

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX073119\  
 Data File : VX011251.D  
 Acq On : 31 Jul 2019 18:27  
 Operator : JC/SP  
 Sample : K4026-02DL 20X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0685DL

Quant Time: Aug 01 02:32:52 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 24 05:39:23 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 233145   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 331343   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 292979   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 138949   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 115587   | 46.60 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.20% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 96331    | 45.80 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.60% |          |
| 50) Toluene-d8              | 8.71  | 98   | 387477   | 49.12 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.24% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 129401   | 44.63 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.26% |          |

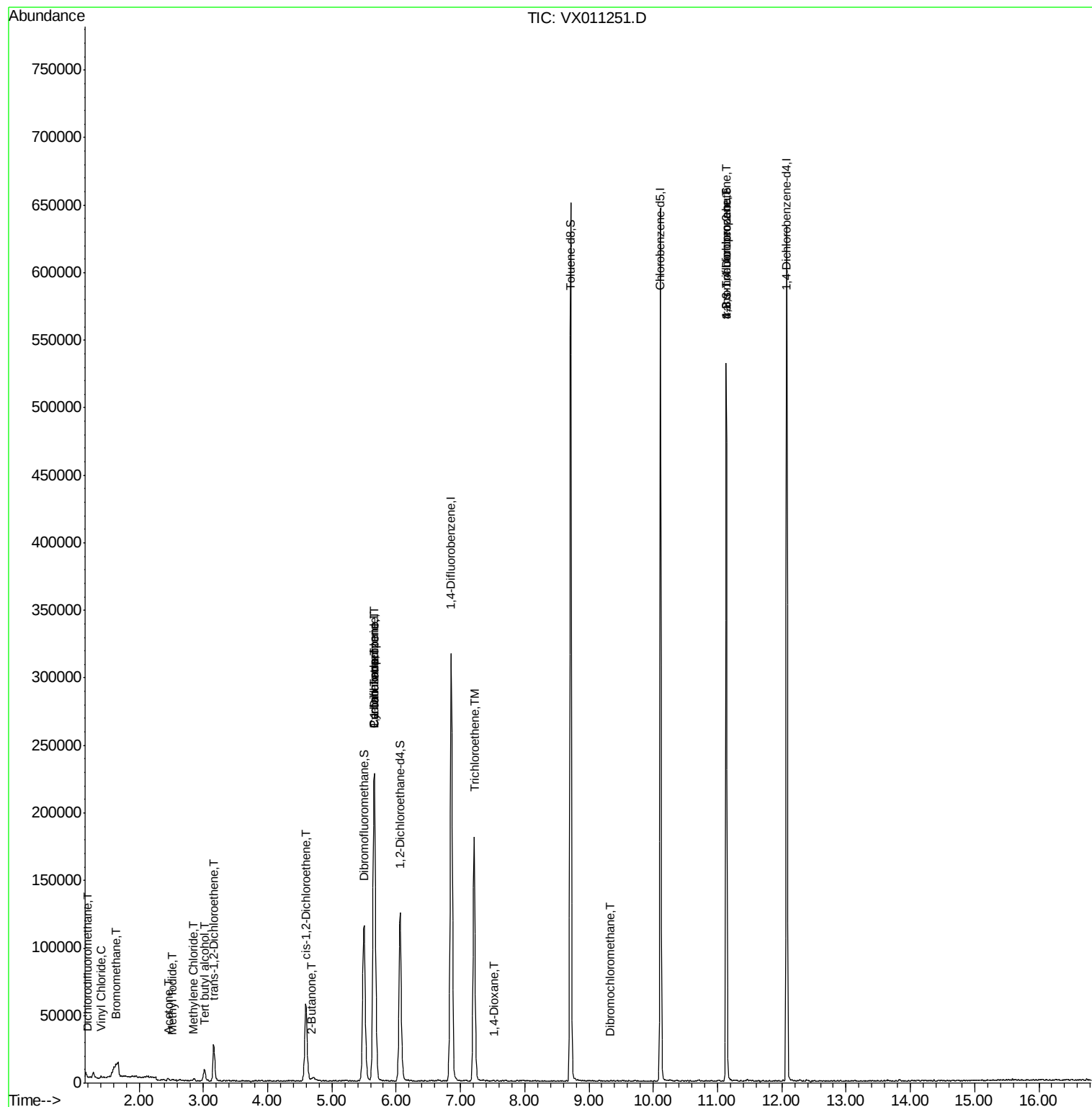
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.20  | 85   | 147      | 0.605  | ug/l # | 43     |
| 4) Vinyl Chloride              | 1.41  | 62   | 1000     | 0.457  | ug/l   | 96     |
| 5) Bromomethane                | 1.64  | 94   | 1043     | 0.846  | ug/l # | 74     |
| 10) Methyl Iodide              | 2.52  | 142  | 889      | 0.321  | ug/l # | 80     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 4886     | 8.459  | ug/l # | 88     |
| 16) Acetone                    | 2.45  | 43   | 1912     | 1.707  | ug/l # | 88     |
| 20) Methylene Chloride         | 2.85  | 84   | 545      | 0.230  | ug/l # | 90     |
| 21) trans-1,2-Dichloroethene   | 3.16  | 96   | 11656    | 5.290  | ug/l   | 96     |
| 25) 2-Butanone                 | 4.68  | 43   | 500      | 0.311  | ug/l # | 46     |
| 27) cis-1,2-Dichloroethene     | 4.59  | 96   | 39300    | 15.411 | ug/l   | 87     |
| 31) Cyclohexane                | 5.66  | 56   | 4616     | 1.371  | ug/l # | 12     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 15653    | 5.751  | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 21465    | 7.568  | ug/l # | 17     |
| 44) Trichloroethene            | 7.21  | 130  | 73020    | 29.589 | ug/l   | 97     |
| 49) 1,4-Dioxane                | 7.52  | 88   | 27       | 0.432  | ug/l # | 36     |
| 60) Dibromochloromethane       | 9.34  | 129  | 46       | 2.545  | ug/l # | 11     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 65675    | 26.192 | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 65675    | 65.058 | ug/l # | 11     |

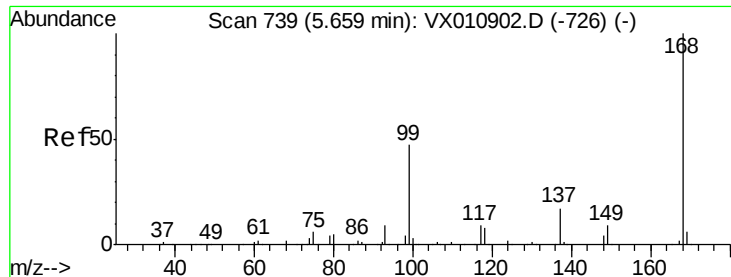
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX073119\  
Data File : VX011251.D  
Acq On : 31 Jul 2019 18:27  
Operator : JC/SP  
Sample : K4026-02DL 20X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleID :  
Z3-0685DL

Quant Time: Aug 01 02:32:52 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jul 24 05:39:23 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.00 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Instrument :

MSVOA\_X

ClientSampleId :

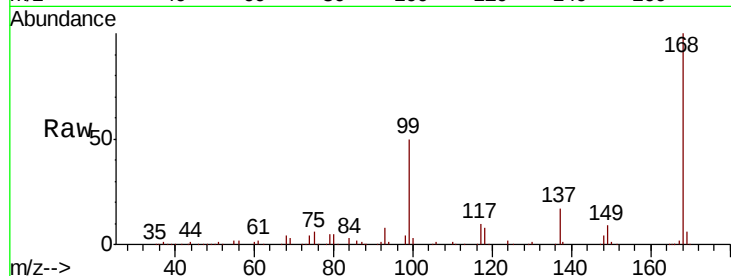
Z3-0685DL

Tot Ion:168 Resp: 233145

Ion Ratio Lower Upper

168 100

99 50.3 37.6 56.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

80000

60000

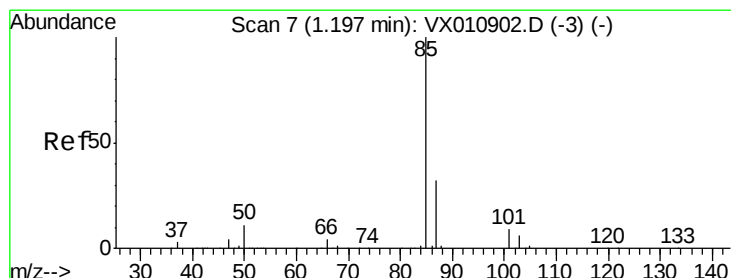
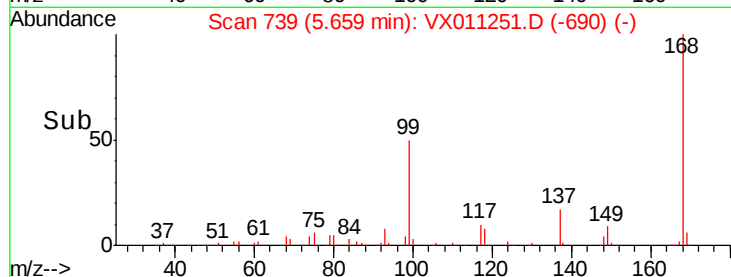
40000

