

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV070920\  
 Data File : VV017413.D  
 Acq On : 09 Jul 2020 21:04  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

Quant Time: Jul 10 04:04:15 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM070820WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Jul 10 04:00:27 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 279885   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 271987   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 147033   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 66120    | 45.38    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 90.76%  |
| 7) Chloroethane-d5             | 1.58    | 69    | 48081    | 46.97    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 93.94%  |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 155784   | 47.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 94.44%  |
| 21) 2-Butanone-d5              | 3.91    | 46    | 100432   | 100.91   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 100.91% |
| 24) Chloroform-d               | 4.38    | 84    | 162472   | 48.21    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.42%  |
| 26) 1,2-Dichloroethane-d4      | 5.06    | 65    | 111974   | 48.40    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.80%  |
| 32) Benzene-d6                 | 5.08    | 84    | 276883   | 47.13    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 94.26%  |
| 36) 1,2-Dichloropropane-d6     | 6.09    | 67    | 81286    | 48.04    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 96.08%  |
| 41) Toluene-d8                 | 7.34    | 98    | 266485   | 47.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 94.36%  |
| 43) trans-1,3-Dichloropropene- | 7.64    | 79    | 47477    | 48.21    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 96.42%  |
| 47) 2-Hexanone-d5              | 8.11    | 63    | 72644    | 104.62   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 104.62% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.24   | 84    | 113193   | 47.65    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 95.30%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 118446   | 48.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 96.36%  |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 138762 | 46.168 | ug/L 100 |
| 3) Chloromethane               | 1.25 | 50  | 97036  | 45.857 | ug/L 96  |
| 5) Vinyl chloride              | 1.32 | 62  | 101914 | 47.651 | ug/L 94  |
| 6) Bromomethane                | 1.53 | 94  | 54344  | 50.058 | ug/L 96  |
| 8) Chloroethane                | 1.60 | 64  | 52624  | 47.420 | ug/L 98  |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 190569 | 47.594 | ug/L 99  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 87110  | 46.868 | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 80134  | 47.668 | ug/L 83  |
| 13) Acetone                    | 2.19 | 43  | 84920  | 62.684 | ug/L 100 |
| 14) Carbon disulfide           | 2.31 | 76  | 228601 | 44.679 | ug/L 100 |
| 15) Methyl Acetate             | 2.45 | 43  | 84924  | 47.226 | ug/L 99  |
| 16) Methylene chloride         | 2.52 | 84  | 88651  | 45.295 | ug/L 99  |
| 17) trans-1,2-Dichloroethene   | 2.78 | 96  | 85600  | 46.824 | ug/L 96  |
| 18) Methyl tert-butyl Ether    | 2.78 | 73  | 298540 | 48.950 | ug/L 100 |
| 19) 1,1-Dichloroethane         | 3.21 | 63  | 157503 | 46.855 | ug/L 99  |
| 20) cis-1,2-Dichloroethene     | 3.94 | 96  | 94033  | 48.006 | ug/L 97  |
| 22) 2-Butanone                 | 3.99 | 43  | 114593 | 86.535 | ug/L 97  |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

Quant Time: Jul 10 04:04:15 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM070820WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Jul 10 04:00:27 2020  
 Response via : Initial Calibration

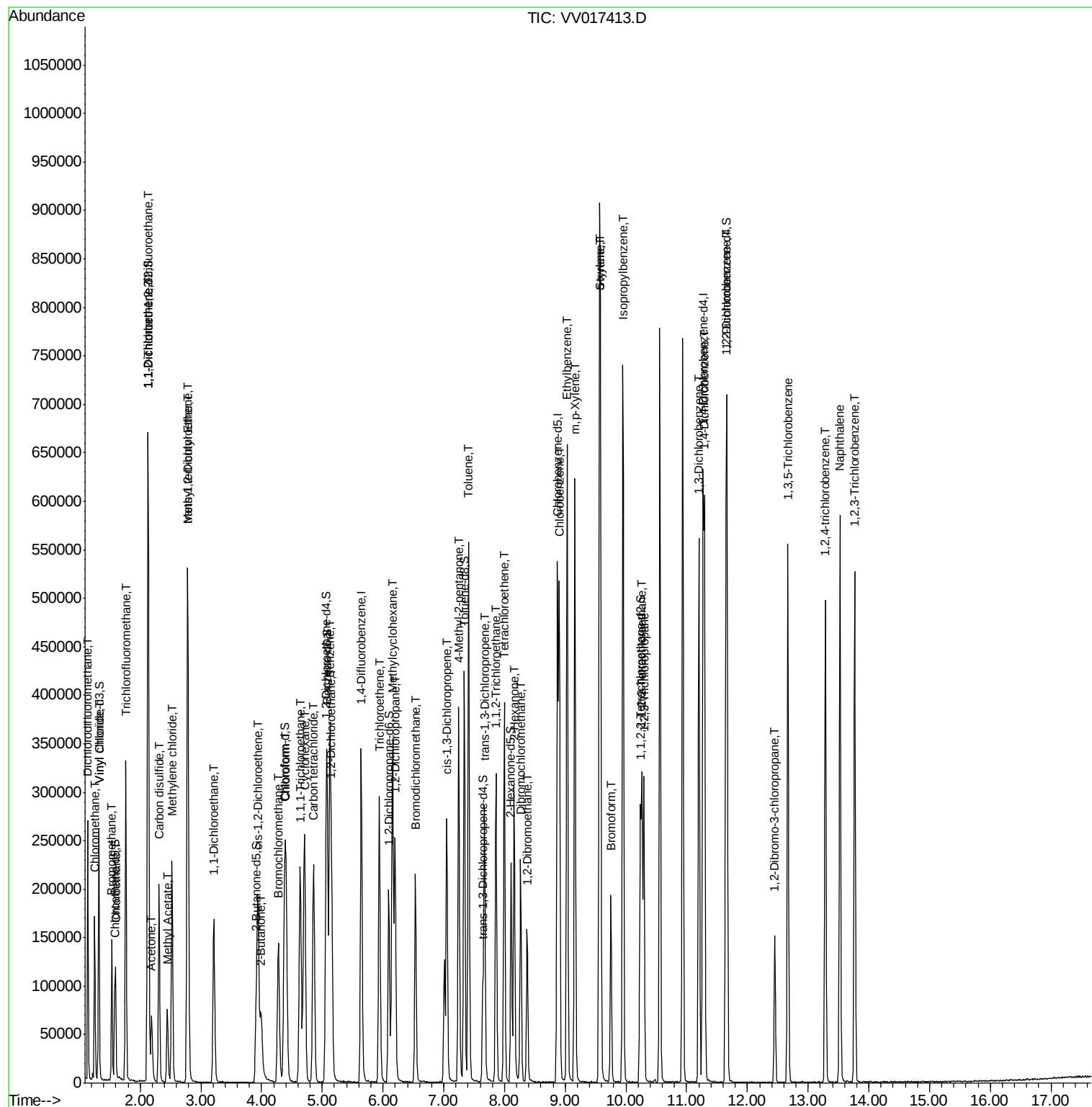
| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.27  | 128  | 51334    | 47.100 | ug/L  | 95       |
| 25) Chloroform                  | 4.40  | 83   | 183146   | 48.540 | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.15  | 62   | 159739   | 48.165 | ug/L  | 99       |
| 29) Cyclohexane                 | 4.71  | 56   | 132949   | 46.873 | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane       | 4.64  | 97   | 178865   | 47.822 | ug/L  | 99       |
| 31) Carbon tetrachloride        | 4.86  | 117  | 165653   | 48.388 | ug/L  | 99       |
| 33) Benzene                     | 5.13  | 78   | 340761   | 47.396 | ug/L  | 100      |
| 34) Trichloroethene             | 5.94  | 95   | 97319    | 45.592 | ug/L  | 98       |
| 35) Methylcyclohexane           | 6.16  | 83   | 144677   | 46.285 | ug/L  | 100      |
| 37) 1,2-Dichloropropane         | 6.20  | 63   | 80192    | 45.603 | ug/L  | 99       |
| 38) Bromodichloromethane        | 6.53  | 83   | 135197   | 47.216 | ug/L  | 98       |
| 39) cis-1,3-Dichloropropene     | 7.05  | 75   | 145744   | 48.634 | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone        | 7.24  | 43   | 234977   | 96.637 | ug/L  | 99       |
| 42) Toluene                     | 7.41  | 91   | 382464   | 47.594 | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.67  | 75   | 148282   | 47.840 | ug/L  | 94       |
| 45) 1,1,2-Trichloroethane       | 7.86  | 97   | 91396    | 47.902 | ug/L  | 92       |
| 46) Tetrachloroethene           | 8.00  | 164  | 83865    | 46.791 | ug/L  | 96       |
| 48) 2-Hexanone                  | 8.16  | 43   | 180737   | 91.819 | ug/L  | 98       |
| 49) Dibromochloromethane        | 8.27  | 129  | 114663   | 48.174 | ug/L  | 99       |
| 50) 1,2-Dibromoethane           | 8.37  | 107  | 98055    | 48.015 | ug/L  | 96       |
| 51) Chlorobenzene               | 8.90  | 112  | 253416   | 46.537 | ug/L  | 100      |
| 52) Ethylbenzene                | 9.03  | 91   | 436346   | 47.472 | ug/L  | 100      |
| 53) m,p-Xylene                  | 9.16  | 106  | 165788   | 48.177 | ug/L  | 99       |
| 54) o-xylene                    | 9.57  | 106  | 162341   | 49.114 | ug/L  | 96       |
| 55) Styrene                     | 9.58  | 104  | 283687   | 49.410 | ug/L  | 100      |
| 56) Isopropylbenzene            | 9.95  | 105  | 456119   | 49.601 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.26 | 83   | 131656   | 46.989 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.30 | 75   | 114634   | 47.043 | ug/L  | 99       |
| 61) Bromoform                   | 9.75  | 173  | 85152    | 48.147 | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene         | 11.20 | 146  | 215877   | 47.053 | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.30 | 146  | 216848   | 46.569 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 11.67 | 146  | 220464   | 48.204 | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.45 | 75   | 35896    | 48.233 | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene      | 12.67 | 180  | 163312   | 47.254 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.28 | 180  | 145632   | 48.053 | ug/L  | 99       |
| 69) Naphthalene                 | 13.52 | 128  | 436245   | 51.545 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.77 | 180  | 152575   | 49.494 | ug/L  | 98       |

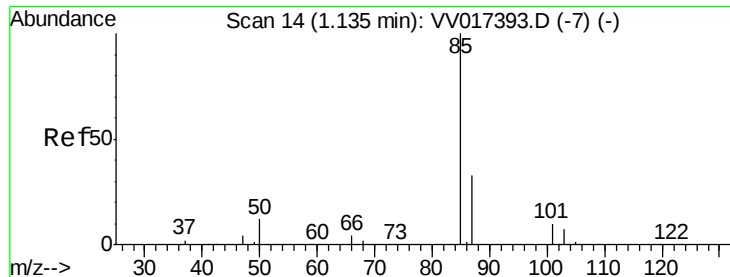
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV070920\  
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Acq On : 09 Jul 2020 21:04  
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Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05078

Quant Time: Jul 10 04:04:15 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM070820WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Jul 10 04:00:27 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 46.168 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

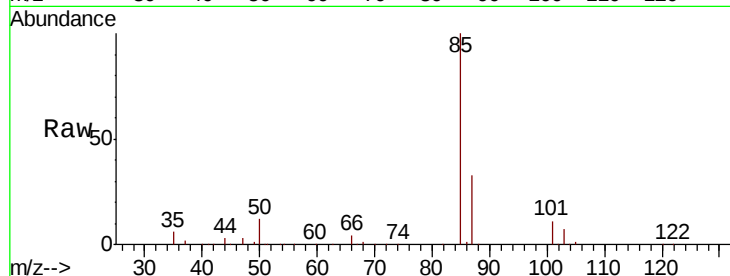
VSTD05078

Tot Ion: 85 Resp: 138762

Ion Ratio Lower Upper

85 100

87 32.6 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0

1.14

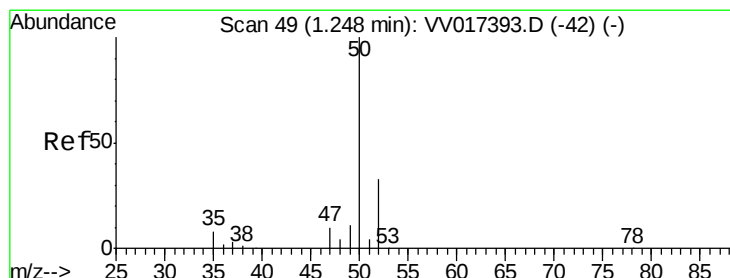
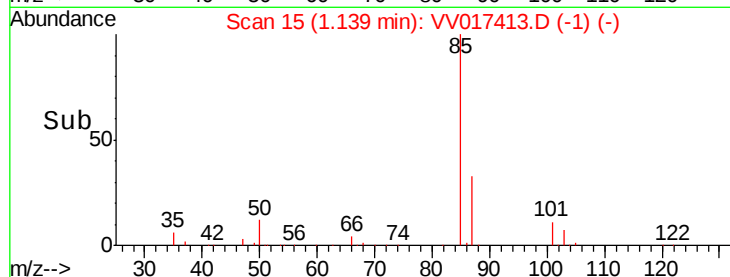
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: 45.857 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV017413.D

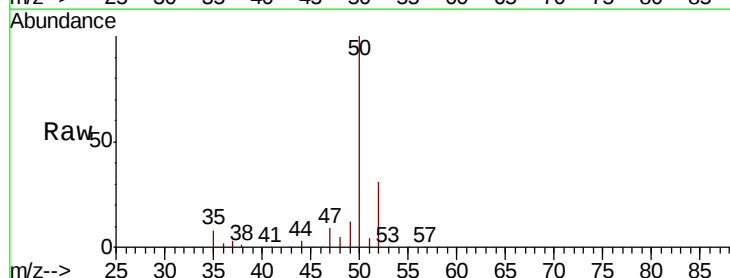
Acq: 09 Jul 2020 21:04

Tgt Ion: 50 Resp: 97036

Ion Ratio Lower Upper

50 100

52 31.2 23.4 43.6



Abundance Ion 50.00 (49.70 to 50.70): VV0

Ion 52.00 (51.70 to 52.70): VV0

1.25

100000

80000

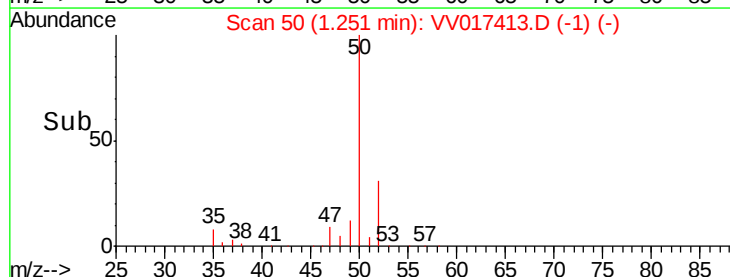
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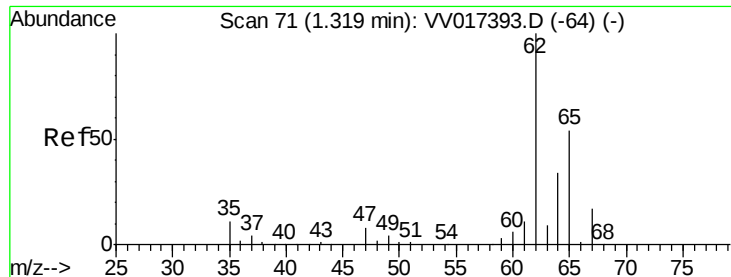
40000

20000

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Time-->





#5

Vinyl chloride

Concen: 47.651 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

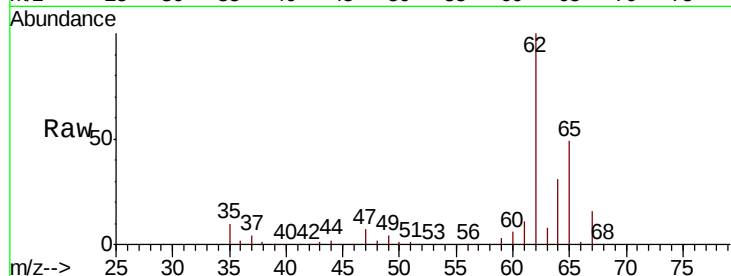
VSTD05078

Tot Ion: 62 Resp: 101914

Ion Ratio Lower Upper

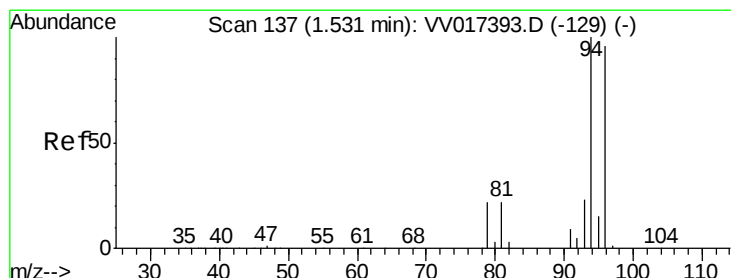
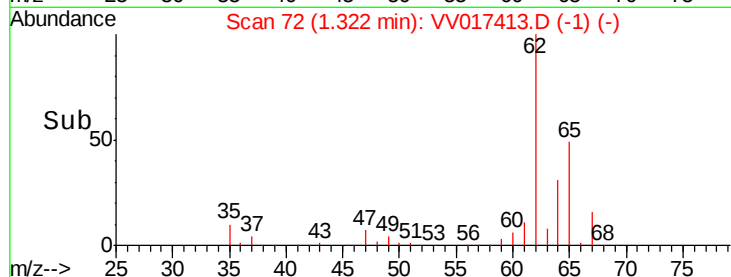
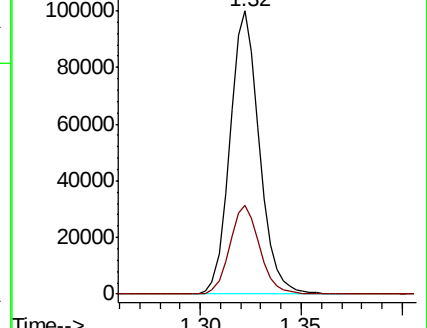
62 100

64 31.2 24.1 44.7



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0



#6

Bromomethane

Concen: 50.058 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV017413.D

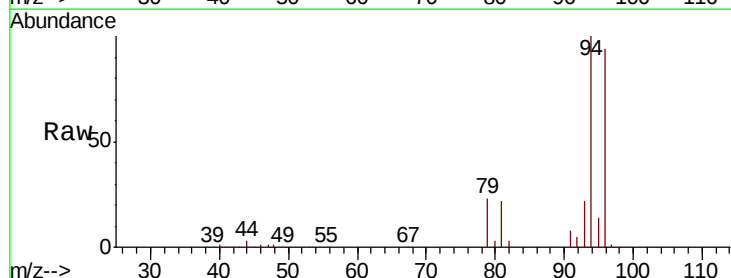
Acq: 09 Jul 2020 21:04

Tgt Ion: 94 Resp: 54344

Ion Ratio Lower Upper

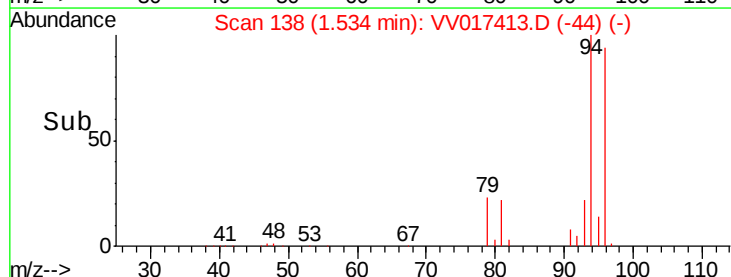
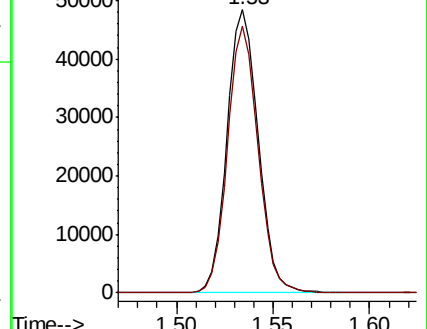
94 100

