

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U121318\  
 Data File : VU028642.D  
 Acq On : 12 Dec 2018 11:08  
 Operator : MD/SY  
 Sample : J6357-12  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB.2018.12.11

Quant Time: Dec 13 00:46:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U120618W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Dec 07 00:39:42 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.98  | 168  | 113278   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.88  | 114  | 203668   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 183865   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 72880    | 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   | 87157    | 50.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.84% |          |
| 35) Dibromofluoromethane    | 4.88  | 113  | 66599    | 51.96 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.92% |          |
| 50) Toluene-d8              | 7.56  | 98   | 255017   | 50.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.60% |          |
| 62) 4-Bromofluorobenzene    | 10.31 | 95   | 86845    | 45.83 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.66%  |          |

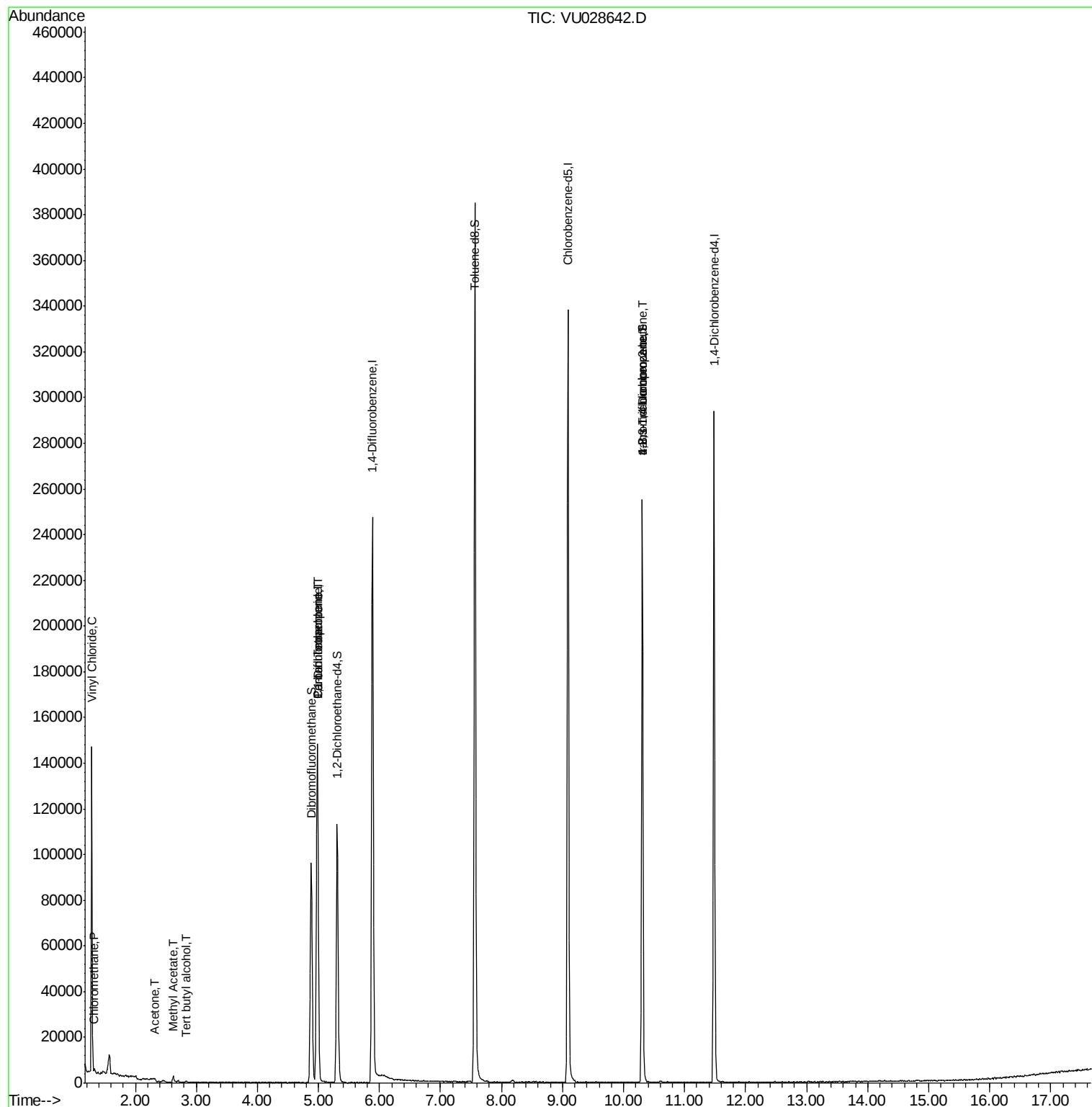
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 1932     | 0.692     | ug/l   | 91     |
| 4) Vinyl Chloride              | 1.28  | 62   | 1214     | 0.603     | ug/l # | 43     |
| 11) Tert butyl alcohol         | 2.83  | 59   | 230      | 0.597     | ug/l # | 73     |
| 16) Acetone                    | 2.32  | 43   | 1209     | 1.072     | ug/l   | 95     |
| 18) Methyl Acetate             | 2.62  | 43   | 3628     | 1.241     | ug/l   | 93     |
| 31) Cyclohexane                | 4.98  | 56   | 2624     | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 4.98  | 75   | 9673     | 4.340     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 4.98  | 117  | 10935    | 6.087     | ug/l # | 15     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75   | 43310    | 23.272    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75   | 43310    | 57.144    | ug/l # | 100    |

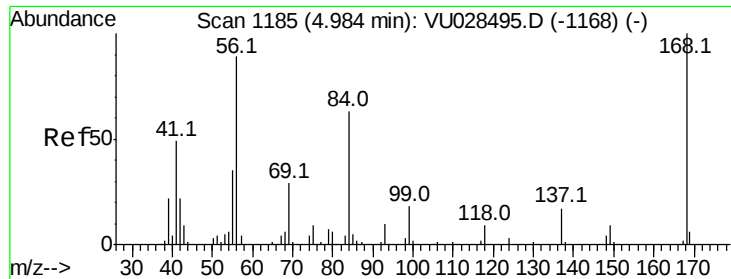
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Fri Dec 07 00:39:42 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.98 min Scan# 1185

Delta R.T. 0.00 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

Instrument :

MSVOA\_U

ClientSampleId :

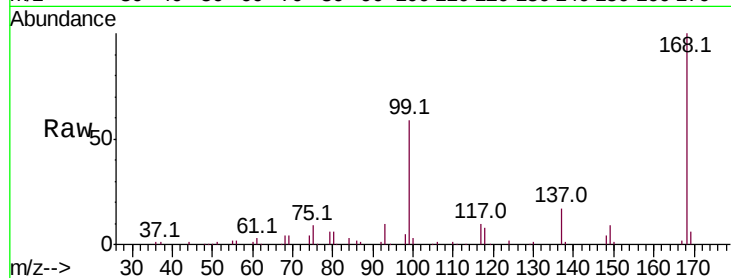
TB.2018.12.11

Tot Ion:168 Resp: 113278

Ion Ratio Lower Upper

168 100

99 58.7 46.6 69.8



Abundance Ion 167.90 (167.60 to 168.60): VU028495.D (-1168) (-)