20000

0

Time-->

5.50 5.60 5.70 5.80



#2

Dichlorodifluoromethane

Concen: 0.605 ug/l

RT: 1.20 min Scan# 8

Delta R.T. 0.01 min

Lab File: VX011251.D

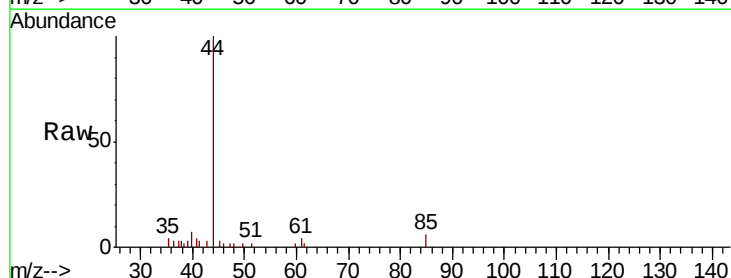
Acq: 31 Jul 2019 18:27

Tgt Ion: 85 Resp: 147

Ion Ratio Lower Upper

85 100

87 0.0 15.9 47.7#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

200

150

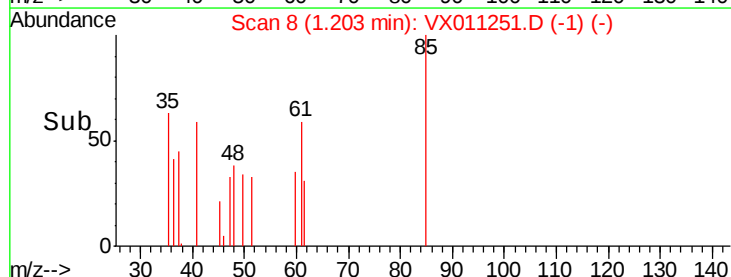
100

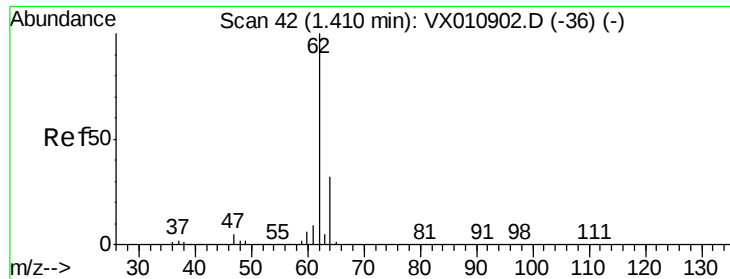
50

0

Time-->

1.16 1.18 1.20 1.22





#4

Vinyl Chloride

Concen: 0.457 ug/l

RT: 1.41 min Scan# 42

Delta R.T. 0.00 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Instrument :

MSVOA\_X

ClientSampleId :

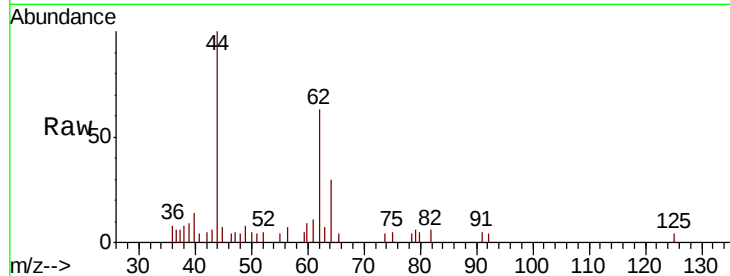
Z3-0685DL

Tot Ion: 62 Resp: 1000

Ion Ratio Lower Upper

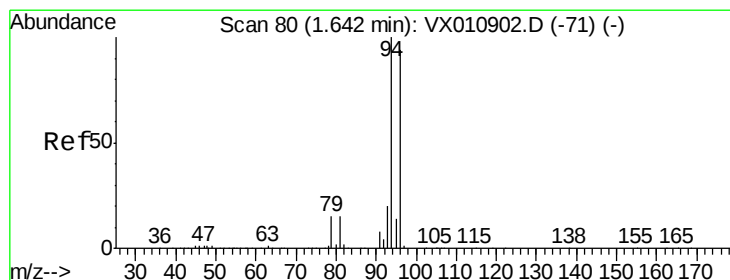
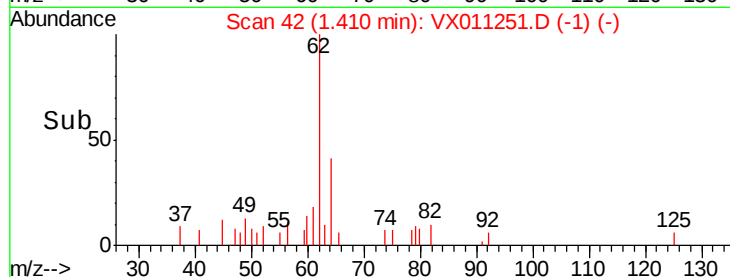
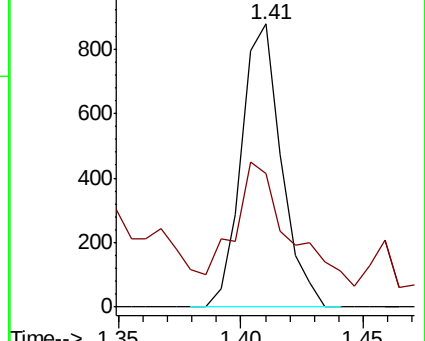
62 100

64 34.3 25.7 38.5



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0



#5

Bromomethane

Concen: 0.846 ug/l

RT: 1.64 min Scan# 79

Delta R.T. -0.01 min

Lab File: VX011251.D

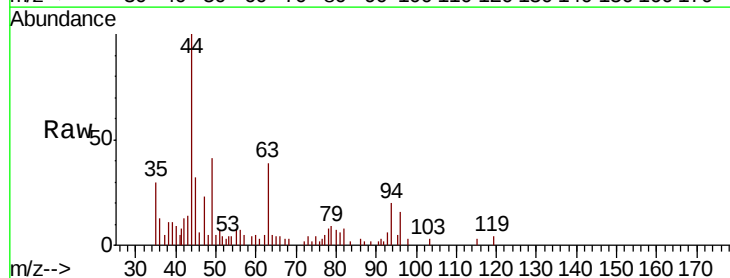
Acq: 31 Jul 2019 18:27

Tgt Ion: 94 Resp: 1043

Ion Ratio Lower Upper

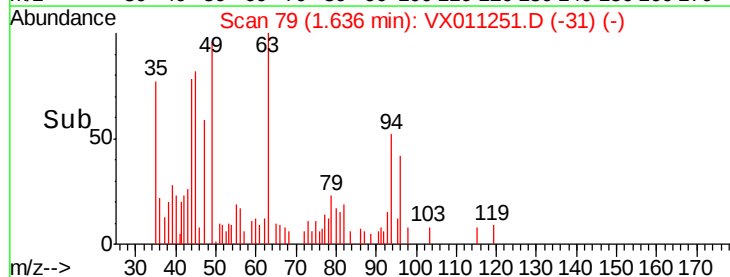
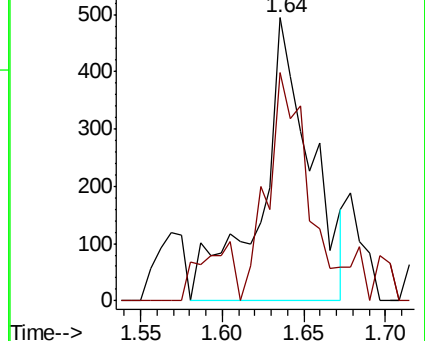
94 100

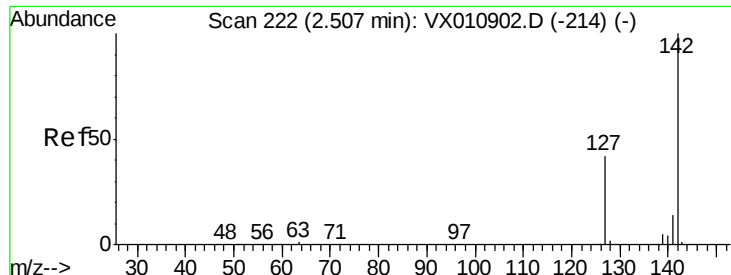
96 69.0 75.6 113.4#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

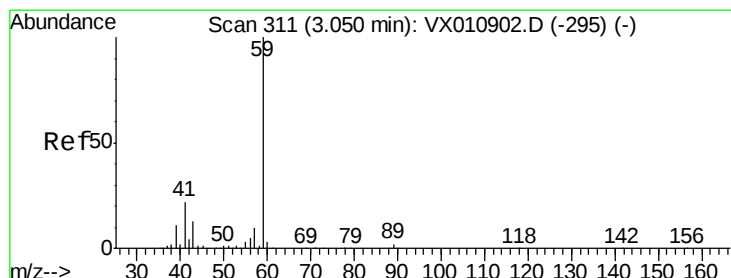
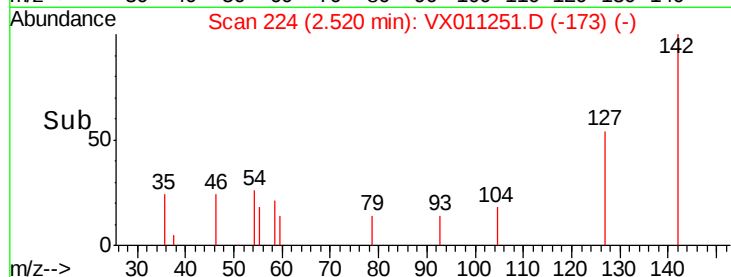
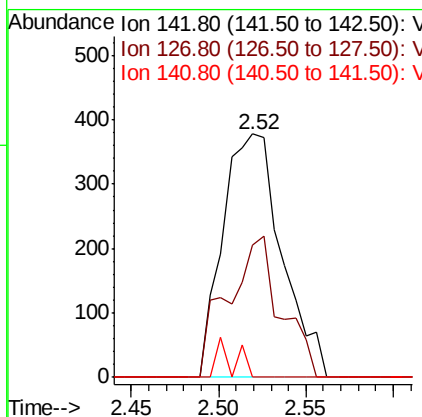
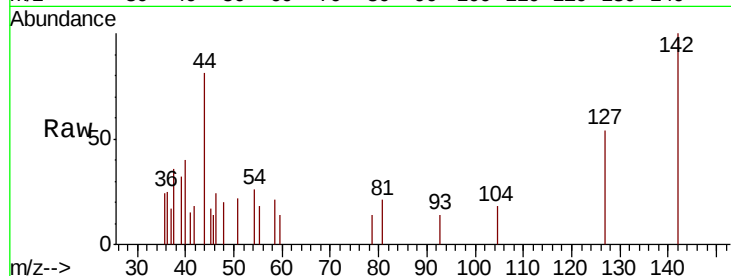




