

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU063018\  
 Data File : VU025110.D  
 Acq On : 01 Jul 2018 00:53  
 Operator : MD/SY  
 Sample : VU0630WBL02  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU0630WBL02

Quant Time: Jul 02 05:44:34 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 13 13:55:26 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 215966   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 323559   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 301425   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 156628   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.31  | 65   | 162126   | 45.98 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.96% |          |
| 35) Dibromofluoromethane    | 4.89  | 113  | 125395   | 46.70 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.40% |          |
| 50) Toluene-d8              | 7.57  | 98   | 465953   | 47.57 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.14% |          |
| 62) 4-Bromofluorobenzene    | 10.31 | 95   | 171870   | 44.19 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 88.38% |          |

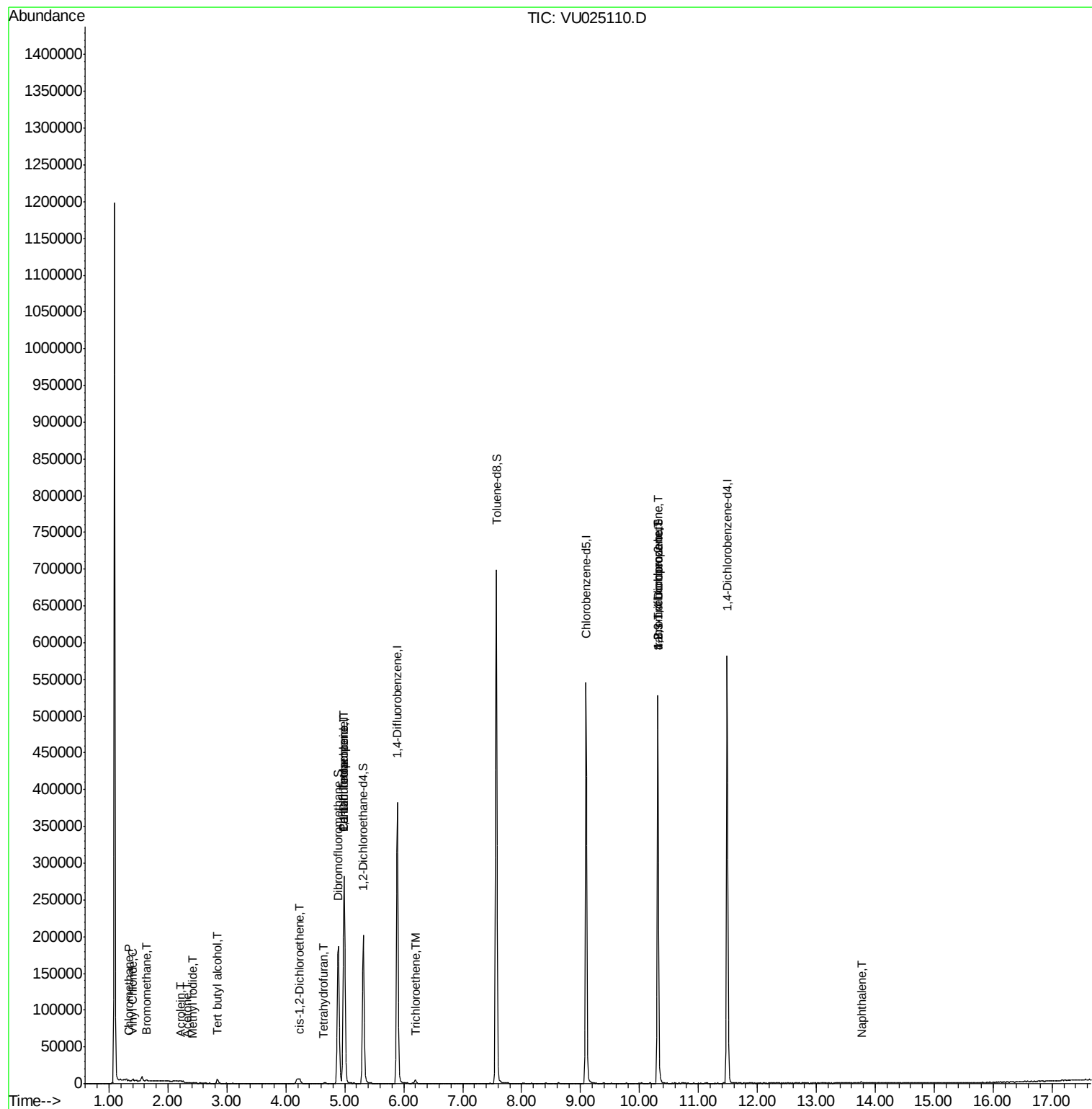
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 1000     | 0.362     | ug/l   | 91     |
| 4) Vinyl Chloride              | 1.40  | 62   | 1310     | 0.460     | ug/l # | 56     |
| 5) Bromomethane                | 1.64  | 94   | 723      | 0.525     | ug/l # | 70     |
| 6) Chloroethane                | 1.71  | 64   | 112      | Below Cal | #      | 43     |
| 10) Methyl Iodide              | 2.41  | 142  | 212      | 5.372     | ug/l # | 79     |
| 11) Tert butyl alcohol         | 2.83  | 59   | 3127     | 3.647     | ug/l # | 72     |
| 13) Acrolein                   | 2.20  | 56   | 263      | 0.584     | ug/l # | 19     |
| 16) Acetone                    | 2.32  | 43   | 837      | 0.442     | ug/l   | 91     |
| 27) cis-1,2-Dichloroethene     | 4.23  | 96   | 3214     | 1.032     | ug/l   | 92     |
| 29) Tetrahydrofuran            | 4.65  | 42   | 561      | 0.356     | ug/l # | 71     |
| 31) Cyclohexane                | 4.99  | 56   | 4373     | Below Cal | #      | 23     |
| 36) 1,1-Dichloropropene        | 4.99  | 75   | 15724    | 4.136     | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 4.99  | 117  | 21178    | 5.065     | ug/l # | 16     |
| 44) Trichloroethene            | 6.19  | 130  | 2043     | 0.663     | ug/l   | 75     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75   | 90672    | 26.294    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75   | 90672    | 60.855    | ug/l # | 100    |
| 95) Naphthalene                | 13.76 | 128  | 3706     | 0.997     | ug/l # | 81     |

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

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Instrument :  
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Quant Time: Jul 02 05:44:34 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jun 13 13:55:26 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.99 min Scan# 1368

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

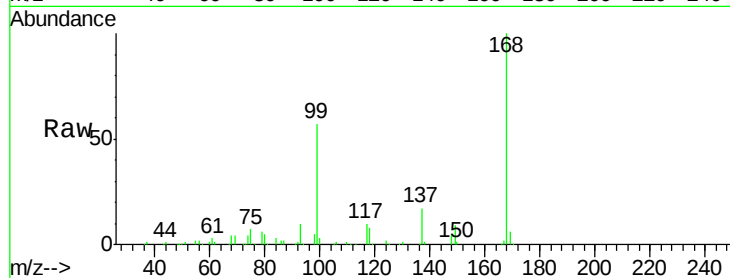
VU0630WBL02

Tgt Ion:168 Resp: 215966

Ion Ratio Lower Upper

168 100

99 57.4 43.2 64.8



Abundance Ion 167.90 (167.60 to 168.60): VU024502.D (-1351) (-)

Ion 98.90 (98.60 to 99.60): VU024502.D (-1351) (-)

4.99

100000

80000

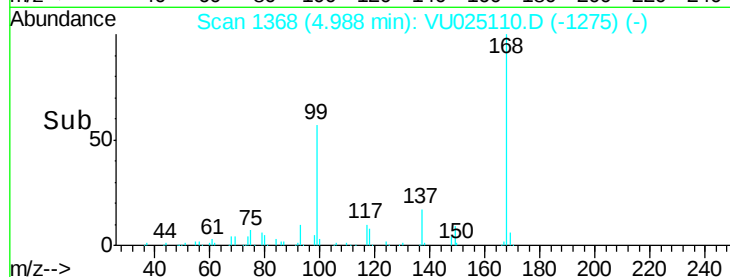
60000

40000

20000

0

Time-->



#3

Chloromethane

Concen: 0.362 ug/l

RT: 1.33 min Scan# 230

Delta R.T. -0.00 min

Lab File: VU025110.D

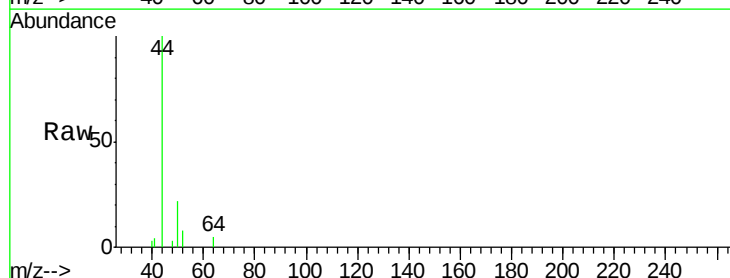
Acq: 01 Jul 2018 00:53

Tgt Ion: 50 Resp: 1000

Ion Ratio Lower Upper

50 100

52 38.3 26.4 39.6



Abundance Ion 49.90 (49.60 to 50.60): VU024502.D (-221) (-)

