

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV071420\  
 Data File : VV017489.D  
 Acq On : 14 Jul 2020 17:39  
 Operator : SY/MD  
 Sample : L3281-10  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 GAXX0

Quant Time: Jul 15 03:07:36 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR071420WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Jul 15 02:49:58 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 136317   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 132131   | 5.00 | ug/L  | 0.00     |
| 61) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 70505    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 34766    | 4.38     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 87.60%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 29862    | 4.73     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 94.60%  |
| 11) 1,1-Dichloroethene-d2      | 2.12   | 63    | 56092    | 3.24     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 64.80%  |
| 20) 2-Butanone-d5              | 3.96   | 46    | 83888    | 51.56    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 103.12% |
| 24) Chloroform-d               | 4.38   | 84    | 79731    | 4.48     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.60%  |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 48529    | 5.13     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 102.60% |
| 32) Benzene-d6                 | 5.07   | 84    | 145403   | 4.75     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 95.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 40218    | 4.76     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 95.20%  |
| 41) Toluene-d8                 | 7.34   | 98    | 134669   | 4.52     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 90.40%  |
| 45) trans-1,3-Dichloropropene- | 7.64   | 79    | 19214    | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 93.40%  |
| 48) 2-Hexanone-d5              | 8.12   | 63    | 62125    | 50.64    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 101.28% |
| 59) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 29264    | 4.88     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 97.60%  |
| 65) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 58716    | 4.87     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 97.40%  |

## Target Compounds

|                                |       |     |       |              | Ovalue |
|--------------------------------|-------|-----|-------|--------------|--------|
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.12  | 101 | 696   | 0.075 ug/L # | 19     |
| 12) 1,1-Dichloroethene         | 2.13  | 96  | 726   | 0.089 ug/L # | 1      |
| 13) Acetone                    | 2.23  | 43  | 3844  | 3.254 ug/L   | 98     |
| 14) Carbon disulfide           | 2.31  | 76  | 6528  | 0.257 ug/L   | 95     |
| 25) Chloroform                 | 4.40  | 83  | 4044  | 0.221 ug/L   | 94     |
| 35) Methylcyclohexane          | 6.10  | 83  | 11771 | 0.745 ug/L # | 17     |
| 37) 1,2-Dichloropropane        | 6.10  | 63  | 5937  | 0.729 ug/L # | 85     |
| 42) Toluene                    | 7.41  | 91  | 7204  | 0.186 ug/L   | 95     |
| 43) 1,3,5-Trimethylbenzene     | 10.94 | 105 | 1935  | 0.050 ug/L   | 87     |
| 44) 1,2,4-Trimethylbenzene     | 10.94 | 105 | 1935  | 0.050 ug/L   | 92     |
| 50) 2-Hexanone                 | 8.16  | 43  | 2843  | 0.900 ug/L # | 78     |
| 54) Ethylbenzene               | 9.04  | 91  | 5253  | 0.118 ug/L   | 91     |
| 55) m,p-xylene                 | 9.16  | 106 | 1355  | 0.081 ug/L   | 92     |
| 56) o-xylene                   | 9.57  | 106 | 1884  | 0.116 ug/L   | 87     |
| 64) 1,4-Dichlorobenzene        | 11.30 | 146 | 1307  | 0.060 ug/L # | 82     |
| 68) 1,3,5-Trichlorobenzene     | 12.67 | 180 | 1149  | 0.064 ug/L # | 68     |
| 70) Naphthalene                | 13.53 | 128 | 2976  | 0.144 ug/L # | 91     |

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Sample : L3281-10  
Misc : 25.0mL/MSVOA V/WATER  
ALS Vial : 21 Sample Multiplier: 1

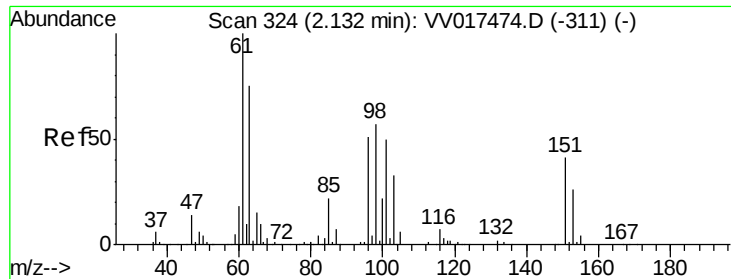
Instrument :  
MSVOA\_V  
ClientSampleId :  
GAXX0

Quant Time: Jul 15 03:07:36 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR071420WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Jul 15 02:49:58 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|----------------------------|-------|------|----------|-------|--------|----------|
| 71) 1,2,3-Trichlorobenzene | 13.77 | 180  | 1146     | 0.091 | ug/L # | 79       |

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





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 0.075 ug/L

RT: 2.12 min Scan# 321

Delta R.T. -0.01 min

Lab File: VV017489.D

Acq: 14 Jul 2020 17:39

Instrument :

MSVOA\_V

ClientSampleId :

GAXX0

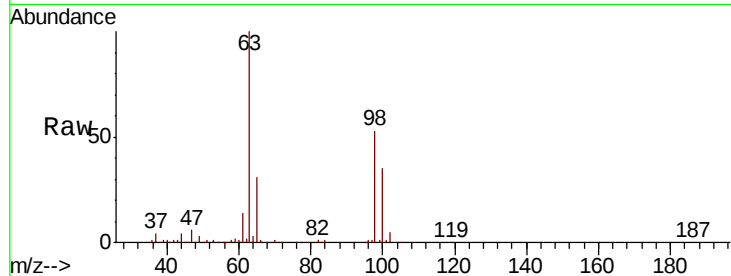
Tot Ion:101 Resp: 696

Ion Ratio Lower Upper

101 100

85 6.3 35.4 53.2#

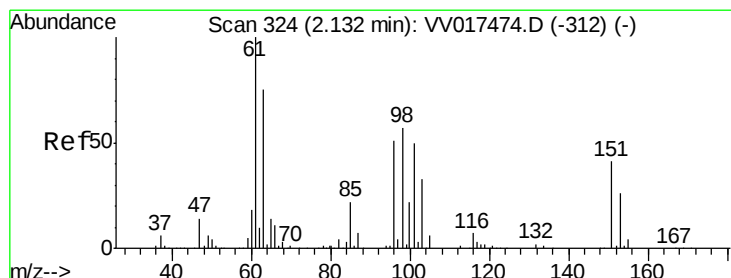
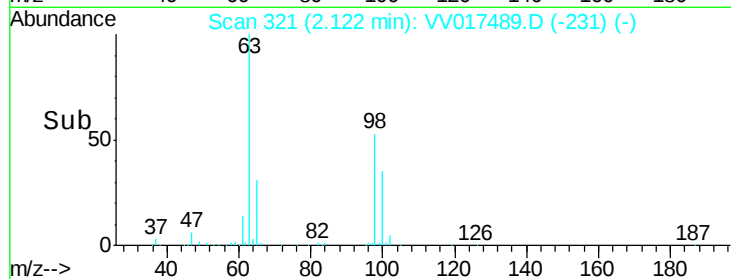
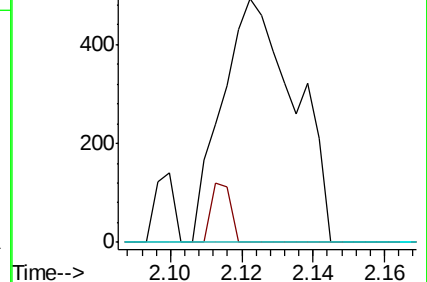
151 0.0 66.5 99.7#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 0.089 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.01 min

