

Data File : VU027519.D  
Acq On : 08 Oct 2018 23:02  
Operator : MD/SY  
Sample : VSTDCCC050EC  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

Quant Time: Oct 09 05:25:05 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM100518WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Oct 09 05:21:41 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 198599   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 182101   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 86884    | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 69575    | 44.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 89.04%  |
| 7) Chloroethane-d5             | 1.68    | 69    | 57831    | 48.03    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 96.06%  |
| 11) 1,1-Dichloroethene-d2      | 2.28    | 63    | 134779   | 45.97    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 91.94%  |
| 21) 2-Butanone-d5              | 4.18    | 46    | 138270   | 109.59   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 109.59% |
| 24) Chloroform-d               | 4.65    | 84    | 128249   | 51.30    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 102.60% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 87196    | 49.78    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.56%  |
| 32) Benzene-d6                 | 5.34    | 84    | 256227   | 49.10    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.20%  |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 91204    | 51.02    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 102.04% |
| 41) Toluene-d8                 | 7.57    | 98    | 222843   | 47.77    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 95.54%  |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 40456    | 46.96    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 93.92%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 100553   | 111.37   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 111.37% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 122502   | 52.40    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 104.80% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 82379    | 48.46    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 96.92%  |

#### Target Compounds

|                                |      |     |        |              | Qvalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 100667 | 51.113 ug/L  | 99     |
| 3) Chloromethane               | 1.33 | 50  | 119143 | 52.646 ug/L  | 99     |
| 5) Vinyl chloride              | 1.40 | 62  | 112940 | 51.071 ug/L  | 100    |
| 6) Bromomethane                | 1.62 | 94  | 40047  | 41.439 ug/L  | 99     |
| 8) Chloroethane                | 1.70 | 64  | 63840  | 48.171 ug/L  | 98     |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 116642 | 52.694 ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 64294  | 48.924 ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.29 | 96  | 61869  | 48.227 ug/L  | 95     |
| 13) Acetone                    | 2.32 | 43  | 95637  | 92.415 ug/L  | 98     |
| 14) Carbon disulfide           | 2.48 | 76  | 221569 | 47.019 ug/L  | 99     |
| 15) Methyl Acetate             | 2.62 | 43  | 113015 | 54.498 ug/L  | 100    |
| 16) Methylene chloride         | 2.70 | 84  | 79512  | 51.030 ug/L  | 94     |
| 17) trans-1,2-Dichloroethene   | 2.99 | 96  | 68541  | 48.247 ug/L  | 96     |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 248022 | 52.509 ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 156319 | 53.290 ug/L  | 99     |
| 20) cis-1,2-Dichloroethene     | 4.23 | 96  | 79169  | 50.237 ug/L  | 97     |
| 22) 2-Butanone                 | 4.26 | 43  | 156434 | 105.600 ug/L | 98     |

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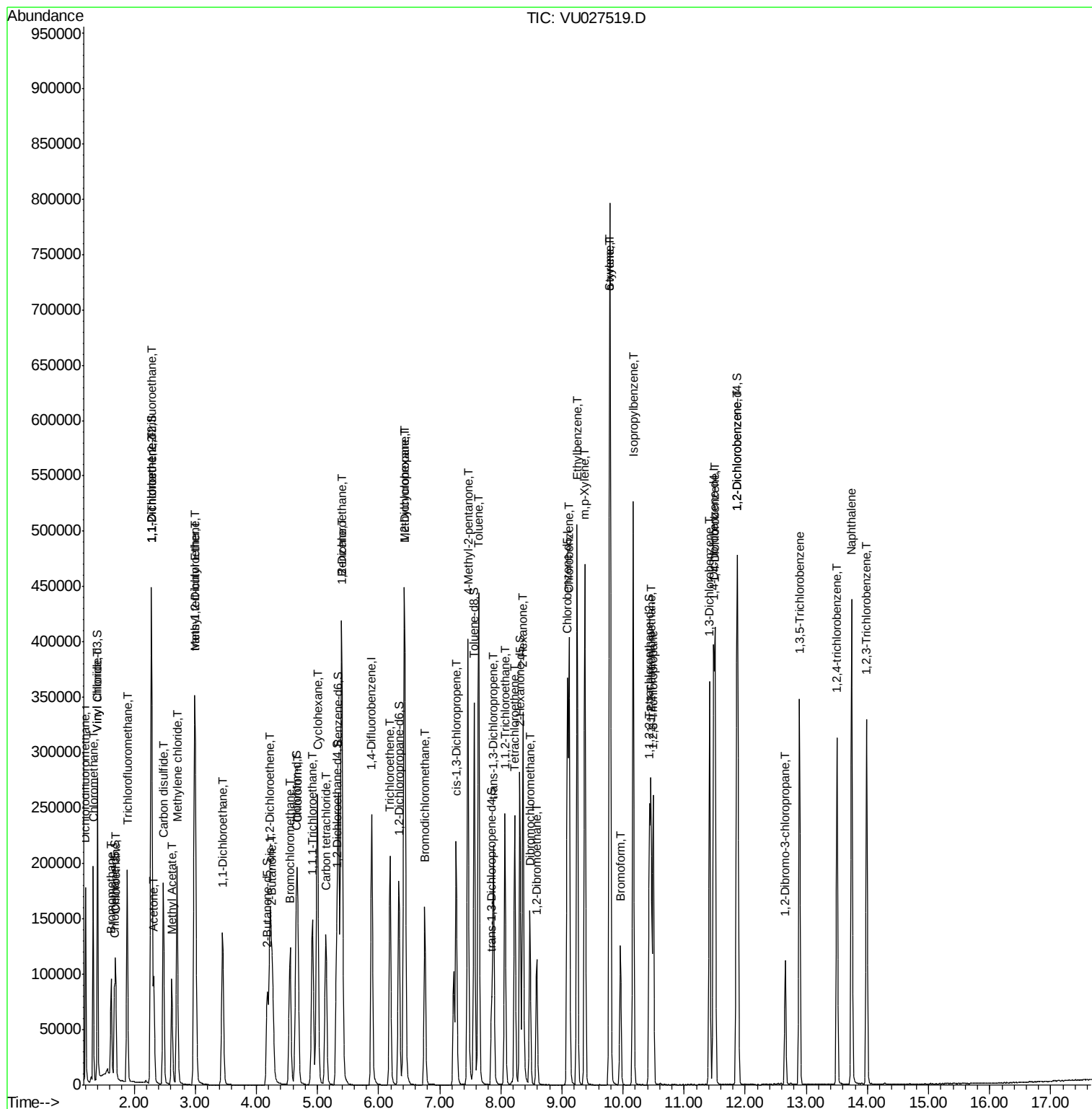
| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane         | 4.55  | 128  | 36917    | 51.369  | ug/L  | 94       |
| 25) Chloroform                 | 4.67  | 83   | 144800   | 51.099  | ug/L  | 98       |
| 27) 1,2-Dichloroethane         | 5.41  | 62   | 118627   | 52.126  | ug/L  | 99       |
| 29) Cyclohexane                | 5.00  | 56   | 146060   | 52.880  | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane      | 4.92  | 97   | 117974   | 54.147  | ug/L  | 99       |
| 31) Carbon tetrachloride       | 5.14  | 117  | 99052    | 54.050  | ug/L  | 100      |
| 33) Benzene                    | 5.39  | 78   | 317569   | 53.069  | ug/L  | 100      |
| 34) Trichloroethene            | 6.19  | 95   | 72148    | 50.133  | ug/L  | 100      |
| 35) Methylcyclohexane          | 6.42  | 83   | 127676   | 51.060  | ug/L  | 98       |
| 37) 1,2-Dichloropropane        | 6.43  | 63   | 95219    | 54.921  | ug/L  | 100      |
| 38) Bromodichloromethane       | 6.76  | 83   | 106542   | 54.078  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene    | 7.27  | 75   | 131257   | 51.523  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.46  | 43   | 292390   | 115.168 | ug/L  | 98       |
| 42) Toluene                    | 7.64  | 91   | 317539   | 52.886  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 119642   | 50.596  | ug/L  | 98       |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 73775    | 53.009  | ug/L  | 99       |
| 46) Tetrachloroethene          | 8.23  | 164  | 53494    | 50.015  | ug/L  | 99       |
| 48) 2-Hexanone                 | 8.36  | 43   | 229468   | 114.465 | ug/L  | 98       |
| 49) Dibromochloromethane       | 8.48  | 129  | 78203    | 53.889  | ug/L  | 97       |
| 50) 1,2-Dibromoethane          | 8.59  | 107  | 75859    | 51.377  | ug/L  | 98       |
| 51) Chlorobenzene              | 9.12  | 112  | 191558   | 50.464  | ug/L  | 100      |
| 52) Ethylbenzene               | 9.25  | 91   | 347818   | 52.172  | ug/L  | 99       |
| 53) m,p-Xylene                 | 9.38  | 106  | 127413   | 52.216  | ug/L  | 99       |
| 54) o-xylene                   | 9.78  | 106  | 125214   | 53.266  | ug/L  | 100      |
| 55) Styrene                    | 9.79  | 104  | 214472   | 53.278  | ug/L  | 98       |
| 56) Isopropylbenzene           | 10.17 | 105  | 325647   | 52.860  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 134377   | 55.107  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 108124   | 55.085  | ug/L  | 99       |
| 61) Bromoform                  | 9.96  | 173  | 54350    | 55.054  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.42 | 146  | 136822   | 50.598  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 140780   | 49.911  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 142893   | 51.910  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 29390    | 57.595  | ug/L  | 93       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 101675   | 48.667  | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 90060    | 46.875  | ug/L  | 99       |
| 69) Naphthalene                | 13.74 | 128  | 324509   | 54.776  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 96473    | 49.378  | ug/L  | 98       |

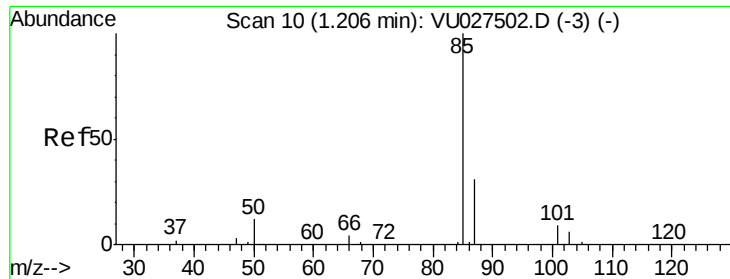
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 51.113 ug/L

RT: 1.21 min Scan# 10

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

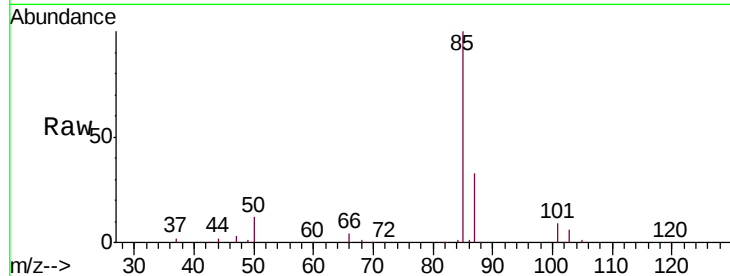
VSTD05042

Tgt Ion: 85 Resp: 100667

Ion Ratio Lower Upper

85 100

87 32.1 25.4 38.2



Abundance Ion 85.00 (84.70 to 85.70): VU027502.D (-3) (-)

Ion 87.00 (86.70 to 87.70): VU027502.D (-3) (-)

1.21

100000

80000

60000

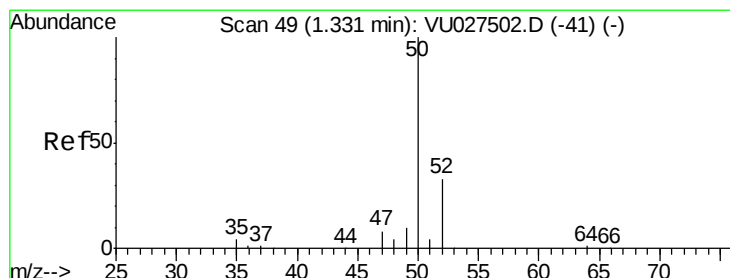
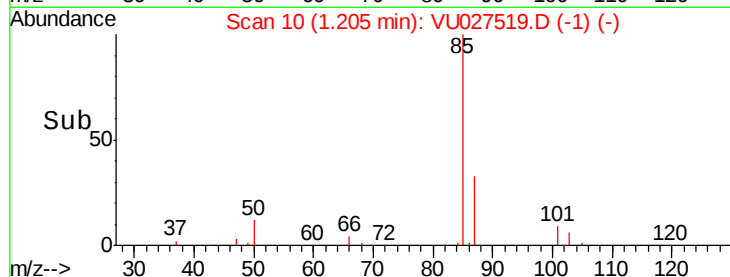
40000

20000

0

1.15 1.20 1.25

Time-->



#3

Chloromethane

Concen: 52.646 ug/L

RT: 1.33 min Scan# 49

Delta R.T. -0.00 min

Lab File: VU027519.D

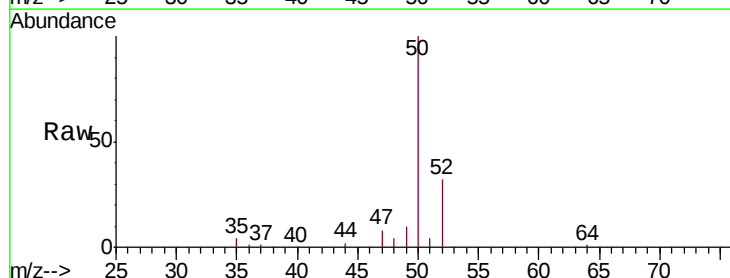
Acq: 08 Oct 2018 23:02

Tgt Ion: 50 Resp: 119143

Ion Ratio Lower Upper

50 100

52 32.4 23.0 42.6



Abundance Ion 50.00 (49.70 to 50.70): VU027502.D (-41) (-)

Ion 52.00 (51.70 to 52.70): VU027502.D (-41) (-)

1.33

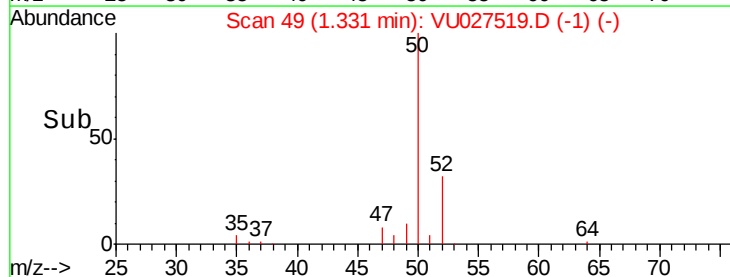
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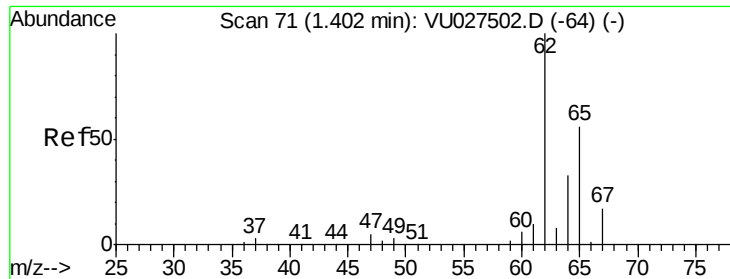
50000

0

1.30 1.35 1.40

Time-->





#5

Vinyl chloride

Concen: 51.071 ug/L

RT: 1.40 min Scan# 72

Delta R.T. 0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

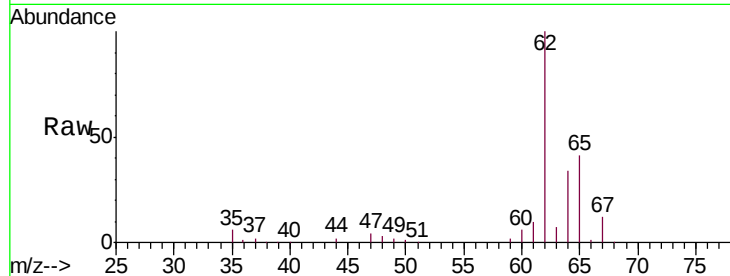
VSTD05042

Tgt Ion: 62 Resp: 112940

Ion Ratio Lower Upper

62 100

64 33.7 23.5 43.7



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0

120000

100000

80000

60000

40000

20000

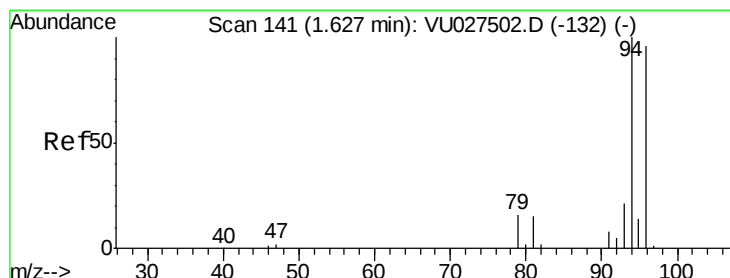
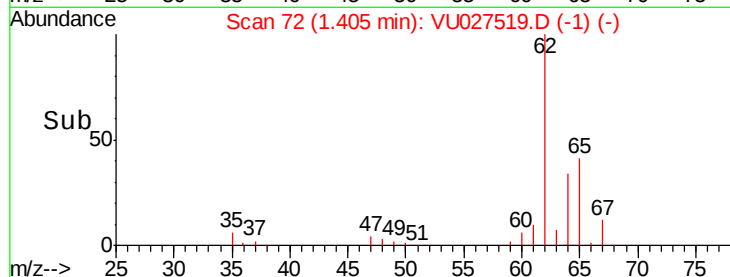
0

1.35

1.40

1.45

Time-->



#6

Bromomethane

Concen: 41.439 ug/L

RT: 1.62 min Scan# 140

Delta R.T. -0.00 min

Lab File: VU027519.D

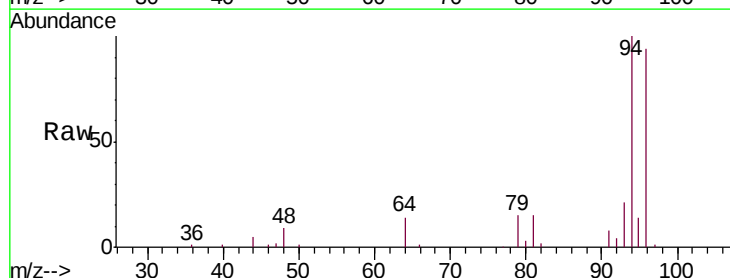
Acq: 08 Oct 2018 23:02

Tgt Ion: 94 Resp: 40047

Ion Ratio Lower Upper

94 100

96 94.1 66.6 123.8



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

30000

20000

10000

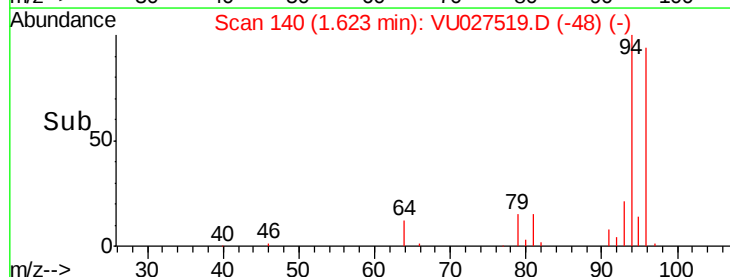
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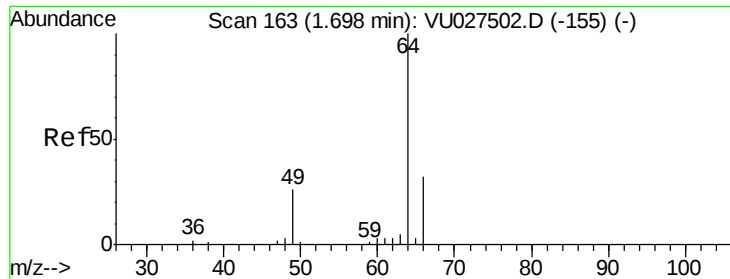
1.60

