

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX052119\  
 Data File : VX009763.D  
 Acq On : 21 May 2019 21:15  
 Operator : JC/SP  
 Sample : K2973-01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S36-0153

Quant Time: May 22 07:09:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu May 09 07:31:15 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 173907   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 276538   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 248516   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 107963   | 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   | 117385   | 49.45 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.90% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 84745    | 48.75 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.50% |          |
| 50) Toluene-d8              | 8.71  | 98   | 350655   | 49.96 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.92% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 118462   | 46.45 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.90% |          |

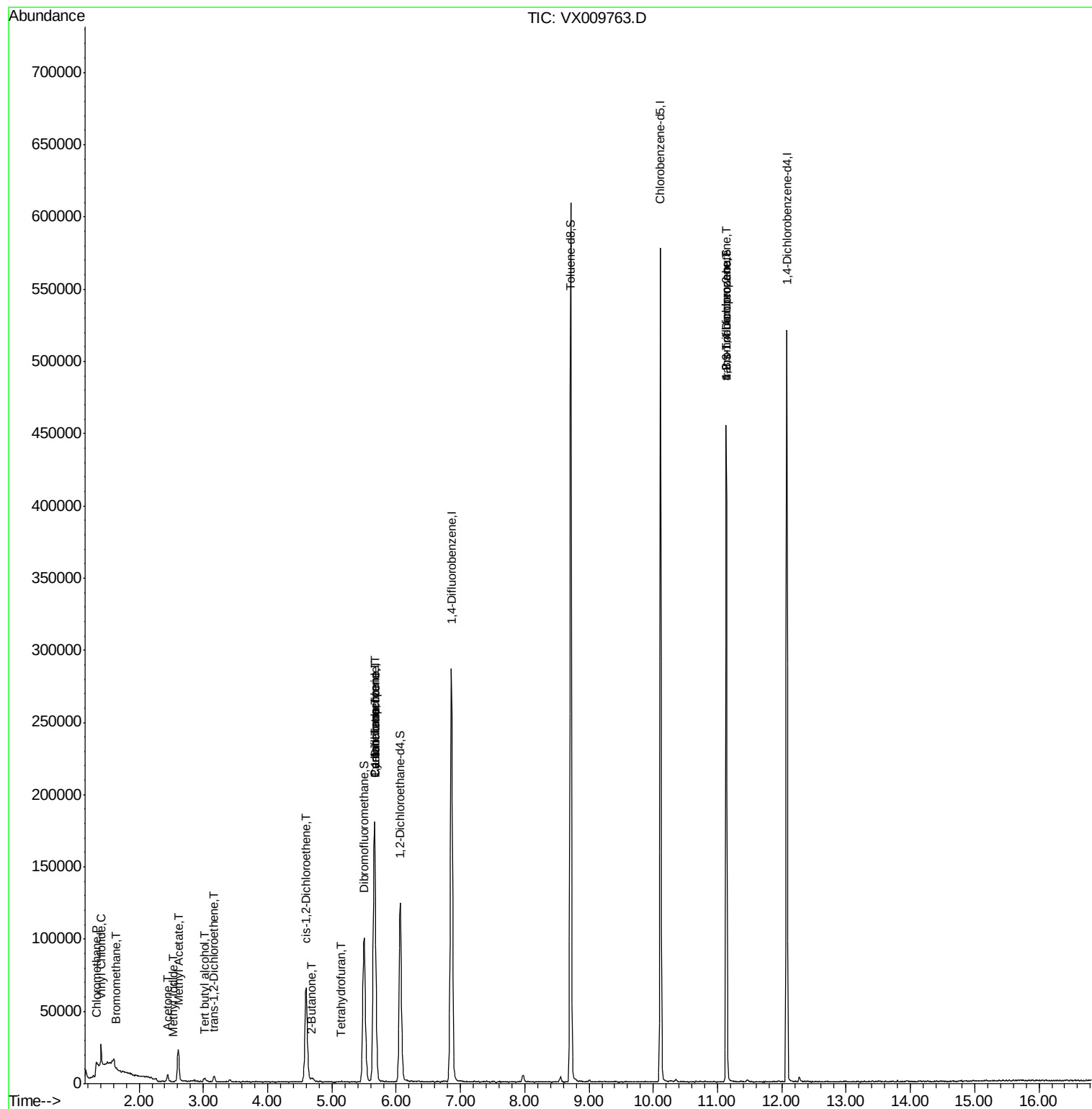
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 717      | 0.328     | ug/l   | 92     |
| 4) Vinyl Chloride              | 1.41  | 62   | 9925     | 4.652     | ug/l   | 95     |
| 5) Bromomethane                | 1.64  | 94   | 288      | 0.225     | ug/l # | 24     |
| 10) Methyl Iodide              | 2.52  | 142  | 19       | 4.603     | ug/l # | 42     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 2112     | 3.843     | ug/l   | 99     |
| 16) Acetone                    | 2.44  | 43   | 5349     | 4.196     | ug/l   | 96     |
| 18) Methyl Acetate             | 2.61  | 43   | 6291     | 2.075     | ug/l # | 56     |
| 21) trans-1,2-Dichloroethene   | 3.17  | 96   | 1358     | 0.767     | ug/l   | 92     |
| 25) 2-Butanone                 | 4.68  | 43   | 414      | 0.209     | ug/l # | 53     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 40592    | 19.217    | ug/l   | 90     |
| 28) Bromochloromethane         | 5.04  | 49   | 26       | Below Cal | #      | 20     |
| 29) Tetrahydrofuran            | 5.13  | 42   | 323      | 0.253     | ug/l # | 55     |
| 31) Cyclohexane                | 5.66  | 56   | 3906     | 1.113     | ug/l # | 17     |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 13794    | 5.368     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 16318    | 6.989     | ug/l # | 15     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 60402    | 24.119    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 60402    | 61.711    | ug/l # | 10     |

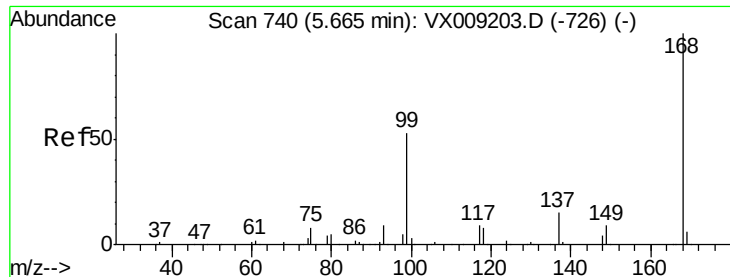
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX052119\  
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Quant Title : SW846 8260  
QLast Update : Thu May 09 07:31:15 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampleId :

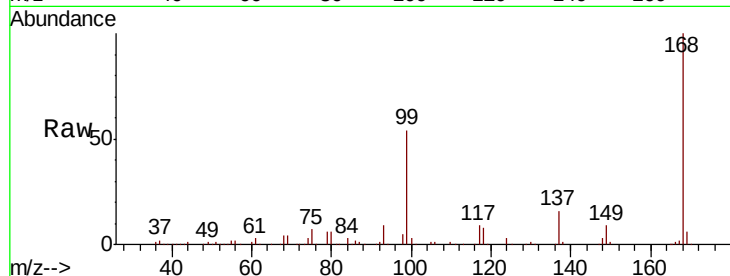
S36-0153

Tot Ion:168 Resp: 173907

Ion Ratio Lower Upper

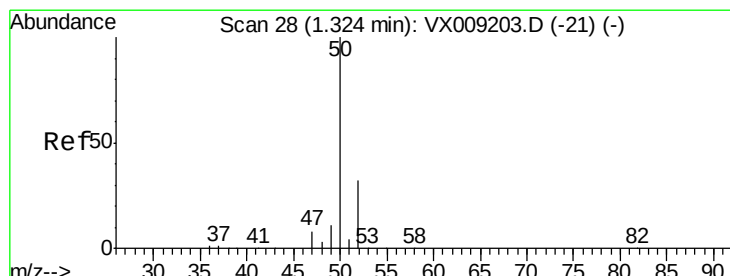
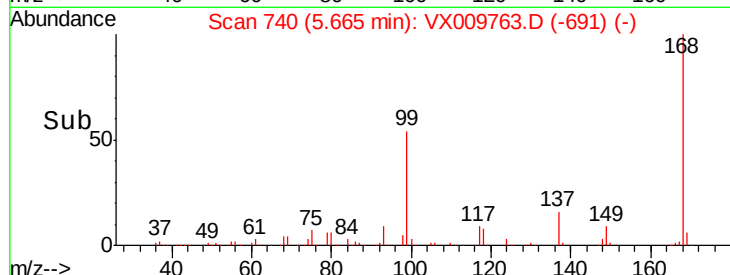
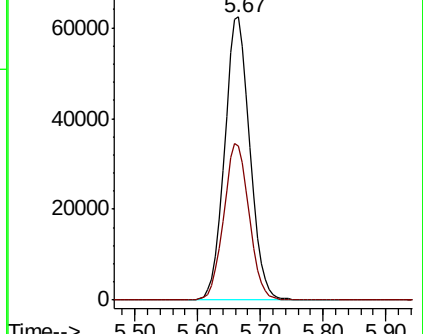
168 100

