

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX050219\  
 Data File : VX009294.D  
 Acq On : 02 May 2019 23:30  
 Operator : JC/SP  
 Sample : K2660-05DL 4X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP-0512-190429DL

Quant Time: May 03 02:47:41 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 30 07:03:50 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 189300   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 306509   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 271001   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 119624   | 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   | 126683   | 49.02 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.04% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 93385    | 48.47 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.94% |          |
| 50) Toluene-d8              | 8.71  | 98   | 387978   | 49.87 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.74% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 129536   | 45.83 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.66% |          |

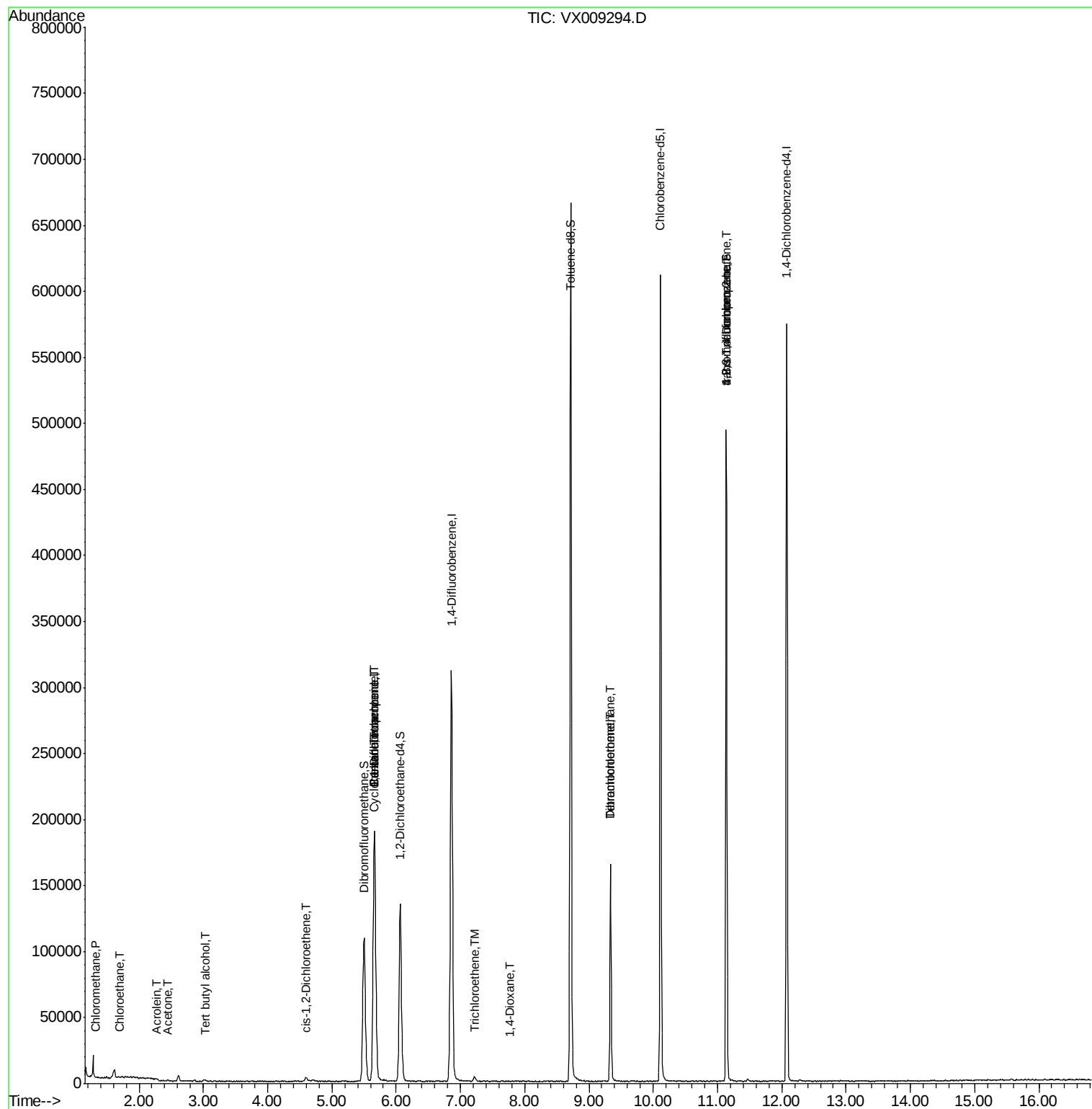
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 517      | 0.217     | ug/l   | 100    |
| 6) Chloroethane                | 1.70  | 64   | 328      | 0.220     | ug/l # | 43     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 930      | 1.555     | ug/l # | 73     |
| 13) Acrolein                   | 2.28  | 56   | 113      | 0.209     | ug/l # | 44     |
| 16) Acetone                    | 2.44  | 43   | 1377     | 0.992     | ug/l   | 90     |
| 27) cis-1,2-Dichloroethene     | 4.59  | 96   | 1686     | 0.733     | ug/l   | 96     |
| 28) Bromochloromethane         | 5.01  | 49   | 41       | Below Cal | #      | 20     |
| 31) Cyclohexane                | 5.65  | 56   | 3946     | 1.033     | ug/l # | 38     |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 14536    | 5.103     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 17470    | 6.750     | ug/l # | 15     |
| 44) Trichloroethene            | 7.22  | 130  | 1346     | 0.632     | ug/l   | 77     |
| 49) 1,4-Dioxane                | 7.76  | 88   | 20       | 0.313     | ug/l # | 1      |
| 60) Dibromochloromethane       | 9.34  | 129  | 30530    | 14.298    | ug/l # | 11     |
| 64) Tetrachloroethene          | 9.34  | 164  | 32435    | 17.448    | ug/l   | 97     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 65931    | 23.760    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 65931    | 60.794    | ug/l # | 10     |

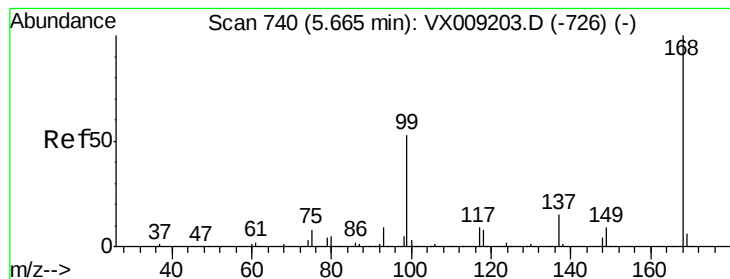
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX050219\  
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DUP-0512-190429DL

Quant Time: May 03 02:47:41 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 30 07:03:50 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.01 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

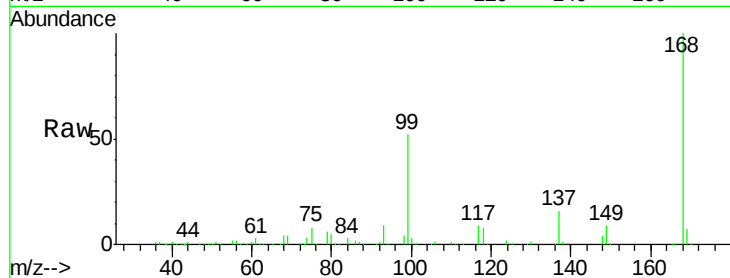
DUP-0512-190429DL

Tot Ion:168 Resp: 189300

Ion Ratio Lower Upper

168 100

99 52.0 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

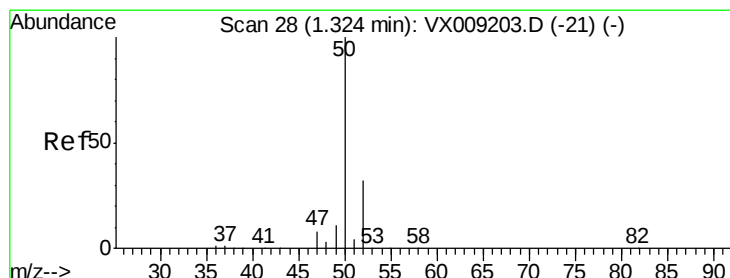
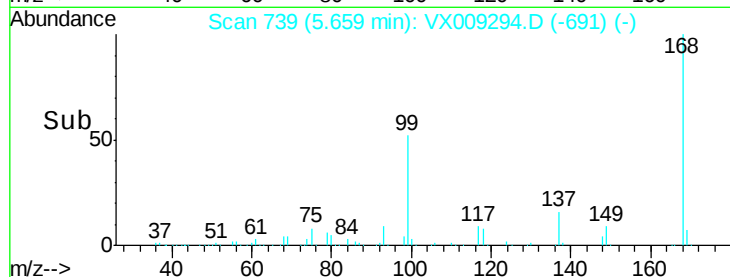
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.217 ug/l