#10  
Methvl Iodide  
Concen: 0.321 ug/l  
RT: 2.52 min Scan# 224  
Delta R.T. 0.01 min  
Lab File: VX011251.D  
Acq: 31 Jul 2019 18:27

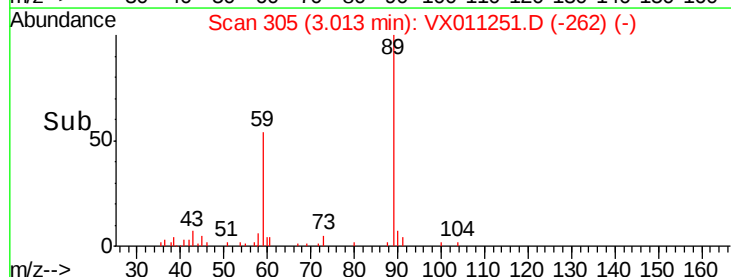
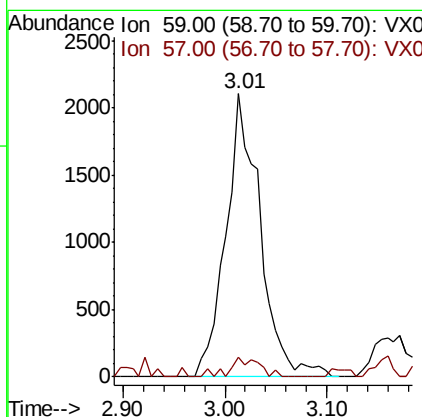
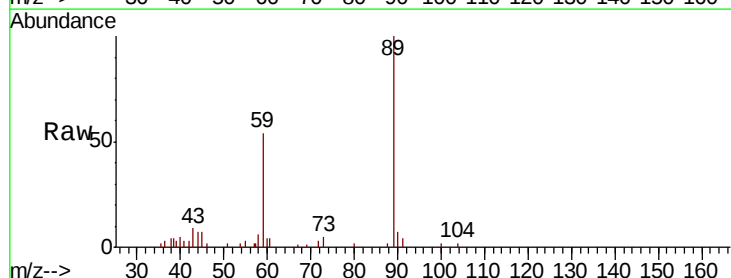
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0685DL

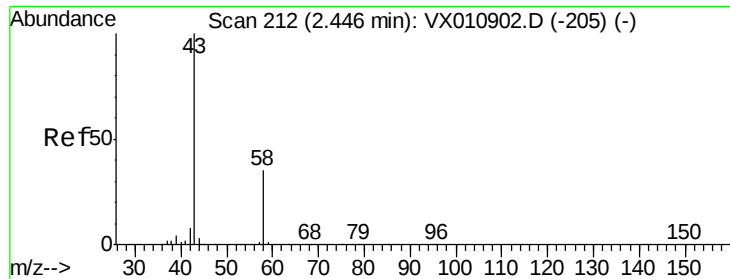
Tot Ion:142 Resp: 889  
Ion Ratio Lower Upper  
142 100  
127 52.2 34.2 51.4#  
141 0.0 11.7 17.5#



#11  
Tert butyl alcohol  
Concen: 8.459 ug/l  
RT: 3.01 min Scan# 305  
Delta R.T. -0.04 min  
Lab File: VX011251.D  
Acq: 31 Jul 2019 18:27

Tgt Ion: 59 Resp: 4886  
Ion Ratio Lower Upper  
59 100  
57 5.4 7.9 11.9#





#16

Acetone

Concen: 1.707 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Instrument :

MSVOA\_X

ClientSampleId :

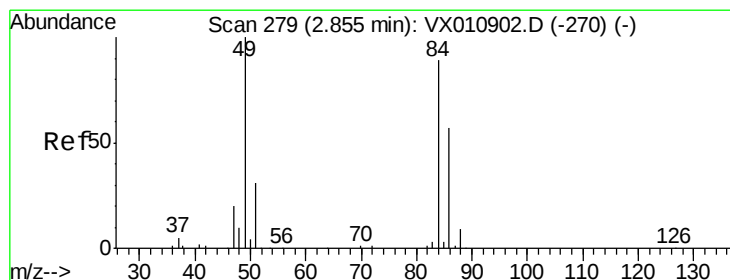
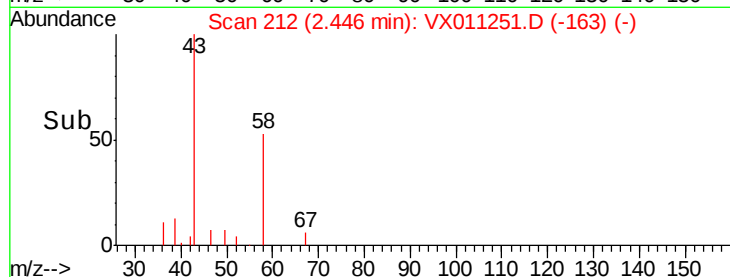
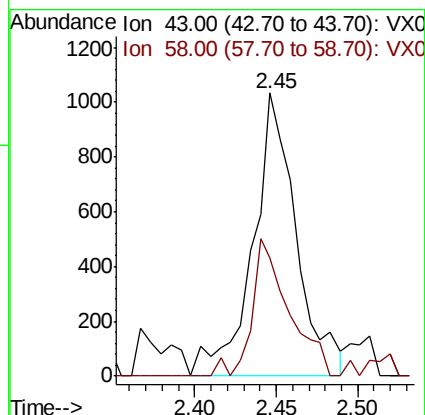
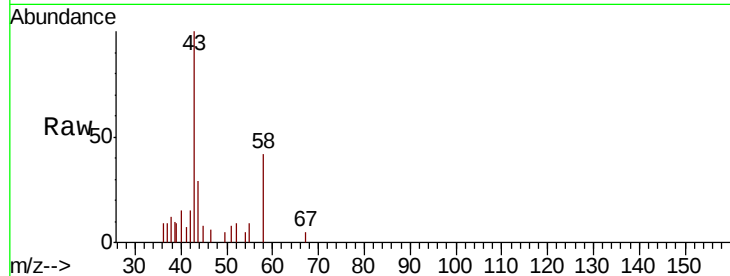
Z3-0685DL

Tot Ion: 43 Resp: 1912

Ion Ratio Lower Upper

43 100

58 41.6 27.7 41.5#



#20

Methylene Chloride

Concen: 0.230 ug/l

RT: 2.85 min Scan# 278

Delta R.T. -0.01 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Tgt Ion: 84 Resp: 545

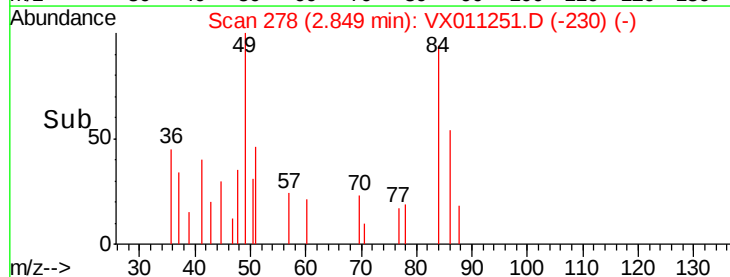
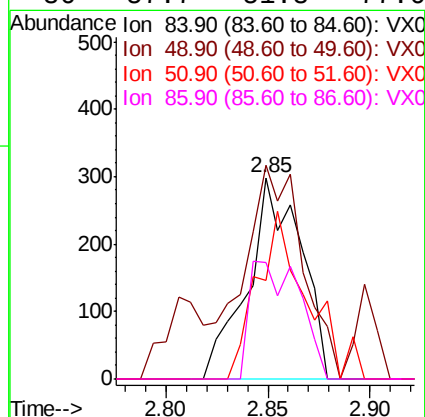
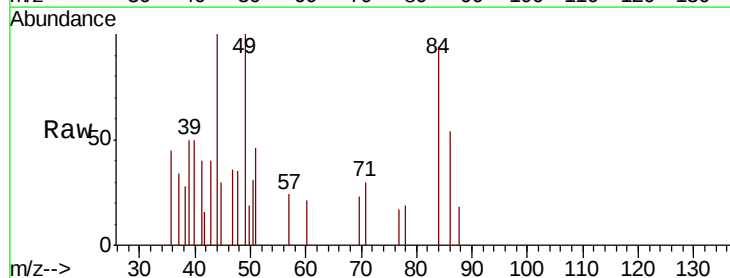
Ion Ratio Lower Upper

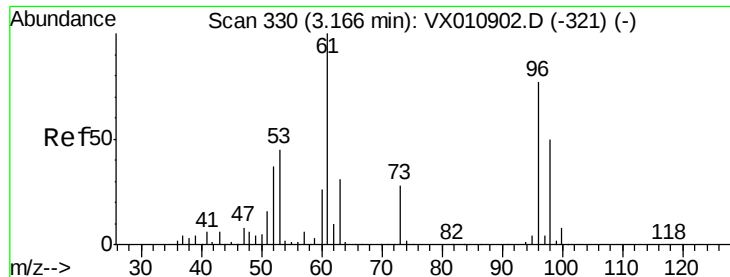
84 100

49 106.4 89.9 134.9

51 49.0 27.8 41.6#

86 57.7 51.8 77.6





#21

trans-1,2-Dichloroethene

Concen: 5.290 ug/l

RT: 3.16 min Scan# 329

Delta R.T. -0.01 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Instrument :

MSVOA\_X

ClientSampleId :

