

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV031620\  
 Data File : VV014935.D  
 Acq On : 16 Mar 2020 10:06  
 Operator : SY/MD  
 Sample : VSTD01064  
 Misc : 5.0mL/MSVOA\_V/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD01064

Quant Time: Mar 16 17:13:53 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM031620WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Mar 16 17:11:04 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 361625   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 352222   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 181363   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |       |      |      |
|--------------------------------|-------|-----|-------|-------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 23221 | 9.50  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.58  | 69  | 17365 | 9.08  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.12  | 63  | 35132 | 8.79  | ug/L | 0.00 |
| 21) 2-Butanone-d5              | 3.94  | 46  | 8358  | 4.84  | ug/L | 0.02 |
| 24) Chloroform-d               | 4.38  | 84  | 47810 | 10.11 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.06  | 65  | 31086 | 9.85  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.08  | 84  | 92324 | 9.88  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.10  | 67  | 26869 | 8.84  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.34  | 98  | 90056 | 9.80  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.64  | 79  | 12607 | 8.31  | ug/L | 0.00 |
| 47) 2-Hexanone-d5              | 8.12  | 63  | 22393 | 16.51 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.24 | 84  | 40875 | 9.67  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.65 | 152 | 37844 | 10.32 | ug/L | 0.00 |

## Target Compounds

|                                |      |     |       |       |      | Qvalue |
|--------------------------------|------|-----|-------|-------|------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 32201 | 9.10  | ug/L | 100    |
| 3) Chloromethane               | 1.25 | 50  | 23909 | 7.94  | ug/L | 97     |
| 5) Vinyl chloride              | 1.32 | 62  | 21591 | 7.66  | ug/L | 91     |
| 6) Bromomethane                | 1.53 | 94  | 14634 | 8.34  | ug/L | 97     |
| 8) Chloroethane                | 1.60 | 64  | 12653 | 8.39  | ug/L | 94     |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 35136 | 9.02  | ug/L | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 18184 | 9.13  | ug/L | 98     |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 15910 | 8.29  | ug/L | 95     |
| 13) Acetone                    | 2.20 | 43  | 16831 | 11.82 | ug/L | 83     |
| 14) Carbon disulfide           | 2.31 | 76  | 51727 | 8.16  | ug/L | 100    |
| 15) Methyl Acetate             | 2.46 | 43  | 17212 | 6.45  | ug/L | 98     |
| 16) Methylene chloride         | 2.52 | 84  | 25010 | 9.37  | ug/L | 92     |
| 17) trans-1,2-Dichloroethene   | 2.78 | 96  | 22190 | 9.13  | ug/L | 96     |
| 18) Methyl tert-butyl Ether    | 2.79 | 73  | 70044 | 8.84  | ug/L | 98     |
| 19) 1,1-Dichloroethane         | 3.21 | 63  | 40695 | 8.72  | ug/L | 98     |
| 20) cis-1,2-Dichloroethene     | 3.95 | 96  | 24965 | 9.15  | ug/L | 94     |
| 22) 2-Butanone                 | 4.02 | 43  | 8678  | 4.47  | ug/L | 79     |
| 23) Bromochloromethane         | 4.28 | 128 | 13626 | 9.71  | ug/L | 95     |
| 25) Chloroform                 | 4.40 | 83  | 46049 | 9.45  | ug/L | 99     |
| 27) 1,2-Dichloroethane         | 5.16 | 62  | 34609 | 9.13  | ug/L | 98     |
| 29) Cyclohexane                | 4.71 | 56  | 33084 | 7.96  | ug/L | 98     |
| 30) 1,1,1-Trichloroethane      | 4.64 | 97  | 39952 | 9.68  | ug/L | 100    |
| 31) Carbon tetrachloride       | 4.85 | 117 | 35292 | 9.97  | ug/L | 100    |
| 33) Benzene                    | 5.13 | 78  | 89525 | 8.85  | ug/L | 100    |
| 34) Trichloroethene            | 5.94 | 95  | 24277 | 9.15  | ug/L | 97     |
| 35) Methylcyclohexane          | 6.15 | 83  | 38231 | 8.75  | ug/L | 99     |
| 37) 1,2-Dichloropropane        | 6.20 | 63  | 23413 | 8.76  | ug/L | 99     |
| 38) Bromodichloromethane       | 6.53 | 83  | 32075 | 9.16  | ug/L | 99     |
| 39) cis-1,3-Dichloropropene    | 7.05 | 75  | 35768 | 8.32  | ug/L | 96     |
| 40) 4-Methyl-2-pentanone       | 7.26 | 43  | 61565 | 15.95 | ug/L | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV031620\  
 Data File : VV014935.D  
 Acq On : 16 Mar 2020 10:06  
 Operator : SY/MD  
 Sample : VSTD01064  
 Misc : 5.0mL/MSVOA\_V/WATER  
 ALS Vial : 3 Sample Multiplier: 1

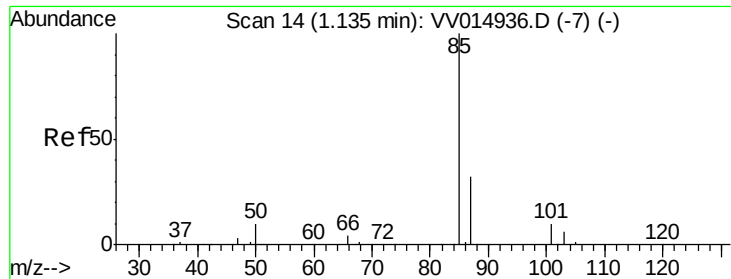
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD01064

Quant Time: Mar 16 17:13:53 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM031620WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Mar 16 17:11:04 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 42) Toluene                    | 7.41  | 91   | 100557   | 8.97  | ug/L  | 97       |
| 44) trans-1,3-Dichloropropene  | 7.68  | 75   | 30150    | 7.79  | ug/L  | 97       |
| 45) 1,1,2-Trichloroethane      | 7.86  | 97   | 23795    | 9.35  | ug/L  | 93       |
| 46) Tetrachloroethene          | 8.00  | 164  | 22950    | 10.26 | ug/L  | 96       |
| 48) 2-Hexanone                 | 8.17  | 43   | 48126    | 15.87 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.27  | 129  | 24840    | 8.92  | ug/L  | 99       |
| 50) 1,2-Dibromoethane          | 8.38  | 107  | 25796    | 9.38  | ug/L  | 97       |
| 51) Chlorobenzene              | 8.90  | 112  | 70898    | 9.72  | ug/L  | 97       |
| 52) Ethylbenzene               | 9.04  | 91   | 112381   | 8.88  | ug/L  | 98       |
| 53) m,p-Xylene                 | 9.16  | 106  | 44380    | 9.28  | ug/L  | 95       |
| 54) o-xylene                   | 9.57  | 106  | 44392    | 9.46  | ug/L  | 92       |
| 55) Styrene                    | 9.58  | 104  | 69820    | 8.70  | ug/L  | 99       |
| 56) Isopropylbenzene           | 9.95  | 105  | 113395   | 9.00  | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.26 | 83   | 39519    | 9.09  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.30 | 75   | 31933    | 9.16  | ug/L  | 98       |
| 61) Bromoform                  | 9.76  | 173  | 16778    | 8.47  | ug/L  | 94       |
| 62) 1,3-Dichlorobenzene        | 11.20 | 146  | 57335    | 9.72  | ug/L  | 96       |
| 63) 1,4-Dichlorobenzene        | 11.30 | 146  | 58627    | 9.92  | ug/L  | 96       |
| 65) 1,2-Dichlorobenzene        | 11.67 | 146  | 56791    | 9.63  | ug/L  | 96       |
| 66) 1,2-Dibromo-3-chloropropan | 12.45 | 75   | 9262     | 9.49  | ug/L  | 92       |
| 67) 1,3,5-Trichlorobenzene     | 12.67 | 180  | 43894    | 9.54  | ug/L  | 97       |
| 68) 1,2,4-trichlorobenzene     | 13.28 | 180  | 37043    | 8.85  | ug/L  | 99       |
| 69) Naphthalene                | 13.52 | 128  | 45300    | 7.36  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.77 | 180  | 36550    | 8.72  | ug/L  | 98       |

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





#2

Dichlorodifluoromethane

Concen: 9.10 ug/L

RT: 1.14 min Scan# 14

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

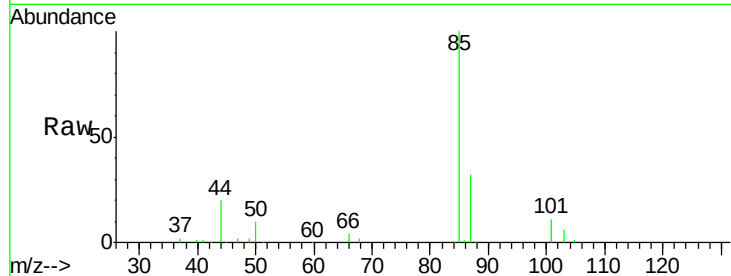
VSTD01064

Tgt Ion: 85 Resp: 32201

Ion Ratio Lower Upper

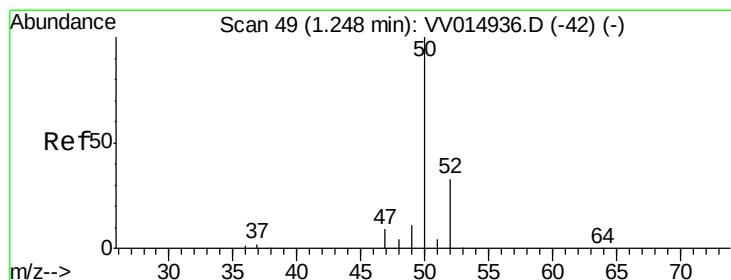
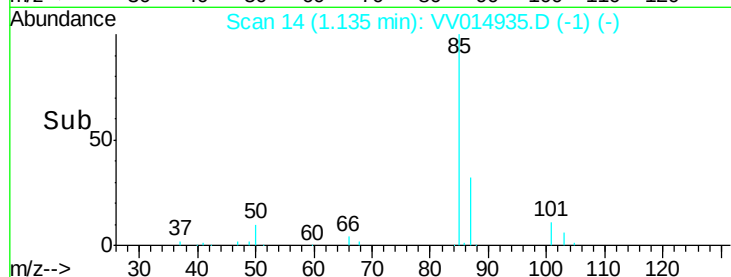
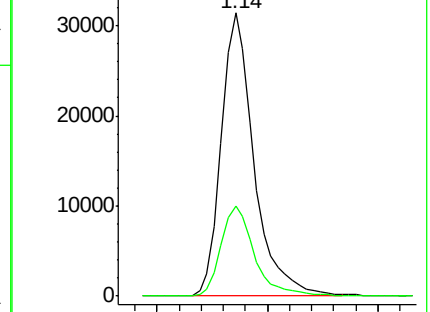
85 100

87 32.4 26.1 39.1



Abundance Ion 85.00 (84.70 to 85.70): VV014935.D (-7) (-)

Ion 87.00 (86.70 to 87.70): VV014935.D (-7) (-)



#3

Chloromethane

Concen: 7.94 ug/L

RT: 1.25 min Scan# 49

Delta R.T. 0.00 min

Lab File: VV014935.D

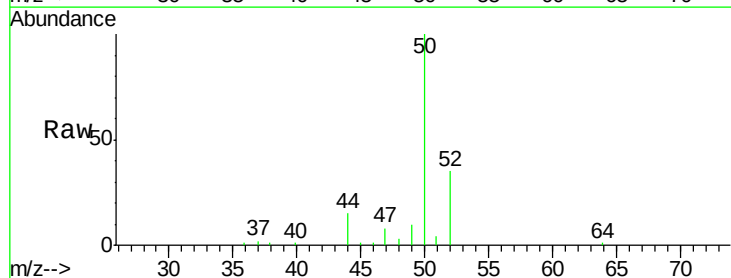
Acq: 16 Mar 2020 10:06

Tgt Ion: 50 Resp: 23909

Ion Ratio Lower Upper

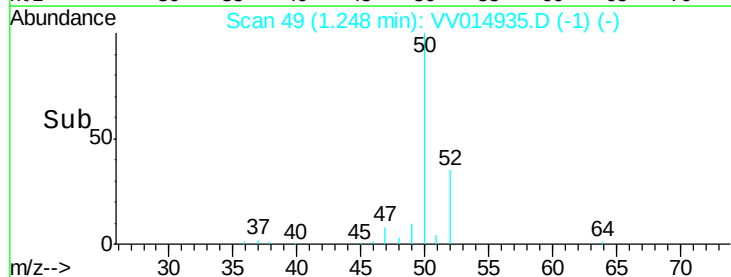
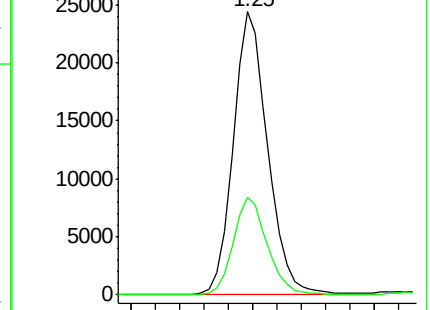
50 100

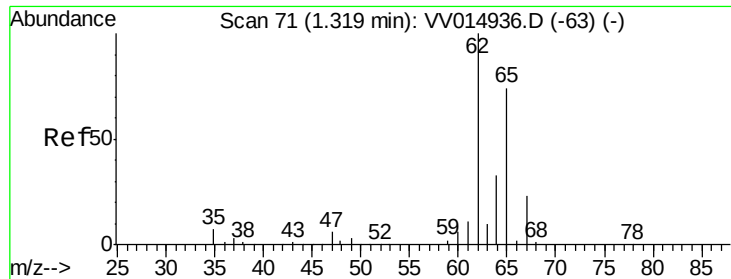
52 34.8 23.0 42.8



Abundance Ion 50.00 (49.70 to 50.70): VV014935.D (-42) (-)

Ion 52.00 (51.70 to 52.70): VV014935.D (-42) (-)





#5

Vinyl chloride

Concen: 7.66 ug/L

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

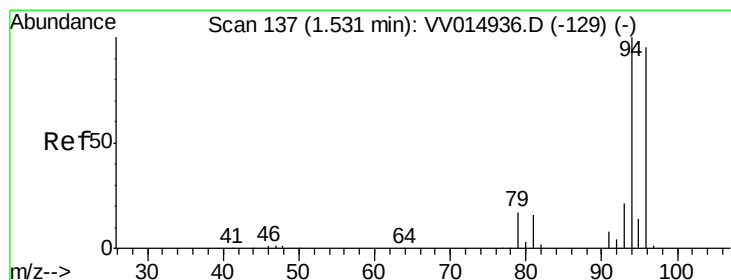
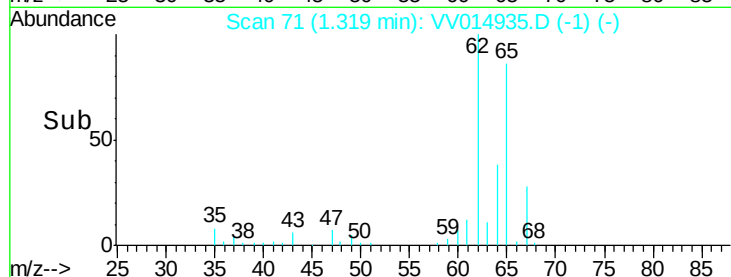
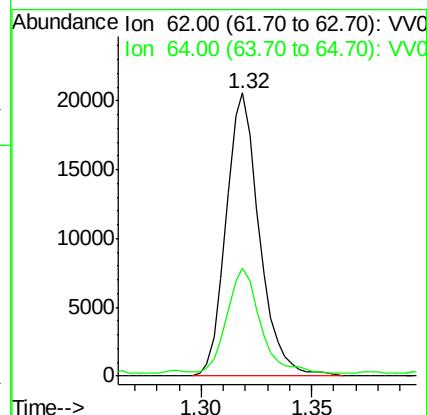
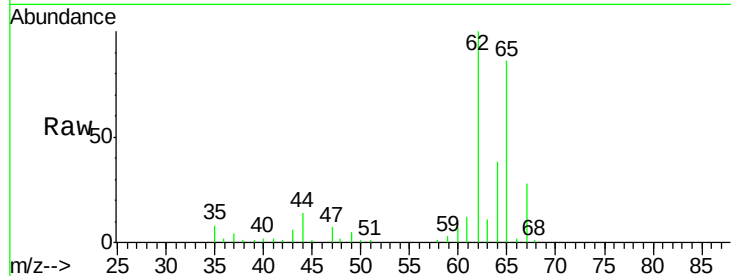
VSTD01064

Tgt Ion: 62 Resp: 21591

Ion Ratio Lower Upper

62 100

64 38.1 23.0 42.8



#6

Bromomethane

Concen: 8.34 ug/L

RT: 1.53 min Scan# 137

Delta R.T. 0.00 min

Lab File: VV014935.D

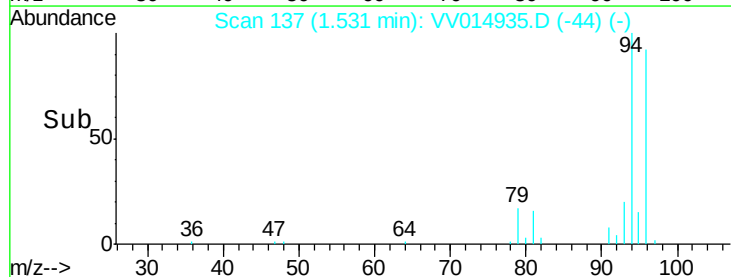
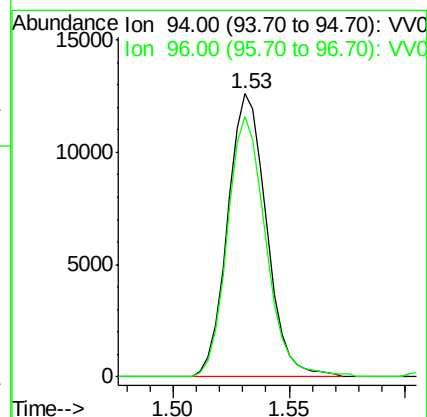
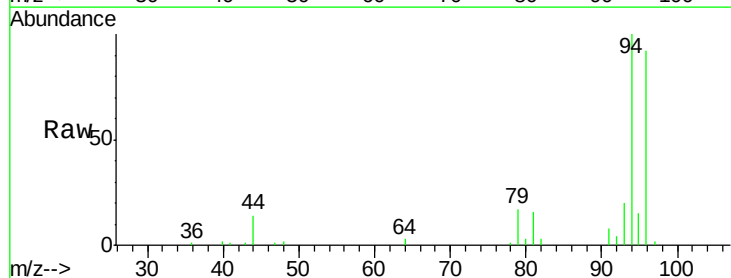
Acq: 16 Mar 2020 10:06

