

Data File : VL033284.D

Acq On : 12 Mar 2019 15:03

Operator : SY/AP

Sample : 0.4 PPB MDL

Misc : 400ml/MSVOA\_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

Quant Time: Mar 13 07:52:28 2019

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031219AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Mar 13 07:17:55 2019

QLast Update : Wed Mar 13 07:17:55 2019

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 830198   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 1911116  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 1867982  | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1510737  | 10.47    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 104.70% |

## Target Compounds

|                                |      |     |        |       |        | Qvalue |
|--------------------------------|------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.22 | 85  | 60563  | 0.361 | ppbv   | 94     |
| 3) Chlorodifluoromethane       | 3.01 | 51  | 45694  | 0.415 | ppbv   | 100    |
| 4) Chloromethane               | 3.17 | 50  | 23692  | 0.402 | ppbv # | 83     |
| 5) Vinyl Chloride              | 3.29 | 62  | 23433  | 0.408 | ppbv # | 84     |
| 6) Bromomethane                | 3.52 | 94  | 14682  | 0.418 | ppbv   | 95     |
| 7) Chloroethane                | 3.60 | 64  | 5328   | 0.256 | ppbv # | 87     |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85  | 60563  | 0.427 | ppbv   | 98     |
| 9) Propene                     | 3.04 | 41  | 19792  | 0.394 | ppbv   | 94     |
| 10) Heptane                    | 8.25 | 43  | 43519  | 0.385 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.00 | 101 | 68682  | 0.414 | ppbv   | 89     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101 | 42001  | 0.442 | ppbv   | 97     |
| 13) Ethanol                    | 3.65 | 45  | 3782   | 0.247 | ppbv # | 1      |
| 14) Bromoethene                | 3.79 | 108 | 16557  | 0.374 | ppbv # | 95     |
| 15) Acetone                    | 3.91 | 43  | 51571  | 0.405 | ppbv   | 98     |
| 16) 1,3-Butadiene              | 3.36 | 39  | 19446  | 0.423 | ppbv   | 89     |
| 17) tert-Butyl alcohol         | 4.35 | 59  | 771    | 0.045 | ppbv # | 74     |
| 18) 1,1-Dichloroethene         | 4.35 | 96  | 19170  | 0.456 | ppbv   | 84     |
| 19) Isopropyl Alcohol          | 4.04 | 45  | 30597  | 0.398 | ppbv # | 93     |
| 20) Methylene Chloride         | 4.41 | 84  | 21864  | 0.516 | ppbv   | 98     |
| 21) Allyl Chloride             | 4.48 | 41  | 26721  | 0.422 | ppbv   | 92     |
| 22) trans-1,2-Dichloroethene   | 4.97 | 96  | 17488  | 0.390 | ppbv   | 87     |
| 23) Vinyl Acetate              | 5.16 | 43  | 59629  | 0.374 | ppbv # | 93     |
| 24) 1,1-Dichloroethane         | 5.09 | 63  | 47833  | 0.413 | ppbv   | 100    |
| 25) Ethyl Acetate              | 5.78 | 43  | 80952  | 0.413 | ppbv   | 98     |
| 26) Hexane                     | 5.78 | 57  | 37650  | 0.409 | ppbv   | 95     |
| 27) Carbon Disulfide           | 4.62 | 76  | 36095  | 0.369 | ppbv # | 85     |
| 28) Methyl tert-Butyl Ether    | 5.12 | 73  | 47647  | 0.364 | ppbv   | 100    |
| 29) Chloroform                 | 5.84 | 83  | 31560  | 0.225 | ppbv   | 99     |
| 30) Cyclohexane                | 7.25 | 84  | 25365  | 0.355 | ppbv   | 91     |
| 31) cis-1,2-Dichloroethene     | 5.63 | 61  | 33206  | 0.376 | ppbv   | 90     |
| 32) 1,1,1-Trichloroethane      | 6.62 | 97  | 53677  | 0.393 | ppbv   | 94     |
| 34) 2-Butanone                 | 5.34 | 43  | 24214  | 0.192 | ppbv # | 55     |
| 35) Carbon Tetrachloride       | 7.13 | 117 | 56088  | 0.402 | ppbv   | 91     |
| 36) Benzene                    | 7.00 | 78  | 70383  | 0.399 | ppbv   | 96     |
| 37) 1,2-Dichloroethane         | 6.41 | 62  | 44765  | 0.423 | ppbv   | 99     |
| 38) Trichloroethene            | 7.96 | 130 | 27196  | 0.396 | ppbv   | 95     |
| 39) 1,2-Dichloropropane        | 7.73 | 63  | 16278  | 0.245 | ppbv   | 93     |
| 40) 1,4-Dioxane                | 7.99 | 88  | 1916   | 0.077 | ppbv # | 1      |
| 42) Bromodichloromethane       | 7.91 | 83  | 29652  | 0.204 | ppbv   | 92     |
| 43) Methyl Methacrylate        | 8.14 | 69  | 24349  | 0.354 | ppbv   | 95     |
| 44) 2,2,4-Trimethylpentane     | 7.99 | 57  | 117893 | 0.394 | ppbv   | 96     |

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ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
0.4 PPB MDL

Quant Time: Mar 13 07:52:28 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031219AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Mar 13 07:17:55 2019  
QLast Update : Wed Mar 13 07:17:55 2019  
Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 45) t-1,3-Dichloropropene     | 9.41  | 75   | 19549    | 0.231 | ppbv   | 94       |
| 46) cis-1,3-Dichloropropene   | 8.83  | 75   | 15682    | 0.158 | ppbv   | 91       |
| 47) 1,1,2-Trichloroethane     | 9.61  | 97   | 21201    | 0.299 | ppbv   | 94       |
| 48) Dibromochloromethane      | 10.44 | 129  | 42218    | 0.364 | ppbv   | 100      |
| 49) Bromoform                 | 13.20 | 173  | 30983    | 0.329 | ppbv   | 98       |
| 50) 4-Methyl-2-Pentanone      | 8.89  | 43   | 65366    | 0.362 | ppbv   | 98       |
| 51) 2-Hexanone                | 10.30 | 43   | 44778    | 0.325 | ppbv # | 97       |
| 52) Tetrachloroethene         | 11.37 | 164  | 14258    | 0.221 | ppbv   | 88       |
| 53) Toluene                   | 9.94  | 91   | 36643    | 0.180 | ppbv # | 28       |
| 54) 1,2-Dibromoethane         | 10.76 | 107  | 41573    | 0.382 | ppbv   | 95       |
| 56) 1,1,1,2-Tetrachloroethane | 12.28 | 131  | 14915    | 0.188 | ppbv # | 1        |
| 57) Chlorobenzene             | 12.31 | 112  | 25967    | 0.184 | ppbv   | 96       |
| 58) Ethyl Benzene             | 12.87 | 91   | 94954    | 0.370 | ppbv   | 94       |
| 59) m/p-Xylene                | 13.12 | 91   | 23603    | 0.110 | ppbv # | 1        |
| 60) o-Xylene                  | 13.84 | 91   | 49252    | 0.239 | ppbv # | 53       |
| 61) Styrene                   | 13.68 | 104  | 23211    | 0.158 | ppbv # | 27       |
| 62) Isopropylbenzene          | 14.82 | 105  | 57409    | 0.200 | ppbv # | 50       |
| 63) 1,1,2,2-Tetrachloroethane | 13.83 | 83   | 60509    | 0.437 | ppbv   | 96       |
| 64) n-propylbenzene           | 15.72 | 120  | 11804    | 0.167 | ppbv # | 1        |
| 65) tert-Butylbenzene         | 16.90 | 119  | 46901    | 0.193 | ppbv # | 17       |
| 66) Benzyl Chloride           | 17.16 | 91   | 23672    | 0.252 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.46 | 105  | 84058    | 0.243 | ppbv # | 72       |
| 69) p-Isopropyltoluene        | 17.82 | 119  | 98665    | 0.354 | ppbv   | 96       |
| 70) n-Butylbenzene            | 18.71 | 91   | 108619   | 0.362 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.61 | 91   | 83077    | 0.383 | ppbv   | 97       |
| 72) 4-Ethyltoluene            | 16.00 | 105  | 51462    | 0.231 | ppbv # | 56       |
| 73) 1,3,5-Trimethylbenzene    | 16.15 | 105  | 46295    | 0.220 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.93 | 105  | 39780    | 0.186 | ppbv   | 94       |
| 75) 1,3-Dichlorobenzene       | 17.17 | 146  | 54945    | 0.429 | ppbv   | 95       |
| 76) 1,4-Dichlorobenzene       | 17.31 | 146  | 37134    | 0.293 | ppbv # | 65       |
| 77) 1,2-Dichlorobenzene       | 17.99 | 146  | 52934    | 0.415 | ppbv   | 96       |
| 78) Hexachloro-1,3-Butadiene  | 23.54 | 225  | 28670    | 0.270 | ppbv # | 57       |
| 79) Naphthalene               | 22.41 | 128  | 22279    | 0.096 | ppbv # | 89       |
| 80) Naphthalene,2-methyl-     | 25.14 | 142  | 4157     | 0.066 | ppbv # | 64       |
| 81) 1,2,4-Trichlorobenzene    | 22.14 | 180  | 28898    | 0.237 | ppbv # | 80       |

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

Data File : VL033284.D

```
Acq On       : 12 Mar 2019  15:03
Operator     : SY/AP
Sample       : 0.4 PPB MDL
Misc        : 400ml/MSVOA_L
ALS Vial     : 1      Sample Multipl
```

**Instrument :**  
MSVOA\_L  
**ClientSampleId :**  
0.4 PPB MDL

Quant Time: Mar 13 07:52:28 2019

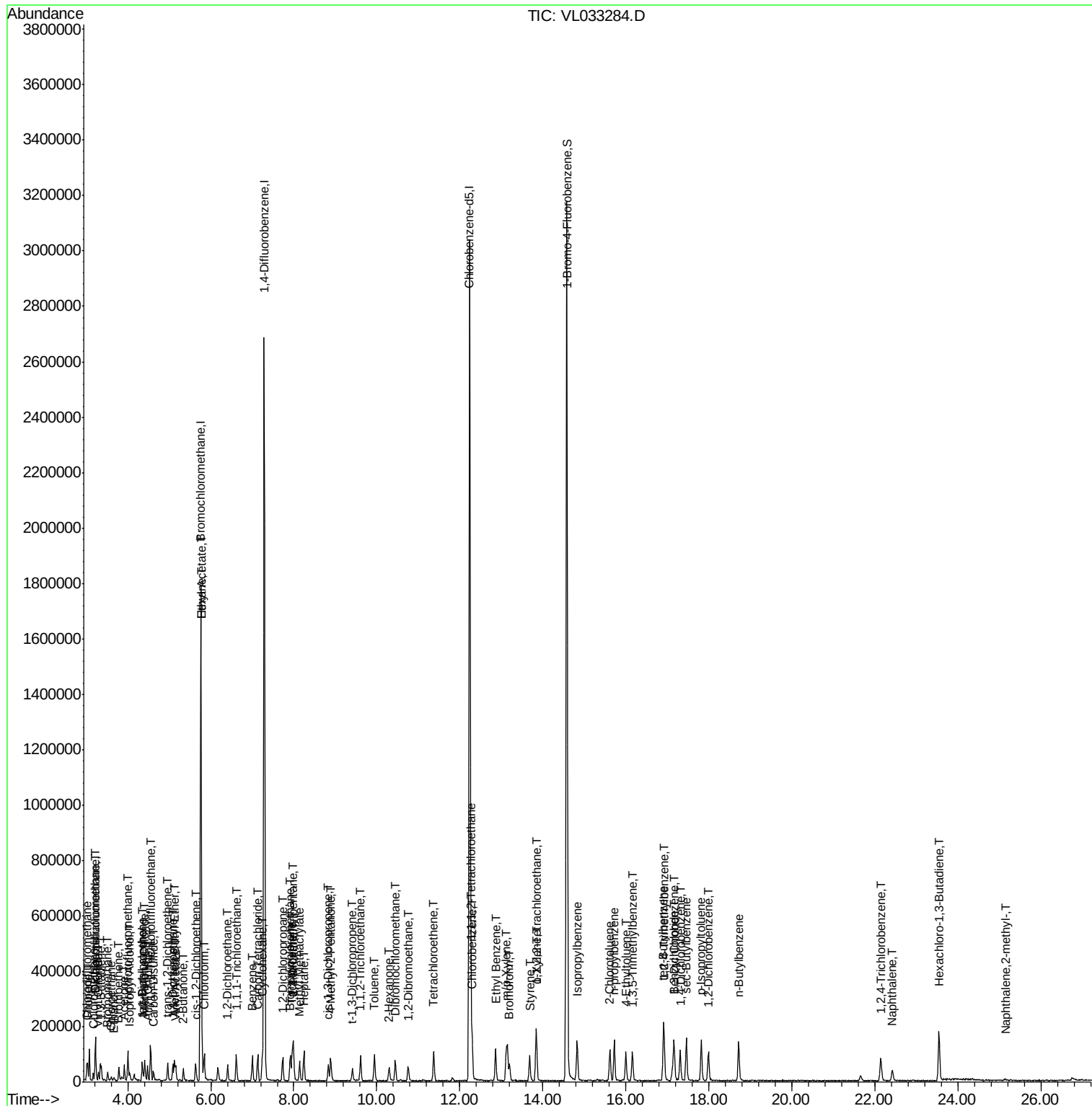
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_L\METHODS\VL031219AIR.M

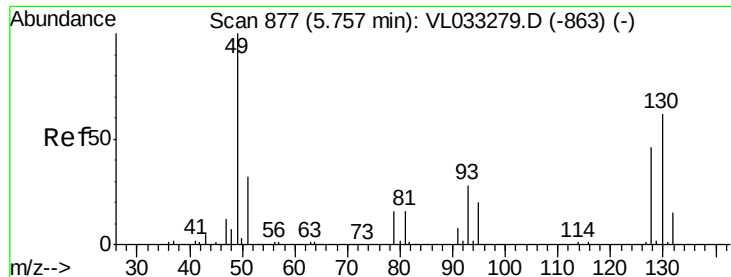
Quant Title : AIR ANALYSIS BY METHOD T0-15

Instrument: MSVOA\_LWed Mar 13 07:17:55 2019

QLast Update : Wed Mar 13 07:17:55 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

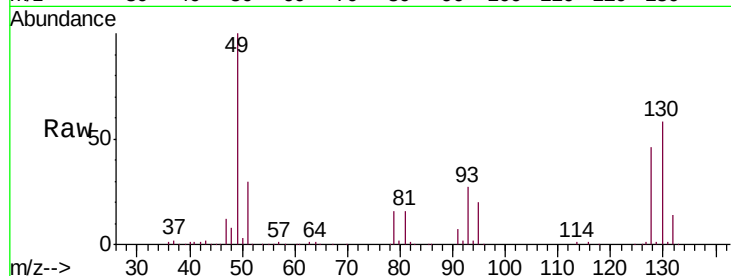
Tgt Ion: 49 Resp: 830198

Ion Ratio Lower Upper

49 100

128 46.6 23.3 69.9

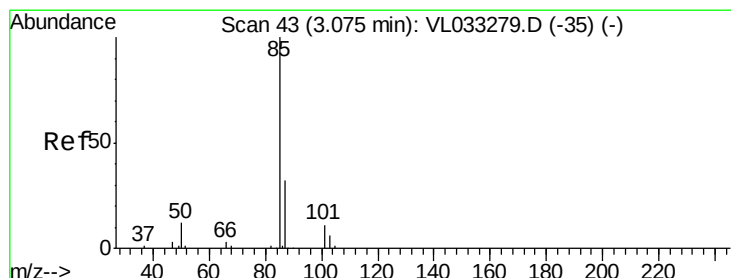
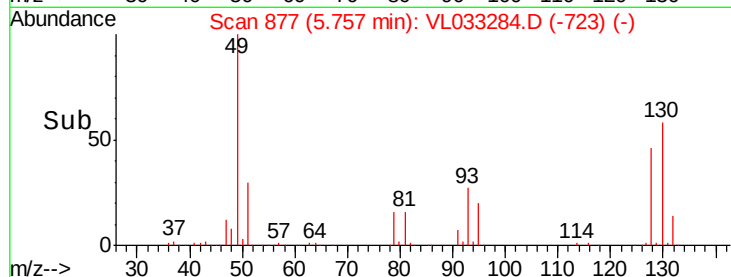
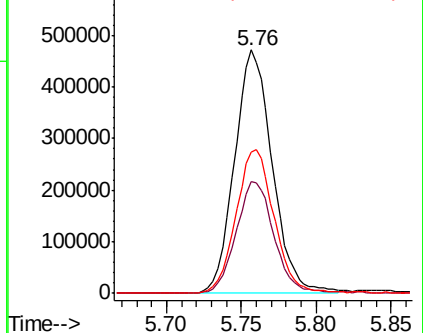
130 59.7 30.0 90.1



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: 0.361 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.14 min

Lab File: VL033284.D

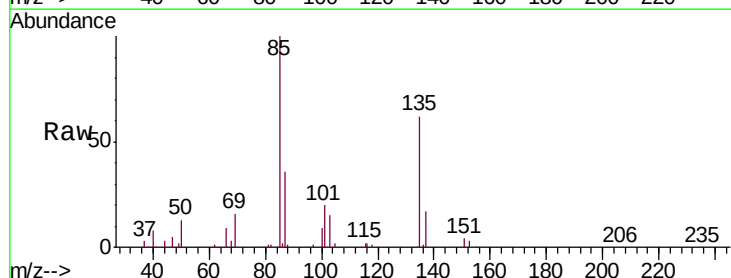
Acq: 12 Mar 2019 15:03

Tgt Ion: 85 Resp: 60563

Ion Ratio Lower Upper

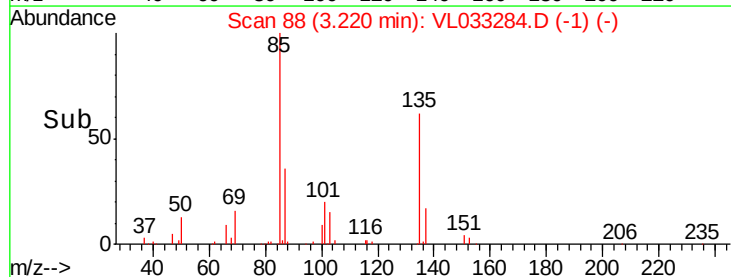
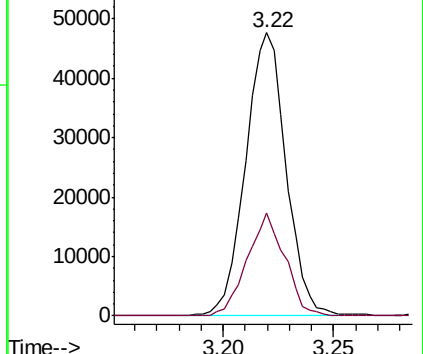
85 100

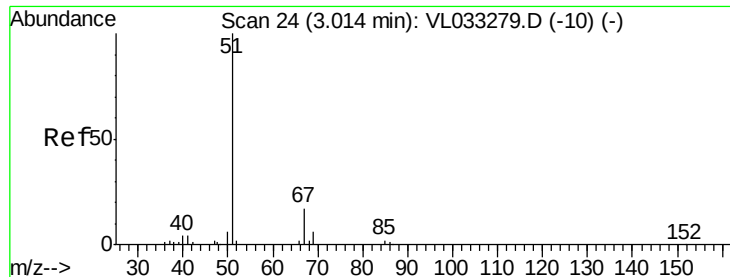
87 36.5 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.415 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

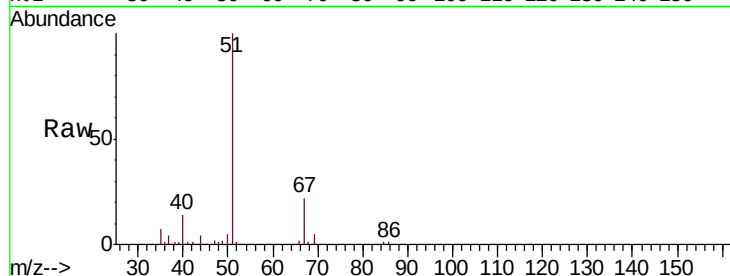
0.4 PPB MDL

Tgt Ion: 51 Resp: 45694

Ion Ratio Lower Upper

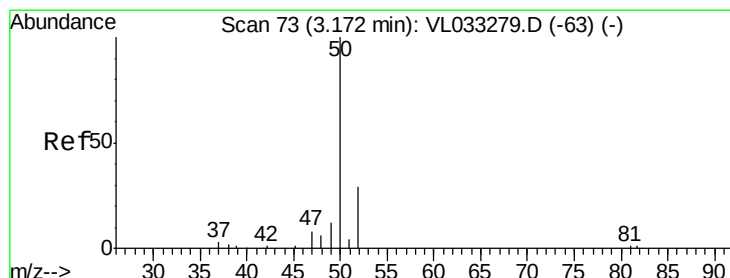
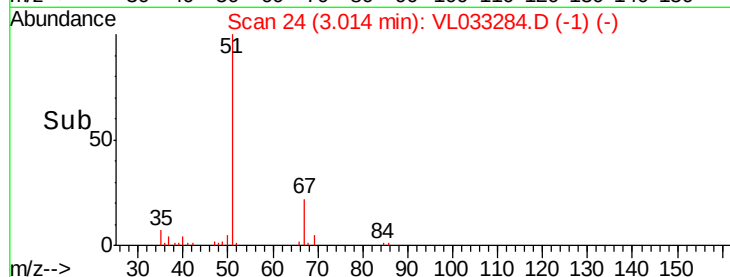
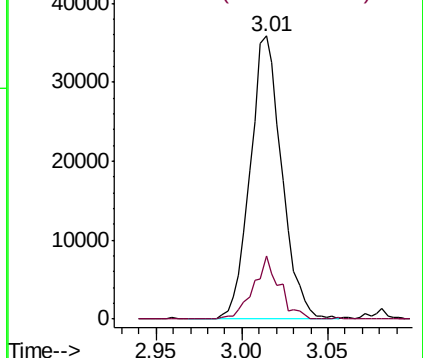
51 100

67 18.5 15.0 22.4



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.402 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033284.D

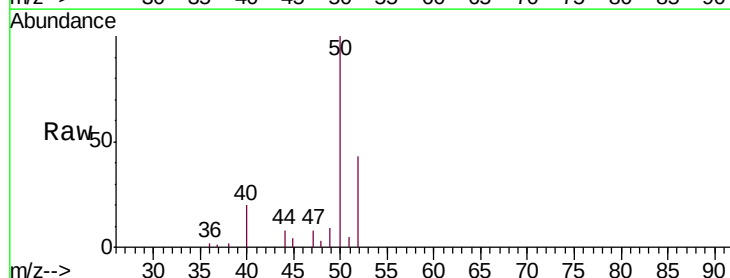
Acq: 12 Mar 2019 15:03

Tgt Ion: 50 Resp: 23692

Ion Ratio Lower Upper

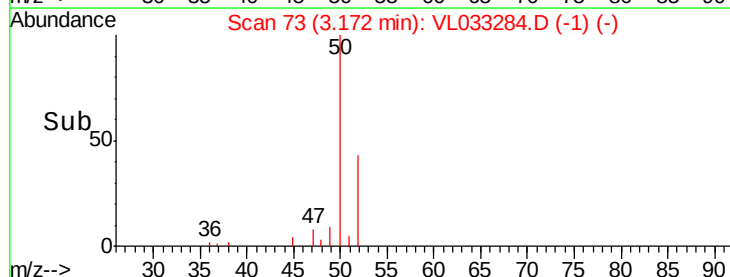
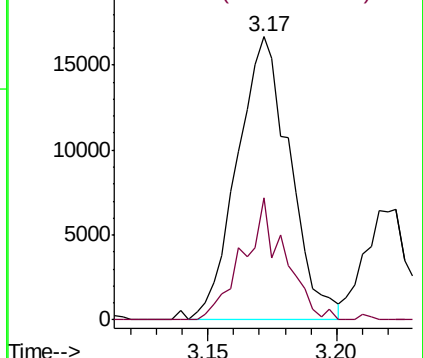
50 100

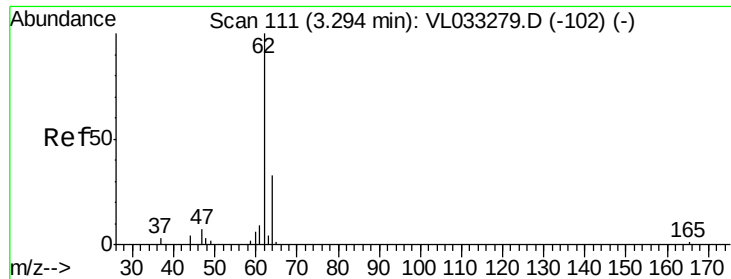
52 43.1 26.6 39.8#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.408 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

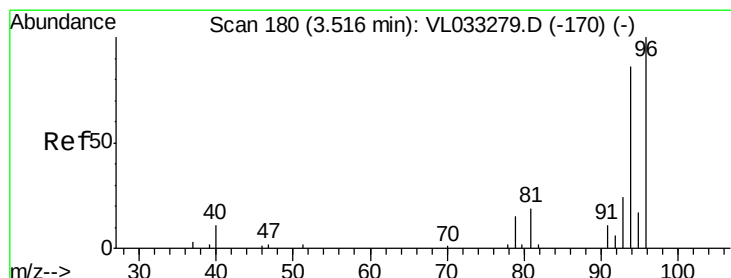
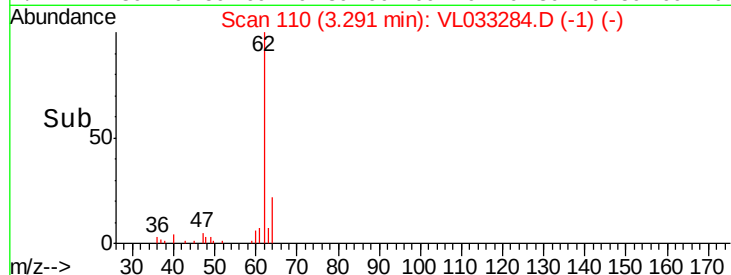
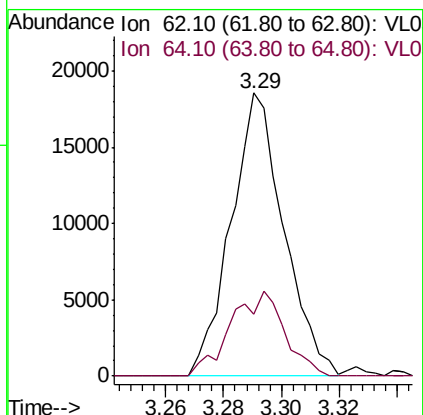
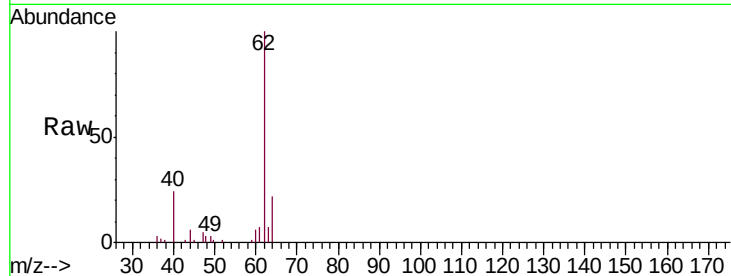
0.4 PPB MDL

Tgt Ion: 62 Resp: 23433

Ion Ratio Lower Upper

62 100

64 21.9 24.5 36.7#



#6

Bromomethane

Concen: 0.418 ppbv

RT: 3.52 min Scan# 181

Delta R.T. 0.00 min

Lab File: VL033284.D

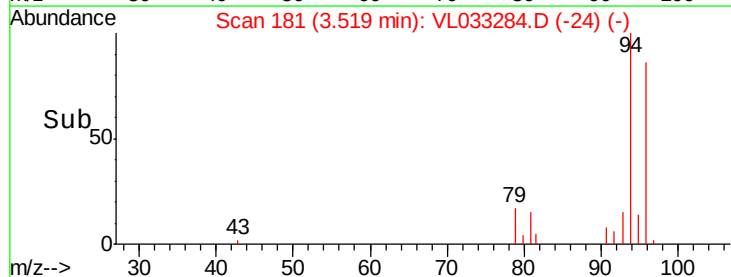
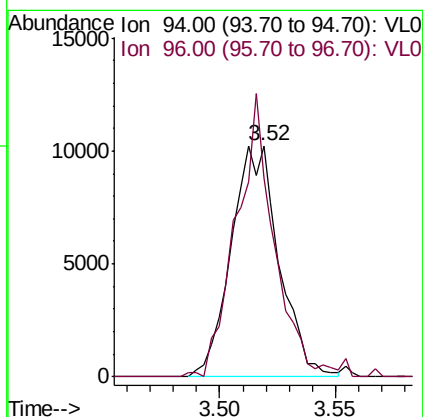
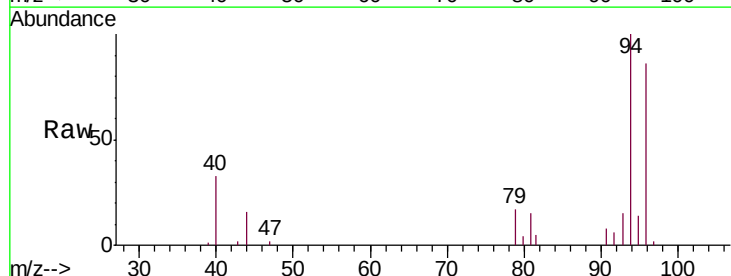
Acq: 12 Mar 2019 15:03

