

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX101018\  
 Data File : VX005244.D  
 Acq On : 11 Oct 2018 09:53  
 Operator : JC/MD  
 Sample : J5364-05  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 43 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 KY038PS038-181008

Quant Time: Oct 11 11:57:28 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 03 04:00:03 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 180863   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 270715   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 269546   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 147846   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 135452   | 52.43 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.86% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 115798   | 50.47 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.94% |          |
| 50) Toluene-d8              | 8.72  | 98   | 395422   | 51.84 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.68% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 138214   | 50.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.60% |          |

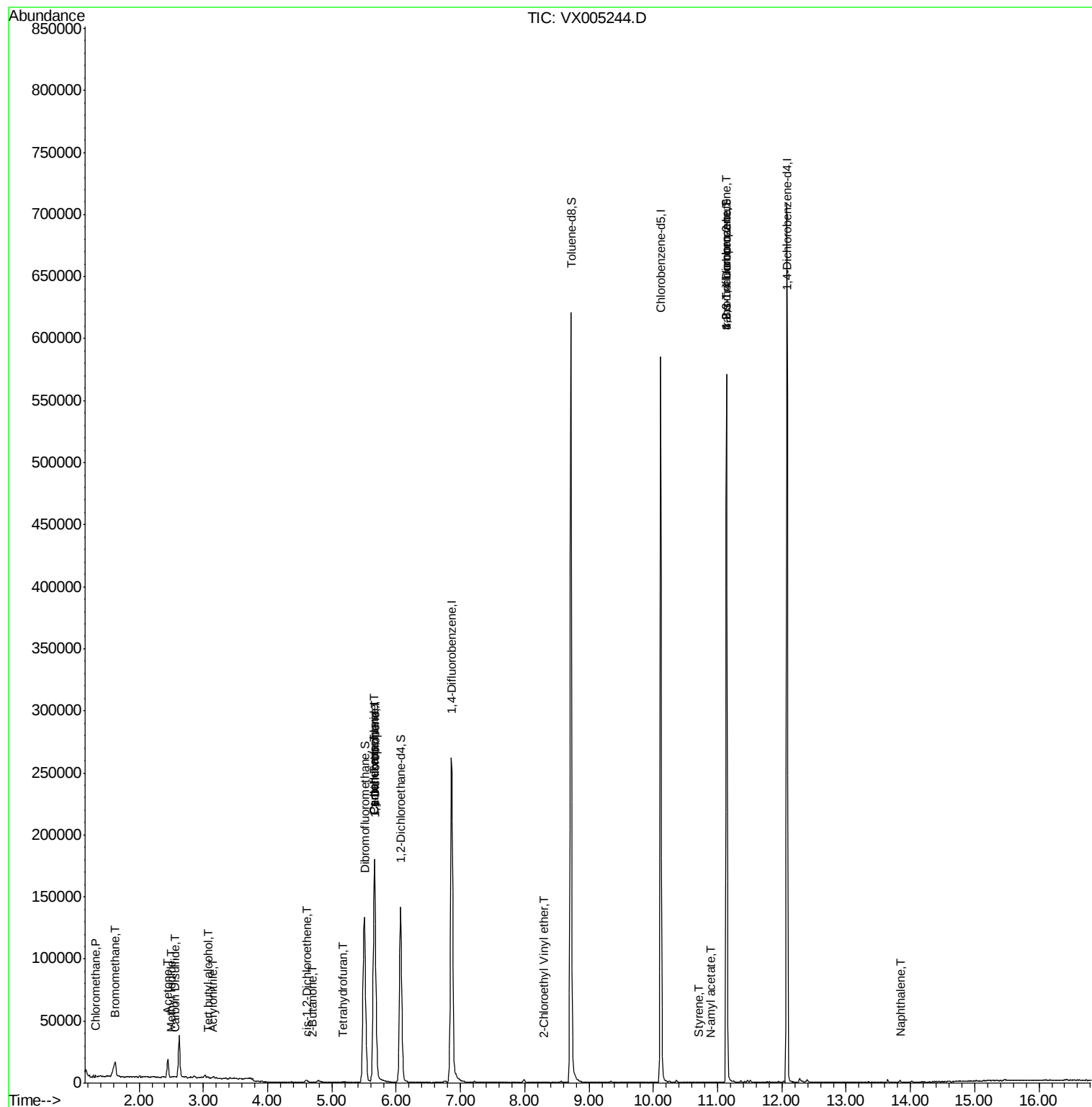
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1016     | 0.34      | ug/l   | 97     |
| 5) Bromomethane                | 1.64  | 94   | 487      | 0.29      | ug/l   | 99     |
| 6) Chloroethane                | 1.73  | 64   | 196      | Below Cal |        | 92     |
| 10) Methyl Iodide              | 2.51  | 142  | 547      | 0.21      | ug/l # | 79     |
| 11) Tert butyl alcohol         | 3.08  | 59   | 980      | 1.36      | ug/l # | 73     |
| 15) Acrylonitrile              | 3.15  | 53   | 416      | 0.26      | ug/l # | 64     |
| 16) Acetone                    | 2.45  | 43   | 15881    | 10.53     | ug/l   | 96     |
| 17) Carbon Disulfide           | 2.57  | 76   | 1301     | 0.22      | ug/l # | 90     |
| 20) Methylene Chloride         | 2.87  | 84   | 384      | Below Cal | #      | 88     |
| 25) 2-Butanone                 | 4.70  | 43   | 486      | 0.22      | ug/l # | 49     |
| 27) cis-1,2-Dichloroethene     | 4.61  | 96   | 771      | 0.32      | ug/l # | 3      |
| 29) Tetrahydrofuran            | 5.17  | 42   | 598      | 0.43      | ug/l # | 53     |
| 31) Cyclohexane                | 5.66  | 56   | 3479     | 1.06      | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 12186    | 3.89      | ug/l # | 46     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 15748    | 4.79      | ug/l # | 19     |
| 58) 2-Chloroethyl Vinyl ether  | 8.30  | 63   | 39       | 14.26     | ug/l # | 49     |
| 70) Styrene                    | 10.71 | 104  | 109      | 2.15      | ug/l # | 71     |
| 74) N-amyl acetate             | 10.90 | 43   | 63       | 1.76      | ug/l # | 39     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 69289    | 20.91     | ug/l # | 35     |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 311      | Below Cal | #      | 63     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 69289    | 56.75     | ug/l # | 10     |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 365      | Below Cal |        | 90     |
| 95) Naphthalene                | 13.84 | 128  | 891      | 0.79      | ug/l   | 96     |

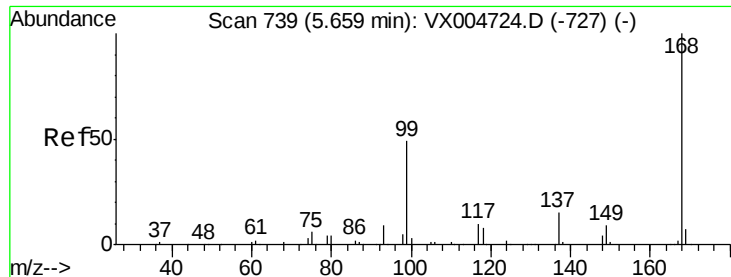
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Oct 03 04:00:03 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

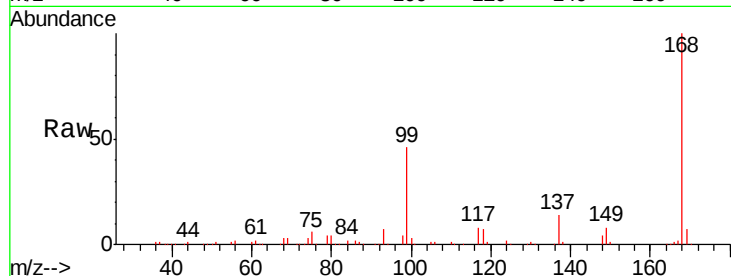
KY038PS038-181008

Tgt Ion:168 Resp: 180863

Ion Ratio Lower Upper

168 100

99 45.5 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

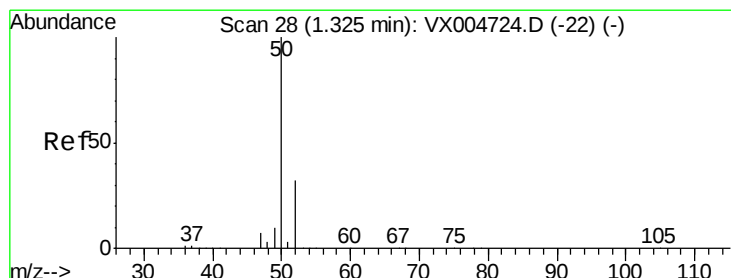
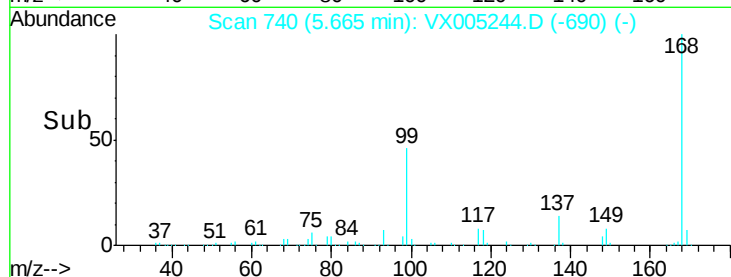
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.34 ug/l

