

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL051719\  
 Data File : VL033705.D  
 Acq On : 17 May 2019 5:13  
 Operator : SY/AP  
 Sample : VSTDIC0.03  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.03

Quant Time: May 17 07:12:57 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL051719AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri May 17 07:07:57 2019  
 QLast Update : Fri May 17 07:07:57 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 1096565  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.28  | 114  | 2424714  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.23 | 117  | 2461561  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.57  | 95    | 2041078  | 10.11    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.10% |

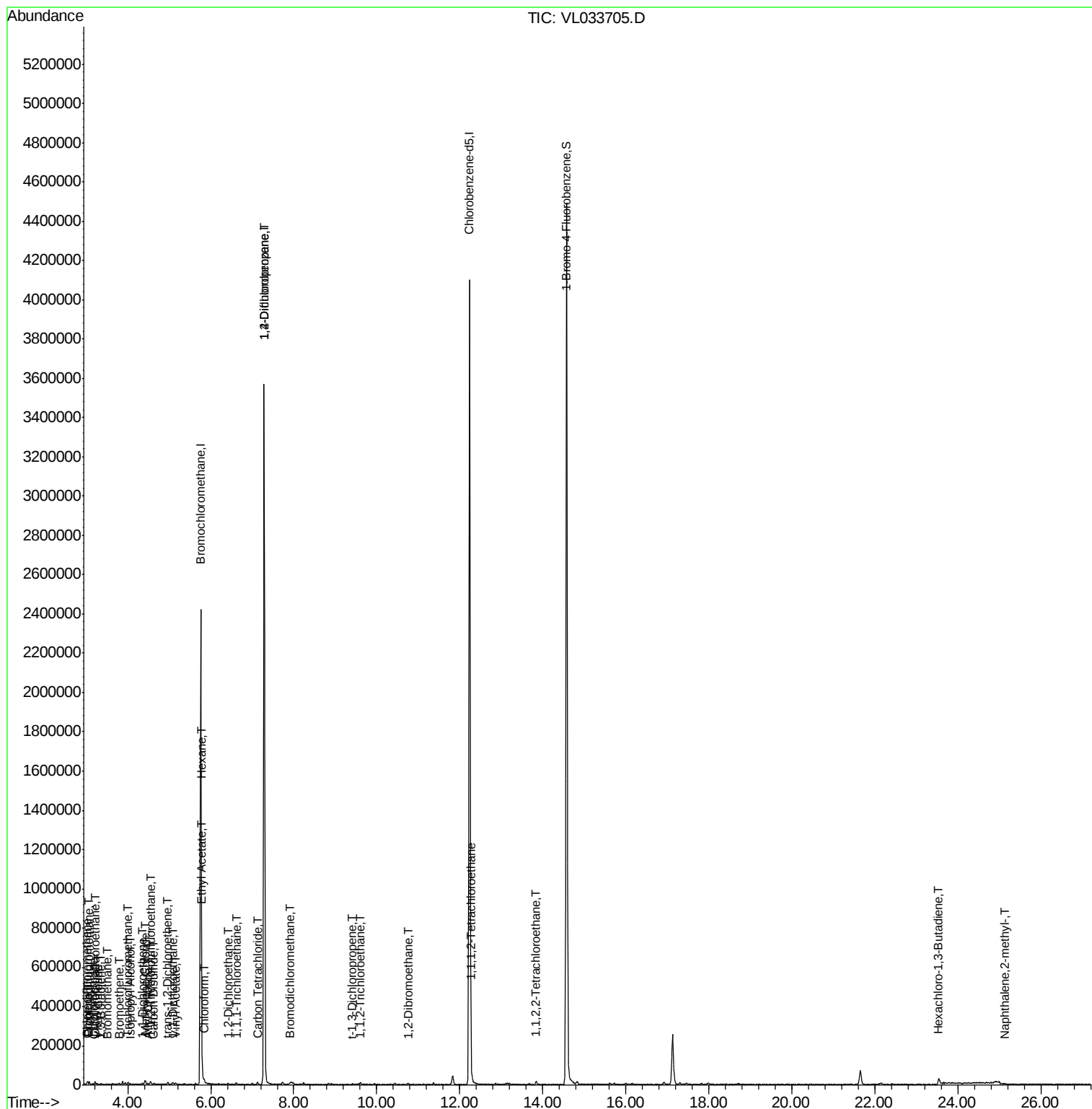
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|-------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.07  | 85   | 8016     | 0.032 | ppbv   | 92     |
| 3) Chlorodifluoromethane       | 3.01  | 51   | 5427     | 0.034 | ppbv # | 90     |
| 4) Chloromethane               | 3.17  | 50   | 2788     | 0.034 | ppbv   | 98     |
| 5) Vinyl Chloride              | 3.29  | 62   | 1706     | 0.021 | ppbv   | 97     |
| 6) Bromomethane                | 3.52  | 94   | 1509     | 0.030 | ppbv   | 98     |
| 8) Dichlorotetrafluoroethane   | 3.22  | 85   | 6490     | 0.031 | ppbv   | 88     |
| 9) Propene                     | 3.03  | 41   | 1108     | 0.018 | ppbv # | 5      |
| 11) Trichlorofluoromethane     | 4.00  | 101  | 7696     | 0.032 | ppbv # | 69     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55  | 101  | 3003     | 0.018 | ppbv # | 13     |
| 14) Bromoethene                | 3.80  | 108  | 716      | 0.011 | ppbv # | 1      |
| 16) 1,3-Butadiene              | 3.36  | 39   | 1358     | 0.020 | ppbv   | 97     |
| 18) 1,1-Dichloroethene         | 4.34  | 96   | 1005     | 0.014 | ppbv # | 1      |
| 19) Isopropyl Alcohol          | 4.05  | 45   | 1200     | 0.012 | ppbv # | 94     |
| 20) Methylene Chloride         | 4.41  | 84   | 3908     | 0.063 | ppbv # | 72     |
| 21) Allyl Chloride             | 4.48  | 41   | 1452     | 0.015 | ppbv # | 21     |
| 22) trans-1,2-Dichloroethene   | 4.95  | 96   | 1059     | 0.015 | ppbv # | 71     |
| 23) Vinyl Acetate              | 5.15  | 43   | 2577     | 0.012 | ppbv # | 78     |
| 24) 1,1-Dichloroethane         | 5.08  | 63   | 4116     | 0.026 | ppbv # | 90     |
| 25) Ethyl Acetate              | 5.79  | 43   | 5545     | 0.021 | ppbv # | 72     |
| 26) Hexane                     | 5.78  | 57   | 1464     | 0.013 | ppbv # | 1      |