Z3-0685DL

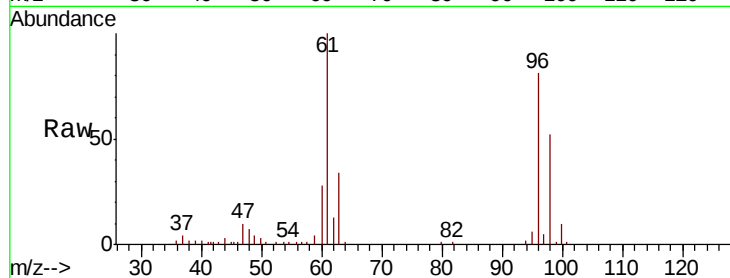
Tot Ion: 96 Resp: 11656

Ion Ratio Lower Upper

96 100

61 124.1 104.2 156.2

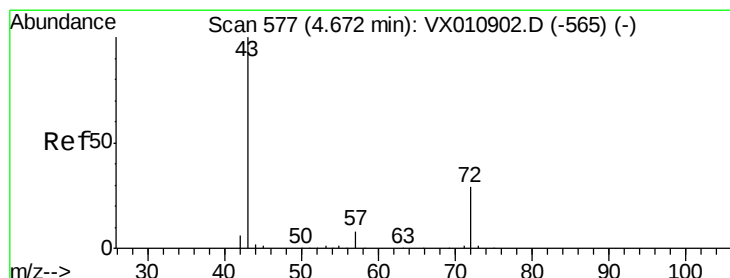
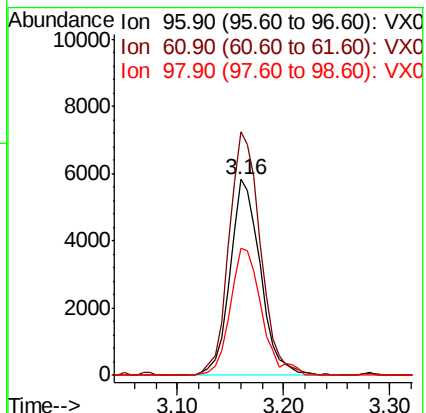
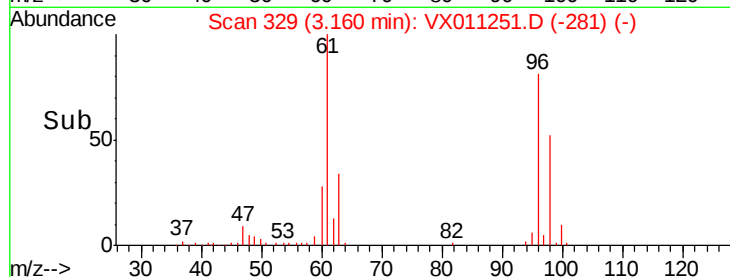
98 64.8 52.2 78.4



Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0



#25

2-Butanone

Concen: 0.311 ug/l

RT: 4.68 min Scan# 578

Delta R.T. 0.01 min

Lab File: VX011251.D

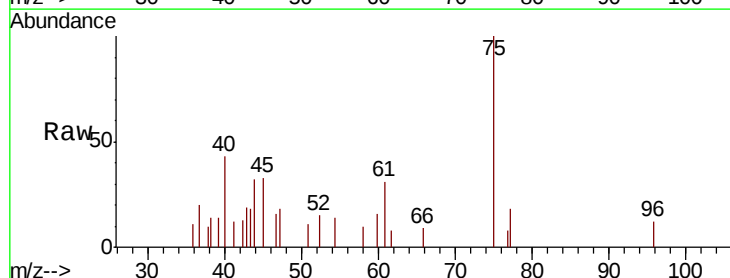
Acq: 31 Jul 2019 18:27

Tgt Ion: 43 Resp: 500

Ion Ratio Lower Upper

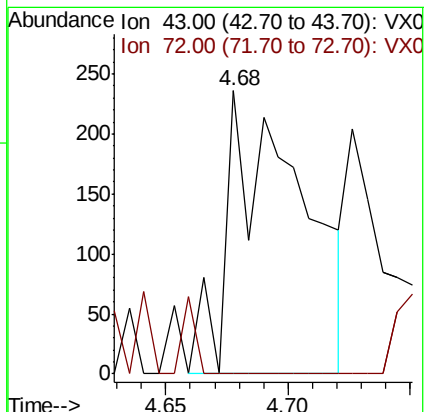
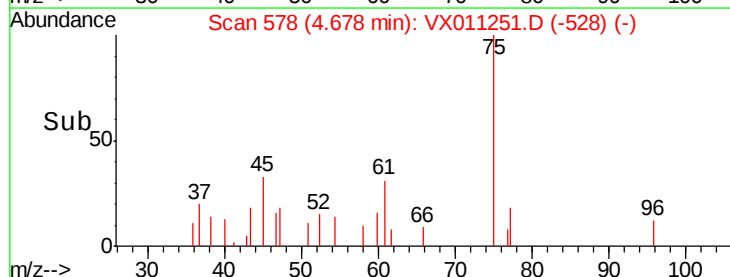
43 100

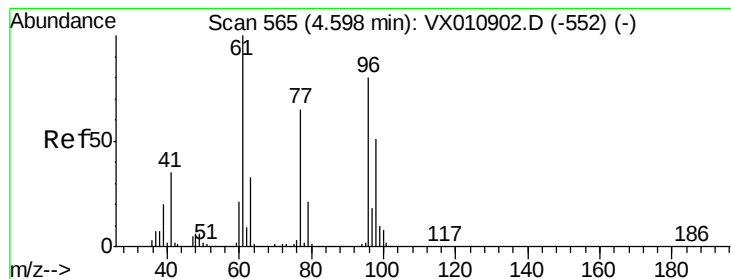
72 0.0 23.0 34.6#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



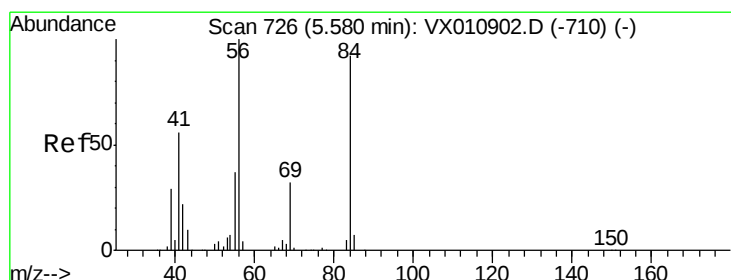
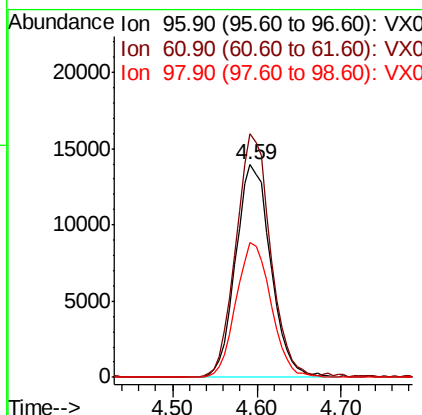
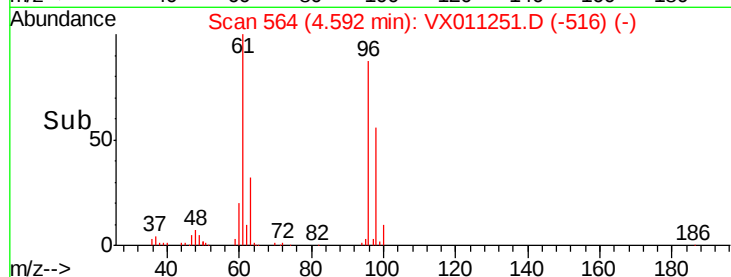
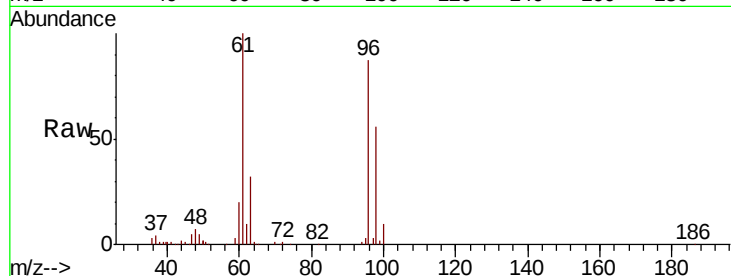


#27

cis-1,2-Dichloroethene  
Concen: 15.411 ug/l  
RT: 4.59 min Scan# 564  
Delta R.T. -0.01 min  
Lab File: VX011251.D  
Acq: 31 Jul 2019 18:27

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0685DL

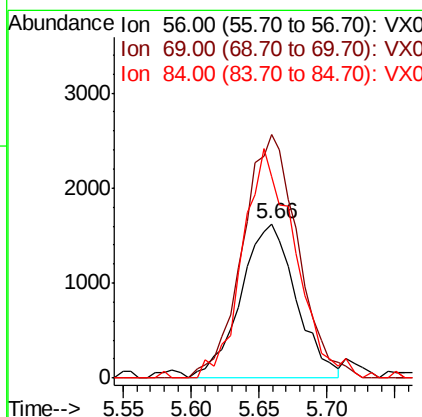
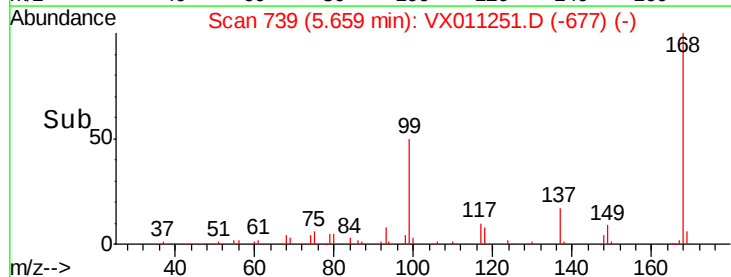
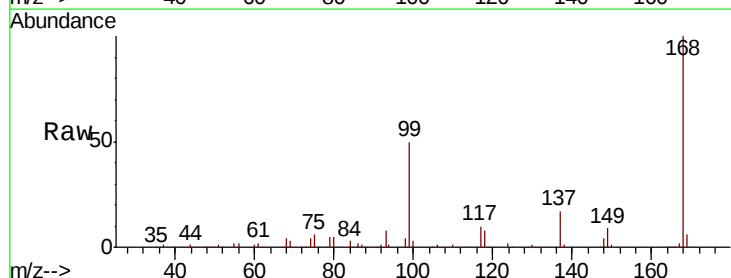
Tot Ion: 96 Resp: 39300  
Ion Ratio Lower Upper  
96 100  
61 112.6 0.0 269.0  
98 63.2 0.0 131.4

