

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW120718\  
 Data File : VW007311.D  
 Acq On : 07 Dec 2018 16:05  
 Operator : SY/AP  
 Sample : VSTDICV025  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VICV97

Quant Time: Dec 08 01:54:02 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM120718S.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Dec 07 16:03:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.84  | 114  | 141492   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 117420   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 58963    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.35   | 65    | 26621    | 28.89    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 115.56% |
| 7) Chloroethane-d5             | 2.89   | 69    | 20032    | 25.66    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 102.64% |
| 10) 1,1-Dichloroethene-d2      | 4.01   | 63    | 82099    | 25.83    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 103.32% |
| 20) 2-Butanone-d5              | 7.07   | 46    | 30218    | 52.02    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 104.04% |
| 24) Chloroform-d               | 7.65   | 84    | 82356    | 24.68    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 98.72%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 46446    | 24.45    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 97.80%  |
| 29) Benzene-d6                 | 8.27   | 84    | 162143   | 25.42    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 101.68% |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 45221    | 24.85    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 99.40%  |
| 37) Toluene-d8                 | 10.32  | 98    | 154622   | 25.86    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 103.44% |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 23653    | 25.42    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 101.68% |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 22318    | 50.94    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 101.88% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 42429    | 25.59    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 102.36% |
| 61) 1,2-Dichlorobenzene-d4     | 13.86  | 152   | 53593    | 25.84    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 103.36% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|--------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 2.01 | 85   | 33272    | 21.532 | ug/L   | 100    |
| 3) Chloromethane               | 2.22 | 50   | 29987    | 24.242 | ug/L   | 97     |
| 5) Vinyl chloride              | 2.37 | 62   | 31103    | 26.652 | ug/L   | 99     |
| 6) Bromomethane                | 2.78 | 94   | 19822    | 24.556 | ug/L   | 99     |
| 8) Chloroethane                | 2.92 | 64   | 17271    | 24.585 | ug/L   | 96     |
| 9) Trichlorofluoromethane      | 3.26 | 101  | 30140    | 22.499 | ug/L   | 99     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101  | 40545    | 22.704 | ug/L   | 98     |
| 12) 1,1-Dichloroethene         | 4.03 | 96   | 41063    | 24.712 | ug/L   | 97     |
| 13) Acetone                    | 4.12 | 43   | 28024    | 41.486 | ug/L   | 100    |
| 14) Carbon disulfide           | 4.37 | 76   | 123107   | 25.374 | ug/L   | 99     |
| 15) Methyl Acetate             | 4.67 | 43   | 24238    | 23.929 | ug/L # | 89     |
| 16) Methylene chloride         | 4.90 | 84   | 45452    | 19.881 | ug/L   | 99     |
| 17) Methyl tert-butyl Ether    | 5.43 | 73   | 66549    | 24.630 | ug/L # | 88     |
| 18) trans-1,2-Dichloroethene   | 5.42 | 96   | 42834    | 24.028 | ug/L   | 96     |
| 19) 1,1-Dichloroethane         | 6.21 | 63   | 74065    | 24.374 | ug/L   | 96     |
| 21) 2-Butanone                 | 7.17 | 43   | 34558    | 47.598 | ug/L   | 99     |
| 22) cis-1,2-Dichloroethene     | 7.17 | 96   | 47230    | 24.076 | ug/L   | 99     |

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 ClientSampleId :  
 VICV97

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 Quant Title : VOC Analysis  
 QLast Update : Fri Dec 07 16:03:25 2018  
 Response via : Initial Calibration

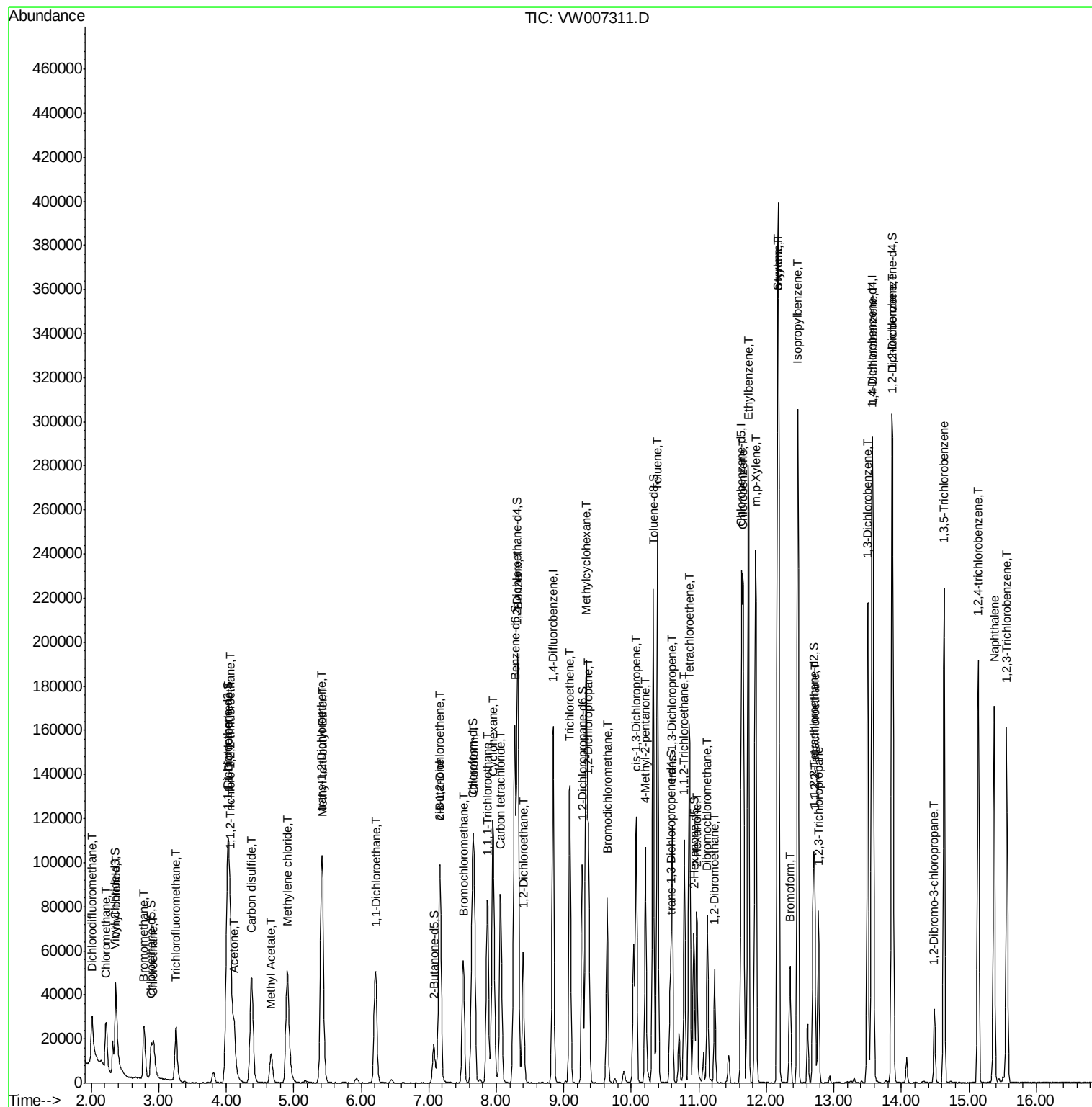
| Internal Standards              | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|---------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane          | 7.51  | 128  | 21656    | 24.216 | ug/L   | 99       |
| 25) Chloroform                  | 7.67  | 83   | 80364    | 24.443 | ug/L   | 99       |
| 27) 1,2-Dichloroethane          | 8.40  | 62   | 56368    | 23.983 | ug/L   | 97       |
| 30) Cyclohexane                 | 7.95  | 56   | 70059    | 24.871 | ug/L   | 99       |
| 31) 1,1,1-Trichloroethane       | 7.87  | 97   | 70046    | 25.346 | ug/L   | 100      |
| 32) Carbon tetrachloride        | 8.06  | 117  | 67314    | 25.205 | ug/L   | 98       |
| 34) Benzene                     | 8.32  | 78   | 167706   | 24.918 | ug/L   | 100      |
| 35) Trichloroethene             | 9.09  | 95   | 48618    | 25.191 | ug/L   | 98       |
| 36) Methylcyclohexane           | 9.34  | 83   | 82619    | 24.798 | ug/L   | 100      |
| 40) 1,2-Dichloropropane         | 9.37  | 63   | 40782    | 24.771 | ug/L   | 100      |
| 41) Bromodichloromethane        | 9.64  | 83   | 57671    | 24.396 | ug/L   | 95       |
| 42) cis-1,3-Dichloropropene     | 10.07 | 75   | 69534    | 25.149 | ug/L   | 94       |
| 43) 4-Methyl-2-pentanone        | 10.21 | 43   | 67087    | 51.483 | ug/L   | 99       |
| 44) Toluene                     | 10.39 | 91   | 183799   | 25.336 | ug/L   | 94       |
| 45) trans-1,3-Dichloropropene   | 10.60 | 75   | 61015    | 25.129 | ug/L   | 100      |
| 46) 1,1,2-Trichloroethane       | 10.79 | 97   | 33922    | 25.023 | ug/L   | 94       |
| 47) Tetrachloroethene           | 10.86 | 164  | 34680    | 23.788 | ug/L   | 93       |
| 49) 2-Hexanone                  | 10.97 | 43   | 48505    | 52.962 | ug/L   | 94       |
| 50) Dibromochloromethane        | 11.13 | 129  | 42004    | 25.222 | ug/L   | 93       |
| 51) 1,2-Dibromoethane           | 11.24 | 107  | 34060    | 25.017 | ug/L # | 100      |
| 52) Chlorobenzene               | 11.66 | 112  | 114670   | 24.356 | ug/L   | 93       |
| 53) Ethylbenzene                | 11.73 | 91   | 199969   | 24.514 | ug/L   | 91       |
| 54) m,p-Xylene                  | 11.84 | 106  | 76891    | 24.814 | ug/L   | 78       |
| 55) o-xylene                    | 12.17 | 106  | 72635    | 24.804 | ug/L   | 98       |
| 56) Styrene                     | 12.18 | 104  | 127408   | 25.382 | ug/L   | 100      |
| 57) Isopropylbenzene            | 12.46 | 105  | 206166   | 25.225 | ug/L   | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 12.72 | 83   | 41543    | 24.720 | ug/L # | 97       |
| 59) 1,2,3-Trichloropropane      | 12.77 | 75   | 32495    | 24.428 | ug/L   | 99       |
| 62) Bromoform                   | 12.35 | 173  | 25068    | 24.826 | ug/L   | 99       |
| 63) 1,3-Dichlorobenzene         | 13.51 | 146  | 91309    | 24.105 | ug/L   | 96       |
| 64) 1,4-Dichlorobenzene         | 13.58 | 146  | 93821    | 24.845 | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene         | 13.88 | 146  | 83847    | 24.733 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 14.49 | 75   | 9194     | 25.606 | ug/L   | 97       |
| 67) 1,3,5-Trichlorobenzene      | 14.63 | 180  | 69775    | 25.429 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene      | 15.14 | 180  | 61905    | 26.168 | ug/L   | 94       |
| 69) Naphthalene                 | 15.38 | 128  | 152291   | 26.044 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene      | 15.57 | 180  | 54863    | 25.509 | ug/L   | 99       |