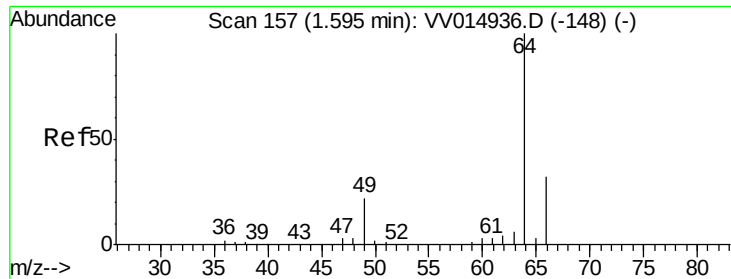
Tgt Ion: 94 Resp: 14634

Ion Ratio Lower Upper

94 100

96 92.1 66.8 124.0





#8

Chloroethane

Concen: 8.39 ug/L

RT: 1.60 min Scan# 157

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

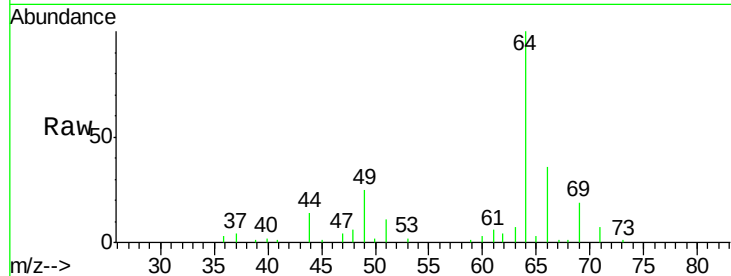
VSTD01064

Tgt Ion: 64 Resp: 12653

Ion Ratio Lower Upper

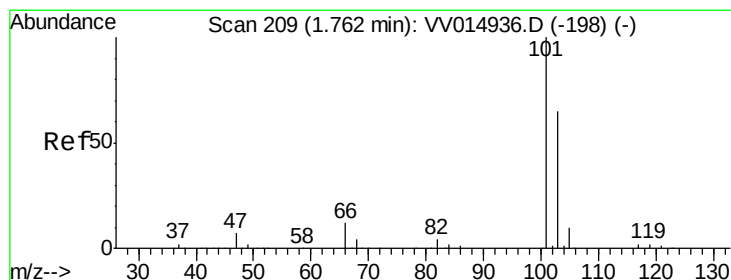
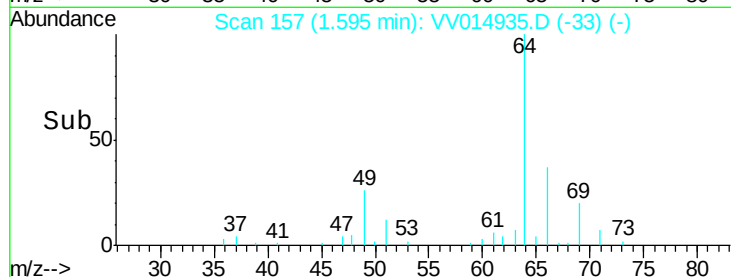
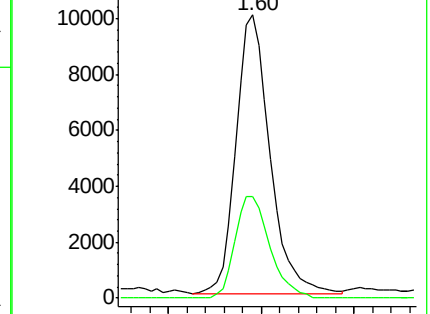
64 100

66 35.8 22.7 42.1



Abundance Ion 64.00 (63.70 to 64.70): VV014935.D (-148) (-)

Ion 66.00 (65.70 to 66.70): VV014935.D (-148) (-)



#9

Trichlorofluoromethane

Concen: 9.02 ug/L

RT: 1.76 min Scan# 209

Delta R.T. 0.00 min

Lab File: VV014935.D

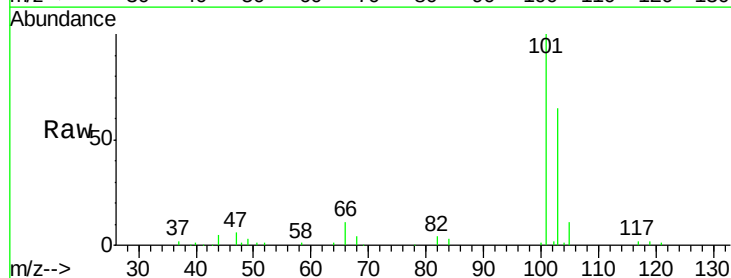
Acq: 16 Mar 2020 10:06

Tgt Ion: 101 Resp: 35136

Ion Ratio Lower Upper

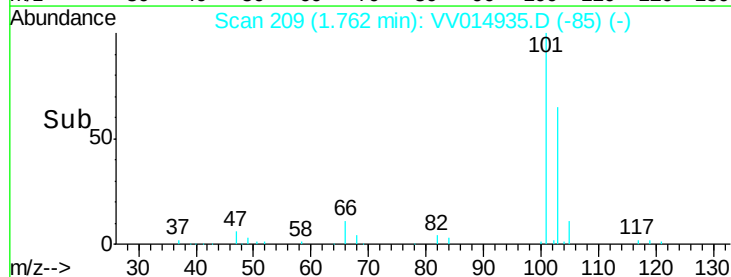
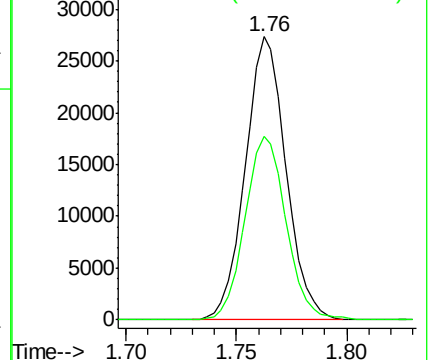
101 100

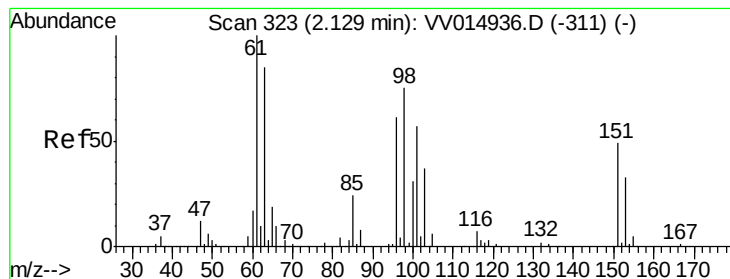
103 65.3 51.9 77.9



Abundance Ion 101.00 (100.70 to 101.70): VV014935.D (-198) (-)

Ion 103.00 (102.70 to 103.70): VV014935.D (-198) (-)





#10

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

Concen: 9.13 ug/L

RT: 2.13 min Scan# 323

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

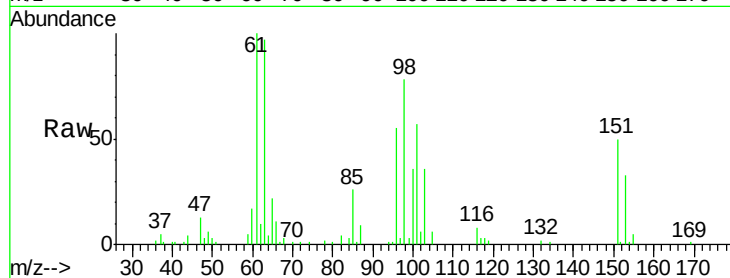
Tgt Ion:101 Resp: 18184

Ion Ratio Lower Upper

101 100

85 43.5 33.9 50.9

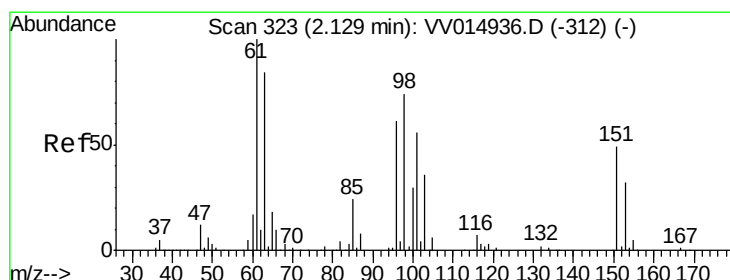
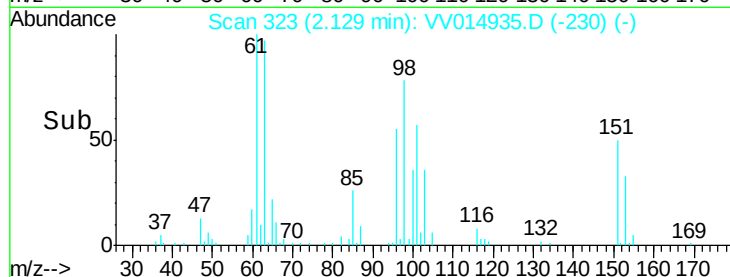
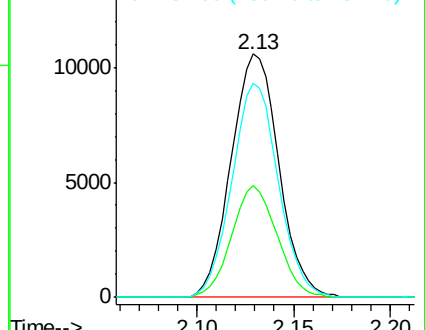
151 85.4 70.1 105.1



Abundance Ion 101.00 (100.70 to 101.70): VV014935.D (-230) (-)

Ion 85.00 (84.70 to 85.70): VV014935.D (-230) (-)

Ion 151.00 (150.70 to 151.70): VV014935.D (-230) (-)



#12

1,1-Dichloroethene

Concen: 8.29 ug/L

RT: 2.13 min Scan# 324

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

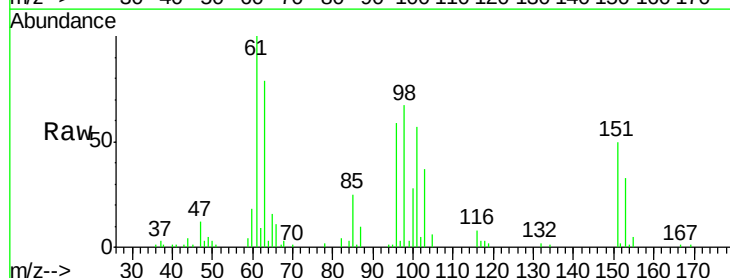
Tgt Ion: 96 Resp: 15910

Ion Ratio Lower Upper

96 100

61 169.5 115.7 214.9

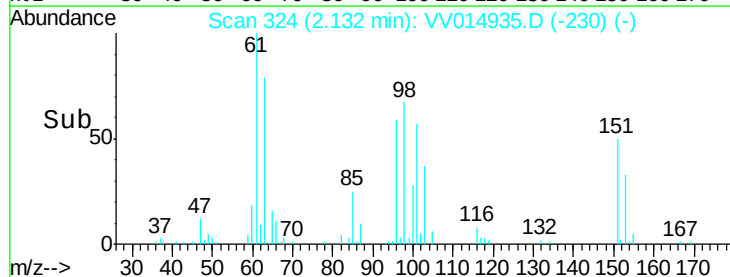
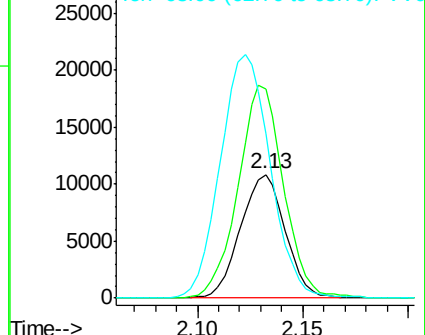
63 133.5 99.2 184.2

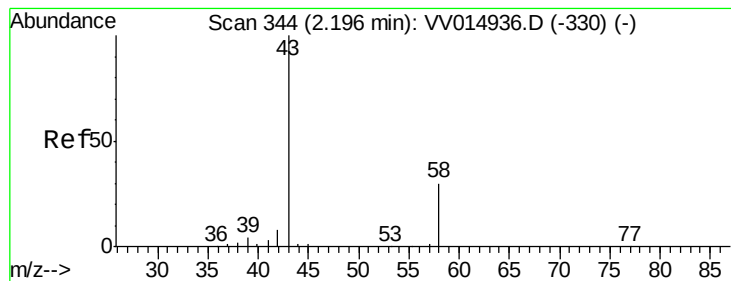


Abundance Ion 96.00 (95.70 to 96.70): VV014935.D (-230) (-)

Ion 61.00 (60.70 to 61.70): VV014935.D (-230) (-)

Ion 63.00 (62.70 to 63.70): VV014935.D (-230) (-)





#13

Acetone

Concen: 11.82 ug/L

RT: 2.20 min Scan# 346

Delta R.T. 0.01 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

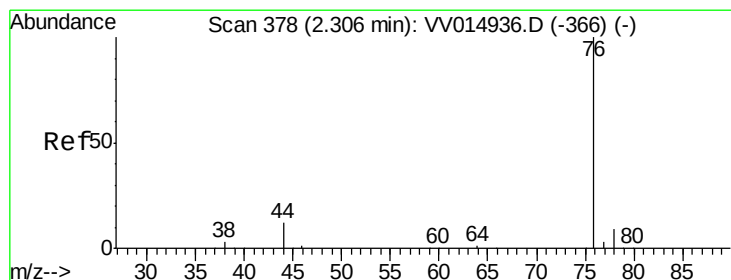
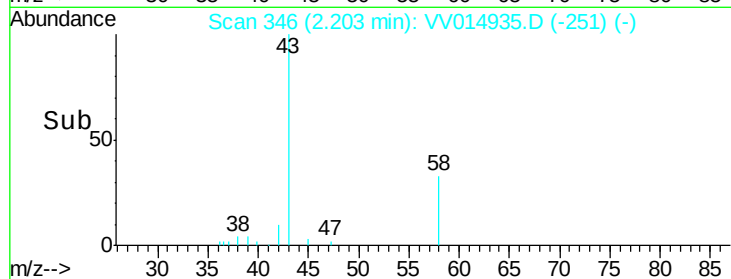
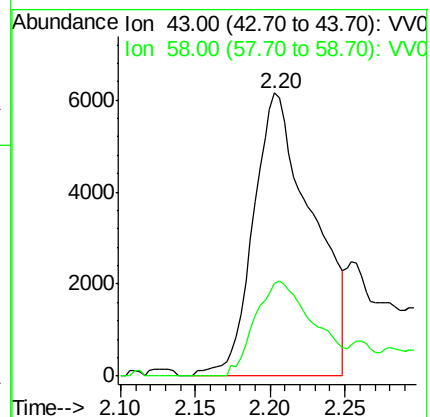
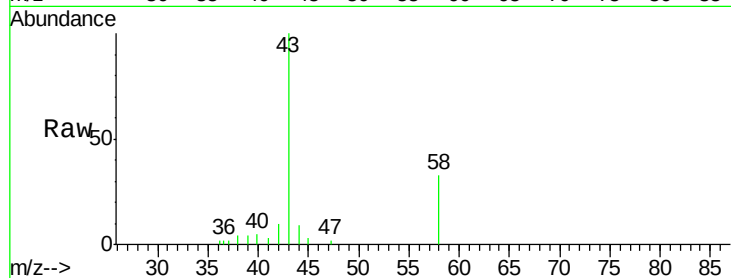
VSTD01064

Tgt Ion: 43 Resp: 16831

Ion Ratio Lower Upper

43 100

58 34.2 0.0 51.6



#14

Carbon disulfide

Concen: 8.16 ug/L

RT: 2.31 min Scan# 378

Delta R.T. 0.00 min

Lab File: VV014935.D

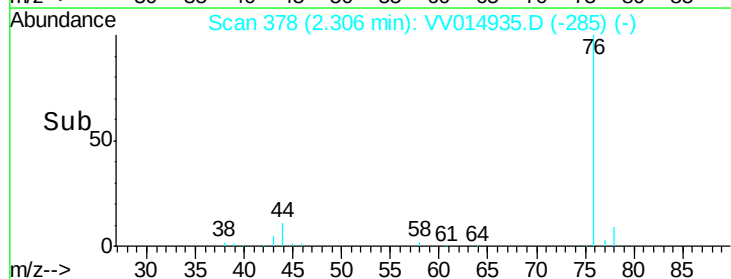
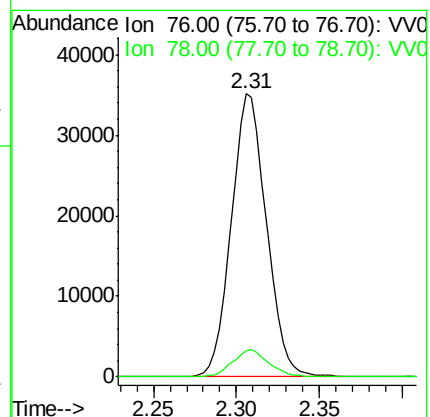
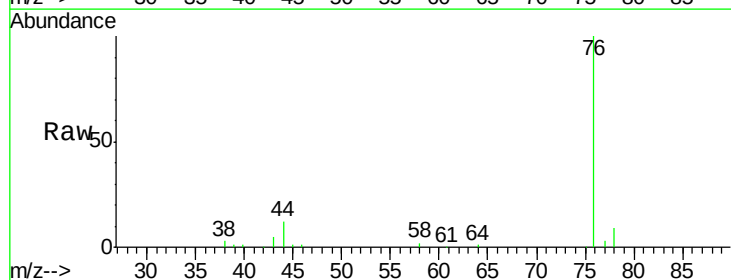
Acq: 16 Mar 2020 10:06

Tgt Ion: 76 Resp: 51727

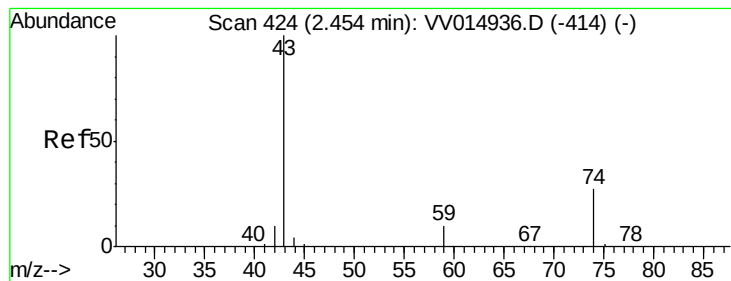
Ion Ratio Lower Upper

76 100

78 9.0 7.2 10.8







#15

Methyl Acetate

Concen: 6.45 ug/L

RT: 2.46 min Scan# 425

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

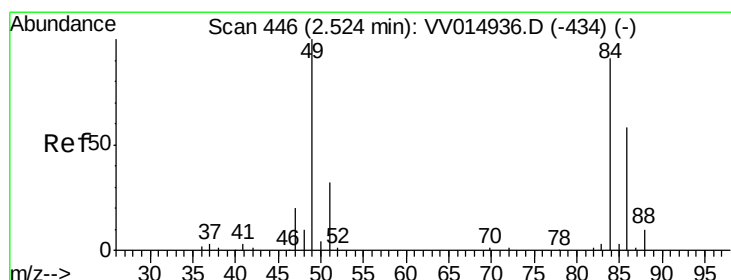
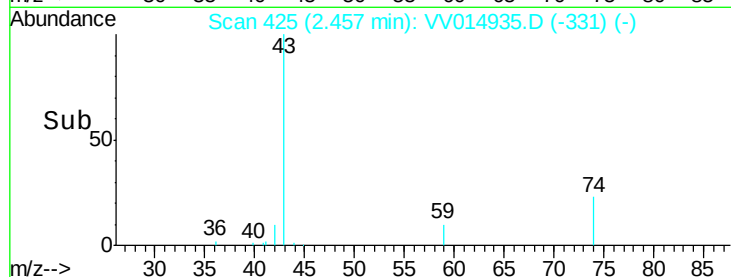
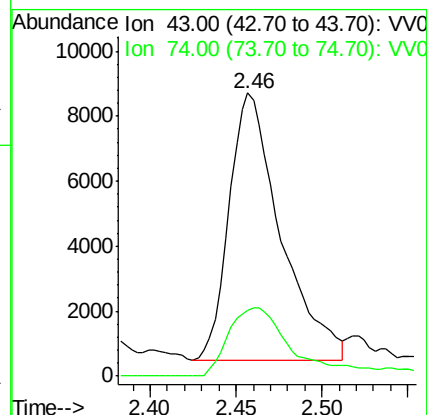
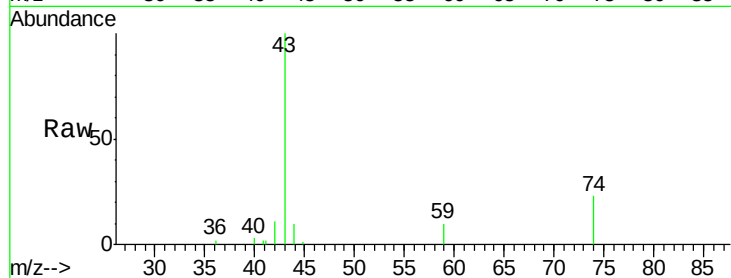
VSTD01064

