

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX052119\  
 Data File : VX009754.D  
 Acq On : 21 May 2019 17:44  
 Operator : JC/SP  
 Sample : K2910-20  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S73-0230

Quant Time: May 22 07:06:47 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  | 174357   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 277655   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 247961   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 104928   | 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   | 116532   | 48.96 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.92% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 85035    | 48.72 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.44% |          |
| 50) Toluene-d8              | 8.71  | 98   | 351244   | 49.84 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.68% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 117308   | 45.81 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.62% |          |

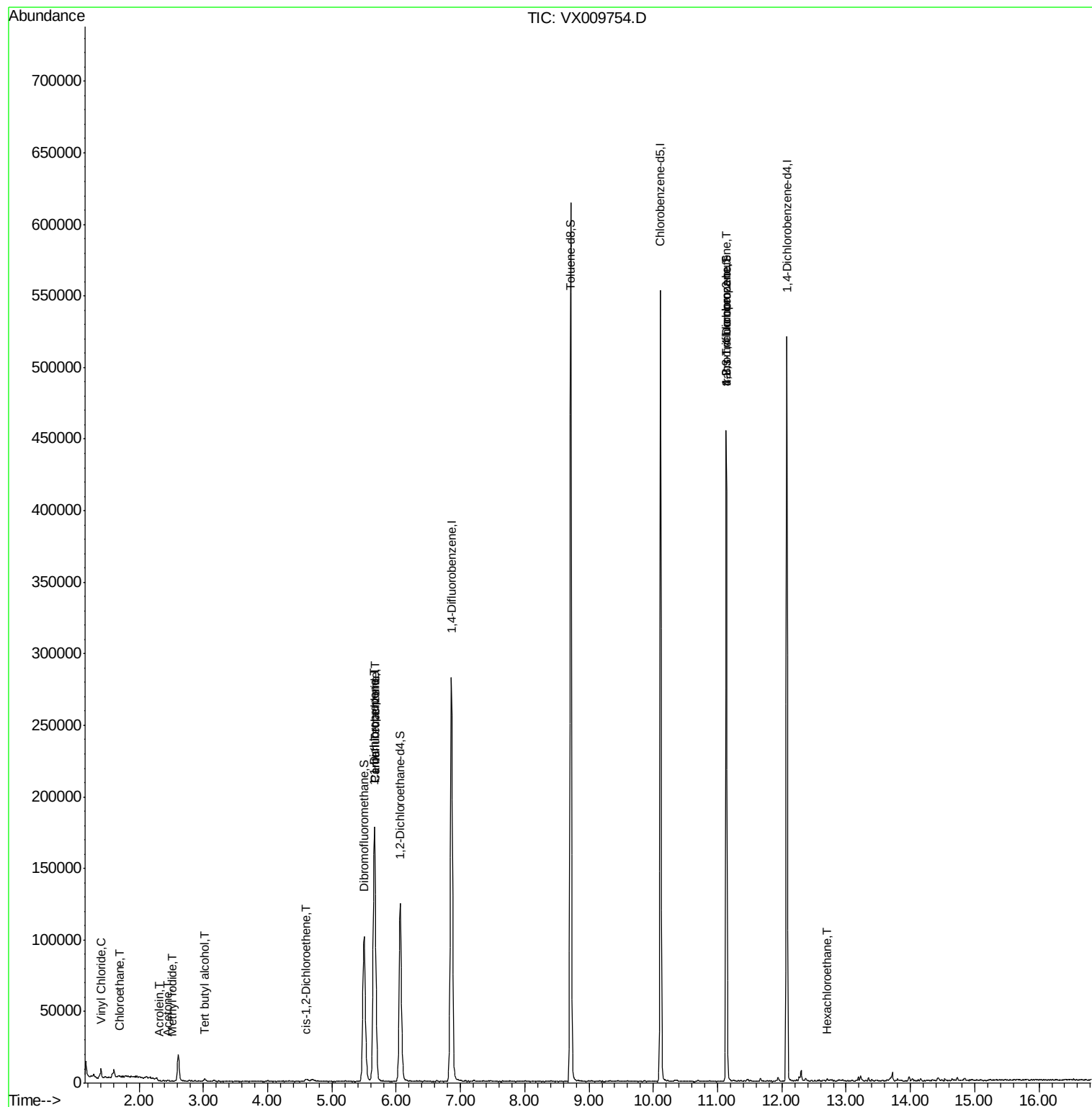
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 4) Vinyl Chloride              | 1.41  | 62   | 3719     | 1.739     | ug/l   | 97     |
| 6) Chloroethane                | 1.70  | 64   | 601      | 0.438     | ug/l # | 80     |
| 10) Methyl Iodide              | 2.52  | 142  | 195      | 4.687     | ug/l # | 83     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 1077     | 1.955     | ug/l # | 94     |
| 13) Acrolein                   | 2.31  | 56   | 123      | 0.247     | ug/l # | 79     |
| 16) Acetone                    | 2.45  | 43   | 1239     | 0.969     | ug/l # | 87     |
| 27) cis-1,2-Dichloroethene     | 4.59  | 96   | 1034     | 0.488     | ug/l   | 90     |
| 28) Bromochloromethane         | 5.02  | 49   | 79       | Below Cal | #      | 20     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 13546    | 5.250     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 16301    | 6.953     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 60293    | 24.772    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 60293    | 63.382    | ug/l # | 10     |
| 90) Hexachloroethane           | 12.69 | 117  | 477      | 0.420     | ug/l # | 7      |

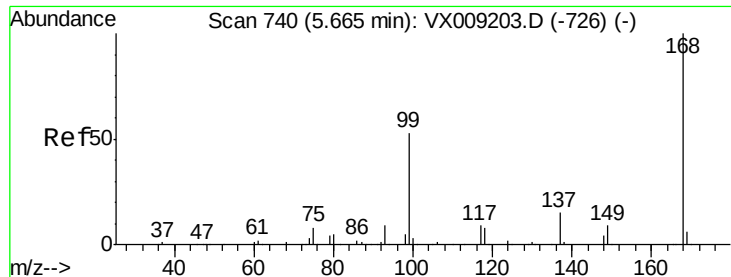
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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S73-0230

Quant Time: May 22 07:06:47 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
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: VX009754.D

Acq: 21 May 2019 17:44

Instrument :

MSVOA\_X

ClientSampleId :

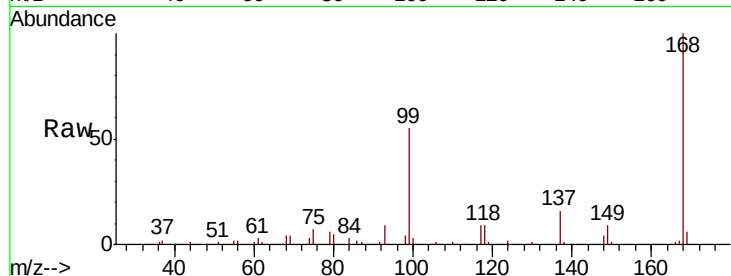
S73-0230

Tot Ion:168 Resp: 174357

Ion Ratio Lower Upper

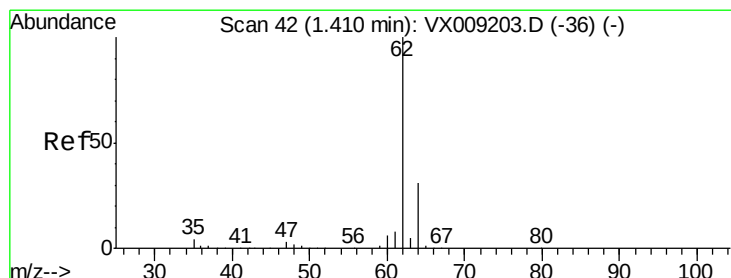
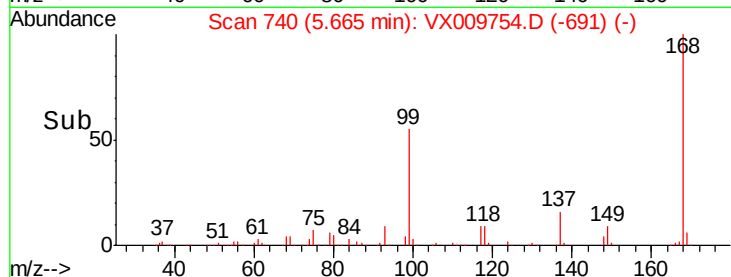
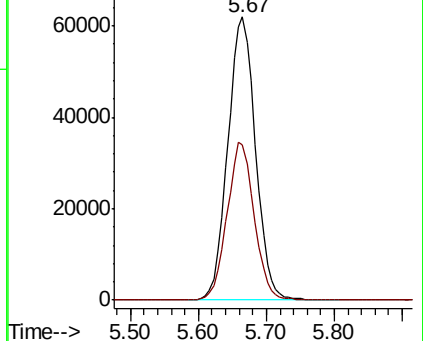
168 100

