

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU062518\  
 Data File : VU024881.D  
 Acq On : 25 Jun 2018 17:45  
 Operator : MD/SY  
 Sample : J3605-03ME  
 Misc : 6.38g/5.0mL/100uL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Jun 26 05:16:28 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      | 4.98  | 168  | 211942   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 325694   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.10  | 117  | 311873   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 181418   | 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   | 156586   | 45.26 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.52% |          |
| 35) Dibromofluoromethane    | 4.88  | 113  | 126080   | 46.64 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.28% |          |
| 50) Toluene-d8              | 7.57  | 98   | 471876   | 47.86 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.72% |          |
| 62) 4-Bromofluorobenzene    | 10.32 | 95   | 192813   | 49.25 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.50% |          |

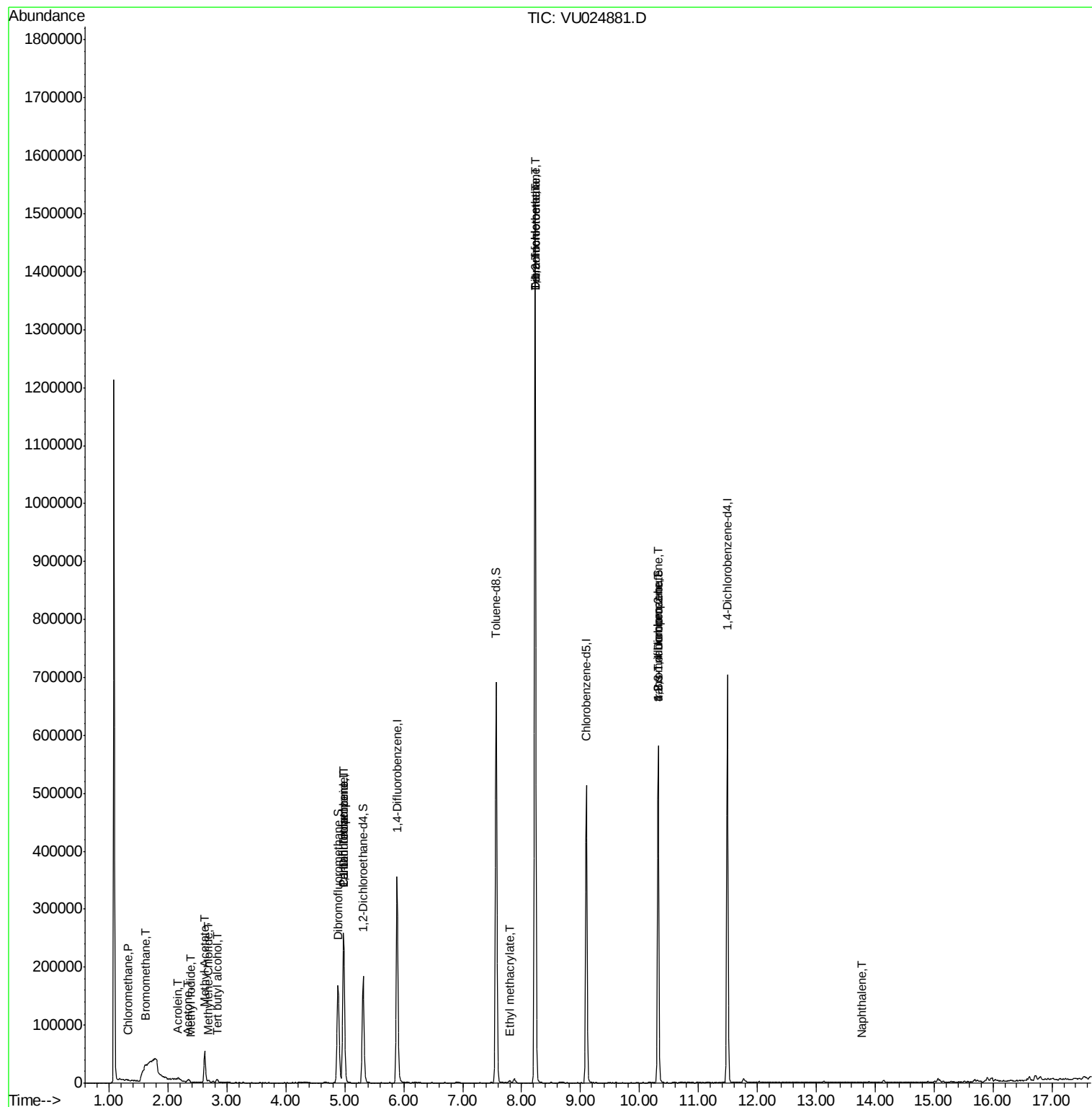
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1044     | 0.39      | ug/l  | 89     |
| 5) Bromomethane                | 1.60  | 94   | 1097     | 0.81      | ug/l  | 92     |
| 6) Chloroethane                | 1.68  | 64   | 427      | Below Cal |       | 89     |
| 8) Diethyl Ether               | 2.10  | 74   | 20       | Below Cal | #     | 1      |
| 10) Methyl Iodide              | 2.39  | 142  | 335      | 5.42      | ug/l  | # 81   |
| 11) Tert butyl alcohol         | 2.83  | 59   | 3186     | 3.79      | ug/l  | # 72   |
| 13) Acrolein                   | 2.17  | 56   | 103      | 0.23      | ug/l  | 94     |
| 16) Acetone                    | 2.35  | 43   | 6240     | 3.36      | ug/l  | 91     |
| 18) Methyl Acetate             | 2.62  | 43   | 70416    | 17.67     | ug/l  | 100    |
| 20) Methylene Chloride         | 2.69  | 84   | 1903     | 0.65      | ug/l  | 90     |
| 31) Cyclohexane                | 4.98  | 56   | 4430     | Below Cal | #     | 15     |
| 36) 1,1-Dichloropropene        | 4.98  | 75   | 15713    | 4.11      | ug/l  | # 51   |
| 38) Carbon Tetrachloride       | 4.98  | 117  | 20034    | 4.76      | ug/l  | # 16   |
| 55) 1,1,2-Trichloroethane      | 8.23  | 97   | 2758     | 0.97      | ug/l  | # 19   |
| 56) Ethyl methacrylate         | 7.78  | 69   | 3793     | 0.79      | ug/l  | # 72   |
| 60) Dibromochloromethane       | 8.23  | 129  | 320768   | 90.19     | ug/l  | # 11   |
| 64) Tetrachloroethene          | 8.23  | 164  | 343026   | 115.71    | ug/l  | 97     |
| 76) 1,2,3-Trichloropropane     | 10.32 | 75   | 99708    | 24.96     | ug/l  | # 36   |
| 81) trans-1,4-Dichloro-2-buten | 10.32 | 75   | 99708    | 57.78     | ug/l  | # 100  |
| 95) Naphthalene                | 13.76 | 128  | 281      | 0.70      | ug/l  | # 69   |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU062518\  
Data File : VU024881.D  
Acq On : 25 Jun 2018 17:45  
Operator : MD/SY  
Sample : J3605-03ME  
Misc : 6.38q/5.0mL/100uL/5.0mL/MSVOA\_U/MEOH  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: Jun 26 05:16:28 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: 50.00 ug/l

RT: 4.98 min Scan# 1366

Delta R.T. -0.01 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

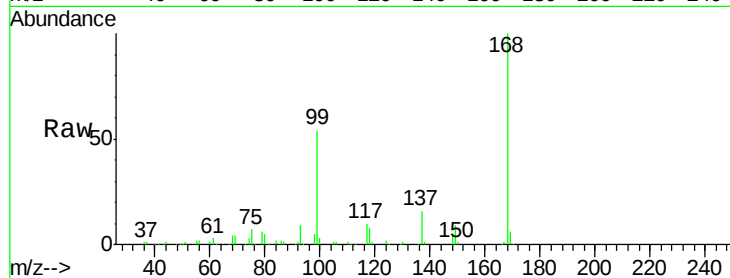
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:168 Resp: 211942

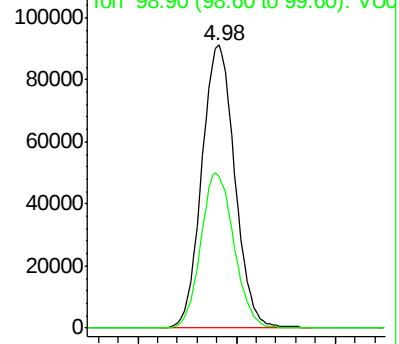
Ion Ratio Lower Upper

168 100

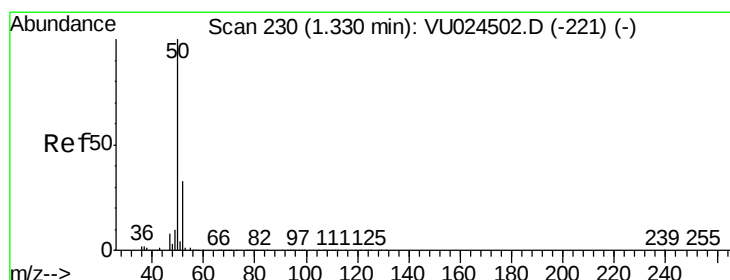
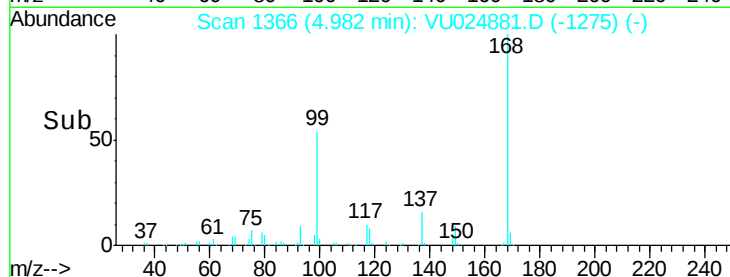
99 53.6 43.2 64.8



Abundance Ion 167.90 (167.60 to 168.60): VU024881.D (-1275) (-)