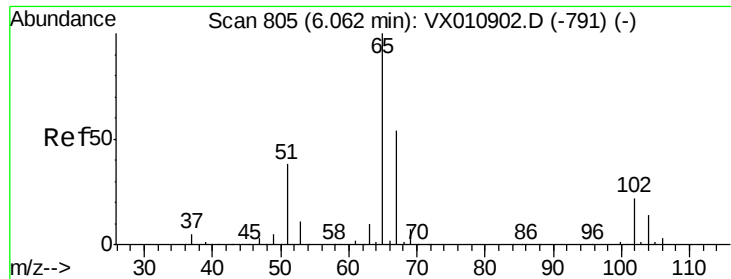


#31

Cyclohexane  
Concen: 1.371 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. 0.08 min  
Lab File: VX011251.D  
Acq: 31 Jul 2019 18:27

Tgt Ion: 56 Resp: 4616  
Ion Ratio Lower Upper  
56 100  
69 157.7 25.8 38.8#  
84 130.5 73.8 110.6#

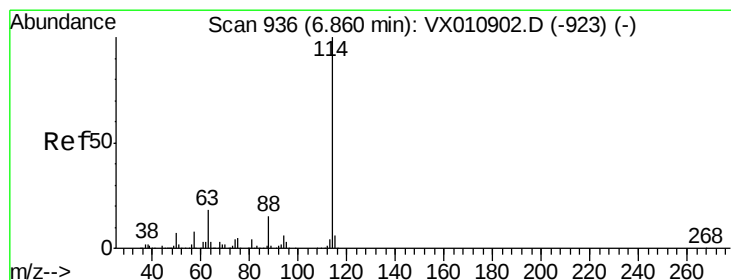
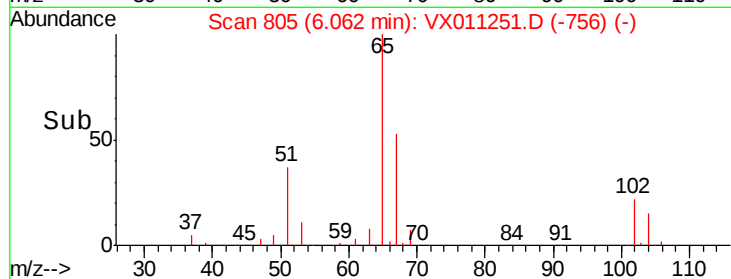
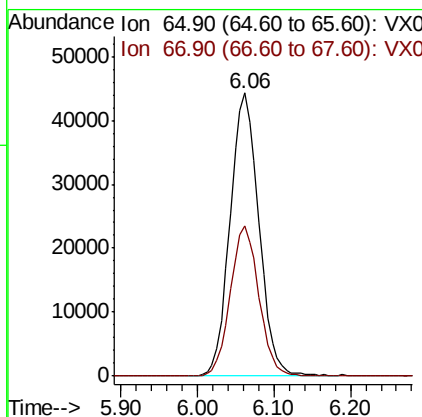
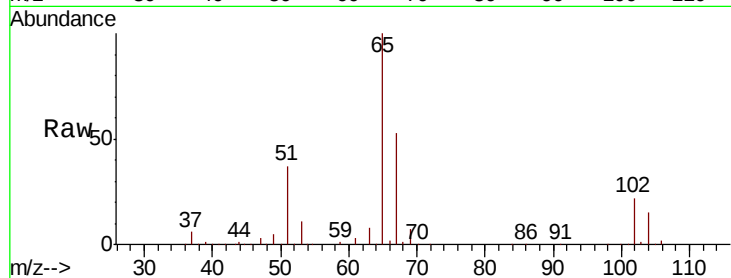




#33  
 1,2-Dichloroethane-d4  
 Concen: 46.602 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. 0.00 min  
 Lab File: VX011251.D  
 Acq: 31 Jul 2019 18:27

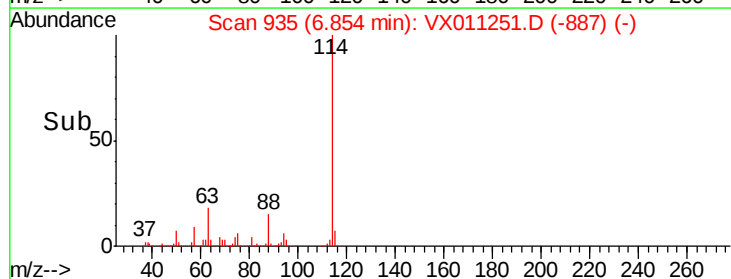
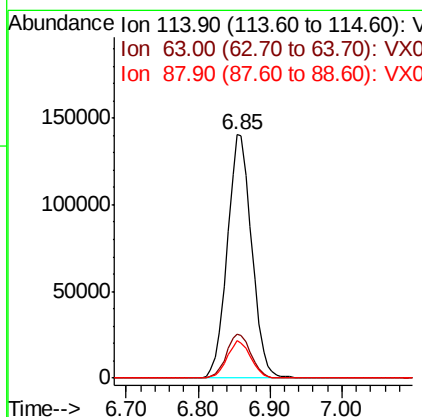
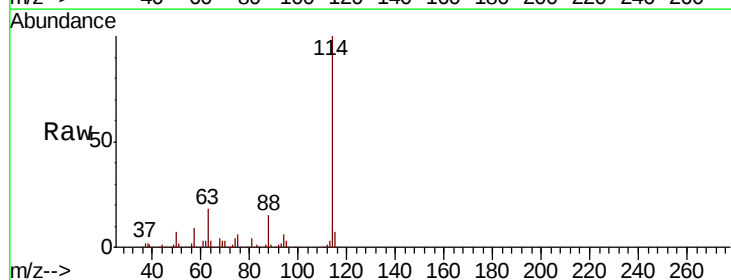
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0685DL

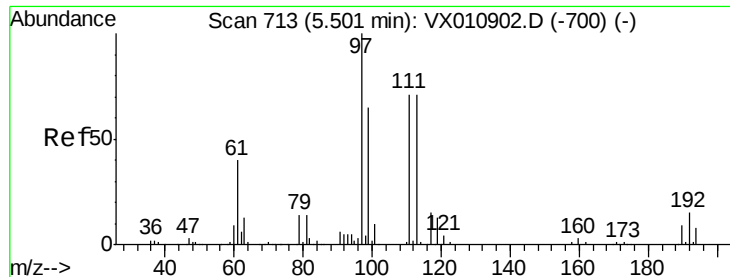
Tot Ion: 65 Resp: 115587  
 Ion Ratio Lower Upper  
 65 100  
 67 52.5 0.0 107.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 935  
 Delta R.T. -0.01 min  
 Lab File: VX011251.D  
 Acq: 31 Jul 2019 18:27

Tgt Ion: 114 Resp: 331343  
 Ion Ratio Lower Upper  
 114 100  
 63 18.1 0.0 35.6  
 88 15.4 0.0 29.8





#35

Dibromofluoromethane

Concen: 45.804 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Instrument :

MSVOA\_X

ClientSampleId :

Z3-0685DL

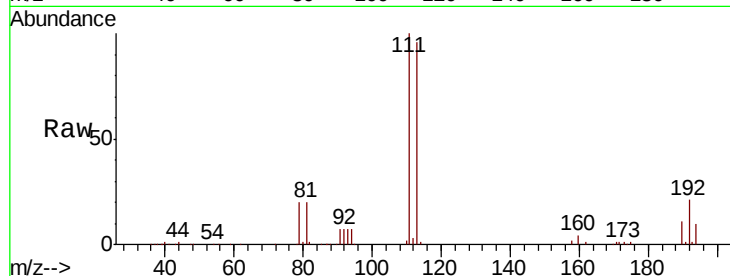
Tot Ion:113 Resp: 96331

Ion Ratio Lower Upper

113 100

111 104.0 82.3 123.5

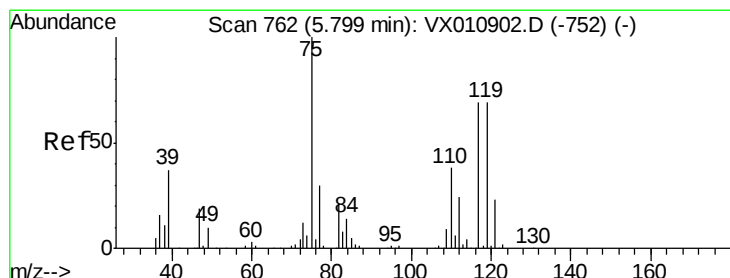
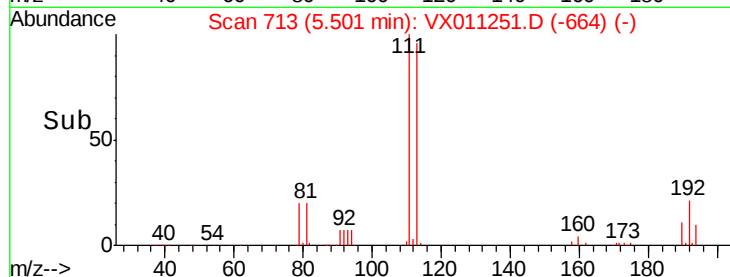
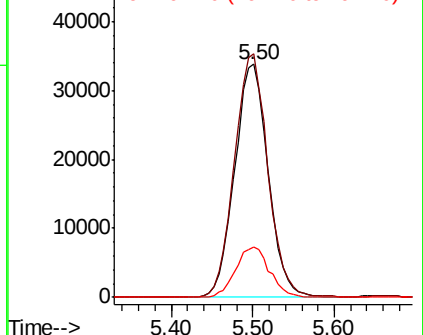
192 22.0 17.4 26.2



