

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\WX093019\  
 Data File : VX012704.D  
 Acq On : 30 Sep 2019 14:46  
 Operator : JC/SP  
 Sample : K5081-09  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-DUP03-20190925

Quant Time: Oct 01 03:46:50 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092319W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Sep 23 12:27:01 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 163411   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 281450   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 237434   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 87150    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 115208   | 48.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.84%  |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 85727    | 51.15 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.30% |      |
| 50) Toluene-d8            | 8.71   | 98  | 332201   | 51.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.92% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 111840   | 44.06 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.12%  |      |

## Target Compounds

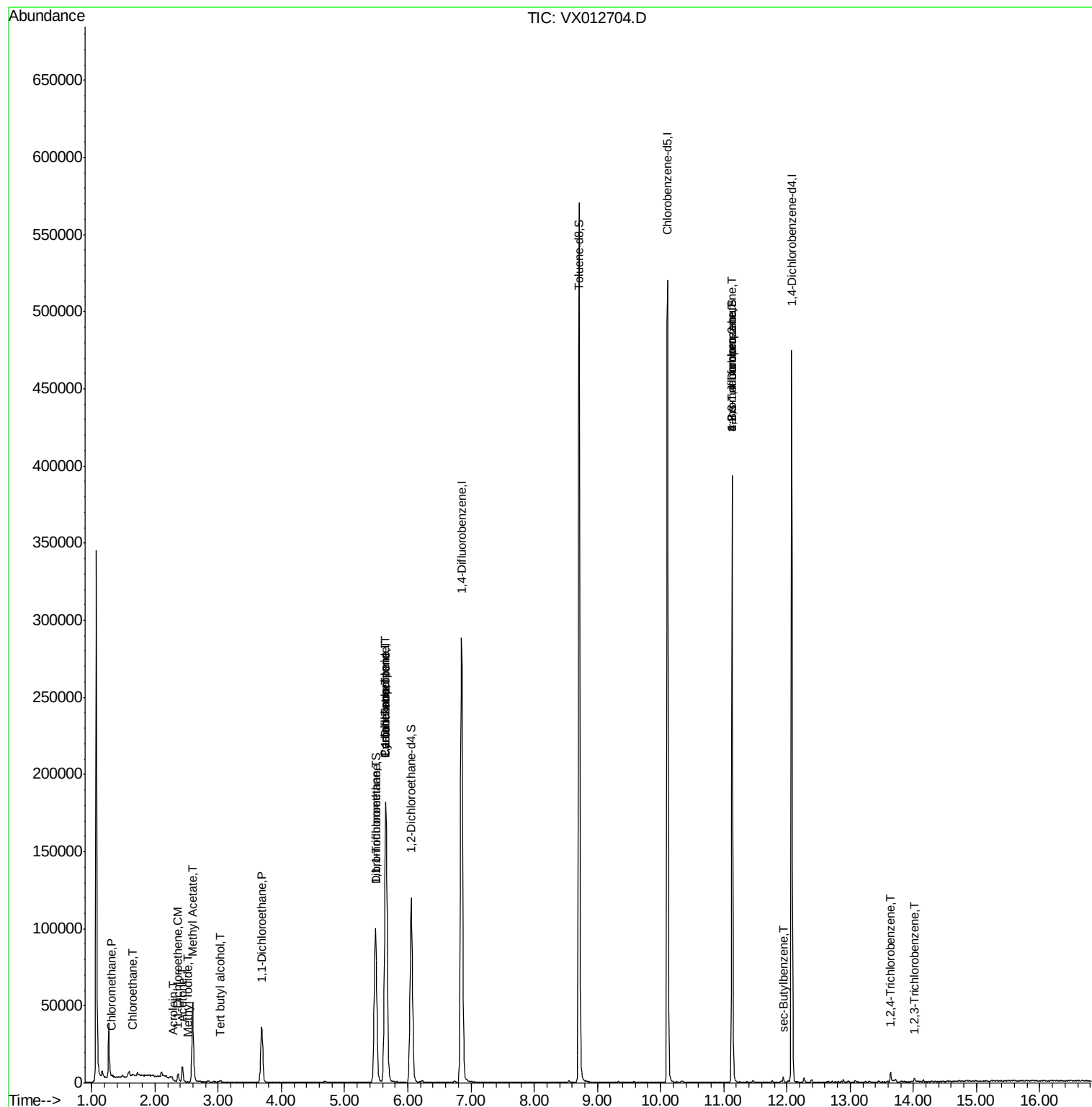
|                                |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 3) Chloromethane               | 1.32  | 50  | 798   | 0.378  | ug/l # | 87     |
| 6) Chloroethane                | 1.64  | 64  | 1658  | 1.172  | ug/l # | 48     |
| 10) Methyl Iodide              | 2.51  | 142 | 49    | 4.976  | ug/l # | 35     |
| 11) Tert butyl alcohol         | 3.03  | 59  | 1238  | 2.083  | ug/l # | 72     |
| 12) 1,1-Dichloroethene         | 2.36  | 96  | 1862  | 1.060  | ug/l   | 79     |
| 13) Acrolein                   | 2.29  | 56  | 80    | 10.465 | ug/l # | 15     |
| 16) Acetone                    | 2.43  | 43  | 11002 | 8.729  | ug/l   | 93     |
| 18) Methyl Acetate             | 2.59  | 43  | 13665 | 4.604  | ug/l # | 54     |
| 24) 1,1-Dichloroethane         | 3.69  | 63  | 39283 | 10.729 | ug/l   | 97     |
| 31) Cyclohexane                | 5.65  | 56  | 4075  | 1.230  | ug/l # | 6      |
| 32) 1,1,1-Trichloroethane      | 5.50  | 97  | 866   | 0.261  | ug/l # | 48     |
| 36) 1,1-Dichloropropene        | 5.65  | 75  | 14442 | 5.324  | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 5.65  | 117 | 18206 | 6.606  | ug/l # | 17     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75  | 56376 | 24.455 | ug/l # | 38     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75  | 56376 | 70.081 | ug/l # | 8      |
| 85) sec-Butylbenzene           | 11.94 | 105 | 1891  | 0.283  | ug/l   | 96     |
| 93) 1,2,4-Trichlorobenzene     | 13.64 | 180 | 1522  | 0.862  | ug/l   | 94     |
| 96) 1,2,3-Trichlorobenzene     | 14.02 | 180 | 547   | 0.309  | ug/l # | 61     |

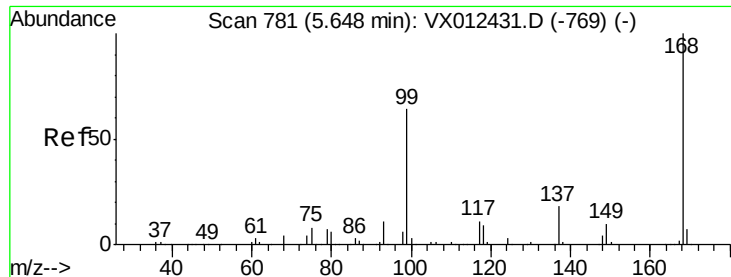
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX093019\  
Data File : VX012704.D  
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Sample : K5081-09  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-DUP03-20190925

Quant Time: Oct 01 03:46:50 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X092319W.M  
Quant Title : SW846 8260  
QLast Update : Mon Sep 23 12:27:01 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.01 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

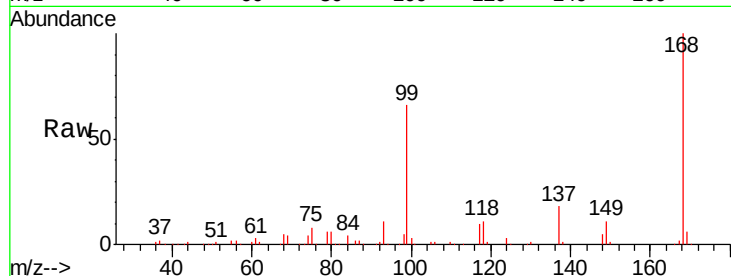
SA-DUP03-20190925

Tgt Ion:168 Resp: 163411

Ion Ratio Lower Upper

168 100

99 65.7 51.4 77.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

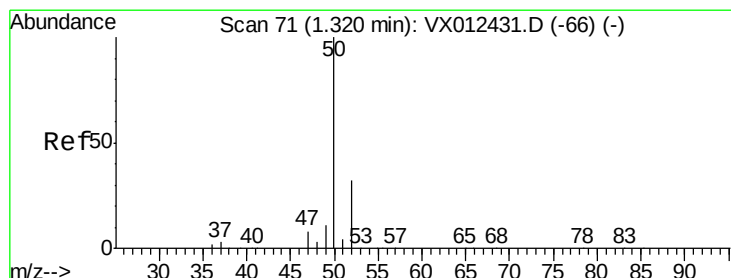
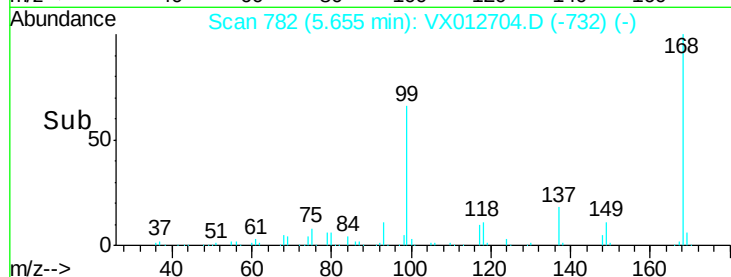
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.378 ug/l

