

Data File : VL033166.D  
Acq On : 5 Feb 2019 3:54  
Operator : SY/AP  
Sample : K1245-01  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
S-01

Quant Time: Feb 05 04:29:46 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL020419AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Feb 04 14:41:39 2019  
QLast Update : Mon Feb 04 14:41:39 2019  
Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 1222560  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 4001672  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 3876552  | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 3003194  | 10.40    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 104.00% |

#### Target Compounds

|                                |       |     |         |        |        | Qvalue |
|--------------------------------|-------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.08  | 85  | 119175  | 0.662  | ppbv   | 91     |
| 3) Chlorodifluoromethane       | 2.99  | 51  | 150759  | 1.107  | ppbv # | 74     |
| 4) Chloromethane               | 3.17  | 50  | 47084   | 0.614  | ppbv # | 88     |
| 7) Chloroethane                | 3.61  | 64  | 1201    | 0.047  | ppbv # | 43     |
| 8) Dichlorotetrafluoroethane   | 3.23  | 85  | 8583    | 0.052  | ppbv   | 94     |
| 9) Propene                     | 3.05  | 41  | 141643  | 2.070  | ppbv # | 71     |
| 10) Heptane                    | 8.25  | 43  | 20030   | 0.094  | ppbv # | 1      |
| 11) Trichlorofluoromethane     | 4.00  | 101 | 45484   | 0.261  | ppbv   | 96     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55  | 101 | 11200   | 0.099  | ppbv   | 95     |
| 13) Ethanol                    | 3.65  | 45  | 2247928 | 83.345 | ppbv   | 99     |
| 15) Acetone                    | 3.90  | 43  | 640824  | 4.403  | ppbv   | 91     |
| 16) 1,3-Butadiene              | 3.35  | 39  | 19905   | 0.337  | ppbv # | 49     |
| 17) tert-Butyl alcohol         | 4.36  | 59  | 2259    | 0.070  | ppbv # | 73     |
| 18) 1,1-Dichloroethene         | 4.35  | 96  | 2082    | 0.040  | ppbv # | 36     |
| 19) Isopropyl Alcohol          | 4.03  | 45  | 205219  | 1.985  | ppbv # | 29     |
| 20) Methylene Chloride         | 4.41  | 84  | 143237  | 2.856  | ppbv   | 96     |
| 23) Vinyl Acetate              | 5.15  | 43  | 56545   | 0.239  | ppbv # | 19     |
| 25) Ethyl Acetate              | 5.78  | 43  | 299929  | 0.997  | ppbv # | 91     |
| 26) Hexane                     | 5.78  | 57  | 255985  | 1.819  | ppbv # | 61     |
| 27) Carbon Disulfide           | 4.62  | 76  | 6768    | 0.056  | ppbv # | 3      |
| 29) Chloroform                 | 5.84  | 83  | 410057  | 1.926  | ppbv   | 98     |
| 30) Cyclohexane                | 7.25  | 84  | 11306   | 0.084  | ppbv # | 1      |
| 31) cis-1,2-Dichloroethene     | 5.64  | 61  | 15777   | 0.118  | ppbv # | 62     |
| 34) 2-Butanone                 | 5.33  | 43  | 111237  | 0.442  | ppbv   | 97     |
| 35) Carbon Tetrachloride       | 7.13  | 117 | 24044   | 0.094  | ppbv   | 93     |
| 36) Benzene                    | 7.00  | 78  | 153865  | 0.380  | ppbv   | 95     |
| 37) 1,2-Dichloroethane         | 6.41  | 62  | 7178    | 0.035  | ppbv # | 91     |
| 38) Trichloroethene            | 7.96  | 130 | 91676   | 0.624  | ppbv   | 93     |
| 39) 1,2-Dichloropropane        | 7.29  | 63  | 1030138 | 6.639  | ppbv # | 26     |
| 41) Tetrahydrofuran            | 6.16  | 42  | 16704   | 0.107  | ppbv   | 98     |
| 42) Bromodichloromethane       | 7.91  | 83  | 18020   | 0.060  | ppbv # | 90     |
| 43) Methyl Methacrylate        | 8.13  | 69  | 4933    | 0.031  | ppbv # | 1      |
| 44) 2,2,4-Trimethylpentane     | 7.98  | 57  | 137225  | 0.202  | ppbv # | 87     |
| 50) 4-Methyl-2-Pentanone       | 8.89  | 43  | 47430   | 0.104  | ppbv   | 99     |
| 52) Tetrachloroethene          | 11.37 | 164 | 379623  | 2.700  | ppbv   | 96     |
| 53) Toluene                    | 9.94  | 91  | 581997  | 1.211  | ppbv   | 98     |
| 58) Ethyl Benzene              | 12.87 | 91  | 89572   | 0.147  | ppbv # | 86     |
| 59) m/p-Xylene                 | 13.12 | 91  | 176433  | 0.353  | ppbv # | 85     |
| 60) o-Xylene                   | 13.84 | 91  | 93357   | 0.203  | ppbv   | 100    |
| 61) Styrene                    | 13.69 | 104 | 33706   | 0.091  | ppbv   | 96     |
| 62) Isopropylbenzene           | 14.82 | 105 | 28801   | 0.044  | ppbv # | 75     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL020419\  
Quantitation Report (Not Reviewed)

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Feb 04 14:41:39 2019  
QLast Update : Mon Feb 04 14:41:39 2019  
Response via : Initial Calibration

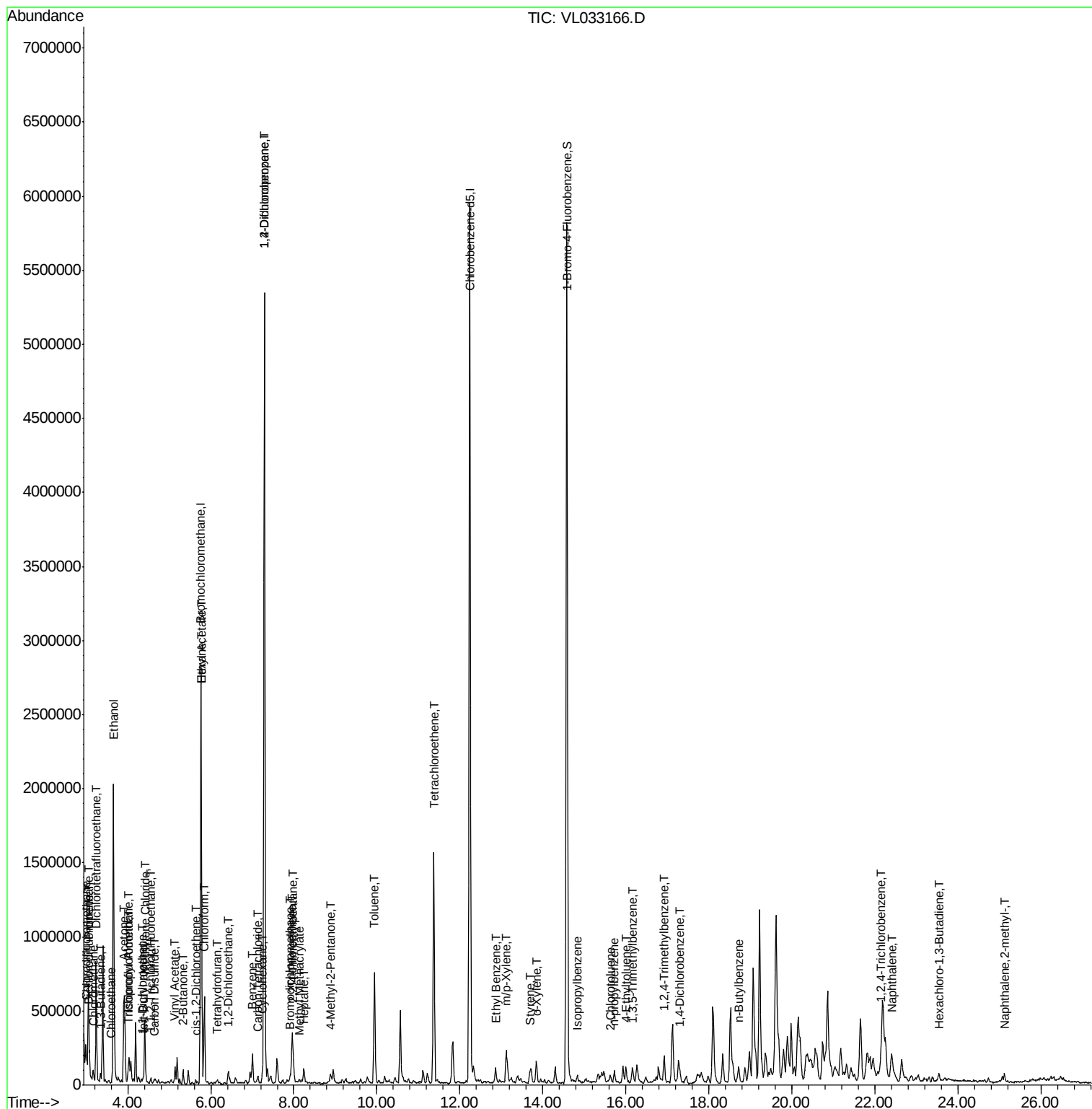
| Internal Standards           | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|------------------------------|-------|------|----------|-------|--------|----------|
| 64) n-propylbenzene          | 15.73 | 120  | 10473    | 0.061 | ppbv # | 1        |
| 70) n-Butylbenzene           | 18.72 | 91   | 23819    | 0.031 | ppbv # | 47       |
| 71) 2-Chlorotoluene          | 15.62 | 91   | 25096    | 0.048 | ppbv   | 94       |
| 72) 4-Ethyltoluene           | 16.00 | 105  | 64328    | 0.117 | ppbv # | 97       |
| 73) 1,3,5-Trimethylbenzene   | 16.15 | 105  | 38882    | 0.073 | ppbv # | 69       |
| 74) 1,2,4-Trimethylbenzene   | 16.93 | 105  | 115963   | 0.214 | ppbv # | 82       |
| 76) 1,4-Dichlorobenzene      | 17.32 | 146  | 10329    | 0.034 | ppbv # | 23       |
| 78) Hexachloro-1,3-Butadiene | 23.54 | 225  | 5611     | 0.038 | ppbv # | 12       |
| 79) Naphthalene              | 22.42 | 128  | 79100    | 0.125 | ppbv # | 96       |
| 80) Naphthalene,2-methyl-    | 25.12 | 142  | 35107    | 0.109 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene   | 22.14 | 180  | 14533    | 0.051 | ppbv # | 22       |

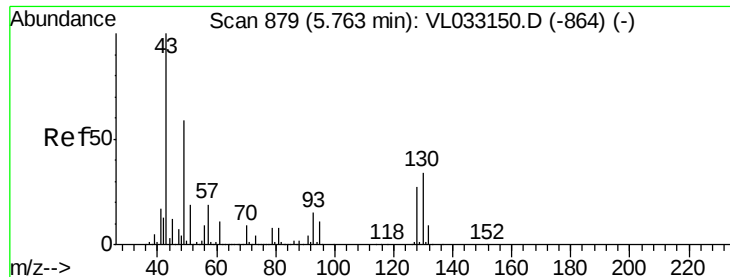
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. 0.00 min

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S-01

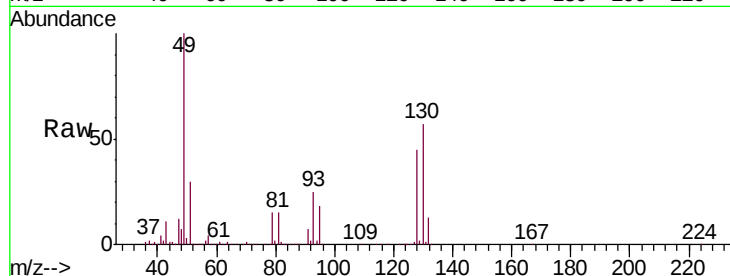
Tgt Ion: 49 Resp: 1222560

Ion Ratio Lower Upper

49 100

128 45.1 23.2 69.5

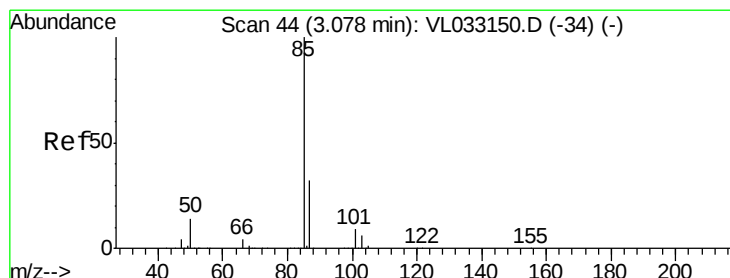
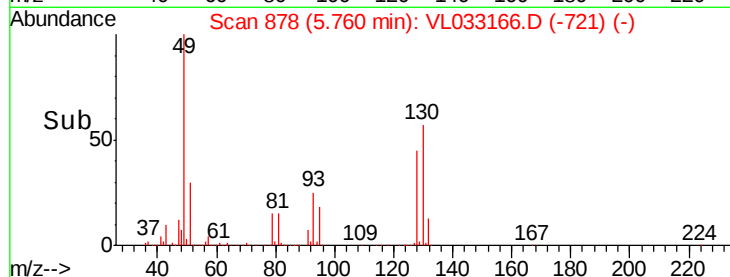
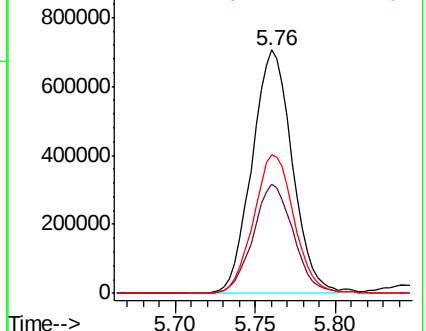
130 58.3 29.5 88.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.662 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033166.D

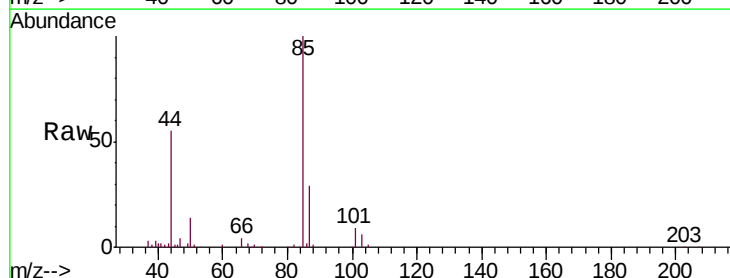
Acq: 5 Feb 2019 3:54

Tgt Ion: 85 Resp: 119175

Ion Ratio Lower Upper

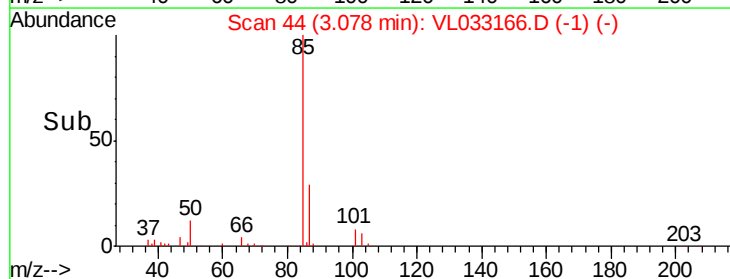
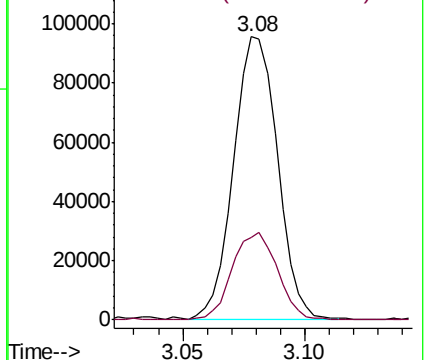
85 100

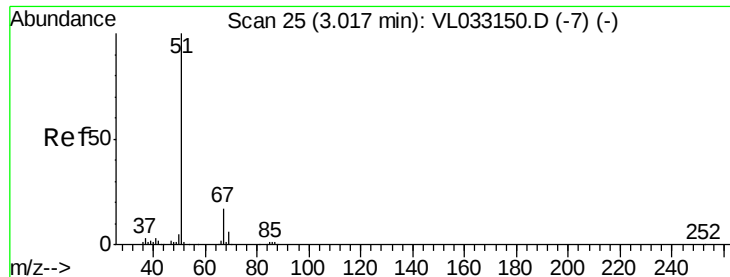
87 29.0 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.107 ppbv

RT: 2.99 min Scan# 17

Delta R.T. -0.02 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

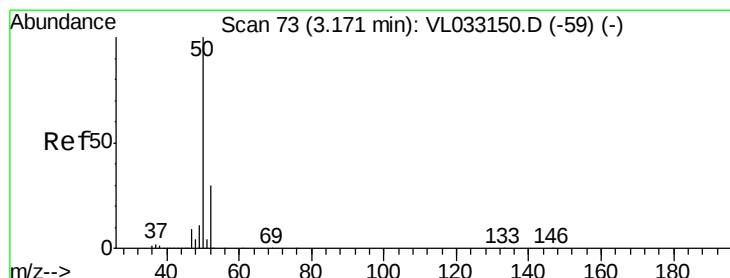
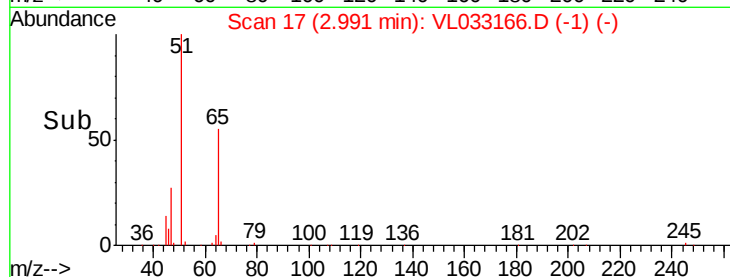
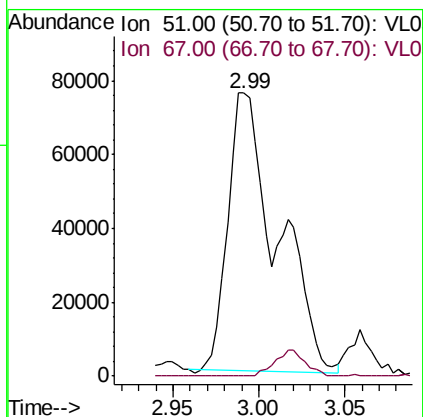
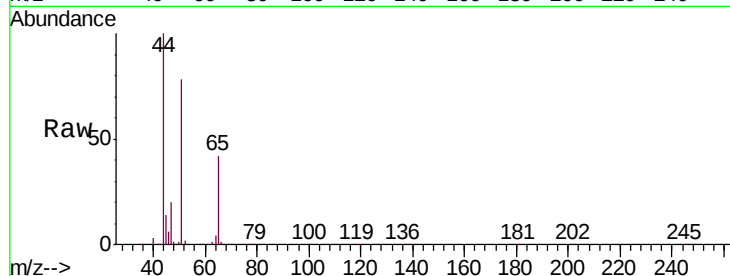
S-01

Tgt Ion: 51 Resp: 150759

Ion Ratio Lower Upper

51 100

67 5.8 13.4 20.2#



#4

Chloromethane

Concen: 0.614 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.01 min

Lab File: VL033166.D

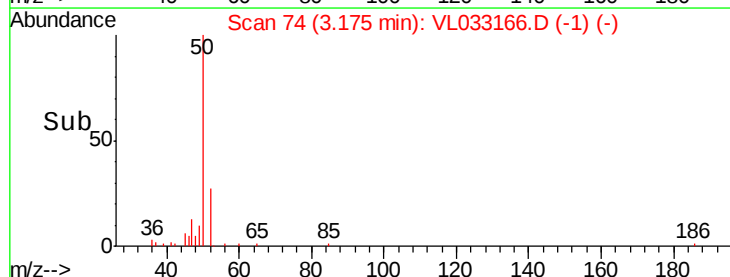
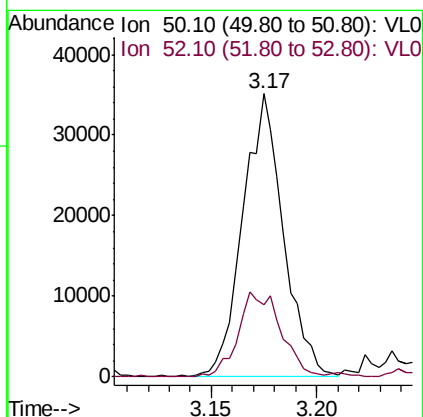
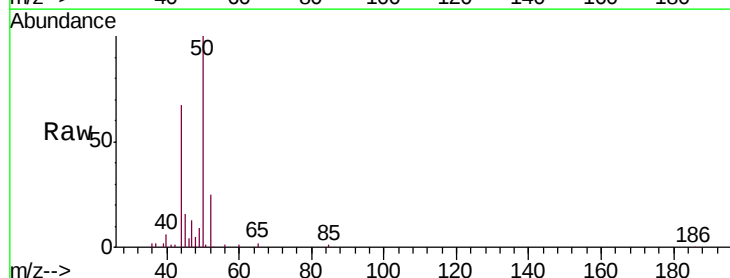
Acq: 5 Feb 2019 3:54

