

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071620\  
 Data File : VL035196.D  
 Acq On : 16 Jul 2020 16:32  
 Operator : SY/AP  
 Sample : L3318-02DUPDL 1200X  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 CARBON-03DL

Quant Time: Jul 17 04:09:15 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL070820AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Jul 08 07:05:23 2020  
 QLast Update : Wed Jul 08 07:05:23 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.64  | 49   | 1101729  | 10.00 | ppbv  | -0.02    |
| 33) 1,4-Difluorobenzene | 7.15  | 114  | 2633731  | 10.00 | ppbv  | -0.03    |
| 55) Chlorobenzene-d5    | 12.09 | 117  | 2444851  | 10.00 | ppbv  | -0.03    |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.42  | 95    | 2034353  | 10.24    | ppbv | -0.03   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 102.40% |

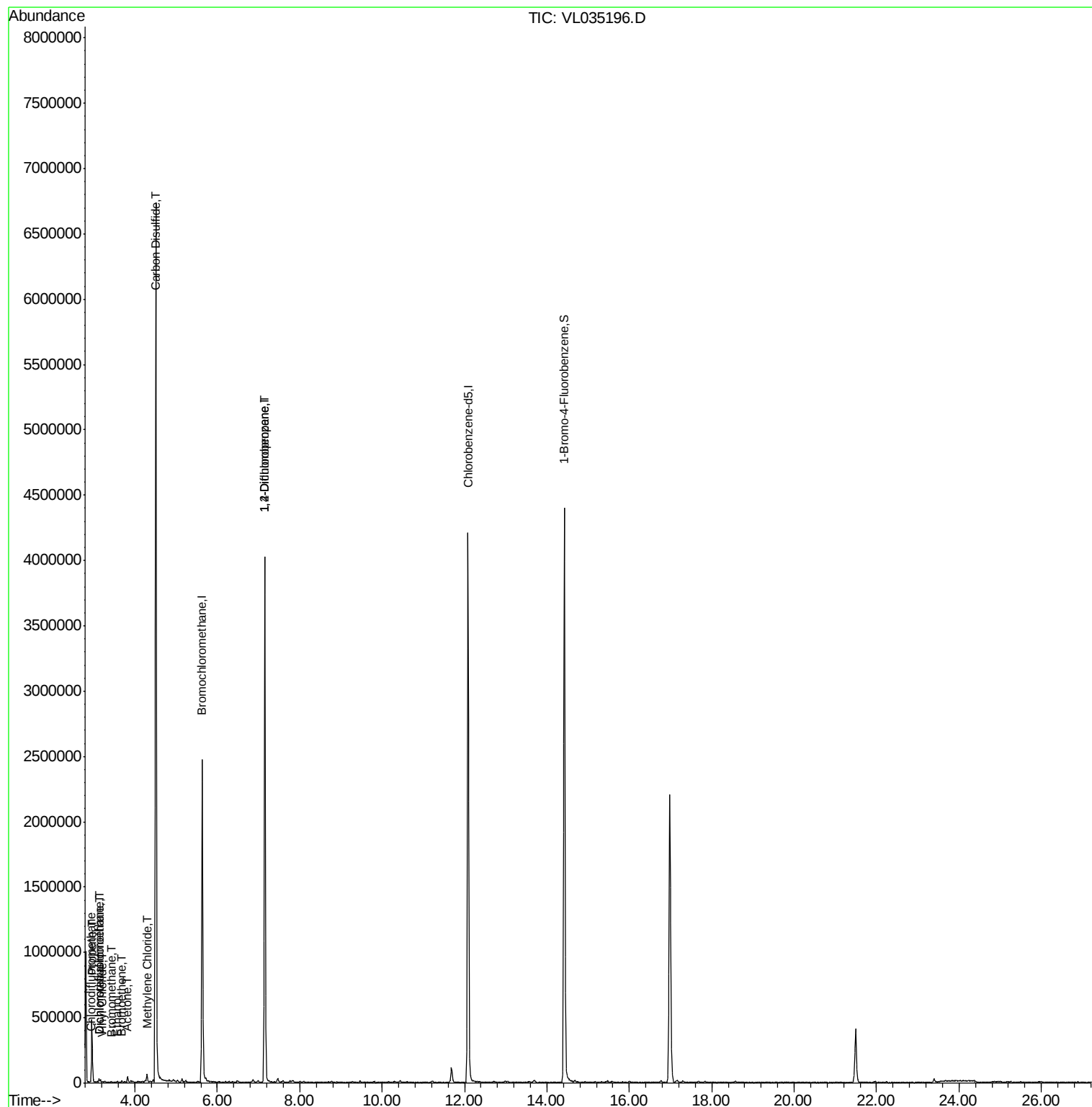
| Target Compounds             | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane   | 3.12 | 85   | 6552     | 0.042  | ppbv   | 98     |
| 3) Chlorodifluoromethane     | 2.93 | 51   | 5702     | 0.047  | ppbv # | 90     |
| 5) Vinyl Chloride            | 3.20 | 62   | 2500     | 0.034  | ppbv # | 67     |
| 6) Bromomethane              | 3.42 | 94   | 1684     | 0.040  | ppbv   | 85     |
| 8) Dichlorotetrafluoroethane | 3.12 | 85   | 6552     | 0.039  | ppbv   | 86     |
| 9) Propene                   | 2.96 | 41   | 3962     | 0.086  | ppbv # | 74     |
| 13) Ethanol                  | 3.57 | 45   | 4361     | 0.298  | ppbv # | 55     |
| 14) Bromoethene              | 3.68 | 108  | 1958     | 0.039  | ppbv # | 87     |
| 15) Acetone                  | 3.82 | 43   | 33699    | 0.226  | ppbv # | 60     |
| 20) Methylene Chloride       | 4.30 | 84   | 17856    | 0.275  | ppbv   | 90     |
| 27) Carbon Disulfide         | 4.50 | 76   | 7966840  | 55.902 | ppbv # | 90     |
| 39) 1,2-Dichloropropane      | 7.15 | 63   | 720590   | 9.506  | ppbv # | 22     |

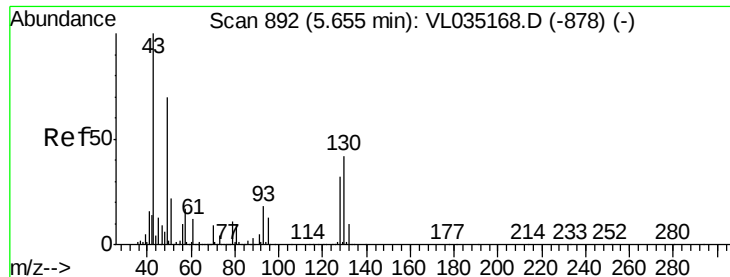
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL071620\  
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Quant Time: Jul 17 04:09:15 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL070820AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Jul 08 07:05:23 2020  
QLast Update : Wed Jul 08 07:05:23 2020  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 886