RT: 1.32 min Scan# 28

Delta R.T. -0.00 min

Lab File: VX005244.D

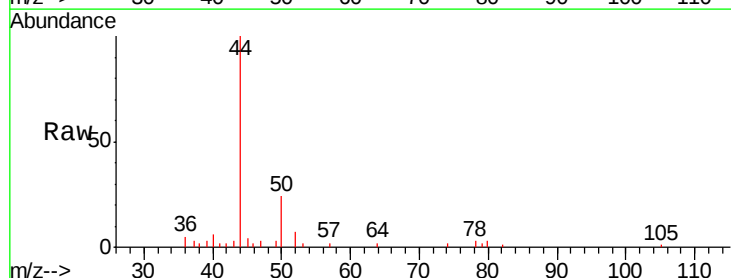
Acq: 11 Oct 2018 09:53

Tgt Ion: 50 Resp: 1016

Ion Ratio Lower Upper

50 100

52 30.7 25.8 38.6



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

800

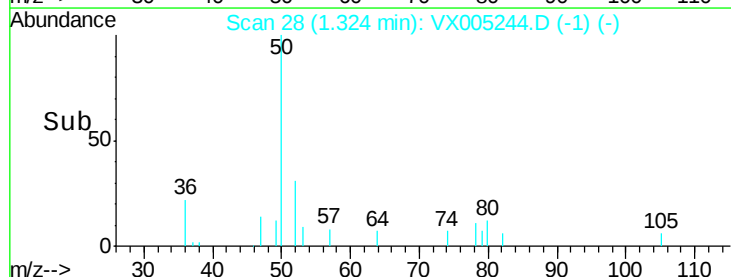
600

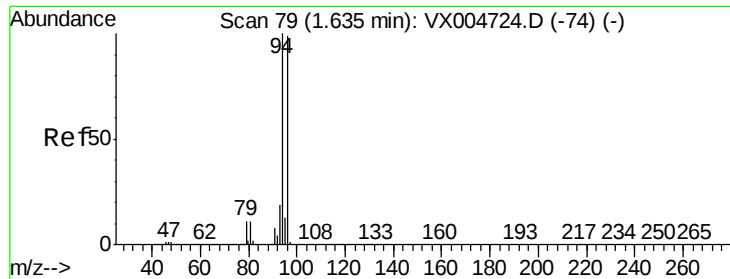
400

200

0

Time--> 1.30 1.35 1.40





#5

Bromomethane

Concen: 0.29 ug/l

RT: 1.64 min Scan# 79

Delta R.T. -0.00 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

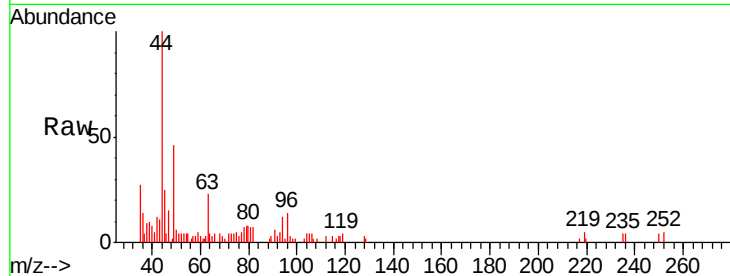
KY038PS038-181008

Tgt Ion: 94 Resp: 487

Ion Ratio Lower Upper

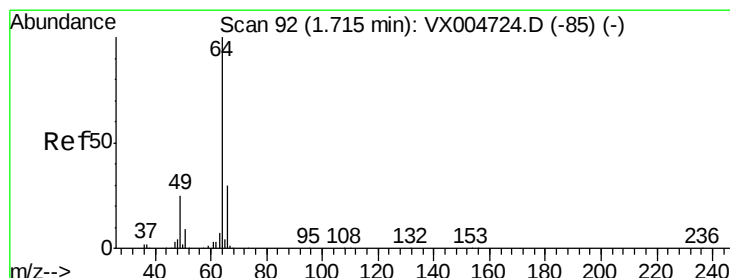
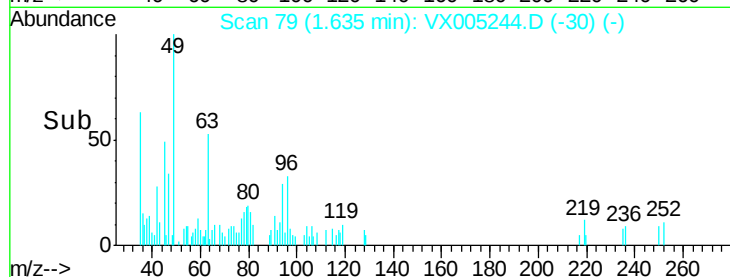
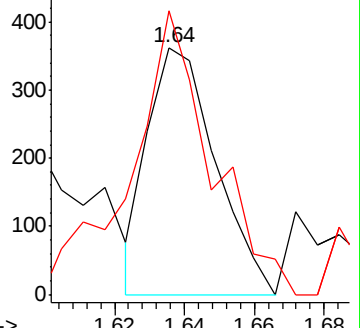
94 100

96 100.8 79.5 119.3



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: Below Cal

RT: 1.73 min Scan# 94

Delta R.T. 0.01 min

Lab File: VX005244.D

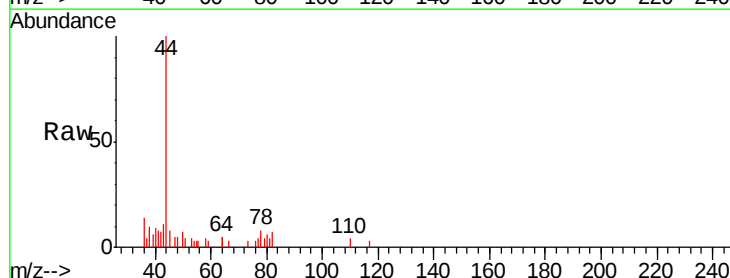
Acq: 11 Oct 2018 09:53

Tgt Ion: 64 Resp: 196

Ion Ratio Lower Upper

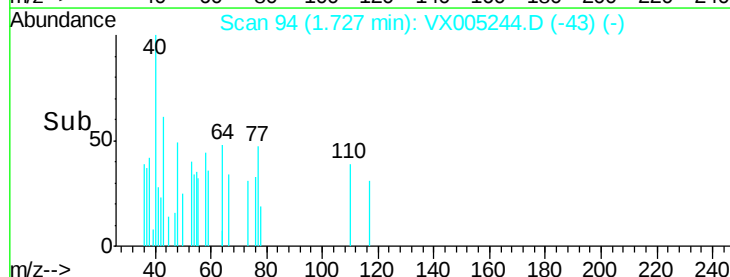
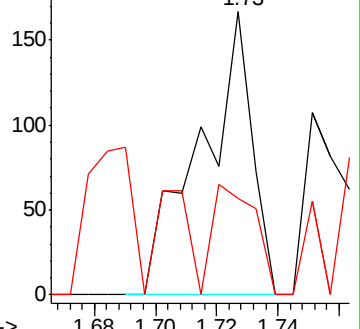
64 100

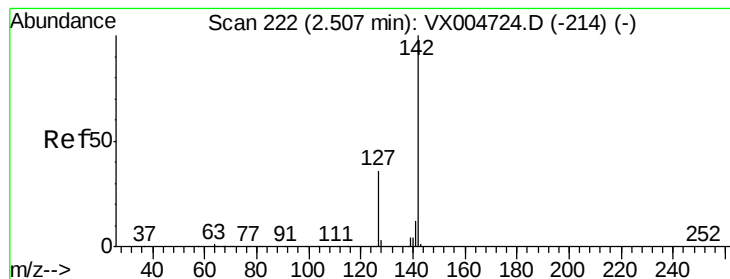
66 34.1 23.8 35.6



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0





#10

Methyl Iodide

Concen: 0.21 ug/l

RT: 2.51 min Scan# 222

Delta R.T. -0.00 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

KY038PS038-181008

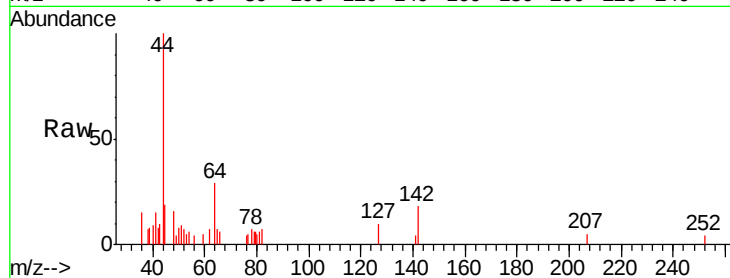
Tgt Ion:142 Resp: 547

Ion Ratio Lower Upper

142 100

127 53.6 30.1 45.1#

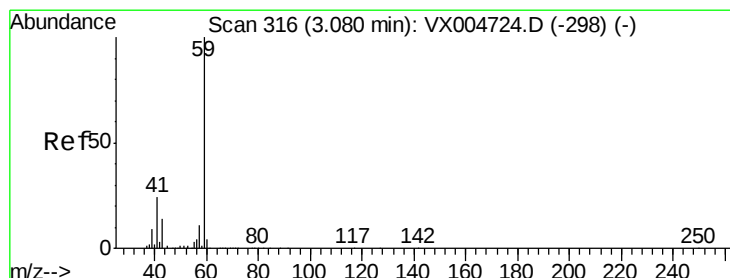
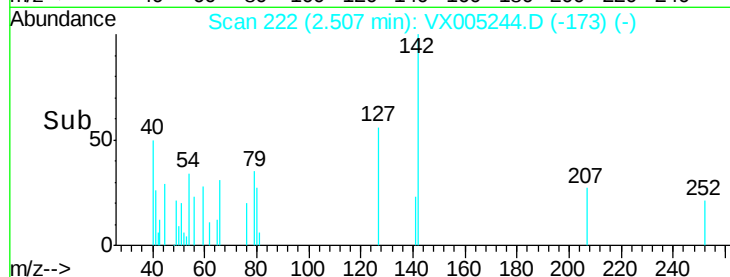
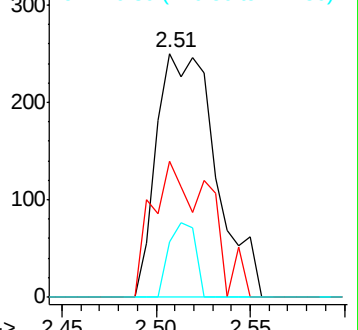
141 13.7 10.1 15.1



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V



#11

Tert butyl alcohol

Concen: 1.36 ug/l

RT: 3.08 min Scan# 316

Delta R.T. -0.00 min

Lab File: VX005244.D

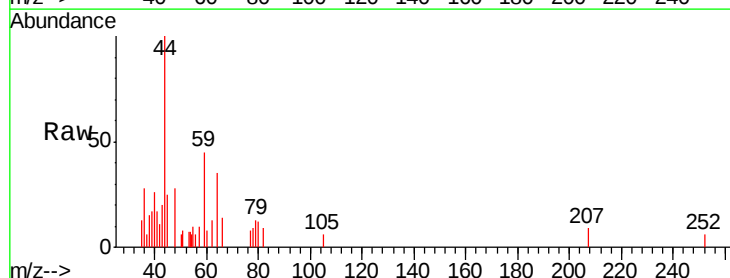
Acq: 11 Oct 2018 09:53

Tgt Ion: 59 Resp: 980

Ion Ratio Lower Upper

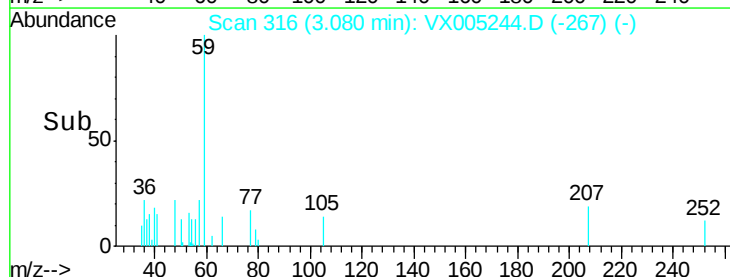
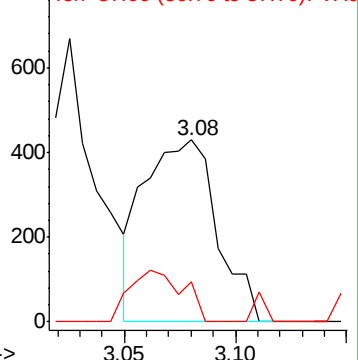
59 100

