

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX101518\  
 Data File : VX005349.D  
 Acq On : 15 Oct 2018 17:41  
 Operator : JC/MD  
 Sample : PB113825ZHE#05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB113825ZHE#05

Quant Time: Oct 16 03:38:02 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 12 11:28:43 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 261159   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 379982   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 351411   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 166154   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 6.07   | 65  | 154348   | 53.25 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 106.50% |      |
| 35) Dibromofluoromethane    | 5.50   | 113 | 122480   | 48.67 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.34%  |      |
| 50) Toluene-d8              | 8.72   | 98  | 462253   | 53.50 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 107.00% |      |
| 62) 4-Bromofluorobenzene    | 11.14  | 95  | 149111   | 45.94 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 91.88%  |      |

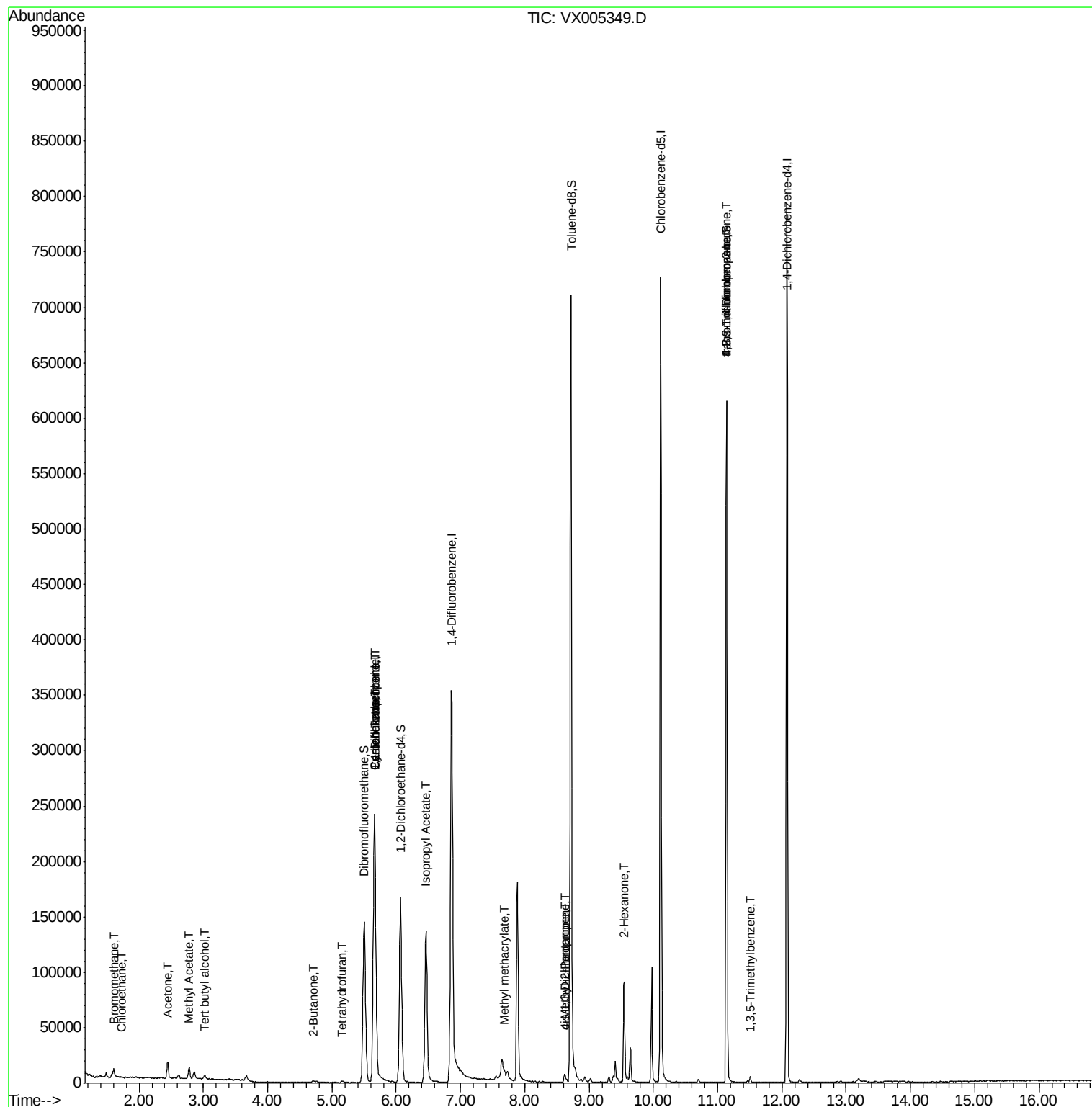
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.61  | 94   | 243      | 0.726     | ug/l # | 3      |
| 6) Chloroethane                | 1.72  | 64   | 768      | 0.726     | ug/l # | 44     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 1825     | 2.232     | ug/l # | 79     |
| 13) Acrolein                   | 2.29  | 56   | 139      | Below Cal | #      | 43     |
| 16) Acetone                    | 2.45  | 43   | 16613    | 9.913     | ug/l   | 95     |
| 18) Methyl Acetate             | 2.78  | 43   | 12554    | 2.633     | ug/l   | 98     |
| 20) Methylene Chloride         | 2.86  | 84   | 2850     | Below Cal |        | 93     |
| 25) 2-Butanone                 | 4.71  | 43   | 2959     | 1.207     | ug/l # | 78     |
| 29) Tetrahydrofuran            | 5.16  | 42   | 1231     | 0.787     | ug/l # | 74     |
| 31) Cyclohexane                | 5.67  | 56   | 4556     | 1.143     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 16775    | 4.558     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 22435    | 6.067     | ug/l # | 16     |
| 43) Isopropyl Acetate          | 6.46  | 43   | 181227   | 28.746    | ug/l   | 96     |
| 44) Trichloroethene            | 7.22  | 130  | 271      | Below Cal |        | 56     |
| 48) Methyl methacrylate        | 7.68  | 41   | 8491     | 2.597     | ug/l # | 18     |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 2412     | 0.553     | ug/l # | 34     |
| 54) cis-1,3-Dichloropropene    | 8.62  | 75   | 1134     | 0.293     | ug/l # | 68     |
| 59) 2-Hexanone                 | 9.55  | 43   | 10687    | 3.043     | ug/l # | 53     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 74140    | 23.004    | ug/l # | 37     |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 2233     | 0.264     | ug/l   | 92     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 74140    | 69.897    | ug/l # | 10     |

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

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Quant Title : SW846 8260  
QLast Update : Fri Oct 12 11:28:43 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.00 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

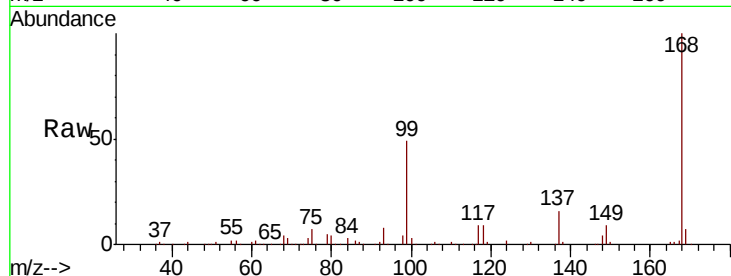
PB113825ZHE#05

Tot Ion:168 Resp: 261159

Ion Ratio Lower Upper

168 100

99 49.4 39.9 59.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

60000

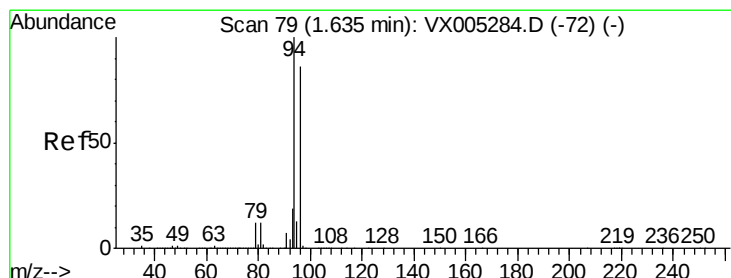
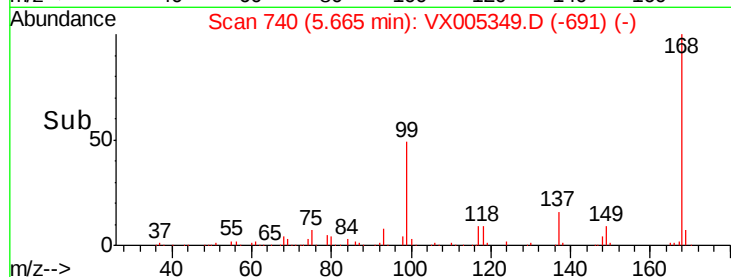
40000