Delta R.T. -0.02 min

Lab File: VL035196.D

Acq: 16 Jul 2020 16:32

Instrument :

MSVOA\_L

ClientSampleId :

CARBON-03DL

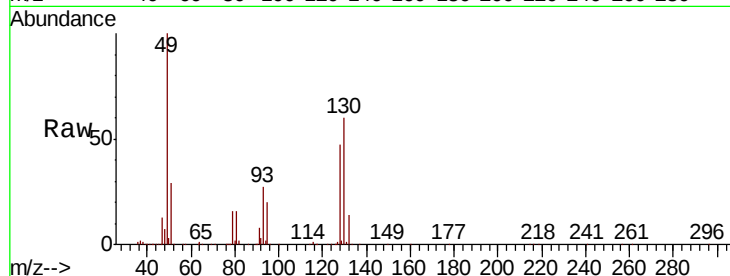
Tot Ion: 49 Resp: 1101729

Ion Ratio Lower Upper

49 100

128 48.7 23.8 71.4

130 62.2 29.9 89.8



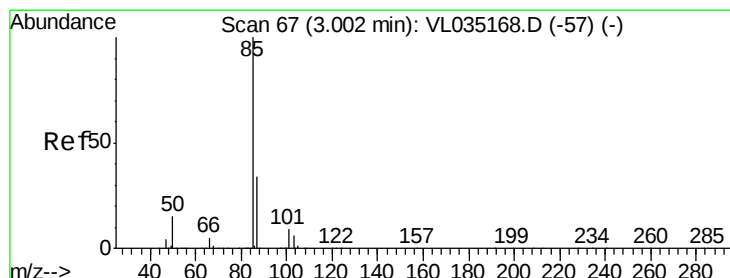
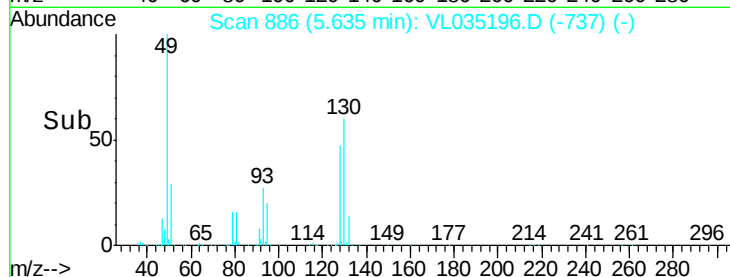
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.64

Time-->



#2

Dichlorodifluoromethane

Concen: 0.042 ppbv

RT: 3.12 min Scan# 105

Delta R.T. 0.12 min

Lab File: VL035196.D

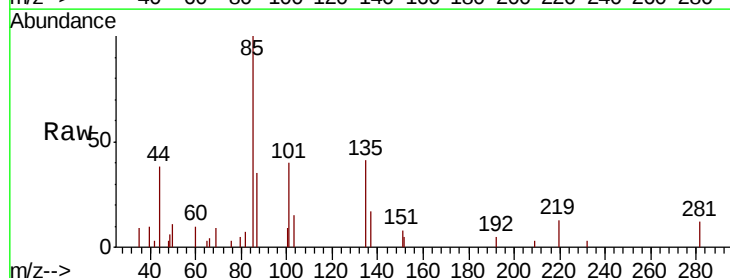
Acq: 16 Jul 2020 16:32

Tgt Ion: 85 Resp: 6552

Ion Ratio Lower Upper

85 100

87 34.8 27.0 40.6

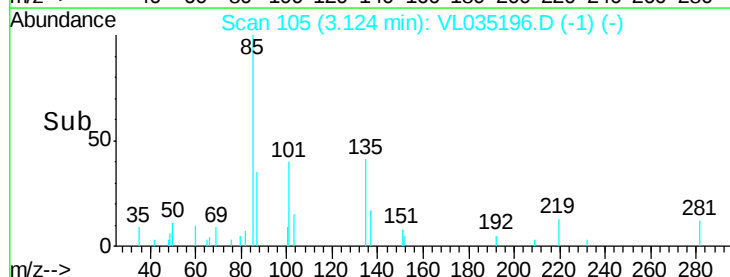


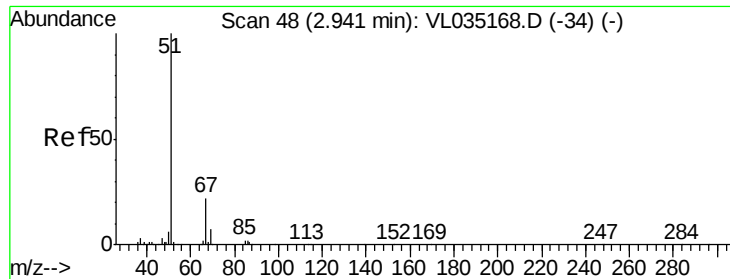
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.12