Time-->



#3

Chloromethane

Concen: 0.39 ug/l

RT: 1.32 min Scan# 227

Delta R.T. -0.01 min

Lab File: VU024881.D

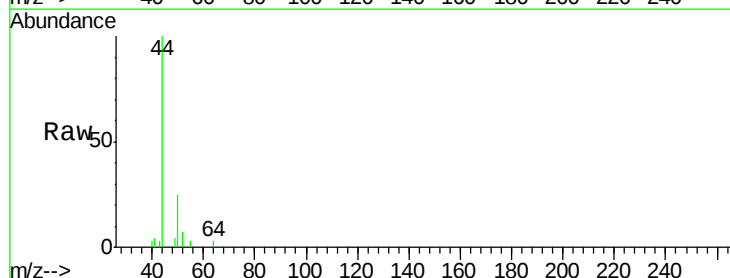
Acq: 25 Jun 2018 17:45

Tgt Ion: 50 Resp: 1044

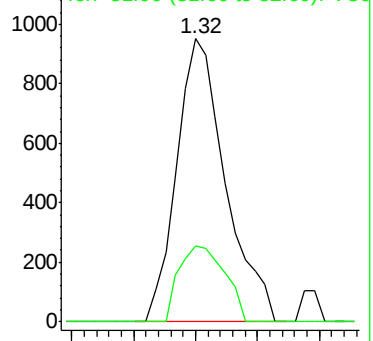
Ion Ratio Lower Upper

50 100

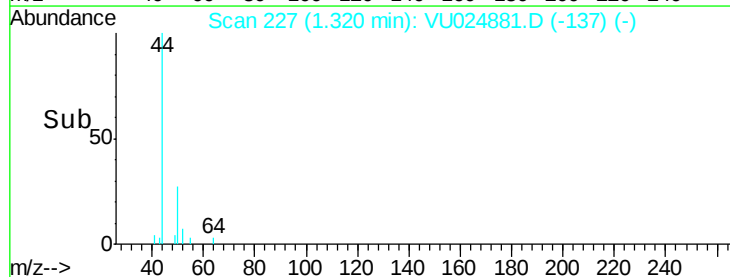
52 26.8 26.4 39.6

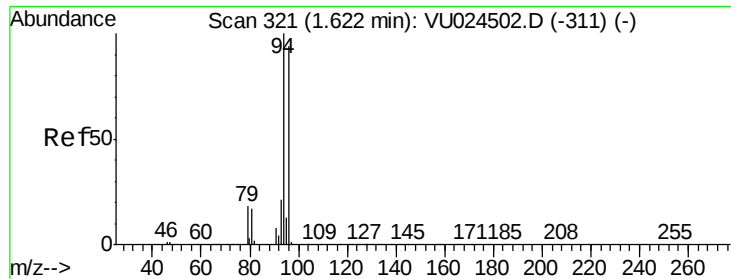


Abundance Ion 49.90 (49.60 to 50.60): VU024881.D (-137) (-)



Time-->





#5

Bromomethane

Concen: 0.81 ug/l

RT: 1.60 min Scan# 315

Delta R.T. -0.02 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

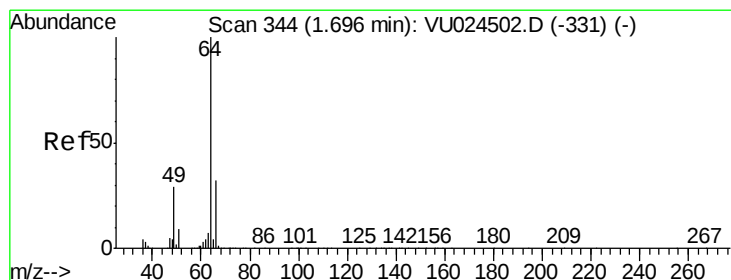
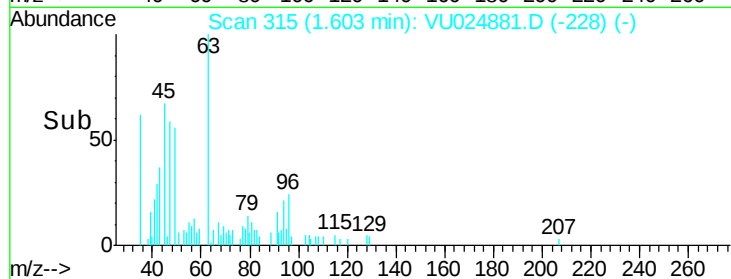
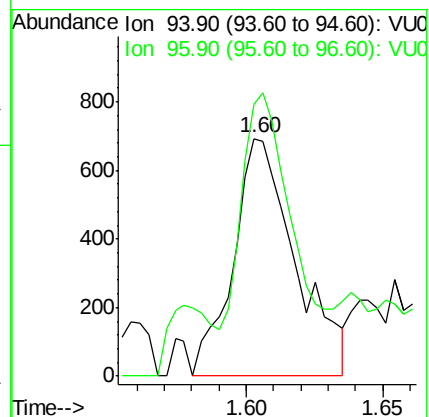
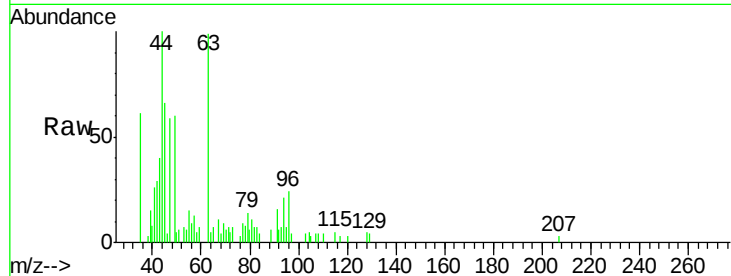
Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 94 Resp: 1097

Ion Ratio Lower Upper

94 100

96 85.4 74.5 111.7



#6

Chloroethane

Concen: Below Cal

RT: 1.68 min Scan# 340

Delta R.T. -0.01 min

Lab File: VU024881.D

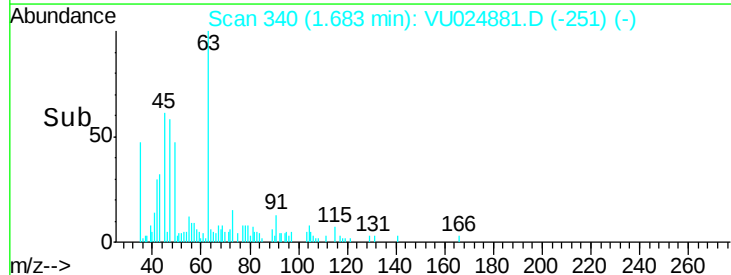
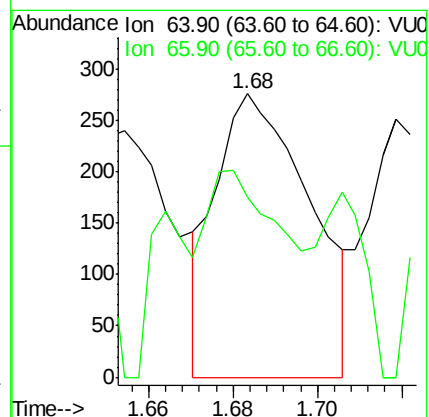
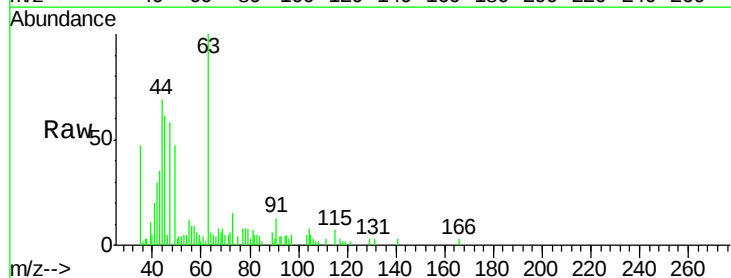
Acq: 25 Jun 2018 17:45

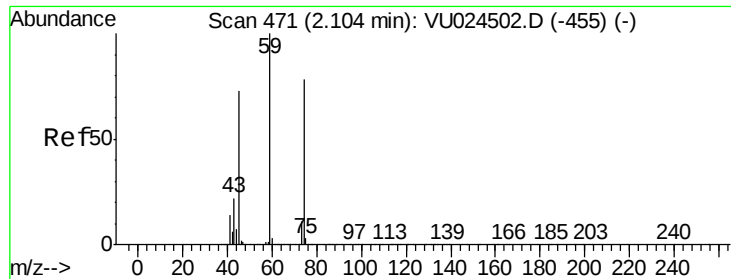
Tgt Ion: 64 Resp: 427

Ion Ratio Lower Upper

64 100

66 38.2 25.5 38.3





#8

Diethyl Ether

Concen: Below Cal

RT: 2.10 min Scan# 470

Delta R.T. -0.00 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Instrument :

MSVOA\_U

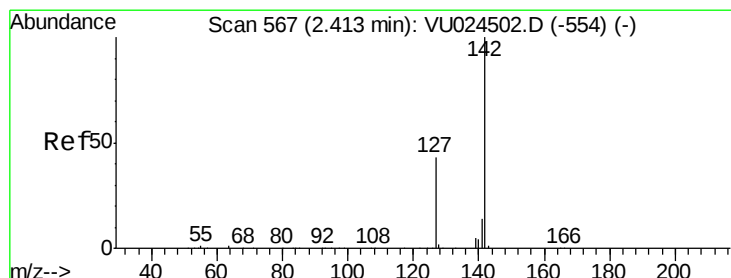
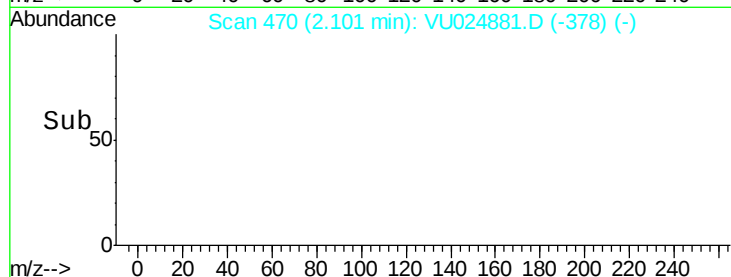
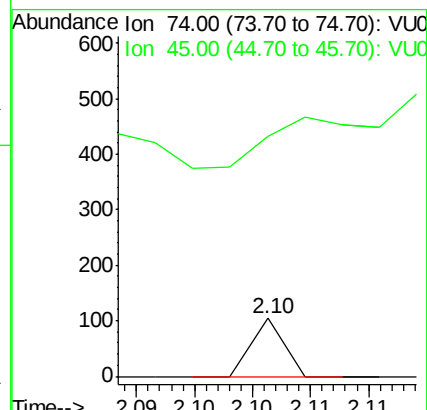
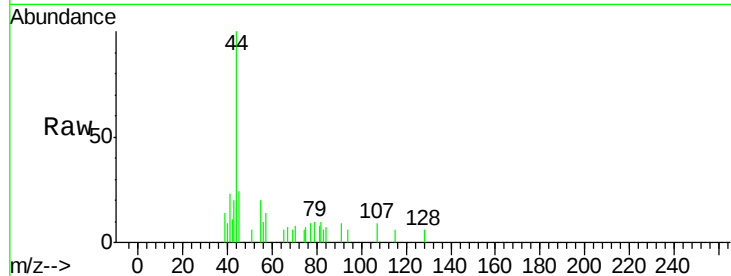
ClientSampleId :