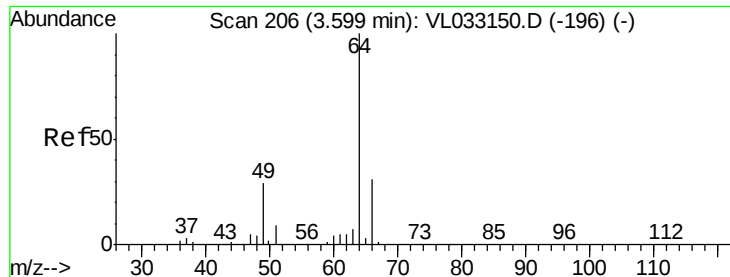
Tgt Ion: 50 Resp: 47084

Ion Ratio Lower Upper

50 100

52 25.4 25.7 38.5#





#7

Chloroethane

Concen: 0.047 ppbv

RT: 3.61 min Scan# 208

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampled :

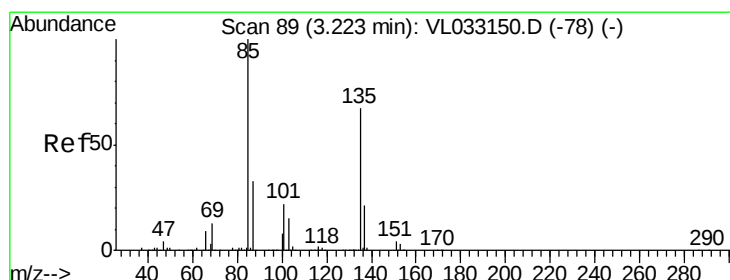
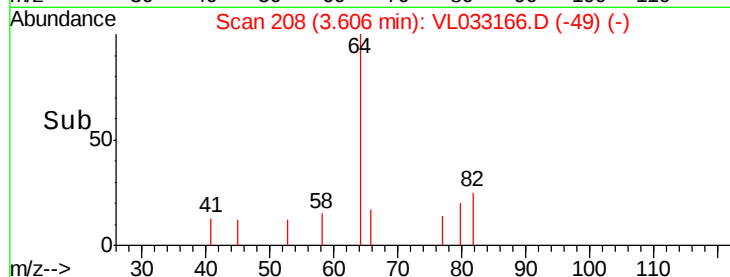
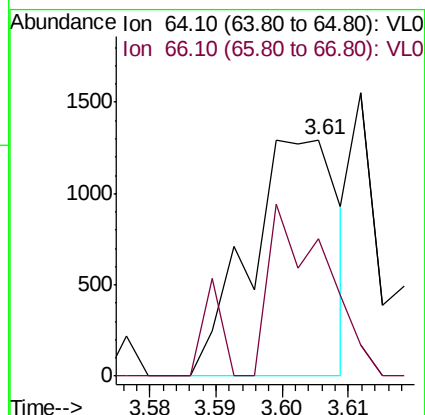
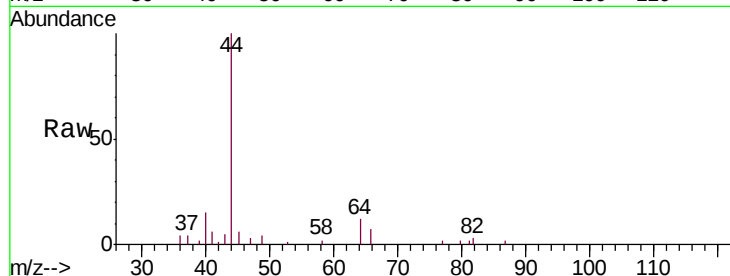
S-01

Tgt Ion: 64 Resp: 1201

Ion Ratio Lower Upper

64 100

66 58.0 22.3 33.5#



#8

Dichlorotetrafluoroethane

Concen: 0.052 ppbv

RT: 3.23 min Scan# 90

Delta R.T. 0.01 min

Lab File: VL033166.D

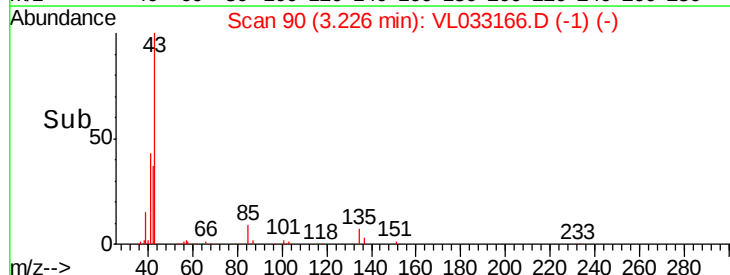
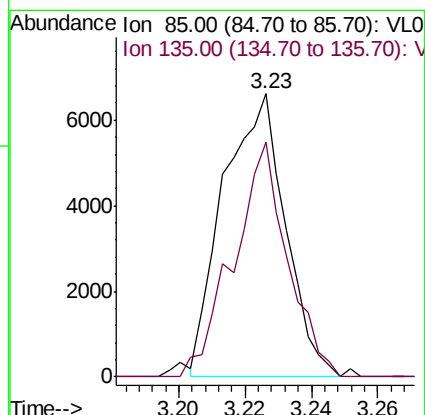
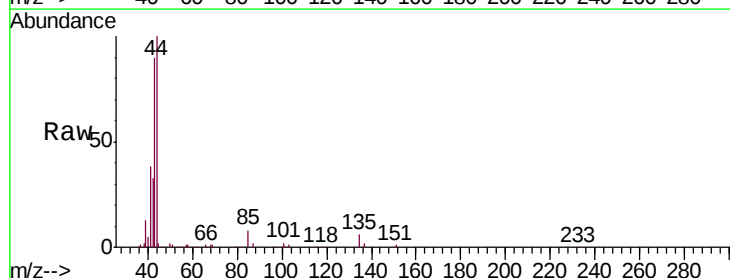
Acq: 5 Feb 2019 3:54

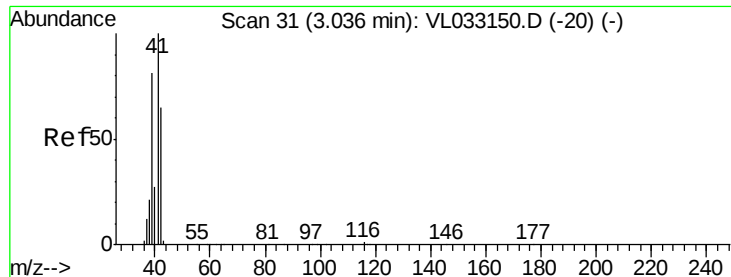
Tgt Ion: 85 Resp: 8583

Ion Ratio Lower Upper

85 100

135 72.1 54.0 81.0





#9

Propene

Concen: 2.070 ppbv

RT: 3.05 min Scan# 36

Delta R.T. 0.02 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampled :

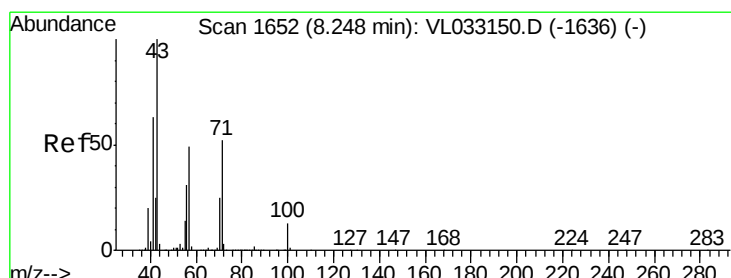
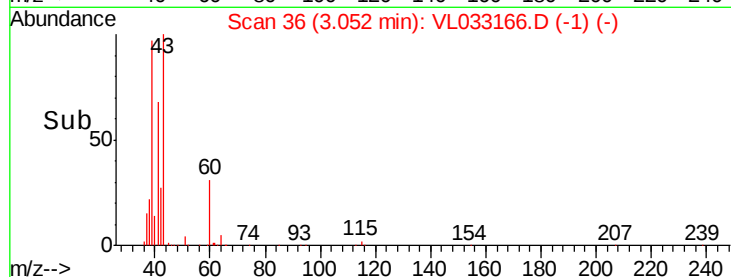
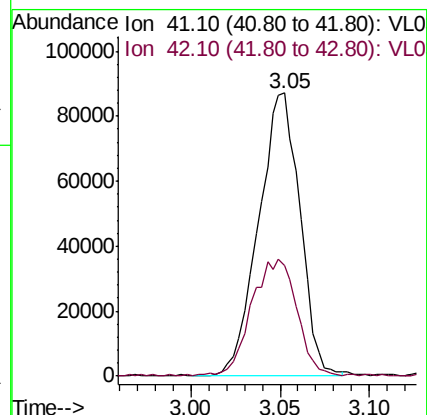
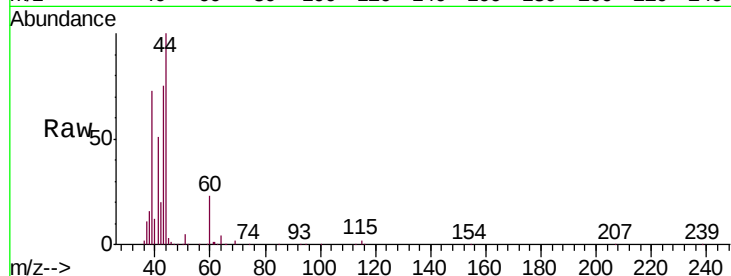
S-01

Tgt Ion: 41 Resp: 141643

Ion Ratio Lower Upper

41 100

42 44.9 55.1 82.7#



#10

Heptane

Concen: 0.094 ppbv

RT: 8.25 min Scan# 1653

Delta R.T. 0.01 min

Lab File: VL033166.D

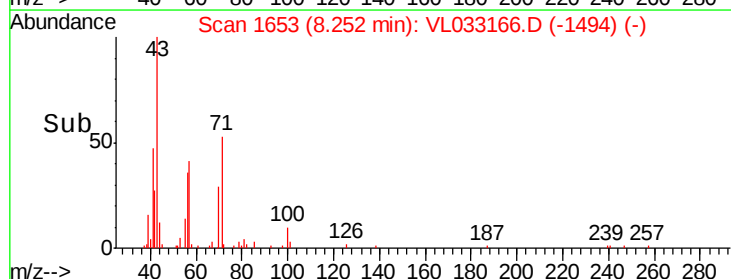
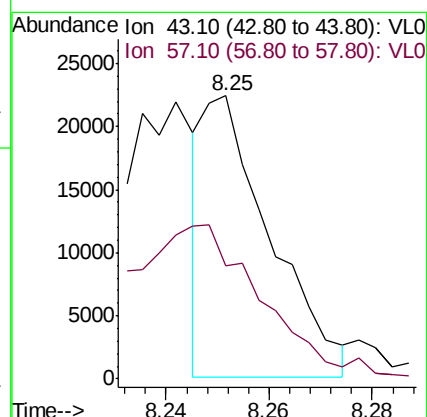
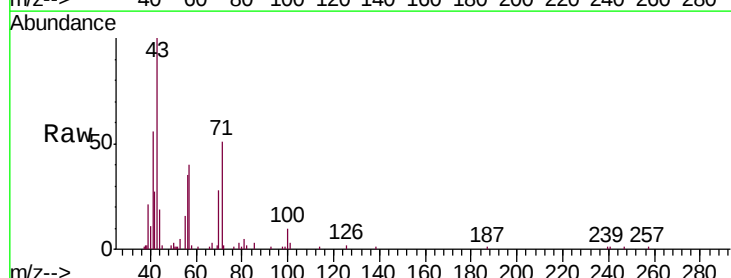
Acq: 5 Feb 2019 3:54

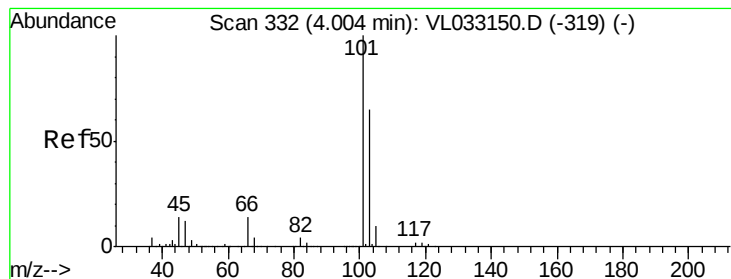
Tgt Ion: 43 Resp: 20030

Ion Ratio Lower Upper

43 100

57 121.7 39.3 58.9#





#11

Trichlorofluoromethane

Concen: 0.261 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

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ClientSampleId :

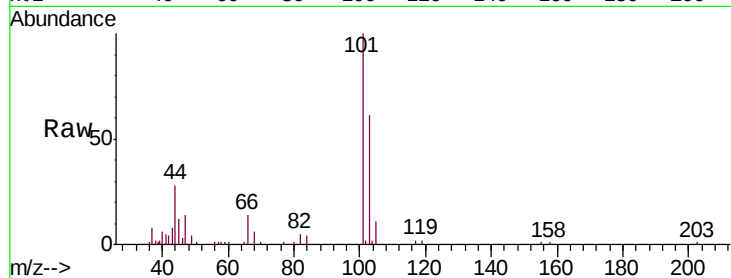
S-01

Tgt Ion:101 Resp: 45484

Ion Ratio Lower Upper

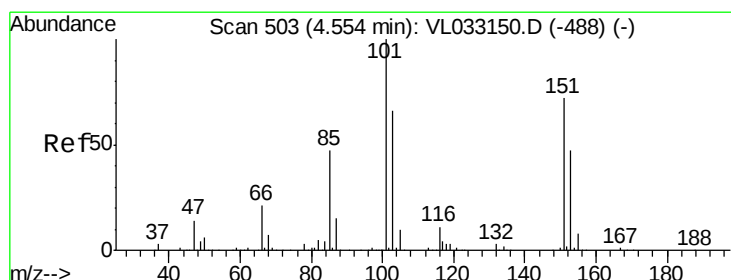
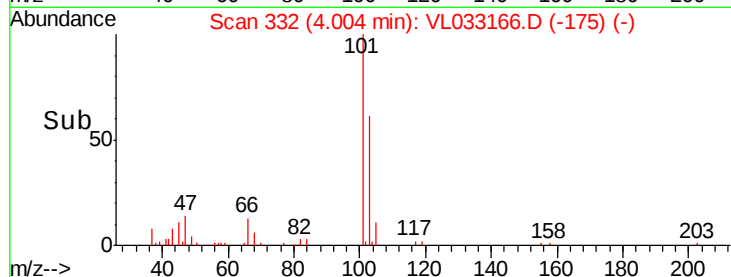
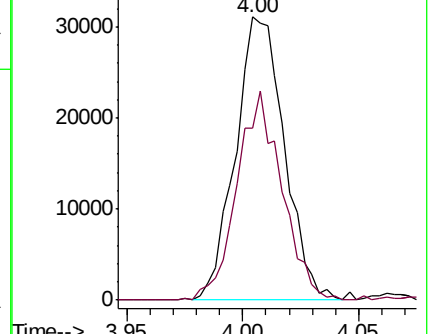
101 100

103 60.6 51.3 76.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.099 ppbv

RT: 4.55 min Scan# 502

Delta R.T. 0.00 min

Lab File: VL033166.D

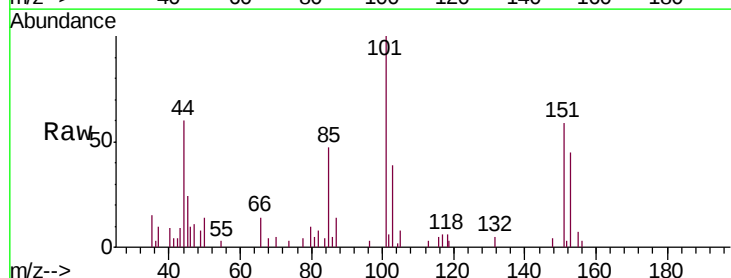
Acq: 5 Feb 2019 3:54

Tgt Ion:101 Resp: 11200

Ion Ratio Lower Upper

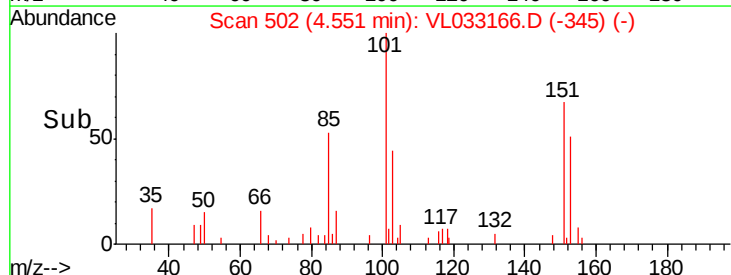
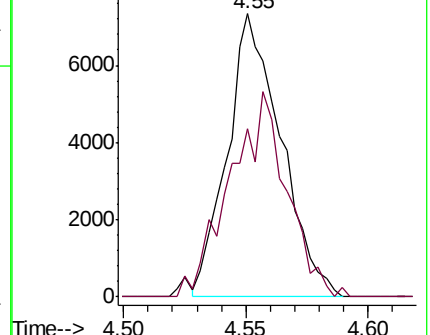
101 100

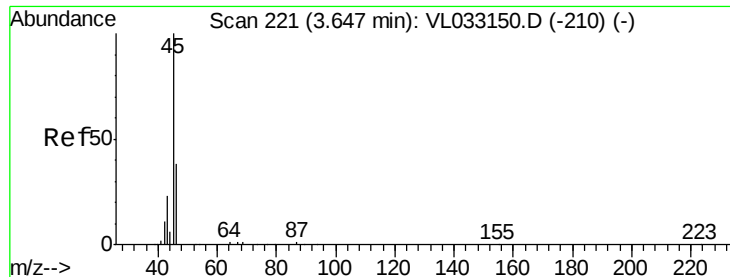
151 76.2 57.9 86.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 83.345 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.01 min

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Acq: 5 Feb 2019 3:54

Instrument :

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ClientSampleId :

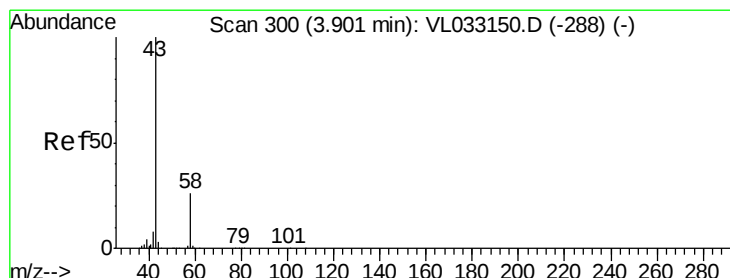
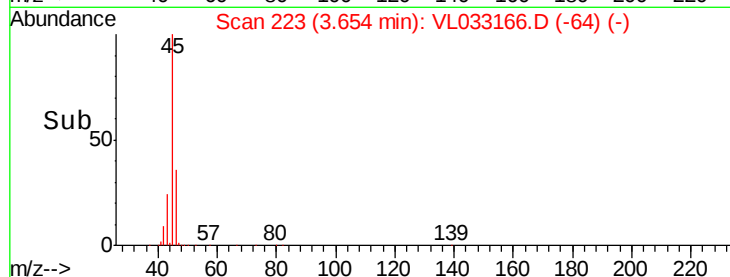
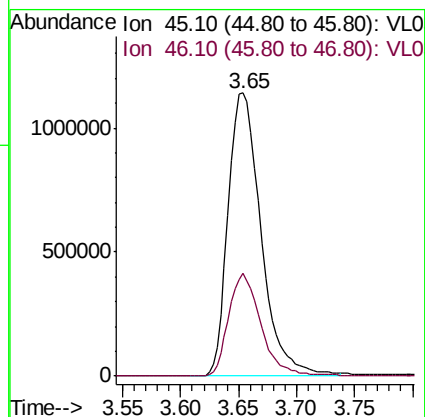
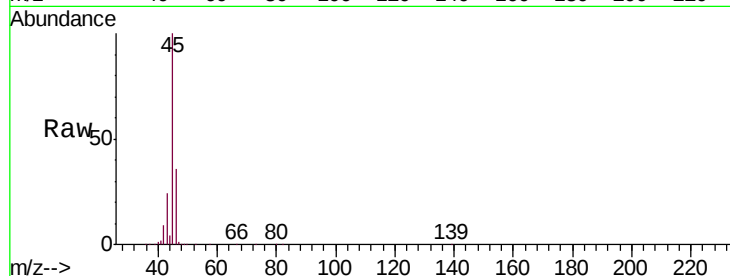
S-01