99 55.0 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#4

Vinyl Chloride

Concen: 1.739 ug/l

RT: 1.41 min Scan# 42

Delta R.T. -0.00 min

Lab File: VX009754.D

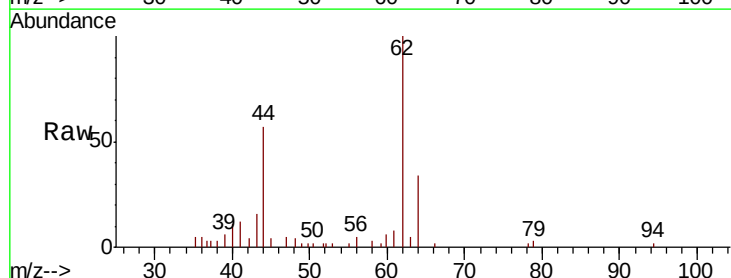
Acq: 21 May 2019 17:44

Tgt Ion: 62 Resp: 3719

Ion Ratio Lower Upper

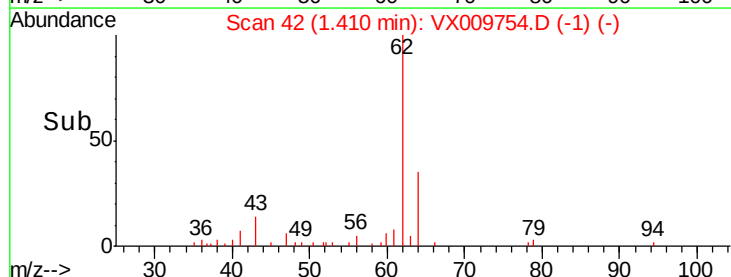
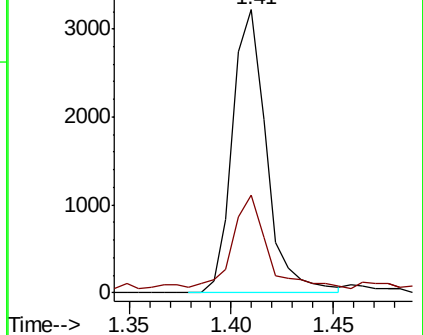
62 100

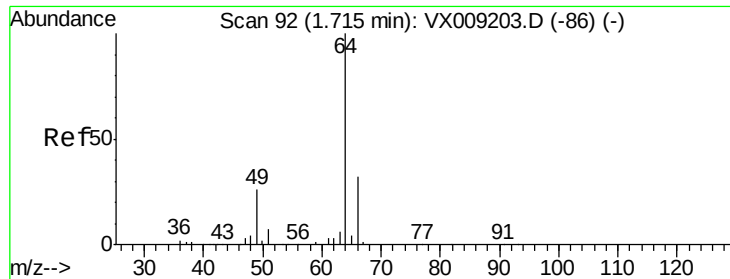
64 32.5 24.6 36.8



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0





#6

Chloroethane

Concen: 0.438 ug/l

RT: 1.70 min Scan# 89

Delta R.T. -0.02 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

Instrument :

MSVOA\_X

ClientSampled :

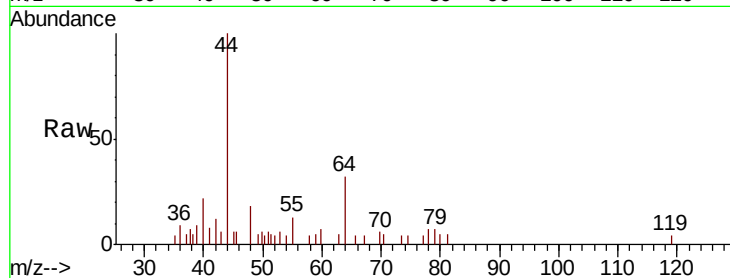
S73-0230

Tot Ion: 64 Resp: 601

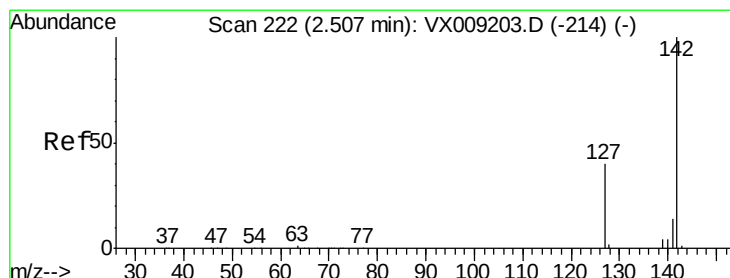
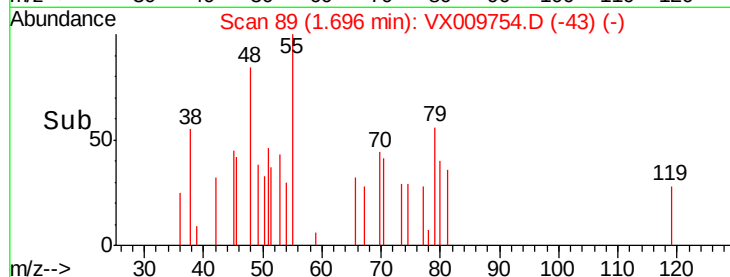
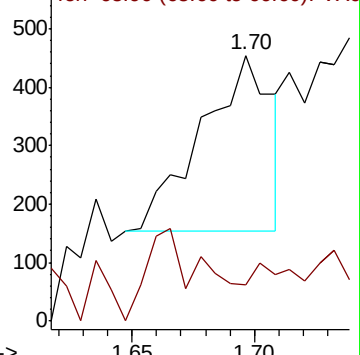
Ion Ratio Lower Upper

64 100

66 20.3 25.3 37.9#



Abundance Ion 63.90 (63.60 to 64.60): VX009203.D (-86) (-)