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VX012704.D

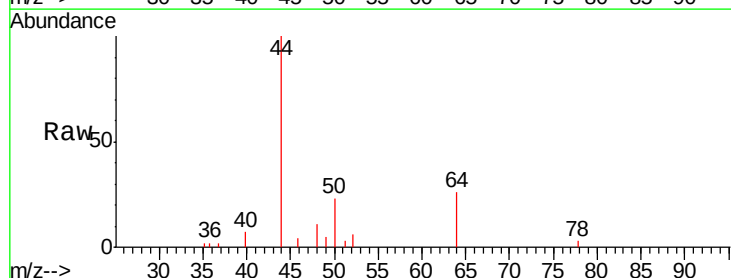
Acq: 30 Sep 2019 14:46

Tgt Ion: 50 Resp: 798

Ion Ratio Lower Upper

50 100

52 24.9 25.7 38.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

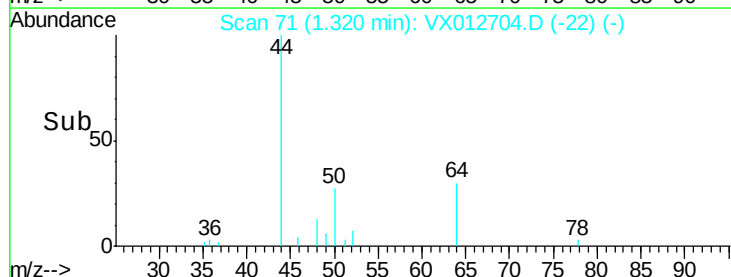
600

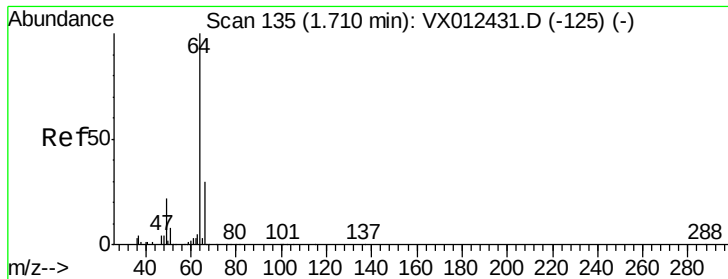
400

200

0

Time--> 1.30 1.35





#6

Chloroethane

Concen: 1.172 ug/l

RT: 1.64 min Scan# 124

Delta R.T. -0.07 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

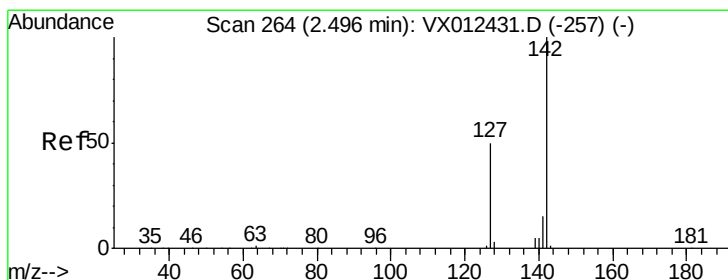
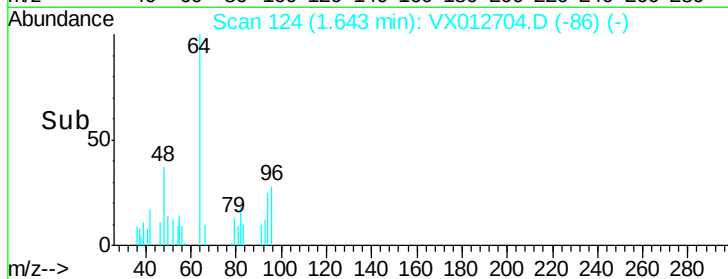
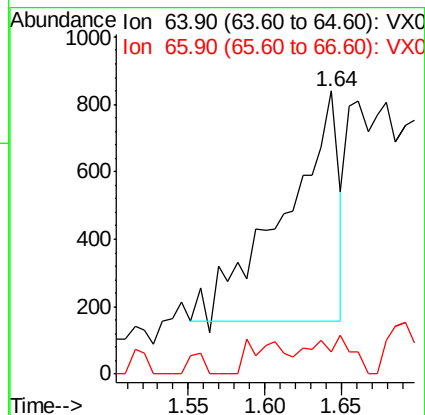
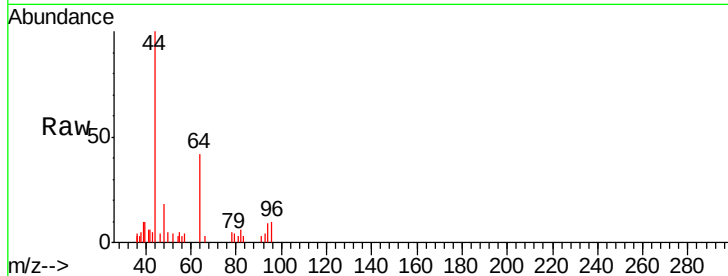
SA-DUP03-20190925

Tgt Ion: 64 Resp: 1658

Ion Ratio Lower Upper

64 100

66 1.8 24.0 36.0#



#10

Methyl Iodide

Concen: 4.976 ug/l

RT: 2.51 min Scan# 266

Delta R.T. 0.01 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

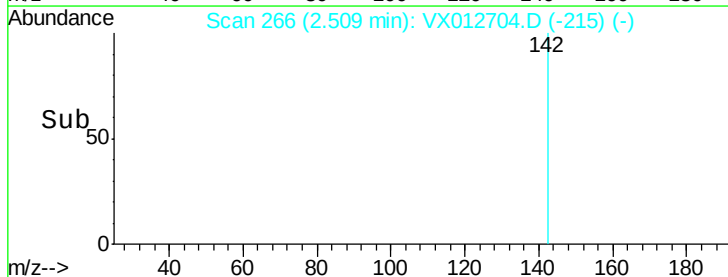
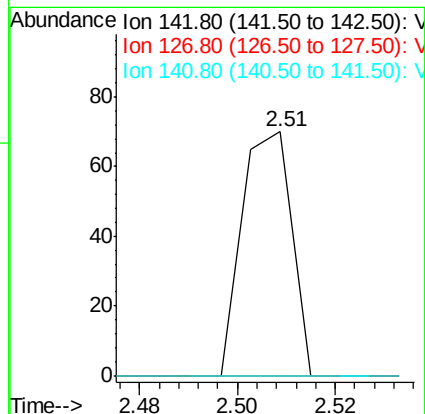
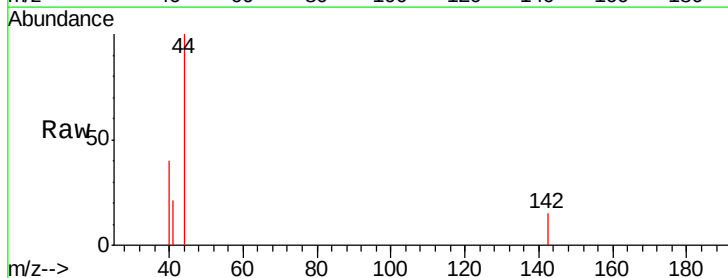
Tgt Ion: 142 Resp: 49

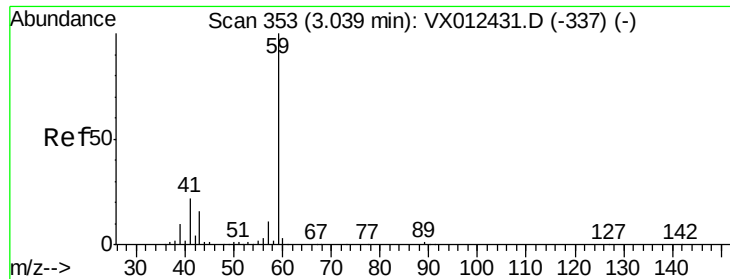
Ion Ratio Lower Upper

142 100

127 0.0 40.8 61.2#

141 0.0 12.1 18.1#

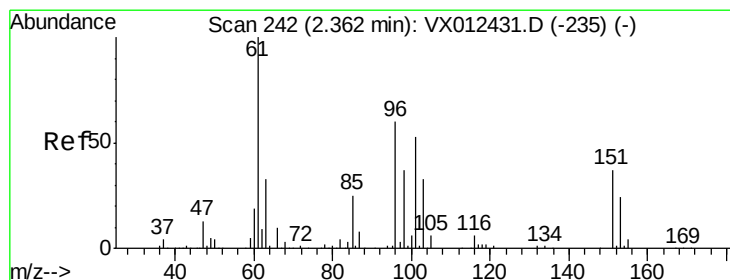
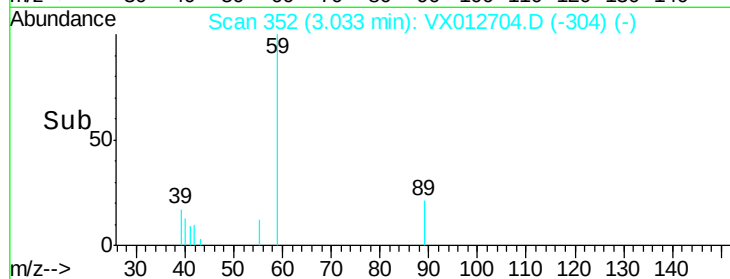
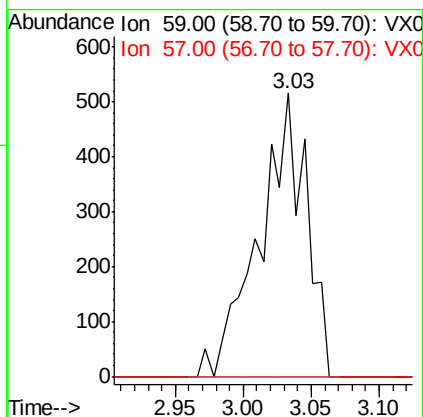
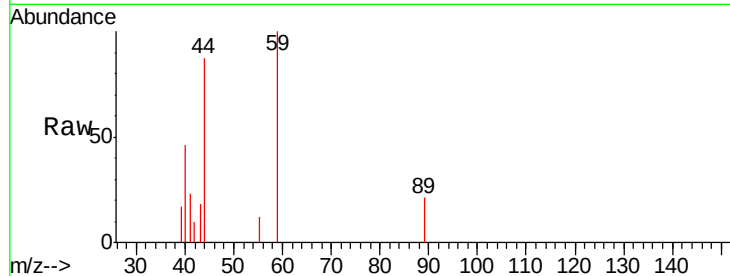