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX009294.D

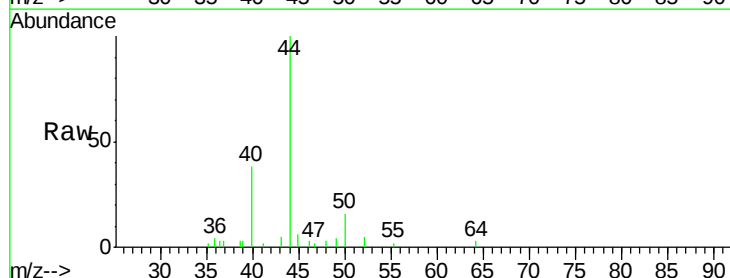
Acq: 02 May 2019 23:30

Tgt Ion: 50 Resp: 517

Ion Ratio Lower Upper

50 100

52 32.3 25.9 38.9



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

400

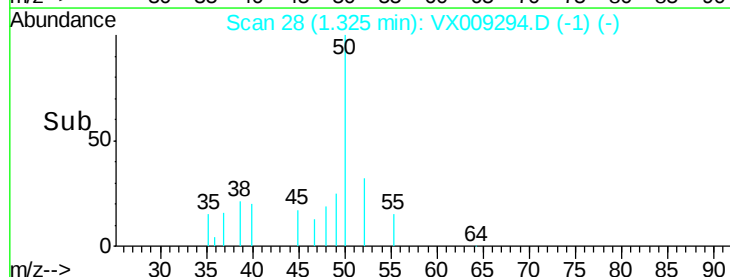
300

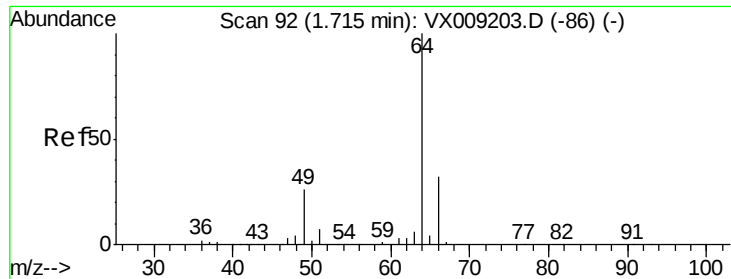
200

100

0

Time--> 1.30 1.35





#6

Chloroethane

Concen: 0.220 ug/l

RT: 1.70 min Scan# 89

Delta R.T. -0.02 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

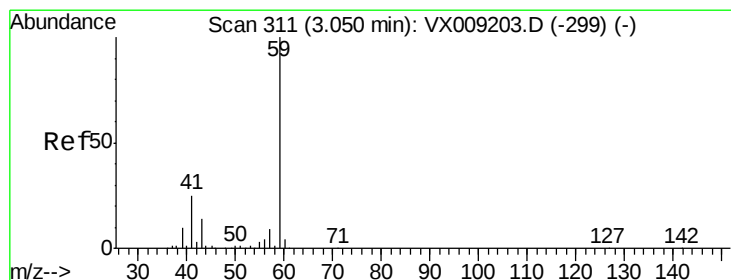
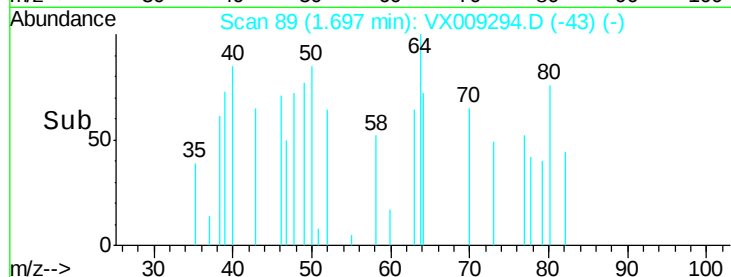
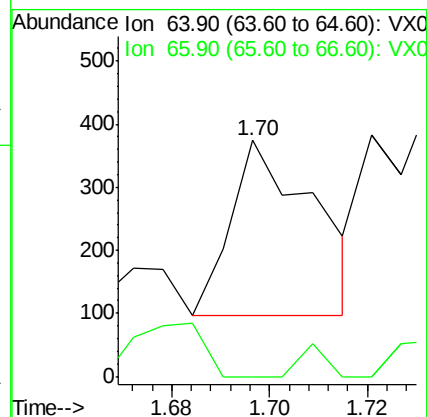
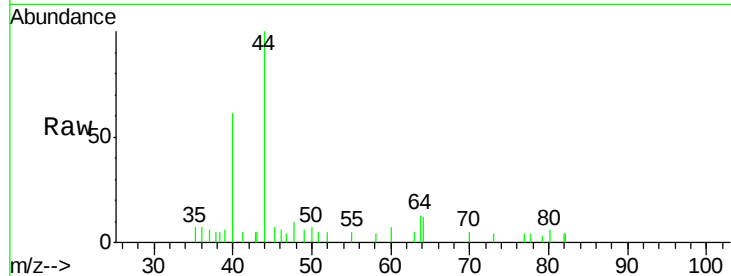
DUP-0512-190429DL

Tot Ion: 64 Resp: 328

Ion Ratio Lower Upper

64 100

66 0.0 25.3 37.9#



#11

Tert butyl alcohol

Concen: 1.555 ug/l

RT: 3.03 min Scan# 307

Delta R.T. -0.02 min

Lab File: VX009294.D

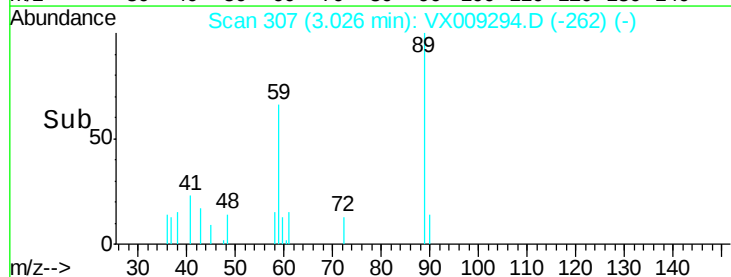
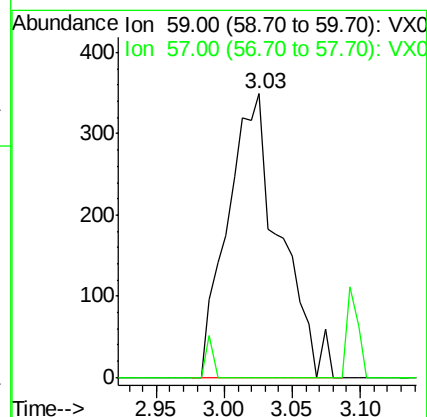
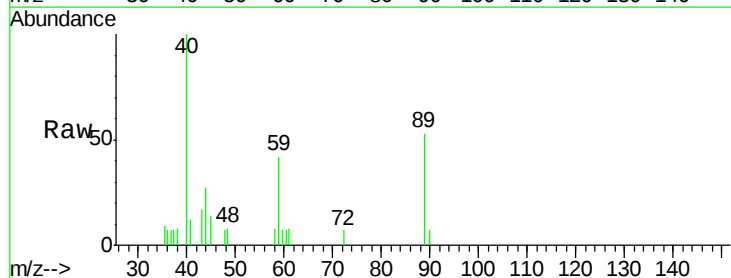
Acq: 02 May 2019 23:30