#10

Methyl Iodide

Concen: 4.687 ug/l

RT: 2.52 min Scan# 224

Delta R.T. 0.01 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

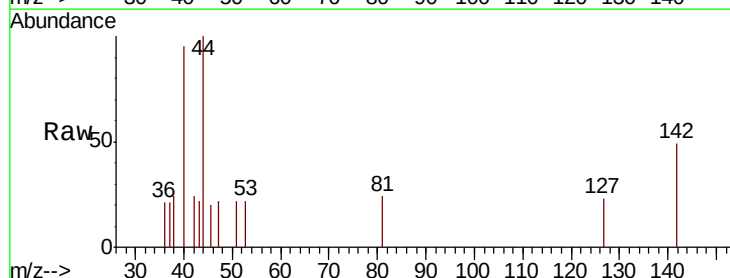
Tgt Ion: 142 Resp: 195

Ion Ratio Lower Upper

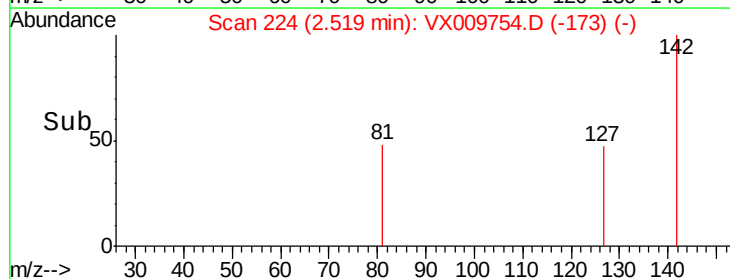
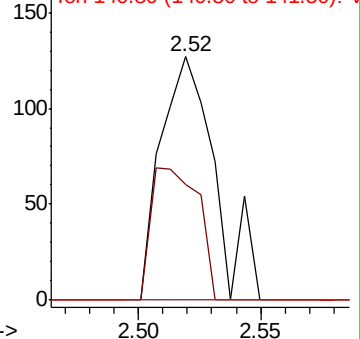
142 100

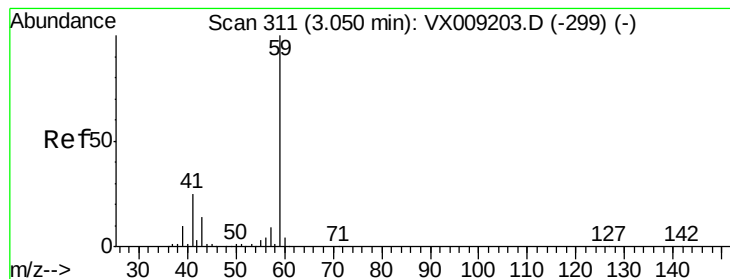
127 47.2 32.7 49.1

141 0.0 11.5 17.3#



Abundance Ion 141.80 (141.50 to 142.50): VX009203.D (-214) (-)





#11

Tert butyl alcohol

Concen: 1.955 ug/l

RT: 3.02 min Scan# 306

Delta R.T. -0.03 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

Instrument :

MSVOA\_X

ClientSampled :

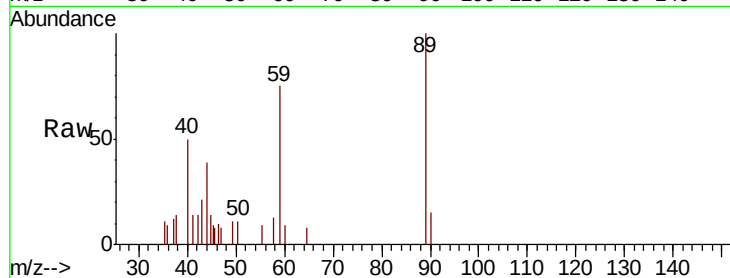
S73-0230

Tot Ion: 59 Resp: 1077

Ion Ratio Lower Upper

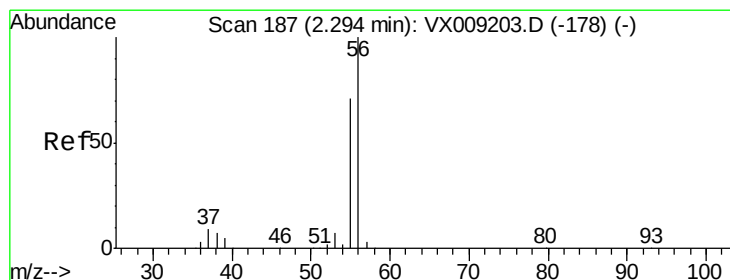
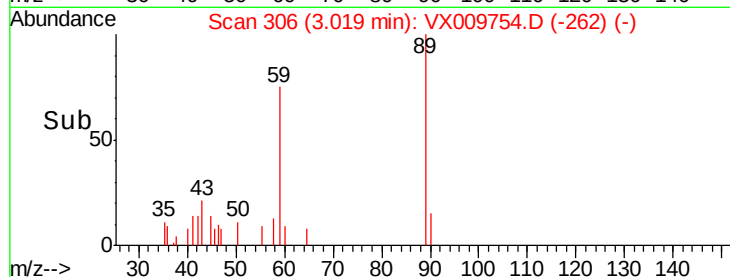
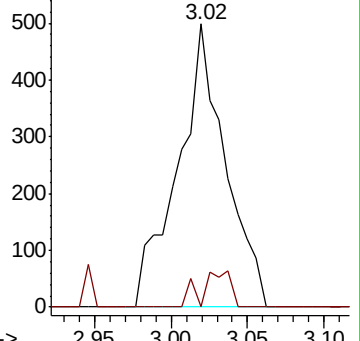
59 100

57 7.8 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0



#13

Acrolein

Concen: 0.247 ug/l

RT: 2.31 min Scan# 190

Delta R.T. 0.02 min

Lab File: VX009754.D

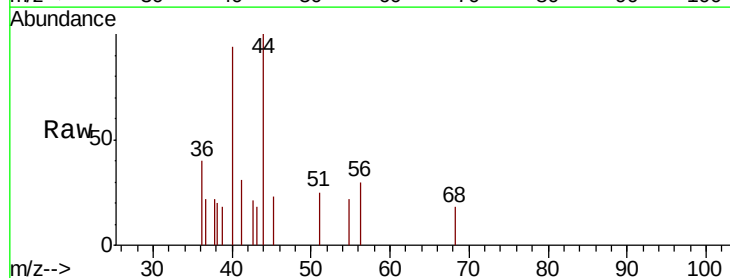
Acq: 21 May 2019 17:44

Tgt Ion: 56 Resp: 123

Ion Ratio Lower Upper

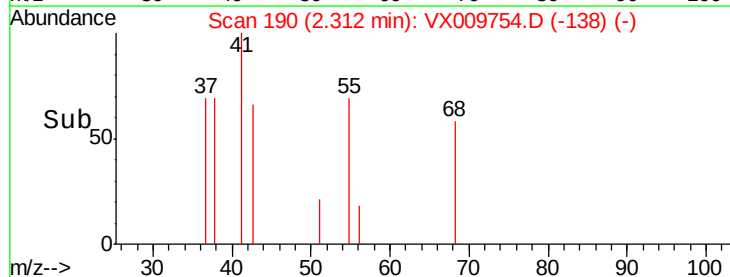
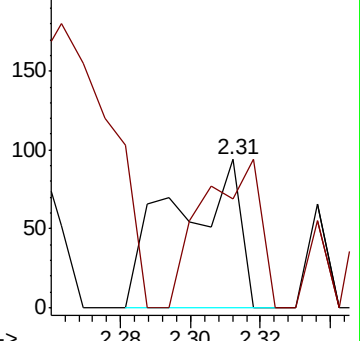
56 100

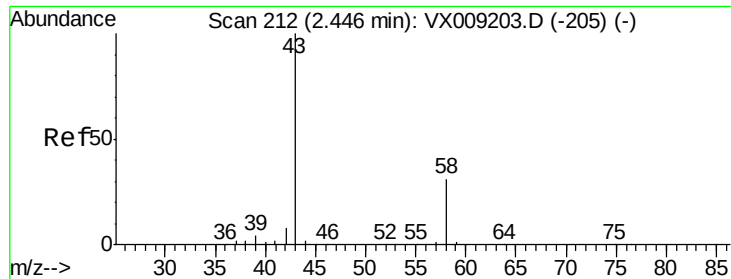
55 87.8 56.6 85.0#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0





#16

Acetone

Concen: 0.969 ug/l

RT: 2.45 min Scan# 213

Delta R.T. 0.01 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

Instrument :

MSVOA\_X

ClientSampled :

