

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV102120\  
 Data File : VV019052.D  
 Acq On : 21 Oct 2020 16:33  
 Operator : SY/MD  
 Sample : L4483-02  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0FH0

Quant Time: Oct 22 06:09:37 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM101420WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Oct 22 06:00:52 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 292064   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 309828   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 141195   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 128410   | 53.41    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 106.82% |
| 7) Chloroethane-d5             | 1.58    | 69    | 106540   | 55.93    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 111.86% |
| 11) 1,1-Dichloroethene-d2      | 2.12    | 63    | 194817   | 42.93    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 85.86%  |
| 21) 2-Butanone-d5              | 3.91    | 46    | 176614   | 105.39   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 105.39% |
| 24) Chloroform-d               | 4.38    | 84    | 237562   | 55.00    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 110.00% |
| 26) 1,2-Dichloroethane-d4      | 5.06    | 65    | 166639   | 58.12    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 116.24% |
| 32) Benzene-d6                 | 5.07    | 84    | 468672   | 51.82    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 103.64% |
| 36) 1,2-Dichloropropane-d6     | 6.09    | 67    | 143892   | 49.76    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 99.52%  |
| 41) Toluene-d8                 | 7.34    | 98    | 426744   | 52.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 105.18% |
| 43) trans-1,3-Dichloropropene- | 7.64    | 79    | 74544    | 52.74    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 105.48% |
| 47) 2-Hexanone-d5              | 8.11    | 63    | 100997   | 94.01    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 94.01%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.24   | 84    | 161397   | 47.62    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 95.24%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 166818   | 58.07    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 116.14% |

## Target Compounds

|                                |       |     |        |              | Ovalue |
|--------------------------------|-------|-----|--------|--------------|--------|
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.12  | 101 | 1787   | 0.943 ug/L # | 20     |
| 12) 1,1-Dichloroethene         | 2.12  | 96  | 1611   | 0.839 ug/L # | 1      |
| 13) Acetone                    | 2.20  | 43  | 6790   | 5.545 ug/L   | 91     |
| 25) Chloroform                 | 4.40  | 83  | 10197  | 2.446 ug/L   | 89     |
| 39) cis-1,3-Dichloropropene    | 7.01  | 75  | 4434   | 1.161 ug/L # | 63     |
| 44) trans-1,3-Dichloropropene  | 7.64  | 75  | 3718   | 1.004 ug/L   | 85     |
| 48) 2-Hexanone                 | 8.16  | 43  | 16733  | 6.019 ug/L # | 82     |
| 51) Chlorobenzene              | 8.90  | 112 | 18340  | 2.868 ug/L   | 96     |
| 59) 1,2,3-Trichloropropane     | 11.27 | 75  | 21784  | 7.078 ug/L   | 98     |
| 62) 1,3-Dichlorobenzene        | 11.21 | 146 | 3560   | 0.813 ug/L   | 85     |
| 63) 1,4-Dichlorobenzene        | 11.29 | 146 | 10888  | 2.366 ug/L   | 99     |
| 65) 1,2-Dichlorobenzene        | 11.67 | 146 | 108148 | 24.489 ug/L  | 98     |
| 67) 1,3,5-Trichlorobenzene     | 13.29 | 180 | 14662  | 4.987 ug/L   | 97     |
| 68) 1,2,4-trichlorobenzene     | 13.29 | 180 | 14662  | 5.412 ug/L   | 97     |
| 70) 1,2,3-Trichlorobenzene     | 13.77 | 180 | 11755  | 4.340 ug/L   | 97     |

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ALS Vial : 1 Sample Multiplier: 1

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MSVOA\_V  
ClientSampleId :  
C0FH0

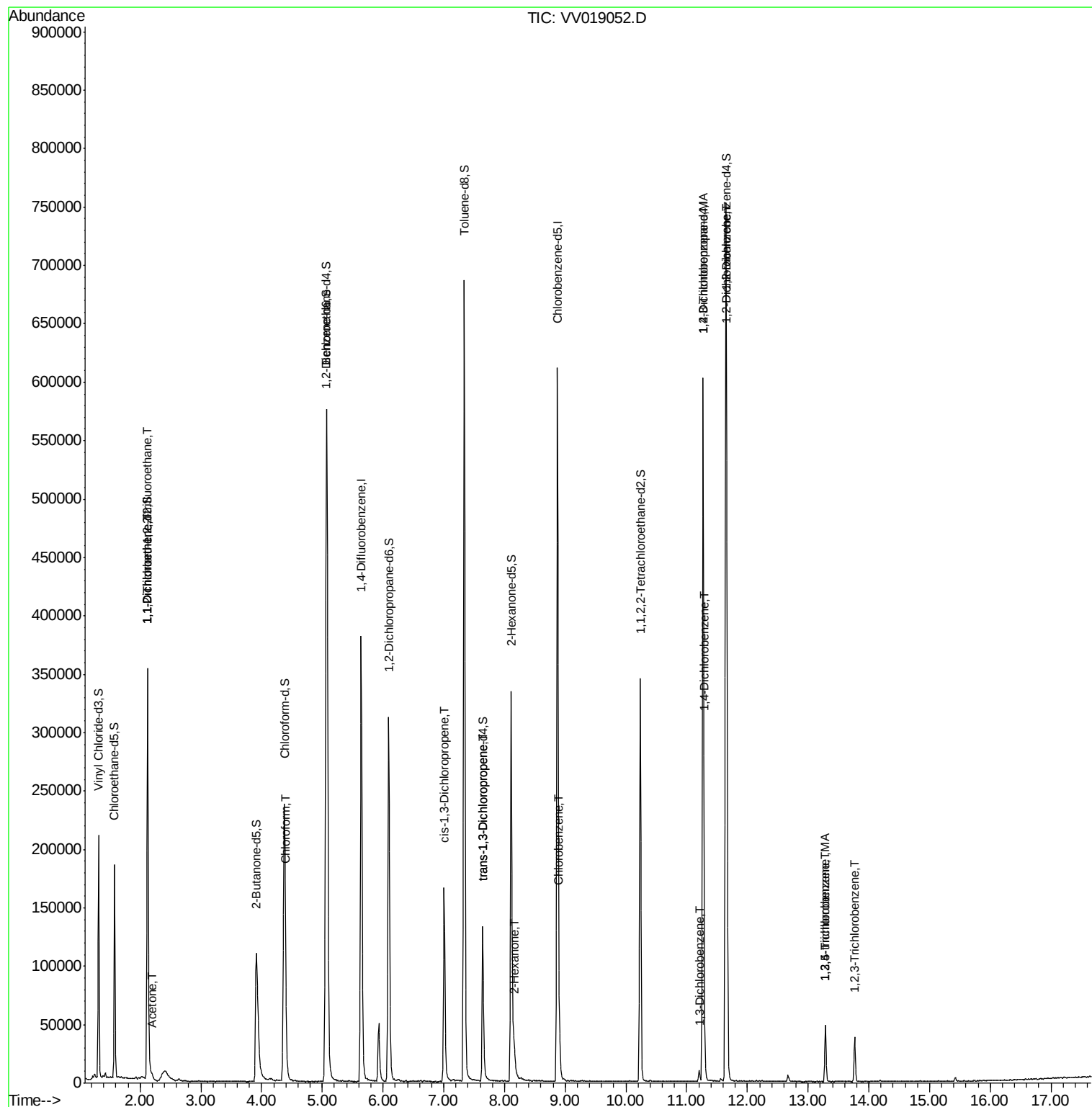
Quant Time: Oct 22 06:09:37 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM101420WMA.M  
Quant Title : VOC Analysis  
QLast Update : Thu Oct 22 06:00:52 2020  
Response via : Initial Calibration