#11  
Tert butyl alcohol  
Concen: 2.083 ug/l  
RT: 3.03 min Scan# 352  
Delta R.T. -0.01 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

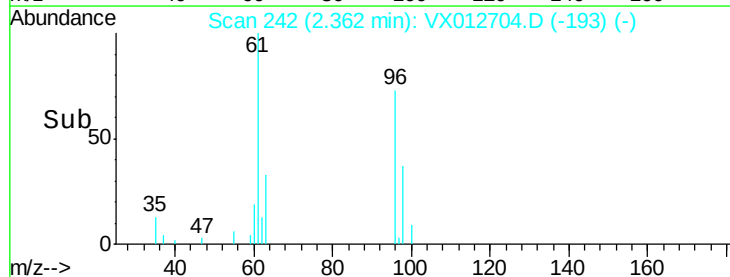
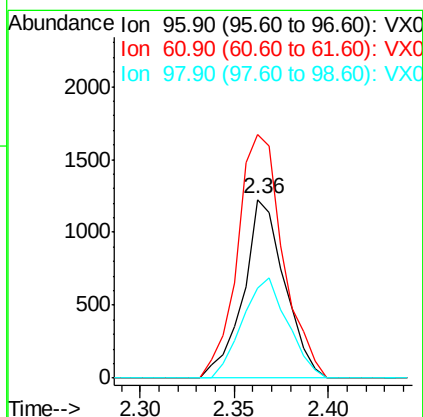
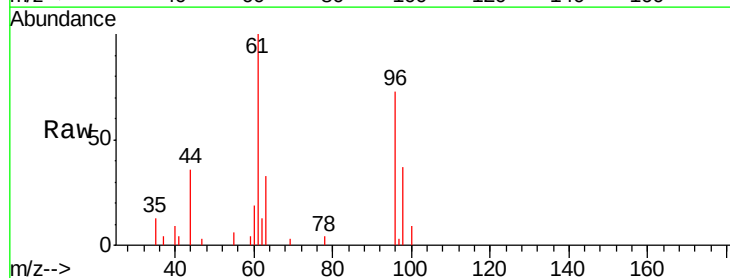
Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-DUP03-20190925

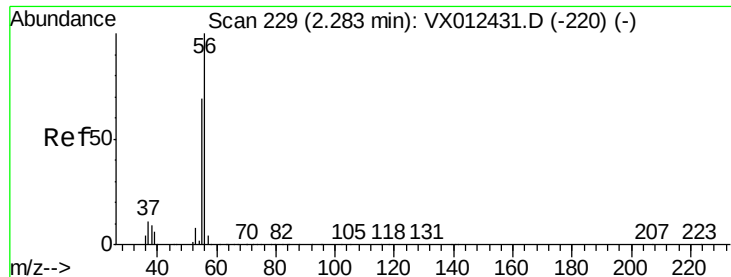
Tgt Ion: 59 Resp: 1238  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.3 12.5#



#12  
1,1-Dichloroethene  
Concen: 1.060 ug/l  
RT: 2.36 min Scan# 242  
Delta R.T. 0.00 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

Tgt Ion: 96 Resp: 1862  
Ion Ratio Lower Upper  
96 100  
61 136.5 133.8 200.6  
98 50.4 49.9 74.9





#13

Acrolein

Concen: 10.465 ug/l

RT: 2.29 min Scan# 230

Delta R.T. 0.01 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

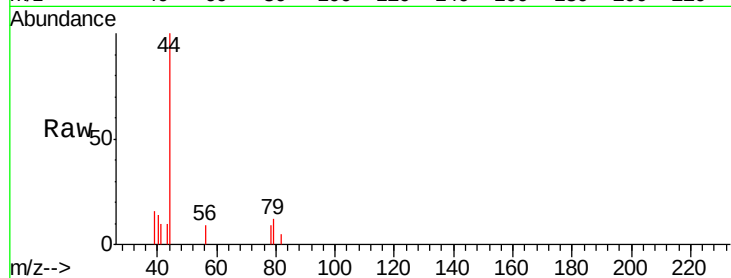
SA-DUP03-20190925

Tgt Ion: 56 Resp: 80

Ion Ratio Lower Upper

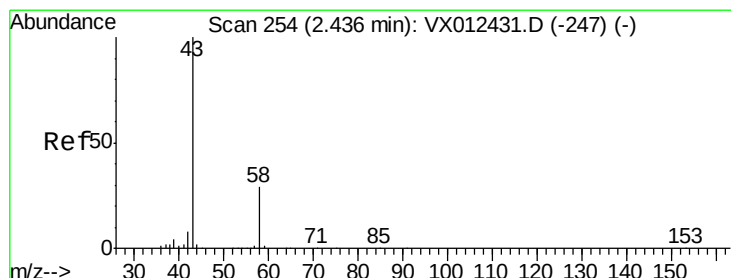
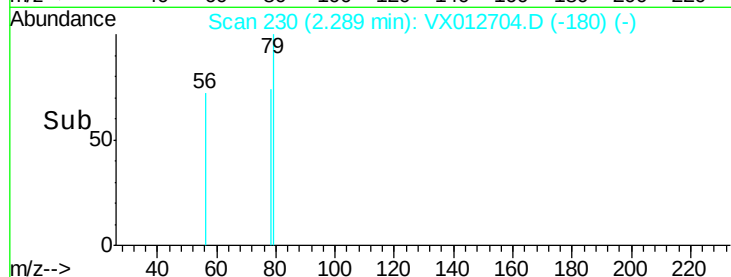
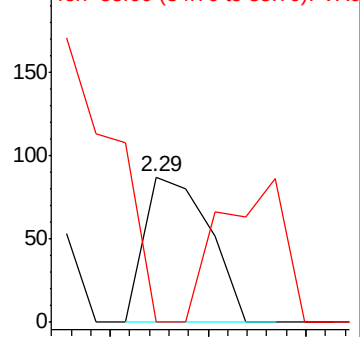
56 100

55 0.0 55.8 83.8#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 8.729 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.01 min

Lab File: VX012704.D

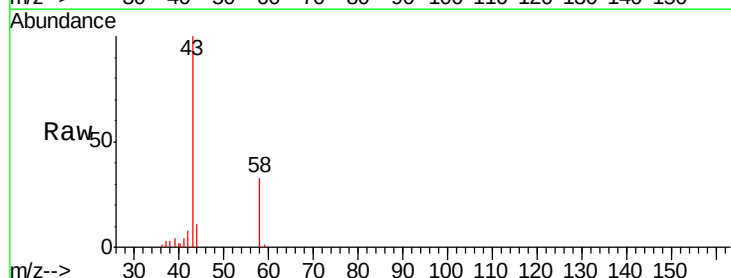
Acq: 30 Sep 2019 14:46

Tgt Ion: 43 Resp: 11002

Ion Ratio Lower Upper

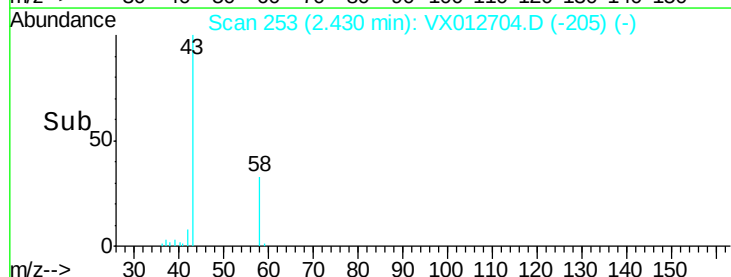
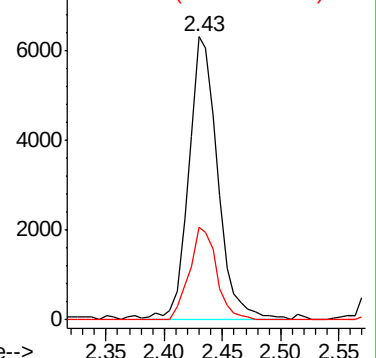
43 100