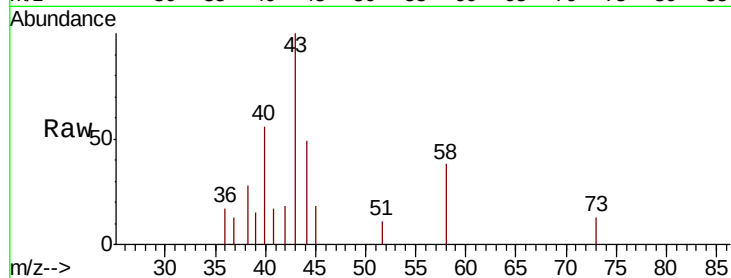
S73-0230

Tot Ion: 43 Resp: 1239

Ion Ratio Lower Upper

43 100

58 38.2 24.9 37.3#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.45

500

400

300

200

100

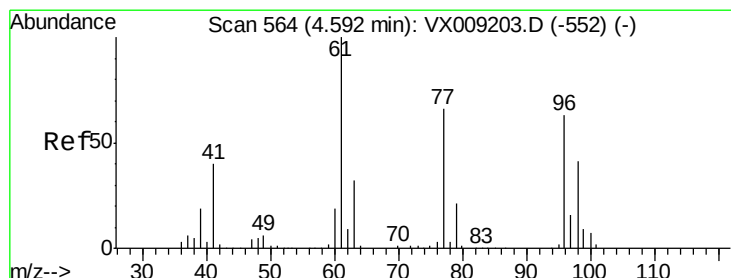
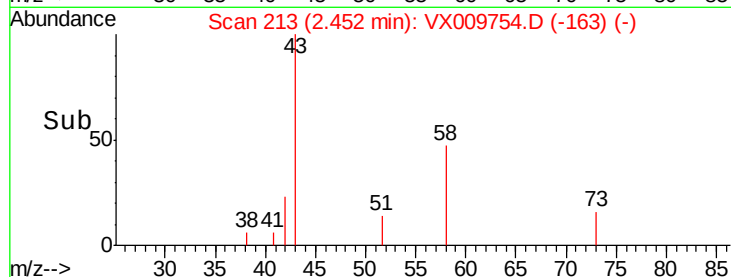
0

2.40

2.45

2.50

Time-->



#27

cis-1,2-Dichloroethene

Concen: 0.488 ug/l

RT: 4.59 min Scan# 564

Delta R.T. -0.00 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

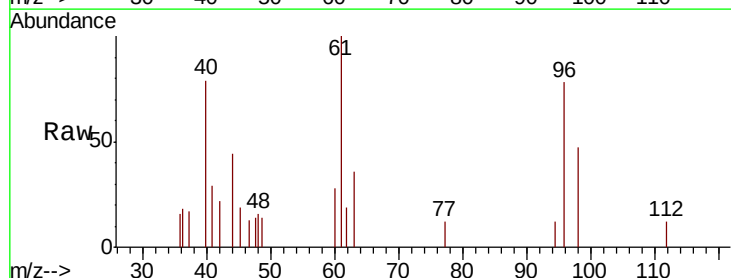
Tgt Ion: 96 Resp: 1034

Ion Ratio Lower Upper

96 100

61 146.1 0.0 324.0

98 61.5 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

600

500

400

300

200

100

0

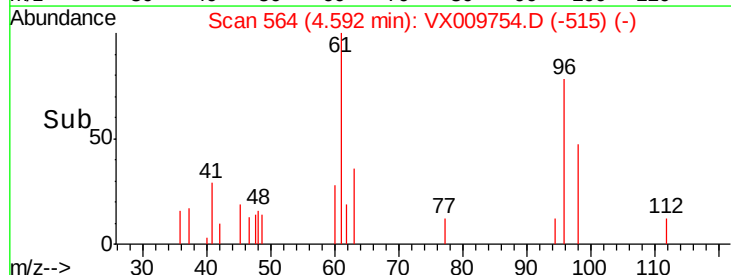
4.50

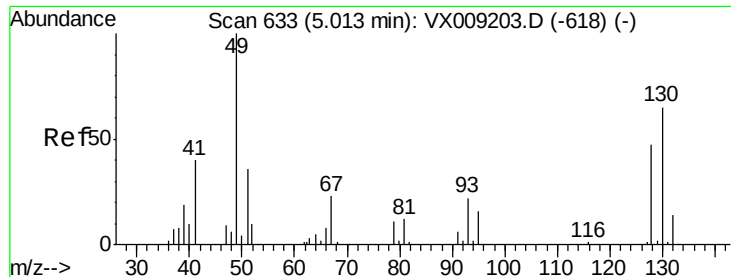
4.55

4.60

4.65

Time-->

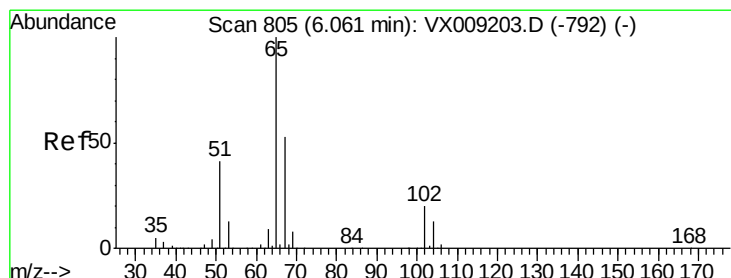
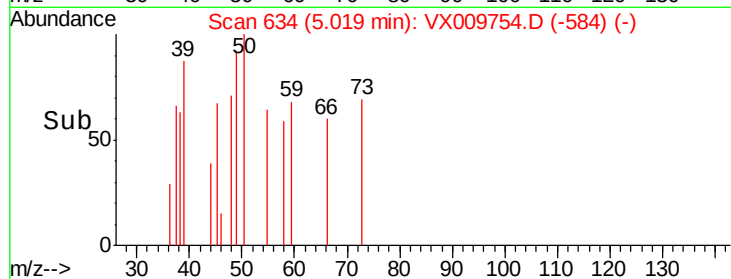
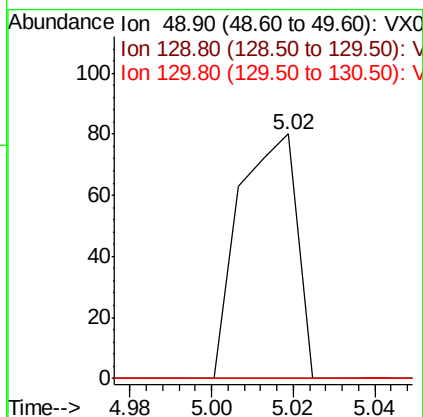
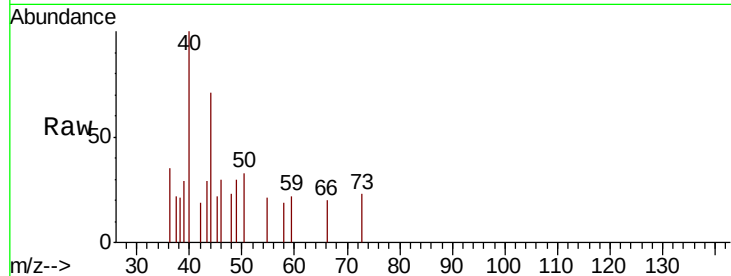




#28  
Bromochloromethane  
Concen: Below Cal  
RT: 5.02 min Scan# 634  
Delta R.T. 0.01 min  
Lab File: VX009754.D  
Acq: 21 May 2019 17:44