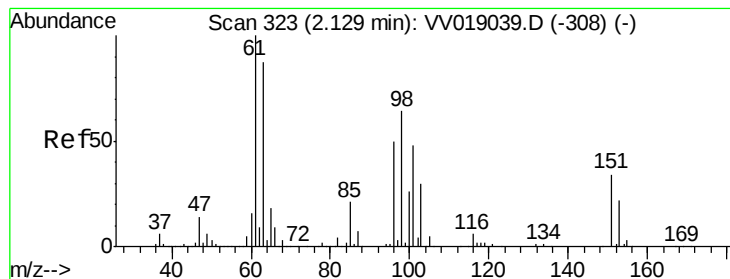
| Internal Standards                                                      | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|-------------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                   |      |      |          |      |       |          |
| (#)= qualifier out of range (m)= manual integration (+)= signals summed |      |      |          |      |       |          |

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Response via : Initial Calibration





#10

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

Concen: 0.943 ug/L

RT: 2.12 min Scan# 321

Delta R.T. -0.01 min

Lab File: VV019052.D

Acq: 21 Oct 2020 16:33

Instrument :

MSVOA\_V

ClientSampleId :

C0FH0

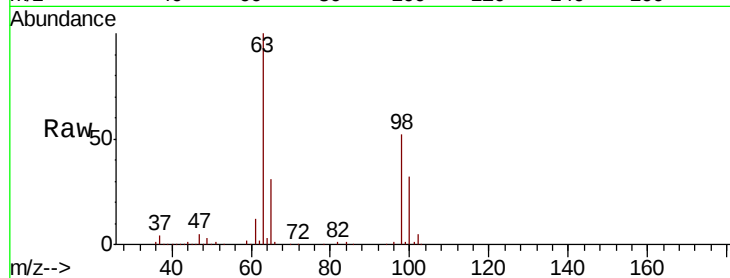
Tot Ion:101 Resp: 1787

Ion Ratio Lower Upper

101 100

85 0.0 35.0 52.4#

151 0.0 59.7 89.5#



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

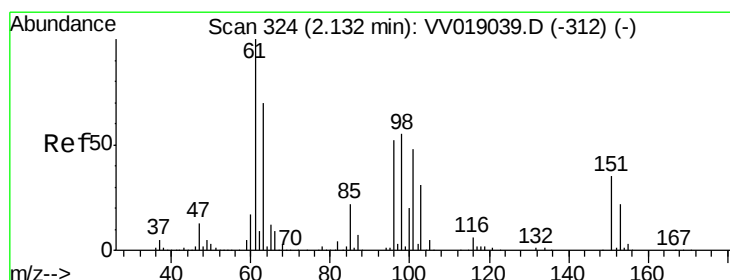
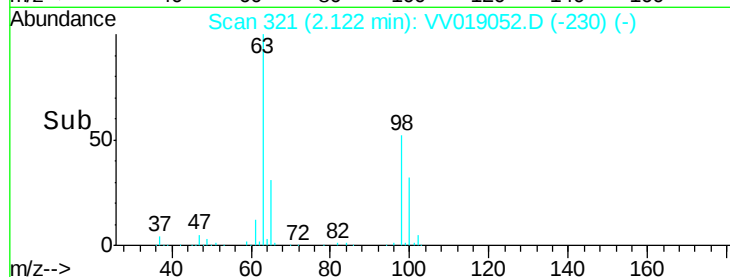
2.12

1000

500

0

Time--> 2.08 2.10 2.12 2.14 2.16



#12

1,1-Dichloroethene

Concen: 0.839 ug/L

RT: 2.12 min Scan# 321

Delta R.T. -0.01 min

Lab File: VV019052.D

Acq: 21 Oct 2020 16:33

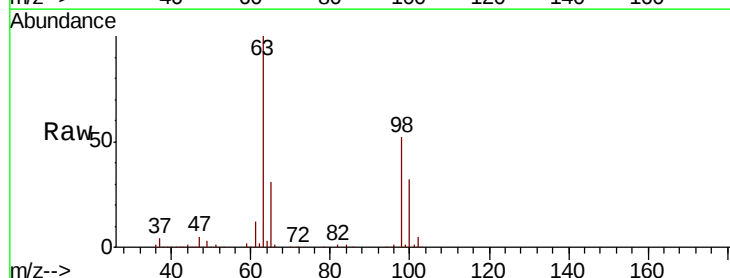
Tgt Ion: 96 Resp: 1611

Ion Ratio Lower Upper

96 100

61 1367.7 133.5 247.9#

63 11361.1 102.1 189.7#



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

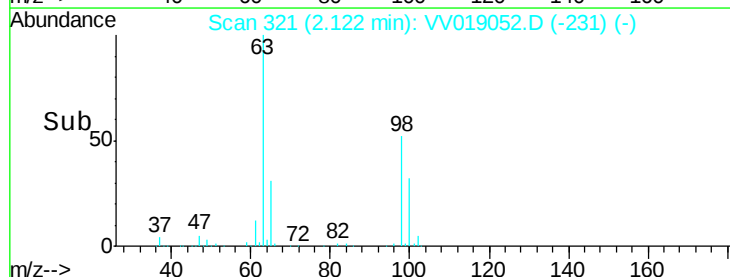
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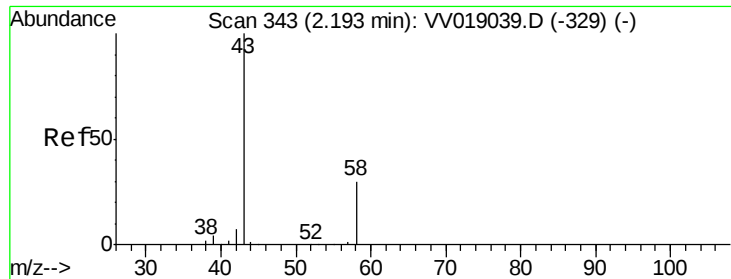
100000