Ion 98.90 (98.60 to 99.60): VU028495.D (-1168) (-)

4.98

50000

40000

30000

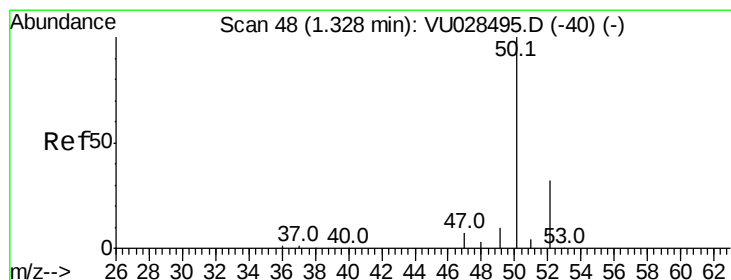
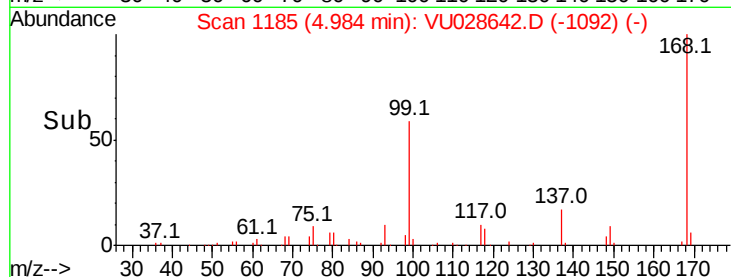
20000

10000

0

4.90 5.00 5.10

Time-->



#3

Chloromethane

Concen: 0.692 ug/l

RT: 1.33 min Scan# 48

Delta R.T. 0.00 min

Lab File: VU028642.D

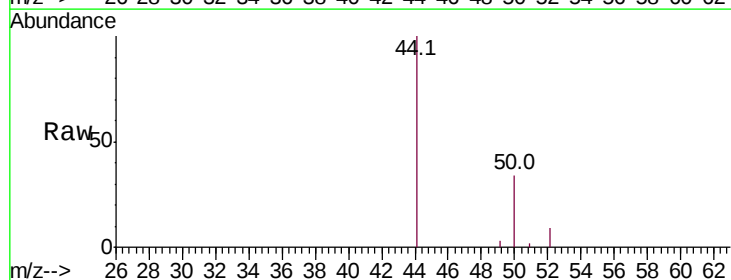
Acq: 12 Dec 2018 11:08

Tgt Ion: 50 Resp: 1932

Ion Ratio Lower Upper

50 100

52 27.1 25.5 38.3



Abundance Ion 49.90 (49.60 to 50.60): VU028495.D (-40) (-)

Ion 51.90 (51.60 to 52.60): VU028495.D (-40) (-)

1.33

1500

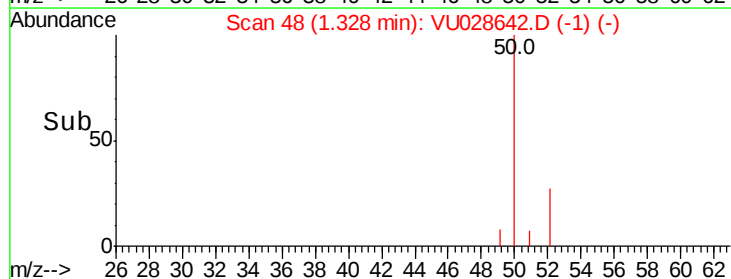
1000

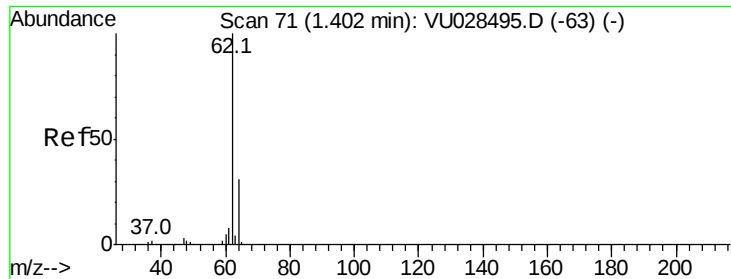
500

0

1.30 1.35 1.40

Time-->





#4

Vinyl Chloride

Concen: 0.603 ug/l

RT: 1.28 min Scan# 34

Delta R.T. -0.12 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

Instrument :

MSVOA\_U

ClientSampled :

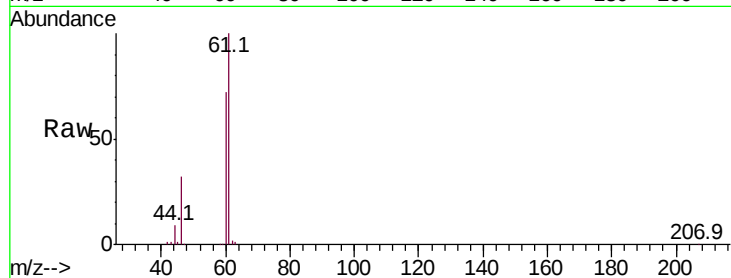
TB.2018.12.11

Tot Ion: 62 Resp: 1214

Ion Ratio Lower Upper

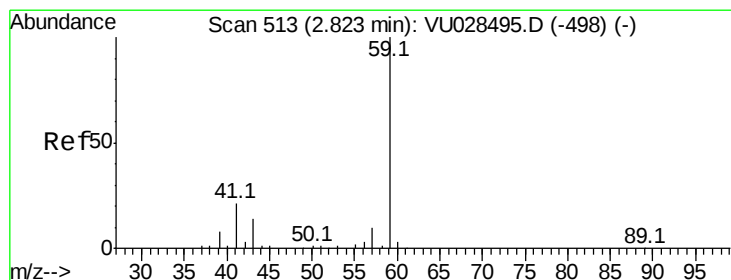
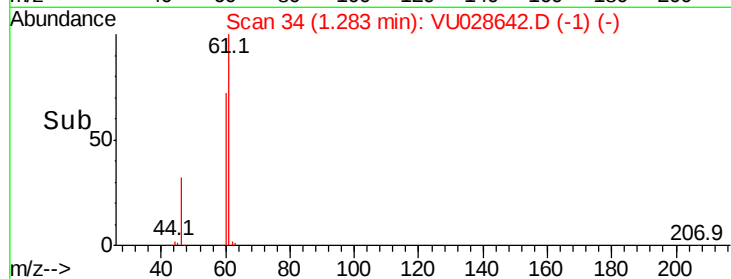
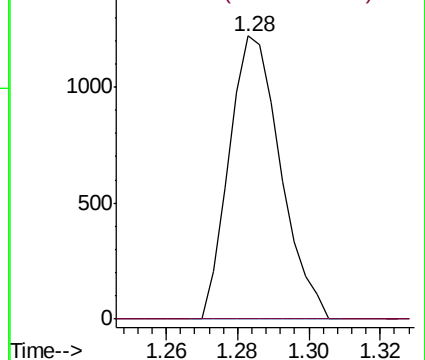
62 100

