

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV021020\  
 Data File : VV014550.D  
 Acq On : 10 Feb 2020 14:33  
 Operator : SY/MD  
 Sample : MDL06  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL06

Quant Time: Feb 11 04:46:49 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM020620W.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Feb 11 04:43:03 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 325521   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 303865   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 151640   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 68774    | 38.96    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 77.92%  |
| 7) Chloroethane-d5             | 1.58    | 69    | 50295    | 41.34    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 82.68%  |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 87083    | 32.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 64.96%  |
| 21) 2-Butanone-d5              | 3.92    | 46    | 126246   | 92.65    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 92.65%  |
| 24) Chloroform-d               | 4.40    | 84    | 190552   | 47.37    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 94.74%  |
| 26) 1,2-Dichloroethane-d4      | 5.08    | 65    | 121980   | 49.68    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.36%  |
| 32) Benzene-d6                 | 5.10    | 84    | 405956   | 48.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.50%  |
| 36) 1,2-Dichloropropane-d6     | 6.11    | 67    | 122745   | 47.57    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 95.14%  |
| 41) Toluene-d8                 | 7.36    | 98    | 377845   | 48.77    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 97.54%  |
| 43) trans-1,3-Dichloropropene- | 7.66    | 79    | 64361    | 46.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 93.04%  |
| 47) 2-Hexanone-d5              | 8.13    | 63    | 101943   | 92.87    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 92.87%  |
| 56) 1,1,2,2-Tetrachloroethane- | 10.25   | 84    | 167284   | 49.93    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.86%  |
| 66) 1,2-Dichlorobenzene-d4     | 11.67   | 152   | 146320   | 50.31    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 100.62% |

## Target Compounds

|                                |      |     |       |              | Ovalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 6618  | 2.538 ug/L   | 96     |
| 3) Chloromethane               | 1.25 | 50  | 6013  | 2.277 ug/L   | 97     |
| 5) Vinyl chloride              | 1.33 | 62  | 4603  | 2.276 ug/L # | 82     |
| 6) Bromomethane                | 1.53 | 94  | 1930  | 2.075 ug/L   | 97     |
| 8) Chloroethane                | 1.60 | 64  | 2203  | 2.192 ug/L   | 91     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 6539  | 2.400 ug/L   | 97     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 3881  | 2.967 ug/L # | 79     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 3311  | 2.646 ug/L # | 1      |
| 13) Acetone                    | 2.18 | 43  | 7588  | 6.651 ug/L   | 97     |
| 14) Carbon disulfide           | 2.32 | 76  | 13319 | 2.193 ug/L   | 99     |
| 15) Methyl Acetate             | 2.46 | 43  | 4394  | 2.003 ug/L   | 91     |
| 16) Methylene chloride         | 2.53 | 84  | 6482  | 2.728 ug/L   | 90     |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96  | 5113  | 2.320 ug/L   | 93     |
| 18) Methyl tert-butyl Ether    | 2.80 | 73  | 15654 | 2.243 ug/L   | 94     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 9288  | 2.356 ug/L   | 97     |
| 20) cis-1,2-Dichloroethene     | 3.96 | 96  | 6169  | 2.487 ug/L   | 98     |
| 22) 2-Butanone                 | 4.03 | 43  | 6889  | 4.083 ug/L   | 82     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV021020\  
 Data File : VV014550.D  
 Acq On : 10 Feb 2020 14:33  
 Operator : SY/MD  
 Sample : MDL06  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 11 Sample Multiplier: 1

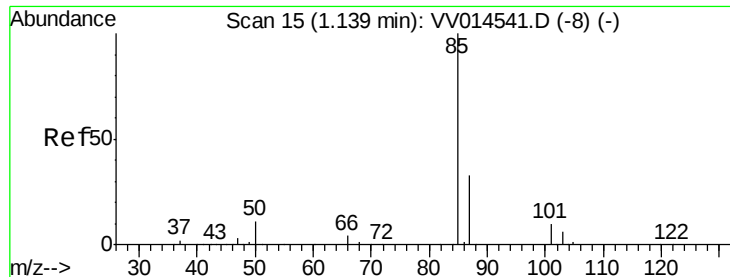
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL06

Quant Time: Feb 11 04:46:49 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM020620W.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Feb 11 04:43:03 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 23) Bromochloromethane         | 4.30  | 128  | 2945     | 2.507 | ug/L # | 73       |
| 25) Chloroform                 | 4.42  | 83   | 14350    | 3.580 | ug/L   | 99       |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 7136     | 2.390 | ug/L   | 96       |
| 29) Cyclohexane                | 4.72  | 56   | 8095     | 2.167 | ug/L   | 93       |
| 30) 1,1,1-Trichloroethane      | 4.66  | 97   | 8646     | 2.493 | ug/L   | 98       |
| 31) Carbon tetrachloride       | 4.87  | 117  | 7424     | 2.427 | ug/L   | 94       |
| 33) Benzene                    | 5.15  | 78   | 21431    | 2.399 | ug/L   | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 5587     | 2.359 | ug/L   | 97       |
| 35) Methylcyclohexane          | 6.17  | 83   | 9523     | 2.461 | ug/L   | 95       |
| 37) 1,2-Dichloropropane        | 6.22  | 63   | 5044     | 2.217 | ug/L   | 99       |
| 38) Bromodichloromethane       | 6.56  | 83   | 7286     | 2.386 | ug/L   | 98       |
| 39) cis-1,3-Dichloropropene    | 7.07  | 75   | 8242     | 2.171 | ug/L   | 98       |
| 40) 4-Methyl-2-pentanone       | 7.27  | 43   | 12415    | 4.222 | ug/L   | 97       |
| 42) Toluene                    | 7.43  | 91   | 23701    | 2.474 | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 8081     | 2.374 | ug/L   | 95       |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 5120     | 2.345 | ug/L   | 94       |
| 46) Tetrachloroethene          | 8.02  | 164  | 4210     | 2.331 | ug/L   | 91       |
| 48) 2-Hexanone                 | 8.18  | 43   | 10441    | 4.612 | ug/L # | 98       |
| 49) Dibromochloromethane       | 8.29  | 129  | 5975     | 2.424 | ug/L   | 97       |
| 50) 1,2-Dibromoethane          | 8.39  | 107  | 5830     | 2.466 | ug/L   | 95       |
| 51) Chlorobenzene              | 8.92  | 112  | 15344    | 2.452 | ug/L   | 97       |
| 52) Ethylbenzene               | 9.05  | 91   | 25019    | 2.329 | ug/L   | 99       |
| 53) m,p-Xylene                 | 9.18  | 106  | 9871     | 2.386 | ug/L   | 95       |
| 54) o-Xylene                   | 9.58  | 106  | 9267     | 2.340 | ug/L   | 97       |
| 55) Styrene                    | 9.60  | 104  | 15506    | 2.291 | ug/L   | 98       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 8653     | 2.529 | ug/L # | 91       |
| 59) Bromoform                  | 9.77  | 173  | 3927     | 2.322 | ug/L # | 95       |
| 60) Isopropylbenzene           | 9.97  | 105  | 24886    | 2.427 | ug/L   | 99       |
| 61) 1,2,3-Trichloropropane     | 10.32 | 75   | 6733     | 2.507 | ug/L   | 97       |
| 62) 1,3,5-Trimethylbenzene     | 10.58 | 105  | 19562    | 2.228 | ug/L   | 96       |
| 63) 1,2,4-Trimethylbenzene     | 10.95 | 105  | 18486    | 2.136 | ug/L   | 97       |
| 64) 1,3-Dichlorobenzene        | 11.22 | 146  | 12264    | 2.535 | ug/L   | 98       |
| 65) 1,4-Dichlorobenzene        | 11.31 | 146  | 12741    | 2.559 | ug/L   | 97       |
| 67) 1,2-Dichlorobenzene        | 11.68 | 146  | 12333    | 2.630 | ug/L   | 98       |
| 68) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 2029     | 2.698 | ug/L # | 83       |
| 69) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 8101     | 2.377 | ug/L   | 97       |
| 70) 1,2,4-trichlorobenzene     | 13.31 | 180  | 7285     | 2.328 | ug/L   | 98       |
| 71) Naphthalene                | 13.55 | 128  | 21724    | 2.114 | ug/L   | 99       |
| 72) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 6476     | 2.130 | ug/L   | 97       |
| -----                          |       |      |          |       |        |          |

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





#2

Dichlorodifluoromethane

Concen: 2.538 ug/L

RT: 1.14 min Scan# 15

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

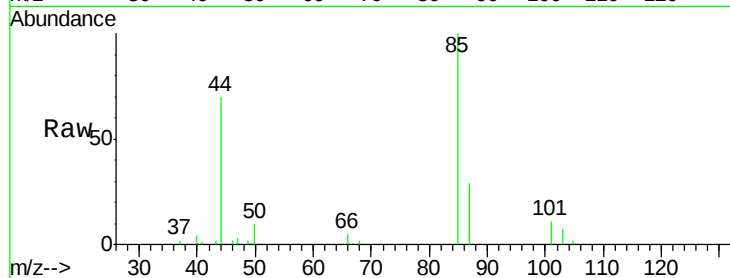
MDL06

Tot Ion: 85 Resp: 6618

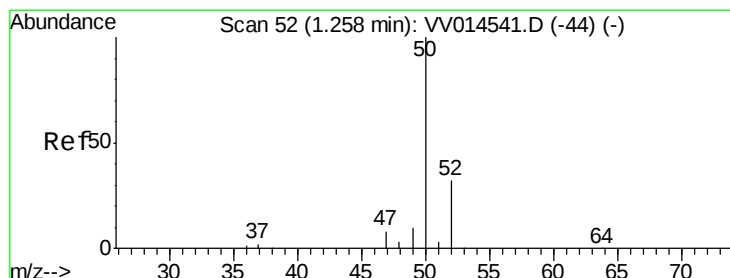
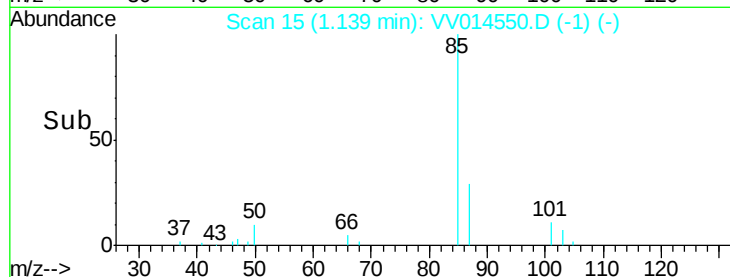
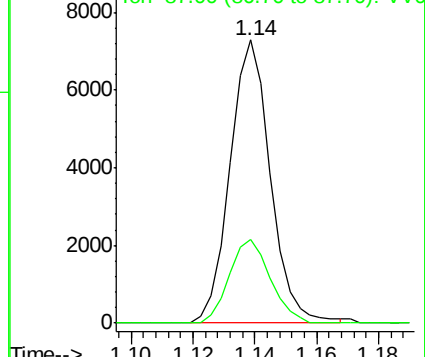
Ion Ratio Lower Upper

85 100

87 29.9 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VV014550.D (-1) (-)



#3

Chloromethane

Concen: 2.277 ug/L

RT: 1.25 min Scan# 51

Delta R.T. -0.00 min

Lab File: VV014550.D

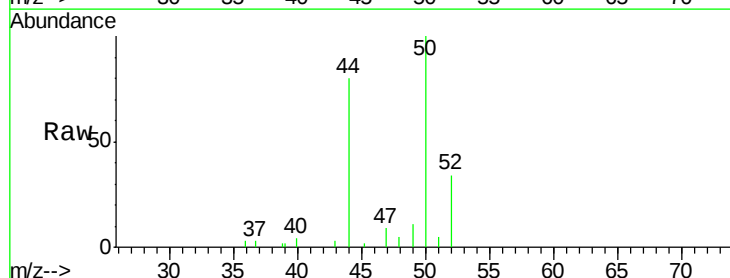
Acq: 10 Feb 2020 14:33

Tgt Ion: 50 Resp: 6013

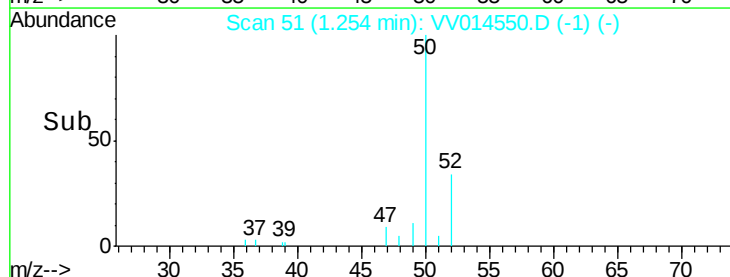
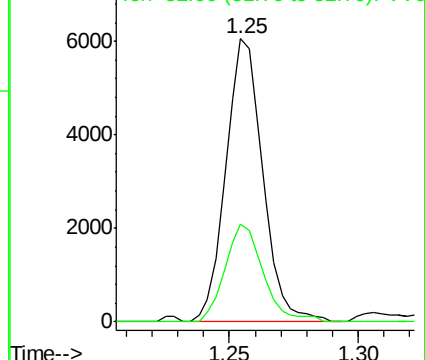
Ion Ratio Lower Upper

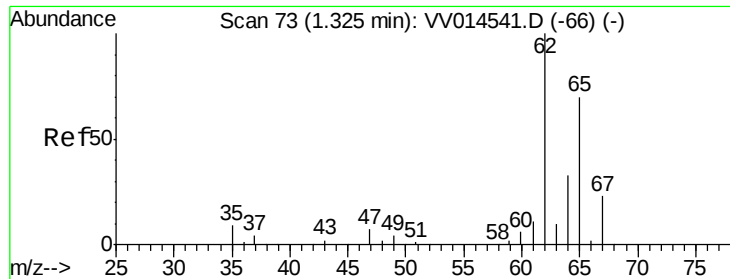
50 100

52 34.4 22.9 42.5



Abundance Ion 50.00 (49.70 to 50.70): VV014550.D (-1) (-)





#5

Vinyl chloride

Concen: 2.276 ug/L

RT: 1.33 min Scan# 73

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampled :

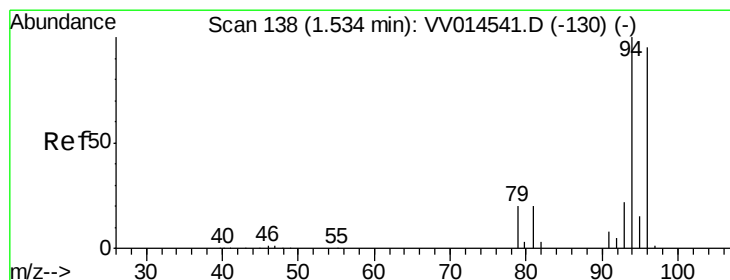
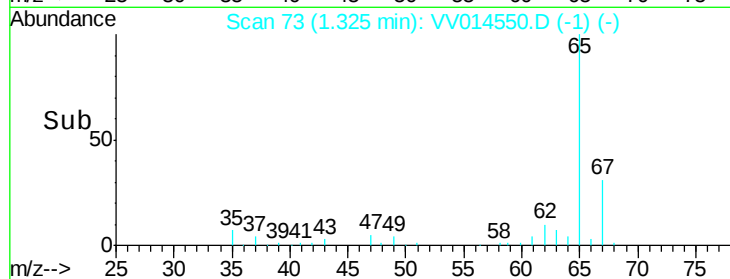
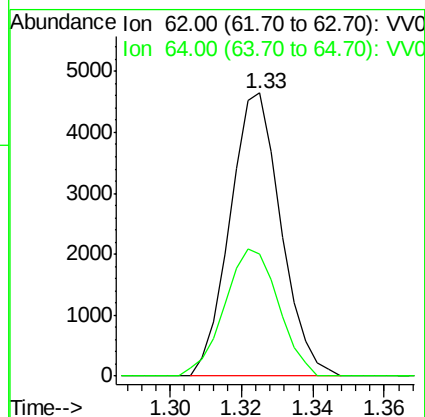
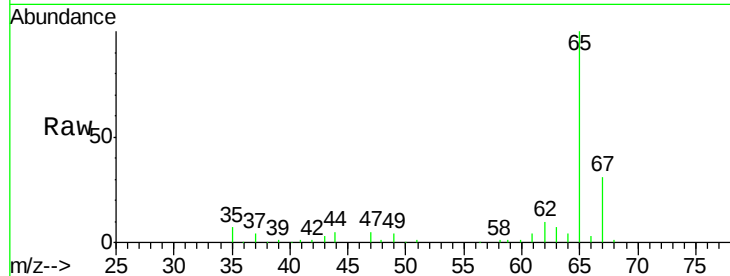
MDL06

Tot Ion: 62 Resp: 4603

Ion Ratio Lower Upper

62 100

64 43.3 23.1 42.9#



#6

Bromomethane

Concen: 2.075 ug/L

RT: 1.53 min Scan# 138

Delta R.T. -0.00 min

Lab File: VV014550.D

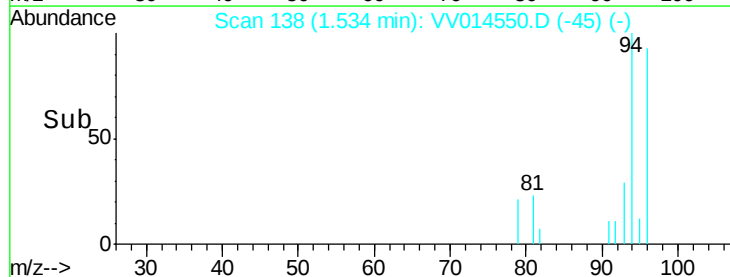
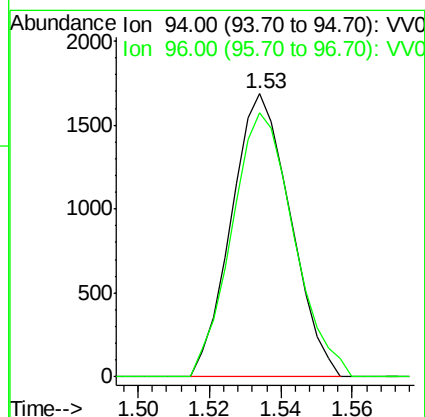
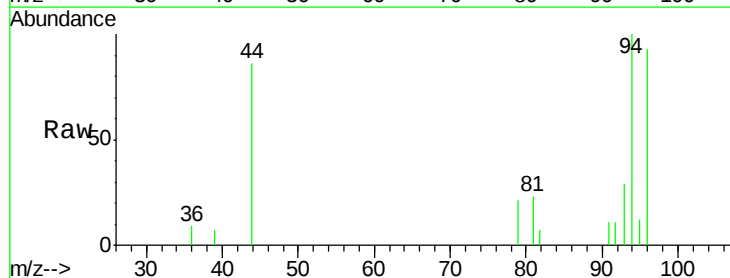
Acq: 10 Feb 2020 14:33

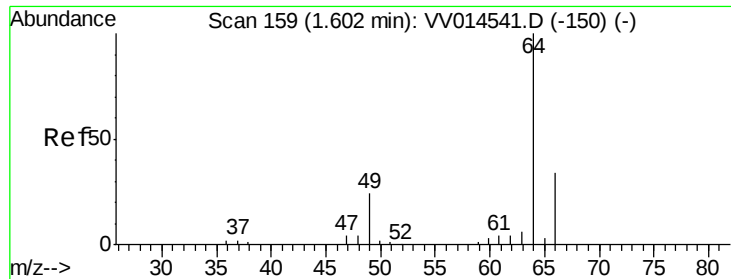
Tgt Ion: 94 Resp: 1930

Ion Ratio Lower Upper

94 100

96 93.2 67.3 124.9





#8

Chloroethane

Concen: 2.192 ug/L

RT: 1.60 min Scan# 158

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

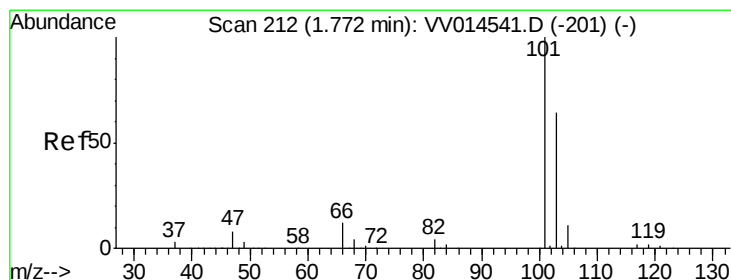
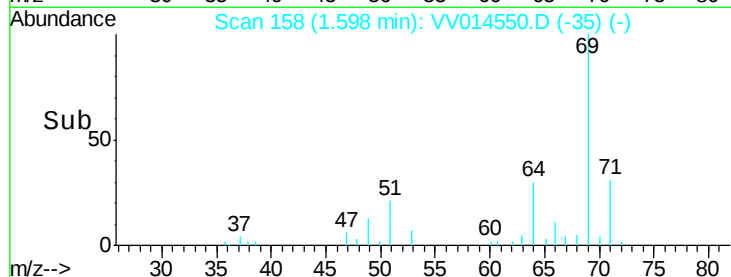
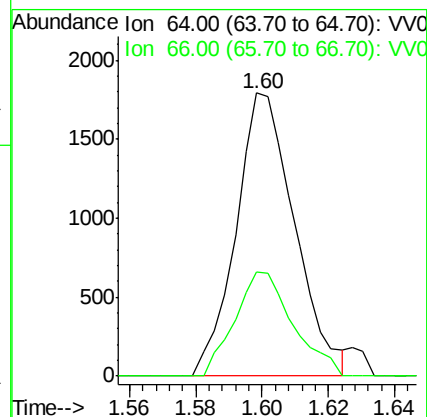
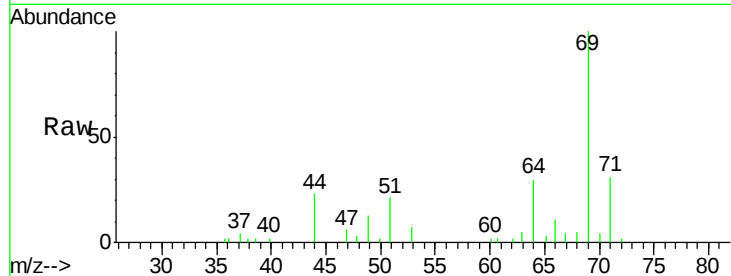
MDL06