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: 5.751 ug/l

RT: 5.65 min Scan# 738

Delta R.T. -0.15 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

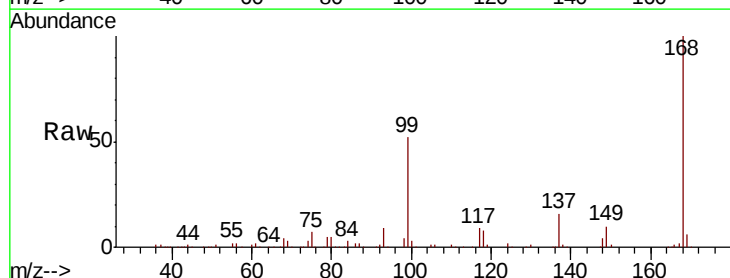
Tgt Ion: 75 Resp: 15653

Ion Ratio Lower Upper

75 100

110 11.3 19.9 59.7#

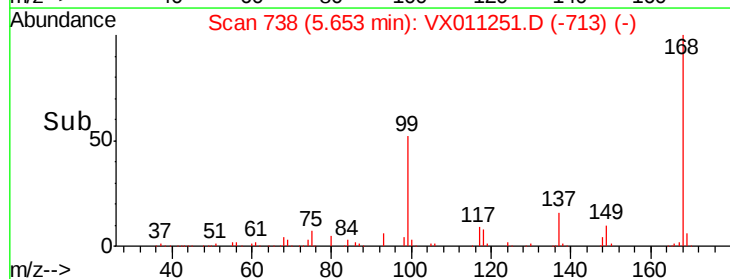
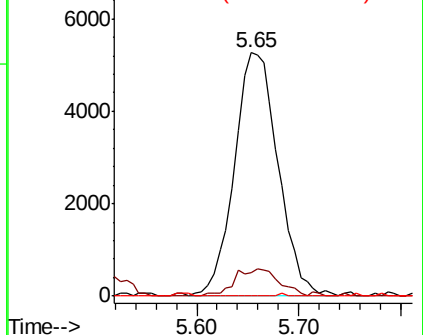
77 0.0 25.0 37.4#

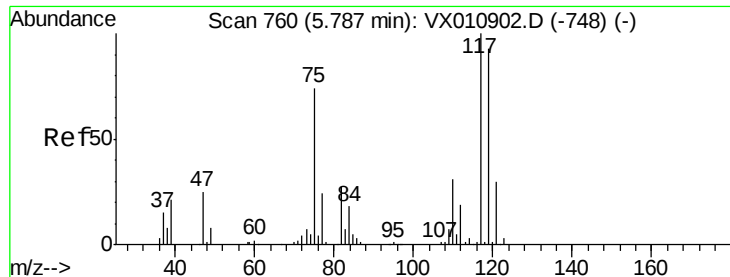


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 7.568 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.13 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Instrument :

MSVOA\_X

ClientSampled :

Z3-0685DL

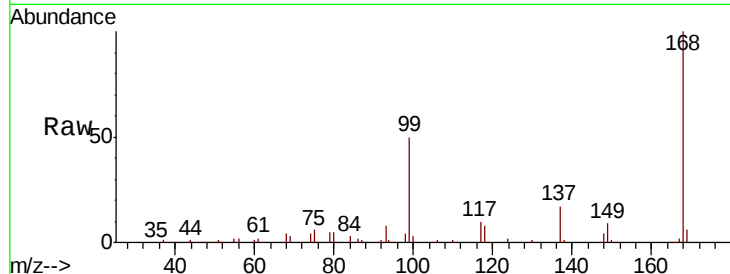
Tot Ion:117 Resp: 21465

Ion Ratio Lower Upper

117 100

119 4.0 74.2 111.2#

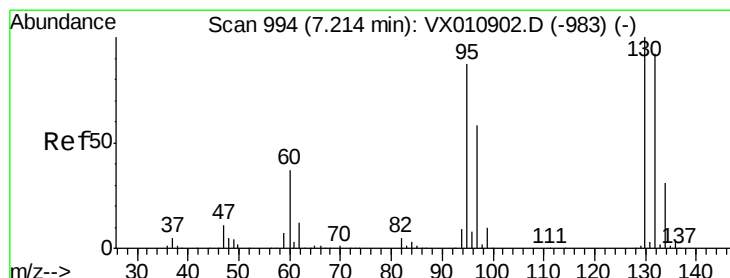
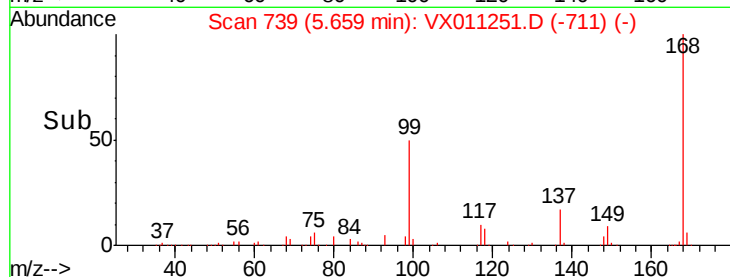
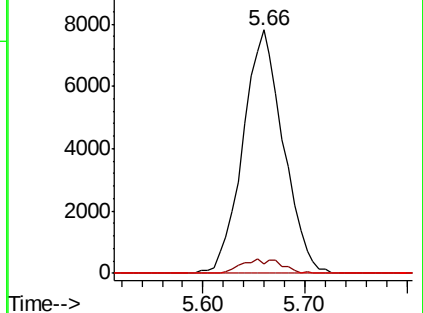
121 0.0 24.2 36.2#



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



#44

Trichloroethene

Concen: 29.589 ug/l

RT: 7.21 min Scan# 994

Delta R.T. 0.00 min

Lab File: VX011251.D

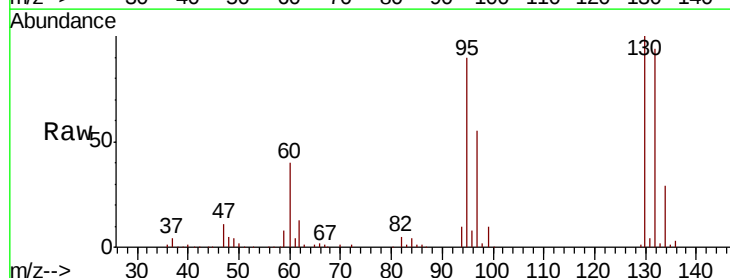
Acq: 31 Jul 2019 18:27

Tgt Ion:130 Resp: 73020

Ion Ratio Lower Upper

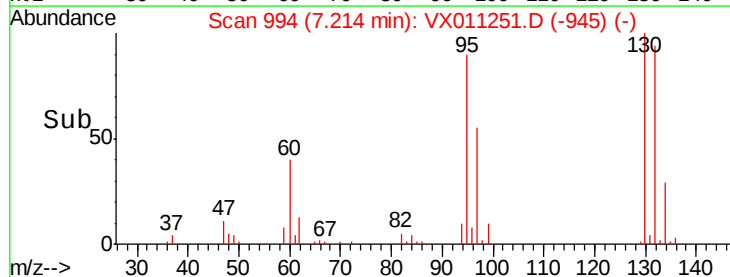
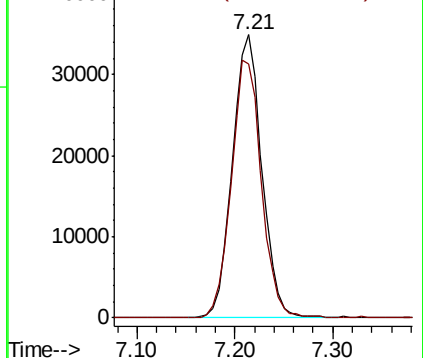
130 100

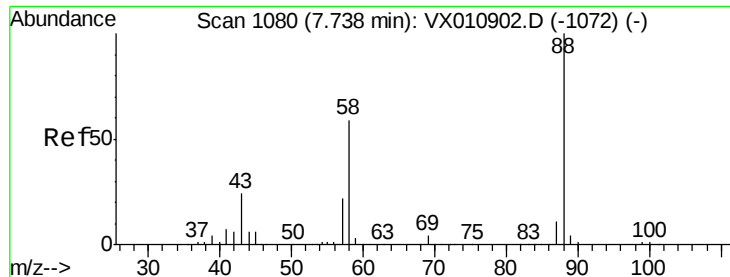
95 89.9 0.0 174.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