Tot Ion: 74 Resp: 20

Ion Ratio Lower Upper

74 100

45 1320.0 55.0 165.0#



#10

Methyl Iodide

Concen: 5.42 ug/l

RT: 2.39 min Scan# 561

Delta R.T. -0.02 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

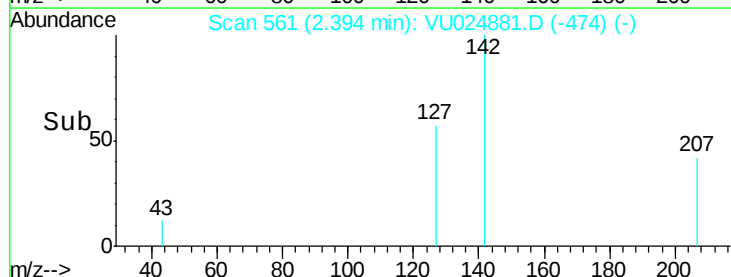
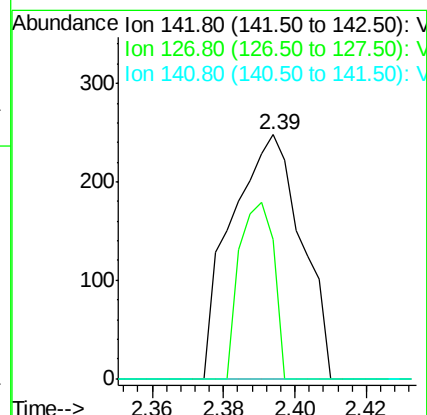
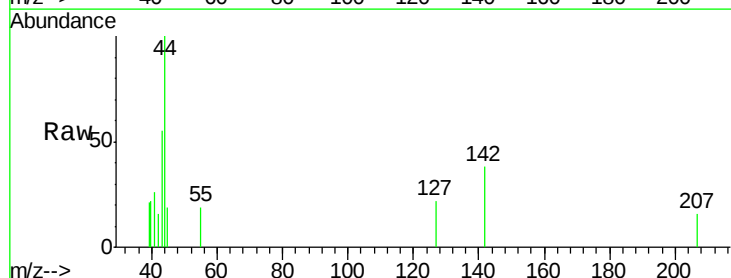
Tgt Ion: 142 Resp: 335

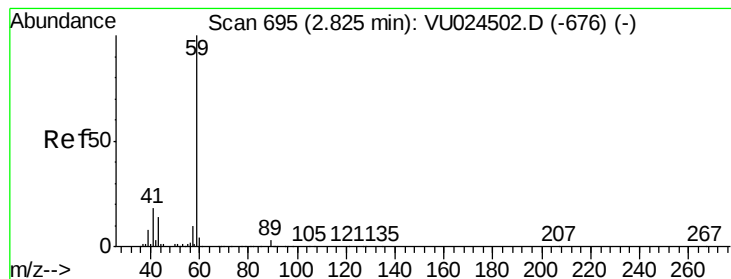
Ion Ratio Lower Upper

142 100

127 35.8 35.6 53.4

141 0.0 11.7 17.5#



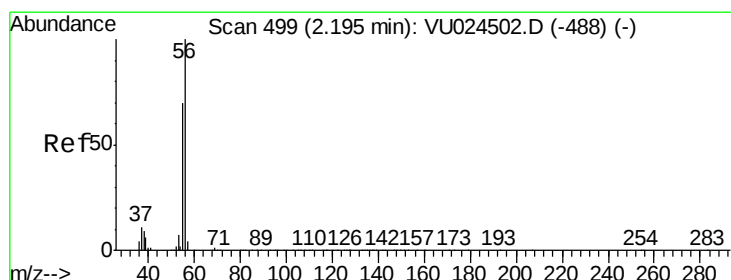
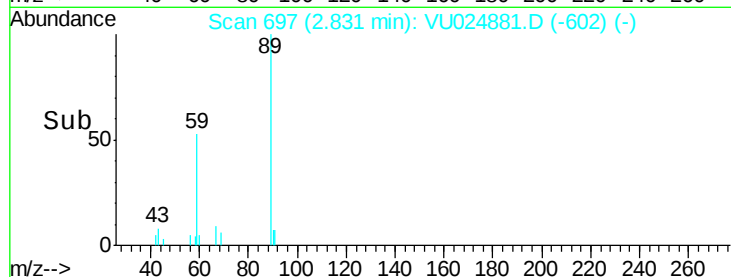
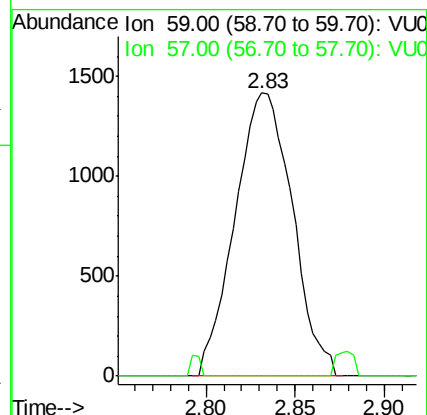
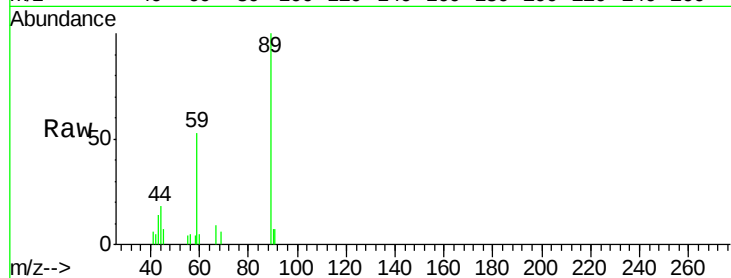


#11

Tert butyl alcohol  
 Concen: 3.79 ug/l  
 RT: 2.83 min Scan# 697  
 Delta R.T. 0.01 min  
 Lab File: VU024881.D  
 Acq: 25 Jun 2018 17:45

Instrument :  
 MSVOA\_U  
 ClientSampleId :

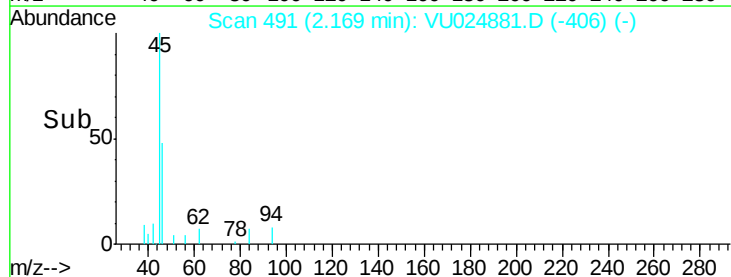
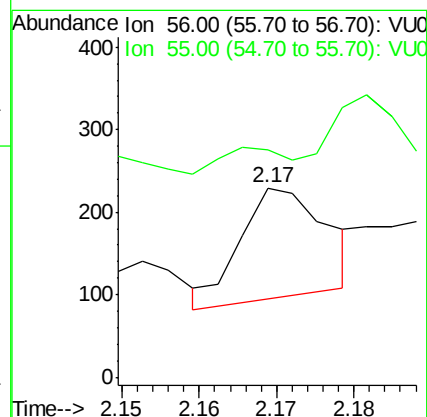
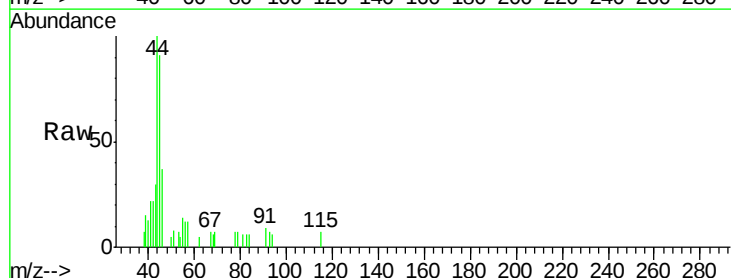
Tot Ion: 59 Resp: 3186  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.5 12.7#



#13

Acrolein  
 Concen: 0.23 ug/l  
 RT: 2.17 min Scan# 491  
 Delta R.T. -0.03 min  
 Lab File: VU024881.D  
 Acq: 25 Jun 2018 17:45

Tgt Ion: 56 Resp: 103  
 Ion Ratio Lower Upper  
 56 100  
 55 77.7 58.4 87.6





#16

Acetone

Concen: 3.36 ug/l

RT: 2.35 min Scan# 546

Delta R.T. 0.02 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Instrument :

MSVOA\_U

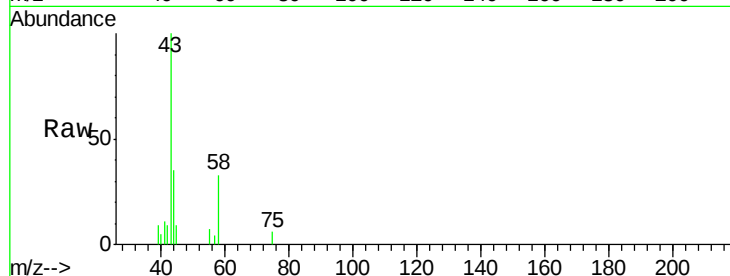
ClientSampleId :