1.65

1.70

Time-->

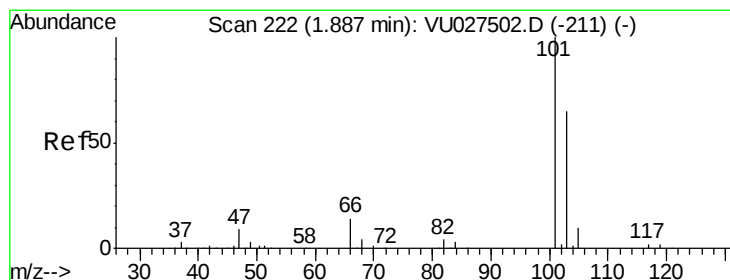
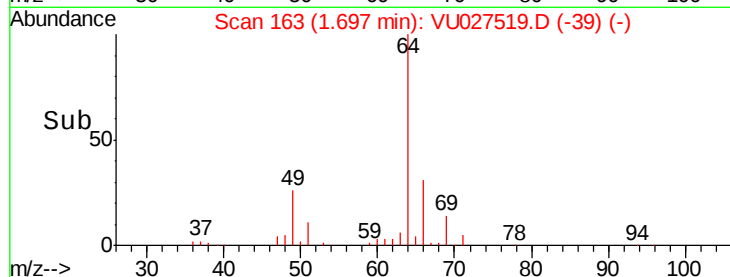
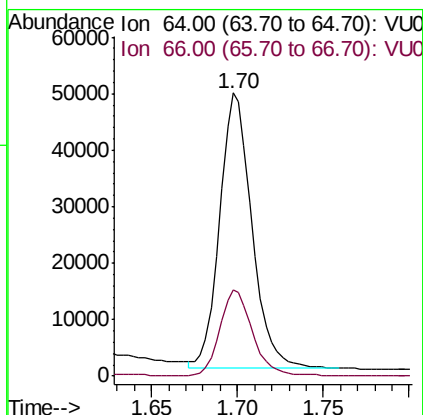
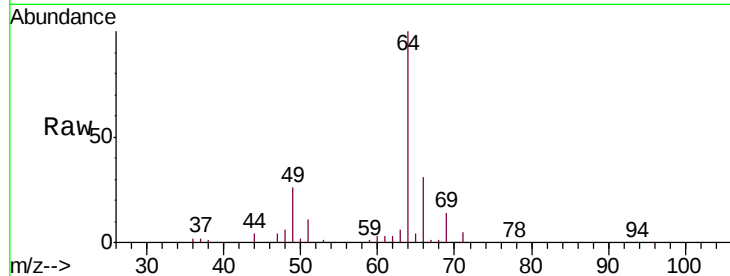




#8  
Chloroethane  
Concen: 48.171 ug/L  
RT: 1.70 min Scan# 163  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

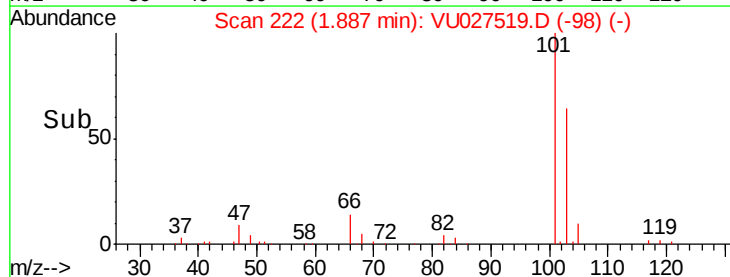
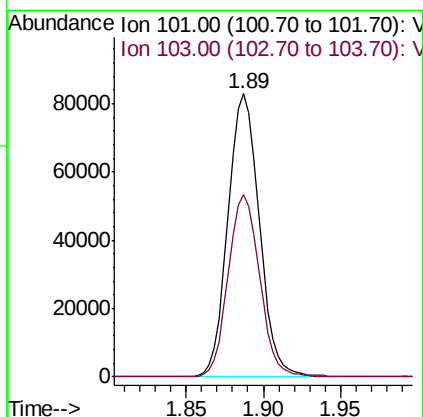
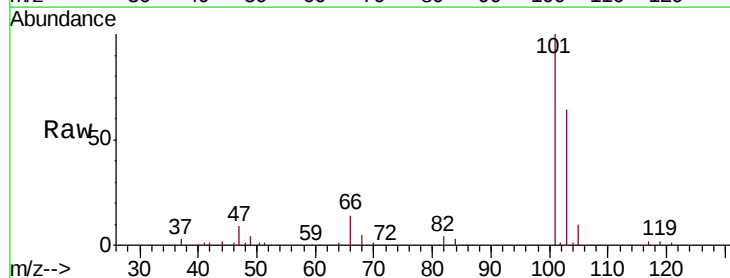
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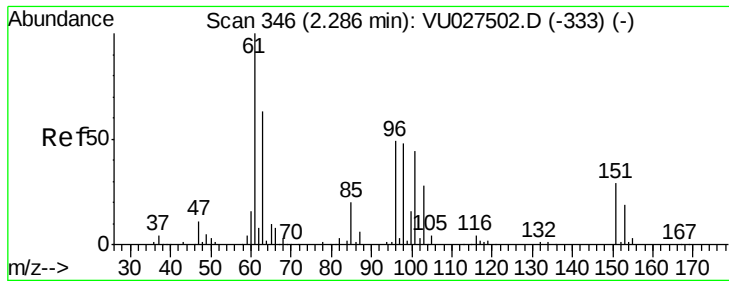
Tgt Ion: 64 Resp: 63840  
Ion Ratio Lower Upper  
64 100  
66 30.5 22.0 40.8



#9  
Trichlorofluoromethane  
Concen: 52.694 ug/L  
RT: 1.89 min Scan# 222  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion: 101 Resp: 116642  
Ion Ratio Lower Upper  
101 100  
103 64.3 51.1 76.7





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 48.924 ug/L

RT: 2.29 min Scan# 347

Delta R.T. 0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

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ClientSampleId :

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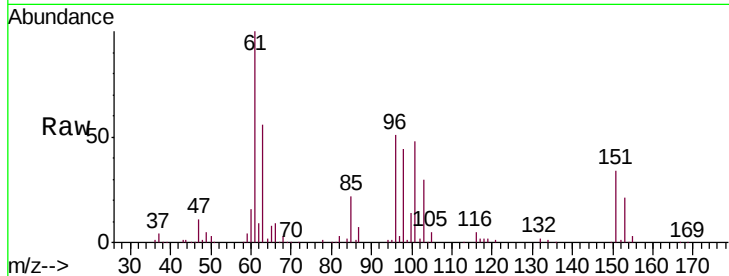
Tgt Ion:101 Resp: 64294

Ion Ratio Lower Upper

101 100

85 45.8 35.9 53.9

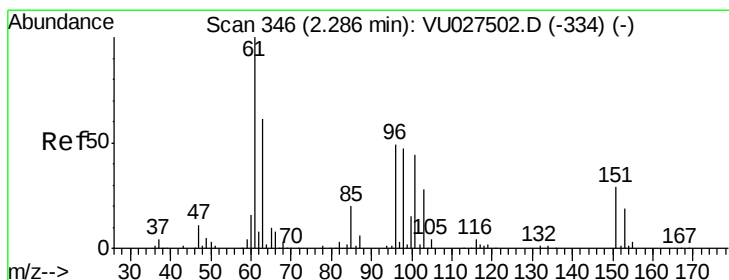
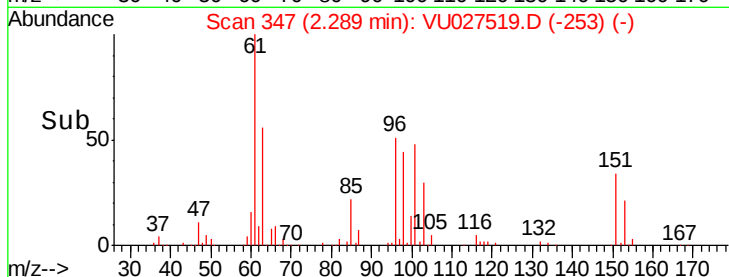
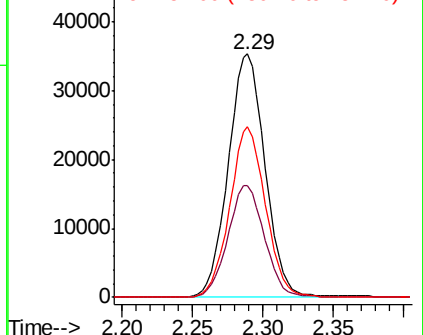
151 68.4 55.7 83.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 48.227 ug/L

RT: 2.29 min Scan# 346

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

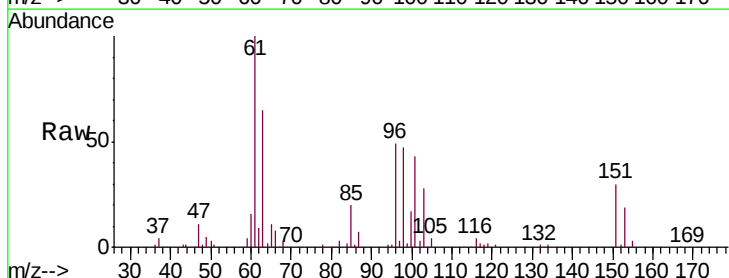
Tgt Ion: 96 Resp: 61869

Ion Ratio Lower Upper

96 100

61 203.2 135.2 251.0

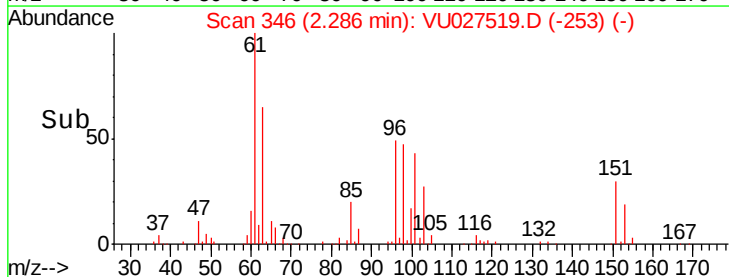
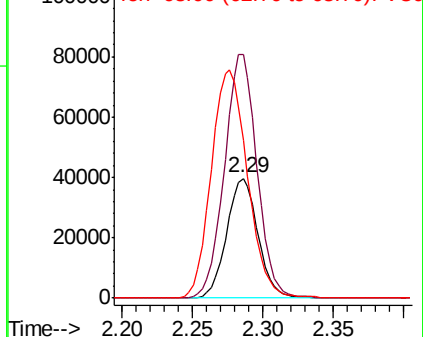
63 132.4 94.3 175.1

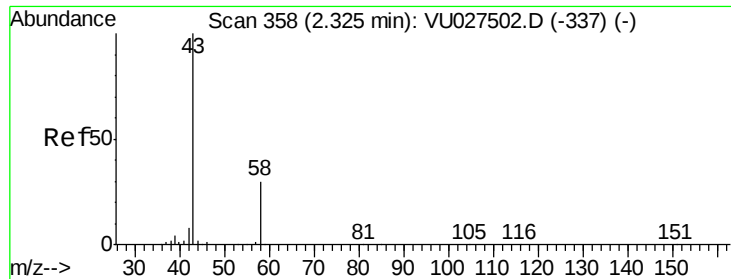


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 92.415 ug/L

RT: 2.32 min Scan# 357

Delta R.T. -0.00 min

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MSVOA\_U

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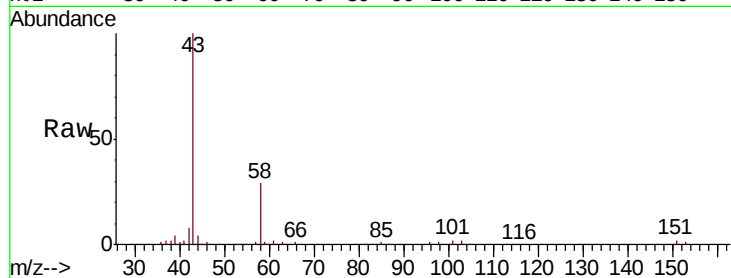
VSTD05042

Tgt Ion: 43 Resp: 95637

Ion Ratio Lower Upper

43 100

58 29.1 0.0 60.8



Abundance Ion 43.00 (42.70 to 43.70): VU027519.D (-337) (-)

Ion 58.00 (57.70 to 58.70): VU027519.D (-337) (-)

2.32

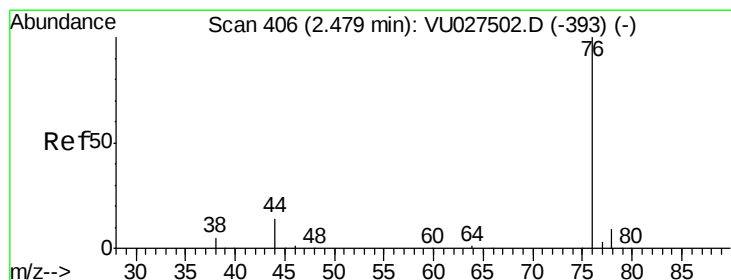
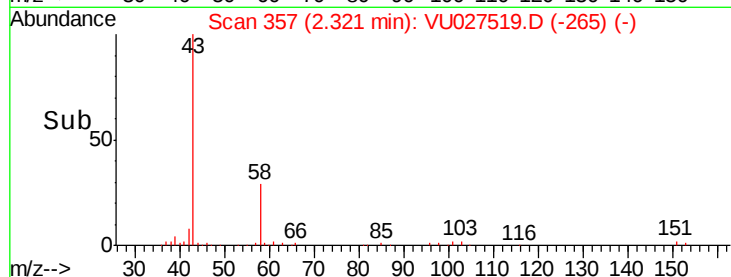
60000

40000

20000

0

Time--> 2.20 2.30 2.40



#14

Carbon disulfide

Concen: 47.019 ug/L

RT: 2.48 min Scan# 406

Delta R.T. -0.00 min

Lab File: VU027519.D

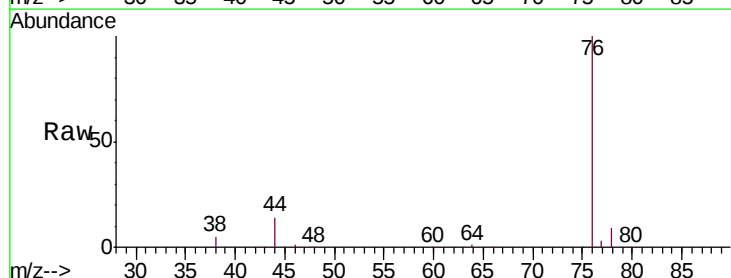
Acq: 08 Oct 2018 23:02

Tgt Ion: 76 Resp: 221569

Ion Ratio Lower Upper

76 100

78 9.0 7.4 11.2



Abundance Ion 76.00 (75.70 to 76.70): VU027519.D (-313) (-)

Ion 78.00 (77.70 to 78.70): VU027519.D (-313) (-)

2.48

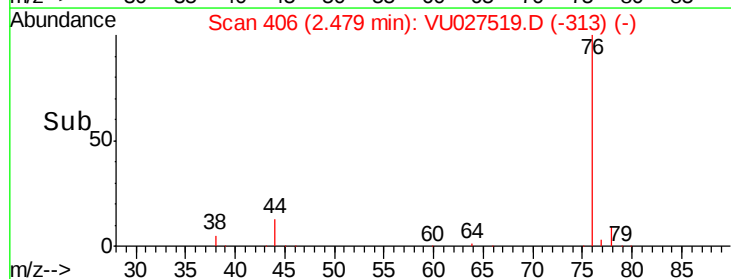
150000

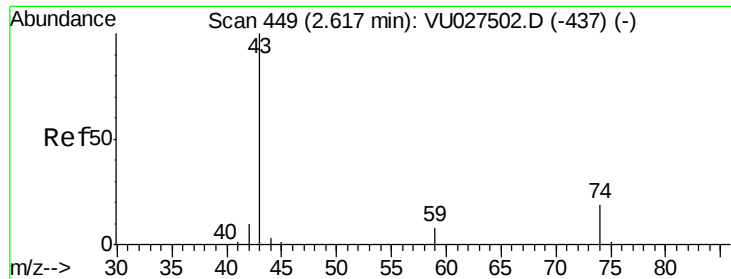
100000

50000

0

Time--> 2.40 2.45 2.50 2.55 2.60

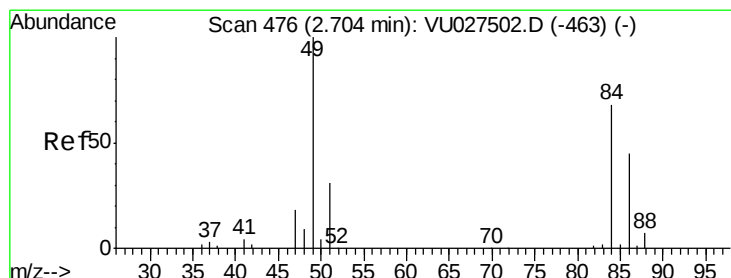
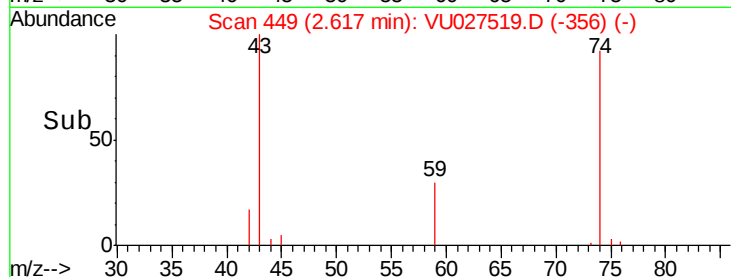
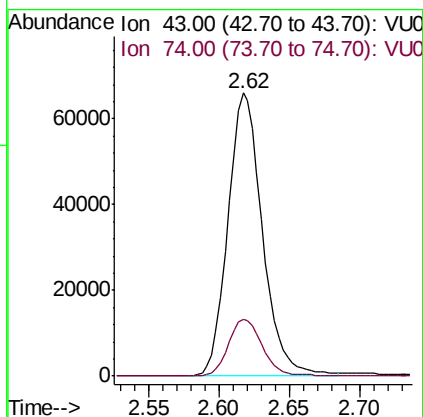
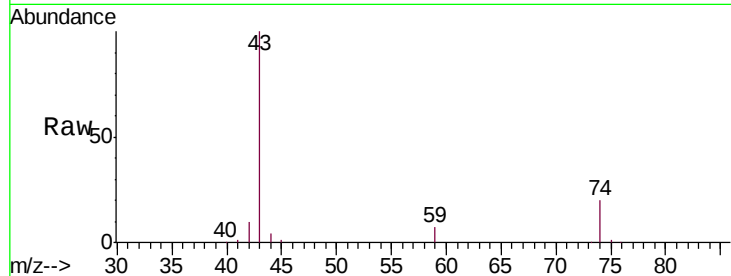




#15  
Methyl Acetate  
Concen: 54.498 ug/L  
RT: 2.62 min Scan# 449  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