64 0.0 25.1 37.7#



Abundance Ion 61.90 (61.60 to 62.60): VU0

Ion 63.90 (63.60 to 64.60): VU0



#11

Tert butyl alcohol

Concen: 0.597 ug/l

RT: 2.83 min Scan# 514

Delta R.T. 0.00 min

Lab File: VU028642.D

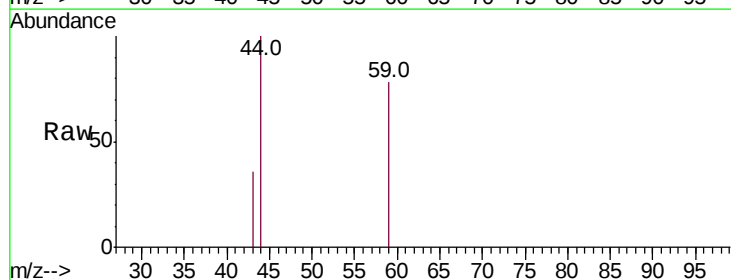
Acq: 12 Dec 2018 11:08

Tgt Ion: 59 Resp: 230

Ion Ratio Lower Upper

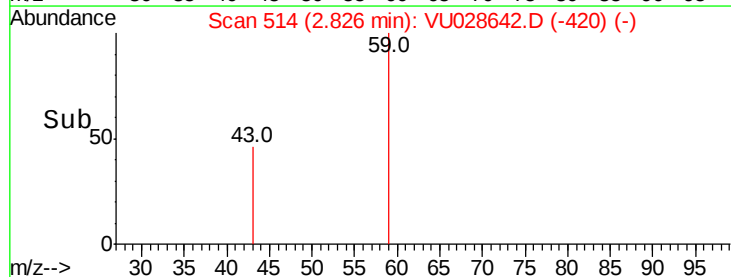
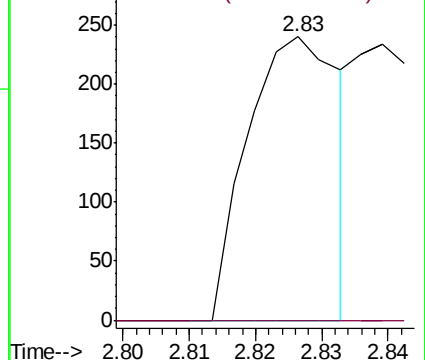
59 100

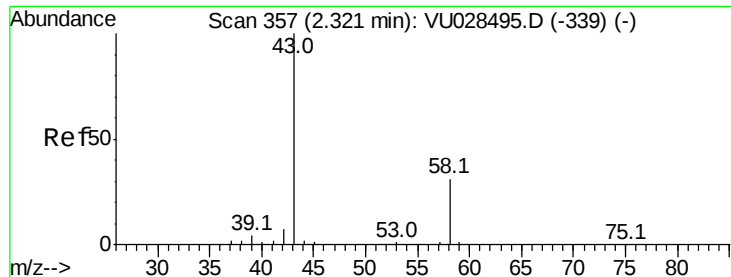
57 0.0 8.0 12.0#



Abundance Ion 59.00 (58.70 to 59.70): VU0

Ion 57.00 (56.70 to 57.70): VU0





#16

Acetone

Concen: 1.072 ug/l

RT: 2.32 min Scan# 358

Delta R.T. 0.00 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

Instrument :

MSVOA\_U

ClientSampleId :

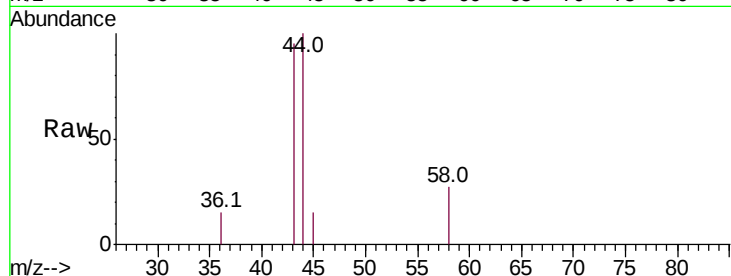
TB.2018.12.11

Tot Ion: 43 Resp: 1209

Ion Ratio Lower Upper

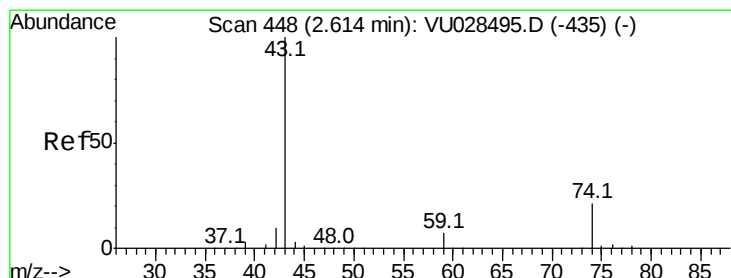
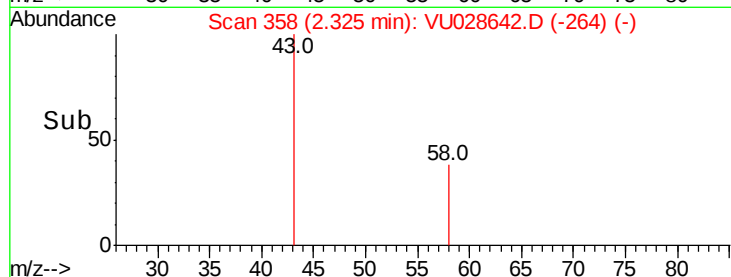
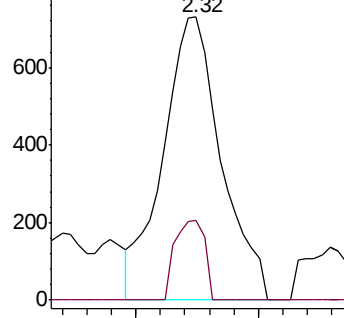
43 100