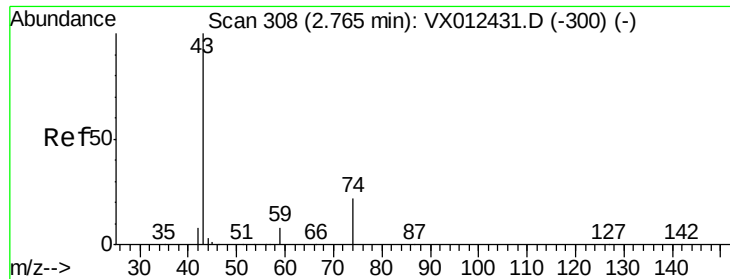
58 32.6 23.3 34.9



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

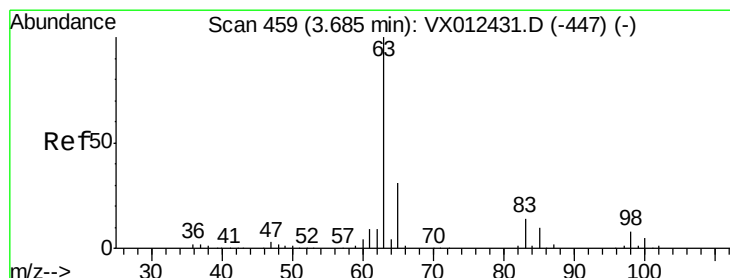
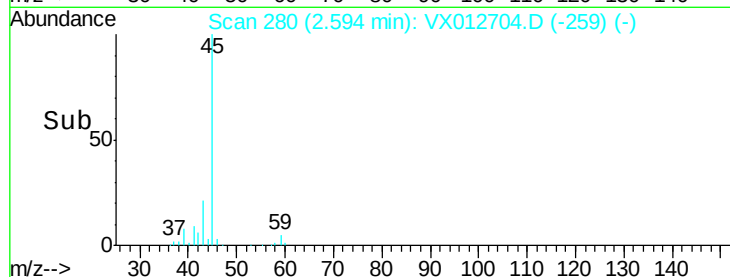
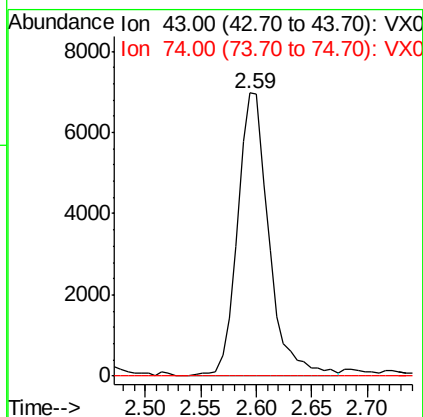
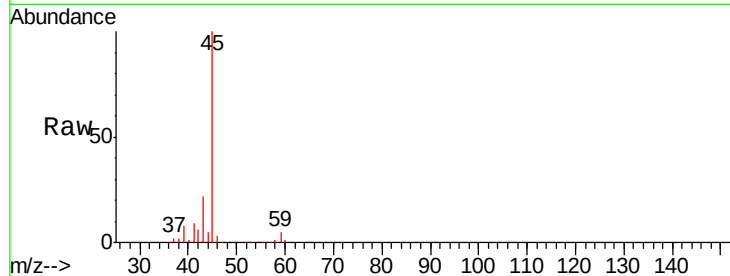




#18  
Methyl Acetate  
Concen: 4.604 ug/l  
RT: 2.59 min Scan# 280  
Delta R.T. -0.17 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

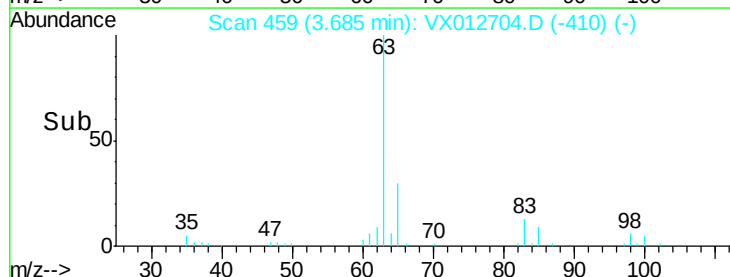
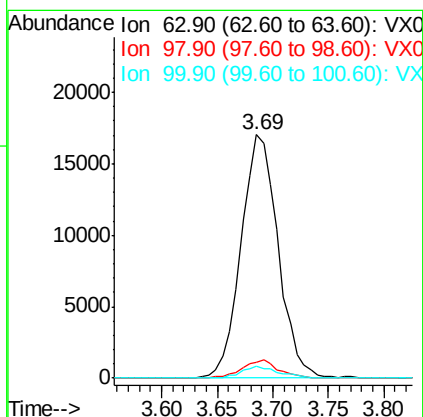
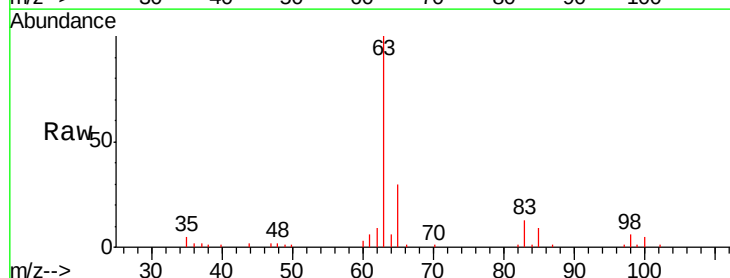
Instrument :  
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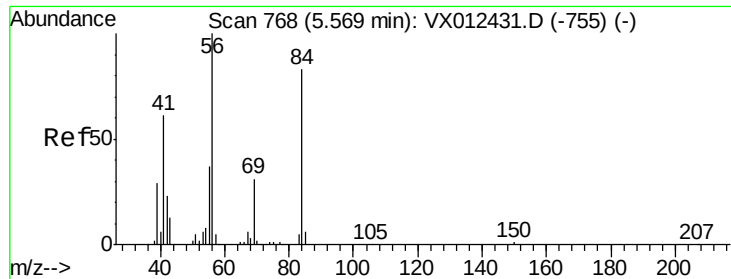
Tgt Ion: 43 Resp: 13665  
Ion Ratio Lower Upper  
43 100  
74 0.0 17.7 26.5#



#24  
1,1-Dichloroethane  
Concen: 10.729 ug/l  
RT: 3.69 min Scan# 459  
Delta R.T. 0.00 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

Tgt Ion: 63 Resp: 39283  
Ion Ratio Lower Upper  
63 100  
98 6.4 3.9 11.7  
100 4.7 2.3 6.9

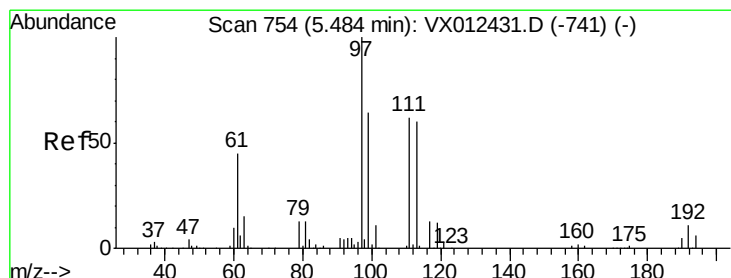
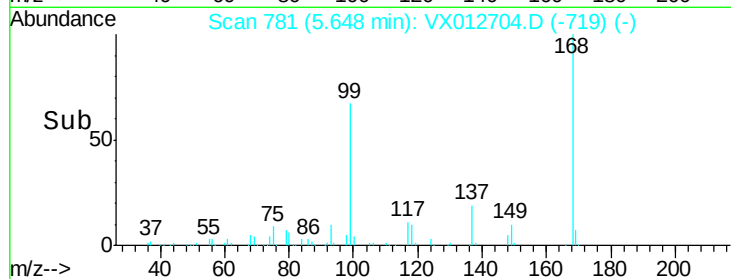
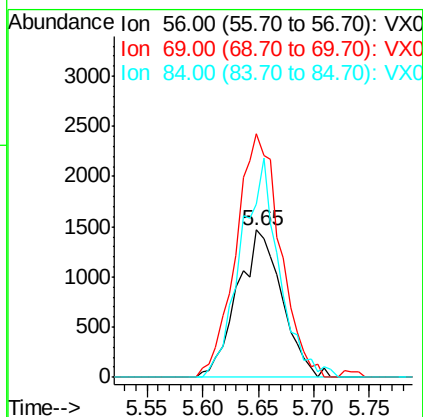
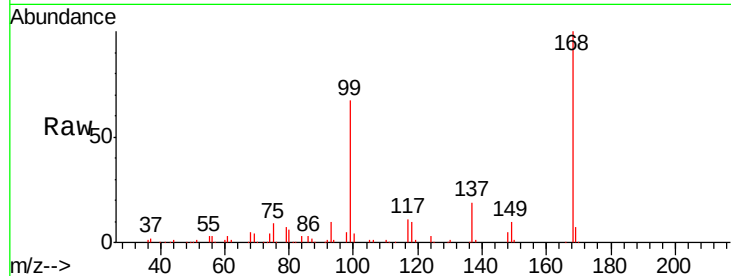




#31  
Cyclohexane  
Concen: 1.230 ug/l  
RT: 5.65 min Scan# 781  
Delta R.T. 0.08 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

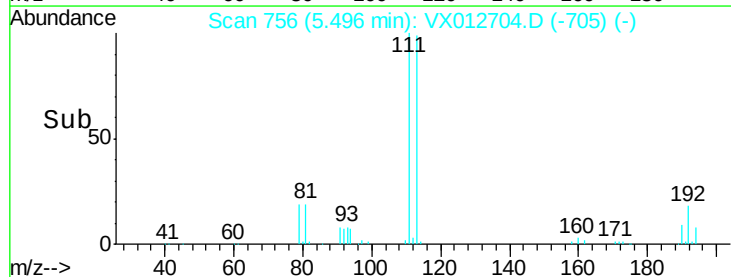
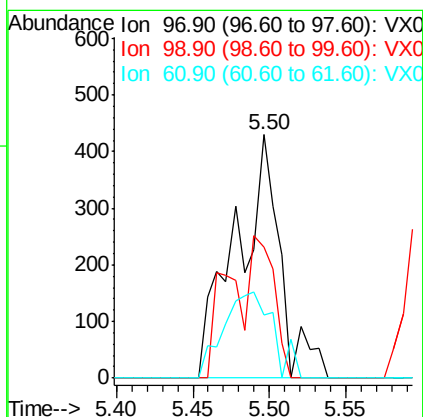
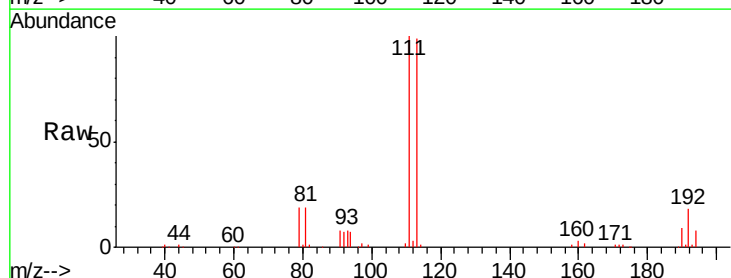
Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-DUP03-20190925