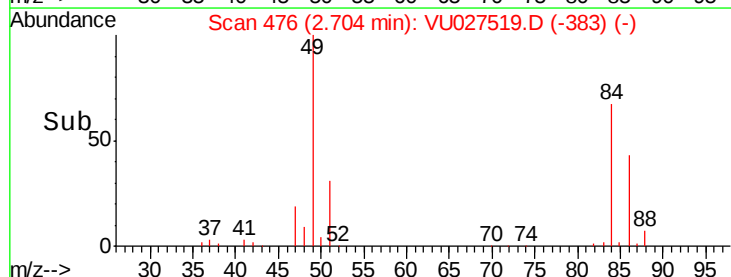
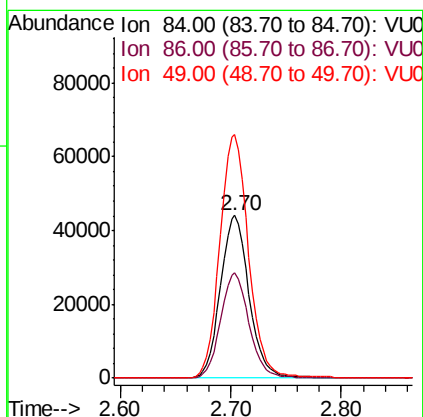
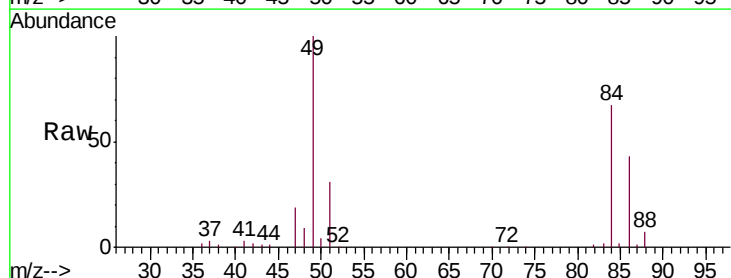
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

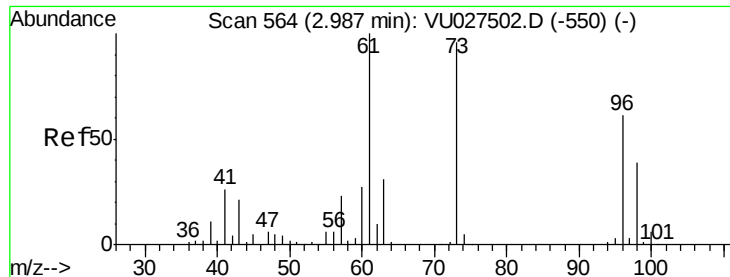
Tgt Ion: 43 Resp: 113015  
Ion Ratio Lower Upper  
43 100  
74 19.9 16.0 24.0



#16  
Methylene chloride  
Concen: 51.030 ug/L  
RT: 2.70 min Scan# 476  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion: 84 Resp: 79512  
Ion Ratio Lower Upper  
84 100  
86 64.6 44.6 82.8  
49 149.8 98.3 182.5





#17

trans-1,2-Dichloroethene

Concen: 48.247 ug/L

RT: 2.99 min Scan# 564

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05042

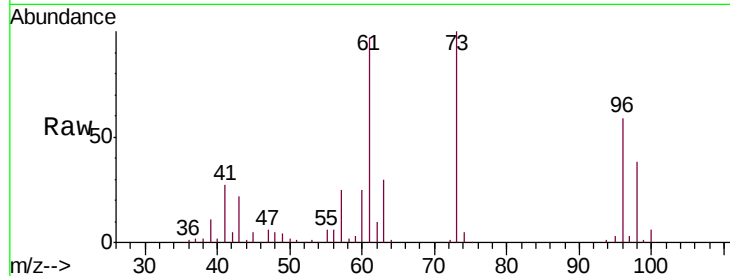
Tgt Ion: 96 Resp: 68541

Ion Ratio Lower Upper

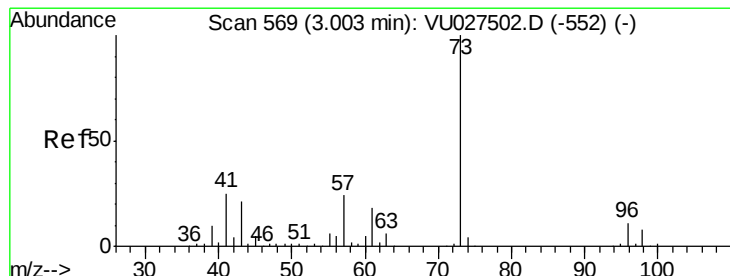
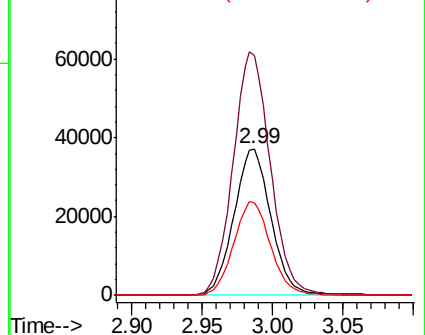
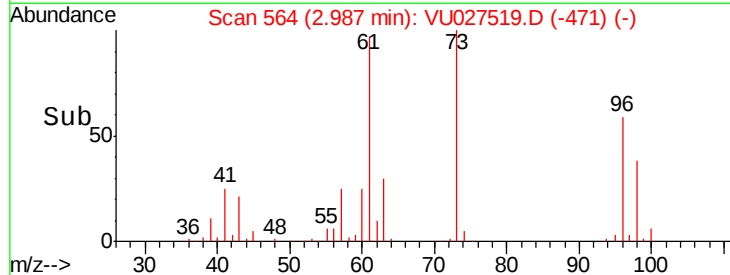
96 100

61 164.1 110.9 205.9

98 63.6 43.7 81.1



Abundance Ion 96.00 (95.70 to 96.70): VU027519.D (-471) (-)



#18

Methyl tert-butyl Ether

Concen: 52.509 ug/L

RT: 3.00 min Scan# 569

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

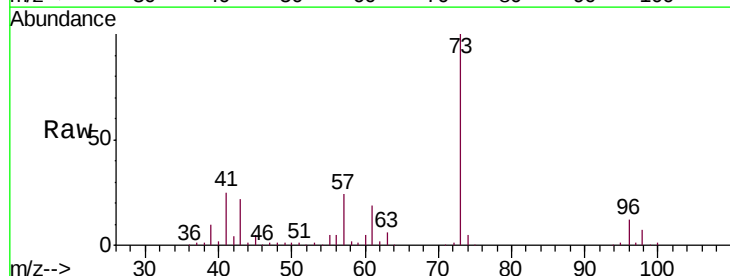
Tgt Ion: 73 Resp: 248022

Ion Ratio Lower Upper

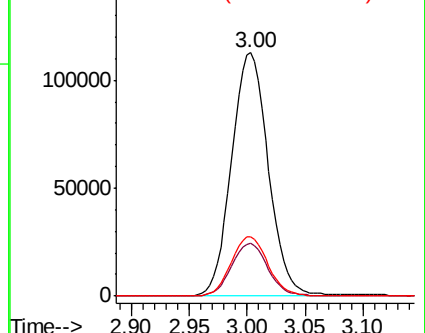
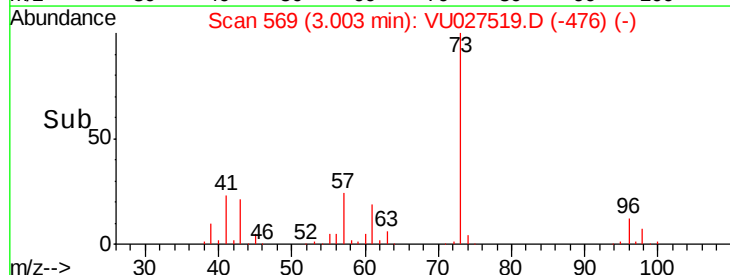
73 100

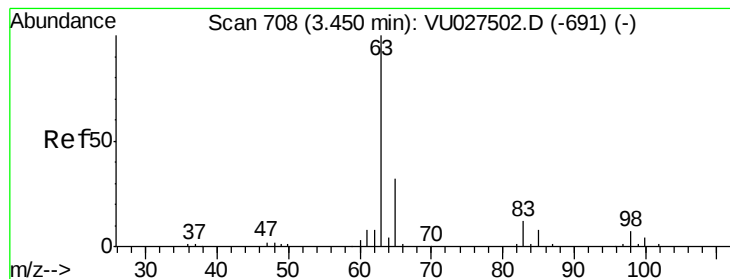
43 21.5 16.5 24.7

57 24.4 19.4 29.0



Abundance Ion 73.00 (72.70 to 73.70): VU027519.D (-476) (-)





#19

1,1-Dichloroethane

Concen: 53.290 ug/L

RT: 3.45 min Scan# 708

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05042

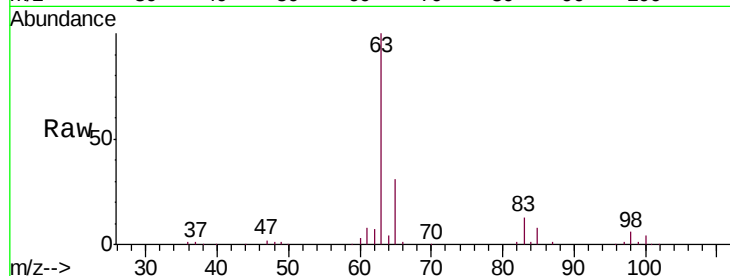
Tgt Ion: 63 Resp: 156319

Ion Ratio Lower Upper

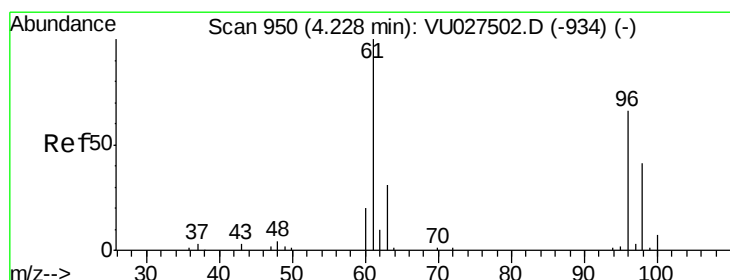
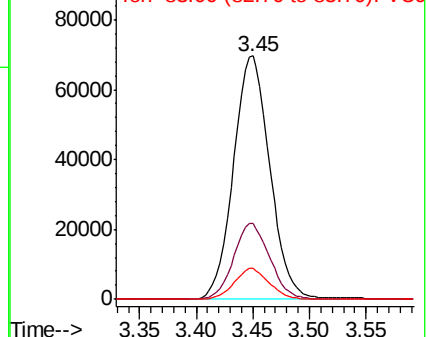
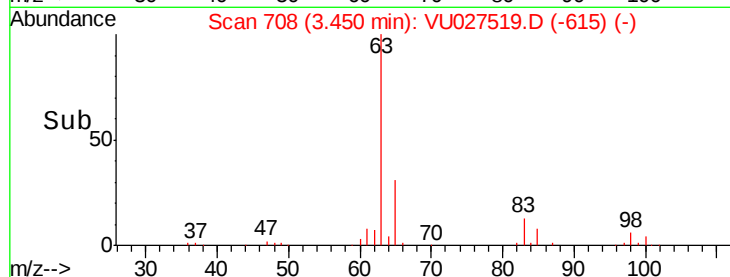
63 100

65 31.1 22.3 41.3

83 12.7 8.4 15.6



Abundance Ion 63.00 (62.70 to 63.70): VU027519.D (-615) (-)



#20

cis-1,2-Dichloroethene

Concen: 50.237 ug/L

RT: 4.23 min Scan# 950

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

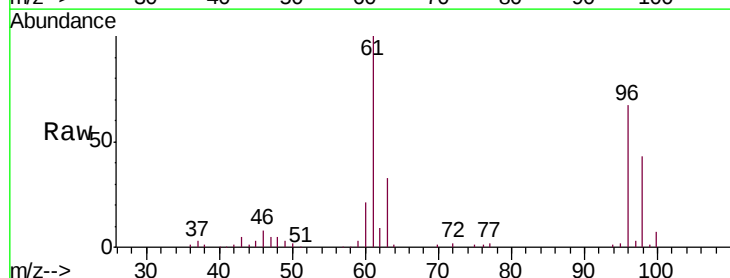
Tgt Ion: 96 Resp: 79169

Ion Ratio Lower Upper

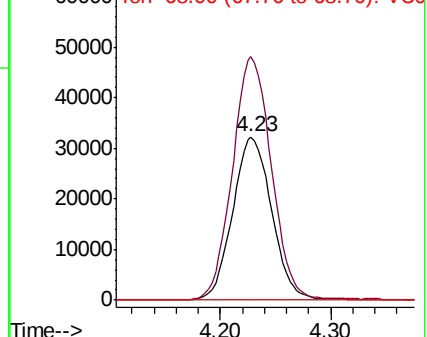
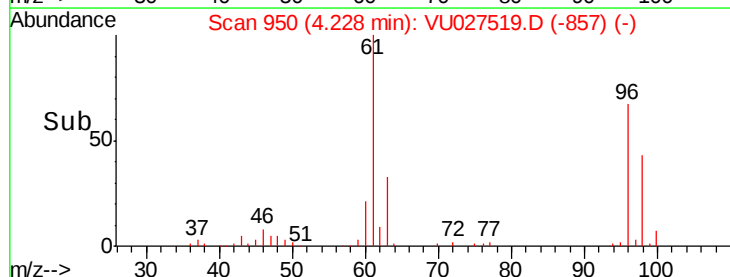
96 100

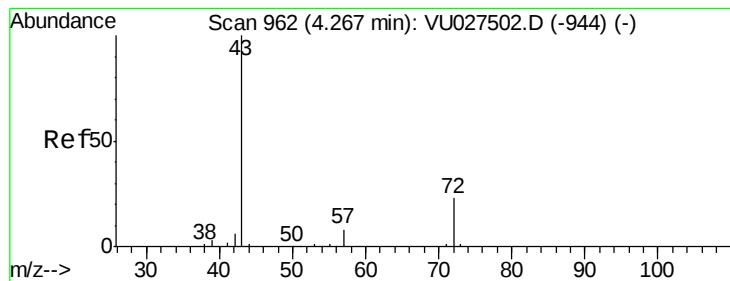
61 149.3 102.0 189.4

68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU027519.D (-857) (-)





#22

2-Butanone

Concen: 105.600 ug/L

RT: 4.26 min Scan# 961

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

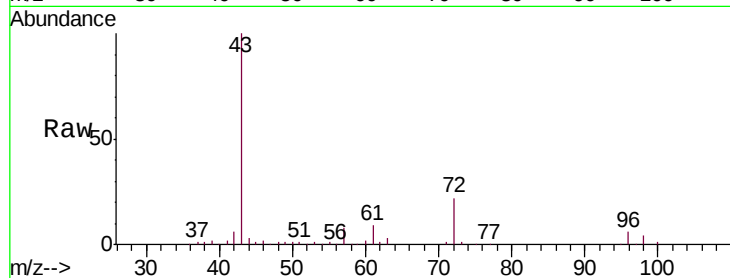
VSTD05042

Tgt Ion: 43 Resp: 156434

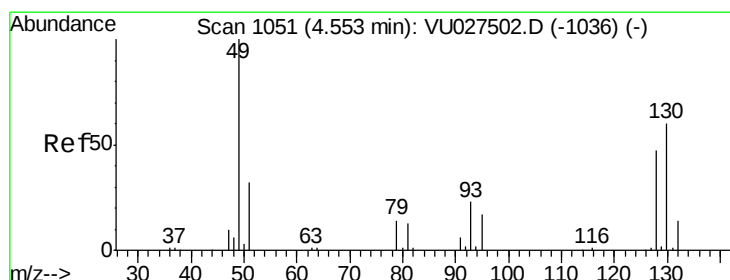
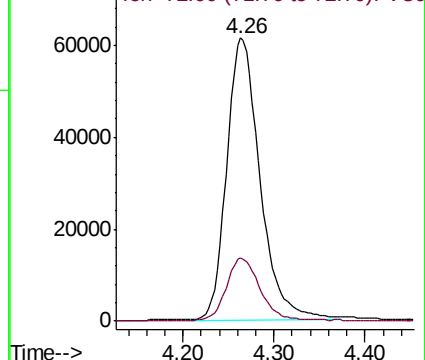
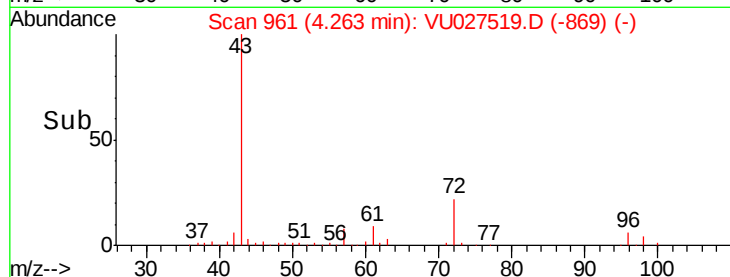
Ion Ratio Lower Upper

43 100

72 22.8 11.9 35.5



Abundance Ion 43.00 (42.70 to 43.70): VU027519.D (-869) (-)



#23

Bromochloromethane

Concen: 51.369 ug/L

RT: 4.55 min Scan# 1051

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Tgt Ion: 128 Resp: 36917

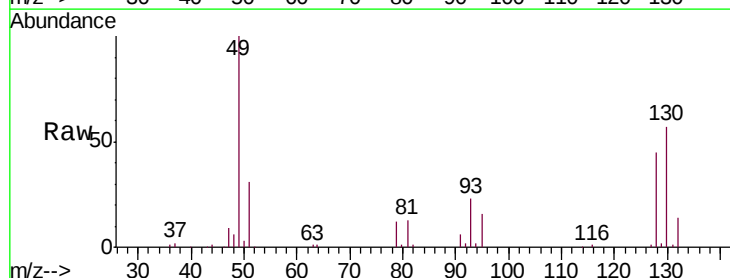
Ion Ratio Lower Upper

128 100

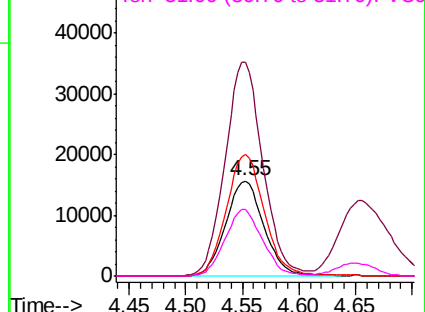
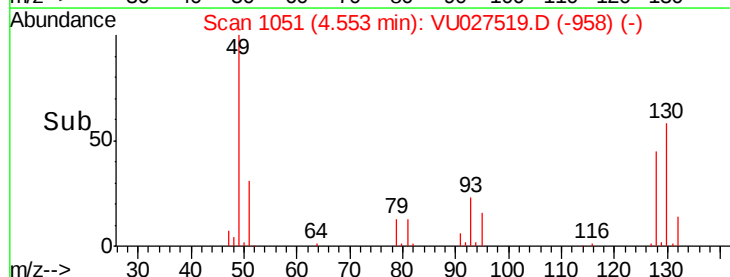
49 223.7 146.9 272.7

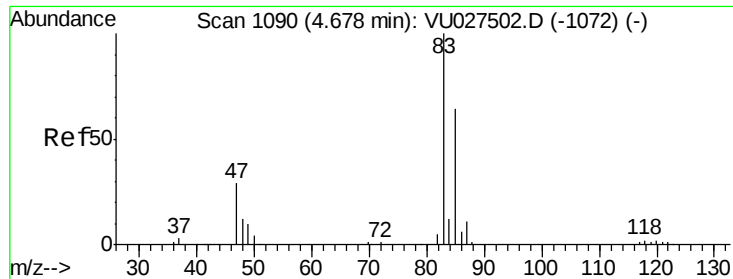
130 127.1 89.2 165.6

51 69.8 52.2 78.4



Abundance Ion 128.00 (127.70 to 128.70): VU027519.D (-958) (-)

