

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081320\  
 Data File : VL035407.D  
 Acq On : 13 Aug 2020 19:02  
 Operator : SY/AP  
 Sample : L3510-01DL 4X  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 E053-1100DL

Quant Time: Aug 15 15:17:46 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081220AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Aug 12 20:32:44 2020  
 QLast Update : Wed Aug 12 20:32:44 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 1502558  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 3338283  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.10 | 117  | 3310150  | 10.00 | ppbv  | -0.01    |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.43  | 95    | 3134378  | 11.73    | ppbv | -0.01   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 117.30% |

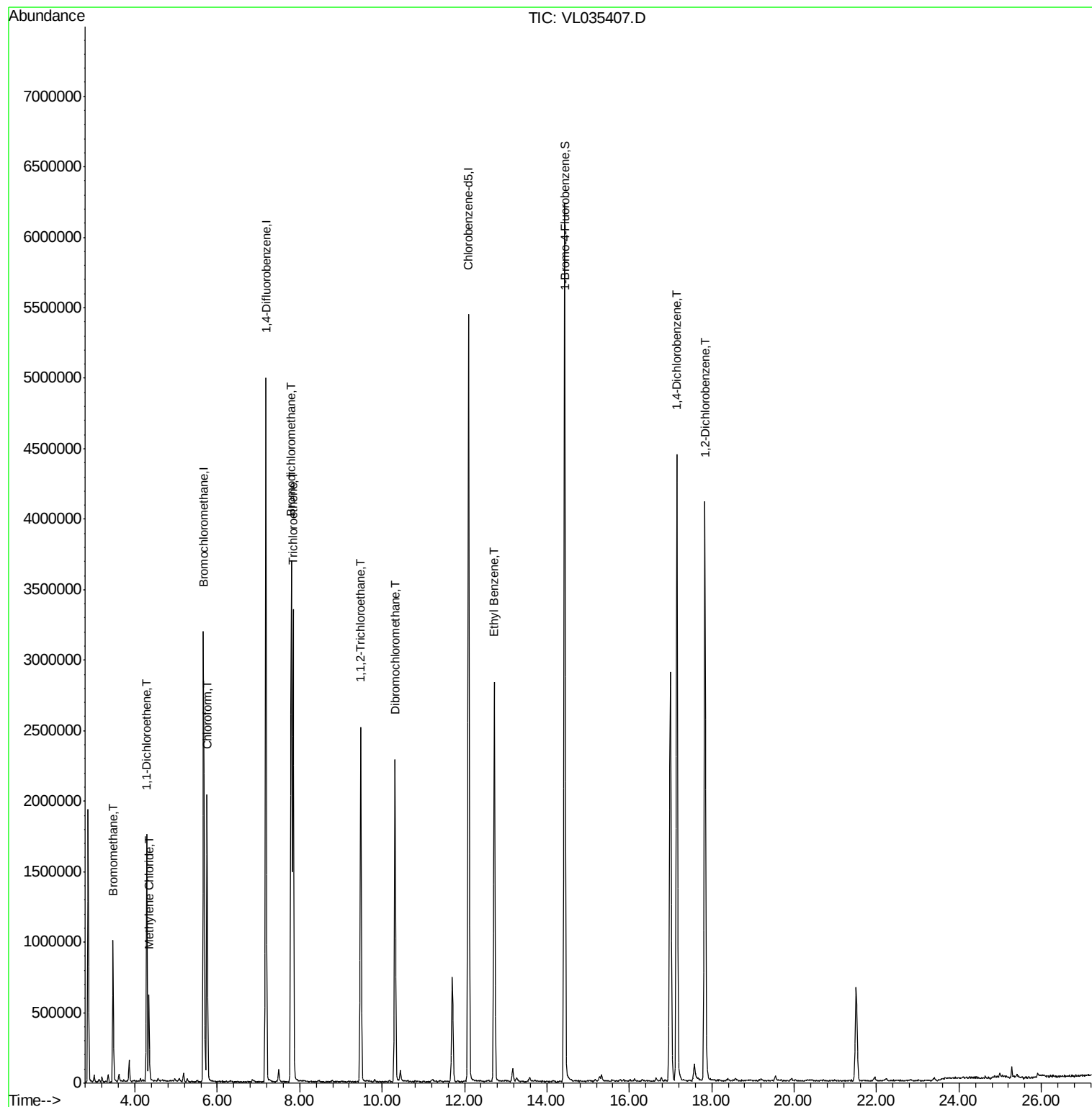
| Target Compounds          | R.T.  | QIon | Response | Conc  | Units | Ovalue |
|---------------------------|-------|------|----------|-------|-------|--------|
| 6) Bromomethane           | 3.47  | 94   | 502790   | 9.397 | ppbv  | 100    |
| 18) 1,1-Dichloroethene    | 4.29  | 96   | 469255   | 6.859 | ppbv  | 99     |
| 20) Methylene Chloride    | 4.34  | 84   | 194688   | 2.724 | ppbv  | 99     |
| 29) Chloroform            | 5.75  | 83   | 1336825  | 5.480 | ppbv  | 100    |
| 38) Trichloroethene       | 7.84  | 130  | 931415   | 7.425 | ppbv  | 94     |
| 42) Bromodichloromethane  | 7.79  | 83   | 2469136  | 9.864 | ppbv  | 99     |
| 47) 1,1,2-Trichloroethane | 9.48  | 97   | 839875   | 6.533 | ppbv  | 98     |
| 48) Dibromochloromethane  | 10.31 | 129  | 1302993  | 6.341 | ppbv  | 99     |
| 58) Ethyl Benzene         | 12.72 | 91   | 2524340  | 4.825 | ppbv  | 96     |
| 76) 1,4-Dichlorobenzene   | 17.16 | 146  | 2141345  | 7.512 | ppbv  | 99     |
| 77) 1,2-Dichlorobenzene   | 17.83 | 146  | 2055311  | 7.346 | ppbv  | 99     |