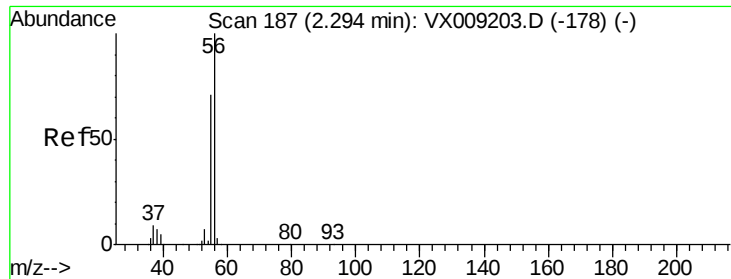
Tgt Ion: 59 Resp: 930

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.2#





#13

Acrolein

Concen: 0.209 ug/l

RT: 2.28 min Scan# 184

Delta R.T. -0.02 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

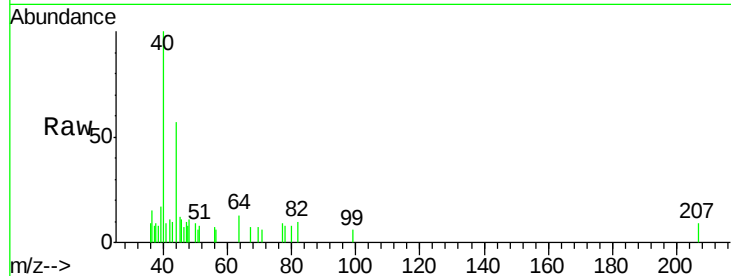
DUP-0512-190429DL

Tot Ion: 56 Resp: 113

Ion Ratio Lower Upper

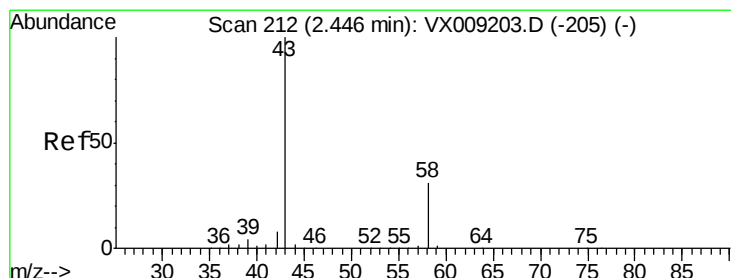
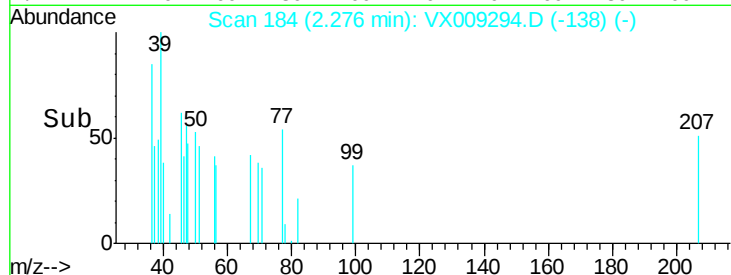
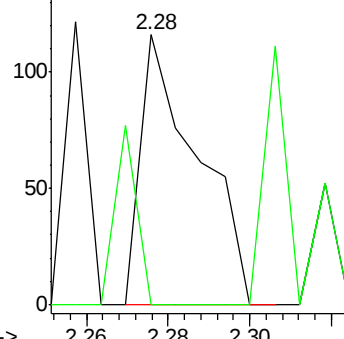
56 100

55 24.8 56.6 85.0#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 0.992 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX009294.D

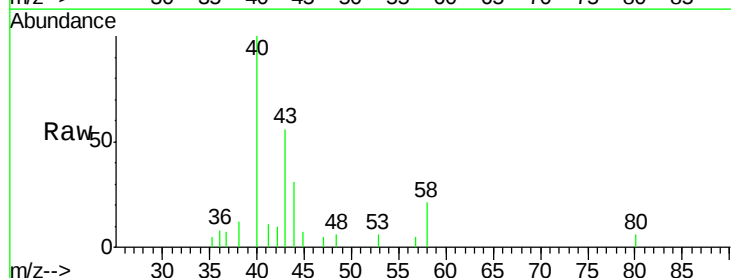
Acq: 02 May 2019 23:30

Tgt Ion: 43 Resp: 1377

Ion Ratio Lower Upper

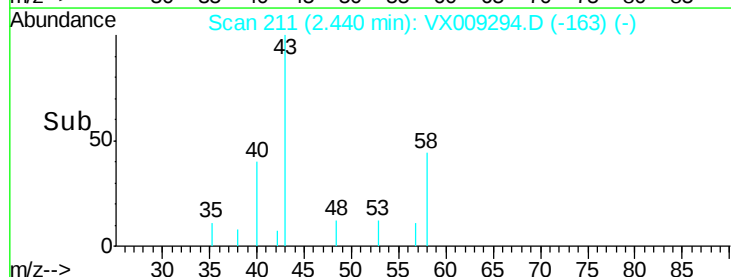
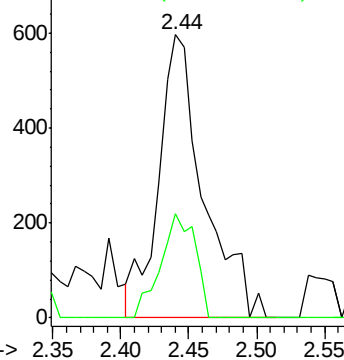
43 100

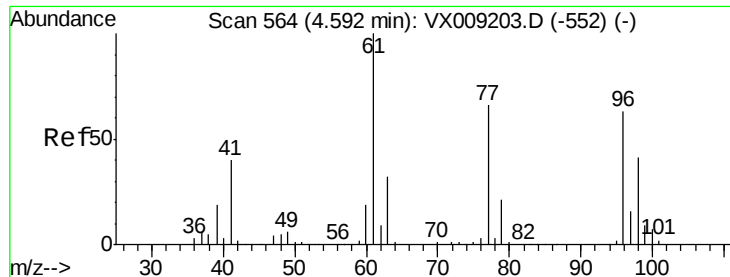
58 36.9 24.9 37.3



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



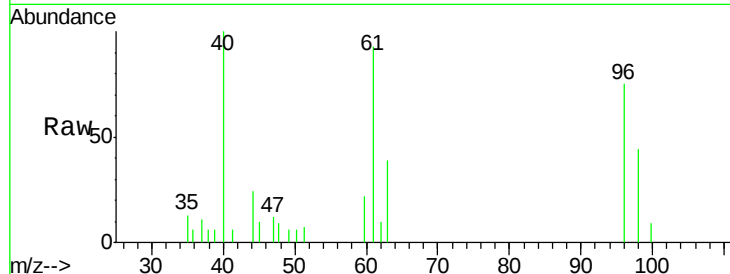


#27

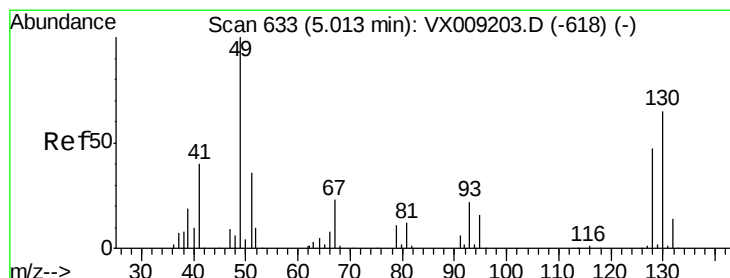
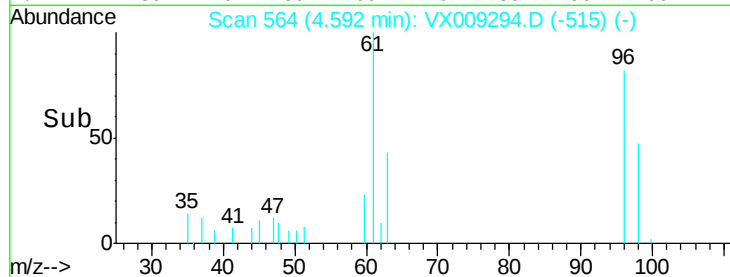
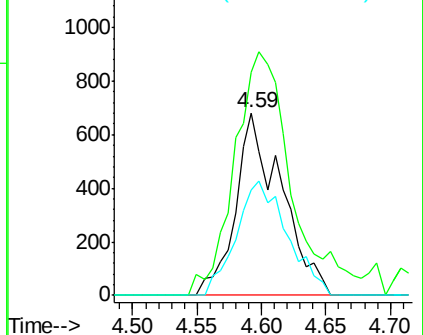
cis-1,2-Dichloroethene  
Concen: 0.733 ug/l  
RT: 4.59 min Scan# 564  
Delta R.T. 0.00 min  
Lab File: VX009294.D  
Acq: 02 May 2019 23:30

Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP-0512-190429DL

Tot Ion: 96 Resp: 1686  
Ion Ratio Lower Upper  
96 100  
61 166.1 0.0 324.0  
98 69.9 0.0 130.4



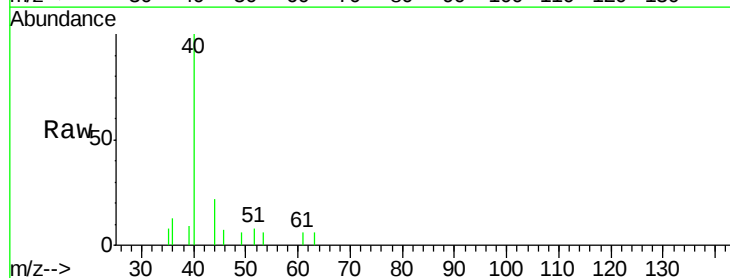
Abundance Ion 95.90 (95.60 to 96.60): VX0  
Ion 60.90 (60.60 to 61.60): VX0  
Ion 97.90 (97.60 to 98.60): VX0