Lab File: VV017489.D

Acq: 14 Jul 2020 17:39

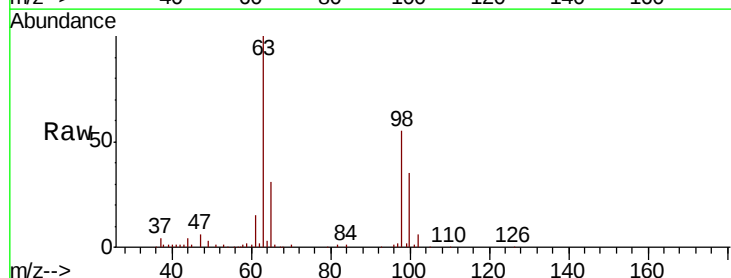
Tgt Ion: 96 Resp: 726

Ion Ratio Lower Upper

96 100

61 1393.2 137.2 254.8#

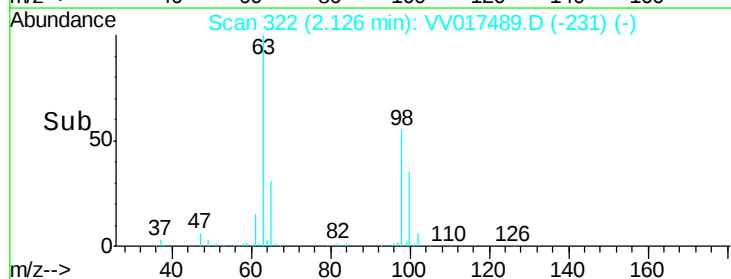
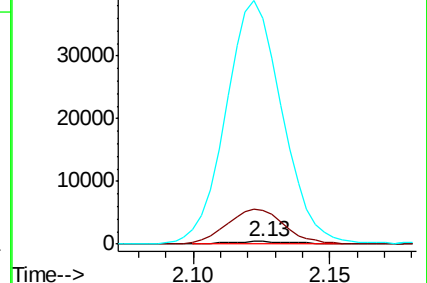
63 9385.4 103.6 192.4#

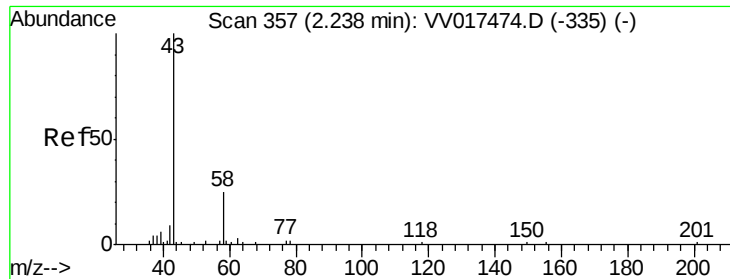


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 3.254 ug/L

RT: 2.23 min Scan# 355

Delta R.T. -0.01 min

Lab File: VV017489.D

Acq: 14 Jul 2020 17:39

Instrument :

MSVOA\_V

ClientSampleId :

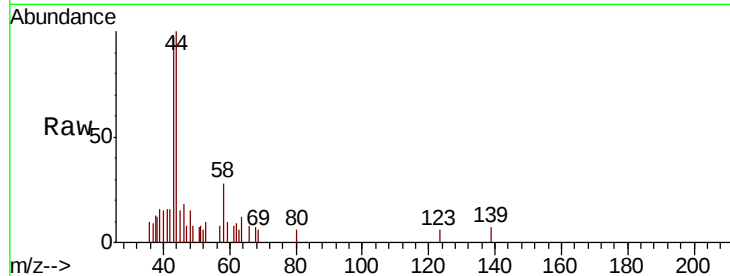
GAXX0

Tot Ion: 43 Resp: 3844

Ion Ratio Lower Upper

43 100

58 15.8 0.0 33.6



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 58.05 (57.75 to 58.75): VV0

2.23

1500

1000

500

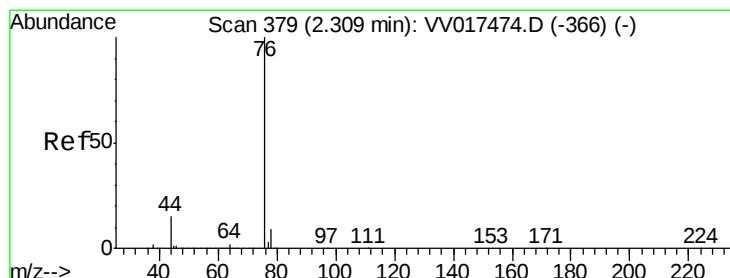
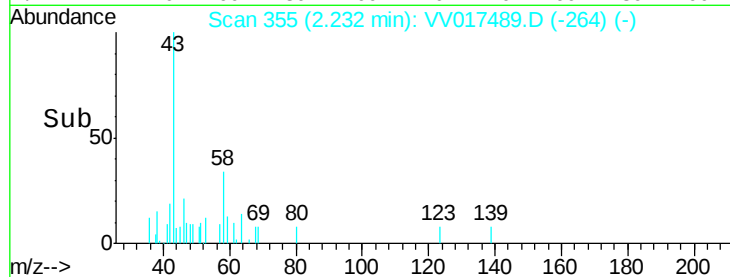
0