| 27) Carbon Disulfide           | 4.62  | 76   | 1964     | 0.012 | ppbv # | 1      |
| 29) Chloroform                 | 5.84  | 83   | 5705     | 0.028 | ppbv   | 96     |
| 32) 1,1,1-Trichloroethane      | 6.62  | 97   | 2169     | 0.010 | ppbv # | 1      |
| 35) Carbon Tetrachloride       | 7.13  | 117  | 3875     | 0.019 | ppbv # | 40     |
| 37) 1,2-Dichloroethane         | 6.41  | 62   | 4300     | 0.028 | ppbv # | 95     |
| 39) 1,2-Dichloropropane        | 7.29  | 63   | 642673   | 7.870 | ppbv # | 22     |
| 42) Bromodichloromethane       | 7.91  | 83   | 6277     | 0.032 | ppbv # | 78     |
| 45) t-1,3-Dichloropropene      | 9.41  | 75   | 1084     | 0.011 | ppbv # | 68     |
| 47) 1,1,2-Trichloroethane      | 9.61  | 97   | 1784     | 0.019 | ppbv # | 76     |
| 54) 1,2-Dibromoethane          | 10.75 | 107  | 2194     | 0.015 | ppbv # | 32     |
| 56) 1,1,1,2-Tetrachloroethane  | 12.28 | 131  | 1317     | 0.012 | ppbv # | 9      |
| 63) 1,1,2,2-Tetrachloroethane  | 13.83 | 83   | 3056     | 0.015 | ppbv # | 12     |
| 78) Hexachloro-1,3-Butadiene   | 23.54 | 225  | 4166     | 0.026 | ppbv # | 45     |
| 80) Naphthalene,2-methyl-      | 25.12 | 142  | 1283     | 0.010 | ppbv # | 61     |

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

```
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Acq On    : 17 May 2019    5:13  
Operator  : SY/AP  
Sample    : VSTDICC0.03  
Misc      : 400ml/MSVOA_L  
ALS Vial  : 1    Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
VSTDICC0.03

Quant Time: May 17 07:12:57 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL051719AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri May 17 07:07:57 2019  
QLast Update : Fri May 17 07:07:57 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

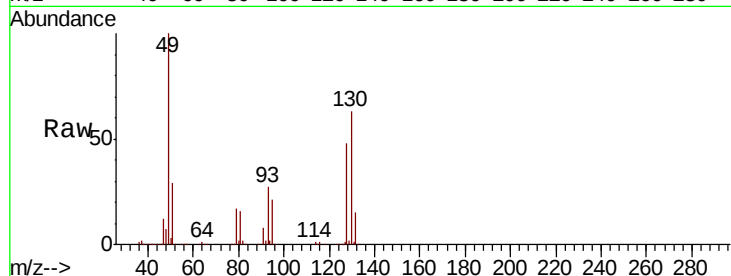
Tgt Ion: 49 Resp: 1096565

Ion Ratio Lower Upper

49 100

128 49.1 25.2 75.6

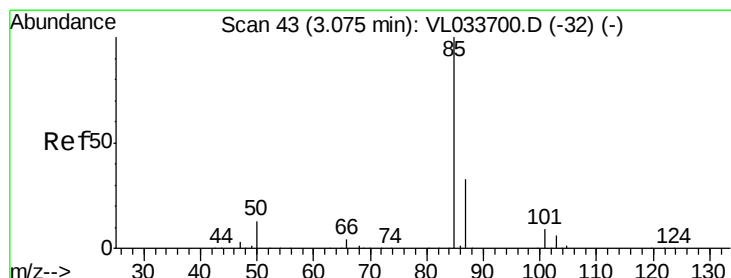
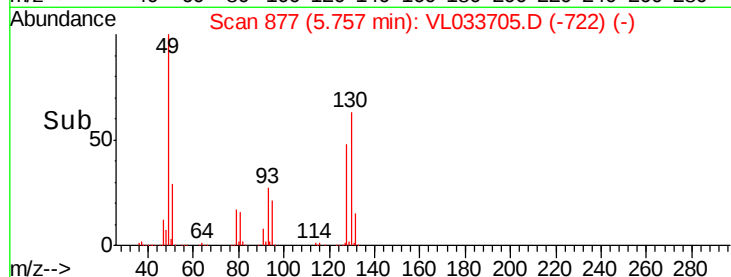
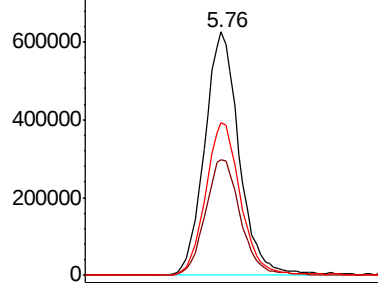
130 63.9 32.5 97.5



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



#2

Dichlorodifluoromethane

Concen: 0.032 ppbv

RT: 3.07 min Scan# 42

Delta R.T. -0.00 min

Lab File: VL033705.D

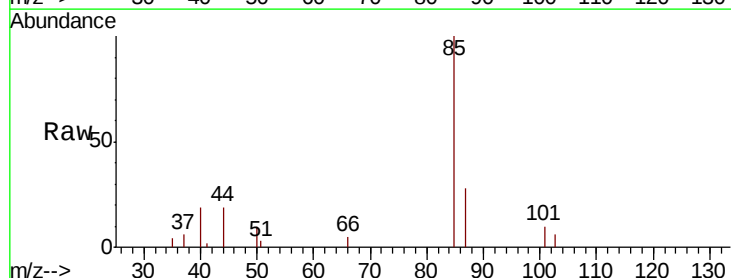
Acq: 17 May 2019 5:13

Tgt Ion: 85 Resp: 8016

Ion Ratio Lower Upper

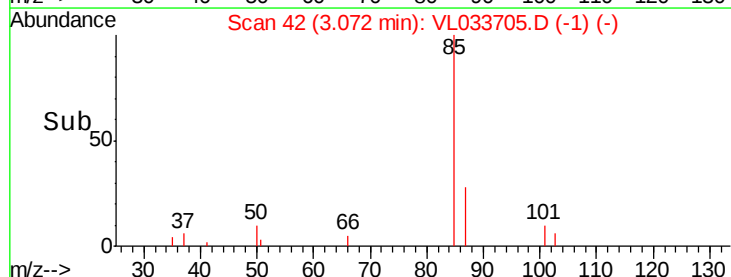
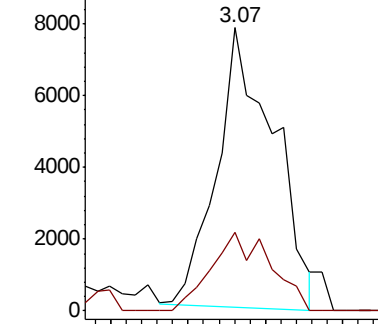
85 100

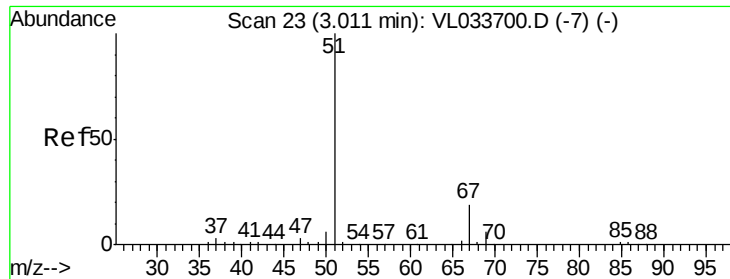
87 28.6 26.3 39.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.034 ppbv

RT: 3.01 min Scan# 23

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