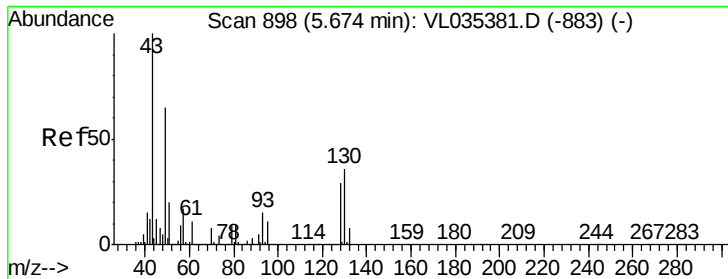
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081320\  
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Instrument :  
MSVOA\_L  
ClientSampleId :  
E053-1100DL

Quant Time: Aug 15 15:17:46 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081220AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Aug 12 20:32:44 2020  
QLast Update : Wed Aug 12 20:32:44 2020  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.01 min

Lab File: VL035407.D

Acq: 13 Aug 2020 19:02

Instrument :

MSVOA\_L

ClientSampleId :

E053-1100DL

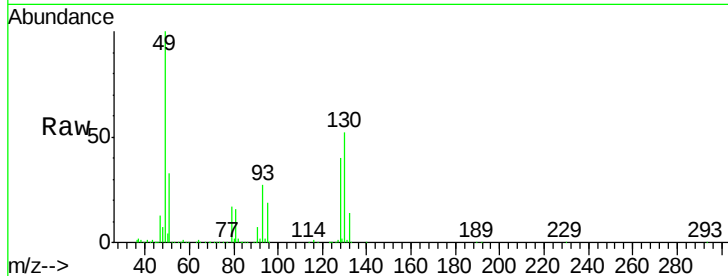
Tot Ion: 49 Resp: 1502558

Ion Ratio Lower Upper

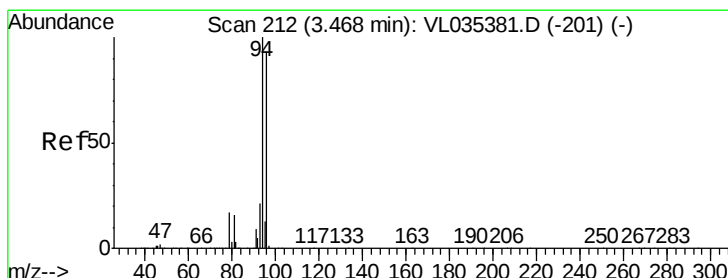
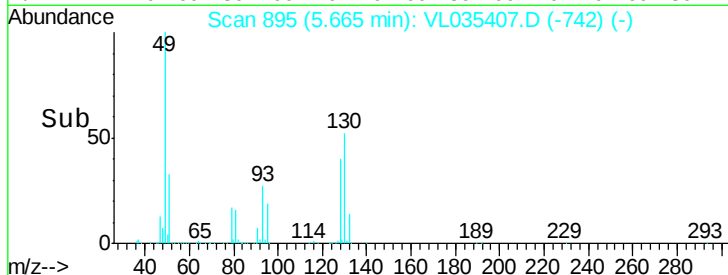
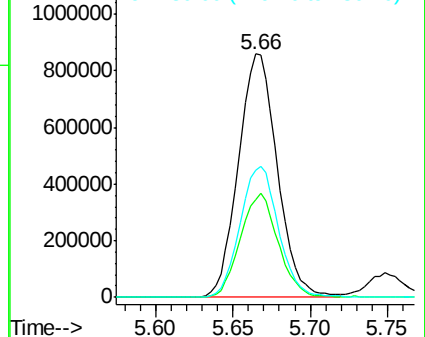
49 100

128 41.8 21.8 65.3

130 53.6 27.9 83.6



Abundance Ion 49.10 (48.80 to 49.80): VL0  
Ion 128.00 (127.70 to 128.70): V  
Ion 130.00 (129.70 to 130.70): V



#6

Bromomethane

Concen: 9.397 ppbv

RT: 3.47 min Scan# 212

Delta R.T. 0.00 min

Lab File: VL035407.D

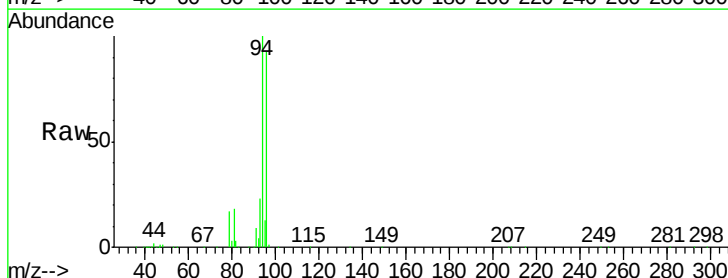
Acq: 13 Aug 2020 19:02

Tgt Ion: 94 Resp: 502790

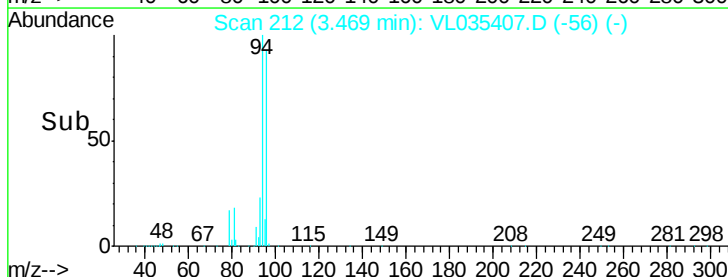
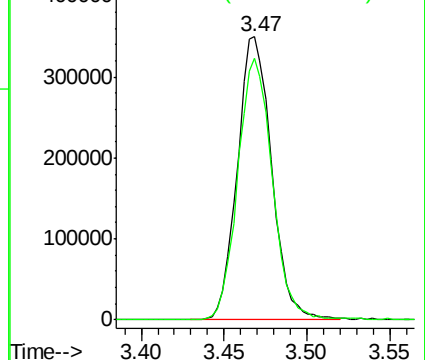
Ion Ratio Lower Upper