Tot Ion: 43 Resp: 6240

Ion Ratio Lower Upper

43 100

58 35.5 24.4 36.6



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0

2.35

2500

2000

1500

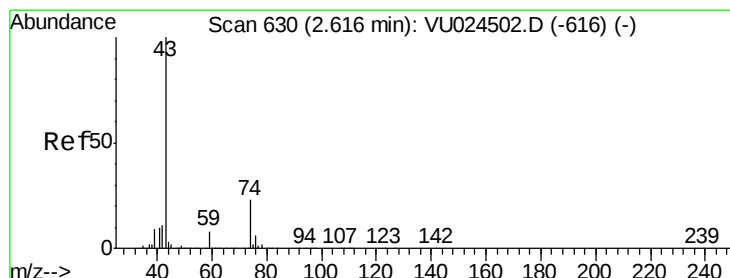
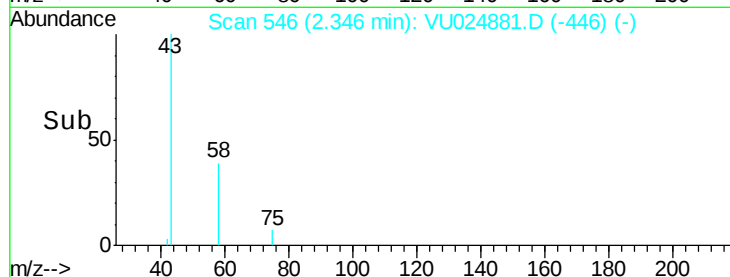
1000

500

0

Time-->

2.30 2.35 2.40



#18

Methyl Acetate

Concen: 17.67 ug/l

RT: 2.62 min Scan# 632

Delta R.T. 0.01 min

Lab File: VU024881.D

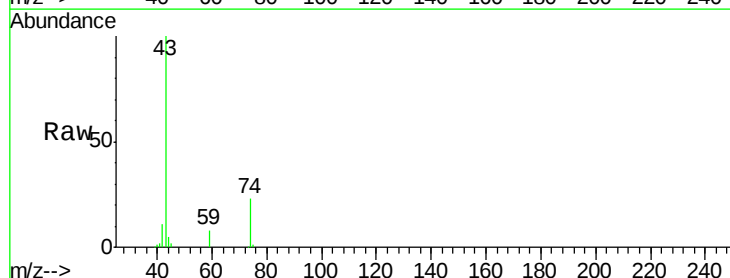
Acq: 25 Jun 2018 17:45

Tgt Ion: 43 Resp: 70416

Ion Ratio Lower Upper

43 100

74 22.7 18.0 27.0



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 74.00 (73.70 to 74.70): VU0

2.62

40000

30000

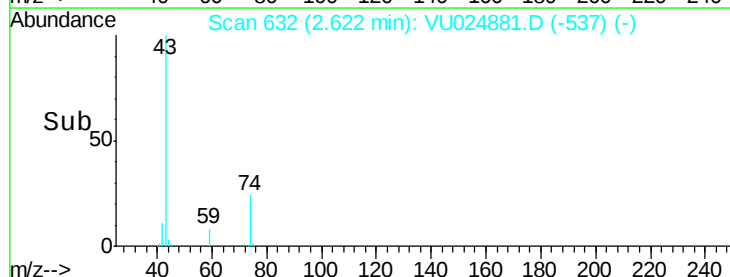
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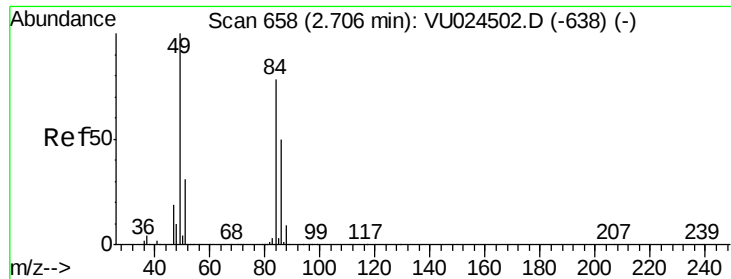
10000

0

Time-->

2.50 2.60 2.70

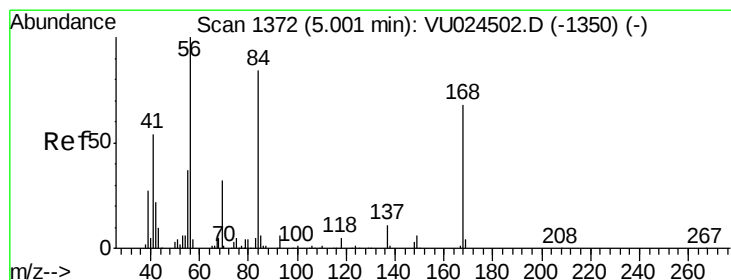
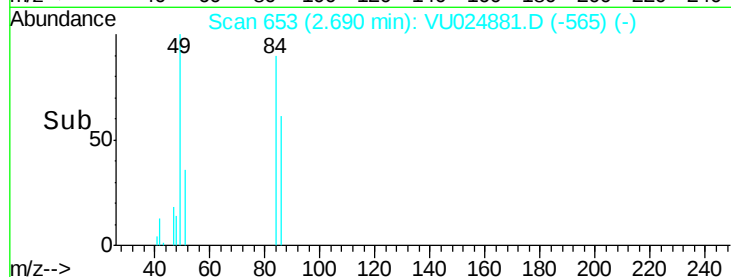
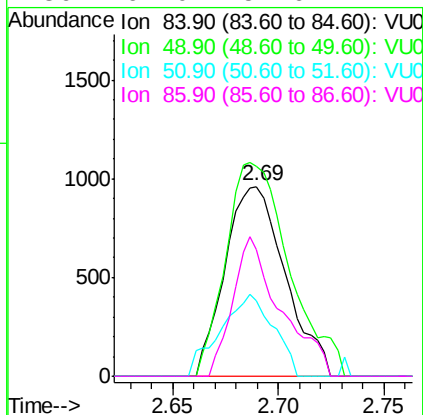
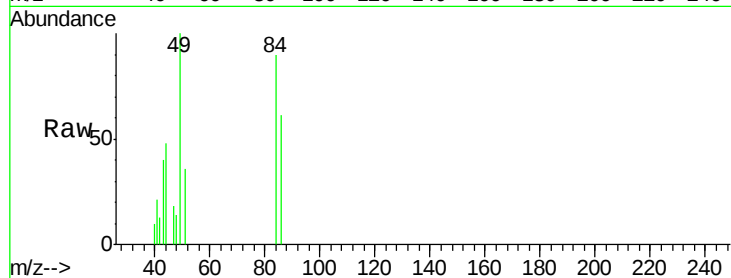




#20  
Methvlene Chloride  
Concen: 0.65 ua/l  
RT: 2.69 min Scan# 653  
Delta R.T. -0.02 min  
Lab File: VU024881.D  
Acq: 25 Jun 2018 17:45

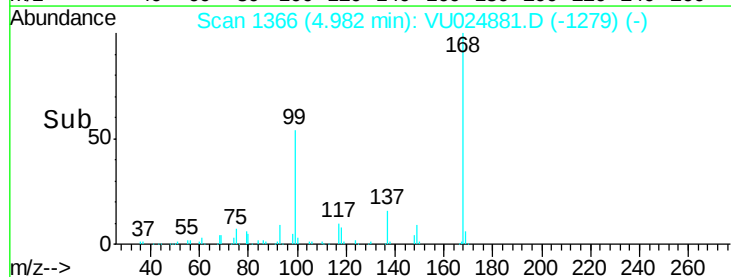
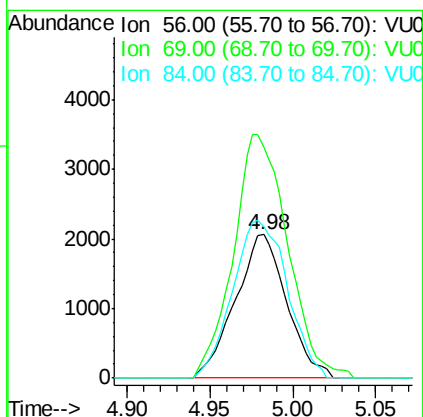
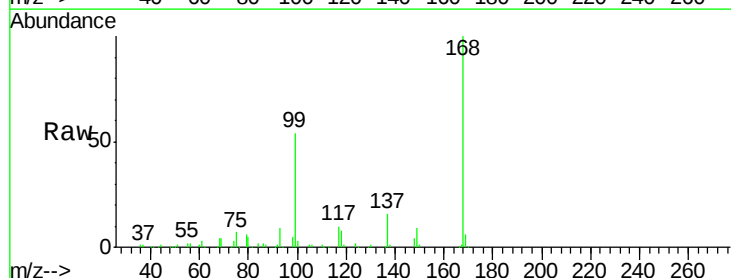
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 84 Resp: 1903  
Ion Ratio Lower Upper  
84 100  
49 110.6 103.8 155.8  
51 40.0 32.0 48.0  
86 67.0 51.6 77.4



#31  
Cyclohexane  
Concen: Below Cal  
RT: 4.98 min Scan# 1366  
Delta R.T. -0.02 min  
Lab File: VU024881.D  
Acq: 25 Jun 2018 17:45

Tgt Ion: 56 Resp: 4430  
Ion Ratio Lower Upper  
56 100  
69 161.0 24.8 37.2#  
84 105.5 65.2 97.8#

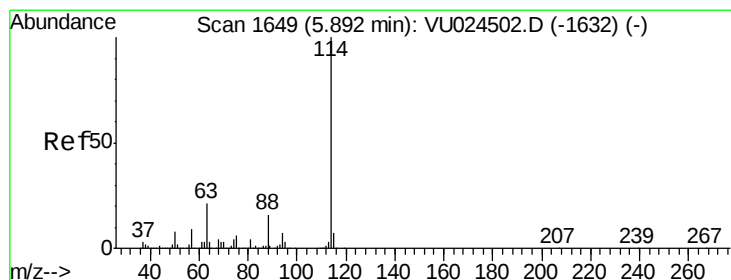
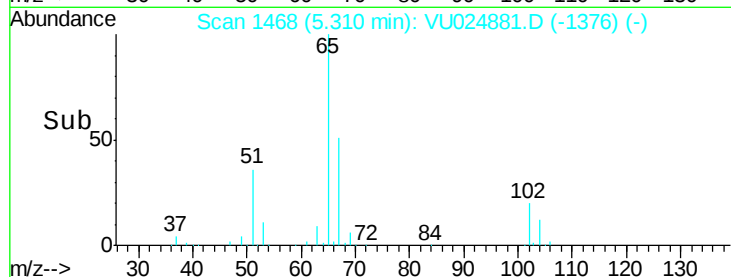
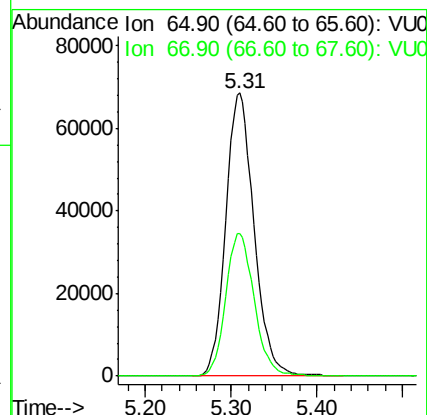
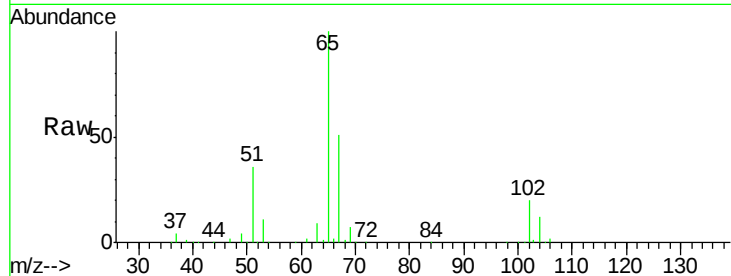