Time-->

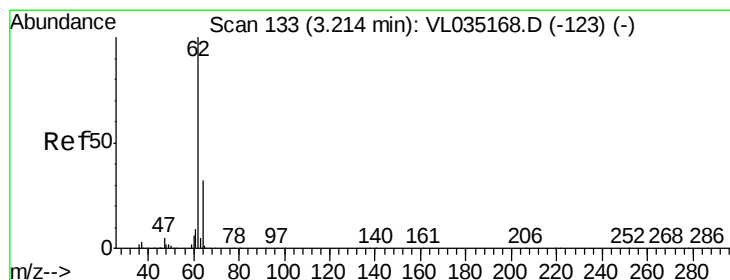
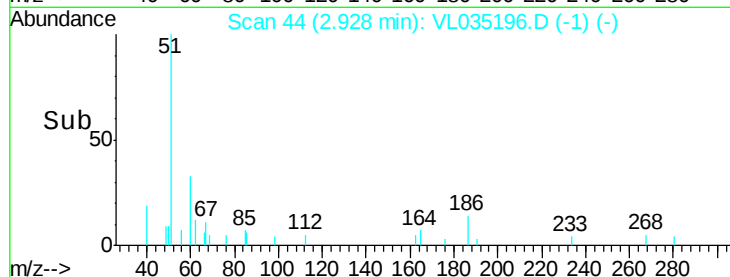
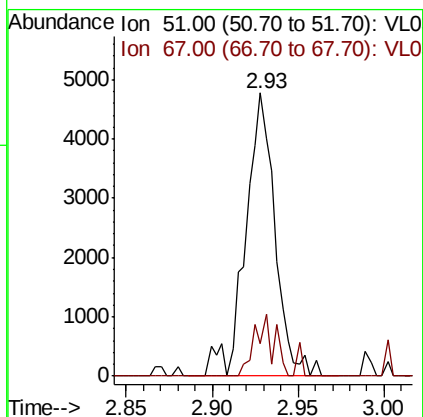
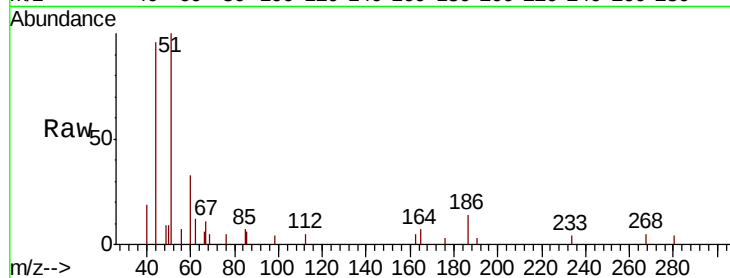




#3  
 Chlorodifluoromethane  
 Concen: 0.047 ppbv  
 RT: 2.93 min Scan# 44  
 Delta R.T. -0.01 min  
 Lab File: VL035196.D  
 Acq: 16 Jul 2020 16:32

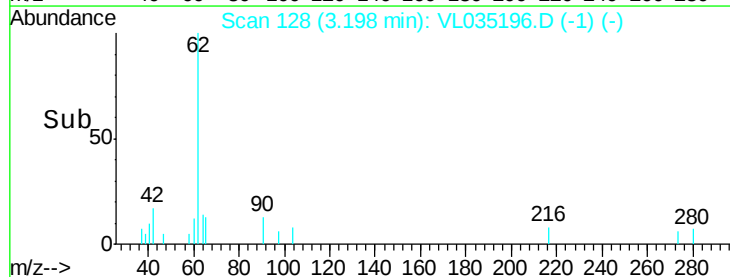
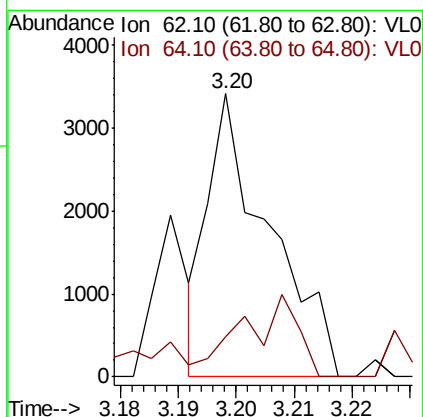
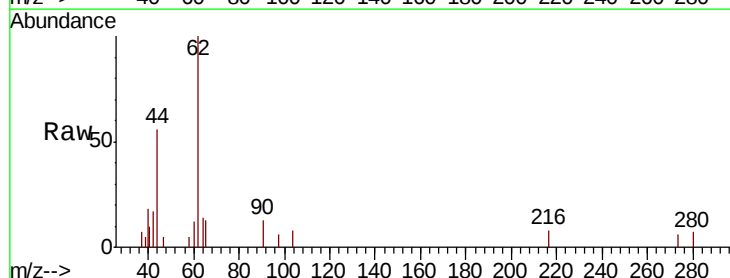
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 CARBON-03DL

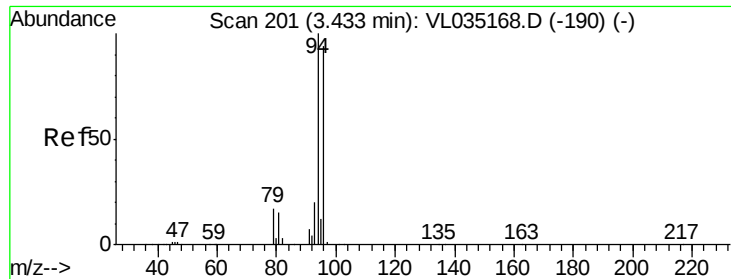
Tot Ion: 51 Resp: 5702  
 Ion Ratio Lower Upper  
 51 100  
 67 16.2 16.6 24.8#



#5  
 Vinyl Chloride  
 Concen: 0.034 ppbv  
 RT: 3.20 min Scan# 128  
 Delta R.T. -0.02 min  
 Lab File: VL035196.D  
 Acq: 16 Jul 2020 16:32

Tgt Ion: 62 Resp: 2500  
 Ion Ratio Lower Upper  
 62 100  
 64 14.1 25.9 38.9#





#6

Bromomethane

Concen: 0.040 ppbv

RT: 3.42 min Scan# 197

Delta R.T. -0.01 min

Lab File: VL035196.D

Acq: 16 Jul 2020 16:32

Instrument :

MSVOA\_L

ClientSampleId :

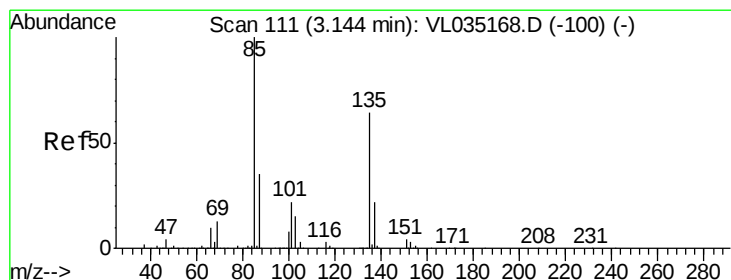
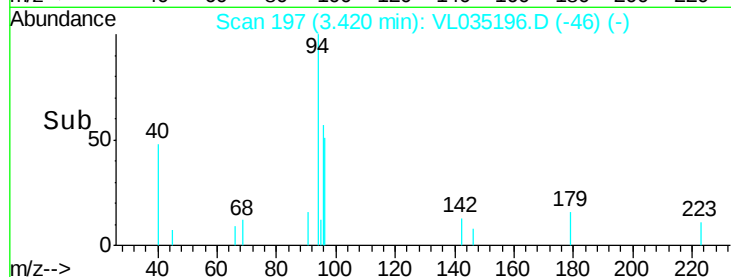
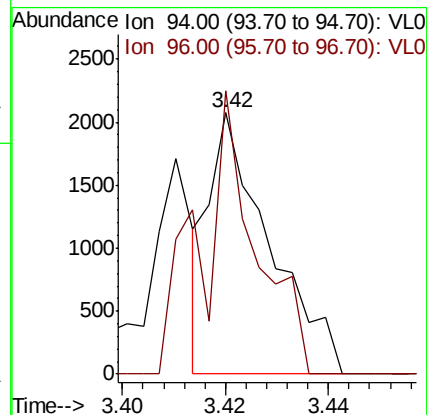
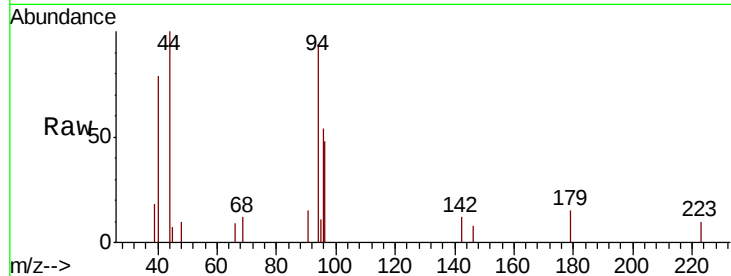
CARBON-03DL

