

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX112619\  
 Data File : VX013628.D  
 Acq On : 27 Nov 2019 03:29  
 Operator : JC/SP  
 Sample : K5962-15DL 100X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP-01-20191120

Quant Time: Nov 27 06:21:59 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 26 15:53:00 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 647955   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 1040166  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 928055   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 414761   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 373437   | 49.65 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.30% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 314307   | 48.88 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.76% |      |
| 50) Toluene-d8            | 8.71   | 98  | 1224067  | 48.86 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.72% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 416202   | 46.07 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.14% |      |

## Target Compounds

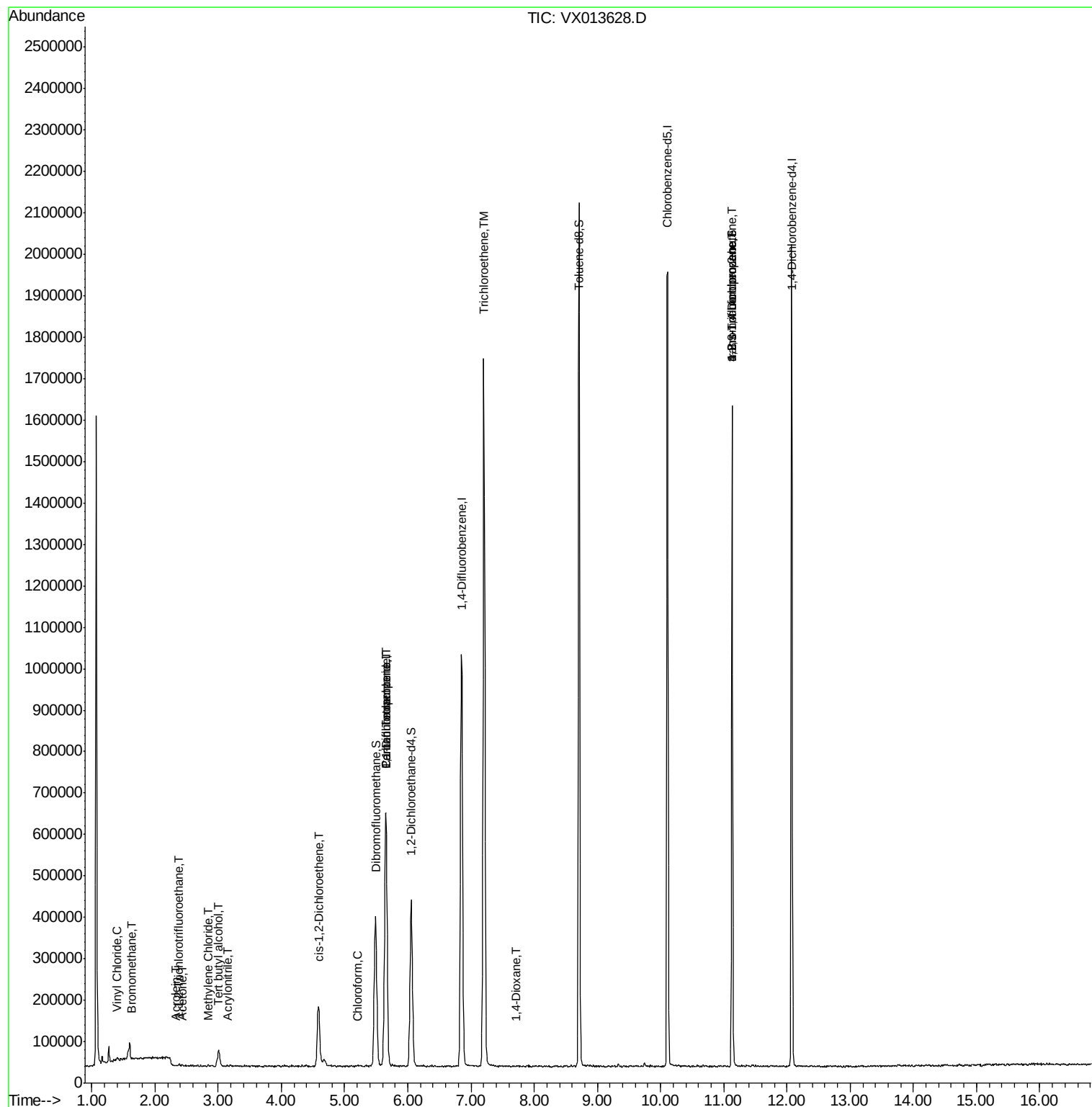
|                                |       |     |        |        | Qvalue |    |
|--------------------------------|-------|-----|--------|--------|--------|----|
| 4) Vinyl Chloride              | 1.40  | 62  | 4263   | 0.468  | ug/l   | 96 |
| 5) Bromomethane                | 1.64  | 94  | 1256   | 0.205  | ug/l # | 76 |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.38  | 101 | 1663   | 0.269  | ug/l # | 66 |
| 11) Tert butyl alcohol         | 3.01  | 59  | 25960  | 13.983 | ug/l # | 84 |
| 13) Acrolein                   | 2.33  | 56  | 333    | 6.266  | ug/l # | 54 |
| 15) Acrylonitrile              | 3.15  | 53  | 924    | 0.241  | ug/l # | 17 |
| 16) Acetone                    | 2.43  | 43  | 3319   | 0.894  | ug/l # | 79 |
| 20) Methylene Chloride         | 2.85  | 84  | 1863   | 0.261  | ug/l # | 54 |
| 27) cis-1,2-Dichloroethene     | 4.59  | 96  | 97461  | 12.633 | ug/l   | 90 |
| 30) Chloroform                 | 5.20  | 83  | 3436   | 0.288  | ug/l # | 69 |
| 36) 1,1-Dichloropropene        | 5.65  | 75  | 43451  | 4.602  | ug/l # | 53 |
| 38) Carbon Tetrachloride       | 5.65  | 117 | 56423  | 6.481  | ug/l # | 16 |
| 44) Trichloroethene            | 7.20  | 130 | 688793 | 87.273 | ug/l   | 97 |
| 49) 1,4-Dioxane                | 7.73  | 88  | 292    | 1.540  | ug/l # | 24 |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 206392 | 22.124 | ug/l # | 39 |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 206392 | 60.528 | ug/l # | 11 |

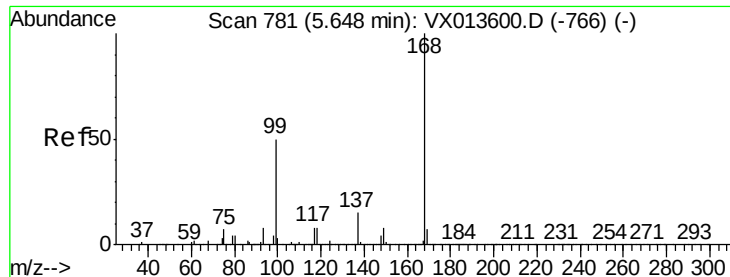
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX112619\  
Data File : VX013628.D  
Acq On : 27 Nov 2019 03:29  
Operator : JC/SP  
Sample : K5962-15DL 100X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 36 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP-01-20191120

Quant Time: Nov 27 06:21:59 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 26 15:53:00 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: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

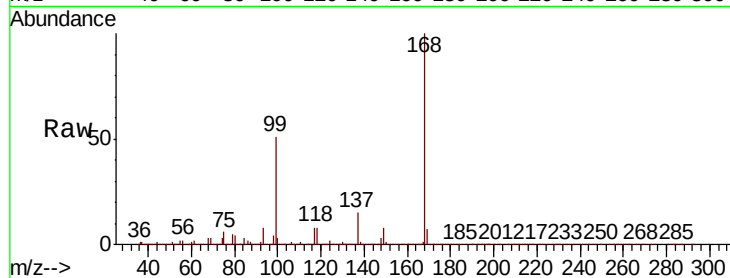
DUP-01-20191120

Tot Ion:168 Resp: 647955

Ion Ratio Lower Upper

168 100

99 50.4 39.8 59.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

250000

200000

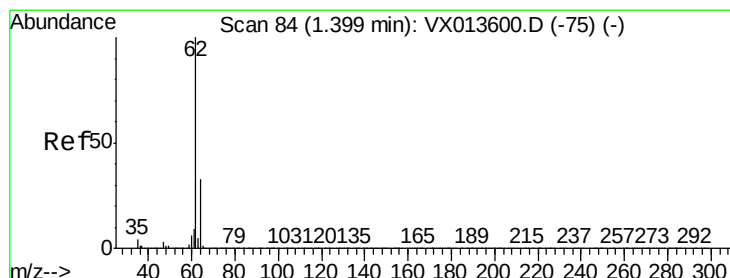
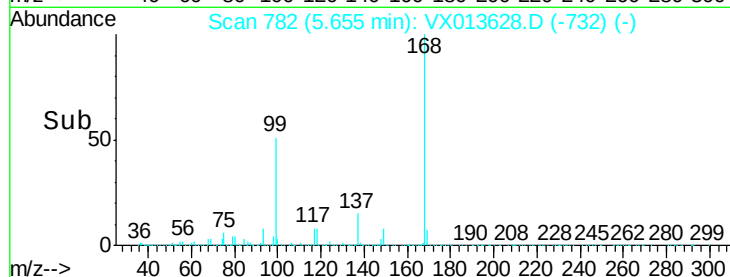
150000