#33  
 1,2-Dichloroethane-d4  
 Concen: 45.26 ug/l  
 RT: 5.31 min Scan# 1468  
 Delta R.T. -0.00 min  
 Lab File: VU024881.D  
 Acq: 25 Jun 2018 17:45

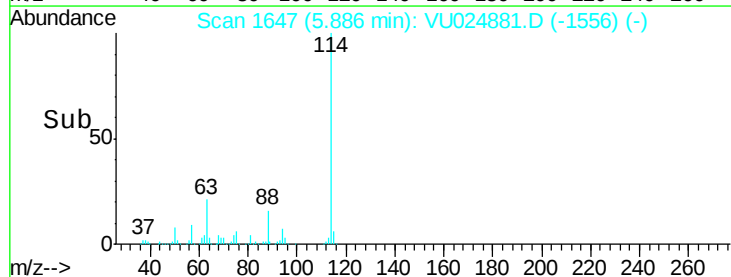
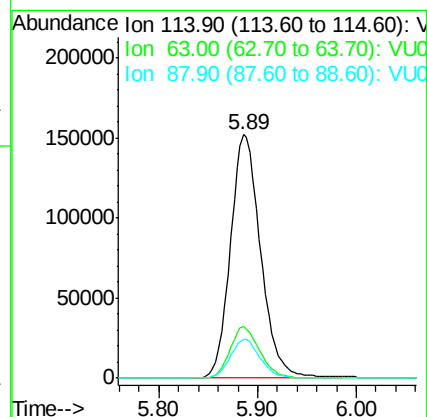
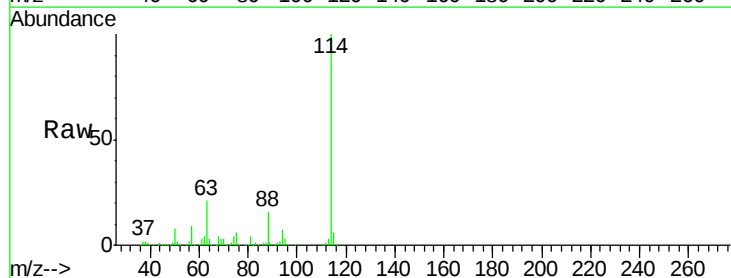
Instrument :  
 MSVOA\_U  
 ClientSampleId :

Tot Ion: 65 Resp: 156586  
 Ion Ratio Lower Upper  
 65 100  
 67 50.9 0.0 107.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 5.89 min Scan# 1647  
 Delta R.T. -0.01 min  
 Lab File: VU024881.D  
 Acq: 25 Jun 2018 17:45

Tgt Ion: 114 Resp: 325694  
 Ion Ratio Lower Upper  
 114 100  
 63 21.1 0.0 45.4  
 88 15.9 0.0 31.0

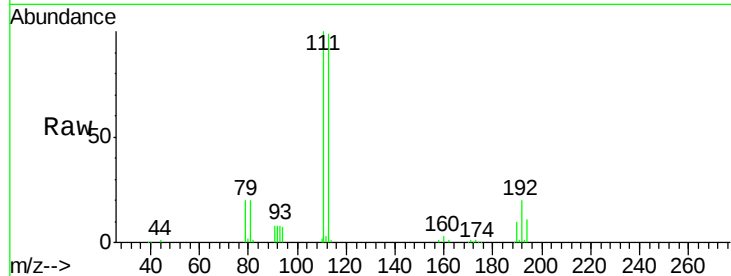




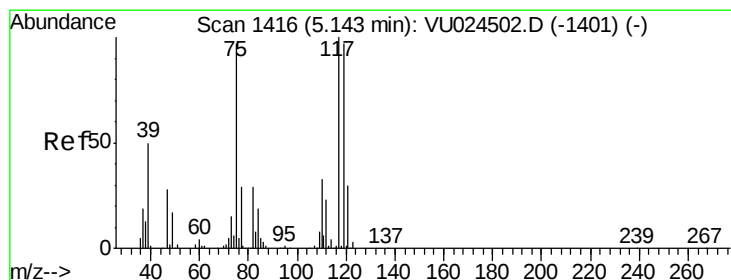
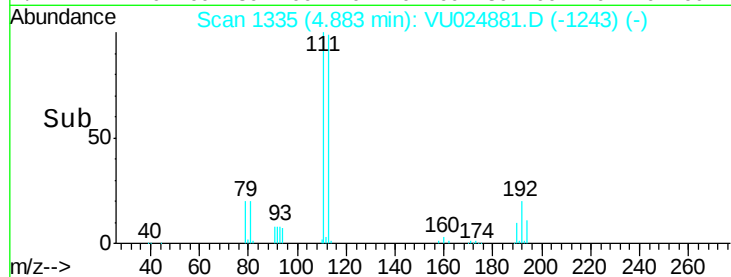
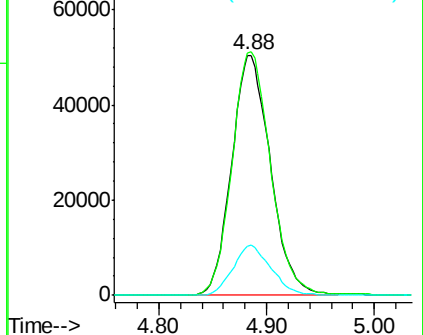
#35  
 Dibromofluoromethane  
 Concen: 46.64 ug/l  
 RT: 4.88 min Scan# 1335  
 Delta R.T. -0.00 min  
 Lab File: VU024881.D  
 Acq: 25 Jun 2018 17:45

Instrument :  
 MSVOA\_U  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 100.9 | 82.2  | 123.4 |
| 192     | 20.5  | 16.2  | 24.4  |

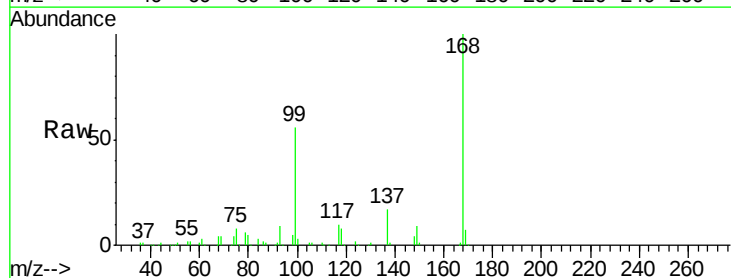


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

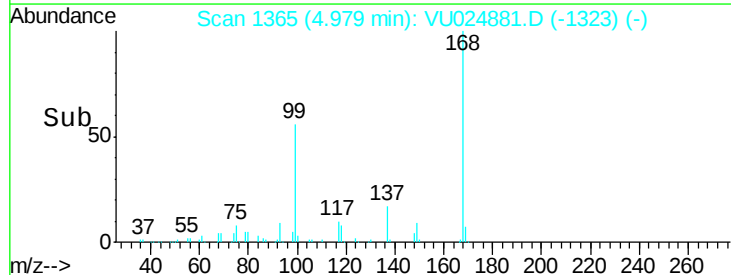
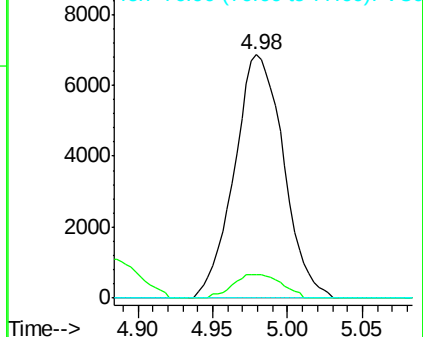


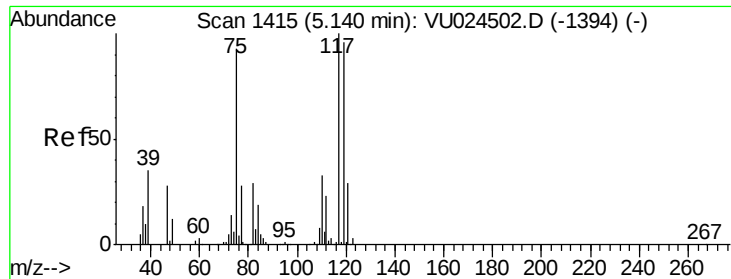
#36  
 1,1-Dichloropropene  
 Concen: 4.11 ug/l  
 RT: 4.98 min Scan# 1365  
 Delta R.T. -0.16 min  
 Lab File: VU024881.D  
 Acq: 25 Jun 2018 17:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.6   | 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: 4.76 ug/l

RT: 4.98 min Scan# 1365

Delta R.T. -0.16 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Instrument :

MSVOA\_U

ClientSampleId :