Tot Ion: 94 Resp: 1684

Ion Ratio Lower Upper

94 100

96 108.4 74.8 112.2



#8

Dichlorotetrafluoroethane

Concen: 0.039 ppbv

RT: 3.12 min Scan# 105

Delta R.T. -0.02 min

Lab File: VL035196.D

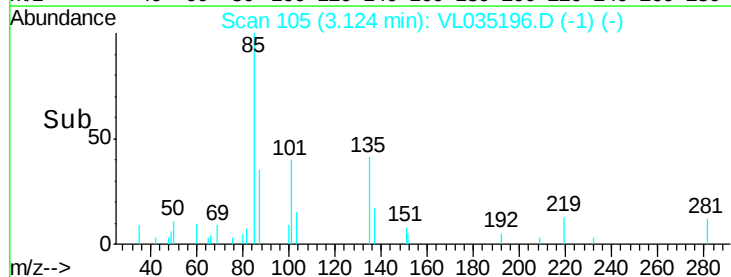
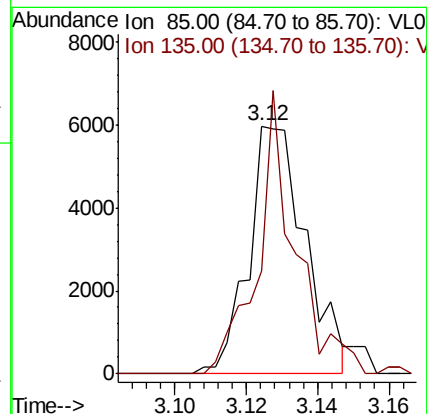
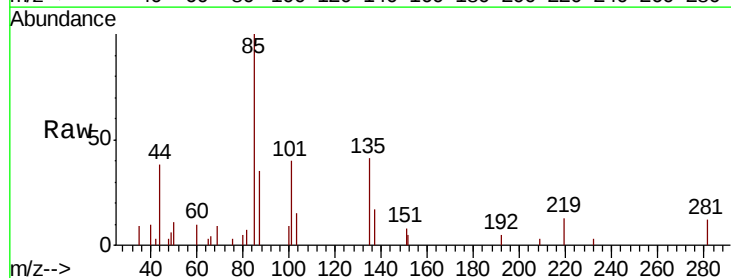
Acq: 16 Jul 2020 16:32

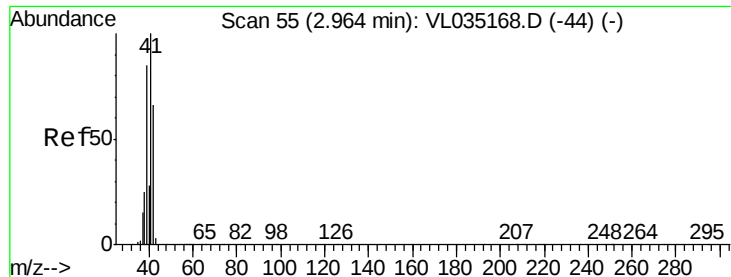
Tgt Ion: 85 Resp: 6552

Ion Ratio Lower Upper

85 100

135 76.0 52.1 78.1





#9

Propene

Concen: 0.086 ppbv

RT: 2.96 min Scan# 54

Delta R.T. -0.00 min

Lab File: VL035196.D

Acq: 16 Jul 2020 16:32

Instrument :

MSVOA\_L

ClientSampleId :

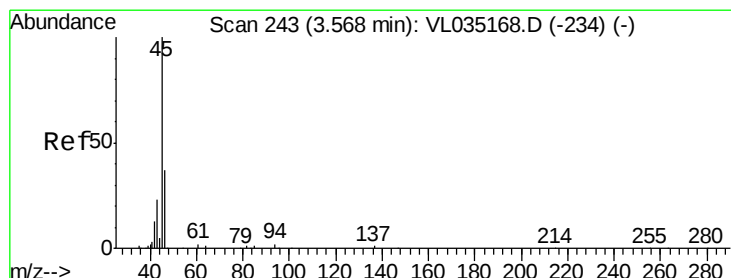
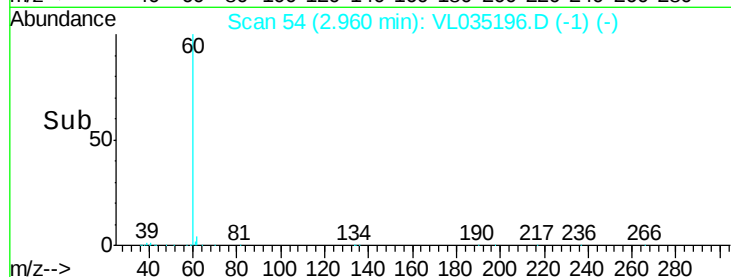
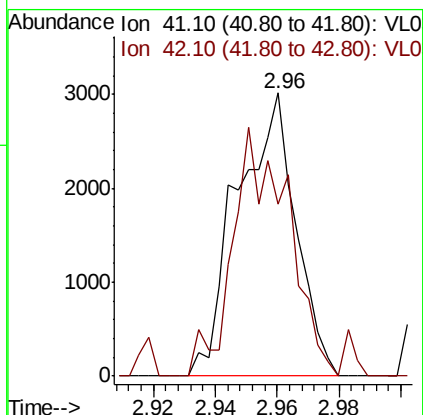
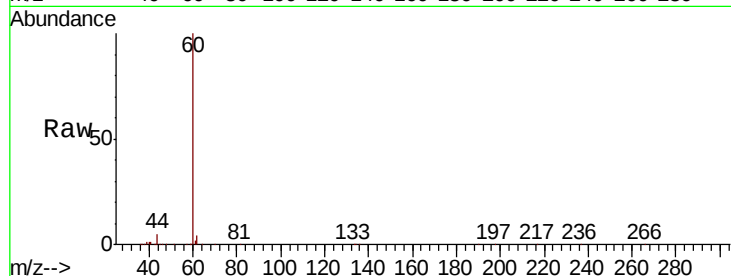
CARBON-03DL