100000

50000

0

Time--> 5.50 5.60 5.70



#4

Vinyl Chloride

Concen: 0.468 ug/l

RT: 1.40 min Scan# 84

Delta R.T. 0.00 min

Lab File: VX013628.D

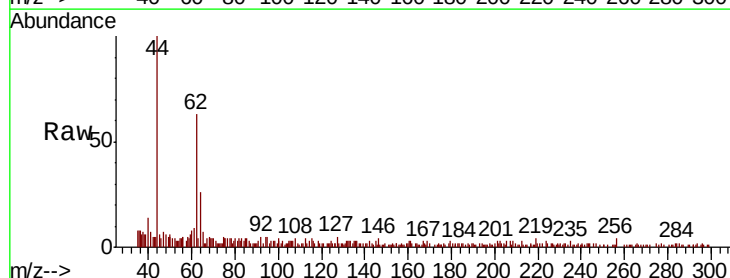
Acq: 27 Nov 2019 03:29

Tgt Ion: 62 Resp: 4263

Ion Ratio Lower Upper

62 100

64 30.3 26.0 39.0



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0

5000

4000

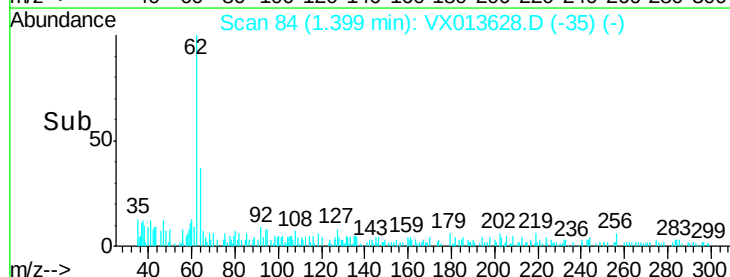
3000

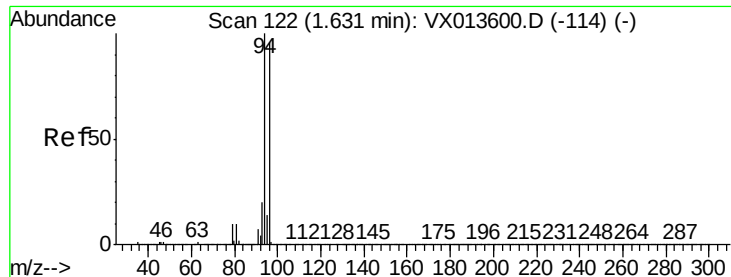
2000

1000

0

Time--> 1.35 1.40





#5

Bromomethane

Concen: 0.205 ug/l

RT: 1.64 min Scan# 124

Delta R.T. 0.01 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

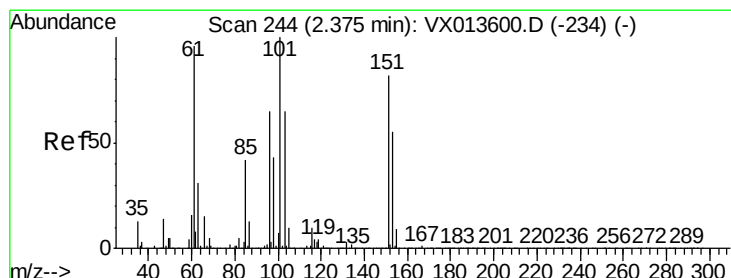
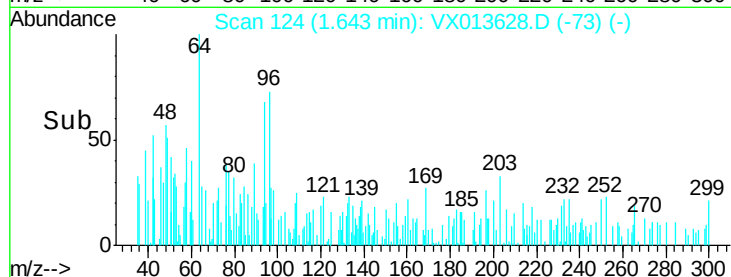
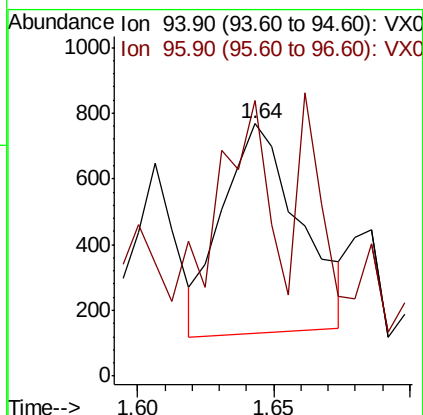
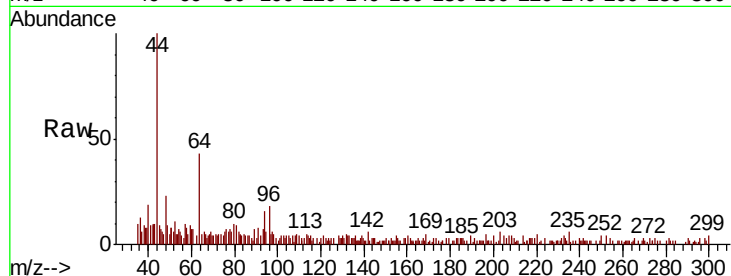
DUP-01-20191120

Tot Ion: 94 Resp: 1256

Ion Ratio Lower Upper

94 100

96 119.3 77.0 115.4#



#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.269 ug/l

RT: 2.38 min Scan# 245

Delta R.T. 0.01 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

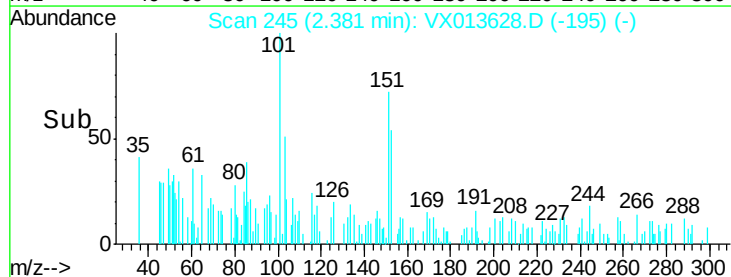
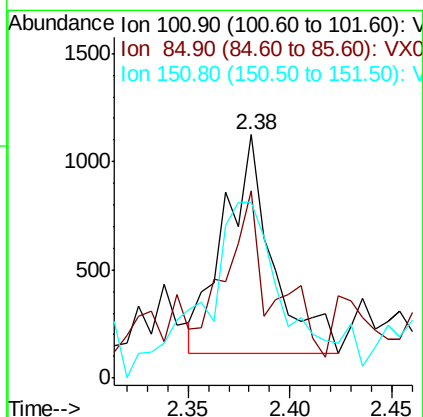
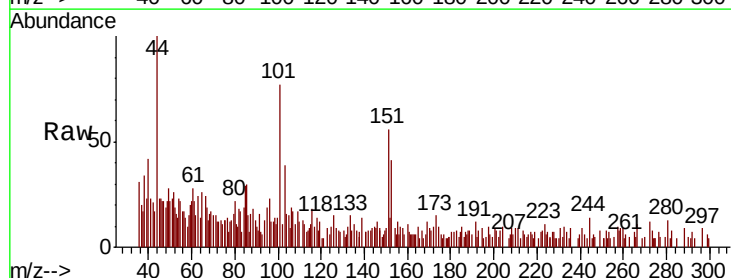
Tgt Ion: 101 Resp: 1663