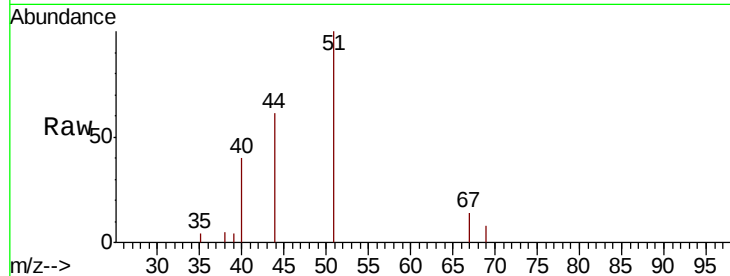
VSTDIC0.03

Tgt Ion: 51 Resp: 5427

Ion Ratio Lower Upper

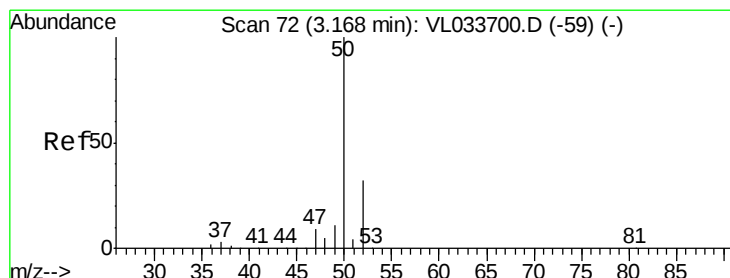
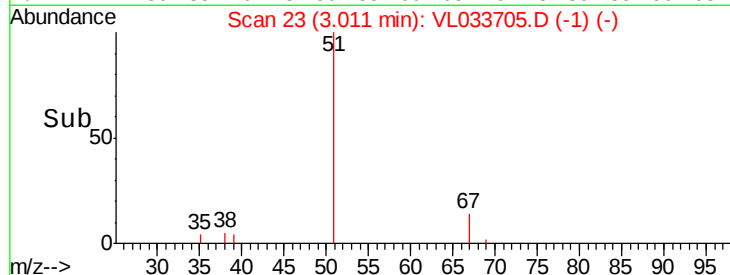
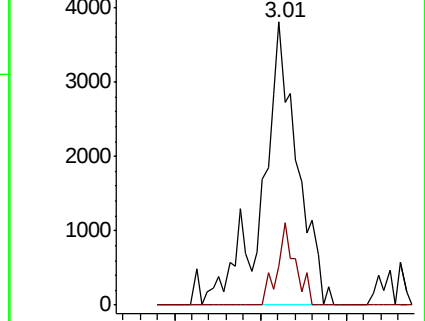
51 100

67 14.8 15.6 23.4#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.034 ppbv

RT: 3.17 min Scan# 72

Delta R.T. 0.00 min

Lab File: VL033705.D

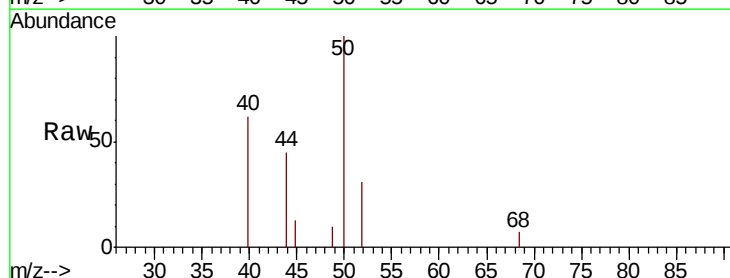
Acq: 17 May 2019 5:13

Tgt Ion: 50 Resp: 2788

Ion Ratio Lower Upper

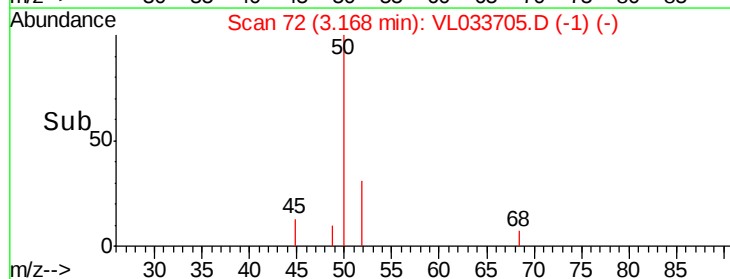
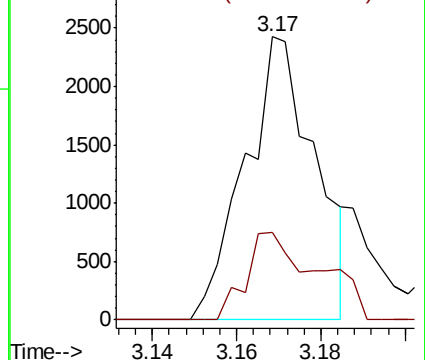
50 100

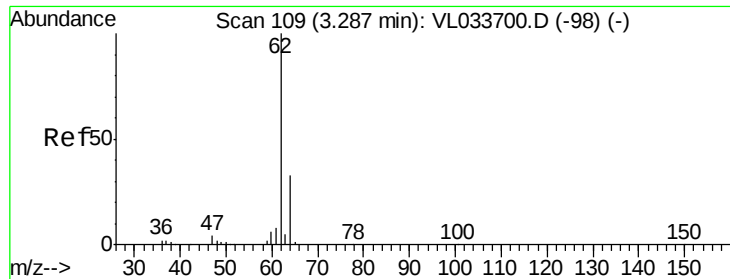
52 31.0 25.7 38.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.021 ppbv

RT: 3.29 min Scan# 109

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

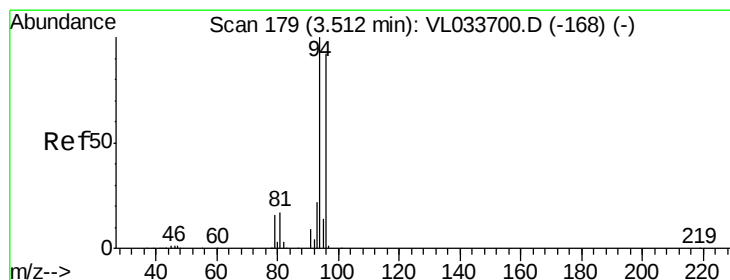
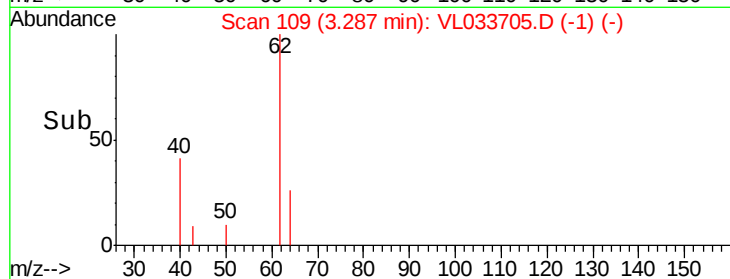
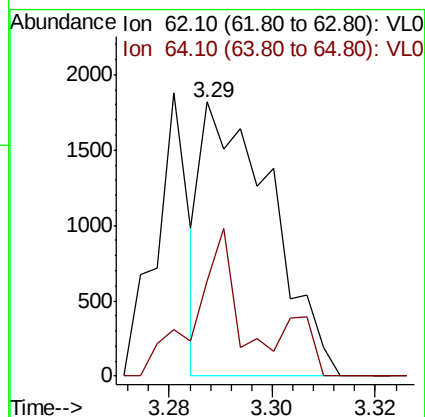
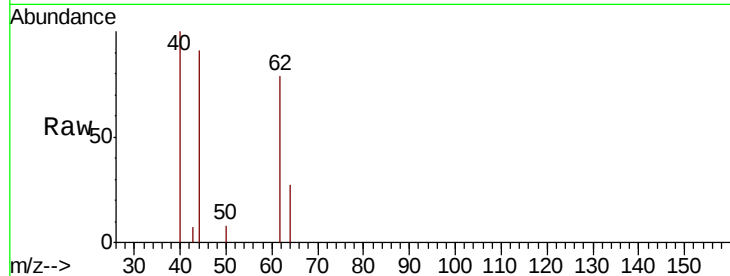
VSTDIC0.03

Tgt Ion: 62 Resp: 1706

Ion Ratio Lower Upper

62 100

64 34.6 26.4 39.6



#6

Bromomethane

Concen: 0.030 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033705.D

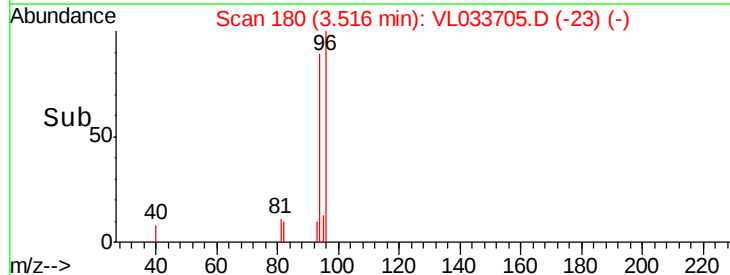
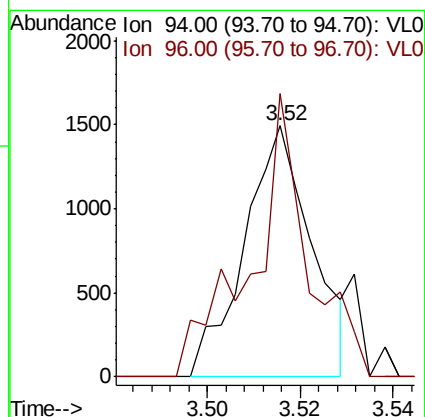
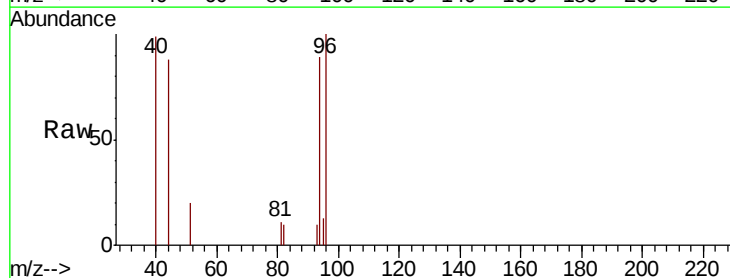
Acq: 17 May 2019 5:13

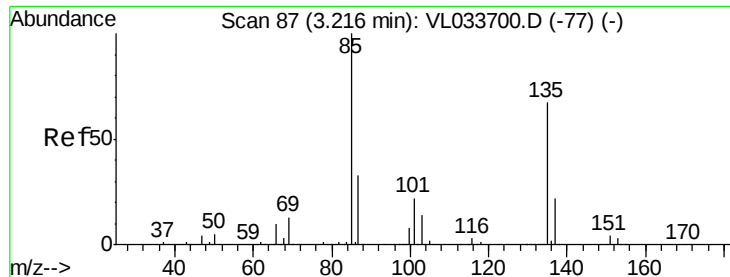
Tgt Ion: 94 Resp: 1509

Ion Ratio Lower Upper

94 100

96 90.3 73.6 110.4





#8

Dichlorotetrafluoroethane

Concen: 0.031 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

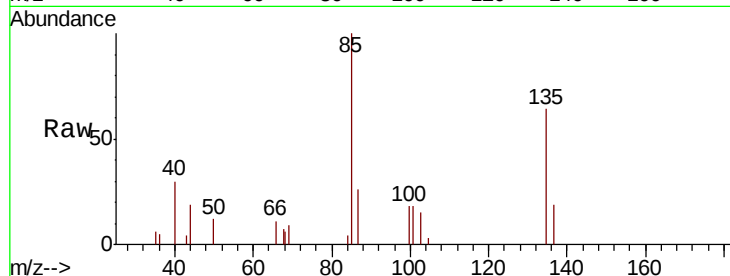
VSTDIC0.03

Tgt Ion: 85 Resp: 6490

Ion Ratio Lower Upper

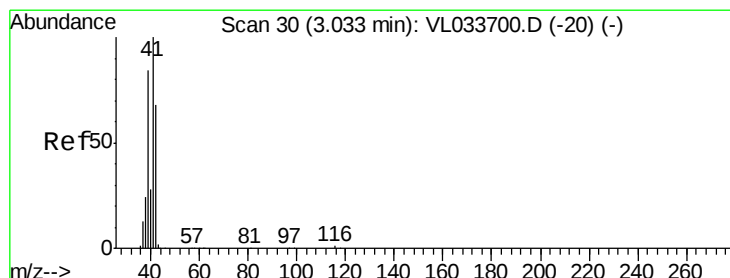
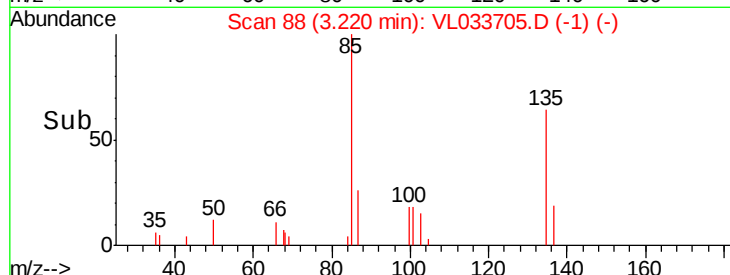
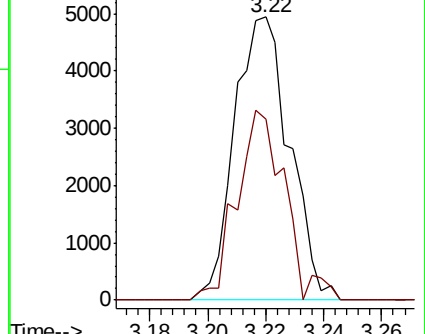
85 100

135 58.8 54.5 81.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#9

Propene

Concen: 0.018 ppbv

RT: 3.03 min Scan# 30

Delta R.T. 0.00 min

Lab File: VL033705.D

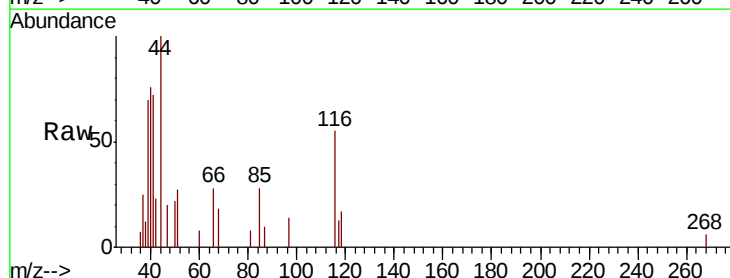
Acq: 17 May 2019 5:13

Tgt Ion: 41 Resp: 1108

Ion Ratio Lower Upper

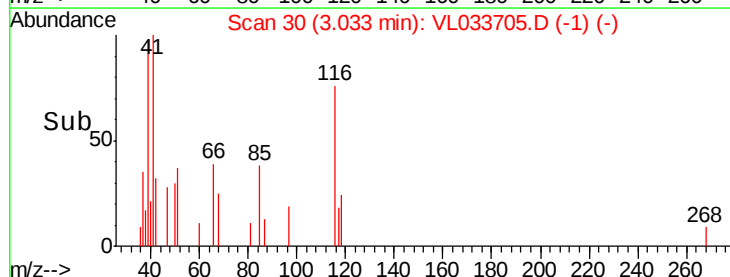
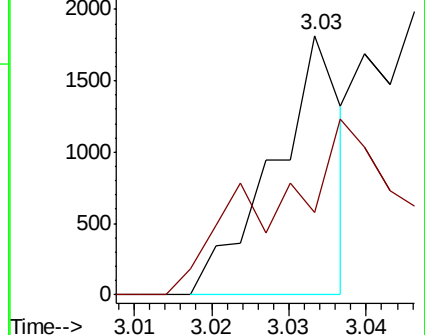
41 100

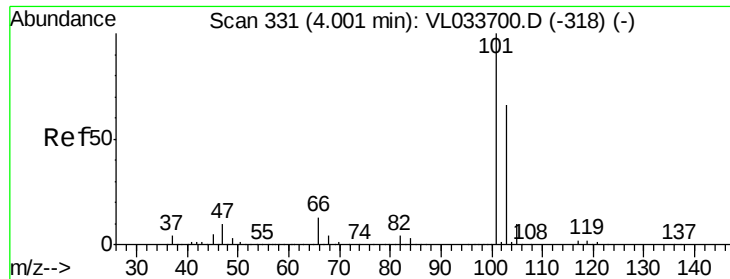
42 147.9 56.1 84.1#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

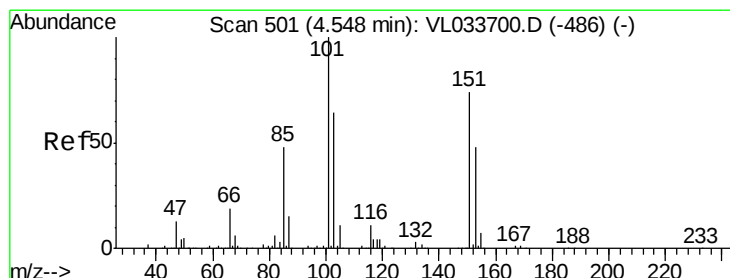
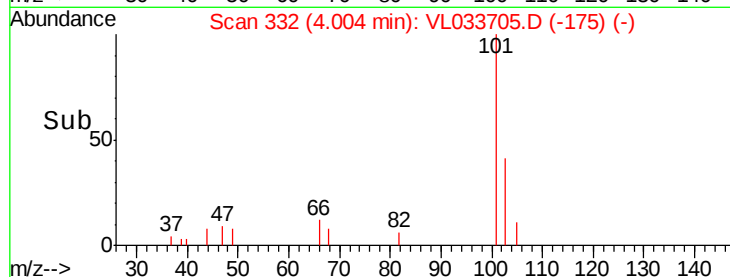
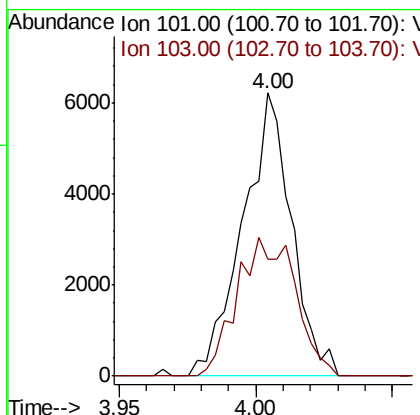
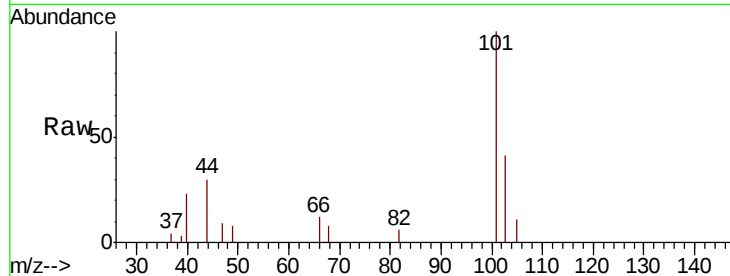




#11  
 Trichlorofluoromethane  
 Concen: 0.032 ppbv  
 RT: 4.00 min Scan# 332  
 Delta R.T. 0.00 min  
 Lab File: VL033705.D  
 Acq: 17 May 2019 5:13

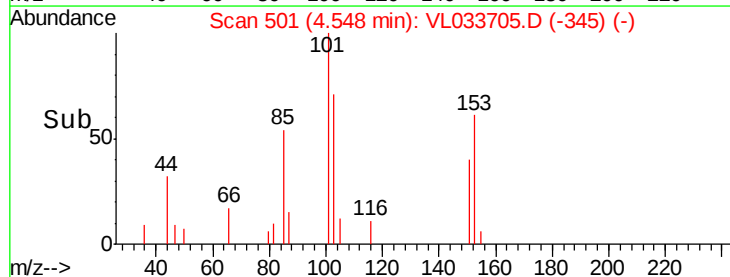
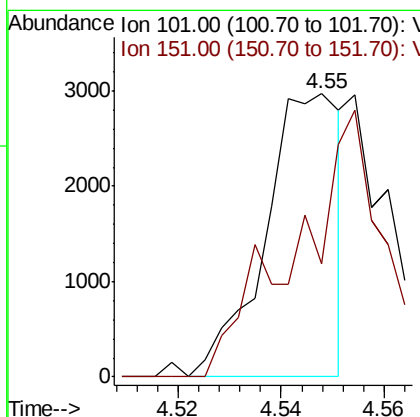