Tgt Ion: 45 Resp: 2247928

Ion Ratio Lower Upper

45 100

46 35.8 14.0 56.2



#15

Acetone

Concen: 4.403 ppbv

RT: 3.90 min Scan# 301

Delta R.T. 0.01 min

Lab File: VL033166.D

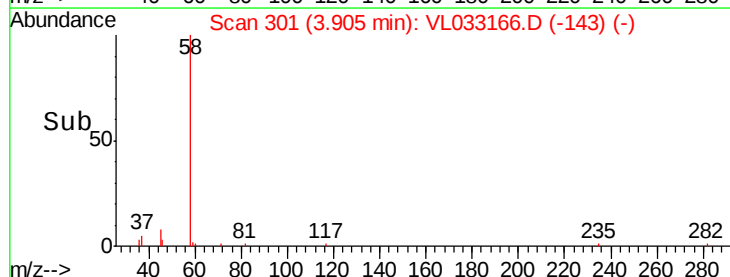
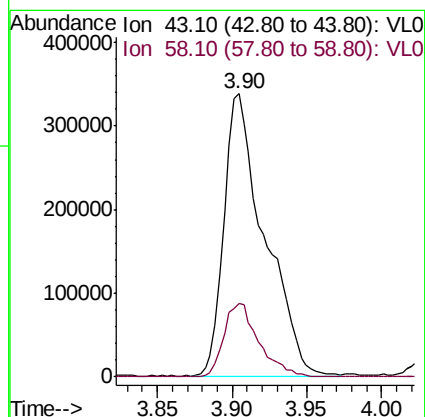
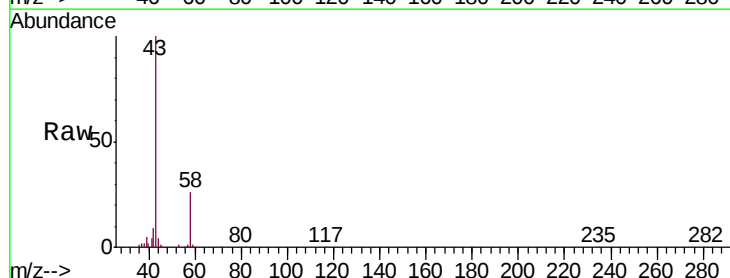
Acq: 5 Feb 2019 3:54

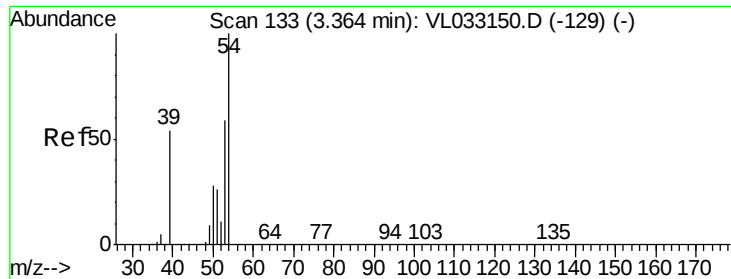
Tgt Ion: 43 Resp: 640824

Ion Ratio Lower Upper

43 100

58 22.6 21.8 32.6

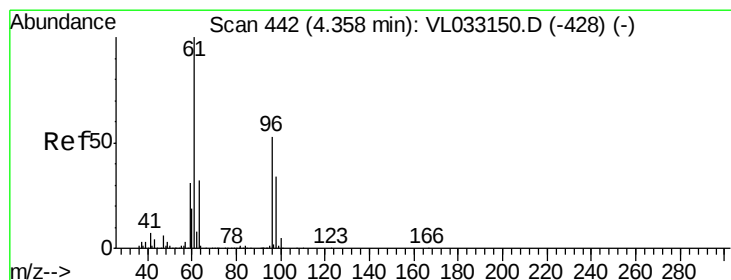
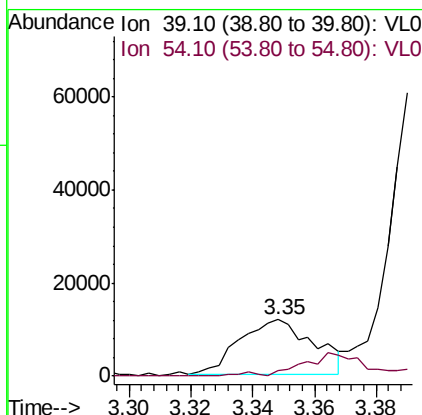
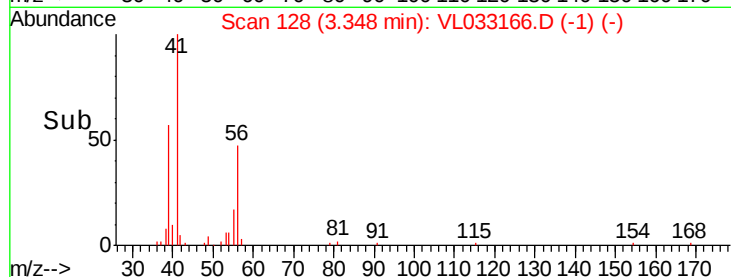
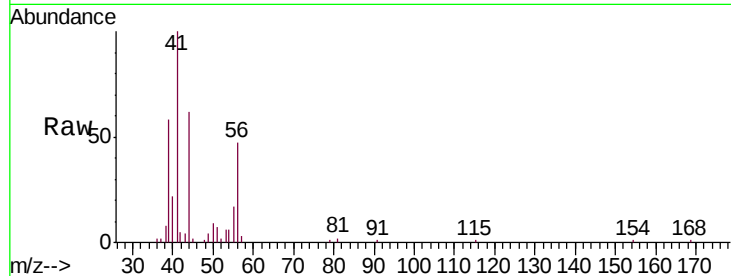




#16  
1,3-Butadiene  
Concen: 0.337 ppbv  
RT: 3.35 min Scan# 128  
Delta R.T. -0.01 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

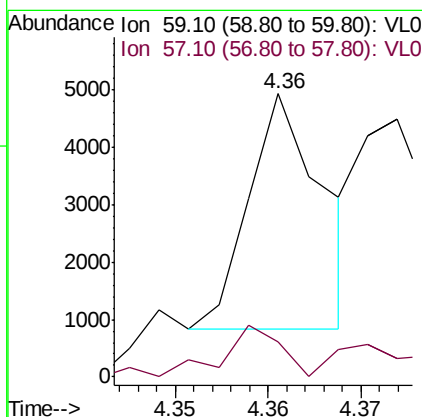
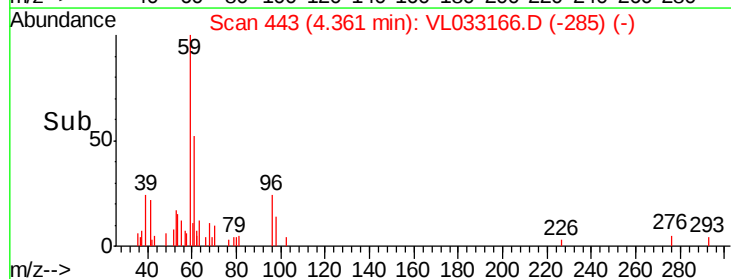
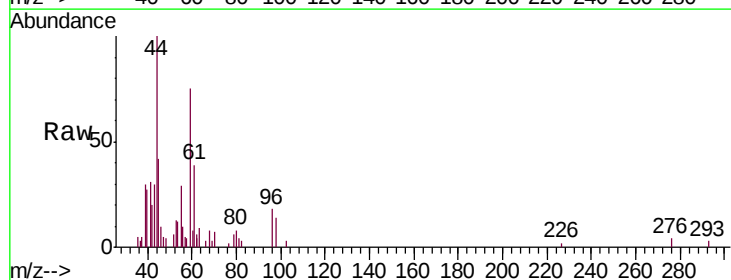
Instrument :  
MSVOA\_L  
ClientSampleId :  
S-01

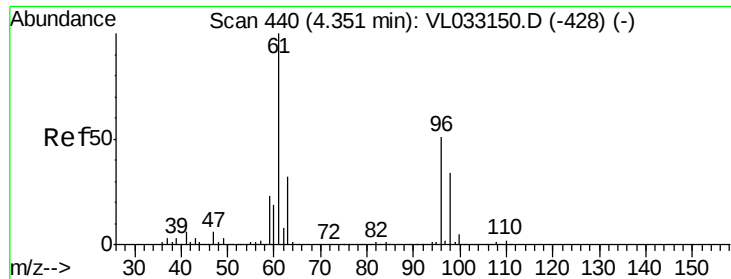
Tgt Ion: 39 Resp: 19905  
Ion Ratio Lower Upper  
39 100  
54 44.7 75.0 112.6#



#17  
tert-Butyl alcohol  
Concen: 0.070 ppbv  
RT: 4.36 min Scan# 443  
Delta R.T. 0.01 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

Tgt Ion: 59 Resp: 2259  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.0 12.0#





#18

1,1-Dichloroethene

Concen: 0.040 ppbv

RT: 4.35 min Scan# 439

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

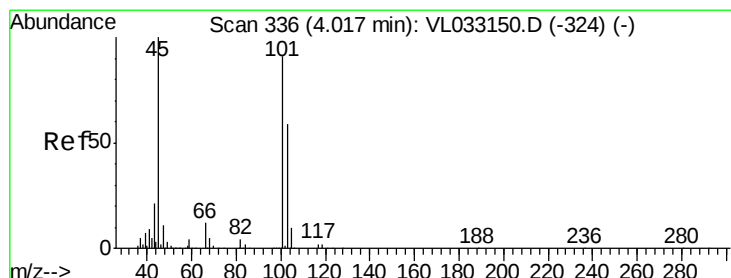
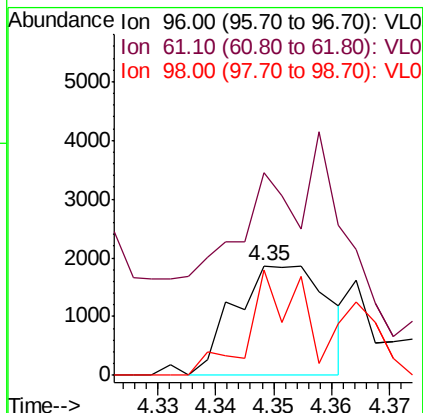
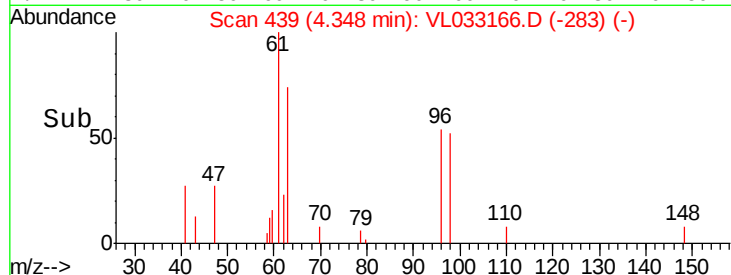
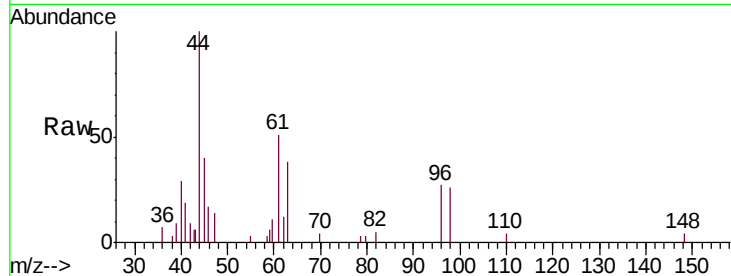
Tgt Ion: 96 Resp: 2082

Ion Ratio Lower Upper

96 100

61 94.1 158.5 237.7#

98 95.7 47.8 71.6#



#19

Isopropyl Alcohol

Concen: 1.985 ppbv

RT: 4.03 min Scan# 341

Delta R.T. 0.02 min

Lab File: VL033166.D

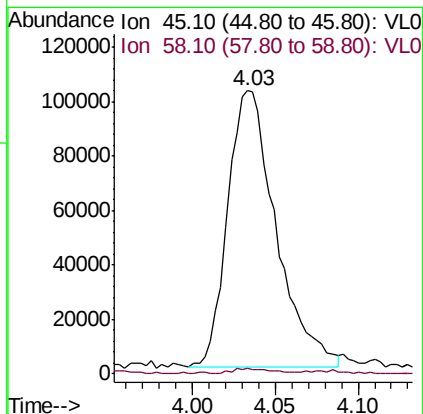
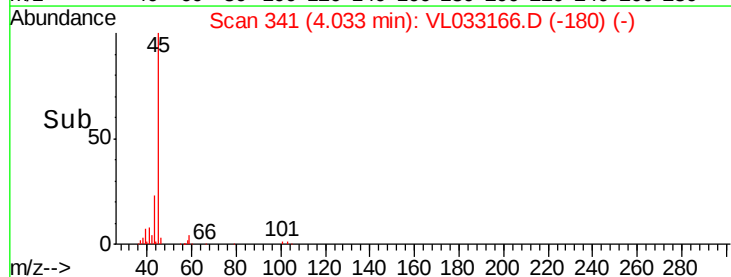
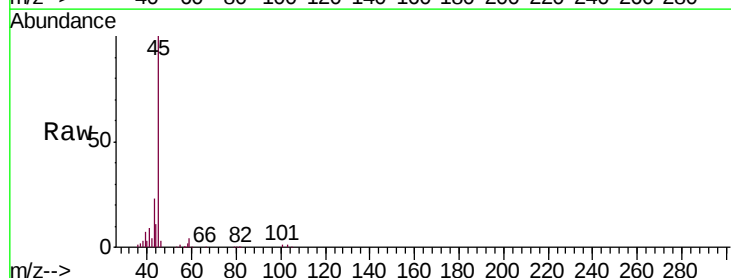
Acq: 5 Feb 2019 3:54

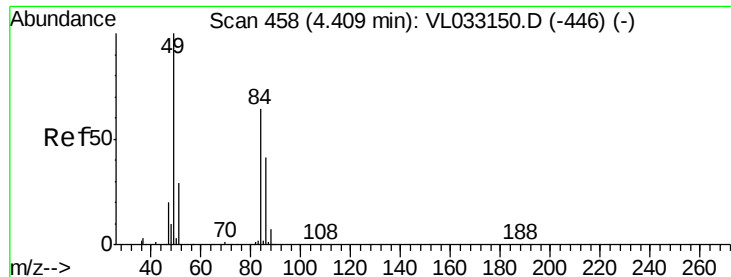
Tgt Ion: 45 Resp: 205219

Ion Ratio Lower Upper

45 100

58 70.7 25.1 37.7#

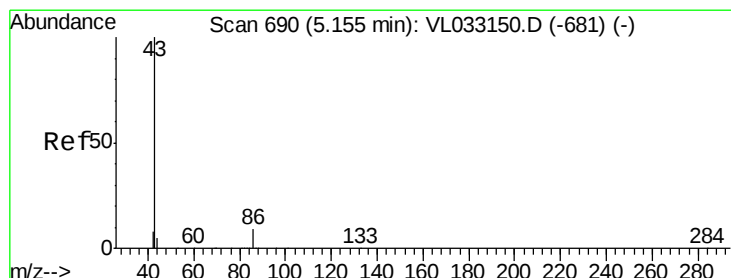
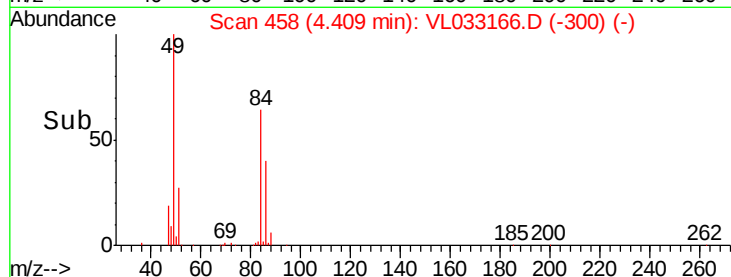
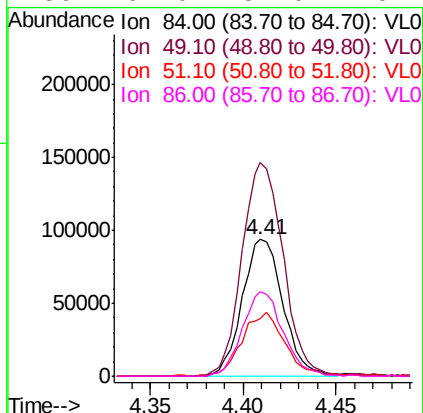
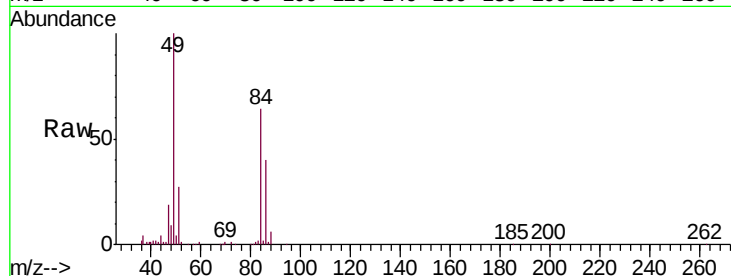




#20  
Methylene Chloride  
Concen: 2.856 ppbv  
RT: 4.41 min Scan# 458  
Delta R.T. 0.01 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

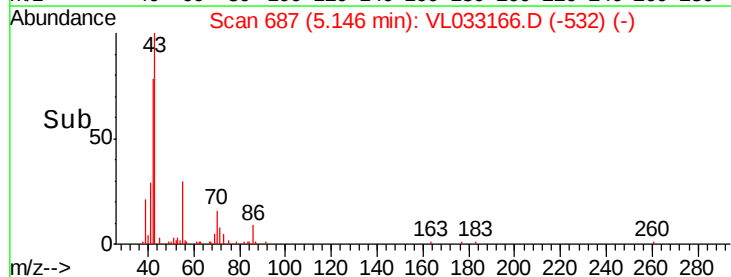
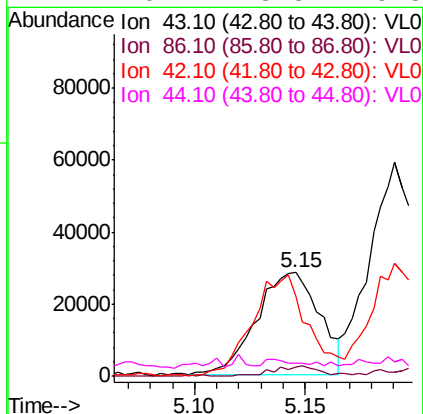
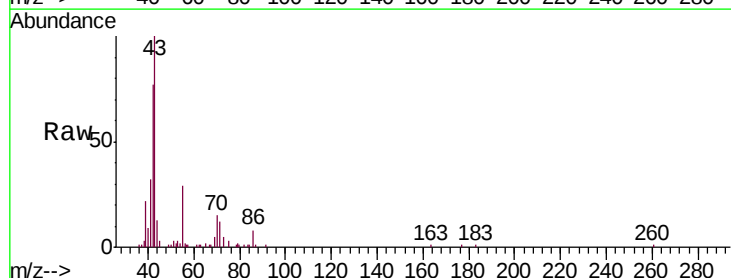
Instrument :  
MSVOA\_L  
ClientSampleId :  
S-01

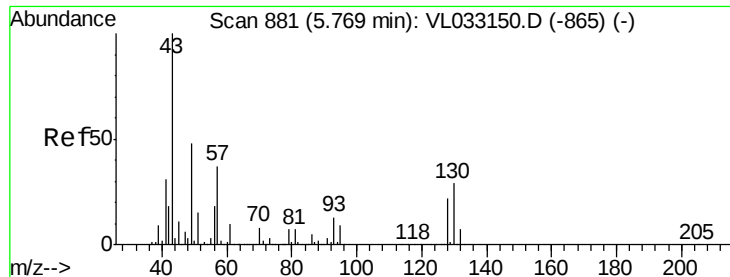
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 84    | Resp: | 143237 |
| Ion      | Ratio | Lower | Upper  |
| 84       | 100   |       |        |
| 49       | 156.4 | 121.1 | 181.7  |
| 51       | 41.7  | 37.5  | 56.3   |
| 86       | 62.0  | 51.0  | 76.4   |



#23  
Vinyl Acetate  
Concen: 0.239 ppbv  
RT: 5.15 min Scan# 687  
Delta R.T. -0.00 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 56545 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 7.4   | 6.2   | 9.4   |
| 42       | 77.0  | 7.7   | 11.5# |
| 44       | 6.2   | 3.8   | 5.8#  |





#25

Ethyl Acetate

Concen: 0.997 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.02 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