50000

0

Time--> 2.10 2.12 2.14 2.16





#13

Acetone

Concen: 5.545 ug/L

RT: 2.20 min Scan# 344

Delta R.T. 0.00 min

Lab File: VV019052.D

Acq: 21 Oct 2020 16:33

Instrument :

MSVOA\_V

ClientSampleId :

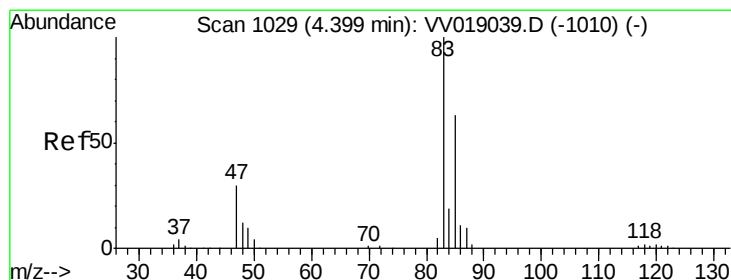
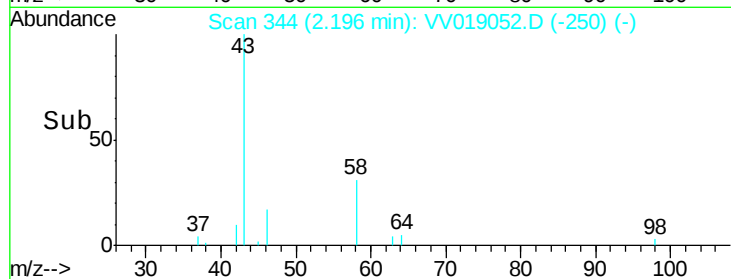
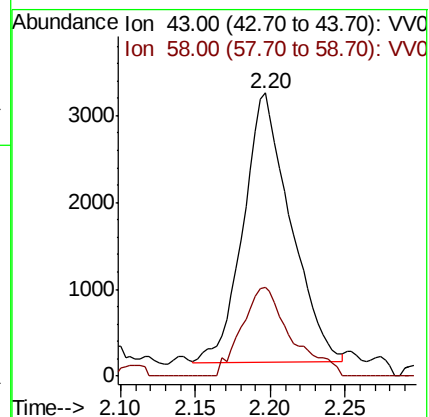
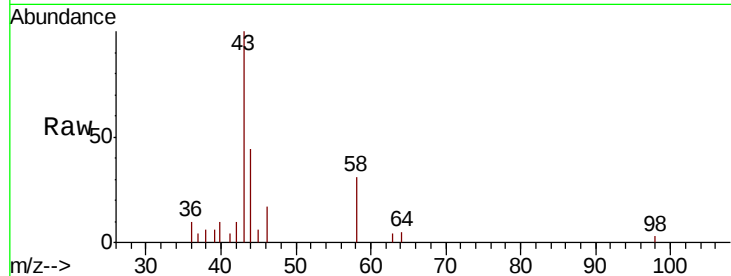
C0FH0

Tot Ion: 43 Resp: 6790

Ion Ratio Lower Upper

43 100

58 34.4 0.0 58.8



#25

Chloroform

Concen: 2.446 ug/L

RT: 4.40 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VV019052.D

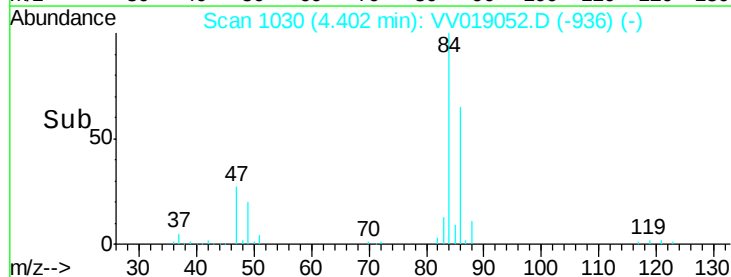
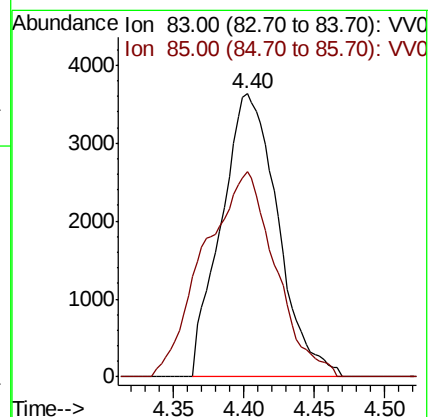
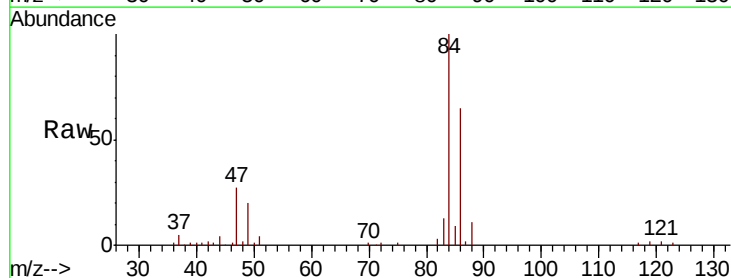
Acq: 21 Oct 2020 16:33