Ion 51.90 (51.60 to 52.60): VU024502.D (-221) (-)

1.33

800

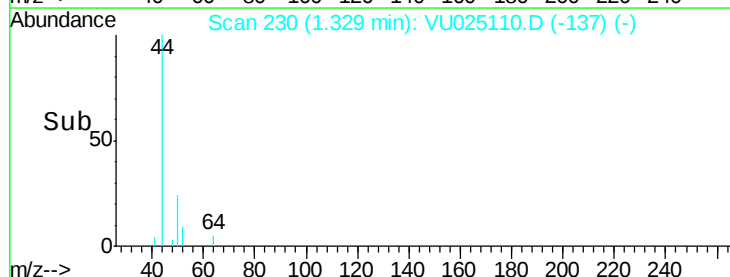
600

400

200

0

Time-->





#4

Vinyl Chloride

Concen: 0.460 ug/l

RT: 1.40 min Scan# 253

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

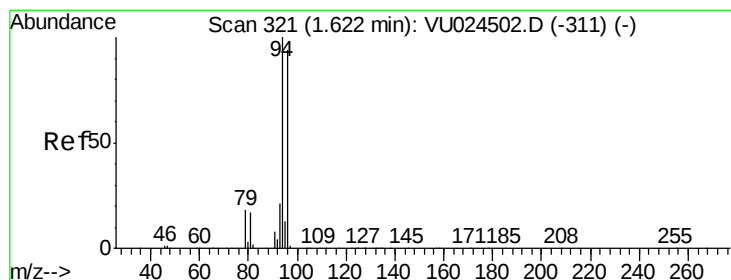
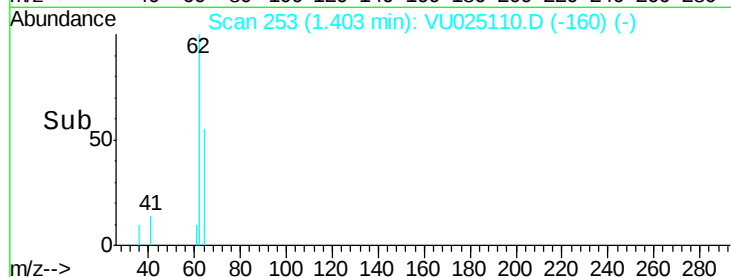
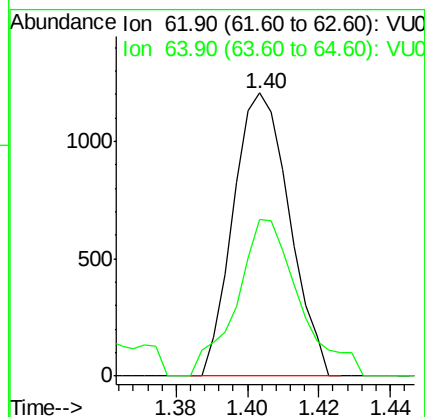
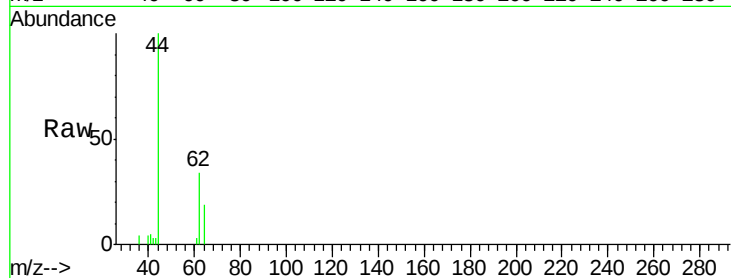
VU0630WBL02

Tgt Ion: 62 Resp: 1310

Ion Ratio Lower Upper

62 100

64 55.3 24.8 37.2#



#5

Bromomethane

Concen: 0.525 ug/l

RT: 1.64 min Scan# 327

Delta R.T. 0.02 min

Lab File: VU025110.D

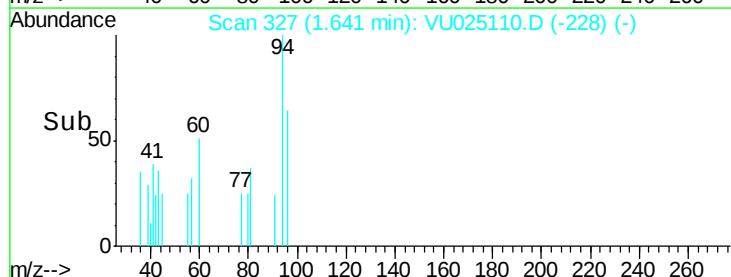
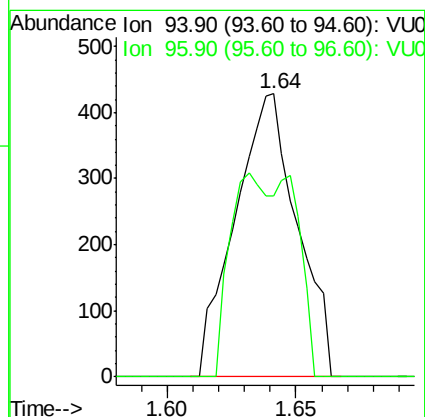
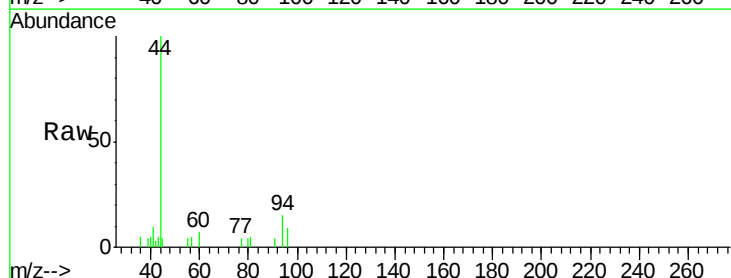
Acq: 01 Jul 2018 00:53

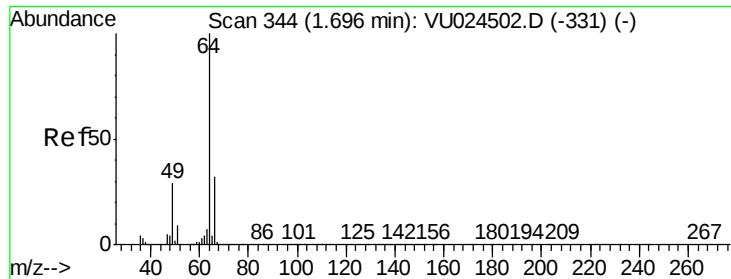
Tgt Ion: 94 Resp: 723

Ion Ratio Lower Upper

94 100

96 64.0 74.5 111.7#





#6

Chloroethane

Concen: Below Cal

RT: 1.71 min Scan# 347

Delta R.T. 0.01 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

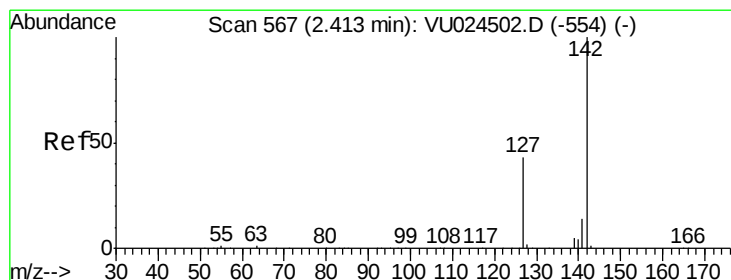
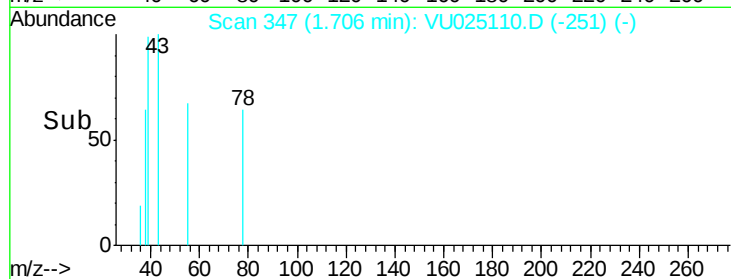
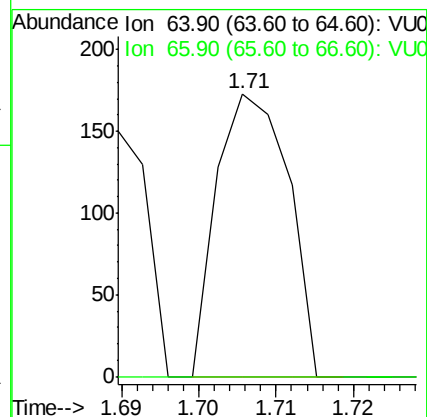
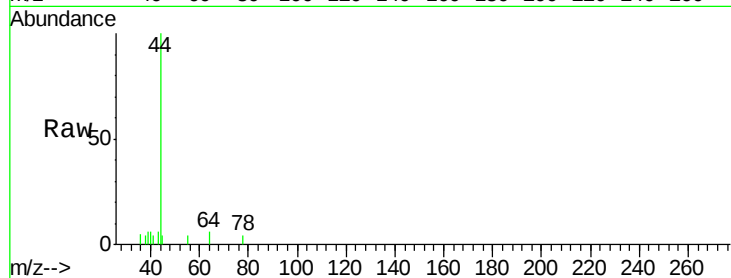
VU0630WBL02