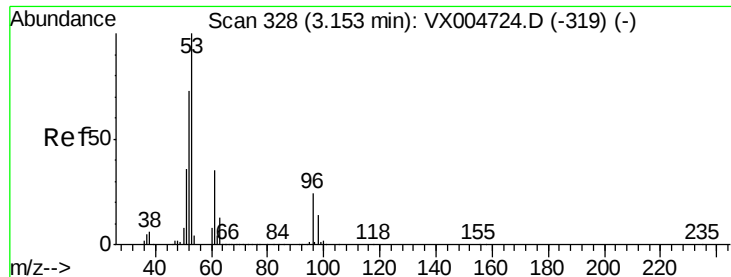
57 20.7 8.6 12.8#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

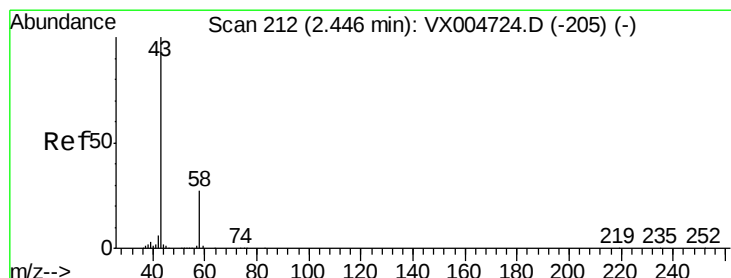
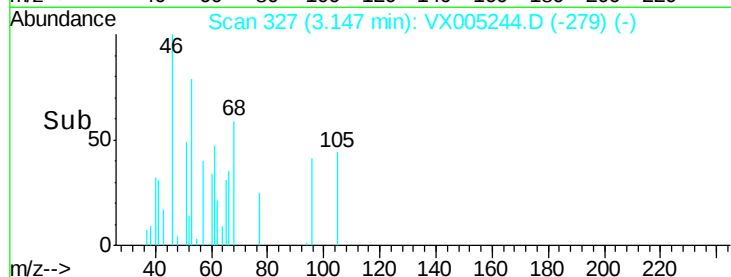
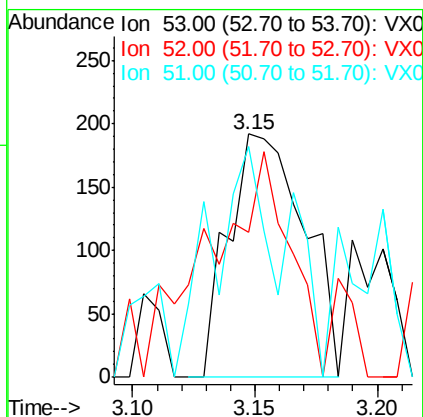
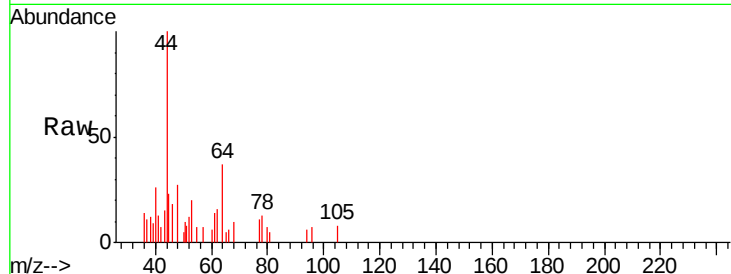




#15  
 Acrylonitrile  
 Concen: 0.26 ug/l  
 RT: 3.15 min Scan# 327  
 Delta R.T. -0.01 min  
 Lab File: VX005244.D  
 Acq: 11 Oct 2018 09:53

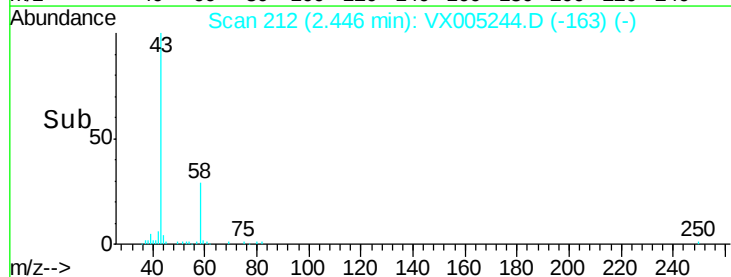
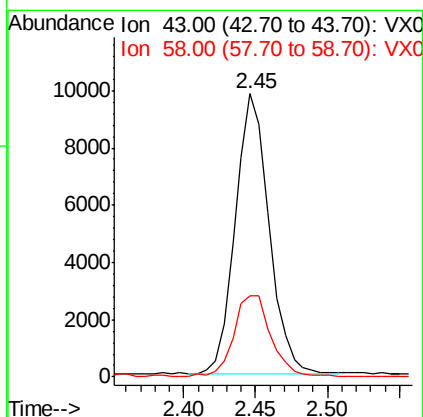
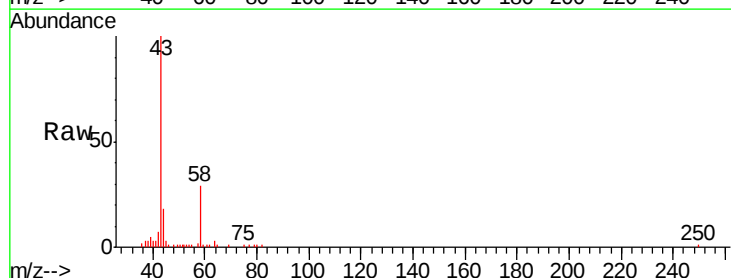
Instrument :  
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 KY038PS038-181008

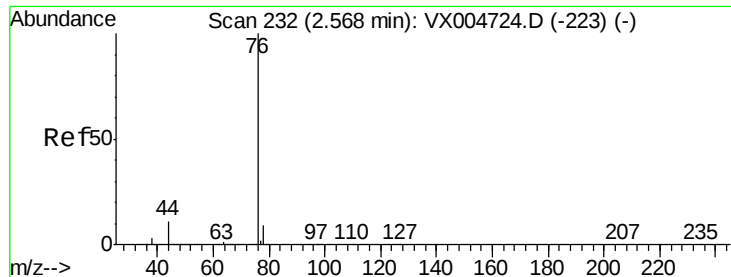
Tgt Ion: 53 Resp: 416  
 Ion Ratio Lower Upper  
 53 100  
 52 103.4 63.0 94.4#  
 51 67.5 28.6 42.8#



#16  
 Acetone  
 Concen: 10.53 ug/l  
 RT: 2.45 min Scan# 212  
 Delta R.T. -0.00 min  
 Lab File: VX005244.D  
 Acq: 11 Oct 2018 09:53

Tgt Ion: 43 Resp: 15881  
 Ion Ratio Lower Upper  
 43 100  
 58 29.1 21.8 32.6

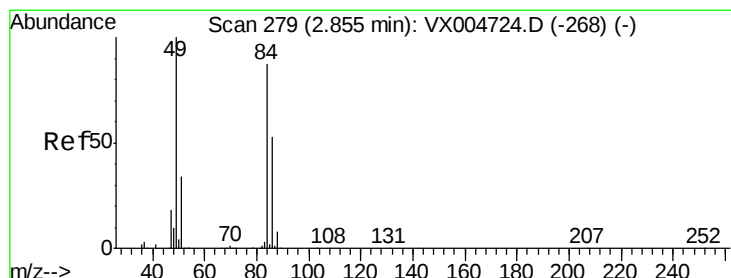
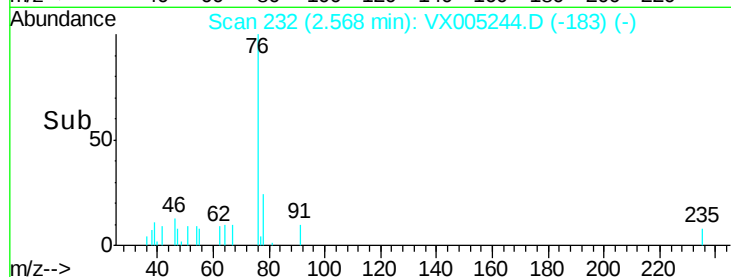
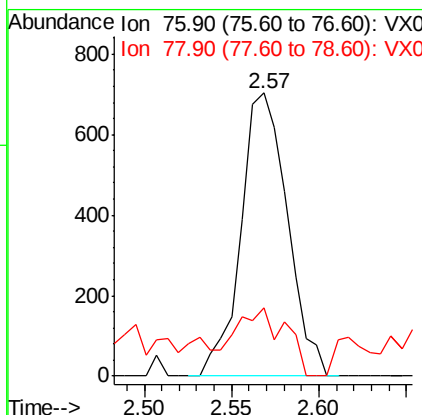
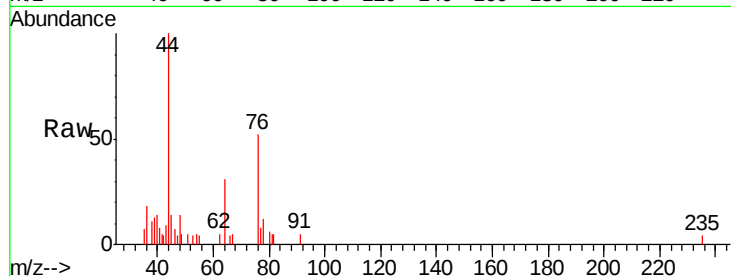




#17  
Carbon Disulfide  
Concen: 0.22 ug/l  
RT: 2.57 min Scan# 232  
Delta R.T. -0.00 min  
Lab File: VX005244.D  
Acq: 11 Oct 2018 09:53