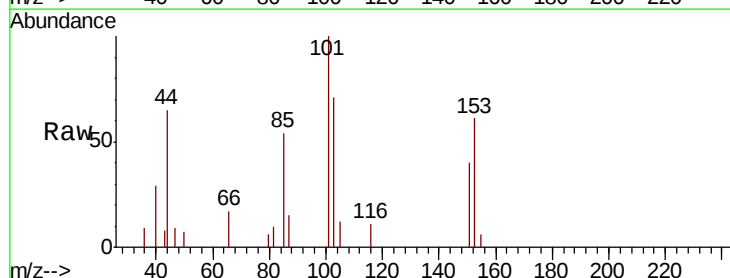
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.03

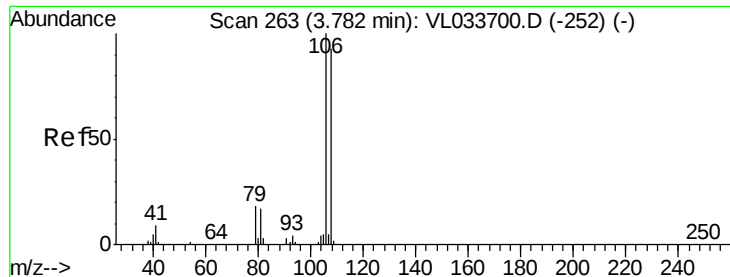
Tgt Ion:101 Resp: 7696  
 Ion Ratio Lower Upper  
 101 100  
 103 41.1 52.6 78.8#



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 0.018 ppbv  
 RT: 4.55 min Scan# 501  
 Delta R.T. 0.00 min  
 Lab File: VL033705.D  
 Acq: 17 May 2019 5:13

Tgt Ion:101 Resp: 3003  
 Ion Ratio Lower Upper  
 101 100  
 151 0.0 58.2 87.4#





#14

Bromoethene

Concen: 0.011 ppbv

RT: 3.80 min Scan# 267

Delta R.T. 0.01 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

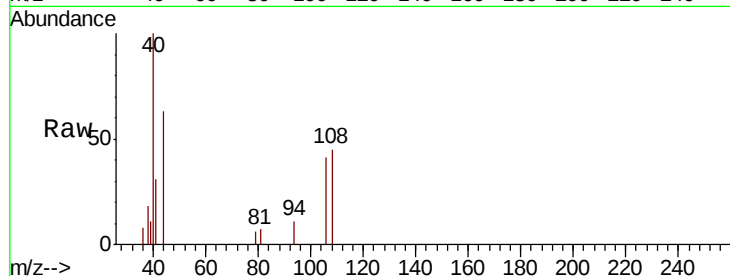
Tgt Ion:108 Resp: 716

Ion Ratio Lower Upper

108 100

106 252.1 86.5 129.7#

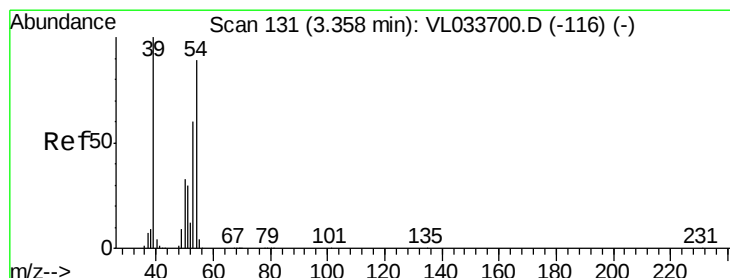
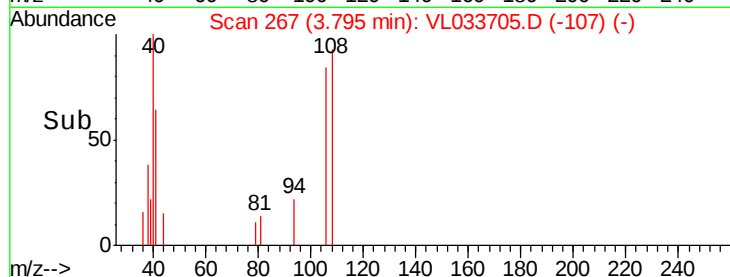
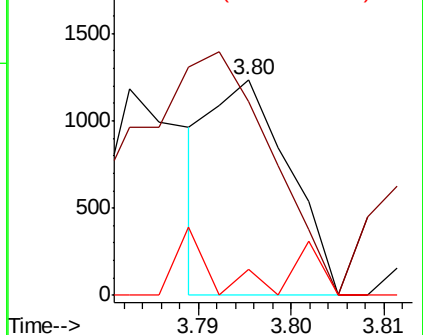
79 28.8 15.1 22.7#



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



#16

1,3-Butadiene

Concen: 0.020 ppbv

RT: 3.36 min Scan# 132

Delta R.T. 0.00 min

Lab File: VL033705.D

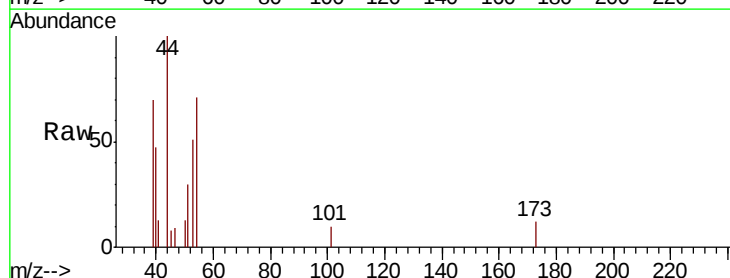
Acq: 17 May 2019 5:13

Tgt Ion: 39 Resp: 1358

Ion Ratio Lower Upper

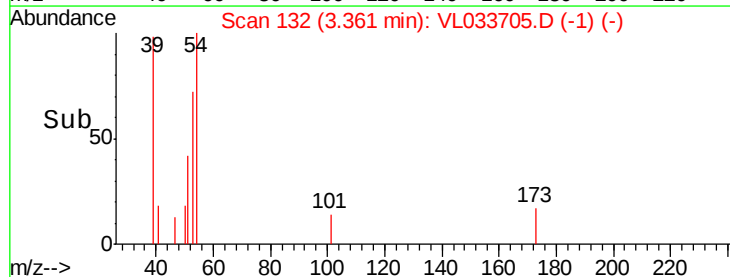
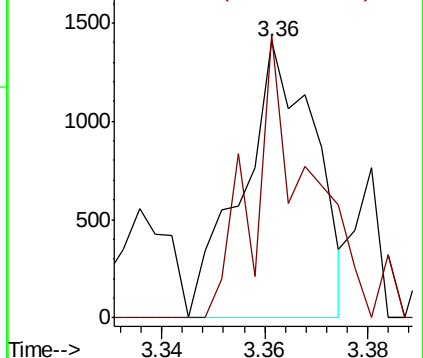
39 100

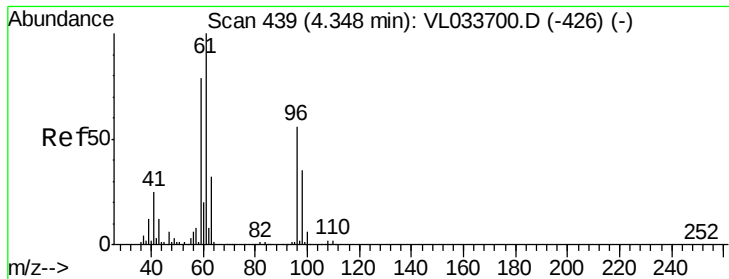
54 83.4 69.0 103.6



Abundance Ion 39.10 (38.80 to 39.80): VLO

Ion 54.10 (53.80 to 54.80): VLO





#18

1,1-Dichloroethene

Concen: 0.014 ppbv

RT: 4.34 min Scan# 437

Delta R.T. -0.01 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

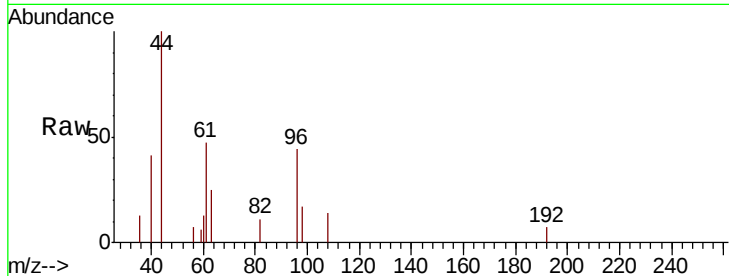
Tgt Ion: 96 Resp: 1005

Ion Ratio Lower Upper

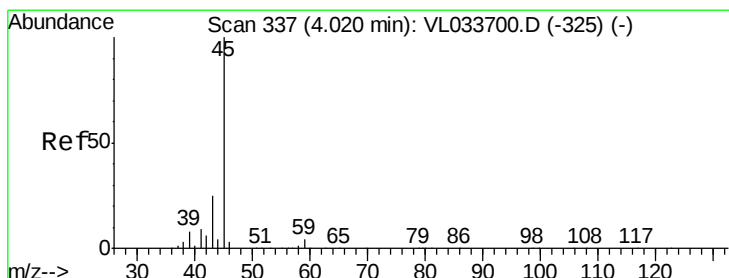
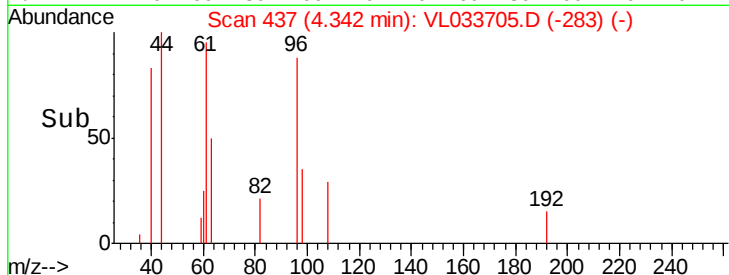
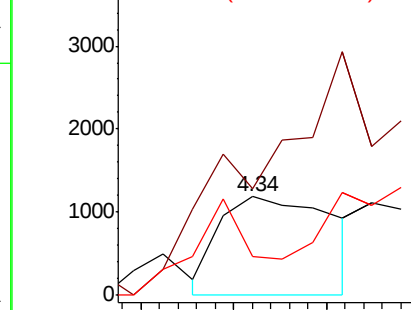
96 100

61 24.6 143.1 214.7#

98 0.2 49.5 74.3#



Abundance Ion 96.00 (95.70 to 96.70): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 98.00 (97.70 to 98.70): VL0



#19

Isopropyl Alcohol

Concen: 0.012 ppbv

RT: 4.05 min Scan# 347

Delta R.T. 0.03 min

Lab File: VL033705.D

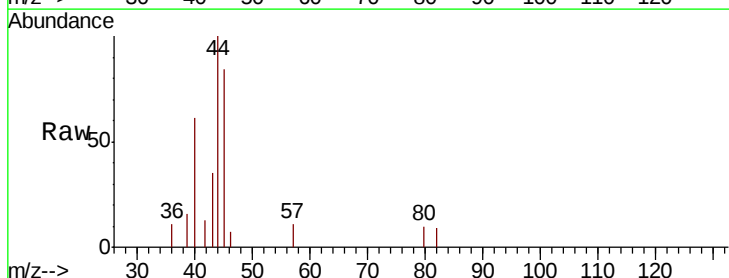
Acq: 17 May 2019 5:13

Tgt Ion: 45 Resp: 1200

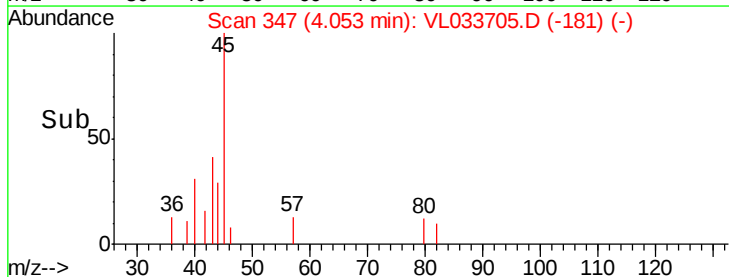
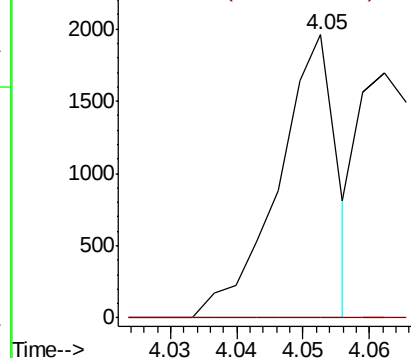
Ion Ratio Lower Upper

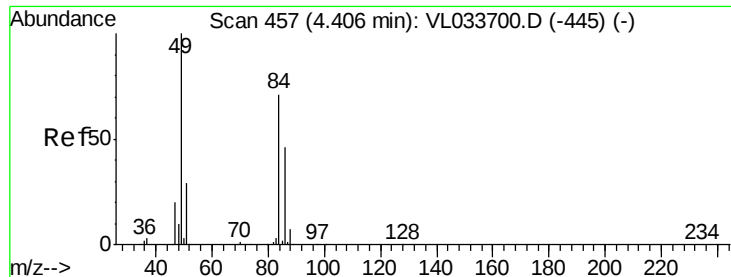
45 100

58 0.0 1.6 2.4#



Abundance Ion 45.10 (44.80 to 45.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0





#20

Methylene Chloride

Concen: 0.063 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

Tgt Ion: 84 Resp: 3908

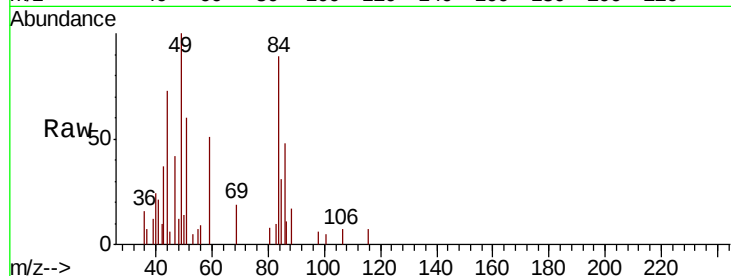
Ion Ratio Lower Upper

84 100

49 99.4 112.8 169.2#

51 67.3 33.4 50.0#

86 60.5 51.7 77.5