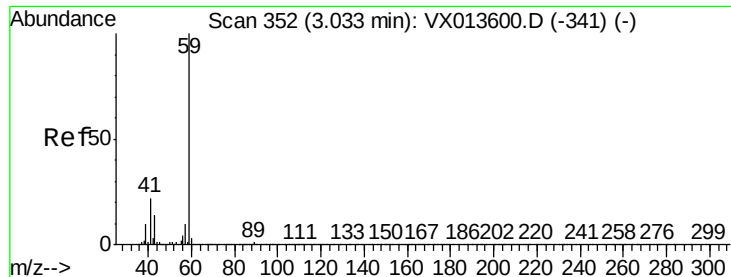
Ion Ratio Lower Upper

101 100

85 49.4 33.9 50.9

151 120.4 64.2 96.2#



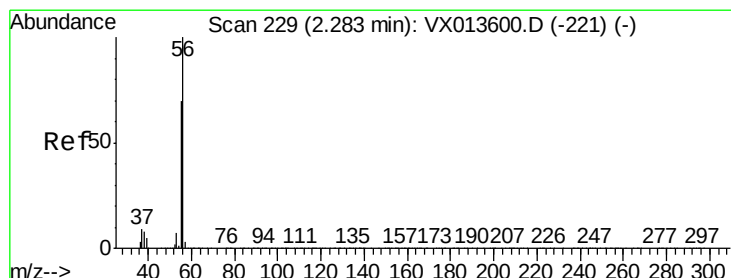
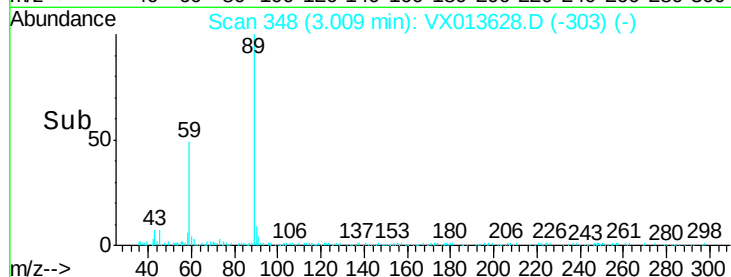
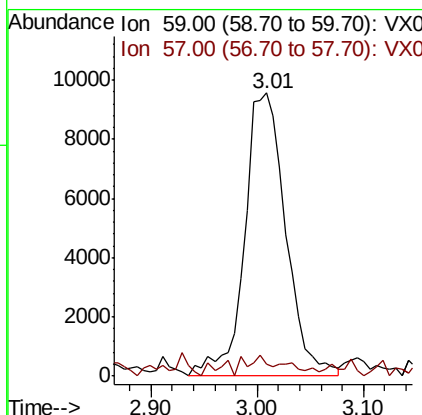
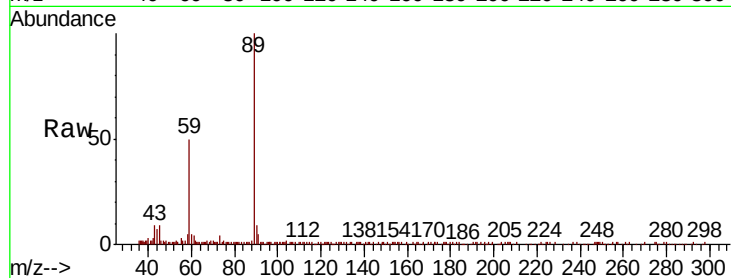


#11

Tert butyl alcohol  
Concen: 13.983 ug/l  
RT: 3.01 min Scan# 348  
Delta R.T. -0.02 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP-01-20191120

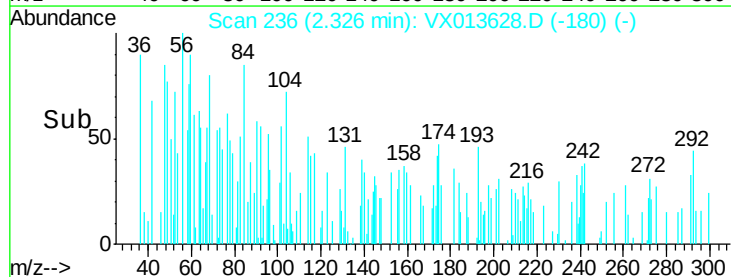
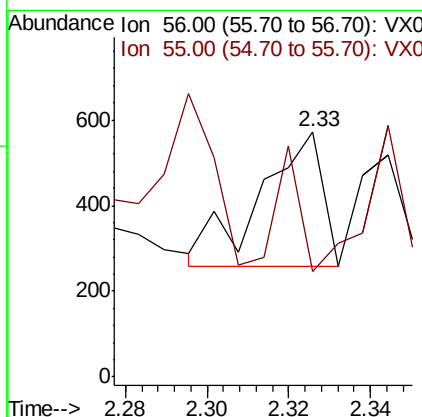
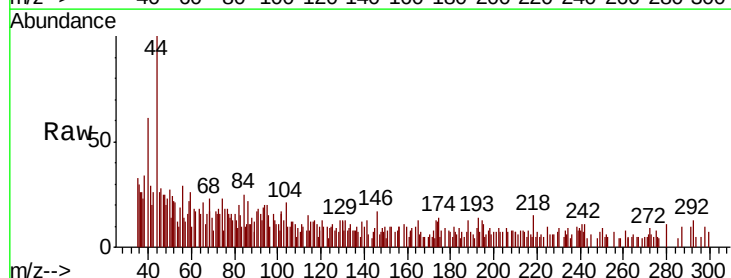
Tot Ion: 59 Resp: 25960  
Ion Ratio Lower Upper  
59 100  
57 4.0 7.8 11.6#

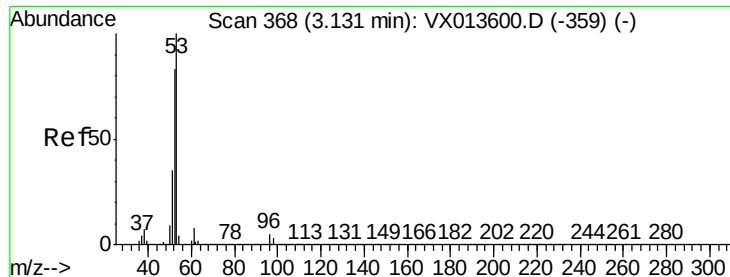


#13

Acrolein  
Concen: 6.266 ug/l  
RT: 2.33 min Scan# 236  
Delta R.T. 0.04 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

Tgt Ion: 56 Resp: 333  
Ion Ratio Lower Upper  
56 100  
55 32.1 56.2 84.4#





#15

Acrylonitrile

Concen: 0.241 ug/l

RT: 3.15 min Scan# 371

Delta R.T. 0.02 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

DUP-01-20191120

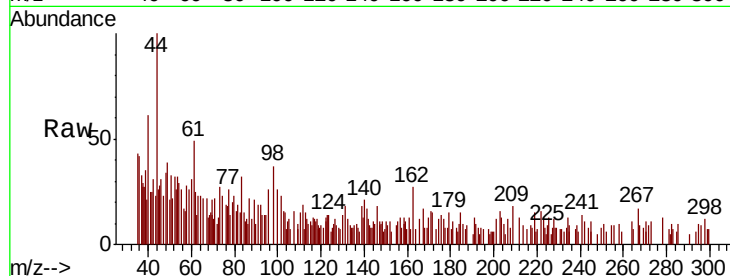
Tot Ion: 53 Resp: 924

Ion Ratio Lower Upper

53 100

52 0.0 66.2 99.2#

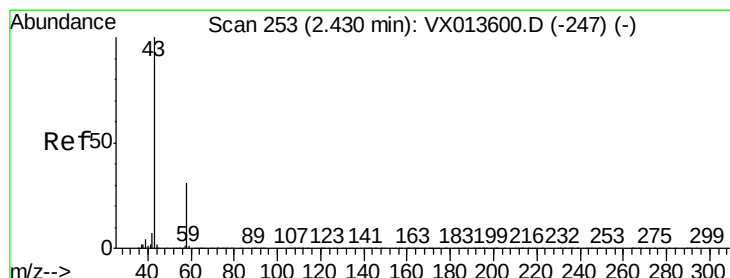
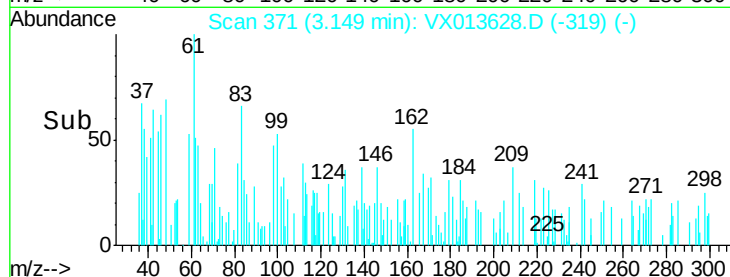
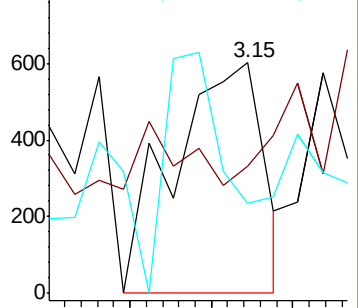
51 0.0 29.0 43.6#



Abundance Ion 53.00 (52.70 to 53.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