20000

0

Time-->

5.50 5.60 5.70 5.80 5.90



#5

Bromomethane

Concen: 0.726 ug/l

RT: 1.61 min Scan# 75

Delta R.T. -0.02 min

Lab File: VX005349.D

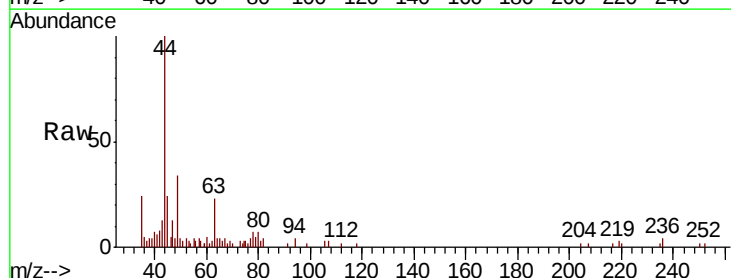
Acq: 15 Oct 2018 17:41

Tgt Ion: 94 Resp: 243

Ion Ratio Lower Upper

94 100

96 0.0 74.5 111.7#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.61

150

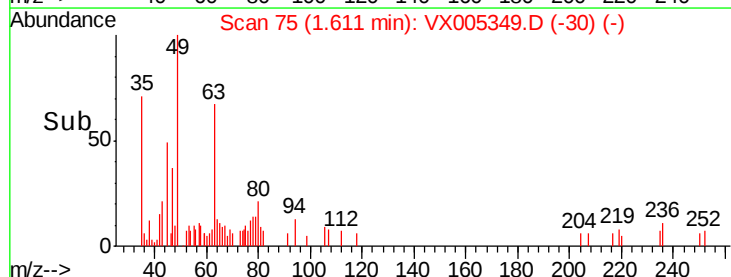
100

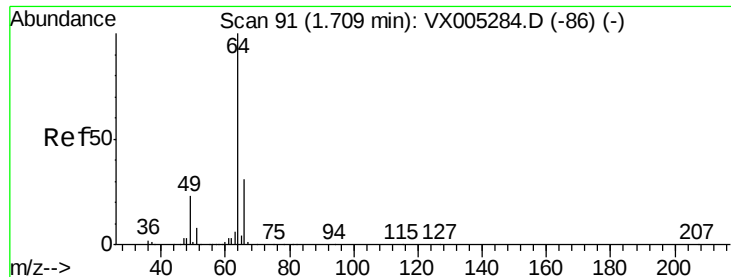
50

0

Time-->

1.56 1.58 1.60 1.62





#6

Chloroethane

Concen: 0.726 ug/l

RT: 1.72 min Scan# 93

Delta R.T. 0.01 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

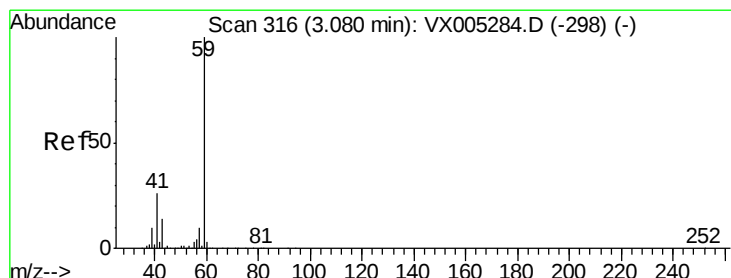
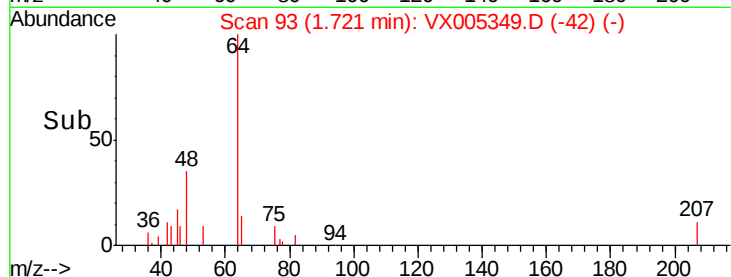
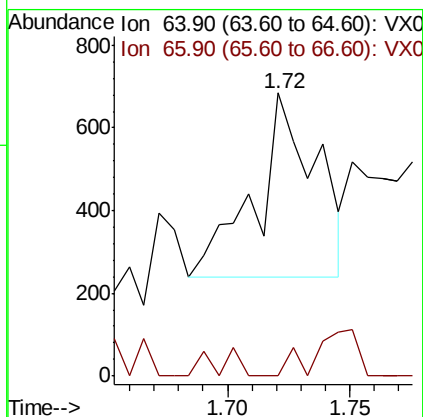
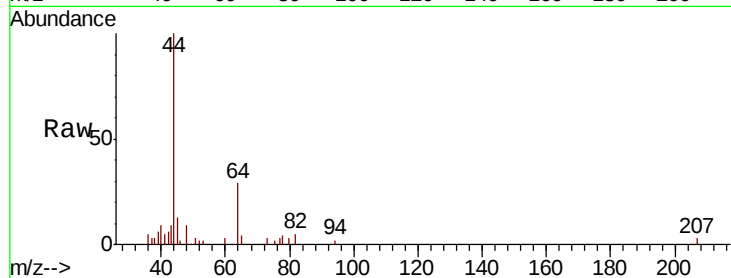
PB113825ZHE#05

Tot Ion: 64 Resp: 768

Ion Ratio Lower Upper

64 100

66 0.0 24.6 36.8#



#11

Tert butyl alcohol

Concen: 2.232 ug/l

RT: 3.02 min Scan# 306

Delta R.T. -0.06 min

Lab File: VX005349.D

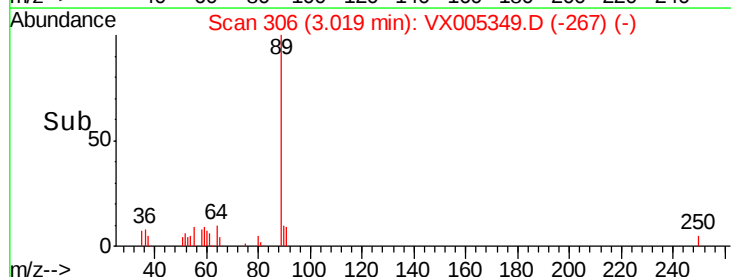
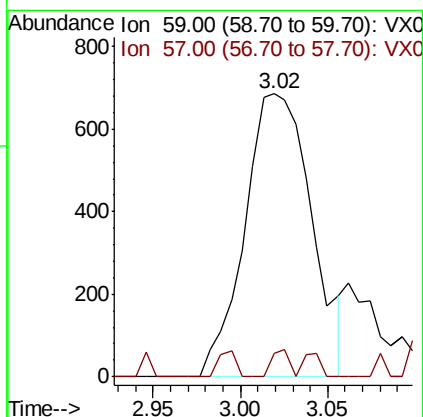
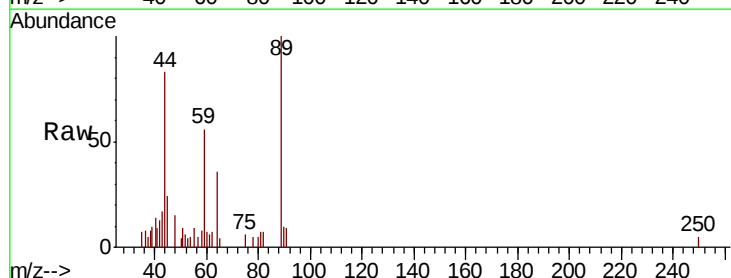
Acq: 15 Oct 2018 17:41

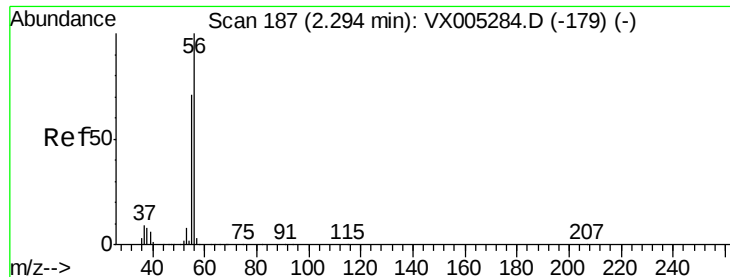
Tgt Ion: 59 Resp: 1825

Ion Ratio Lower Upper

59 100

57 2.5 8.2 12.4#





#13

Acrolein

Concen: Below Cal

RT: 2.29 min Scan# 187

Delta R.T. 0.00 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

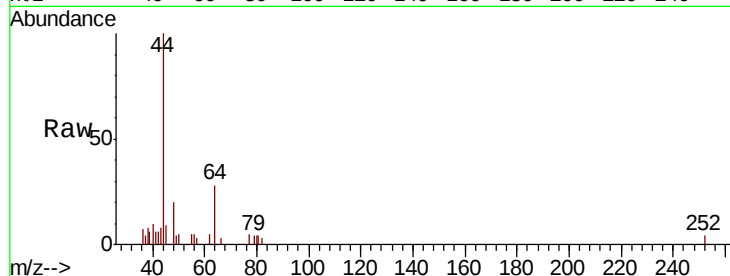
PB113825ZHE#05

Tot Ion: 56 Resp: 139

Ion Ratio Lower Upper

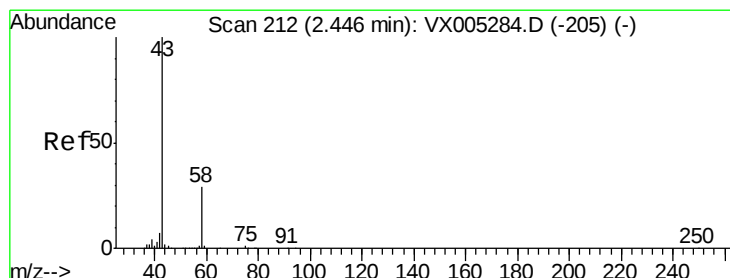
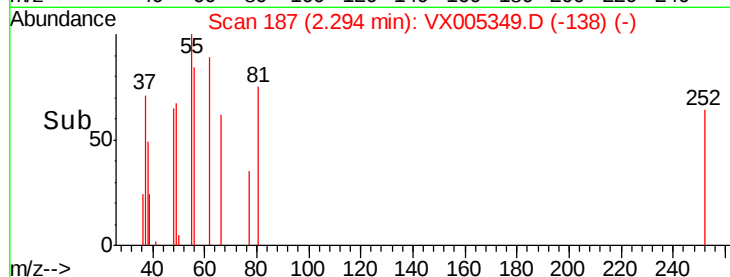
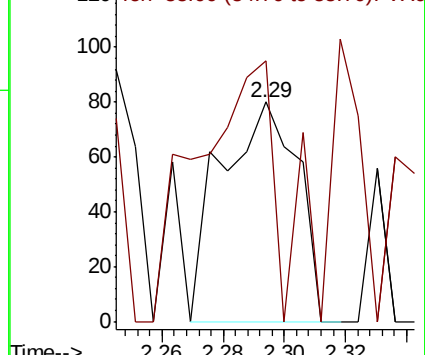
56 100

55 114.4 54.7 82.1#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 9.913 ug/l