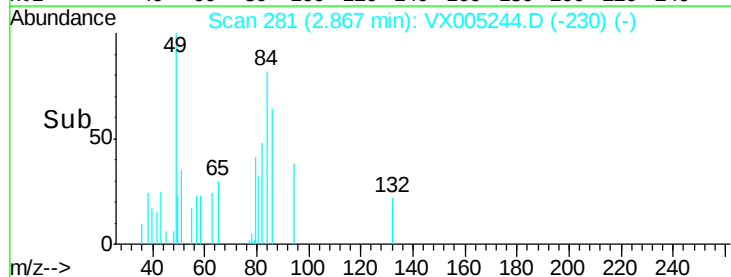
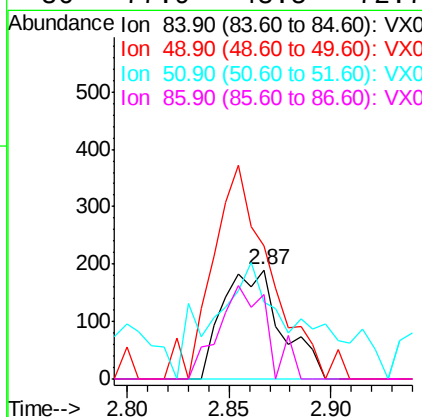
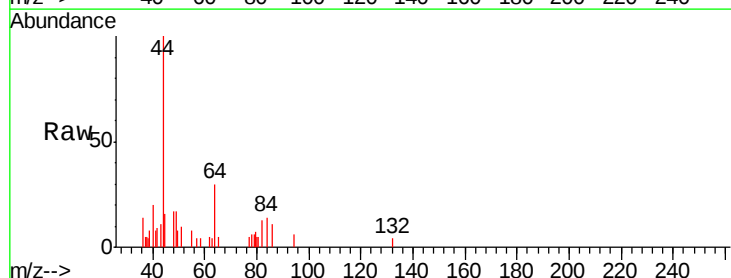
Instrument :  
MSVOA\_X  
ClientSampleId :  
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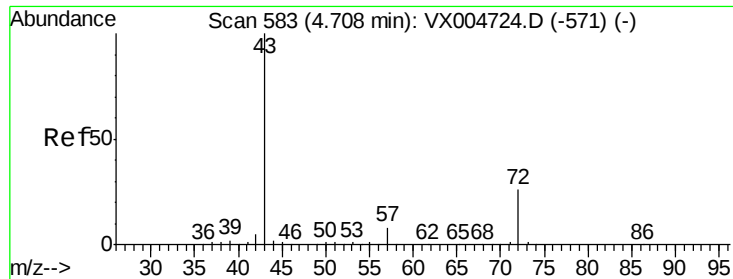
Tgt Ion: 76 Resp: 1301  
Ion Ratio Lower Upper  
76 100  
78 12.5 7.0 10.6#



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.87 min Scan# 281  
Delta R.T. 0.01 min  
Lab File: VX005244.D  
Acq: 11 Oct 2018 09:53

Tgt Ion: 84 Resp: 384  
Ion Ratio Lower Upper  
84 100  
49 122.6 92.3 138.5  
51 34.2 31.8 47.6  
86 77.9 48.5 72.7#





#25

2-Butanone

Concen: 0.22 ug/l

RT: 4.70 min Scan# 582

Delta R.T. -0.01 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

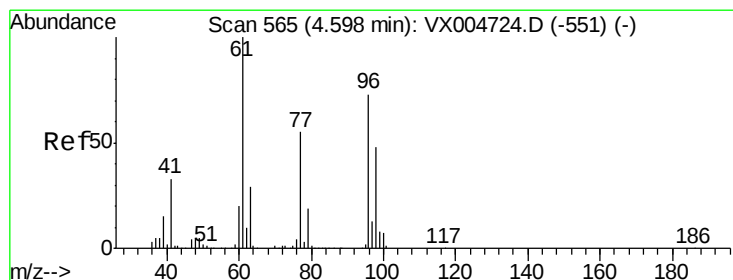
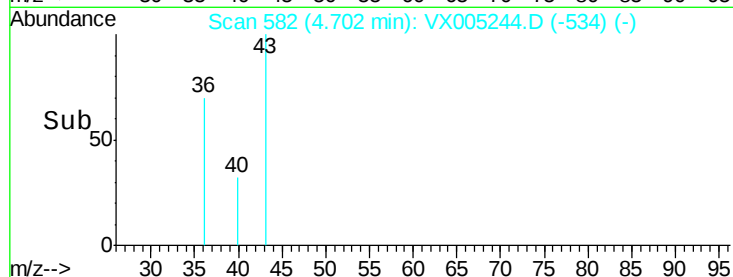
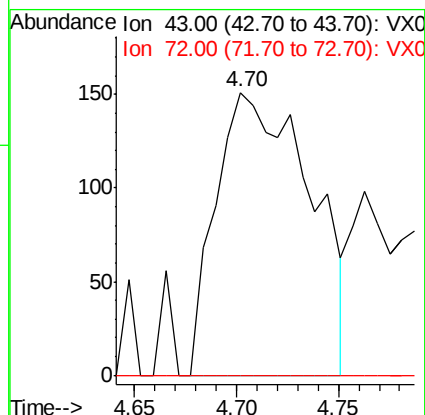
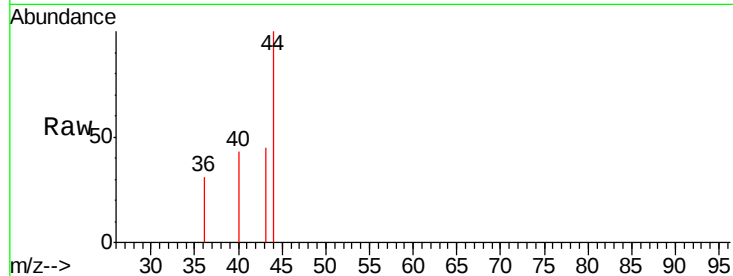
KY038PS038-181008

Tgt Ion: 43 Resp: 486

Ion Ratio Lower Upper

43 100

72 0.0 20.8 31.2#



#27

cis-1,2-Dichloroethene

Concen: 0.32 ug/l

RT: 4.61 min Scan# 567

Delta R.T. 0.01 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

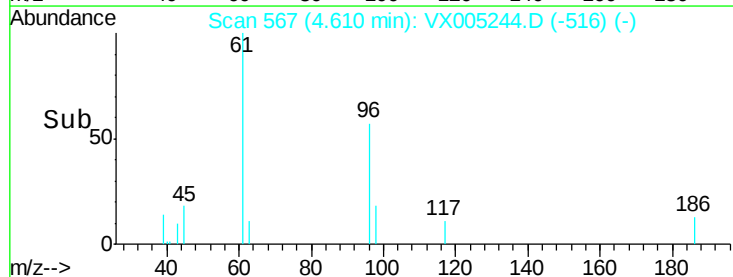
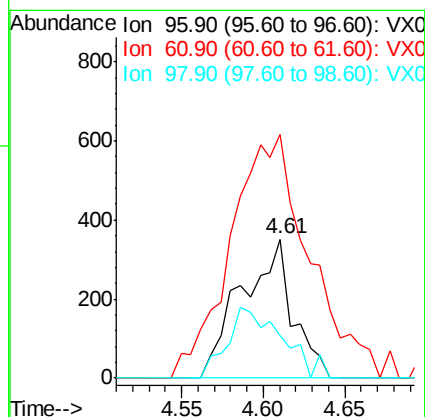
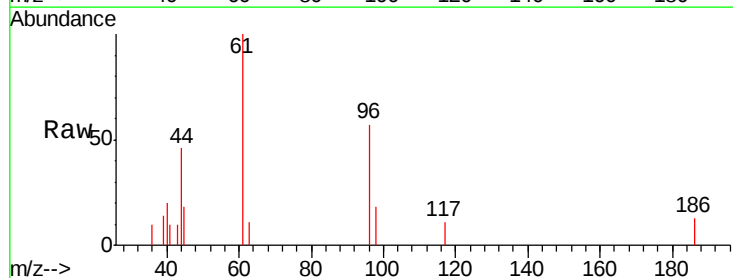
Tgt Ion: 96 Resp: 771

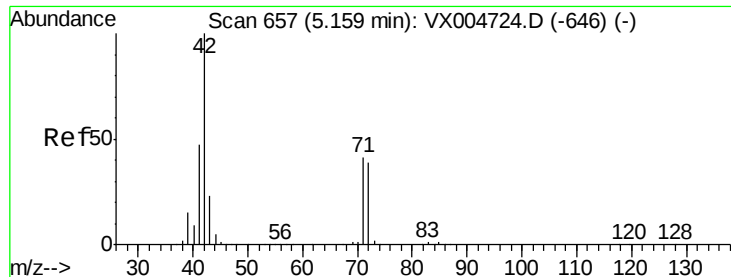
Ion Ratio Lower Upper

96 100

61 270.2 0.0 285.8

98 0.0 0.0 136.2





#29

Tetrahydrofuran

Concen: 0.43 ug/l

RT: 5.17 min Scan# 659

Delta R.T. 0.01 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

KY038PS038-181008

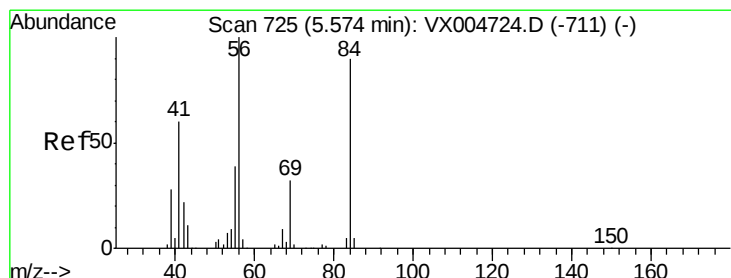
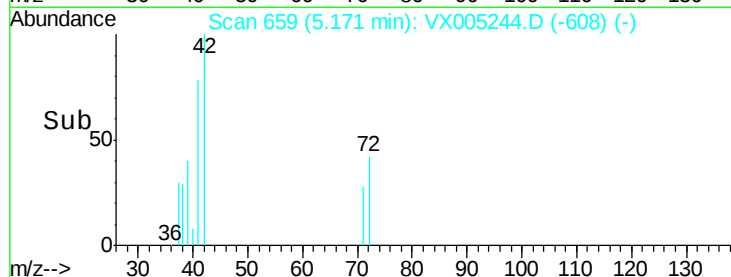
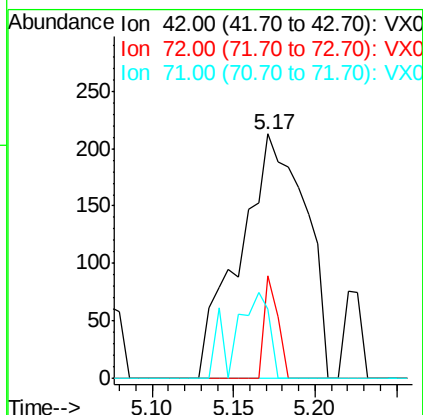
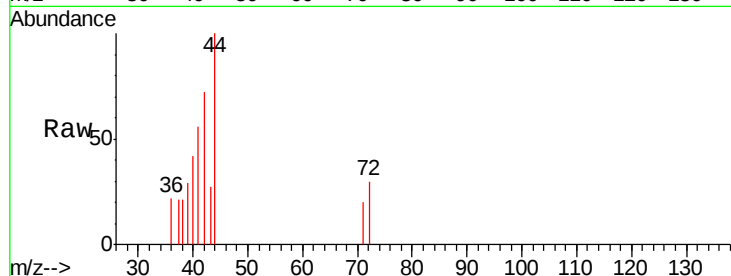
Tgt Ion: 42 Resp: 598

Ion Ratio Lower Upper

42 100

72 8.7 33.7 50.5#

71 15.1 32.2 48.4#



#31

Cyclohexane

Concen: 1.06 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.09 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