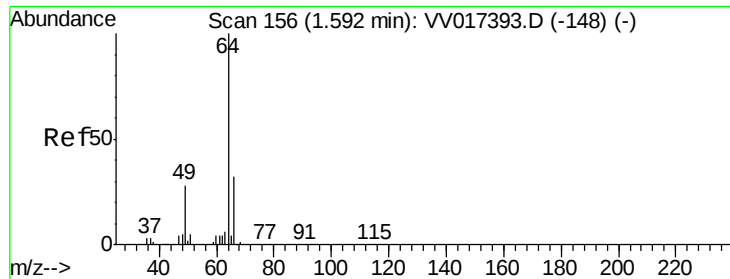
96 94.1 69.0 128.1



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0

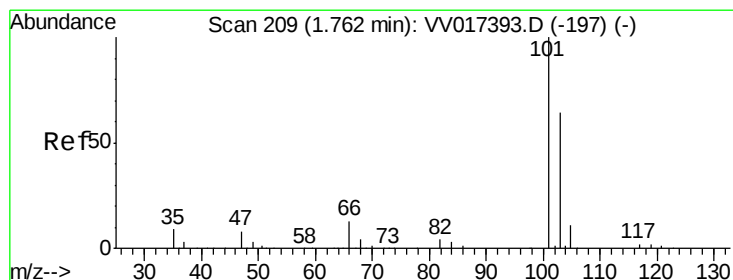
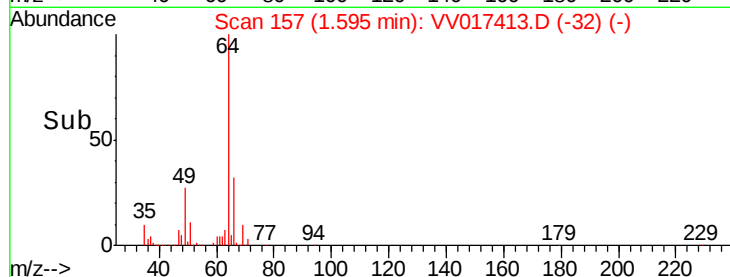
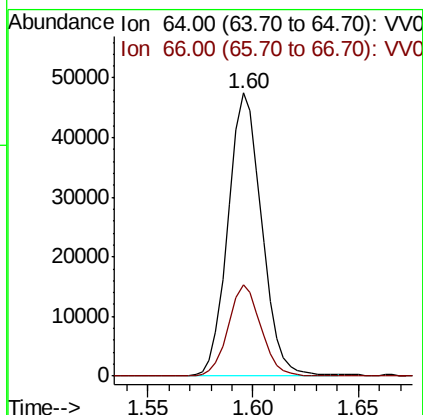
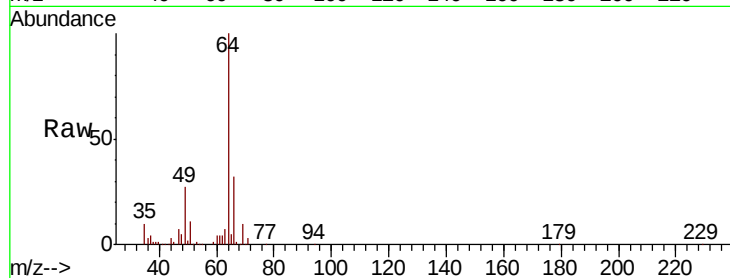




#8  
Chloroethane  
Concen: 47.420 ug/L  
RT: 1.60 min Scan# 157  
Delta R.T. 0.00 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

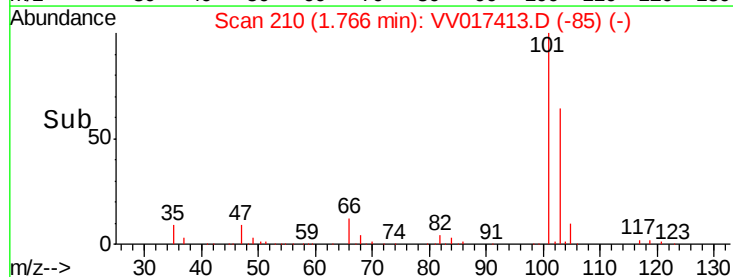
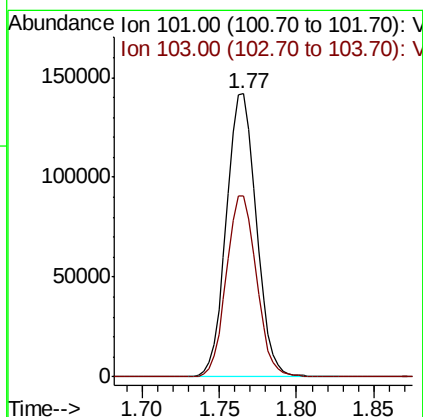
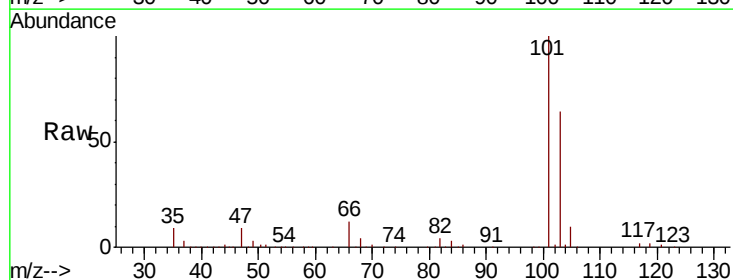
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05078

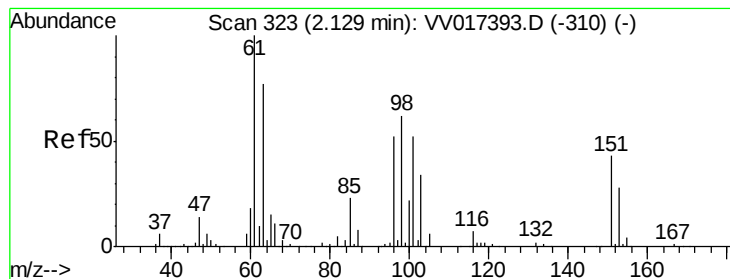
Tot Ion: 64 Resp: 52624  
Ion Ratio Lower Upper  
64 100  
66 32.2 21.8 40.4



#9  
Trichlorofluoromethane  
Concen: 47.594 ug/L  
RT: 1.77 min Scan# 210  
Delta R.T. 0.00 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

Tgt Ion: 101 Resp: 190569  
Ion Ratio Lower Upper  
101 100  
103 64.1 51.9 77.9





#10

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

Concen: 46.868 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.01 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

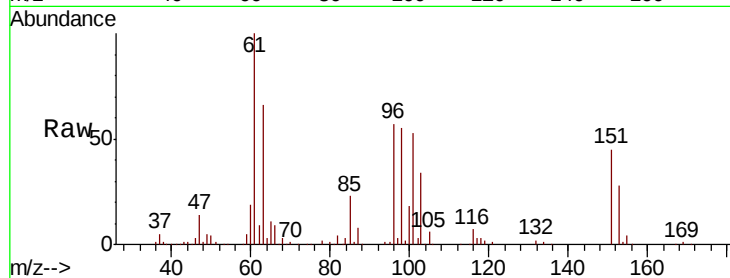
Tot Ion:101 Resp: 87110

Ion Ratio Lower Upper

101 100

85 44.1 36.2 54.4

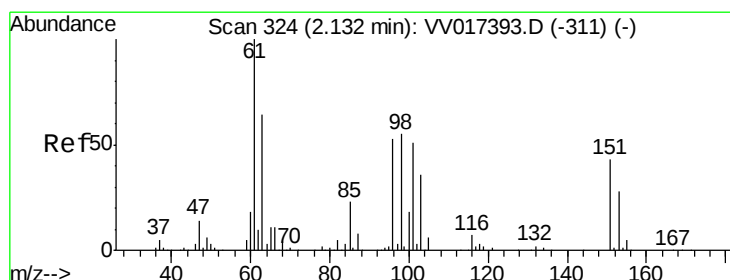
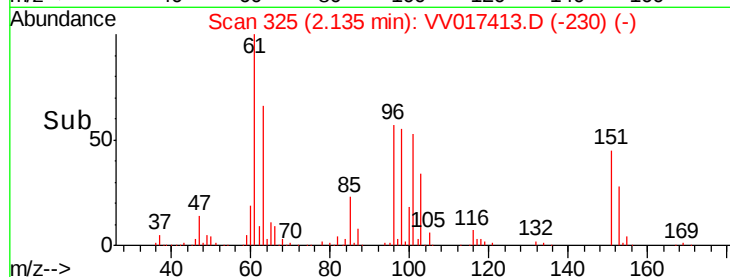
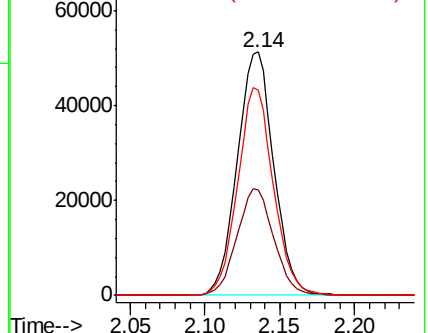
151 83.3 66.8 100.2



Abundance Ion 101.00 (100.70 to 101.70): VV017413.D (-230) (-)

Ion 85.00 (84.70 to 85.70): VV017413.D (-230) (-)

Ion 151.00 (150.70 to 151.70): VV017413.D (-230) (-)



#12

1,1-Dichloroethene

Concen: 47.668 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

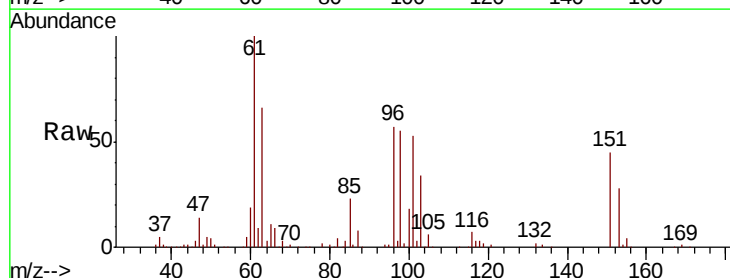
Tgt Ion: 96 Resp: 80134

Ion Ratio Lower Upper

96 100

61 174.1 132.7 246.4

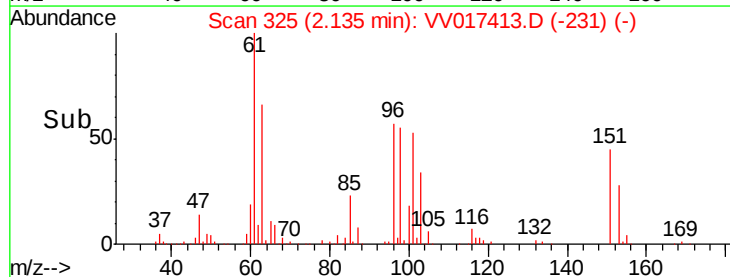
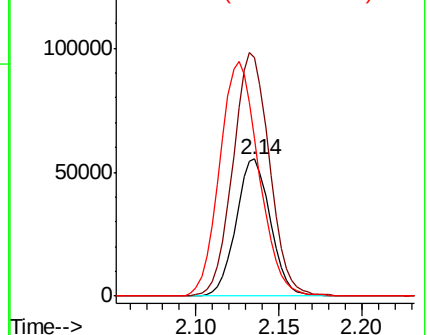
63 115.4 103.3 191.8

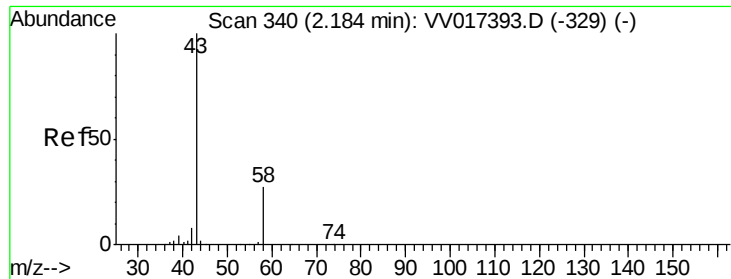


Abundance Ion 96.00 (95.70 to 96.70): VV017413.D (-231) (-)

Ion 61.00 (60.70 to 61.70): VV017413.D (-231) (-)

Ion 63.00 (62.70 to 63.70): VV017413.D (-231) (-)





#13

Acetone

Concen: 62.684 ug/L

RT: 2.19 min Scan# 341

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

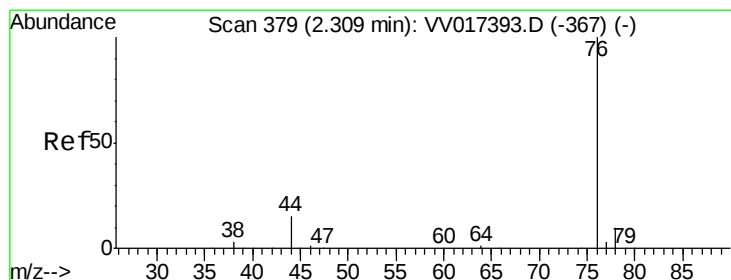
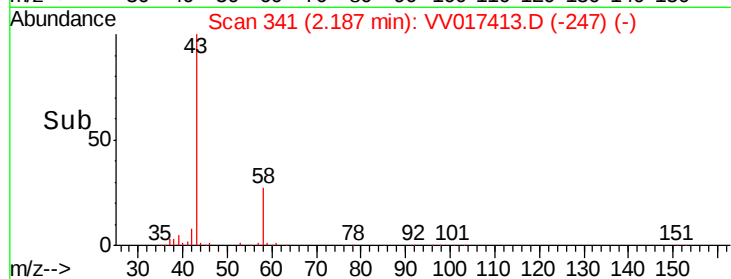
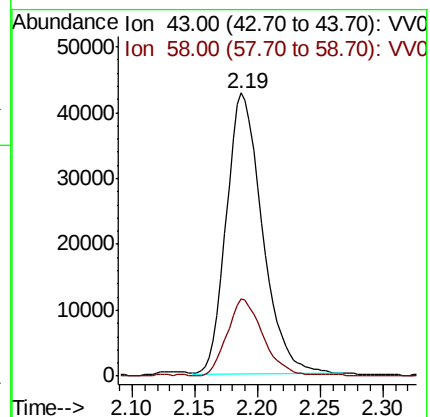
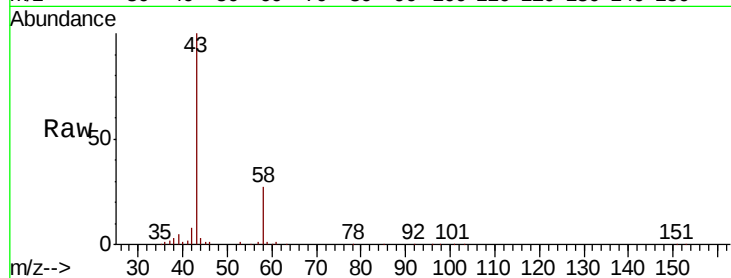
VSTD05078

Tot Ion: 43 Resp: 84920

Ion Ratio Lower Upper

43 100

58 27.8 0.0 56.0



#14

Carbon disulfide

Concen: 44.679 ug/L

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VV017413.D

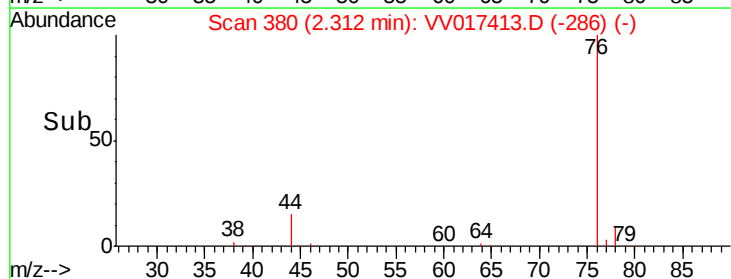
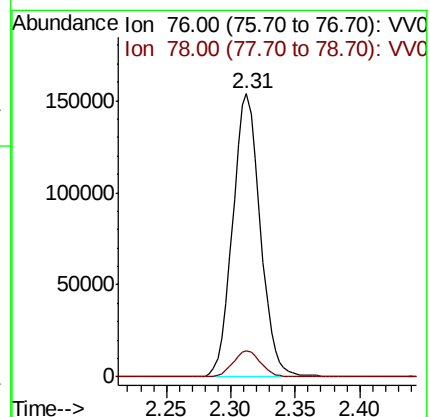
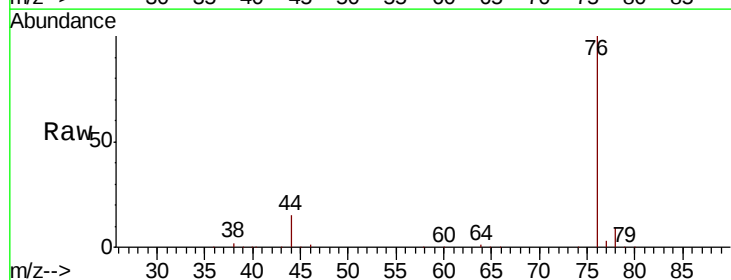
Acq: 09 Jul 2020 21:04

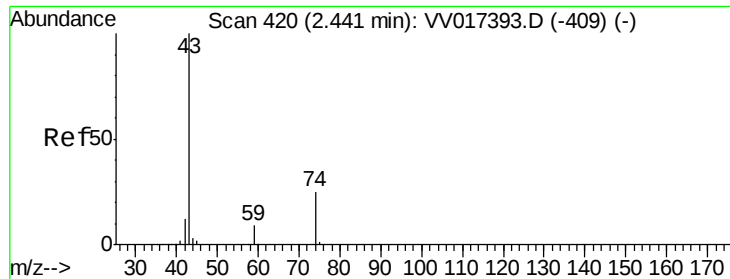
Tgt Ion: 76 Resp: 228601

Ion Ratio Lower Upper

76 100

78 9.4 7.4 11.2

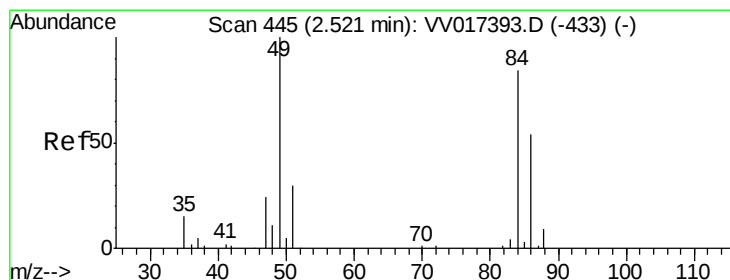
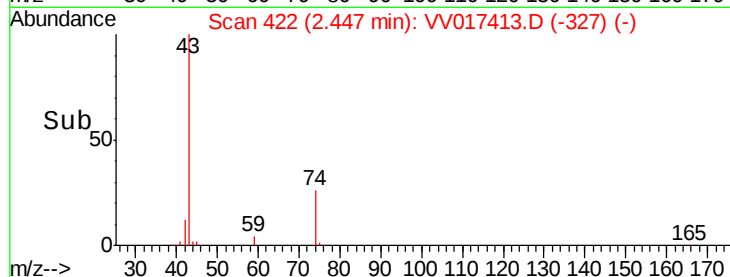
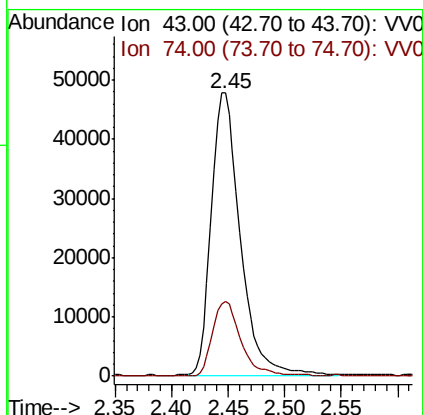
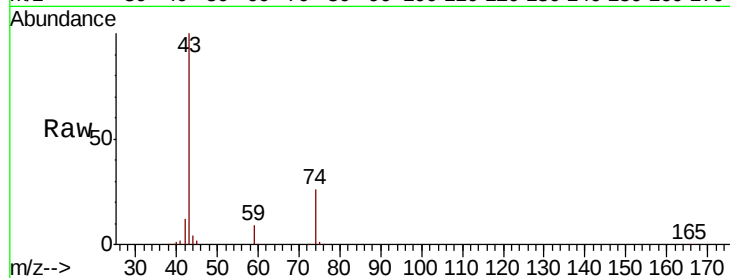