Tgt Ion: 43 Resp: 17212

Ion Ratio Lower Upper

43 100

74 29.1 22.4 33.6



#16

Methylene chloride

Concen: 9.37 ug/L

RT: 2.52 min Scan# 446

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

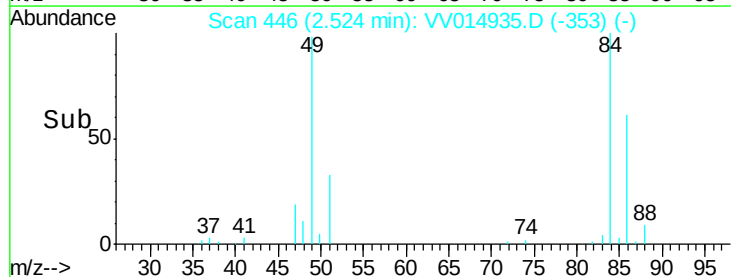
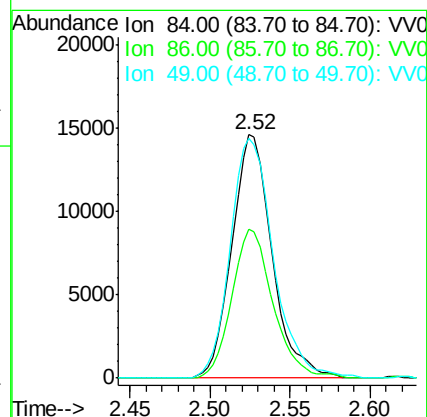
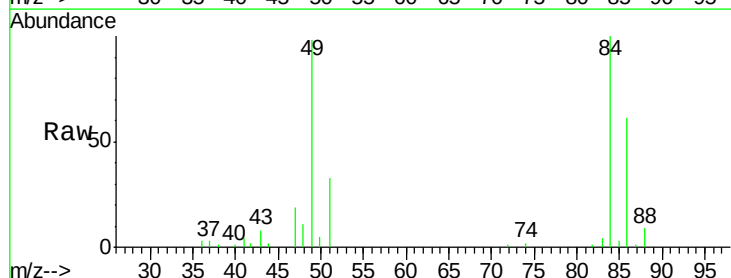
Tgt Ion: 84 Resp: 25010

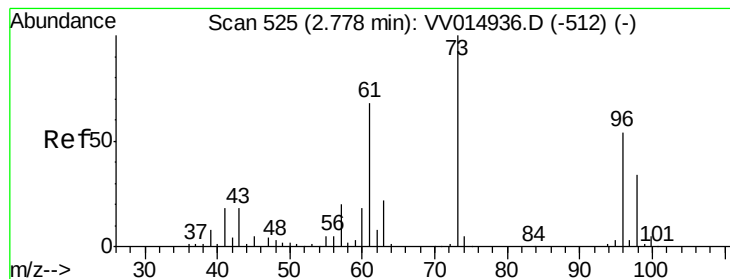
Ion Ratio Lower Upper

84 100

86 61.0 44.6 82.8

49 98.4 76.9 142.9





#17

trans-1,2-Dichloroethene

Concen: 9.13 ug/L

RT: 2.78 min Scan# 525

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

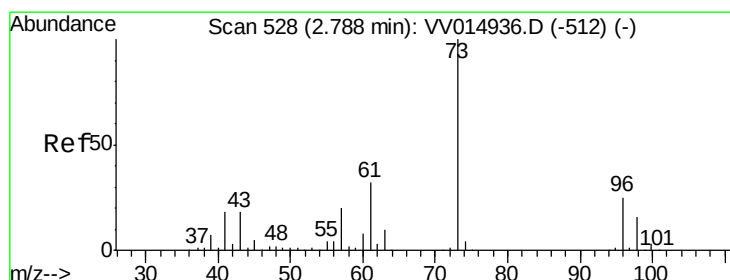
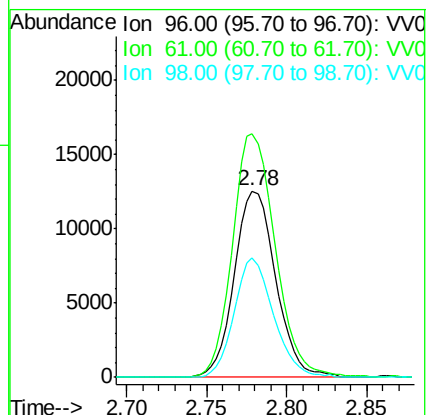
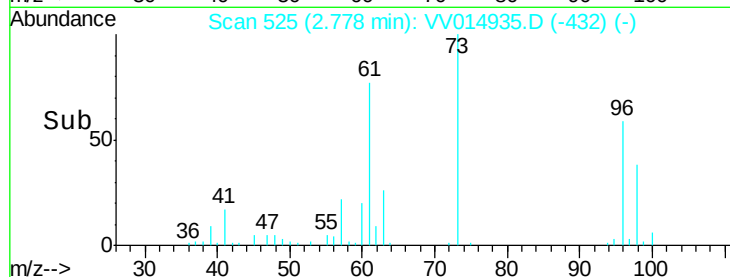
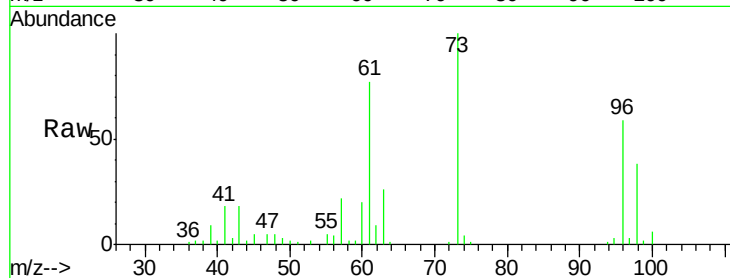
Tgt Ion: 96 Resp: 22190

Ion Ratio Lower Upper

96 100

61 130.8 87.9 163.3

98 63.9 43.5 80.7



#18

Methyl tert-butyl Ether

Concen: 8.84 ug/L

RT: 2.79 min Scan# 529

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

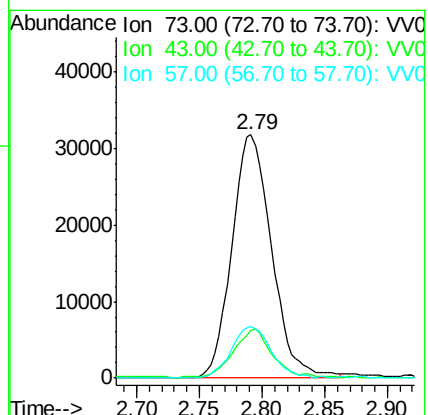
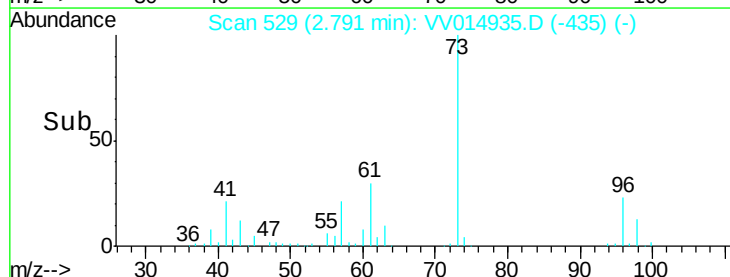
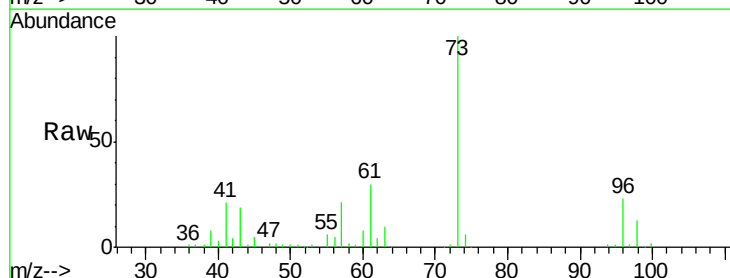
Tgt Ion: 73 Resp: 70044

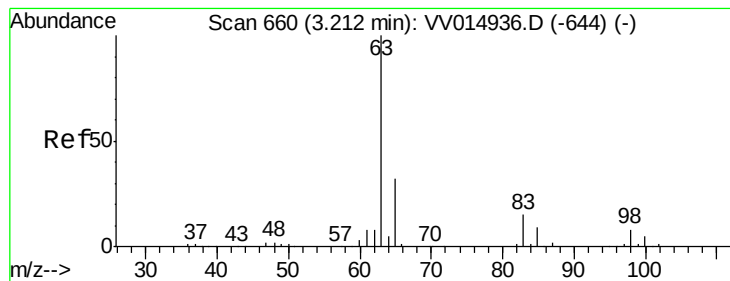
Ion Ratio Lower Upper

73 100

43 18.6 14.4 21.6

57 21.2 16.0 24.0





#19

1,1-Dichloroethane

Concen: 8.72 ug/L

RT: 3.21 min Scan# 660

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

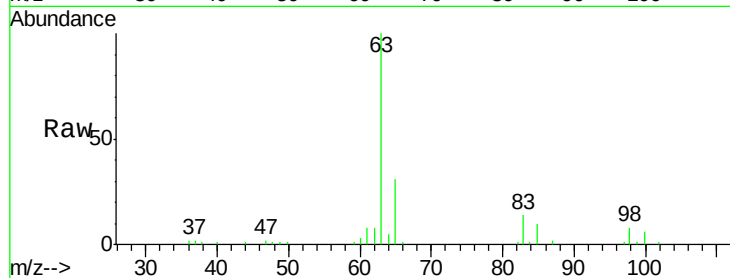
Tgt Ion: 63 Resp: 40695

Ion Ratio Lower Upper

63 100

65 31.3 22.7 42.3

83 14.1 10.4 19.2

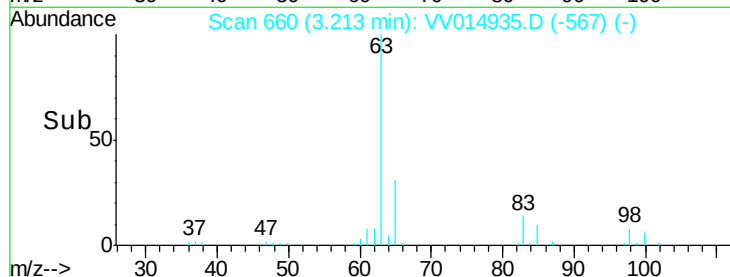


Abundance Ion 63.00 (62.70 to 63.70): VV014935.D (-644) (-)

Ion 65.00 (64.70 to 65.70): VV014935.D (-644) (-)

Ion 83.00 (82.70 to 83.70): VV014935.D (-644) (-)

Time-->



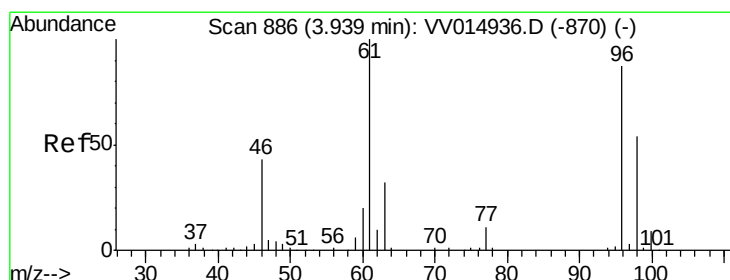
Abundance

Ion 63.00 (62.70 to 63.70): VV014935.D (-644) (-)

Ion 65.00 (64.70 to 65.70): VV014935.D (-644) (-)

Ion 83.00 (82.70 to 83.70): VV014935.D (-644) (-)

Time-->



#20

cis-1,2-Dichloroethene

Concen: 9.15 ug/L

RT: 3.95 min Scan# 888

Delta R.T. 0.01 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

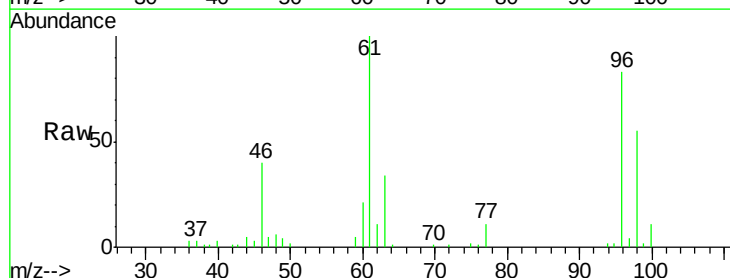
Tgt Ion: 96 Resp: 24965

Ion Ratio Lower Upper

96 100

61 120.6 80.2 149.0

68 0.0 0.0 0.0

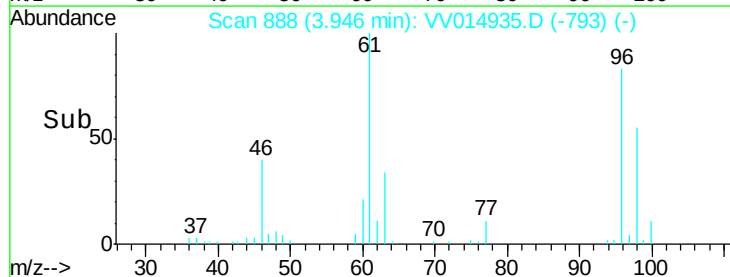


Abundance Ion 96.00 (95.70 to 96.70): VV014935.D (-793) (-)

Ion 61.00 (60.70 to 61.70): VV014935.D (-793) (-)

Ion 68.00 (67.70 to 68.70): VV014935.D (-793) (-)

Time-->



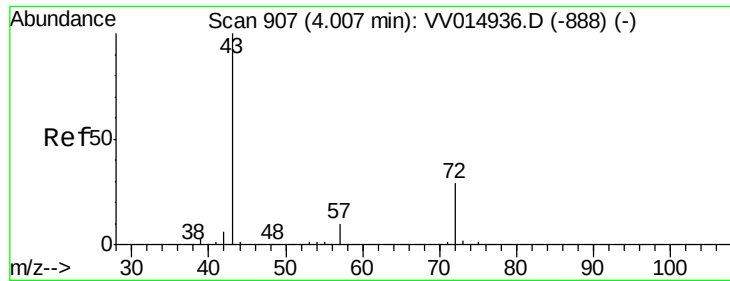
Abundance

Ion 96.00 (95.70 to 96.70): VV014935.D (-793) (-)

Ion 61.00 (60.70 to 61.70): VV014935.D (-793) (-)

Ion 68.00 (67.70 to 68.70): VV014935.D (-793) (-)

Time-->



#22

2-Butanone

Concen: 4.47 ug/L

RT: 4.02 min Scan# 911

Delta R.T. 0.01 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

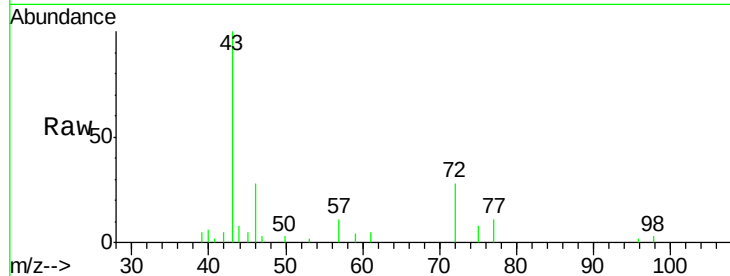
VSTD01064

Tgt Ion: 43 Resp: 8678

Ion Ratio Lower Upper

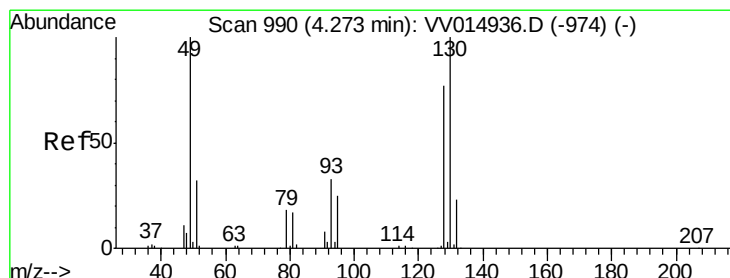
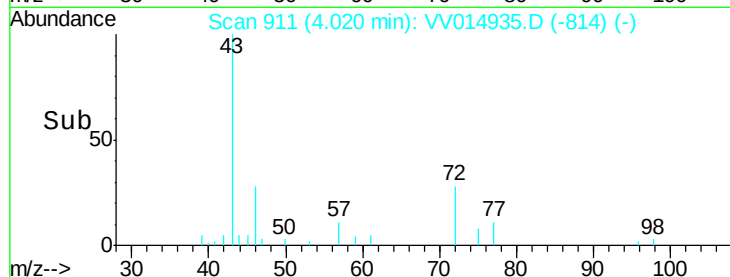
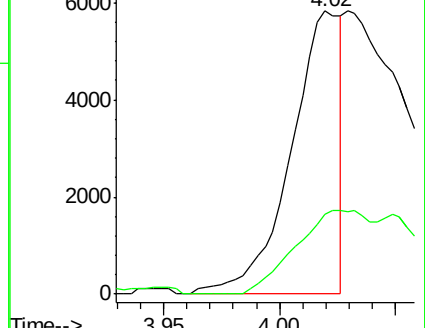
43 100

72 31.6 10.9 32.6



Abundance Ion 43.00 (42.70 to 43.70): VV014935.D (-814) (-)

Ion 72.00 (71.70 to 72.70): VV014935.D (-814) (-)



#23

Bromochloromethane

Concen: 9.71 ug/L

RT: 4.28 min Scan# 991

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Tgt Ion: 128 Resp: 13626

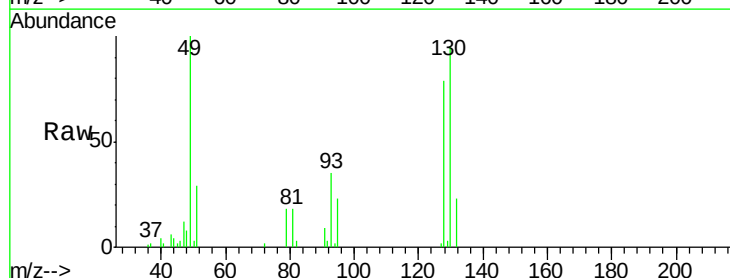
Ion Ratio Lower Upper

128 100

49 127.1 90.4 167.8

130 120.4 90.4 168.0

51 37.5 32.7 49.1

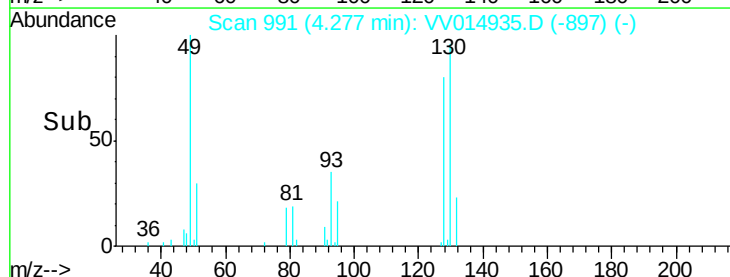
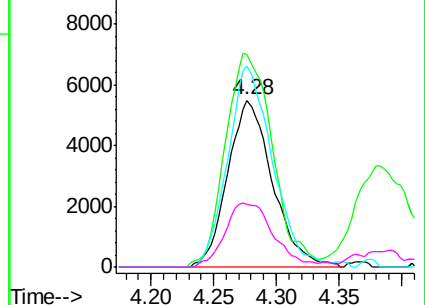


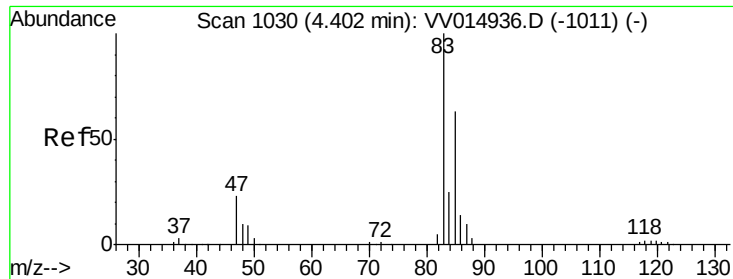
Abundance Ion 128.00 (127.70 to 128.70): VV014935.D (-897) (-)

Ion 49.00 (48.70 to 49.70): VV014935.D (-897) (-)

