

Data File : VV014932.D  
Acq On : 14 Mar 2020 02:46  
Operator : SY/MD  
Sample : VSTDCCC050EC  
Misc : 5.0mL/MSVOA\_V/WATER  
ALS Vial : 39 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05091

Quant Time: Mar 16 01:42:17 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM030620WMA.M  
Quant Title : VOC Analysis  
QLast Update : Mon Mar 16 01:36:12 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 385235   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 382680   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 205192   | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 93903    | 36.02    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 72.04% |
| 7) Chloroethane-d5             | 1.58    | 69    | 75861    | 36.81    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 73.62% |
| 11) 1,1-Dichloroethene-d2      | 2.12    | 63    | 163076   | 37.64    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 75.28% |
| 21) 2-Butanone-d5              | 3.94    | 46    | 145970   | 75.07    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 75.07% |
| 24) Chloroform-d               | 4.38    | 84    | 233955   | 47.39    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 94.78% |
| 26) 1,2-Dichloroethane-d4      | 5.06    | 65    | 150036   | 44.75    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.50% |
| 32) Benzene-d6                 | 5.08    | 84    | 453119   | 44.84    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.68% |
| 36) 1,2-Dichloropropane-d6     | 6.10    | 67    | 138915   | 41.48    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 82.96% |
| 41) Toluene-d8                 | 7.34    | 98    | 447377   | 45.21    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 90.42% |
| 43) trans-1,3-Dichloropropene- | 7.64    | 79    | 69800    | 42.69    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 85.38% |
| 47) 2-Hexanone-d5              | 8.12    | 63    | 139143   | 93.58    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 93.58% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.24   | 84    | 207065   | 44.95    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 89.90% |
| 64) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 196246   | 48.25    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 96.50% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 166346 | 43.691 ug/L | 99     |
| 3) Chloromethane               | 1.25 | 50  | 119745 | 35.709 ug/L | 98     |
| 5) Vinyl chloride              | 1.32 | 62  | 118363 | 38.089 ug/L | 99     |
| 6) Bromomethane                | 1.53 | 94  | 71599  | 37.124 ug/L | 99     |
| 8) Chloroethane                | 1.60 | 64  | 64121  | 38.386 ug/L | 99     |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 188419 | 45.345 ug/L | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 90072  | 42.107 ug/L | 96     |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 86016  | 41.102 ug/L | 95     |
| 13) Acetone                    | 2.21 | 43  | 57914  | 35.675 ug/L | 97     |
| 14) Carbon disulfide           | 2.31 | 76  | 269929 | 39.013 ug/L | 100    |
| 15) Methyl Acetate             | 2.46 | 43  | 108590 | 35.605 ug/L | 97     |
| 16) Methylene chloride         | 2.52 | 84  | 132641 | 46.669 ug/L | 90     |
| 17) trans-1,2-Dichloroethene   | 2.78 | 96  | 119065 | 46.055 ug/L | 94     |
| 18) Methyl tert-butyl Ether    | 2.79 | 73  | 396206 | 46.811 ug/L | 96     |
| 19) 1,1-Dichloroethane         | 3.21 | 63  | 220757 | 43.718 ug/L | 98     |
| 20) cis-1,2-Dichloroethene     | 3.94 | 96  | 137968 | 47.715 ug/L | 89     |
| 22) 2-Butanone                 | 4.02 | 43  | 138418 | 64.636 ug/L | 94     |

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Operator : SY/MD  
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ALS Vial : 39 Sample Multiplier: 1

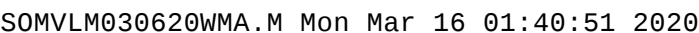
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05091

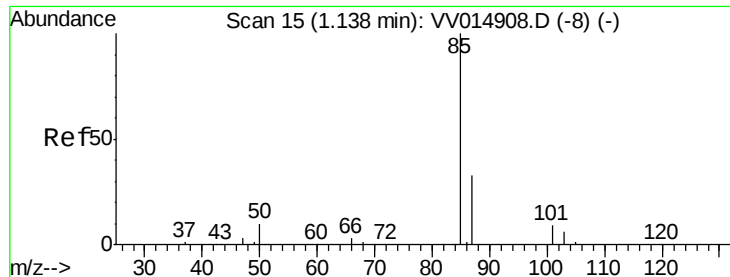
Quant Time: Mar 16 01:42:17 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM030620WMA.M  
Quant Title : VOC Analysis  
QLast Update : Mon Mar 16 01:36:12 2020  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.28  | 128  | 72037    | 48.936 | ug/L # | 87       |
| 25) Chloroform                 | 4.41  | 83   | 244333   | 46.707 | ug/L   | 100      |
| 27) 1,2-Dichloroethane         | 5.16  | 62   | 183680   | 45.304 | ug/L   | 97       |
| 29) Cyclohexane                | 4.70  | 56   | 187523   | 40.218 | ug/L   | 86       |
| 30) 1,1,1-Trichloroethane      | 4.64  | 97   | 218239   | 49.189 | ug/L   | 97       |
| 31) Carbon tetrachloride       | 4.85  | 117  | 189732   | 50.353 | ug/L   | 98       |
| 33) Benzene                    | 5.13  | 78   | 502719   | 45.346 | ug/L   | 100      |
| 34) Trichloroethene            | 5.94  | 95   | 130103   | 44.906 | ug/L   | 93       |
| 35) Methylcyclohexane          | 6.15  | 83   | 204629   | 42.786 | ug/L   | 93       |
| 37) 1,2-Dichloropropane        | 6.20  | 63   | 123912   | 41.361 | ug/L # | 95       |
| 38) Bromodichloromethane       | 6.53  | 83   | 177822   | 46.661 | ug/L   | 100      |
| 39) cis-1,3-Dichloropropene    | 7.05  | 75   | 202266   | 43.074 | ug/L   | 95       |
| 40) 4-Methyl-2-pentanone       | 7.26  | 43   | 354005   | 81.541 | ug/L # | 93       |
| 42) Toluene                    | 7.41  | 91   | 566112   | 46.286 | ug/L   | 98       |
| 44) trans-1,3-Dichloropropene  | 7.67  | 75   | 180796   | 42.235 | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 7.86  | 97   | 133580   | 48.414 | ug/L   | 95       |
| 46) Tetrachloroethene          | 8.00  | 164  | 118682   | 50.067 | ug/L   | 96       |
| 48) 2-Hexanone                 | 8.17  | 43   | 270651   | 79.265 | ug/L # | 92       |
| 49) Dibromochloromethane       | 8.27  | 129  | 145321   | 48.323 | ug/L   | 97       |
| 50) 1,2-Dibromoethane          | 8.38  | 107  | 143410   | 48.084 | ug/L   | 99       |
| 51) Chlorobenzene              | 8.90  | 112  | 381728   | 48.507 | ug/L   | 96       |
| 52) Ethylbenzene               | 9.03  | 91   | 645047   | 46.813 | ug/L   | 99       |
| 53) m,p-Xylene                 | 9.16  | 106  | 250513   | 48.445 | ug/L   | 94       |
| 54) o-xylene                   | 9.57  | 106  | 246679   | 48.563 | ug/L   | 96       |
| 55) Styrene                    | 9.58  | 104  | 420638   | 48.427 | ug/L   | 98       |
| 56) Isopropylbenzene           | 9.95  | 105  | 650662   | 47.827 | ug/L   | 98       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.26 | 83   | 216117   | 45.475 | ug/L   | 99       |
| 59) 1,2,3-Trichloropropane     | 10.30 | 75   | 172878   | 45.185 | ug/L   | 99       |
| 61) Bromoform                  | 9.75  | 173  | 104220   | 46.818 | ug/L   | 98       |
| 62) 1,3-Dichlorobenzene        | 11.20 | 146  | 316667   | 47.724 | ug/L   | 98       |
| 63) 1,4-Dichlorobenzene        | 11.29 | 146  | 320725   | 47.976 | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.67 | 146  | 322289   | 48.787 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.45 | 75   | 49201    | 43.883 | ug/L   | 83       |
| 67) 1,3,5-Trichlorobenzene     | 12.67 | 180  | 241023   | 46.967 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.28 | 180  | 217432   | 46.098 | ug/L   | 99       |
| 69) Naphthalene                | 13.52 | 128  | 318374   | 44.836 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.76 | 180  | 229402   | 48.794 | ug/L   | 100      |

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

Quant Time: Mar 16 01:42:17 2020  
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Quant Title : VOC Analysis  
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Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 43.691 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

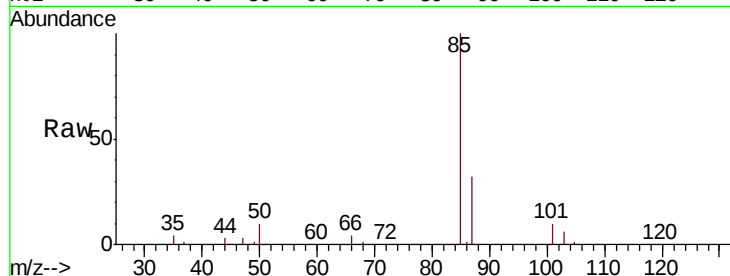
VSTD05091

Tgt Ion: 85 Resp: 166346

Ion Ratio Lower Upper

85 100

87 31.7 25.8 38.8



Abundance Ion 85.00 (84.70 to 85.70): VV014908.D (-8) (-)

Ion 87.00 (86.70 to 87.70): VV014908.D (-8) (-)

1.14

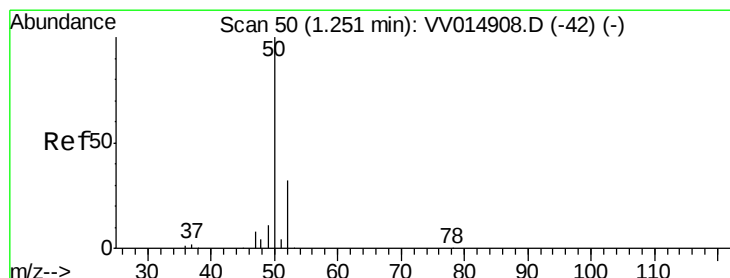
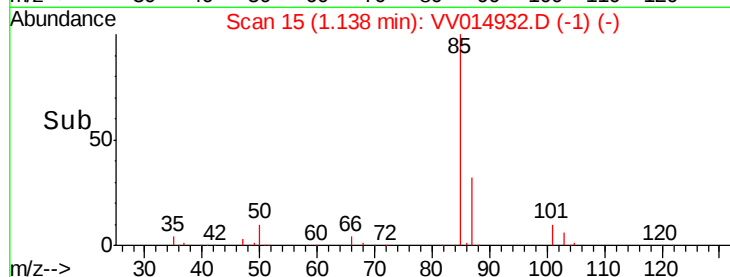
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: 35.709 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV014932.D

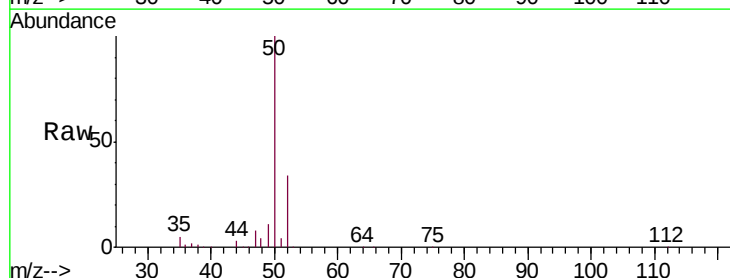
Acq: 14 Mar 2020 02:46

Tgt Ion: 50 Resp: 119745

Ion Ratio Lower Upper

50 100

52 33.6 22.9 42.5



Abundance Ion 50.00 (49.70 to 50.70): VV014908.D (-42) (-)

Ion 52.00 (51.70 to 52.70): VV014908.D (-42) (-)

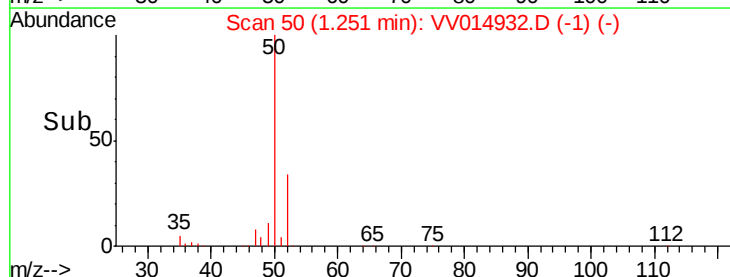
1.25

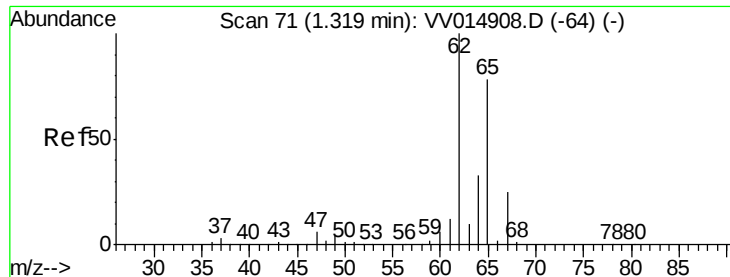
100000

50000

0

Time-->





#5

Vinyl chloride

Concen: 38.089 ug/L

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

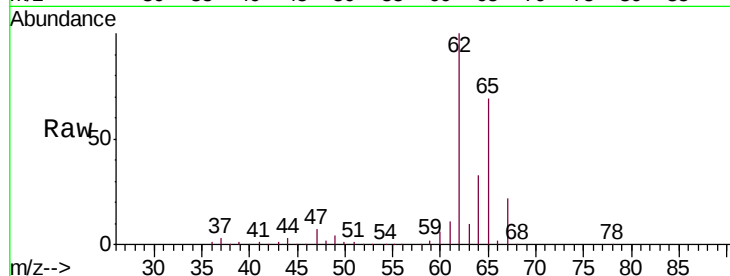
VSTD05091

Tgt Ion: 62 Resp: 118363

Ion Ratio Lower Upper

62 100

64 32.7 22.3 41.5



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0

1.32

120000

100000

80000

60000

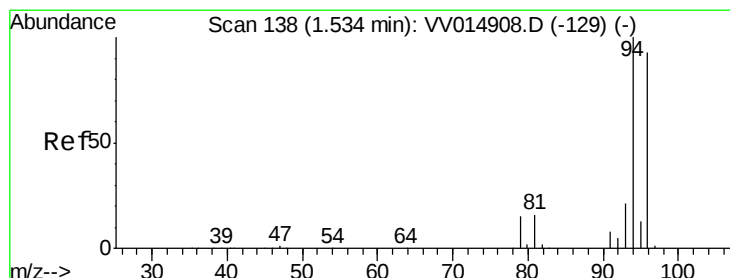
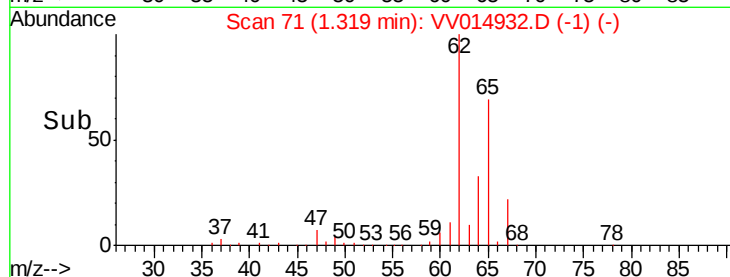
40000

20000

0

Time-->

1.25 1.30 1.35 1.40



#6

Bromomethane

Concen: 37.124 ug/L

RT: 1.53 min Scan# 137

Delta R.T. -0.00 min

Lab File: VV014932.D

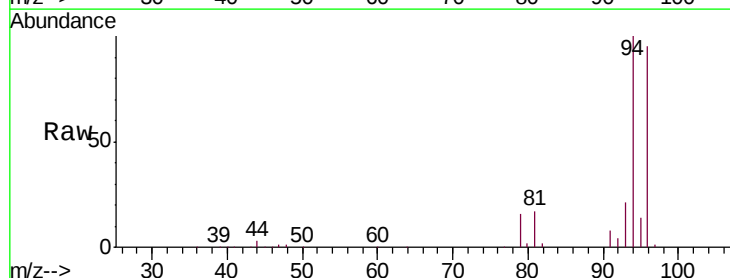
Acq: 14 Mar 2020 02:46

Tgt Ion: 94 Resp: 71599

Ion Ratio Lower Upper

94 100

96 95.0 67.2 124.8



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0

1.53

60000

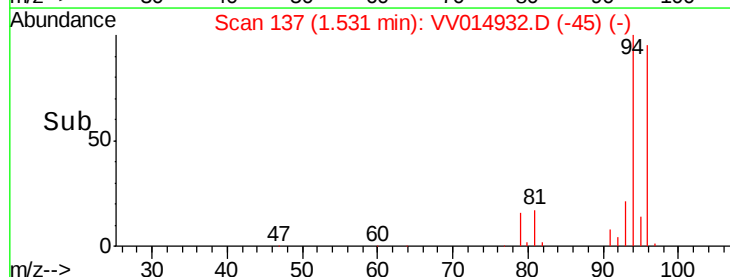
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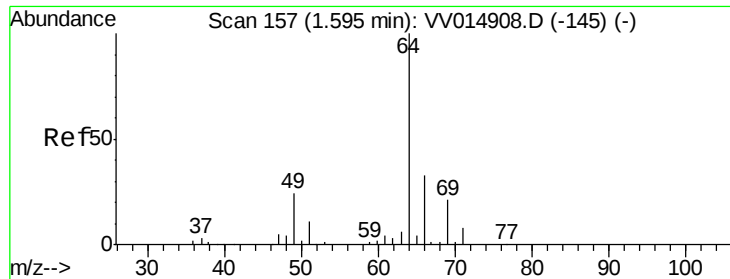
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0

Time-->

1.50 1.55 1.60

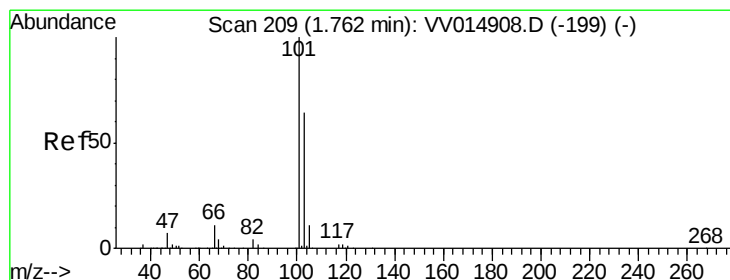
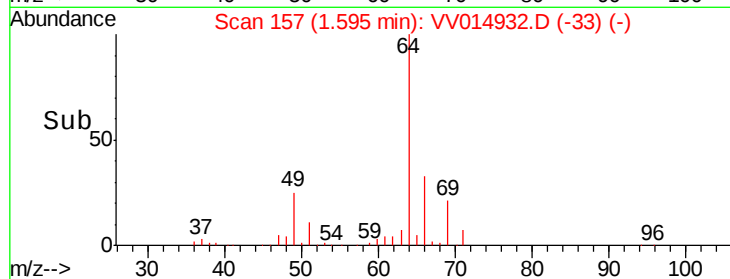
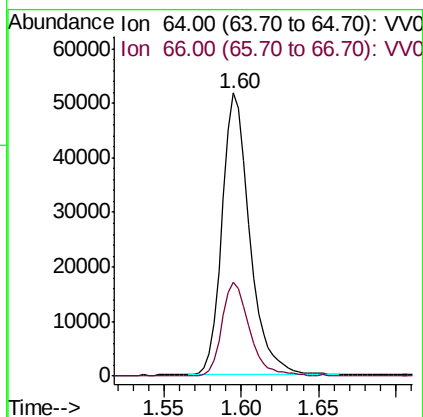
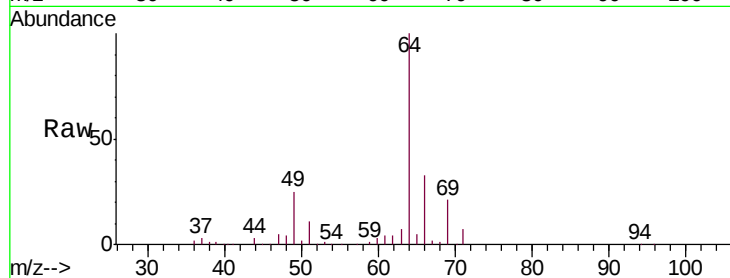