Time-->

2.15

2.20

2.25



#14

Carbon disulfide

Concen: 0.257 ug/L

RT: 2.31 min Scan# 379

Delta R.T. -0.00 min

Lab File: VV017489.D

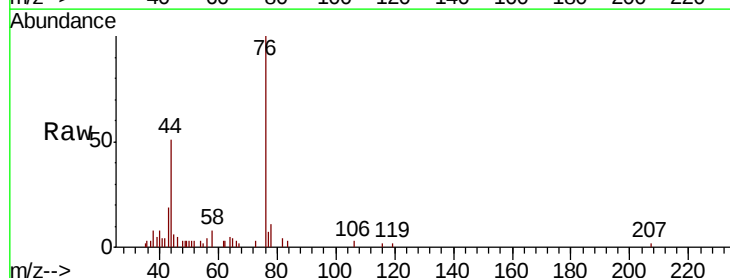
Acq: 14 Jul 2020 17:39

Tgt Ion: 76 Resp: 6528

Ion Ratio Lower Upper

76 100

78 11.3 7.5 11.3



Abundance Ion 76.05 (75.75 to 76.75): VV0

Ion 78.00 (77.70 to 78.70): VV0

5000

4000

3000

2000

1000

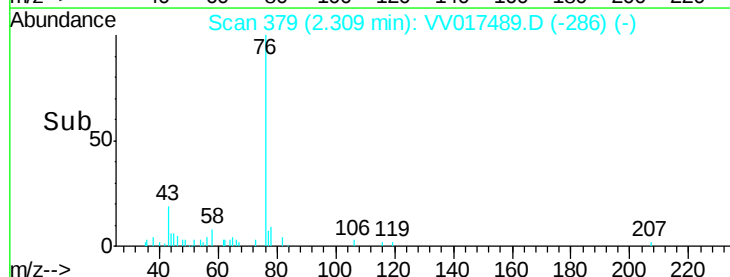
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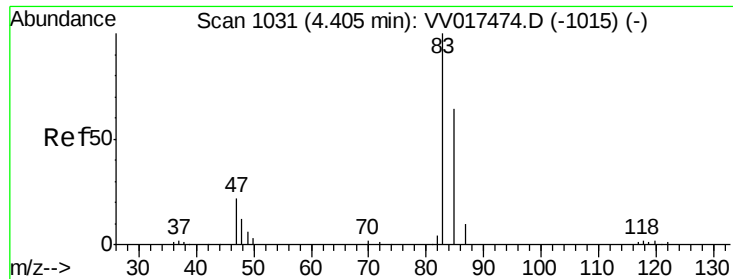
Time-->

2.25

2.30

2.35

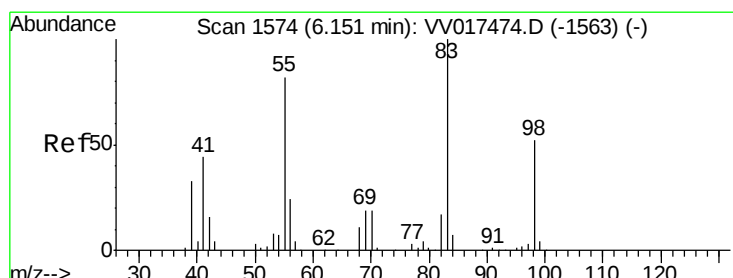
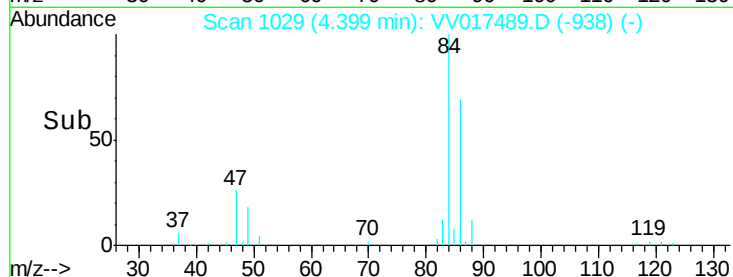
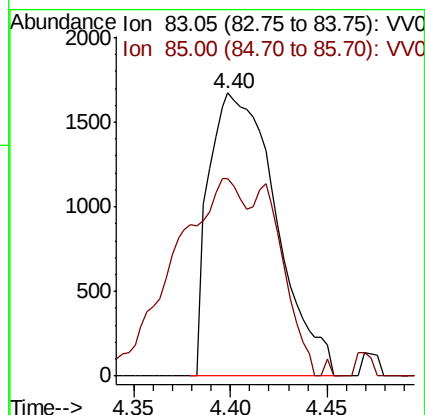
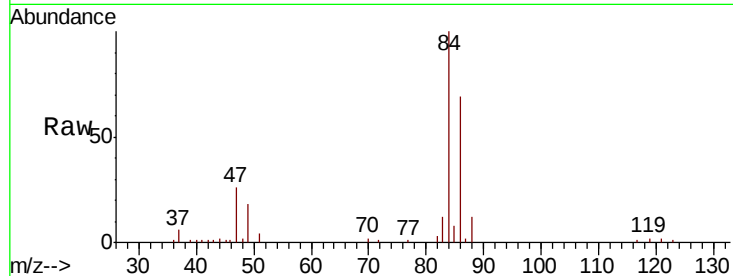




#25  
Chloroform  
Concen: 0.221 ug/L  
RT: 4.40 min Scan# 1029  
Delta R.T. -0.01 min  
Lab File: VV017489.D  
Acq: 14 Jul 2020 17:39

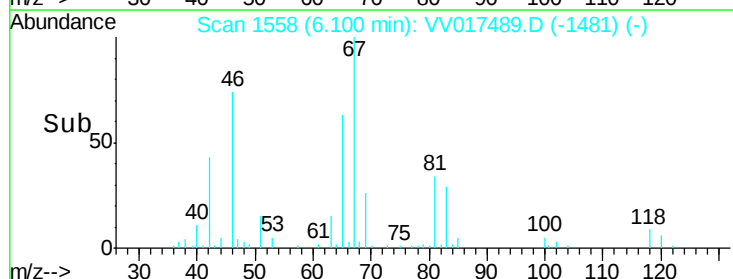
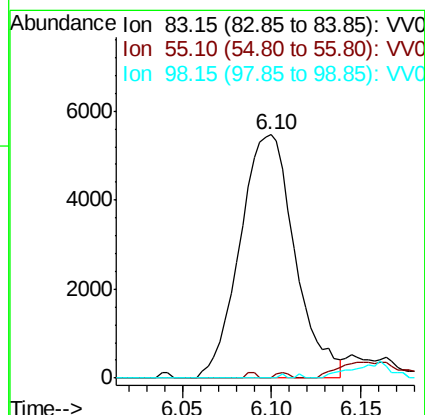
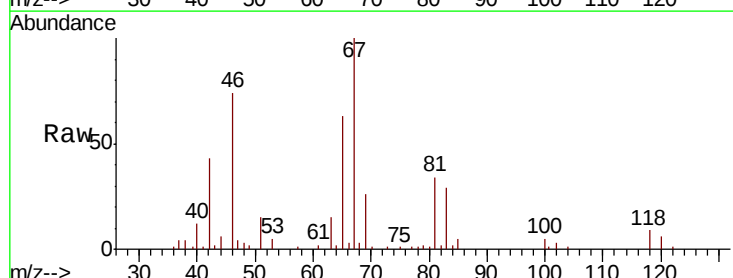
Instrument :  
MSVOA\_V  
ClientSampleId :  
GAXX0

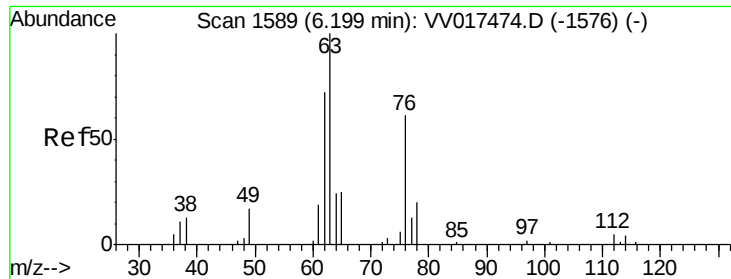
Tot Ion: 83 Resp: 4044  
Ion Ratio Lower Upper  
83 100  
85 69.7 45.4 84.4