Ion 51.00 (50.70 to 51.70): VX0



#16

Acetone

Concen: 0.894 ug/l

RT: 2.43 min Scan# 253

Delta R.T. 0.00 min

Lab File: VX013628.D

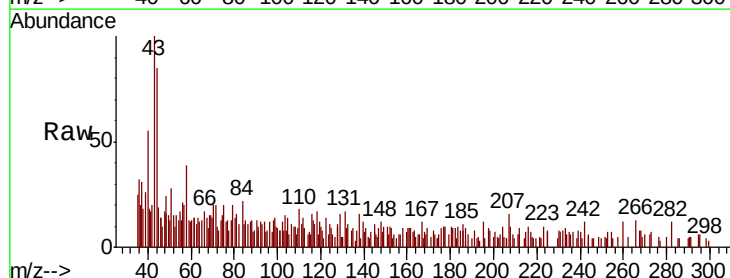
Acq: 27 Nov 2019 03:29

Tgt Ion: 43 Resp: 3319

Ion Ratio Lower Upper

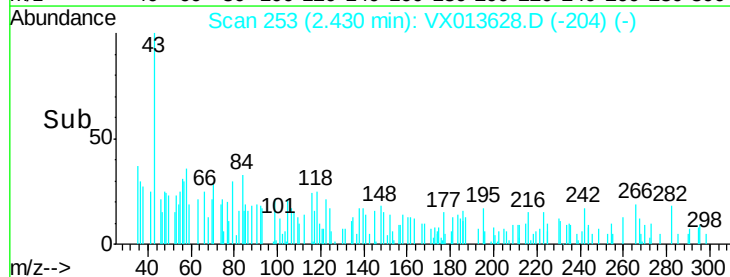
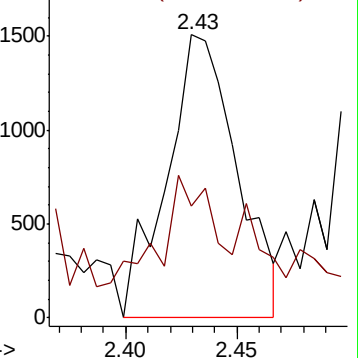
43 100

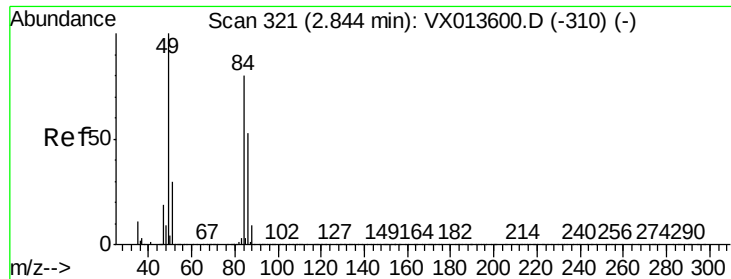
58 19.4 24.6 36.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

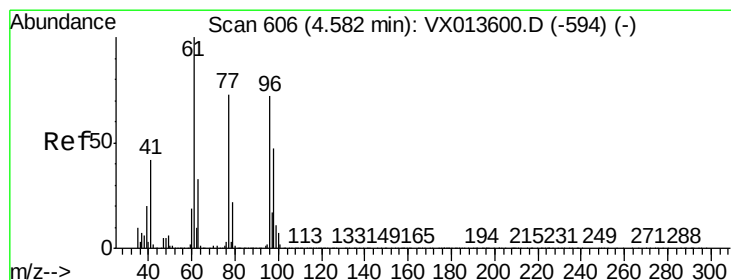
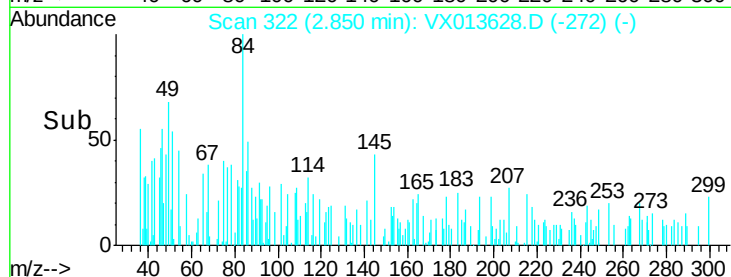
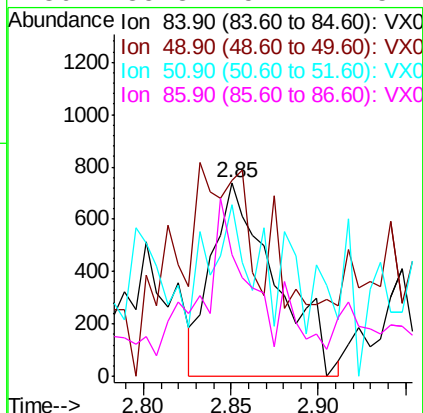
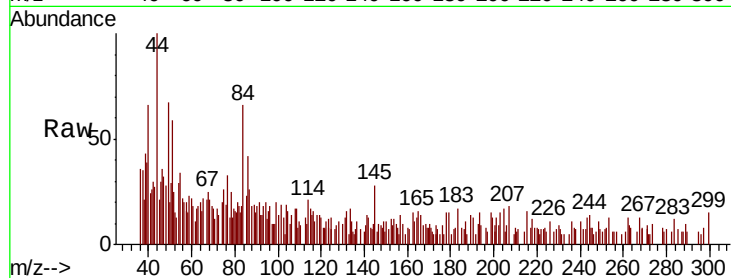




#20  
Methylene Chloride  
Concen: 0.261 ug/l  
RT: 2.85 min Scan# 322  
Delta R.T. 0.01 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

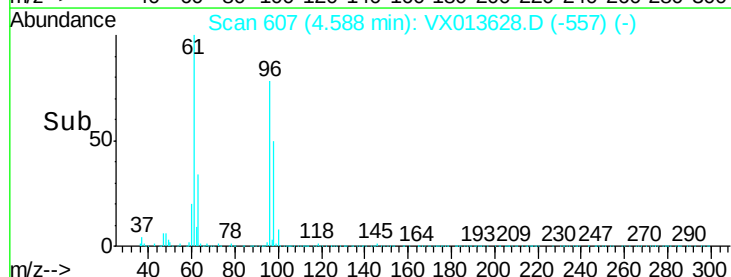
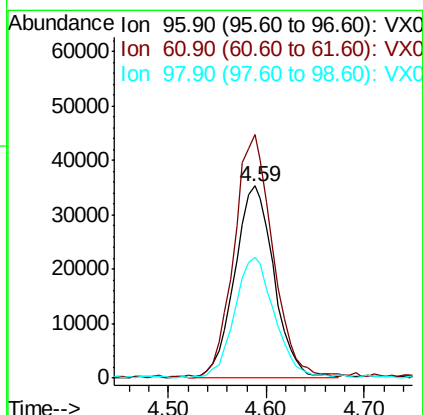
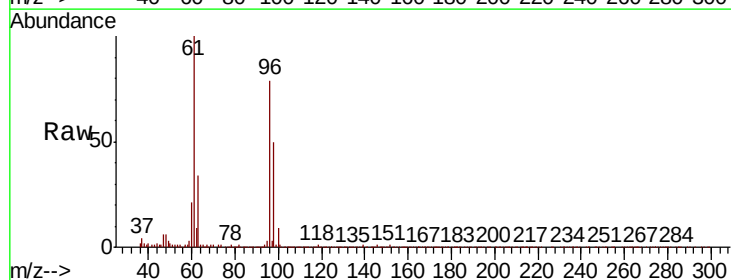
Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP-01-20191120

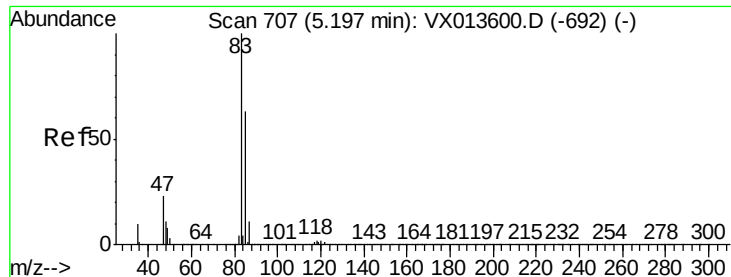
Tot Ion: 84 Resp: 1863  
Ion Ratio Lower Upper  
84 100  
49 70.4 99.7 149.5#  
51 69.4 29.9 44.9#  
86 35.3 52.2 78.4#



#27  
cis-1,2-Dichloroethene  
Concen: 12.633 ug/l  
RT: 4.59 min Scan# 607  
Delta R.T. 0.01 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

Tgt Ion: 96 Resp: 97461  
Ion Ratio Lower Upper  
96 100  
61 125.3 0.0 286.4  
98 63.2 0.0 127.4