#8  
Chloroethane  
Concen: 38.386 ug/L  
RT: 1.60 min Scan# 157  
Delta R.T. 0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

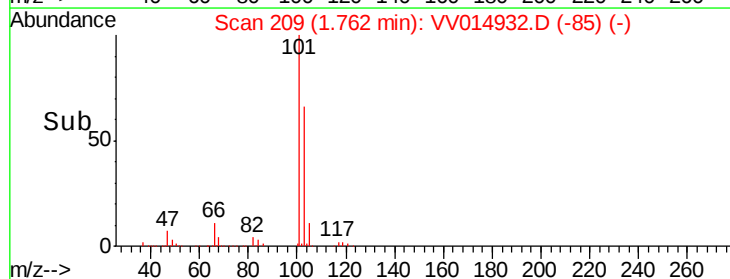
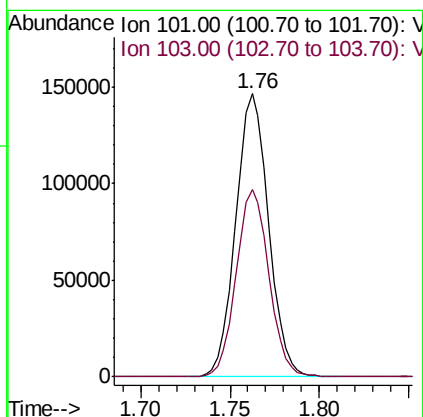
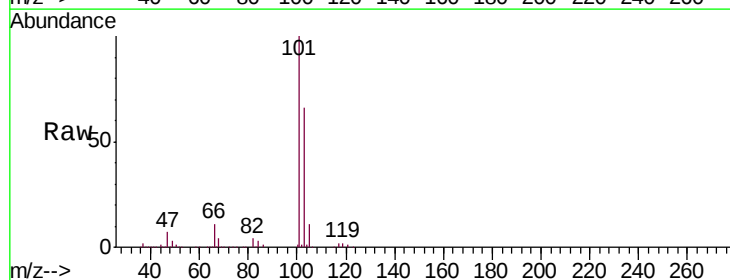
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05091

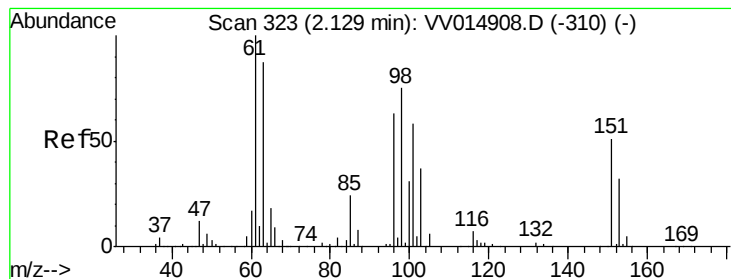
Tgt Ion: 64 Resp: 64121  
Ion Ratio Lower Upper  
64 100  
66 33.1 22.6 42.0



#9  
Trichlorofluoromethane  
Concen: 45.345 ug/L  
RT: 1.76 min Scan# 209  
Delta R.T. 0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

Tgt Ion: 101 Resp: 188419  
Ion Ratio Lower Upper  
101 100  
103 66.1 51.8 77.8





#10

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

Concen: 42.107 ug/L

RT: 2.13 min Scan# 323

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05091

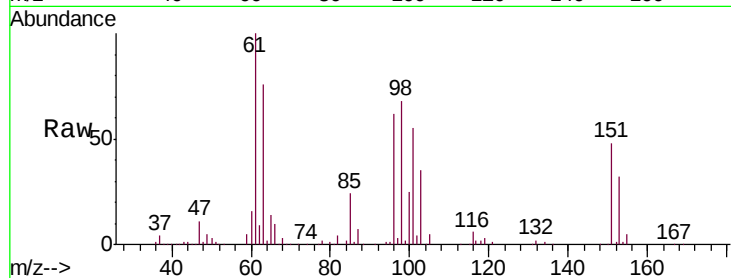
Tgt Ion: 101 Resp: 90072

Ion Ratio Lower Upper

101 100

85 42.4 35.0 52.6

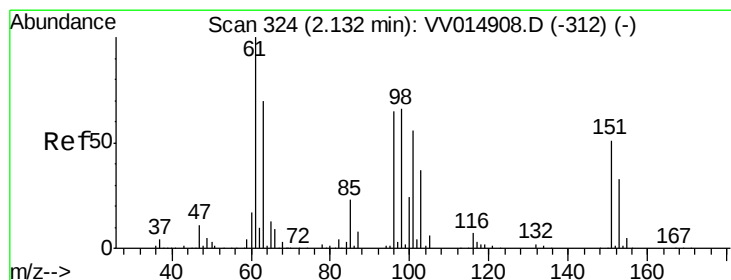
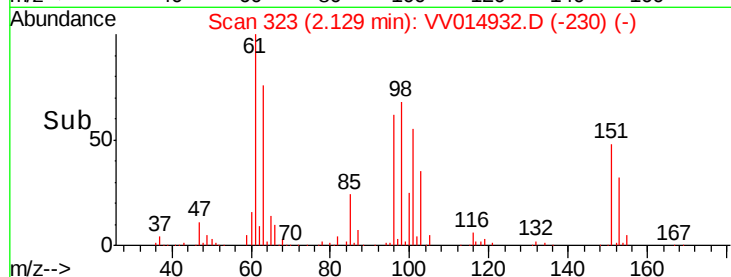
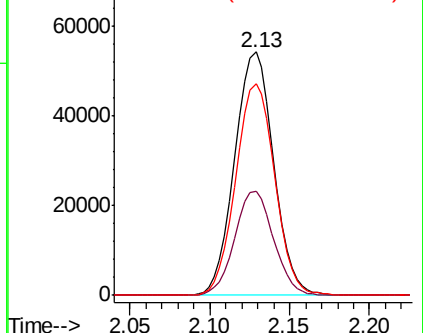
151 87.2 66.4 99.6



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 41.102 ug/L

RT: 2.13 min Scan# 323

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

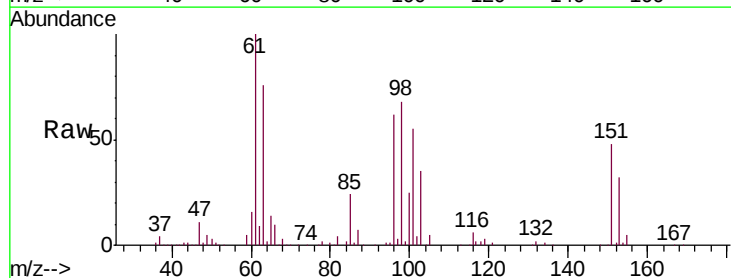
Tgt Ion: 96 Resp: 86016

Ion Ratio Lower Upper

96 100

61 161.6 118.4 220.0

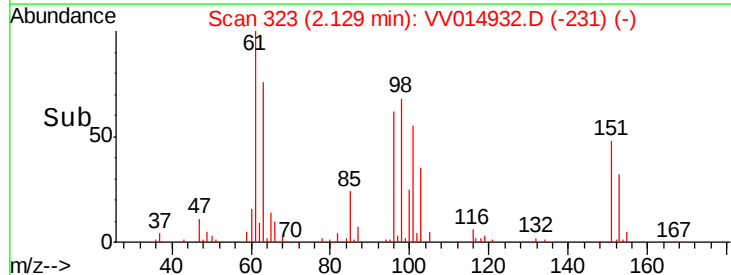
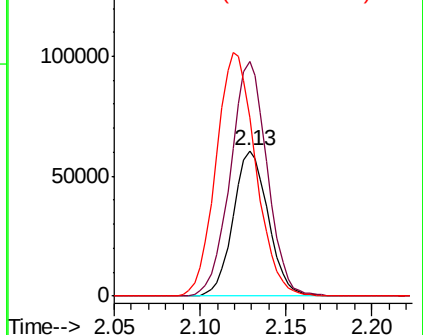
63 122.8 88.4 164.2

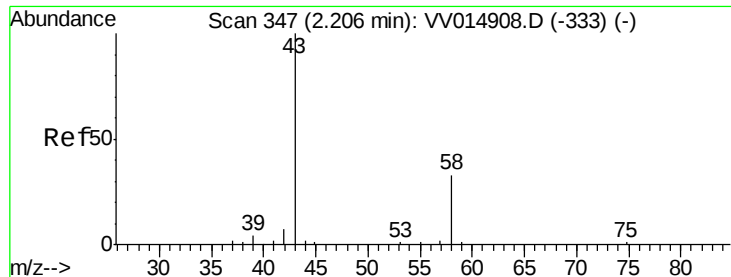


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 35.675 ug/L

RT: 2.21 min Scan# 348

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

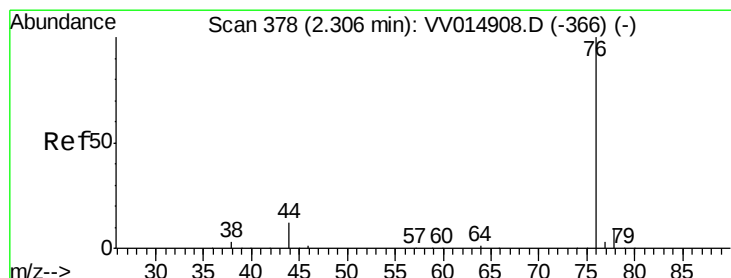
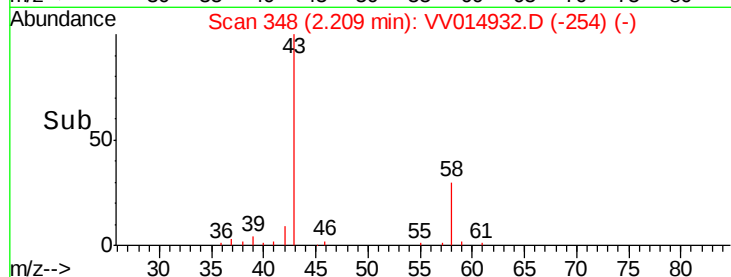
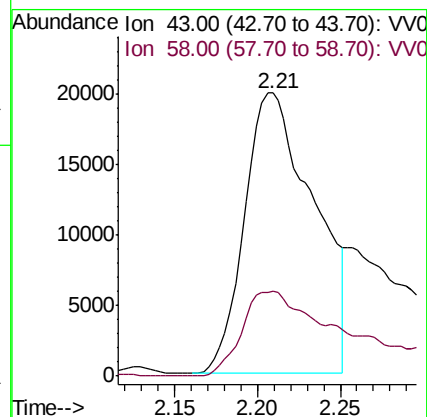
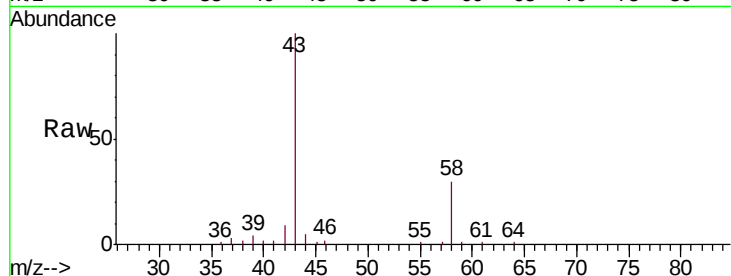
VSTD05091

Tgt Ion: 43 Resp: 57914

Ion Ratio Lower Upper

43 100

58 29.2 0.0 62.2



#14

Carbon disulfide

Concen: 39.013 ug/L

RT: 2.31 min Scan# 378

Delta R.T. 0.00 min

Lab File: VV014932.D

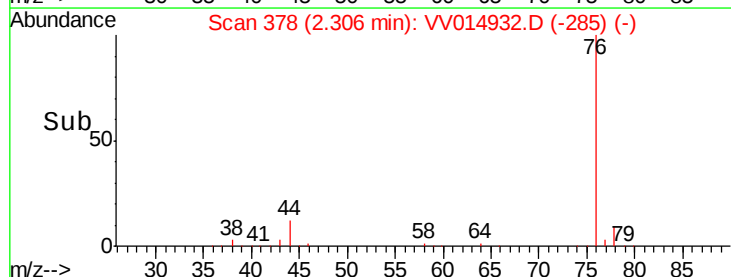
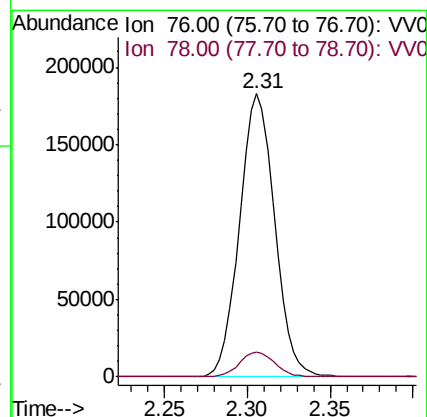
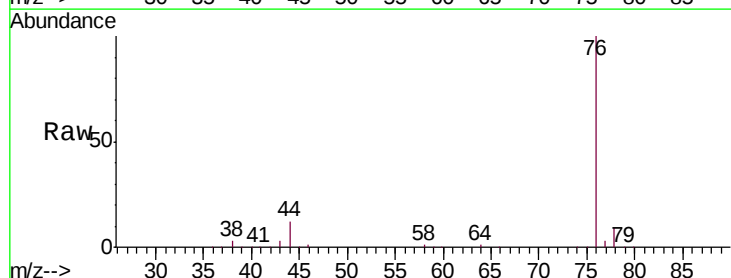
Acq: 14 Mar 2020 02:46

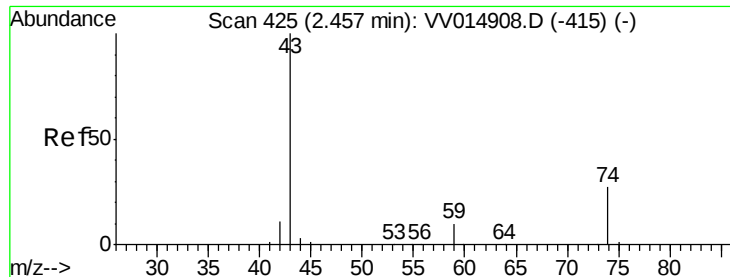
Tgt Ion: 76 Resp: 269929

Ion Ratio Lower Upper

76 100

78 8.8 7.1 10.7





#15

Methyl Acetate

Concen: 35.605 ug/L

RT: 2.46 min Scan# 425

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampled :

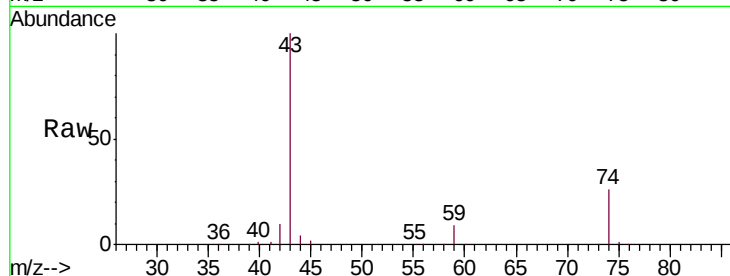
VSTD05091

Tgt Ion: 43 Resp: 108590

Ion Ratio Lower Upper

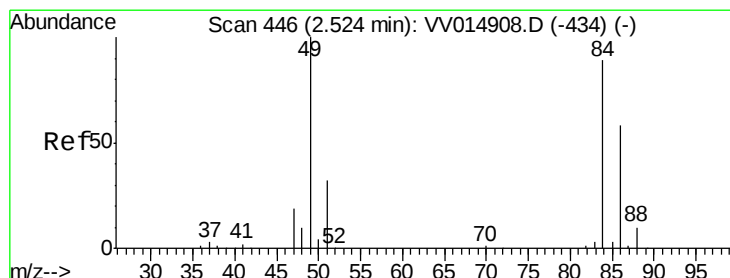
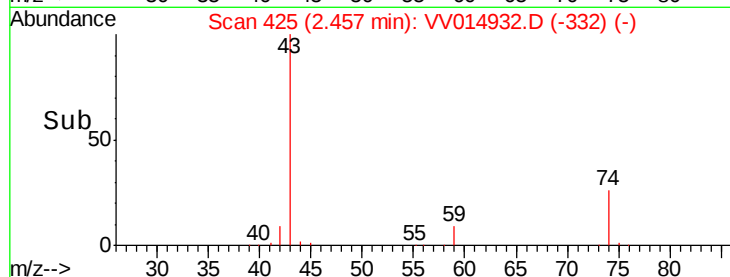
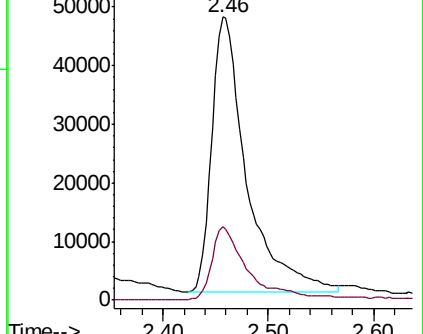
43 100

74 23.8 17.9 26.9



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 74.00 (73.70 to 74.70): VV0



#16

Methylene chloride

Concen: 46.669 ug/L

RT: 2.52 min Scan# 446

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

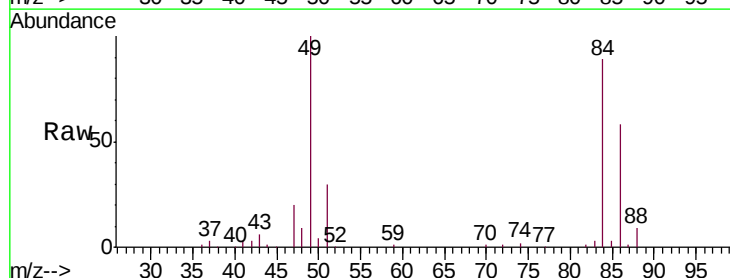
Tgt Ion: 84 Resp: 132641

Ion Ratio Lower Upper

84 100

86 64.6 47.3 87.9

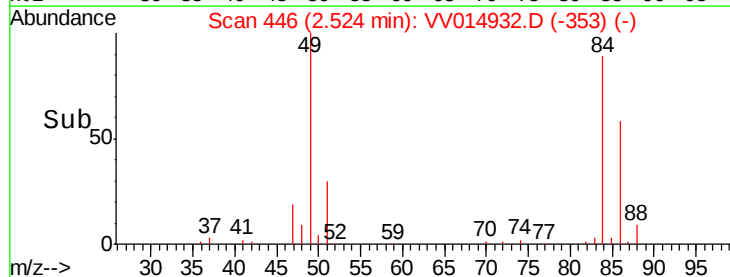
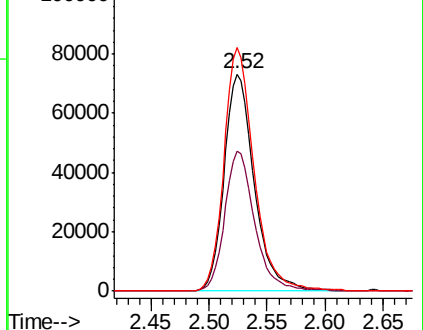
49 112.2 88.7 164.7