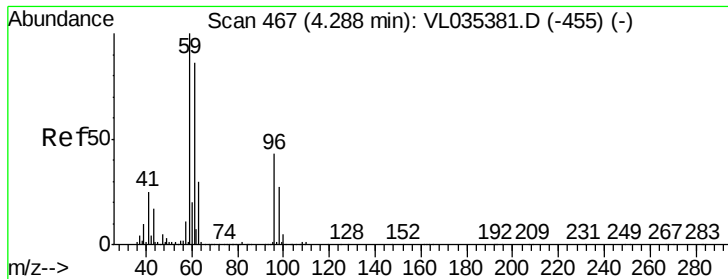
94 100

96 92.6 74.4 111.6



Abundance Ion 94.00 (93.70 to 94.70): VL0  
Ion 96.00 (95.70 to 96.70): VL0

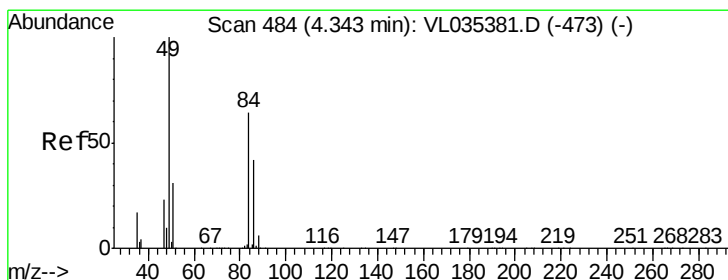
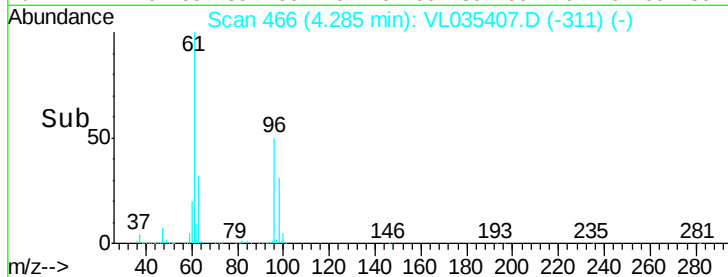
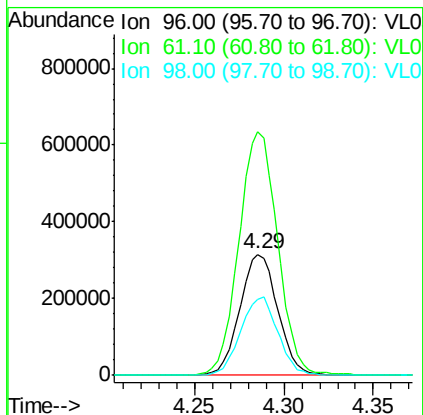
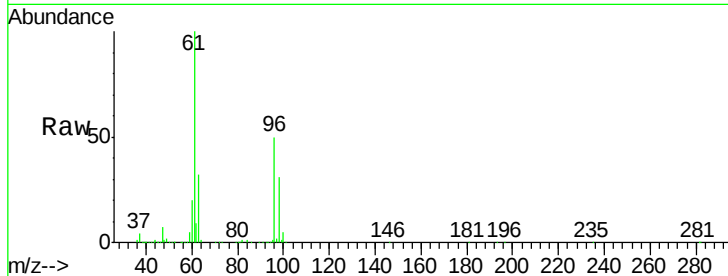




#18  
 1,1-Dichloroethene  
 Concen: 6.859 ppbv  
 RT: 4.29 min Scan# 466  
 Delta R.T. -0.00 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

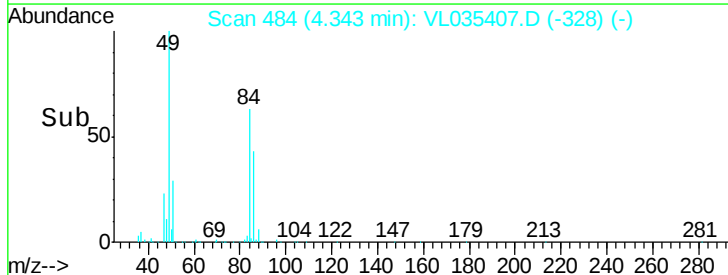
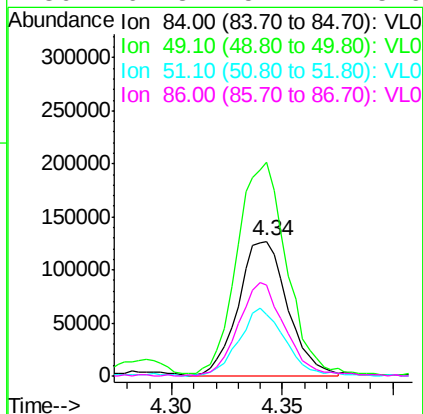
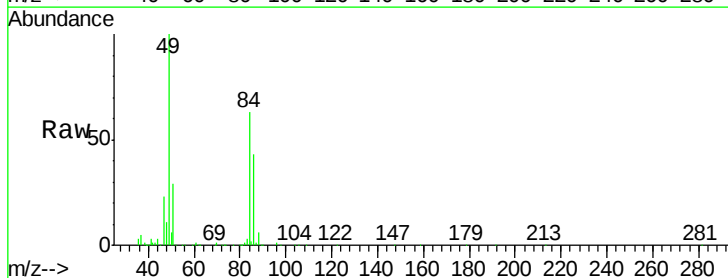
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 E053-1100DL

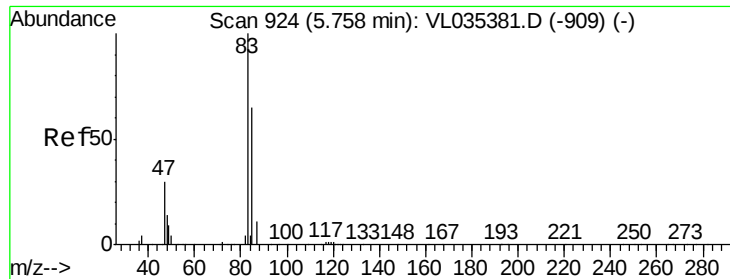
Tot Ion: 96 Resp: 469255  
 Ion Ratio Lower Upper  
 96 100  
 61 201.0 159.0 238.4  
 98 62.2 50.3 75.5