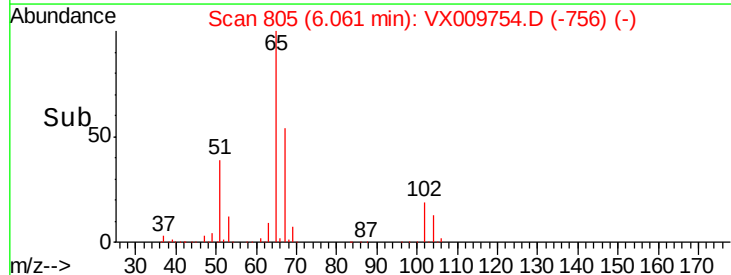
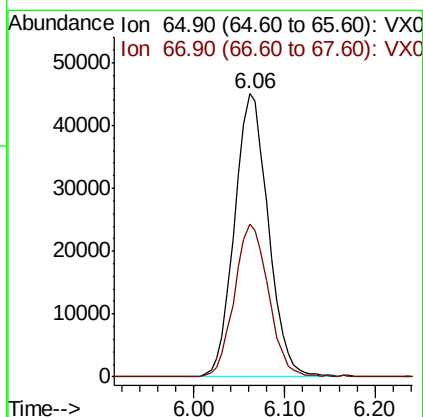
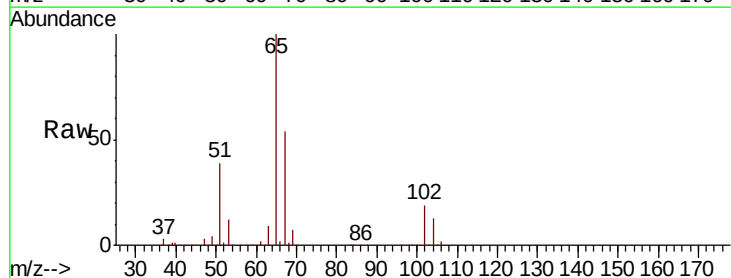
Instrument :  
MSVOA\_X  
ClientSampleId :  
S73-0230

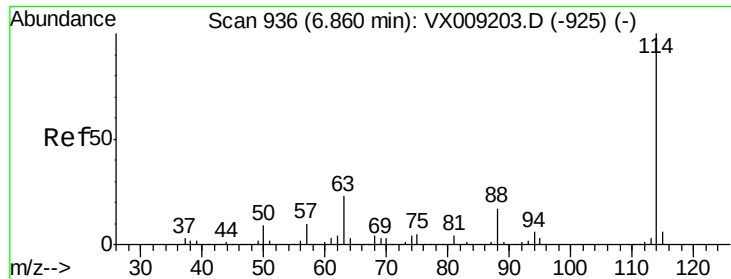
Tot Ion: 49 Resp: 79  
Ion Ratio Lower Upper  
49 100  
129 0.0 0.0 3.8  
130 0.0 51.2 76.8#



#33  
1,2-Dichloroethane-d4  
Concen: 48.959 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. -0.00 min  
Lab File: VX009754.D  
Acq: 21 May 2019 17:44

Tgt Ion: 65 Resp: 116532  
Ion Ratio Lower Upper  
65 100  
67 54.6 0.0 106.6

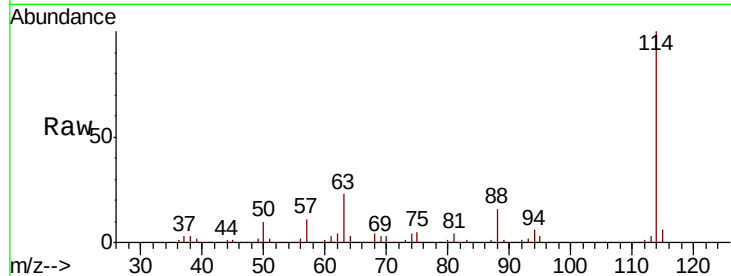




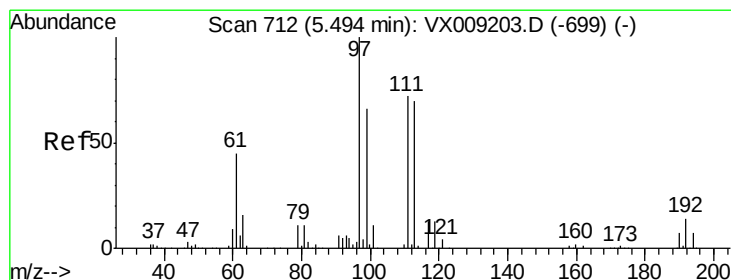
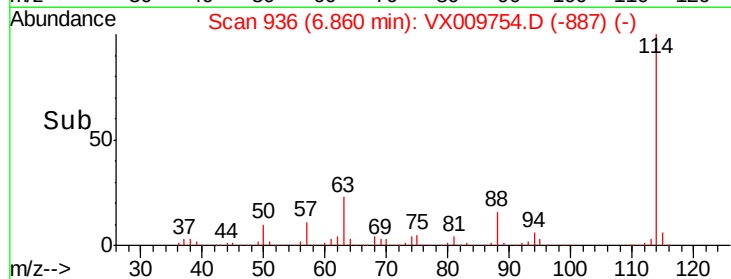
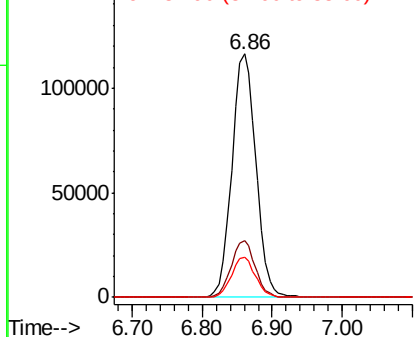
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX009754.D  
 Acq: 21 May 2019 17:44

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S73-0230

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 23.3  | 0.0   | 45.6  |
| 88      | 16.4  | 0.0   | 33.2  |

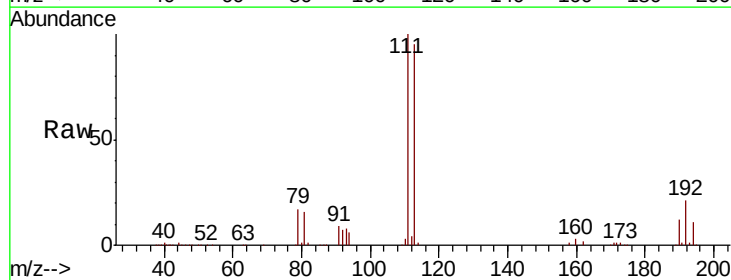


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

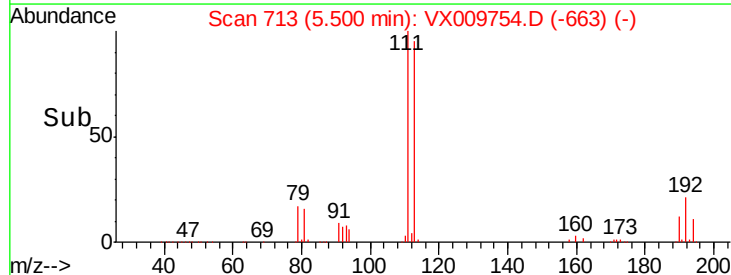
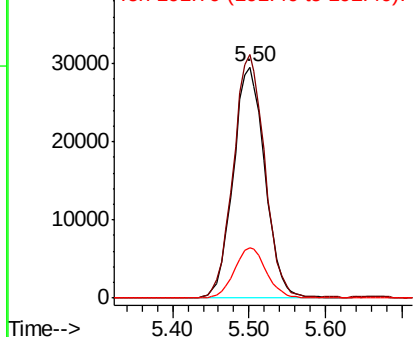


#35  
 Dibromofluoromethane  
 Concen: 48.718 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.01 min  
 Lab File: VX009754.D  
 Acq: 21 May 2019 17:44

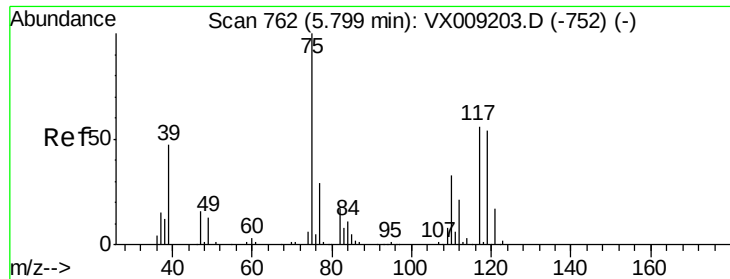
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 104.0 | 82.8  | 124.2 |
| 192     | 21.9  | 17.0  | 25.6  |