#15  
Methvl Acetate  
Concen: 47.226 ug/L  
RT: 2.45 min Scan# 422  
Delta R.T. 0.01 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

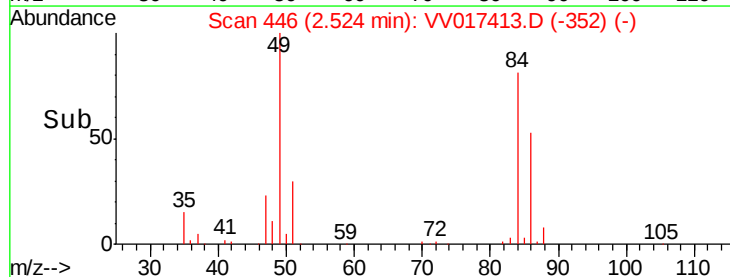
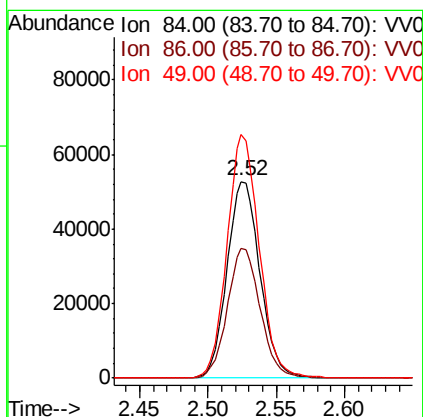
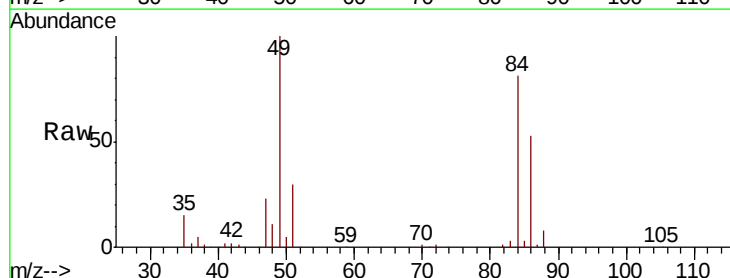
Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD05078

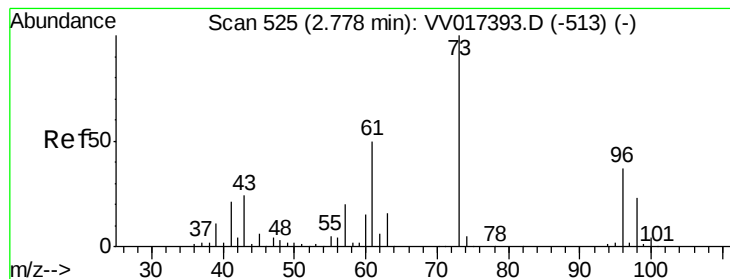
Tot Ion: 43 Resp: 84924  
Ion Ratio Lower Upper  
43 100  
74 26.0 20.2 30.4



#16  
Methylene chloride  
Concen: 45.295 ug/L  
RT: 2.52 min Scan# 446  
Delta R.T. 0.00 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

Tgt Ion: 84 Resp: 88651  
Ion Ratio Lower Upper  
84 100  
86 66.0 46.5 86.5  
49 123.7 85.3 158.5





#17

trans-1,2-Dichloroethene

Concen: 46.824 ug/L

RT: 2.78 min Scan# 526

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

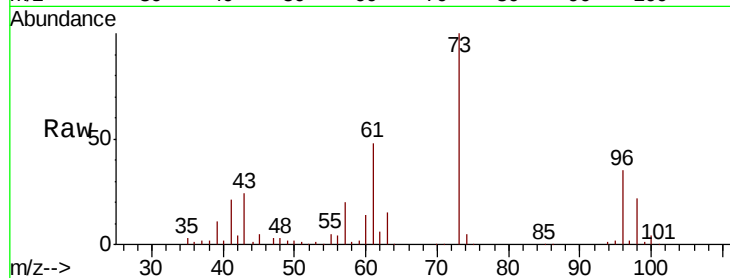
Tot Ion: 96 Resp: 85600

Ion Ratio Lower Upper

96 100

61 136.5 99.0 184.0

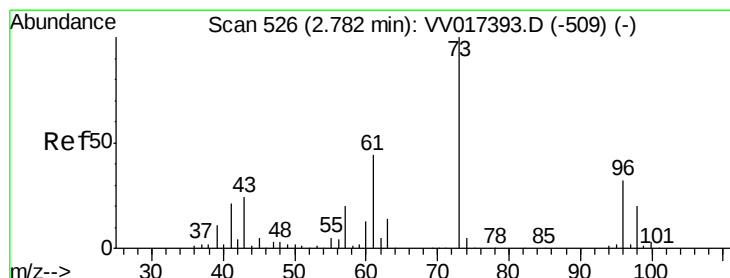
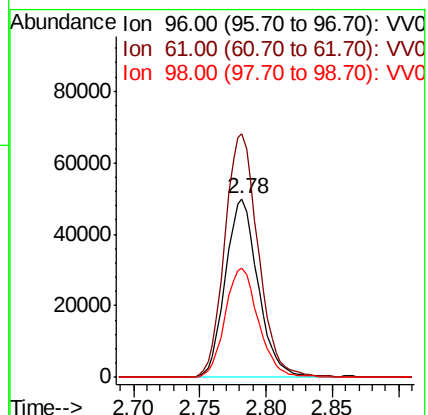
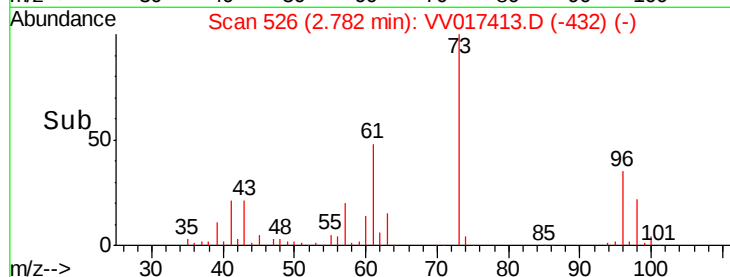
98 61.2 44.4 82.5



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 98.00 (97.70 to 98.70): VV0



#18

Methyl tert-butyl Ether

Concen: 48.950 ug/L

RT: 2.78 min Scan# 527

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

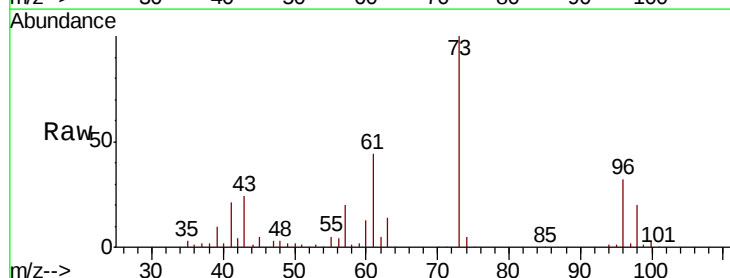
Tgt Ion: 73 Resp: 298540

Ion Ratio Lower Upper

73 100

43 23.0 18.2 27.2

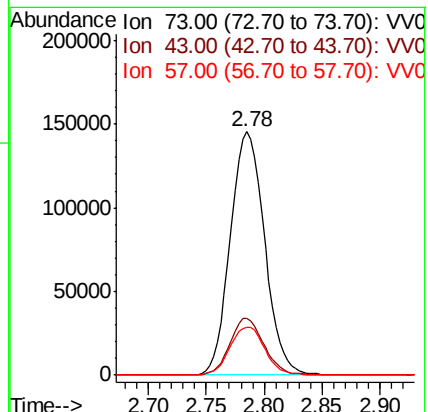
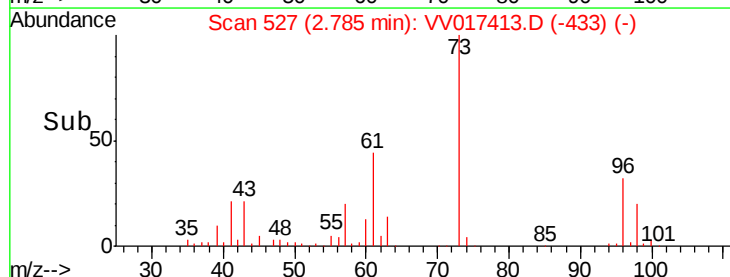
57 20.2 16.2 24.4

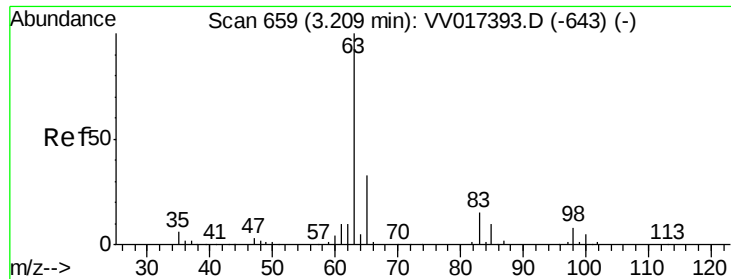


Abundance Ion 73.00 (72.70 to 73.70): VV0

Ion 43.00 (42.70 to 43.70): VV0

Ion 57.00 (56.70 to 57.70): VV0

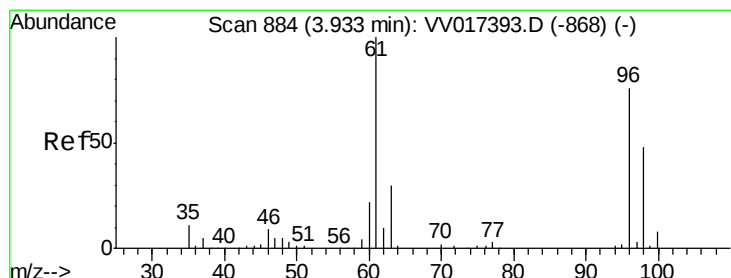
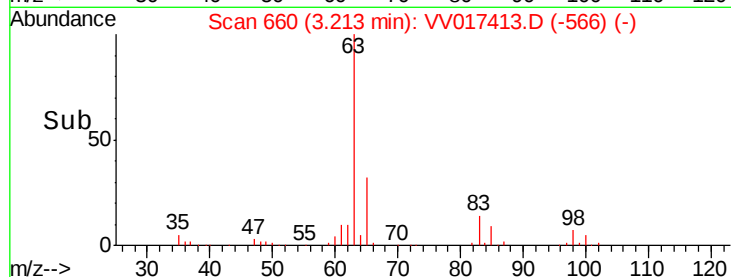
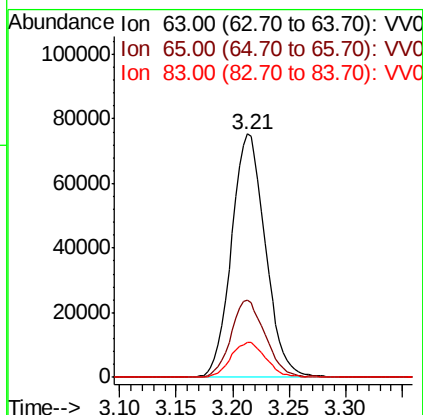
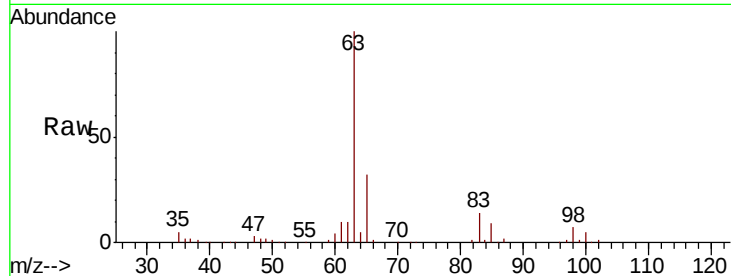




#19  
 1,1-Dichloroethane  
 Concen: 46.855 ug/L  
 RT: 3.21 min Scan# 660  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

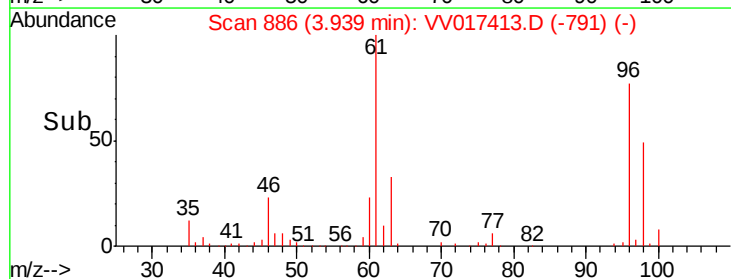
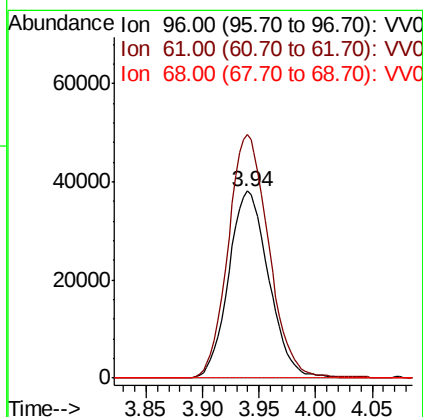
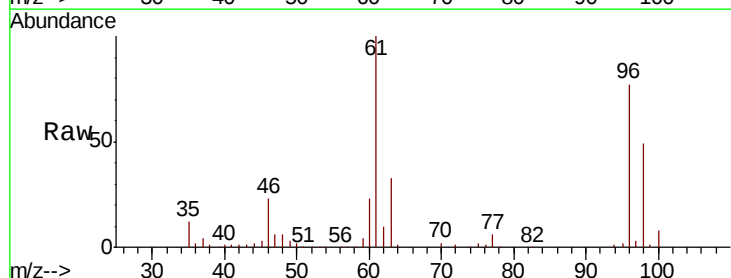
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

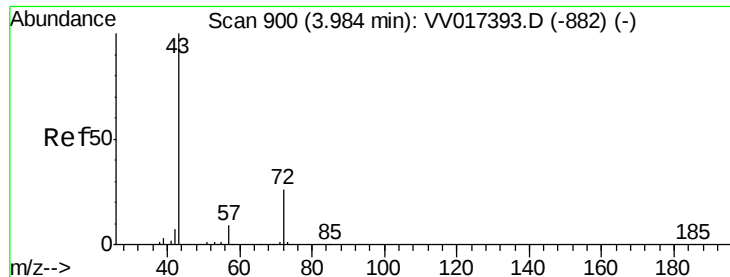
| Tot Ion   | 63    | Resp  | 157503 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 63        | 100   |       |        |
| 65        | 31.9  | 22.1  | 41.1   |
| 83        | 14.3  | 10.1  | 18.9   |



#20  
 cis-1,2-Dichloroethene  
 Concen: 48.006 ug/L  
 RT: 3.94 min Scan# 886  
 Delta R.T. 0.01 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

| Tgt Ion   | 96    | Resp  | 94033 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 96        | 100   |       |       |
| 61        | 130.4 | 88.9  | 165.1 |
| 68        | 0.0   | 0.0   | 0.0   |





#22

2-Butanone

Concen: 86.535 ug/L

RT: 3.99 min Scan# 902

Delta R.T. 0.01 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

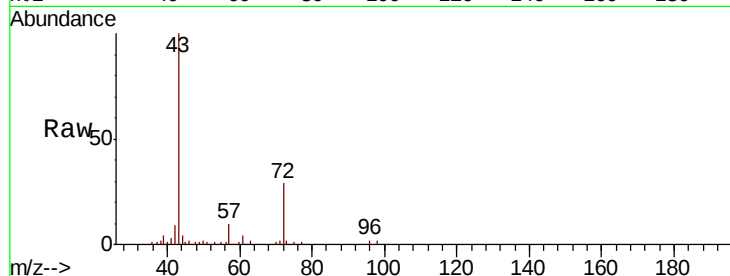
VSTD05078

Tot Ion: 43 Resp: 114593

Ion Ratio Lower Upper

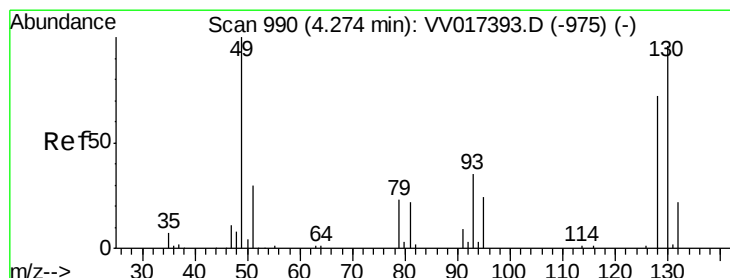
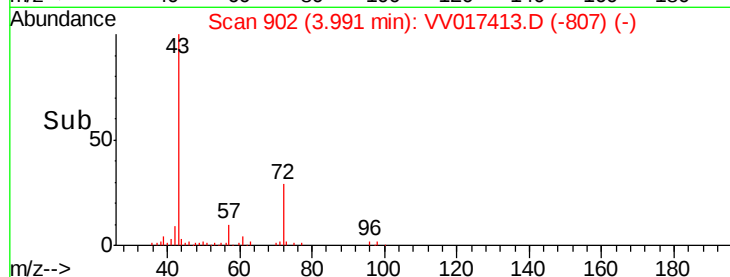
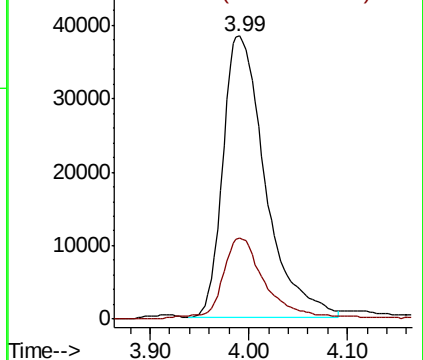
43 100

72 25.3 11.9 35.5



Abundance Ion 43.00 (42.70 to 43.70): VV017413.D (-897) (-)

Ion 72.00 (71.70 to 72.70): VV017413.D (-897) (-)



#23

Bromochloromethane

Concen: 47.100 ug/L

RT: 4.27 min Scan# 990

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Tgt Ion: 128 Resp: 51334

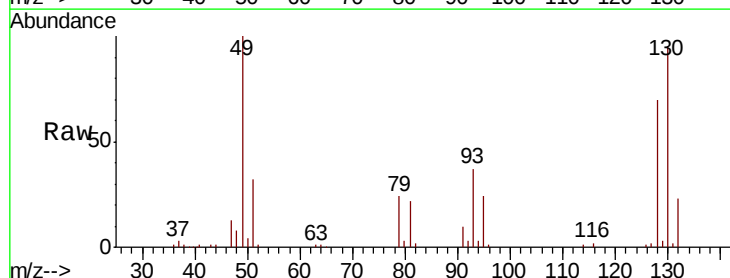
Ion Ratio Lower Upper

128 100

49 143.0 96.7 179.5

130 136.3 88.3 164.1

51 45.3 36.1 54.1

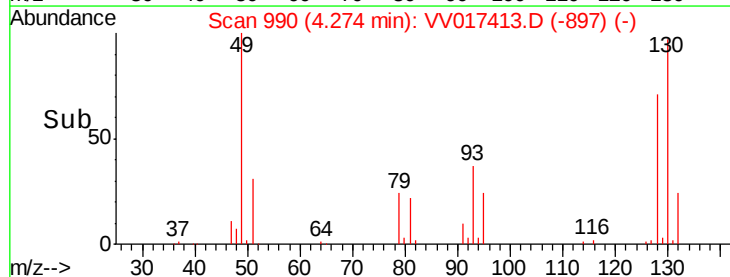
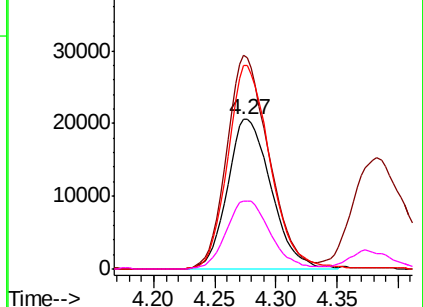