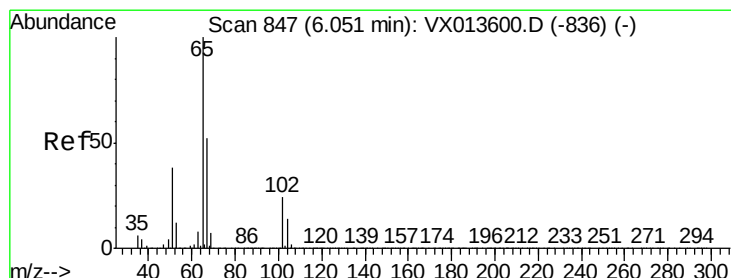
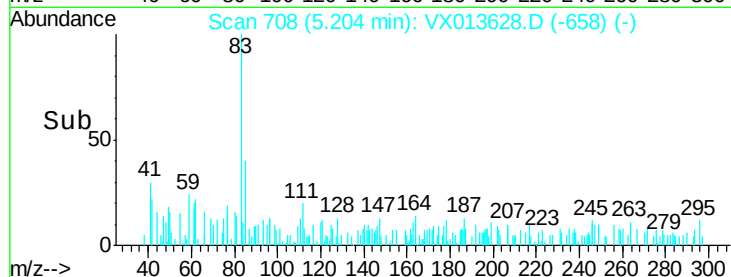
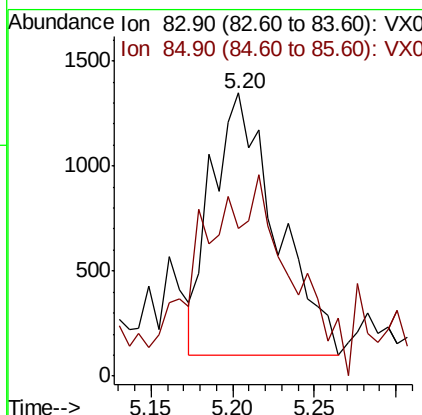
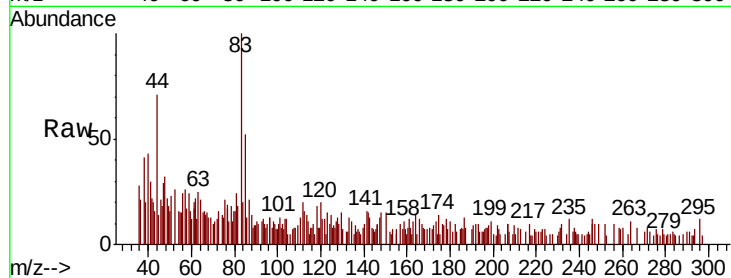




#30  
Chloroform  
Concen: 0.288 ug/l  
RT: 5.20 min Scan# 708  
Delta R.T. 0.01 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

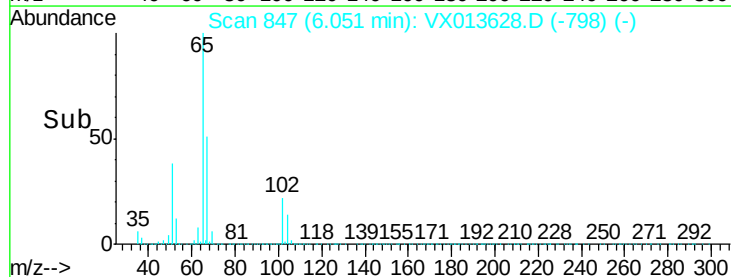
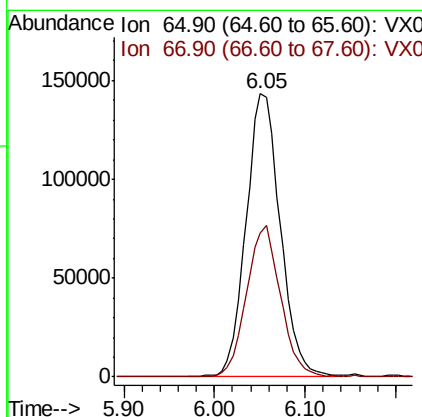
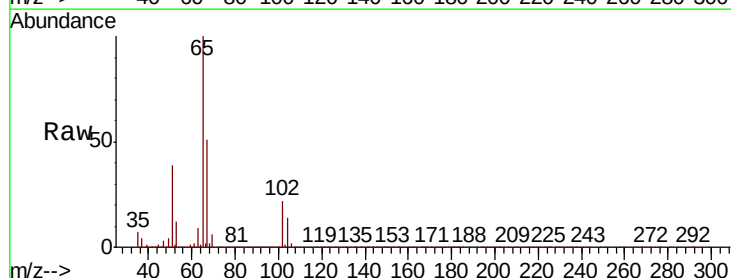
Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP-01-20191120

Tot Ion: 83 Resp: 3436  
Ion Ratio Lower Upper  
83 100  
85 38.7 50.2 75.4#

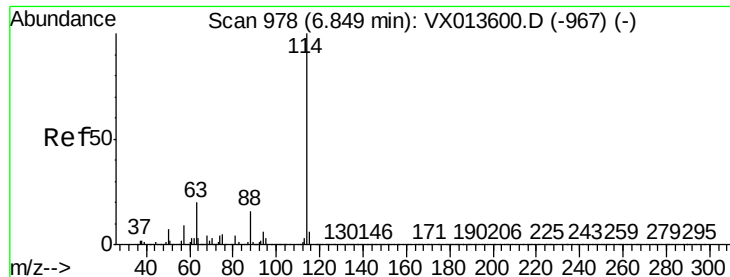


#33  
1,2-Dichloroethane-d4  
Concen: 49.651 ug/l  
RT: 6.05 min Scan# 847  
Delta R.T. 0.00 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

Tgt Ion: 65 Resp: 373437  
Ion Ratio Lower Upper  
65 100  
67 53.4 0.0 104.4







#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

DUP-01-20191120

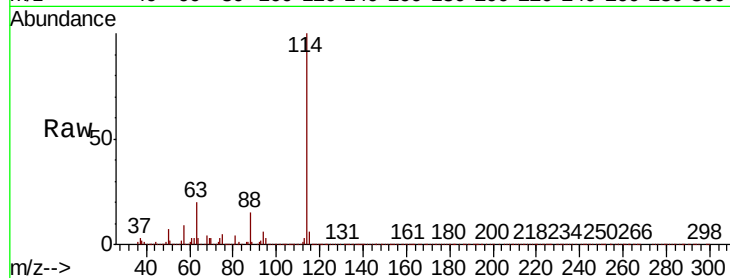
Tot Ion:114 Resp: 1040166

Ion Ratio Lower Upper

114 100

63 19.4 0.0 39.6

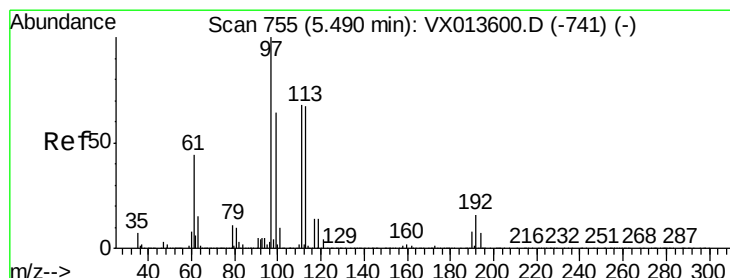
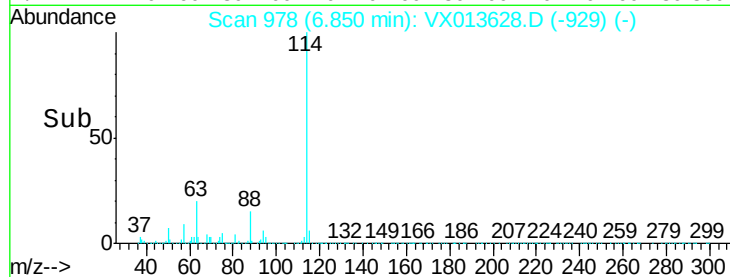
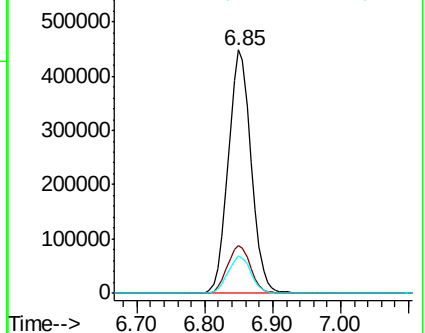
88 15.3 0.0 31.4



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: 48.878 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

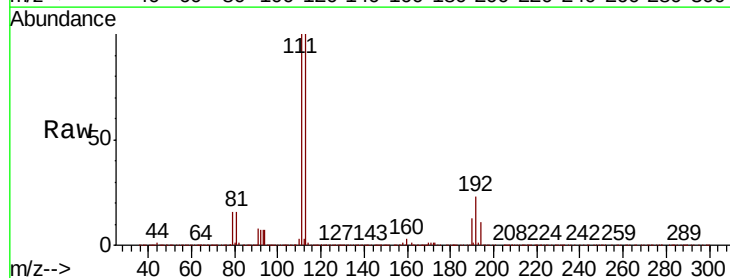
Tgt Ion:113 Resp: 314307

Ion Ratio Lower Upper

113 100

111 100.9 83.6 125.4

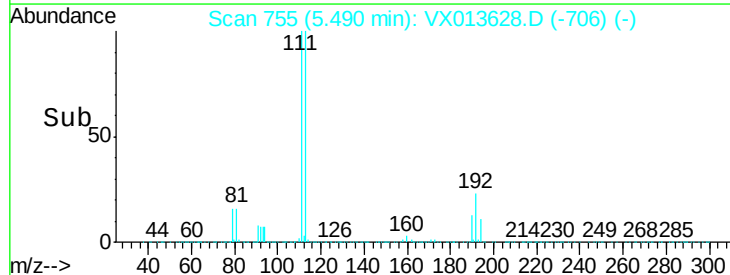
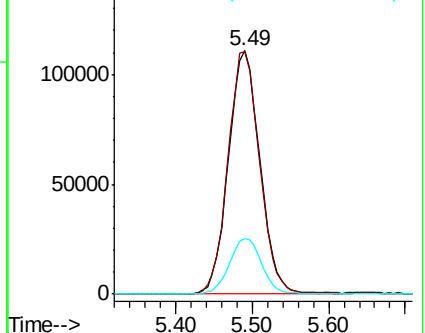
192 23.6 19.2 28.8