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



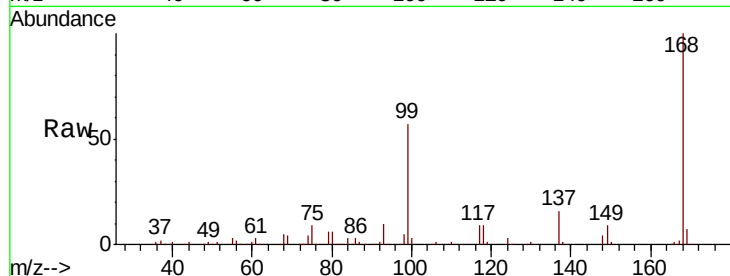




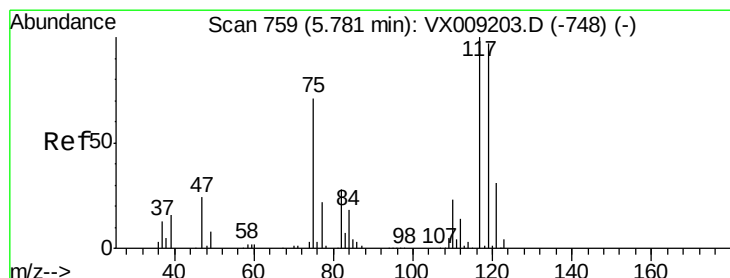
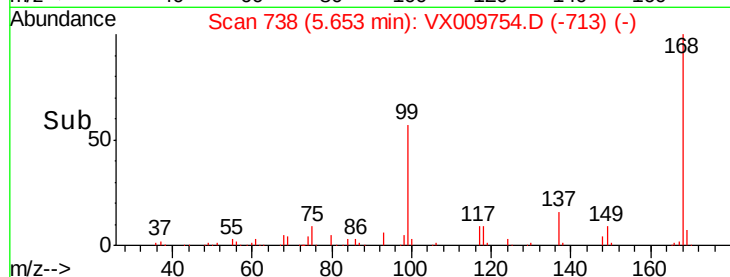
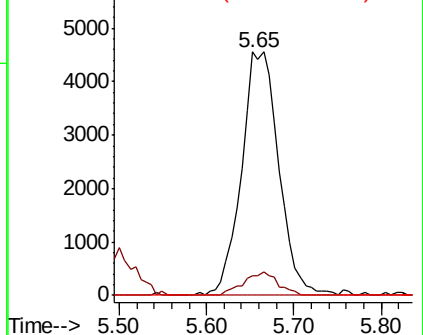
#36  
 1,1-Dichloropropene  
 Concen: 5.250 ug/l  
 RT: 5.65 min Scan# 738  
 Delta R.T. -0.15 min  
 Lab File: VX009754.D  
 Acq: 21 May 2019 17:44

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S73-0230

Tot Ion: 75 Resp: 13546  
 Ion Ratio Lower Upper  
 75 100  
 110 8.8 16.9 50.6#  
 77 0.0 24.8 37.2#

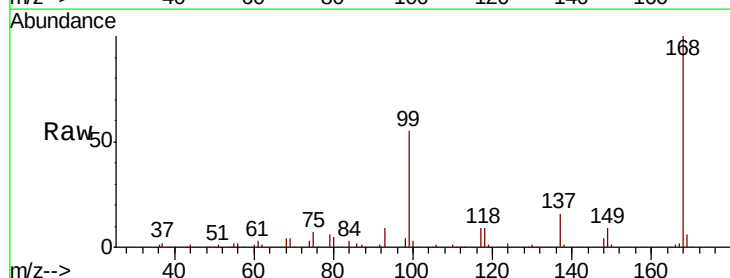


Abundance Ion 74.90 (74.60 to 75.60): VX0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VX0

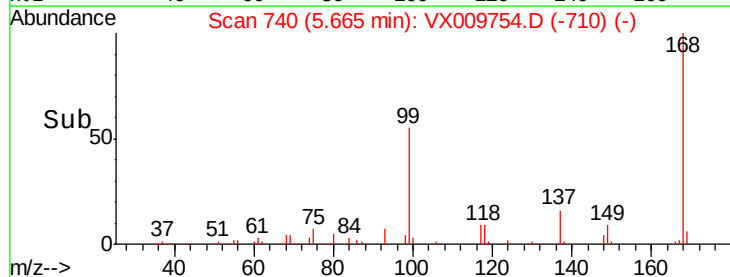
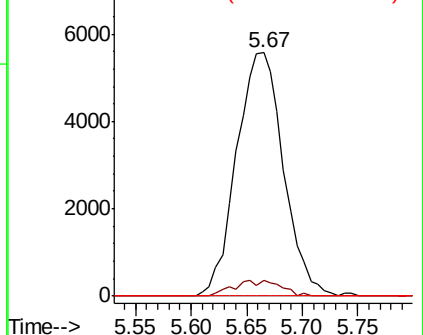


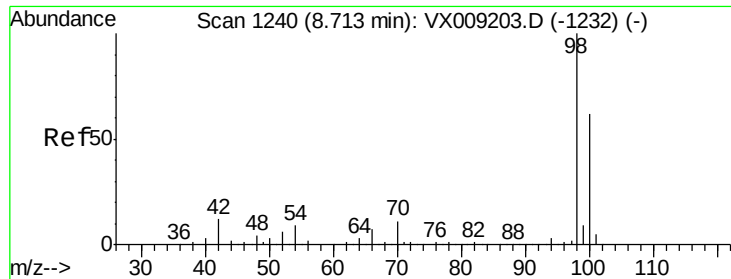
#38  
 Carbon Tetrachloride  
 Concen: 6.953 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.12 min  
 Lab File: VX009754.D  
 Acq: 21 May 2019 17:44

Tgt Ion: 117 Resp: 16301  
 Ion Ratio Lower Upper  
 117 100  
 119 6.4 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

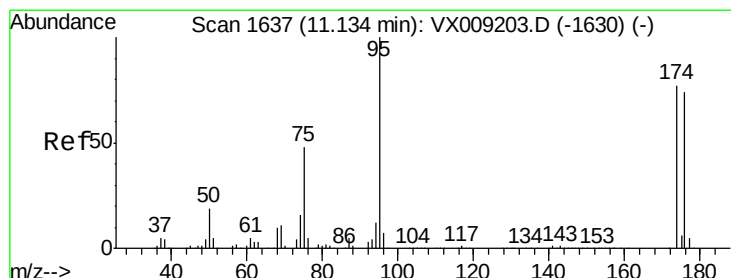
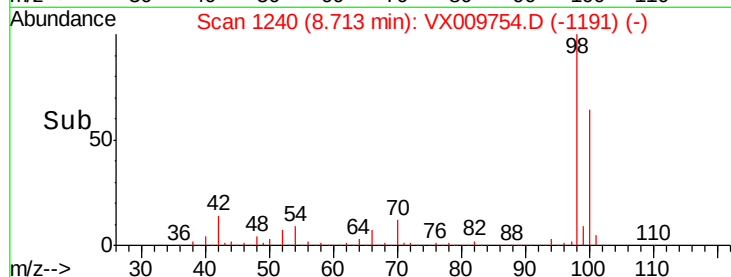
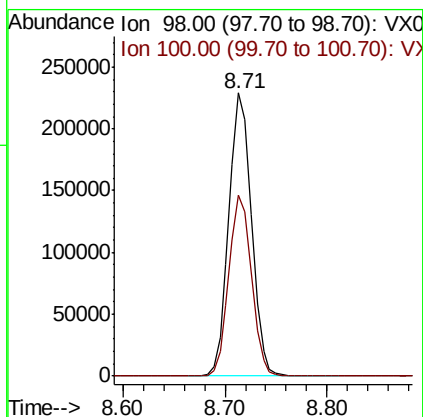
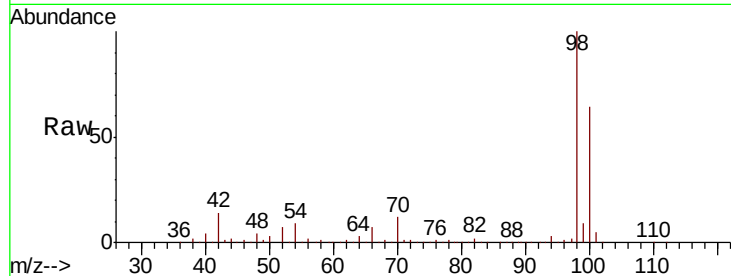