Tot Ion: 41 Resp: 3962

Ion Ratio Lower Upper

41 100

42 89.3 54.6 81.8#



#13

Ethanol

Concen: 0.298 ppbv

RT: 3.57 min Scan# 243

Delta R.T. -0.00 min

Lab File: VL035196.D

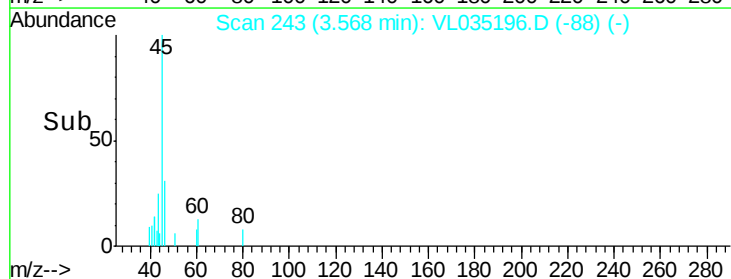
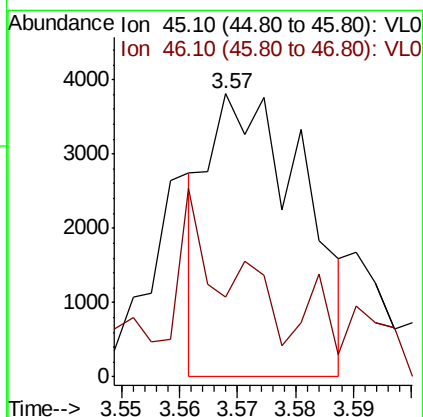
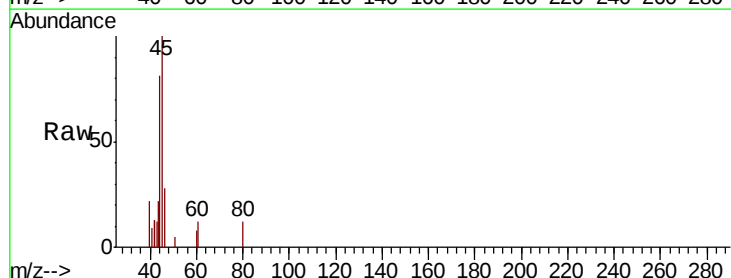
Acq: 16 Jul 2020 16:32

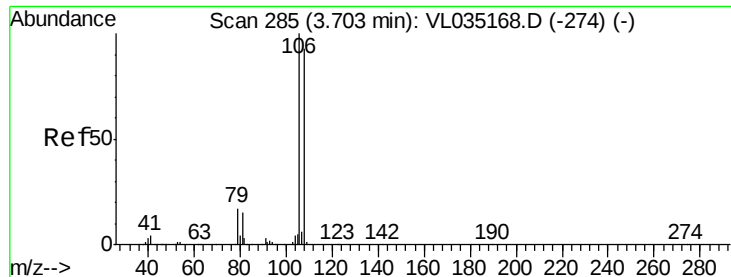
Tgt Ion: 45 Resp: 4361

Ion Ratio Lower Upper

45 100

46 68.8 16.2 65.0#





#14

Bromoethene

Concen: 0.039 ppbv

RT: 3.68 min Scan# 279

Delta R.T. -0.02 min

Lab File: VL035196.D

Acq: 16 Jul 2020 16:32

Instrument :

MSVOA\_L

ClientSampleId :

CARBON-03DL

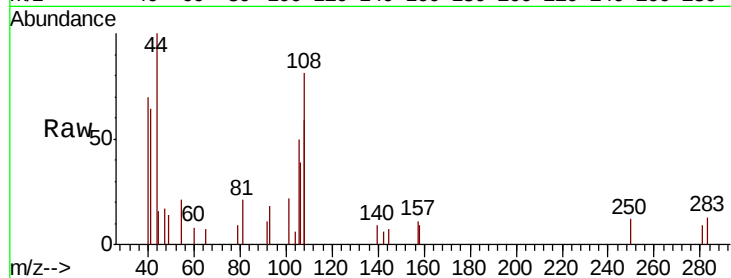
Tot Ion:108 Resp: 1958

Ion Ratio Lower Upper

108 100

106 115.9 86.2 129.2

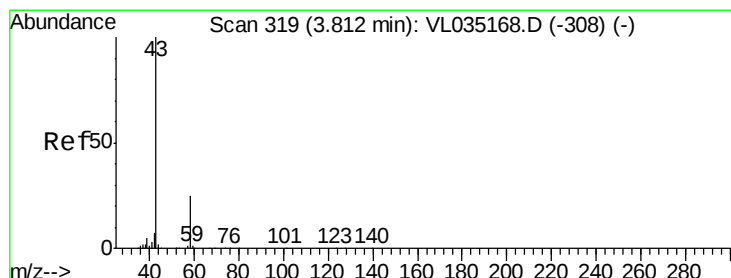
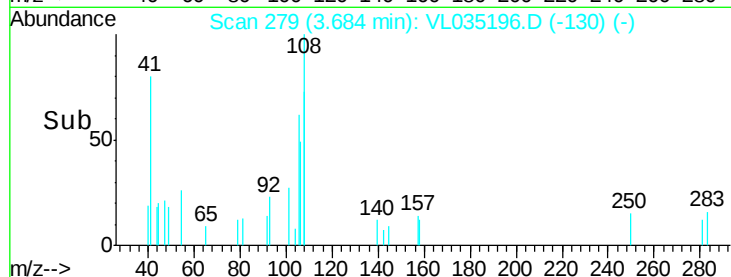
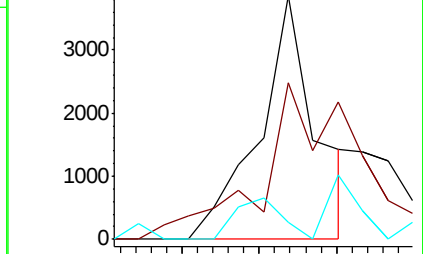
79 38.7 15.0 22.6#



Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VLO



#15

Acetone

Concen: 0.226 ppbv

RT: 3.82 min Scan# 321

Delta R.T. 0.01 min

Lab File: VL035196.D

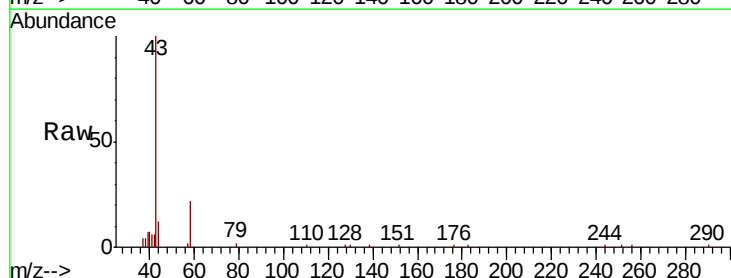
Acq: 16 Jul 2020 16:32

Tgt Ion: 43 Resp: 33699

Ion Ratio Lower Upper

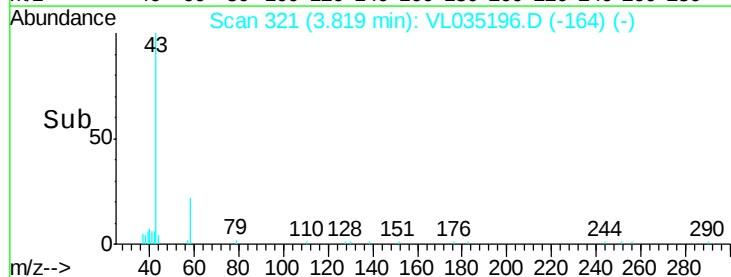
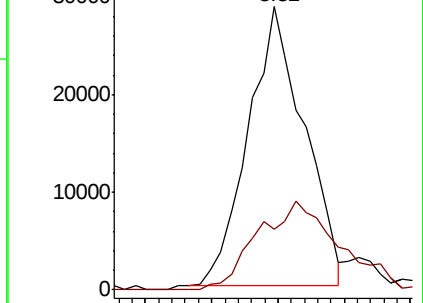
43 100

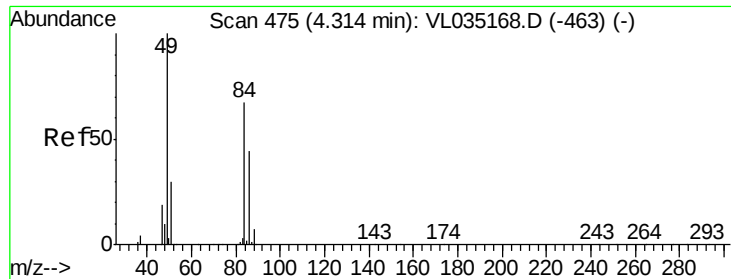
58 47.0 21.3 31.9#



Abundance Ion 43.10 (42.80 to 43.80): VLO

Ion 58.10 (57.80 to 58.80): VLO

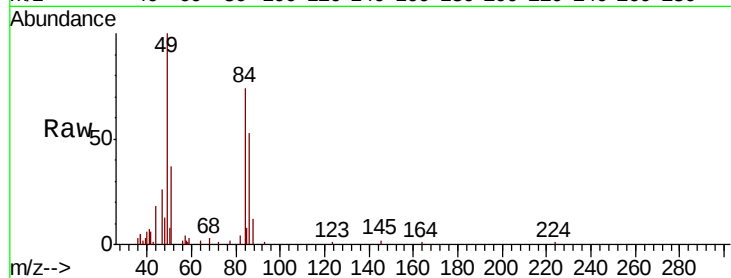




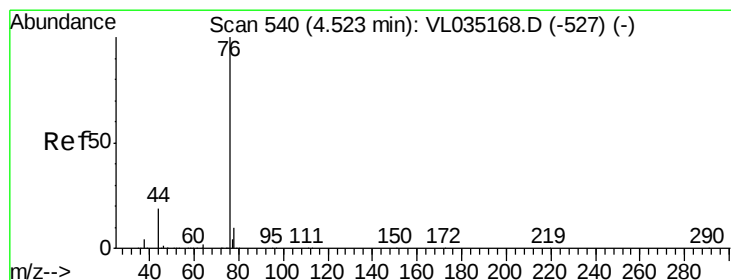
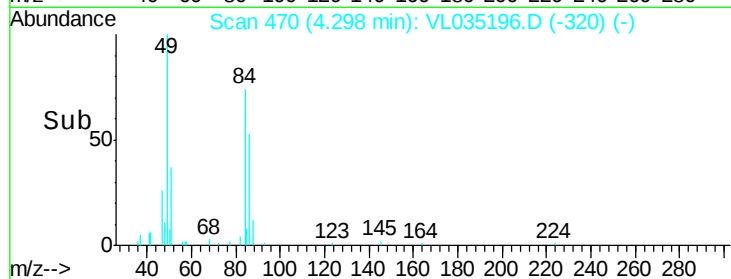
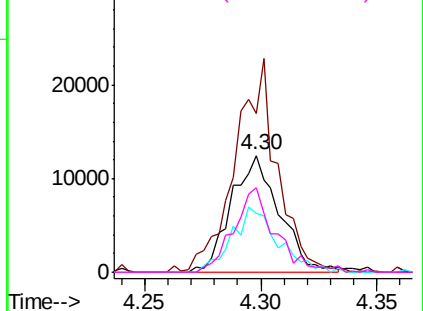
#20  
Methvlene Chloride  
Concen: 0.275 ppbv  
RT: 4.30 min Scan# 470  
Delta R.T. -0.02 min  
Lab File: VL035196.D  
Acq: 16 Jul 2020 16:32

Instrument :  
MSVOA\_L  
ClientSampleId :  
CARBON-03DL

Tot Ion: 84 Resp: 17856  
Ion Ratio Lower Upper  
84 100  
49 133.6 119.4 179.0  
51 50.0 36.6 55.0  
86 71.9 52.5 78.7