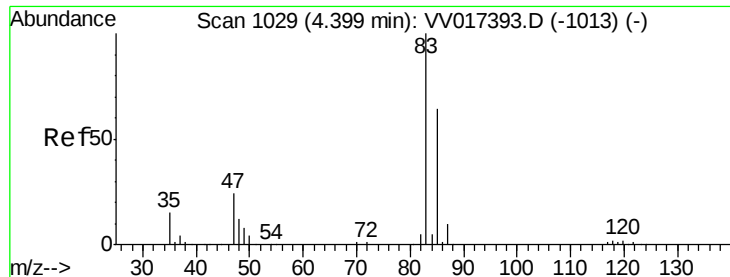
Abundance Ion 128.00 (127.70 to 128.70): VV017413.D (-897) (-)

Ion 49.00 (48.70 to 49.70): VV017413.D (-897) (-)

Ion 130.00 (129.70 to 130.70): VV017413.D (-897) (-)

Ion 51.00 (50.70 to 51.70): VV017413.D (-897) (-)

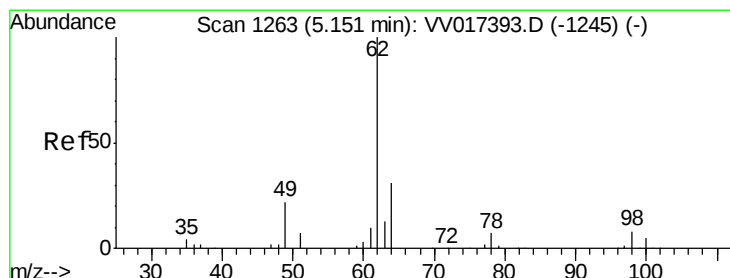
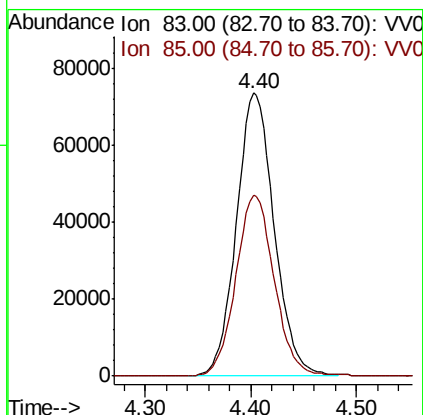
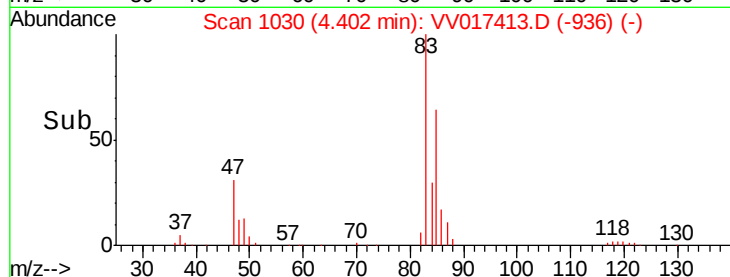
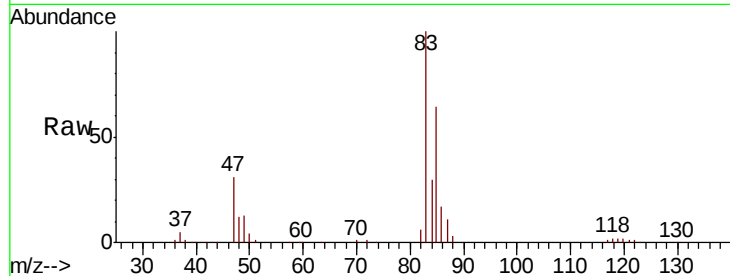




#25  
Chloroform  
Concen: 48.540 ug/L  
RT: 4.40 min Scan# 1030  
Delta R.T. 0.00 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

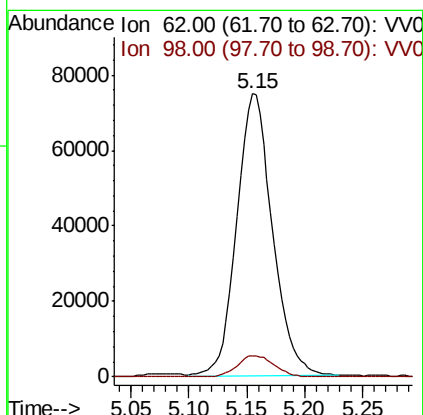
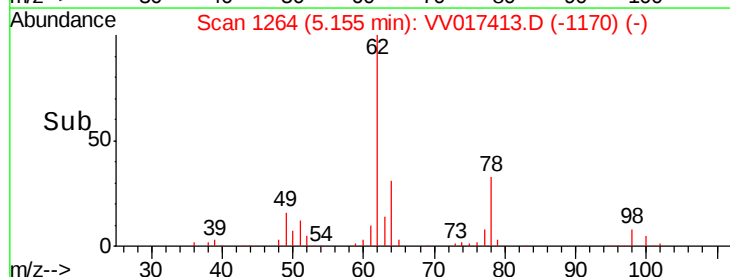
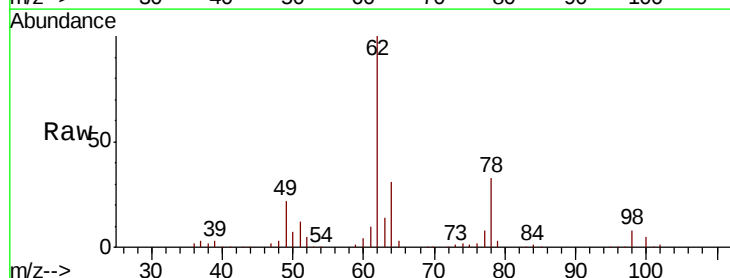
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05078

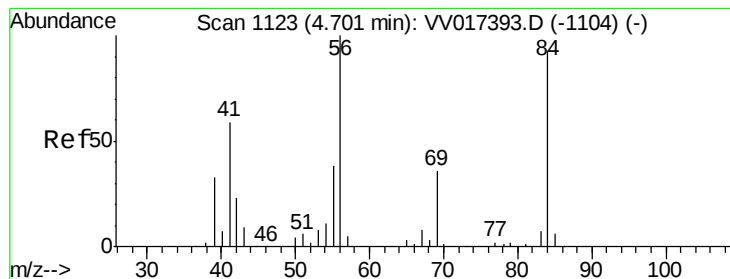
Tot Ion: 83 Resp: 183146  
Ion Ratio Lower Upper  
83 100  
85 63.9 45.1 83.9



#27  
1,2-Dichloroethane  
Concen: 48.165 ug/L  
RT: 5.15 min Scan# 1264  
Delta R.T. 0.00 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

Tgt Ion: 62 Resp: 159739  
Ion Ratio Lower Upper  
62 100  
98 7.5 6.4 9.6





#29

Cvclohexane

Concen: 46.873 ug/L

RT: 4.71 min Scan# 1125

Delta R.T. 0.01 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

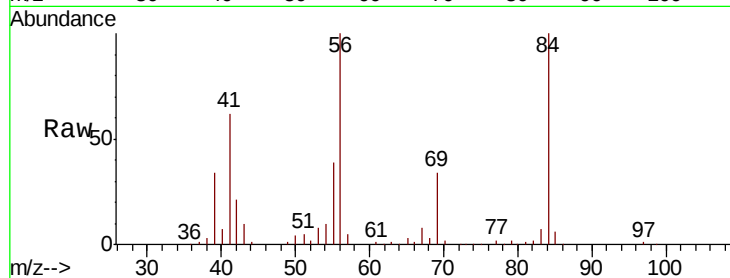
Tot Ion: 56 Resp: 132949

Ion Ratio Lower Upper

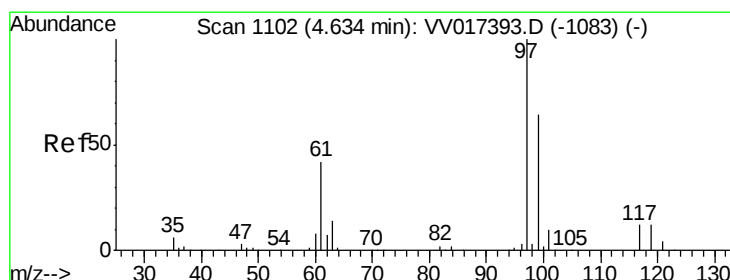
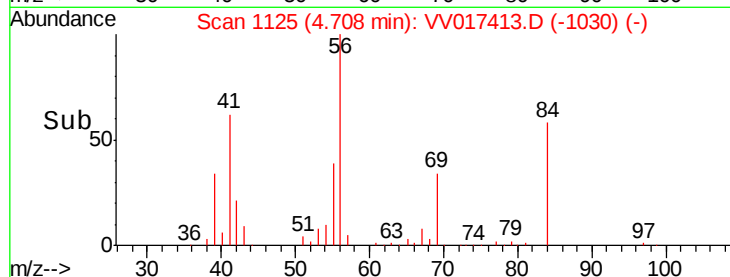
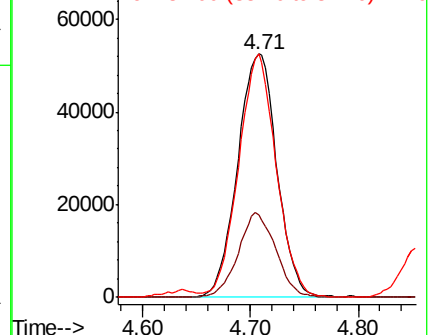
56 100

69 33.5 27.0 40.4

84 96.0 77.4 116.0



Abundance Ion 56.00 (55.70 to 56.70): VV0  
Ion 69.00 (68.70 to 69.70): VV0  
Ion 84.00 (83.70 to 84.70): VV0



#30

1,1,1-Trichloroethane

Concen: 47.822 ug/L

RT: 4.64 min Scan# 1103

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

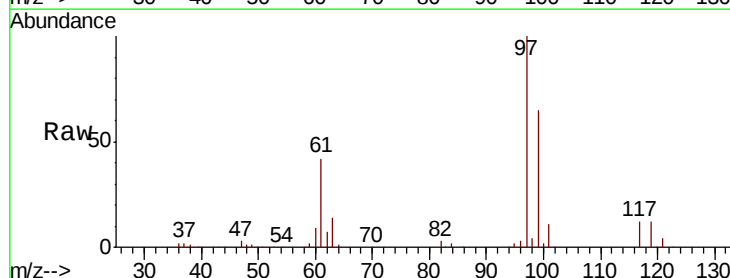
Tgt Ion: 97 Resp: 178865

Ion Ratio Lower Upper

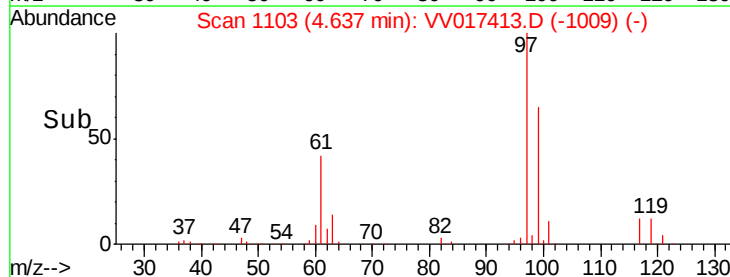
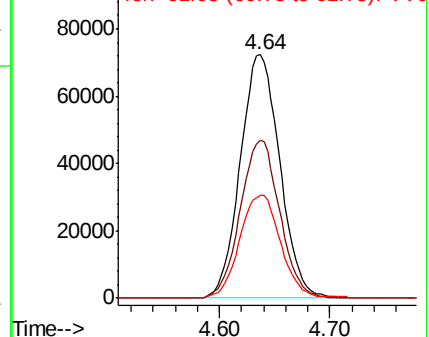
97 100

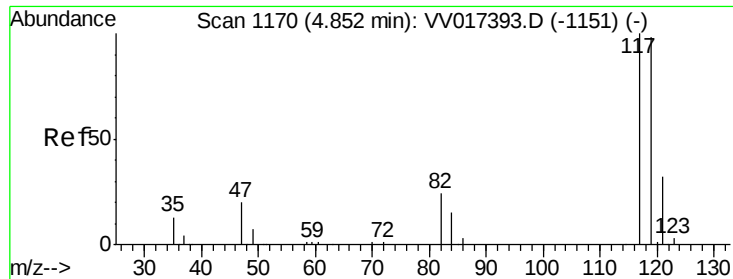
99 65.1 51.3 76.9

61 43.4 34.1 51.1



Abundance Ion 97.00 (96.70 to 97.70): VV0  
Ion 99.00 (98.70 to 99.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0





#31

Carbon tetrachloride

Concen: 48.388 ug/L

RT: 4.86 min Scan# 1171

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

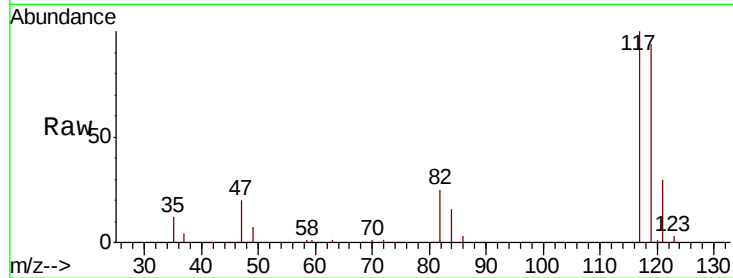
VSTD05078

Tot Ion:117 Resp: 165653

Ion Ratio Lower Upper

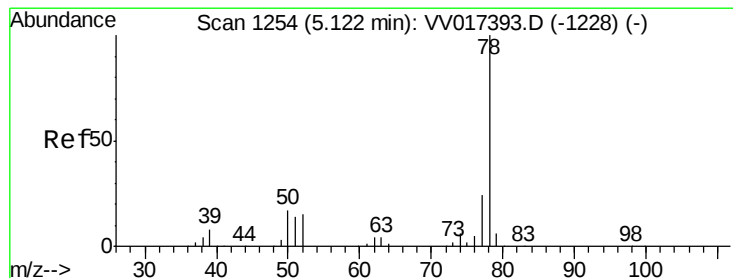
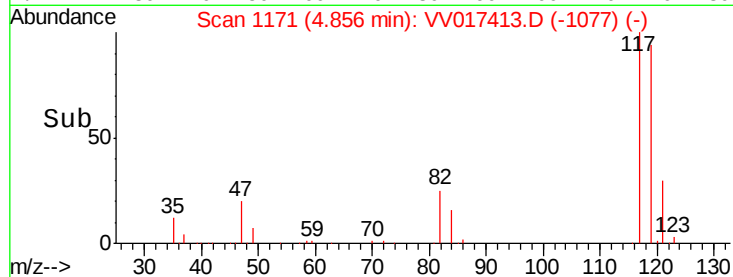
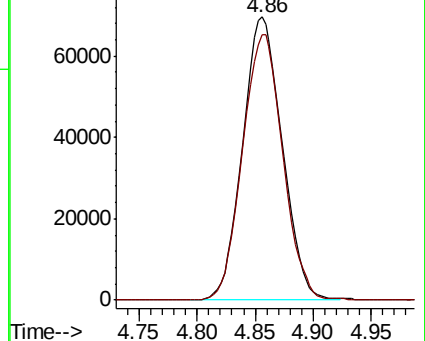
117 100

119 95.5 77.4 116.0



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#33

Benzene

Concen: 47.396 ug/L

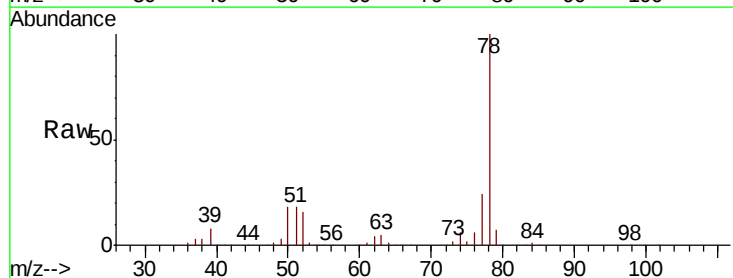
RT: 5.13 min Scan# 1255

Delta R.T. 0.00 min

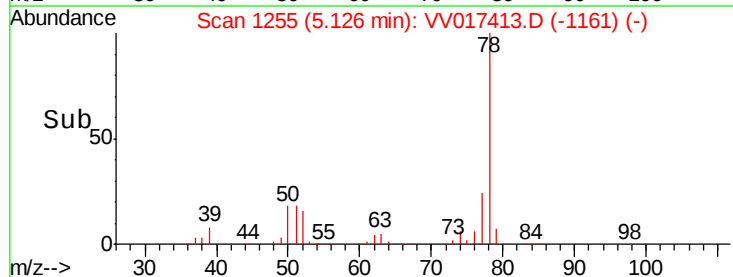
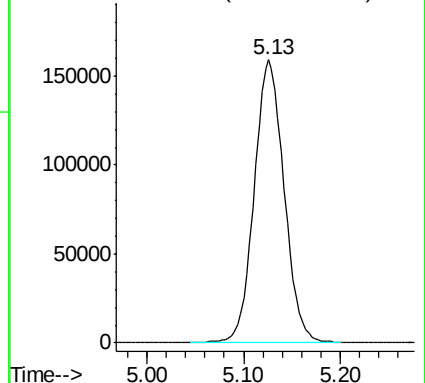
Lab File: VV017413.D

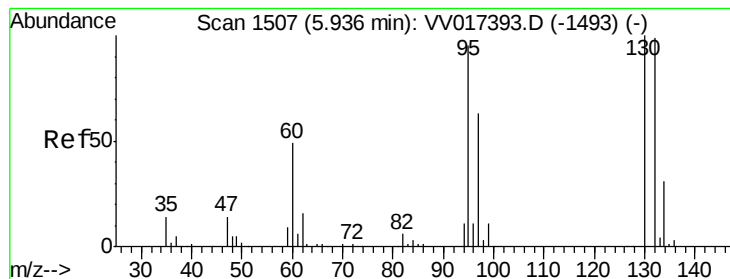
Acq: 09 Jul 2020 21:04

Tgt Ion: 78 Resp: 340761



Abundance Ion 78.00 (77.70 to 78.70): VV0





#34

Trichloroethene

Concen: 45.592 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

Tot Ion: 95 Resp: 97319

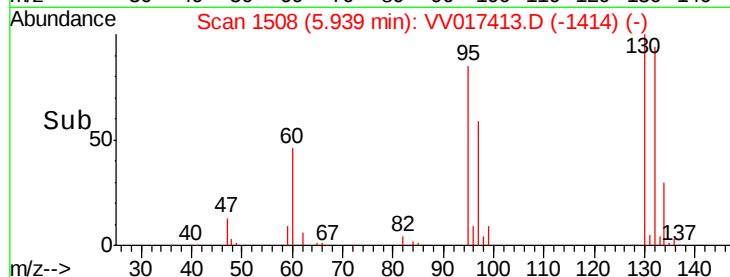
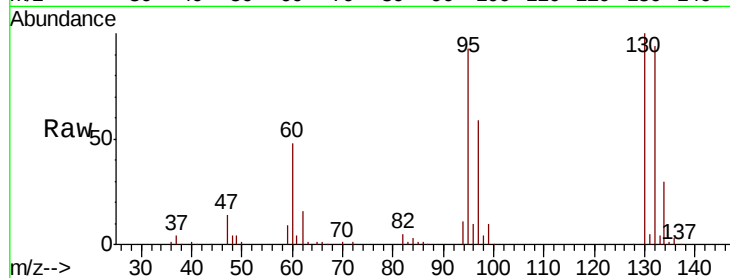
Ion Ratio Lower Upper

95 100

97 63.9 45.6 84.6

132 101.5 74.1 137.5

130 107.6 75.5 140.3



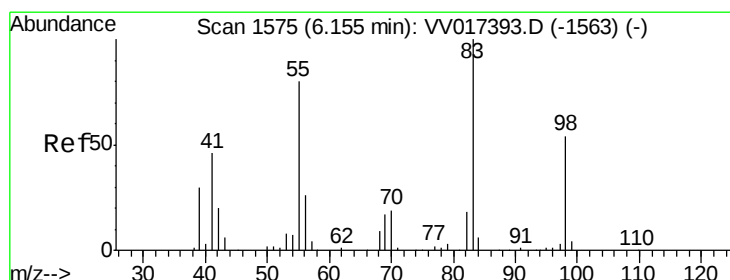
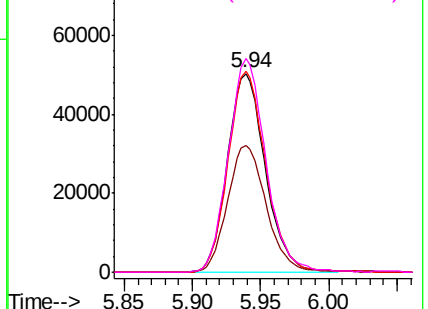
Abundance