#50  
Toluene-d8  
Concen: 49.844 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. -0.00 min  
Lab File: VX009754.D  
Acq: 21 May 2019 17:44

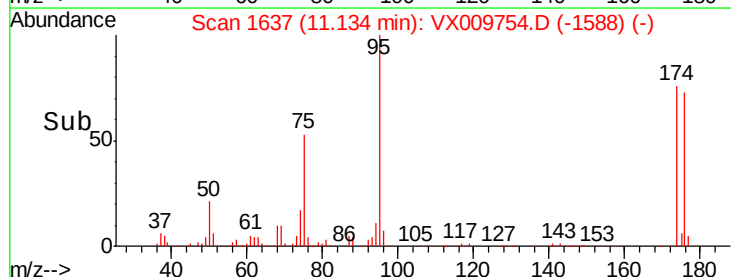
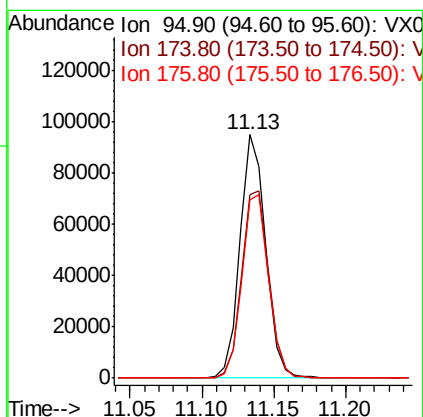
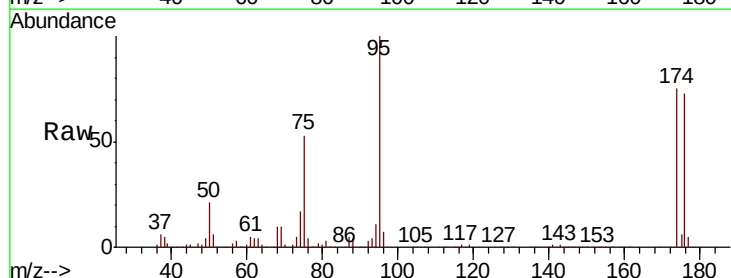
Instrument :  
MSVOA\_X  
ClientSampleId :  
S73-0230

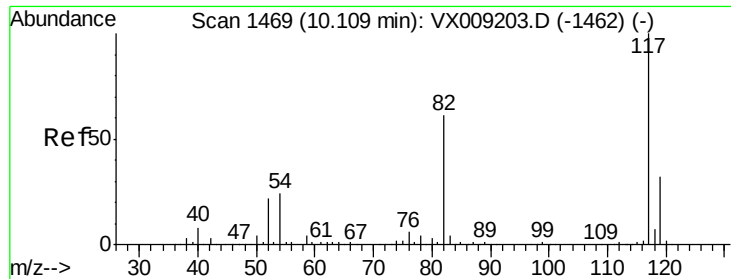
Tot Ion: 98 Resp: 351244  
Ion Ratio Lower Upper  
98 100  
100 64.1 51.2 76.8



#62  
4-Bromofluorobenzene  
Concen: 45.814 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.00 min  
Lab File: VX009754.D  
Acq: 21 May 2019 17:44

Tgt Ion: 95 Resp: 117308  
Ion Ratio Lower Upper  
95 100  
174 81.3 0.0 161.6  
176 78.4 0.0 159.2

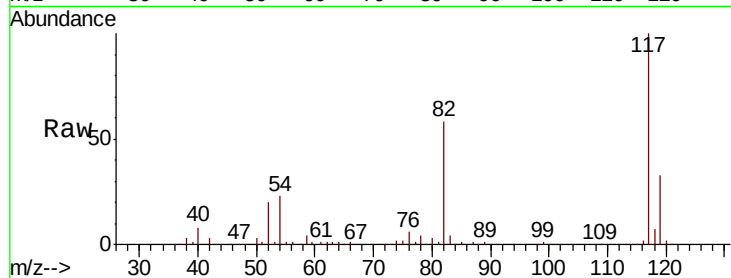




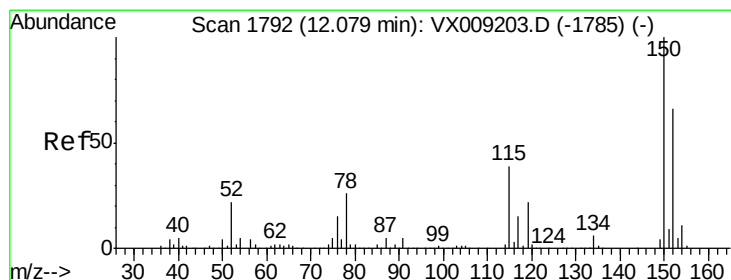
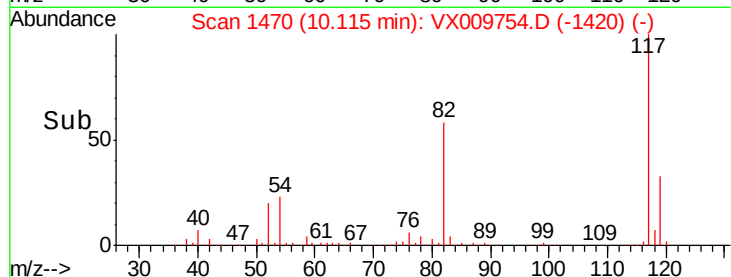
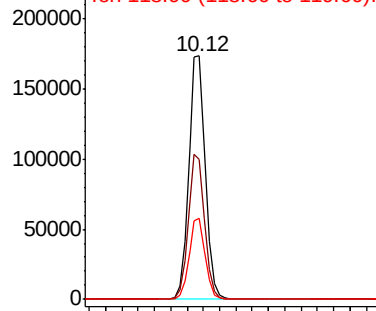
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.01 min  
Lab File: VX009754.D  
Acq: 21 May 2019 17:44

Instrument :  
MSVOA\_X  
ClientSampleId :  
S73-0230

Tot Ion:117 Resp: 247961  
Ion Ratio Lower Upper  
117 100  
82 57.6 48.8 73.2  
119 33.3 25.8 38.6