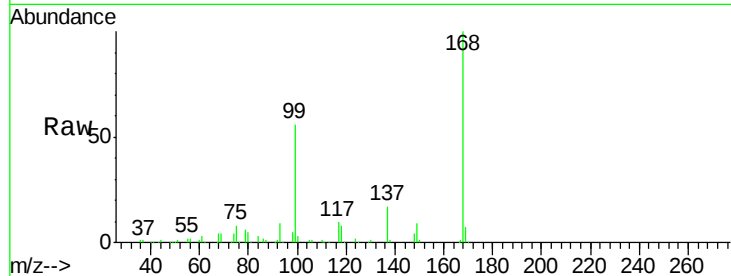
Tot Ion:117 Resp: 20034

Ion Ratio Lower Upper

117 100

119 4.3 76.1 114.1#

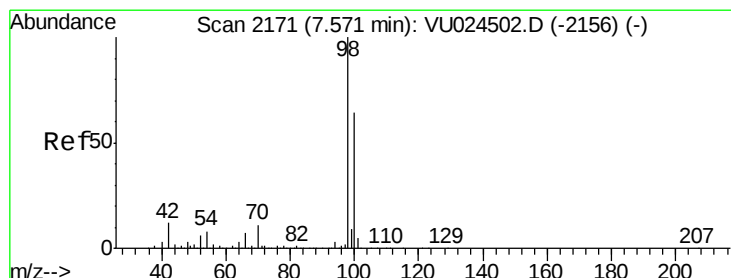
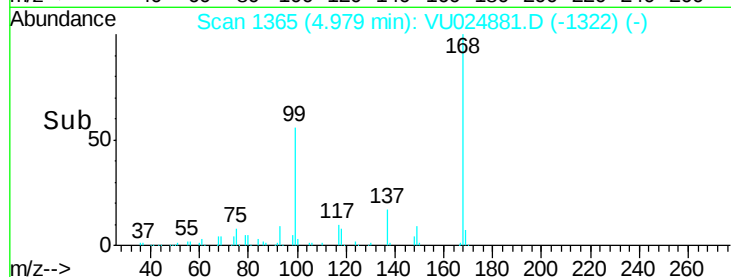
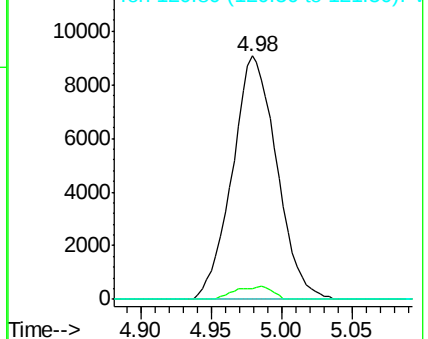
121 0.0 23.7 35.5#



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



#50

Toluene-d8

Concen: 47.86 ug/l

RT: 7.57 min Scan# 2170

Delta R.T. -0.00 min

Lab File: VU024881.D

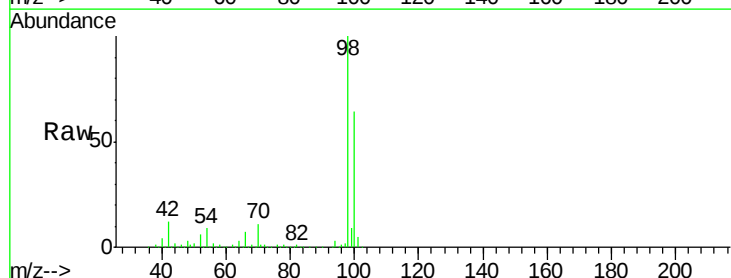
Acq: 25 Jun 2018 17:45

Tgt Ion: 98 Resp: 471876

Ion Ratio Lower Upper

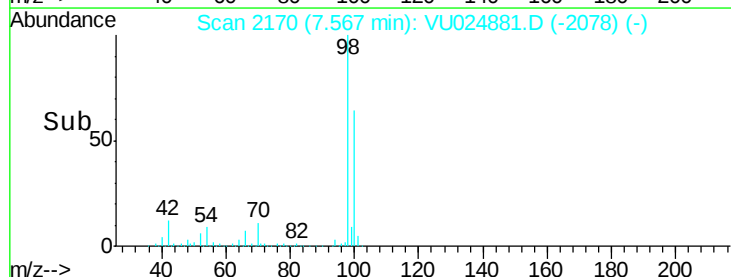
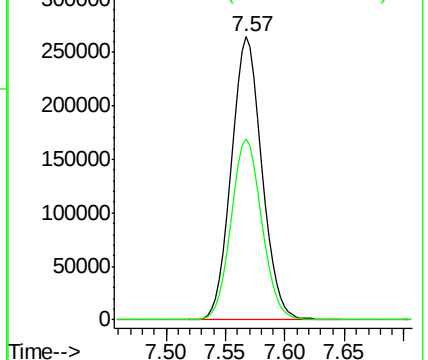
98 100

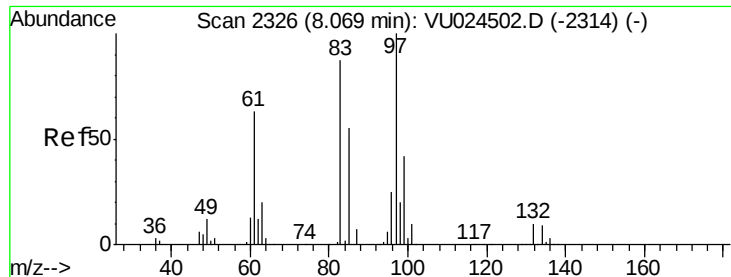
100 64.4 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VU0

Ion 100.00 (99.70 to 100.70): VU0





#55

1,1,2-Trichloroethane

Concen: 0.97 ug/l

RT: 8.23 min Scan# 2375

Delta R.T. 0.16 min

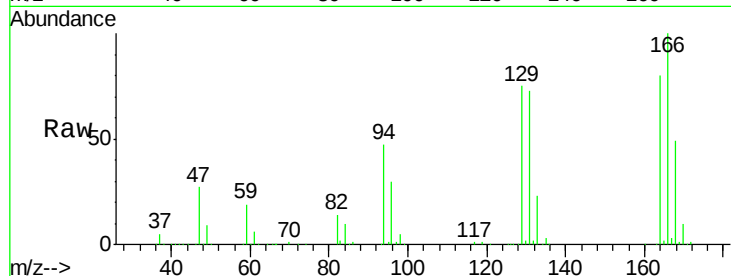
Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 97 Resp: 2758

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 97  | 100   |       |        |
| 83  | 215.4 | 70.5  | 105.7# |
| 85  | 40.0  | 46.4  | 69.6#  |
| 99  | 19.2  | 50.2  | 75.2#  |

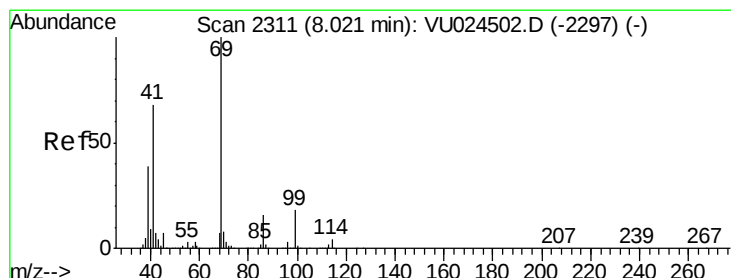
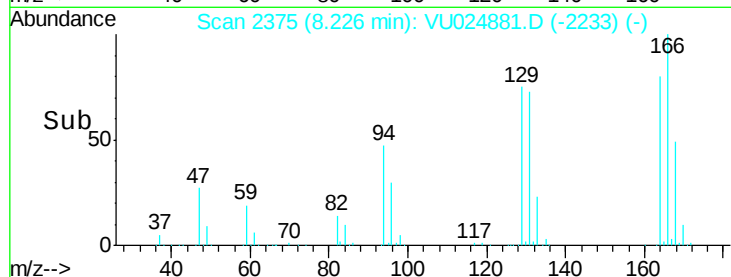


Abundance Ion 96.90 (96.60 to 97.60): VU0

Ion 82.90 (82.60 to 83.60): VU0

Ion 84.90 (84.60 to 85.60): VU0

Ion 98.90 (98.60 to 99.60): VU0



#56

Ethyl methacrylate

Concen: 0.79 ug/l

RT: 7.78 min Scan# 2237

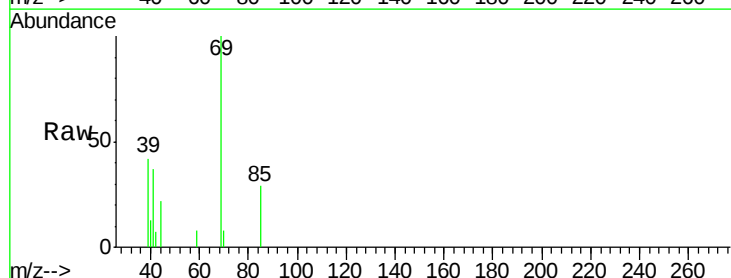
Delta R.T. -0.24 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Tgt Ion: 69 Resp: 3793

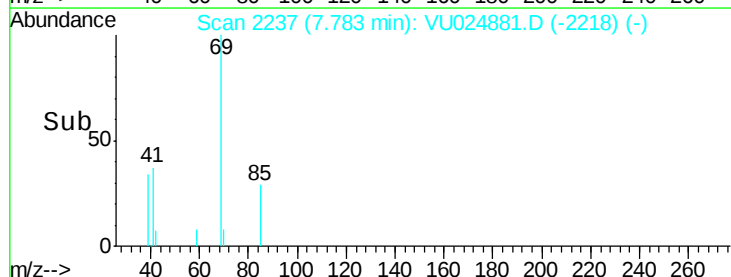
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 69  | 100   |       |       |
| 41  | 45.9  | 54.1  | 81.1# |
| 39  | 19.4  | 30.3  | 45.5# |

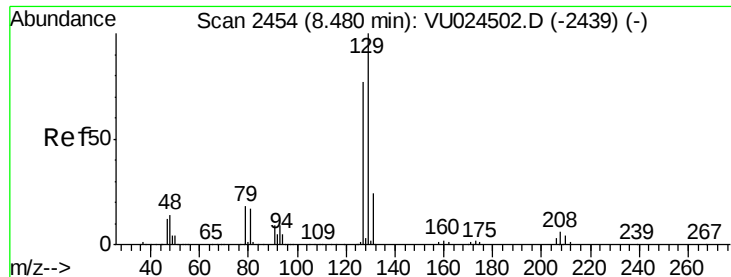


Abundance Ion 69.00 (68.70 to 69.70): VU0

Ion 41.00 (40.70 to 41.70): VU0

Ion 39.00 (38.70 to 39.70): VU0





#60

Dibromochloromethane

Concen: 90.19 ug/l

RT: 8.23 min Scan# 2376

Delta R.T. -0.25 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Instrument :