Tgt Ion: 56 Resp: 4075  
Ion Ratio Lower Upper  
56 100  
69 165.0 25.0 37.6#  
84 117.3 66.4 99.6#

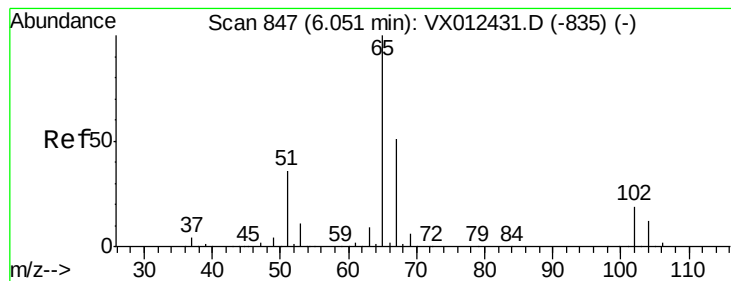


#32  
1,1,1-Trichloroethane  
Concen: 0.261 ug/l  
RT: 5.50 min Scan# 756  
Delta R.T. 0.01 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

Tgt Ion: 97 Resp: 866  
Ion Ratio Lower Upper  
97 100  
99 0.0 51.3 76.9#  
61 39.5 36.1 54.1







#33

1,2-Dichloroethane-d4

Concen: 48.415 ug/l

RT: 6.05 min Scan# 847

Delta R.T. 0.00 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

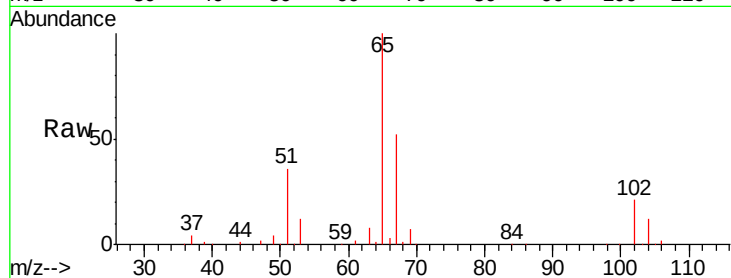
SA-DUP03-20190925

Tgt Ion: 65 Resp: 115208

Ion Ratio Lower Upper

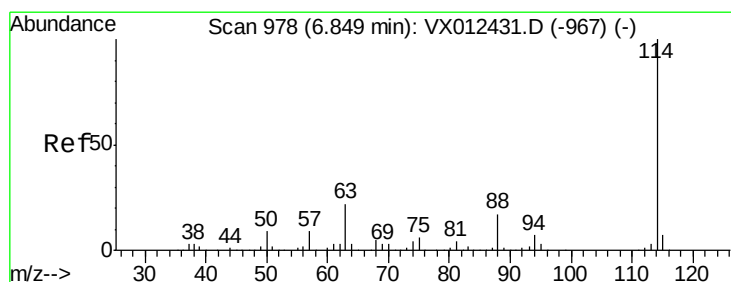
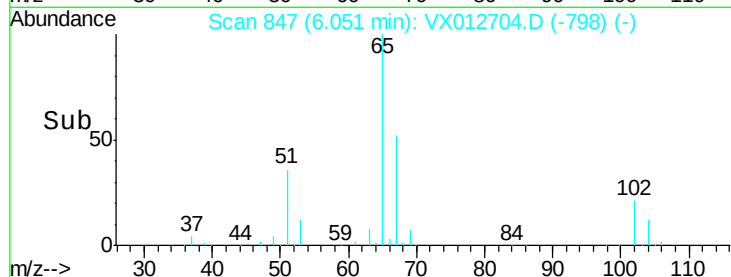
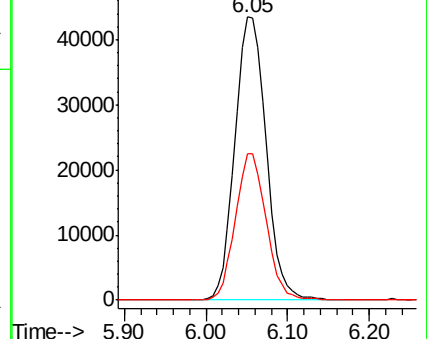
65 100

67 50.9 0.0 101.2



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

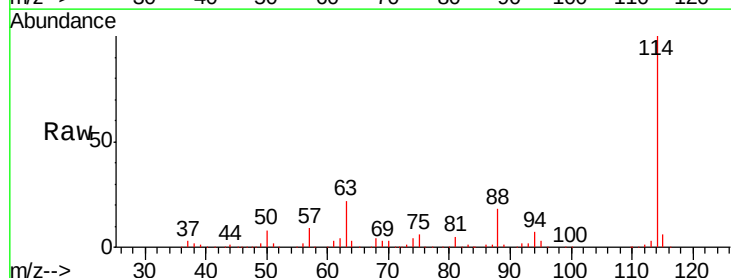
Tgt Ion: 114 Resp: 281450

Ion Ratio Lower Upper

114 100

63 22.1 0.0 43.2

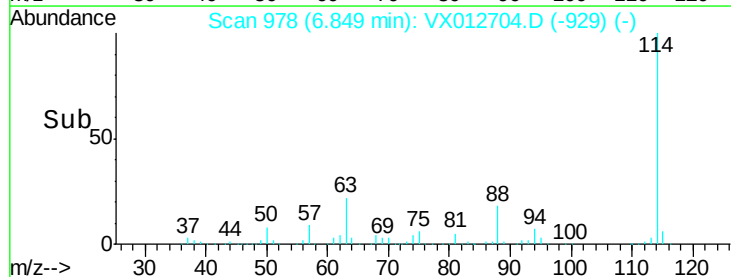
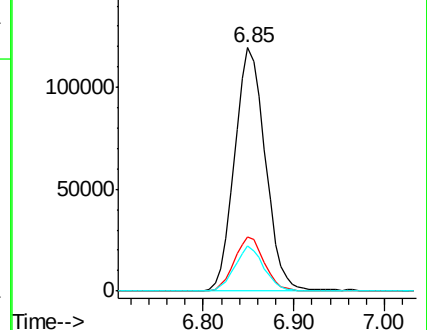
88 18.5 0.0 33.2

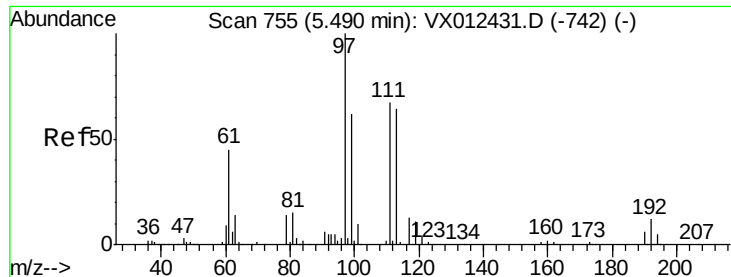


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 51.145 ug/l

RT: 5.48 min Scan# 754

Delta R.T. -0.01 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

SA-DUP03-20190925

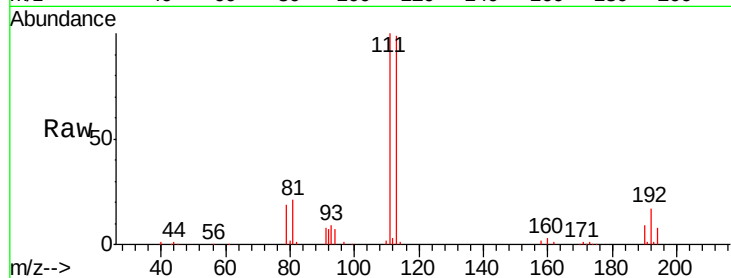
Tgt Ion:113 Resp: 85727

Ion Ratio Lower Upper

113 100

111 103.8 83.4 125.2

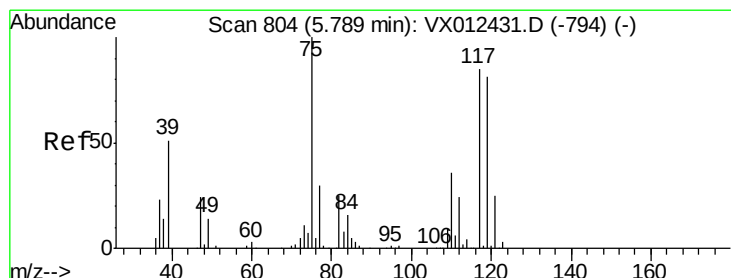
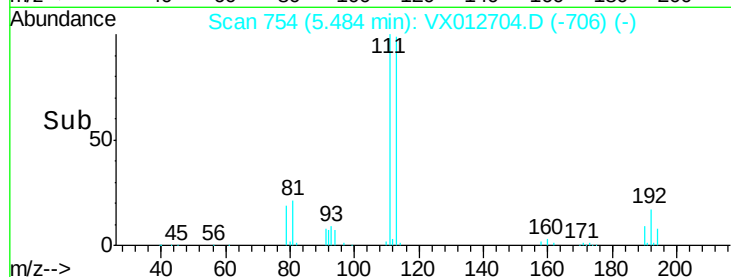
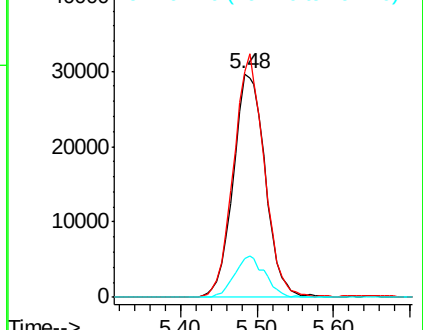
192 17.8 14.4 21.6



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 5.324 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.14 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