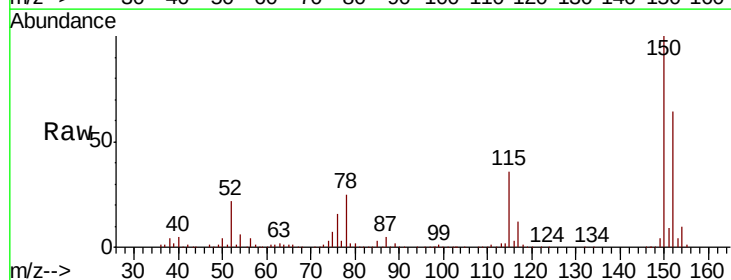


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

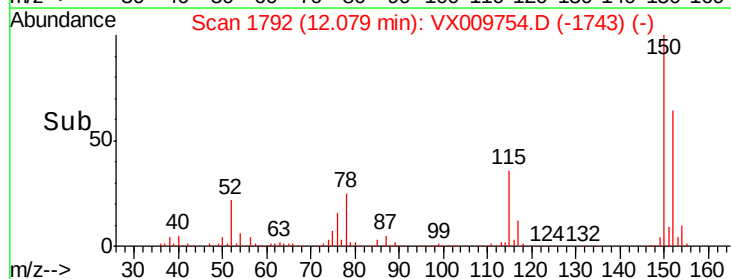
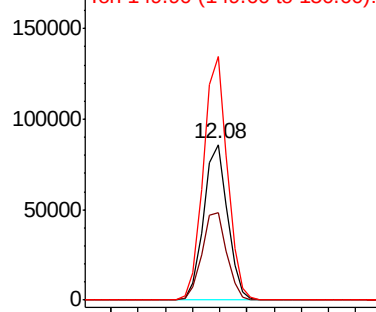


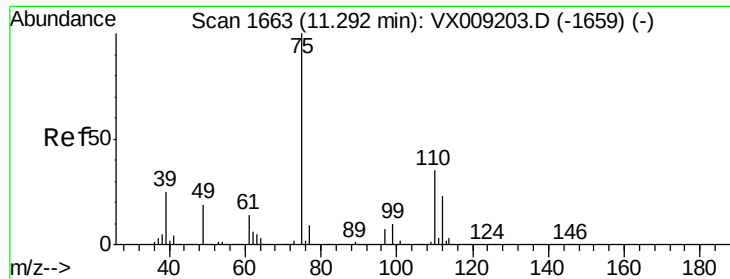
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. -0.00 min  
Lab File: VX009754.D  
Acq: 21 May 2019 17:44

Tgt Ion:152 Resp: 104928  
Ion Ratio Lower Upper  
152 100  
115 58.8 41.2 123.6  
150 157.3 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: 24.772 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

Instrument :

MSVOA\_X

ClientSampled :

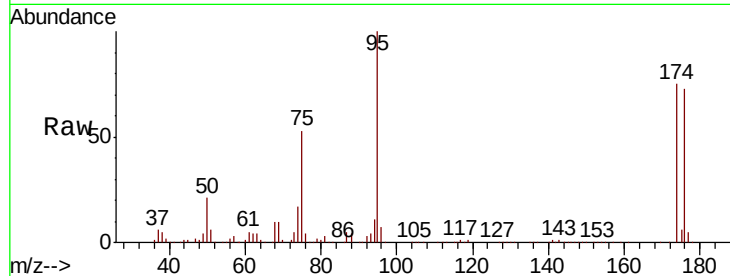
S73-0230

Tot Ion: 75 Resp: 60293

Ion Ratio Lower Upper

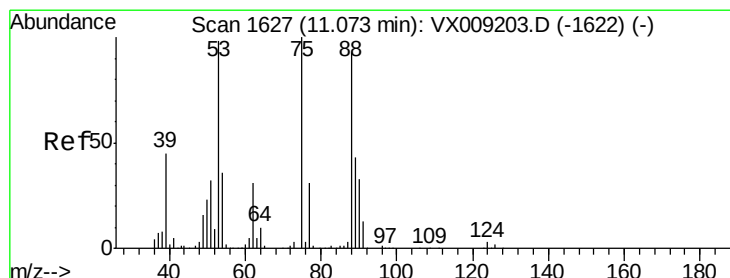
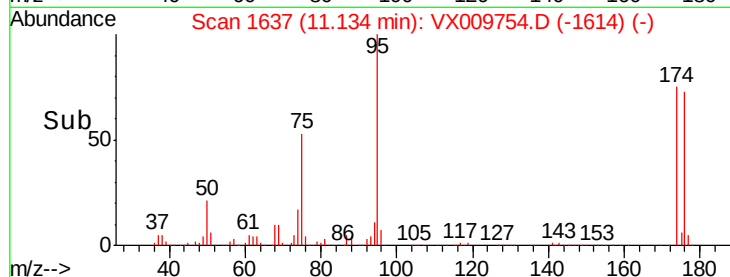
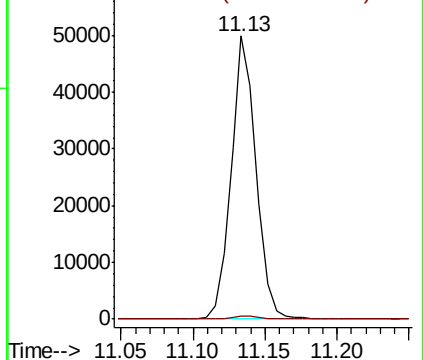
75 100

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



#81

trans-1,4-Dichloro-2-butene

Concen: 63.382 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

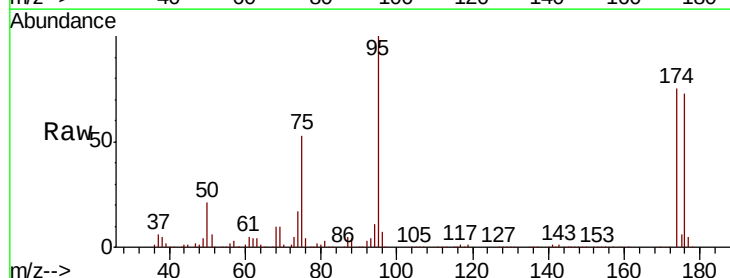
Tgt Ion: 75 Resp: 60293

Ion Ratio Lower Upper

75 100

53 0.0 79.0 118.6#

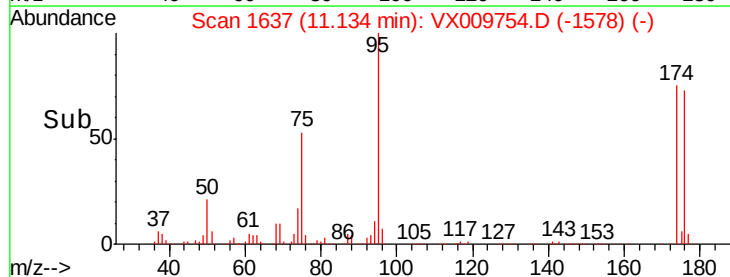
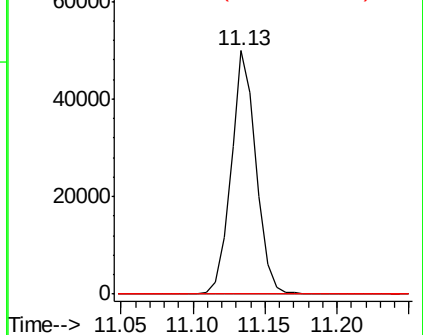
89 0.0 34.7 52.1#

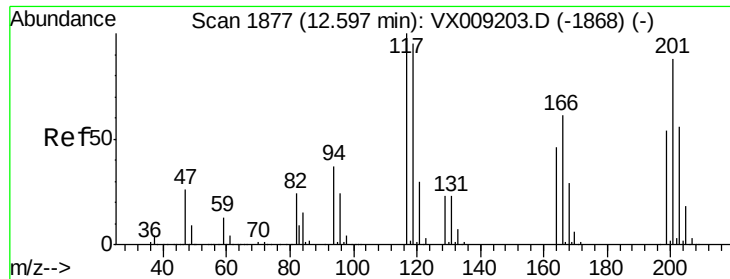


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#90

Hexachloroethane

Concen: 0.420 ug/l

RT: 12.69 min Scan# 1893

Delta R.T. 0.10 min

Lab File: VX009754.D

Acq: 21 May 2019 17:44

Instrument :

MSVOA\_X

ClientSampleId :

S73-0230

Tot Ion:117 Resp: 477

Ion Ratio Lower Upper

117 100

201 0.0 42.3 126.9#