#35  
Methylcyclohexane  
Concen: 0.745 ug/L  
RT: 6.10 min Scan# 1558  
Delta R.T. -0.05 min  
Lab File: VV017489.D  
Acq: 14 Jul 2020 17:39

Tgt Ion: 83 Resp: 11771  
Ion Ratio Lower Upper  
83 100  
55 0.5 62.0 93.0#  
98 0.0 41.4 62.2#

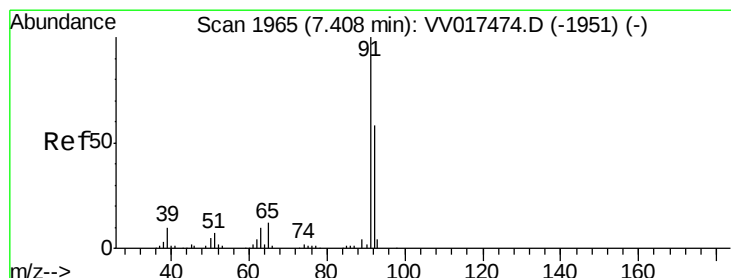
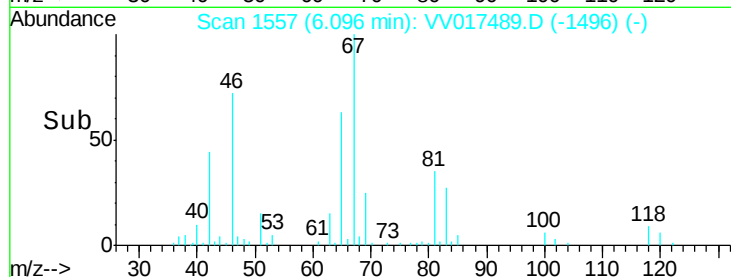
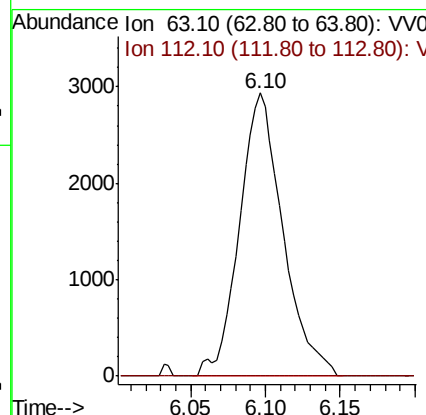
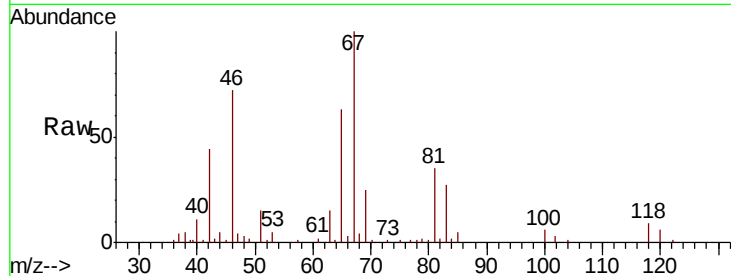




#37  
 1,2-Dichloropropane  
 Concen: 0.729 ug/L  
 RT: 6.10 min Scan# 1557  
 Delta R.T. -0.10 min  
 Lab File: VV017489.D  
 Acq: 14 Jul 2020 17:39

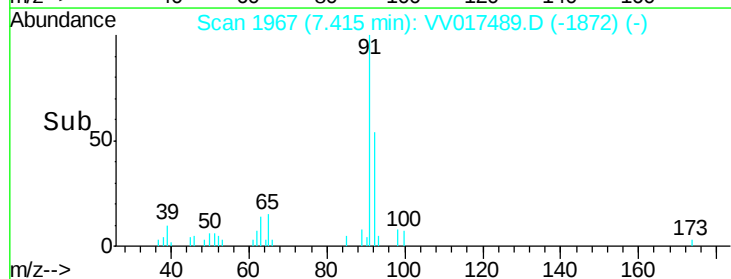
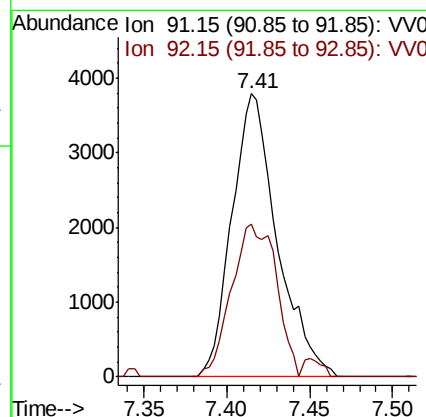
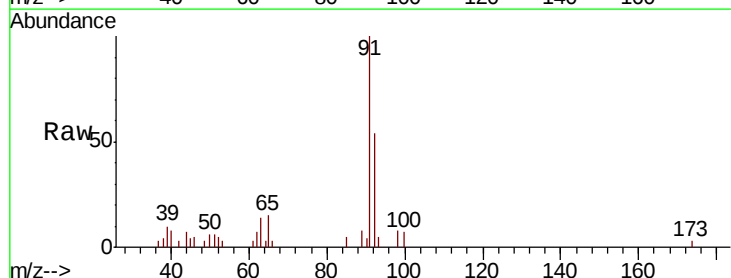
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 GAXX0

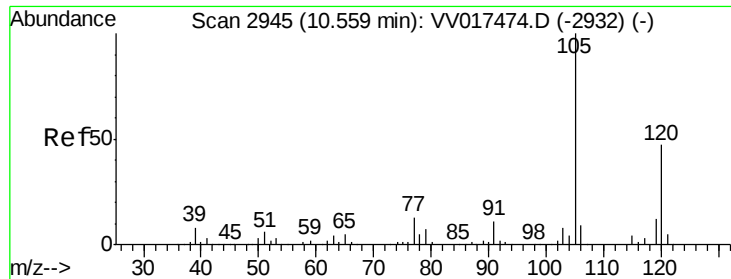
Tot Ion: 63 Resp: 5937  
 Ion Ratio Lower Upper  
 63 100  
 112 0.4 4.4 6.6#



#42  
 Toluene  
 Concen: 0.186 ug/L  
 RT: 7.41 min Scan# 1967  
 Delta R.T. 0.01 min  
 Lab File: VV017489.D  
 Acq: 14 Jul 2020 17:39