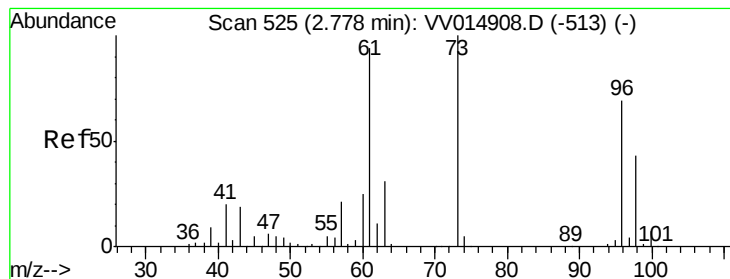


Abundance Ion 84.00 (83.70 to 84.70): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.00 (48.70 to 49.70): VV0





#17

trans-1,2-Dichloroethene

Concen: 46.055 ug/L

RT: 2.78 min Scan# 525

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05091

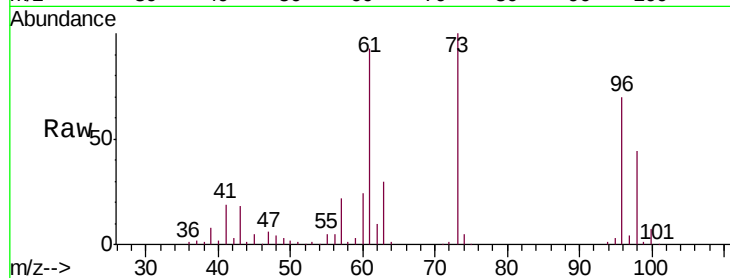
Tgt Ion: 96 Resp: 119065

Ion Ratio Lower Upper

96 100

61 133.5 100.5 186.7

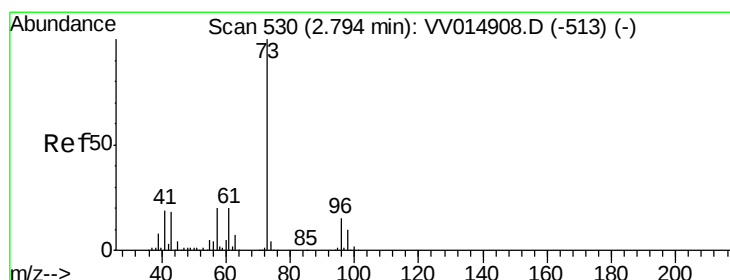
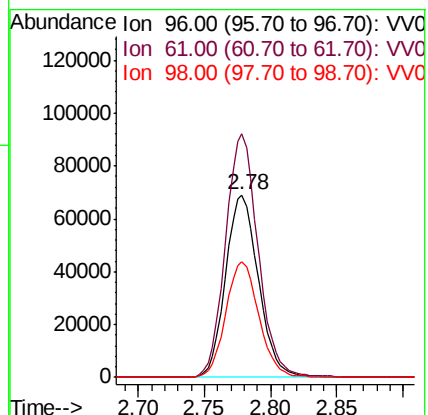
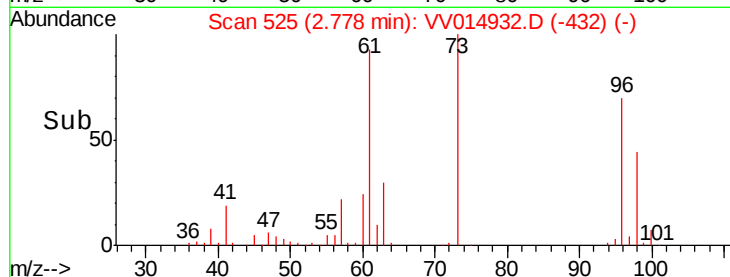
98 63.6 45.1 83.7



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: 46.811 ug/L

RT: 2.79 min Scan# 530

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

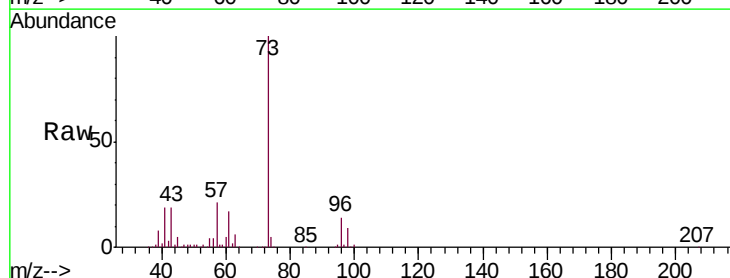
Tgt Ion: 73 Resp: 396206

Ion Ratio Lower Upper

73 100

43 17.8 15.9 23.9

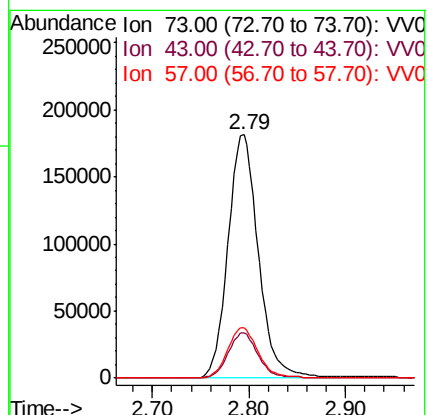
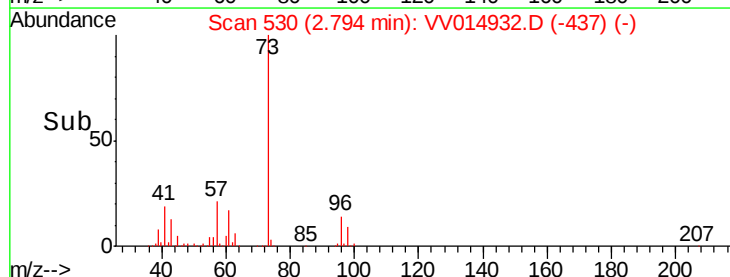
57 20.7 18.0 27.0

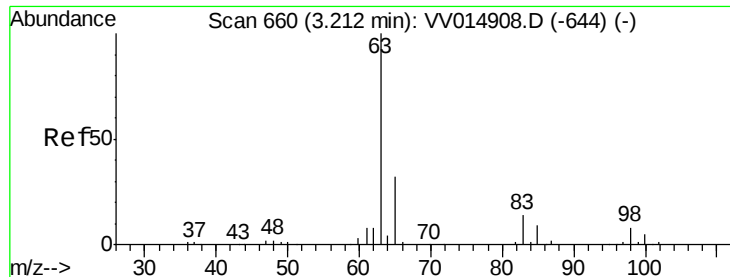


Abundance Ion 73.00 (72.70 to 73.70): VV0

Ion 43.00 (42.70 to 43.70): VV0

Ion 57.00 (56.70 to 57.70): VV0

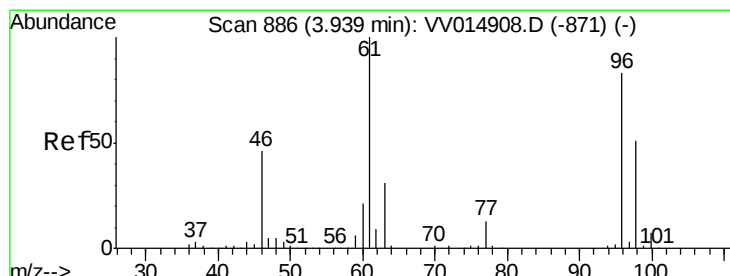
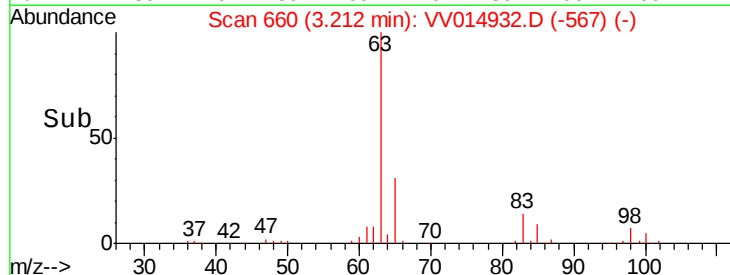
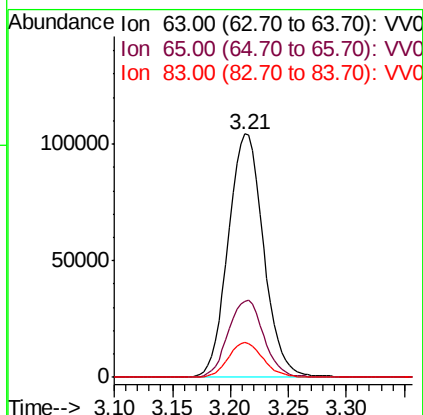
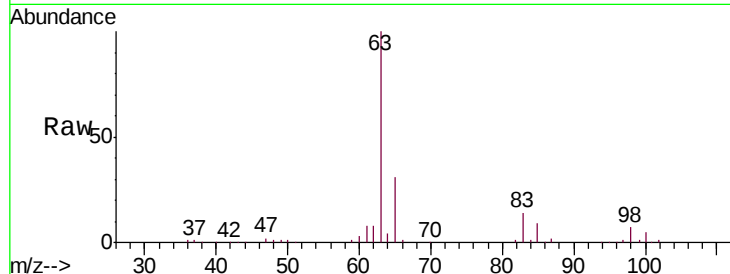




#19  
 1,1-Dichloroethane  
 Concen: 43.718 ug/L  
 RT: 3.21 min Scan# 660  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

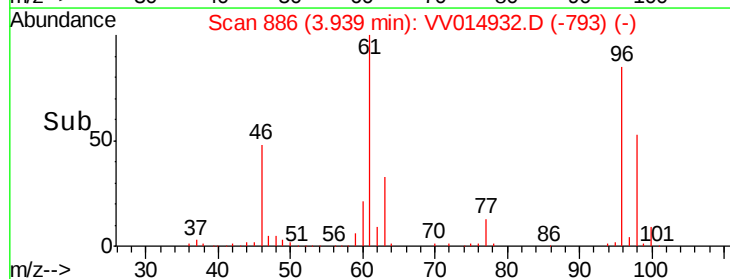
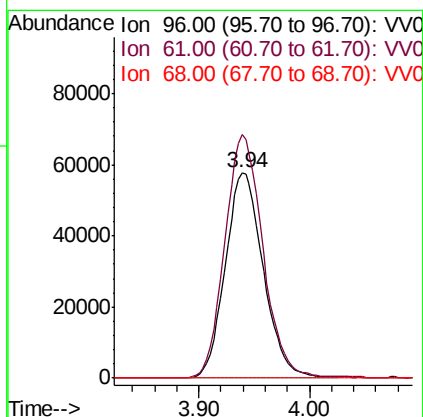
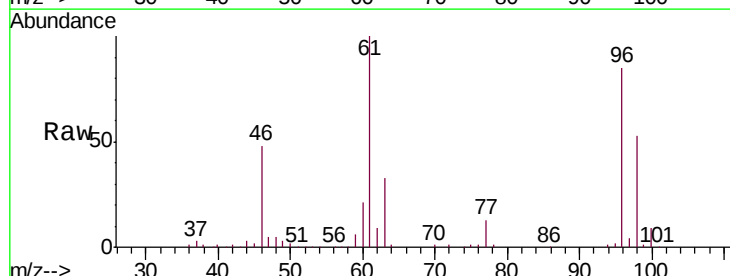
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD05091

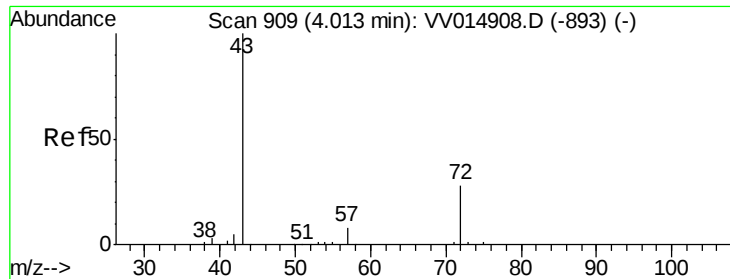
Tgt Ion: 63 Resp: 220757  
 Ion Ratio Lower Upper  
 63 100  
 65 31.4 22.5 41.7  
 83 14.2 9.1 16.9



#20  
 cis-1,2-Dichloroethene  
 Concen: 47.715 ug/L  
 RT: 3.94 min Scan# 886  
 Delta R.T. -0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

Tgt Ion: 96 Resp: 137968  
 Ion Ratio Lower Upper  
 96 100  
 61 118.3 92.2 171.2  
 68 0.0 0.0 0.0





#22

2-Butanone

Concen: 64.636 ug/L

RT: 4.02 min Scan# 910

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

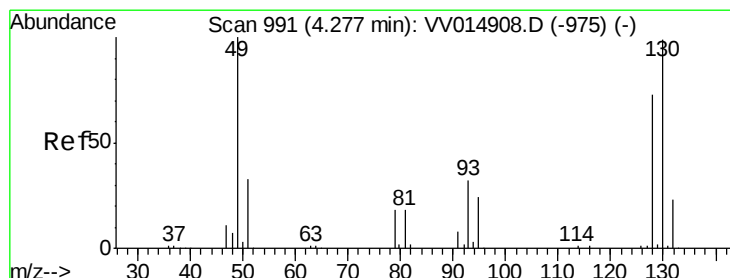
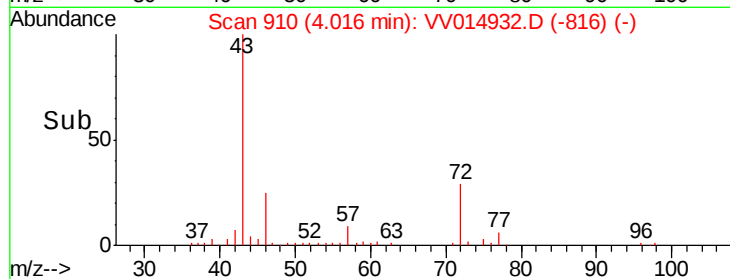
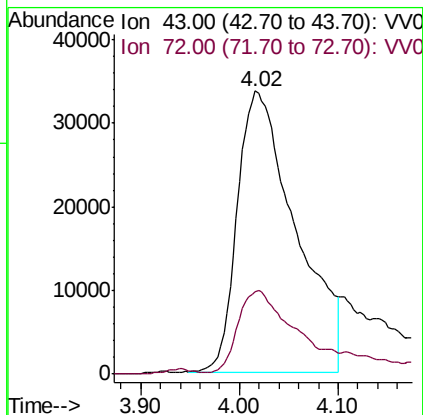
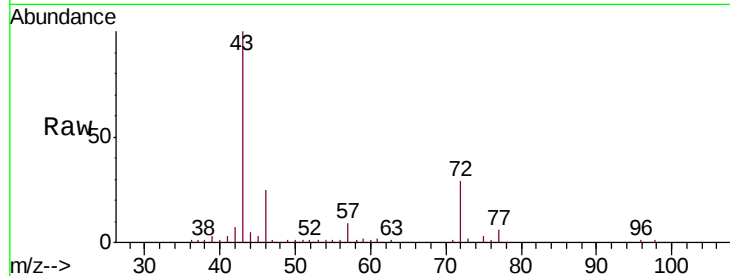
VSTD05091

Tgt Ion: 43 Resp: 138418

Ion Ratio Lower Upper

43 100

72 26.8 12.0 36.0



#23

Bromochloromethane

Concen: 48.936 ug/L

RT: 4.28 min Scan# 991

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Tgt Ion: 128 Resp: 72037

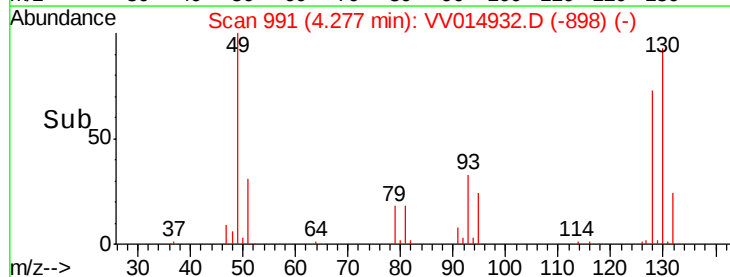
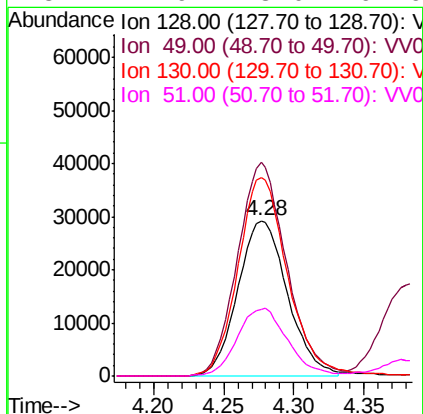
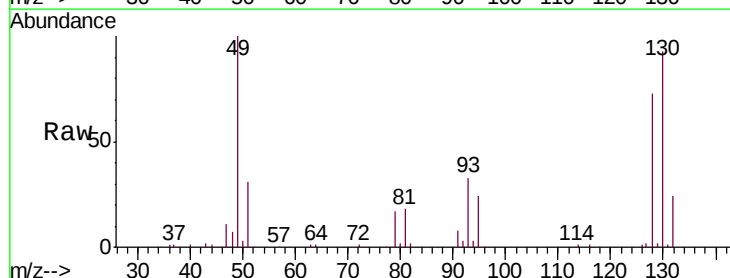
Ion Ratio Lower Upper

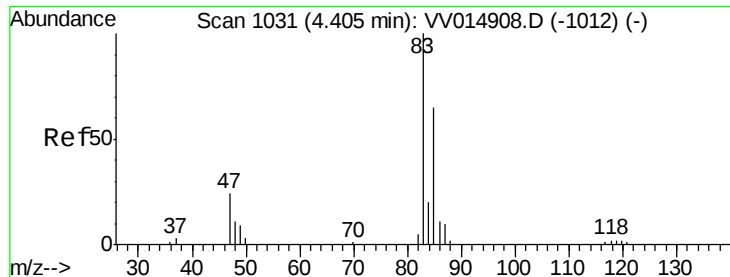
128 100

49 137.3 116.3 215.9

130 127.7 88.9 165.1

51 42.9 43.0 64.6#

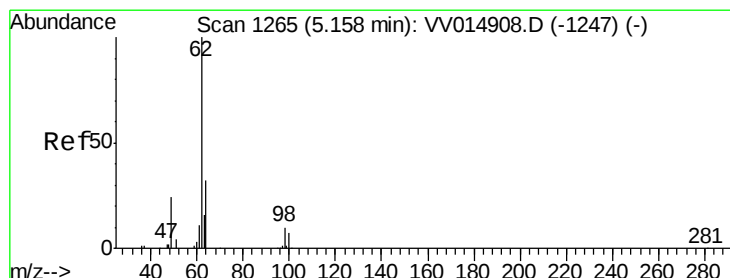
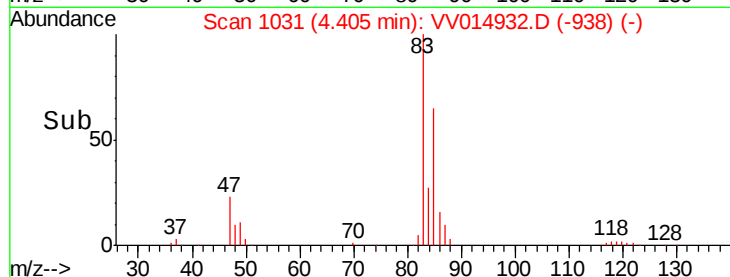
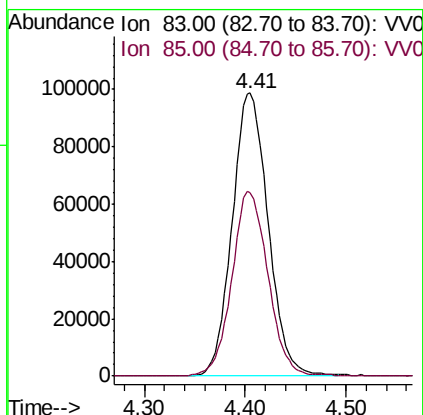
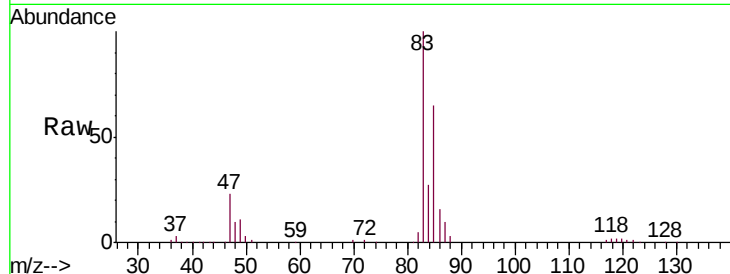