#20  
 Methylene Chloride  
 Concen: 2.724 ppbv  
 RT: 4.34 min Scan# 484  
 Delta R.T. 0.00 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

Tgt Ion: 84 Resp: 194688  
 Ion Ratio Lower Upper  
 84 100  
 49 157.5 125.7 188.5  
 51 45.7 38.5 57.7  
 86 67.3 52.4 78.6





#29

Chloroform

Concen: 5.480 ppbv

RT: 5.75 min Scan# 921

Delta R.T. -0.01 min

Lab File: VL035407.D

Acq: 13 Aug 2020 19:02

Instrument :

MSVOA\_L

ClientSampleId :

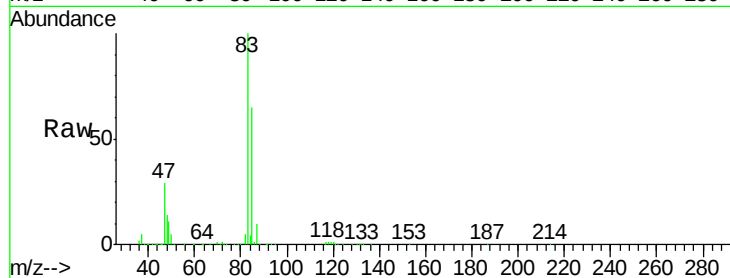
E053-1100DL

Tot Ion: 83 Resp: 1336825

Ion Ratio Lower Upper

83 100

85 64.8 51.7 77.5



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

800000

600000

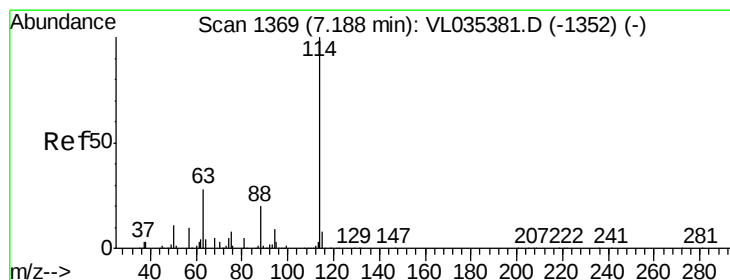
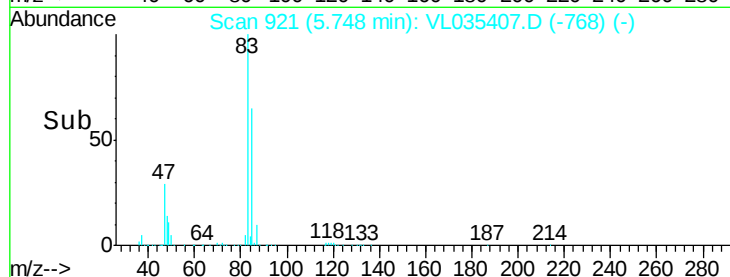
400000

200000

0

5.65 5.70 5.75 5.80

Time-->



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.01 min

Lab File: VL035407.D

Acq: 13 Aug 2020 19:02

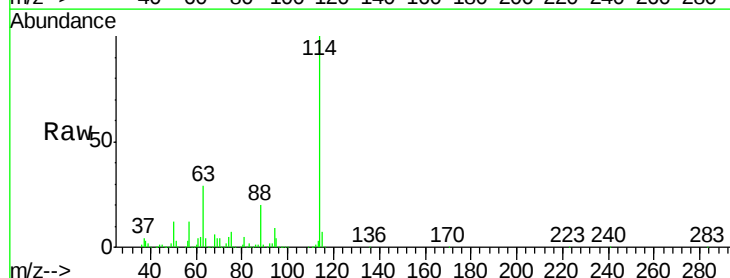
Tgt Ion: 114 Resp: 3338283

Ion Ratio Lower Upper

114 100

63 28.8 21.5 32.3

88 20.3 15.6 23.4



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

2500000

2000000

1500000

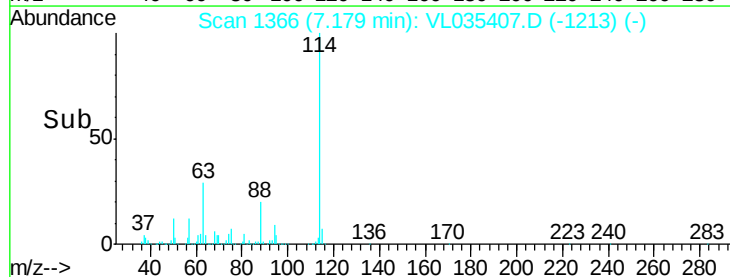
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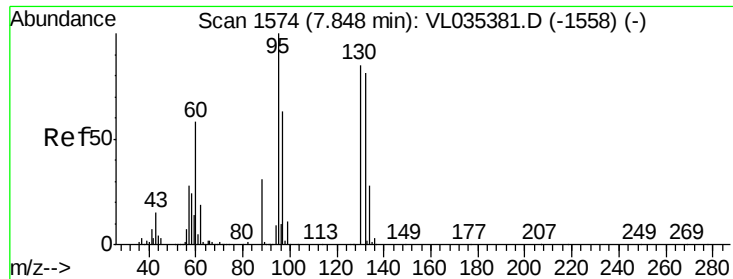
500000