RT: 2.45 min Scan# 212

Delta R.T. -0.00 min

Lab File: VX005349.D

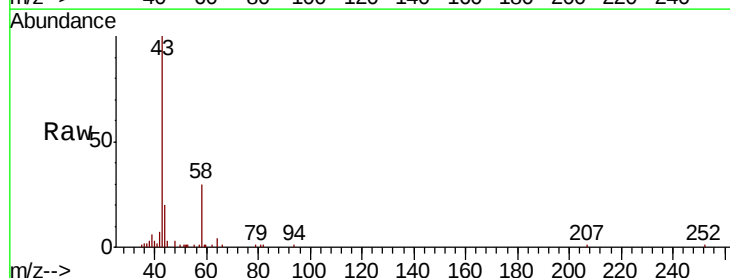
Acq: 15 Oct 2018 17:41

Tgt Ion: 43 Resp: 16613

Ion Ratio Lower Upper

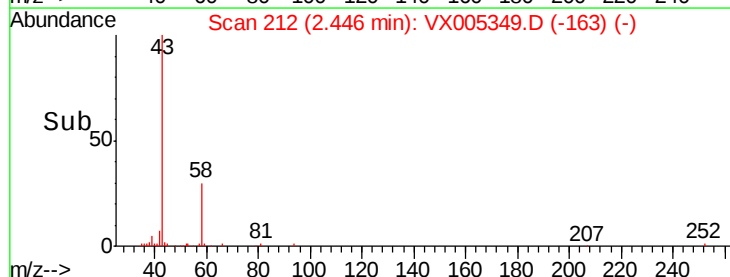
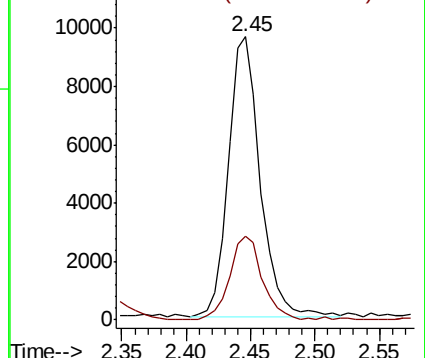
43 100

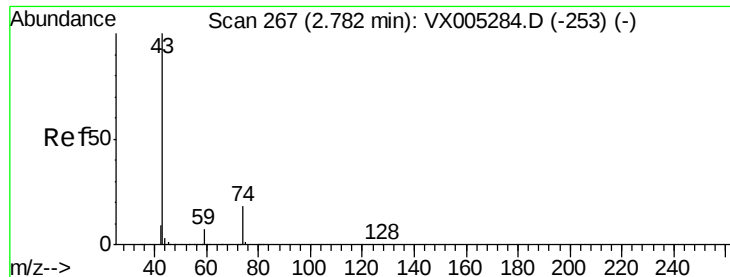
58 30.1 26.2 39.4



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

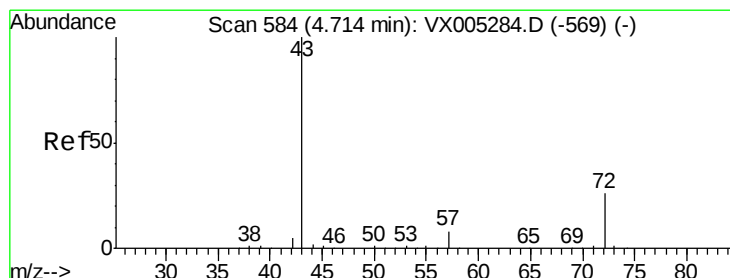
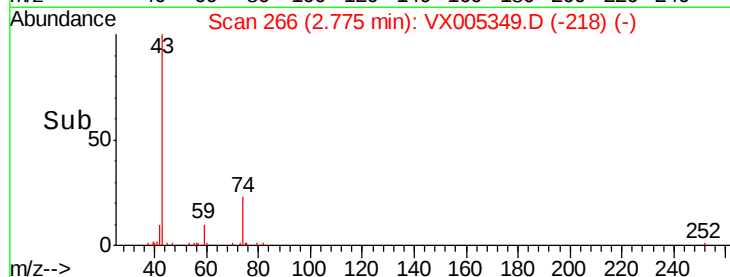
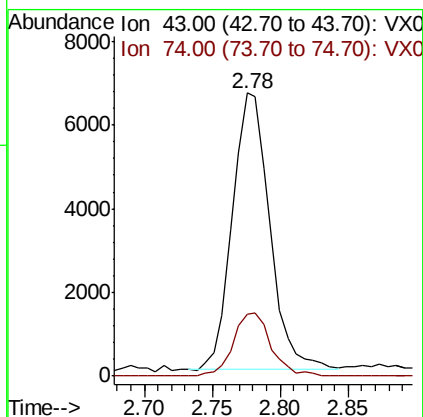
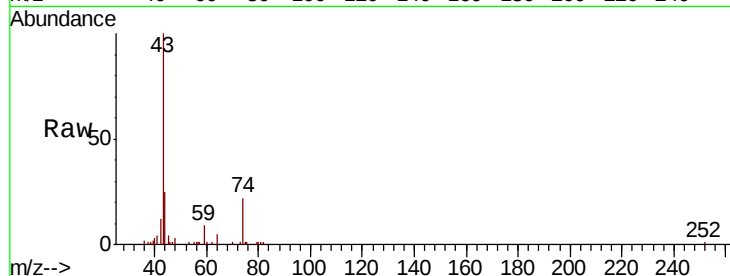




#18  
Methvl Acetate  
Concen: 2.633 ug/l  
RT: 2.78 min Scan# 266  
Delta R.T. -0.01 min  
Lab File: VX005349.D  
Acq: 15 Oct 2018 17:41

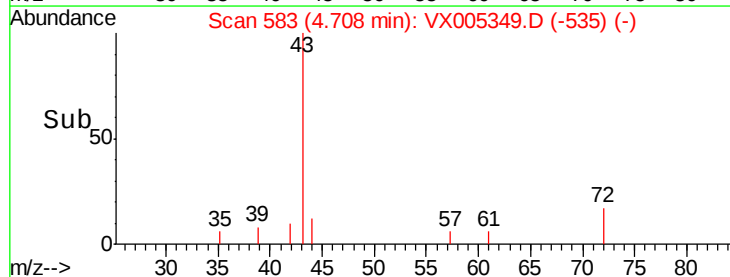
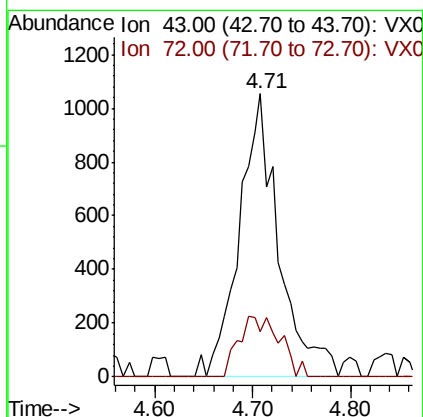
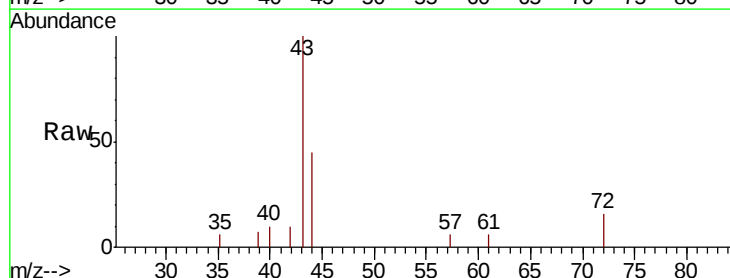
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB113825ZHE#05

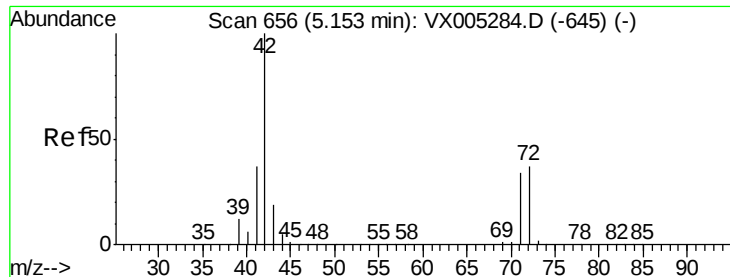
Tot Ion: 43 Resp: 12554  
Ion Ratio Lower Upper  
43 100  
74 23.3 19.4 29.2



#25  
2-Butanone  
Concen: 1.207 ug/l  
RT: 4.71 min Scan# 583  
Delta R.T. -0.01 min  
Lab File: VX005349.D  
Acq: 15 Oct 2018 17:41

Tgt Ion: 43 Resp: 2959  
Ion Ratio Lower Upper  
43 100  
72 15.8 22.0 33.0#





#29

Tetrahydrofuran

Concen: 0.787 ug/l

RT: 5.16 min Scan# 657

Delta R.T. 0.01 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

PB113825ZHE#05

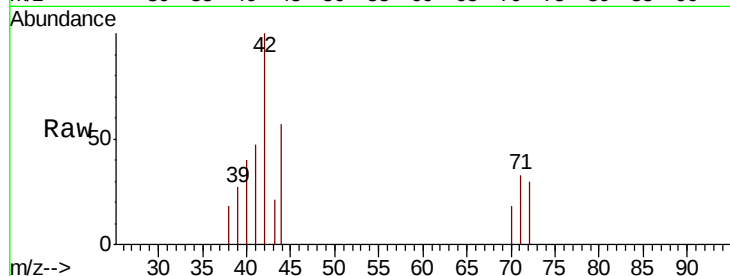
Tot Ion: 42 Resp: 1231

Ion Ratio Lower Upper

42 100

72 19.6 37.4 56.0#

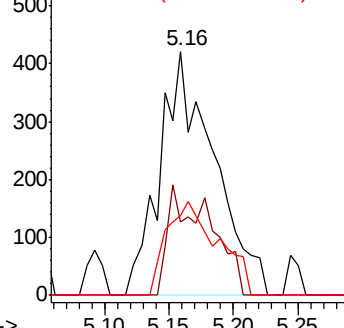
71 37.0 34.5 51.7



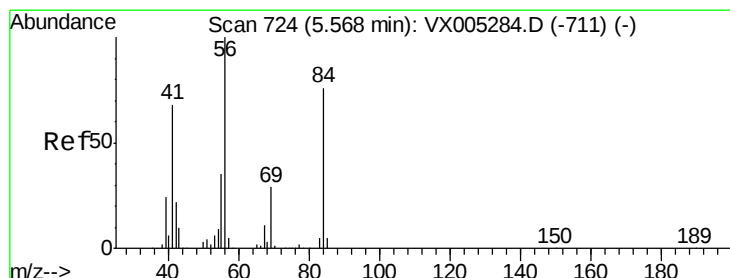
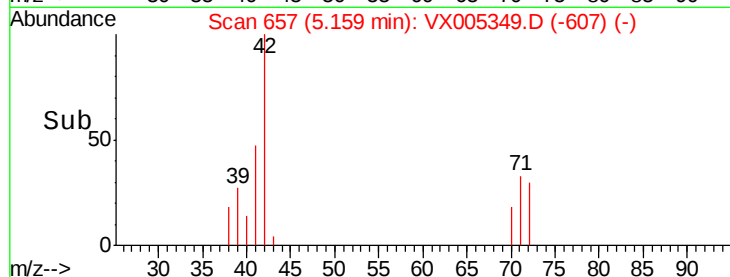
Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