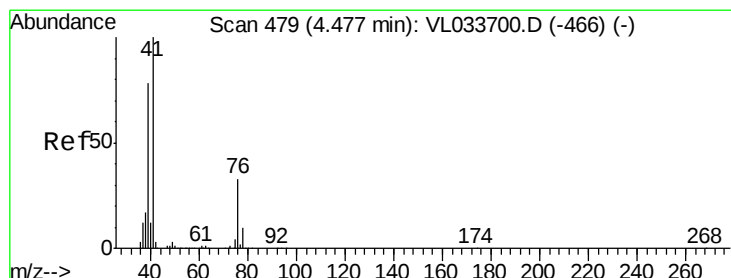
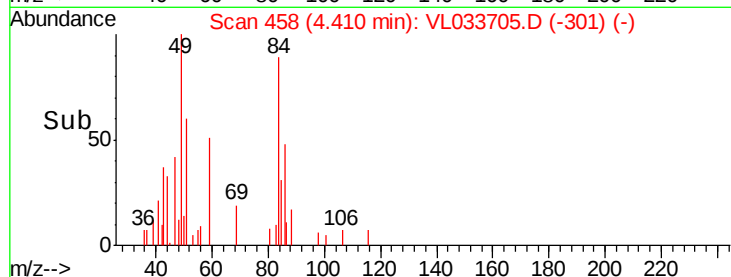
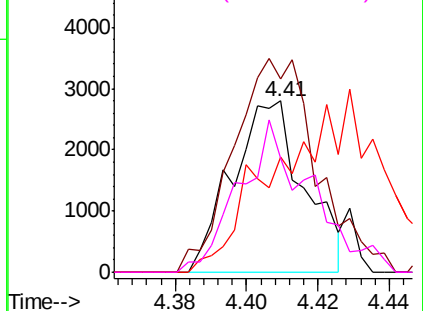


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#21

Allyl Chloride

Concen: 0.015 ppbv

RT: 4.48 min Scan# 480

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

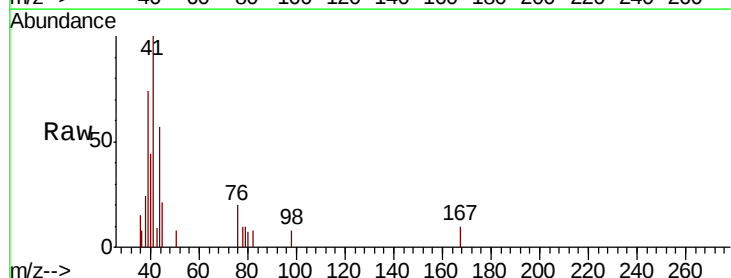
Tgt Ion: 41 Resp: 1452

Ion Ratio Lower Upper

41 100

76 60.0 25.9 38.9#

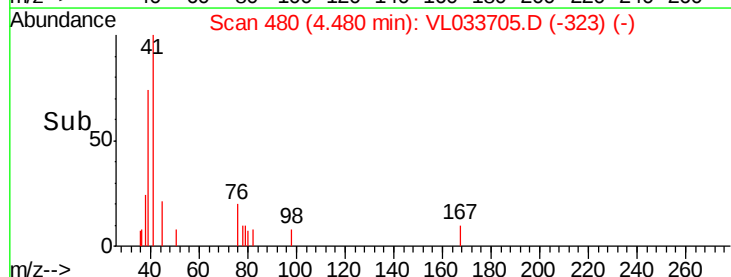
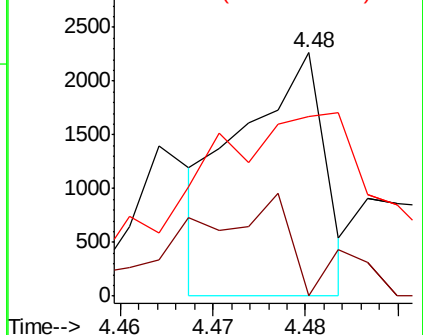
39 0.0 64.6 97.0#

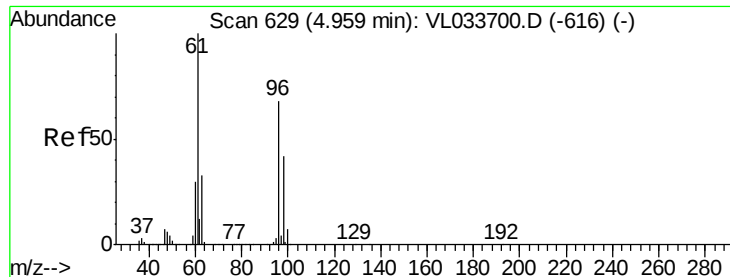


Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0





#22

trans-1,2-Dichloroethene

Concen: 0.015 ppbv

RT: 4.95 min Scan# 627

Delta R.T. -0.01 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

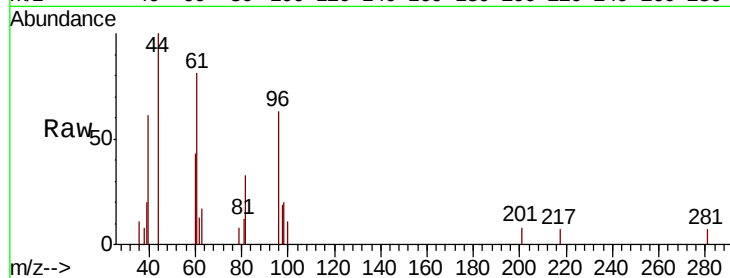
Tgt Ion: 96 Resp: 1059

Ion Ratio Lower Upper

96 100

61 95.7 116.8 175.2#

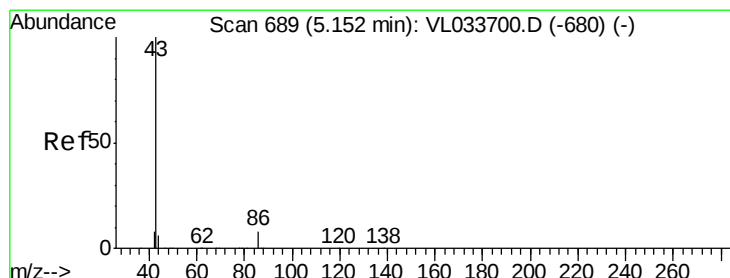
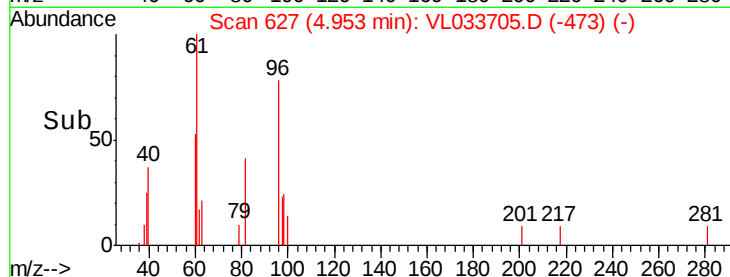
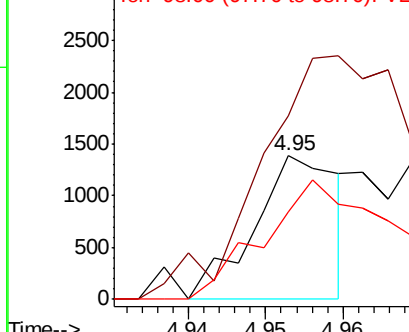
98 60.7 49.4 74.0



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#23

Vinyl Acetate

Concen: 0.012 ppbv

RT: 5.15 min Scan# 689

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Tgt Ion: 43 Resp: 2577

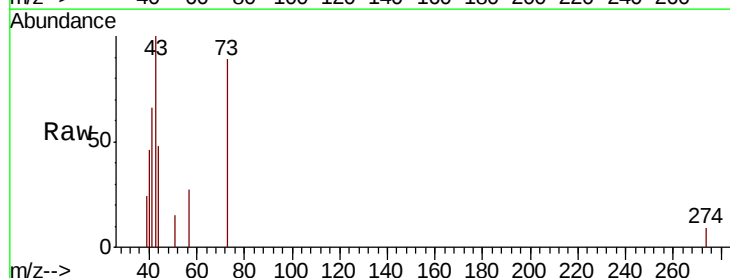
Ion Ratio Lower Upper

43 100

86 0.0 6.0 9.0#

42 0.0 7.5 11.3#

44 0.0 4.4 6.6#

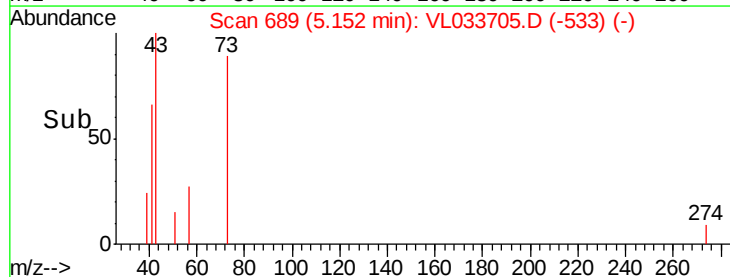
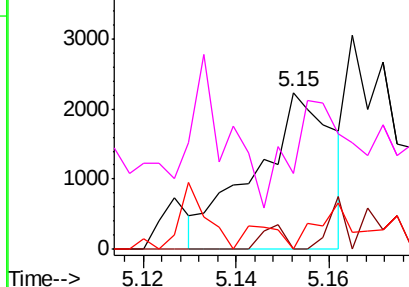


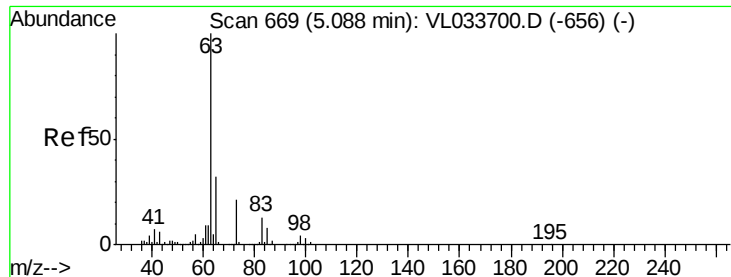
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0





#24

1,1-Dichloroethane

Concen: 0.026 ppbv

RT: 5.08 min Scan# 668

Delta R.T. -0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

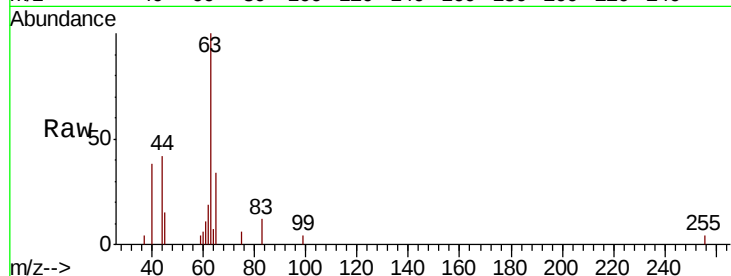
Tgt Ion: 63 Resp: 4116

Ion Ratio Lower Upper

63 100

98 0.0 1.8 5.5#

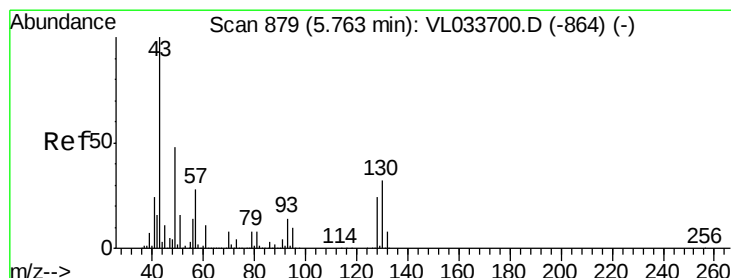
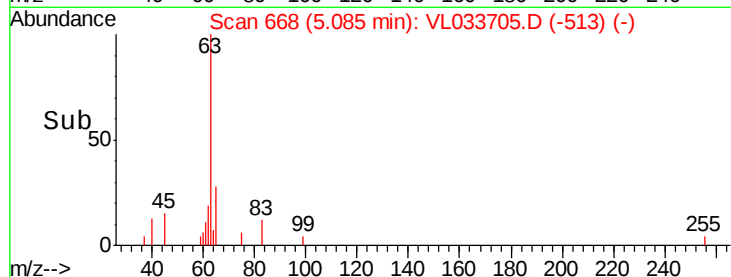
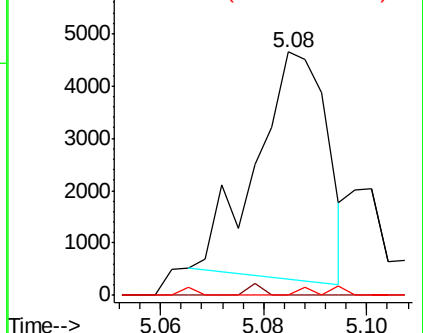
100 0.0 1.4 4.2#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0



#25

Ethyl Acetate

Concen: 0.021 ppbv

RT: 5.79 min Scan# 886

Delta R.T. 0.02 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Tgt Ion: 43 Resp: 5545

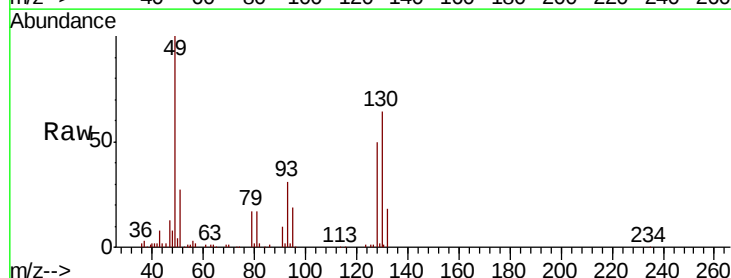
Ion Ratio Lower Upper

43 100

45 25.0 7.9 11.9#

61 16.9 7.7 11.5#

70 0.0 5.8 8.6#

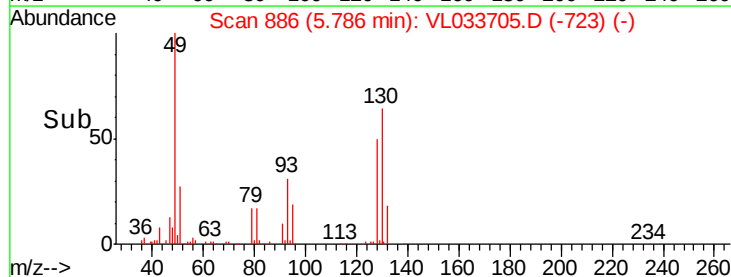
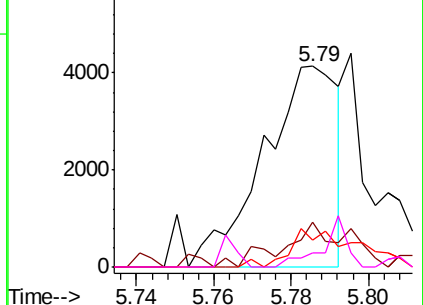


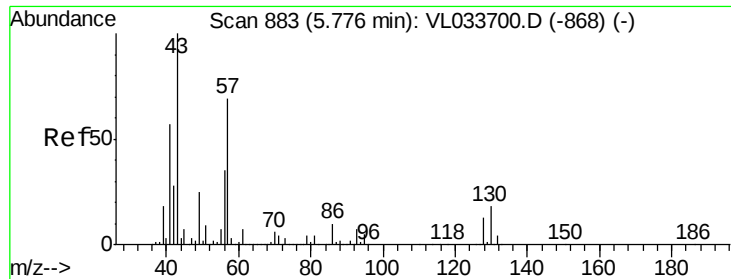
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0





#26

Hexane

Concen: 0.013 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

Tgt Ion: 57 Resp: 1464

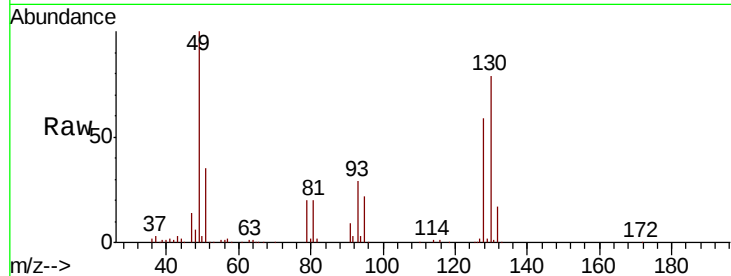
Ion Ratio Lower Upper

57 100

