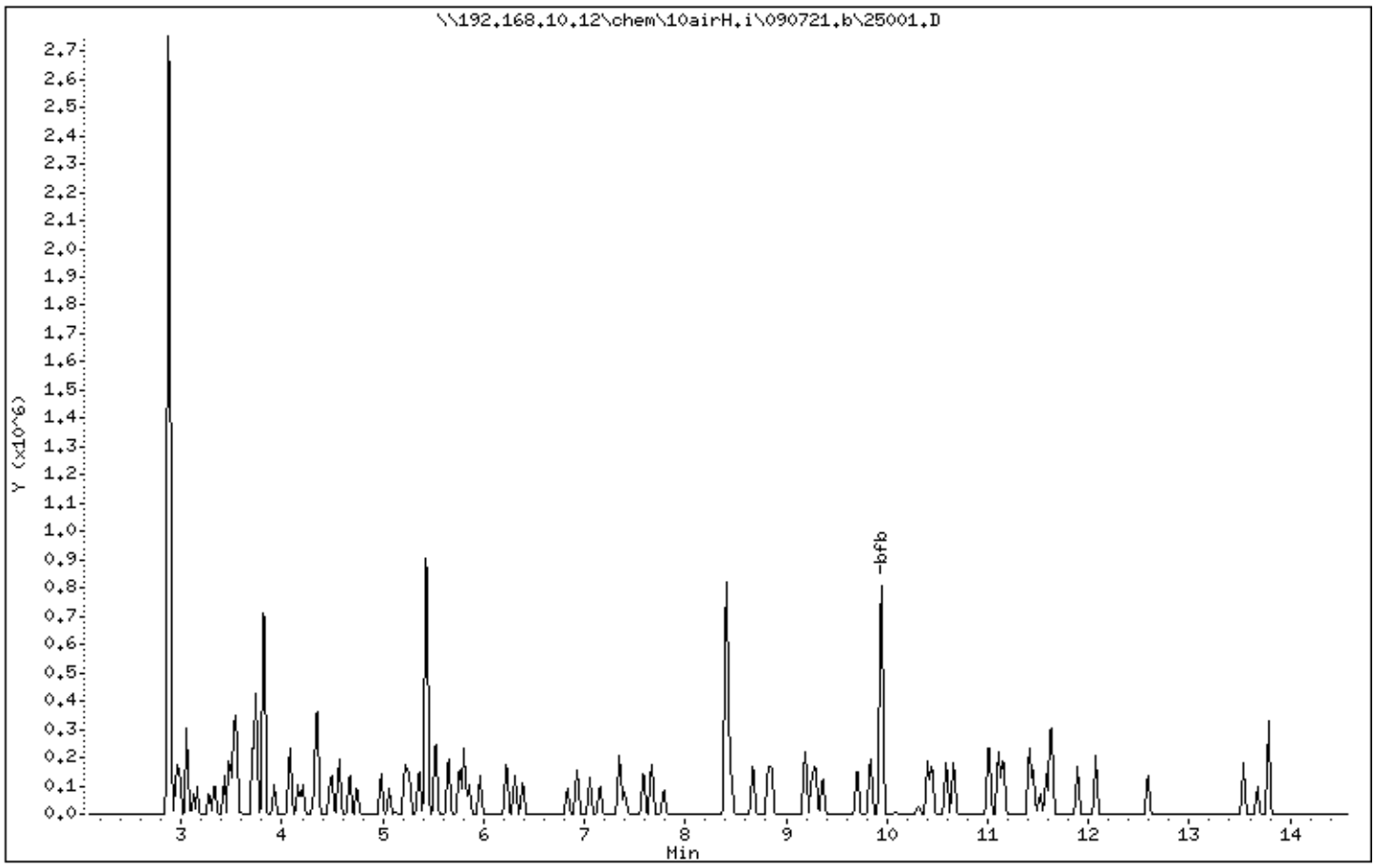
Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: J&W DB-5

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090721.b\25001.D



Date : 07-SEP-2021 06:51

Client ID: BFB

Instrument: 10airH.i

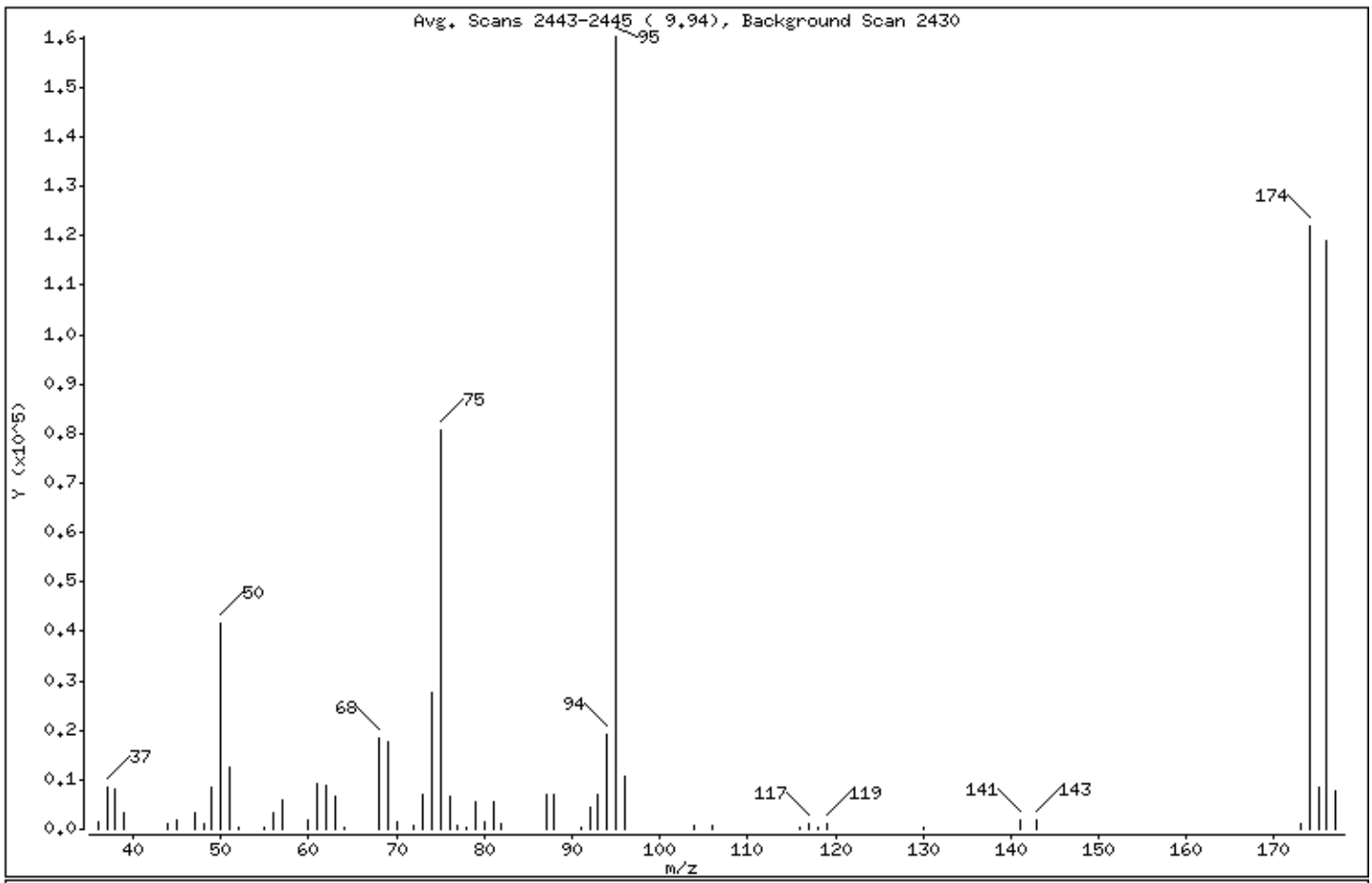
Sample Info:

Operator: GT

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 25.95 |
| 75 | 30.00 - 66.00% of mass 95 | 50.33 |
| 96 | 5.00 - 9.00% of mass 95 | 6.68 |
| 173 | Less than 2.00% of mass 174 | 0.61 ( 0.80) |
| 174 | 50.00 - 120.00% of mass 95 | 76.04 |
| 175 | 4.00 - 9.00% of mass 174 | 5.33 ( 7.01) |
| 176 | 93.00 - 101.00% of mass 174 | 74.17 ( 97.53) |
| 177 | 5.00 - 9.00% of mass 176 | 4.77 ( 6.43) |

Data File: \\192.168.10.12\chem\10airH.i\090721.b\25001.D

Date : 07-SEP-2021 06:51

Client ID: BFB

Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25001.D
Spectrum: Avg. Scans 2443-2445 ( 9.94), Background Scan 2430
Location of Maximum: 95.00
Number of points: 56

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1442 | 60.00 | 1751 | 79.00 | 5525 | 117.00 | 1099 |
| 37.00 | 8540 | 61.00 | 9127 | 80.00 | 1486 | 118.00 | 489 |
| 38.00 | 8145 | 62.00 | 8948 | 81.00 | 5507 | 119.00 | 1023 |
| 39.00 | 3156 | 63.00 | 6667 | 82.00 | 1149 | 130.00 | 482 |
| 44.00 | 1249 | 64.00 | 205 | 87.00 | 6940 | 141.00 | 1691 |
| 45.00 | 1828 | 68.00 | 18352 | 88.00 | 6919 | 143.00 | 1777 |
| 47.00 | 3199 | 69.00 | 17672 | 91.00 | 453 | 173.00 | 974 |
| 48.00 | 1091 | 70.00 | 1321 | 92.00 | 4524 | 174.00 | 121864 |
| 49.00 | 8466 | 72.00 | 807 | 93.00 | 7023 | 175.00 | 8546 |
| 50.00 | 41584 | 73.00 | 6997 | 94.00 | 19040 | 176.00 | 118856 |
| 51.00 | 12610 | 74.00 | 27736 | 95.00 | 160256 | 177.00 | 7639 |
| 52.00 | 230 | 75.00 | 80656 | 96.00 | 10698 | | |
| 55.00 | 201 | 76.00 | 6702 | 104.00 | 778 | | |
| 56.00 | 3199 | 77.00 | 905 | 106.00 | 757 | | |
| 57.00 | 6066 | 78.00 | 449 | 116.00 | 477 | | |

Form 5-OR
GC/MS Instrument Performance Check

EPA SAMPLE NO.

**BFB**

Lab Name: Pace Analytical Services, LLC
Lab Code: PASI Case No.: SAS No.: SDG No.:
Lab File ID: 25101.D BFB Injection Date: 09/08/2021
Instrument ID: 10AIRB BFB Injection Time: 09:25
GC Column: J&W DB-5 ID: 0.32 (mm)

| m/e | Ion Abundance Criteria | % Relative Abundance | |
|---|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 | |
| 50 | 8.00 - 40.00% of mass 95 | 12.49 | |
| 75 | 30.00 - 66.00% of mass 95 | 40.48 | |
| 96 | 5.00 - 9.00% of mass 95 | 6.37 | |
| 173 | Less than 2.00% of mass 174 | 0.49 | (0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 90.41 | |
| 175 | 4.00 - 9.00% of mass 174 | 6.23 | (6.89) |
| 176 | 93.00 - 101.00% of mass 174 | 87.16 | (96.40) |
| 177 | 5.00 - 9.00% of mass 176 | 5.73 | (6.58) |

| | Client Sample ID | Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 1 | | BFB | 25101.D | 09/08/2021 | 09:25 |
| 2 | | CCV | 25102.D | 09/08/2021 | 09:52 |
| 3 | LCS for HBN 768868 [AIR/40159] | 4096964 | 25102_40159.D | 09/08/2021 | 09:52 |
| 4 | | IC | 25104.D | 09/08/2021 | 10:50 |
| 5 | | IC | 25105.D | 09/08/2021 | 11:21 |
| 6 | BLANK for HBN 768868 [AIR/4015 | 4096963 | 25105_40159.D | 09/08/2021 | 11:21 |
| 7 | IA-1A #3613(4091711DUP) | 4095235-DUP | 25109.D | 09/08/2021 | 13:20 |
| 8 | IA-2 - Kitchen(4093578DUP) | 4098167-DUP | 25114.D | 09/08/2021 | 16:41 |
| 9 | IA-1 - Dining Room(4093574DUP) | 4098166-DUP | 25116.D | 09/08/2021 | 17:40 |
| 10 | IA-1 DUP | 10577519007 | 25117.D | 09/08/2021 | 18:09 |
| 11 | IA-1 | 10577519008 | 25118.D | 09/08/2021 | 18:39 |
| 12 | SS-1 | 10577519001 | 25123.D | 09/08/2021 | 21:04 |
| 13 | SS-2 | 10577519002 | 25124.D | 09/08/2021 | 21:33 |
| 14 | SS-3 | 10577519003 | 25125.D | 09/08/2021 | 22:04 |
| 15 | SS-4 | 10577519004 | 25128.D | 09/08/2021 | 23:34 |
| 16 | SS-5 | 10577519005 | 25129.D | 09/09/2021 | 00:03 |
| 17 | SS-6 | 10577519006 | 25130.D | 09/09/2021 | 00:32 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25101.D



Date : 08-SEP-2021 09:25

Client ID: BFB

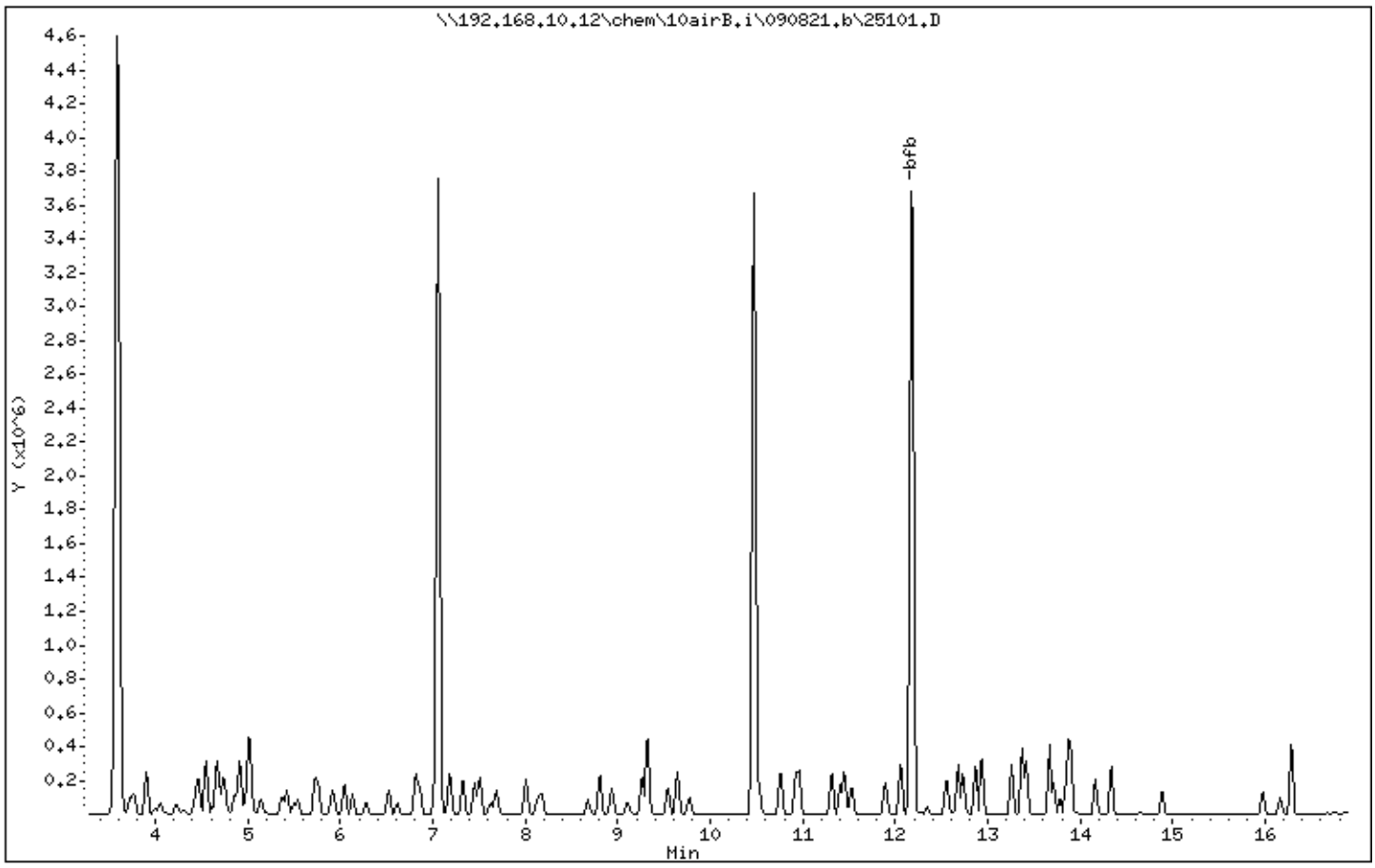
Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: J&W DB-5

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25101.D



Date : 08-SEP-2021 09:25

Client ID: BFB

Instrument: 10airB.i

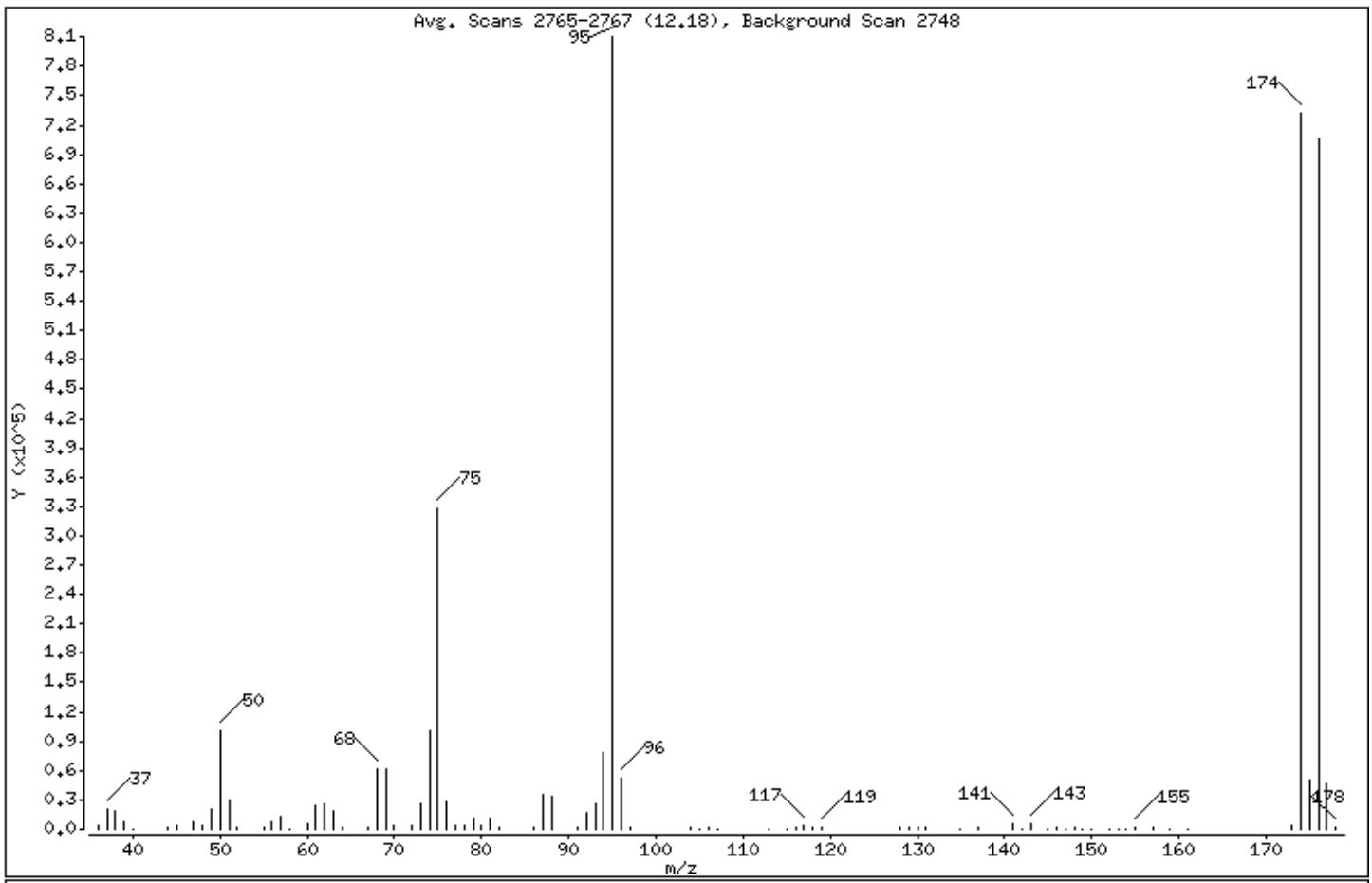
Sample Info:

Operator: HMH

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 12.49 |
| 75 | 30.00 - 66.00% of mass 95 | 40.48 |
| 96 | 5.00 - 9.00% of mass 95 | 6.37 |
| 173 | Less than 2.00% of mass 174 | 0.49 ( 0.54) |
| 174 | 50.00 - 120.00% of mass 95 | 90.41 |
| 175 | 4.00 - 9.00% of mass 174 | 6.23 ( 6.89) |
| 176 | 93.00 - 101.00% of mass 174 | 87.16 ( 96.40) |
| 177 | 5.00 - 9.00% of mass 176 | 5.73 ( 6.58) |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25101.D

Date : 08-SEP-2021 09:25

Client ID: BFB

Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25101.D
Spectrum: Avg. Scans 2765-2767 (12.18), Background Scan 2748
Location of Maximum: 95.00
Number of points: 85

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 4129 | 67.00 | 1576 | 95.00 | 810432 | 145.00 | 436 |
| 37.00 | 20560 | 68.00 | 60904 | 96.00 | 51600 | 146.00 | 988 |
| 38.00 | 18968 | 69.00 | 60568 | 97.00 | 1347 | 147.00 | 167 |
| 39.00 | 7420 | 70.00 | 4380 | 104.00 | 2281 | 148.00 | 1493 |
| 40.00 | 186 | 72.00 | 3231 | 105.00 | 409 | 149.00 | 371 |
| 44.00 | 2793 | 73.00 | 25984 | 106.00 | 2085 | 150.00 | 572 |
| 45.00 | 4322 | 74.00 | 100096 | 107.00 | 379 | 152.00 | 195 |
| 47.00 | 8133 | 75.00 | 328064 | 113.00 | 173 | 153.00 | 477 |
| 48.00 | 3046 | 76.00 | 27384 | 115.00 | 579 | 154.00 | 177 |
| 49.00 | 20088 | 77.00 | 4030 | 116.00 | 1914 | 155.00 | 1718 |
| 50.00 | 101248 | 78.00 | 3085 | 117.00 | 3597 | 157.00 | 1118 |
| 51.00 | 30680 | 79.00 | 10770 | 118.00 | 1962 | 159.00 | 802 |
| 52.00 | 1283 | 80.00 | 3657 | 119.00 | 2677 | 161.00 | 700 |
| 55.00 | 1380 | 81.00 | 11544 | 128.00 | 2147 | 173.00 | 3959 |
| 56.00 | 7182 | 82.00 | 2257 | 129.00 | 1109 | 174.00 | 732736 |
| 57.00 | 13414 | 86.00 | 959 | 130.00 | 2334 | 175.00 | 50480 |
| 58.00 | 800 | 87.00 | 34600 | 131.00 | 958 | 176.00 | 706368 |
| 60.00 | 5042 | 88.00 | 33080 | 135.00 | 865 | 177.00 | 46472 |
| 61.00 | 24656 | 91.00 | 1743 | 137.00 | 1044 | 178.00 | 1353 |
| 62.00 | 25152 | 92.00 | 16816 | 141.00 | 4795 | | |
| 63.00 | 18432 | 93.00 | 26072 | 142.00 | 699 | | |
| 64.00 | 1666 | 94.00 | 77760 | 143.00 | 4998 | | |

Form 5-OR
GC/MS Instrument Performance Check

EPA SAMPLE NO.

**BFB**

Lab Name: Pace Analytical Services, LLC
Lab Code: PASI Case No.: SAS No.: SDG No.:
Lab File ID: 25101.D BFB Injection Date: 09/08/2021
Instrument ID: 10AIRB BFB Injection Time: 09:25
GC Column: J&W DB-5 ID: 0.32 (mm)

| m/e | Ion Abundance Criteria | % Relative Abundance | |
|---|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 | |
| 50 | 8.00 - 40.00% of mass 95 | 12.49 | |
| 75 | 30.00 - 66.00% of mass 95 | 40.48 | |
| 96 | 5.00 - 9.00% of mass 95 | 6.37 | |
| 173 | Less than 2.00% of mass 174 | 0.49 | (0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 90.41 | |
| 175 | 4.00 - 9.00% of mass 174 | 6.23 | (6.89) |
| 176 | 93.00 - 101.00% of mass 174 | 87.16 | (96.40) |
| 177 | 5.00 - 9.00% of mass 176 | 5.73 | (6.58) |

| | Client Sample ID | Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 1 | | BFB | 25101.D | 09/08/2021 | 09:25 |
| 2 | | CCV | 25102.D | 09/08/2021 | 09:52 |
| 3 | LCS for HBN 768868 [AIR/40159] | 4096964 | 25102_40159.D | 09/08/2021 | 09:52 |
| 4 | | IC | 25104.D | 09/08/2021 | 10:50 |
| 5 | | IC | 25105.D | 09/08/2021 | 11:21 |
| 6 | BLANK for HBN 768868 [AIR/4015 | 4096963 | 25105_40159.D | 09/08/2021 | 11:21 |
| 7 | IA-1A #3613(4091711DUP) | 4095235-DUP | 25109.D | 09/08/2021 | 13:20 |
| 8 | IA-2 - Kitchen(4093578DUP) | 4098167-DUP | 25114.D | 09/08/2021 | 16:41 |
| 9 | IA-1 - Dining Room(4093574DUP) | 4098166-DUP | 25116.D | 09/08/2021 | 17:40 |
| 10 | IA-1 DUP | 10577519007 | 25117.D | 09/08/2021 | 18:09 |
| 11 | IA-1 | 10577519008 | 25118.D | 09/08/2021 | 18:39 |
| 12 | SS-1 | 10577519001 | 25123.D | 09/08/2021 | 21:04 |
| 13 | SS-2 | 10577519002 | 25124.D | 09/08/2021 | 21:33 |
| 14 | SS-3 | 10577519003 | 25125.D | 09/08/2021 | 22:04 |
| 15 | SS-4 | 10577519004 | 25128.D | 09/08/2021 | 23:34 |
| 16 | SS-5 | 10577519005 | 25129.D | 09/09/2021 | 00:03 |
| 17 | SS-6 | 10577519006 | 25130.D | 09/09/2021 | 00:32 |

Form 5-OR
GC/MS Instrument Performance Check

EPA SAMPLE NO.

**BFB**

Lab Name: Pace Analytical Services, LLC
Lab Code: PASI Case No.: SAS No.: SDG No.:
Lab File ID: 25101.D BFB Injection Date: 09/08/2021
Instrument ID: 10AIRH BFB Injection Time: 06:52
GC Column: J&W DB-5 ID: 0.32 (mm)

| m/e | Ion Abundance Criteria | % Relative Abundance | |
|---|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 | |
| 50 | 8.00 - 40.00% of mass 95 | 23.90 | |
| 75 | 30.00 - 66.00% of mass 95 | 47.91 | |
| 96 | 5.00 - 9.00% of mass 95 | 6.59 | |
| 173 | Less than 2.00% of mass 174 | 0.53 | (0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 79.62 | |
| 175 | 4.00 - 9.00% of mass 174 | 5.59 | (7.02) |
| 176 | 93.00 - 101.00% of mass 174 | 77.97 | (97.93) |
| 177 | 5.00 - 9.00% of mass 176 | 5.01 | (6.43) |

| | Client Sample ID | Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 1 | | BFB | 25101.D | 09/08/2021 | 06:52 |
| 2 | | CCV | 25102.D | 09/08/2021 | 07:18 |
| 3 | LCS for HBN 768799 [AIR/40152] | 4096714 | 25102_40152.D | 09/08/2021 | 07:18 |
| 4 | LCS for HBN 768869 [AIR/40160] | 4096971 | 25102_40160.D | 09/08/2021 | 07:18 |
| 5 | BLANK for HBN 768799 [AIR/4015 | 4096713 | 25104_40152.D | 09/08/2021 | 09:05 |
| 6 | BLANK for HBN 768869 [AIR/4016 | 4096970 | 25104_40160.D | 09/08/2021 | 09:05 |
| 7 | Trip Blank | 10577519016 | 25111.D | 09/08/2021 | 16:31 |
| 8 | Trip Blank(4094235DUP) | 4098708-DUP | 25112.D | 09/08/2021 | 16:58 |
| 9 | IA-2 | 10577519009 | 25113.D | 09/08/2021 | 17:25 |
| 10 | IA-2(4094228DUP) | 4098707-DUP | 25114.D | 09/08/2021 | 17:52 |
| 11 | IA-3 | 10577519010 | 25115.D | 09/08/2021 | 18:19 |
| 12 | IA-4 | 10577519011 | 25116.D | 09/08/2021 | 18:46 |
| 13 | IA-5 | 10577519012 | 25117.D | 09/08/2021 | 19:13 |
| 14 | IA-6 | 10577519013 | 25118.D | 09/08/2021 | 19:40 |
| 15 | UPWIND | 10577519014 | 25119.D | 09/08/2021 | 20:07 |
| 16 | DOWNWIND | 10577519015 | 25120.D | 09/08/2021 | 20:34 |
| 17 | DOWNWIND | 10577519015 | 25121.D | 09/08/2021 | 20:59 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25101.D



Date : 08-SEP-2021 06:52

Client ID: BFB

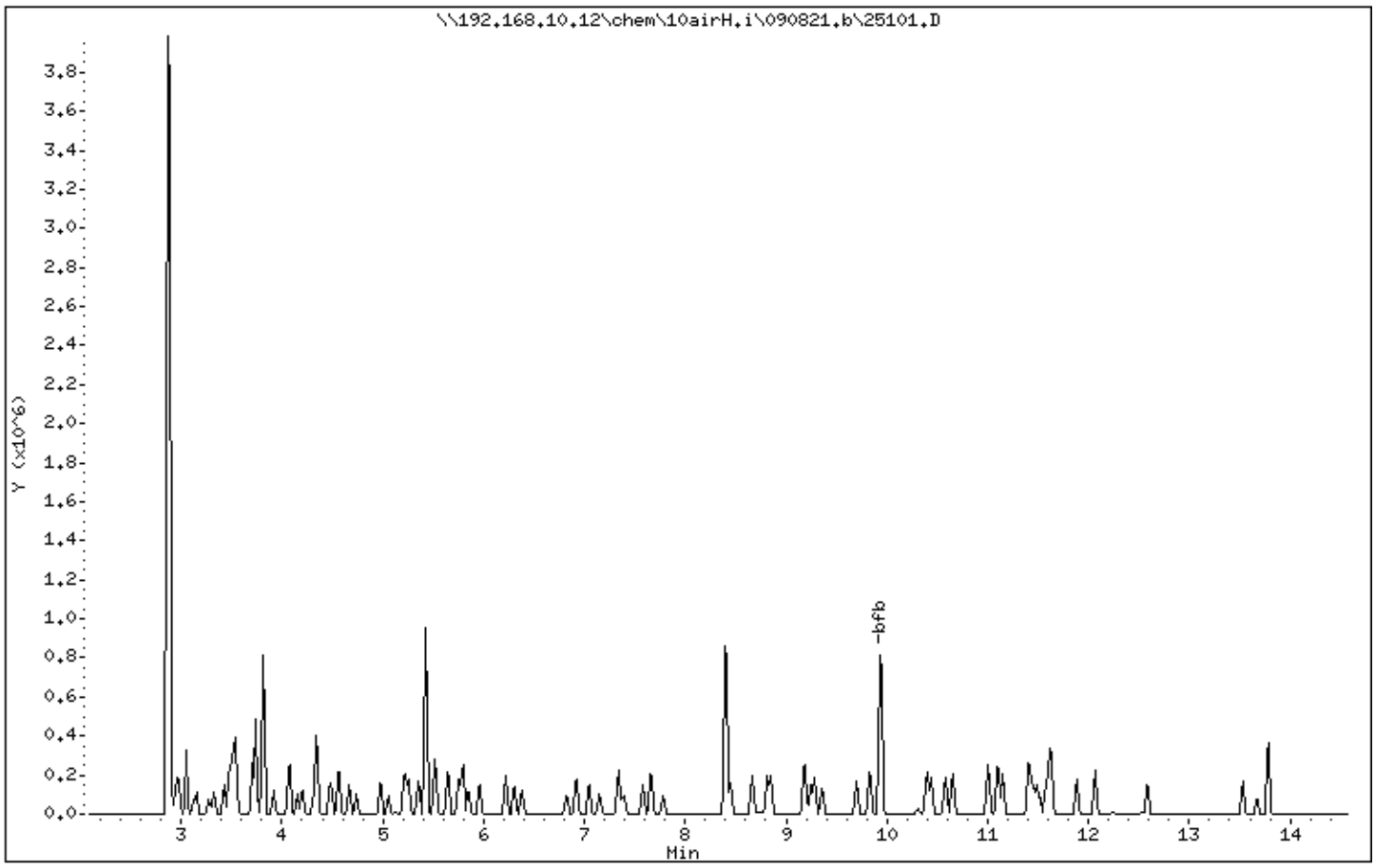
Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: J&W DB-5

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25101.D



Date : 08-SEP-2021 06:52

Client ID: BFB

Instrument: 10airH.i

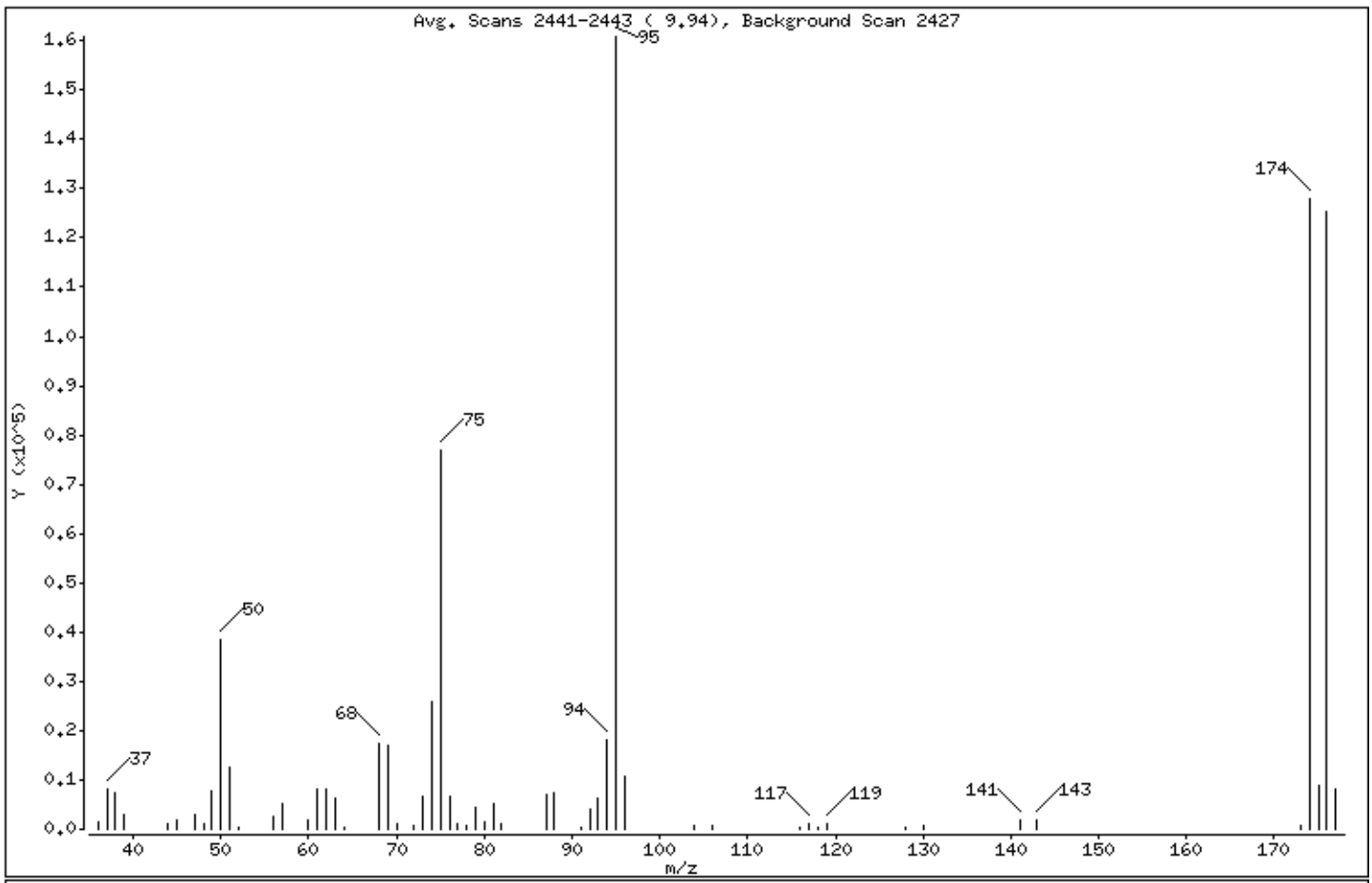
Sample Info:

Operator: GT

Column phase: J&W DB-5

Column diameter: 0.32

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 23.90 |
| 75 | 30.00 - 66.00% of mass 95 | 47.91 |
| 96 | 5.00 - 9.00% of mass 95 | 6.59 |
| 173 | Less than 2.00% of mass 174 | 0.53 ( 0.67) |
| 174 | 50.00 - 120.00% of mass 95 | 79.62 |
| 175 | 4.00 - 9.00% of mass 174 | 5.59 ( 7.02) |
| 176 | 93.00 - 101.00% of mass 174 | 77.97 ( 97.93) |
| 177 | 5.00 - 9.00% of mass 176 | 5.01 ( 6.43) |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25101.D

Date : 08-SEP-2021 06:52

Client ID: BFB

Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: J&W DB-5

Column diameter: 0.32

Data File: 25101.D
Spectrum: Avg. Scans 2441-2443 ( 9.94), Background Scan 2427
Location of Maximum: 95.00
Number of points: 56

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1422 | 61.00 | 8211 | 80.00 | 1406 | 118.00 | 442 |
| 37.00 | 8310 | 62.00 | 8224 | 81.00 | 5146 | 119.00 | 934 |
| 38.00 | 7369 | 63.00 | 6145 | 82.00 | 999 | 128.00 | 445 |
| 39.00 | 2993 | 64.00 | 200 | 87.00 | 7012 | 130.00 | 684 |
| 44.00 | 1253 | 68.00 | 17424 | 88.00 | 7382 | 141.00 | 1710 |
| 45.00 | 1759 | 69.00 | 16920 | 91.00 | 428 | 143.00 | 1720 |
| 47.00 | 2967 | 70.00 | 1198 | 92.00 | 4160 | 173.00 | 859 |
| 48.00 | 1006 | 72.00 | 811 | 93.00 | 6289 | 174.00 | 128056 |
| 49.00 | 7661 | 73.00 | 6624 | 94.00 | 18168 | 175.00 | 8991 |
| 50.00 | 38432 | 74.00 | 25904 | 95.00 | 160832 | 176.00 | 125400 |
| 51.00 | 12435 | 75.00 | 77048 | 96.00 | 10606 | 177.00 | 8062 |
| 52.00 | 200 | 76.00 | 6553 | 104.00 | 819 | | |
| 56.00 | 2755 | 77.00 | 931 | 106.00 | 815 | | |
| 57.00 | 5099 | 78.00 | 842 | 116.00 | 240 | | |
| 60.00 | 1681 | 79.00 | 4560 | 117.00 | 945 | | |

Form 5-OR
GC/MS Instrument Performance Check

EPA SAMPLE NO.

**BFB**

Lab Name: Pace Analytical Services, LLC
Lab Code: PASI Case No.: SAS No.: SDG No.:
Lab File ID: 25101.D BFB Injection Date: 09/08/2021
Instrument ID: 10AIRH BFB Injection Time: 06:52
GC Column: J&W DB-5 ID: 0.32 (mm)

| m/e | Ion Abundance Criteria | % Relative Abundance | |
|---|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 | |
| 50 | 8.00 - 40.00% of mass 95 | 23.90 | |
| 75 | 30.00 - 66.00% of mass 95 | 47.91 | |
| 96 | 5.00 - 9.00% of mass 95 | 6.59 | |
| 173 | Less than 2.00% of mass 174 | 0.53 | (0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 79.62 | |
| 175 | 4.00 - 9.00% of mass 174 | 5.59 | (7.02) |
| 176 | 93.00 - 101.00% of mass 174 | 77.97 | (97.93) |
| 177 | 5.00 - 9.00% of mass 176 | 5.01 | (6.43) |

| | Client Sample ID | Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 1 | | BFB | 25101.D | 09/08/2021 | 06:52 |
| 2 | | CCV | 25102.D | 09/08/2021 | 07:18 |
| 3 | LCS for HBN 768799 [AIR/40152] | 4096714 | 25102_40152.D | 09/08/2021 | 07:18 |
| 4 | LCS for HBN 768869 [AIR/40160] | 4096971 | 25102_40160.D | 09/08/2021 | 07:18 |
| 5 | BLANK for HBN 768799 [AIR/4015 | 4096713 | 25104_40152.D | 09/08/2021 | 09:05 |
| 6 | BLANK for HBN 768869 [AIR/4016 | 4096970 | 25104_40160.D | 09/08/2021 | 09:05 |
| 7 | Trip Blank | 10577519016 | 25111.D | 09/08/2021 | 16:31 |
| 8 | Trip Blank(4094235DUP) | 4098708-DUP | 25112.D | 09/08/2021 | 16:58 |
| 9 | IA-2 | 10577519009 | 25113.D | 09/08/2021 | 17:25 |
| 10 | IA-2(4094228DUP) | 4098707-DUP | 25114.D | 09/08/2021 | 17:52 |
| 11 | IA-3 | 10577519010 | 25115.D | 09/08/2021 | 18:19 |
| 12 | IA-4 | 10577519011 | 25116.D | 09/08/2021 | 18:46 |
| 13 | IA-5 | 10577519012 | 25117.D | 09/08/2021 | 19:13 |
| 14 | IA-6 | 10577519013 | 25118.D | 09/08/2021 | 19:40 |
| 15 | UPWIND | 10577519014 | 25119.D | 09/08/2021 | 20:07 |
| 16 | DOWNWIND | 10577519015 | 25120.D | 09/08/2021 | 20:34 |
| 17 | DOWNWIND | 10577519015 | 25121.D | 09/08/2021 | 20:59 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airB.i  Injection Date: 08-SEP-2021 09:52
Lab File ID: 25102.D  Init. Cal. Date(s): 26-AUG-2021  26-AUG-2021
Analysis Type: AIR  Init. Cal. Times:  09:44  12:31
Lab Sample ID: CCV  Quant Type:  ISTD
Method: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m

| COMPOUND | RRF / AMOUNT | RF10 | CCAL RRF10 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE | QC FLAGS |
|---|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 0.10254 | 0.11664 | 0.11664 | 0.010 | 13.74279 | 30.00000 | Aver | |
| 2 Propylene | 0.10977 | 0.12030 | 0.12030 | 0.010 | 9.59292 | 30.00000 | Aver | |
| 3 Chlorodifluoromethane | 0.03589 | 0.04011 | 0.04011 | 0.010 | 11.77897 | 30.00000 | Aver | |
| 4 Dichlorodifluoromethane | 0.43598 | 0.46462 | 0.46462 | 0.010 | 6.56845 | 30.00000 | Aver | |
| 5 Chloromethane | 0.15886 | 0.17947 | 0.17947 | 0.010 | 12.97316 | 30.00000 | Aver | |
| 6 Dichlorotetrafluoroethane | 0.52449 | 0.55990 | 0.55990 | 0.010 | 6.75048 | 30.00000 | Aver | |
| 7 Vinyl chloride | 0.16974 | 0.19178 | 0.19178 | 0.010 | 12.98690 | 30.00000 | Aver | |
| 8 1,3-Butadiene | 0.12363 | 0.13882 | 0.13882 | 0.010 | 12.28159 | 30.00000 | Aver | |
| 9 Bromomethane | 0.17326 | 0.19454 | 0.19454 | 0.010 | 12.28431 | 30.00000 | Aver | |
| 10 Chloroethane | 0.09215 | 0.10264 | 0.10264 | 0.010 | 11.38459 | 30.00000 | Aver | |
| 11 Ethanol | 0.05585 | 0.05844 | 0.05844 | 0.005 | 4.64563 | 30.00000 | Aver | |
| 12 Vinyl Bromide | 0.17858 | 0.19645 | 0.19645 | 0.010 | 10.01147 | 30.00000 | Aver | |
| 13 Isopentane | 0.19259 | 0.18066 | 0.18066 | 0.010 | -6.19751 | 30.00000 | Aver | |
| 14 Freon 123 | 0.42166 | 0.46193 | 0.46193 | 0.010 | 9.55030 | 30.00000 | Aver | |
| 15 Trichlorofluoromethane | 0.42776 | 0.46251 | 0.46251 | 0.010 | 8.12274 | 30.00000 | Aver | |
| 16 Acrolein | 30.49000 | 30.18825 | 0.07355 | 0.010 | -0.98968 | 30.00000 | Quad | |
| 17 Acetone | 0.19878 | 0.22502 | 0.22502 | 0.010 | 13.20077 | 30.00000 | Aver | |
| 18 Isopropyl Alcohol | 0.25059 | 0.27260 | 0.27260 | 0.010 | 8.78565 | 30.00000 | Aver | |
| 19 1,1-Dichloroethene | 0.26061 | 0.29306 | 0.29306 | 0.010 | 12.45133 | 30.00000 | Aver | |
| 20 Acrylonitrile | 29.84000 | 30.10085 | 0.12966 | 0.010 | 0.87417 | 30.00000 | Quad | |
| 21 Freon 113 | 0.40269 | 0.44018 | 0.44018 | 0.010 | 9.30929 | 30.00000 | Aver | |
| 22 Methyl Acetate | 10.75000 | 10.95984 | 0.34321 | 0.010 | 1.95198 | 30.00000 | Quad | |
| 23 Tert Butyl Alcohol (TBA) | 0.36962 | 0.43094 | 0.43094 | 0.010 | 16.59080 | 30.00000 | Aver | |
| 24 Allyl Chloride | 0.08442 | 0.09776 | 0.09776 | 0.010 | 15.80635 | 30.00000 | Aver | |
| 25 Methylene chloride | 0.16168 | 0.18038 | 0.18038 | 0.010 | 11.56627 | 30.00000 | Aver | |
| 26 Carbon Disulfide | 0.54026 | 0.59205 | 0.59205 | 0.010 | 9.58596 | 30.00000 | Aver | |
| 27 trans-1,2-dichloroethene | 0.19919 | 0.22259 | 0.22259 | 0.010 | 11.74470 | 30.00000 | Aver | |
| 28 Methyl Tert Butyl Ether | 0.50726 | 0.56739 | 0.56739 | 0.010 | 11.85298 | 30.00000 | Aver | |
| 29 Vinyl Acetate | 12.95000 | 13.25915 | 0.33350 | 0.010 | 2.38728 | 30.00000 | Quad | |
| 30 1,1-Dichloroethane | 0.31637 | 0.34930 | 0.34930 | 0.010 | 10.41043 | 30.00000 | Aver | |
| 31 Methyl Ethyl Ketone | 0.09973 | 0.10911 | 0.10911 | 0.010 | 9.40882 | 30.00000 | Aver | (M) |
| 32 n-Hexane | 10.61000 | 10.58904 | 0.32695 | 0.010 | -0.19755 | 30.00000 | Quad | (M) |
| 33 Di-isopropyl Ether | 0.49014 | 0.55509 | 0.55509 | 0.010 | 13.25292 | 30.00000 | Aver | |
| 34 Ethyl Acetate | 0.32068 | 0.35923 | 0.35923 | 0.010 | 12.02092 | 30.00000 | Aver | |
| 35 cis-1,2-Dichloroethene | 0.20772 | 0.23006 | 0.23006 | 0.010 | 10.75659 | 30.00000 | Aver | |
| 36 Ethyl Tert-Butyl Ether | 0.54484 | 0.62099 | 0.62099 | 0.010 | 13.97704 | 30.00000 | Aver | |
| 37 Chloroform | 0.38351 | 0.42529 | 0.42529 | 0.010 | 10.89203 | 30.00000 | Aver | |
| 38 Tetrahydrofuran | 0.16336 | 0.18764 | 0.18764 | 0.010 | 14.86284 | 30.00000 | Aver | |
| 39 1,1,1-Trichloroethane | 0.37404 | 0.40902 | 0.40902 | 0.010 | 9.35162 | 30.00000 | Aver | |
| 40 1,2-Dichloroethane | 0.19923 | 0.22681 | 0.22681 | 0.010 | 13.84416 | 30.00000 | Aver | |
| 41 Benzene | 0.62388 | 0.68432 | 0.68432 | 0.010 | 9.68778 | 30.00000 | Aver | |
| 42 Carbon tetrachloride | 0.35291 | 0.40718 | 0.40718 | 0.010 | 15.37843 | 30.00000 | Aver | |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airB.i  Injection Date: 08-SEP-2021 09:52
Lab File ID: 25102.D  Init. Cal. Date(s): 26-AUG-2021  26-AUG-2021
Analysis Type: AIR  Init. Cal. Times:  09:44  12:31
Lab Sample ID: CCV  Quant Type:  ISTD
Method: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m

| COMPOUND | RRF / AMOUNT | RF10 | CCAL RRF10 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE | QC FLAGS |
|---|---|---|---|---|---|---|---|---|
| 43 Cyclohexane | 0.28262 | 0.30937 | 0.30937 | 0.010 | 9.46641 | 30.00000 | Aver | |
| 44 Tert Amyl Methyl Ether | 10.75000 | 10.66255 | 0.63433 | 0.010 | -0.81346 | 30.00000 | Quad | |
| 46 2,2,4-Trimethylpentane | 0.88076 | 0.96682 | 0.96682 | 0.010 | 9.77169 | 30.00000 | Aver | |
| 47 Heptane | 0.27190 | 0.30662 | 0.30662 | 0.010 | 12.76790 | 30.00000 | Aver | |
| 48 Trichloroethene | 0.29320 | 0.32679 | 0.32679 | 0.010 | 11.45837 | 30.00000 | Aver | |
| 49 Methyl methacrylate | 0.22017 | 0.23148 | 0.23148 | 0.010 | 5.13515 | 30.00000 | Aver | |
| 50 1,2-Dichloropropane | 0.20350 | 0.22790 | 0.22790 | 0.010 | 11.99002 | 30.00000 | Aver | |
| 51 1,4-Dioxane | 0.14209 | 0.16210 | 0.16210 | 0.010 | 14.08283 | 30.00000 | Aver | |
| 52 Bromodichloromethane | 0.38182 | 0.43192 | 0.43192 | 0.010 | 13.12112 | 30.00000 | Aver | |
| 53 Methylcyclohexane | 0.18042 | 0.20409 | 0.20409 | 0.010 | 13.12265 | 30.00000 | Aver | |
| 54 Methyl Isobutyl Ketone | 10.78000 | 10.91816 | 0.39932 | 0.010 | 1.28159 | 30.00000 | Quad | |
| 55 cis-1,3-Dichloropropene | 0.32409 | 0.37090 | 0.37090 | 0.010 | 14.44340 | 30.00000 | Aver | |
| 56 trans-1,3-Dichloropropene | 10.95000 | 10.82262 | 0.30400 | 0.010 | -1.16328 | 30.00000 | Quad | (M) |
| 57 Toluene | 0.75462 | 0.85310 | 0.85310 | 0.010 | 13.04984 | 30.00000 | Aver | |
| 58 1,1,2-Trichloroethane | 0.24003 | 0.27048 | 0.27048 | 0.010 | 12.68679 | 30.00000 | Aver | |
| 59 Methyl Butyl Ketone | 10.75000 | 10.71877 | 0.45331 | 0.010 | -0.29053 | 30.00000 | Quad | (M) |
| 60 n-Octane | 10.75000 | 10.83617 | 0.52870 | 0.010 | 0.80157 | 30.00000 | Quad | |
| 61 Dibromochloromethane | 0.53154 | 0.60449 | 0.60449 | 0.010 | 13.72417 | 30.00000 | Aver | |
| 62 Tetrachloroethene | 0.50619 | 0.55189 | 0.55189 | 0.010 | 9.02746 | 30.00000 | Aver | |
| 63 1,2-Dibromoethane | 0.43990 | 0.52253 | 0.52253 | 0.010 | 18.78538 | 30.00000 | Aver | |
| 65 Chlorobenzene | 0.75940 | 0.85332 | 0.85332 | 0.010 | 12.36743 | 30.00000 | Aver | |
| 66 Ethyl Benzene | 10.84000 | 10.75834 | 1.36009 | 0.010 | -0.75334 | 30.00000 | Quad | |
| 67 m&p-Xylene | 0.90523 | 1.05626 | 1.05626 | 0.010 | 16.68374 | 30.00000 | Aver | (M) |
| 68 n-Nonane | 10.77000 | 10.98769 | 0.54847 | 0.010 | 2.02123 | 30.00000 | Quad | |
| 69 Styrene | 10.85000 | 10.85517 | 0.85024 | 0.010 | 0.04766 | 30.00000 | Quad | (M) |
| 70 o-Xylene | 0.94305 | 1.08972 | 1.08972 | 0.010 | 15.55213 | 30.00000 | Aver | |
| 71 Bromoform | 0.49625 | 0.58090 | 0.58090 | 0.010 | 17.05838 | 30.00000 | Aver | |
| 72 1,1,2,2-Tetrachloroethane | 10.81000 | 10.70782 | 0.75271 | 0.010 | -0.94522 | 30.00000 | Quad | |
| 73 Isopropylbenzene | 10.67000 | 10.64304 | 1.61886 | 0.010 | -0.25266 | 30.00000 | Quad | |
| 74 N-Propylbenzene | 10.81000 | 10.66815 | 1.84392 | 0.010 | -1.31217 | 30.00000 | Quad | |
| 75 2-Chlorotoluene | 0.98432 | 1.13697 | 1.13697 | 0.010 | 15.50788 | 30.00000 | Aver | (M) |
| 76 4-Ethyltoluene | 10.74000 | 10.74784 | 1.52103 | 0.010 | 0.07302 | 30.00000 | Quad | |
| 77 1,3,5-Trimethylbenzene | 1.16770 | 1.34639 | 1.34639 | 0.010 | 15.30257 | 30.00000 | Aver | |
| 78 n-Decane | 10.87000 | 10.84257 | 0.57101 | 0.010 | -0.25234 | 30.00000 | Quad | |
| 79 Tert-Butyl Benzene | 1.16911 | 1.34307 | 1.34307 | 0.010 | 14.87935 | 30.00000 | Aver | |
| 80 1,2,4-Trimethylbenzene | 10.81000 | 10.85208 | 1.33121 | 0.010 | 0.38931 | 30.00000 | Quad | |
| 81 Sec- Butylbenzene | 10.85000 | 10.76771 | 1.96895 | 0.010 | -0.75843 | 30.00000 | Quad | |
| 82 1,3-Dichlorobenzene | 10.85000 | 10.72424 | 0.76680 | 0.010 | -1.15908 | 30.00000 | Quad | |
| 83 Benzyl Chloride | 10.94000 | 10.52138 | 0.73481 | 0.010 | -3.82649 | 30.00000 | Quad | |
| 84 1,4-Dichlorobenzene | 10.85000 | 10.66680 | 0.69075 | 0.010 | -1.68848 | 30.00000 | Quad | |
| 85 p-Isopropyltoluene | 10.89000 | 10.77255 | 1.79622 | 0.010 | -1.07848 | 30.00000 | Quad | |
| 86 1,2,3-Trimethylbenzene | 10.85000 | 10.78021 | 1.37566 | 0.010 | -0.64322 | 30.00000 | Quad | |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airB.i  Injection Date: 08-SEP-2021 09:52
Lab File ID: 25102.D  Init. Cal. Date(s): 26-AUG-2021  26-AUG-2021
Analysis Type: AIR  Init. Cal. Times:  09:44  12:31
Lab Sample ID: CCV  Quant Type:  ISTD
Method: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m

| COMPOUND | RRF / AMOUNT | RF10 | CCAL RRF10 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE | QC FLAGS |
|---|---|---|---|---|---|---|---|---|
| 87 1,2-Dichlorobenzene | 10.83000 | 10.78480 | 0.78731 | 0.010 | -0.41737 | 30.00000 | Quad | |
| 88 N-Butylbenzene | 10.81000 | 10.63943 | 1.38757 | 0.010 | -1.57793 | 30.00000 | Quad | |
| 89 1,2-Dibromo-3-Chloropropane | 10.91000 | 10.28772 | 0.39651 | 0.010 | -5.70375 | 30.00000 | Quad | |
| 90 1,2,4-Trichlorobenzene | 23.49000 | 23.73733 | 0.30479 | 0.010 | 1.05291 | 30.00000 | Quad | |
| 91 Naphthalene | 12.25000 | 12.13454 | 0.81062 | 0.010 | -0.94254 | 30.00000 | Quad | |
| 92 Hexachlorobutadiene | 12.25000 | 12.20885 | 0.53147 | 0.010 | -0.33591 | 30.00000 | Quad | |

QC Flag Legend

M - Compound response manually integrated.

Average %D / Drift Results.

Calculated Average %D/Drift = 8.21752
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Lab Smp Id: CCV
Inj Date : 08-SEP-2021 09:52
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.714 | 3.714 | (0.526) | 257497 | 10.7100 | 12.2 |
| 2 Propylene | 41 | 3.727 | 3.727 | (0.528) | 267324 | 10.7800 | 11.8 |
| 3 Chlorodifluoromethane | 67 | 3.733 | 3.733 | (0.529) | 88643 | 10.7200 | 12.0 |
| 4 Dichlorodifluoromethane | 85 | 3.765 | 3.765 | (0.533) | 1041065 | 10.8700 | 11.6 |
| 5 Chloromethane | 50 | 3.888 | 3.888 | (0.551) | 397701 | 10.7500 | 12.1 |
| 6 Dichlorotetrafluoroethane | 85 | 3.897 | 3.897 | (0.552) | 1156456 | 10.0200 | 10.7 |
| 7 Vinyl chloride | 62 | 3.991 | 3.991 | (0.565) | 426173 | 10.7800 | 12.2 |
| 8 1,3-Butadiene | 54 | 4.042 | 4.042 | (0.572) | 307322 | 10.7400 | 12.1 |
| 9 Bromomethane | 94 | 4.216 | 4.216 | (0.597) | 431495 | 10.7600 | 12.1 |
| 10 Chloroethane | 64 | 4.286 | 4.286 | (0.607) | 227455 | 10.7500 | 12.0 |
| 11 Ethanol | 45 | 4.402 | 4.402 | (0.623) | 778584 | 64.6300 | 67.6 |
| 12 Vinyl Bromide | 106 | 4.437 | 4.437 | (0.628) | 434118 | 10.7200 | 11.8 |
| 13 Isopentane | 43 | 4.463 | 4.463 | (0.632) | 410753 | 11.0300 | 10.3 |
| 14 Freon 123 | 83 | 4.531 | 4.531 | (0.642) | 1015988 | 10.6700 | 11.7 |
| 15 Trichlorofluoromethane | 101 | 4.547 | 4.547 | (0.644) | 1035389 | 10.8600 | 11.7 |
| 16 Acrolein | 56 | 4.595 | 4.595 | (0.651) | 462247 | 30.4900 | 30.2 |
| 17 Acetone | 43 | 4.630 | 4.630 | (0.656) | 2456544 | 52.9600 | 60.0 |
| 18 Isopropyl Alcohol | 45 | 4.701 | 4.701 | (0.666) | 3347441 | 59.5700 | 64.8 |
| 19 1,1-Dichloroethene | 61 | 4.852 | 4.852 | (0.687) | 652435 | 10.8000 | 12.1 |
| 20 Acrylonitrile | 53 | 4.900 | 4.900 | (0.694) | 797574 | 29.8400 | 30.1 |
| 21 Freon 113 | 101 | 4.907 | 4.907 | (0.695) | 973610 | 10.7300 | 11.7 |
| 22 Methyl Acetate | 43 | 4.933 | 4.933 | (0.699) | 760533 | 10.7500 | 11.0 |
| 23 Tert Butyl Alcohol (TBA) | 59 | 4.971 | 4.971 | (0.704) | 942513 | 10.6100 | 12.4 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 24 Allyl Chloride | 76 | 5.016 | 5.016 | (0.710) | 214215 | 10.6300 | 12.3 |
| 25 Methylene chloride | 49 | 5.013 | 5.013 | (0.710) | 2003363 | 53.8800 | 60.1 |
| 26 Carbon Disulfide | 76 | 5.142 | 5.142 | (0.728) | 1326592 | 10.8700 | 11.9 |
| 27 trans-1,2-dichloroethene | 96 | 5.370 | 5.370 | (0.760) | 496000 | 10.8100 | 12.1 |
| 28 Methyl Tert Butyl Ether | 73 | 5.386 | 5.386 | (0.763) | 1263148 | 10.8000 | 12.1 |
| 29 Vinyl Acetate | 43 | 5.489 | 5.489 | (0.777) | 890257 | 12.9500 | 13.3 |
| 30 1,1-Dichloroethane | 63 | 5.547 | 5.547 | (0.786) | 769003 | 10.6800 | 11.8 |
| 31 Methyl Ethyl Ketone | 72 | 5.707 | 5.707 | (0.808) | 242237 | 10.7700 | 11.8(M) |
| 32 n-Hexane | 57 | 5.727 | 5.727 | (0.811) | 715068 | 10.6100 | 10.6(M) |
| 33 Di-isopropyl Ether | 45 | 5.733 | 5.733 | (0.812) | 1209464 | 10.5700 | 12.0 |
| 34 Ethyl Acetate | 43 | 5.904 | 5.904 | (0.836) | 786412 | 10.6200 | 11.9 |
| 35 cis-1,2-Dichloroethene | 96 | 5.916 | 5.916 | (0.838) | 510750 | 10.7700 | 11.9 |
| 36 Ethyl Tert-Butyl Ether | 59 | 6.019 | 6.019 | (0.852) | 1376089 | 10.7500 | 12.3 |
| 37 Chloroform | 83 | 6.142 | 6.142 | (0.870) | 925758 | 10.5600 | 11.7 |
| 38 Tetrahydrofuran | 42 | 6.244 | 6.244 | (0.884) | 413476 | 10.6900 | 12.3 |
| 39 1,1,1-Trichloroethane | 97 | 6.531 | 6.531 | (0.925) | 902157 | 10.7000 | 11.7 |
| 40 1,2-Dichloroethane | 62 | 6.624 | 6.624 | (0.938) | 504946 | 10.8000 | 12.3 |
| 41 Benzene | 78 | 6.817 | 6.817 | (0.965) | 1513605 | 10.7300 | 11.8 |
| 42 Carbon tetrachloride | 117 | 6.836 | 6.836 | (0.968) | 910691 | 10.8500 | 12.5 |
| 43 Cyclohexane | 56 | 6.865 | 6.865 | (0.972) | 681729 | 10.6900 | 11.7 |
| 44 Tert Amyl Methyl Ether | 73 | 6.994 | 6.994 | (0.990) | 1405652 | 10.7500 | 10.7 |
| * 45 1,4-Difluorobenzene | 114 | 7.061 | 7.061 | (1.000) | 2061354 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 7.183 | 7.183 | (1.017) | 2140445 | 10.7400 | 11.8 |
| 47 Heptane | 43 | 7.325 | 7.325 | (1.037) | 676930 | 10.7100 | 12.1 |
| 48 Trichloroethene | 130 | 7.457 | 7.457 | (1.056) | 720794 | 10.7000 | 11.9 |
| 49 Methyl methacrylate | 69 | 7.498 | 7.498 | (1.062) | 511987 | 10.7300 | 11.3 |
| 50 1,2-Dichloropropane | 63 | 7.511 | 7.511 | (1.064) | 505966 | 10.7700 | 12.1 |
| 51 1,4-Dioxane | 88 | 7.579 | 7.579 | (1.073) | 895829 | 26.8100 | 30.6 |
| 52 Bromodichloromethane | 83 | 7.695 | 7.695 | (1.090) | 956220 | 10.7400 | 12.1 |
| 53 Methylcyclohexane | 98 | 8.010 | 8.010 | (1.134) | 452257 | 10.7500 | 12.2 |
| 54 Methyl Isobutyl Ketone | 43 | 8.103 | 8.103 | (1.148) | 887334 | 10.7800 | 10.9 |
| 55 cis-1,3-Dichloropropene | 75 | 8.180 | 8.180 | (1.158) | 818840 | 10.7100 | 12.3 |
| 56 trans-1,3-Dichloropropene | 75 | 8.678 | 8.678 | (1.229) | 686183 | 10.9500 | 10.8(M) |
| 57 Toluene | 91 | 8.804 | 8.804 | (1.247) | 1908006 | 10.8500 | 12.3 |
| 58 1,1,2-Trichloroethane | 97 | 8.936 | 8.936 | (1.265) | 599369 | 10.7500 | 12.1 |
| 59 Methyl Butyl Ketone | 43 | 9.061 | 9.061 | (0.865) | 783014 | 10.7500 | 10.7(M) |
| 60 n-Octane | 43 | 9.264 | 9.264 | (0.885) | 913223 | 10.7500 | 10.8 |
| 61 Dibromochloromethane | 129 | 9.547 | 9.547 | (0.912) | 1045123 | 10.7600 | 12.2 |
| 62 Tetrachloroethene | 166 | 9.643 | 9.643 | (0.921) | 944417 | 10.6500 | 11.6 |
| 63 1,2-Dibromoethane | 107 | 9.778 | 9.778 | (0.934) | 886626 | 10.5600 | 12.5 |
| * 64 Chlorobenzene - d5 | 117 | 10.473 | 10.473 | (1.000) | 1606804 | 10.0000 | |
| 65 Chlorobenzene | 112 | 10.524 | 10.524 | (1.005) | 1469832 | 10.7200 | 12.0 |
| 66 Ethyl Benzene | 91 | 10.759 | 10.759 | (1.027) | 2368979 | 10.8400 | 10.8 |
| 67 m&p-Xylene | 91 | 10.958 | 10.958 | (1.046) | 3667662 | 21.6100 | 25.2(M) |
| 68 n-Nonane | 43 | 11.315 | 11.315 | (1.080) | 949144 | 10.7700 | 11.0 |
| 69 Styrene | 104 | 11.408 | 11.408 | (1.089) | 1482292 | 10.8500 | 10.9(M) |
| 70 o-Xylene | 91 | 11.450 | 11.450 | (1.093) | 1885784 | 10.7700 | 12.4 |
| 71 Bromoform | 173 | 11.534 | 11.534 | (1.101) | 1011804 | 10.8400 | 12.7 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 11.891 | 11.891 | (1.135) | 1307417 | 10.8100 | 10.7 |
| 73 Isopropylbenzene | 105 | 12.058 | 12.058 | (1.151) | 2775470 | 10.6700 | 10.6 |
| 74 N-Propylbenzene | 91 | 12.681 | 12.681 | (1.211) | 3202807 | 10.8100 | 10.7 |
| 75 2-Chlorotoluene | 91 | 12.730 | 12.730 | (1.216) | 1985829 | 10.8700 | 12.6(M) |
| 76 4-Ethyltoluene | 105 | 12.868 | 12.868 | (1.229) | 2624856 | 10.7400 | 10.7 |
| 77 1,3,5-Trimethylbenzene | 105 | 12.935 | 12.935 | (1.235) | 2325642 | 10.7500 | 12.4 |

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Report Date: 09-Sep-2021 15:02

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 78 n-Decane | 57 | 13.257 | 13.257 | (1.877) | 1279464 | 10.8700 | 10.8 |
| 79 Tert-Butyl Benzene | 119 | 13.376 | 13.376 | (1.277) | 2339320 | 10.8400 | 12.5 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.415 | 13.415 | (1.281) | 2312250 | 10.8100 | 10.9 |
| 81 Sec- Butylbenzene | 105 | 13.672 | 13.672 | (1.305) | 3432634 | 10.8500 | 10.8 |
| 82 1,3-Dichlorobenzene | 146 | 13.710 | 13.710 | (1.309) | 1336824 | 10.8500 | 10.7 |
| 83 Benzyl Chloride | 91 | 13.778 | 13.778 | (1.316) | 1291678 | 10.9400 | 10.5 |
| 84 1,4-Dichlorobenzene | 146 | 13.842 | 13.842 | (1.322) | 1204241 | 10.8500 | 10.7 |
| 85 p-Isopropyltoluene | 119 | 13.874 | 13.874 | (1.325) | 3143044 | 10.8900 | 10.8 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.897 | 13.897 | (1.327) | 2398304 | 10.8500 | 10.8 |
| 87 1,2-Dichlorobenzene | 146 | 14.161 | 14.161 | (1.352) | 1370044 | 10.8300 | 10.8 |
| 88 N-Butylbenzene | 91 | 14.334 | 14.334 | (1.369) | 2410155 | 10.8100 | 10.6 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.884 | 14.884 | (1.421) | 695096 | 10.9100 | 10.3 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.971 | 15.971 | (1.525) | 1150398 | 23.4900 | 23.7 |
| 91 Naphthalene | 128 | 16.157 | 16.157 | (1.543) | 1595577 | 12.2500 | 12.1 |
| 92 Hexachlorobutadiene | 225 | 16.279 | 16.279 | (1.554) | 1046110 | 12.2500 | 12.2 |

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

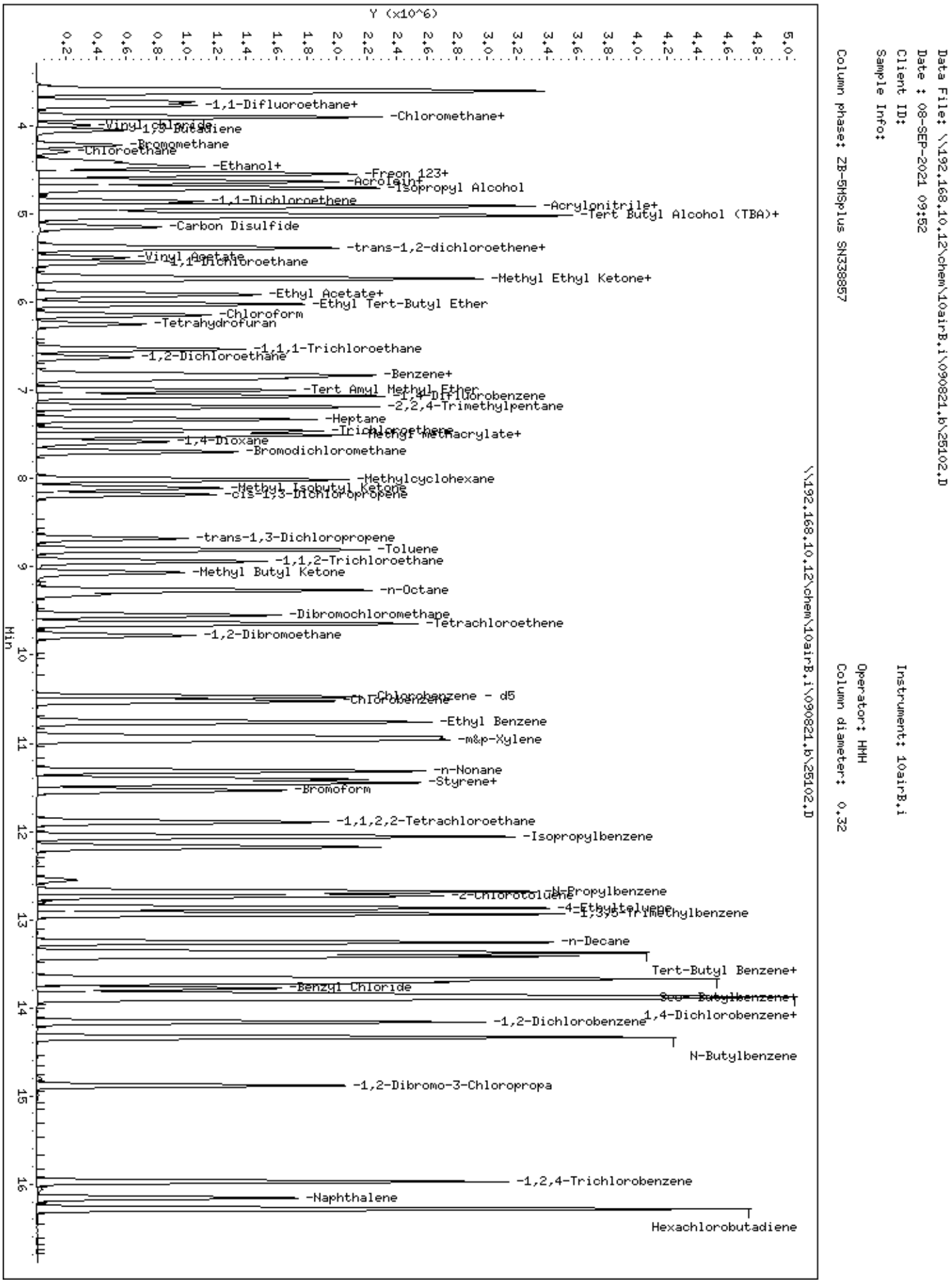
Instrument ID: 10airB.i
Calibration Date: 07-SEP-2021
Lab File ID: 25102.D
Calibration Time: 09:50
Lab Smp Id: CCV
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2061354 | -2.41 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1606804 | -2.90 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.06 | 0.04 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | 0.03 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.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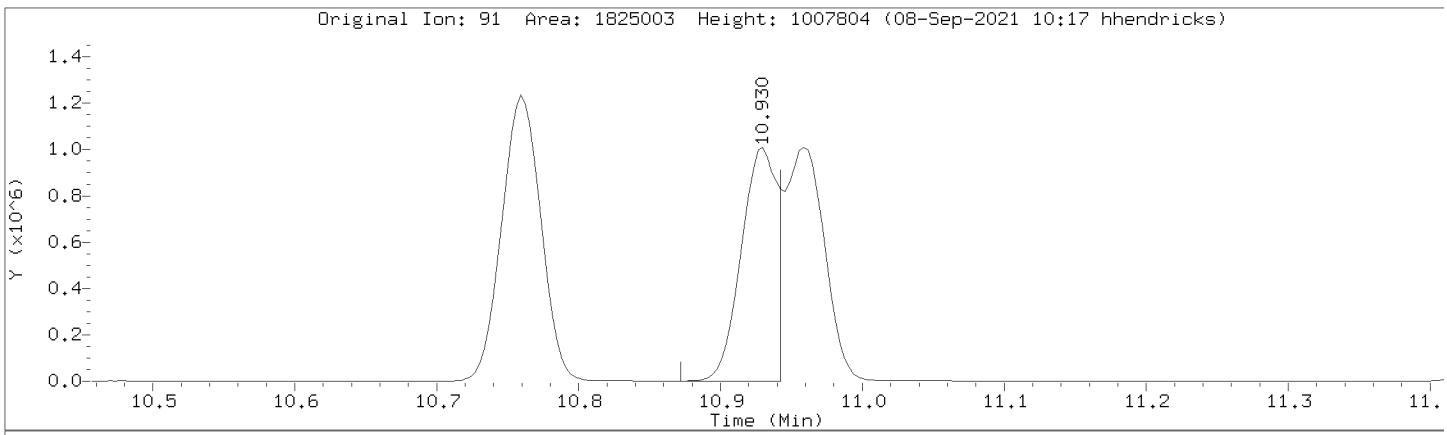
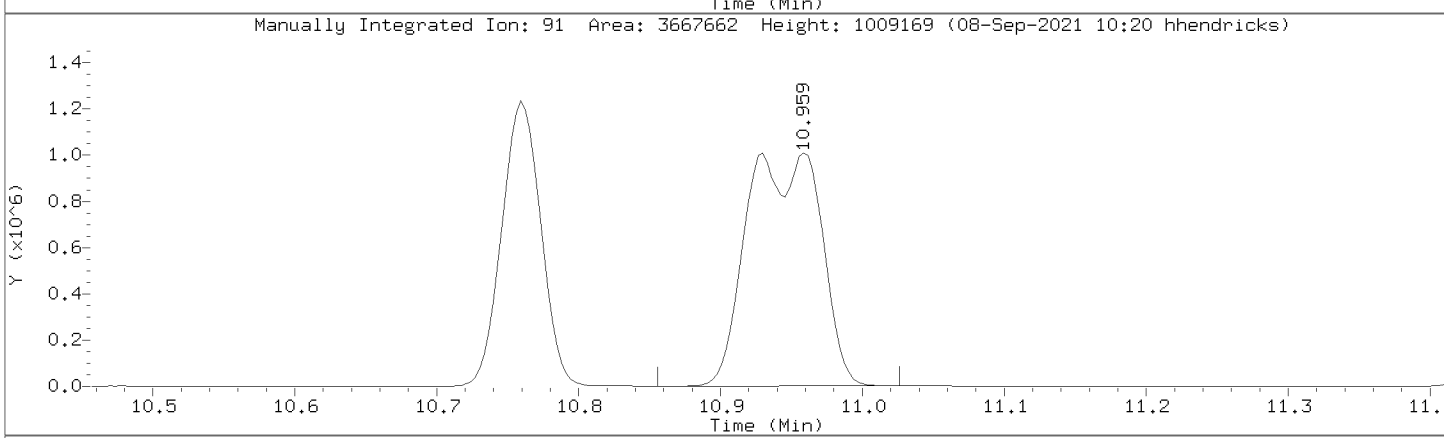
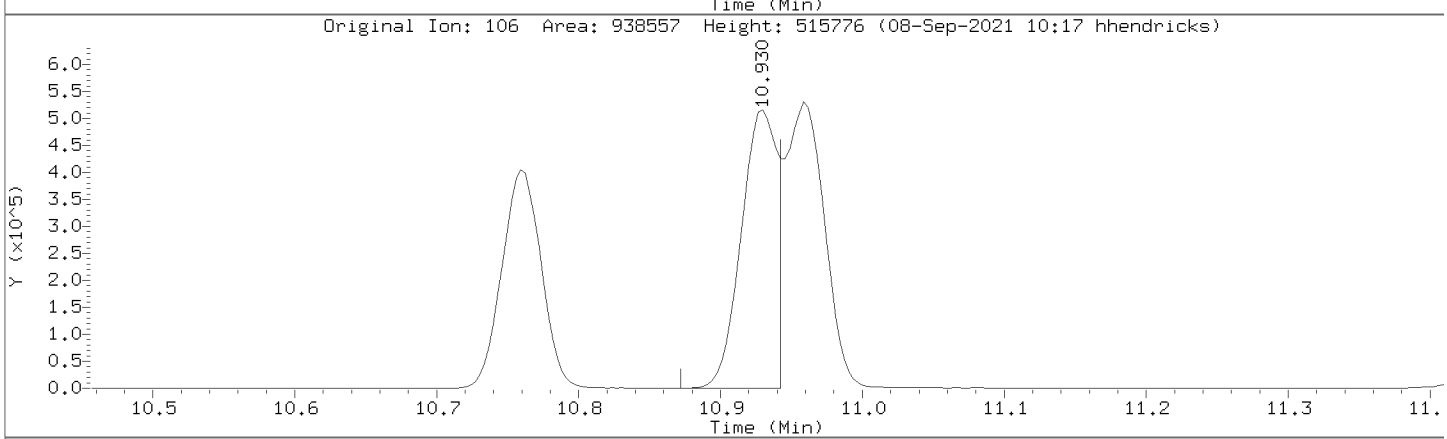
Date : 08-SEP-2021 09:52
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airB.i
Operator: HMH
Column diameter: 0.32
\\192.168.10.12\chem\10airB.i\090821.b\25102.D
Y (x10^6)
Min
-1,1-Difluoroethane+
-Chloromethane+
-Vinyl Chloride
-1,3-Butadiene
-Bromomethane
-Chloroethane
-Ethanol+
-Freon 123+
-Acrolein+
-Isopropyl Alcohol
-1,1-Dichloroethene
-Acrylonitrile+
-Tert Butyl Alcohol (TBA)+
-Carbon Disulfide
-trans-1,2-dichloroethene+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl Methacrylate+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5
-Chlorobenzene
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-2-Chlorotoluene
-N-Propylbenzene
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
Tert-Butyl Benzene+
-Benzyl Chloride
Sec-Butylbenzene+
1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
Hexachlorobutadiene

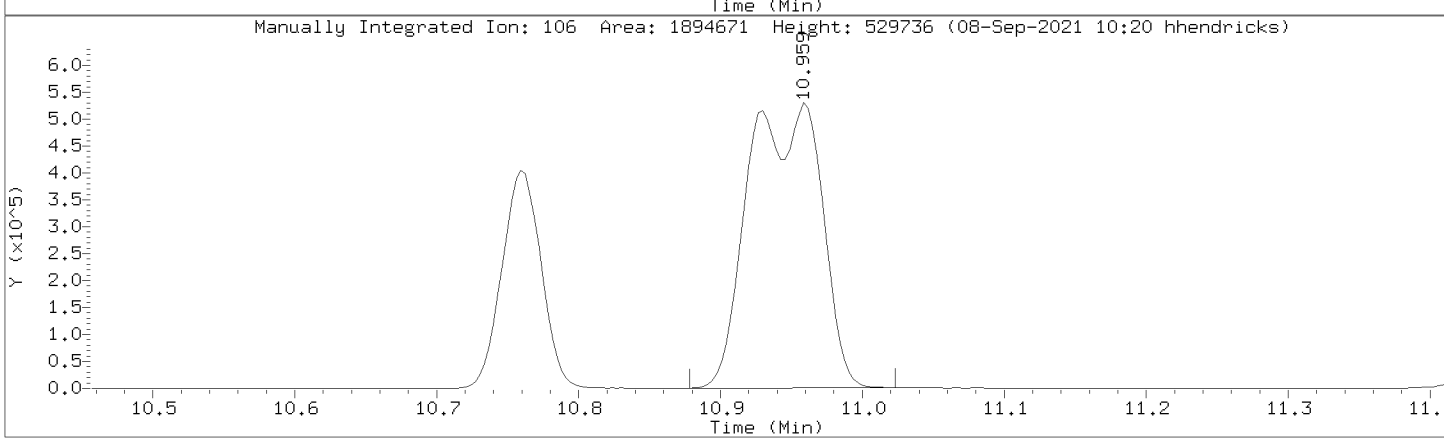
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25102.D
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV

Compound: m&p-Xylene
CAS Number: 7816-60-0



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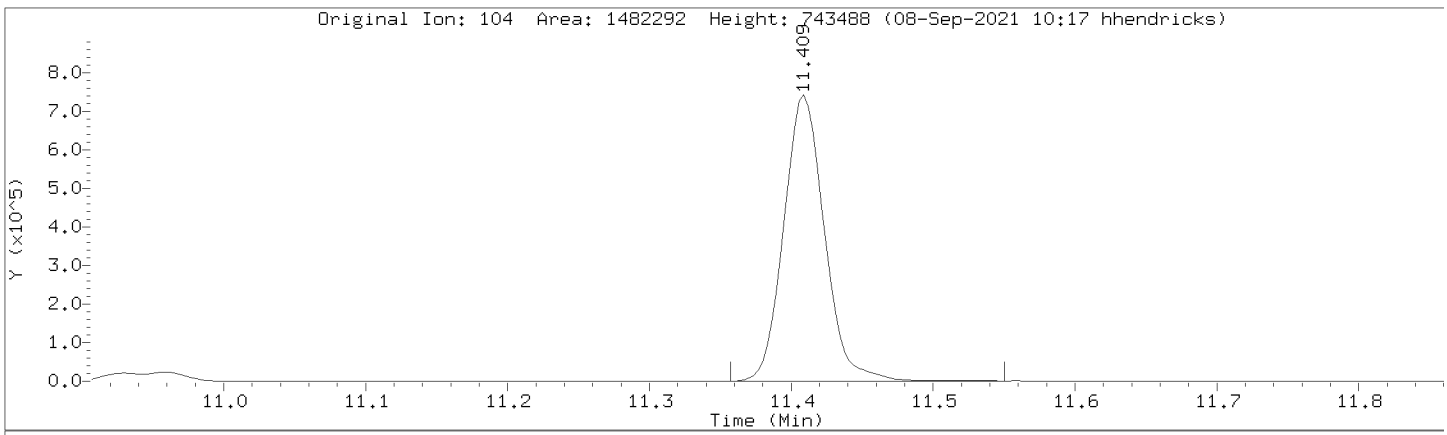
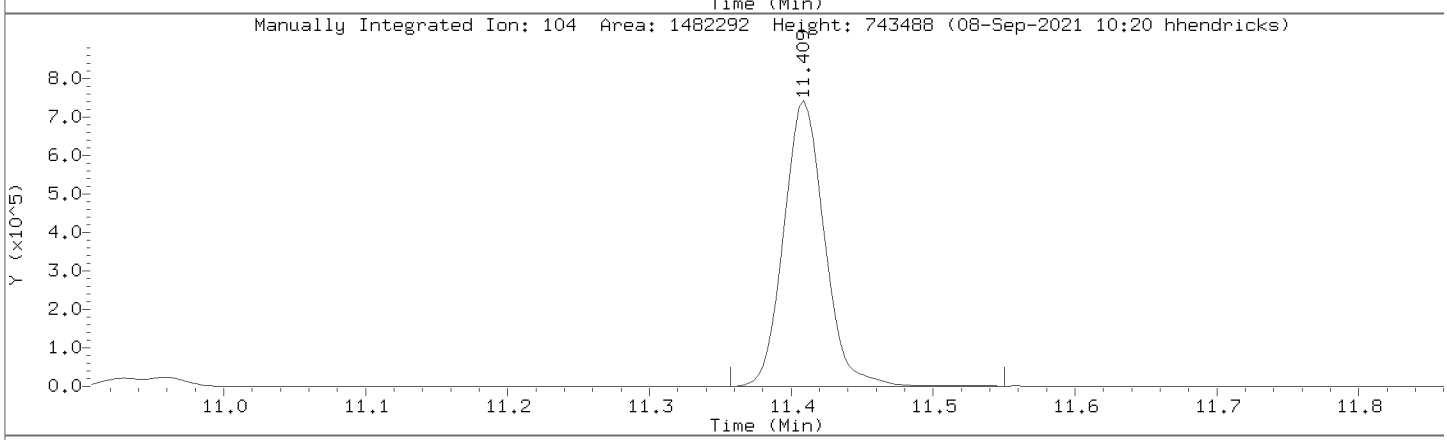
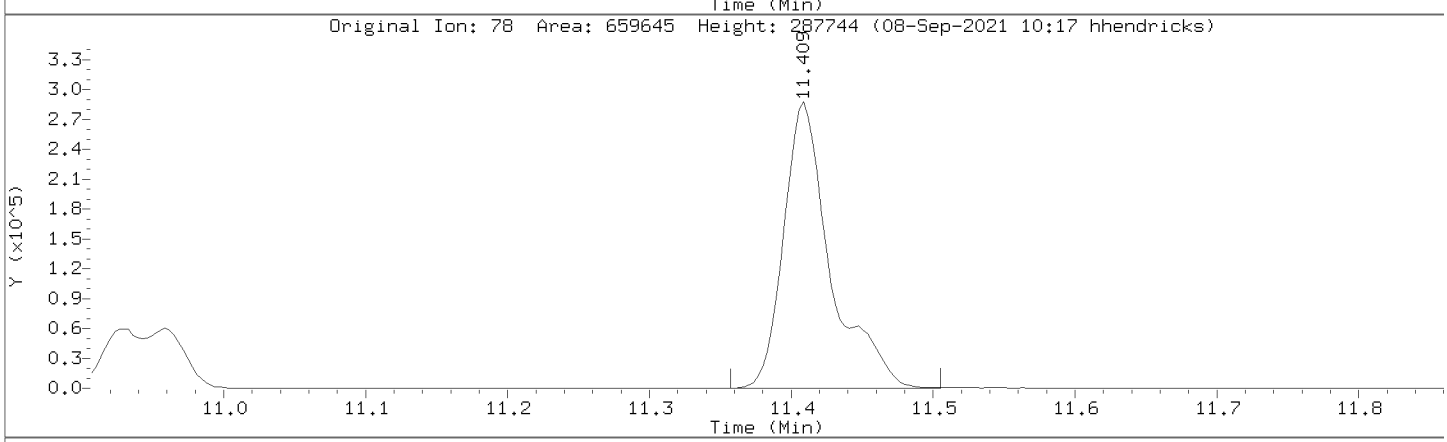
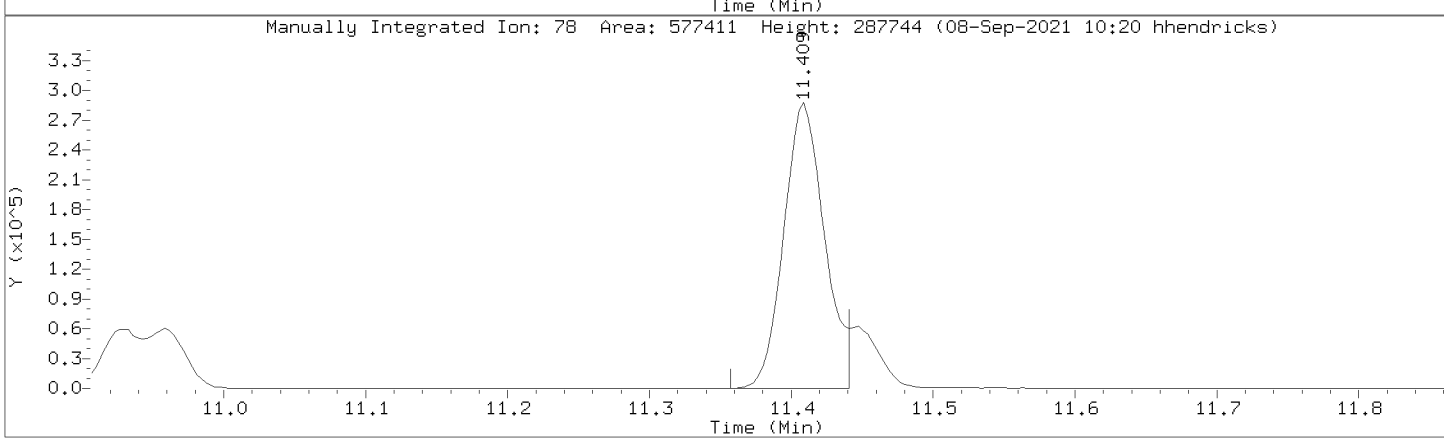
Instrument: 10airB.i
Lab Sample ID: CCV

Compound: Styrene
CAS Number: 100-42-5



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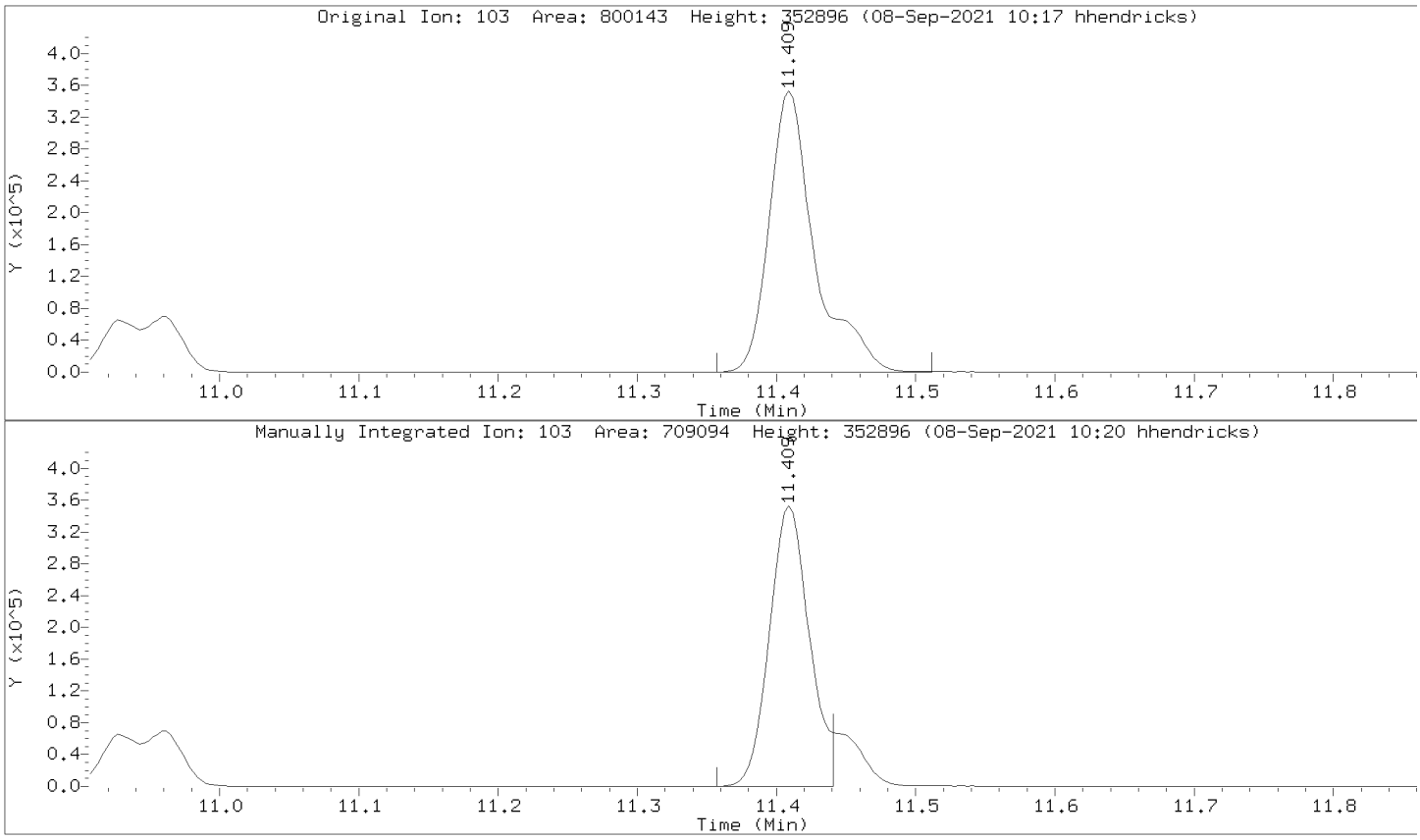
Instrument: 10airB.i
Lab Sample ID: CCV



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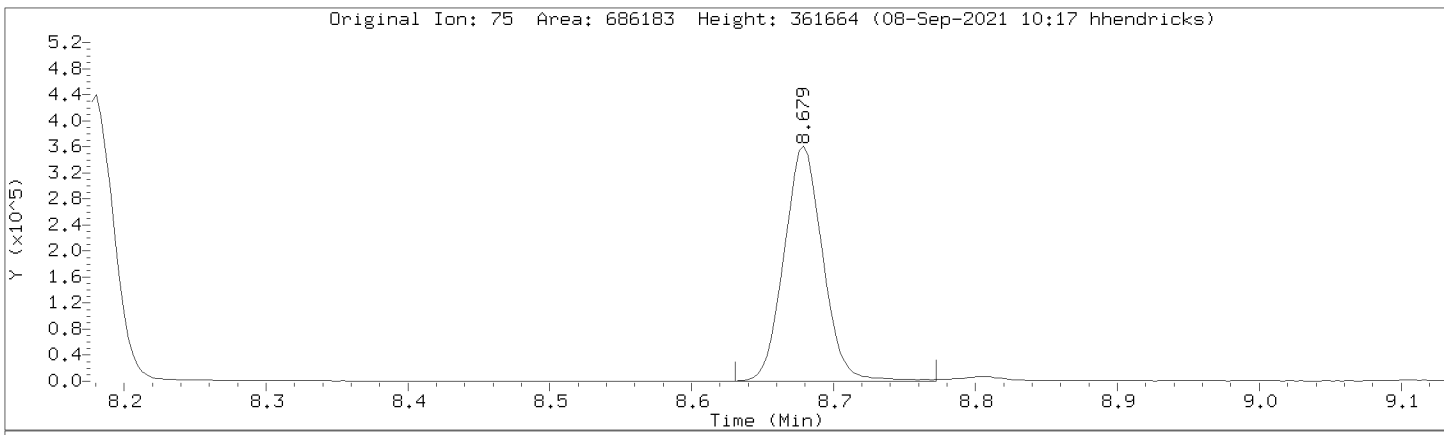
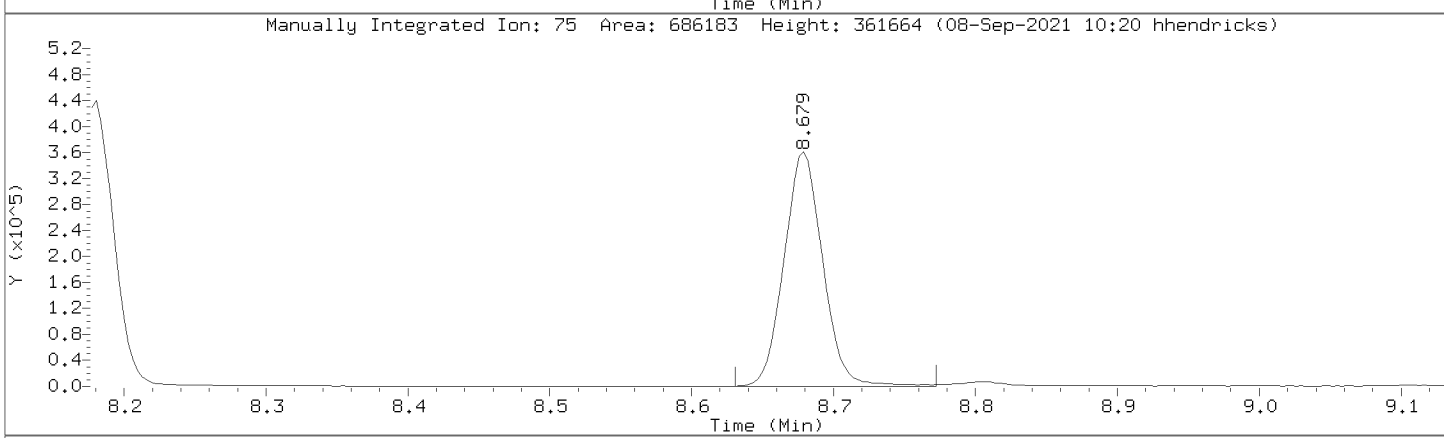
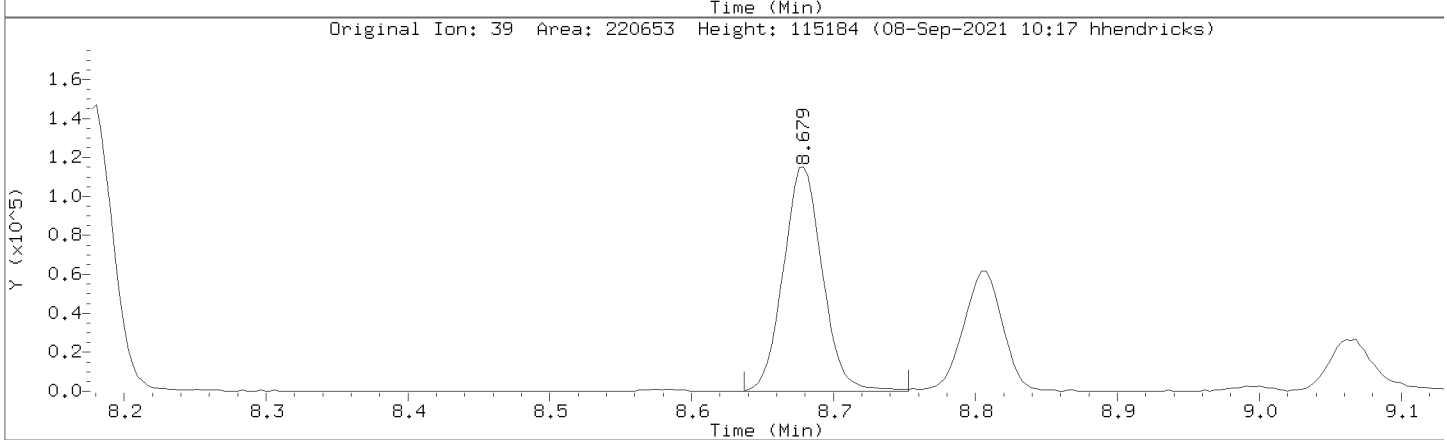
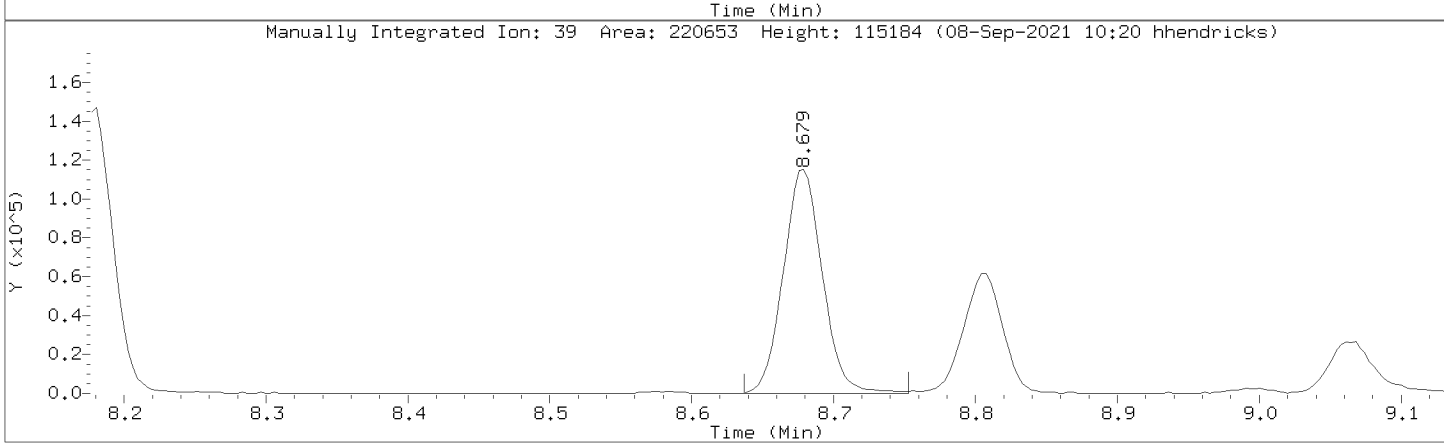
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV

Compound: trans-1,3-Dichloropropene
CAS Number: 10061-02-6



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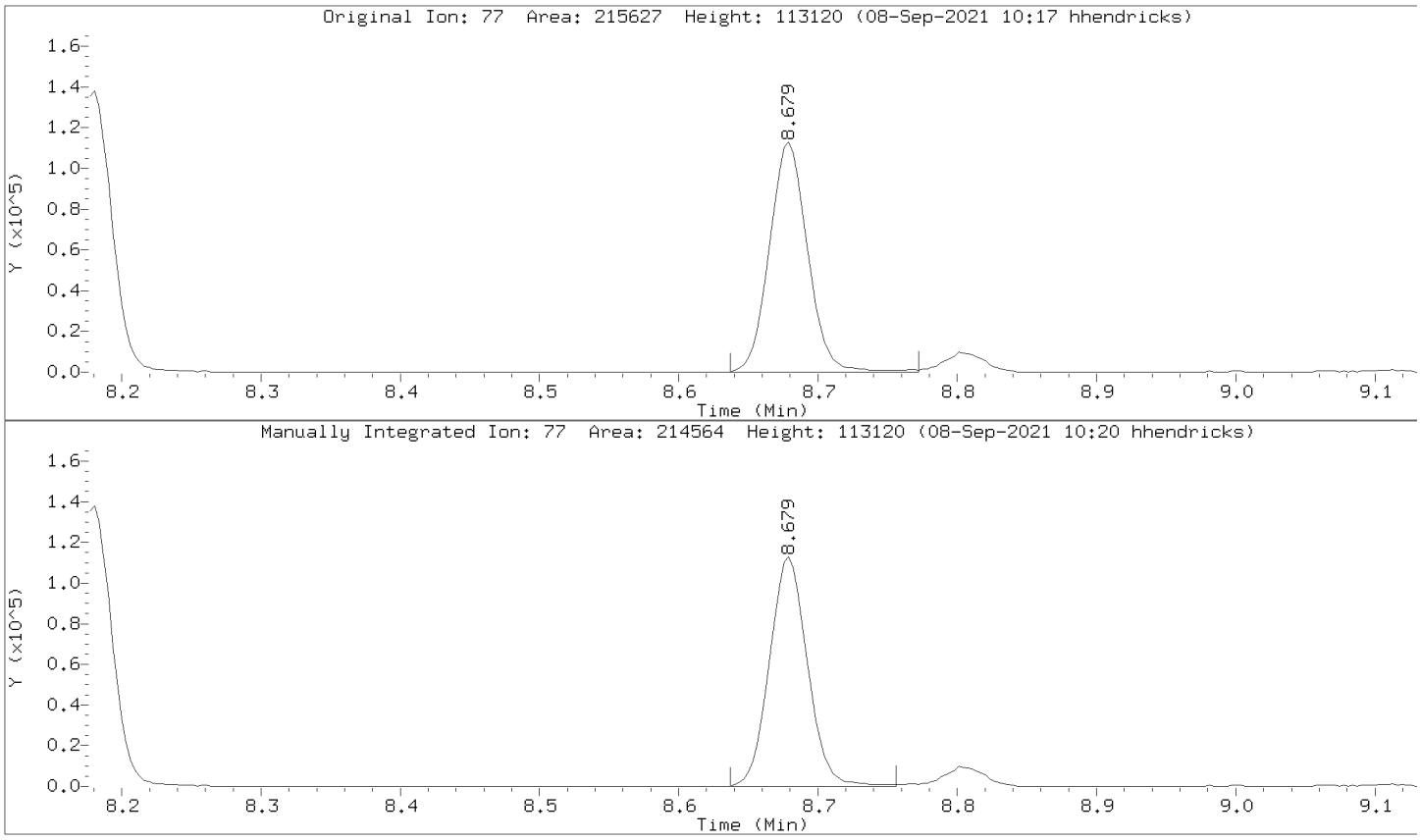
Lab Sample ID: CCV



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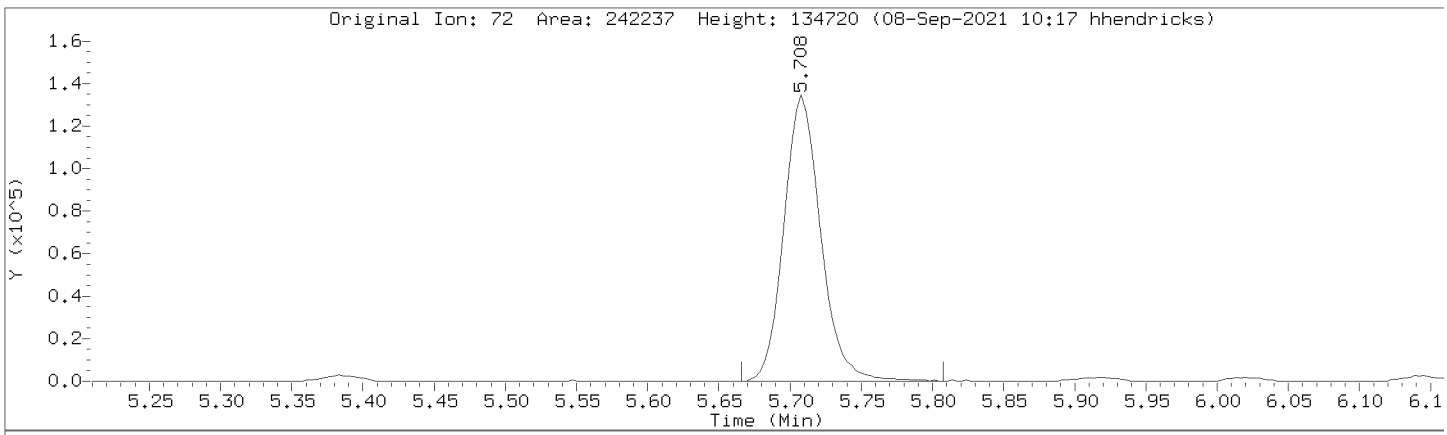
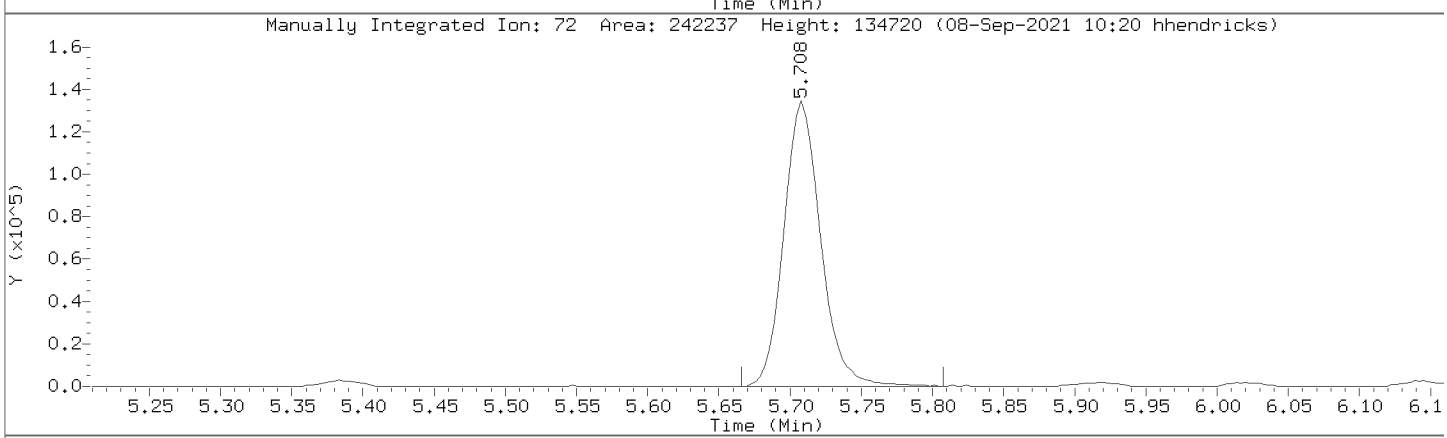
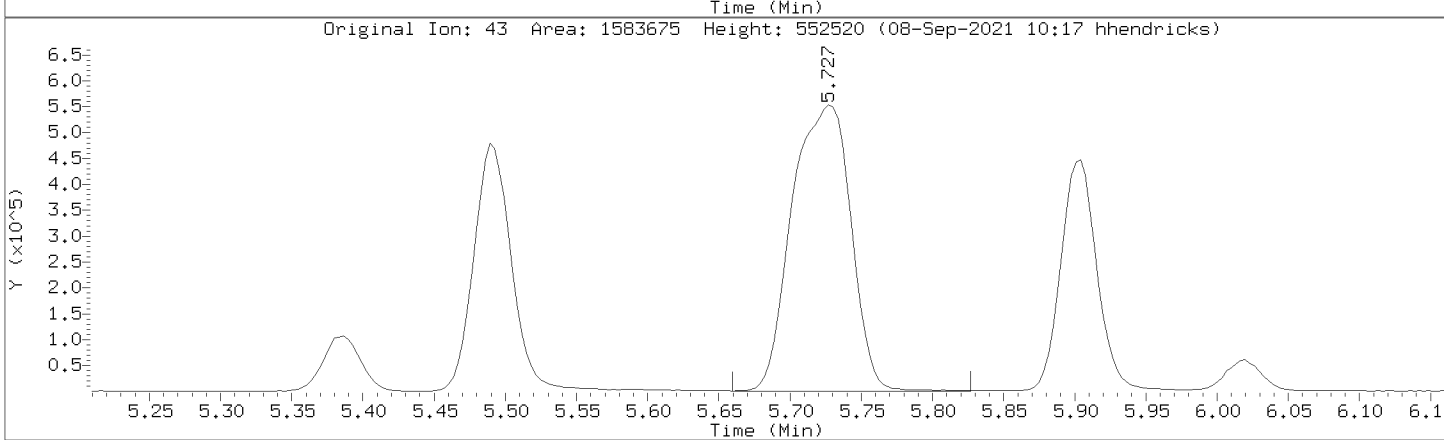
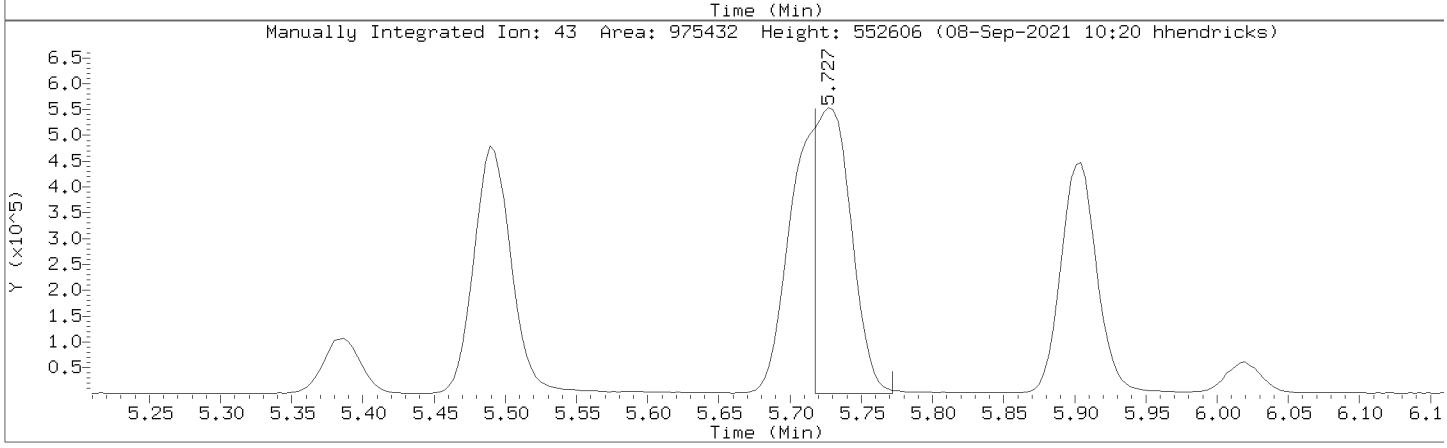
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3



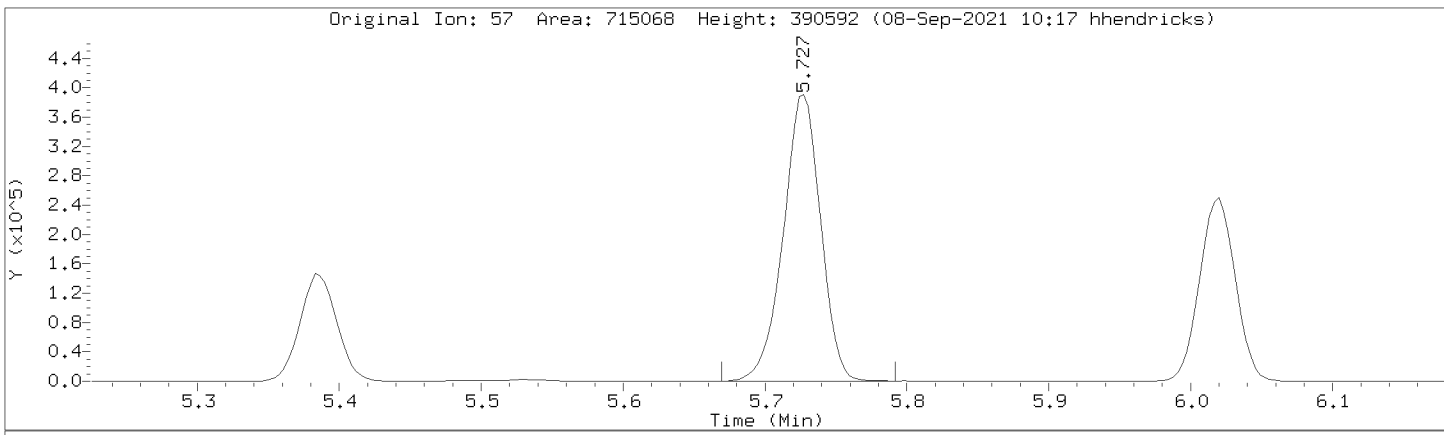



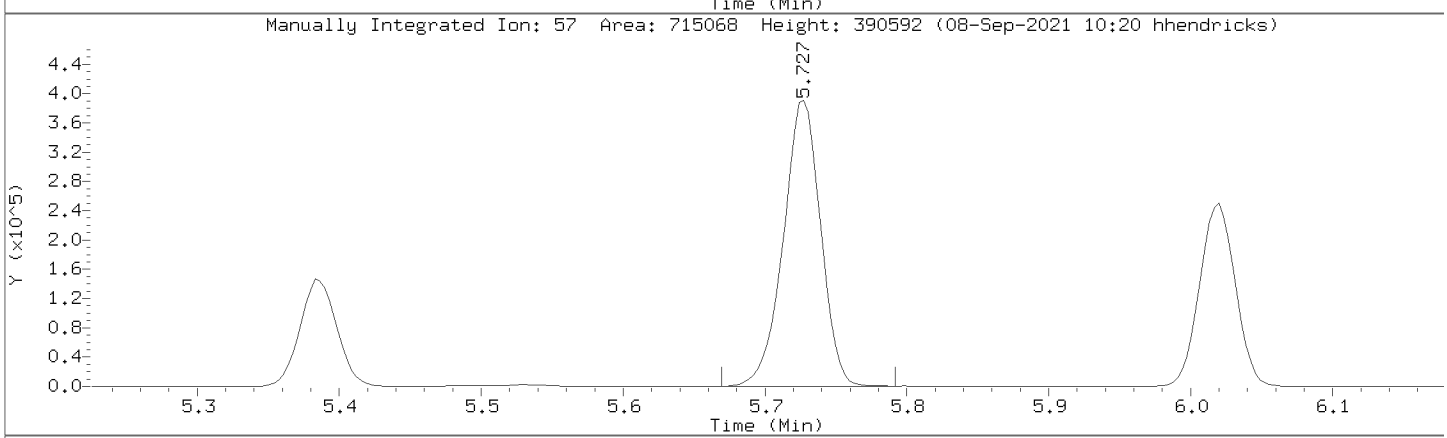



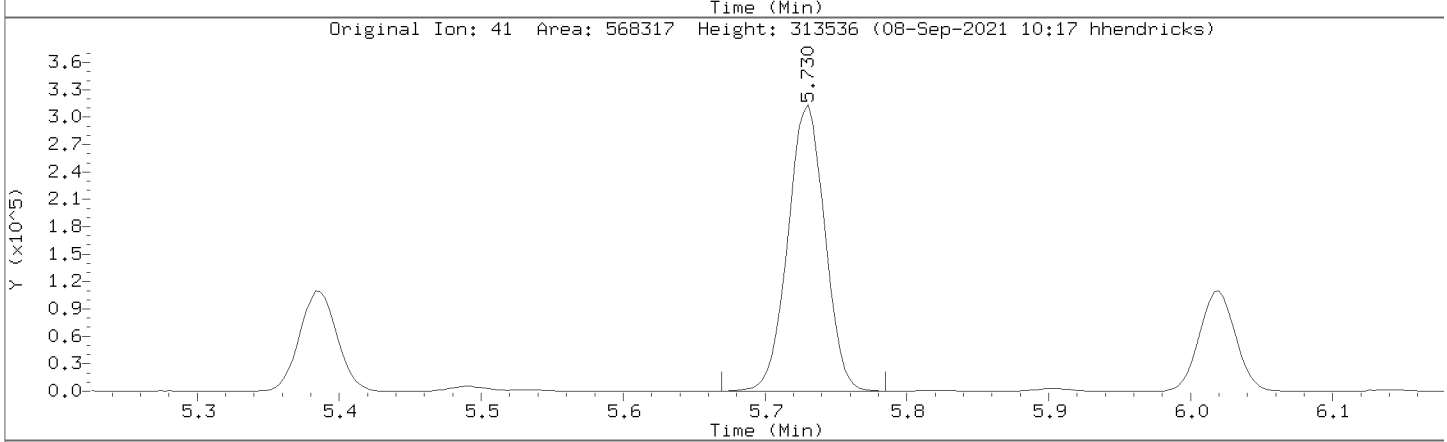



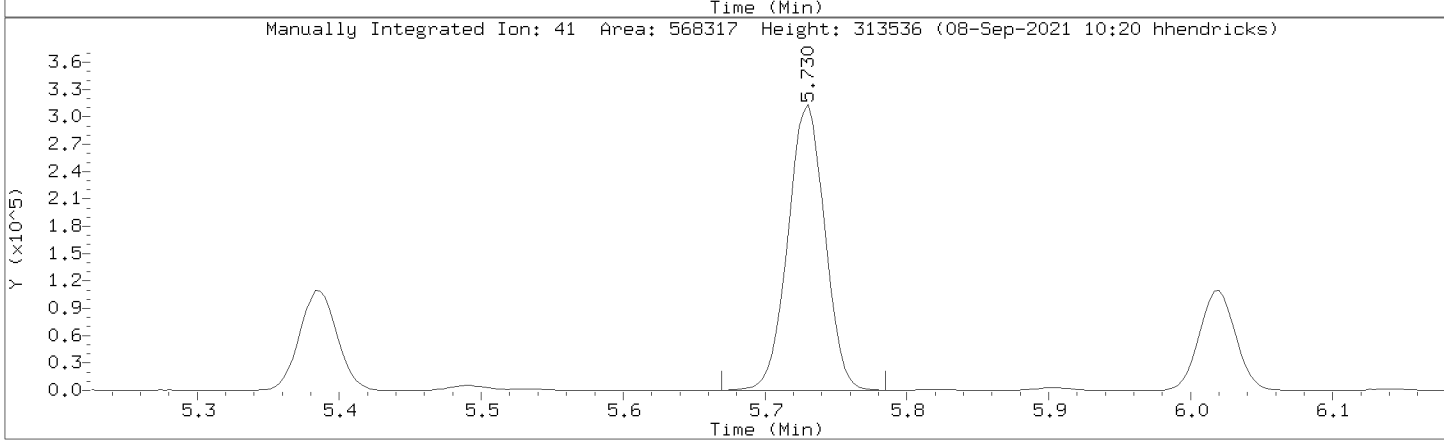
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25102.D
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV

Compound: n-Hexane
CAS Number: 110-54-3



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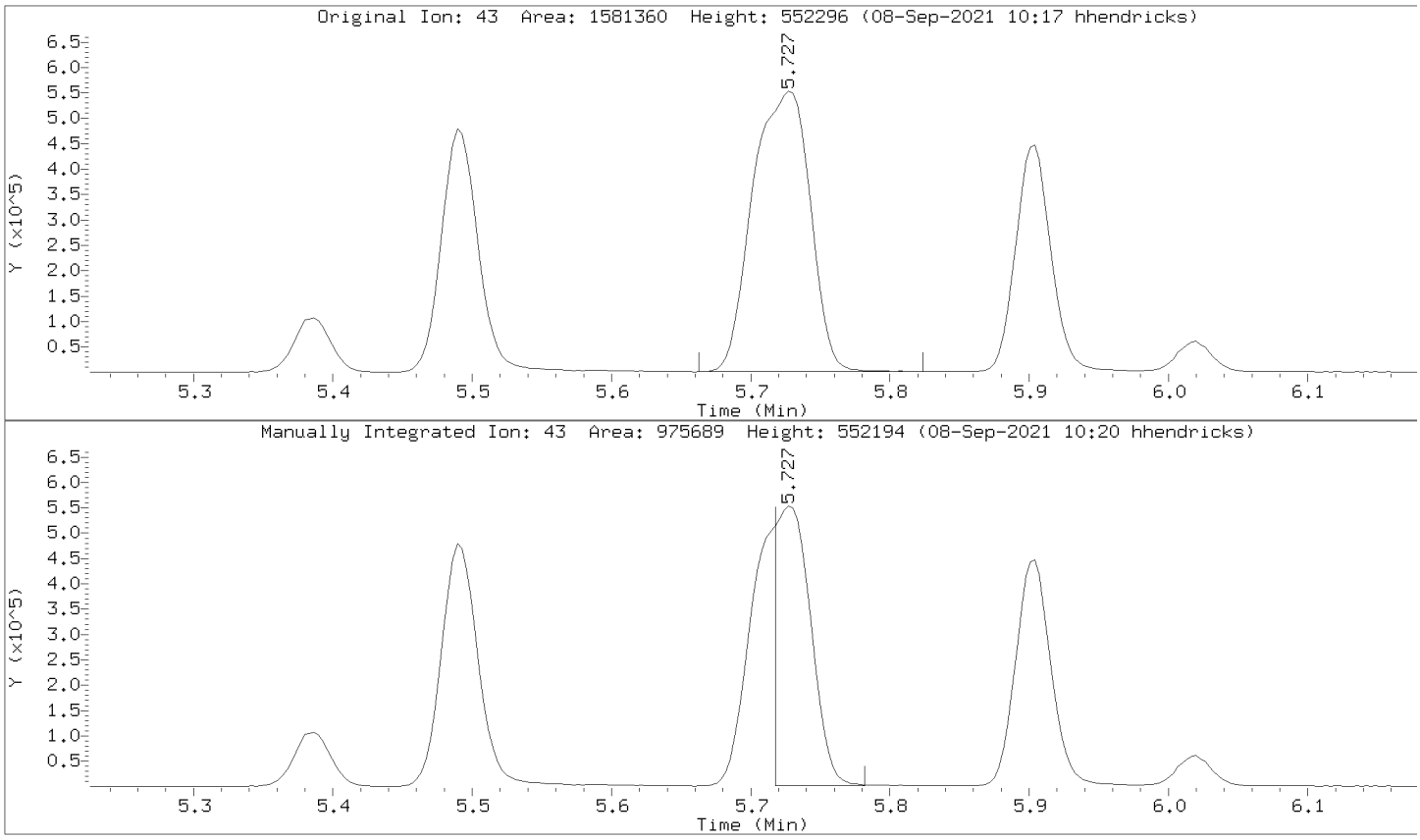
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV



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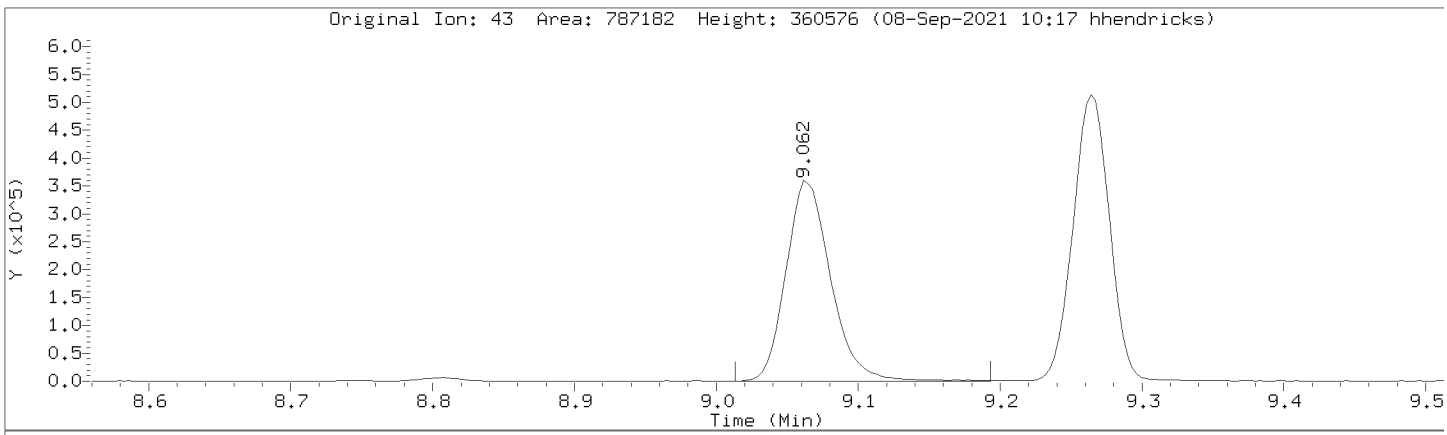
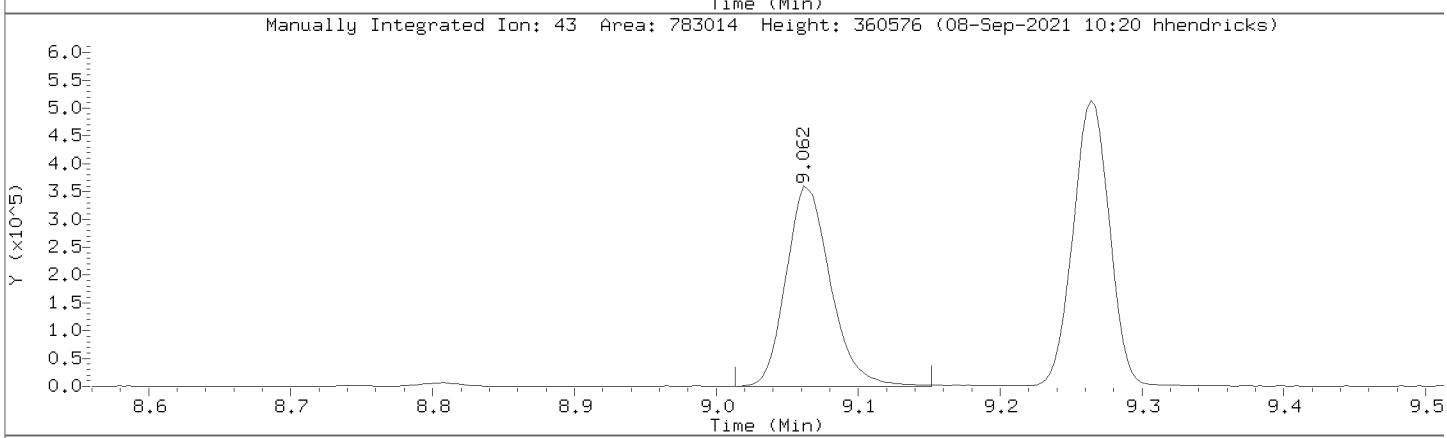
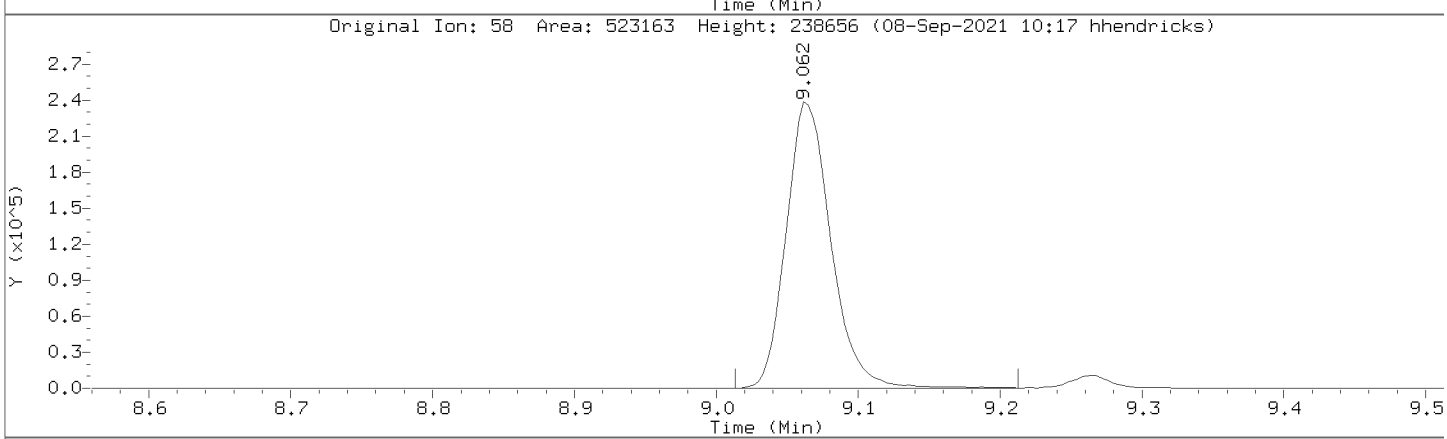
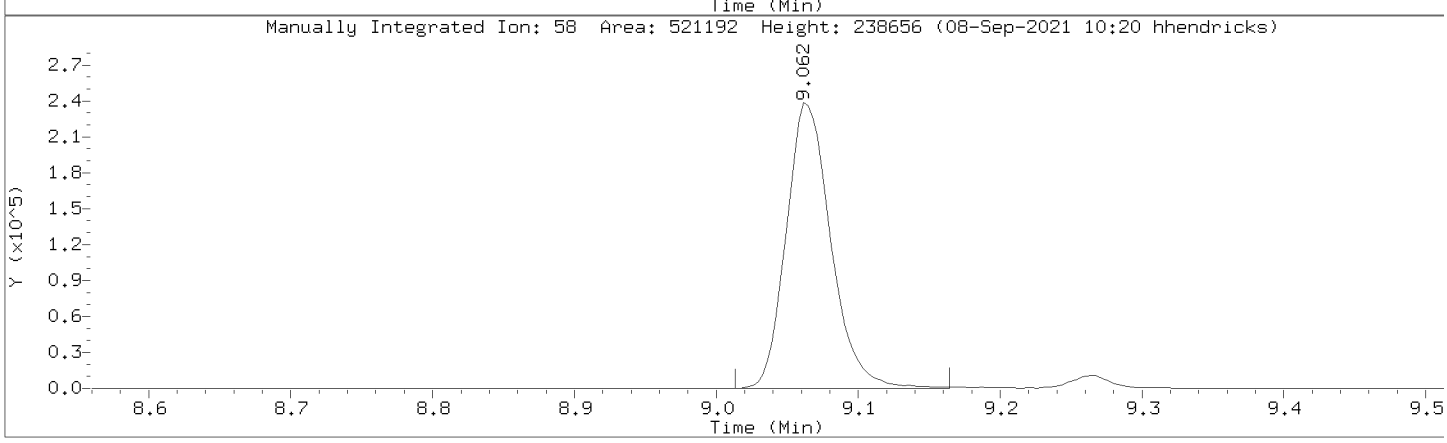
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV

Compound: Methyl Butyl Ketone
CAS Number: 591-78-6



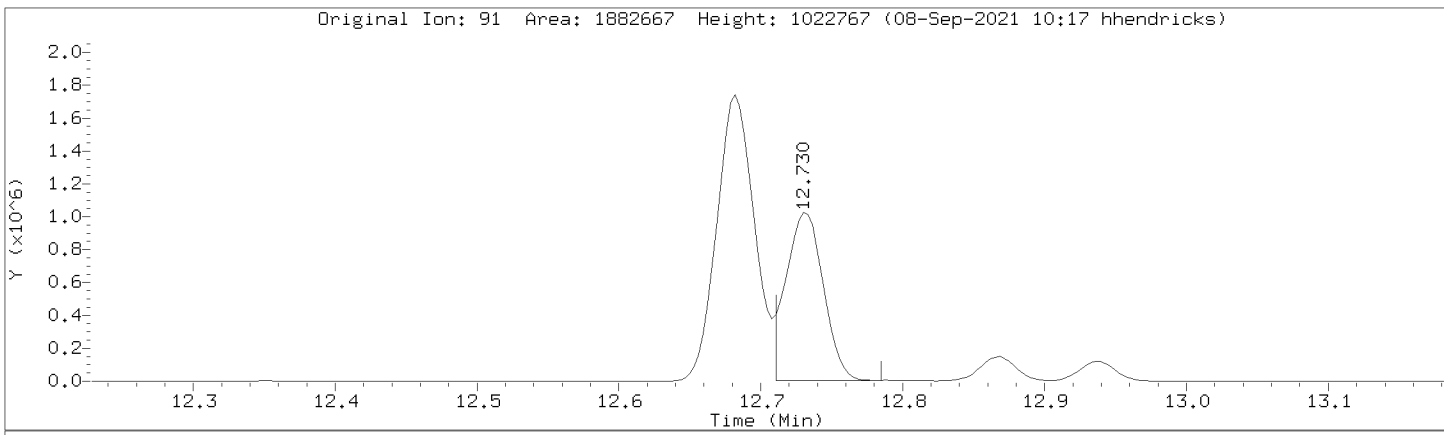



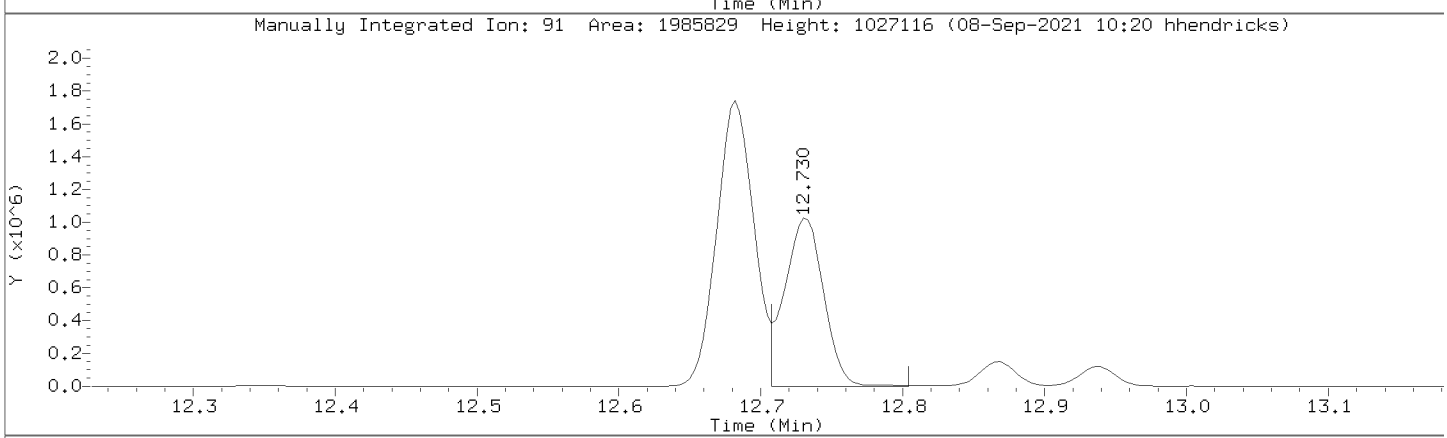



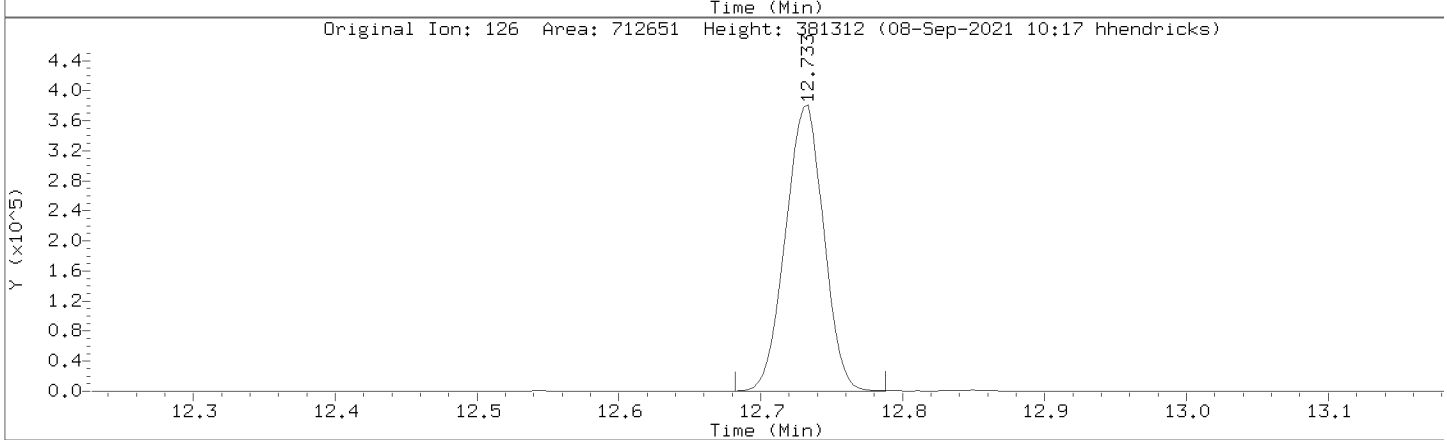



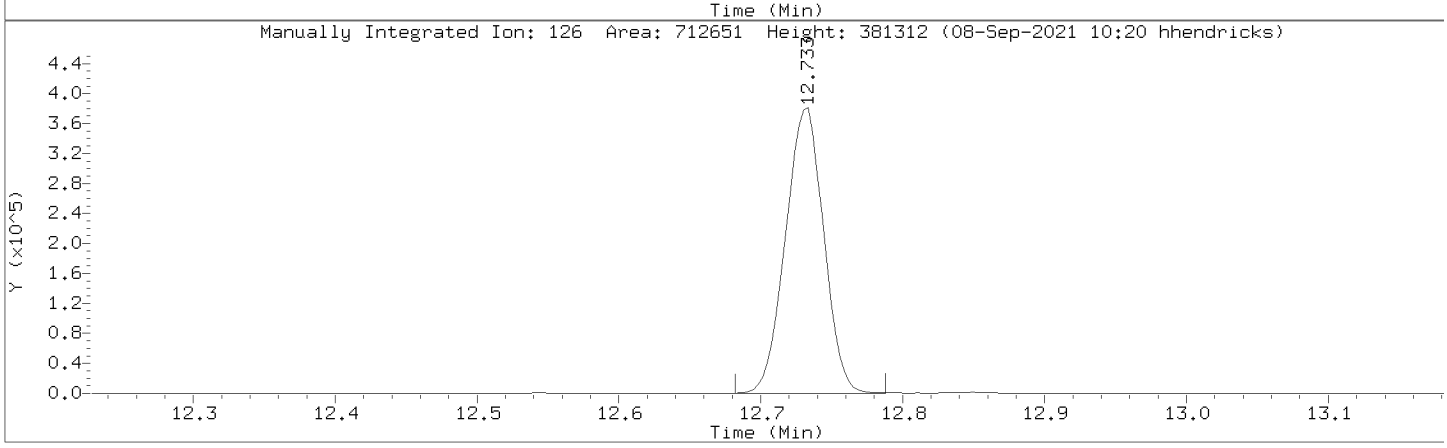
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25102.D
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

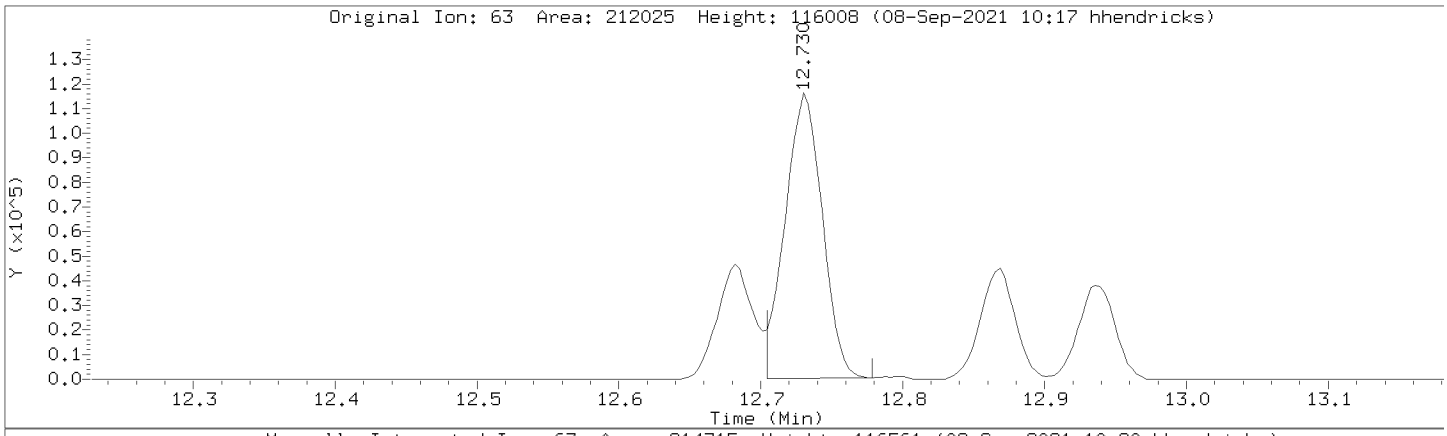


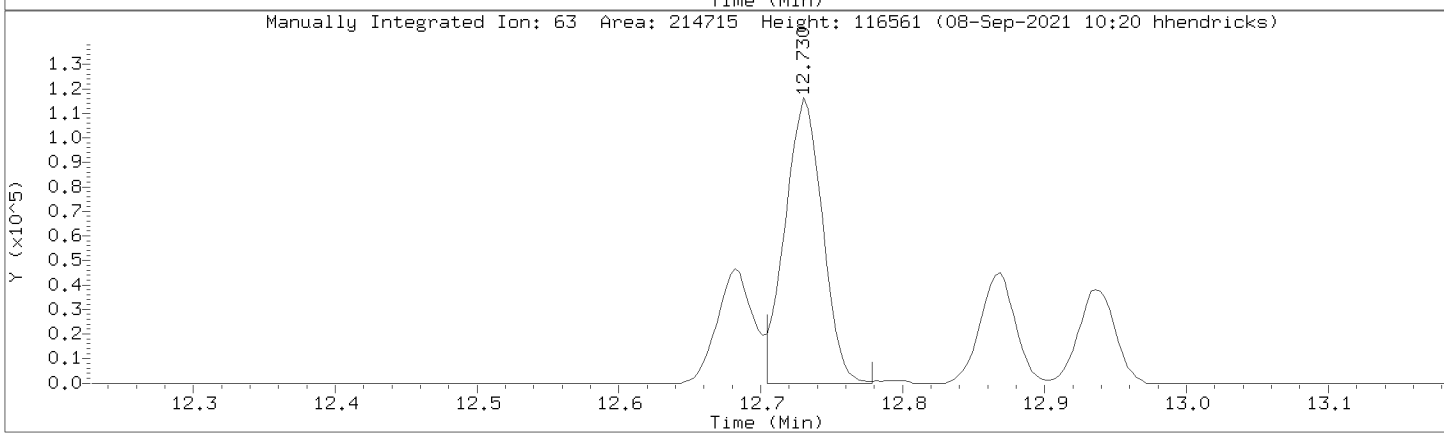



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25102.D
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: CCV



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airH.i  Injection Date: 08-SEP-2021 07:18
Lab File ID: 25102.D  Init. Cal. Date(s): 07-SEP-2021  07-SEP-2021
Analysis Type: AIR  Init. Cal. Times:  08:26  11:01
Lab Sample ID: CCV  Quant Type:  ISTD
Method: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m

| COMPOUND | RRF / AMOUNT | RF10 | CCAL RRF10 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE | QC FLAGS |
|---|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 10.71000 | 10.13661 | 0.29100 | 0.010 | -5.35381 | 30.00000 | Quad | (M) |
| 2 Chlorodifluoromethane | 10.72000 | 9.68837 | 0.10687 | 0.010 | -9.62339 | 30.00000 | Quad | (M) |
| 3 Propylene | 0.47389 | 0.39535 | 0.39535 | 0.010 | -16.57368 | 30.00000 | Aver | |
| 4 Dichlorodifluoromethane | 1.15547 | 0.97988 | 0.97988 | 0.010 | -15.19643 | 30.00000 | Aver | |
| 5 Dichlorotetrafluoroethane | 1.16611 | 1.05608 | 1.05608 | 0.010 | -9.43628 | 30.00000 | Aver | |
| 6 Chloromethane | 0.60054 | 0.55175 | 0.55175 | 0.010 | -8.12533 | 30.00000 | Aver | |
| 7 Vinyl chloride | 0.46707 | 0.46129 | 0.46129 | 0.010 | -1.23791 | 30.00000 | Aver | |
| 8 1,3-Butadiene | 0.32952 | 0.34113 | 0.34113 | 0.010 | 3.52585 | 30.00000 | Aver | |
| 9 Bromomethane | 0.35135 | 0.34076 | 0.34076 | 0.010 | -3.01418 | 30.00000 | Aver | |
| 10 Chloroethane | 0.19048 | 0.20755 | 0.20755 | 0.010 | 8.96314 | 30.00000 | Aver | |
| 11 Ethanol | 0.12779 | 0.13216 | 0.13216 | 0.005 | 3.41828 | 30.00000 | Aver | |
| 12 Vinyl Bromide | 0.31919 | 0.32415 | 0.32415 | 0.010 | 1.55553 | 30.00000 | Aver | |
| 13 Isopentane | 0.39854 | 0.40628 | 0.40628 | 0.010 | 1.94015 | 30.00000 | Aver | |
| 14 Freon 123 | 0.77921 | 0.73656 | 0.73656 | 0.010 | -5.47396 | 30.00000 | Aver | |
| 15 Trichlorofluoromethane | 1.02868 | 0.88423 | 0.88423 | 0.010 | -14.04202 | 30.00000 | Aver | |
| 16 Acrolein | 0.14807 | 0.15618 | 0.15618 | 0.010 | 5.47647 | 30.00000 | Aver | |
| 17 Acetone | 52.96000 | 55.16286 | 0.49655 | 0.010 | 4.15948 | 30.00000 | Line | (A) |
| 18 Isopropyl Alcohol | 0.65403 | 0.54243 | 0.54243 | 0.010 | -17.06299 | 30.00000 | Aver | |
| 19 1,1-Dichloroethene | 0.76291 | 0.71225 | 0.71225 | 0.010 | -6.64147 | 30.00000 | Aver | |
| 20 Acrylonitrile | 0.32481 | 0.32798 | 0.32798 | 0.010 | 0.97482 | 30.00000 | Aver | |
| 21 Tert Butyl Alcohol (TBA) | 1.19842 | 1.01155 | 1.01155 | 0.010 | -15.59295 | 30.00000 | Aver | |
| 22 Methyl Acetate | 1.17717 | 0.91364 | 0.91364 | 0.010 | -22.38705 | 30.00000 | Aver | |
| 23 Freon 113 | 0.87408 | 0.78200 | 0.78200 | 0.010 | -10.53424 | 30.00000 | Aver | |
| 24 Allyl Chloride | 0.16664 | 0.17319 | 0.17319 | 0.010 | 3.93032 | 30.00000 | Aver | |
| 25 Methylene chloride | 53.88000 | 51.82661 | 0.49903 | 0.010 | -3.81104 | 30.00000 | Quad | |
| 26 Carbon Disulfide | 1.15125 | 1.07874 | 1.07874 | 0.010 | -6.29845 | 30.00000 | Aver | |
| 27 Methyl Tert Butyl Ether | 1.07520 | 0.98782 | 0.98782 | 0.010 | -8.12680 | 30.00000 | Aver | |
| 28 trans-1,2-dichloroethene | 0.41755 | 0.38045 | 0.38045 | 0.010 | -8.88504 | 30.00000 | Aver | |
| 29 Vinyl Acetate | 0.97952 | 0.88349 | 0.88349 | 0.010 | -9.80347 | 30.00000 | Aver | |
| 30 1,1-Dichloroethane | 0.94184 | 0.85000 | 0.85000 | 0.010 | -9.75090 | 30.00000 | Aver | |
| 31 Methyl Ethyl Ketone | 0.18677 | 0.19122 | 0.19122 | 0.010 | 2.38257 | 30.00000 | Aver | |
| 32 Di-isopropyl Ether | 1.82690 | 1.55555 | 1.55555 | 0.010 | -14.85312 | 30.00000 | Aver | |
| 33 n-Hexane | 0.89353 | 0.76517 | 0.76517 | 0.010 | -14.36517 | 30.00000 | Aver | |
| 34 Ethyl Acetate | 1.23156 | 1.09703 | 1.09703 | 0.010 | -10.92387 | 30.00000 | Aver | (M) |
| 35 cis-1,2-Dichloroethene | 0.42768 | 0.38743 | 0.38743 | 0.010 | -9.41023 | 30.00000 | Aver | (M) |
| 36 Ethyl Tert-Butyl Ether | 1.64046 | 1.47235 | 1.47235 | 0.010 | -10.24781 | 30.00000 | Aver | |
| 37 Chloroform | 0.93367 | 0.83082 | 0.83082 | 0.010 | -11.01533 | 30.00000 | Aver | |
| 38 Tetrahydrofuran | 0.57954 | 0.55733 | 0.55733 | 0.010 | -3.83302 | 30.00000 | Aver | |
| 39 1,1,1-Trichloroethane | 0.89981 | 0.80452 | 0.80452 | 0.010 | -10.59043 | 30.00000 | Aver | |
| 40 1,2-Dichloroethane | 0.70793 | 0.62999 | 0.62999 | 0.010 | -11.00908 | 30.00000 | Aver | |
| 41 Benzene | 10.73000 | 10.81201 | 1.09445 | 0.010 | 0.76433 | 30.00000 | Quad | |
| 42 Carbon tetrachloride | 0.77296 | 0.79803 | 0.79803 | 0.010 | 3.24399 | 30.00000 | Aver | |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airH.i  Injection Date: 08-SEP-2021 07:18
Lab File ID: 25102.D  Init. Cal. Date(s): 07-SEP-2021  07-SEP-2021
Analysis Type: AIR  Init. Cal. Times:  08:26  11:01
Lab Sample ID: CCV  Quant Type:  ISTD
Method: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m

| COMPOUND | RRF / AMOUNT | RF10 | CCAL RRF10 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE | QC FLAGS |
|---|---|---|---|---|---|---|---|---|
| 43 Cyclohexane | 0.87033 | 0.79281 | 0.79281 | 0.010 | -8.90678 | 30.00000 | Aver | (M) |
| 44 Tert Amyl Methyl Ether | 1.07920 | 1.05437 | 1.05437 | 0.010 | -2.30062 | 30.00000 | Aver | |
| 46 2,2,4-Trimethylpentane | 2.67621 | 2.37417 | 2.37417 | 0.010 | -11.28597 | 30.00000 | Aver | |
| 47 Heptane | 1.00304 | 0.86762 | 0.86762 | 0.010 | -13.50009 | 30.00000 | Aver | |
| 48 Trichloroethene | 0.54080 | 0.52179 | 0.52179 | 0.010 | -3.51525 | 30.00000 | Aver | |
| 49 Methyl methacrylate | 0.43991 | 0.40684 | 0.40684 | 0.010 | -7.51753 | 30.00000 | Aver | |
| 50 1,2-Dichloropropane | 0.57998 | 0.54037 | 0.54037 | 0.010 | -6.82942 | 30.00000 | Aver | |
| 51 1,4-Dioxane | 0.25900 | 0.26213 | 0.26213 | 0.010 | 1.20895 | 30.00000 | Aver | |
| 52 Bromodichloromethane | 0.91675 | 0.85082 | 0.85082 | 0.010 | -7.19170 | 30.00000 | Aver | |
| 53 Methylcyclohexane | 10.75000 | 10.86160 | 0.30461 | 0.010 | 1.03817 | 30.00000 | Quad | |
| 54 Methyl Isobutyl Ketone | 1.19327 | 1.16339 | 1.16339 | 0.010 | -2.50477 | 30.00000 | Aver | |
| 55 cis-1,3-Dichloropropene | 0.66281 | 0.67599 | 0.67599 | 0.010 | 1.98737 | 30.00000 | Aver | |
| 56 trans-1,3-Dichloropropene | 0.53416 | 0.56964 | 0.56964 | 0.010 | 6.64220 | 30.00000 | Aver | |
| 57 Toluene | 1.32766 | 1.27160 | 1.27160 | 0.010 | -4.22236 | 30.00000 | Aver | |
| 58 1,1,2-Trichloroethane | 0.47872 | 0.46959 | 0.46959 | 0.010 | -1.90696 | 30.00000 | Aver | |
| 59 Methyl Butyl Ketone | 1.23777 | 1.28543 | 1.28543 | 0.010 | 3.85050 | 30.00000 | Aver | |
| 60 n-Octane | 1.46207 | 1.40659 | 1.40659 | 0.010 | -3.79439 | 30.00000 | Aver | |
| 61 Dibromochloromethane | 1.04457 | 1.06054 | 1.06054 | 0.010 | 1.52934 | 30.00000 | Aver | |
| 62 Tetrachloroethene | 0.78900 | 0.76052 | 0.76052 | 0.010 | -3.60917 | 30.00000 | Aver | |
| 63 1,2-Dibromoethane | 0.90883 | 0.91462 | 0.91462 | 0.010 | 0.63692 | 30.00000 | Aver | |
| 65 Chlorobenzene | 1.27993 | 1.22934 | 1.22934 | 0.010 | -3.95307 | 30.00000 | Aver | |
| 66 Ethyl Benzene | 1.96447 | 1.96479 | 1.96479 | 0.010 | 0.01592 | 30.00000 | Aver | |
| 67 m&p-Xylene | 1.51322 | 1.52444 | 1.52444 | 0.010 | 0.74188 | 30.00000 | Aver | (M) |
| 68 n-Nonane | 1.38440 | 1.42914 | 1.42914 | 0.010 | 3.23179 | 30.00000 | Aver | |
| 69 Styrene | 10.85000 | 11.34198 | 1.17119 | 0.010 | 4.53439 | 30.00000 | Quad | |
| 70 o-Xylene | 1.58833 | 1.57117 | 1.57117 | 0.010 | -1.08068 | 30.00000 | Aver | |
| 71 Bromoform | 0.76230 | 0.93022 | 0.93022 | 0.010 | 22.02856 | 30.00000 | Aver | |
| 72 1,1,2,2-Tetrachloroethane | 1.25130 | 1.25857 | 1.25857 | 0.010 | 0.58081 | 30.00000 | Aver | |
| 73 Isopropylbenzene | 2.07009 | 2.16817 | 2.16817 | 0.010 | 4.73797 | 30.00000 | Aver | |
| 74 N-Propylbenzene | 2.48424 | 2.58997 | 2.58997 | 0.010 | 4.25625 | 30.00000 | Aver | |
| 75 2-Chlorotoluene | 1.65739 | 1.63616 | 1.63616 | 0.010 | -1.28132 | 30.00000 | Aver | (M) |
| 76 4-Ethyltoluene | 10.74000 | 10.60568 | 2.08077 | 0.010 | -1.25067 | 30.00000 | Quad | |
| 77 1,3,5-Trimethylbenzene | 10.75000 | 11.11011 | 1.82711 | 0.010 | 3.34984 | 30.00000 | Quad | |
| 78 n-Decane | 10.87000 | 10.38722 | 1.43602 | 0.010 | -4.44142 | 30.00000 | Quad | |
| 79 Tert-Butyl Benzene | 1.66321 | 1.76774 | 1.76774 | 0.010 | 6.28464 | 30.00000 | Aver | |
| 80 1,2,4-Trimethylbenzene | 1.56589 | 1.84161 | 1.84161 | 0.010 | 17.60793 | 30.00000 | Aver | |
| 81 Sec- Butylbenzene | 2.32741 | 2.70132 | 2.70132 | 0.010 | 16.06561 | 30.00000 | Aver | |
| 82 1,3-Dichlorobenzene | 10.85000 | 10.70434 | 1.13755 | 0.010 | -1.34250 | 30.00000 | Quad | |
| 83 Benzyl Chloride | 10.94000 | 10.85878 | 1.20153 | 0.010 | -0.74241 | 30.00000 | Line | |
| 84 1,4-Dichlorobenzene | 10.85000 | 10.70923 | 1.09003 | 0.010 | -1.29744 | 30.00000 | Quad | |
| 85 p-Isopropyltoluene | 10.89000 | 11.05817 | 2.39671 | 0.010 | 1.54430 | 30.00000 | Quad | |
| 86 1,2,3-Trimethylbenzene | 1.68322 | 1.95193 | 1.95193 | 0.010 | 15.96384 | 30.00000 | Aver | |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10airH.i  Injection Date: 08-SEP-2021 07:18
Lab File ID: 25102.D  Init. Cal. Date(s): 07-SEP-2021  07-SEP-2021
Analysis Type: AIR  Init. Cal. Times:  08:26  11:01
Lab Sample ID: CCV  Quant Type:  ISTD
Method: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m

| COMPOUND | RRF / AMOUNT | RF10 | CCAL RRF10 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE | QC FLAGS |
|---|---|---|---|---|---|---|---|---|
| 87 1,2-Dichlorobenzene | 10.83000 | 10.97528 | 1.16411 | 0.010 | 1.34144 | 30.00000 | Quad | |
| 88 N-Butylbenzene | 10.81000 | 10.41801 | 1.94410 | 0.010 | -3.62618 | 30.00000 | Quad | |
| 89 1,2-Dibromo-3-Chloropropane | 10.91000 | 10.28715 | 0.60336 | 0.010 | -5.70902 | 30.00000 | Quad | |
| 90 1,2,4-Trichlorobenzene | 23.49000 | 21.77300 | 0.50625 | 0.010 | -7.30951 | 30.00000 | Quad | |
| 91 Naphthalene | 12.25000 | 12.51042 | 1.23087 | 0.010 | 2.12587 | 30.00000 | Quad | |
| 92 Hexachlorobutadiene | 0.56846 | 0.64573 | 0.64573 | 0.010 | 13.59295 | 30.00000 | Aver | |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Average %D / Drift Results.

Calculated Average %D/Drift = 6.52857
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Lab Smp Id: CCV
Inj Date : 08-SEP-2021 07:18
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info :
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS10

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.942 | 2.942 | (0.542) | 156207 | 10.7100 | 10.1(M) |
| 2 Chlorodifluoromethane | 67 | 2.954 | 2.954 | (0.544) | 57419 | 10.7200 | 9.69(M) |
| 3 Propylene | 41 | 2.961 | 2.961 | (0.545) | 213604 | 10.7800 | 8.99 |
| 4 Dichlorodifluoromethane | 85 | 2.980 | 2.980 | (0.549) | 533842 | 10.8700 | 9.22 |
| 5 Dichlorotetrafluoroethane | 85 | 3.051 | 3.051 | (0.562) | 530364 | 10.0200 | 9.07 |
| 6 Chloromethane | 50 | 3.054 | 3.054 | (0.562) | 297275 | 10.7500 | 9.88 |
| 7 Vinyl chloride | 62 | 3.125 | 3.125 | (0.575) | 249233 | 10.7800 | 10.6 |
| 8 1,3-Butadiene | 54 | 3.157 | 3.157 | (0.581) | 183629 | 10.7400 | 11.1 |
| 9 Bromomethane | 94 | 3.273 | 3.273 | (0.603) | 183768 | 10.7600 | 10.4 |
| 10 Chloroethane | 64 | 3.318 | 3.318 | (0.611) | 111828 | 10.7500 | 11.7 |
| 11 Ethanol | 45 | 3.334 | 3.334 | (0.614) | 428085 | 64.6300 | 66.8 |
| 12 Vinyl Bromide | 106 | 3.421 | 3.421 | (0.630) | 174164 | 10.7200 | 10.9 |
| 13 Isopentane | 43 | 3.433 | 3.433 | (0.632) | 224599 | 11.0300 | 11.2 |
| 14 Freon 123 | 83 | 3.472 | 3.472 | (0.639) | 393898 | 10.6700 | 10.1 |
| 15 Trichlorofluoromethane | 101 | 3.495 | 3.495 | (0.644) | 481290 | 10.8600 | 9.34 |
| 16 Acrolein | 56 | 3.498 | 3.498 | (0.644) | 238669 | 30.4900 | 32.2 |
| 17 Acetone | 43 | 3.517 | 3.517 | (0.648) | 1318023 | 52.9600 | 55.2(A) |
| 18 Isopropyl Alcohol | 45 | 3.546 | 3.546 | (0.653) | 1619504 | 59.5700 | 49.4 |
| 19 1,1-Dichloroethene | 61 | 3.707 | 3.707 | (0.683) | 385536 | 10.8000 | 10.1 |
| 20 Acrylonitrile | 53 | 3.716 | 3.716 | (0.684) | 490522 | 29.8400 | 30.1 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.742 | 3.742 | (0.689) | 537917 | 10.6100 | 8.96 |
| 22 Methyl Acetate | 43 | 3.739 | 3.739 | (0.689) | 492258 | 10.7500 | 8.34 |
| 23 Freon 113 | 101 | 3.739 | 3.739 | (0.689) | 420550 | 10.7300 | 9.60 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 24 Allyl Chloride | 76 | 3.816 | 3.816 | (0.703) | 92272 | 10.6300 | 11.0 |
| 25 Methylene chloride | 49 | 3.819 | 3.819 | (0.703) | 1347615 | 53.8800 | 51.8 |
| 26 Carbon Disulfide | 76 | 3.922 | 3.922 | (0.722) | 587701 | 10.8700 | 10.2 |
| 27 Methyl Tert Butyl Ether | 73 | 4.070 | 4.070 | (0.750) | 534701 | 10.8000 | 9.92 |
| 28 trans-1,2-dichloroethene | 96 | 4.083 | 4.083 | (0.752) | 206125 | 10.8100 | 9.85 |
| 29 Vinyl Acetate | 43 | 4.157 | 4.157 | (0.766) | 573433 | 12.9500 | 11.7 |
| 30 1,1-Dichloroethane | 63 | 4.208 | 4.208 | (0.775) | 454991 | 10.6800 | 9.64 |
| 31 Methyl Ethyl Ketone | 72 | 4.318 | 4.318 | (0.795) | 103217 | 10.7700 | 11.0 |
| 32 Di-isopropyl Ether | 45 | 4.340 | 4.340 | (0.799) | 824081 | 10.5700 | 9.00 |
| 33 n-Hexane | 57 | 4.350 | 4.350 | (0.801) | 406899 | 10.6100 | 9.09 |
| 34 Ethyl Acetate | 43 | 4.475 | 4.475 | (0.824) | 583921 | 10.6200 | 9.46(M) |
| 35 cis-1,2-Dichloroethene | 96 | 4.495 | 4.495 | (0.828) | 209134 | 10.7700 | 9.76(M) |
| 36 Ethyl Tert-Butyl Ether | 59 | 4.562 | 4.562 | (0.840) | 793288 | 10.7500 | 9.65 |
| 37 Chloroform | 83 | 4.675 | 4.675 | (0.861) | 439727 | 10.5600 | 9.40 |
| 38 Tetrahydrofuran | 42 | 4.739 | 4.739 | (0.873) | 298607 | 10.6900 | 10.3 |
| 39 1,1,1-Trichloroethane | 97 | 4.983 | 4.983 | (0.918) | 431451 | 10.7000 | 9.57 |
| 40 1,2-Dichloroethane | 62 | 5.064 | 5.064 | (0.933) | 341012 | 10.8000 | 9.61 |
| 41 Benzene | 78 | 5.218 | 5.218 | (0.961) | 588579 | 10.7300 | 10.8 |
| 42 Carbon tetrachloride | 117 | 5.234 | 5.234 | (0.964) | 433971 | 10.8500 | 11.2 |
| 43 Cyclohexane | 56 | 5.257 | 5.257 | (0.968) | 424775 | 10.6900 | 9.74(M) |
| 44 Tert Amyl Methyl Ether | 73 | 5.356 | 5.356 | (0.986) | 568084 | 10.7500 | 10.5 |
| * 45 1,4-Difluorobenzene | 114 | 5.430 | 5.430 | (1.000) | 501200 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 5.520 | 5.520 | (1.017) | 1277991 | 10.7400 | 9.53 |
| 47 Heptane | 43 | 5.649 | 5.649 | (1.040) | 465728 | 10.7100 | 9.26 |
| 48 Trichloroethene | 130 | 5.758 | 5.758 | (1.060) | 279826 | 10.7000 | 10.3 |
| 49 Methyl methacrylate | 69 | 5.800 | 5.800 | (1.068) | 218793 | 10.7300 | 9.92 |
| 50 1,2-Dichloropropane | 63 | 5.803 | 5.803 | (1.069) | 291689 | 10.7700 | 10.0 |
| 51 1,4-Dioxane | 88 | 5.848 | 5.848 | (1.077) | 352226 | 26.8100 | 27.1 |
| 52 Bromodichloromethane | 83 | 5.964 | 5.964 | (1.098) | 457985 | 10.7400 | 9.97 |
| 53 Methylcyclohexane | 98 | 6.224 | 6.224 | (1.146) | 164119 | 10.7500 | 10.9 |
| 54 Methyl Isobutyl Ketone | 43 | 6.302 | 6.302 | (1.160) | 628570 | 10.7800 | 10.5 |
| 55 cis-1,3-Dichloropropene | 75 | 6.385 | 6.385 | (1.176) | 362859 | 10.7100 | 10.9 |
| 56 trans-1,3-Dichloropropene | 75 | 6.829 | 6.829 | (1.258) | 312629 | 10.9500 | 11.7 |
| 57 Toluene | 91 | 6.925 | 6.925 | (1.275) | 691501 | 10.8500 | 10.4 |
| 58 1,1,2-Trichloroethane | 97 | 7.051 | 7.051 | (1.298) | 253013 | 10.7500 | 10.5 |
| 59 Methyl Butyl Ketone | 43 | 7.144 | 7.144 | (0.850) | 576559 | 10.7500 | 11.2 |
| 60 n-Octane | 43 | 7.340 | 7.340 | (0.873) | 630902 | 10.7500 | 10.3 |
| 61 Dibromochloromethane | 129 | 7.584 | 7.584 | (0.902) | 476130 | 10.7600 | 10.9 |
| 62 Tetrachloroethene | 166 | 7.665 | 7.665 | (0.912) | 337945 | 10.6500 | 10.3 |
| 63 1,2-Dibromoethane | 107 | 7.784 | 7.784 | (0.926) | 402987 | 10.5600 | 10.6 |
| * 64 Chlorobenzene - d5 | 117 | 8.404 | 8.404 | (1.000) | 417240 | 10.0000 | |
| 65 Chlorobenzene | 112 | 8.449 | 8.449 | (1.005) | 549859 | 10.7200 | 10.3 |
| 66 Ethyl Benzene | 91 | 8.665 | 8.665 | (1.031) | 888649 | 10.8400 | 10.8 |
| 67 m&p-Xylene | 91 | 8.848 | 8.848 | (1.053) | 1374524 | 21.6100 | 21.8(M) |
| 68 n-Nonane | 43 | 9.182 | 9.182 | (1.093) | 642209 | 10.7700 | 11.1 |
| 69 Styrene | 104 | 9.250 | 9.250 | (1.101) | 530203 | 10.8500 | 11.3 |
| 70 o-Xylene | 91 | 9.285 | 9.285 | (1.105) | 706032 | 10.7700 | 10.7 |
| 71 Bromoform | 173 | 9.359 | 9.359 | (1.114) | 420727 | 10.8400 | 13.2 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 9.700 | 9.700 | (1.154) | 567659 | 10.8100 | 10.9 |
| 73 Isopropylbenzene | 105 | 9.832 | 9.832 | (1.170) | 965260 | 10.6700 | 11.2 |
| 74 N-Propylbenzene | 91 | 10.398 | 10.398 | (1.237) | 1168172 | 10.8100 | 11.3 |
| 75 2-Chlorotoluene | 91 | 10.440 | 10.440 | (1.242) | 742063 | 10.8700 | 10.7(M) |
| 76 4-Ethyltoluene | 105 | 10.584 | 10.584 | (1.259) | 932426 | 10.7400 | 10.6 |
| 77 1,3,5-Trimethylbenzene | 105 | 10.655 | 10.655 | (1.268) | 819518 | 10.7500 | 11.1 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ppbv) | AMOUNTS ON-COL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 78 n-Decane | 57 | 11.006 | 11.006 | (2.027) | 782350 | 10.8700 | 10.4 |
| 79 Tert-Butyl Benzene | 119 | 11.102 | 11.102 | (1.321) | 799528 | 10.8400 | 11.5 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.150 | 11.150 | (1.327) | 830635 | 10.8100 | 12.7 |
| 81 Sec- Butylbenzene | 105 | 11.411 | 11.411 | (1.358) | 1222904 | 10.8500 | 12.6 |
| 82 1,3-Dichlorobenzene | 146 | 11.443 | 11.443 | (1.361) | 514977 | 10.8500 | 10.7 |
| 83 Benzyl Chloride | 91 | 11.517 | 11.517 | (1.370) | 548450 | 10.9400 | 10.9 |
| 84 1,4-Dichlorobenzene | 146 | 11.578 | 11.578 | (1.378) | 493462 | 10.8500 | 10.7 |
| 85 p-Isopropyltoluene | 119 | 11.616 | 11.616 | (1.382) | 1089002 | 10.8900 | 11.1 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.629 | 11.629 | (1.384) | 883647 | 10.8500 | 12.6 |
| 87 1,2-Dichlorobenzene | 146 | 11.887 | 11.887 | (1.414) | 526026 | 10.8300 | 11.0 |
| 88 N-Butylbenzene | 91 | 12.067 | 12.067 | (1.436) | 876862 | 10.8100 | 10.4 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.584 | 12.584 | (1.497) | 274653 | 10.9100 | 10.3 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.533 | 13.533 | (1.610) | 496176 | 23.4900 | 21.8 |
| 91 Naphthalene | 128 | 13.671 | 13.671 | (1.627) | 629120 | 12.2500 | 12.5 |
| 92 Hexachlorobutadiene | 225 | 13.780 | 13.780 | (1.640) | 330047 | 12.2500 | 13.9 |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Calibration Date: 07-SEP-2021
Lab File ID: 25102.D
Calibration Time: 10:08
Lab Smp Id: CCV
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info:

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

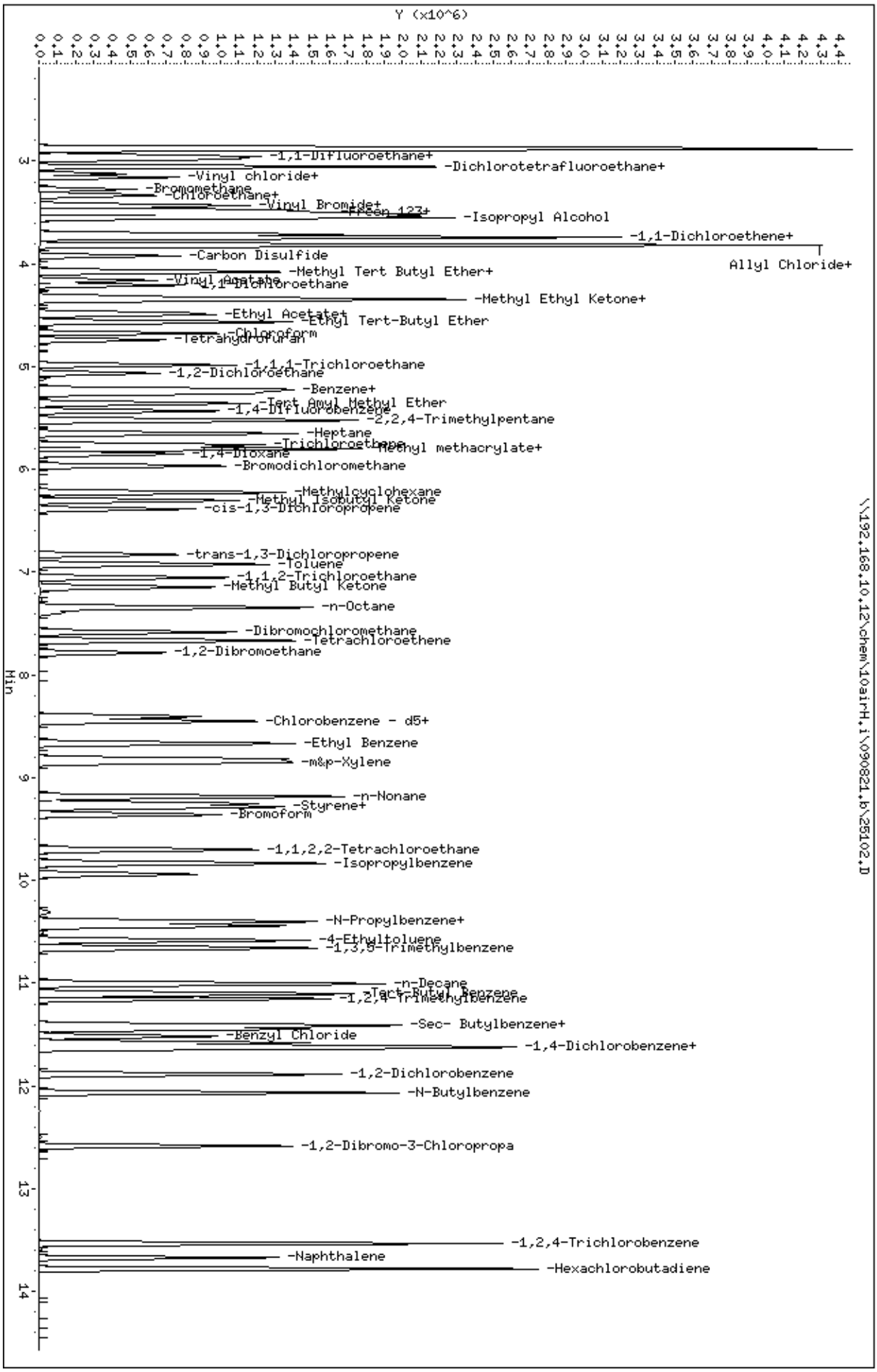
| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 501200 | 9.00 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 417240 | 6.43 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.06 |
| 64 Chlorobenzene - d | 8.41 | 8.08 | 8.74 | 8.40 | -0.04 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102.D
Date : 08-SEP-2021 07:18
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i
Operator: GT
Column diameter: 0.32



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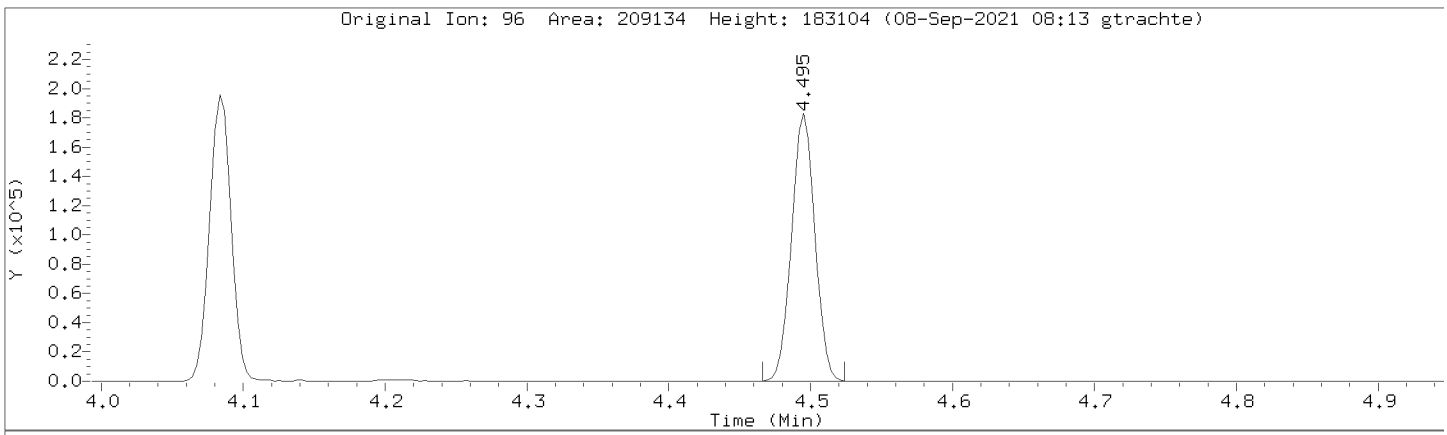
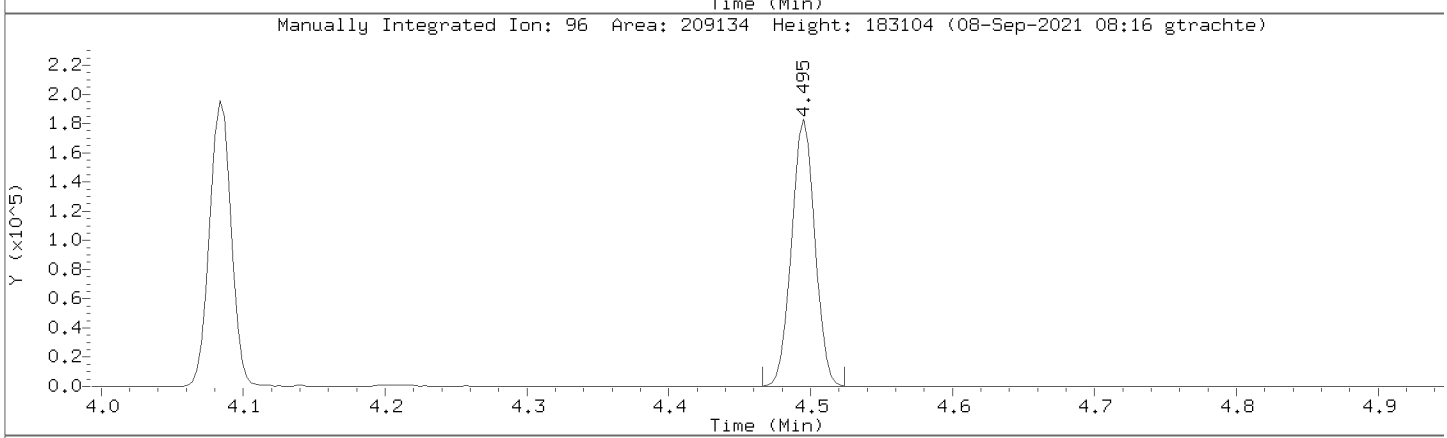
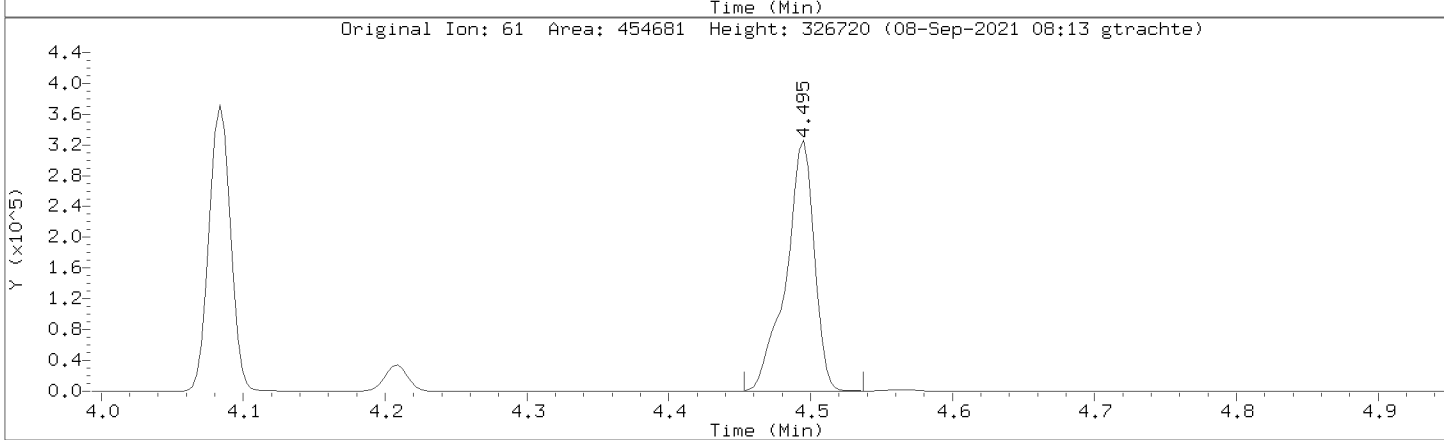
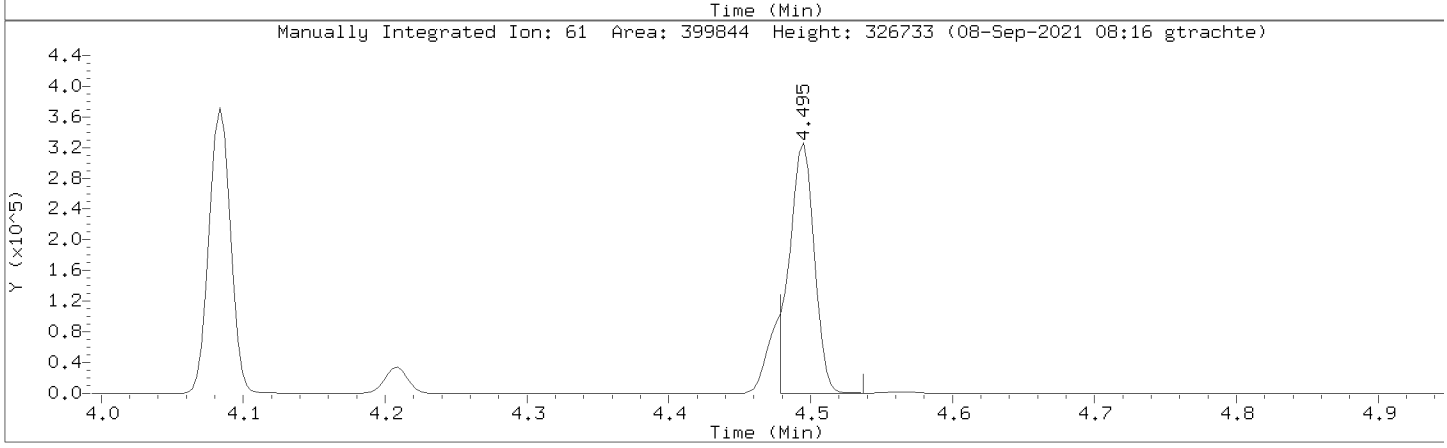
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



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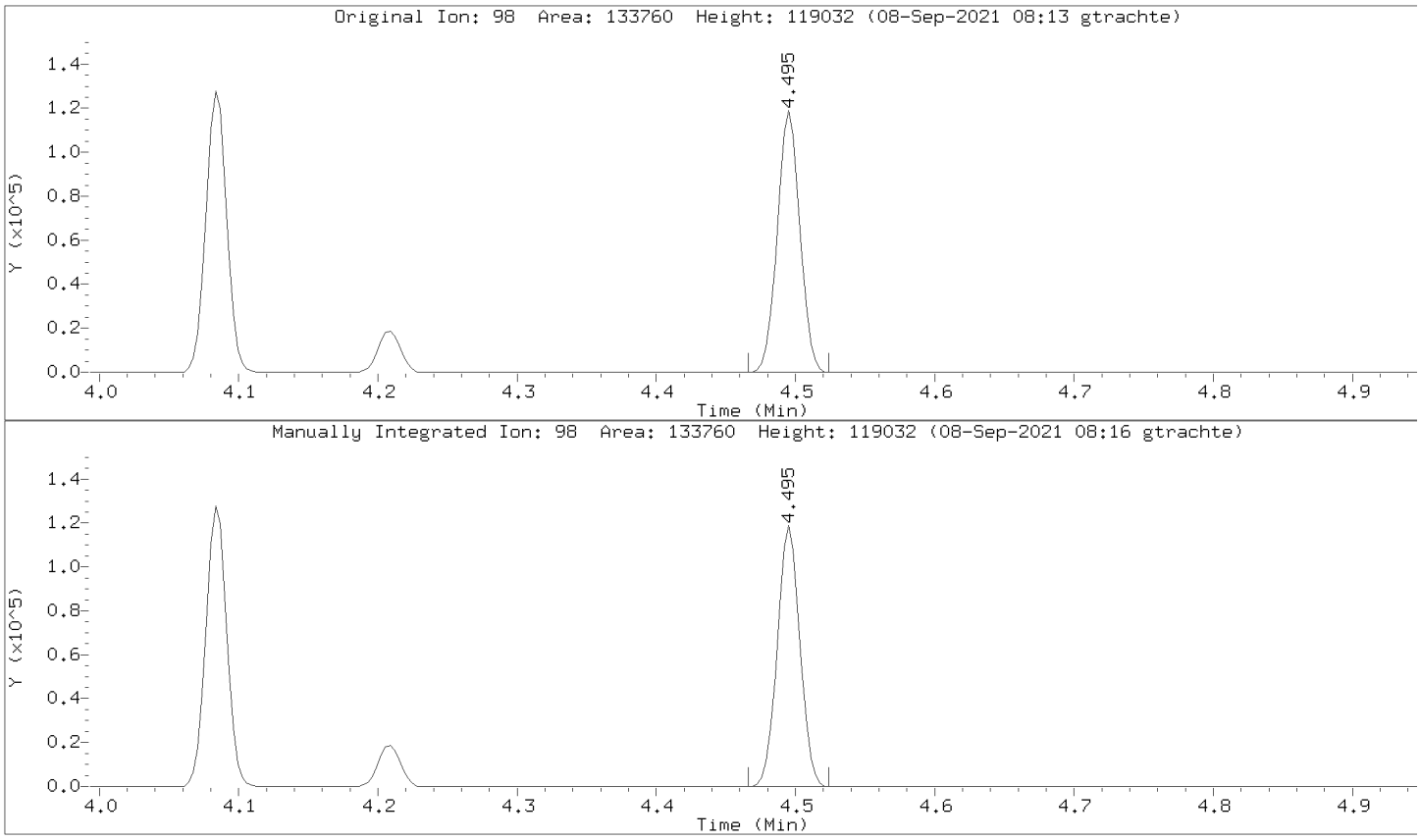
Instrument: 10airH.i
Lab Sample ID: CCV



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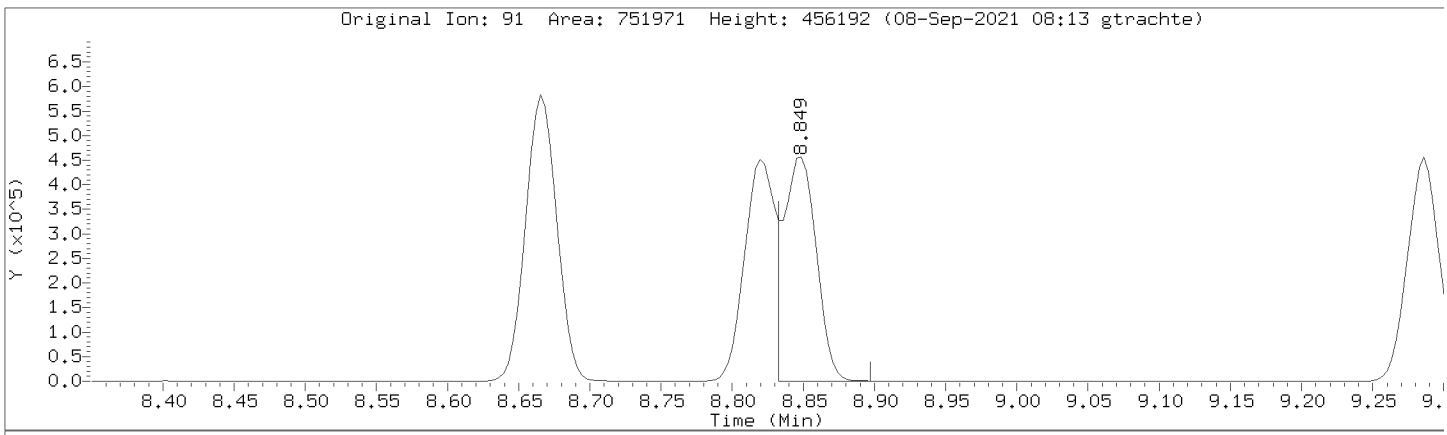
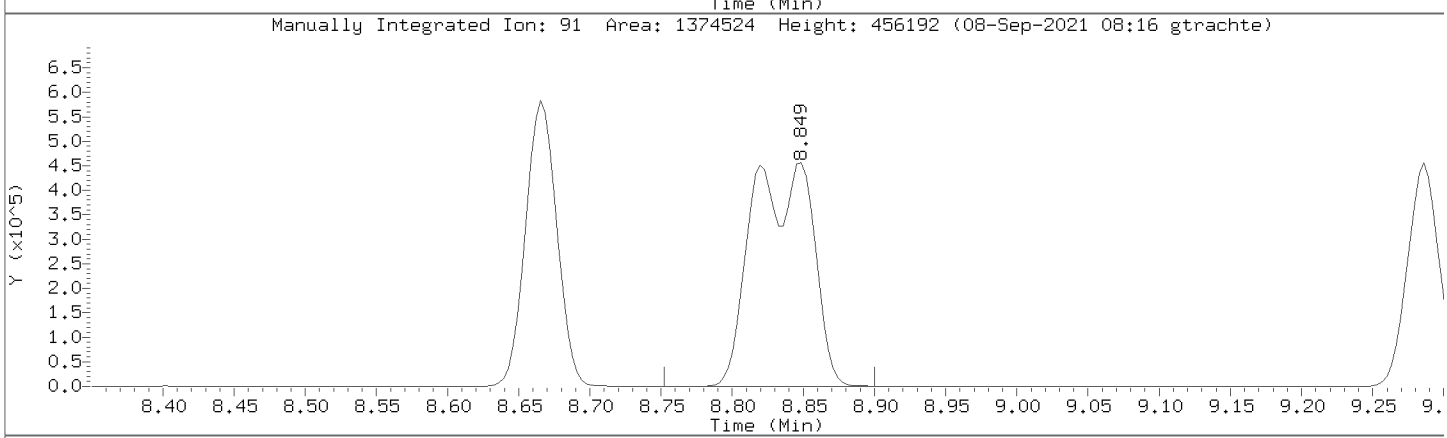
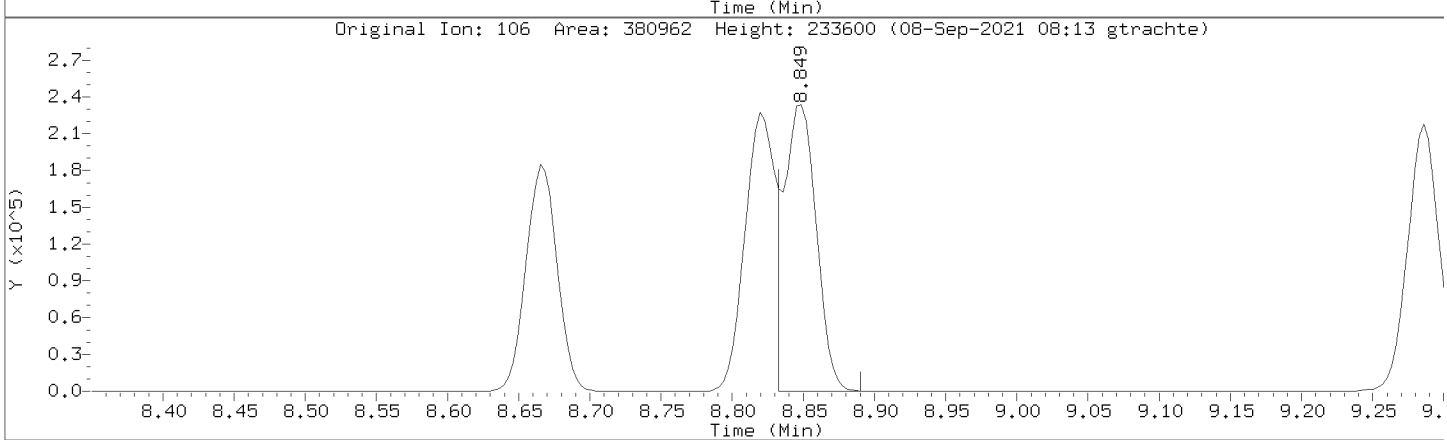
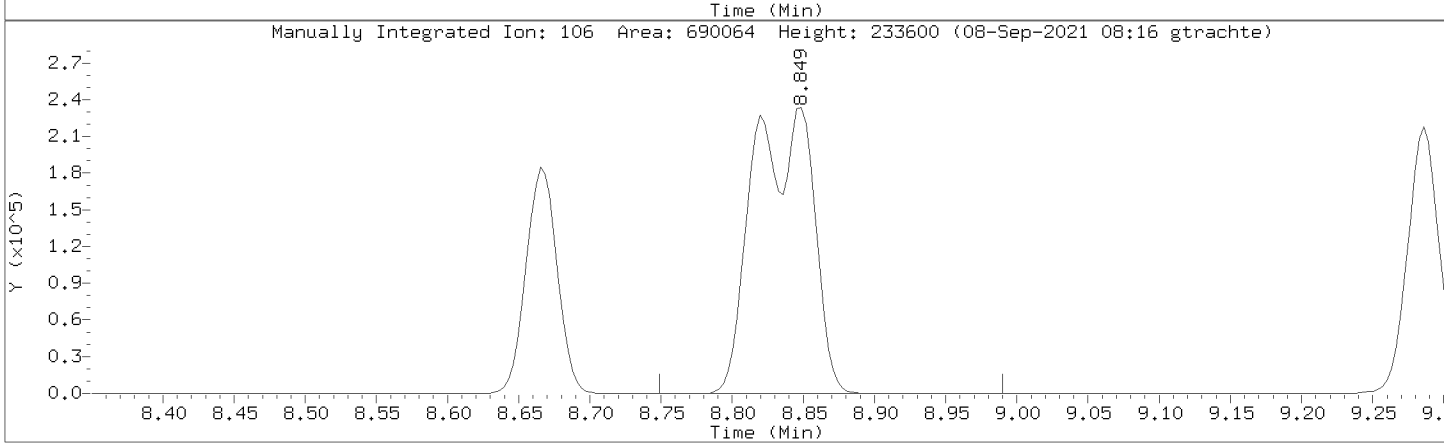
Instrument: 10airH.i
Lab Sample ID: CCV

Compound: m&p-Xylene
CAS Number: 7816-60-0



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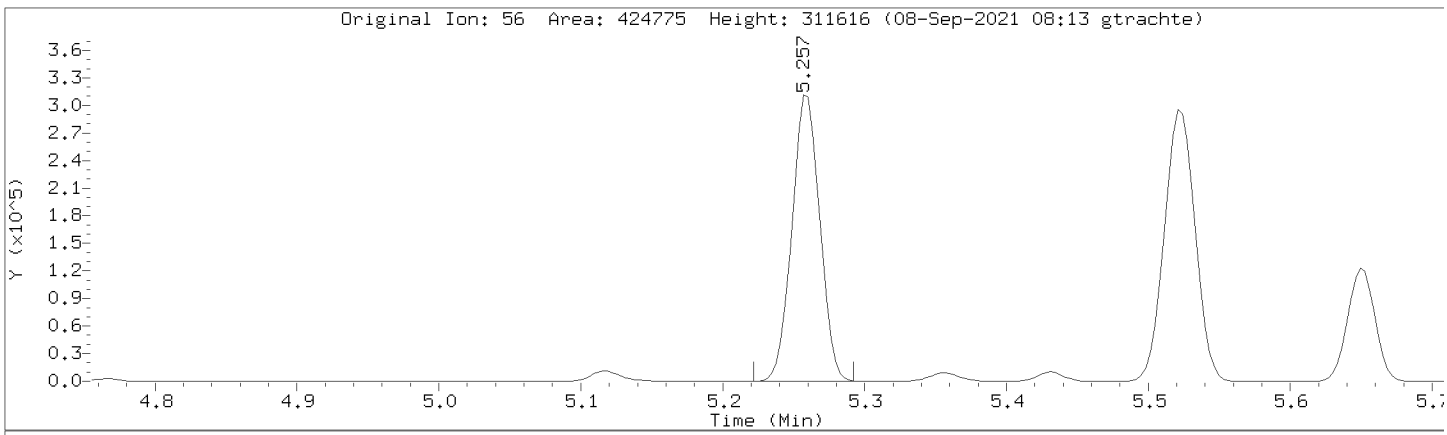
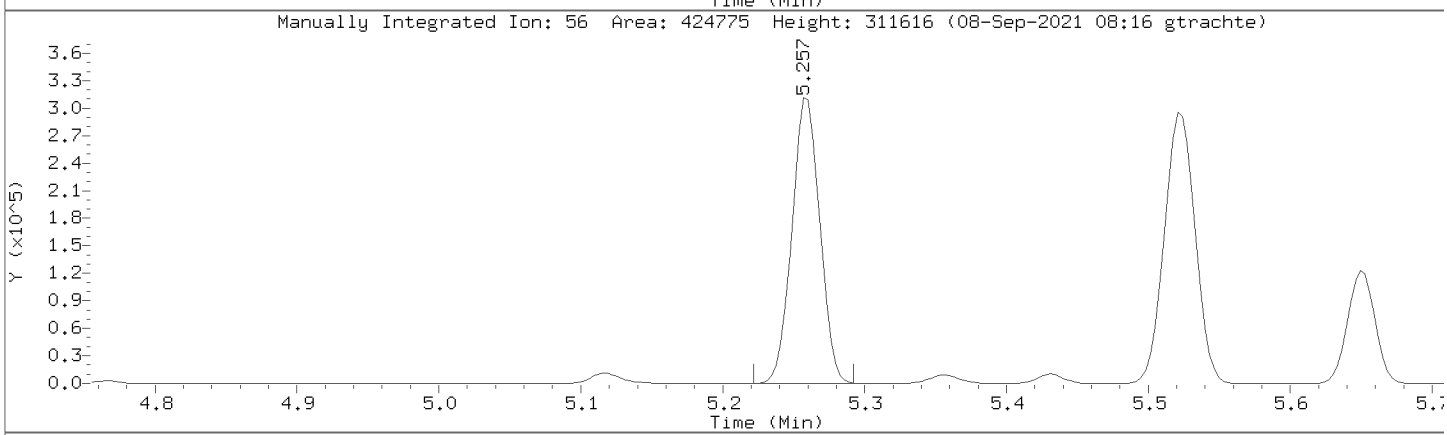
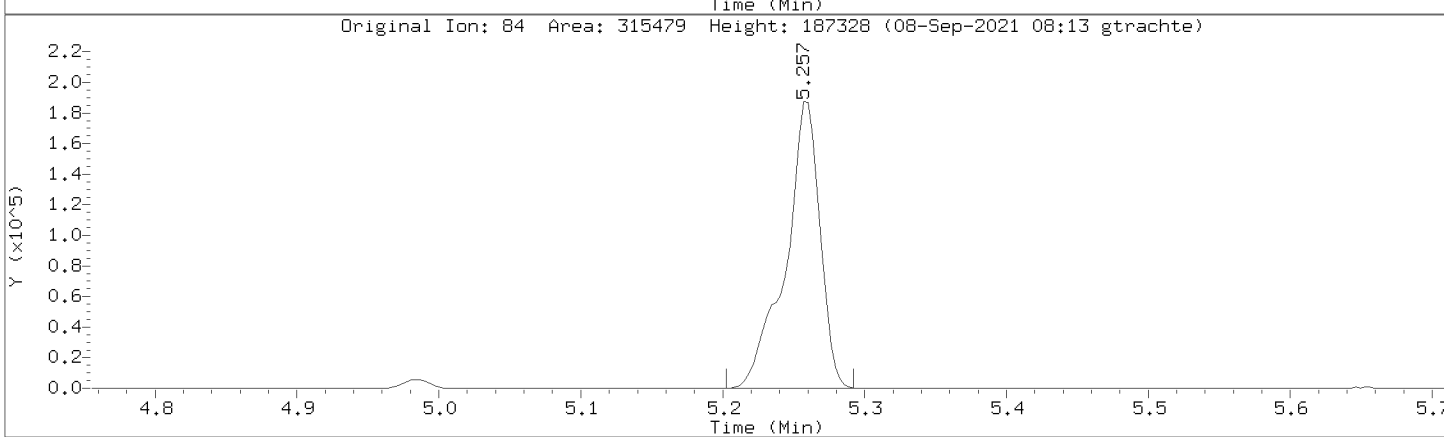
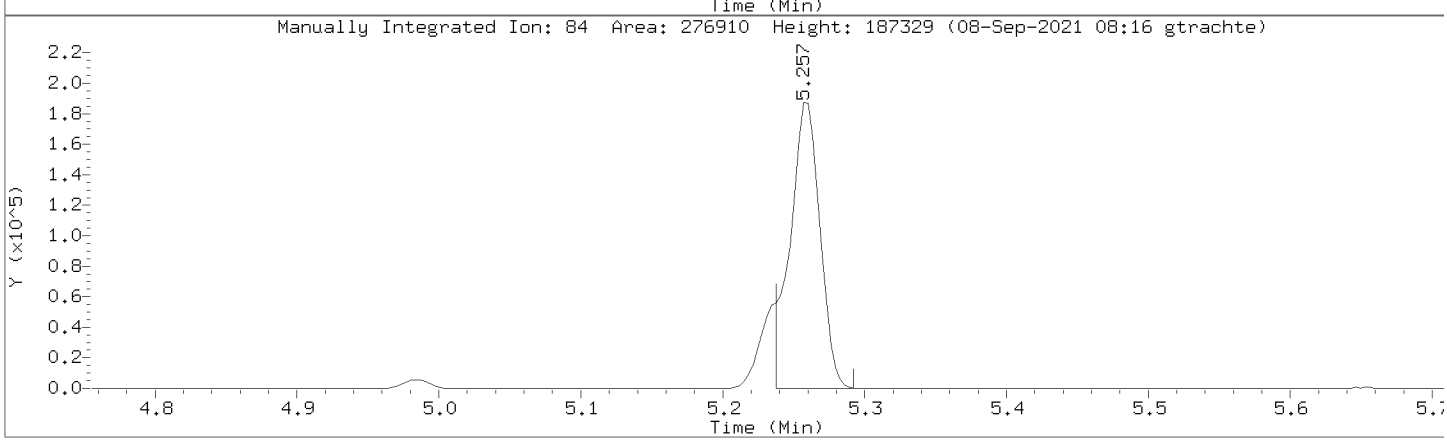
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

Compound: Cyclohexane
CAS Number: 110-82-7



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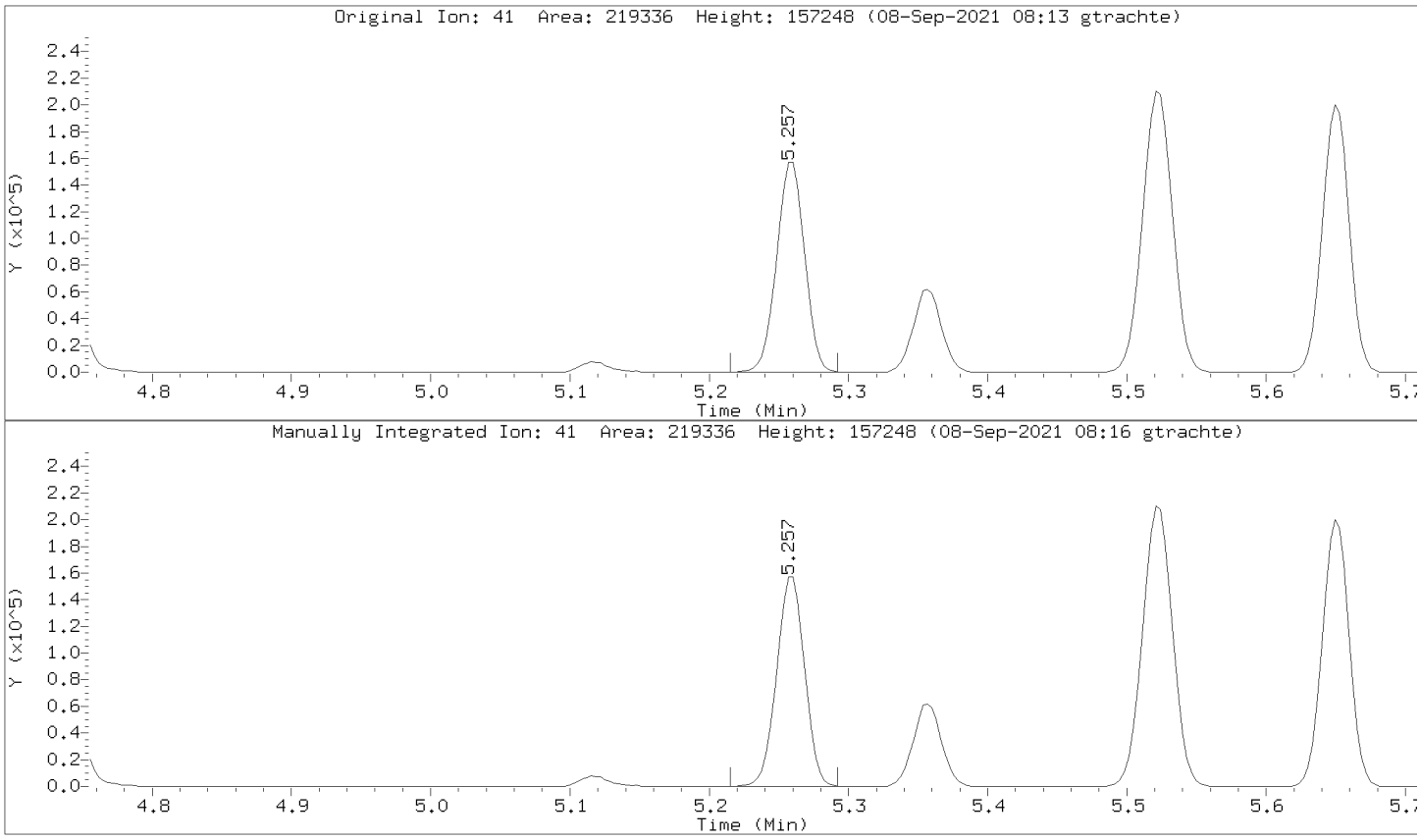
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV



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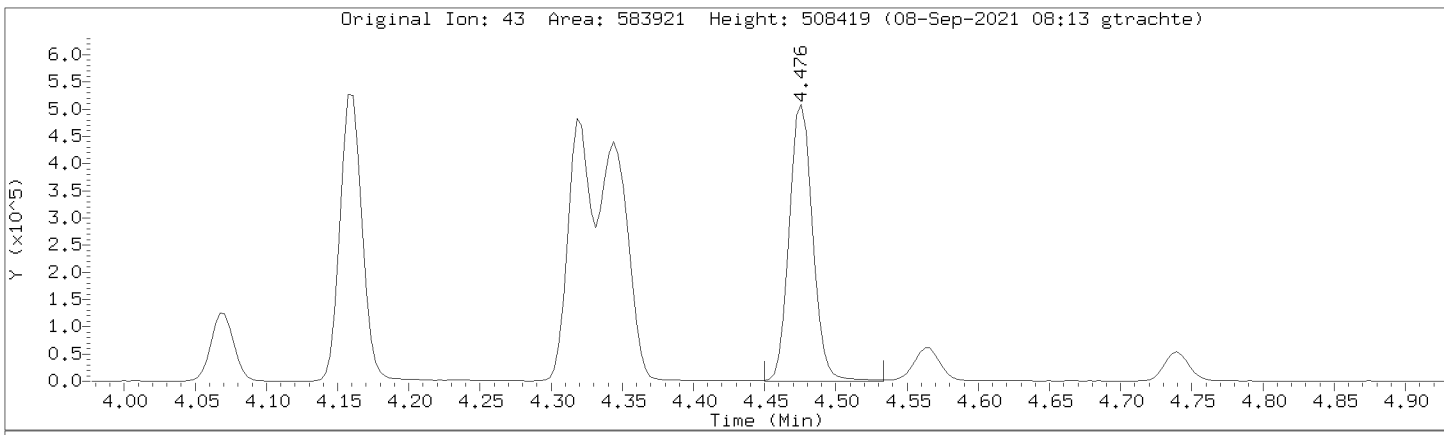
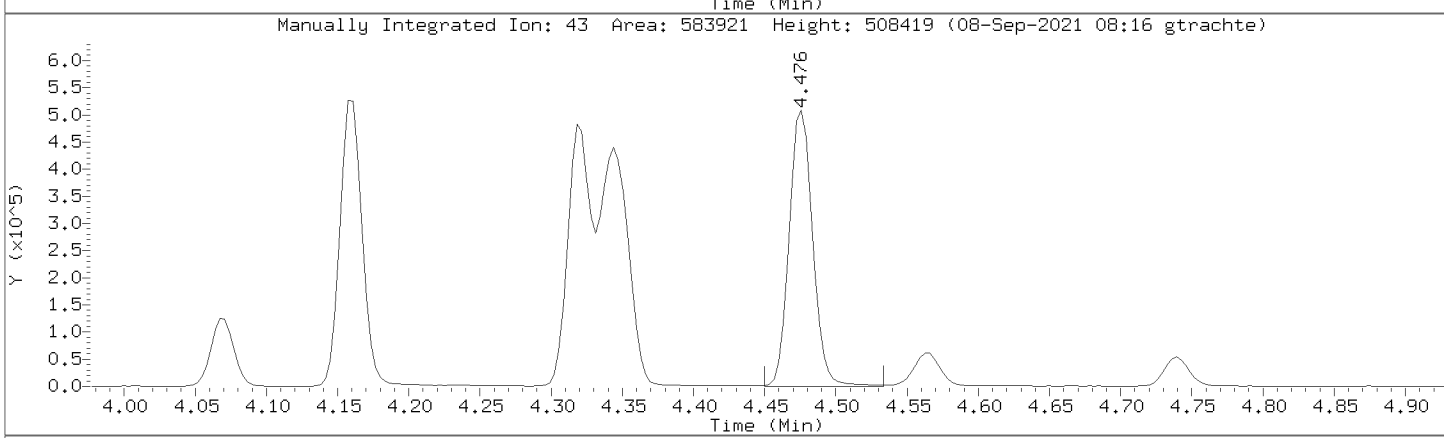
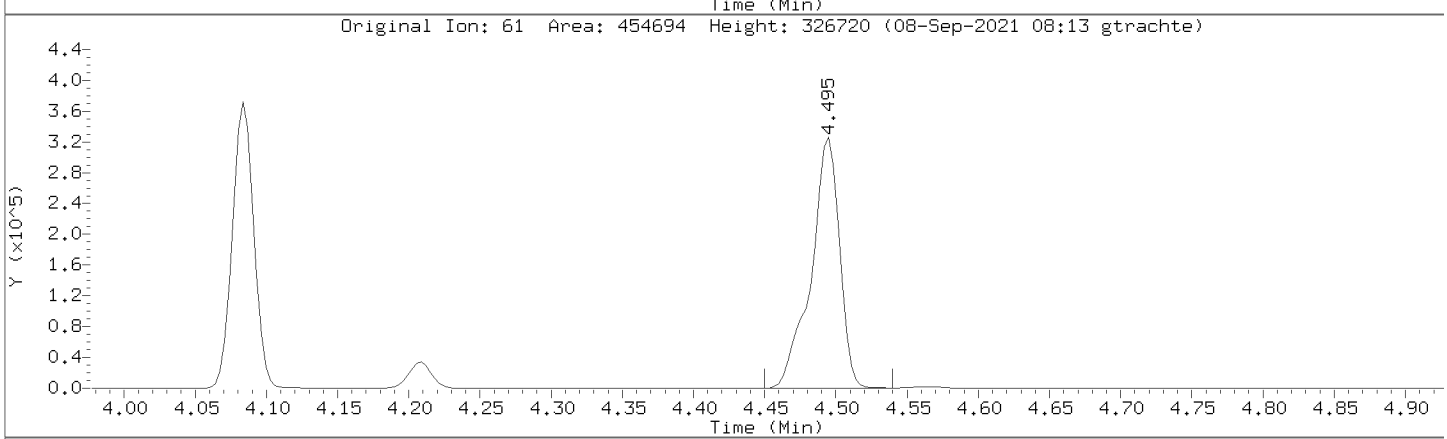
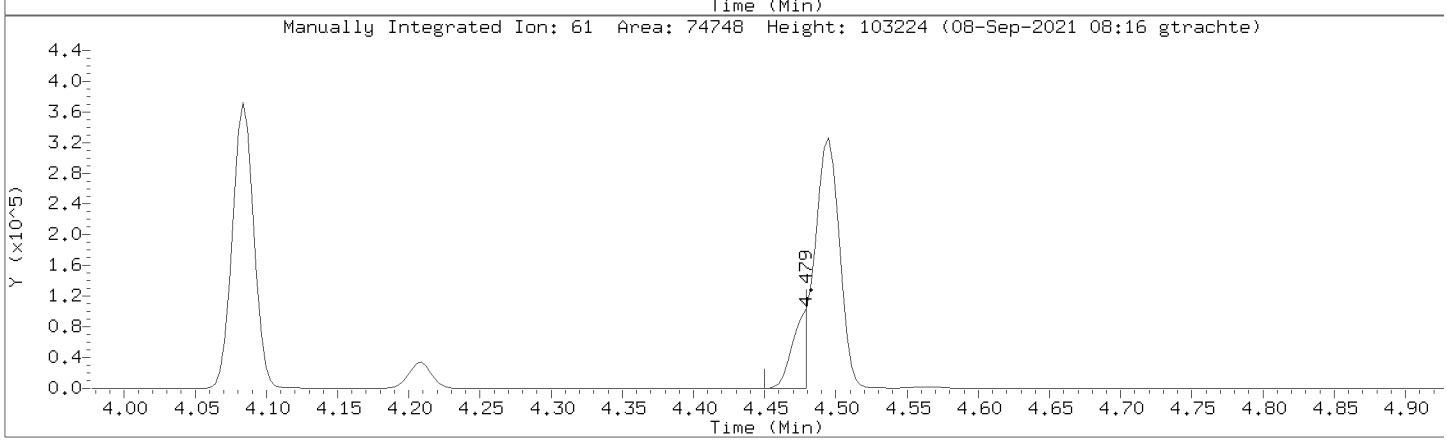
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

Compound: Ethyl Acetate
CAS Number: 141-78-6



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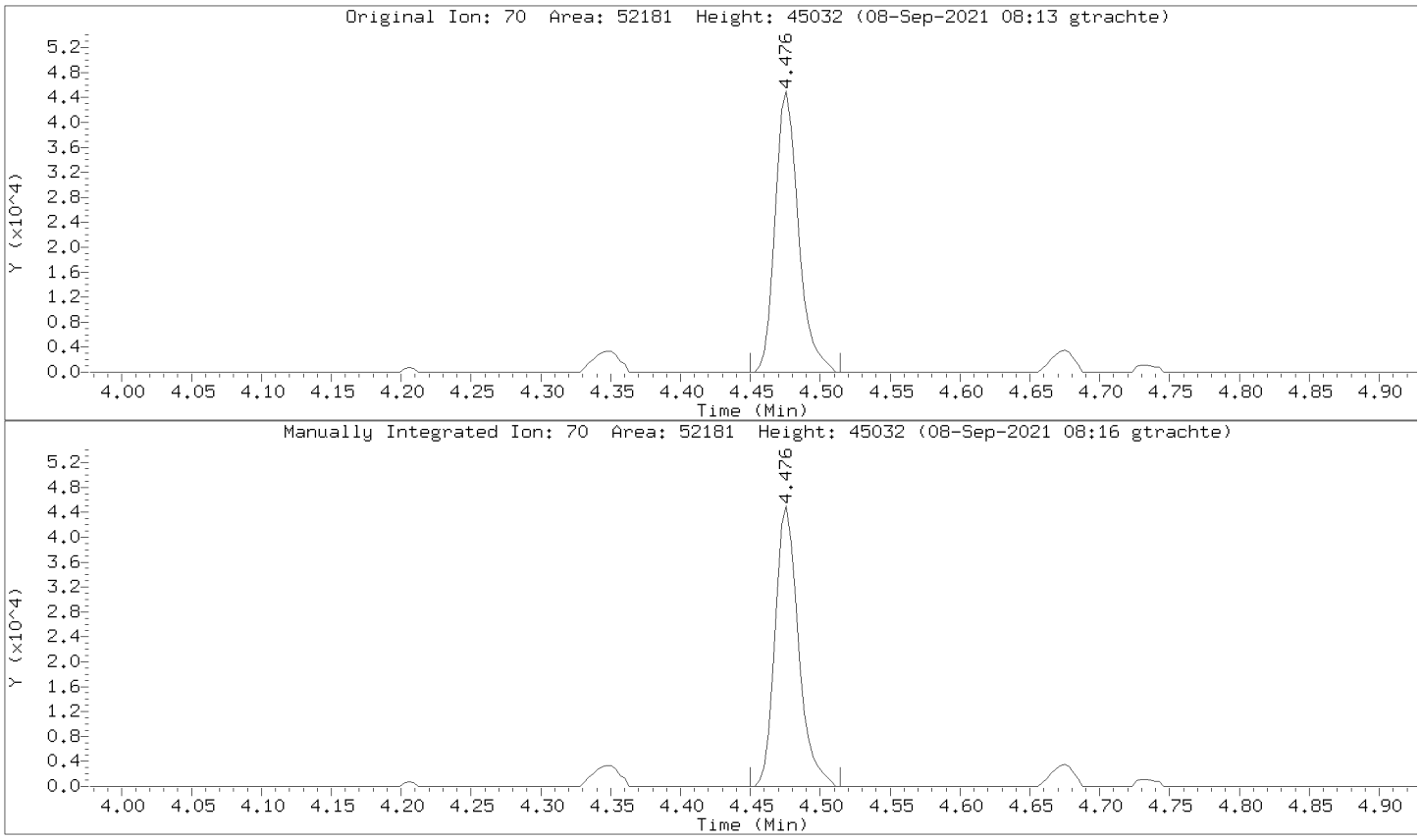
Instrument: 10airH.i
Lab Sample ID: CCV



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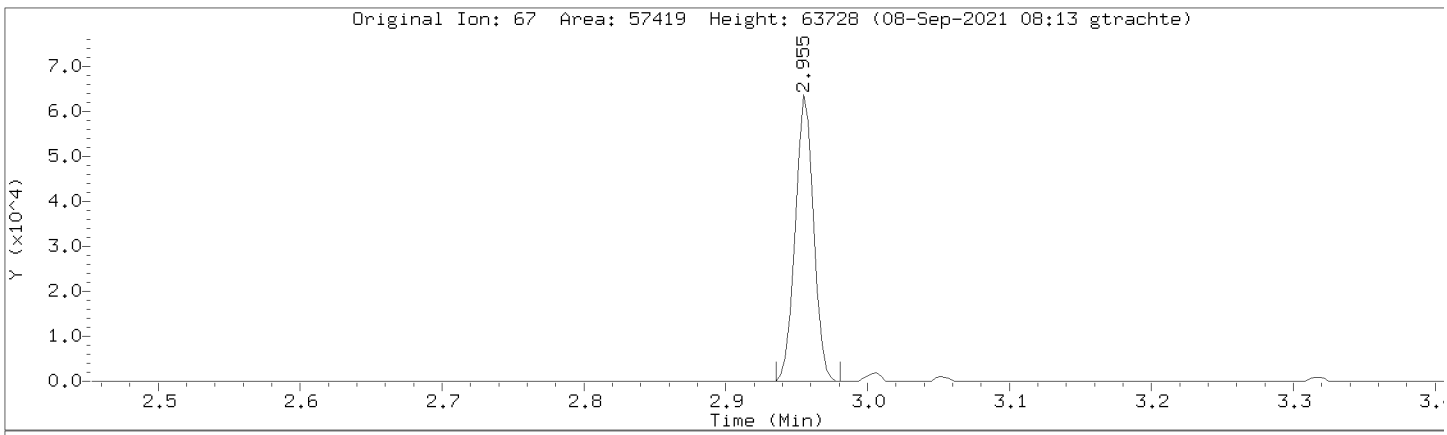
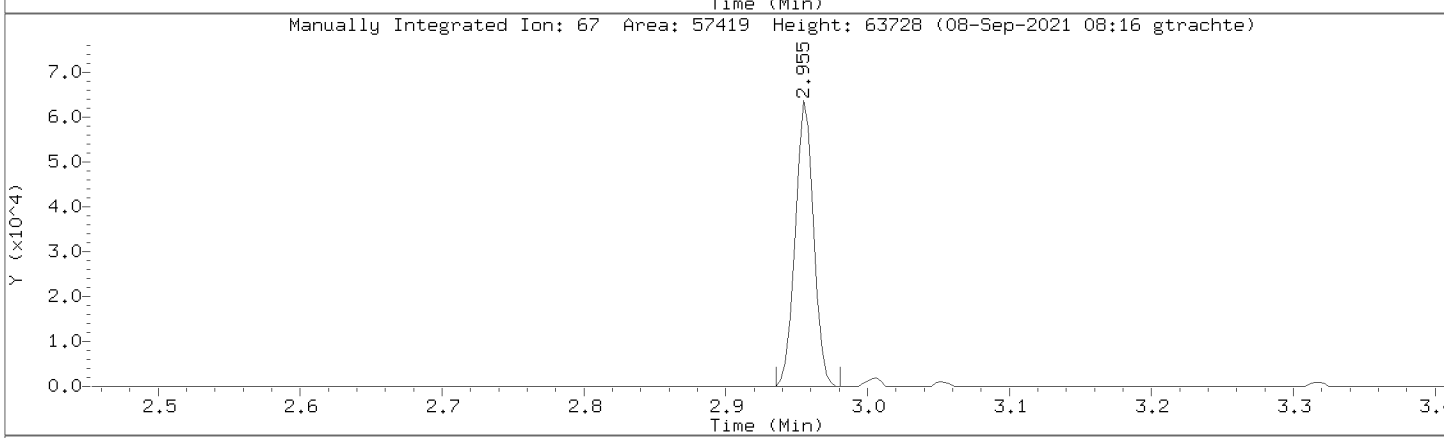
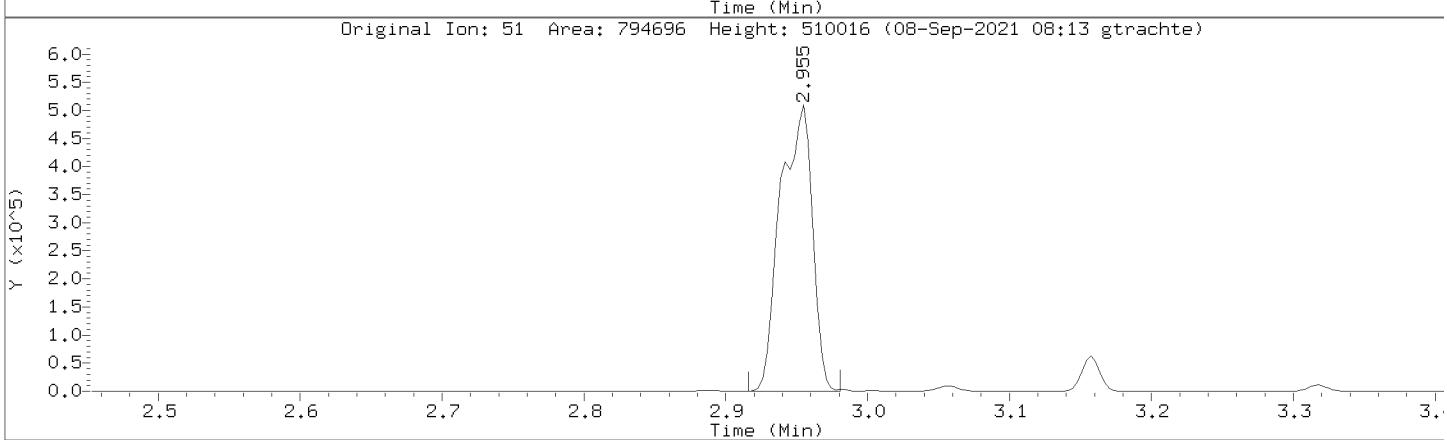
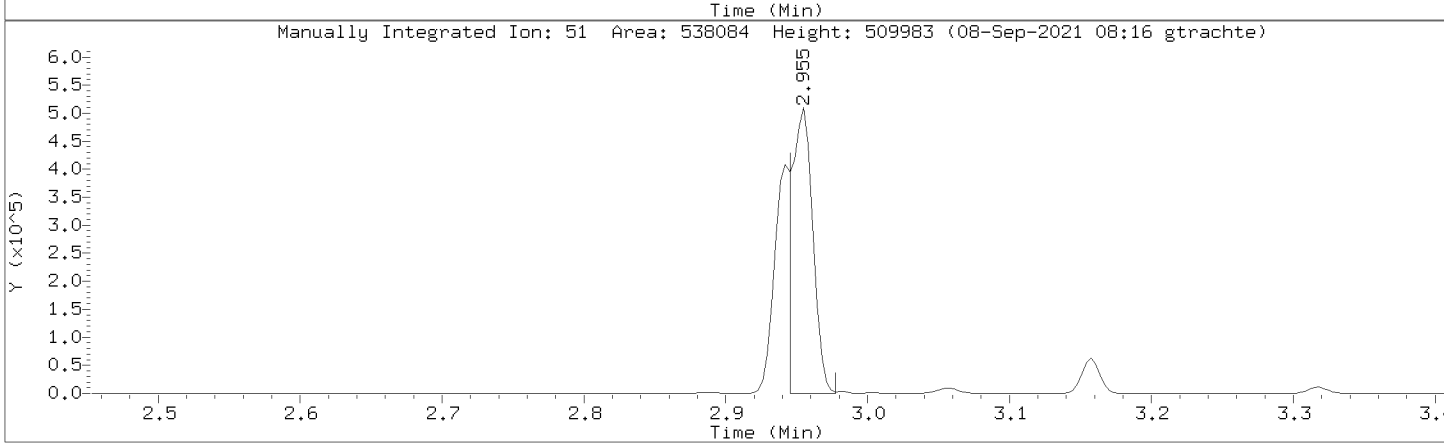
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

Compound: Chlorodifluoromethane
CAS Number: 76-13-1

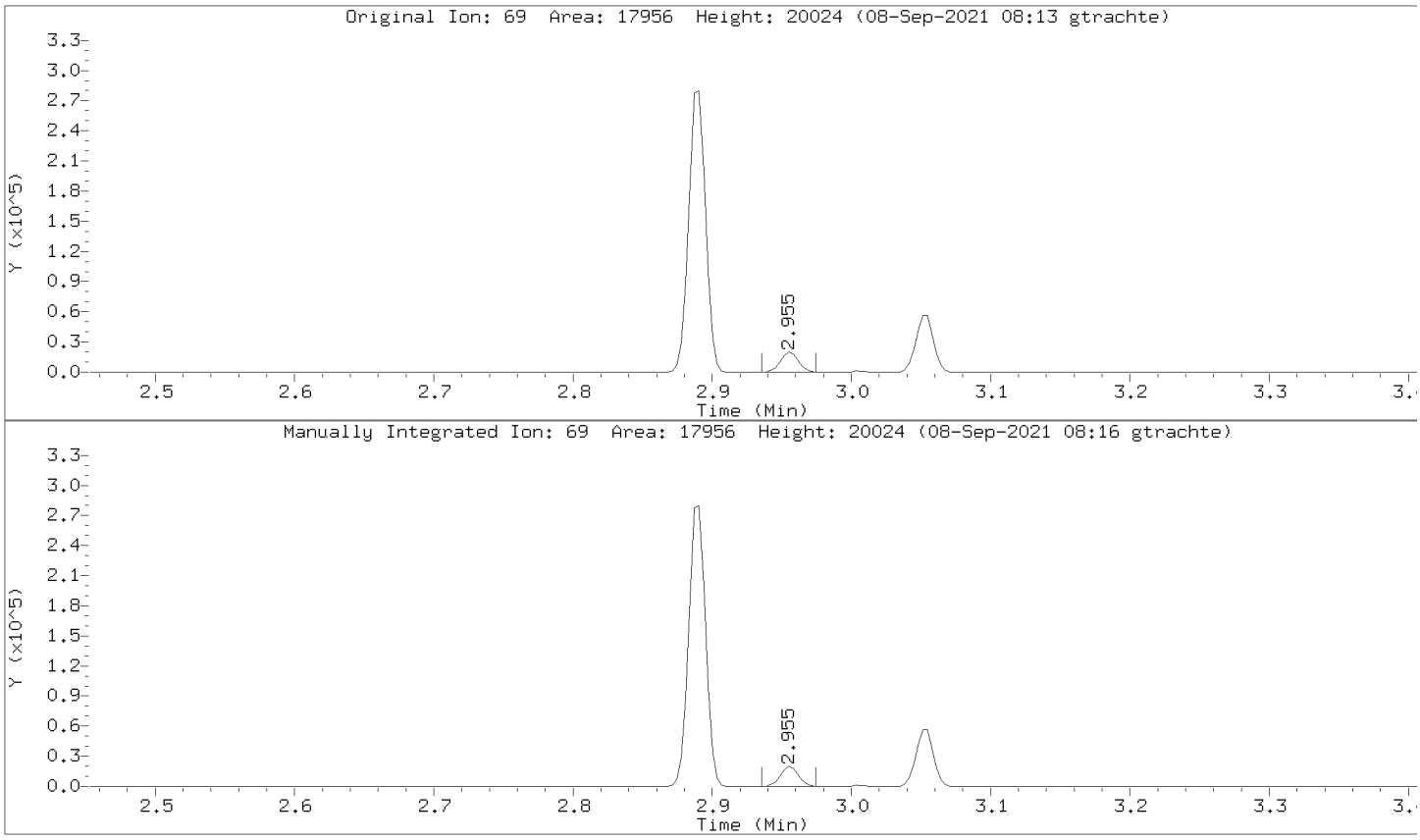


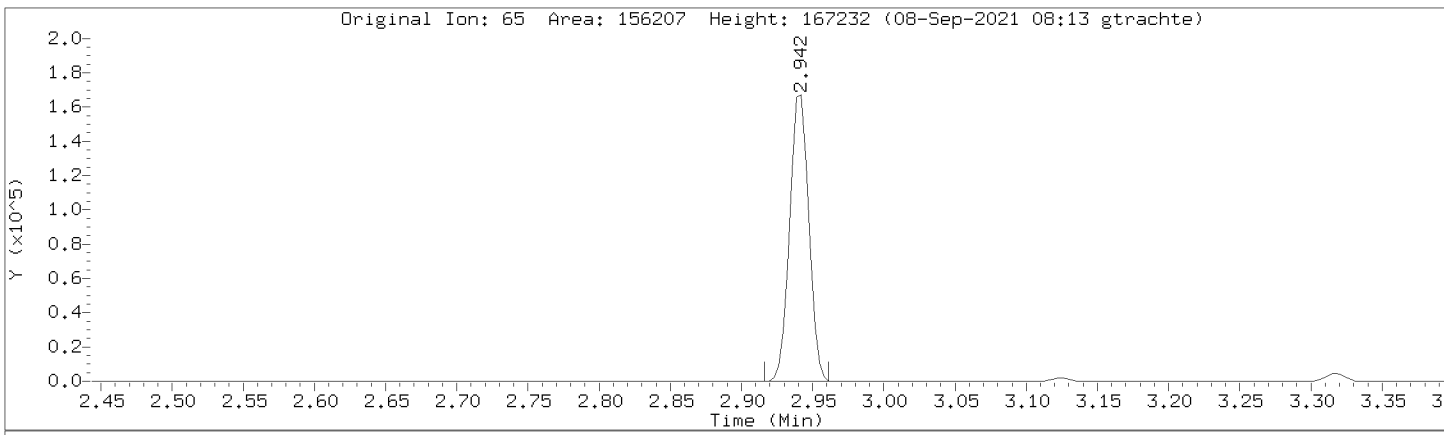



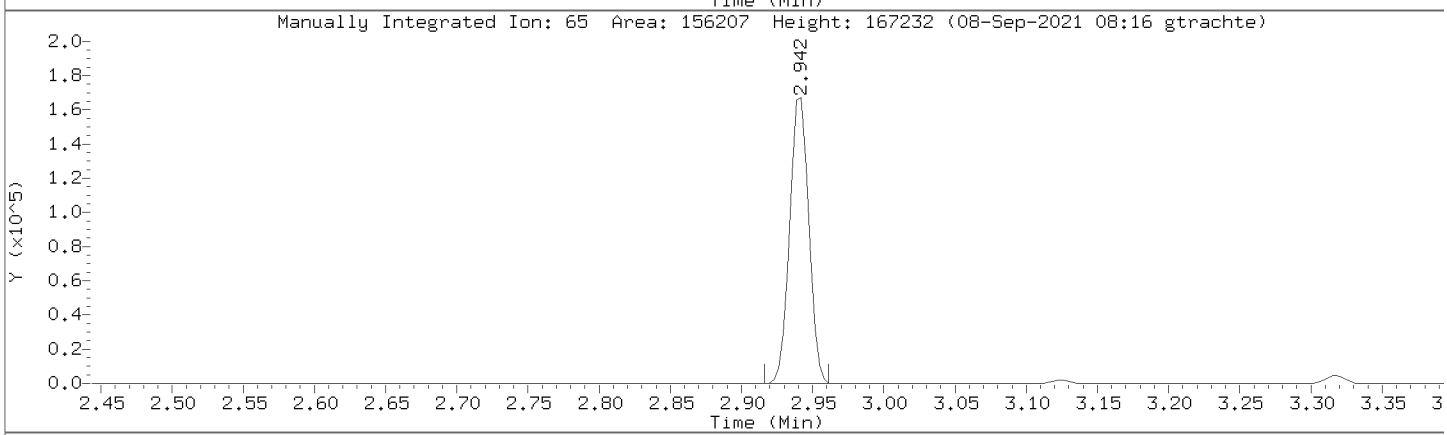
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

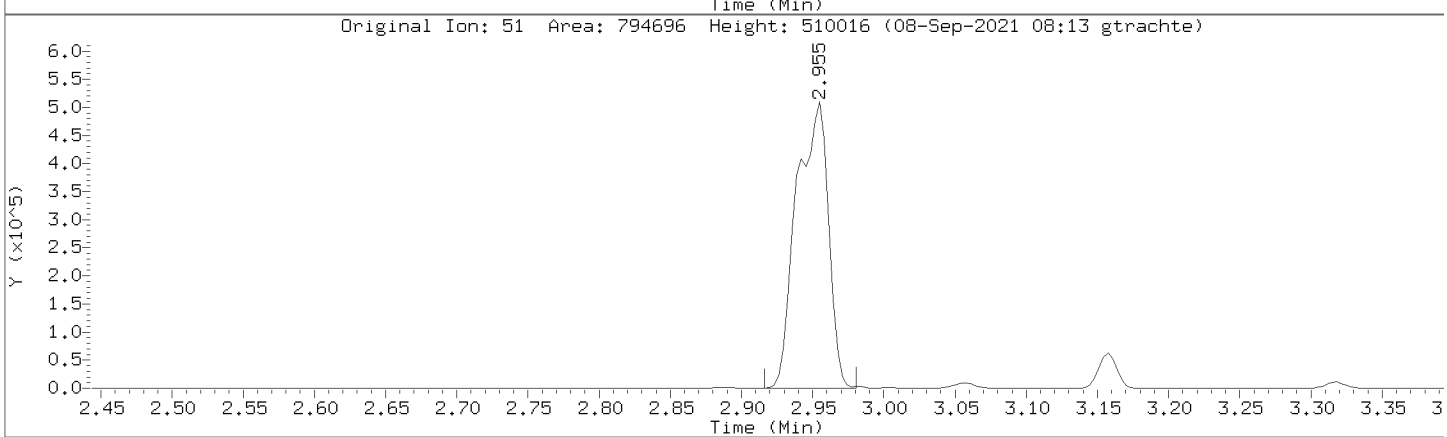


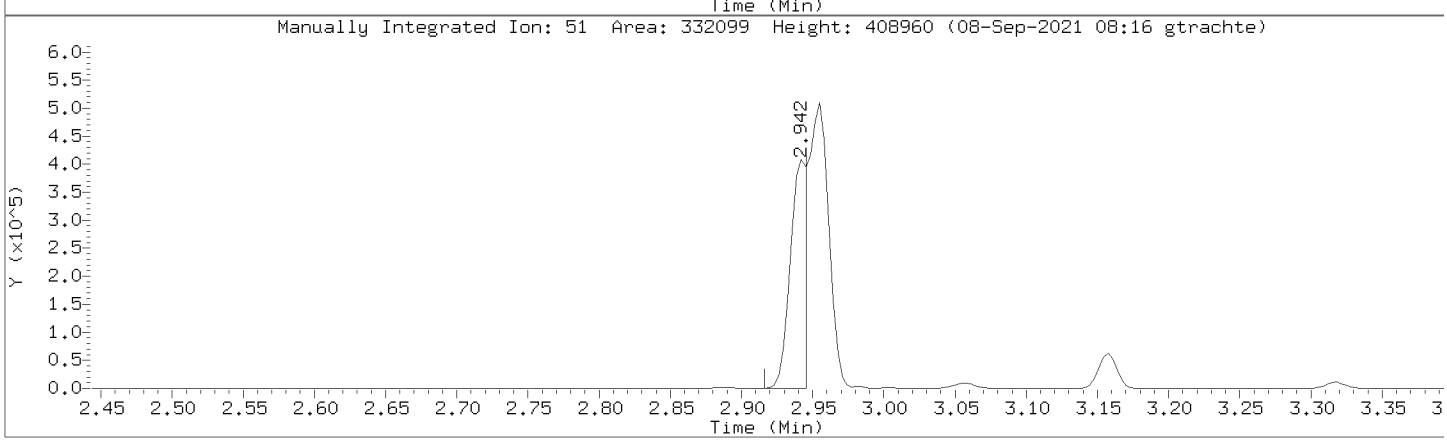
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6