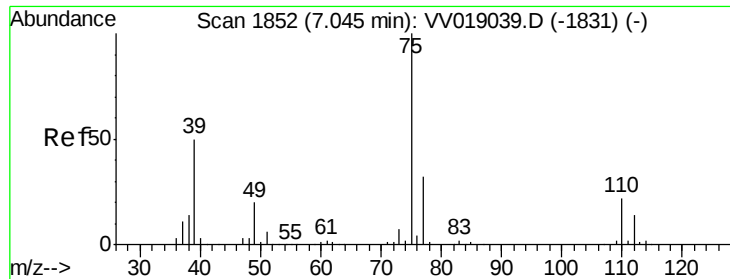
Tgt Ion: 83 Resp: 10197

Ion Ratio Lower Upper

83 100

85 72.5 44.6 82.8

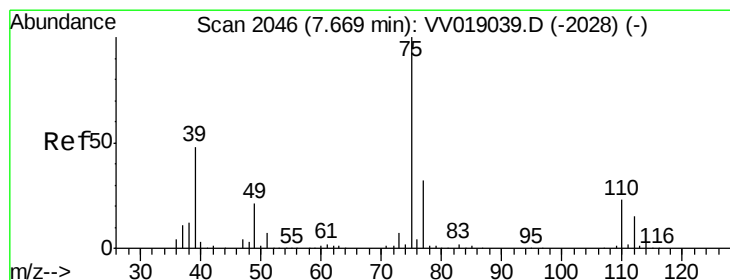
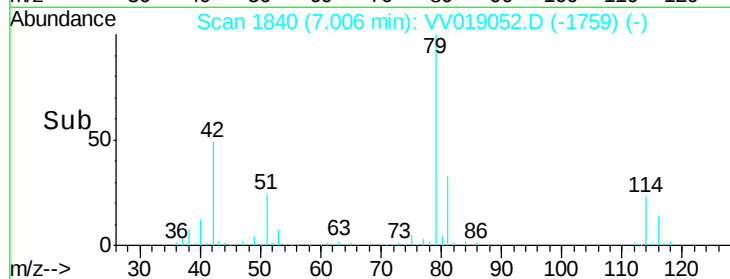
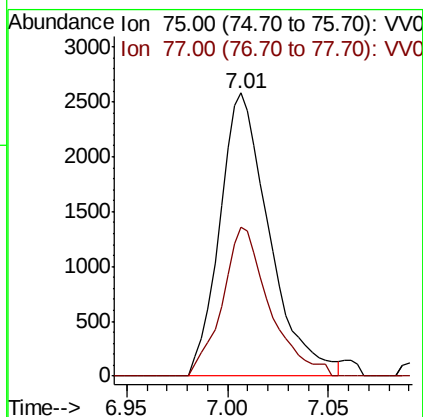
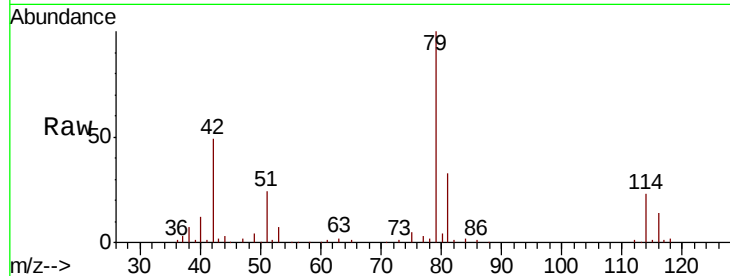




#39  
 cis-1,3-Dichloropropene  
 Concen: 1.161 ug/L  
 RT: 7.01 min Scan# 1840  
 Delta R.T. -0.04 min  
 Lab File: VV019052.D  
 Acq: 21 Oct 2020 16:33

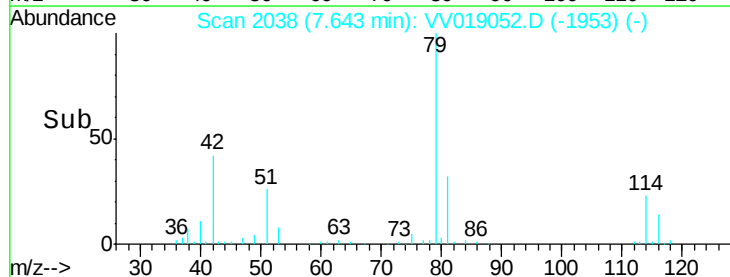
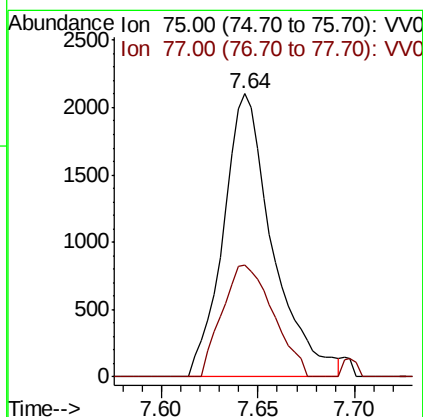
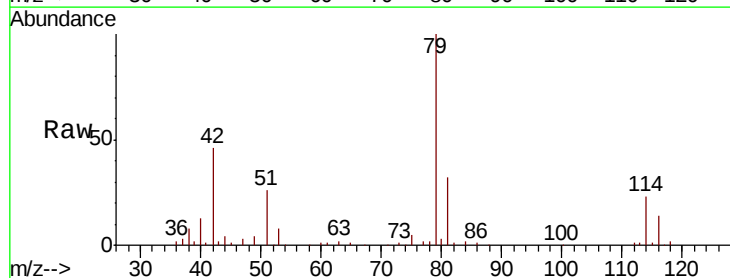
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0FH0

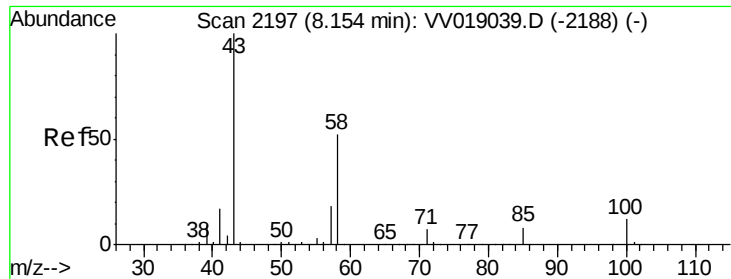
Tot Ion: 75 Resp: 4434  
 Ion Ratio Lower Upper  
 75 100  
 77 52.8 22.5 41.9#



#44  
 trans-1,3-Dichloropropene  
 Concen: 1.004 ug/L  
 RT: 7.64 min Scan# 2038  
 Delta R.T. -0.03 min  
 Lab File: VV019052.D  
 Acq: 21 Oct 2020 16:33