Tgt Ion: 64 Resp: 112

Ion Ratio Lower Upper

64 100

66 0.0 25.5 38.3#



#10

Methyl Iodide

Concen: 5.372 ug/l

RT: 2.41 min Scan# 567

Delta R.T. 0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

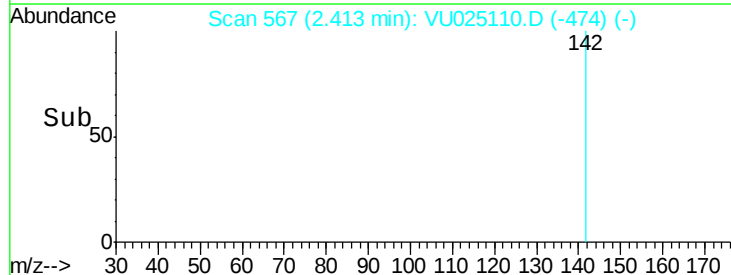
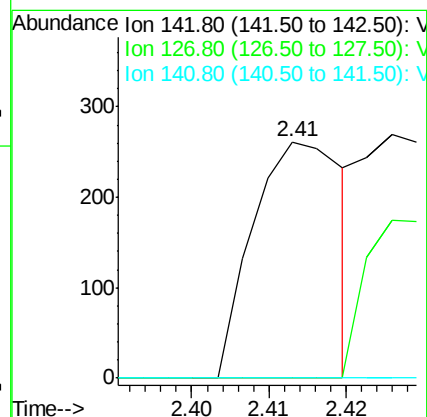
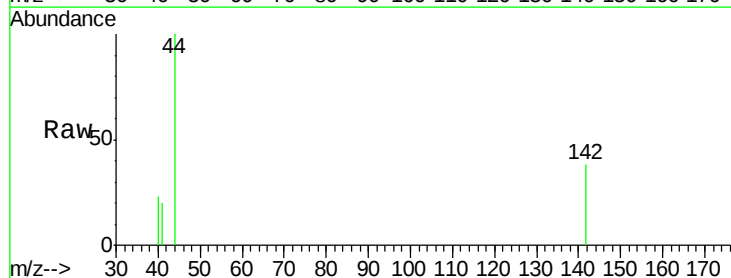
Tgt Ion: 142 Resp: 212

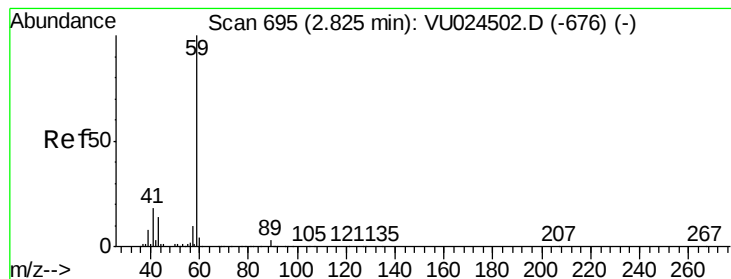
Ion Ratio Lower Upper

142 100

127 55.2 35.6 53.4#

141 0.0 11.7 17.5#



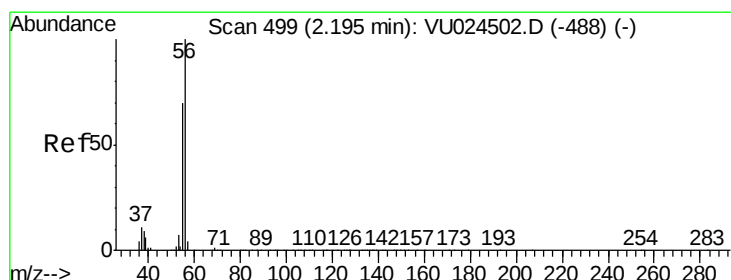
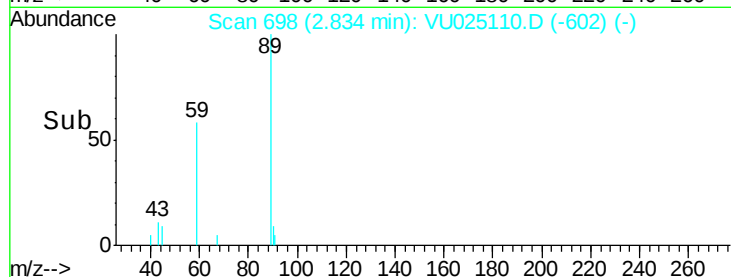
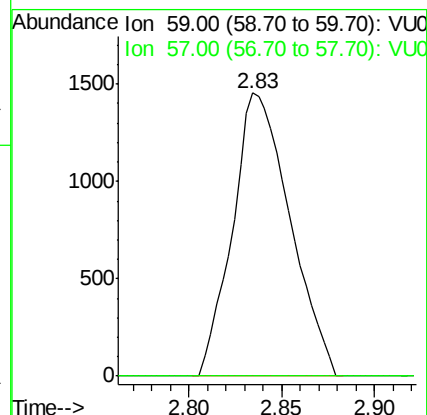
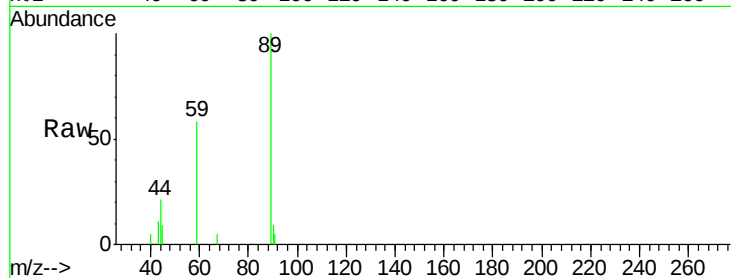


#11

Tert butyl alcohol  
 Concen: 3.647 ug/l  
 RT: 2.83 min Scan# 698  
 Delta R.T. 0.01 min  
 Lab File: VU025110.D  
 Acq: 01 Jul 2018 00:53

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU0630WBL02

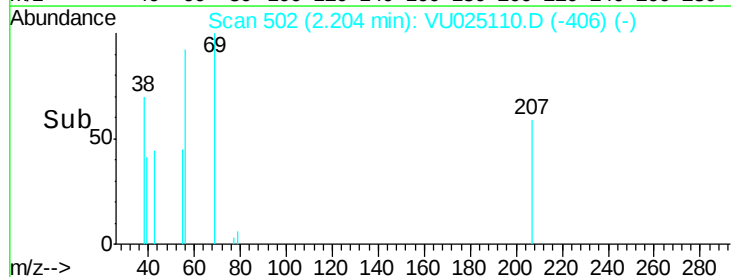
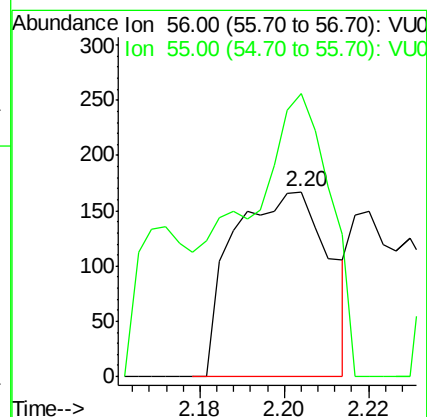
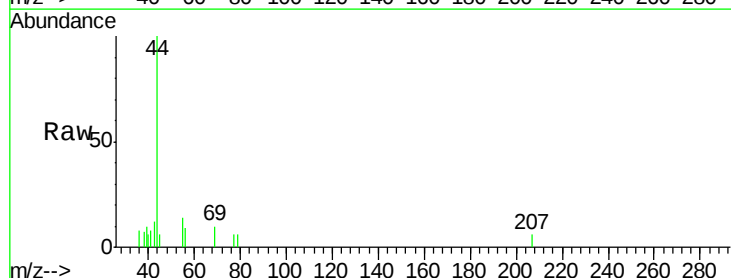
Tgt Ion: 59 Resp: 3127  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.5 12.7#



#13

Acrolein  
 Concen: 0.584 ug/l  
 RT: 2.20 min Scan# 502  
 Delta R.T. 0.01 min  
 Lab File: VU025110.D  
 Acq: 01 Jul 2018 00:53