#25  
Chloroform  
Concen: 46.707 ug/L  
RT: 4.41 min Scan# 1031  
Delta R.T. -0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

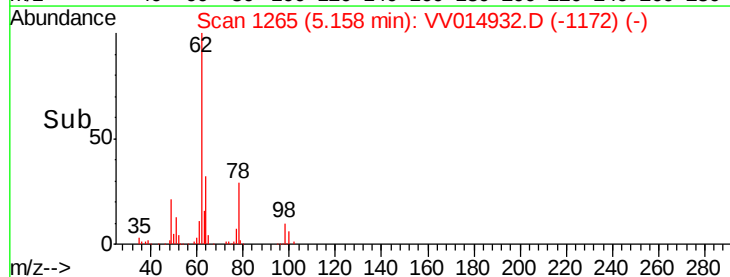
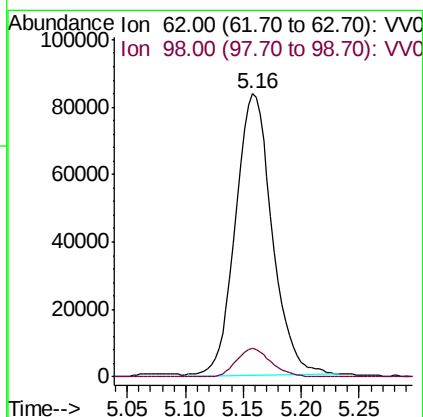
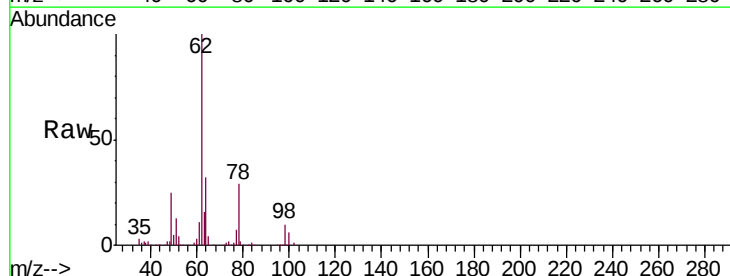
Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD05091

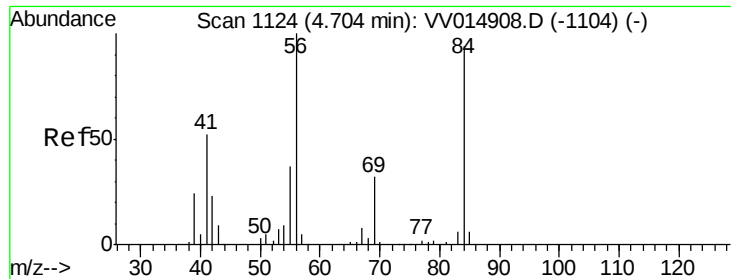
Tgt Ion: 83 Resp: 244333  
Ion Ratio Lower Upper  
83 100  
85 64.8 45.1 83.9



#27  
1,2-Dichloroethane  
Concen: 45.304 ug/L  
RT: 5.16 min Scan# 1265  
Delta R.T. -0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

Tgt Ion: 62 Resp: 183680  
Ion Ratio Lower Upper  
62 100  
98 10.2 7.2 10.8

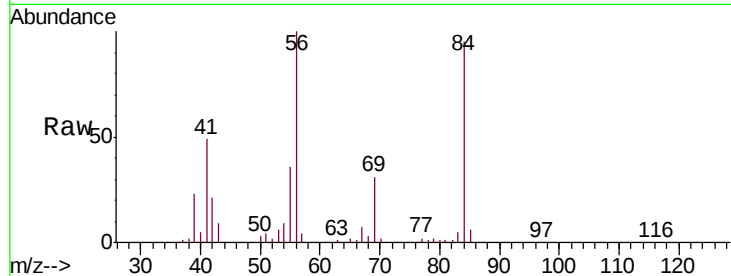




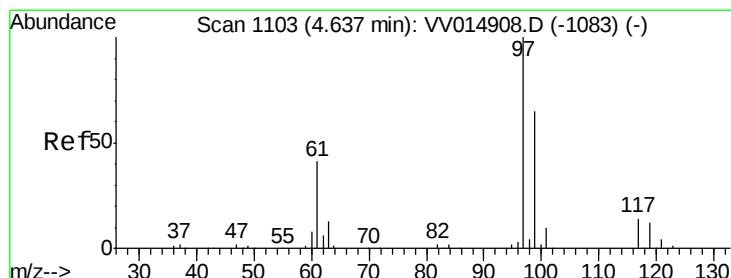
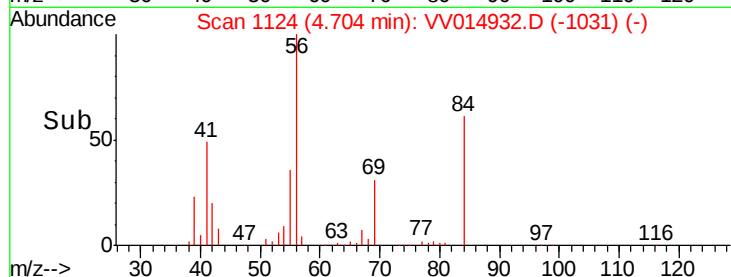
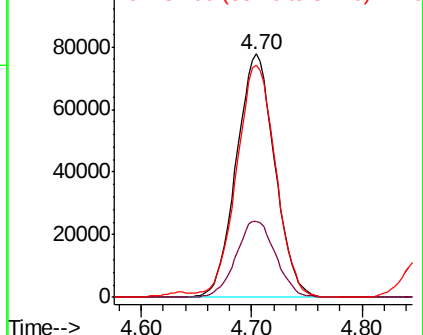
#29  
Cyclohexane  
Concen: 40.218 ug/L  
RT: 4.70 min Scan# 1124  
Delta R.T. 0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05091

Tgt Ion: 56 Resp: 187523  
Ion Ratio Lower Upper  
56 100  
69 32.2 23.5 35.3  
84 96.9 65.3 97.9

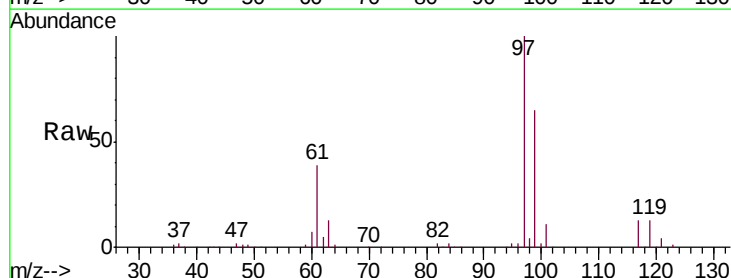


Abundance Ion 56.00 (55.70 to 56.70): VV0  
Ion 69.00 (68.70 to 69.70): VV0  
Ion 84.00 (83.70 to 84.70): VV0

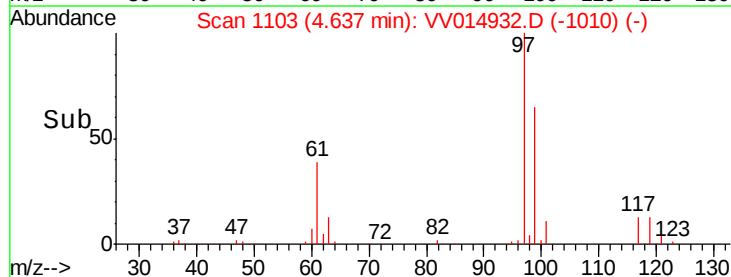
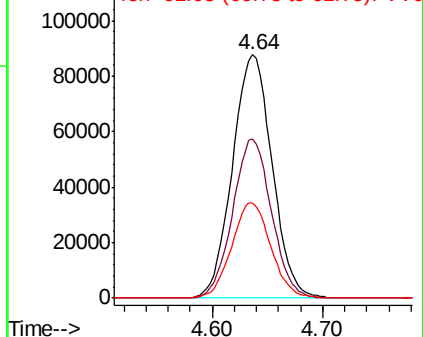


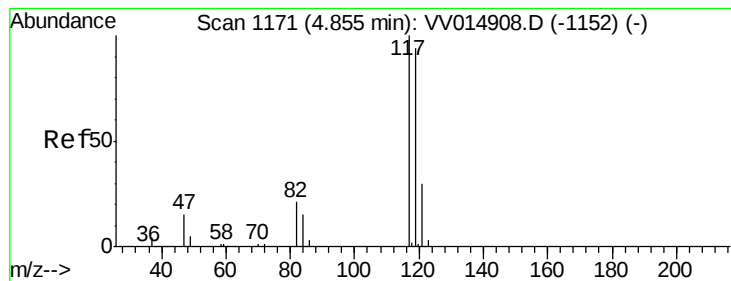
#30  
1,1,1-Trichloroethane  
Concen: 49.189 ug/L  
RT: 4.64 min Scan# 1103  
Delta R.T. 0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

Tgt Ion: 97 Resp: 218239  
Ion Ratio Lower Upper  
97 100  
99 64.1 51.6 77.4  
61 38.9 34.6 52.0



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: 50.353 ug/L

RT: 4.85 min Scan# 1170

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

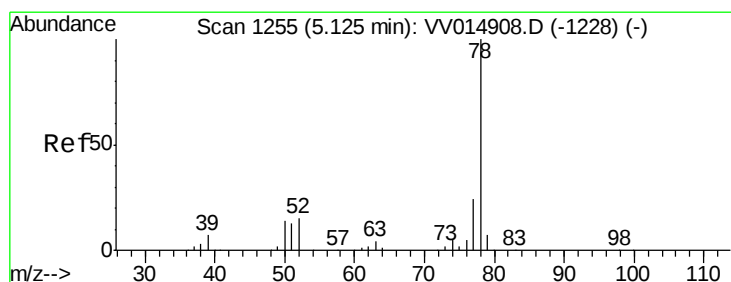
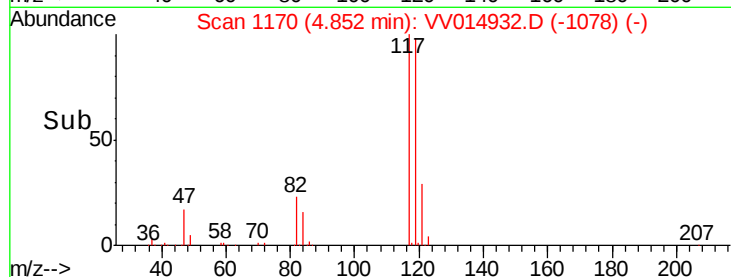
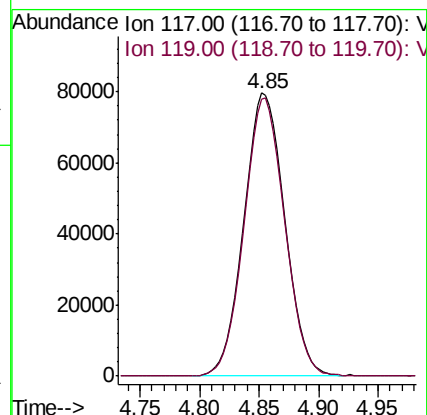
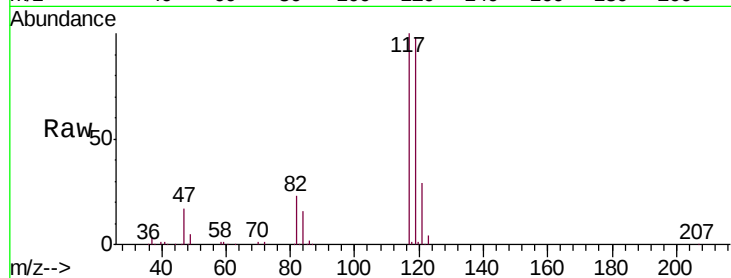
VSTD05091

Tgt Ion:117 Resp: 189732

Ion Ratio Lower Upper

117 100

119 97.3 76.5 114.7



#33

Benzene

Concen: 45.346 ug/L

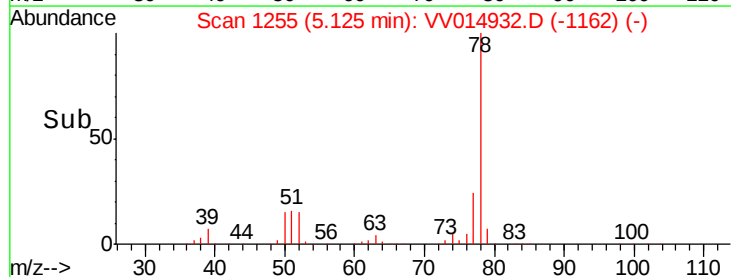
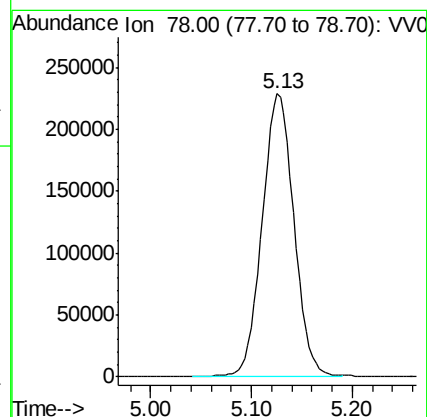
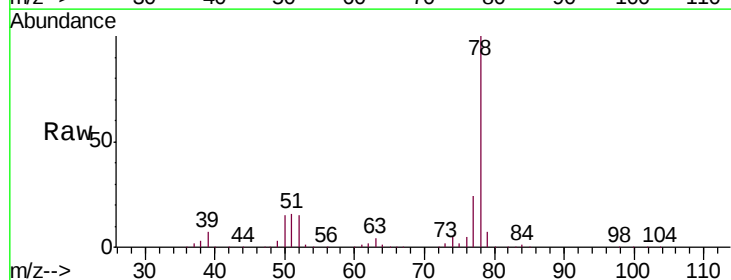
RT: 5.13 min Scan# 1255

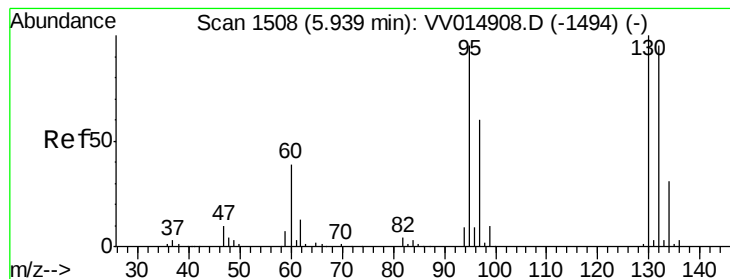
Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Tgt Ion: 78 Resp: 502719





#34

Trichloroethene

Concen: 44.906 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampled :

VSTD05091

Tgt Ion: 95 Resp: 130103

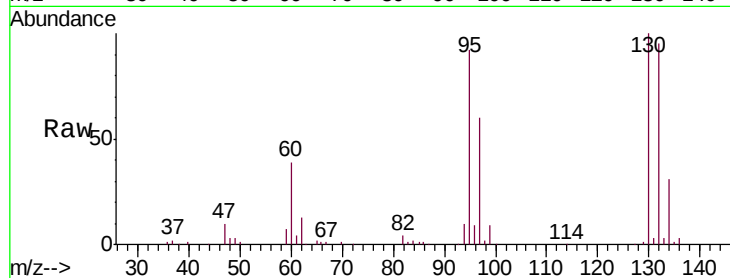
Ion Ratio Lower Upper

95 100

97 65.1 43.8 81.4

132 103.1 65.8 122.2

130 109.1 70.6 131.2

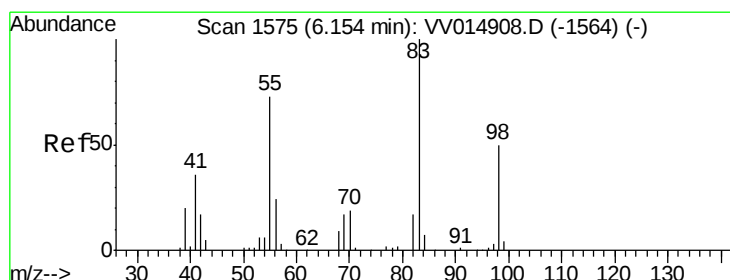
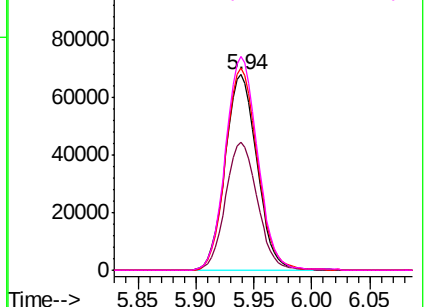
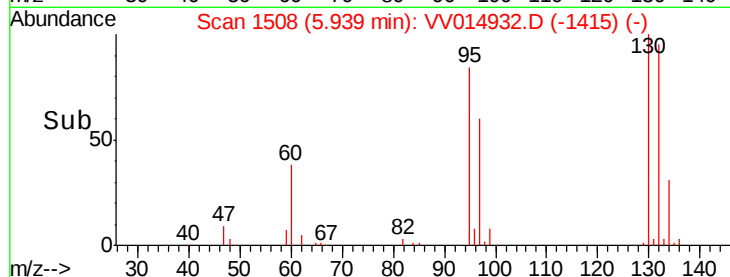


Abundance Ion 95.00 (94.70 to 95.70): VV0

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: 42.786 ug/L

RT: 6.15 min Scan# 1575

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

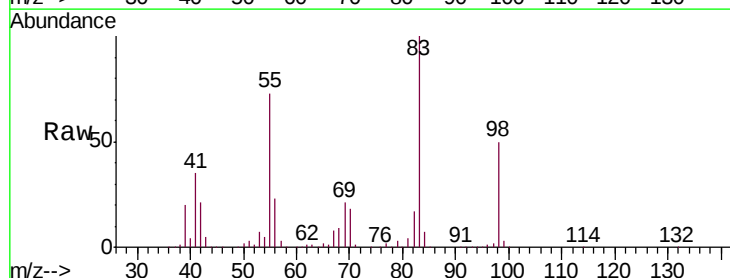
Tgt Ion: 83 Resp: 204629

Ion Ratio Lower Upper

83 100

55 73.0 63.4 95.2

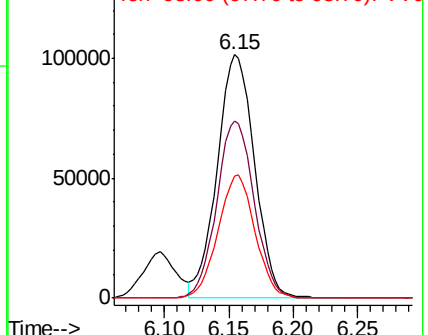
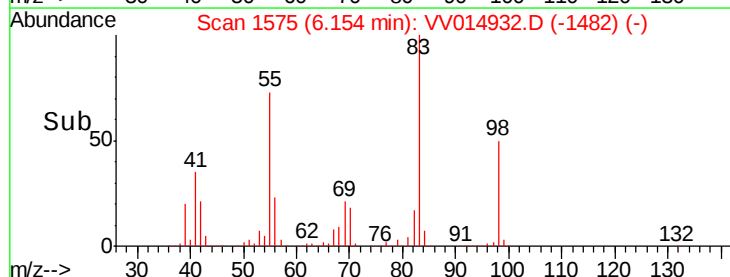
98 50.0 36.8 55.2