Tgt Ion: 91 Resp: 7204  
 Ion Ratio Lower Upper  
 91 100  
 92 54.2 40.7 75.5

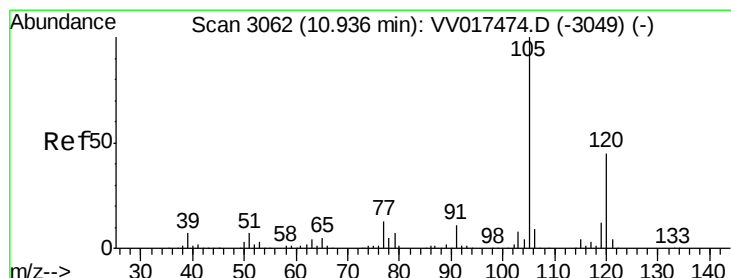
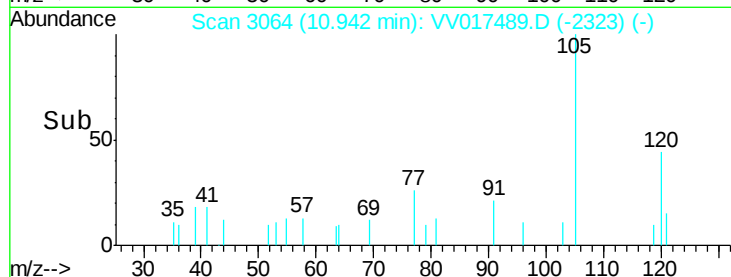
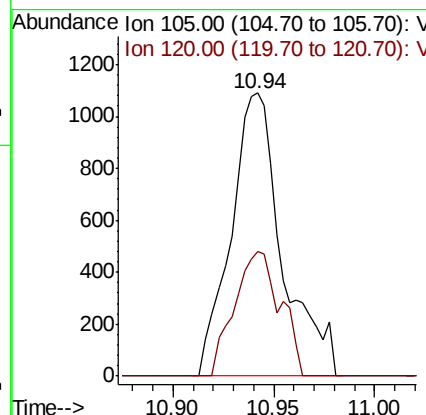
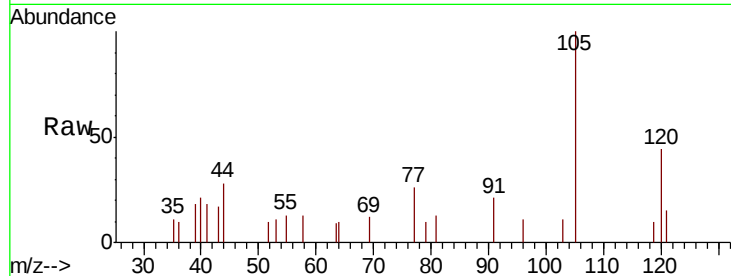




#43  
 1,3,5-Trimethylbenzene  
 Concen: 0.050 ug/L  
 RT: 10.94 min Scan# 3064  
 Delta R.T. 0.38 min  
 Lab File: VV017489.D  
 Acq: 14 Jul 2020 17:39

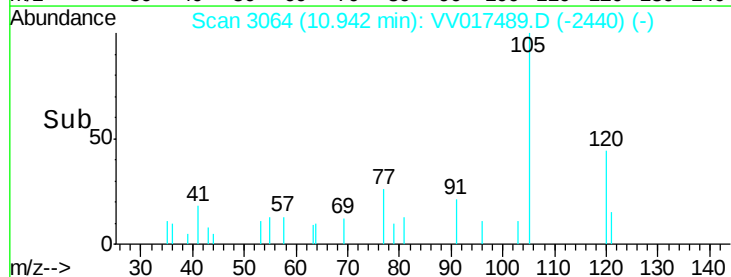
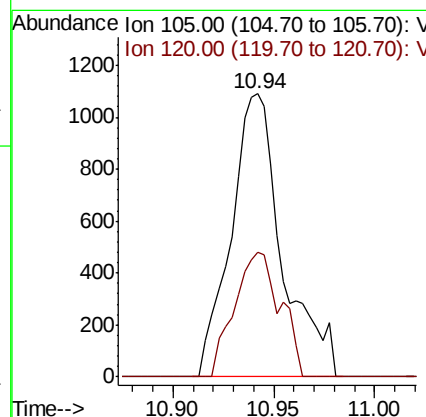
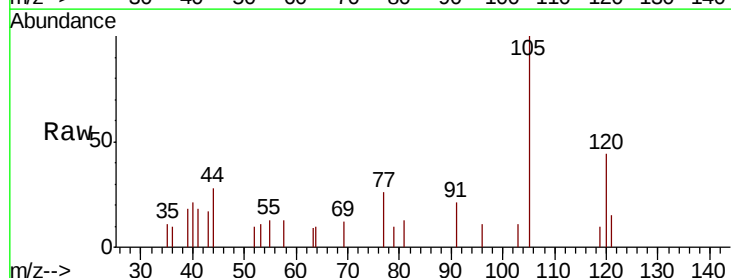
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 GAXX0

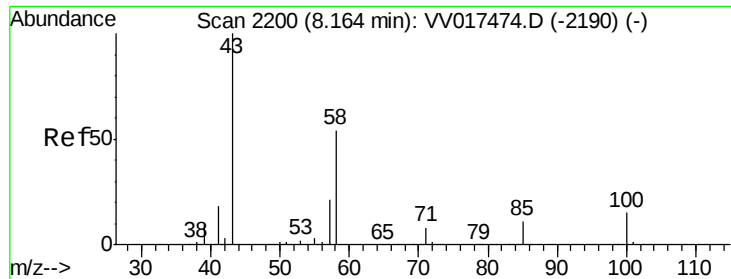
Tot Ion:105 Resp: 1935  
 Ion Ratio Lower Upper  
 105 100  
 120 39.5 38.6 58.0



#44  
 1,2,4-Trimethylbenzene  
 Concen: 0.050 ug/L  
 RT: 10.94 min Scan# 3064  
 Delta R.T. 0.01 min  
 Lab File: VV017489.D  
 Acq: 14 Jul 2020 17:39

Tgt Ion:105 Resp: 1935  
 Ion Ratio Lower Upper  
 105 100  
 120 39.5 35.6 53.4

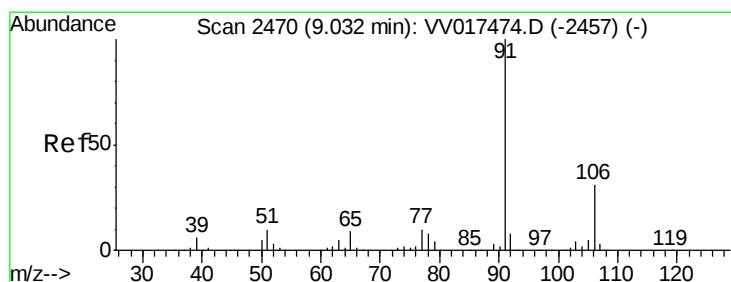
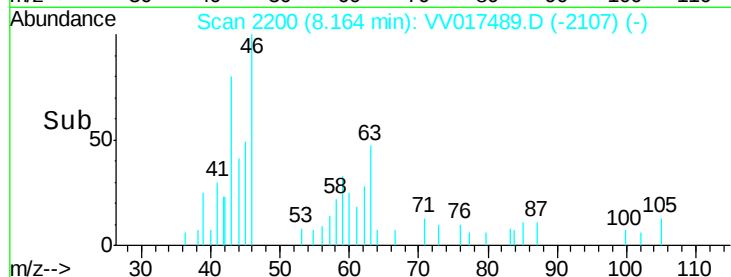
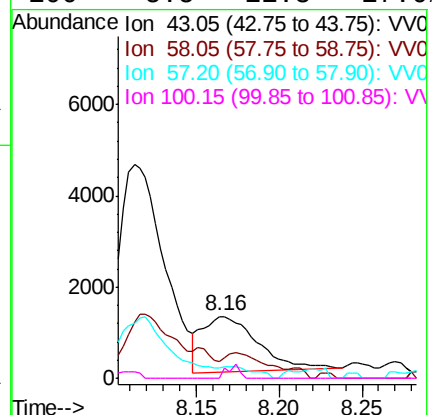
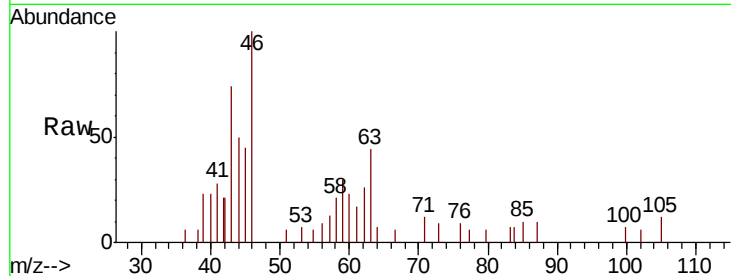