Tgt Ion: 56 Resp: 263  
 Ion Ratio Lower Upper  
 56 100  
 55 141.1 58.4 87.6#





#16

Acetone

Concen: 0.442 ug/l

RT: 2.32 min Scan# 539

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

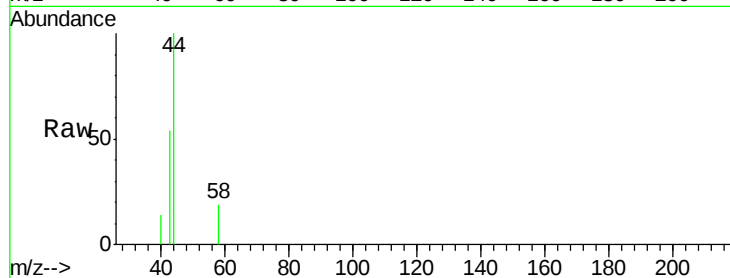
VU0630WBL02

Tgt Ion: 43 Resp: 837

Ion Ratio Lower Upper

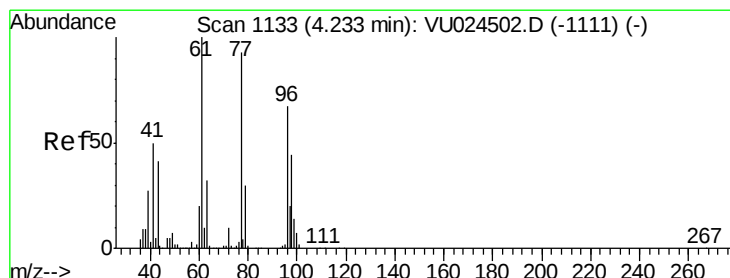
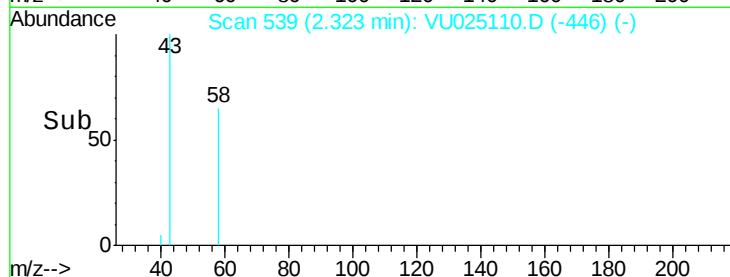
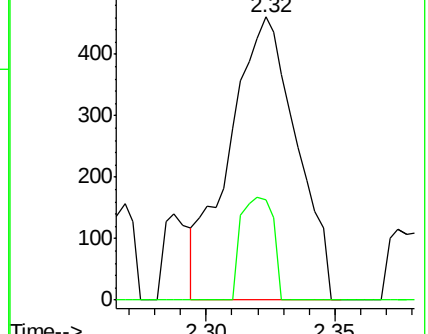
43 100

58 35.6 24.4 36.6



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0



#27

cis-1,2-Dichloroethene

Concen: 1.032 ug/l

RT: 4.23 min Scan# 1133

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

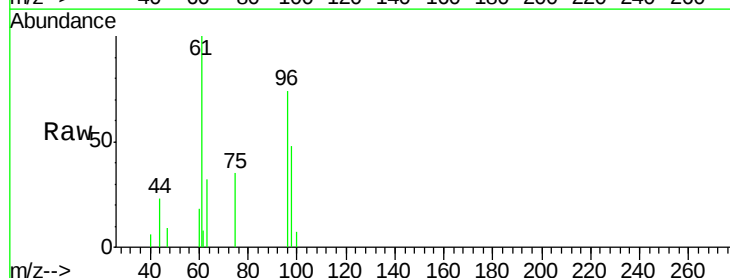
Tgt Ion: 96 Resp: 3214

Ion Ratio Lower Upper

96 100

61 138.8 0.0 306.6

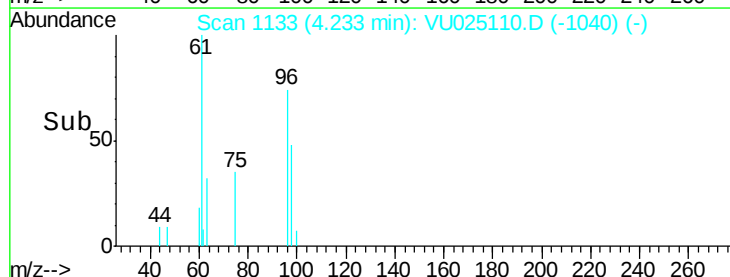
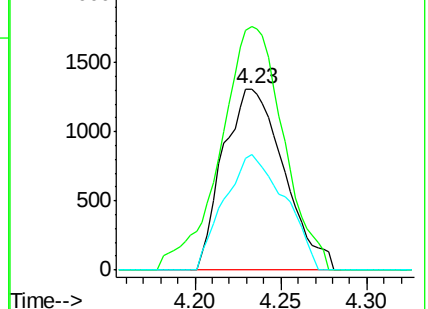
98 63.6 0.0 128.8

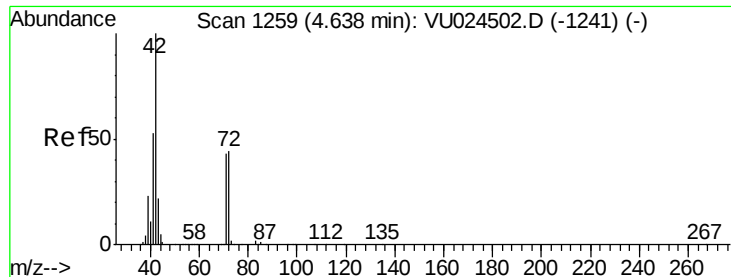


Abundance Ion 95.90 (95.60 to 96.60): VU0

Ion 60.90 (60.60 to 61.60): VU0

Ion 97.90 (97.60 to 98.60): VU0





#29

Tetrahydrofuran

Concen: 0.356 ug/l

RT: 4.65 min Scan# 1263

Delta R.T. 0.01 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

VU0630WBL02

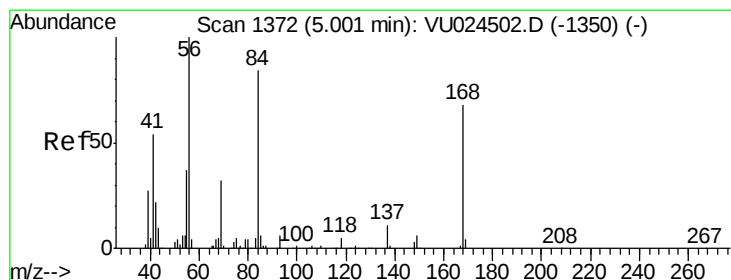
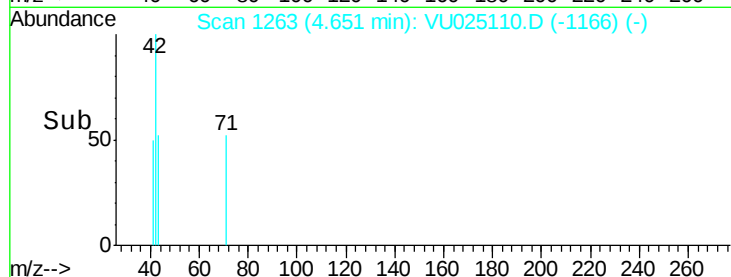
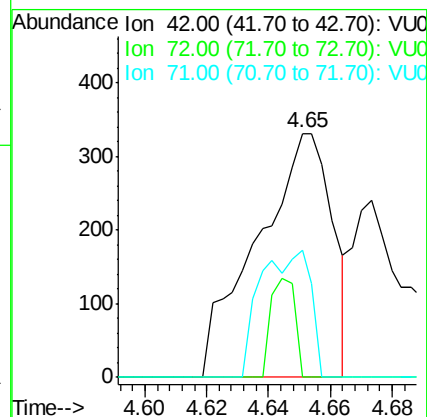
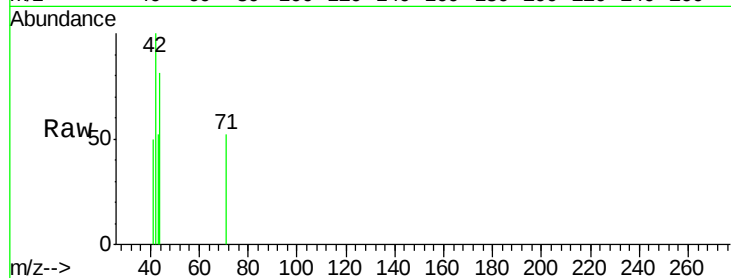
Tgt Ion: 42 Resp: 561