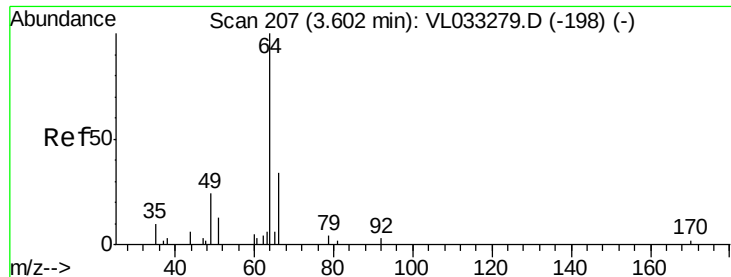
Tgt Ion: 94 Resp: 14682

Ion Ratio Lower Upper

94 100

96 84.3 71.3 106.9





#7

Chloroethane

Concen: 0.256 ppbv

RT: 3.60 min Scan# 206

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

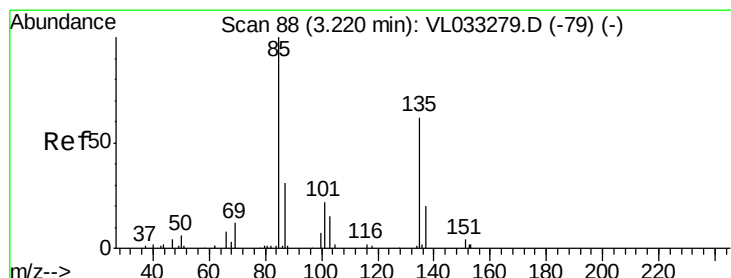
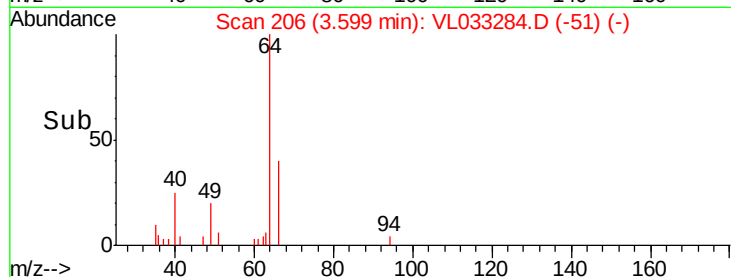
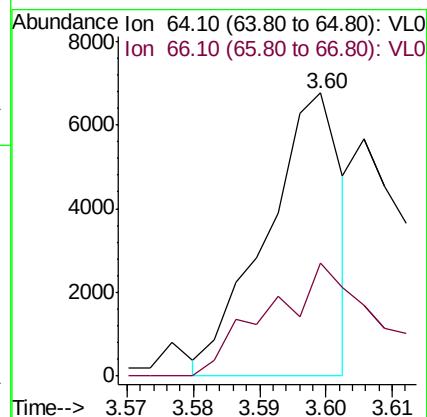
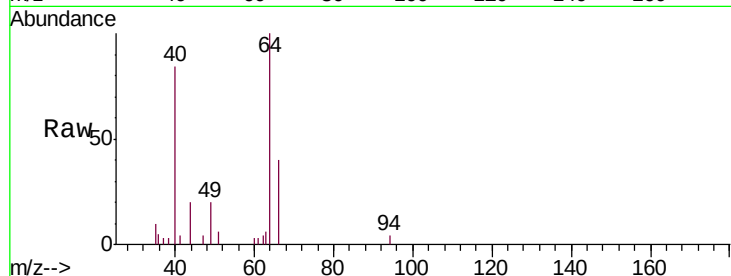
0.4 PPB MDL

Tgt Ion: 64 Resp: 5328

Ion Ratio Lower Upper

64 100

66 40.0 26.2 39.2#



#8

Dichlorotetrafluoroethane

Concen: 0.427 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL033284.D

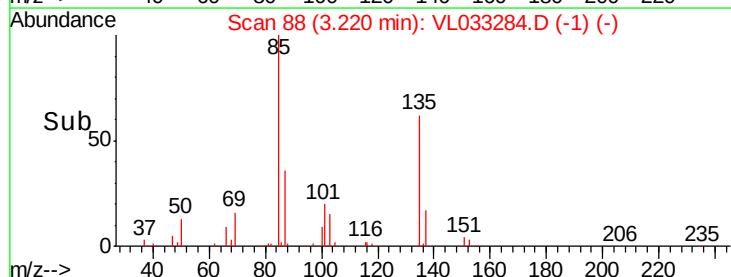
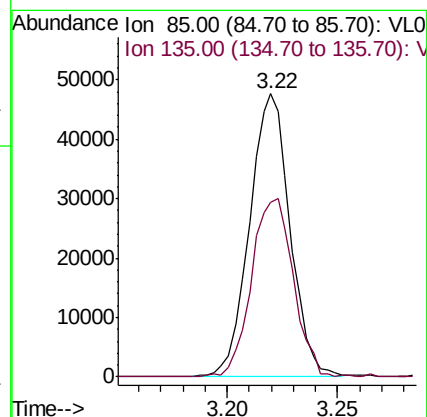
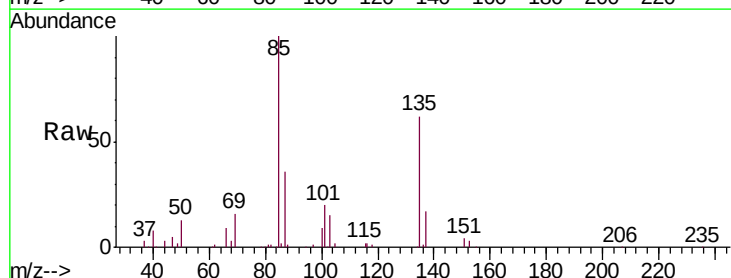
Acq: 12 Mar 2019 15:03

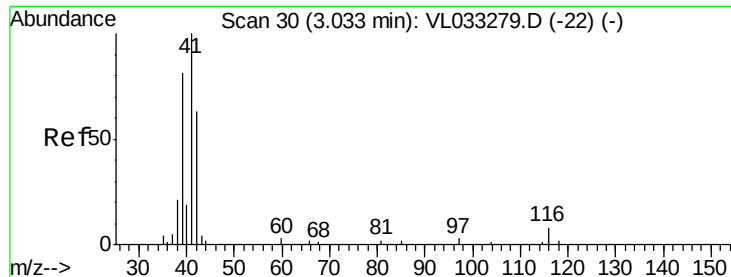
Tgt Ion: 85 Resp: 60563

Ion Ratio Lower Upper

85 100

135 65.5 53.4 80.2





#9

Propene

Concen: 0.394 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

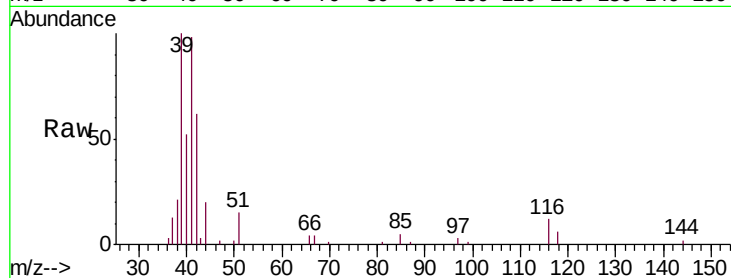
0.4 PPB MDL

Tgt Ion: 41 Resp: 19792

Ion Ratio Lower Upper

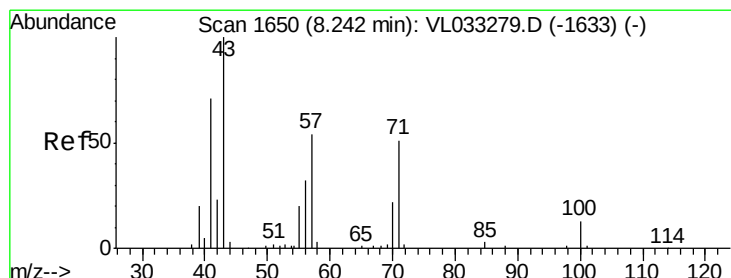
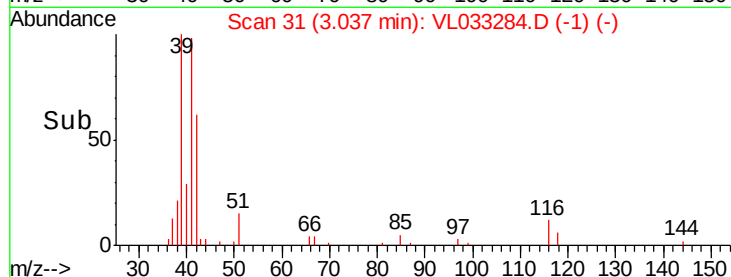
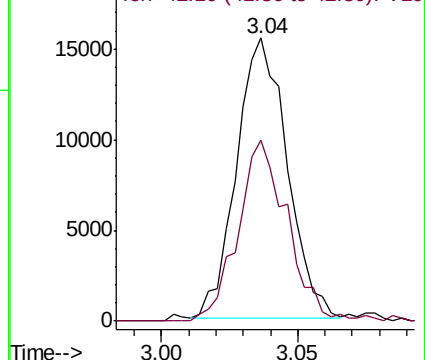
41 100

42 63.6 54.6 82.0



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.385 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.00 min

Lab File: VL033284.D

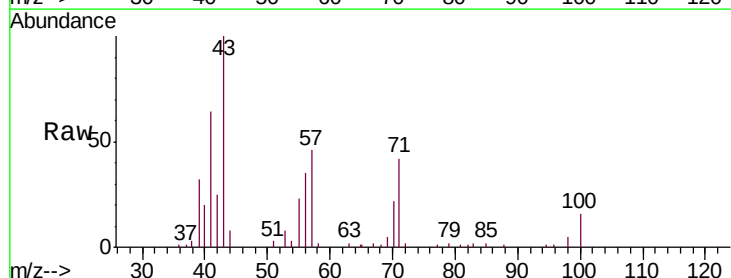
Acq: 12 Mar 2019 15:03

Tgt Ion: 43 Resp: 43519

Ion Ratio Lower Upper

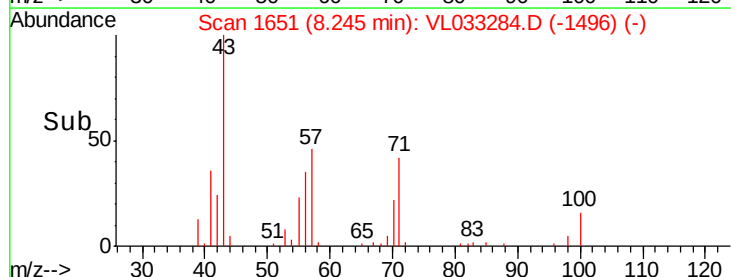
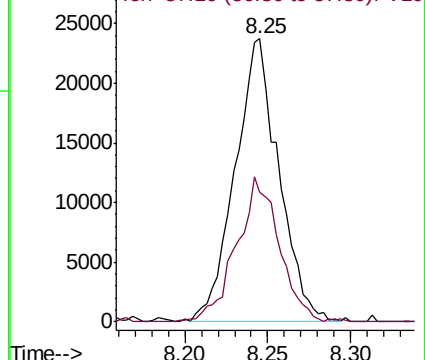
43 100

57 50.3 39.8 59.8

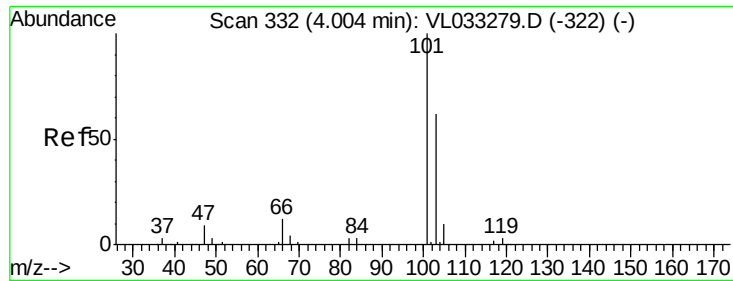


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



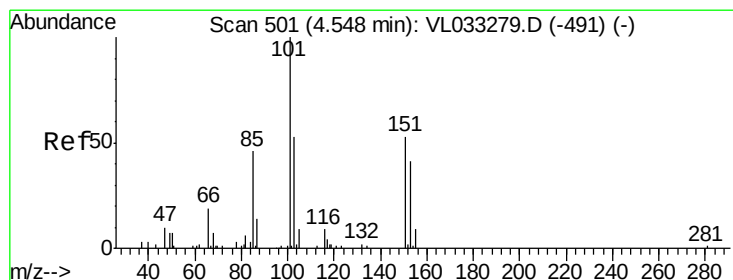
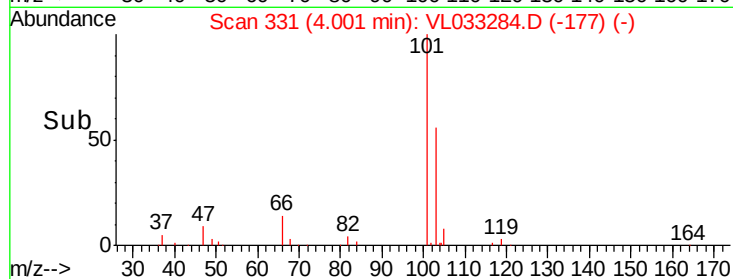
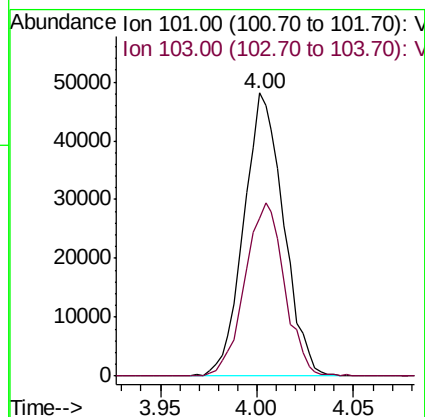
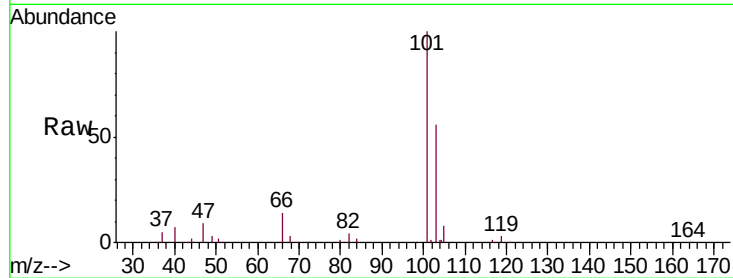




#11  
 Trichlorofluoromethane  
 Concen: 0.414 ppbv  
 RT: 4.00 min Scan# 331  
 Delta R.T. -0.01 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

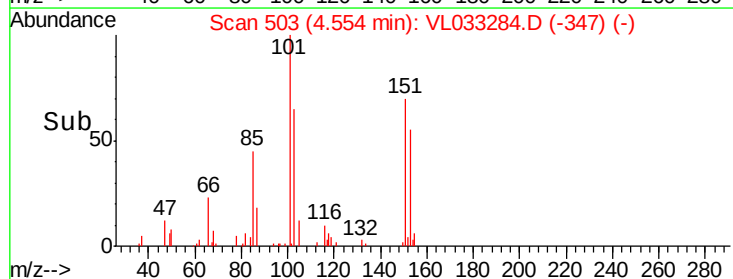
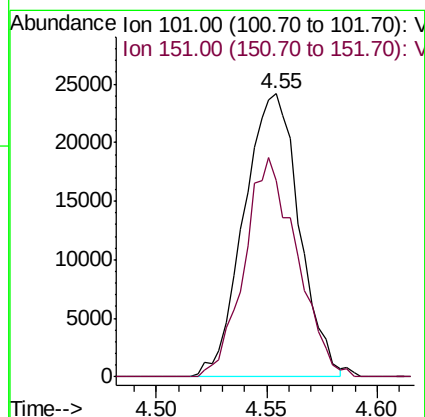
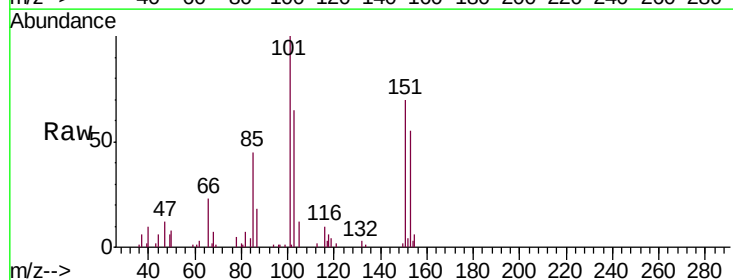
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 0.4 PPB MDL

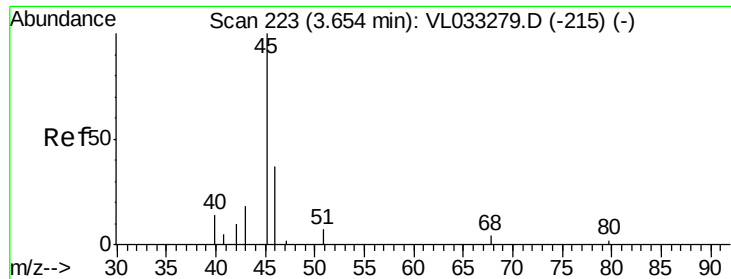
Tgt Ion:101 Resp: 68682  
 Ion Ratio Lower Upper  
 101 100  
 103 56.0 51.8 77.8



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 0.442 ppbv  
 RT: 4.55 min Scan# 503  
 Delta R.T. 0.00 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

Tgt Ion:101 Resp: 42001  
 Ion Ratio Lower Upper  
 101 100  
 151 73.5 56.9 85.3





#13

Ethanol

Concen: 0.247 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

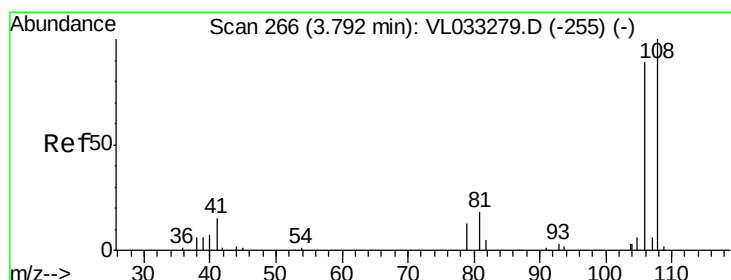
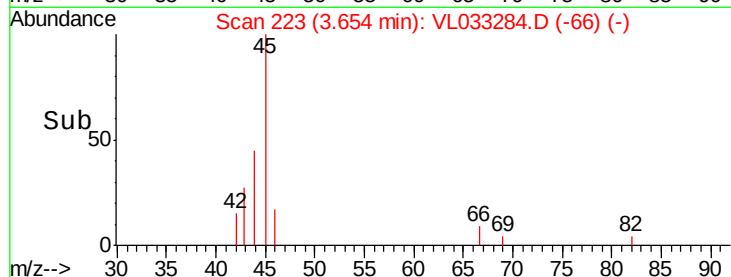
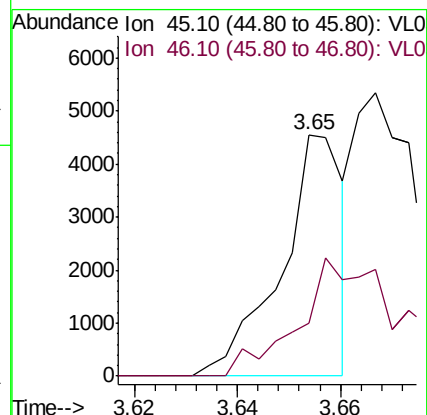
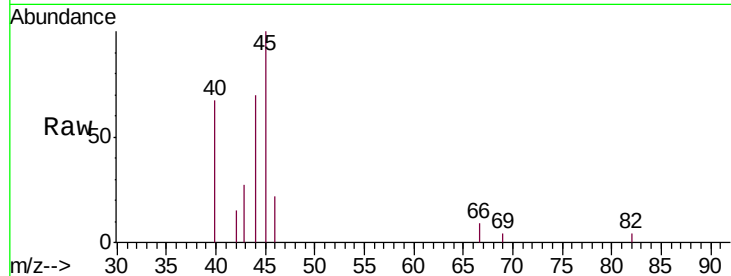
0.4 PPB MDL

Tgt Ion: 45 Resp: 3782

Ion Ratio Lower Upper

45 100

46 98.7 13.9 55.7#



#14

Bromoethene

Concen: 0.374 ppbv

RT: 3.79 min Scan# 265

Delta R.T. 0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

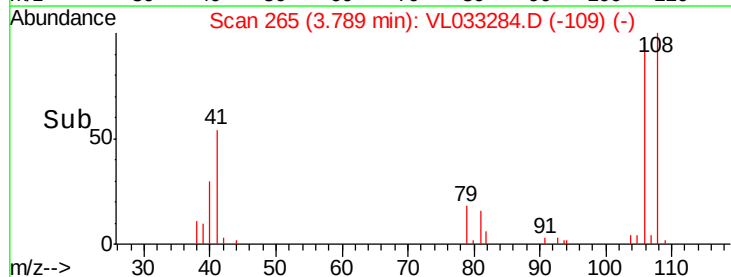
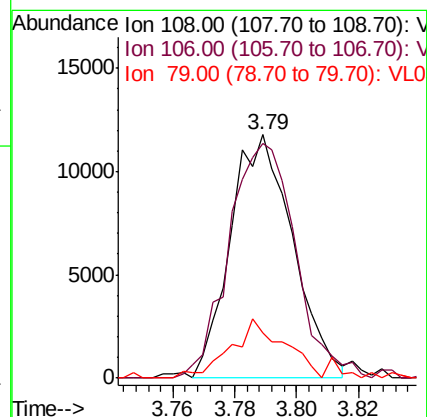
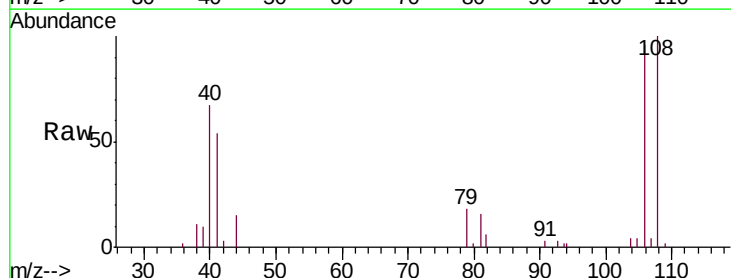
Tgt Ion: 108 Resp: 16557

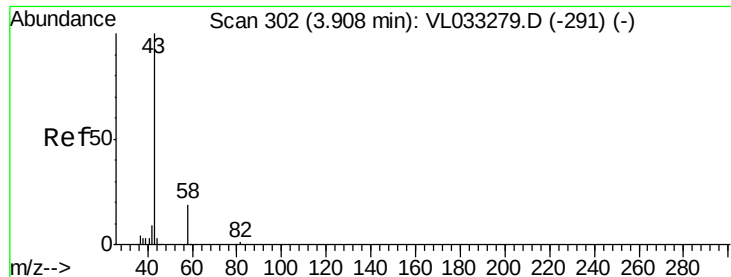
Ion Ratio Lower Upper

108 100

106 103.6 85.9 128.9

79 23.6 14.9 22.3#





#15

Acetone

Concen: 0.405 ppbv

RT: 3.91 min Scan# 304

Delta R.T. 0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

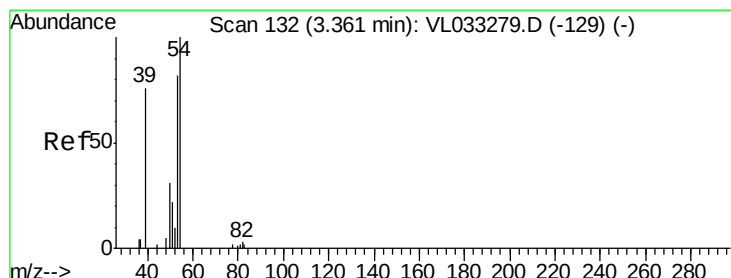
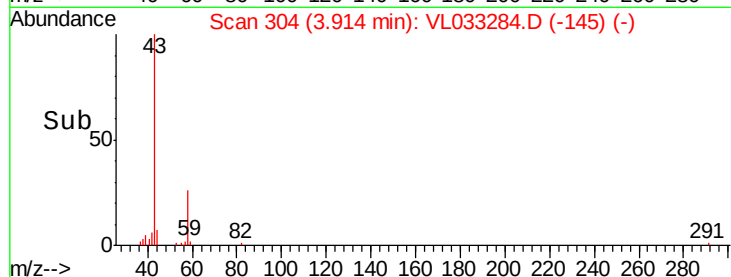
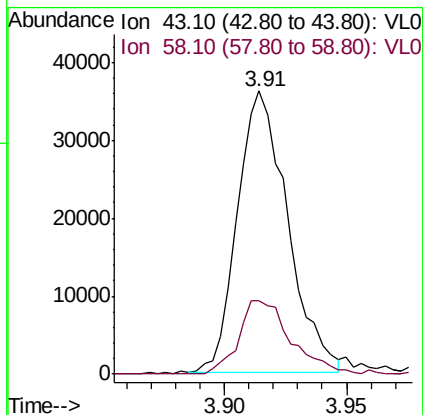
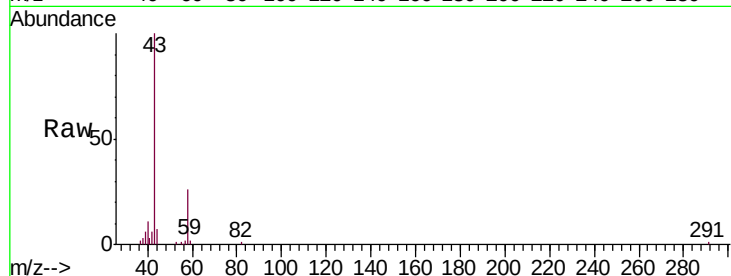
0.4 PPB MDL

Tgt Ion: 43 Resp: 51571

Ion Ratio Lower Upper

43 100

58 27.5 21.1 31.7



#16

1,3-Butadiene

Concen: 0.423 ppbv

RT: 3.36 min Scan# 132

Delta R.T. -0.00 min

Lab File: VL033284.D

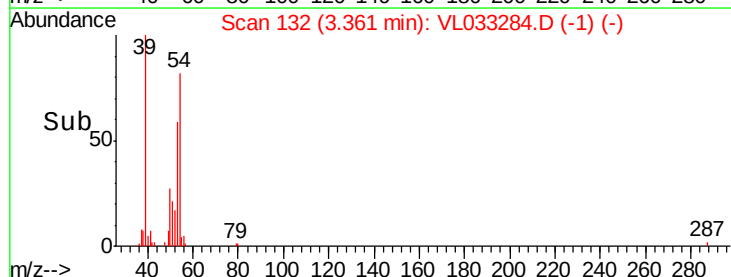
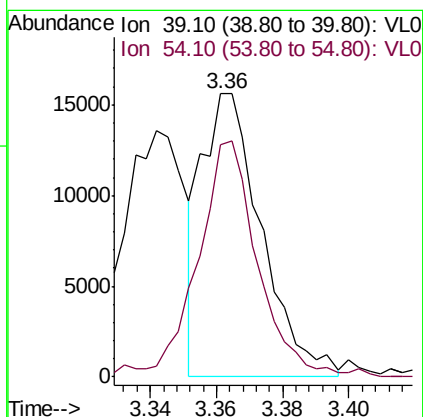
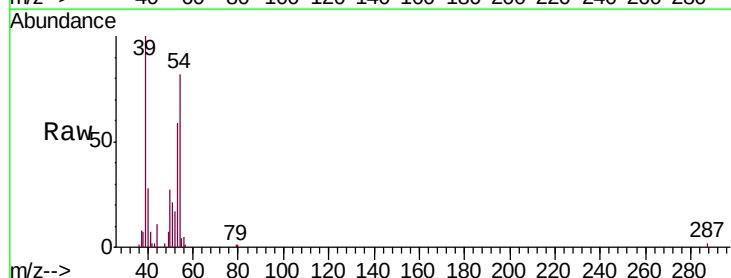
Acq: 12 Mar 2019 15:03