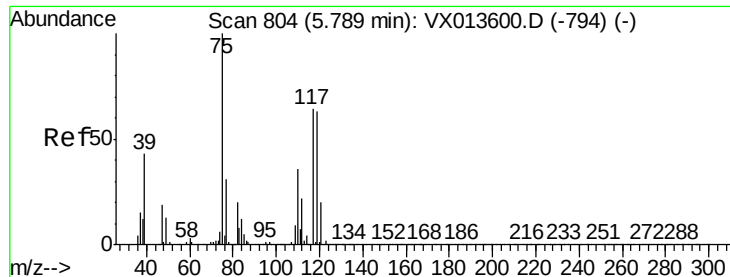


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.602 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.14 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

DUP-01-20191120

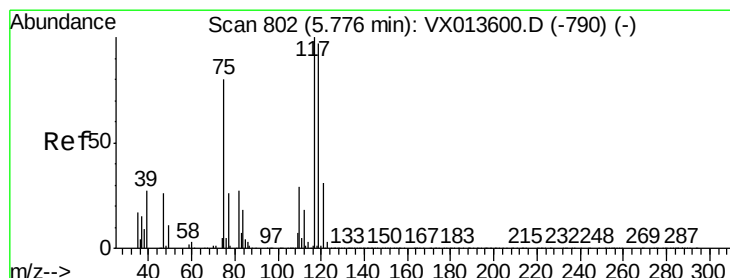
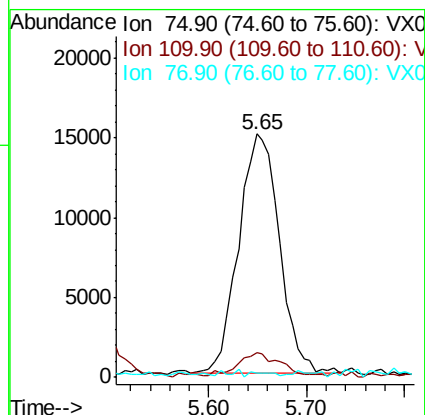
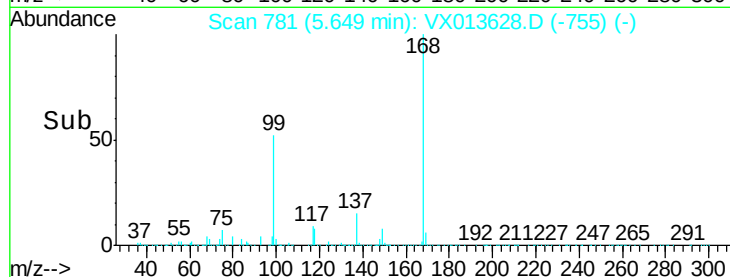
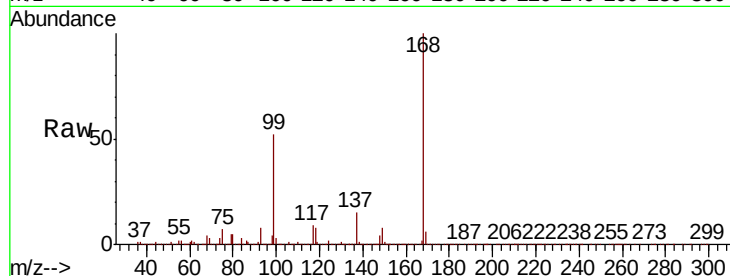
Tot Ion: 75 Resp: 43451

Ion Ratio Lower Upper

75 100

110 11.3 18.1 54.1#

77 1.3 24.5 36.7#



#38

Carbon Tetrachloride

Concen: 6.481 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.13 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

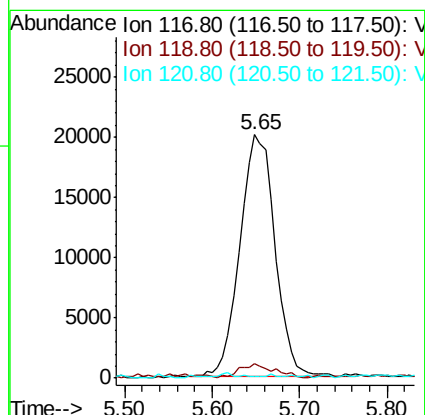
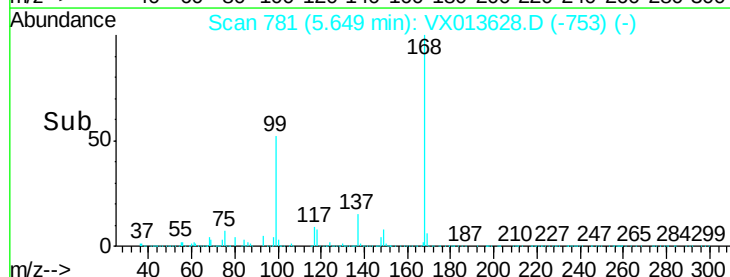
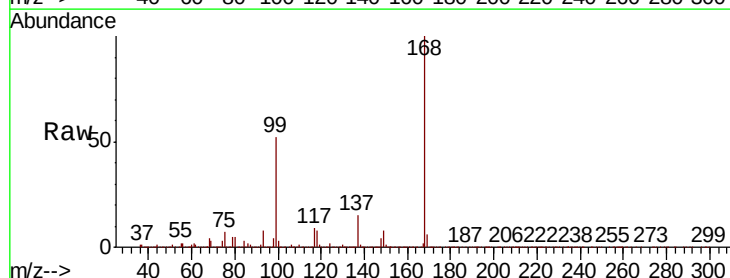
Tgt Ion: 117 Resp: 56423

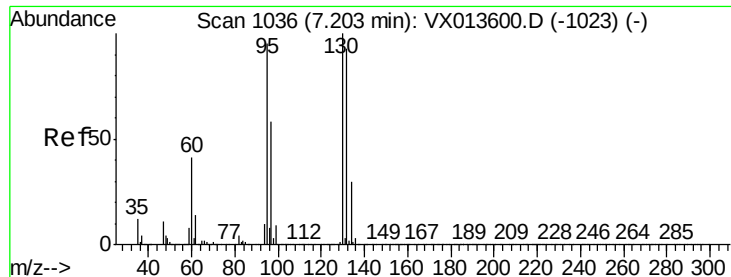
Ion Ratio Lower Upper

117 100

119 5.6 77.5 116.3#

121 0.0 25.0 37.6#





#44

Trichloroethene

Concen: 87.273 ug/l

RT: 7.20 min Scan# 1036

Delta R.T. 0.00 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

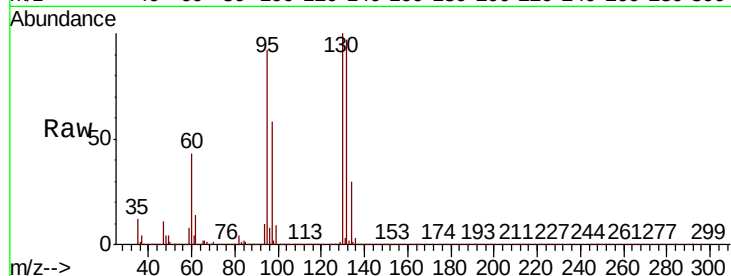
DUP-01-20191120

Tot Ion:130 Resp: 688793

Ion Ratio Lower Upper

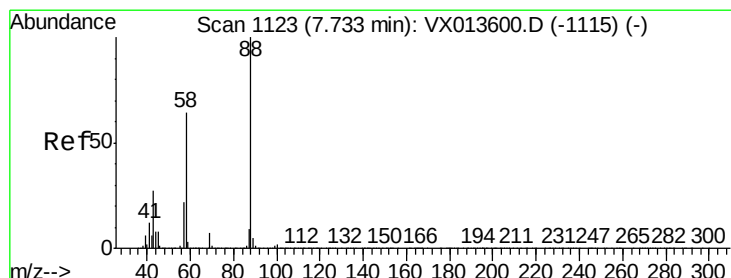
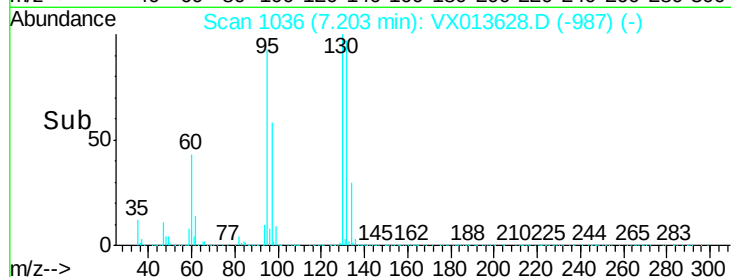
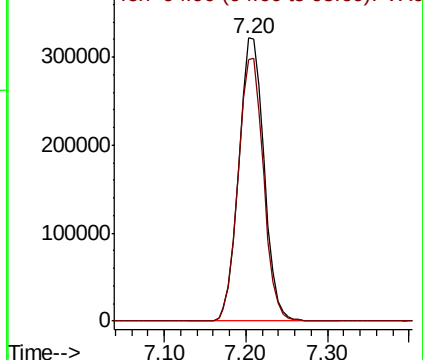
130 100