Tgt Ion: 75 Resp: 3718  
 Ion Ratio Lower Upper  
 75 100  
 77 39.6 21.9 40.7

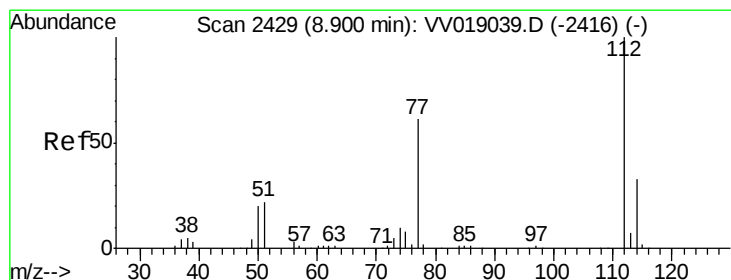
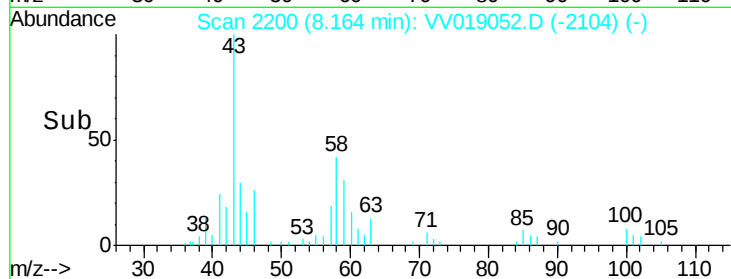
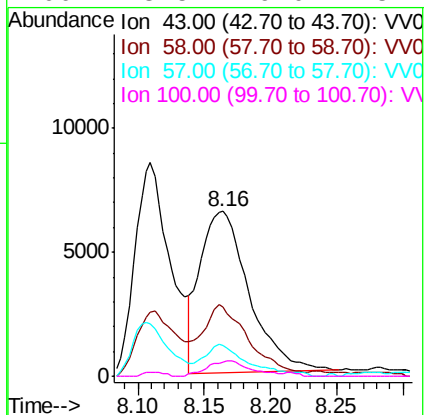
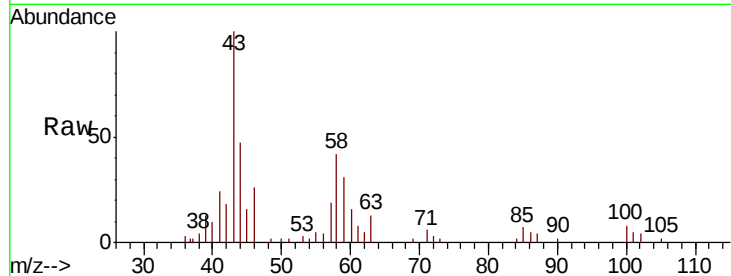




#48  
2-Hexanone  
Concen: 6.019 ug/L  
RT: 8.16 min Scan# 2200  
Delta R.T. 0.01 min  
Lab File: VV019052.D  
Acq: 21 Oct 2020 16:33

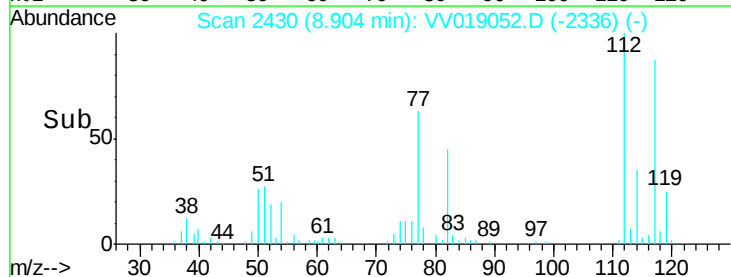
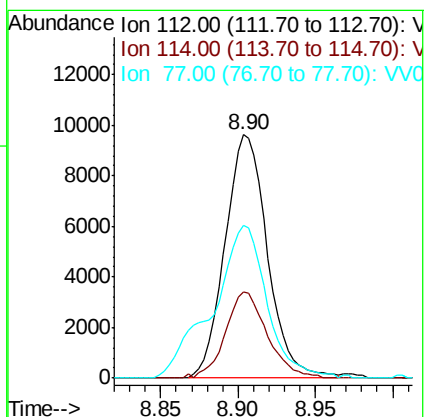
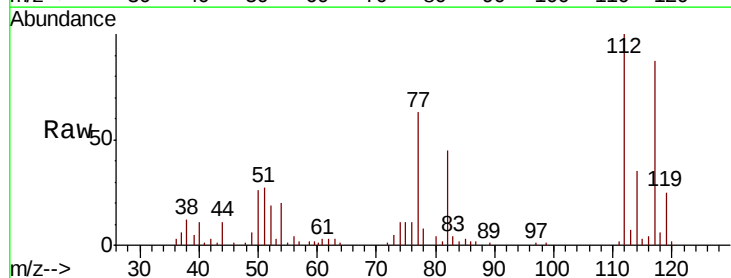
Instrument :  
MSVOA\_V  
ClientSampleId :  
C0FH0

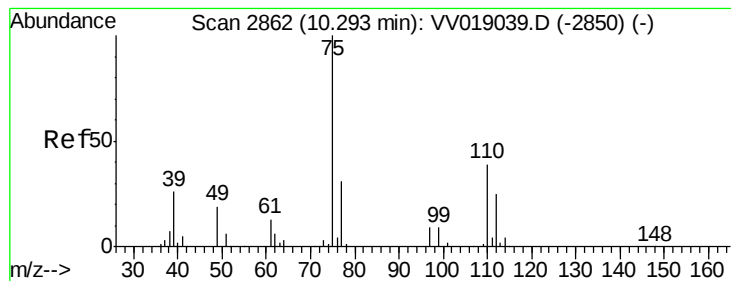
Tot Ion: 43 Resp: 16733  
Ion Ratio Lower Upper  
43 100  
58 37.0 42.5 63.7#  
57 14.1 14.5 21.7#  
100 8.5 9.0 13.4#



#51  
Chlorobenzene  
Concen: 2.868 ug/L  
RT: 8.90 min Scan# 2430  
Delta R.T. 0.00 min  
Lab File: VV019052.D  
Acq: 21 Oct 2020 16:33

Tgt Ion: 112 Resp: 18340  
Ion Ratio Lower Upper  
112 100  
114 35.5 21.8 40.6  
77 62.9 49.2 73.8





#59

1,2,3-Trichloropropane

Concen: 7.078 ug/L

RT: 11.27 min Scan# 3166

Delta R.T. 0.98 min

Lab File: VV019052.D

Acq: 21 Oct 2020 16:33

Instrument :

MSVOA\_V

ClientSampleId :