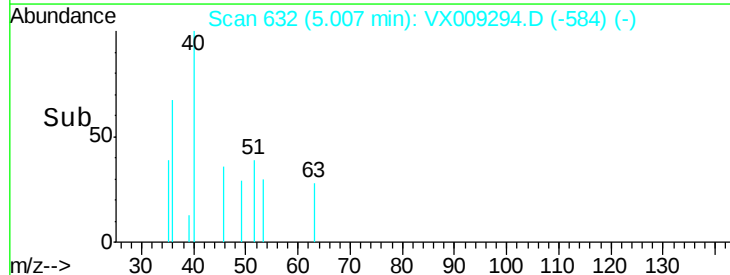
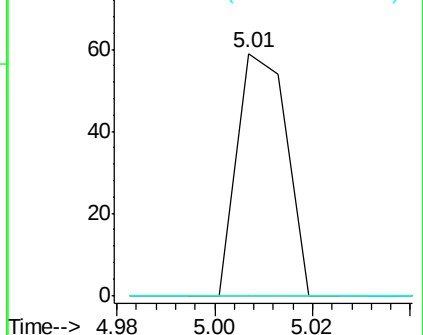
#28

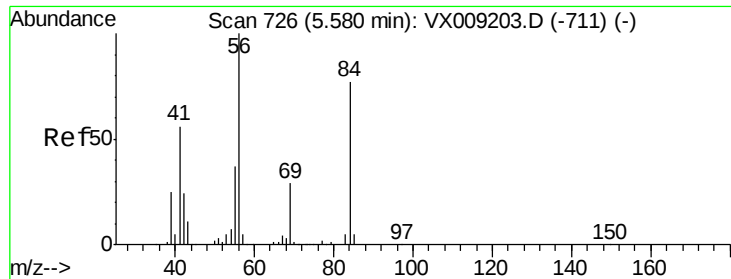
Bromochloromethane  
Concen: Below Cal  
RT: 5.01 min Scan# 632  
Delta R.T. -0.01 min  
Lab File: VX009294.D  
Acq: 02 May 2019 23:30

Tgt Ion: 49 Resp: 41  
Ion Ratio Lower Upper  
49 100  
129 0.0 0.0 3.8  
130 0.0 51.2 76.8#



Abundance Ion 48.90 (48.60 to 49.60): VX0  
Ion 128.80 (128.50 to 129.50): V  
Ion 129.80 (129.50 to 130.50): V

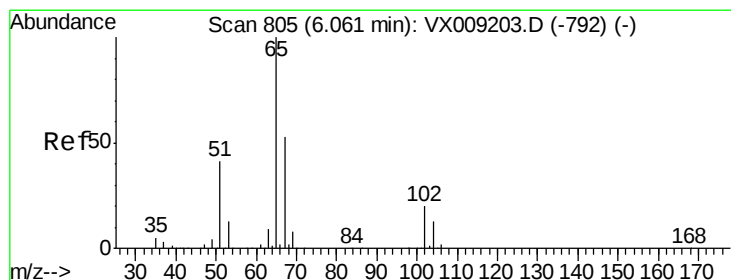
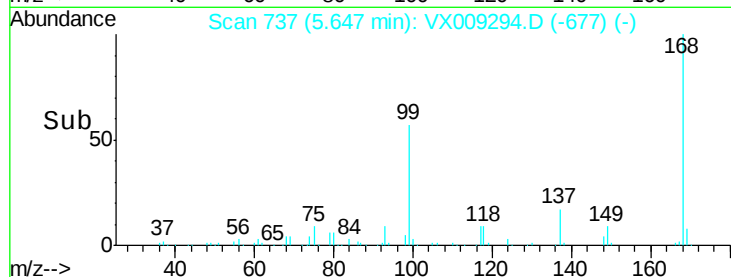
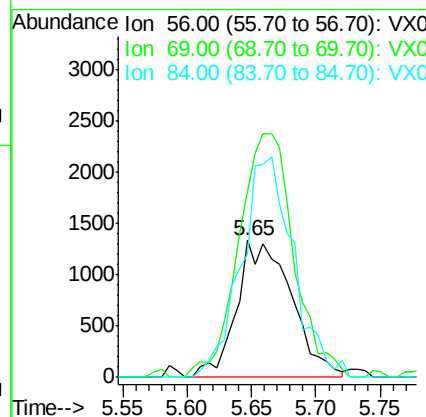
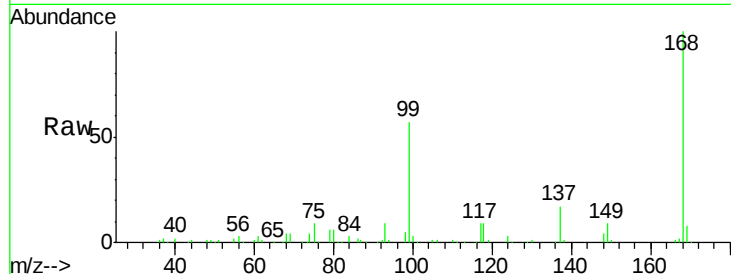




#31  
Cyclohexane  
Concen: 1.033 ug/l  
RT: 5.65 min Scan# 737  
Delta R.T. 0.07 min  
Lab File: VX009294.D  
Acq: 02 May 2019 23:30

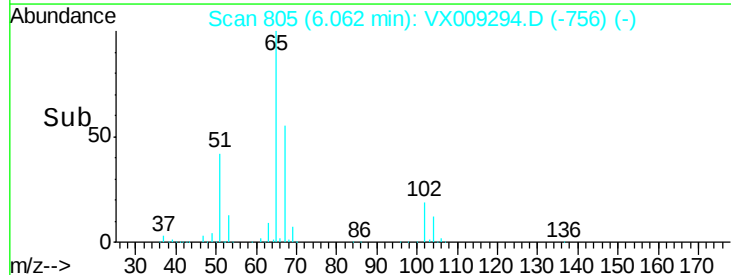
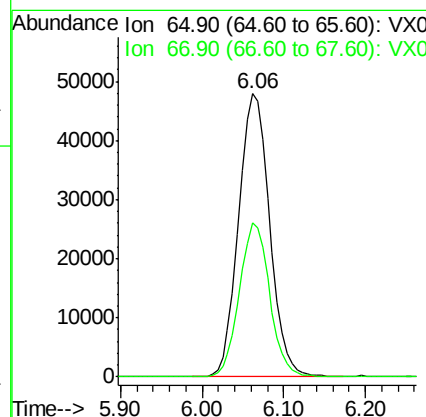
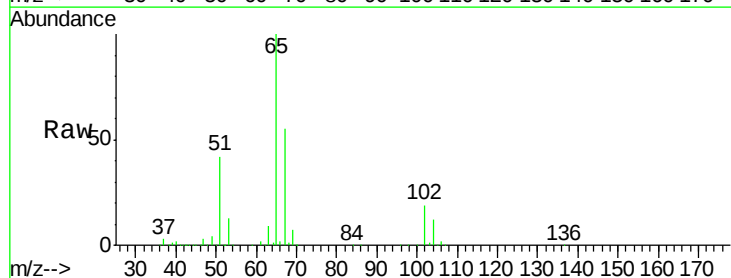
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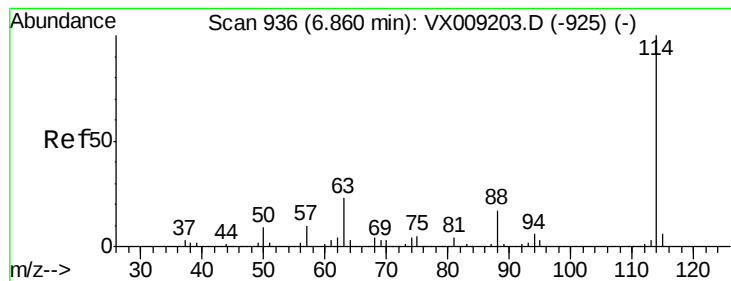
Tot Ion: 56 Resp: 3946  
Ion Ratio Lower Upper  
56 100  
69 129.7 23.4 35.0#  
84 90.1 61.9 92.9



#33  
1,2-Dichloroethane-d4  
Concen: 49.023 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. 0.00 min  
Lab File: VX009294.D  
Acq: 02 May 2019 23:30

Tgt Ion: 65 Resp: 126683  
Ion Ratio Lower Upper  
65 100  
67 53.1 0.0 106.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. 0.00 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

DUP-0512-190429DL

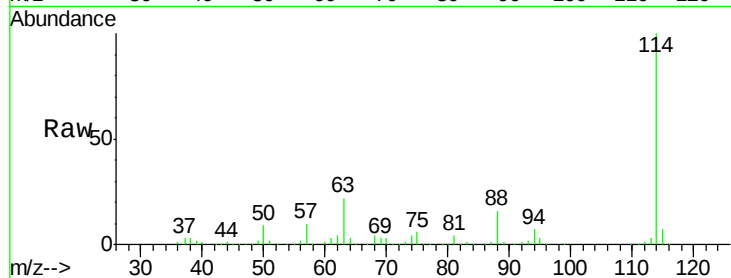
Tot Ion:114 Resp: 306509

Ion Ratio Lower Upper

114 100

63 22.2 0.0 45.6

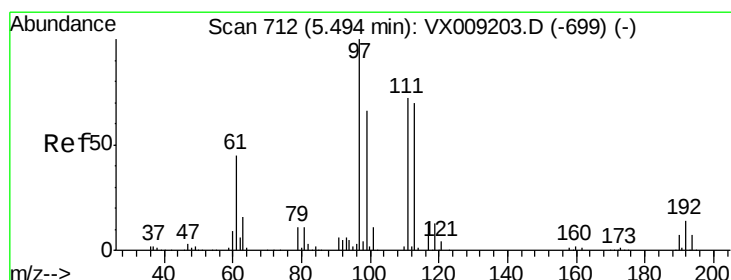
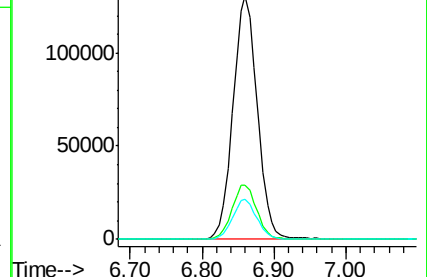
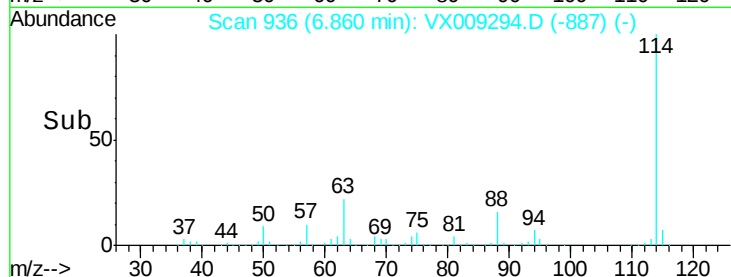
88 16.3 0.0 33.2



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: 48.465 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.01 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

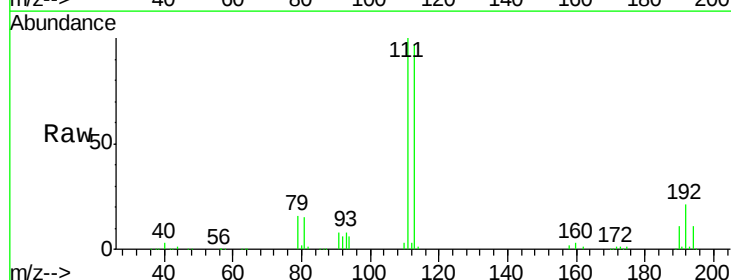
Tgt Ion:113 Resp: 93385

Ion Ratio Lower Upper

113 100

111 103.0 82.8 124.2

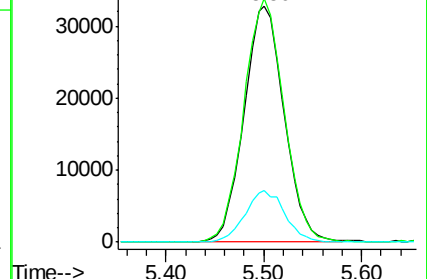
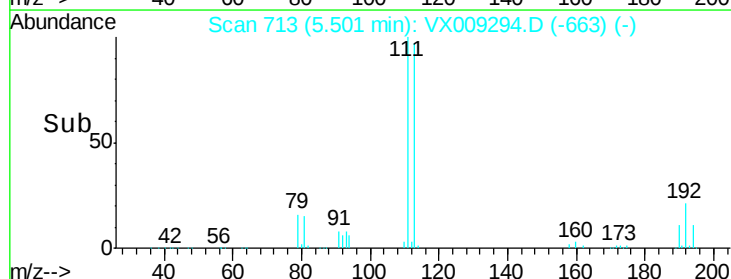
192 21.7 17.0 25.6

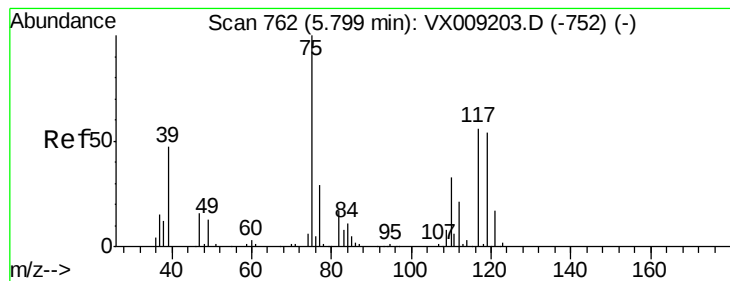


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 5.103 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

DUP-0512-190429DL

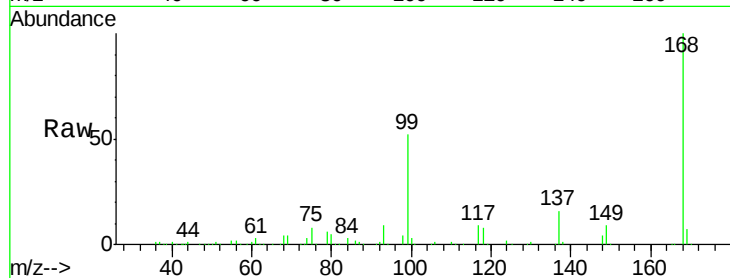
Tot Ion: 75 Resp: 14536

Ion Ratio Lower Upper

75 100

110 8.5 16.9 50.6#

77 0.0 24.8 37.2#

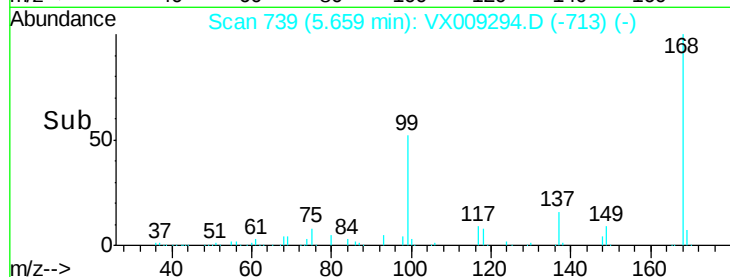


Abundance Ion 74.90 (74.60 to 75.60): VX009294.D (-713) (-)

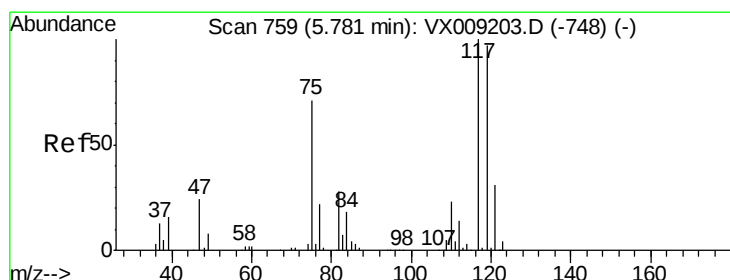
Ion 109.90 (109.60 to 110.60): VX009294.D (-713) (-)

Ion 76.90 (76.60 to 77.60): VX009294.D (-713) (-)

Time-->



Time-->



#38

Carbon Tetrachloride

Concen: 6.750 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

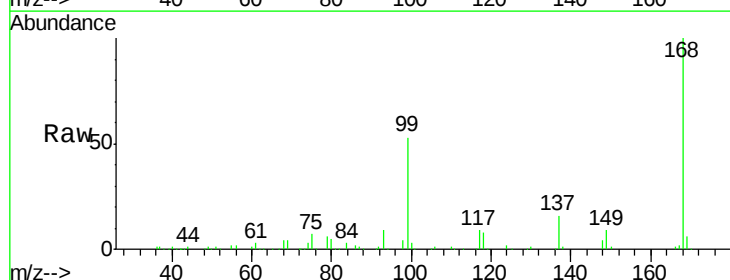
Tgt Ion: 117 Resp: 17470

Ion Ratio Lower Upper

117 100

119 4.4 77.5 116.3#

121 0.0 24.7 37.1#

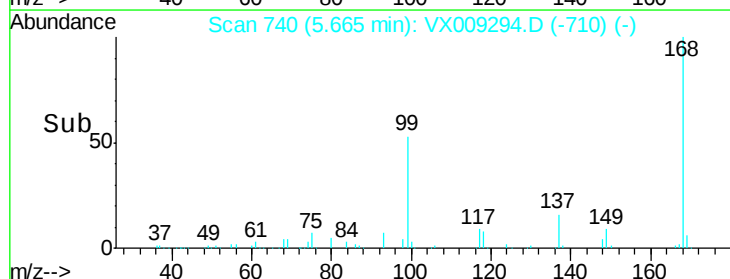


Abundance Ion 116.80 (116.50 to 117.50): VX009294.D (-710) (-)

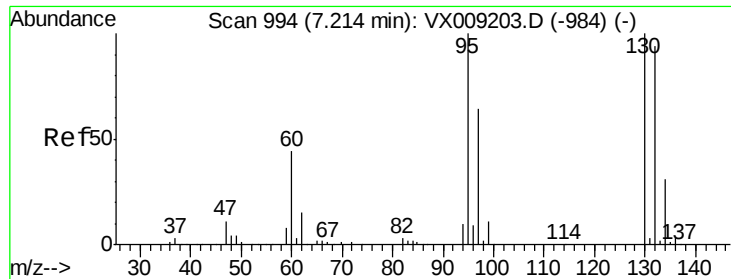
Ion 118.80 (118.50 to 119.50): VX009294.D (-710) (-)

Ion 120.80 (120.50 to 121.50): VX009294.D (-710) (-)

Time-->



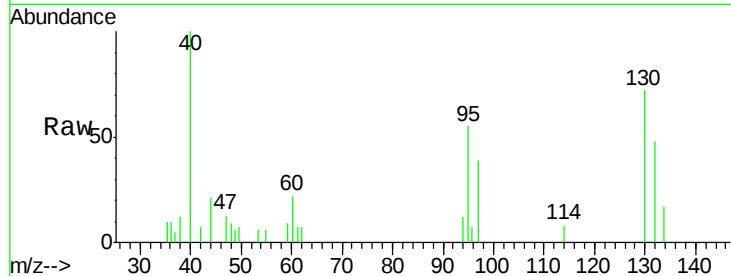
Time-->



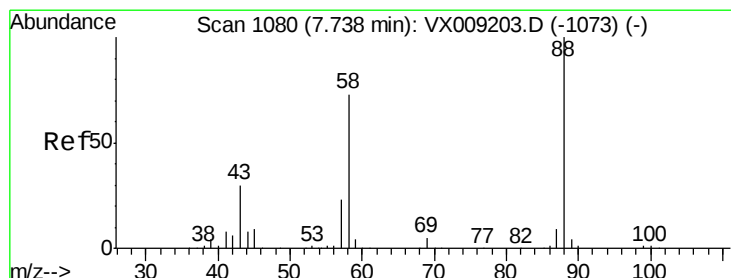
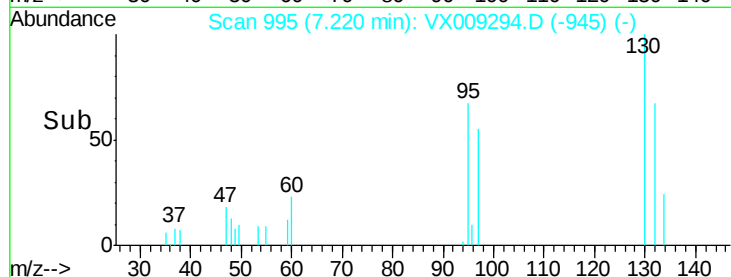
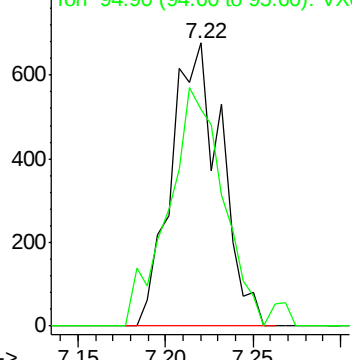
#44  
 Trichloroethene  
 Concen: 0.632 ug/l  
 RT: 7.22 min Scan# 995  
 Delta R.T. 0.01 min  
 Lab File: VX009294.D  
 Acq: 02 May 2019 23:30

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP-0512-190429DL

Tot Ion:130 Resp: 1346  
 Ion Ratio Lower Upper  
 130 100  
 95 76.7 0.0 199.2

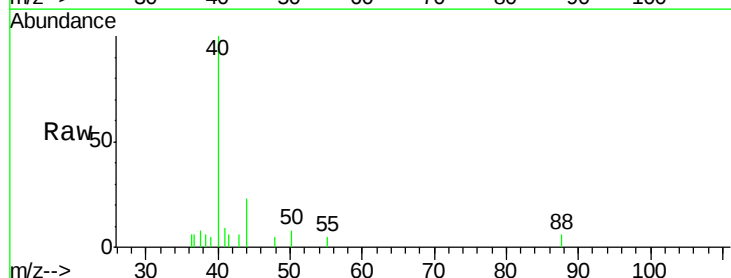


Abundance Ion 129.80 (129.50 to 130.50): V

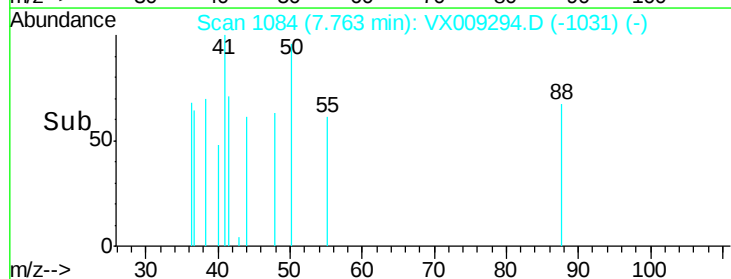
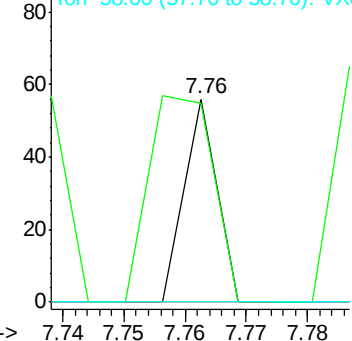


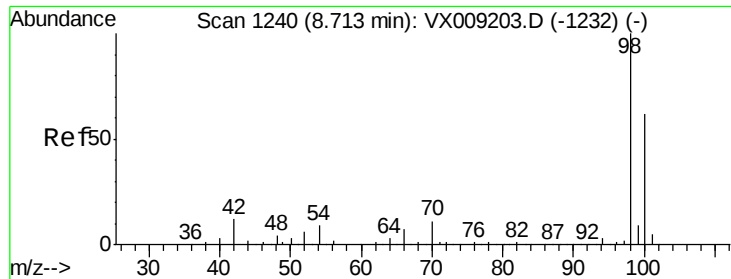
#49  
 1,4-Dioxane  
 Concen: 0.313 ug/l  
 RT: 7.76 min Scan# 1084  
 Delta R.T. 0.02 min  
 Lab File: VX009294.D  
 Acq: 02 May 2019 23:30

Tgt Ion: 88 Resp: 20  
 Ion Ratio Lower Upper  
 88 100  
 43 205.0 28.6 42.8#  
 58 0.0 61.7 92.5#



Abundance Ion 88.00 (87.70 to 88.70): VX0





#50

Toluene-d8

Concen: 49.874 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

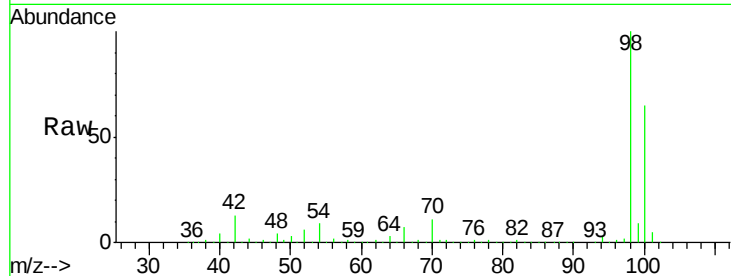
DUP-0512-190429DL

Tot Ion: 98 Resp: 387978

Ion Ratio Lower Upper

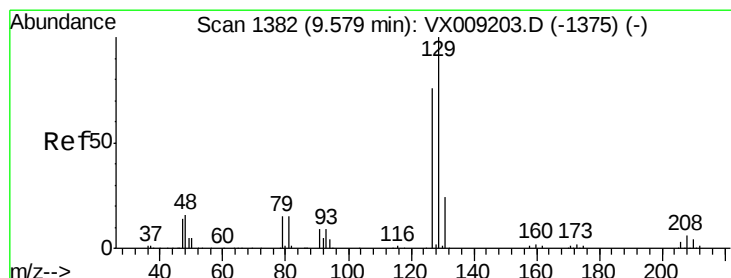
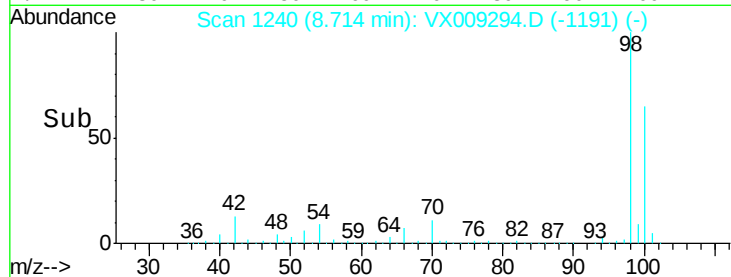
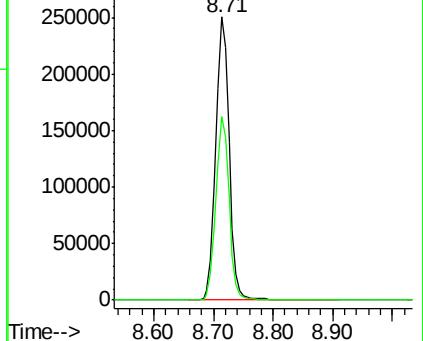
98 100

100 64.0 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V



#60

Dibromochloromethane

Concen: 14.298 ug/l

RT: 9.34 min Scan# 1342

Delta R.T. -0.24 min

Lab File: VX009294.D

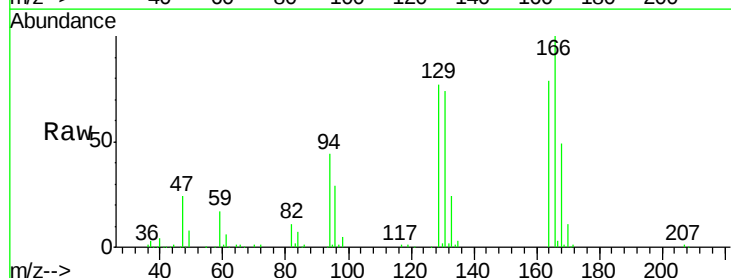
Acq: 02 May 2019 23:30

Tgt Ion: 129 Resp: 30530

Ion Ratio Lower Upper

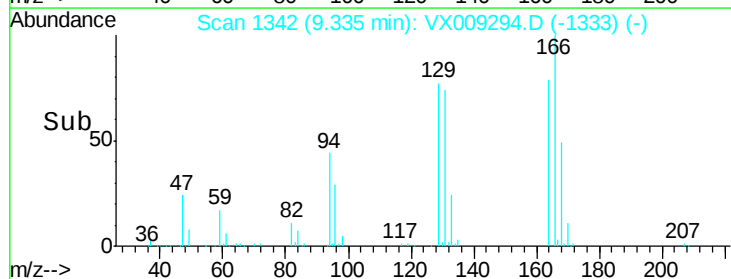
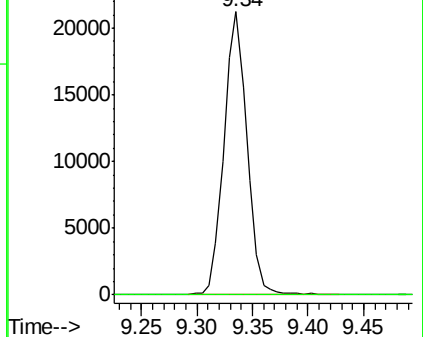
129 100

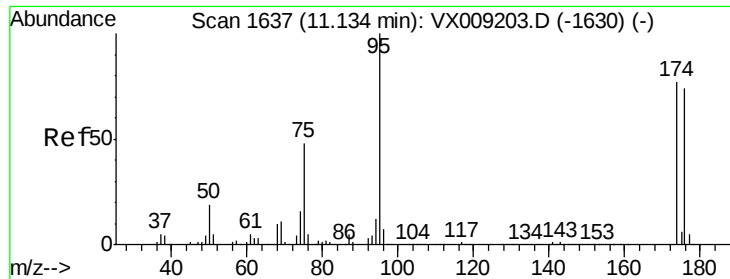
127 0.0 38.4 115.1#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V

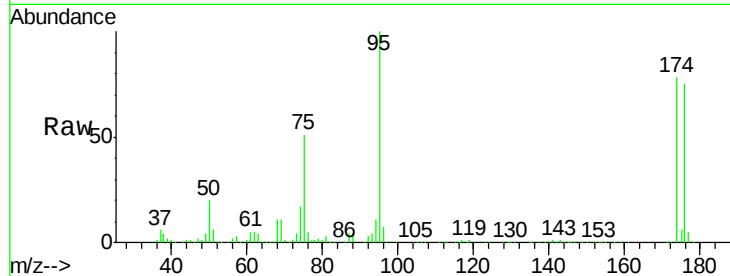




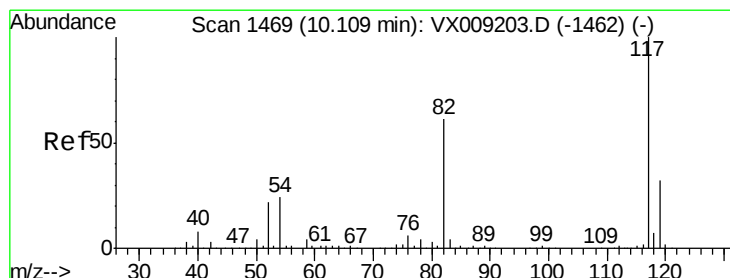
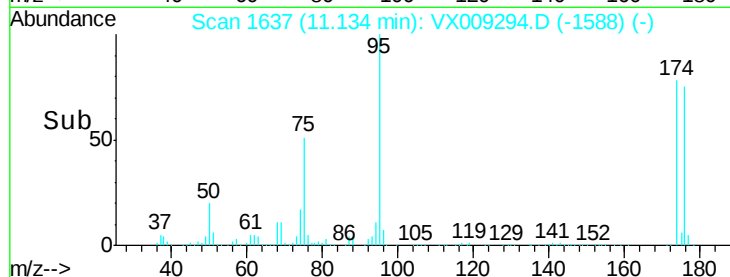
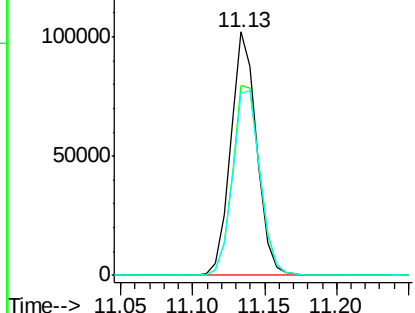
#62  
4-Bromofluorobenzene  
Concen: 45.827 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. 0.00 min  
Lab File: VX009294.D  
Acq: 02 May 2019 23:30

Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP-0512-190429DL

Tot Ion: 95 Resp: 129536  
Ion Ratio Lower Upper  
95 100  
174 82.4 0.0 161.6  
176 80.2 0.0 159.2

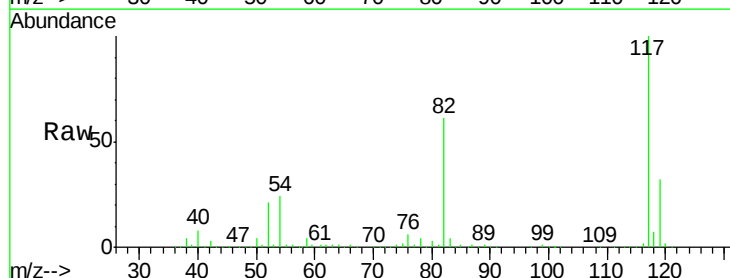


Abundance Ion 94.90 (94.60 to 95.60): VX0  
Ion 173.80 (173.50 to 174.50): V  
Ion 175.80 (175.50 to 176.50): V

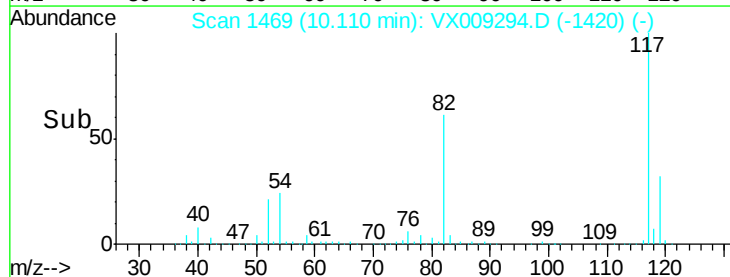
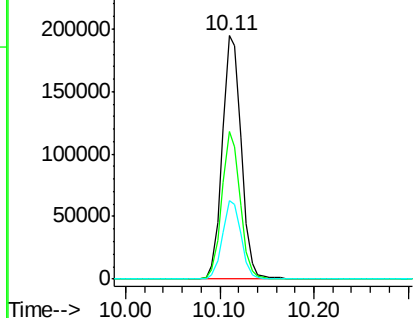


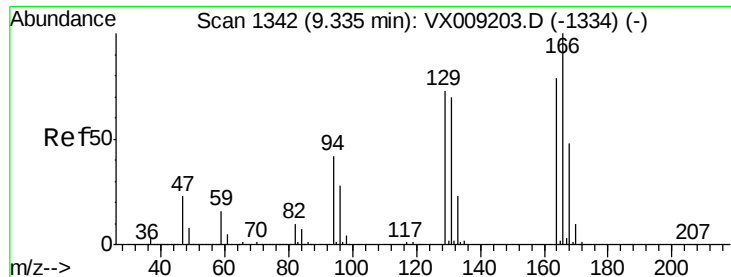
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. 0.00 min  
Lab File: VX009294.D  
Acq: 02 May 2019 23:30

Tgt Ion: 117 Resp: 271001  
Ion Ratio Lower Upper  
117 100  
82 60.6 48.8 73.2  
119 32.1 25.8 38.6