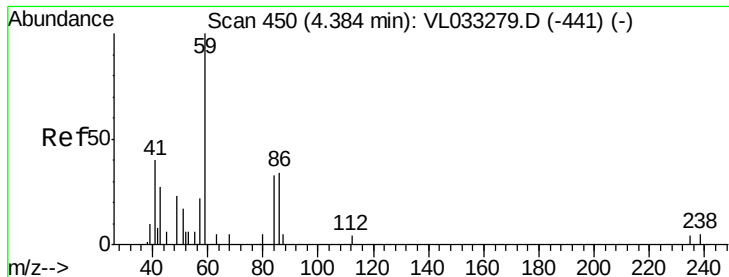
Tgt Ion: 39 Resp: 19446

Ion Ratio Lower Upper

39 100

54 85.0 76.6 114.8





#17

tert-Butyl alcohol

Concen: 0.045 ppbv

RT: 4.35 min Scan# 439

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

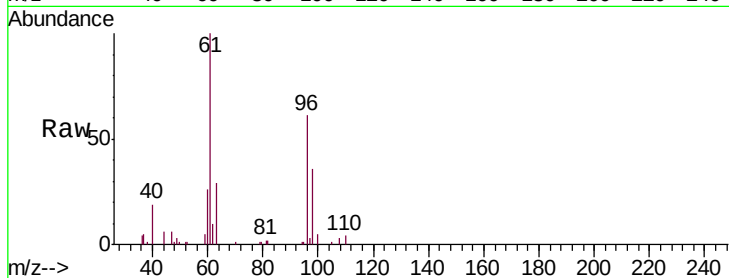
0.4 PPB MDL

Tgt Ion: 59 Resp: 771

Ion Ratio Lower Upper

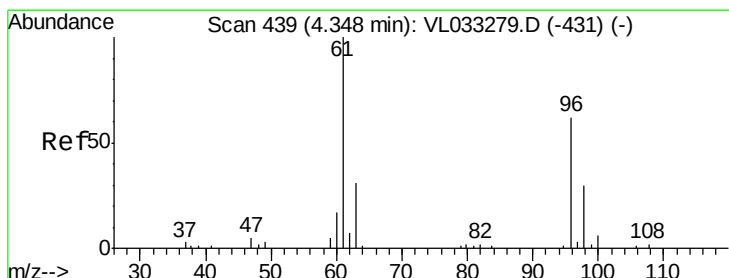
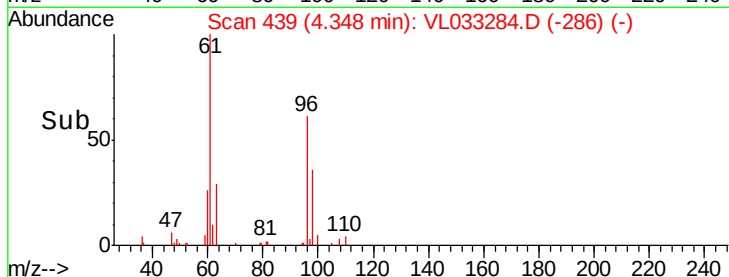
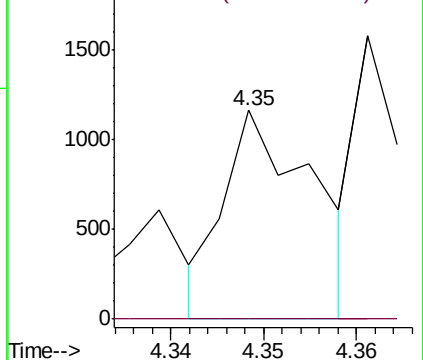
59 100

57 0.0 7.5 11.3#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#18

1,1-Dichloroethene

Concen: 0.456 ppbv

RT: 4.35 min Scan# 440

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

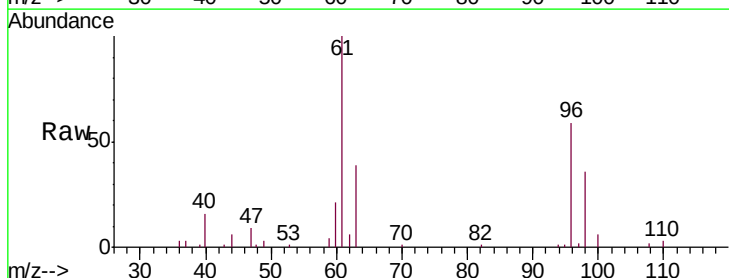
Tgt Ion: 96 Resp: 19170

Ion Ratio Lower Upper

96 100

61 169.5 158.9 238.3

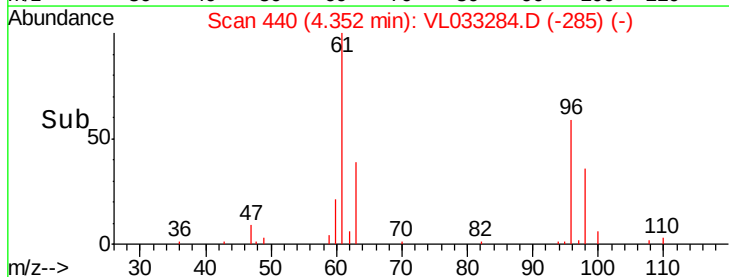
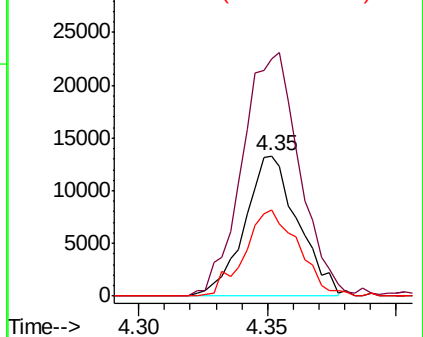
98 61.1 52.4 78.6

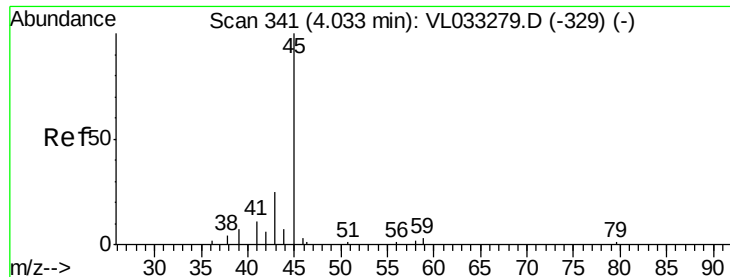


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#19

Isopropyl Alcohol

Concen: 0.398 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.02 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

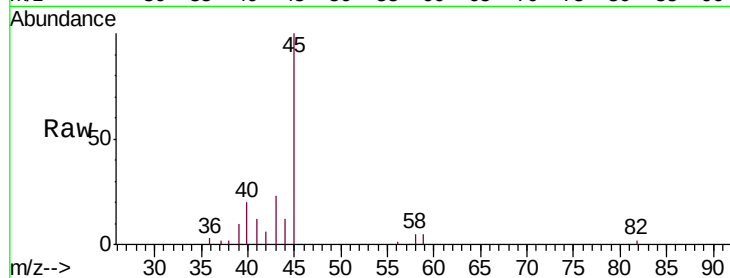
0.4 PPB MDL

Tgt Ion: 45 Resp: 30597

Ion Ratio Lower Upper

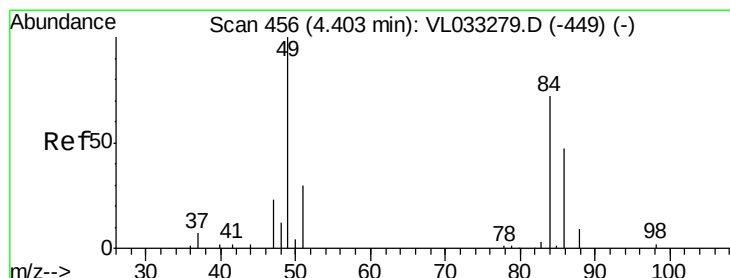
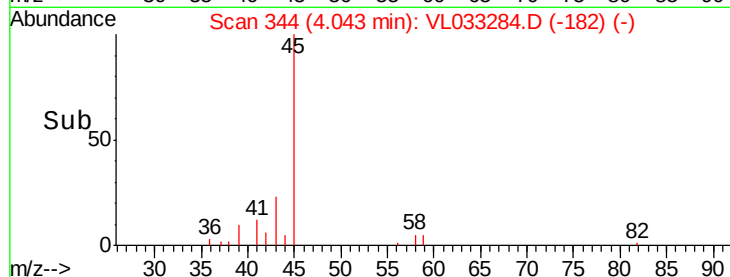
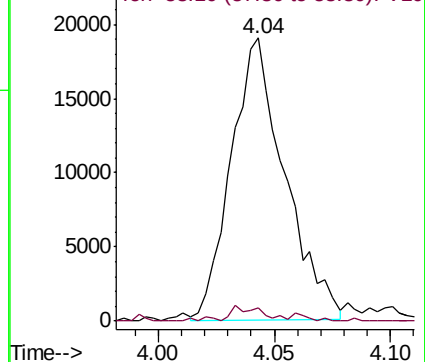
45 100

58 4.2 1.4 2.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 0.516 ppbv

RT: 4.41 min Scan# 457

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Tgt Ion: 84 Resp: 21864

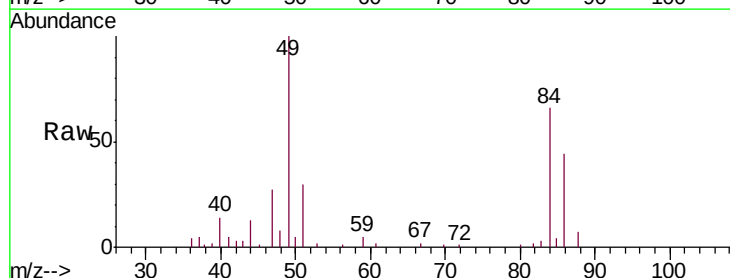
Ion Ratio Lower Upper

84 100

49 147.1 120.3 180.5

51 44.9 36.2 54.4

86 65.0 52.5 78.7

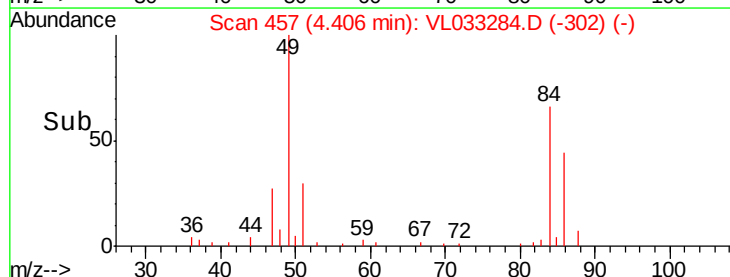
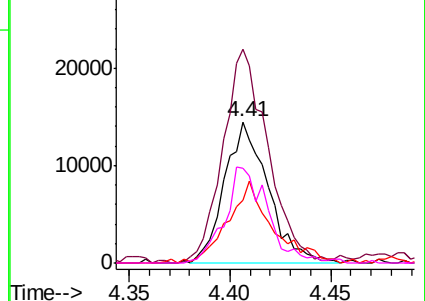


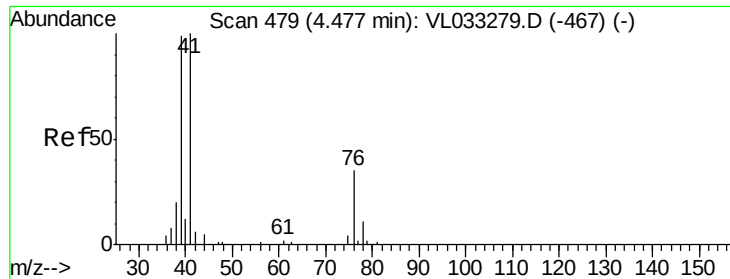
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





#21

Allyl Chloride

Concen: 0.422 ppbv

RT: 4.48 min Scan# 479

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

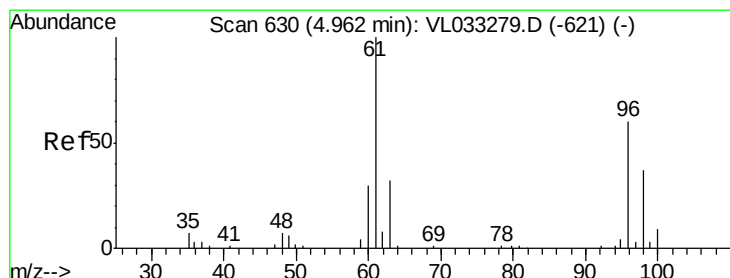
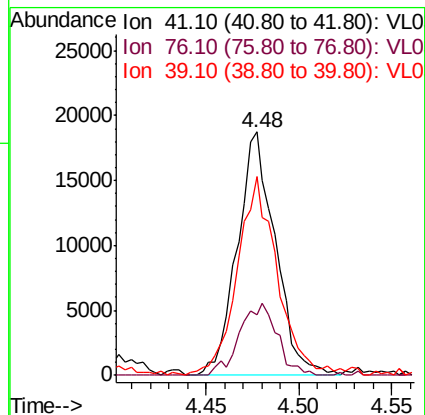
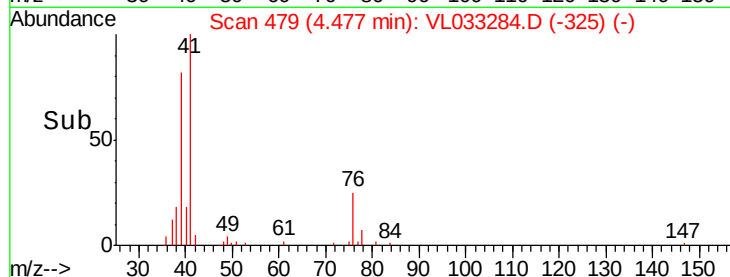
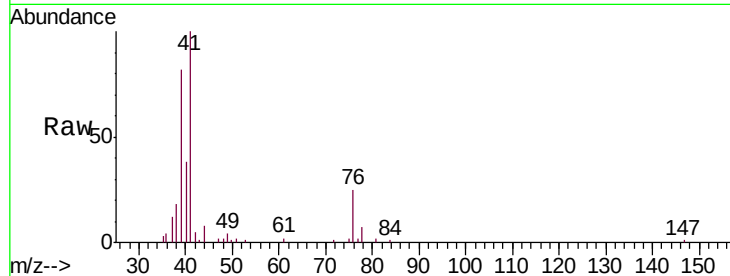
Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 41    | Resp: | 26721 |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 76       | 29.1  | 25.0  | 37.4  |
| 39       | 88.4  | 64.2  | 96.4  |



#22

trans-1,2-Dichloroethene

Concen: 0.390 ppbv

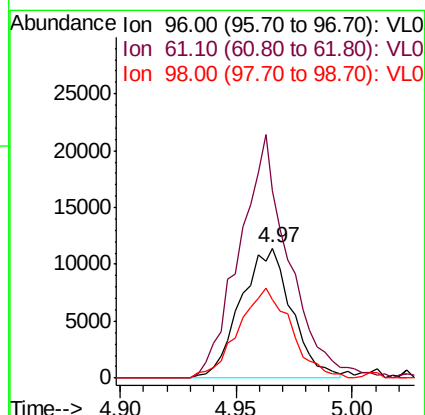
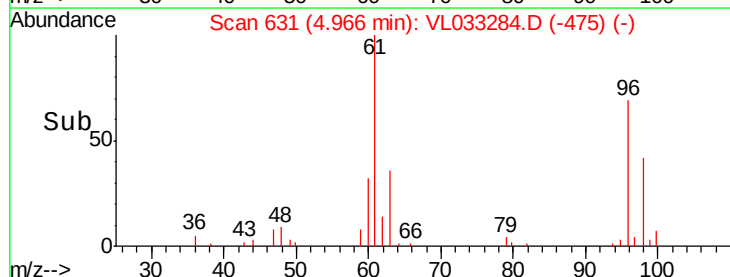
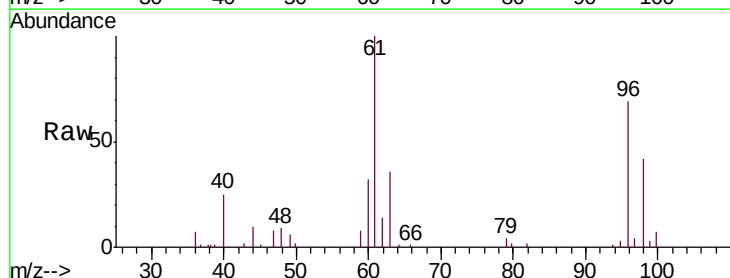
RT: 4.97 min Scan# 631

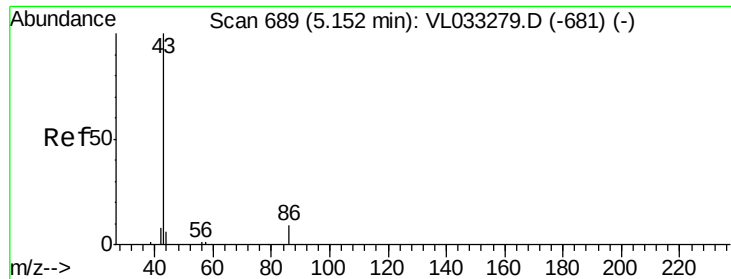
Delta R.T. 0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 17488 |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 144.7 | 131.6 | 197.4 |
| 98       | 60.9  | 54.1  | 81.1  |

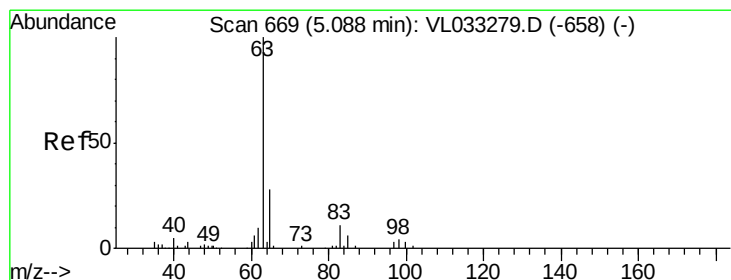
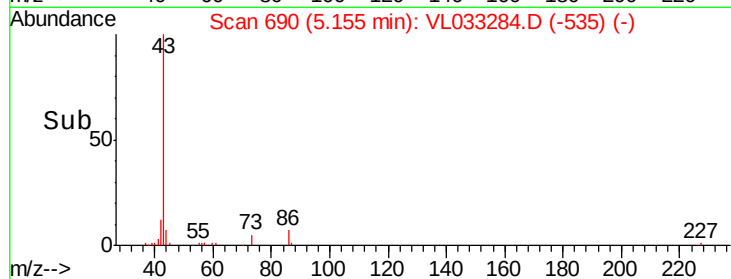
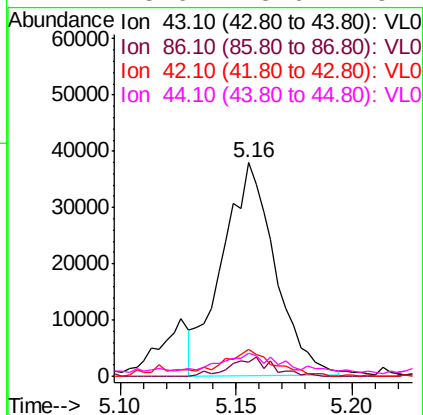
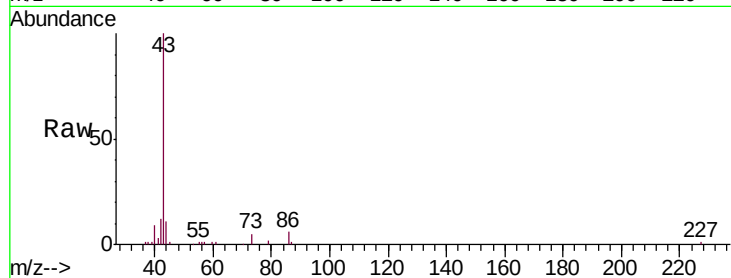




#23  
 Vinyl Acetate  
 Concen: 0.374 ppbv  
 RT: 5.16 min Scan# 690  
 Delta R.T. -0.00 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

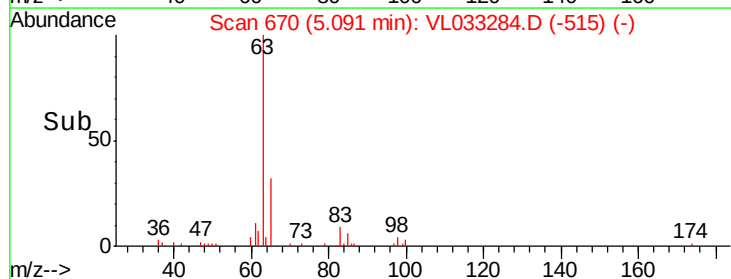
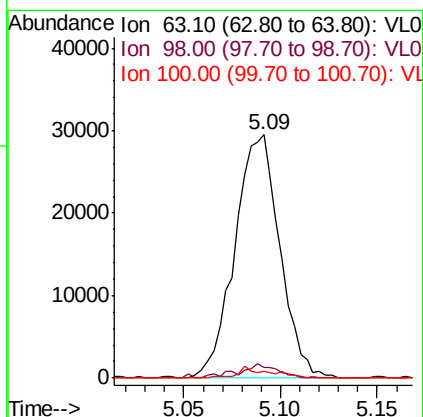
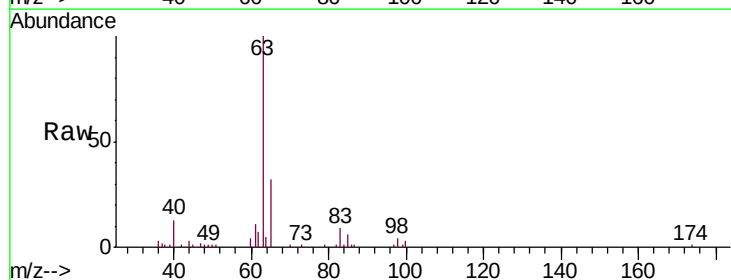
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 0.4 PPB MDL

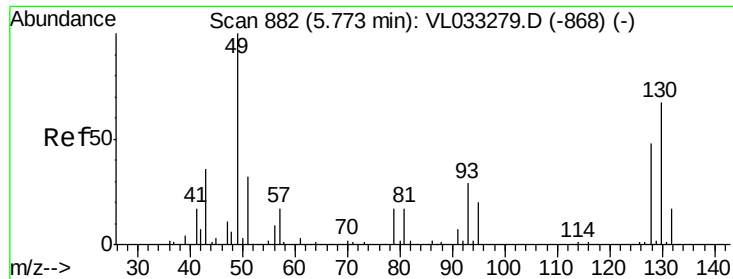
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 59629 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 6.6   | 5.5   | 8.3   |
| 42       | 12.6  | 7.8   | 11.6# |
| 44       | 8.6   | 3.6   | 5.4#  |



#24  
 1,1-Dichloroethane  
 Concen: 0.413 ppbv  
 RT: 5.09 min Scan# 670  
 Delta R.T. -0.00 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 47833 |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 4.3   | 2.2   | 6.6   |
| 100      | 2.7   | 1.5   | 4.4   |

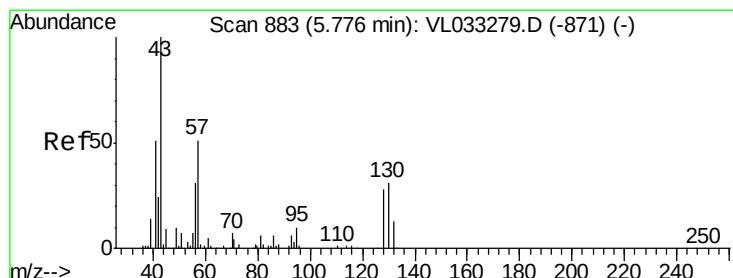
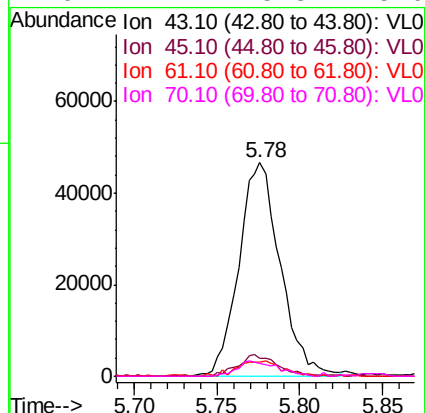
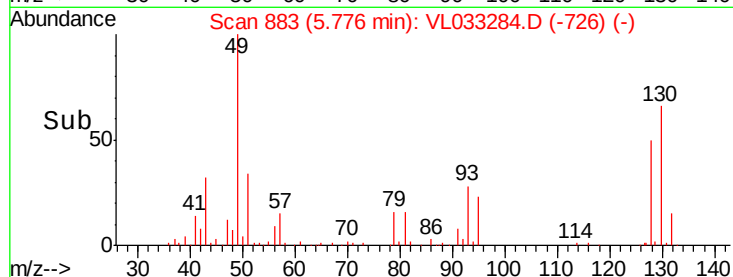
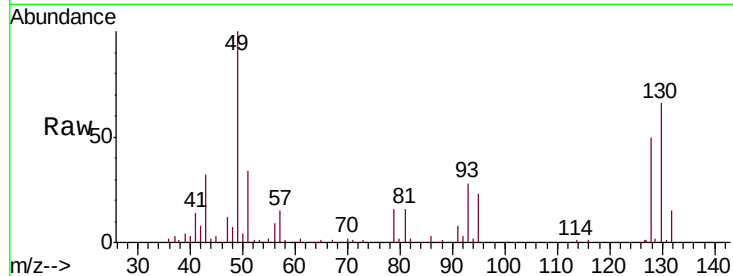




#25  
Ethyl Acetate  
Concen: 0.413 ppbv  
RT: 5.78 min Scan# 883  
Delta R.T. 0.00 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

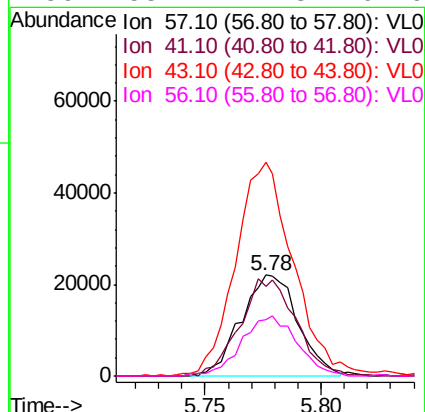
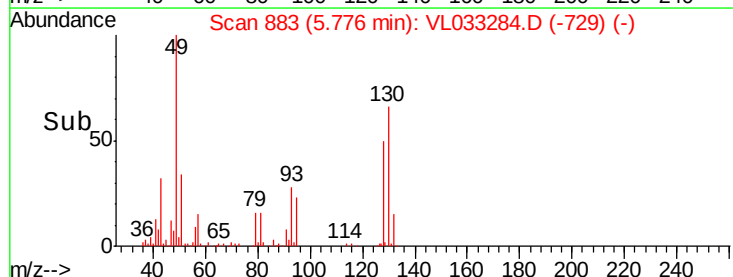
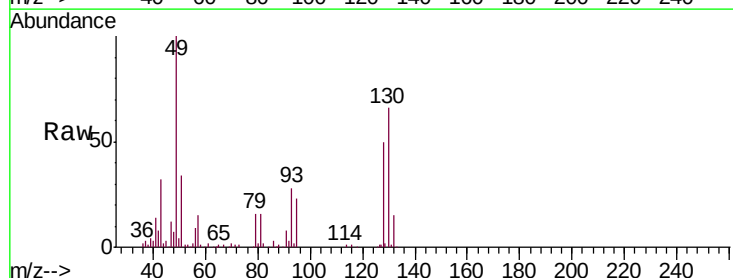
Instrument :  
MSVOA\_L  
ClientSampleId :  
0.4 PPB MDL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 80952 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 10.0  | 7.8   | 11.6  |
| 61       | 7.9   | 7.3   | 10.9  |
| 70       | 7.1   | 5.8   | 8.6   |

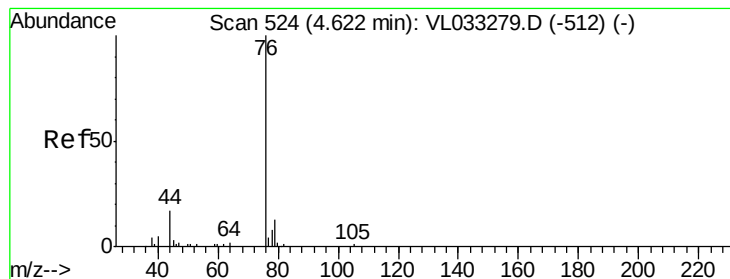


#26  
Hexane  
Concen: 0.409 ppbv  
RT: 5.78 min Scan# 883  
Delta R.T. -0.01 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 57    | Resp: | 37650 |
| Ion      | Ratio | Lower | Upper |
| 57       | 100   |       |       |
| 41       | 95.1  | 70.7  | 106.1 |
| 43       | 218.7 | 178.6 | 267.8 |
| 56       | 58.4  | 41.3  | 61.9  |







#27

Carbon Disulfide

Concen: 0.369 ppbv

RT: 4.62 min Scan# 523

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

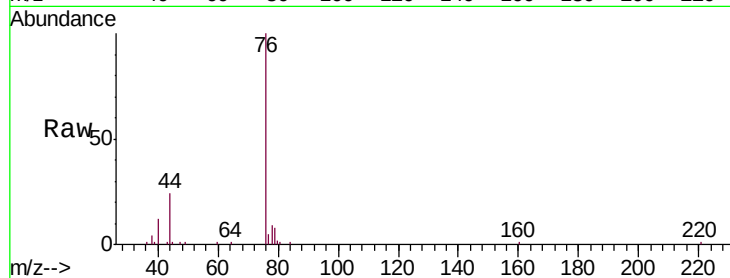
Tgt Ion: 76 Resp: 36095

Ion Ratio Lower Upper

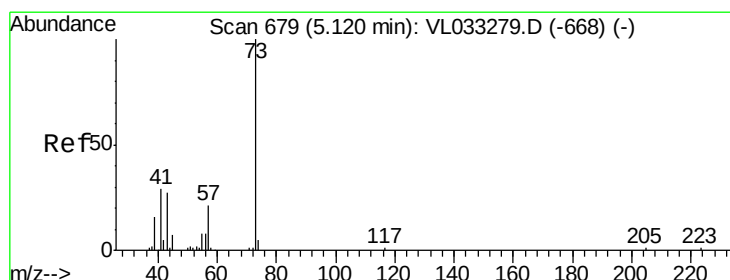
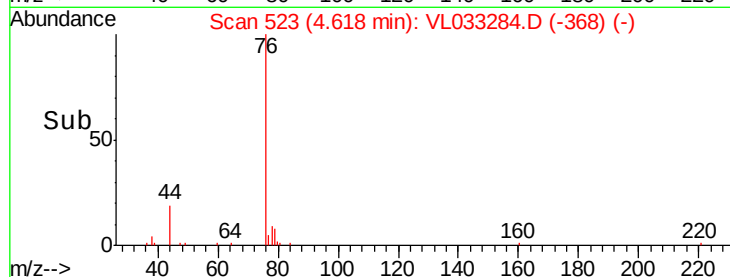
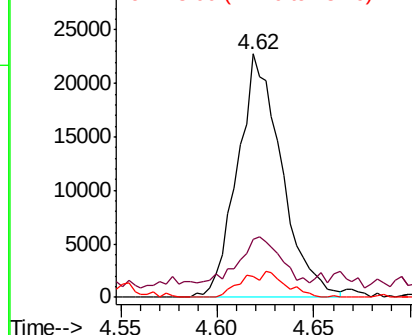
76 100