58 28.1 24.6 37.0



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0



#18

Methyl Acetate

Concen: 1.241 ug/l

RT: 2.62 min Scan# 450

Delta R.T. 0.01 min

Lab File: VU028642.D

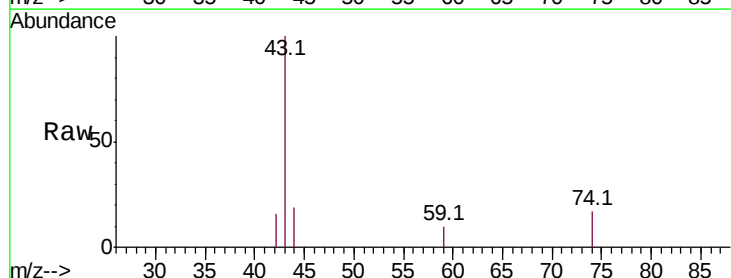
Acq: 12 Dec 2018 11:08

Tgt Ion: 43 Resp: 3628

Ion Ratio Lower Upper

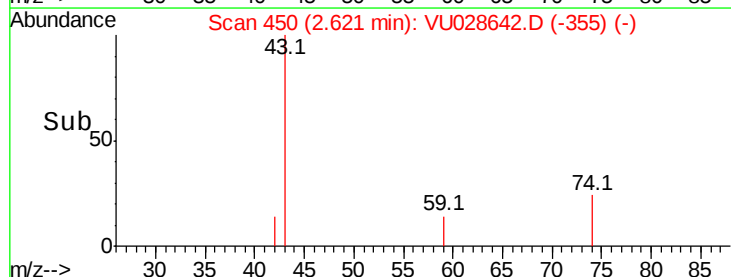
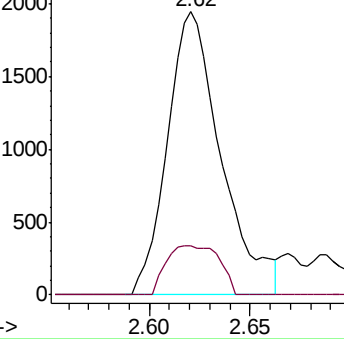
43 100

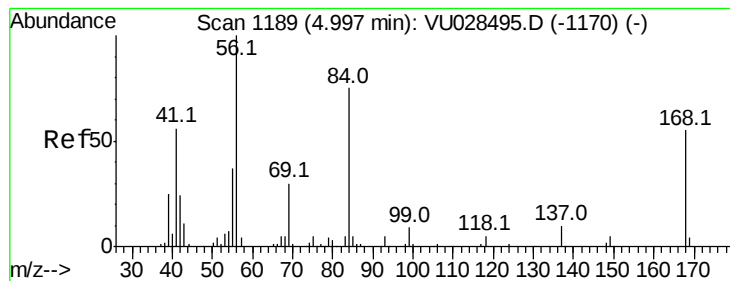
74 17.2 16.4 24.6



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 74.00 (73.70 to 74.70): VU0





#31

Cyclohexane

Concen: Below Cal

RT: 4.98 min Scan# 1185

Delta R.T. -0.01 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

Instrument :

MSVOA\_U

ClientSampleId :

TB.2018.12.11

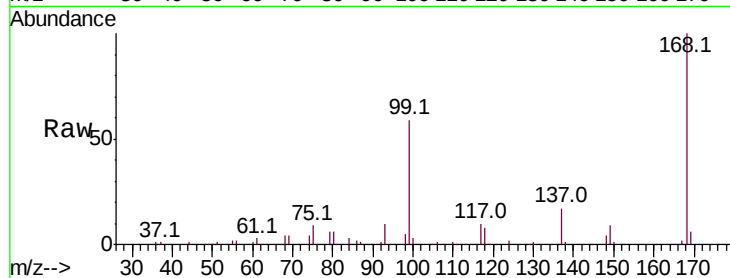
Tot Ion: 56 Resp: 2624

Ion Ratio Lower Upper

56 100

69 173.9 24.0 36.0#

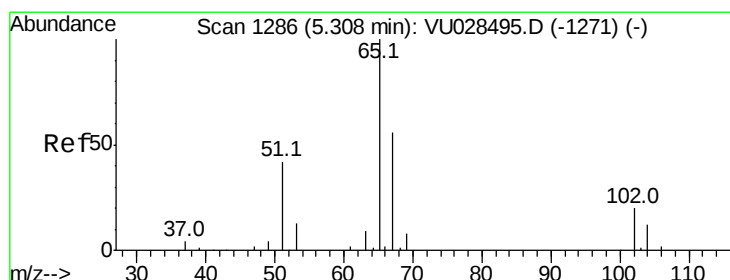
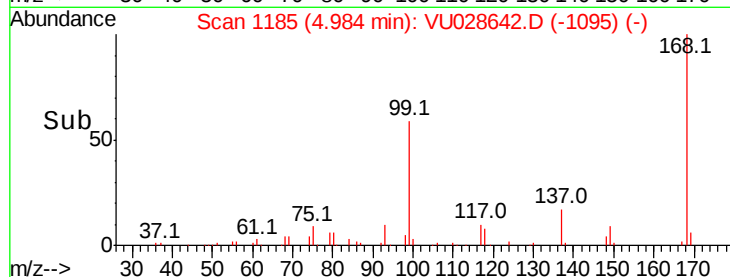
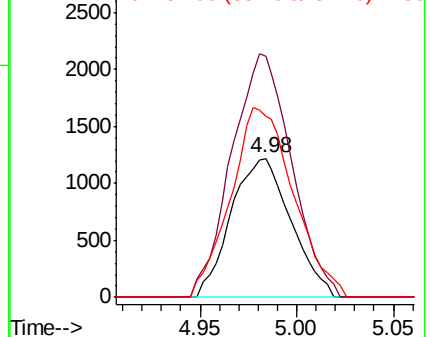
84 130.5 59.7 89.5#



Abundance Ion 56.00 (55.70 to 56.70): VU0

Ion 69.00 (68.70 to 69.70): VU0

Ion 84.00 (83.70 to 84.70): VU0



#33

1,2-Dichloroethane-d4

Concen: 50.418 ug/l

RT: 5.31 min Scan# 1286

Delta R.T. 0.00 min

Lab File: VU028642.D

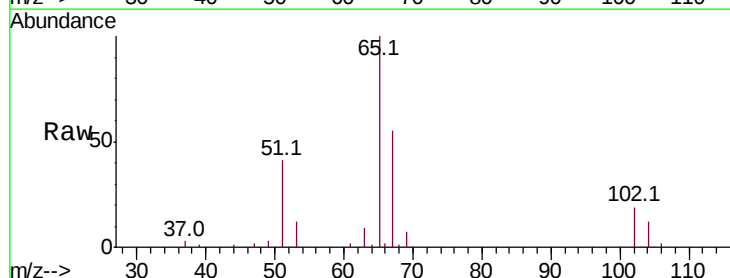
Acq: 12 Dec 2018 11:08

Tgt Ion: 65 Resp: 87157

Ion Ratio Lower Upper

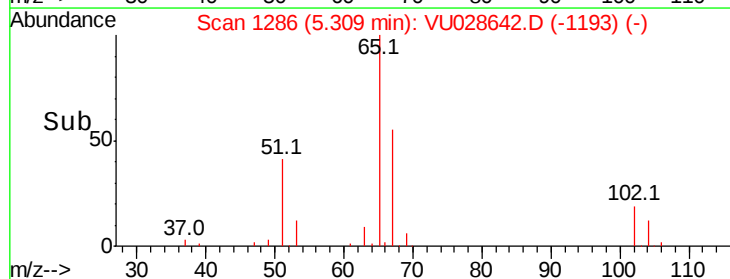
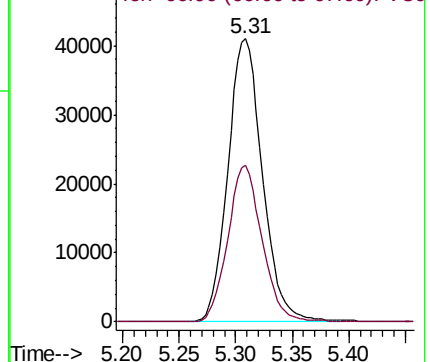
65 100