Time-->



#31

Cyclohexane

Concen: 1.143 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.10 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

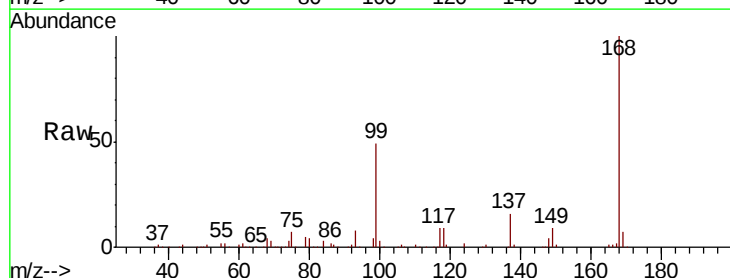
Tgt Ion: 56 Resp: 4556

Ion Ratio Lower Upper

56 100

69 177.3 25.4 38.2#

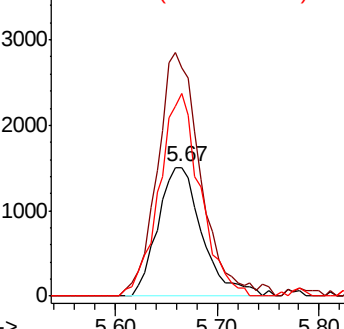
84 157.1 71.4 107.2#



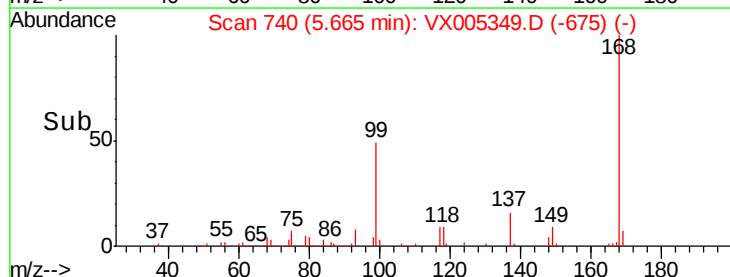
Abundance Ion 56.00 (55.70 to 56.70): VX0

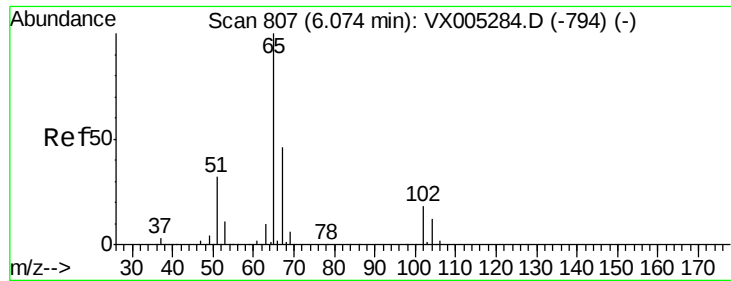
Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0



Time-->

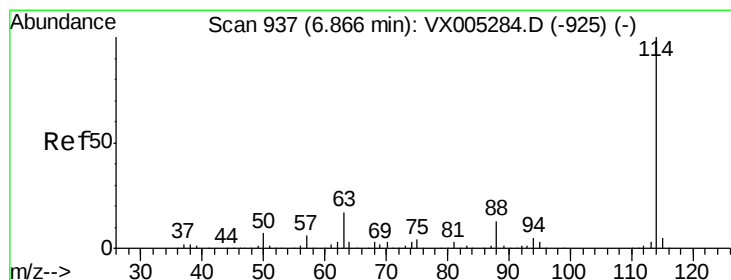
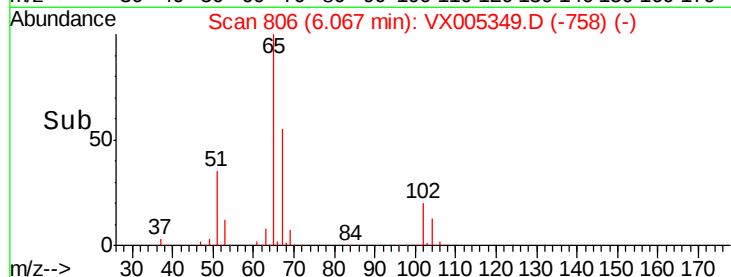
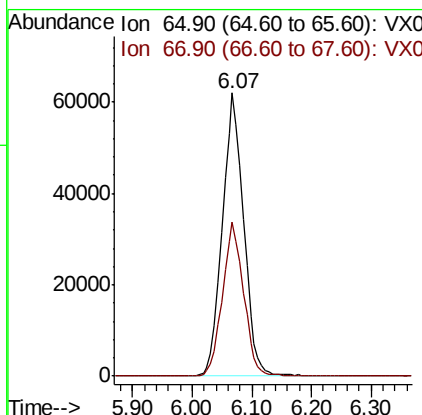
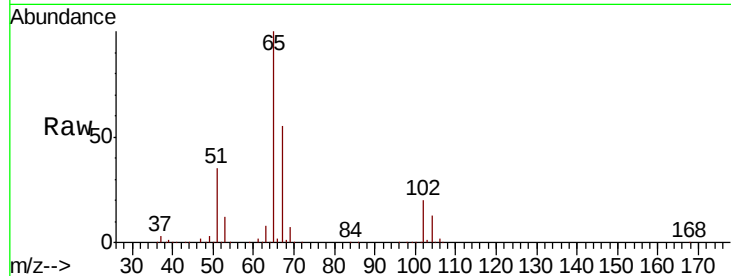




#33  
 1,2-Dichloroethane-d4  
 Concen: 53.252 ug/l  
 RT: 6.07 min Scan# 806  
 Delta R.T. -0.01 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

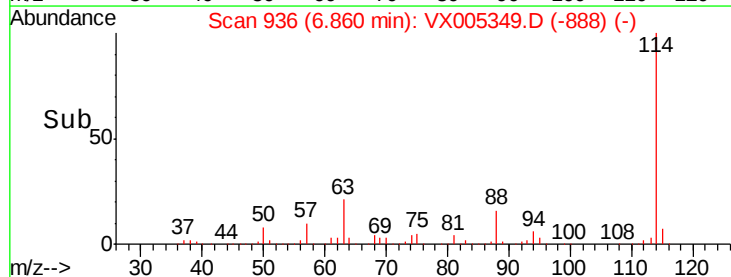
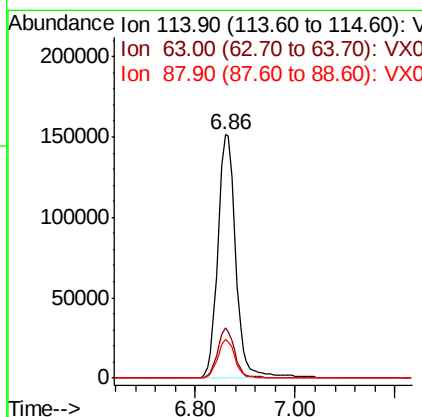
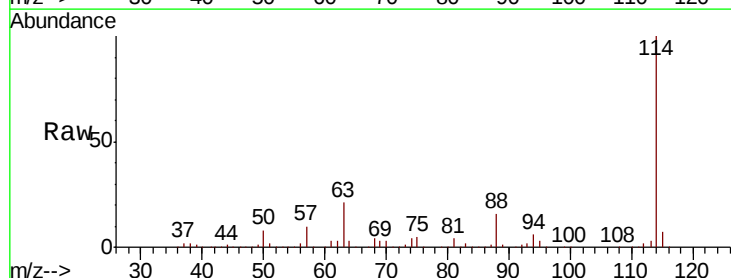
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB113825ZHE#05

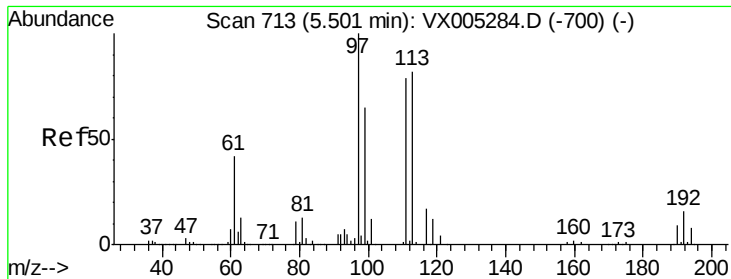
Tot Ion: 65 Resp: 154348  
 Ion Ratio Lower Upper  
 65 100  
 67 54.0 0.0 106.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.01 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

Tgt Ion: 114 Resp: 379982  
 Ion Ratio Lower Upper  
 114 100  
 63 20.5 0.0 39.0  
 88 15.7 0.0 30.4

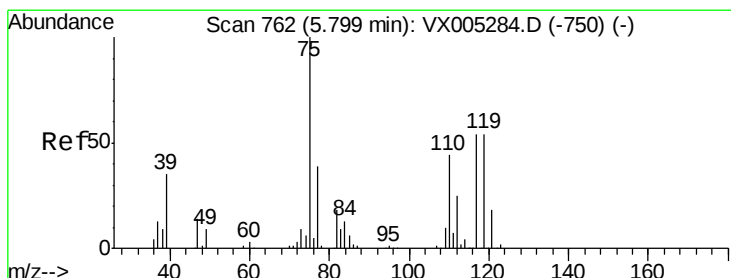
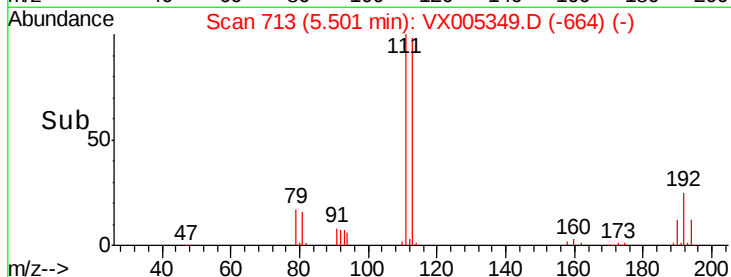
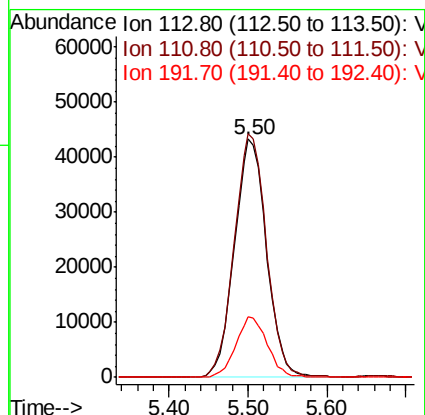
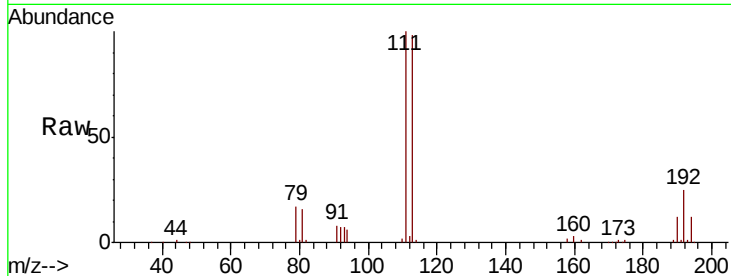