Tot Ion: 64 Resp: 2203

Ion Ratio Lower Upper

64 100

66 37.0 22.4 41.6



#9

Trichlorofluoromethane

Concen: 2.400 ug/L

RT: 1.77 min Scan# 211

Delta R.T. -0.00 min

Lab File: VV014550.D

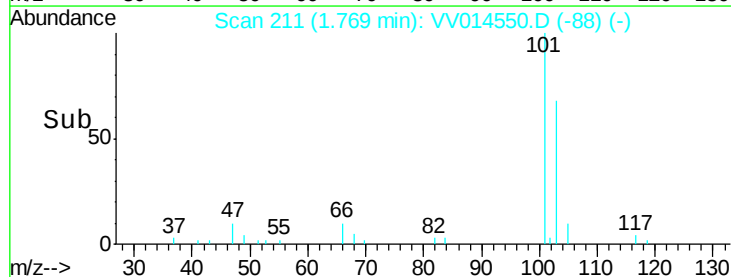
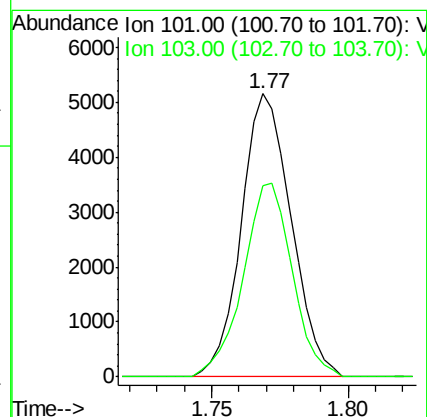
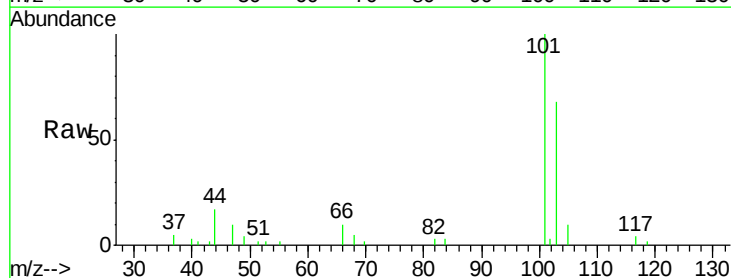
Acq: 10 Feb 2020 14:33

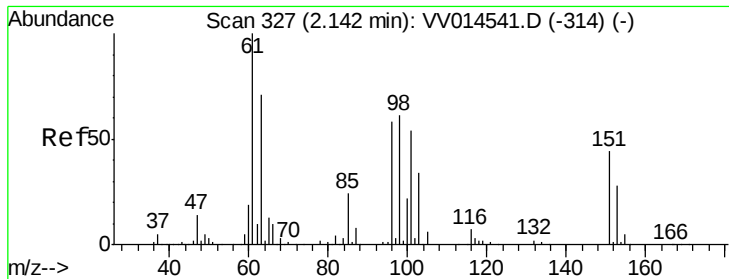
Tgt Ion: 101 Resp: 6539

Ion Ratio Lower Upper

101 100

103 67.2 51.8 77.8





#10

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

Concen: 2.967 ug/L

RT: 2.14 min Scan# 325

Delta R.T. -0.01 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampled :

MDL06

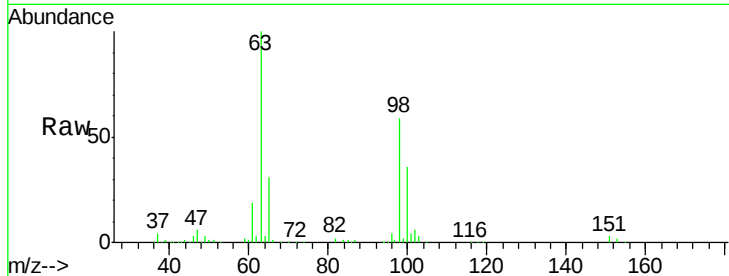
Tot Ion:101 Resp: 3881

Ion Ratio Lower Upper

101 100

85 28.9 35.0 52.6#

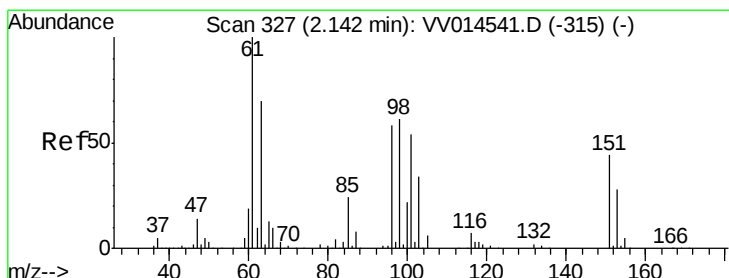
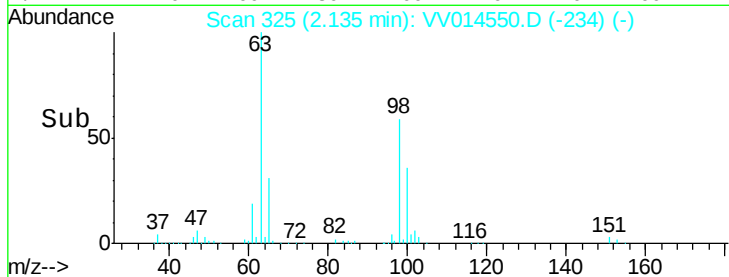
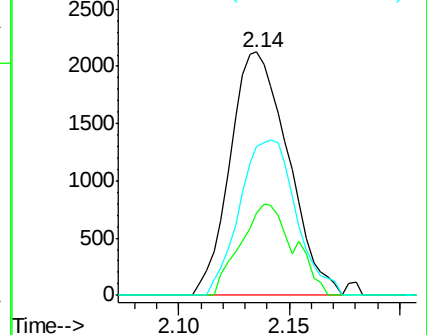
151 62.3 64.4 96.6#



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: 2.646 ug/L

RT: 2.14 min Scan# 326

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

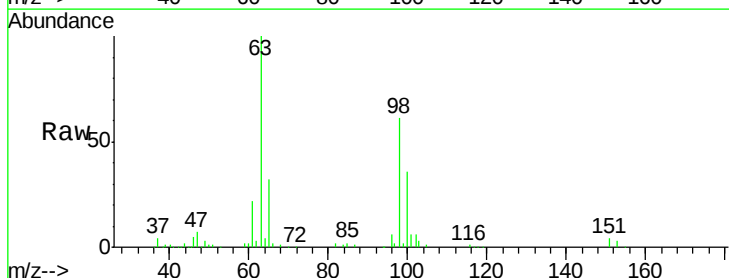
Tgt Ion: 96 Resp: 3311

Ion Ratio Lower Upper

96 100

61 382.9 125.0 232.2#

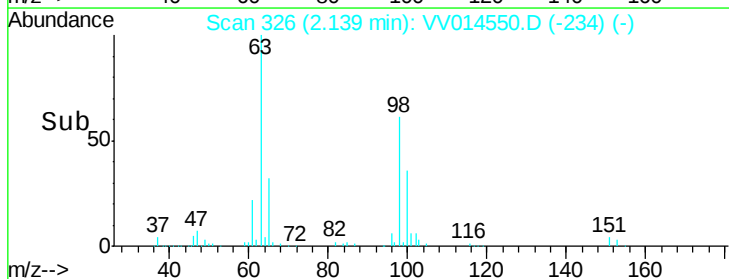
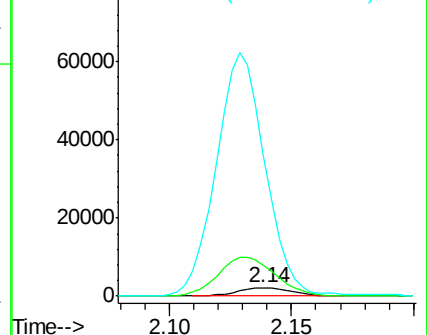
63 1761.9 101.6 188.6#

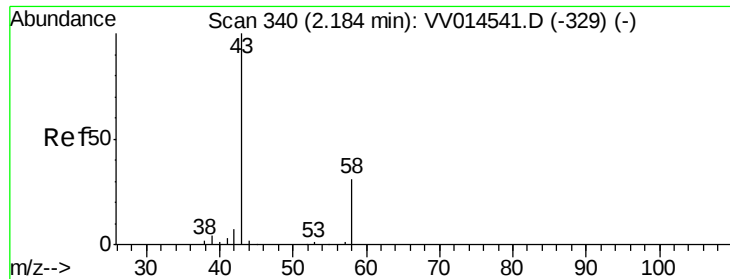


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 6.651 ug/L

RT: 2.18 min Scan# 340

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampled :

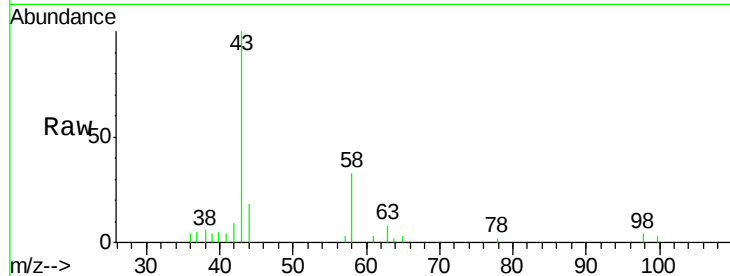
MDL06

Tot Ion: 43 Resp: 7588

Ion Ratio Lower Upper

43 100

58 32.4 0.0 61.8



Abundance Ion 43.00 (42.70 to 43.70): VV014550.D (-247) (-)

Ion 58.00 (57.70 to 58.70): VV014550.D (-247) (-)

2.18

5000

4000

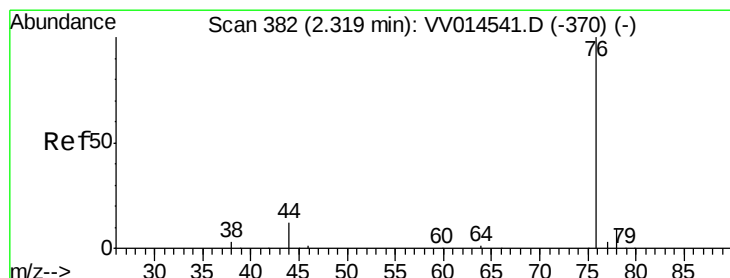
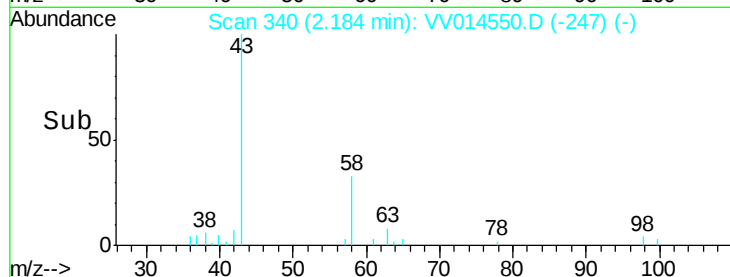
3000

2000

1000

0

Time-->



#14

Carbon disulfide

Concen: 2.193 ug/L

RT: 2.32 min Scan# 382

Delta R.T. -0.00 min

Lab File: VV014550.D

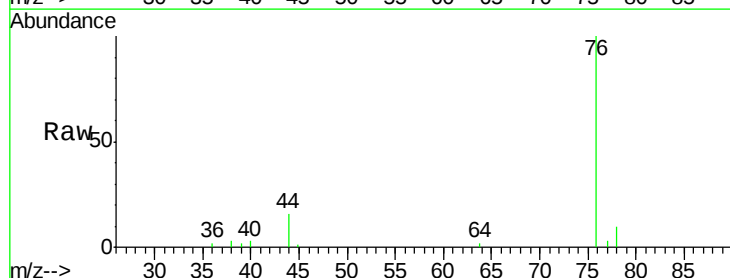
Acq: 10 Feb 2020 14:33

Tgt Ion: 76 Resp: 13319

Ion Ratio Lower Upper

76 100

78 9.6 7.4 11.2



Abundance Ion 76.00 (75.70 to 76.70): VV014550.D (-289) (-)

Ion 78.00 (77.70 to 78.70): VV014550.D (-289) (-)

2.32

10000

8000

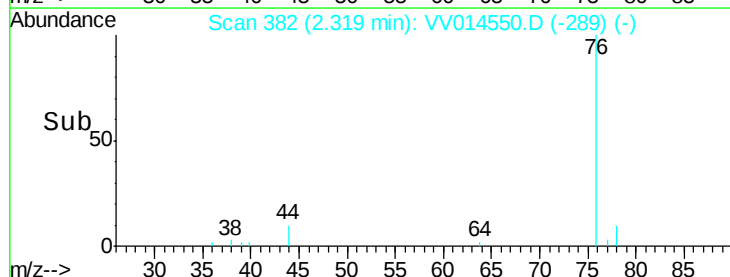
6000

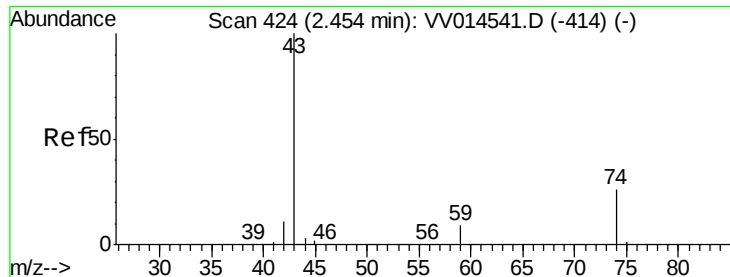
4000

2000

0

Time-->

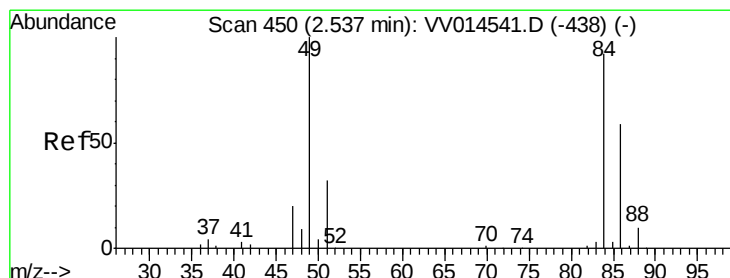
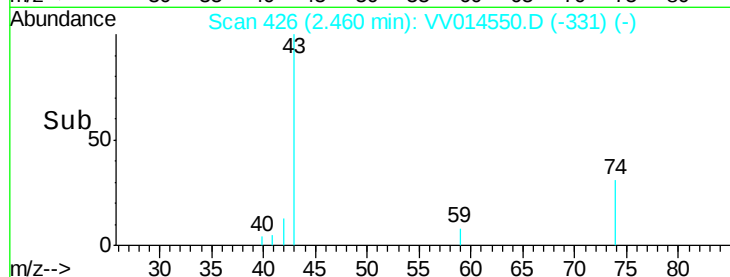
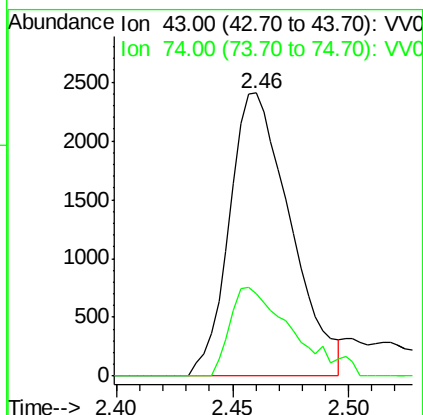
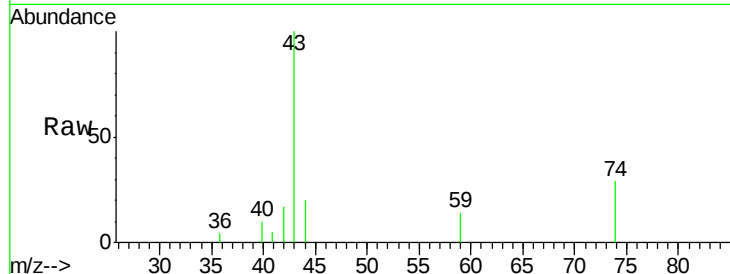




#15  
Methvl Acetate  
Concen: 2.003 ug/L  
RT: 2.46 min Scan# 426  
Delta R.T. 0.01 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

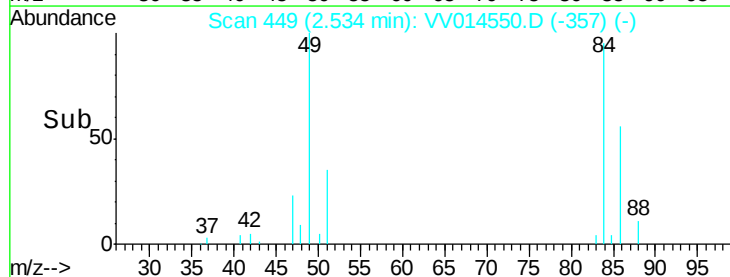
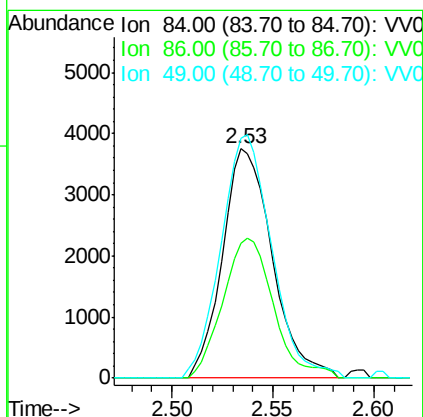
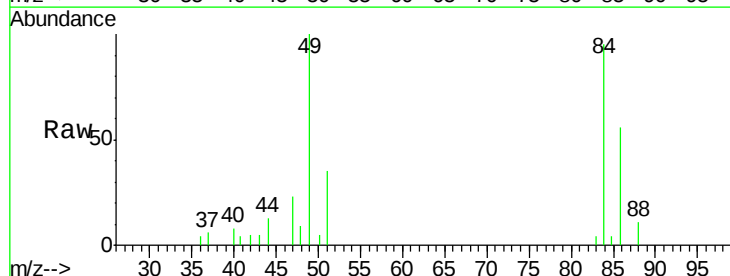
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL06

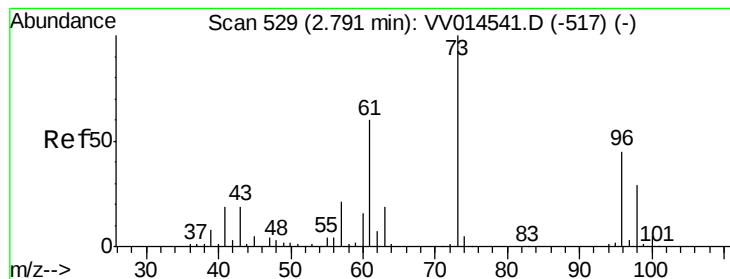
Tot Ion: 43 Resp: 4394  
Ion Ratio Lower Upper  
43 100  
74 28.5 19.4 29.0



#16  
Methylene chloride  
Concen: 2.728 ug/L  
RT: 2.53 min Scan# 449  
Delta R.T. -0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

Tgt Ion: 84 Resp: 6482  
Ion Ratio Lower Upper  
84 100  
86 59.0 44.6 82.8  
49 104.8 83.2 154.4