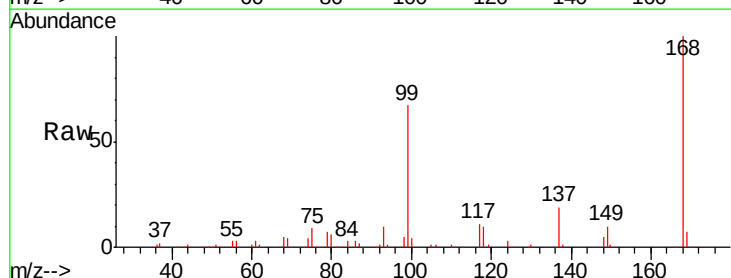
Tgt Ion: 75 Resp: 14442

Ion Ratio Lower Upper

75 100

110 9.8 16.7 50.0#

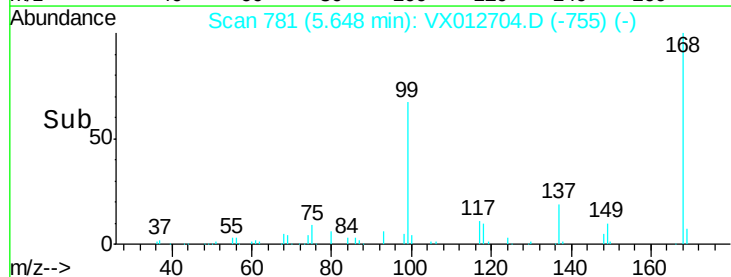
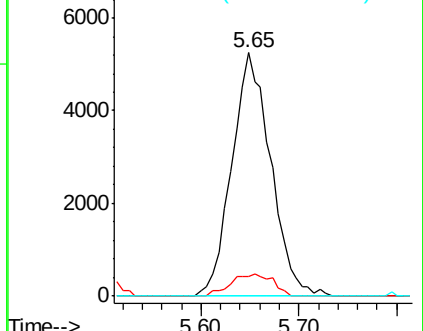
77 0.0 24.2 36.2#

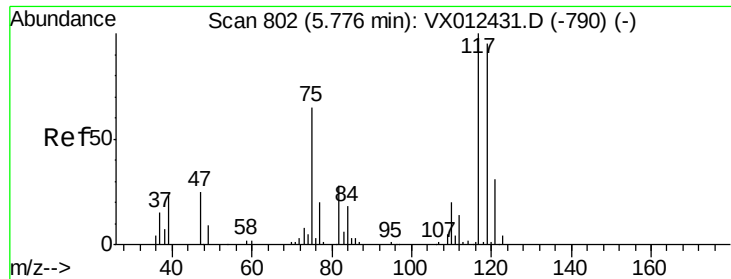


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

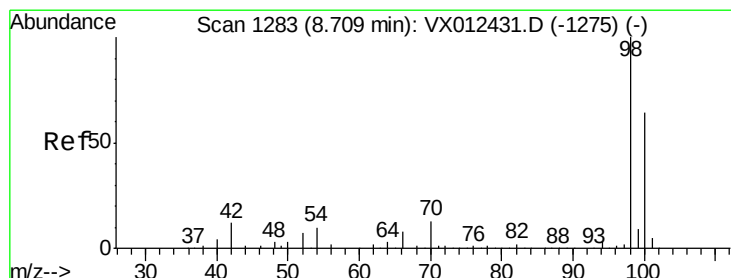
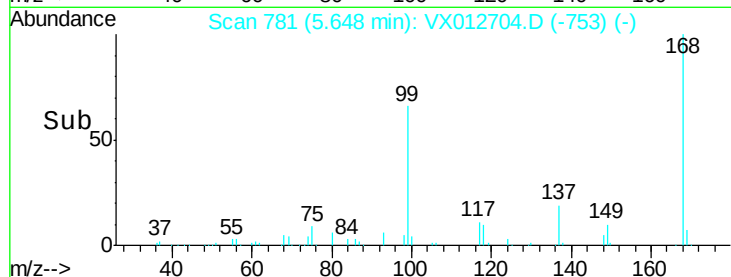
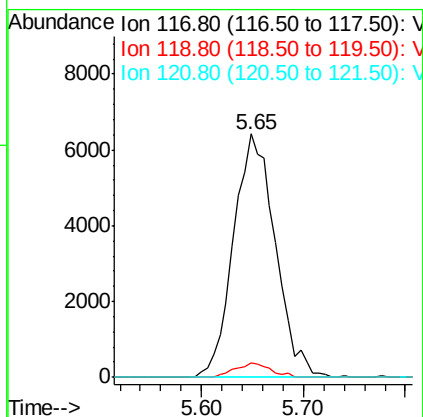
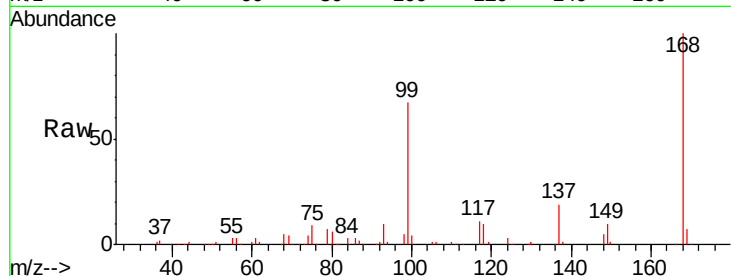




#38  
Carbon Tetrachloride  
Concen: 6.606 ug/l  
RT: 5.65 min Scan# 781  
Delta R.T. -0.13 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

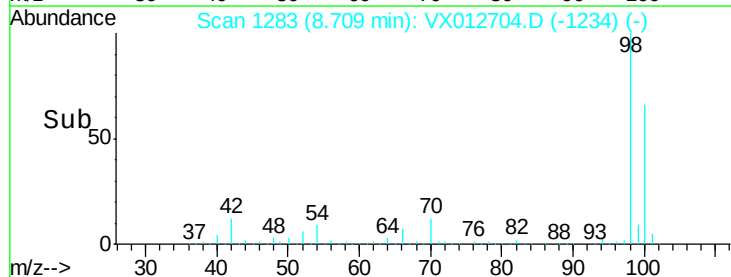
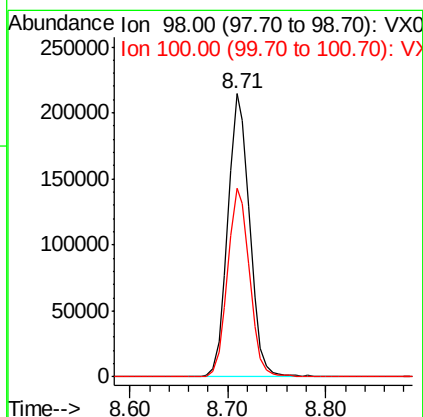
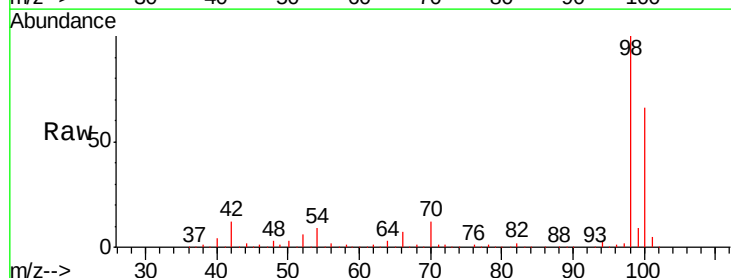
Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-DUP03-20190925

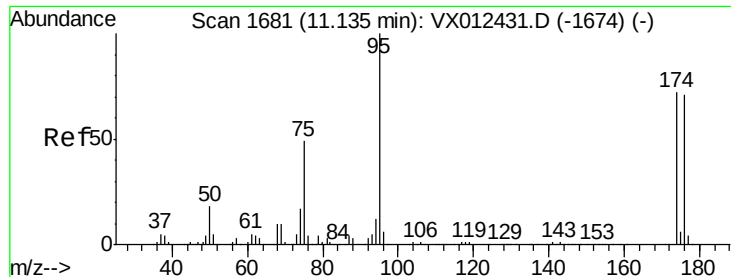
Tgt Ion:117 Resp: 18206  
Ion Ratio Lower Upper  
117 100  
119 5.7 75.7 113.5#  
121 0.0 24.2 36.4#



#50  
Toluene-d8  
Concen: 51.464 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX012704.D  
Acq: 30 Sep 2019 14:46

Tgt Ion: 98 Resp: 332201  
Ion Ratio Lower Upper  
98 100  
100 66.9 53.4 80.2





#62

4-Bromofluorobenzene

Concen: 44.064 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.00 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

SA-DUP03-20190925

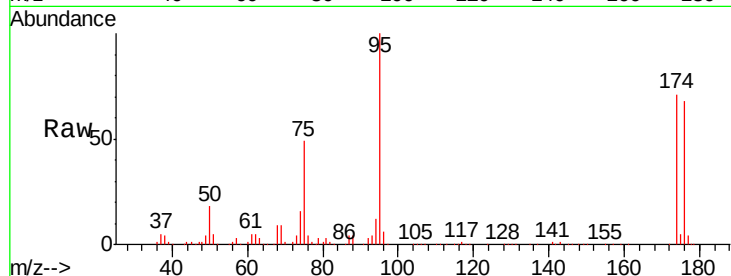
Tgt Ion: 95 Resp: 111840

Ion Ratio Lower Upper

95 100

174 69.0 0.0 140.0

176 66.0 0.0 135.4

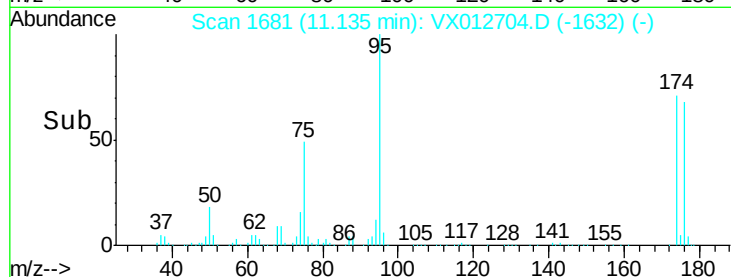


Abundance Ion 94.90 (94.60 to 95.60): VX012704.D (-1632) (-)