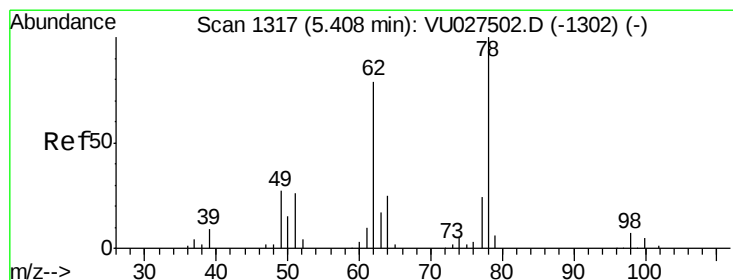
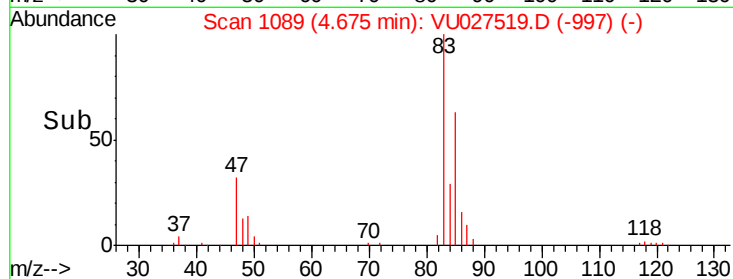
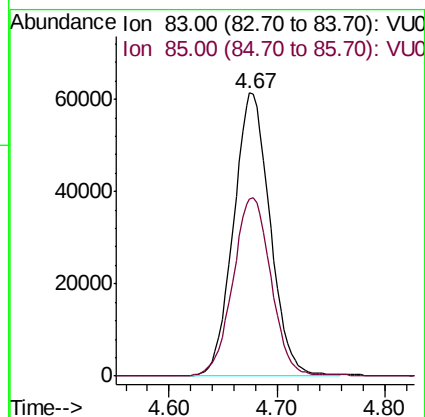
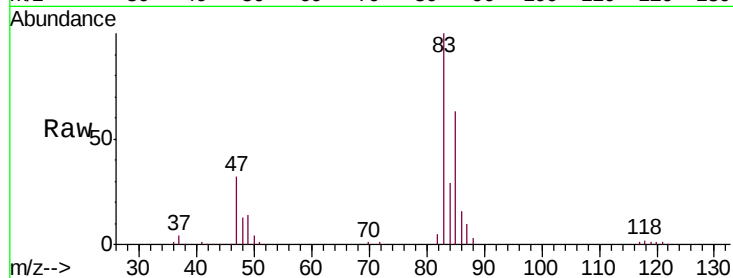




#25  
Chloroform  
Concen: 51.099 ug/L  
RT: 4.67 min Scan# 1089  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

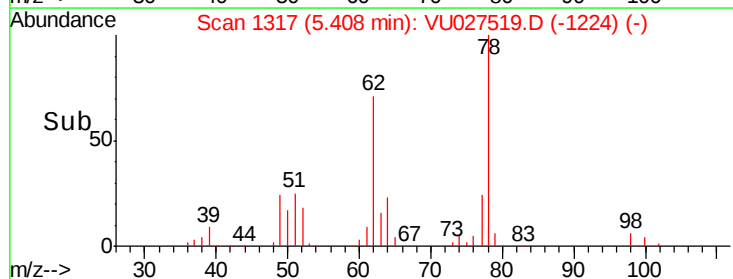
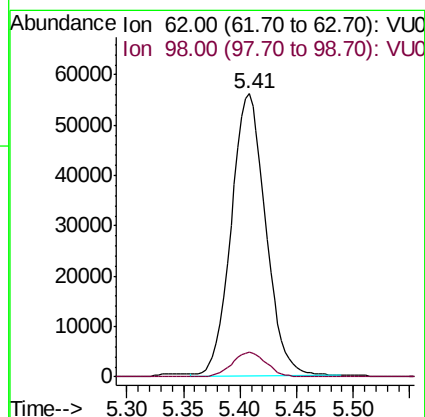
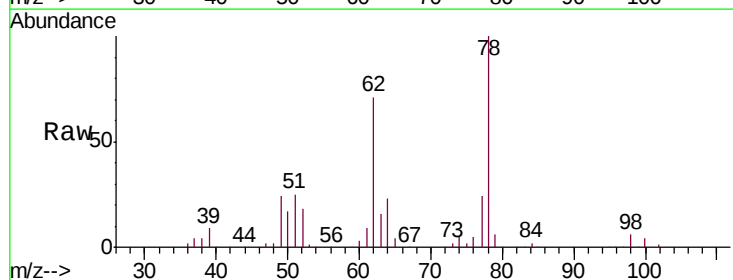
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

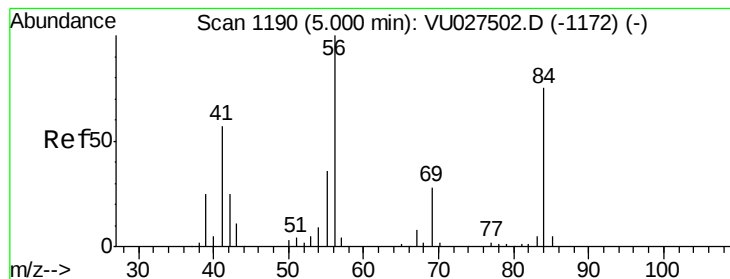
Tgt Ion: 83 Resp: 144800  
Ion Ratio Lower Upper  
83 100  
85 62.8 45.0 83.6



#27  
1,2-Dichloroethane  
Concen: 52.126 ug/L  
RT: 5.41 min Scan# 1317  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion: 62 Resp: 118627  
Ion Ratio Lower Upper  
62 100  
98 8.6 7.1 10.7

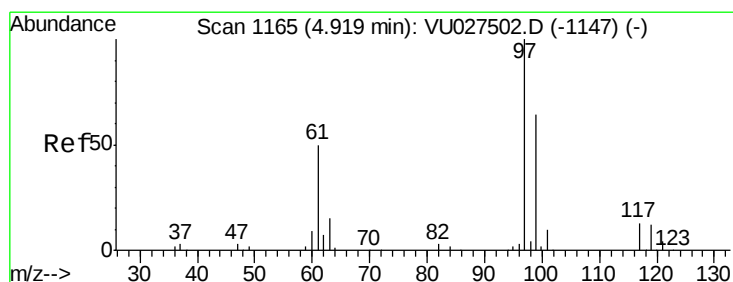
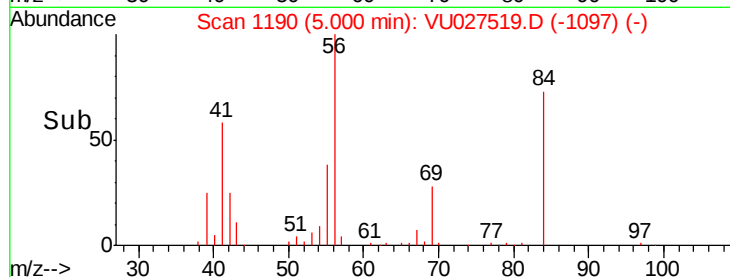
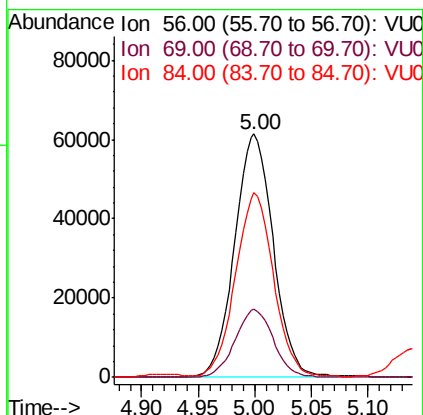
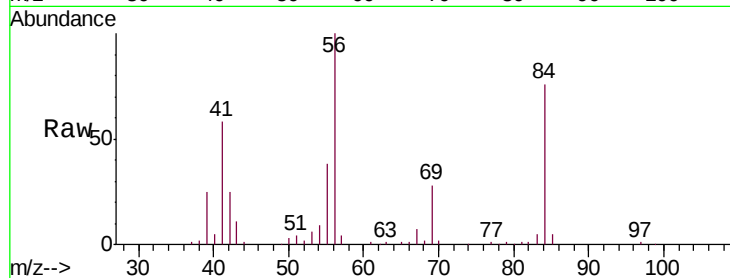




#29  
Cyclohexane  
Concen: 52.880 ug/L  
RT: 5.00 min Scan# 1190  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

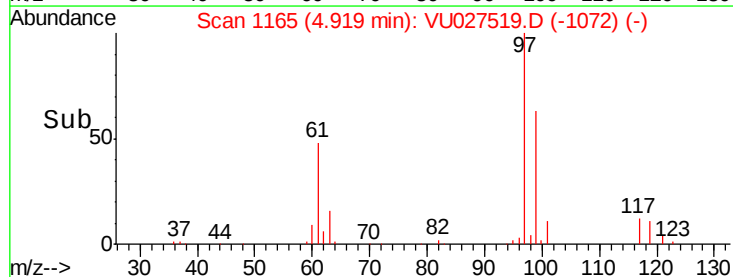
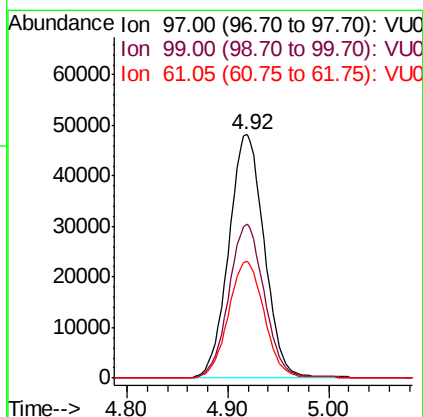
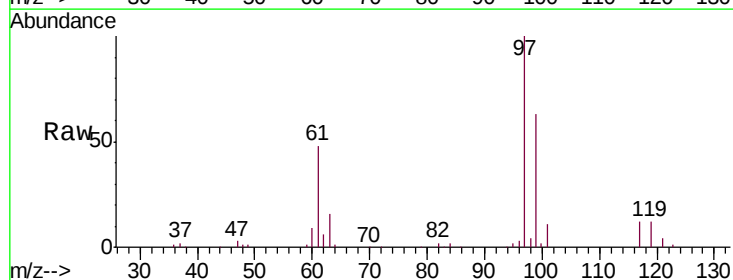
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

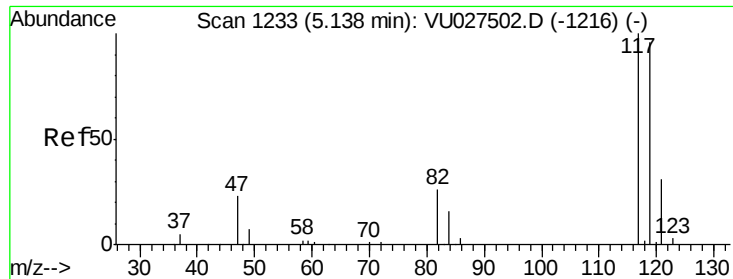
Tgt Ion: 56 Resp: 146060  
Ion Ratio Lower Upper  
56 100  
69 27.7 22.5 33.7  
84 74.9 60.9 91.3



#30  
1,1,1-Trichloroethane  
Concen: 54.147 ug/L  
RT: 4.92 min Scan# 1165  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion: 97 Resp: 117974  
Ion Ratio Lower Upper  
97 100  
99 62.9 50.9 76.3  
61 48.2 38.2 57.4

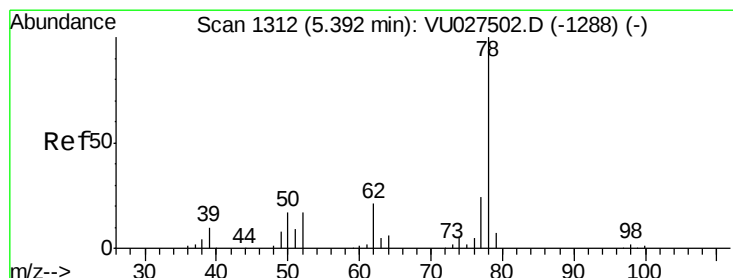
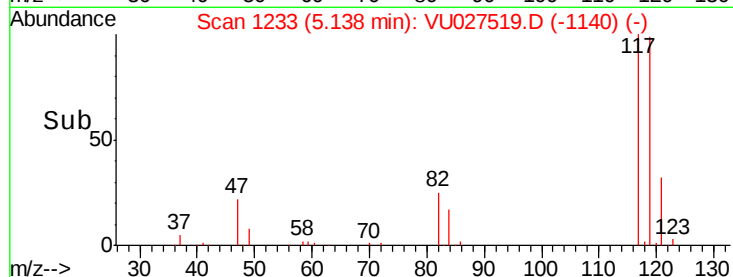
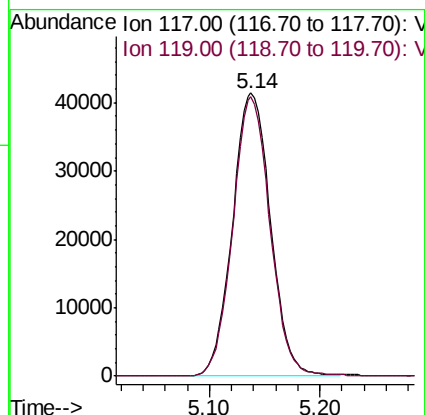
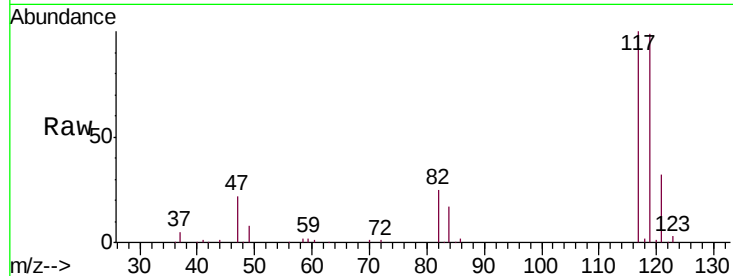




#31  
Carbon tetrachloride  
Concen: 54.050 ug/L  
RT: 5.14 min Scan# 1233  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

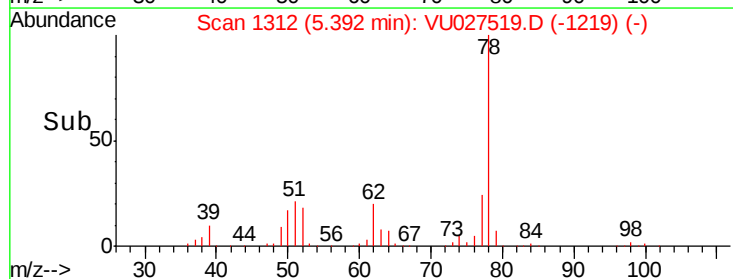
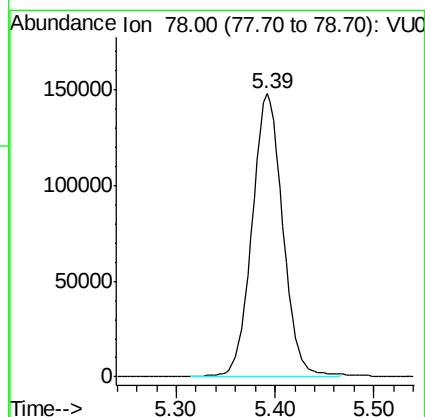
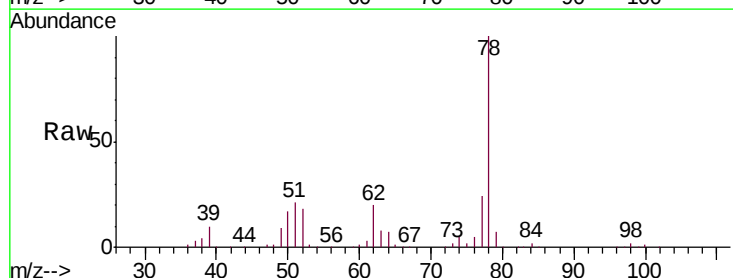
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

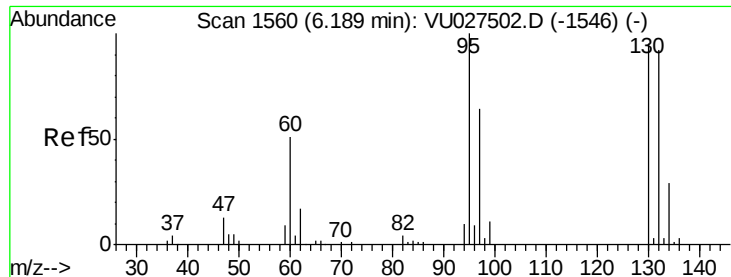
Tgt Ion:117 Resp: 99052  
Ion Ratio Lower Upper  
117 100  
119 96.3 76.8 115.2



#33  
Benzene  
Concen: 53.069 ug/L  
RT: 5.39 min Scan# 1312  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion: 78 Resp: 317569

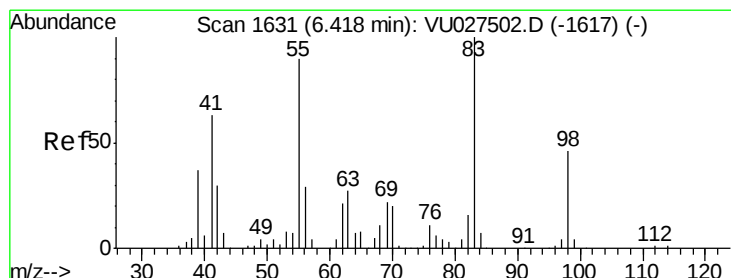
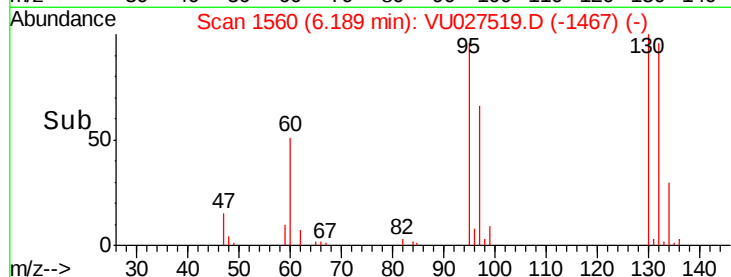
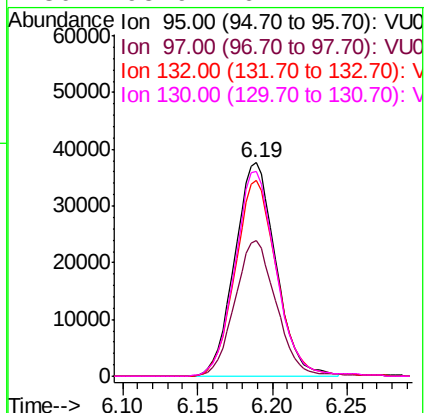
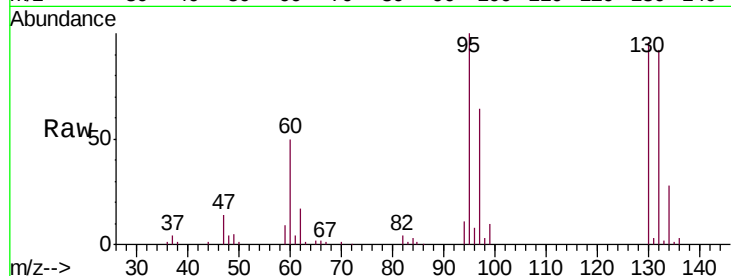




#34  
 Trichloroethene  
 Concen: 50.133 ug/L  
 RT: 6.19 min Scan# 1560  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