Ion 130.00 (129.70 to 130.70): VV014935.D (-897) (-)

Ion 51.00 (50.70 to 51.70): VV014935.D (-897) (-)

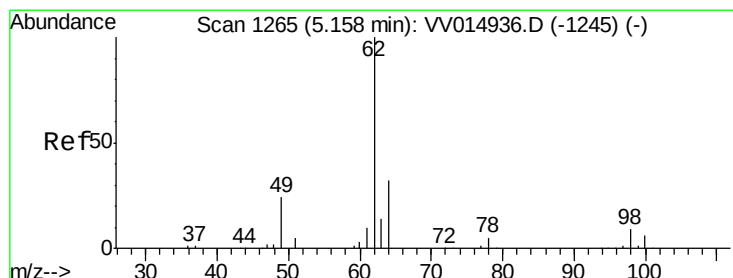
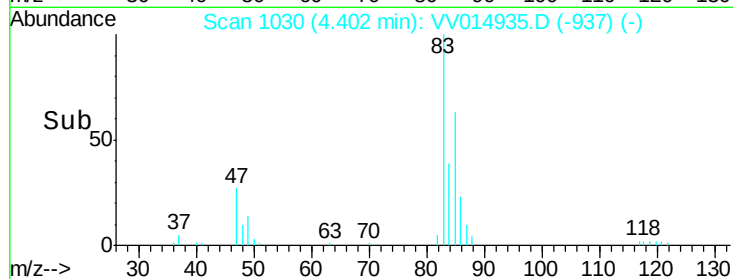
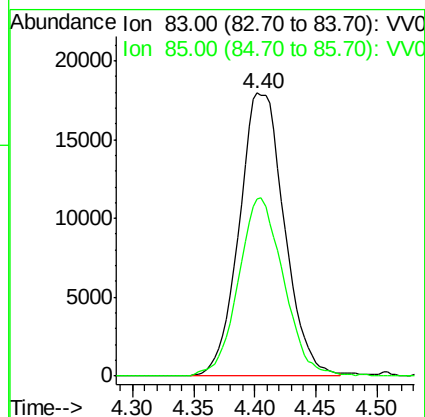
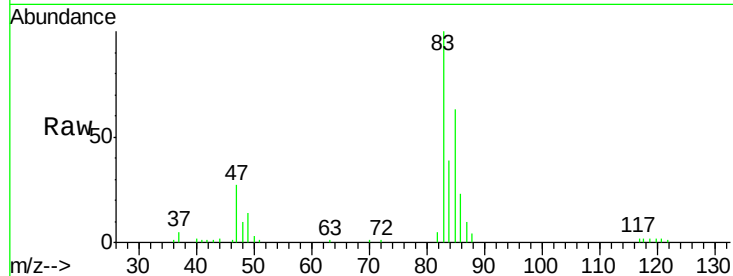




#25  
Chloroform  
Concen: 9.45 ug/L  
RT: 4.40 min Scan# 1030  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

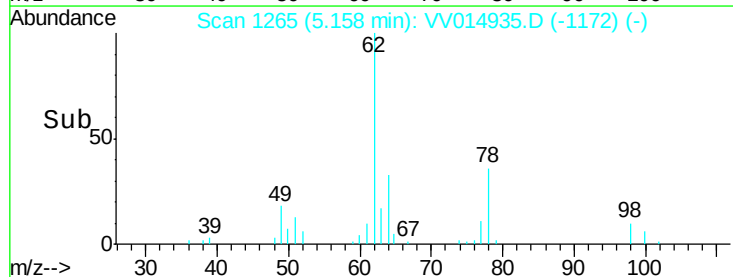
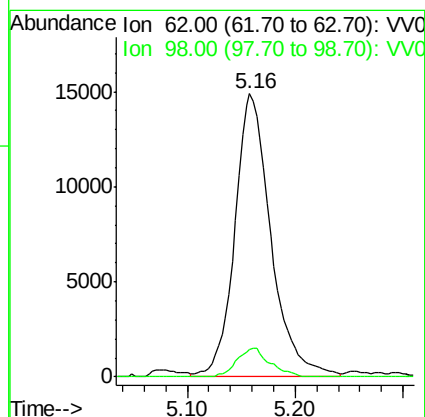
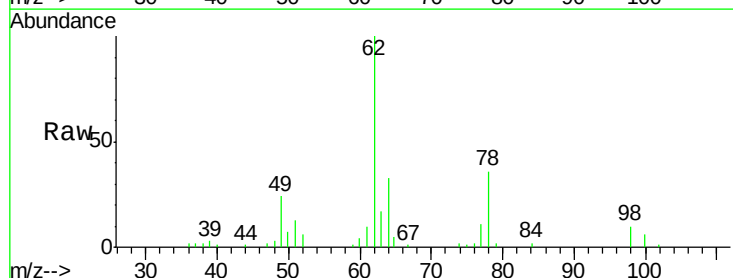
Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD01064

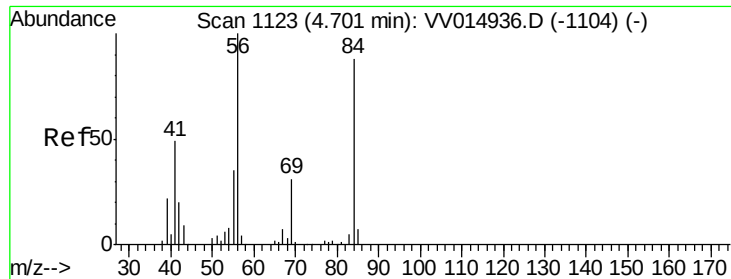
Tgt Ion: 83 Resp: 46049  
Ion Ratio Lower Upper  
83 100  
85 62.6 44.6 82.8



#27  
1,2-Dichloroethane  
Concen: 9.13 ug/L  
RT: 5.16 min Scan# 1265  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

Tgt Ion: 62 Resp: 34609  
Ion Ratio Lower Upper  
62 100  
98 9.8 7.4 11.0

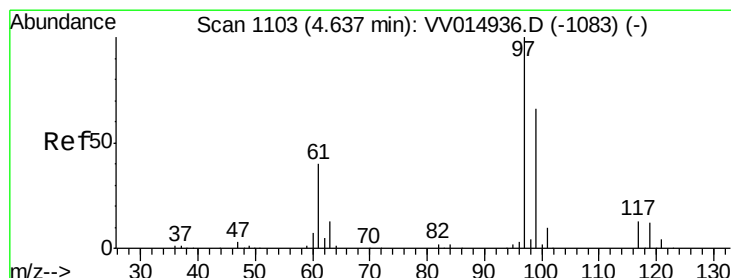
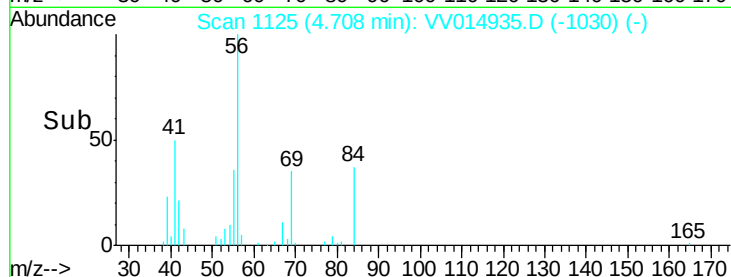
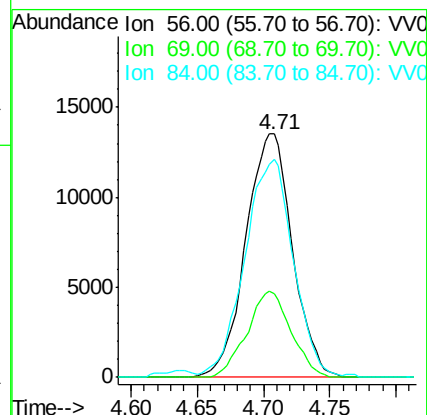
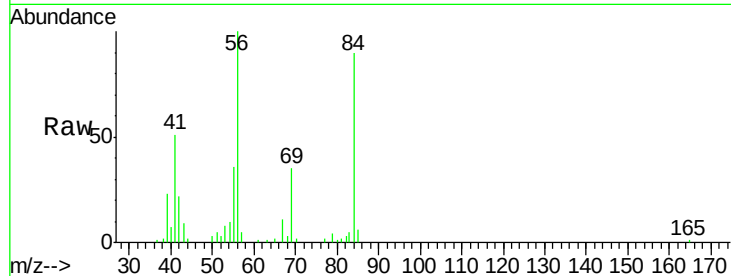




#29  
Cyclohexane  
Concen: 7.96 ug/L  
RT: 4.71 min Scan# 1125  
Delta R.T. 0.01 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

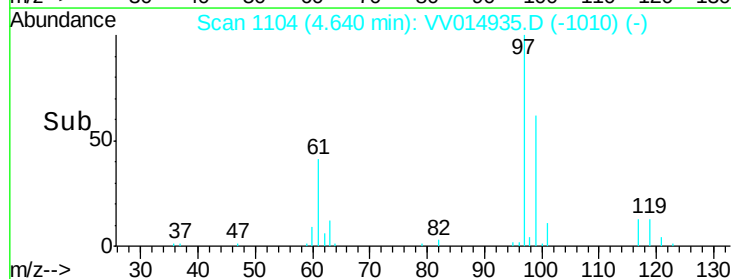
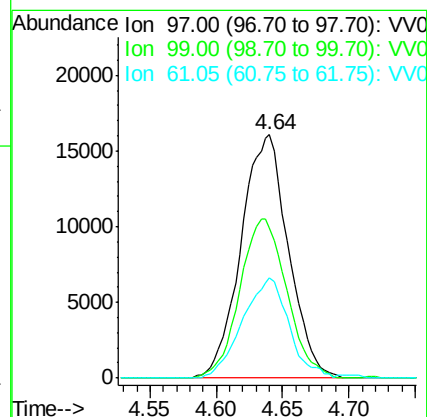
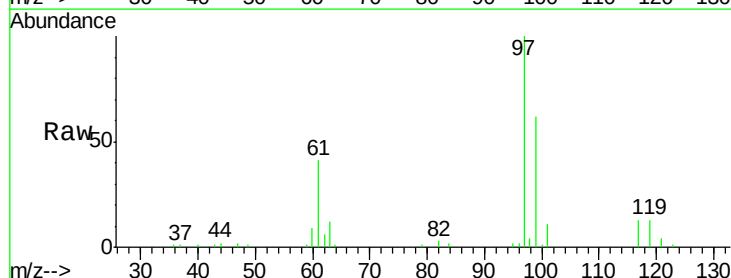
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD01064

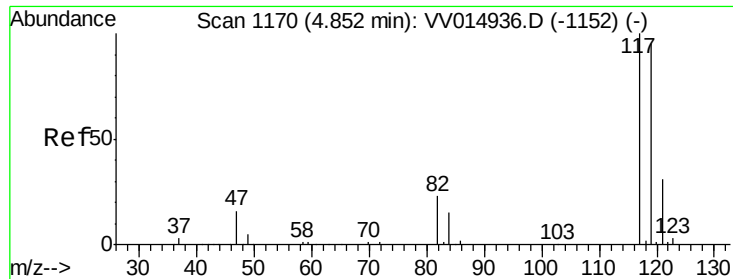
Tgt Ion: 56 Resp: 33084  
Ion Ratio Lower Upper  
56 100  
69 33.4 25.2 37.8  
84 93.6 76.4 114.6



#30  
1,1,1-Trichloroethane  
Concen: 9.68 ug/L  
RT: 4.64 min Scan# 1104  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

Tgt Ion: 97 Resp: 39952  
Ion Ratio Lower Upper  
97 100  
99 64.9 51.8 77.6  
61 40.1 32.0 48.0





#31

Carbon tetrachloride

Concen: 9.97 ug/L

RT: 4.85 min Scan# 1170

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

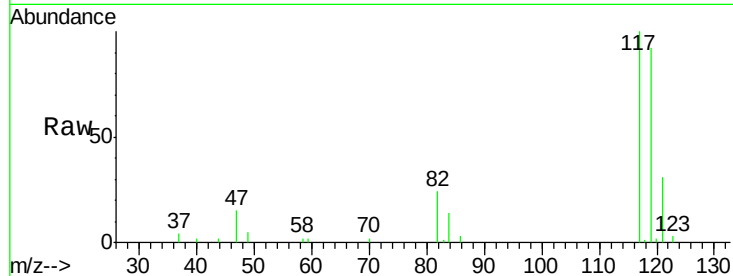
VSTD01064

Tgt Ion:117 Resp: 35292

Ion Ratio Lower Upper

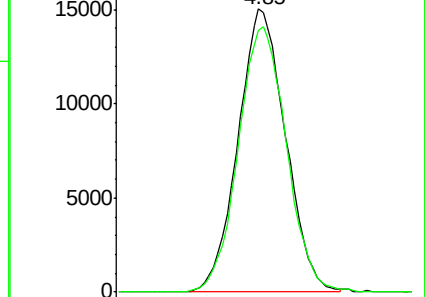
117 100

119 95.2 75.9 113.9

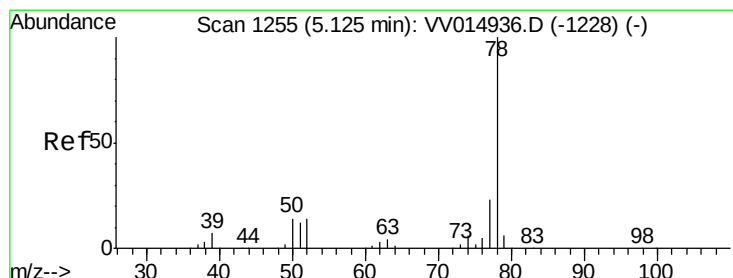
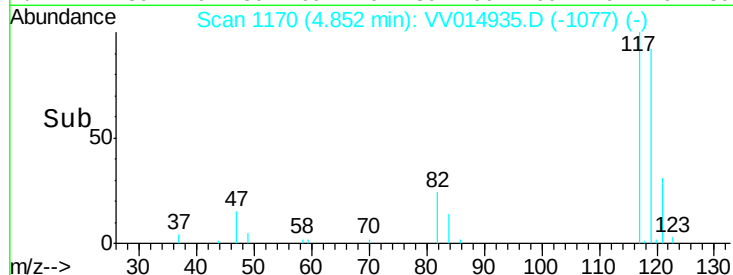


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



Time-->



#33

Benzene

Concen: 8.85 ug/L

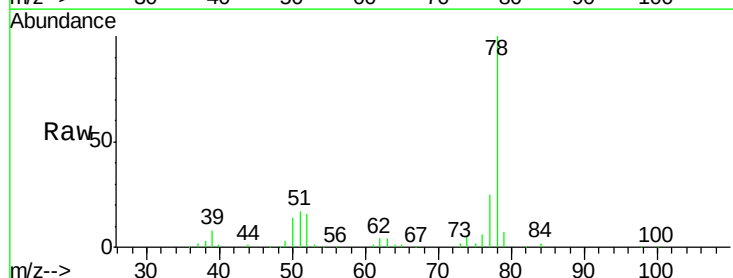
RT: 5.13 min Scan# 1256

Delta R.T. 0.00 min

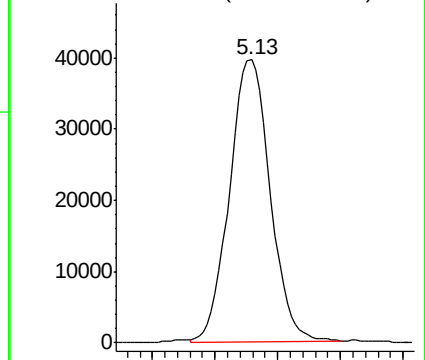
Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

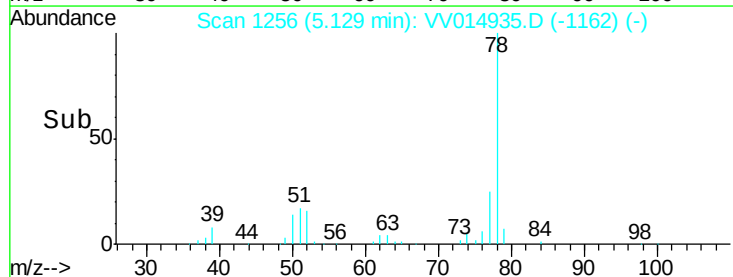
Tgt Ion: 78 Resp: 89525

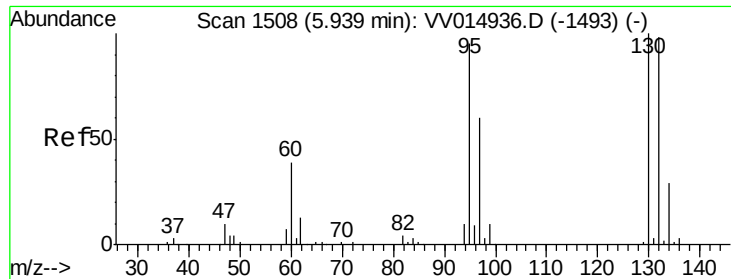


Abundance Ion 78.00 (77.70 to 78.70): VV0



Time-->





#34

Trichloroethene

Concen: 9.15 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

Tgt Ion: 95 Resp: 24277

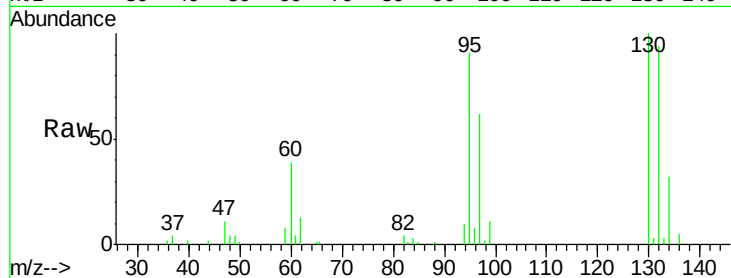
Ion Ratio Lower Upper

95 100

97 67.8 44.4 82.4

132 103.6 72.4 134.4

130 110.0 74.1 137.5

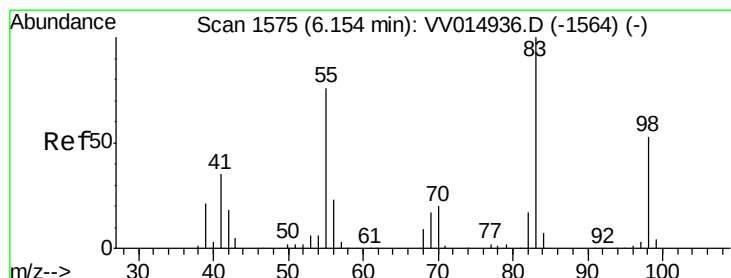
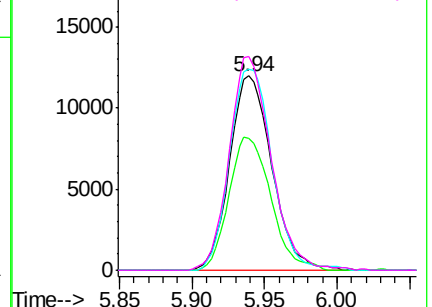
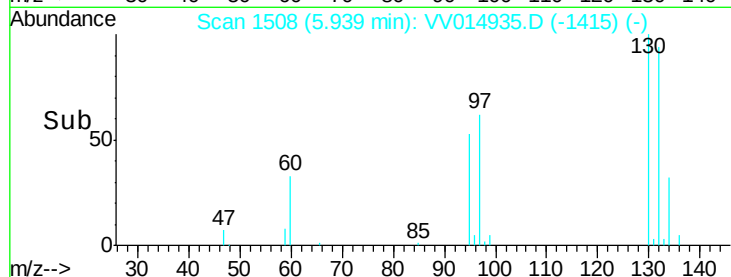