#35  
 Dibromofluoromethane  
 Concen: 48.667 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. -0.00 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

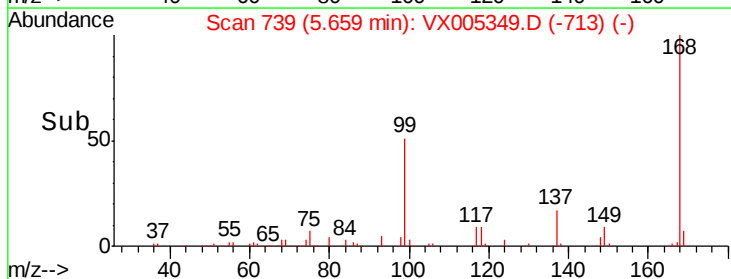
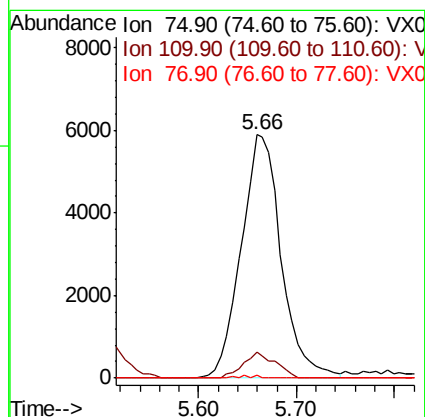
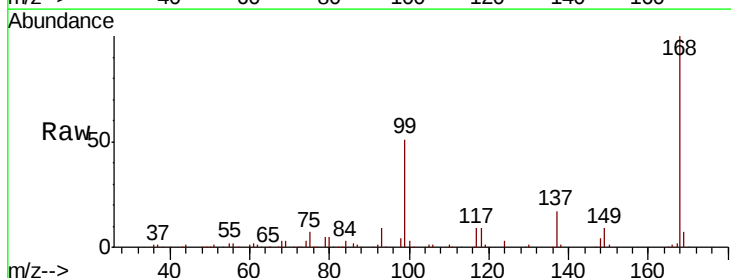
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB113825ZHE#05

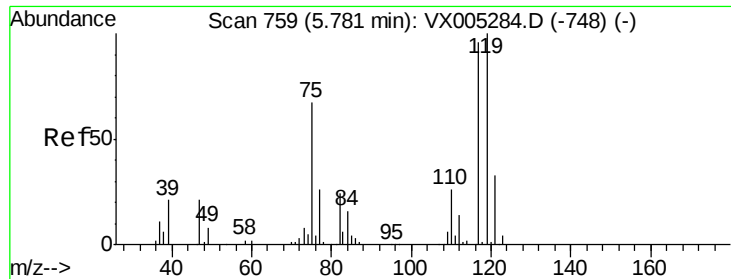
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.8 | 82.4  | 123.6 |
| 192     | 24.8  | 19.4  | 29.2  |



#36  
 1,1-Dichloropropene  
 Concen: 4.558 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.5   | 18.0  | 54.0# |
| 77      | 0.3   | 24.6  | 36.8# |





#38

Carbon Tetrachloride

Concen: 6.067 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

PB113825ZHE#05

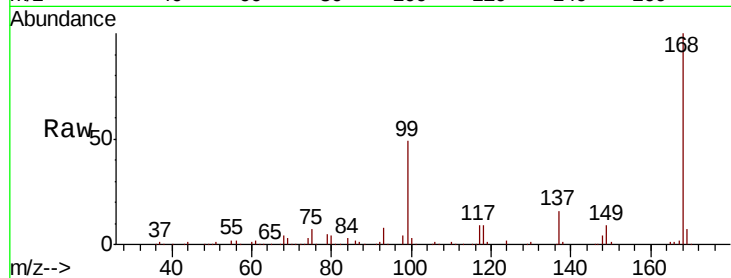
Tot Ion:117 Resp: 22435

Ion Ratio Lower Upper

117 100

119 6.7 78.8 118.2#

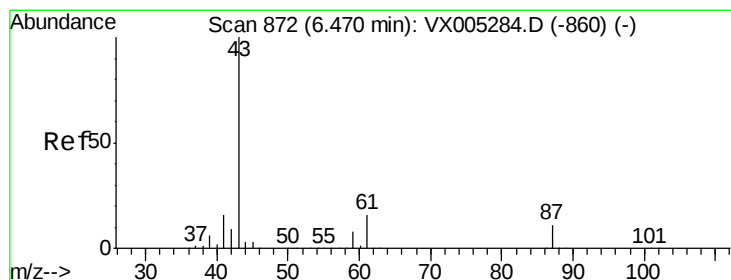
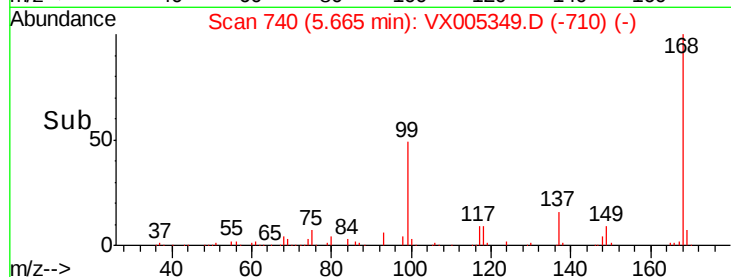
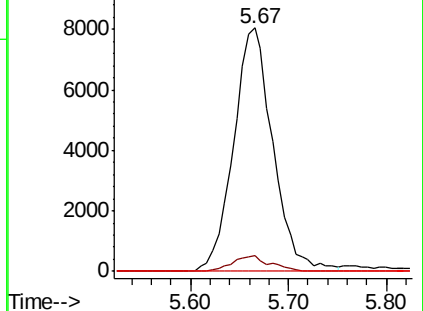
121 0.0 24.9 37.3#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 28.746 ug/l

RT: 6.46 min Scan# 871

Delta R.T. -0.01 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

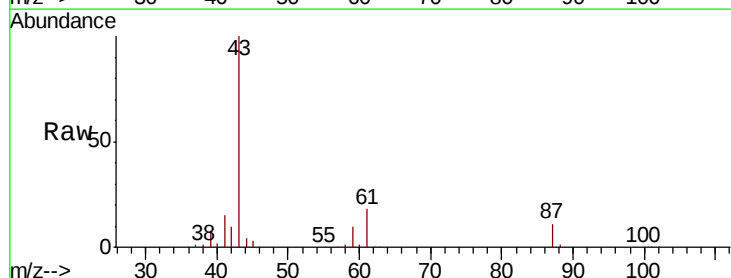
Tgt Ion: 43 Resp: 181227

Ion Ratio Lower Upper

43 100

61 19.6 17.0 25.4

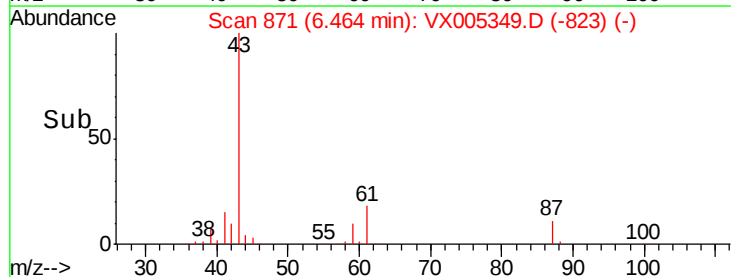
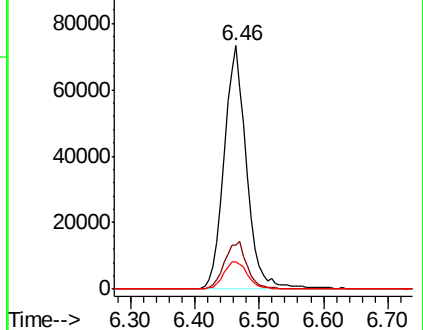
87 12.0 11.4 17.2