Ion 173.80 (173.50 to 174.50): VX012704.D (-1632) (-)

Ion 175.80 (175.50 to 176.50): VX012704.D (-1632) (-)

Time-->

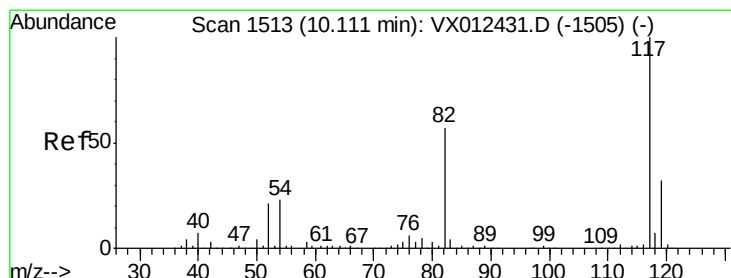


Abundance Ion 94.90 (94.60 to 95.60): VX012704.D (-1632) (-)

Ion 173.80 (173.50 to 174.50): VX012704.D (-1632) (-)

Ion 175.80 (175.50 to 176.50): VX012704.D (-1632) (-)

Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

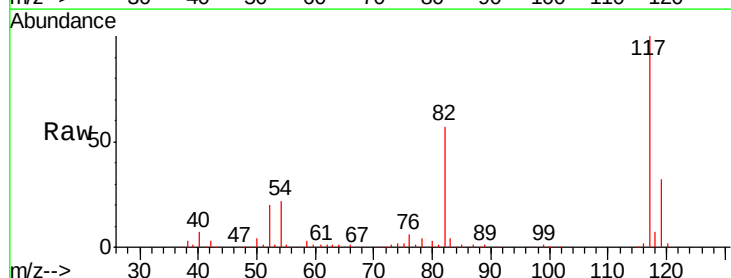
Tgt Ion: 117 Resp: 237434

Ion Ratio Lower Upper

117 100

82 56.8 45.9 68.9

119 31.9 25.3 37.9

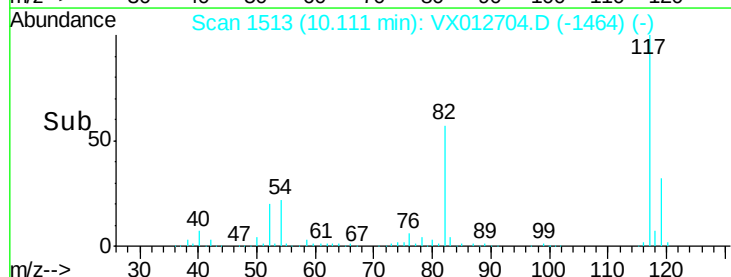


Abundance Ion 116.90 (116.60 to 117.60): VX012704.D (-1464) (-)

Ion 82.00 (81.70 to 82.70): VX012704.D (-1464) (-)

Ion 118.90 (118.60 to 119.60): VX012704.D (-1464) (-)

Time-->

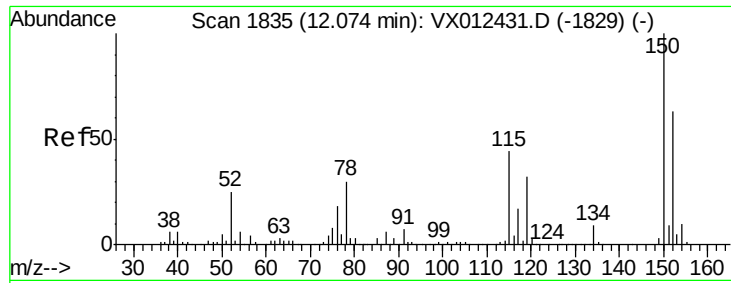


Abundance Ion 116.90 (116.60 to 117.60): VX012704.D (-1464) (-)

Ion 82.00 (81.70 to 82.70): VX012704.D (-1464) (-)

Ion 118.90 (118.60 to 119.60): VX012704.D (-1464) (-)

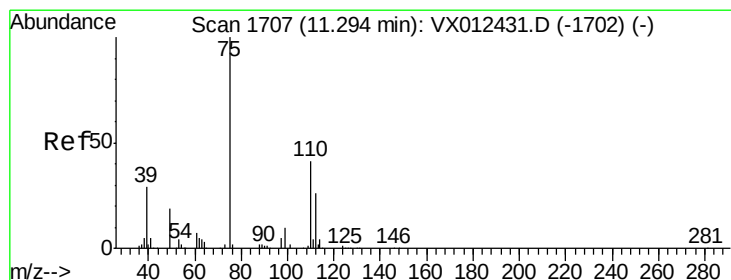
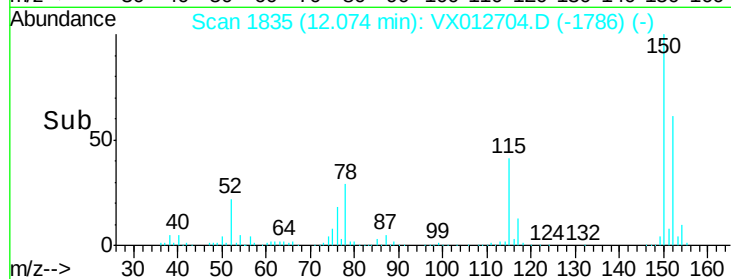
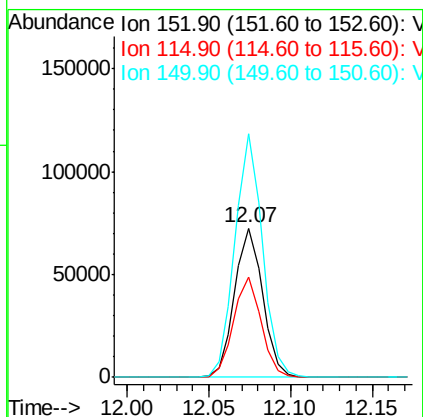
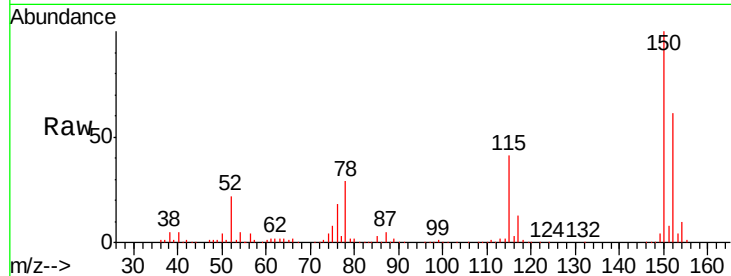
Time-->



#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 12.07 min Scan# 1835  
 Delta R.T. 0.00 min  
 Lab File: VX012704.D  
 Acq: 30 Sep 2019 14:46

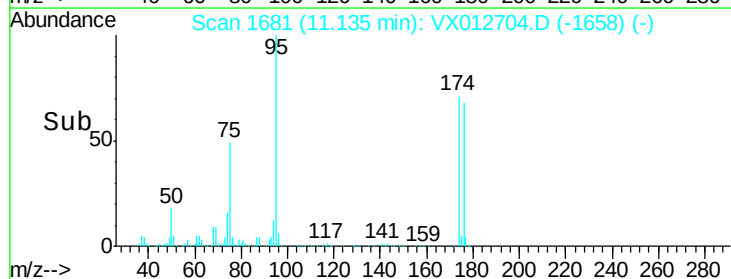
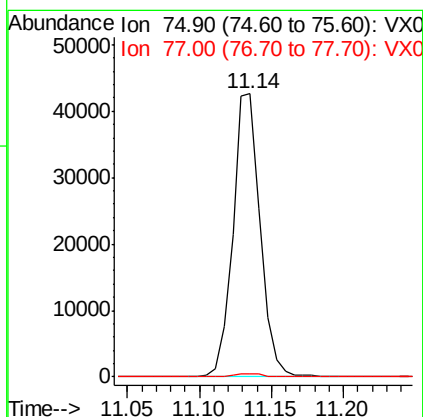
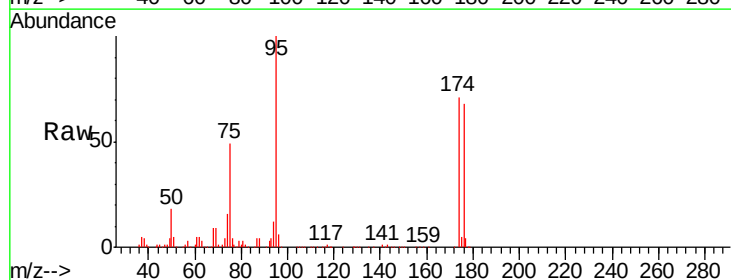
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-DUP03-20190925

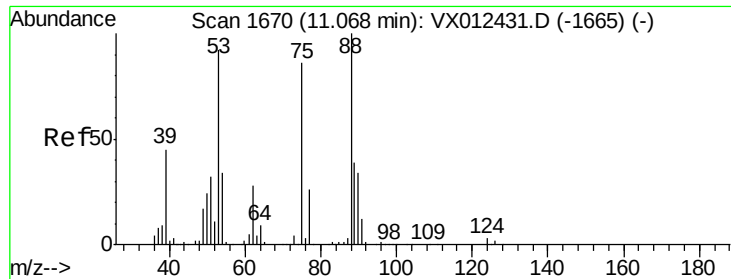
Tgt Ion: 152 Resp: 87150  
 Ion Ratio Lower Upper  
 152 100  
 115 66.1 44.1 132.3  
 150 159.9 0.0 343.8