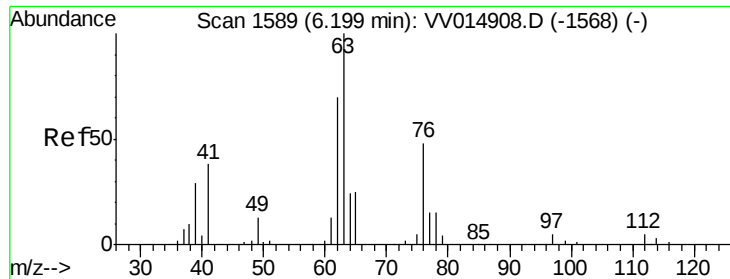


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0

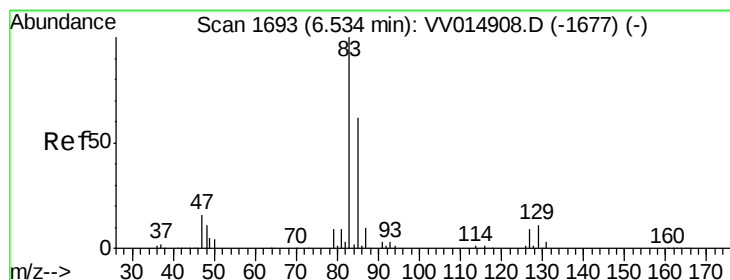
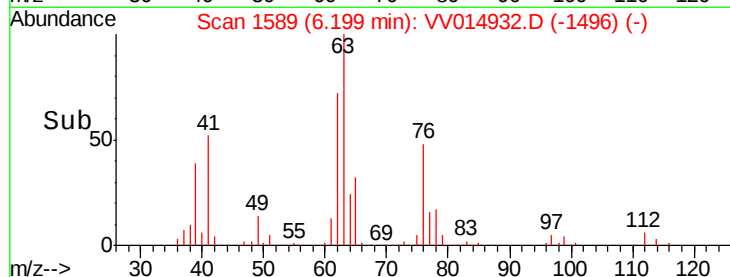
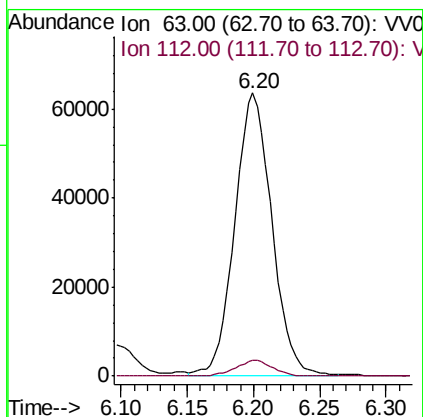
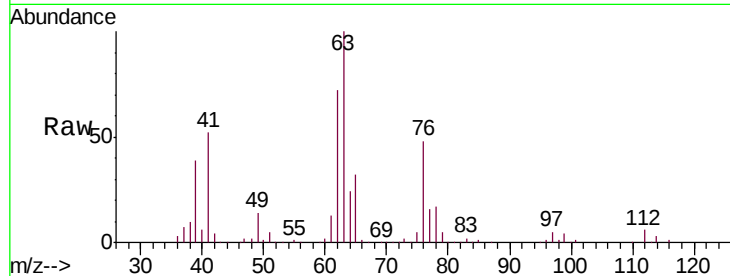




#37  
 1,2-Dichloropropane  
 Concen: 41.361 ug/L  
 RT: 6.20 min Scan# 1589  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

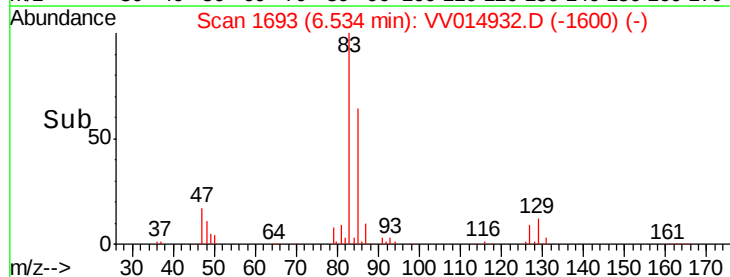
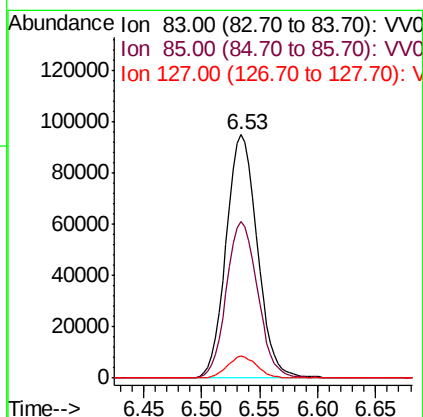
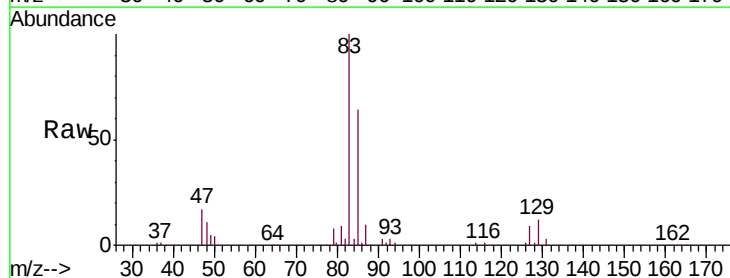
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05091

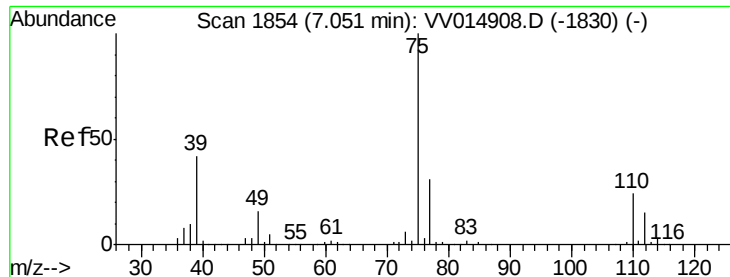
Tgt Ion: 63 Resp: 123912  
 Ion Ratio Lower Upper  
 63 100  
 112 5.5 3.2 4.8#



#38  
 Bromodichloromethane  
 Concen: 46.661 ug/L  
 RT: 6.53 min Scan# 1693  
 Delta R.T. -0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

Tgt Ion: 83 Resp: 177822  
 Ion Ratio Lower Upper  
 83 100  
 85 64.1 45.1 83.7  
 127 8.9 6.7 10.1

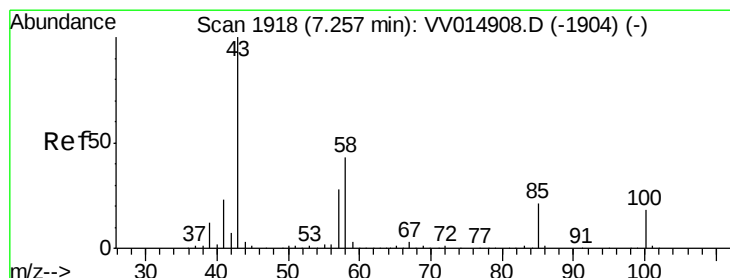
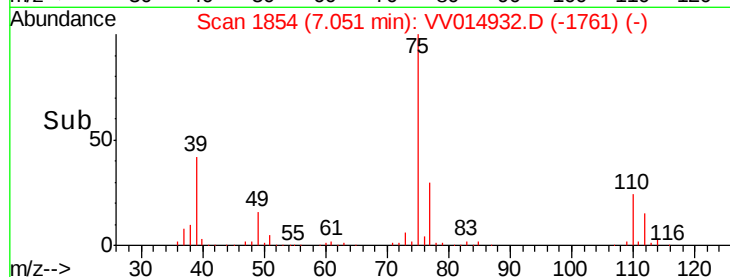
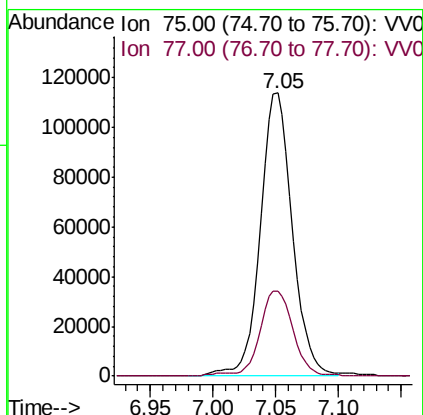
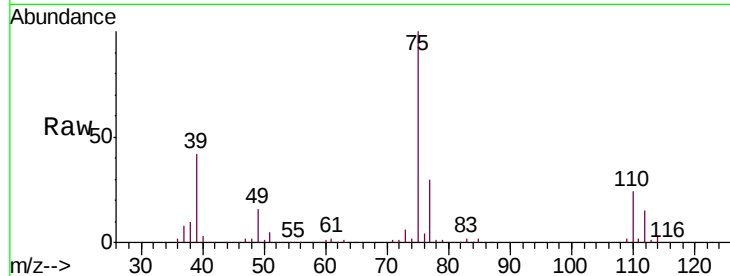




#39  
 cis-1,3-Dichloropropene  
 Concen: 43.074 ug/L  
 RT: 7.05 min Scan# 1854  
 Delta R.T. -0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

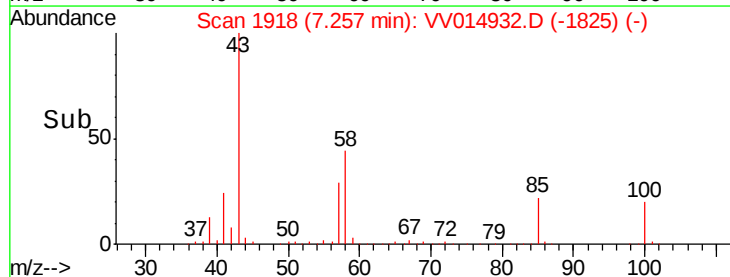
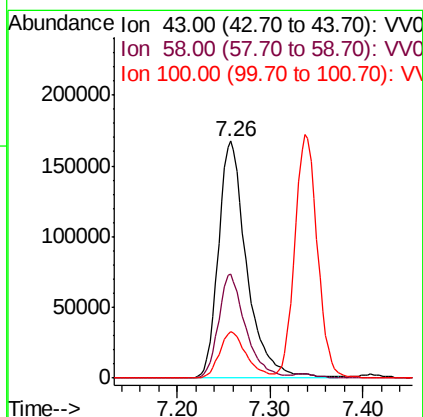
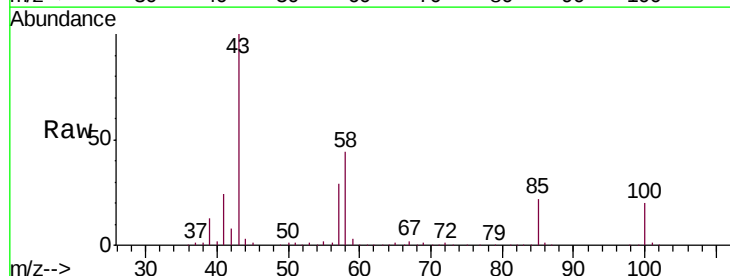
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05091

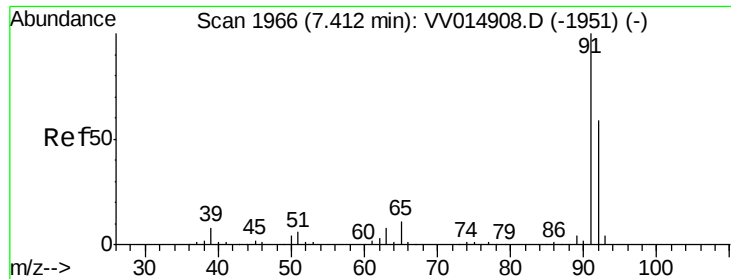
Tgt Ion: 75 Resp: 202266  
 Ion Ratio Lower Upper  
 75 100  
 77 29.9 22.8 42.4



#40  
 4-Methyl-2-pentanone  
 Concen: 81.541 ug/L  
 RT: 7.26 min Scan# 1918  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

Tgt Ion: 43 Resp: 354005  
 Ion Ratio Lower Upper  
 43 100  
 58 42.0 31.0 46.4  
 100 18.7 11.2 16.8#





#42

Toluene

Concen: 46.286 ug/L

RT: 7.41 min Scan# 1966

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

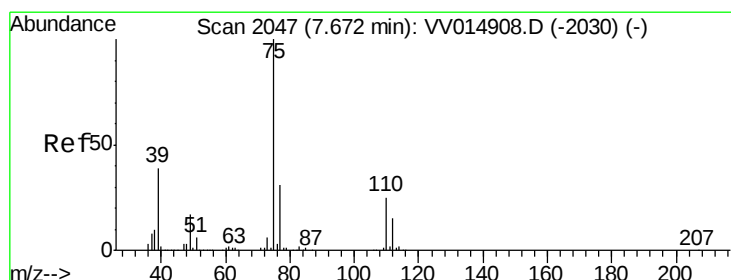
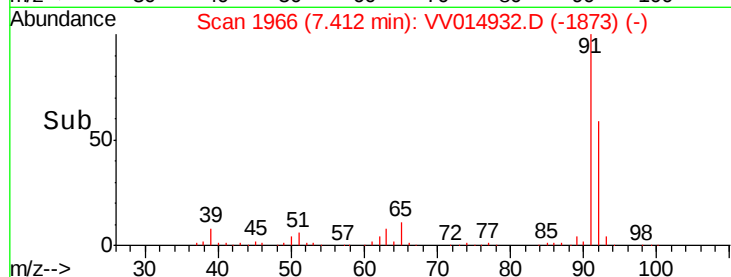
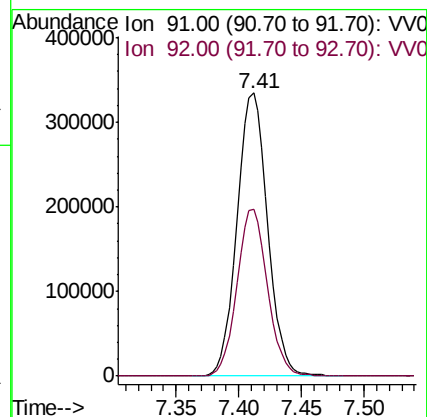
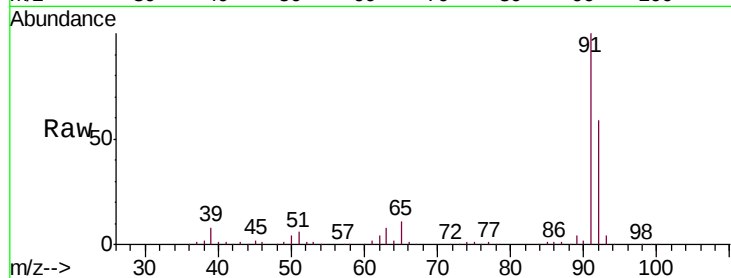
VSTD05091

Tgt Ion: 91 Resp: 566112

Ion Ratio Lower Upper

91 100

92 58.9 40.1 74.5



#44

trans-1,3-Dichloropropene

Concen: 42.235 ug/L

RT: 7.67 min Scan# 2047

Delta R.T. -0.00 min

Lab File: VV014932.D

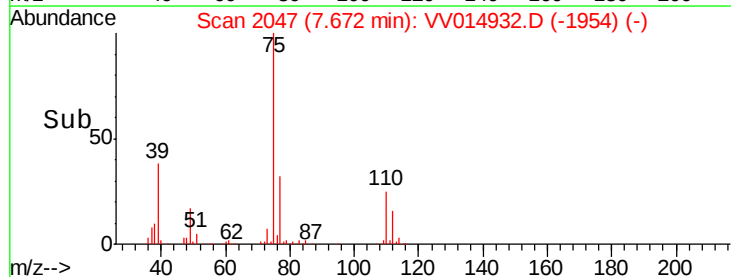
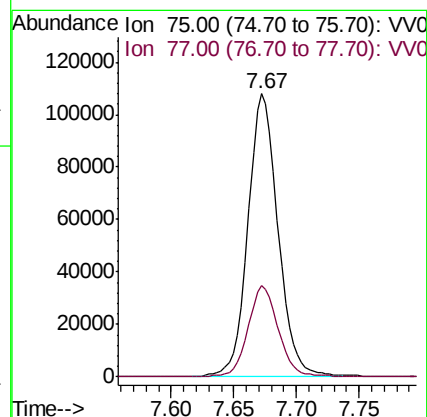
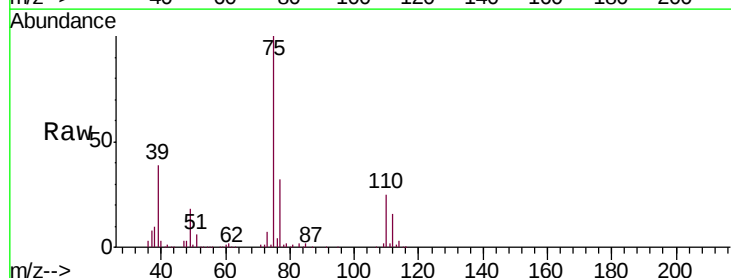
Acq: 14 Mar 2020 02:46

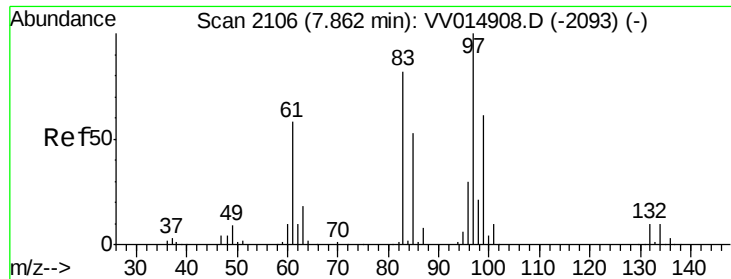
Tgt Ion: 75 Resp: 180796

Ion Ratio Lower Upper

75 100

77 32.2 22.0 40.8

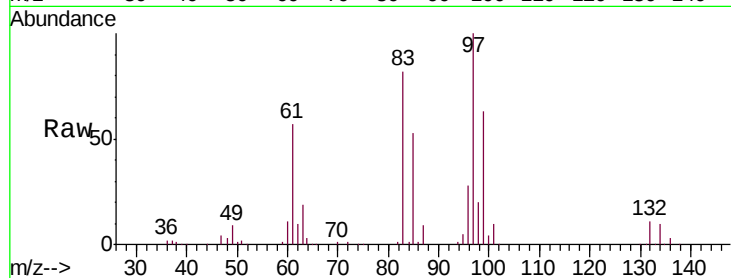




#45  
 1,1,2-Trichloroethane  
 Concen: 48.414 ug/L  
 RT: 7.86 min Scan# 2106  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05091

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 133580 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 62.7  | 43.1  | 80.1   |
| 83       | 81.6  | 62.4  | 115.8  |
| 85       | 53.2  | 40.1  | 74.5   |