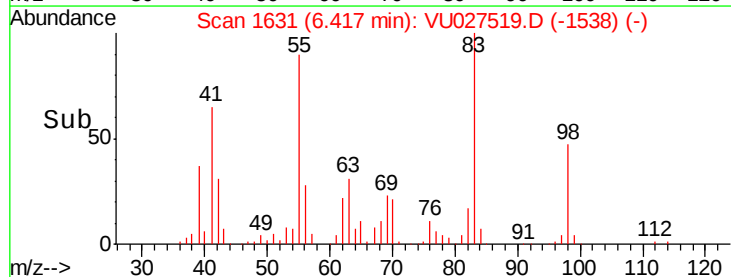
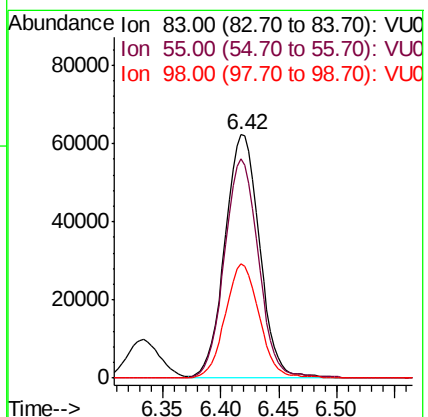
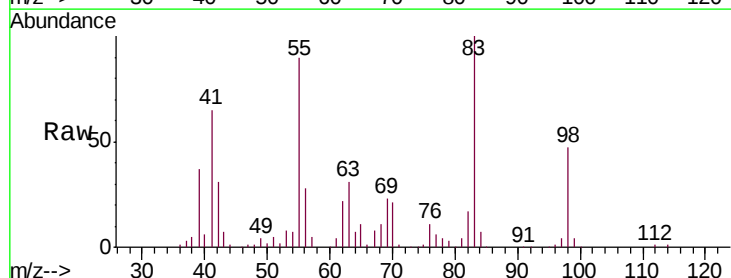
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05042

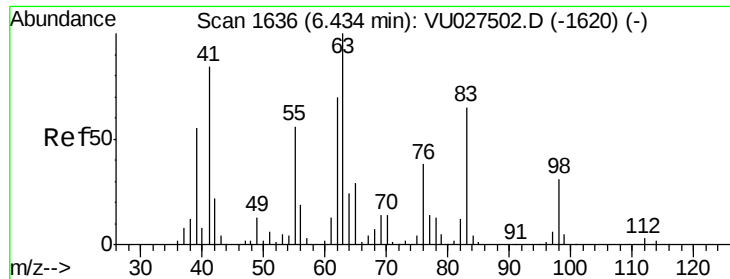
Tgt Ion: 95 Resp: 72148  
 Ion Ratio Lower Upper  
 95 100  
 97 63.5 44.9 83.3  
 132 91.9 64.8 120.4  
 130 95.9 67.1 124.7



#35  
 Methylcyclohexane  
 Concen: 51.060 ug/L  
 RT: 6.42 min Scan# 1631  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

Tgt Ion: 83 Resp: 127676  
 Ion Ratio Lower Upper  
 83 100  
 55 89.6 69.9 104.9  
 98 46.6 37.1 55.7

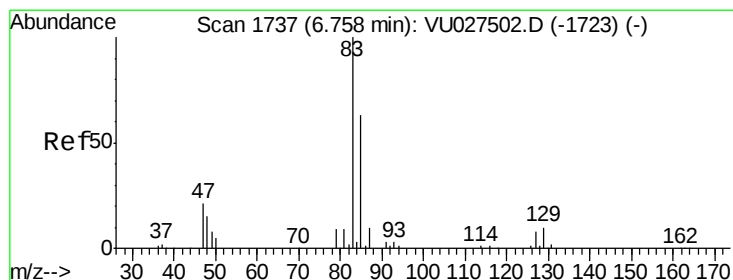
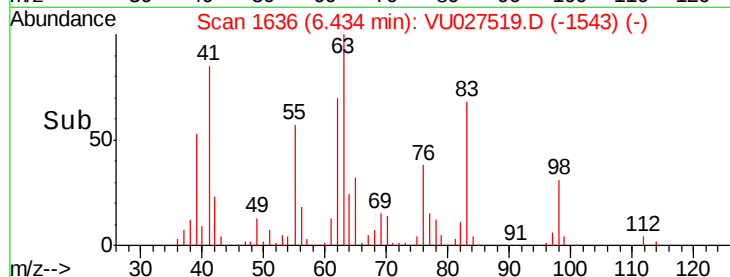
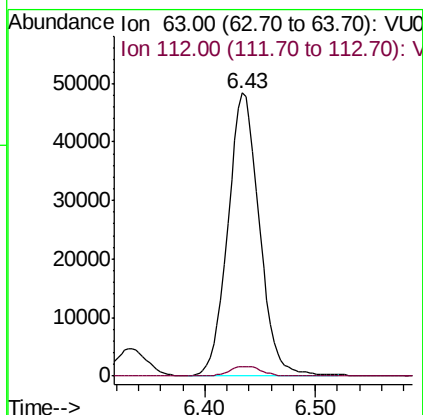
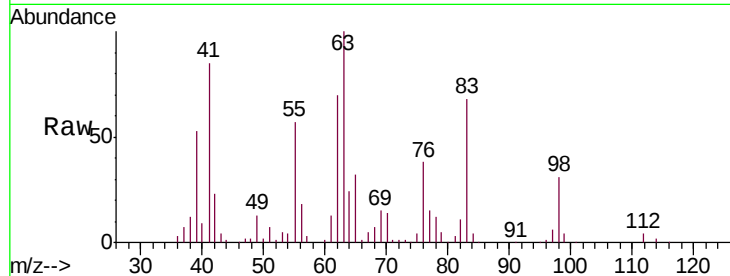




#37  
 1,2-Dichloropropane  
 Concen: 54.921 ug/L  
 RT: 6.43 min Scan# 1636  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

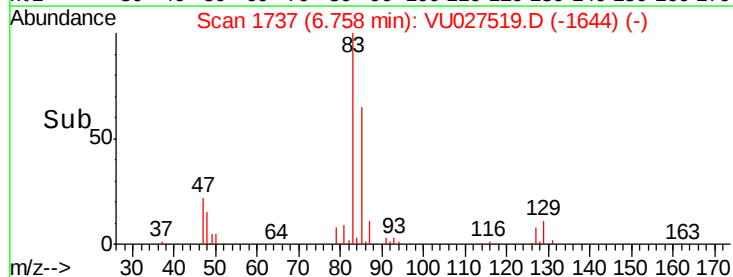
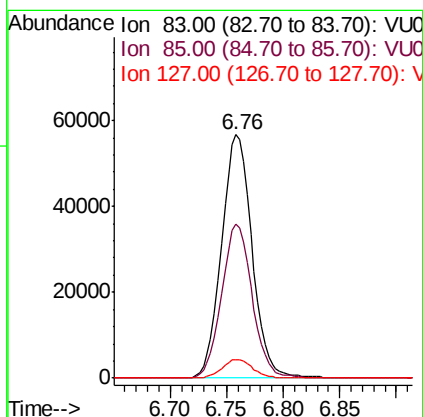
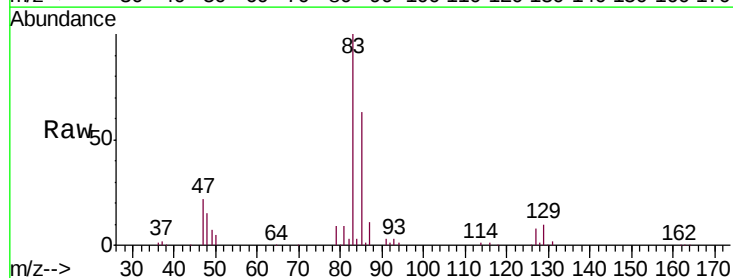
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05042

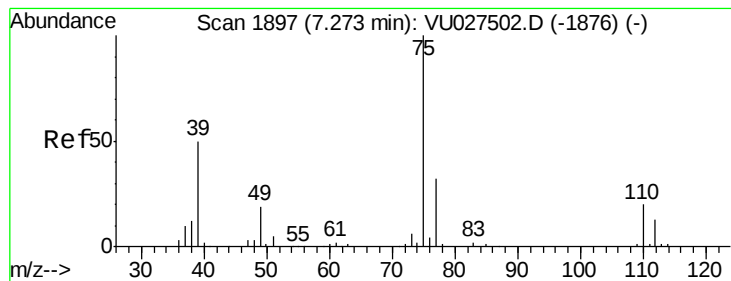
Tgt Ion: 63 Resp: 95219  
 Ion Ratio Lower Upper  
 63 100  
 112 3.5 2.9 4.3



#38  
 Bromodichloromethane  
 Concen: 54.078 ug/L  
 RT: 6.76 min Scan# 1737  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

Tgt Ion: 83 Resp: 106542  
 Ion Ratio Lower Upper  
 83 100  
 85 63.2 45.1 83.7  
 127 7.8 6.3 9.5



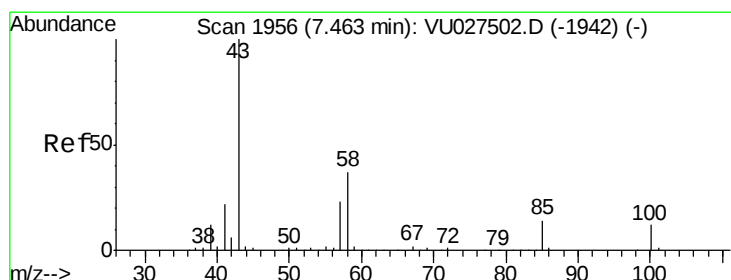
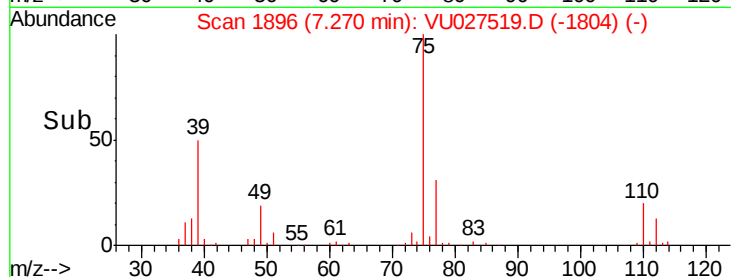
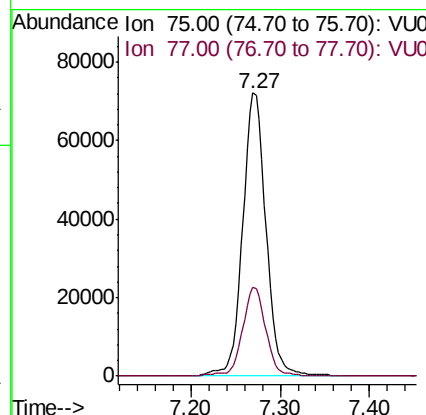
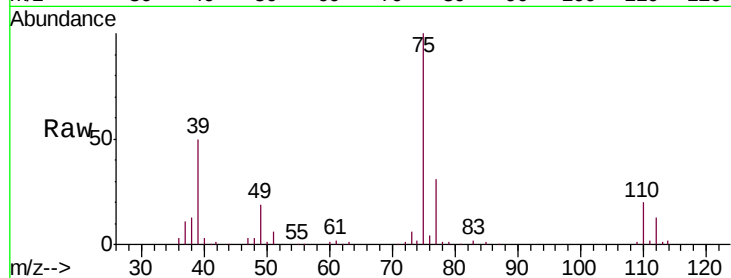


#39

cis-1,3-Dichloropropene  
 Concen: 51.523 ug/L  
 RT: 7.27 min Scan# 1896  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05042

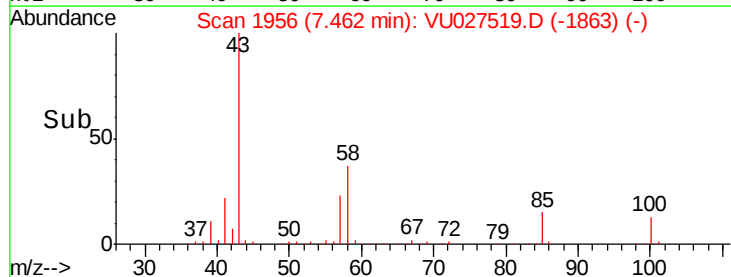
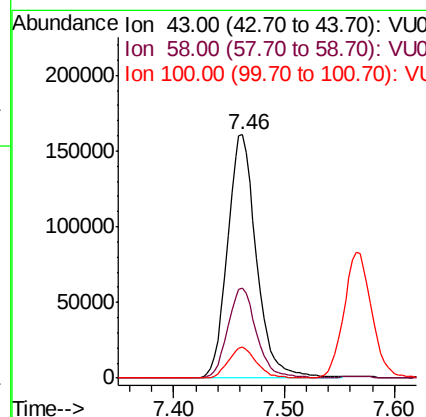
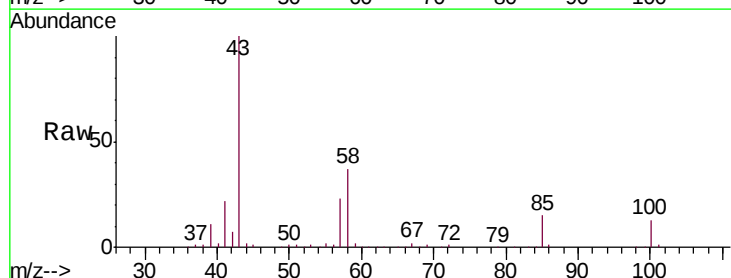
Tgt Ion: 75 Resp: 131257  
 Ion Ratio Lower Upper  
 75 100  
 77 31.3 22.1 41.1

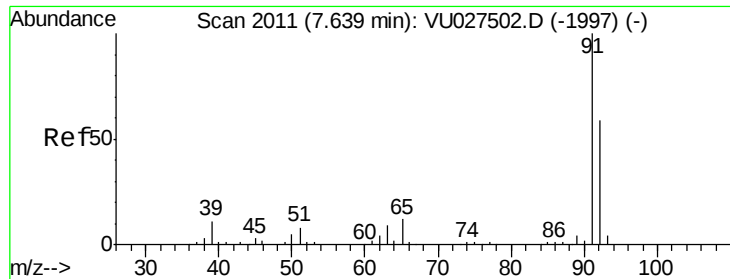


#40

4-Methyl-2-pentanone  
 Concen: 115.168 ug/L  
 RT: 7.46 min Scan# 1956  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

Tgt Ion: 43 Resp: 292390  
 Ion Ratio Lower Upper  
 43 100  
 58 36.9 30.7 46.1  
 100 12.4 10.2 15.4





#42

Toluene

Concen: 52.886 ug/L

RT: 7.64 min Scan# 2010

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

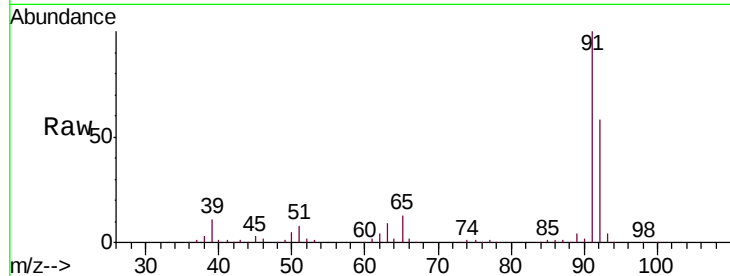
VSTD05042

Tgt Ion: 91 Resp: 317539

Ion Ratio Lower Upper

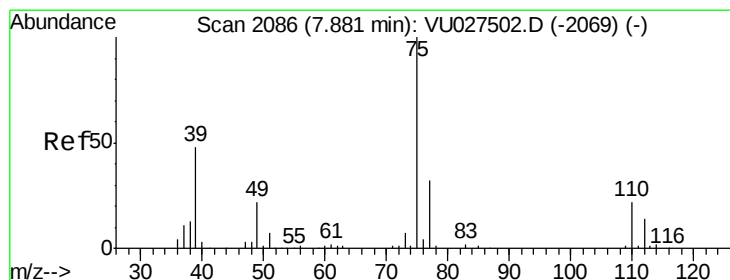
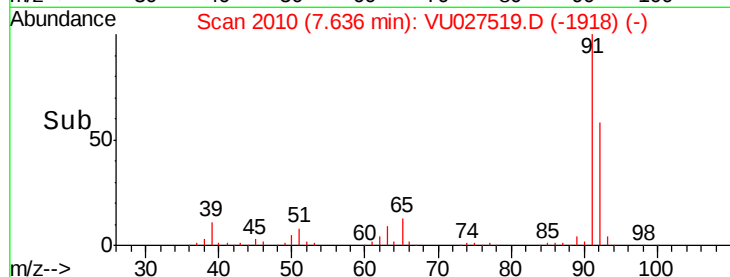
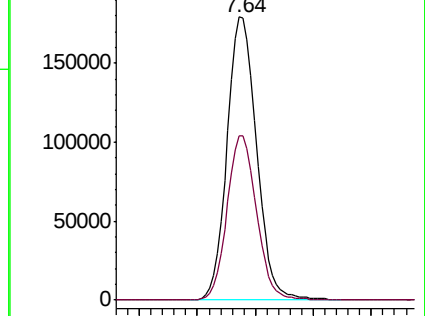
91 100

92 58.1 40.2 74.6



Abundance Ion 91.00 (90.70 to 91.70): VU0

Ion 92.00 (91.70 to 92.70): VU0



#44

trans-1,3-Dichloropropene

Concen: 50.596 ug/L

RT: 7.88 min Scan# 2086

Delta R.T. -0.00 min

Lab File: VU027519.D

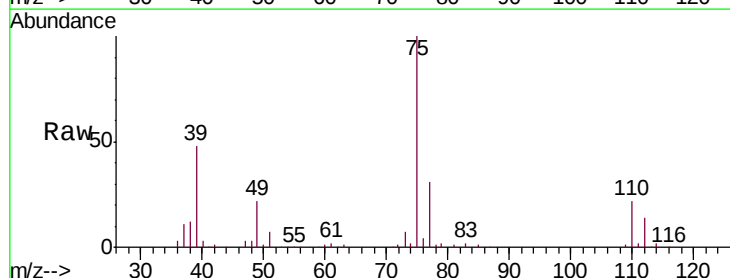
Acq: 08 Oct 2018 23:02

Tgt Ion: 75 Resp: 119642

Ion Ratio Lower Upper

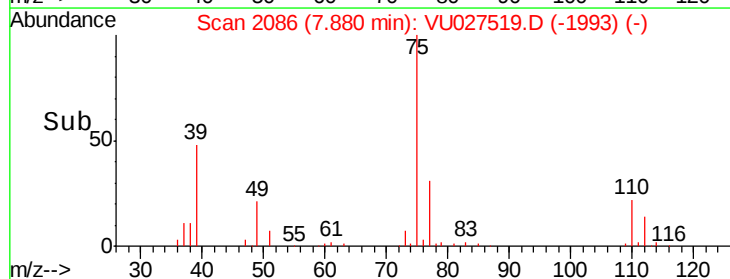
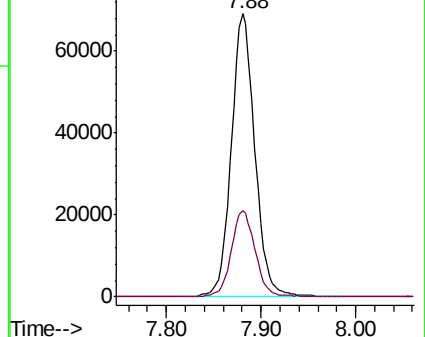
75 100