99 54.5 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: 0.328 ug/l

RT: 1.33 min Scan# 29

Delta R.T. 0.01 min

Lab File: VX009763.D

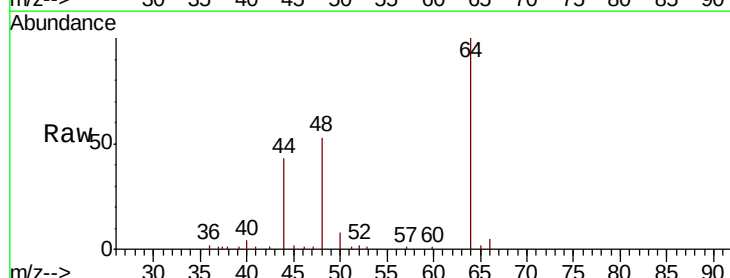
Acq: 21 May 2019 21:15

Tgt Ion: 50 Resp: 717

Ion Ratio Lower Upper

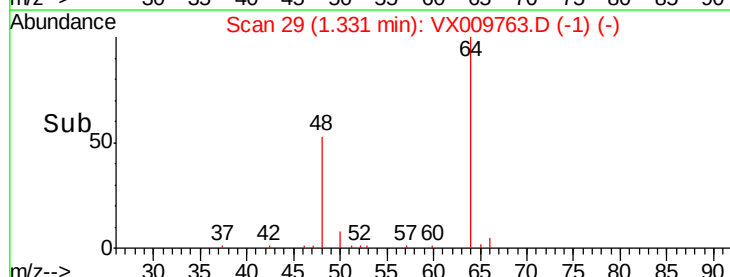
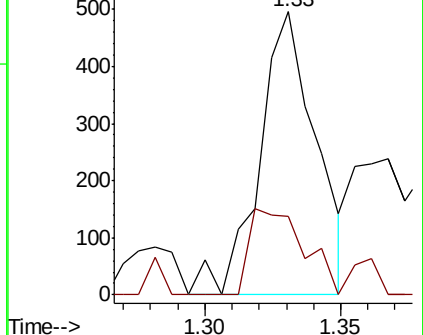
50 100

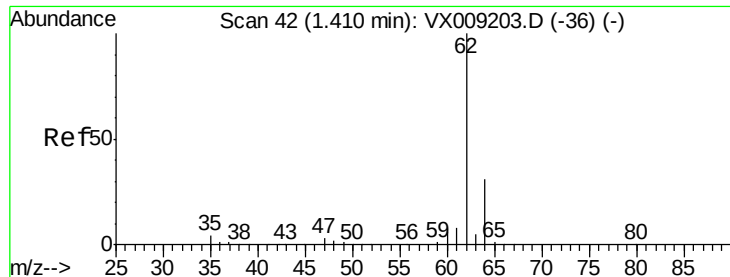
52 27.8 25.9 38.9



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#4

Vinyl Chloride

Concen: 4.652 ug/l

RT: 1.41 min Scan# 42

Delta R.T. 0.00 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampleId :

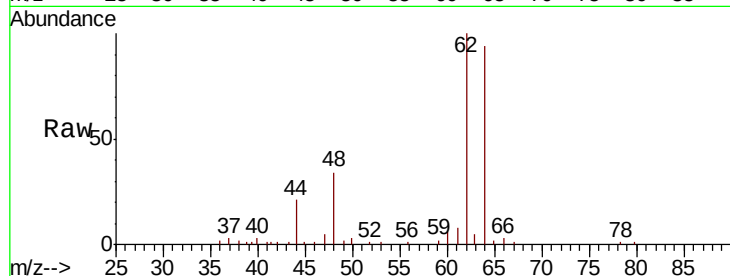
S36-0153

Tot Ion: 62 Resp: 9925

Ion Ratio Lower Upper

62 100

64 33.3 24.6 36.8



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0

1.41

10000

8000

6000

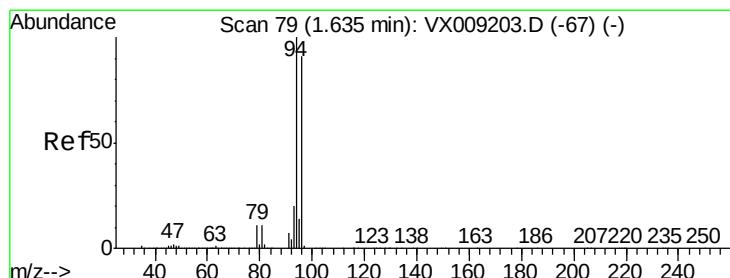
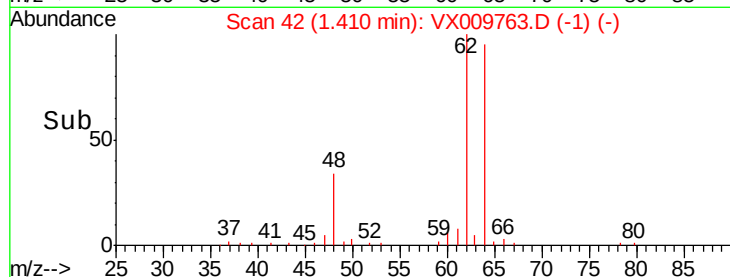
4000

2000

0

Time-->

1.35 1.40 1.45



#5

Bromomethane

Concen: 0.225 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX009763.D

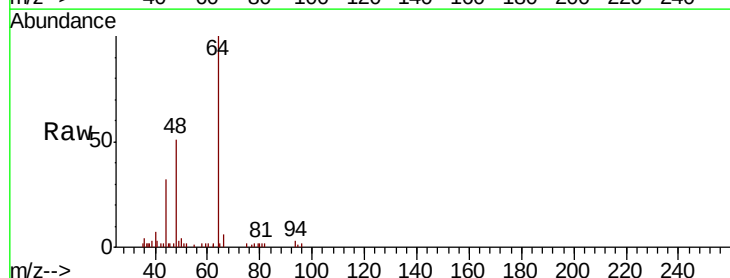
Acq: 21 May 2019 21:15

Tgt Ion: 94 Resp: 288

Ion Ratio Lower Upper

94 100

96 19.2 73.0 109.6#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

200

150

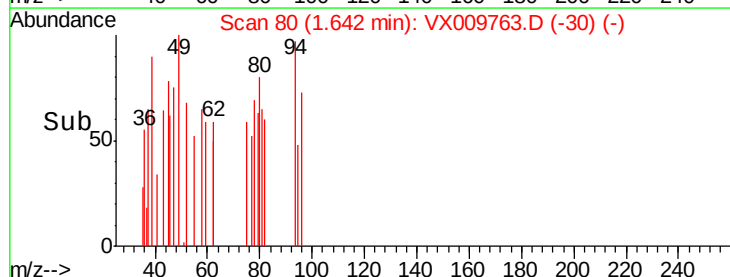
100

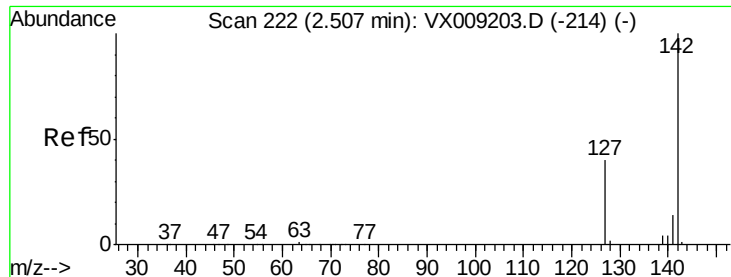
50

0

Time-->

1.60 1.65 1.70

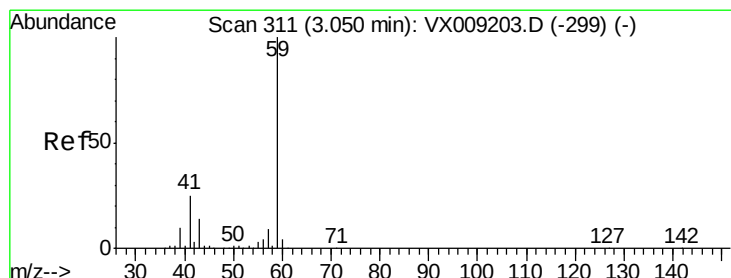
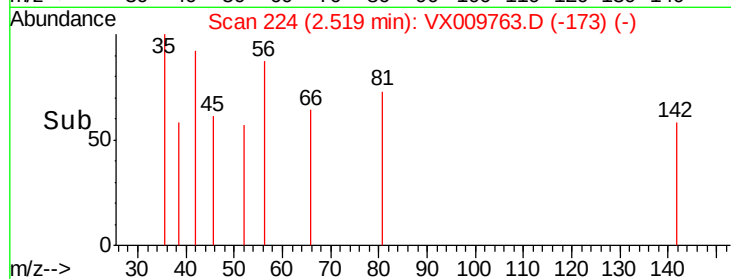
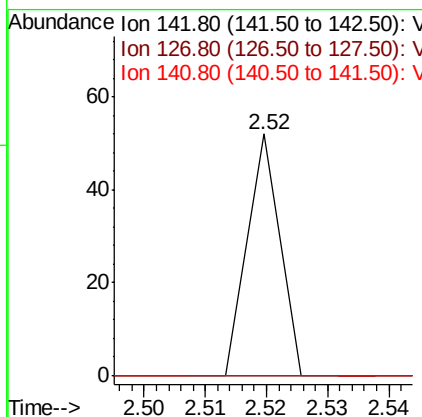
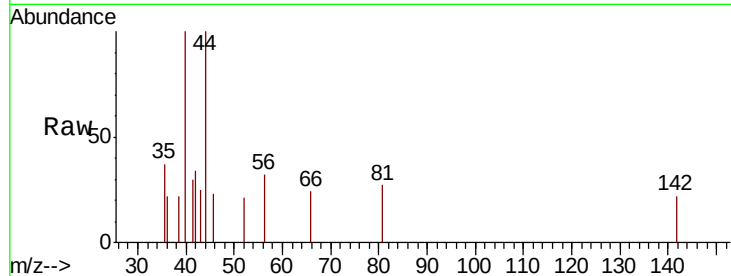