Abundance Ion 95.00 (94.70 to 95.70): VV0

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: 8.75 ug/L

RT: 6.15 min Scan# 1575

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

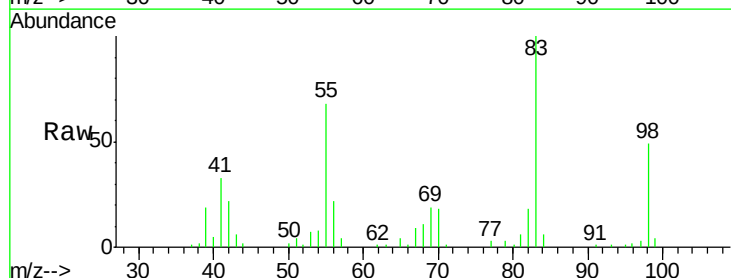
Tgt Ion: 83 Resp: 38231

Ion Ratio Lower Upper

83 100

55 71.3 57.5 86.3

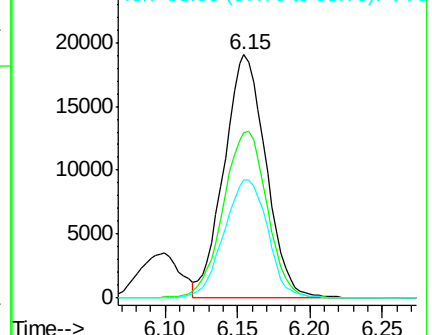
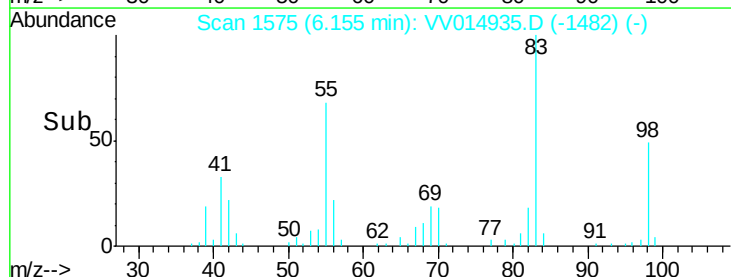
98 50.6 39.5 59.3



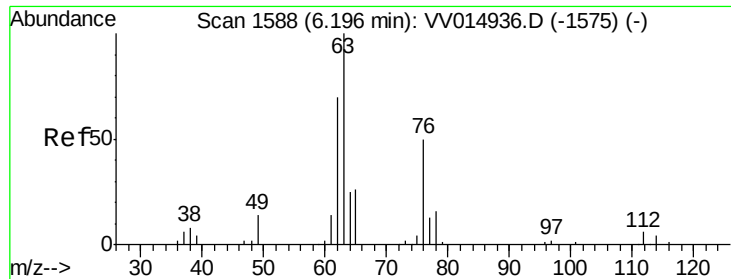
Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0



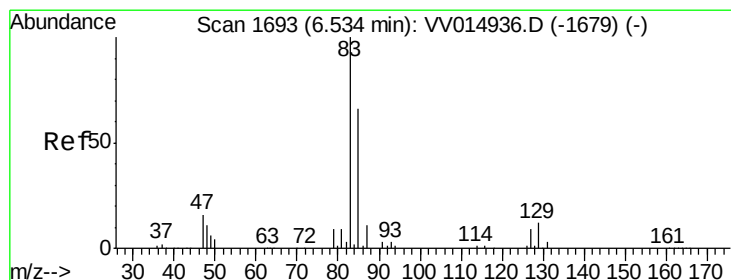
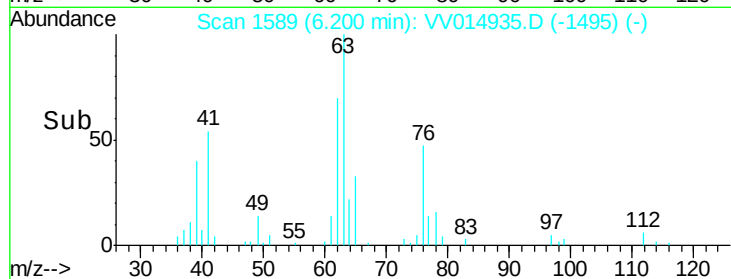
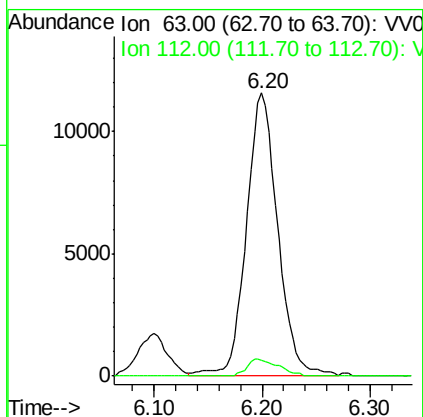
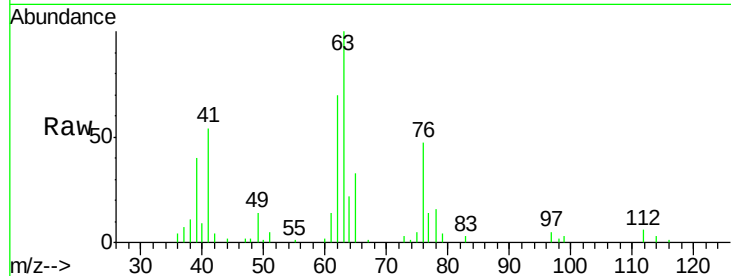




#37  
 1,2-Dichloropropane  
 Concen: 8.76 ug/L  
 RT: 6.20 min Scan# 1589  
 Delta R.T. 0.00 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

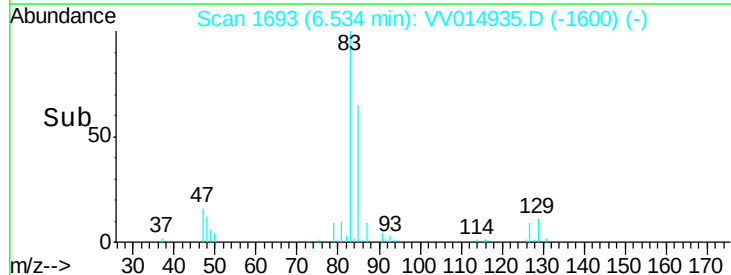
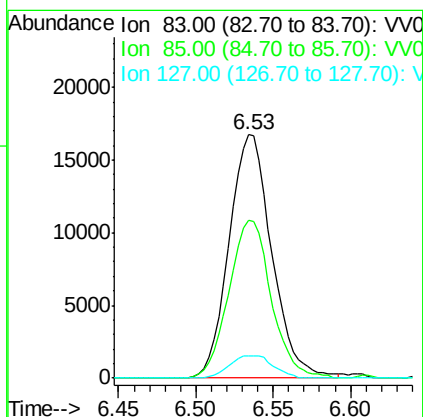
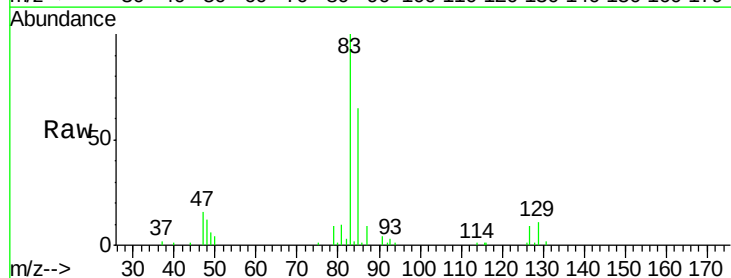
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD01064

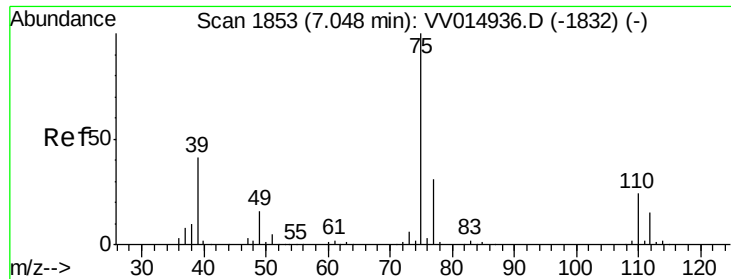
Tgt Ion: 63 Resp: 23413  
 Ion Ratio Lower Upper  
 63 100  
 112 5.8 4.4 6.6



#38  
 Bromodichloromethane  
 Concen: 9.16 ug/L  
 RT: 6.53 min Scan# 1693  
 Delta R.T. 0.00 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

Tgt Ion: 83 Resp: 32075  
 Ion Ratio Lower Upper  
 83 100  
 85 65.1 46.0 85.4  
 127 9.1 7.5 11.3

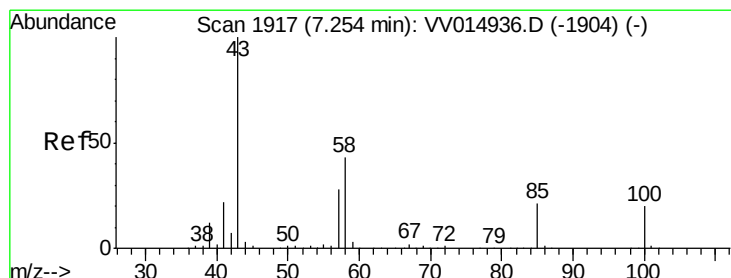
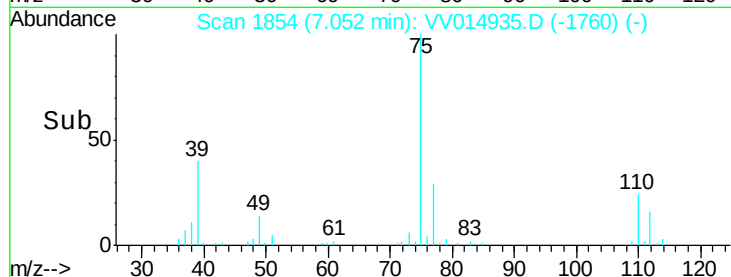
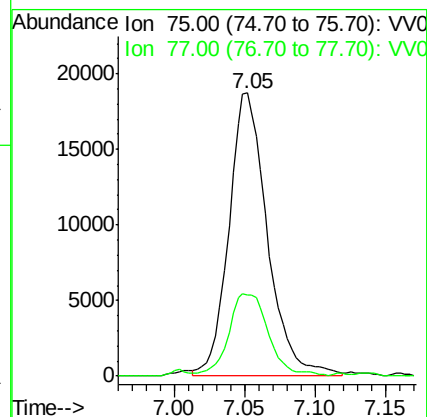
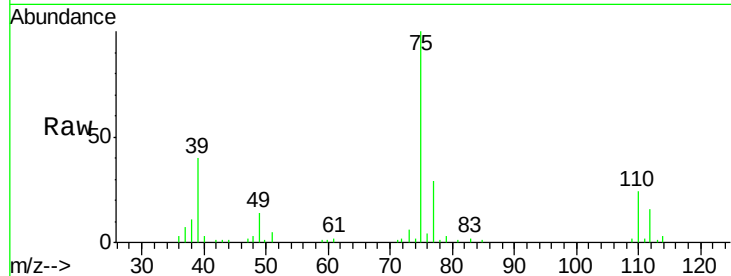




#39  
 cis-1,3-Dichloropropene  
 Concen: 8.32 ug/L  
 RT: 7.05 min Scan# 1854  
 Delta R.T. 0.00 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

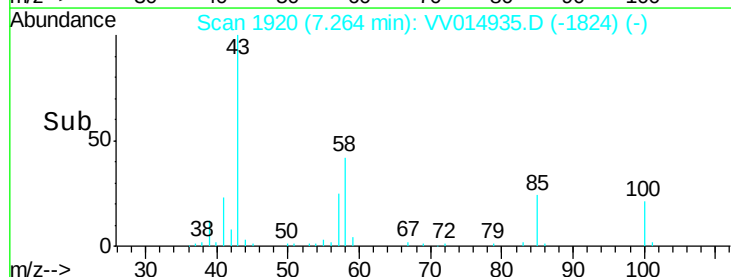
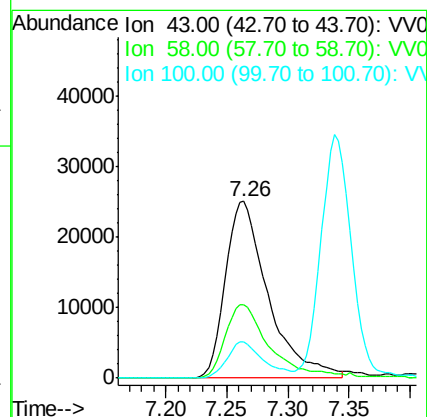
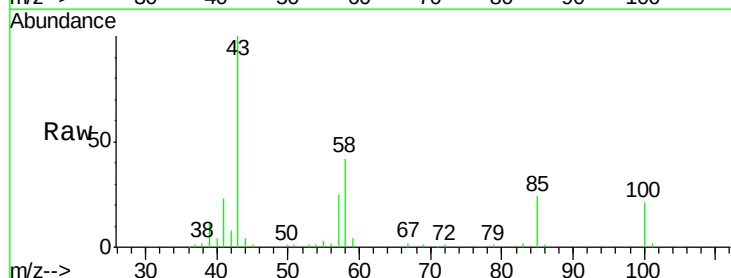
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD01064

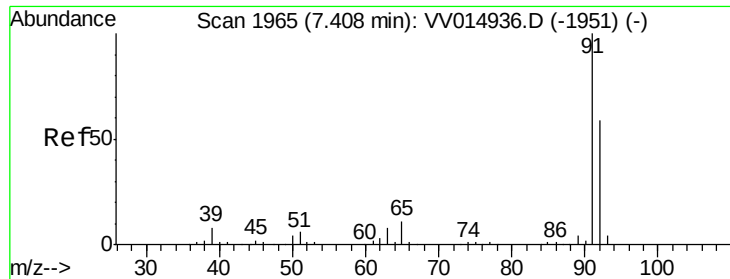
Tgt Ion: 75 Resp: 35768  
 Ion Ratio Lower Upper  
 75 100  
 77 28.8 21.8 40.6



#40  
 4-Methyl-2-pentanone  
 Concen: 15.95 ug/L  
 RT: 7.26 min Scan# 1920  
 Delta R.T. 0.01 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

Tgt Ion: 43 Resp: 61565  
 Ion Ratio Lower Upper  
 43 100  
 58 41.1 33.9 50.9  
 100 17.9 15.1 22.7





#42

Toluene

Concen: 8.97 ug/L

RT: 7.41 min Scan# 1966

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

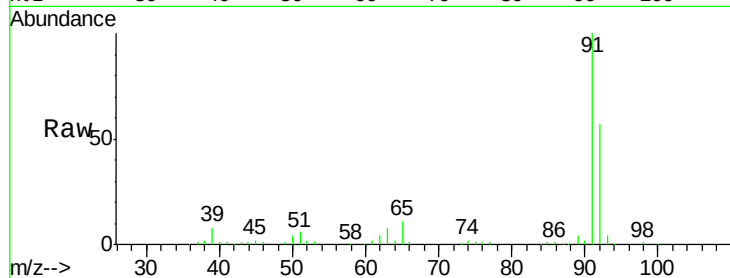
VSTD01064

Tgt Ion: 91 Resp: 100557

Ion Ratio Lower Upper

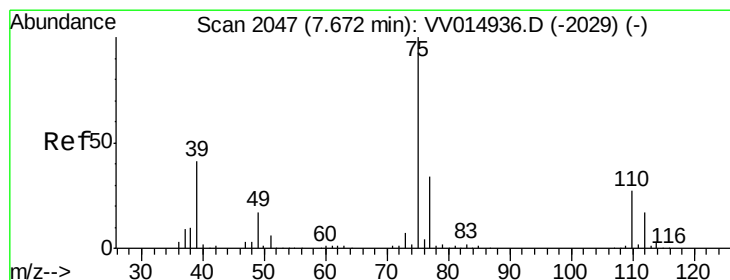
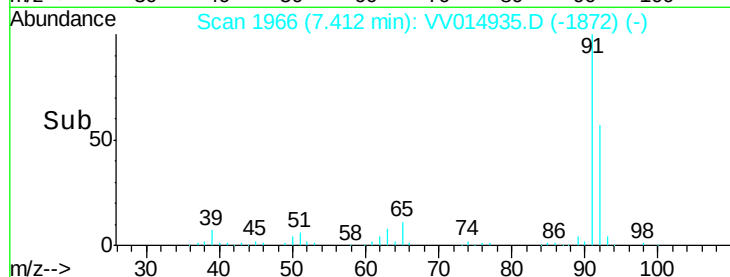
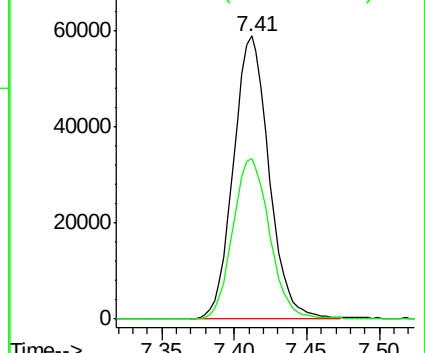
91 100

92 56.7 41.4 76.8



Abundance Ion 91.00 (90.70 to 91.70): VV0

Ion 92.00 (91.70 to 92.70): VV0



#44

trans-1,3-Dichloropropene

Concen: 7.79 ug/L

RT: 7.68 min Scan# 2048

Delta R.T. 0.00 min

Lab File: VV014935.D

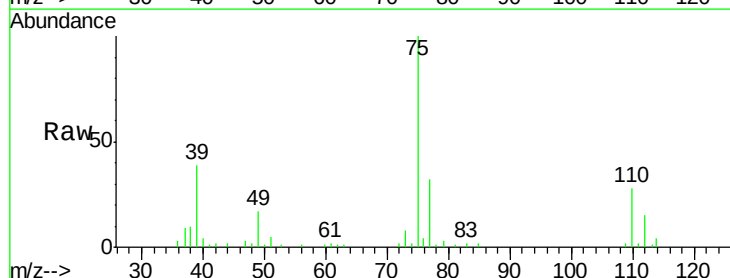
Acq: 16 Mar 2020 10:06

Tgt Ion: 75 Resp: 30150

Ion Ratio Lower Upper

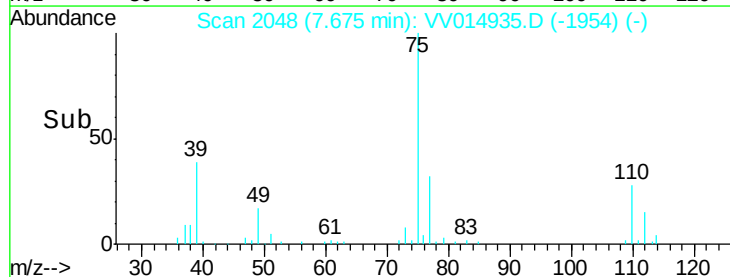
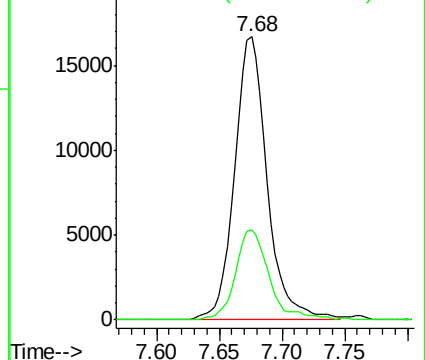
75 100

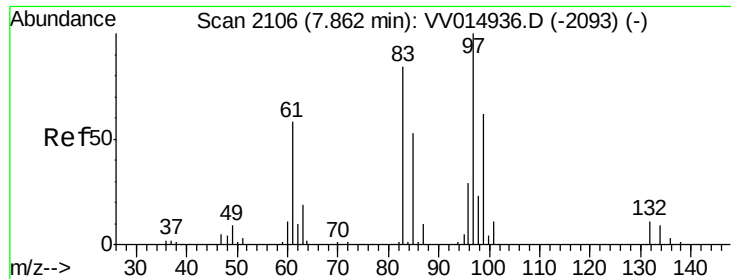
77 32.0 23.5 43.7



Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0

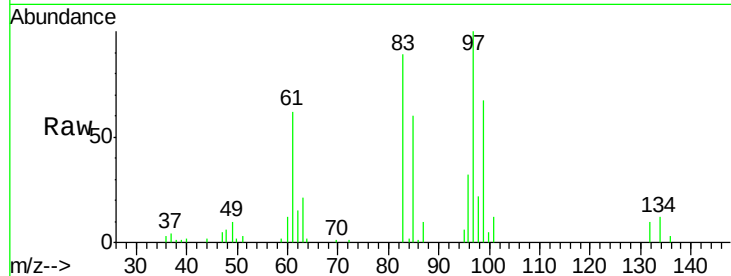




#45  
 1,1,2-Trichloroethane  
 Concen: 9.35 ug/L  
 RT: 7.86 min Scan# 2106  
 Delta R.T. 0.00 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD01064