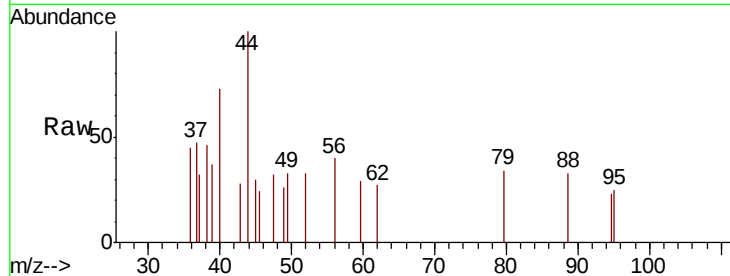




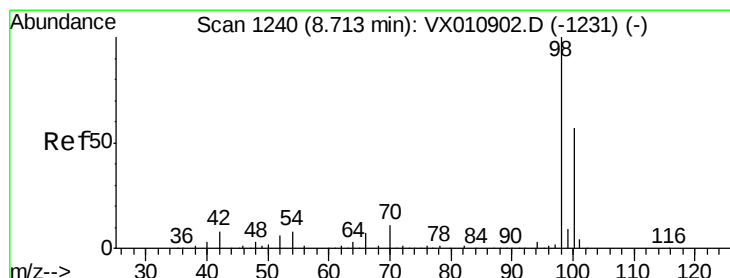
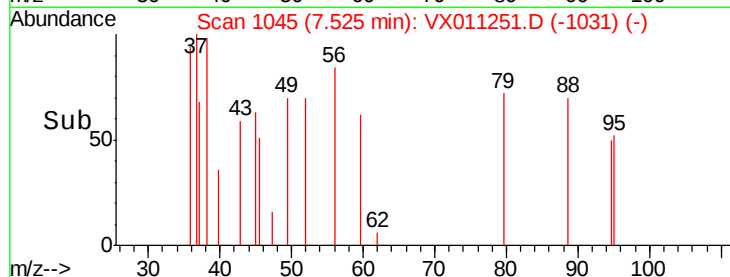
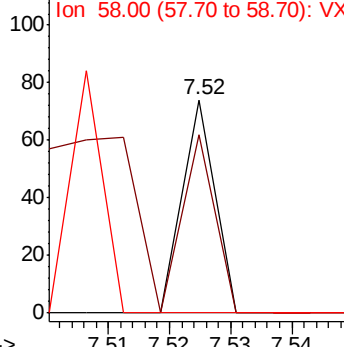
#49  
 1,4-Dioxane  
 Concen: 0.432 ug/l  
 RT: 7.52 min Scan# 1045  
 Delta R.T. -0.21 min  
 Lab File: VX011251.D  
 Acq: 31 Jul 2019 18:27

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0685DL

Tot Ion: 88 Resp: 27  
 Ion Ratio Lower Upper  
 88 100  
 43 0.0 22.9 34.3#  
 58 114.8 49.8 74.8#

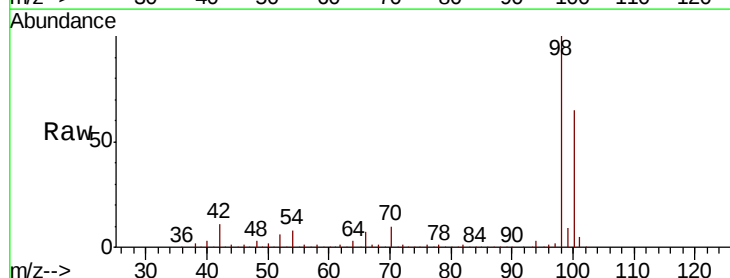


Abundance Ion 88.00 (87.70 to 88.70): VX0  
 Ion 43.00 (42.70 to 43.70): VX0  
 Ion 58.00 (57.70 to 58.70): VX0

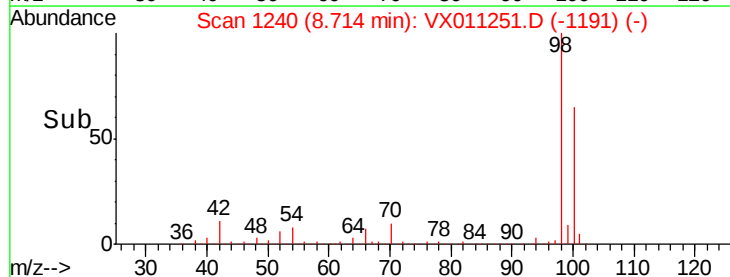
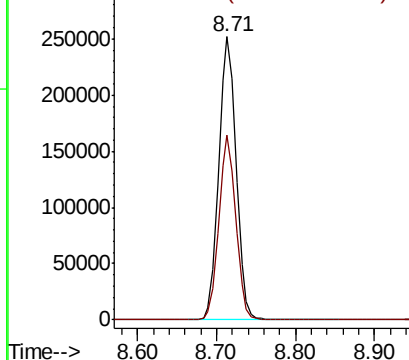


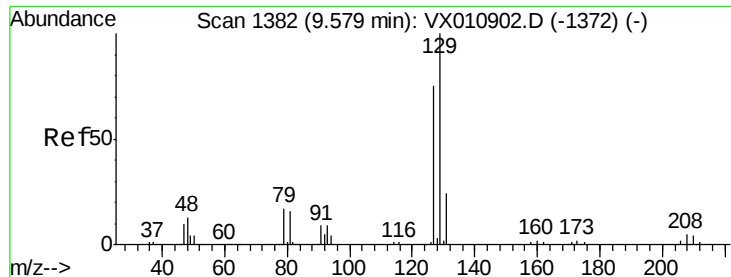
#50  
 Toluene-d8  
 Concen: 49.122 ug/l  
 RT: 8.71 min Scan# 1240  
 Delta R.T. 0.00 min  
 Lab File: VX011251.D  
 Acq: 31 Jul 2019 18:27

Tgt Ion: 98 Resp: 387477  
 Ion Ratio Lower Upper  
 98 100  
 100 63.5 50.6 75.8



Abundance Ion 98.00 (97.70 to 98.70): VX0  
 Ion 100.00 (99.70 to 100.70): V





#60

Dibromochloromethane

Concen: 2.545 ug/l

RT: 9.34 min Scan# 1342

Delta R.T. -0.24 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

Instrument :

MSVOA\_X

ClientSampleId :

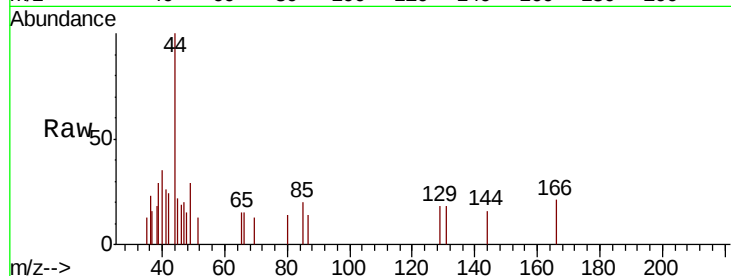
Z3-0685DL

Tot Ion:129 Resp: 46

Ion Ratio Lower Upper

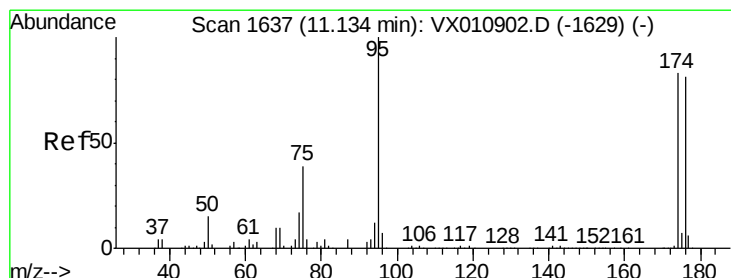
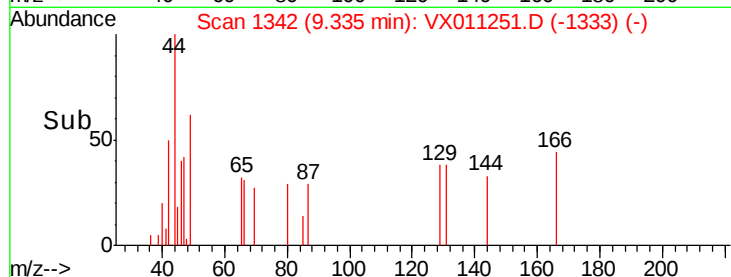
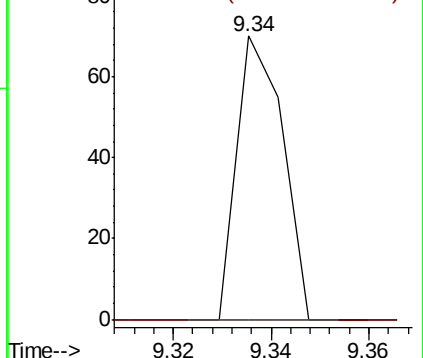
129 100

127 0.0 38.6 115.8#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 44.631 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX011251.D

Acq: 31 Jul 2019 18:27

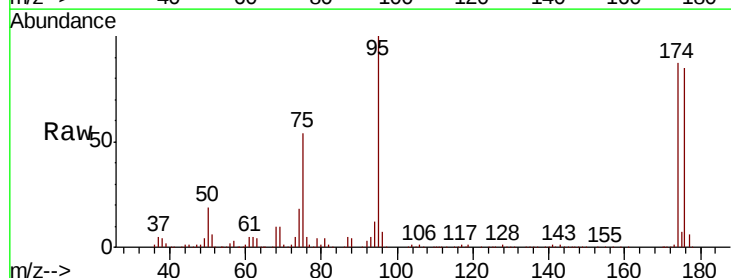
Tgt Ion: 95 Resp: 129401

Ion Ratio Lower Upper

95 100

174 91.4 0.0 180.6

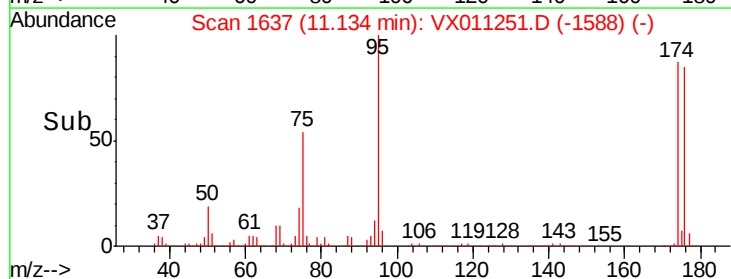
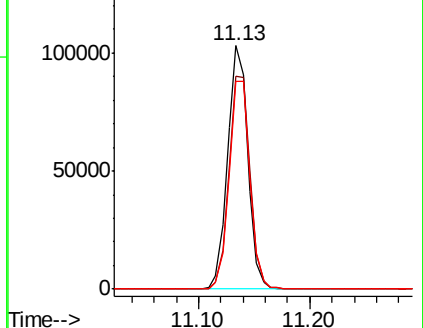
176 88.3 0.0 173.8