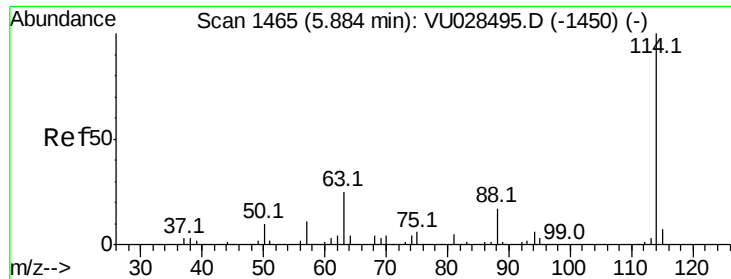
67 54.5 0.0 110.6



Abundance Ion 64.90 (64.60 to 65.60): VU0

Ion 66.90 (66.60 to 67.60): VU0

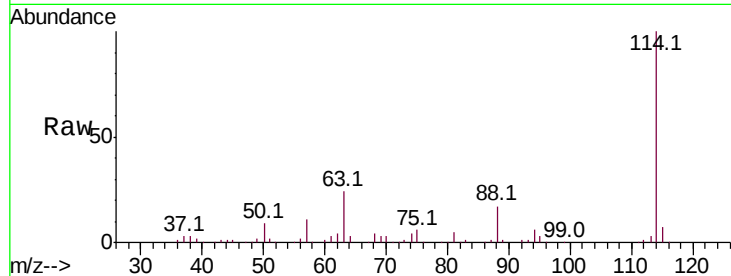




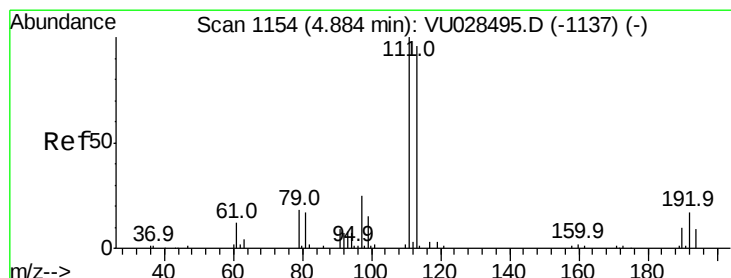
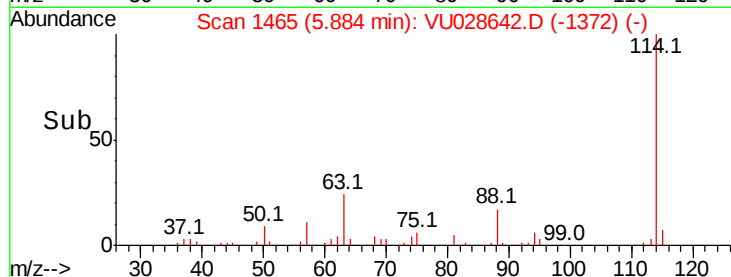
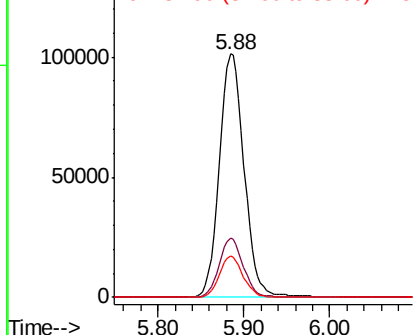
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.88 min Scan# 1465  
 Delta R.T. 0.00 min  
 Lab File: VU028642.D  
 Acq: 12 Dec 2018 11:08

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB.2018.12.11

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 114   | Resp: | 203668 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 24.2  | 0.0   | 49.2   |
| 88       | 16.9  | 0.0   | 33.4   |

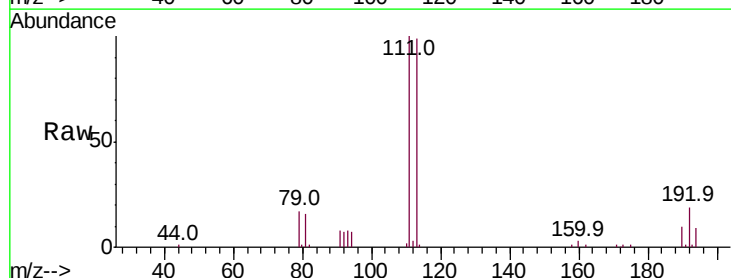


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VU0  
 Ion 87.90 (87.60 to 88.60): VU0

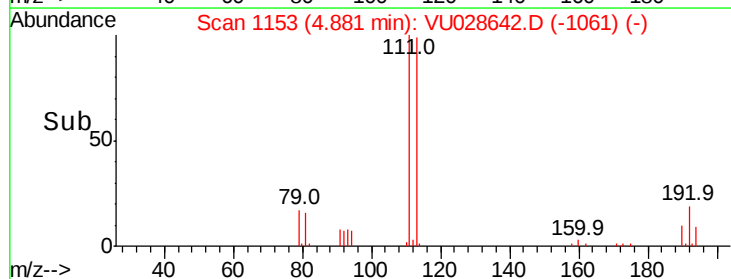
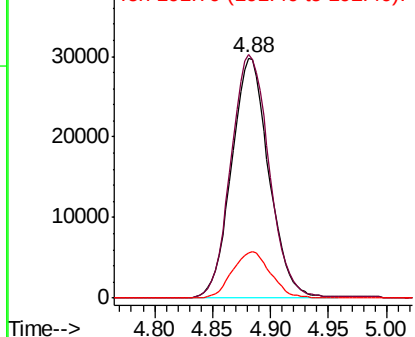


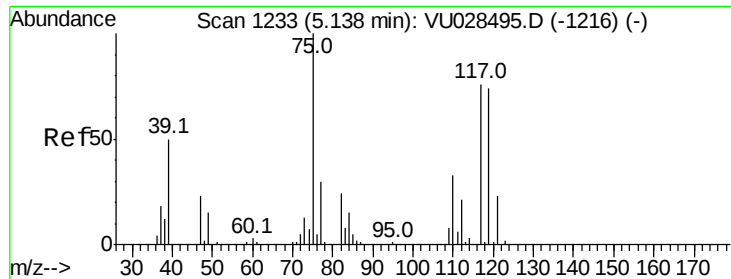
#35  
 Dibromofluoromethane  
 Concen: 51.962 ug/l  
 RT: 4.88 min Scan# 1153  
 Delta R.T. -0.00 min  
 Lab File: VU028642.D  
 Acq: 12 Dec 2018 11:08