41 240.3 69.8 104.6#

43 0.0 181.8 272.6#

56 169.3 42.1 63.1#

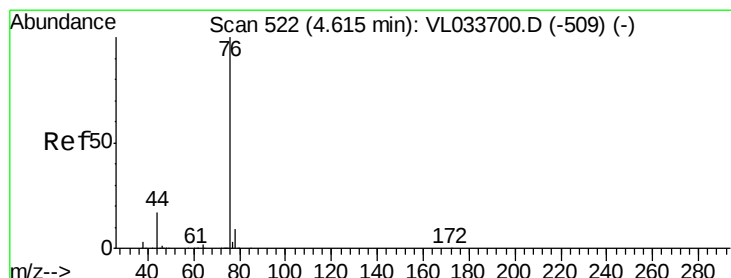
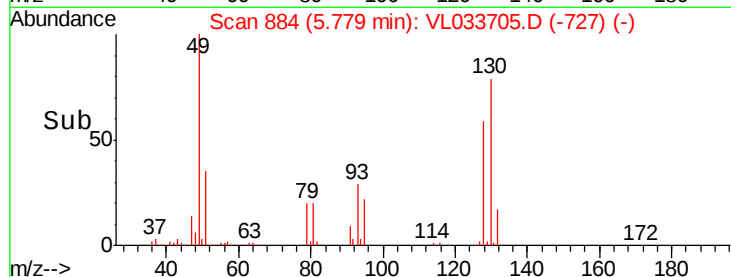
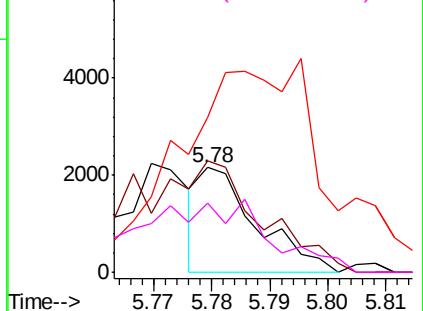


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#27

Carbon Disulfide

Concen: 0.012 ppbv

RT: 4.62 min Scan# 522

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

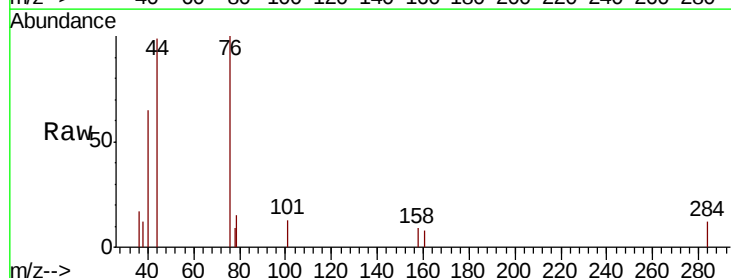
Tgt Ion: 76 Resp: 1964

Ion Ratio Lower Upper

76 100

44 87.7 13.8 20.8#

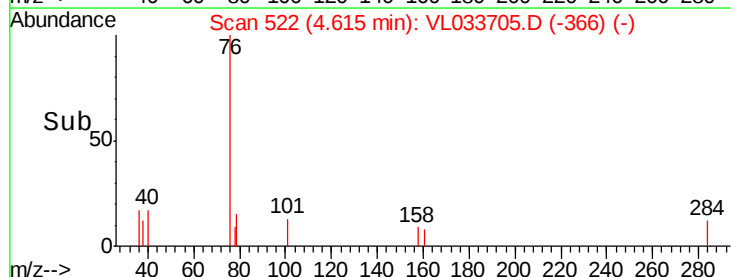
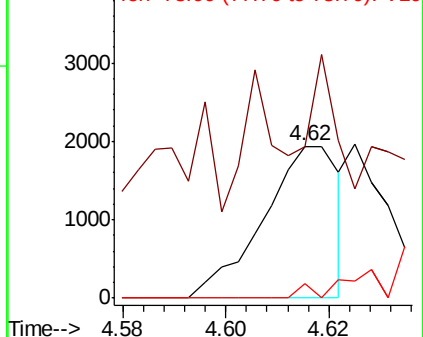
78 0.0 7.4 11.0#

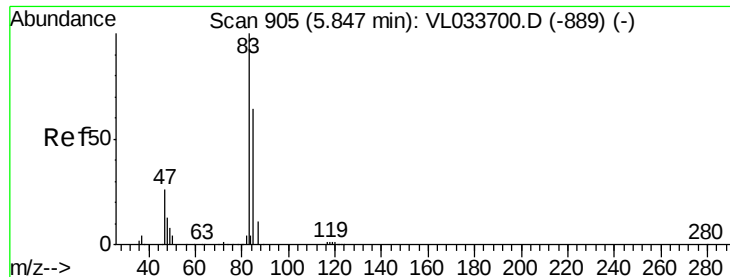


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0

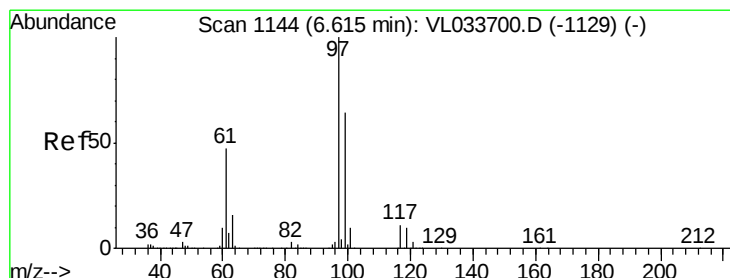
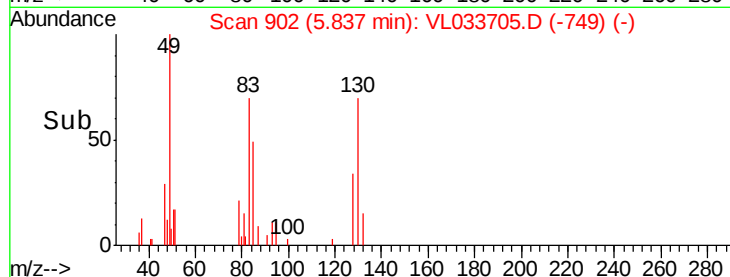
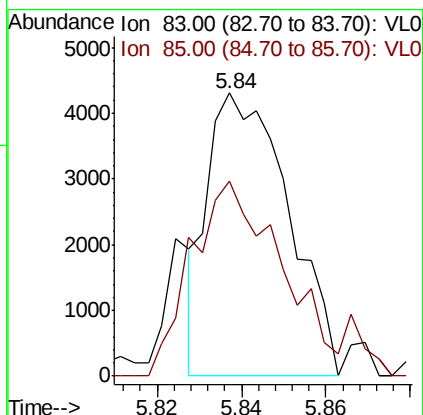
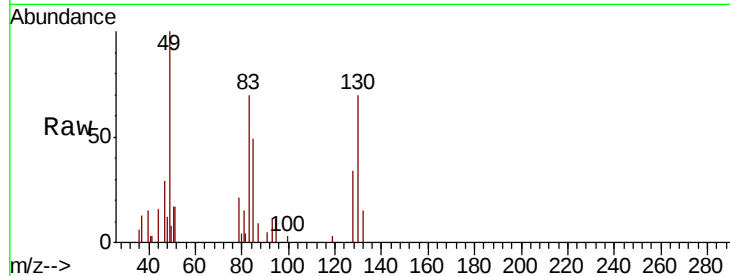




#29  
Chloroform  
Concen: 0.028 ppbv  
RT: 5.84 min Scan# 902  
Delta R.T. -0.01 min  
Lab File: VL033705.D  
Acq: 17 May 2019 5:13

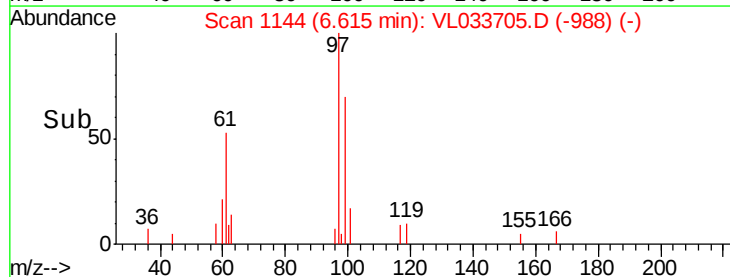
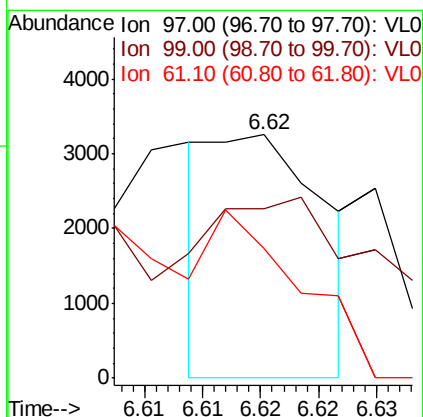
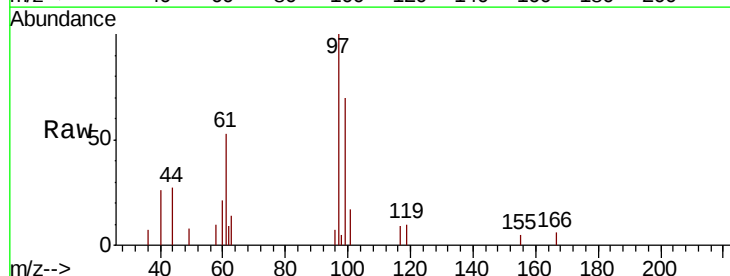
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

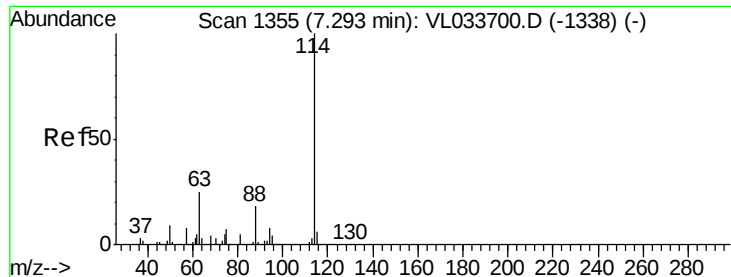
Tgt Ion: 83 Resp: 5705  
Ion Ratio Lower Upper  
83 100  
85 61.2 51.5 77.3



#32  
1,1,1-Trichloroethane  
Concen: 0.010 ppbv  
RT: 6.62 min Scan# 1144  
Delta R.T. 0.00 min  
Lab File: VL033705.D  
Acq: 17 May 2019 5:13

Tgt Ion: 97 Resp: 2169  
Ion Ratio Lower Upper  
97 100  
99 196.3 51.5 77.3#  
61 139.0 37.8 56.8#

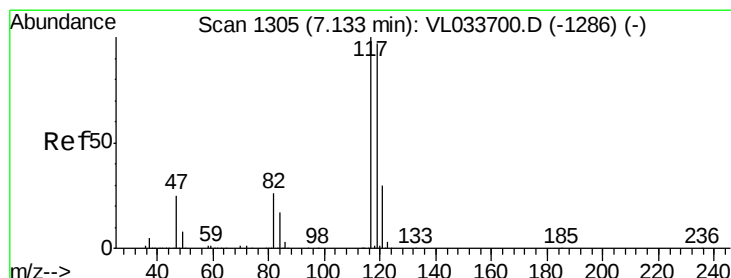
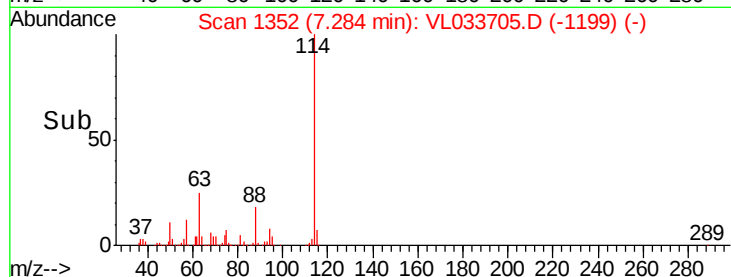
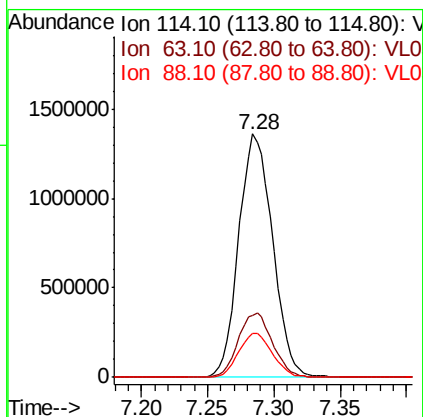
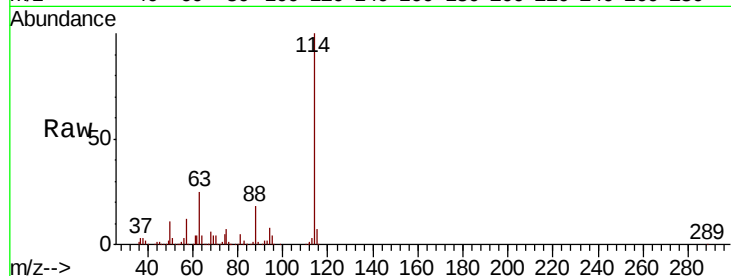




#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.28 min Scan# 1352  
 Delta R.T. -0.01 min  
 Lab File: VL033705.D  
 Acq: 17 May 2019 5:13

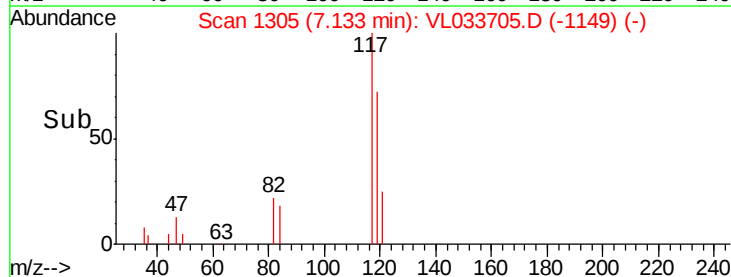
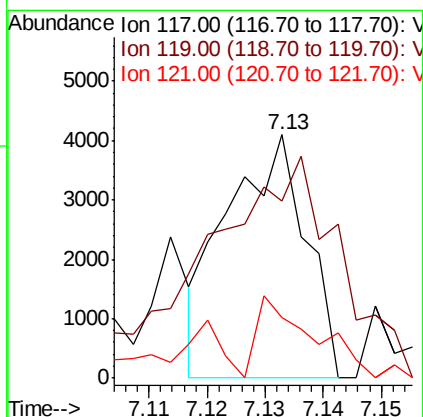
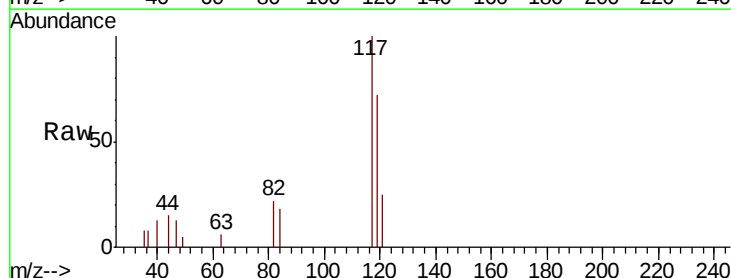
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.03

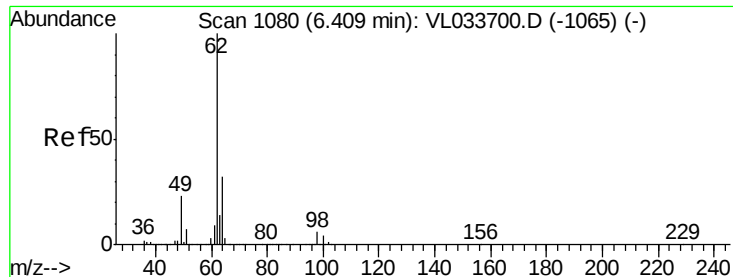
Tgt Ion:114 Resp: 2424714  
 Ion Ratio Lower Upper  
 114 100  
 63 26.7 20.9 31.3  
 88 18.0 14.3 21.5



#35  
 Carbon Tetrachloride  
 Concen: 0.019 ppbv  
 RT: 7.13 min Scan# 1305  
 Delta R.T. 0.00 min  
 Lab File: VL033705.D  
 Acq: 17 May 2019 5:13

Tgt Ion:117 Resp: 3875  
 Ion Ratio Lower Upper  
 117 100  
 119 29.7 77.2 115.8#  
 121 11.0 24.1 36.1#





#37

1,2-Dichloroethane

Concen: 0.028 ppbv

RT: 6.41 min Scan# 1079

Delta R.T. -0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

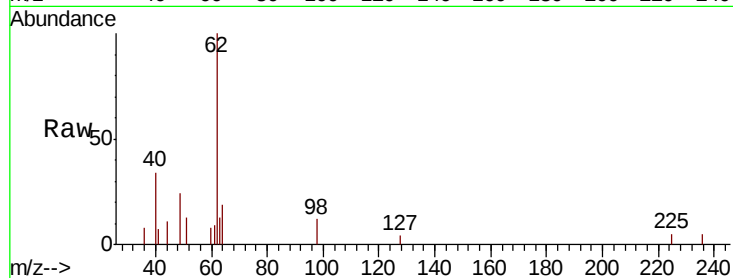
VSTDIC0.03

Tgt Ion: 62 Resp: 4300