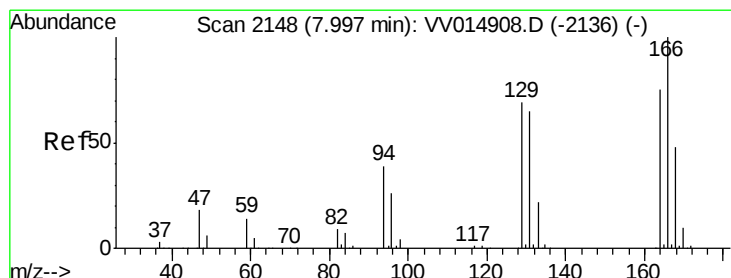
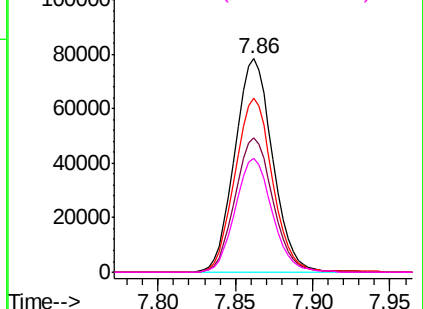
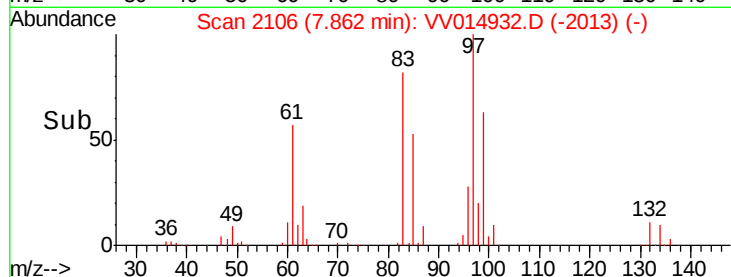
Abundance

Ion 97.00 (96.70 to 97.70): VV014932.D (-2013) (-)

Ion 99.00 (98.70 to 99.70): VV014932.D (-2013) (-)

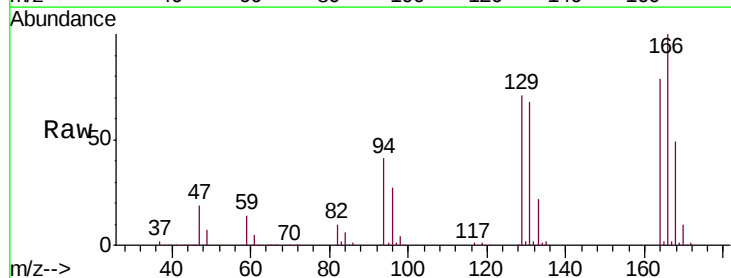
Ion 83.00 (82.70 to 83.70): VV014932.D (-2013) (-)

Ion 85.00 (84.70 to 85.70): VV014932.D (-2013) (-)



#46  
 Tetrachloroethene  
 Concen: 50.067 ug/L  
 RT: 8.00 min Scan# 2148  
 Delta R.T. -0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 118682 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 89.2  | 66.0  | 122.6  |
| 131      | 85.4  | 63.9  | 118.7  |
| 166      | 125.8 | 89.7  | 166.7  |



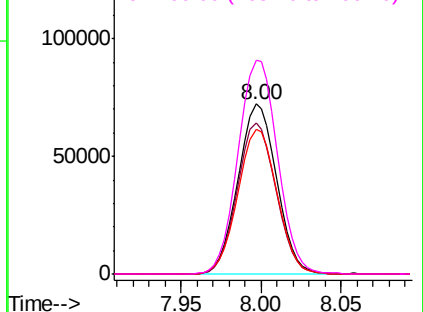
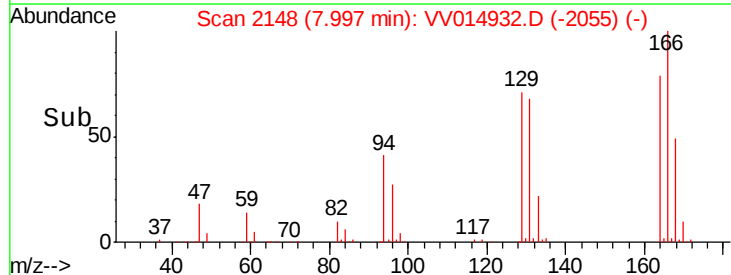
Abundance

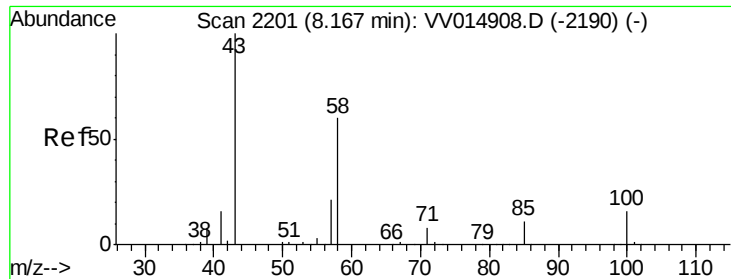
Ion 164.00 (163.70 to 164.70): VV014932.D (-2055) (-)

Ion 129.00 (128.70 to 129.70): VV014932.D (-2055) (-)

Ion 131.00 (130.70 to 131.70): VV014932.D (-2055) (-)

Ion 166.00 (165.70 to 166.70): VV014932.D (-2055) (-)

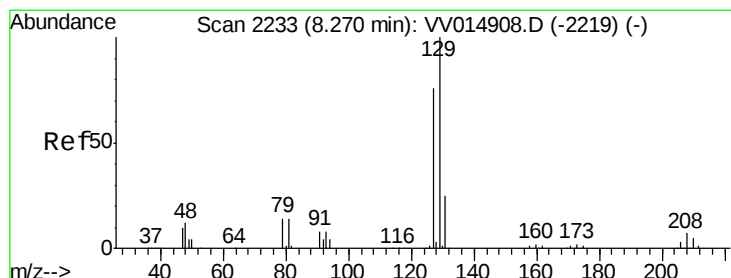
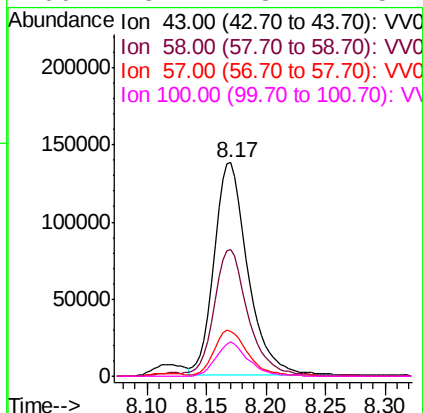
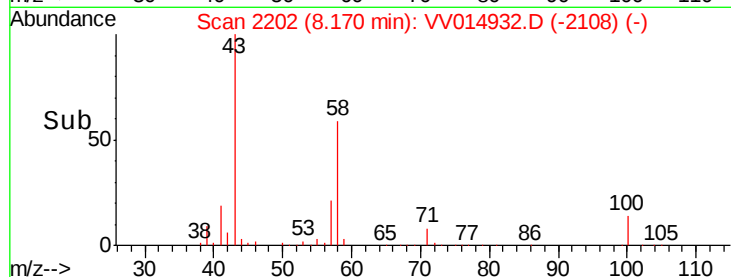
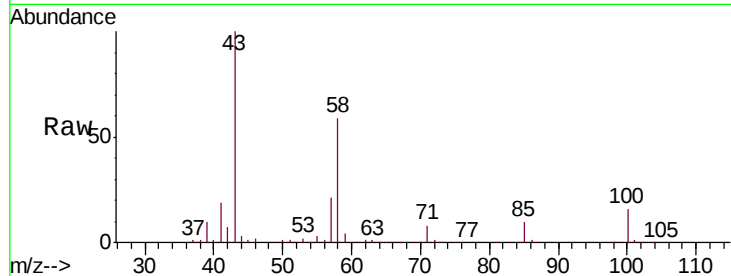




#48  
2-Hexanone  
Concen: 79.265 ug/L  
RT: 8.17 min Scan# 2202  
Delta R.T. 0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

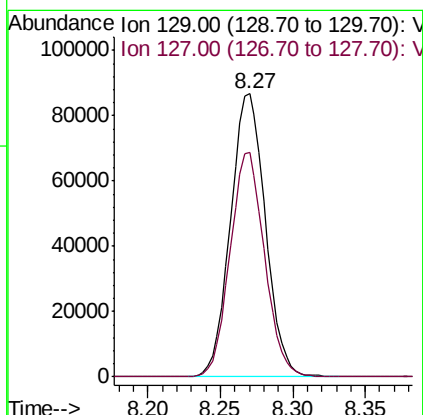
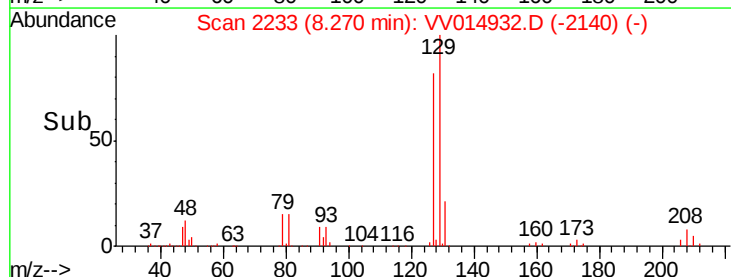
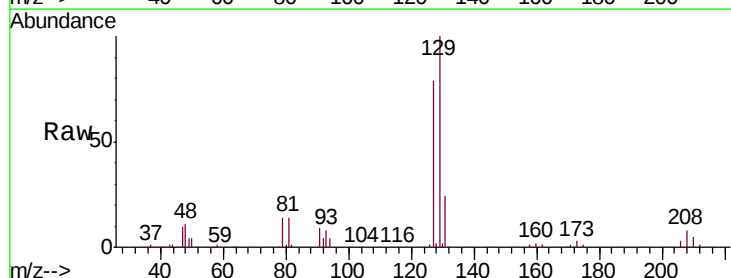
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05091

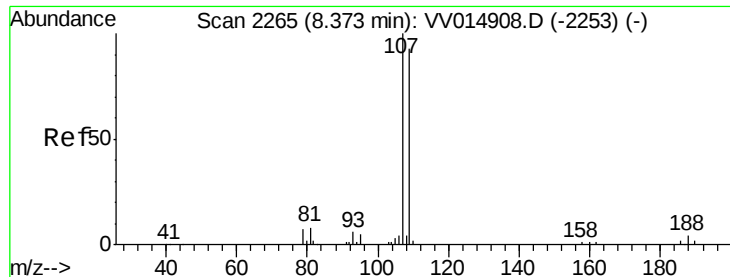
Tgt Ion: 43 Resp: 270651  
Ion Ratio Lower Upper  
43 100  
58 59.7 43.3 64.9  
57 21.9 15.6 23.4  
100 15.4 8.7 13.1#



#49  
Dibromochloromethane  
Concen: 48.323 ug/L  
RT: 8.27 min Scan# 2233  
Delta R.T. -0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

Tgt Ion: 129 Resp: 145321  
Ion Ratio Lower Upper  
129 100  
127 79.2 53.9 100.1

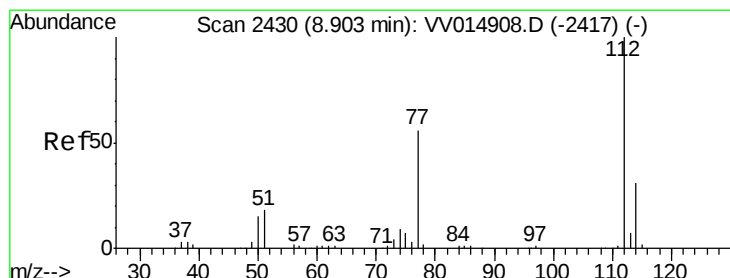
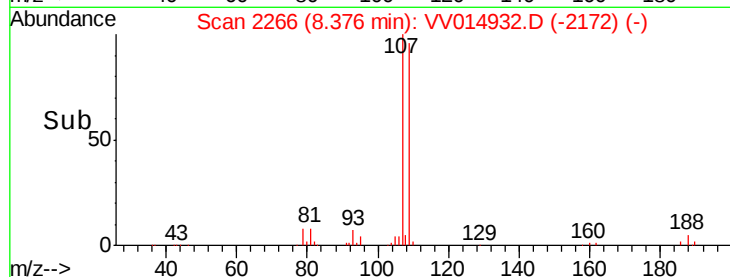
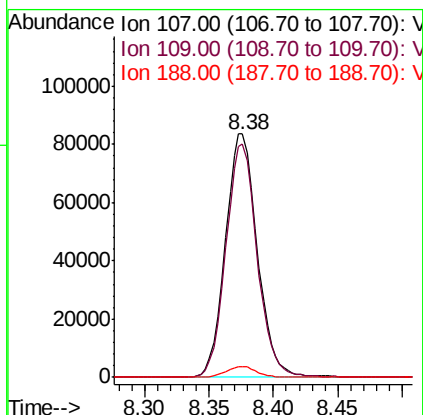
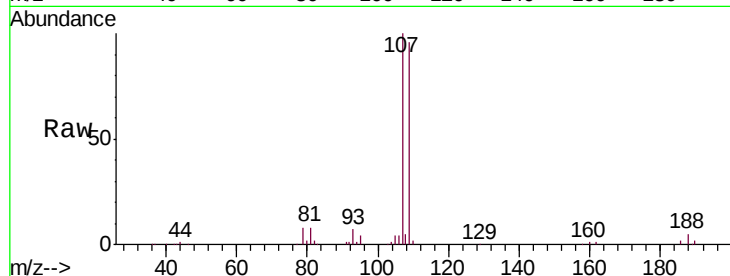




#50  
1,2-Dibromoethane  
Concen: 48.084 ug/L  
RT: 8.38 min Scan# 2266  
Delta R.T. 0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

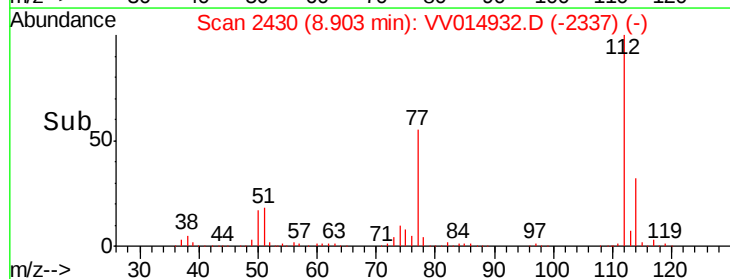
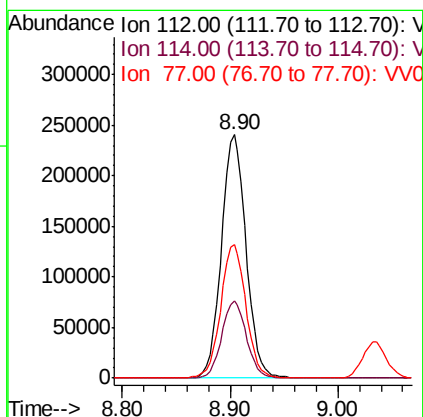
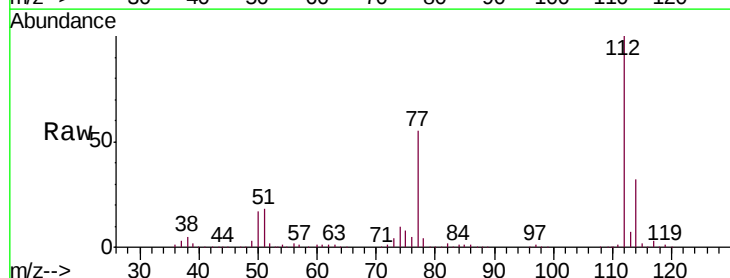
Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD05091

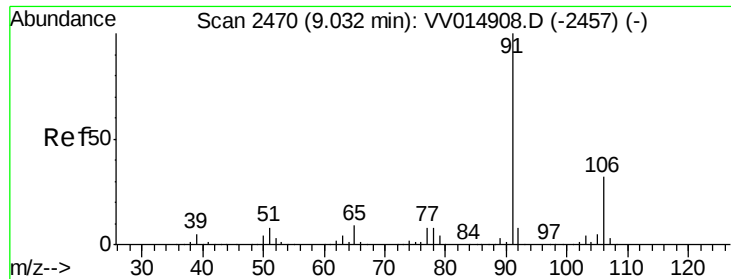
Tgt Ion:107 Resp: 143410  
Ion Ratio Lower Upper  
107 100  
109 96.0 66.6 123.6  
188 4.5 3.0 4.6



#51  
Chlorobenzene  
Concen: 48.507 ug/L  
RT: 8.90 min Scan# 2430  
Delta R.T. -0.00 min  
Lab File: VV014932.D  
Acq: 14 Mar 2020 02:46

Tgt Ion:112 Resp: 381728  
Ion Ratio Lower Upper  
112 100  
114 31.5 22.1 41.1  
77 54.9 47.8 71.8





#52

Ethylbenzene

Concen: 46.813 ug/L

RT: 9.03 min Scan# 2470

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

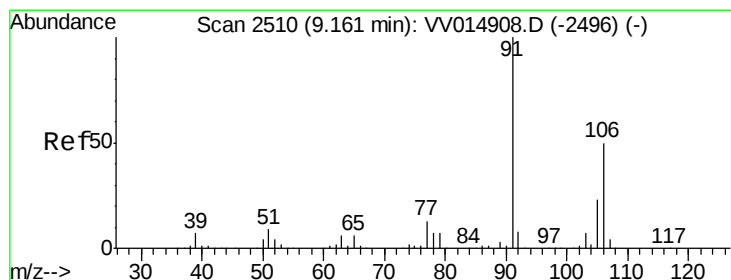
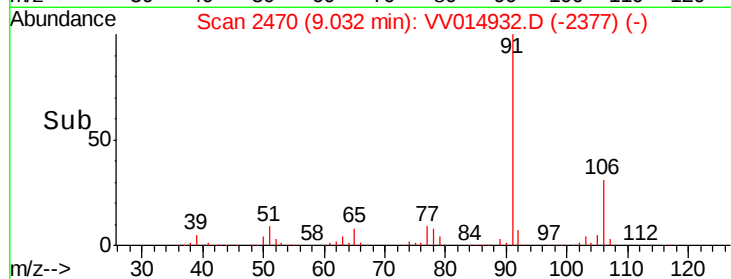
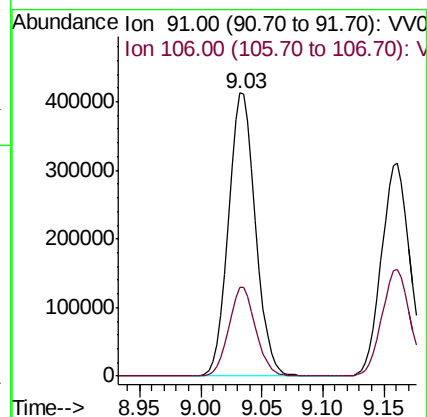
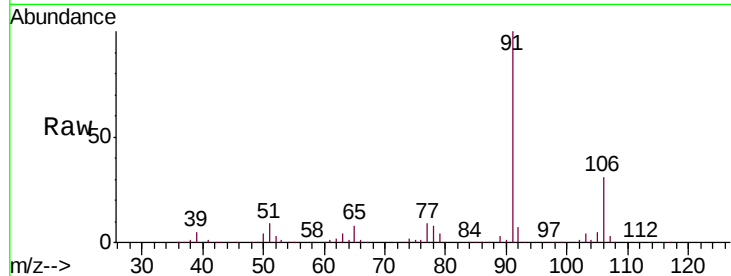
VSTD05091