Ion 95.00 (94.70 to 95.70): VV0

Ion 97.00 (96.70 to 97.70): VV0

Ion 132.00 (131.70 to 132.70): VV0

Ion 130.00 (129.70 to 130.70): VV0



#35

Methylcyclohexane

Concen: 46.285 ug/L

RT: 6.16 min Scan# 1576

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

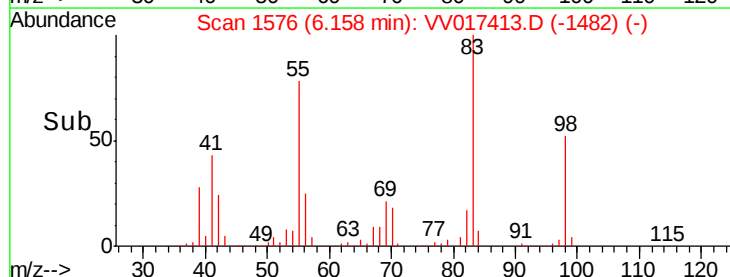
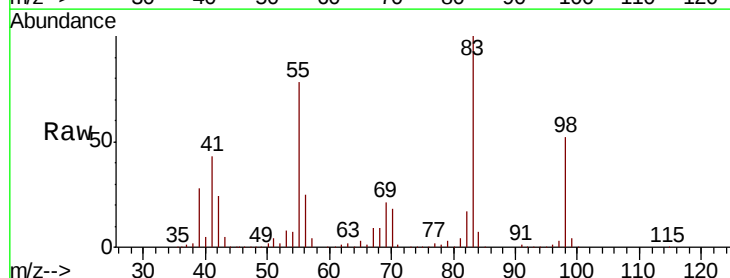
Tgt Ion: 83 Resp: 144677

Ion Ratio Lower Upper

83 100

55 76.4 61.0 91.6

98 51.7 41.3 61.9

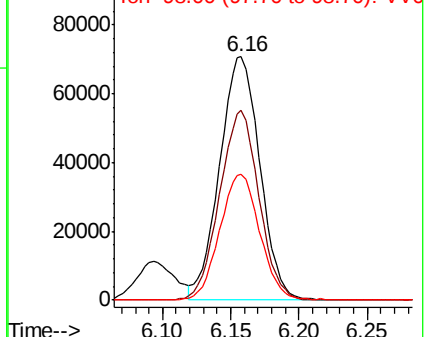


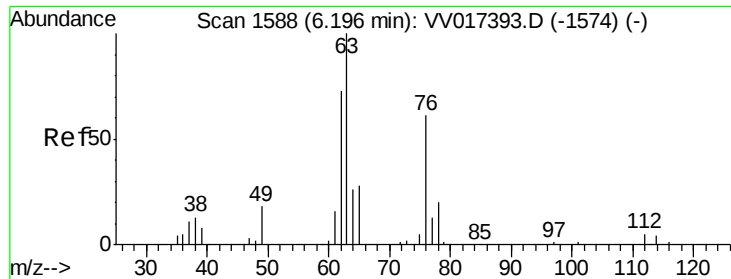
Abundance

Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0

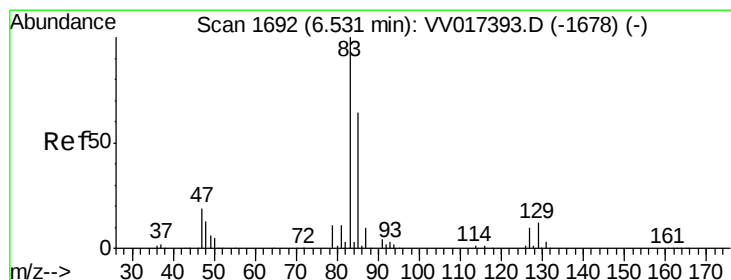
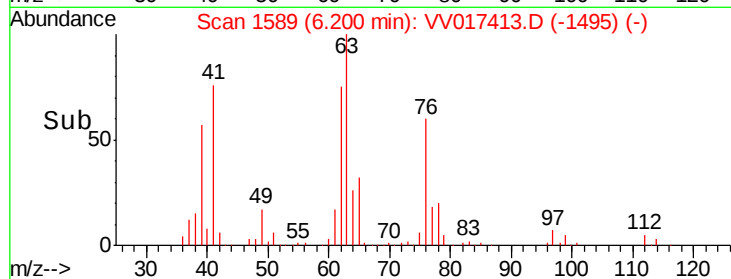
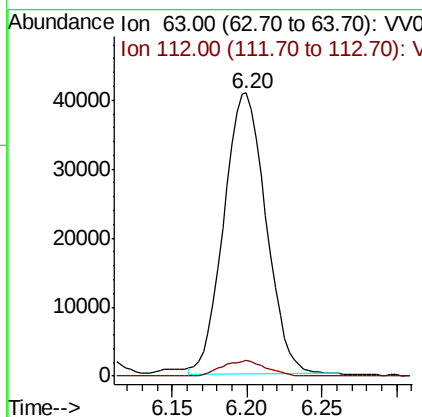
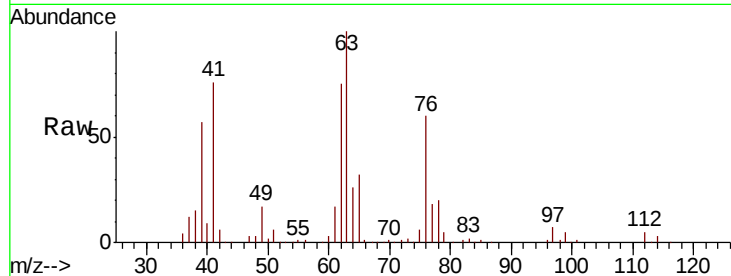




#37  
 1,2-Dichloropropane  
 Concen: 45.603 ug/L  
 RT: 6.20 min Scan# 1589  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

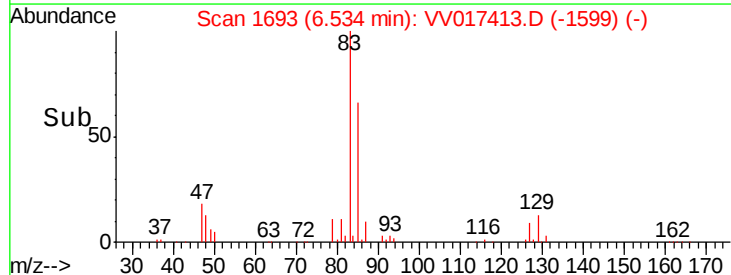
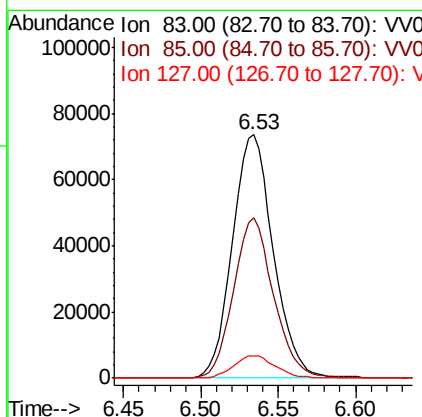
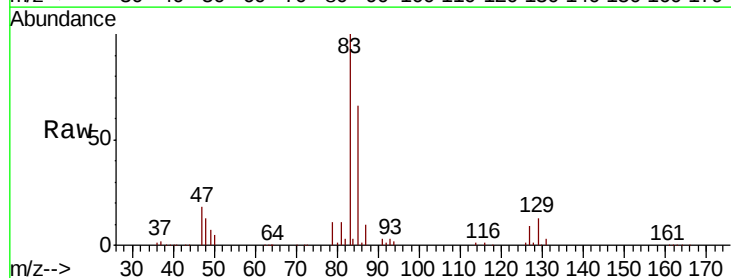
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

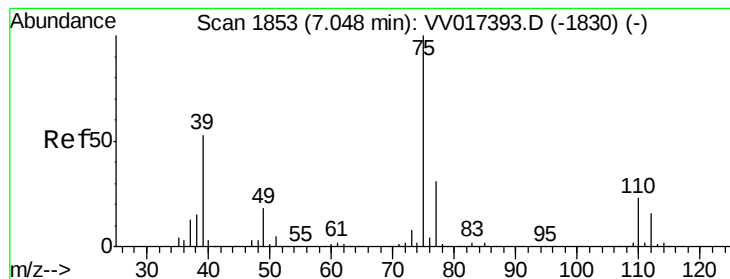
Tot Ion: 63 Resp: 80192  
 Ion Ratio Lower Upper  
 63 100  
 112 5.8 4.4 6.6



#38  
 Bromodichloromethane  
 Concen: 47.216 ug/L  
 RT: 6.53 min Scan# 1693  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

Tgt Ion: 83 Resp: 135197  
 Ion Ratio Lower Upper  
 83 100  
 85 65.9 44.6 82.8  
 127 9.3 7.4 11.2



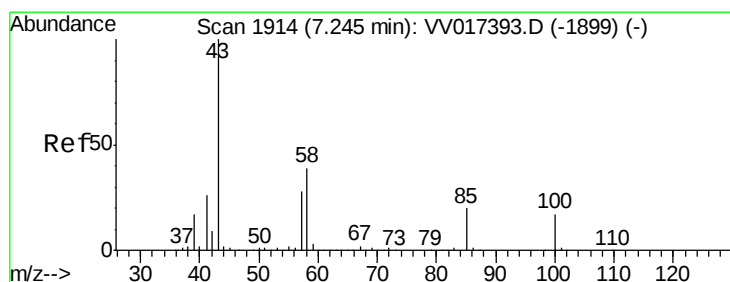
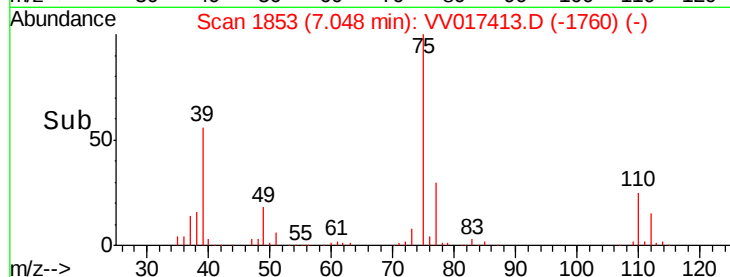
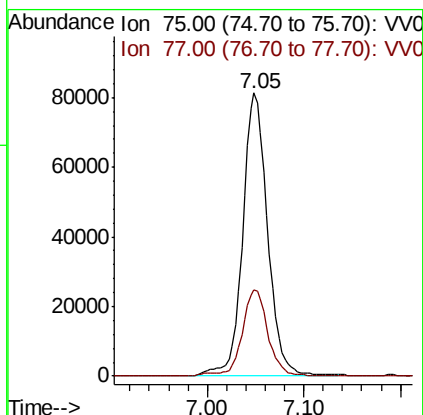
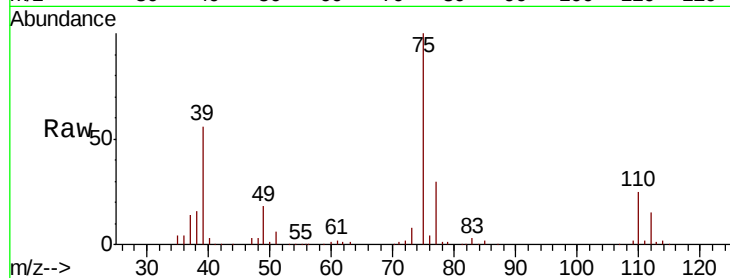


#39

cis-1,3-Dichloropropene  
 Concen: 48.634 ug/L  
 RT: 7.05 min Scan# 1853  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

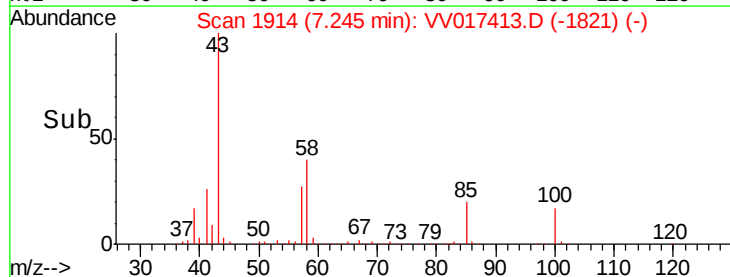
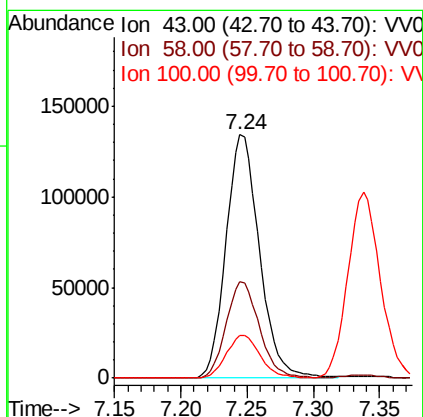
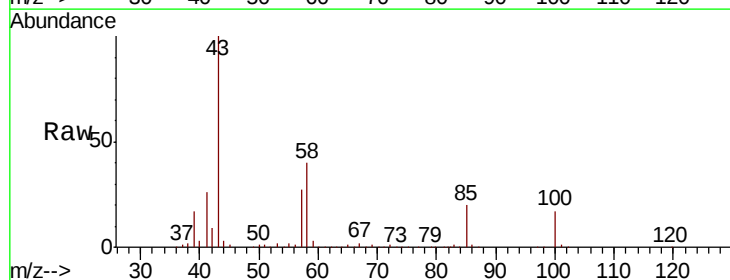
Tot Ion: 75 Resp: 145744  
 Ion Ratio Lower Upper  
 75 100  
 77 30.5 22.2 41.2

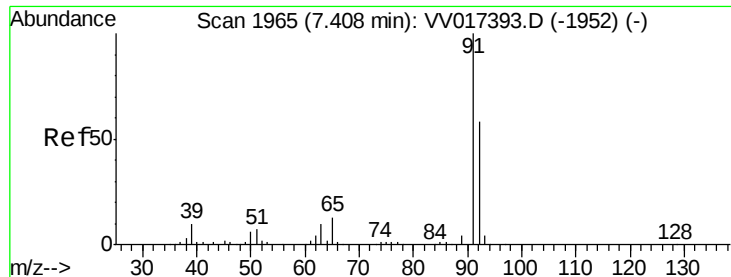


#40

4-Methyl-2-pentanone  
 Concen: 96.637 ug/L  
 RT: 7.24 min Scan# 1914  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

Tgt Ion: 43 Resp: 234977  
 Ion Ratio Lower Upper  
 43 100  
 58 39.5 32.2 48.4  
 100 17.8 14.1 21.1





#42

Toluene

Concen: 47.594 ug/L

RT: 7.41 min Scan# 1965

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampled :

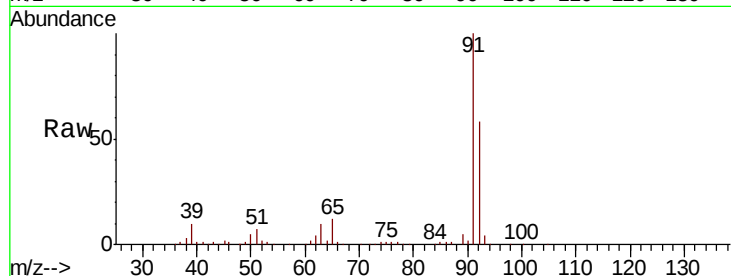
VSTD05078

Tot Ion: 91 Resp: 382464

Ion Ratio Lower Upper

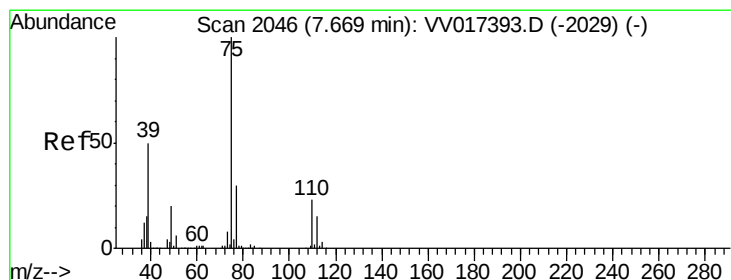
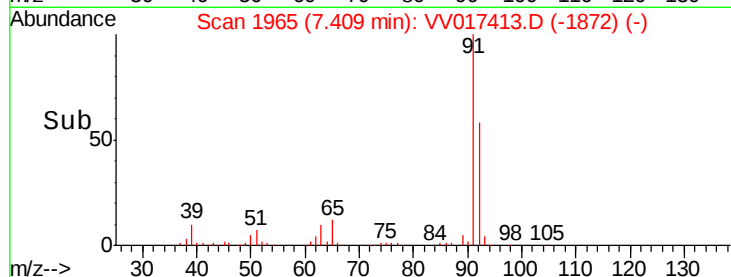
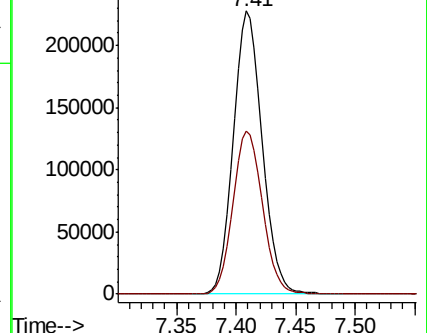
91 100

92 57.7 40.8 75.8



Abundance Ion 91.00 (90.70 to 91.70): VV017413.D (-1952) (-)

Ion 92.00 (91.70 to 92.70): VV017413.D (-1952) (-)



#44

trans-1,3-Dichloropropene

Concen: 47.840 ug/L

RT: 7.67 min Scan# 2047

Delta R.T. 0.00 min

Lab File: VV017413.D

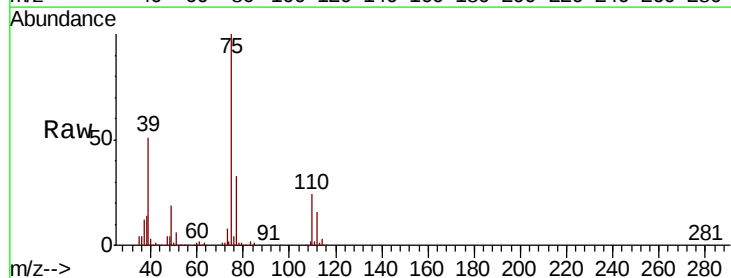
Acq: 09 Jul 2020 21:04

Tgt Ion: 75 Resp: 148282

Ion Ratio Lower Upper

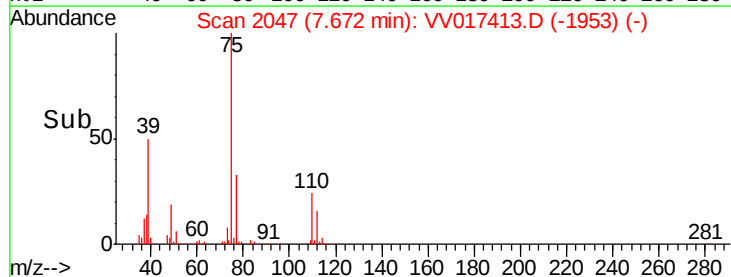
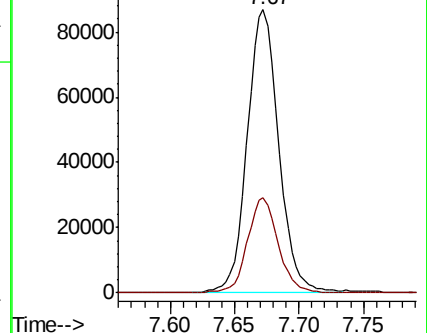
75 100