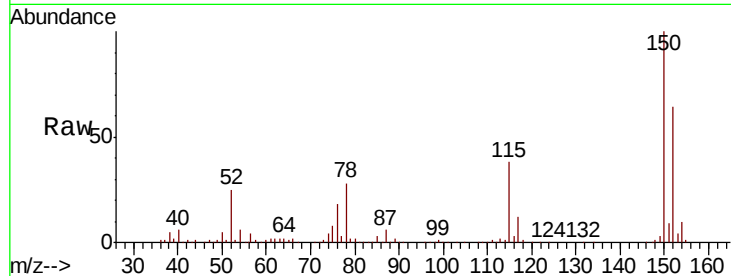
C0FH0

Tot Ion: 75 Resp: 21784

Ion Ratio Lower Upper

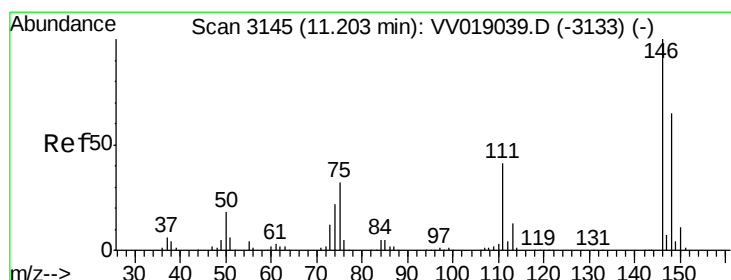
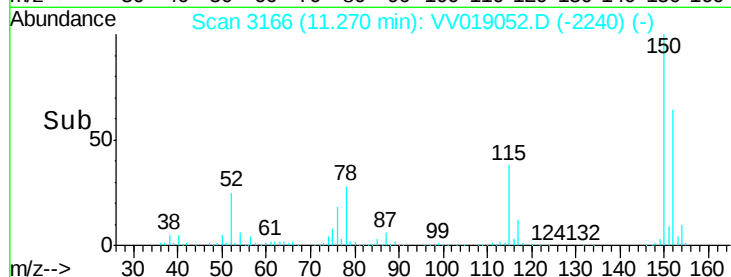
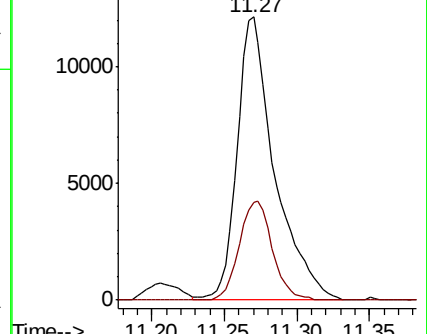
75 100

77 30.7 25.4 38.2



Abundance Ion 75.00 (74.70 to 75.70): VV019039.D (-2850) (-)

Ion 77.00 (76.70 to 77.70): VV019039.D (-2850) (-)



#62

1,3-Dichlorobenzene

Concen: 0.813 ug/L

RT: 11.21 min Scan# 3147

Delta R.T. 0.01 min

Lab File: VV019052.D

Acq: 21 Oct 2020 16:33

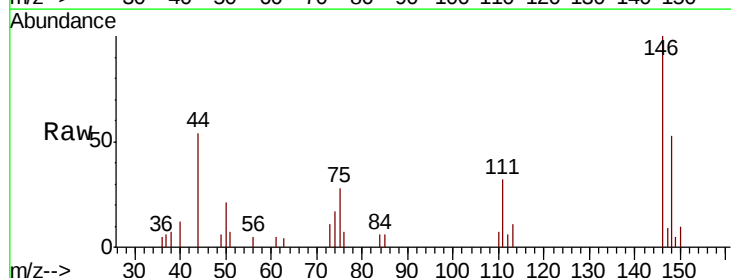
Tgt Ion: 146 Resp: 3560

Ion Ratio Lower Upper

146 100

111 31.9 28.3 52.7

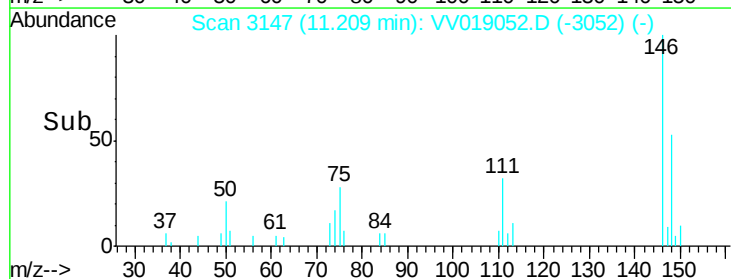
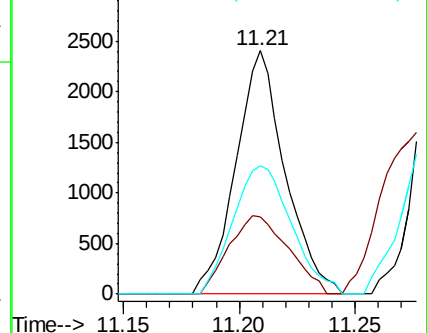
148 52.6 45.1 83.7

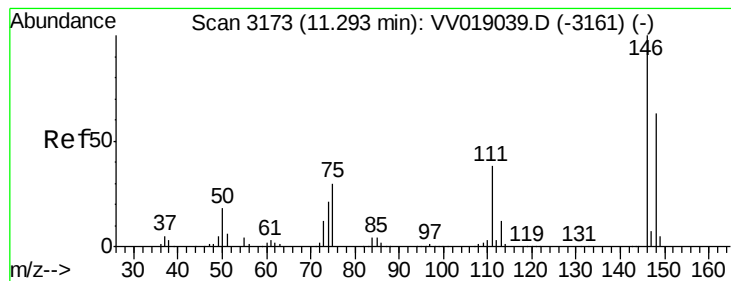


Abundance Ion 146.00 (145.70 to 146.70): VV019039.D (-3133) (-)

Ion 111.00 (110.70 to 111.70): VV019039.D (-3133) (-)

Ion 148.00 (147.70 to 148.70): VV019039.D (-3133) (-)





#63

1,4-Dichlorobenzene

Concen: 2.366 ug/L

RT: 11.29 min Scan# 3173

Delta R.T. -0.00 min

Lab File: VV019052.D

Acq: 21 Oct 2020 16:33

Instrument :

MSVOA\_V

ClientSampleId :