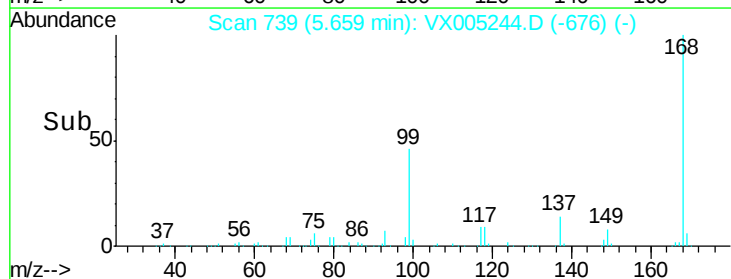
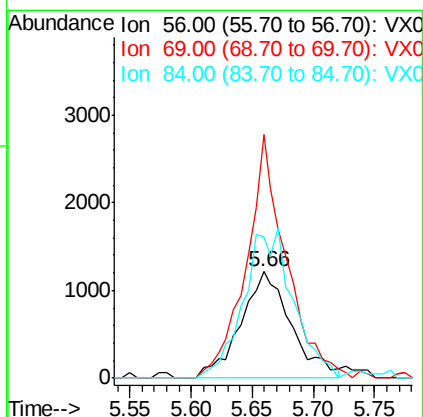
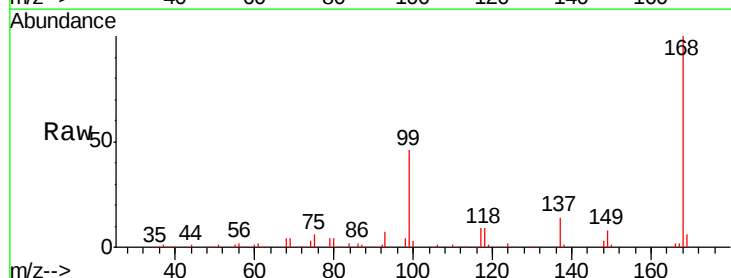
Tgt Ion: 56 Resp: 3479

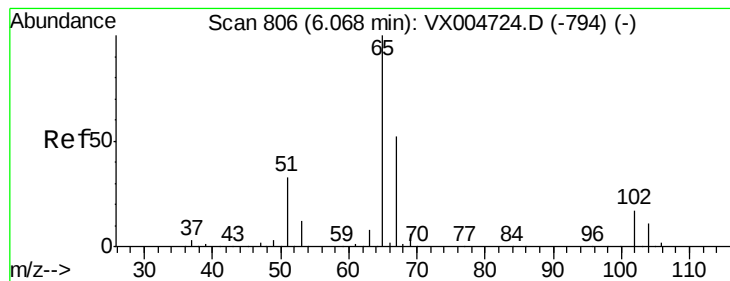
Ion Ratio Lower Upper

56 100

69 229.6 25.9 38.9#

84 133.1 71.9 107.9#





#33

1,2-Dichloroethane-d4

Concen: 52.43 ug/l

RT: 6.07 min Scan# 806

Delta R.T. -0.00 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

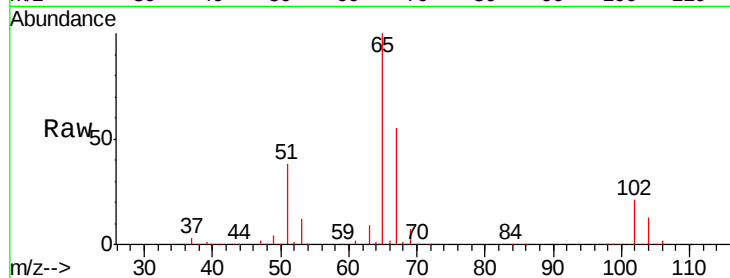
KY038PS038-181008

Tgt Ion: 65 Resp: 135452

Ion Ratio Lower Upper

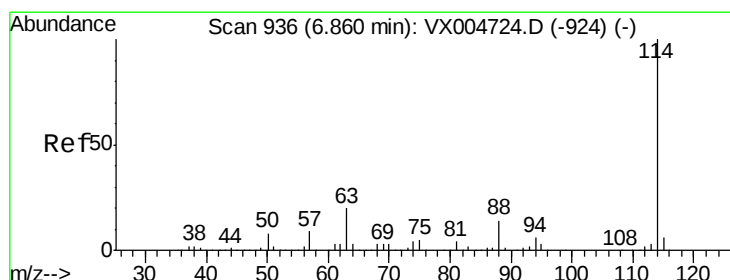
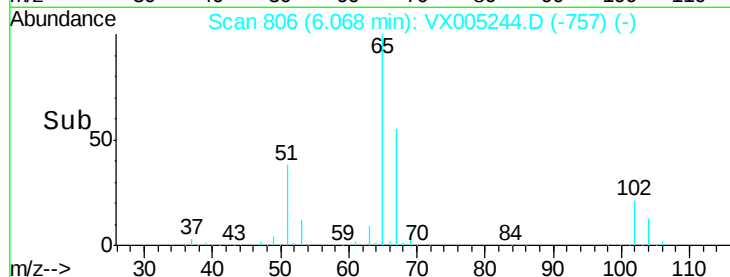
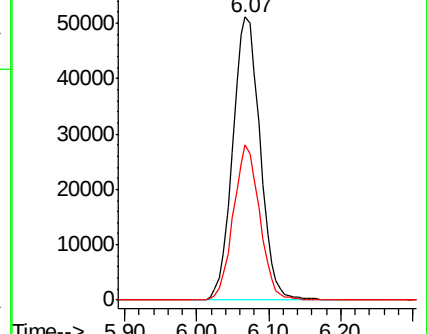
65 100

67 52.8 0.0 107.4



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.86 min Scan# 936

Delta R.T. -0.00 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

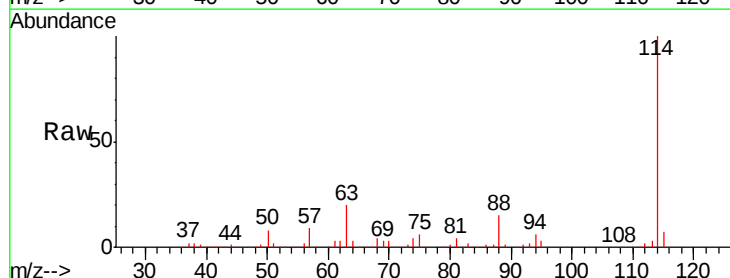
Tgt Ion: 114 Resp: 270715

Ion Ratio Lower Upper

114 100

63 20.4 0.0 39.8

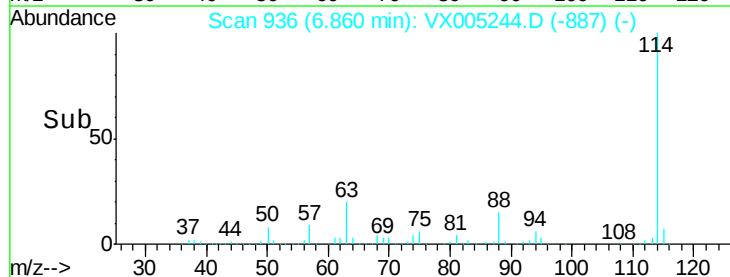
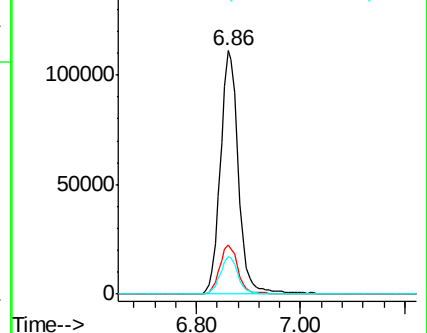
88 15.3 0.0 27.0

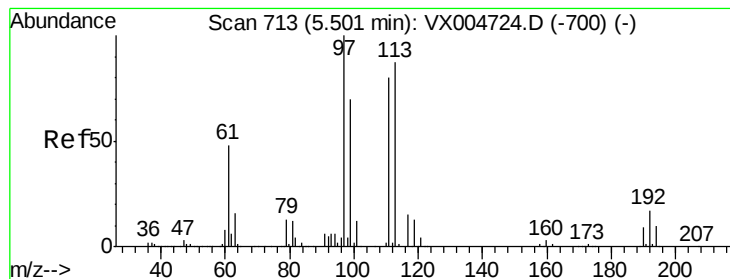


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 50.47 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

KY038PS038-181008

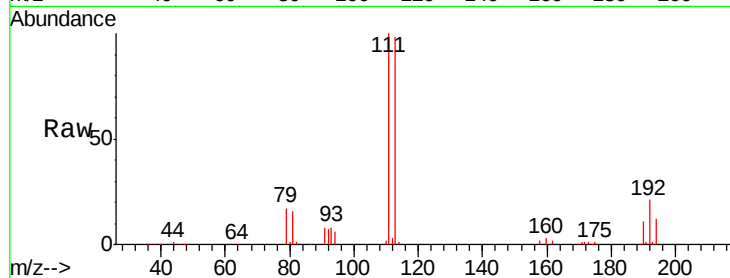
Tgt Ion:113 Resp: 115798

Ion Ratio Lower Upper

113 100

111 102.0 77.0 115.4

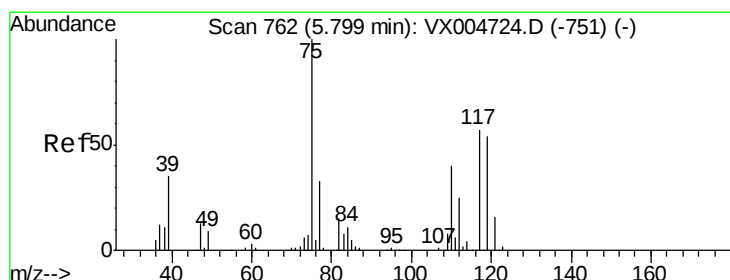
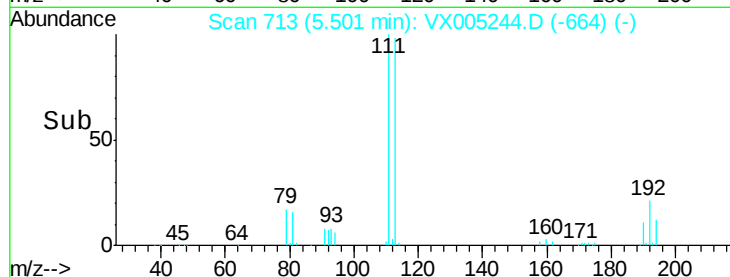
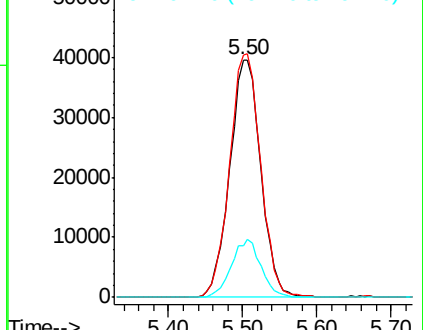
192 23.0 17.0 25.6