0

7.10 7.15 7.20 7.25

Time-->

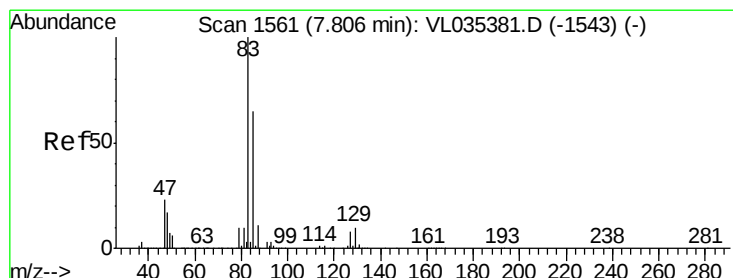
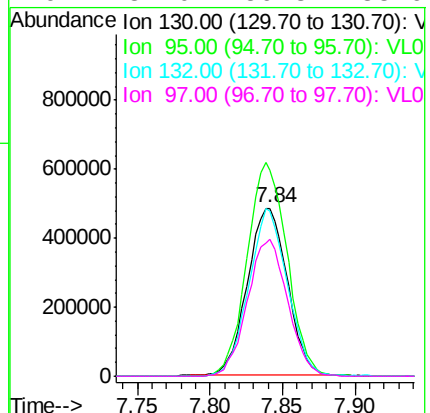
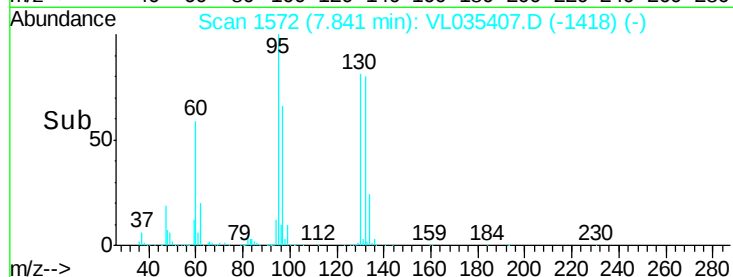
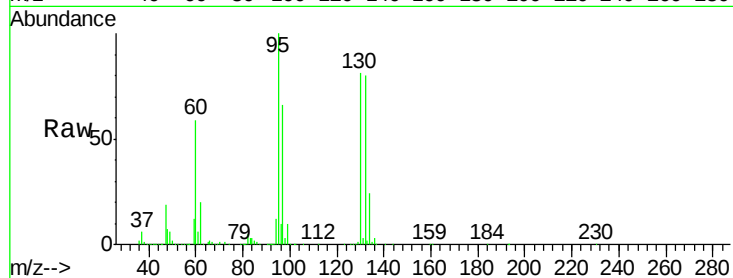




#38  
 Trichloroethene  
 Concen: 7.425 ppbv  
 RT: 7.84 min Scan# 1572  
 Delta R.T. -0.01 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

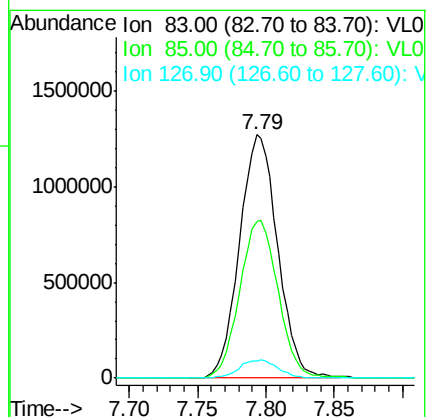
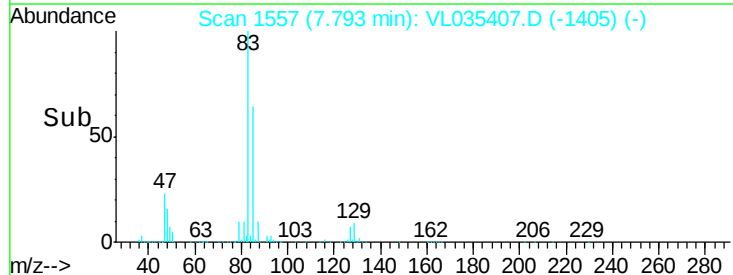
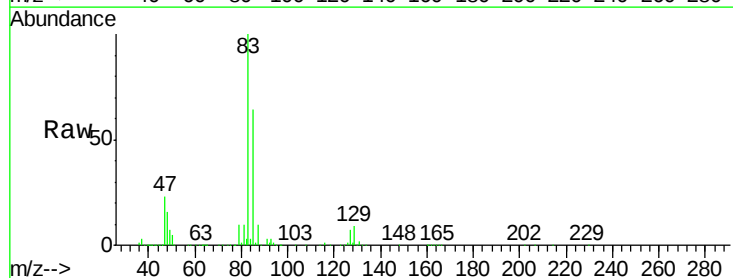
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 E053-1100DL

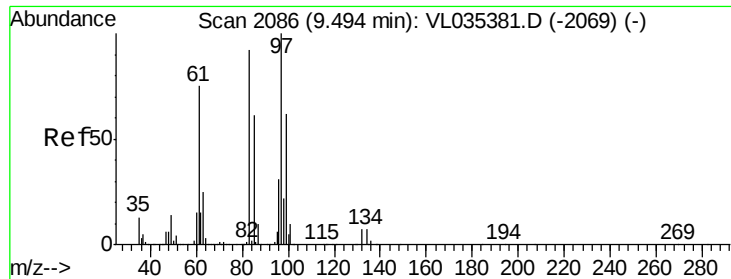
|             |       |            |
|-------------|-------|------------|
| Tot Ion:130 | Resp: | 931415     |
| Ion Ratio   | Lower | Upper      |
| 130         | 100   |            |
| 95          | 123.5 | 94.2 141.4 |
| 132         | 98.6  | 76.6 114.8 |
| 97          | 82.0  | 59.3 88.9  |



#42  
 Bromodichloromethane  
 Concen: 9.864 ppbv  
 RT: 7.79 min Scan# 1557  
 Delta R.T. -0.01 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 83 | Resp: | 2469136   |
| Ion Ratio   | Lower | Upper     |
| 83          | 100   |           |
| 85          | 64.4  | 52.2 78.4 |
| 127         | 6.9   | 6.3 9.5   |