#17

trans-1,2-Dichloroethene

Concen: 2.320 ug/L

RT: 2.79 min Scan# 530

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

MDL06

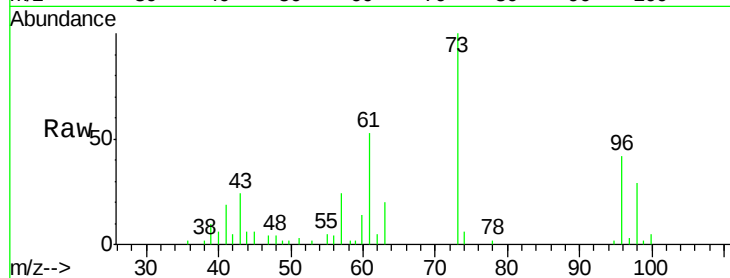
Tot Ion: 96 Resp: 5113

Ion Ratio Lower Upper

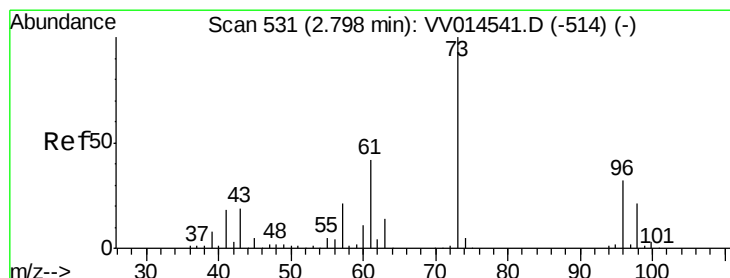
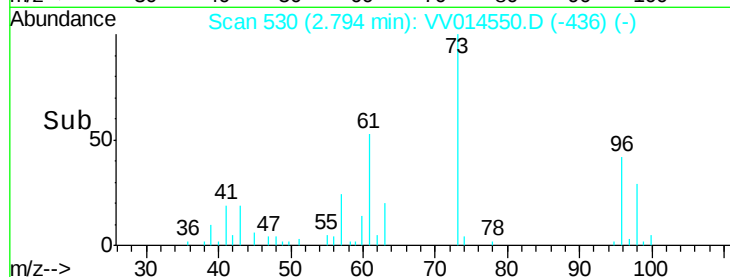
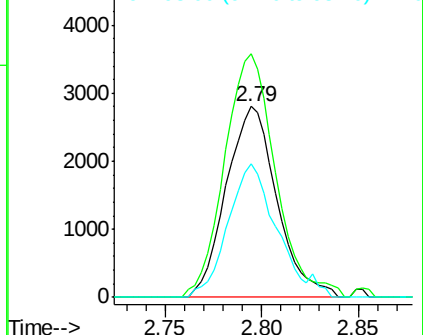
96 100

61 127.7 95.8 178.0

98 69.7 45.1 83.7



Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.00 (60.70 to 61.70): VV0  
Ion 98.00 (97.70 to 98.70): VV0



#18

Methyl tert-butyl Ether

Concen: 2.243 ug/L

RT: 2.80 min Scan# 532

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

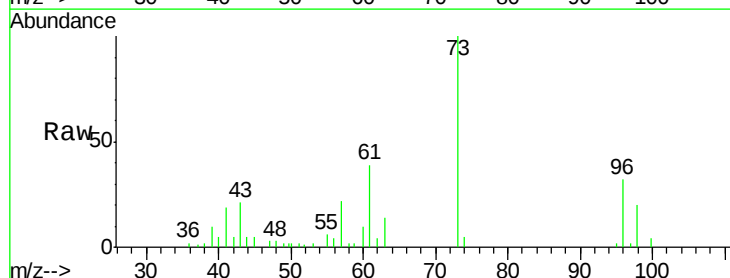
Tgt Ion: 73 Resp: 15654

Ion Ratio Lower Upper

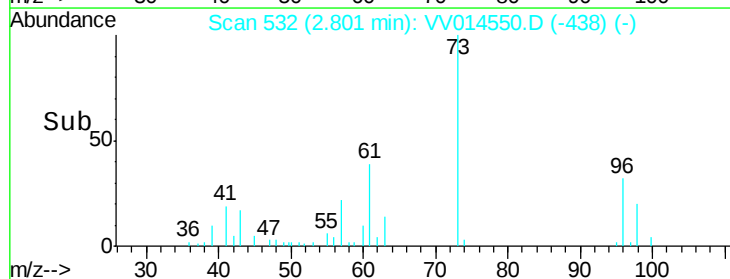
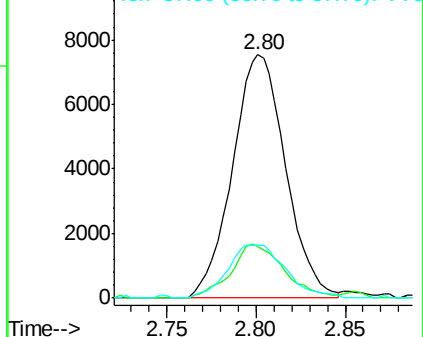
73 100

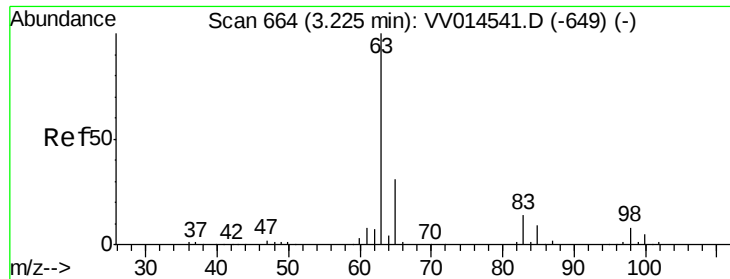
43 22.3 14.9 22.3

57 24.0 17.5 26.3



Abundance Ion 73.00 (72.70 to 73.70): VV0  
Ion 43.00 (42.70 to 43.70): VV0  
Ion 57.00 (56.70 to 57.70): VV0

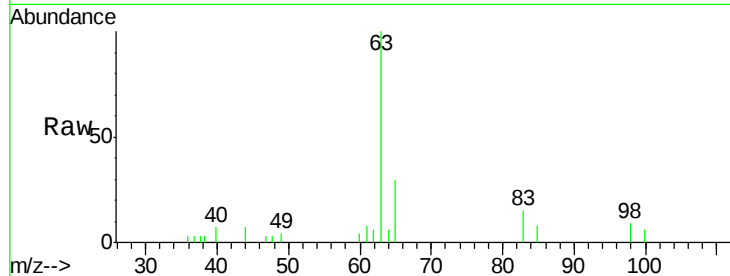




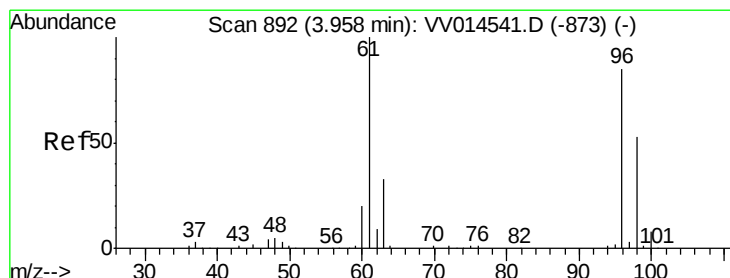
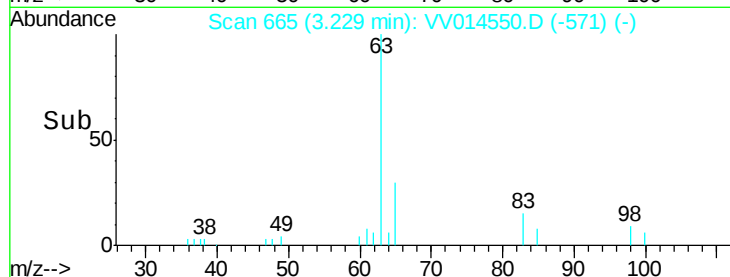
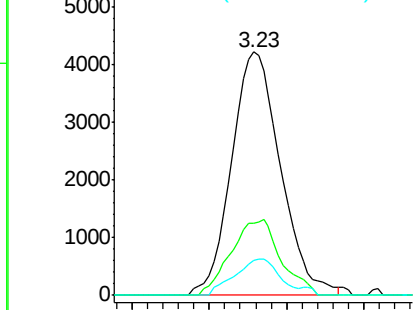
#19  
 1,1-Dichloroethane  
 Concen: 2.356 ug/L  
 RT: 3.23 min Scan# 665  
 Delta R.T. 0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Instrument :  
 MSVOA\_V  
 ClientSampled :  
 MDL06

Tot Ion: 63 Resp: 9288  
 Ion Ratio Lower Upper  
 63 100  
 65 29.9 22.5 41.7  
 83 14.5 9.7 18.1

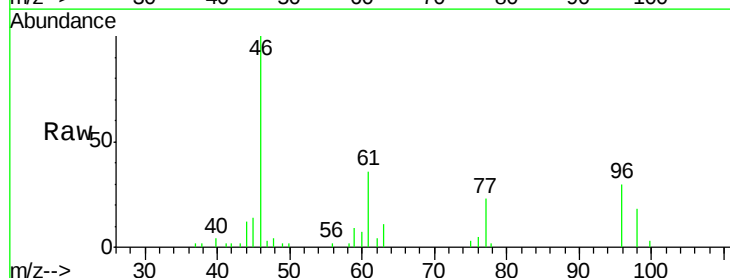


Abundance Ion 63.00 (62.70 to 63.70): VV0  
 Ion 65.00 (64.70 to 65.70): VV0  
 Ion 83.00 (82.70 to 83.70): VV0

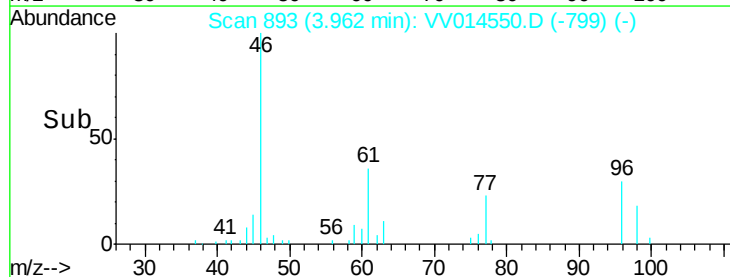
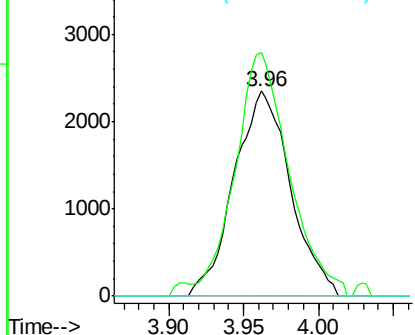


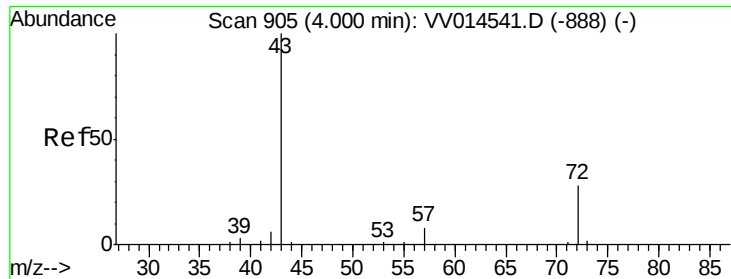
#20  
 cis-1,2-Dichloroethene  
 Concen: 2.487 ug/L  
 RT: 3.96 min Scan# 893  
 Delta R.T. 0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Tgt Ion: 96 Resp: 6169  
 Ion Ratio Lower Upper  
 96 100  
 61 119.0 85.2 158.2  
 68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.00 (60.70 to 61.70): VV0  
 Ion 68.00 (67.70 to 68.70): VV0





#22

2-Butanone

Concen: 4.083 ug/L

RT: 4.03 min Scan# 914

Delta R.T. 0.03 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

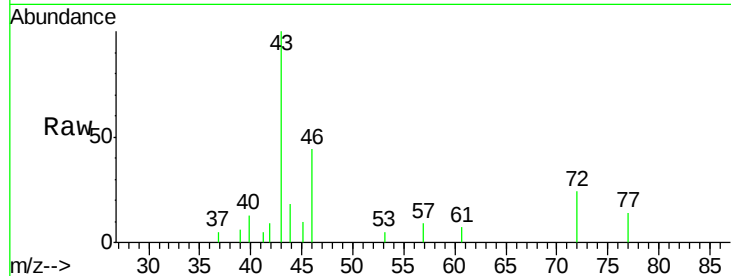
MDL06

Tot Ion: 43 Resp: 6889

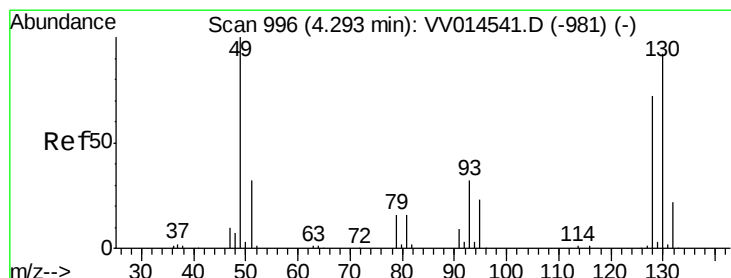
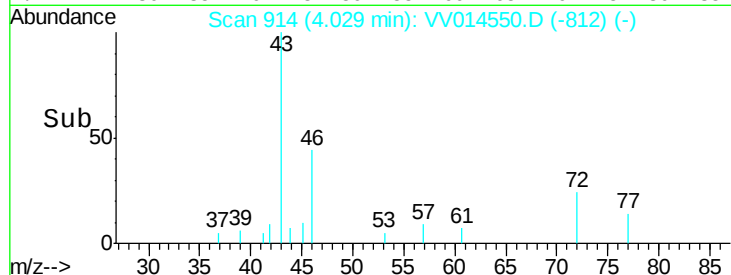
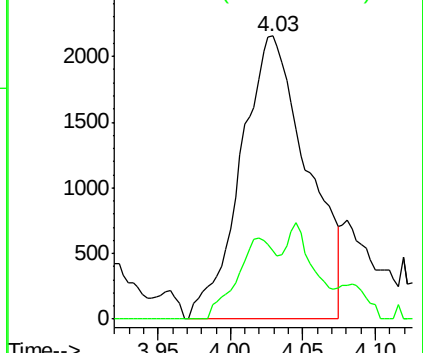
Ion Ratio Lower Upper

43 100

72 16.3 12.7 38.1



Abundance Ion 43.00 (42.70 to 43.70): VV014550.D (-912) (-)



#23

Bromochloromethane

Concen: 2.507 ug/L

RT: 4.30 min Scan# 997

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Tgt Ion: 128 Resp: 2945

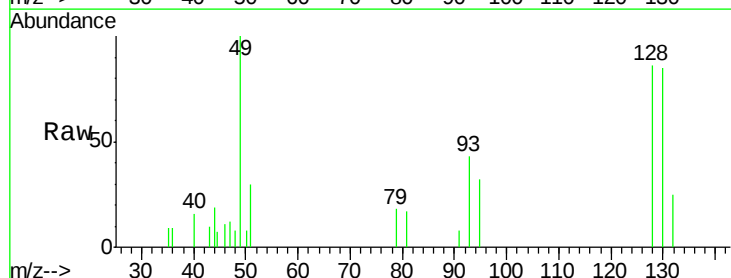
Ion Ratio Lower Upper

128 100

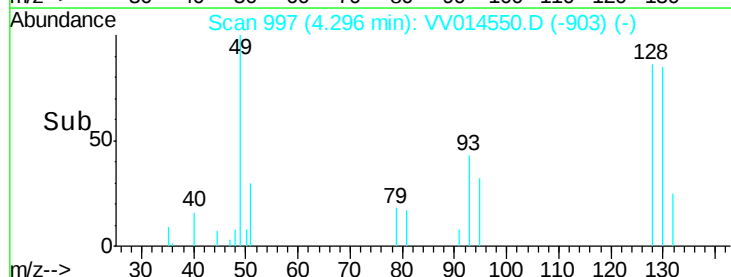
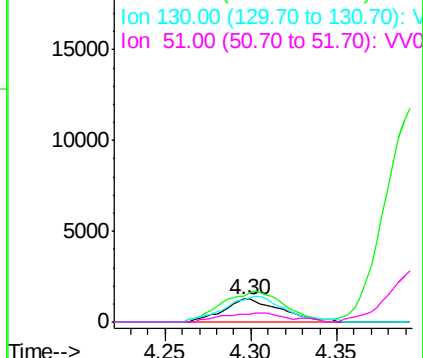
49 115.9 110.1 204.5

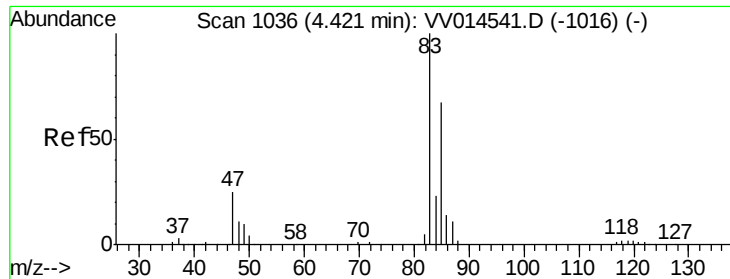
130 99.0 88.5 164.4

51 34.4 39.4 59.0#



Abundance Ion 128.00 (127.70 to 128.70): VV014550.D (-903) (-)

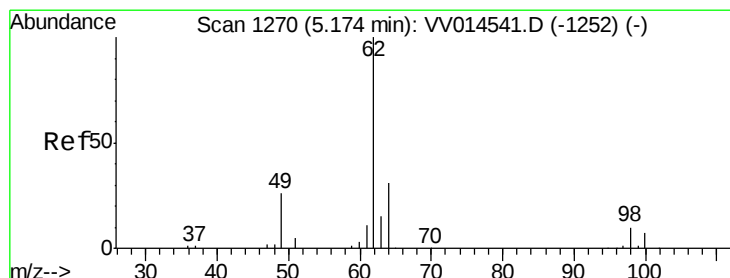
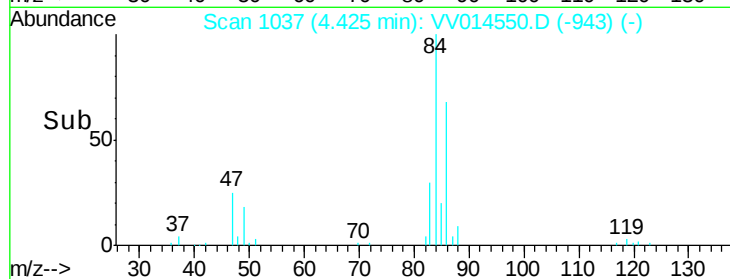
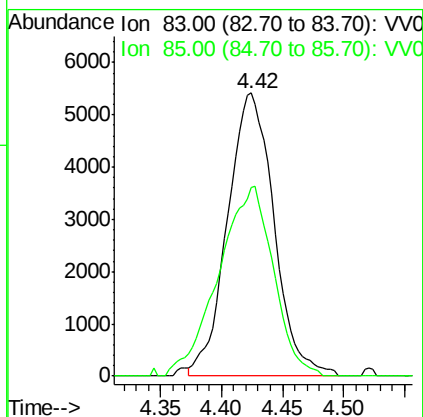
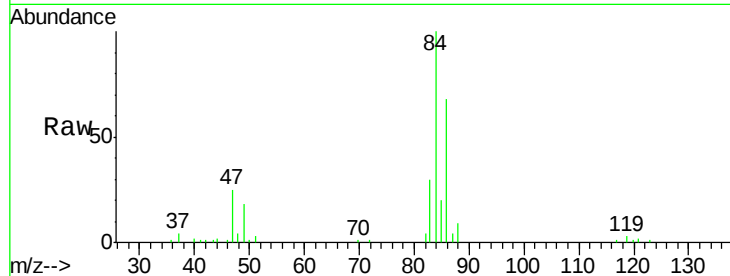




#25  
Chloroform  
Concen: 3.580 ug/L  
RT: 4.42 min Scan# 1037  
Delta R.T. 0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

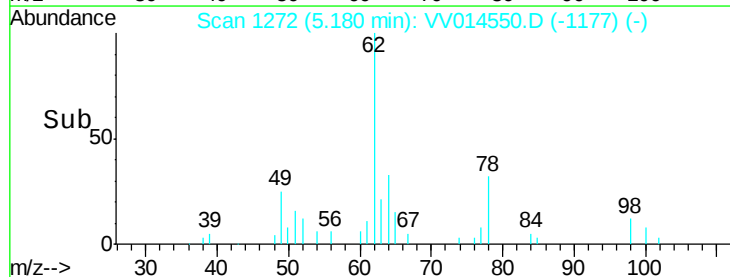
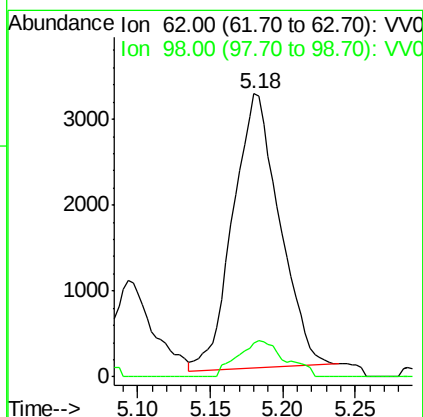
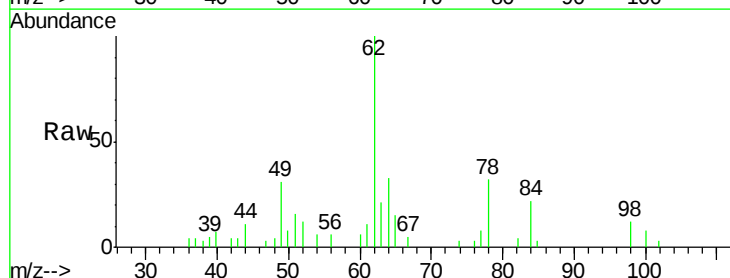
Instrument :  
MSVOA\_V  
ClientSampled :  
MDL06