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: 3.89 ug/l

RT: 5.67 min Scan# 741

Delta R.T. -0.13 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

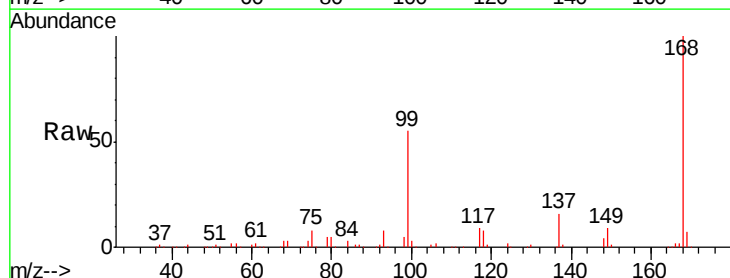
Tgt Ion: 75 Resp: 12186

Ion Ratio Lower Upper

75 100

110 9.6 20.0 59.9#

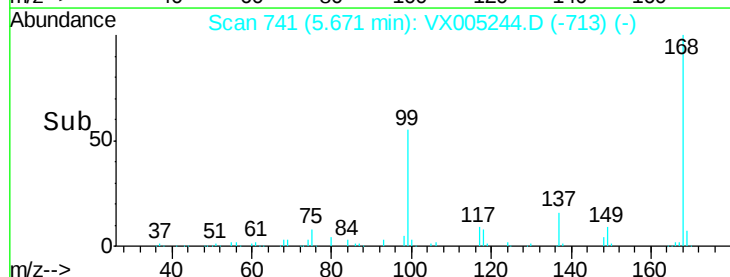
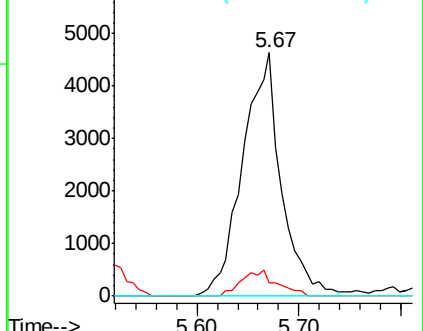
77 0.0 27.1 40.7#

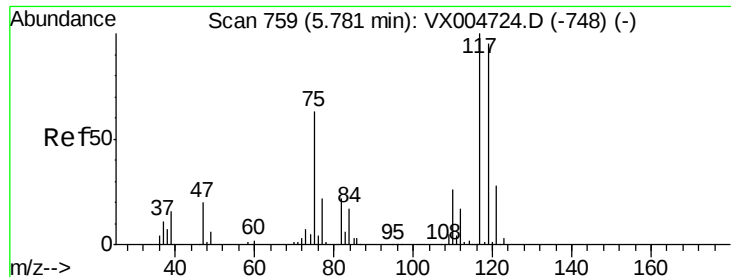


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

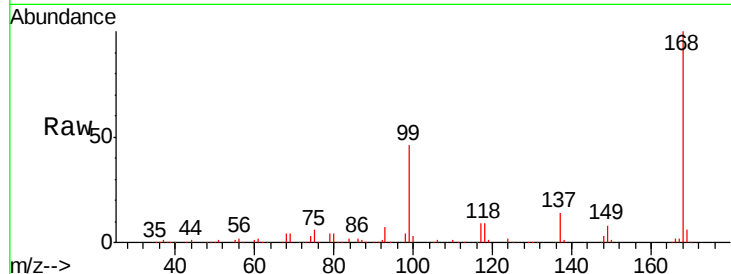




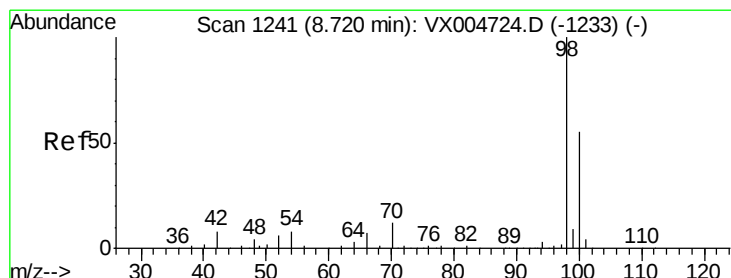
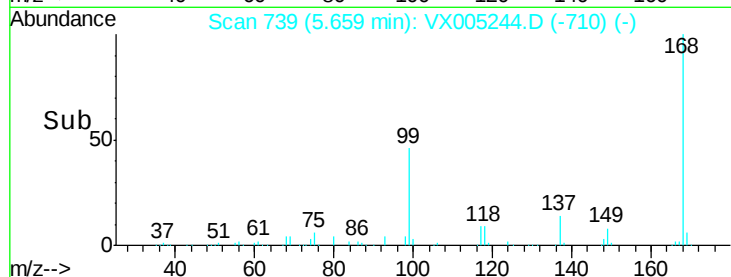
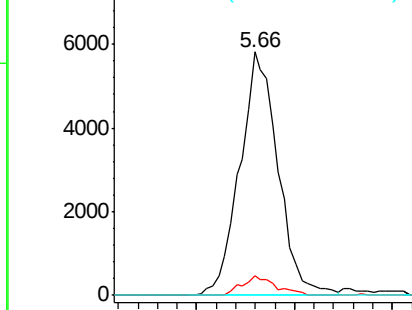
#38  
Carbon Tetrachloride  
Concen: 4.79 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.12 min  
Lab File: VX005244.D  
Acq: 11 Oct 2018 09:53

Instrument :  
MSVOA\_X  
ClientSampleId :  
KY038PS038-181008

Tgt Ion:117 Resp: 15748  
Ion Ratio Lower Upper  
117 100  
119 7.8 75.2 112.8#  
121 0.0 22.5 33.7#

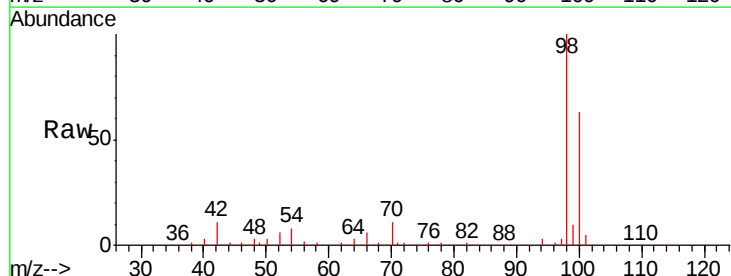


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

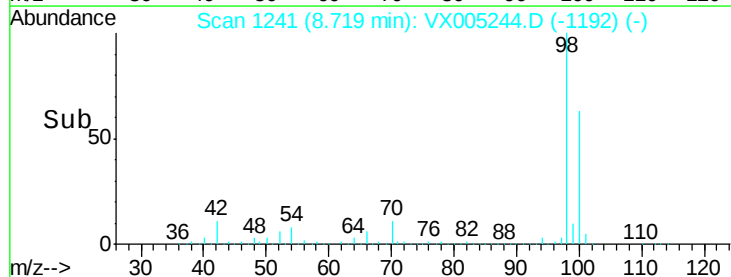
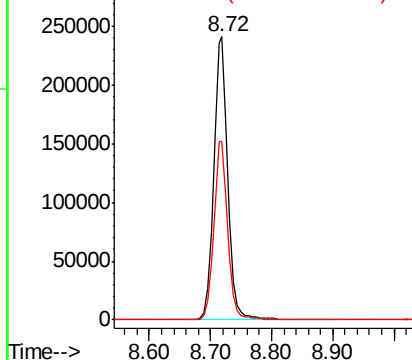


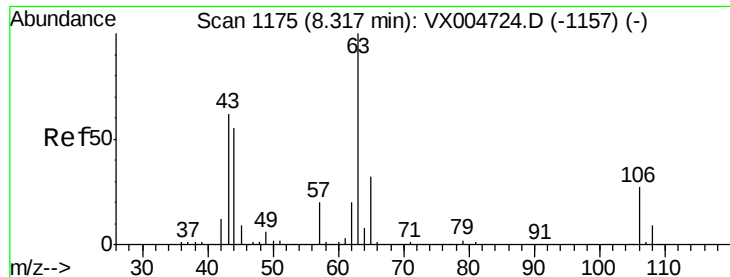
#50  
Toluene-d8  
Concen: 51.84 ug/l  
RT: 8.72 min Scan# 1241  
Delta R.T. -0.00 min  
Lab File: VX005244.D  
Acq: 11 Oct 2018 09:53

Tgt Ion: 98 Resp: 395422  
Ion Ratio Lower Upper  
98 100  
100 63.0 51.9 77.9



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

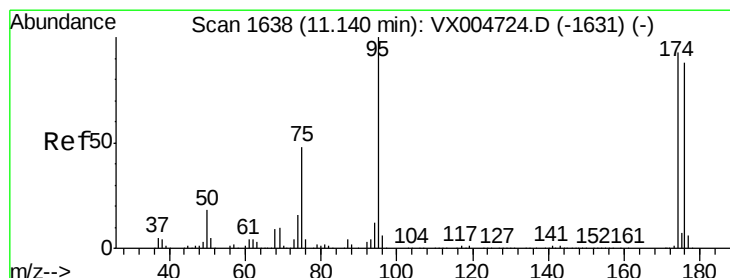
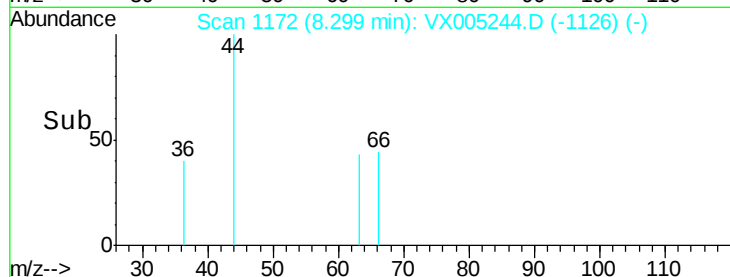
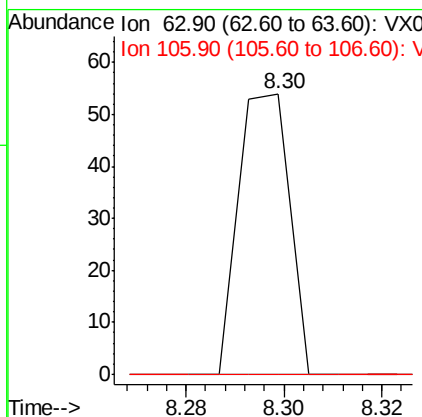
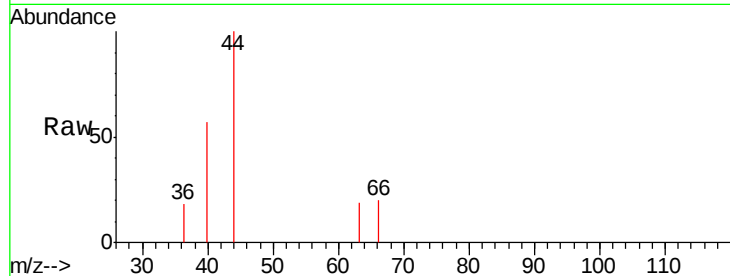