Tgt Ion: 91 Resp: 645047

Ion Ratio Lower Upper

91 100

106 31.3 21.3 39.6



#53

m,p-Xylene

Concen: 48.445 ug/L

RT: 9.16 min Scan# 2510

Delta R.T. 0.00 min

Lab File: VV014932.D

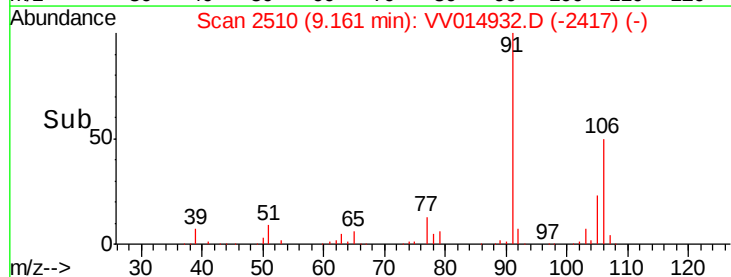
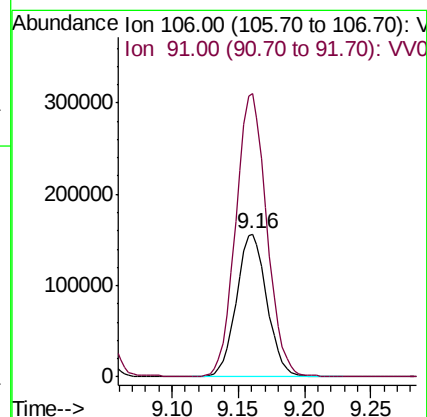
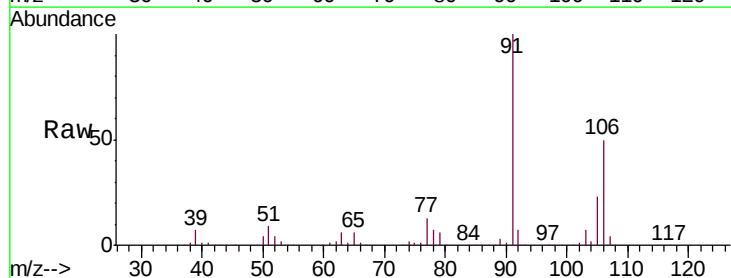
Acq: 14 Mar 2020 02:46

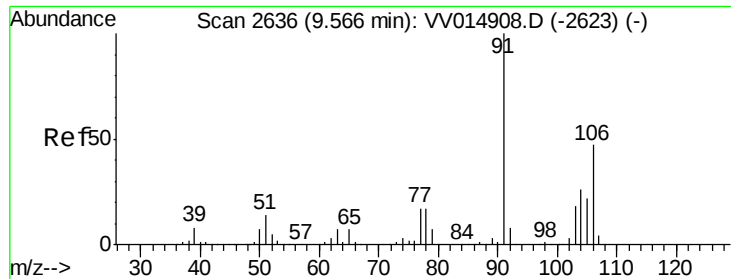
Tgt Ion: 106 Resp: 250513

Ion Ratio Lower Upper

106 100

91 198.3 145.1 269.5





#54

o-xylene

Concen: 48.563 ug/L

RT: 9.57 min Scan# 2636

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

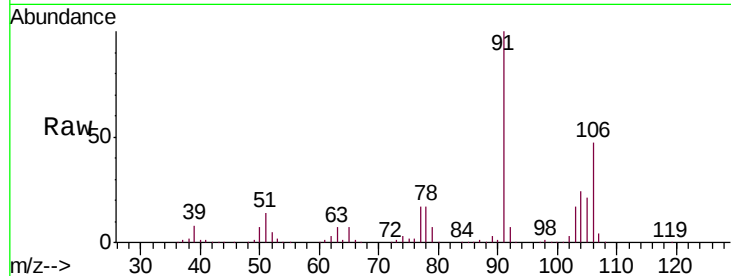
VSTD05091

Tgt Ion:106 Resp: 246679

Ion Ratio Lower Upper

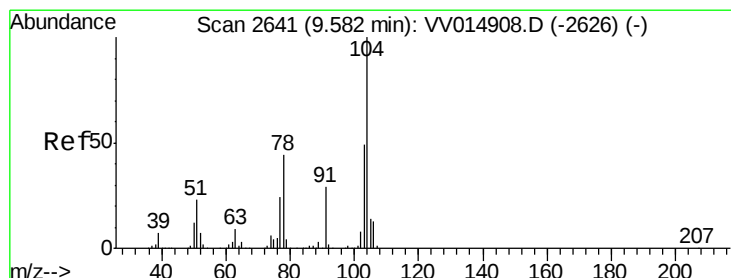
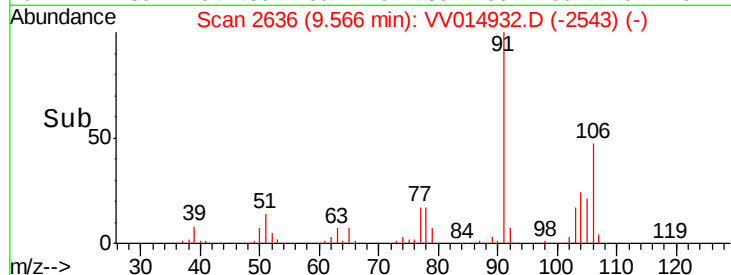
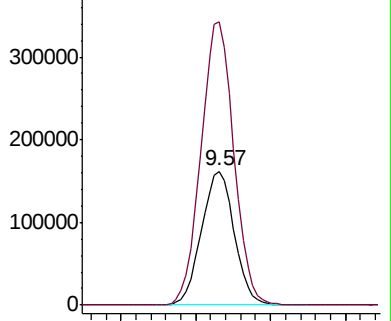
106 100

91 211.4 152.5 283.3



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#55

Styrene

Concen: 48.427 ug/L

RT: 9.58 min Scan# 2641

Delta R.T. 0.00 min

Lab File: VV014932.D

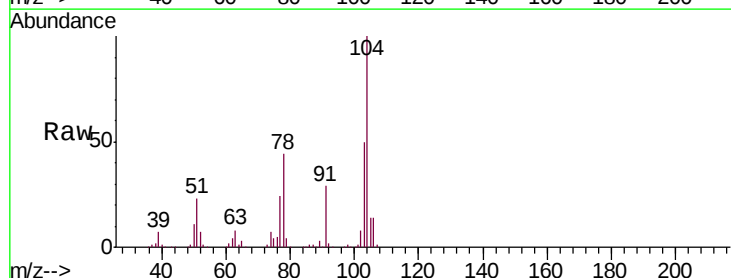
Acq: 14 Mar 2020 02:46

Tgt Ion:104 Resp: 420638

Ion Ratio Lower Upper

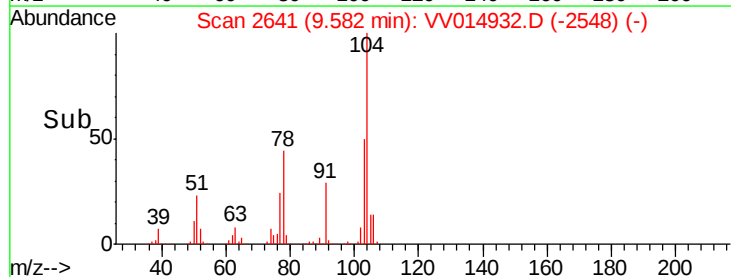
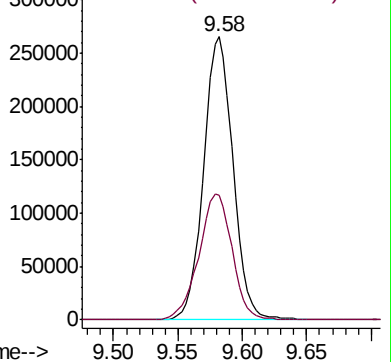
104 100

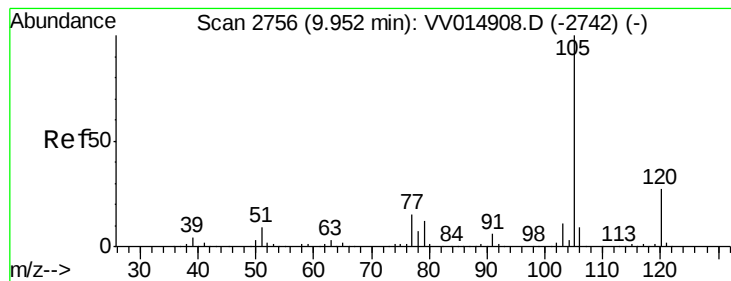
78 43.8 31.6 58.6



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VV0





#56

Isopropylbenzene

Concen: 47.827 ug/L

RT: 9.95 min Scan# 2756

Delta R.T. -0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05091

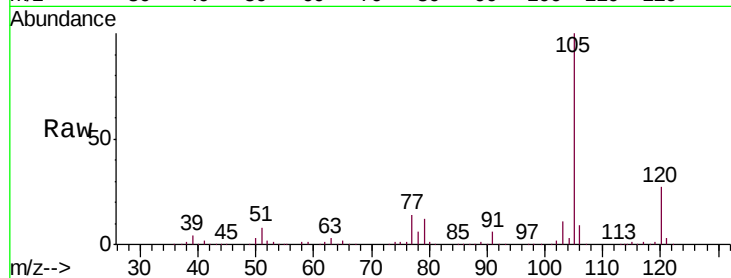
Tgt Ion: 105 Resp: 650662

Ion Ratio Lower Upper

105 100

120 26.8 20.6 31.0

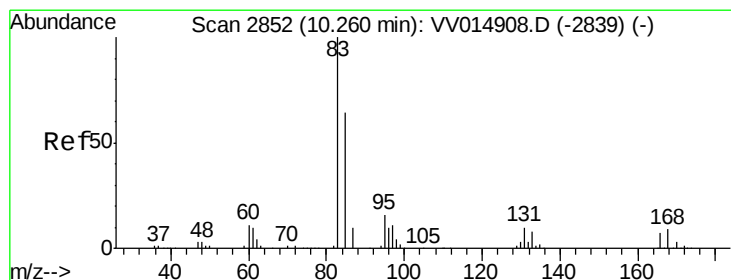
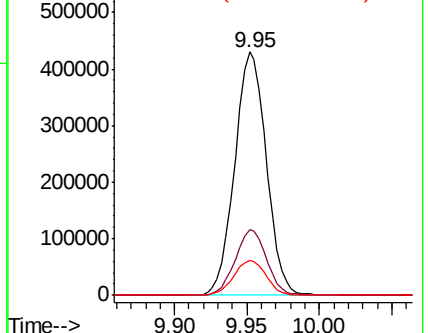
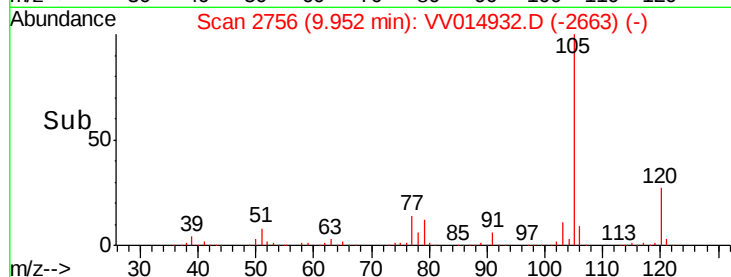
77 14.6 12.7 19.1



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: 45.475 ug/L

RT: 10.26 min Scan# 2853

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

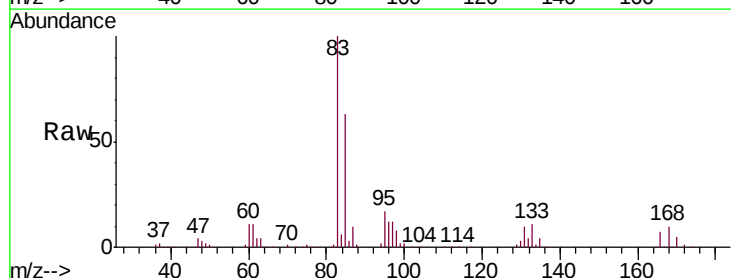
Tgt Ion: 83 Resp: 216117

Ion Ratio Lower Upper

83 100

85 62.9 44.4 82.5

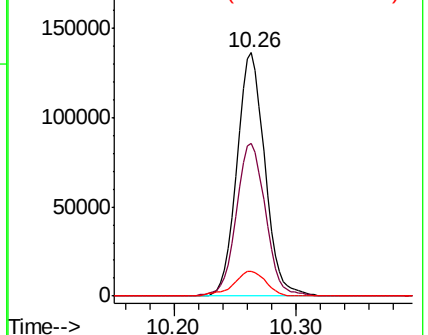
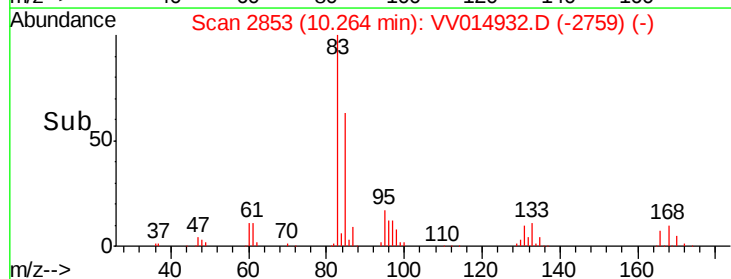
131 10.3 7.8 11.8

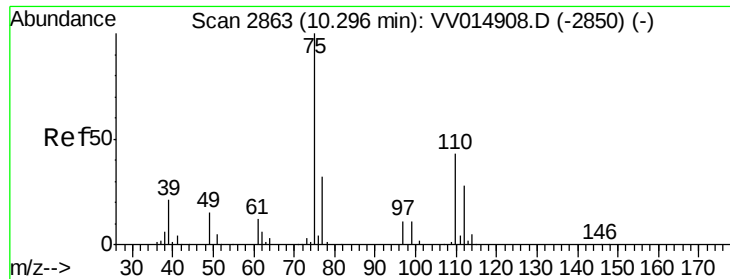


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 45.185 ug/L

RT: 10.30 min Scan# 2863

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

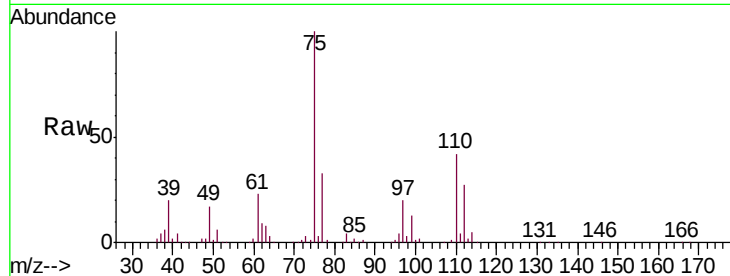
VSTD05091

Tgt Ion: 75 Resp: 172878

Ion Ratio Lower Upper

75 100

77 32.6 25.6 38.4



Abundance Ion 75.00 (74.70 to 75.70): VV014908.D (-2850) (-)

Ion 77.00 (76.70 to 77.70): VV014908.D (-2850) (-)

120000

100000

80000

60000

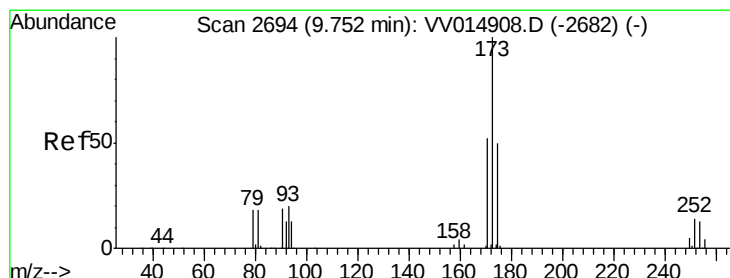
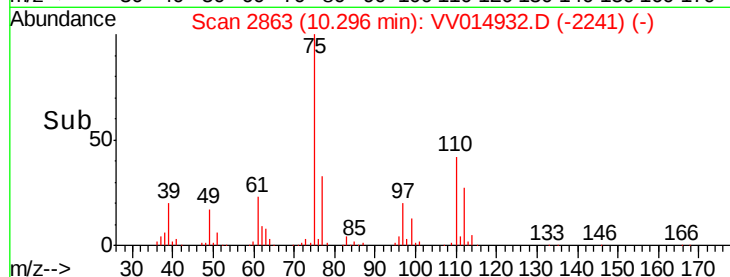
40000

20000

0

10.25 10.30 10.35

Time-->



#61

Bromoform

Concen: 46.818 ug/L

RT: 9.75 min Scan# 2694

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

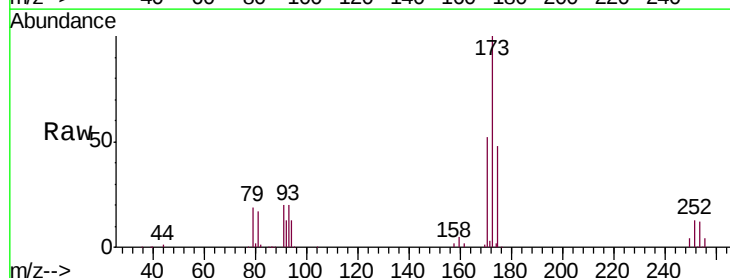
Tgt Ion: 173 Resp: 104220

Ion Ratio Lower Upper

173 100

175 48.2 39.0 58.4

254 12.8 8.6 13.0



Abundance Ion 173.00 (172.70 to 173.70): VV014908.D (-2682) (-)

Ion 175.00 (174.70 to 175.70): VV014908.D (-2682) (-)

Ion 254.00 (253.70 to 254.70): VV014908.D (-2682) (-)

80000

60000

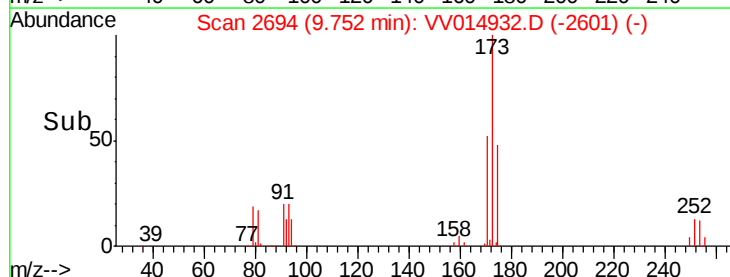
40000

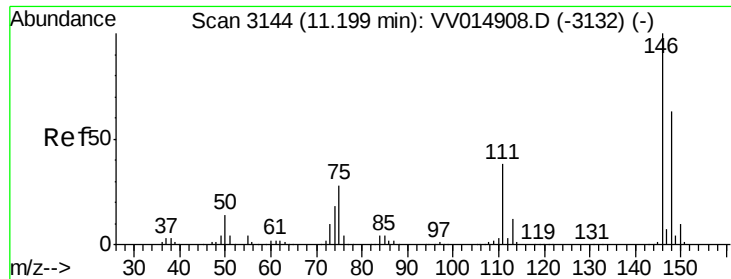
20000

0

9.70 9.75 9.80

Time-->

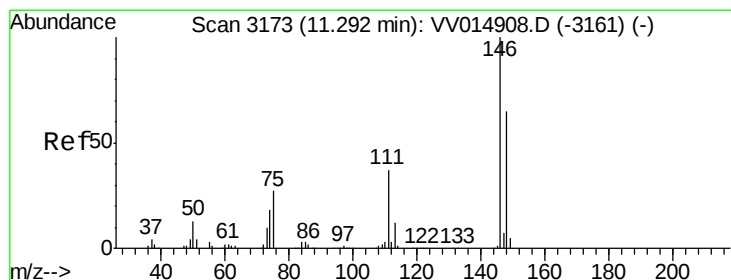
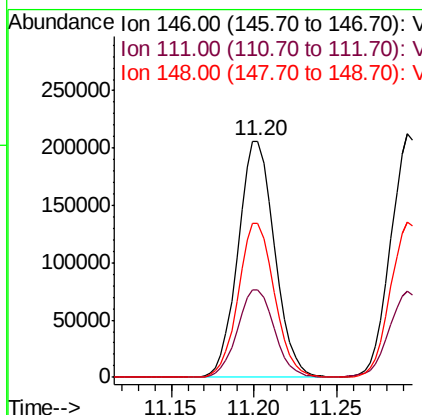
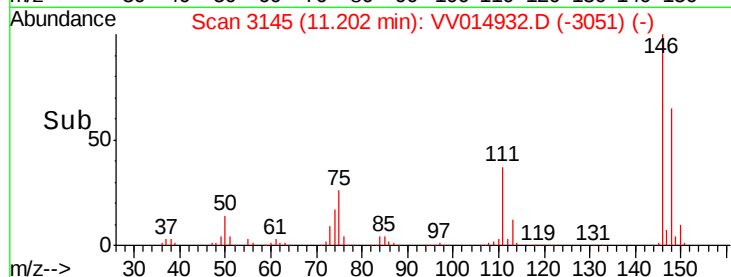
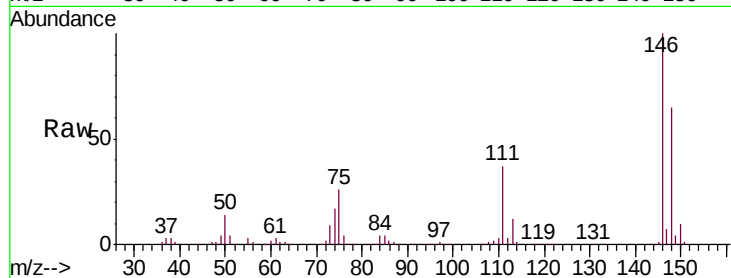