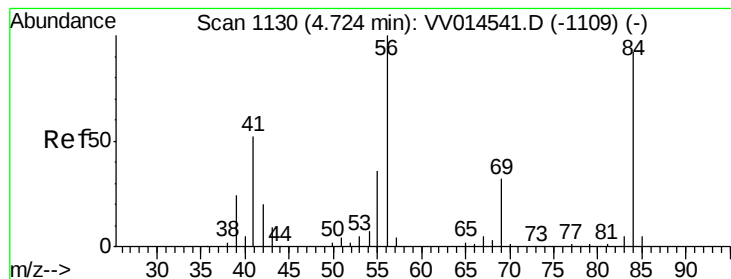
Tot Ion: 83 Resp: 14350  
Ion Ratio Lower Upper  
83 100  
85 66.5 45.8 85.0



#27  
1,2-Dichloroethane  
Concen: 2.390 ug/L  
RT: 5.18 min Scan# 1272  
Delta R.T. 0.01 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

Tgt Ion: 62 Resp: 7136  
Ion Ratio Lower Upper  
62 100  
98 11.7 8.2 12.4





#29

Cyclohexane

Concen: 2.167 ug/L

RT: 4.72 min Scan# 1130

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

MDL06

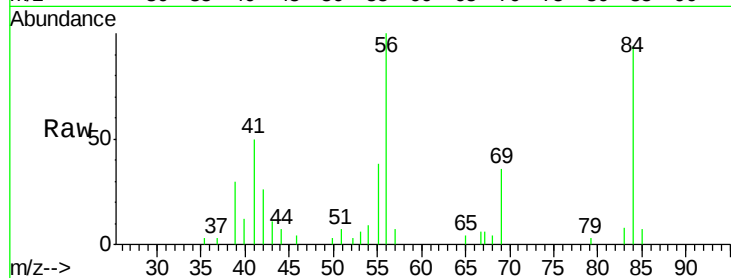
Tot Ion: 56 Resp: 8095

Ion Ratio Lower Upper

56 100

69 36.8 25.2 37.8

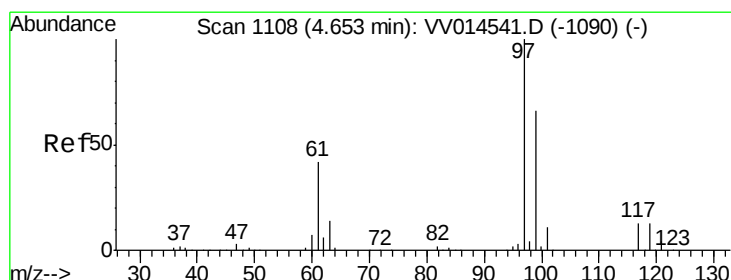
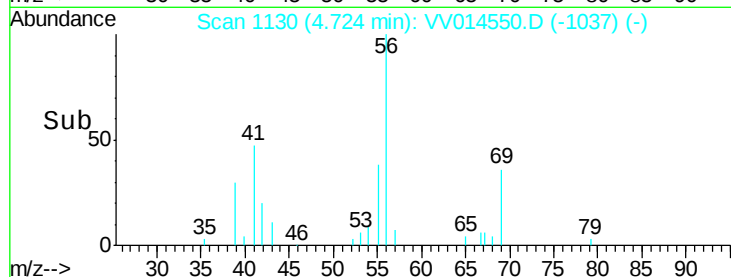
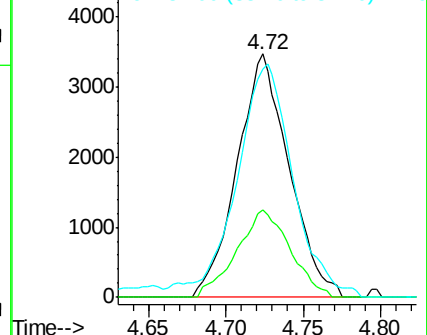
84 92.4 69.8 104.8



Abundance Ion 56.00 (55.70 to 56.70): VV0

Ion 69.00 (68.70 to 69.70): VV0

Ion 84.00 (83.70 to 84.70): VV0



#30

1,1,1-Trichloroethane

Concen: 2.493 ug/L

RT: 4.66 min Scan# 1109

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

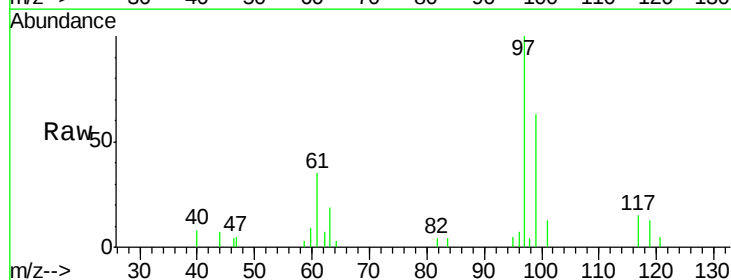
Tgt Ion: 97 Resp: 8646

Ion Ratio Lower Upper

97 100

99 65.2 50.6 76.0

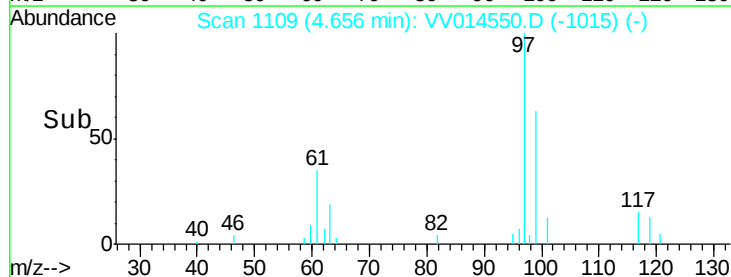
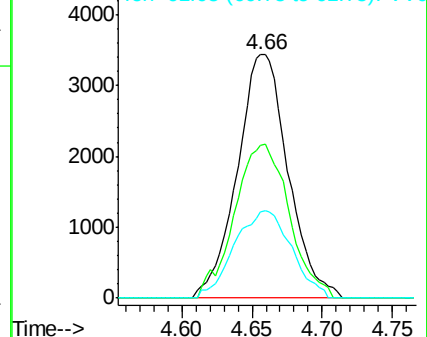
61 40.1 33.0 49.4

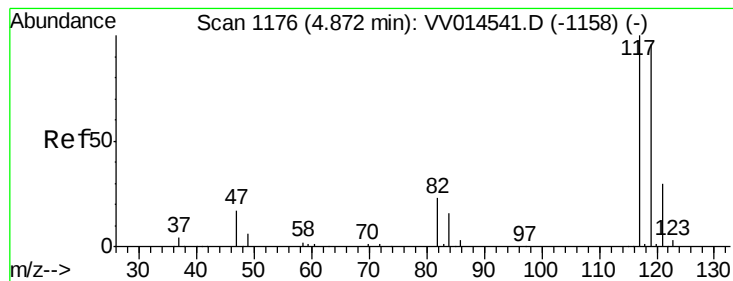


Abundance Ion 97.00 (96.70 to 97.70): VV0

Ion 99.00 (98.70 to 99.70): VV0

Ion 61.05 (60.75 to 61.75): VV0





#31

Carbon tetrachloride

Concen: 2.427 ug/L

RT: 4.87 min Scan# 1177

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

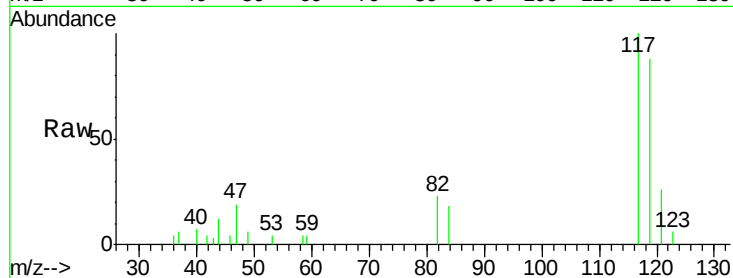
MDL06

Tot Ion:117 Resp: 7424

Ion Ratio Lower Upper

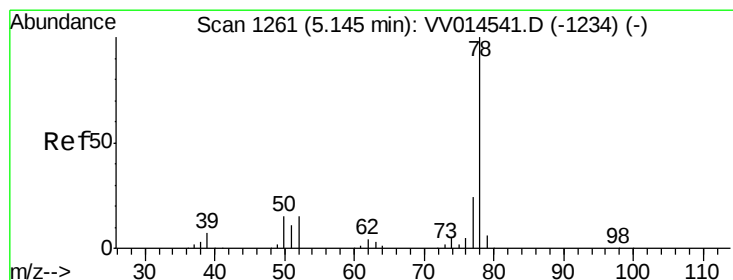
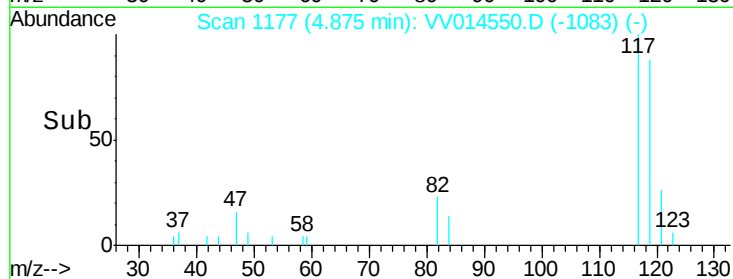
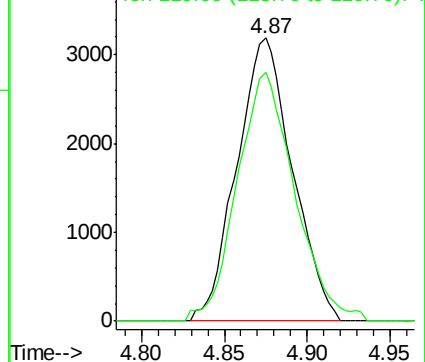
117 100

119 89.9 76.7 115.1



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#33

Benzene

Concen: 2.399 ug/L

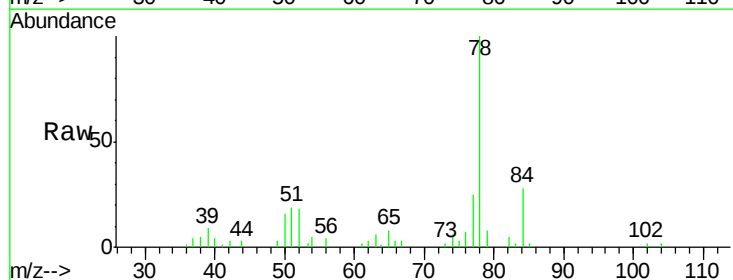
RT: 5.15 min Scan# 1262

Delta R.T. 0.00 min

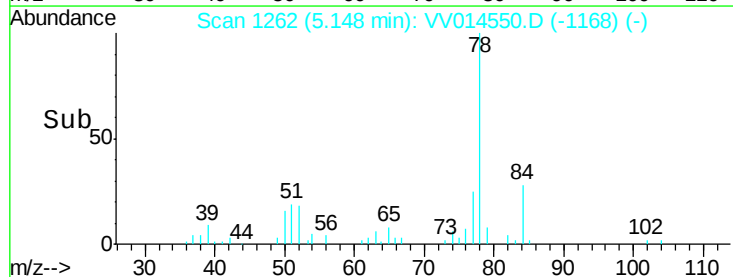
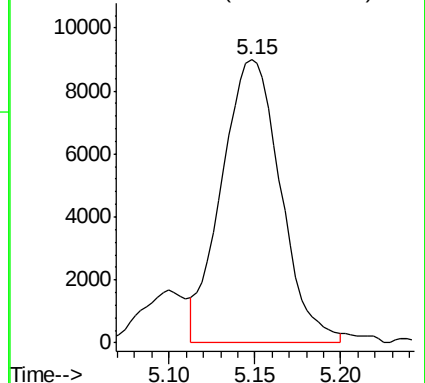
Lab File: VV014550.D

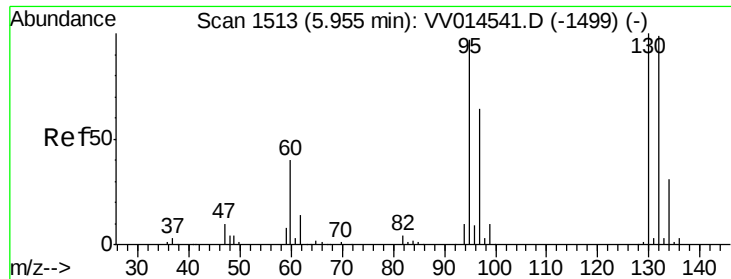
Acq: 10 Feb 2020 14:33

Tgt Ion: 78 Resp: 21431



Abundance Ion 78.00 (77.70 to 78.70): VV0

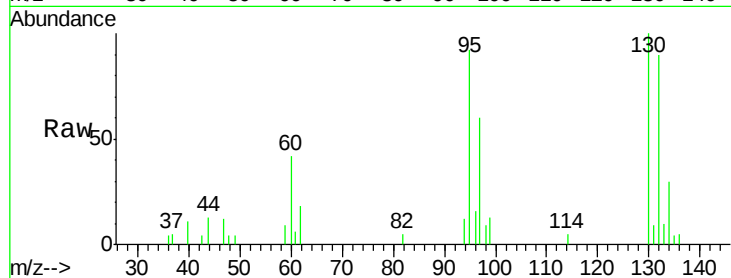




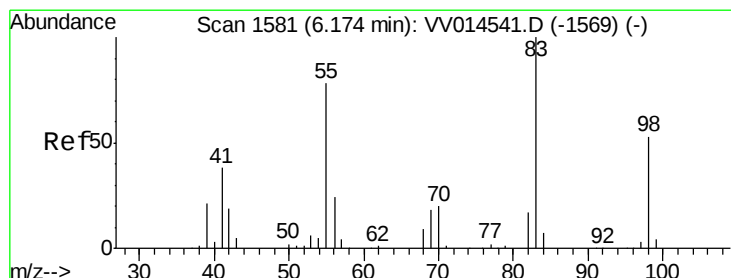
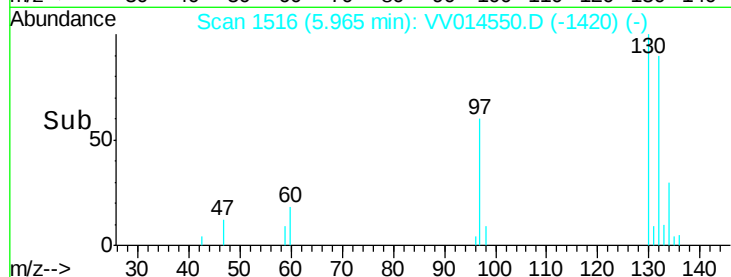
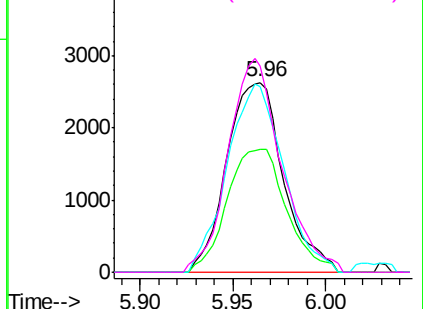
#34  
 Trichloroethene  
 Concen: 2.359 ug/L  
 RT: 5.96 min Scan# 1516  
 Delta R.T. 0.01 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL06

Tot Ion: 95 Resp: 5587  
 Ion Ratio Lower Upper  
 95 100  
 97 65.0 45.1 83.7  
 132 97.5 67.7 125.7  
 130 108.2 70.5 130.9

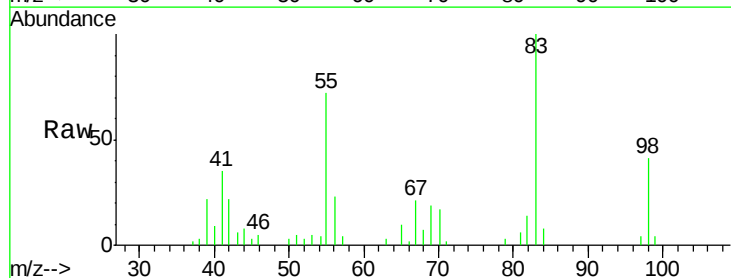


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 97.00 (96.70 to 97.70): VV0  
 Ion 132.00 (131.70 to 132.70): VV0  
 Ion 130.00 (129.70 to 130.70): VV0

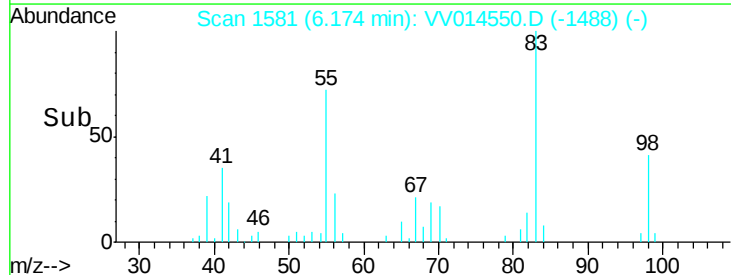
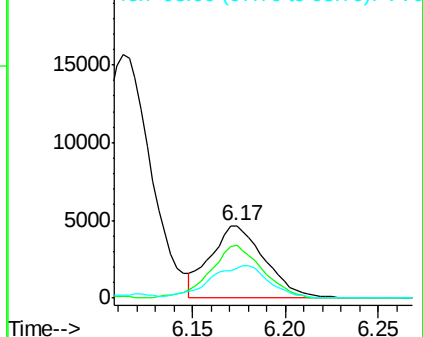


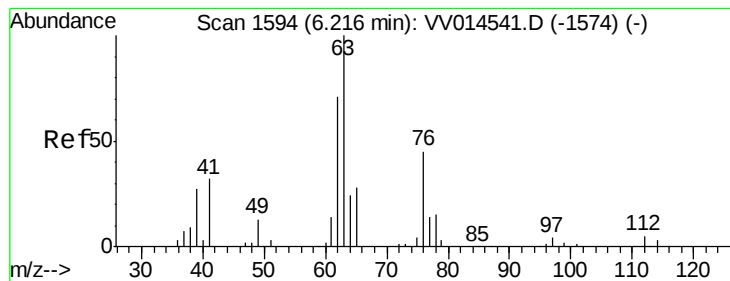
#35  
 Methylcyclohexane  
 Concen: 2.461 ug/L  
 RT: 6.17 min Scan# 1581  
 Delta R.T. -0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Tgt Ion: 83 Resp: 9523  
 Ion Ratio Lower Upper  
 83 100  
 55 69.3 60.7 91.1  
 98 48.1 39.4 59.0



Abundance Ion 83.00 (82.70 to 83.70): VV0  
 Ion 55.00 (54.70 to 55.70): VV0  
 Ion 98.00 (97.70 to 98.70): VV0





#37

1,2-Dichloropropane

Concen: 2.217 ug/L

RT: 6.22 min Scan# 1595

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampled :

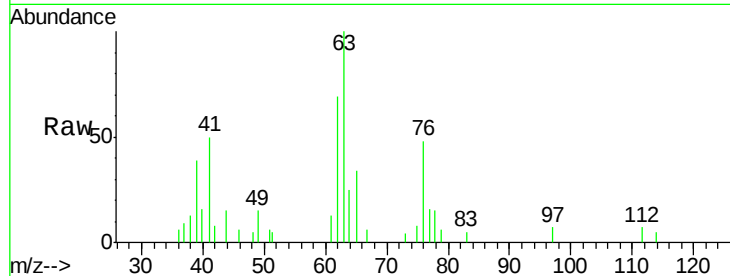
MDL06

Tot Ion: 63 Resp: 5044

Ion Ratio Lower Upper

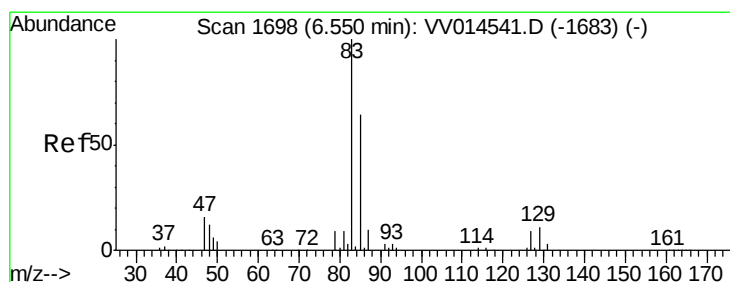
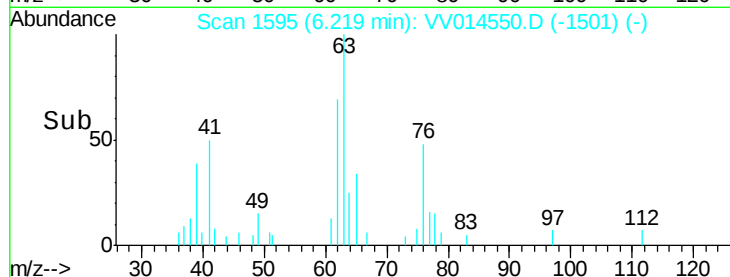
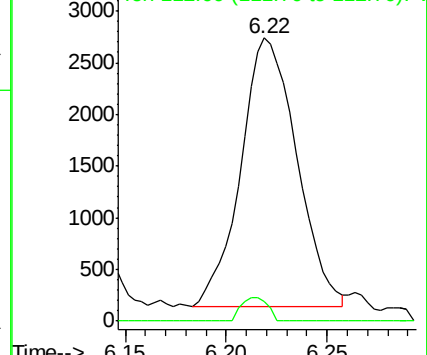
63 100

112 4.2 3.7 5.5



Abundance Ion 63.00 (62.70 to 63.70): VV0

Ion 112.00 (111.70 to 112.70): V



#38

Bromodichloromethane

Concen: 2.386 ug/L

RT: 6.56 min Scan# 1700

Delta R.T. 0.01 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

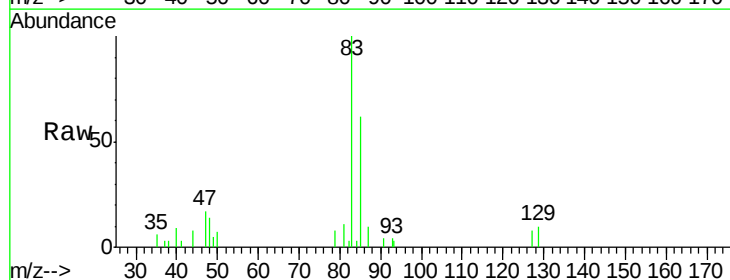
Tgt Ion: 83 Resp: 7286

Ion Ratio Lower Upper

83 100

85 62.1 44.4 82.4

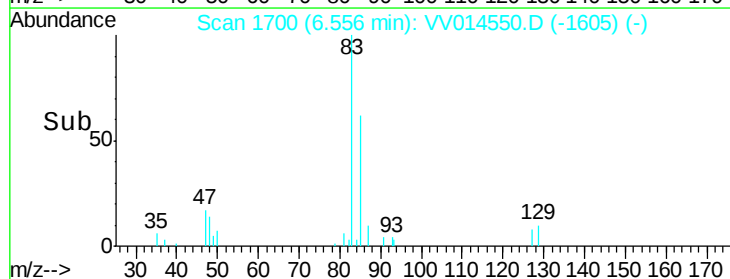
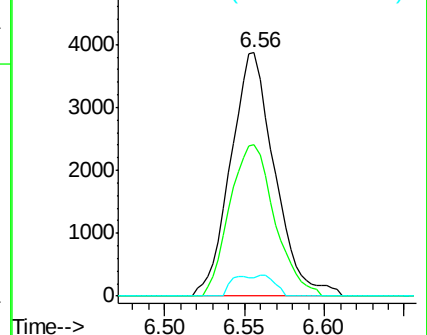
127 7.7 6.7 10.1

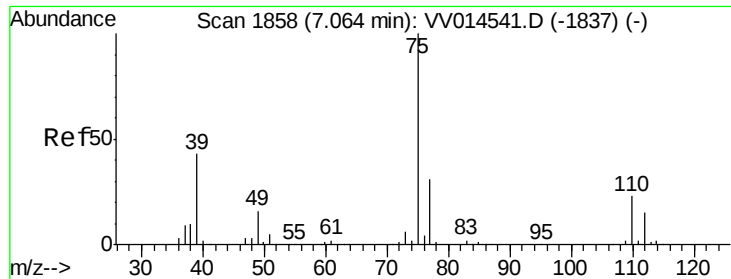


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 127.00 (126.70 to 127.70): V

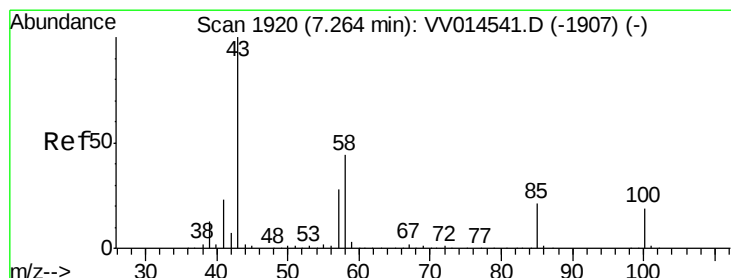
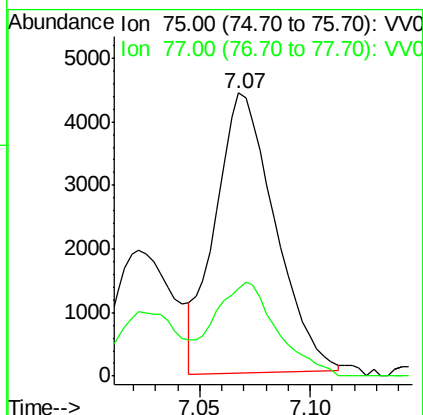
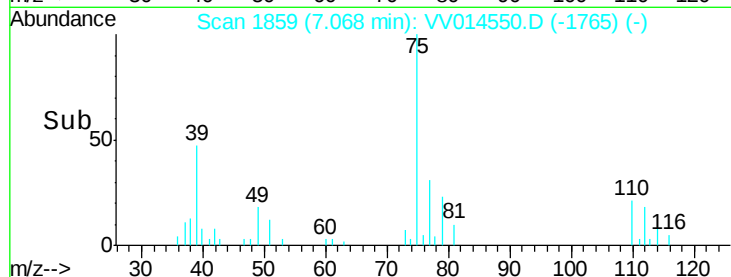
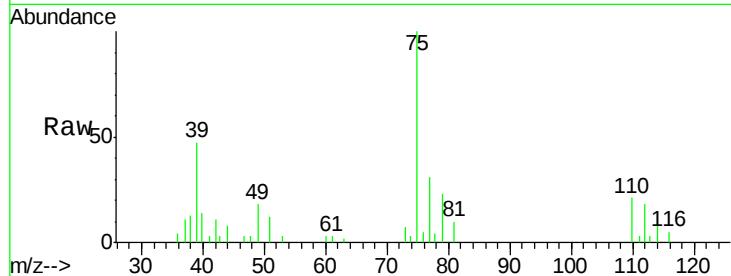




#39  
 cis-1,3-Dichloropropene  
 Concen: 2.171 ug/L  
 RT: 7.07 min Scan# 1859  
 Delta R.T. 0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

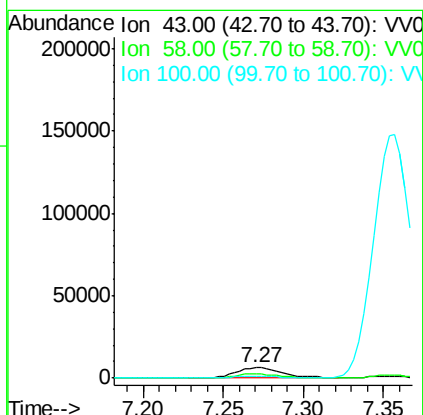
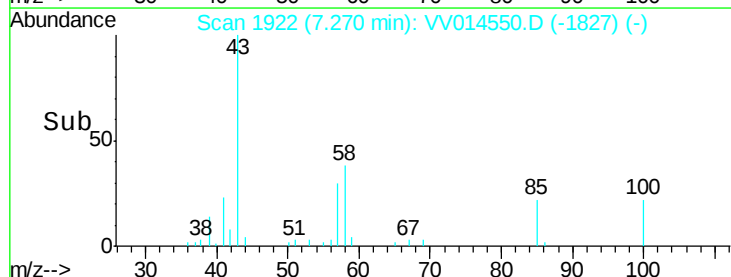
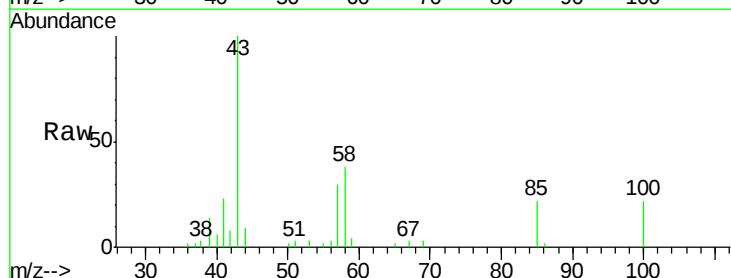
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 MDL06

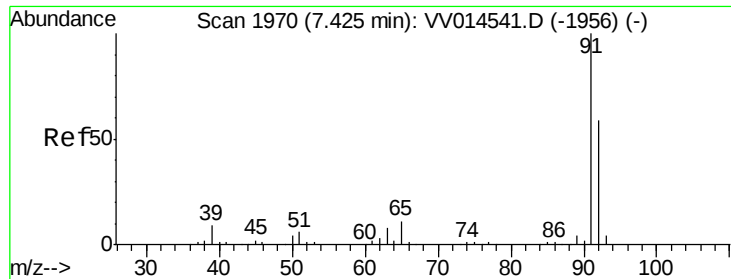
Tot Ion: 75 Resp: 8242  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 22.7 42.1



#40  
 4-Methyl-2-pentanone  
 Concen: 4.222 ug/L  
 RT: 7.27 min Scan# 1922  
 Delta R.T. 0.01 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Tgt Ion: 43 Resp: 12415  
 Ion Ratio Lower Upper  
 43 100  
 58 40.0 33.2 49.8  
 100 19.8 13.9 20.9





#42

Toluene

Concen: 2.474 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.01 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

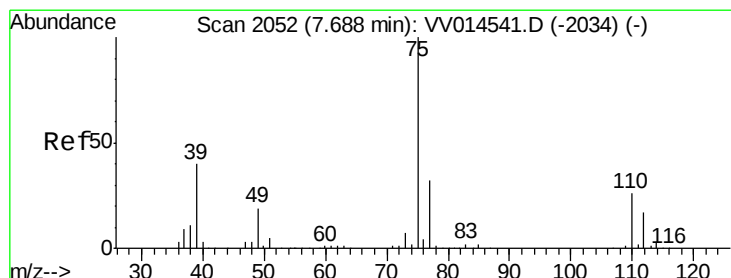
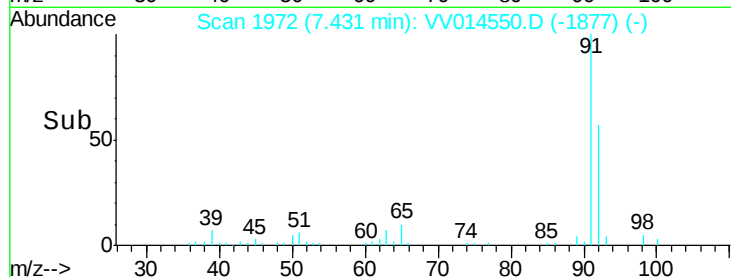
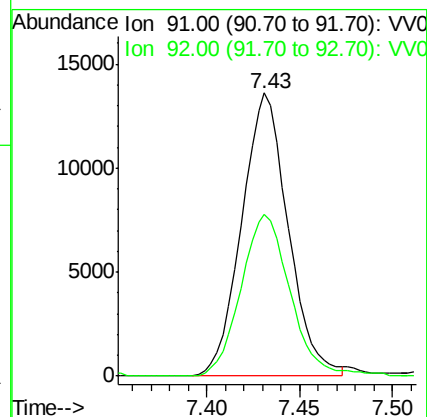
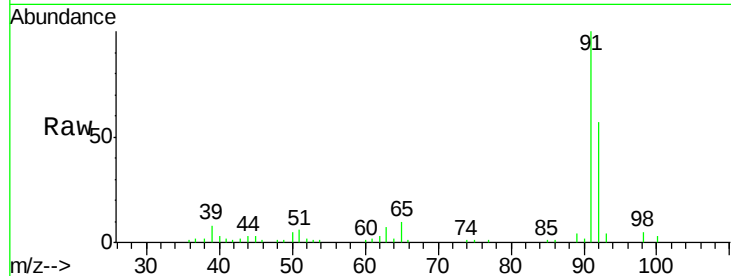
MDL06

Tot Ion: 91 Resp: 23701

Ion Ratio Lower Upper

91 100

92 57.3 41.6 77.2



#44

trans-1,3-Dichloropropene

Concen: 2.374 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV014550.D

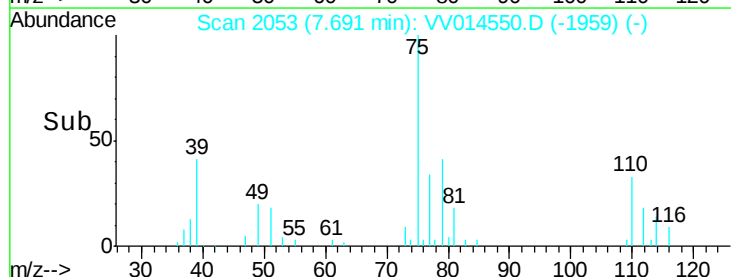
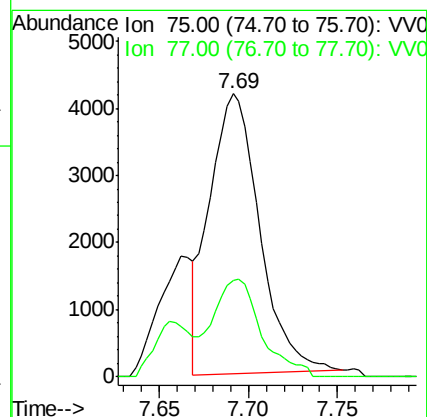
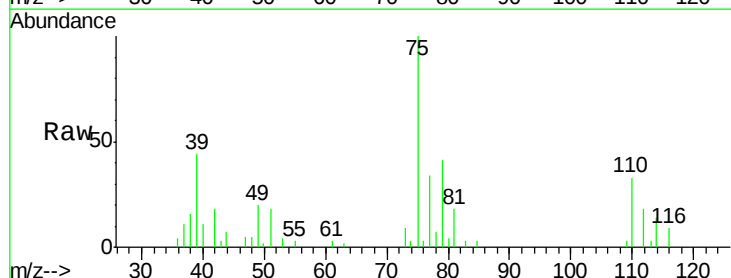
Acq: 10 Feb 2020 14:33

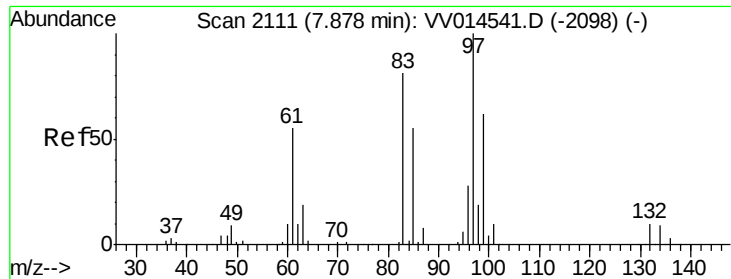
Tgt Ion: 75 Resp: 8081

Ion Ratio Lower Upper

75 100

77 34.2 22.2 41.2

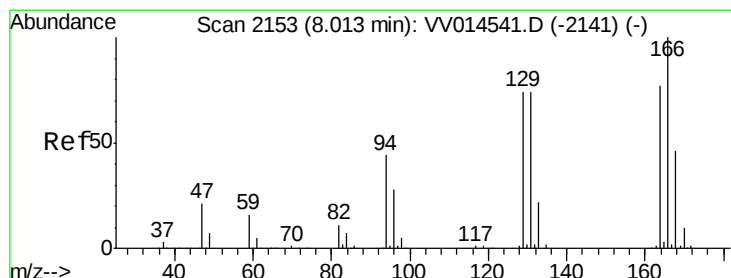
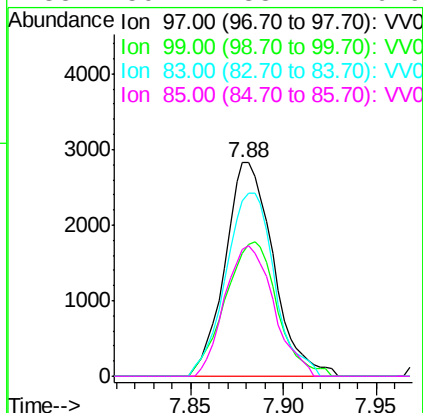
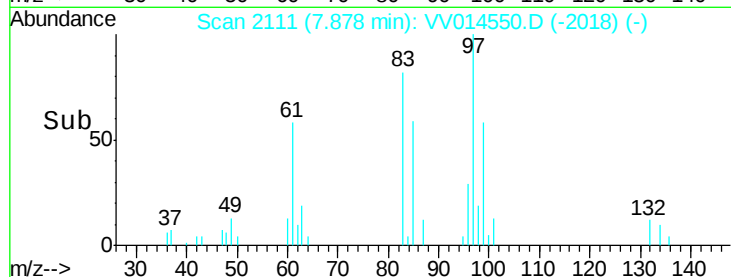
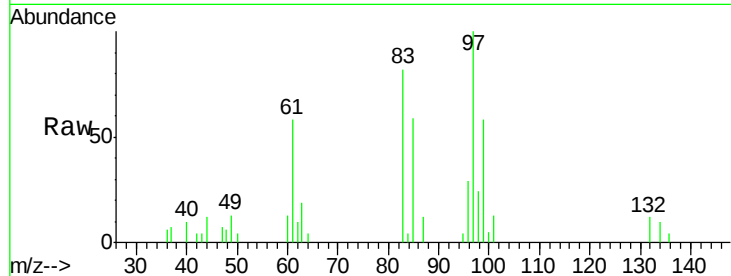




#45  
1,1,2-Trichloroethane  
Concen: 2.345 ug/L  
RT: 7.88 min Scan# 2111  
Delta R.T. -0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

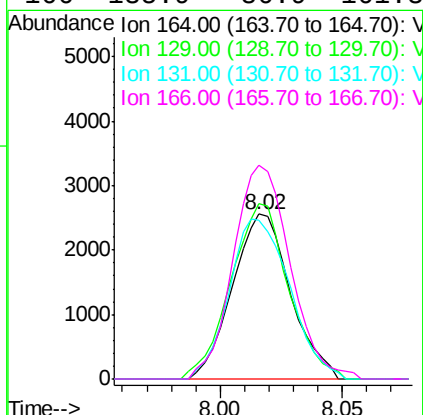
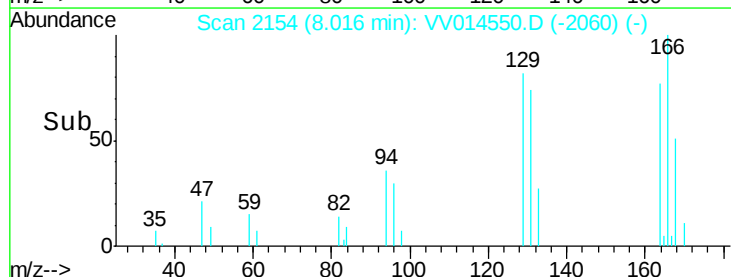
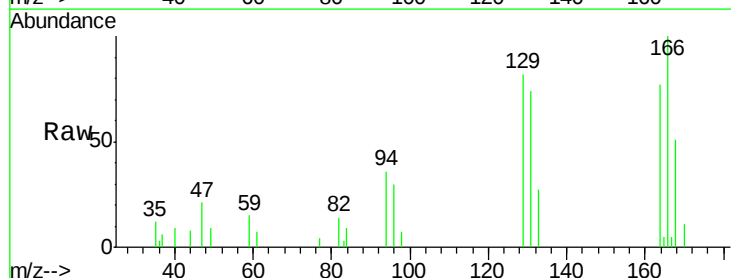
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL06