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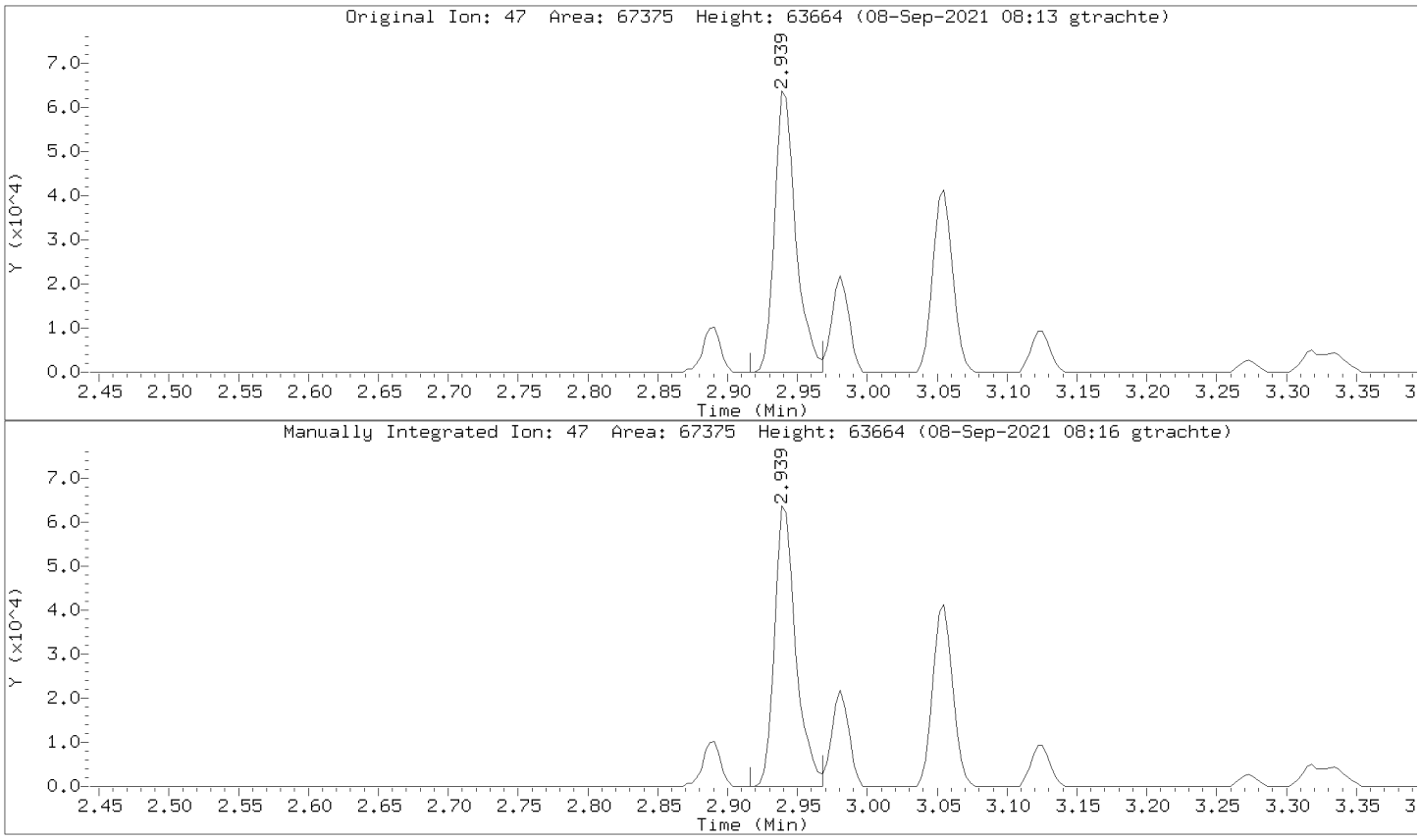
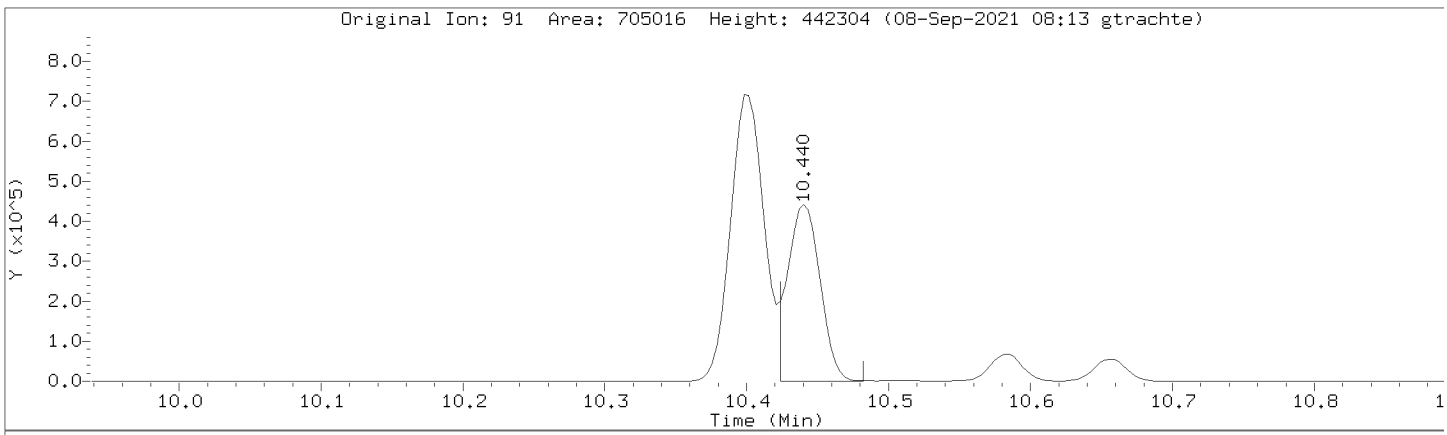
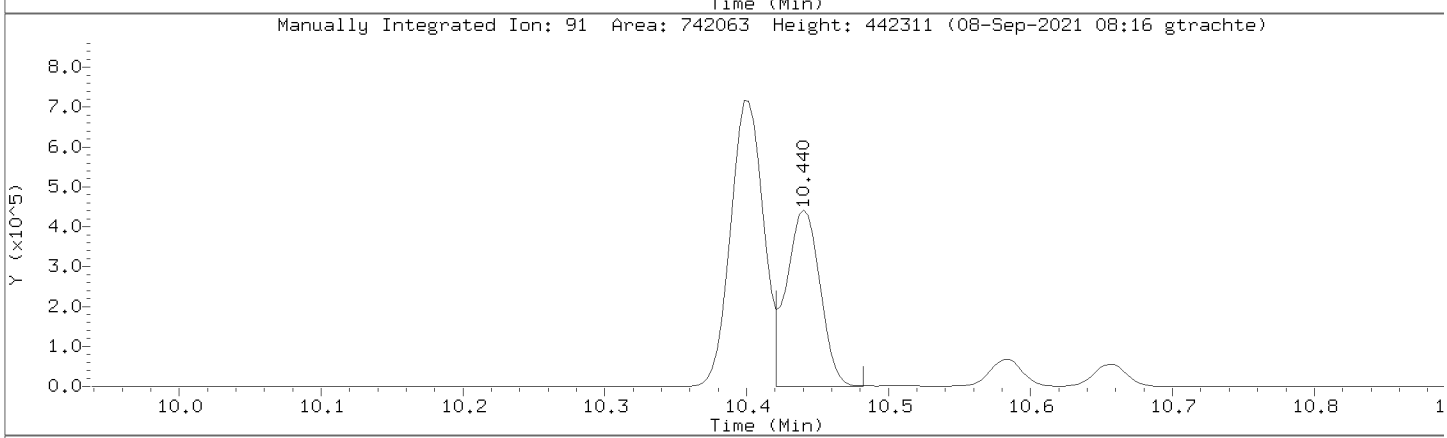
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

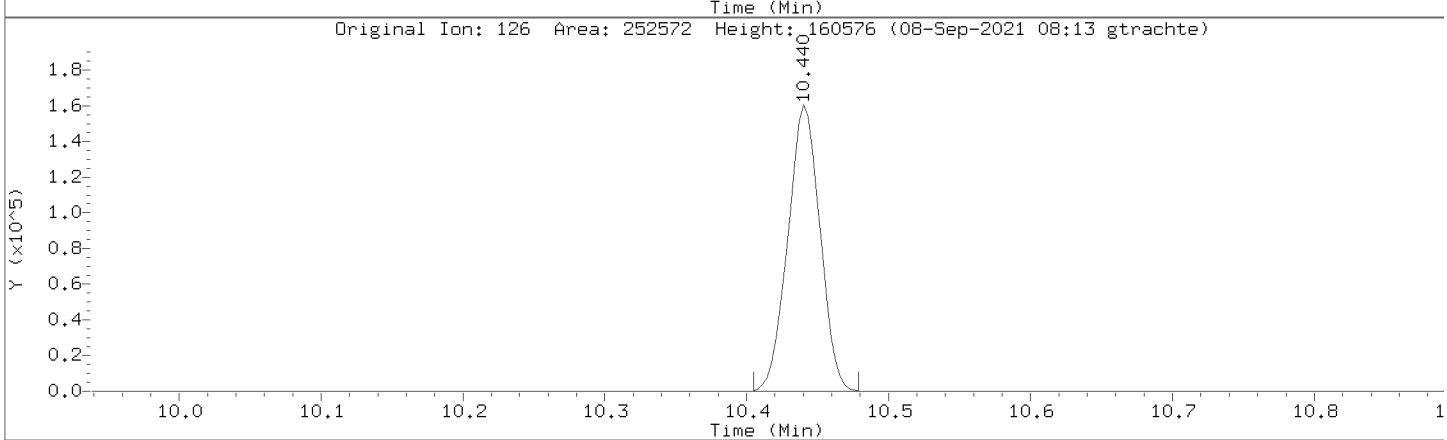


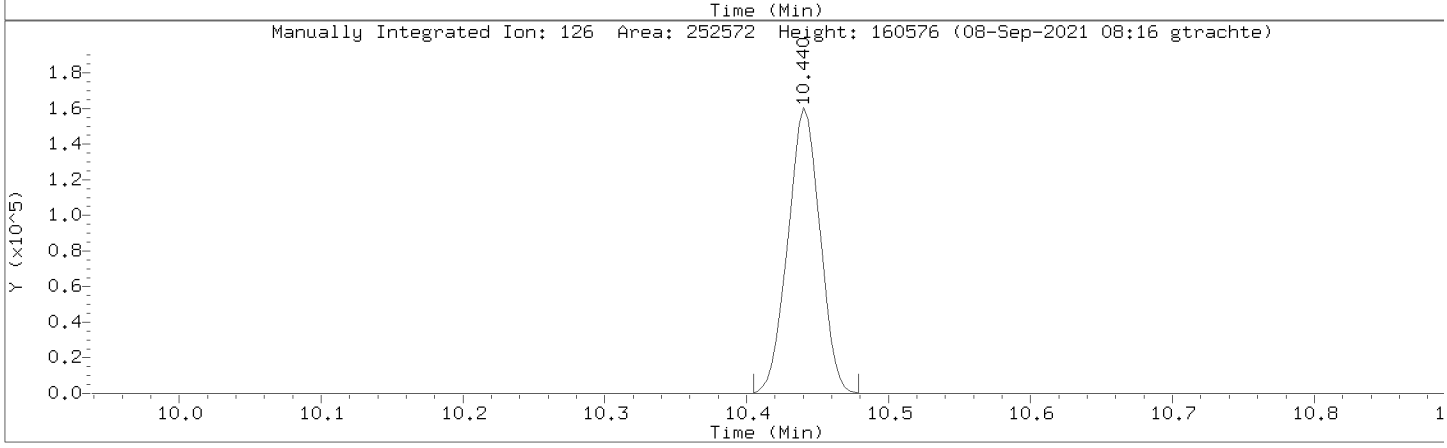
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

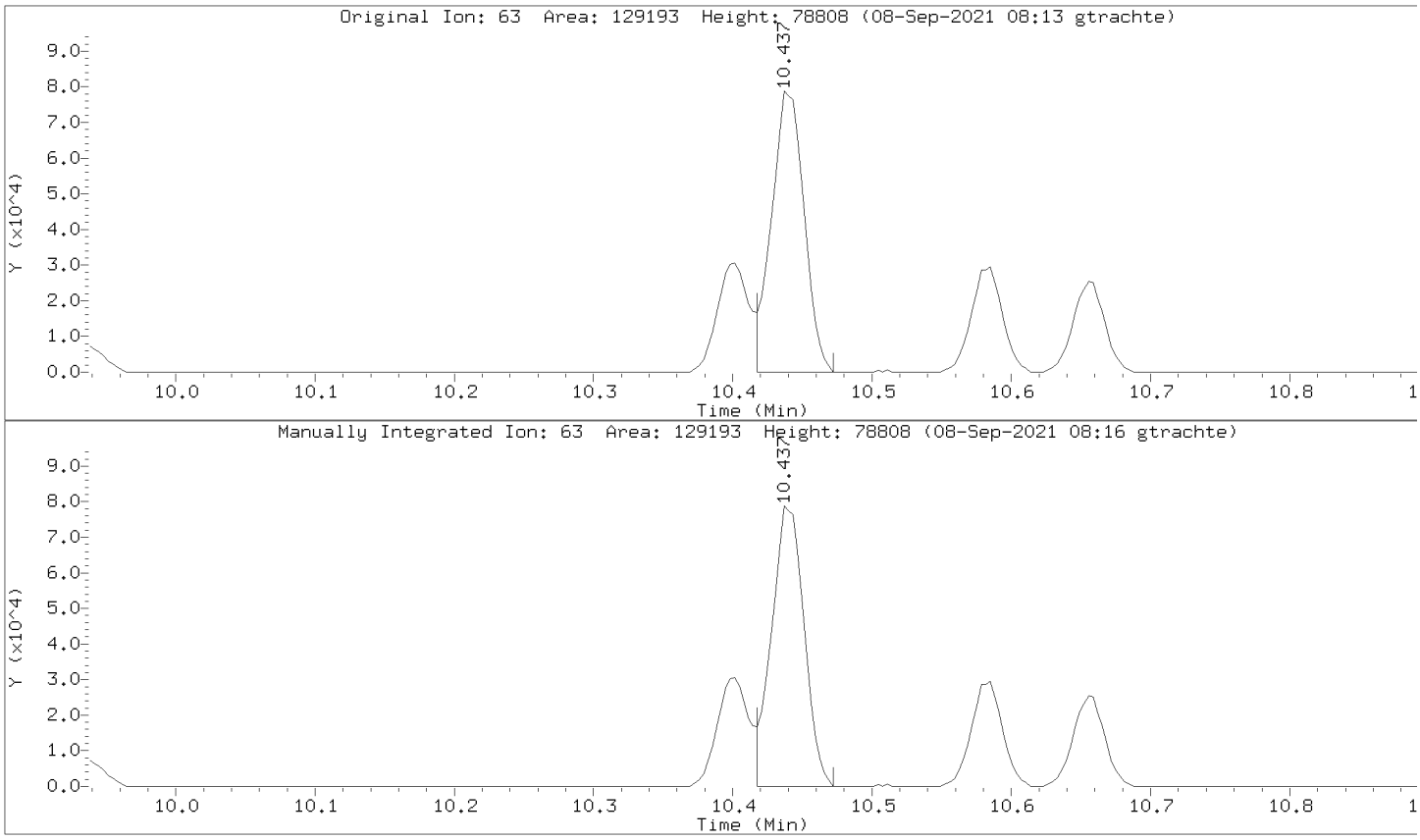


Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: CCV



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Lab Smp Id: 4096963
Inj Date : 08-SEP-2021 11:21
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 0.50000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 0.500 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | Compound Not Detected. | | | | | |
| 2 Propylene | 41 | Compound Not Detected. | | | | | |
| 3 Chlorodifluoromethane | 67 | Compound Not Detected. | | | | | |
| 4 Dichlorodifluoromethane | 85 | 3.749 | 3.765 | (0.532) | 2894 | 0.03432 | 0.0172(a) |
| 5 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 6 Dichlorotetrafluoroethane | 85 | Compound Not Detected. | | | | | |
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 8 1,3-Butadiene | 54 | Compound Not Detected. | | | | | |
| 9 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 10 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 11 Ethanol | 45 | Compound Not Detected. | | | | | |
| 12 Vinyl Bromide | 106 | Compound Not Detected. | | | | | |
| 13 Isopentane | 43 | Compound Not Detected. | | | | | |
| 14 Freon 123 | 83 | Compound Not Detected. | | | | | |
| 15 Trichlorofluoromethane | 101 | 4.531 | 4.547 | (0.643) | 1462 | 0.01767 | 0.00884(aM) |
| 16 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 Acetone | 43 | 4.720 | 4.630 | (0.670) | 5700 | 0.14826 | 0.0741 |
| 18 Isopropyl Alcohol | 45 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 20 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 21 Freon 113 | 101 | 4.910 | 4.907 | (0.697) | 2147 | 0.02757 | 0.0138(a) |
| 22 Methyl Acetate | 43 | Compound Not Detected. | | | | | |
| 23 Tert Butyl Alcohol (TBA) | 59 | Compound Not Detected. | | | | | |
| 24 Allyl Chloride | 76 | Compound Not Detected. | | | | | |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Report Date: 09-Sep-2021 15:02

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | CONCENTRATIONS FINAL ( ppbv) | |
|---|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | Compound Not Detected. | | | | | | |
| 26 Carbon Disulfide | 76 | Compound Not Detected. | | | | | | |
| 27 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | | |
| 28 Methyl Tert Butyl Ether | 73 | Compound Not Detected. | | | | | | |
| 29 Vinyl Acetate | 43 | Compound Not Detected. | | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | | |
| 31 Methyl Ethyl Ketone | 72 | Compound Not Detected. | | | | | | |
| 32 n-Hexane | 57 | Compound Not Detected. | | | | | | |
| 33 Di-isopropyl Ether | 45 | Compound Not Detected. | | | | | | |
| 34 Ethyl Acetate | 43 | Compound Not Detected. | | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | | |
| 36 Ethyl Tert-Butyl Ether | 59 | Compound Not Detected. | | | | | | |
| 37 Chloroform | 83 | Compound Not Detected. | | | | | | |
| 38 Tetrahydrofuran | 42 | Compound Not Detected. | | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | | |
| 40 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | | |
| 41 Benzene | 78 | Compound Not Detected. | | | | | | |
| 42 Carbon tetrachloride | 117 | Compound Not Detected. | | | | | | |
| 43 Cyclohexane | 56 | Compound Not Detected. | | | | | | |
| 44 Tert Amyl Methyl Ether | 73 | Compound Not Detected. | | | | | | (D) |
| * 45 1,4-Difluorobenzene | 114 | 7.048 | 7.061 | (1.000) | 1934031 | 10.0000 | | |
| 46 2,2,4-Trimethylpentane | 57 | Compound Not Detected. | | | | | | |
| 47 Heptane | 43 | Compound Not Detected. | | | | | | |
| 48 Trichloroethene | 130 | Compound Not Detected. | | | | | | |
| 49 Methyl methacrylate | 69 | Compound Not Detected. | | | | | | |
| 50 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | | |
| 51 1,4-Dioxane | 88 | Compound Not Detected. | | | | | | |
| 52 Bromodichloromethane | 83 | Compound Not Detected. | | | | | | |
| 53 Methylcyclohexane | 98 | Compound Not Detected. | | | | | | |
| 54 Methyl Isobutyl Ketone | 43 | Compound Not Detected. | | | | | | |
| 55 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | | |
| 56 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | | |
| 57 Toluene | 91 | Compound Not Detected. | | | | | | |
| 58 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | | |
| 59 Methyl Butyl Ketone | 43 | Compound Not Detected. | | | | | | |
| 60 n-Octane | 43 | Compound Not Detected. | | | | | | |
| 61 Dibromochloromethane | 129 | Compound Not Detected. | | | | | | |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | | |
| 63 1,2-Dibromoethane | 107 | Compound Not Detected. | | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 10.469 | 10.473 | (1.000) | 1409402 | 10.0000 | | |
| 65 Chlorobenzene | 112 | Compound Not Detected. | | | | | | |
| 66 Ethyl Benzene | 91 | Compound Not Detected. | | | | | | |
| 67 m&p-Xylene | 91 | Compound Not Detected. | | | | | | |
| 68 n-Nonane | 43 | Compound Not Detected. | | | | | | |
| 69 Styrene | 104 | Compound Not Detected. | | | | | | |
| 70 o-Xylene | 91 | Compound Not Detected. | | | | | | |
| 71 Bromoform | 173 | Compound Not Detected. | | | | | | |
| 72 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | | |
| 73 Isopropylbenzene | 105 | Compound Not Detected. | | | | | | |
| 74 N-Propylbenzene | 91 | Compound Not Detected. | | | | | | |
| 75 2-Chlorotoluene | 91 | Compound Not Detected. | | | | | | |
| 76 4-Ethyltoluene | 105 | Compound Not Detected. | | | | | | |
| 77 1,3,5-Trimethylbenzene | 105 | Compound Not Detected. | | | | | | |
| 78 n-Decane | 57 | Compound Not Detected. | | | | | | |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Report Date: 09-Sep-2021 15:02

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | Compound Not Detected. | | | | | |
| 80 1,2,4-Trimethylbenzene | 105 | Compound Not Detected. | | | | | |
| 81 Sec- Butylbenzene | 105 | Compound Not Detected. | | | | | |
| 82 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 83 Benzyl Chloride | 91 | Compound Not Detected. | | | | | |
| 84 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 85 p-Isopropyltoluene | 119 | Compound Not Detected. | | | | | |
| 86 1,2,3-Trimethylbenzene | 105 | Compound Not Detected. | | | | | |
| 87 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 88 N-Butylbenzene | 91 | Compound Not Detected. | | | | | |
| 89 1,2-Dibromo-3-Chloropropane | 157 | Compound Not Detected. | | | | | |
| 90 1,2,4-Trichlorobenzene | 180 | 16.013 | 15.971 | (1.529) | 97 | 0.47443 | 0.237(QM) |
| 91 Naphthalene | 128 | 16.212 | 16.157 | (1.548) | 2363 | 0.23890 | 0.119(M) |
| 92 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Lab Smp Id: 4096963
Inj Date : 08-SEP-2021 11:21
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 0.50000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 0.500 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.049 | 3870063 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.470 | 3701869 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 3.583 | 4206723 | 10.8699075 | 5.43 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | |
| 9.328 | 381021 | 1.02926580 | 0.515 | 91 | NIST05.L | 73123 | 64 |
| Benzene, 1-bromo-3-fluoro- | | | | | CAS #: 1073-06-9 | | |
| 12.184 | 3143097 | 8.49056606 | 4.25 | 97 | NIST05.L | 39151 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Calibration Date: 08-SEP-2021
Lab File ID: 25105_40159.D
Calibration Time: 09:52
Lab Smp Id: 4096963
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1934031 | -8.44 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1409402 | -14.83 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.18 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.03 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 4096963
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 11:21

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

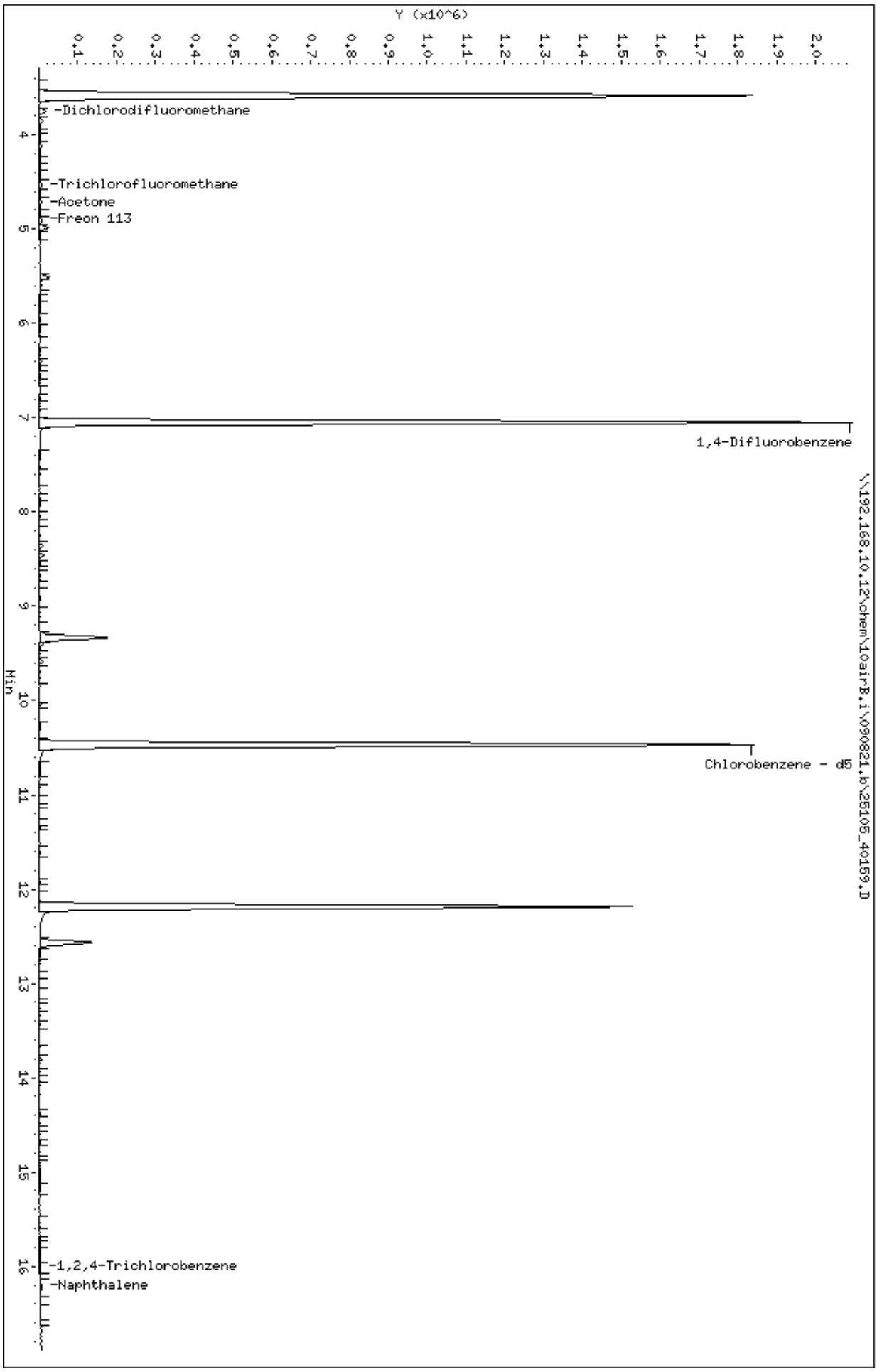
Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.583 | 5.43 | _J__ |
| 2. 541-05-9 | Cyclotrisiloxane, hexamethy | 9.328 | 0.515 | NJ__ |
| 3. 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 12.184 | 4.25 | NJ__ |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D
Date : 08-SEP-2021 11:21
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airB.i
Operator: HHH
Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D

Date : 08-SEP-2021 11:21

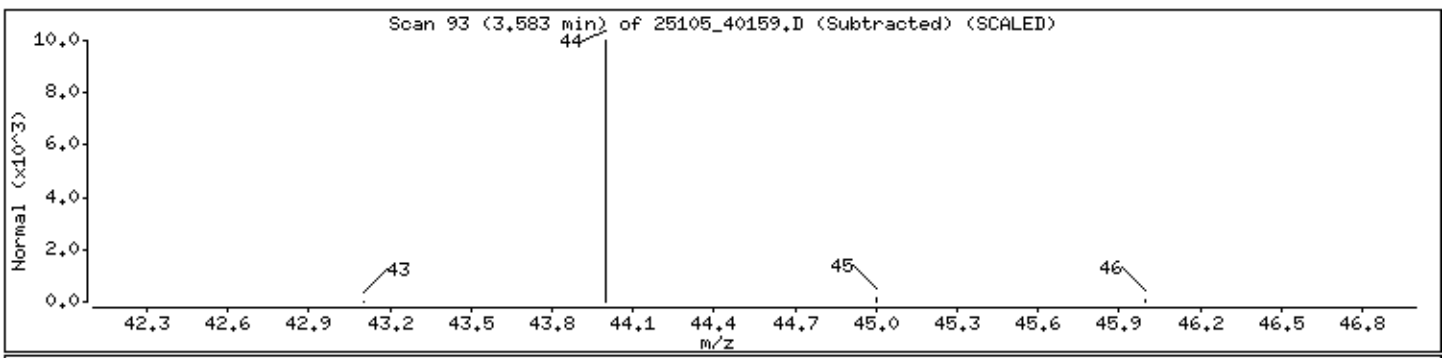
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D

Date : 08-SEP-2021 11:21

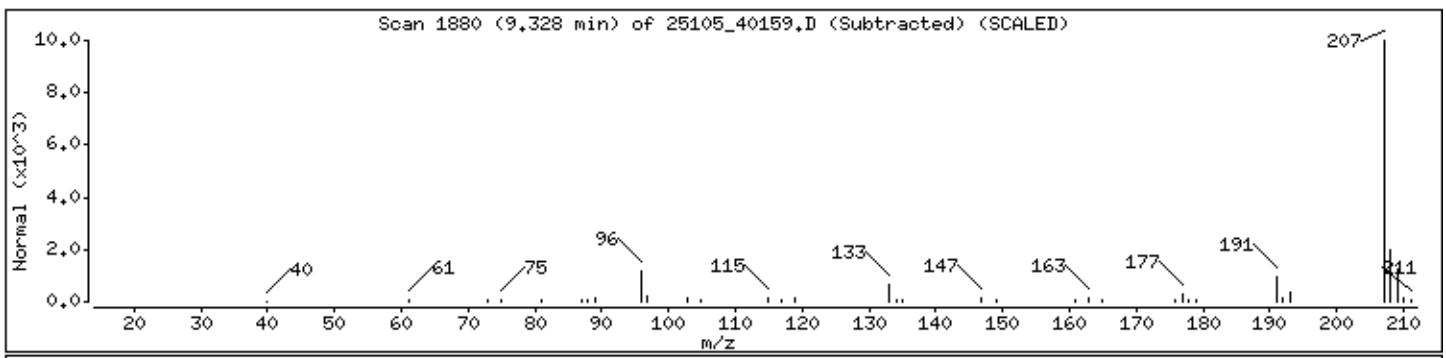
Client ID: Instrument: 10airB.i

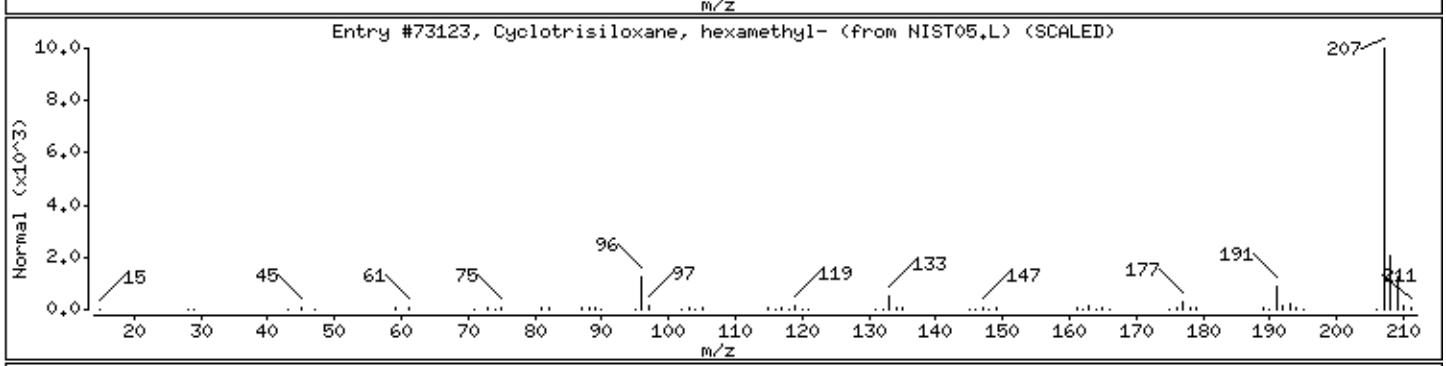
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 91 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25105_40159.D

Date : 08-SEP-2021 11:21

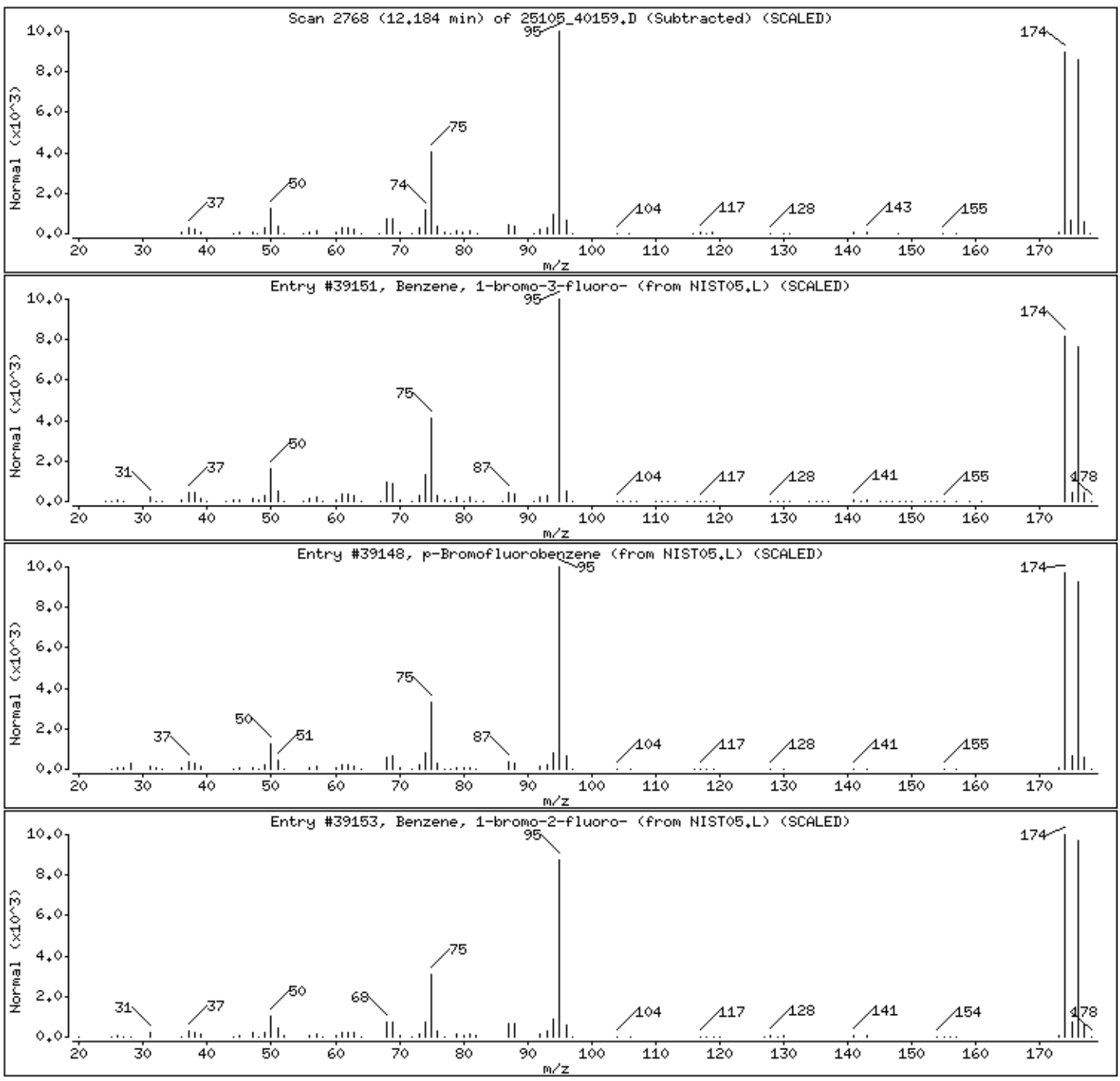
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

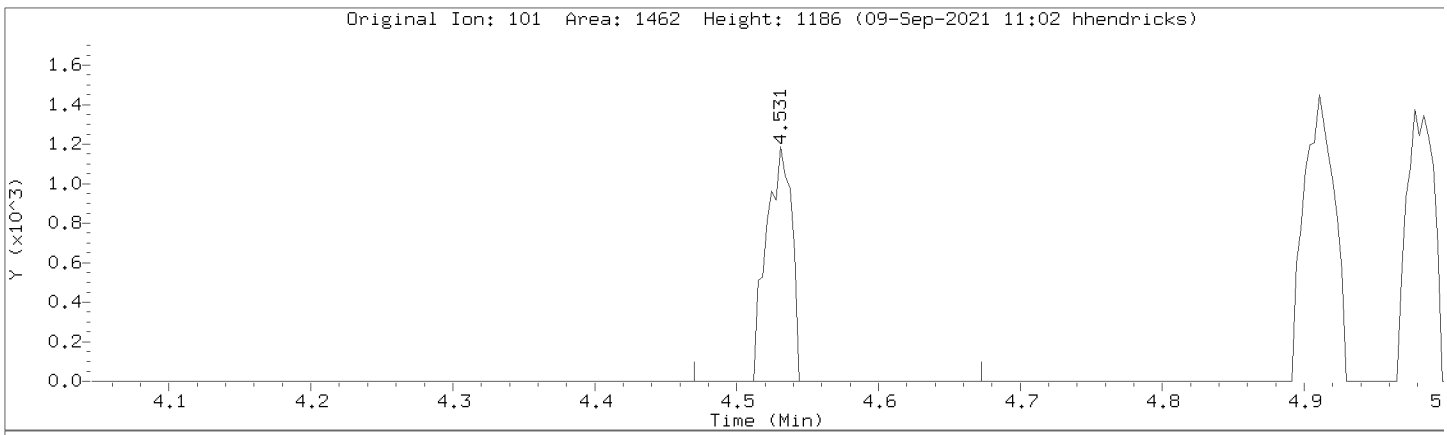
Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

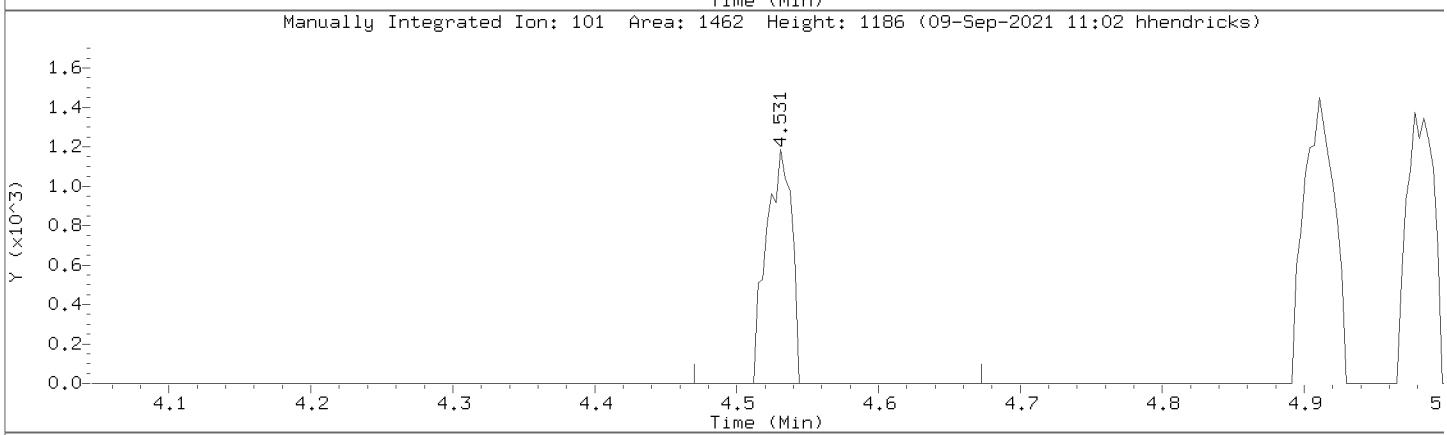
| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 97 | C6H4BrF | 174 |
| p-Bromofluorobenzene | 460-00-4 | NIST05.L | 39148 | 97 | C6H4BrF | 174 |
| Benzene, 1-bromo-2-fluoro- | 1072-85-1 | NIST05.L | 39153 | 94 | C6H4BrF | 174 |

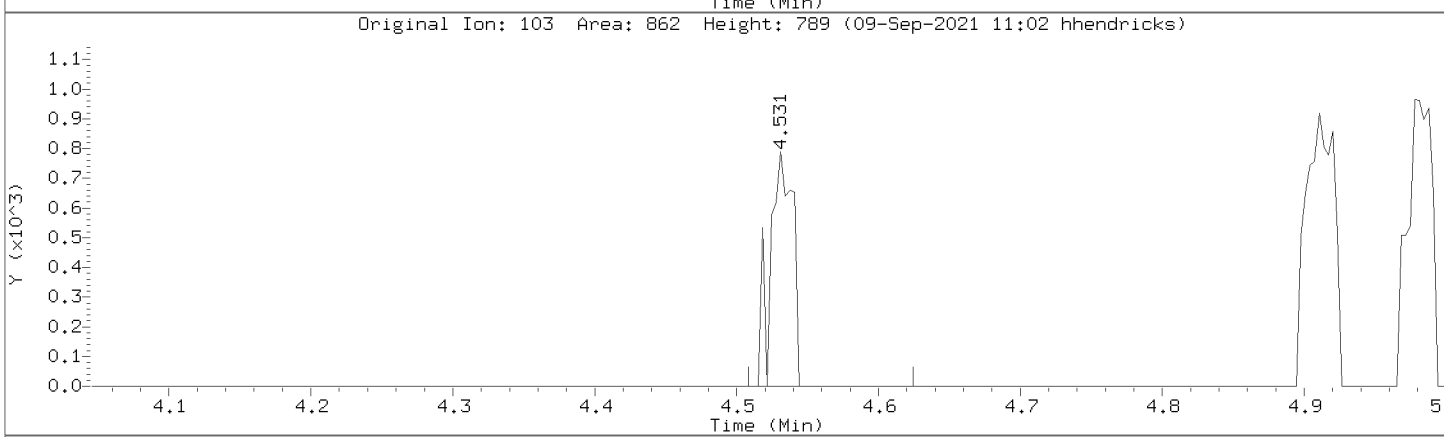


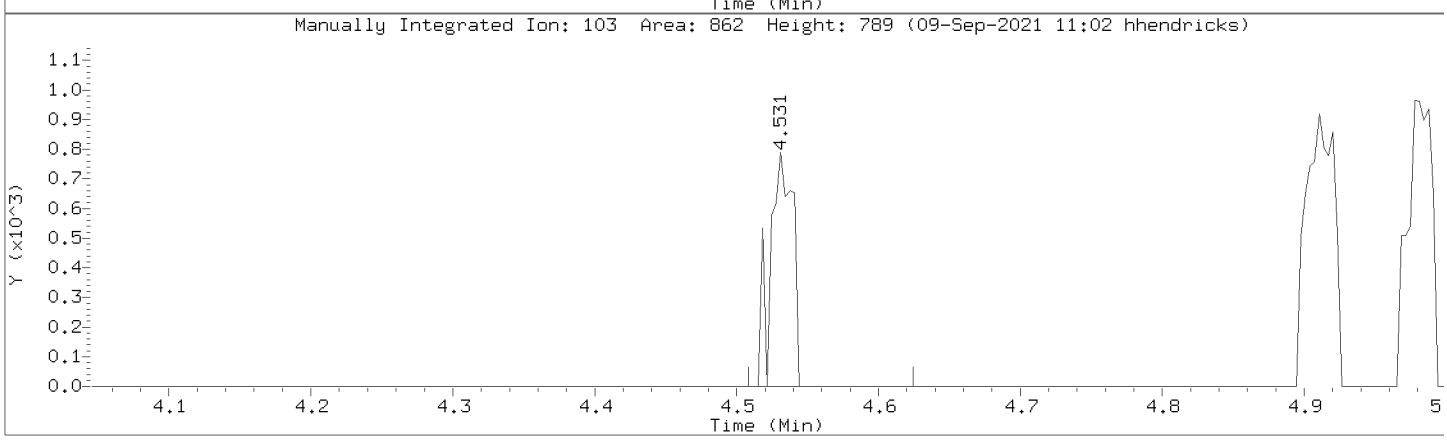
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25105_40159.D
Injection Date: 08-SEP-2021 11:21
Instrument: 10airB.i
Lab Sample ID: 4096963

Compound: Trichlorofluoromethane
CAS Number: 75-69-4

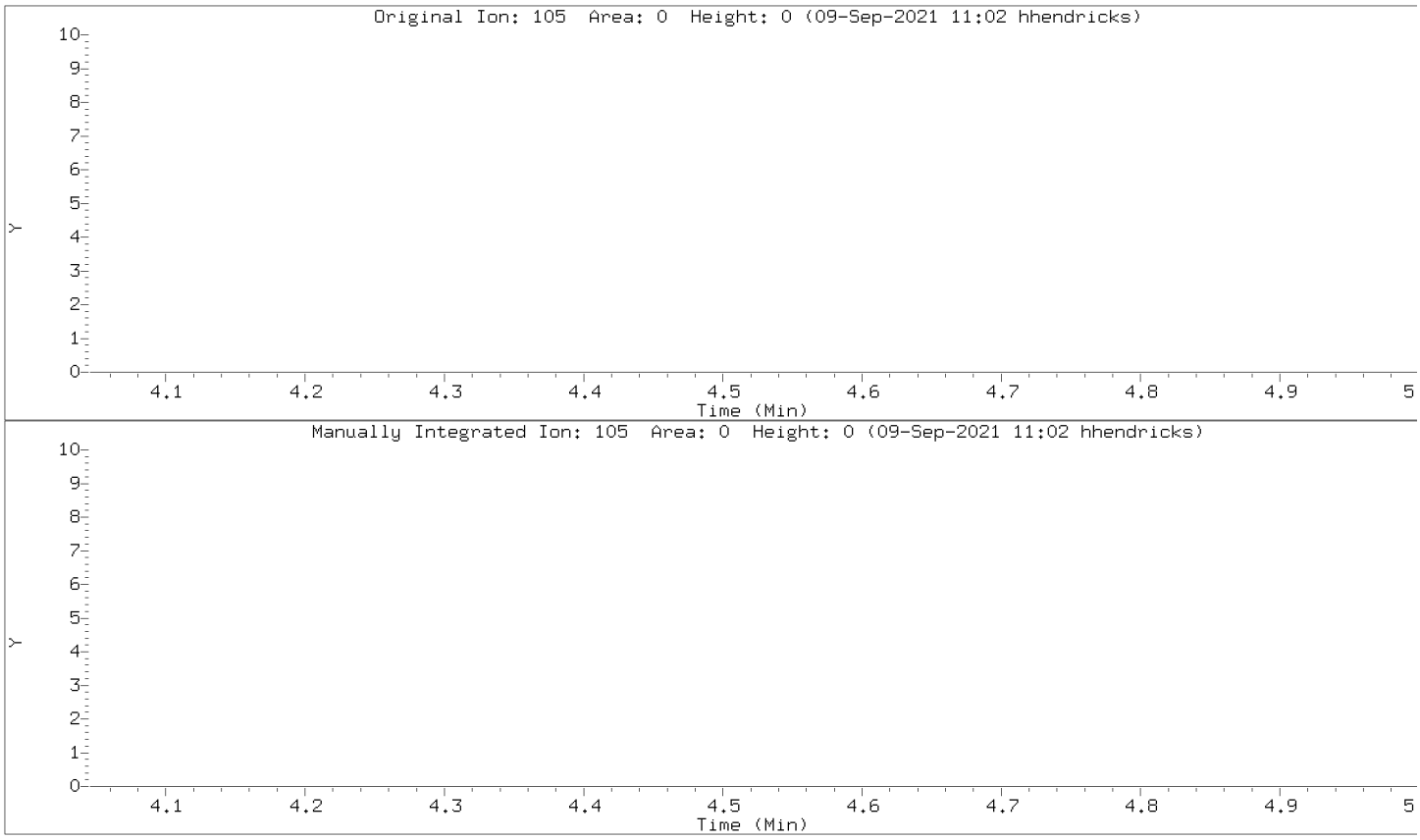


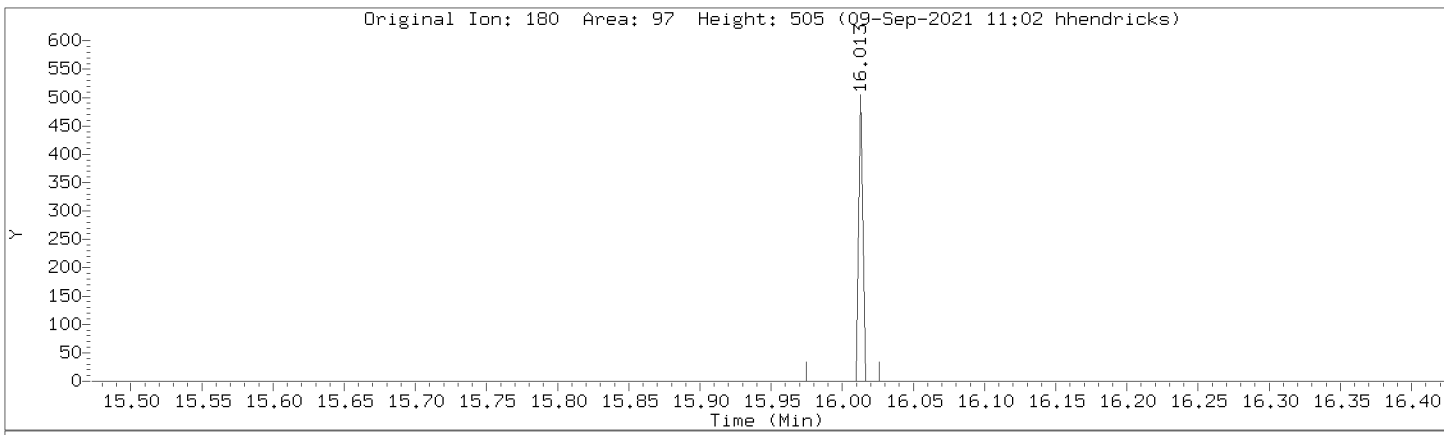



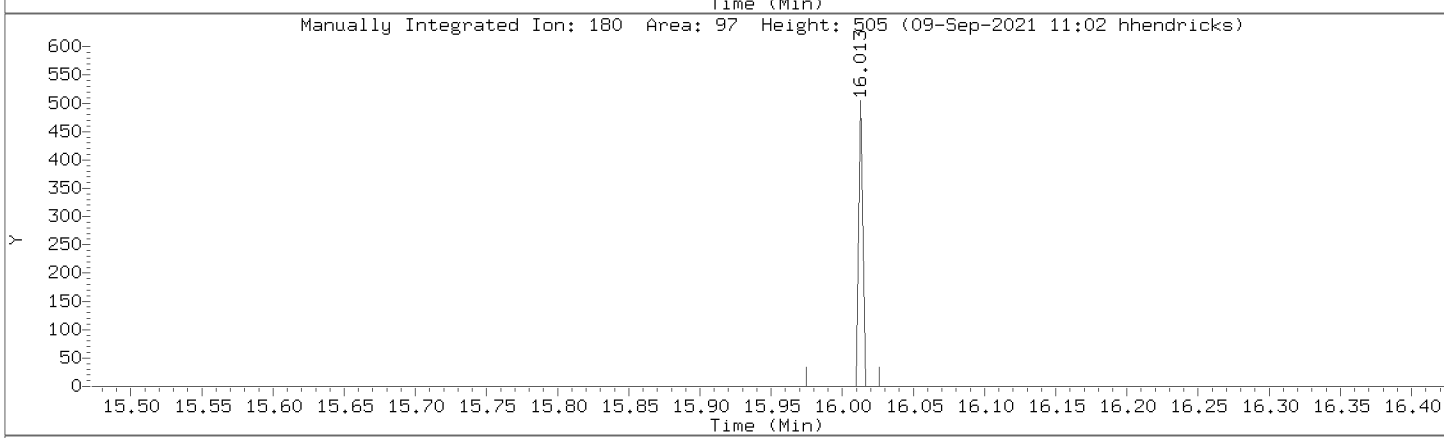
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25105_40159.D
Injection Date: 08-SEP-2021 11:21
Instrument: 10airB.i
Lab Sample ID: 4096963

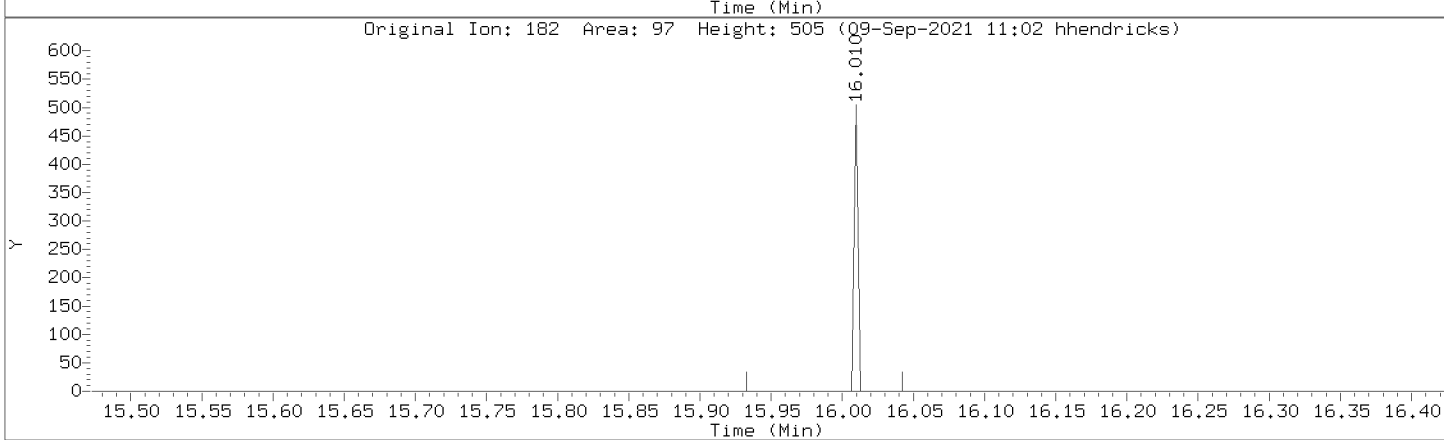


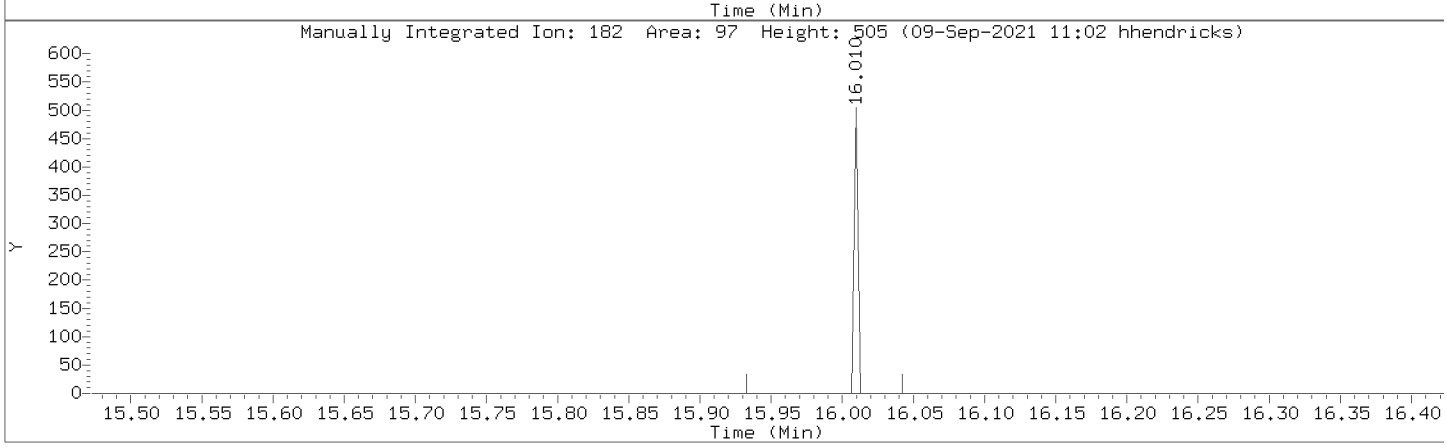
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25105_40159.D
Injection Date: 08-SEP-2021 11:21
Instrument: 10airB.i
Lab Sample ID: 4096963

Compound: 1,2,4-Trichlorobenzene
CAS Number: 95-63-6

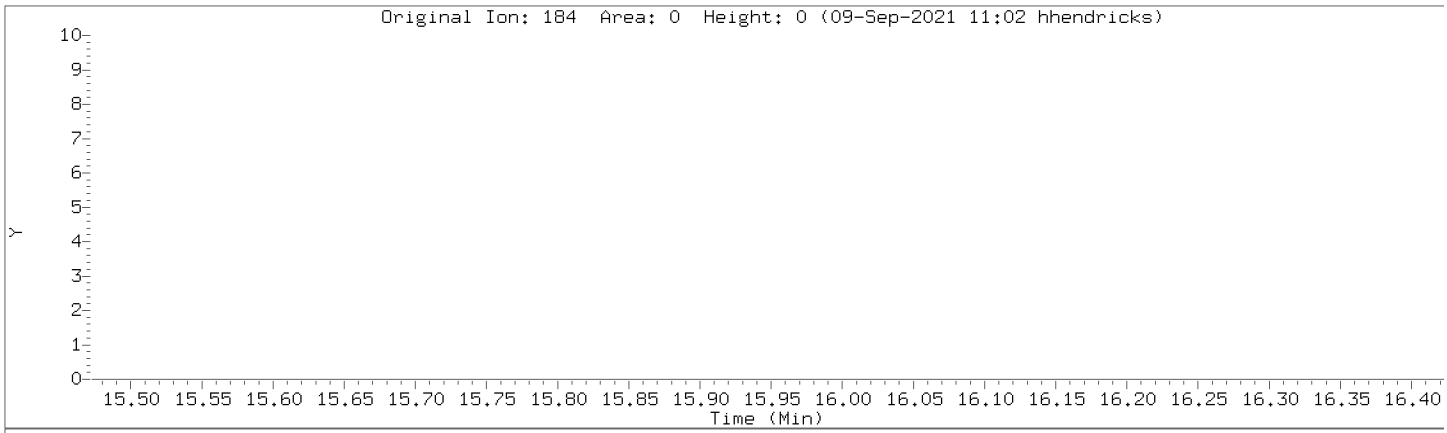


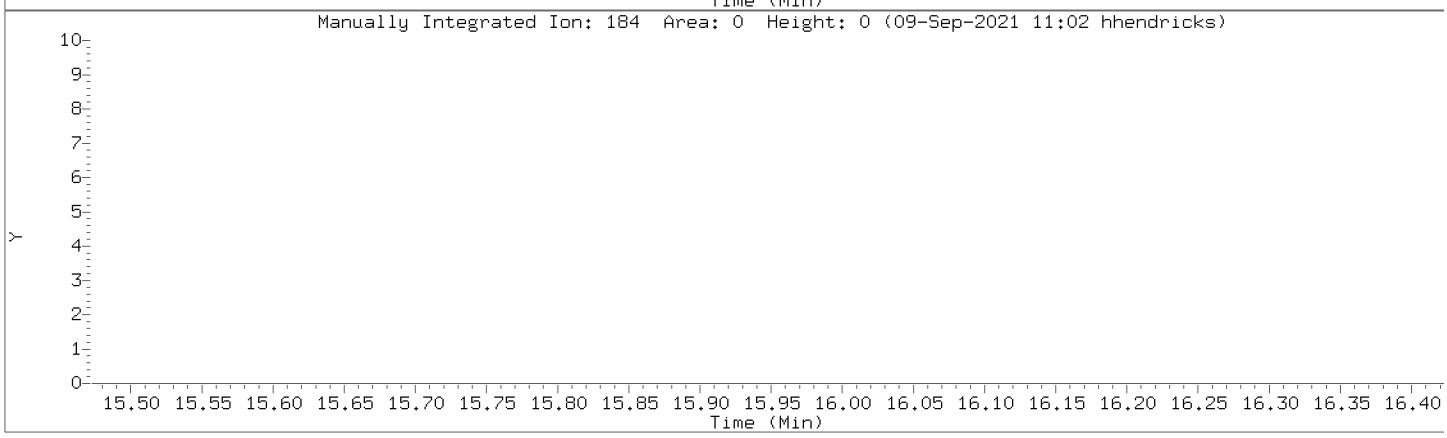



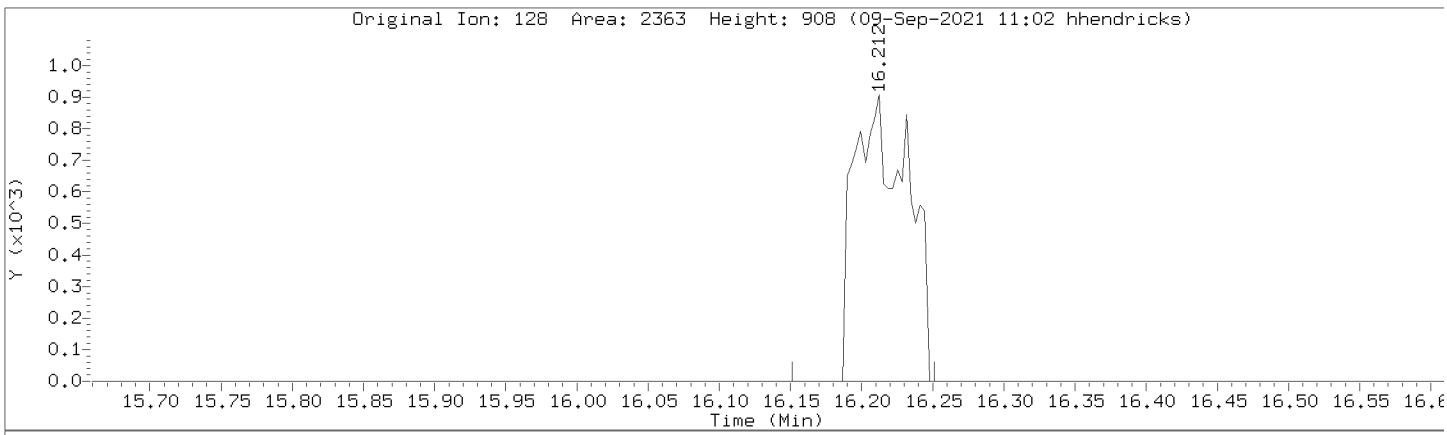
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25105_40159.D
Injection Date: 08-SEP-2021 11:21
Instrument: 10airB.i
Lab Sample ID: 4096963

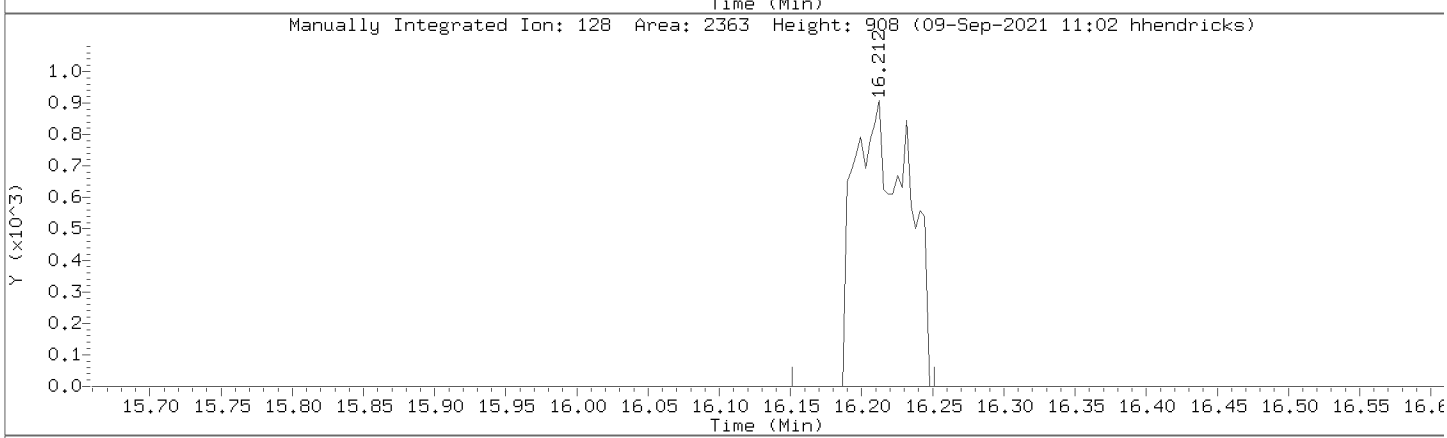


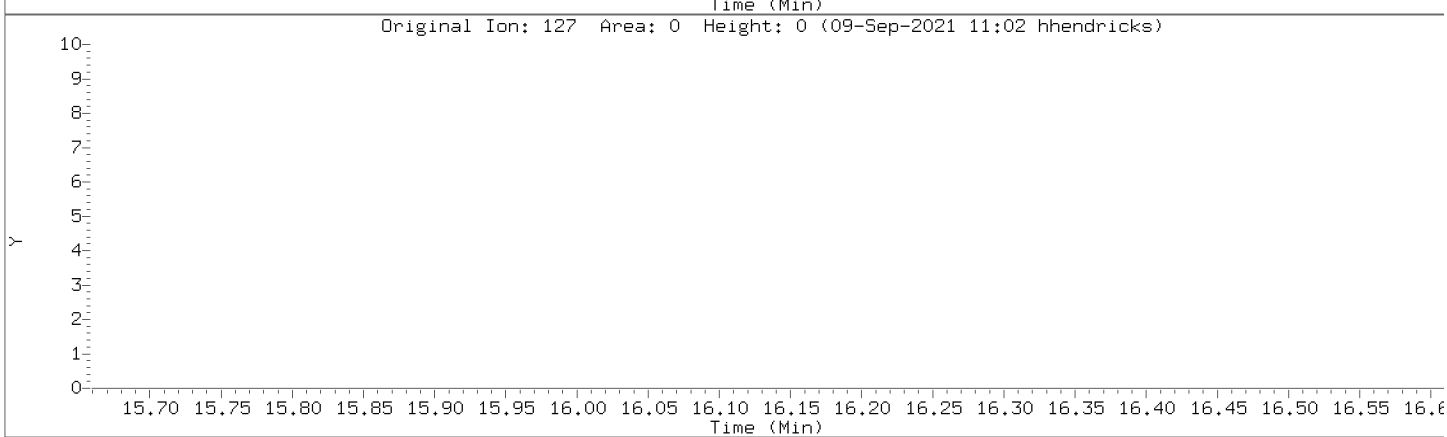



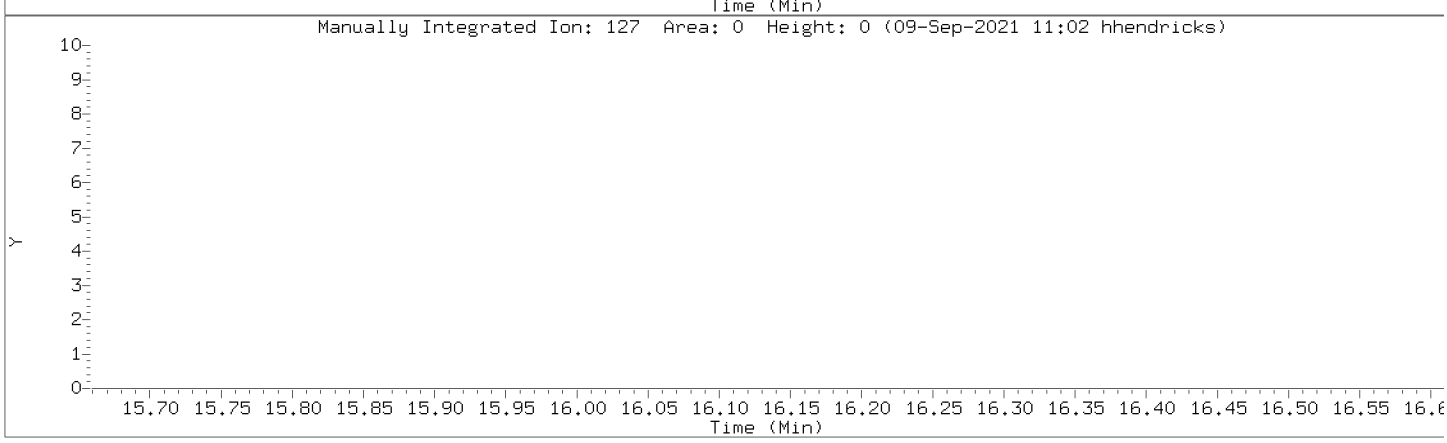
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25105_40159.D
Injection Date: 08-SEP-2021 11:21
Instrument: 10airB.i
Lab Sample ID: 4096963

Compound: Naphthalene
CAS Number: 91-20-3



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Lab Smp Id: 4096970
Inj Date : 08-SEP-2021 09:05
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 0.50000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 0.500 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | Compound Not Detected. | | | | | |
| 2 Chlorodifluoromethane | 67 | Compound Not Detected. | | | | | |
| 3 Propylene | 41 | Compound Not Detected. | | | | | |
| 4 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 5 Dichlorotetrafluoroethane | 85 | Compound Not Detected. | | | | | |
| 6 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 8 1,3-Butadiene | 54 | Compound Not Detected. | | | | | |
| 9 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 10 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 11 Ethanol | 45 | Compound Not Detected. | | | | | |
| 12 Vinyl Bromide | 106 | Compound Not Detected. | | | | | |
| 13 Isopentane | 43 | Compound Not Detected. | | | | | |
| 14 Freon 123 | 83 | Compound Not Detected. | | | | | |
| 15 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 16 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 Acetone | 43 | Compound Not Detected. | | | | | |
| 18 Isopropyl Alcohol | 45 | 3.556 | 3.546 | (0.656) | 2799 | 0.09120 | 0.0456(Q) |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 20 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 21 Tert Butyl Alcohol (TBA) | 59 | Compound Not Detected. | | | | | |
| 22 Methyl Acetate | 43 | Compound Not Detected. | | | | | |
| 23 Freon 113 | 101 | Compound Not Detected. | | | | | |
| 24 Allyl Chloride | 76 | Compound Not Detected. | | | | | |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Report Date: 09-Sep-2021 14:20

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | CONCENTRATIONS FINAL ( ppbv) | |
|---|---|---|---|---|---|---|---|---|---|
| 25 | Methylene chloride | 49 | Compound Not Detected. | | | | | | |
| 26 | Carbon Disulfide | 76 | Compound Not Detected. | | | | | | |
| 27 | Methyl Tert Butyl Ether | 73 | Compound Not Detected. | | | | | | |
| 28 | trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | | |
| 29 | Vinyl Acetate | 43 | Compound Not Detected. | | | | | | |
| 30 | 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | | |
| 31 | Methyl Ethyl Ketone | 72 | Compound Not Detected. | | | | | | |
| 32 | Di-isopropyl Ether | 45 | Compound Not Detected. | | | | | | |
| 33 | n-Hexane | 57 | Compound Not Detected. | | | | | | |
| 34 | Ethyl Acetate | 43 | Compound Not Detected. | | | | | | |
| 35 | cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | | |
| 36 | Ethyl Tert-Butyl Ether | 59 | Compound Not Detected. | | | | | | |
| 37 | Chloroform | 83 | Compound Not Detected. | | | | | | |
| 38 | Tetrahydrofuran | 42 | Compound Not Detected. | | | | | | |
| 39 | 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | | |
| 40 | 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | | |
| 41 | Benzene | 78 | Compound Not Detected. | | | | | | |
| 42 | Carbon tetrachloride | 117 | Compound Not Detected. | | | | | | |
| 43 | Cyclohexane | 56 | Compound Not Detected. | | | | | | |
| 44 | Tert Amyl Methyl Ether | 73 | Compound Not Detected. | | | | | | (D) |
| * 45 | 1,4-Difluorobenzene | 114 | 5.424 | 5.430 | (1.000) | 469234 | 10.0000 | | |
| 46 | 2,2,4-Trimethylpentane | 57 | Compound Not Detected. | | | | | | |
| 47 | Heptane | 43 | Compound Not Detected. | | | | | | |
| 48 | Trichloroethene | 130 | Compound Not Detected. | | | | | | |
| 49 | Methyl methacrylate | 69 | Compound Not Detected. | | | | | | |
| 50 | 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | | |
| 51 | 1,4-Dioxane | 88 | 5.864 | 5.848 | (1.081) | 1946 | 0.16012 | 0.0801(QM) | |
| 52 | Bromodichloromethane | 83 | Compound Not Detected. | | | | | | |
| 53 | Methylcyclohexane | 98 | Compound Not Detected. | | | | | | |
| 54 | Methyl Isobutyl Ketone | 43 | Compound Not Detected. | | | | | | |
| 55 | cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | | |
| 56 | trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | | |
| 57 | Toluene | 91 | Compound Not Detected. | | | | | | |
| 58 | 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | | |
| 59 | Methyl Butyl Ketone | 43 | Compound Not Detected. | | | | | | |
| 60 | n-Octane | 43 | Compound Not Detected. | | | | | | |
| 61 | Dibromochloromethane | 129 | Compound Not Detected. | | | | | | |
| 62 | Tetrachloroethene | 166 | Compound Not Detected. | | | | | | |
| 63 | 1,2-Dibromoethane | 107 | Compound Not Detected. | | | | | | |
| * 64 | Chlorobenzene - d5 | 117 | 8.401 | 8.404 | (1.000) | 372150 | 10.0000 | | |
| 65 | Chlorobenzene | 112 | Compound Not Detected. | | | | | | |
| 66 | Ethyl Benzene | 91 | Compound Not Detected. | | | | | | |
| 67 | m&p-Xylene | 91 | Compound Not Detected. | | | | | | |
| 68 | n-Nonane | 43 | Compound Not Detected. | | | | | | |
| 69 | Styrene | 104 | Compound Not Detected. | | | | | | |
| 70 | o-Xylene | 91 | Compound Not Detected. | | | | | | |
| 71 | Bromoform | 173 | Compound Not Detected. | | | | | | |
| 72 | 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | | |
| 73 | Isopropylbenzene | 105 | Compound Not Detected. | | | | | | |
| 74 | N-Propylbenzene | 91 | Compound Not Detected. | | | | | | |
| 75 | 2-Chlorotoluene | 91 | Compound Not Detected. | | | | | | |
| 76 | 4-Ethyltoluene | 105 | Compound Not Detected. | | | | | | |
| 77 | 1,3,5-Trimethylbenzene | 105 | Compound Not Detected. | | | | | | |
| 78 | n-Decane | 57 | Compound Not Detected. | | | | | | (D) |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Report Date: 09-Sep-2021 14:20

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | Compound Not Detected. | | | | | |
| 80 1,2,4-Trimethylbenzene | 105 | Compound Not Detected. | | | | | |
| 81 Sec- Butylbenzene | 105 | Compound Not Detected. | | | | | |
| 82 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 83 Benzyl Chloride | 91 | Compound Not Detected. | | | | | |
| 84 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 85 p-Isopropyltoluene | 119 | Compound Not Detected. | | | | | |
| 86 1,2,3-Trimethylbenzene | 105 | Compound Not Detected. | | | | | |
| 87 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 88 N-Butylbenzene | 91 | Compound Not Detected. | | | | | |
| 89 1,2-Dibromo-3-Chloropropane | 157 | Compound Not Detected. | | | | | |
| 90 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 91 Naphthalene | 128 | 13.674 | 13.671 | (1.628) | 2315 | 0.23701 | 0.119(M) |
| 92 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Lab Smp Id: 4096970
Inj Date : 08-SEP-2021 09:05
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 0.50000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 0.500 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 5.424 | 1156168 | 10.000 |
| * 64 Chlorobenzene - d5 | 8.402 | 1174402 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | | |
|---|---|---|---|---|---|---|---|---|
| | RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | | CAS #: | | |
| | 2.871 | 1153688 | 9.97854399 | 4.99 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | | CAS #: 541-05-9 | | |
| | 7.395 | 121743 | 1.03663380 | 0.518 | 90 | NIST05.L | 73121 | 64 |
| Benzene, 1-bromo-3-fluoro- | | | | | | CAS #: 1073-06-9 | | |
| | 9.935 | 959992 | 8.17429902 | 4.09 | 97 | NIST05.L | 39151 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Calibration Date: 08-SEP-2021
Lab File ID: 25104_40160.D
Calibration Time: 07:18
Lab Smp Id: 4096970
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 469234 | 2.05 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 372150 | -5.07 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.42 | -0.12 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.04 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 4096970
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 09:05

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 2.871 | 4.99 | _J__ |
| 2. 541-05-9 | Cyclotrisiloxane, hexamethy | 7.395 | 0.518 | NJ__ |
| 3. 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 9.935 | 4.09 | NJ__ |

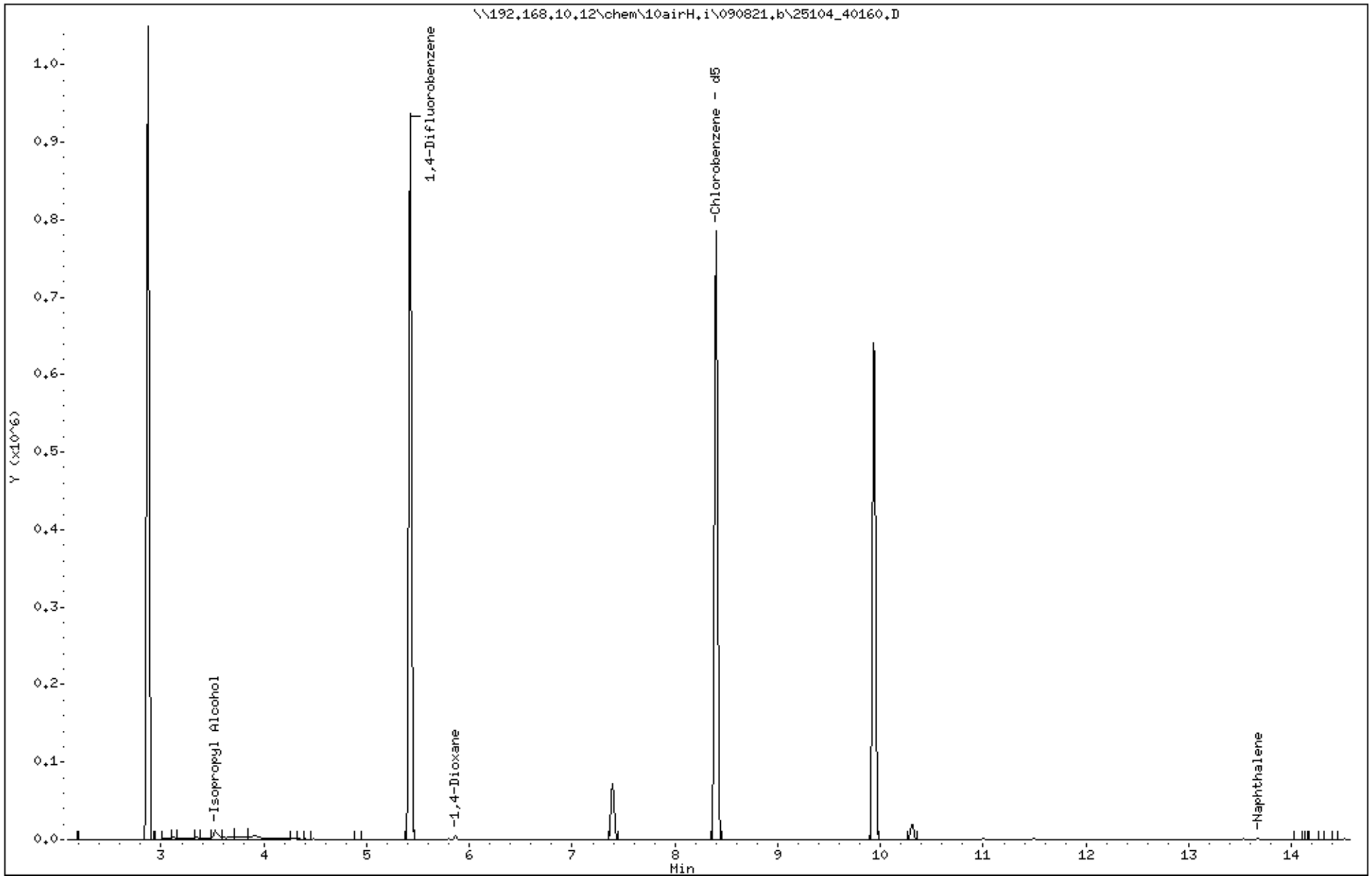
Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D
Date : 08-SEP-2021 09:05
Client ID:
Sample Info:

Instrument: 10airH.i

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D

Date : 08-SEP-2021 09:05

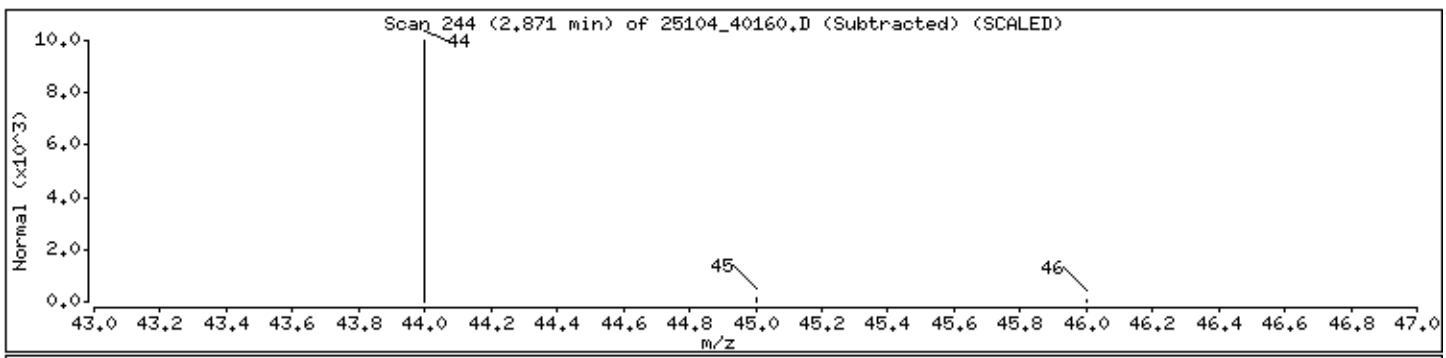
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D

Date : 08-SEP-2021 09:05

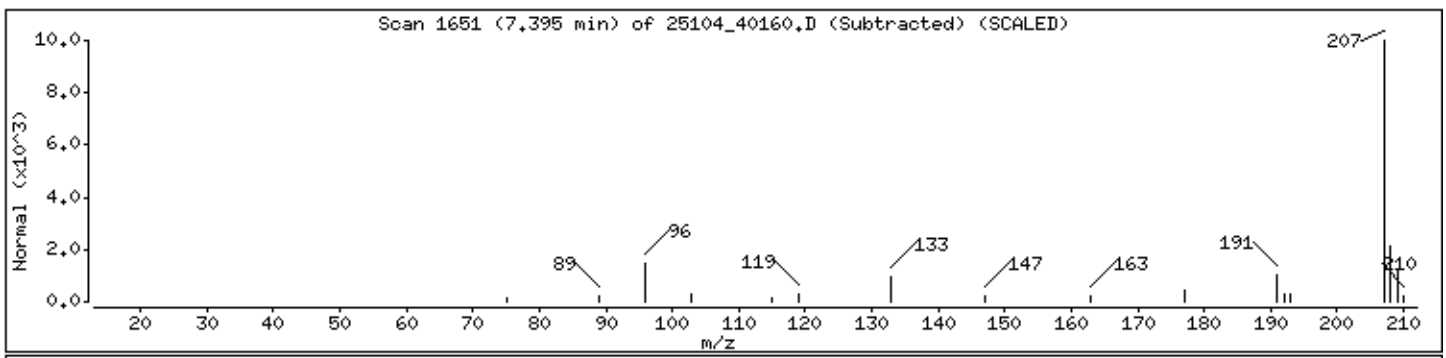
Client ID: Instrument: 10airH.i

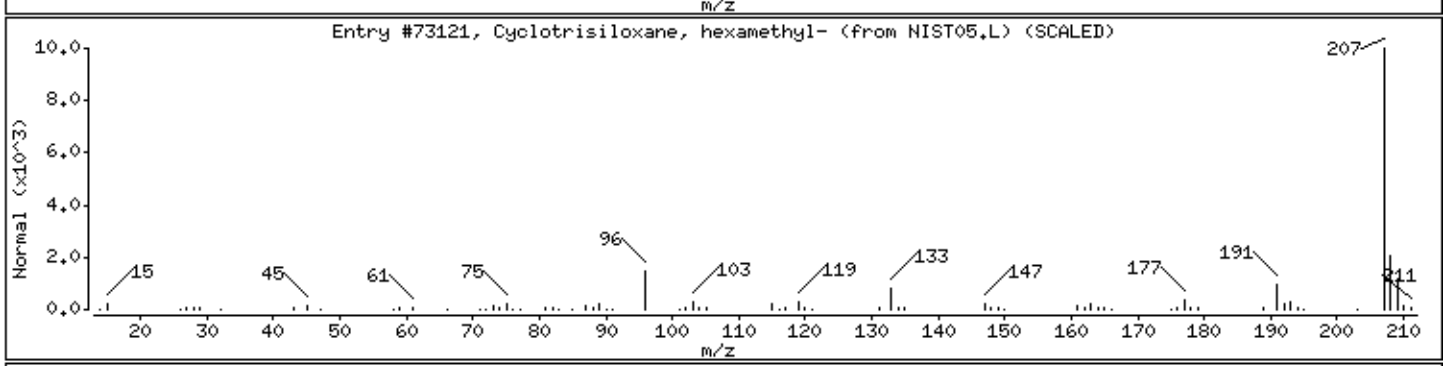
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73121 | 90 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25104_40160.D

Date : 08-SEP-2021 09:05

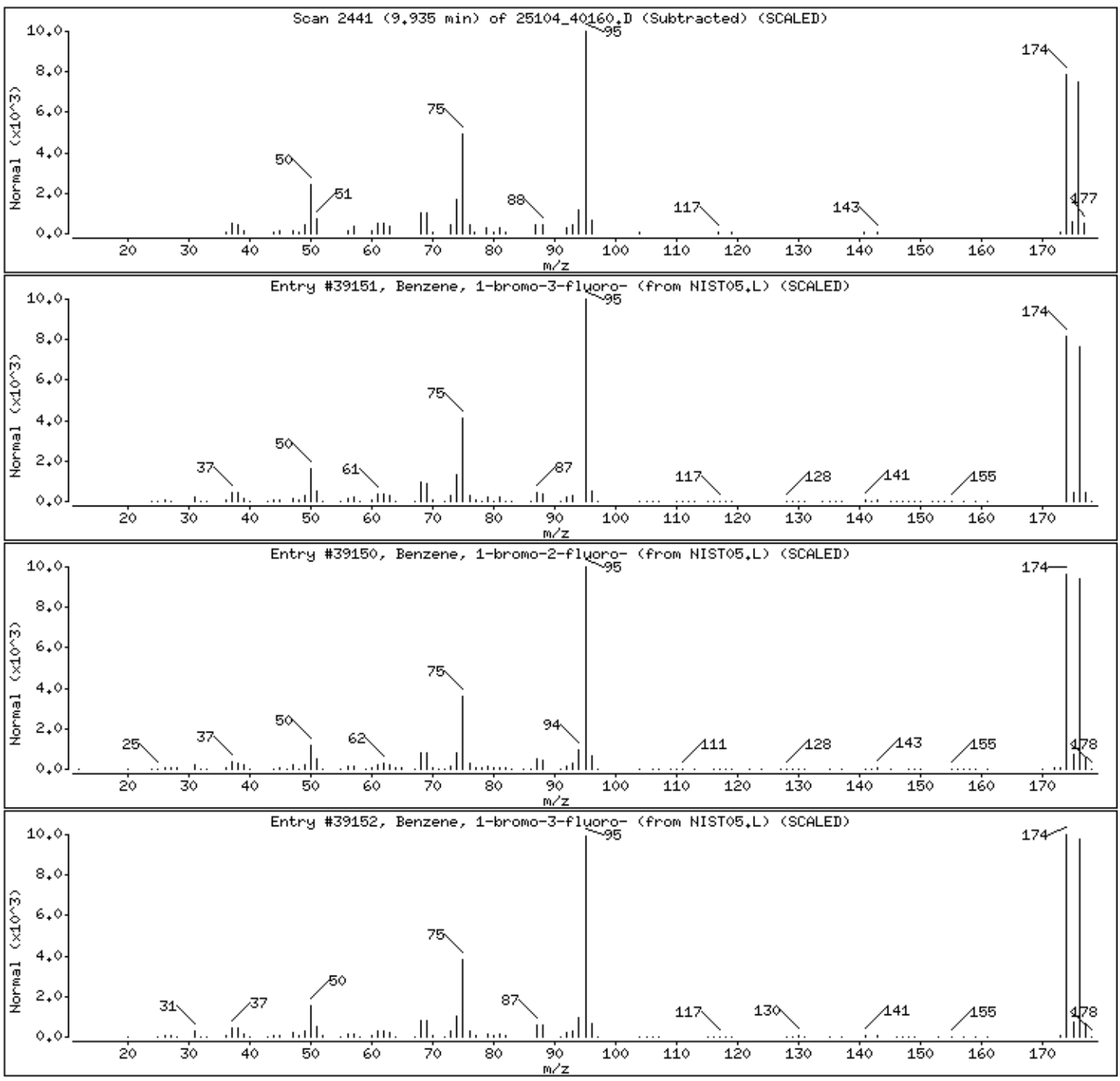
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

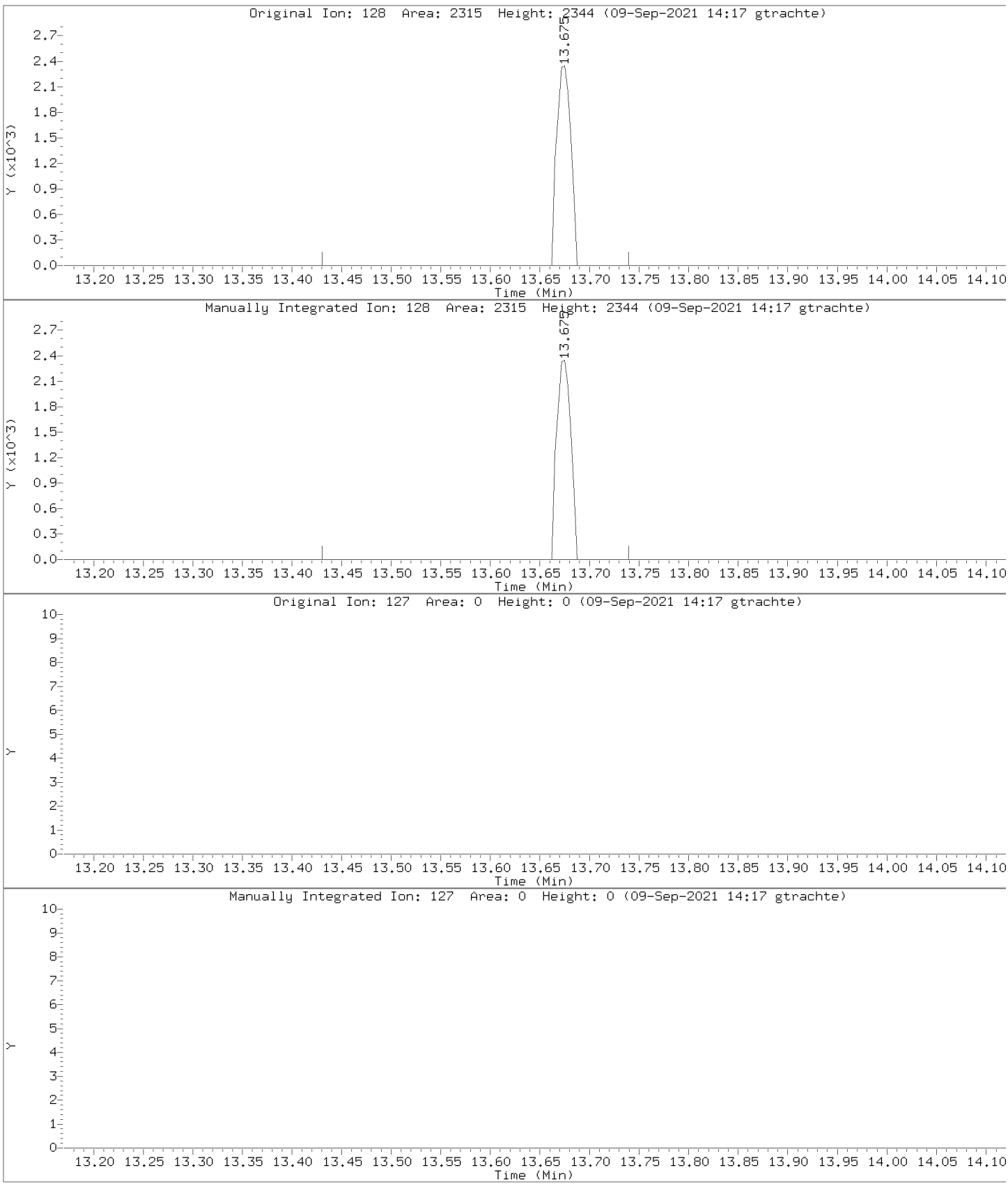
Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 97 | C6H4BrF | 174 |
| Benzene, 1-bromo-2-fluoro- | 1072-85-1 | NIST05.L | 39150 | 94 | C6H4BrF | 174 |
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39152 | 94 | C6H4BrF | 174 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25104_40160.D
Injection Date: 08-SEP-2021 09:05
Instrument: 10airH.i
Lab Sample ID: 4096970

Compound: Naphthalene
CAS Number: 91-20-3



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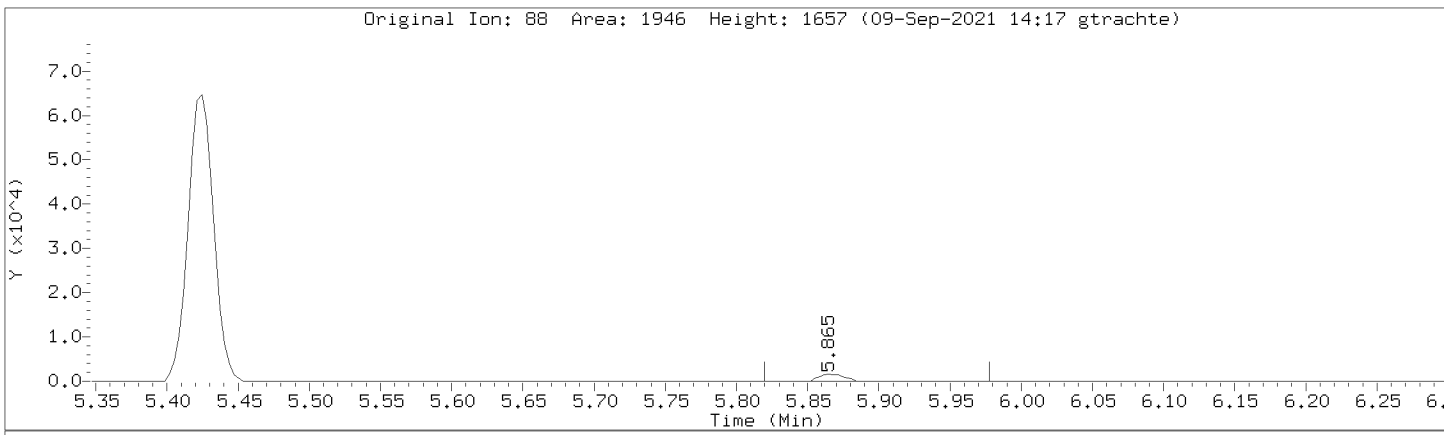
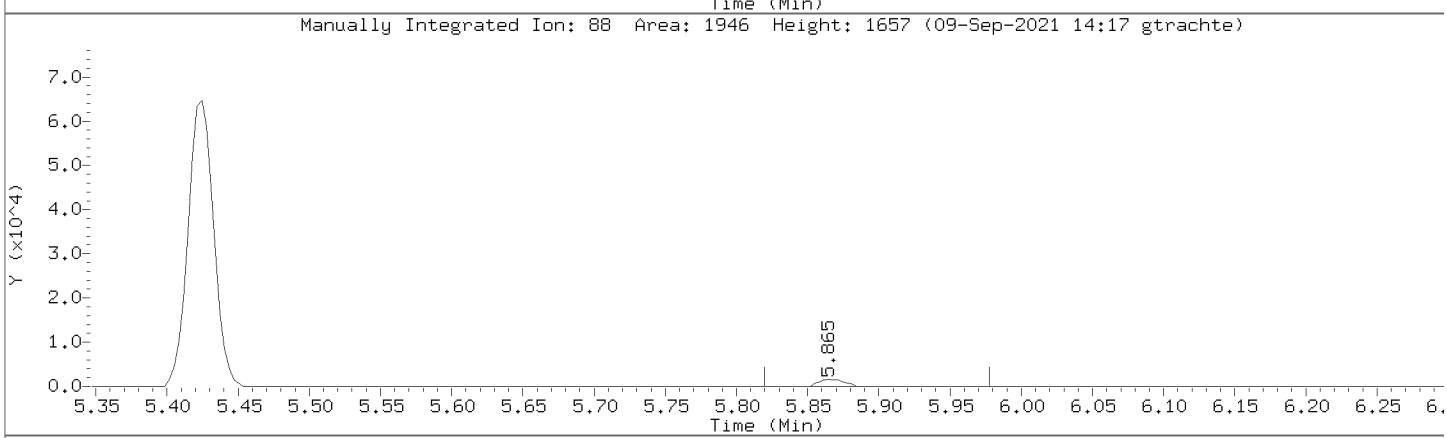
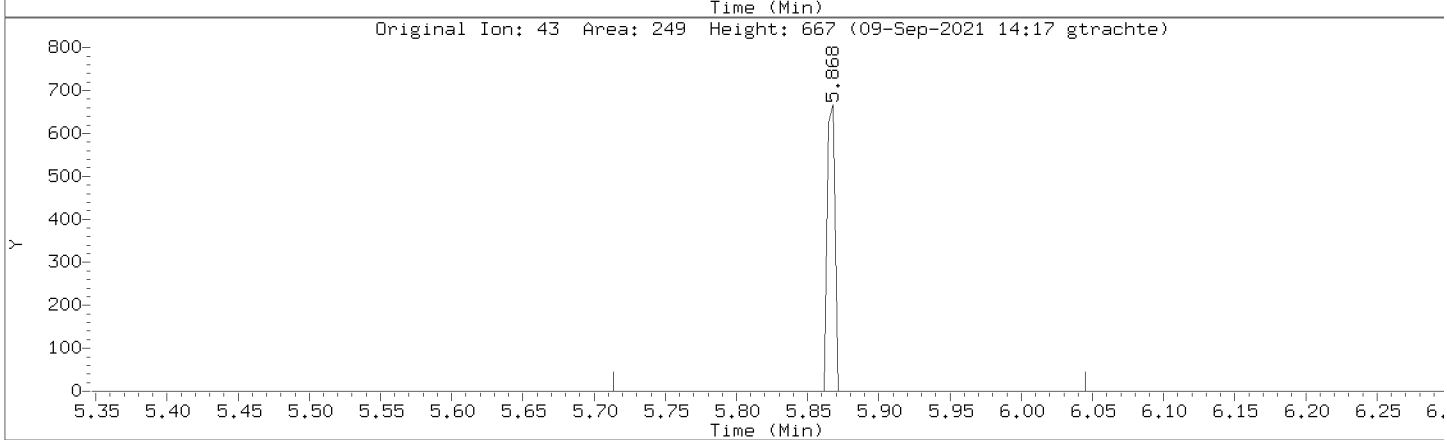
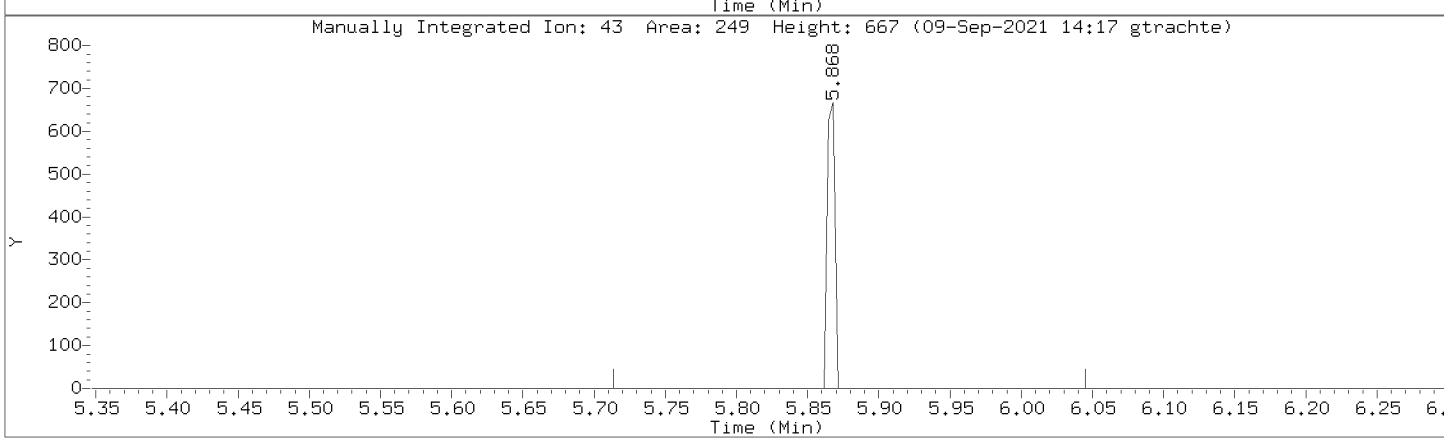
Injection Date: 08-SEP-2021 09:05
Instrument: 10airH.i
Lab Sample ID: 4096970

Compound: 1,4-Dioxane
CAS Number: 123-91-1



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Lab Smp Id: 4096964
Inj Date : 08-SEP-2021 09:52
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 3.714 | 3.714 | (0.526) | 257497 | 12.1819 | 12.2 |
| 2 Propylene | 41 | 3.727 | 3.727 | (0.528) | 267324 | 11.8141 | 11.8 |
| 3 Chlorodifluoromethane | 67 | 3.733 | 3.733 | (0.529) | 88643 | 11.9827 | 12.0 |
| 4 Dichlorodifluoromethane | 85 | 3.765 | 3.765 | (0.533) | 1041065 | 11.5840 | 11.6 |
| 5 Chloromethane | 50 | 3.888 | 3.888 | (0.551) | 397701 | 12.1446 | 12.1 |
| 6 Dichlorotetrafluoroethane | 85 | 3.897 | 3.897 | (0.552) | 1156456 | 10.6964 | 10.7 |
| 7 Vinyl chloride | 62 | 3.991 | 3.991 | (0.565) | 426173 | 12.1800 | 12.2 |
| 8 1,3-Butadiene | 54 | 4.042 | 4.042 | (0.572) | 307322 | 12.0590 | 12.1 |
| 9 Bromomethane | 94 | 4.216 | 4.216 | (0.597) | 431495 | 12.0818 | 12.1 |
| 10 Chloroethane | 64 | 4.286 | 4.286 | (0.607) | 227455 | 11.9738 | 12.0 |
| 11 Ethanol | 45 | 4.402 | 4.402 | (0.623) | 778584 | 67.6325 | 67.6 |
| 12 Vinyl Bromide | 106 | 4.437 | 4.437 | (0.628) | 434118 | 11.7932 | 11.8 |
| 13 Isopentane | 43 | 4.463 | 4.463 | (0.632) | 410753 | 10.3464 | 10.3 |
| 14 Freon 123 | 83 | 4.531 | 4.531 | (0.642) | 1015988 | 11.6890 | 11.7 |
| 15 Trichlorofluoromethane | 101 | 4.547 | 4.547 | (0.644) | 1035389 | 11.7421 | 11.7 |
| 16 Acrolein | 56 | 4.595 | 4.595 | (0.651) | 462247 | 30.1882 | 30.2 |
| 17 Acetone | 43 | 4.630 | 4.630 | (0.656) | 2456544 | 59.9511 | 60.0 |
| 18 Isopropyl Alcohol | 45 | 4.701 | 4.701 | (0.666) | 3347441 | 64.8036 | 64.8 |
| 19 1,1-Dichloroethene | 61 | 4.852 | 4.852 | (0.687) | 652435 | 12.1447 | 12.1 |
| 20 Acrylonitrile | 53 | 4.900 | 4.900 | (0.694) | 797574 | 30.1009 | 30.1 |
| 21 Freon 113 | 101 | 4.907 | 4.907 | (0.695) | 973610 | 11.7289 | 11.7 |
| 22 Methyl Acetate | 43 | 4.933 | 4.933 | (0.699) | 760533 | 10.9598 | 11.0 |
| 23 Tert Butyl Alcohol (TBA) | 59 | 4.971 | 4.971 | (0.704) | 942513 | 12.3703 | 12.4 |
| 24 Allyl Chloride | 76 | 5.016 | 5.016 | (0.710) | 214215 | 12.3102 | 12.3 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Report Date: 09-Sep-2021 15:02

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 5.013 | 5.013 | (0.710) | 2003363 | 60.1119 | 60.1 |
| 26 Carbon Disulfide | 76 | 5.142 | 5.142 | (0.728) | 1326592 | 11.9120 | 11.9 |
| 27 trans-1,2-dichloroethene | 96 | 5.370 | 5.370 | (0.760) | 496000 | 12.0796 | 12.1 |
| 28 Methyl Tert Butyl Ether | 73 | 5.386 | 5.386 | (0.763) | 1263148 | 12.0801 | 12.1 |
| 29 Vinyl Acetate | 43 | 5.489 | 5.489 | (0.777) | 890257 | 13.2592 | 13.3 |
| 30 1,1-Dichloroethane | 63 | 5.547 | 5.547 | (0.786) | 769003 | 11.7918 | 11.8 |
| 31 Methyl Ethyl Ketone | 72 | 5.707 | 5.707 | (0.808) | 242237 | 11.7833 | 11.8(M) |
| 32 n-Hexane | 57 | 5.727 | 5.727 | (0.811) | 715068 | 10.5890 | 10.6(M) |
| 33 Di-isopropyl Ether | 45 | 5.733 | 5.733 | (0.812) | 1209464 | 11.9708 | 12.0 |
| 34 Ethyl Acetate | 43 | 5.904 | 5.904 | (0.836) | 786412 | 11.8966 | 11.9 |
| 35 cis-1,2-Dichloroethene | 96 | 5.916 | 5.916 | (0.838) | 510750 | 11.9285 | 11.9 |
| 36 Ethyl Tert-Butyl Ether | 59 | 6.019 | 6.019 | (0.852) | 1376089 | 12.2525 | 12.3 |
| 37 Chloroform | 83 | 6.142 | 6.142 | (0.870) | 925758 | 11.7102 | 11.7 |
| 38 Tetrahydrofuran | 42 | 6.244 | 6.244 | (0.884) | 413476 | 12.2788 | 12.3 |
| 39 1,1,1-Trichloroethane | 97 | 6.531 | 6.531 | (0.925) | 902157 | 11.7006 | 11.7 |
| 40 1,2-Dichloroethane | 62 | 6.624 | 6.624 | (0.938) | 504946 | 12.2952 | 12.3 |
| 41 Benzene | 78 | 6.817 | 6.817 | (0.965) | 1513605 | 11.7695 | 11.8 |
| 42 Carbon tetrachloride | 117 | 6.836 | 6.836 | (0.968) | 910691 | 12.5186 | 12.5 |
| 43 Cyclohexane | 56 | 6.865 | 6.865 | (0.972) | 681729 | 11.7020 | 11.7 |
| 44 Tert Amyl Methyl Ether | 73 | 6.994 | 6.994 | (0.990) | 1405652 | 10.6626 | 10.7 |
| * 45 1,4-Difluorobenzene | 114 | 7.061 | 7.061 | (1.000) | 2061354 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 7.183 | 7.183 | (1.017) | 2140445 | 11.7895 | 11.8 |
| 47 Heptane | 43 | 7.325 | 7.325 | (1.037) | 676930 | 12.0774 | 12.1 |
| 48 Trichloroethene | 130 | 7.457 | 7.457 | (1.056) | 720794 | 11.9260 | 11.9 |
| 49 Methyl methacrylate | 69 | 7.498 | 7.498 | (1.062) | 511987 | 11.2810 | 11.3 |
| 50 1,2-Dichloropropane | 63 | 7.511 | 7.511 | (1.064) | 505966 | 12.0613 | 12.1 |
| 51 1,4-Dioxane | 88 | 7.579 | 7.579 | (1.073) | 895829 | 30.5856 | 30.6 |
| 52 Bromodichloromethane | 83 | 7.695 | 7.695 | (1.090) | 956220 | 12.1492 | 12.1 |
| 53 Methylcyclohexane | 98 | 8.010 | 8.010 | (1.134) | 452257 | 12.1607 | 12.2 |
| 54 Methyl Isobutyl Ketone | 43 | 8.103 | 8.103 | (1.148) | 887334 | 10.9182 | 10.9 |
| 55 cis-1,3-Dichloropropene | 75 | 8.180 | 8.180 | (1.158) | 818840 | 12.2569 | 12.3 |
| 56 trans-1,3-Dichloropropene | 75 | 8.678 | 8.678 | (1.229) | 686183 | 10.8226 | 10.8(M) |
| 57 Toluene | 91 | 8.804 | 8.804 | (1.247) | 1908006 | 12.2659 | 12.3 |
| 58 1,1,2-Trichloroethane | 97 | 8.936 | 8.936 | (1.265) | 599369 | 12.1138 | 12.1 |
| 59 Methyl Butyl Ketone | 43 | 9.061 | 9.061 | (0.865) | 783014 | 10.7188 | 10.7(M) |
| 60 n-Octane | 43 | 9.264 | 9.264 | (0.885) | 913223 | 10.8362 | 10.8 |
| 61 Dibromochloromethane | 129 | 9.547 | 9.547 | (0.912) | 1045123 | 12.2367 | 12.2 |
| 62 Tetrachloroethene | 166 | 9.643 | 9.643 | (0.921) | 944417 | 11.6114 | 11.6 |
| 63 1,2-Dibromoethane | 107 | 9.778 | 9.778 | (0.934) | 886626 | 12.5437 | 12.5 |
| * 64 Chlorobenzene - d5 | 117 | 10.473 | 10.473 | (1.000) | 1606804 | 10.0000 | |
| 65 Chlorobenzene | 112 | 10.524 | 10.524 | (1.005) | 1469832 | 12.0458 | 12.0 |
| 66 Ethyl Benzene | 91 | 10.759 | 10.759 | (1.027) | 2368979 | 10.7583 | 10.8 |
| 67 m&p-Xylene | 91 | 10.958 | 10.958 | (1.046) | 3667662 | 25.2154 | 25.2(M) |
| 68 n-Nonane | 43 | 11.315 | 11.315 | (1.080) | 949144 | 10.9877 | 11.0 |
| 69 Styrene | 104 | 11.408 | 11.408 | (1.089) | 1482292 | 10.8552 | 10.9(M) |
| 70 o-Xylene | 91 | 11.450 | 11.450 | (1.093) | 1885784 | 12.4450 | 12.4 |
| 71 Bromoform | 173 | 11.534 | 11.534 | (1.101) | 1011804 | 12.6891 | 12.7 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 11.891 | 11.891 | (1.135) | 1307417 | 10.7078 | 10.7 |
| 73 Isopropylbenzene | 105 | 12.058 | 12.058 | (1.151) | 2775470 | 10.6430 | 10.6 |
| 74 N-Propylbenzene | 91 | 12.681 | 12.681 | (1.211) | 3202807 | 10.6682 | 10.7 |
| 75 2-Chlorotoluene | 91 | 12.730 | 12.730 | (1.216) | 1985829 | 12.5557 | 12.6(M) |
| 76 4-Ethyltoluene | 105 | 12.868 | 12.868 | (1.229) | 2624856 | 10.7478 | 10.7 |
| 77 1,3,5-Trimethylbenzene | 105 | 12.935 | 12.935 | (1.235) | 2325642 | 12.3950 | 12.4 |
| 78 n-Decane | 57 | 13.257 | 13.257 | (1.877) | 1279464 | 10.8426 | 10.8 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Report Date: 09-Sep-2021 15:02

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 13.376 | 13.376 | (1.277) | 2339320 | 12.4529 | 12.5 |
| 80 1,2,4-Trimethylbenzene | 105 | 13.415 | 13.415 | (1.281) | 2312250 | 10.8521 | 10.9 |
| 81 Sec- Butylbenzene | 105 | 13.672 | 13.672 | (1.305) | 3432634 | 10.7677 | 10.8 |
| 82 1,3-Dichlorobenzene | 146 | 13.710 | 13.710 | (1.309) | 1336824 | 10.7242 | 10.7 |
| 83 Benzyl Chloride | 91 | 13.778 | 13.778 | (1.316) | 1291678 | 10.5214 | 10.5 |
| 84 1,4-Dichlorobenzene | 146 | 13.842 | 13.842 | (1.322) | 1204241 | 10.6668 | 10.7 |
| 85 p-Isopropyltoluene | 119 | 13.874 | 13.874 | (1.325) | 3143044 | 10.7726 | 10.8 |
| 86 1,2,3-Trimethylbenzene | 105 | 13.897 | 13.897 | (1.327) | 2398304 | 10.7802 | 10.8 |
| 87 1,2-Dichlorobenzene | 146 | 14.161 | 14.161 | (1.352) | 1370044 | 10.7848 | 10.8 |
| 88 N-Butylbenzene | 91 | 14.334 | 14.334 | (1.369) | 2410155 | 10.6394 | 10.6 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 14.884 | 14.884 | (1.421) | 695096 | 10.2877 | 10.3 |
| 90 1,2,4-Trichlorobenzene | 180 | 15.971 | 15.971 | (1.525) | 1150398 | 23.7373 | 23.7 |
| 91 Naphthalene | 128 | 16.157 | 16.157 | (1.543) | 1595577 | 12.1345 | 12.1 |
| 92 Hexachlorobutadiene | 225 | 16.279 | 16.279 | (1.554) | 1046110 | 12.2089 | 12.2 |

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Lab Smp Id: 4096964
Inj Date : 08-SEP-2021 09:52
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 25102_40159.D
Lab Smp Id: 4096964
Analysis Type: VOA
Quant Type: ISTD
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Calibration Date: 08-SEP-2021
Calibration Time: 09:52
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2061354 | -2.41 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1606804 | -2.90 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.06 | 0.00 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 4096964
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 09:52

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

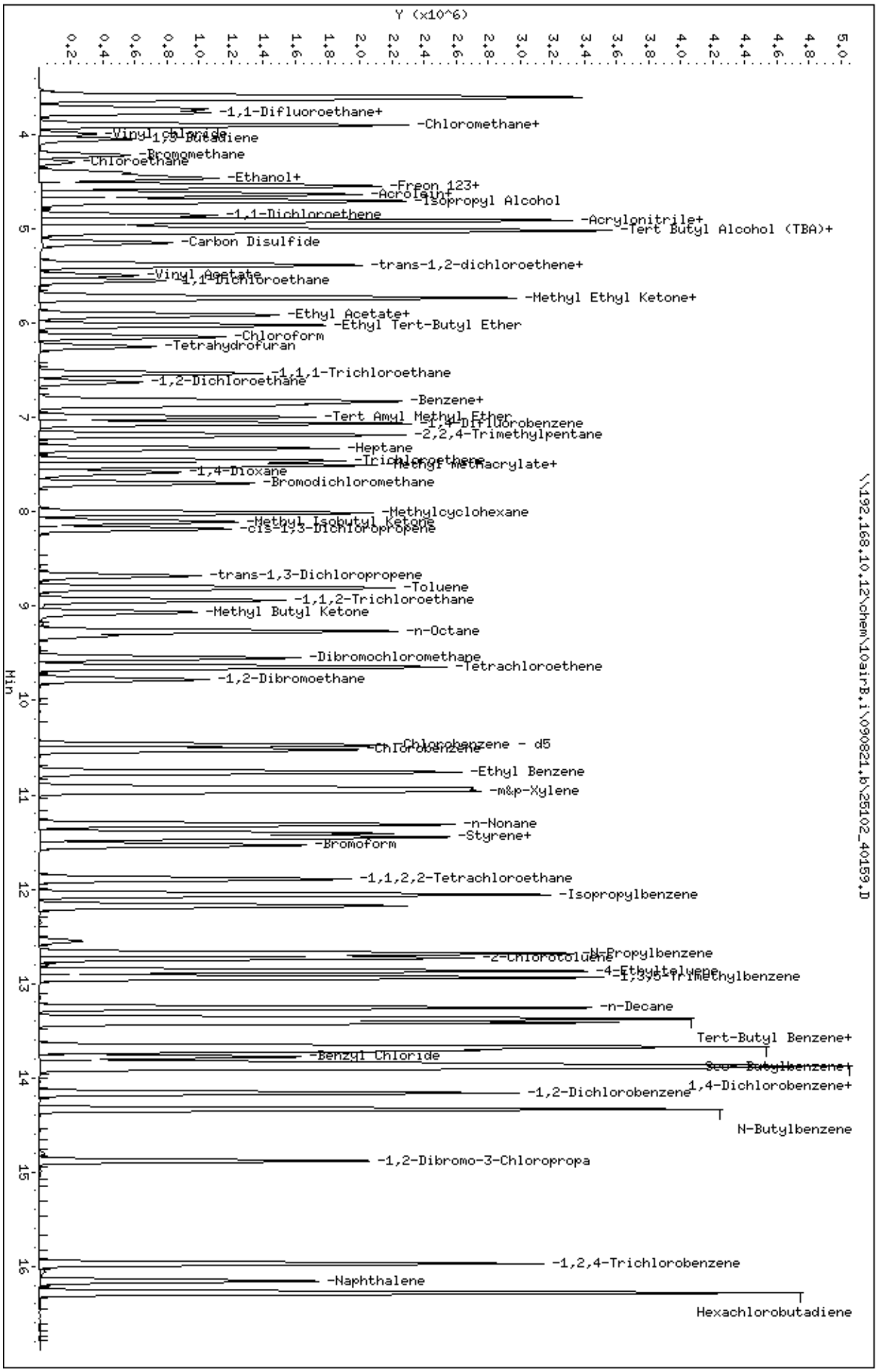
Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25102_40159.D
Date : 08-SEP-2021 09:52
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airB.i
Operator: HMH
Column diameter: 0.32