44 27.9 15.1 22.7#

78 10.5 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



#28

Methyl tert-Butyl Ether

Concen: 0.364 ppbv

RT: 5.12 min Scan# 680

Delta R.T. 0.01 min

Lab File: VL033284.D

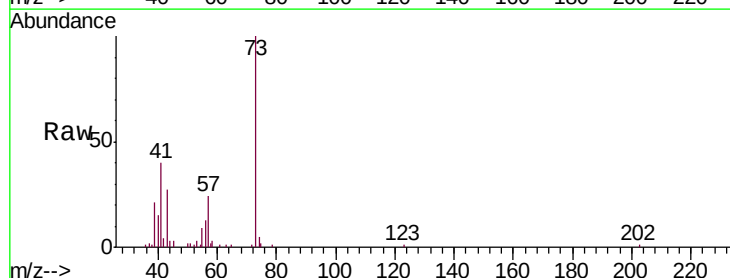
Acq: 12 Mar 2019 15:03

Tgt Ion: 73 Resp: 47647

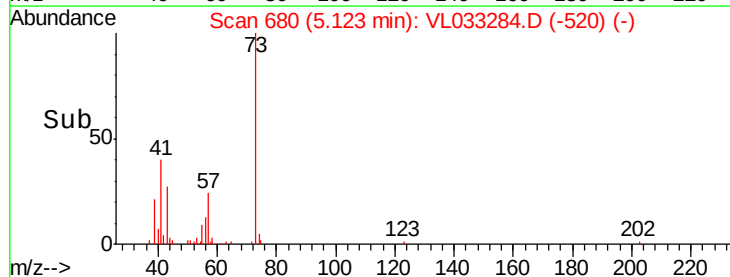
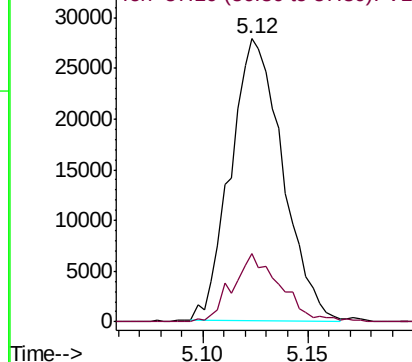
Ion Ratio Lower Upper

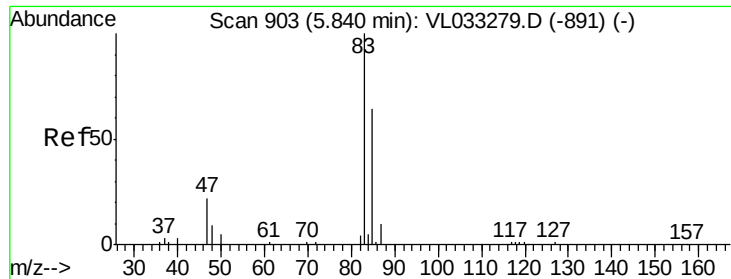
73 100

57 22.3 17.9 26.9



Abundance Ion 73.10 (72.80 to 73.80): VL0  
Ion 57.10 (56.80 to 57.80): VL0

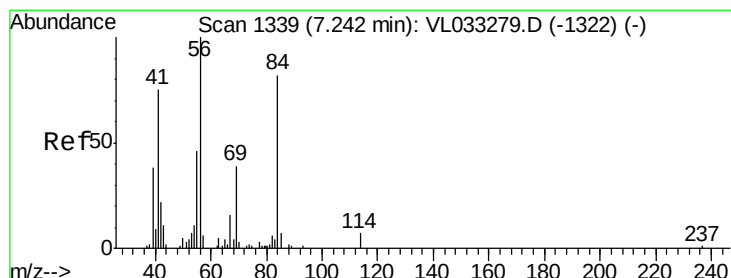
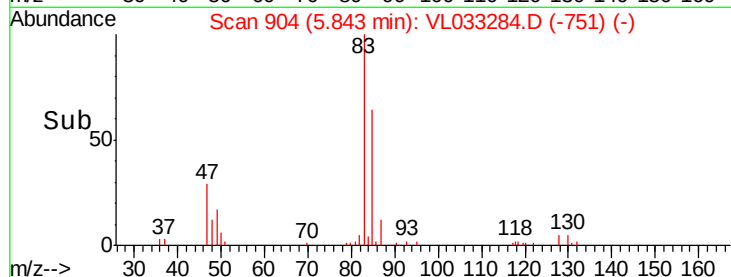
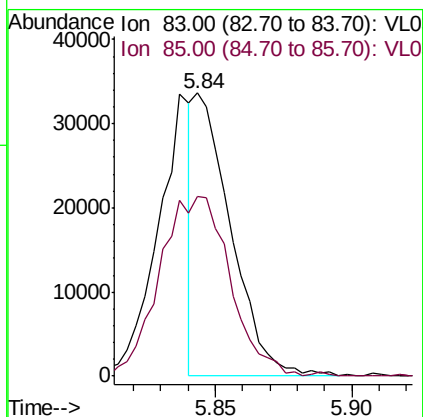
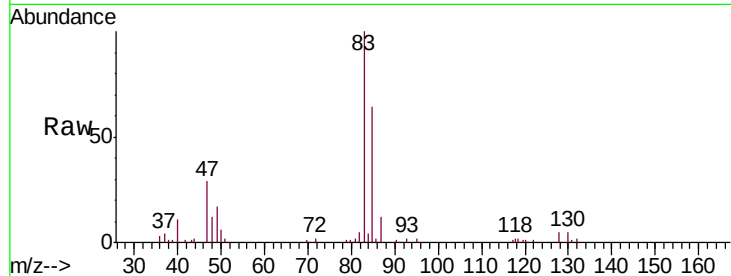




#29  
Chloroform  
Concen: 0.225 ppbv  
RT: 5.84 min Scan# 904  
Delta R.T. -0.01 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

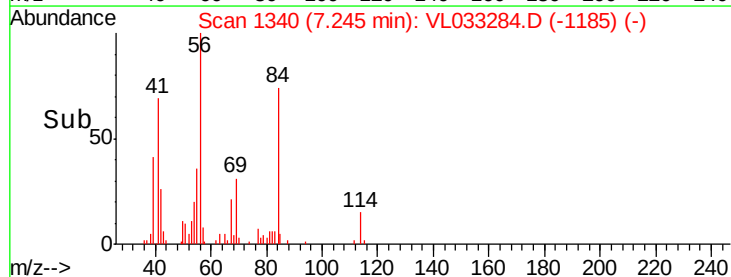
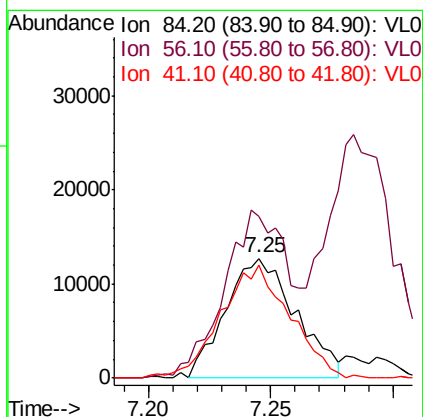
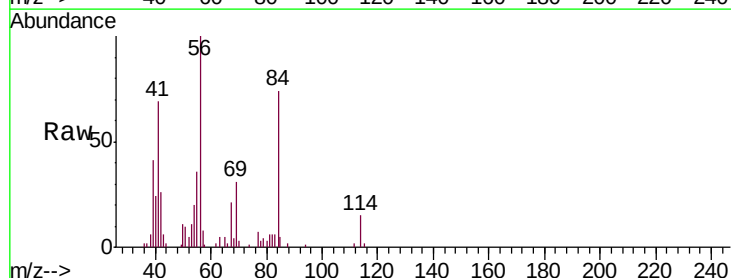
Instrument :  
MSVOA\_L  
ClientSampleId :  
0.4 PPB MDL

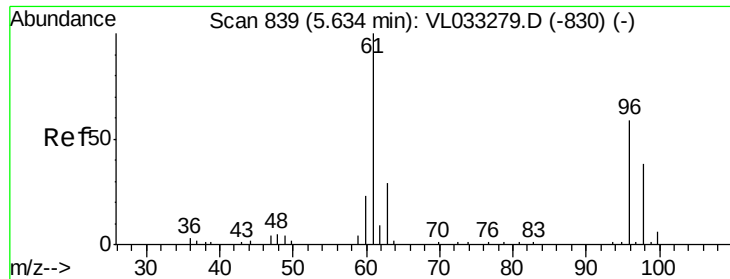
Tgt Ion: 83 Resp: 31560  
Ion Ratio Lower Upper  
83 100  
85 66.0 52.5 78.7



#30  
Cyclohexane  
Concen: 0.355 ppbv  
RT: 7.25 min Scan# 1340  
Delta R.T. -0.00 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

Tgt Ion: 84 Resp: 25365  
Ion Ratio Lower Upper  
84 100  
56 126.3 112.0 168.0  
41 93.1 69.9 104.9





#31

cis-1,2-Dichloroethene

Concen: 0.376 ppbv

RT: 5.63 min Scan# 838

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

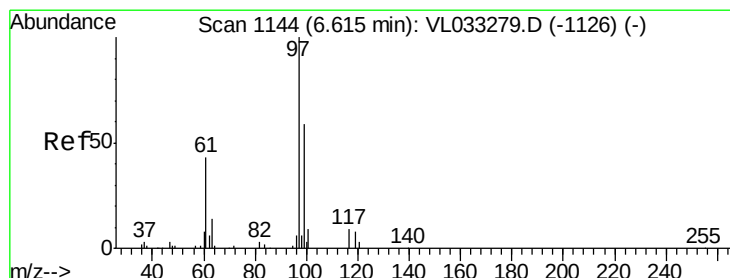
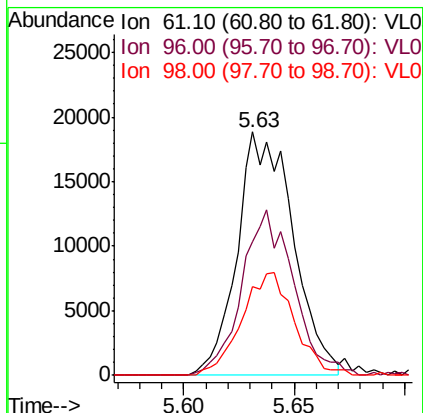
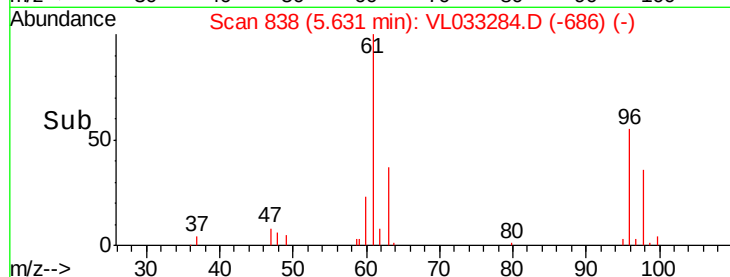
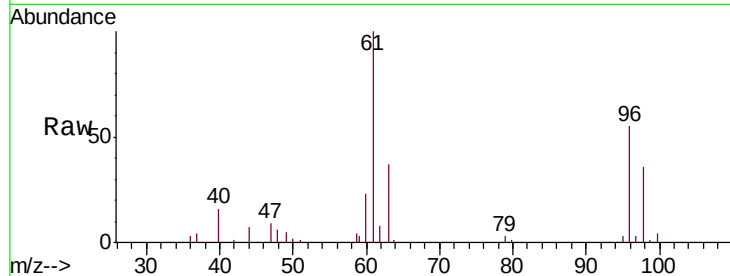
Tgt Ion: 61 Resp: 33206

Ion Ratio Lower Upper

61 100

96 54.7 51.8 77.8

98 37.3 32.9 49.3



#32

1,1,1-Trichloroethane

Concen: 0.393 ppbv

RT: 6.62 min Scan# 1144

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

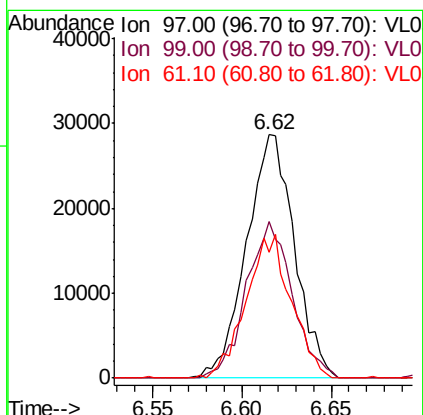
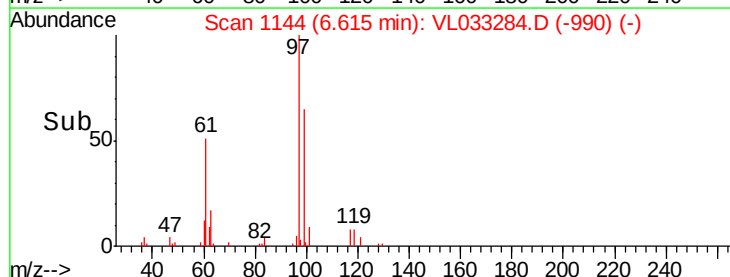
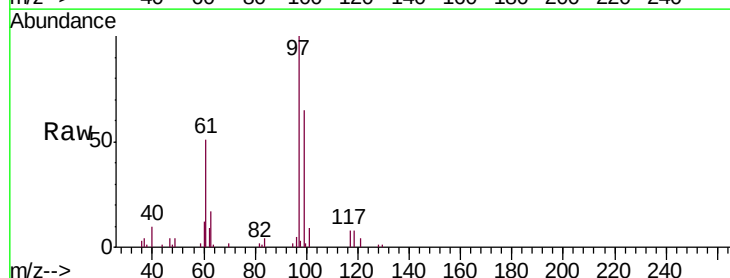
Tgt Ion: 97 Resp: 53677

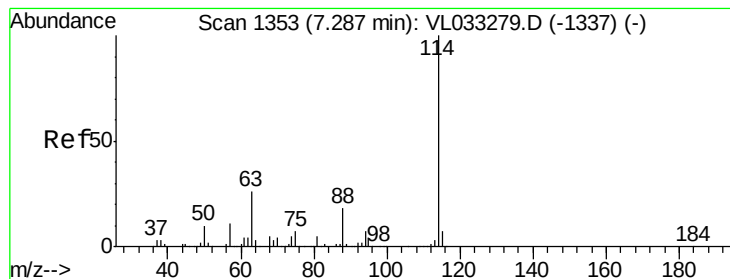
Ion Ratio Lower Upper

97 100

99 61.9 51.7 77.5

61 55.6 39.7 59.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

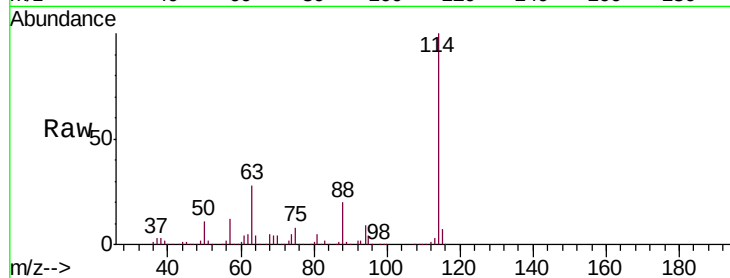
Tgt Ion:114 Resp: 1911116

Ion Ratio Lower Upper

114 100

63 27.2 21.5 32.3

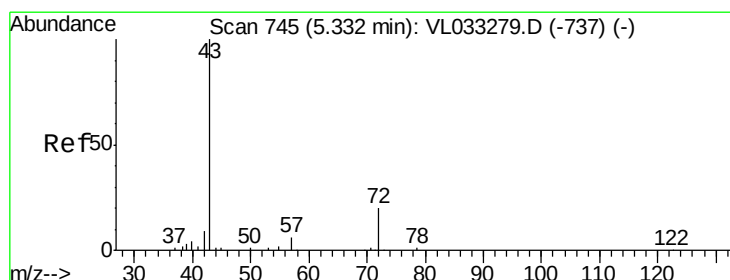
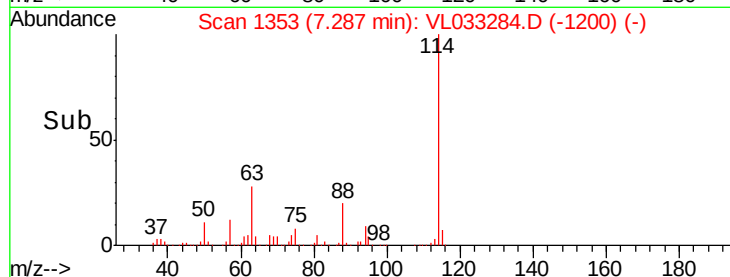
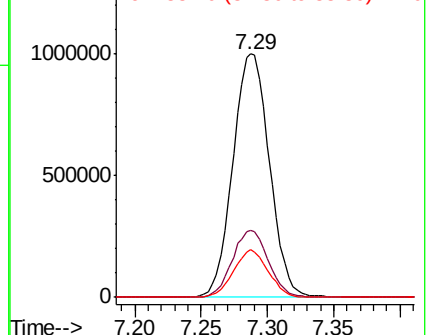
88 18.5 14.6 22.0



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.192 ppbv

RT: 5.34 min Scan# 746

Delta R.T. 0.00 min

Lab File: VL033284.D

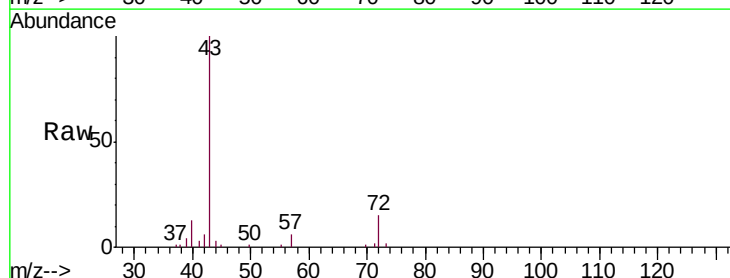
Acq: 12 Mar 2019 15:03

Tgt Ion: 43 Resp: 24214

Ion Ratio Lower Upper

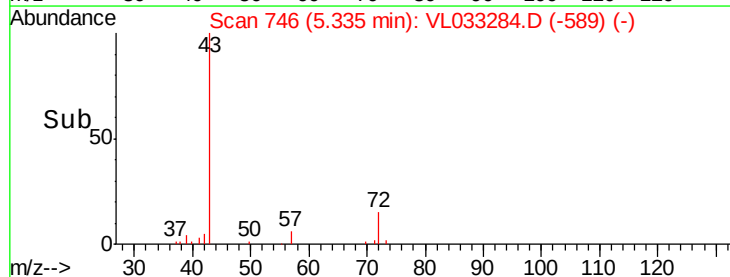
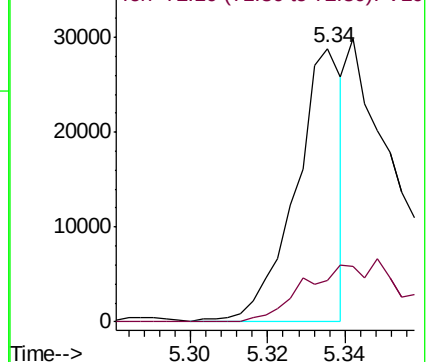
43 100

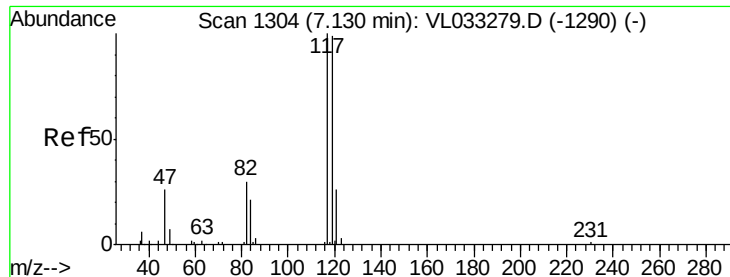
72 0.0 17.0 25.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.402 ppbv

RT: 7.13 min Scan# 1305

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

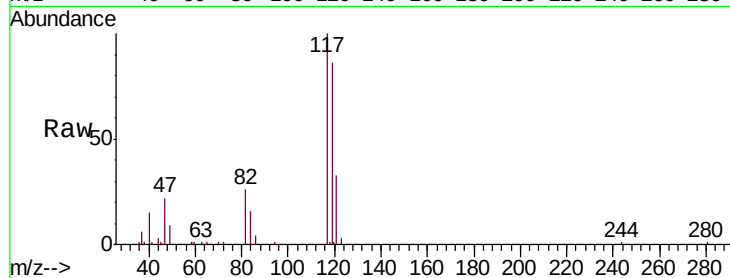
Tgt Ion: 117 Resp: 56088

Ion Ratio Lower Upper

117 100

119 85.9 77.4 116.0

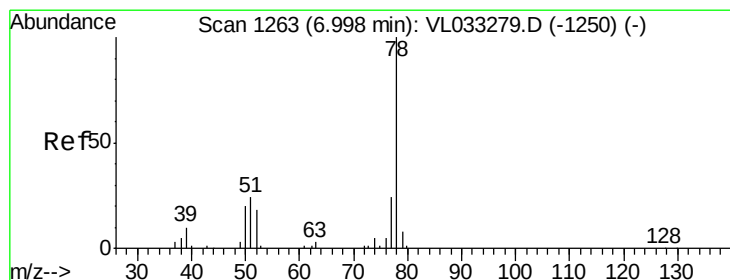
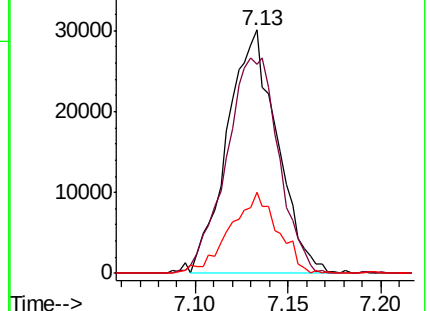
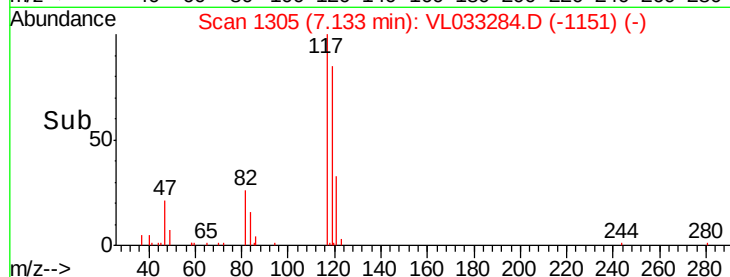
121 33.2 24.9 37.3



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: 0.399 ppbv

RT: 7.00 min Scan# 1264

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

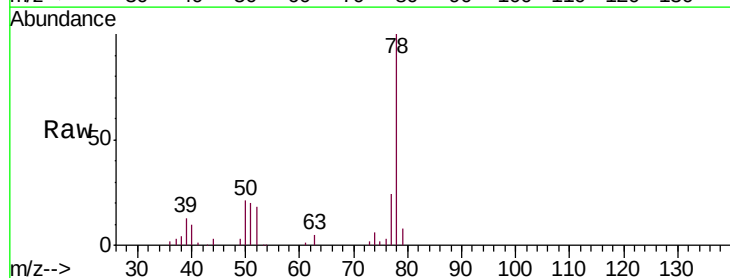
Tgt Ion: 78 Resp: 70383

Ion Ratio Lower Upper

78 100

77 24.5 17.7 26.5

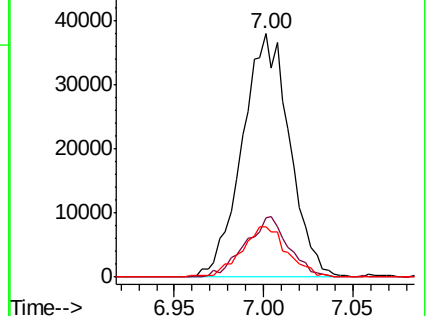
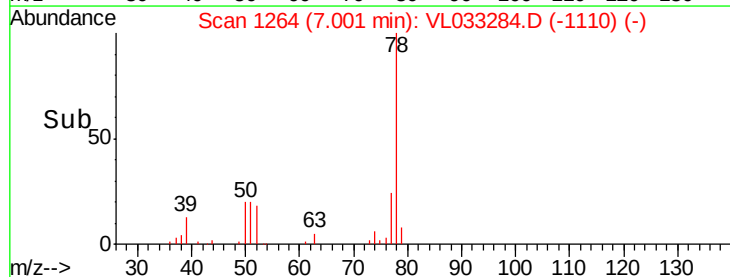
50 20.8 15.7 23.5

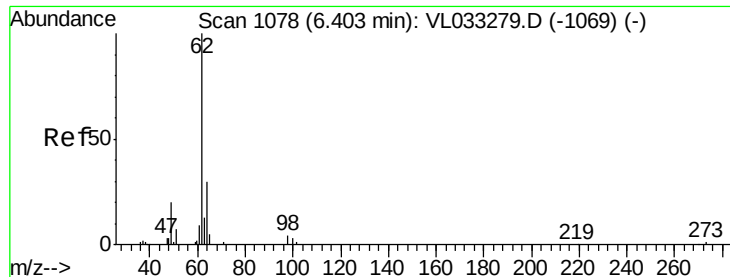


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 0.423 ppbv

RT: 6.41 min Scan# 1080

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

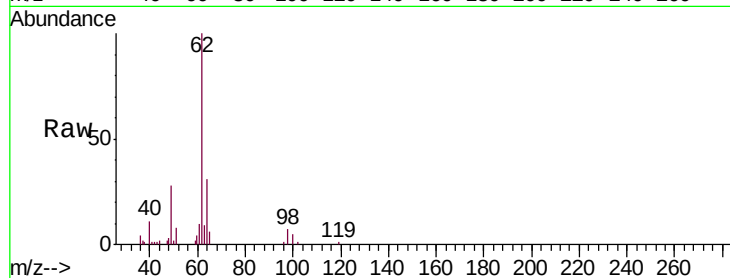
0.4 PPB MDL

Tgt Ion: 62 Resp: 44765

Ion Ratio Lower Upper

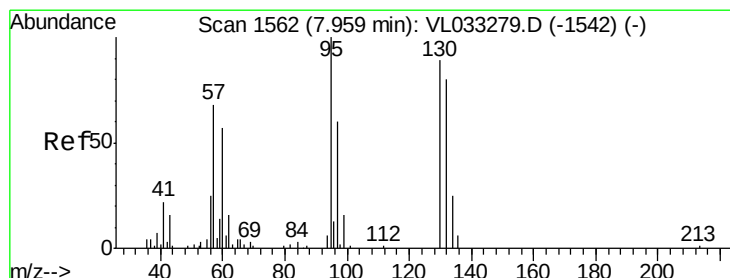
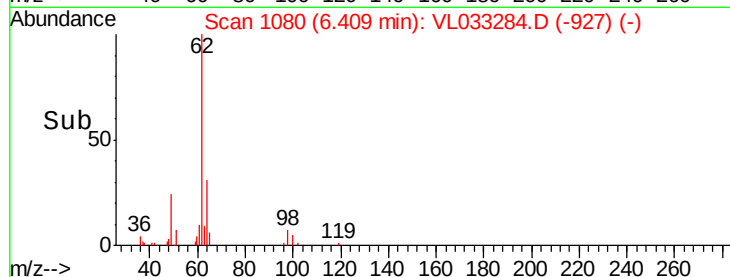
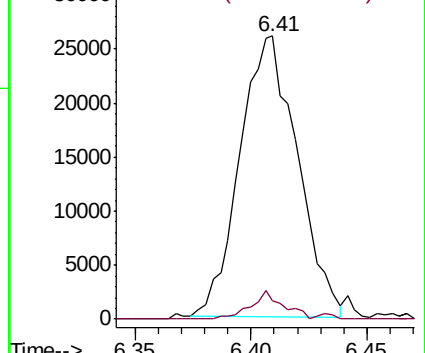
62 100