C0FH0

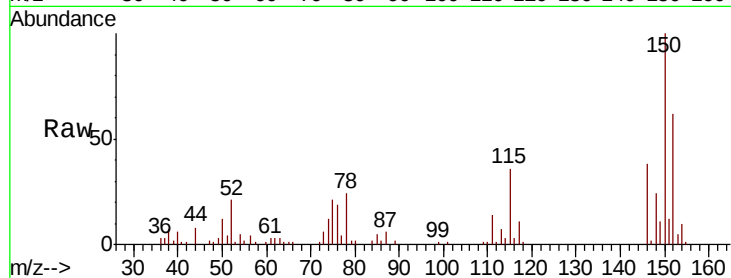
Tot Ion:146 Resp: 10888

Ion Ratio Lower Upper

146 100

111 38.2 27.5 51.1

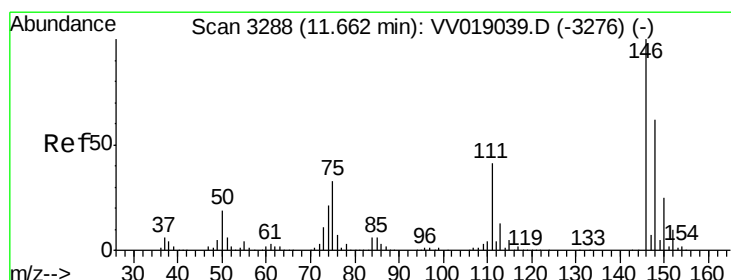
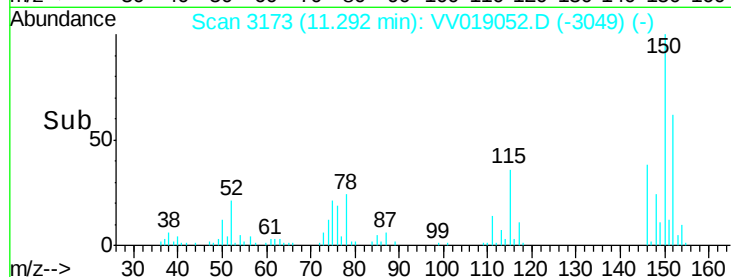
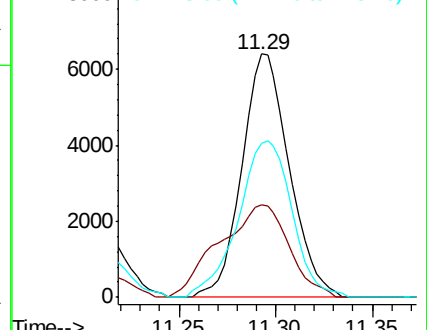
148 63.4 44.1 81.9



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

1,2-Dichlorobenzene

Concen: 24.489 ug/L

RT: 11.67 min Scan# 3289

Delta R.T. 0.00 min

Lab File: VV019052.D

Acq: 21 Oct 2020 16:33

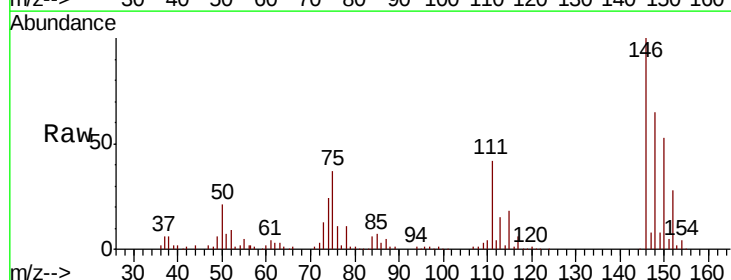
Tgt Ion:146 Resp: 108148

Ion Ratio Lower Upper

146 100

111 41.7 33.9 50.9

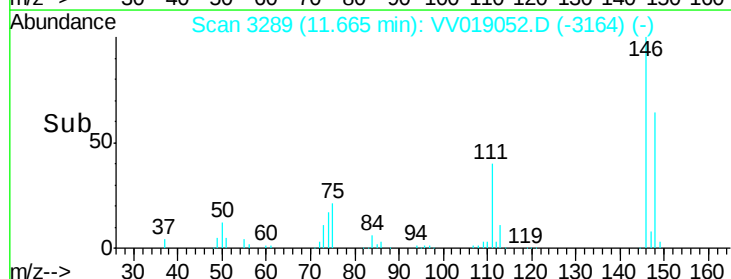
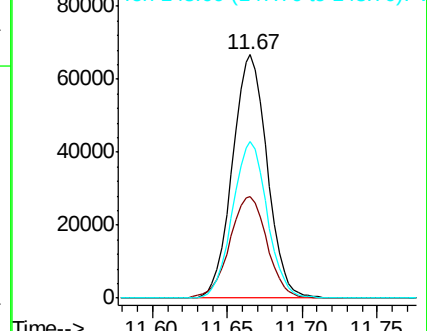
148 64.5 49.8 74.8