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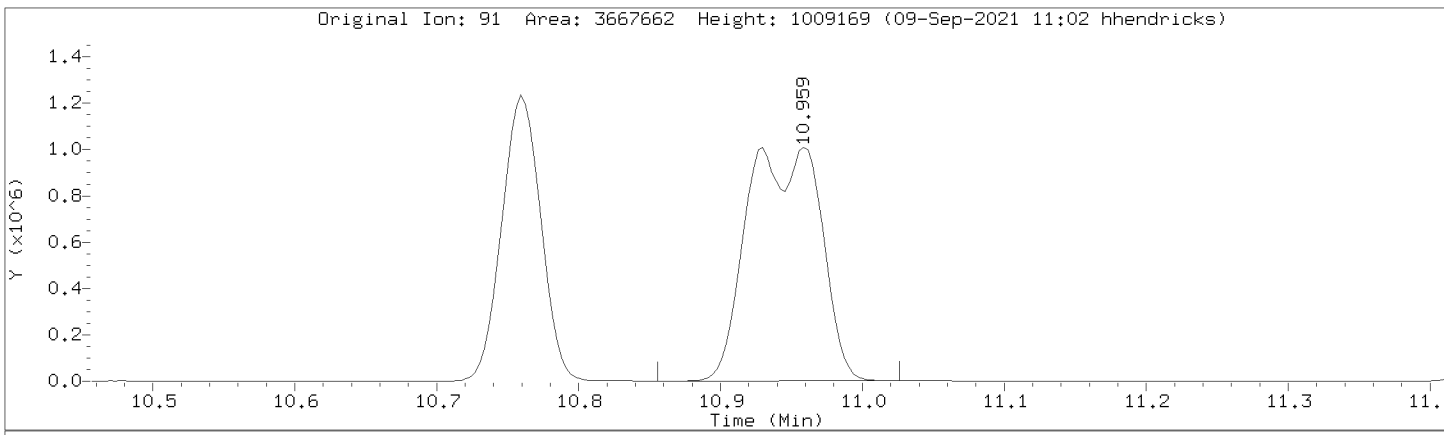
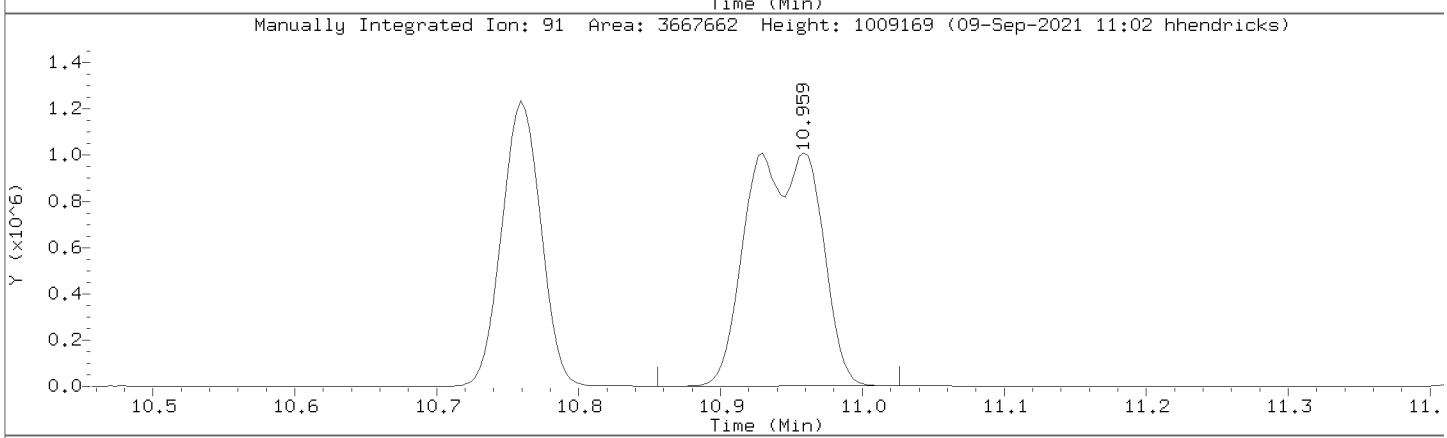
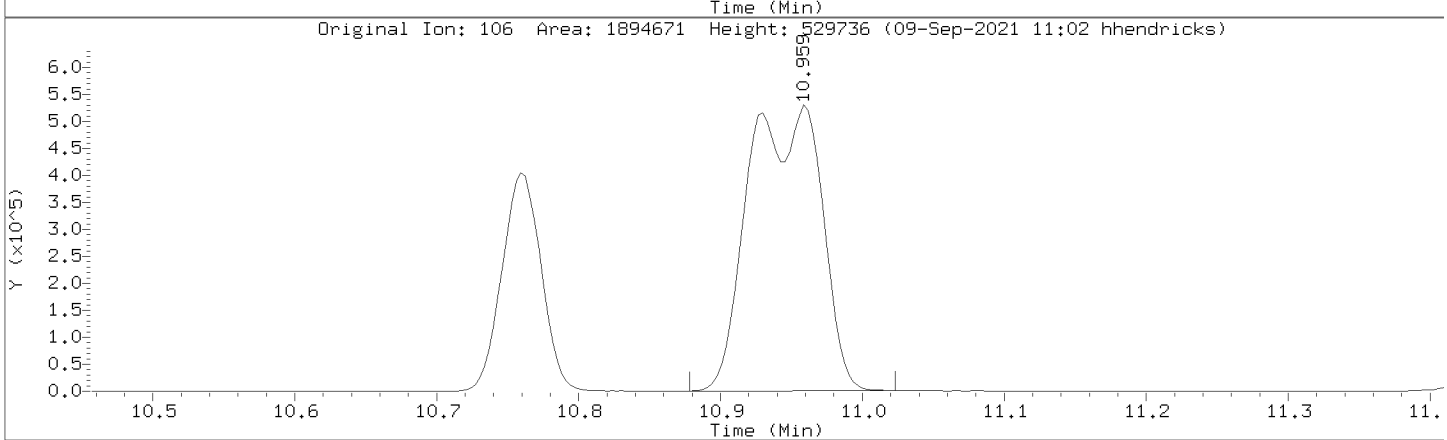
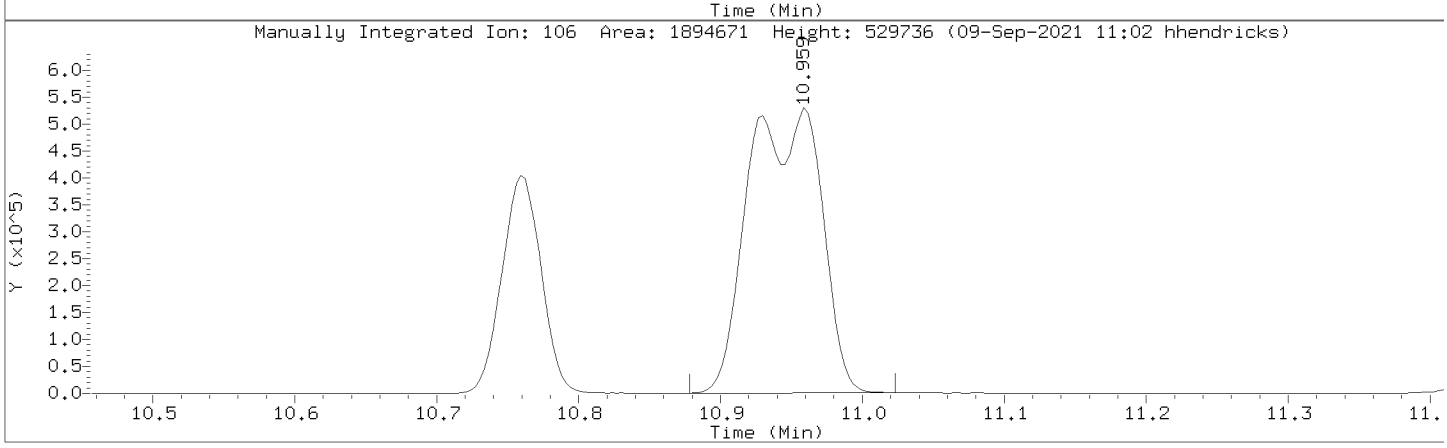
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964

Compound: m&p-Xylene
CAS Number: 7816-60-0



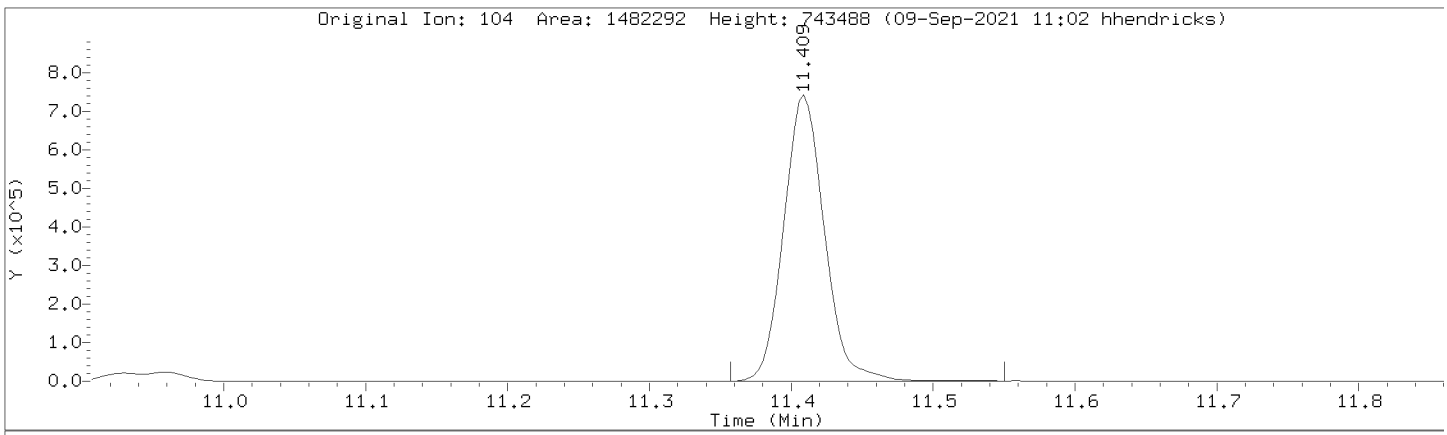



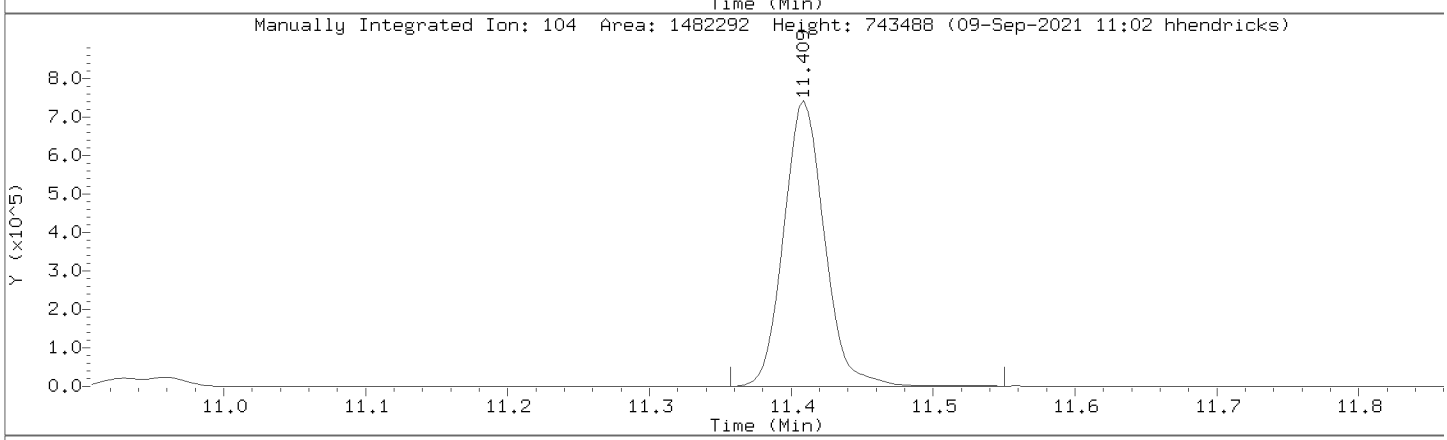



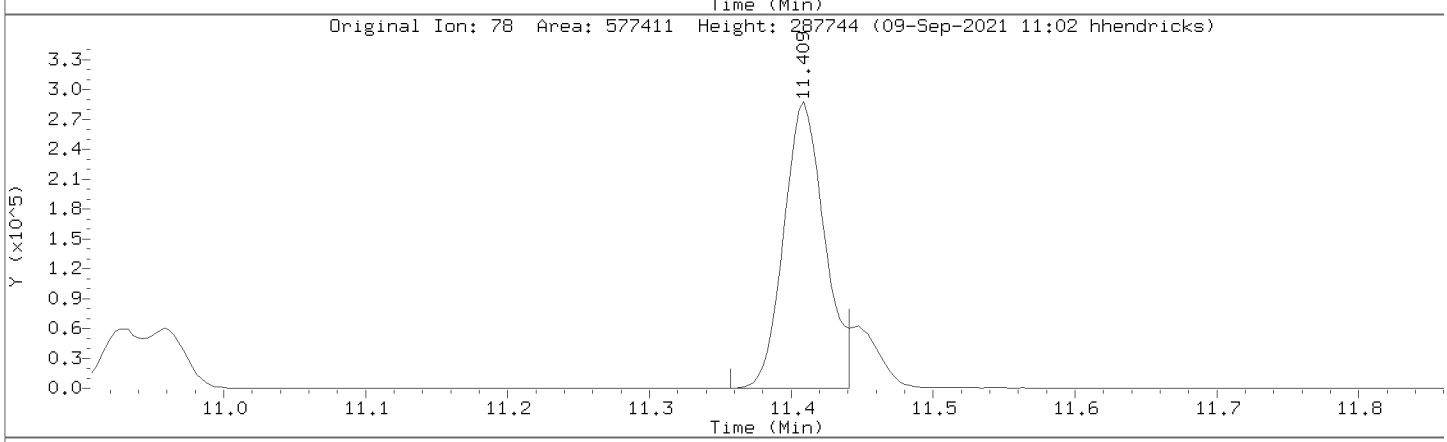



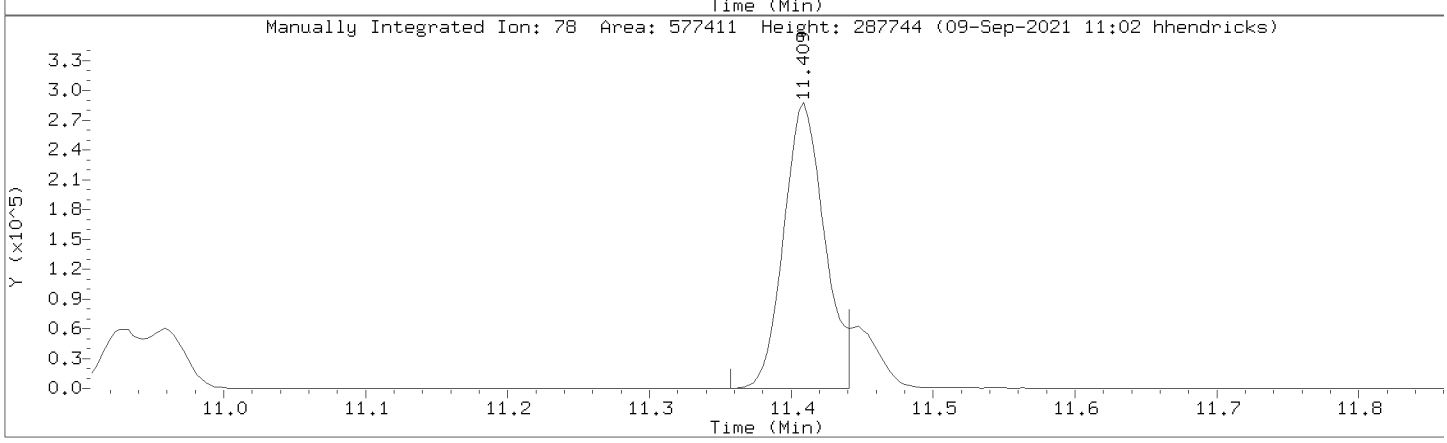
Data File: \\192.168.10.12\chem\10airB.i\090821.b/25102_40159.D
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964

Compound: Styrene
CAS Number: 100-42-5

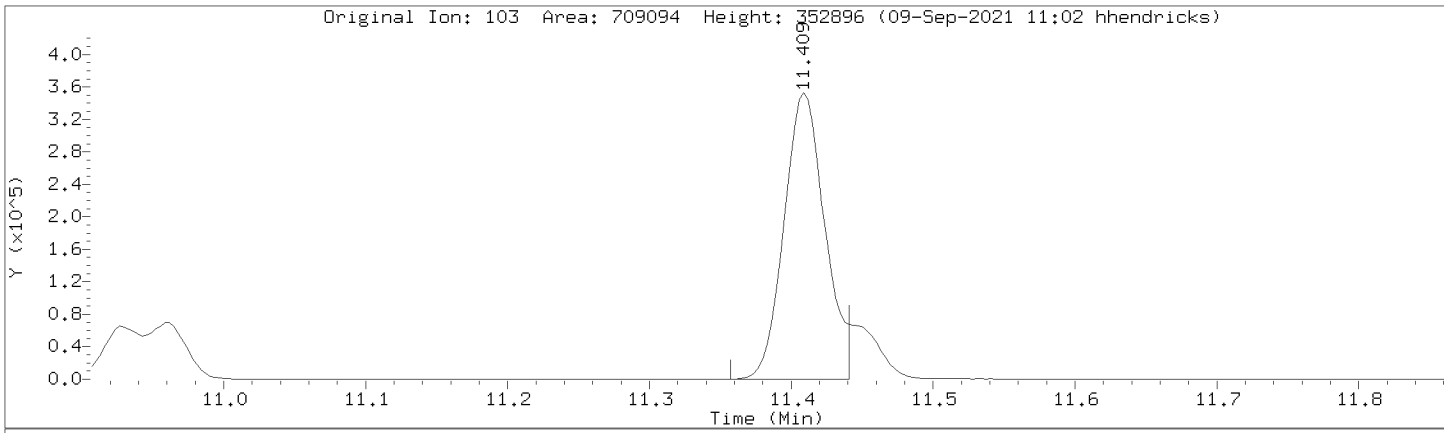


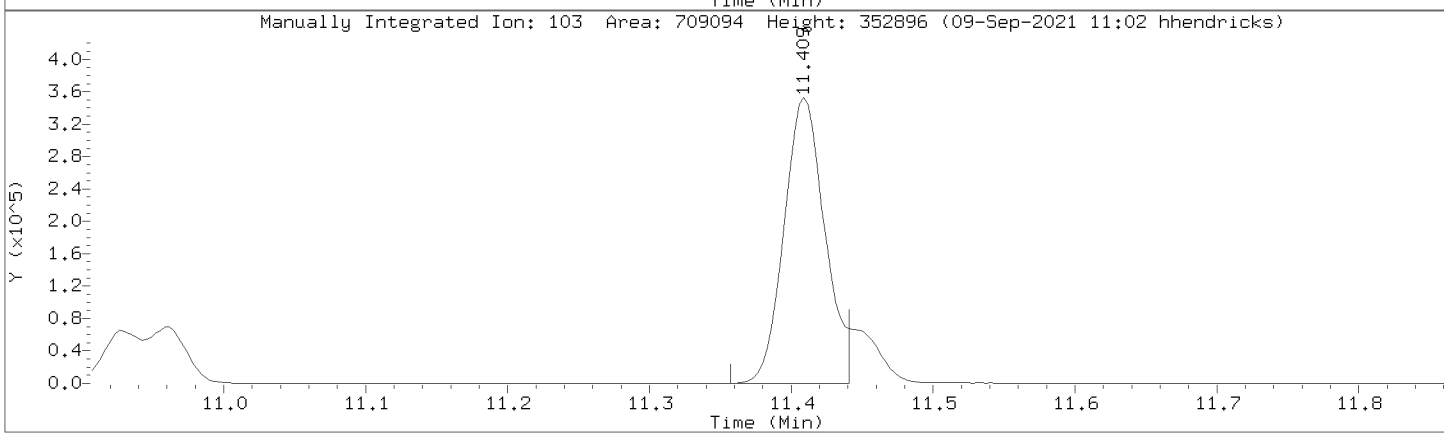



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25102_40159.D
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964



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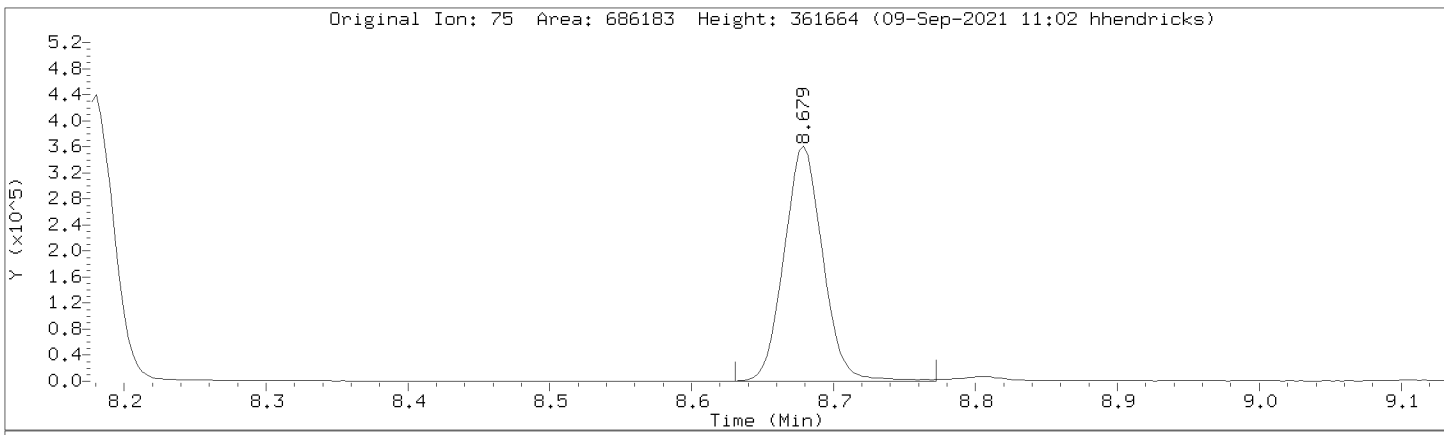
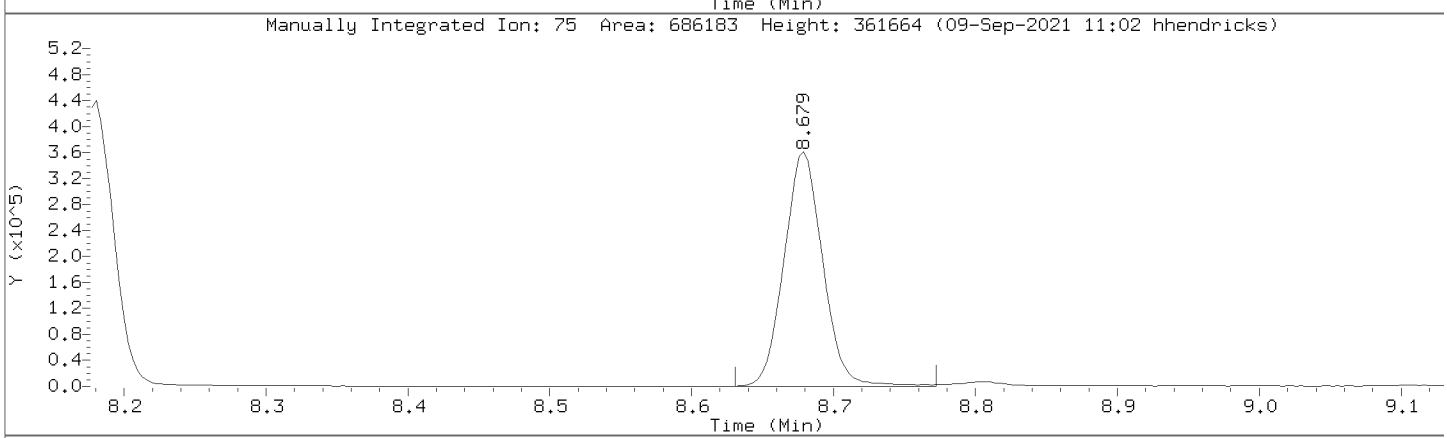
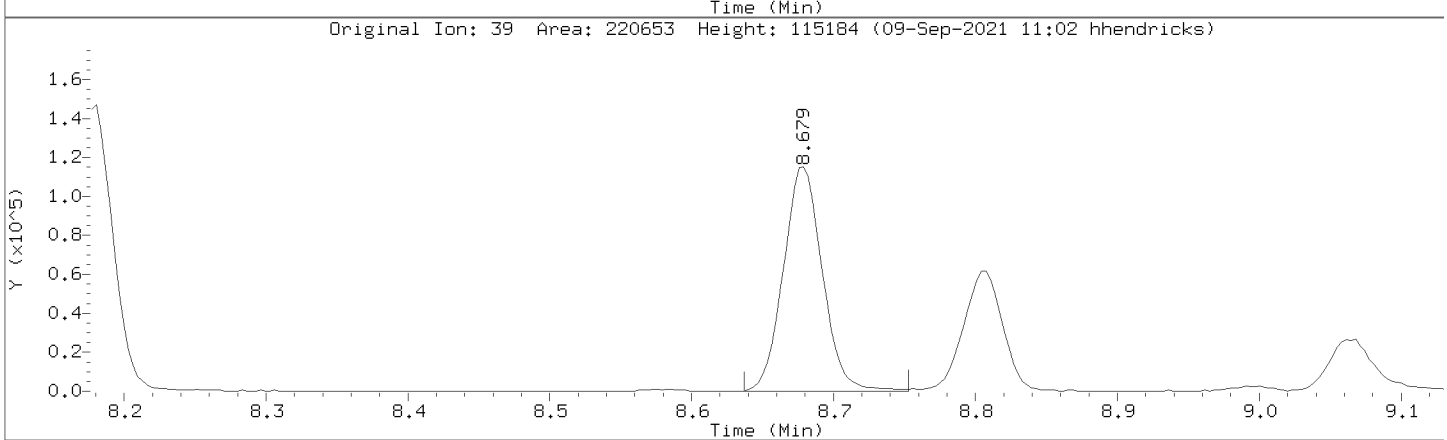
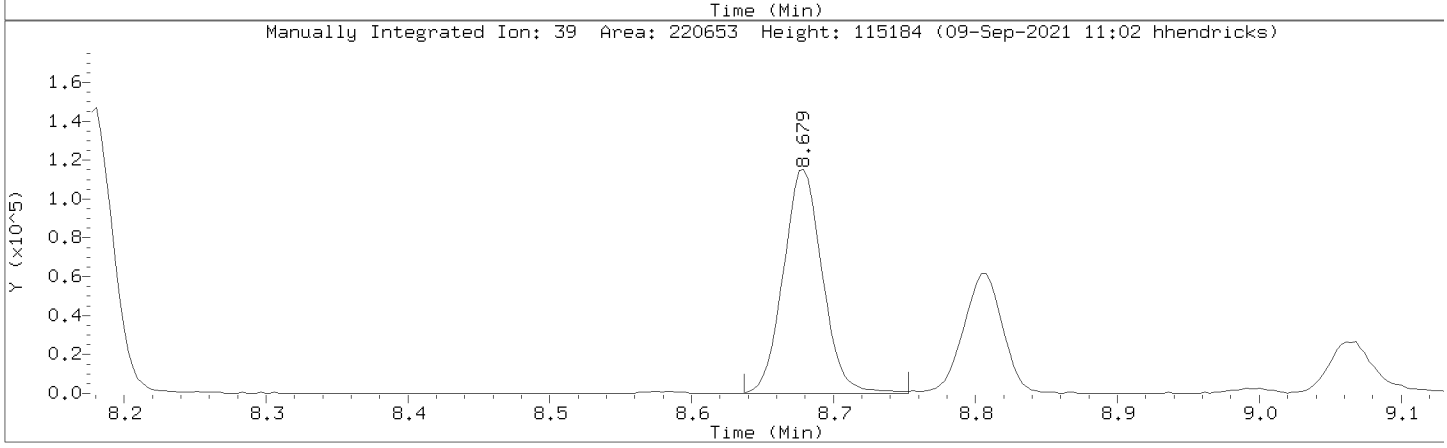
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964

Compound: trans-1,3-Dichloropropene
CAS Number: 10061-02-6



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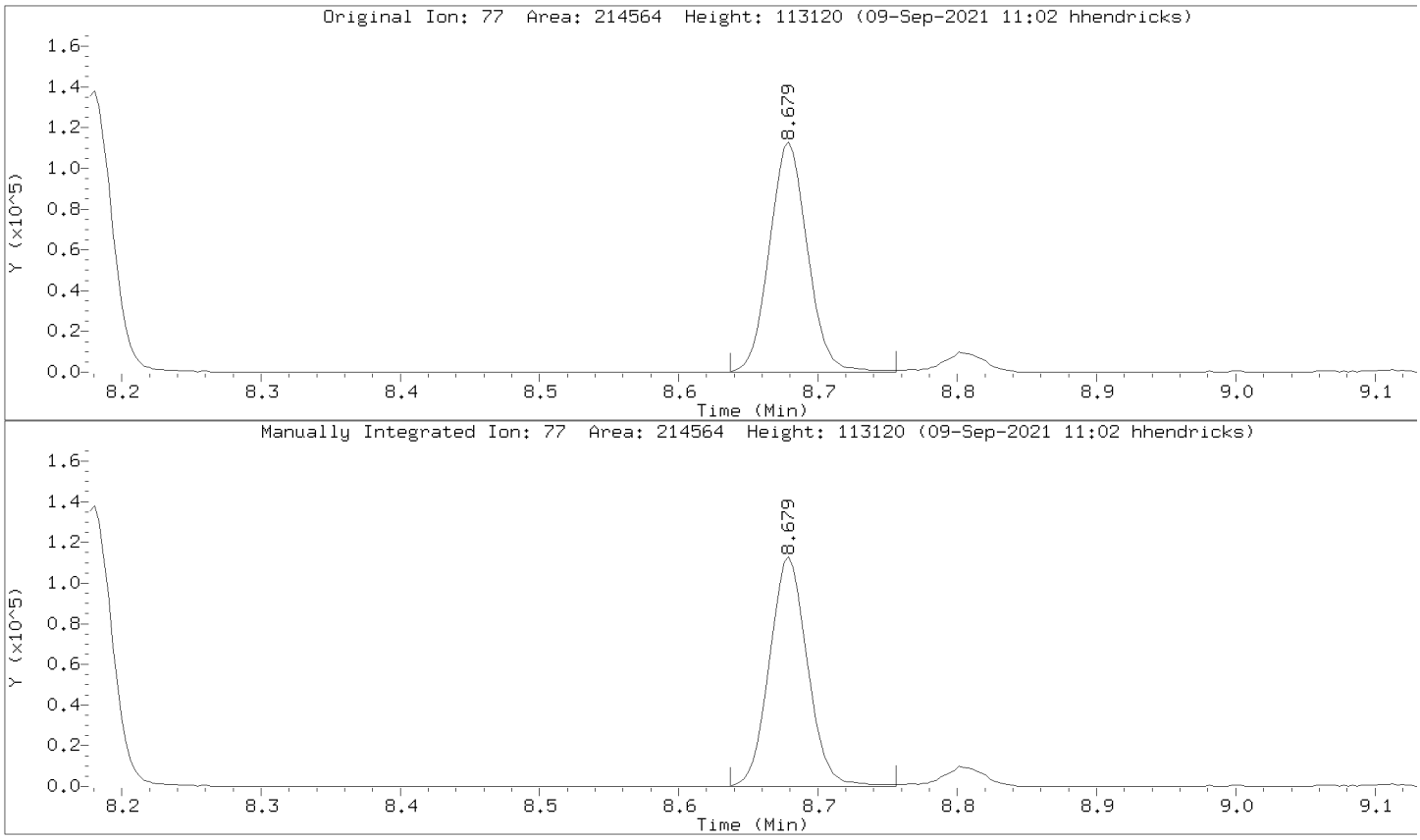
Lab Sample ID: 4096964



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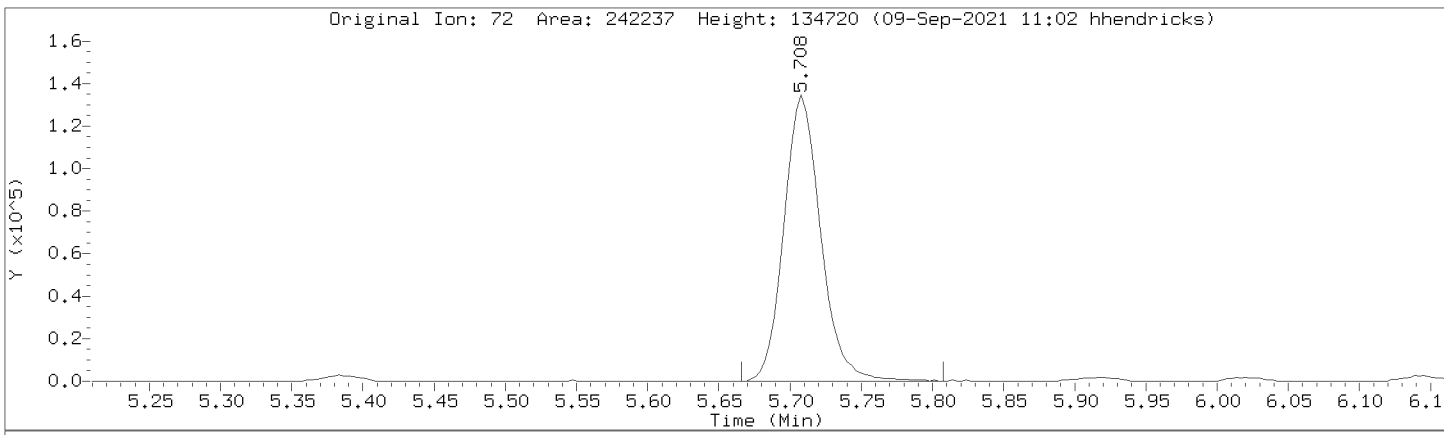
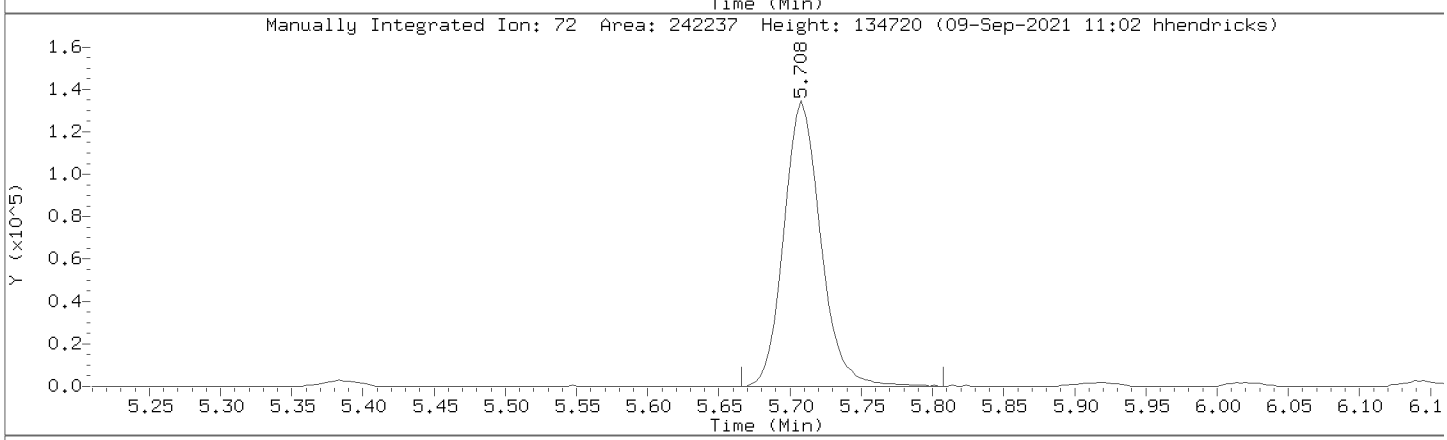
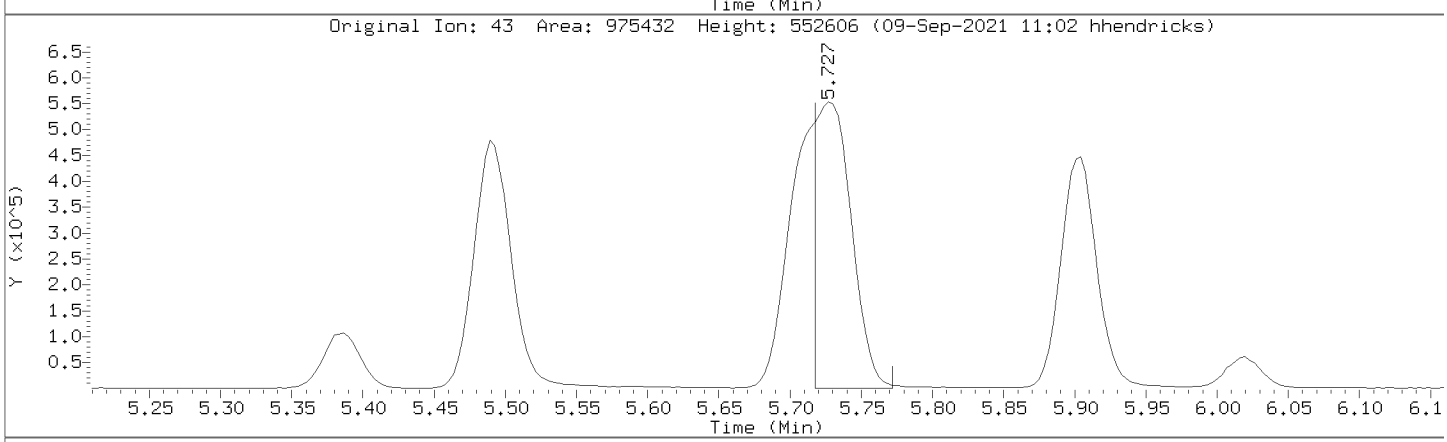
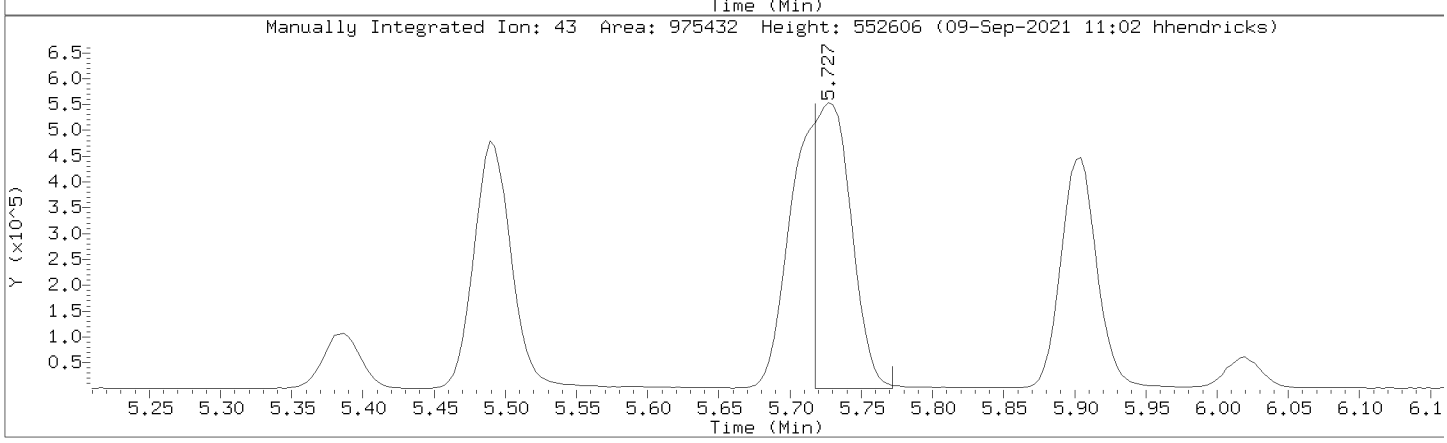
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964

Compound: Methyl Ethyl Ketone
CAS Number: 78-93-3



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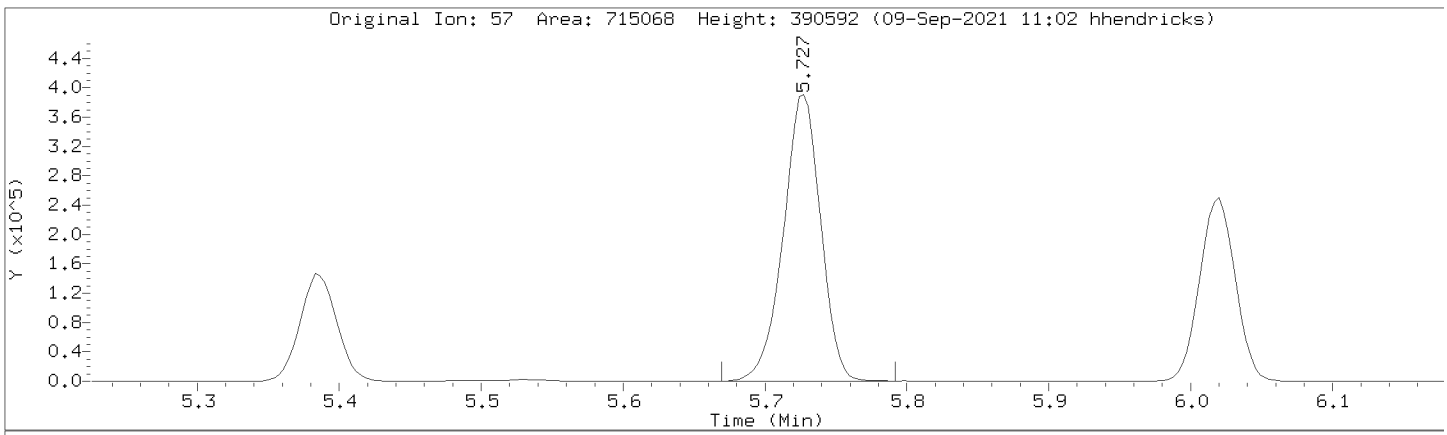
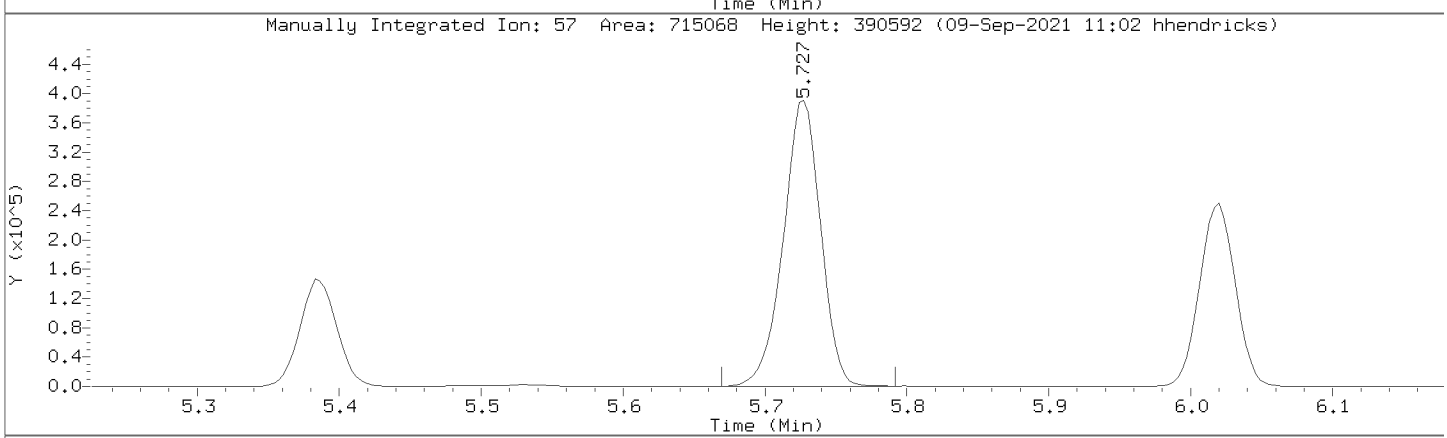
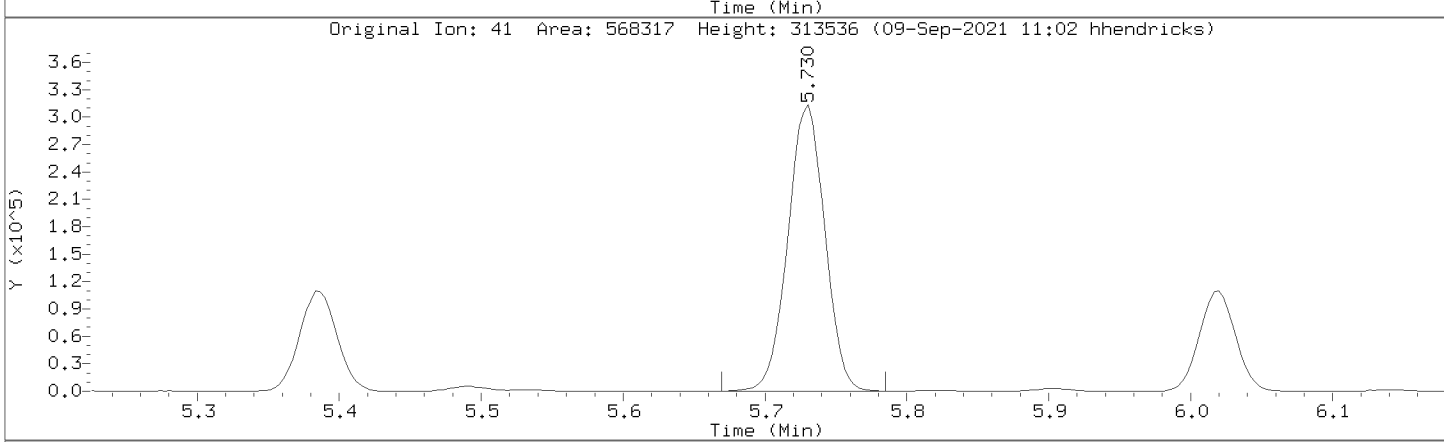
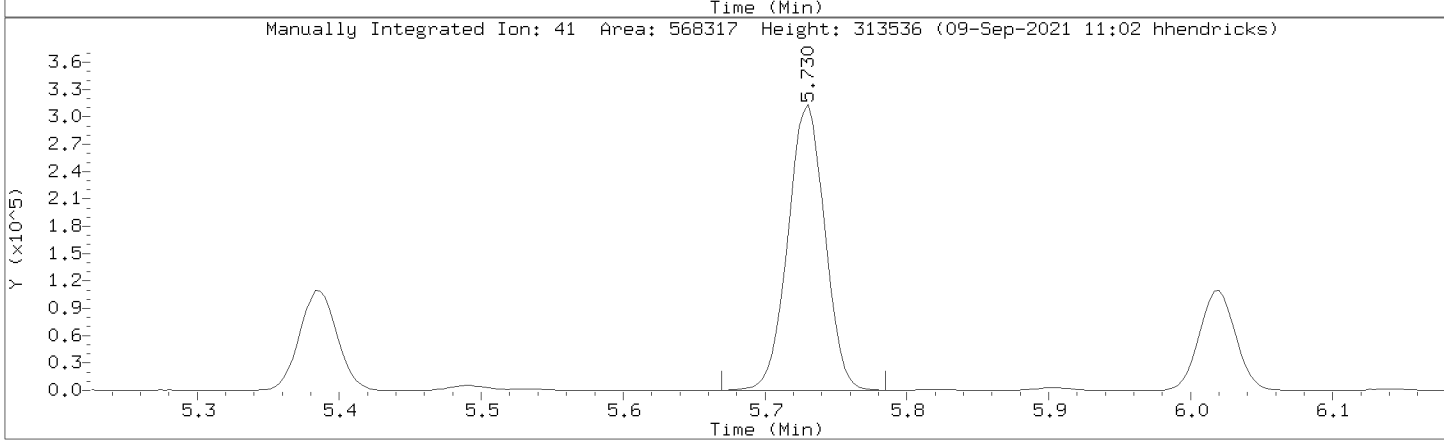
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964

Compound: n-Hexane
CAS Number: 110-54-3



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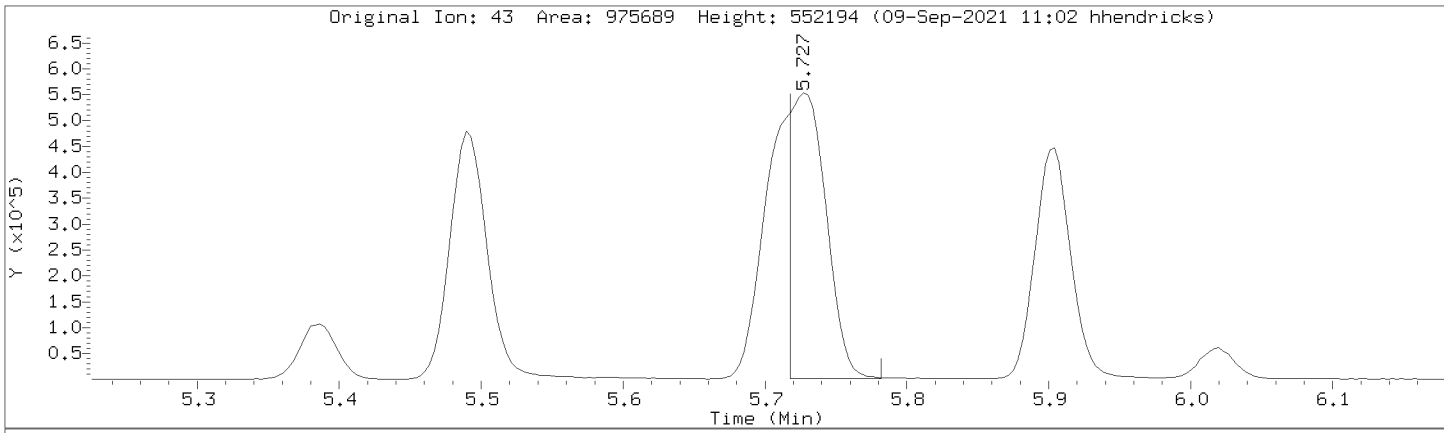
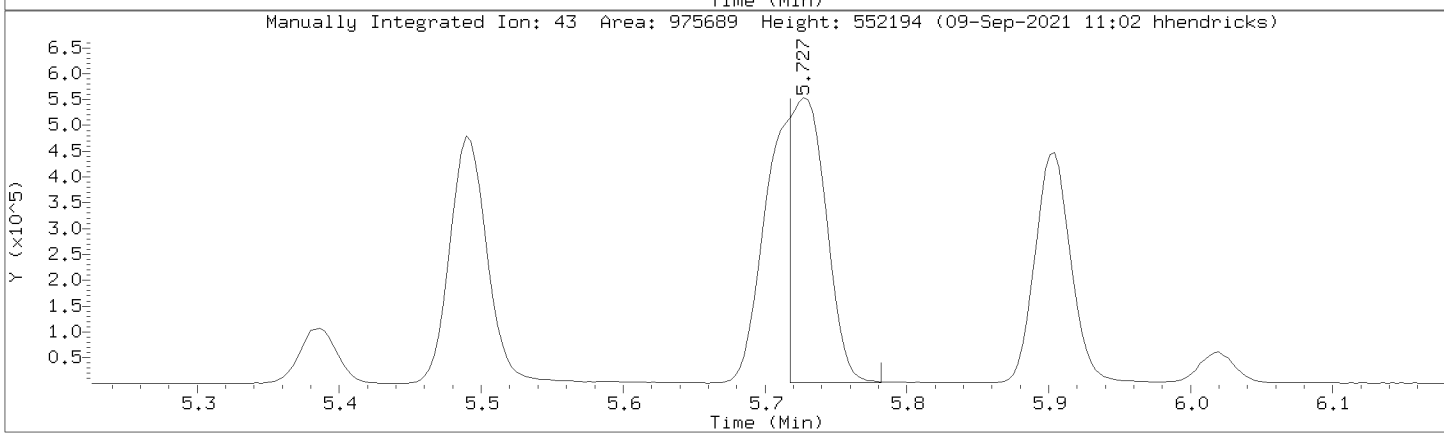
Instrument: 10airB.i
Lab Sample ID: 4096964



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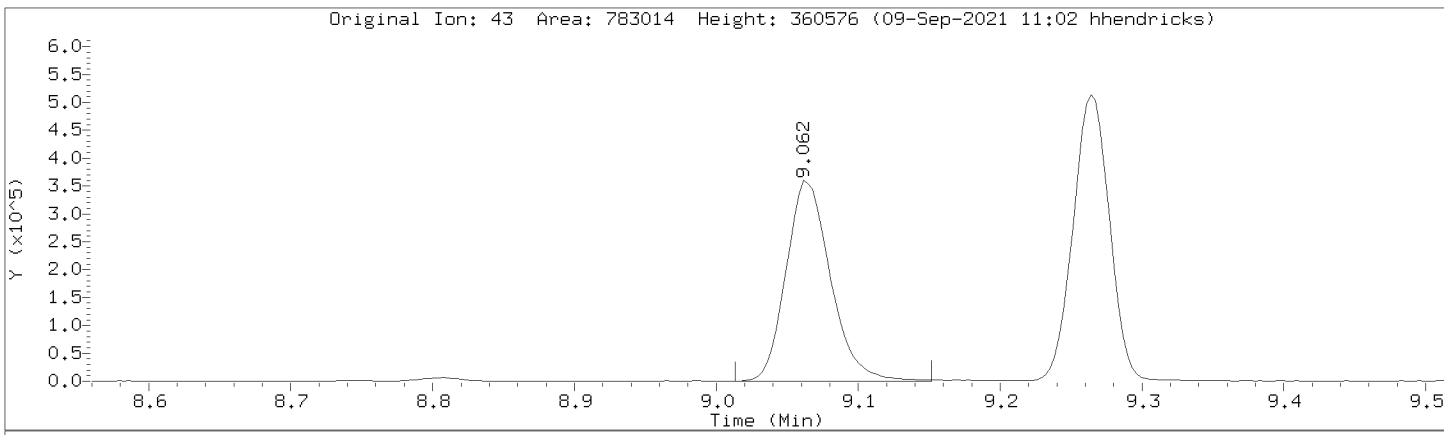
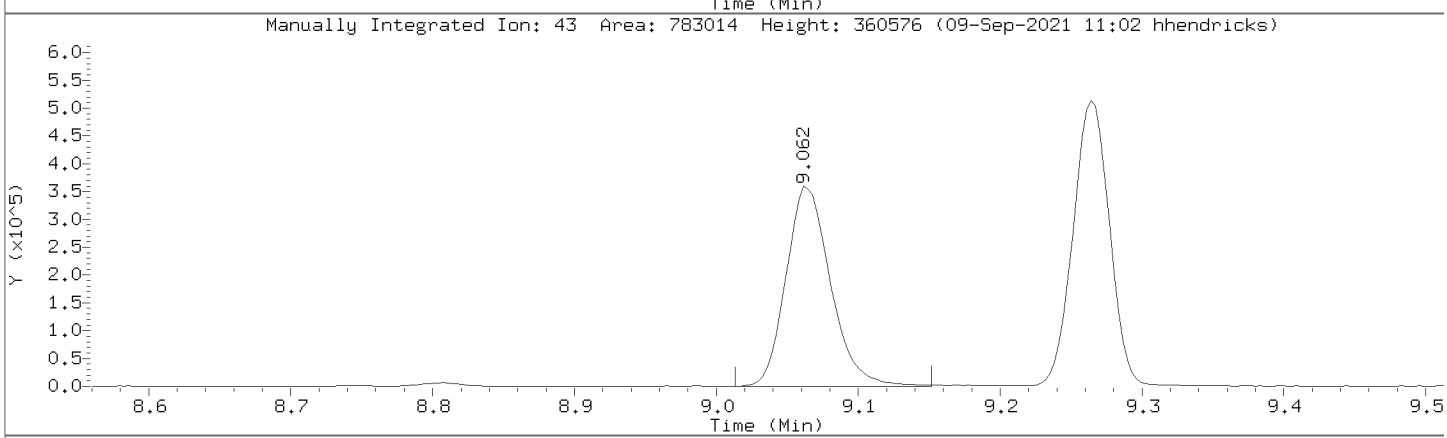
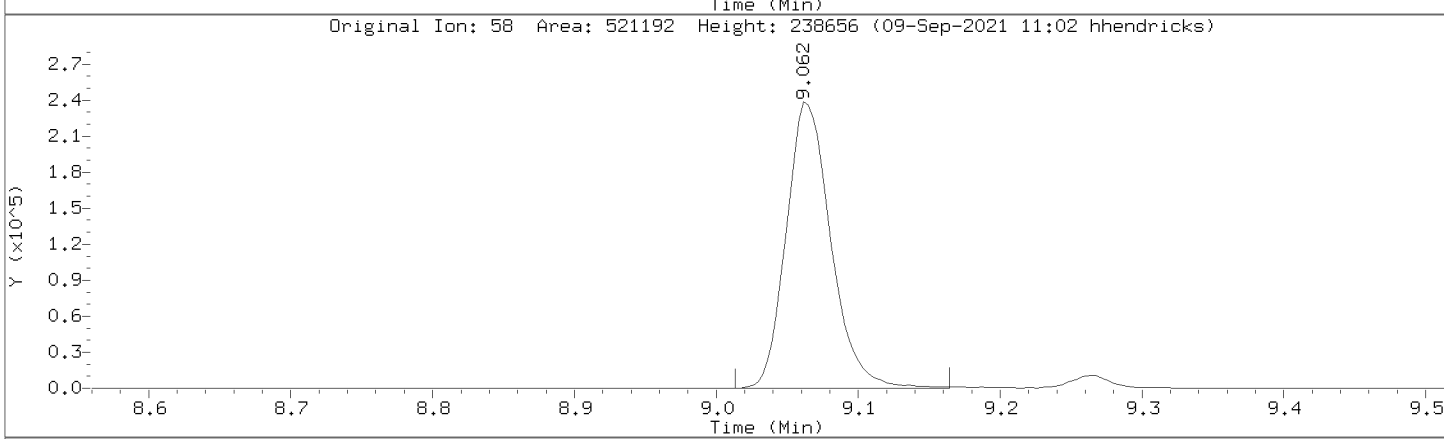
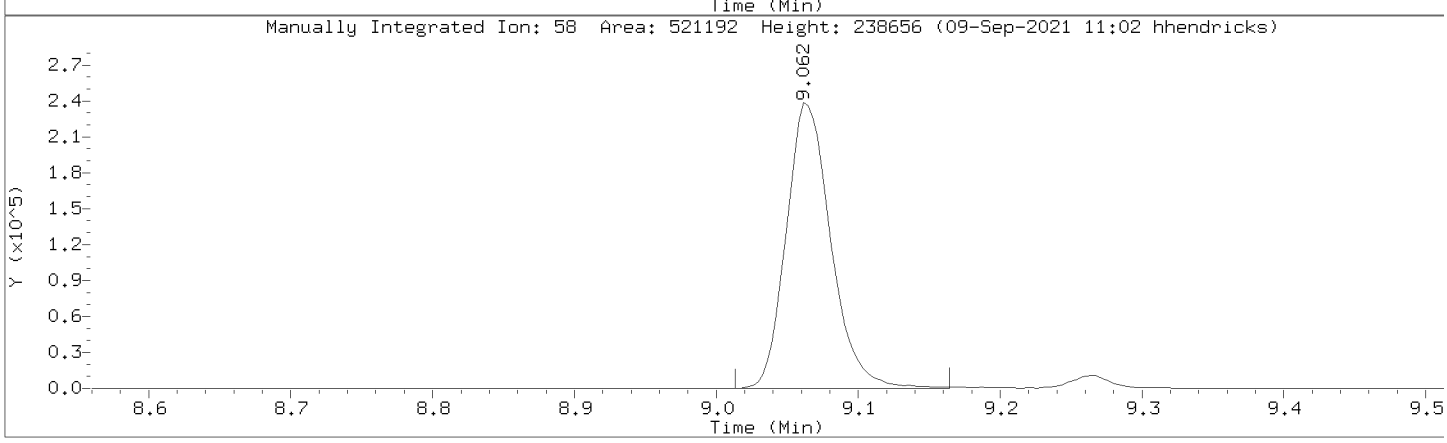
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964

Compound: Methyl Butyl Ketone
CAS Number: 591-78-6



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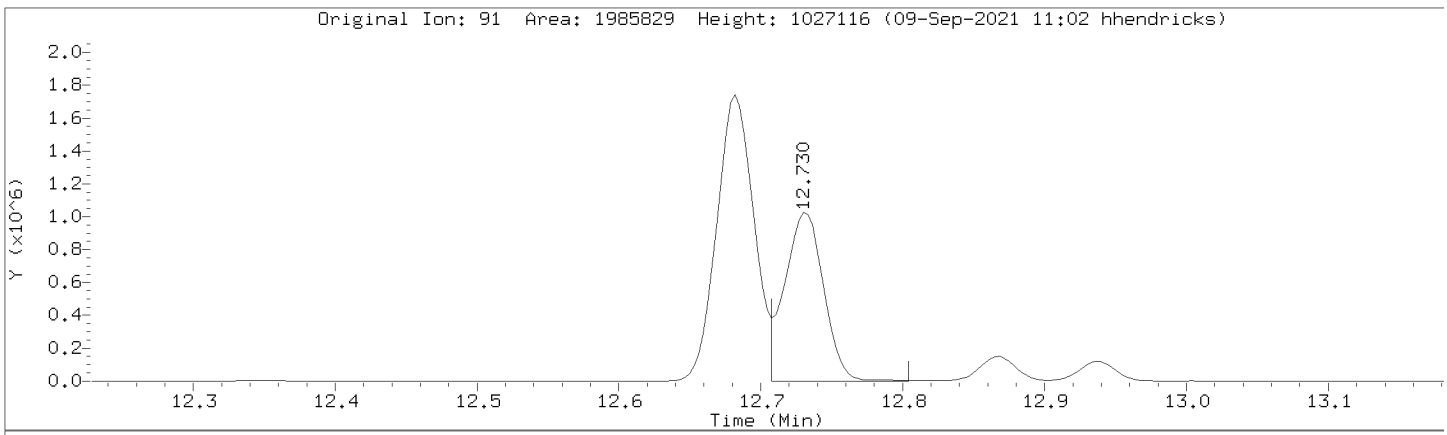
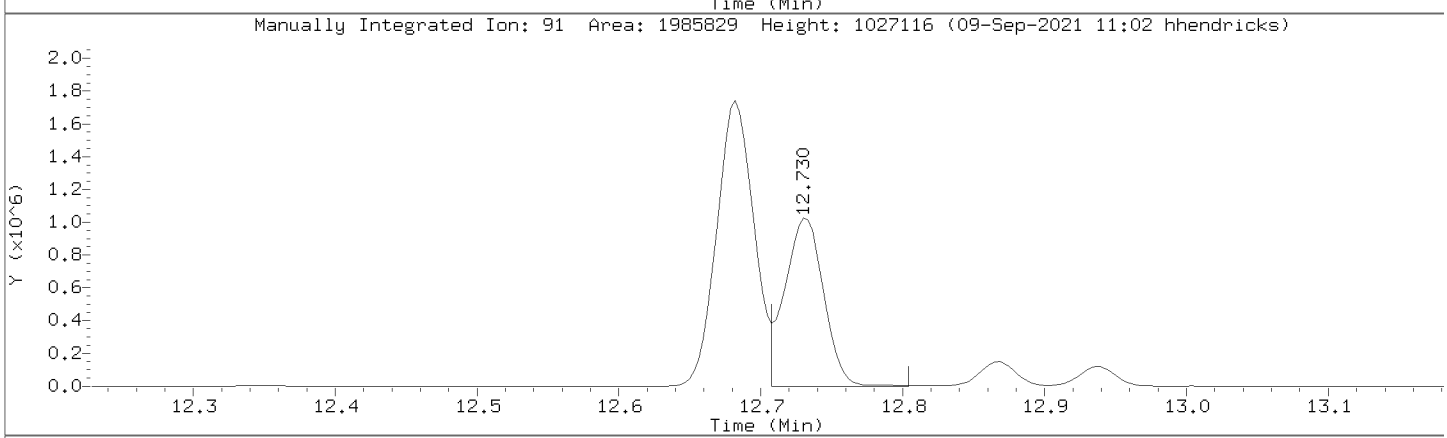
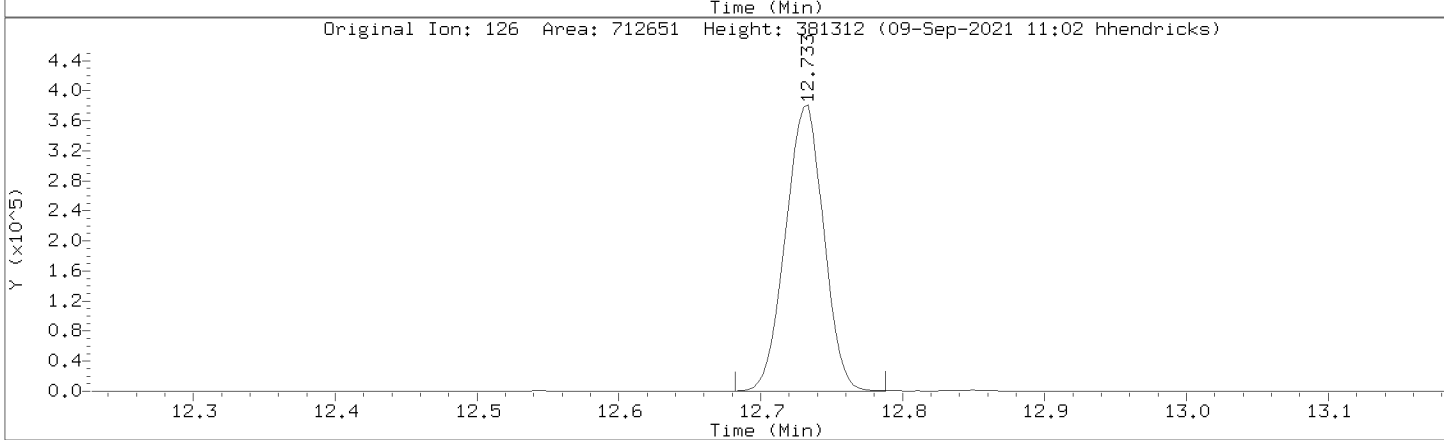
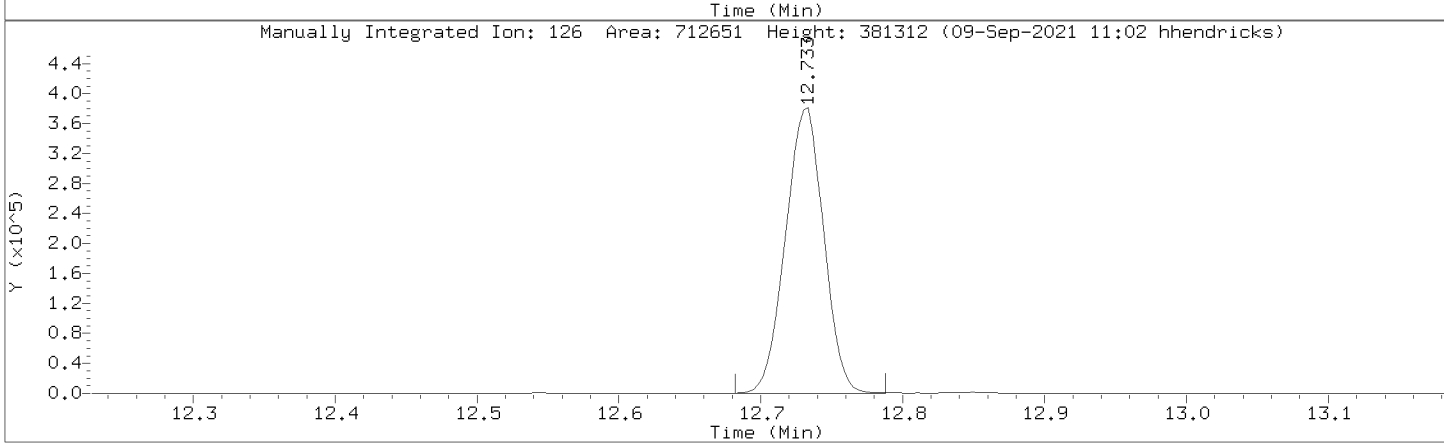
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964

Compound: 2-Chlorotoluene
CAS Number: 95-49-8



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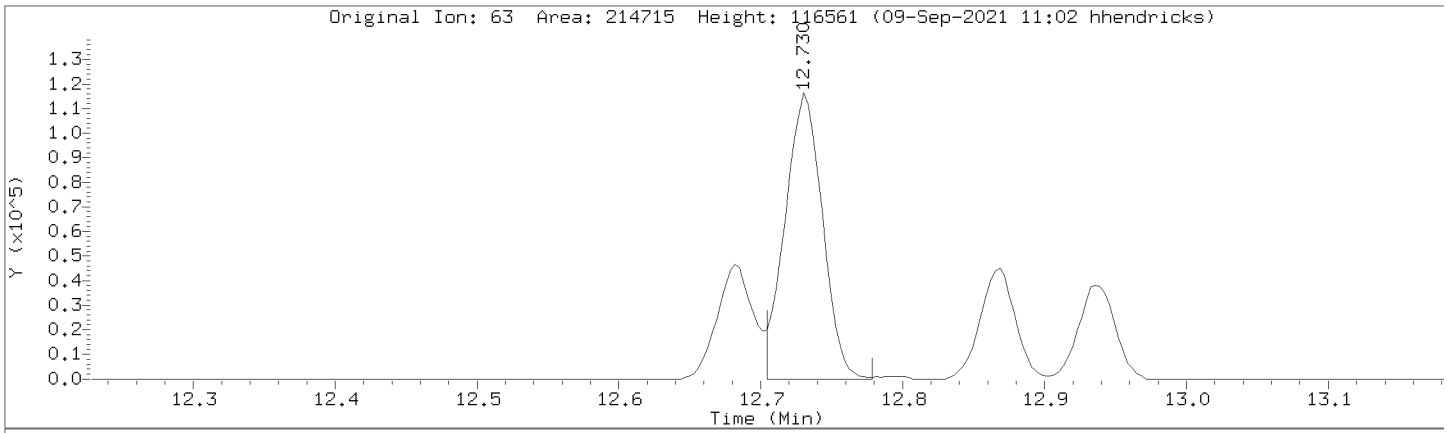
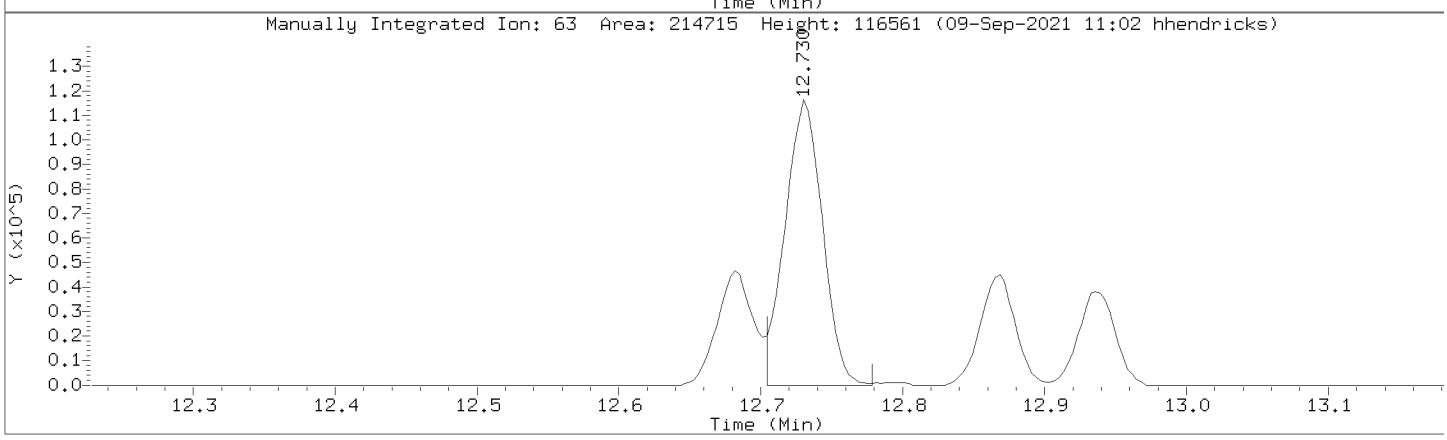
Injection Date: 08-SEP-2021 09:52
Instrument: 10airB.i
Lab Sample ID: 4096964



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Lab Smp Id: 4096971
Inj Date : 08-SEP-2021 07:18
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 1 1,1-Difluoroethane | 65 | 2.942 | 2.942 | (0.542) | 156207 | 10.1366 | 10.1(M) |
| 2 Chlorodifluoromethane | 67 | 2.954 | 2.954 | (0.544) | 57419 | 9.68837 | 9.69(M) |
| 3 Propylene | 41 | 2.961 | 2.961 | (0.545) | 213604 | 8.99336 | 8.99 |
| 4 Dichlorodifluoromethane | 85 | 2.980 | 2.980 | (0.549) | 533842 | 9.21815 | 9.22 |
| 5 Dichlorotetrafluoroethane | 85 | 3.051 | 3.051 | (0.562) | 530364 | 9.07448 | 9.07 |
| 6 Chloromethane | 50 | 3.054 | 3.054 | (0.562) | 297275 | 9.87653 | 9.88 |
| 7 Vinyl chloride | 62 | 3.125 | 3.125 | (0.575) | 249233 | 10.6466 | 10.6 |
| 8 1,3-Butadiene | 54 | 3.157 | 3.157 | (0.581) | 183629 | 11.1187 | 11.1 |
| 9 Bromomethane | 94 | 3.273 | 3.273 | (0.603) | 183768 | 10.4357 | 10.4 |
| 10 Chloroethane | 64 | 3.318 | 3.318 | (0.611) | 111828 | 11.7135 | 11.7 |
| 11 Ethanol | 45 | 3.334 | 3.334 | (0.614) | 428085 | 66.8392 | 66.8 |
| 12 Vinyl Bromide | 106 | 3.421 | 3.421 | (0.630) | 174164 | 10.8868 | 10.9 |
| 13 Isopentane | 43 | 3.433 | 3.433 | (0.632) | 224599 | 11.2440 | 11.2 |
| 14 Freon 123 | 83 | 3.472 | 3.472 | (0.639) | 393898 | 10.0859 | 10.1 |
| 15 Trichlorofluoromethane | 101 | 3.495 | 3.495 | (0.644) | 481290 | 9.33504 | 9.34 |
| 16 Acrolein | 56 | 3.498 | 3.498 | (0.644) | 238669 | 32.1598 | 32.2 |
| 17 Acetone | 43 | 3.517 | 3.517 | (0.648) | 1318023 | 55.1629 | 55.2(A) |
| 18 Isopropyl Alcohol | 45 | 3.546 | 3.546 | (0.653) | 1619504 | 49.4056 | 49.4 |
| 19 1,1-Dichloroethene | 61 | 3.707 | 3.707 | (0.683) | 385536 | 10.0827 | 10.1 |
| 20 Acrylonitrile | 53 | 3.716 | 3.716 | (0.684) | 490522 | 30.1309 | 30.1 |
| 21 Tert Butyl Alcohol (TBA) | 59 | 3.742 | 3.742 | (0.689) | 537917 | 8.95559 | 8.96 |
| 22 Methyl Acetate | 43 | 3.739 | 3.739 | (0.689) | 492258 | 8.34339 | 8.34 |
| 23 Freon 113 | 101 | 3.739 | 3.739 | (0.689) | 420550 | 9.59968 | 9.60 |
| 24 Allyl Chloride | 76 | 3.816 | 3.816 | (0.703) | 92272 | 11.0478 | 11.0 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Report Date: 09-Sep-2021 14:20

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 25 Methylene chloride | 49 | 3.819 | 3.819 | (0.703) | 1347615 | 51.8266 | 51.8 |
| 26 Carbon Disulfide | 76 | 3.922 | 3.922 | (0.722) | 587701 | 10.1854 | 10.2 |
| 27 Methyl Tert Butyl Ether | 73 | 4.070 | 4.070 | (0.750) | 534701 | 9.92231 | 9.92 |
| 28 trans-1,2-dichloroethene | 96 | 4.083 | 4.083 | (0.752) | 206125 | 9.84953 | 9.85 |
| 29 Vinyl Acetate | 43 | 4.157 | 4.157 | (0.766) | 573433 | 11.6805 | 11.7 |
| 30 1,1-Dichloroethane | 63 | 4.208 | 4.208 | (0.775) | 454991 | 9.63860 | 9.64 |
| 31 Methyl Ethyl Ketone | 72 | 4.318 | 4.318 | (0.795) | 103217 | 11.0266 | 11.0 |
| 32 Di-isopropyl Ether | 45 | 4.340 | 4.340 | (0.799) | 824081 | 9.00003 | 9.00 |
| 33 n-Hexane | 57 | 4.350 | 4.350 | (0.801) | 406899 | 9.08586 | 9.09 |
| 34 Ethyl Acetate | 43 | 4.475 | 4.475 | (0.824) | 583921 | 9.45989 | 9.46(M) |
| 35 cis-1,2-Dichloroethene | 96 | 4.495 | 4.495 | (0.828) | 209134 | 9.75652 | 9.76(M) |
| 36 Ethyl Tert-Butyl Ether | 59 | 4.562 | 4.562 | (0.840) | 793288 | 9.64836 | 9.65 |
| 37 Chloroform | 83 | 4.675 | 4.675 | (0.861) | 439727 | 9.39678 | 9.40 |
| 38 Tetrahydrofuran | 42 | 4.739 | 4.739 | (0.873) | 298607 | 10.2802 | 10.3 |
| 39 1,1,1-Trichloroethane | 97 | 4.983 | 4.983 | (0.918) | 431451 | 9.56682 | 9.57 |
| 40 1,2-Dichloroethane | 62 | 5.064 | 5.064 | (0.933) | 341012 | 9.61102 | 9.61 |
| 41 Benzene | 78 | 5.218 | 5.218 | (0.961) | 588579 | 10.8120 | 10.8 |
| 42 Carbon tetrachloride | 117 | 5.234 | 5.234 | (0.964) | 433971 | 11.2020 | 11.2 |
| 43 Cyclohexane | 56 | 5.257 | 5.257 | (0.968) | 424775 | 9.73787 | 9.74(M) |
| 44 Tert Amyl Methyl Ether | 73 | 5.356 | 5.356 | (0.986) | 568084 | 10.5027 | 10.5 |
| * 45 1,4-Difluorobenzene | 114 | 5.430 | 5.430 | (1.000) | 501200 | 10.0000 | |
| 46 2,2,4-Trimethylpentane | 57 | 5.520 | 5.520 | (1.017) | 1277991 | 9.52789 | 9.53 |
| 47 Heptane | 43 | 5.649 | 5.649 | (1.040) | 465728 | 9.26414 | 9.26 |
| 48 Trichloroethene | 130 | 5.758 | 5.758 | (1.060) | 279826 | 10.3239 | 10.3 |
| 49 Methyl methacrylate | 69 | 5.800 | 5.800 | (1.068) | 218793 | 9.92337 | 9.92 |
| 50 1,2-Dichloropropane | 63 | 5.803 | 5.803 | (1.069) | 291689 | 10.0345 | 10.0 |
| 51 1,4-Dioxane | 88 | 5.848 | 5.848 | (1.077) | 352226 | 27.1341 | 27.1 |
| 52 Bromodichloromethane | 83 | 5.964 | 5.964 | (1.098) | 457985 | 9.96761 | 9.97 |
| 53 Methylcyclohexane | 98 | 6.224 | 6.224 | (1.146) | 164119 | 10.8616 | 10.9 |
| 54 Methyl Isobutyl Ketone | 43 | 6.302 | 6.302 | (1.160) | 628570 | 10.5100 | 10.5 |
| 55 cis-1,3-Dichloropropene | 75 | 6.385 | 6.385 | (1.176) | 362859 | 10.9228 | 10.9 |
| 56 trans-1,3-Dichloropropene | 75 | 6.829 | 6.829 | (1.258) | 312629 | 11.6773 | 11.7 |
| 57 Toluene | 91 | 6.925 | 6.925 | (1.275) | 691501 | 10.3919 | 10.4 |
| 58 1,1,2-Trichloroethane | 97 | 7.051 | 7.051 | (1.298) | 253013 | 10.5450 | 10.5 |
| 59 Methyl Butyl Ketone | 43 | 7.144 | 7.144 | (0.850) | 576559 | 11.1639 | 11.2 |
| 60 n-Octane | 43 | 7.340 | 7.340 | (0.873) | 630902 | 10.3421 | 10.3 |
| 61 Dibromochloromethane | 129 | 7.584 | 7.584 | (0.902) | 476130 | 10.9246 | 10.9 |
| 62 Tetrachloroethene | 166 | 7.665 | 7.665 | (0.912) | 337945 | 10.2656 | 10.3 |
| 63 1,2-Dibromoethane | 107 | 7.784 | 7.784 | (0.926) | 402987 | 10.6273 | 10.6 |
| * 64 Chlorobenzene - d5 | 117 | 8.404 | 8.404 | (1.000) | 417240 | 10.0000 | |
| 65 Chlorobenzene | 112 | 8.449 | 8.449 | (1.005) | 549859 | 10.2962 | 10.3 |
| 66 Ethyl Benzene | 91 | 8.665 | 8.665 | (1.031) | 888649 | 10.8417 | 10.8 |
| 67 m&p-Xylene | 91 | 8.848 | 8.848 | (1.053) | 1374524 | 21.7703 | 21.8(M) |
| 68 n-Nonane | 43 | 9.182 | 9.182 | (1.093) | 642209 | 11.1181 | 11.1 |
| 69 Styrene | 104 | 9.250 | 9.250 | (1.101) | 530203 | 11.3420 | 11.3 |
| 70 o-Xylene | 91 | 9.285 | 9.285 | (1.105) | 706032 | 10.6536 | 10.7 |
| 71 Bromoform | 173 | 9.359 | 9.359 | (1.114) | 420727 | 13.2279 | 13.2 |
| 72 1,1,2,2-Tetrachloroethane | 83 | 9.700 | 9.700 | (1.154) | 567659 | 10.8728 | 10.9 |
| 73 Isopropylbenzene | 105 | 9.832 | 9.832 | (1.170) | 965260 | 11.1755 | 11.2 |
| 74 N-Propylbenzene | 91 | 10.398 | 10.398 | (1.237) | 1168172 | 11.2701 | 11.3 |
| 75 2-Chlorotoluene | 91 | 10.440 | 10.440 | (1.242) | 742063 | 10.7307 | 10.7(M) |
| 76 4-Ethyltoluene | 105 | 10.584 | 10.584 | (1.259) | 932426 | 10.6057 | 10.6 |
| 77 1,3,5-Trimethylbenzene | 105 | 10.655 | 10.655 | (1.268) | 819518 | 11.1101 | 11.1 |
| 78 n-Decane | 57 | 11.006 | 11.006 | (2.027) | 782350 | 10.3872 | 10.4 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Report Date: 09-Sep-2021 14:20

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 79 Tert-Butyl Benzene | 119 | 11.102 | 11.102 | (1.321) | 799528 | 11.5213 | 11.5 |
| 80 1,2,4-Trimethylbenzene | 105 | 11.150 | 11.150 | (1.327) | 830635 | 12.7134 | 12.7 |
| 81 Sec- Butylbenzene | 105 | 11.411 | 11.411 | (1.358) | 1222904 | 12.5931 | 12.6 |
| 82 1,3-Dichlorobenzene | 146 | 11.443 | 11.443 | (1.361) | 514977 | 10.7043 | 10.7 |
| 83 Benzyl Chloride | 91 | 11.517 | 11.517 | (1.370) | 548450 | 10.8588 | 10.9 |
| 84 1,4-Dichlorobenzene | 146 | 11.578 | 11.578 | (1.378) | 493462 | 10.7092 | 10.7 |
| 85 p-Isopropyltoluene | 119 | 11.616 | 11.616 | (1.382) | 1089002 | 11.0582 | 11.1 |
| 86 1,2,3-Trimethylbenzene | 105 | 11.629 | 11.629 | (1.384) | 883647 | 12.5821 | 12.6 |
| 87 1,2-Dichlorobenzene | 146 | 11.887 | 11.887 | (1.414) | 526026 | 10.9753 | 11.0 |
| 88 N-Butylbenzene | 91 | 12.067 | 12.067 | (1.436) | 876862 | 10.4180 | 10.4 |
| 89 1,2-Dibromo-3-Chloropropane | 157 | 12.584 | 12.584 | (1.497) | 274653 | 10.2871 | 10.3 |
| 90 1,2,4-Trichlorobenzene | 180 | 13.533 | 13.533 | (1.610) | 496176 | 21.7730 | 21.8 |
| 91 Naphthalene | 128 | 13.671 | 13.671 | (1.627) | 629120 | 12.5104 | 12.5 |
| 92 Hexachlorobutadiene | 225 | 13.780 | 13.780 | (1.640) | 330047 | 13.9151 | 13.9 |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Lab Smp Id: 4096971
Inj Date : 08-SEP-2021 07:18
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Calibration Date: 08-SEP-2021
Lab File ID: 25102_40160.D
Calibration Time: 07:18
Lab Smp Id: 4096971
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 501200 | 9.00 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 417240 | 6.43 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | 0.00 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 4096971
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 07:18

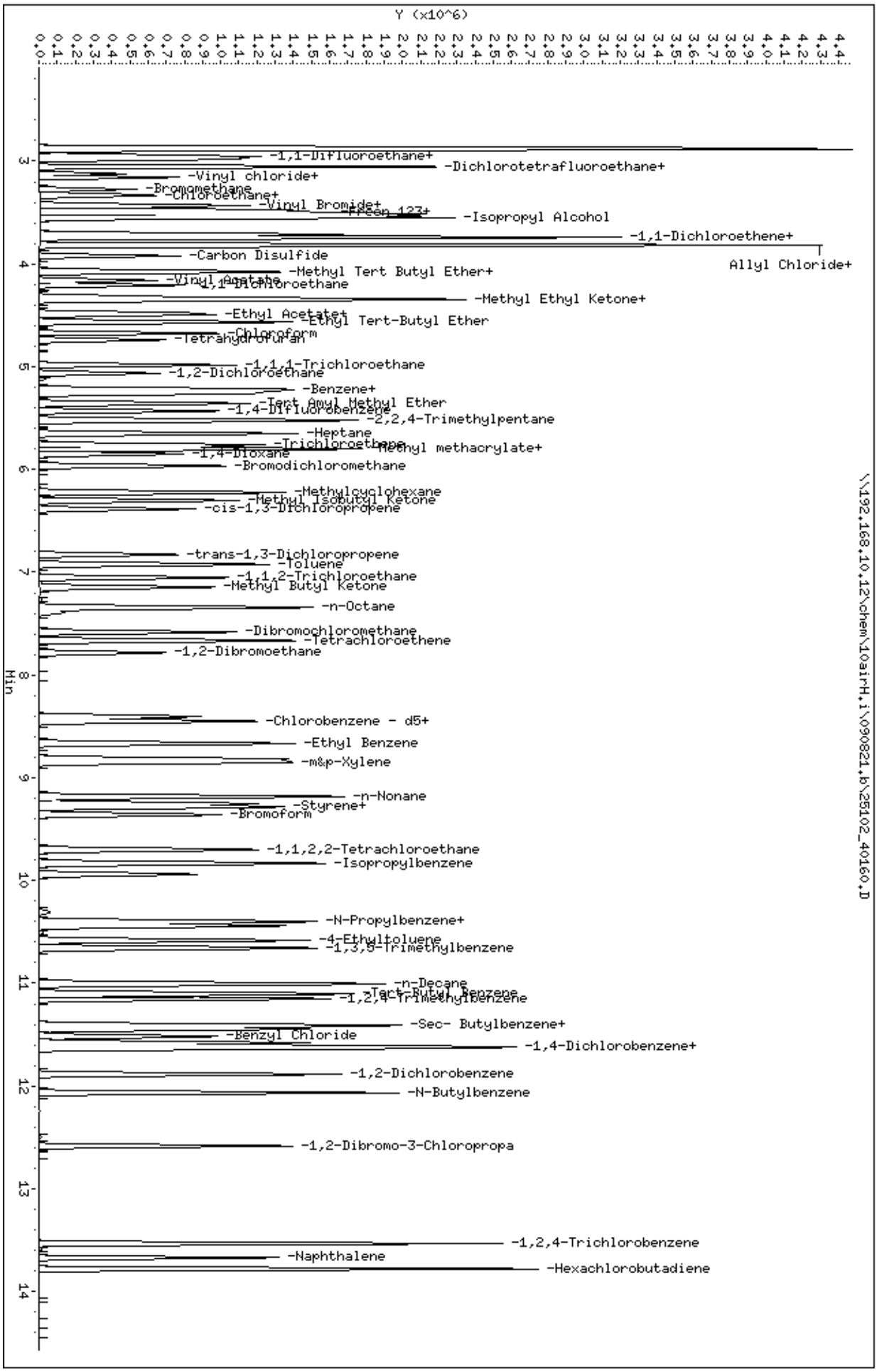
Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 0

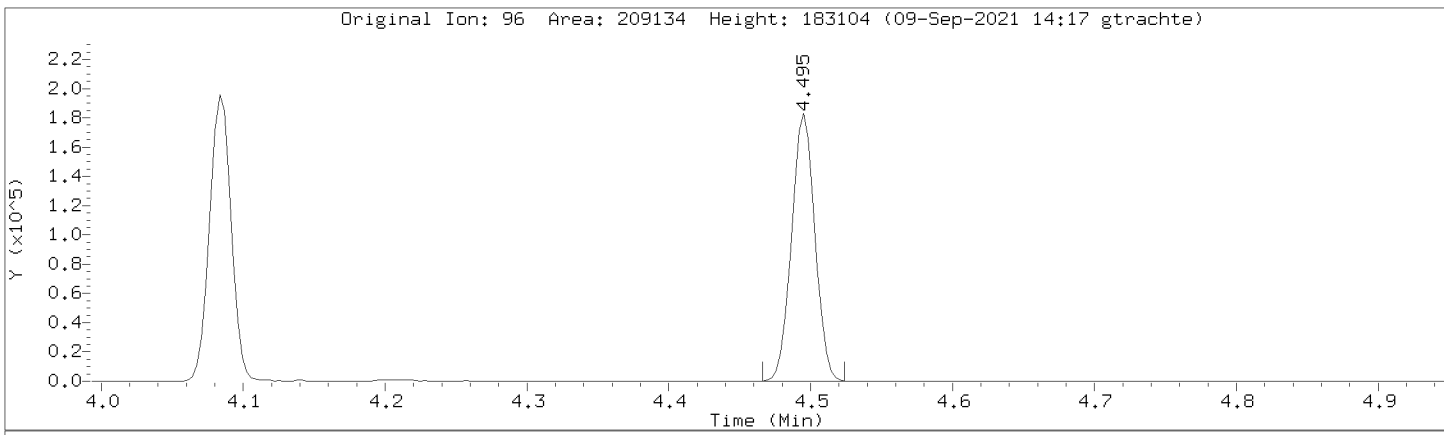
CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

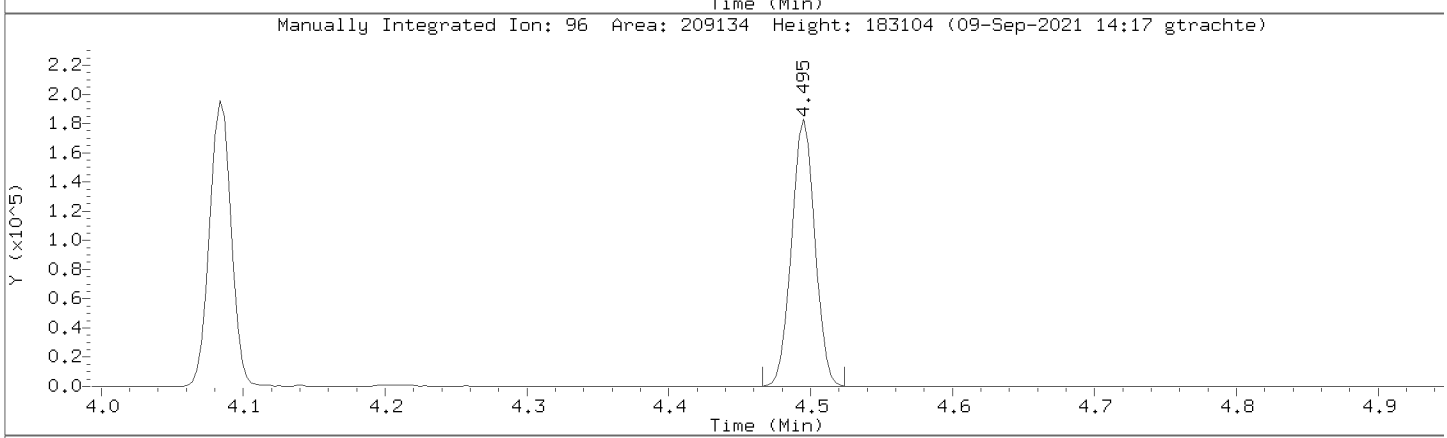
| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|

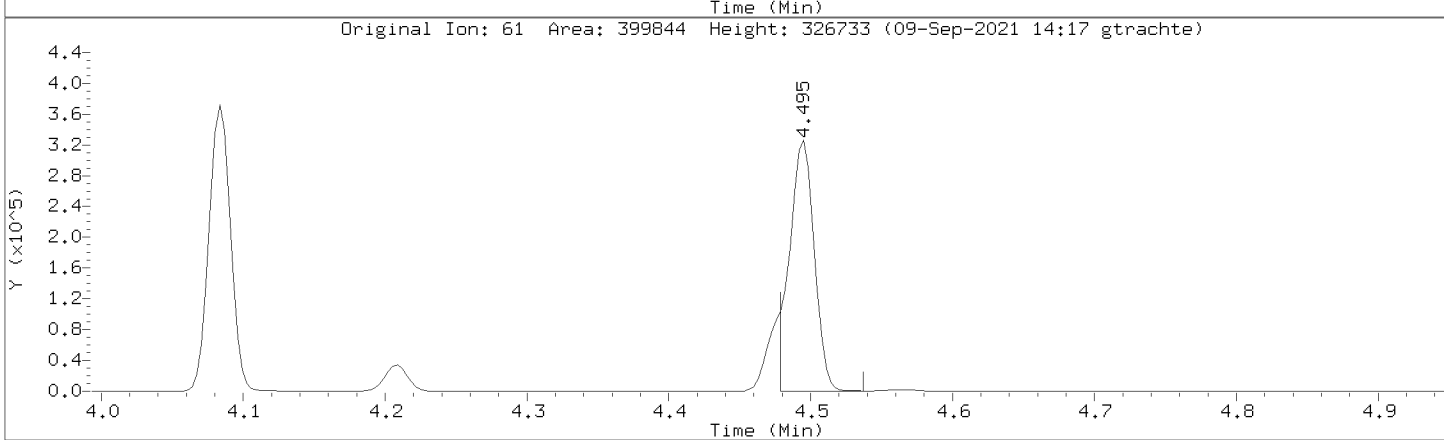

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Date : 08-SEP-2021 07:18
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airH.i
Operator: GT
Column diameter: 0.32
\\192.168.10.12\chem\10airH.i\090821.b\25102_40160.D
Y (x10^6)
Min
-1,1-Difluoroethane+
-Dichlorotetrafluoroethane+
-Vinyl chloride+
-Bromomethane
-Chloroethane+
-Vinyl Bromide+
-Freon 123+
-Isopropyl Alcohol
-1,1-Dichloroethene+
-Carbon Disulfide
Allyl Chloride+
-Methyl Tert Butyl Ether+
-Vinyl Acetate
-1,1-Dichloroethane
-Methyl Ethyl Ketone+
-Ethyl Acetate+
-Ethyl Tert-Butyl Ether
-Chloroform
-Tetrahydrofuran
-1,1,1-Trichloroethane
-1,2-Dichloroethane
-Benzene+
-Tert Amyl Methyl Ether
-1,4-Difluorobenzene
-2,2,4-Trimethylpentane
-Heptane
-Trichloroethene
-Methyl methacrylate+
-1,4-Dioxane
-Bromodichloromethane
-Methylcyclohexane
-Methyl Isobutyl Ketone
-cis-1,3-Dichloropropene
-trans-1,3-Dichloropropene
-Toluene
-1,1,2-Trichloroethane
-Methyl Butyl Ketone
-n-Octane
-Dibromochloromethane
-Tetrachloroethene
-1,2-Dibromoethane
-Chlorobenzene - d5+
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-Bromoform
-1,1,2,2-Tetrachloroethane
-Isopropylbenzene
-N-Propylbenzene+
-4-Ethyltoluene
-1,3,5-Trimethylbenzene
-n-Decane
-Tert-Butyl Benzene
-1,2,4-Trimethylbenzene
-Sec- Butylbenzene+
-Benzyl Chloride
-1,4-Dichlorobenzene+
-1,2-Dichlorobenzene
-N-Butylbenzene
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene

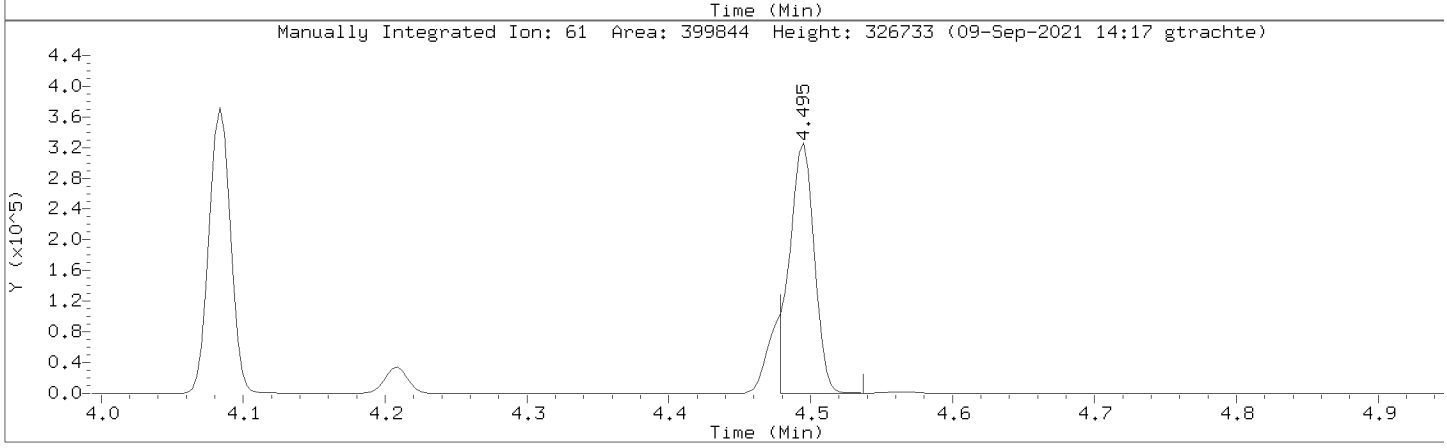
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



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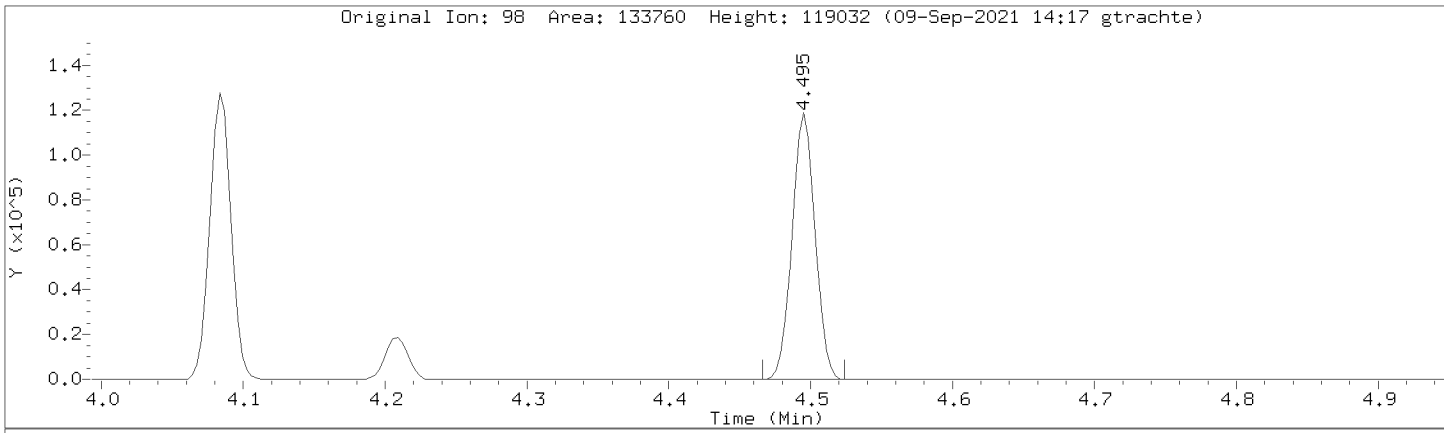
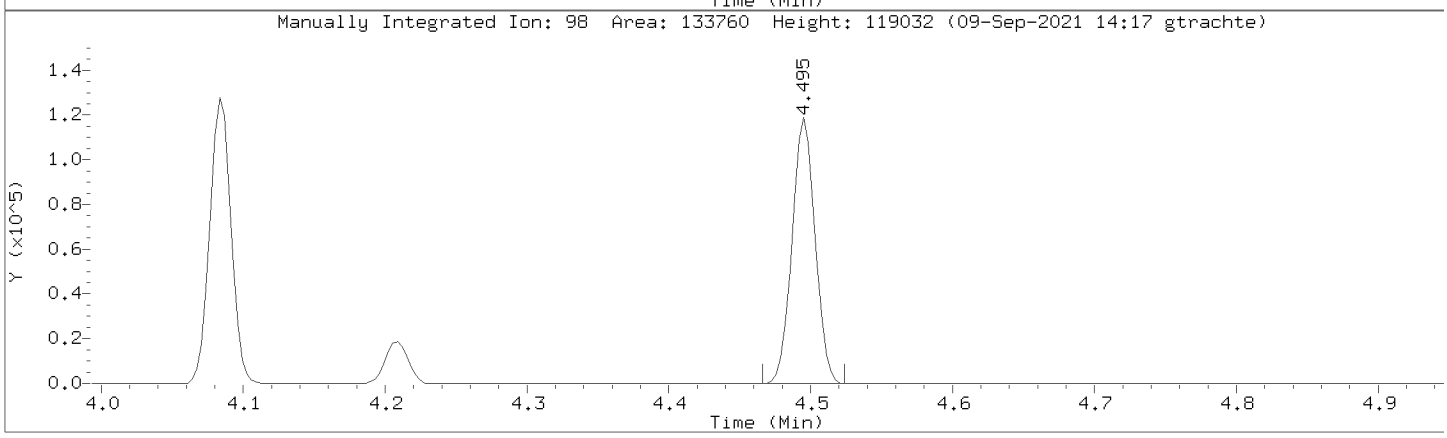
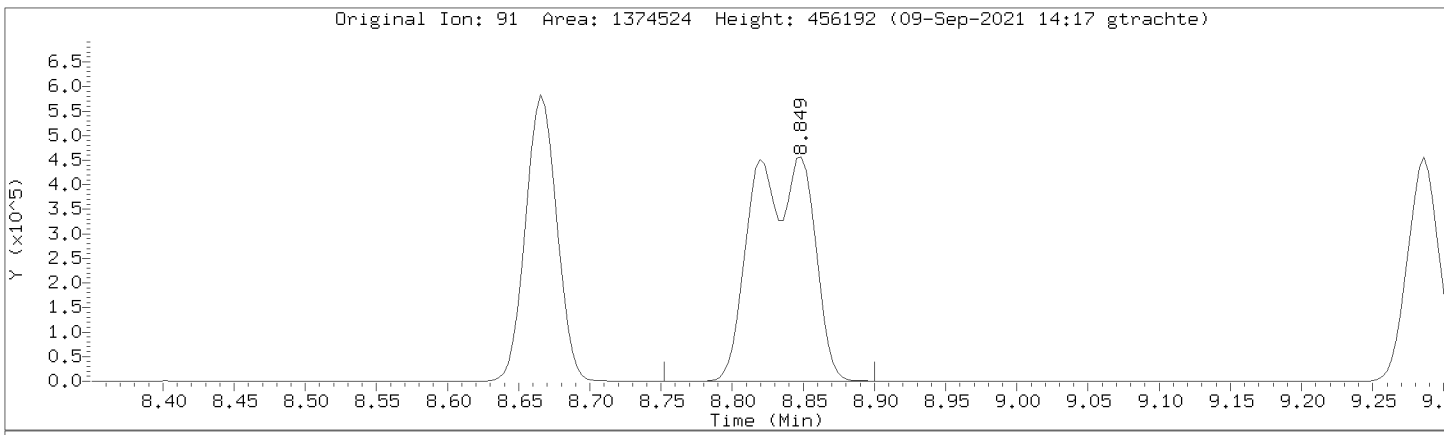
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

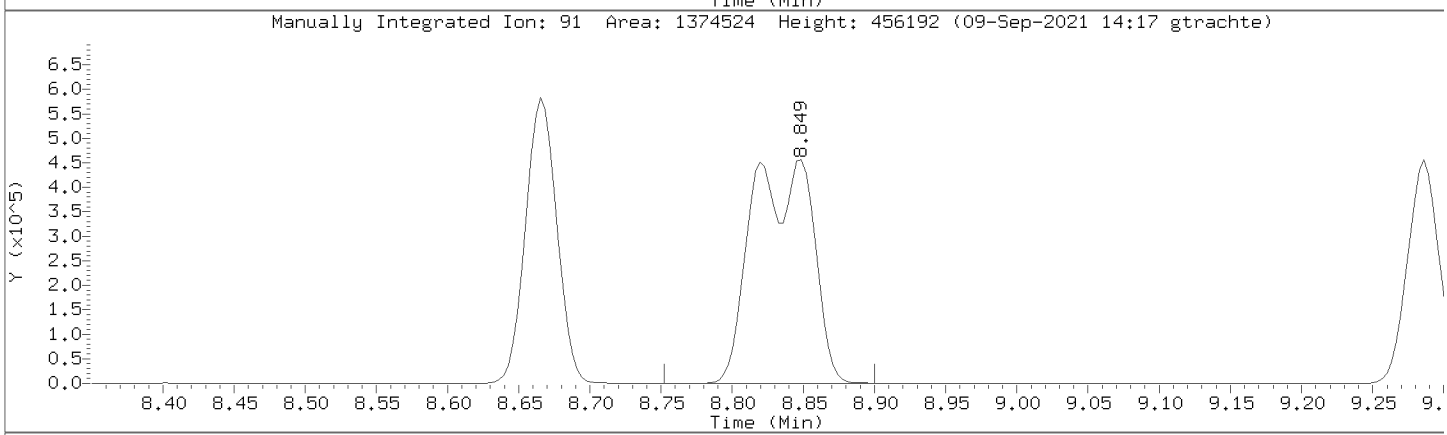


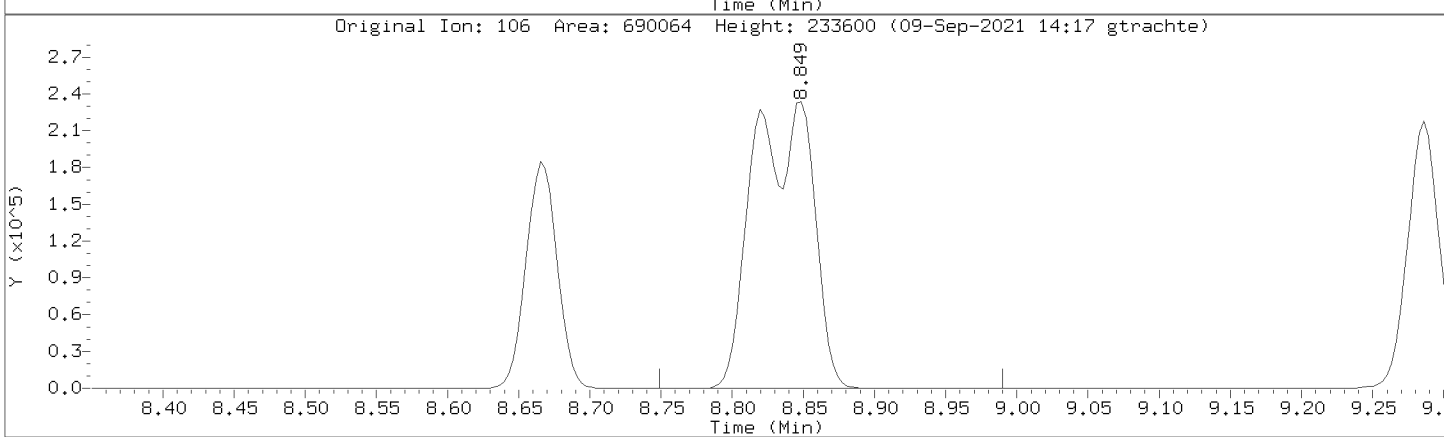



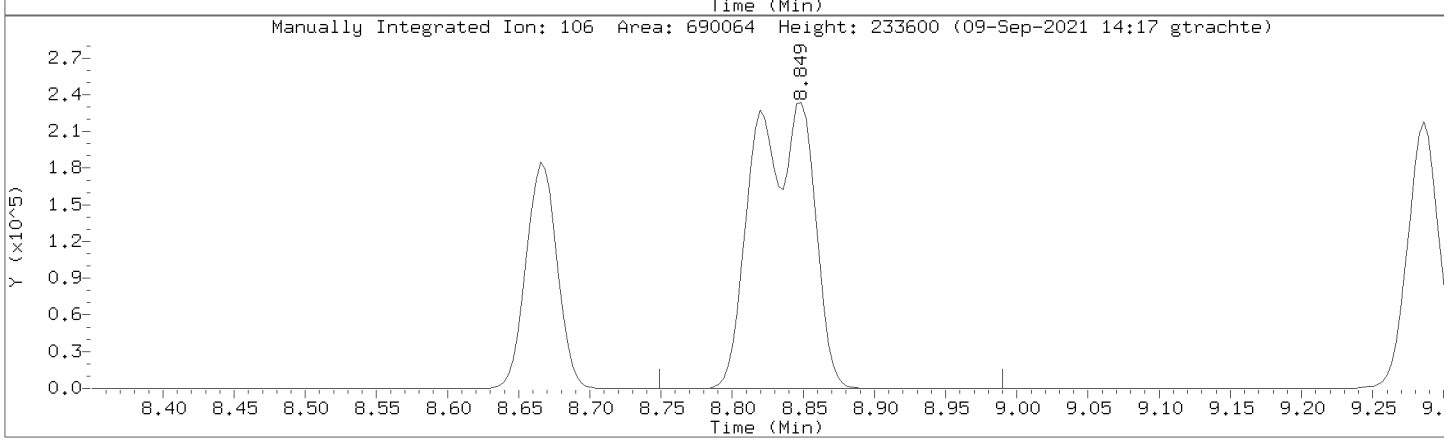
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

Compound: m&p-Xylene
CAS Number: 7816-60-0



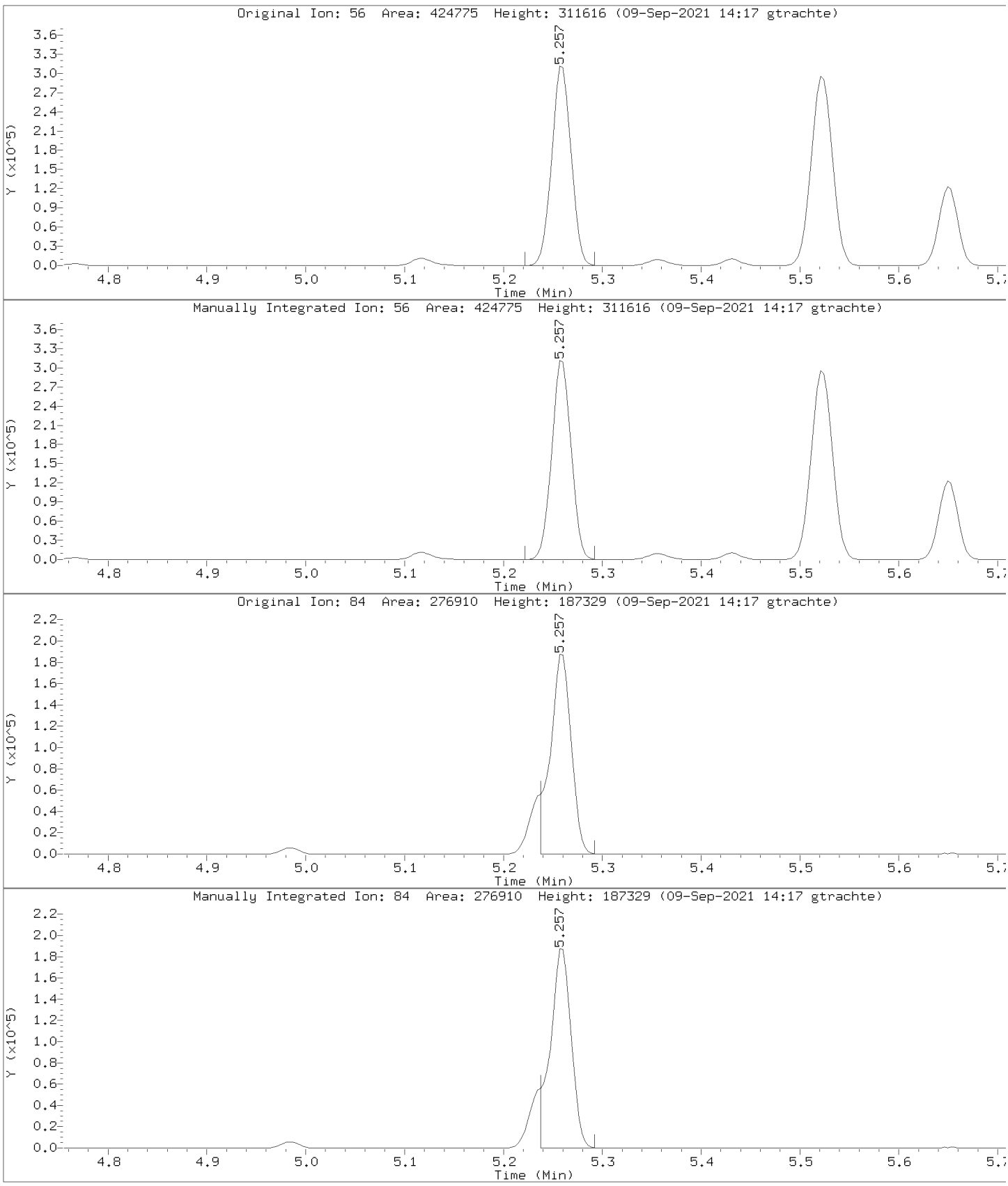



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

Compound: Cyclohexane
CAS Number: 110-82-7



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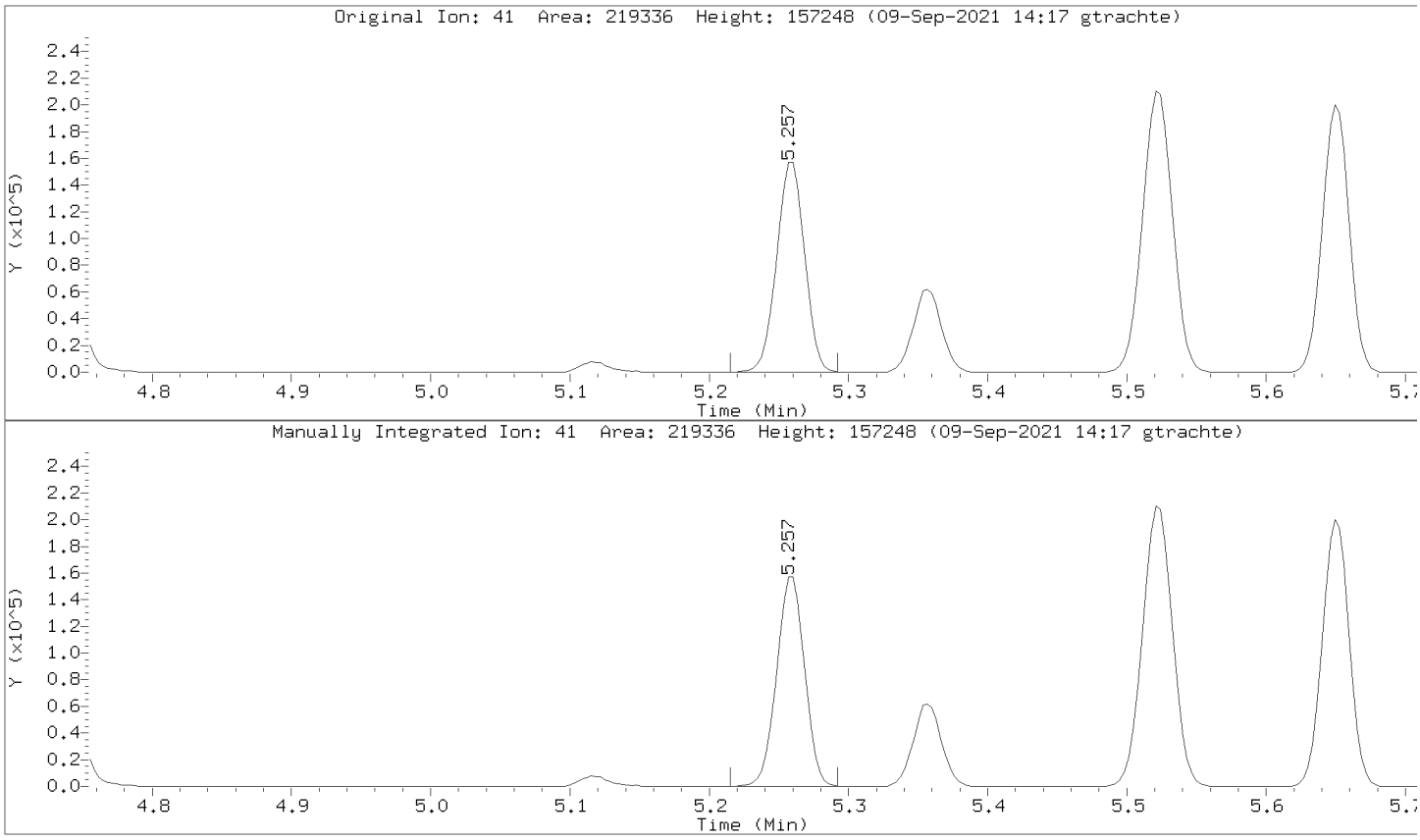
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971



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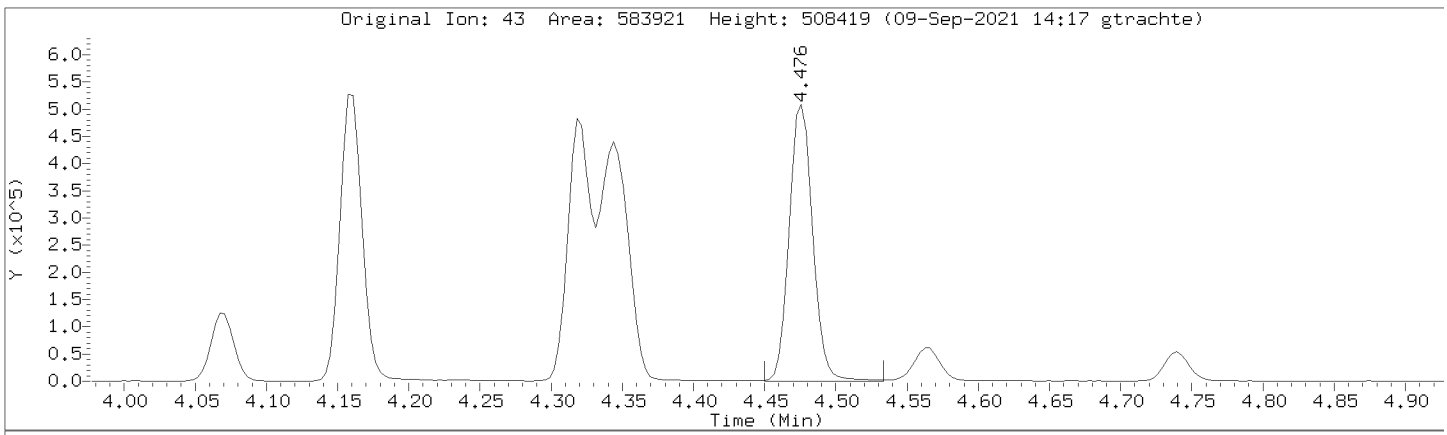
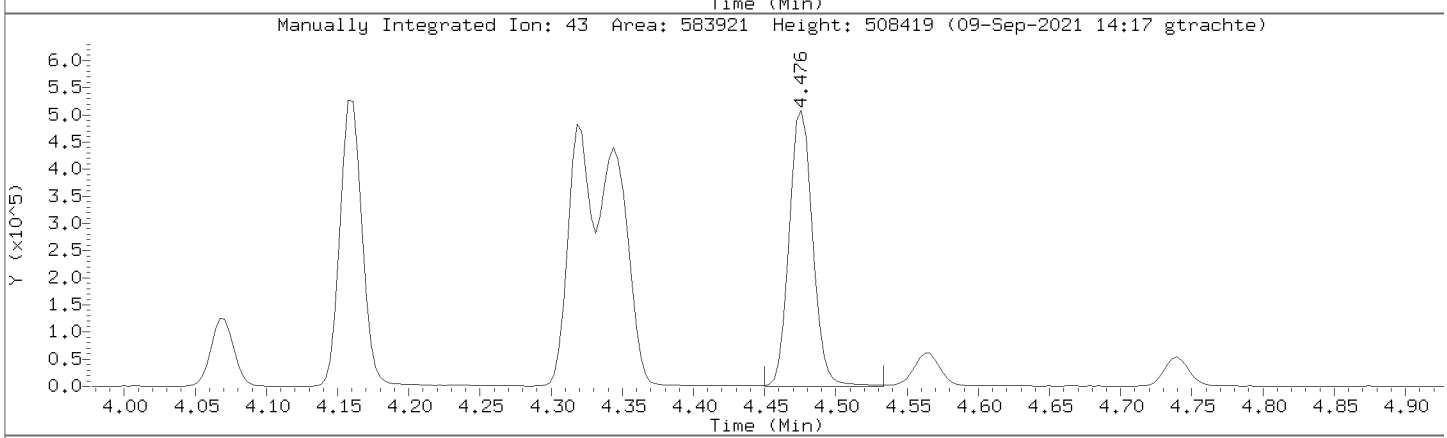
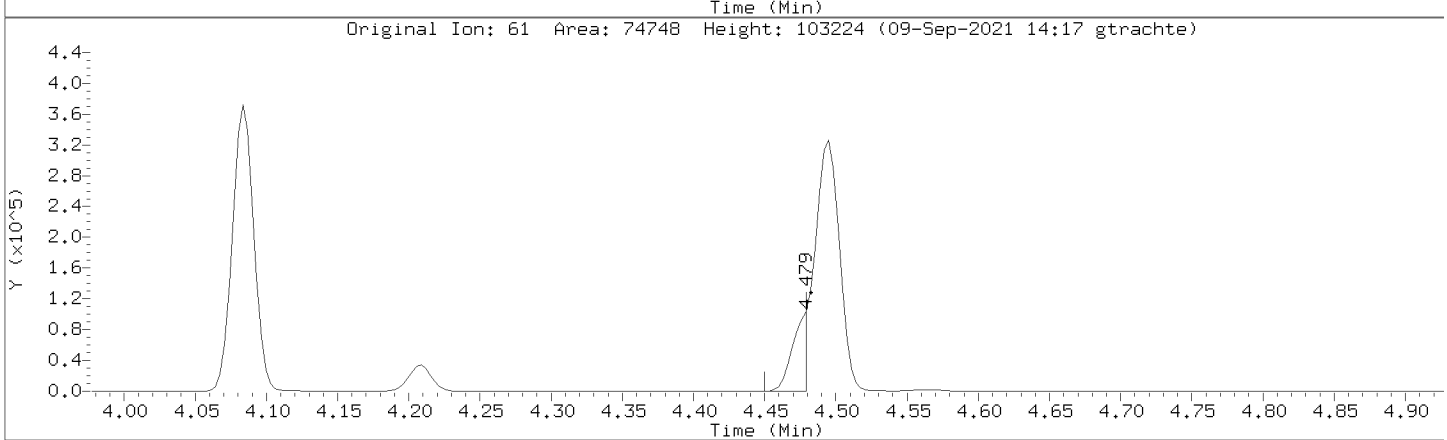
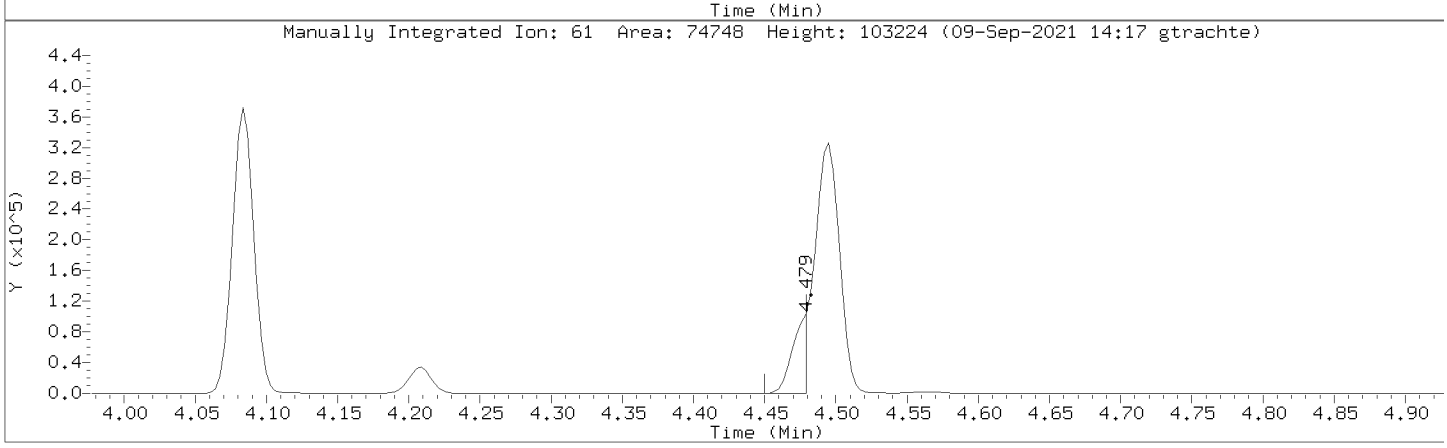
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