Ion Ratio Lower Upper

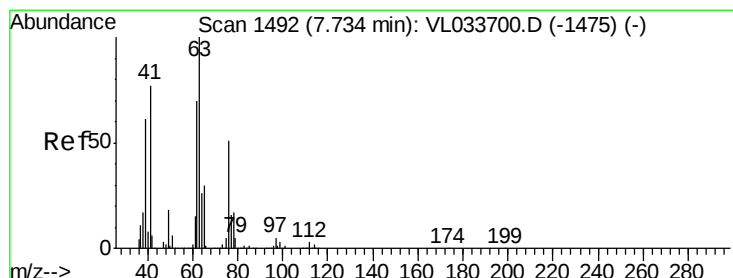
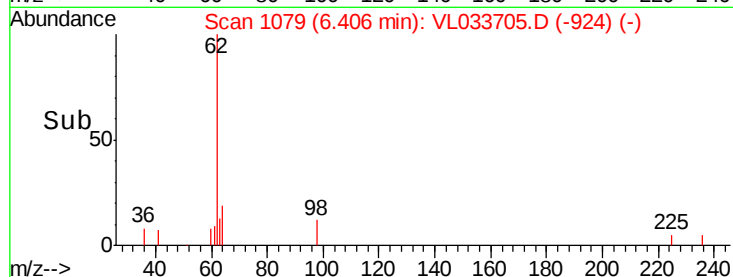
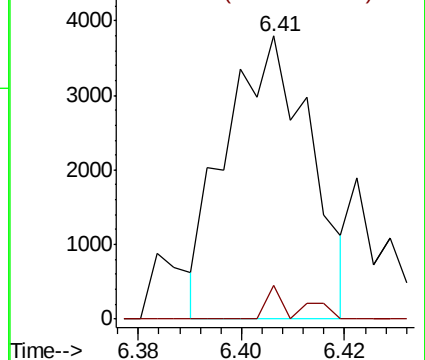
62 100

98 4.0 4.5 6.7#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#39

1,2-Dichloropropane

Concen: 7.870 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.45 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

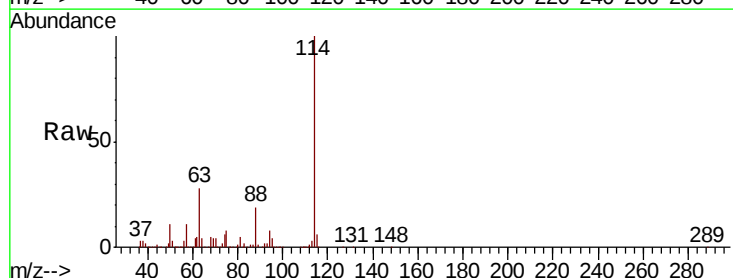
Tgt Ion: 63 Resp: 642673

Ion Ratio Lower Upper

63 100

41 0.0 61.5 92.3#

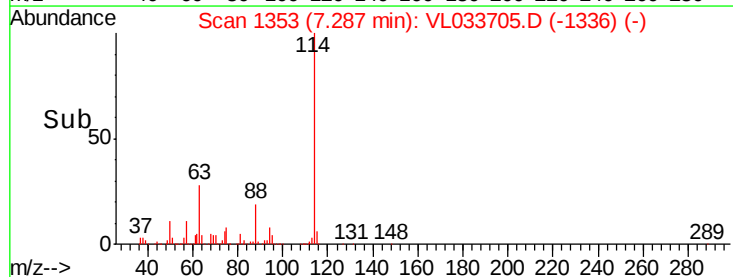
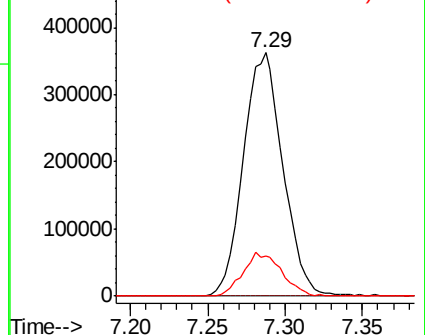
62 16.5 56.2 84.4#

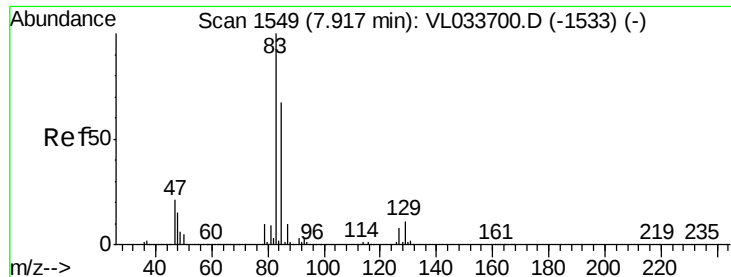


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#42

Bromodichloromethane

Concen: 0.032 ppbv

RT: 7.91 min Scan# 1548

Delta R.T. -0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

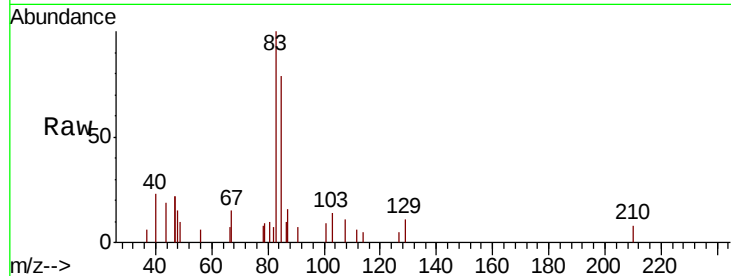
Tgt Ion: 83 Resp: 6277

Ion Ratio Lower Upper

83 100

85 84.3 53.3 79.9#

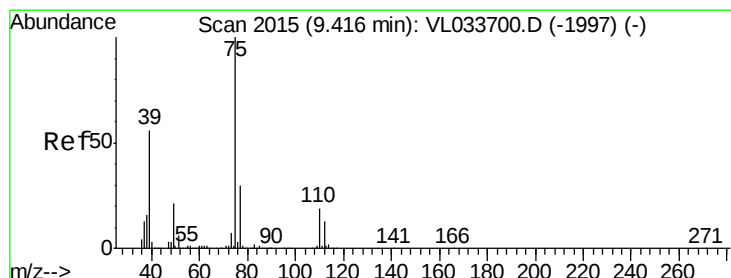
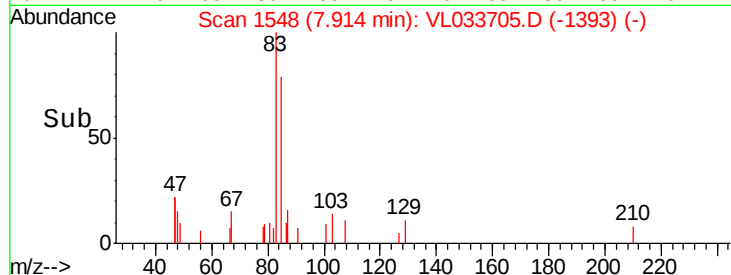
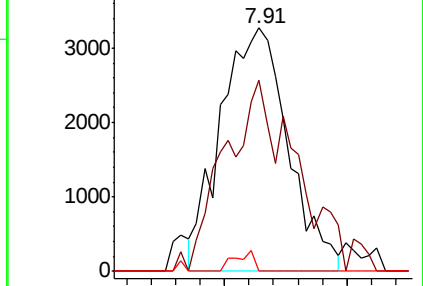
127 0.0 6.5 9.7#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): VL0



#45

t-1,3-Dichloropropene

Concen: 0.011 ppbv

RT: 9.41 min Scan# 2014

Delta R.T. -0.00 min

Lab File: VL033705.D

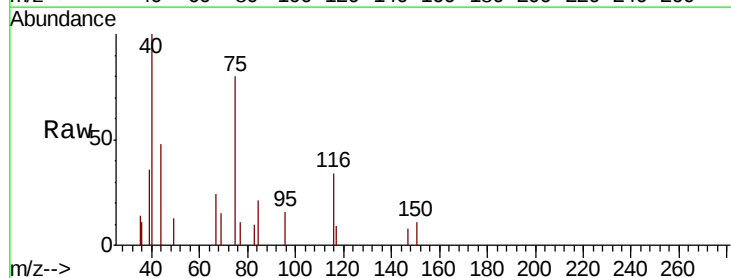
Acq: 17 May 2019 5:13

Tgt Ion: 75 Resp: 1084

Ion Ratio Lower Upper

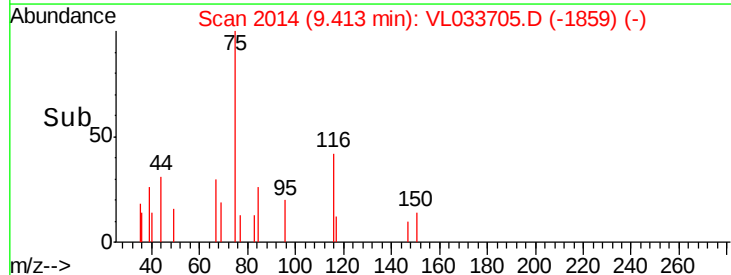
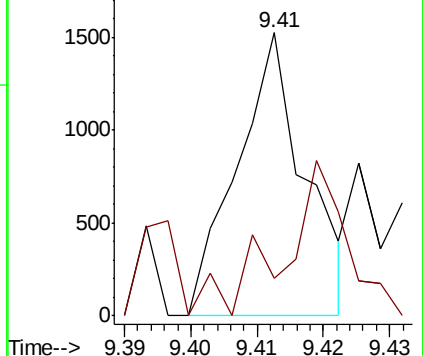
75 100

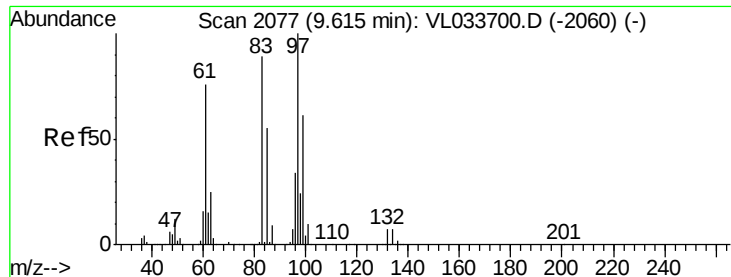
77 13.2 24.4 36.6#



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#47

1,1,2-Trichloroethane

Concen: 0.019 ppbv

RT: 9.61 min Scan# 2075

Delta R.T. -0.01 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

Tgt Ion: 97 Resp: 1784

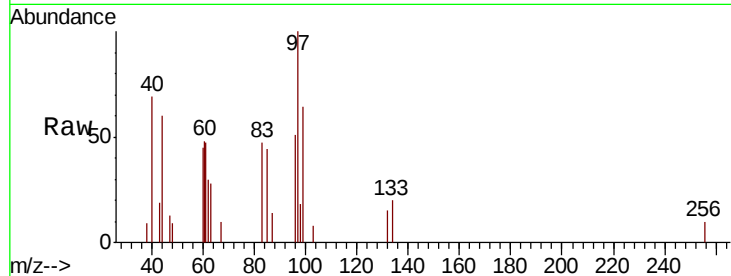
Ion Ratio Lower Upper

97 100

83 46.9 70.8 106.2#

85 43.9 43.7 65.5

99 63.7 48.7 73.1

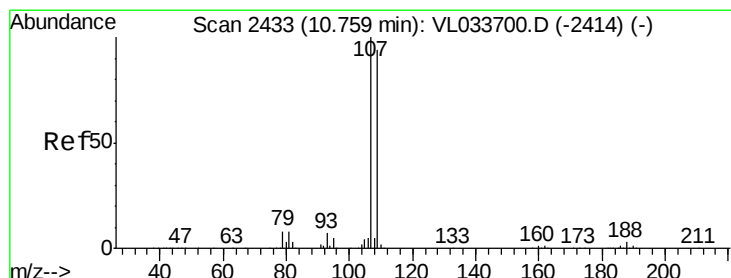
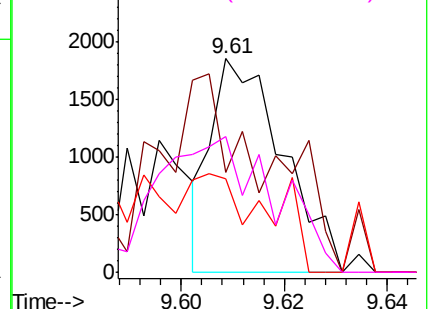
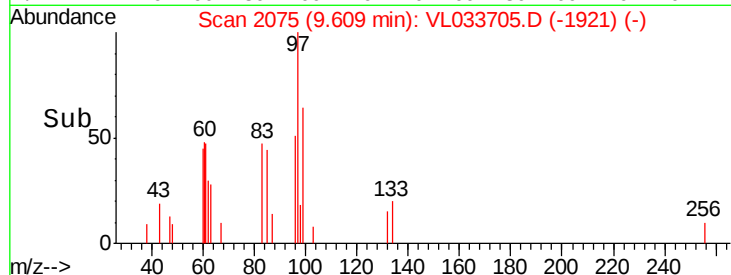


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#54

1,2-Dibromoethane

Concen: 0.015 ppbv

RT: 10.75 min Scan# 2431

Delta R.T. -0.01 min

Lab File: VL033705.D

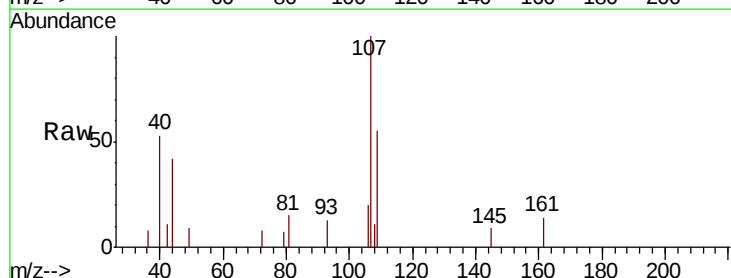
Acq: 17 May 2019 5:13

Tgt Ion: 107 Resp: 2194

Ion Ratio Lower Upper

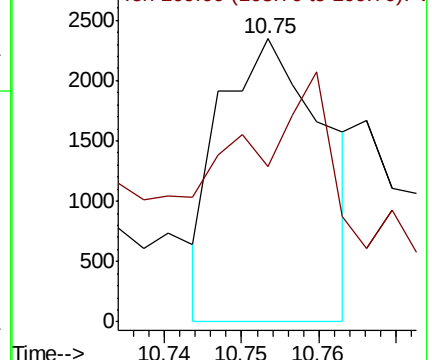
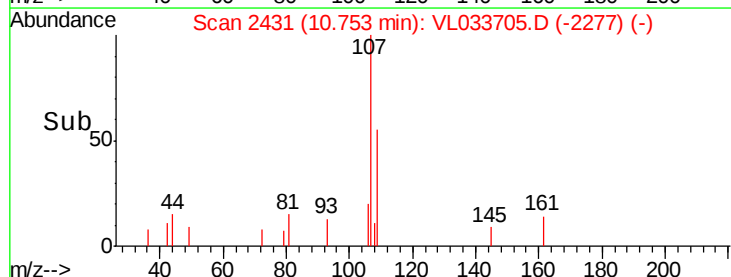
107 100

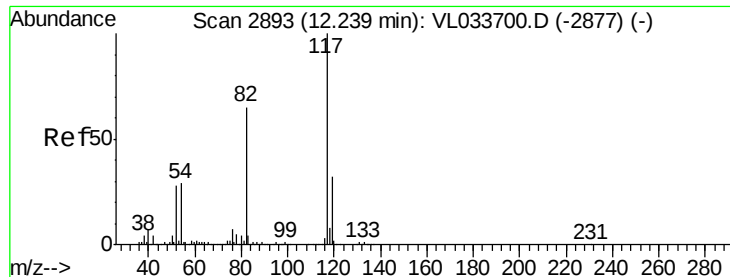
109 28.7 75.2 112.8#



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

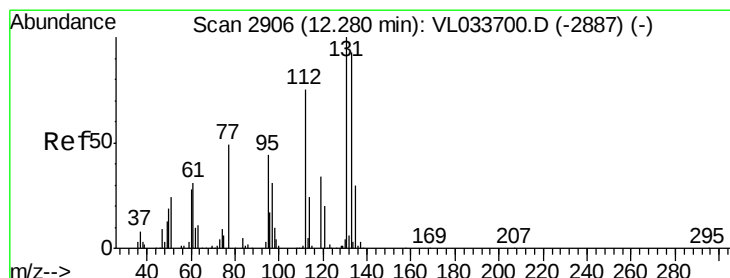
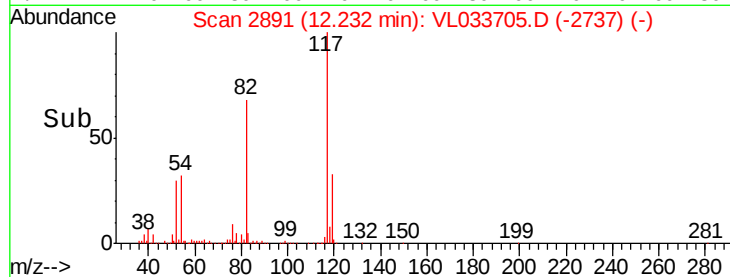
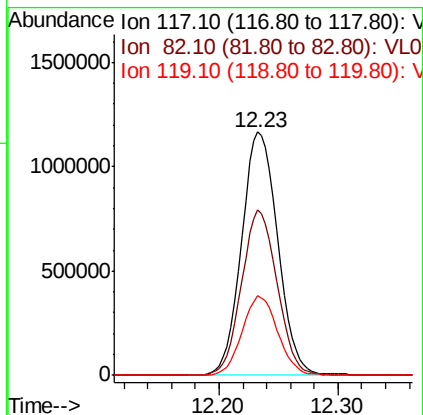