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 23795 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 67.1  | 43.7  | 81.1  |
| 83       | 89.0  | 58.6  | 108.8 |
| 85       | 59.6  | 37.0  | 68.6  |



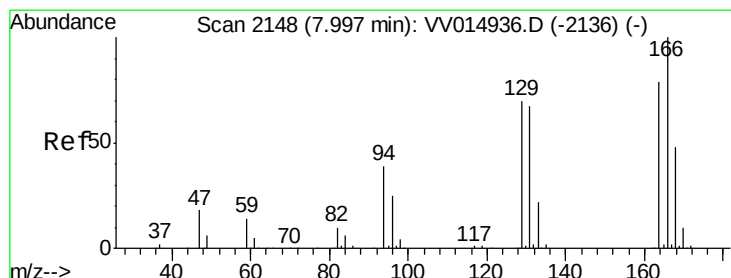
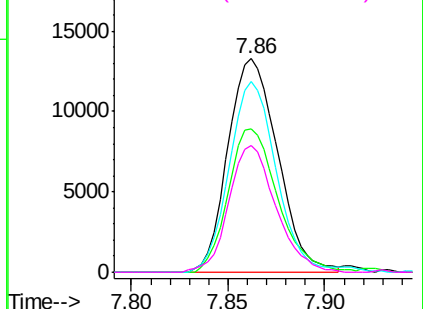
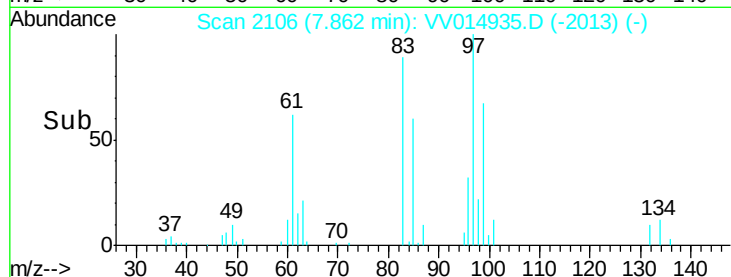
Abundance

Ion 97.00 (96.70 to 97.70): VV014935.D (-2013) (-)

Ion 99.00 (98.70 to 99.70): VV014935.D (-2013) (-)

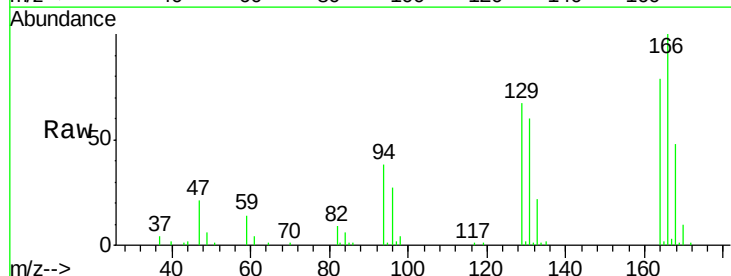
Ion 83.00 (82.70 to 83.70): VV014935.D (-2013) (-)

Ion 85.00 (84.70 to 85.70): VV014935.D (-2013) (-)



#46  
 Tetrachloroethene  
 Concen: 10.26 ug/L  
 RT: 8.00 min Scan# 2148  
 Delta R.T. 0.00 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 22950 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 84.2  | 62.0  | 115.2 |
| 131      | 76.5  | 59.5  | 110.5 |
| 166      | 126.5 | 88.5  | 164.4 |



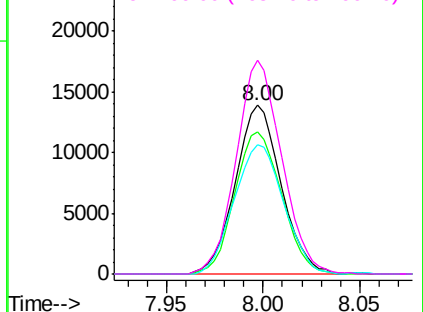
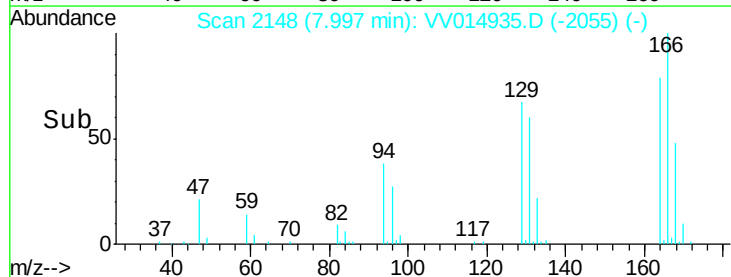
Abundance

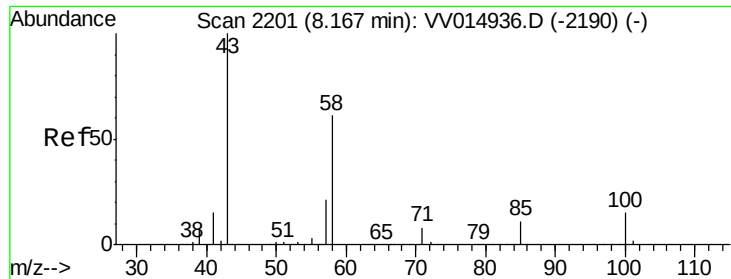
Ion 164.00 (163.70 to 164.70): VV014935.D (-2055) (-)

Ion 129.00 (128.70 to 129.70): VV014935.D (-2055) (-)

Ion 131.00 (130.70 to 131.70): VV014935.D (-2055) (-)

Ion 166.00 (165.70 to 166.70): VV014935.D (-2055) (-)

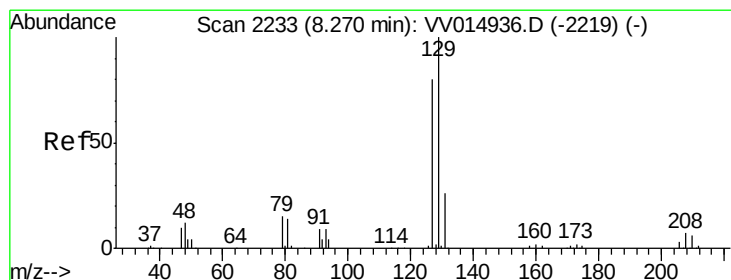
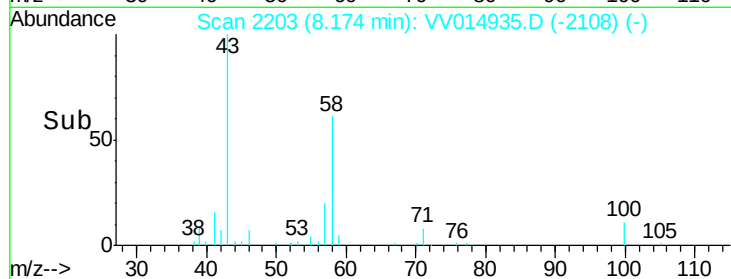
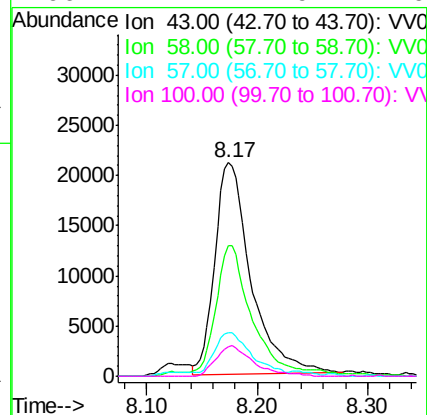
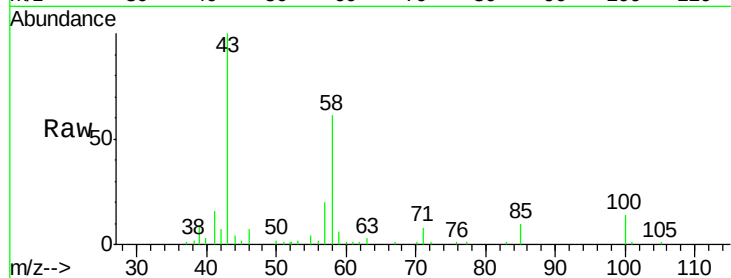




#48  
2-Hexanone  
Concen: 15.87 ug/L  
RT: 8.17 min Scan# 2203  
Delta R.T. 0.01 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

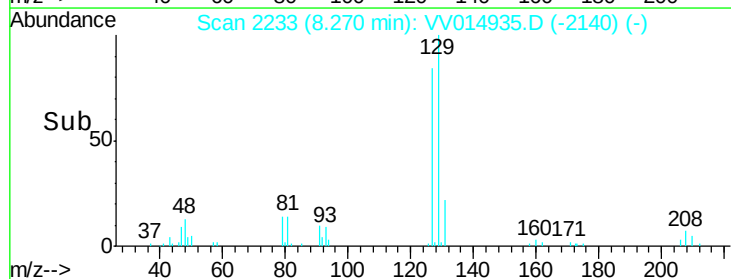
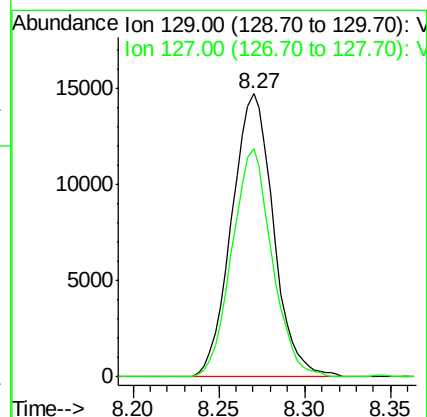
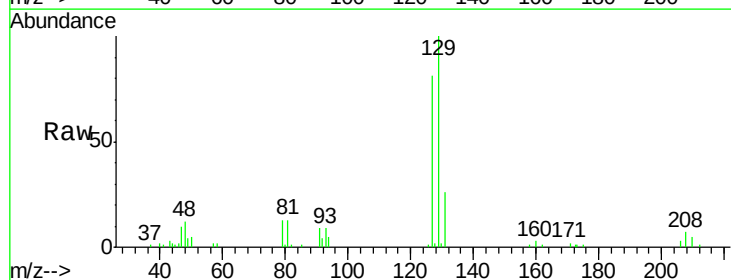
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD01064

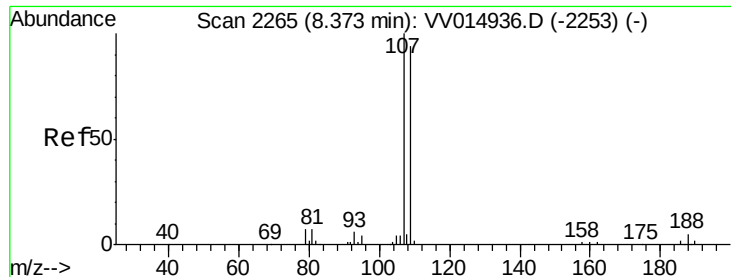
Tgt Ion: 43 Resp: 48126  
Ion Ratio Lower Upper  
43 100  
58 57.8 46.9 70.3  
57 19.1 16.2 24.4  
100 14.7 11.9 17.9



#49  
Dibromochloromethane  
Concen: 8.92 ug/L  
RT: 8.27 min Scan# 2233  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

Tgt Ion: 129 Resp: 24840  
Ion Ratio Lower Upper  
129 100  
127 80.7 55.9 103.9

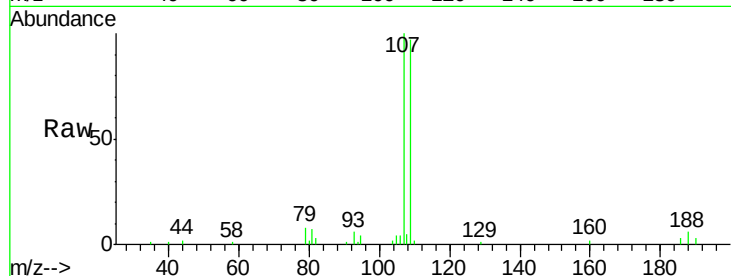




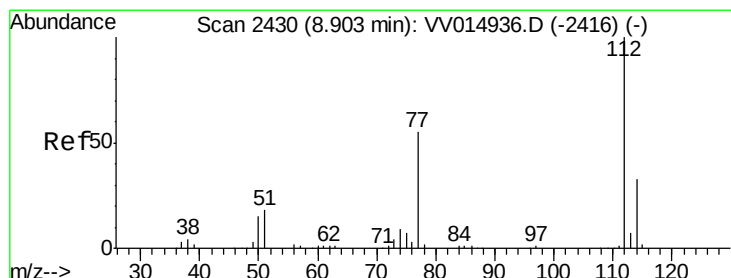
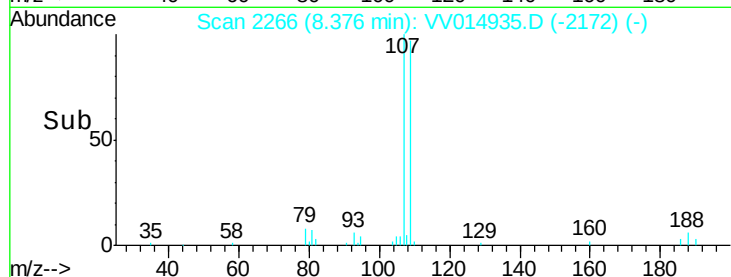
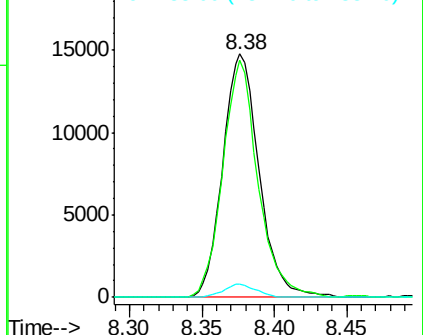
#50  
1,2-Dibromoethane  
Concen: 9.38 ug/L  
RT: 8.38 min Scan# 2266  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD01064

Tgt Ion:107 Resp: 25796  
Ion Ratio Lower Upper  
107 100  
109 97.3 66.1 122.7  
188 5.5 4.0 6.0

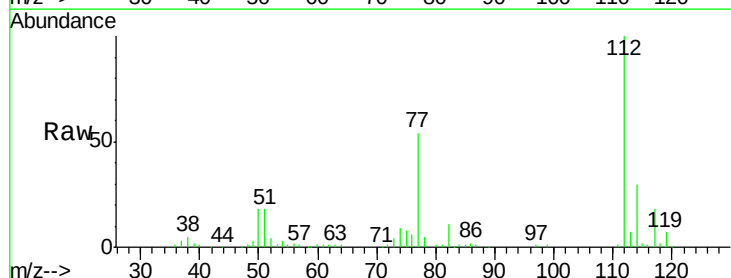


Abundance Ion 107.00 (106.70 to 107.70): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 188.00 (187.70 to 188.70): V

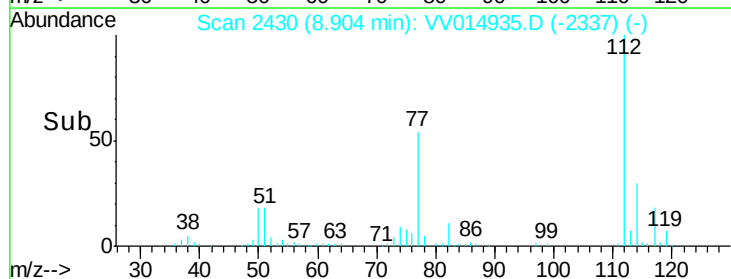
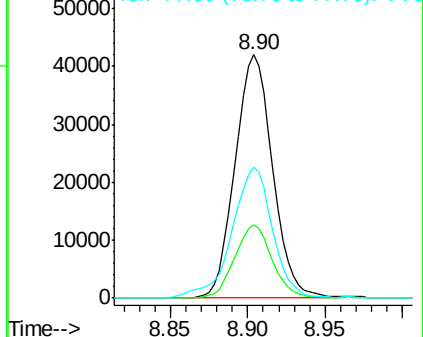


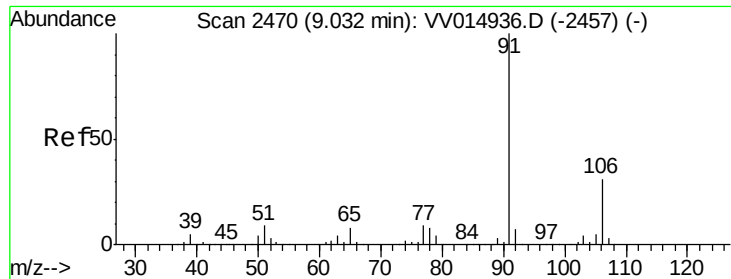
#51  
Chlorobenzene  
Concen: 9.72 ug/L  
RT: 8.90 min Scan# 2430  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

Tgt Ion:112 Resp: 70898  
Ion Ratio Lower Upper  
112 100  
114 30.0 22.8 42.4  
77 53.9 44.5 66.7



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





#52

Ethylbenzene

Concen: 8.88 ug/L

RT: 9.04 min Scan# 2471

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

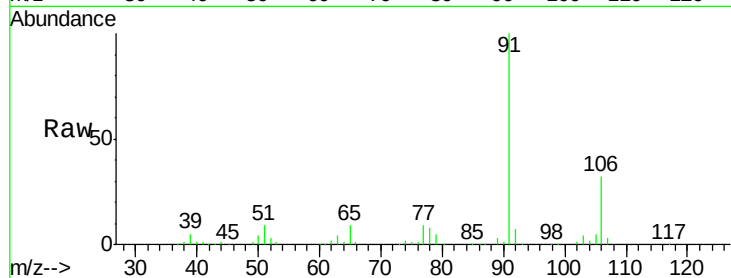
VSTD01064

Tgt Ion: 91 Resp: 112381

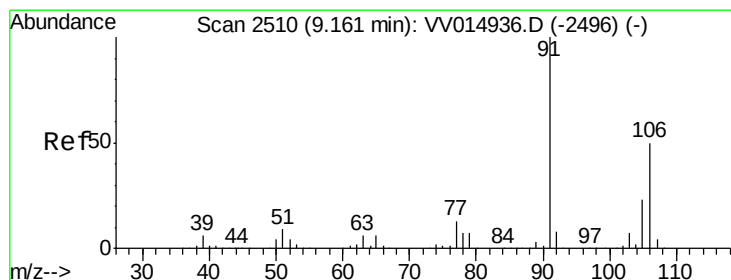
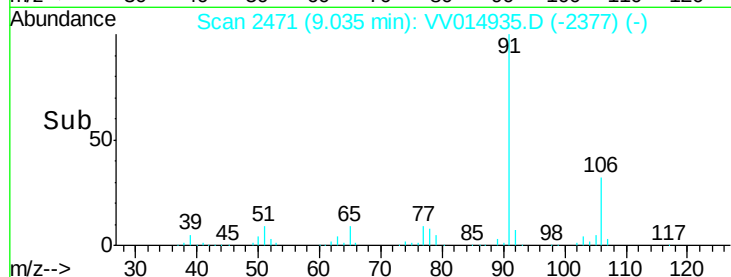
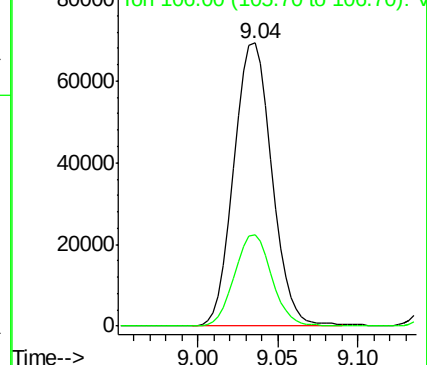
Ion Ratio Lower Upper