#76  
 1,2,3-Trichloropropane  
 Concen: 24.455 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. -0.16 min  
 Lab File: VX012704.D  
 Acq: 30 Sep 2019 14:46

Tgt Ion: 75 Resp: 56376  
 Ion Ratio Lower Upper  
 75 100  
 77 1.1 19.7 59.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 70.081 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.07 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

SA-DUP03-20190925

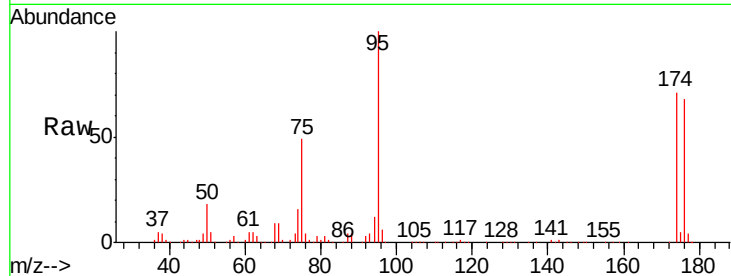
Tgt Ion: 75 Resp: 56376

Ion Ratio Lower Upper

75 100

53 0.0 83.6 125.4#

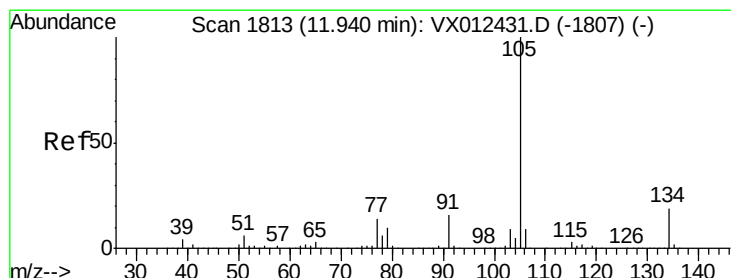
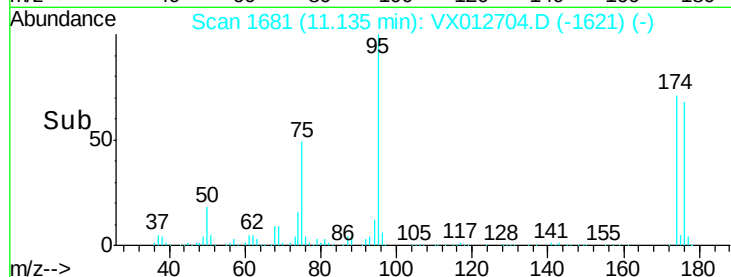
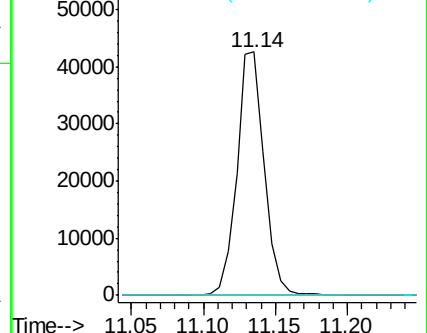
89 0.0 36.3 54.5#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0



#85

sec-Butylbenzene

Concen: 0.283 ug/l

RT: 11.94 min Scan# 1813

Delta R.T. 0.00 min

Lab File: VX012704.D

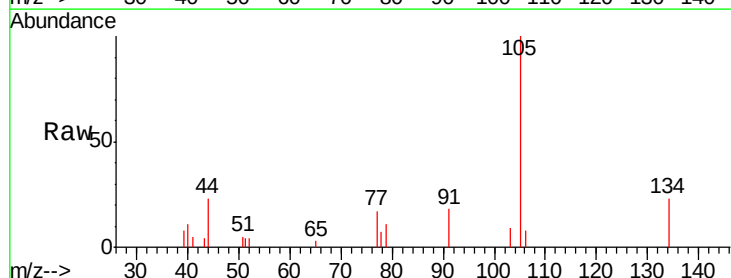
Acq: 30 Sep 2019 14:46

Tgt Ion: 105 Resp: 1891

Ion Ratio Lower Upper

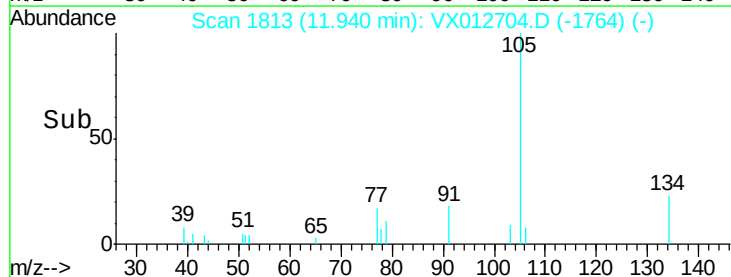
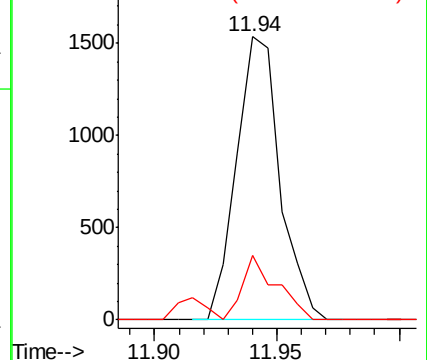
105 100

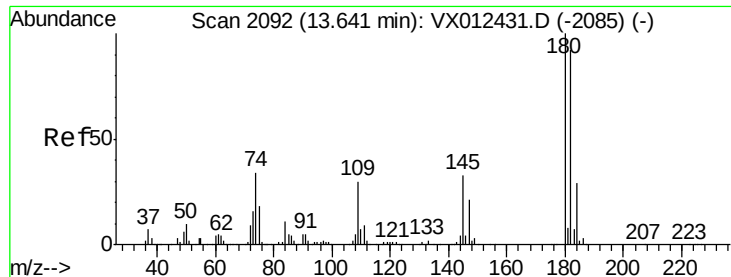
134 17.8 9.8 29.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V





#93

1,2,4-Trichlorobenzene

Concen: 0.862 ug/l

RT: 13.64 min Scan# 2092

Delta R.T. 0.00 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

Instrument :

MSVOA\_X

ClientSampleId :

SA-DUP03-20190925

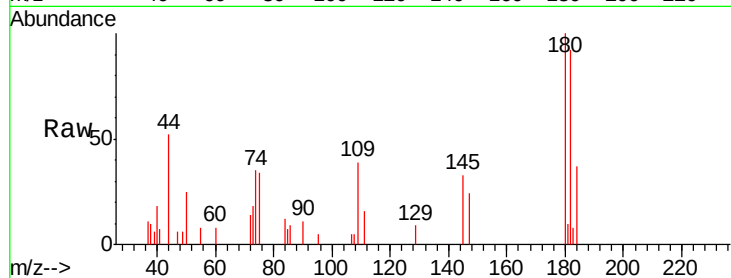
Tgt Ion:180 Resp: 1522

Ion Ratio Lower Upper

180 100

182 93.8 47.0 141.0

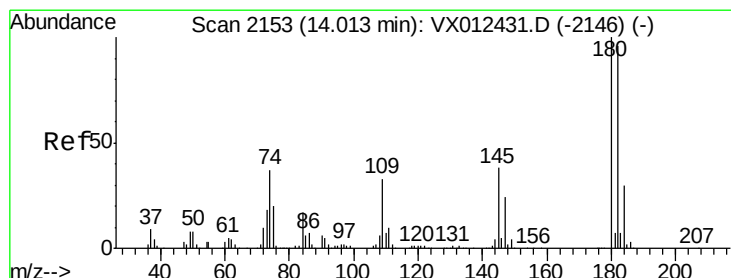
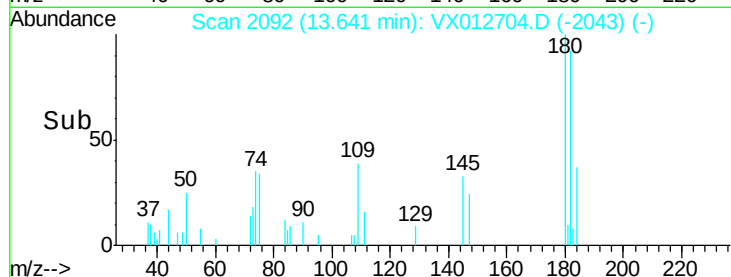
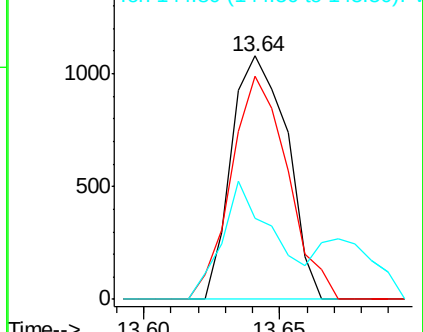
145 46.1 16.8 50.4



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V



#96

1,2,3-Trichlorobenzene

Concen: 0.309 ug/l

RT: 14.02 min Scan# 2154

Delta R.T. 0.01 min

Lab File: VX012704.D

Acq: 30 Sep 2019 14:46

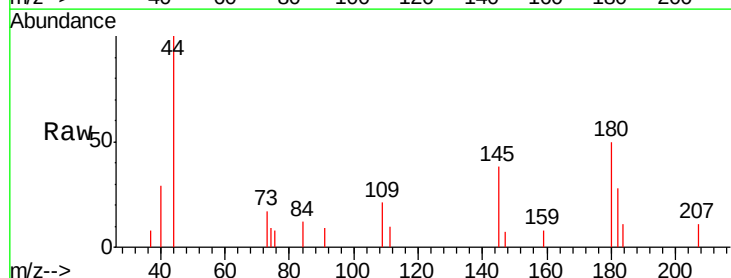
Tgt Ion:180 Resp: 547

Ion Ratio Lower Upper

180 100

182 87.0 47.1 141.3

145 107.1 18.0 54.0#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