Compound: Ethyl Acetate
CAS Number: 141-78-6

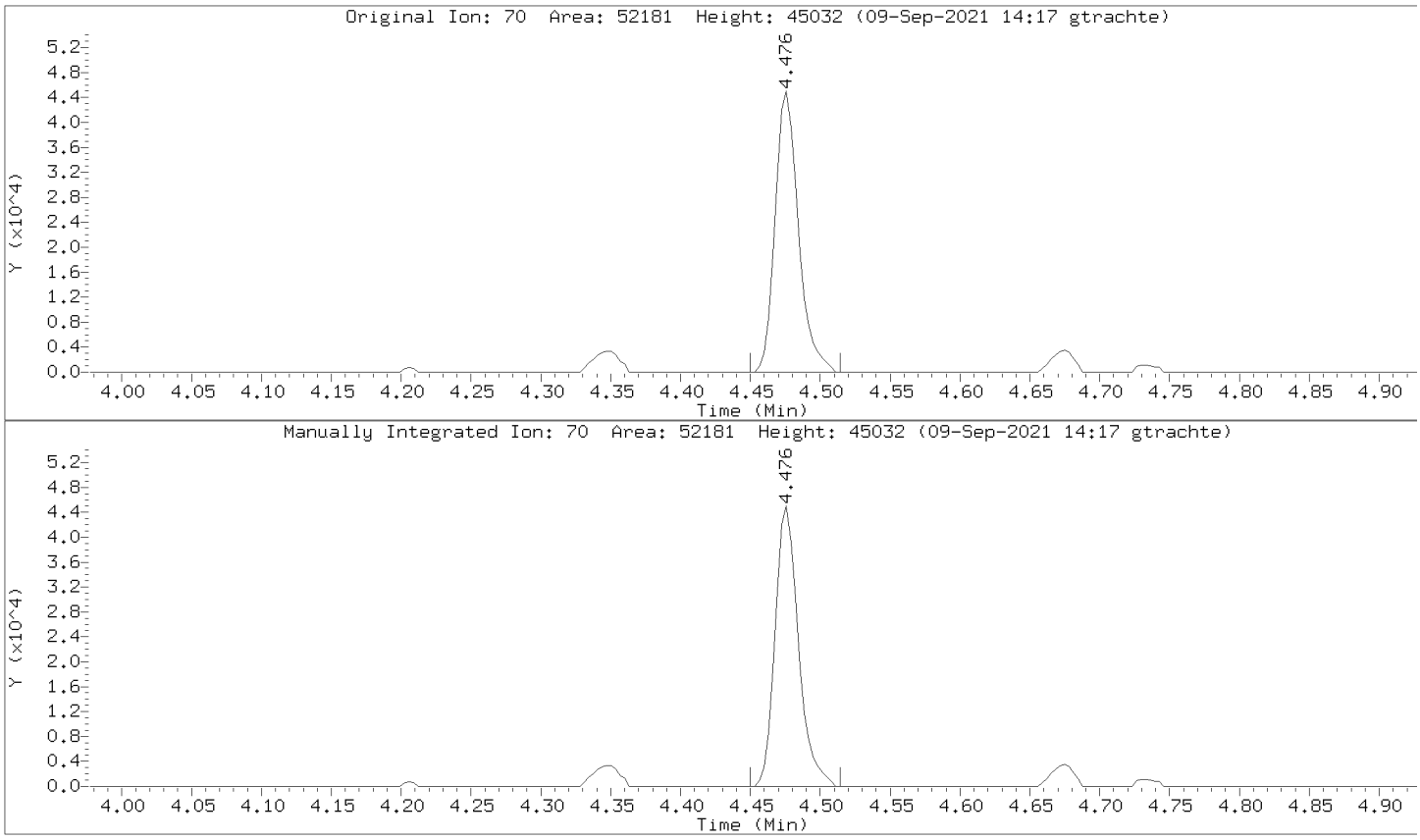


Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971



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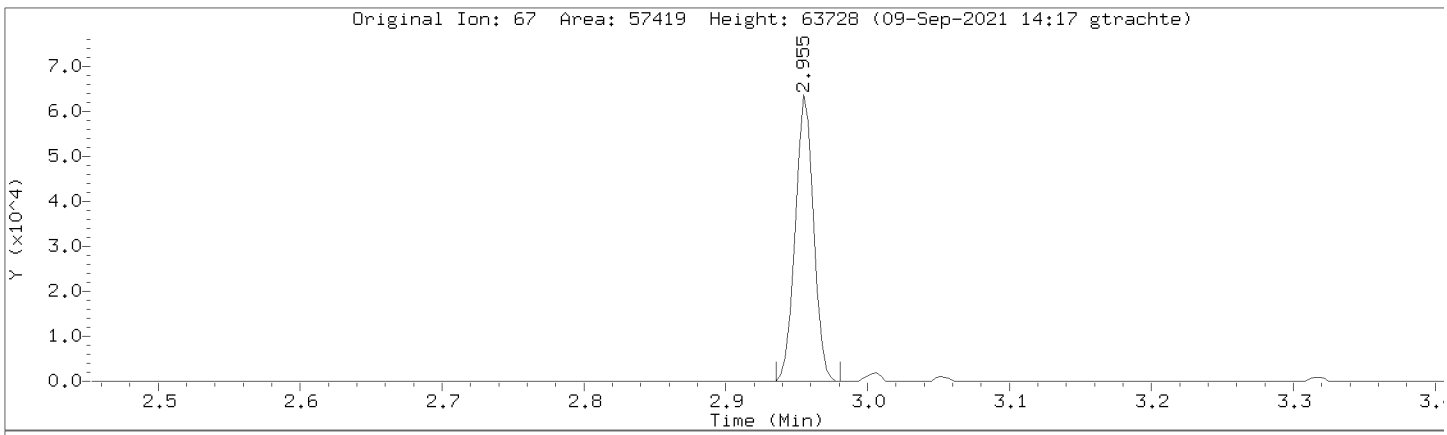
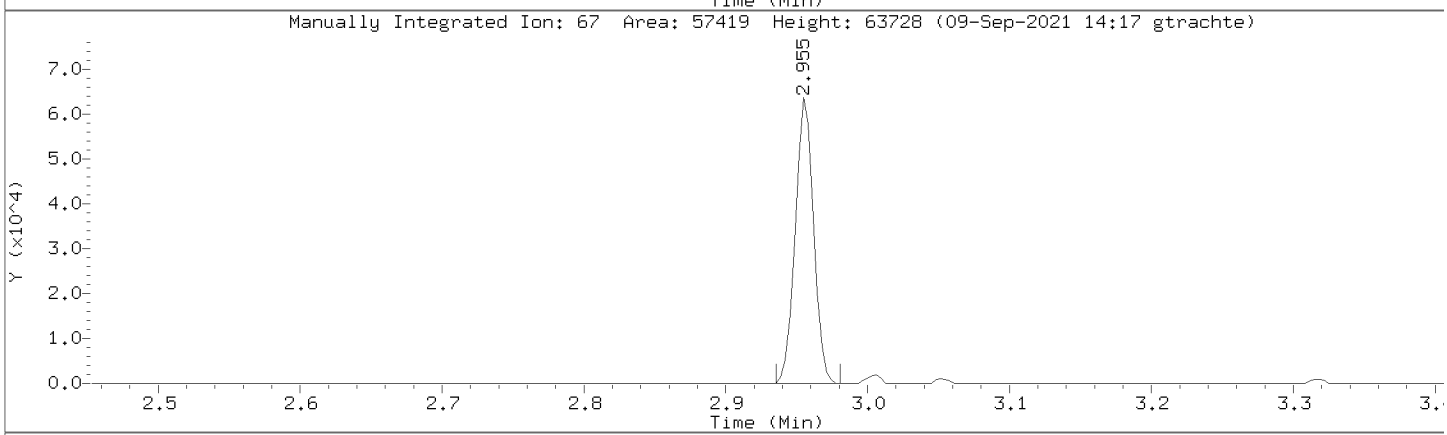
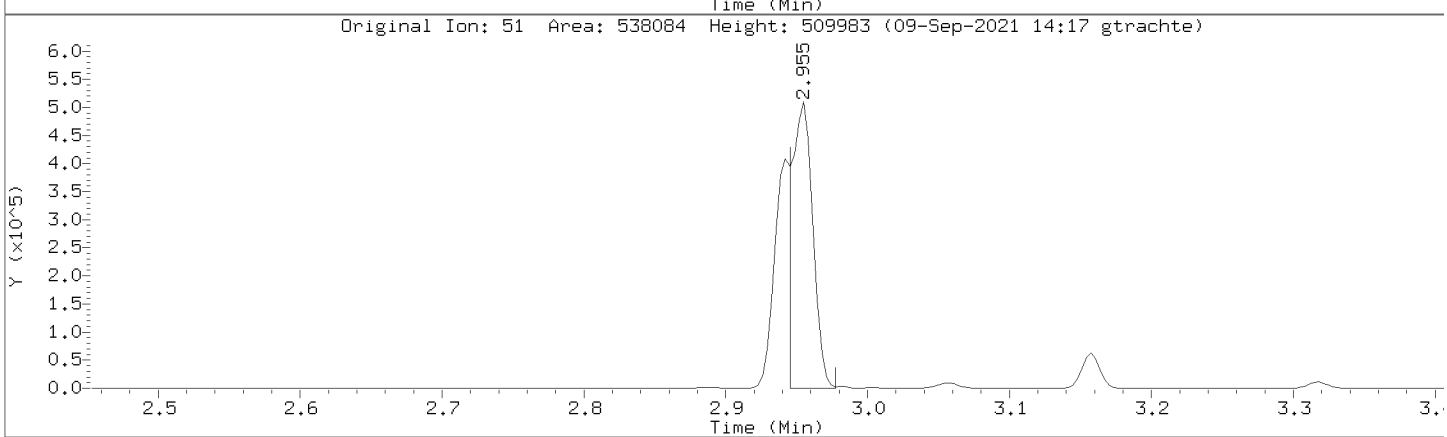
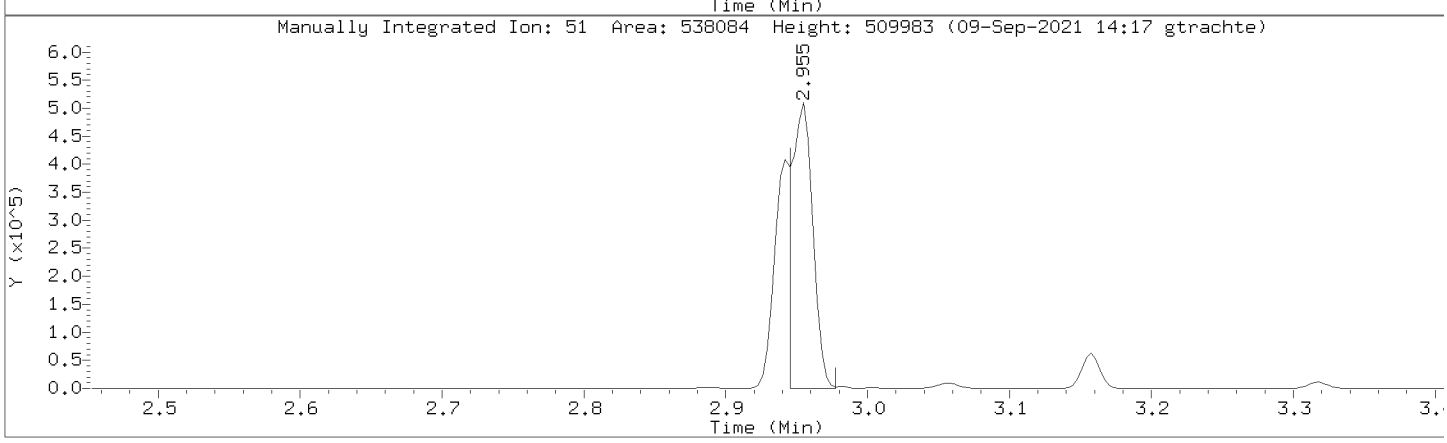
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

Compound: Chlorodifluoromethane
CAS Number: 76-13-1

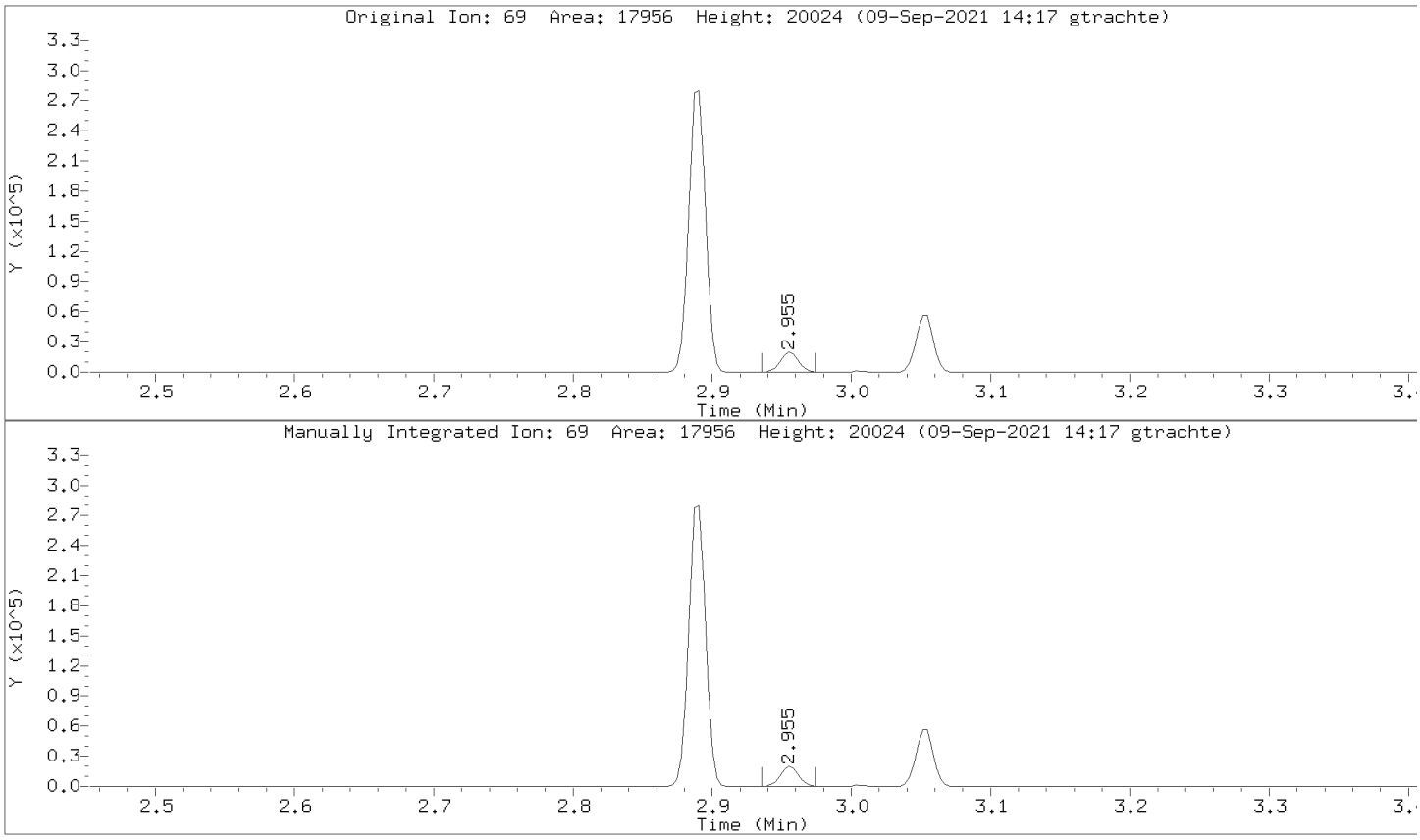


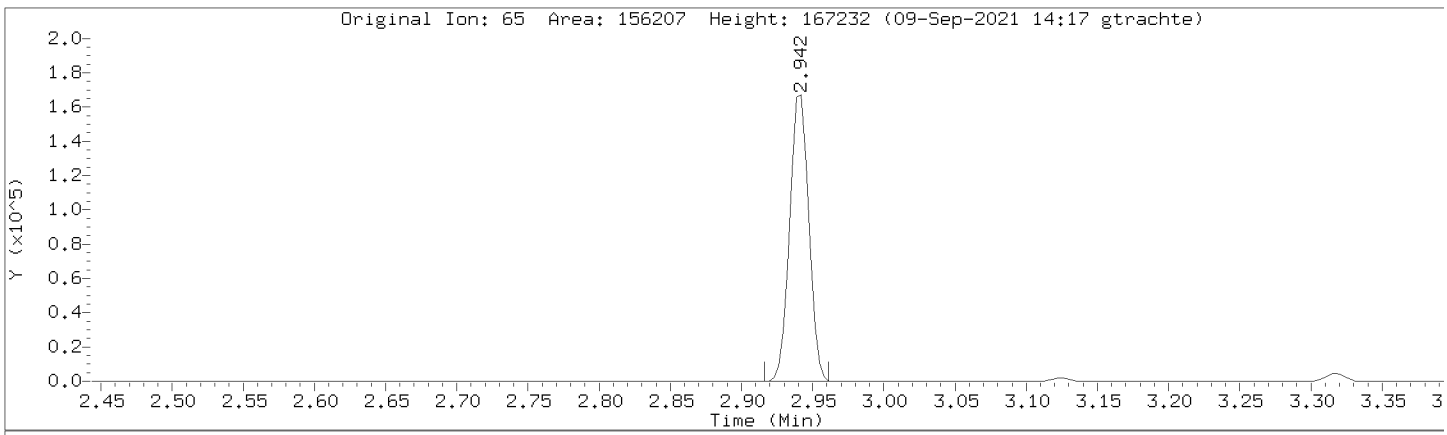



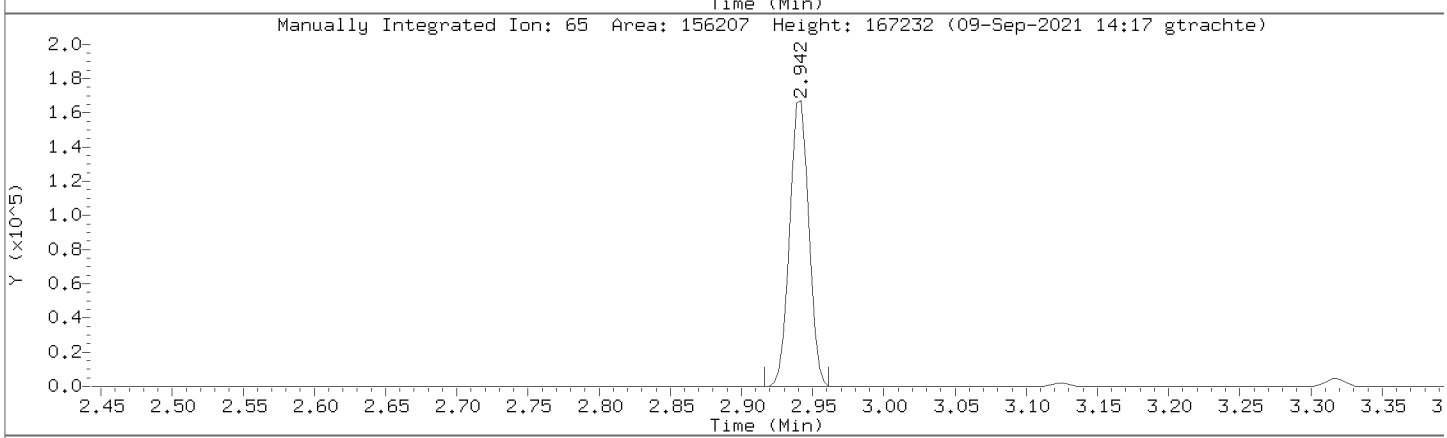
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

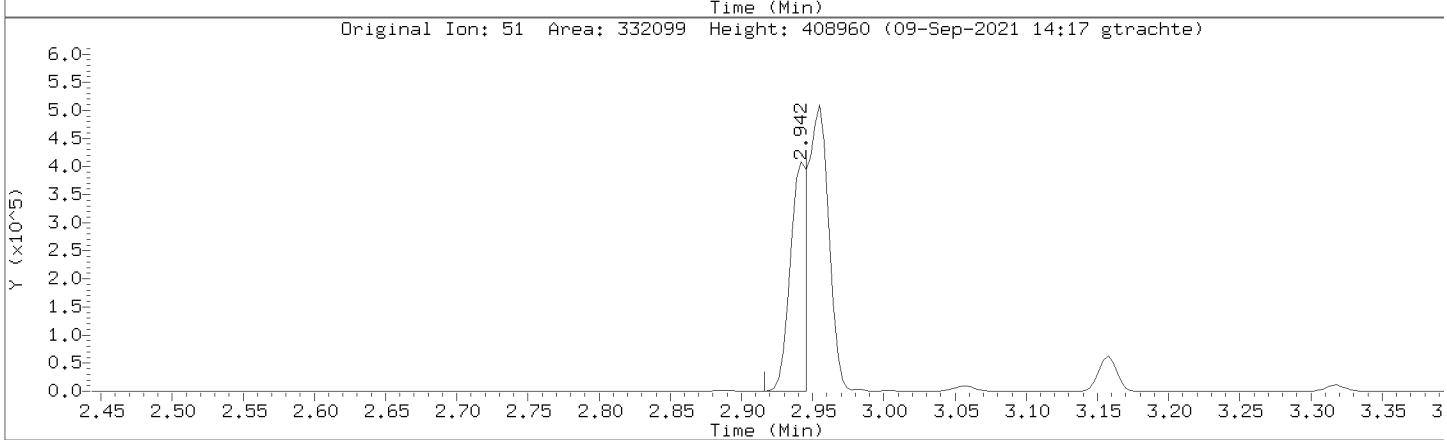


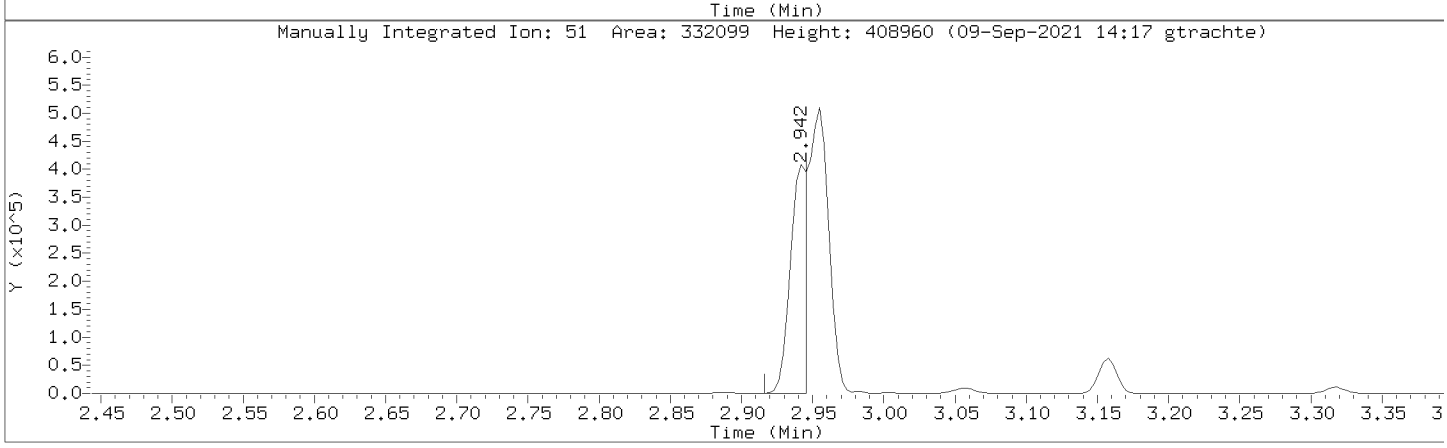
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

Compound: 1,1-Difluoroethane
CAS Number: 75-37-6

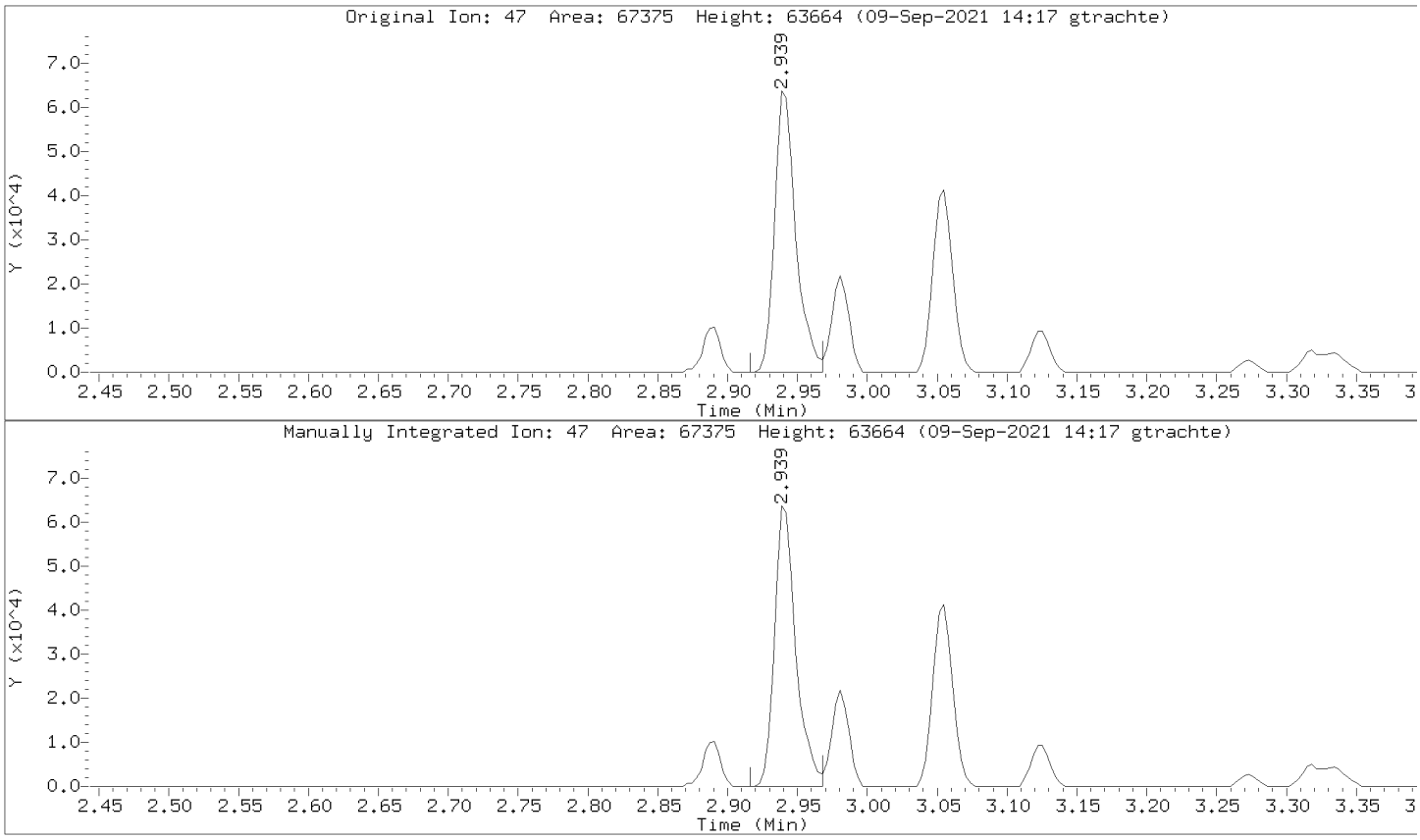


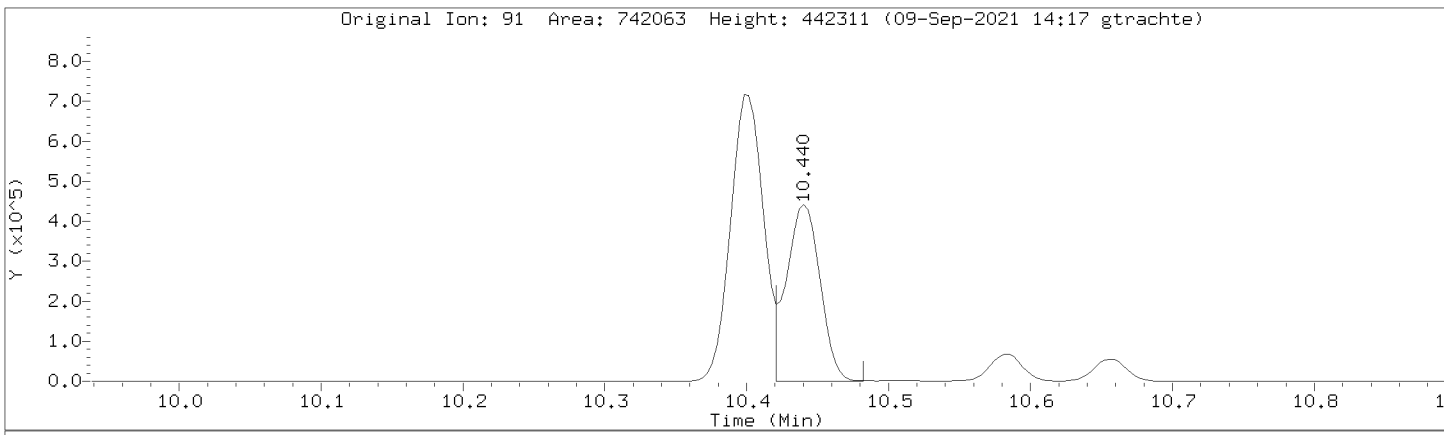



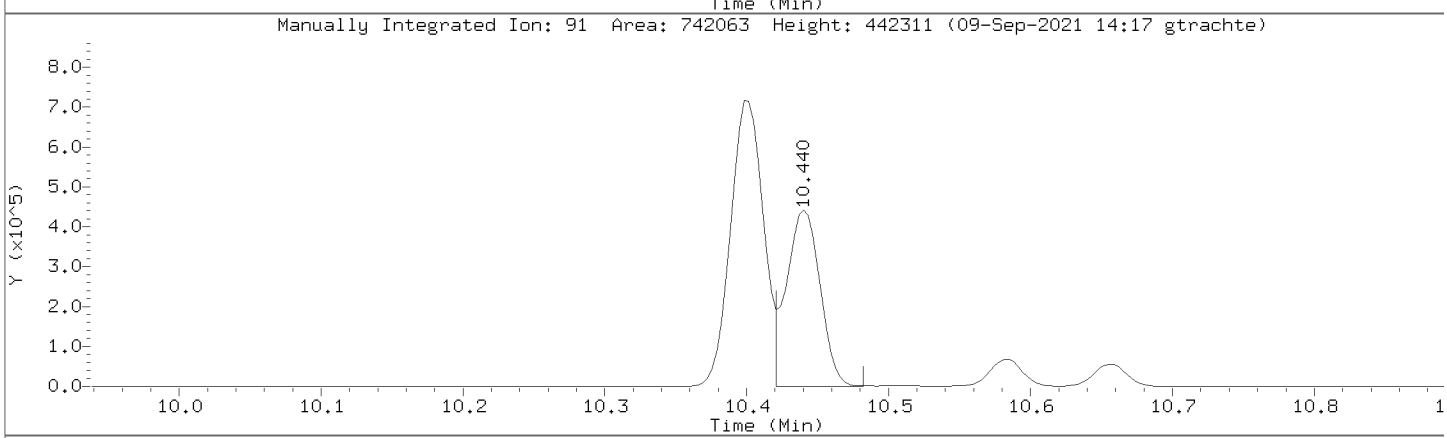
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

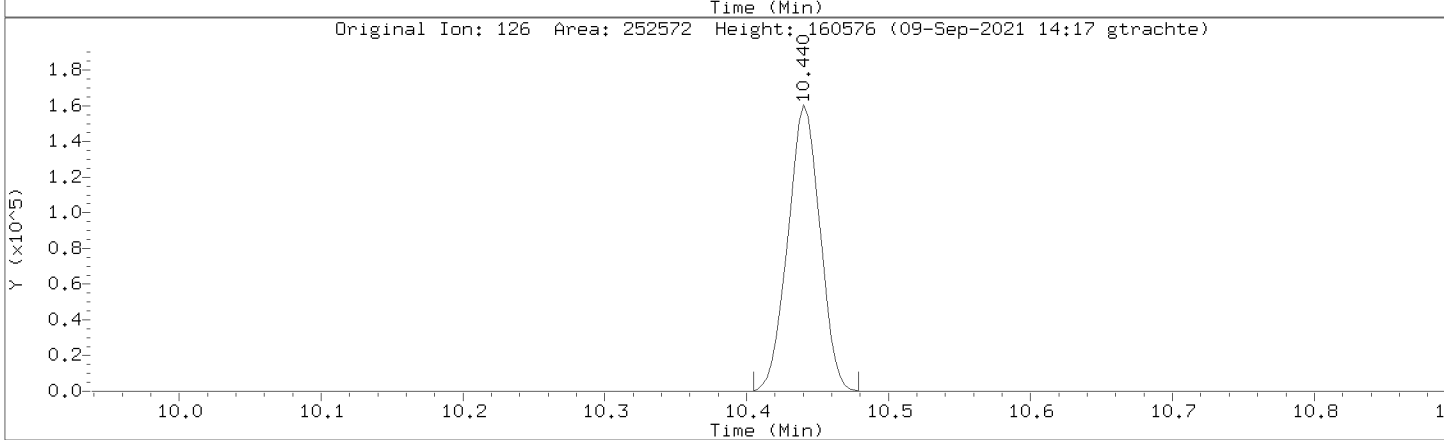


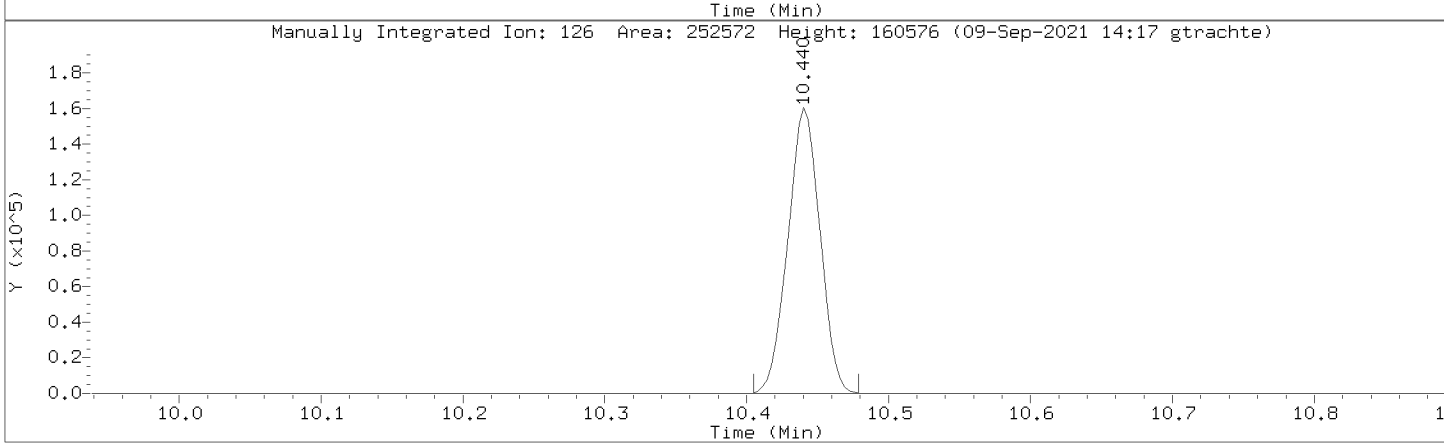
Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971

Compound: 2-Chlorotoluene
CAS Number: 95-49-8

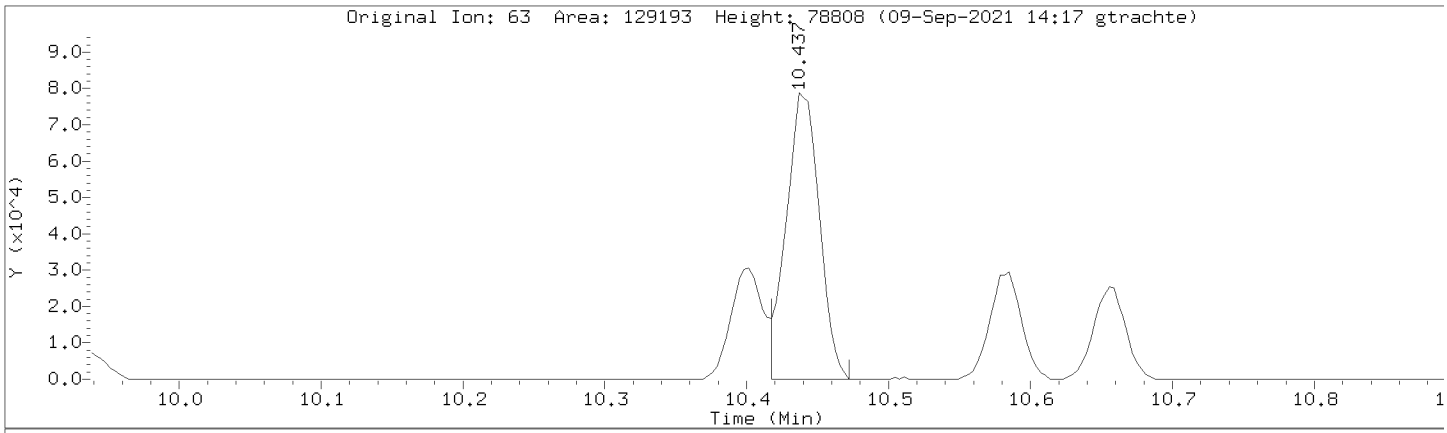


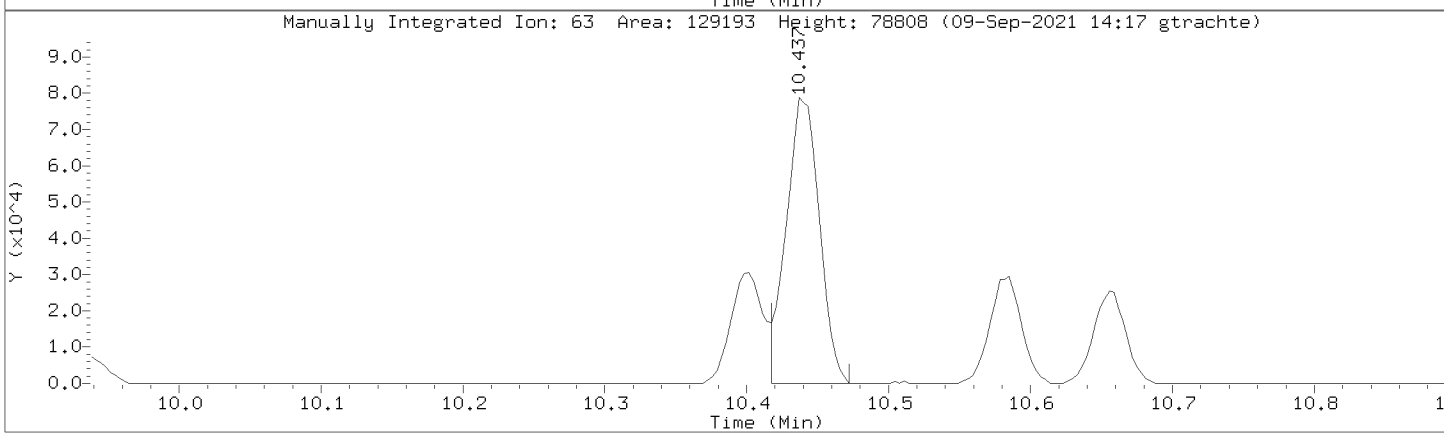



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25102_40160.D
Injection Date: 08-SEP-2021 07:18
Instrument: 10airH.i
Lab Sample ID: 4096971



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Lab Smp Id: 10577519015
Inj Date : 08-SEP-2021 20:34
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 20
Dil Factor: 1.55000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.550 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) | |
|---|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | | (D) |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.430 | 5.430 | (1.000) | 489392 | 10.0000 | | |
| 48 Trichloroethene | 130 | Compound Not Detected. | | | | | | |
| 62 Tetrachloroethene | 166 | 7.662 | 7.665 | (0.912) | 1082 | 0.03363 | 0.0521(a) | |
| * 64 Chlorobenzene - d5 | 117 | 8.401 | 8.404 | (1.000) | 407777 | 10.0000 | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Lab Smp Id: 10577519015
Inj Date : 08-SEP-2021 20:34
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 20
Dil Factor: 1.55000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.550 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 5.431 | 2727760 | 10.000 |
| * 64 Chlorobenzene - d5 | 8.402 | 1413928 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 2.855 | 11678193 | 42.8123902 | 66.4 | 0 | | 0 | 45 |
| Unknown | | | | | CAS #: | | |
| 10.337 | 8504478 | 60.1478652 | 93.2 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.295 | 6643195 | 46.9839503 | 72.8 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.389 | 12388029 | 87.6142545 | 136 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.864 | 5760021 | 40.7377142 | 63.1 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Report Date: 09-Sep-2021 14:21

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | | CAS #: | | |
| 11.945 | 24926506 | 176.292550 | 273 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.019 | 14554910 | 102.939509 | 160 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.128 | 4703659 | 33.2665955 | 51.6 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.208 | 13510956 | 95.5561475 | 148 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.389 | 5016352 | 35.4781170 | 55.0 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.450 | 5391097 | 38.1284954 | 59.1 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25120.D
Lab Smp Id: 10577519015
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18

Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 489392 | 6.43 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 407777 | 4.02 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.00 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.04 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519015
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 20:34

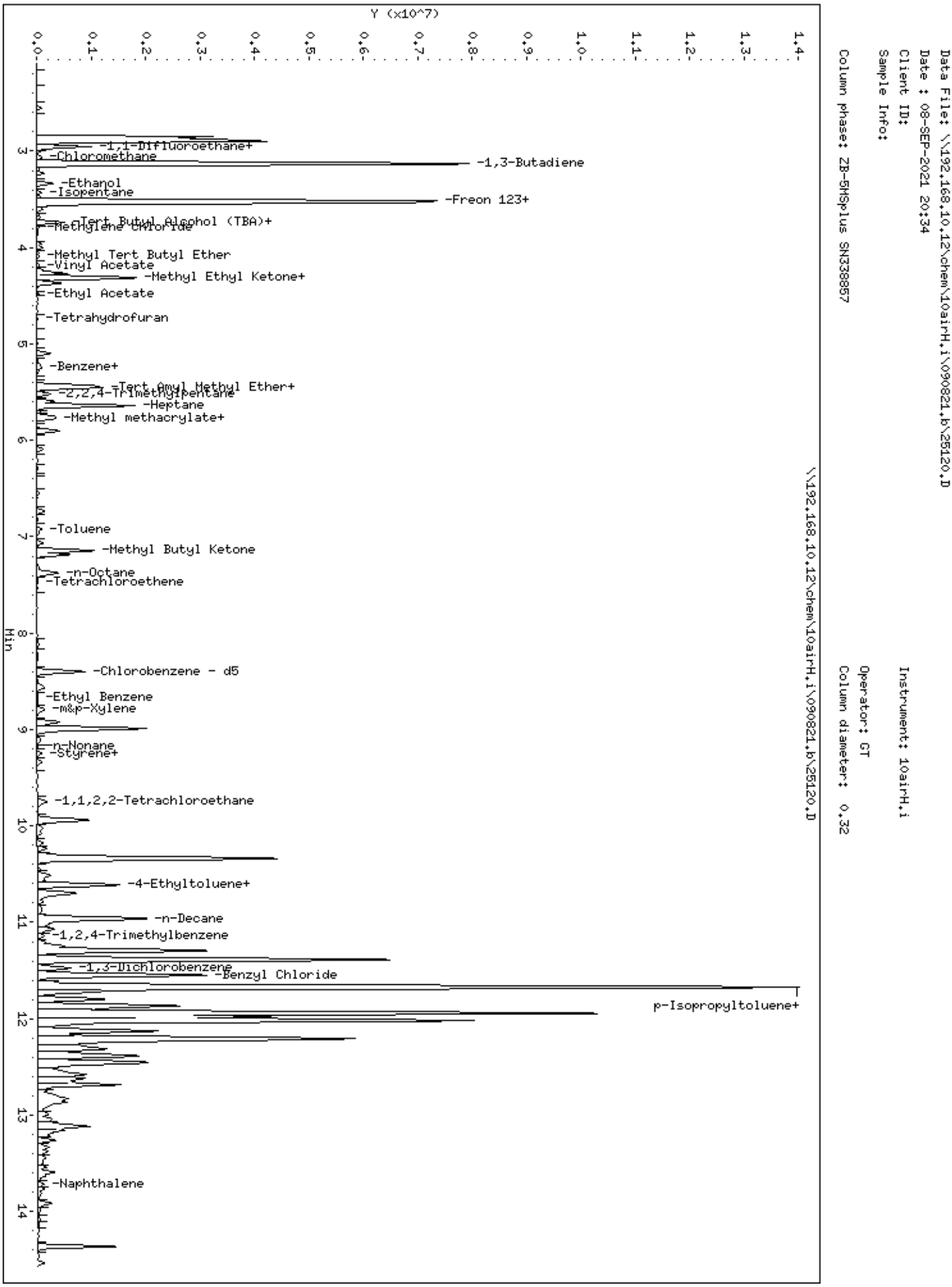
Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 2.855 | 66.4 | _J__ |
| 2. | Unknown | 10.337 | 93.2 | _J__ |
| 3. | Unknown | 11.295 | 72.8 | _J__ |
| 4. | Unknown | 11.389 | 136 | _J__ |
| 5. | Unknown | 11.864 | 63.1 | _J__ |
| 6. | Unknown | 11.945 | 273 | _J__ |
| 7. | Unknown | 12.019 | 160 | _J__ |
| 8. | Unknown | 12.128 | 51.6 | _J__ |
| 9. | Unknown | 12.208 | 148 | _J__ |
| 10. | Unknown | 12.389 | 55.0 | _J__ |
| 11. | Unknown | 12.450 | 59.1 | _J__ |


Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D
Date : 08-SEP-2021 20:34
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857
Instrument: 10airH.i
Operator: GT
Column diameter: 0.32
\\192.168.10.12\chem\10airH.i\090821.b\25120.D
Y (x10^7)
Min
-1,1-Difluoroethane+
-Chloromethane
-1,3-Butadiene
-Ethanol
-Isopentane
-Freon 123+
-Tert Butyl Alcohol (TBA)+
-Methylene Chloride
-Methyl Tert Butyl Ether
-Vinyl Acetate
-Methyl Ethyl Ketone+
-Ethyl Acetate
-Tetrahydrofuran
-Benzene+
-Tert Amyl Methyl Ether+
-2,2,4-Trimethylpentane
-Heptane
-Methyl methacrylate+
-Toluene
-Methyl Butyl Ketone
-n-Octane
-Tetrachloroethene
-Chlorobenzene - d5
-Ethyl Benzene
-m&p-Xylene
-n-Nonane
-Styrene+
-1,1,2,2-Tetrachloroethane
-4-Ethyltoluene+
-n-Decane
-1,2,4-Trimethylbenzene
-1,3-Dichlorobenzene
-Benzyl Chloride
p-Isopropyltoluene+
-Naphthalene

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

Client ID:

Instrument: 10airH.i

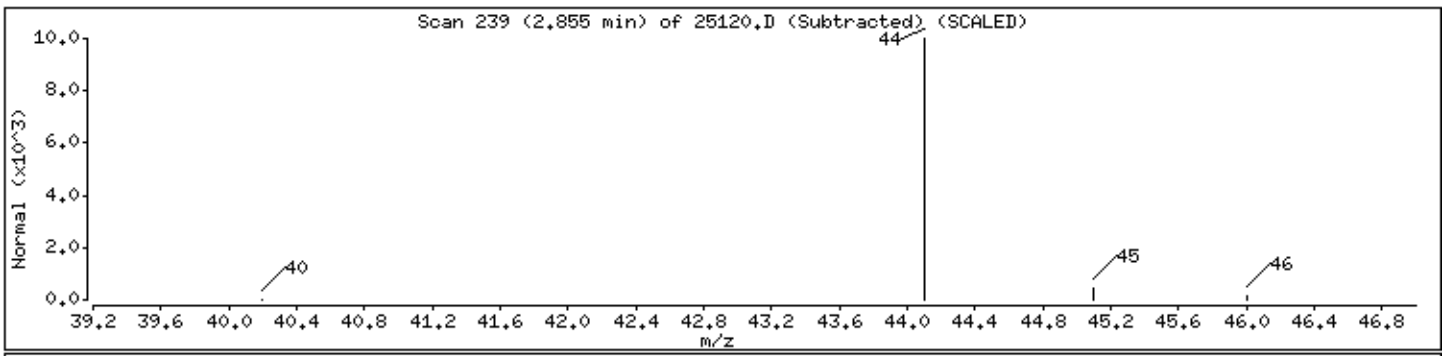
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

Client ID:

Instrument: 10airH.i

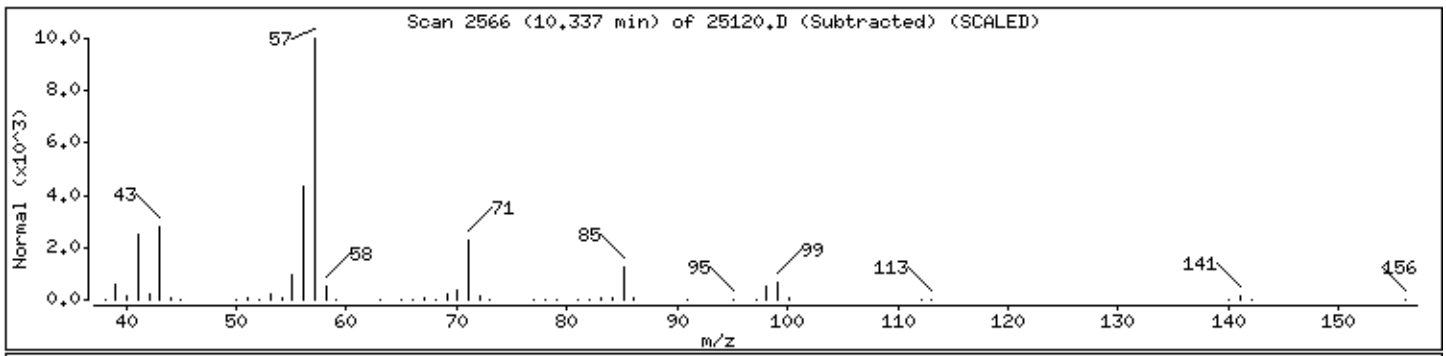
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

Client ID:

Instrument: 10airH.i

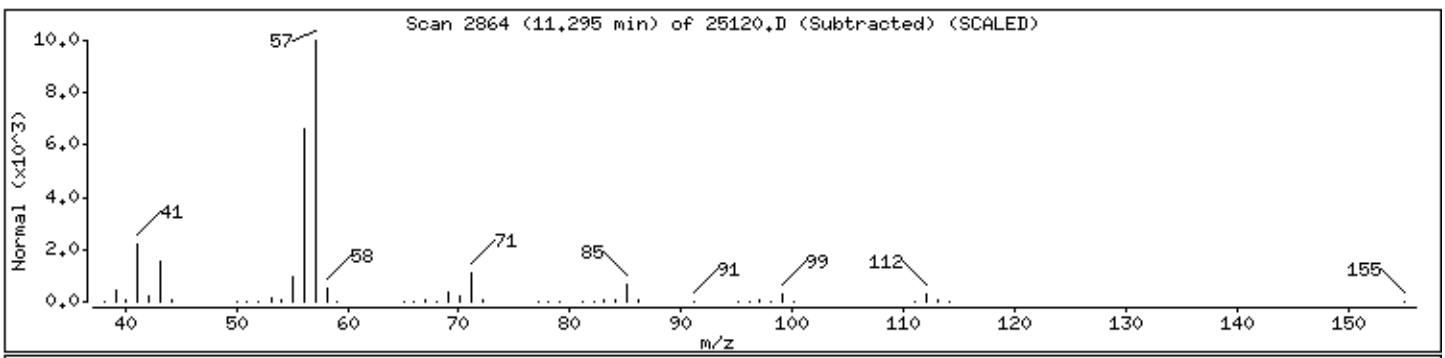
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

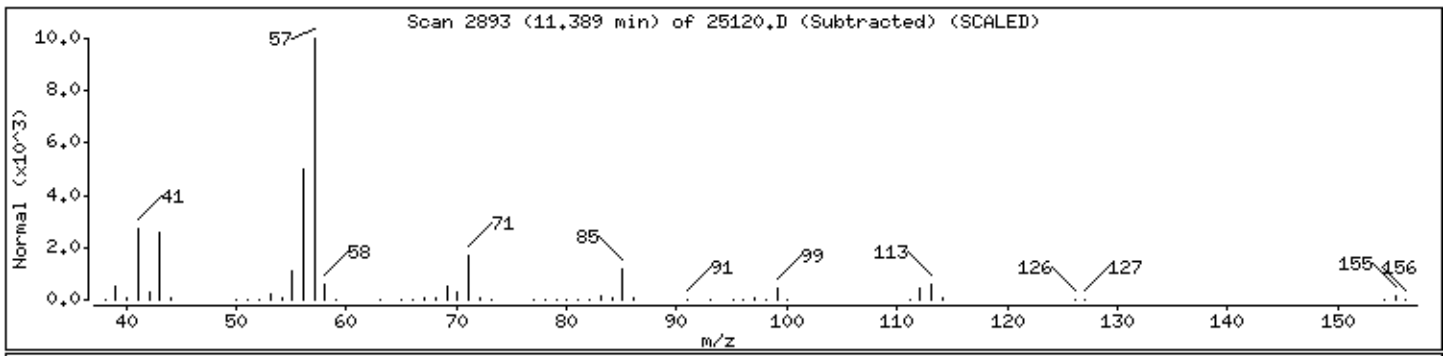
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

Client ID:

Instrument: 10airH.i

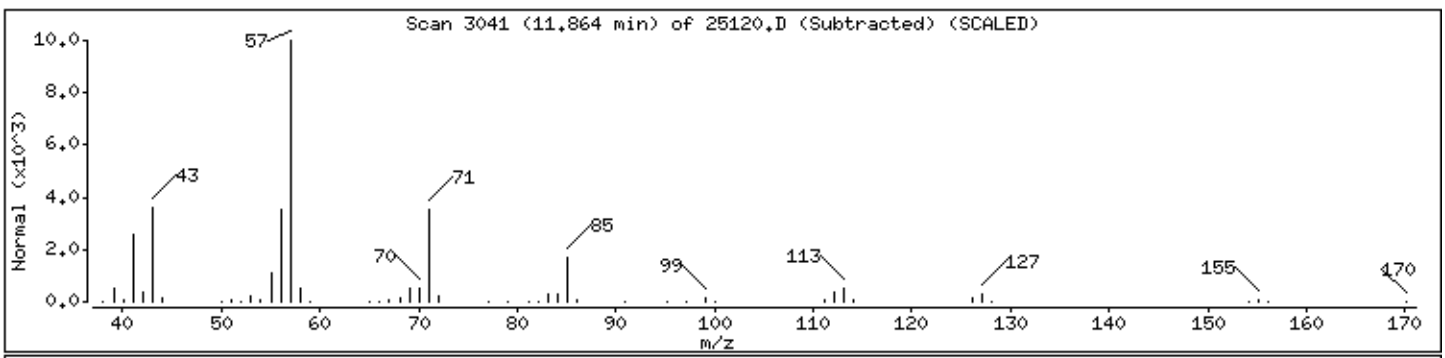
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

Client ID:

Instrument: 10airH.i

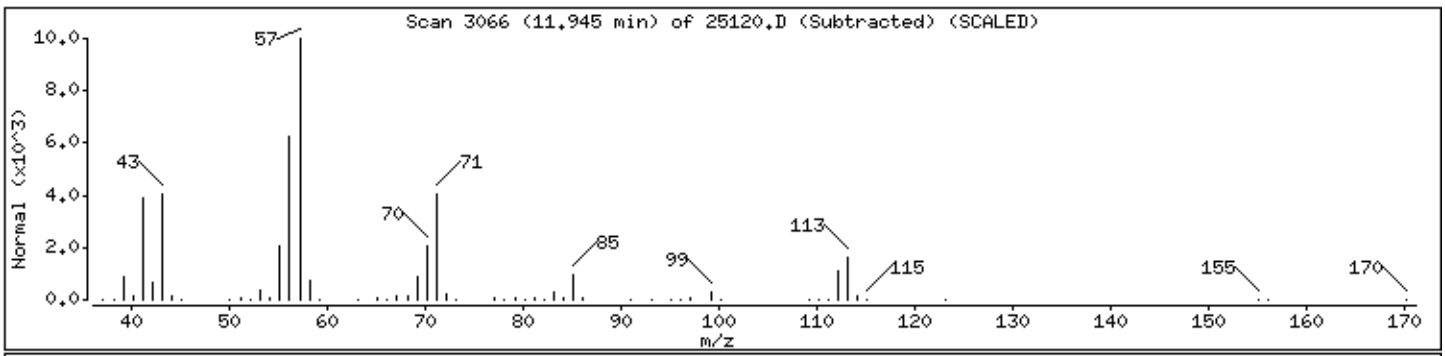
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

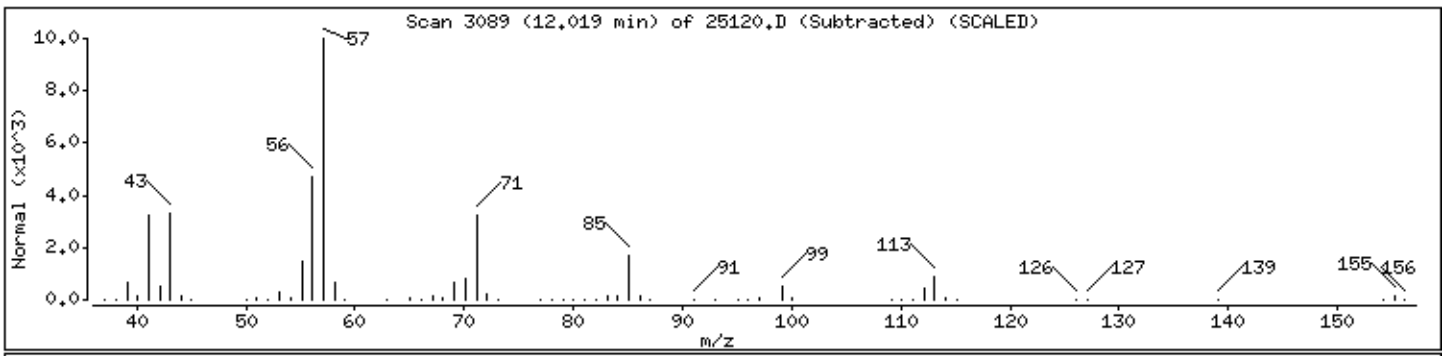
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

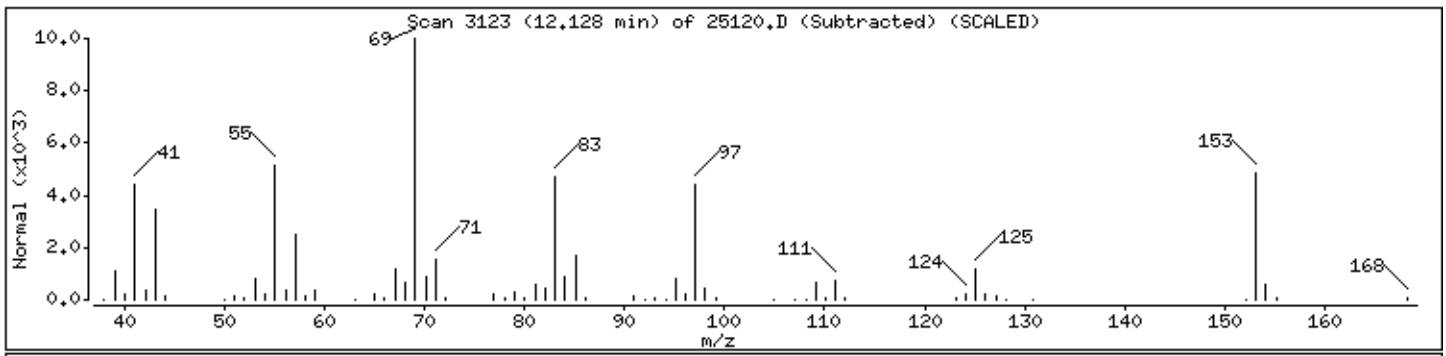
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

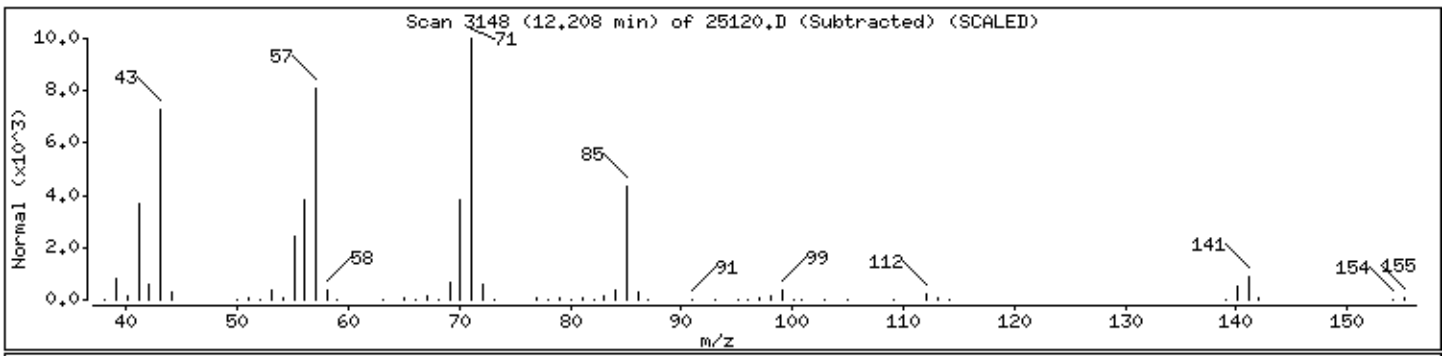
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

Client ID:

Instrument: 10airH.i

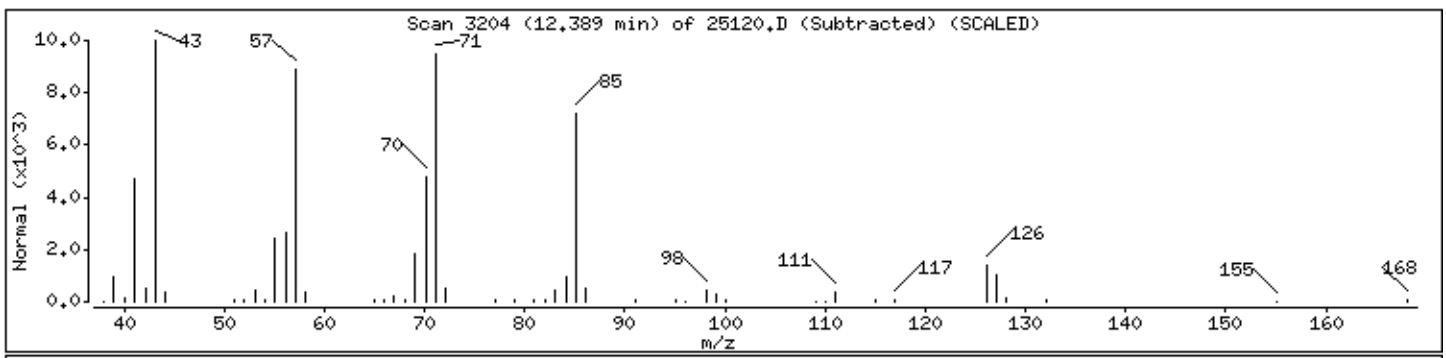
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25120.D

Date : 08-SEP-2021 20:34

Client ID:

Instrument: 10airH.i

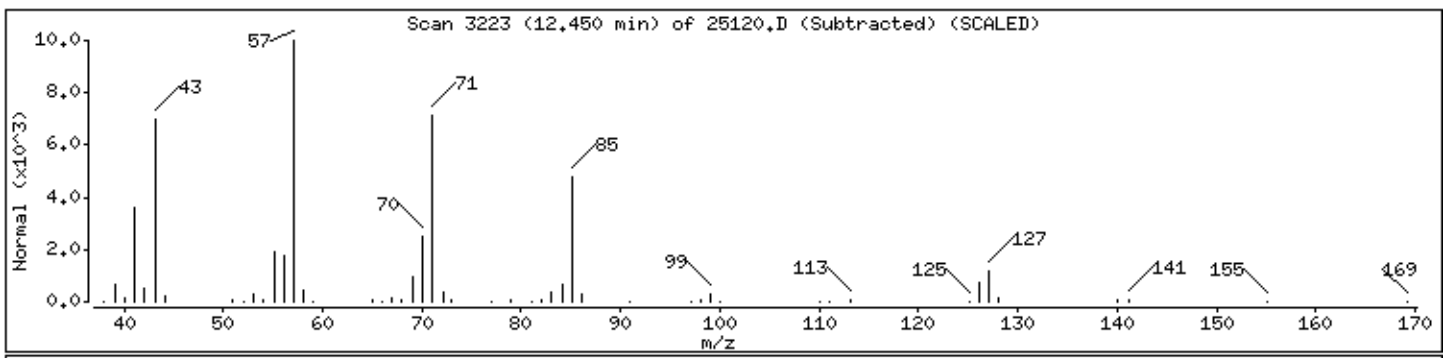
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25120.D
Injection Date: 08-SEP-2021 20:34
Instrument: 10airH.i
Lab Sample ID: 10577519015
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Lab Smp Id: 10577519008
Inj Date : 08-SEP-2021 18:39
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 18
Dil Factor: 1.39000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.390 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.048 | 7.061 | (1.000) | 1984488 | 10.0000 | |
| 48 Trichloroethene | 130 | 7.447 | 7.457 | (1.057) | 1134 | 0.01949 | 0.0271(aQ) |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 10.466 | 10.473 | (1.000) | 1485090 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Lab Smp Id: 10577519008
Inj Date : 08-SEP-2021 18:39
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 18
Dil Factor: 1.39000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.390 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.049 | 4472551 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.467 | 3950015 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 3.624 | 44148679 | 98.7102816 | 137 | 0 | | 0 | 45 |
| Ethane, 1,1-difluoro- | | | | | CAS #: 75-37-6 | | |
| 3.718 | 2080254 | 4.65115735 | 6.47 | 90 | NIST05.L | 353 | 45 |
| Unknown | | | | | CAS #: | | |
| 4.634 | 2278992 | 5.09550762 | 7.08 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | |
| 9.316 | 2097080 | 5.30904198 | 7.38 | 91 | NIST05.L | 73123 | 64 |
| Benzene, 1-bromo-3-fluoro- | | | | | CAS #: 1073-06-9 | | |
| 12.174 | 3895272 | 9.86140968 | 13.7 | 95 | NIST05.L | 39151 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Report Date: 09-Sep-2021 15:02

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 12.608 | 1847443 | 4.67705384 | 6.50 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 13.634 | 3127650 | 7.91807151 | 11.0 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 13.926 | 10620221 | 26.8865336 | 37.4 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.206 | 5635060 | 14.2659199 | 19.8 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.274 | 5460945 | 13.8251247 | 19.2 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.476 | 3384682 | 8.56878186 | 11.9 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Calibration Date: 08-SEP-2021
Lab File ID: 25118.D
Calibration Time: 09:52
Lab Smp Id: 10577519008
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1984488 | -6.05 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1485090 | -10.26 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.18 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519008
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 18:39

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | Unknown | 3.624 | 137 | _J__ |
| 2. | 75-37-6 | Ethane, 1,1-difluoro- | 3.718 | 6.47 | NJ__ |
| 3. | | Unknown | 4.634 | 7.08 | _J__ |
| 4. | 541-05-9 | Cyclotrisiloxane, hexamethy | 9.316 | 7.38 | NJ__ |
| 5. | 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 12.174 | 13.7 | NJ__ |
| 6. | | Unknown | 12.608 | 6.50 | _J__ |
| 7. | | Unknown | 13.634 | 11.0 | _J__ |
| 8. | | Unknown | 13.926 | 37.4 | _J__ |
| 9. | | Unknown | 14.206 | 19.8 | _J__ |
| 10. | | Unknown | 14.274 | 19.2 | _J__ |
| 11. | | Unknown | 14.476 | 11.9 | _J__ |

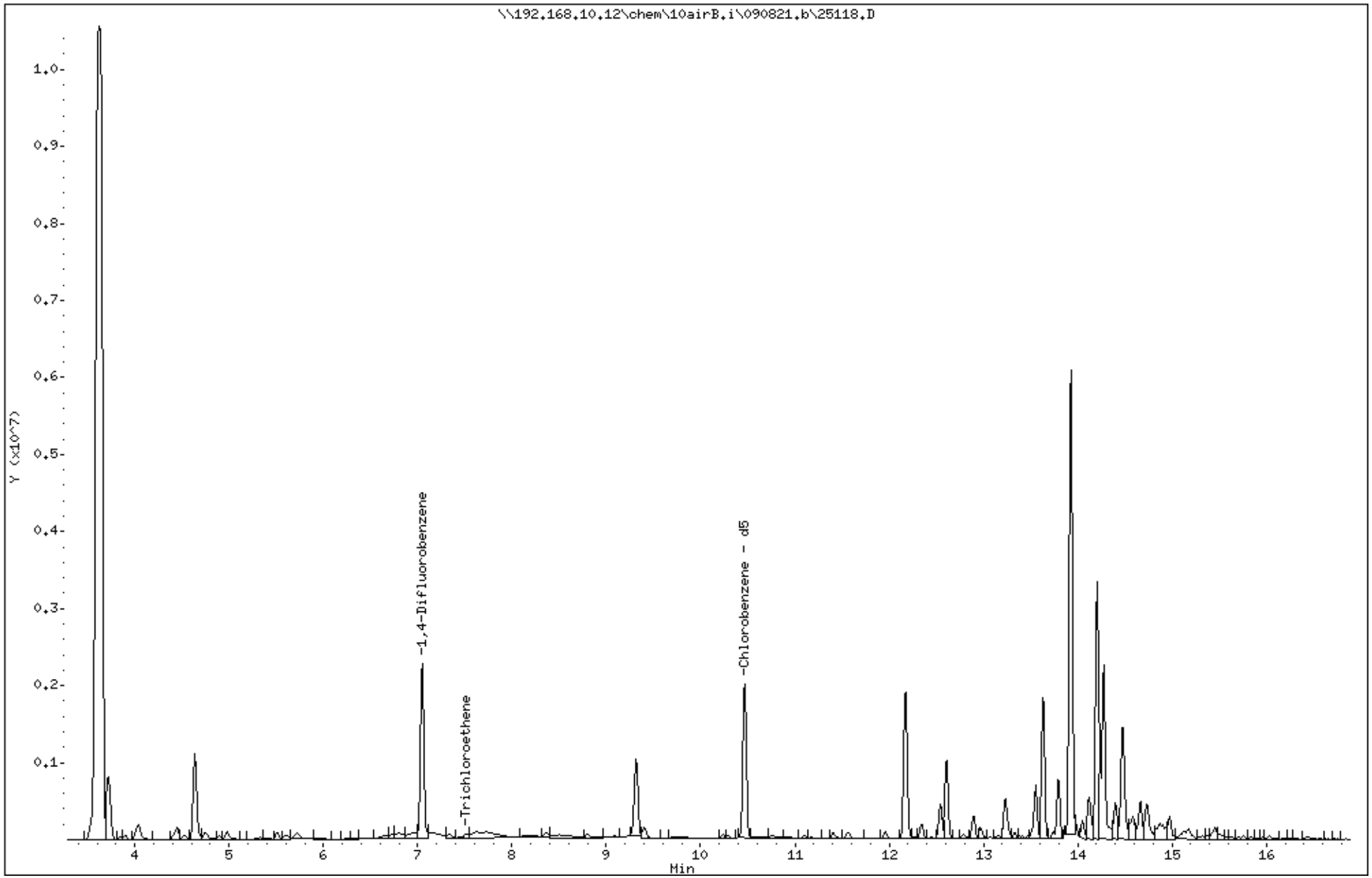
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D
Date : 08-SEP-2021 18:39
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

Client ID:

Instrument: 10airB.i

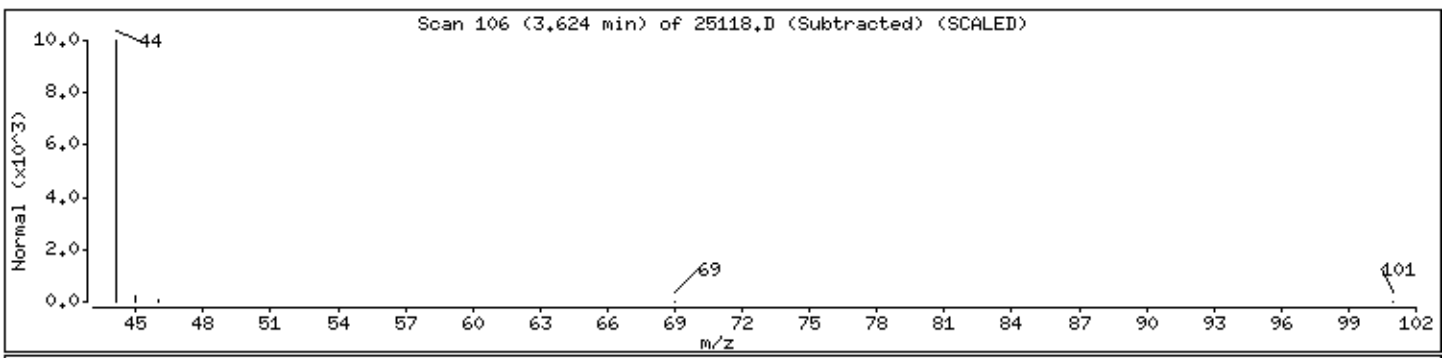
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

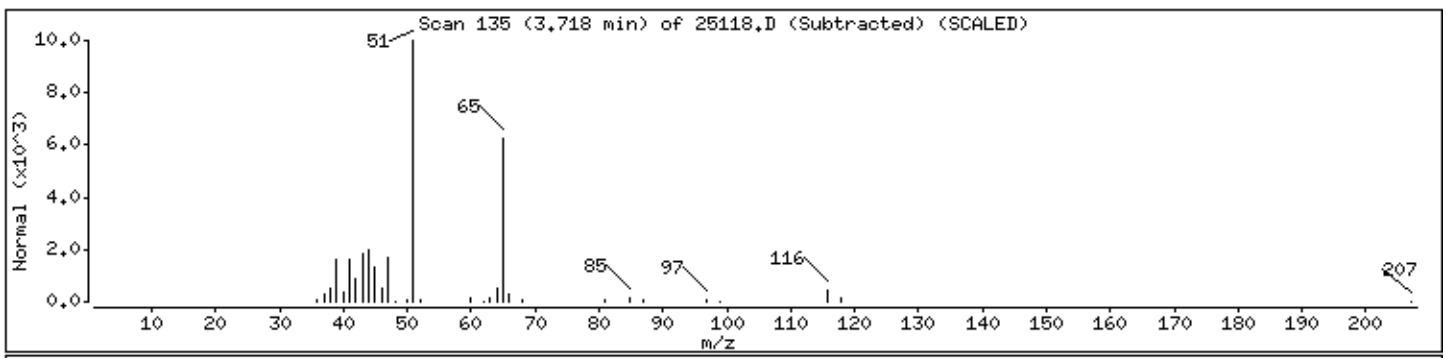
Client ID: Instrument: 10airB.i

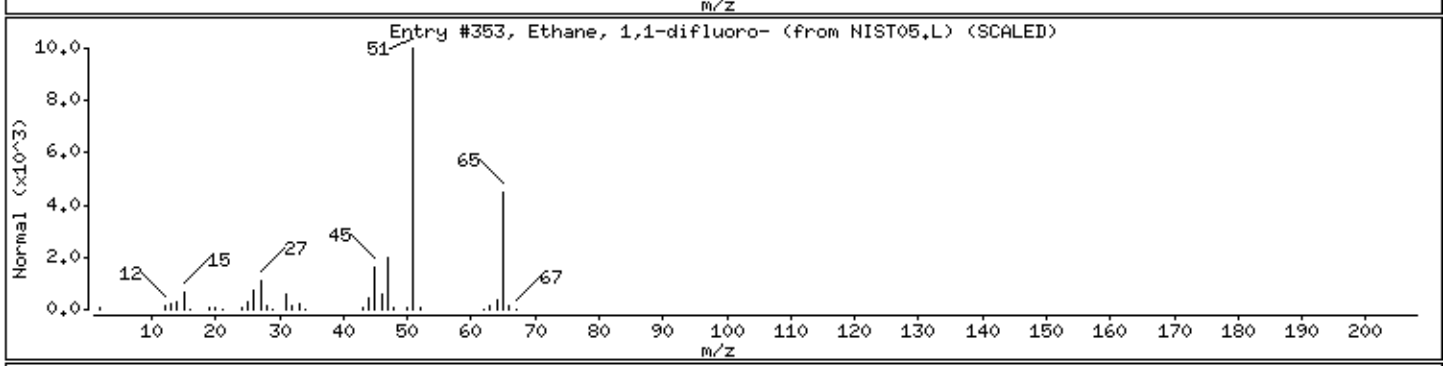
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Ethane, 1,1-difluoro- | 75-37-6 | NIST05.L | 353 | 90 | C2H4F2 | 66 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

Client ID:

Instrument: 10airB.i

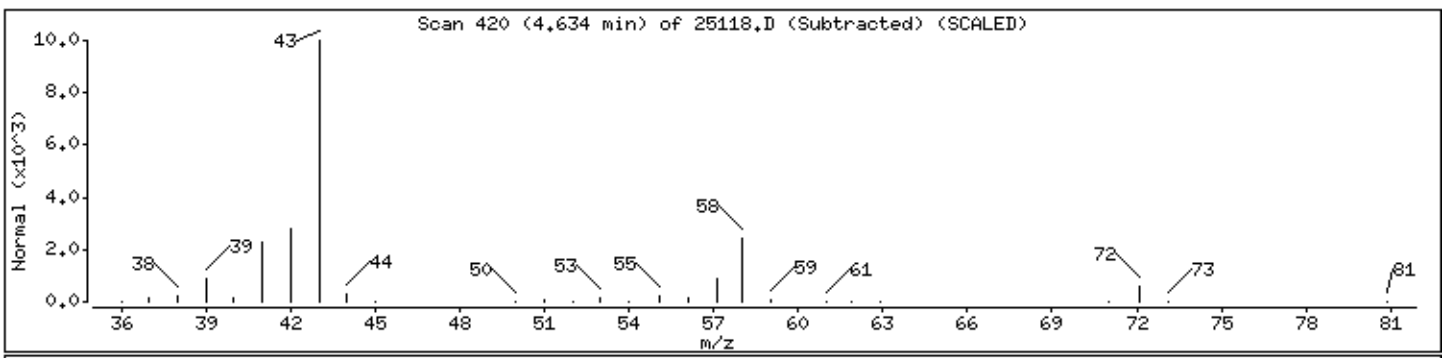
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

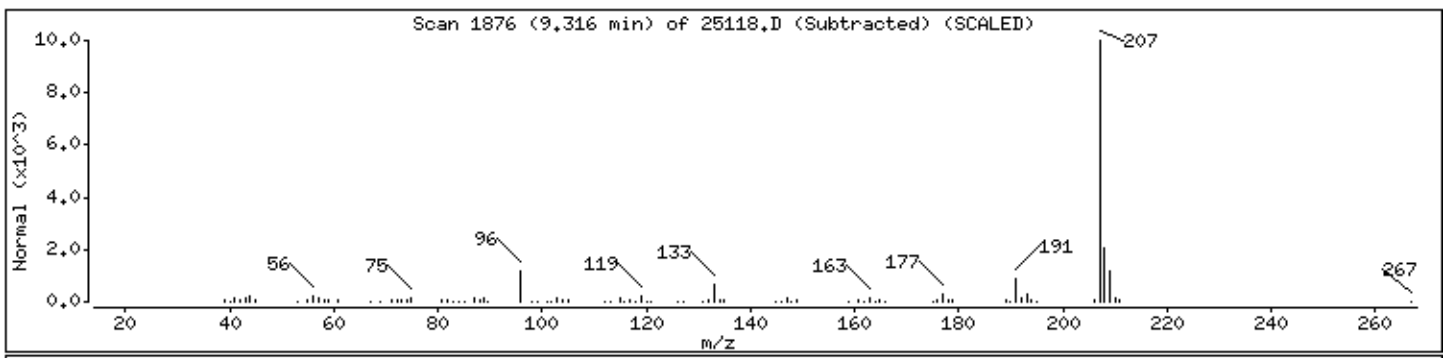
Client ID: Instrument: 10airB.i

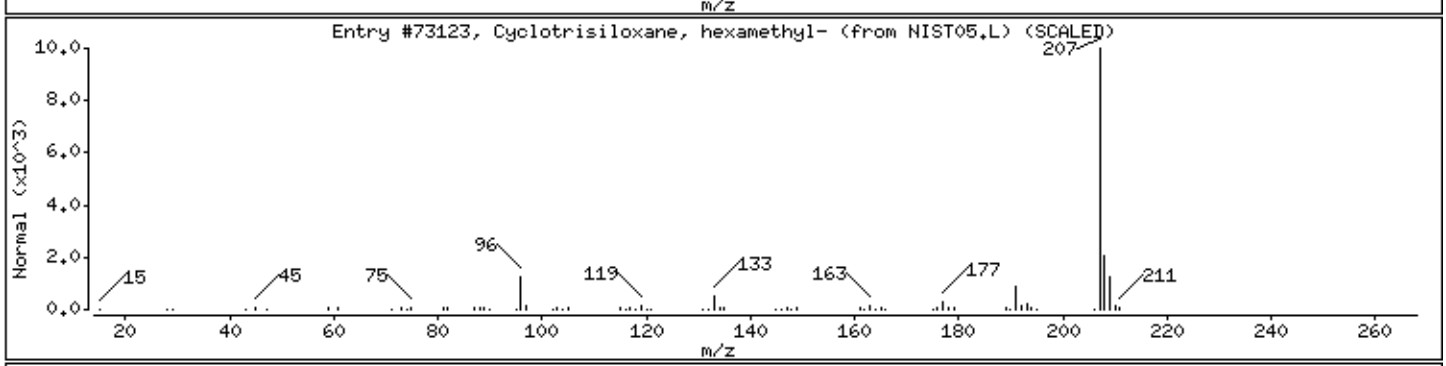
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 91 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

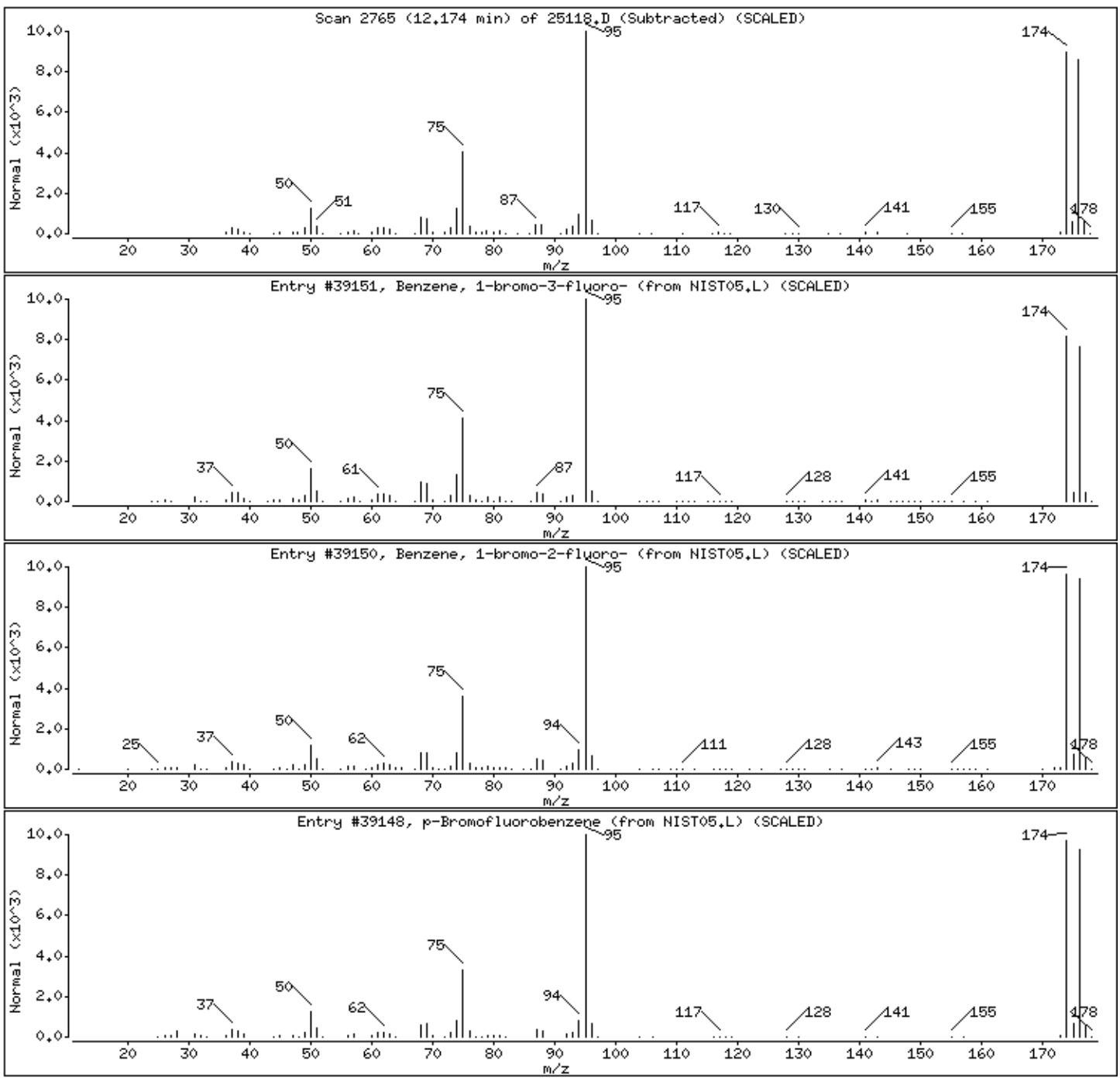
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 95 | C6H4BrF | 174 |
| Benzene, 1-bromo-2-fluoro- | 1072-85-1 | NIST05.L | 39150 | 95 | C6H4BrF | 174 |
| p-Bromofluorobenzene | 460-00-4 | NIST05.L | 39148 | 94 | C6H4BrF | 174 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

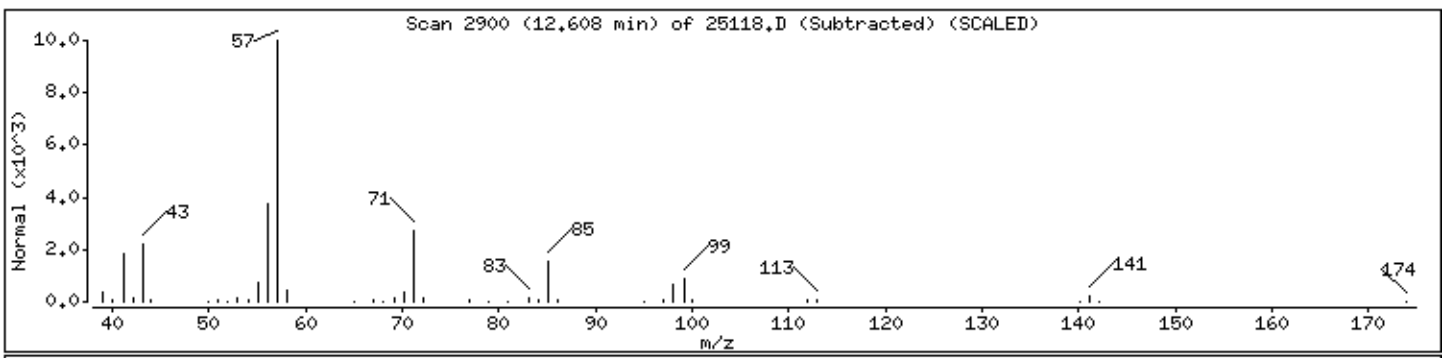
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

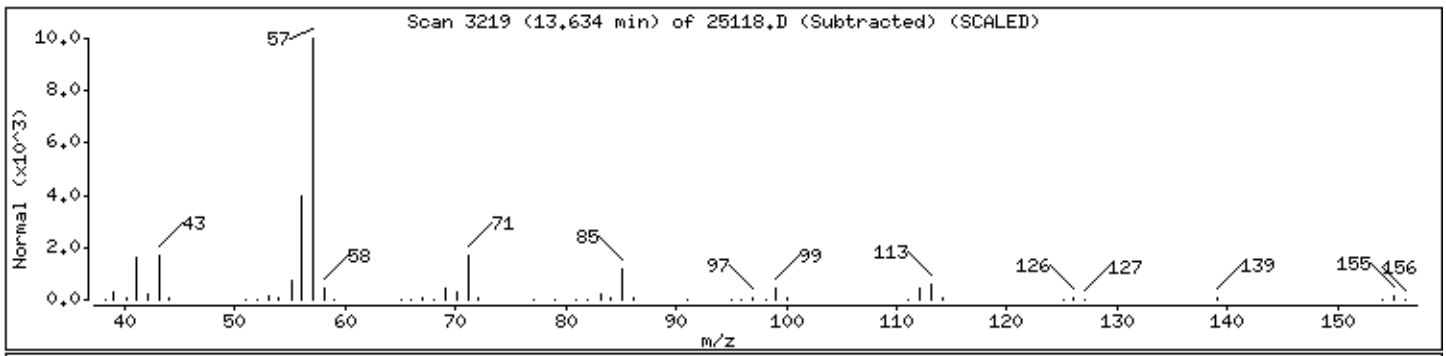
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

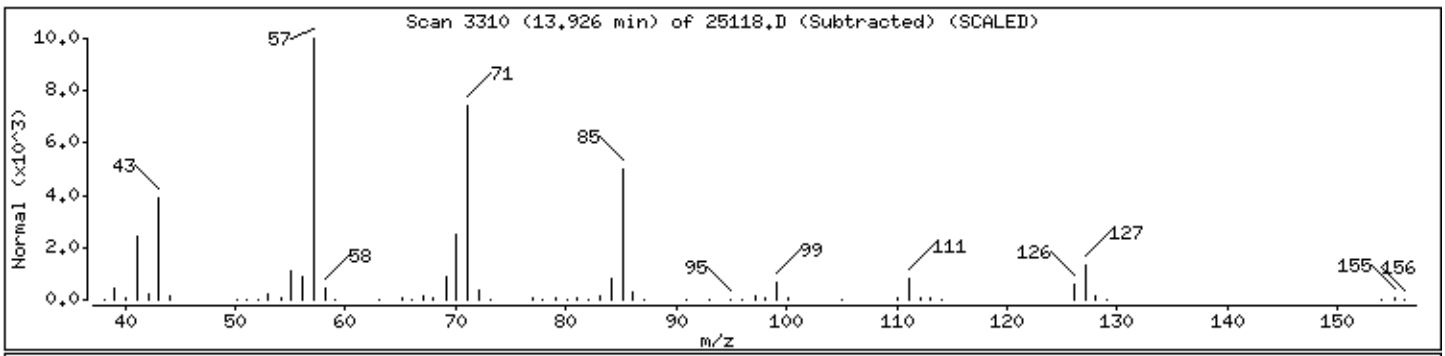
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

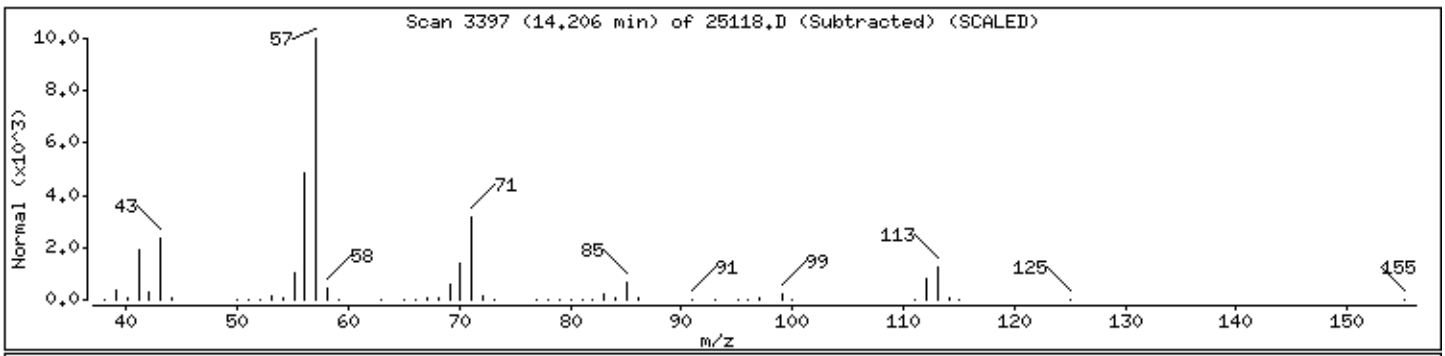
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

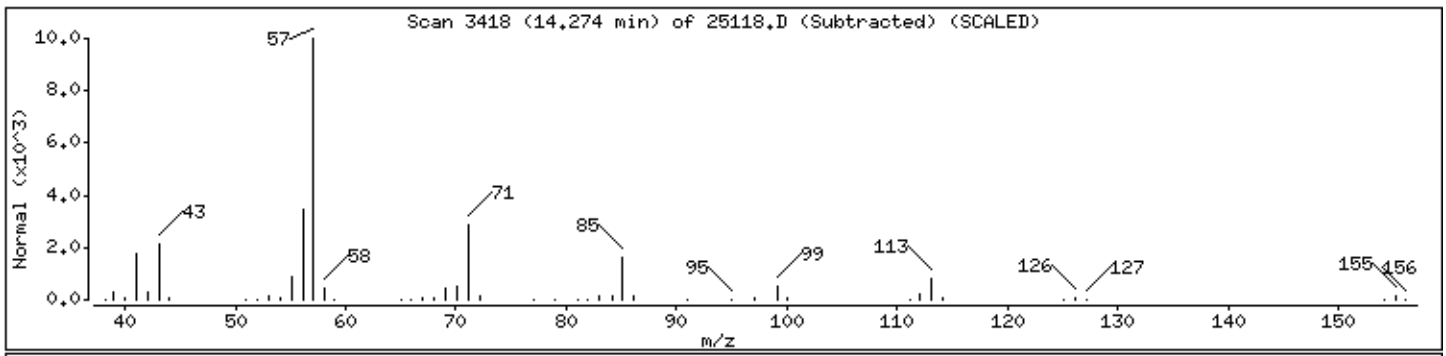
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25118.D

Date : 08-SEP-2021 18:39

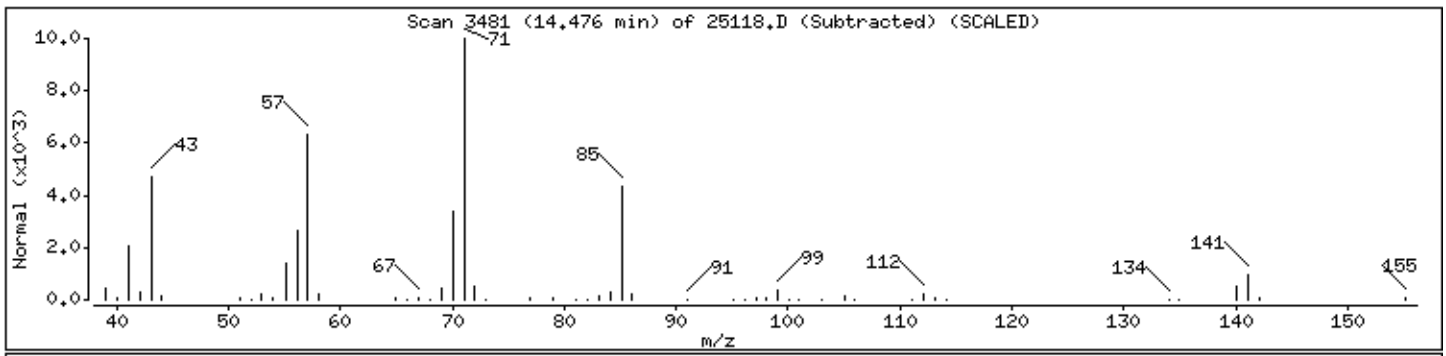
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25118.D
Injection Date: 08-SEP-2021 18:39
Instrument: 10airB.i
Lab Sample ID: 10577519008
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Lab Smp Id: 10577519007
Inj Date : 08-SEP-2021 18:09
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 17
Dil Factor: 1.61000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.610 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.042 | 7.061 | (1.000) | 1976301 | 10.0000 | |
| 48 Trichloroethene | 130 | 7.437 | 7.457 | (1.056) | 1784 | 0.03079 | 0.0496(aQ) |
| 62 Tetrachloroethene | 166 | 9.640 | 9.643 | (0.921) | 2185 | 0.02907 | 0.0468(a) |
| * 64 Chlorobenzene - d5 | 117 | 10.466 | 10.473 | (1.000) | 1484897 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Lab Smp Id: 10577519007
Inj Date : 08-SEP-2021 18:09
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 17
Dil Factor: 1.61000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.610 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.042 | 3970566 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.467 | 3947698 | 10.000 |

| RT | AREA | CONCENTRATIONS ON-COL( ppbv) | FINAL( ppbv) | QUAL | QUANT LIBRARY | LIB ENTRY | CPND # |
|---|---|---|---|---|---|---|---|
| Unknown | | | | | CAS #: | | |
| 3.592 | 46850835 | 117.995353 | 190 | 0 | | 0 | 45 |
| Unknown | | | | | CAS #: | | |
| 12.608 | 10621767 | 26.9062250 | 43.3 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.235 | 7567998 | 19.1706586 | 30.9 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.560 | 8412647 | 21.3102566 | 34.3 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.643 | 21432705 | 54.2916451 | 87.4 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Report Date: 09-Sep-2021 15:02

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 13.807 | 8799152 | 22.2893201 | 35.9 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 13.939 | 58364922 | 147.845438 | 238 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.129 | 6955607 | 17.6193979 | 28.4 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.216 | 38673690 | 97.9651550 | 158 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.286 | 25913796 | 65.6427932 | 106 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.486 | 16752625 | 42.4364355 | 68.3 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Calibration Date: 08-SEP-2021
Lab File ID: 25117.D
Calibration Time: 09:52
Lab Smp Id: 10577519007
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1976301 | -6.44 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1484897 | -10.27 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.04 | -0.27 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Report Date: 09-Sep-2021 15:02

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519007
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 18:09

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.592 | 190 | _J__ |
| 2. | Unknown | 12.608 | 43.3 | _J__ |
| 3. | Unknown | 13.235 | 30.9 | _J__ |
| 4. | Unknown | 13.560 | 34.3 | _J__ |
| 5. | Unknown | 13.643 | 87.4 | _J__ |
| 6. | Unknown | 13.807 | 35.9 | _J__ |
| 7. | Unknown | 13.939 | 238 | _J__ |
| 8. | Unknown | 14.129 | 28.4 | _J__ |
| 9. | Unknown | 14.216 | 158 | _J__ |
| 10. | Unknown | 14.286 | 106 | _J__ |
| 11. | Unknown | 14.486 | 68.3 | _J__ |

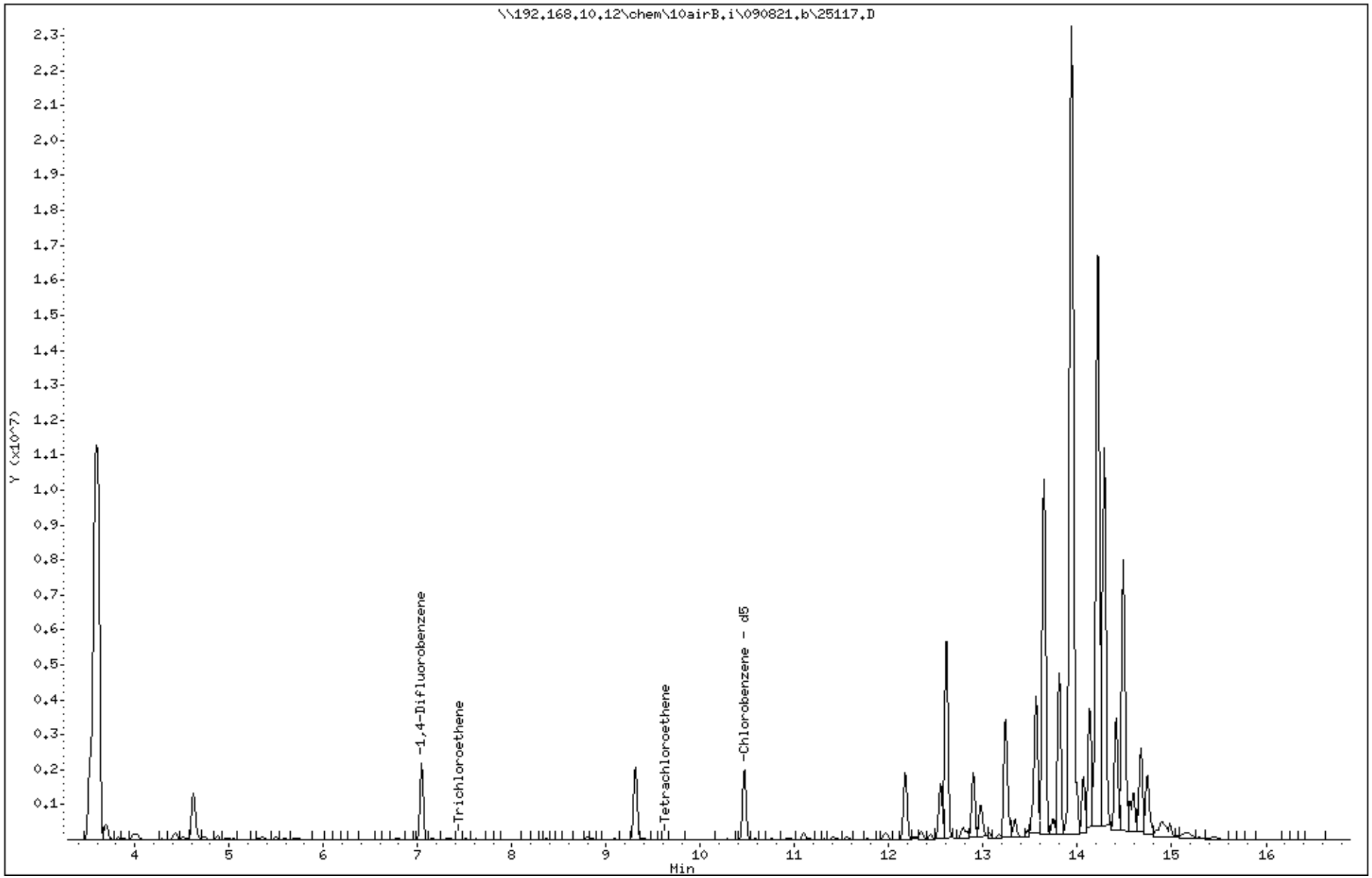
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D
Date : 08-SEP-2021 18:09
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

Client ID:

Instrument: 10airB.i

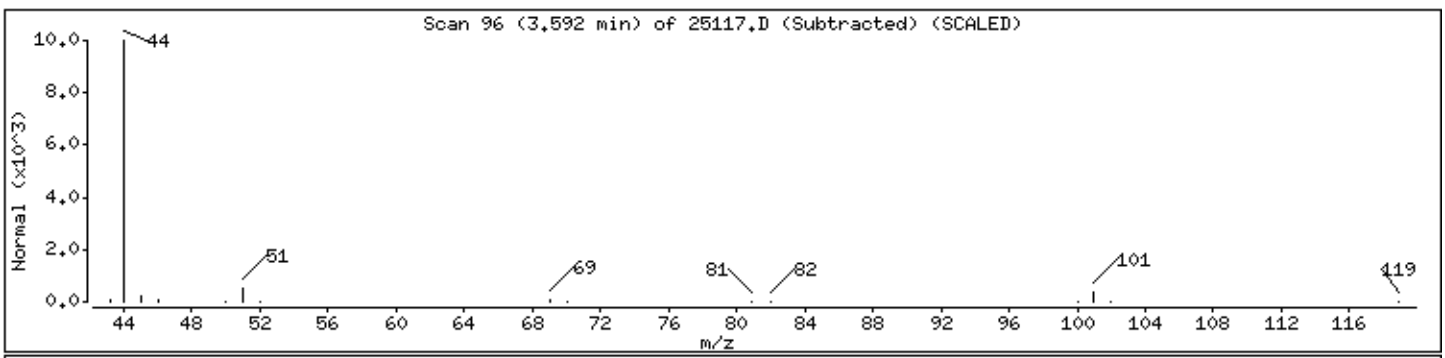
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

Client ID:

Instrument: 10airB.i

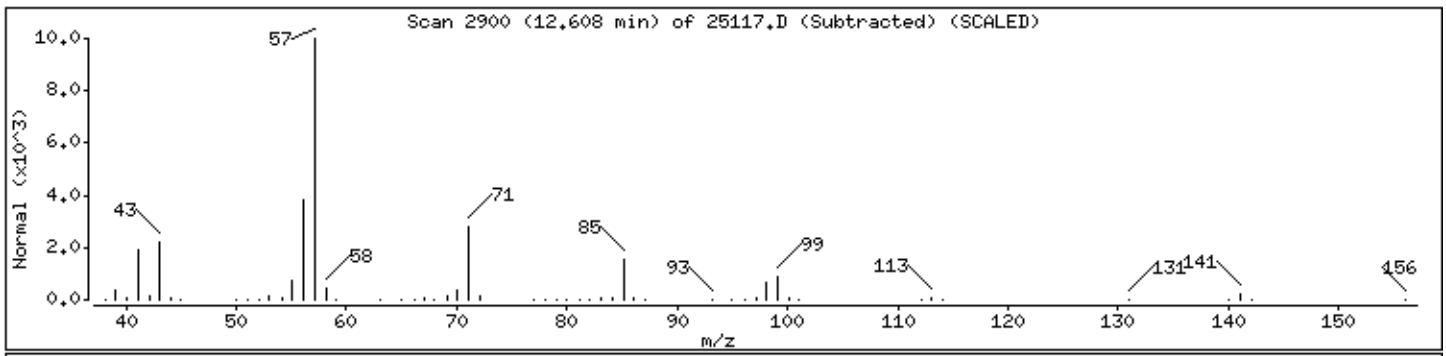
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

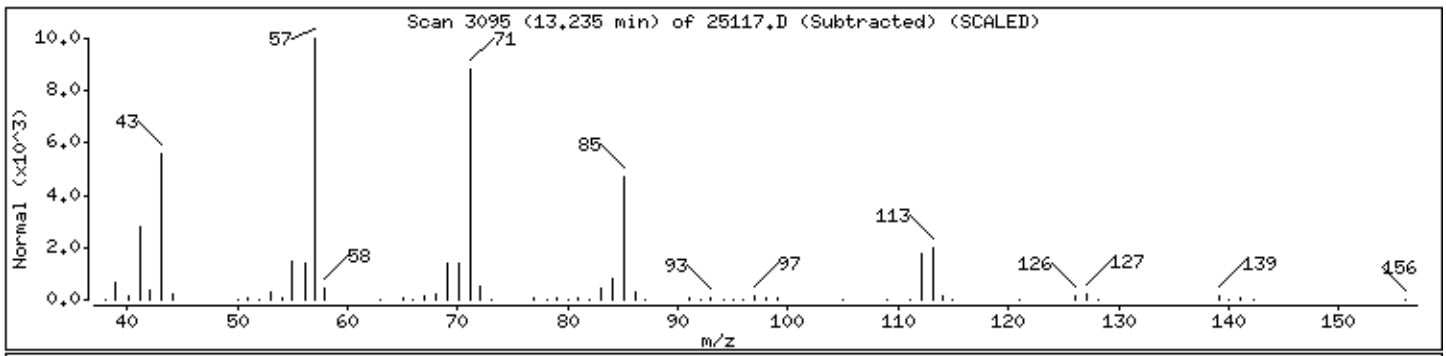
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

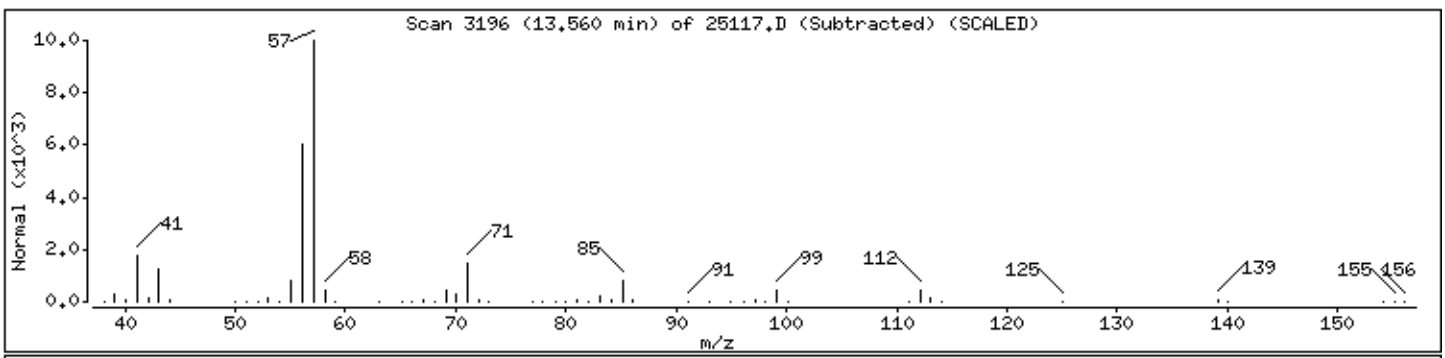
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

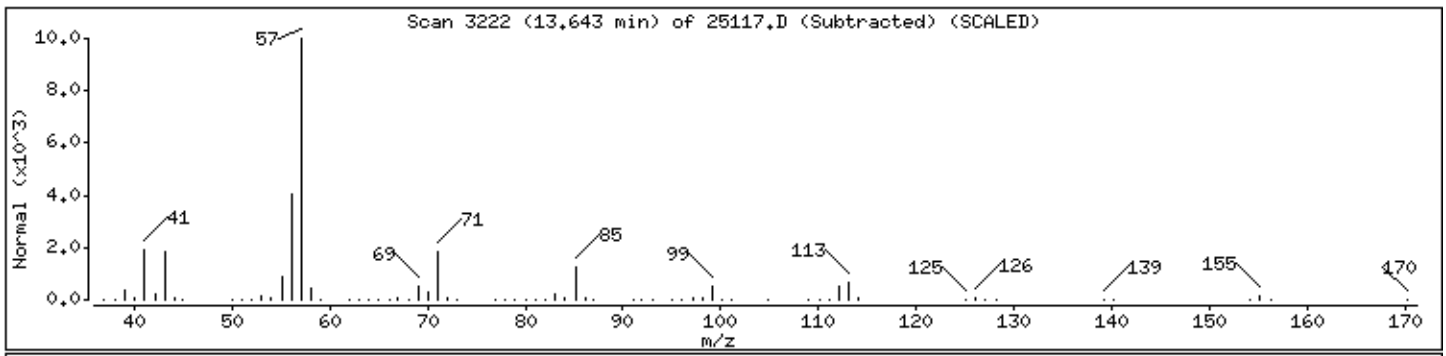
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

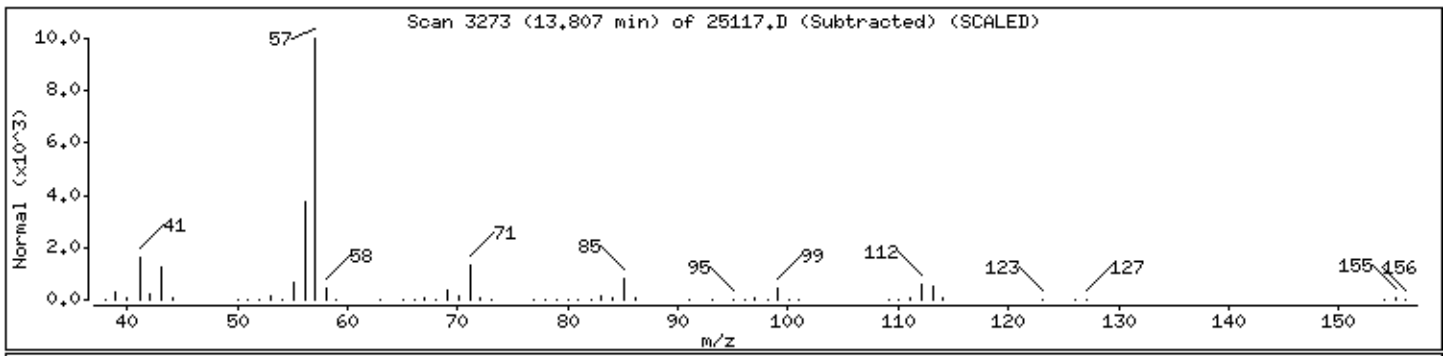
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

Client ID:

Instrument: 10airB.i

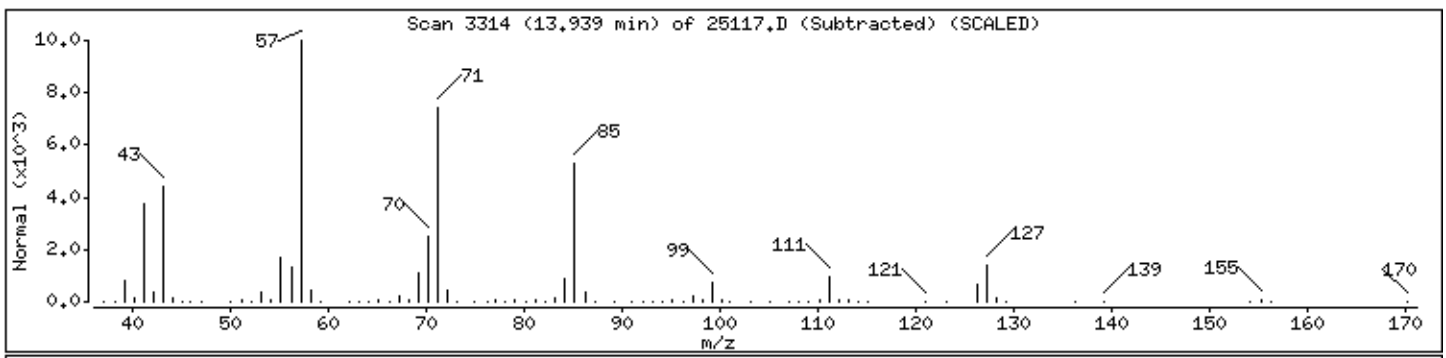
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

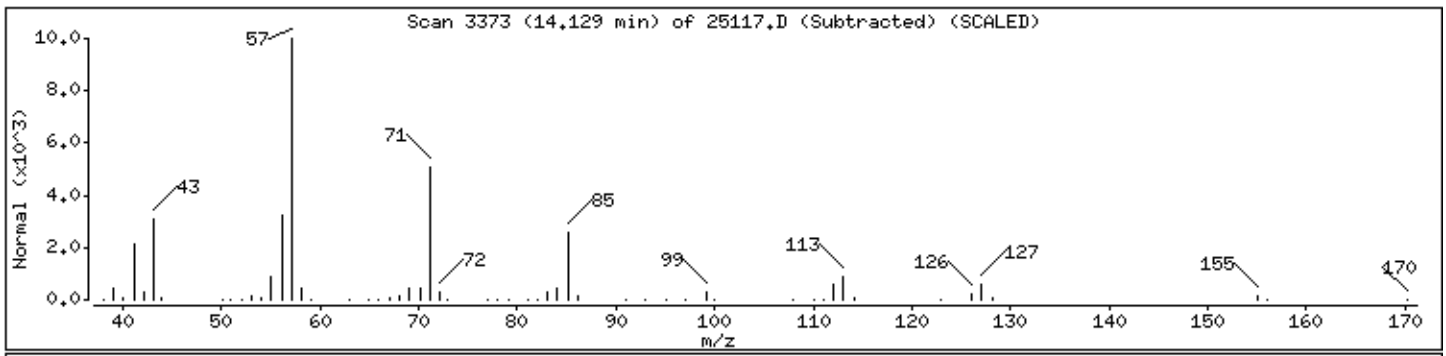
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

Client ID:

Instrument: 10airB.i

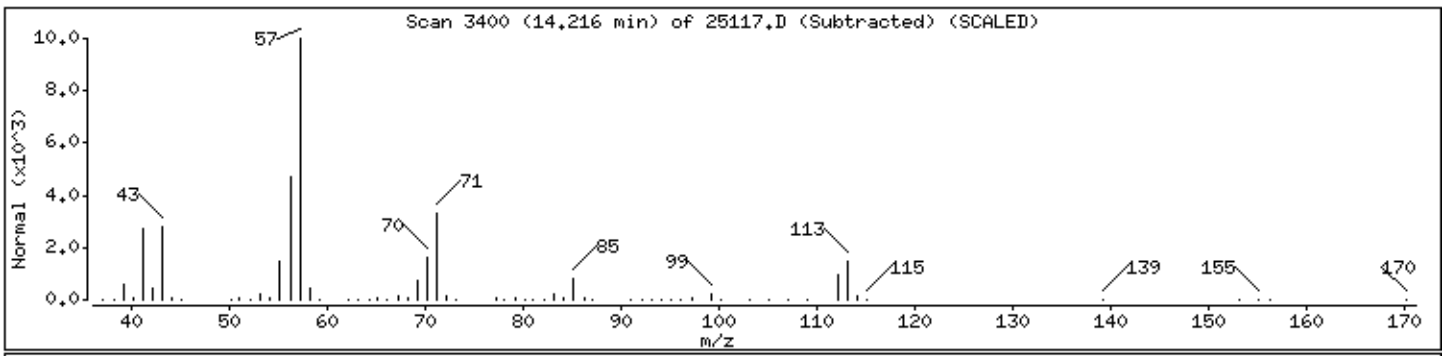
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