98 6.1 4.5 6.7



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#38

Trichloroethene

Concen: 0.396 ppbv

RT: 7.96 min Scan# 1561

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Tgt Ion: 130 Resp: 27196

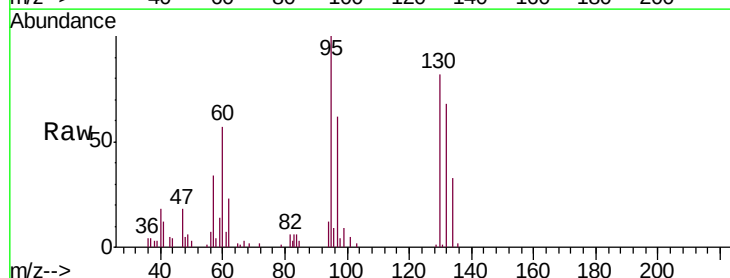
Ion Ratio Lower Upper

130 100

95 118.3 93.3 139.9

132 82.0 75.4 113.2

97 74.3 60.6 91.0

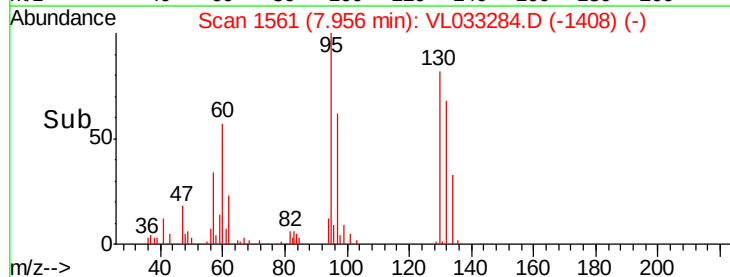
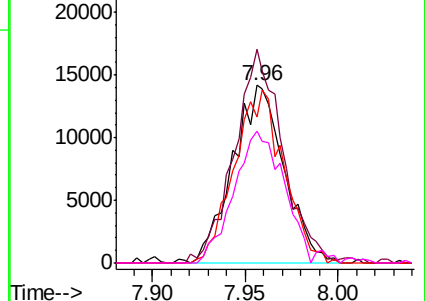


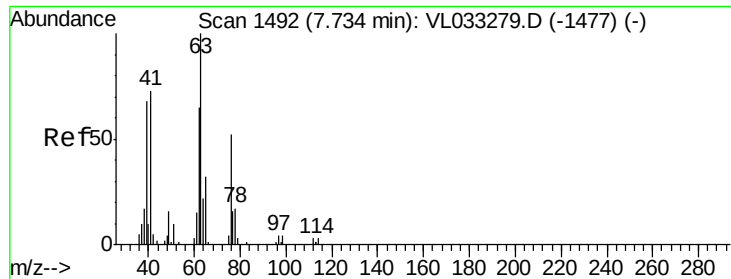
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0





#39

1,2-Dichloropropane

Concen: 0.245 ppbv

RT: 7.73 min Scan# 1491

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

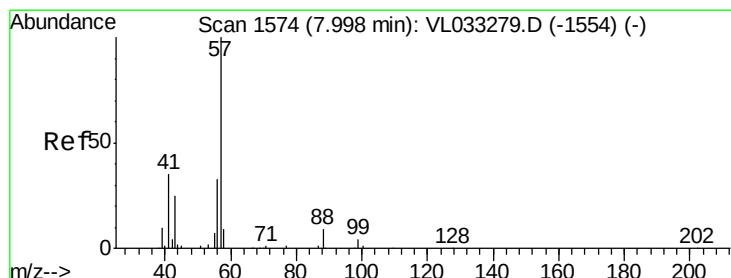
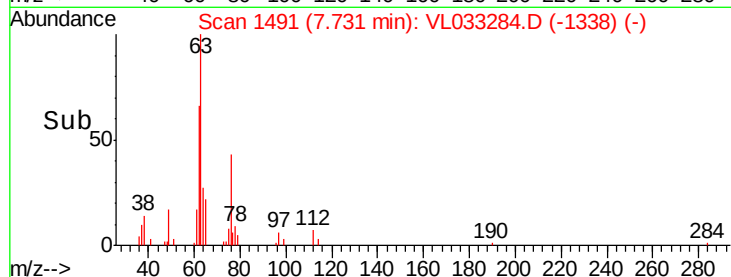
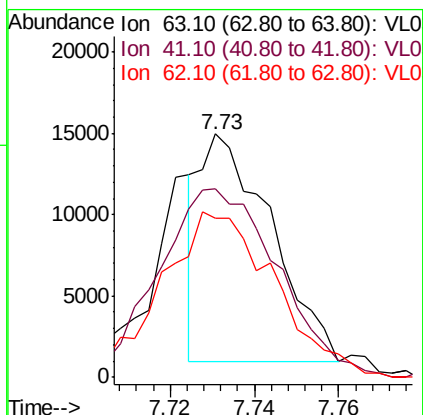
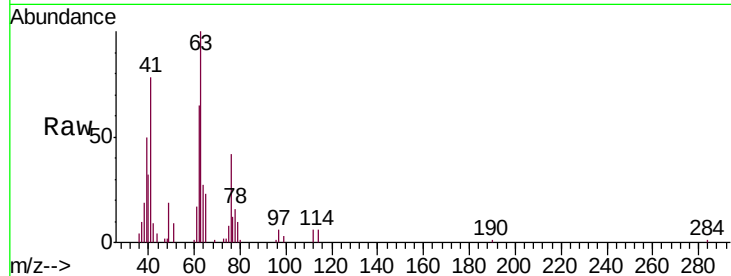
Tgt Ion: 63 Resp: 16278

Ion Ratio Lower Upper

63 100

41 75.5 58.3 87.5

62 59.7 55.3 82.9



#40

1,4-Dioxane

Concen: 0.077 ppbv

RT: 7.99 min Scan# 1571

Delta R.T. 0.03 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Tgt Ion: 88 Resp: 1916

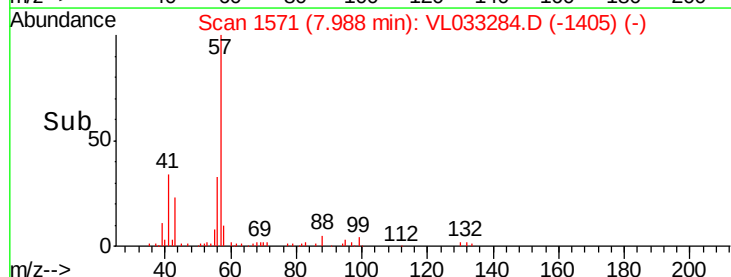
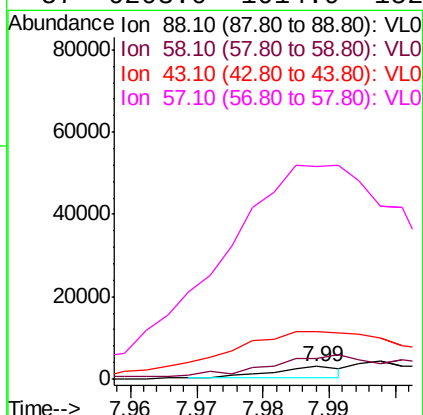
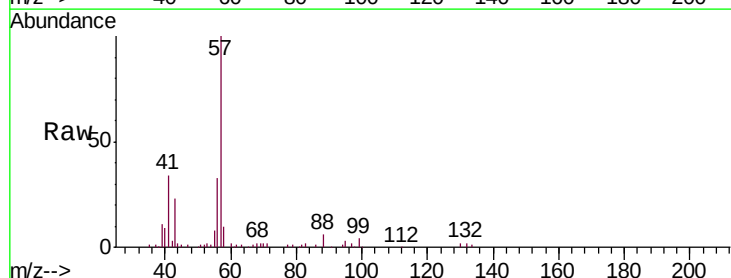
Ion Ratio Lower Upper

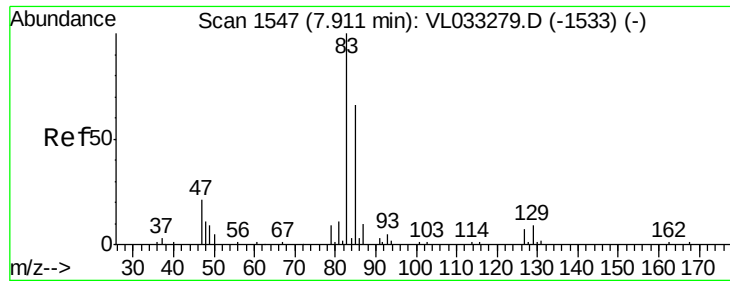
88 100

58 767.0 107.0 160.6#

43 1505.5 230.2 345.4#

57 6203.0 1014.9 1522.3#





#42

Bromodichloromethane

Concen: 0.204 ppbv

RT: 7.91 min Scan# 1546

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

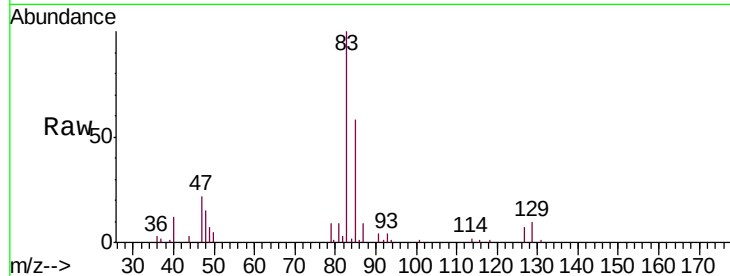
Tgt Ion: 83 Resp: 29652

Ion Ratio Lower Upper

83 100

85 56.8 51.0 76.4

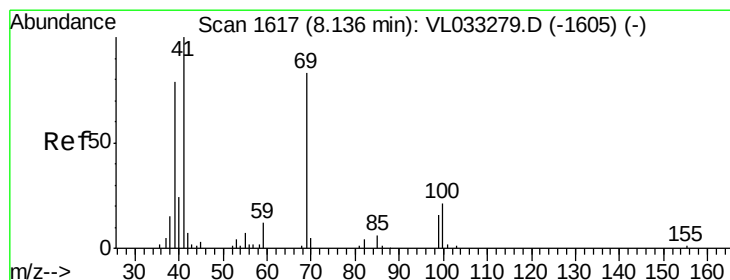
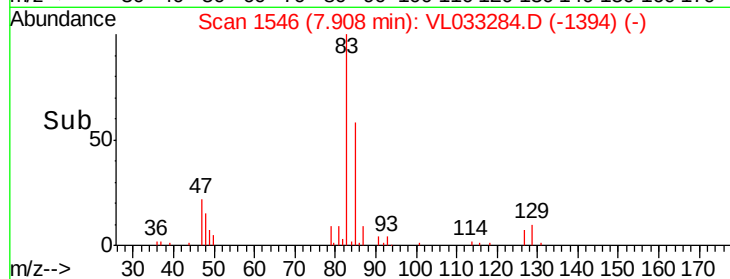
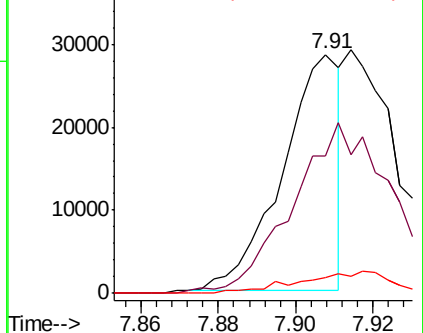
127 6.6 6.0 9.0



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: 0.354 ppbv

RT: 8.14 min Scan# 1619

Delta R.T. 0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

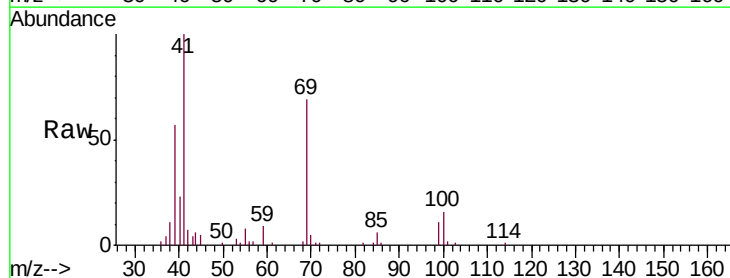
Tgt Ion: 69 Resp: 24349

Ion Ratio Lower Upper

69 100

41 158.8 121.0 181.4

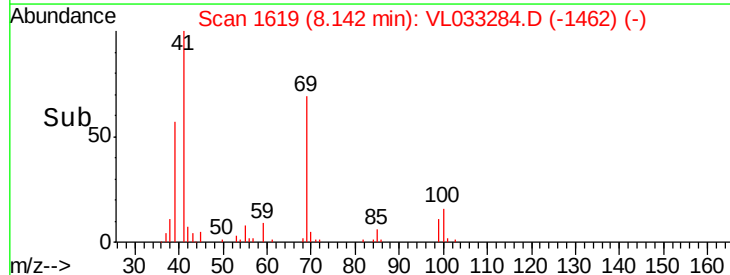
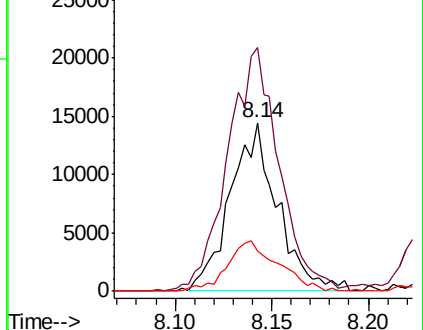
100 32.1 24.4 36.6



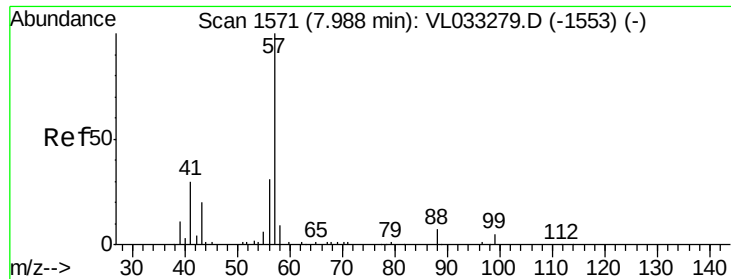
Abundance Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0







#44

2,2,4-Trimethylpentane

Concen: 0.394 ppbv

RT: 7.99 min Scan# 1572

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

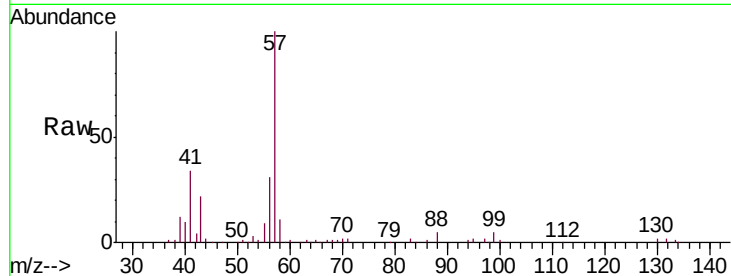
Tgt Ion: 57 Resp: 117893

Ion Ratio Lower Upper

57 100

41 36.3 26.2 39.2

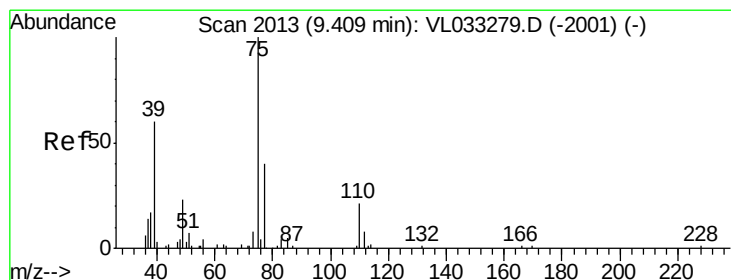
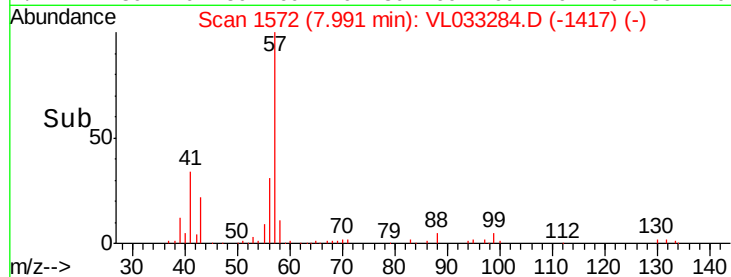
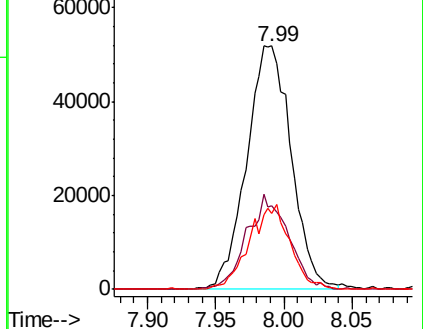
56 31.9 24.8 37.2



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



#45

t-1,3-Dichloropropene

Concen: 0.231 ppbv

RT: 9.41 min Scan# 2014

Delta R.T. -0.01 min

Lab File: VL033284.D

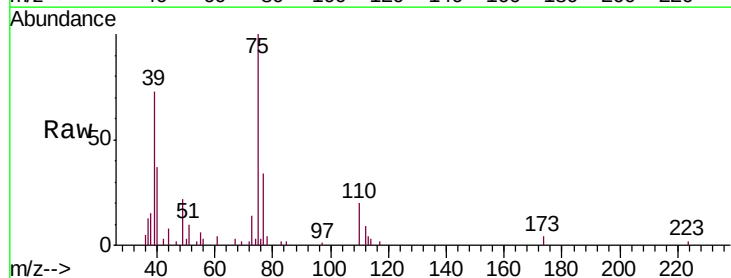
Acq: 12 Mar 2019 15:03

Tgt Ion: 75 Resp: 19549

Ion Ratio Lower Upper

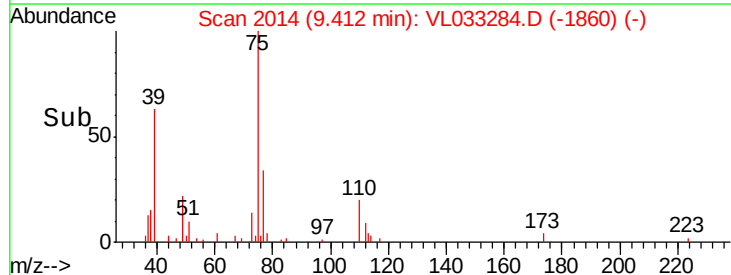
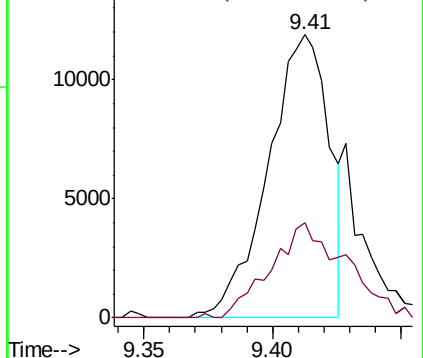
75 100

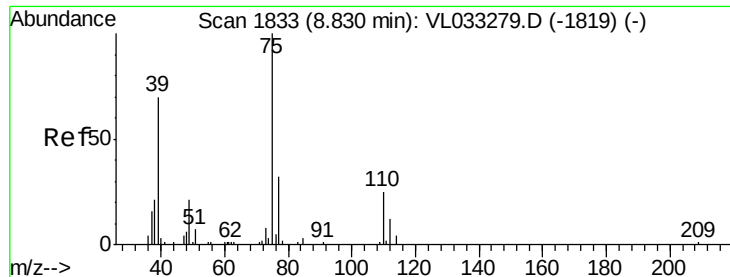
77 33.5 24.4 36.6



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#46

cis-1,3-Dichloropropene

Concen: 0.158 ppbv

RT: 8.83 min Scan# 1832

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

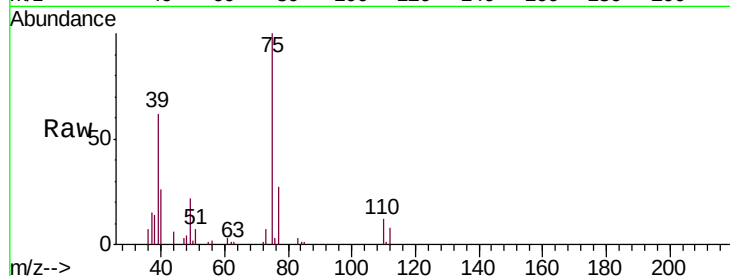
Tgt Ion: 75 Resp: 15682

Ion Ratio Lower Upper

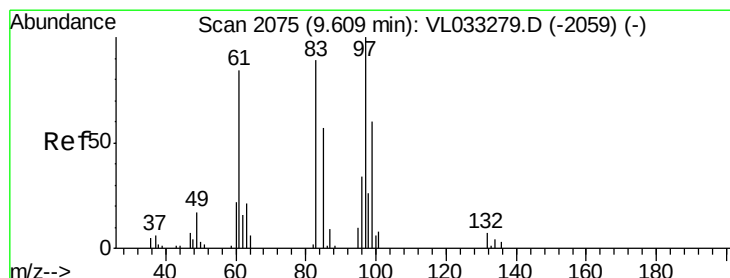
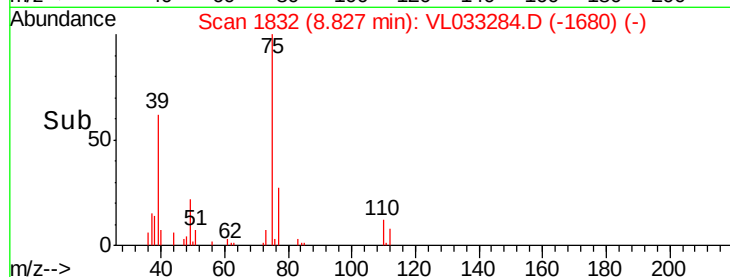
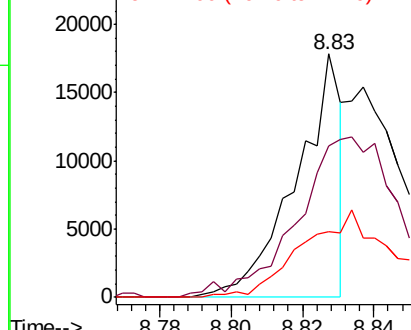
75 100

39 60.3 54.2 81.2

77 26.7 24.5 36.7



Abundance Ion 75.00 (74.70 to 75.70): VL0  
Ion 39.00 (38.70 to 39.70): VL0  
Ion 77.00 (76.70 to 77.70): VL0



#47

1,1,2-Trichloroethane

Concen: 0.299 ppbv

RT: 9.61 min Scan# 2075

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Tgt Ion: 97 Resp: 21201

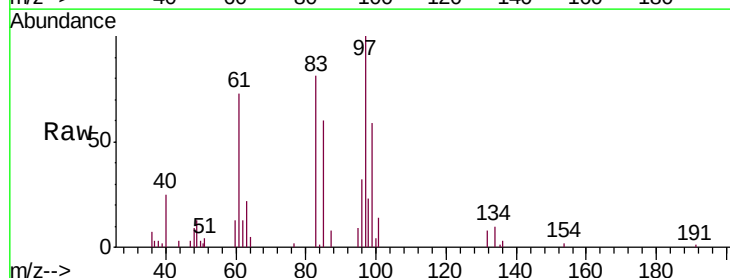
Ion Ratio Lower Upper

97 100

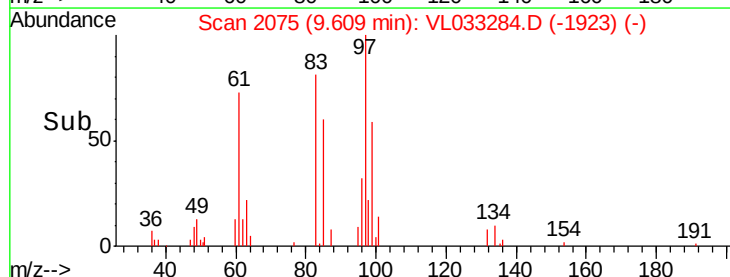
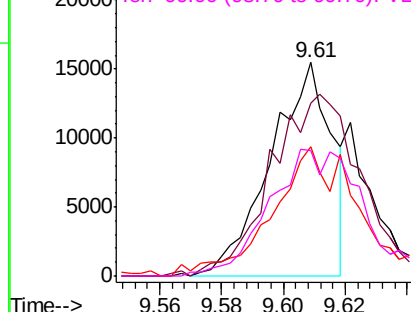
83 80.8 71.0 106.4

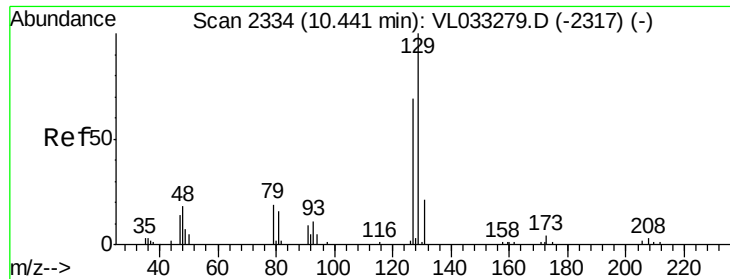
85 57.8 48.2 72.4

99 56.9 49.3 73.9



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





#48

Dibromochloromethane

Concen: 0.364 ppbv

RT: 10.44 min Scan# 2335

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

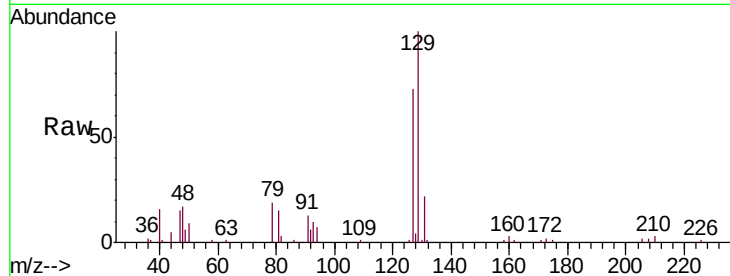
0.4 PPB MDL

Tgt Ion:129 Resp: 42218

Ion Ratio Lower Upper

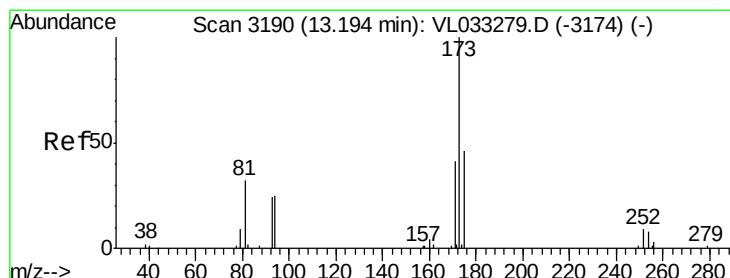
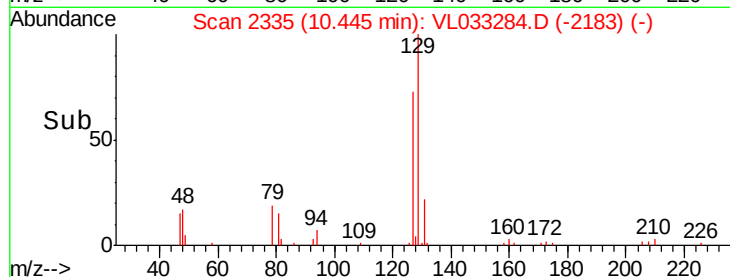
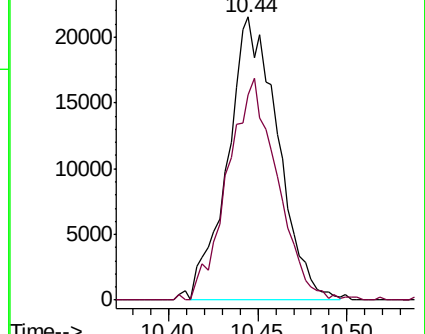
129 100

127 77.8 38.9 116.6



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#49

Bromoform

Concen: 0.329 ppbv

RT: 13.20 min Scan# 3192

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

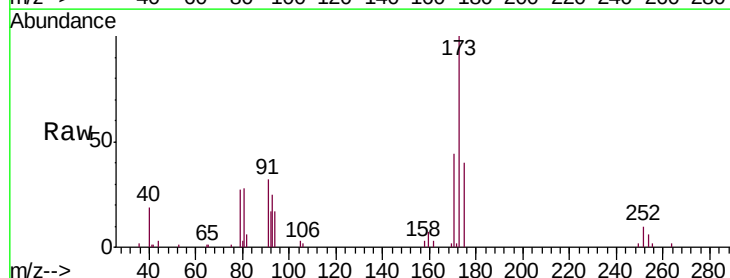
Tgt Ion:173 Resp: 30983

Ion Ratio Lower Upper

173 100

175 46.5 39.0 58.6

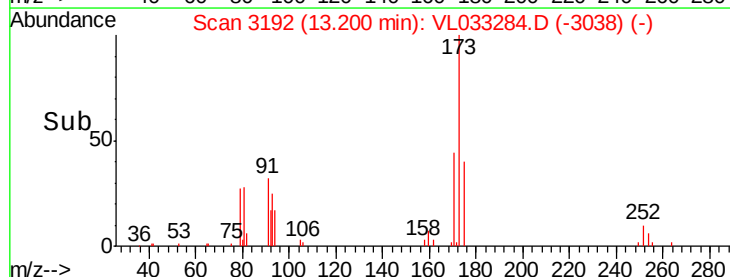
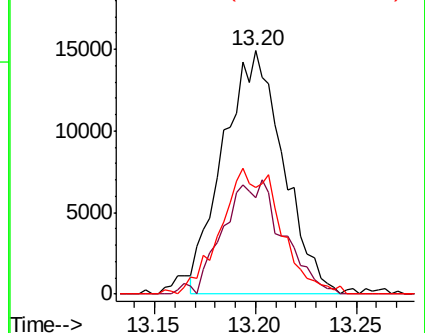
171 51.2 41.2 61.8