Tgt Ion: 43 Resp: 299929

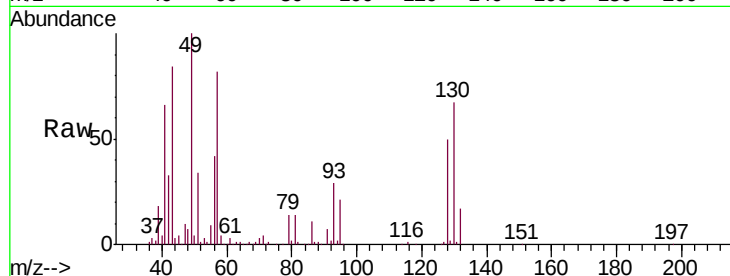
Ion Ratio Lower Upper

43 100

45 6.6 8.0 12.0#

61 5.9 7.4 11.2#

70 4.6 5.9 8.9#

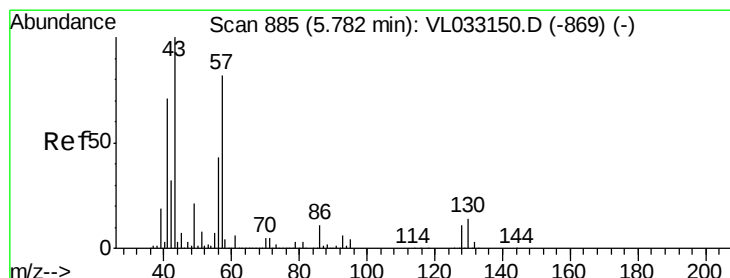
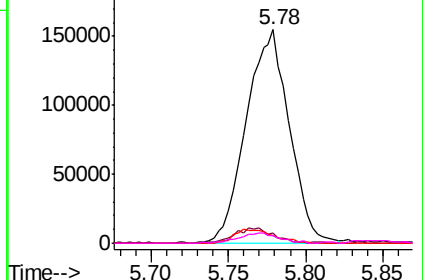
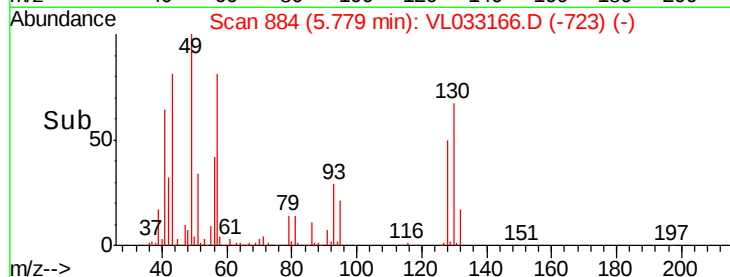


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 1.819 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Tgt Ion: 57 Resp: 255985

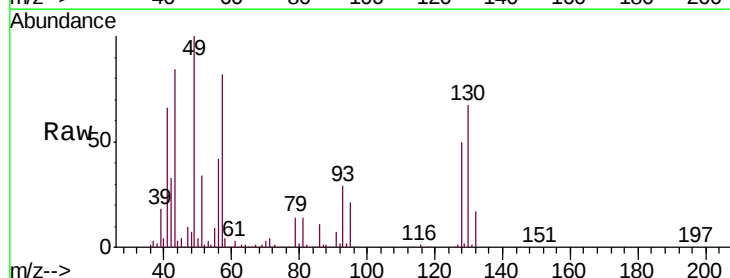
Ion Ratio Lower Upper

57 100

41 86.0 69.5 104.3

43 118.2 175.5 263.3#

56 51.3 41.6 62.4

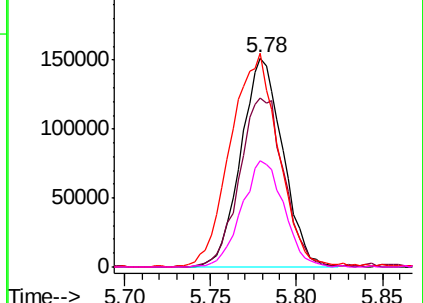
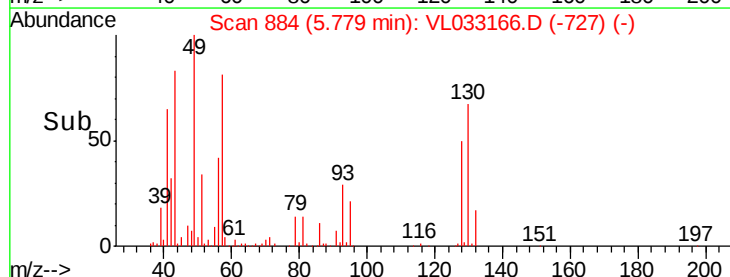


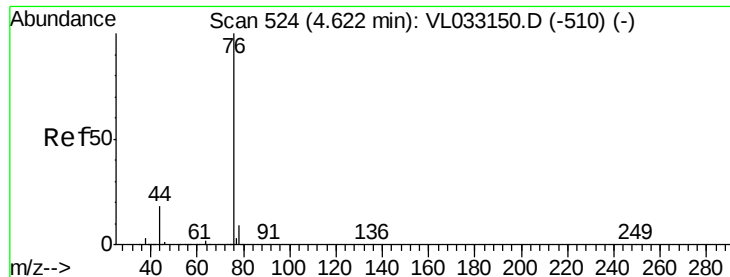
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.056 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

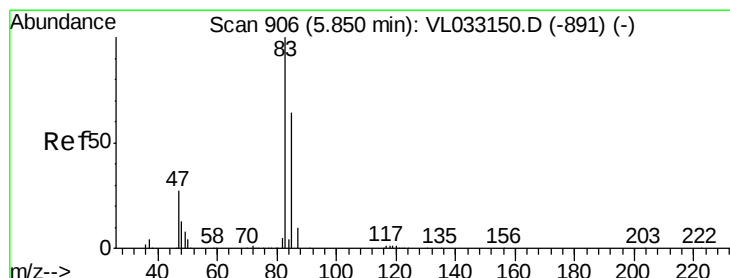
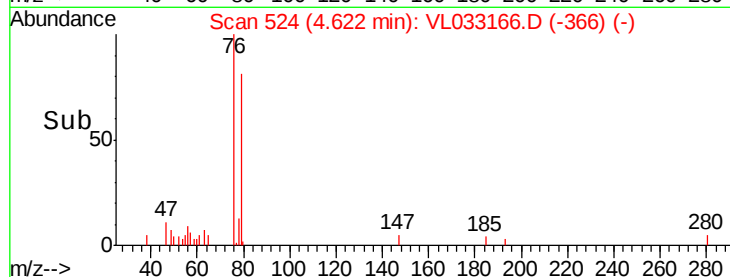
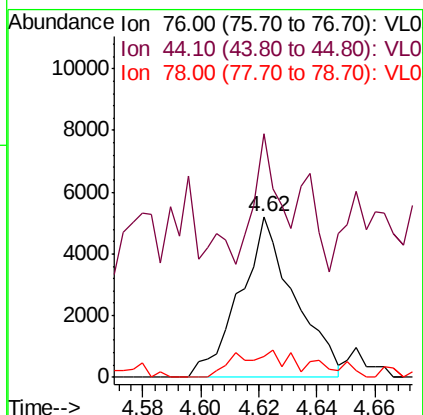
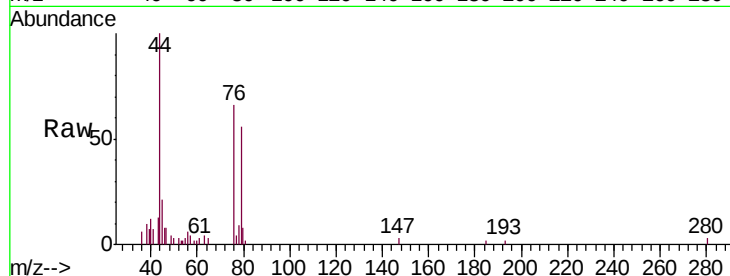
Tgt Ion: 76 Resp: 6768

Ion Ratio Lower Upper

76 100

44 79.4 17.1 25.7#

78 21.8 7.2 10.8#



#29

Chloroform

Concen: 1.926 ppbv

RT: 5.84 min Scan# 904

Delta R.T. 0.00 min

Lab File: VL033166.D

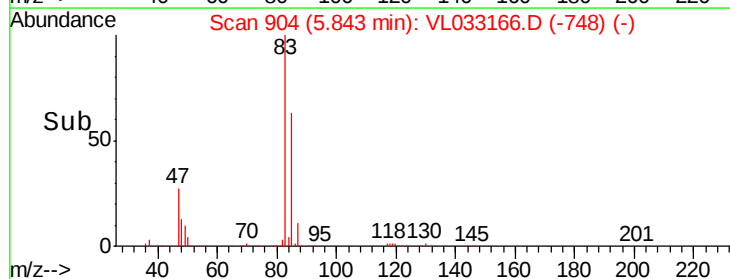
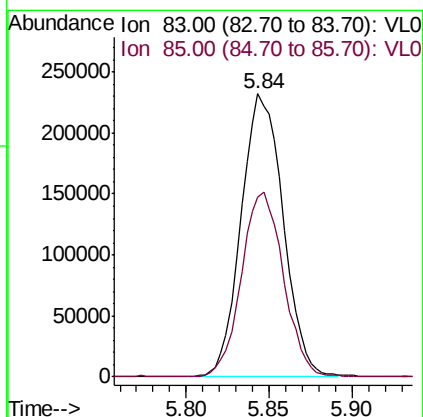
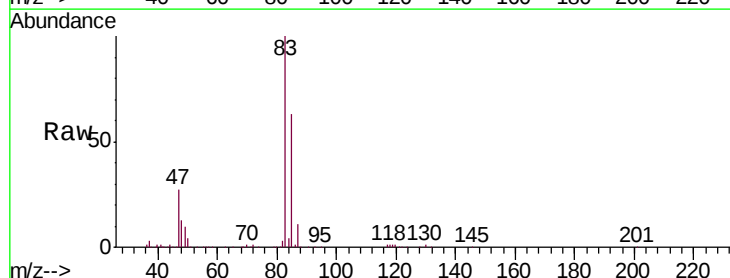
Acq: 5 Feb 2019 3:54

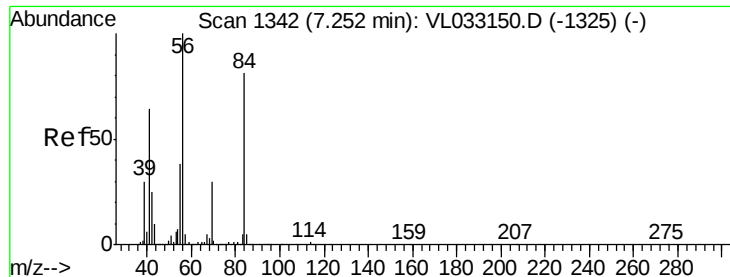
Tgt Ion: 83 Resp: 410057

Ion Ratio Lower Upper

83 100

85 63.3 51.6 77.4

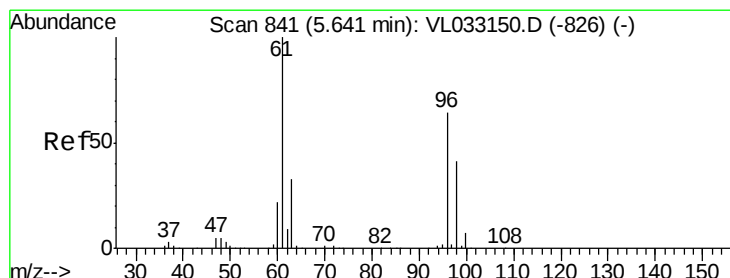
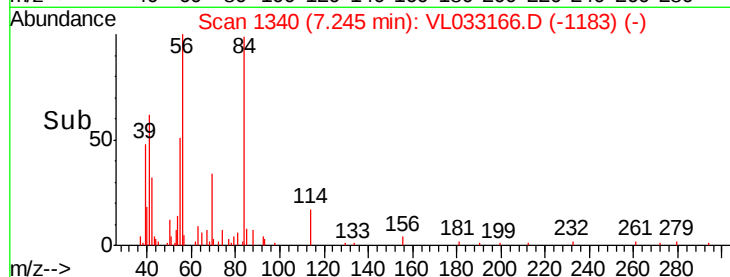
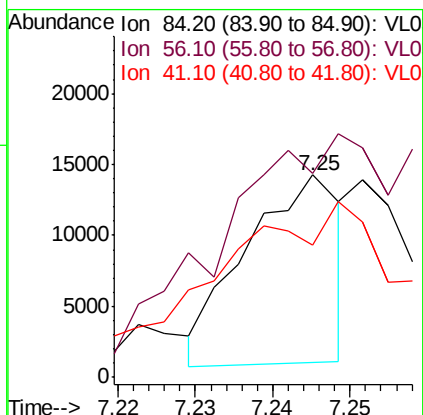
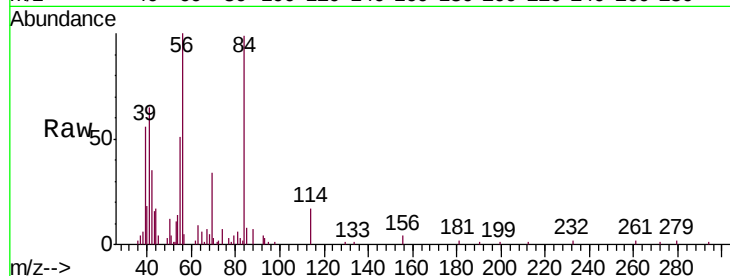




#30  
Cyclohexane  
Concen: 0.084 ppbv  
RT: 7.25 min Scan# 1340  
Delta R.T. 0.00 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

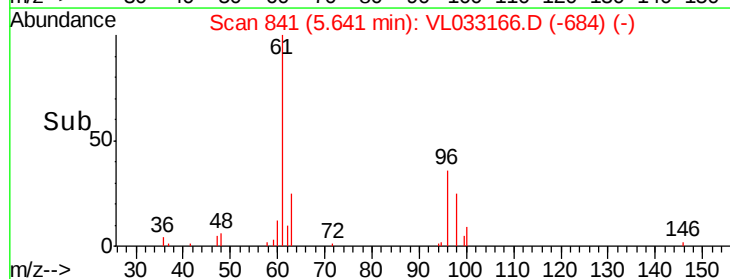
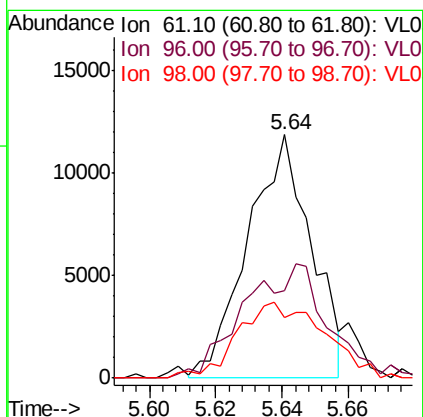
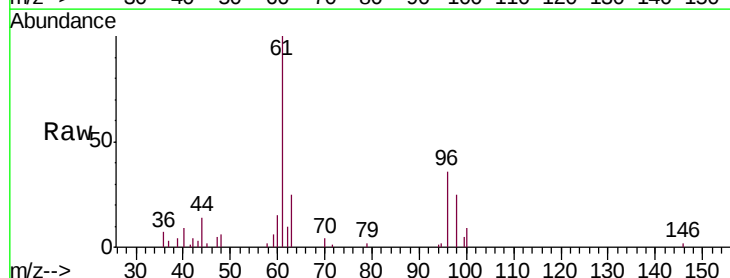
Instrument :  
MSVOA\_L  
ClientSampled :  
S-01

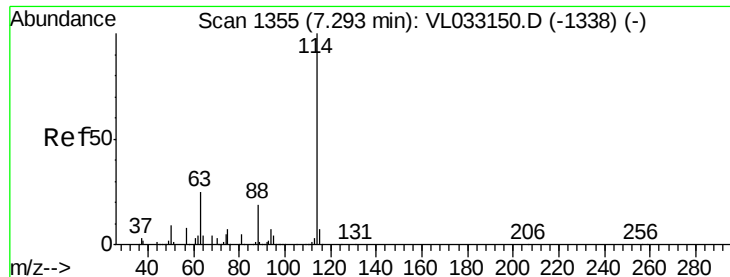
Tgt Ion: 84 Resp: 11306  
Ion Ratio Lower Upper  
84 100  
56 0.0 109.0 163.4#  
41 0.0 65.3 97.9#



#31  
cis-1,2-Dichloroethene  
Concen: 0.118 ppbv  
RT: 5.64 min Scan# 841  
Delta R.T. 0.00 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

Tgt Ion: 61 Resp: 15777  
Ion Ratio Lower Upper  
61 100  
96 32.4 53.3 79.9#  
98 22.4 33.7 50.5#

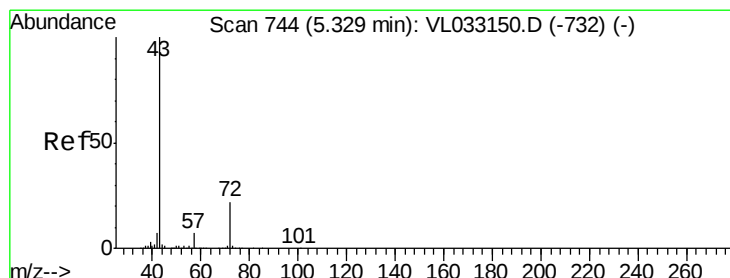
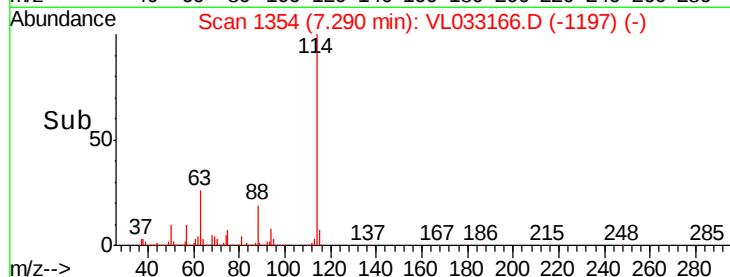
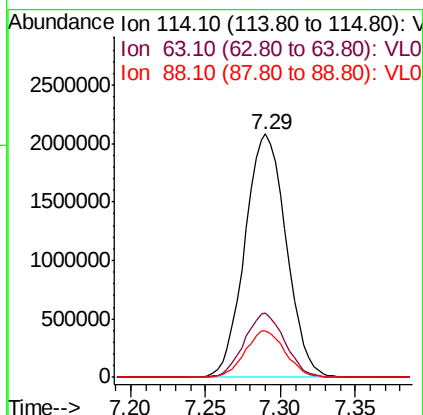
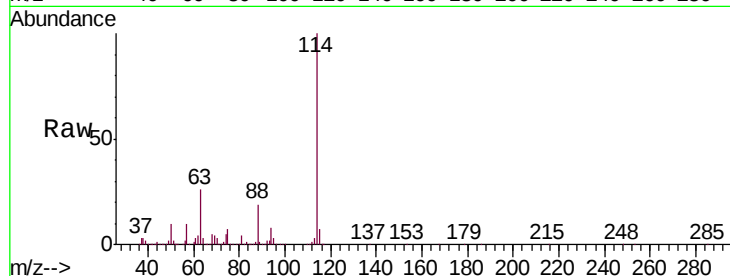




#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.29 min Scan# 1354  
 Delta R.T. 0.00 min  
 Lab File: VL033166.D  
 Acq: 5 Feb 2019 3:54

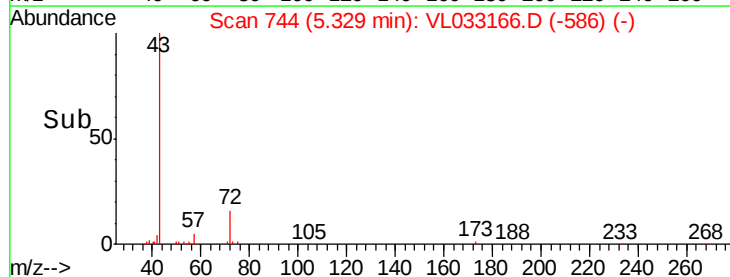
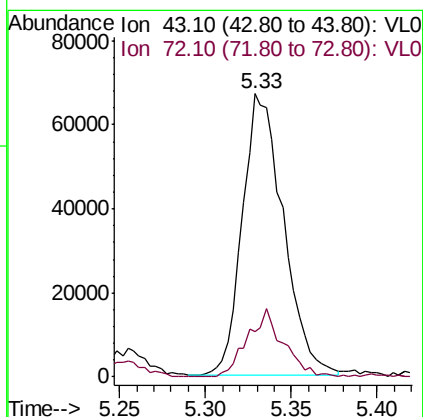
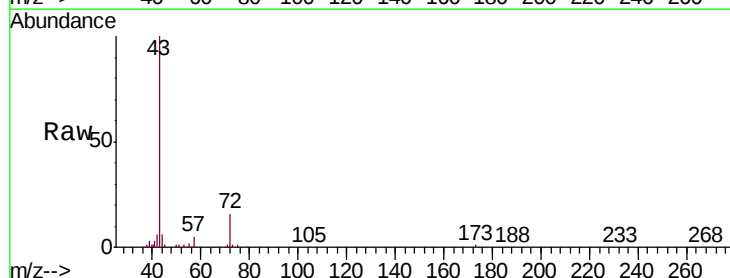
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 S-01