MSVOA\_U

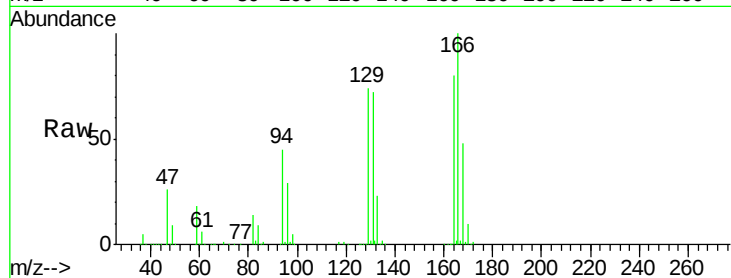
ClientSampleId :

Tot Ion:129 Resp: 320768

Ion Ratio Lower Upper

129 100

127 0.1 38.6 116.0#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V

8.23

200000

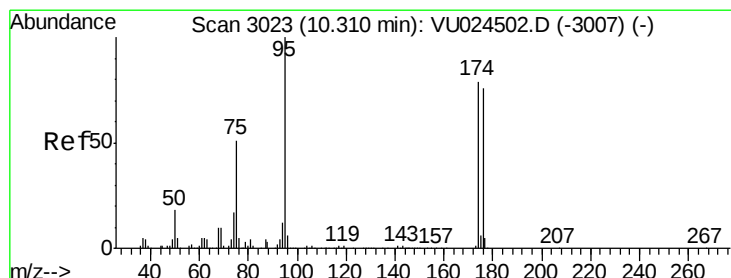
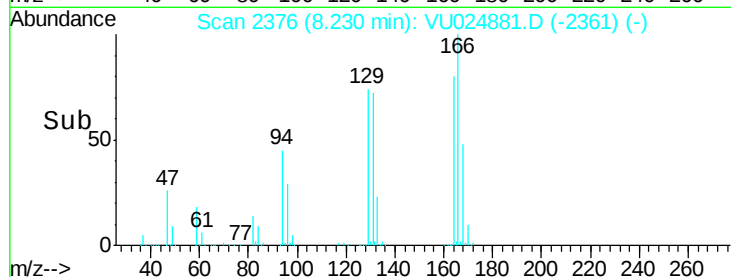
150000

100000

50000

0

Time-->



#62

4-Bromofluorobenzene

Concen: 49.25 ug/l

RT: 10.32 min Scan# 3025

Delta R.T. 0.01 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

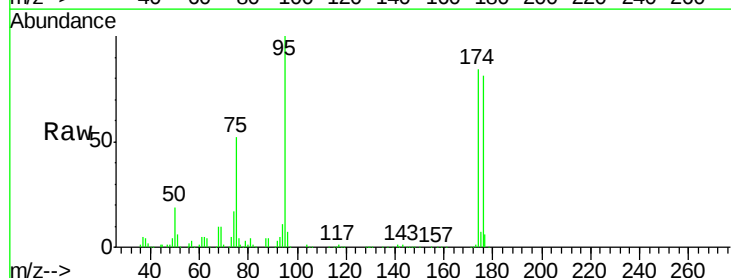
Tgt Ion: 95 Resp: 192813

Ion Ratio Lower Upper

95 100

174 84.2 0.0 165.8

176 81.5 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

10.32

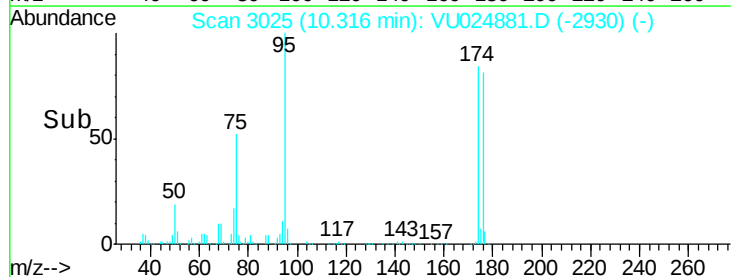
150000

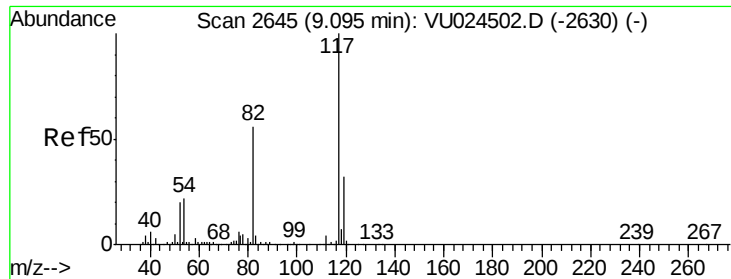
100000

50000

0

Time-->

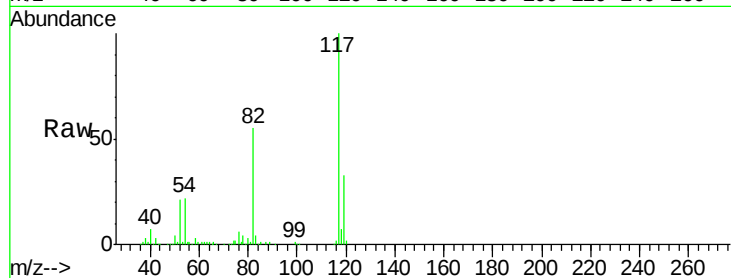




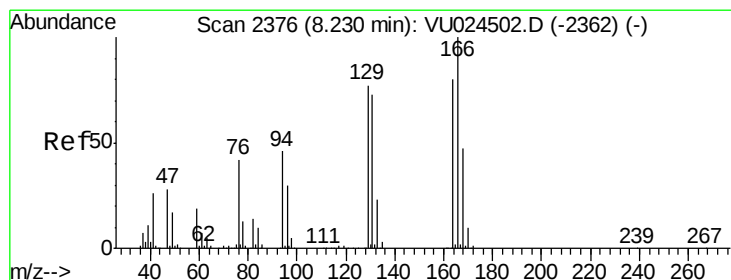
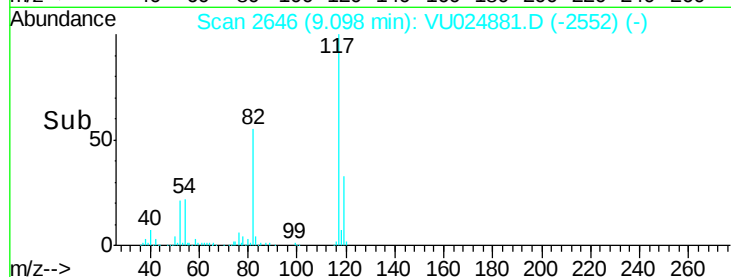
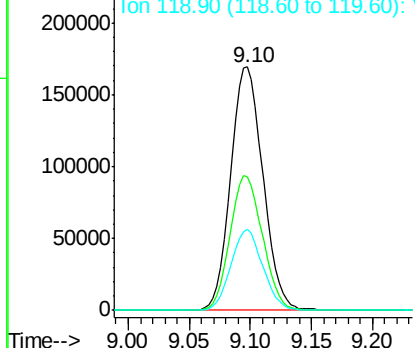
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 9.10 min Scan# 2646  
Delta R.T. 0.00 min  
Lab File: VU024881.D  
Acq: 25 Jun 2018 17:45

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:117 Resp: 311873  
Ion Ratio Lower Upper  
117 100  
82 54.7 44.3 66.5  
119 33.1 25.4 38.2



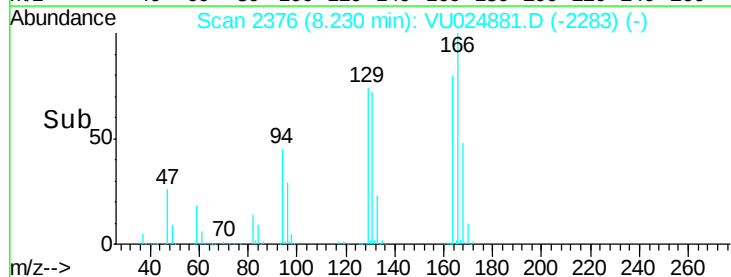
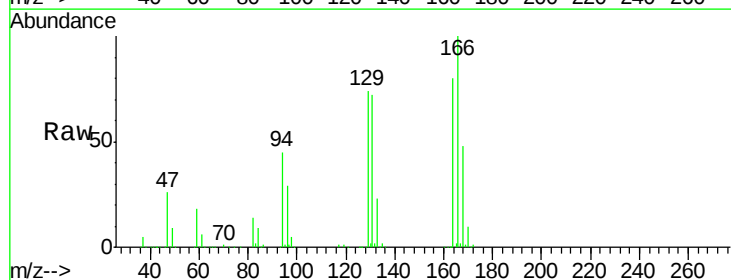
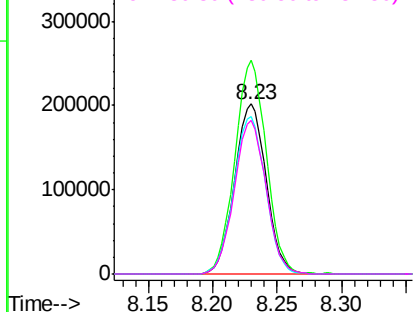
Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

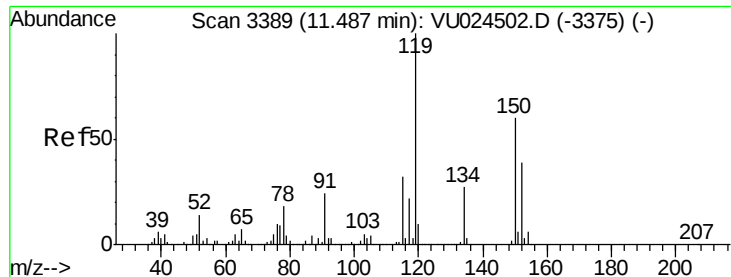


#64  
Tetrachloroethene  
Concen: 115.71 ug/l  
RT: 8.23 min Scan# 2376  
Delta R.T. 0.00 min  
Lab File: VU024881.D  
Acq: 25 Jun 2018 17:45

Tgt Ion:164 Resp: 343026  
Ion Ratio Lower Upper  
164 100  
166 125.5 101.7 152.5  
129 92.6 76.9 115.3  
131 90.5 74.9 112.3