#50  
2-Hexanone  
Concen: 0.900 ug/L  
RT: 8.16 min Scan# 2200  
Delta R.T. -0.00 min  
Lab File: VV017489.D  
Acq: 14 Jul 2020 17:39

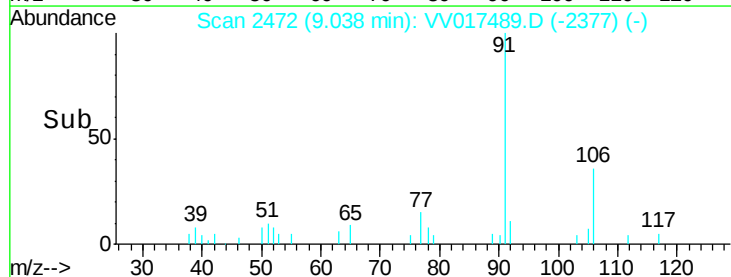
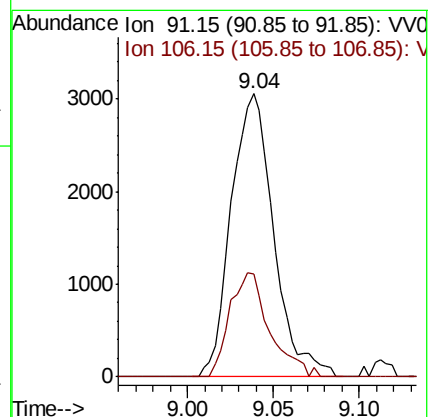
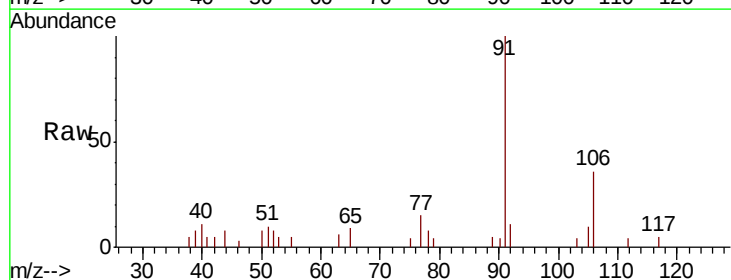
Instrument :  
MSVOA\_V  
ClientSampleId :  
GAXX0

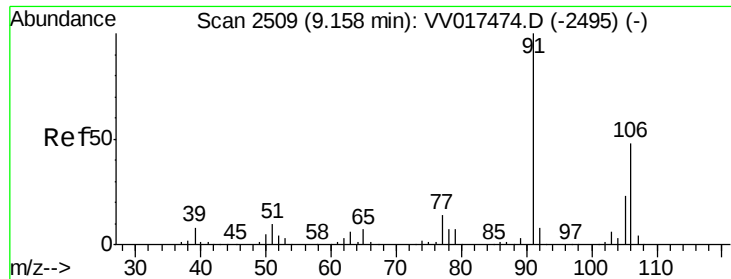
Tot Ion: 43 Resp: 2843  
Ion Ratio Lower Upper  
43 100  
58 38.2 43.0 64.4#  
57 11.4 16.8 25.2#  
100 5.5 11.8 17.6#



#54  
Ethylbenzene  
Concen: 0.118 ug/L  
RT: 9.04 min Scan# 2472  
Delta R.T. 0.01 min  
Lab File: VV017489.D  
Acq: 14 Jul 2020 17:39

Tgt Ion: 91 Resp: 5253  
Ion Ratio Lower Upper  
91 100  
106 36.3 21.9 40.7





#55

m,p-xylene

Concen: 0.081 ug/L

RT: 9.16 min Scan# 2510

Delta R.T. 0.00 min

Lab File: VV017489.D

Acq: 14 Jul 2020 17:39

Instrument :

MSVOA\_V

ClientSampleId :

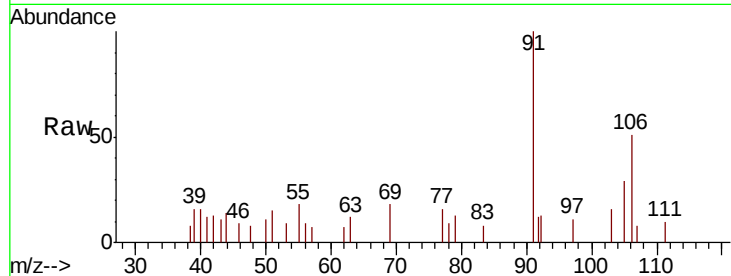
GAXX0

Tot Ion:106 Resp: 1355

Ion Ratio Lower Upper

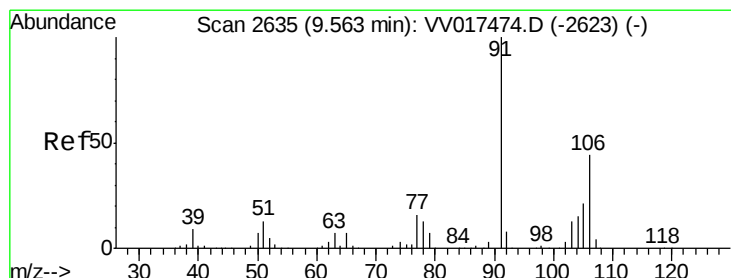
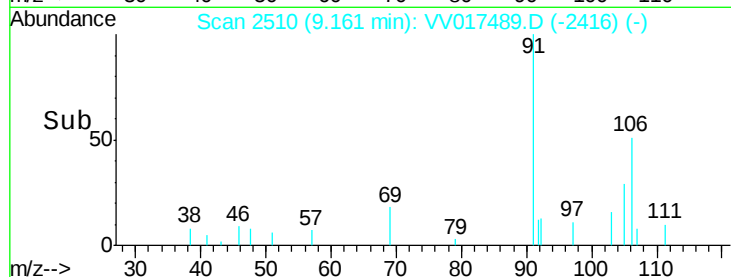
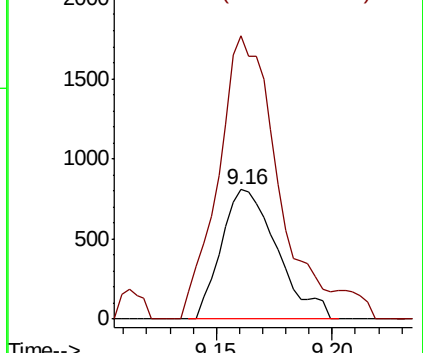
106 100