#62  
 1,3-Dichlorobenzene  
 Concen: 47.724 ug/L  
 RT: 11.20 min Scan# 3145  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

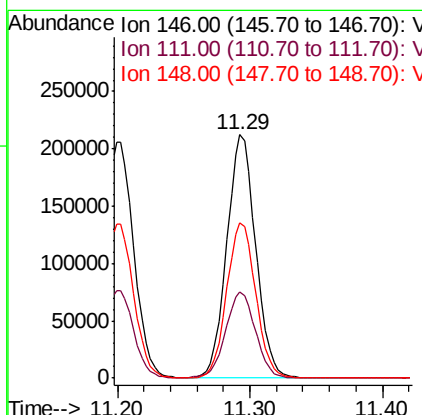
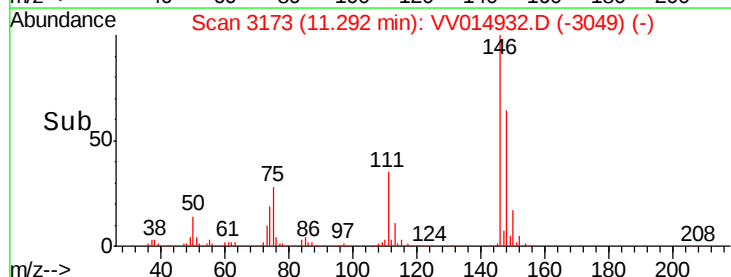
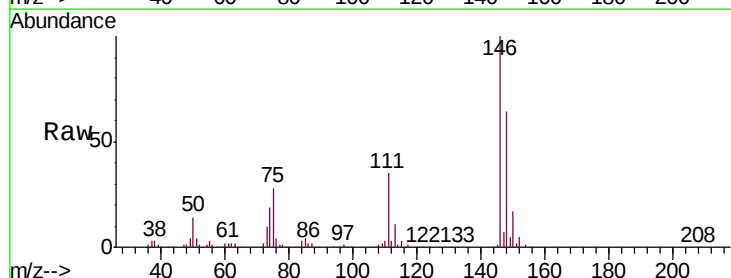
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05091

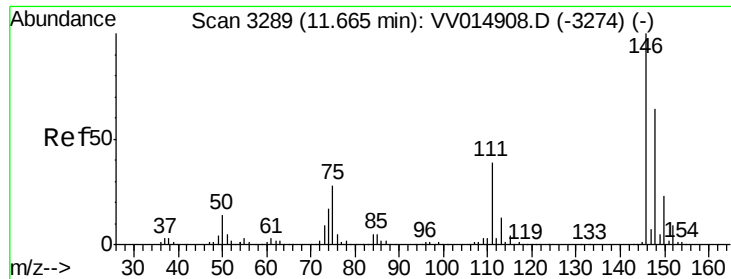
Tgt Ion:146 Resp: 316667  
 Ion Ratio Lower Upper  
 146 100  
 111 37.1 27.2 50.4  
 148 64.9 44.2 82.2



#63  
 1,4-Dichlorobenzene  
 Concen: 47.976 ug/L  
 RT: 11.29 min Scan# 3173  
 Delta R.T. -0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

Tgt Ion:146 Resp: 320725  
 Ion Ratio Lower Upper  
 146 100  
 111 35.5 26.3 48.9  
 148 63.7 44.0 81.8

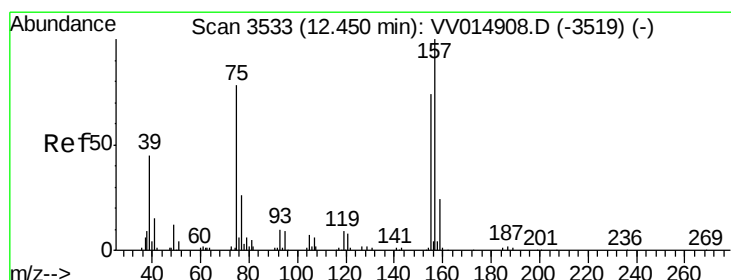
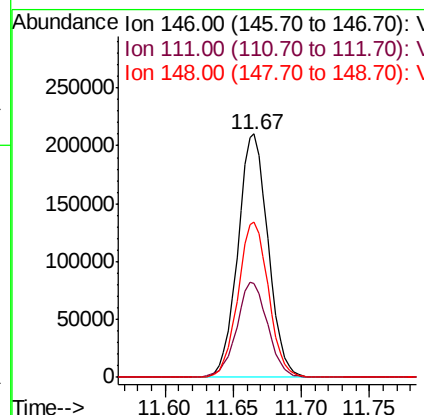
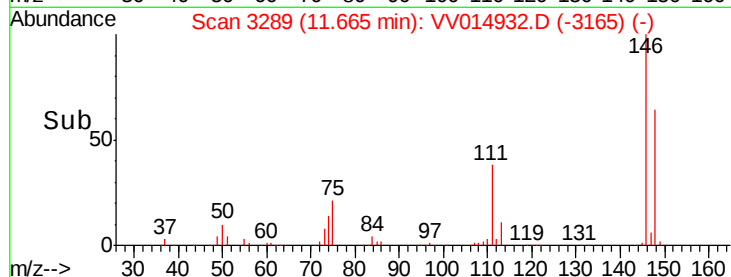
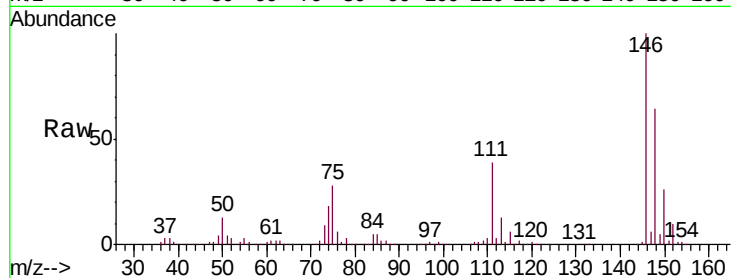




#65  
 1,2-Dichlorobenzene  
 Concen: 48.787 ug/L  
 RT: 11.67 min Scan# 3289  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

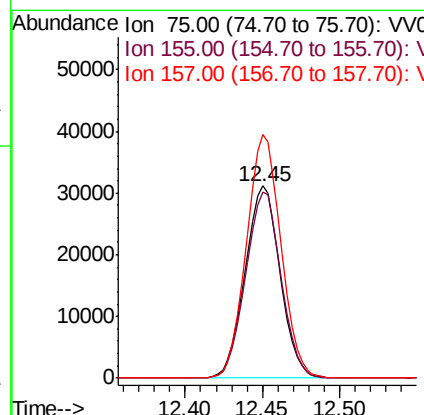
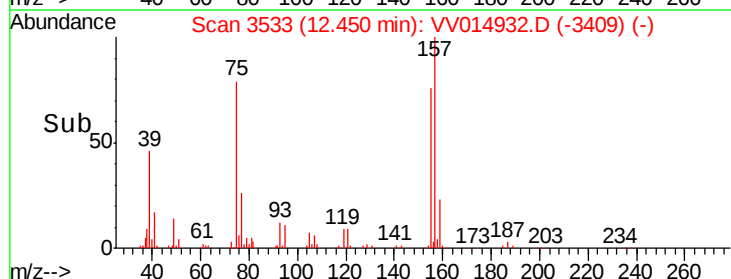
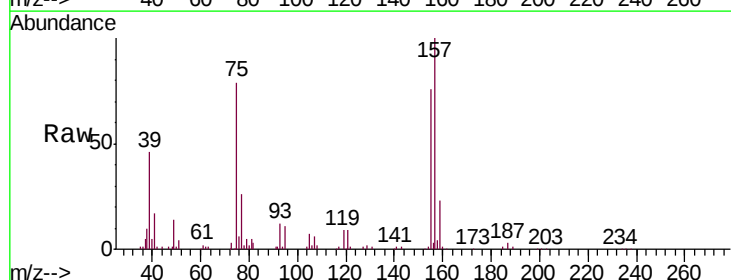
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD05091

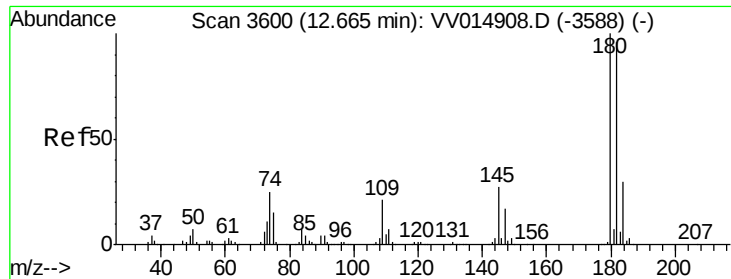
Tgt Ion: 146 Resp: 322289  
 Ion Ratio Lower Upper  
 146 100  
 111 38.8 33.9 50.9  
 148 63.9 51.4 77.0



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 43.883 ug/L  
 RT: 12.45 min Scan# 3533  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

Tgt Ion: 75 Resp: 49201  
 Ion Ratio Lower Upper  
 75 100  
 155 96.7 66.4 99.6  
 157 126.7 86.1 129.1

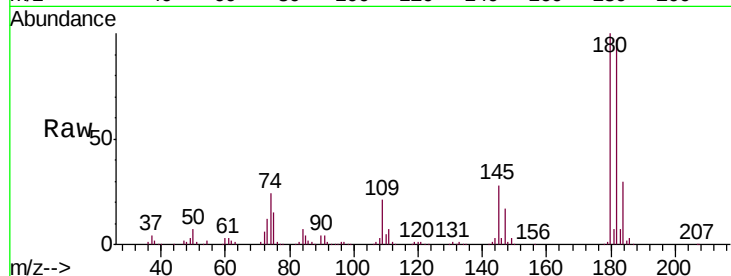




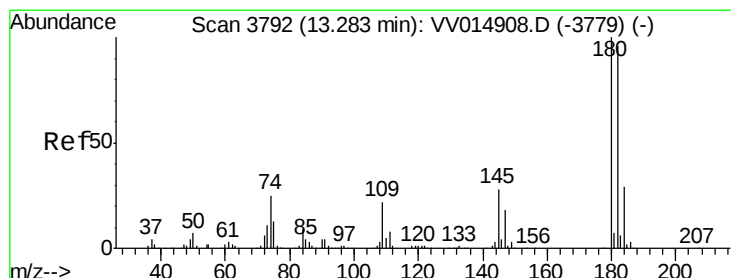
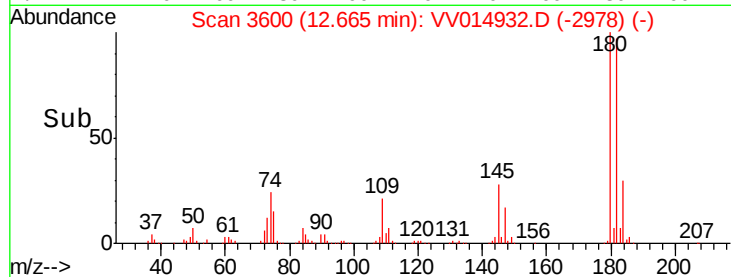
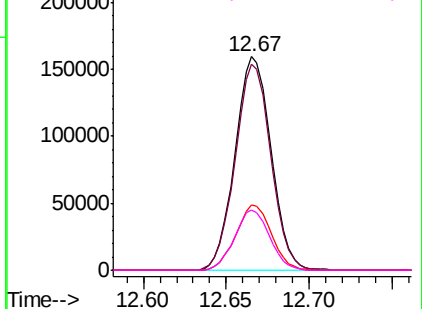
#67  
 1,3,5-Trichlorobenzene  
 Concen: 46.967 ug/L  
 RT: 12.67 min Scan# 3600  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05091

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 241023 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 95.5  | 75.6  | 113.4  |
| 184      | 30.2  | 24.8  | 37.2   |
| 145      | 27.4  | 23.3  | 34.9   |

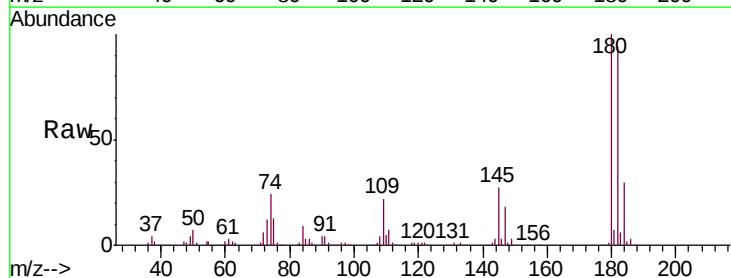


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

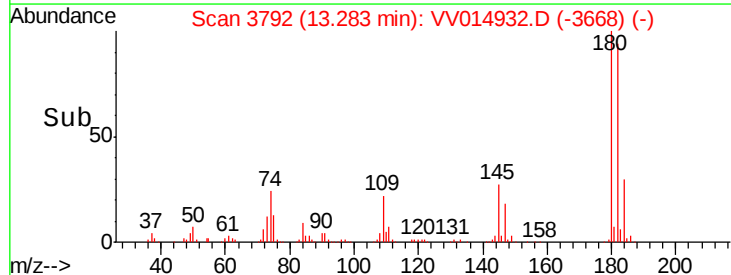
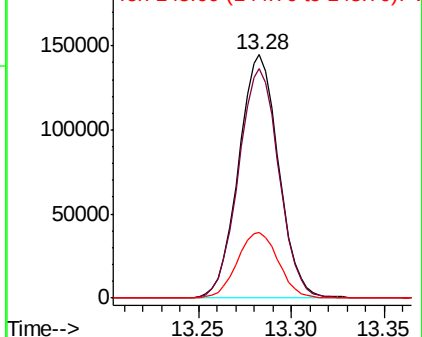


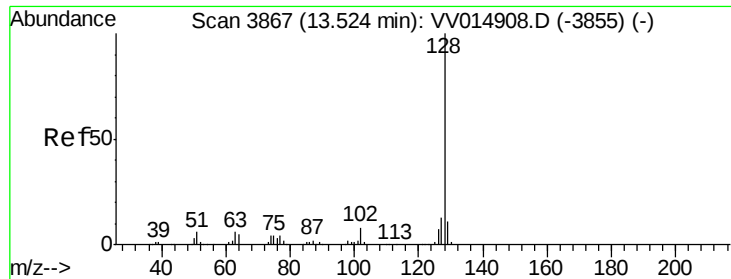
#68  
 1,2,4-trichlorobenzene  
 Concen: 46.098 ug/L  
 RT: 13.28 min Scan# 3792  
 Delta R.T. 0.00 min  
 Lab File: VV014932.D  
 Acq: 14 Mar 2020 02:46

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 217432 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 95.5  | 76.6  | 114.8  |
| 145      | 27.7  | 23.4  | 35.0   |



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





#69

Naphthalene

Concen: 44.836 ug/L

RT: 13.52 min Scan# 3867

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05091

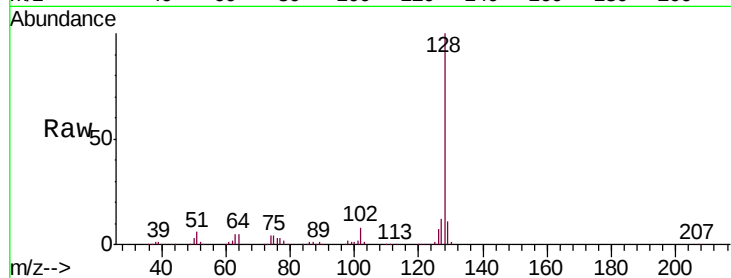
Tgt Ion:128 Resp: 318374

Ion Ratio Lower Upper

128 100

127 12.3 10.3 15.5

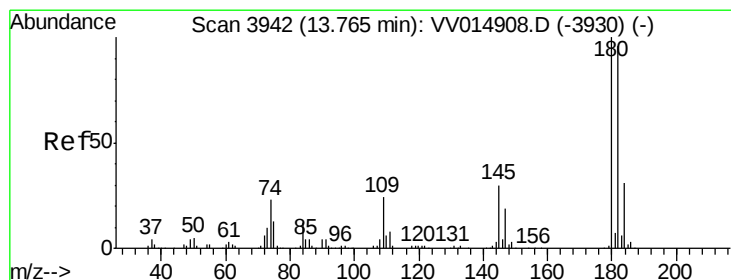
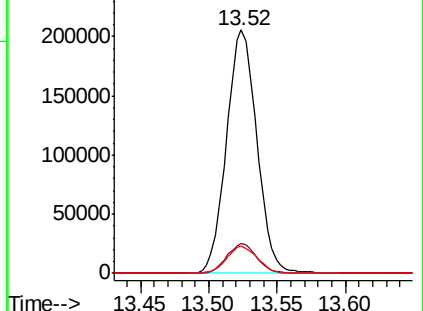
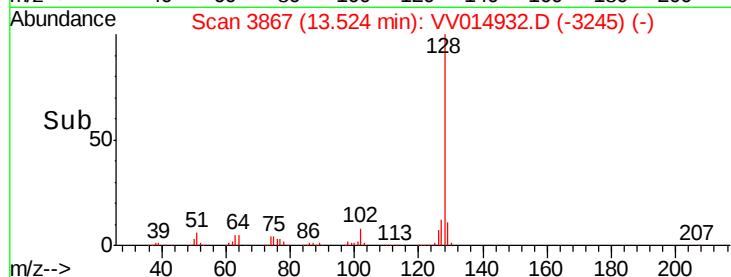
129 11.2 8.5 12.7



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: 48.794 ug/L

RT: 13.76 min Scan# 3942

Delta R.T. 0.00 min

Lab File: VV014932.D

Acq: 14 Mar 2020 02:46

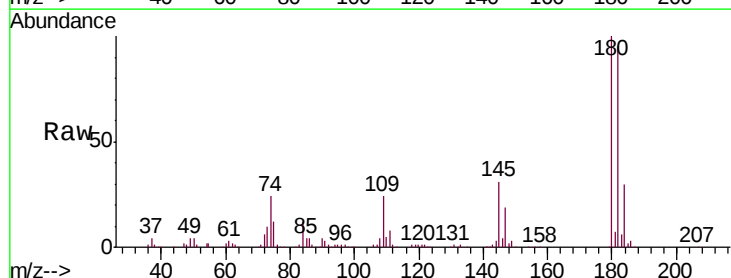
Tgt Ion:180 Resp: 229402

Ion Ratio Lower Upper

180 100

182 95.4 76.5 114.7

145 30.6 25.0 37.4



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