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 113   | Resp: | 66599 |
| Ion      | Ratio | Lower | Upper |
| 113      | 100   |       |       |
| 111      | 104.1 | 83.4  | 125.0 |
| 192      | 19.9  | 14.8  | 22.2  |



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

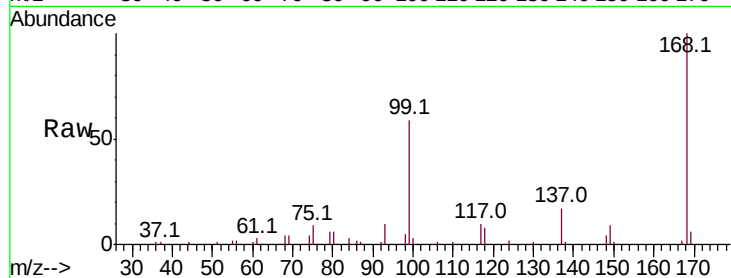




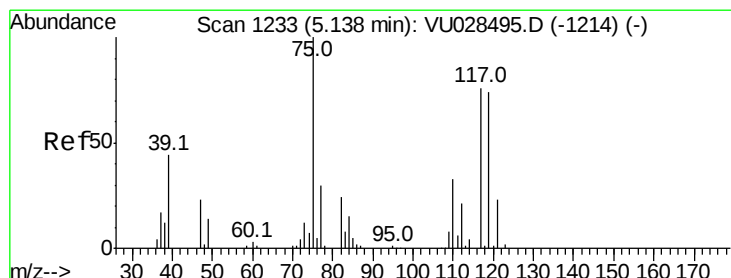
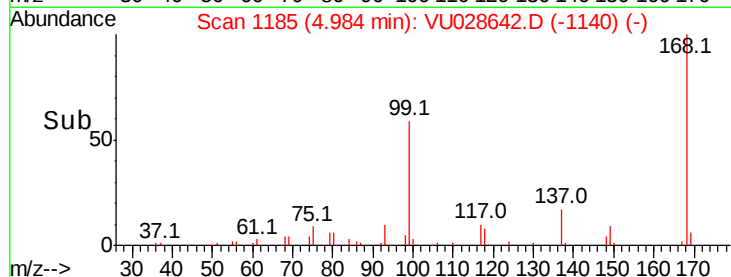
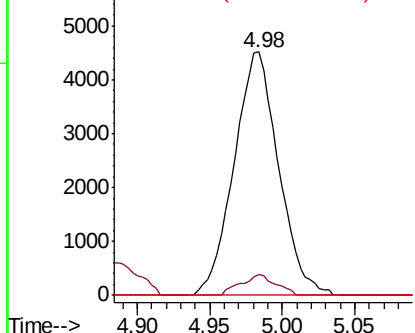
#36  
 1,1-Dichloropropene  
 Concen: 4.340 ug/l  
 RT: 4.98 min Scan# 1185  
 Delta R.T. -0.15 min  
 Lab File: VU028642.D  
 Acq: 12 Dec 2018 11:08

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB.2018.12.11

Tot Ion: 75 Resp: 9673  
 Ion Ratio Lower Upper  
 75 100  
 110 6.7 16.1 48.2#  
 77 0.0 24.5 36.7#

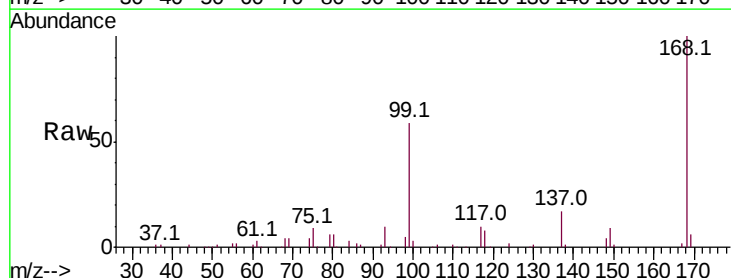


Abundance Ion 74.90 (74.60 to 75.60): VU0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VU0

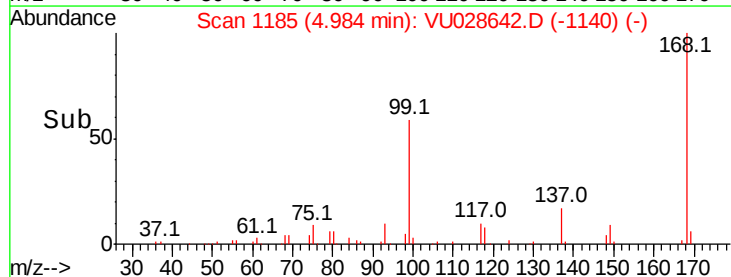
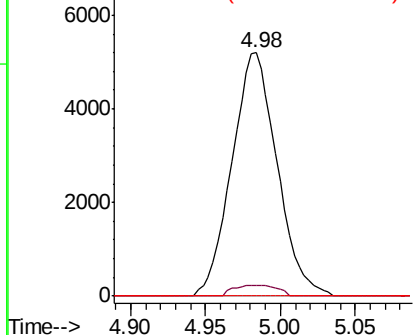


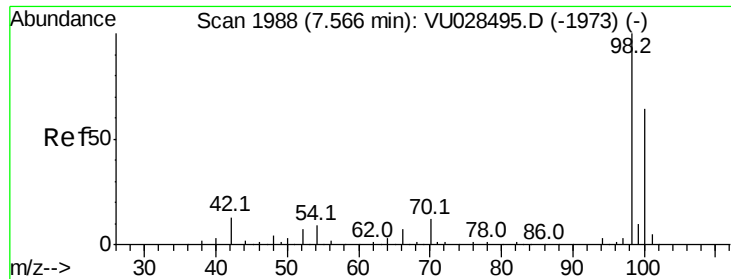
#38  
 Carbon Tetrachloride  
 Concen: 6.087 ug/l  
 RT: 4.98 min Scan# 1185  
 Delta R.T. -0.15 min  
 Lab File: VU028642.D  
 Acq: 12 Dec 2018 11:08

Tgt Ion: 117 Resp: 10935  
 Ion Ratio Lower Upper  
 117 100  
 119 4.4 77.6 116.4#  
 121 0.0 24.6 36.8#



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: 50.298 ug/l

RT: 7.56 min Scan# 1987

Delta R.T. -0.00 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

Instrument :

MSVOA\_U

ClientSampleId :

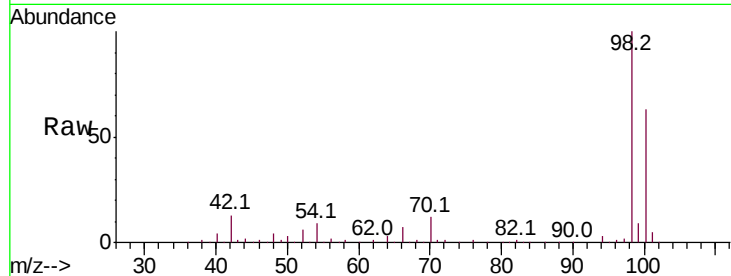
TB.2018.12.11

Tot Ion: 98 Resp: 255017

Ion Ratio Lower Upper

98 100

100 64.2 51.0 76.6



Abundance Ion 98.00 (97.70 to 98.70): VU028495.D (-1973) (-)