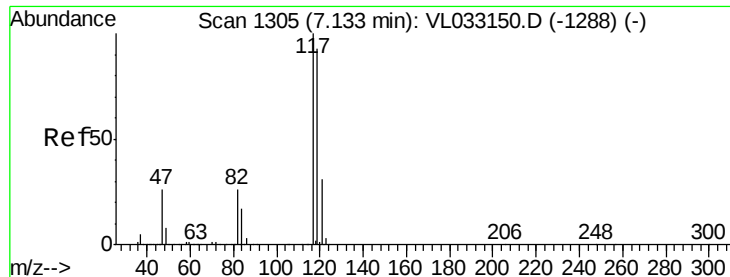
Tgt Ion:114 Resp: 4001672  
 Ion Ratio Lower Upper  
 114 100  
 63 25.9 20.0 30.0  
 88 18.6 14.4 21.6



#34  
 2-Butanone  
 Concen: 0.442 ppbv  
 RT: 5.33 min Scan# 744  
 Delta R.T. 0.01 min  
 Lab File: VL033166.D  
 Acq: 5 Feb 2019 3:54

Tgt Ion: 43 Resp: 111237  
 Ion Ratio Lower Upper  
 43 100  
 72 21.1 17.9 26.9





#35

Carbon Tetrachloride

Concen: 0.094 ppbv

RT: 7.13 min Scan# 1305

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

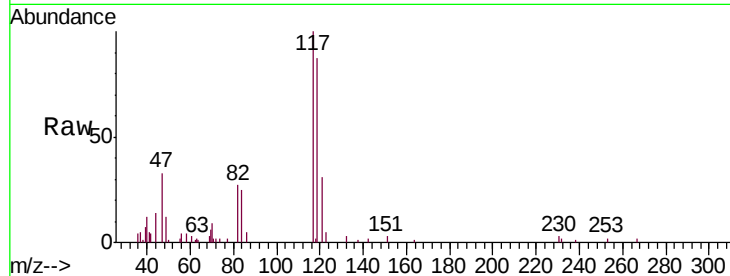
Tgt Ion: 117 Resp: 24044

Ion Ratio Lower Upper

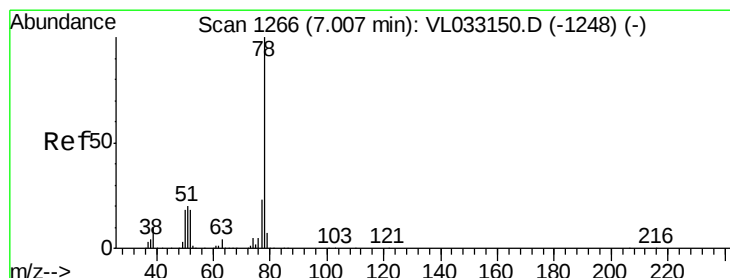
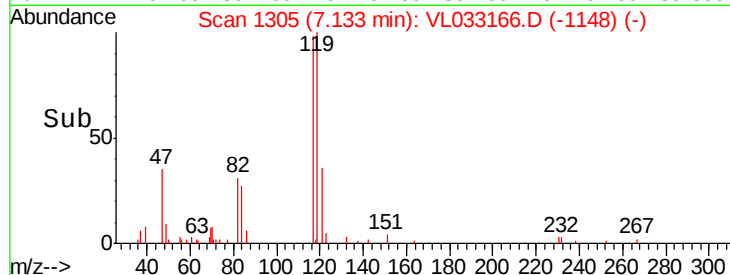
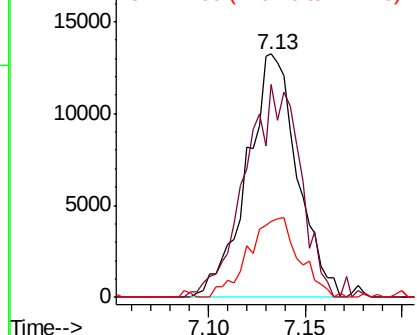
117 100

119 87.3 76.6 114.8

121 29.7 25.0 37.4



Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V  
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.380 ppbv

RT: 7.00 min Scan# 1264

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

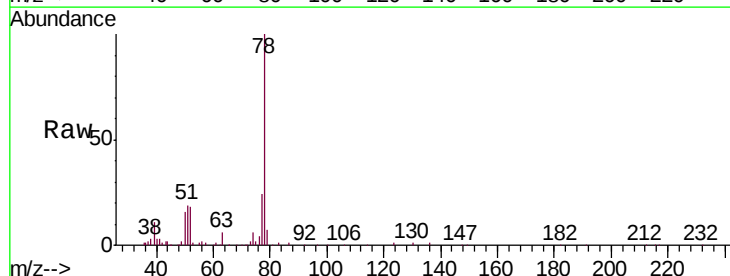
Tgt Ion: 78 Resp: 153865

Ion Ratio Lower Upper

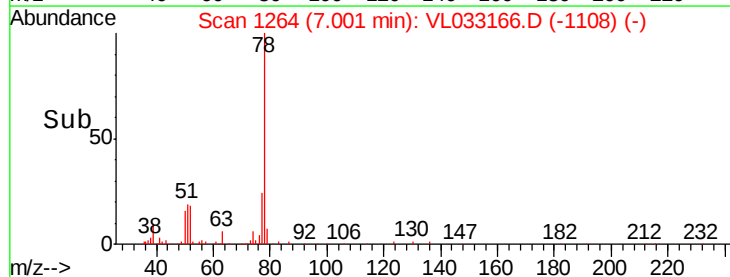
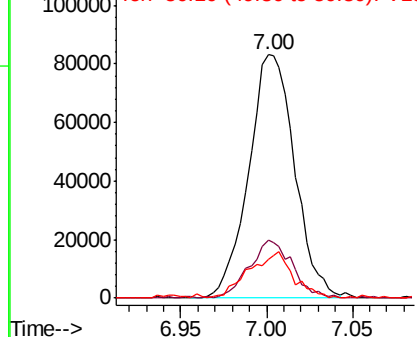
78 100

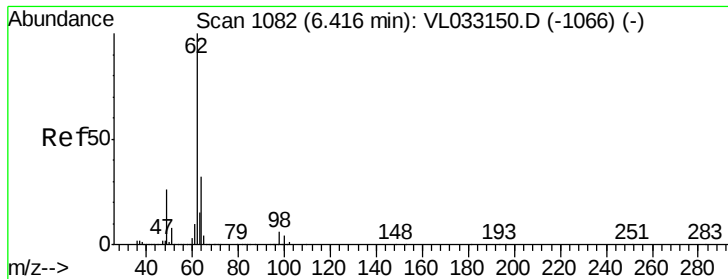
77 23.8 17.8 26.6

50 15.7 14.7 22.1



Abundance Ion 78.10 (77.80 to 78.80): VL0  
Ion 77.10 (76.80 to 77.80): VL0  
Ion 50.10 (49.80 to 50.80): VL0

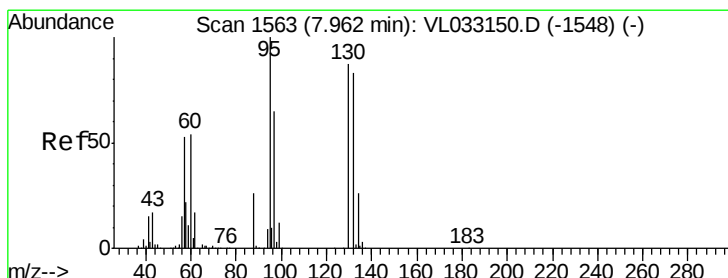
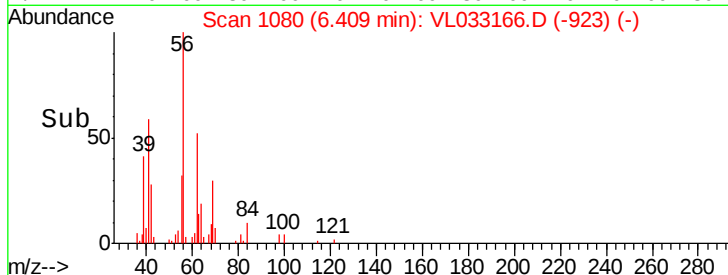
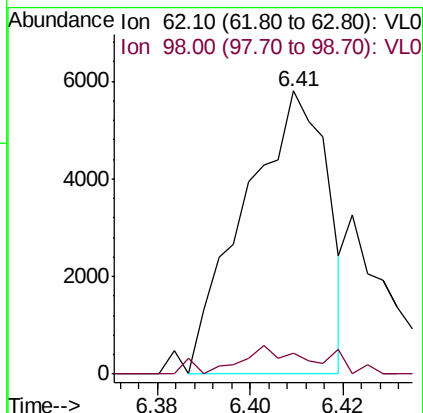
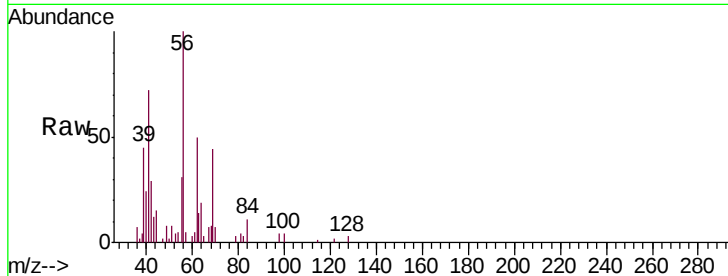




#37  
 1,2-Dichloroethane  
 Concen: 0.035 ppbv  
 RT: 6.41 min Scan# 1080  
 Delta R.T. 0.00 min  
 Lab File: VL033166.D  
 Acq: 5 Feb 2019 3:54

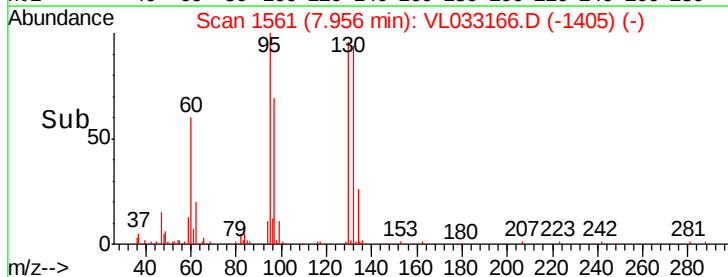
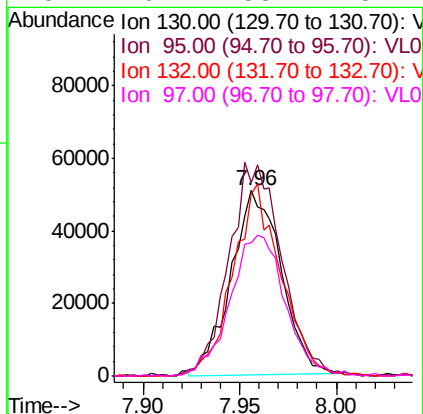
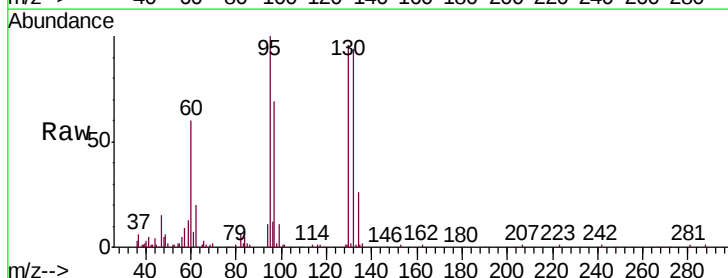
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 S-01

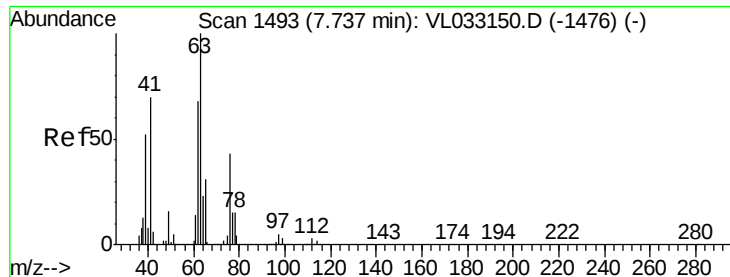
Tgt Ion: 62 Resp: 7178  
 Ion Ratio Lower Upper  
 62 100  
 98 9.6 5.3 7.9#



#38  
 Trichloroethene  
 Concen: 0.624 ppbv  
 RT: 7.96 min Scan# 1561  
 Delta R.T. 0.00 min  
 Lab File: VL033166.D  
 Acq: 5 Feb 2019 3:54

Tgt Ion: 130 Resp: 91676  
 Ion Ratio Lower Upper  
 130 100  
 95 101.1 91.6 137.4  
 132 95.5 79.0 118.4  
 97 70.4 58.1 87.1





#39

1,2-Dichloropropane

Concen: 6.639 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.44 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

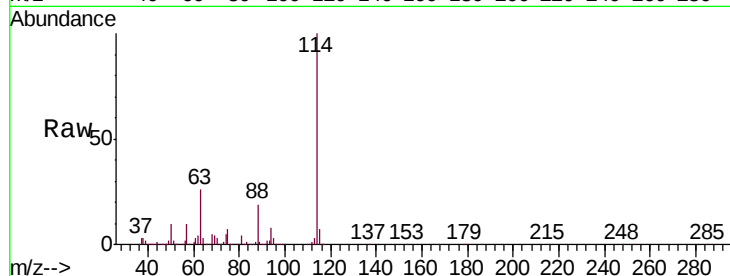
Tgt Ion: 63 Resp: 1030138

Ion Ratio Lower Upper

63 100

41 0.0 53.2 79.8#

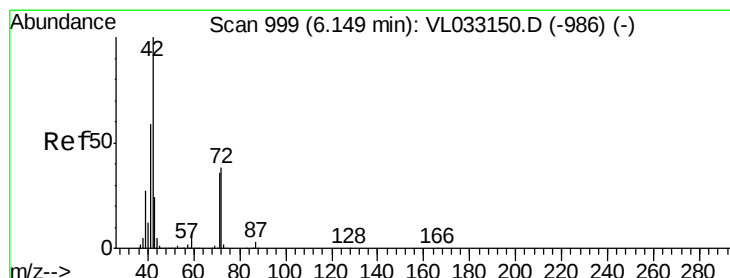
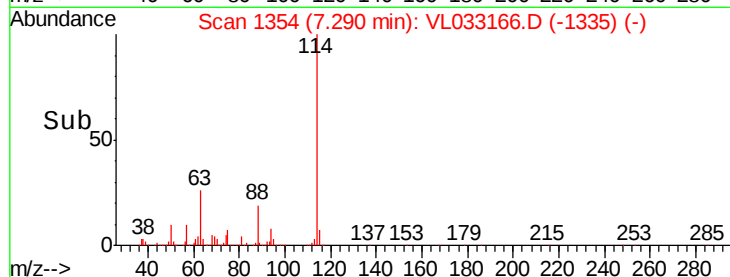
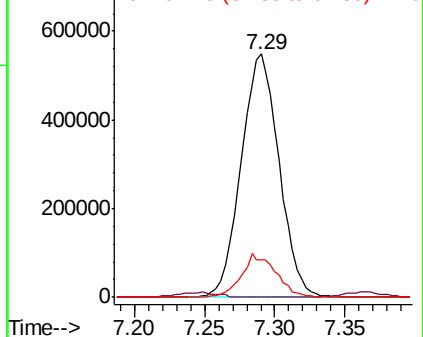
62 15.4 54.4 81.6#



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



#41

Tetrahydrofuran

Concen: 0.107 ppbv

RT: 6.16 min Scan# 1002

Delta R.T. 0.02 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

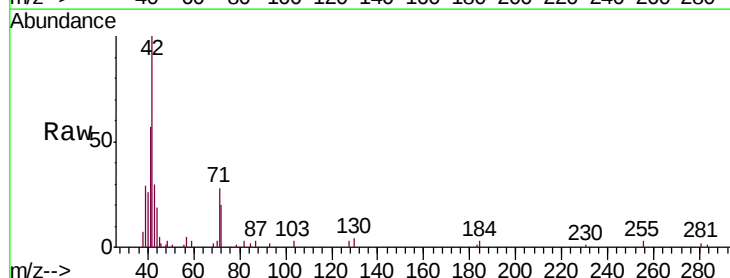
Tgt Ion: 42 Resp: 16704

Ion Ratio Lower Upper

42 100

72 39.6 30.2 45.4

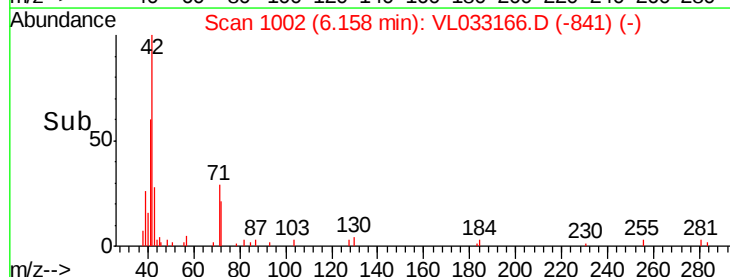
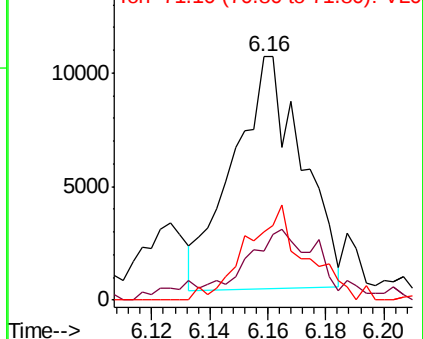
71 35.9 28.8 43.2

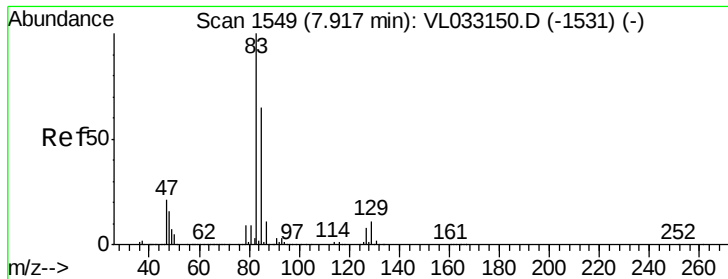


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#42

Bromodichloromethane

Concen: 0.060 ppbv

RT: 7.91 min Scan# 1547

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

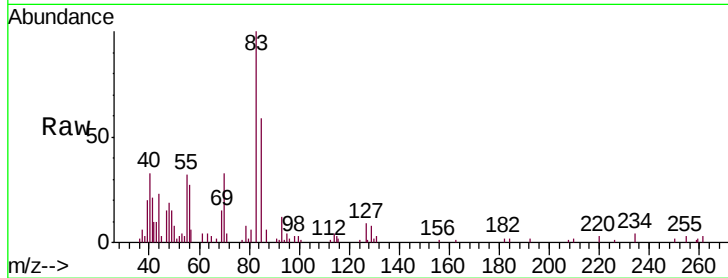
Tgt Ion: 83 Resp: 18020

Ion Ratio Lower Upper

83 100

85 56.1 51.3 76.9

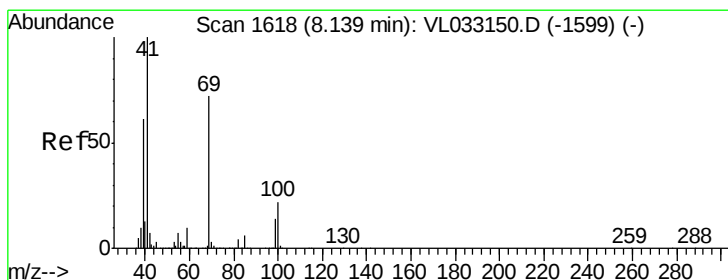
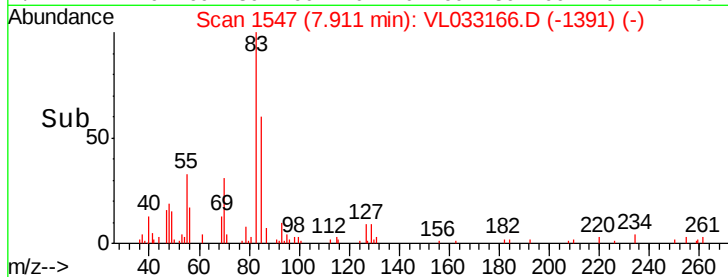
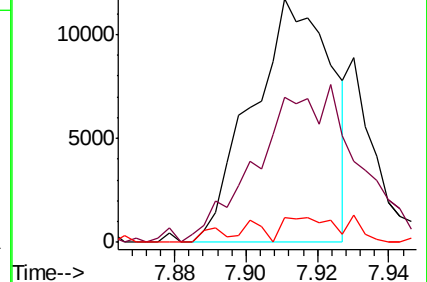
127 9.9 6.1 9.1#



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



#43

Methyl Methacrylate

Concen: 0.031 ppbv

RT: 8.13 min Scan# 1616

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

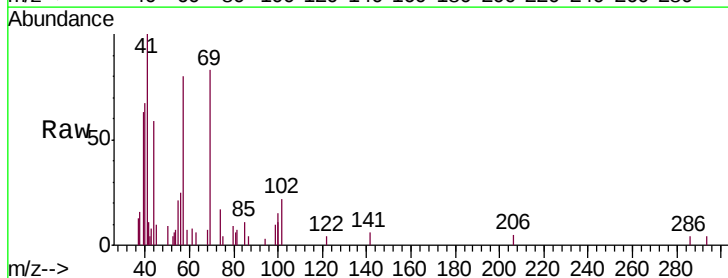
Tgt Ion: 69 Resp: 4933

Ion Ratio Lower Upper

69 100

41 292.0 118.4 177.6#

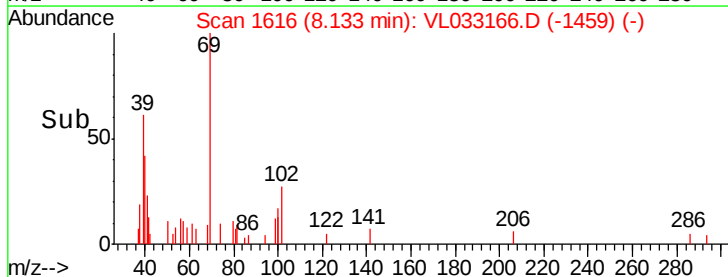
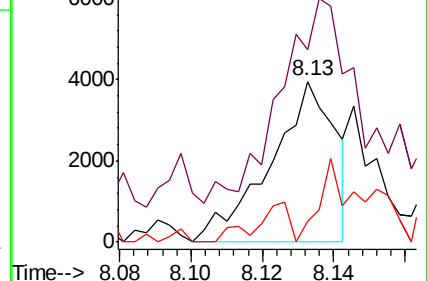
100 57.1 26.5 39.7#

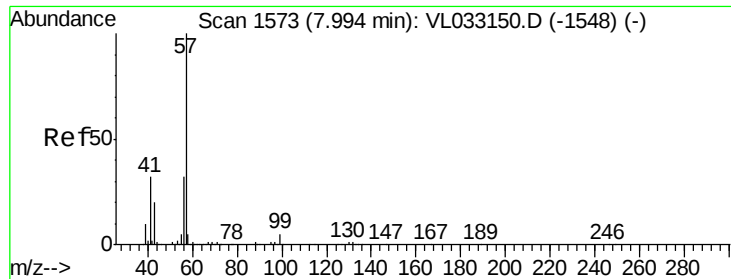


Abundance Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.202 ppbv

RT: 7.98 min Scan# 1570

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

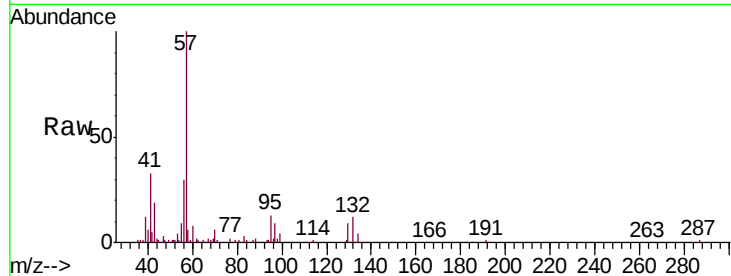
Tgt Ion: 57 Resp: 137225

Ion Ratio Lower Upper

57 100

41 38.1 24.6 36.8#

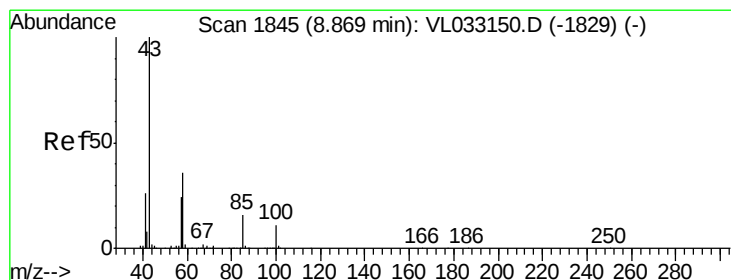
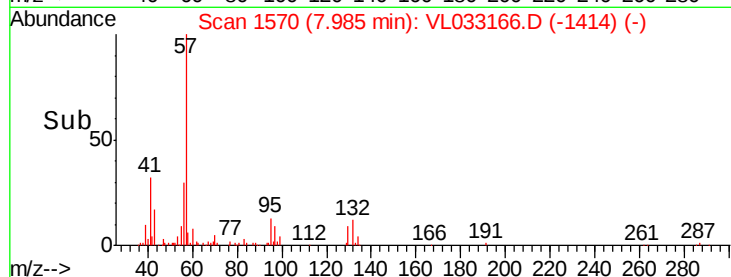
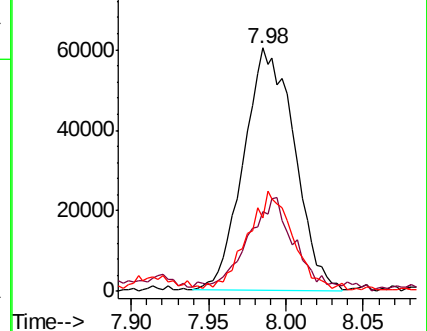
56 37.4 24.9 37.3#



Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#50

4-Methyl-2-Pentanone

Concen: 0.104 ppbv

RT: 8.89 min Scan# 1851

Delta R.T. 0.03 min

Lab File: VL033166.D

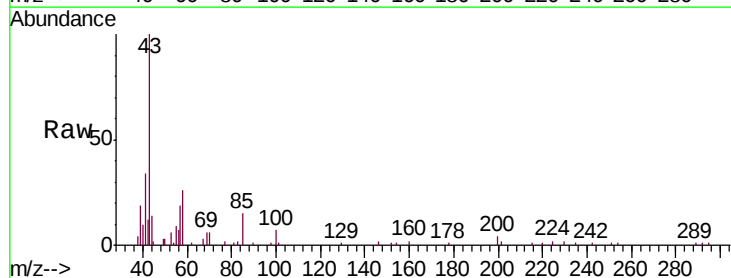
Acq: 5 Feb 2019 3:54

Tgt Ion: 43 Resp: 47430

Ion Ratio Lower Upper

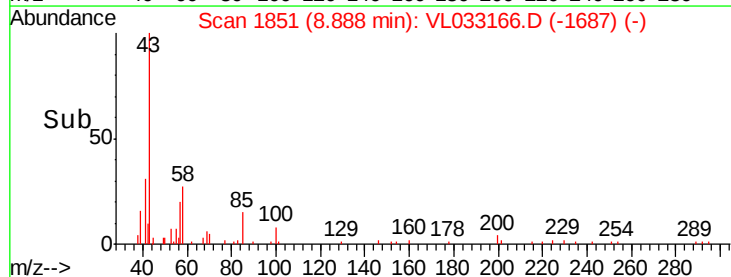
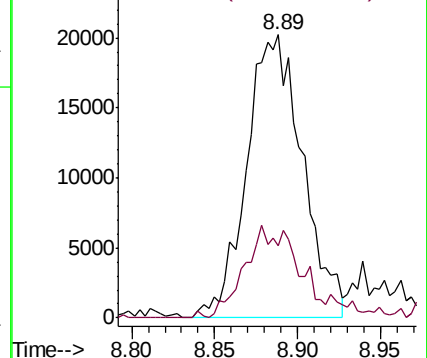
43 100

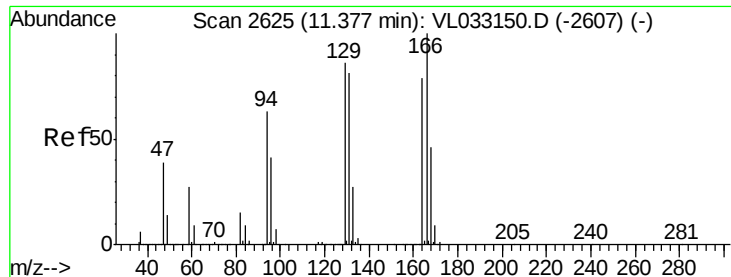
58 35.5 28.7 43.1



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#52

Tetrachloroethene

Concen: 2.700 ppbv

RT: 11.37 min Scan# 2623

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

Tgt Ion:164 Resp: 379623

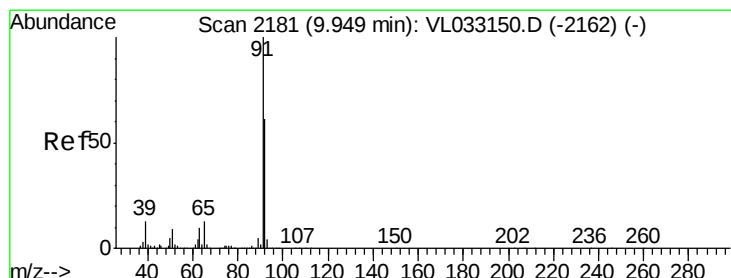
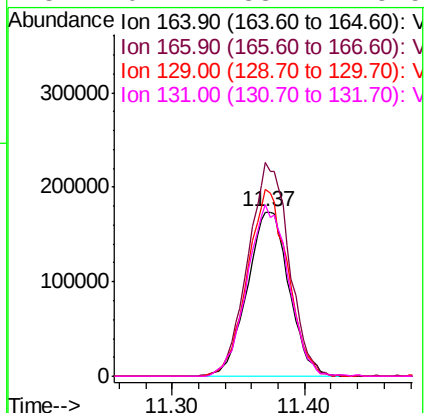
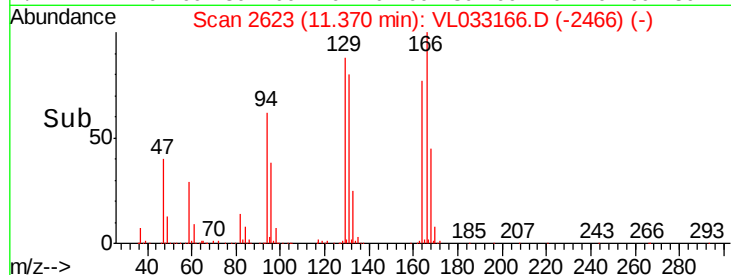
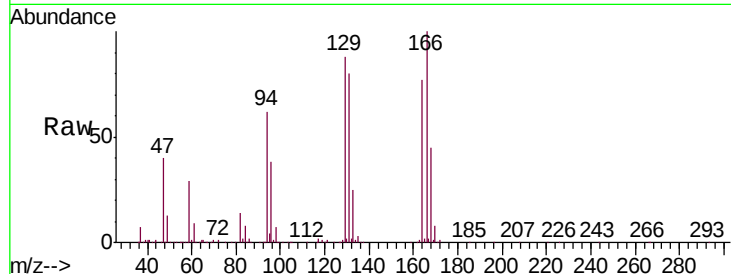
Ion Ratio Lower Upper

164 100

166 130.0 98.6 148.0

129 114.2 86.3 129.5

131 104.4 83.7 125.5



#53

Toluene

Concen: 1.211 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. 0.00 min

Lab File: VL033166.D

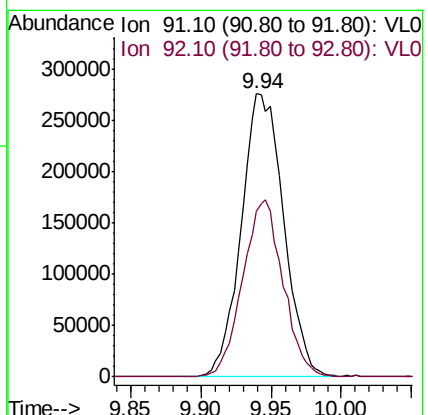
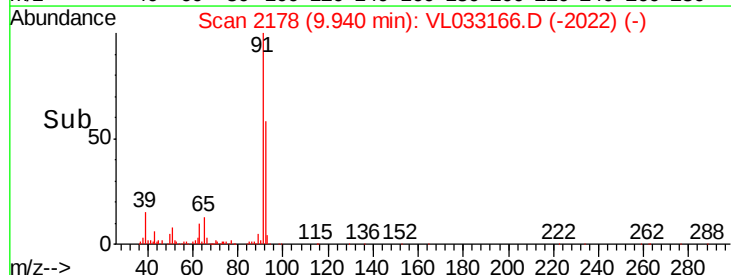
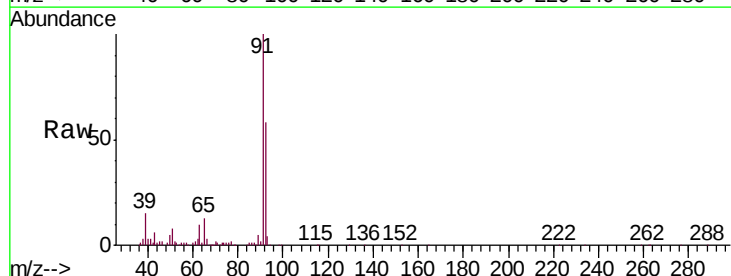
Acq: 5 Feb 2019 3:54

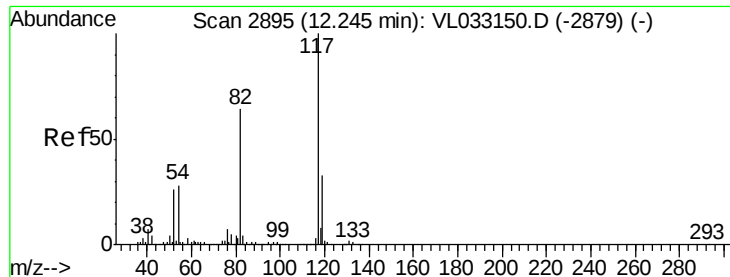
Tgt Ion: 91 Resp: 581997

Ion Ratio Lower Upper

91 100

92 59.5 48.9 73.3

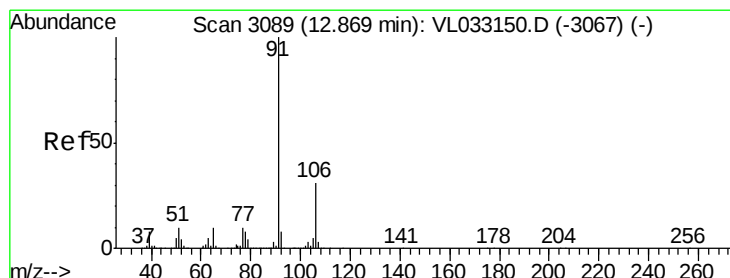
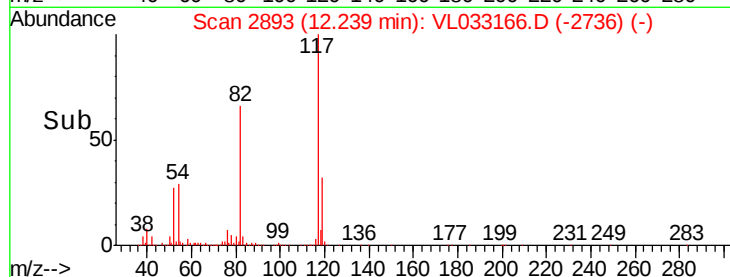
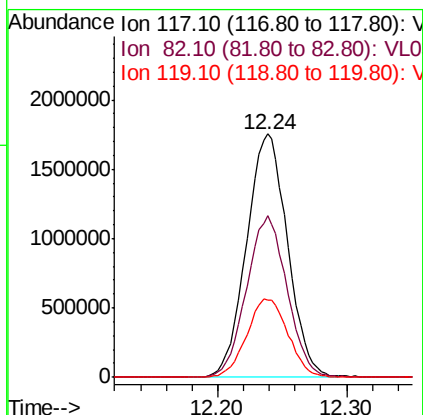
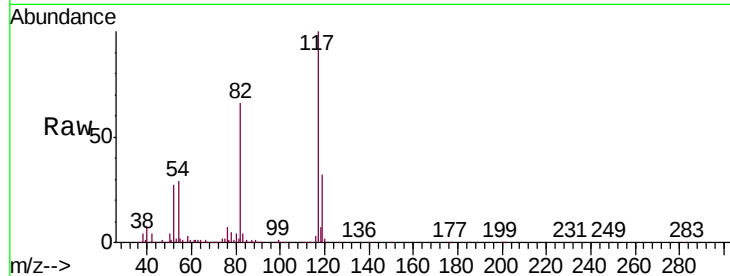




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.24 min Scan# 2893  
Delta R.T. 0.00 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

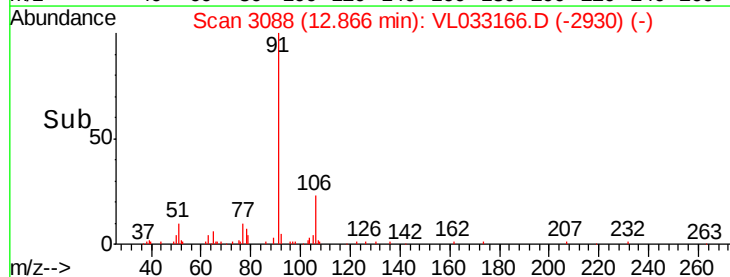
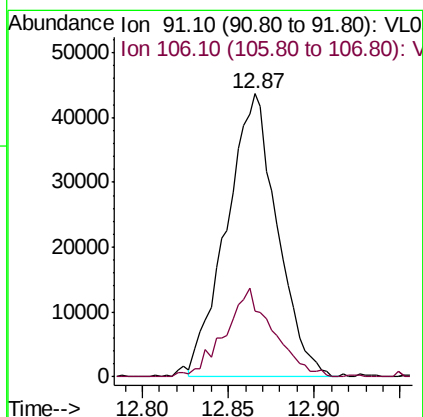
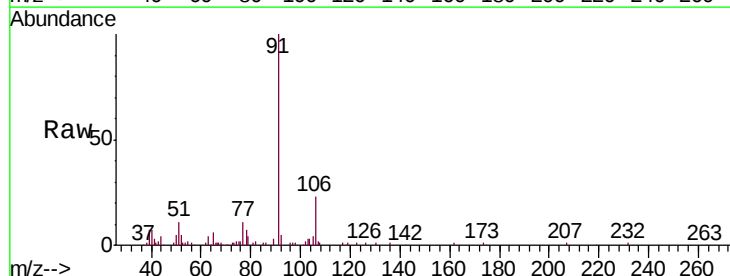
Instrument :  
MSVOA\_L  
ClientSampleId :  
S-01

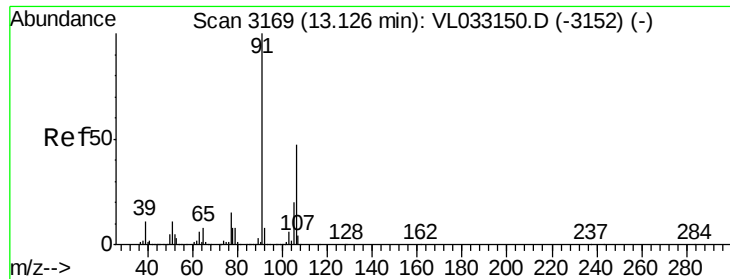
Tgt Ion:117 Resp: 3876552  
Ion Ratio Lower Upper  
117 100  
82 65.7 49.3 73.9  
119 32.5 27.1 40.7



#58  
Ethyl Benzene  
Concen: 0.147 ppbv  
RT: 12.87 min Scan# 3088  
Delta R.T. 0.01 min  
Lab File: VL033166.D  
Acq: 5 Feb 2019 3:54

Tgt Ion: 91 Resp: 89572  
Ion Ratio Lower Upper  
91 100  
106 23.1 24.7 37.1#





#59

m/p-Xylene

Concen: 0.353 ppbv

RT: 13.12 min Scan# 3166

Delta R.T. -0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampled :

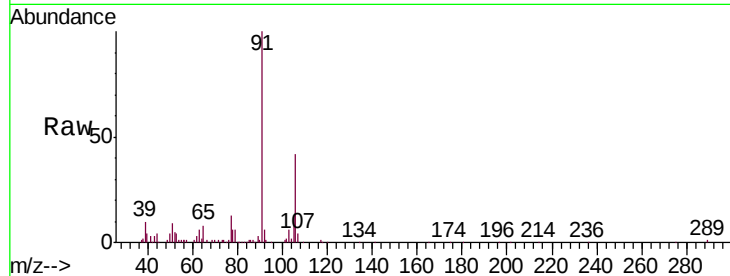
S-01

Tgt Ion: 91 Resp: 176433

Ion Ratio Lower Upper

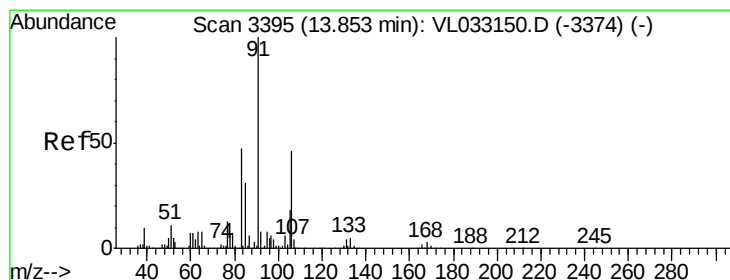
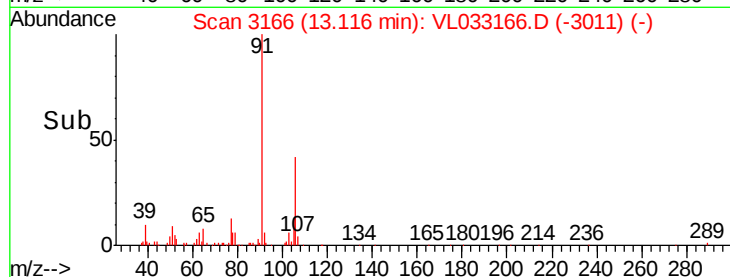
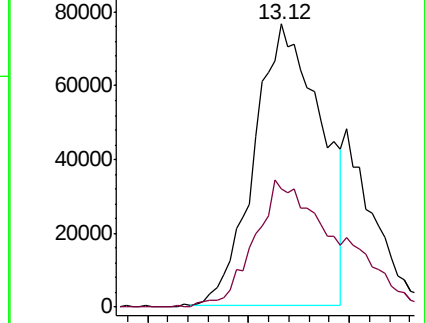
91 100

106 56.8 37.6 56.4#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 0.203 ppbv

RT: 13.84 min Scan# 3392

Delta R.T. -0.00 min

Lab File: VL033166.D

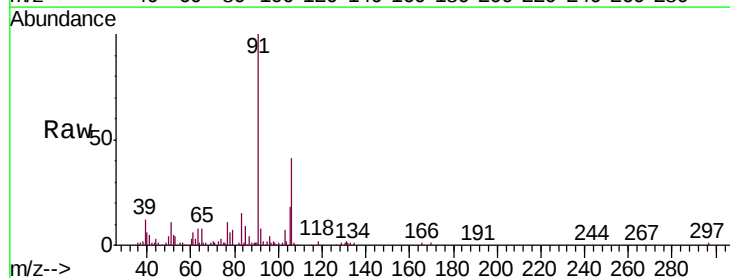
Acq: 5 Feb 2019 3:54

Tgt Ion: 91 Resp: 93357

Ion Ratio Lower Upper

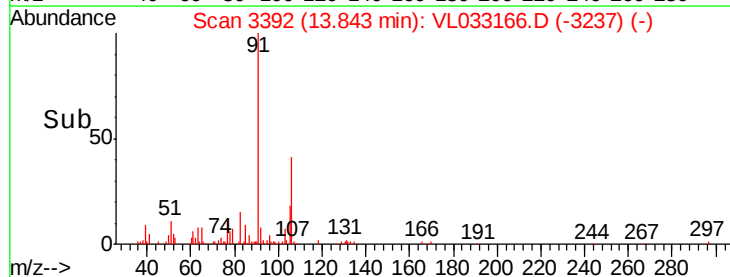
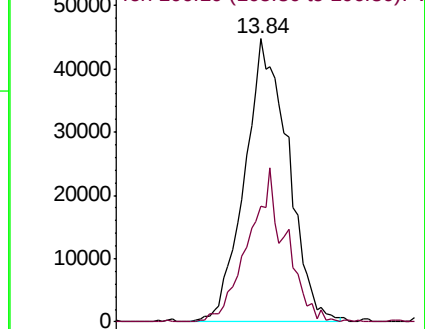
91 100

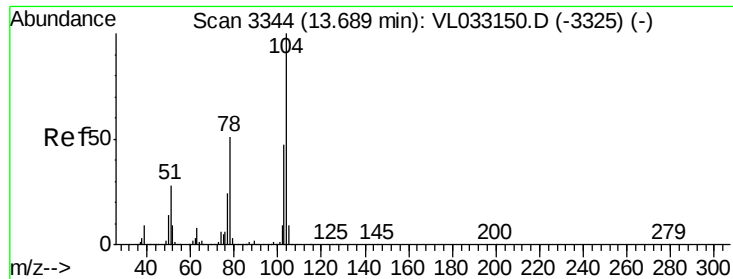
106 46.5 23.2 69.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#61

Styrene

Concen: 0.091 ppbv

RT: 13.69 min Scan# 3344

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

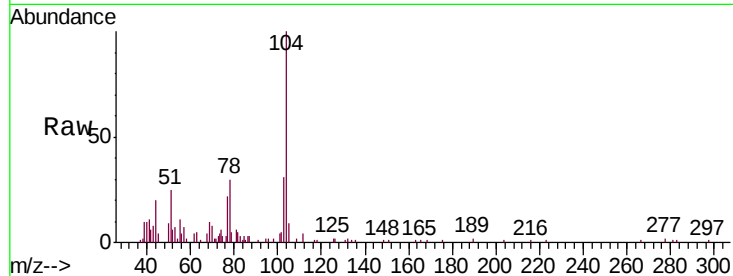
Tgt Ion:104 Resp: 33706

Ion Ratio Lower Upper

104 100

78 54.2 39.7 59.5

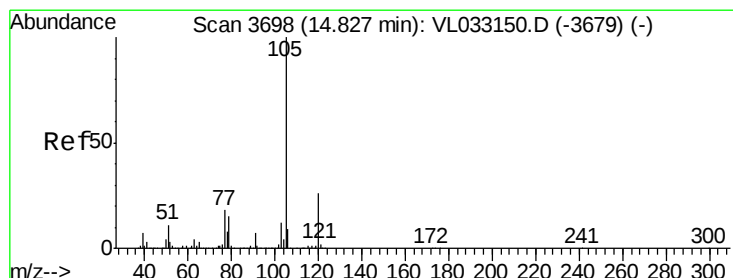
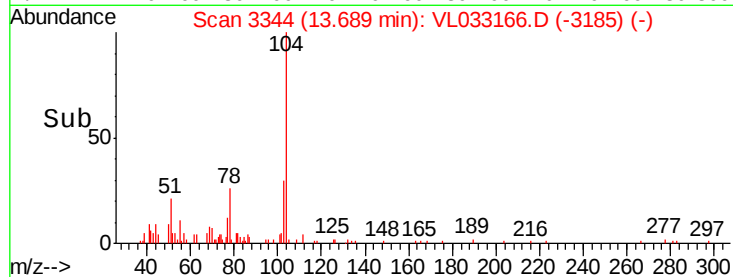
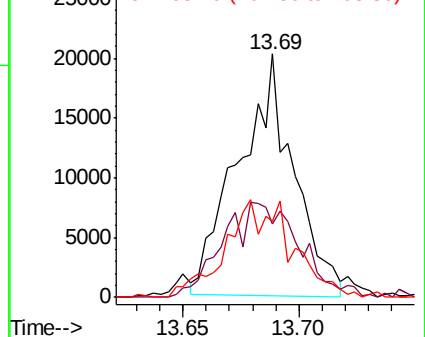
103 48.4 37.7 56.5



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 0.044 ppbv

RT: 14.82 min Scan# 3696

Delta R.T. -0.00 min

Lab File: VL033166.D

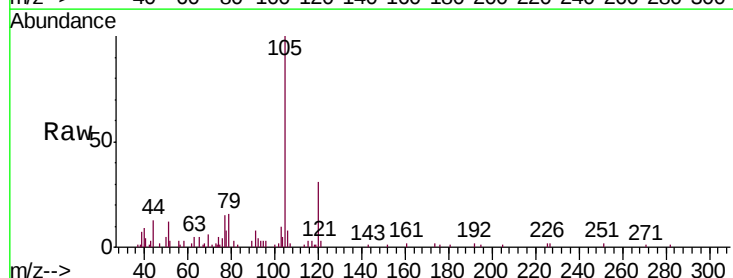
Acq: 5 Feb 2019 3:54

Tgt Ion:105 Resp: 28801

Ion Ratio Lower Upper

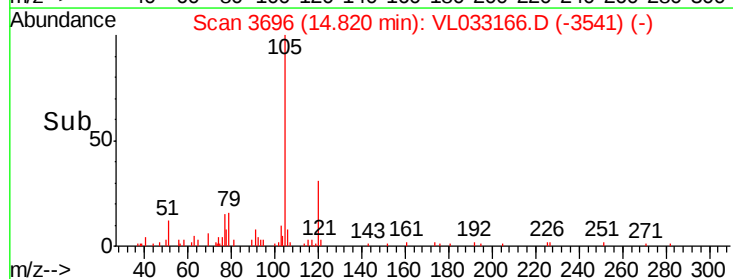
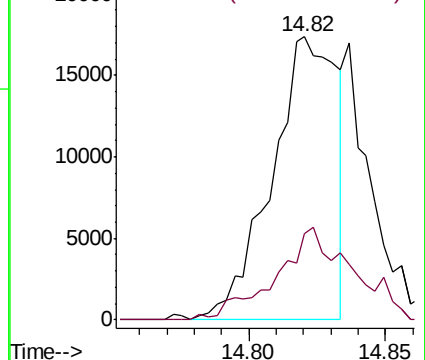
105 100

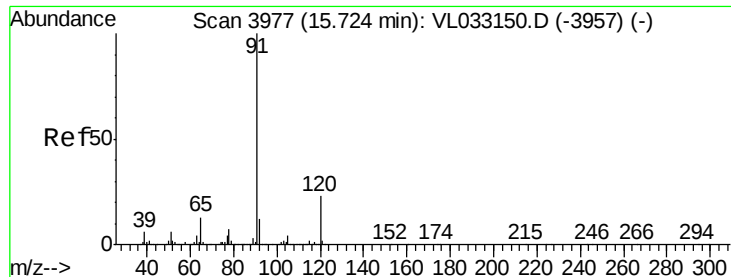
120 38.5 20.8 31.2#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#64

n-propylbenzene

Concen: 0.061 ppbv

RT: 15.73 min Scan# 3978

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

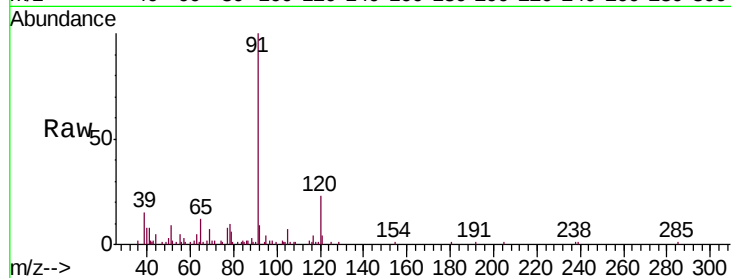
S-01

Tgt Ion:120 Resp: 10473

Ion Ratio Lower Upper

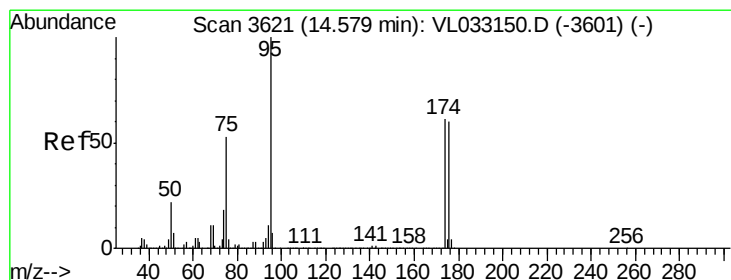
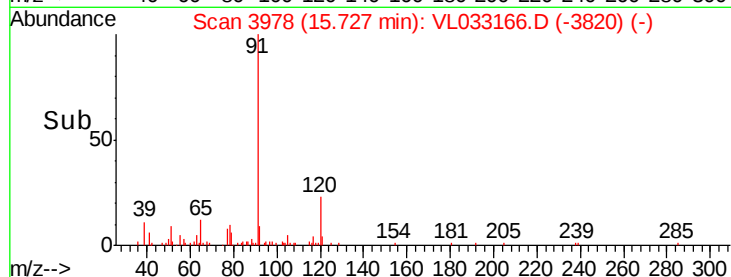
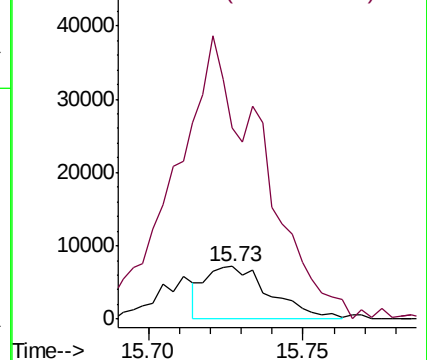
120 100

91 744.3 370.2 555.2#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#68

1-Bromo-4-Fluorobenzene

Concen: 10.395 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

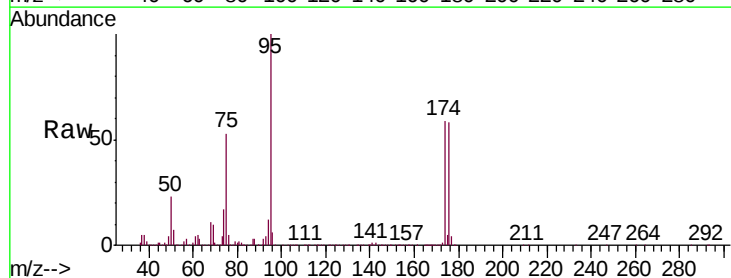
Tgt Ion: 95 Resp: 3003194

Ion Ratio Lower Upper

95 100

174 60.3 49.2 73.8

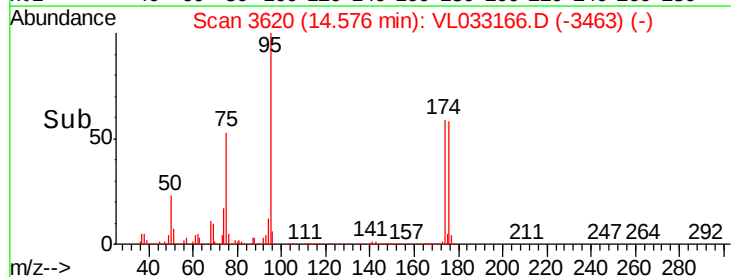
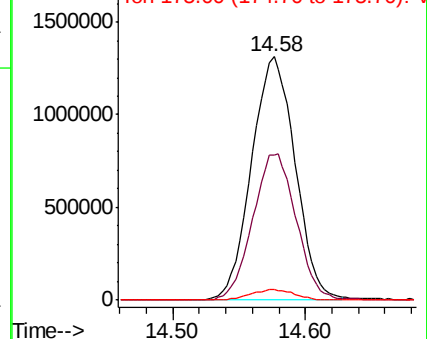
175 4.4 3.7 5.5

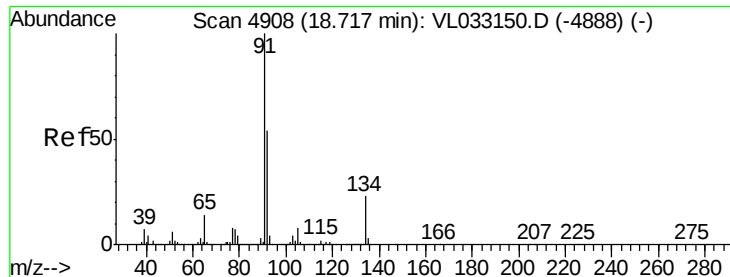


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#70

n-Butylbenzene

Concen: 0.031 ppbv

RT: 18.72 min Scan# 4908

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleID :

S-01

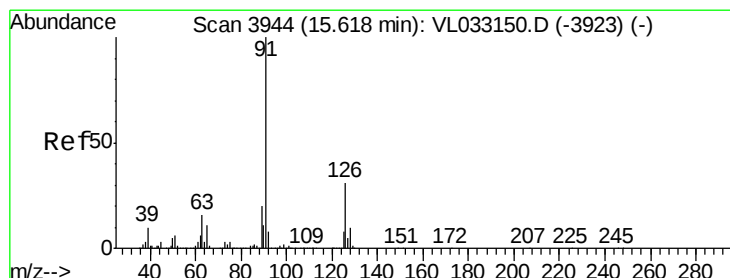
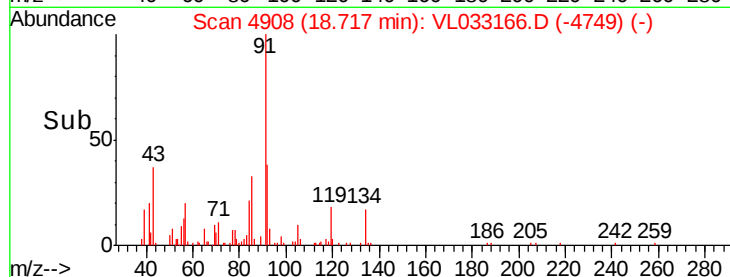
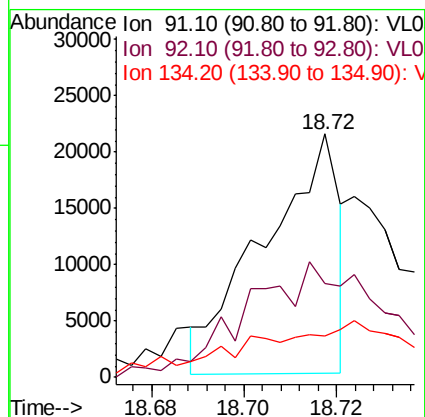
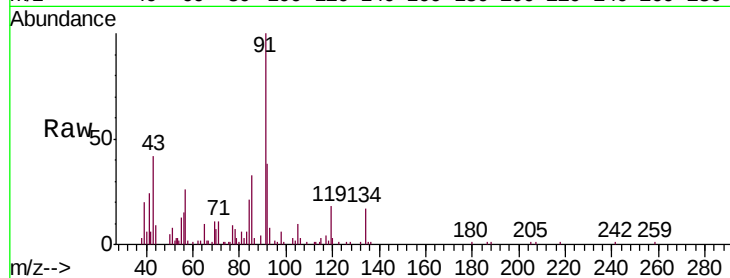
Tgt Ion: 91 Resp: 23819

Ion Ratio Lower Upper

91 100

92 94.0 43.7 65.5#

134 0.0 18.4 27.6#



#71

2-Chlorotoluene

Concen: 0.048 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. 0.01 min

Lab File: VL033166.D

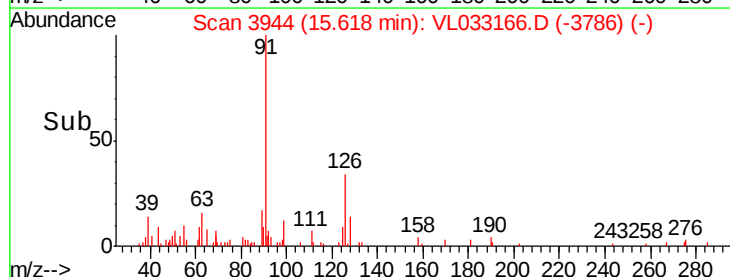
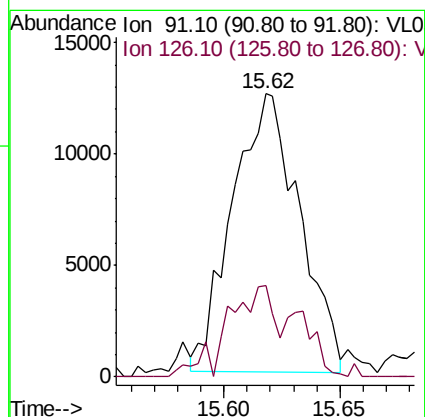
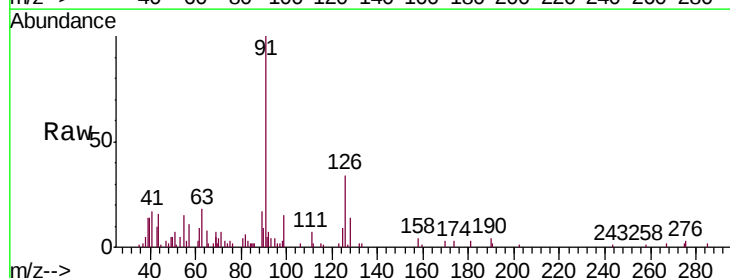
Acq: 5 Feb 2019 3:54

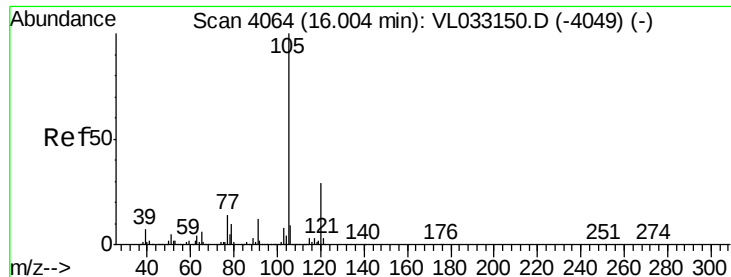
Tgt Ion: 91 Resp: 25096

Ion Ratio Lower Upper

91 100

126 33.9 12.3 49.1





#72

4-Ethyltoluene

Concen: 0.117 ppbv

RT: 16.00 min Scan# 4063

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

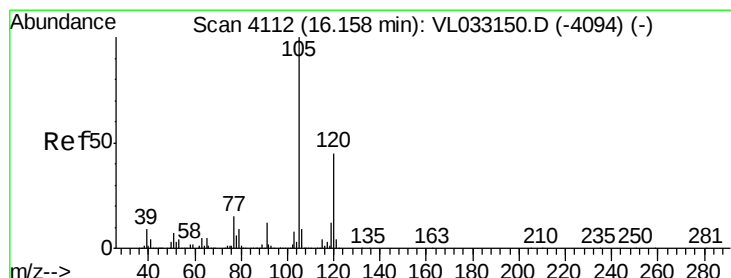
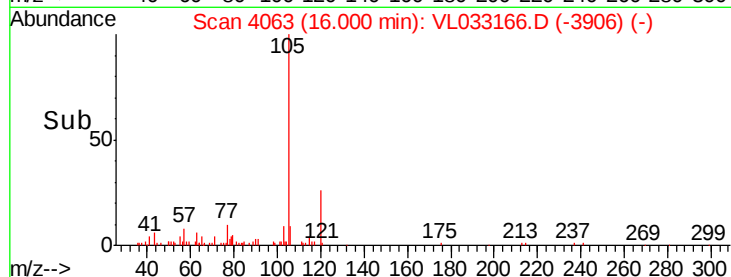
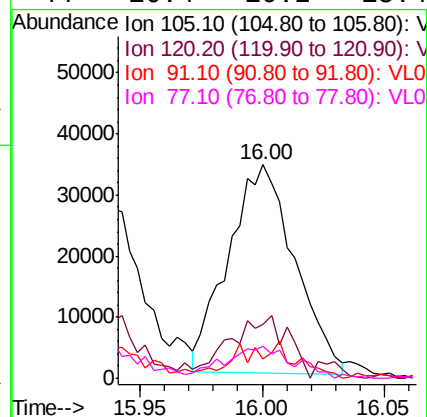
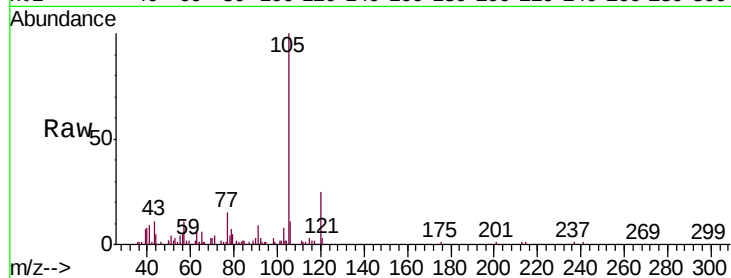
Instrument :

MSVOA\_L

ClientSampleId :

S-01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 64328 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 28.5  | 23.2  | 34.8  |
| 91       | 12.2  | 9.5   | 14.3  |
| 77       | 16.4  | 10.2  | 15.4  |



#73

1,3,5-Trimethylbenzene

Concen: 0.073 ppbv

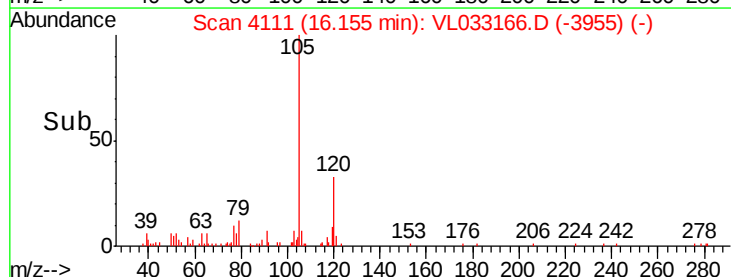
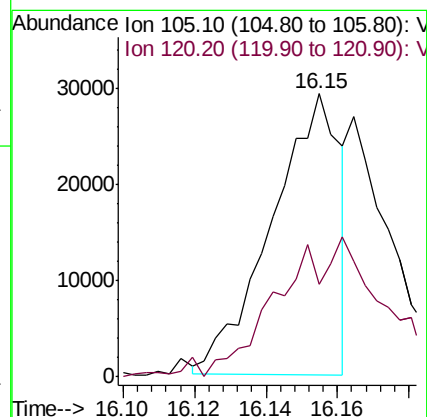
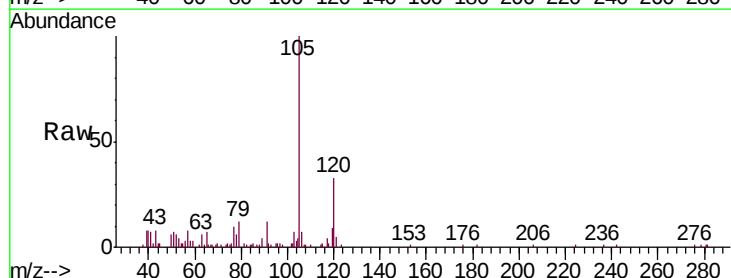
RT: 16.15 min Scan# 4111

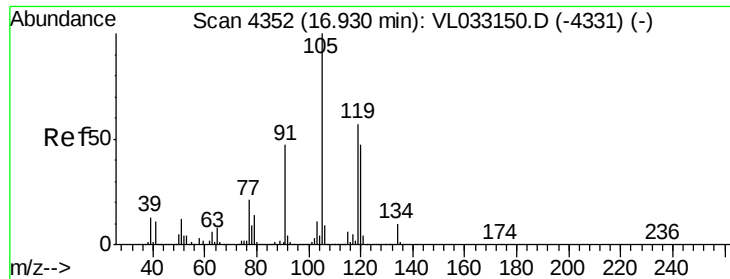
Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 38882 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 26.9  | 38.0  | 57.0  |





#74

1,2,4-Trimethylbenzene

Concen: 0.214 ppbv

RT: 16.93 min Scan# 4351

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

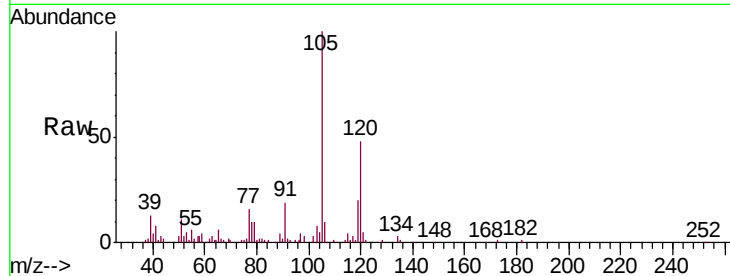
Instrument :

MSVOA\_L

ClientSampleId :

S-01

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 105   | Resp: | 115963 |
| Ion Ratio | Lower | Upper |        |
| 105       | 100   |       |        |
| 120       | 48.3  | 38.2  | 57.4   |
| 91        | 17.9  | 35.0  | 52.4#  |
| 77        | 14.8  | 15.8  | 23.6#  |

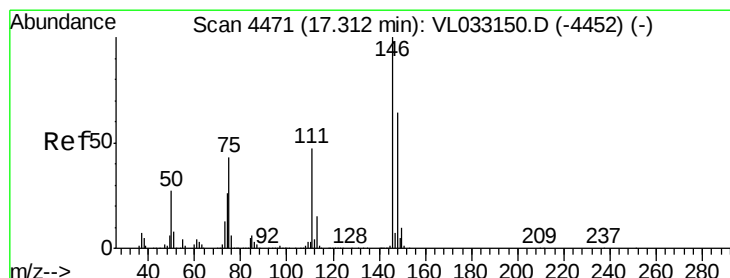
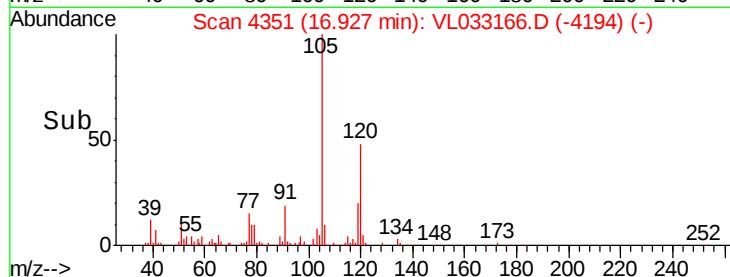
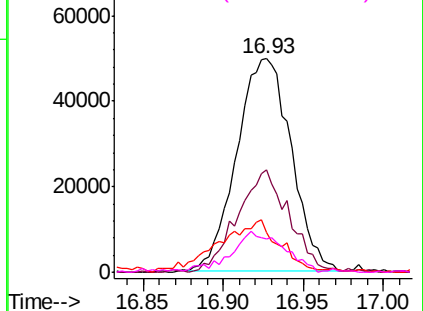


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#76

1,4-Dichlorobenzene

Concen: 0.034 ppbv

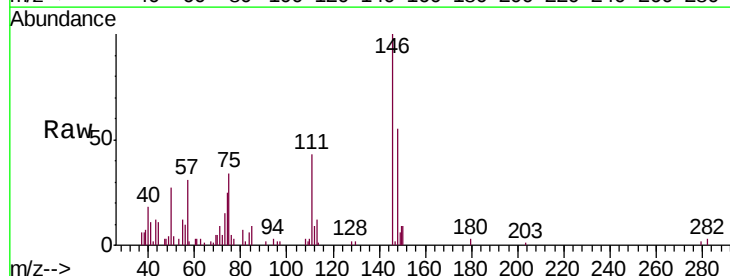
RT: 17.32 min Scan# 4472

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

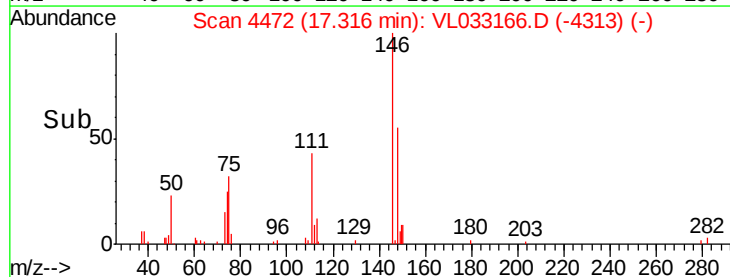
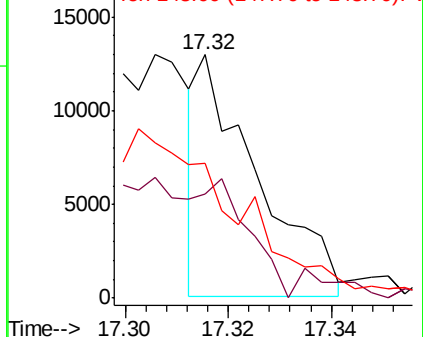
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 146   | Resp: | 10329 |
| Ion Ratio | Lower | Upper |       |
| 146       | 100   |       |       |
| 111       | 0.0   | 23.4  | 70.0# |
| 148       | 0.0   | 31.9  | 95.9# |

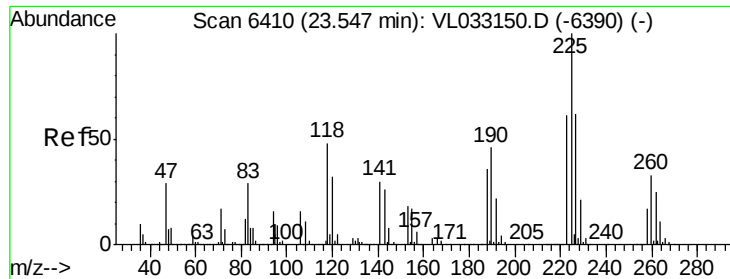


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#78

Hexachloro-1,3-Butadiene

Concen: 0.038 ppbv

RT: 23.54 min Scan# 6408

Delta R.T. 0.00 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

Instrument :

MSVOA\_L

ClientSampleId :

S-01

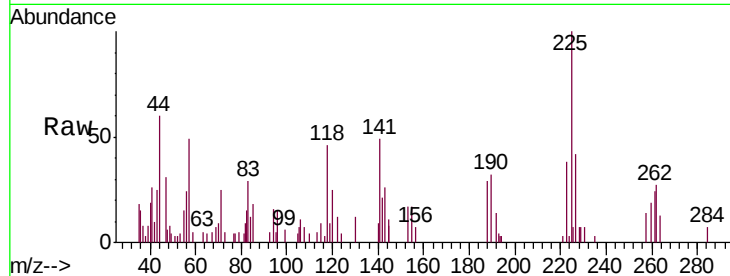
Tgt Ion:225 Resp: 5611

Ion Ratio Lower Upper

225 100

223 136.5 50.2 75.4#

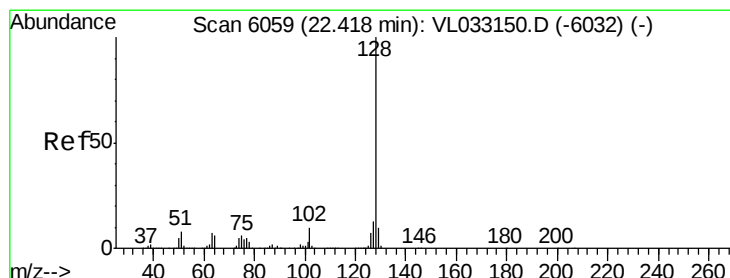
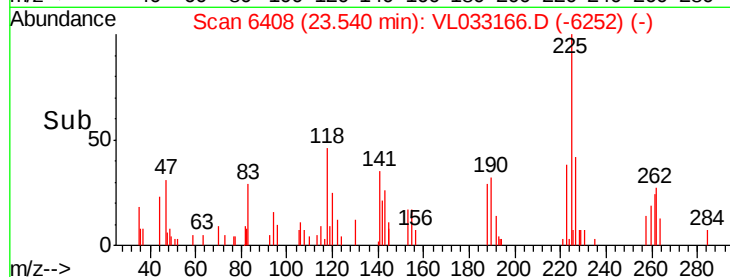
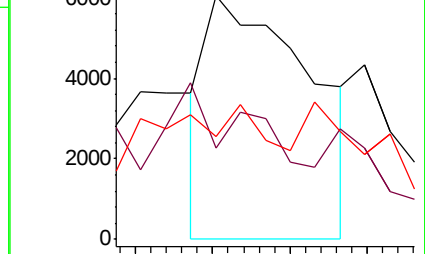
227 0.0 51.1 76.7#



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



#79

Naphthalene

Concen: 0.125 ppbv

RT: 22.42 min Scan# 6060

Delta R.T. 0.02 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

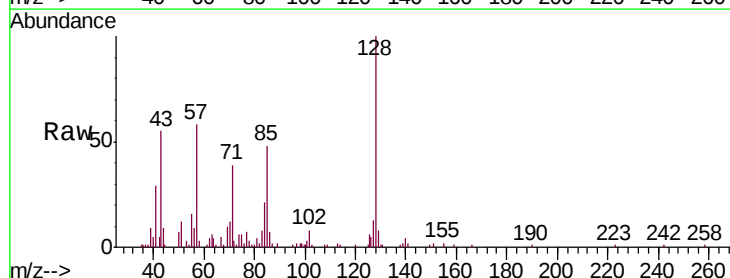
Tgt Ion:128 Resp: 79100

Ion Ratio Lower Upper

128 100

127 12.6 10.6 16.0

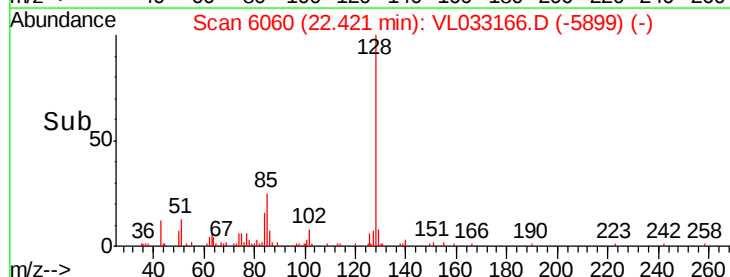
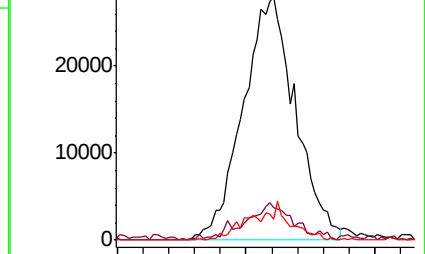
129 8.4 9.0 13.4#

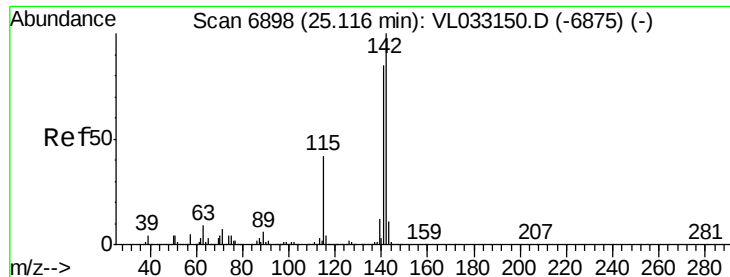


Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V





#80

Naphthalene, 2-methyl-

Concen: 0.109 ppbv

RT: 25.12 min Scan# 6899

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

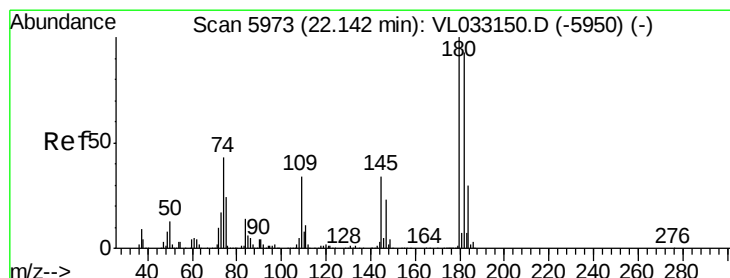
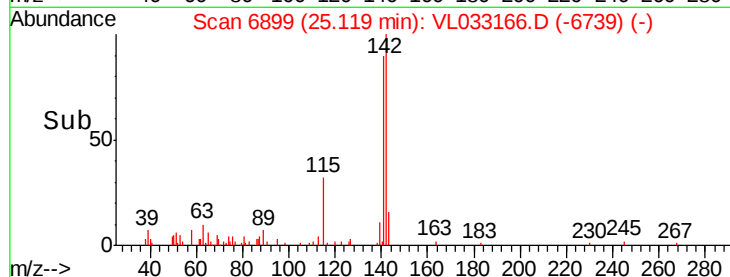
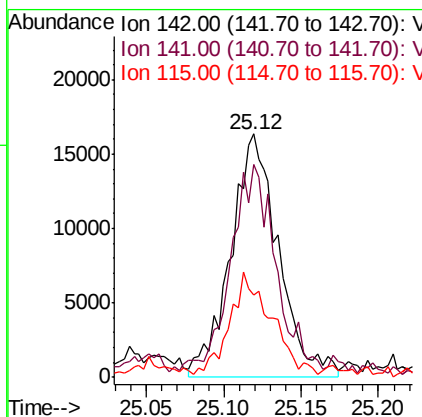
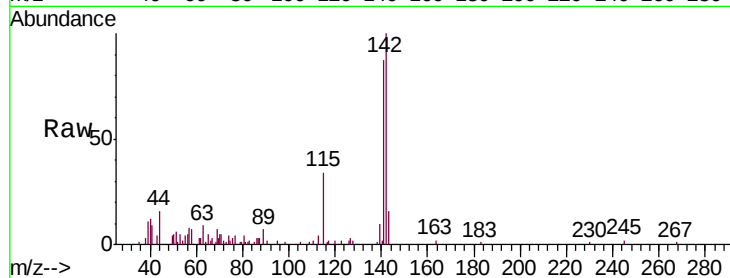
Instrument :

MSVOA\_L

ClientSampleId :

S-01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 142   | Resp: | 35107 |
| Ion      | Ratio | Lower | Upper |
| 142      | 100   |       |       |
| 141      | 85.1  | 66.5  | 99.7  |
| 115      | 40.0  | 31.3  | 46.9  |



#81

1,2,4-Trichlorobenzene

Concen: 0.051 ppbv

RT: 22.14 min Scan# 5972

Delta R.T. 0.01 min

Lab File: VL033166.D

Acq: 5 Feb 2019 3:54

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 14533  |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 176.7 | 76.2  | 114.4# |
| 184      | 64.6  | 24.6  | 36.8#  |