95 92.4 0.0 190.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0



#49

1,4-Dioxane

Concen: 1.540 ug/l

RT: 7.73 min Scan# 1122

Delta R.T. -0.01 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

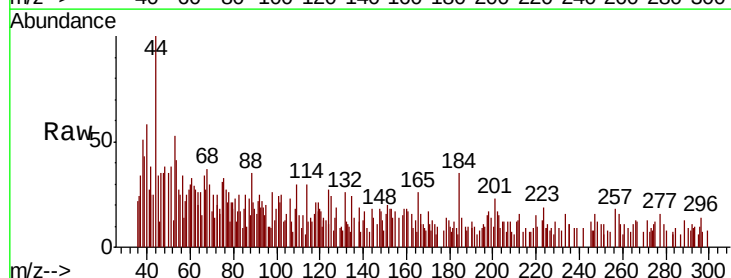
Tgt Ion: 88 Resp: 292

Ion Ratio Lower Upper

88 100

43 0.0 25.8 38.6#

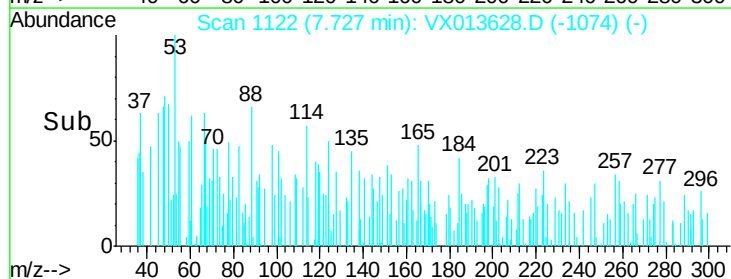
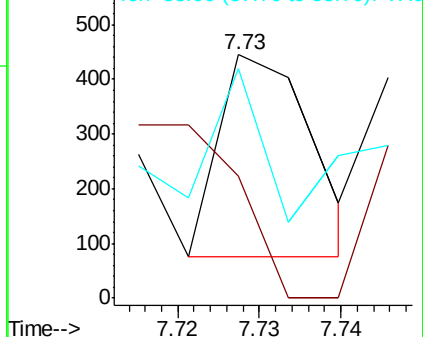
58 0.0 54.6 82.0#

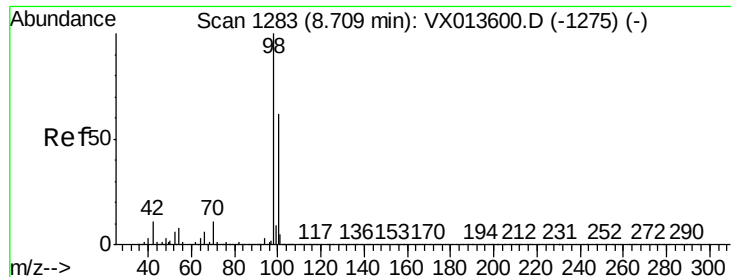


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

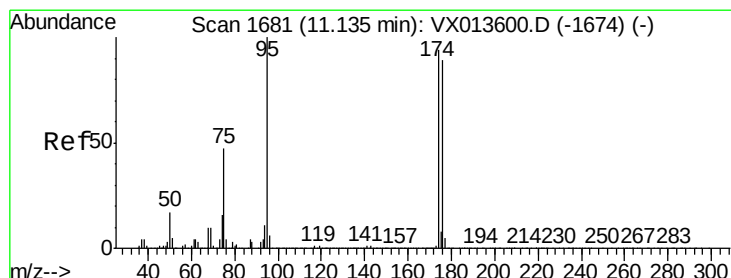
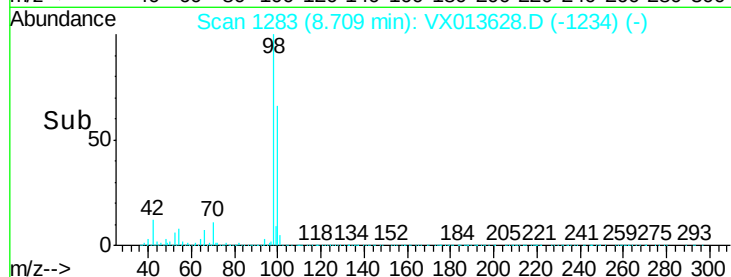
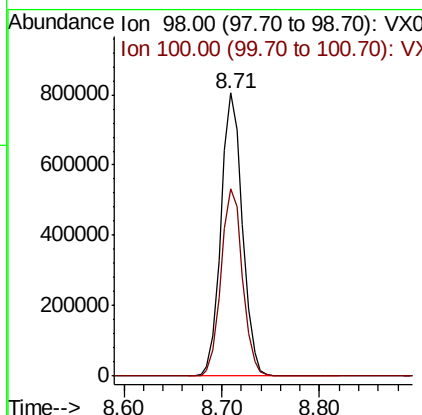
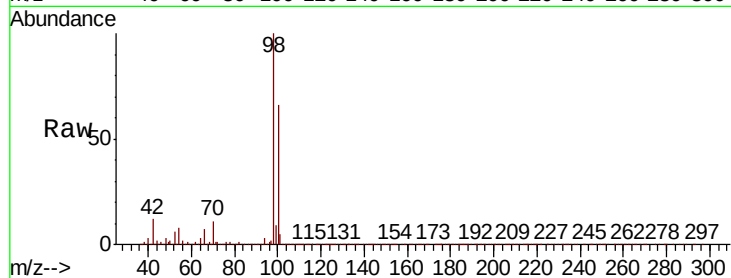




#50  
Toluene-d8  
Concen: 48.858 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

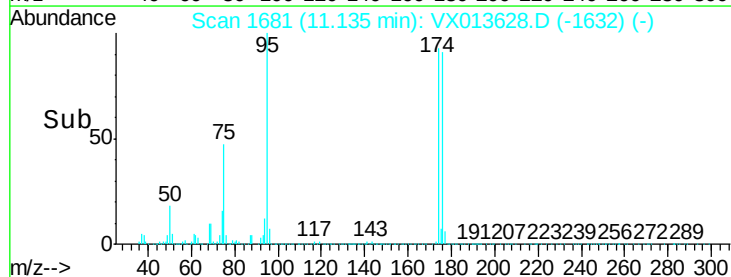
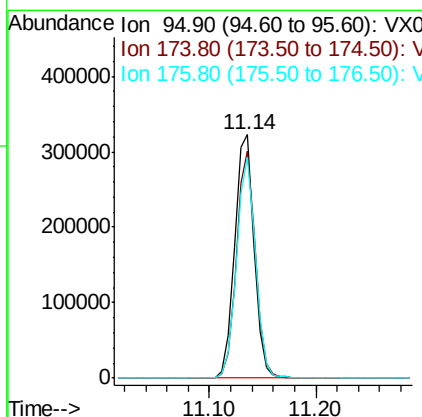
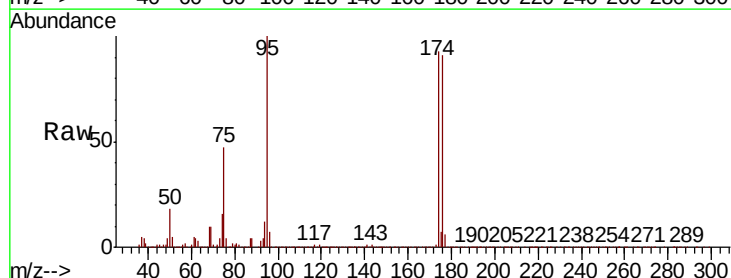
Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP-01-20191120

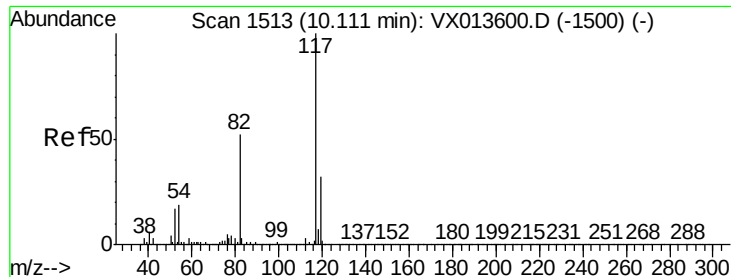
Tot Ion: 98 Resp: 1224067  
Ion Ratio Lower Upper  
98 100  
100 66.6 53.1 79.7