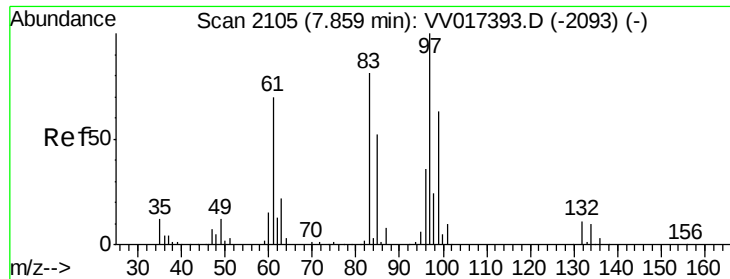
77 33.5 21.3 39.5



Abundance Ion 75.00 (74.70 to 75.70): VV017413.D (-1953) (-)

Ion 77.00 (76.70 to 77.70): VV017413.D (-1953) (-)

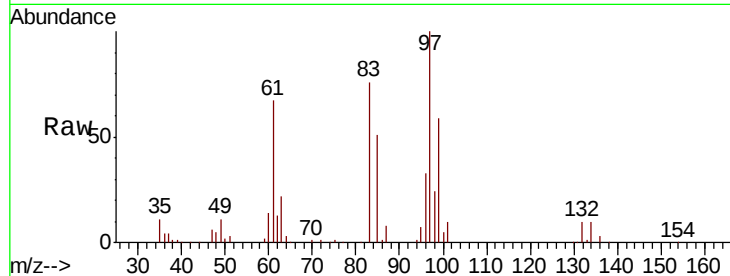




#45  
1,1,2-Trichloroethane  
Concen: 47.902 ug/L  
RT: 7.86 min Scan# 2105  
Delta R.T. 0.00 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

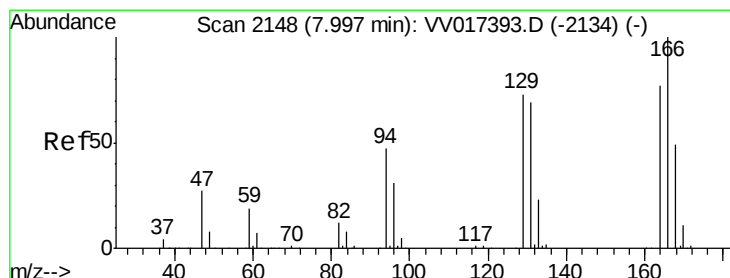
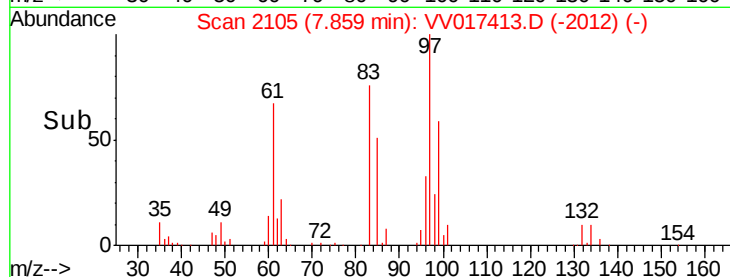
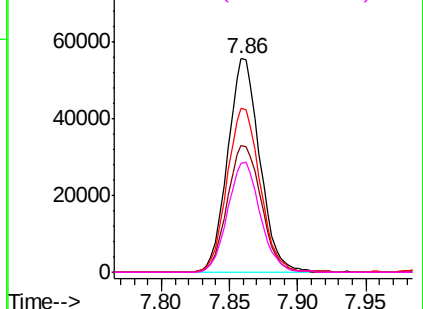
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05078

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 91396 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 59.4  | 44.6  | 82.8  |
| 83       | 76.4  | 60.1  | 111.7 |
| 85       | 51.2  | 39.0  | 72.4  |



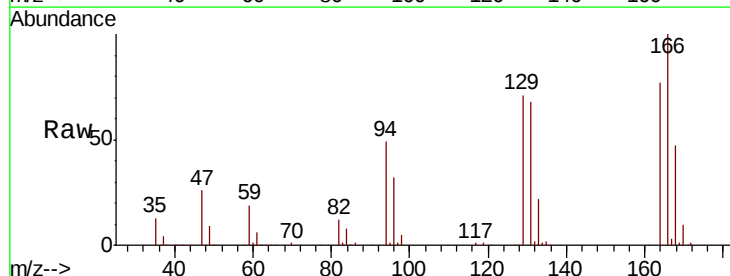
Abundance

Ion 97.00 (96.70 to 97.70): VV017413.D (-2093) (-)



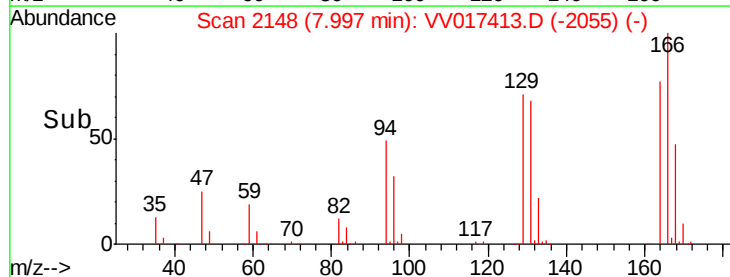
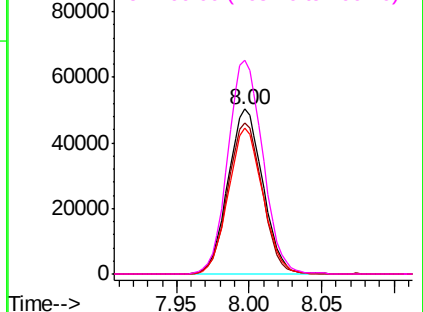
#46  
Tetrachloroethene  
Concen: 46.791 ug/L  
RT: 8.00 min Scan# 2148  
Delta R.T. 0.00 min  
Lab File: VV017413.D  
Acq: 09 Jul 2020 21:04

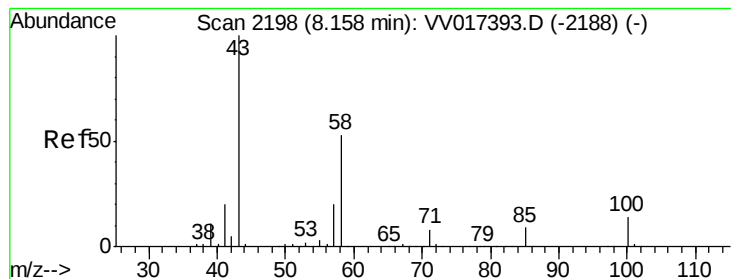
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 83865 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 91.4  | 66.6  | 123.8 |
| 131      | 88.7  | 65.5  | 121.7 |
| 166      | 129.5 | 93.9  | 174.5 |



Abundance

Ion 164.00 (163.70 to 164.70): VV017413.D (-2055) (-)





#48

2-Hexanone

Concen: 91.819 ug/L

RT: 8.16 min Scan# 2198

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

Tot Ion: 43 Resp: 180737

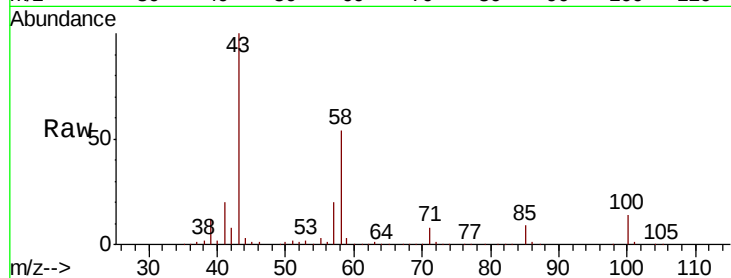
Ion Ratio Lower Upper

43 100

58 55.1 42.6 64.0

57 20.1 16.2 24.4

100 14.6 10.9 16.3

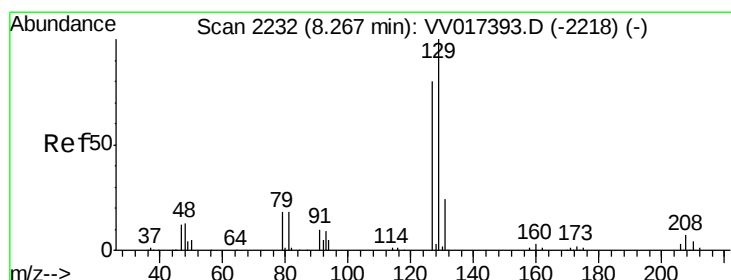
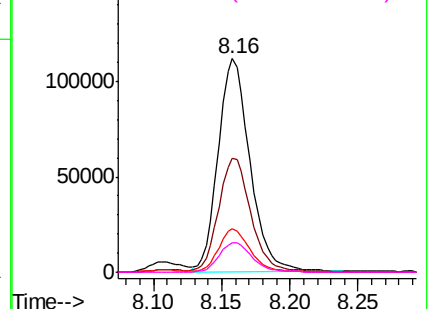
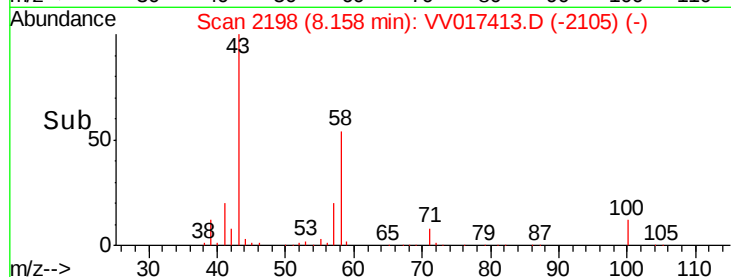


Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 57.00 (56.70 to 57.70): VV0

Ion 100.00 (99.70 to 100.70): VV0



#49

Dibromochloromethane

Concen: 48.174 ug/L

RT: 8.27 min Scan# 2232

Delta R.T. 0.00 min

Lab File: VV017413.D

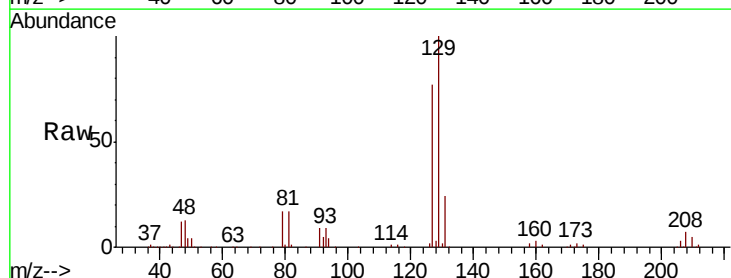
Acq: 09 Jul 2020 21:04

Tgt Ion: 129 Resp: 114663

Ion Ratio Lower Upper

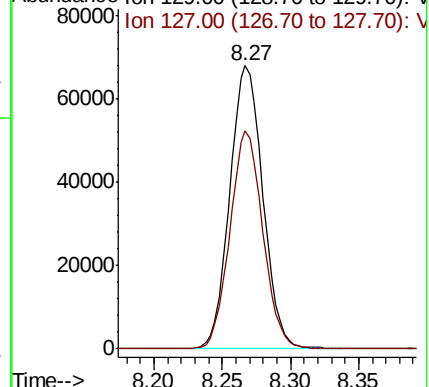
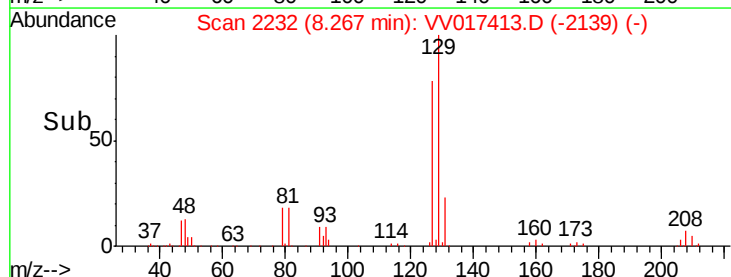
129 100

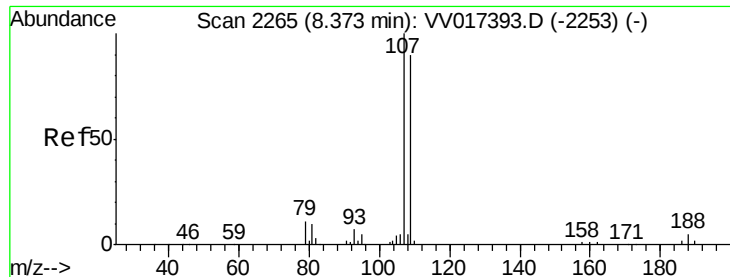
127 77.0 54.6 101.4



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

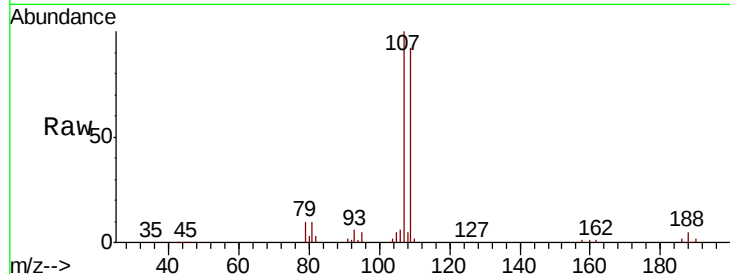




#50  
 1,2-Dibromoethane  
 Concen: 48.015 ug/L  
 RT: 8.37 min Scan# 2265  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 92.4  | 67.3  | 125.1 |
| 188     | 4.6   | 3.5   | 5.3   |

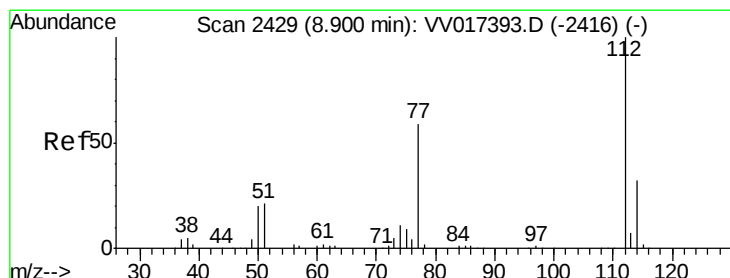
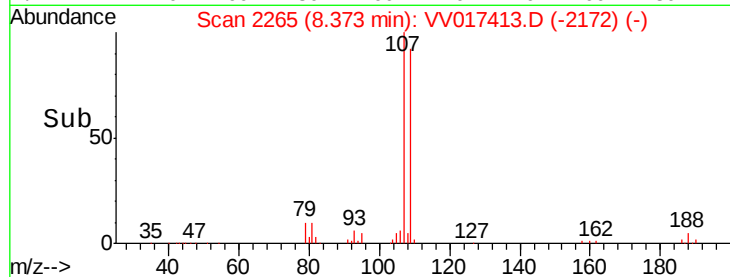
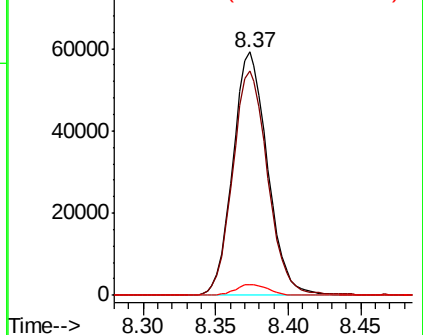


Abundance

Ion 107.00 (106.70 to 107.70): V

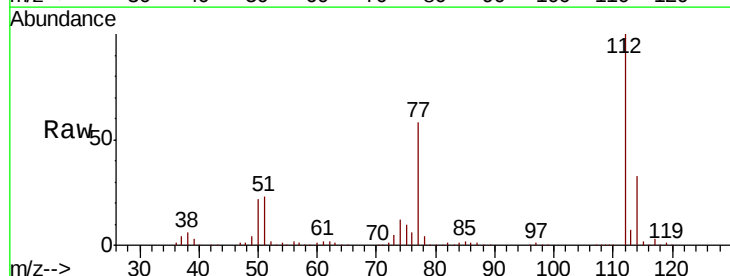
Ion 109.00 (108.70 to 109.70): V

Ion 188.00 (187.70 to 188.70): V



#51  
 Chlorobenzene  
 Concen: 46.537 ug/L  
 RT: 8.90 min Scan# 2430  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 32.5  | 22.7  | 42.1  |
| 77      | 58.2  | 46.7  | 70.1  |

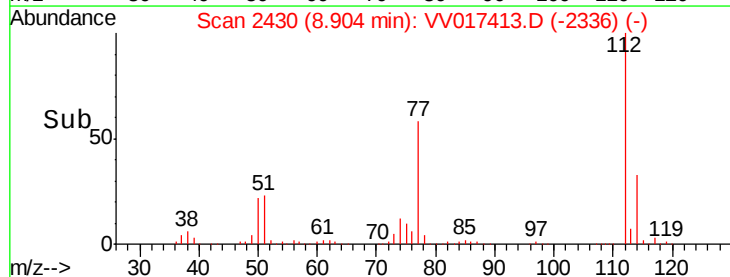
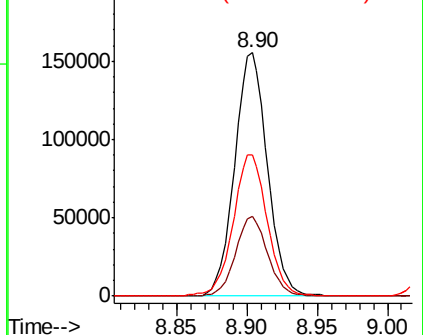


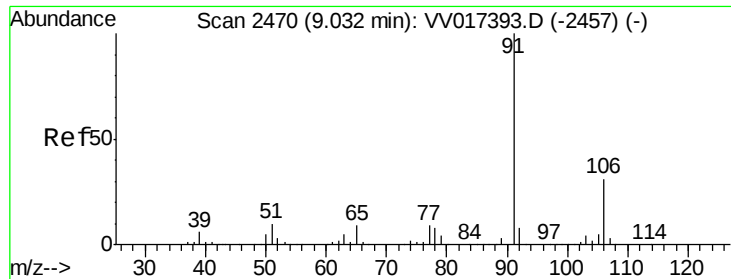
Abundance

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): VV0





#52

Ethylbenzene

Concen: 47.472 ug/L

RT: 9.03 min Scan# 2470

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

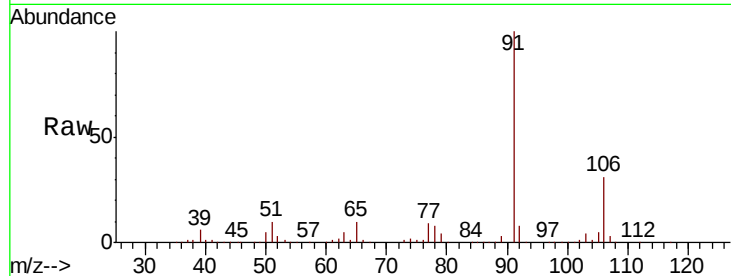
VSTD05078

Tot Ion: 91 Resp: 436346

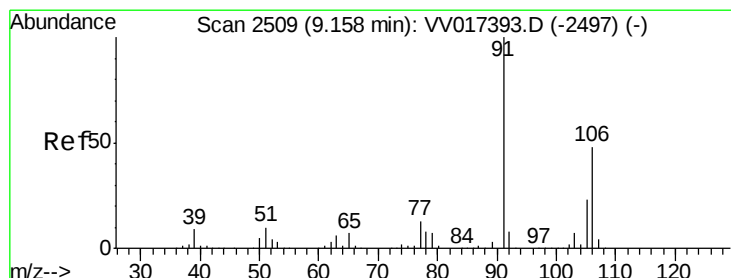
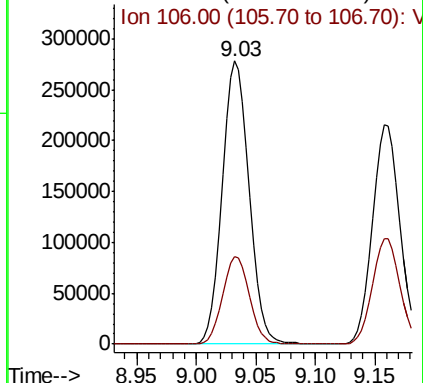
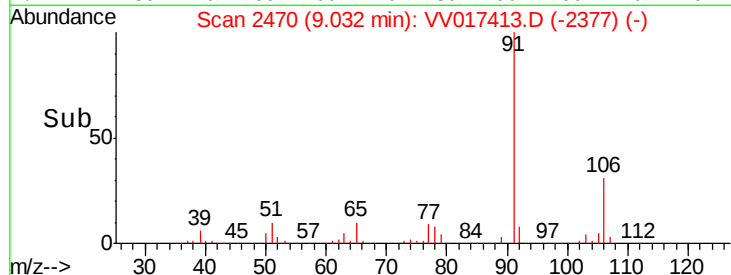
Ion Ratio Lower Upper