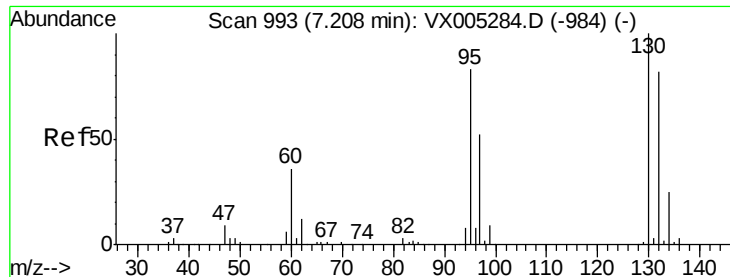


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0





#44

Trichloroethene

Concen: Below Cal

RT: 7.22 min Scan# 995

Delta R.T. 0.01 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

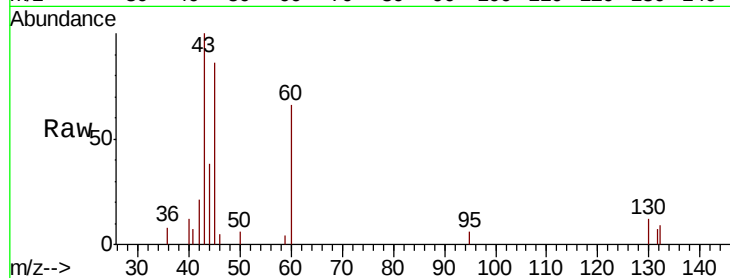
PB113825ZHE#05

Tot Ion:130 Resp: 271

Ion Ratio Lower Upper

130 100

95 48.9 0.0 181.6



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

7.22

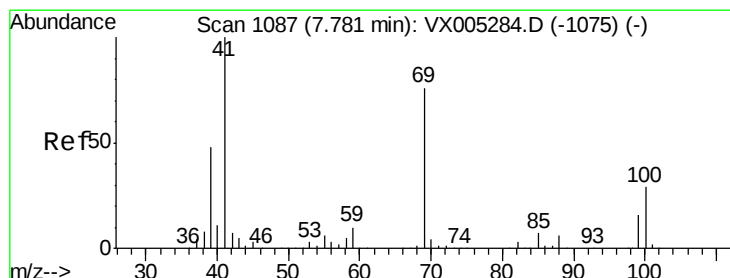
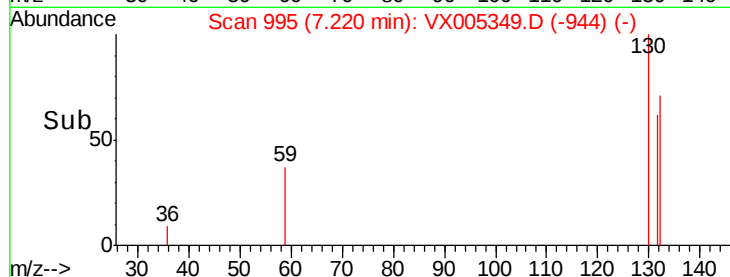
150

100

50

0

Time--> 7.15 7.20 7.25



#48

Methyl methacrylate

Concen: 2.597 ug/l

RT: 7.68 min Scan# 1071

Delta R.T. -0.10 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

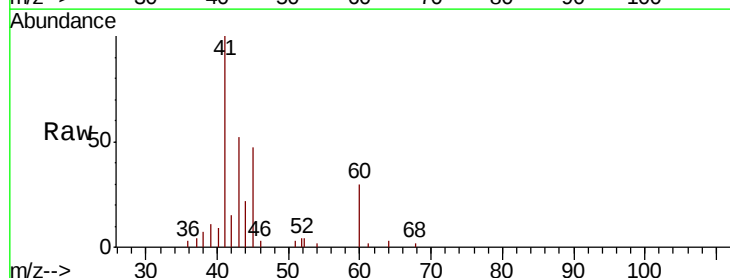
Tgt Ion: 41 Resp: 8491

Ion Ratio Lower Upper

41 100

69 0.0 70.2 105.4#

39 9.8 42.7 64.1#



Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

12000

10000

8000

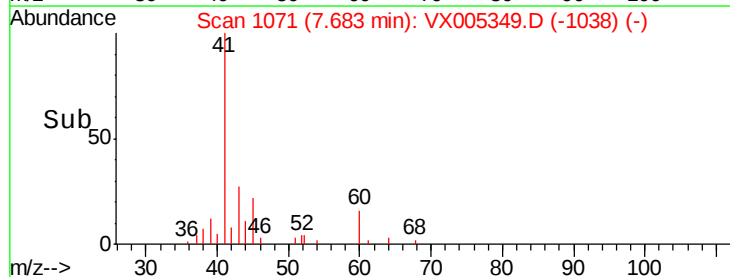
6000

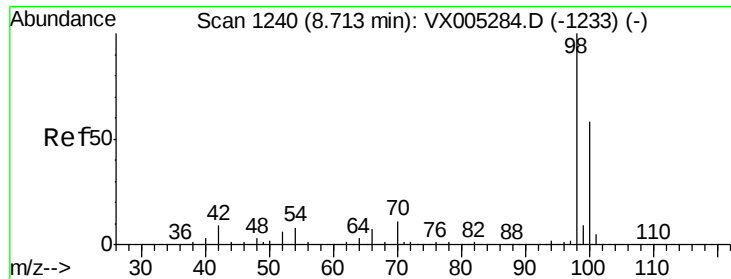
4000

2000

0

Time--> 7.60 7.70 7.80

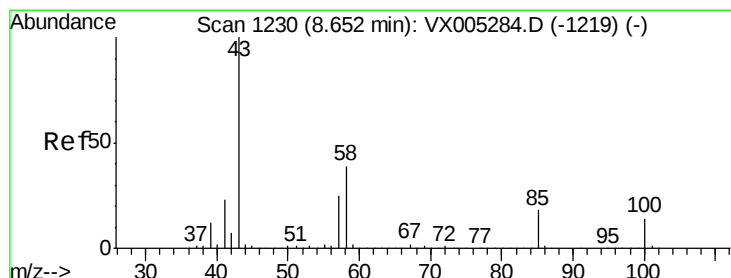
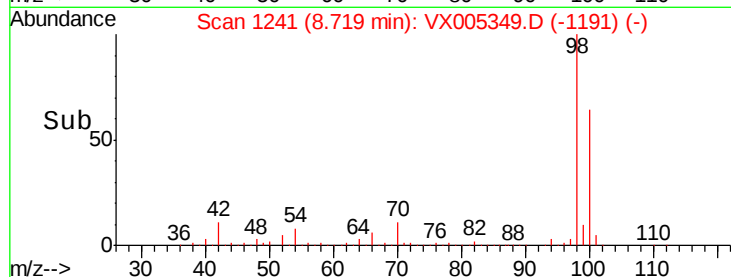
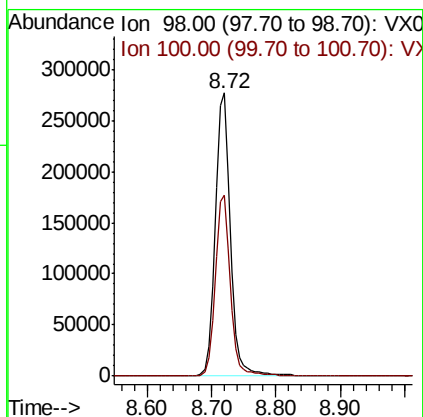
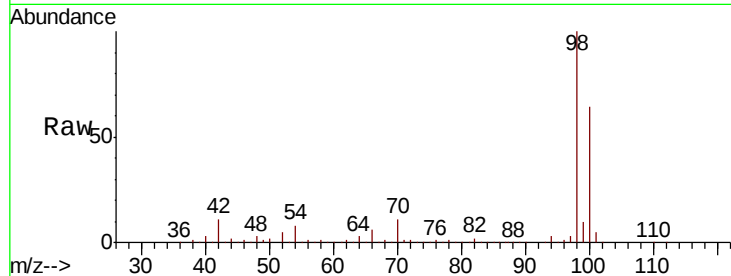




#50  
Toluene-d8  
Concen: 53.501 ug/l  
RT: 8.72 min Scan# 1241  
Delta R.T. 0.01 min  
Lab File: VX005349.D  
Acq: 15 Oct 2018 17:41

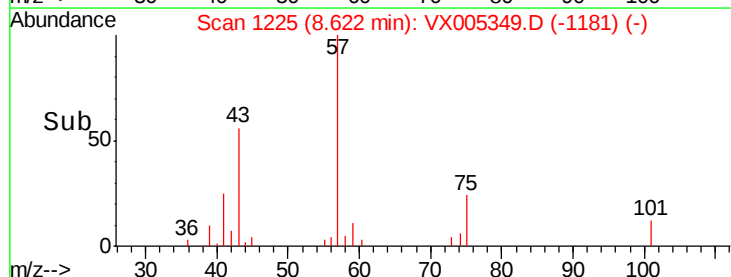
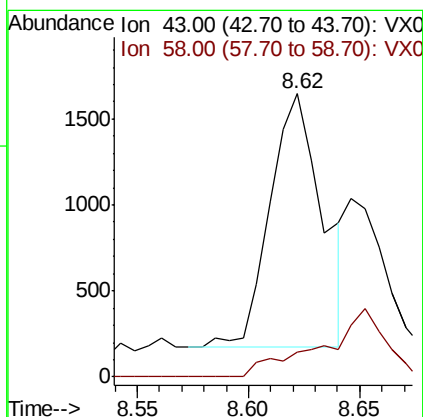
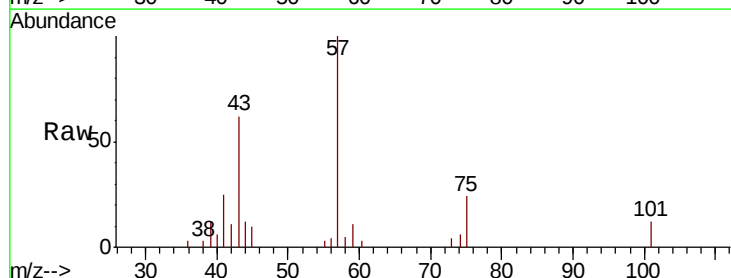
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB113825ZHE#05

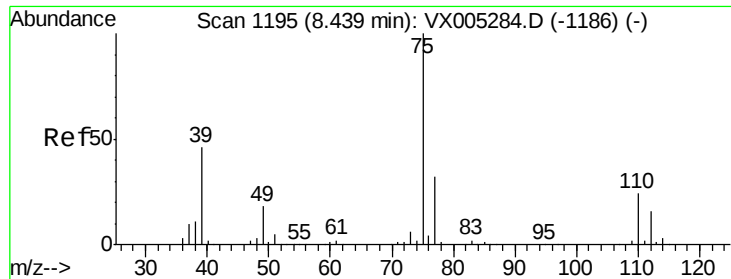
Tot Ion: 98 Resp: 462253  
Ion Ratio Lower Upper  
98 100  
100 63.5 52.9 79.3



#51  
4-Methyl-2-Pentanone  
Concen: 0.553 ug/l  
RT: 8.62 min Scan# 1225  
Delta R.T. -0.03 min  
Lab File: VX005349.D  
Acq: 15 Oct 2018 17:41