#10  
Methvl Iodide  
Concen: 4.603 ug/l  
RT: 2.52 min Scan# 224  
Delta R.T. 0.01 min  
Lab File: VX009763.D  
Acq: 21 May 2019 21:15

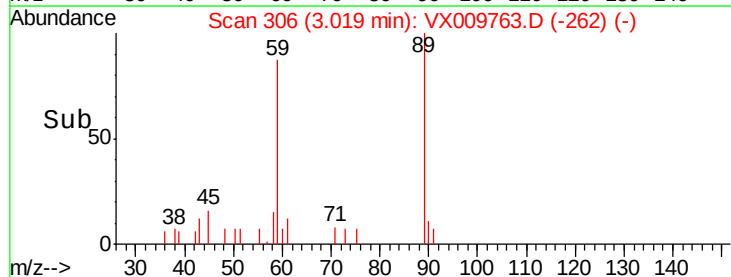
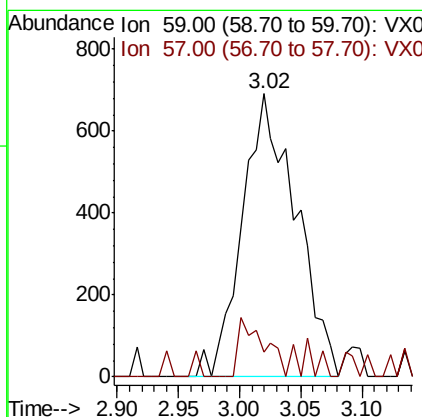
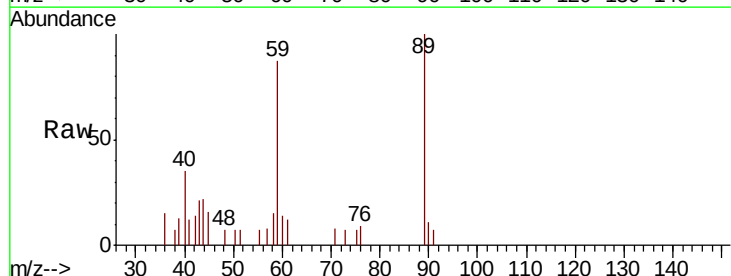
Instrument :  
MSVOA\_X  
ClientSampleId :  
S36-0153

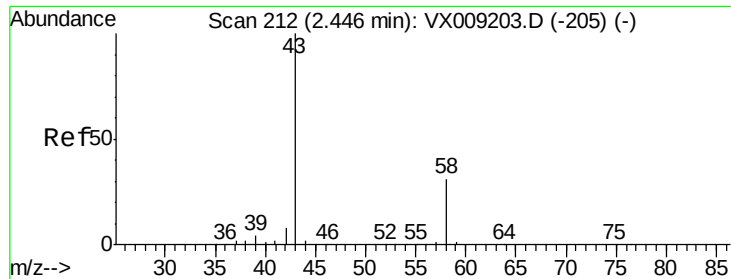
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 127     | 0.0   | 32.7  | 49.1# |
| 141     | 0.0   | 11.5  | 17.3# |



#11  
Tert butyl alcohol  
Concen: 3.843 ug/l  
RT: 3.02 min Scan# 306  
Delta R.T. -0.03 min  
Lab File: VX009763.D  
Acq: 21 May 2019 21:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 9.9   | 8.2   | 12.2  |





#16

Acetone

Concen: 4.196 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampled :

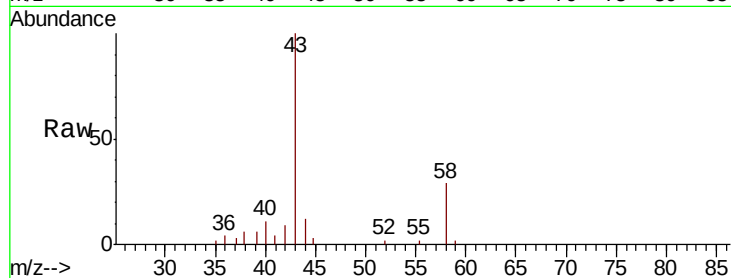
S36-0153

Tot Ion: 43 Resp: 5349

Ion Ratio Lower Upper

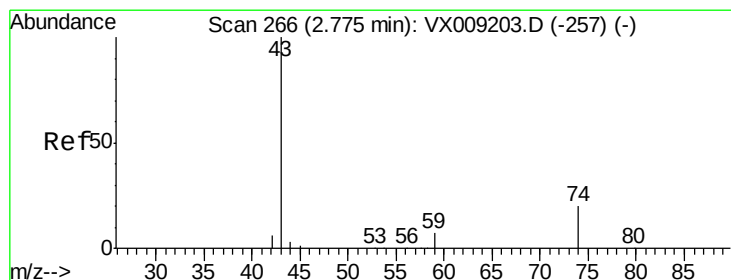
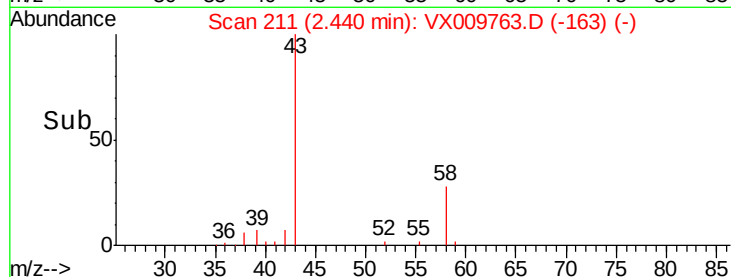
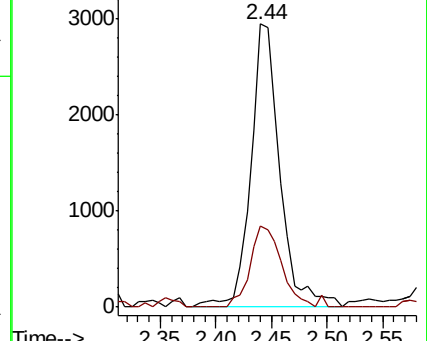
43 100

58 28.7 24.9 37.3



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#18

Methyl Acetate

Concen: 2.075 ug/l

RT: 2.61 min Scan# 239

Delta R.T. -0.16 min

Lab File: VX009763.D

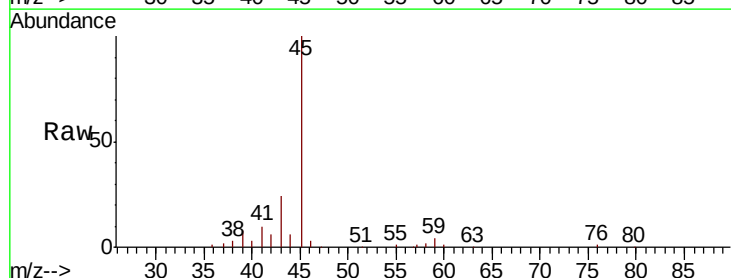
Acq: 21 May 2019 21:15

Tgt Ion: 43 Resp: 6291

Ion Ratio Lower Upper

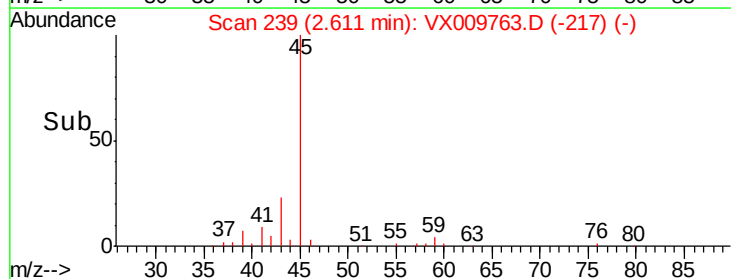
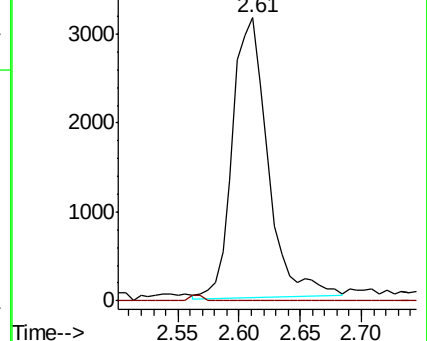
43 100

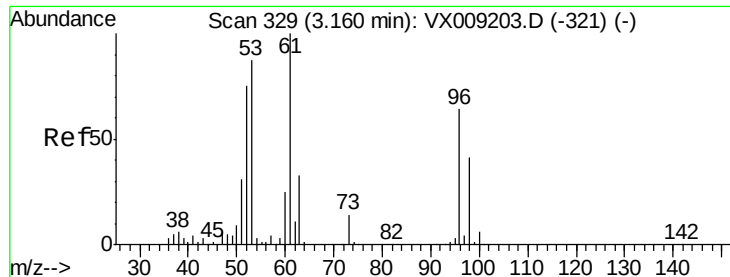
74 0.0 16.2 24.4#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 74.00 (73.70 to 74.70): VX0