91 100

106 32.4 21.9 40.7



Abundance Ion 91.00 (90.70 to 91.70): VV014935.D (-2471) (-)



#53

m,p-Xylene

Concen: 9.28 ug/L

RT: 9.16 min Scan# 2510

Delta R.T. 0.00 min

Lab File: VV014935.D

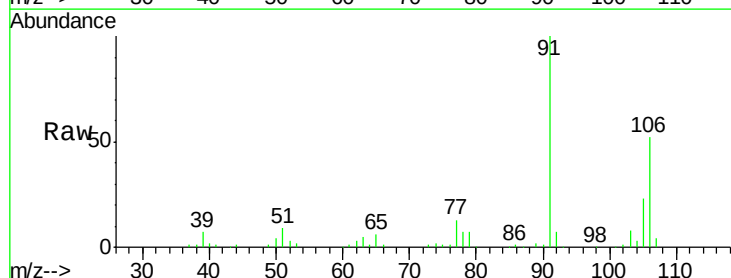
Acq: 16 Mar 2020 10:06

Tgt Ion: 106 Resp: 44380

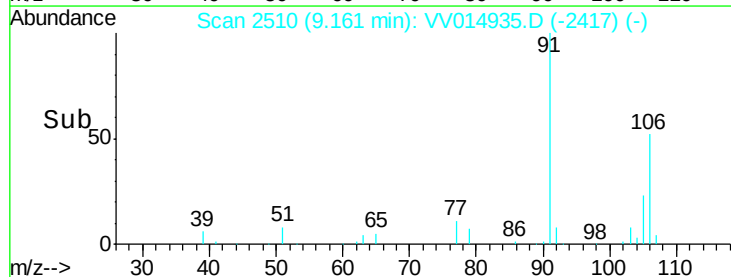
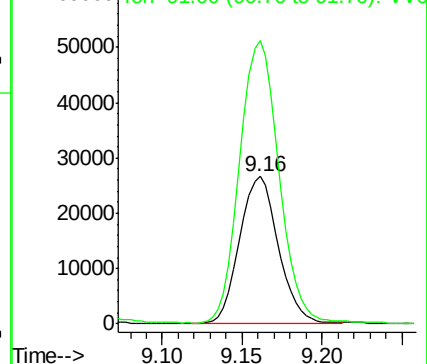
Ion Ratio Lower Upper

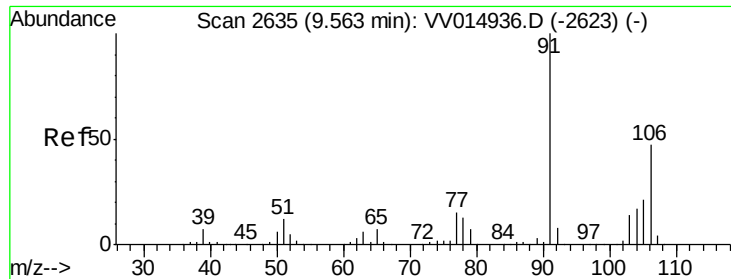
106 100

91 192.2 140.3 260.6



Abundance Ion 106.00 (105.70 to 106.70): VV014935.D (-2510) (-)

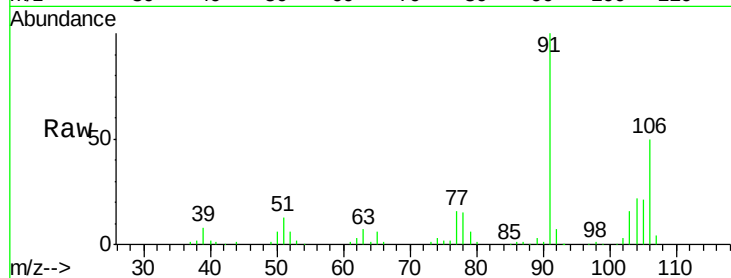




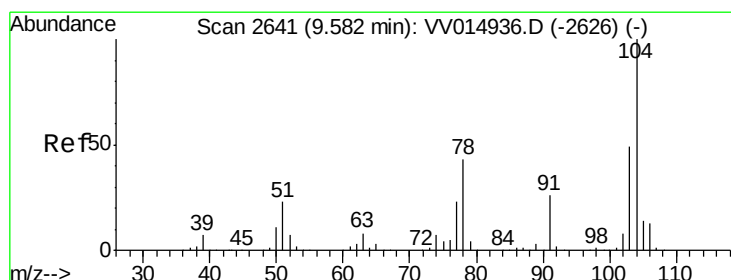
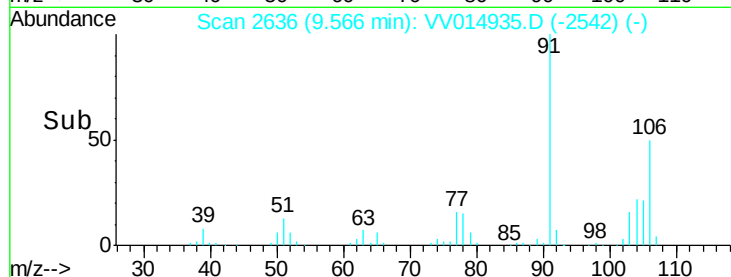
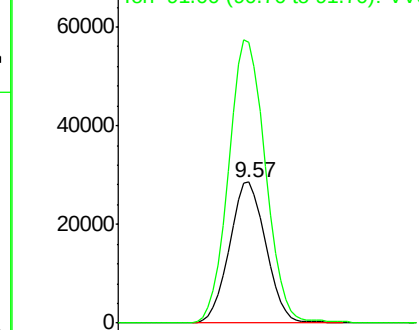
#54  
o-xylene  
Concen: 9.46 ug/L  
RT: 9.57 min Scan# 2636  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD01064

Tgt Ion:106 Resp: 44392  
Ion Ratio Lower Upper  
106 100  
91 198.9 147.9 274.7

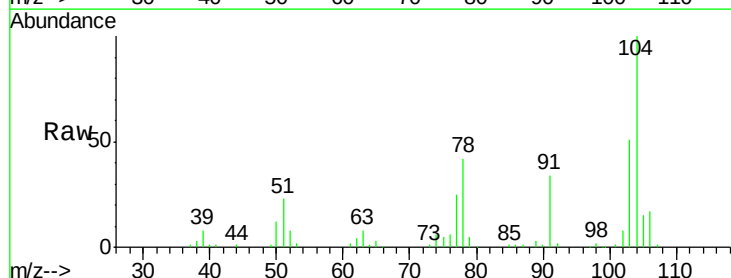


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VV0

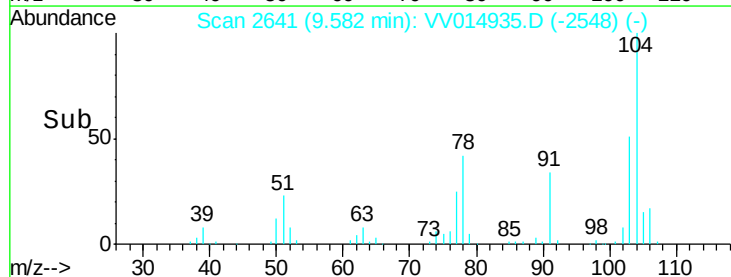
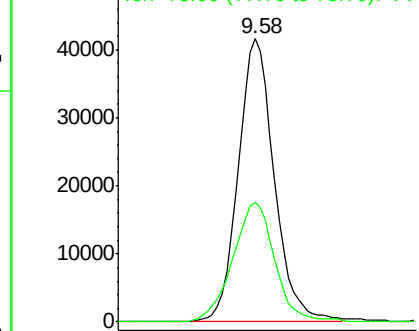


#55  
Styrene  
Concen: 8.70 ug/L  
RT: 9.58 min Scan# 2641  
Delta R.T. 0.00 min  
Lab File: VV014935.D  
Acq: 16 Mar 2020 10:06

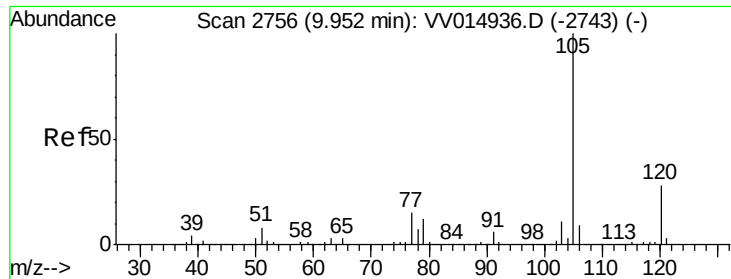
Tgt Ion:104 Resp: 69820  
Ion Ratio Lower Upper  
104 100  
78 42.2 30.1 55.9



Abundance Ion 104.00 (103.70 to 104.70): V  
Ion 78.00 (77.70 to 78.70): VV0







#56

Isopropylbenzene

Concen: 9.00 ug/L

RT: 9.95 min Scan# 2756

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

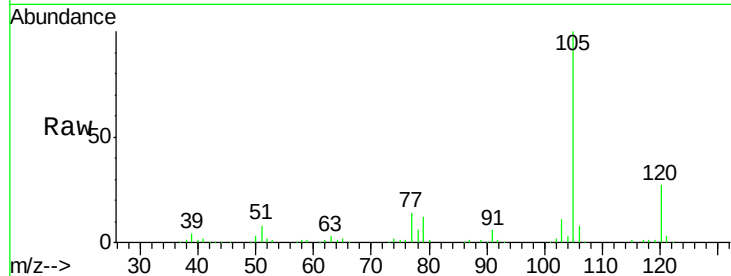
Tgt Ion: 105 Resp: 113395

Ion Ratio Lower Upper

105 100

120 26.9 21.6 32.4

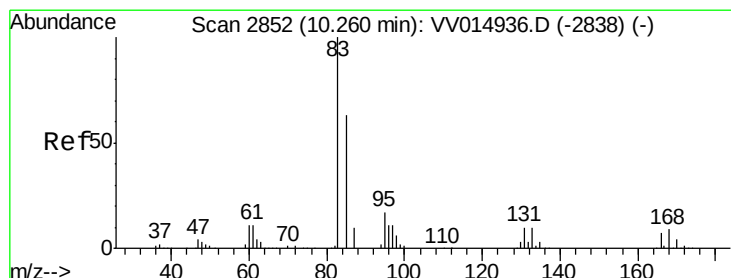
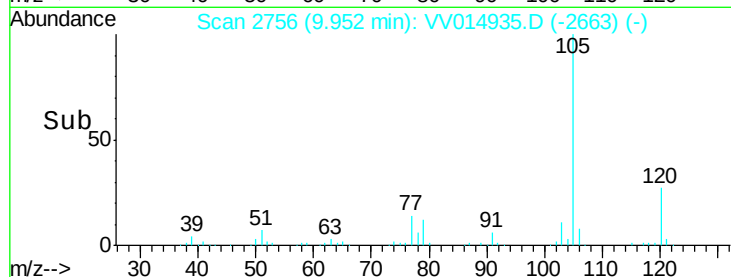
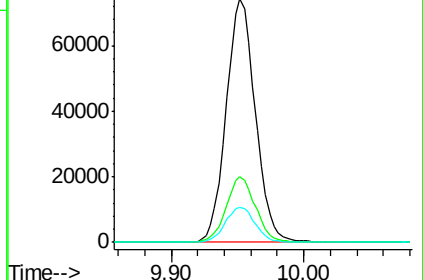
77 14.8 11.9 17.9



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: 9.09 ug/L

RT: 10.26 min Scan# 2853

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

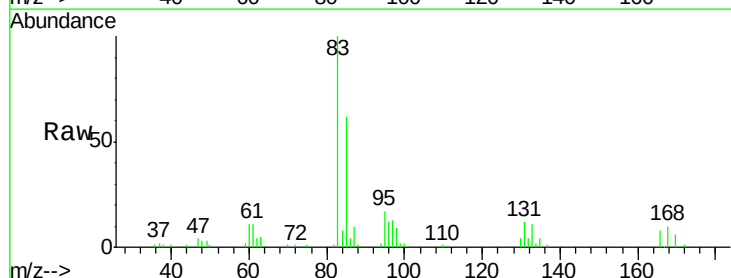
Tgt Ion: 83 Resp: 39519

Ion Ratio Lower Upper

83 100

85 62.3 44.0 81.6

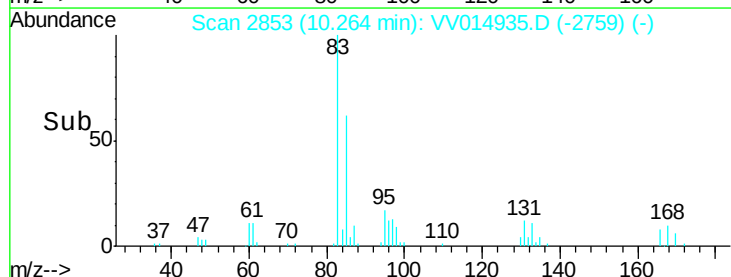
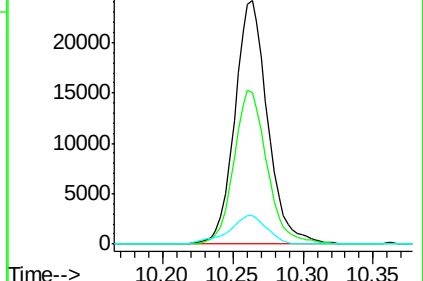
131 11.8 8.5 12.7

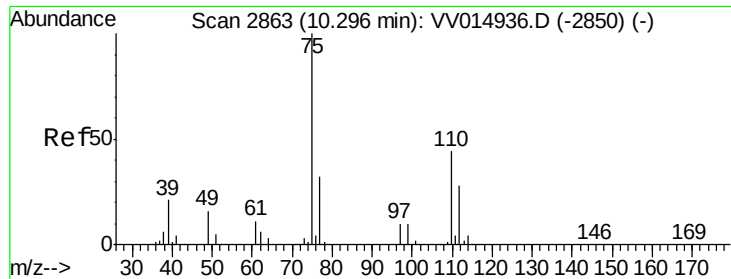


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 9.16 ug/L

RT: 10.30 min Scan# 2863

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

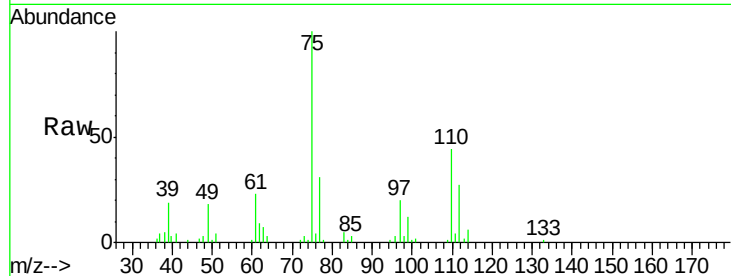
VSTD01064

Tgt Ion: 75 Resp: 31933

Ion Ratio Lower Upper

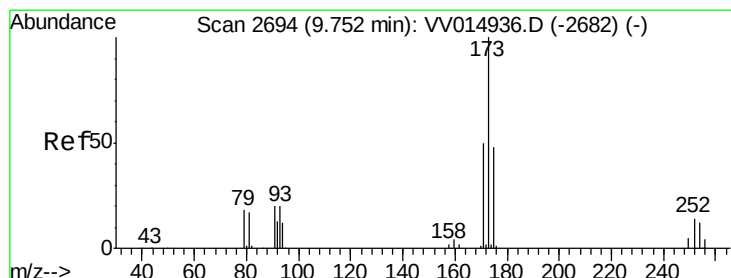
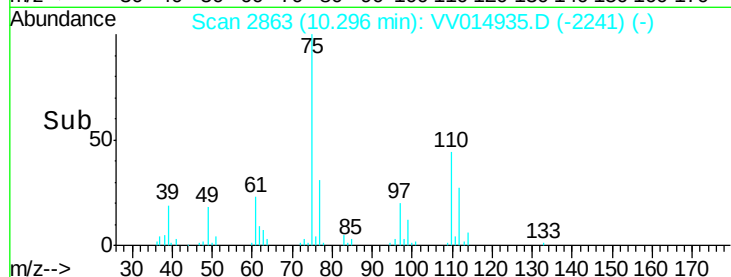
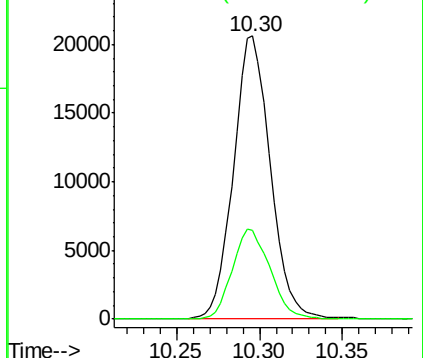
75 100

77 32.4 26.6 40.0



Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0



#61

Bromoform

Concen: 8.47 ug/L

RT: 9.76 min Scan# 2695

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

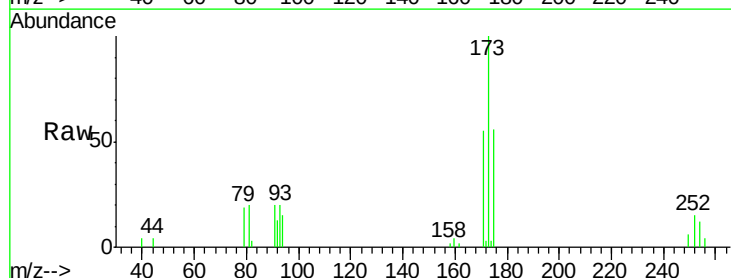
Tgt Ion: 173 Resp: 16778

Ion Ratio Lower Upper

173 100

175 53.4 39.4 59.2

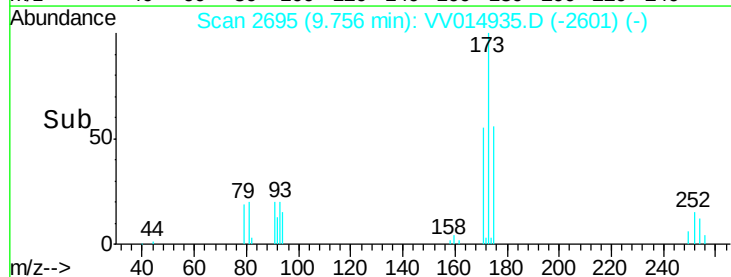
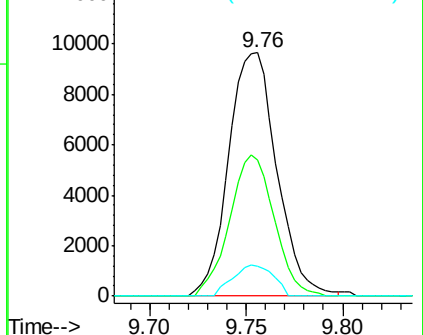
254 10.7 10.2 15.4