91 100

106 31.0 21.8 40.6



Abundance Ion 91.00 (90.70 to 91.70): VV017413.D (-2377) (-)



#53

m,p-Xylene

Concen: 48.177 ug/L

RT: 9.16 min Scan# 2509

Delta R.T. 0.00 min

Lab File: VV017413.D

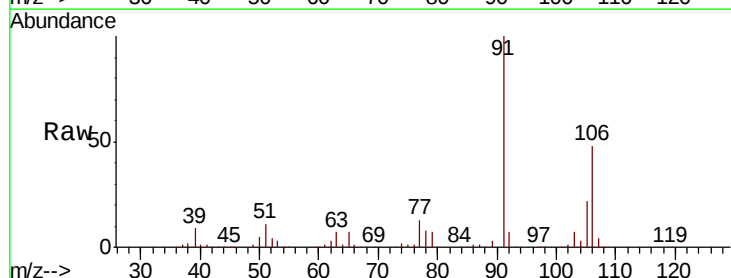
Acq: 09 Jul 2020 21:04

Tgt Ion: 106 Resp: 165788

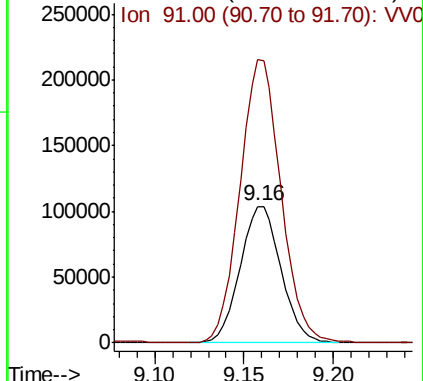
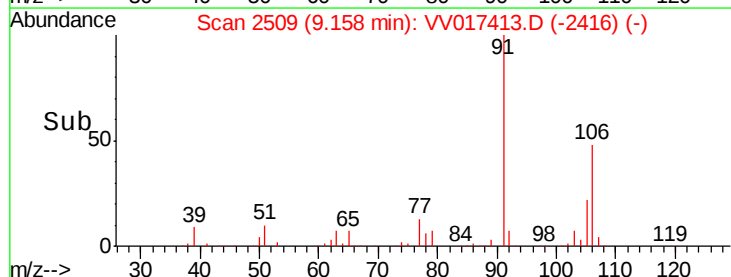
Ion Ratio Lower Upper

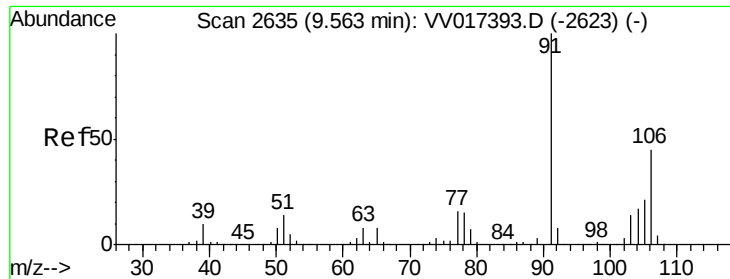
106 100

91 207.5 146.4 271.8



Abundance Ion 106.00 (105.70 to 106.70): VV017413.D (-2416) (-)





#54

o-xylene

Concen: 49.114 ug/L

RT: 9.57 min Scan# 2636

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

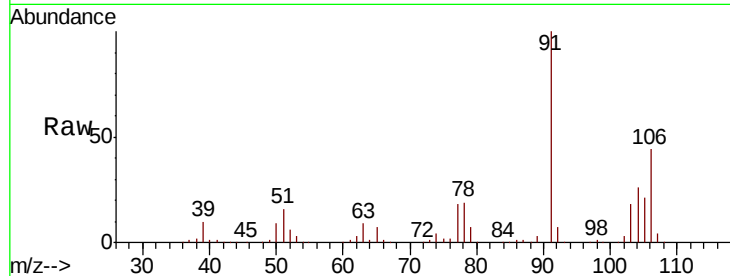
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05078

Tot Ion:106 Resp: 162341

Ion Ratio Lower Upper

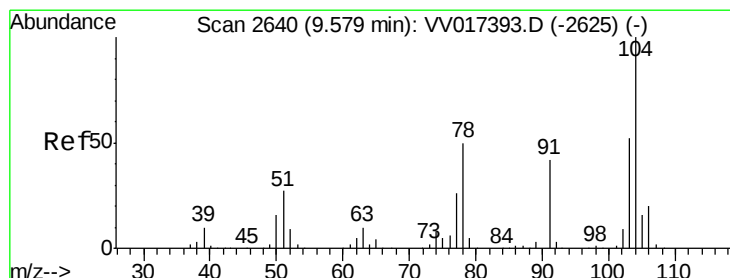
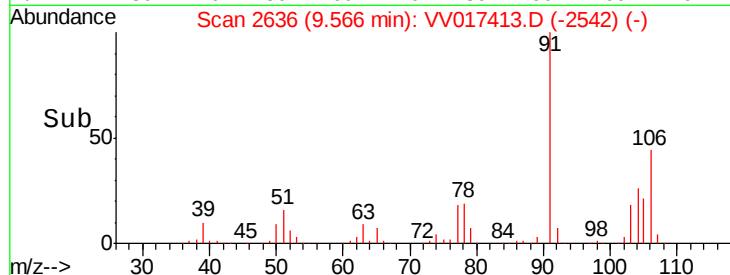
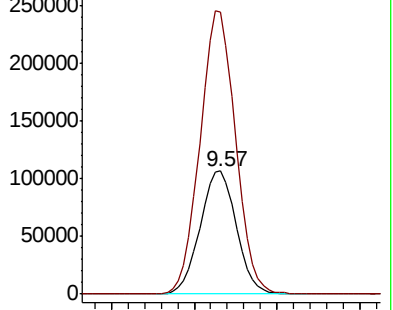
106 100

91 228.5 155.6 289.0



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#55

Styrene

Concen: 49.410 ug/L

RT: 9.58 min Scan# 2641

Delta R.T. 0.00 min

Lab File: VV017413.D

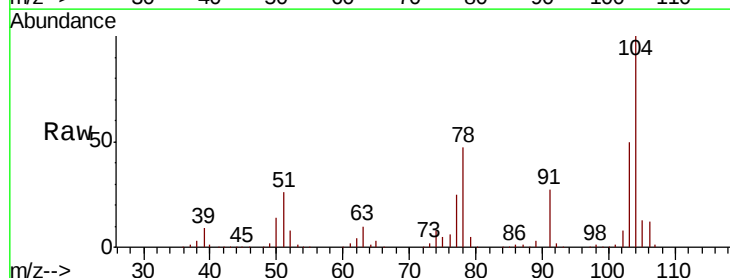
Acq: 09 Jul 2020 21:04

Tgt Ion:104 Resp: 283687

Ion Ratio Lower Upper

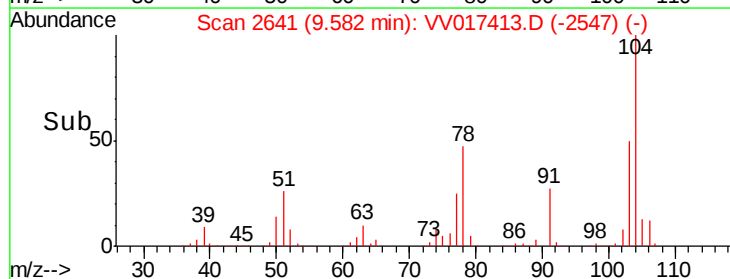
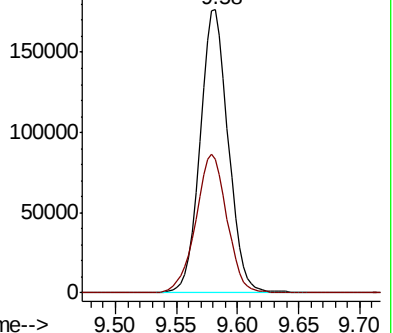
104 100

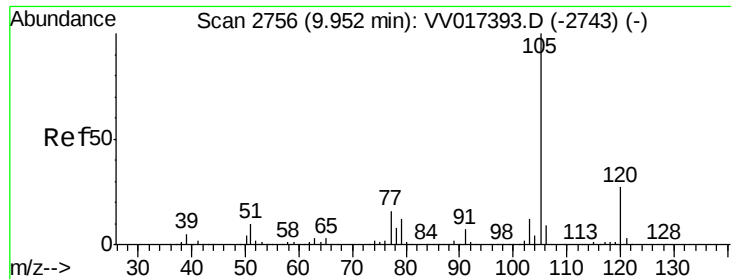
78 47.2 33.1 61.5



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VV0





#56

Isopropylbenzene

Concen: 49.601 ug/L

RT: 9.95 min Scan# 2756

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

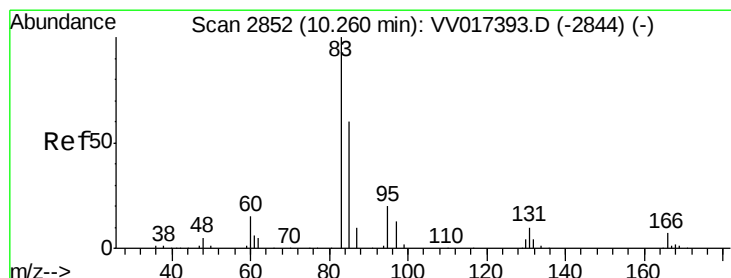
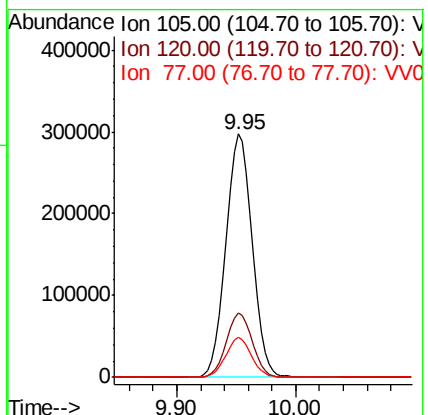
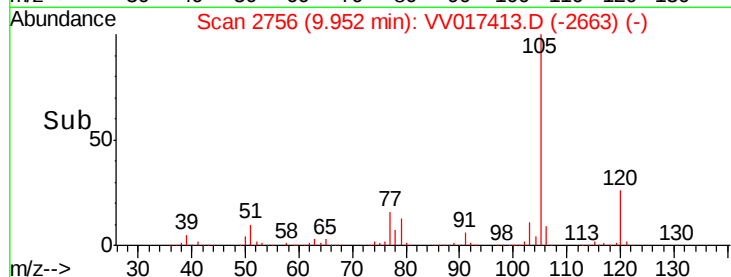
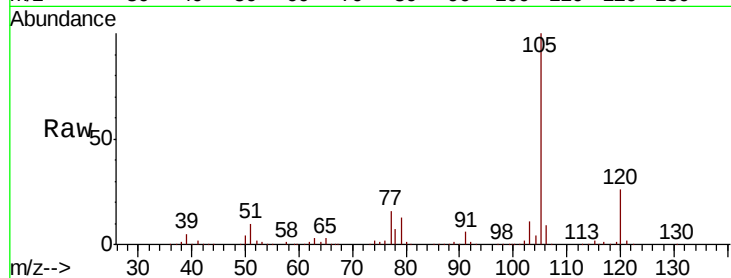
Tot Ion:105 Resp: 456119

Ion Ratio Lower Upper

105 100

120 25.8 21.1 31.7

77 16.1 13.0 19.6



#58

1,1,2,2-Tetrachloroethane

Concen: 46.989 ug/L

RT: 10.26 min Scan# 2853

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

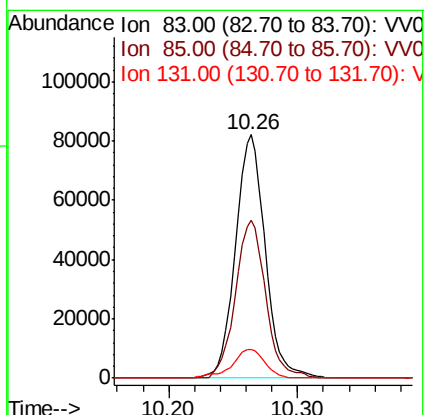
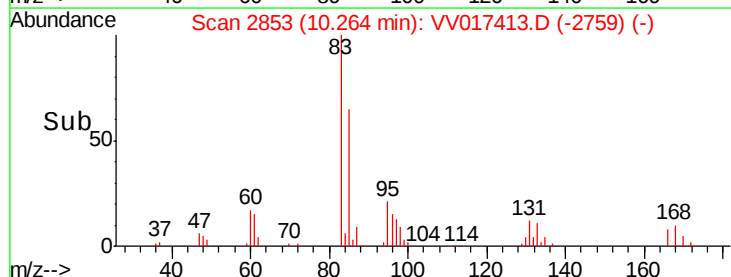
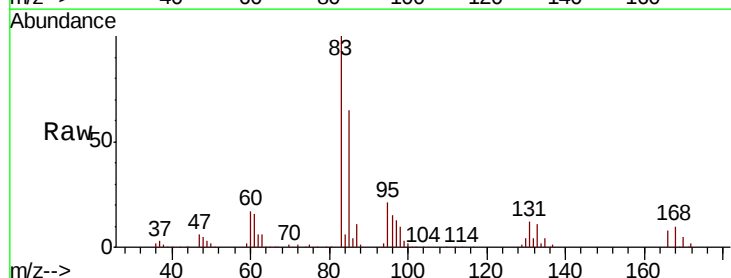
Tgt Ion: 83 Resp: 131656

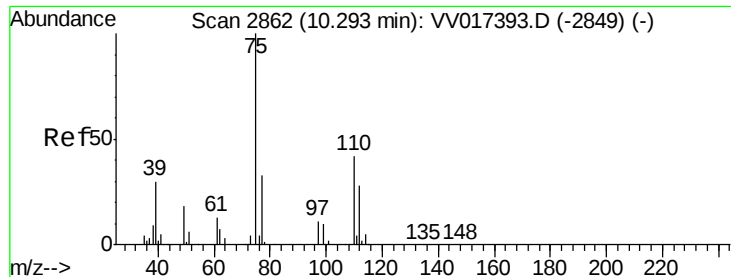
Ion Ratio Lower Upper

83 100

85 64.9 44.9 83.5

131 11.8 9.4 14.2





#59

1,2,3-Trichloropropane

Concen: 47.043 ug/L

RT: 10.30 min Scan# 2863

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

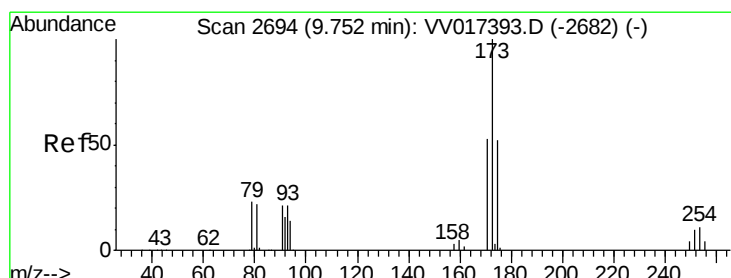
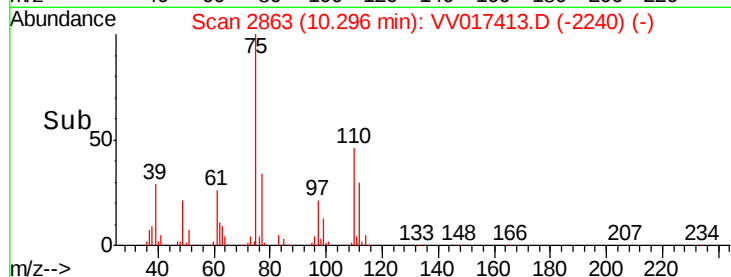
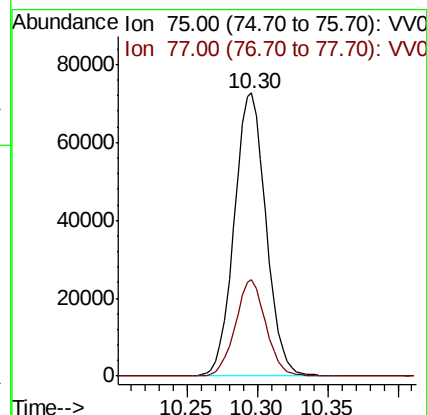
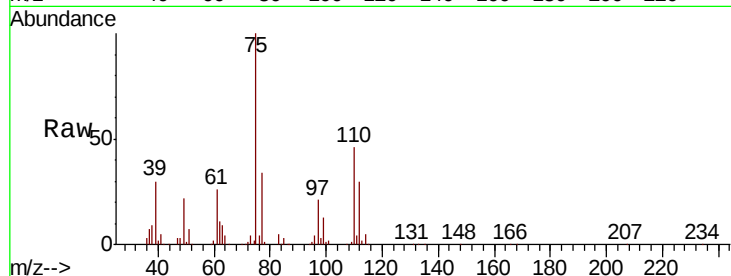
VSTD05078

Tot Ion: 75 Resp: 114634

Ion Ratio Lower Upper

75 100

77 32.6 26.5 39.7



#61

Bromoform

Concen: 48.147 ug/L

RT: 9.75 min Scan# 2694

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

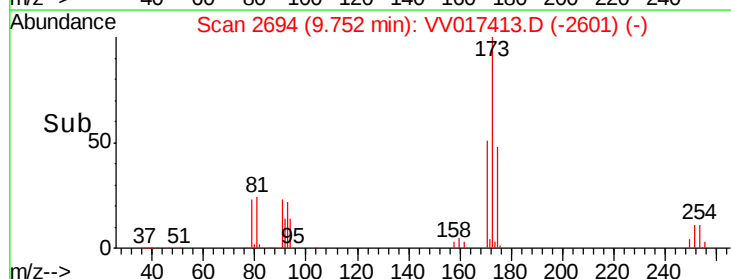
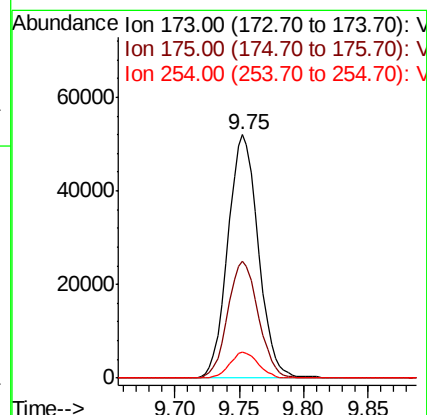
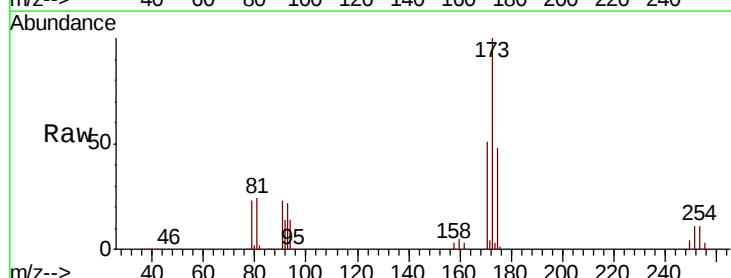
Tgt Ion: 173 Resp: 85152