#21

trans-1,2-Dichloroethene

Concen: 0.767 ug/l

RT: 3.17 min Scan# 331

Delta R.T. 0.01 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampleId :

S36-0153

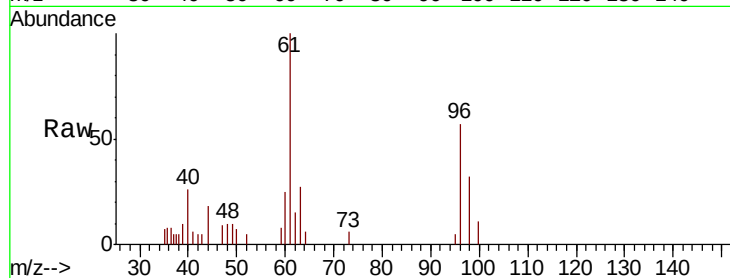
Tot Ion: 96 Resp: 1358

Ion Ratio Lower Upper

96 100

61 165.3 124.5 186.7

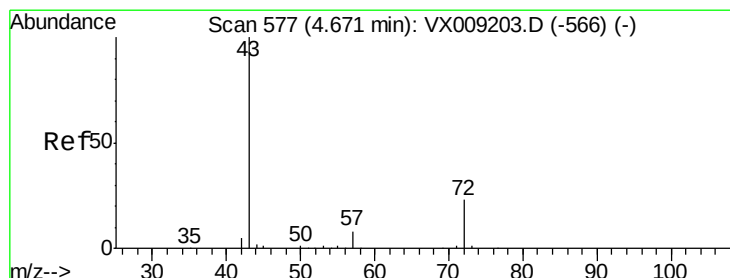
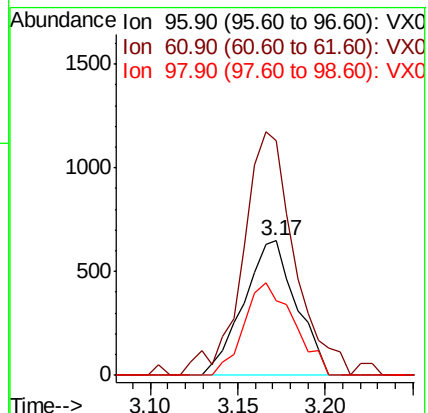
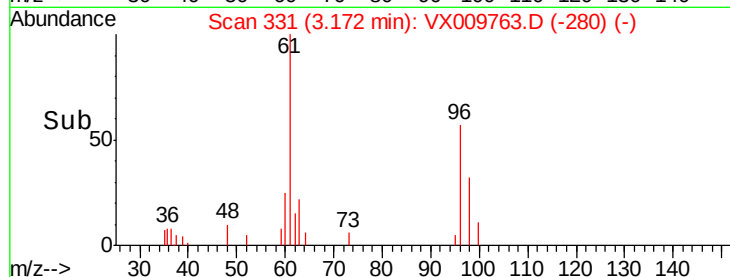
98 55.6 50.4 75.6



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: 0.209 ug/l

RT: 4.68 min Scan# 578

Delta R.T. 0.01 min

Lab File: VX009763.D

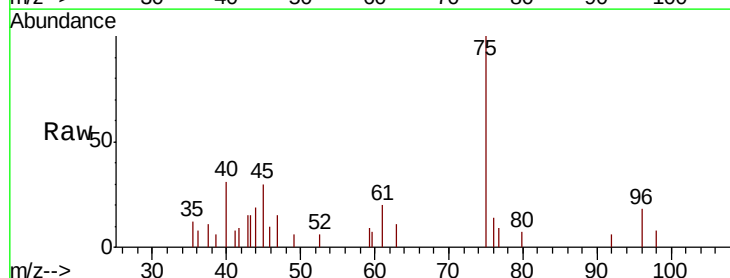
Acq: 21 May 2019 21:15

Tgt Ion: 43 Resp: 414

Ion Ratio Lower Upper

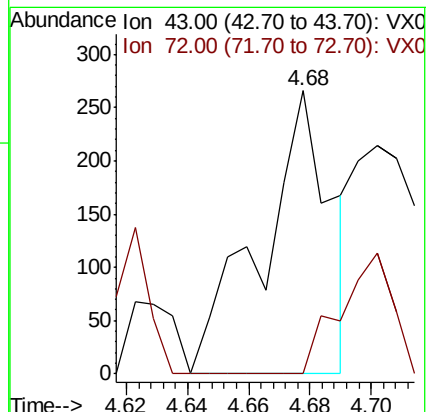
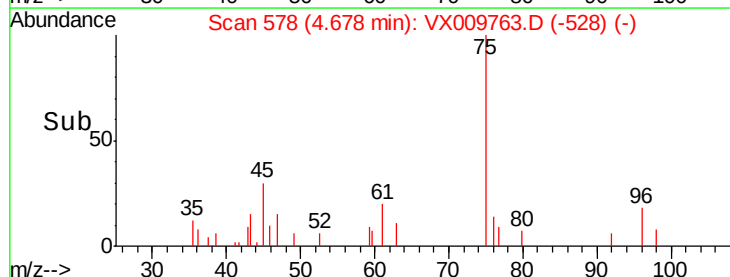
43 100

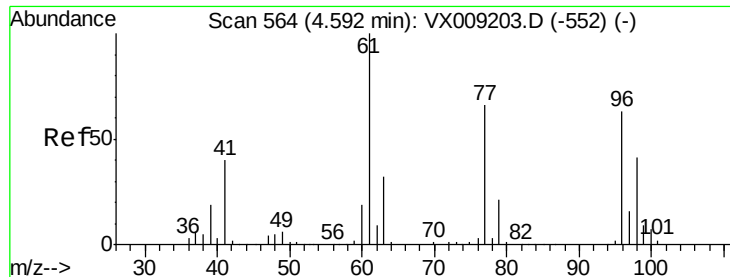
72 0.0 18.2 27.2#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



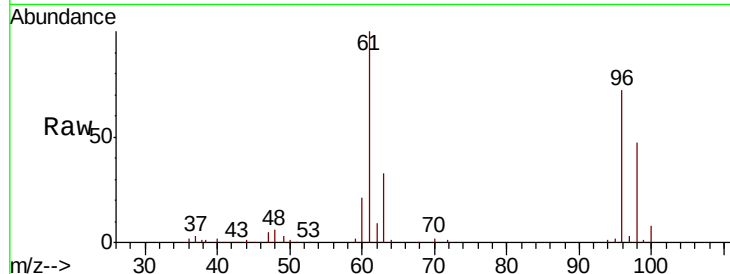


#27

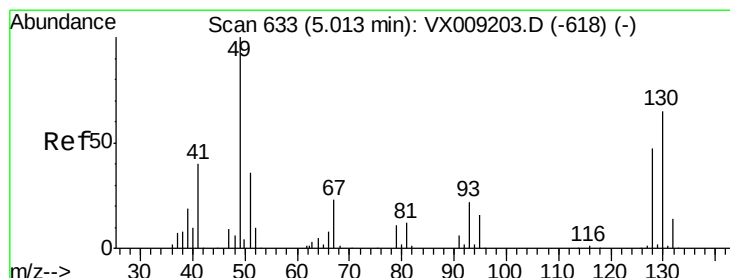
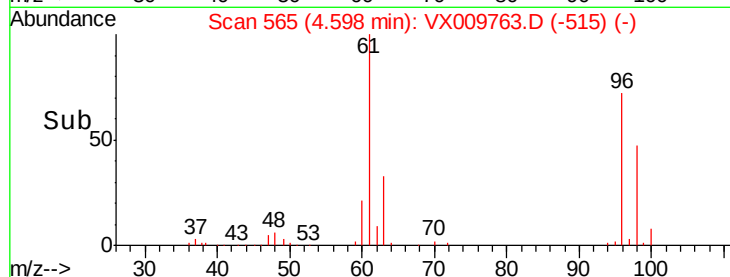
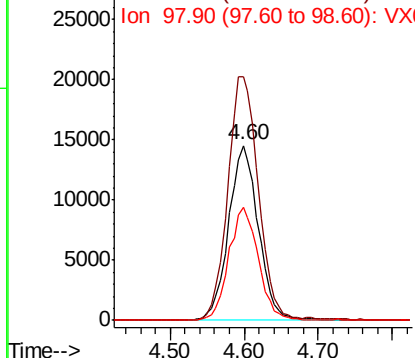
cis-1,2-Dichloroethene  
 Concen: 19.217 ug/l  
 RT: 4.60 min Scan# 565  
 Delta R.T. 0.01 min  
 Lab File: VX009763.D  
 Acq: 21 May 2019 21:15

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 S36-0153

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 143.7 | 0.0   | 324.0 |
| 98      | 64.2  | 0.0   | 130.4 |