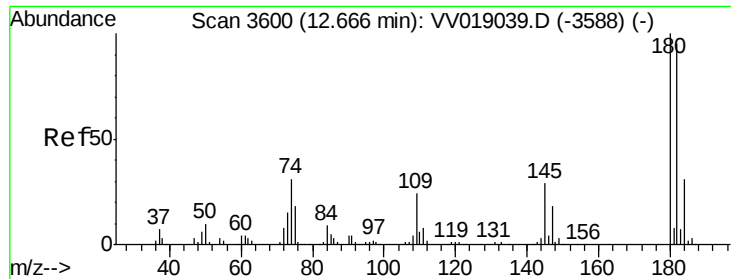


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

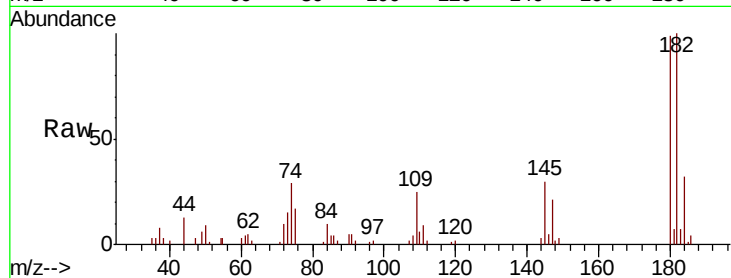




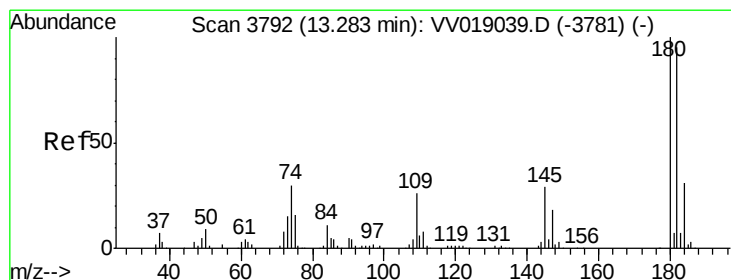
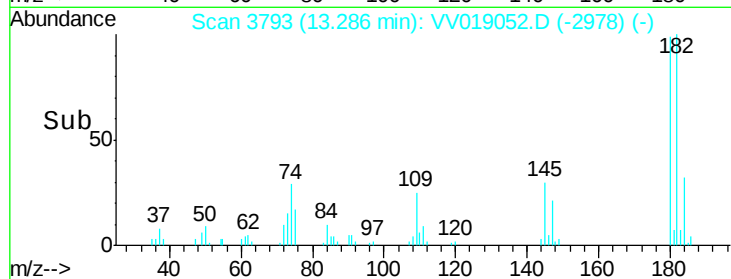
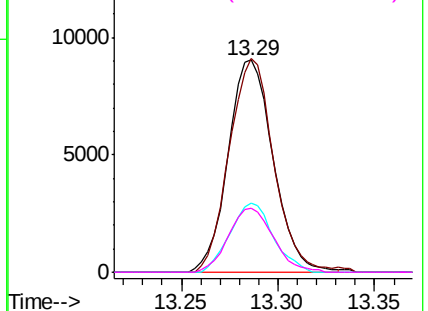
#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.987 ug/L  
 RT: 13.29 min Scan# 3793  
 Delta R.T. 0.62 min  
 Lab File: VV019052.D  
 Acq: 21 Oct 2020 16:33

Instrument :  
 MSVOA\_V  
 ClientSampled :  
 C0FH0

| Tot Ion   | 180   | 182   | 184  | 145  |
|-----------|-------|-------|------|------|
| Resp:     | 14662 |       |      |      |
| Ion Ratio | 100   | 98.9  | 31.3 | 30.1 |
| Lower     |       | 75.8  | 24.9 | 23.2 |
| Upper     |       | 113.8 | 37.3 | 34.8 |

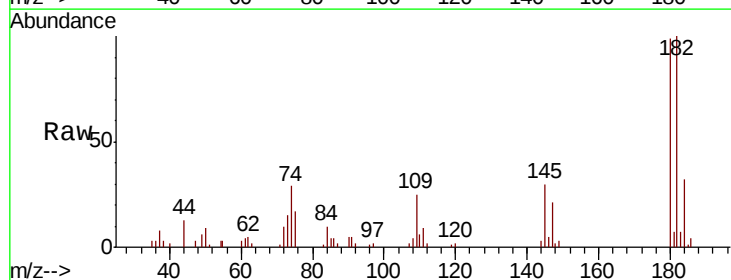


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

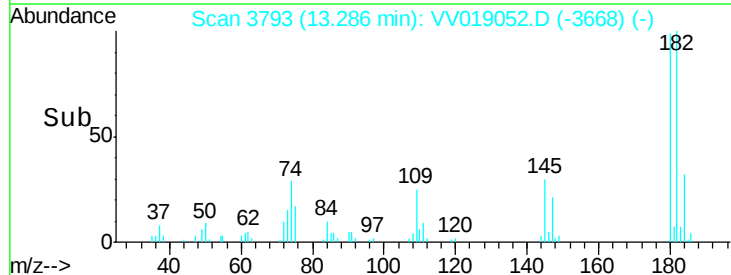
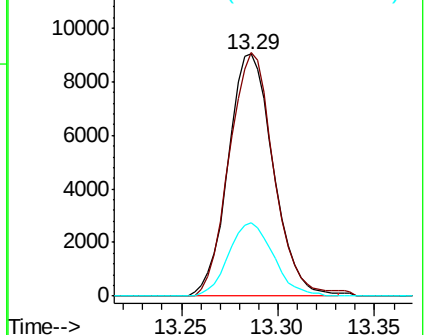


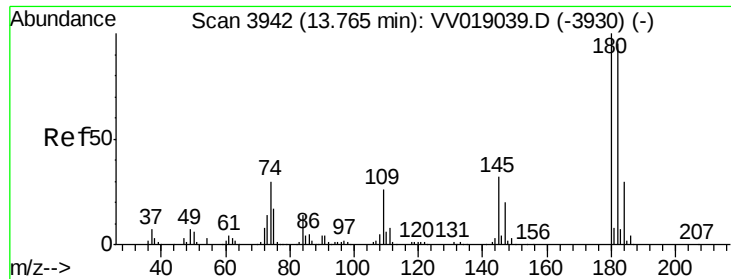
#68  
 1,2,4-trichlorobenzene  
 Concen: 5.412 ug/L  
 RT: 13.29 min Scan# 3793  
 Delta R.T. 0.00 min  
 Lab File: VV019052.D  
 Acq: 21 Oct 2020 16:33

| Tgt Ion   | 180   | 182   | 145  |
|-----------|-------|-------|------|
| Resp:     | 14662 |       |      |
| Ion Ratio | 100   | 98.9  | 30.1 |
| Lower     |       | 76.5  | 23.7 |
| Upper     |       | 114.7 | 35.5 |



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

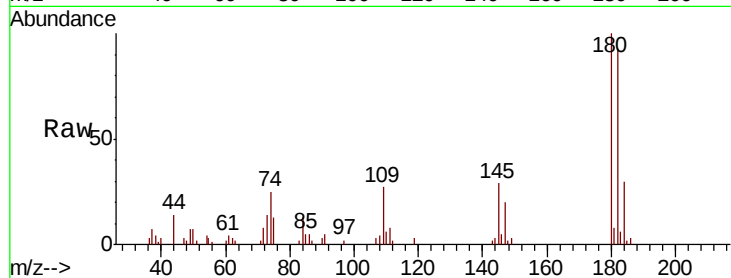




#70  
 1,2,3-Trichlorobenzene  
 Concen: 4.340 ug/L  
 RT: 13.77 min Scan# 3943  
 Delta R.T. 0.00 min  
 Lab File: VV019052.D  
 Acq: 21 Oct 2020 16:33

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0FH0

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 180     | 100  |       |       |       |
| 182     | 93.9 | 76.8  | 115.2 |       |
| 145     | 29.5 | 25.4  | 38.0  |       |



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