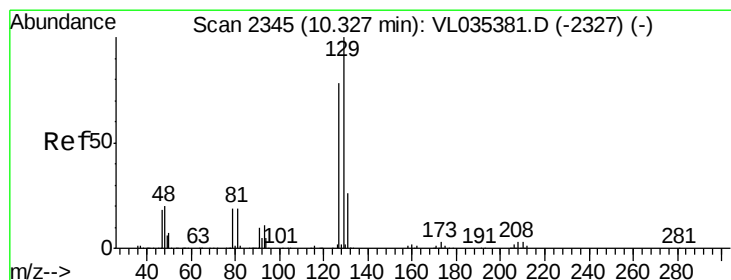
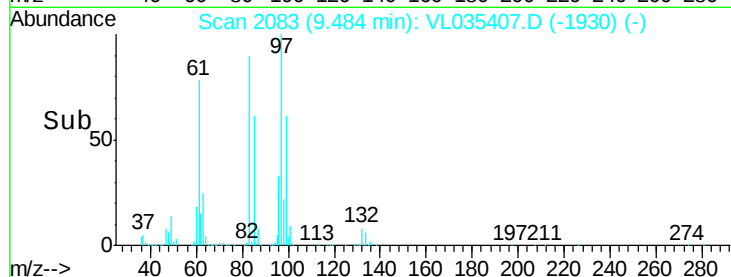
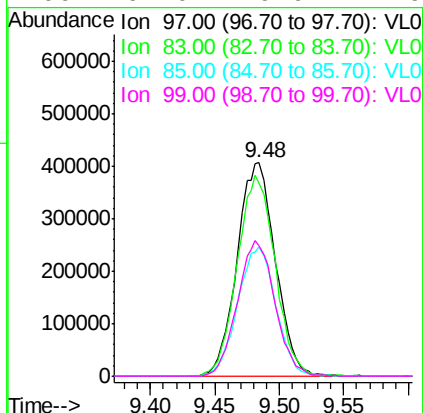
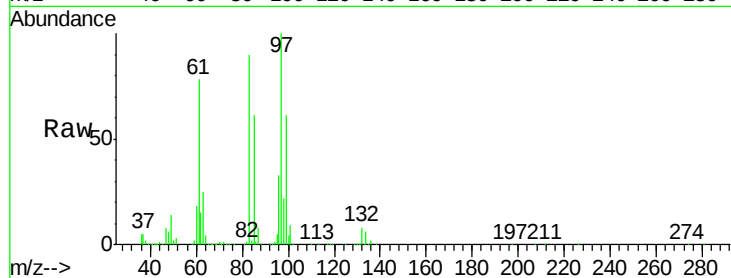




#47  
 1,1,2-Trichloroethane  
 Concen: 6.533 ppbv  
 RT: 9.48 min Scan# 2083  
 Delta R.T. -0.01 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

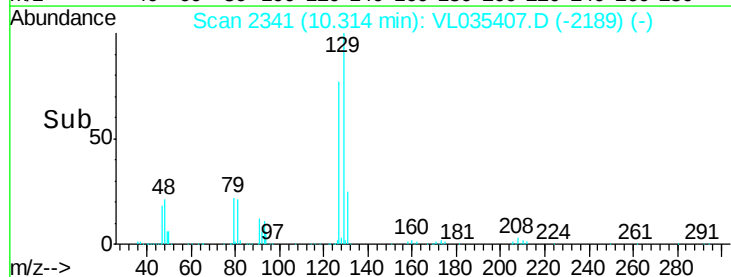
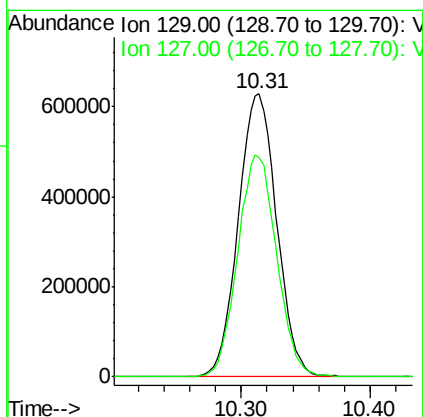
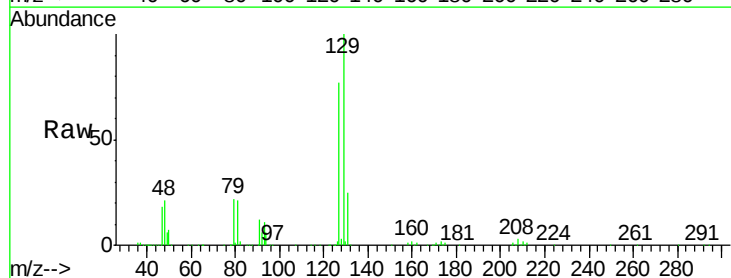
Instrument :  
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 E053-1100DL

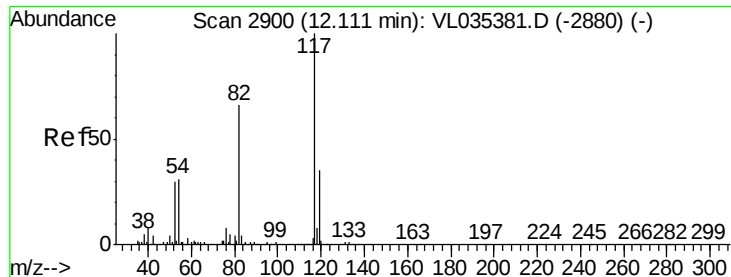
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 97    | Resp: | 839875 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 83       | 90.4  | 73.9  | 110.9  |
| 85       | 60.5  | 49.0  | 73.6   |
| 99       | 61.0  | 49.9  | 74.9   |



#48  
 Dibromochloromethane  
 Concen: 6.341 ppbv  
 RT: 10.31 min Scan# 2341  
 Delta R.T. -0.01 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 129   | Resp: | 1302993 |
| Ion      | Ratio | Lower | Upper   |
| 129      | 100   |       |         |
| 127      | 79.7  | 39.3  | 117.8   |