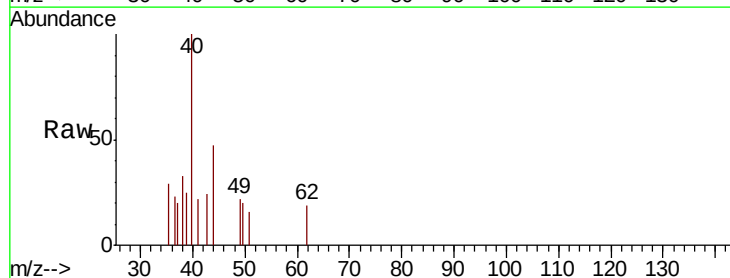
Abundance Ion 95.90 (95.60 to 96.60): VX0  
 Ion 60.90 (60.60 to 61.60): VX0  
 Ion 97.90 (97.60 to 98.60): VX0



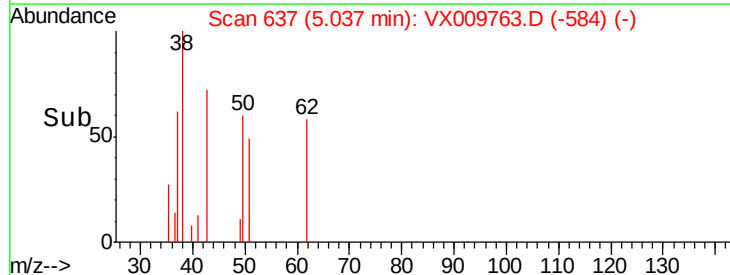
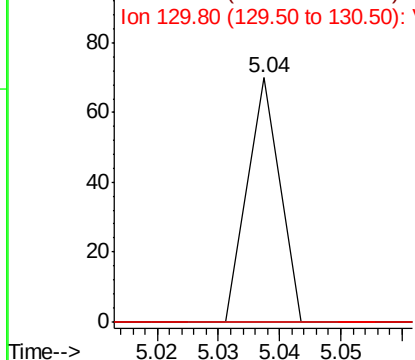
#28

Bromochloromethane  
 Concen: Below Cal  
 RT: 5.04 min Scan# 637  
 Delta R.T. 0.03 min  
 Lab File: VX009763.D  
 Acq: 21 May 2019 21:15

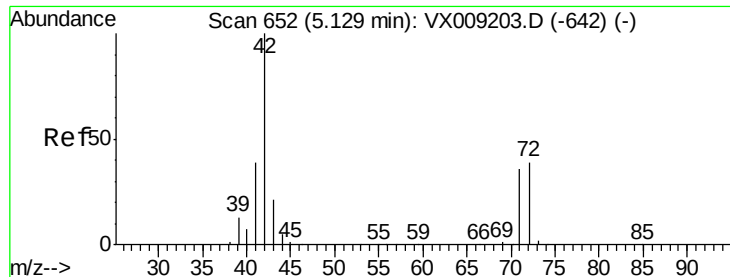
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 49      | 100   |       |       |
| 129     | 0.0   | 0.0   | 3.8   |
| 130     | 0.0   | 51.2  | 76.8# |



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







#29

Tetrahydrofuran

Concen: 0.253 ug/l

RT: 5.13 min Scan# 652

Delta R.T. 0.00 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampled :

S36-0153

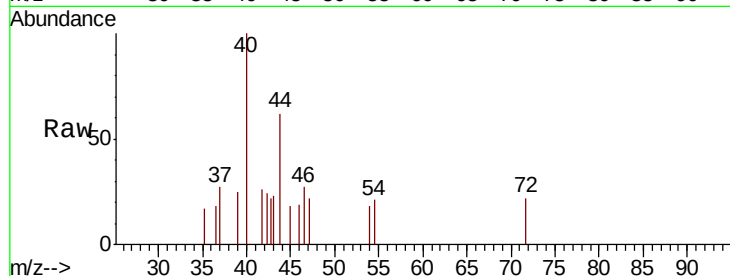
Tot Ion: 42 Resp: 323

Ion Ratio Lower Upper

42 100

72 7.4 30.4 45.6#

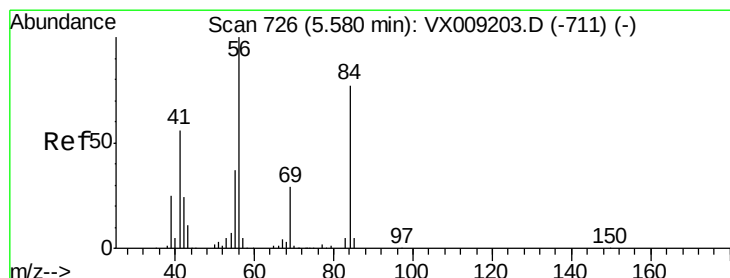
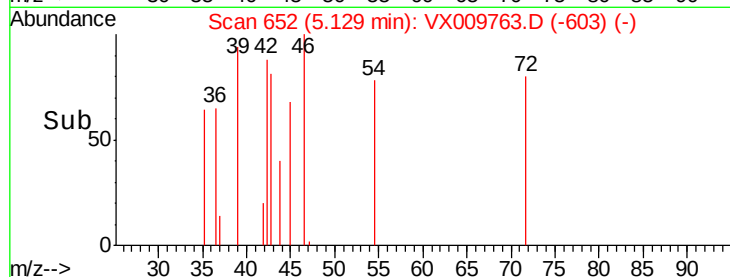
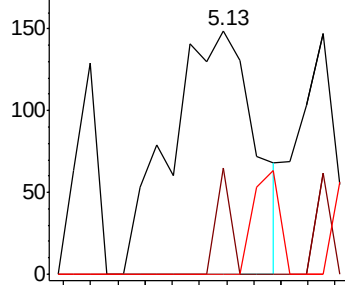
71 13.0 28.6 43.0#



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



#31

Cyclohexane

Concen: 1.113 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.08 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

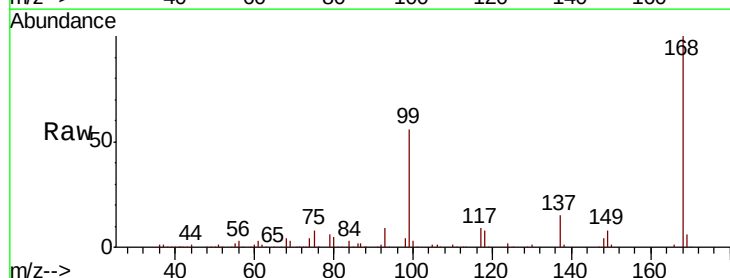
Tgt Ion: 56 Resp: 3906

Ion Ratio Lower Upper

56 100

69 132.8 23.4 35.0#

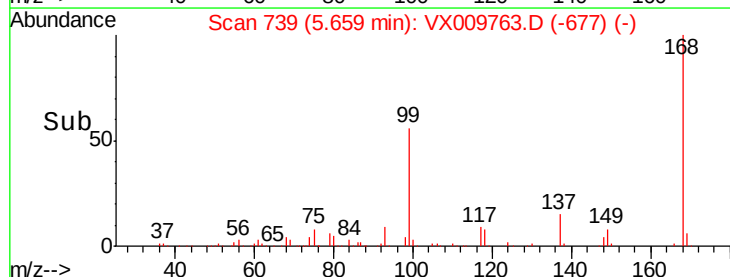
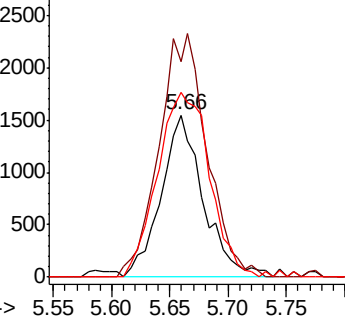
84 113.8 61.9 92.9#

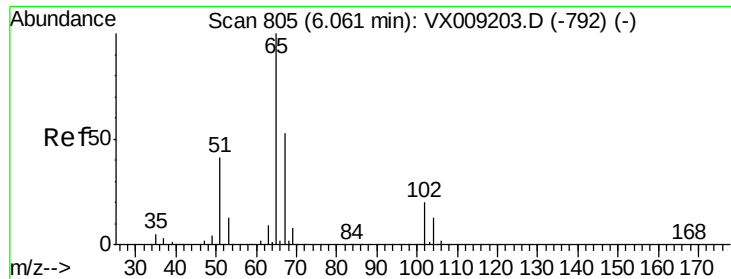


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0

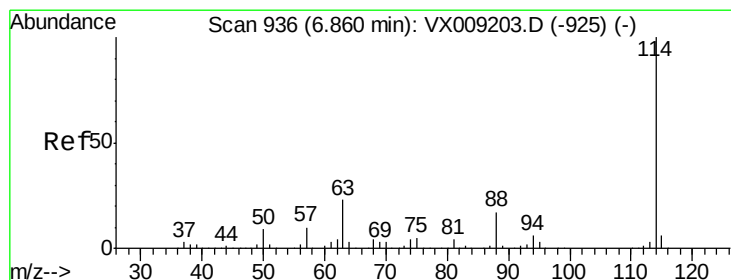
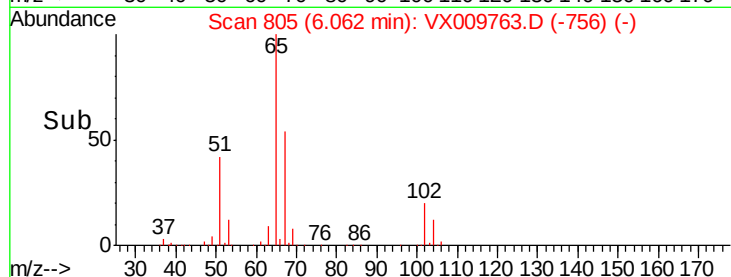
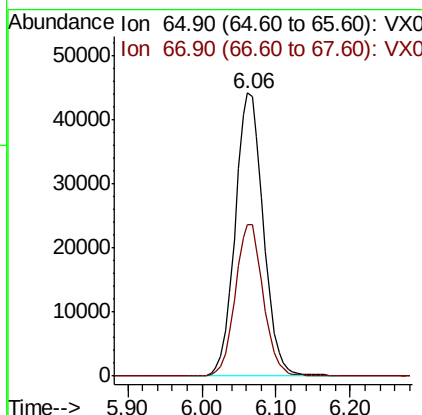
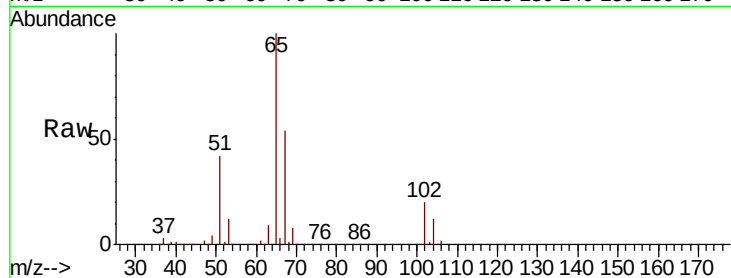