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





#64

Tetrachloroethene

Concen: 17.448 ug/l

RT: 9.34 min Scan# 1342

Delta R.T. 0.00 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

DUP-0512-190429DL

Tot Ion:164 Resp: 32435

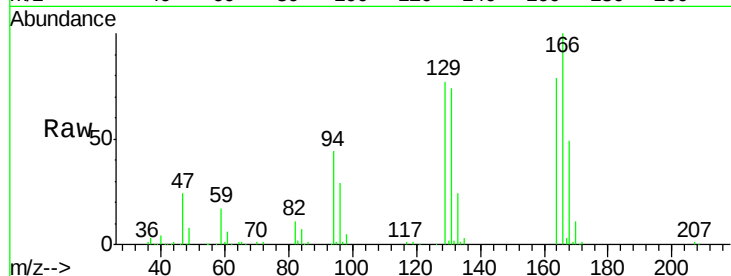
Ion Ratio Lower Upper

164 100

166 125.9 101.2 151.8

129 96.4 74.3 111.5

131 93.3 71.0 106.6

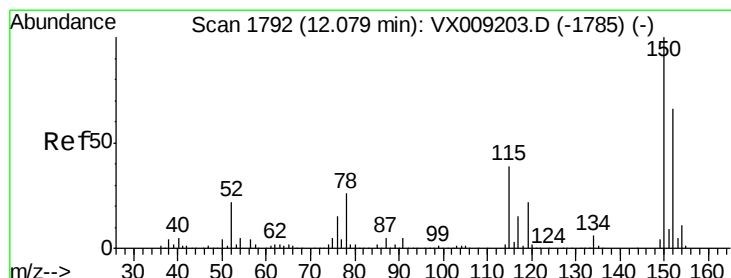
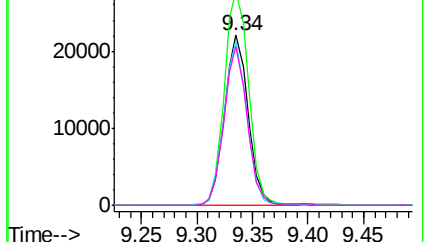
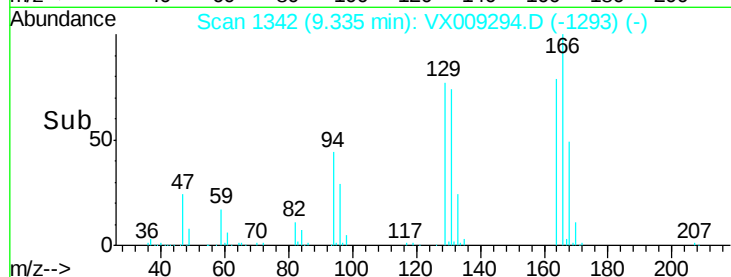


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

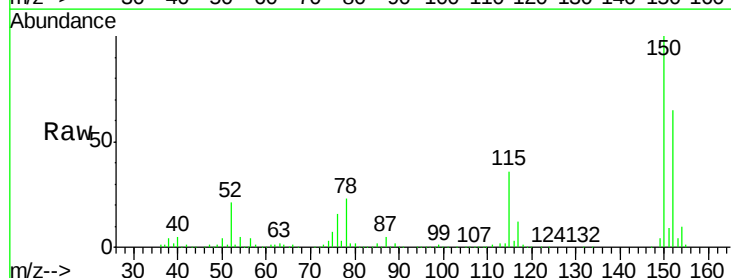
Tgt Ion:152 Resp: 119624

Ion Ratio Lower Upper

152 100

115 58.2 41.2 123.6

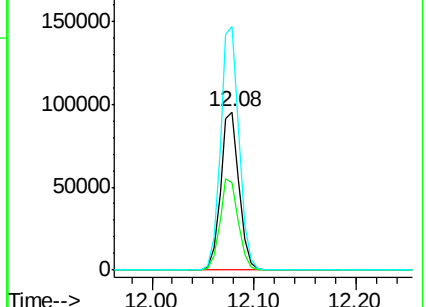
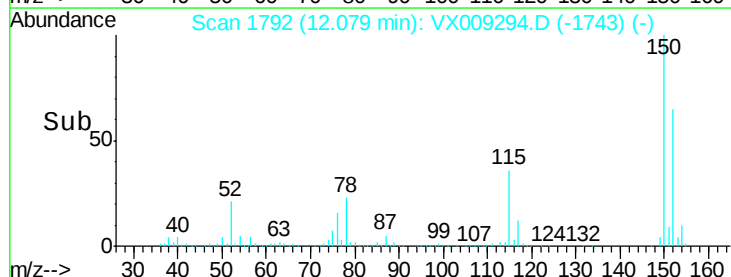
150 155.9 0.0 346.4

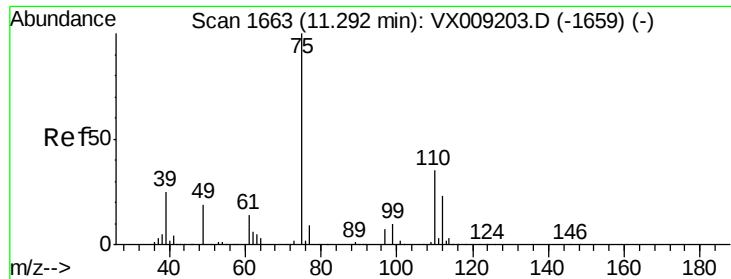


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 23.760 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

Instrument :

MSVOA\_X

ClientSampleId :

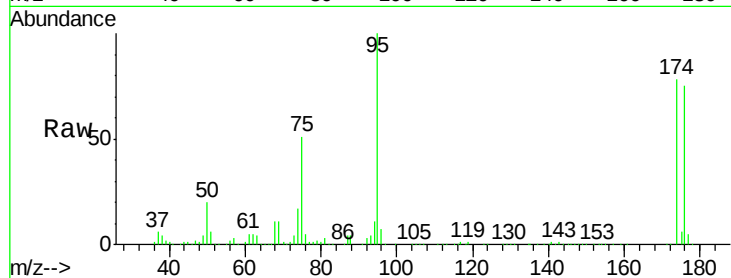
DUP-0512-190429DL

Tot Ion: 75 Resp: 65931

Ion Ratio Lower Upper

75 100

77 1.5 22.1 66.1#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

11.13

60000

50000

40000

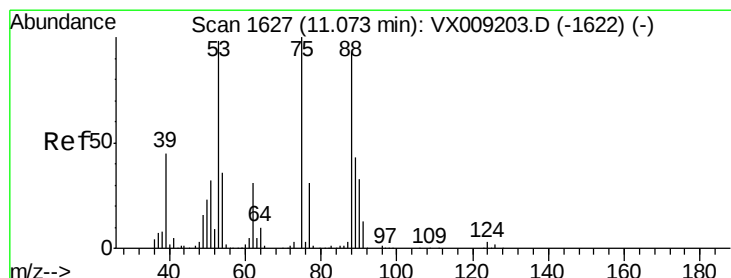
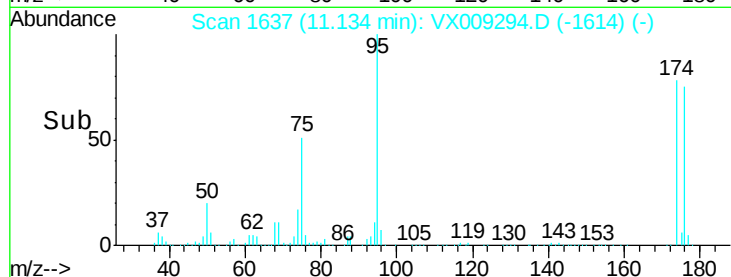
30000

20000

10000

0

Time--> 11.05 11.10 11.15 11.20



#81

trans-1,4-Dichloro-2-butene

Concen: 60.794 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009294.D

Acq: 02 May 2019 23:30

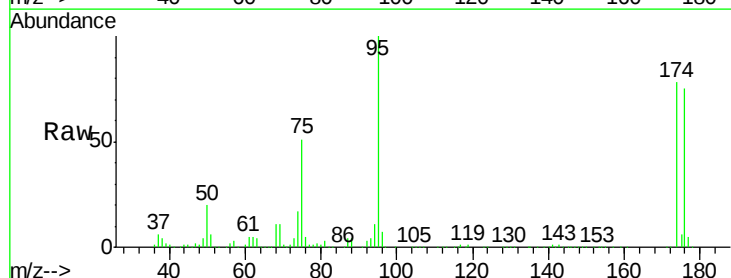
Tgt Ion: 75 Resp: 65931

Ion Ratio Lower Upper

75 100

53 0.1 79.0 118.6#

89 0.0 34.7 52.1#



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

11.13

60000

40000

20000

0

Time--> 11.05 11.10 11.15 11.20