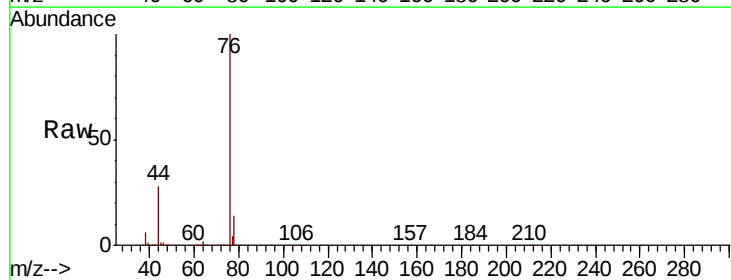


Abundance Ion 84.00 (83.70 to 84.70): VL0  
Ion 49.10 (48.80 to 49.80): VL0  
Ion 51.10 (50.80 to 51.80): VL0  
Ion 86.00 (85.70 to 86.70): VL0

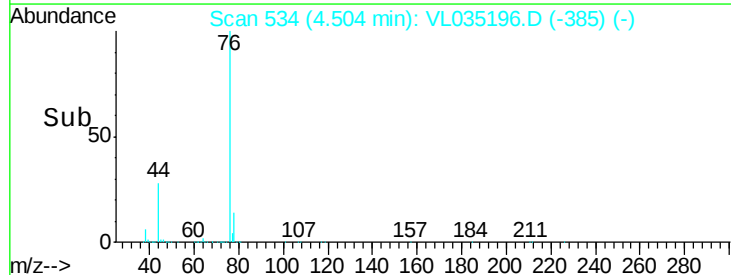
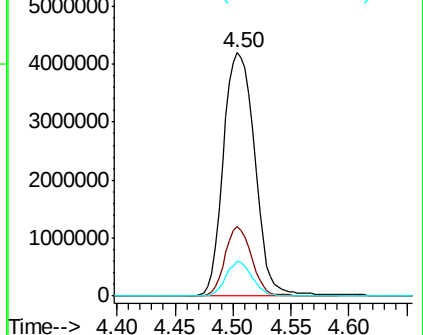


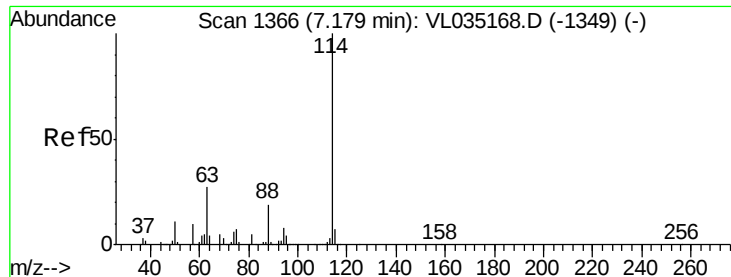
#27  
Carbon Disulfide  
Concen: 55.902 ppbv  
RT: 4.50 min Scan# 534  
Delta R.T. -0.02 min  
Lab File: VL035196.D  
Acq: 16 Jul 2020 16:32

Tgt Ion: 76 Resp: 7966840  
Ion Ratio Lower Upper  
76 100  
44 24.1 14.9 22.3#  
78 11.9 7.5 11.3#



Abundance Ion 76.00 (75.70 to 76.70): VL0  
Ion 44.10 (43.80 to 44.80): VL0  
Ion 78.00 (77.70 to 78.70): VL0

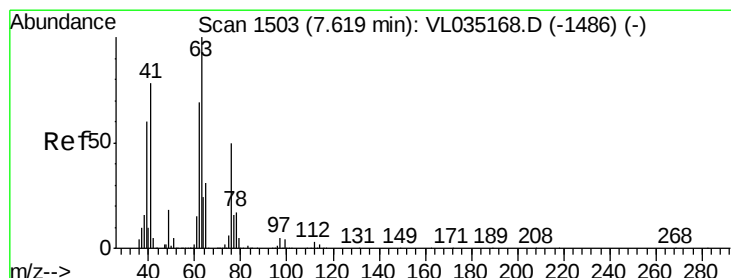
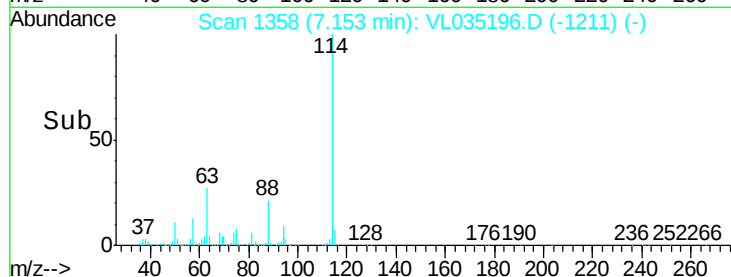
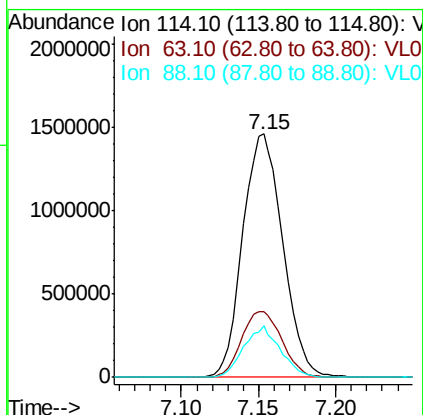
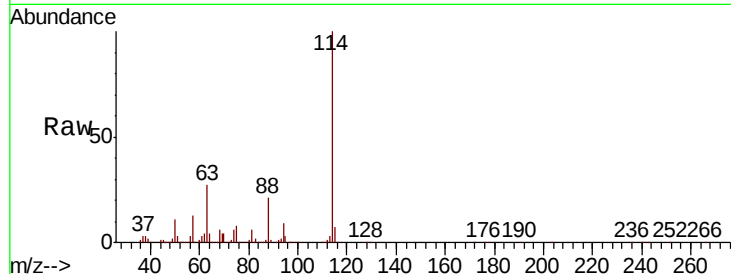




#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.15 min Scan# 1358  
 Delta R.T. -0.03 min  
 Lab File: VL035196.D  
 Acq: 16 Jul 2020 16:32