#33  
 1,2-Dichloroethane-d4  
 Concen: 49.445 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. 0.00 min  
 Lab File: VX009763.D  
 Acq: 21 May 2019 21:15

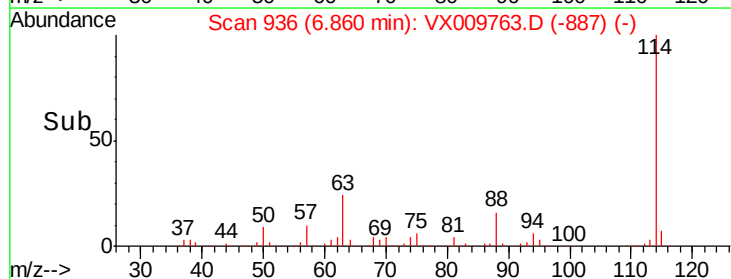
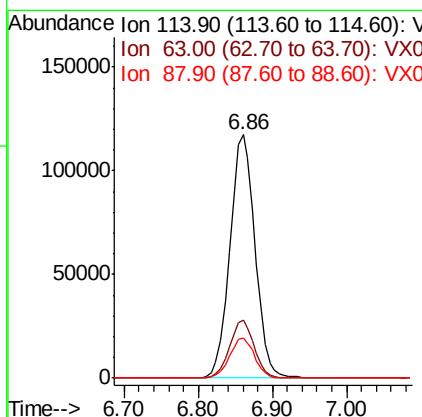
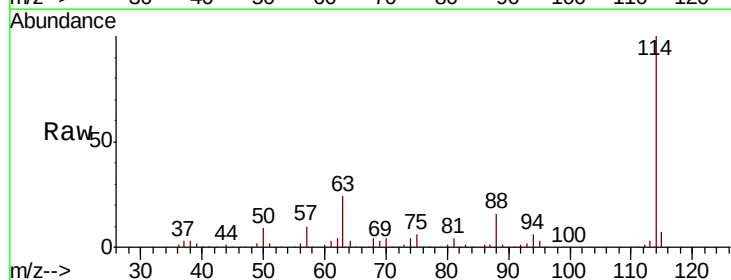
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S36-0153

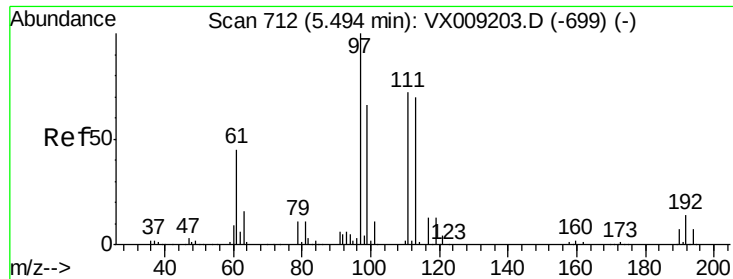
Tot Ion: 65 Resp: 117385  
 Ion Ratio Lower Upper  
 65 100  
 67 53.4 0.0 106.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX009763.D  
 Acq: 21 May 2019 21:15

Tgt Ion: 114 Resp: 276538  
 Ion Ratio Lower Upper  
 114 100  
 63 23.7 0.0 45.6  
 88 16.3 0.0 33.2

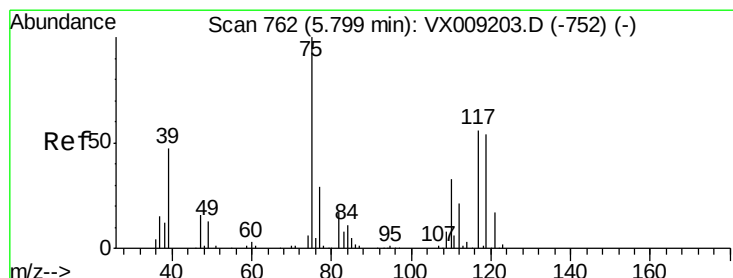
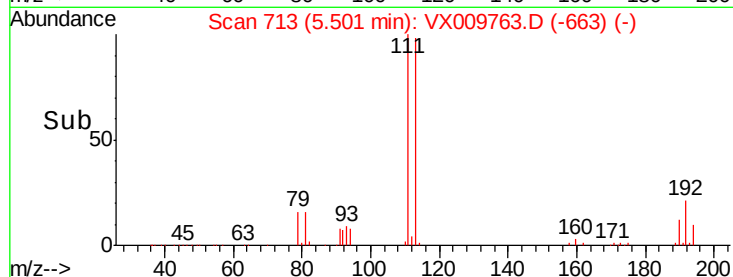
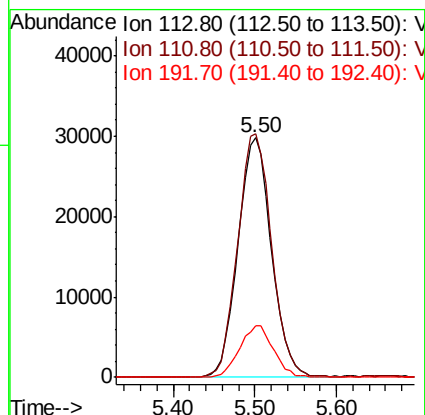
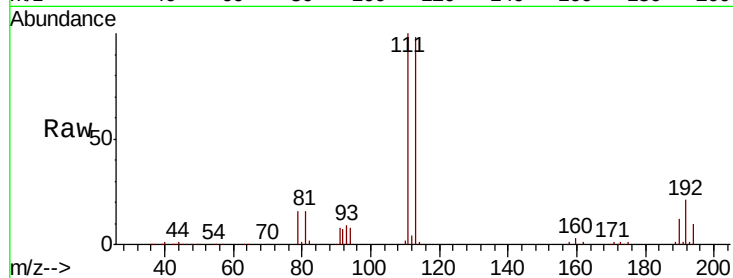




#35  
 Dibromofluoromethane  
 Concen: 48.748 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.01 min  
 Lab File: VX009763.D  
 Acq: 21 May 2019 21:15

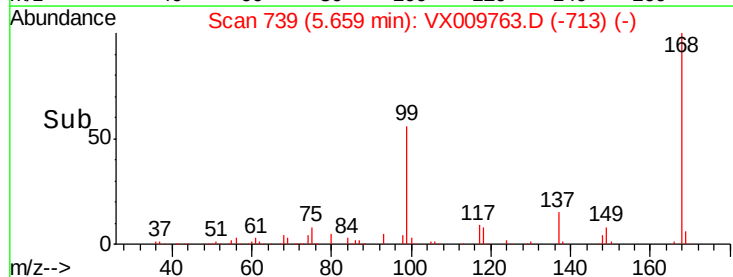
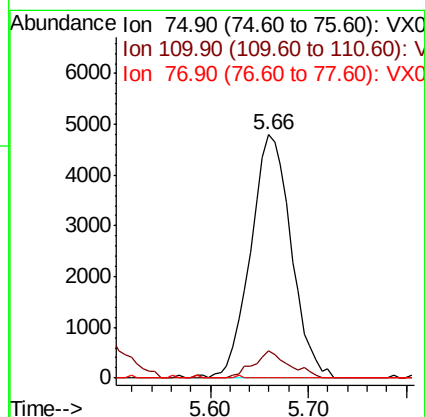
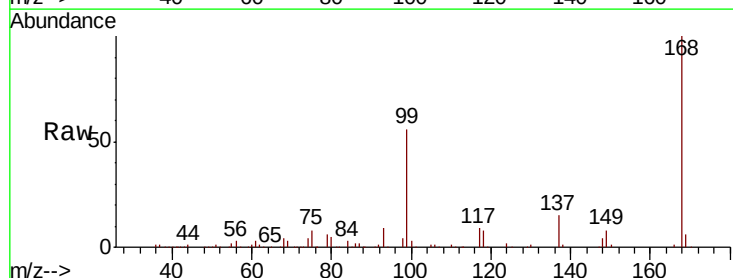
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S36-0153