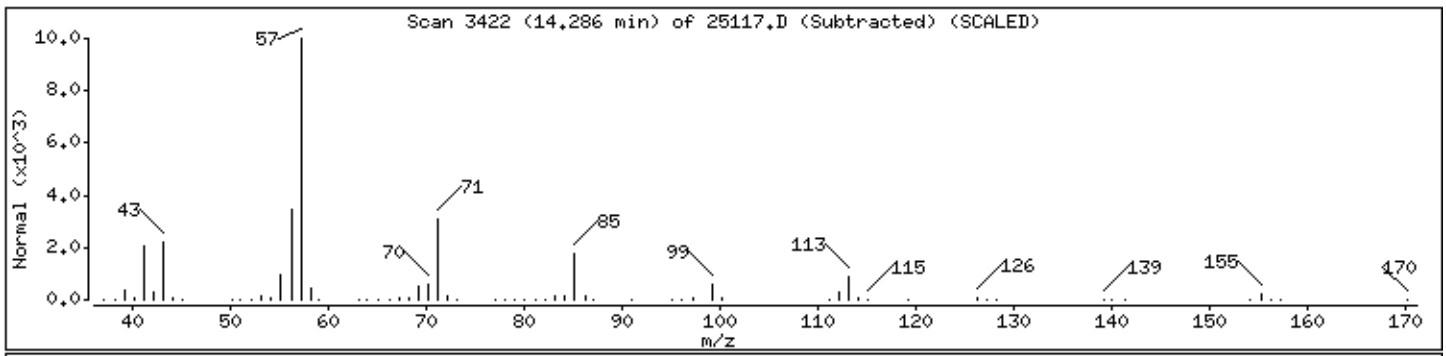
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25117.D

Date : 08-SEP-2021 18:09

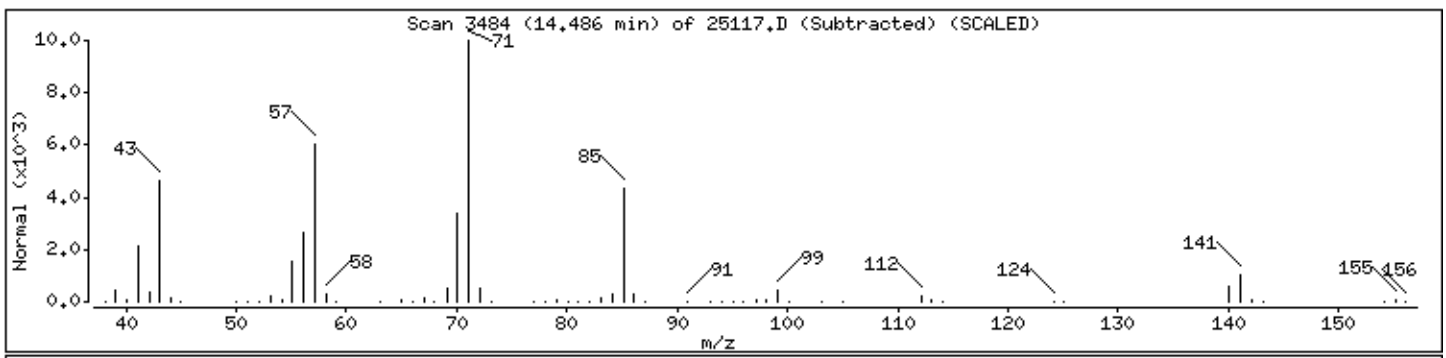
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25117.D
Injection Date: 08-SEP-2021 18:09
Instrument: 10airB.i
Lab Sample ID: 10577519007
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Lab Smp Id: 10577519009
Inj Date : 08-SEP-2021 17:25
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 13
Dil Factor: 1.61000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.610 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.424 | 5.430 | (1.000) | 405688 | 10.0000 | |
| 48 Trichloroethene | 130 | 5.752 | 5.758 | (1.060) | 679 | 0.03095 | 0.0498(aQ) |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 8.398 | 8.404 | (1.000) | 334329 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Lab Smp Id: 10577519009
Inj Date : 08-SEP-2021 17:25
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 13
Dil Factor: 1.61000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.610 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 5.424 | 1043412 | 10.000 |
| * 64 Chlorobenzene - d5 | 8.398 | 1084165 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 2.862 | 11124088 | 106.612608 | 172 | 0 | | 0 | 45 |
| Unknown | | | | | CAS #: | | |
| 10.337 | 6449372 | 59.4869911 | 95.8 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.389 | 12070479 | 111.334322 | 179 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.868 | 6404906 | 59.0768427 | 95.1 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.945 | 26505264 | 244.476259 | 394 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Report Date: 09-Sep-2021 14:20

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 12.019 | 17057424 | 157.332340 | 253 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.128 | 5493774 | 50.6728554 | 81.6 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.209 | 16753332 | 154.527492 | 249 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.389 | 6780387 | 62.5401633 | 101 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.450 | 7414019 | 68.3845892 | 110 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.620 | 6735263 | 62.1239593 | 100 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25113.D
Lab Smp Id: 10577519009
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 405688 | -11.77 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 334329 | -14.72 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.42 | -0.12 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.08 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519009
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 17:25

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

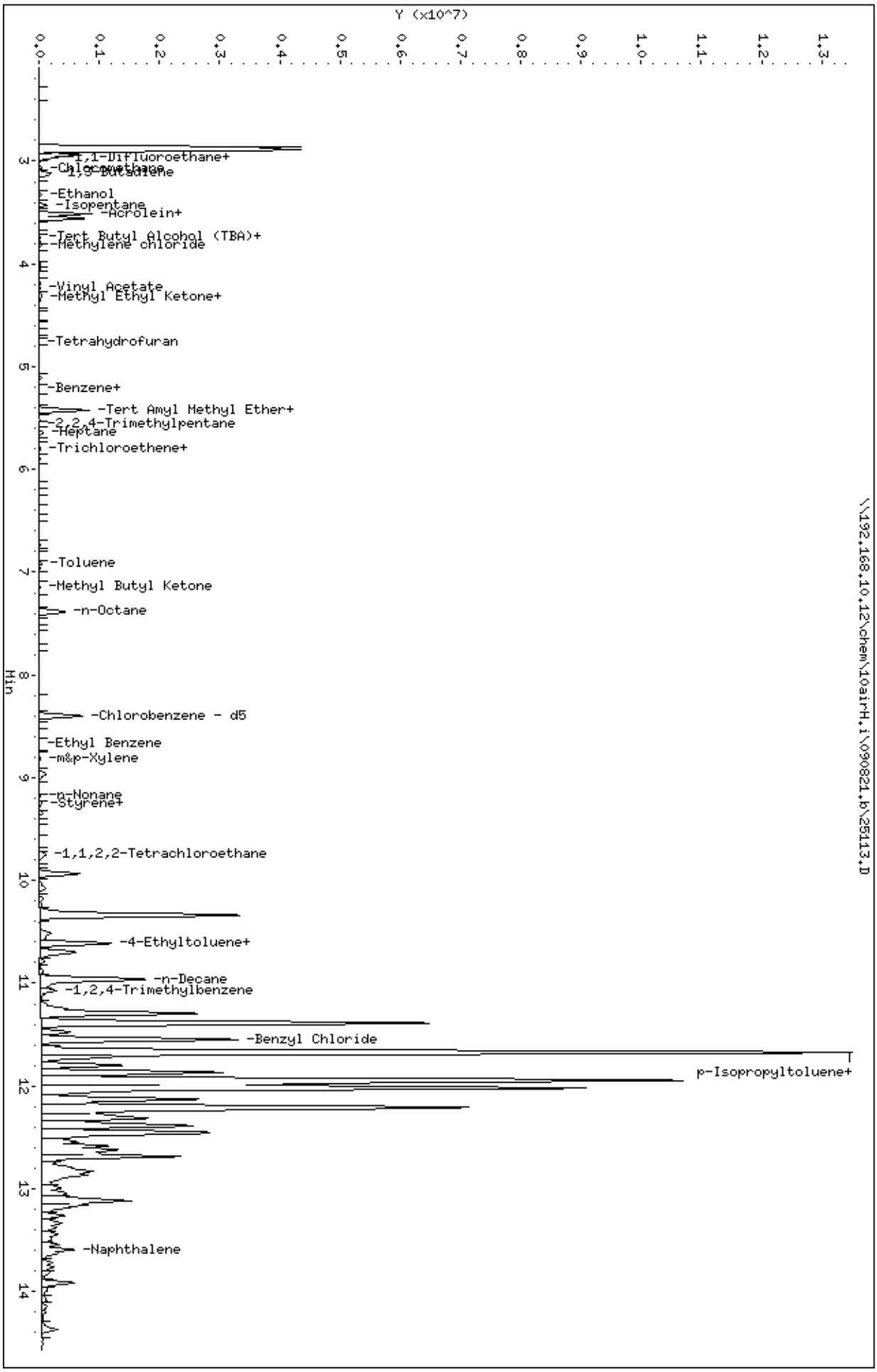
Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 2.862 | 172 | _J__ |
| 2. | Unknown | 10.337 | 95.8 | _J__ |
| 3. | Unknown | 11.389 | 179 | _J__ |
| 4. | Unknown | 11.868 | 95.1 | _J__ |
| 5. | Unknown | 11.945 | 394 | _J__ |
| 6. | Unknown | 12.019 | 253 | _J__ |
| 7. | Unknown | 12.128 | 81.6 | _J__ |
| 8. | Unknown | 12.209 | 249 | _J__ |
| 9. | Unknown | 12.389 | 101 | _J__ |
| 10. | Unknown | 12.450 | 110 | _J__ |
| 11. | Unknown | 12.620 | 100 | _J__ |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D
Date : 08-SEP-2021 17:25
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i
Operator: GT
Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

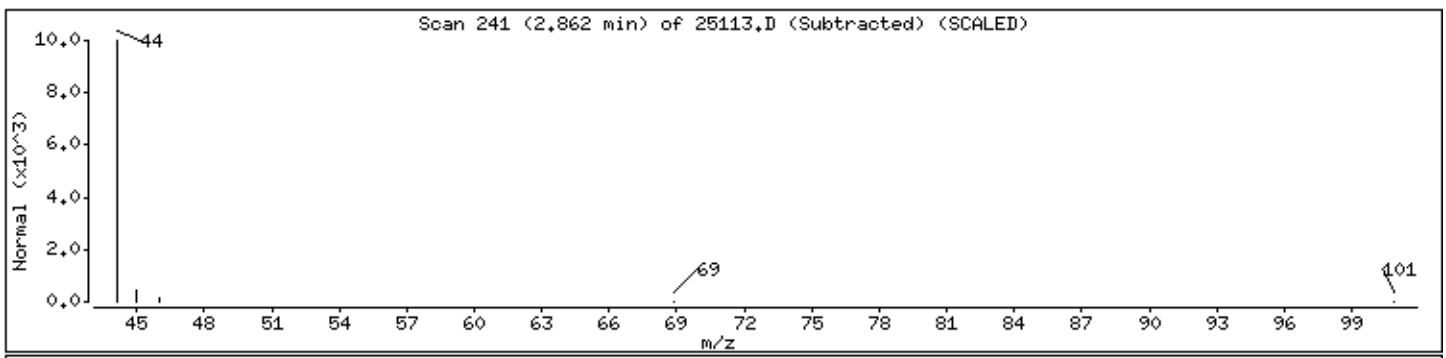
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

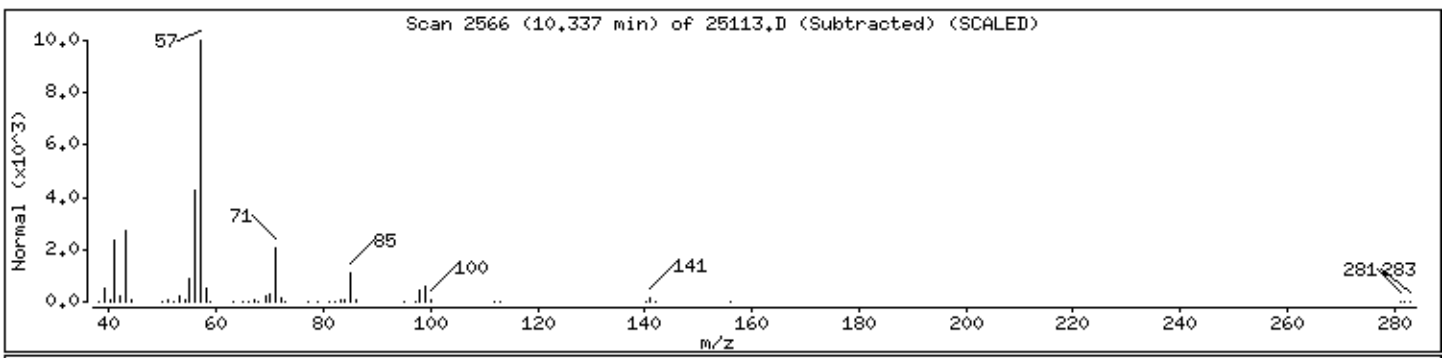
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

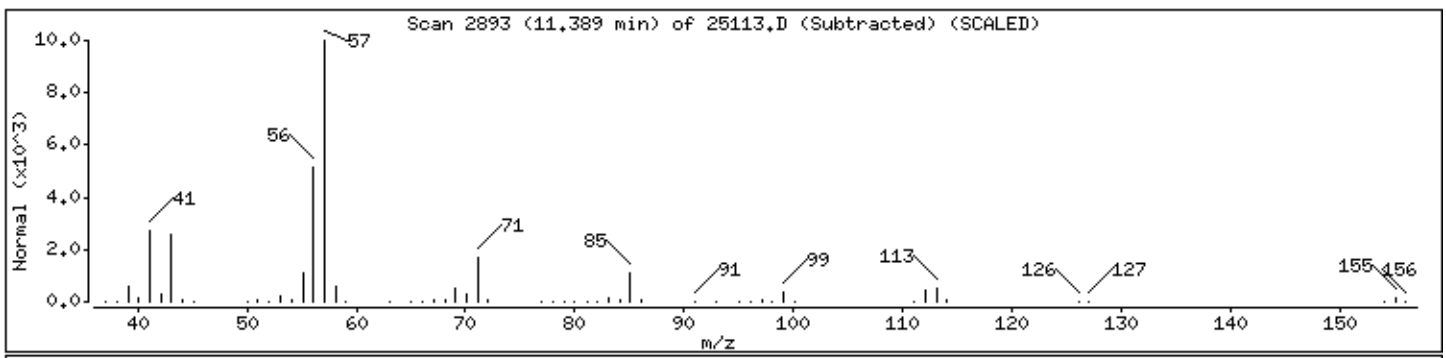
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

Client ID:

Instrument: 10airH.i

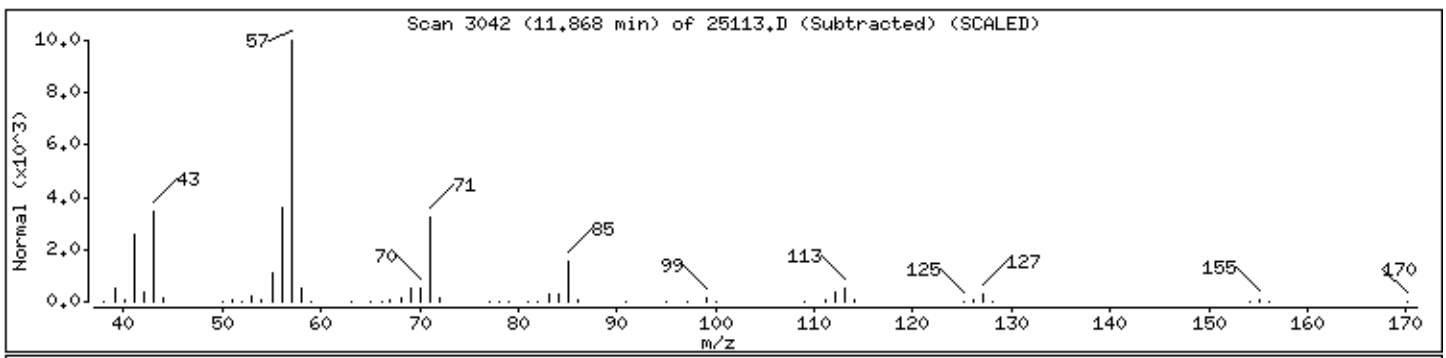
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

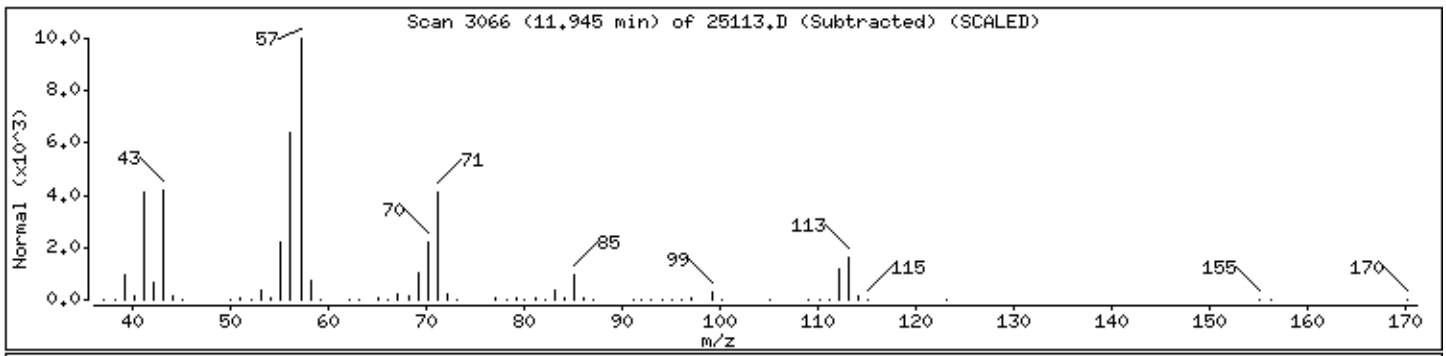
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

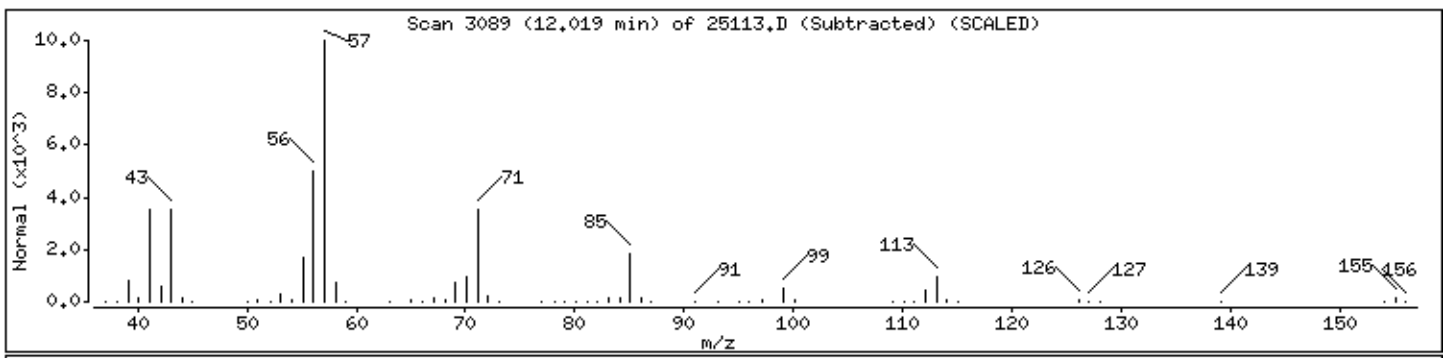
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

Client ID:

Instrument: 10airH.i

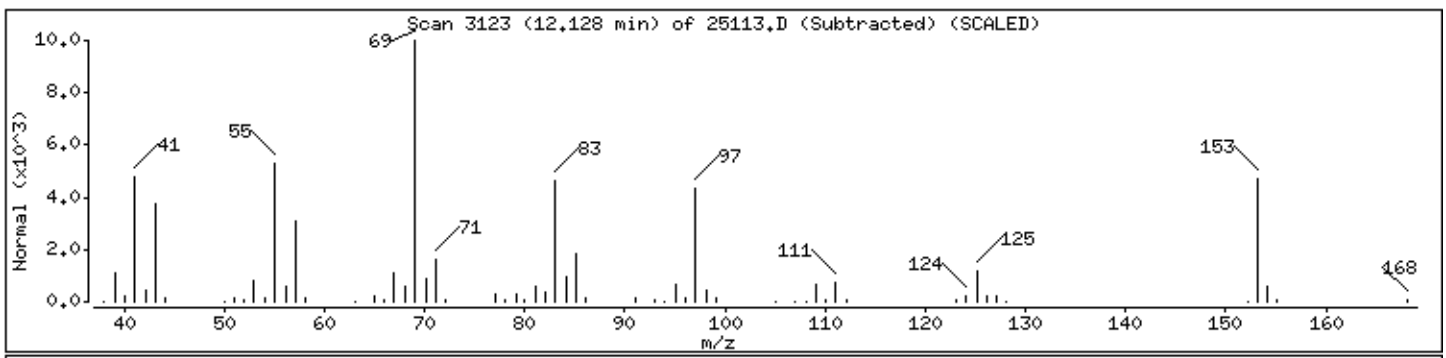
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

Client ID:

Instrument: 10airH.i

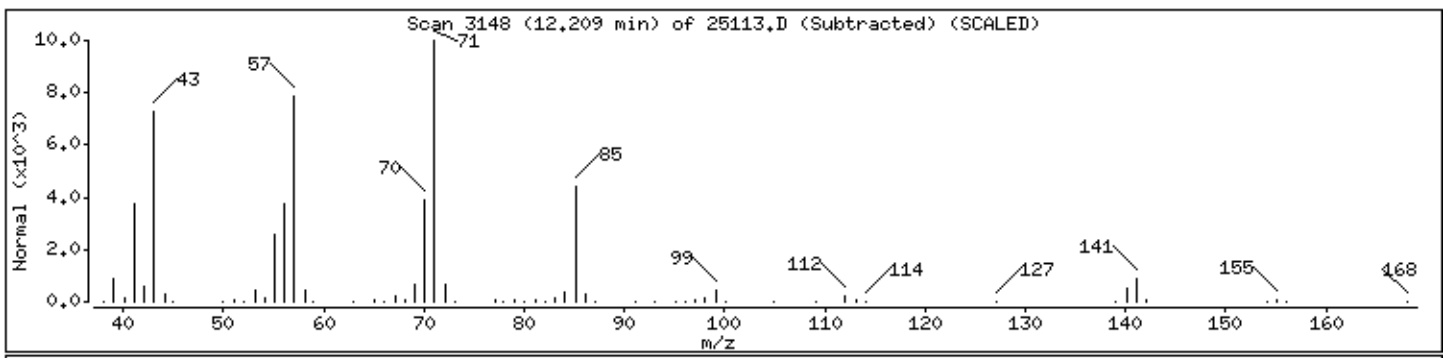
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

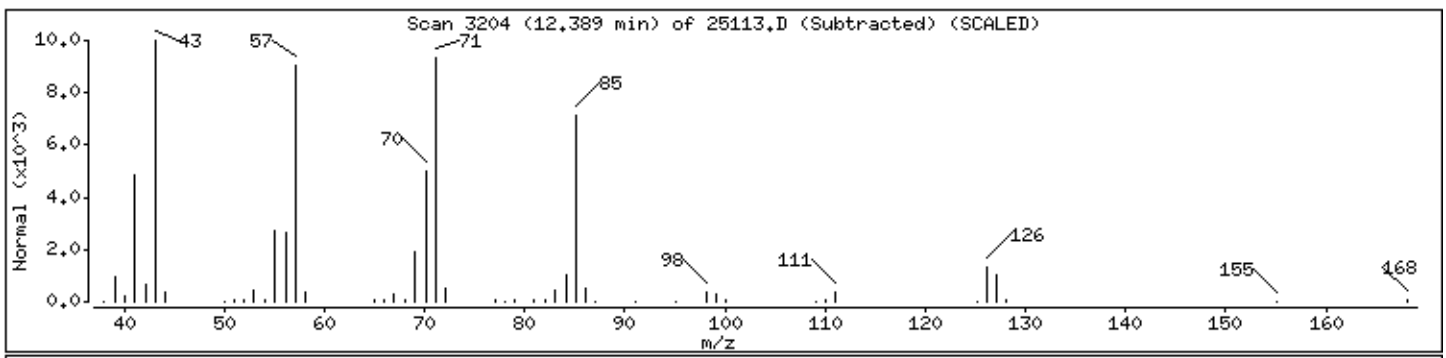
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

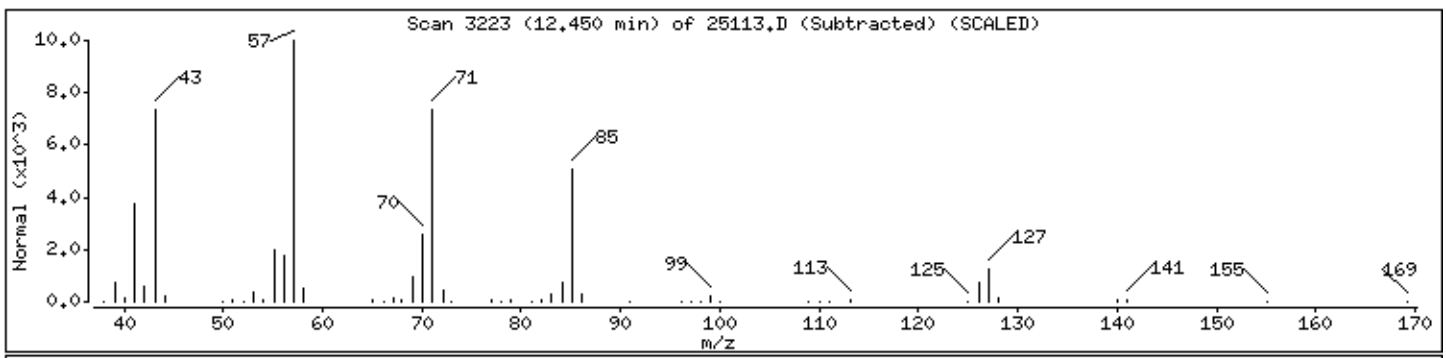
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25113.D

Date : 08-SEP-2021 17:25

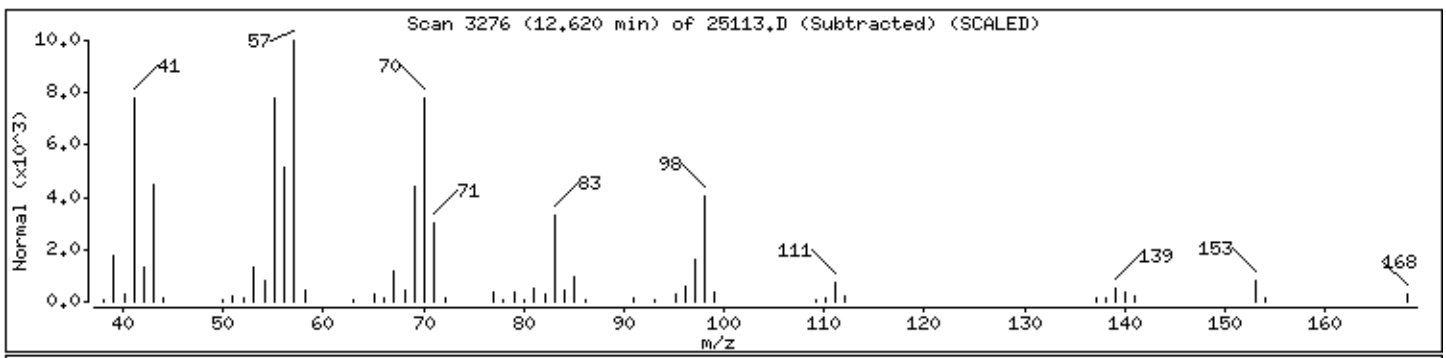
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25113.D
Injection Date: 08-SEP-2021 17:25
Instrument: 10airH.i
Lab Sample ID: 10577519009
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Lab Smp Id: 10577519010
Inj Date : 08-SEP-2021 18:19
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 15
Dil Factor: 1.34000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.340 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.427 | 5.430 | (1.000) | 463488 | 10.0000 | |
| 48 Trichloroethene | 130 | 5.755 | 5.758 | (1.060) | 560 | 0.02234 | 0.0299(aQ) |
| 62 Tetrachloroethene | 166 | 7.662 | 7.665 | (0.912) | 982 | 0.03274 | 0.0439(aQ) |
| * 64 Chlorobenzene - d5 | 117 | 8.398 | 8.404 | (1.000) | 380185 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Lab Smp Id: 10577519010
Inj Date : 08-SEP-2021 18:19
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 15
Dil Factor: 1.34000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.340 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 64 Chlorobenzene - d5 | 8.399 | 1226492 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 10.334 | 3502329 | 28.5556464 | 38.3 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.296 | 2480245 | 20.2222578 | 27.1 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.386 | 5880087 | 47.9423005 | 64.2 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.546 | 1978216 | 16.1290494 | 21.6 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.865 | 2428654 | 19.8016227 | 26.5 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.942 | 11806875 | 96.2653657 | 129 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Report Date: 09-Sep-2021 14:21

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | CAS #: | | | |
| 12.125 | 1723983 | 14.0562017 | 18.8 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.206 | 6360661 | 51.8605811 | 69.5 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.389 | 1994373 | 16.2607871 | 21.8 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.450 | 2190282 | 17.8580960 | 23.9 | 0 | | 0 | 64 |
| 5-Undecene, 9-methyl-, (Z)- | | | | CAS #: 74630-65-2 | | | |
| 12.620 | 1692690 | 13.8010601 | 18.5 | 89 | NIST05.L | 35048 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25115.D
Lab Smp Id: 10577519010
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 463488 | 0.80 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 380185 | -3.02 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.06 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.07 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519010
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 18:19

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

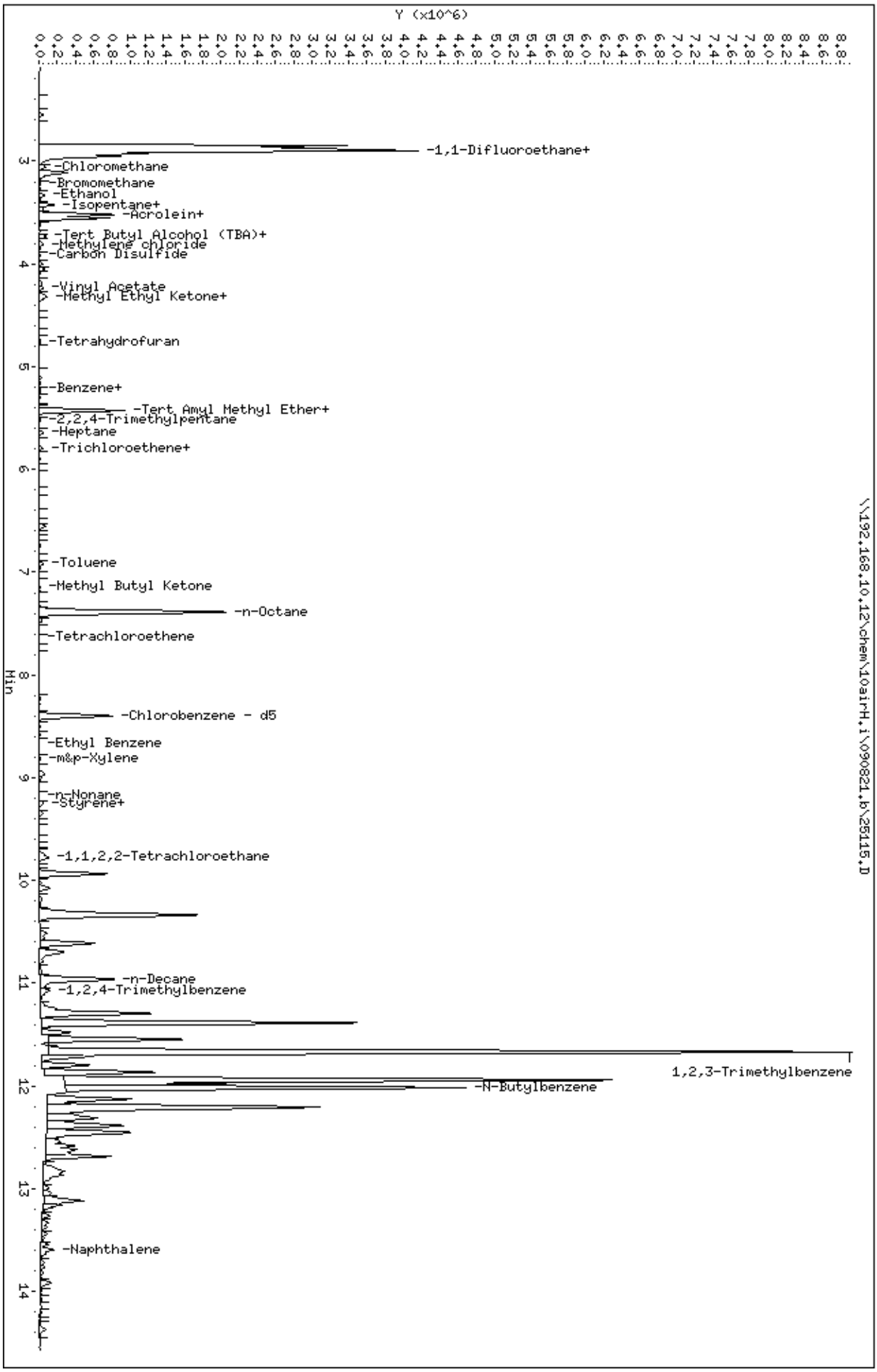
Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | Unknown | 10.334 | 38.3 | _J__ |
| 2. | | Unknown | 11.296 | 27.1 | _J__ |
| 3. | | Unknown | 11.386 | 64.2 | _J__ |
| 4. | | Unknown | 11.546 | 21.6 | _J__ |
| 5. | | Unknown | 11.865 | 26.5 | _J__ |
| 6. | | Unknown | 11.942 | 129 | _J__ |
| 7. | | Unknown | 12.125 | 18.8 | _J__ |
| 8. | | Unknown | 12.206 | 69.5 | _J__ |
| 9. | | Unknown | 12.389 | 21.8 | _J__ |
| 10. | | Unknown | 12.450 | 23.9 | _J__ |
| 11. | 74630-65-2 | 5-Undecene, 9-methyl-, (Z)- | 12.620 | 18.5 | NJ__ |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D
Date : 08-SEP-2021 18:19
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i
Operator: GT
Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

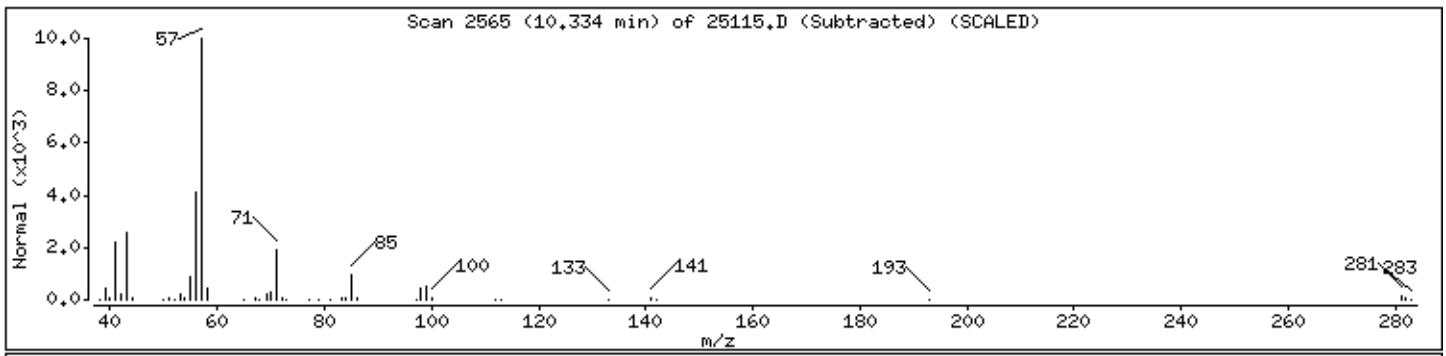
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

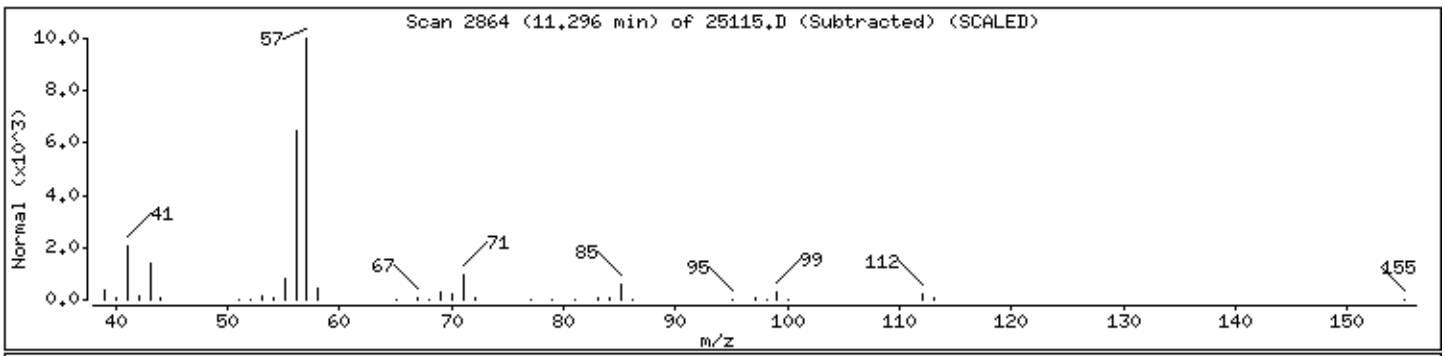
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

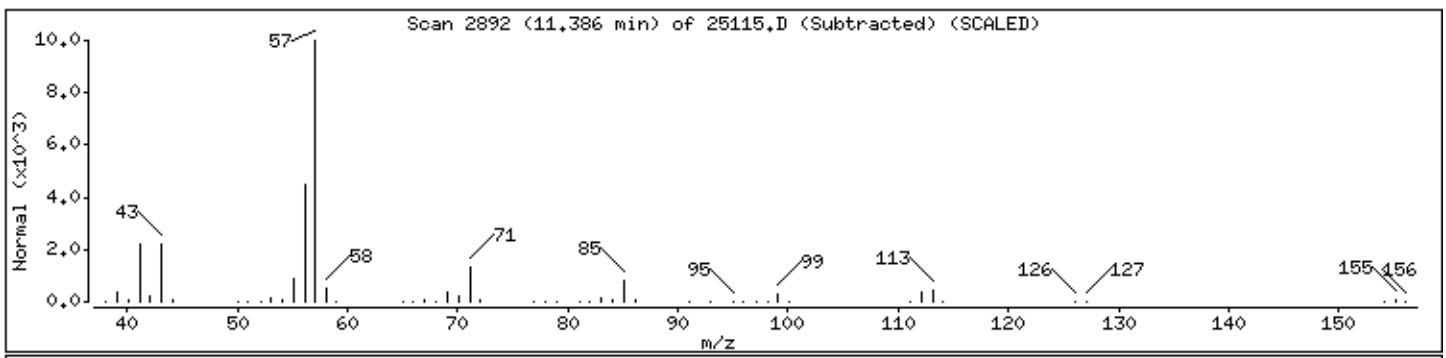
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

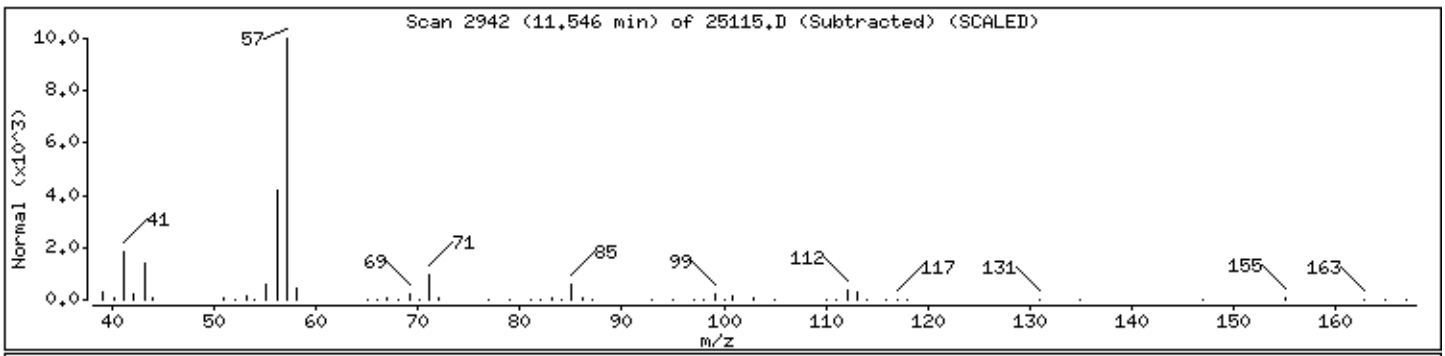
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

Client ID:

Instrument: 10airH.i

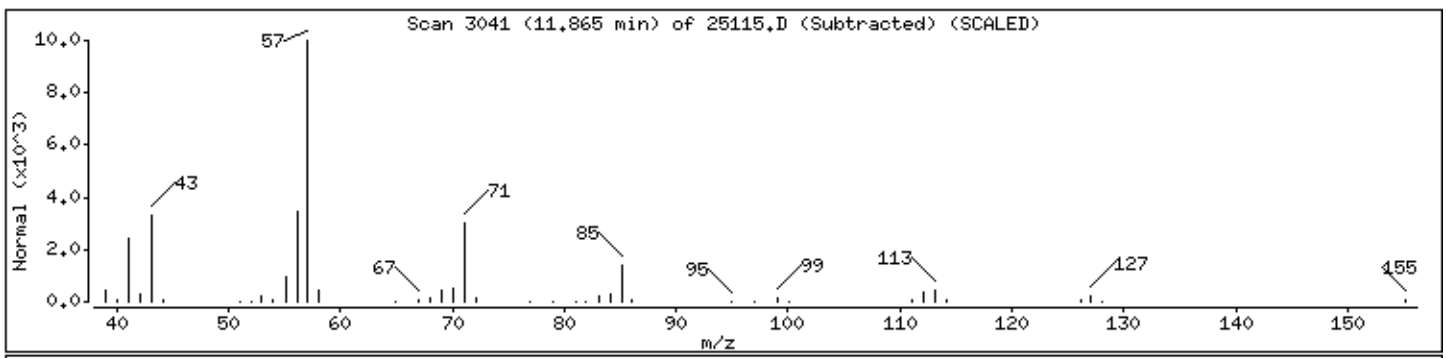
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

Client ID:

Instrument: 10airH.i

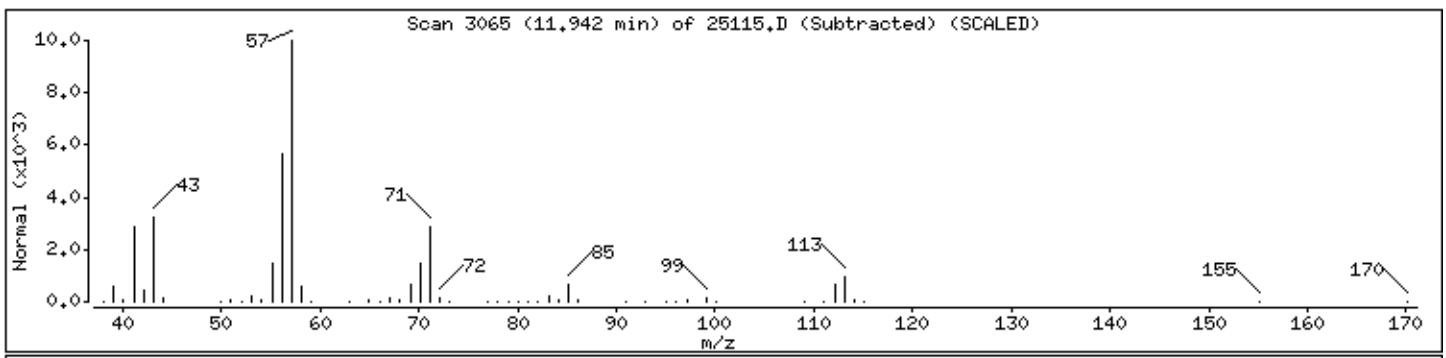
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

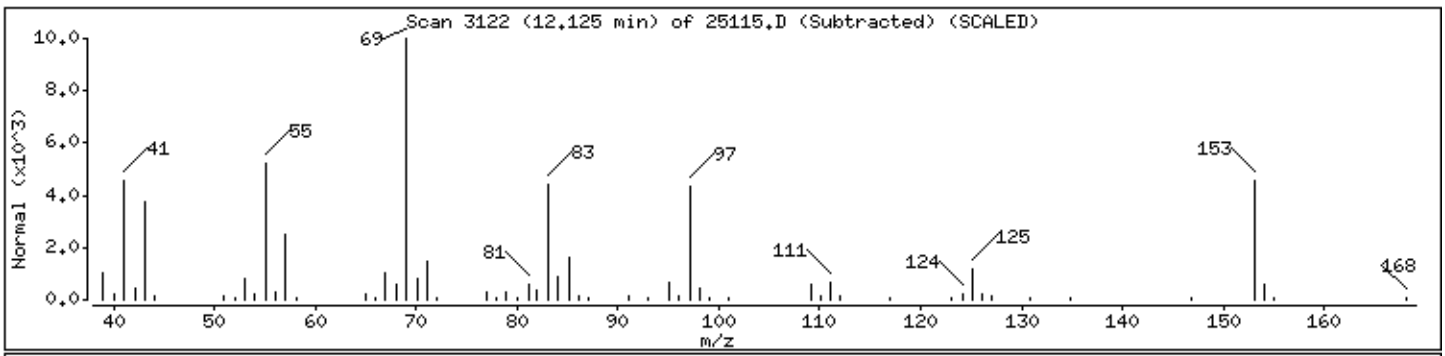
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

Client ID:

Instrument: 10airH.i

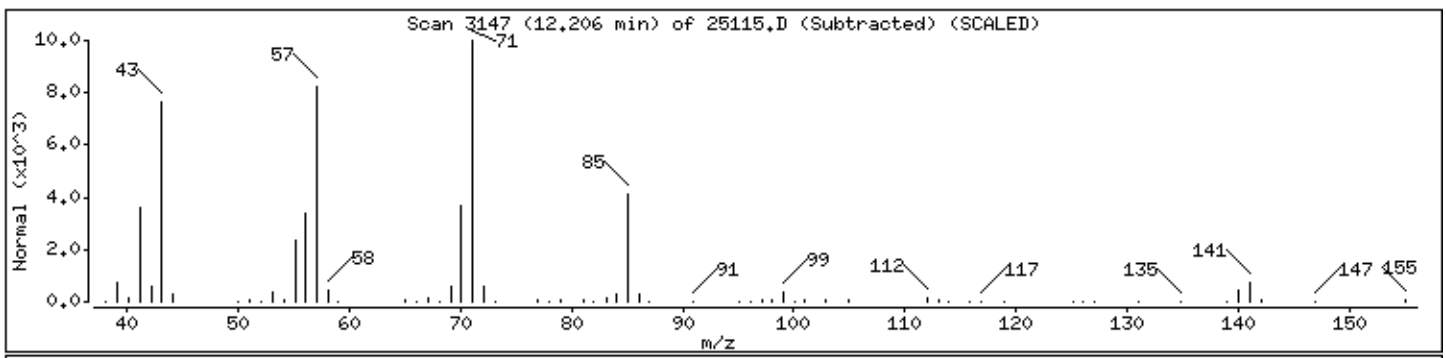
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

Client ID:

Instrument: 10airH.i

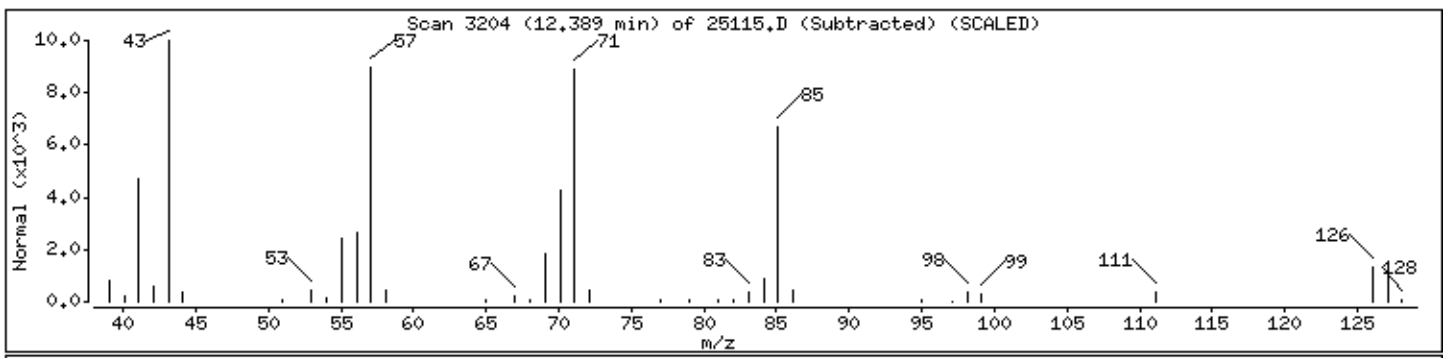
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

Client ID:

Instrument: 10airH.i

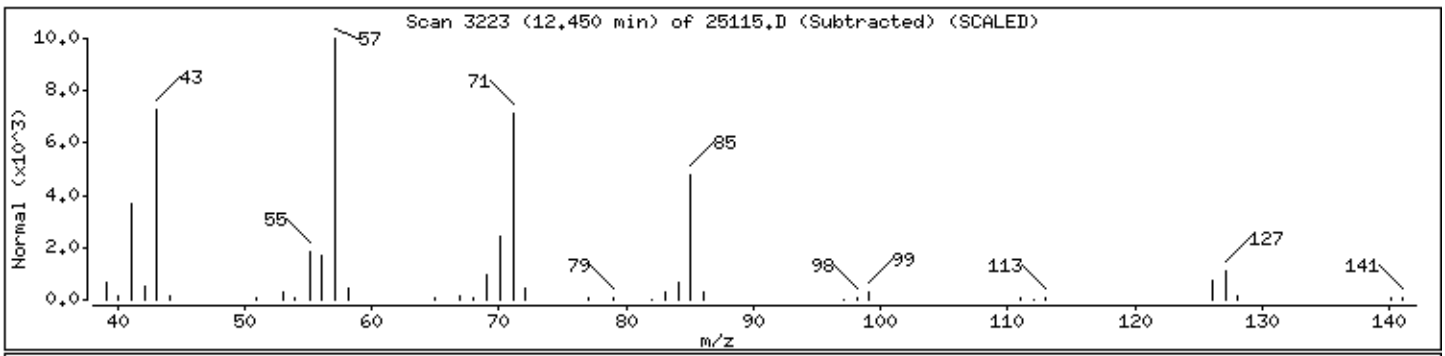
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25115.D

Date : 08-SEP-2021 18:19

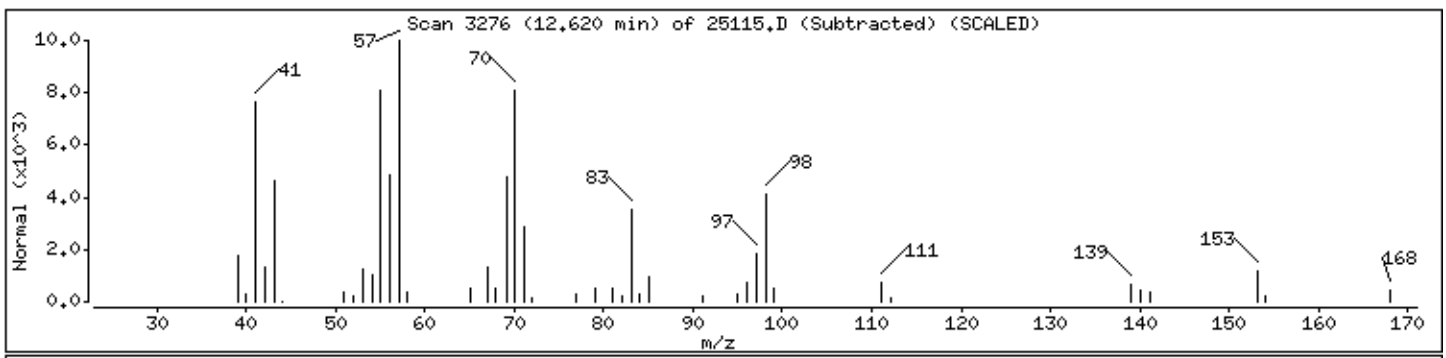
Client ID: Instrument: 10airH.i

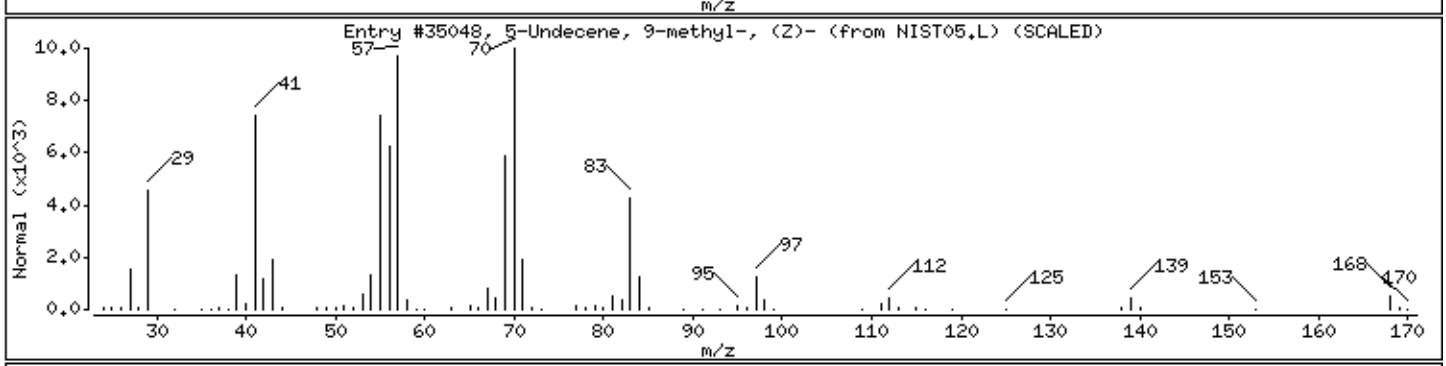
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| 5-Undecene, 9-methyl-, (Z)- | 74630-65-2 | NIST05.L | 35048 | 89 | C12H24 | 168 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25115.D
Injection Date: 08-SEP-2021 18:19
Instrument: 10airH.i
Lab Sample ID: 10577519010
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Lab Smp Id: 10577519011
Inj Date : 08-SEP-2021 18:46
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 16
Dil Factor: 2.88000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.880 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.424 | 5.430 | (1.000) | 458612 | 10.0000 | |
| 48 Trichloroethene | 130 | 5.752 | 5.758 | (1.060) | 7287 | 0.29381 | 0.846 |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 8.398 | 8.404 | (1.000) | 372096 | 10.0000 | |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Lab Smp Id: 10577519011
Inj Date : 08-SEP-2021 18:46
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 16
Dil Factor: 2.88000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.880 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 5.424 | 1138572 | 10.000 |
| * 64 Chlorobenzene - d5 | 8.398 | 1194452 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 2.865 | 10627928 | 93.3443264 | 269 | 0 | | 0 | 45 |
| Unknown | | | | | CAS #: | | |
| 10.337 | 3953729 | 33.1007563 | 95.3 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.292 | 3050827 | 25.5416237 | 73.6 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.386 | 7110677 | 59.5308280 | 171 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.546 | 2979078 | 24.9409452 | 71.8 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Report Date: 09-Sep-2021 14:21

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 11.668 | 17990143 | 150.614085 | 434 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 11.865 | 2875737 | 24.0757638 | 69.3 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 11.942 | 14110158 | 118.130719 | 340 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.016 | 7431208 | 62.2143206 | 179 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.205 | 7729385 | 64.7106750 | 186 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.450 | 2892192 | 24.2135280 | 69.7 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25116.D
Lab Smp Id: 10577519011
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 458612 | -0.26 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 372096 | -5.09 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.42 | -0.12 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.08 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519011
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 18:46

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 2.865 | 269 | _J__ |
| 2. | Unknown | 10.337 | 95.3 | _J__ |
| 3. | Unknown | 11.292 | 73.6 | _J__ |
| 4. | Unknown | 11.386 | 171 | _J__ |
| 5. | Unknown | 11.546 | 71.8 | _J__ |
| 6. | Unknown | 11.668 | 434 | _J__ |
| 7. | Unknown | 11.865 | 69.3 | _J__ |
| 8. | Unknown | 11.942 | 340 | _J__ |
| 9. | Unknown | 12.016 | 179 | _J__ |
| 10. | Unknown | 12.205 | 186 | _J__ |
| 11. | Unknown | 12.450 | 69.7 | _J__ |

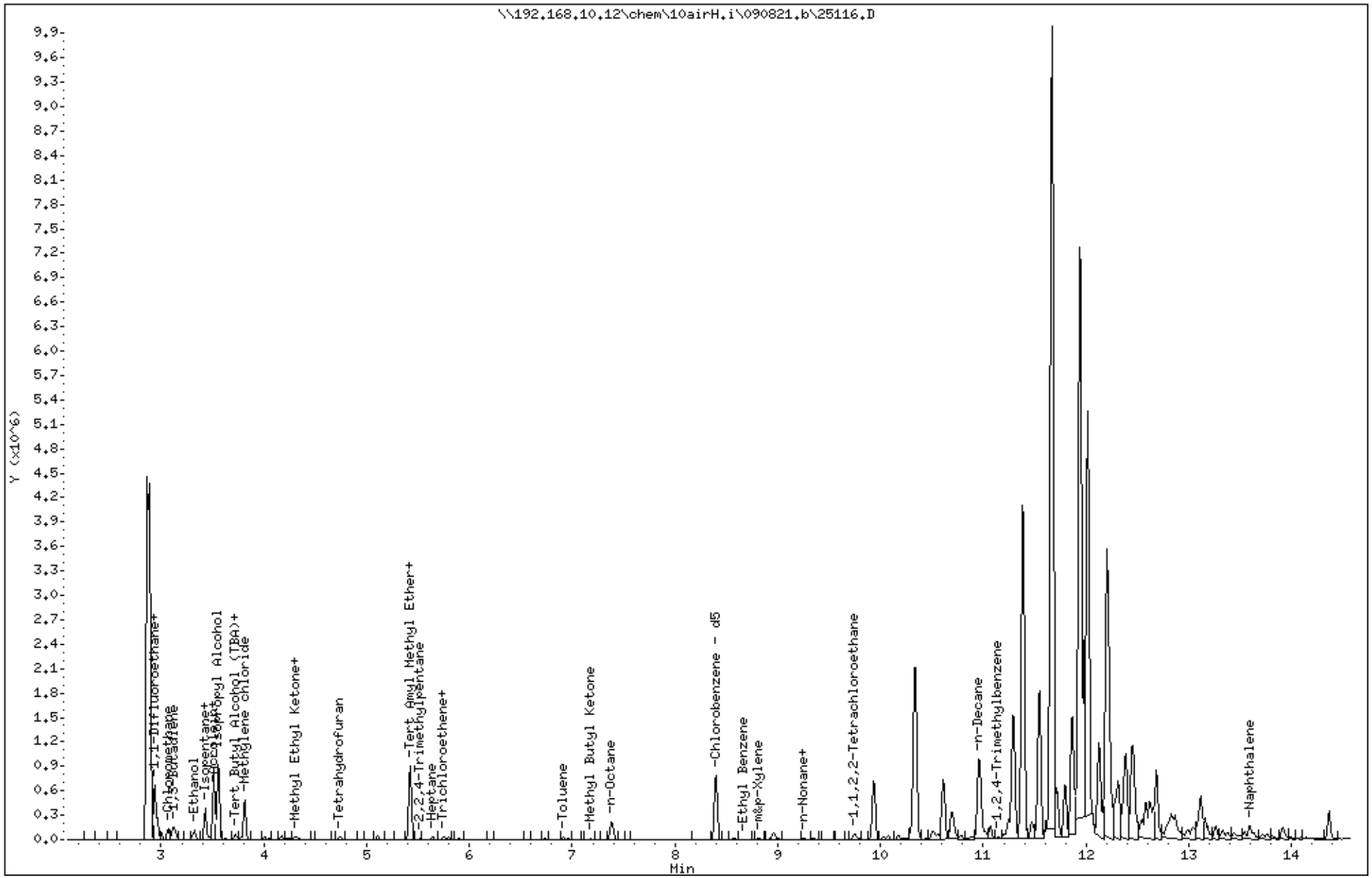
Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D
Date : 08-SEP-2021 18:46
Client ID:
Sample Info:

Instrument: 10airH.i

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

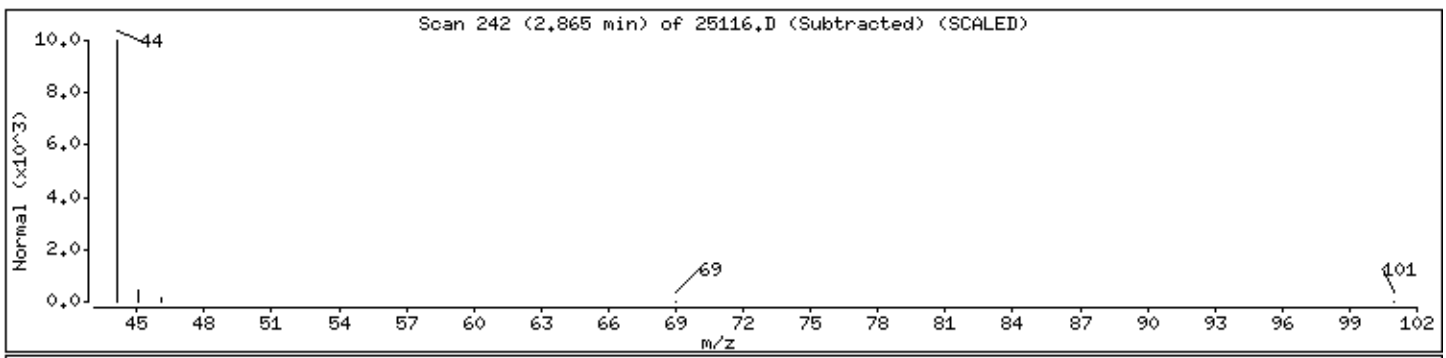
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

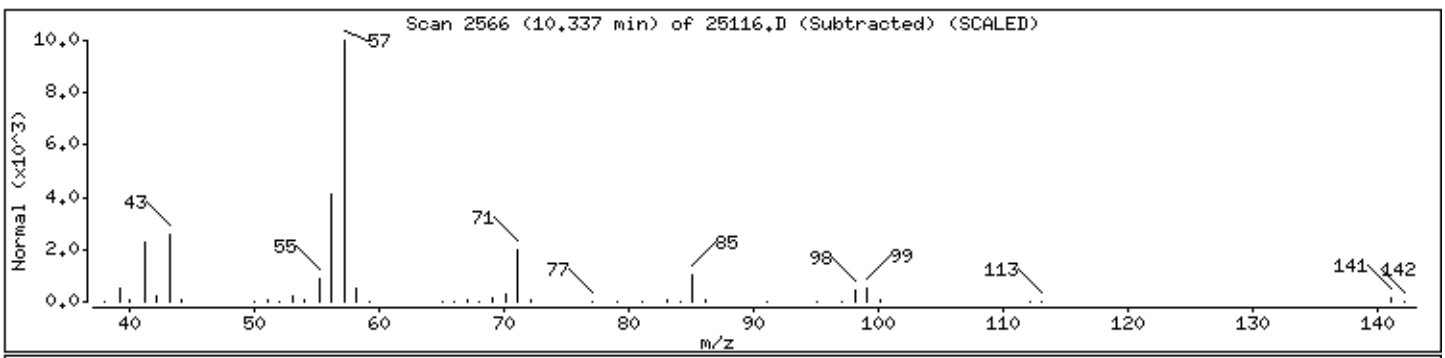
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

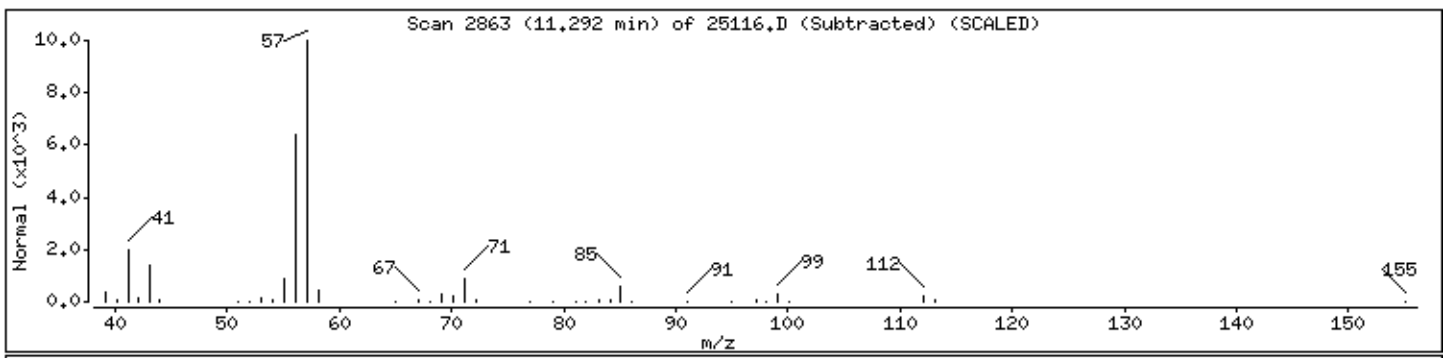
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

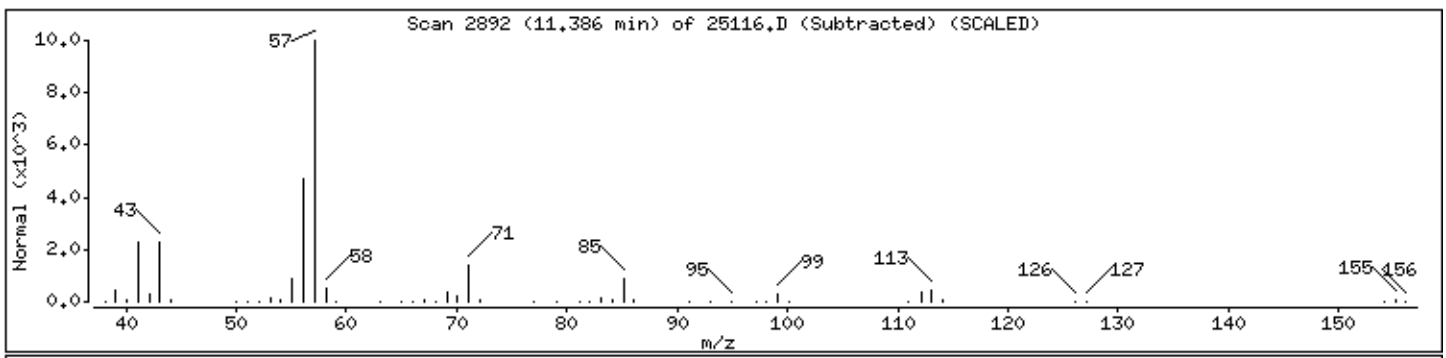
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

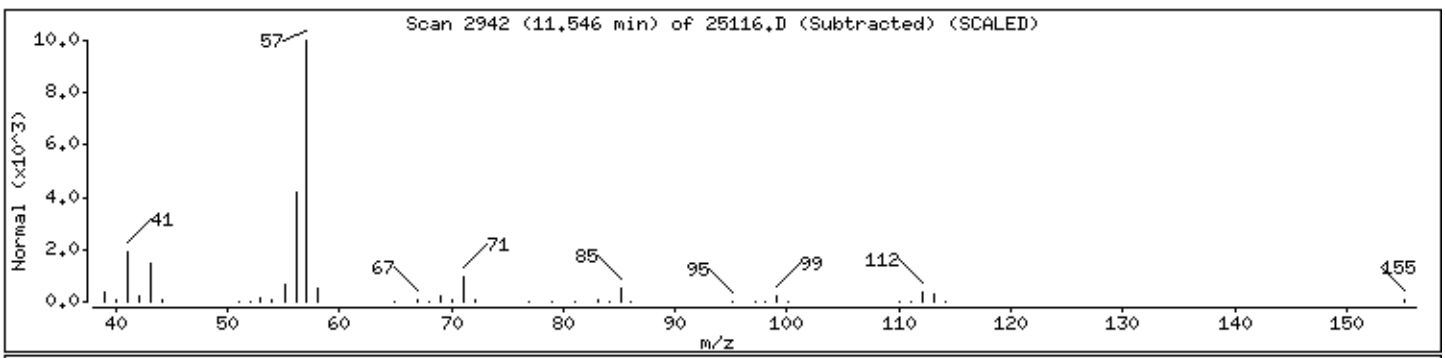
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

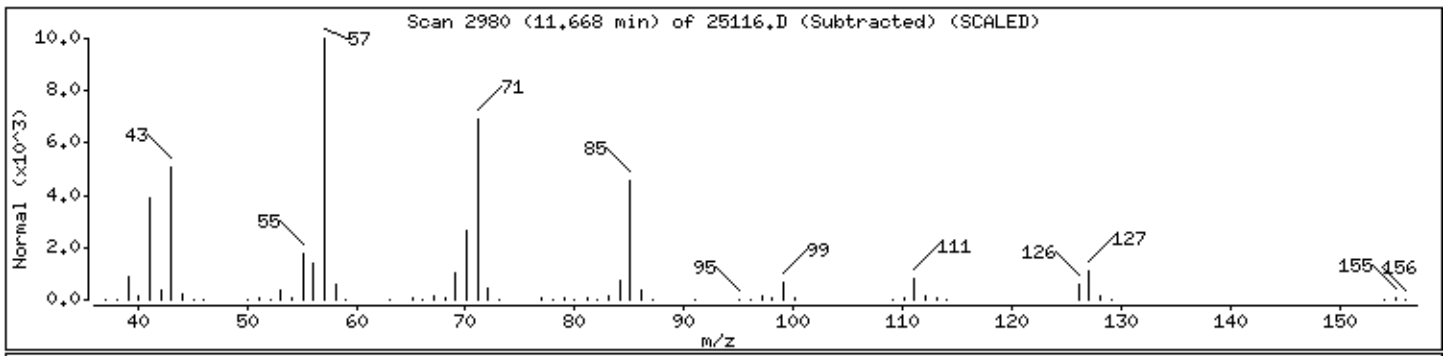
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

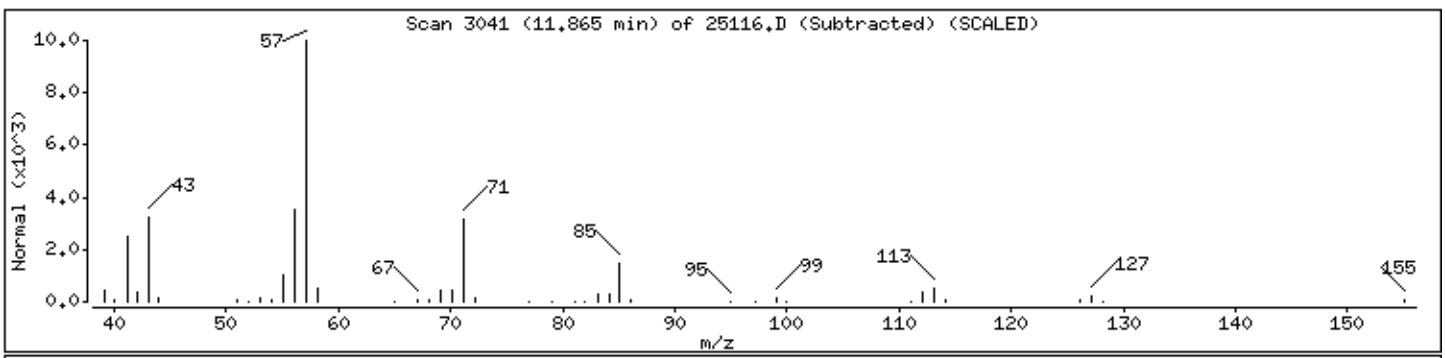
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

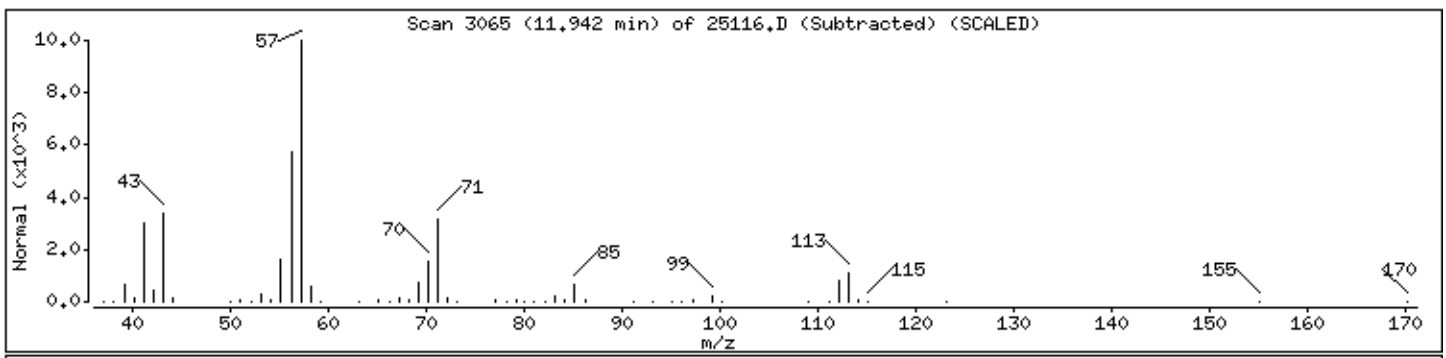
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

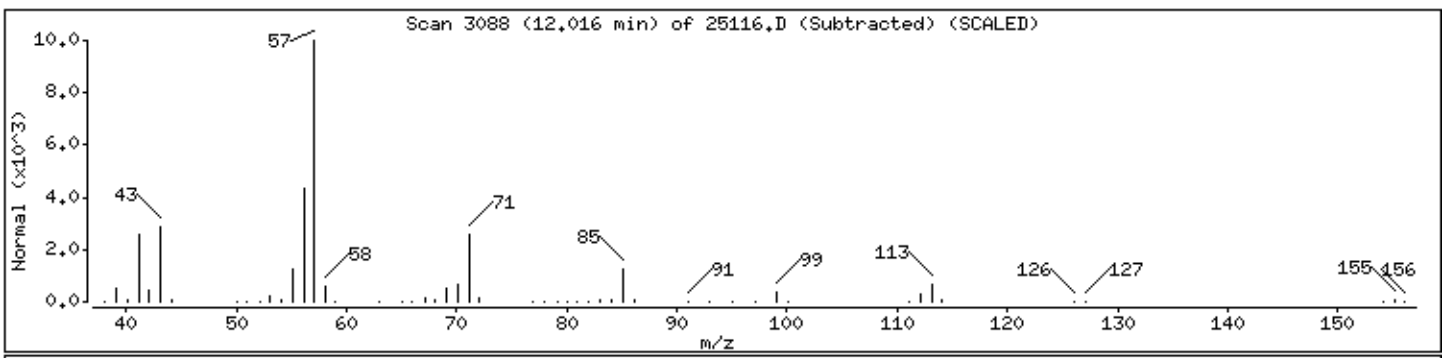
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

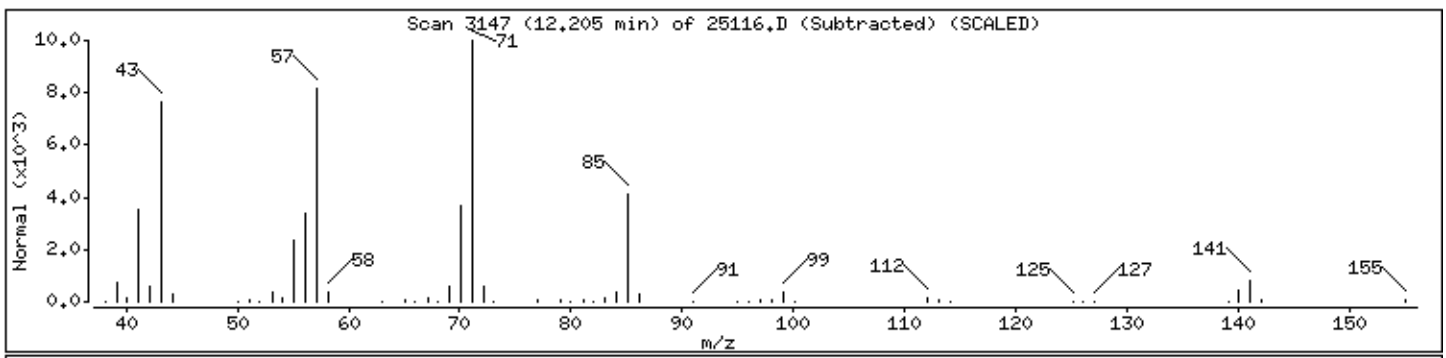
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25116.D

Date : 08-SEP-2021 18:46

Client ID:

Instrument: 10airH.i

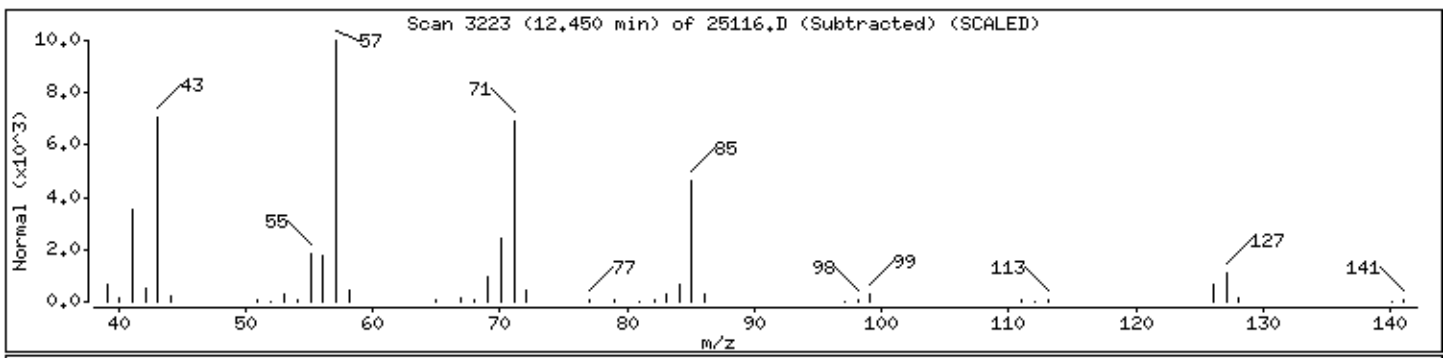
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25116.D
Injection Date: 08-SEP-2021 18:46
Instrument: 10airH.i
Lab Sample ID: 10577519011
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Lab Smp Id: 10577519012
Inj Date : 08-SEP-2021 19:13
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 17
Dil Factor: 1.58000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.580 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.427 | 5.430 | (1.000) | 470086 | 10.0000 | |
| 48 Trichloroethene | 130 | 5.758 | 5.758 | (1.061) | 22304 | 0.87735 | 1.39 |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 8.401 | 8.404 | (1.000) | 386173 | 10.0000 | |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Lab Smp Id: 10577519012
Inj Date : 08-SEP-2021 19:13
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 17
Dil Factor: 1.58000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.580 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 64 Chlorobenzene - d5 | 8.402 | 1234330 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 10.337 | 4307443 | 34.8970045 | 55.1 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.295 | 3728979 | 30.2105393 | 47.7 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.389 | 8692465 | 70.4225105 | 111 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.546 | 3913994 | 31.7094476 | 50.1 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.864 | 4363819 | 35.3537345 | 55.9 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.942 | 19773436 | 160.195650 | 253 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Report Date: 09-Sep-2021 14:21

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 12.019 | 12173623 | 98.6253219 | 156 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.205 | 11532353 | 93.4300355 | 148 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.389 | 4431154 | 35.8992523 | 56.7 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 12.450 | 4807750 | 38.9502691 | 61.5 | 0 | | 0 | 64 |
| Cyclopropane, 1-ethyl-2-heptyl- | | | | CAS #: 74663-86-8 | | | |
| 12.620 | 4244440 | 34.3865762 | 54.3 | 89 | NIST05.L | 35059 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25117.D
Lab Smp Id: 10577519012
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 470086 | 2.23 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 386173 | -1.49 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.06 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.04 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519012
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 19:13

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | Unknown | 10.337 | 55.1 | _J__ |
| 2. | | Unknown | 11.295 | 47.7 | _J__ |
| 3. | | Unknown | 11.389 | 111 | _J__ |
| 4. | | Unknown | 11.546 | 50.1 | _J__ |
| 5. | | Unknown | 11.864 | 55.9 | _J__ |
| 6. | | Unknown | 11.942 | 253 | _J__ |
| 7. | | Unknown | 12.019 | 156 | _J__ |
| 8. | | Unknown | 12.205 | 148 | _J__ |
| 9. | | Unknown | 12.389 | 56.7 | _J__ |
| 10. | | Unknown | 12.450 | 61.5 | _J__ |
| 11. | 74663-86-8 | Cyclopropane, 1-ethyl-2-hep | 12.620 | 54.3 | NJ__ |

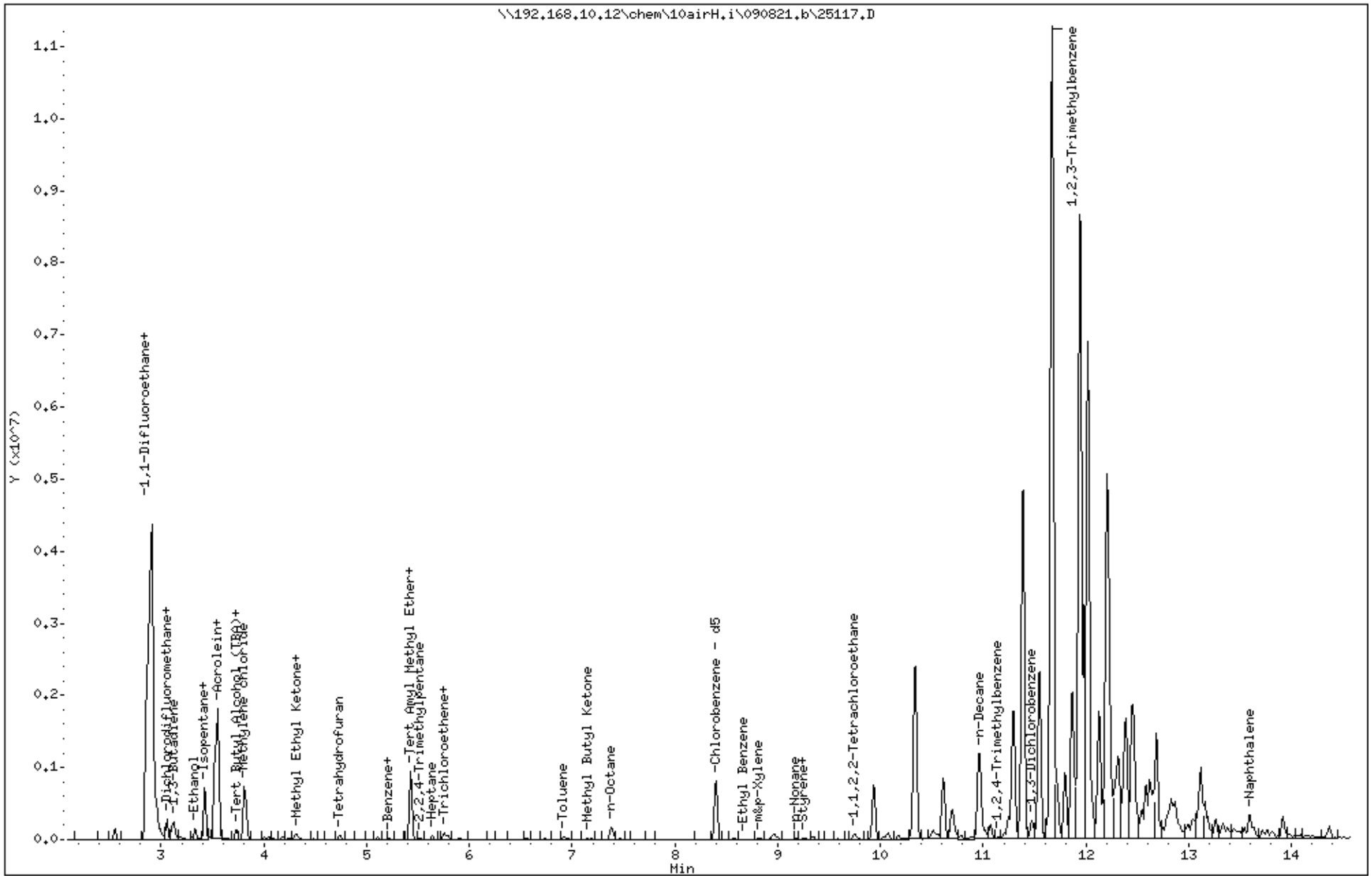
Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D
Date : 08-SEP-2021 19:13
Client ID:
Sample Info:

Instrument: 10airH.i

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

Client ID:

Instrument: 10airH.i

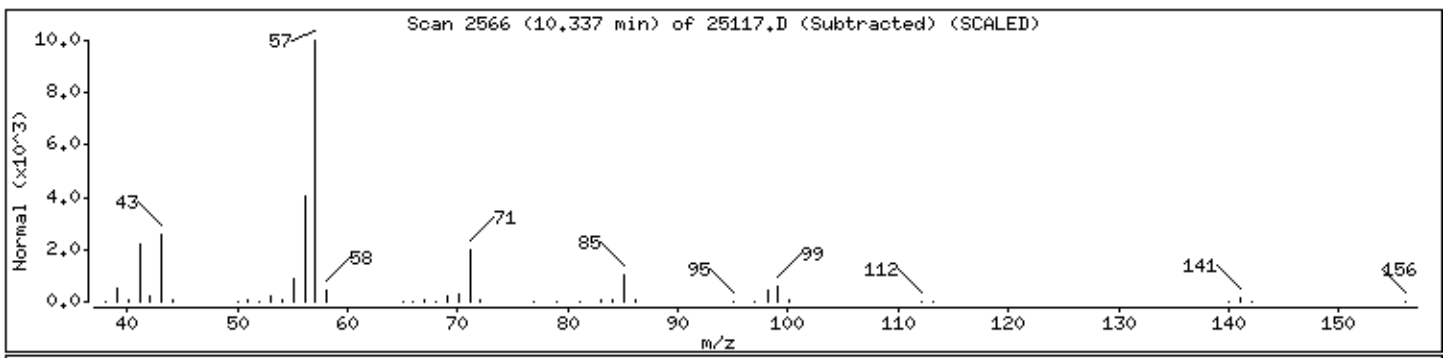
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

Client ID:

Instrument: 10airH.i

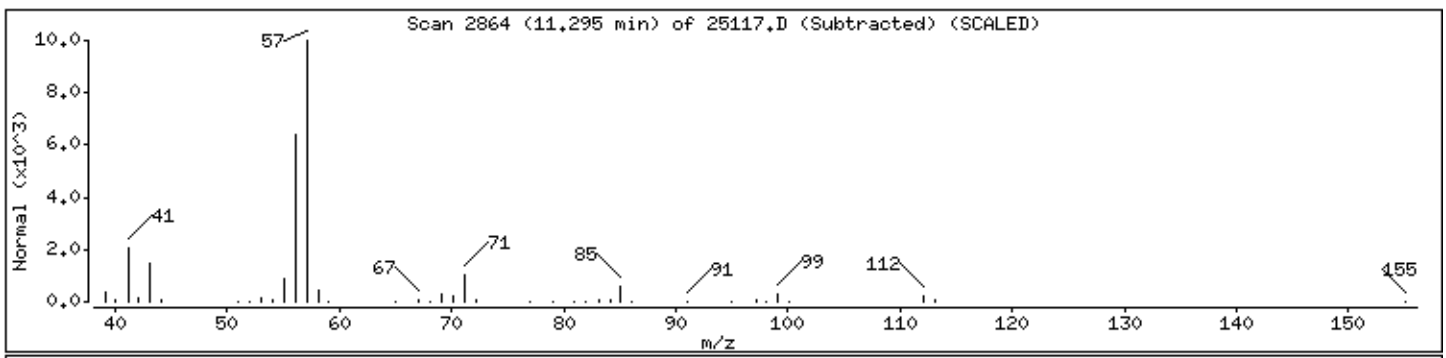
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

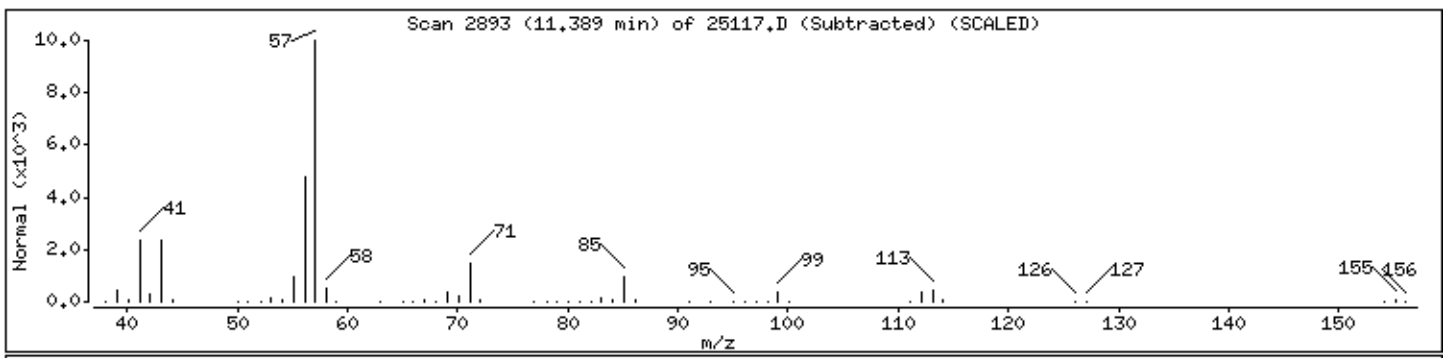
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

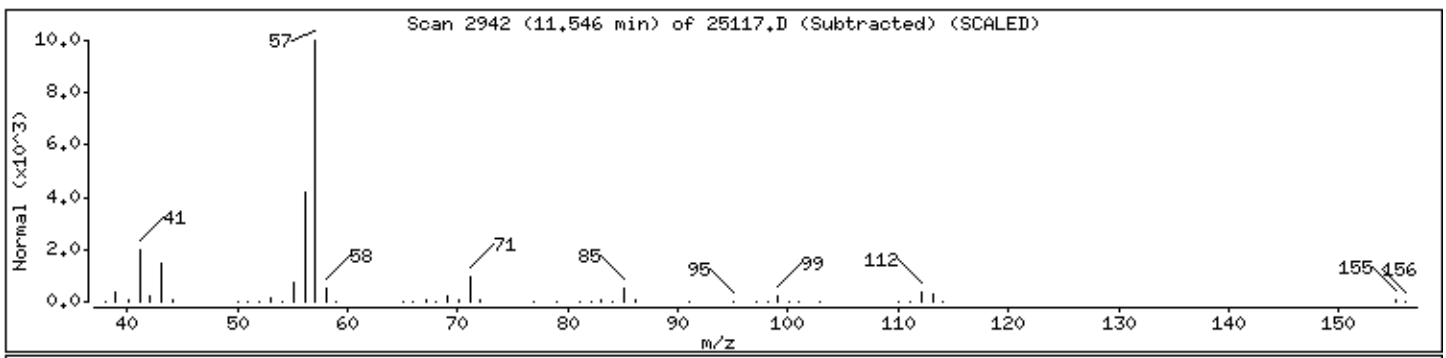
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

Client ID:

Instrument: 10airH.i

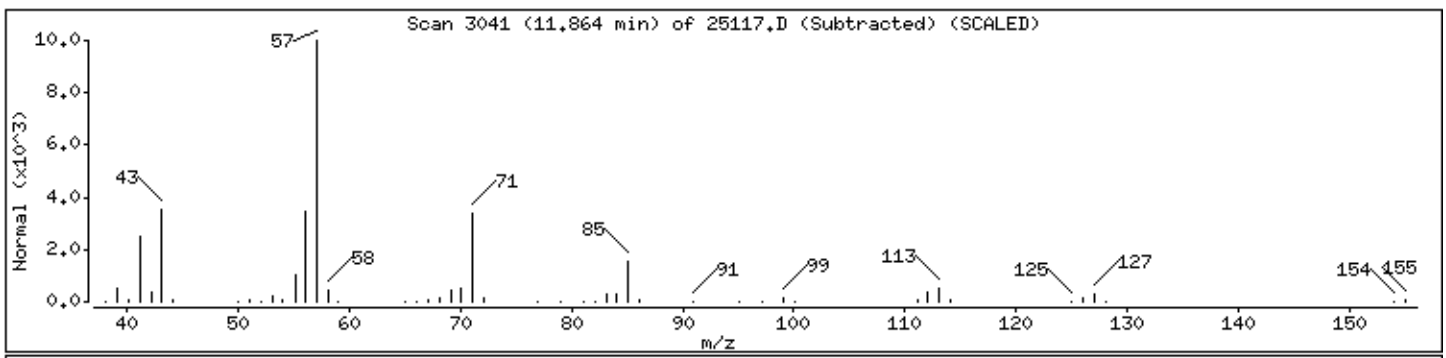
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

Client ID:

Instrument: 10airH.i

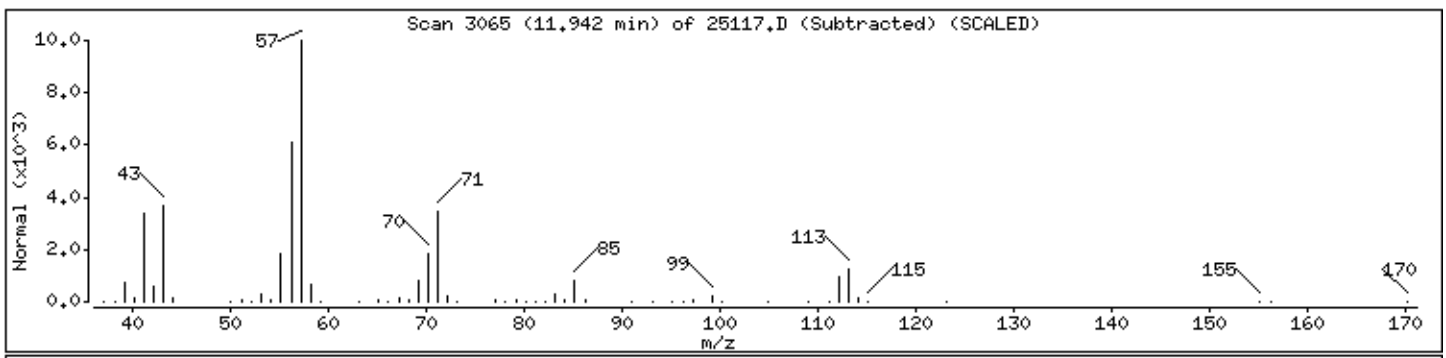
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

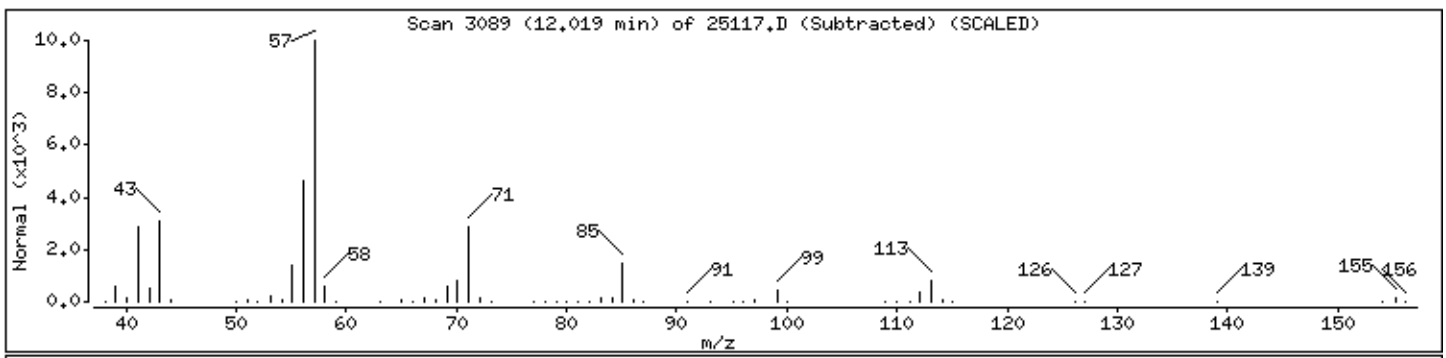
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

Client ID:

Instrument: 10airH.i

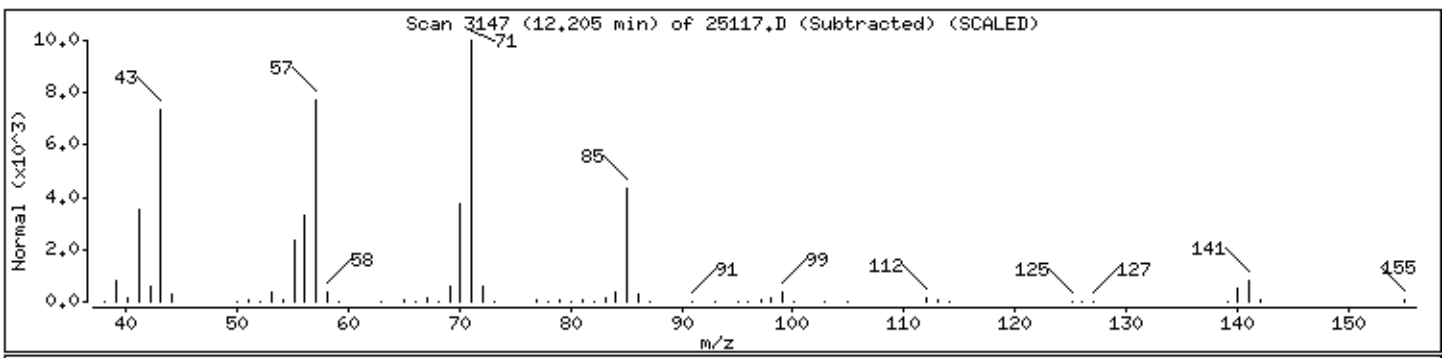
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

Client ID:

Instrument: 10airH.i

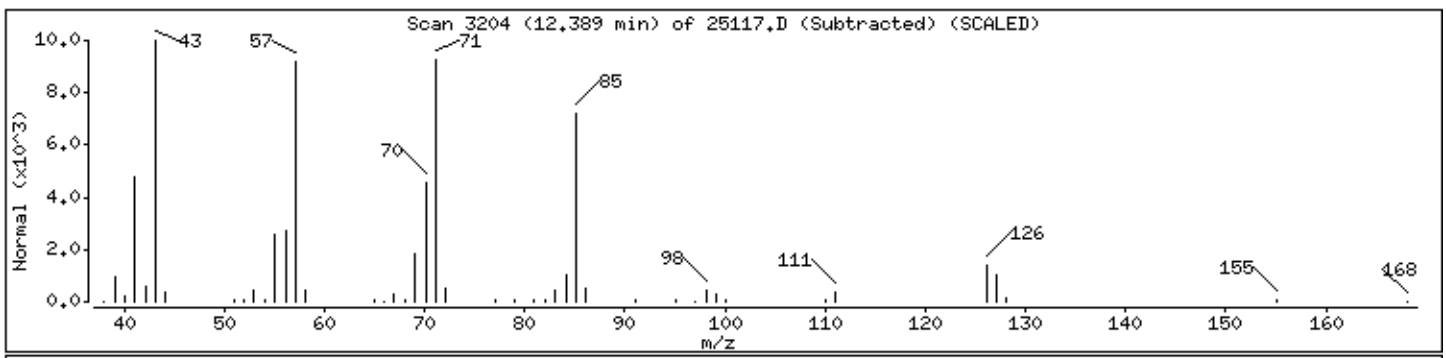
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

Client ID:

Instrument: 10airH.i

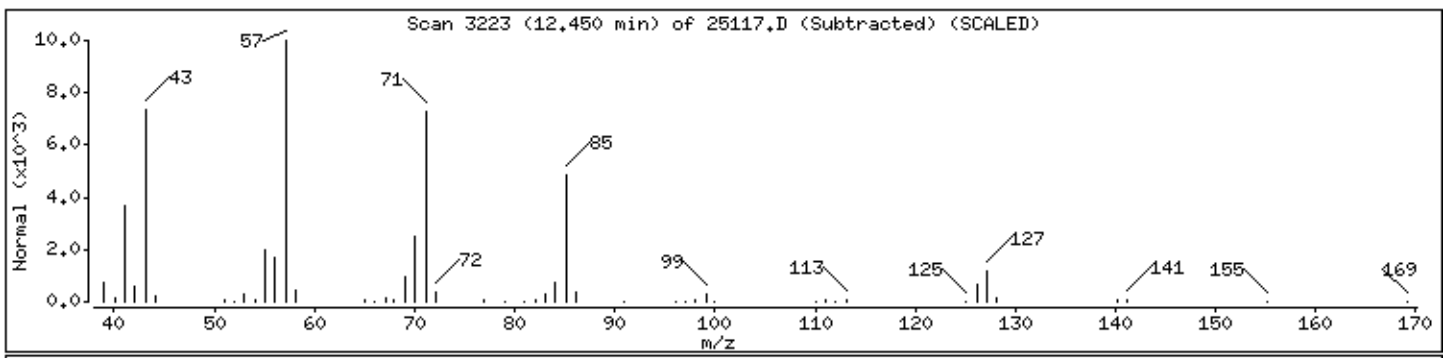
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25117.D

Date : 08-SEP-2021 19:13

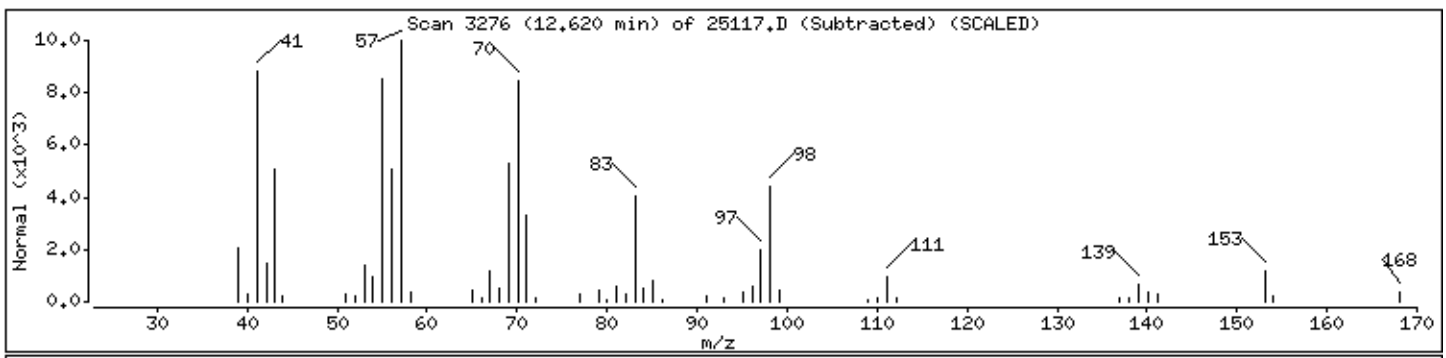
Client ID: Instrument: 10airH.i

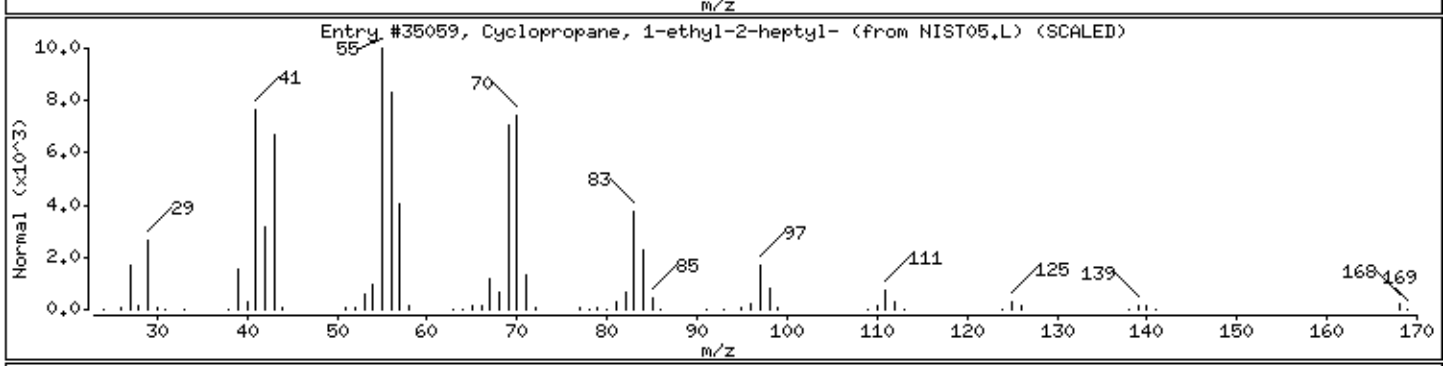
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclopropane, 1-ethyl-2-heptyl- | 74663-86-8 | NIST05.L | 35059 | 89 | C12H24 | 168 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25117.D
Injection Date: 08-SEP-2021 19:13
Instrument: 10airH.i
Lab Sample ID: 10577519012
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Lab Smp Id: 10577519013
Inj Date : 08-SEP-2021 19:40
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 18
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.830 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.427 | 5.430 | (1.000) | 464446 | 10.0000 | |
| 48 Trichloroethene | 130 | 5.755 | 5.758 | (1.060) | 42467 | 1.69076 | 3.09 |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 8.398 | 8.404 | (1.000) | 384045 | 10.0000 | |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Lab Smp Id: 10577519013
Inj Date : 08-SEP-2021 19:40
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 18
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.830 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 64 Chlorobenzene - d5 | 8.398 | 1242475 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 10.334 | 4331641 | 34.8629830 | 63.8 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.295 | 3621523 | 29.1476353 | 53.3 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.389 | 8373846 | 67.3964484 | 123 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.546 | 3745531 | 30.1457062 | 55.2 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.865 | 4096961 | 32.9741664 | 60.3 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.942 | 18752818 | 150.931043 | 276 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Report Date: 09-Sep-2021 14:21

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | | CAS #: | | |
| 12.019 | 11422630 | 91.9344239 | 168 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.209 | 10686592 | 86.0104610 | 157 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.389 | 4058970 | 32.6684012 | 59.8 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.450 | 4325955 | 34.8172198 | 63.7 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.620 | 3778781 | 30.4133140 | 55.7 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25118.D
Lab Smp Id: 10577519013
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 464446 | 1.01 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 384045 | -2.04 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | -0.06 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.08 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519013
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 19:40

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 10.334 | 63.8 | _J__ |
| 2. | Unknown | 11.295 | 53.3 | _J__ |
| 3. | Unknown | 11.389 | 123 | _J__ |
| 4. | Unknown | 11.546 | 55.2 | _J__ |
| 5. | Unknown | 11.865 | 60.3 | _J__ |
| 6. | Unknown | 11.942 | 276 | _J__ |
| 7. | Unknown | 12.019 | 168 | _J__ |
| 8. | Unknown | 12.209 | 157 | _J__ |
| 9. | Unknown | 12.389 | 59.8 | _J__ |
| 10. | Unknown | 12.450 | 63.7 | _J__ |
| 11. | Unknown | 12.620 | 55.7 | _J__ |

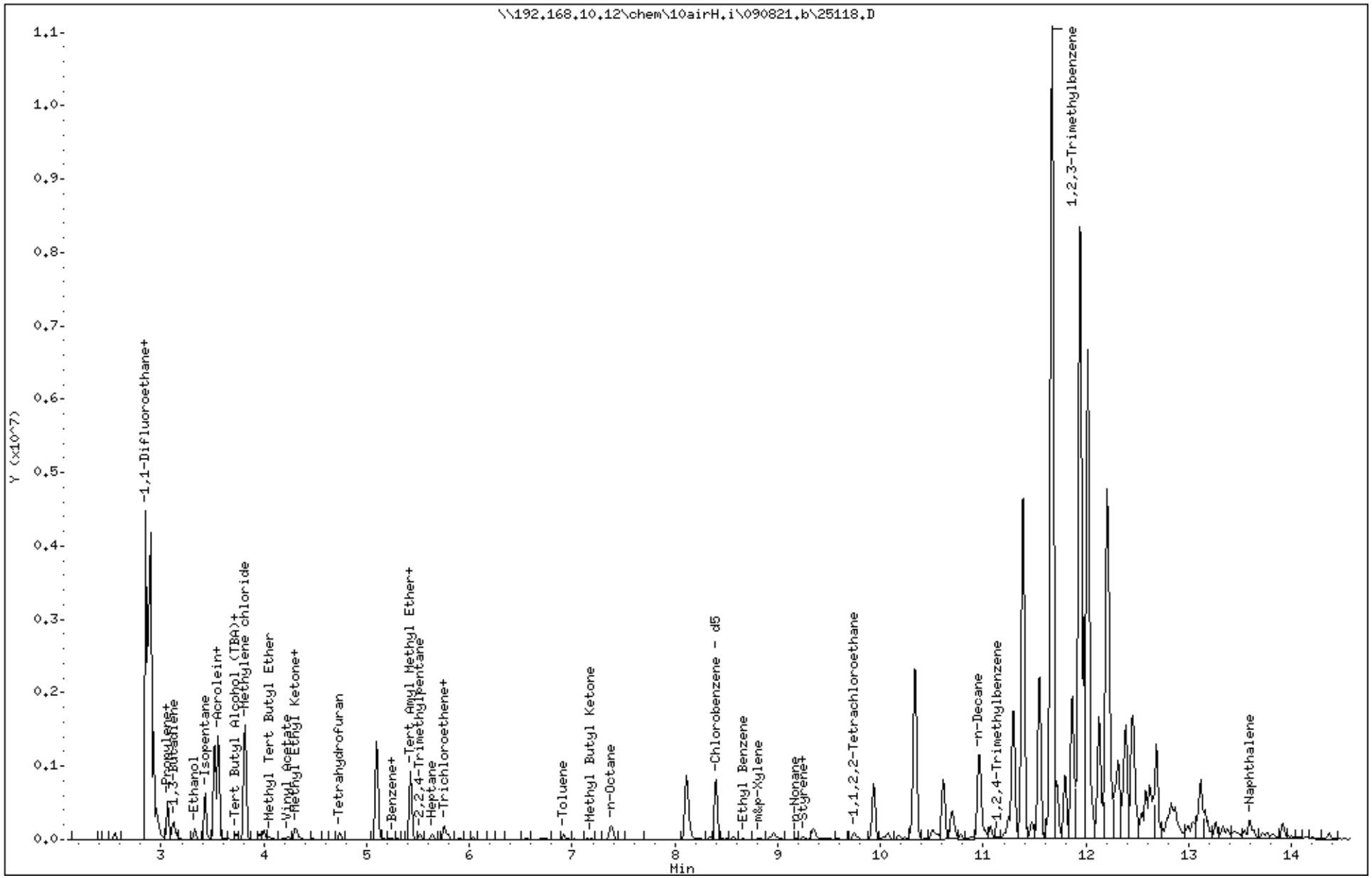
Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D
Date : 08-SEP-2021 19:40
Client ID:
Sample Info:

Instrument: 10airH.i

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

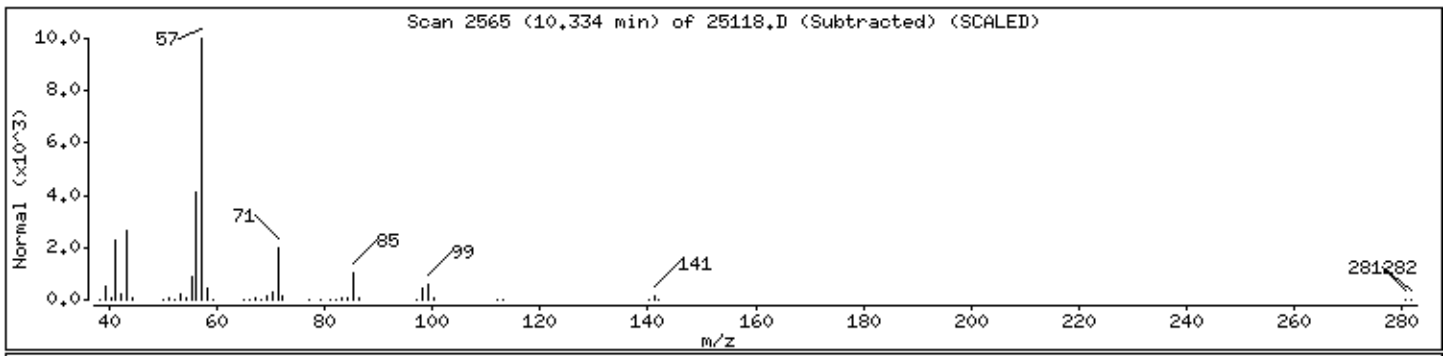
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

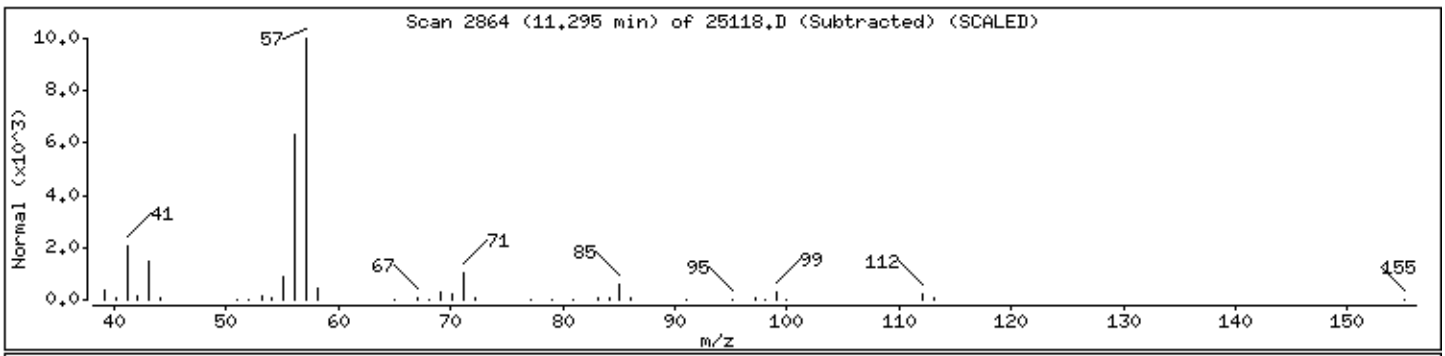
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

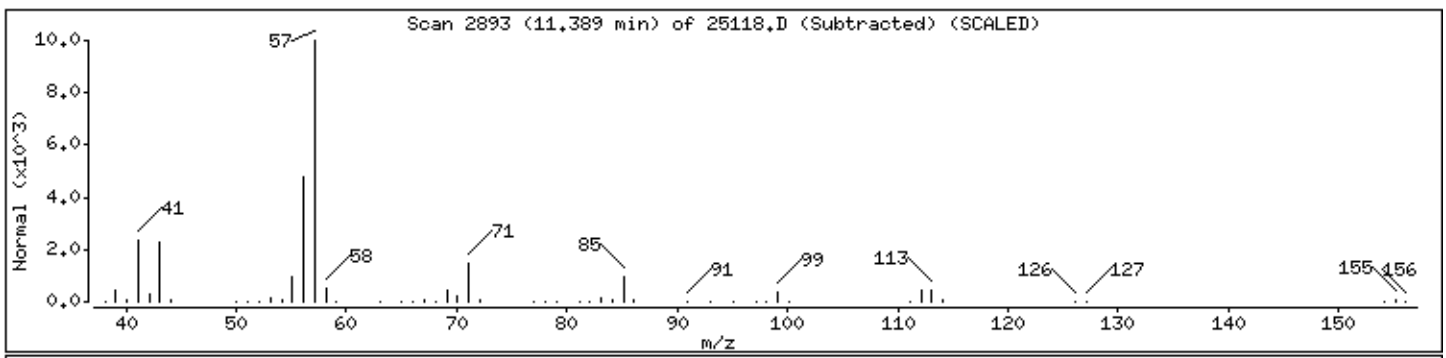
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

Client ID:

Instrument: 10airH.i

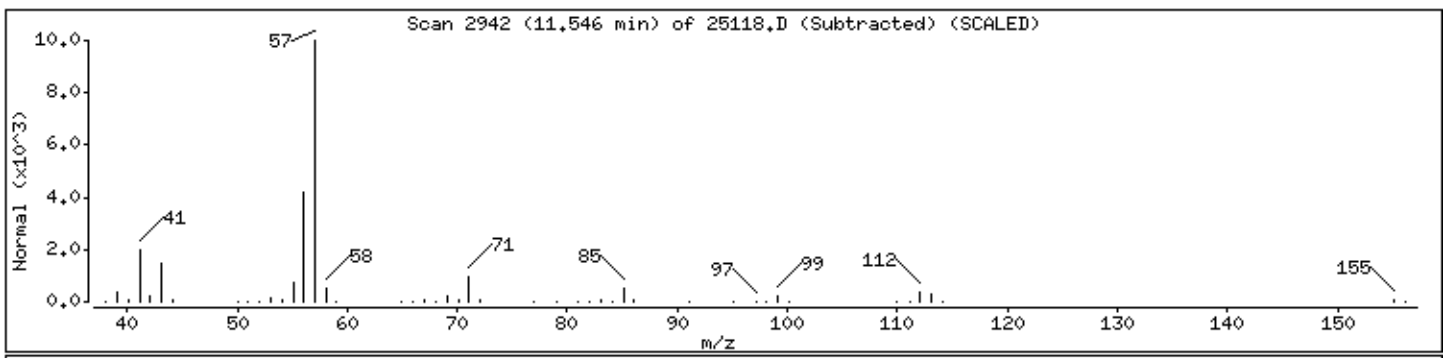
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

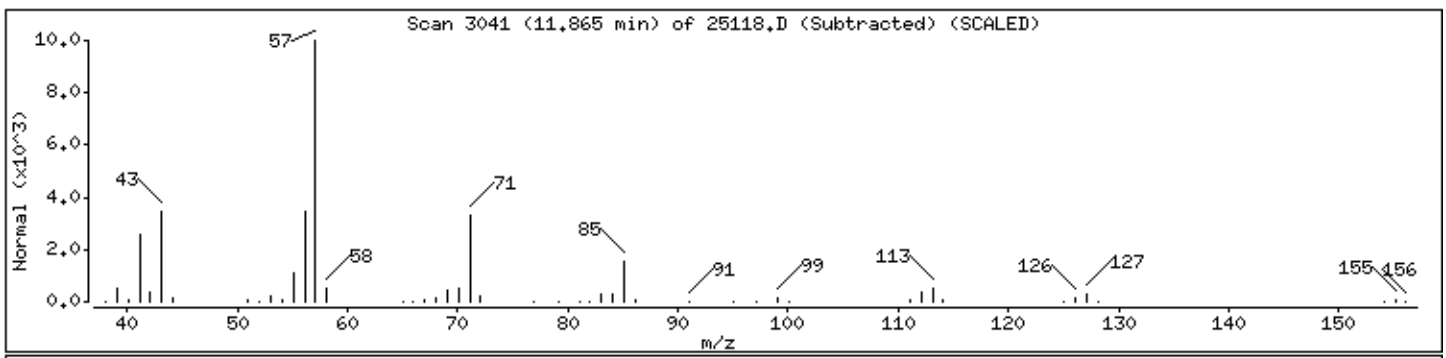
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

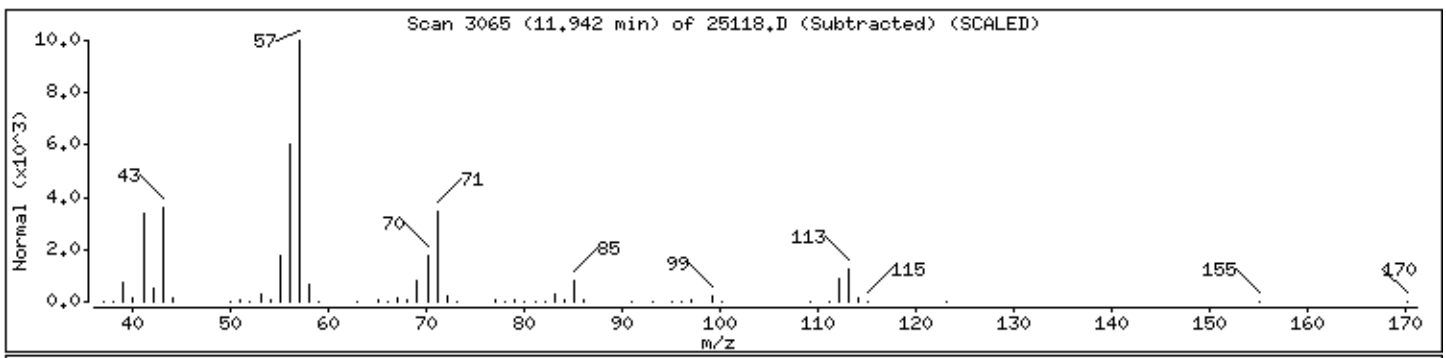
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

Client ID:

Instrument: 10airH.i

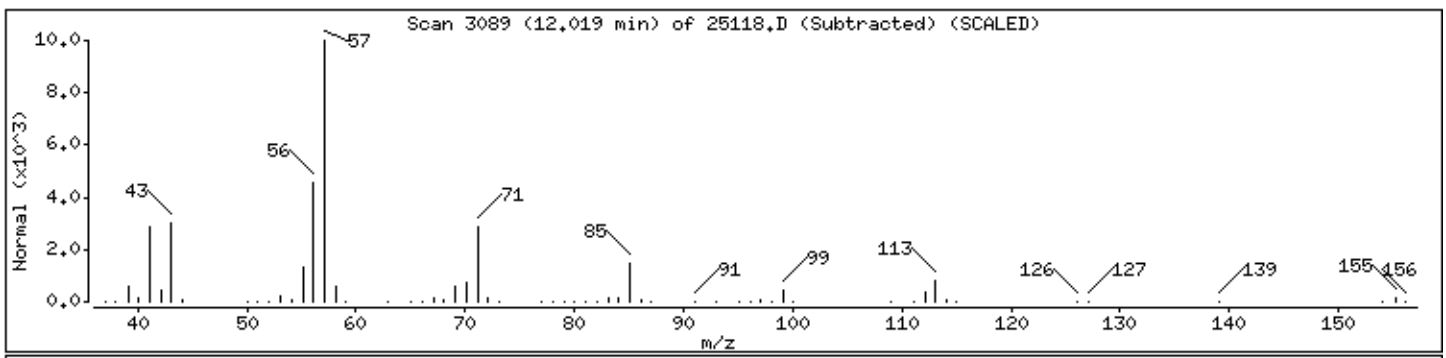
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

Client ID:

Instrument: 10airH.i

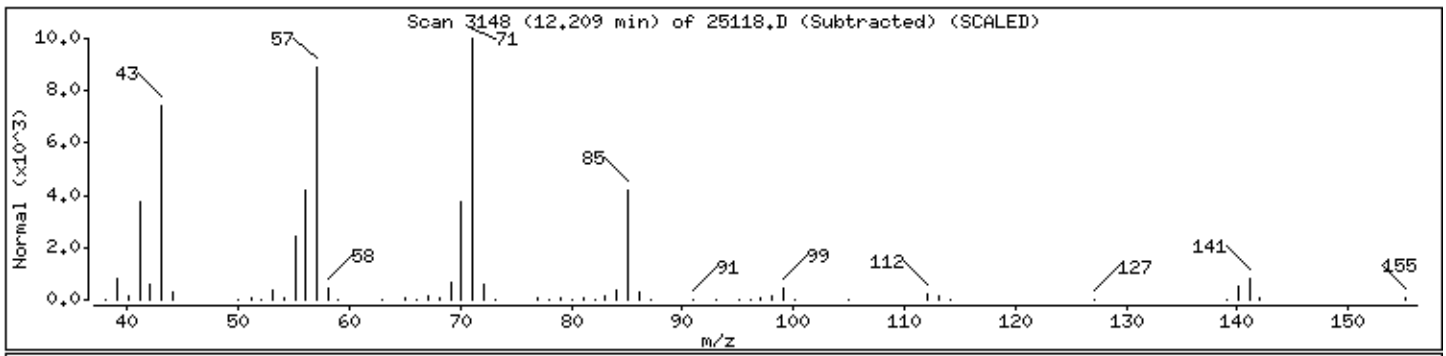
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

Client ID:

Instrument: 10airH.i

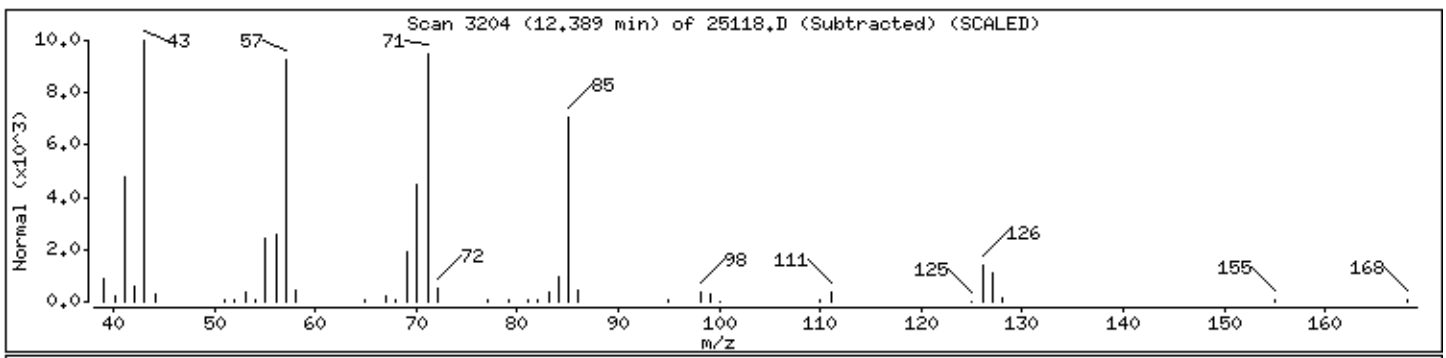
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

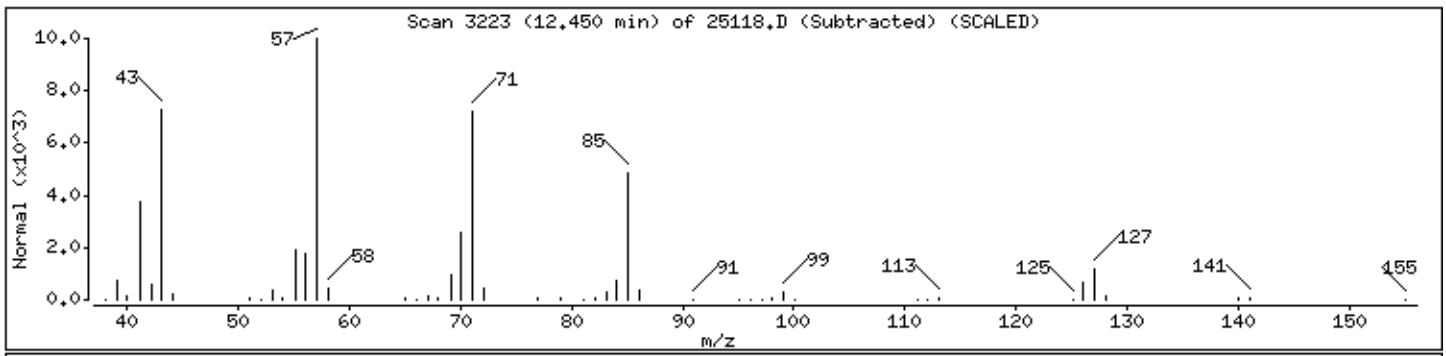
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25118.D

Date : 08-SEP-2021 19:40

Client ID:

Instrument: 10airH.i

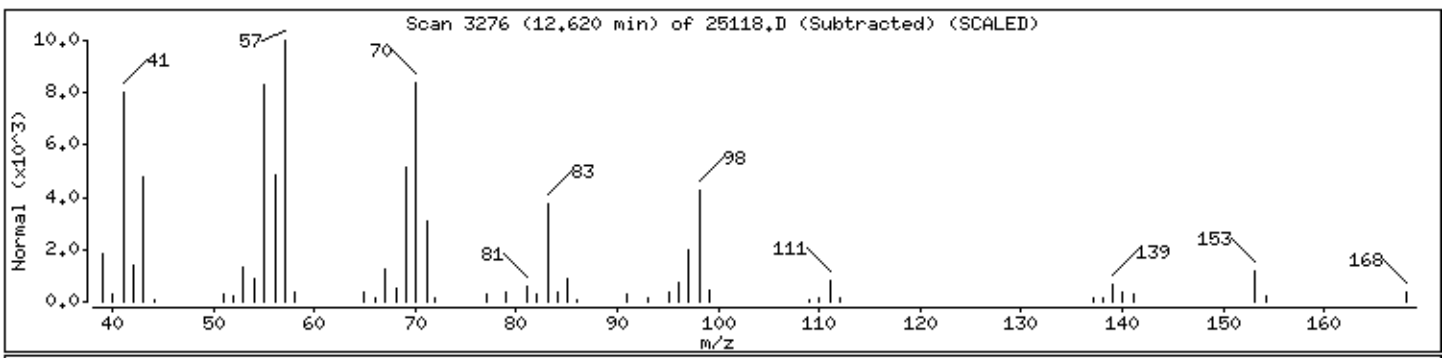
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25118.D
Injection Date: 08-SEP-2021 19:40
Instrument: 10airH.i
Lab Sample ID: 10577519013
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Lab Smp Id: 10577519001
Inj Date : 08-SEP-2021 21:04
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 23
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.045 | 7.061 | (1.000) | 1955844 | 10.0000 | |
| 48 Trichloroethene | 130 | 7.444 | 7.457 | (1.057) | 2720 | 0.04743 | 0.0996(a) |
| 62 Tetrachloroethene | 166 | 9.637 | 9.643 | (0.921) | 3404 | 0.04484 | 0.0942(a) |
| * 64 Chlorobenzene - d5 | 117 | 10.466 | 10.473 | (1.000) | 1499637 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Lab Smp Id: 10577519001
Inj Date : 08-SEP-2021 21:04
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 23
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.046 | 3930292 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.467 | 3948195 | 10.000 |

| RT | AREA | CONCENTRATIONS ON-COL( ppbv) | FINAL( ppbv) | QUAL | QUANT LIBRARY | LIB ENTRY | CPND # |
|---|---|---|---|---|---|---|---|
| Unknown | | | | | CAS #: | | |
| 3.608 | 50952682 | 129.640928 | 272 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | |
| 9.312 | 35716864 | 90.4637614 | 190 | 91 | NIST05.L | 73123 | 64 |
| Cyclotetrasiloxane, octamethyl- | | | | | CAS #: 556-67-2 | | |
| 12.544 | 32854847 | 83.2148367 | 175 | 91 | NIST05.L | 122480 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.637 | 11814585 | 29.9240106 | 62.8 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.933 | 36220375 | 91.7390533 | 193 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Report Date: 09-Sep-2021 15:03

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 14.126 | 5668735 | 14.3577864 | 30.2 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.213 | 27303182 | 69.1535667 | 145 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.280 | 22032181 | 55.8031626 | 117 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.483 | 18263936 | 46.2589408 | 97.1 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.672 | 7180434 | 18.1866205 | 38.2 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.740 | 8164916 | 20.6801182 | 43.4 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 25123.D
Lab Smp Id: 10577519001
Analysis Type: VOA
Quant Type: ISTD
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Calibration Date: 08-SEP-2021
Calibration Time: 09:52
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1955844 | -7.41 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1499637 | -9.38 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.23 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519001
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 21:04

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.608 | 272 | _J__ |
| 2. 541-05-9 | Cyclotrisiloxane, hexamethy | 9.312 | 190 | NJ__ |
| 3. 556-67-2 | Cyclotetrasiloxane, octamet | 12.544 | 175 | NJ__ |
| 4. | Unknown | 13.637 | 62.8 | _J__ |
| 5. | Unknown | 13.933 | 193 | _J__ |
| 6. | Unknown | 14.126 | 30.2 | _J__ |
| 7. | Unknown | 14.213 | 145 | _J__ |
| 8. | Unknown | 14.280 | 117 | _J__ |
| 9. | Unknown | 14.483 | 97.1 | _J__ |
| 10. | Unknown | 14.672 | 38.2 | _J__ |
| 11. | Unknown | 14.740 | 43.4 | _J__ |

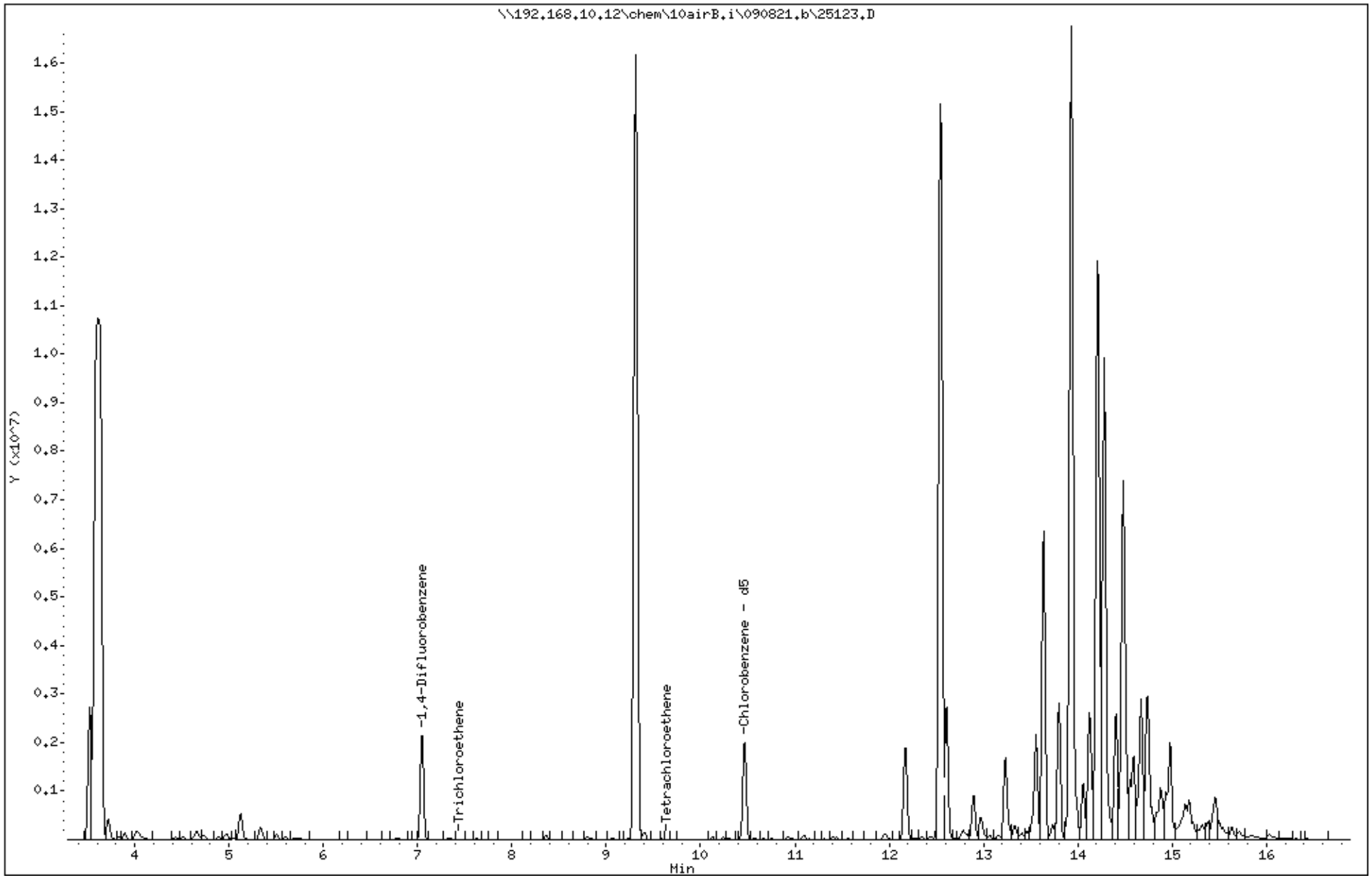
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D
Date : 08-SEP-2021 21:04
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

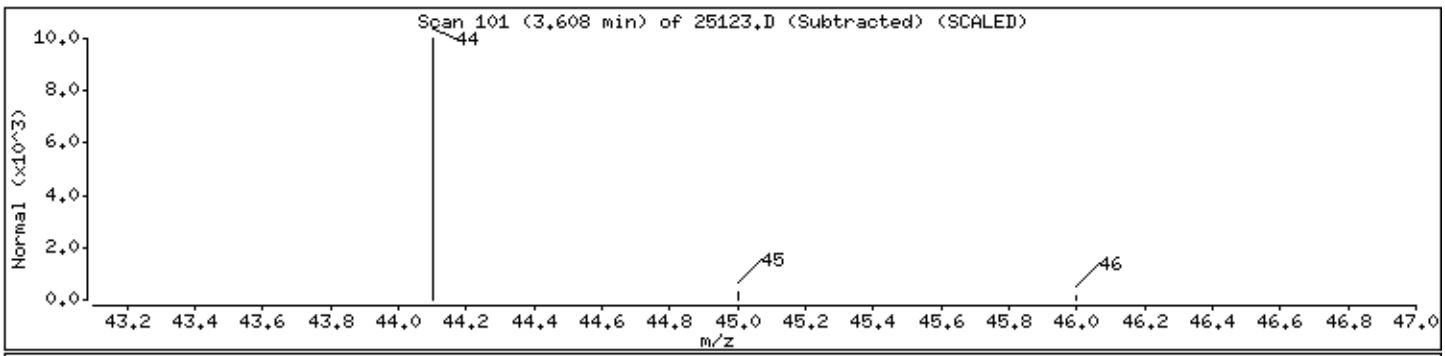
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

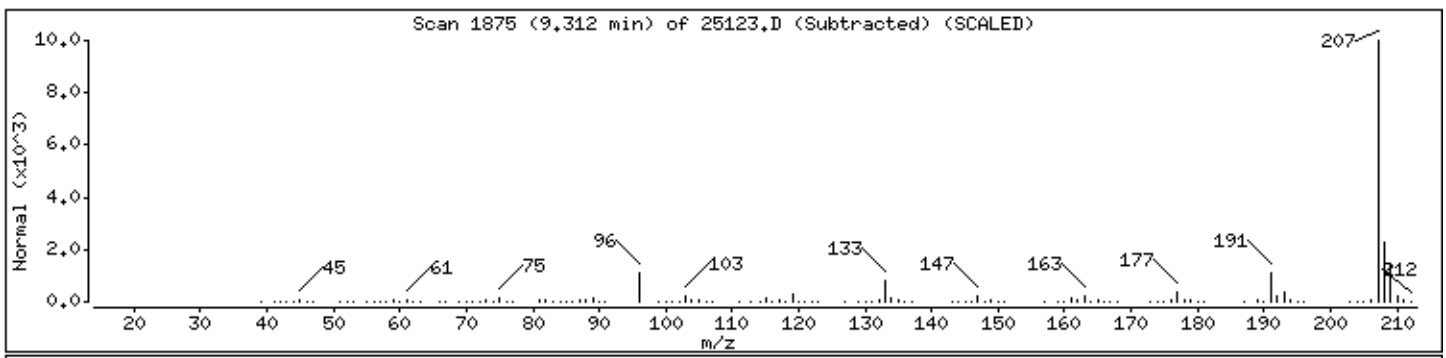
Client ID: Instrument: 10airB.i

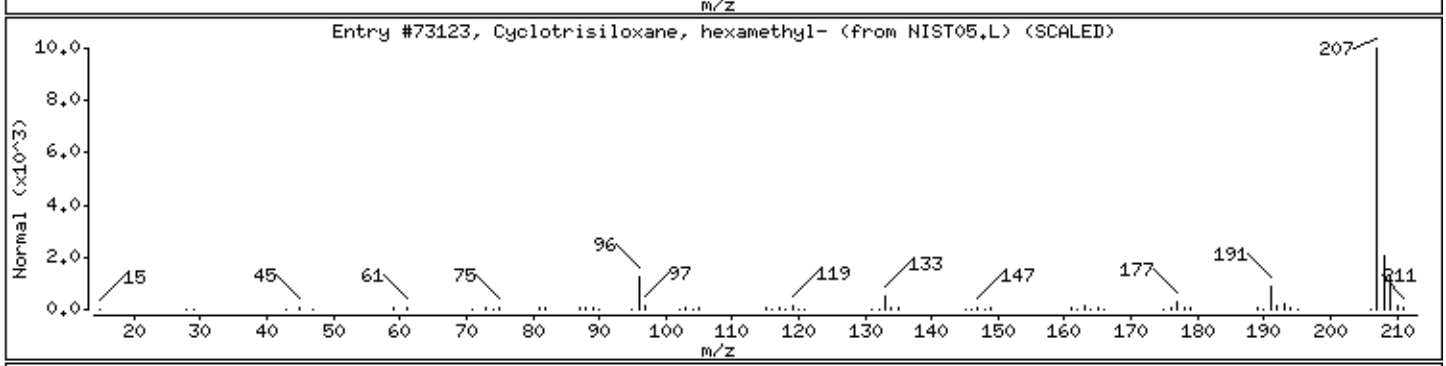
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 91 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

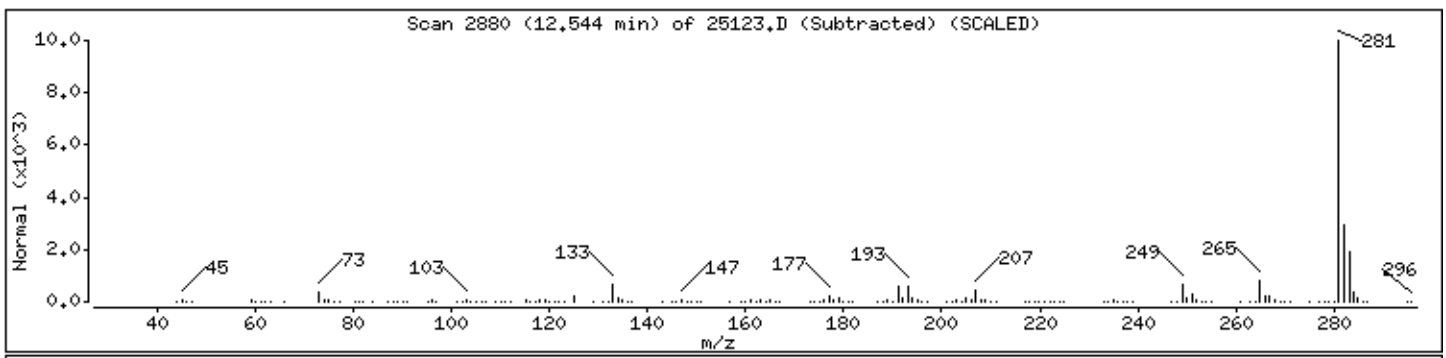
Client ID: Instrument: 10airB.i

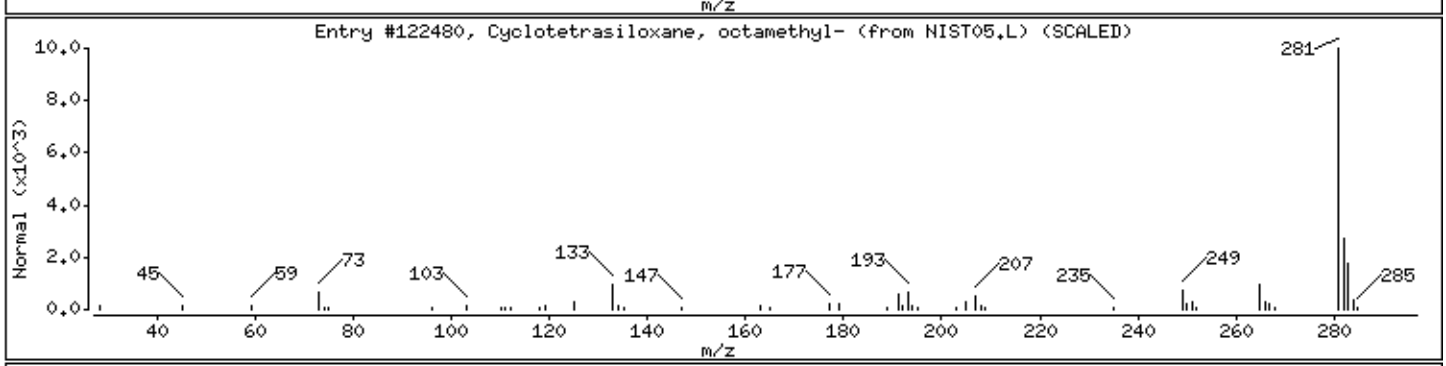
Sample Info:

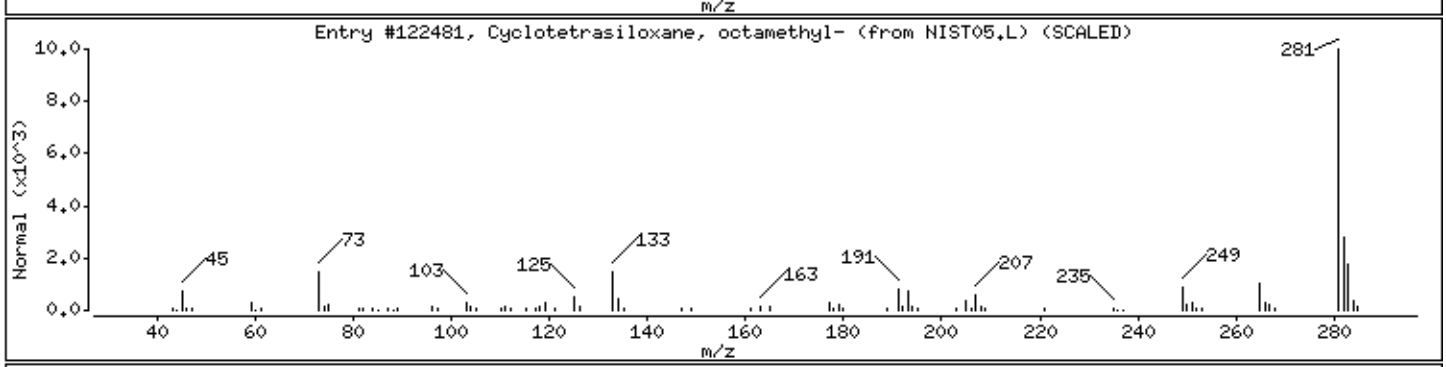
Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122480 | 91 | C8H24O4Si4 | 296 |
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122481 | 91 | C8H24O4Si4 | 296 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

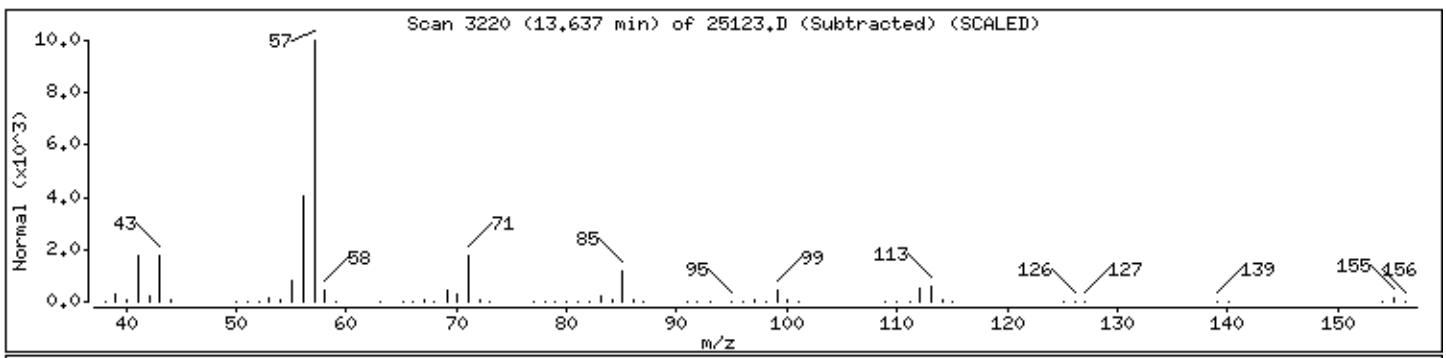
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

Client ID:

Instrument: 10airB.i

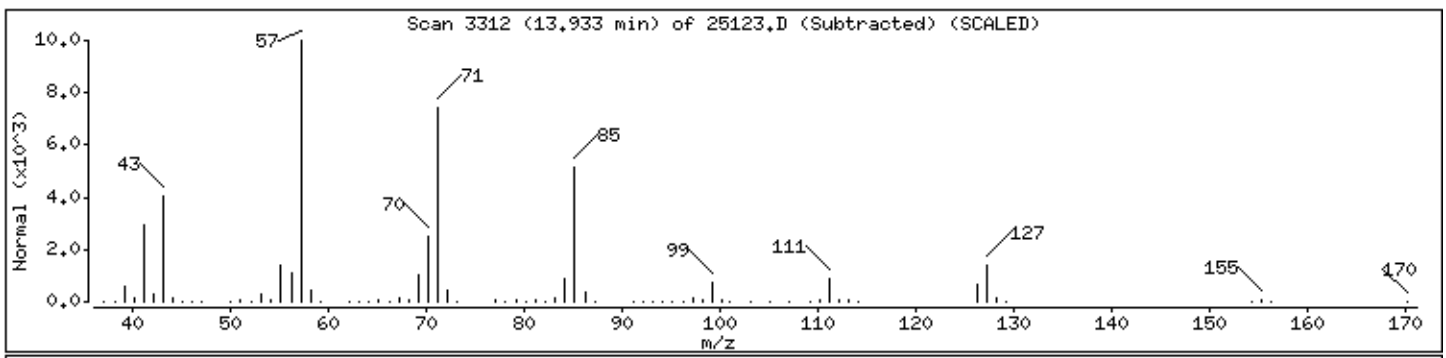
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

Client ID:

Instrument: 10airB.i

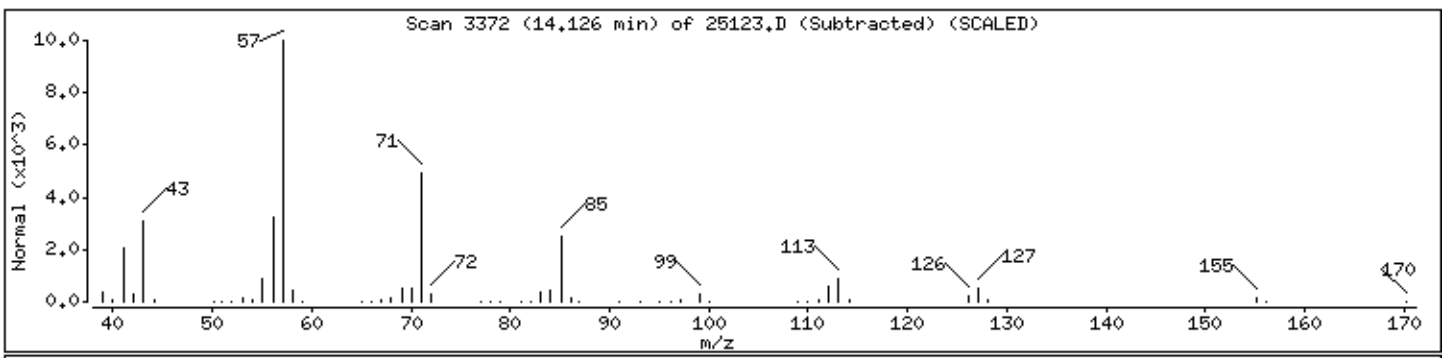
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

Client ID:

Instrument: 10airB.i

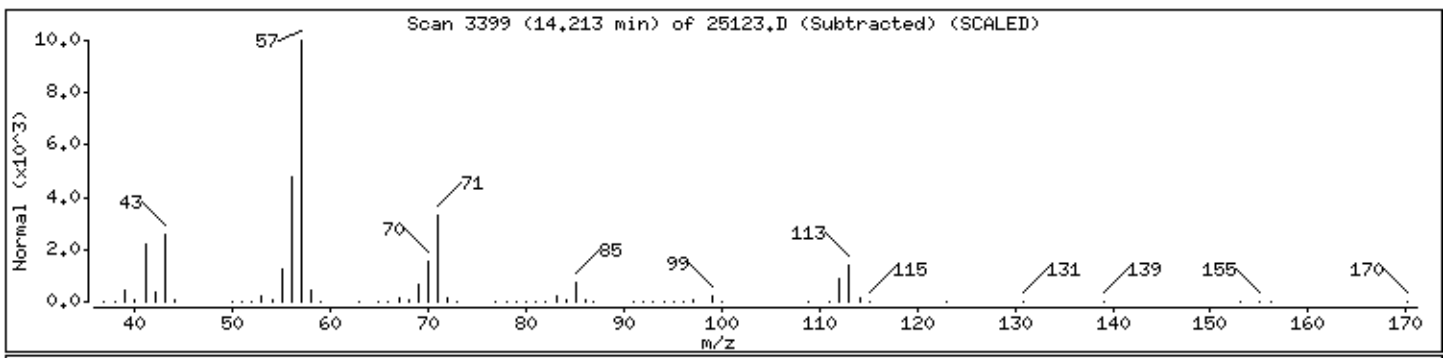
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

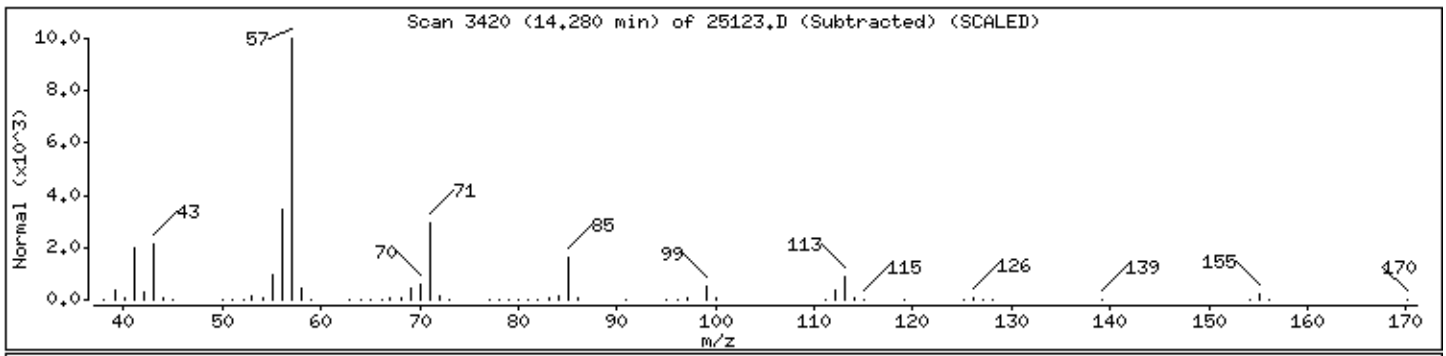
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

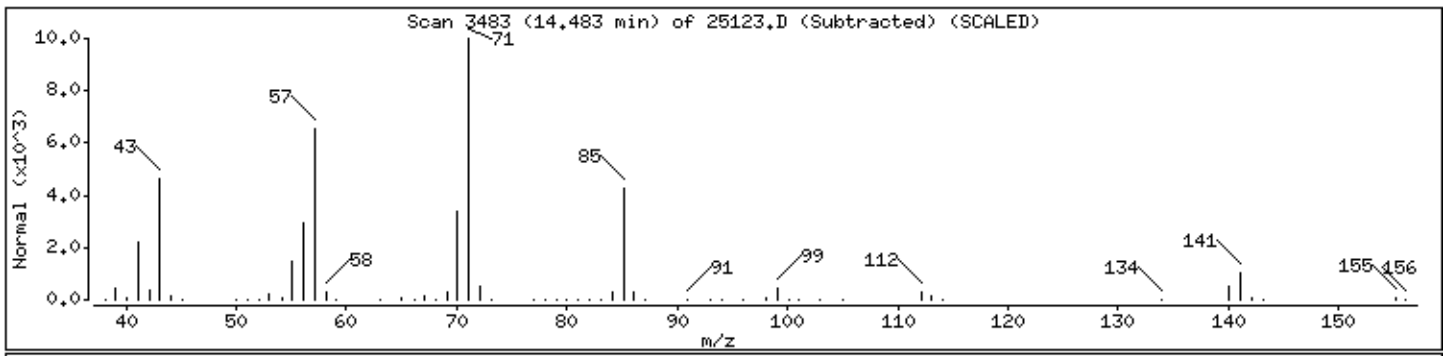
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

Client ID:

Instrument: 10airB.i

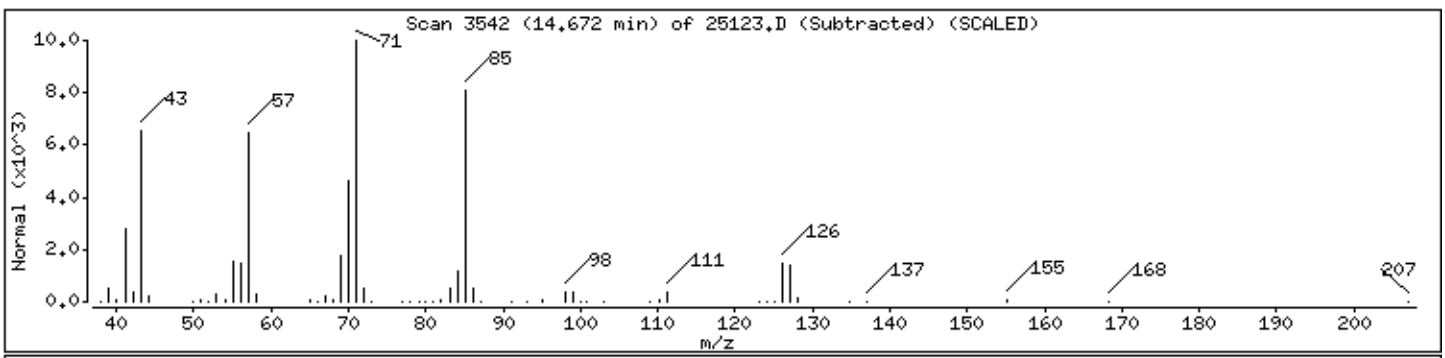
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25123.D

Date : 08-SEP-2021 21:04

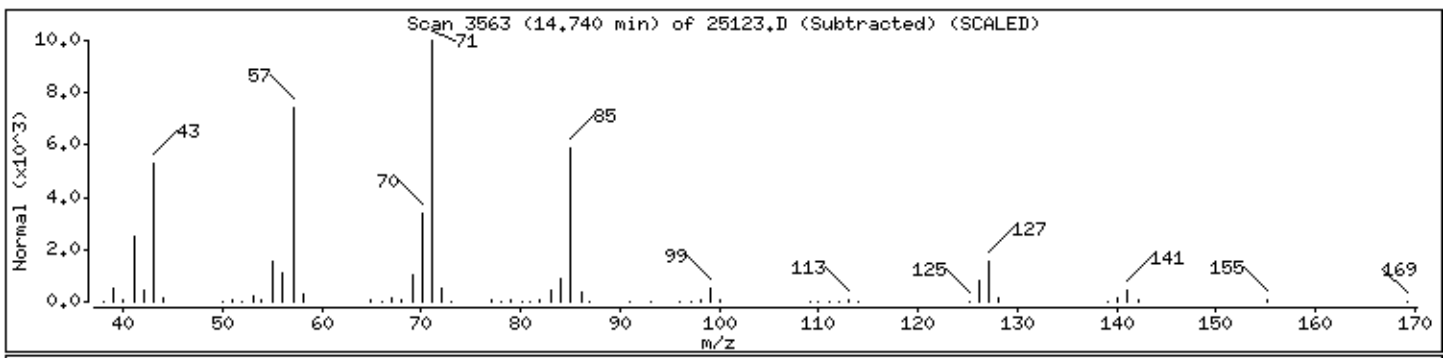
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25123.D
Injection Date: 08-SEP-2021 21:04
Instrument: 10airB.i
Lab Sample ID: 10577519001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Lab Smp Id: 10577519002
Inj Date : 08-SEP-2021 21:33
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 24
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.048 | 7.061 | (1.000) | 1924140 | 10.0000 | |
| 48 Trichloroethene | 130 | 7.444 | 7.457 | (1.056) | 15254 | 0.27039 | 0.568 |
| 62 Tetrachloroethene | 166 | 9.633 | 9.643 | (0.920) | 6364 | 0.08621 | 0.181 |
| * 64 Chlorobenzene - d5 | 117 | 10.466 | 10.473 | (1.000) | 1458387 | 10.0000 | |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Lab Smp Id: 10577519002
Inj Date : 08-SEP-2021 21:33
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 24
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.049 | 3867197 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.467 | 3879047 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 3.624 | 77893253 | 201.420392 | 423 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | |
| 9.312 | 5923960 | 15.2716885 | 32.1 | 91 | NIST05.L | 73123 | 64 |
| Cyclotetrasiloxane, octamethyl- | | | | | CAS #: 556-67-2 | | |
| 12.544 | 14722554 | 37.9540479 | 79.7 | 91 | NIST05.L | 122481 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.640 | 10999442 | 28.3560417 | 59.5 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.933 | 34477697 | 88.8818739 | 187 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Report Date: 09-Sep-2021 15:03

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | | CAS #: | | |
| 14.212 | 25827539 | 66.5821750 | 140 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.283 | 21164961 | 54.5622701 | 115 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.405 | 6040456 | 15.5720105 | 32.7 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.483 | 16805864 | 43.3247235 | 91.0 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.672 | 6155623 | 15.8689052 | 33.3 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.743 | 8884954 | 22.9049906 | 48.1 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 25124.D
Lab Smp Id: 10577519002
Analysis Type: VOA
Quant Type: ISTD
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Calibration Date: 08-SEP-2021
Calibration Time: 09:52
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1924140 | -8.91 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1458387 | -11.87 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.18 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519002
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 21:33

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.624 | 423 | _J__ |
| 2. 541-05-9 | Cyclotrisiloxane, hexamethy | 9.312 | 32.1 | NJ__ |
| 3. 556-67-2 | Cyclotetrasiloxane, octamet | 12.544 | 79.7 | NJ__ |
| 4. | Unknown | 13.640 | 59.5 | _J__ |
| 5. | Unknown | 13.933 | 187 | _J__ |
| 6. | Unknown | 14.212 | 140 | _J__ |
| 7. | Unknown | 14.283 | 115 | _J__ |
| 8. | Unknown | 14.405 | 32.7 | _J__ |
| 9. | Unknown | 14.483 | 91.0 | _J__ |
| 10. | Unknown | 14.672 | 33.3 | _J__ |
| 11. | Unknown | 14.743 | 48.1 | _J__ |

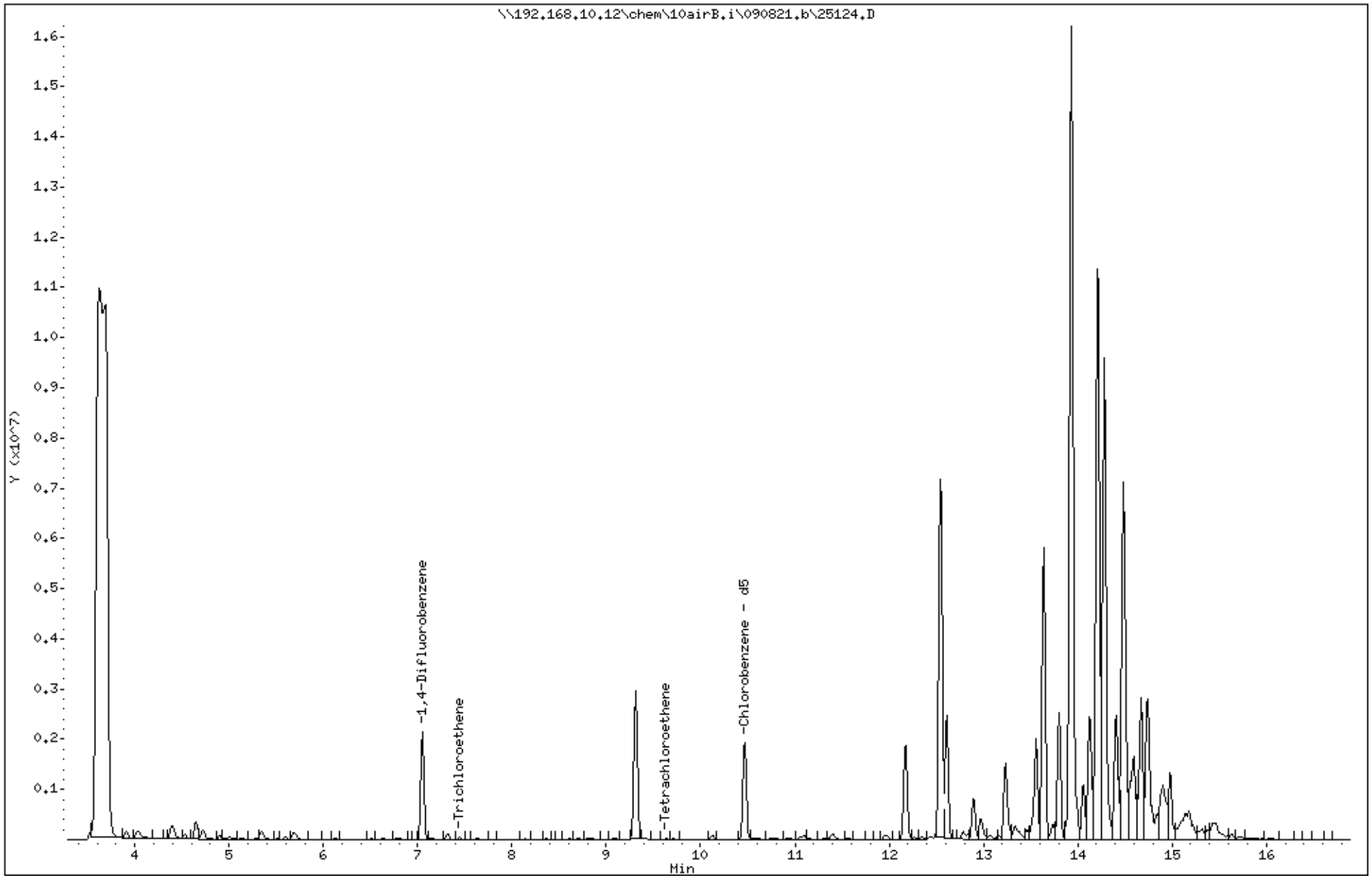
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D
Date : 08-SEP-2021 21:33
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

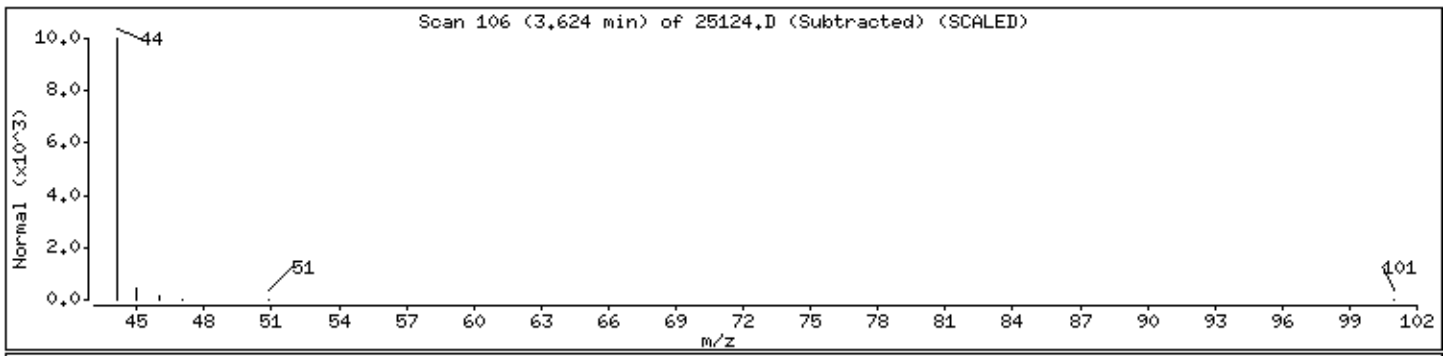
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

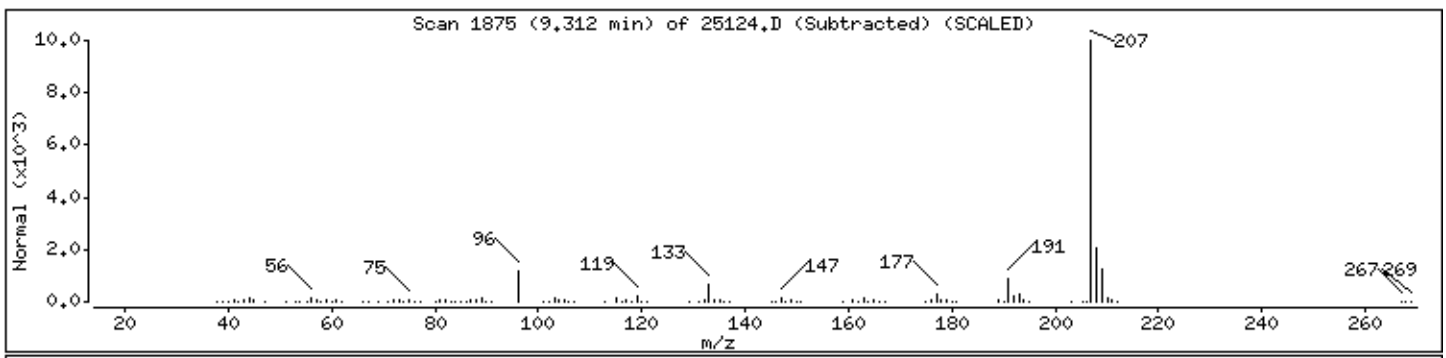
Client ID: Instrument: 10airB.i

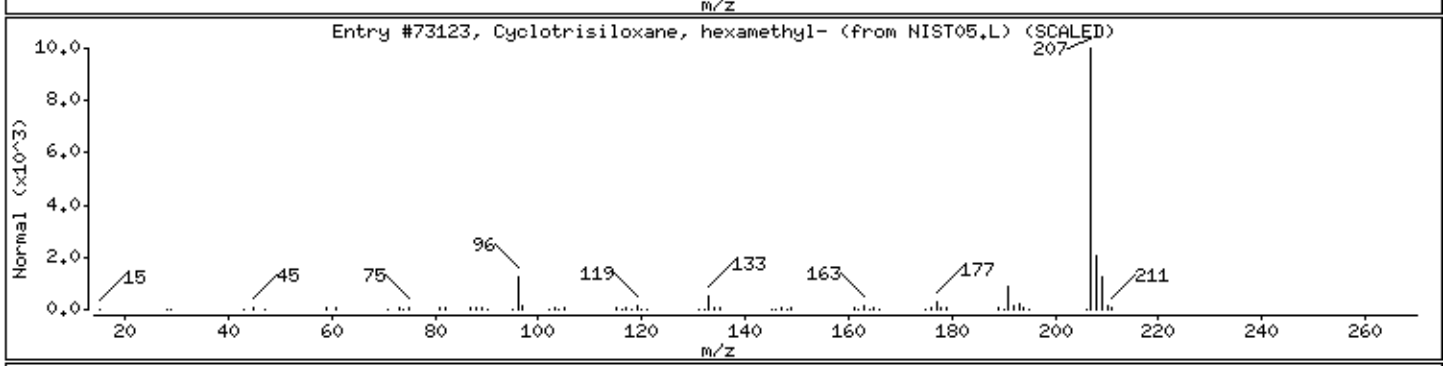
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 91 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

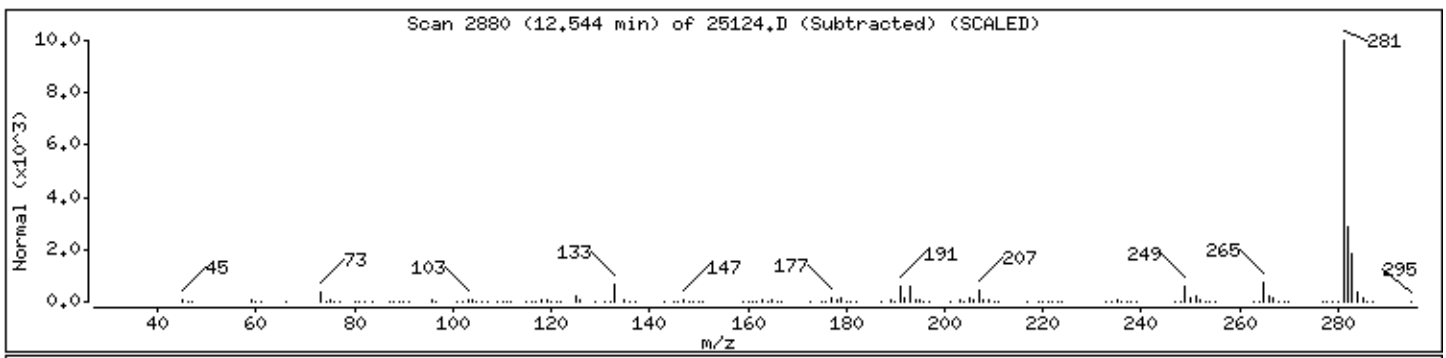
Client ID: Instrument: 10airB.i

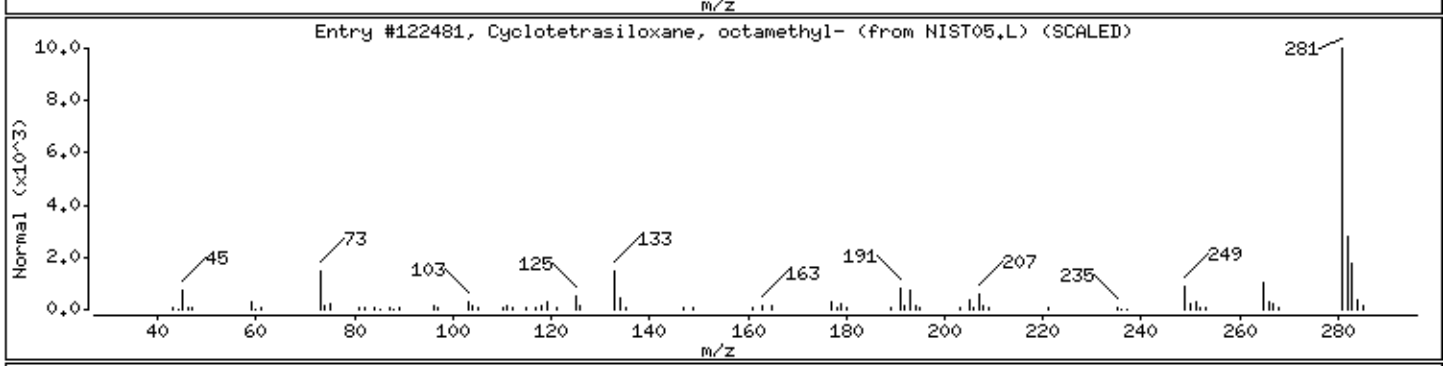
Sample Info:

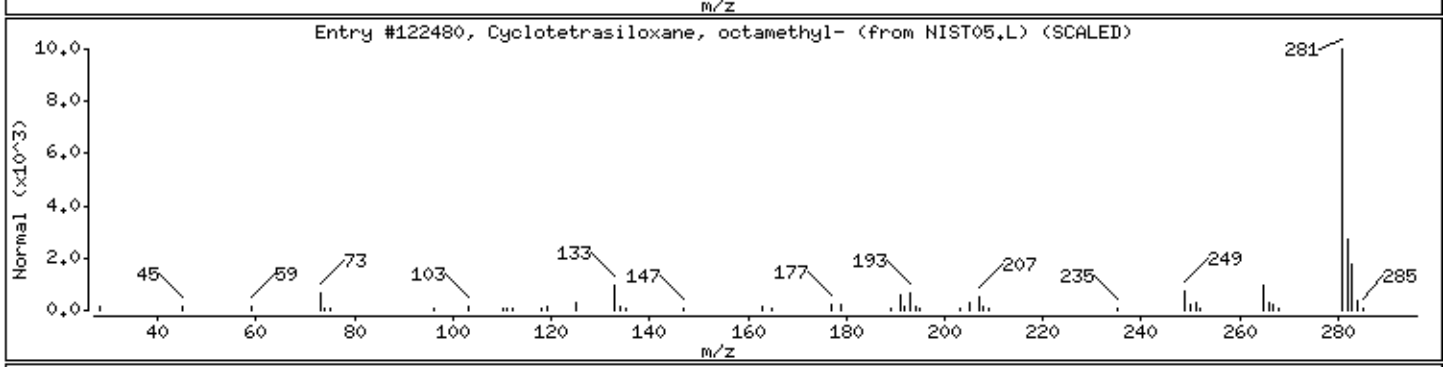
Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122481 | 91 | C8H24O4Si4 | 296 |
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122480 | 91 | C8H24O4Si4 | 296 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

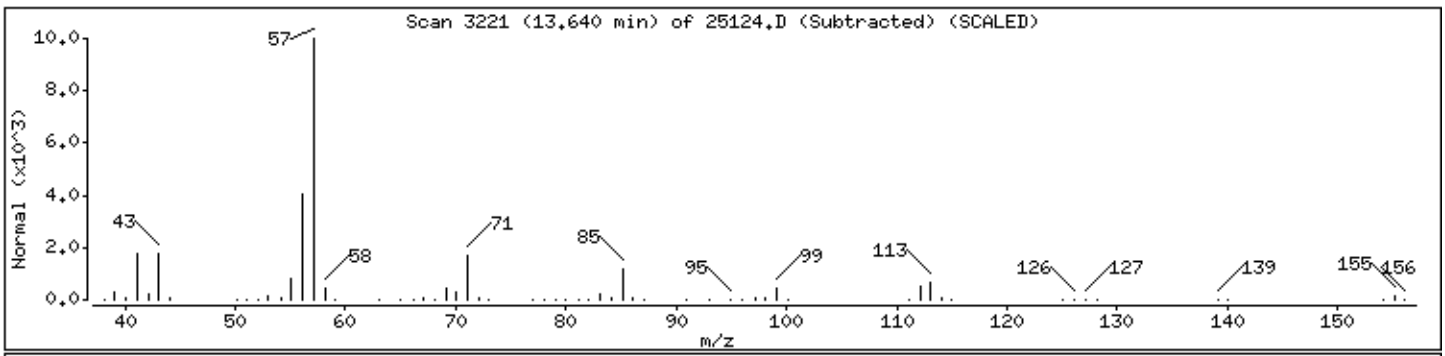
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

Client ID:

Instrument: 10airB.i

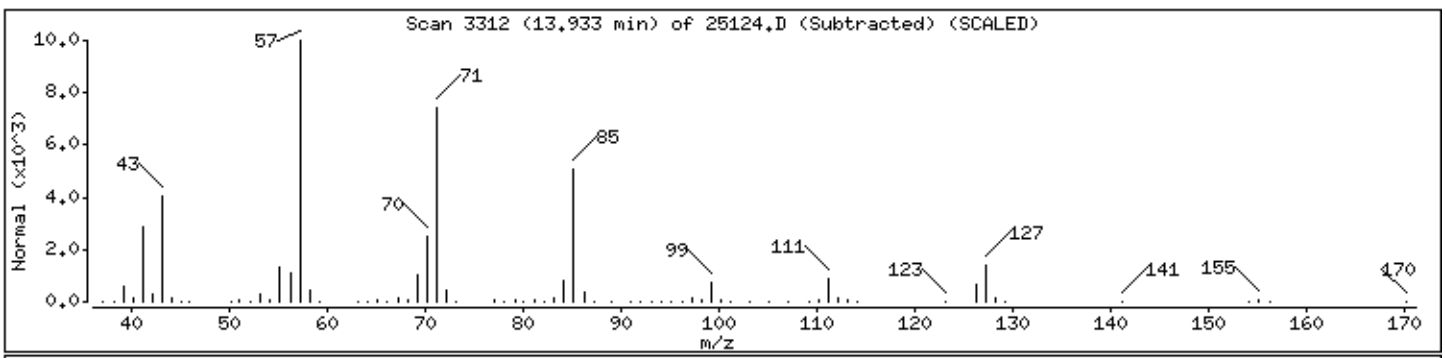
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

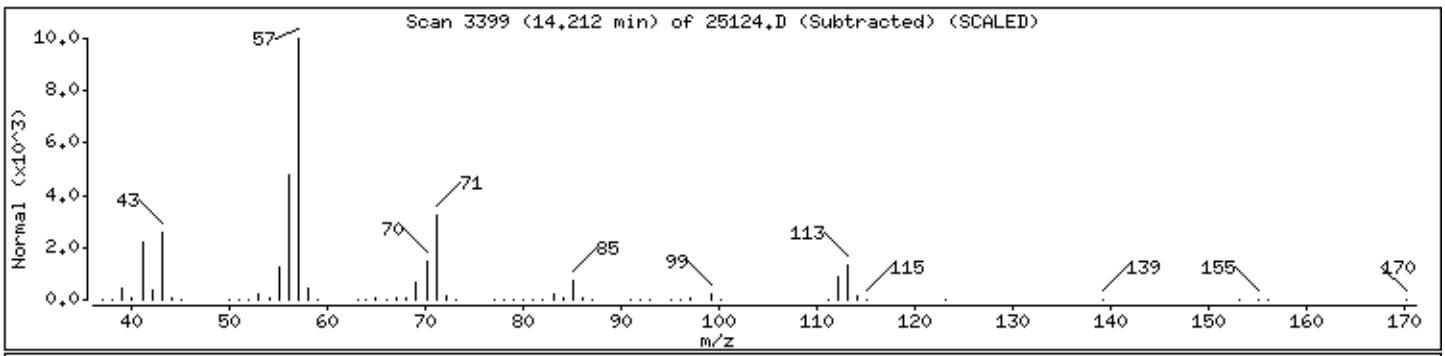
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

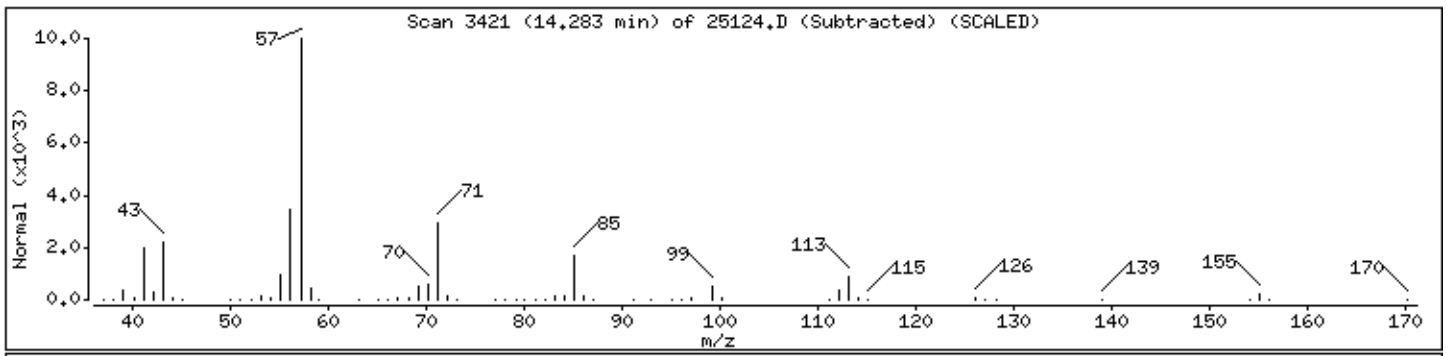
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

Client ID:

Instrument: 10airB.i

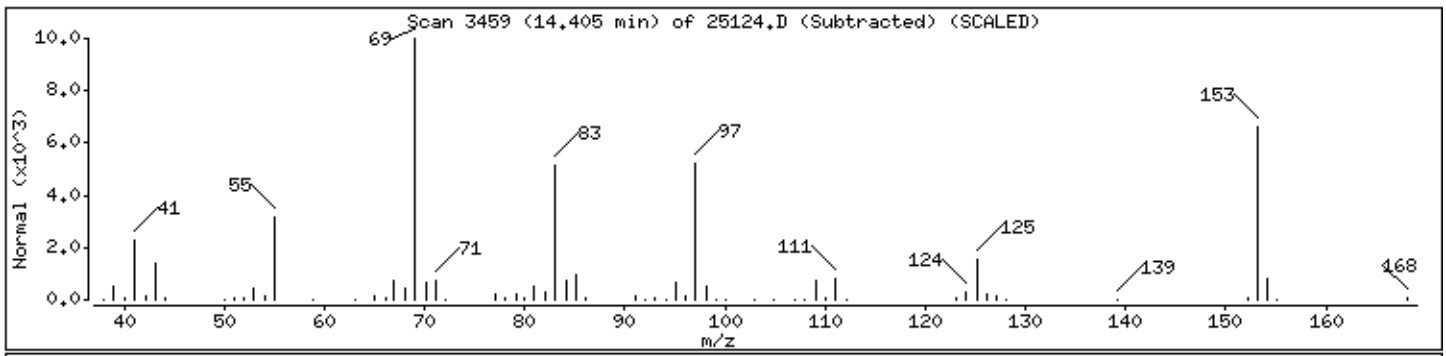
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

Client ID:

Instrument: 10airB.i

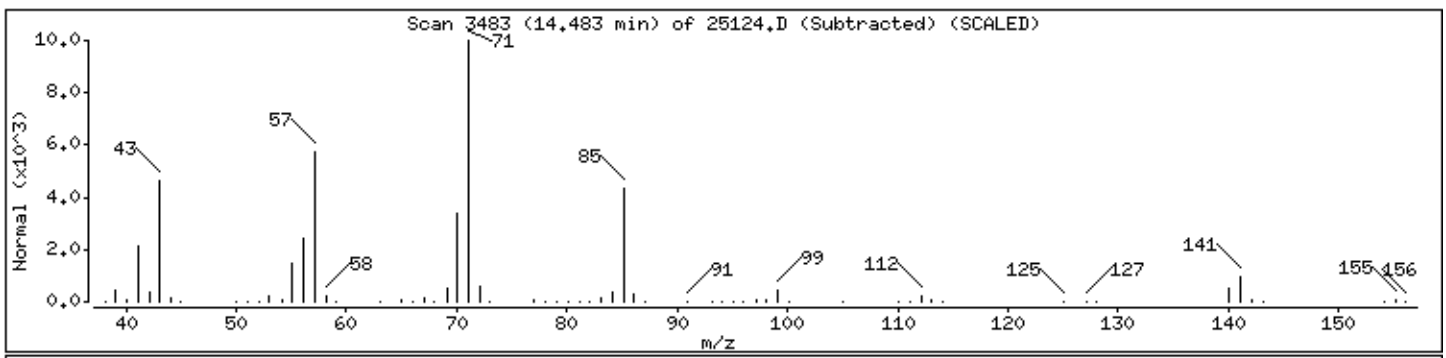
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

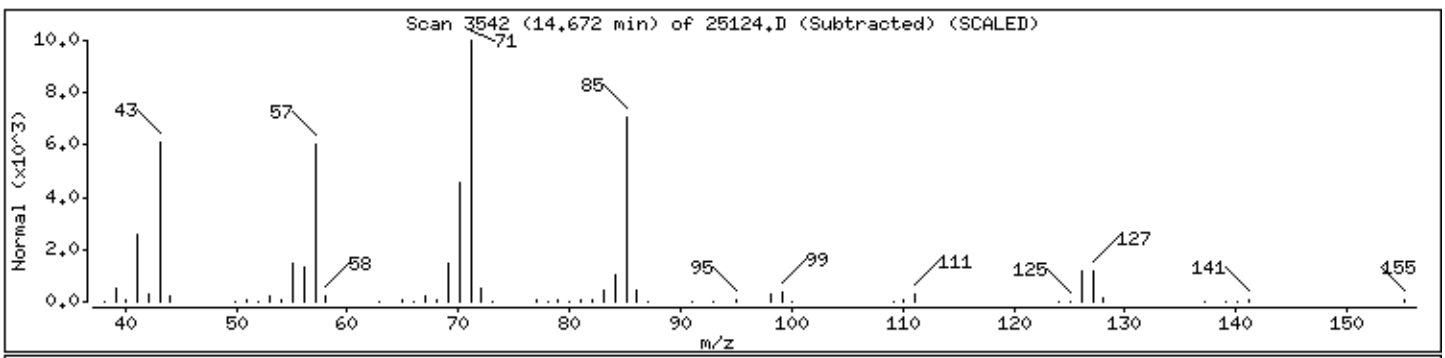
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25124.D

Date : 08-SEP-2021 21:33

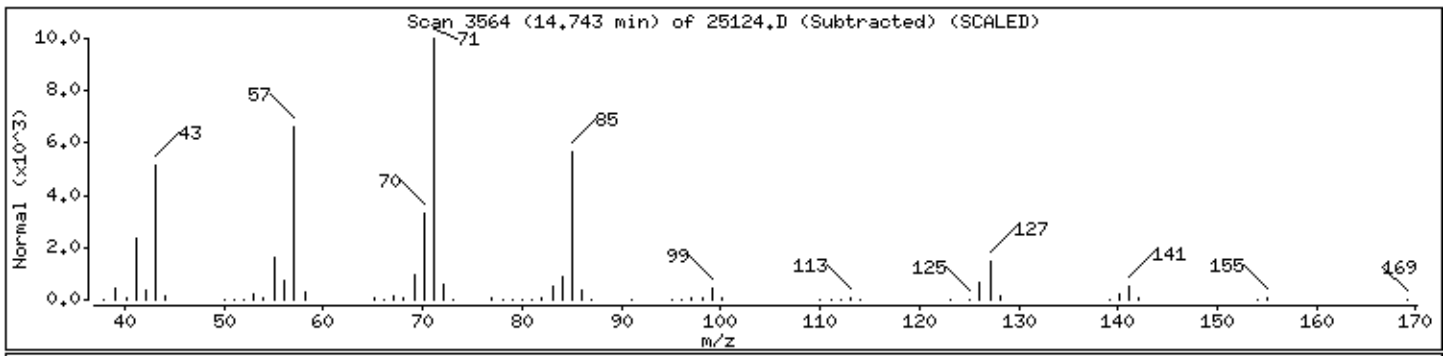
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25124.D
Injection Date: 08-SEP-2021 21:33
Instrument: 10airB.i
Lab Sample ID: 10577519002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Lab Smp Id: 10577519003
Inj Date : 08-SEP-2021 22:04
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 25
Dil Factor: 1.74000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.740 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) | |
|---|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.051 | 7.061 | (1.000) | 2010558 | 10.0000 | | |
| 48 Trichloroethene | 130 | Compound Not Detected. | | | | | | (D) |
| 62 Tetrachloroethene | 166 | 9.636 | 9.643 | (0.920) | 3466 | 0.04488 | 0.0781(a) | |
| * 64 Chlorobenzene - d5 | 117 | 10.469 | 10.473 | (1.000) | 1525749 | 10.0000 | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Lab Smp Id: 10577519003
Inj Date : 08-SEP-2021 22:04
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 25
Dil Factor: 1.74000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.740 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.052 | 4156591 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.470 | 4855904 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | CAS #: | | | |
| 3.618 | 28991338 | 69.7478576 | 121 | 0 | | 0 | 45 |
| Unknown | | | | CAS #: | | | |
| 3.737 | 7502892 | 18.0505864 | 31.4 | 0 | | 0 | 45 |
| Unknown | | | | CAS #: | | | |
| 4.602 | 10012921 | 24.0892562 | 41.9 | 0 | | 0 | 45 |
| Cyclotetrasiloxane, octamethyl- | | | | CAS #: 556-67-2 | | | |
| 12.544 | 10254621 | 21.1178399 | 36.7 | 91 | NIST05.L | 122481 | 64 |
| Unknown | | | | CAS #: | | | |
| 13.637 | 9484897 | 19.5327090 | 34.0 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Report Date: 09-Sep-2021 15:03

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | | CAS #: | | |
| 13.933 | 30311639 | 62.4222322 | 109 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.209 | 22002496 | 45.3108090 | 78.8 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.280 | 17826731 | 36.7114538 | 63.9 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.482 | 14680057 | 30.2313556 | 52.6 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.672 | 6266483 | 12.9048731 | 22.5 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.736 | 8684009 | 17.8834015 | 31.1 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Calibration Date: 08-SEP-2021
Lab File ID: 25125.D
Calibration Time: 09:52
Lab Smp Id: 10577519003
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 2010558 | -4.82 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1525749 | -7.80 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.14 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.03 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519003
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 22:04

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.618 | 121 | _J__ |
| 2. | Unknown | 3.737 | 31.4 | _J__ |
| 3. | Unknown | 4.602 | 41.9 | _J__ |
| 4. 556-67-2 | Cyclotetrasiloxane, octamet | 12.544 | 36.7 | NJ__ |
| 5. | Unknown | 13.637 | 34.0 | _J__ |
| 6. | Unknown | 13.933 | 109 | _J__ |
| 7. | Unknown | 14.209 | 78.8 | _J__ |
| 8. | Unknown | 14.280 | 63.9 | _J__ |
| 9. | Unknown | 14.482 | 52.6 | _J__ |
| 10. | Unknown | 14.672 | 22.5 | _J__ |
| 11. | Unknown | 14.736 | 31.1 | _J__ |

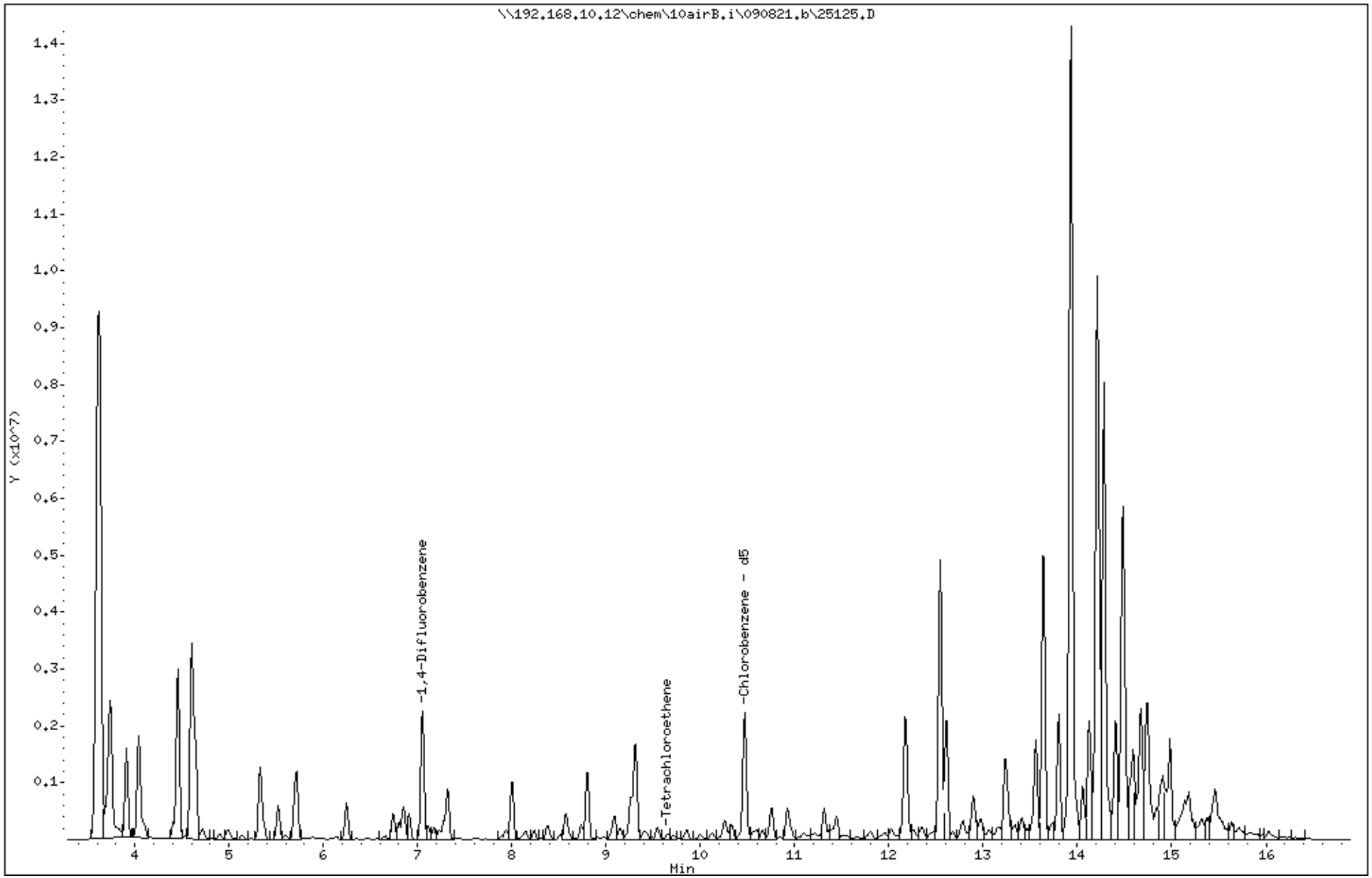
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D
Date : 08-SEP-2021 22:04
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

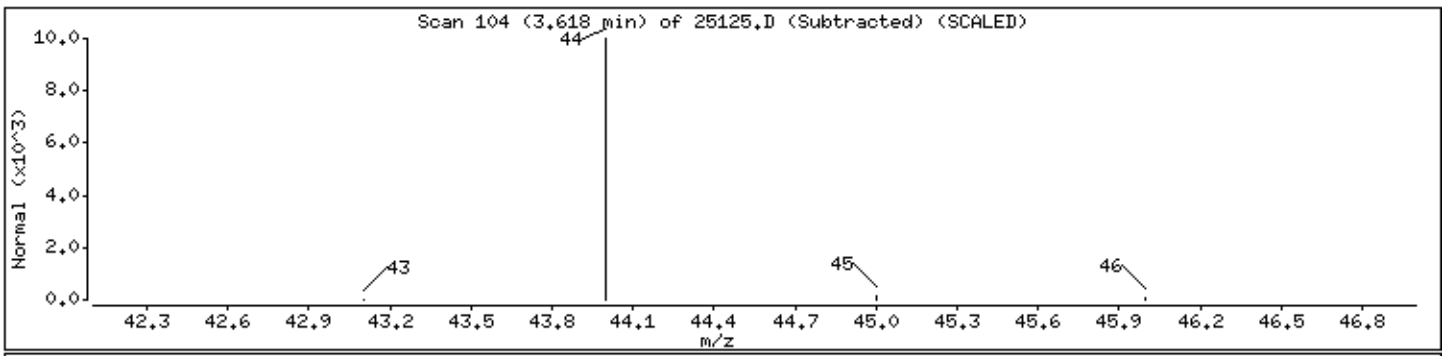
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

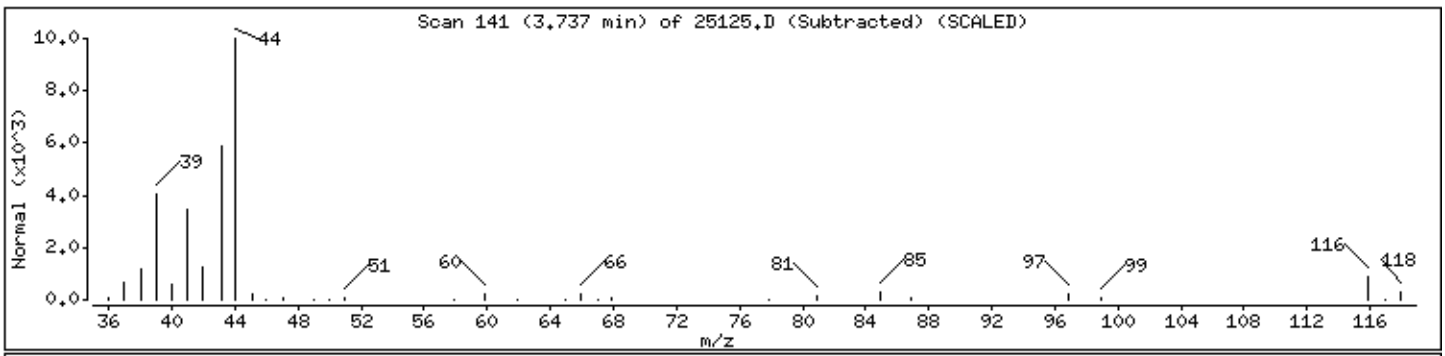
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

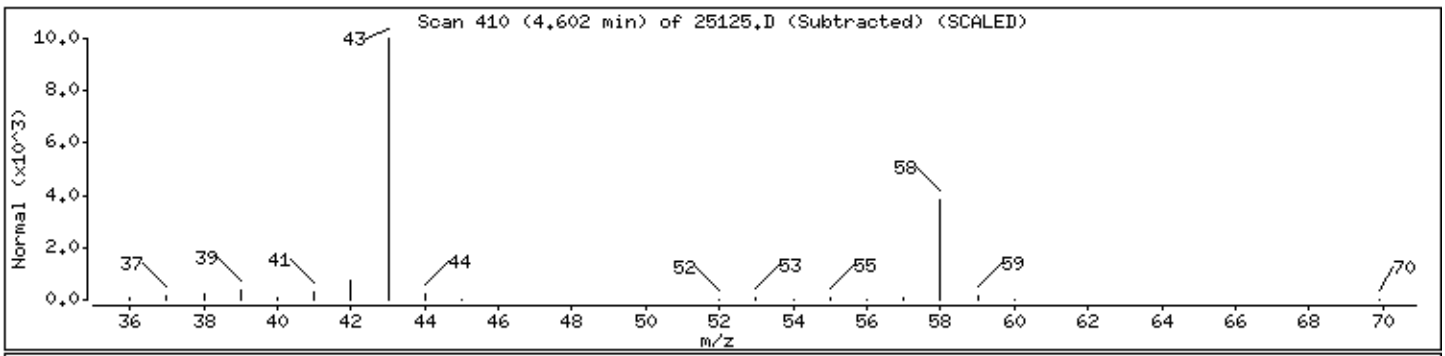
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

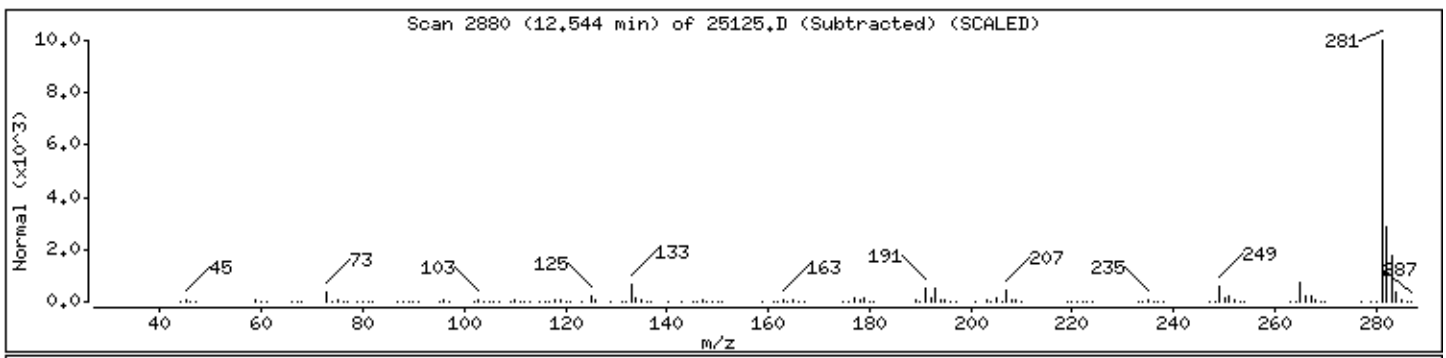
Client ID: Instrument: 10airB.i

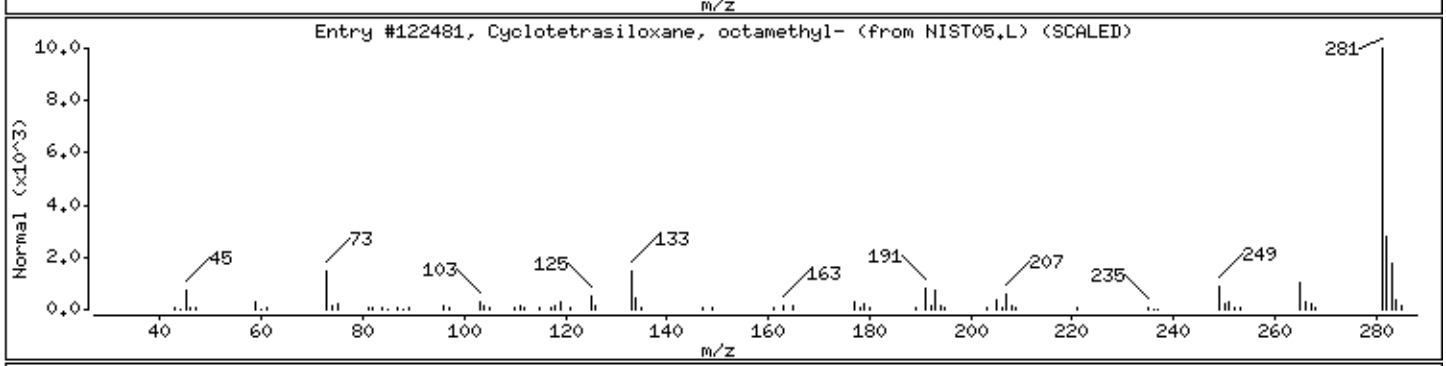
Sample Info:

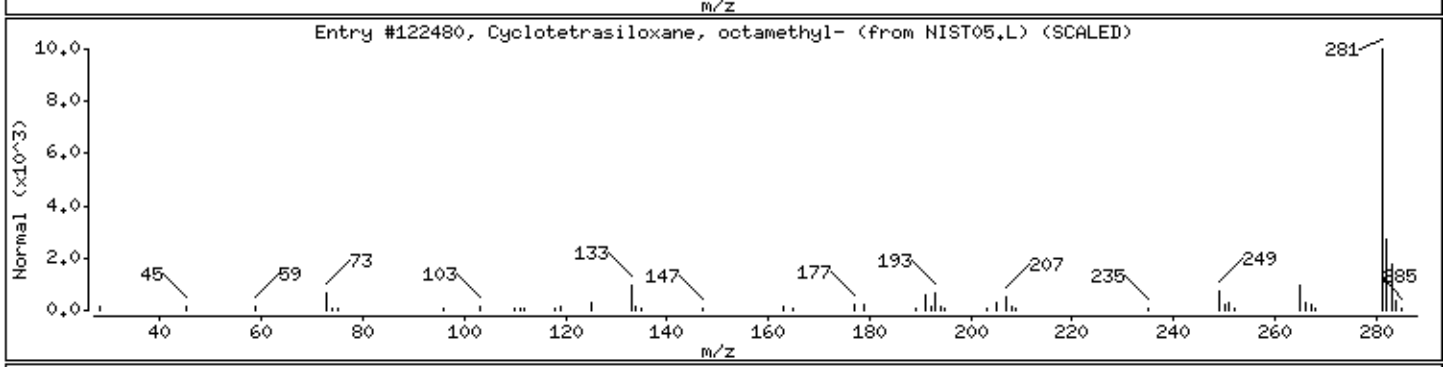
Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122481 | 91 | C8H24O4Si4 | 296 |
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122480 | 91 | C8H24O4Si4 | 296 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

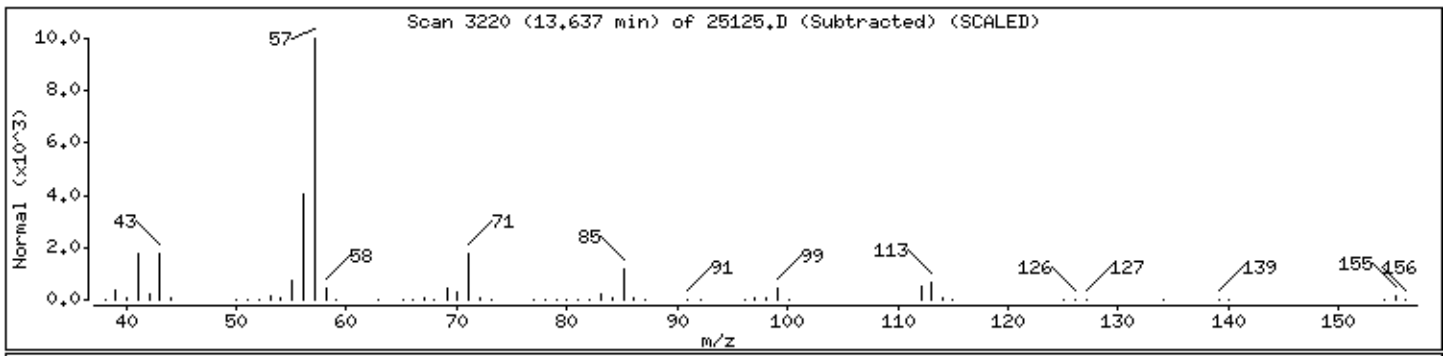
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

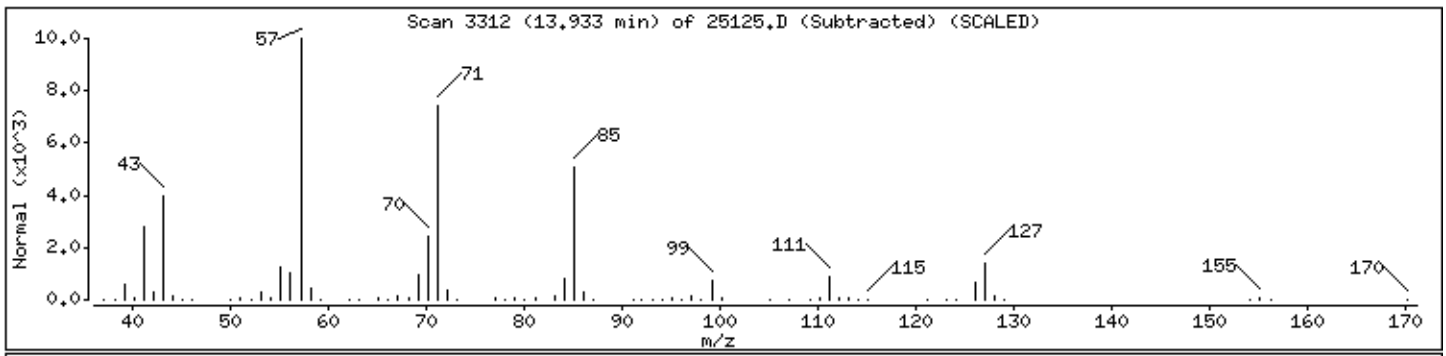
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

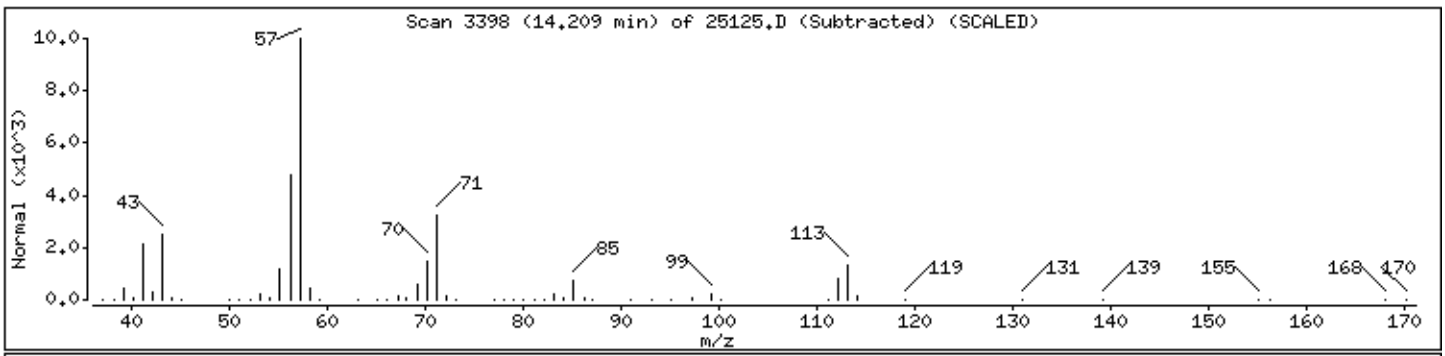
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

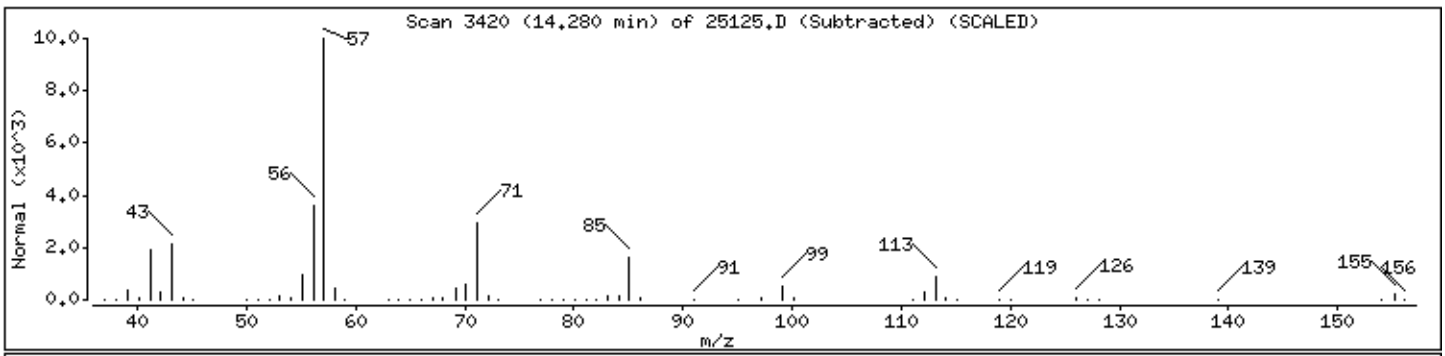
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

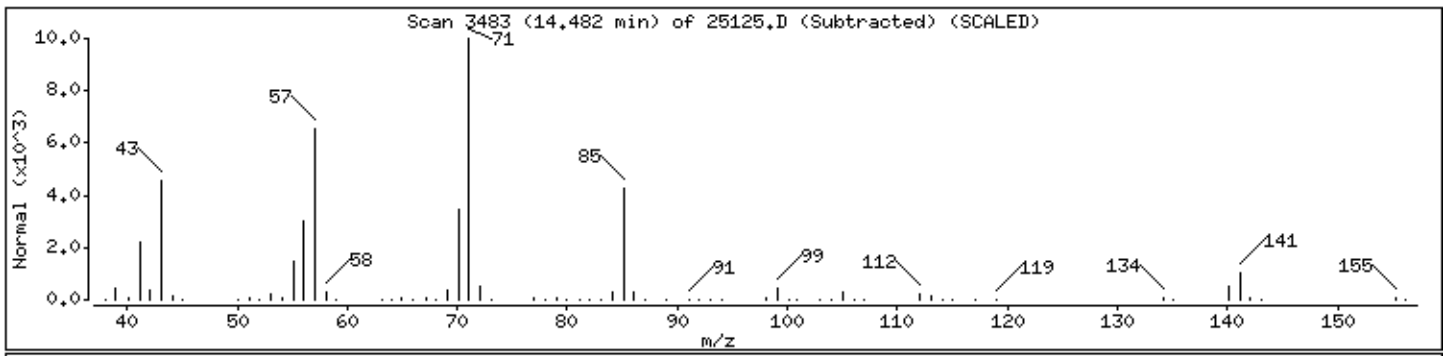
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

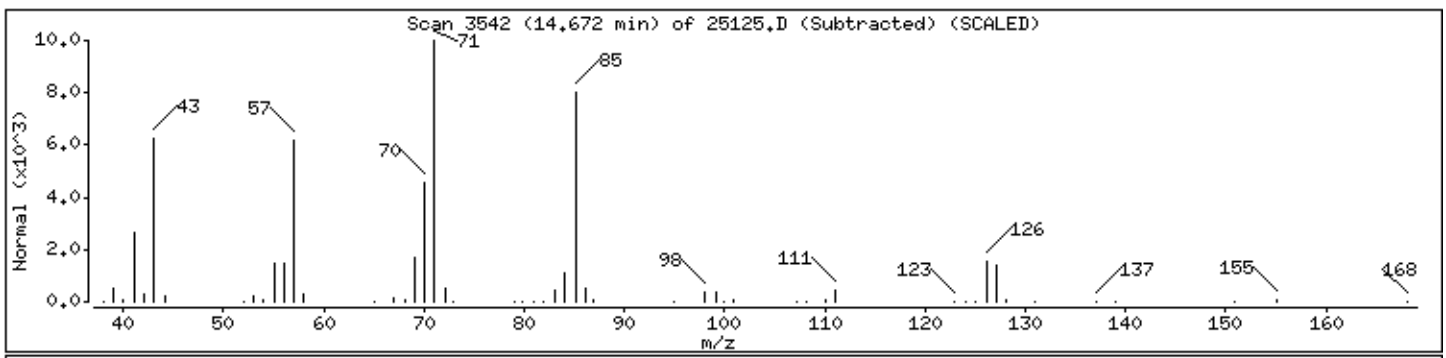
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25125.D

Date : 08-SEP-2021 22:04

Client ID:

Instrument: 10airB.i

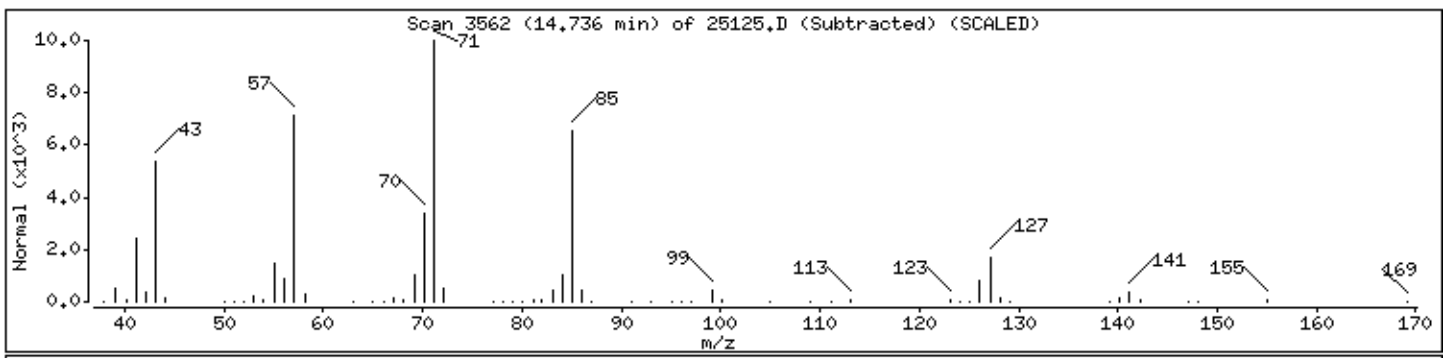
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25125.D
Injection Date: 08-SEP-2021 22:04
Instrument: 10airB.i
Lab Sample ID: 10577519003
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Lab Smp Id: 10577519004
Inj Date : 08-SEP-2021 23:34
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 28
Dil Factor: 1.94000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.940 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.048 | 7.061 | (1.000) | 1942016 | 10.0000 | |
| 48 Trichloroethene | 130 | 7.441 | 7.457 | (1.056) | 3172 | 0.05571 | 0.108 |
| 62 Tetrachloroethene | 166 | 9.640 | 9.643 | (0.921) | 1015 | 0.01363 | 0.0265(a) |
| * 64 Chlorobenzene - d5 | 117 | 10.466 | 10.473 | (1.000) | 1470606 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Lab Smp Id: 10577519004
Inj Date : 08-SEP-2021 23:34
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 28
Dil Factor: 1.94000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.940 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.049 | 3895269 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.467 | 3881850 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | | |
|---|---|---|---|---|---|---|---|---|
| | RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | | |
| | 3.628 | 41776286 | 107.248757 | 208 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | | |
| | 9.309 | 6613105 | 17.0359609 | 33.0 | 91 | NIST05.L | 73123 | 64 |
| Benzene, 1-bromo-3-fluoro- | | | | | CAS #: 1073-06-9 | | | |
| | 12.174 | 3847622 | 9.91182496 | 19.2 | 97 | NIST05.L | 39151 | 64 |
| Cyclotetrasiloxane, octamethyl- | | | | | CAS #: 556-67-2 | | | |
| | 12.544 | 9057659 | 23.3333559 | 45.3 | 91 | NIST05.L | 122481 | 64 |
| Unknown | | | | | CAS #: | | | |
| | 13.634 | 5767388 | 14.8573164 | 28.8 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Report Date: 09-Sep-2021 15:03

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 13.930 | 17489668 | 45.0549803 | 87.4 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.209 | 12096459 | 31.1615821 | 60.5 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.277 | 13163838 | 33.9112461 | 65.8 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.479 | 9450721 | 24.3459183 | 47.2 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.669 | 3622229 | 9.33119217 | 18.1 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.737 | 4525159 | 11.6572220 | 22.6 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Calibration Date: 08-SEP-2021
Lab File ID: 25128.D
Calibration Time: 09:52
Lab Smp Id: 10577519004
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1942016 | -8.06 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1470606 | -11.13 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.18 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519004
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 23:34

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.628 | 208 | _J__ |
| 2. 541-05-9 | Cyclotrisiloxane, hexamethy | 9.309 | 33.0 | NJ__ |
| 3. 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 12.174 | 19.2 | NJ__ |
| 4. 556-67-2 | Cyclotetrasiloxane, octamet | 12.544 | 45.3 | NJ__ |
| 5. | Unknown | 13.634 | 28.8 | _J__ |
| 6. | Unknown | 13.930 | 87.4 | _J__ |
| 7. | Unknown | 14.209 | 60.5 | _J__ |
| 8. | Unknown | 14.277 | 65.8 | _J__ |
| 9. | Unknown | 14.479 | 47.2 | _J__ |
| 10. | Unknown | 14.669 | 18.1 | _J__ |
| 11. | Unknown | 14.737 | 22.6 | _J__ |

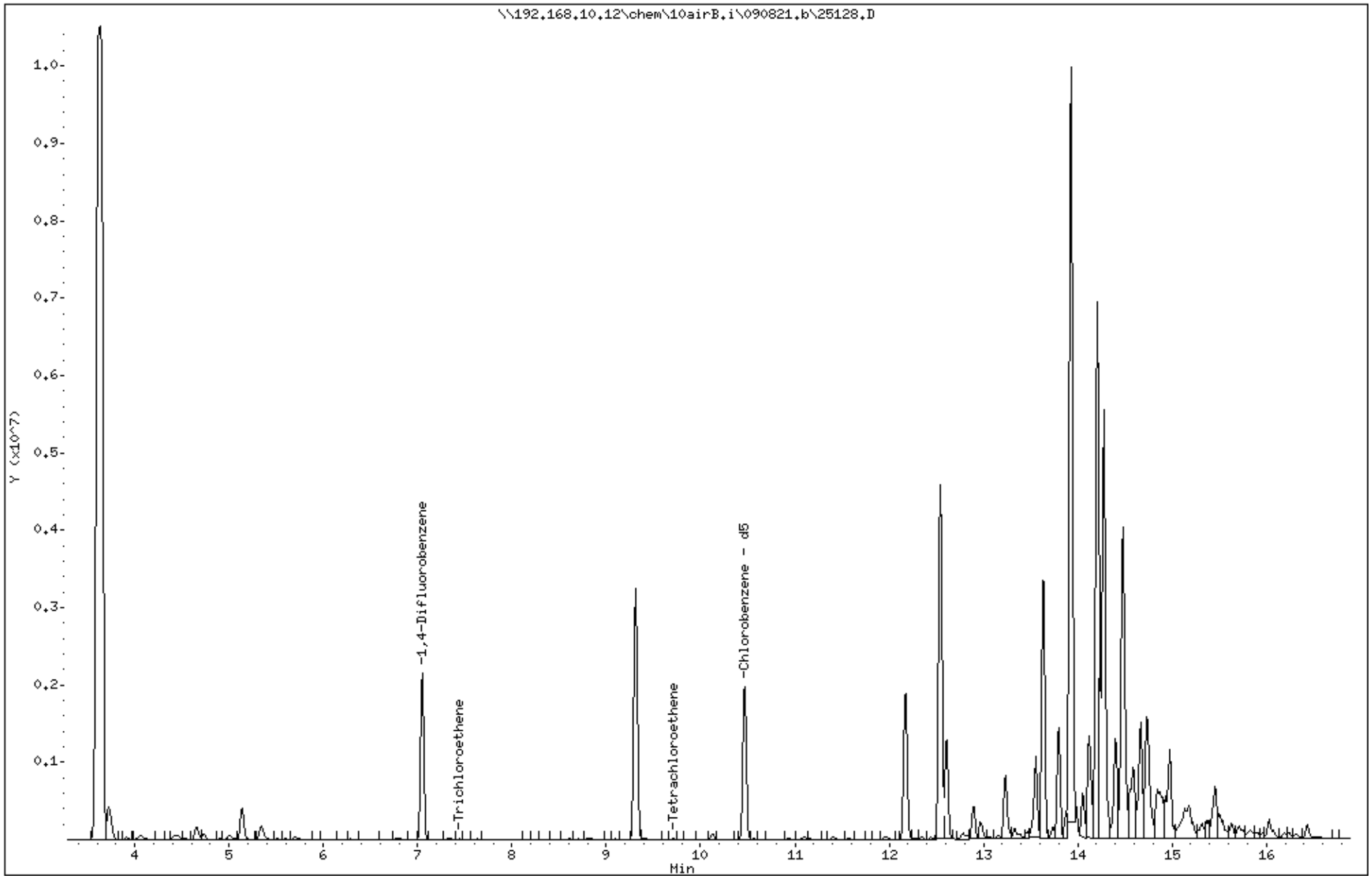
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D
Date : 08-SEP-2021 23:34
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

Client ID:

Instrument: 10airB.i

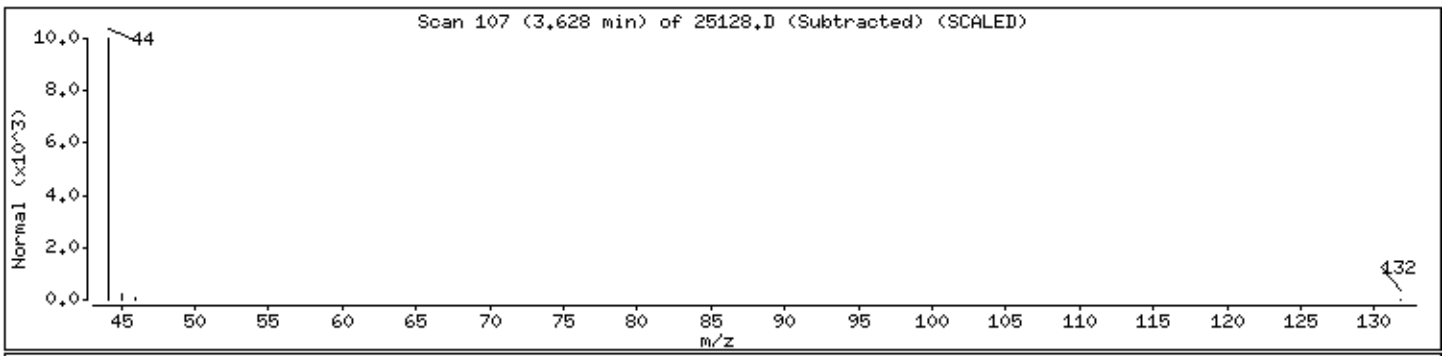
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

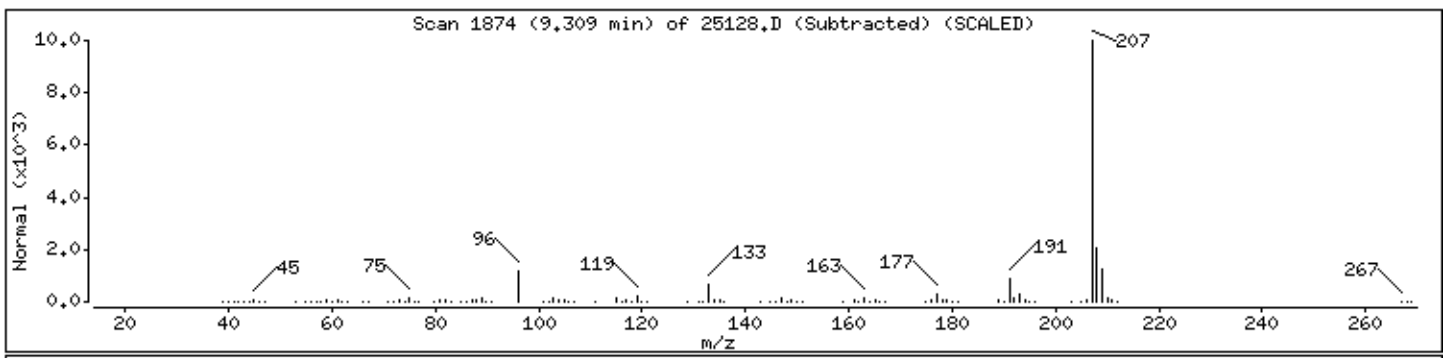
Client ID: Instrument: 10airB.i

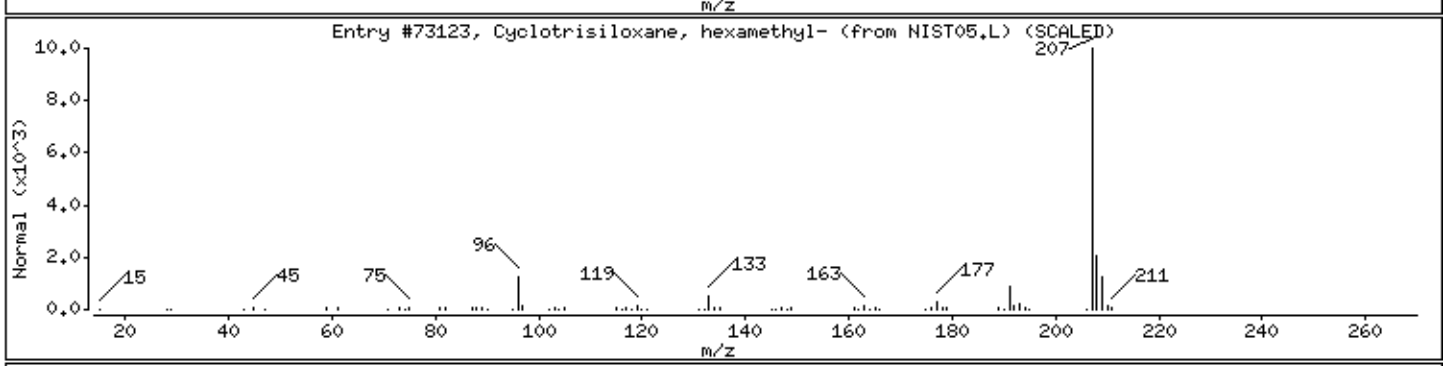
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 91 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

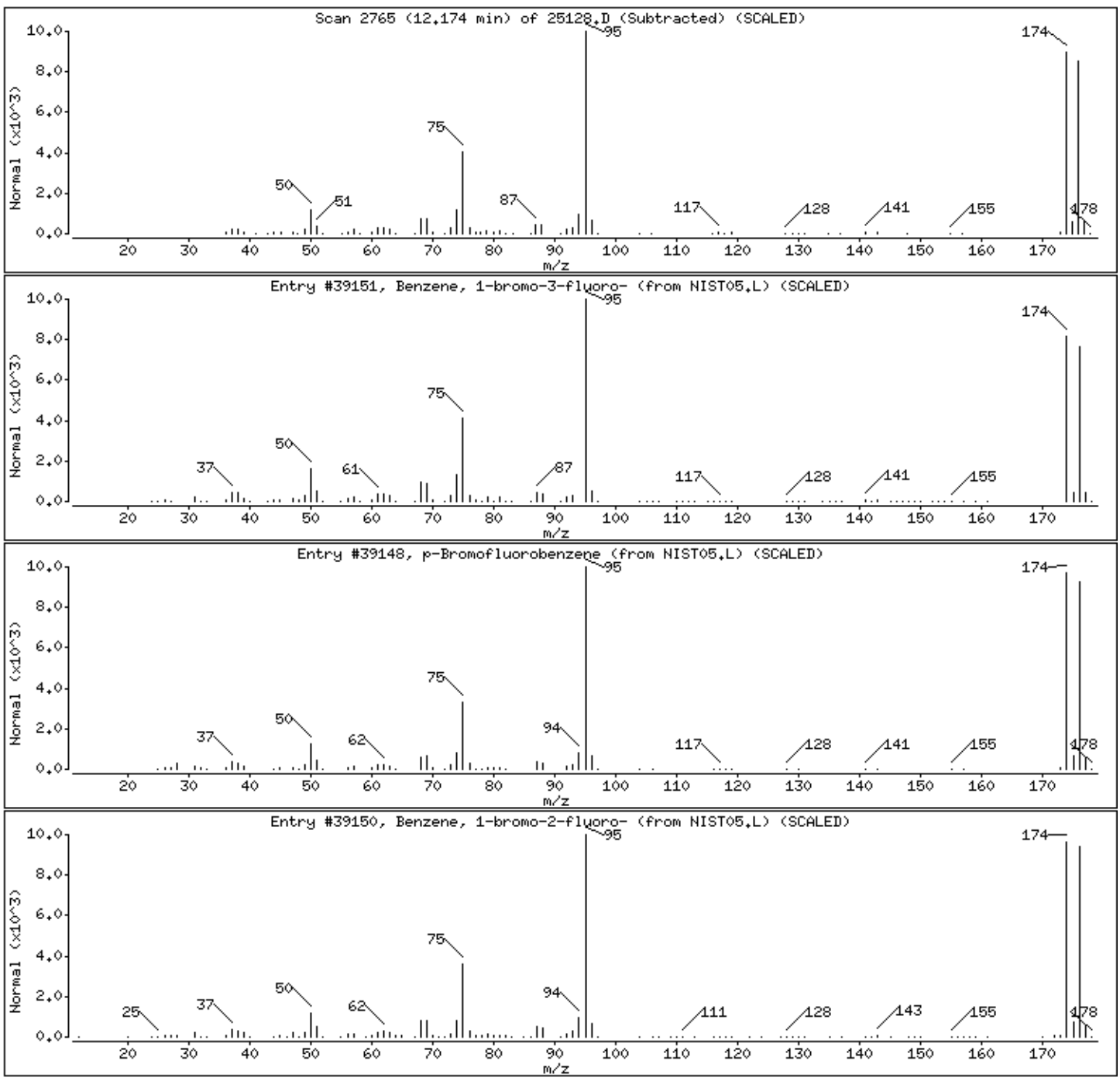
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 97 | C6H4BrF | 174 |
| p-Bromofluorobenzene | 460-00-4 | NIST05.L | 39148 | 97 | C6H4BrF | 174 |
| Benzene, 1-bromo-2-fluoro- | 1072-85-1 | NIST05.L | 39150 | 94 | C6H4BrF | 174 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

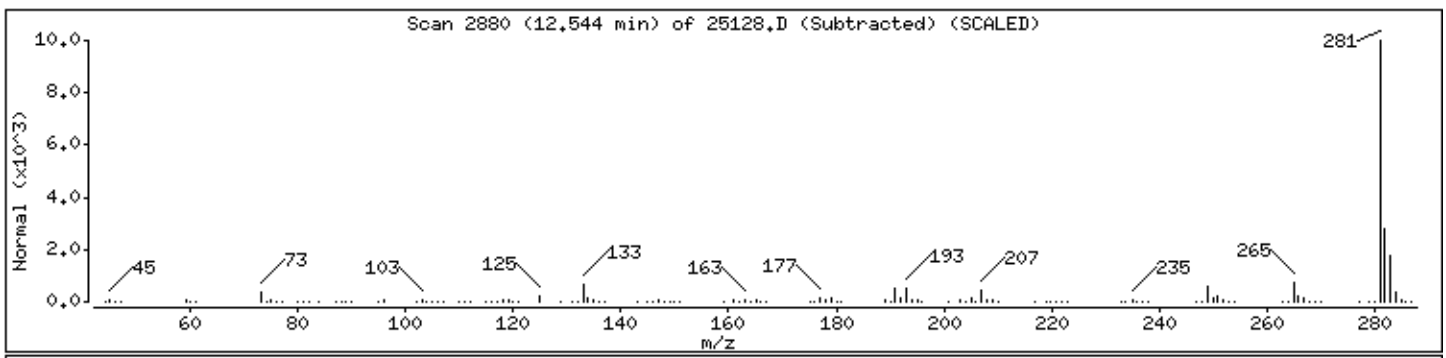
Client ID: Instrument: 10airB.i

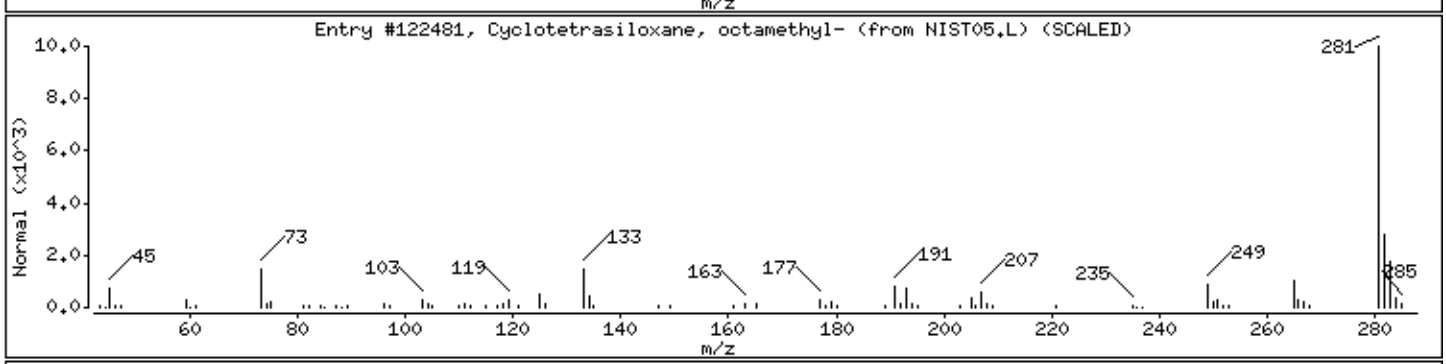
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122481 | 91 | C8H24O4Si4 | 296 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

Client ID:

Instrument: 10airB.i

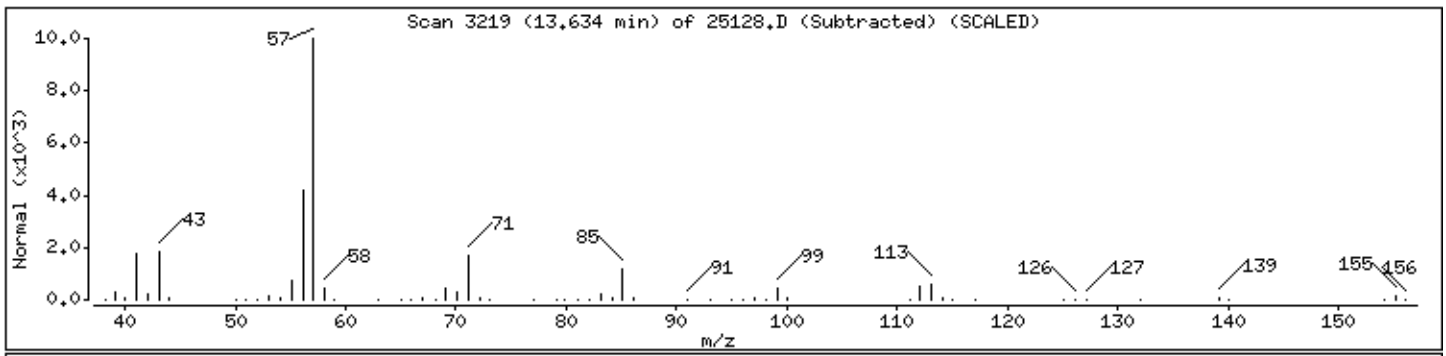
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

Client ID:

Instrument: 10airB.i

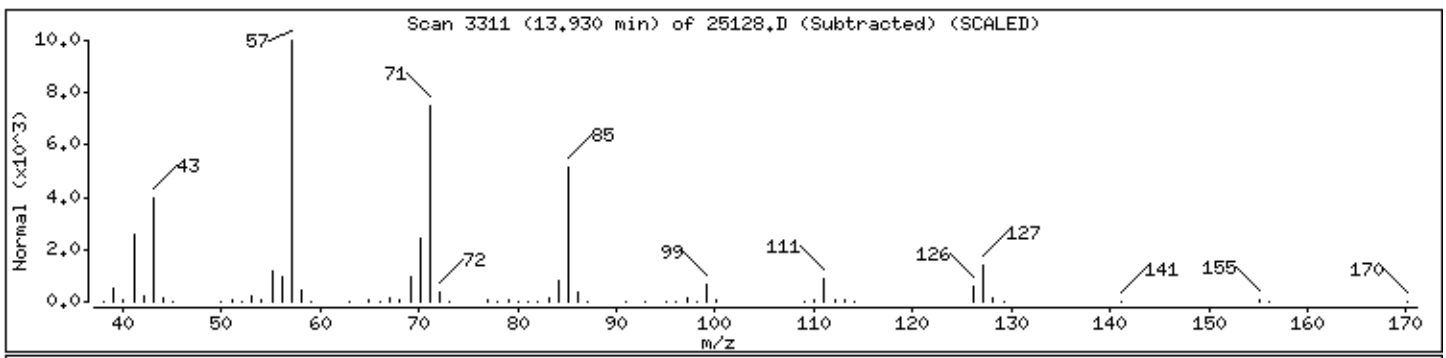
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

Client ID:

Instrument: 10airB.i

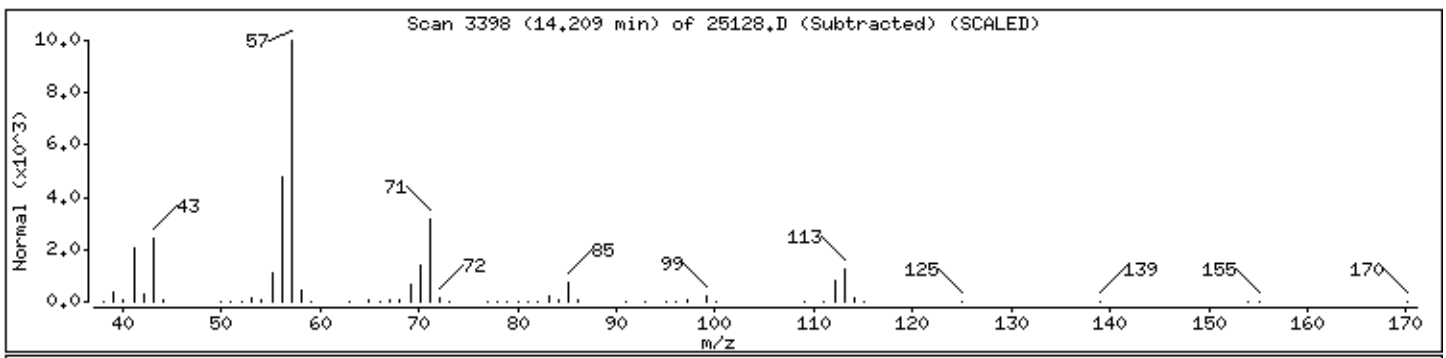
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

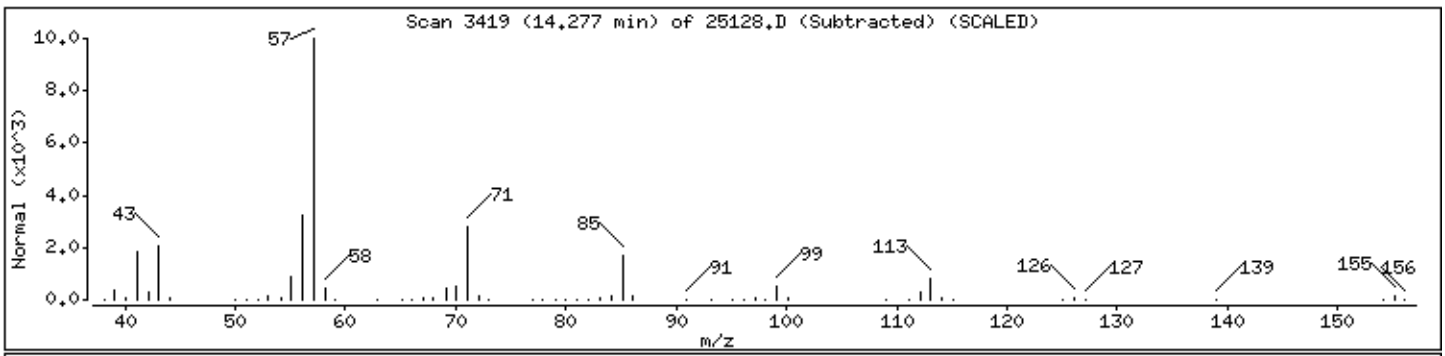
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

Client ID:

Instrument: 10airB.i

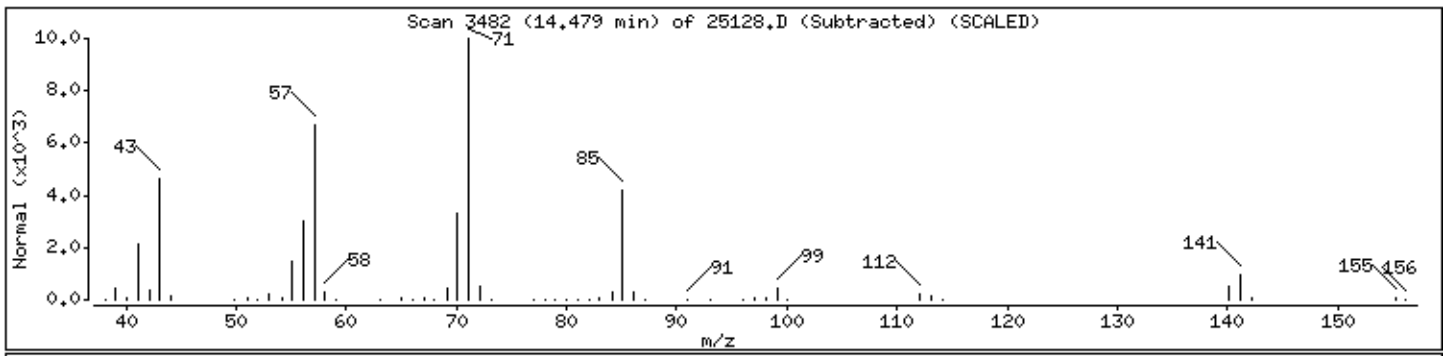
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

Client ID:

Instrument: 10airB.i

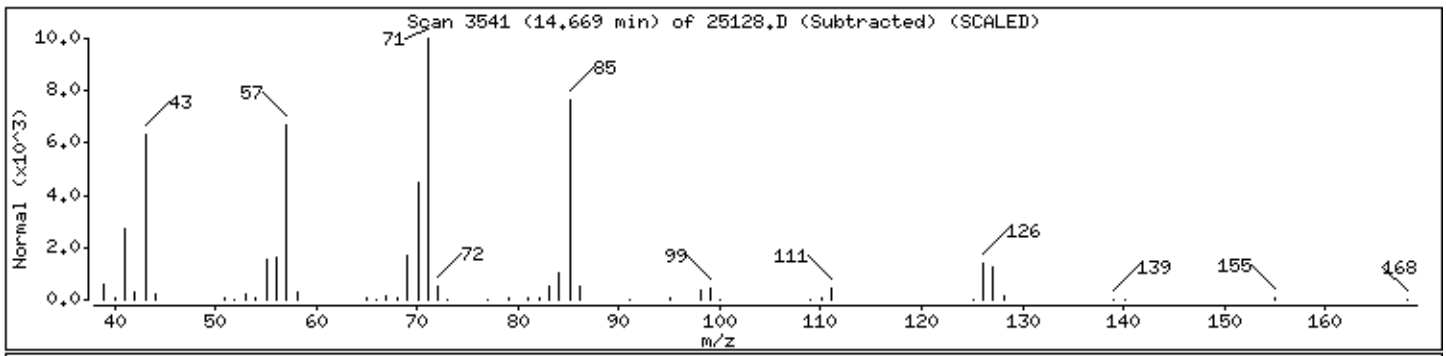
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25128.D

Date : 08-SEP-2021 23:34

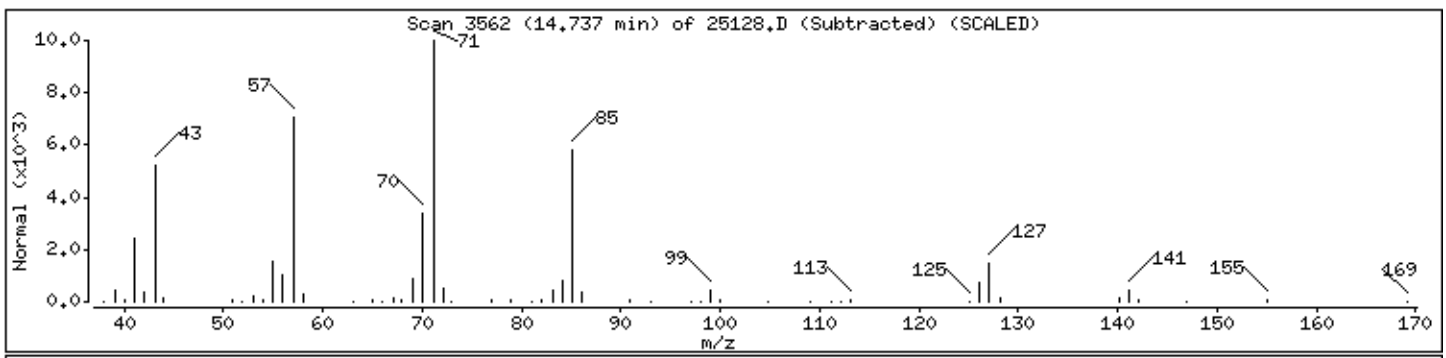
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25128.D
Injection Date: 08-SEP-2021 23:34
Instrument: 10airB.i
Lab Sample ID: 10577519004
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Lab Smp Id: 10577519005
Inj Date : 09-SEP-2021 00:03
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 29
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.042 | 7.061 | (1.000) | 1935064 | 10.0000 | |
| 48 Trichloroethene | 130 | 7.444 | 7.457 | (1.057) | 12382 | 0.21824 | 0.458 |
| 62 Tetrachloroethene | 166 | 9.640 | 9.643 | (0.921) | 2589 | 0.03442 | 0.0723(a) |
| * 64 Chlorobenzene - d5 | 117 | 10.466 | 10.473 | (1.000) | 1485844 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Lab Smp Id: 10577519005
Inj Date : 09-SEP-2021 00:03
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 29
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.042 | 3939387 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.467 | 4397294 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 3.525 | 10395928 | 26.3897050 | 55.4 | 0 | | 0 | 45 |
| Unknown | | | | | CAS #: | | |
| 3.615 | 51573275 | 130.916976 | 275 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | |
| 9.309 | 8887911 | 20.2122259 | 42.4 | 91 | NIST05.L | 73123 | 64 |
| Benzene, 1-bromo-3-fluoro- | | | | | CAS #: 1073-06-9 | | |
| 12.171 | 4168446 | 9.47957001 | 19.9 | 97 | NIST05.L | 39151 | 64 |
| Cyclotetrasiloxane, octamethyl- | | | | | CAS #: 556-67-2 | | |
| 12.557 | 79195367 | 180.100210 | 378 | 91 | NIST05.L | 122480 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Report Date: 09-Sep-2021 15:03

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | | CAS #: | | |
| 13.640 | 8904395 | 20.2497123 | 42.5 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.933 | 28186031 | 64.0985737 | 135 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.212 | 19368929 | 44.0473764 | 92.5 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.283 | 14861909 | 33.7978480 | 71.0 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.483 | 11763385 | 26.7514146 | 56.2 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 14.743 | 4938499 | 11.2307676 | 23.6 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Lab File ID: 25129.D
Lab Smp Id: 10577519005
Analysis Type: VOA
Quant Type: ISTD
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Calibration Date: 08-SEP-2021
Calibration Time: 09:52
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1935064 | -8.39 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1485844 | -10.21 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.04 | -0.27 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519005
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 09-SEP-2021 00:03

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | Unknown | 3.525 | 55.4 | _J__ |
| 2. | | Unknown | 3.615 | 275 | _J__ |
| 3. | 541-05-9 | Cyclotrisiloxane, hexamethy | 9.309 | 42.4 | NJ__ |
| 4. | 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 12.171 | 19.9 | NJ__ |
| 5. | 556-67-2 | Cyclotetrasiloxane, octamet | 12.557 | 378 | NJ__ |
| 6. | | Unknown | 13.640 | 42.5 | _J__ |
| 7. | | Unknown | 13.933 | 135 | _J__ |
| 8. | | Unknown | 14.212 | 92.5 | _J__ |
| 9. | | Unknown | 14.283 | 71.0 | _J__ |
| 10. | | Unknown | 14.483 | 56.2 | _J__ |
| 11. | | Unknown | 14.743 | 23.6 | _J__ |

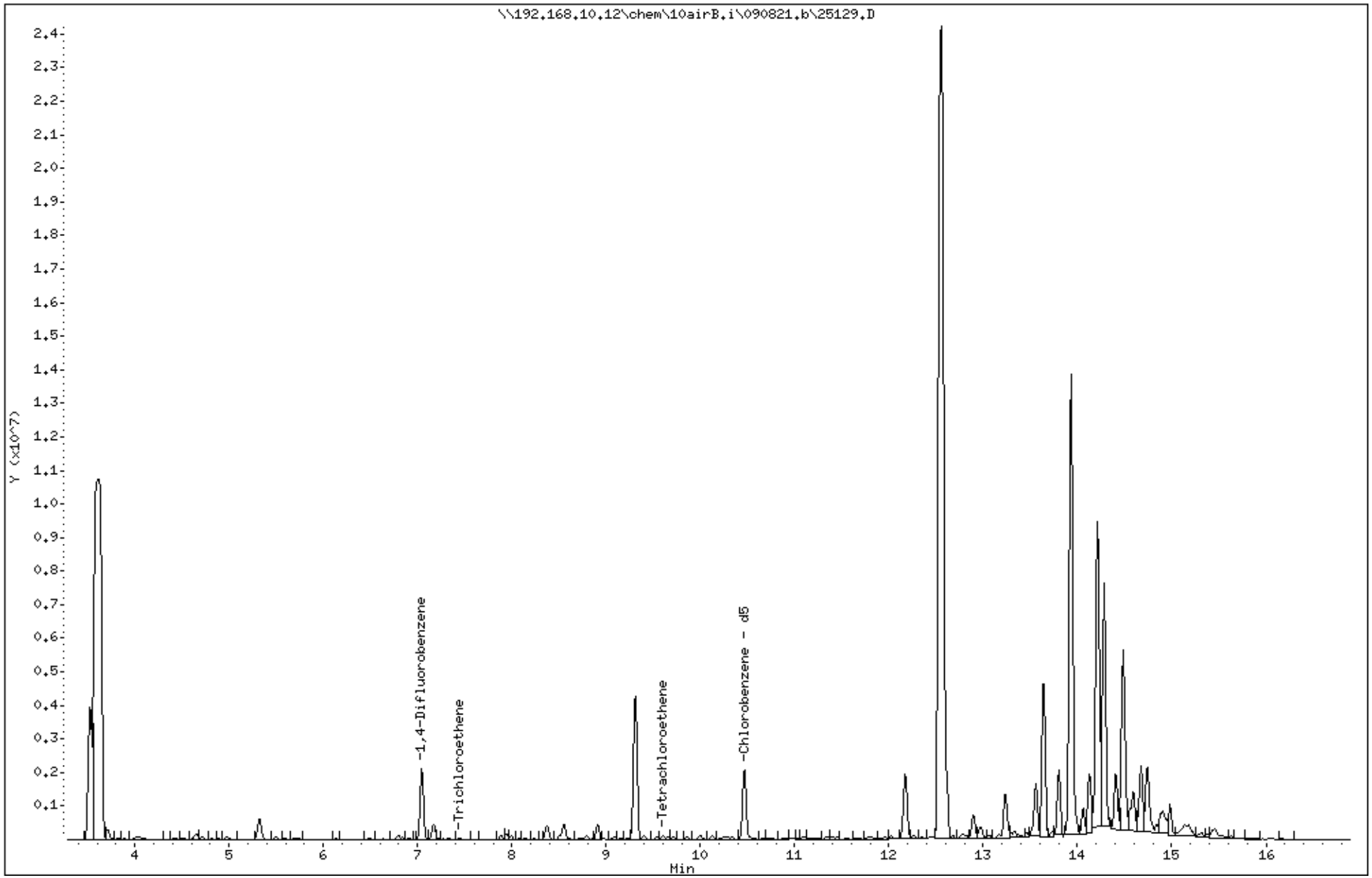
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D
Date : 09-SEP-2021 00:03
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

Client ID:

Instrument: 10airB.i

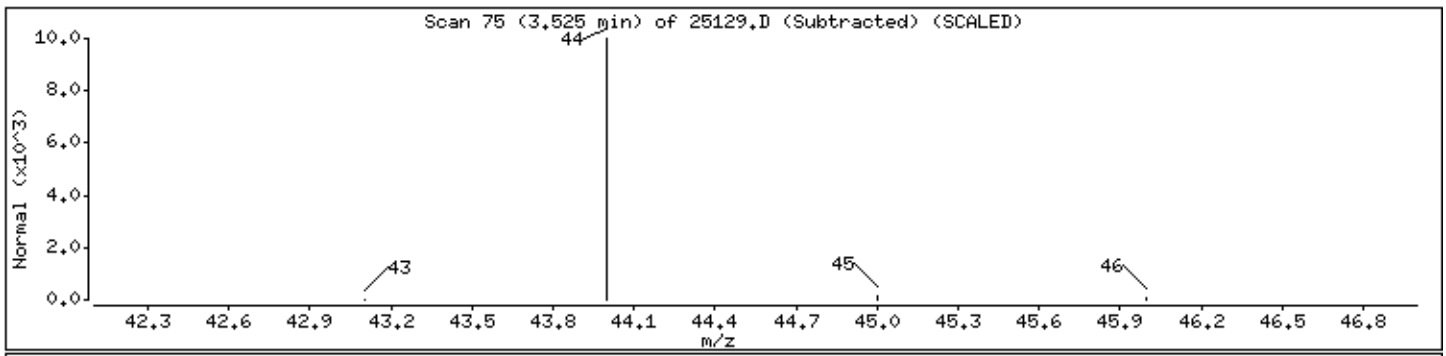
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

Client ID:

Instrument: 10airB.i

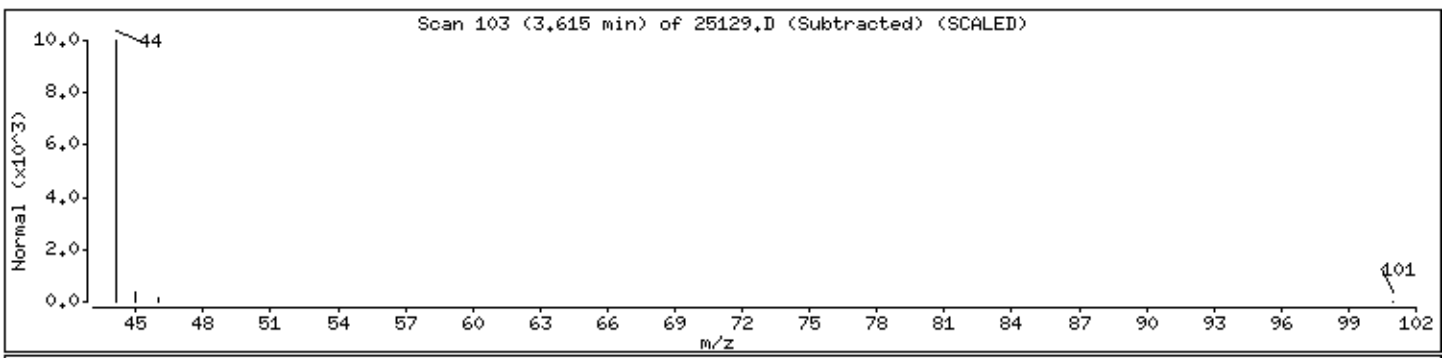
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

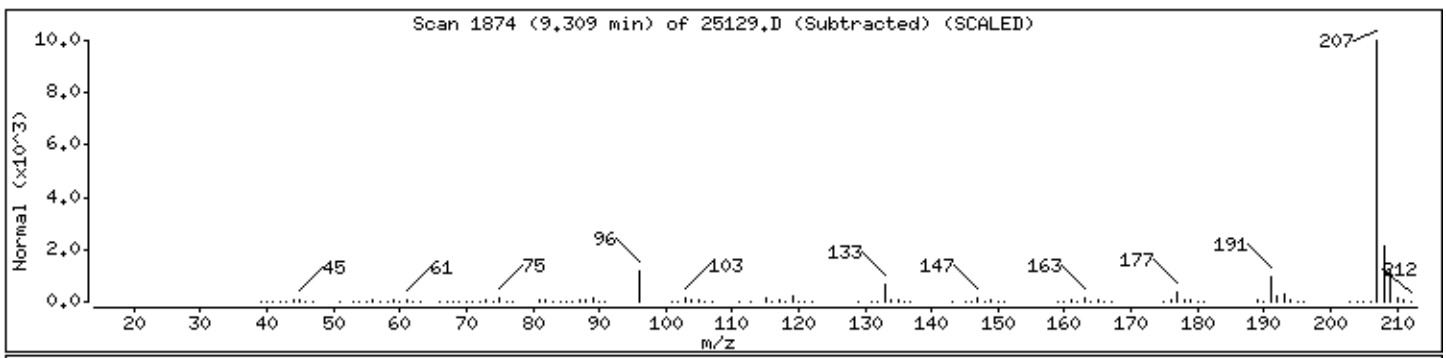
Client ID: Instrument: 10airB.i

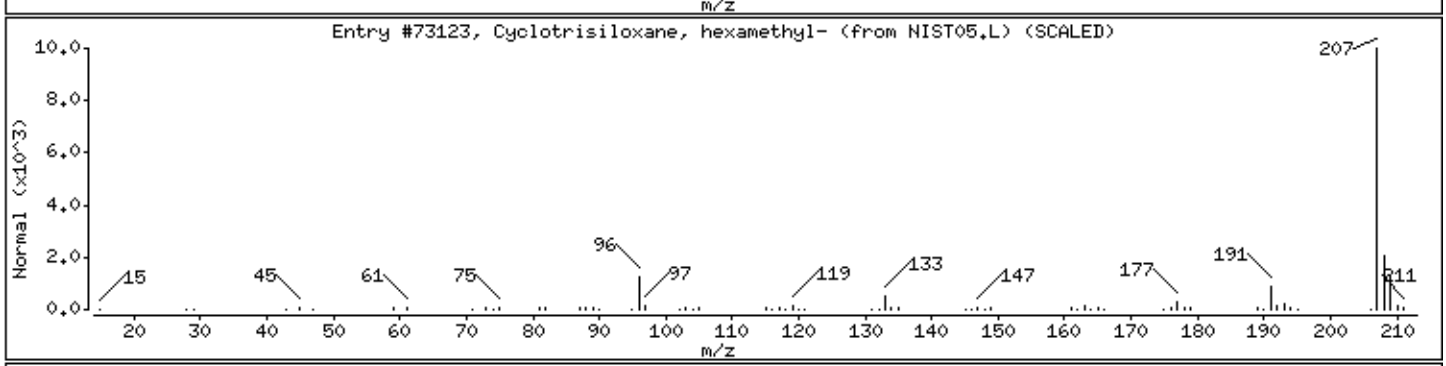
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 91 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

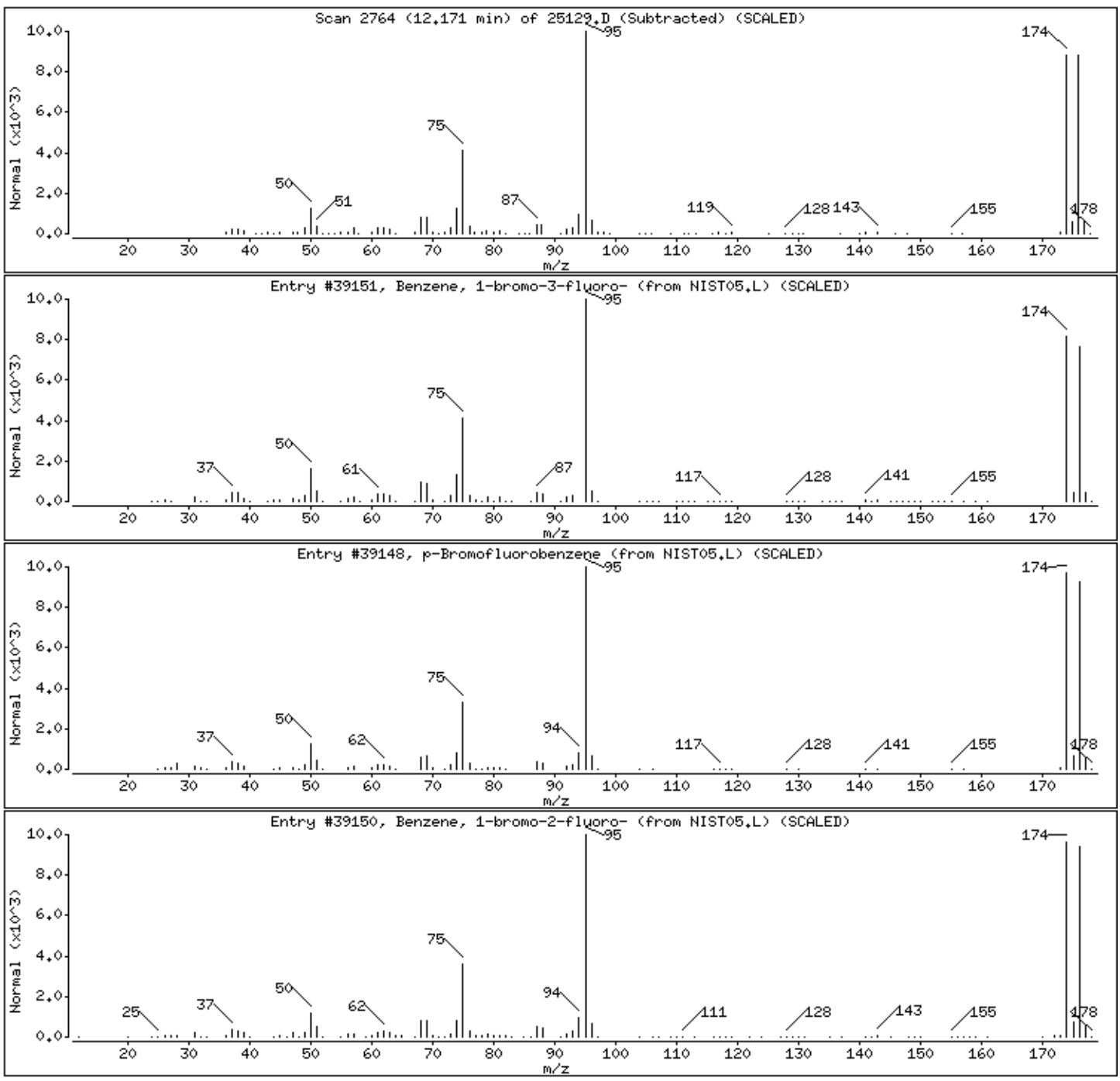
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 97 | C6H4BrF | 174 |
| p-Bromofluorobenzene | 460-00-4 | NIST05.L | 39148 | 97 | C6H4BrF | 174 |
| Benzene, 1-bromo-2-fluoro- | 1072-85-1 | NIST05.L | 39150 | 94 | C6H4BrF | 174 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

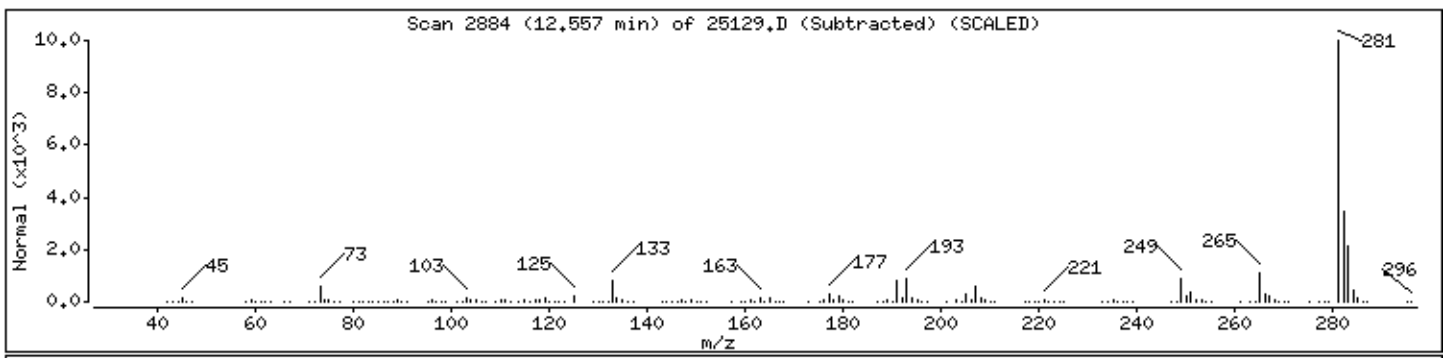
Client ID: Instrument: 10airB.i

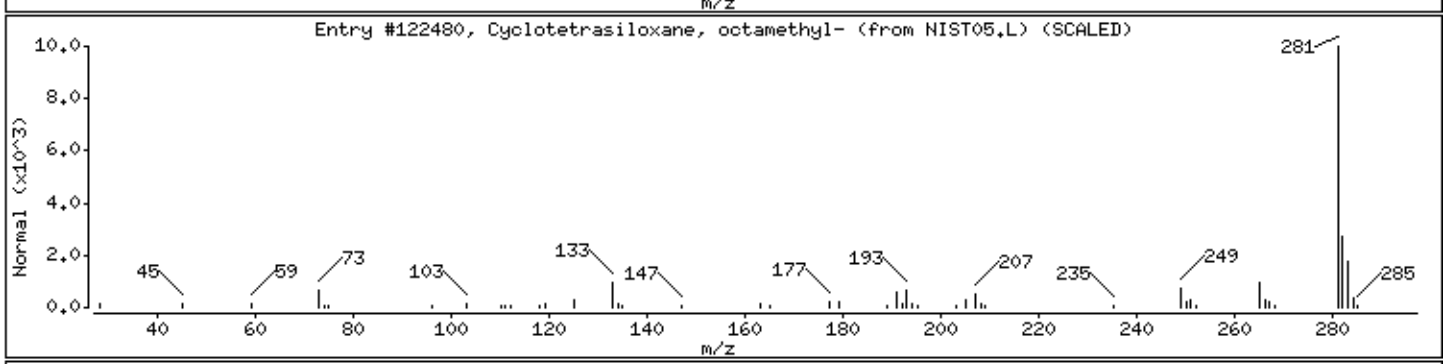
Sample Info:

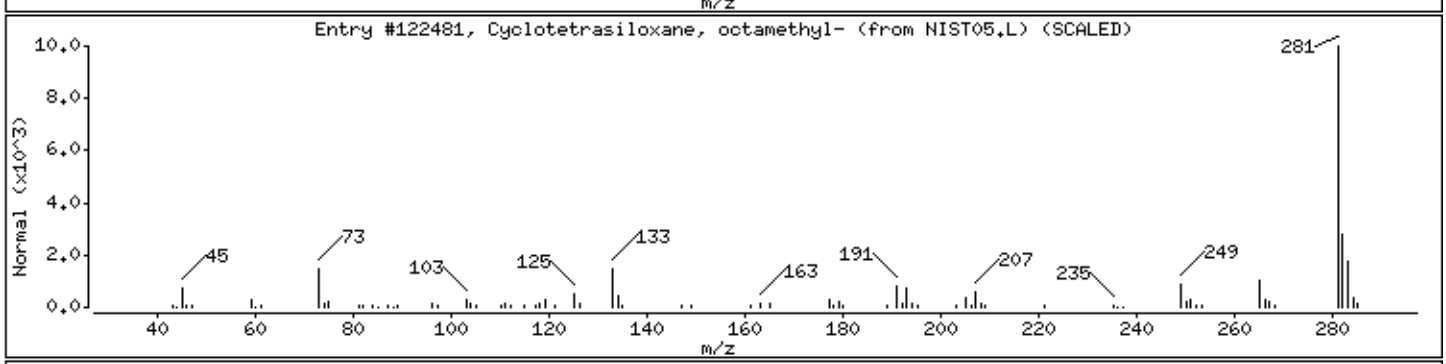
Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122480 | 91 | C8H24O4Si4 | 296 |
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122481 | 91 | C8H24O4Si4 | 296 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

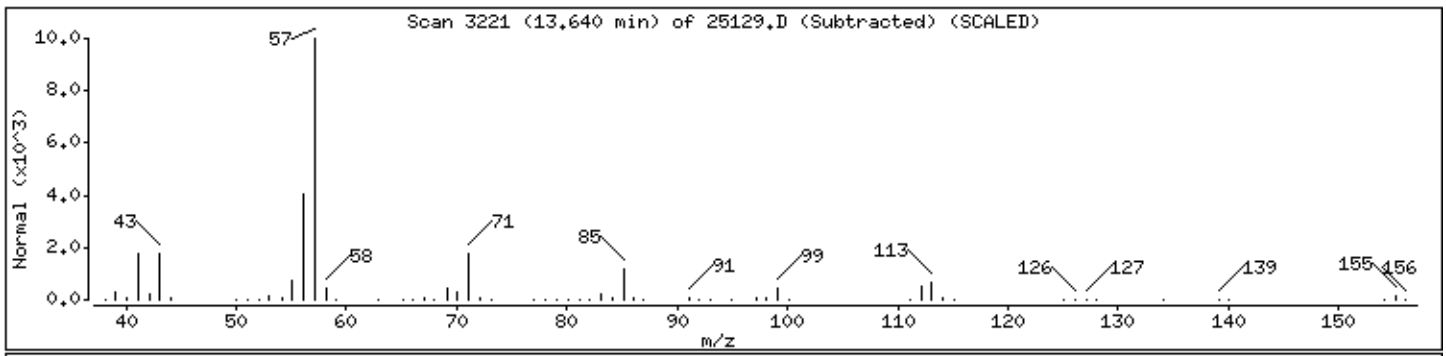
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

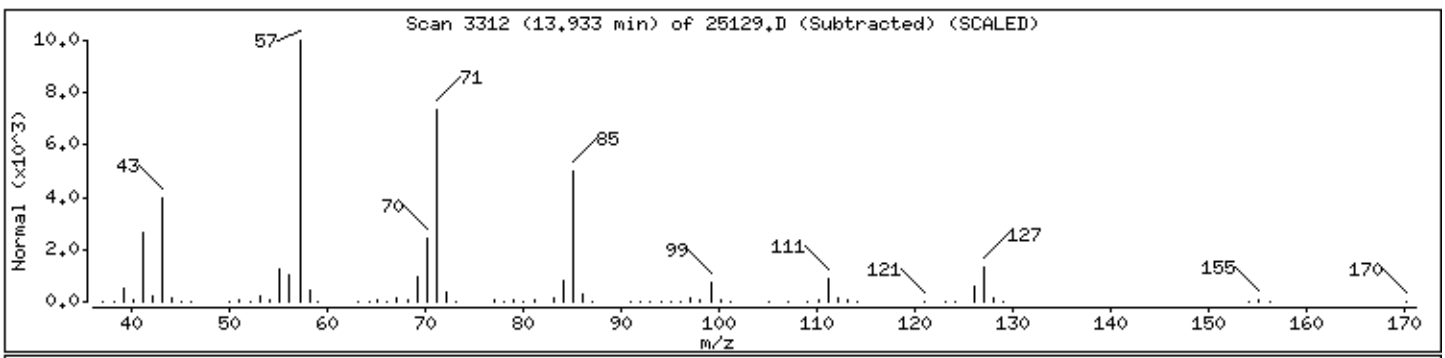
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

Client ID:

Instrument: 10airB.i

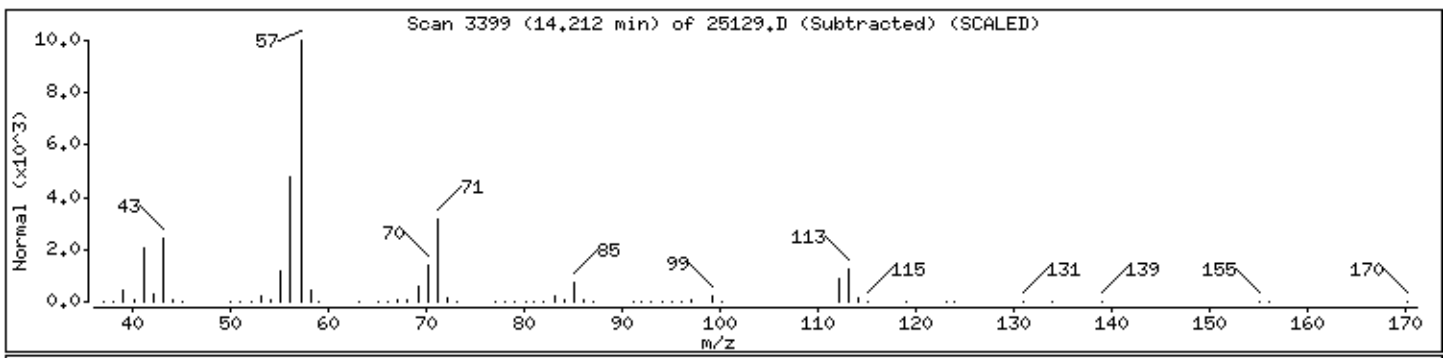
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

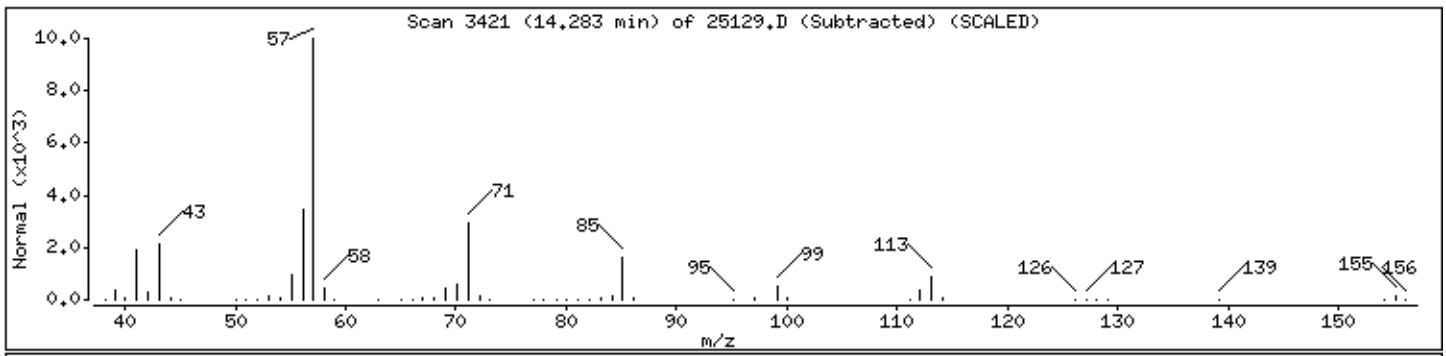
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

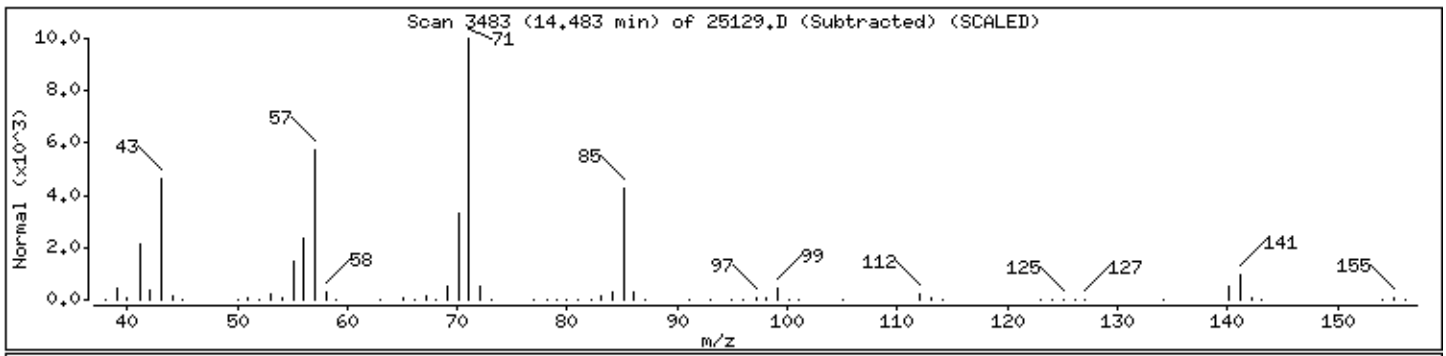
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25129.D

Date : 09-SEP-2021 00:03

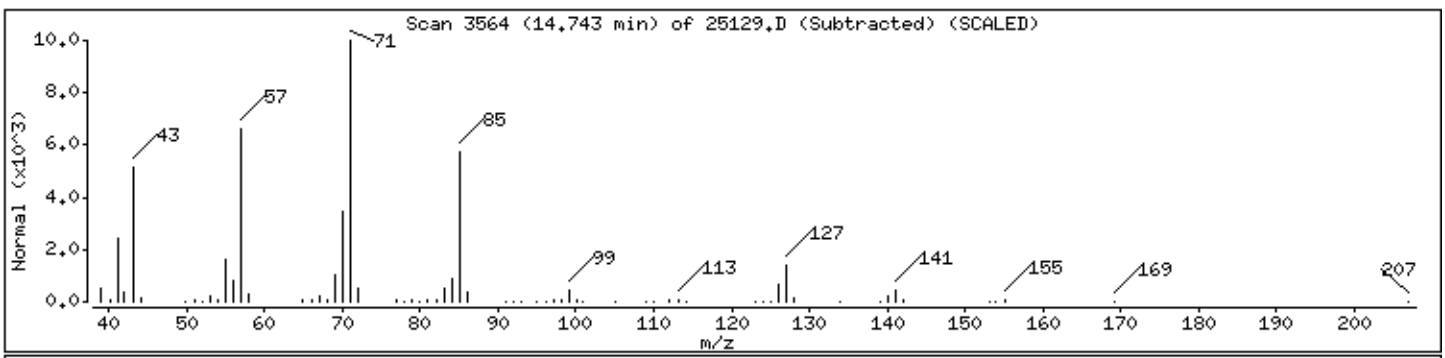
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25129.D
Injection Date: 09-SEP-2021 00:03
Instrument: 10airB.i
Lab Sample ID: 10577519005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Lab Smp Id: 10577519006
Inj Date : 09-SEP-2021 00:32
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 30
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 7.045 | 7.061 | (1.000) | 1966287 | 10.0000 | |
| 48 Trichloroethene | 130 | 7.440 | 7.457 | (1.056) | 91860 | 1.59337 | 3.35 |
| 62 Tetrachloroethene | 166 | 9.643 | 9.643 | (0.921) | 2690 | 0.03552 | 0.0746(a) |
| * 64 Chlorobenzene - d5 | 117 | 10.466 | 10.473 | (1.000) | 1496123 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Lab Smp Id: 10577519006
Inj Date : 09-SEP-2021 00:32
Operator : HMH Inst ID: 10airB.i
Smp Info :
Misc Info : 40159
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Meth Date : 09-Sep-2021 11:40 hhendricks Quant Type: ISTD
Cal Date : 26-AUG-2021 12:31 Cal File: 23810.D
Als bottle: 30
Dil Factor: 2.10000
Integrator: HP RTE Compound Sublist: 40159.7519.sub
Target Version: RC10A
Processing Host: 10MNAIRWKS09

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.100 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 7.045 | 3989607 | 10.000 |
| * 64 Chlorobenzene - d5 | 10.466 | 3963972 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 3.631 | 59969316 | 150.313812 | 316 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | |
| 9.309 | 10817208 | 27.2888059 | 57.3 | 91 | NIST05.L | 73123 | 64 |
| Cyclotetrasiloxane, octamethyl- | | | | | CAS #: 556-67-2 | | |
| 12.544 | 40095737 | 101.150386 | 212 | 91 | NIST05.L | 122481 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.637 | 9825321 | 24.7865496 | 52.1 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 13.933 | 30720304 | 77.4987776 | 163 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Report Date: 09-Sep-2021 15:03

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 14.212 | 22419384 | 56.5578666 | 119 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.280 | 17526514 | 44.2145180 | 92.9 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.482 | 14377491 | 36.2704073 | 76.2 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.672 | 5523807 | 13.9350289 | 29.3 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.740 | 6325761 | 15.9581347 | 33.5 | 0 | | 0 | 64 |
| Unknown | | | | CAS #: | | | |
| 14.907 | 4912525 | 12.3929344 | 26.0 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airB.i
Calibration Date: 08-SEP-2021
Lab File ID: 25130.D
Calibration Time: 09:52
Lab Smp Id: 10577519006
Analysis Type: VOA
Level: LOW
Quant Type: ISTD
Sample Type: AIR
Operator: HMH
Method File: \\192.168.10.12\chem\10airB.i\090821.b\TO15_238_21.m
Misc Info: 40159

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 2112359 | 1267415 | 2957303 | 1966287 | -6.92 |
| 64 Chlorobenzene - d | 1654814 | 992888 | 2316740 | 1496123 | -9.59 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 45 1,4-Difluorobenze | 7.06 | 6.73 | 7.39 | 7.05 | -0.23 |
| 64 Chlorobenzene - d | 10.47 | 10.14 | 10.80 | 10.47 | -0.06 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Report Date: 09-Sep-2021 15:03

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519006
Operator : HMH
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 09-SEP-2021 00:32

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 3.631 | 316 | _J__ |
| 2. 541-05-9 | Cyclotrisiloxane, hexamethy | 9.309 | 57.3 | NJ__ |
| 3. 556-67-2 | Cyclotetrasiloxane, octamet | 12.544 | 212 | NJ__ |
| 4. | Unknown | 13.637 | 52.1 | _J__ |
| 5. | Unknown | 13.933 | 163 | _J__ |
| 6. | Unknown | 14.212 | 119 | _J__ |
| 7. | Unknown | 14.280 | 92.9 | _J__ |
| 8. | Unknown | 14.482 | 76.2 | _J__ |
| 9. | Unknown | 14.672 | 29.3 | _J__ |
| 10. | Unknown | 14.740 | 33.5 | _J__ |
| 11. | Unknown | 14.907 | 26.0 | _J__ |

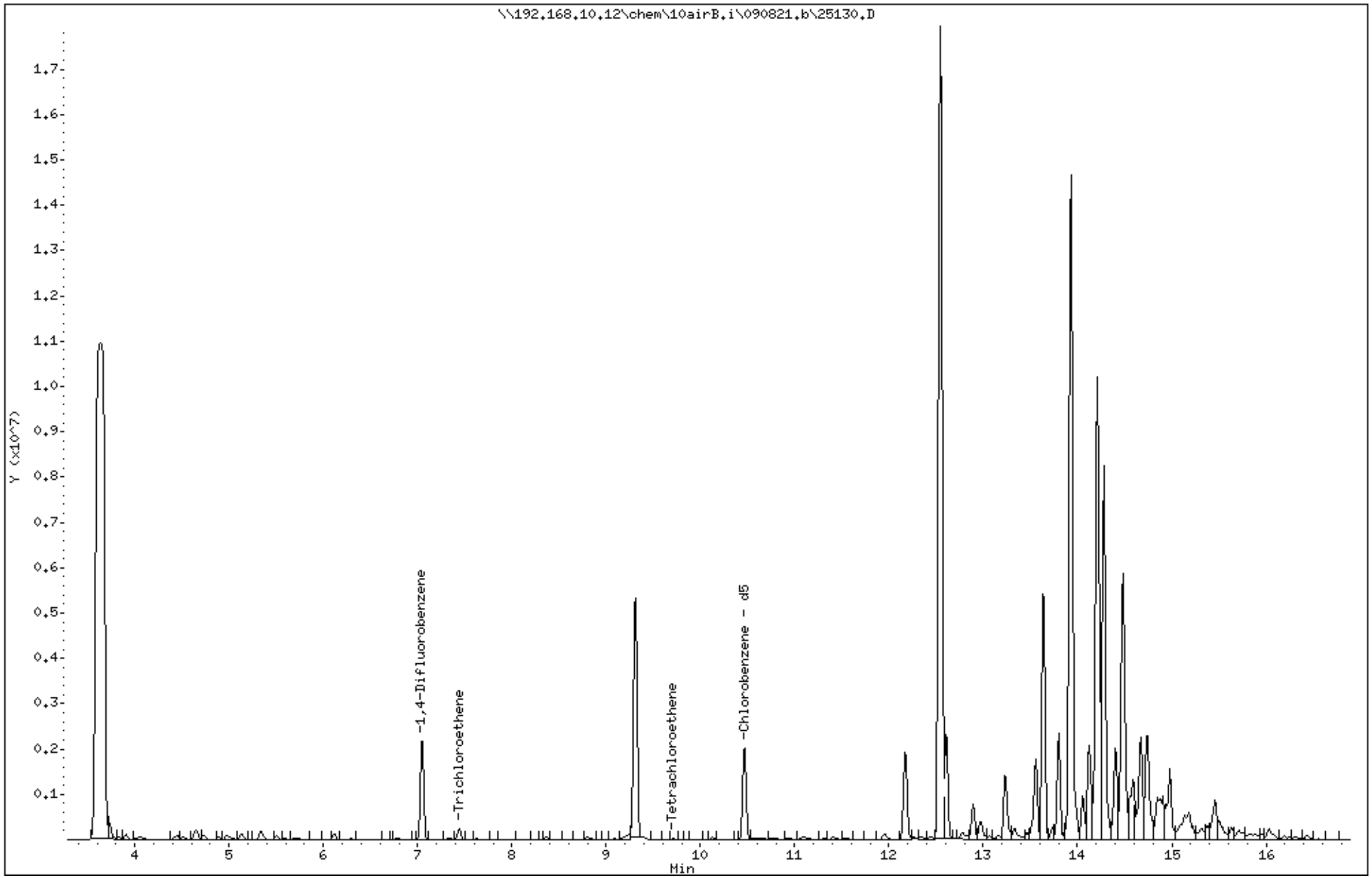
Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D
Date : 09-SEP-2021 00:32
Client ID:
Sample Info:

Instrument: 10airB.i

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

Client ID:

Instrument: 10airB.i

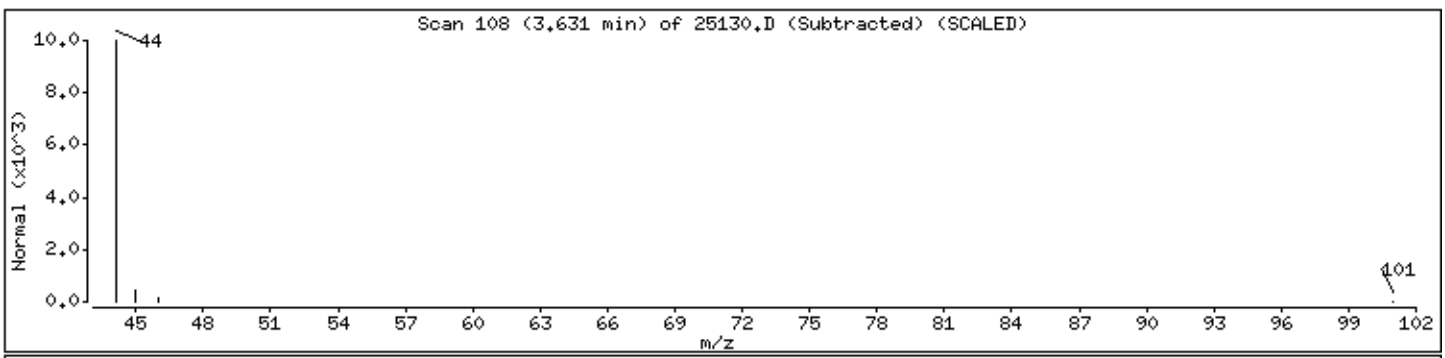
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

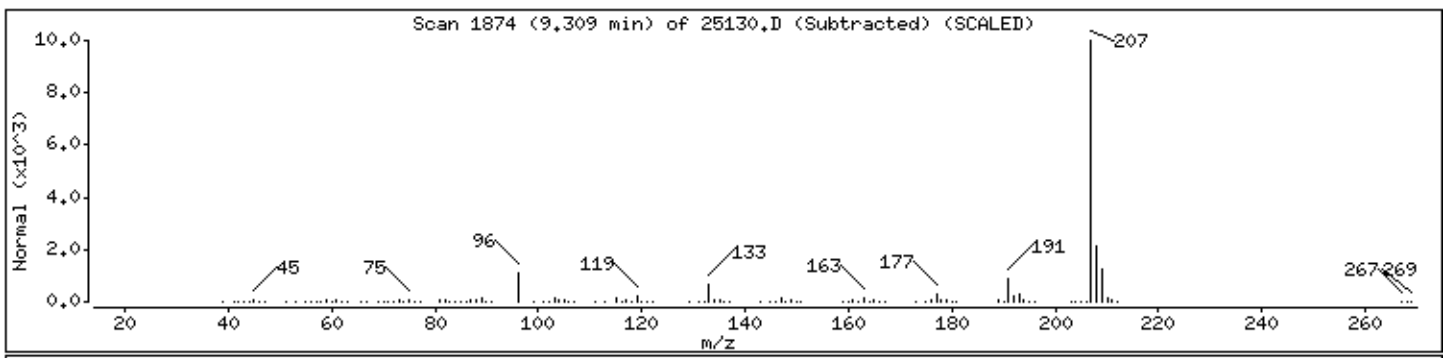
Client ID: Instrument: 10airB.i

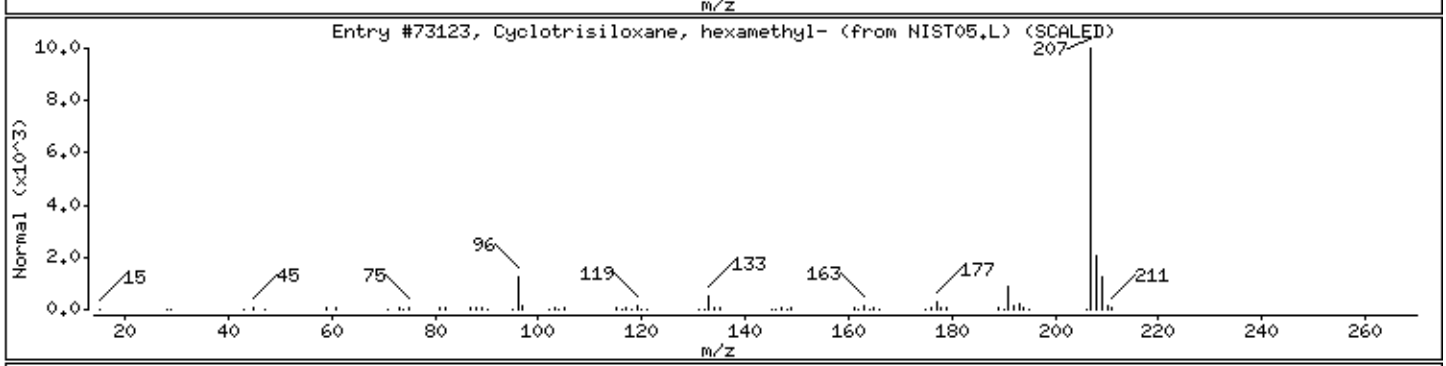
Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 91 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

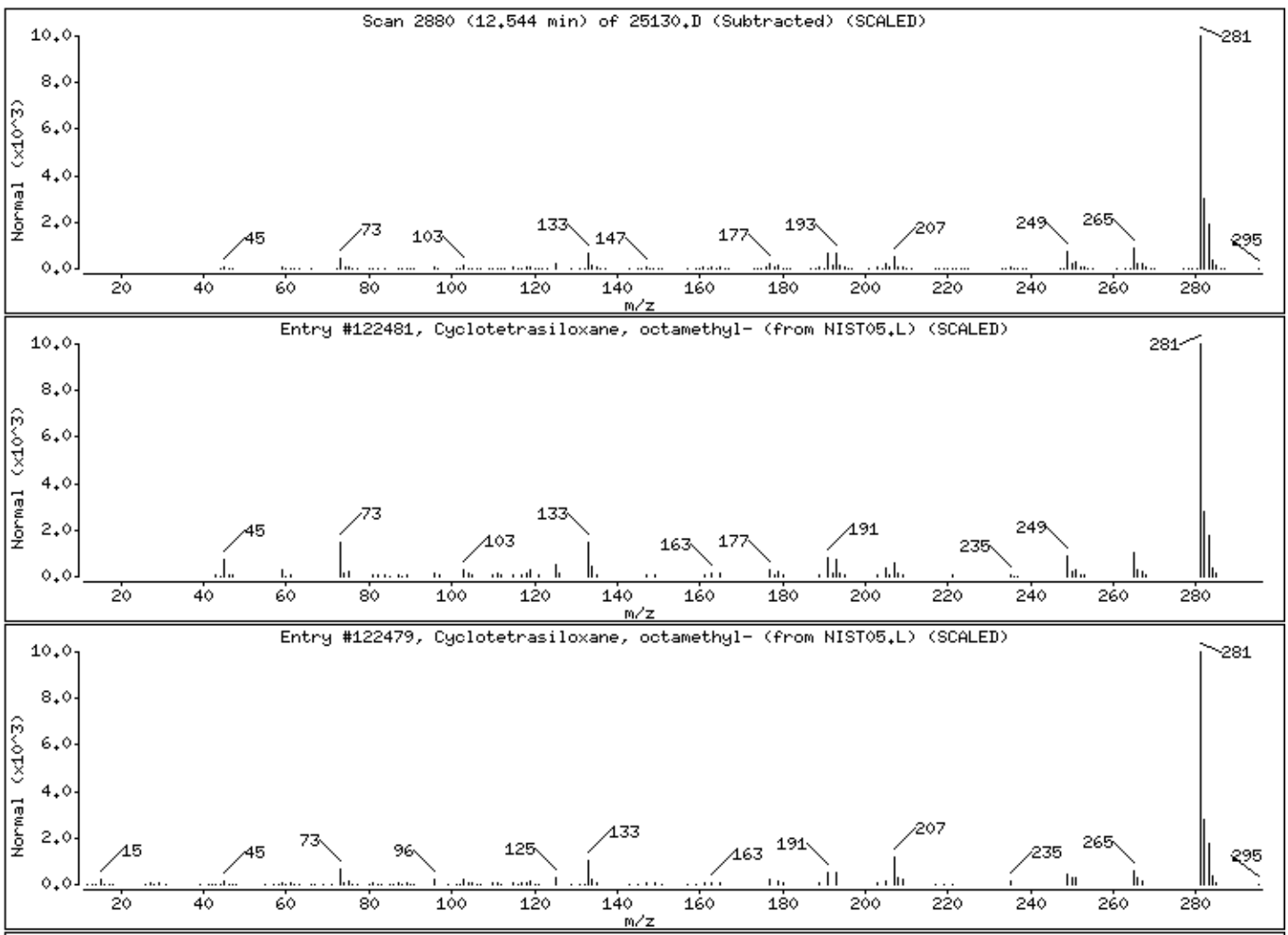
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122481 | 91 | C8H24O4Si4 | 296 |
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122479 | 86 | C8H24O4Si4 | 296 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

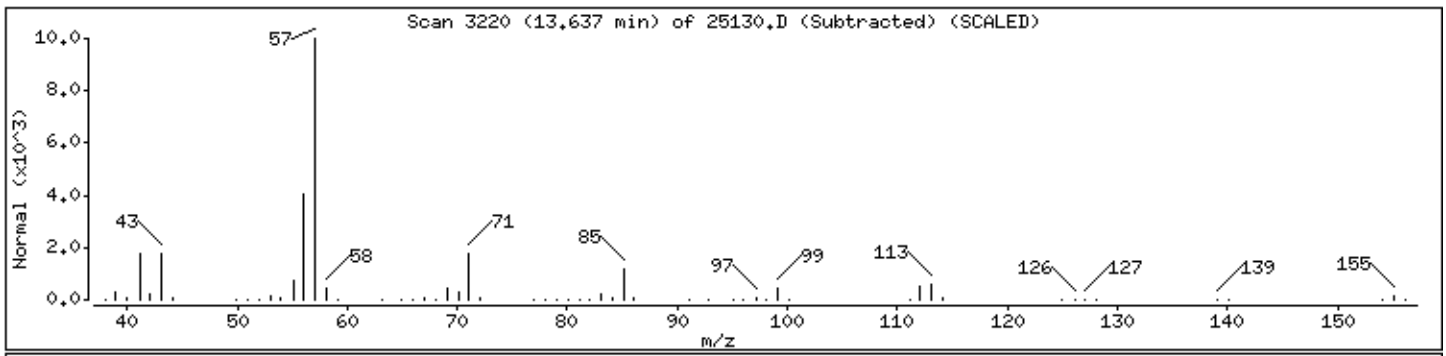
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

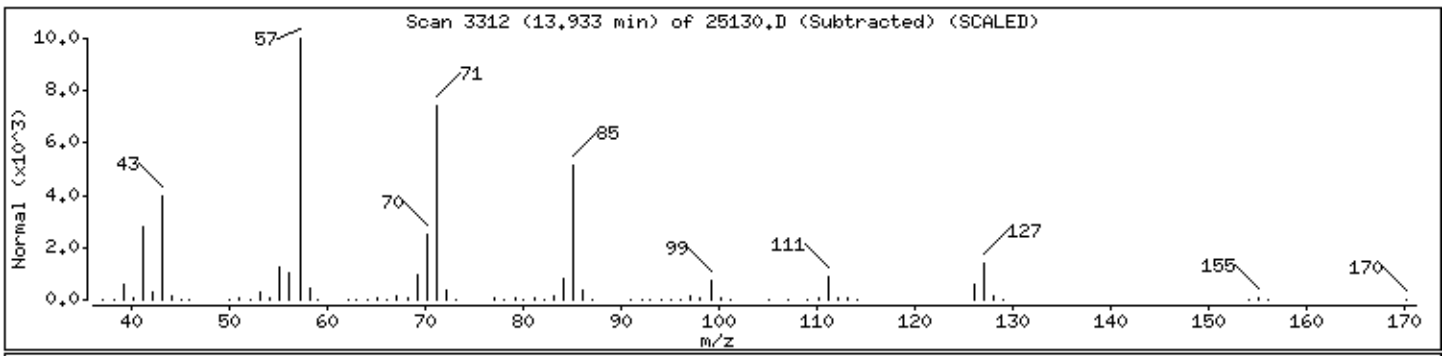
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

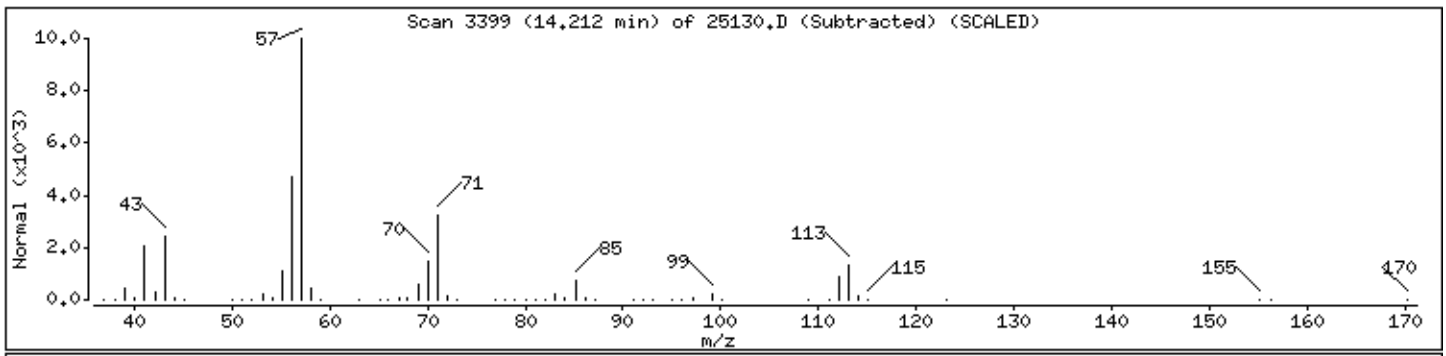
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

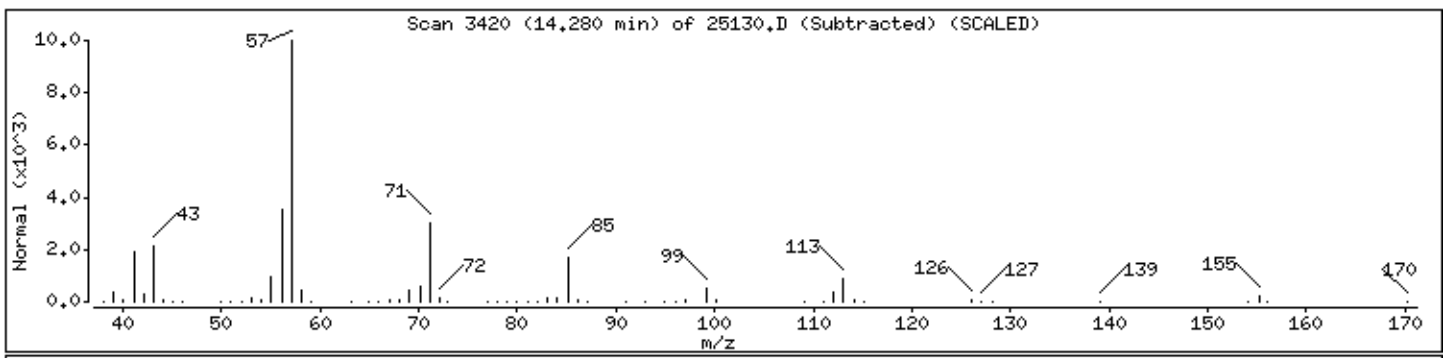
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

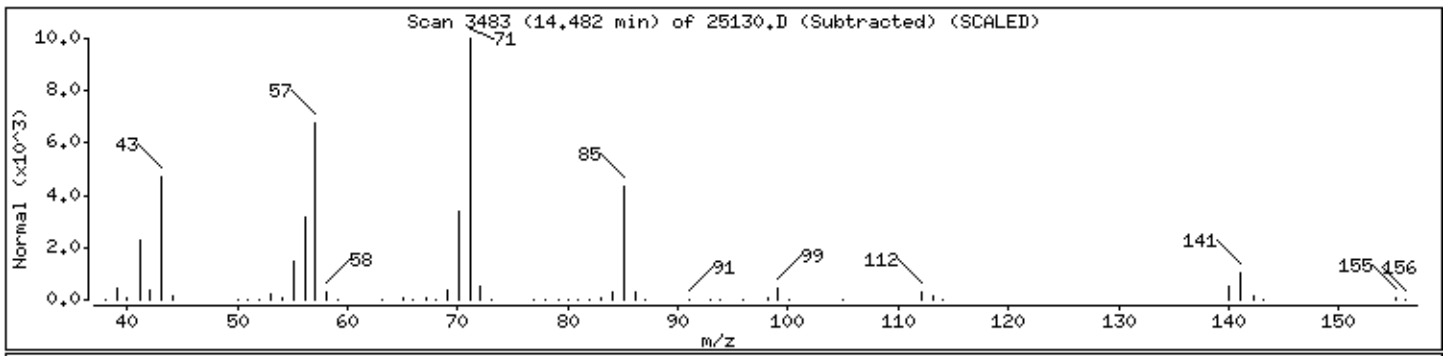
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

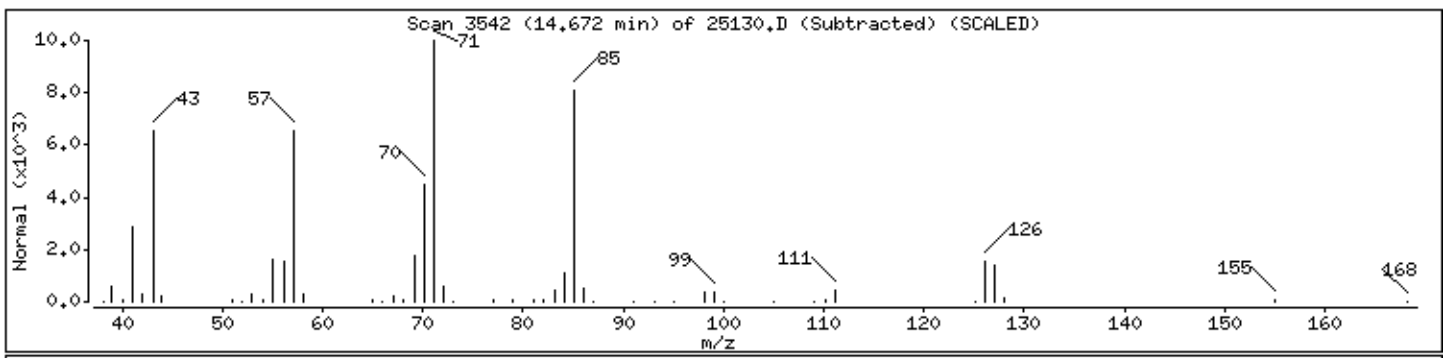
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

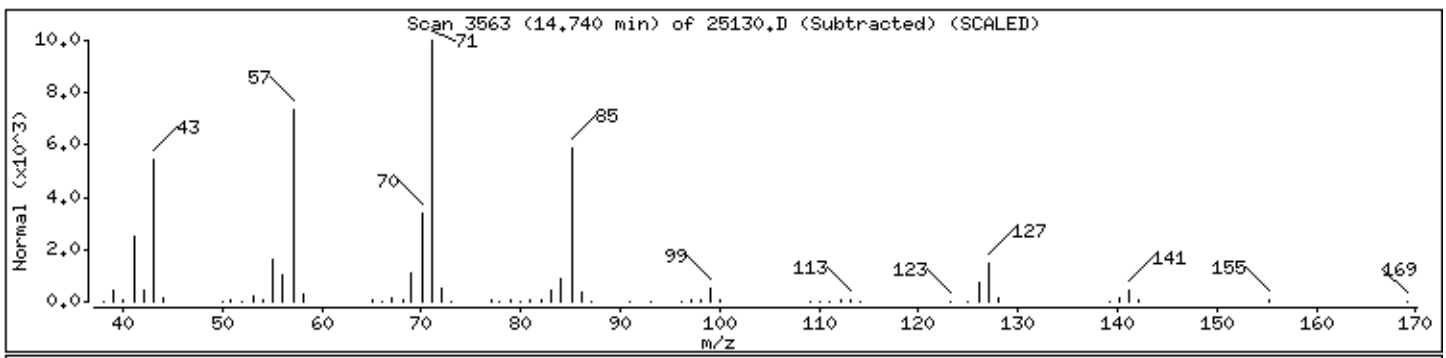
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b\25130.D

Date : 09-SEP-2021 00:32

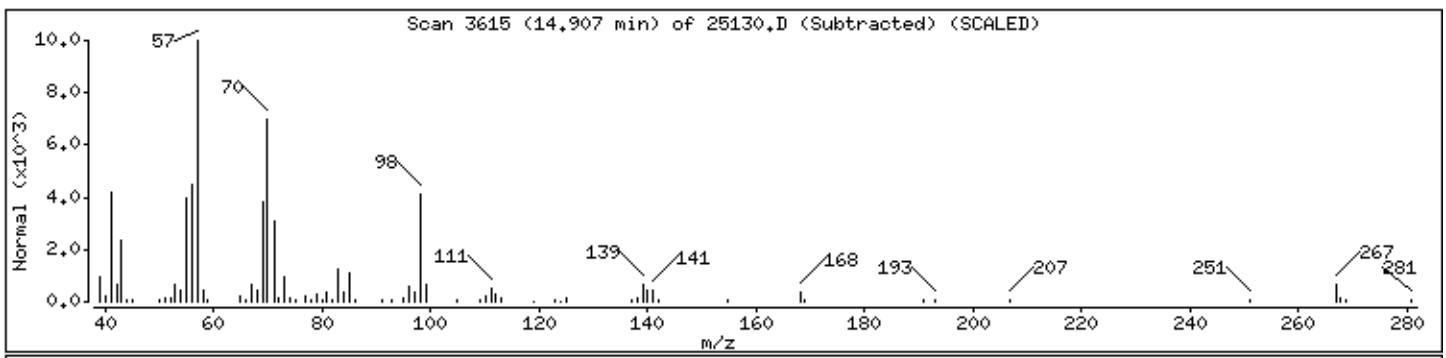
Client ID: Instrument: 10airB.i

Sample Info:

Operator: HMH

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airB.i\090821.b/25130.D
Injection Date: 09-SEP-2021 00:32
Instrument: 10airB.i
Lab Sample ID: 10577519006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Lab Smp Id: 10577519016
Inj Date : 08-SEP-2021 16:31
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.424 | 5.430 | (1.000) | 448334 | 10.0000 | |
| 48 Trichloroethene | 130 | 5.755 | 5.758 | (1.061) | 15511 | 0.63974 | 0.640 |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 8.401 | 8.404 | (1.000) | 356463 | 10.0000 | |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Lab Smp Id: 10577519016
Inj Date : 08-SEP-2021 16:31
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.000 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 5.424 | 1108243 | 10.000 |
| * 64 Chlorobenzene - d5 | 8.402 | 1134967 | 10.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 2.871 | 6373875 | 57.5133023 | 57.5 | 0 | | 0 | 45 |
| Unknown | | | | | CAS #: | | |
| 4.003 | 111481 | 1.00592568 | 1.01 | 0 | | 0 | 45 |
| Cyclotrisiloxane, hexamethyl- | | | | | CAS #: 541-05-9 | | |
| 7.389 | 4309968 | 37.9743853 | 38.0 | 91 | NIST05.L | 73121 | 64 |
| Benzene, 1-bromo-3-fluoro- | | | | | CAS #: 1073-06-9 | | |
| 9.935 | 969209 | 8.53953526 | 8.54 | 97 | NIST05.L | 39151 | 64 |
| Cyclotetrasiloxane, octamethyl- | | | | | CAS #: 556-67-2 | | |
| 10.305 | 3014820 | 26.5630599 | 26.6 | 90 | NIST05.L | 122480 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Report Date: 09-Sep-2021 14:20

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | CAS #: | | | |
| 12.569 | 150694 | 1.32773561 | 1.33 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25111.D
Lab Smp Id: 10577519016
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18

Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 448334 | -2.50 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 356463 | -9.07 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.42 | -0.12 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.04 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Report Date: 09-Sep-2021 14:20

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519016
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 16:31

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 2.871 | 57.5 | _J__ |
| 2. | Unknown | 4.003 | 1.01 | _J__ |
| 3. 541-05-9 | Cyclotrisiloxane, hexamethy | 7.389 | 38.0 | NJ__ |
| 4. 1073-06-9 | Benzene, 1-bromo-3-fluoro- | 9.935 | 8.54 | NJ__ |
| 5. 556-67-2 | Cyclotetrasiloxane, octamet | 10.305 | 26.6 | NJ__ |
| 6. | Unknown | 12.569 | 1.33 | _J__ |

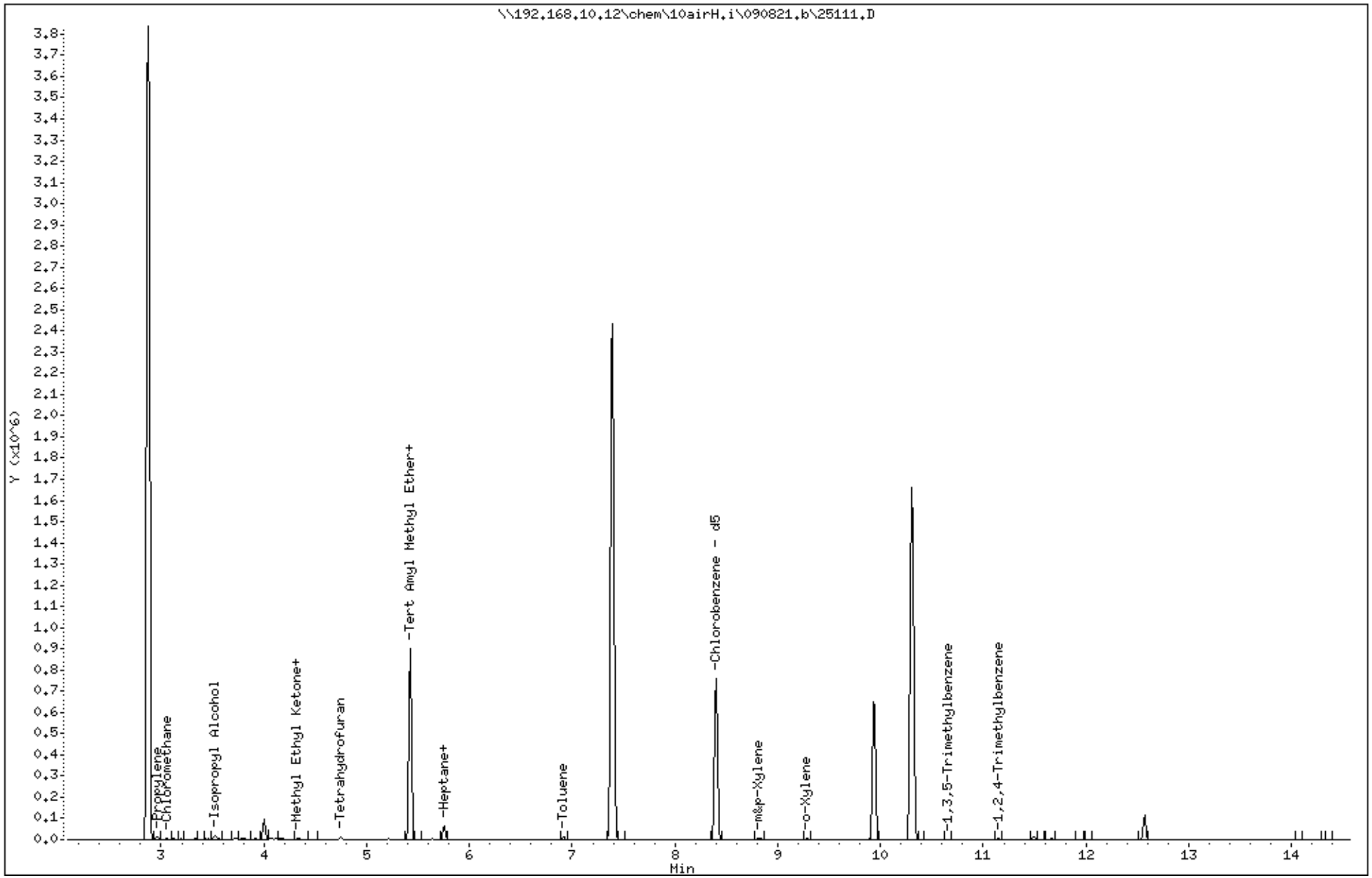
Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D
Date : 08-SEP-2021 16:31
Client ID:
Sample Info:

Instrument: 10airH.i

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D

Date : 08-SEP-2021 16:31

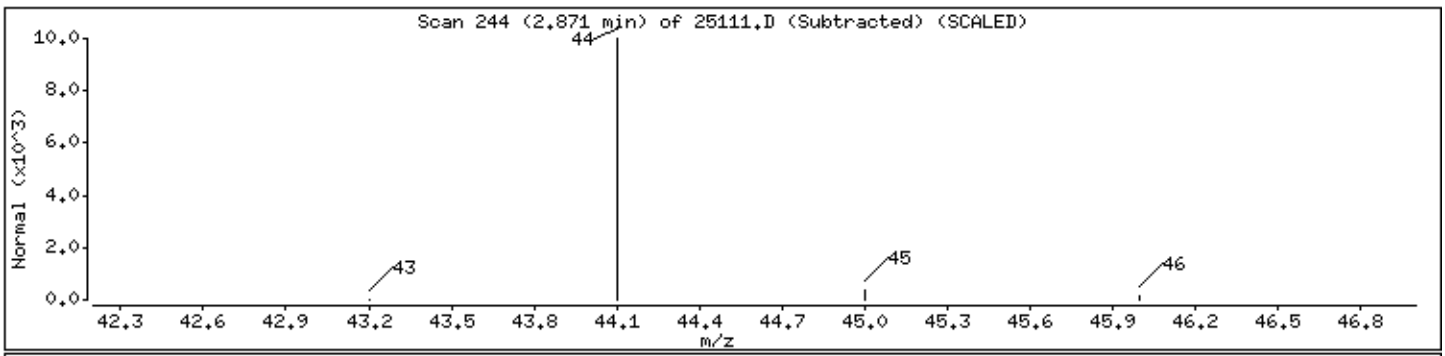
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D

Date : 08-SEP-2021 16:31

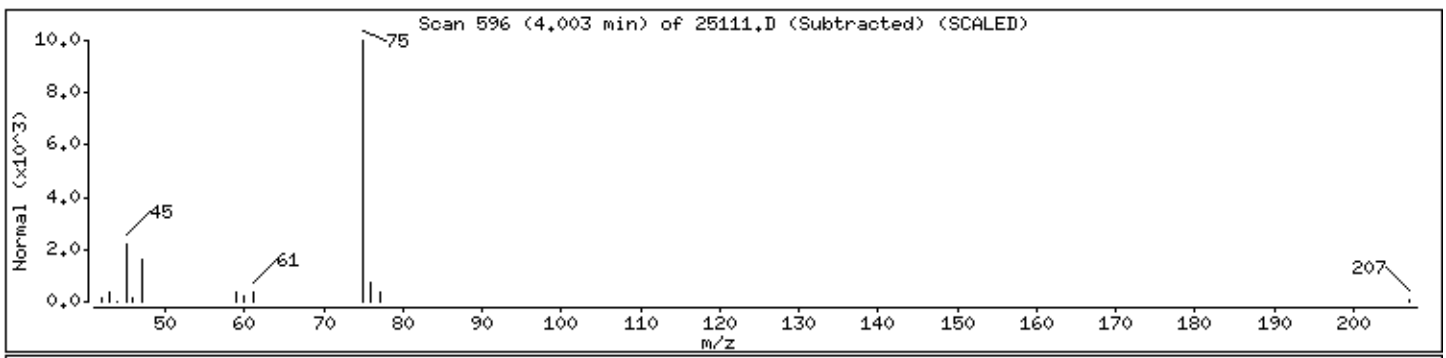
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D

Date : 08-SEP-2021 16:31

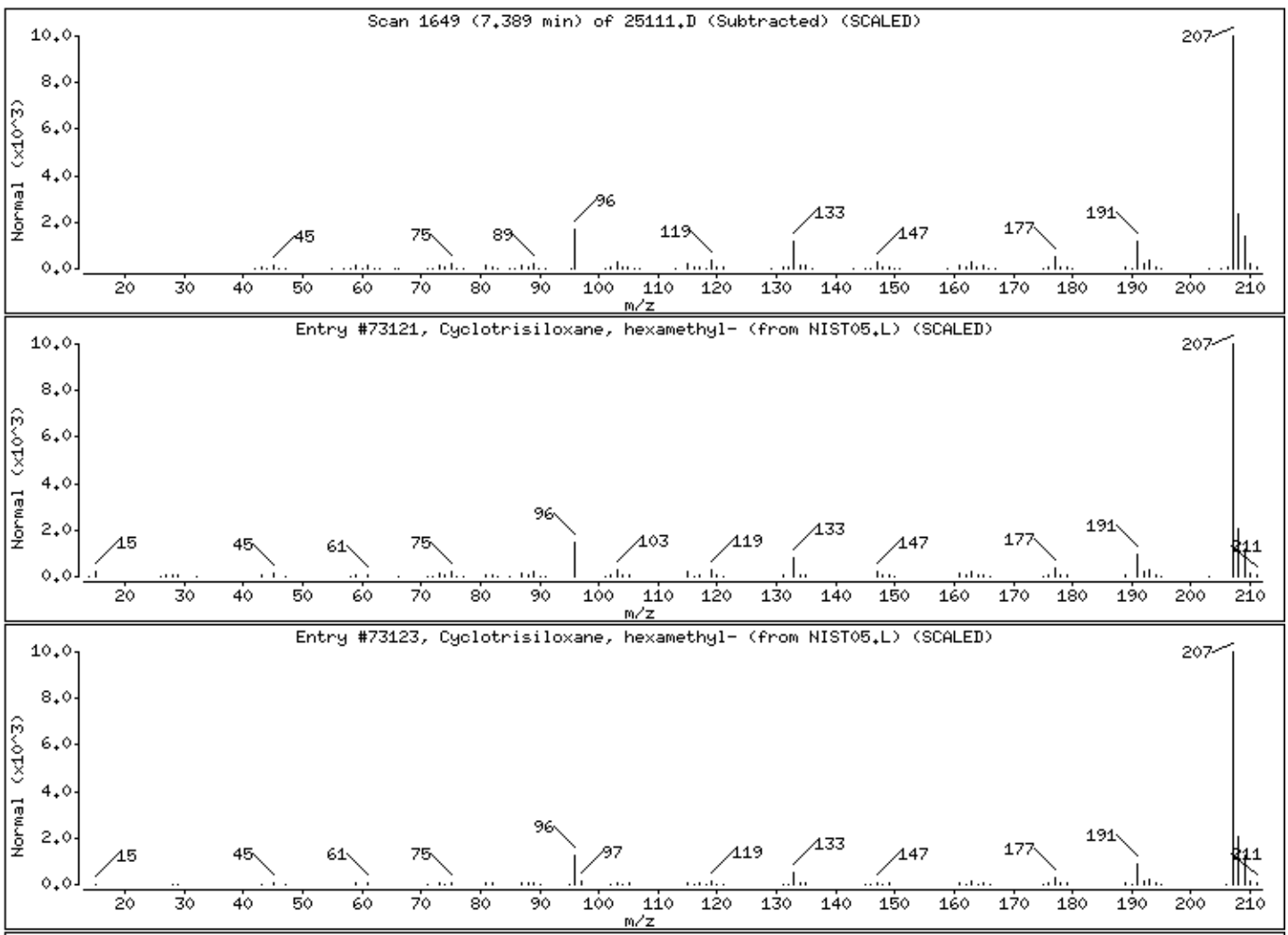
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73121 | 91 | C6H18O3Si3 | 222 |
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NIST05.L | 73123 | 90 | C6H18O3Si3 | 222 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D

Date : 08-SEP-2021 16:31

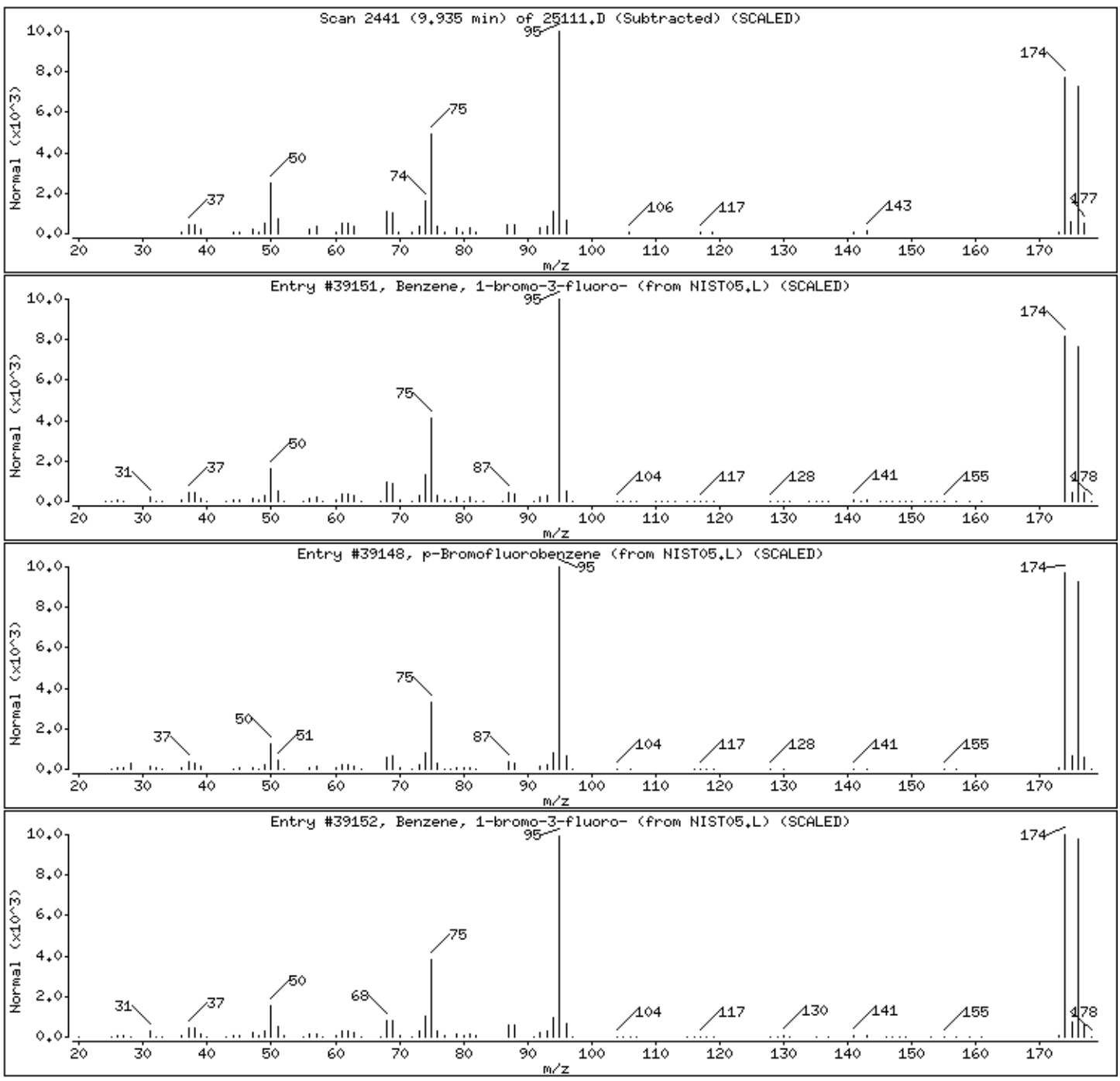
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39151 | 97 | C6H4BrF | 174 |
| p-Bromofluorobenzene | 460-00-4 | NIST05.L | 39148 | 97 | C6H4BrF | 174 |
| Benzene, 1-bromo-3-fluoro- | 1073-06-9 | NIST05.L | 39152 | 94 | C6H4BrF | 174 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D

Date : 08-SEP-2021 16:31

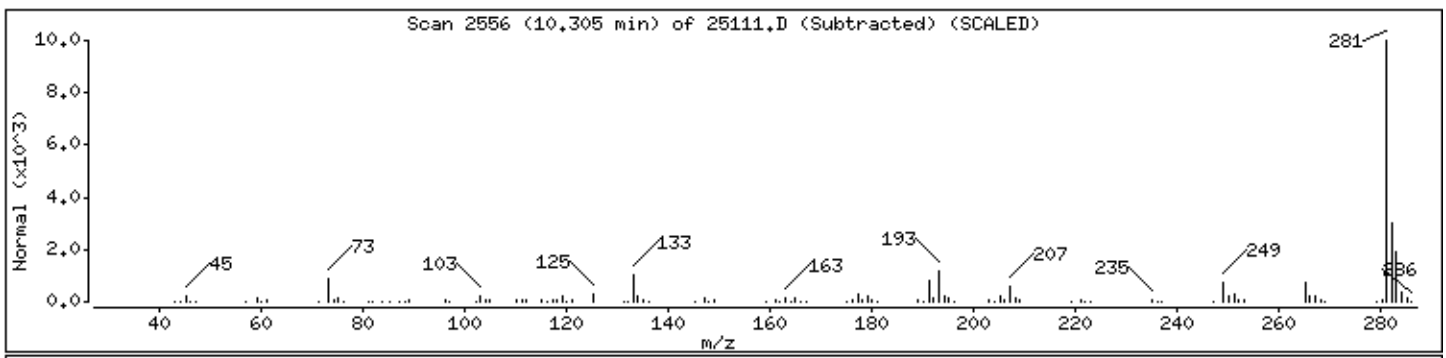
Client ID: Instrument: 10airH.i

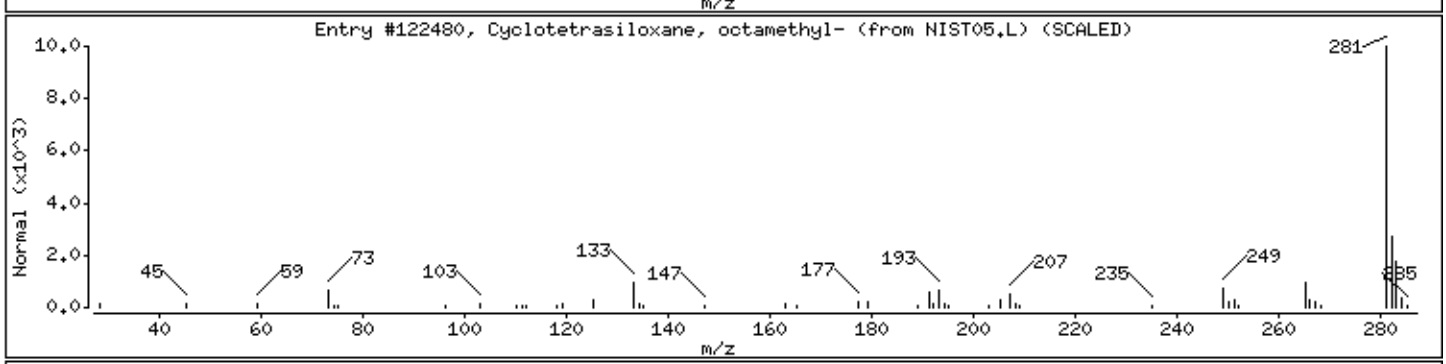
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NIST05.L | 122480 | 90 | C8H24O4Si4 | 296 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25111.D

Date : 08-SEP-2021 16:31

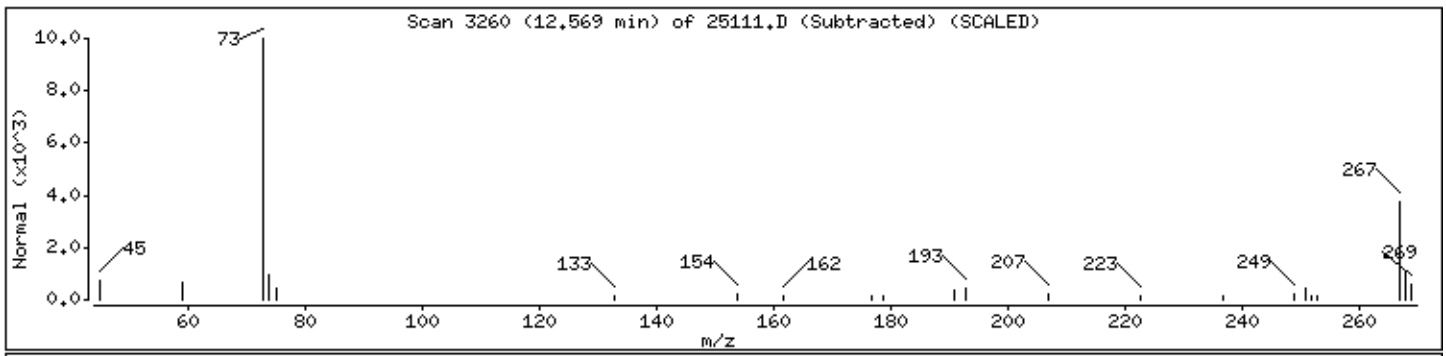
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b/25111.D
Injection Date: 08-SEP-2021 16:31
Instrument: 10airH.i
Lab Sample ID: 10577519016
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Lab Smp Id: 10577519014
Inj Date : 08-SEP-2021 20:07
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 19
Dil Factor: 1.55000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.550 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ppbv) | FINAL ( ppbv) |
|---|---|---|---|---|---|---|---|
| 7 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 61 | Compound Not Detected. | | | | | |
| 28 trans-1,2-dichloroethene | 96 | Compound Not Detected. | | | | | |
| 30 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 35 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 39 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| * 45 1,4-Difluorobenzene | 114 | 5.430 | 5.430 | (1.000) | 480023 | 10.0000 | |
| 48 Trichloroethene | 130 | 5.762 | 5.758 | (1.061) | 769 | 0.02962 | 0.0459(a) |
| 62 Tetrachloroethene | 166 | Compound Not Detected. | | | | | |
| * 64 Chlorobenzene - d5 | 117 | 8.401 | 8.404 | (1.000) | 402386 | 10.0000 | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Lab Smp Id: 10577519014
Inj Date : 08-SEP-2021 20:07
Operator : GT Inst ID: 10airH.i
Smp Info :
Misc Info : 40160
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Meth Date : 09-Sep-2021 08:57 gtrachte Quant Type: ISTD
Cal Date : 07-SEP-2021 11:01 Cal File: 25010.D
Als bottle: 19
Dil Factor: 1.55000
Integrator: HP RTE Compound Sublist: 1Custom.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.550 | Dilution Factor |
| Uf | 1.000 | ng unit correction factor |
| Cpnd Variable | | Local Compound Variable |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 45 1,4-Difluorobenzene | 5.431 | 2246904 | 10.000 |
| * 64 Chlorobenzene - d5 | 8.402 | 1357640 | 10.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 2.855 | 11558515 | 51.4419478 | 79.7 | 0 | | 0 | 45 |
| Unknown | | | | | CAS #: | | |
| 10.337 | 8462268 | 62.3307089 | 96.6 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.296 | 6625213 | 48.7994766 | 75.6 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.389 | 12633928 | 93.0579946 | 144 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 11.868 | 6017837 | 44.3257130 | 68.7 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Report Date: 09-Sep-2021 14:21

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ppbv) | FINAL( ppbv) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | | CAS #: | | |
| 11.945 | 26031642 | 191.741824 | 297 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.019 | 15162905 | 111.685735 | 173 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.206 | 14207097 | 104.645521 | 162 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.386 | 5287253 | 38.9444344 | 60.4 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.450 | 5504811 | 40.5469069 | 62.8 | 0 | | 0 | 64 |
| Unknown | | | | | CAS #: | | |
| 12.620 | 4903646 | 36.1188914 | 56.0 | 0 | | 0 | 64 |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10airH.i
Lab File ID: 25119.D
Lab Smp Id: 10577519014
Analysis Type: VOA
Quant Type: ISTD
Operator: GT
Method File: \\192.168.10.12\chem\10airH.i\090821.b\TO15_250-21.m
Misc Info: 40160

Calibration Date: 08-SEP-2021
Calibration Time: 07:18
Level: LOW
Sample Type: AIR

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

| COMPOUND | STANDARD | AREA LIMIT LOWER | AREA LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 459822 | 275893 | 643751 | 480023 | 4.39 |
| 64 Chlorobenzene - d | 392032 | 235219 | 548845 | 402386 | 2.64 |

| COMPOUND | STANDARD | RT LIMIT LOWER | RT LIMIT UPPER | SAMPLE | %DIFF |
|---|---|---|---|---|---|
| 45 1,4-Difluorobenze | 5.43 | 5.10 | 5.76 | 5.43 | 0.00 |
| 64 Chlorobenzene - d | 8.40 | 8.07 | 8.73 | 8.40 | -0.04 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Report Date: 09-Sep-2021 14:21

Pace Analytical Services, Inc.

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10577519014
Operator : GT
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 08-SEP-2021 20:07

Client SDG: 090821.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

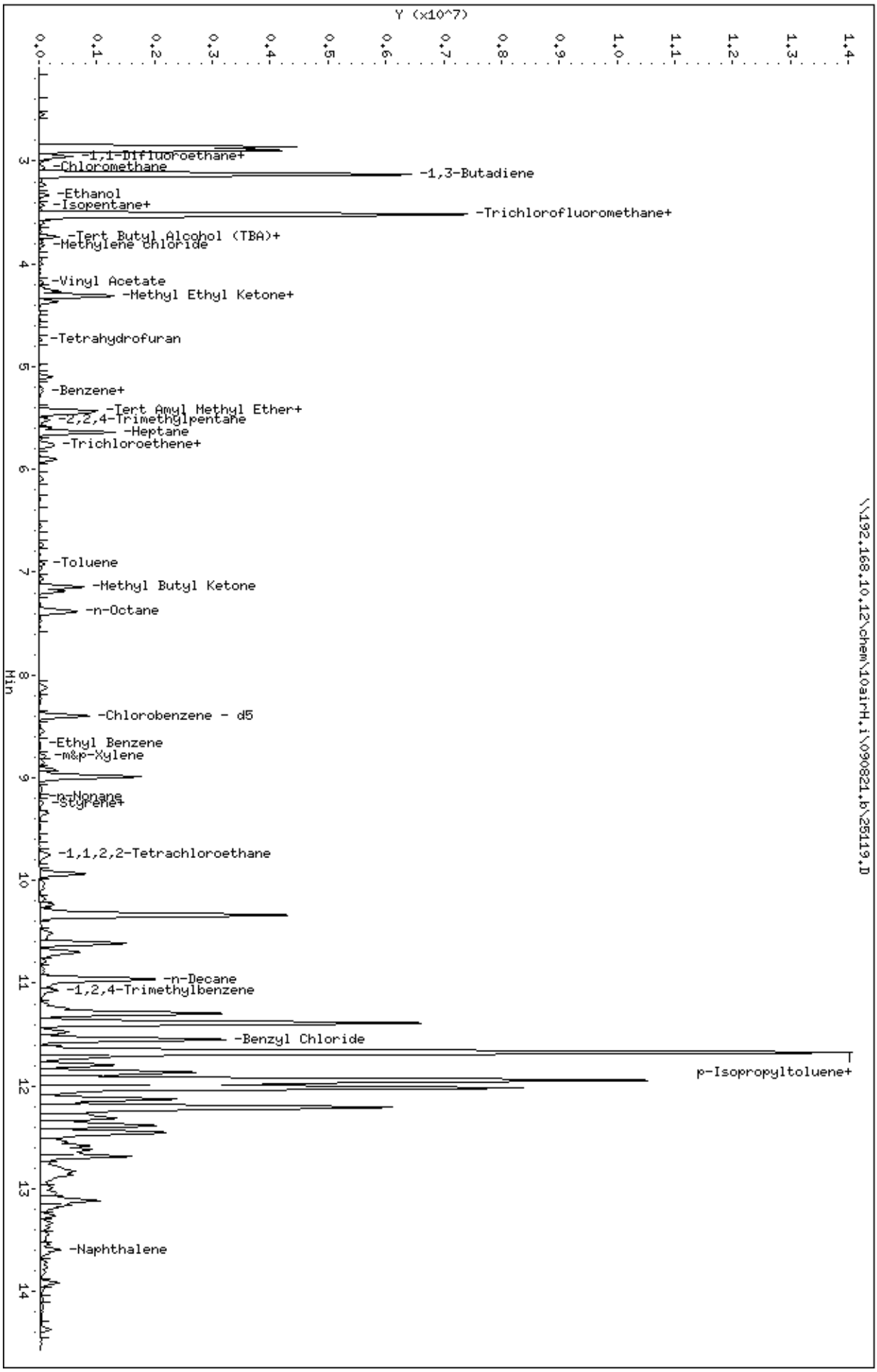
Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | Unknown | 2.855 | 79.7 | _J__ |
| 2. | Unknown | 10.337 | 96.6 | _J__ |
| 3. | Unknown | 11.296 | 75.6 | _J__ |
| 4. | Unknown | 11.389 | 144 | _J__ |
| 5. | Unknown | 11.868 | 68.7 | _J__ |
| 6. | Unknown | 11.945 | 297 | _J__ |
| 7. | Unknown | 12.019 | 173 | _J__ |
| 8. | Unknown | 12.206 | 162 | _J__ |
| 9. | Unknown | 12.386 | 60.4 | _J__ |
| 10. | Unknown | 12.450 | 62.8 | _J__ |
| 11. | Unknown | 12.620 | 56.0 | _J__ |

Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D
Date : 08-SEP-2021 20:07
Client ID:
Sample Info:
Column phase: ZB-5MSplus SN338857

Instrument: 10airH.i
Operator: GT
Column diameter: 0.32



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

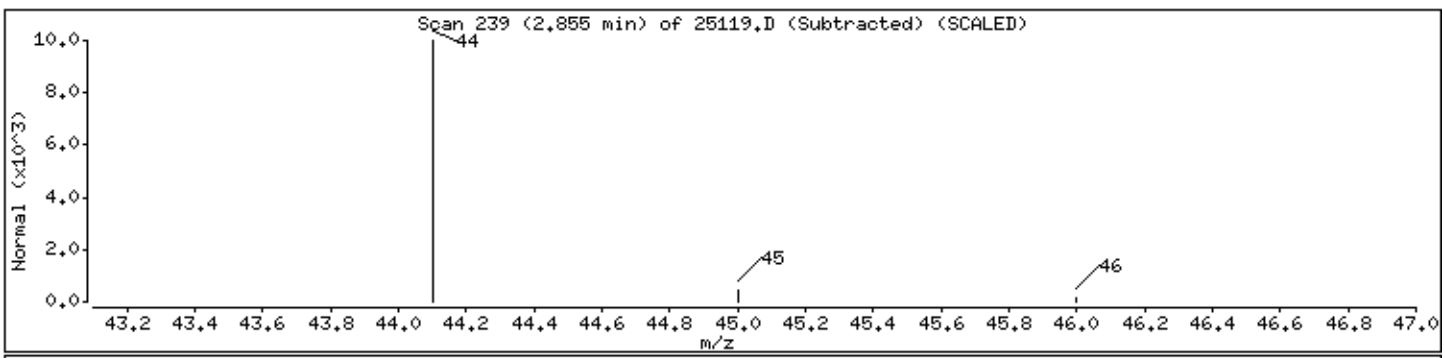
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

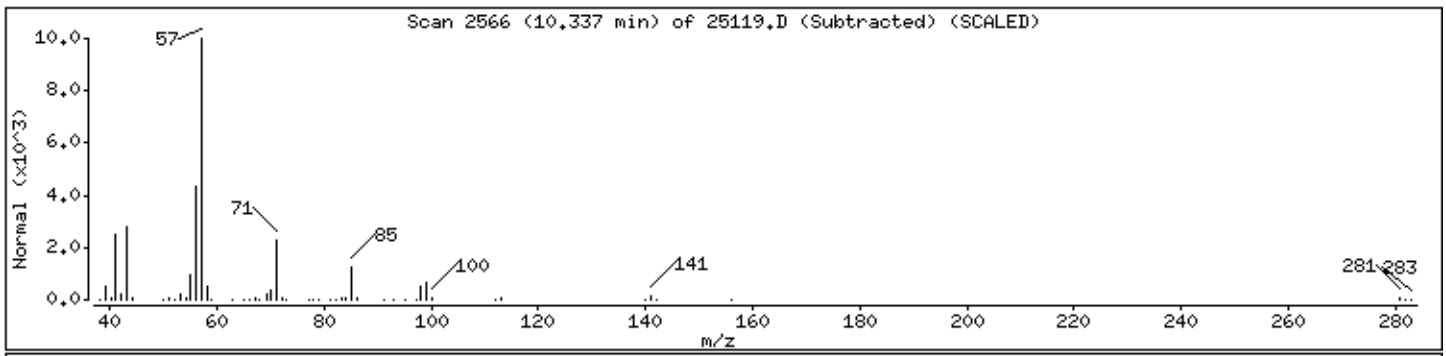
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

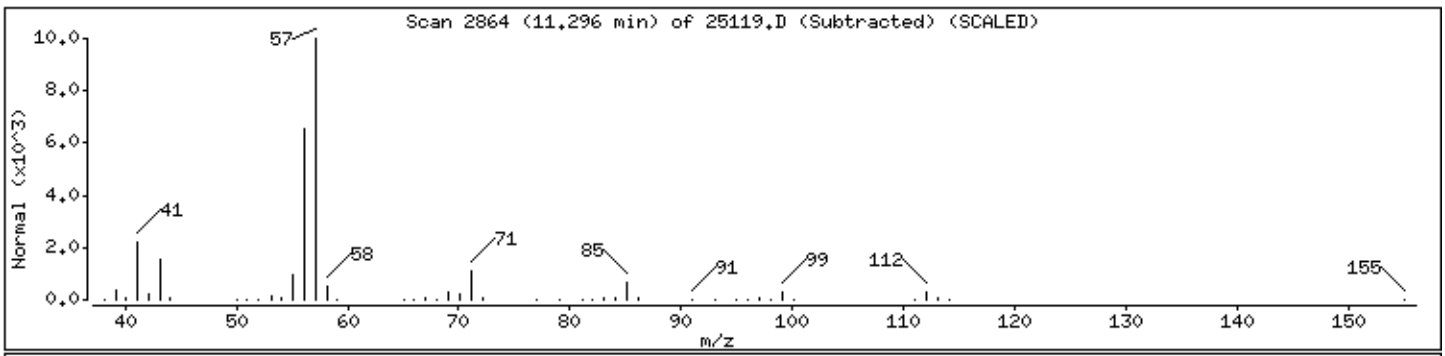
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

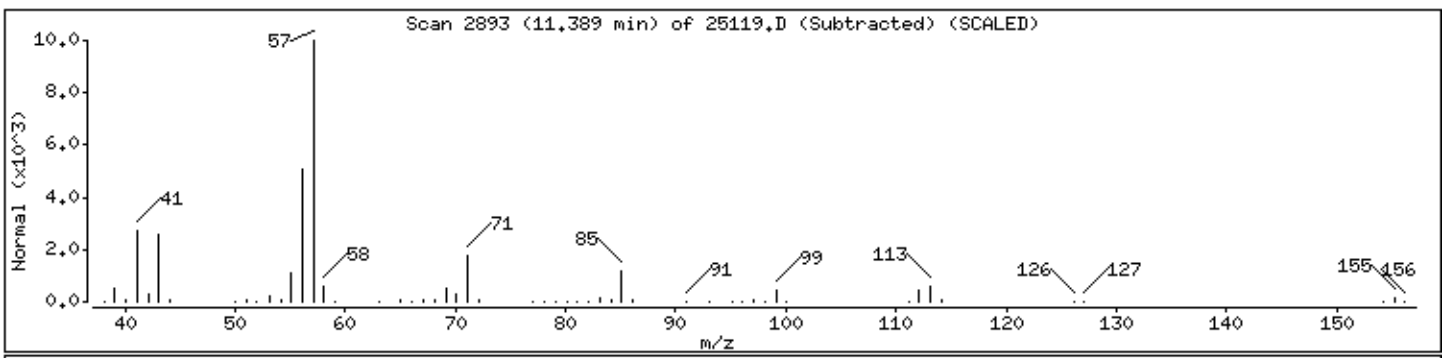
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

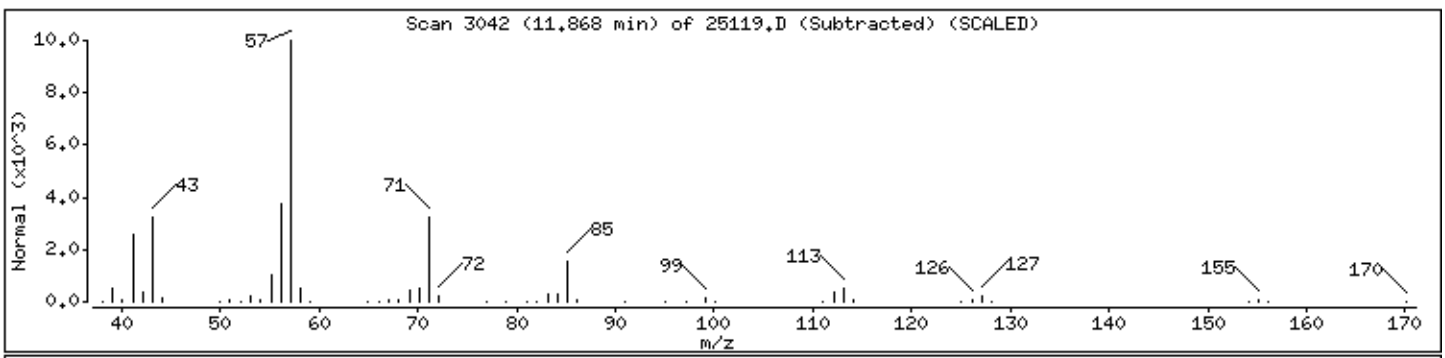
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

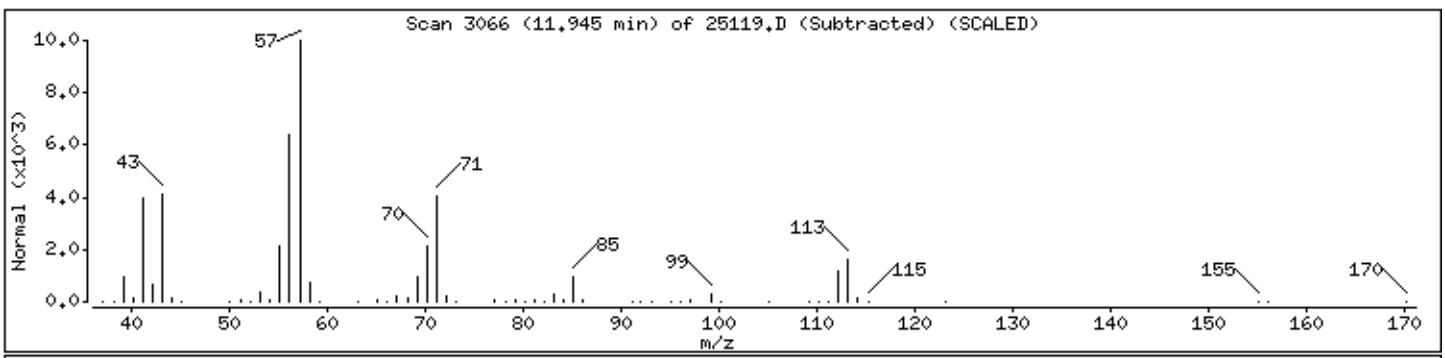
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

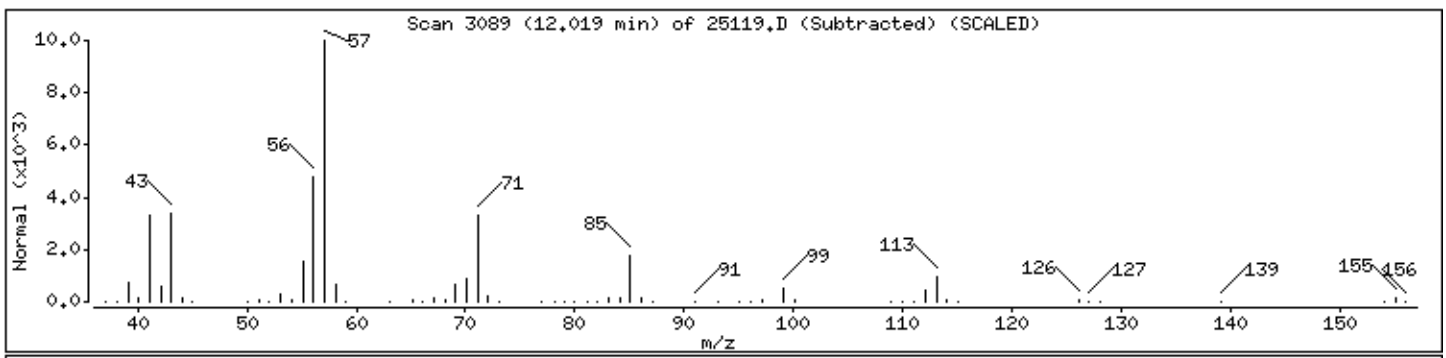
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

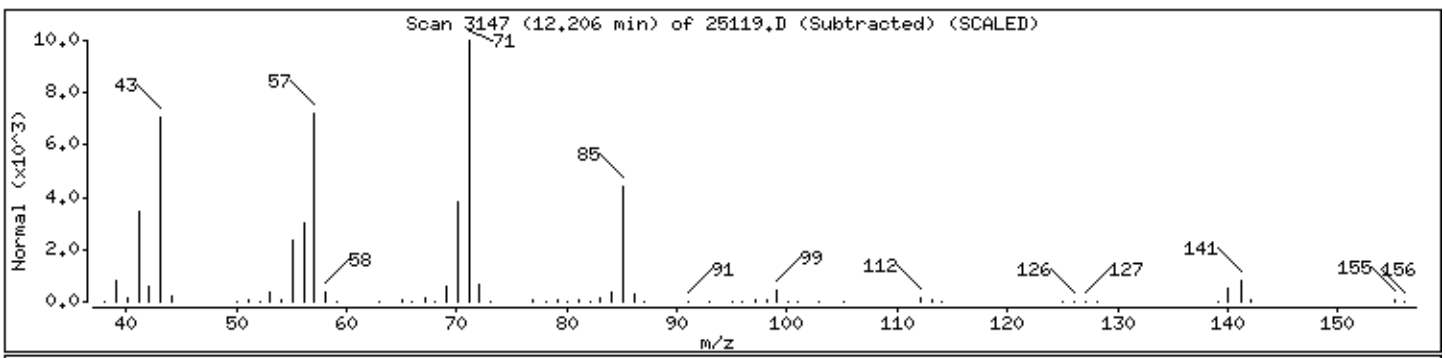
Client ID: Instrument: 10airH.i

Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

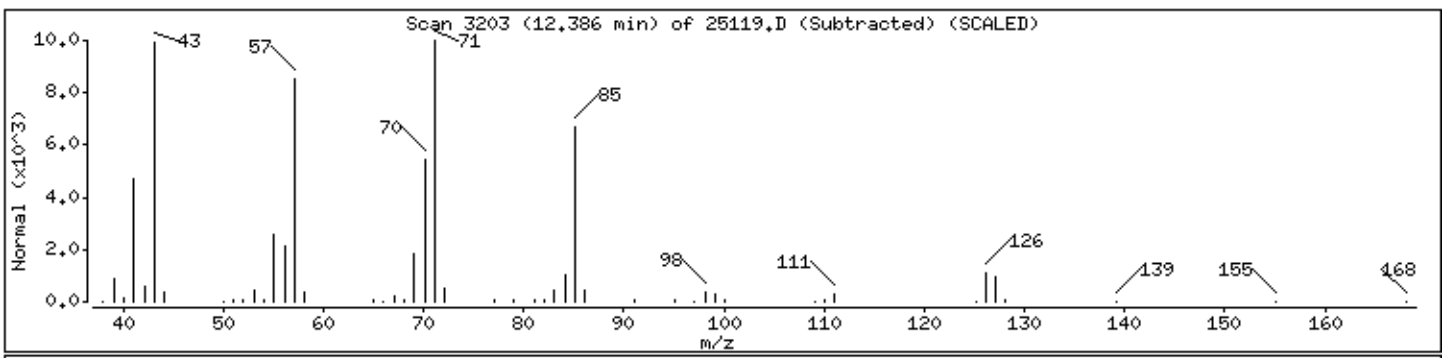
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



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Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

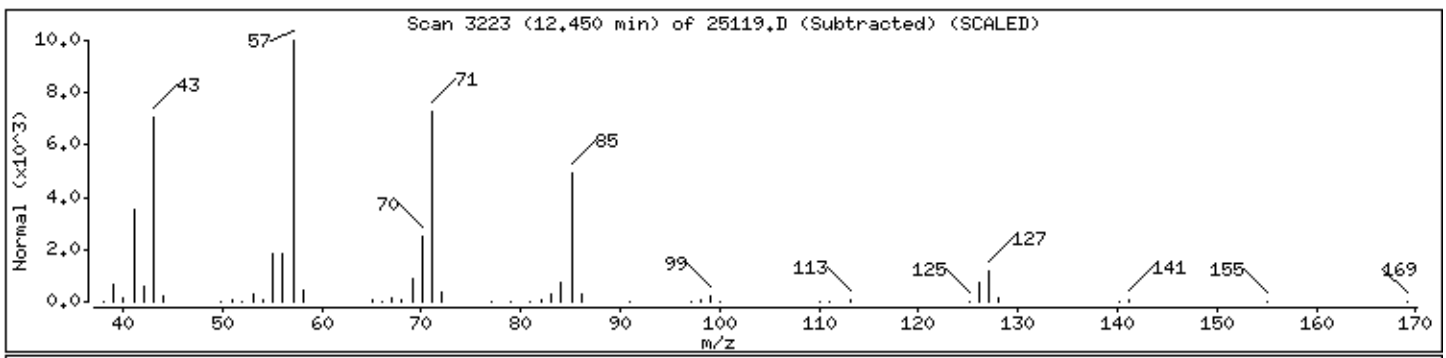
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



Data File: \\192.168.10.12\chem\10airH.i\090821.b\25119.D

Date : 08-SEP-2021 20:07

Client ID:

Instrument: 10airH.i

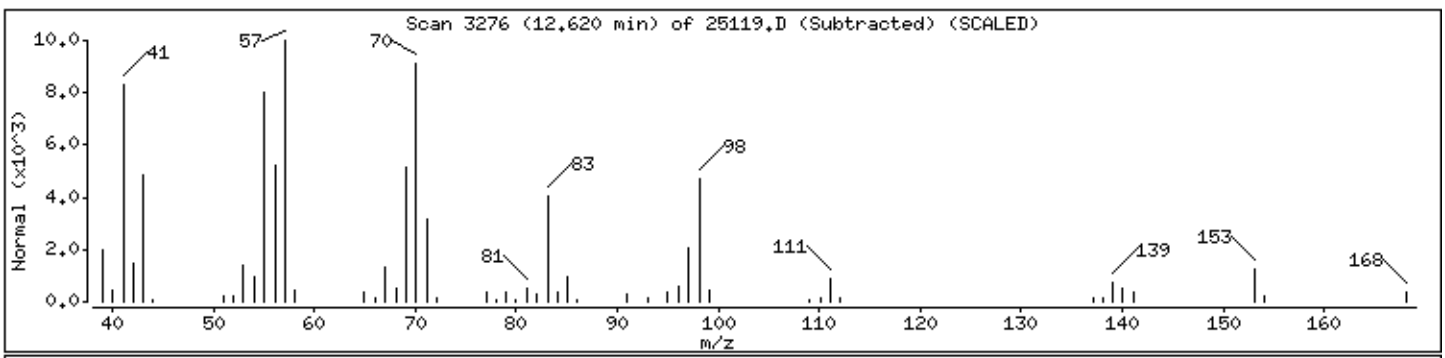
Sample Info:

Operator: GT

Column phase: ZB-5MSplus SN338857

Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | 0 | 0 | | 0 |



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Injection Date: 08-SEP-2021 20:07
Instrument: 10airH.i
Lab Sample ID: 10577519014
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE