

Data Path : Z:\VOASRV\HPCHEM1\MSVOA R\DATA\VR041119\  
 Data File : VR026585.D  
 Acq On : 12 Apr 2019 00:32  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25mL/MSVOA R/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

Quant Time: Apr 12 02:12:33 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR041119WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Apr 12 02:06:27 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.46  | 114  | 591082   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.28 | 117  | 494716   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.22 | 152  | 202789   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.15   | 65    | 177905   | 4.01     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 80.20%  |
| 7) Chloroethane-d5             | 2.63   | 69    | 167945   | 4.36     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 87.20%  |
| 11) 1,1-Dichloroethene-d2      | 3.60   | 63    | 539824   | 4.34     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 86.80%  |
| 20) 2-Butanone-d5              | 6.58   | 46    | 199301   | 47.29    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 94.58%  |
| 24) Chloroform-d               | 7.20   | 84    | 405354   | 4.43     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 88.60%  |
| 26) 1,2-Dichloroethane-d4      | 7.89   | 65    | 167656   | 4.36     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 87.20%  |
| 32) Benzene-d6                 | 7.85   | 84    | 737318   | 4.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.00%  |
| 36) 1,2-Dichloropropane-d6     | 8.89   | 67    | 190467   | 4.42     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 88.40%  |
| 41) Toluene-d8                 | 9.96   | 98    | 683894   | 4.66     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 93.20%  |
| 43) trans-1,3-Dichloropropene- | 10.23  | 79    | 41618    | 3.84     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 76.80%  |
| 46) 2-Hexanone-d5              | 10.59  | 63    | 177628   | 54.92    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 109.84% |
| 57) 1,1,2,2-Tetrachloroethane- | 12.36  | 84    | 83615    | 4.64     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 92.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 13.51  | 152   | 137877   | 4.23     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 84.60%  |

## Target Compounds

|                                |      |     |        |              | Ovalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.82 | 85  | 274937 | 4.334 ug/L   | 95     |
| 3) Chloromethane               | 2.01 | 50  | 294234 | 4.596 ug/L   | 97     |
| 5) Vinyl chloride              | 2.15 | 62  | 311477 | 4.744 ug/L   | 94     |
| 6) Bromomethane                | 2.52 | 94  | 176026 | 4.560 ug/L   | 99     |
| 8) Chloroethane                | 2.66 | 64  | 177936 | 4.723 ug/L   | 93     |
| 9) Trichlorofluoromethane      | 2.93 | 101 | 467832 | 4.785 ug/L   | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 3.67 | 101 | 231460 | 4.545 ug/L   | 99     |
| 12) 1,1-Dichloroethene         | 3.62 | 96  | 266642 | 4.792 ug/L   | 85     |
| 13) Acetone                    | 3.69 | 43  | 209363 | 48.161 ug/L  | 97     |
| 14) Carbon disulfide           | 3.93 | 76  | 730347 | 4.987 ug/L   | 98     |
| 15) Methyl Acetate             | 4.19 | 43  | 54758  | 4.642 ug/L # | 70     |
| 16) Methylene chloride         | 4.40 | 84  | 226555 | 4.555 ug/L   | 98     |
| 17) Methyl tert-butyl Ether    | 4.89 | 73  | 230357 | 4.403 ug/L   | 99     |
| 18) trans-1,2-Dichloroethene   | 4.88 | 96  | 236071 | 4.707 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 5.68 | 63  | 436918 | 4.839 ug/L   | 99     |
| 21) 2-Butanone                 | 6.69 | 43  | 274445 | 52.458 ug/L  | 98     |
| 22) cis-1,2-Dichloroethene     | 6.67 | 96  | 219665 | 5.255 ug/L   | 99     |

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 Misc : 25mL/MSVOA R/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

Quant Time: Apr 12 02:12:33 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR041119WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Apr 12 02:06:27 2019  
 Response via : Initial Calibration

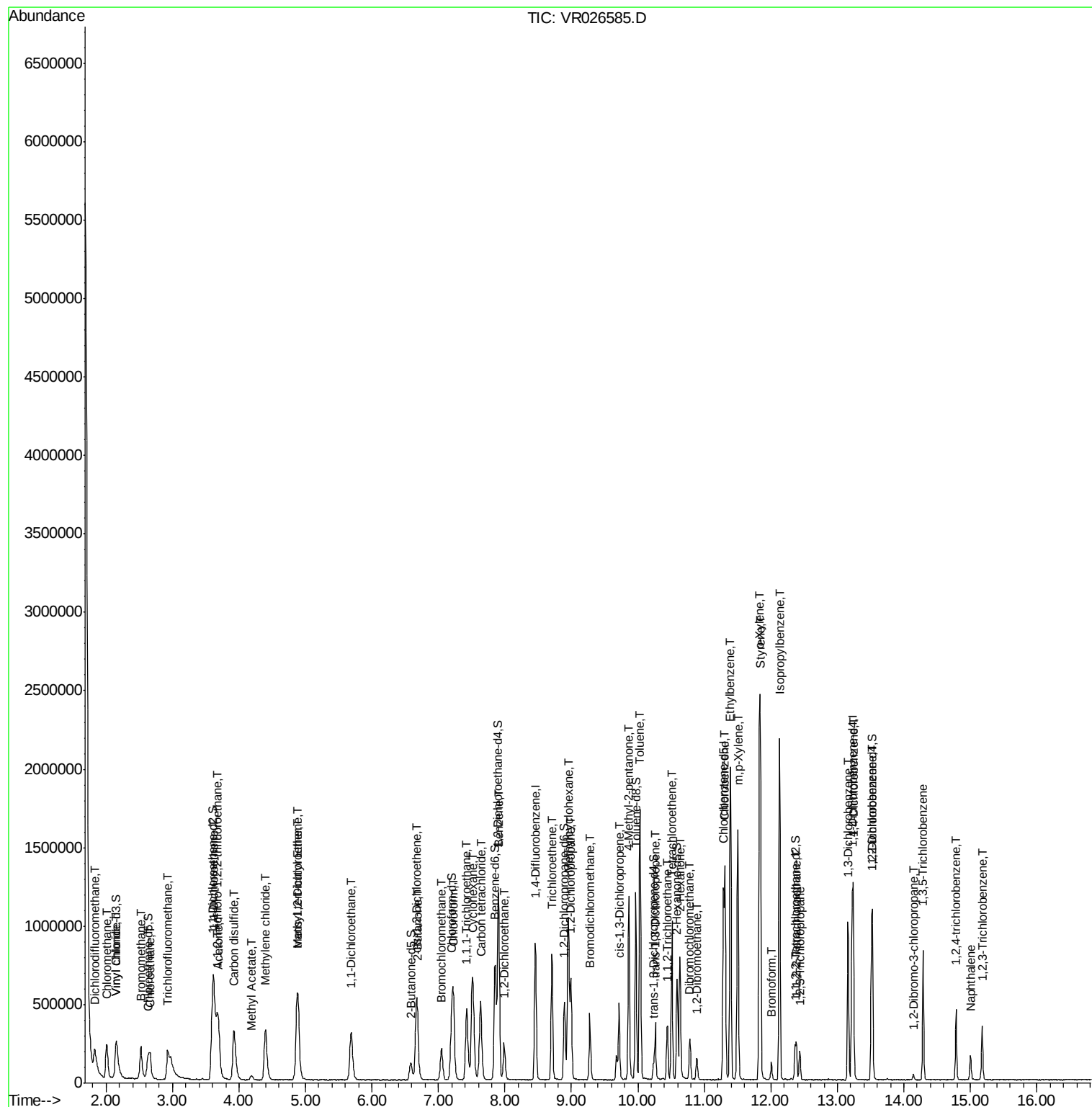
| Internal Standards              | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|---------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane          | 7.04  | 128  | 65784    | 4.804  | ug/L   | 91       |
| 25) Chloroform                  | 7.23  | 83   | 433782   | 4.844  | ug/L   | 98       |
| 27) 1,2-Dichloroethane          | 7.99  | 62   | 219241   | 4.903  | ug/L   | 97       |
| 29) 1,1,1-Trichloroethane       | 7.43  | 97   | 374196   | 5.021  | ug/L   | 98       |
| 30) Cyclohexane                 | 7.51  | 56   | 380787   | 5.494  | ug/L   | 97       |
| 31) Carbon tetrachloride        | 7.63  | 117  | 372965   | 4.917  | ug/L   | 99       |
| 33) Benzene                     | 7.90  | 78   | 991472   | 5.224  | ug/L   | 100      |
| 34) Trichloroethene             | 8.71  | 95   | 246555   | 4.854  | ug/L   | 94       |
| 35) Methylcyclohexane           | 8.95  | 83   | 358348   | 5.140  | ug/L   | 99       |
| 37) 1,2-Dichloropropane         | 9.00  | 63   | 203083   | 4.959  | ug/L   | 99       |
| 38) Bromodichloromethane        | 9.28  | 83   | 239710   | 5.067  | ug/L   | 98       |
| 39) cis-1,3-Dichloropropene     | 9.72  | 75   | 227703   | 5.108  | ug/L   | 99       |
| 40) 4-Methyl-2-pentanone        | 9.86  | 43   | 719913   | 59.327 | ug/L   | 98       |
| 42) Toluene                     | 10.03 | 91   | 1044868  | 5.305  | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene   | 10.26 | 75   | 154595   | 4.983  | ug/L   | 98       |
| 45) 1,1,2-Trichloroethane       | 10.45 | 97   | 88911    | 4.915  | ug/L   | 94       |
| 47) Tetrachloroethene           | 10.51 | 164  | 178729   | 4.818  | ug/L   | 90       |
| 48) 2-Hexanone                  | 10.63 | 43   | 467837   | 54.299 | ug/L   | 97       |
| 49) Dibromochloromethane        | 10.78 | 129  | 111831   | 5.084  | ug/L   | 97       |
| 50) 1,2-Dibromoethane           | 10.88 | 107  | 74783    | 4.878  | ug/L # | 91       |
| 51) Chlorobenzene               | 11.31 | 112  | 554312   | 4.881  | ug/L   | 98       |
| 52) Ethylbenzene                | 11.39 | 91   | 1207572  | 5.374  | ug/L   | 98       |
| 53) m,p-Xylene                  | 11.50 | 106  | 429539   | 5.324  | ug/L   | 97       |
| 54) o-Xylene                    | 11.83 | 106  | 386662   | 5.362  | ug/L   | 100      |
| 55) Styrene                     | 11.84 | 104  | 626884   | 5.430  | ug/L   | 94       |
| 56) Isopropylbenzene            | 12.13 | 105  | 1120090  | 5.613  | ug/L   | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 12.39 | 83   | 82722    | 4.792  | ug/L   | 96       |
| 59) 1,2,3-Trichloropropane      | 12.43 | 75   | 63697    | 4.944  | ug/L   | 98       |
| 61) Bromoform                   | 12.01 | 173  | 41450    | 4.865  | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene         | 13.16 | 146  | 308964   | 4.913  | ug/L   | 97       |
| 63) 1,4-Dichlorobenzene         | 13.24 | 146  | 345741   | 4.587  | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene         | 13.53 | 146  | 267291   | 4.909  | ug/L   | 91       |
| 66) 1,2-Dibromo-3-chloropropan  | 14.14 | 75   | 8262     | 3.971  | ug/L   | 93       |
| 67) 1,3,5-Trichlorobenzene      | 14.29 | 180  | 189226   | 4.581  | ug/L   | 97       |
| 68) 1,2,4-trichlorobenzene      | 14.78 | 180  | 101295   | 4.406  | ug/L   | 99       |
| 69) Naphthalene                 | 15.00 | 128  | 97947    | 4.638  | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene      | 15.18 | 180  | 85976    | 5.275  | ug/L   | 100      |

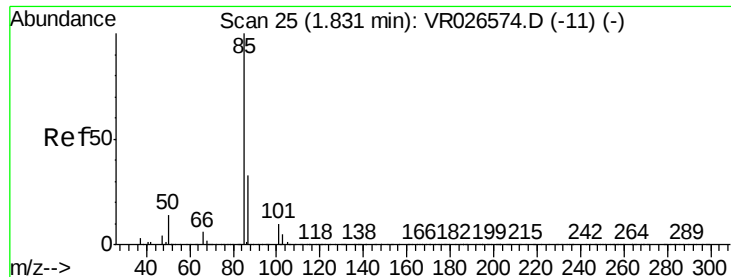
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA R\DATA\VR041119\  
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Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Apr 12 02:06:27 2019  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 4.334 ug/L

RT: 1.82 min Scan# 24

Delta R.T. -0.01 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

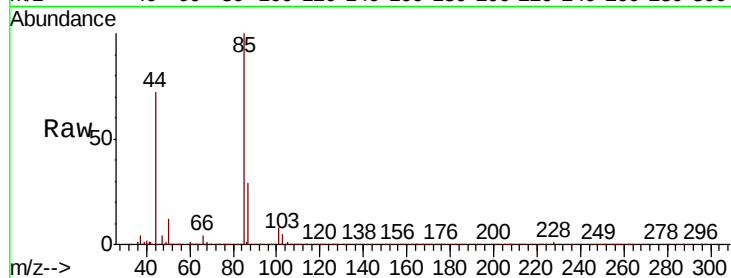
VSTD00571

Tot Ion: 85 Resp: 274937

Ion Ratio Lower Upper

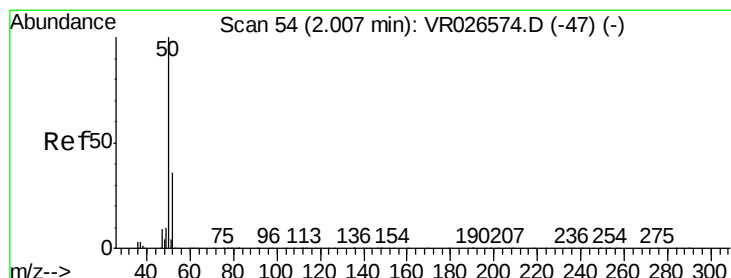
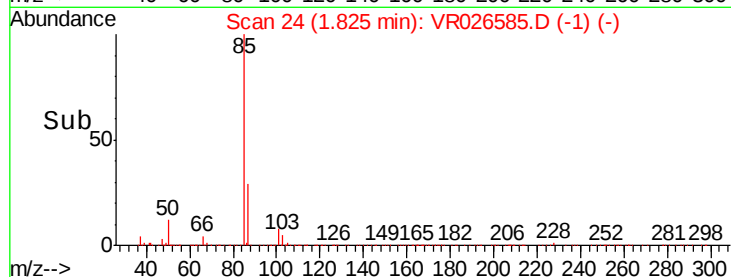
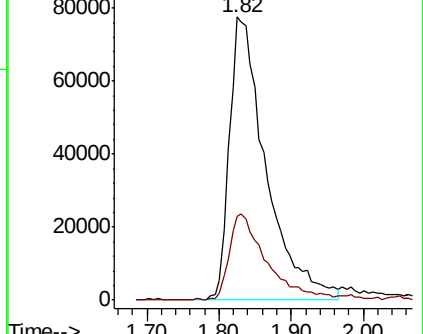
85 100

87 30.2 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VR0

Ion 87.00 (86.70 to 87.70): VR0



#3

Chloromethane

Concen: 4.596 ug/L

RT: 2.01 min Scan# 54

Delta R.T. 0.00 min

Lab File: VR026585.D

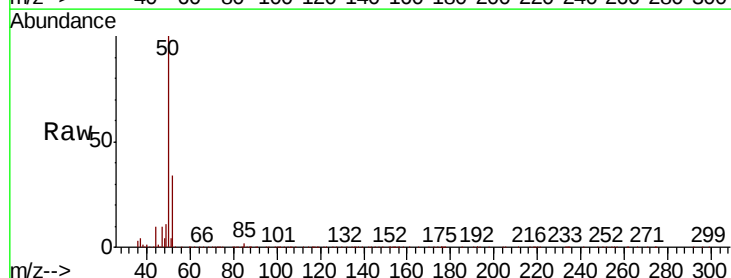
Acq: 12 Apr 2019 00:32

Tgt Ion: 50 Resp: 294234

Ion Ratio Lower Upper

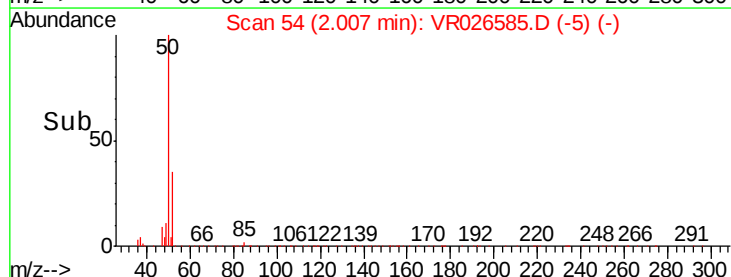
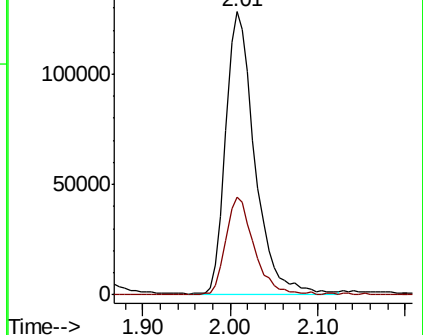
50 100

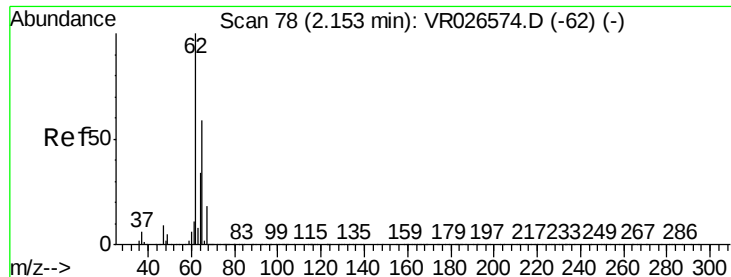
52 34.5 22.8 42.4



Abundance Ion 50.05 (49.75 to 50.75): VR0

Ion 52.05 (51.75 to 52.75): VR0





#5

Vinyl chloride

Concen: 4.744 ug/L

RT: 2.15 min Scan# 78

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

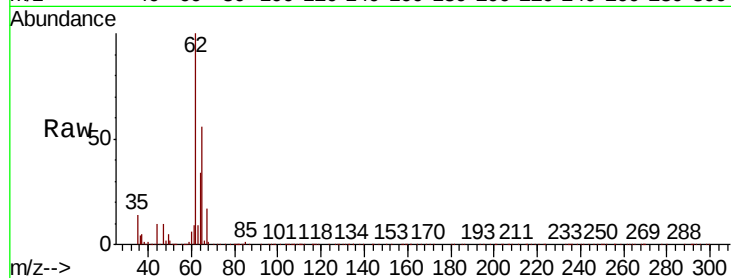
VSTD00571

Tot Ion: 62 Resp: 311477

Ion Ratio Lower Upper

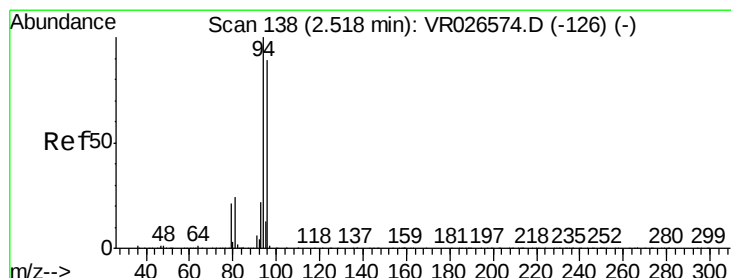
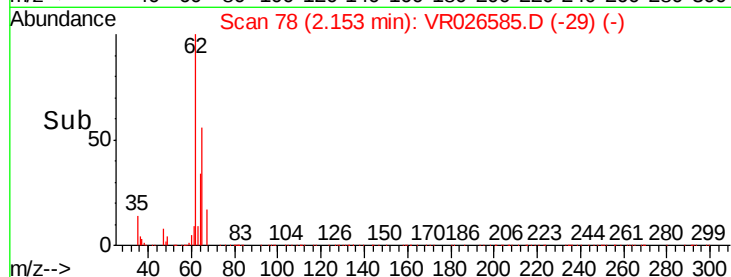
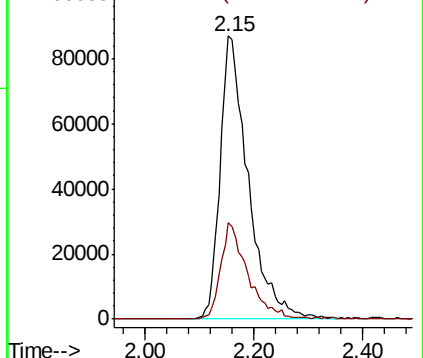
62 100

64 34.1 21.6 40.2



Abundance Ion 62.00 (61.70 to 62.70): VR0

Ion 64.10 (63.80 to 64.80): VR0



#6

Bromomethane

Concen: 4.560 ug/L

RT: 2.52 min Scan# 139

Delta R.T. 0.01 min

Lab File: VR026585.D

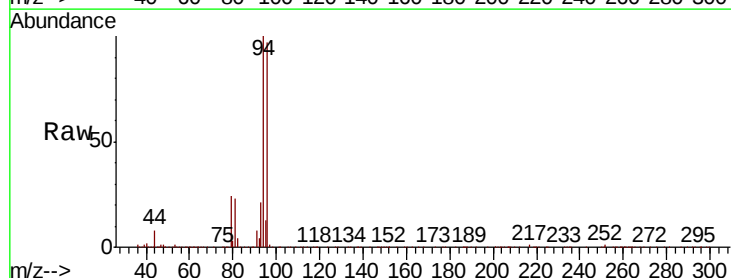
Acq: 12 Apr 2019 00:32

Tgt Ion: 94 Resp: 176026

Ion Ratio Lower Upper

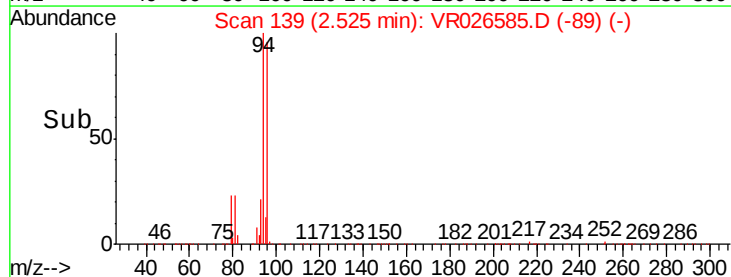
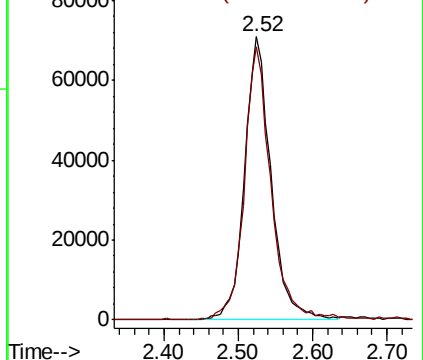
94 100

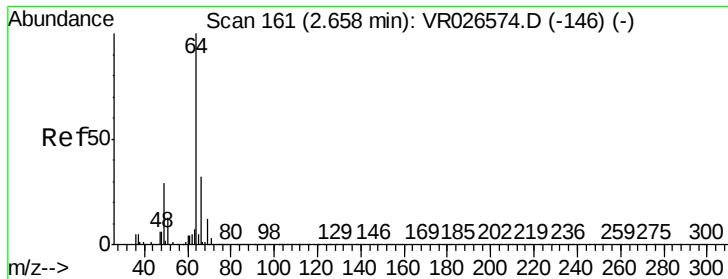
96 96.6 68.5 127.3



Abundance Ion 94.00 (93.70 to 94.70): VR0

Ion 96.00 (95.70 to 96.70): VR0





#8

Chloroethane

Concen: 4.723 ug/L

RT: 2.66 min Scan# 161

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

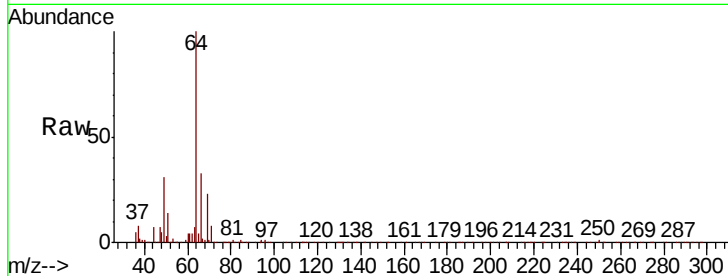
VSTD00571

Tot Ion: 64 Resp: 177936

Ion Ratio Lower Upper

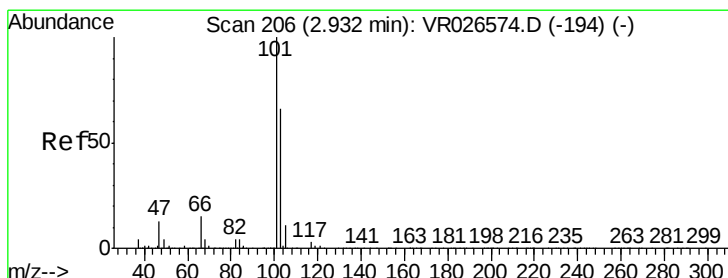
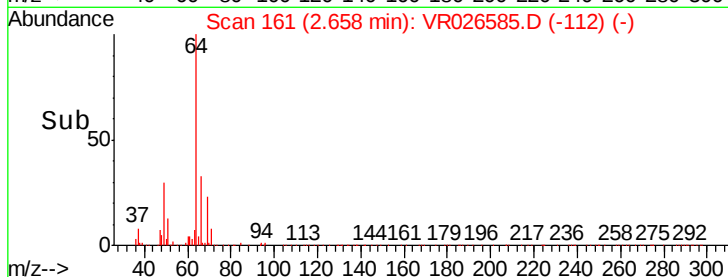
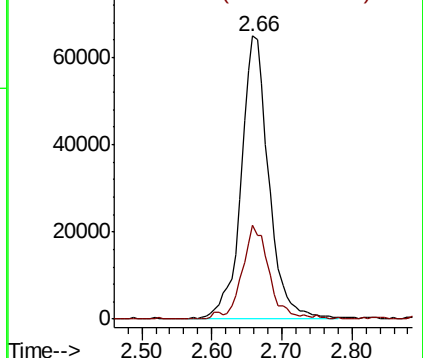
64 100

66 33.2 20.7 38.5



Abundance Ion 64.10 (63.80 to 64.80): VR0

Ion 66.05 (65.75 to 66.75): VR0



#9

Trichlorofluoromethane

Concen: 4.785 ug/L

RT: 2.93 min Scan# 206

Delta R.T. 0.00 min

Lab File: VR026585.D

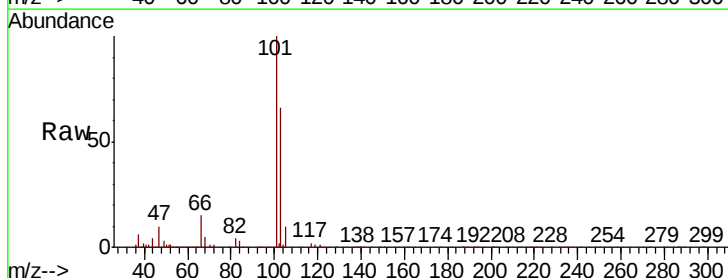
Acq: 12 Apr 2019 00:32

Tgt Ion:101 Resp: 467832

Ion Ratio Lower Upper

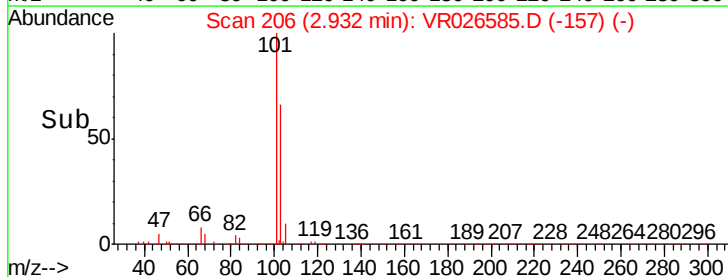
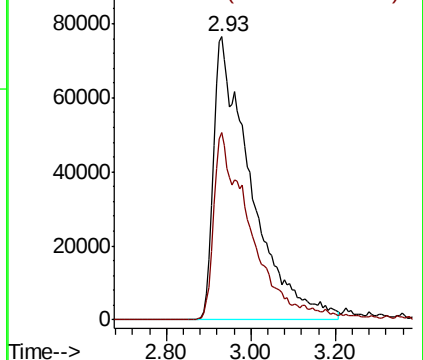
101 100

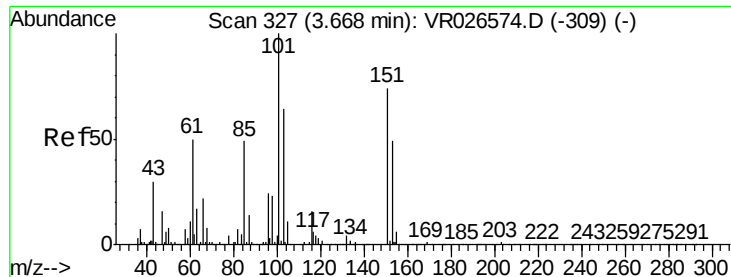
103 61.5 50.7 76.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#10

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

Concen: 4.545 ug/L

RT: 3.67 min Scan# 328

Delta R.T. 0.01 min

Lab File: VR026585.D

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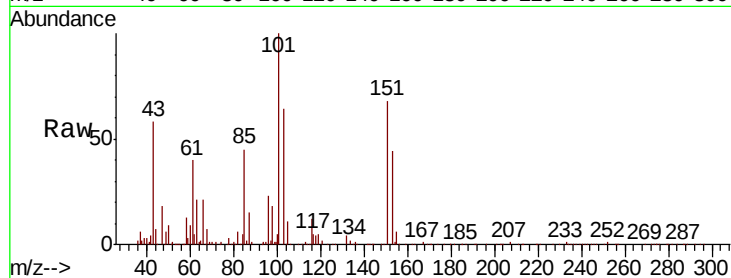
Tot Ion:101 Resp: 231460

Ion Ratio Lower Upper

101 100

85 49.9 40.4 60.6

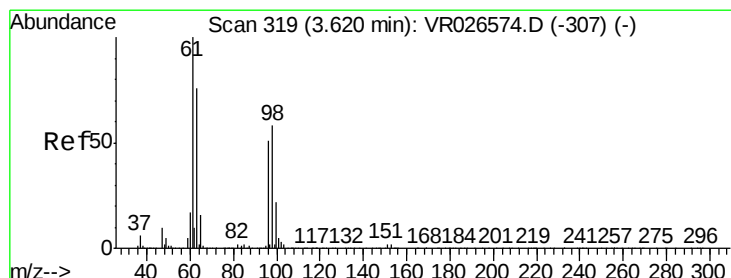
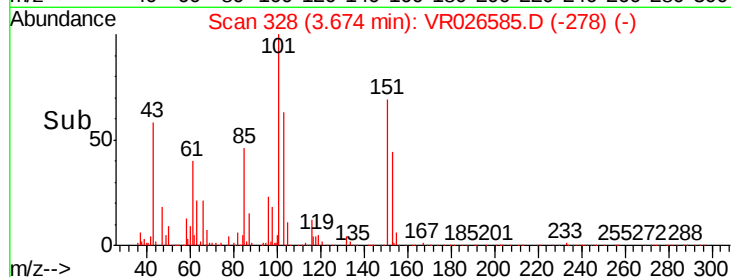
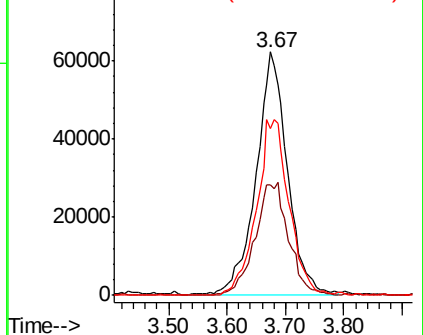
151 75.1 59.4 89.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VR0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 4.792 ug/L

RT: 3.62 min Scan# 319

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

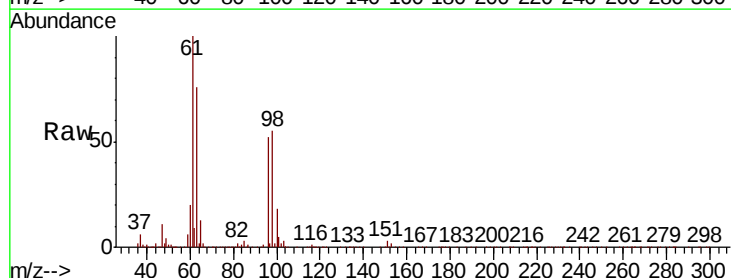
Tgt Ion: 96 Resp: 266642

Ion Ratio Lower Upper

96 100

61 190.6 140.8 261.6

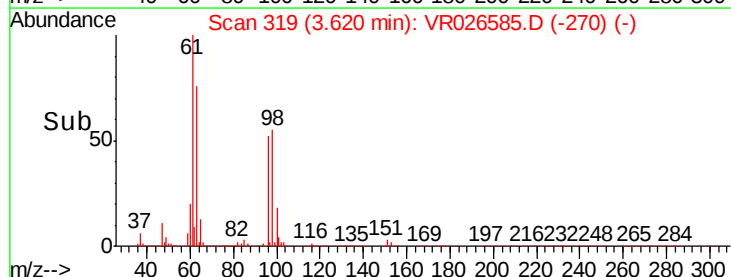
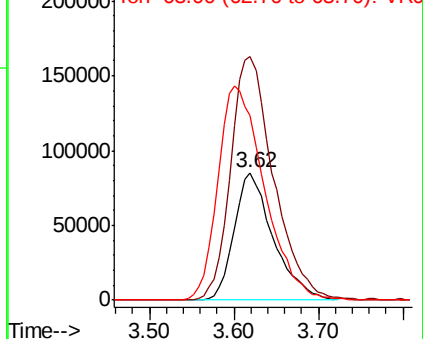
63 144.4 124.0 230.4

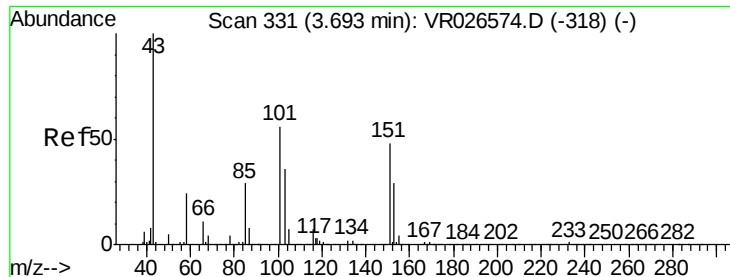


Abundance Ion 96.00 (95.70 to 96.70): VR0

Ion 61.05 (60.75 to 61.75): VR0

Ion 63.00 (62.70 to 63.70): VR0





#13

Acetone

Concen: 48.161 ug/L

RT: 3.69 min Scan# 331

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

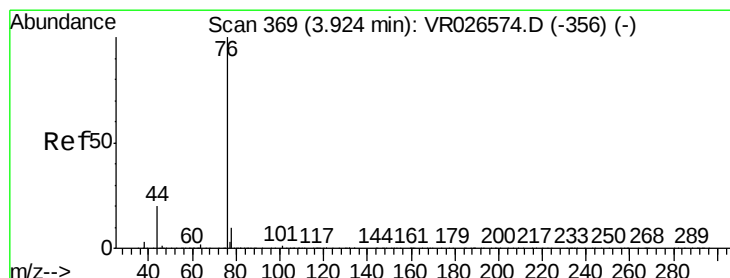
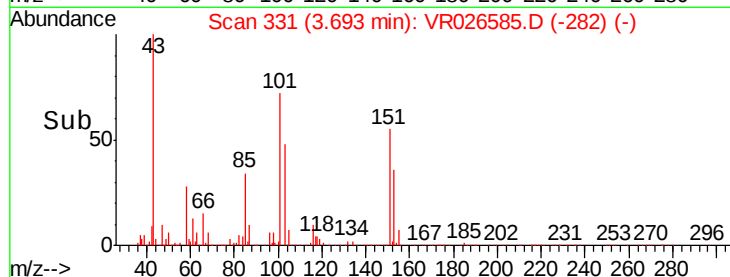
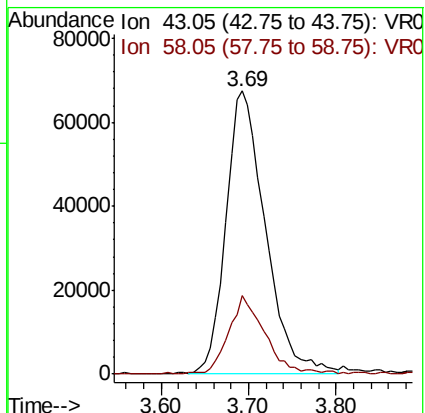
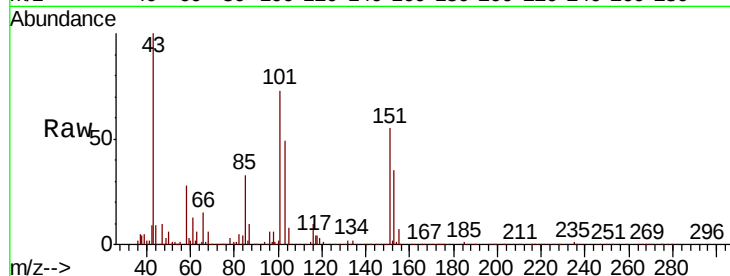
Instrument :  
MSVOA\_R  
ClientSampleId :  
VSTD00571

Tot Ion: 43 Resp: 209363

Ion Ratio Lower Upper

43 100

58 26.0 0.0 49.4



#14

Carbon disulfide

Concen: 4.987 ug/L

RT: 3.93 min Scan# 370

Delta R.T. 0.01 min

Lab File: VR026585.D

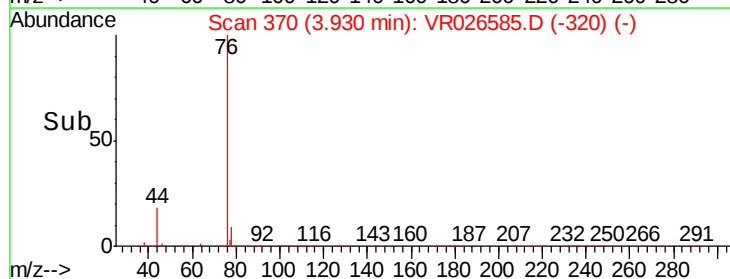
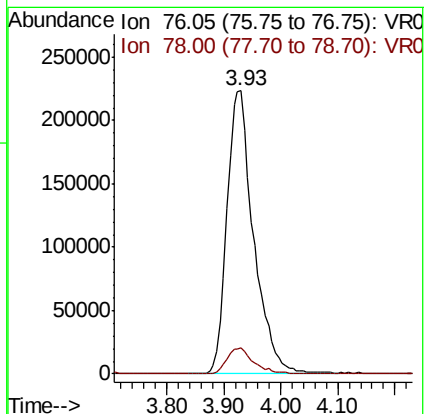
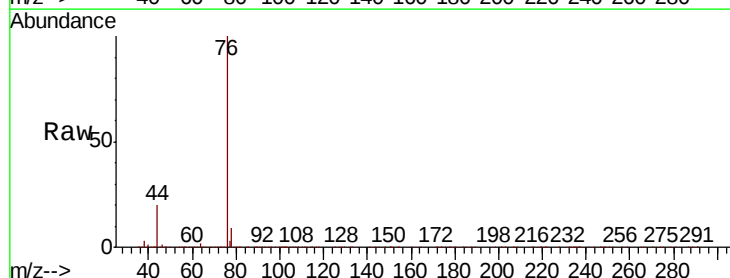
Acq: 12 Apr 2019 00:32

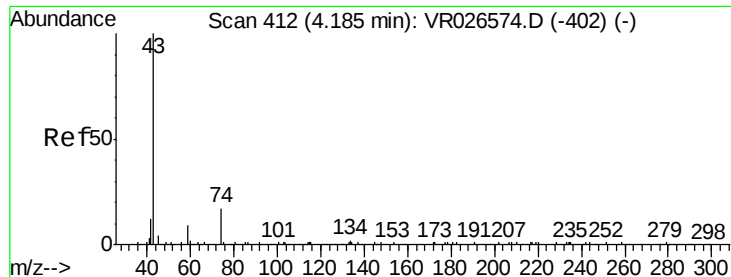
Tgt Ion: 76 Resp: 730347

Ion Ratio Lower Upper

76 100

78 9.3 7.9 11.9





#15

Methvl Acetate

Concen: 4.642 ug/L

RT: 4.19 min Scan# 413

Delta R.T. 0.01 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

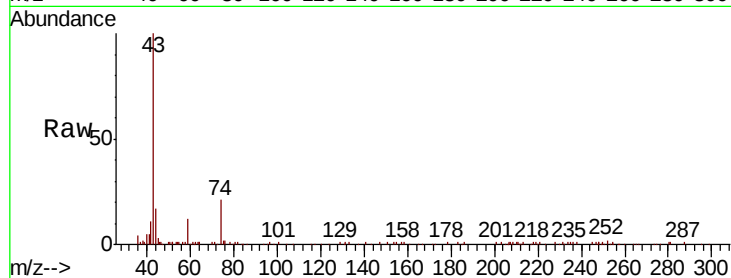
VSTD00571

Tot Ion: 43 Resp: 54758

Ion Ratio Lower Upper

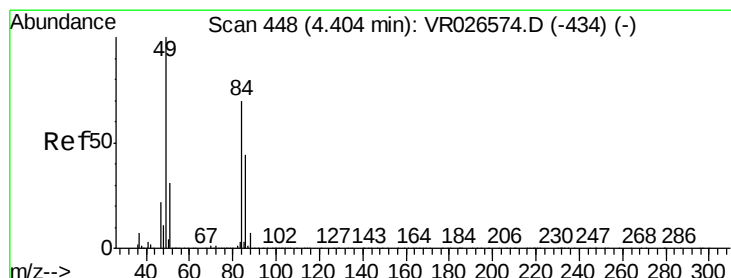
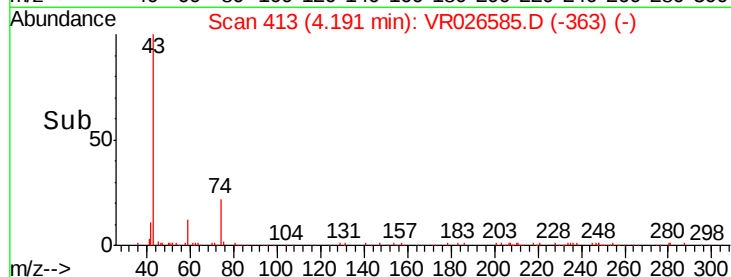
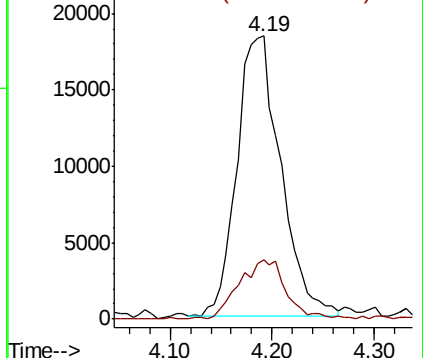
43 100

74 22.7 9.0 13.6#



Abundance Ion 43.05 (42.75 to 43.75): VR0

Ion 74.05 (73.75 to 74.75): VR0



#16

Methylene chloride

Concen: 4.555 ug/L

RT: 4.40 min Scan# 447

Delta R.T. -0.01 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

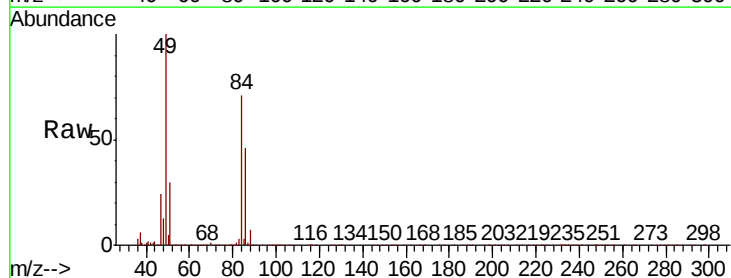
Tgt Ion: 84 Resp: 226555

Ion Ratio Lower Upper

84 100

86 64.3 45.1 83.7

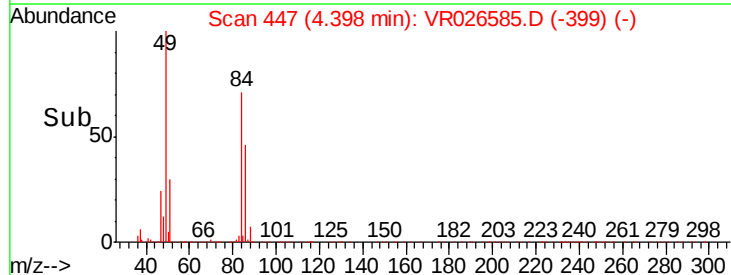
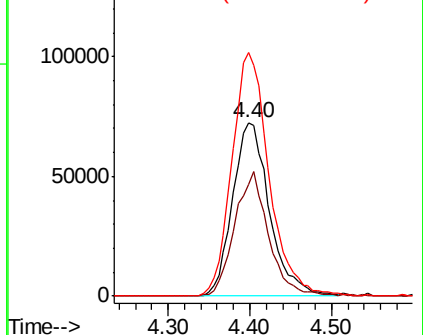
49 140.1 95.2 176.8

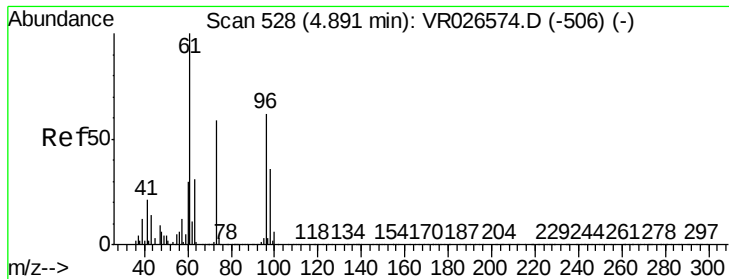


Abundance Ion 84.05 (83.75 to 84.75): VR0

Ion 86.00 (85.70 to 86.70): VR0

Ion 49.10 (48.80 to 49.80): VR0

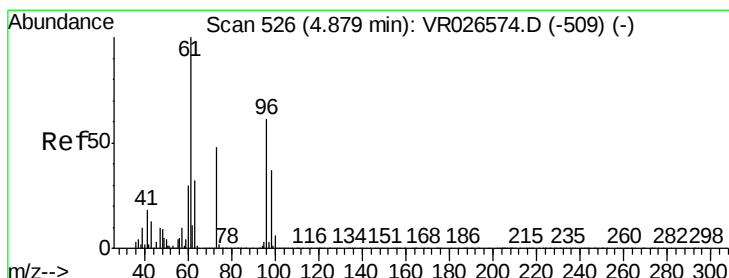
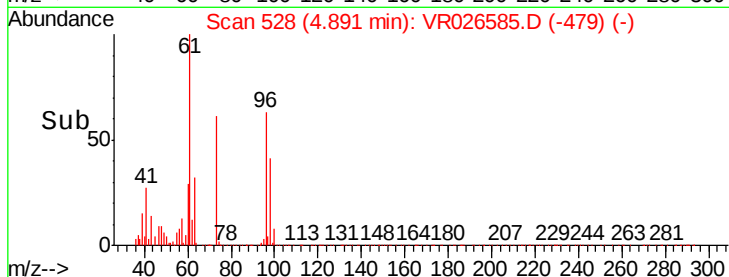
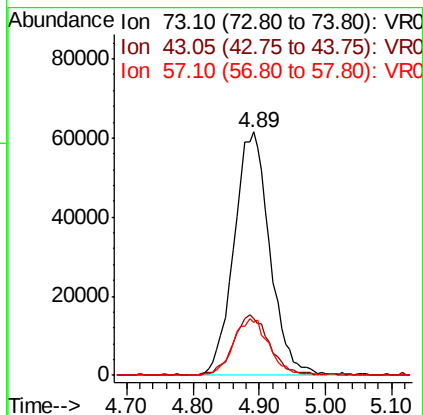
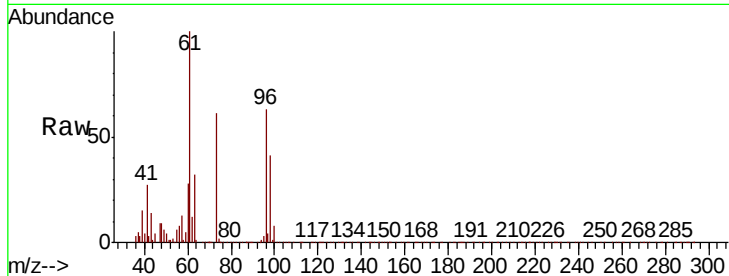




#17  
Methvl tert-butvl Ether  
Concen: 4.403 ug/L  
RT: 4.89 min Scan# 528  
Delta R.T. 0.00 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

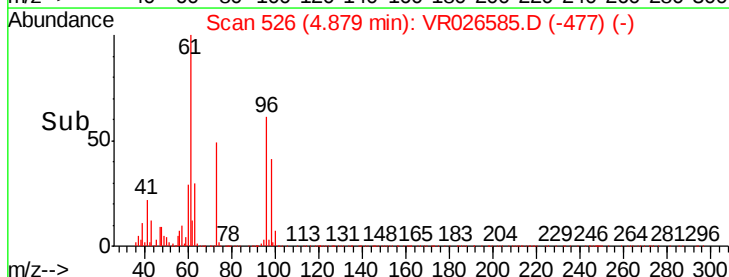
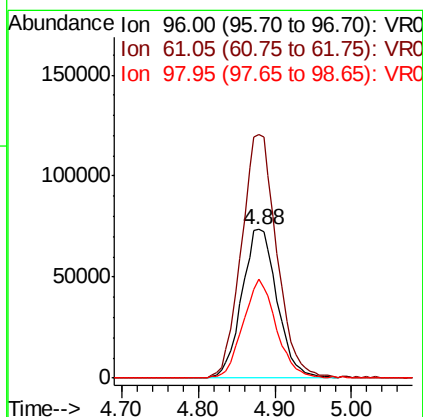
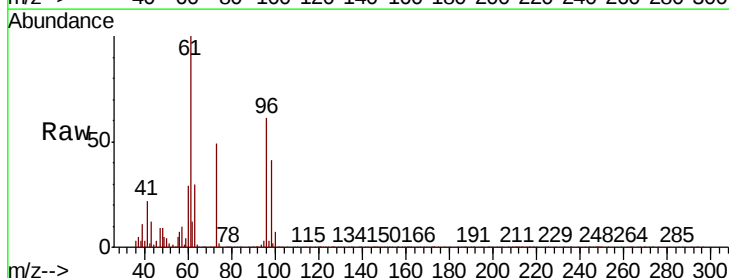
Instrument :  
MSVOA\_R  
ClientSampleId :  
VSTD00571

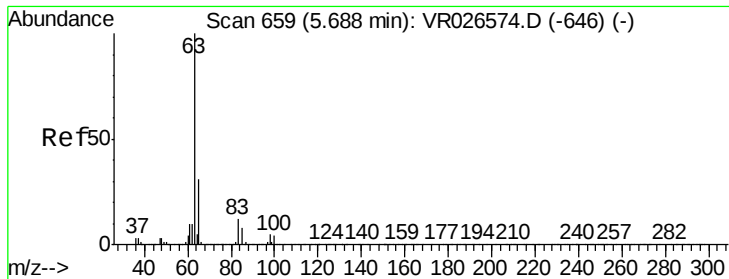
Tot Ion: 73 Resp: 230357  
Ion Ratio Lower Upper  
73 100  
43 25.1 20.6 30.8  
57 23.2 18.6 27.8



#18  
trans-1,2-Dichloroethene  
Concen: 4.707 ug/L  
RT: 4.88 min Scan# 526  
Delta R.T. 0.00 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

Tgt Ion: 96 Resp: 236071  
Ion Ratio Lower Upper  
96 100  
61 163.6 115.5 214.5  
98 66.3 43.6 81.0

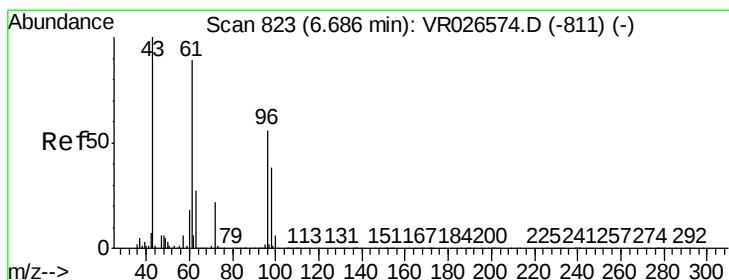
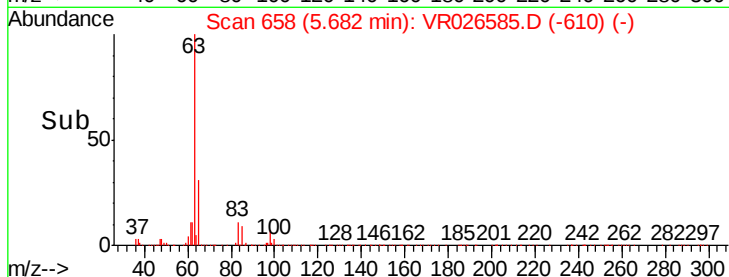
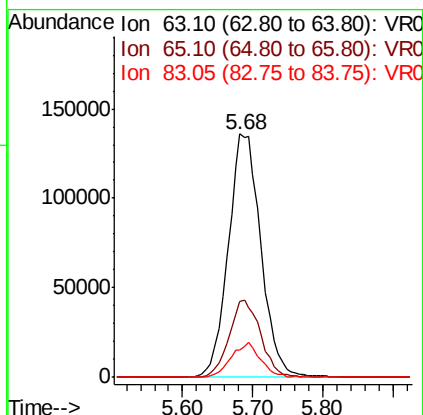
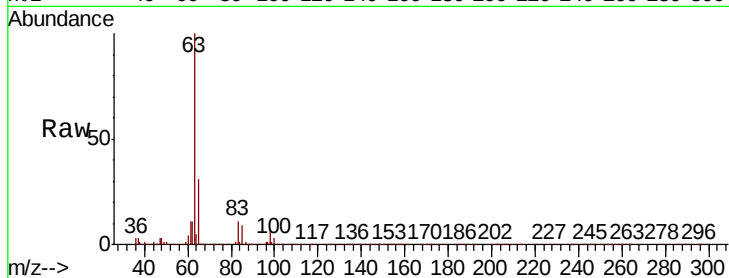




#19  
 1,1-Dichloroethane  
 Concen: 4.839 ug/L  
 RT: 5.68 min Scan# 658  
 Delta R.T. -0.01 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

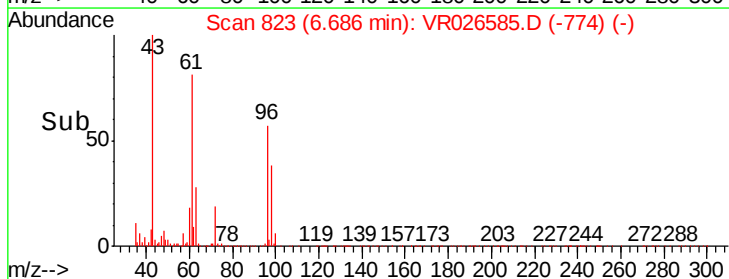
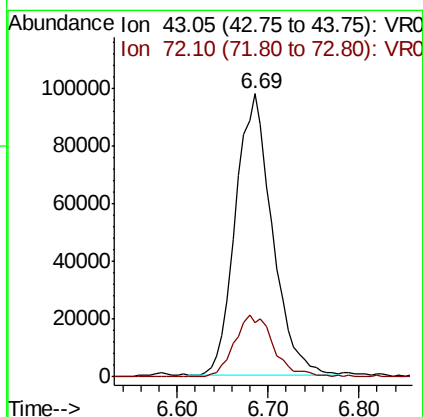
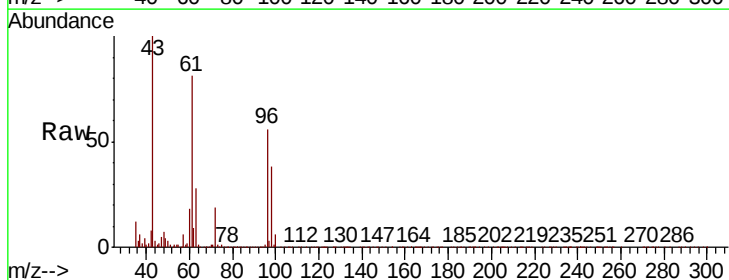
Instrument :  
 MSVOA\_R  
 ClientSampleID :  
 VSTD00571

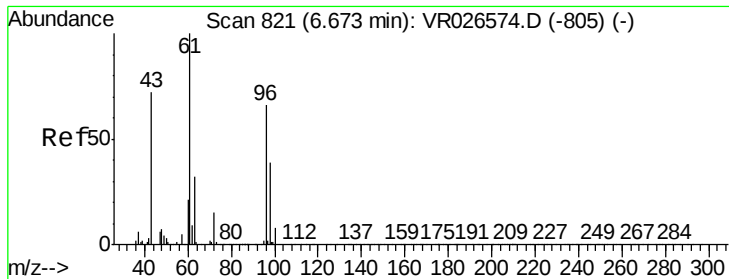
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 31.3  | 21.9  | 40.7  |
| 83      | 11.5  | 8.9   | 16.5  |



#21  
 2-Butanone  
 Concen: 52.458 ug/L  
 RT: 6.69 min Scan# 823  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 23.1  | 11.1  | 33.3  |



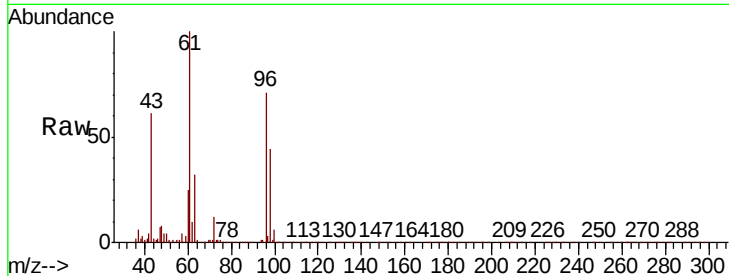


#22

cis-1,2-Dichloroethene  
Concen: 5.255 ug/L  
RT: 6.67 min Scan# 820  
Delta R.T. -0.01 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

Instrument :  
MSVOA\_R  
ClientSampleId :  
VSTD00571

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 141.0 | 99.3  | 184.5 |
| 68      | 0.2   | 0.1   | 0.3   |

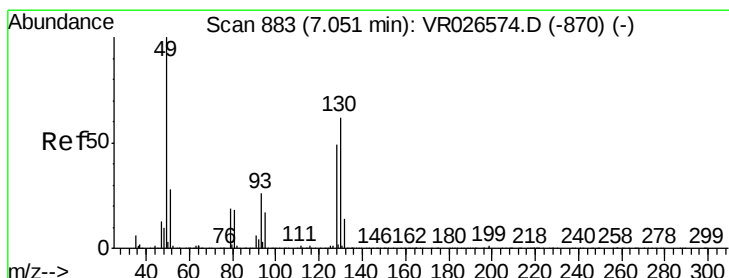
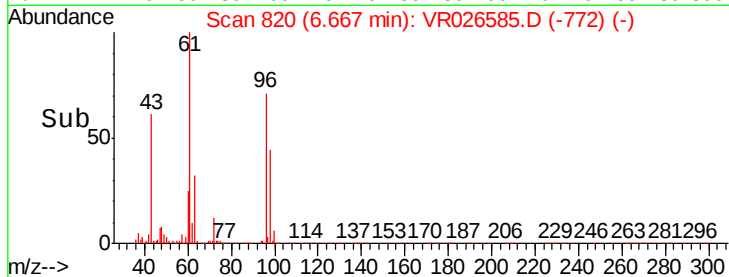
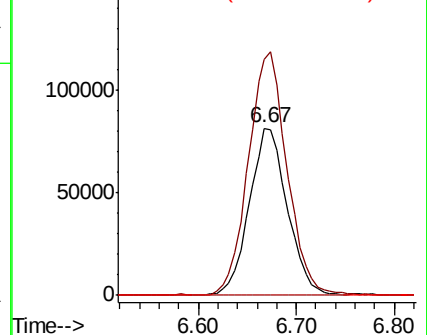


Abundance

Ion 96.00 (95.70 to 96.70): VR0

Ion 61.05 (60.75 to 61.75): VR0

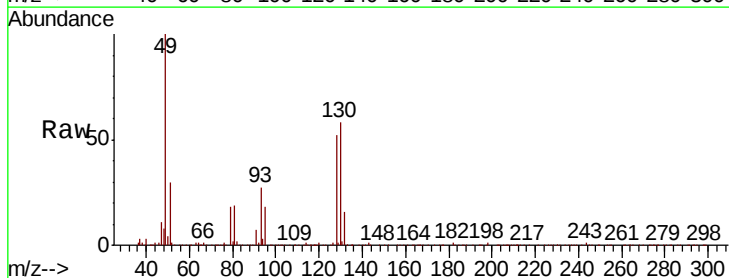
Ion 68.15 (67.85 to 68.85): VR0



#23

Bromochloromethane  
Concen: 4.804 ug/L  
RT: 7.04 min Scan# 882  
Delta R.T. -0.01 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 49      | 191.1 | 144.4 | 268.2 |
| 130     | 111.6 | 86.2  | 160.0 |
| 51      | 57.4  | 44.9  | 67.3  |



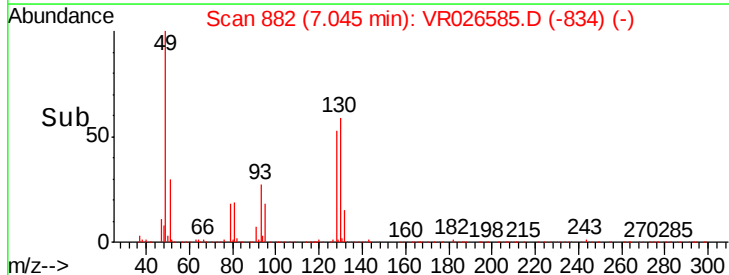
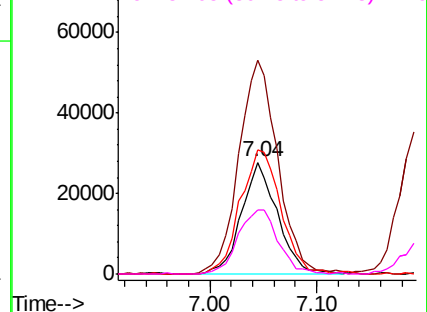
Abundance

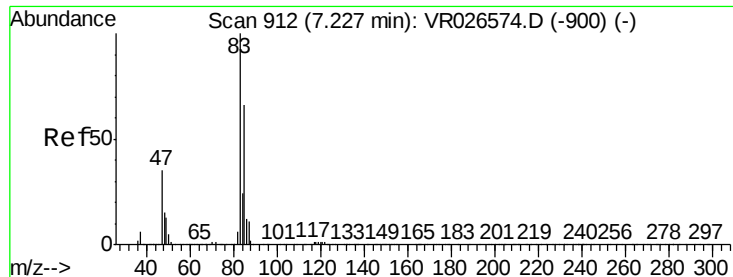
Ion 127.90 (127.60 to 128.60): VR0

Ion 49.10 (48.80 to 49.80): VR0

Ion 129.95 (129.65 to 130.65): VR0

Ion 51.05 (50.75 to 51.75): VR0





#25

Chloroform

Concen: 4.844 ug/L

RT: 7.23 min Scan# 912

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

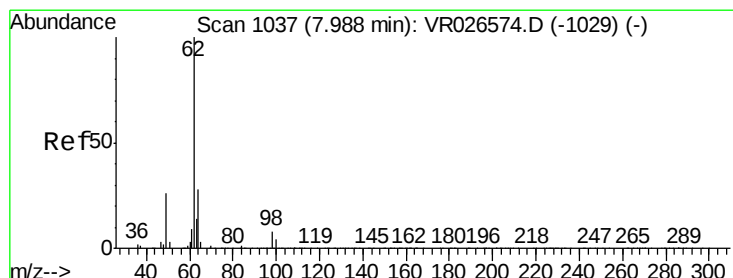
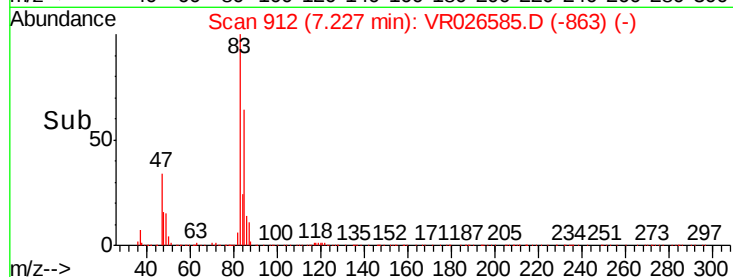
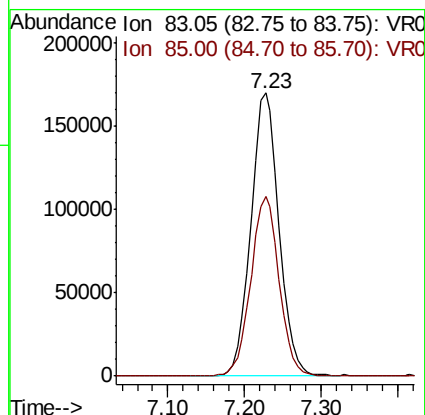
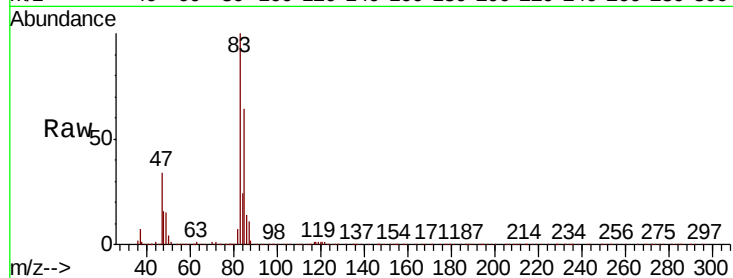
VSTD00571

Tot Ion: 83 Resp: 433782

Ion Ratio Lower Upper

83 100

85 63.5 45.6 84.6



#27

1,2-Dichloroethane

Concen: 4.903 ug/L

RT: 7.99 min Scan# 1038

Delta R.T. 0.01 min

Lab File: VR026585.D

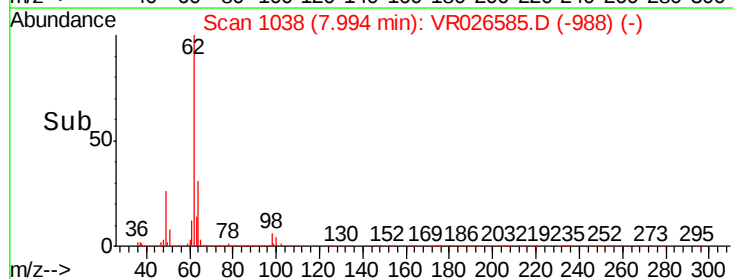
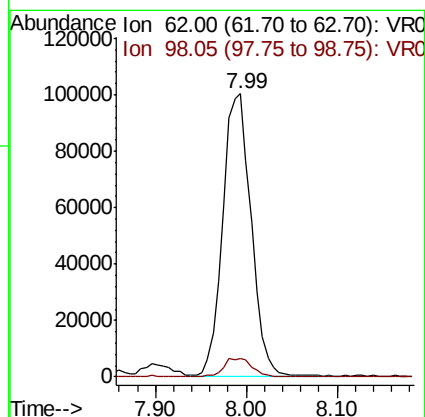
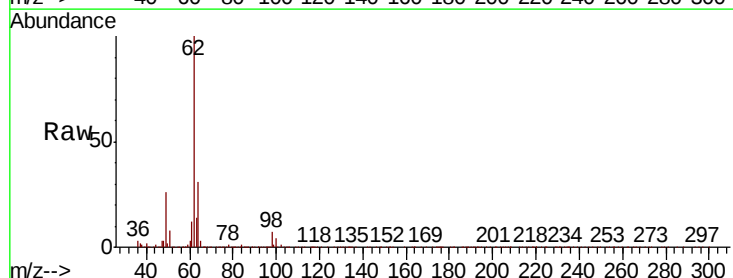
Acq: 12 Apr 2019 00:32

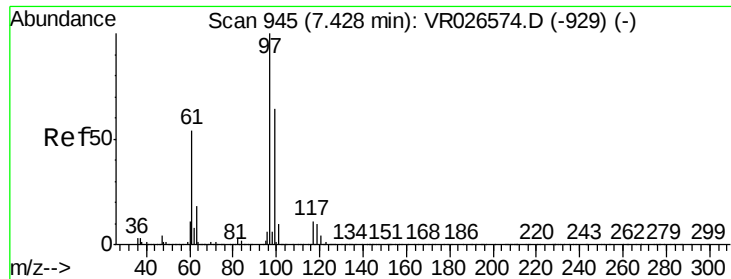
Tgt Ion: 62 Resp: 219241

Ion Ratio Lower Upper

62 100

98 6.5 6.0 9.0

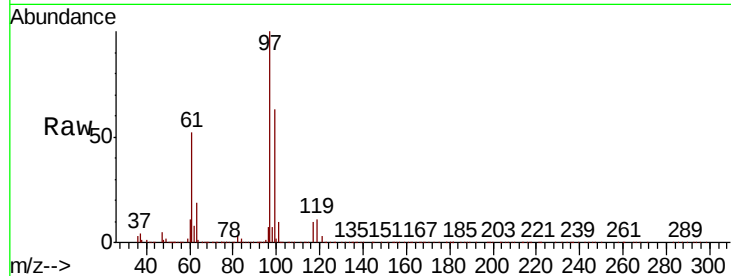




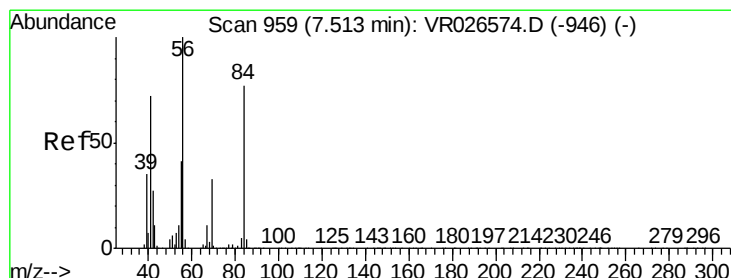
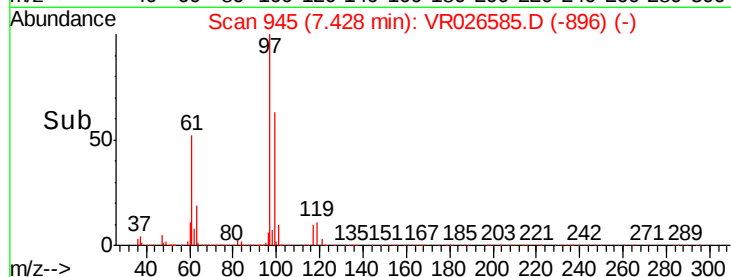
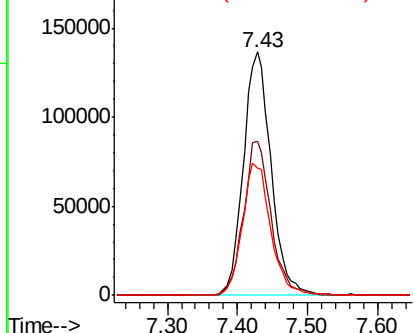
#29  
 1,1,1-Trichloroethane  
 Concen: 5.021 ug/L  
 RT: 7.43 min Scan# 945  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 62.8  | 52.0  | 78.0  |
| 61      | 55.7  | 44.5  | 66.7  |

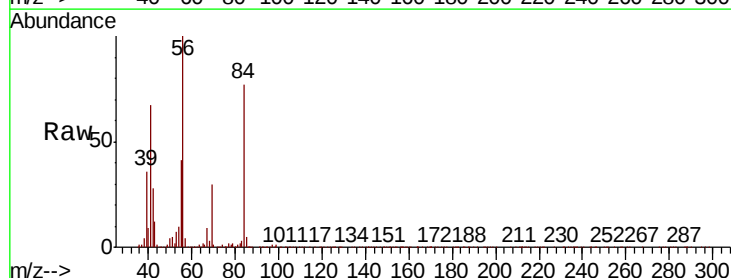


Abundance Ion 96.95 (96.65 to 97.65): VR0  
 Ion 99.05 (98.75 to 99.75): VR0  
 Ion 61.05 (60.75 to 61.75): VR0

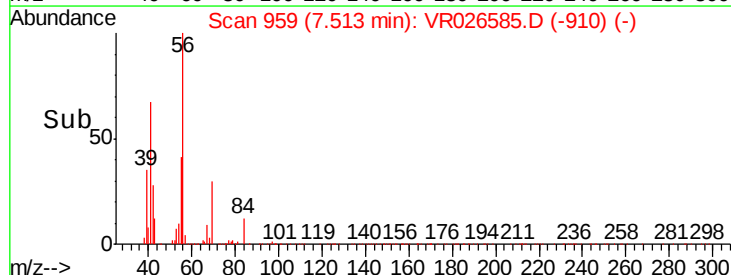
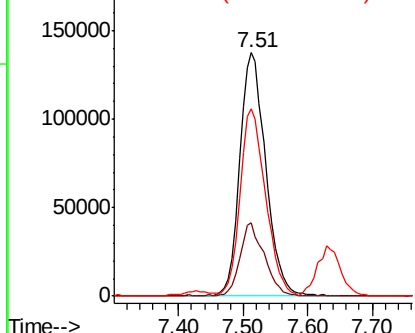


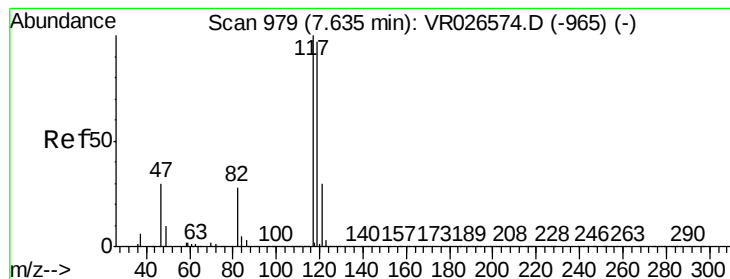
#30  
 Cyclohexane  
 Concen: 5.494 ug/L  
 RT: 7.51 min Scan# 959  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 28.3  | 23.0  | 34.4  |
| 84      | 75.4  | 63.4  | 95.0  |



Abundance Ion 56.10 (55.80 to 56.80): VR0  
 Ion 69.15 (68.85 to 69.85): VR0  
 Ion 84.15 (83.85 to 84.85): VR0





#31

Carbon tetrachloride

Concen: 4.917 ug/L

RT: 7.63 min Scan# 979

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

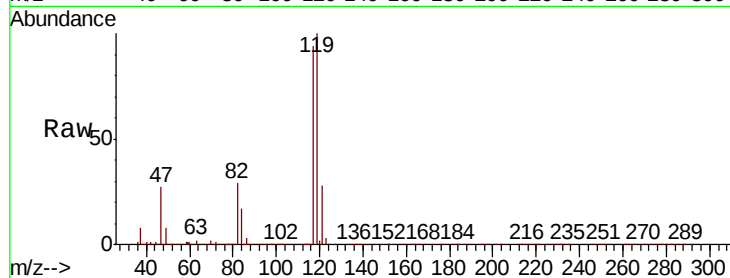
VSTD00571

Tot Ion:117 Resp: 372965

Ion Ratio Lower Upper

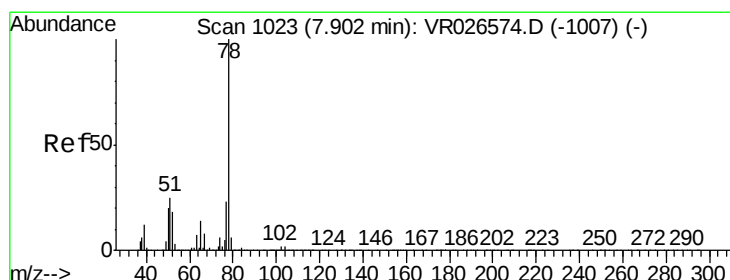
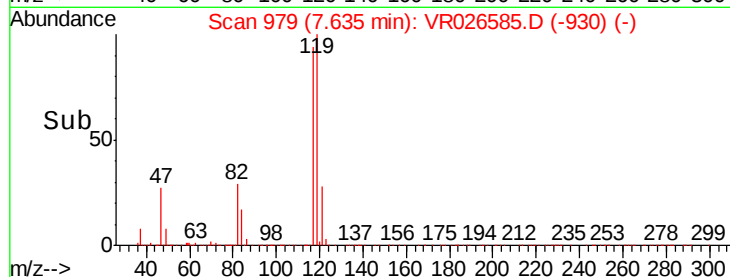
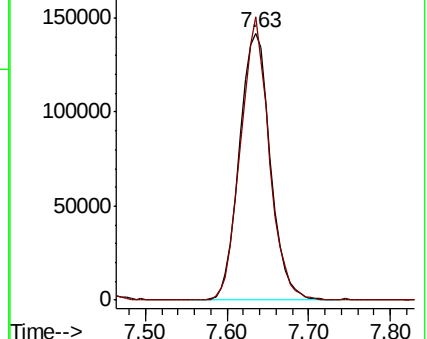
117 100

119 98.1 77.9 116.9



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.224 ug/L

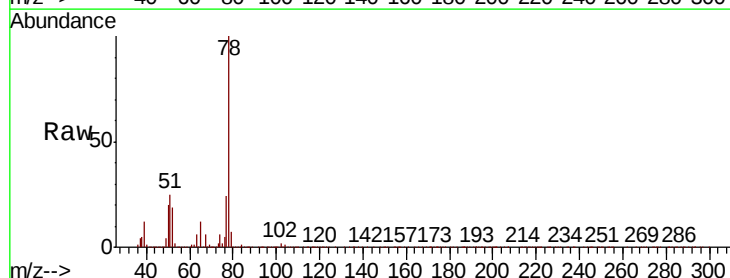
RT: 7.90 min Scan# 1023

Delta R.T. 0.00 min

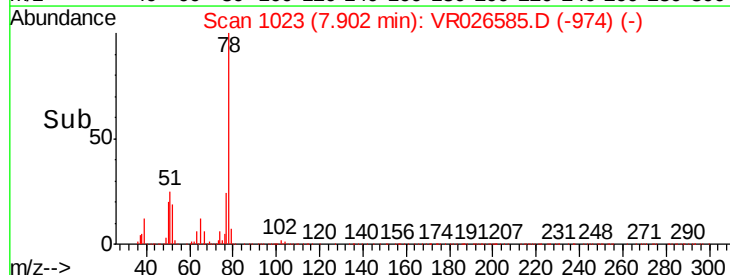
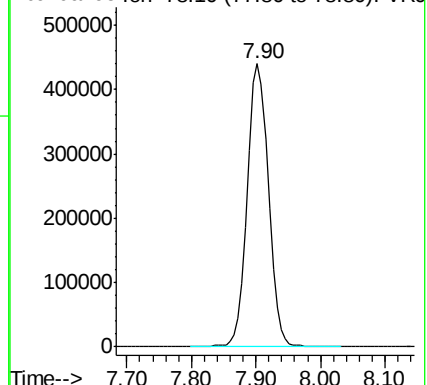
Lab File: VR026585.D

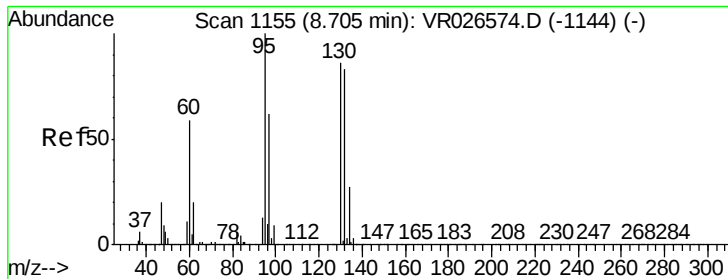
Acq: 12 Apr 2019 00:32

Tgt Ion: 78 Resp: 991472



Abundance Ion 78.10 (77.80 to 78.80): VR0

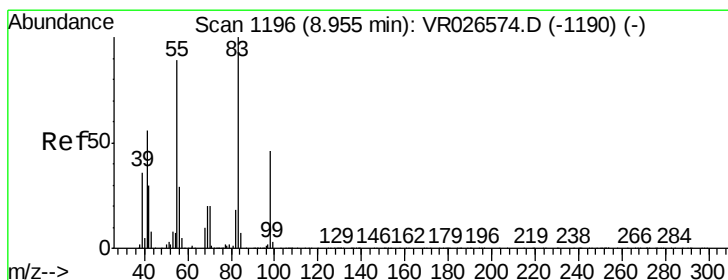
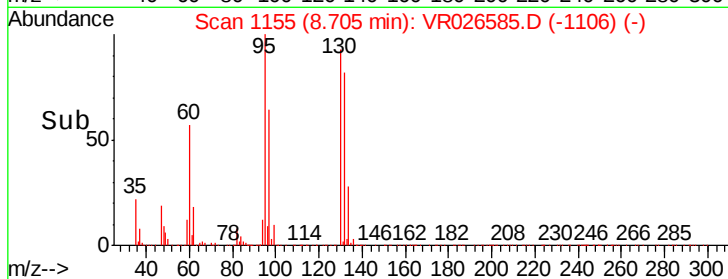
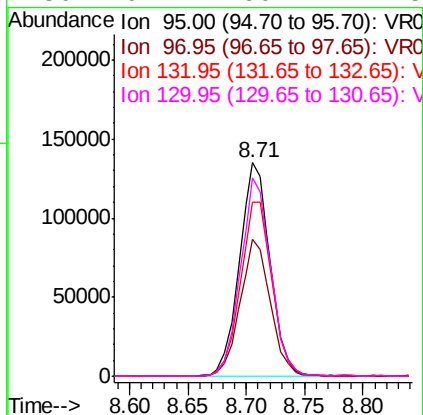
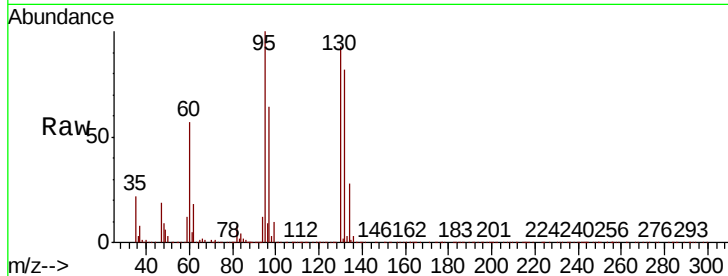




#34  
 Trichloroethene  
 Concen: 4.854 ug/L  
 RT: 8.71 min Scan# 1155  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

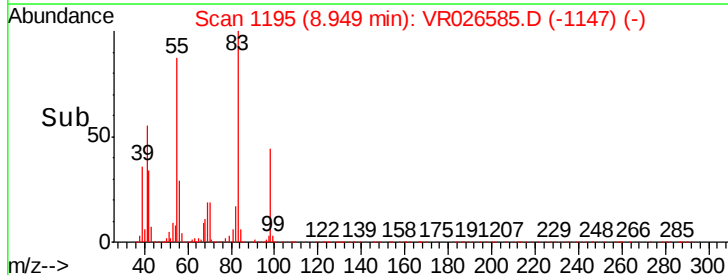
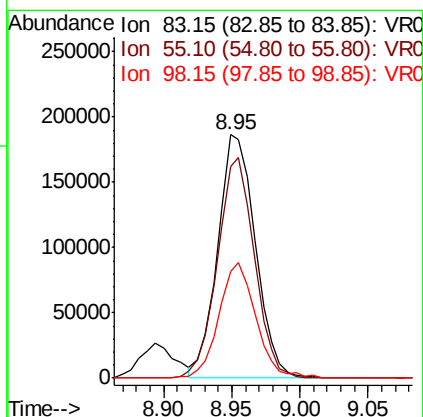
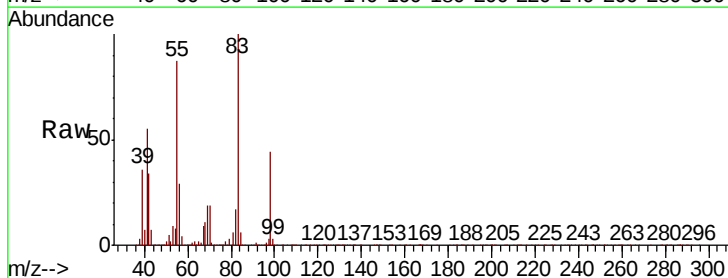
Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

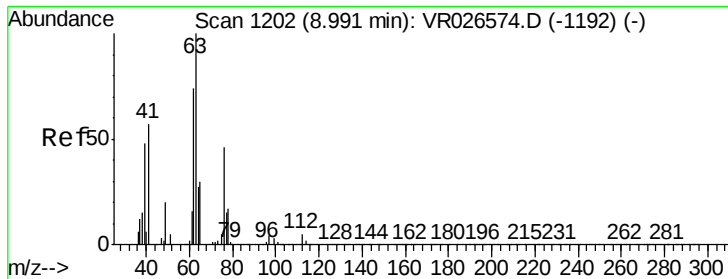
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 95    | Resp: | 246555 |
| Ion      | Ratio | Lower | Upper  |
| 95       | 100   |       |        |
| 97       | 64.4  | 39.1  | 72.7   |
| 132      | 81.6  | 57.6  | 107.0  |
| 130      | 92.7  | 60.1  | 111.5  |



#35  
 Methylcyclohexane  
 Concen: 5.140 ug/L  
 RT: 8.95 min Scan# 1195  
 Delta R.T. -0.01 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 358348 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 55       | 88.7  | 70.7  | 106.1  |
| 98       | 46.4  | 36.0  | 54.0   |

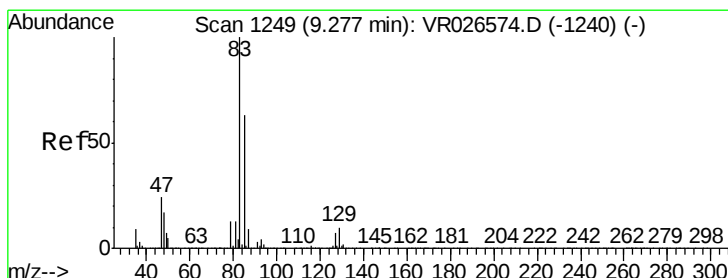
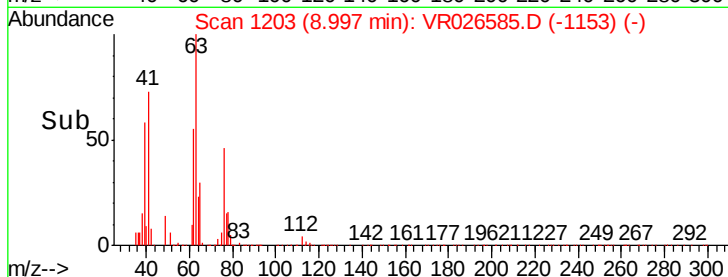
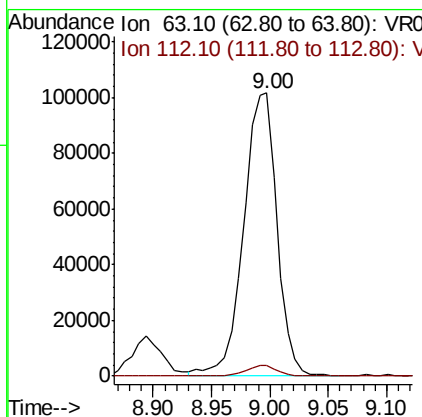
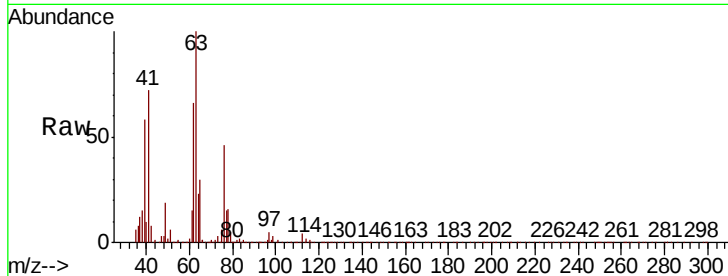




#37  
 1,2-Dichloropropane  
 Concen: 4.959 ug/L  
 RT: 9.00 min Scan# 1203  
 Delta R.T. 0.01 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

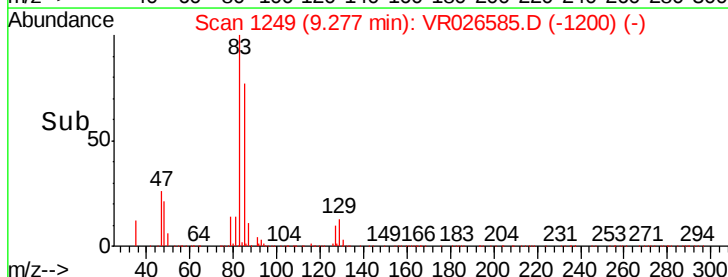
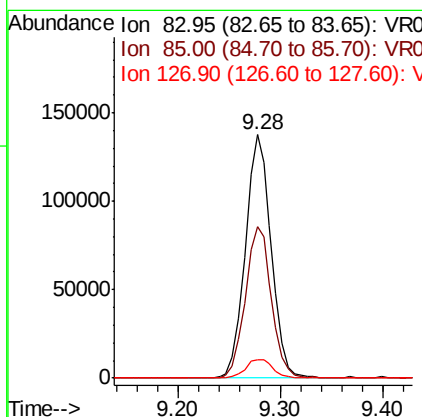
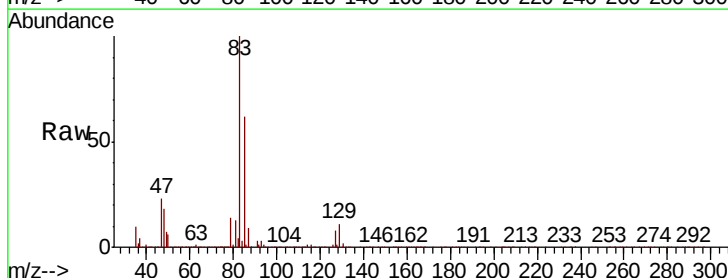
Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

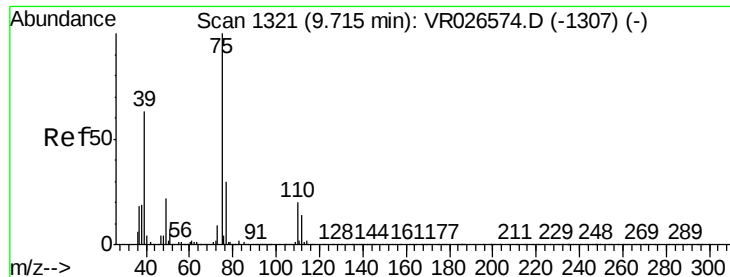
Tot Ion: 63 Resp: 203083  
 Ion Ratio Lower Upper  
 63 100  
 112 3.5 3.0 4.4



#38  
 Bromodichloromethane  
 Concen: 5.067 ug/L  
 RT: 9.28 min Scan# 1249  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

Tgt Ion: 83 Resp: 239710  
 Ion Ratio Lower Upper  
 83 100  
 85 62.1 44.7 83.1  
 127 7.8 6.3 9.5

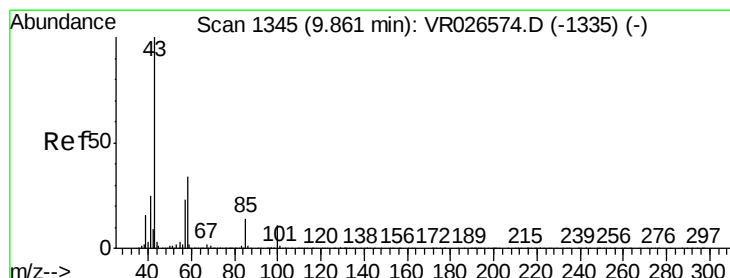
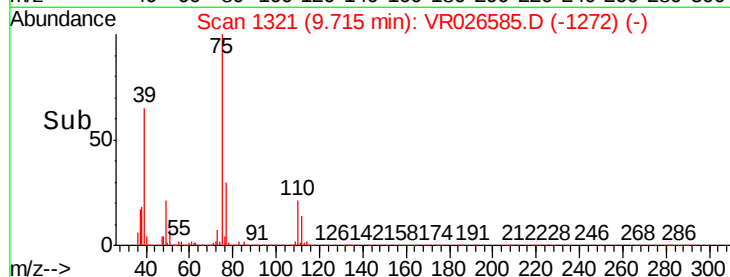
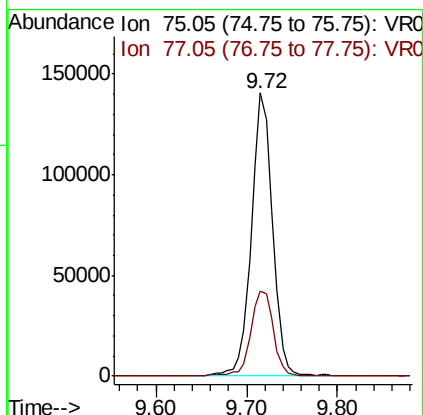
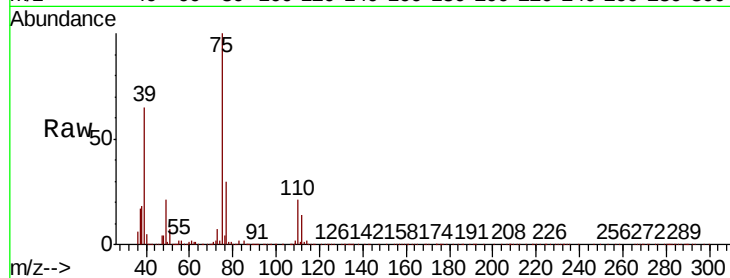




#39  
 cis-1,3-Dichloropropene  
 Concen: 5.108 ug/L  
 RT: 9.72 min Scan# 1321  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

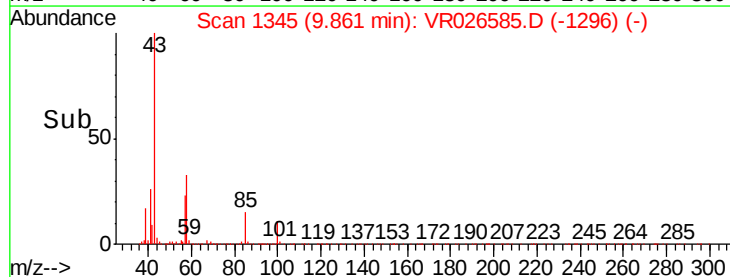
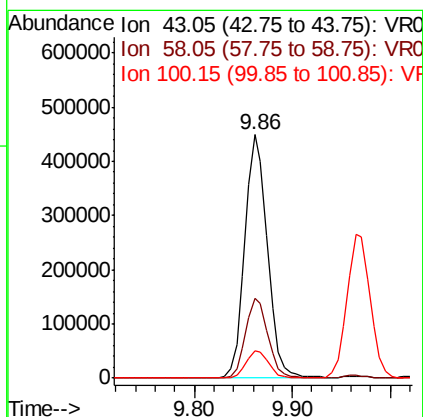
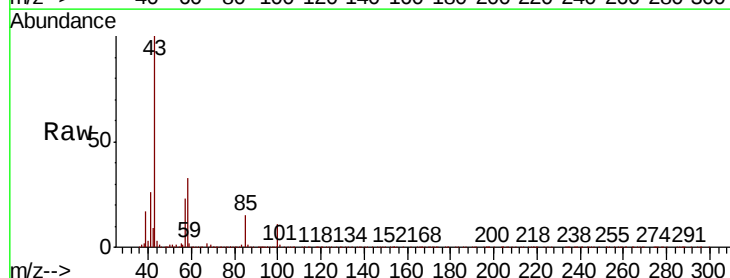
Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

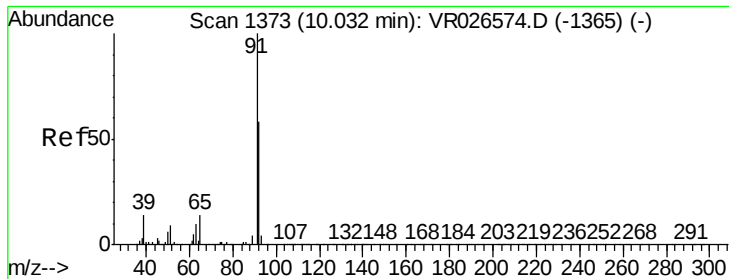
Tot Ion: 75 Resp: 227703  
 Ion Ratio Lower Upper  
 75 100  
 77 29.8 21.4 39.8



#40  
 4-Methyl-2-pentanone  
 Concen: 59.327 ug/L  
 RT: 9.86 min Scan# 1345  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

Tgt Ion: 43 Resp: 719913  
 Ion Ratio Lower Upper  
 43 100  
 58 32.4 27.0 40.4  
 100 11.2 9.0 13.6





#42

Toluene

Concen: 5.305 ug/L

RT: 10.03 min Scan# 1373

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

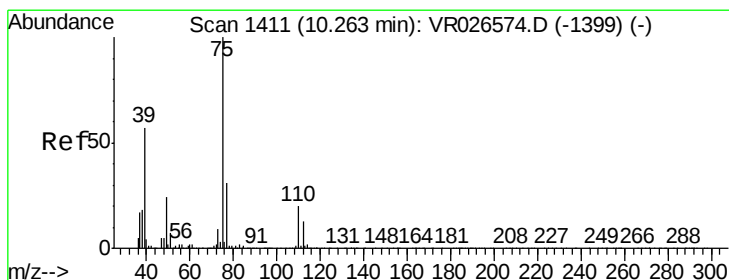
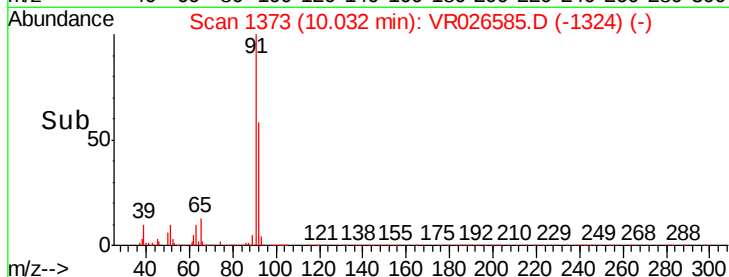
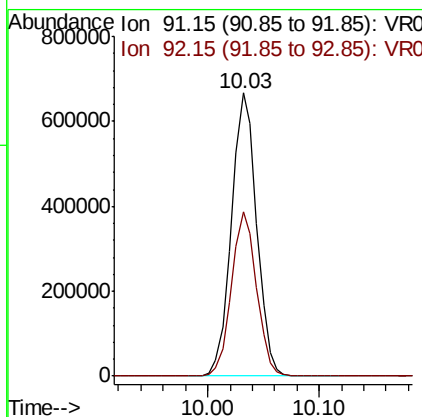
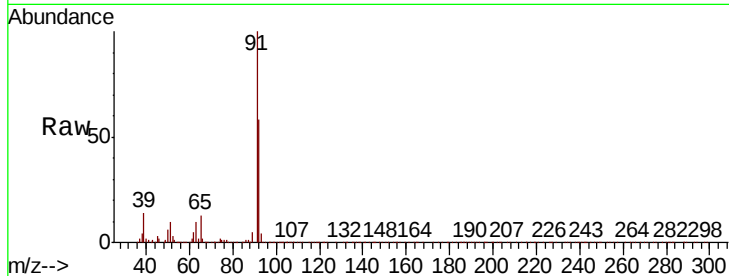
VSTD00571

Tot Ion: 91 Resp: 1044868

Ion Ratio Lower Upper

91 100

92 58.1 39.2 72.8



#44

trans-1,3-Dichloropropene

Concen: 4.983 ug/L

RT: 10.26 min Scan# 1411

Delta R.T. 0.00 min

Lab File: VR026585.D

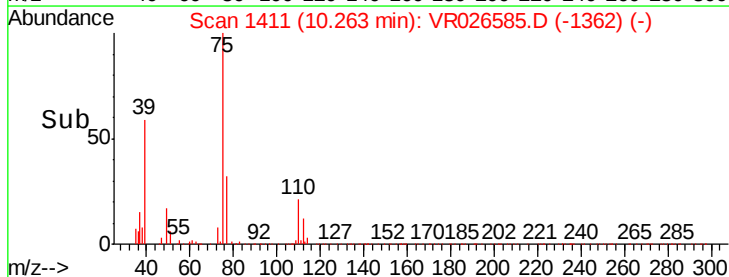
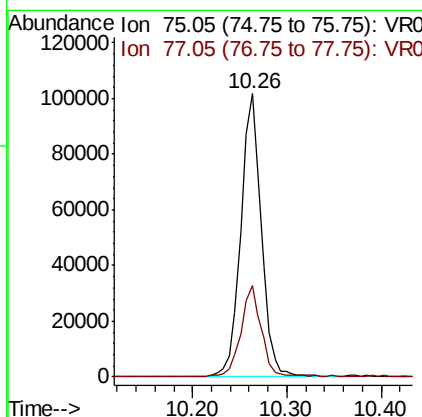
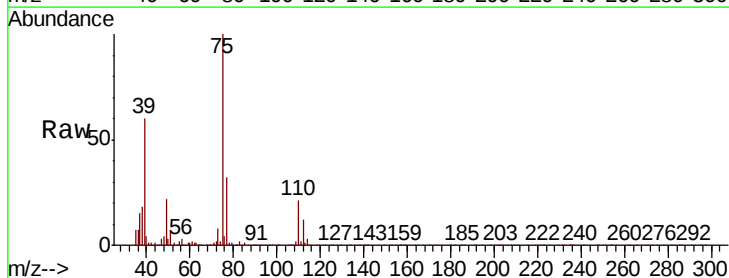
Acq: 12 Apr 2019 00:32

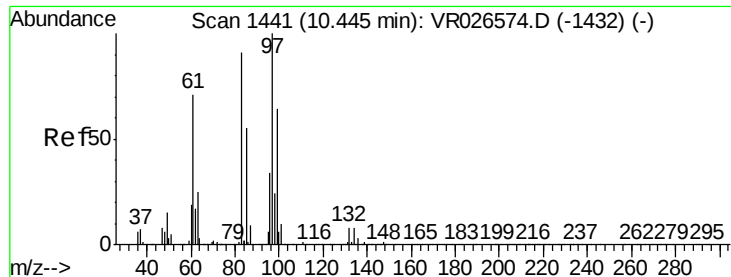
Tgt Ion: 75 Resp: 154595

Ion Ratio Lower Upper

75 100

77 32.2 21.6 40.2

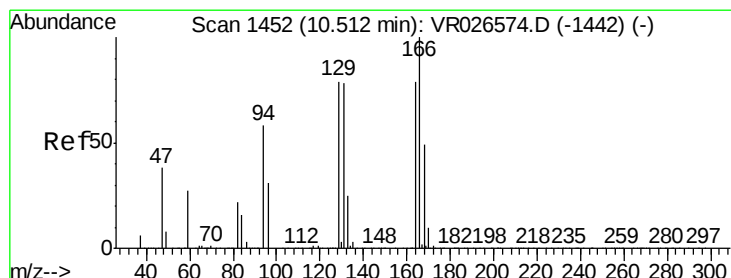
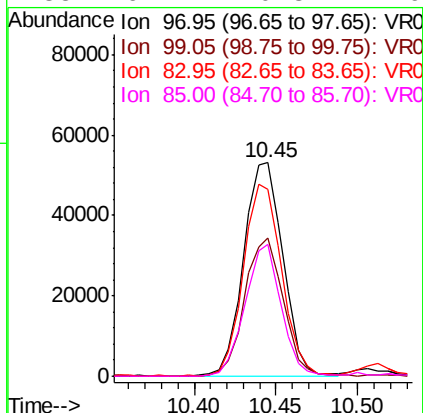
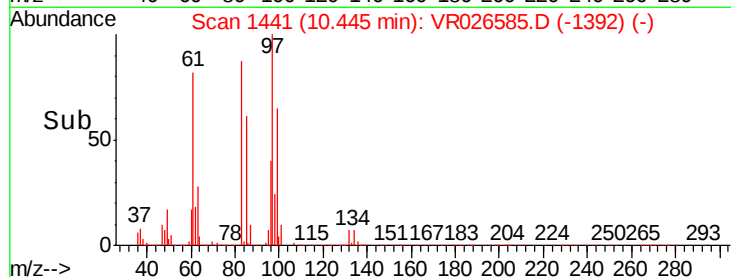
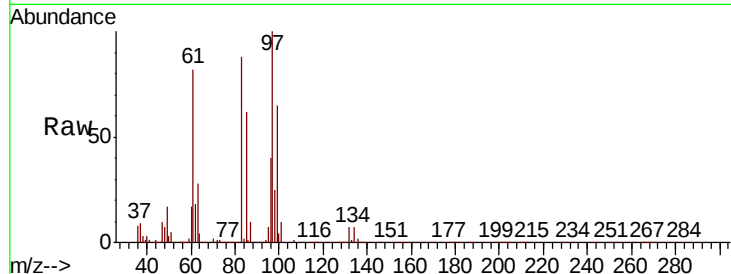




#45  
 1,1,2-Trichloroethane  
 Concen: 4.915 ug/L  
 RT: 10.45 min Scan# 1441  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

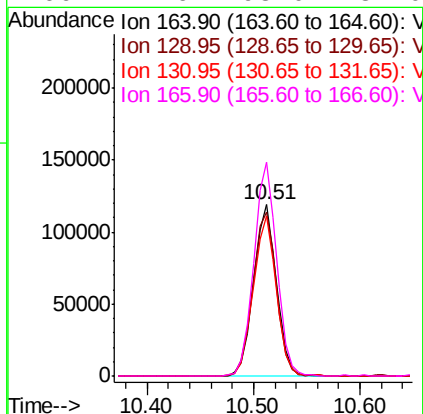
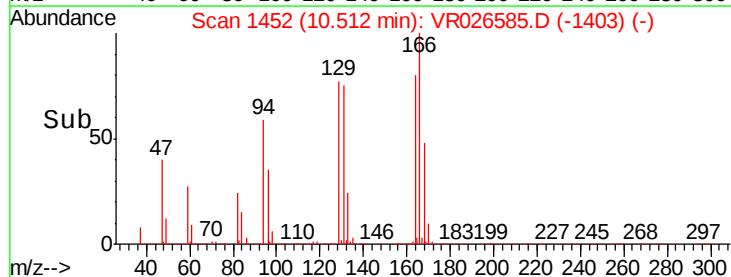
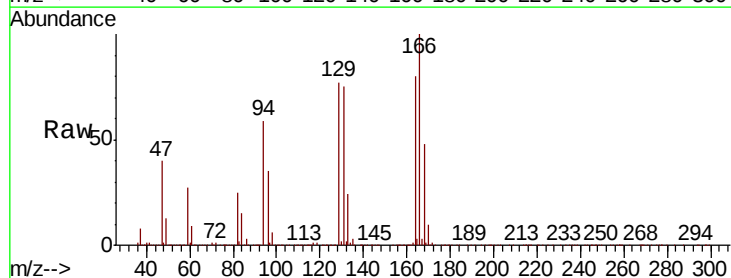
Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

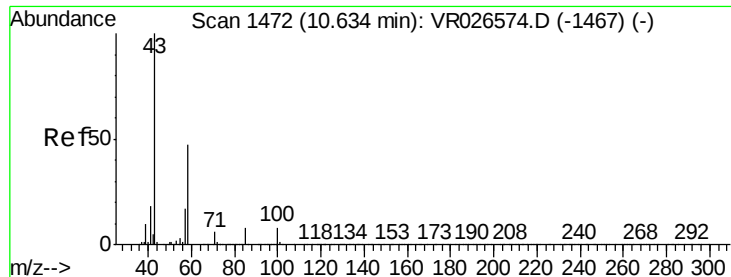
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 88911 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 64.7  | 39.3  | 72.9  |
| 83       | 87.6  | 63.0  | 117.0 |
| 85       | 61.7  | 40.3  | 74.9  |



#47  
 Tetrachloroethene  
 Concen: 4.818 ug/L  
 RT: 10.51 min Scan# 1452  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 178729 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 95.5  | 72.7  | 134.9  |
| 131      | 93.1  | 72.0  | 133.6  |
| 166      | 124.6 | 98.0  | 182.0  |

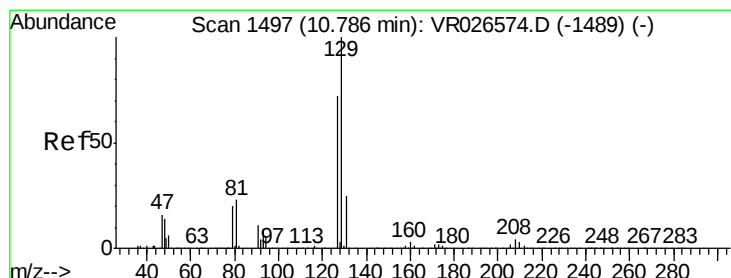
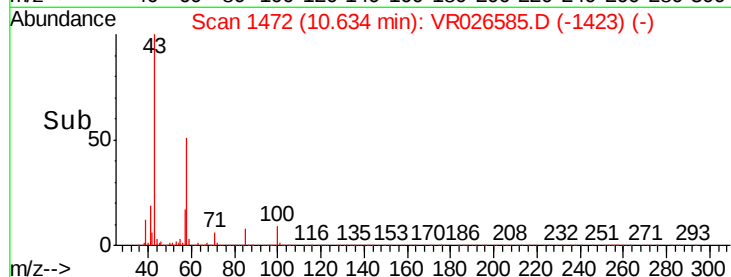
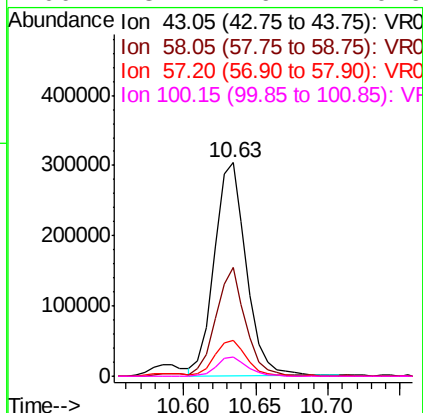
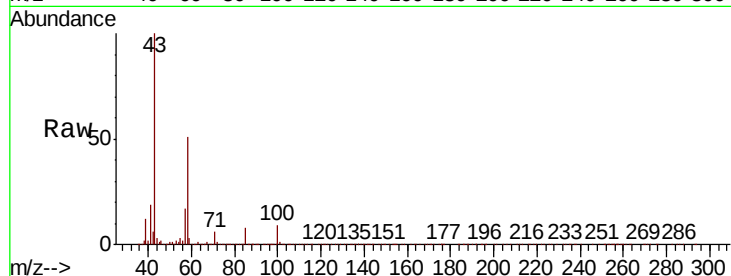




#48  
2-Hexanone  
Concen: 54.299 ug/L  
RT: 10.63 min Scan# 1472  
Delta R.T. 0.00 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

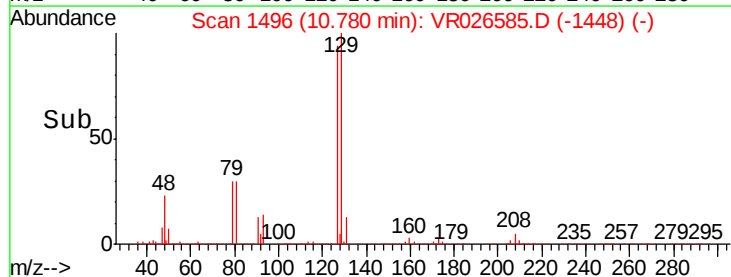
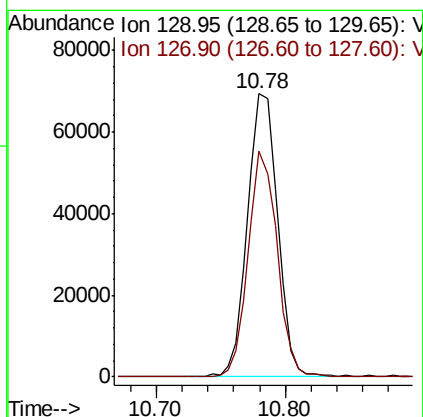
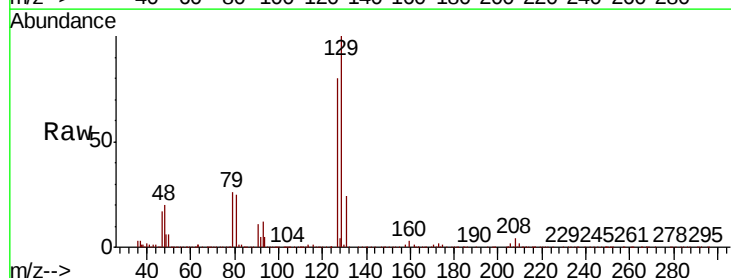
Instrument :  
MSVOA\_R  
ClientSampled :  
VSTD00571

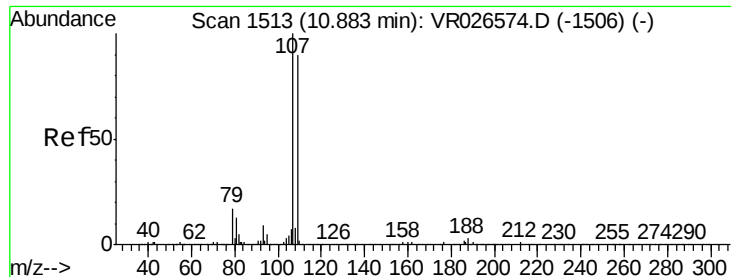
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 43    | Resp: | 467837 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 49.3  | 37.2  | 55.8   |
| 57       | 16.4  | 13.4  | 20.0   |
| 100      | 8.7   | 6.4   | 9.6    |



#49  
Dibromochloromethane  
Concen: 5.084 ug/L  
RT: 10.78 min Scan# 1496  
Delta R.T. -0.01 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 129   | Resp: | 111831 |
| Ion      | Ratio | Lower | Upper  |
| 129      | 100   |       |        |
| 127      | 79.7  | 53.9  | 100.1  |

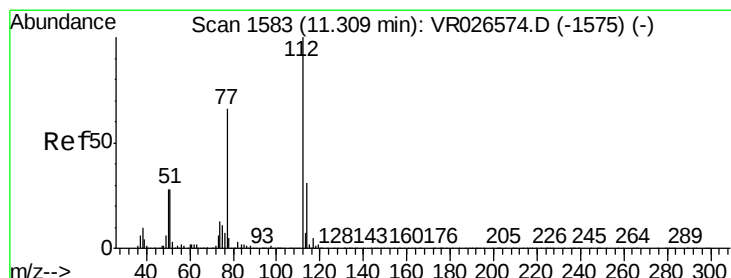
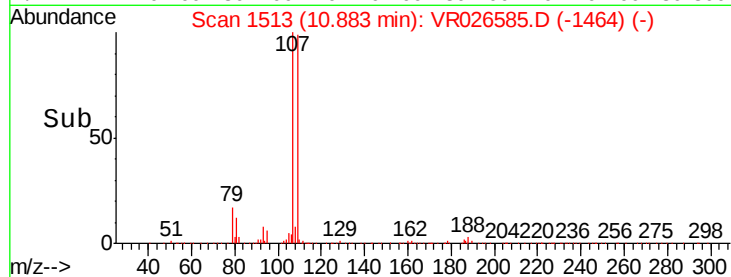
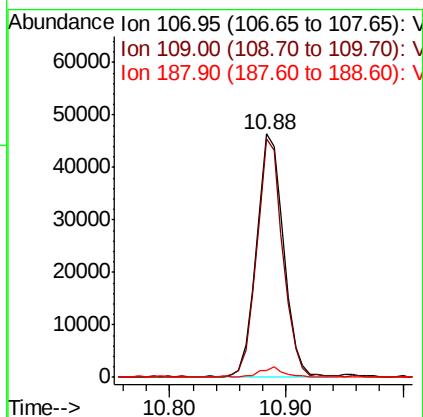
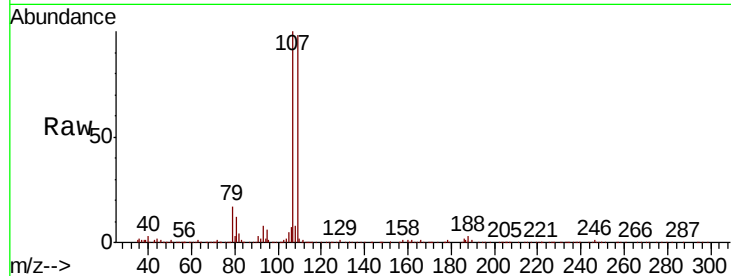




#50  
1,2-Dibromoethane  
Concen: 4.878 ug/L  
RT: 10.88 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

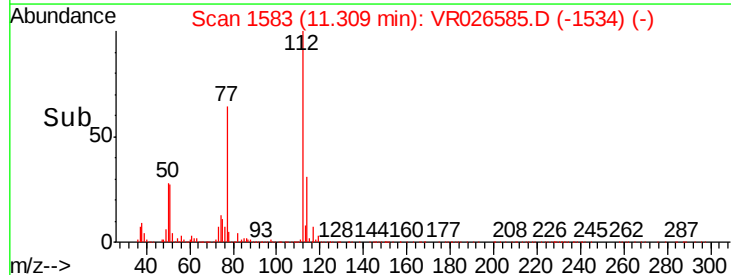
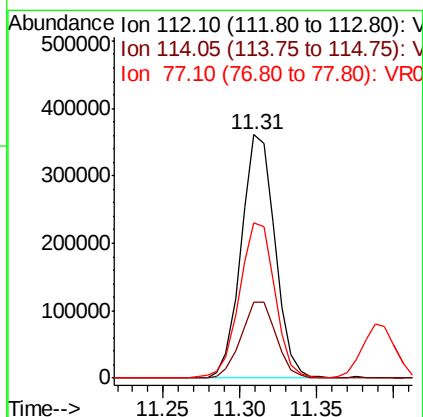
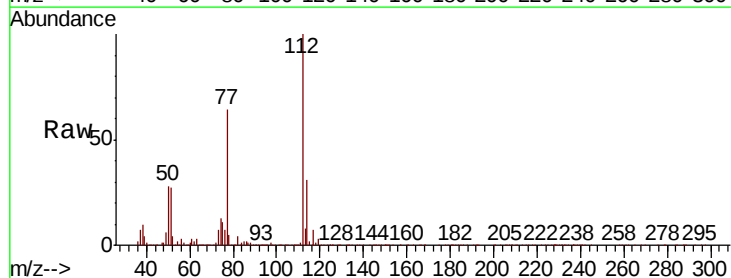
Instrument :  
MSVOA\_R  
ClientSampleId :  
VSTD00571

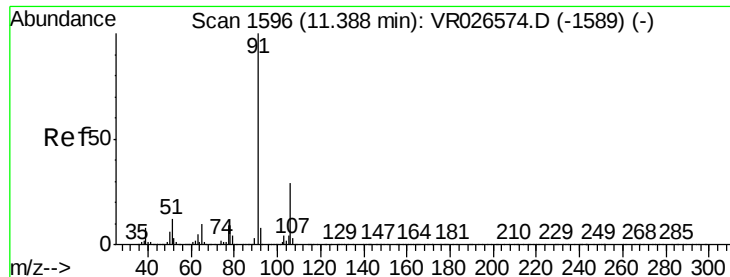
Tot Ion:107 Resp: 74783  
Ion Ratio Lower Upper  
107 100  
109 98.1 62.6 116.3  
188 2.9 3.4 5.0#



#51  
Chlorobenzene  
Concen: 4.881 ug/L  
RT: 11.31 min Scan# 1583  
Delta R.T. 0.00 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

Tgt Ion:112 Resp: 554312  
Ion Ratio Lower Upper  
112 100  
114 31.3 22.8 42.4  
77 63.7 51.8 77.8





#52

Ethylbenzene

Concen: 5.374 ug/L

RT: 11.39 min Scan# 1596

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

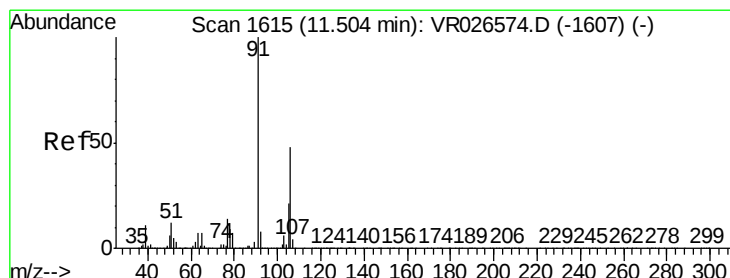
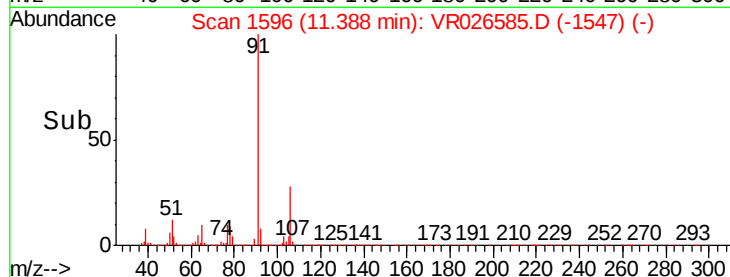
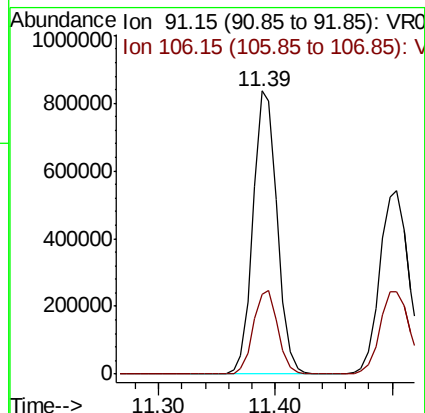
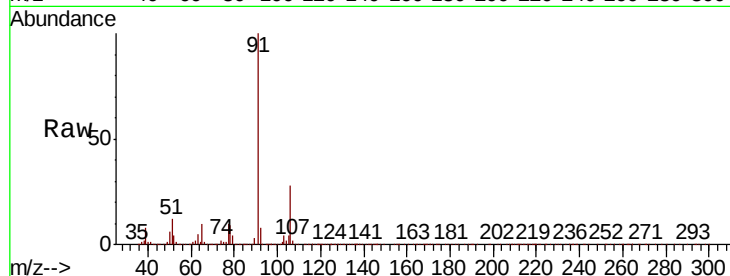
VSTD00571

Tot Ion: 91 Resp: 1207572

Ion Ratio Lower Upper

91 100

106 28.1 20.4 38.0



#53

m,p-Xylene

Concen: 5.324 ug/L

RT: 11.50 min Scan# 1615

Delta R.T. 0.00 min

Lab File: VR026585.D

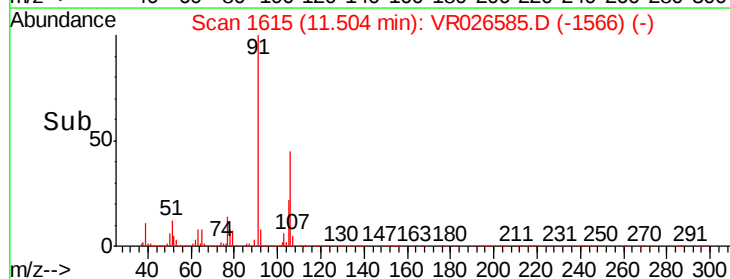
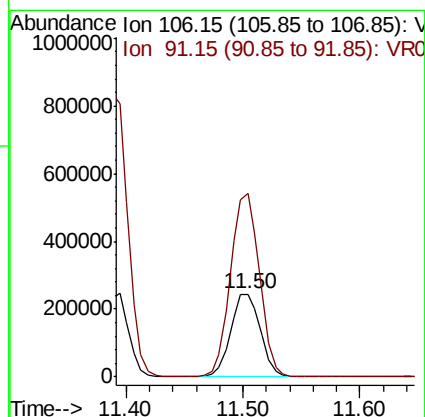
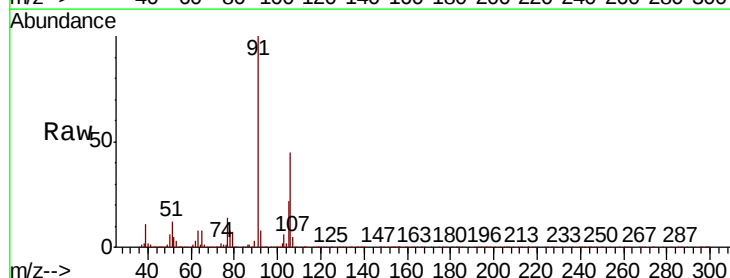
Acq: 12 Apr 2019 00:32

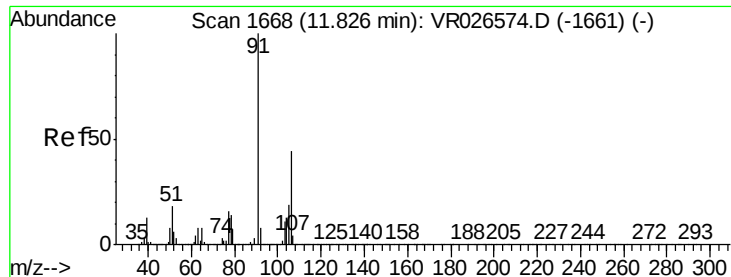
Tgt Ion: 106 Resp: 429539

Ion Ratio Lower Upper

106 100

91 221.3 151.8 282.0

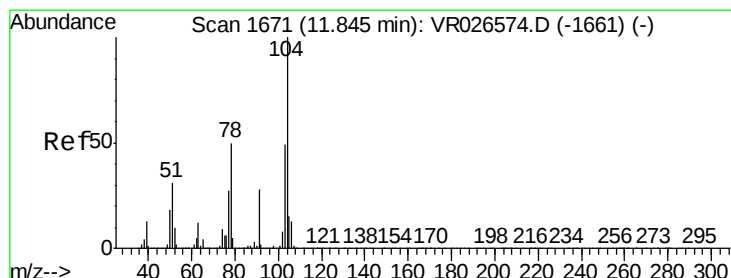
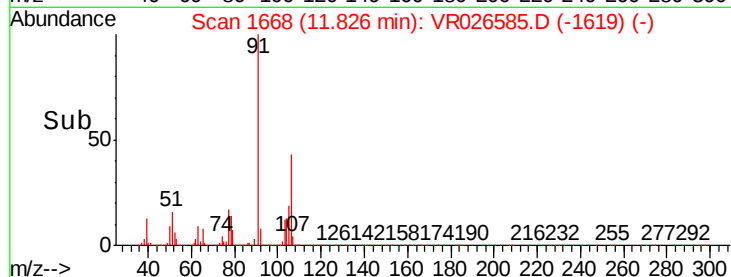
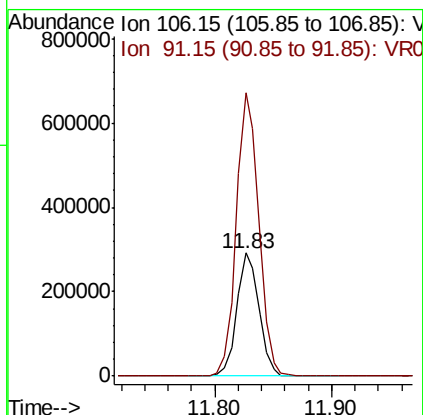
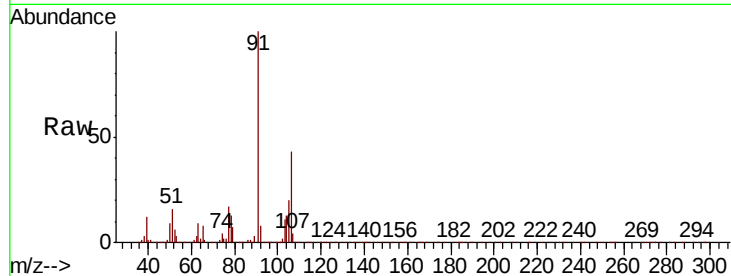




#54  
o-Xylene  
Concen: 5.362 ug/L  
RT: 11.83 min Scan# 1668  
Delta R.T. 0.00 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

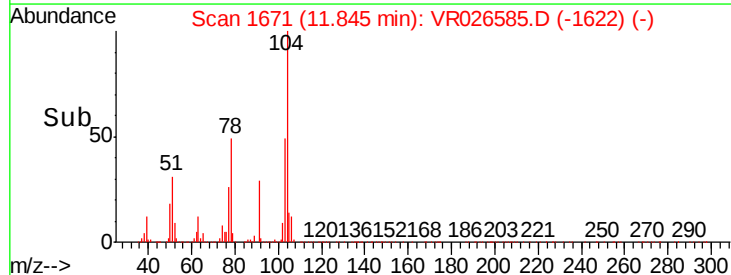
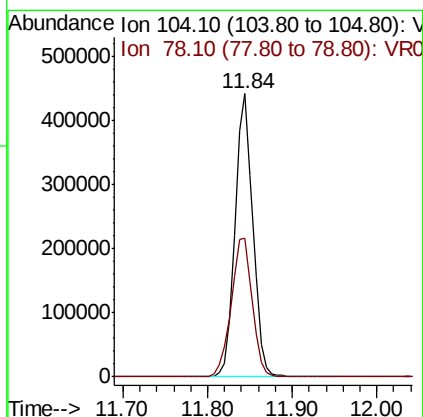
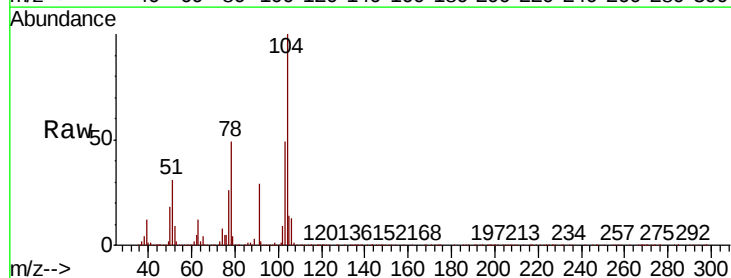
Instrument :  
MSVOA\_R  
ClientSampleId :  
VSTD00571

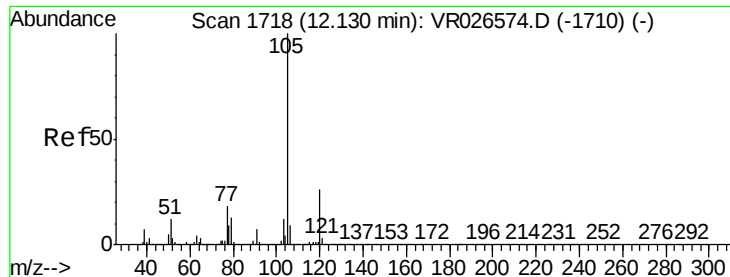
Tot Ion:106 Resp: 386662  
Ion Ratio Lower Upper  
106 100  
91 230.1 161.0 299.0



#55  
Styrene  
Concen: 5.430 ug/L  
RT: 11.84 min Scan# 1671  
Delta R.T. 0.00 min  
Lab File: VR026585.D  
Acq: 12 Apr 2019 00:32

Tgt Ion:104 Resp: 626884  
Ion Ratio Lower Upper  
104 100  
78 49.1 37.5 69.7





#56

Isopropylbenzene

Concen: 5.613 ug/L

RT: 12.13 min Scan# 1718

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampled :

VSTD00571

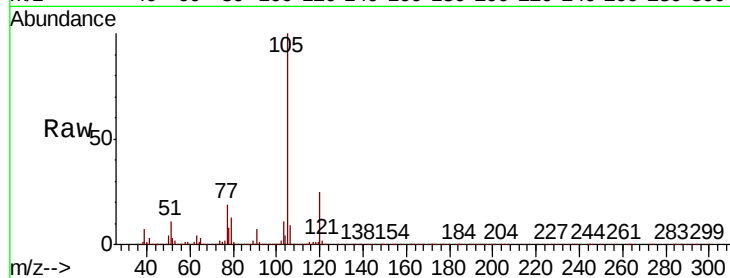
Tot Ion:105 Resp: 1120090

Ion Ratio Lower Upper

105 100

120 25.8 20.6 31.0

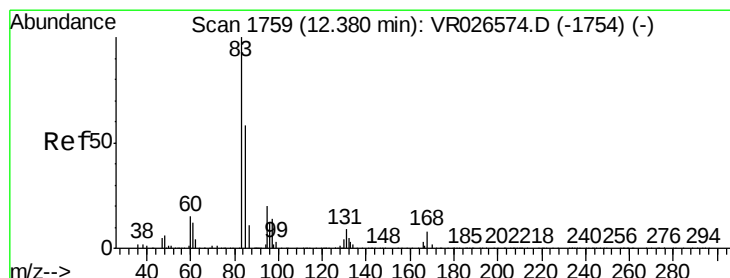
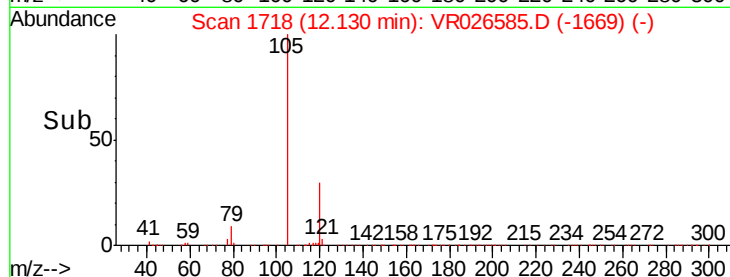
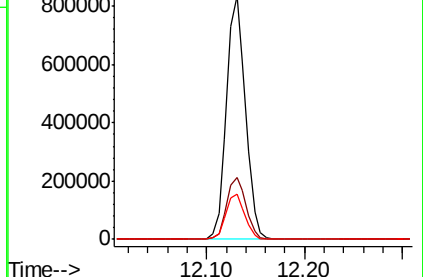
77 18.7 14.3 21.5



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 4.792 ug/L

RT: 12.39 min Scan# 1760

Delta R.T. 0.01 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

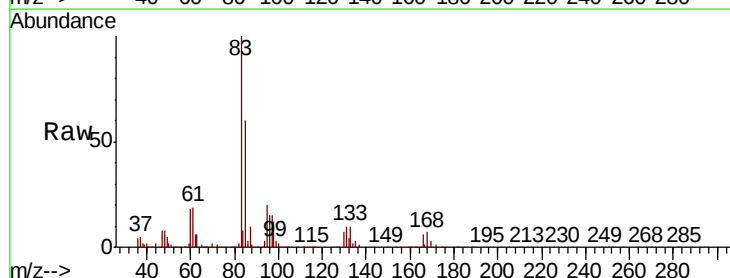
Tgt Ion: 83 Resp: 82722

Ion Ratio Lower Upper

83 100

85 60.5 44.3 82.3

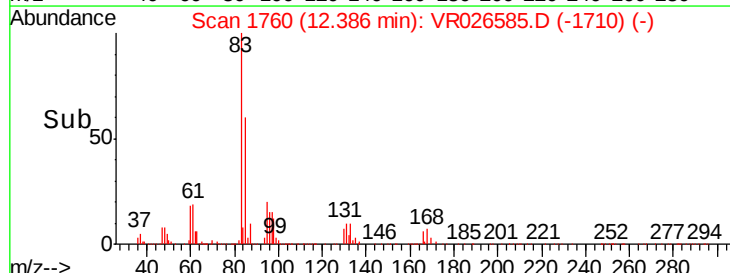
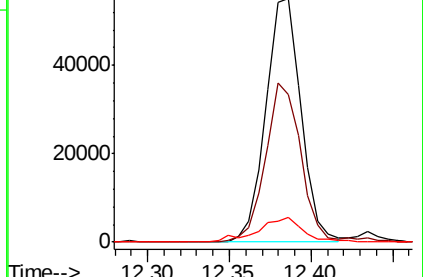
131 10.0 8.9 13.3

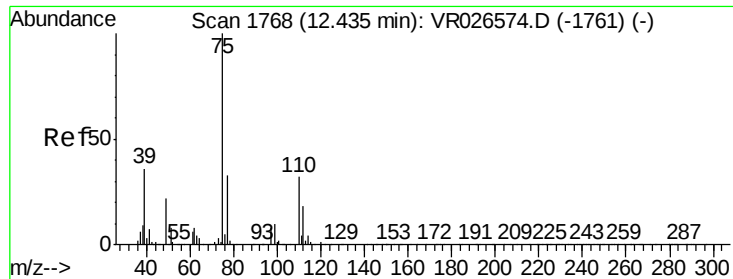


Abundance Ion 82.95 (82.65 to 83.65): VR0

Ion 85.00 (84.70 to 85.70): VR0

Ion 130.95 (130.65 to 131.65): V

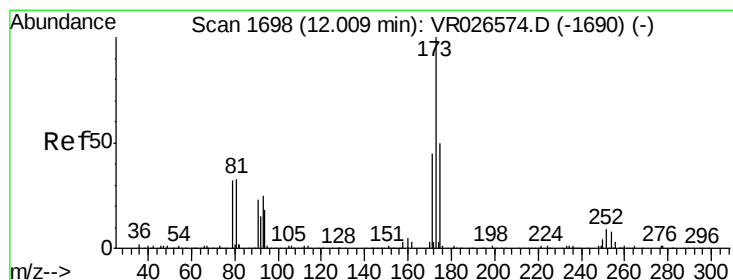
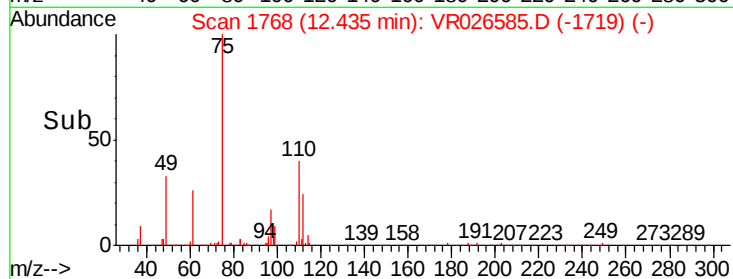
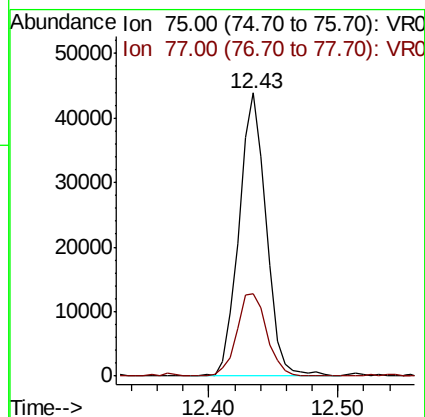
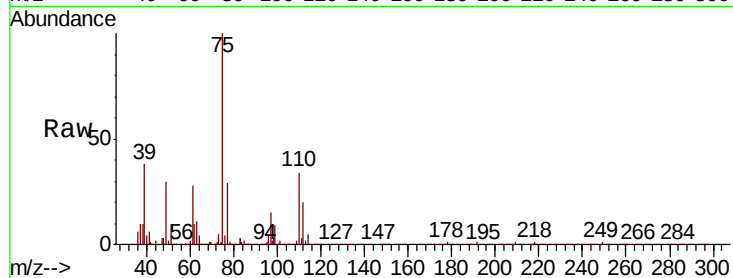




#59  
 1,2,3-Trichloropropane  
 Concen: 4.944 ug/L  
 RT: 12.43 min Scan# 1768  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

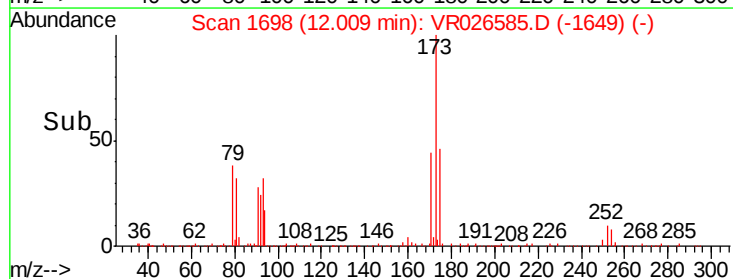
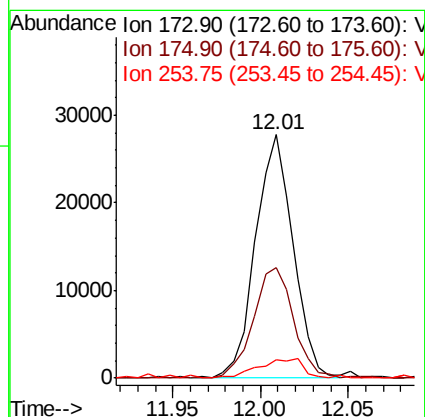
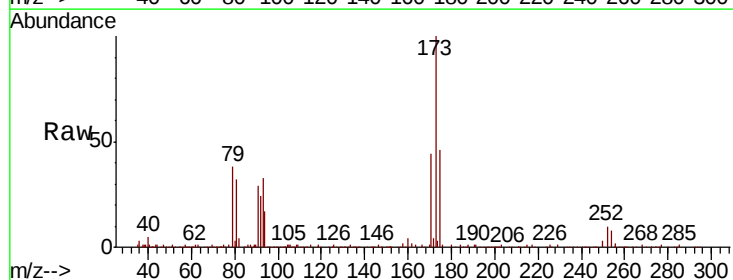
Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

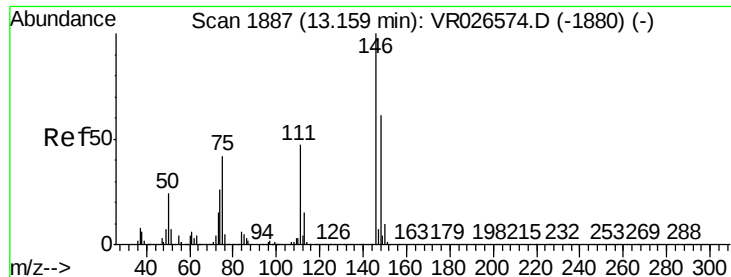
Tot Ion: 75 Resp: 63697  
 Ion Ratio Lower Upper  
 75 100  
 77 32.8 25.2 37.8



#61  
 Bromoform  
 Concen: 4.865 ug/L  
 RT: 12.01 min Scan# 1698  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

Tgt Ion:173 Resp: 41450  
 Ion Ratio Lower Upper  
 173 100  
 175 48.7 39.1 58.7  
 254 9.4 8.3 12.5

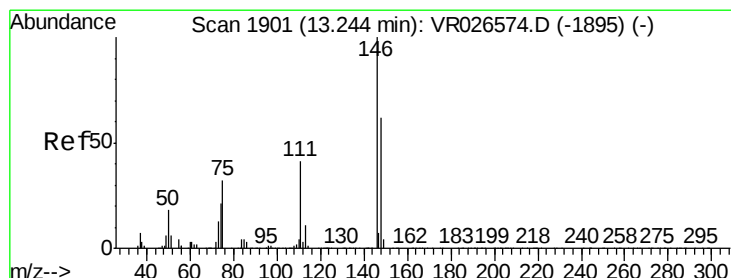
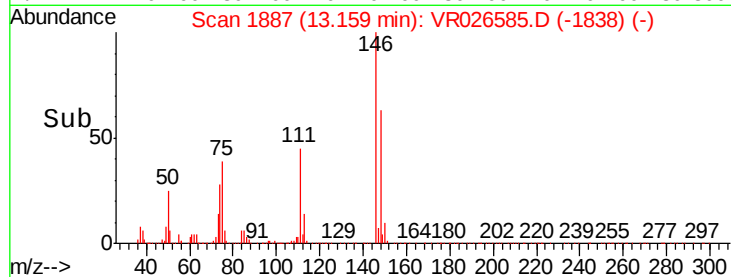
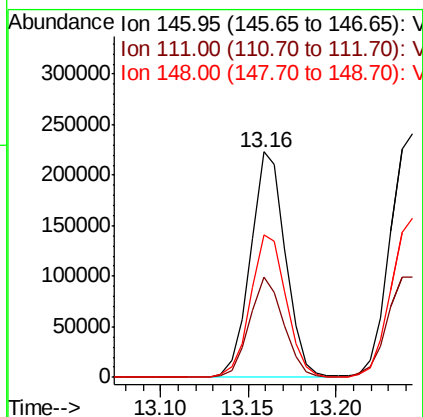
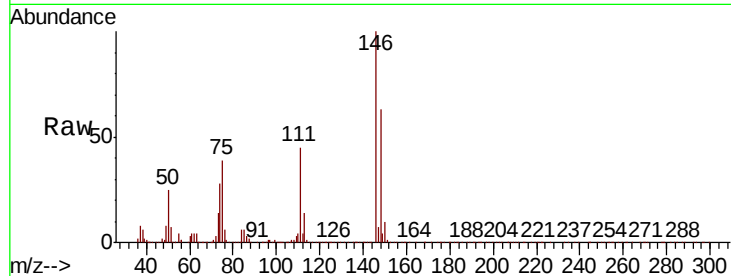




#62  
 1,3-Dichlorobenzene  
 Concen: 4.913 ug/L  
 RT: 13.16 min Scan# 1887  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

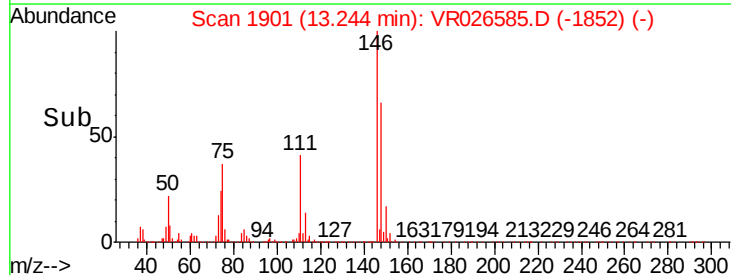
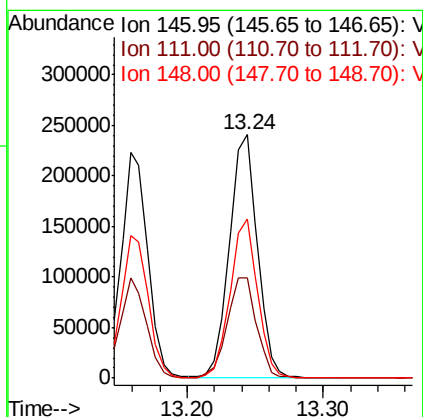
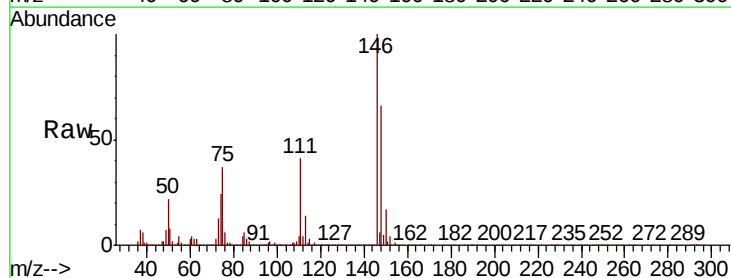
Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

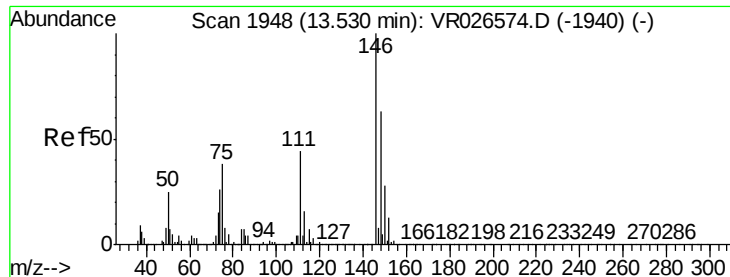
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 44.6  | 31.4  | 58.2  |
| 148     | 63.3  | 46.5  | 86.5  |



#63  
 1,4-Dichlorobenzene  
 Concen: 4.587 ug/L  
 RT: 13.24 min Scan# 1901  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.1  | 28.4  | 52.8  |
| 148     | 65.6  | 45.4  | 84.4  |

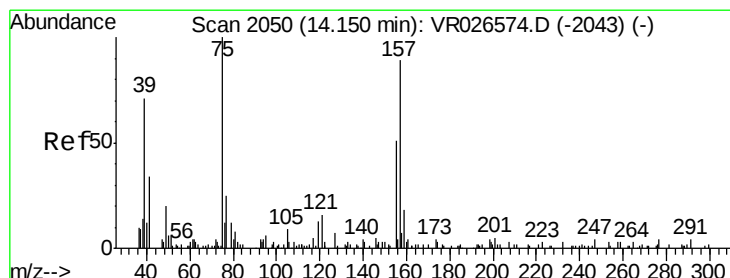
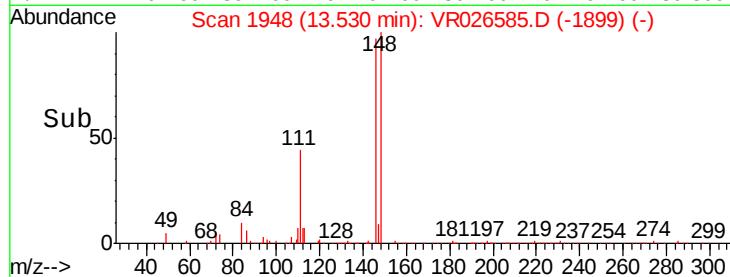
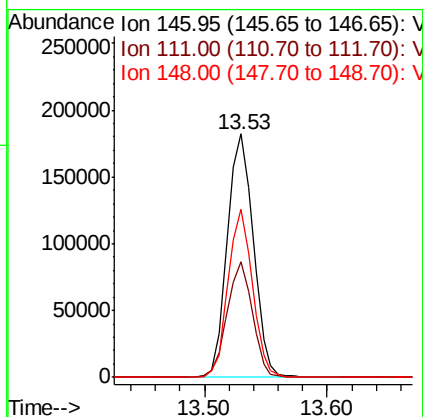
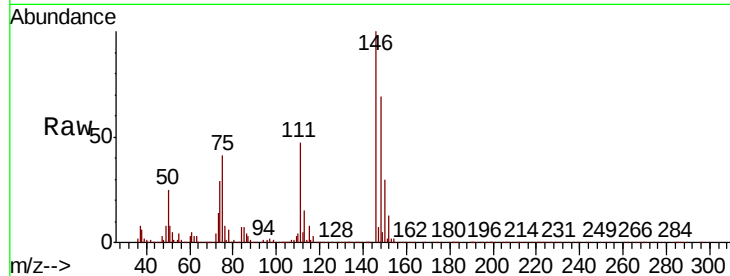




#65  
 1,2-Dichlorobenzene  
 Concen: 4.909 ug/L  
 RT: 13.53 min Scan# 1948  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

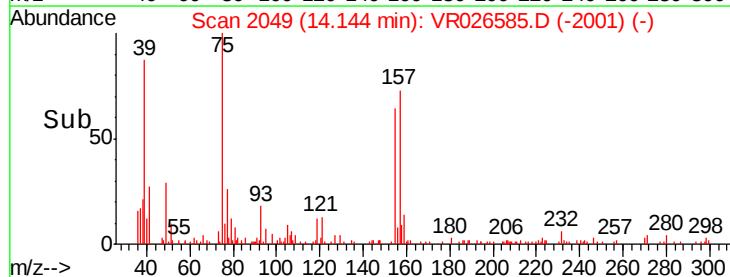
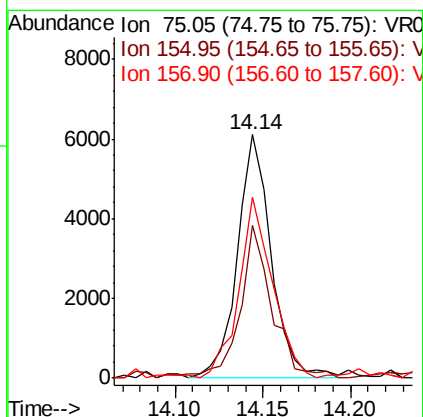
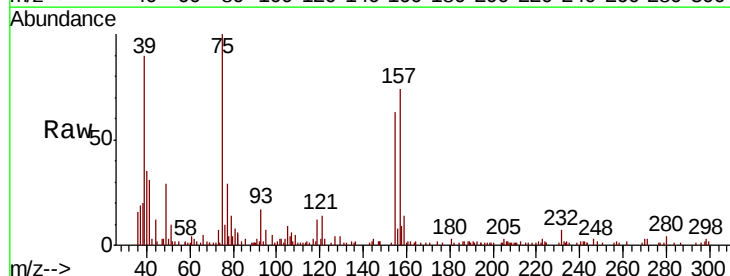
Instrument :  
 MSVOA\_R  
 ClientSampleID :  
 VSTD00571

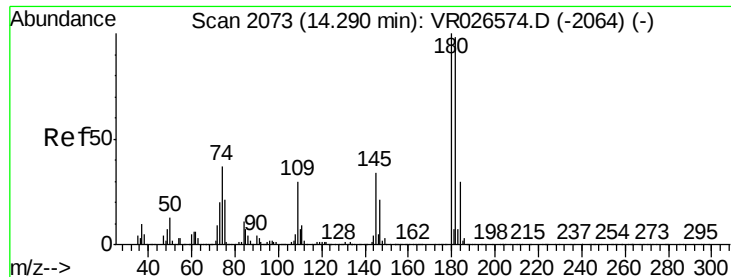
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 47.4  | 35.8  | 53.8  |
| 148     | 68.8  | 47.4  | 71.0  |



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 3.971 ug/L  
 RT: 14.14 min Scan# 2049  
 Delta R.T. -0.01 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 155     | 62.9  | 57.2  | 85.8  |
| 157     | 74.4  | 56.7  | 85.1  |

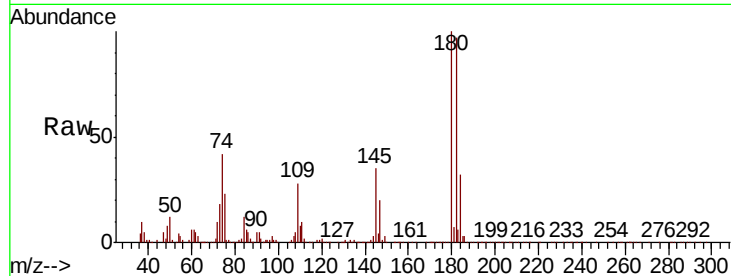




#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.581 ug/L  
 RT: 14.29 min Scan# 2073  
 Delta R.T. 0.00 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

Instrument :  
 MSVOA\_R  
 ClientSampleId :  
 VSTD00571

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 97.1  | 74.4  | 111.6 |
| 184     | 30.4  | 24.6  | 37.0  |
| 145     | 33.1  | 26.2  | 39.4  |



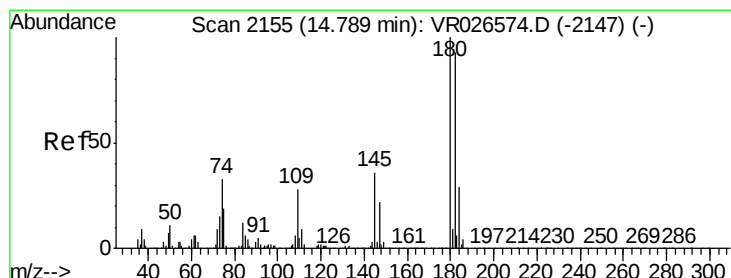
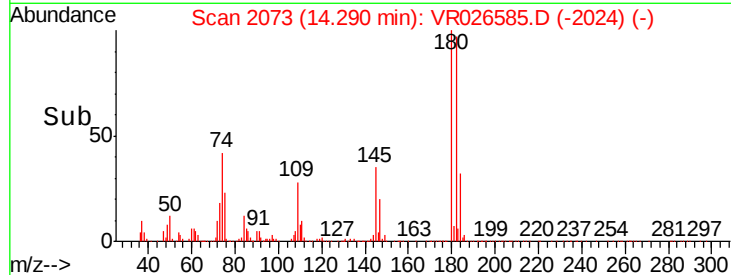
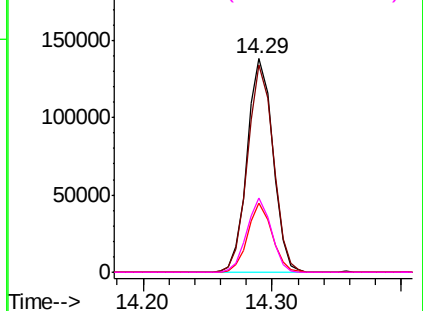
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

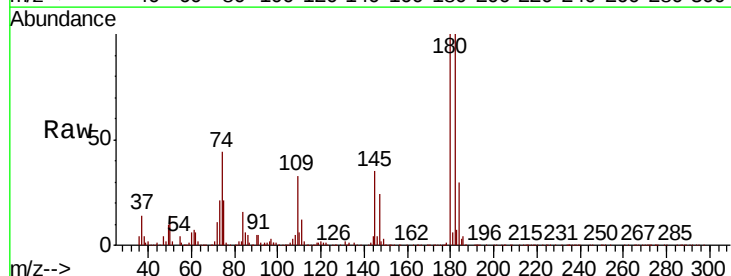
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 4.406 ug/L  
 RT: 14.78 min Scan# 2154  
 Delta R.T. -0.01 min  
 Lab File: VR026585.D  
 Acq: 12 Apr 2019 00:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.5  | 76.0  | 114.0 |
| 145     | 34.9  | 26.1  | 39.1  |

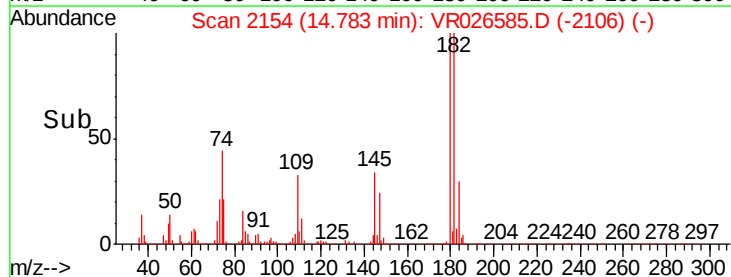
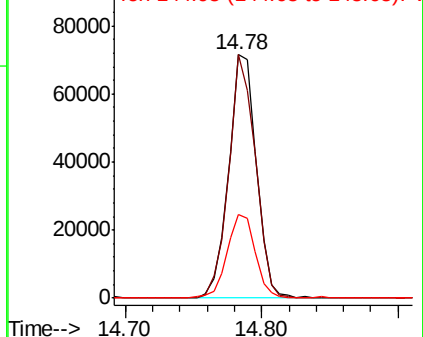


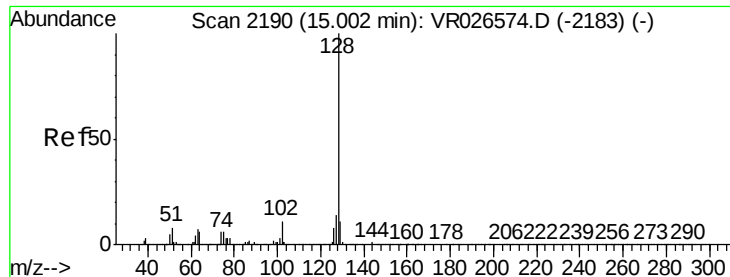
Abundance

Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 4.638 ug/L

RT: 15.00 min Scan# 2190

Delta R.T. 0.00 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

Instrument :

MSVOA\_R

ClientSampleId :

VSTD00571

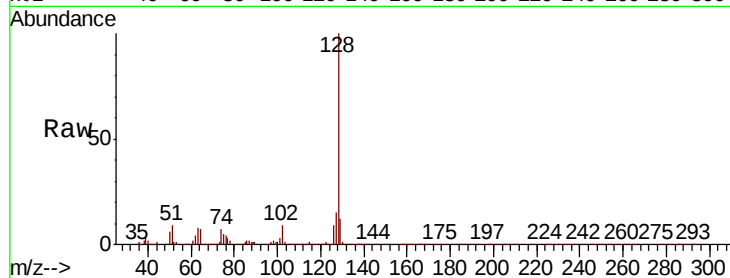
Tot Ion:128 Resp: 97947

Ion Ratio Lower Upper

128 100

127 14.6 11.8 17.6

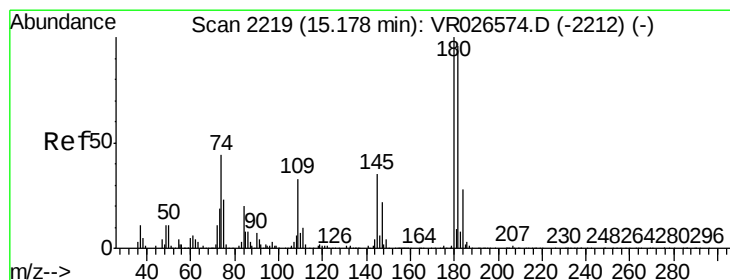
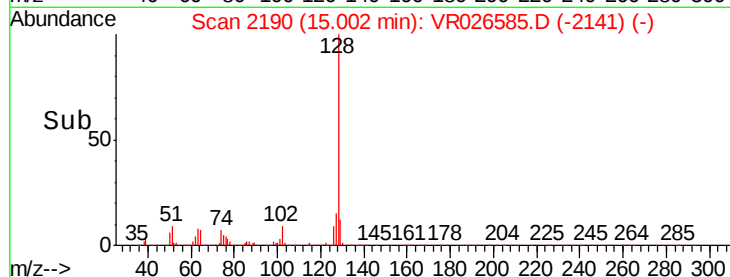
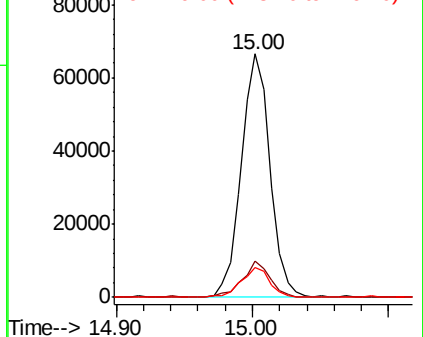
129 12.4 9.3 13.9



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: 5.275 ug/L

RT: 15.18 min Scan# 2220

Delta R.T. 0.01 min

Lab File: VR026585.D

Acq: 12 Apr 2019 00:32

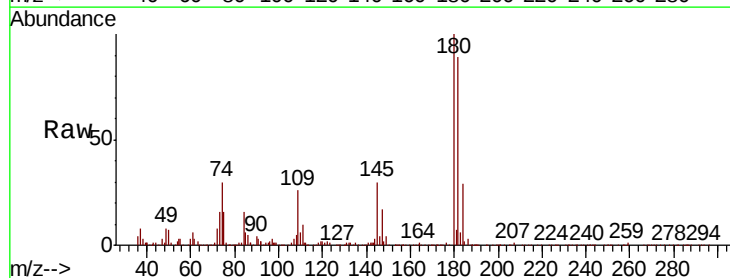
Tgt Ion:180 Resp: 85976

Ion Ratio Lower Upper

180 100

182 93.2 74.8 112.2

145 34.0 27.6 41.4



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