Ion Ratio Lower Upper

42 100

72 12.8 34.5 51.7#

71 34.8 32.2 48.4



#31

Cyclohexane

Concen: Below Cal

RT: 4.99 min Scan# 1367

Delta R.T. -0.02 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

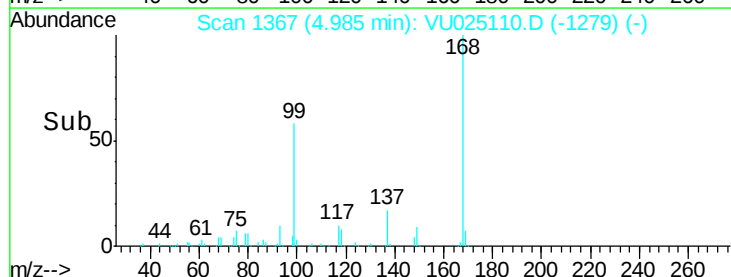
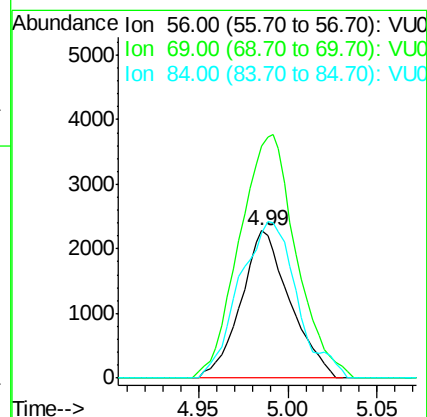
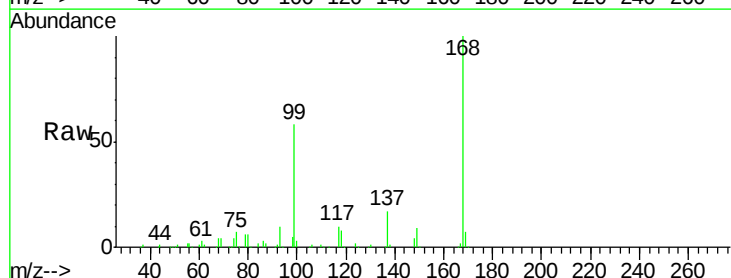
Tgt Ion: 56 Resp: 4373

Ion Ratio Lower Upper

56 100

69 157.4 24.8 37.2#

84 98.2 65.2 97.8#





#33

1,2-Dichloroethane-d4

Concen: 45.984 ug/l

RT: 5.31 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

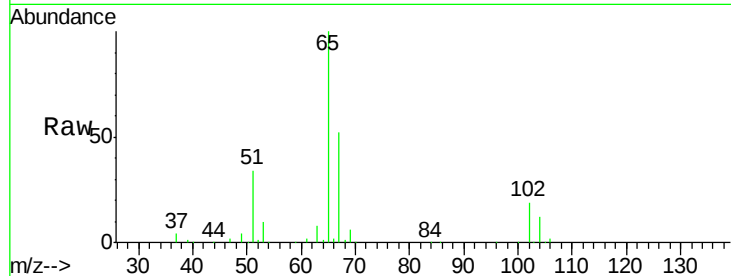
VU0630WBL02

Tgt Ion: 65 Resp: 162126

Ion Ratio Lower Upper

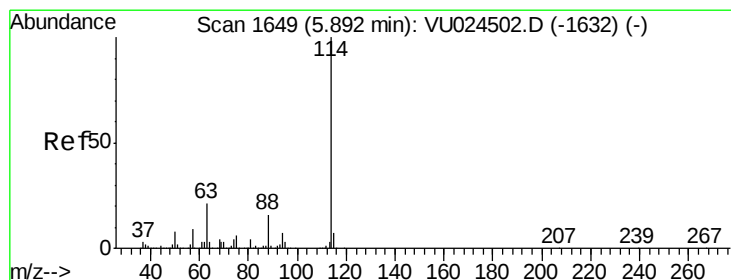
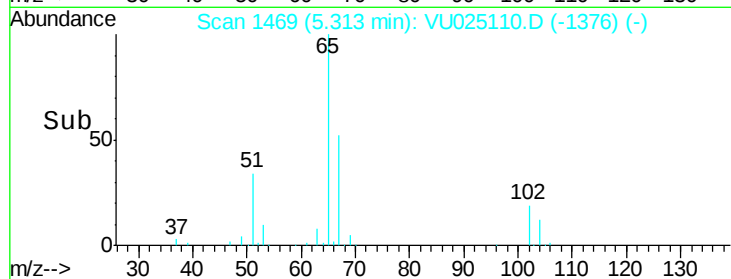
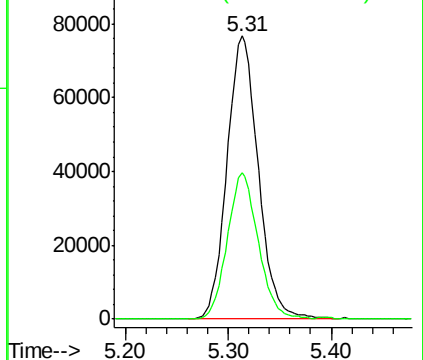
65 100

67 51.1 0.0 107.0



Abundance Ion 64.90 (64.60 to 65.60): VU0

Ion 66.90 (66.60 to 67.60): VU0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.89 min Scan# 1649

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

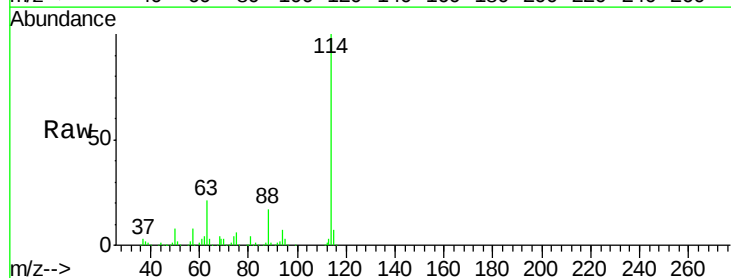
Tgt Ion: 114 Resp: 323559

Ion Ratio Lower Upper

114 100

63 21.3 0.0 45.4

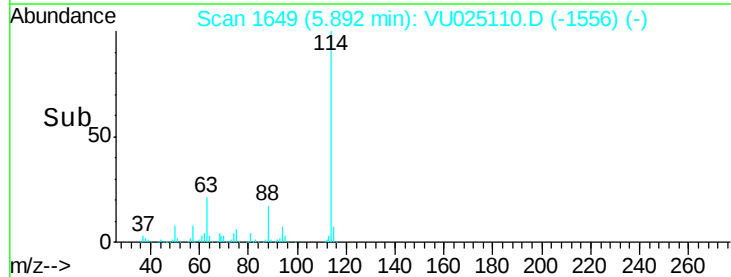
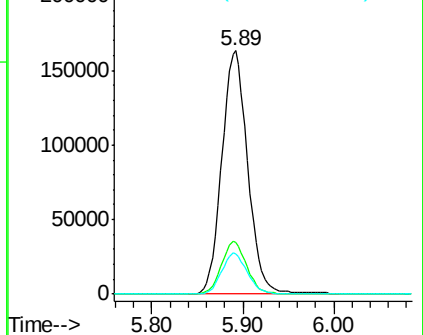
88 16.7 0.0 31.0

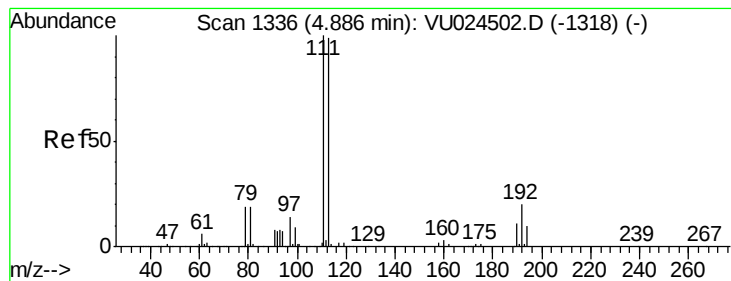


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VU0

Ion 87.90 (87.60 to 88.60): VU0





#35

Dibromofluoromethane

Concen: 46.697 ug/l

RT: 4.89 min Scan# 1337

Delta R.T. 0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

VU0630WBL02

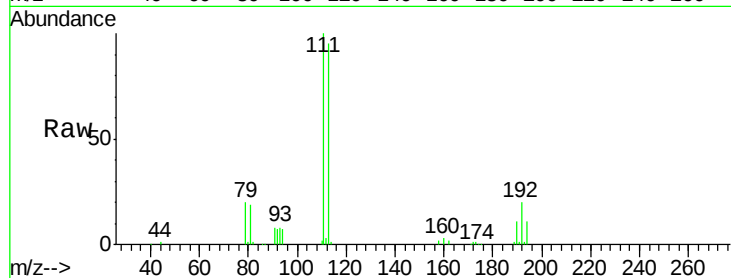
Tgt Ion:113 Resp: 125395

Ion Ratio Lower Upper

113 100

111 103.5 82.2 123.4

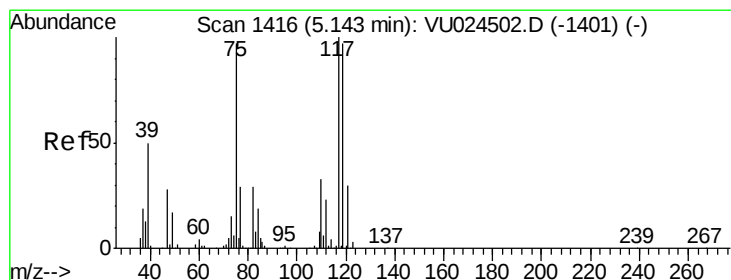
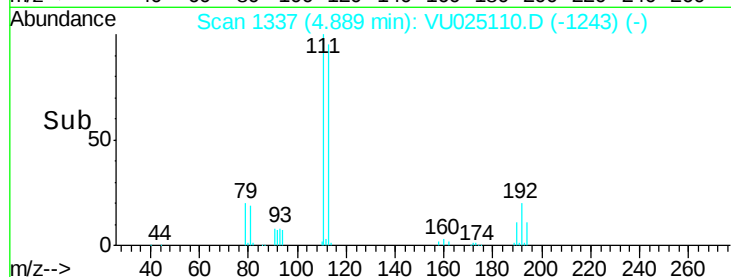
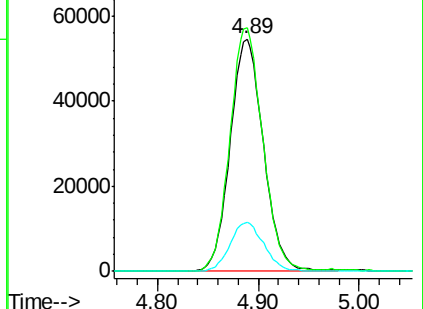
192 21.4 16.2 24.4