Tgt Ion: 43 Resp: 2412  
Ion Ratio Lower Upper  
43 100  
58 0.0 33.1 49.7#

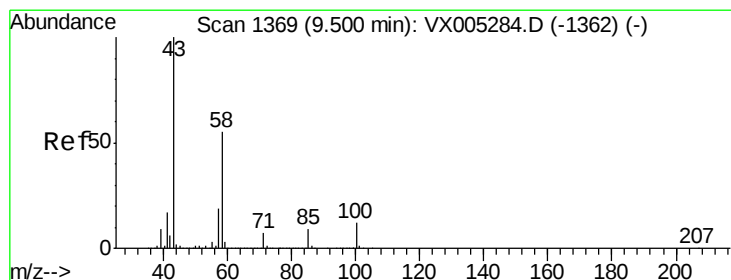
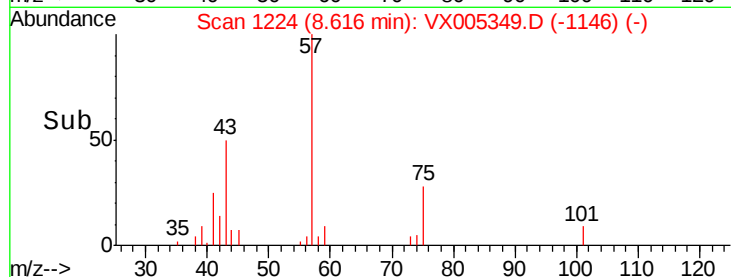
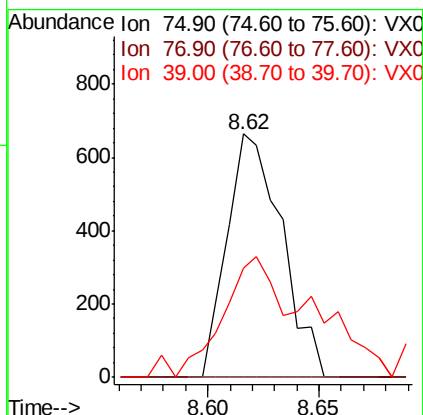
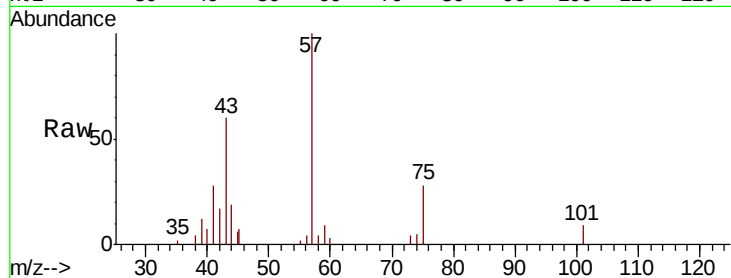




#54  
 cis-1,3-Dichloropropene  
 Concen: 0.293 ug/l  
 RT: 8.62 min Scan# 1224  
 Delta R.T. 0.18 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

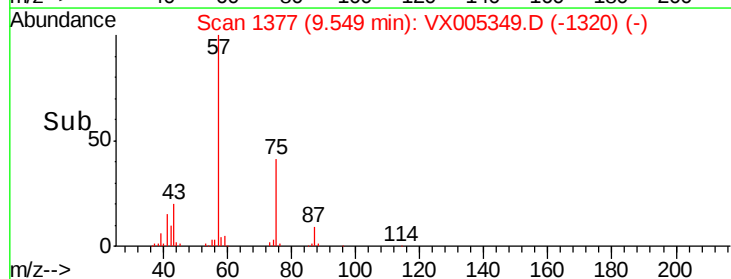
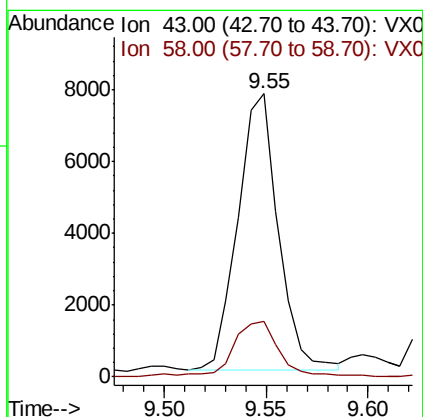
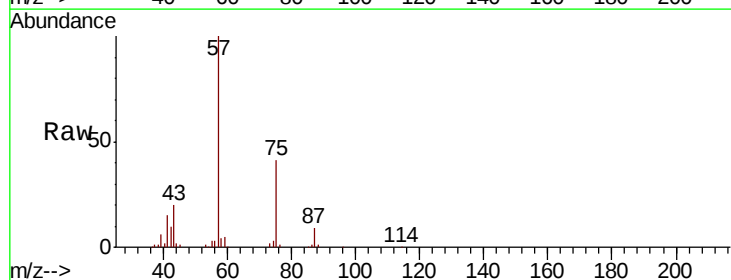
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB113825ZHE#05

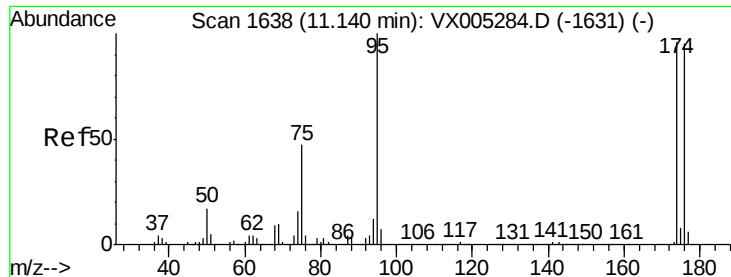
Tot Ion: 75 Resp: 1134  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 26.2 39.2#  
 39 36.4 36.4 54.6



#59  
 2-Hexanone  
 Concen: 3.043 ug/l  
 RT: 9.55 min Scan# 1377  
 Delta R.T. 0.05 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

Tgt Ion: 43 Resp: 10687  
 Ion Ratio Lower Upper  
 43 100  
 58 22.9 29.0 87.0#





#62

4-Bromofluorobenzene

Concen: 45.940 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.00 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

PB113825ZHE#05

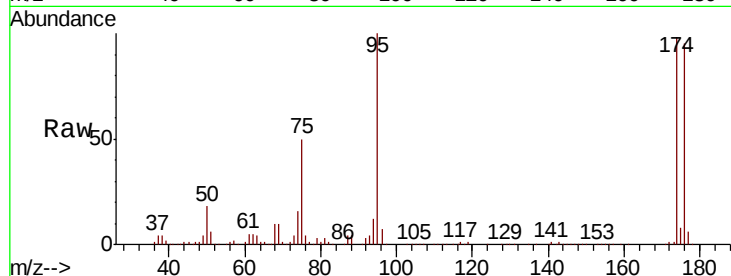
Tot Ion: 95 Resp: 149111

Ion Ratio Lower Upper

95 100

174 97.1 0.0 185.2

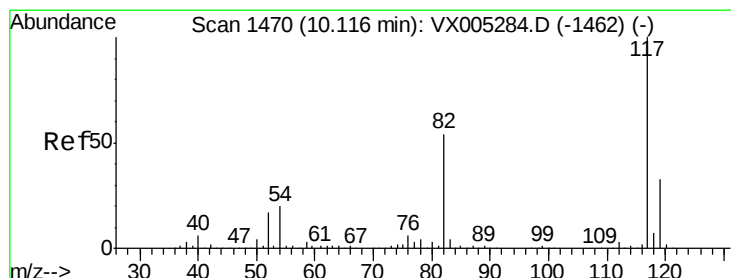
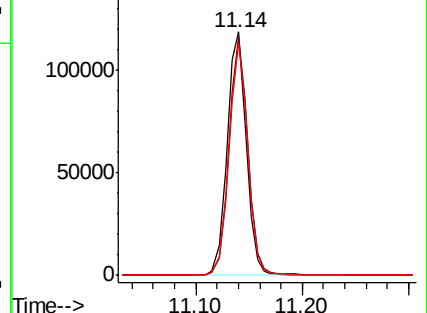
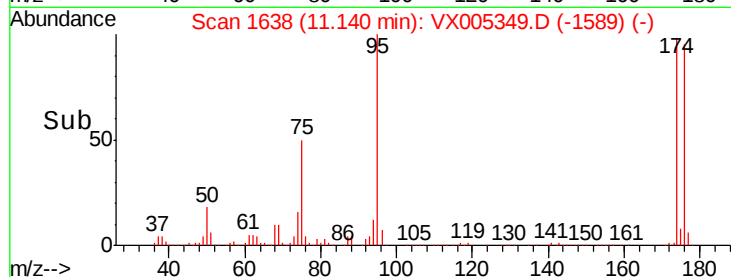
176 93.5 0.0 178.6



Abundance Ion 94.90 (94.60 to 95.60): VX005349.D (-1589) (-)

Ion 173.80 (173.50 to 174.50): VX005349.D (-1589) (-)

Ion 175.80 (175.50 to 176.50): VX005349.D (-1589) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.12 min Scan# 1470

Delta R.T. -0.00 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

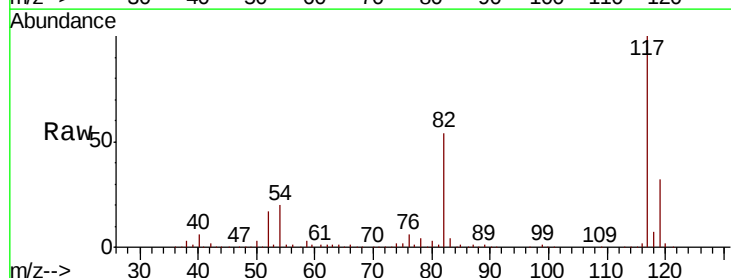
Tgt Ion: 117 Resp: 351411

Ion Ratio Lower Upper

117 100

82 54.3 47.8 71.6

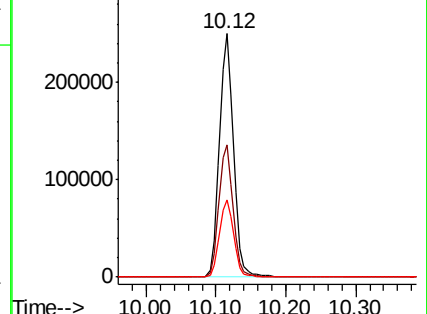
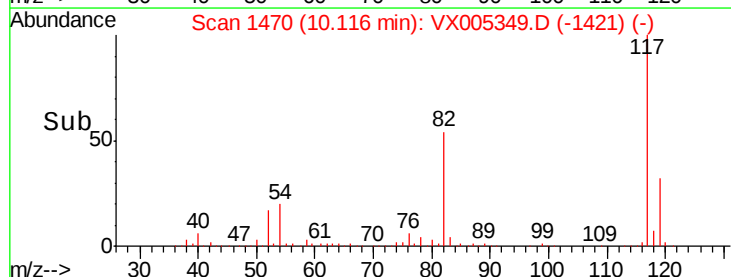
119 31.9 29.3 43.9