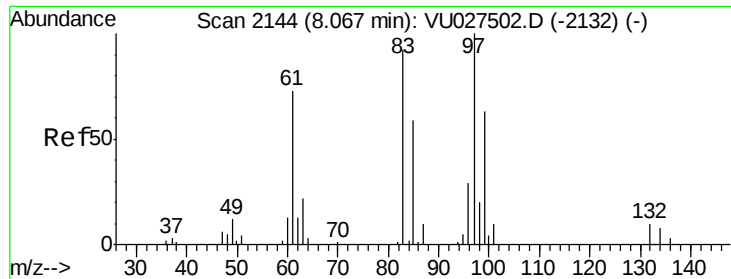
77 30.6 22.2 41.2



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0

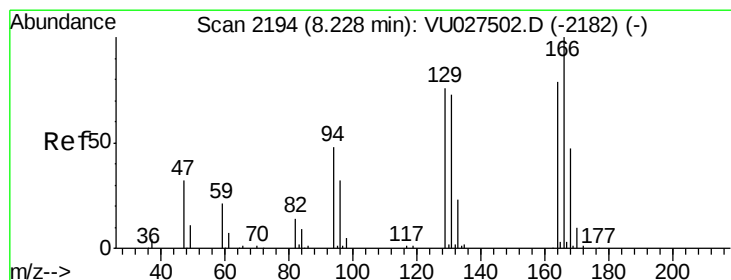
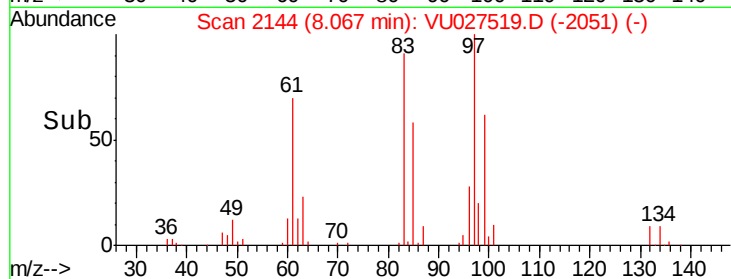
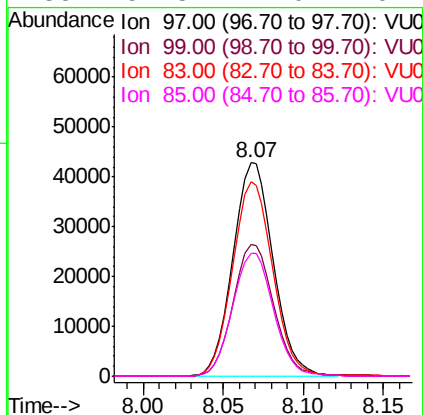
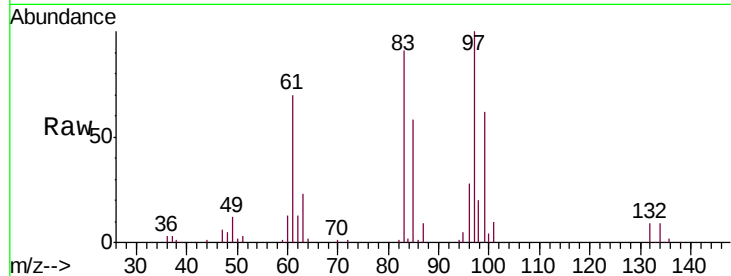




#45  
 1,1,2-Trichloroethane  
 Concen: 53.009 ug/L  
 RT: 8.07 min Scan# 2144  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

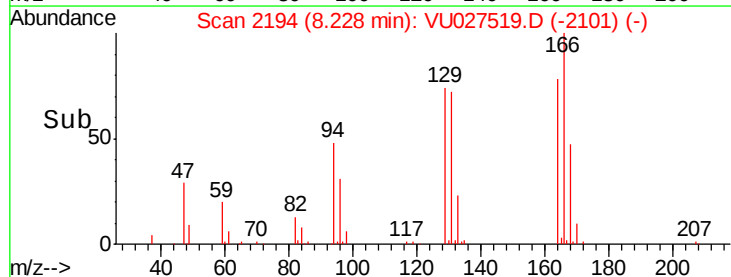
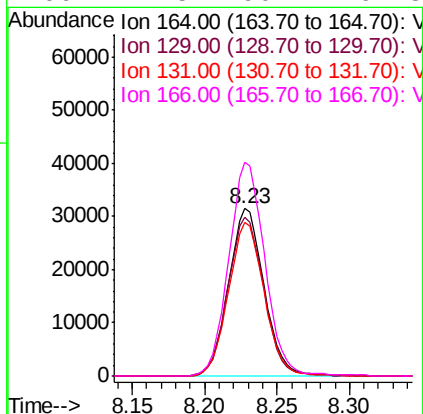
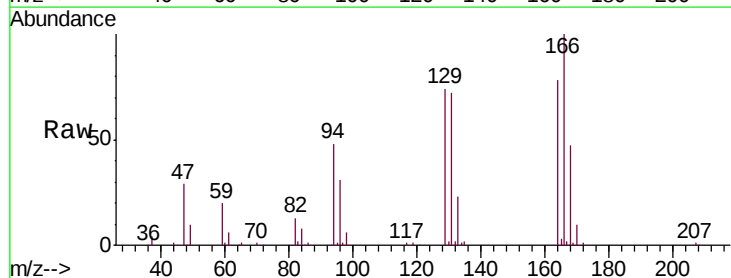
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05042

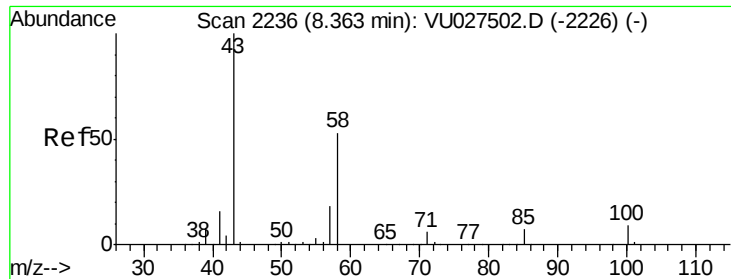
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 73775 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 61.8  | 43.2  | 80.2  |
| 83       | 91.0  | 64.3  | 119.5 |
| 85       | 57.8  | 41.0  | 76.2  |



#46  
 Tetrachloroethene  
 Concen: 50.015 ug/L  
 RT: 8.23 min Scan# 2194  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 53494 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 94.8  | 67.0  | 124.4 |
| 131      | 91.3  | 65.1  | 120.9 |
| 166      | 127.5 | 90.4  | 167.8 |

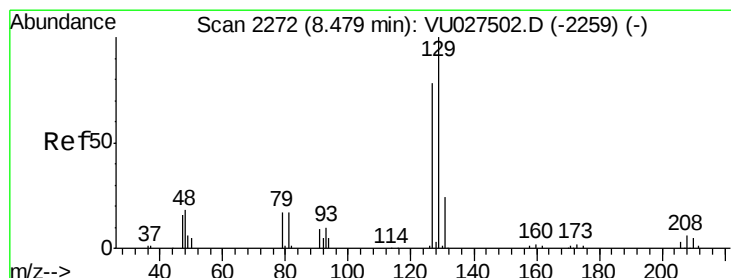
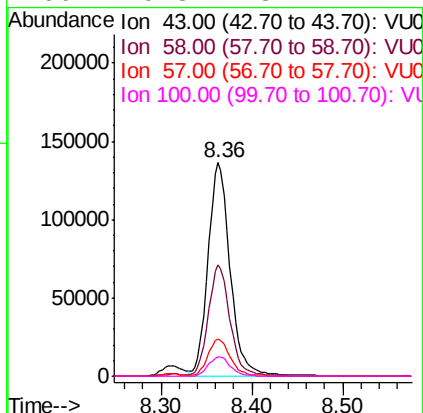
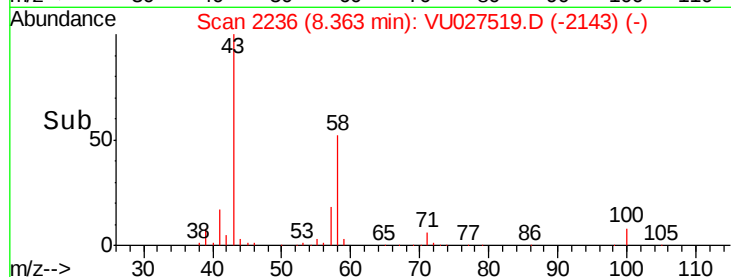
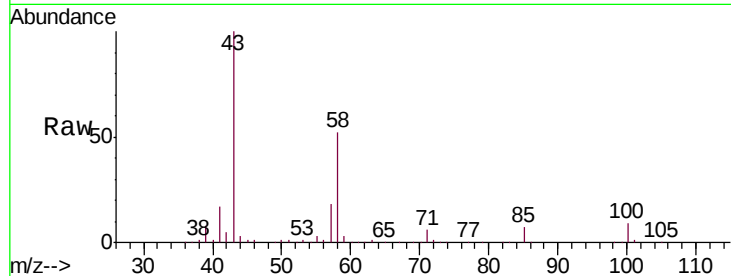




#48  
2-Hexanone  
Concen: 114.465 ug/L  
RT: 8.36 min Scan# 2236  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

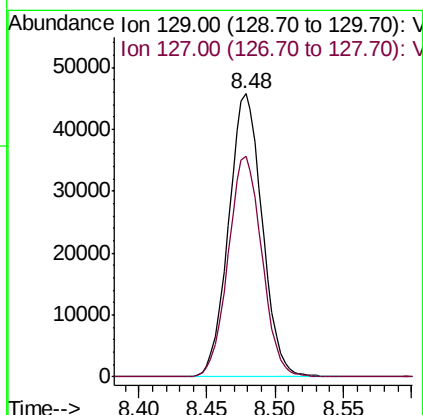
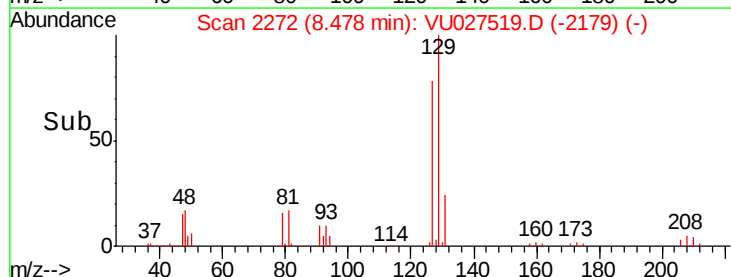
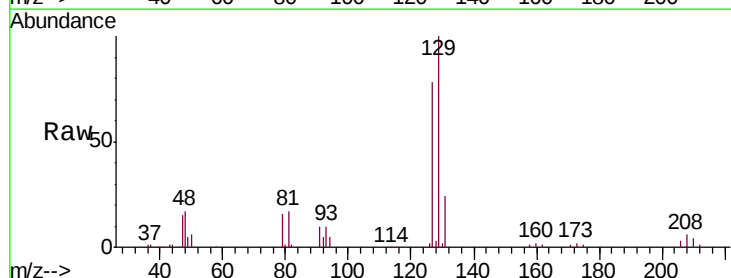
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

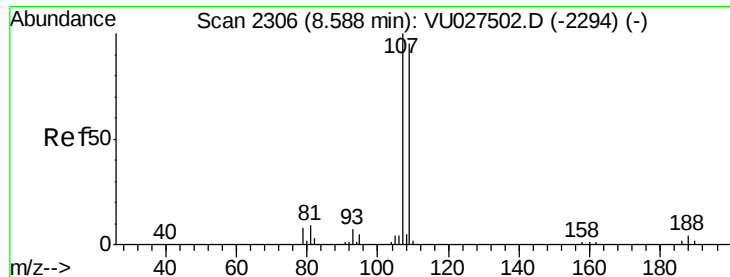
Tgt Ion: 43 Resp: 229468  
Ion Ratio Lower Upper  
43 100  
58 51.3 42.7 64.1  
57 17.8 14.5 21.7  
100 9.3 8.2 12.2



#49  
Dibromochloromethane  
Concen: 53.889 ug/L  
RT: 8.48 min Scan# 2272  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion: 129 Resp: 78203  
Ion Ratio Lower Upper  
129 100  
127 77.9 52.7 97.9

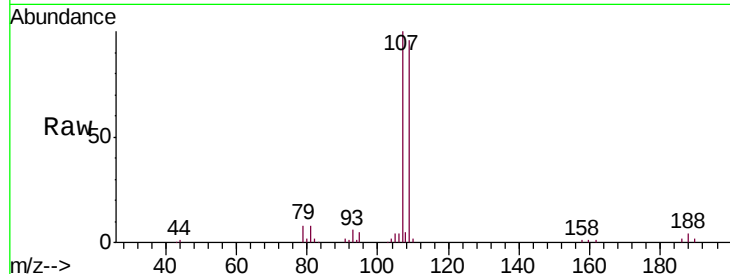




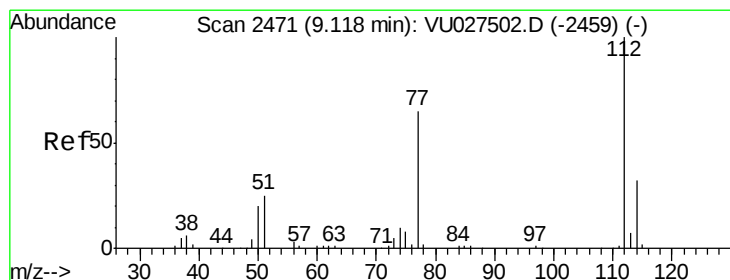
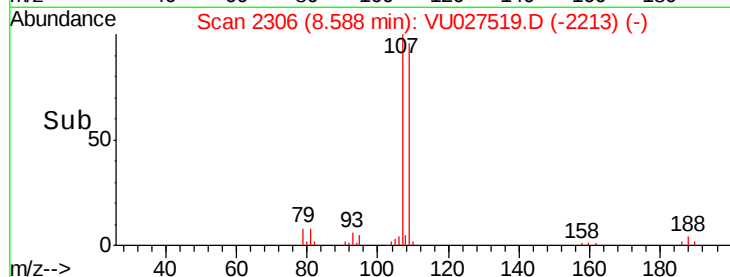
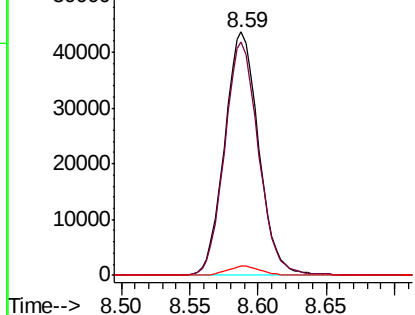
#50  
1,2-Dibromoethane  
Concen: 51.377 ug/L  
RT: 8.59 min Scan# 2306  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

Tgt Ion:107 Resp: 75859  
Ion Ratio Lower Upper  
107 100  
109 95.6 65.5 121.6  
188 3.9 3.0 4.6

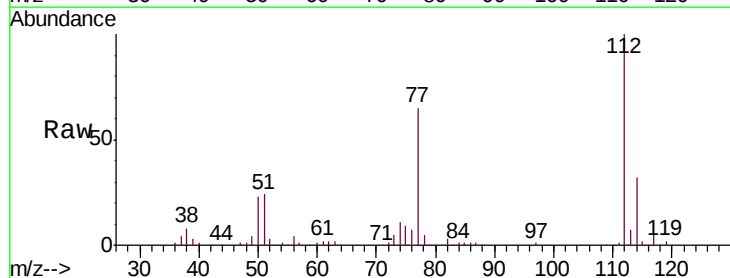


Abundance Ion 107.00 (106.70 to 107.70): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 188.00 (187.70 to 188.70): V

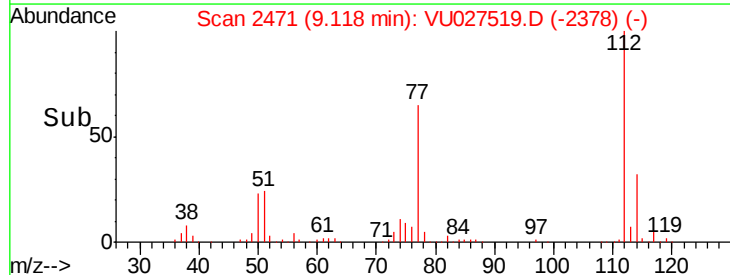
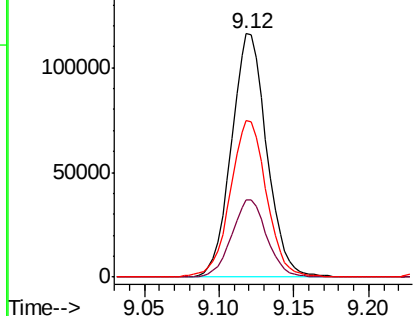


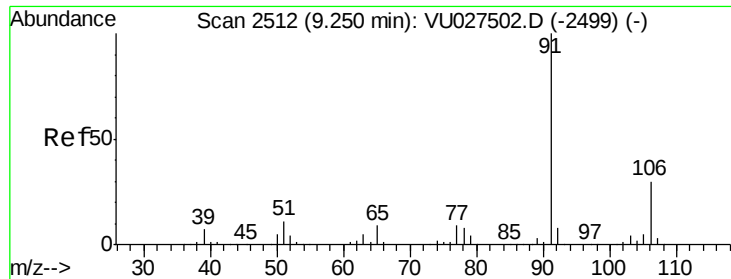
#51  
Chlorobenzene  
Concen: 50.464 ug/L  
RT: 9.12 min Scan# 2471  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion:112 Resp: 191558  
Ion Ratio Lower Upper  
112 100  
114 31.8 22.3 41.5  
77 64.6 51.7 77.5



Abundance Ion 112.00 (111.70 to 112.70): V  
Ion 114.00 (113.70 to 114.70): V  
Ion 77.00 (76.70 to 77.70): V





#52

Ethylbenzene

Concen: 52.172 ug/L

RT: 9.25 min Scan# 2512

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

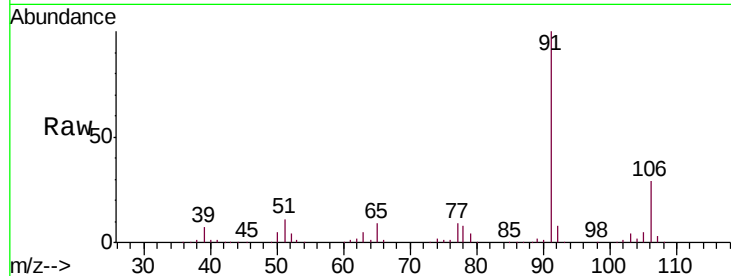
VSTD05042

Tgt Ion: 91 Resp: 347818

Ion Ratio Lower Upper

91 100

106 29.1 20.6 38.4



Abundance Ion 91.00 (90.70 to 91.70): VU027502.D (-2499) (-)

Ion 106.00 (105.70 to 106.70): VU027519.D (-2419) (-)

9.25

200000

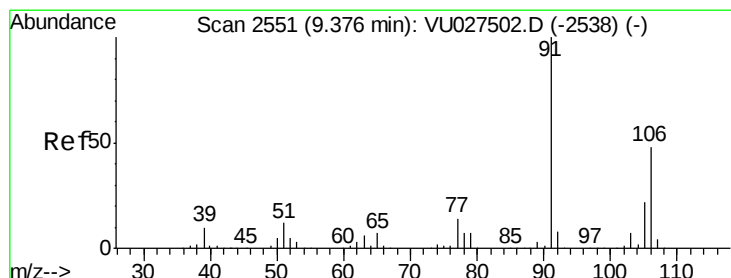
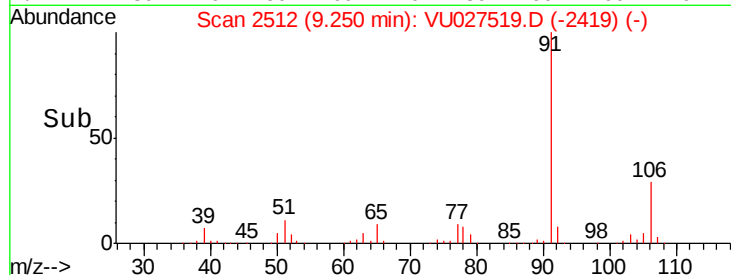
150000