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.136 ug/l

RT: 4.99 min Scan# 1367

Delta R.T. -0.16 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

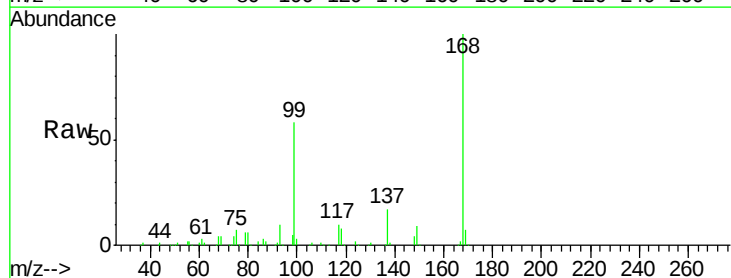
Tgt Ion: 75 Resp: 15724

Ion Ratio Lower Upper

75 100

110 10.0 17.0 50.9#

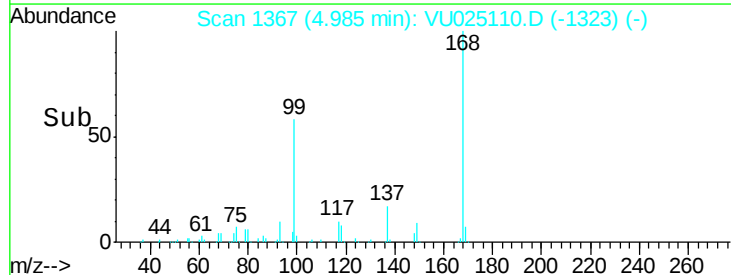
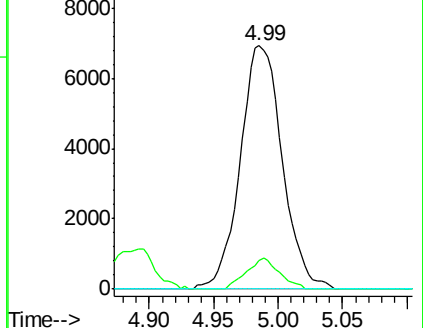
77 0.0 24.2 36.4#

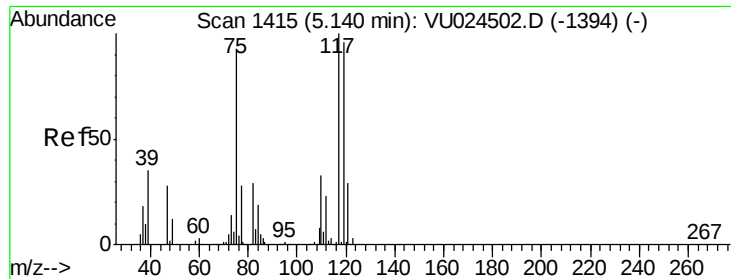


Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VU0





#38

Carbon Tetrachloride

Concen: 5.065 ug/l

RT: 4.99 min Scan# 1368

Delta R.T. -0.15 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

VU0630WBL02

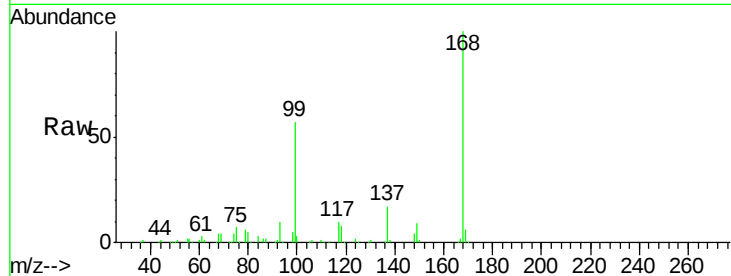
Tgt Ion:117 Resp: 21178

Ion Ratio Lower Upper

117 100

119 4.2 76.1 114.1#

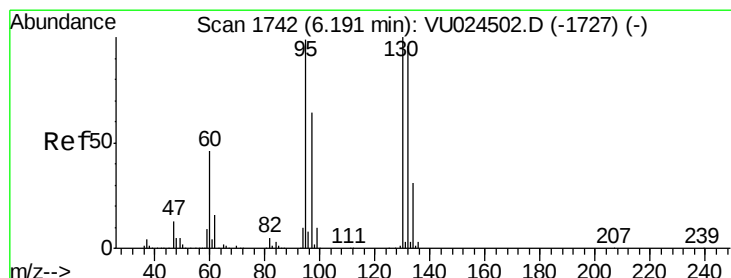
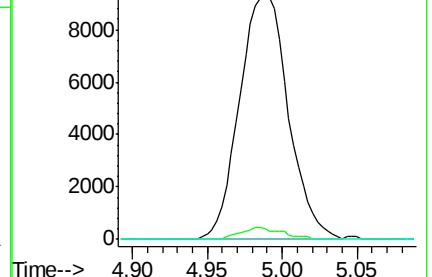
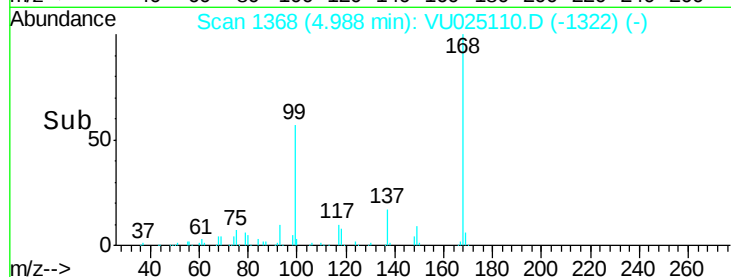
121 0.0 23.7 35.5#



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



#44

Trichloroethene

Concen: 0.663 ug/l

RT: 6.19 min Scan# 1742

Delta R.T. -0.00 min

Lab File: VU025110.D

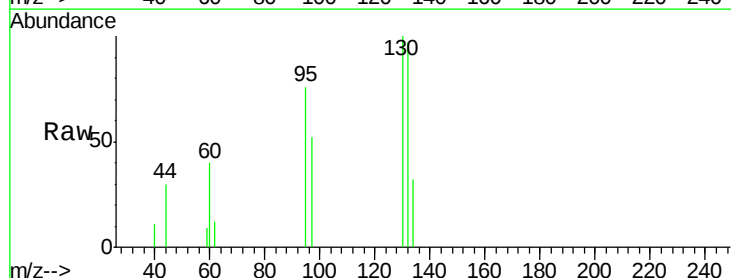
Acq: 01 Jul 2018 00:53

Tgt Ion:130 Resp: 2043

Ion Ratio Lower Upper

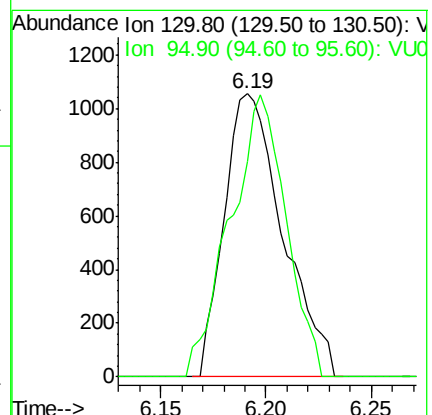
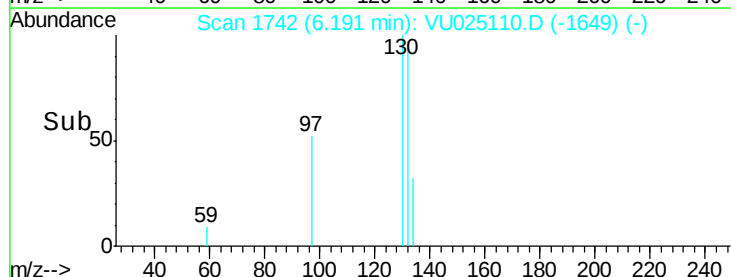
130 100