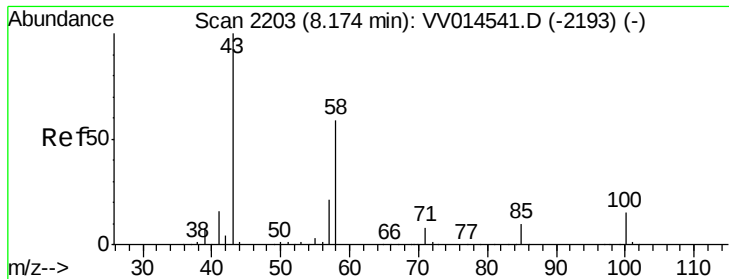
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 5120  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 57.7  | 44.5  | 82.7  |
| 83       | 82.3  | 60.1  | 111.5 |
| 85       | 59.4  | 38.1  | 70.9  |



#46  
Tetrachloroethene  
Concen: 2.331 ug/L  
RT: 8.02 min Scan# 2154  
Delta R.T. 0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 4210  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 106.5 | 68.0  | 126.4 |
| 131      | 95.9  | 63.4  | 117.8 |
| 166      | 135.9 | 86.9  | 161.3 |





#48

2-Hexanone

Concen: 4.612 ug/L

RT: 8.18 min Scan# 2205

Delta R.T. 0.01 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

MDL06

Tot Ion: 43 Resp: 10441

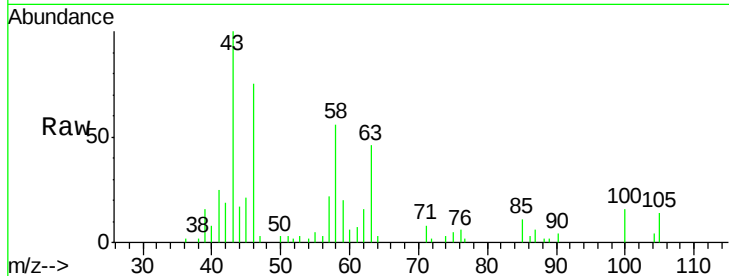
Ion Ratio Lower Upper

43 100

58 57.3 45.5 68.3

57 21.3 15.8 23.6

100 16.3 10.8 16.2#

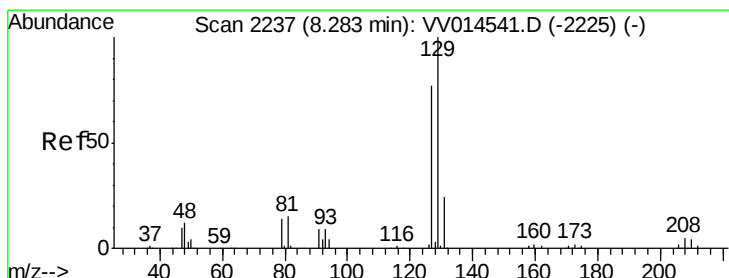
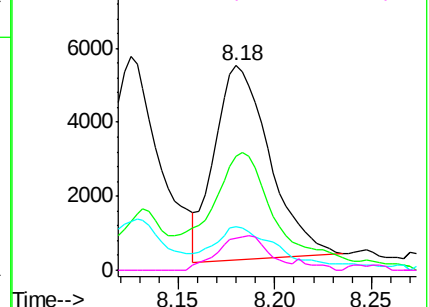
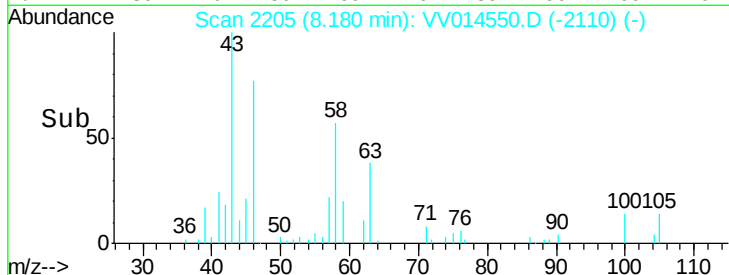


Abundance Ion 43.00 (42.70 to 43.70): VV014550.D (-2110) (-)

Ion 58.00 (57.70 to 58.70): VV014550.D (-2110) (-)

Ion 57.00 (56.70 to 57.70): VV014550.D (-2110) (-)

Ion 100.00 (99.70 to 100.70): VV014550.D (-2110) (-)



#49

Dibromochloromethane

Concen: 2.424 ug/L

RT: 8.29 min Scan# 2238

Delta R.T. 0.00 min

Lab File: VV014550.D

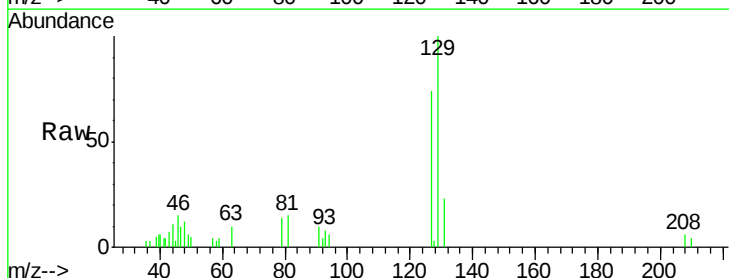
Acq: 10 Feb 2020 14:33

Tgt Ion: 129 Resp: 5975

Ion Ratio Lower Upper

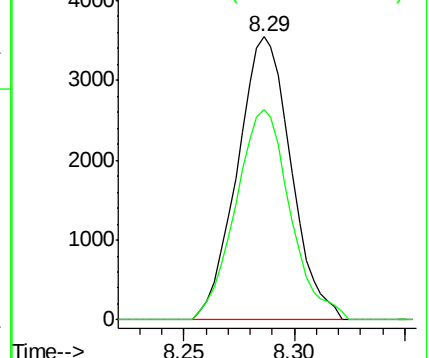
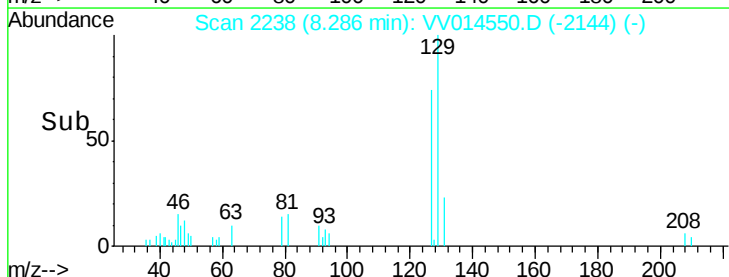
129 100

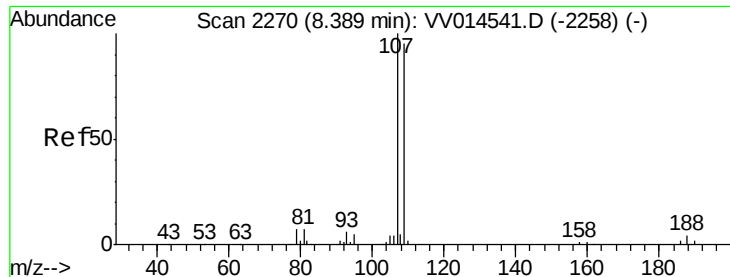
127 74.4 54.1 100.5



Abundance Ion 129.00 (128.70 to 129.70): VV014550.D (-2144) (-)

Ion 127.00 (126.70 to 127.70): VV014550.D (-2144) (-)

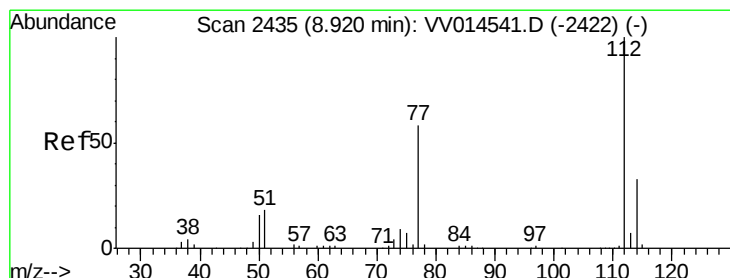
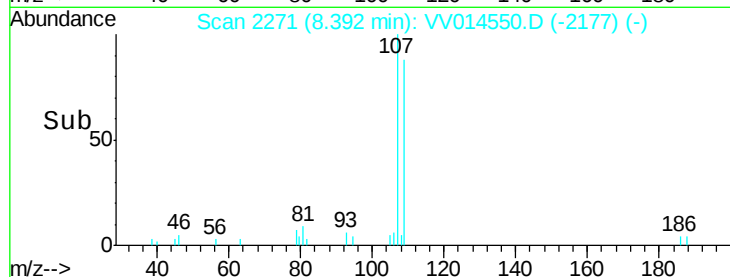
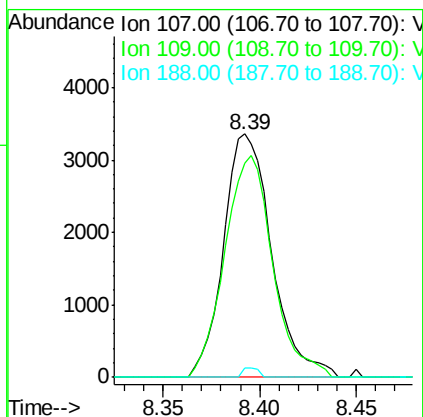
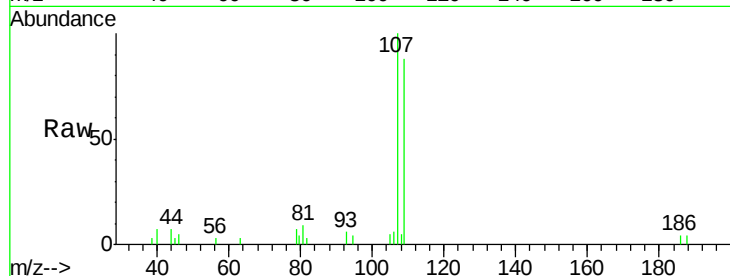




#50  
1,2-Dibromoethane  
Concen: 2.466 ug/L  
RT: 8.39 min Scan# 2271  
Delta R.T. 0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

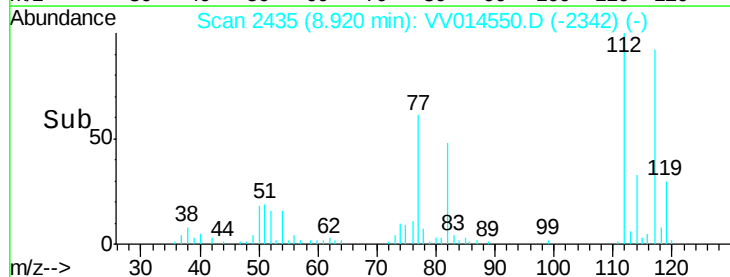
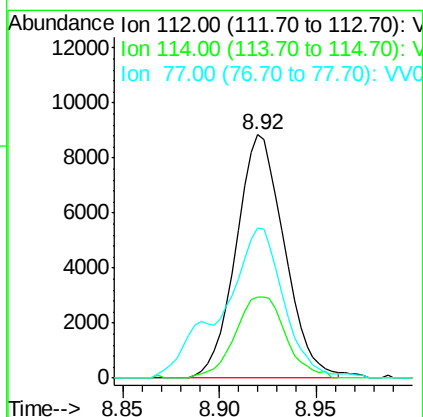
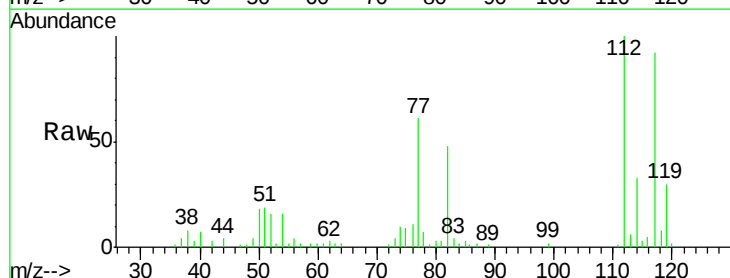
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL06

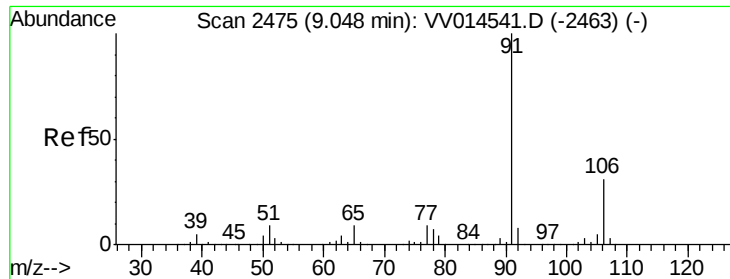
Tot Ion:107 Resp: 5830  
Ion Ratio Lower Upper  
107 100  
109 88.1 65.2 121.2  
188 3.6 2.6 4.0



#51  
Chlorobenzene  
Concen: 2.452 ug/L  
RT: 8.92 min Scan# 2435  
Delta R.T. -0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

Tgt Ion:112 Resp: 15344  
Ion Ratio Lower Upper  
112 100  
114 33.4 22.3 41.5  
77 61.5 47.3 70.9

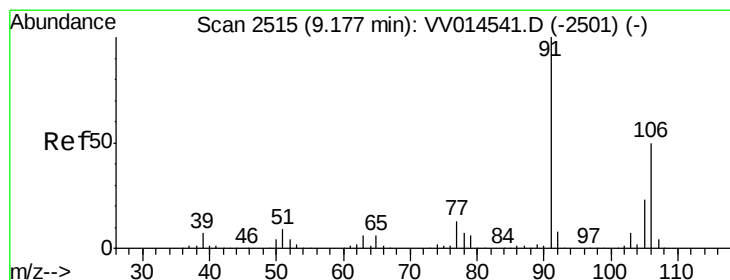
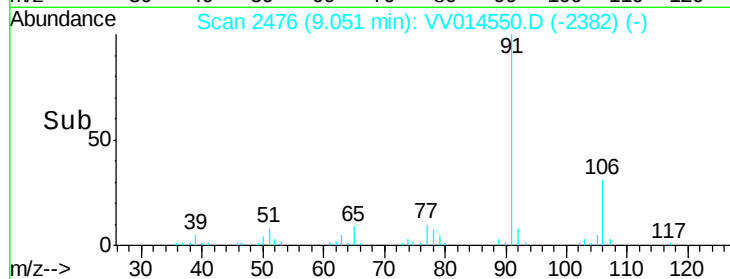
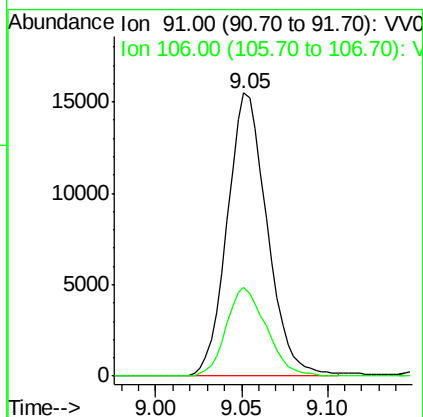
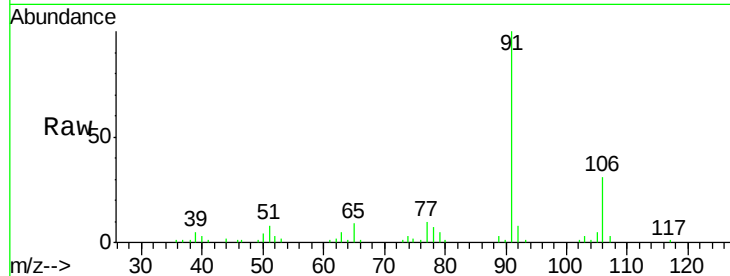




#52  
Ethylbenzene  
Concen: 2.329 ug/L  
RT: 9.05 min Scan# 2476  
Delta R.T. 0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

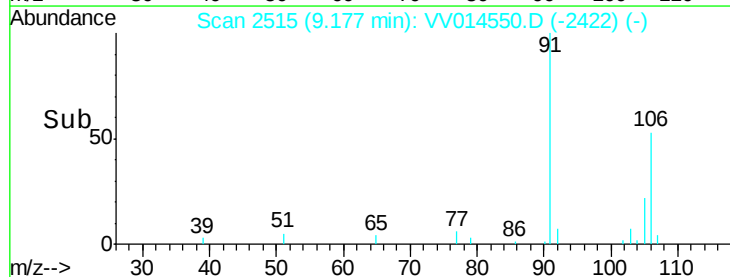
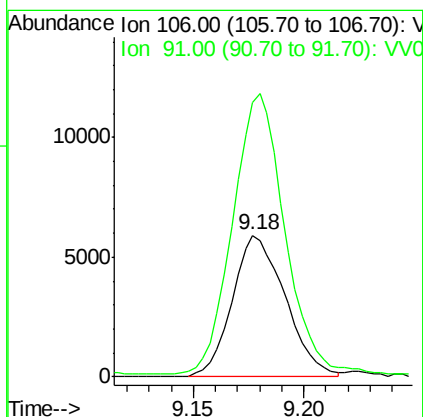
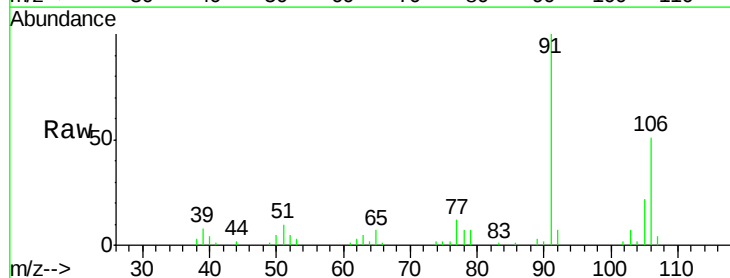
Instrument :  
MSVOA\_V  
ClientSampled :  
MDL06

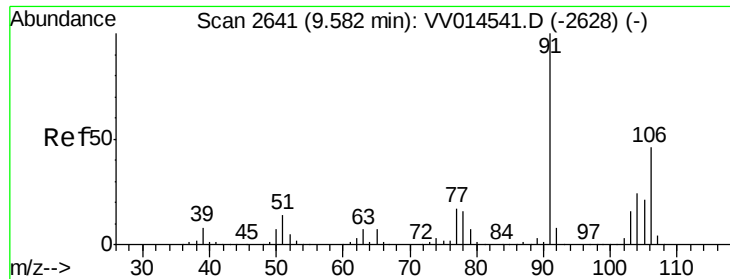
Tot Ion: 91 Resp: 25019  
Ion Ratio Lower Upper  
91 100  
106 31.3 21.5 39.9



#53  
m,p-Xylene  
Concen: 2.386 ug/L  
RT: 9.18 min Scan# 2515  
Delta R.T. -0.00 min  
Lab File: VV014550.D  
Acq: 10 Feb 2020 14:33

Tgt Ion: 106 Resp: 9871  
Ion Ratio Lower Upper  
106 100  
91 194.4 141.4 262.6





#54

o-Xylene

Concen: 2.340 ug/L

RT: 9.58 min Scan# 2641

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

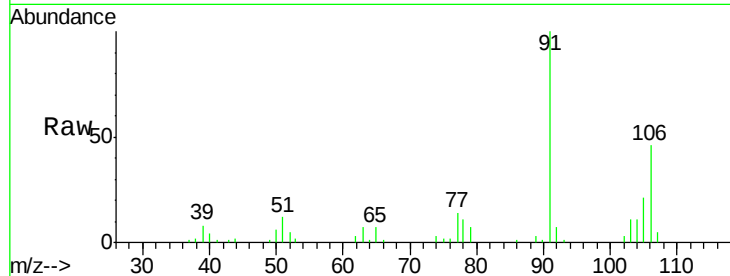
MDL06

Tot Ion:106 Resp: 9267

Ion Ratio Lower Upper

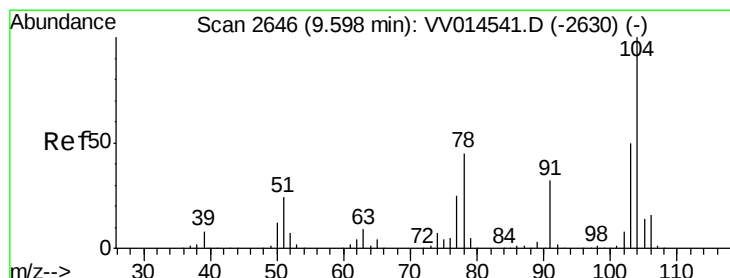
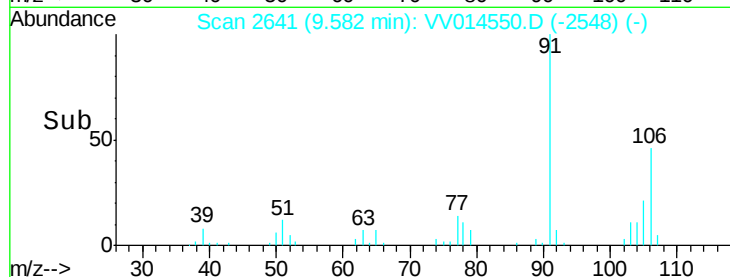
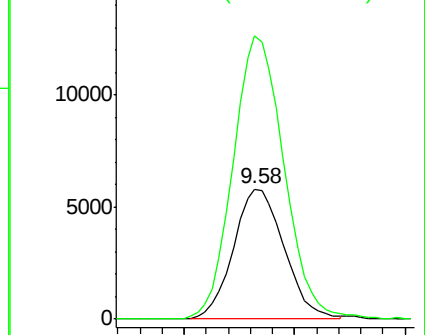
106 100