#58  
 2-Chloroethyl Vinyl ether  
 Concen: 14.26 ug/l  
 RT: 8.30 min Scan# 1172  
 Delta R.T. -0.02 min  
 Lab File: VX005244.D  
 Acq: 11 Oct 2018 09:53

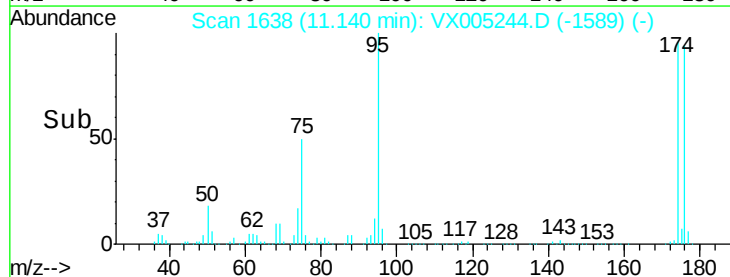
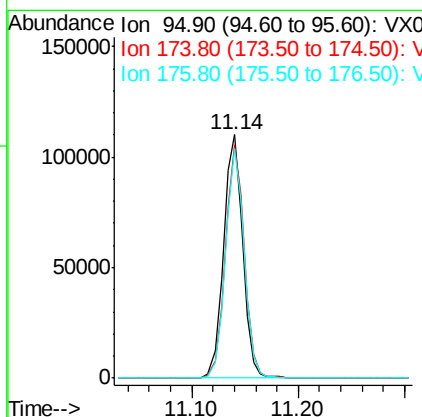
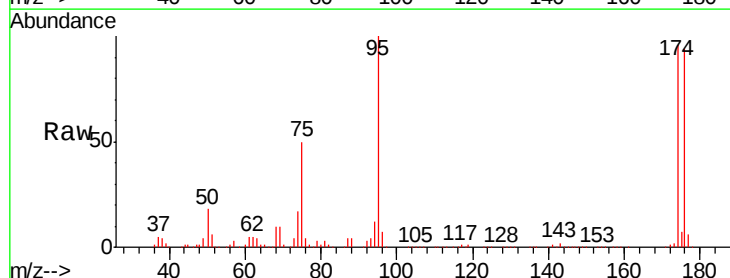
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 KY038PS038-181008

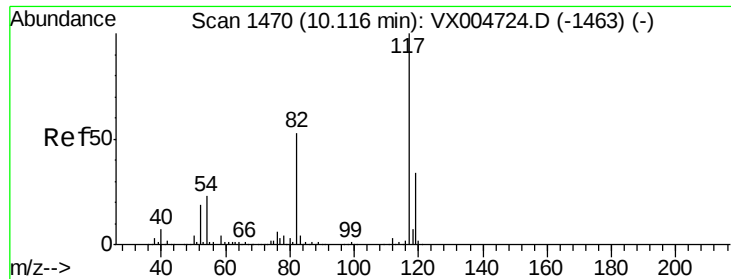
Tgt Ion: 63 Resp: 39  
 Ion Ratio Lower Upper  
 63 100  
 106 0.0 21.0 31.6#



#62  
 4-Bromofluorobenzene  
 Concen: 50.30 ug/l  
 RT: 11.14 min Scan# 1638  
 Delta R.T. -0.00 min  
 Lab File: VX005244.D  
 Acq: 11 Oct 2018 09:53

Tgt Ion: 95 Resp: 138214  
 Ion Ratio Lower Upper  
 95 100  
 174 95.3 0.0 185.0  
 176 92.5 0.0 180.2

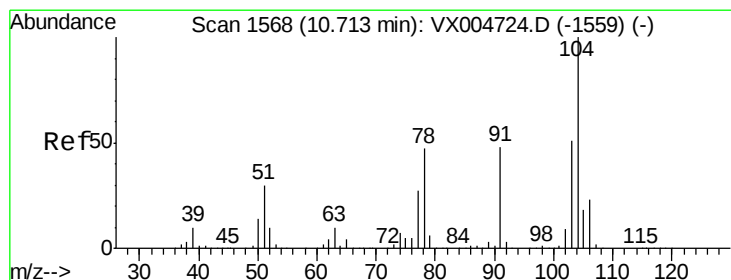
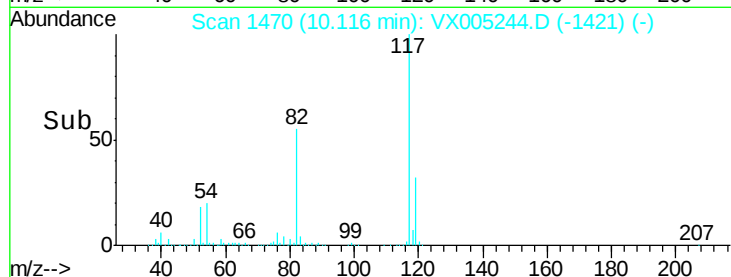
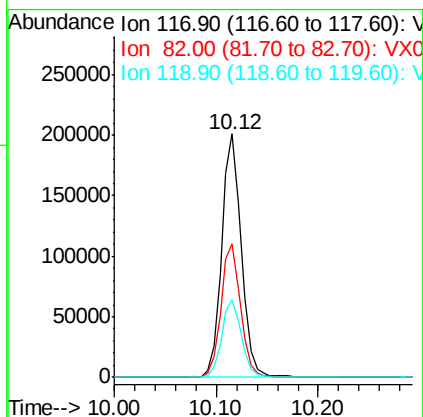
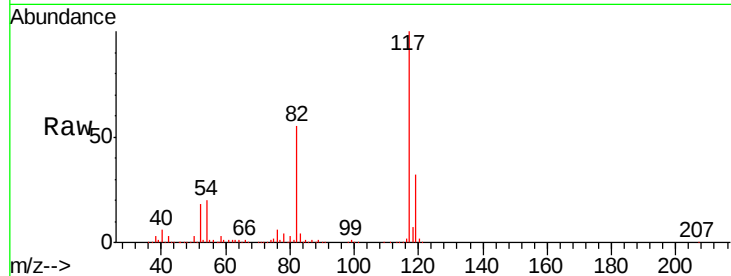




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. -0.00 min  
Lab File: VX005244.D  
Acq: 11 Oct 2018 09:53

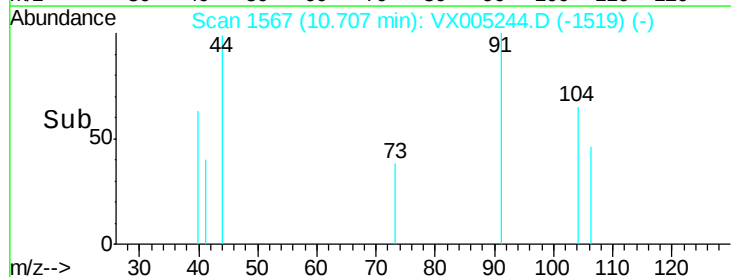
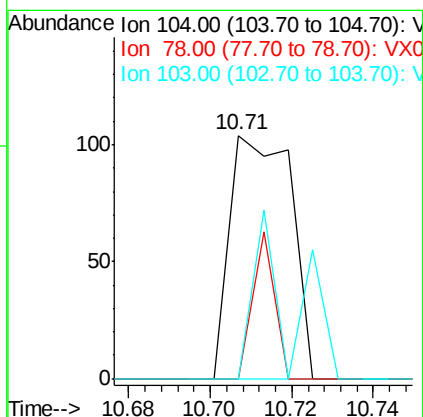
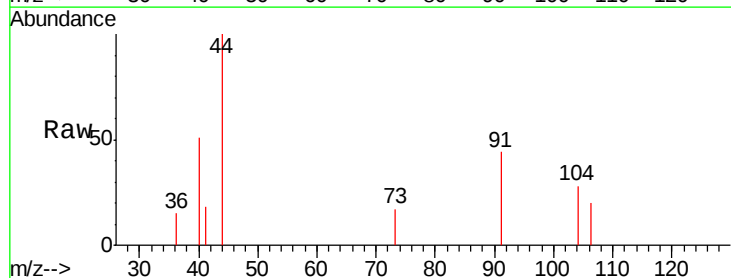
Instrument :  
MSVOA\_X  
ClientSampleId :  
KY038PS038-181008

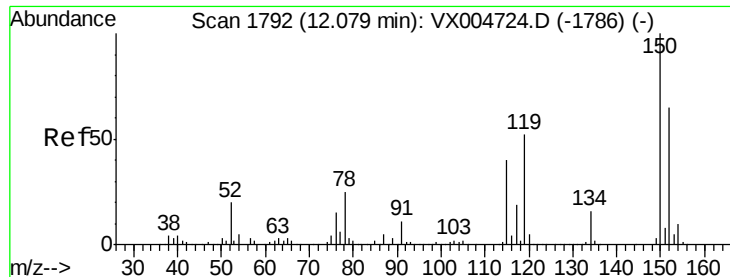
Tgt Ion:117 Resp: 269546  
Ion Ratio Lower Upper  
117 100  
82 54.6 42.2 63.4  
119 31.6 27.4 41.0



#70  
Styrene  
Concen: 2.15 ug/l  
RT: 10.71 min Scan# 1567  
Delta R.T. -0.01 min  
Lab File: VX005244.D  
Acq: 11 Oct 2018 09:53

Tgt Ion:104 Resp: 109  
Ion Ratio Lower Upper  
104 100  
78 21.1 40.0 60.0#  
103 42.2 44.3 66.5#