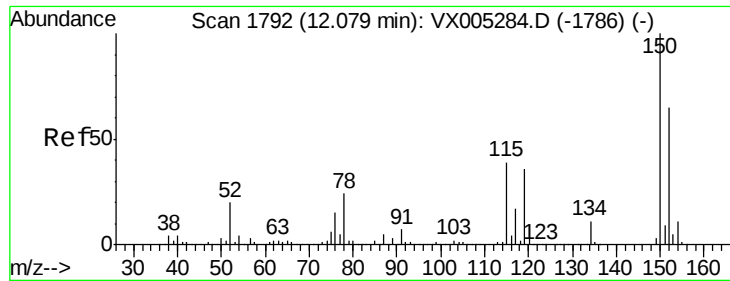


Abundance Ion 116.90 (116.60 to 117.60): VX005349.D (-1421) (-)

Ion 82.00 (81.70 to 82.70): VX005349.D (-1421) (-)

Ion 118.90 (118.60 to 119.60): VX005349.D (-1421) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX005349.D

Acq: 15 Oct 2018 17:41

Instrument :

MSVOA\_X

ClientSampleId :

PB113825ZHE#05

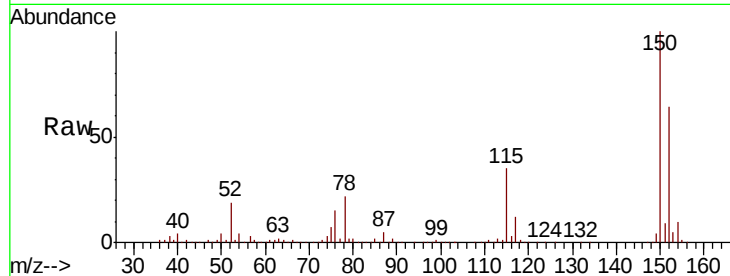
Tot Ion:152 Resp: 166154

Ion Ratio Lower Upper

152 100

115 54.8 39.0 117.0

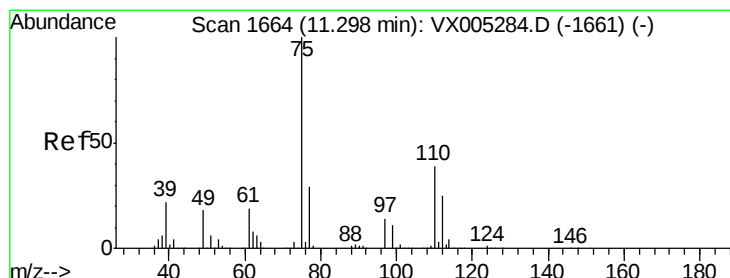
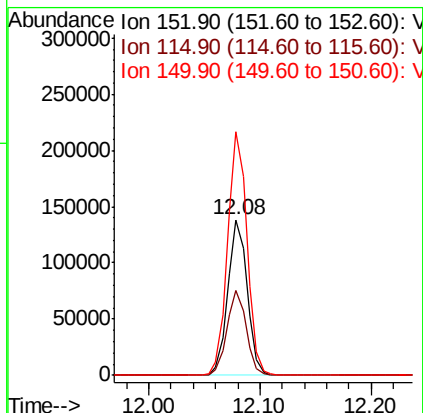
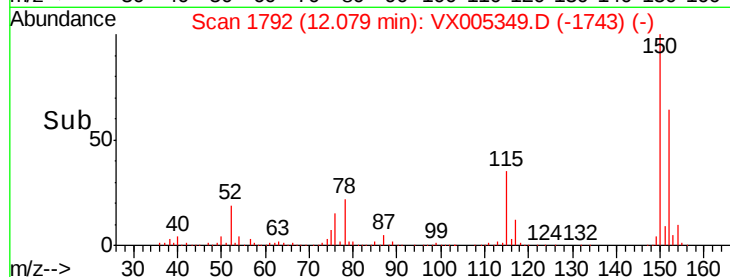
150 157.3 0.0 351.0



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 23.004 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX005349.D

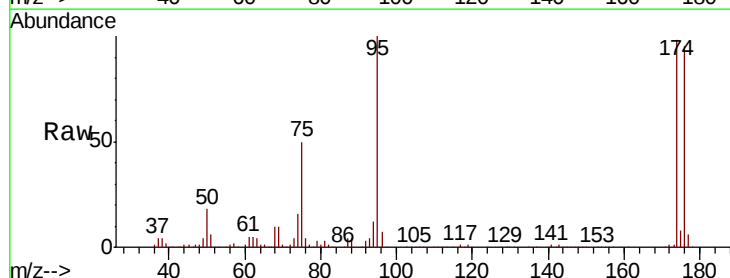
Acq: 15 Oct 2018 17:41

Tgt Ion: 75 Resp: 74140

Ion Ratio Lower Upper

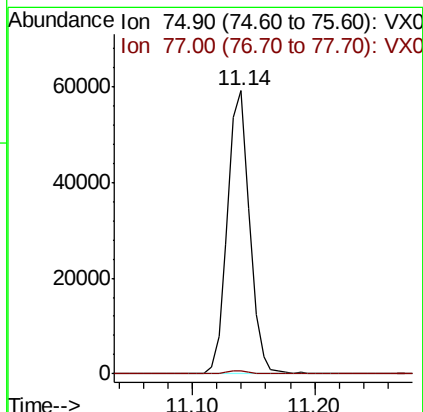
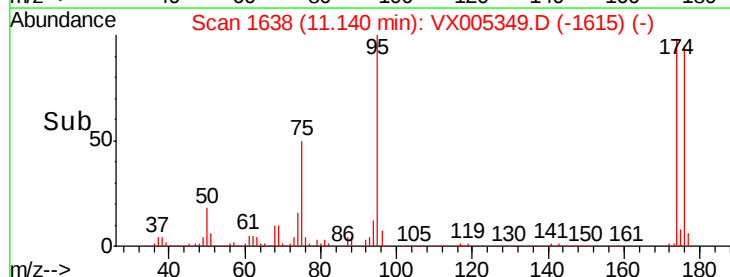
75 100

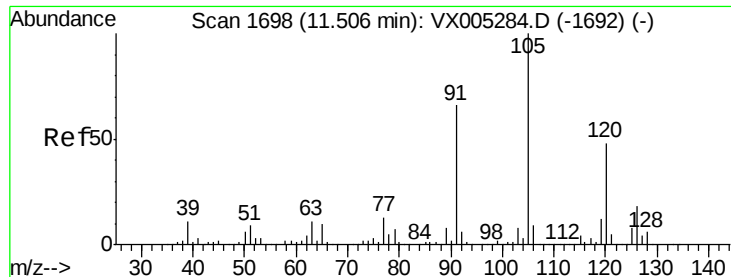
77 1.3 20.2 60.6#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

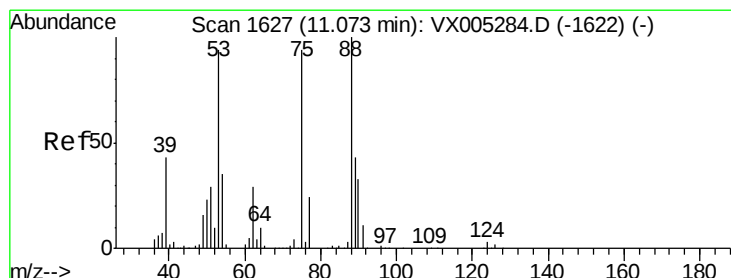
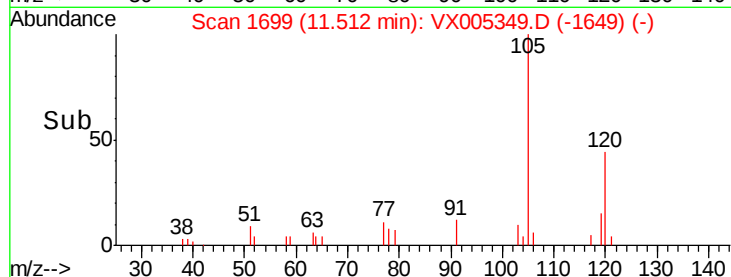
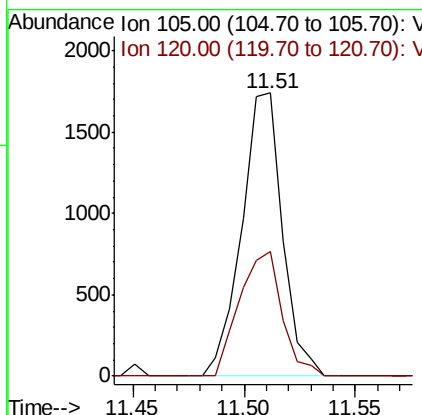
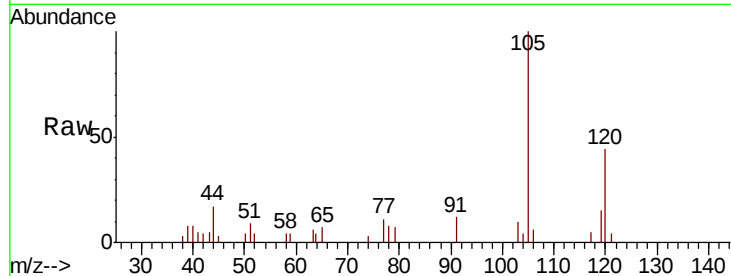




#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.264 ug/l  
 RT: 11.51 min Scan# 1699  
 Delta R.T. 0.01 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB113825ZHE#05

Tot Ion:105 Resp: 2233  
 Ion Ratio Lower Upper  
 105 100  
 120 45.9 25.6 76.8



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 69.897 ug/l  
 RT: 11.14 min Scan# 1638  
 Delta R.T. 0.07 min  
 Lab File: VX005349.D  
 Acq: 15 Oct 2018 17:41

Tgt Ion: 75 Resp: 74140  
 Ion Ratio Lower Upper  
 75 100  
 53 0.3 80.1 120.1#  
 89 0.0 37.2 55.8#