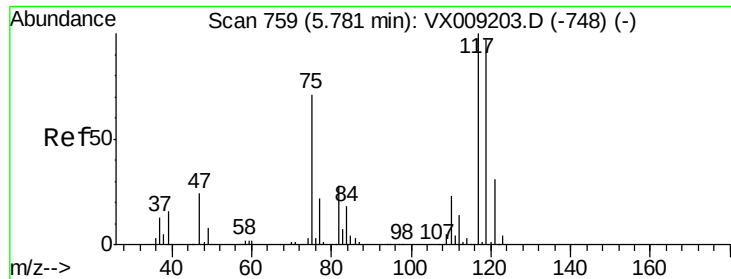
Tot Ion:113 Resp: 84745  
 Ion Ratio Lower Upper  
 113 100  
 111 103.4 82.8 124.2  
 192 21.8 17.0 25.6



#36  
 1,1-Dichloropropene  
 Concen: 5.368 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX009763.D  
 Acq: 21 May 2019 21:15

Tgt Ion: 75 Resp: 13794  
 Ion Ratio Lower Upper  
 75 100  
 110 9.8 16.9 50.6#  
 77 0.0 24.8 37.2#

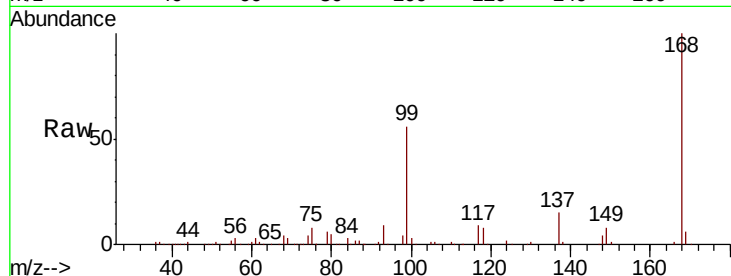




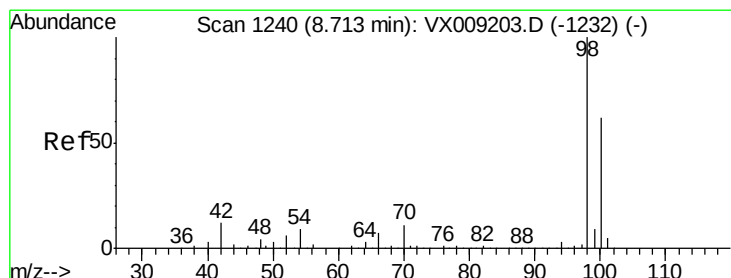
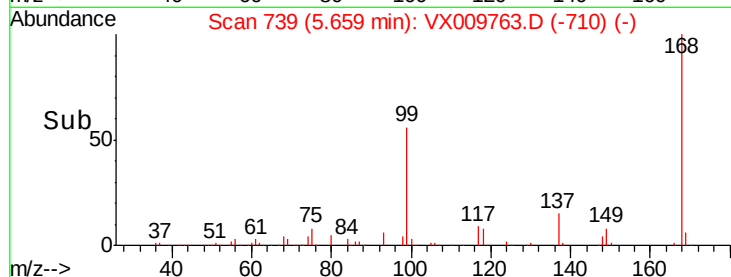
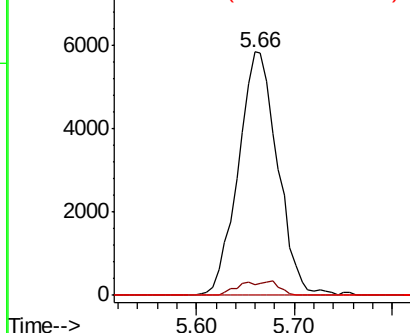
#38  
Carbon Tetrachloride  
Concen: 6.989 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.12 min  
Lab File: VX009763.D  
Acq: 21 May 2019 21:15

Instrument :  
MSVOA\_X  
ClientSampleId :  
S36-0153

Tot Ion:117 Resp: 16318  
Ion Ratio Lower Upper  
117 100  
119 4.6 77.5 116.3#  
121 0.0 24.7 37.1#

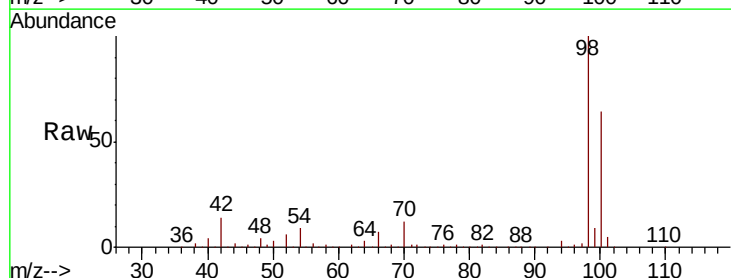


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

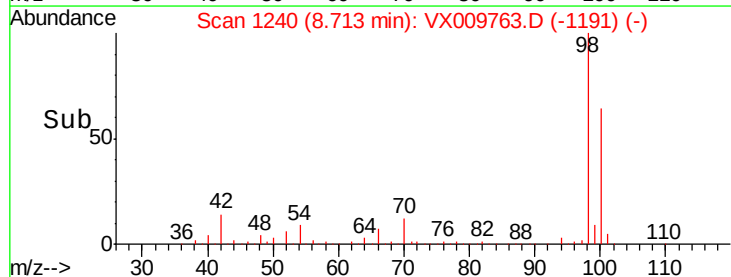
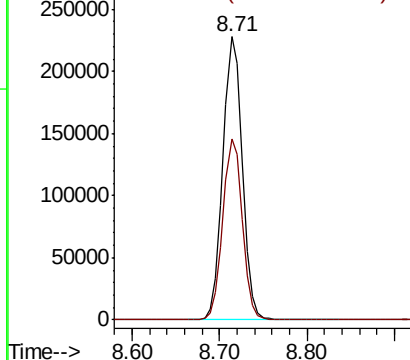


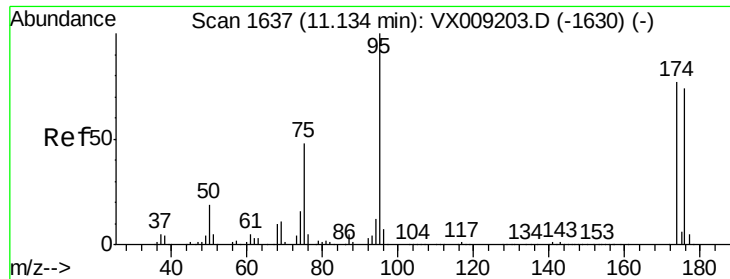
#50  
Toluene-d8  
Concen: 49.962 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX009763.D  
Acq: 21 May 2019 21:15

Tgt Ion: 98 Resp: 350655  
Ion Ratio Lower Upper  
98 100  
100 64.1 51.2 76.8



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





#62

4-Bromofluorobenzene

Concen: 46.451 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampleId :

S36-0153

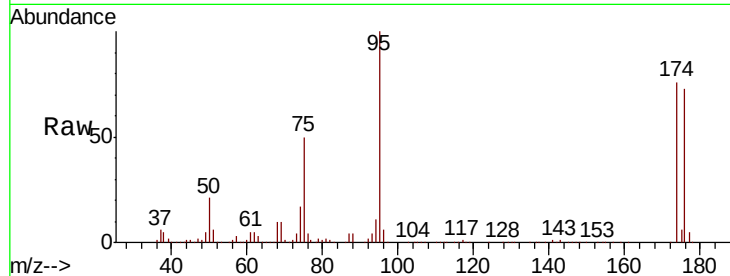
Tot Ion: 95 Resp: 118462

Ion Ratio Lower Upper

95 100

174 80.9 0.0 161.6

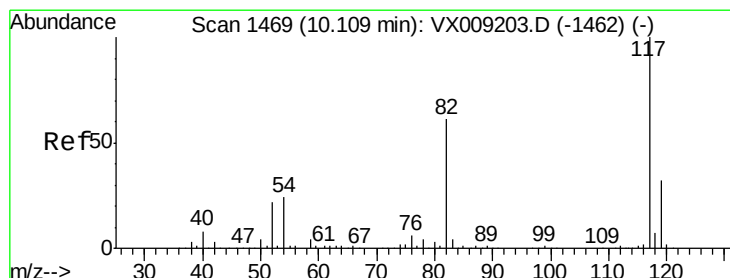
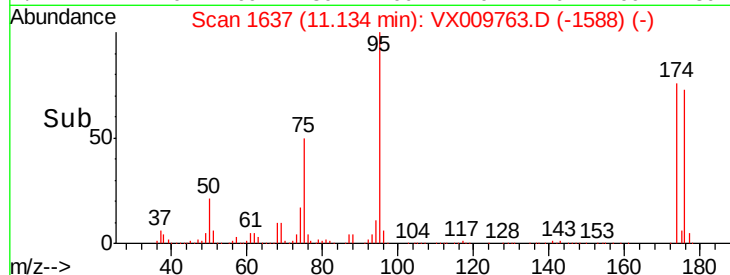
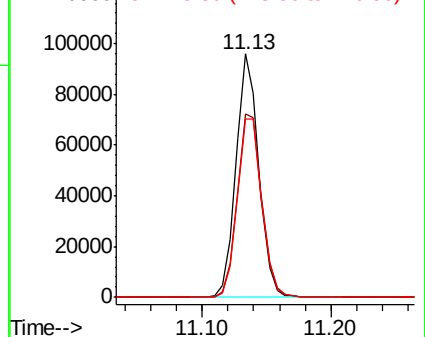
176 78.8 0.0 159.2