91 218.8 144.2 267.8



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#56

o-xylene

Concen: 0.116 ug/L

RT: 9.57 min Scan# 2637

Delta R.T. 0.01 min

Lab File: VV017489.D

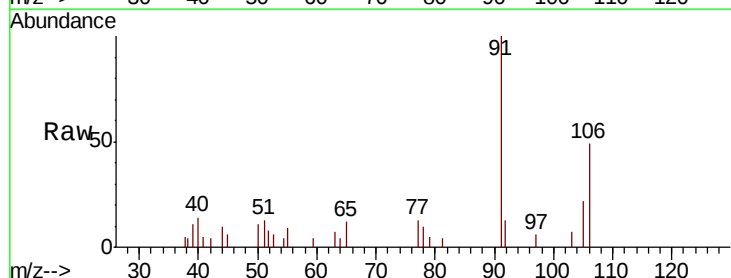
Acq: 14 Jul 2020 17:39

Tgt Ion:106 Resp: 1884

Ion Ratio Lower Upper

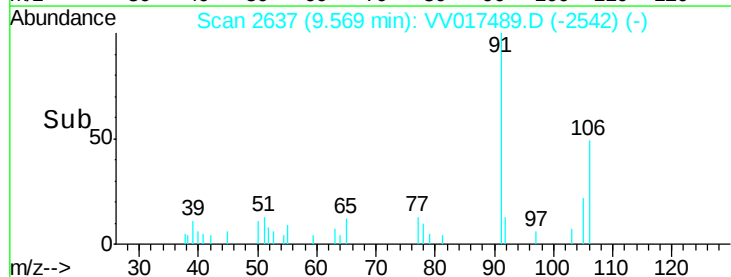
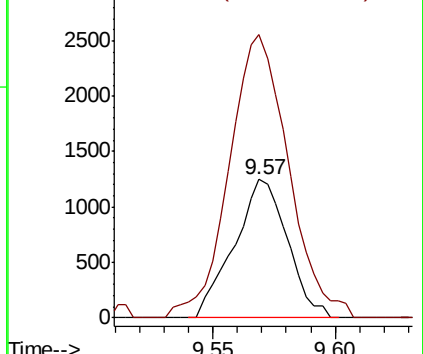
106 100

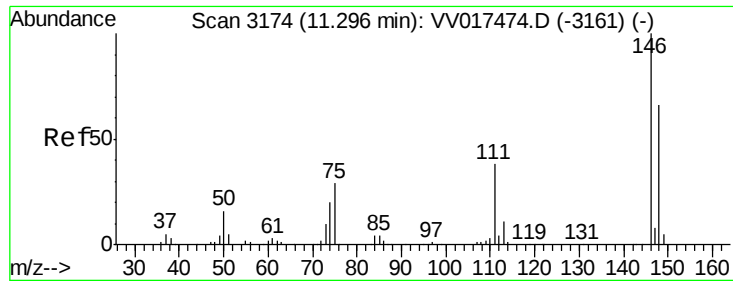
91 204.9 158.8 294.8



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0





#64

1,4-Dichlorobenzene

Concen: 0.060 ug/L

RT: 11.30 min Scan# 3174

Delta R.T. -0.00 min

Lab File: VV017489.D

Acq: 14 Jul 2020 17:39

Instrument :

MSVOA\_V

ClientSampled :

GAXX0

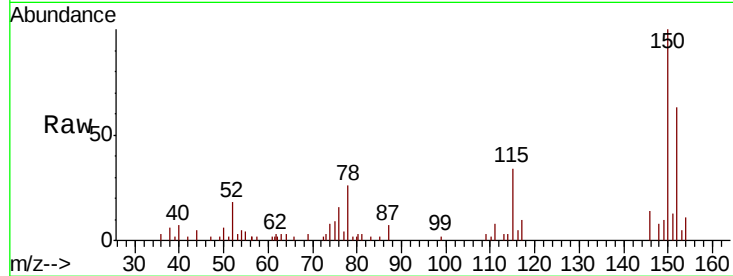
Tot Ion:146 Resp: 1307

Ion Ratio Lower Upper

146 100

111 57.5 26.9 50.1#

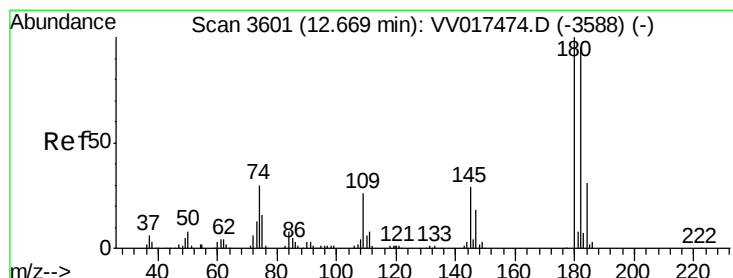
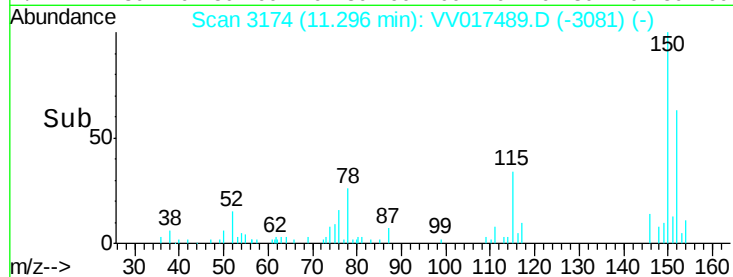
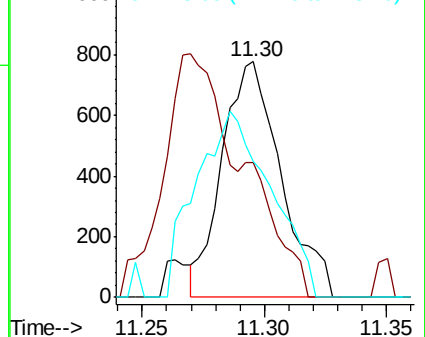
148 57.9 46.1 85.5