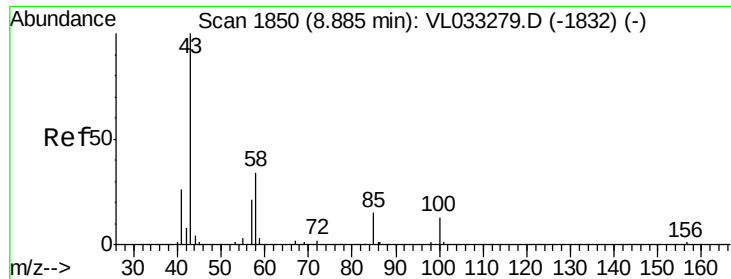


Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V

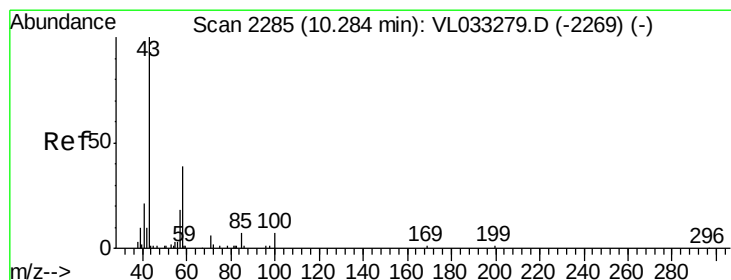
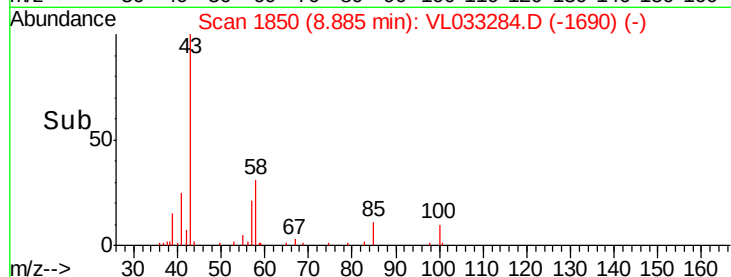
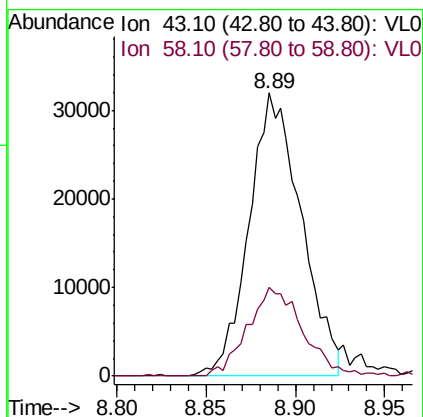
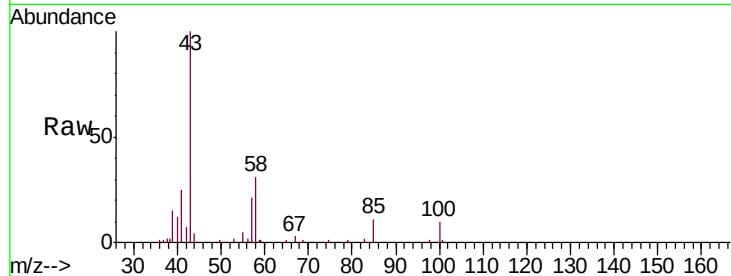




#50  
 4-Methyl-2-Pentanone  
 Concen: 0.362 ppbv  
 RT: 8.89 min Scan# 1850  
 Delta R.T. 0.01 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

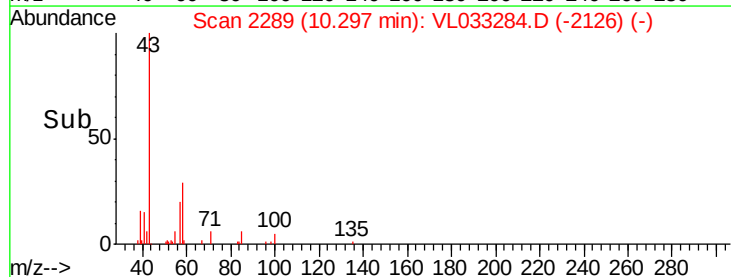
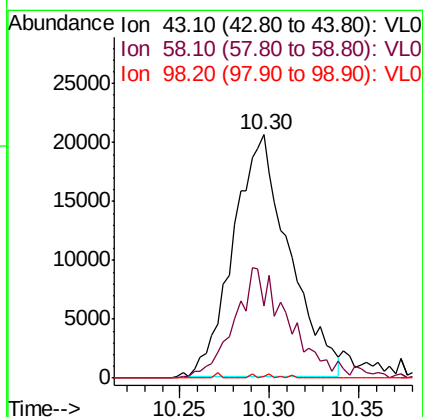
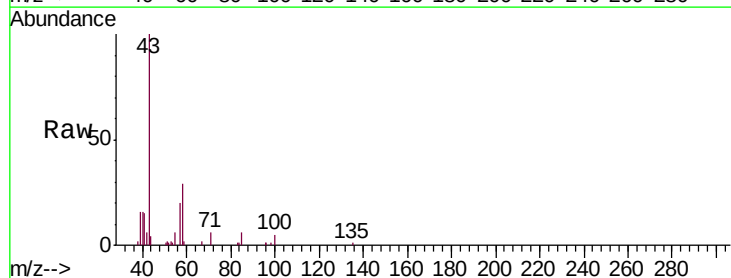
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 0.4 PPB MDL

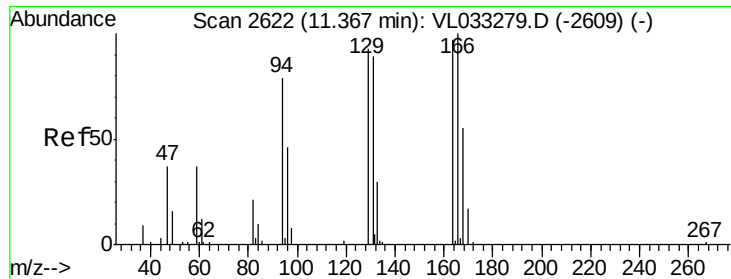
Tgt Ion: 43 Resp: 65366  
 Ion Ratio Lower Upper  
 43 100  
 58 33.6 28.0 42.0



#51  
 2-Hexanone  
 Concen: 0.325 ppbv  
 RT: 10.30 min Scan# 2289  
 Delta R.T. 0.02 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

Tgt Ion: 43 Resp: 44778  
 Ion Ratio Lower Upper  
 43 100  
 58 45.7 38.1 57.1  
 98 0.6 0.1 0.1#





#52

Tetrachloroethene

Concen: 0.221 ppbv

RT: 11.37 min Scan# 2623

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

Tgt Ion:164 Resp: 14258

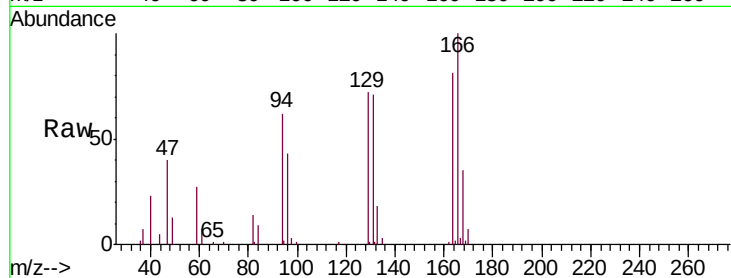
Ion Ratio Lower Upper

164 100

166 116.1 100.8 151.2

129 91.3 80.6 121.0

131 81.3 79.2 118.8



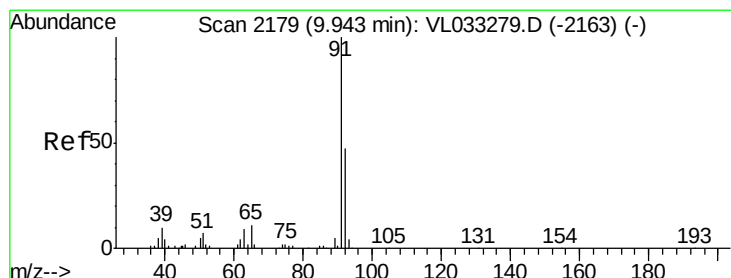
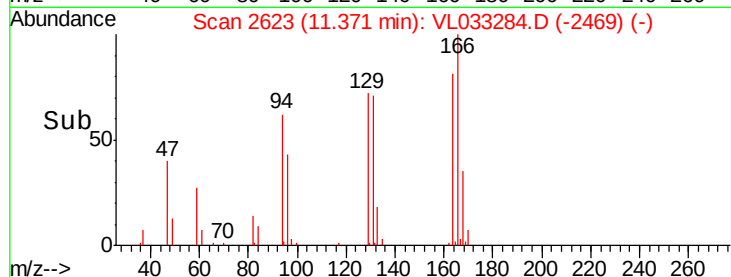
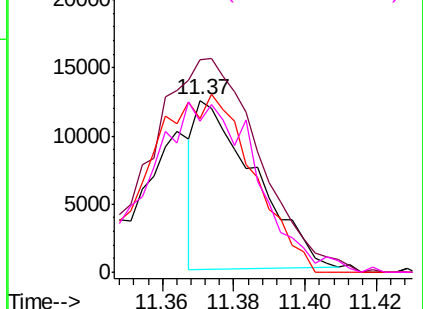
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.180 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL033284.D

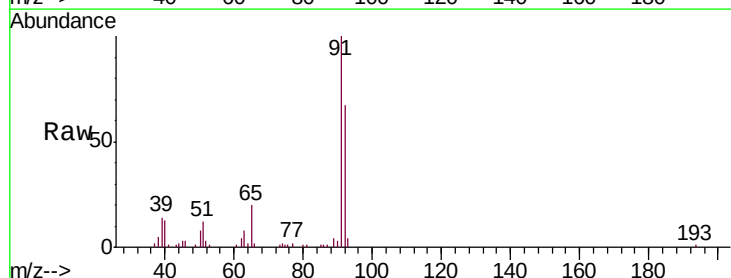
Acq: 12 Mar 2019 15:03

Tgt Ion: 91 Resp: 36643

Ion Ratio Lower Upper

91 100

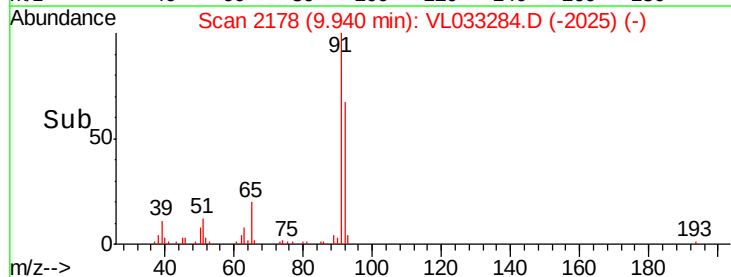
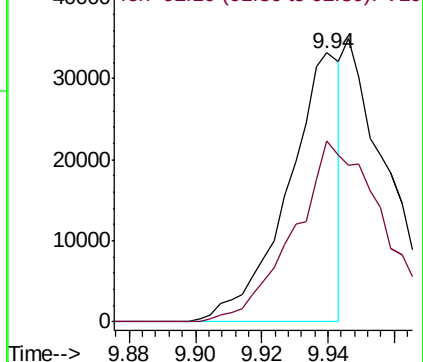
92 114.5 47.8 71.8#

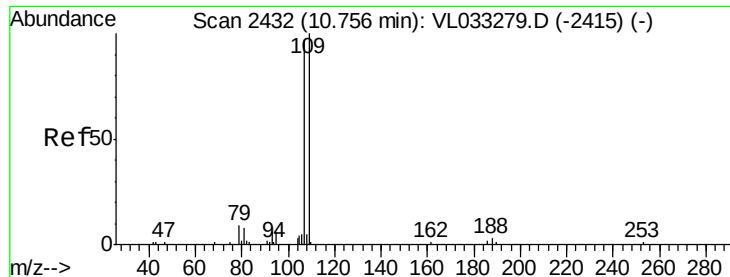


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#54

1,2-Dibromoethane

Concen: 0.382 ppbv

RT: 10.76 min Scan# 2433

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

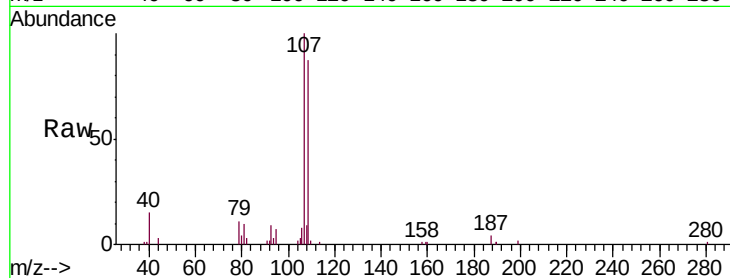
0.4 PPB MDL

Tgt Ion:107 Resp: 41573

Ion Ratio Lower Upper

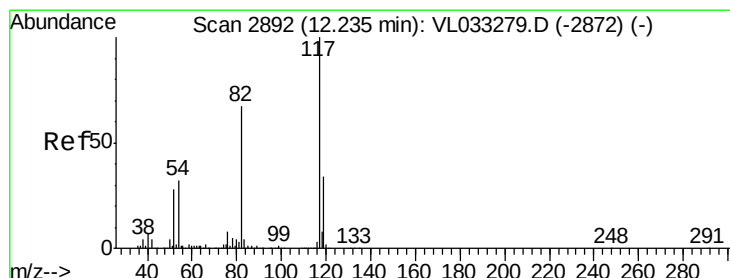
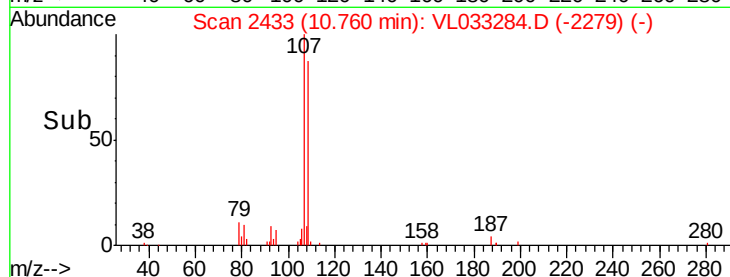
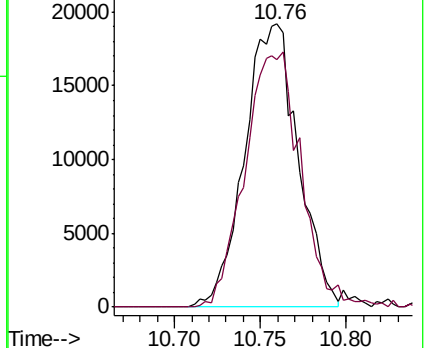
107 100

109 87.4 74.2 111.2



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: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

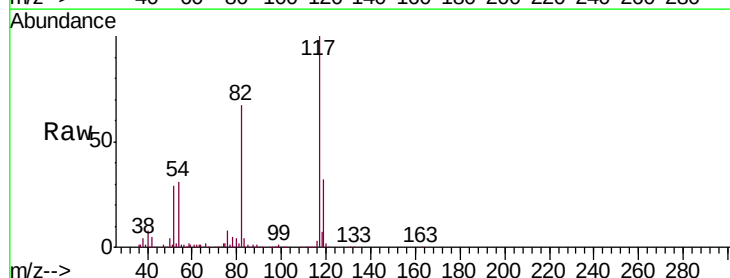
Tgt Ion:117 Resp: 1867982

Ion Ratio Lower Upper

117 100

82 68.4 51.1 76.7

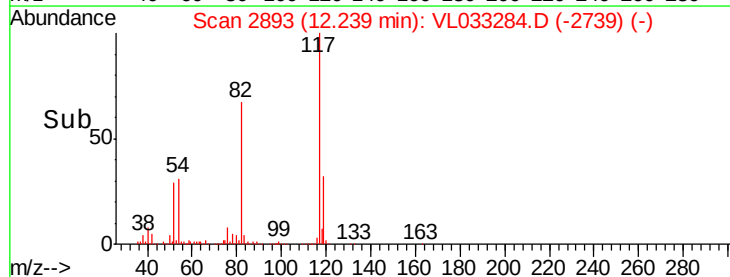
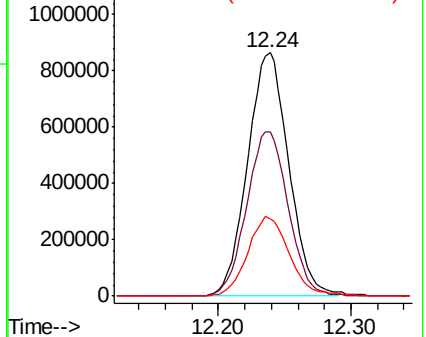
119 33.3 43.6 65.4#

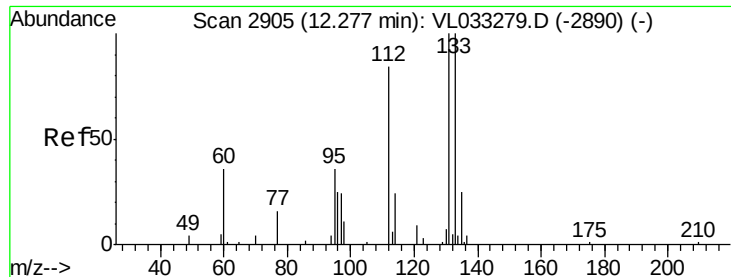


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

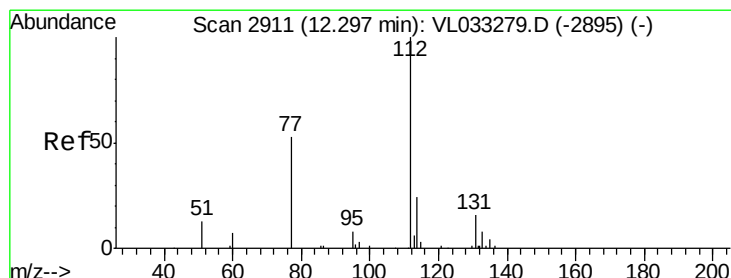
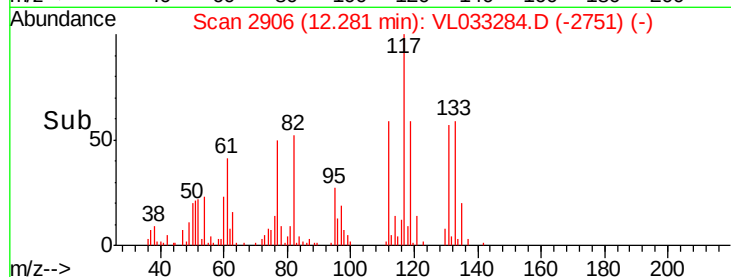
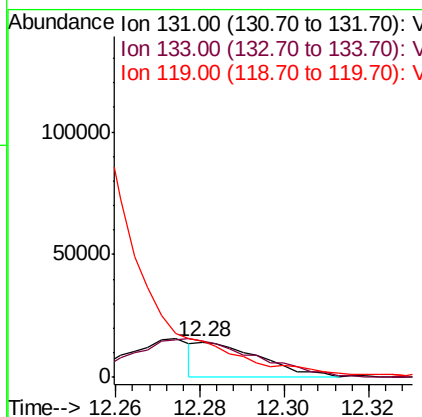
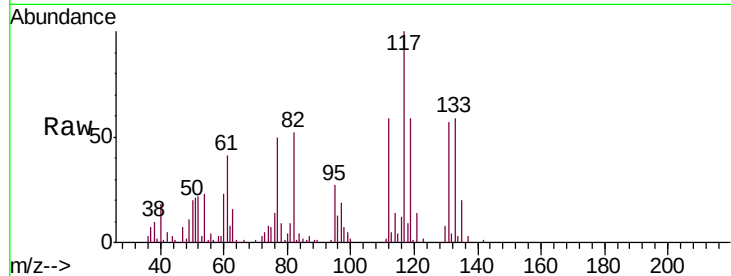




#56  
 1,1,1,2-Tetrachloroethane  
 Concen: 0.188 ppbv  
 RT: 12.28 min Scan# 2906  
 Delta R.T. -0.00 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

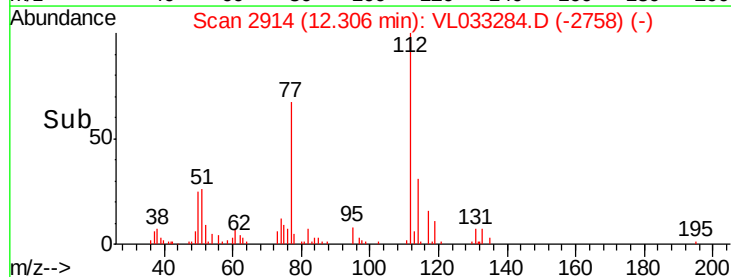
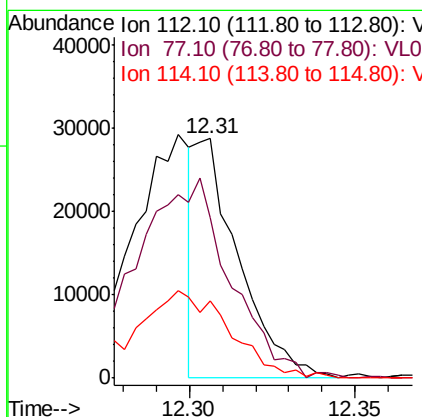
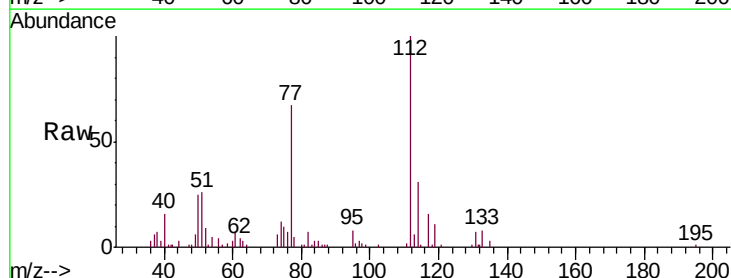
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 0.4 PPB MDL

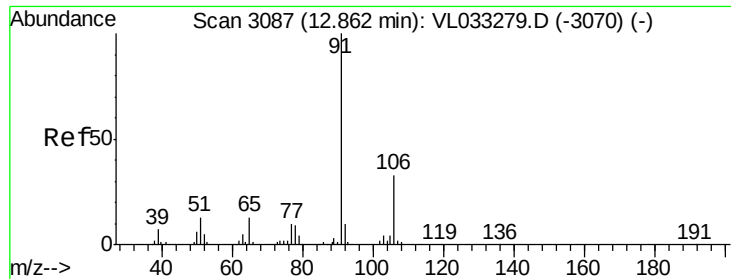
Tgt Ion:131 Resp: 14915  
 Ion Ratio Lower Upper  
 131 100  
 133 225.4 76.2 114.4#  
 119 0.0 110.3 165.5#



#57  
 Chlorobenzene  
 Concen: 0.184 ppbv  
 RT: 12.31 min Scan# 2914  
 Delta R.T. 0.00 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

Tgt Ion:112 Resp: 25967  
 Ion Ratio Lower Upper  
 112 100  
 77 65.9 55.8 83.8  
 114 32.2 29.5 36.1





#58

Ethyl Benzene

Concen: 0.370 ppbv

RT: 12.87 min Scan# 3088

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

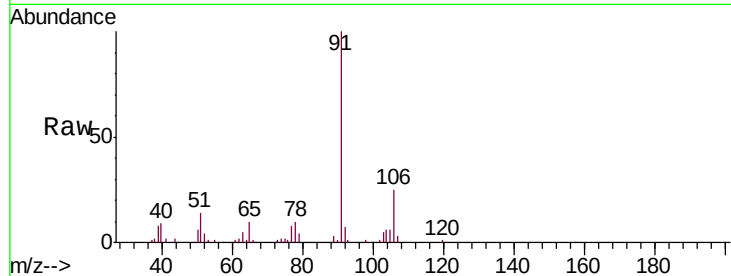
0.4 PPB MDL

Tgt Ion: 91 Resp: 94954

Ion Ratio Lower Upper

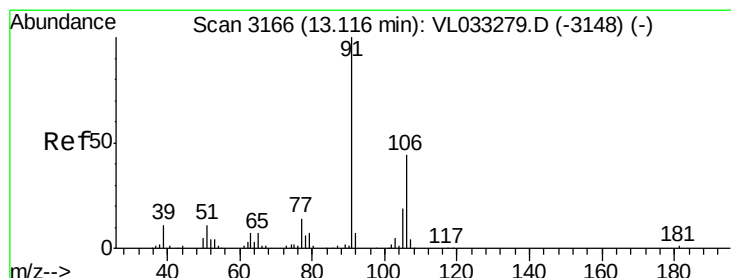
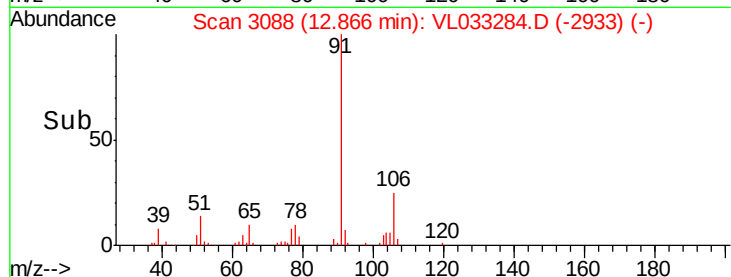
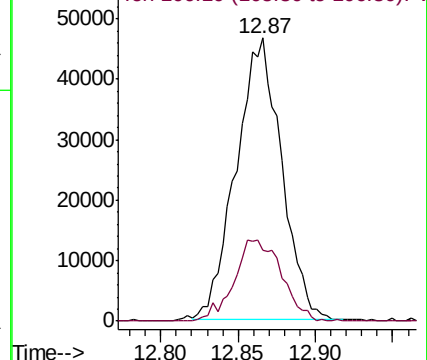
91 100

106 25.2 22.5 33.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.110 ppbv

RT: 13.12 min Scan# 3167

Delta R.T. -0.01 min

Lab File: VL033284.D

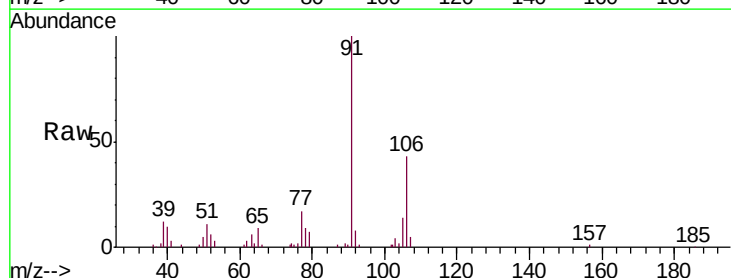
Acq: 12 Mar 2019 15:03

Tgt Ion: 91 Resp: 23603

Ion Ratio Lower Upper

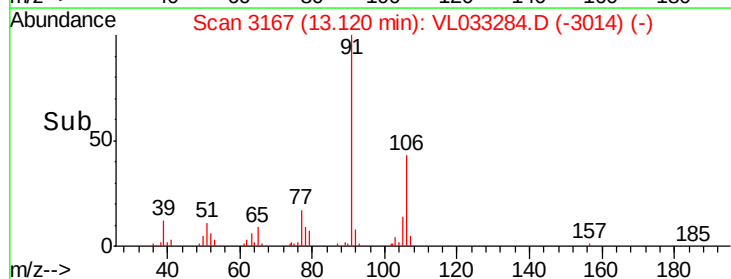
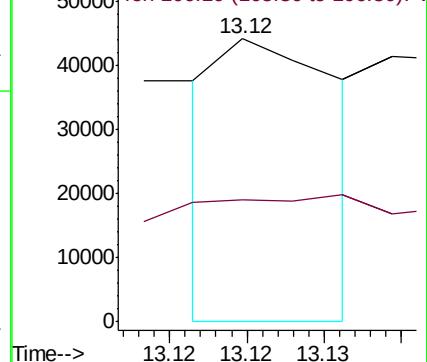
91 100

106 314.9 35.5 53.3#

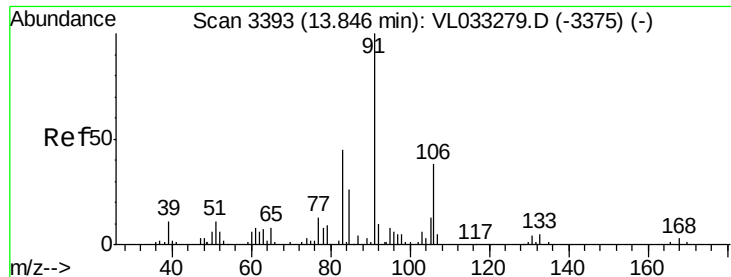


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



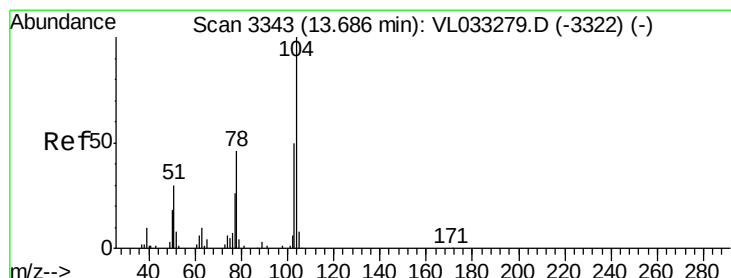
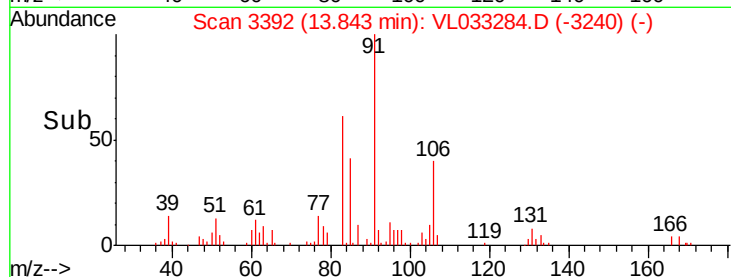
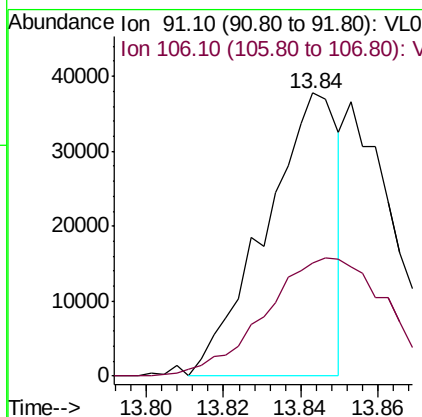
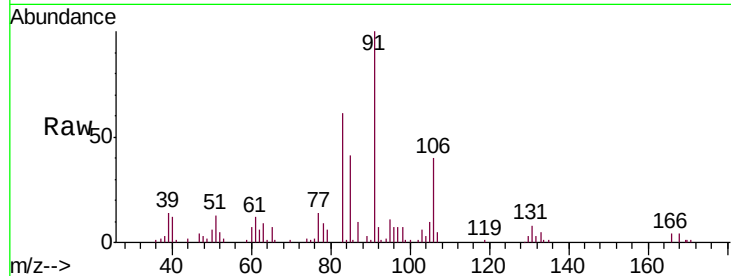