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: VX009763.D

Acq: 21 May 2019 21:15

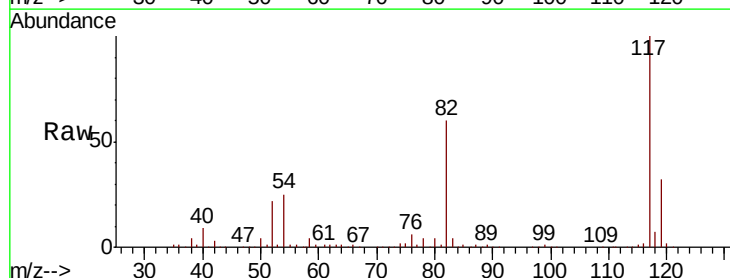
Tgt Ion: 117 Resp: 248516

Ion Ratio Lower Upper

117 100

82 60.0 48.8 73.2

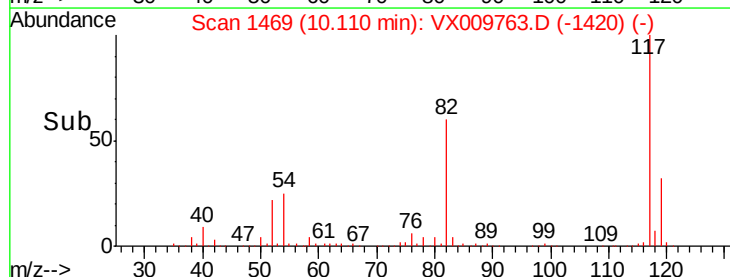
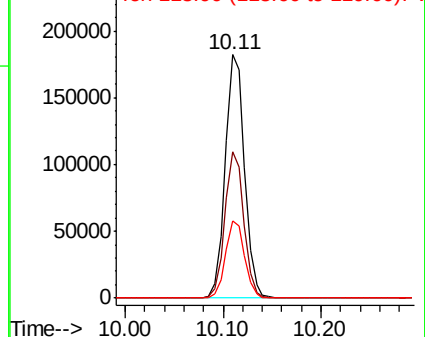
119 31.6 25.8 38.6

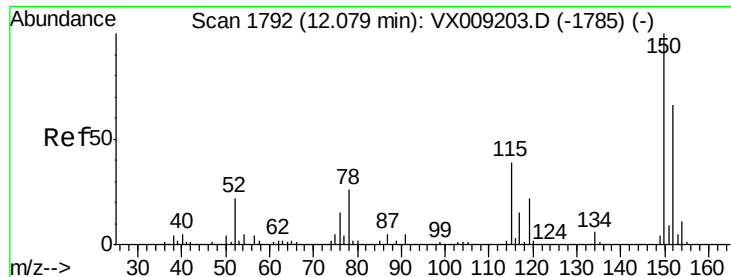


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampleId :

S36-0153

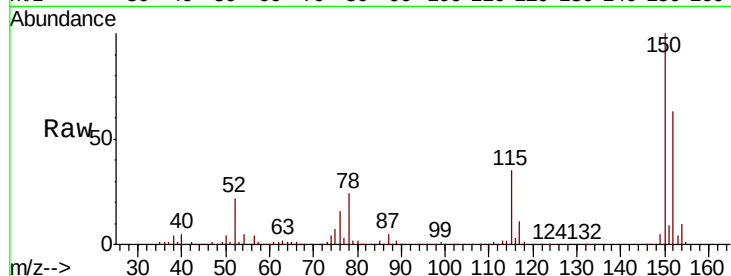
Tot Ion:152 Resp: 107963

Ion Ratio Lower Upper

152 100

115 57.8 41.2 123.6

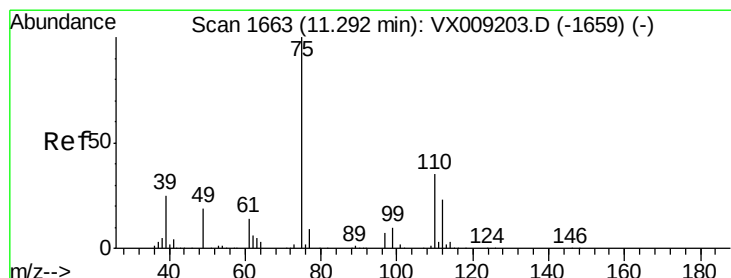
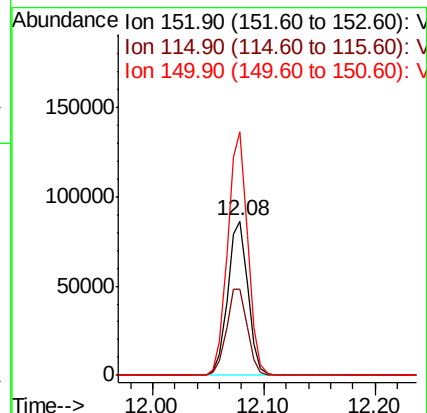
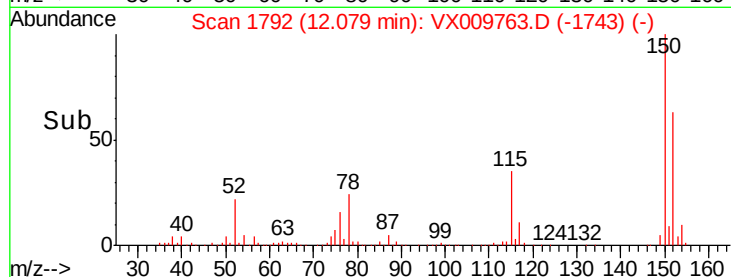
150 157.0 0.0 346.4



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: 24.119 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX009763.D

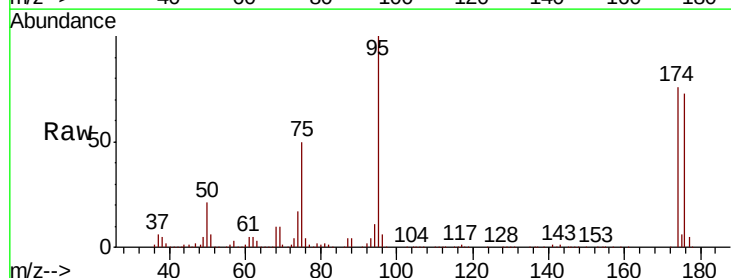
Acq: 21 May 2019 21:15

Tgt Ion: 75 Resp: 60402

Ion Ratio Lower Upper

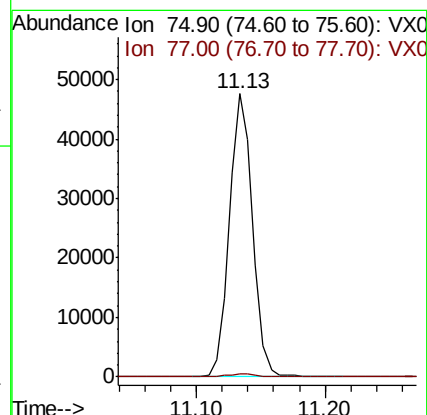
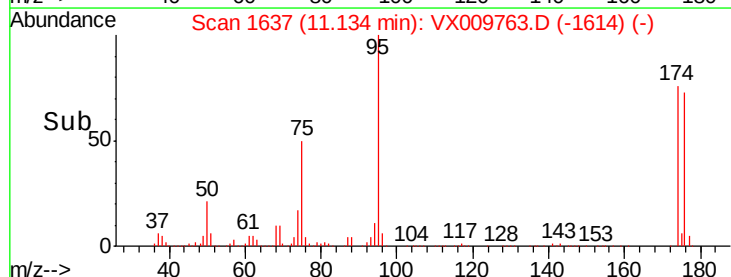
75 100

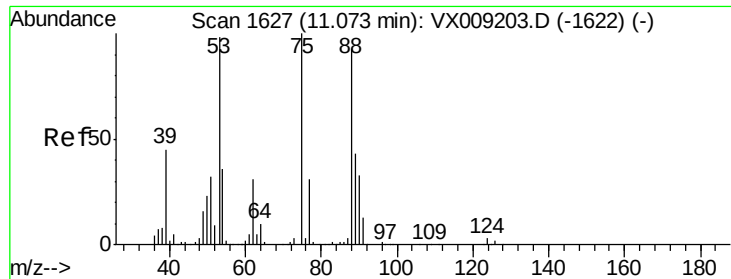
77 1.4 22.1 66.1#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 61.711 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009763.D

Acq: 21 May 2019 21:15

Instrument :

MSVOA\_X

ClientSampleId :

S36-0153

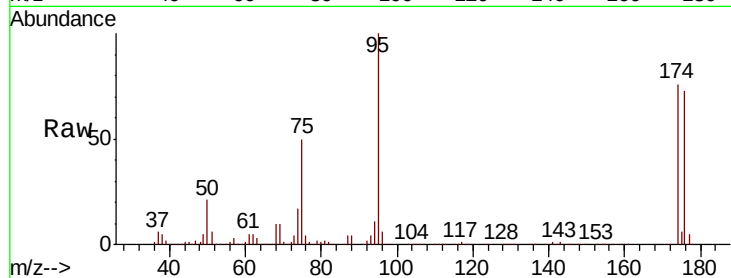
Tot Ion: 75 Resp: 60402

Ion Ratio Lower Upper

75 100

53 0.3 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