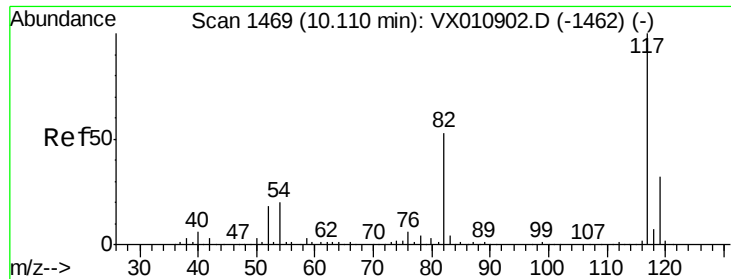


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

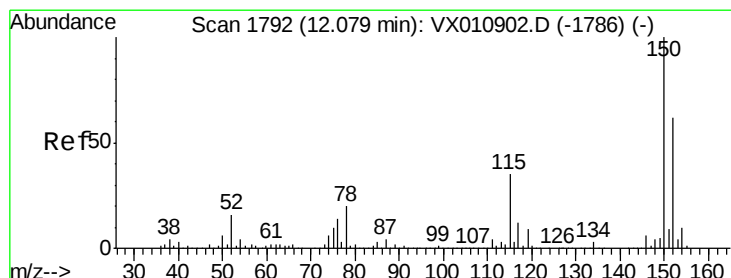
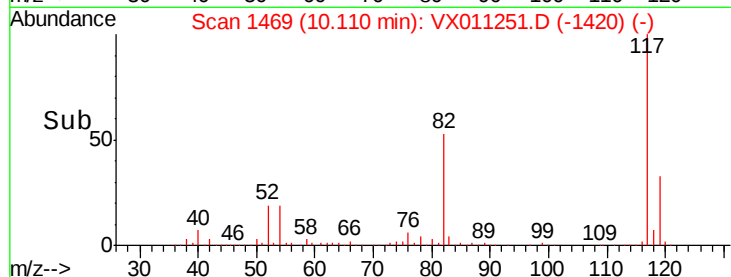
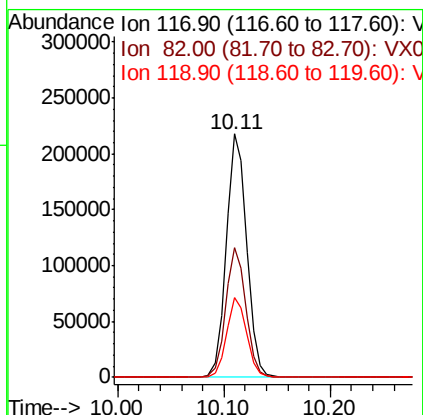
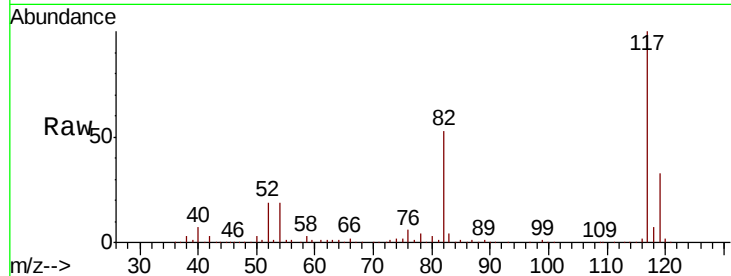




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. 0.00 min  
Lab File: VX011251.D  
Acq: 31 Jul 2019 18:27

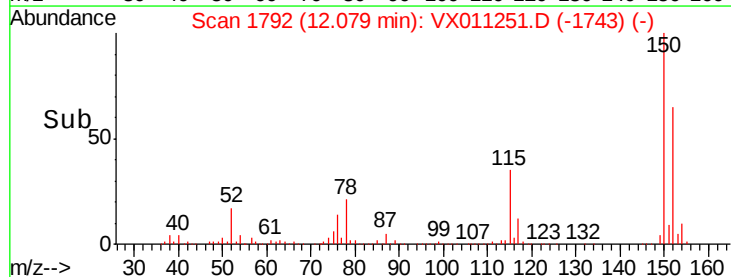
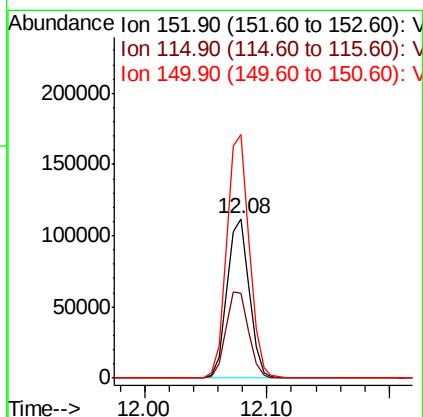
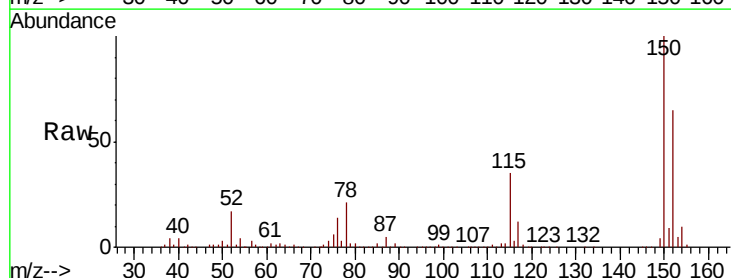
Instrument :  
MSVOA\_X  
ClientSampled :  
Z3-0685DL

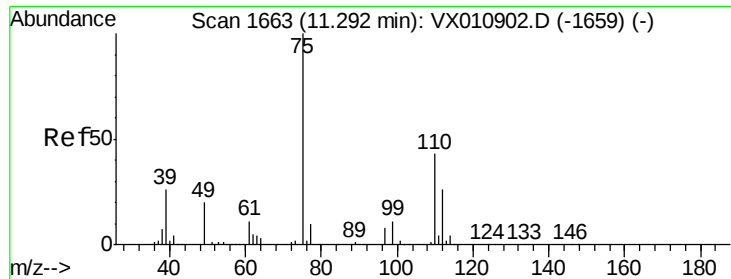
Tot Ion:117 Resp: 292979  
Ion Ratio Lower Upper  
117 100  
82 53.4 42.6 63.8  
119 32.6 25.9 38.9



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX011251.D  
Acq: 31 Jul 2019 18:27

Tgt Ion:152 Resp: 138949  
Ion Ratio Lower Upper  
152 100  
115 55.5 39.7 119.1  
150 155.4 0.0 345.6

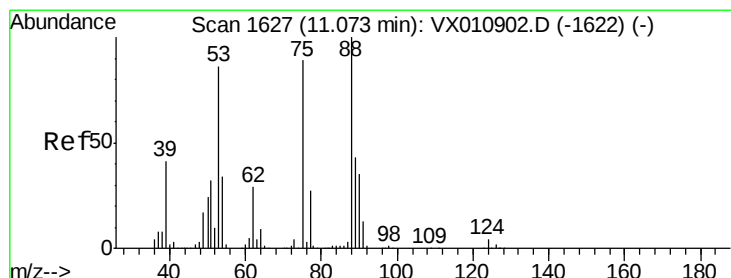
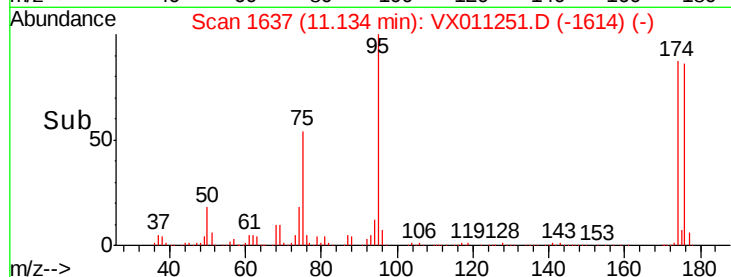
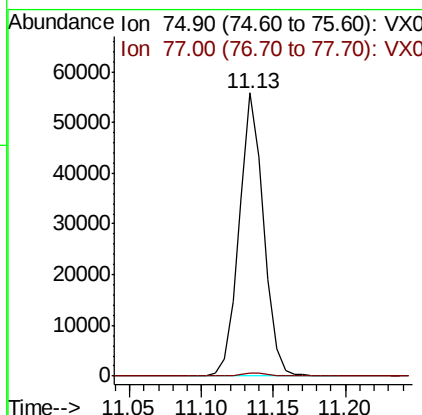
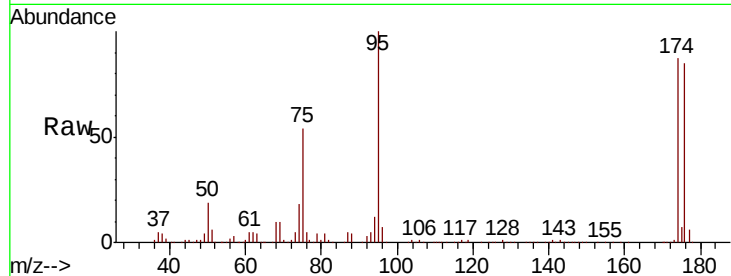




#76  
 1,2,3-Trichloropropane  
 Concen: 26.192 ug/l  
 RT: 11.13 min Scan# 1637  
 Delta R.T. -0.16 min  
 Lab File: VX011251.D  
 Acq: 31 Jul 2019 18:27

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 Z3-0685DL

Tot Ion: 75 Resp: 65675  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 21.3 64.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 65.058 ug/l  
 RT: 11.13 min Scan# 1637  
 Delta R.T. 0.06 min  
 Lab File: VX011251.D  
 Acq: 31 Jul 2019 18:27

Tgt Ion: 75 Resp: 65675  
 Ion Ratio Lower Upper  
 75 100  
 53 0.1 76.7 115.1#  
 89 0.1 38.5 57.7#