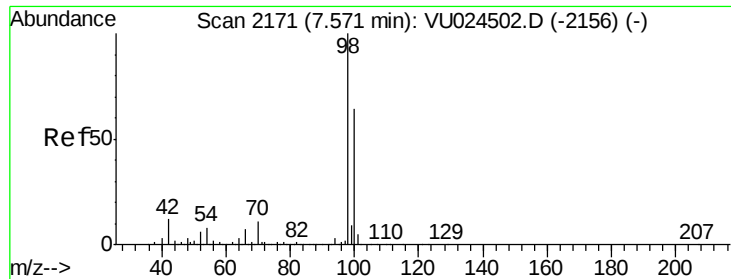
95 76.3 0.0 202.4



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VU0





#50

Toluene-d8

Concen: 47.571 ug/l

RT: 7.57 min Scan# 2171

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

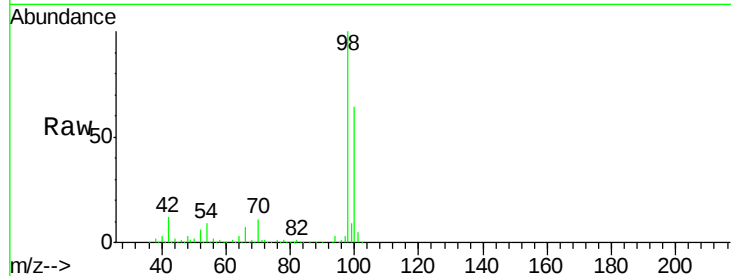
VU0630WBL02

Tgt Ion: 98 Resp: 465953

Ion Ratio Lower Upper

98 100

100 64.0 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VU0

Ion 100.00 (99.70 to 100.70): VU

7.57

250000

200000

150000

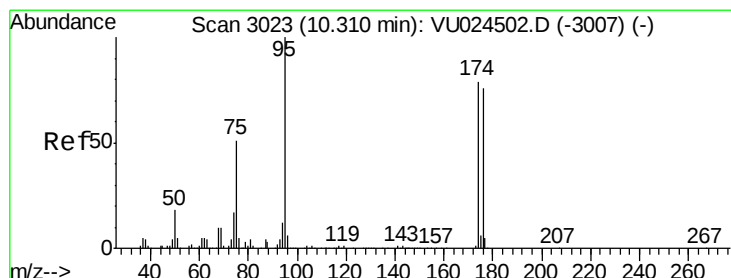
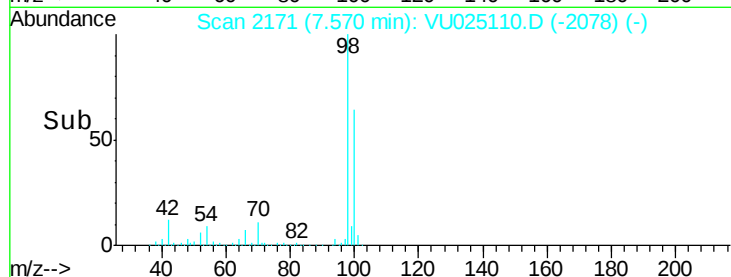
100000

50000

0

7.50 7.55 7.60 7.65

Time-->



#62

4-Bromofluorobenzene

Concen: 44.194 ug/l

RT: 10.31 min Scan# 3023

Delta R.T. -0.00 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

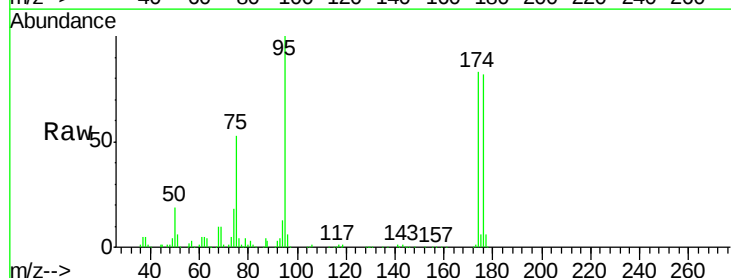
Tgt Ion: 95 Resp: 171870

Ion Ratio Lower Upper

95 100

174 85.2 0.0 165.8

176 83.1 0.0 159.4



Abundance Ion 94.90 (94.60 to 95.60): VU0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

10.31

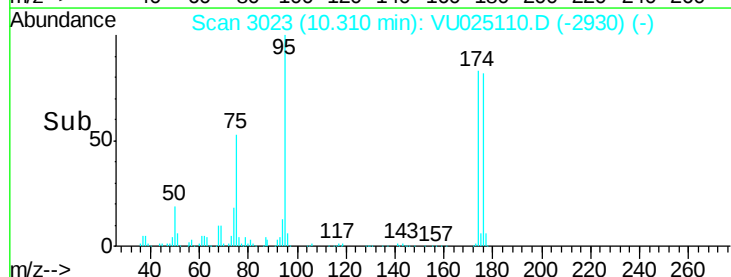
100000

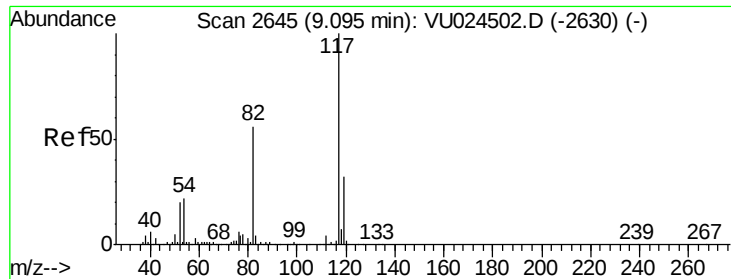
50000

0

10.30 10.40

Time-->

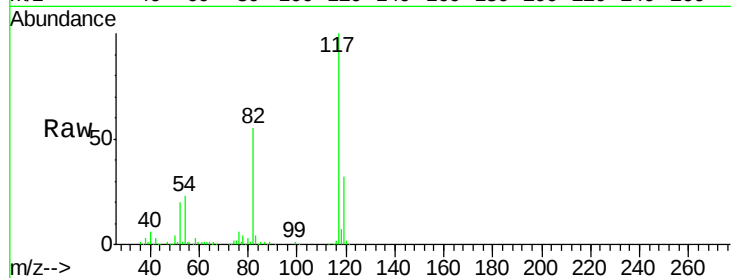




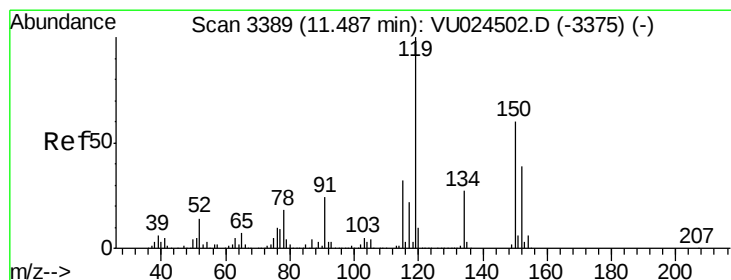
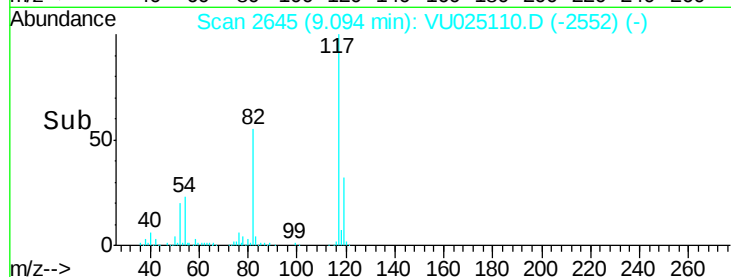
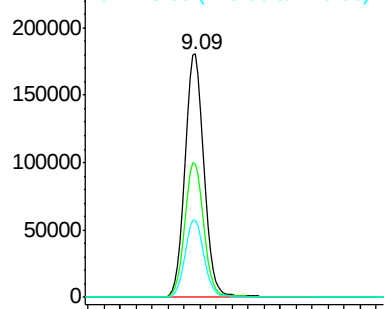
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.09 min Scan# 2645  
Delta R.T. -0.00 min  
Lab File: VU025110.D  
Acq: 01 Jul 2018 00:53

Instrument :  
MSVOA\_U  
ClientSampleId :  
VU0630WBL02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 55.1  | 44.3  | 66.5  |
| 119     | 32.0  | 25.4  | 38.2  |

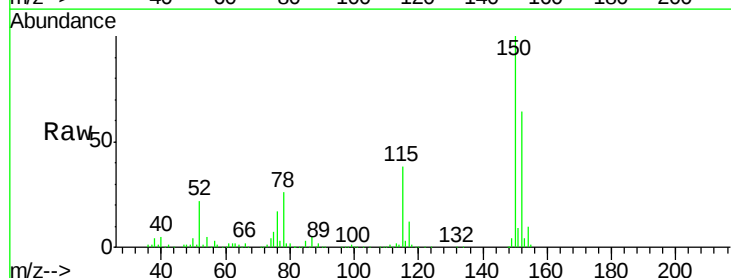


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

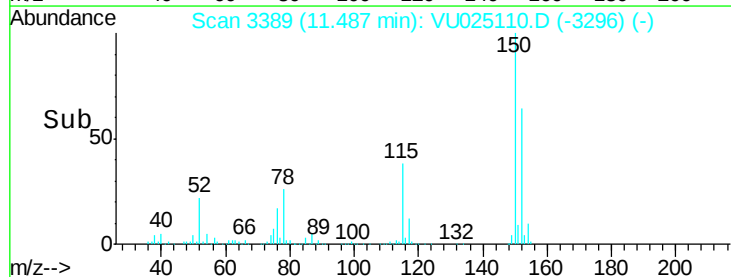
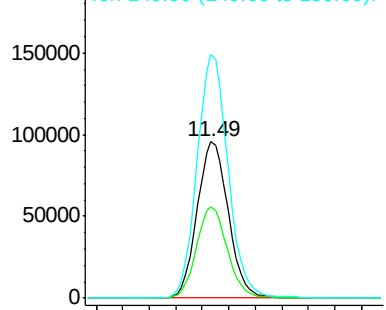