Ion 100.00 (99.70 to 100.70): VU028495.D (-1973) (-)

7.56

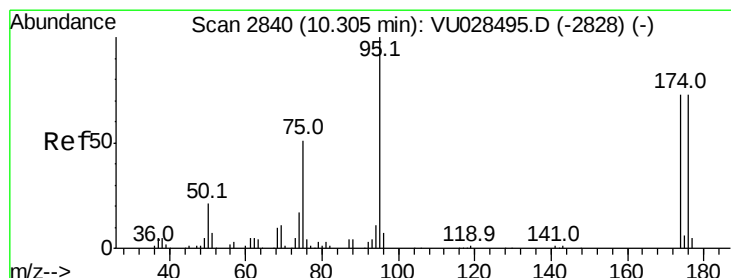
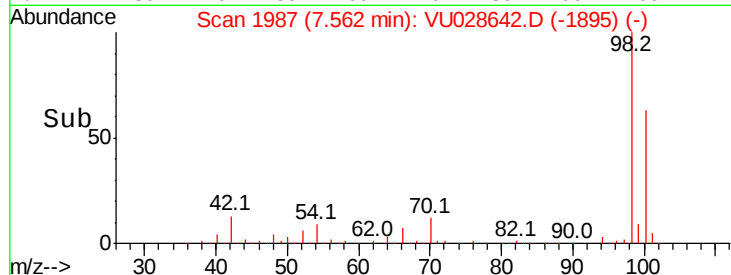
150000

100000

50000

0

Time-->



#62

4-Bromofluorobenzene

Concen: 45.827 ug/l

RT: 10.31 min Scan# 2840

Delta R.T. 0.00 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

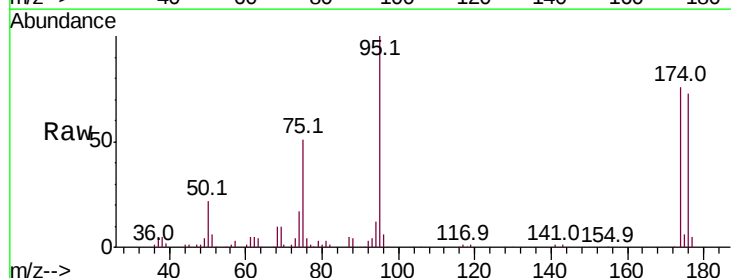
Tgt Ion: 95 Resp: 86845

Ion Ratio Lower Upper

95 100

174 76.5 0.0 150.4

176 74.4 0.0 145.2



Abundance Ion 94.90 (94.60 to 95.60): VU028495.D (-2828) (-)

Ion 173.80 (173.50 to 174.50): VU028495.D (-2828) (-)

Ion 175.80 (175.50 to 176.50): VU028495.D (-2828) (-)

10.31

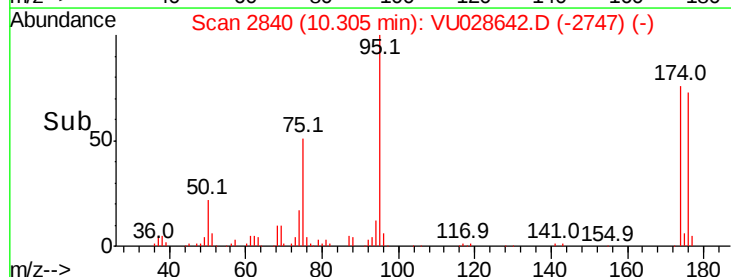
60000

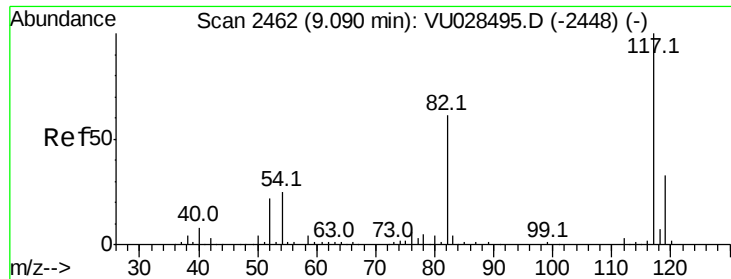
40000

20000

0

Time-->

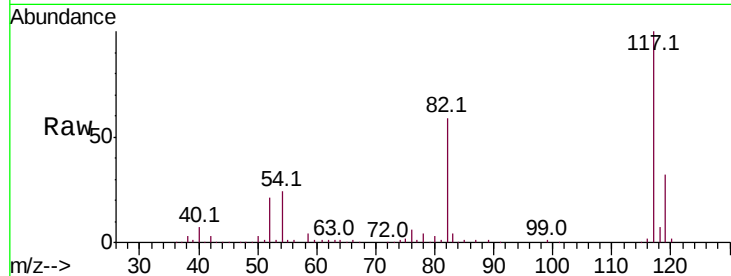




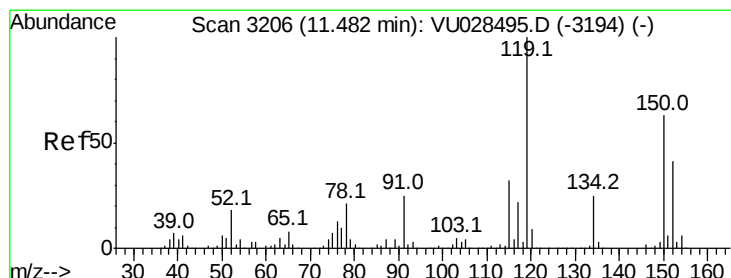
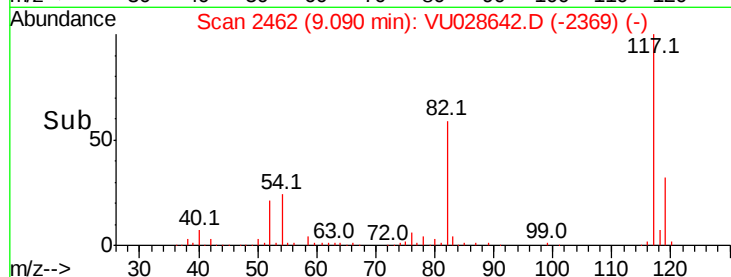
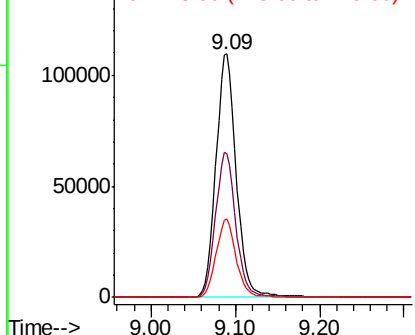
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.09 min Scan# 2462  
Delta R.T. 0.00 min  
Lab File: VU028642.D  
Acq: 12 Dec 2018 11:08