100000

50000

0

Time-->



#53

m,p-Xylene

Concen: 52.216 ug/L

RT: 9.38 min Scan# 2551

Delta R.T. -0.00 min

Lab File: VU027519.D

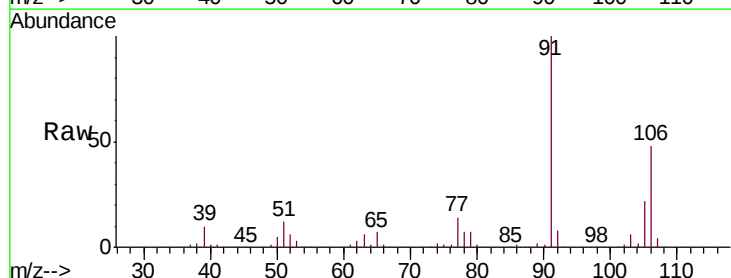
Acq: 08 Oct 2018 23:02

Tgt Ion: 106 Resp: 127413

Ion Ratio Lower Upper

106 100

91 209.5 145.0 269.4



Abundance Ion 106.00 (105.70 to 106.70): VU027502.D (-2538) (-)

Ion 91.00 (90.70 to 91.70): VU027519.D (-2458) (-)

9.38

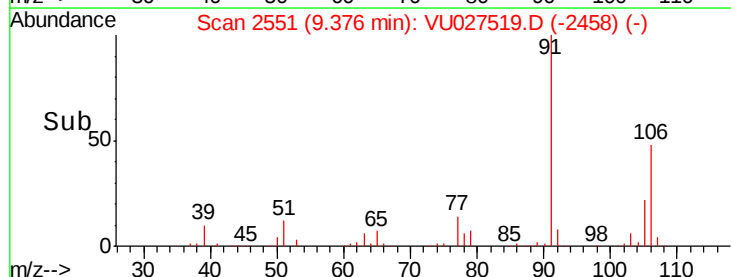
150000

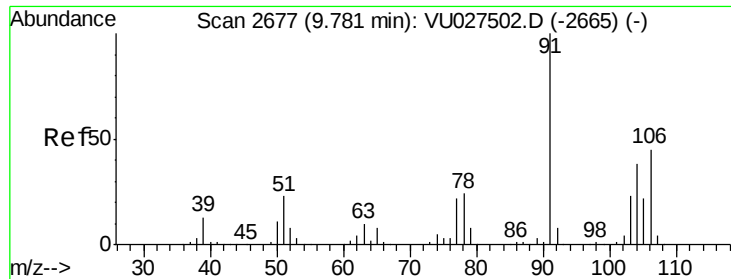
100000

50000

0

Time-->

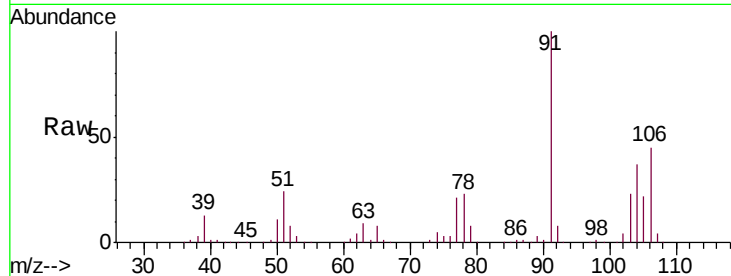




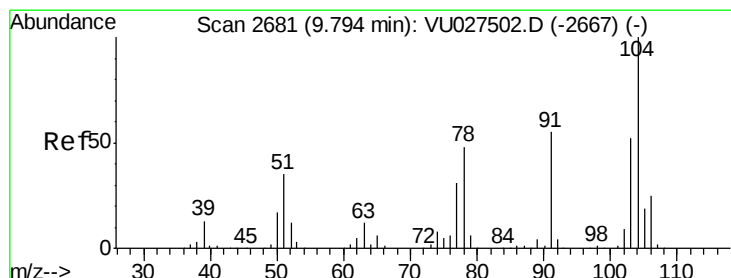
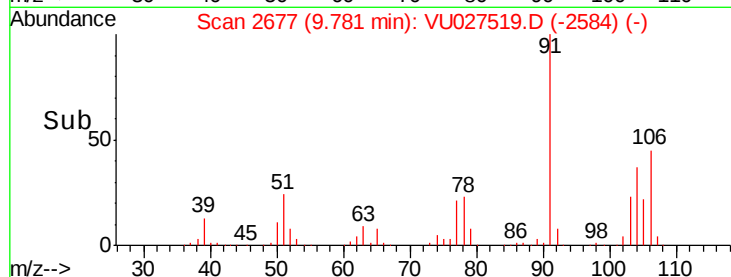
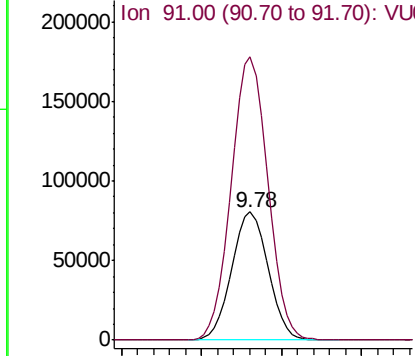
#54  
o-xylene  
Concen: 53.266 ug/L  
RT: 9.78 min Scan# 2677  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05042

Tgt Ion:106 Resp: 125214  
Ion Ratio Lower Upper  
106 100  
91 220.5 154.8 287.4

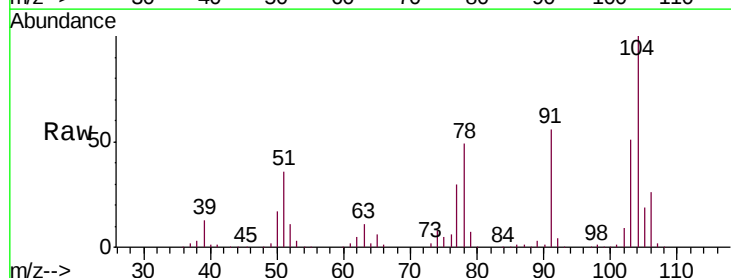


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VU0

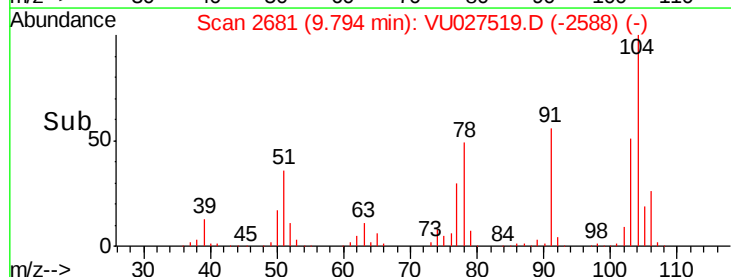
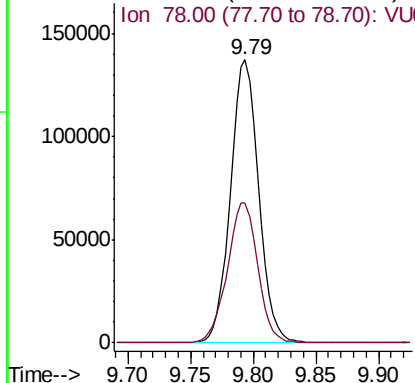


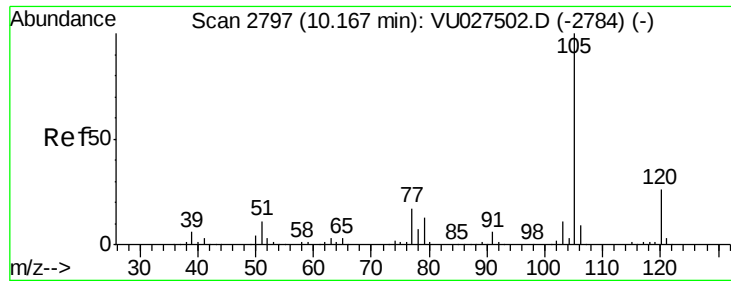
#55  
Styrene  
Concen: 53.278 ug/L  
RT: 9.79 min Scan# 2681  
Delta R.T. -0.00 min  
Lab File: VU027519.D  
Acq: 08 Oct 2018 23:02

Tgt Ion:104 Resp: 214472  
Ion Ratio Lower Upper  
104 100  
78 49.3 33.6 62.4



Abundance Ion 104.00 (103.70 to 104.70): V  
Ion 78.00 (77.70 to 78.70): VU0





#56

Isopropylbenzene

Concen: 52.860 ug/L

RT: 10.17 min Scan# 2797

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05042

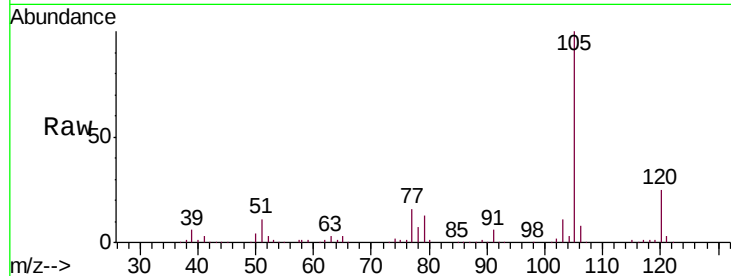
Tgt Ion: 105 Resp: 325647

Ion Ratio Lower Upper

105 100

120 25.1 20.6 30.8

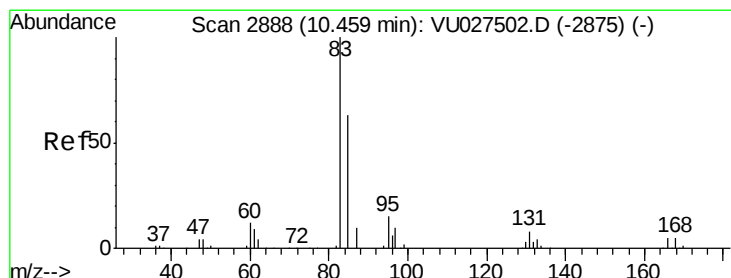
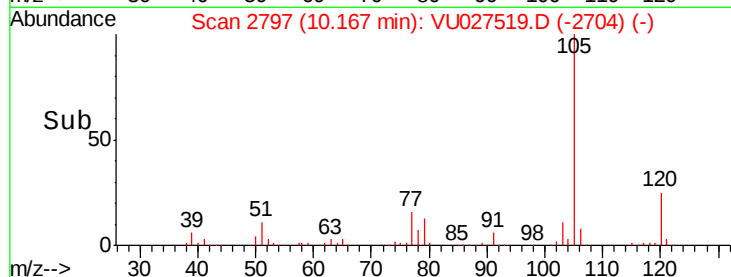
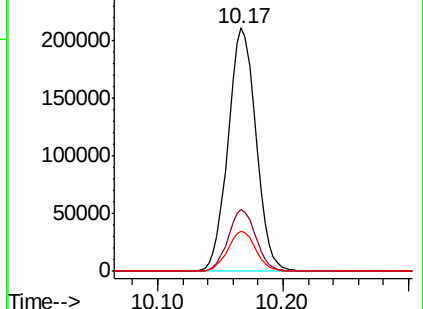
77 16.5 13.0 19.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 55.107 ug/L

RT: 10.46 min Scan# 2888

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

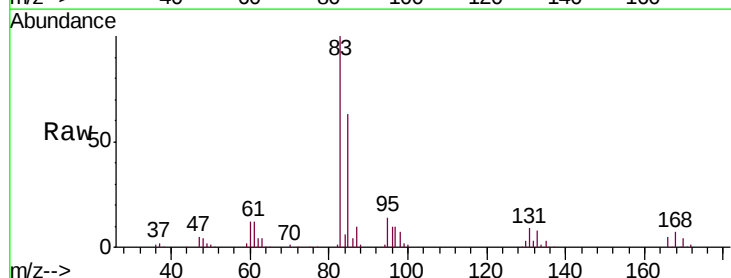
Tgt Ion: 83 Resp: 134377

Ion Ratio Lower Upper

83 100

85 63.3 45.2 84.0

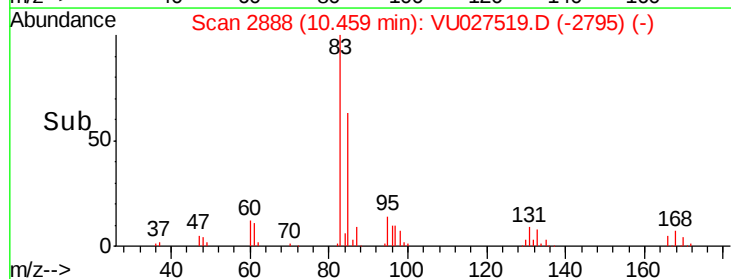
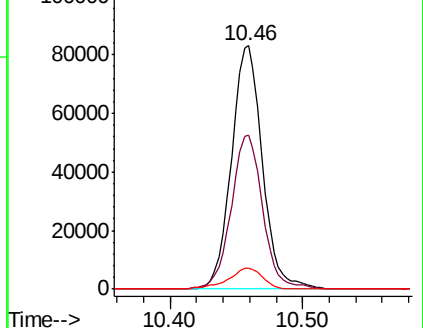
131 8.7 6.7 10.1

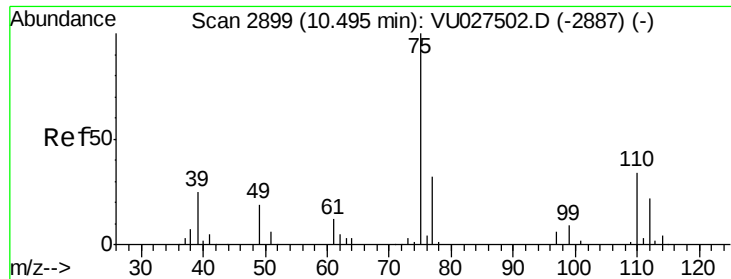


Abundance Ion 83.00 (82.70 to 83.70): V

Ion 85.00 (84.70 to 85.70): V

Ion 131.00 (130.70 to 131.70): V

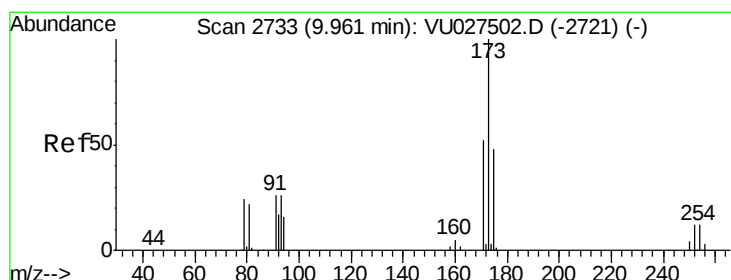
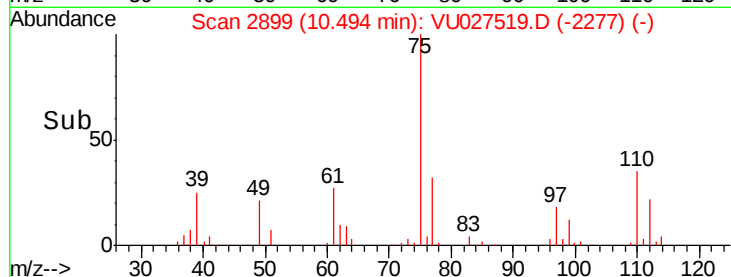
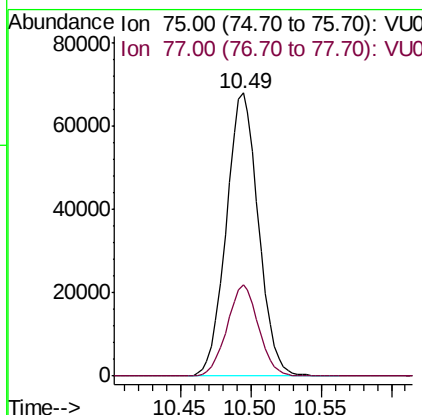
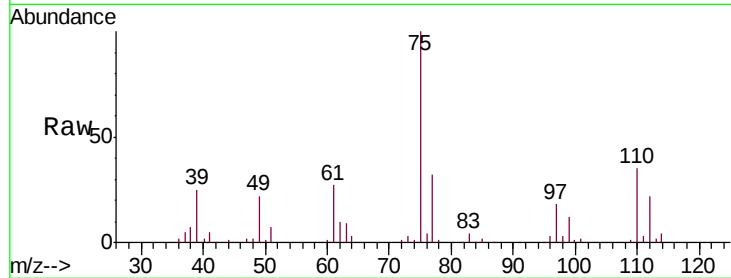




#59  
 1,2,3-Trichloropropane  
 Concen: 55.085 ug/L  
 RT: 10.49 min Scan# 2899  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

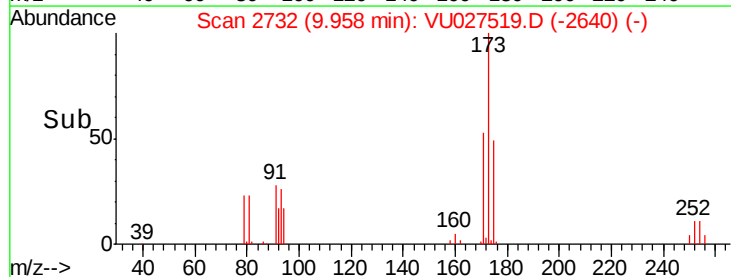
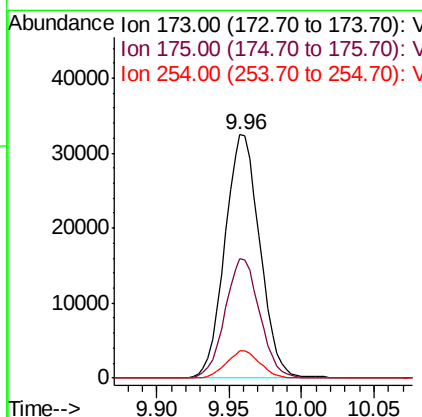
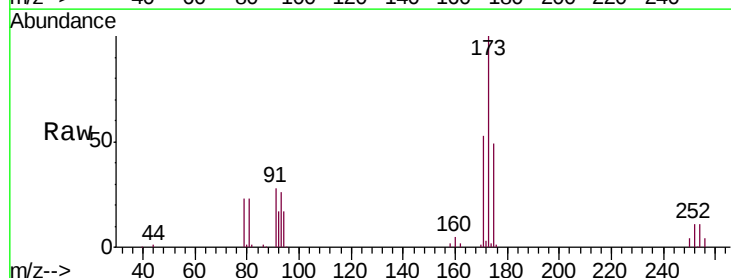
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05042

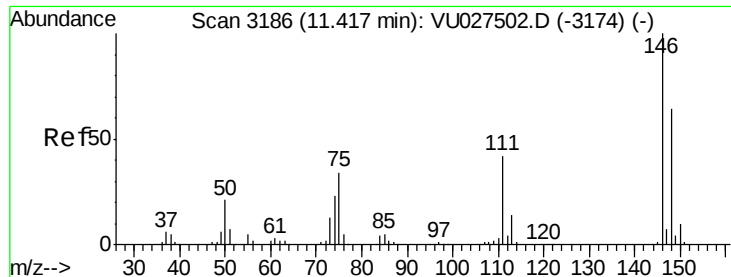
Tgt Ion: 75 Resp: 108124  
 Ion Ratio Lower Upper  
 75 100  
 77 31.7 25.7 38.5



#61  
 Bromoform  
 Concen: 55.054 ug/L  
 RT: 9.96 min Scan# 2732  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

Tgt Ion: 173 Resp: 54350  
 Ion Ratio Lower Upper  
 173 100  
 175 48.3 39.0 58.4  
 254 10.7 8.3 12.5