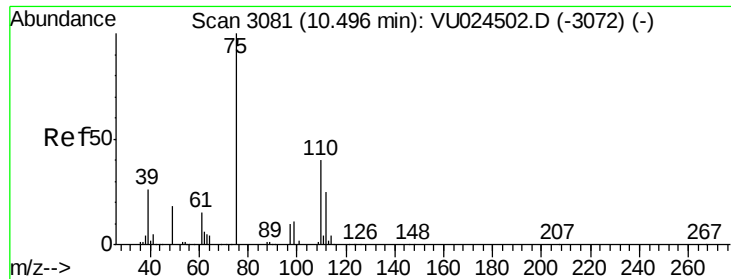
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.49 min Scan# 3389  
Delta R.T. -0.00 min  
Lab File: VU025110.D  
Acq: 01 Jul 2018 00:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 57.9  | 43.0  | 129.0 |
| 150     | 154.9 | 0.0   | 354.0 |



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

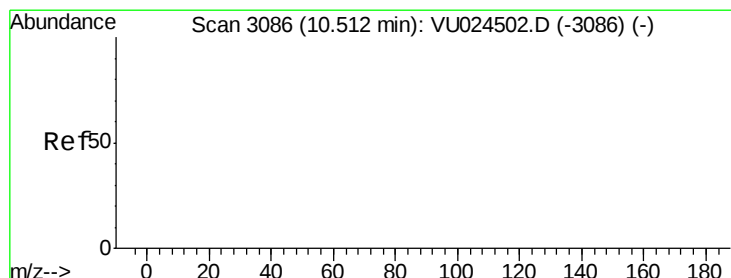
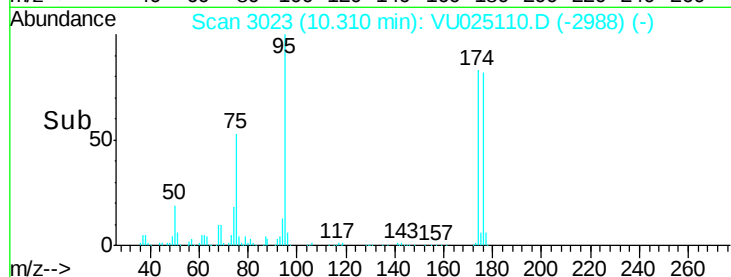
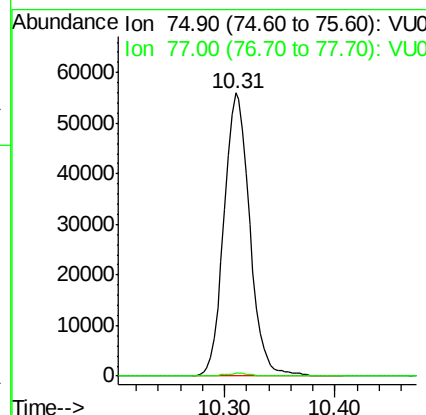
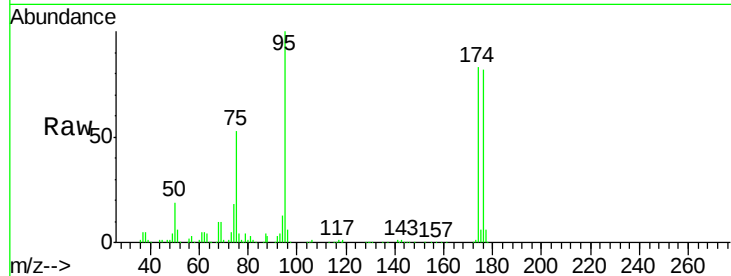




#76  
 1,2,3-Trichloropropane  
 Concen: 26.294 ug/l  
 RT: 10.31 min Scan# 3023  
 Delta R.T. -0.19 min  
 Lab File: VU025110.D  
 Acq: 01 Jul 2018 00:53

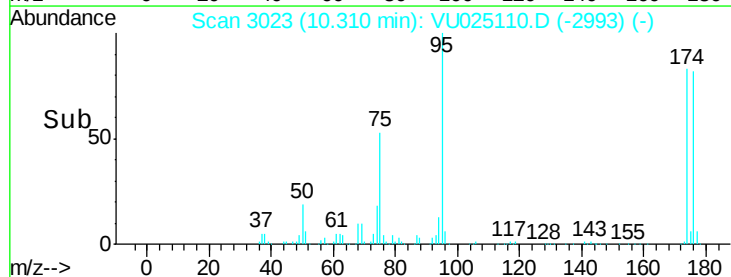
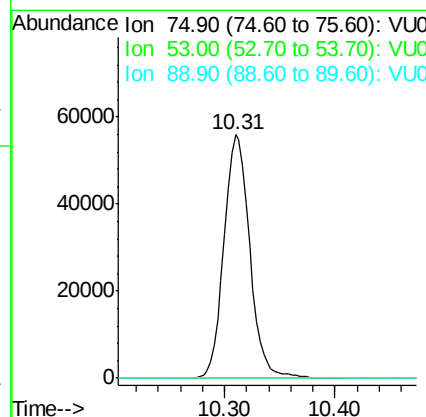
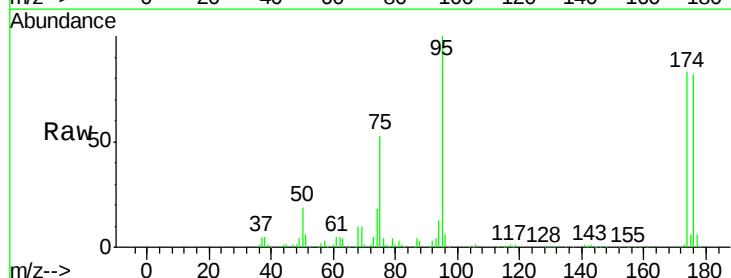
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU0630WBL02

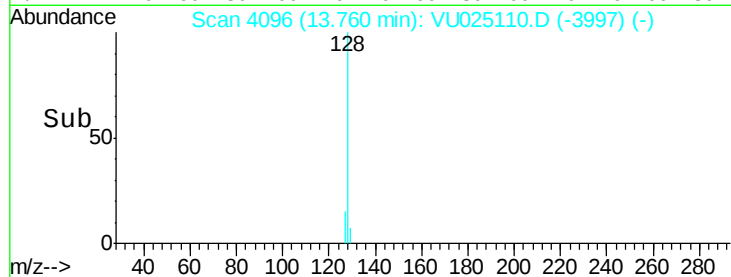
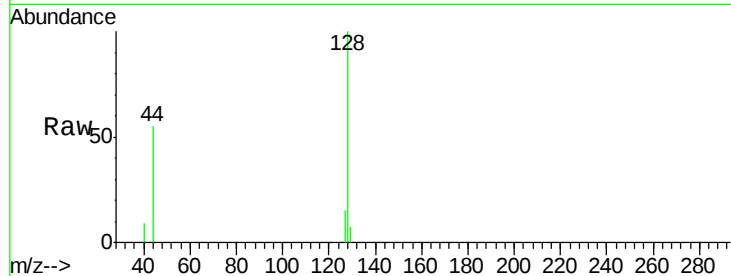
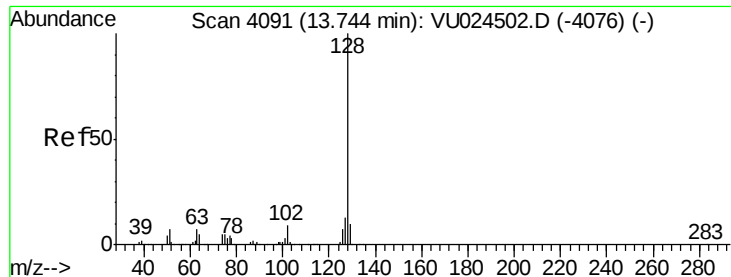
Tgt Ion: 75 Resp: 90672  
 Ion Ratio Lower Upper  
 75 100  
 77 1.0 20.9 62.7#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 60.855 ug/l  
 RT: 10.31 min Scan# 3023  
 Delta R.T. -0.20 min  
 Lab File: VU025110.D  
 Acq: 01 Jul 2018 00:53

Tgt Ion: 75 Resp: 90672  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 0.0 0.0  
 89 0.0 0.0 0.0





#95

Naphthalene

Concen: 0.997 ug/l

RT: 13.76 min Scan# 4096

Delta R.T. 0.02 min

Lab File: VU025110.D

Acq: 01 Jul 2018 00:53

Instrument :

MSVOA\_U

ClientSampleId :

VU0630WBL02

Tgt Ion:128 Resp: 3706

Ion Ratio Lower Upper

128 100

127 6.7 10.6 16.0#

129 2.3 8.6 12.8#