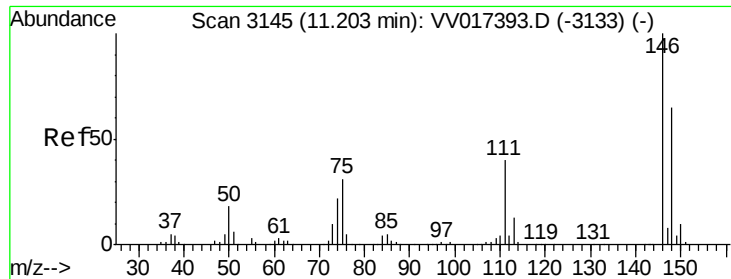
Ion Ratio Lower Upper

173 100

175 48.1 38.1 57.1

254 10.2 7.4 11.2

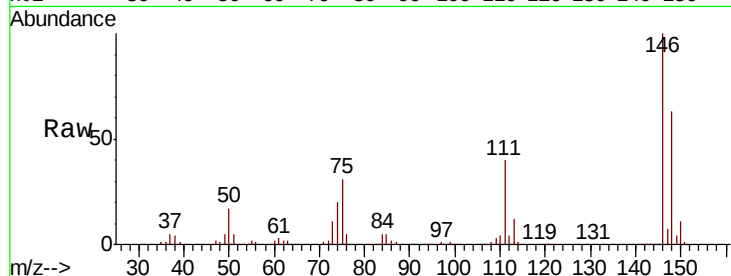




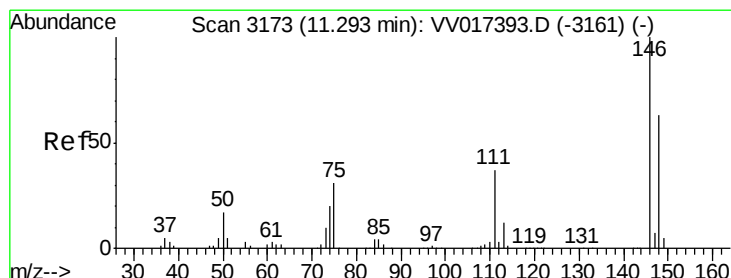
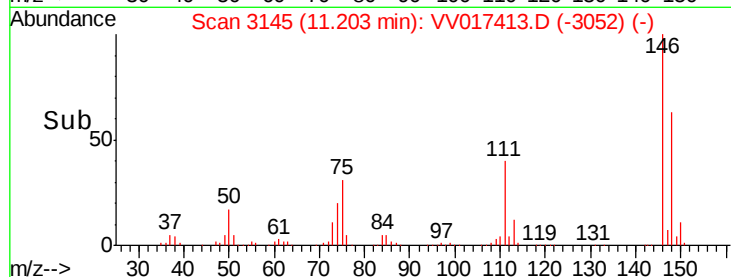
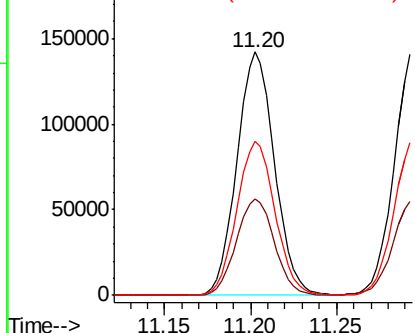
#62  
 1,3-Dichlorobenzene  
 Concen: 47.053 ug/L  
 RT: 11.20 min Scan# 3145  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

Tot Ion:146 Resp: 215877  
 Ion Ratio Lower Upper  
 146 100  
 111 39.8 27.2 50.6  
 148 63.2 44.7 82.9

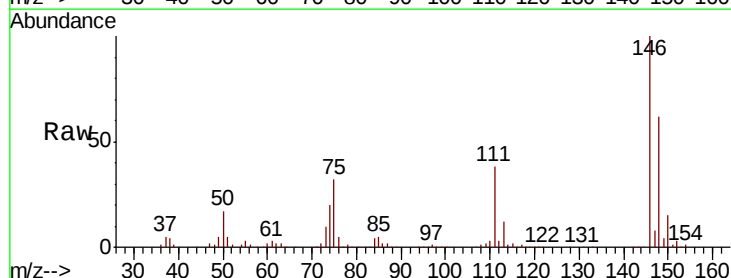


Abundance Ion 146.00 (145.70 to 146.70): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

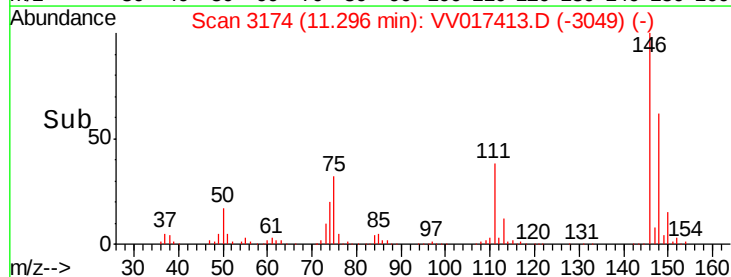
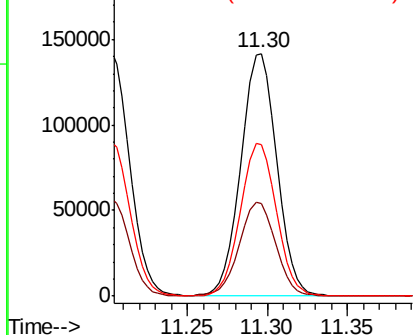


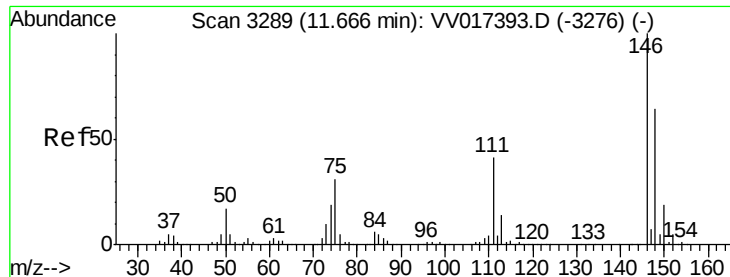
#63  
 1,4-Dichlorobenzene  
 Concen: 46.569 ug/L  
 RT: 11.30 min Scan# 3174  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

Tgt Ion:146 Resp: 216848  
 Ion Ratio Lower Upper  
 146 100  
 111 38.1 27.2 50.4  
 148 62.4 45.4 84.4



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





#65

1,2-Dichlorobenzene

Concen: 48.204 ug/L

RT: 11.67 min Scan# 3289

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

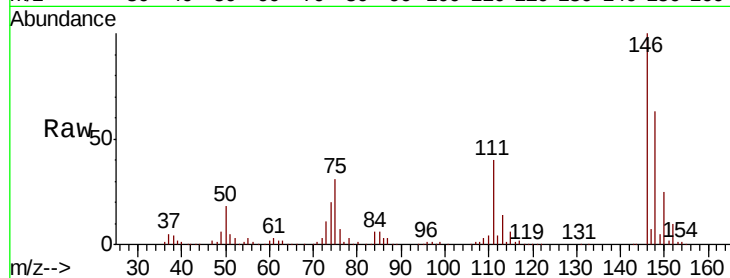
Tot Ion:146 Resp: 220464

Ion Ratio Lower Upper

146 100

111 40.2 33.5 50.3

148 63.5 50.6 76.0

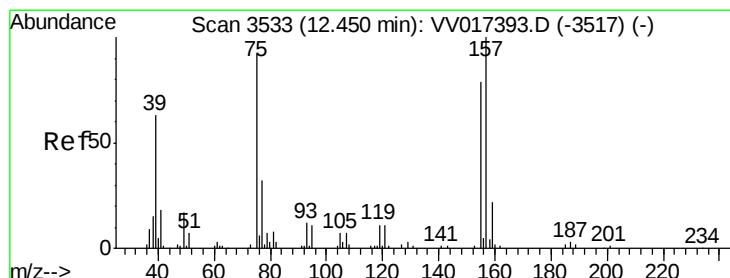
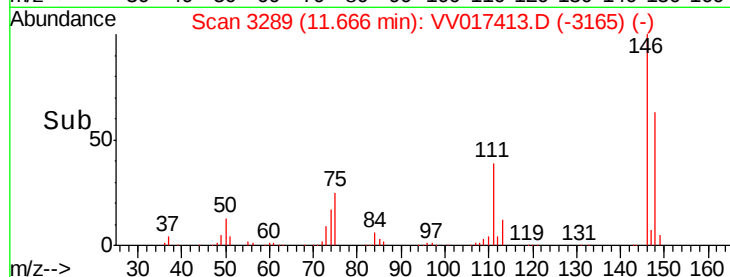
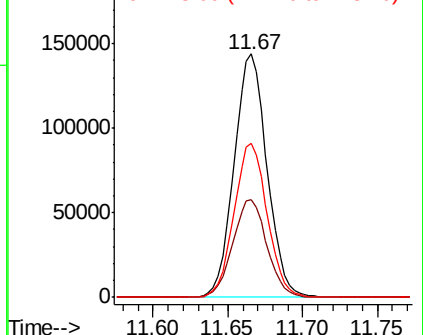


Abundance

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: 48.233 ug/L

RT: 12.45 min Scan# 3533

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

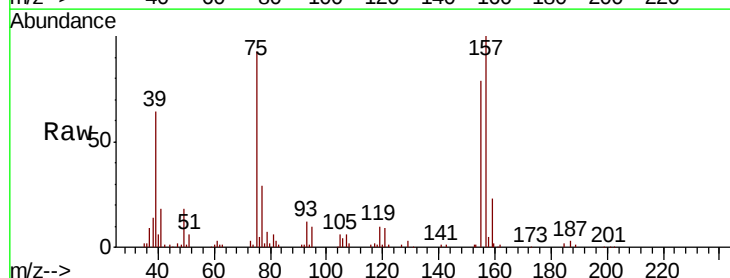
Tgt Ion: 75 Resp: 35896

Ion Ratio Lower Upper

75 100

155 85.3 63.4 95.2

157 107.4 84.5 126.7

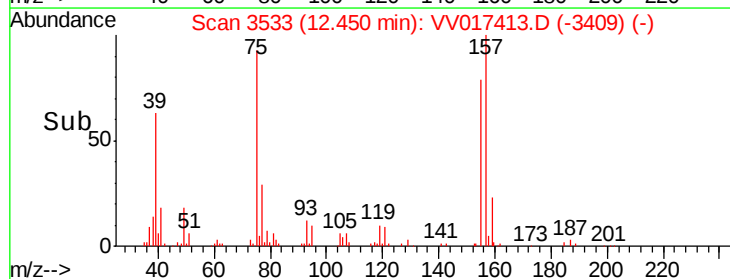
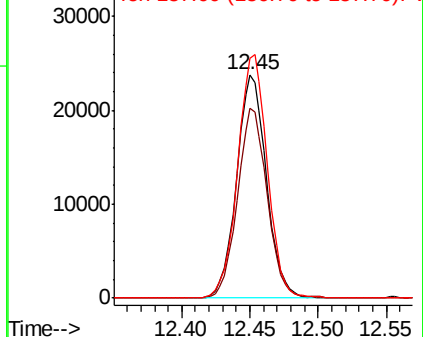


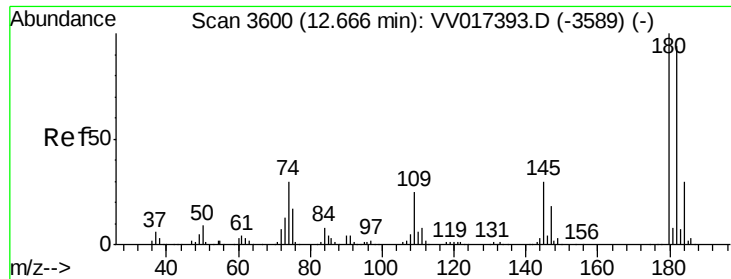
Abundance

Ion 75.00 (74.70 to 75.70): VV0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

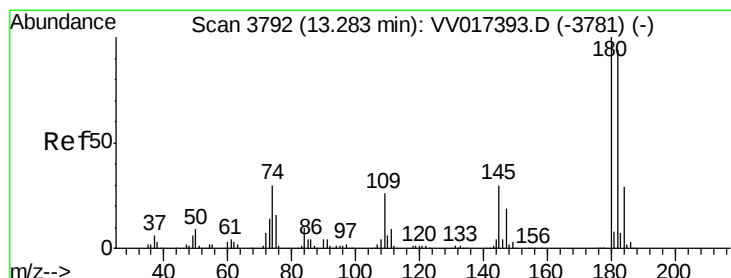
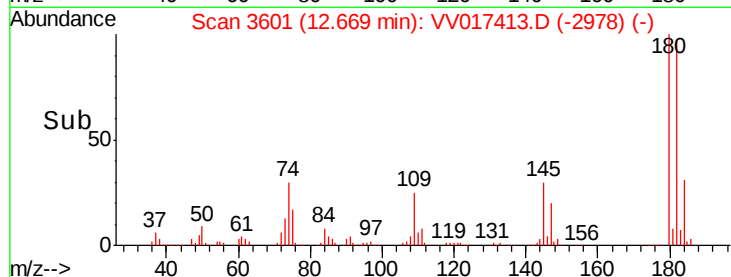
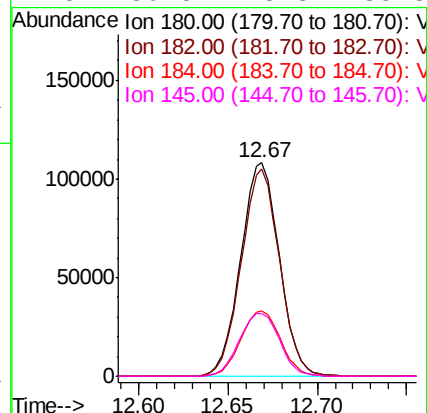
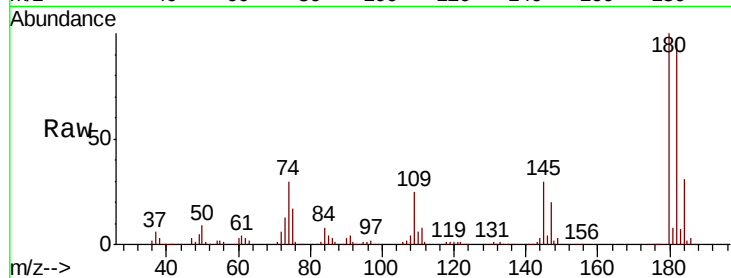




#67  
 1,3,5-Trichlorobenzene  
 Concen: 47.254 ug/L  
 RT: 12.67 min Scan# 3601  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

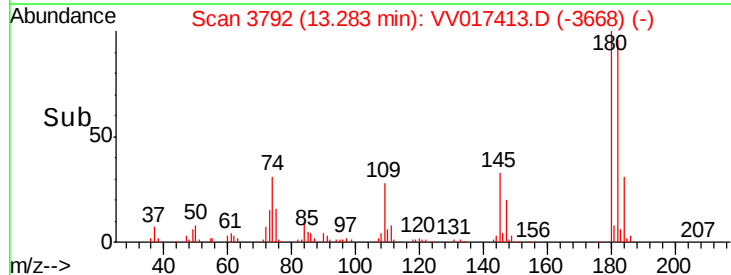
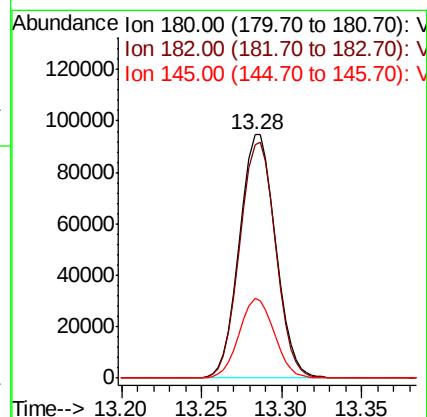
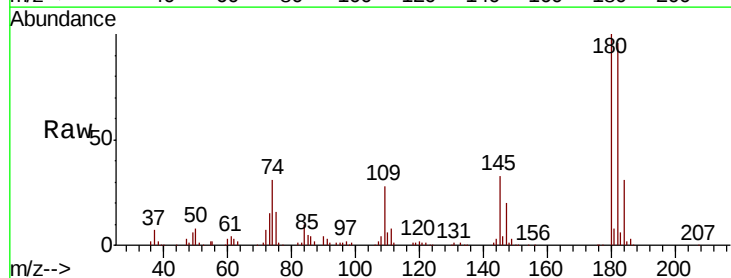
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

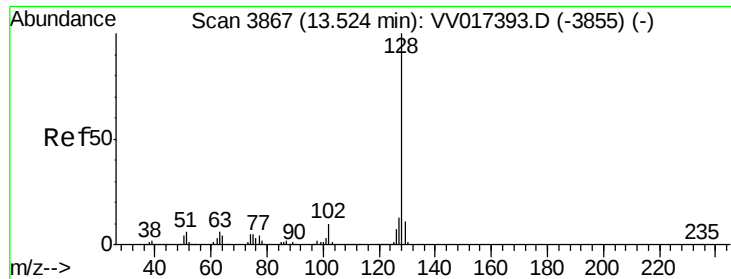
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.2  | 77.0  | 115.4 |
| 184     | 31.4  | 24.0  | 36.0  |
| 145     | 30.8  | 23.8  | 35.8  |



#68  
 1,2,4-trichlorobenzene  
 Concen: 48.053 ug/L  
 RT: 13.28 min Scan# 3792  
 Delta R.T. 0.00 min  
 Lab File: VV017413.D  
 Acq: 09 Jul 2020 21:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.3  | 76.0  | 114.0 |
| 145     | 31.7  | 24.6  | 36.8  |





#69

Naphthalene

Concen: 51.545 ug/L

RT: 13.52 min Scan# 3867

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05078

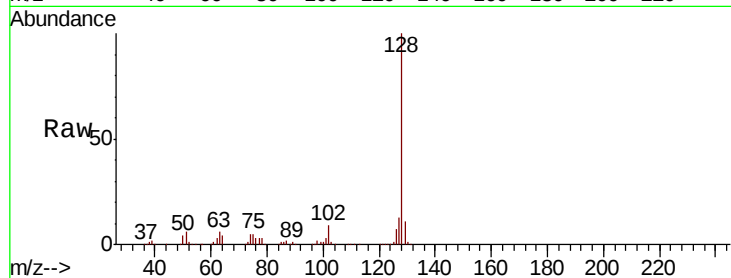
Tot Ion:128 Resp: 436245

Ion Ratio Lower Upper

128 100

127 13.5 10.7 16.1

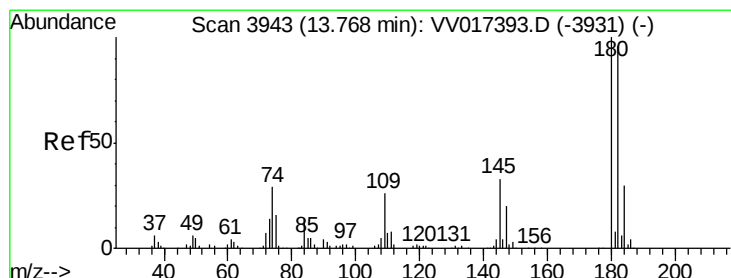
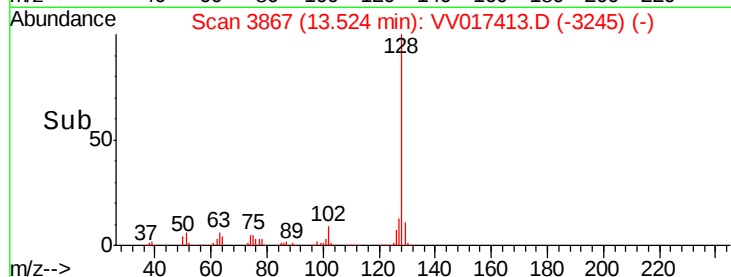
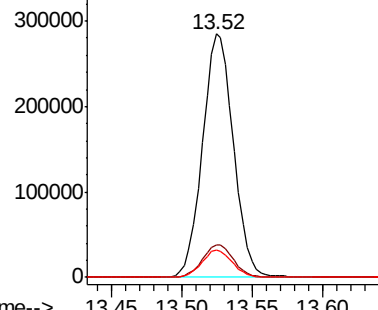
129 11.1 8.6 12.8



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: 49.494 ug/L

RT: 13.77 min Scan# 3943

Delta R.T. 0.00 min

Lab File: VV017413.D

Acq: 09 Jul 2020 21:04

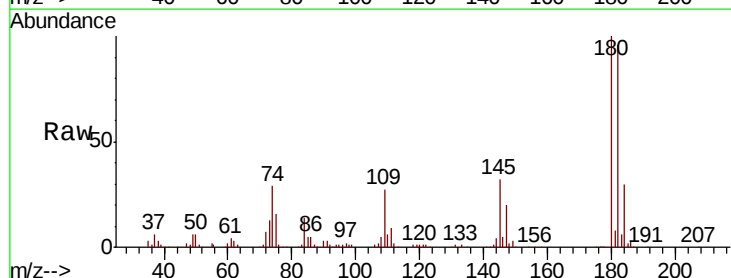
Tgt Ion:180 Resp: 152575

Ion Ratio Lower Upper

180 100

182 97.4 76.3 114.5

145 32.4 26.5 39.7



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