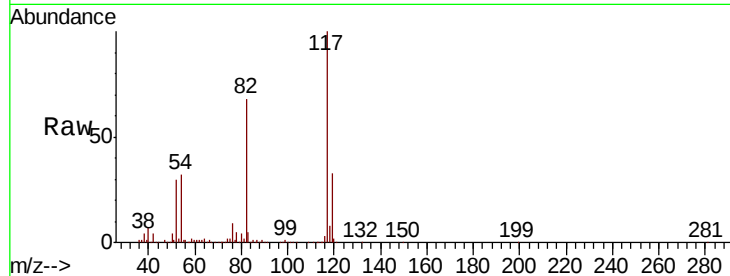




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.23 min Scan# 2891  
Delta R.T. -0.01 min  
Lab File: VL033705.D  
Acq: 17 May 2019 5:13

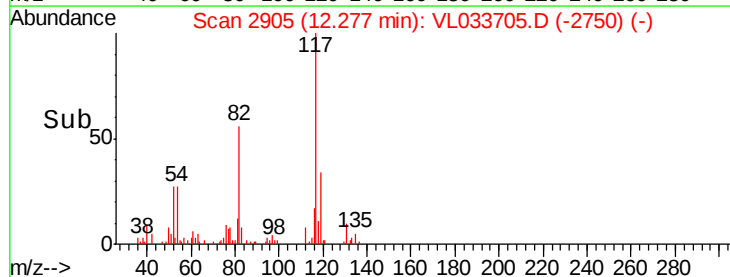
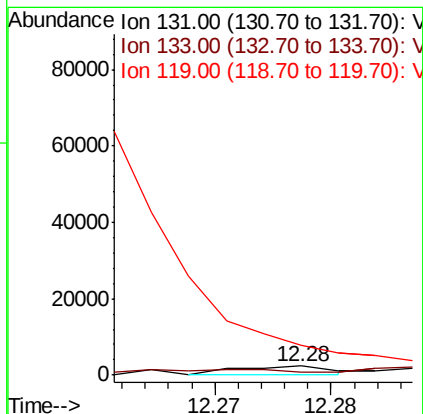
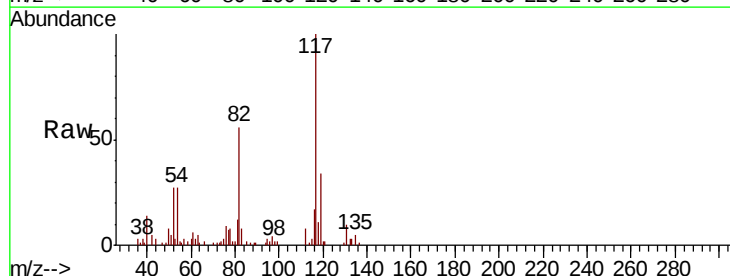
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

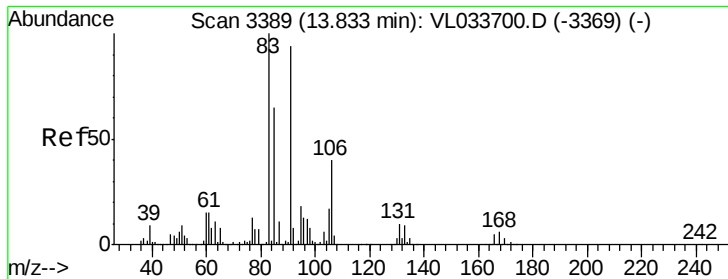
Tgt Ion:117 Resp: 2461561  
Ion Ratio Lower Upper  
117 100  
82 67.3 49.4 74.0  
119 32.2 24.9 37.3



#56  
1,1,1,2-Tetrachloroethane  
Concen: 0.012 ppbv  
RT: 12.28 min Scan# 2905  
Delta R.T. -0.00 min  
Lab File: VL033705.D  
Acq: 17 May 2019 5:13

Tgt Ion:131 Resp: 1317  
Ion Ratio Lower Upper  
131 100  
133 0.0 76.6 114.8#  
119 0.0 49.0 73.4#

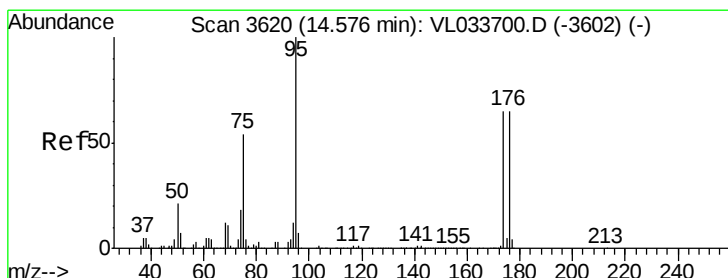
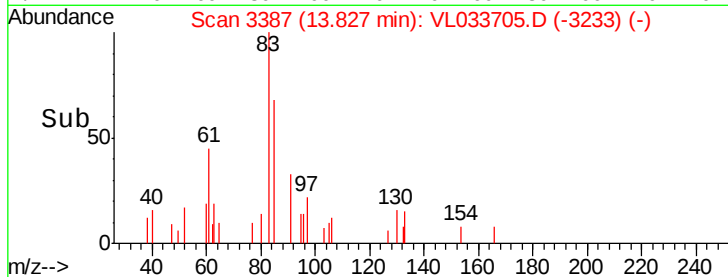
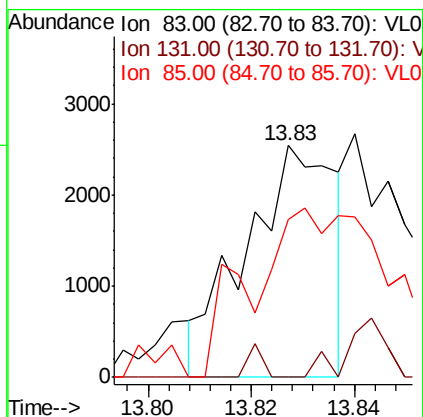
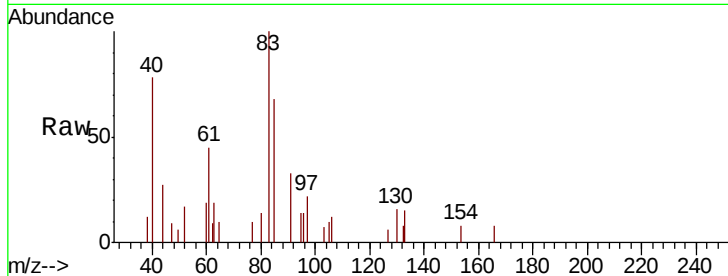




#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 0.015 ppbv  
 RT: 13.83 min Scan# 3387  
 Delta R.T. -0.01 min  
 Lab File: VL033705.D  
 Acq: 17 May 2019 5:13

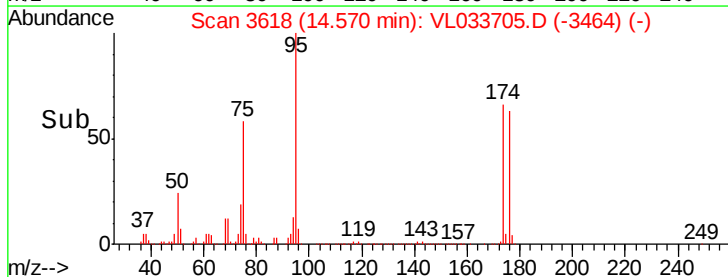
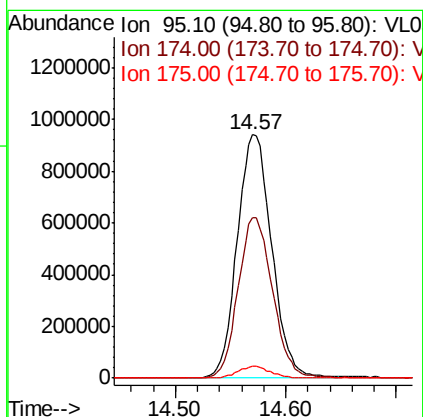
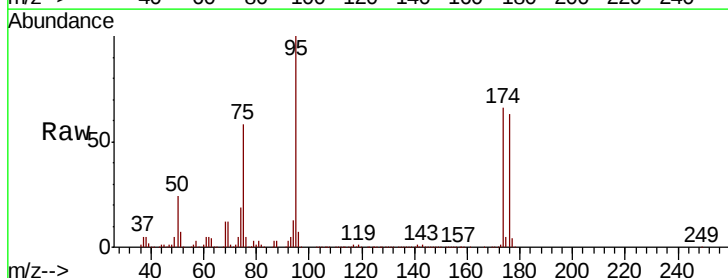
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.03

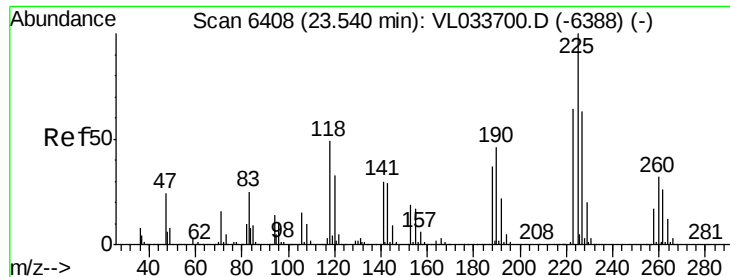
Tgt Ion: 83 Resp: 3056  
 Ion Ratio Lower Upper  
 83 100  
 131 0.0 4.8 14.3#  
 85 141.1 32.3 96.9#



#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.115 ppbv  
 RT: 14.57 min Scan# 3618  
 Delta R.T. -0.01 min  
 Lab File: VL033705.D  
 Acq: 17 May 2019 5:13

Tgt Ion: 95 Resp: 2041078  
 Ion Ratio Lower Upper  
 95 100  
 174 66.2 53.9 80.9  
 175 4.8 3.8 5.8





#78

Hexachloro-1,3-Butadiene

Concen: 0.026 ppbv

RT: 23.54 min Scan# 6408

Delta R.T. 0.00 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

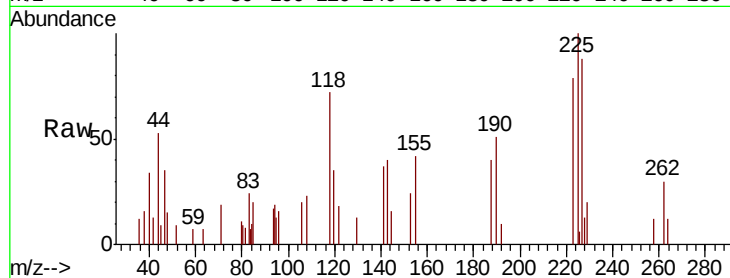
Tgt Ion:225 Resp: 4166

Ion Ratio Lower Upper

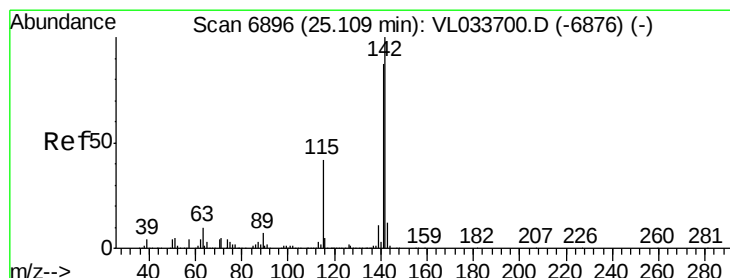
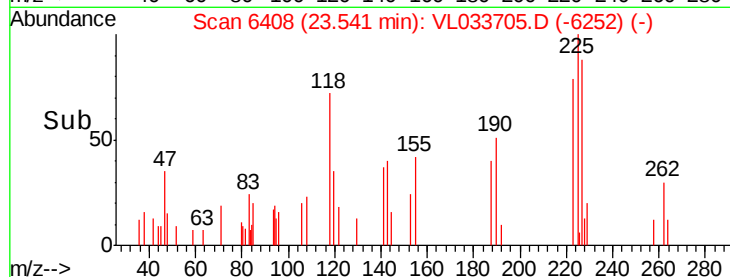
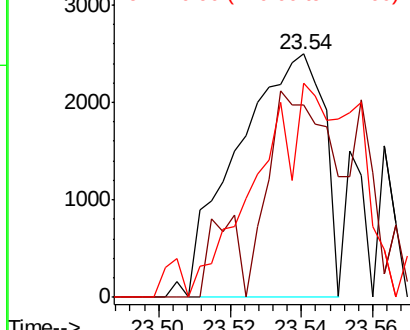
225 100

223 99.3 50.2 75.4#

227 111.7 50.7 76.1#



Abundance Ion 224.90 (224.60 to 225.60): V  
Ion 222.90 (222.60 to 223.60): V  
Ion 226.90 (226.60 to 227.60): V



#80

Naphthalene, 2-methyl-

Concen: 0.010 ppbv

RT: 25.12 min Scan# 6900

Delta R.T. 0.01 min

Lab File: VL033705.D

Acq: 17 May 2019 5:13

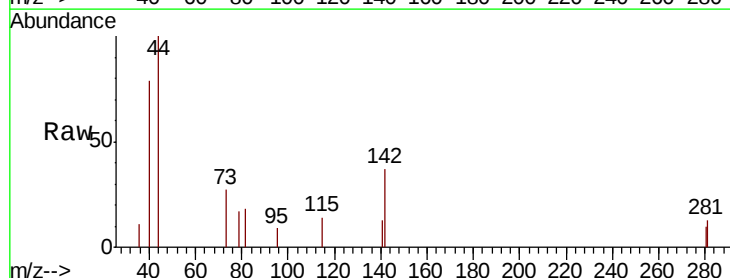
Tgt Ion:142 Resp: 1283

Ion Ratio Lower Upper

142 100

141 51.1 67.2 100.8#

115 13.8 34.1 51.1#



Abundance Ion 142.00 (141.70 to 142.70): V  
Ion 141.00 (140.70 to 141.70): V  
Ion 115.00 (114.70 to 115.70): V