#62  
4-Bromofluorobenzene  
Concen: 46.068 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. 0.00 min  
Lab File: VX013628.D  
Acq: 27 Nov 2019 03:29

Tgt Ion: 95 Resp: 416202  
Ion Ratio Lower Upper  
95 100  
174 90.1 0.0 180.0  
176 87.8 0.0 173.6





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

DUP-01-20191120

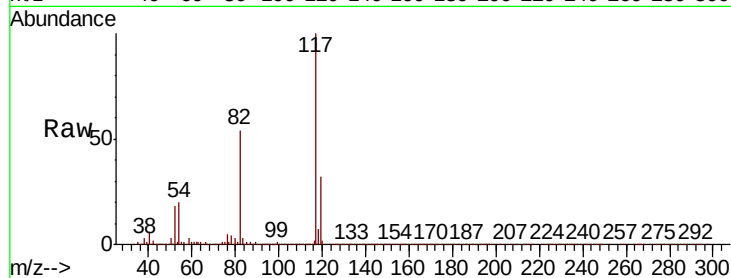
Tot Ion:117 Resp: 928055

Ion Ratio Lower Upper

117 100

82 53.9 41.8 62.8

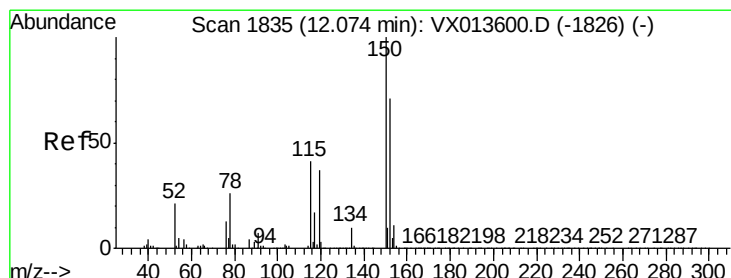
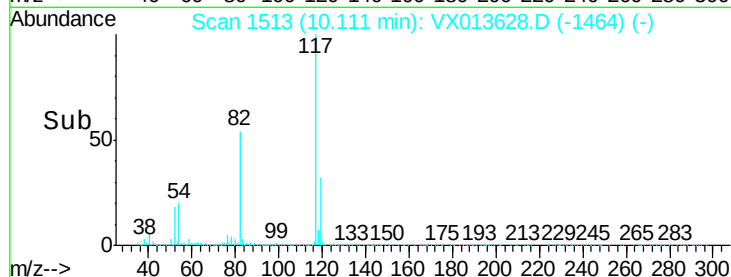
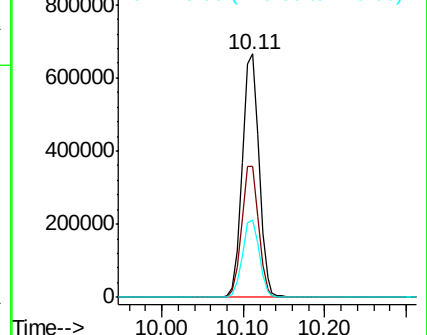
119 31.9 25.8 38.8



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

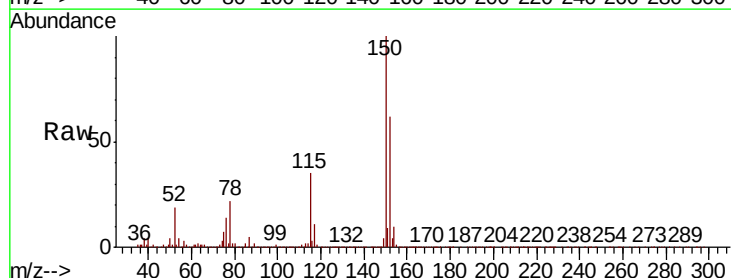
Tgt Ion:152 Resp: 414761

Ion Ratio Lower Upper

152 100

115 55.8 38.4 115.1

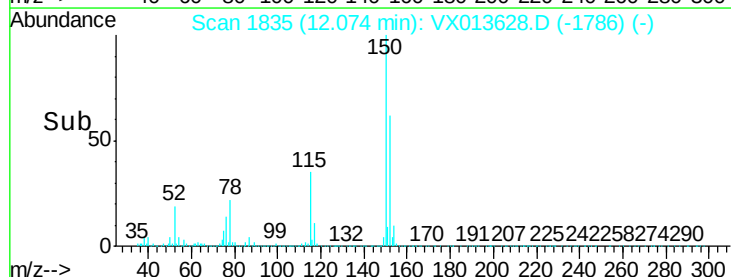
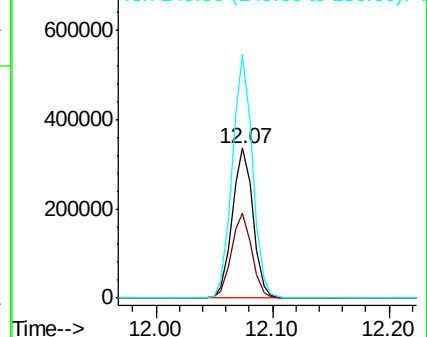
150 159.1 0.0 346.8

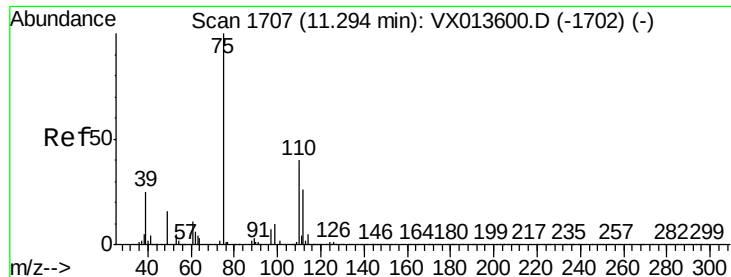


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 22.124 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Instrument :

MSVOA\_X

ClientSampleId :

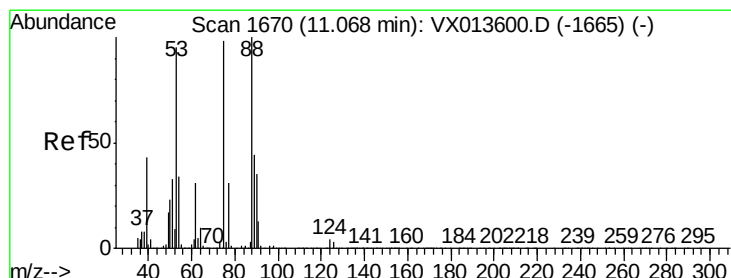
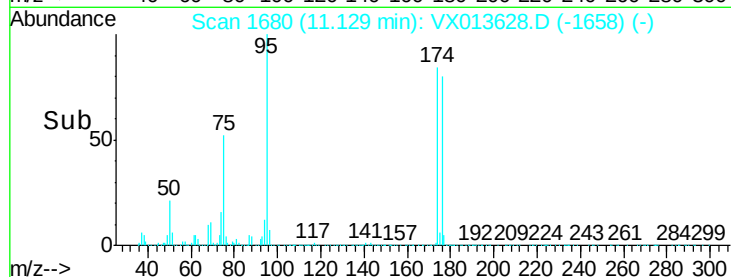
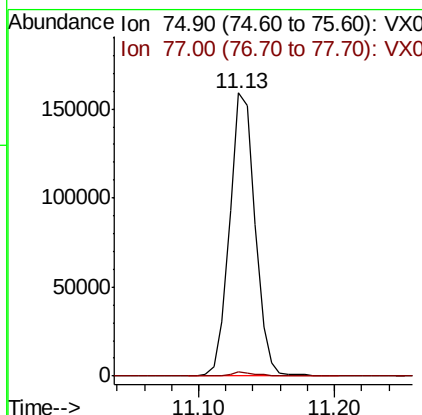
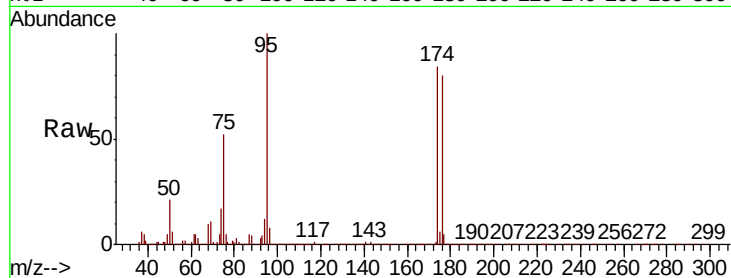
DUP-01-20191120

Tot Ion: 75 Resp: 206392

Ion Ratio Lower Upper

75 100

77 1.5 19.1 57.5#



#81

trans-1,4-Dichloro-2-butene

Concen: 60.528 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX013628.D

Acq: 27 Nov 2019 03:29

Tgt Ion: 75 Resp: 206392

Ion Ratio Lower Upper

75 100

53 0.4 78.2 117.2#

89 0.0 35.4 53.2#