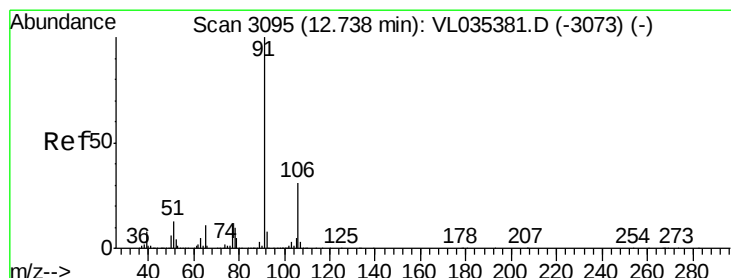
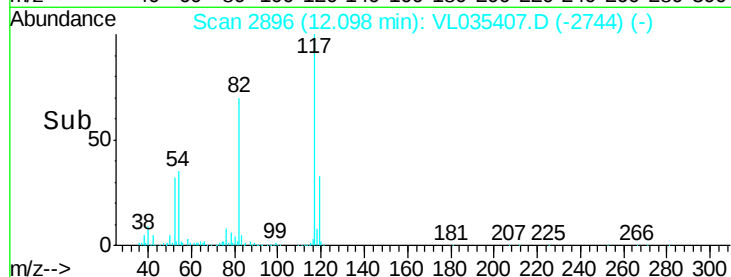
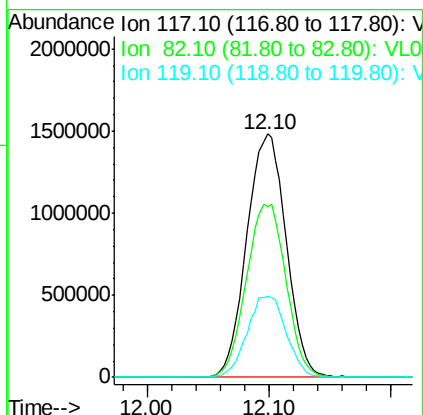
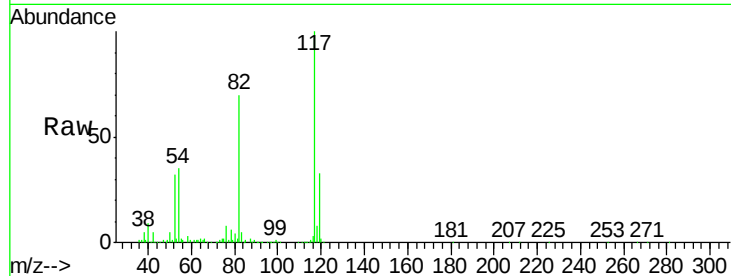




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.10 min Scan# 2896  
Delta R.T. -0.01 min  
Lab File: VL035407.D  
Acq: 13 Aug 2020 19:02

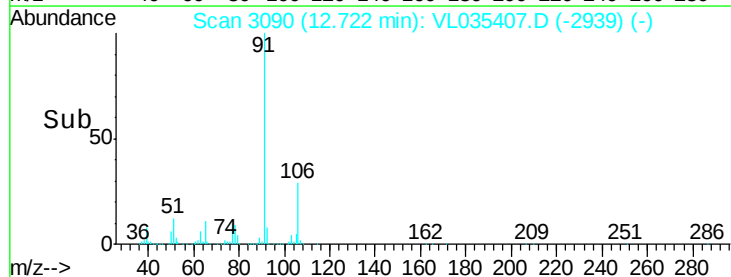
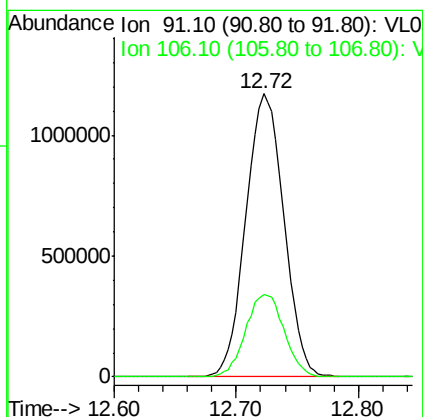
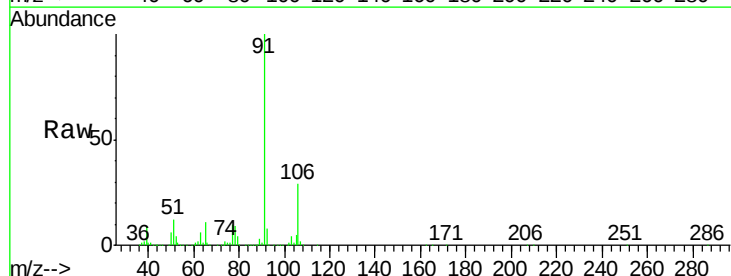
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E053-1100DL

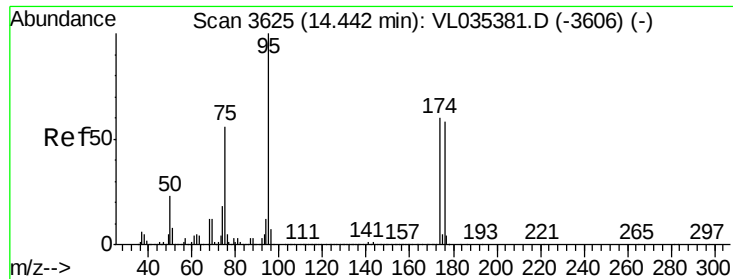
Tot Ion:117 Resp: 3310150  
Ion Ratio Lower Upper  
117 100  
82 71.6 53.0 79.6  
119 33.0 25.7 38.5



#58  
Ethyl Benzene  
Concen: 4.825 ppbv  
RT: 12.72 min Scan# 3090  
Delta R.T. -0.02 min  
Lab File: VL035407.D  
Acq: 13 Aug 2020 19:02