#60  
o-Xylene  
Concen: 0.239 ppbv  
RT: 13.84 min Scan# 3392  
Delta R.T. -0.01 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

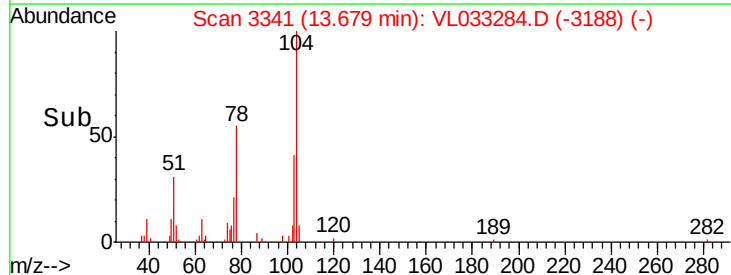
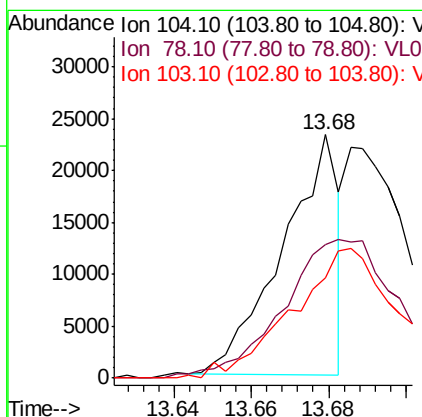
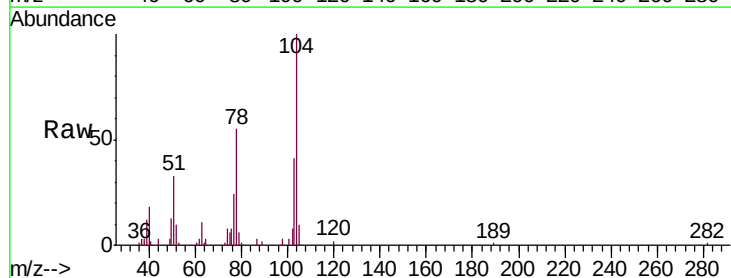
Instrument :  
MSVOA\_L  
ClientSampleId :  
0.4 PPB MDL

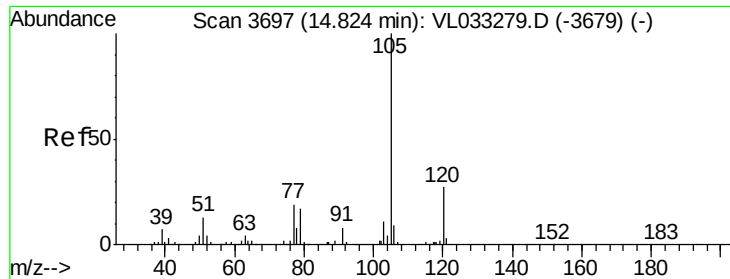
Tgt Ion: 91 Resp: 49252  
Ion Ratio Lower Upper  
91 100  
106 72.6 21.3 63.7#



#61  
Styrene  
Concen: 0.158 ppbv  
RT: 13.68 min Scan# 3341  
Delta R.T. -0.01 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

Tgt Ion: 104 Resp: 23211  
Ion Ratio Lower Upper  
104 100  
78 0.0 43.3 64.9#  
103 0.0 38.0 57.0#





#62

Isopropylbenzene

Concen: 0.200 ppbv

RT: 14.82 min Scan# 3696

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

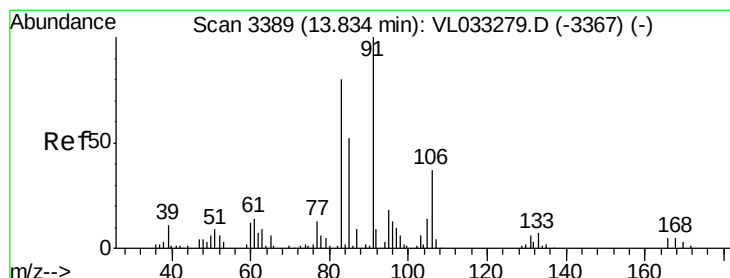
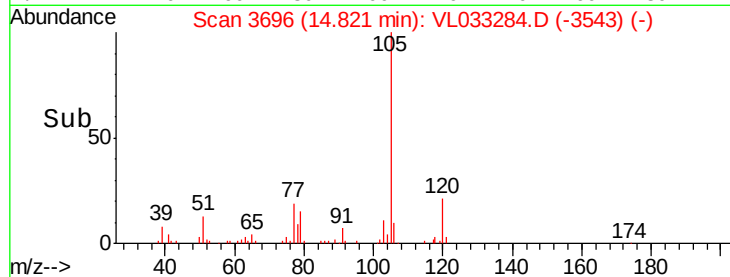
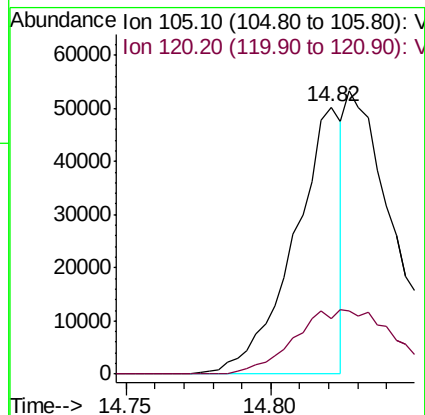
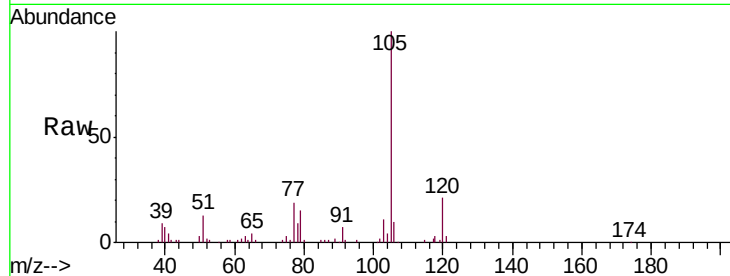
0.4 PPB MDL

Tgt Ion:105 Resp: 57409

Ion Ratio Lower Upper

105 100

120 0.0 20.0 30.0#



#63

1,1,2,2-Tetrachloroethane

Concen: 0.437 ppbv

RT: 13.83 min Scan# 3389

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

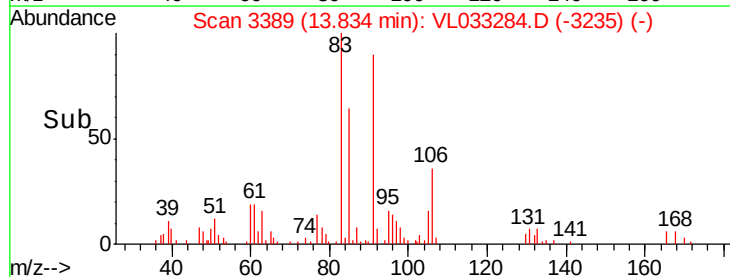
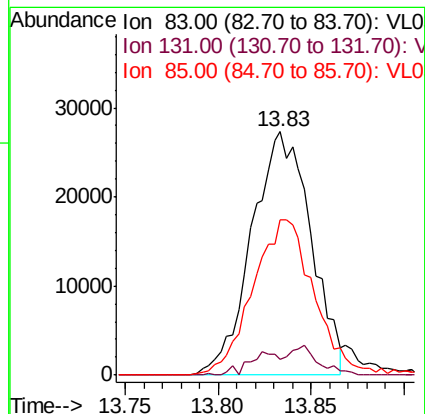
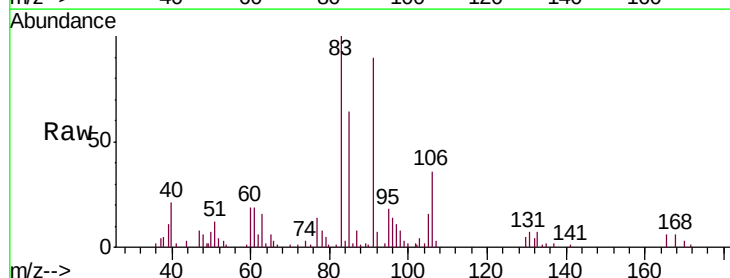
Tgt Ion: 83 Resp: 60509

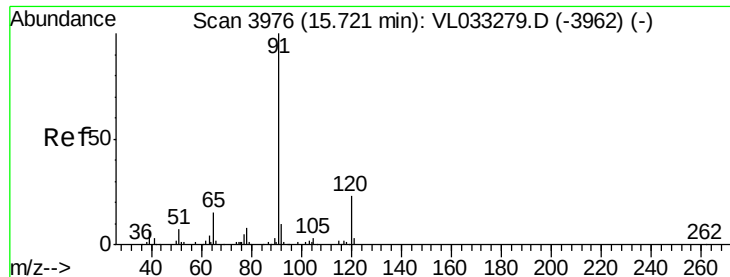
Ion Ratio Lower Upper

83 100

131 10.8 4.5 13.7

85 67.5 32.2 96.6





#64

n-propylbenzene

Concen: 0.167 ppbv

RT: 15.72 min Scan# 3976

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

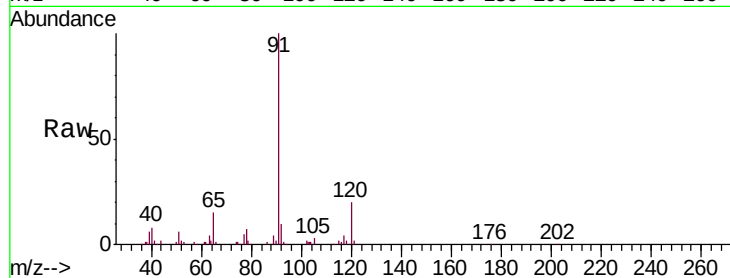
0.4 PPB MDL

Tgt Ion:120 Resp: 11804

Ion Ratio Lower Upper

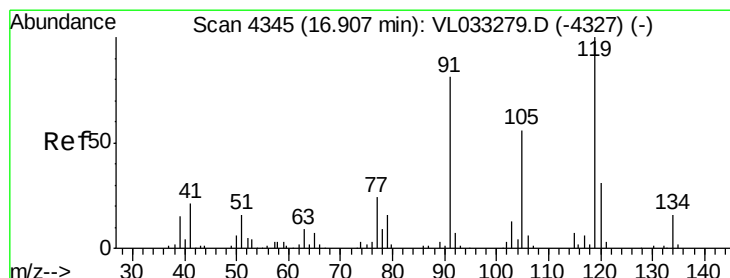
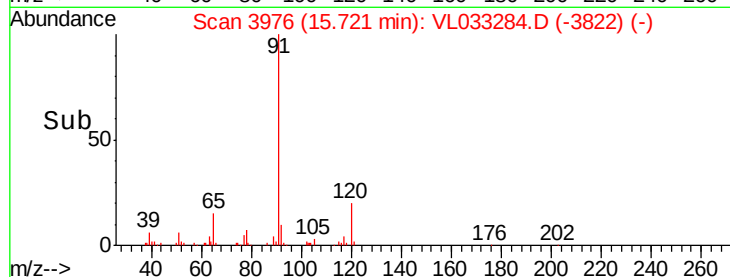
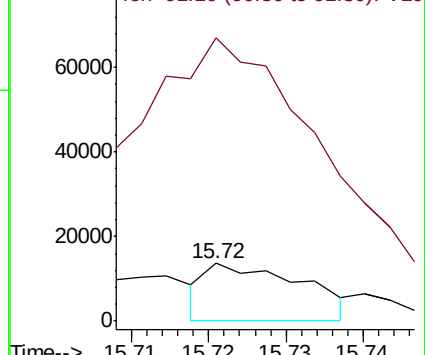
120 100

91 1217.1 385.8 578.8#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#65

tert-Butylbenzene

Concen: 0.193 ppbv

RT: 16.90 min Scan# 4343

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

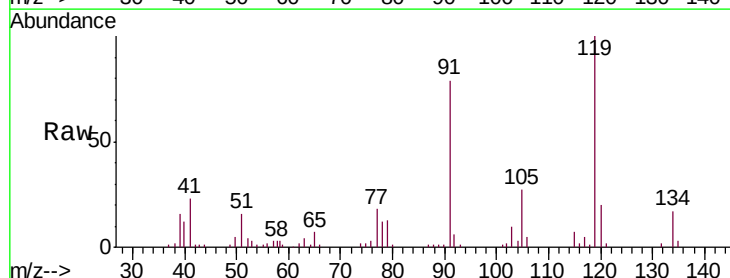
Tgt Ion:119 Resp: 46901

Ion Ratio Lower Upper

119 100

91 0.0 67.3 100.9#

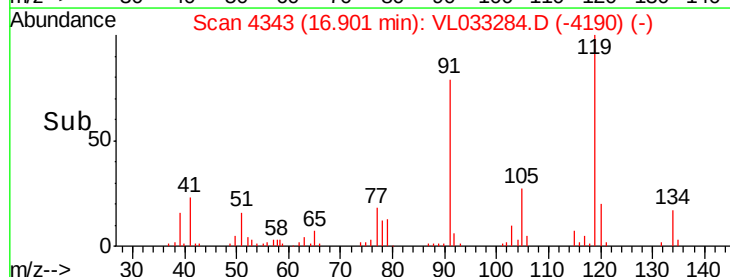
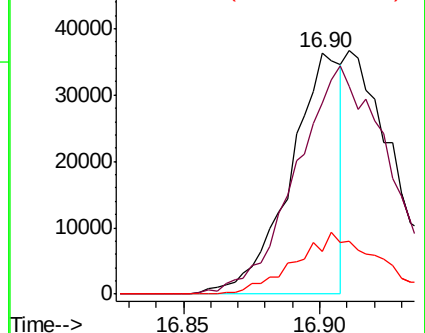
134 0.0 15.4 23.2#

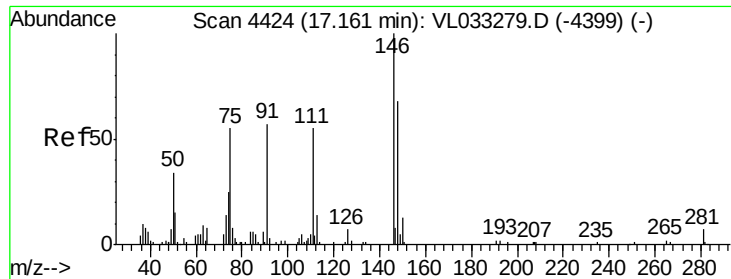


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V

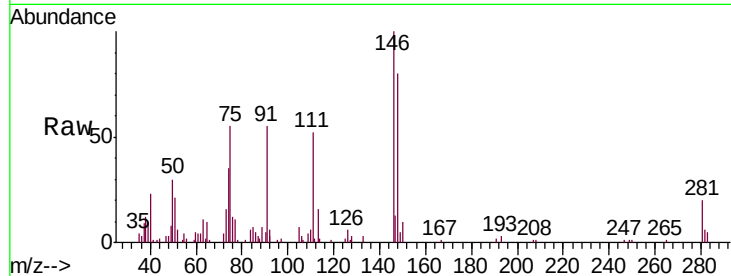




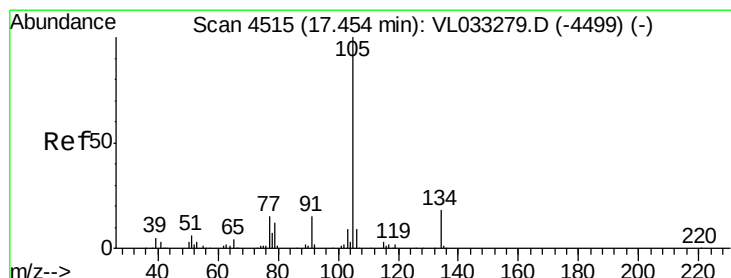
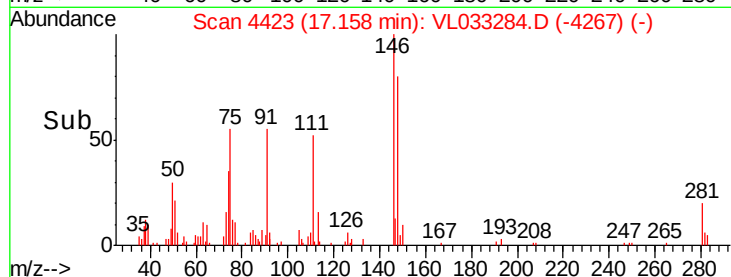
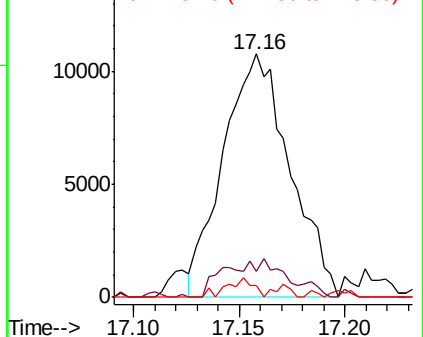
#66  
Benzyl Chloride  
Concen: 0.252 ppbv  
RT: 17.16 min Scan# 4423  
Delta R.T. 0.00 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
0.4 PPB MDL

Tgt Ion: 91 Resp: 23672  
Ion Ratio Lower Upper  
91 100  
126 15.8 13.0 19.6  
128 4.8 4.3 6.5

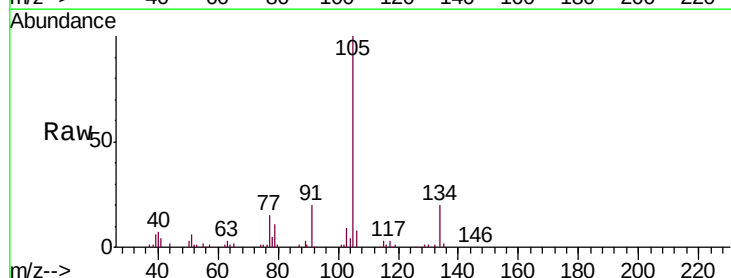


Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 126.10 (125.80 to 126.80): V  
Ion 128.10 (127.80 to 128.80): V

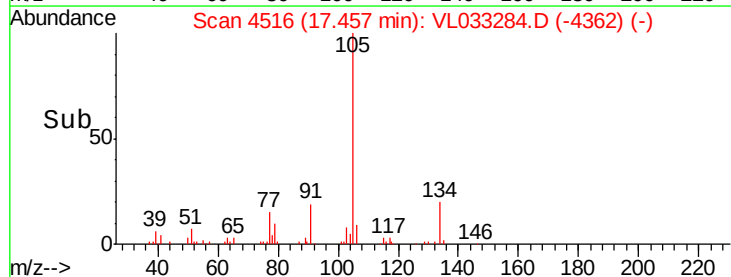
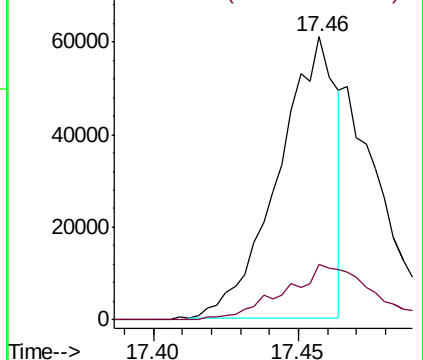


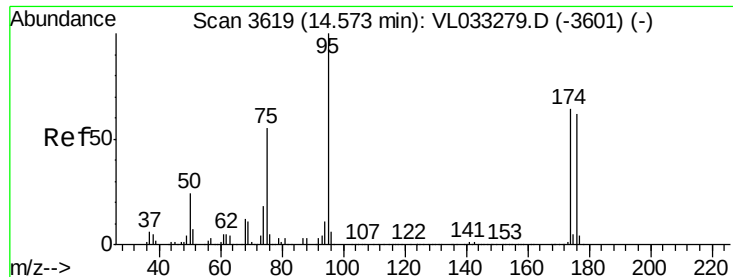
#67  
sec-Butylbenzene  
Concen: 0.243 ppbv  
RT: 17.46 min Scan# 4516  
Delta R.T. -0.01 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

Tgt Ion: 105 Resp: 84058  
Ion Ratio Lower Upper  
105 100  
134 29.9 14.2 21.2#



Abundance Ion 105.10 (104.80 to 105.80): V  
Ion 134.20 (133.90 to 134.90): V

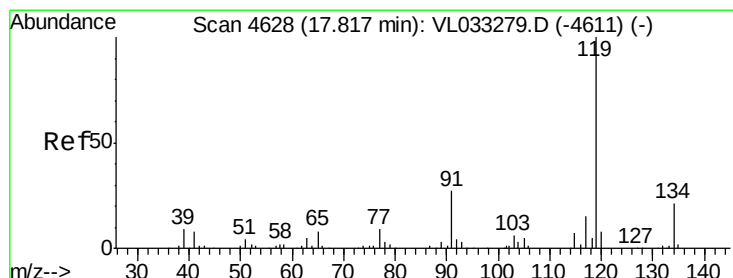
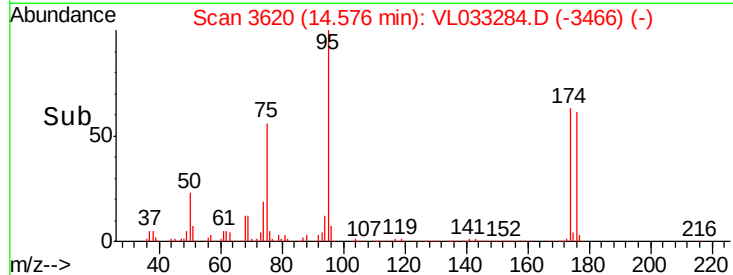
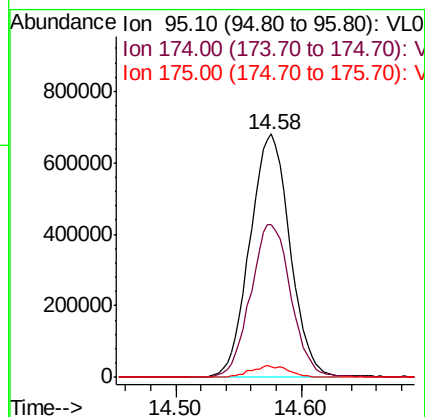
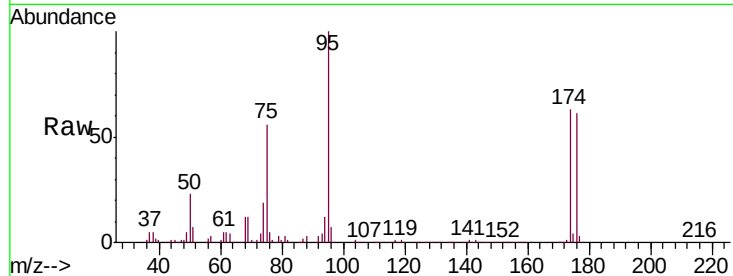




#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.473 ppbv  
RT: 14.58 min Scan# 3620  
Delta R.T. -0.01 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

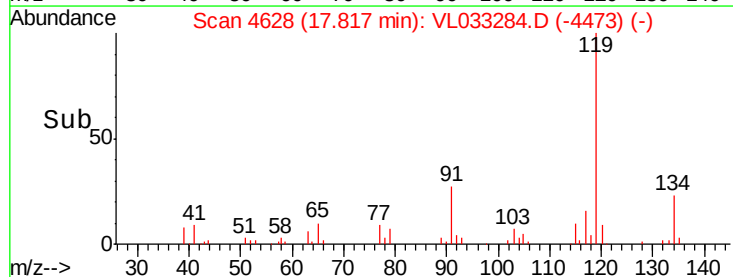
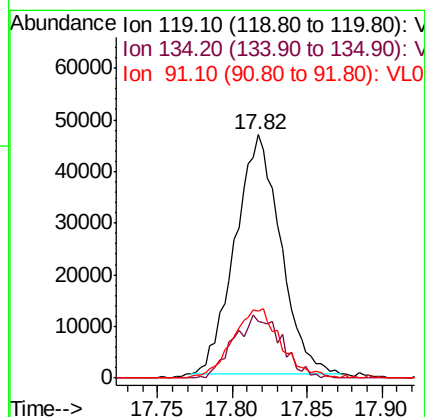
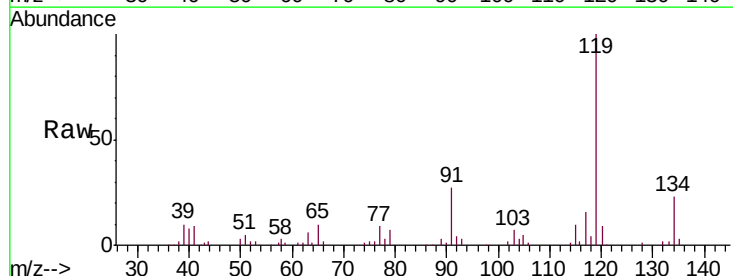
Instrument :  
MSVOA\_L  
ClientSampleId :  
0.4 PPB MDL

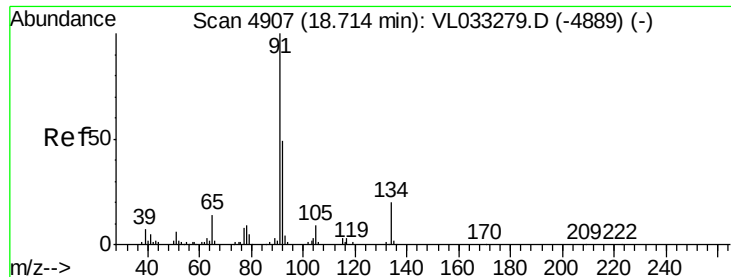
Tgt Ion: 95 Resp: 1510737  
Ion Ratio Lower Upper  
95 100  
174 63.7 51.7 77.5  
175 4.6 3.7 5.5



#69  
p-Isopropyltoluene  
Concen: 0.354 ppbv  
RT: 17.82 min Scan# 4628  
Delta R.T. -0.00 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

Tgt Ion: 119 Resp: 98665  
Ion Ratio Lower Upper  
119 100  
134 27.4 19.7 29.5  
91 30.6 23.5 35.3





#70

n-Butylbenzene

Concen: 0.362 ppbv

RT: 18.71 min Scan# 4907

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

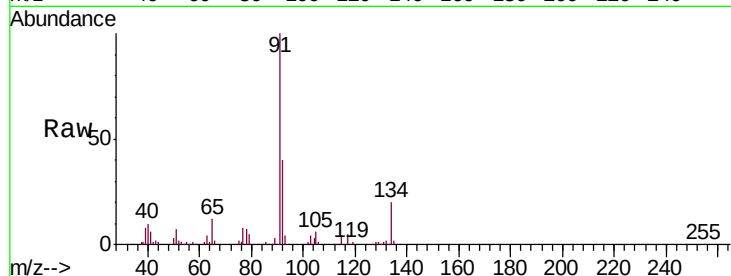
Tgt Ion: 91 Resp: 108619

Ion Ratio Lower Upper

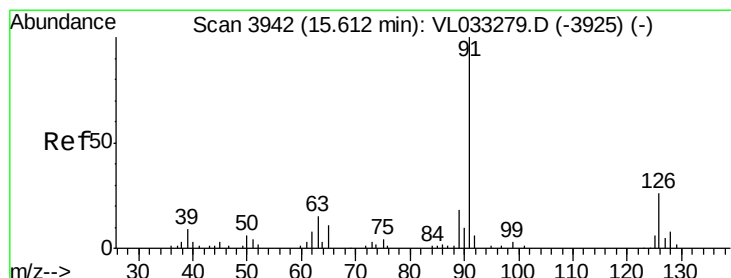
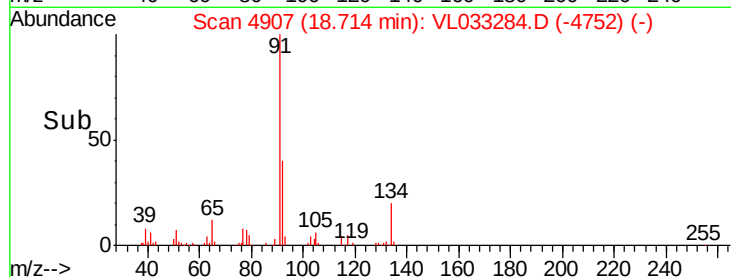
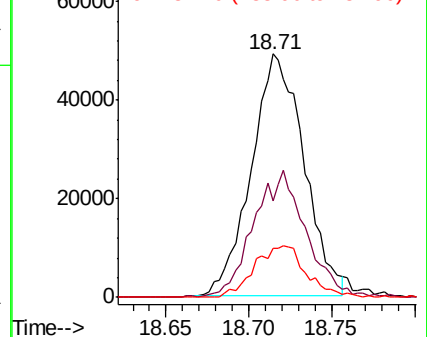
91 100