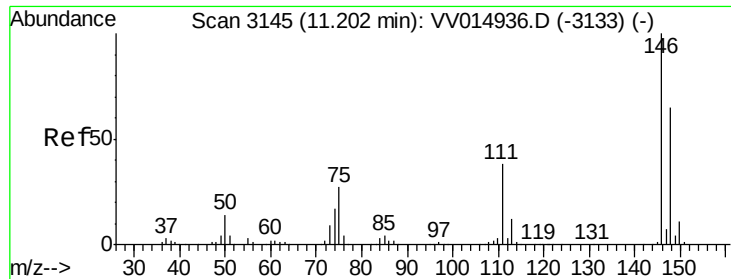


Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V





#62

1,3-Dichlorobenzene

Concen: 9.72 ug/L

RT: 11.20 min Scan# 3145

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

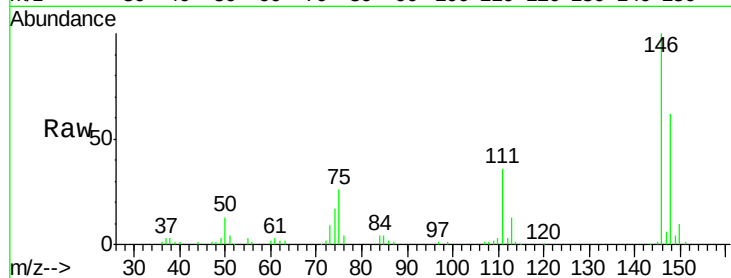
Tgt Ion:146 Resp: 57335

Ion Ratio Lower Upper

146 100

111 35.8 26.5 49.3

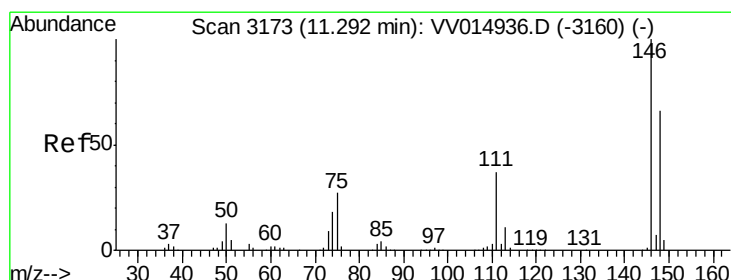
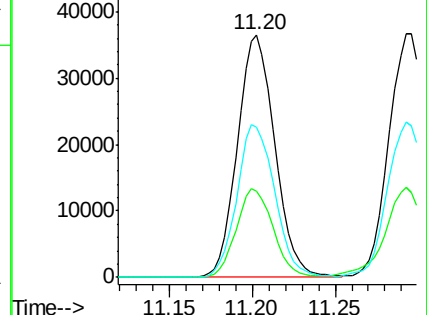
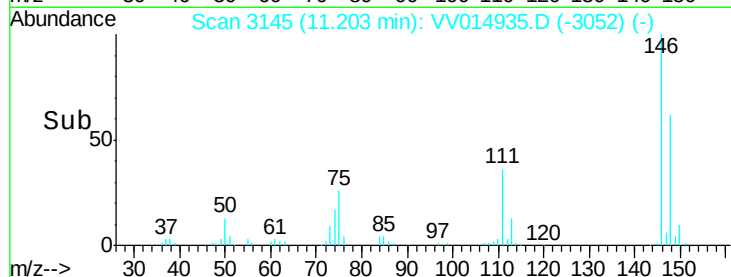
148 61.9 45.4 84.2



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 9.92 ug/L

RT: 11.30 min Scan# 3174

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

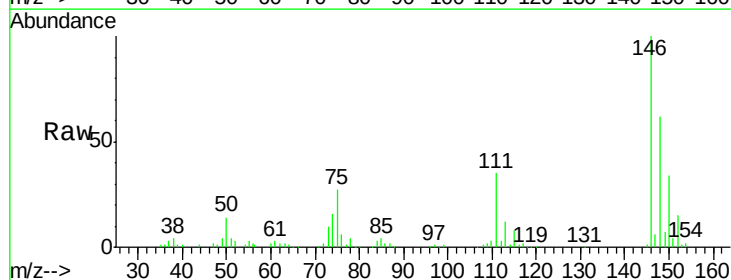
Tgt Ion:146 Resp: 58627

Ion Ratio Lower Upper

146 100

111 34.8 26.0 48.2

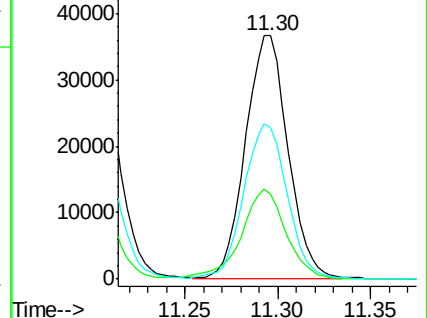
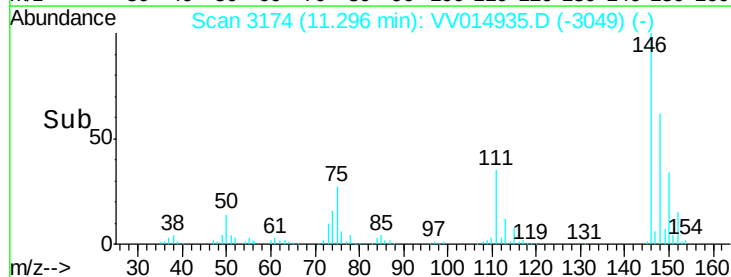
148 62.2 46.1 85.5

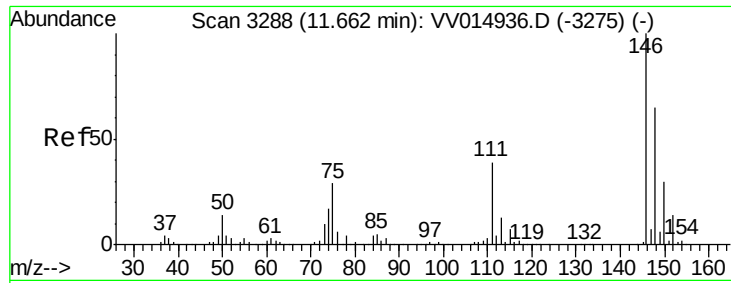


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

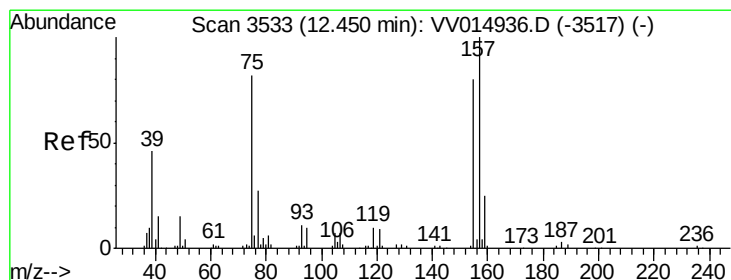
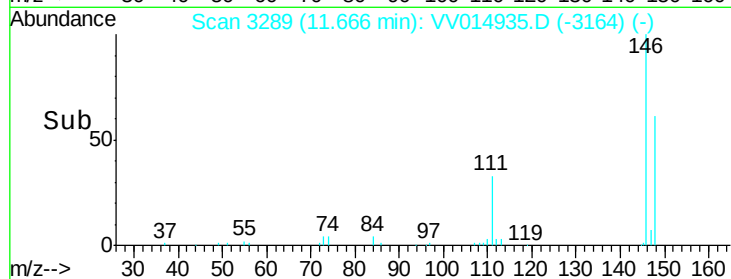
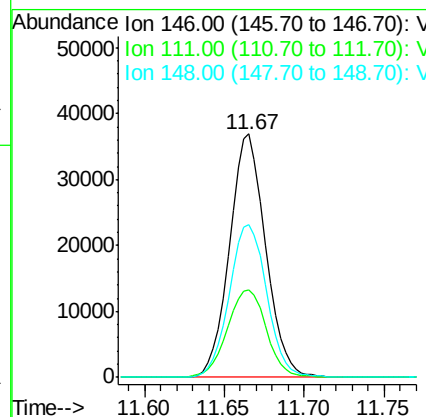
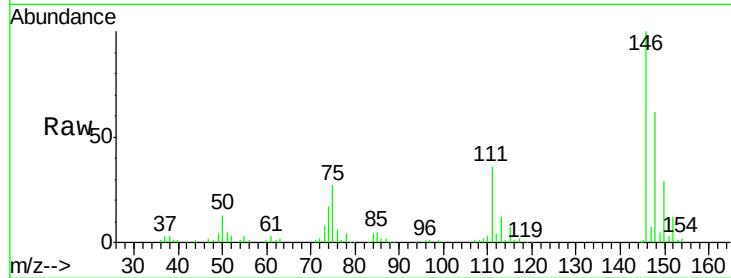




#65  
 1,2-Dichlorobenzene  
 Concen: 9.63 ug/L  
 RT: 11.67 min Scan# 3289  
 Delta R.T. 0.00 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

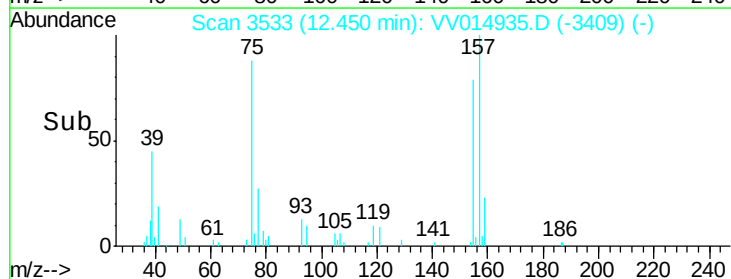
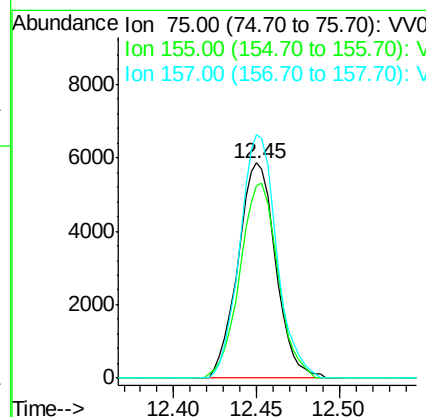
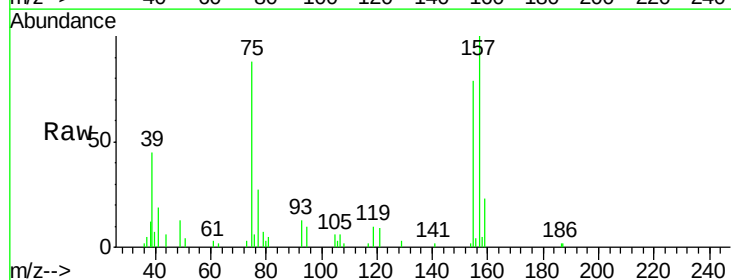
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD01064

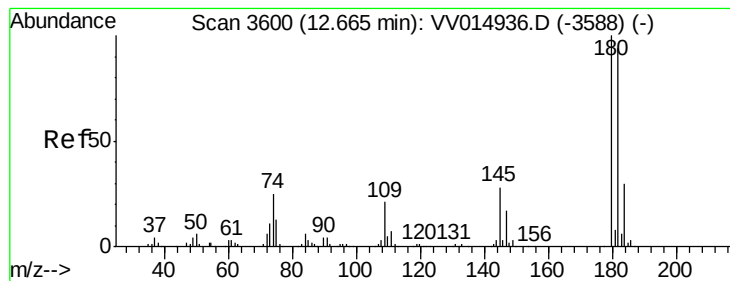
Tgt Ion: 146 Resp: 56791  
 Ion Ratio Lower Upper  
 146 100  
 111 35.9 31.6 47.4  
 148 62.5 52.2 78.4



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 9.49 ug/L  
 RT: 12.45 min Scan# 3533  
 Delta R.T. 0.00 min  
 Lab File: VV014935.D  
 Acq: 16 Mar 2020 10:06

Tgt Ion: 75 Resp: 9262  
 Ion Ratio Lower Upper  
 75 100  
 155 89.5 77.7 116.5  
 157 113.3 97.2 145.8





#67

1,3,5-Trichlorobenzene

Concen: 9.54 ug/L

RT: 12.67 min Scan# 3600

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

Tgt Ion:180 Resp: 43894

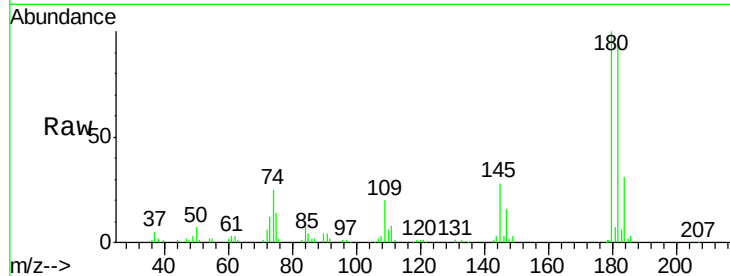
Ion Ratio Lower Upper

180 100

182 91.7 75.7 113.5

184 29.1 24.2 36.4

145 26.8 22.0 33.0

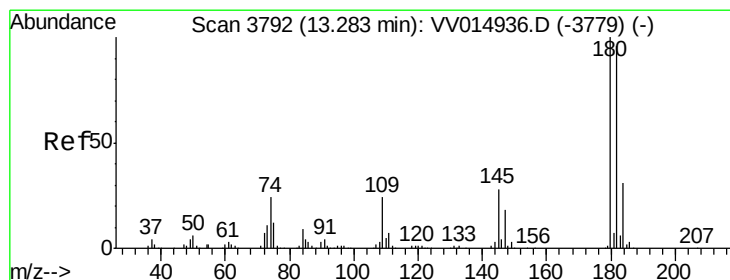
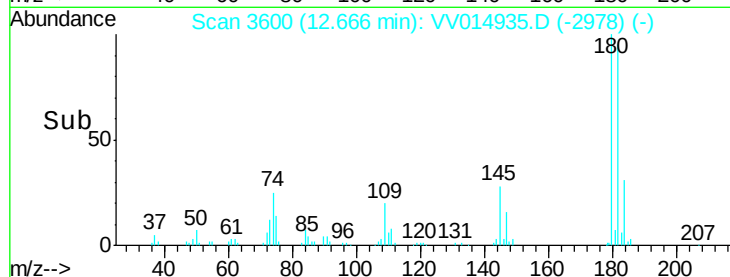
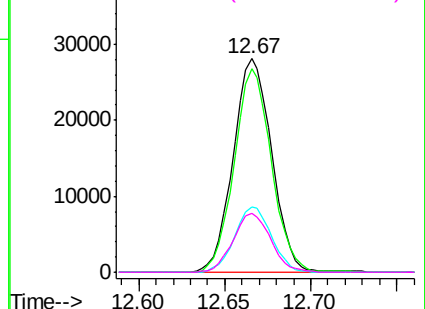


Abundance Ion 180.00 (179.70 to 180.70): V

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: 8.85 ug/L

RT: 13.28 min Scan# 3792

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

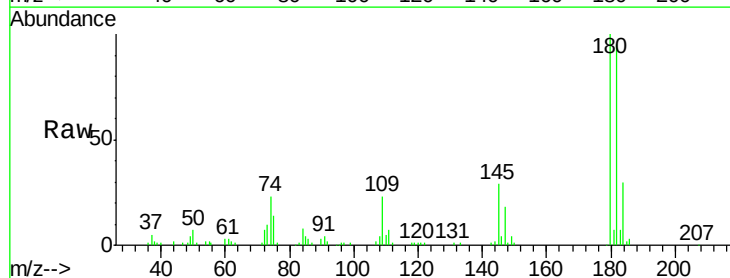
Tgt Ion:180 Resp: 37043

Ion Ratio Lower Upper

180 100

182 95.1 76.3 114.5

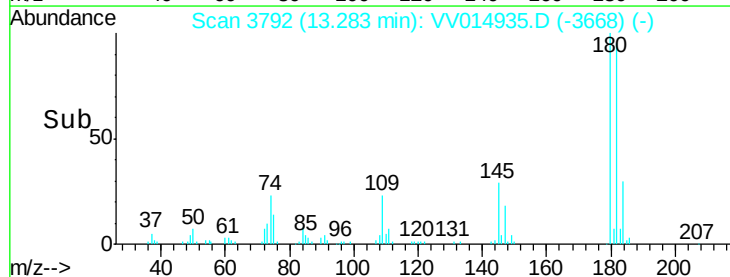
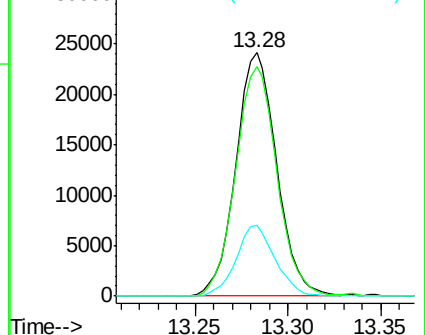
145 27.5 23.1 34.7

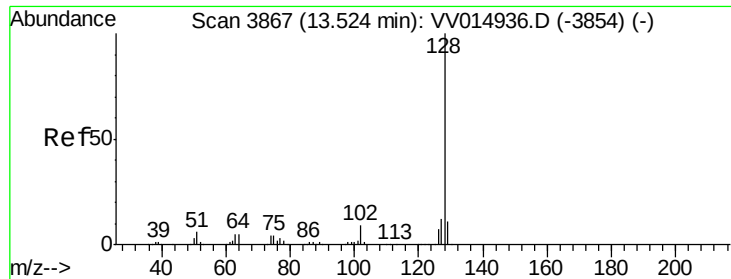


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V





#69

Naphthalene

Concen: 7.36 ug/L

RT: 13.52 min Scan# 3867

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD01064

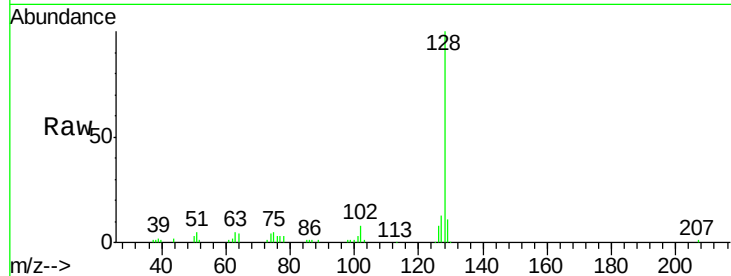
Tgt Ion:128 Resp: 45300

Ion Ratio Lower Upper

128 100

127 12.4 10.2 15.4

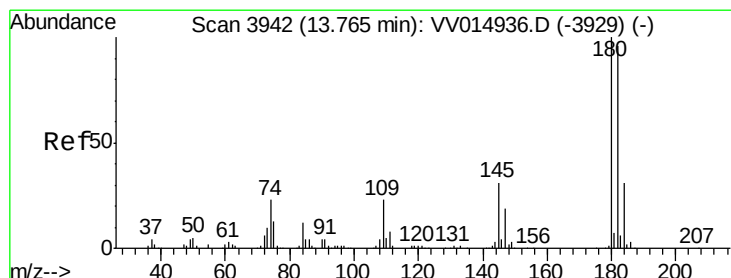
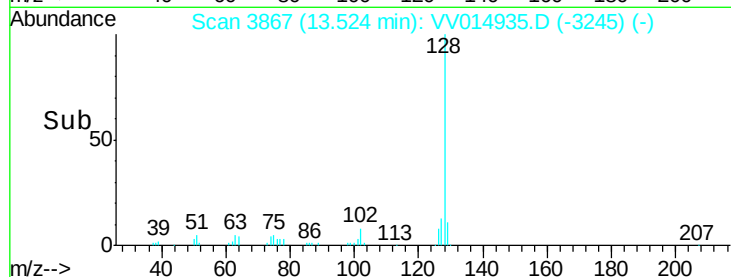
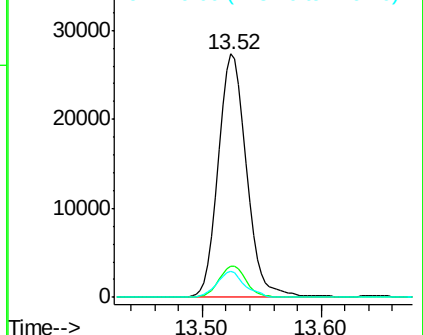
129 10.3 8.6 13.0



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: 8.72 ug/L

RT: 13.77 min Scan# 3942

Delta R.T. 0.00 min

Lab File: VV014935.D

Acq: 16 Mar 2020 10:06

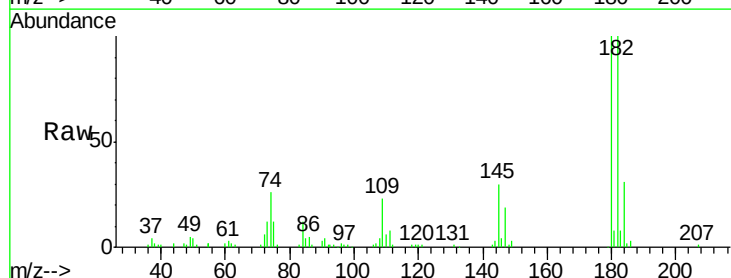
Tgt Ion:180 Resp: 36550

Ion Ratio Lower Upper

180 100

182 97.2 76.2 114.4

145 30.0 24.1 36.1



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