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

KY038PS038-181008

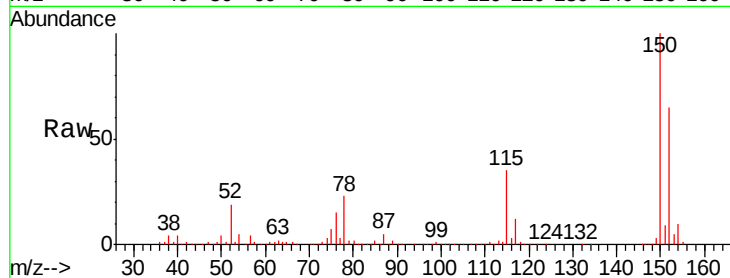
Tgt Ion: 152 Resp: 147846

Ion Ratio Lower Upper

152 100

115 54.5 40.2 120.6

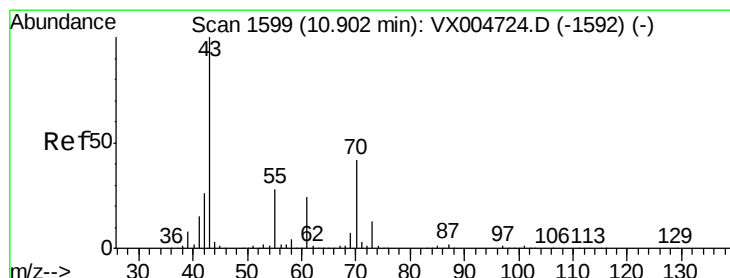
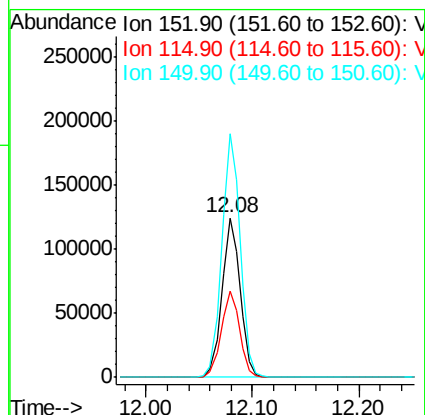
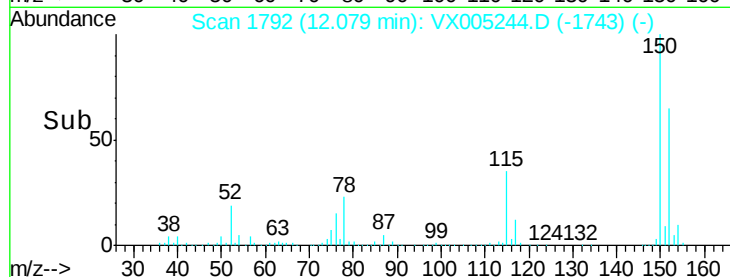
150 154.7 0.0 351.0



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



#74

N-ethyl acetate

Concen: 1.76 ug/l

RT: 10.90 min Scan# 1598

Delta R.T. -0.01 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Tgt Ion: 43 Resp: 63

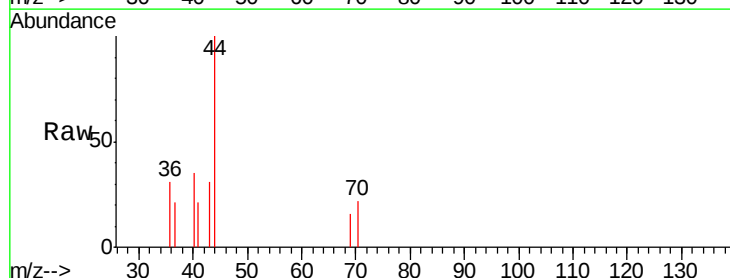
Ion Ratio Lower Upper

43 100

70 77.8 32.6 48.8#

55 65.1 21.6 32.4#

61 0.0 19.1 28.7#

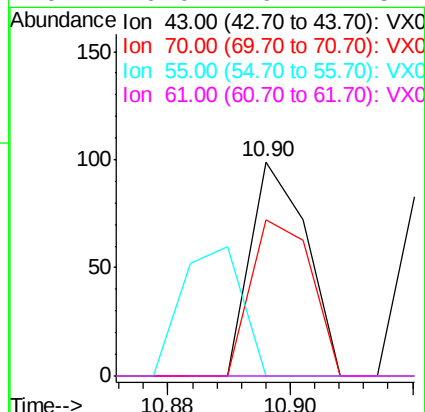
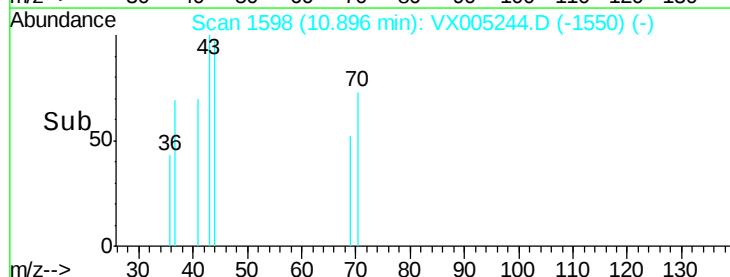


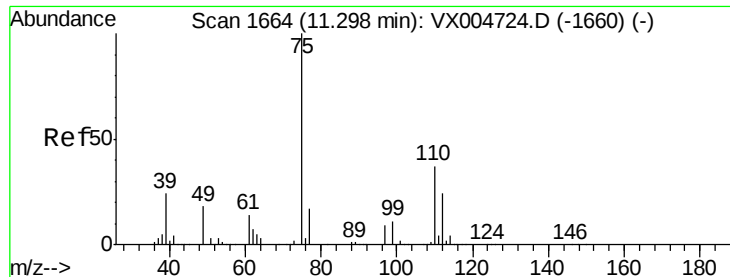
Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0





#76

1,2,3-Trichloropropane

Concen: 20.91 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

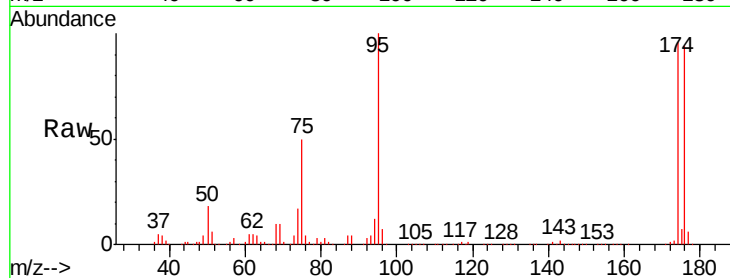
KY038PS038-181008

Tgt Ion: 75 Resp: 69289

Ion Ratio Lower Upper

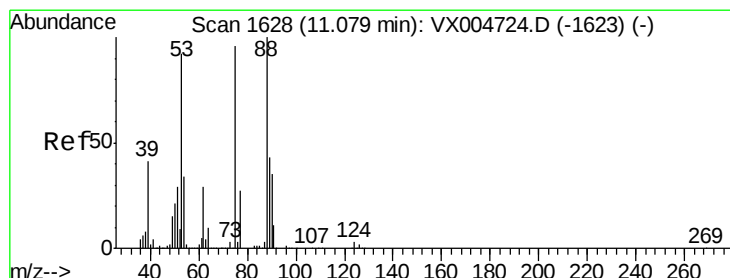
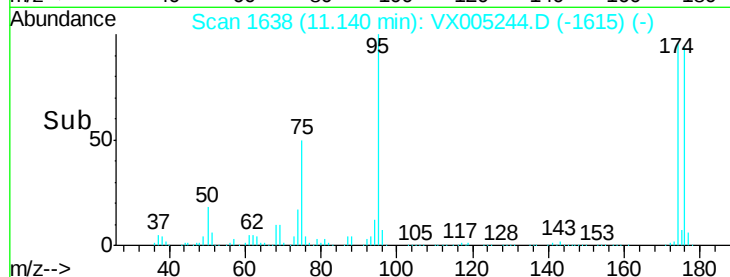
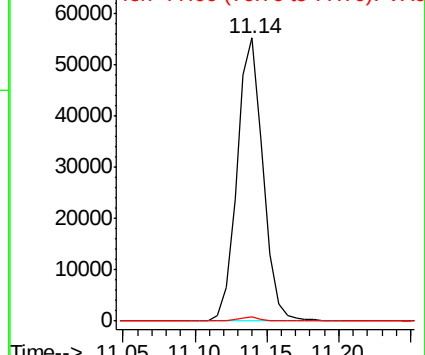
75 100

77 1.3 21.4 64.3#



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: 56.75 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.06 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

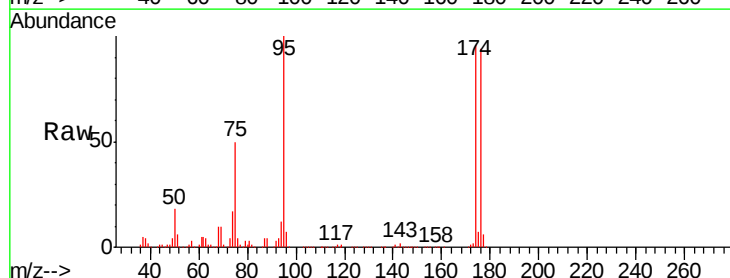
Tgt Ion: 75 Resp: 69289

Ion Ratio Lower Upper

75 100

53 0.4 80.2 120.4#

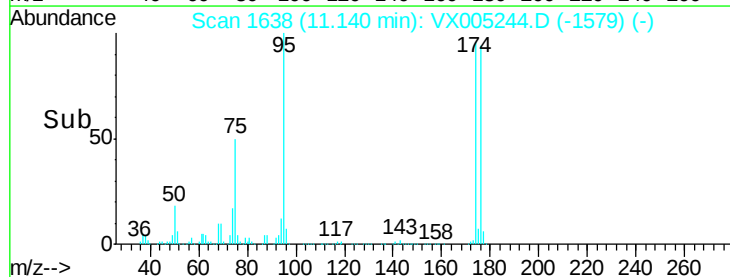
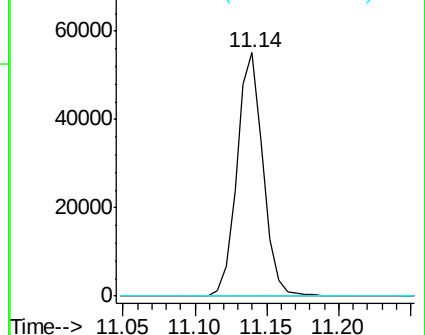
89 0.0 37.1 55.7#

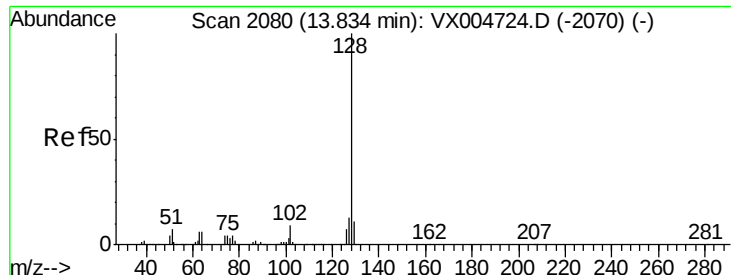


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#95

Naphthalene

Concen: 0.79 ug/l

RT: 13.84 min Scan# 2081

Delta R.T. 0.01 min

Lab File: VX005244.D

Acq: 11 Oct 2018 09:53

Instrument :

MSVOA\_X

ClientSampleId :

KY038PS038-181008

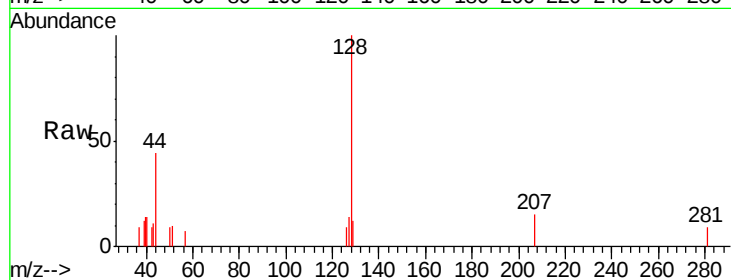
Tgt Ion:128 Resp: 891

Ion Ratio Lower Upper

128 100

127 14.8 10.4 15.6

129 12.1 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