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#68

1,3,5-Trichlorobenzene

Concen: 0.064 ug/L

RT: 12.67 min Scan# 3601

Delta R.T. -0.00 min

Lab File: VV017489.D

Acq: 14 Jul 2020 17:39

Tgt Ion:180 Resp: 1149

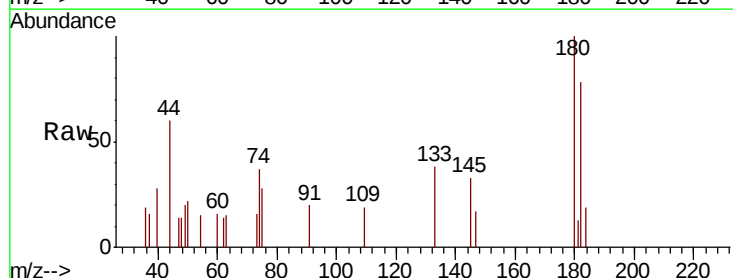
Ion Ratio Lower Upper

180 100

182 53.5 76.2 114.4#

184 15.9 24.3 36.5#

145 31.9 24.2 36.4

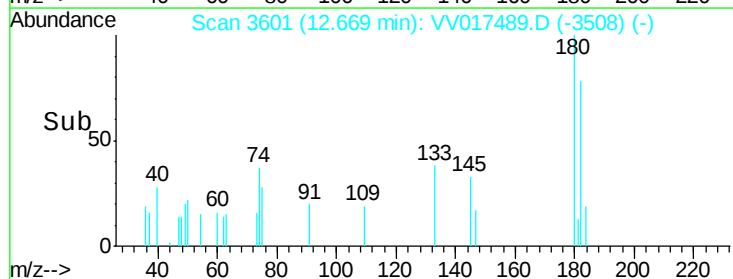
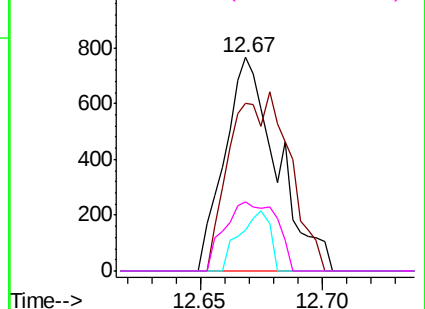


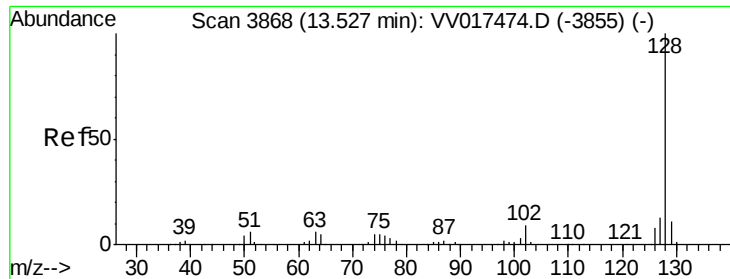
Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V

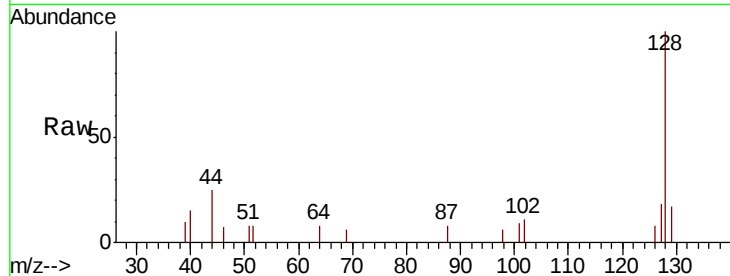




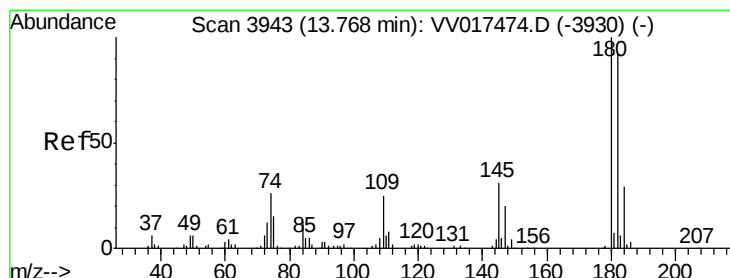
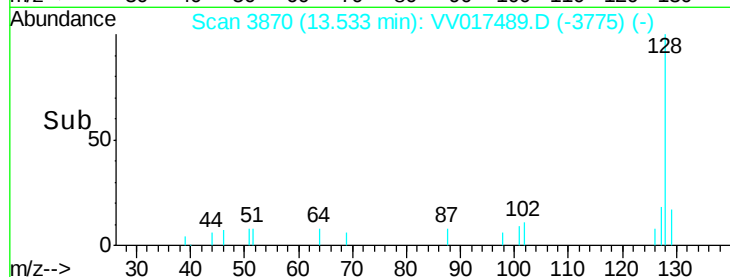
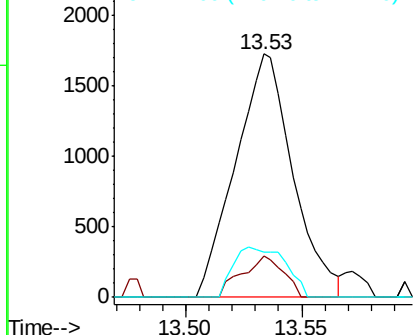
#70  
Naphthalene  
Concen: 0.144 ug/L  
RT: 13.53 min Scan# 3870  
Delta R.T. 0.01 min  
Lab File: VV017489.D  
Acq: 14 Jul 2020 17:39

Instrument :  
MSVOA\_V  
ClientSampleId :  
GAXX0

Tot Ion:128 Resp: 2976  
Ion Ratio Lower Upper  
128 100  
129 12.2 8.5 12.7  
127 18.6 10.6 15.8#

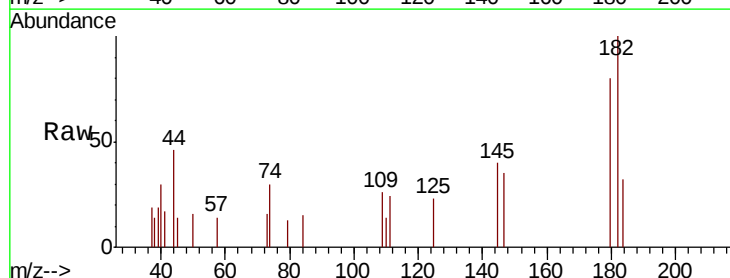


Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 129.00 (128.70 to 129.70): V  
Ion 127.00 (126.70 to 127.70): V



#71  
1,2,3-Trichlorobenzene  
Concen: 0.091 ug/L  
RT: 13.77 min Scan# 3944  
Delta R.T. 0.00 min  
Lab File: VV017489.D  
Acq: 14 Jul 2020 17:39

Tgt Ion:180 Resp: 1146  
Ion Ratio Lower Upper  
180 100  
182 118.0 74.0 111.0#  
145 35.1 26.0 39.0



Abundance Ion 179.90 (179.60 to 180.60): V  
Ion 181.90 (181.60 to 182.60): V  
Ion 144.95 (144.65 to 145.65): V