Abundance Ion 163.80 (163.50 to 164.50): V  
Ion 165.80 (165.50 to 166.50): V  
Ion 128.80 (128.50 to 129.50): V  
Ion 130.80 (130.50 to 131.50): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 11.49 min Scan# 3390

Delta R.T. 0.00 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Instrument :

MSVOA\_U

ClientSampleId :

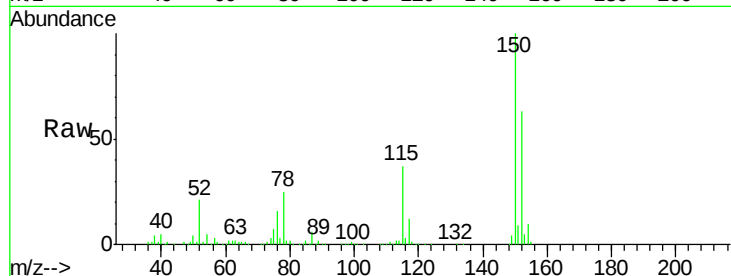
Tot Ion:152 Resp: 181418

Ion Ratio Lower Upper

152 100

115 57.6 43.0 129.0

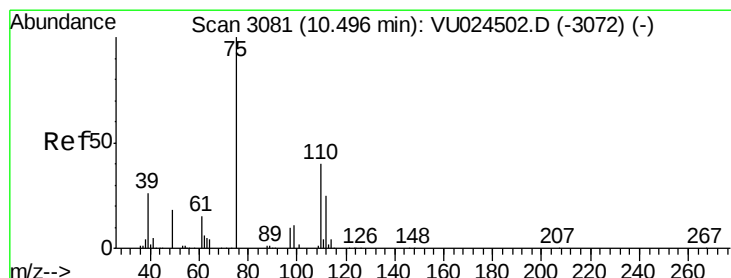
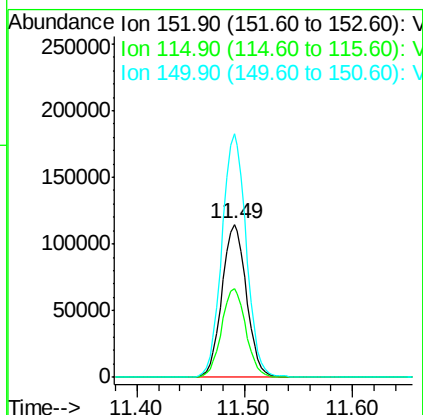
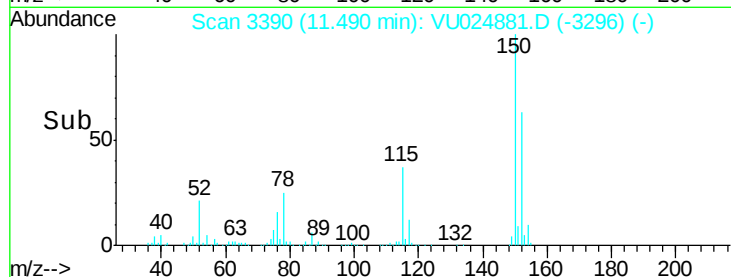
150 157.8 0.0 354.0



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: 24.96 ug/l

RT: 10.32 min Scan# 3025

Delta R.T. -0.18 min

Lab File: VU024881.D

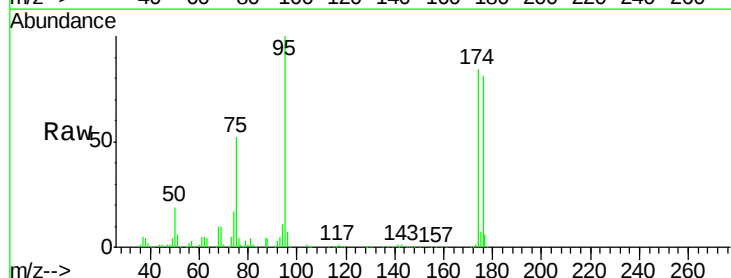
Acq: 25 Jun 2018 17:45

Tgt Ion: 75 Resp: 99708

Ion Ratio Lower Upper

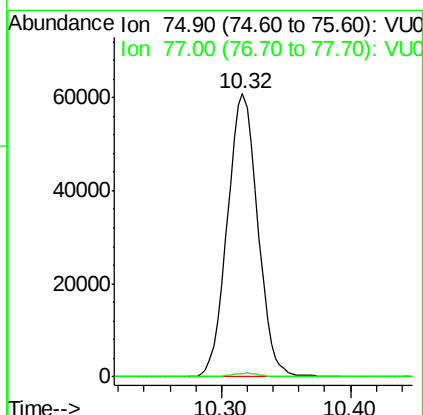
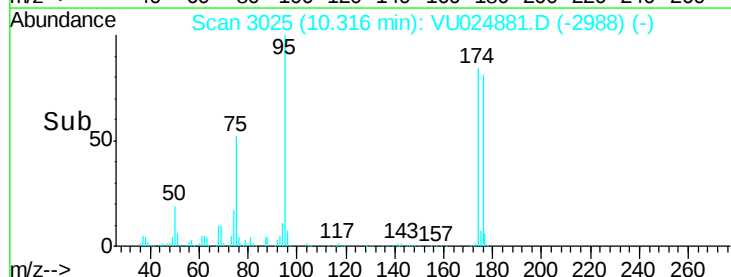
75 100

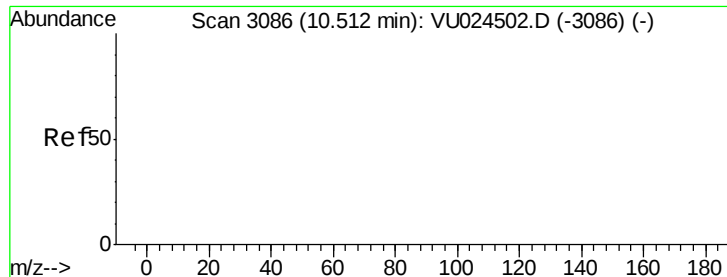
77 1.2 20.9 62.7#



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 77.00 (76.70 to 77.70): VU0





#81

trans-1,4-Dichloro-2-butene

Concen: 57.78 ug/l

RT: 10.32 min Scan# 3025

Delta R.T. -0.20 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

Instrument :

MSVOA\_U

ClientSampleId :

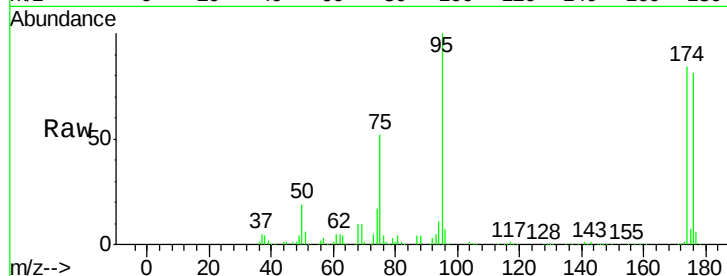
Tot Ion: 75 Resp: 99708

Ion Ratio Lower Upper

75 100

53 0.0 0.0 0.0

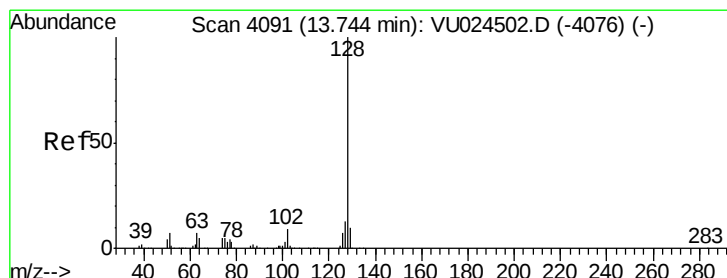
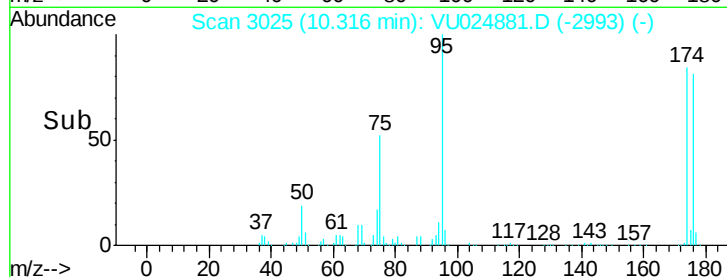
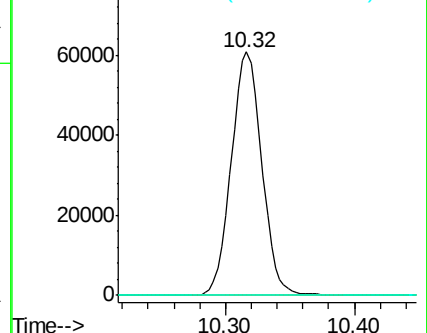
89 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VU024502.D (-3086) (-)

Ion 53.00 (52.70 to 53.70): VU024502.D (-3086) (-)

Ion 88.90 (88.60 to 89.60): VU024502.D (-3086) (-)



#95

Naphthalene

Concen: 0.70 ug/l

RT: 13.76 min Scan# 4095

Delta R.T. 0.01 min

Lab File: VU024881.D

Acq: 25 Jun 2018 17:45

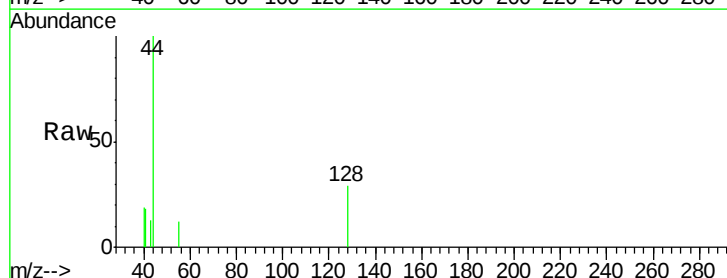
Tgt Ion: 128 Resp: 281

Ion Ratio Lower Upper

128 100

127 0.0 10.6 16.0#

129 0.0 8.6 12.8#



Abundance Ion 128.00 (127.70 to 128.70): VU024502.D (-4076) (-)

Ion 127.00 (126.70 to 127.70): VU024502.D (-4076) (-)

Ion 129.00 (128.70 to 129.70): VU024502.D (-4076) (-)