#62

1,3-Dichlorobenzene

Concen: 50.598 ug/L

RT: 11.42 min Scan# 3186

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05042

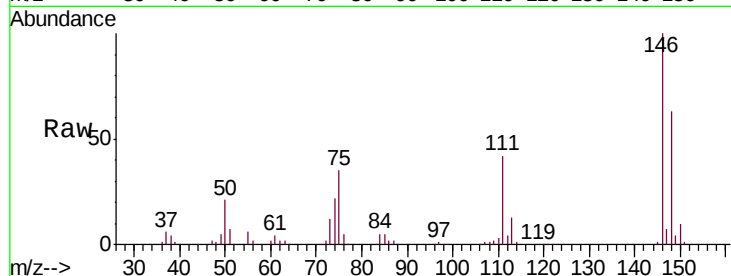
Tgt Ion:146 Resp: 136822

Ion Ratio Lower Upper

146 100

111 41.8 29.0 53.8

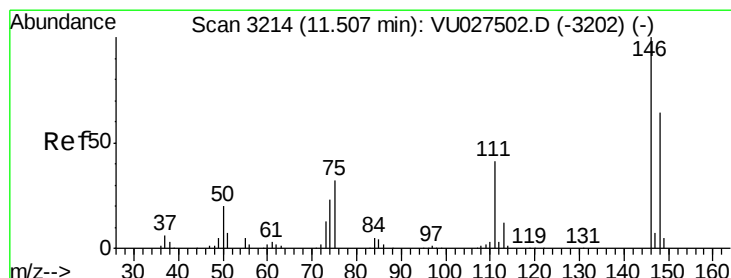
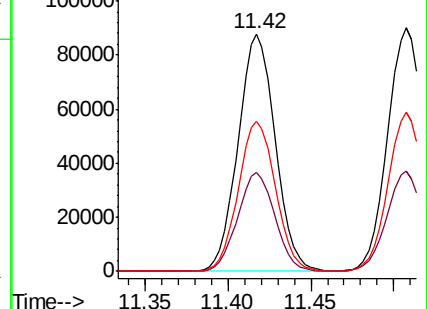
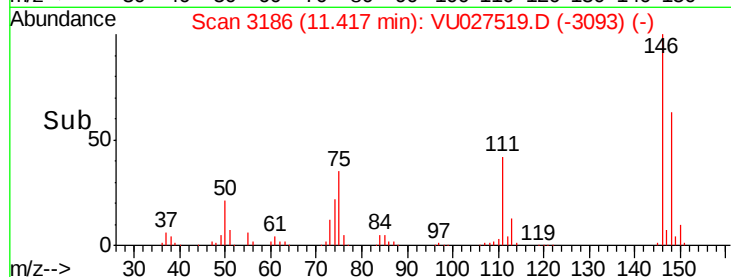
148 63.4 45.4 84.2



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 49.911 ug/L

RT: 11.51 min Scan# 3214

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

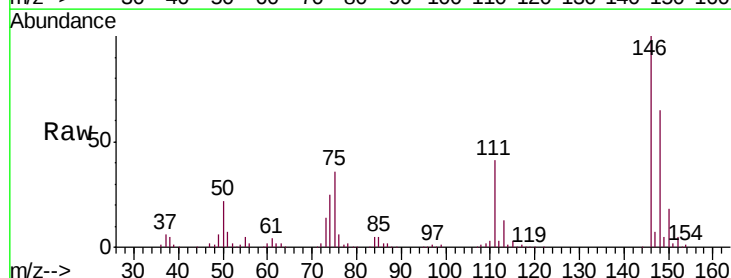
Tgt Ion:146 Resp: 140780

Ion Ratio Lower Upper

146 100

111 40.9 28.1 52.1

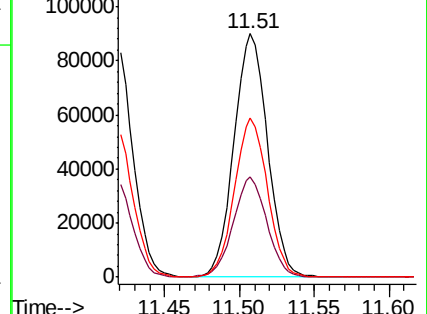
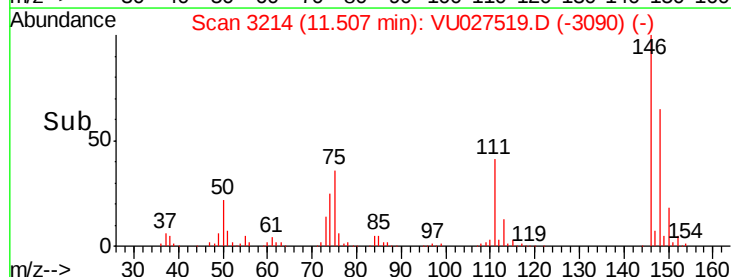
148 65.1 44.4 82.5

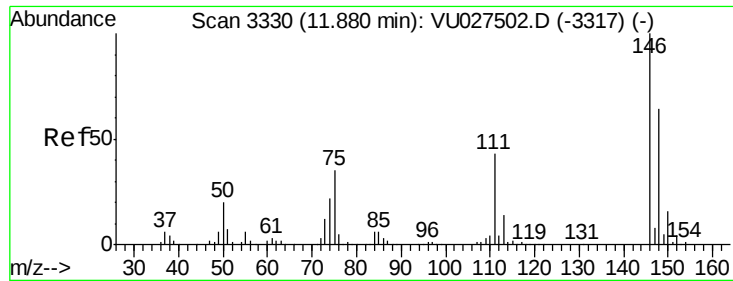


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 51.910 ug/L

RT: 11.88 min Scan# 3330

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05042

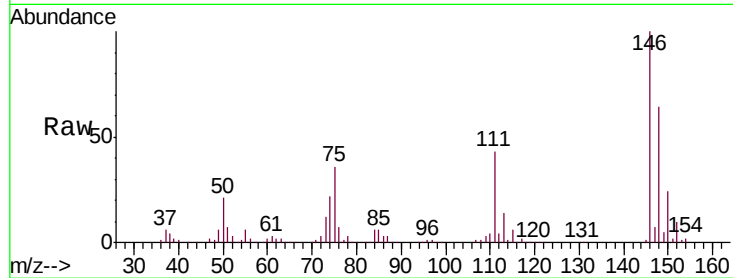
Tgt Ion:146 Resp: 142893

Ion Ratio Lower Upper

146 100

111 43.5 34.9 52.3

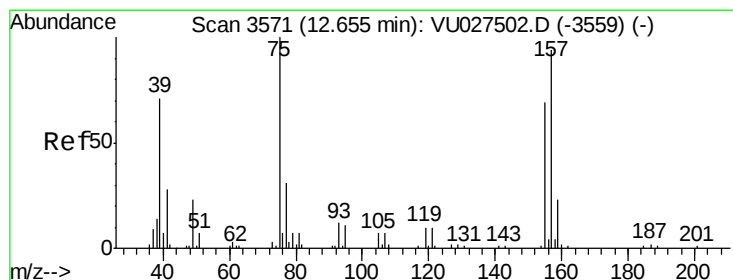
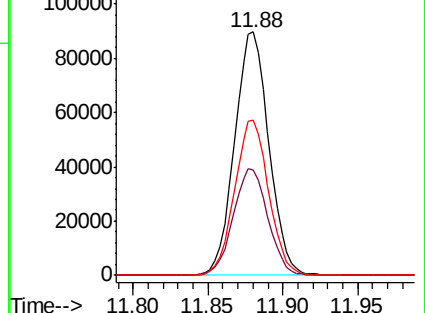
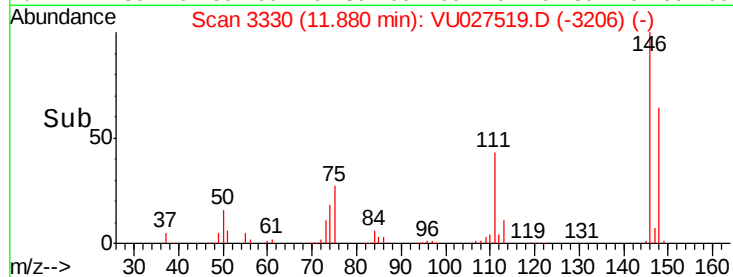
148 63.7 51.6 77.4



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 57.595 ug/L

RT: 12.66 min Scan# 3571

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

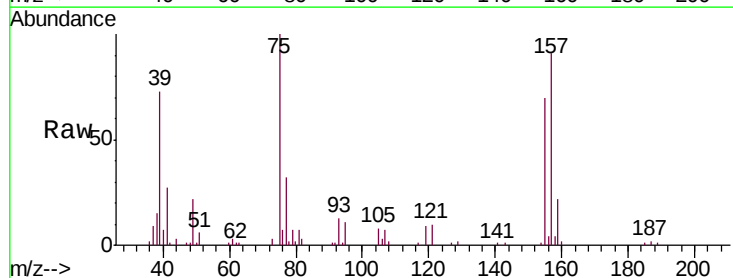
Tgt Ion: 75 Resp: 29390

Ion Ratio Lower Upper

75 100

155 70.1 61.0 91.6

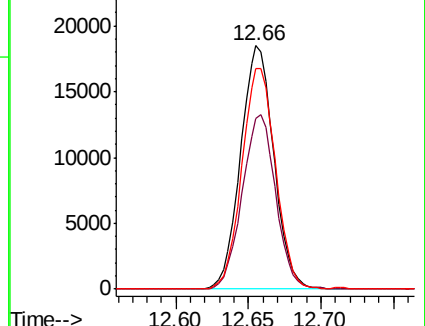
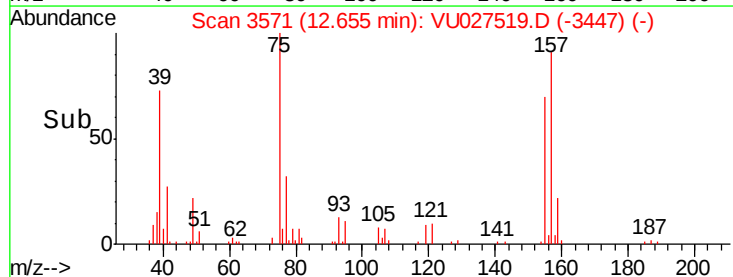
157 90.8 77.8 116.8

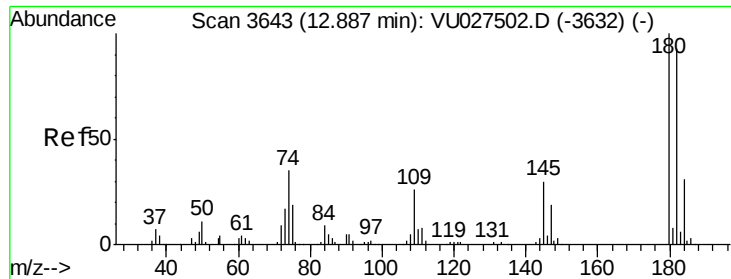


Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

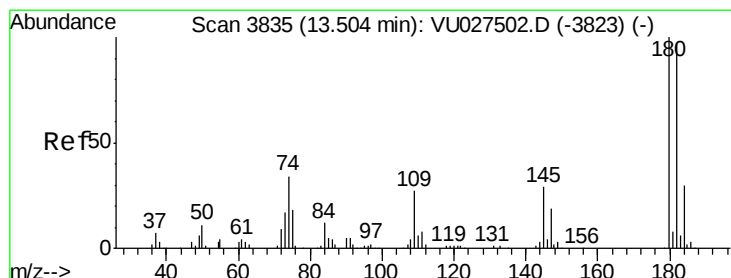
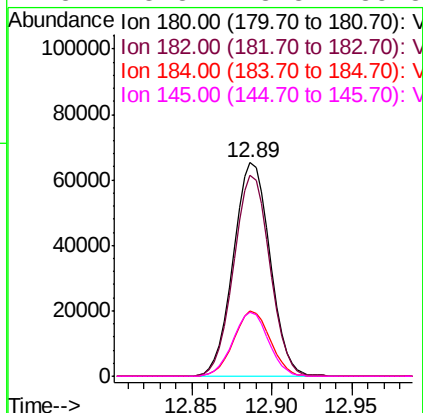
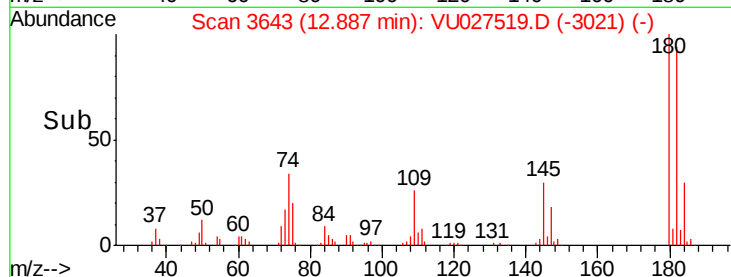
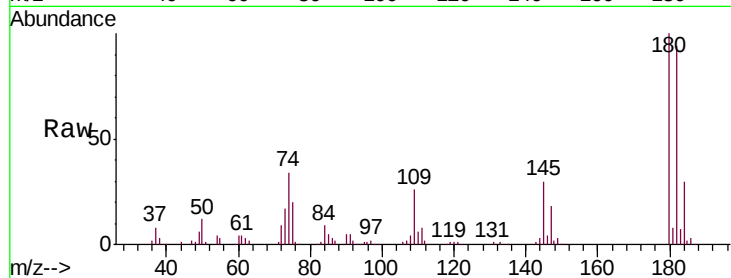




#67  
 1,3,5-Trichlorobenzene  
 Concen: 48.667 ug/L  
 RT: 12.89 min Scan# 3643  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

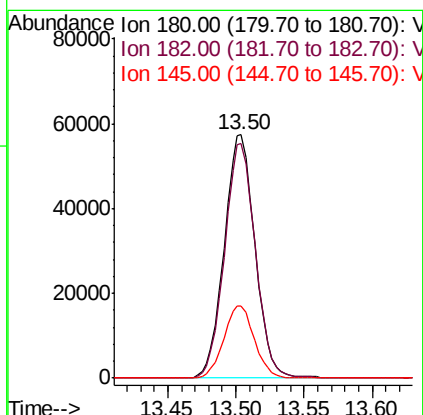
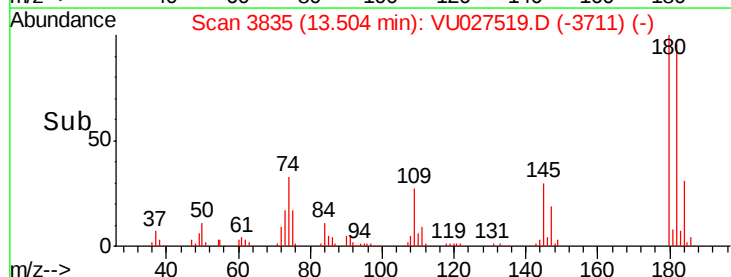
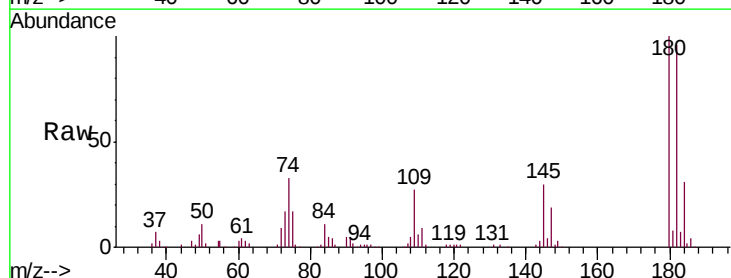
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05042

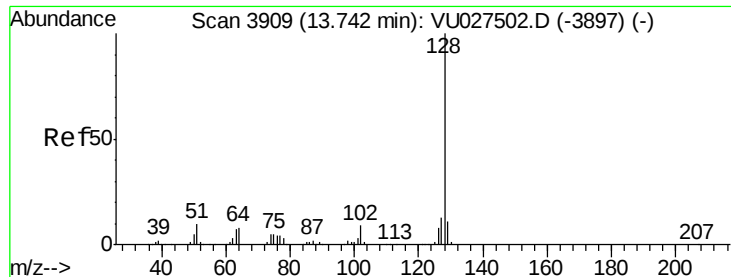
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 101675 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 93.0  | 76.7  | 115.1  |
| 184      | 30.2  | 24.5  | 36.7   |
| 145      | 28.8  | 23.8  | 35.8   |



#68  
 1,2,4-trichlorobenzene  
 Concen: 46.875 ug/L  
 RT: 13.50 min Scan# 3835  
 Delta R.T. -0.00 min  
 Lab File: VU027519.D  
 Acq: 08 Oct 2018 23:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 90060 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 95.9  | 76.3  | 114.5 |
| 145      | 29.6  | 24.2  | 36.2  |





#69

Naphthalene

Concen: 54.776 ug/L

RT: 13.74 min Scan# 3909

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05042

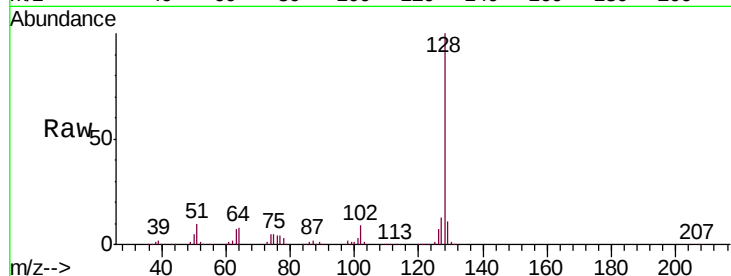
Tgt Ion:128 Resp: 324509

Ion Ratio Lower Upper

128 100

127 13.1 10.4 15.6

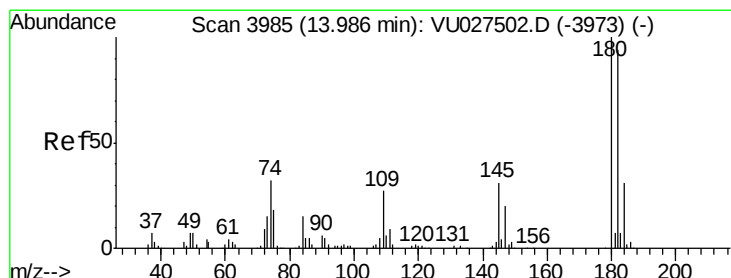
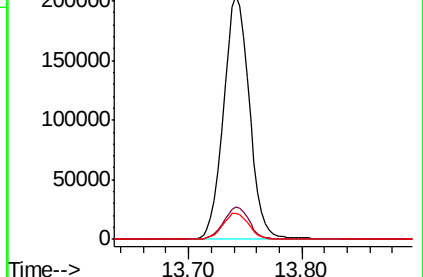
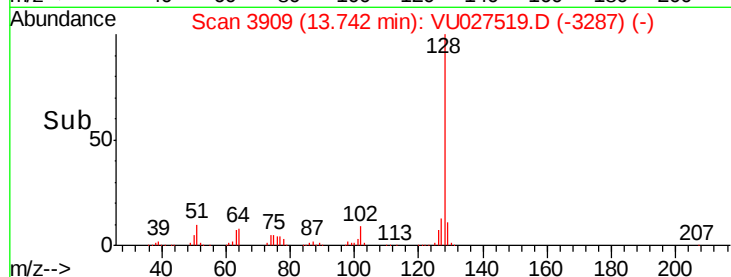
129 10.9 8.6 12.8



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



#70

1,2,3-Trichlorobenzene

Concen: 49.378 ug/L

RT: 13.99 min Scan# 3985

Delta R.T. -0.00 min

Lab File: VU027519.D

Acq: 08 Oct 2018 23:02

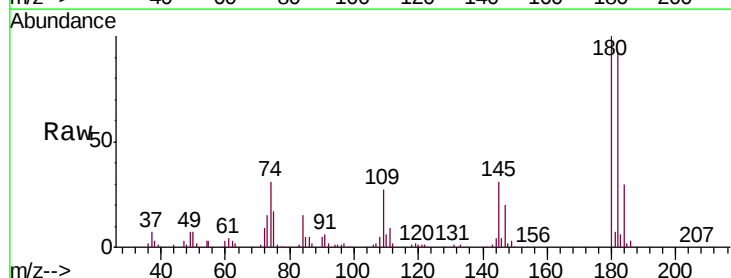
Tgt Ion:180 Resp: 96473

Ion Ratio Lower Upper

180 100

182 94.7 77.4 116.0

145 32.1 25.5 38.3



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