Instrument :  
MSVOA\_U  
ClientSampled :  
TB.2018.12.11

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 59.1  | 48.9  | 73.3  |
| 119     | 32.0  | 26.2  | 39.4  |

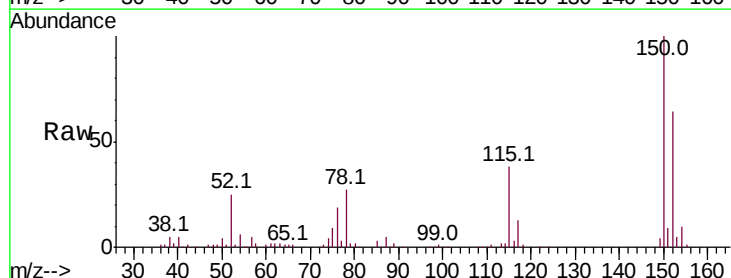


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VU0  
Ion 118.90 (118.60 to 119.60): V

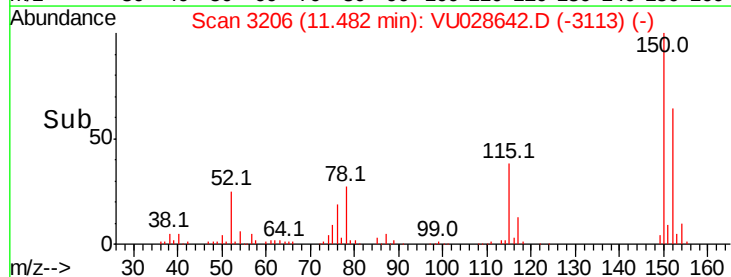
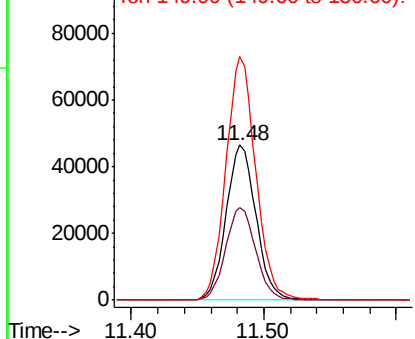


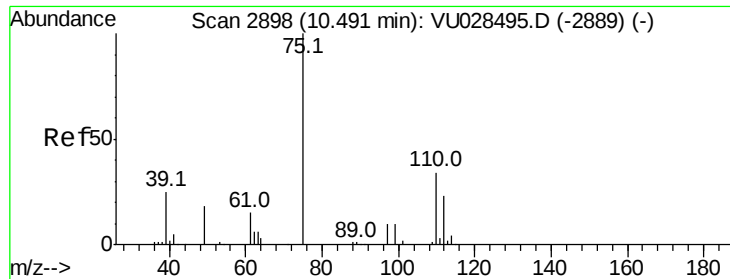
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.48 min Scan# 3206  
Delta R.T. 0.00 min  
Lab File: VU028642.D  
Acq: 12 Dec 2018 11:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 59.9  | 42.7  | 128.1 |
| 150     | 157.0 | 0.0   | 346.0 |



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: 23.272 ug/l

RT: 10.31 min Scan# 2840

Delta R.T. -0.19 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

Instrument :

MSVOA\_U

ClientSampleId :

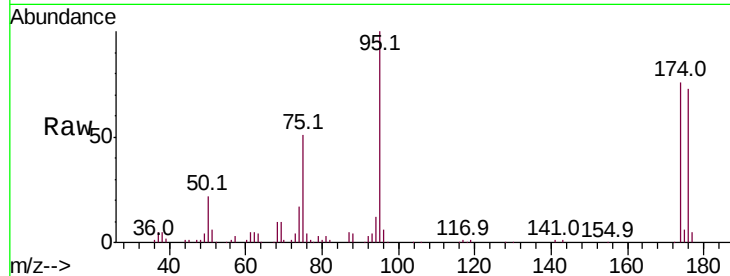
TB.2018.12.11

Tot Ion: 75 Resp: 43310

Ion Ratio Lower Upper

75 100

77 0.8 20.8 62.4#



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 77.00 (76.70 to 77.70): VU0

10.31

25000

20000

15000

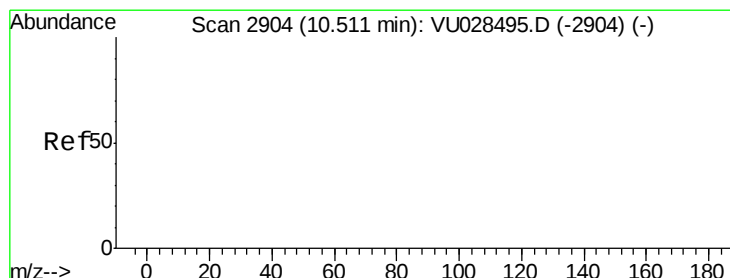
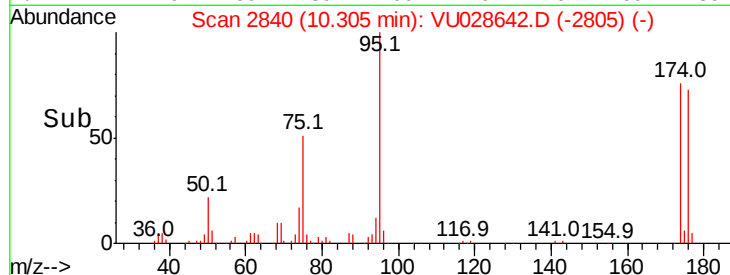
10000

5000

0

Time-->

10.25 10.30 10.35 10.40



#81

trans-1,4-Dichloro-2-butene

Concen: 57.144 ug/l

RT: 10.31 min Scan# 2840

Delta R.T. -0.20 min

Lab File: VU028642.D

Acq: 12 Dec 2018 11:08

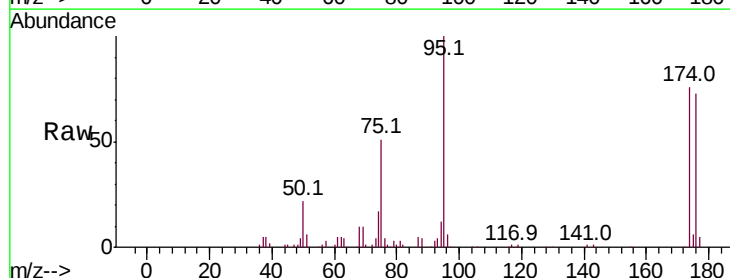
Tgt Ion: 75 Resp: 43310

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): VU0

Ion 53.00 (52.70 to 53.70): VU0

Ion 88.90 (88.60 to 89.60): VU0

10.31

30000

20000

10000

0

Time-->

10.25 10.30 10.35 10.40