Tgt Ion: 91 Resp: 2524340  
Ion Ratio Lower Upper  
91 100  
106 29.2 25.1 37.7



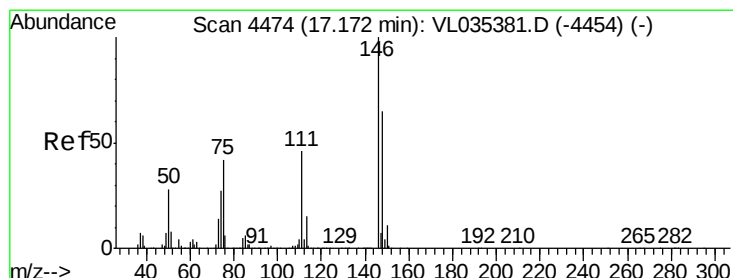
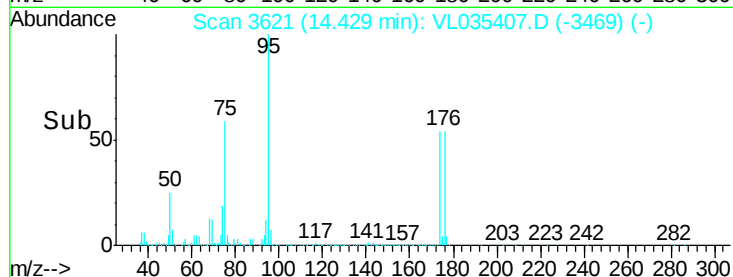
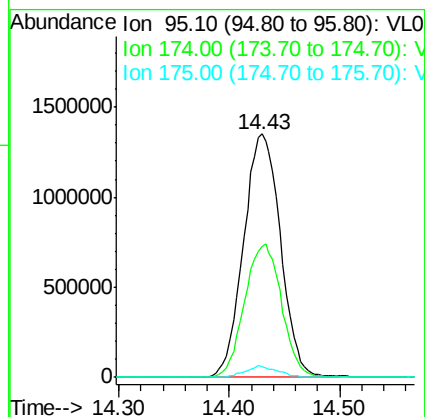
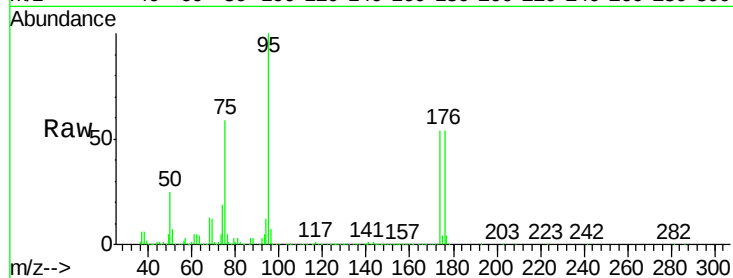


#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 11.728 ppbv  
 RT: 14.43 min Scan# 3621  
 Delta R.T. -0.01 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 E053-1100DL

Tot Ion: 95 Resp: 3134378  

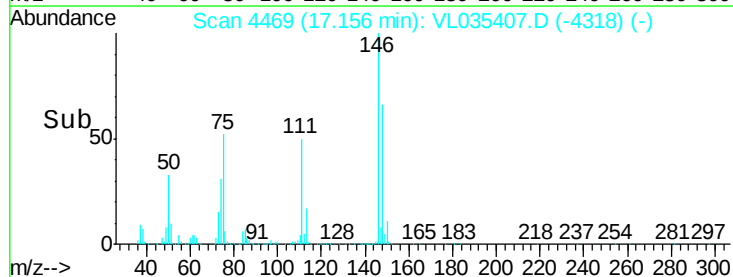
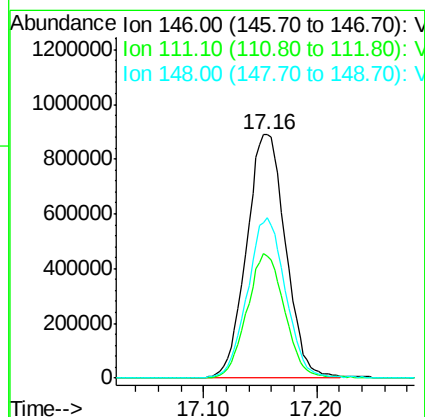
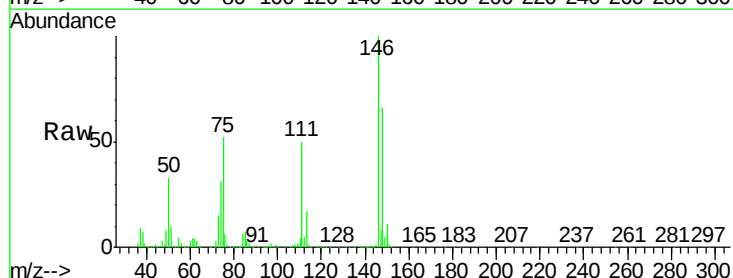
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 174 | 55.0  | 48.2  | 72.2  |
| 175 | 4.1   | 3.7   | 5.5   |

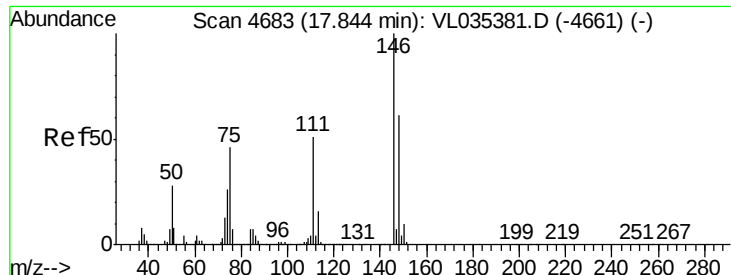


#76  
 1,4-Dichlorobenzene  
 Concen: 7.512 ppbv  
 RT: 17.16 min Scan# 4469  
 Delta R.T. -0.02 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

Tgt Ion: 146 Resp: 2141345  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 49.6  | 24.0  | 72.0  |
| 148 | 64.4  | 32.5  | 97.5  |





#77  
 1,2-Dichlorobenzene  
 Concen: 7.346 ppbv  
 RT: 17.83 min Scan# 4679  
 Delta R.T. -0.01 min  
 Lab File: VL035407.D  
 Acq: 13 Aug 2020 19:02

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 E053-1100DL

Tot Ion:146 Resp: 2055311  
 Ion Ratio Lower Upper  
 146 100  
 111 52.7 25.9 77.8  
 148 63.9 32.1 96.3