92 52.4 42.4 63.6

134 21.1 17.1 25.7



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 92.10 (91.80 to 92.80): VL0  
Ion 134.20 (133.90 to 134.90): V



#71

2-Chlorotoluene

Concen: 0.383 ppbv

RT: 15.61 min Scan# 3943

Delta R.T. -0.01 min

Lab File: VL033284.D

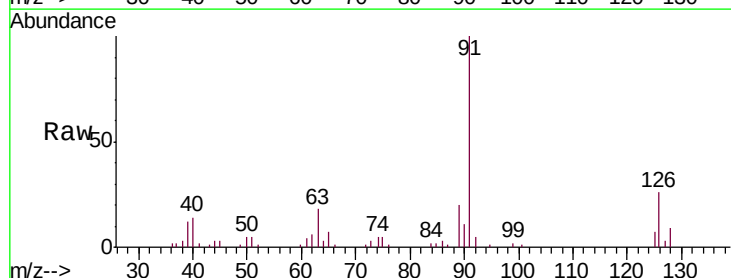
Acq: 12 Mar 2019 15:03

Tgt Ion: 91 Resp: 83077

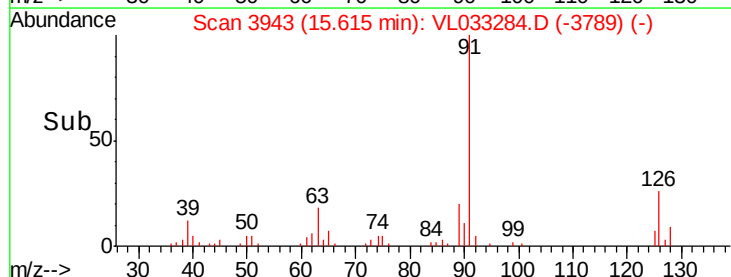
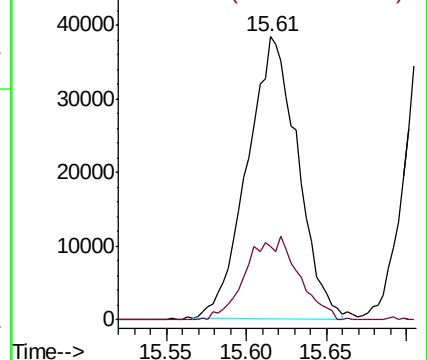
Ion Ratio Lower Upper

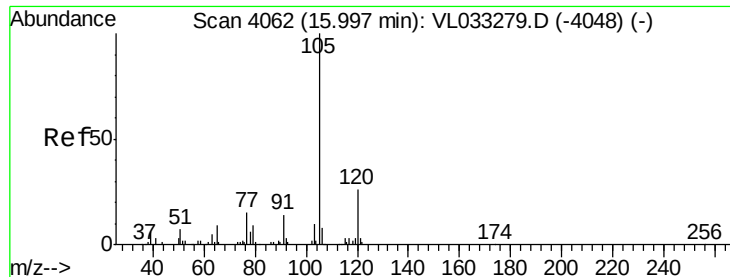
91 100

126 30.5 11.7 46.7



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 126.10 (125.80 to 126.80): V





#72

4-Ethyltoluene

Concen: 0.231 ppbv

RT: 16.00 min Scan# 4062

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

Tgt Ion:105 Resp: 51462

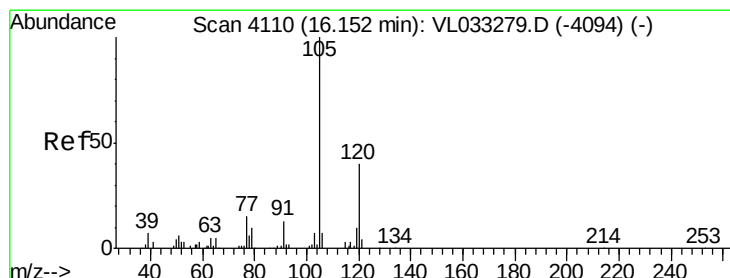
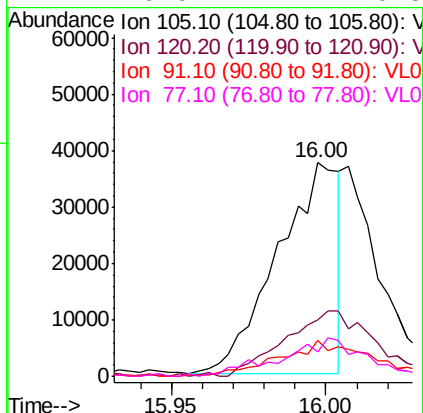
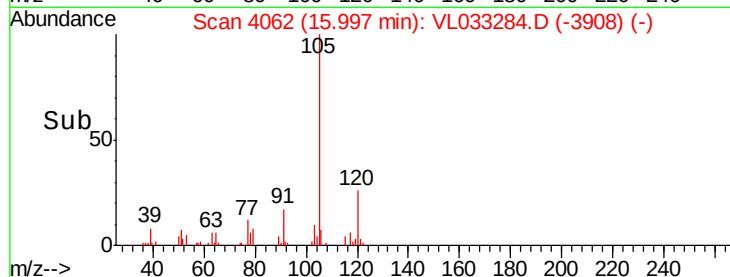
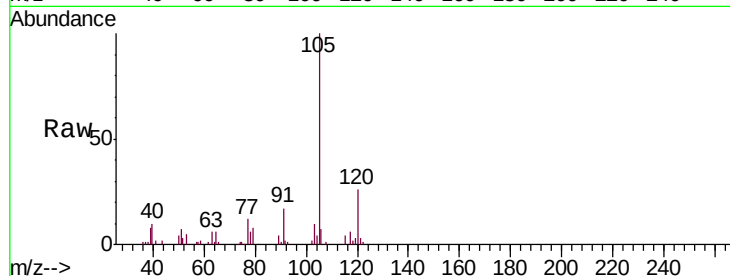
Ion Ratio Lower Upper

105 100

120 0.0 22.9 34.3#

91 25.3 10.2 15.2#

77 0.0 11.2 16.8#



#73

1,3,5-Trimethylbenzene

Concen: 0.220 ppbv

RT: 16.15 min Scan# 4111

Delta R.T. -0.01 min

Lab File: VL033284.D

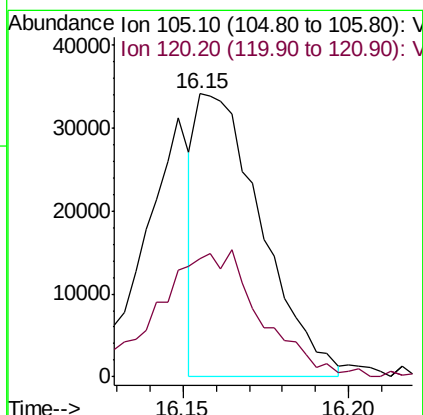
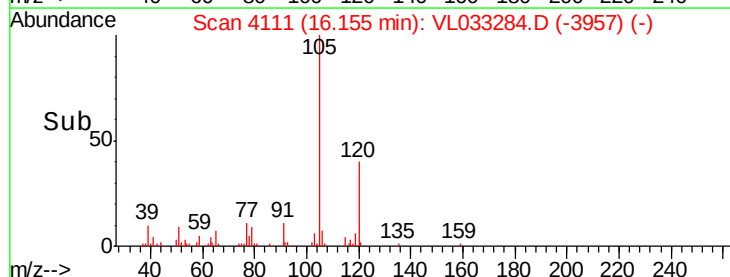
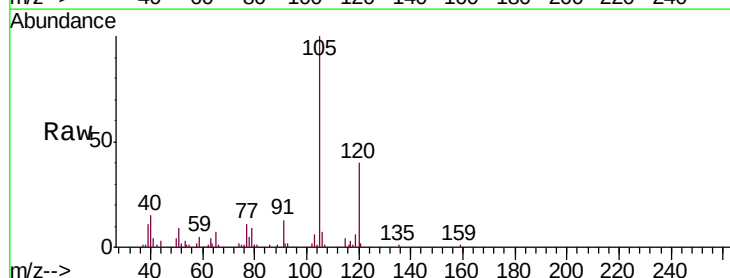
Acq: 12 Mar 2019 15:03

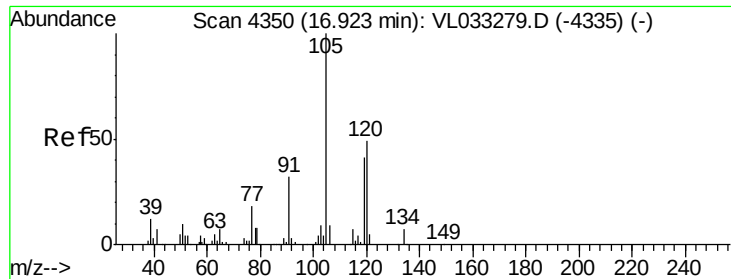
Tgt Ion:105 Resp: 46295

Ion Ratio Lower Upper

105 100

120 42.0 35.1 52.7

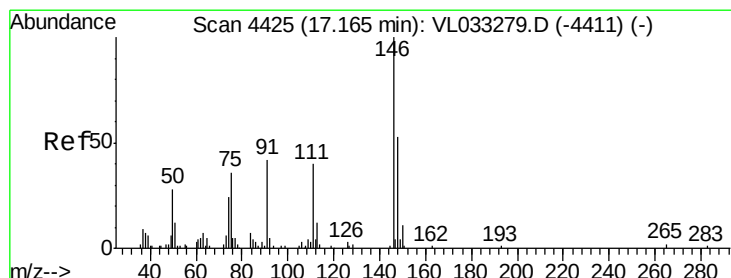
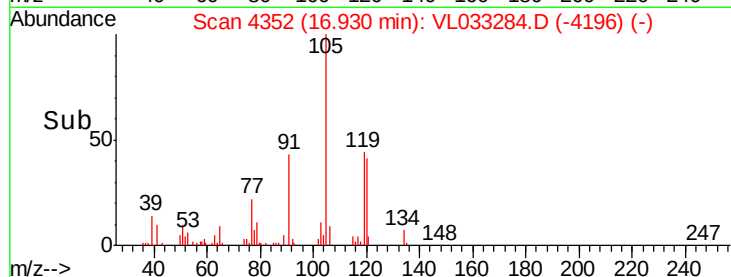
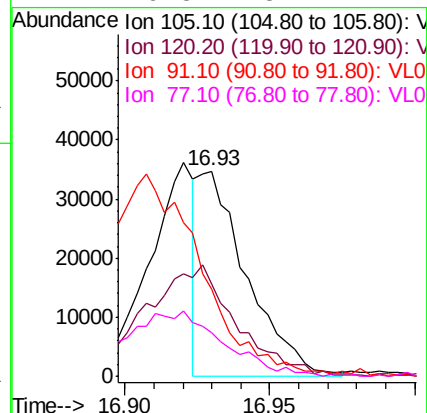
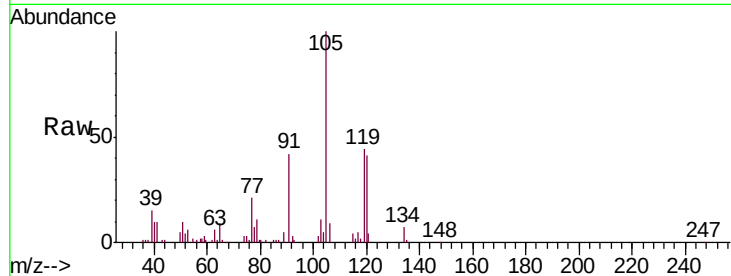




#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.186 ppbv  
 RT: 16.93 min Scan# 4352  
 Delta R.T. 0.00 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

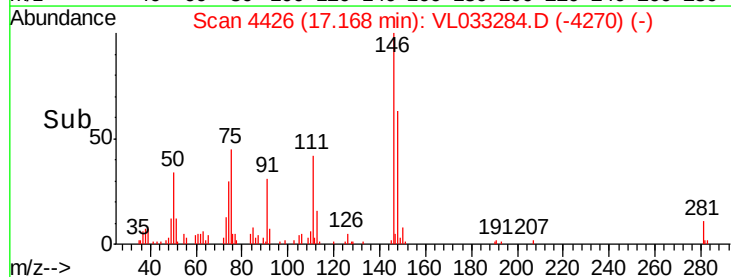
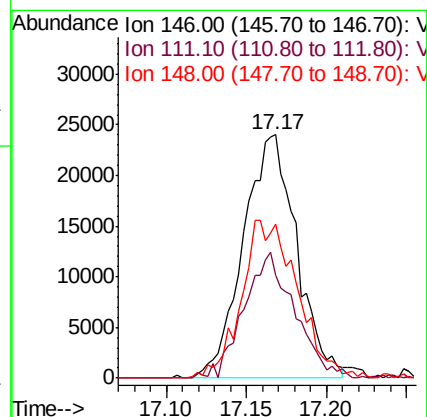
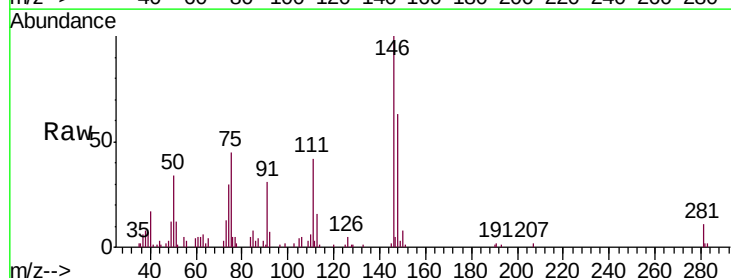
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 0.4 PPB MDL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 39780 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 45.5  | 36.1  | 54.1  |
| 91       | 40.8  | 38.6  | 58.0  |
| 77       | 20.8  | 18.2  | 27.4  |

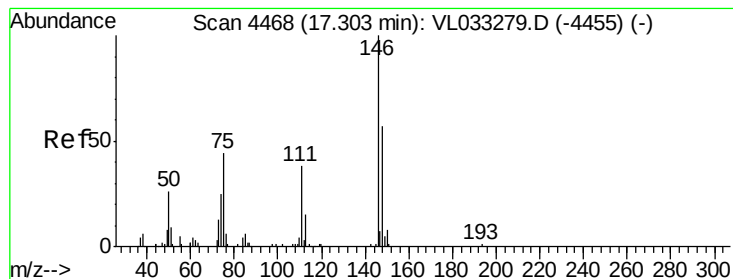


#75  
 1,3-Dichlorobenzene  
 Concen: 0.429 ppbv  
 RT: 17.17 min Scan# 4426  
 Delta R.T. 0.00 min  
 Lab File: VL033284.D  
 Acq: 12 Mar 2019 15:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 54945 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 49.4  | 22.8  | 68.4  |
| 148      | 67.5  | 31.8  | 95.3  |







#76

1,4-Dichlorobenzene

Concen: 0.293 ppbv

RT: 17.31 min Scan# 4470

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

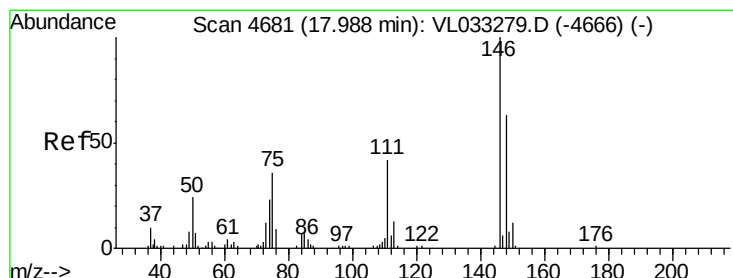
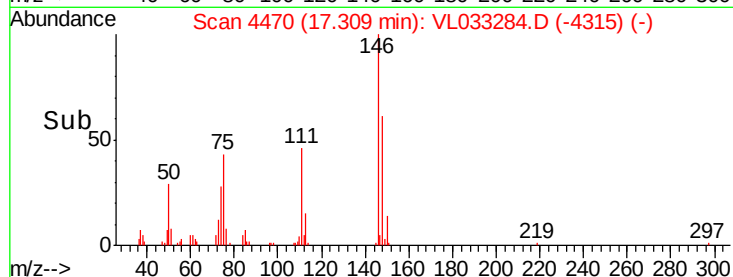
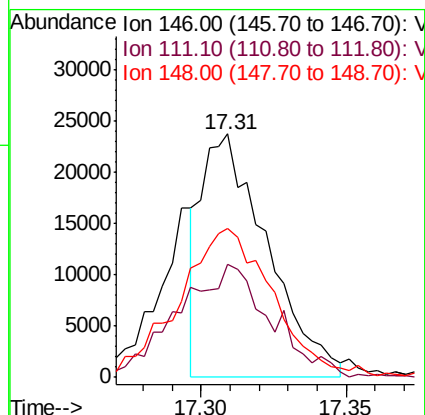
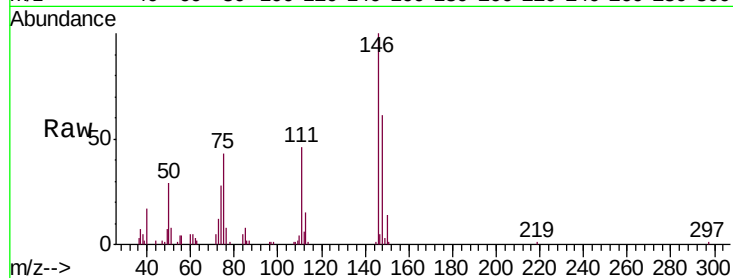
Tgt Ion:146 Resp: 37134

Ion Ratio Lower Upper

146 100

111 68.0 22.1 66.1#

148 90.1 31.8 95.3



#77

1,2-Dichlorobenzene

Concen: 0.415 ppbv

RT: 17.99 min Scan# 4681

Delta R.T. -0.00 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

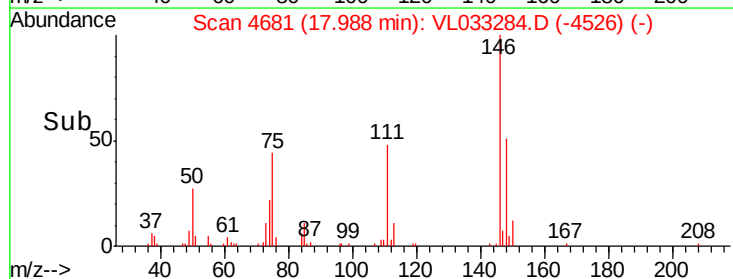
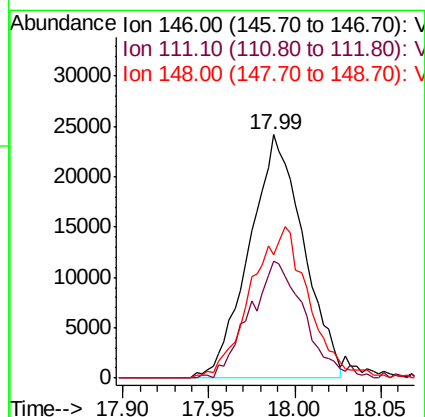
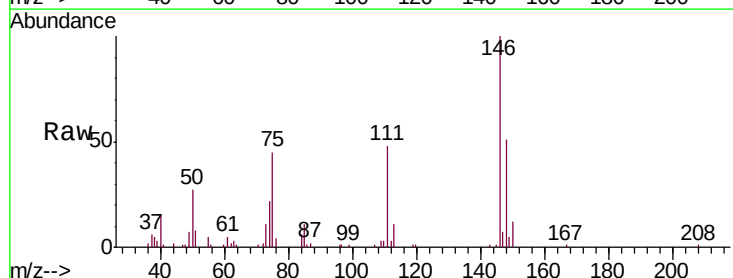
Tgt Ion:146 Resp: 52934

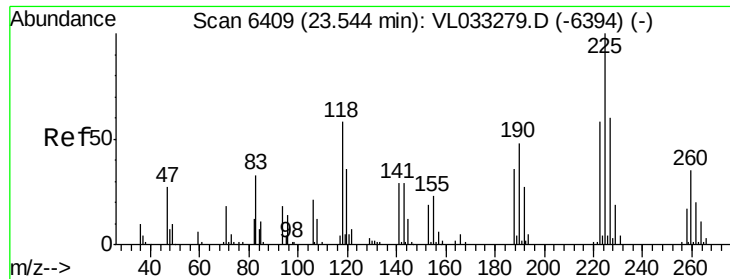
Ion Ratio Lower Upper

146 100

111 49.3 23.5 70.5

148 66.7 31.7 95.1





#78

Hexachloro-1,3-Butadiene

Concen: 0.270 ppbv

RT: 23.54 min Scan# 6409

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

Instrument :

MSVOA\_L

ClientSampleId :

0.4 PPB MDL

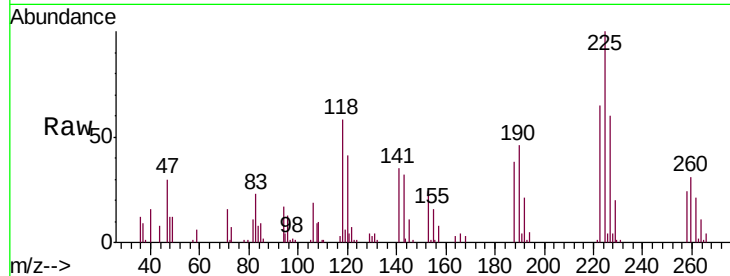
Tgt Ion:225 Resp: 28670

Ion Ratio Lower Upper

225 100

223 94.4 50.3 75.5#

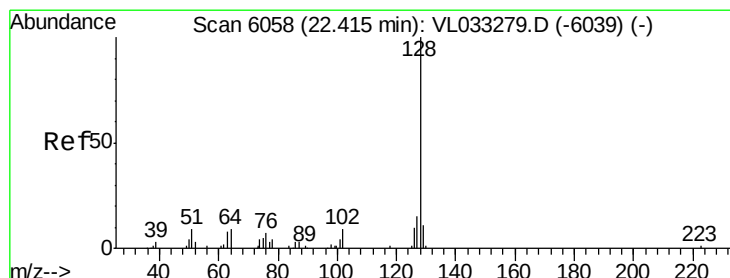
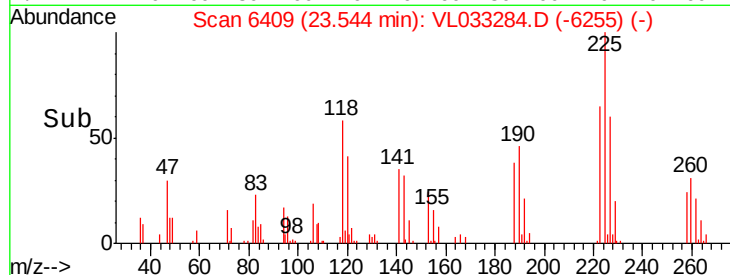
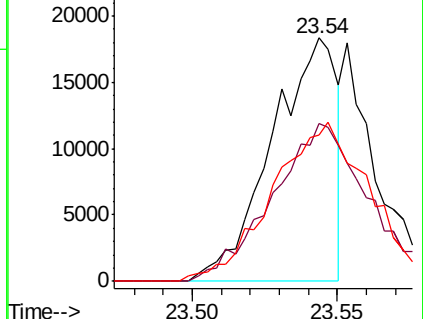
227 98.9 51.1 76.7#



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: 0.096 ppbv

RT: 22.41 min Scan# 6056

Delta R.T. -0.01 min

Lab File: VL033284.D

Acq: 12 Mar 2019 15:03

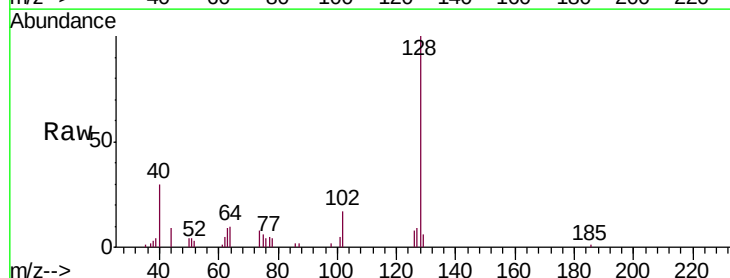
Tgt Ion:128 Resp: 22279

Ion Ratio Lower Upper

128 100

127 9.1 10.5 15.7#

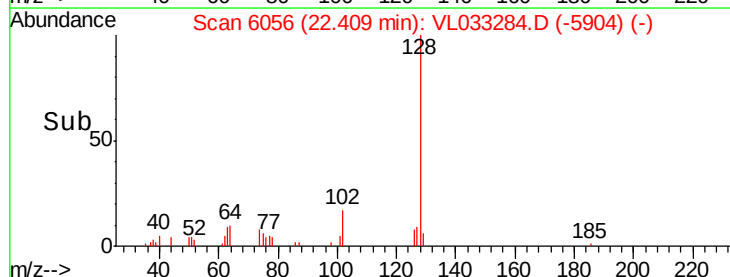
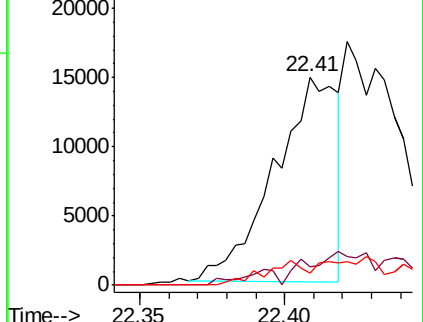
129 5.9 8.4 12.6#

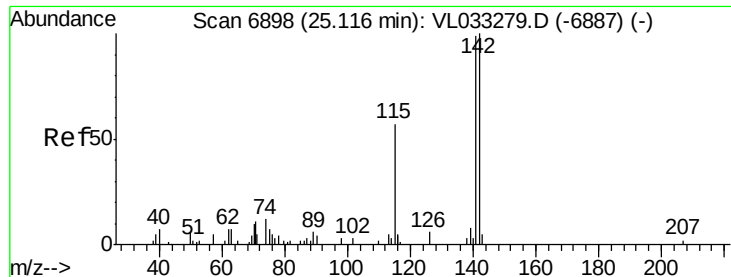


Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V

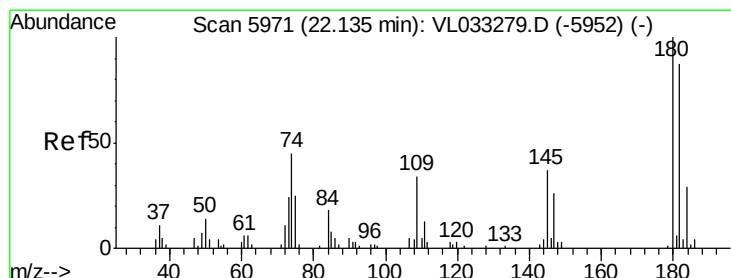
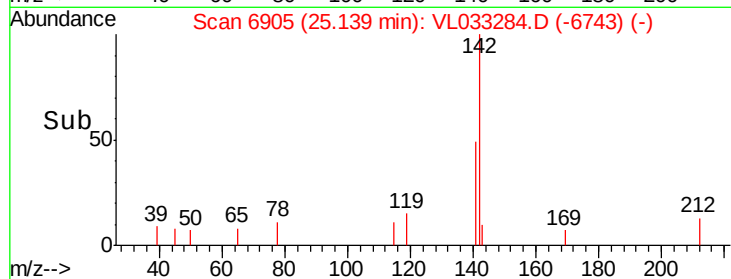
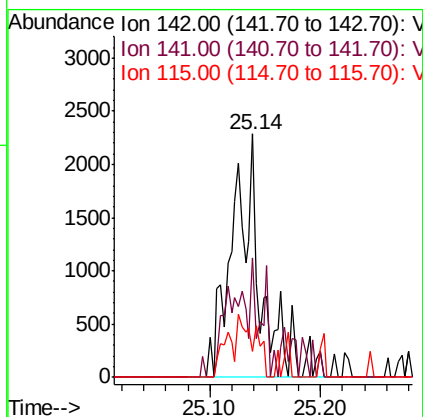
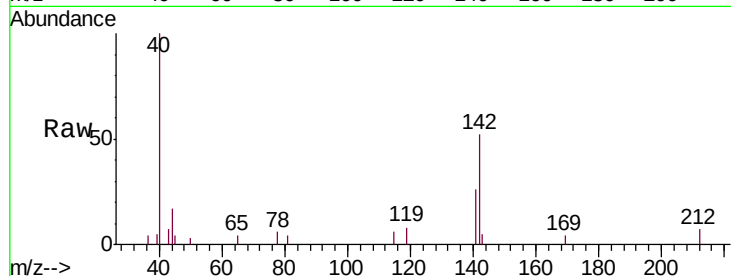




#80  
Naphthalene, 2-methyl-  
Concen: 0.066 ppbv  
RT: 25.14 min Scan# 6905  
Delta R.T. 0.02 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

Instrument :  
MSVOA\_L  
ClientSampleId :  
0.4 PPB MDL

Tgt Ion:142 Resp: 4157  
Ion Ratio Lower Upper  
142 100  
141 46.4 68.0 102.0#  
115 27.1 33.8 50.6#



#81  
1,2,4-Trichlorobenzene  
Concen: 0.237 ppbv  
RT: 22.14 min Scan# 5972  
Delta R.T. 0.00 min  
Lab File: VL033284.D  
Acq: 12 Mar 2019 15:03

Tgt Ion:180 Resp: 28898  
Ion Ratio Lower Upper  
180 100  
182 117.3 76.6 114.8#  
184 38.4 24.2 36.4#