91 218.1 149.4 277.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#55

Styrene

Concen: 2.291 ug/L

RT: 9.60 min Scan# 2647

Delta R.T. 0.00 min

Lab File: VV014550.D

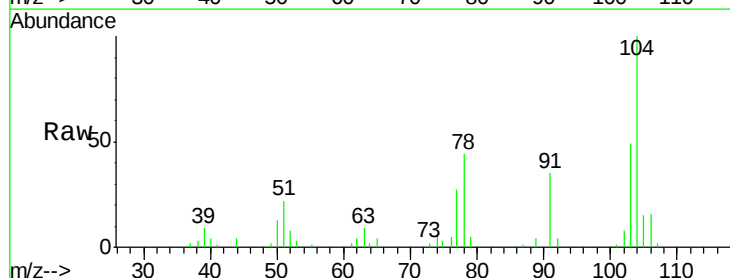
Acq: 10 Feb 2020 14:33

Tgt Ion:104 Resp: 15506

Ion Ratio Lower Upper

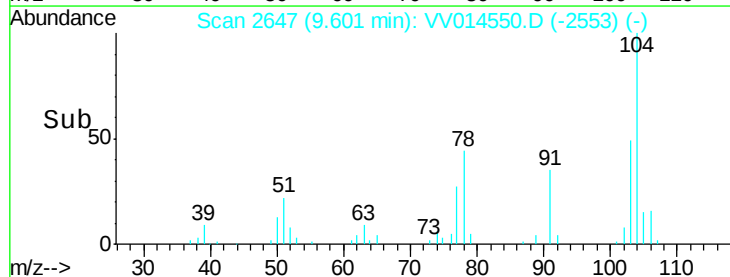
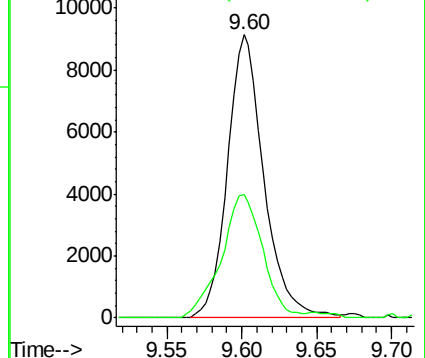
104 100

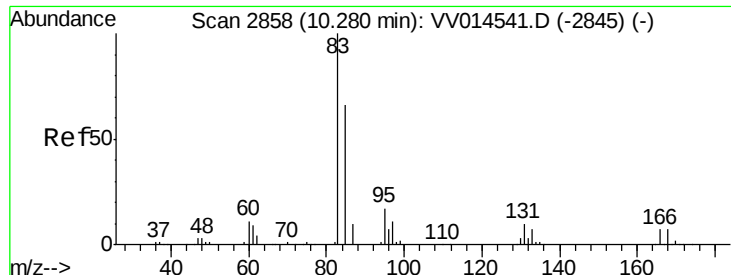
78 43.7 31.6 58.8



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VV0

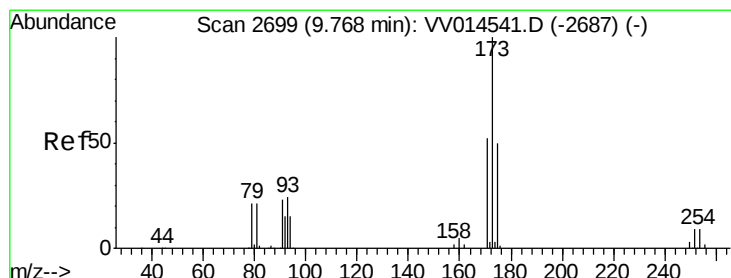
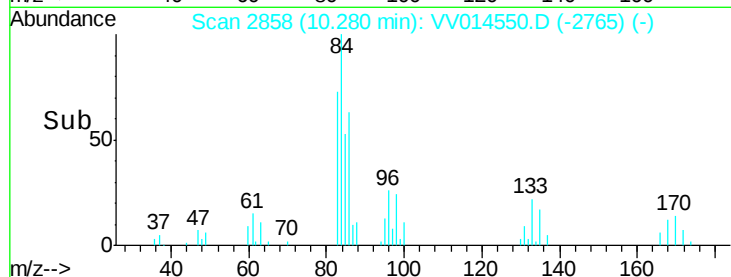
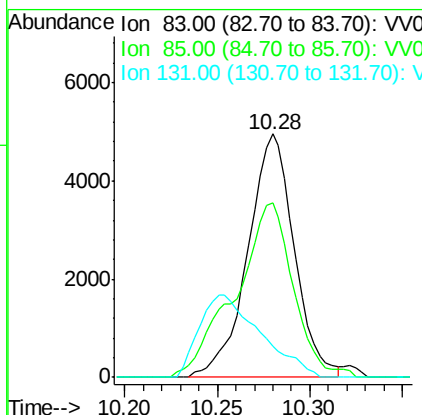
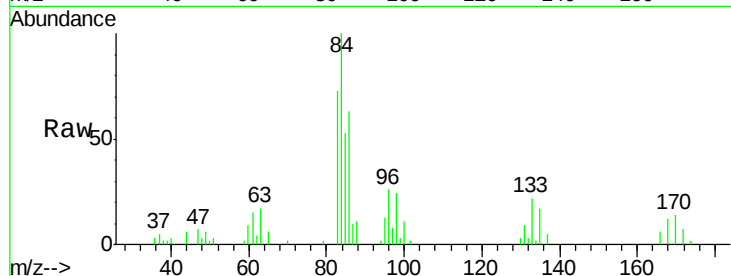




#57  
 1,1,2,2-Tetrachloroethane  
 Concen: 2.529 ug/L  
 RT: 10.28 min Scan# 2858  
 Delta R.T. -0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

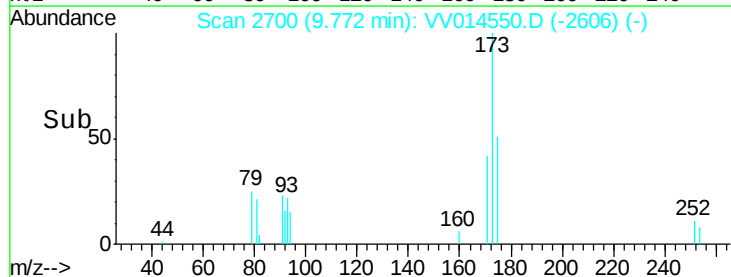
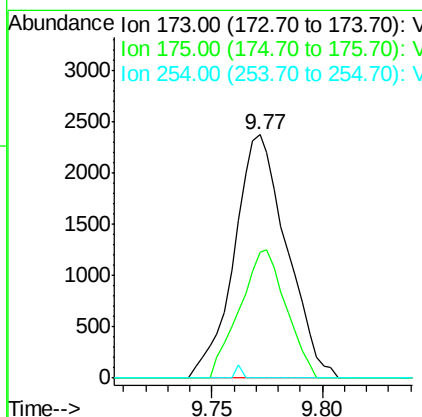
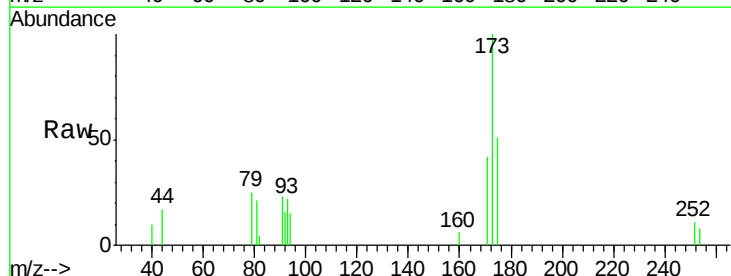
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 MDL06

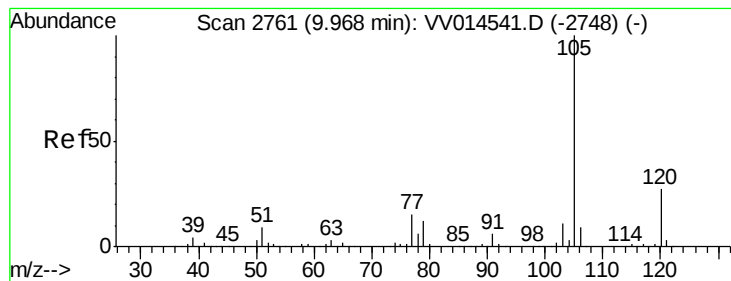
Tot Ion: 83 Resp: 8653  
 Ion Ratio Lower Upper  
 83 100  
 85 71.8 45.2 84.0  
 131 12.9 7.8 11.8#



#59  
 Bromoform  
 Concen: 2.322 ug/L  
 RT: 9.77 min Scan# 2700  
 Delta R.T. 0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Tgt Ion: 173 Resp: 3927  
 Ion Ratio Lower Upper  
 173 100  
 175 46.5 37.8 56.8  
 254 0.0 7.0 10.6#





#60

Isopropylbenzene

Concen: 2.427 ug/L

RT: 9.97 min Scan# 2762

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

MDL06

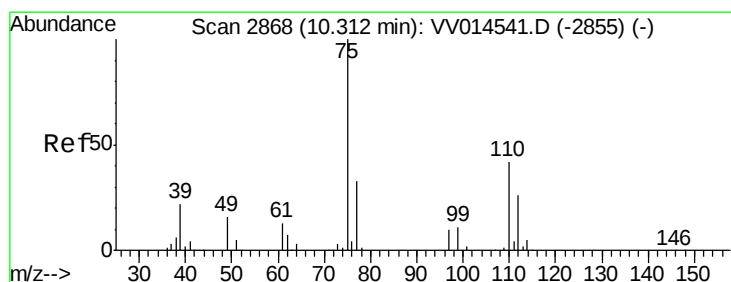
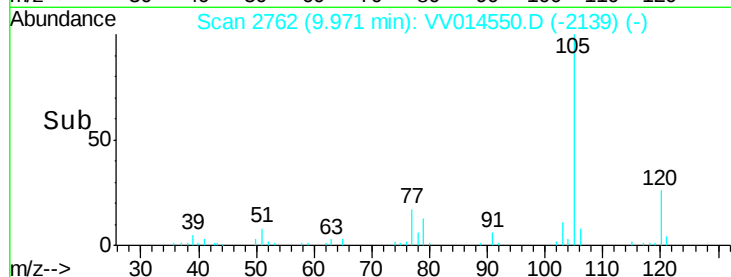
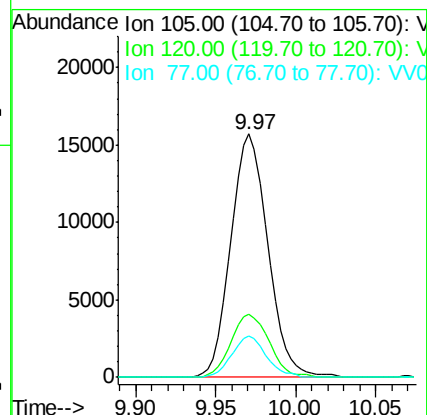
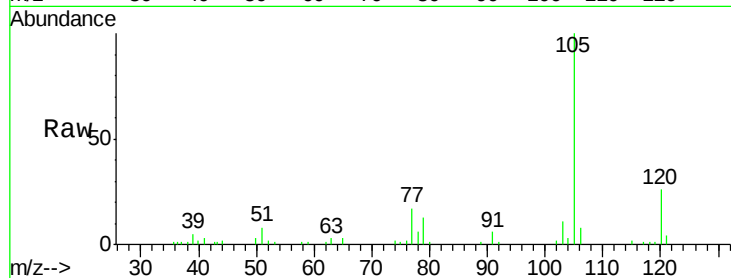
Tot Ion:105 Resp: 24886

Ion Ratio Lower Upper

105 100

120 26.7 21.5 32.3

77 15.7 12.2 18.4



#61

1,2,3-Trichloropropane

Concen: 2.507 ug/L

RT: 10.32 min Scan# 2869

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

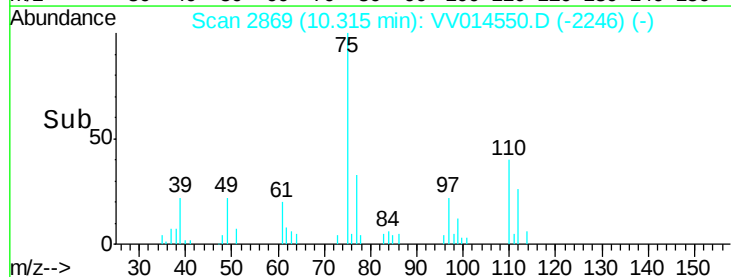
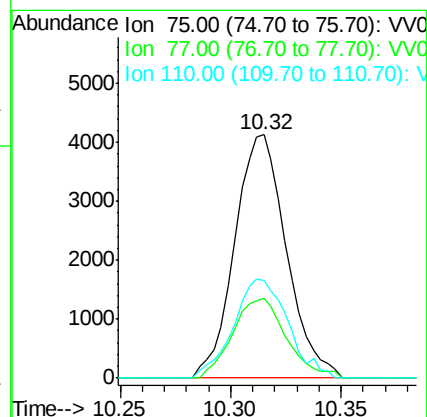
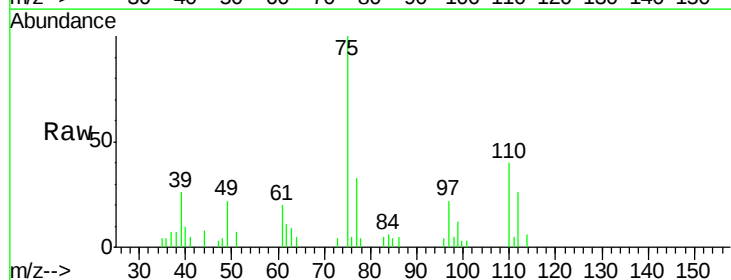
Tgt Ion: 75 Resp: 6733

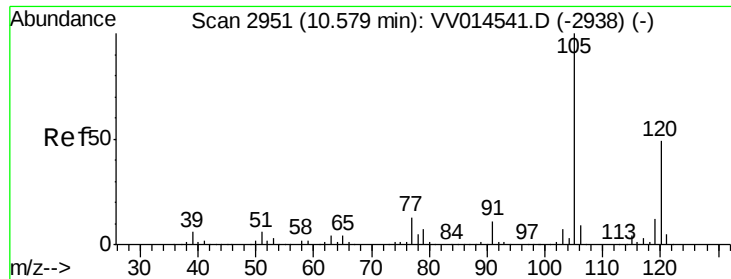
Ion Ratio Lower Upper

75 100

77 33.6 25.8 38.8

110 42.8 32.4 48.6

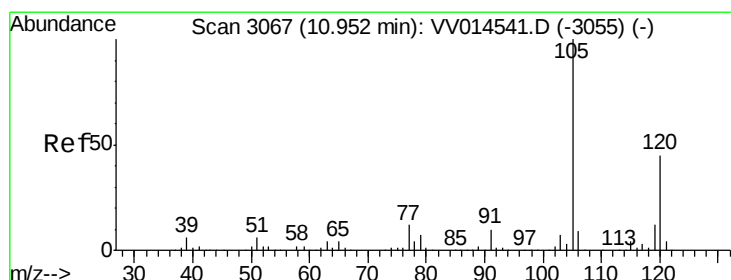
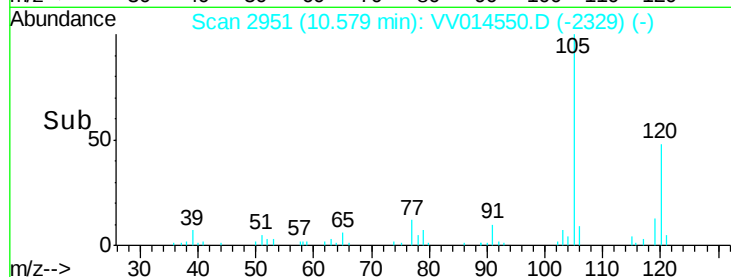
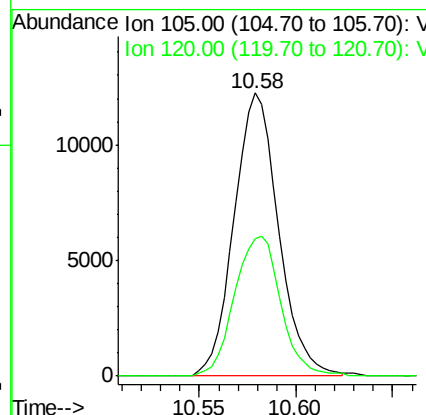
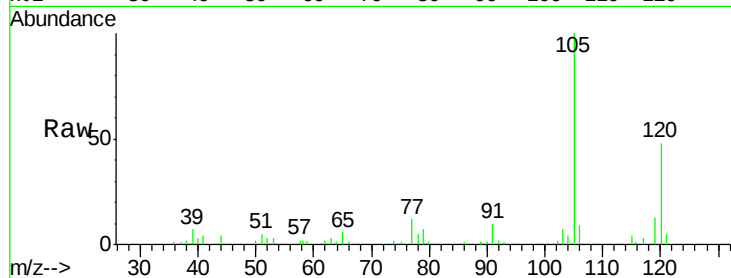




#62  
 1,3,5-Trimethylbenzene  
 Concen: 2.228 ug/L  
 RT: 10.58 min Scan# 2951  
 Delta R.T. -0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

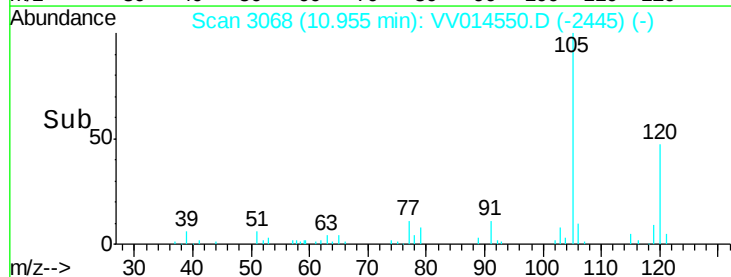
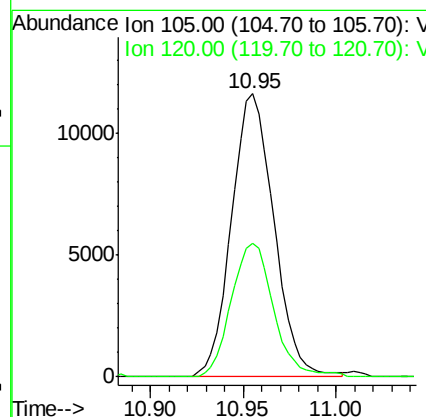
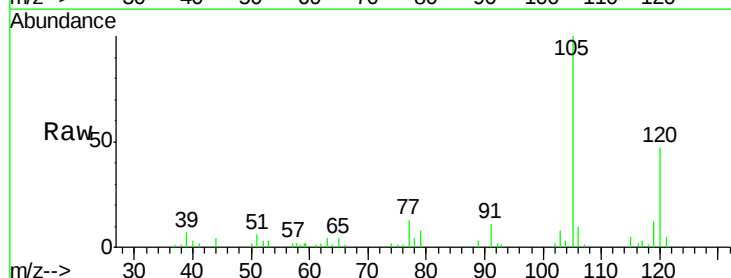
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 MDL06

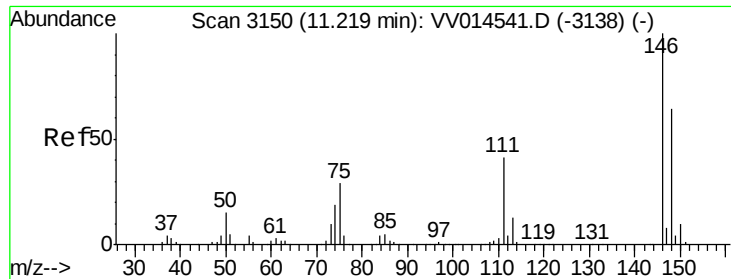
Tot Ion:105 Resp: 19562  
 Ion Ratio Lower Upper  
 105 100  
 120 51.3 39.0 58.6



#63  
 1,2,4-Trimethylbenzene  
 Concen: 2.136 ug/L  
 RT: 10.95 min Scan# 3068  
 Delta R.T. 0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Tgt Ion:105 Resp: 18486  
 Ion Ratio Lower Upper  
 105 100  
 120 46.9 36.2 54.4





#64

1,3-Dichlorobenzene

Concen: 2.535 ug/L

RT: 11.22 min Scan# 3151

Delta R.T. 0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampled :

MDL06

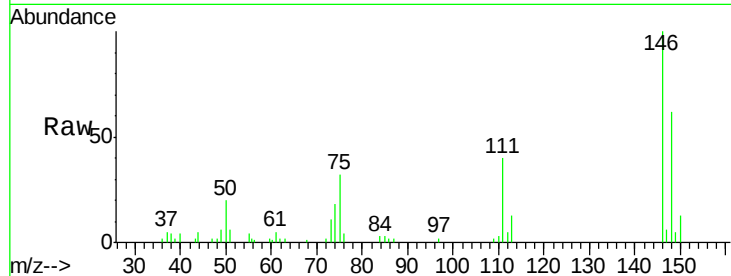
Tot Ion:146 Resp: 12264

Ion Ratio Lower Upper

146 100

111 40.5 28.9 53.7

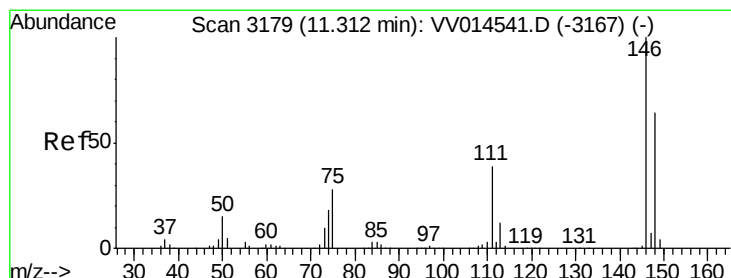
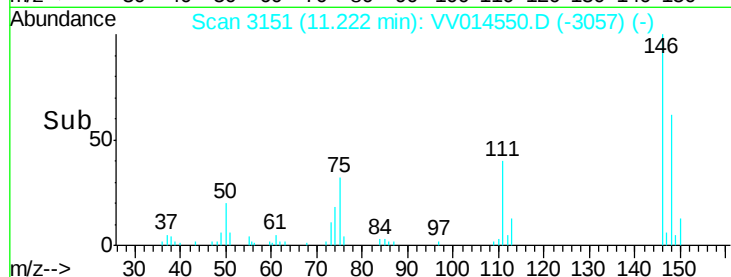
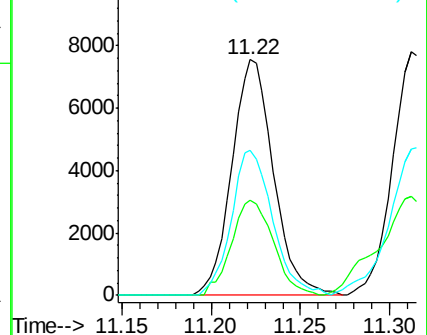
148 61.8 44.4 82.5



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#65

1,4-Dichlorobenzene

Concen: 2.559 ug/L

RT: 11.31 min Scan# 3179

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

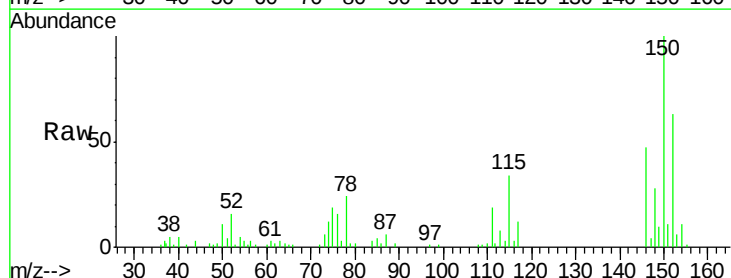
Tgt Ion:146 Resp: 12741

Ion Ratio Lower Upper

146 100

111 40.5 28.1 52.3

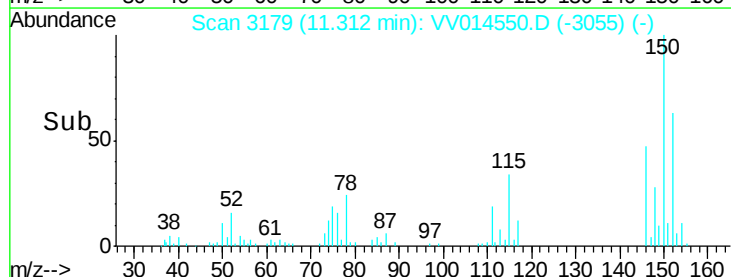
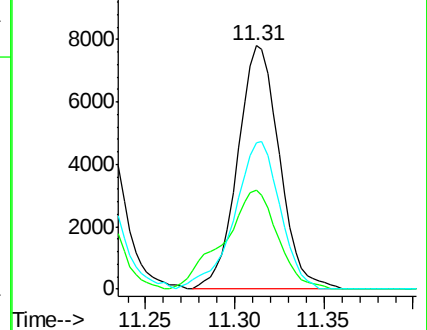
148 60.3 44.4 82.4

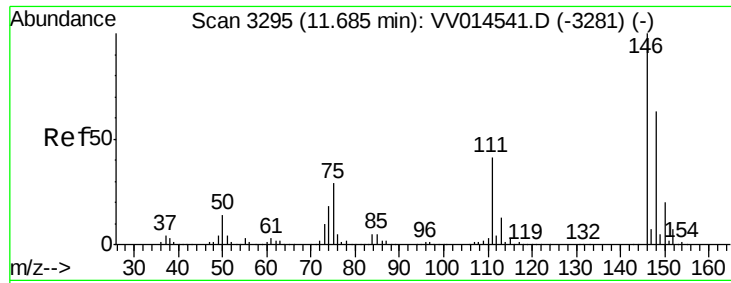


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

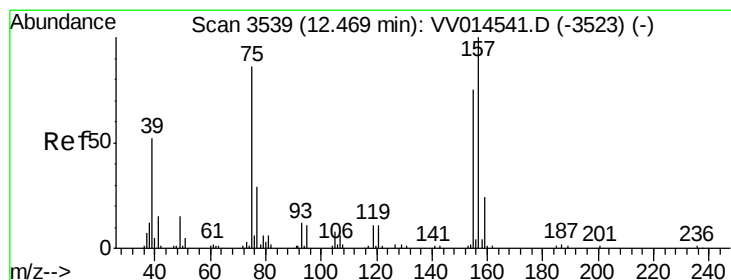
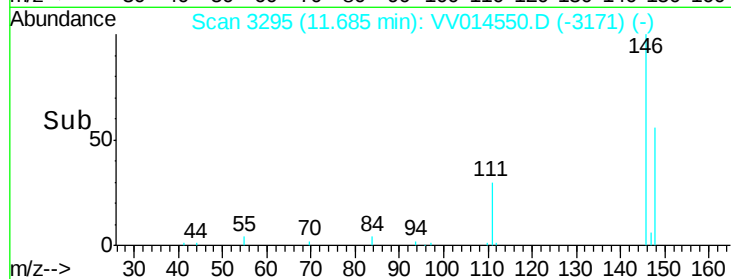
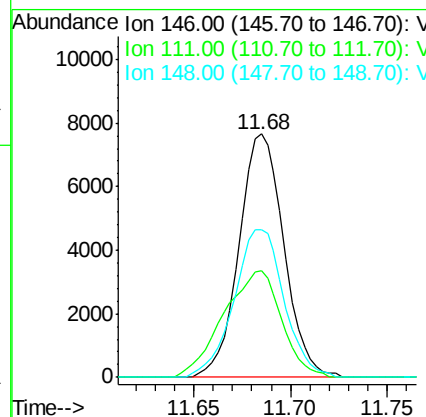
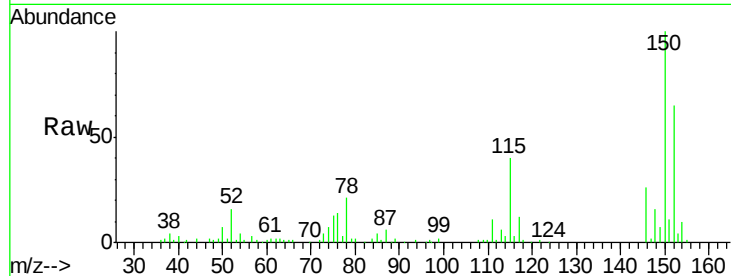




#67  
 1,2-Dichlorobenzene  
 Concen: 2.630 ug/L  
 RT: 11.68 min Scan# 3295  
 Delta R.T. -0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

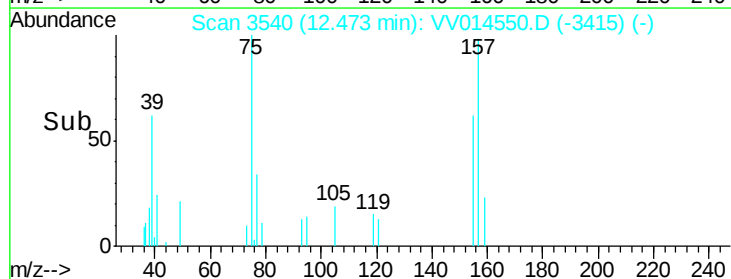
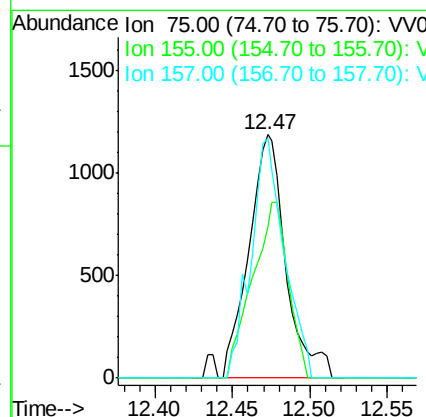
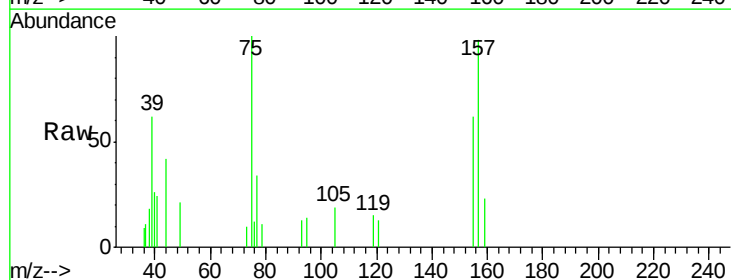
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 MDL06

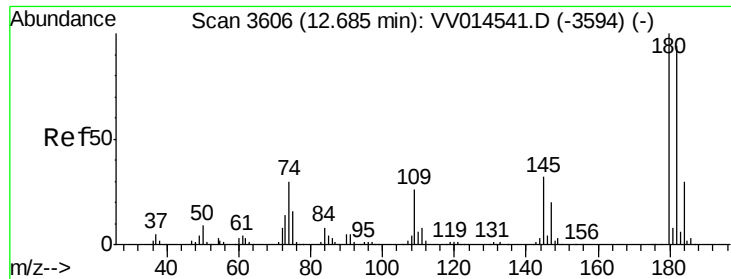
Tot Ion:146 Resp: 12333  
 Ion Ratio Lower Upper  
 146 100  
 111 43.9 34.6 51.8  
 148 60.8 50.2 75.4



#68  
 1,2-Dibromo-3-chloropropane  
 Concen: 2.698 ug/L  
 RT: 12.47 min Scan# 3540  
 Delta R.T. 0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Tgt Ion: 75 Resp: 2029  
 Ion Ratio Lower Upper  
 75 100  
 155 62.3 68.3 102.5#  
 157 98.3 87.1 130.7

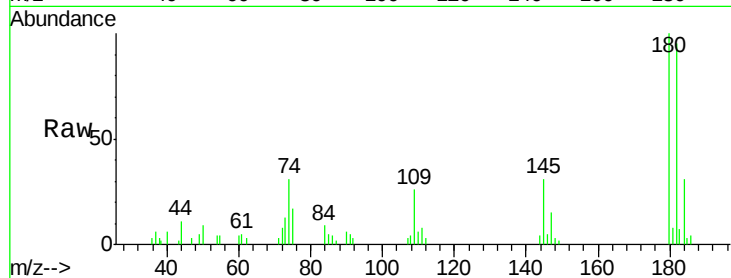




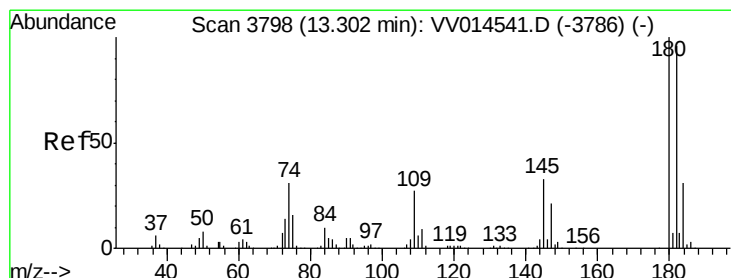
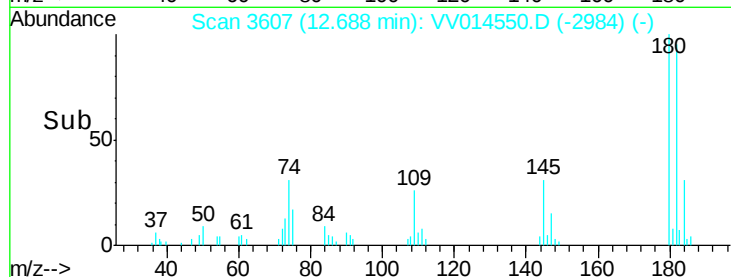
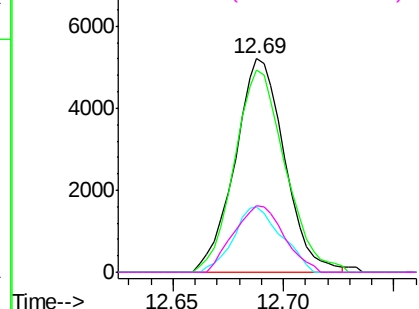
#69  
 1,3,5-Trichlorobenzene  
 Concen: 2.377 ug/L  
 RT: 12.69 min Scan# 3607  
 Delta R.T. 0.00 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL06

Tot Ion:180 Resp: 8101  
 Ion Ratio Lower Upper  
 180 100  
 182 97.0 75.0 112.4  
 184 29.5 24.2 36.2  
 145 31.7 24.3 36.5

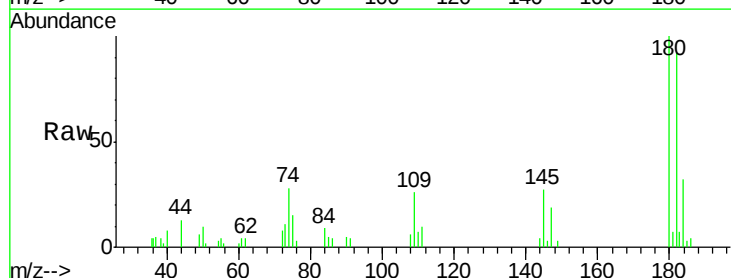


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

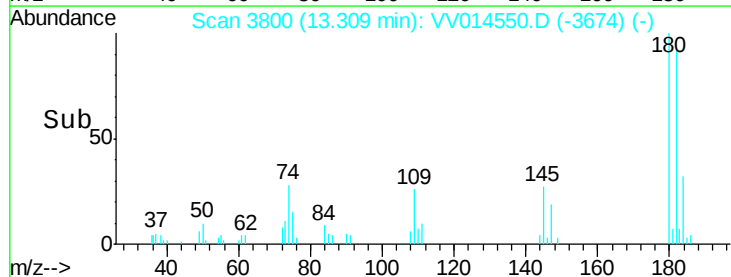
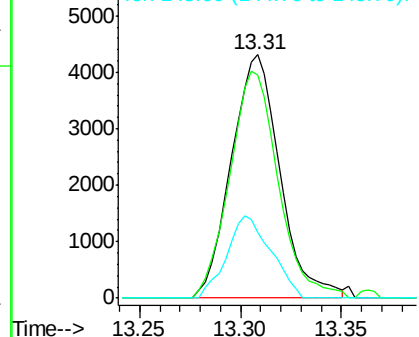


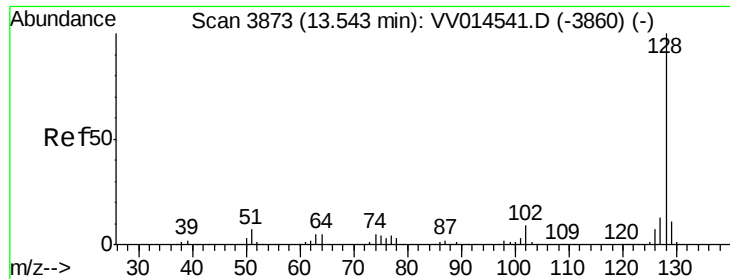
#70  
 1,2,4-trichlorobenzene  
 Concen: 2.328 ug/L  
 RT: 13.31 min Scan# 3800  
 Delta R.T. 0.01 min  
 Lab File: VV014550.D  
 Acq: 10 Feb 2020 14:33

Tgt Ion:180 Resp: 7285  
 Ion Ratio Lower Upper  
 180 100  
 182 92.6 76.0 114.0  
 145 30.4 25.3 37.9



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V





#71

Naphthalene

Concen: 2.114 ug/L

RT: 13.55 min Scan# 3875

Delta R.T. 0.01 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

Instrument :

MSVOA\_V

ClientSampleId :

MDL06

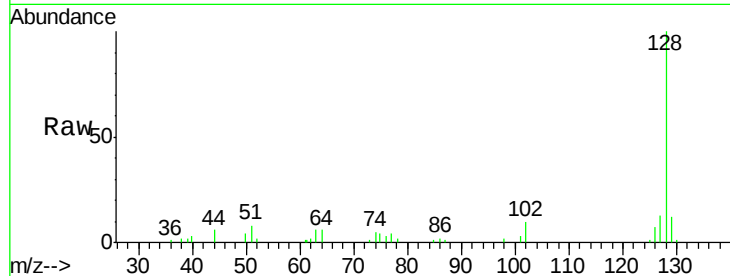
Tot Ion:128 Resp: 21724

Ion Ratio Lower Upper

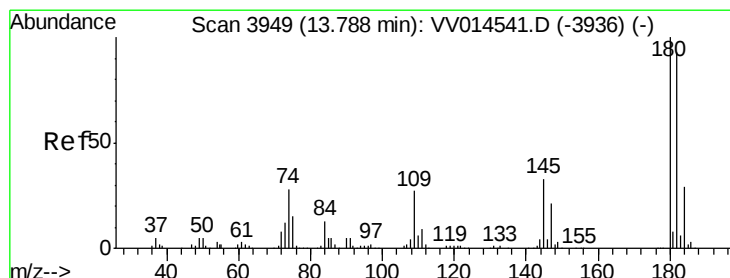
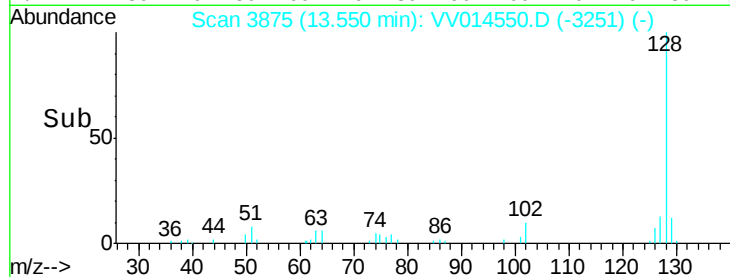
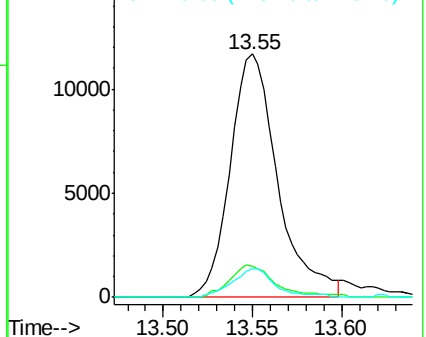
128 100

127 12.6 10.3 15.5

129 10.5 8.7 13.1



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



#72

1,2,3-Trichlorobenzene

Concen: 2.130 ug/L

RT: 13.79 min Scan# 3949

Delta R.T. -0.00 min

Lab File: VV014550.D

Acq: 10 Feb 2020 14:33

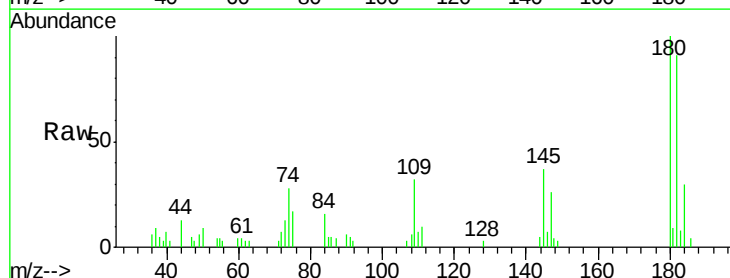
Tgt Ion:180 Resp: 6476

Ion Ratio Lower Upper

180 100

182 96.9 75.2 112.8

145 34.9 27.1 40.7



Abundance Ion 180.00 (179.70 to 180.70): V  
Ion 182.00 (181.70 to 182.70): V  
Ion 145.00 (144.70 to 145.70): V