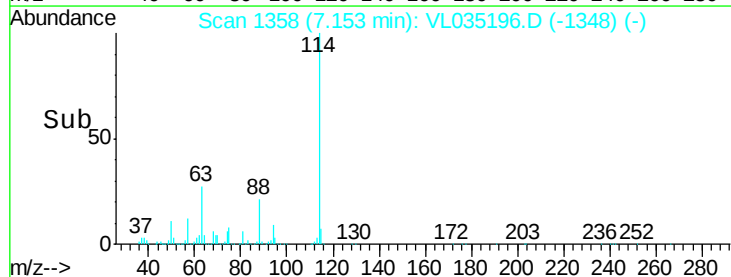
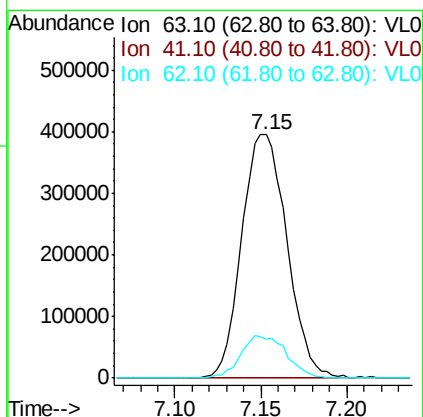
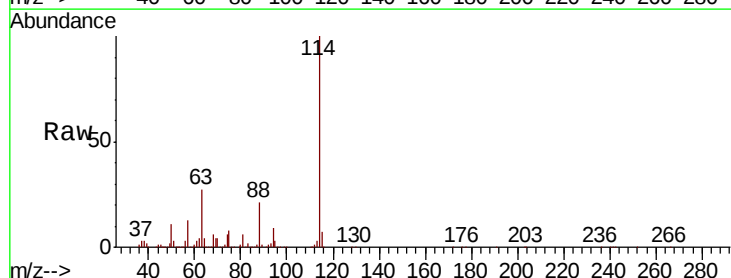
Instrument :  
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 CARBON-03DL

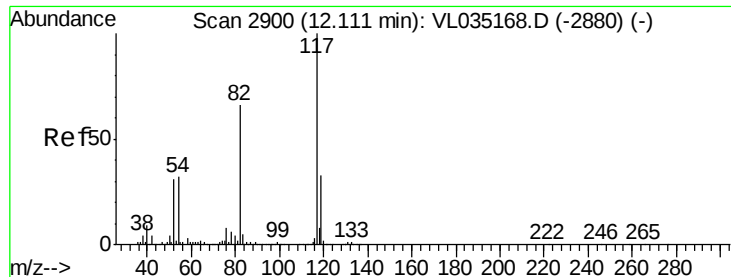
Tot Ion:114 Resp: 2633731  
 Ion Ratio Lower Upper  
 114 100  
 63 27.6 22.0 33.0  
 88 19.3 15.4 23.0



#39  
 1,2-Dichloropropane  
 Concen: 9.506 ppbv  
 RT: 7.15 min Scan# 1358  
 Delta R.T. -0.47 min  
 Lab File: VL035196.D  
 Acq: 16 Jul 2020 16:32

Tgt Ion: 63 Resp: 720590  
 Ion Ratio Lower Upper  
 63 100  
 41 0.0 62.6 94.0#  
 62 16.0 55.0 82.6#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2892

Delta R.T. -0.03 min

Lab File: VL035196.D

Acq: 16 Jul 2020 16:32

Instrument :

MSVOA\_L

ClientSampleId :

CARBON-03DL

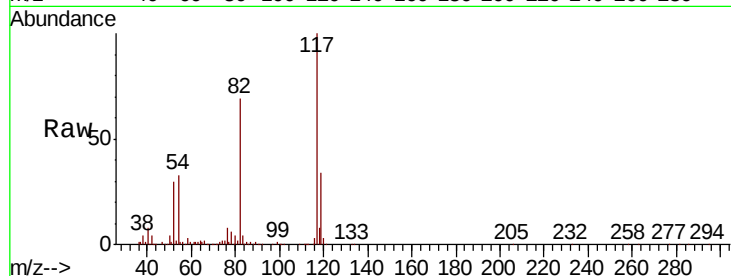
Tot Ion:117 Resp: 2444851

Ion Ratio Lower Upper

117 100

82 69.3 52.3 78.5

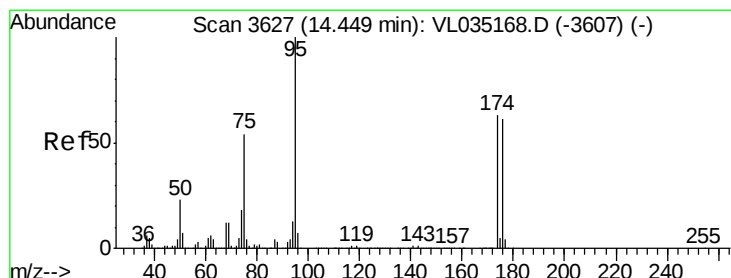
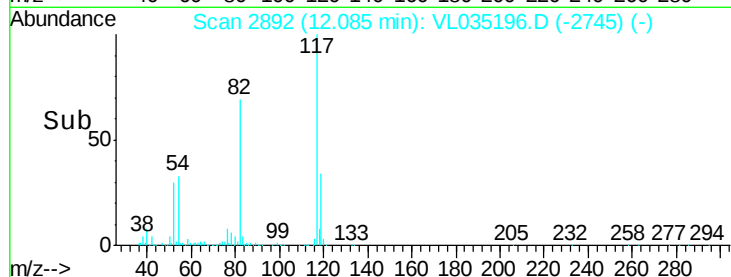
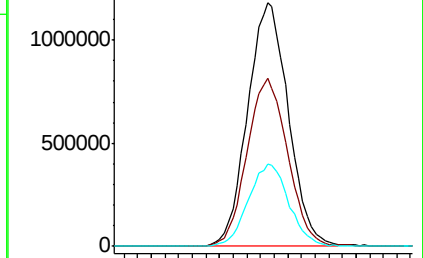
119 33.8 24.9 37.3



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.243 ppbv

RT: 14.42 min Scan# 3618

Delta R.T. -0.03 min

Lab File: VL035196.D

Acq: 16 Jul 2020 16:32

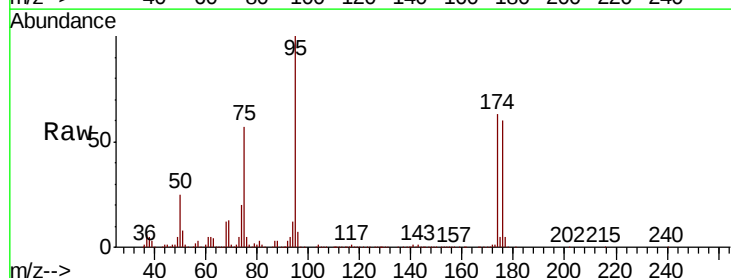
Tgt Ion: 95 Resp: 2034353

Ion Ratio Lower Upper

95 100

174 65.1 52.2 78.2

175 4.9 4.0 6.0



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