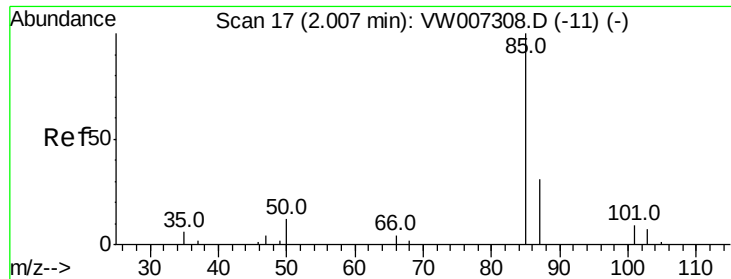
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : VOC Analysis  
QLast Update : Fri Dec 07 16:03:25 2018  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 21.532 ug/L

RT: 2.01 min Scan# 17

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

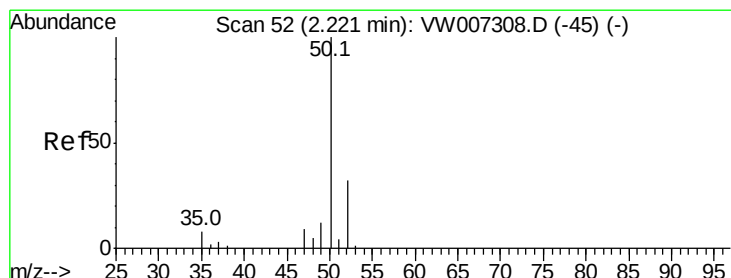
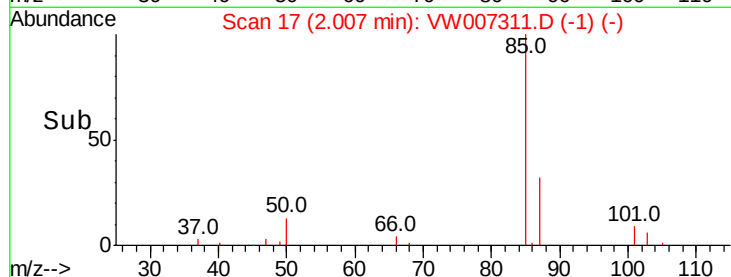
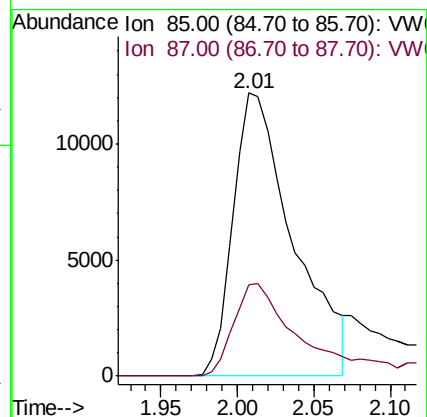
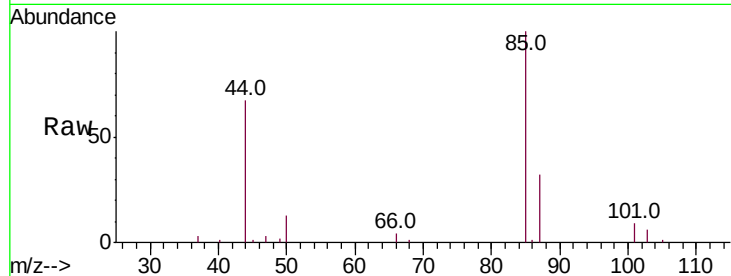
VICV97

Tot Ion: 85 Resp: 33272

Ion Ratio Lower Upper

85 100

87 33.0 23.2 43.0



#3

Chloromethane

Concen: 24.242 ug/L

RT: 2.22 min Scan# 52

Delta R.T. -0.00 min

Lab File: VW007311.D

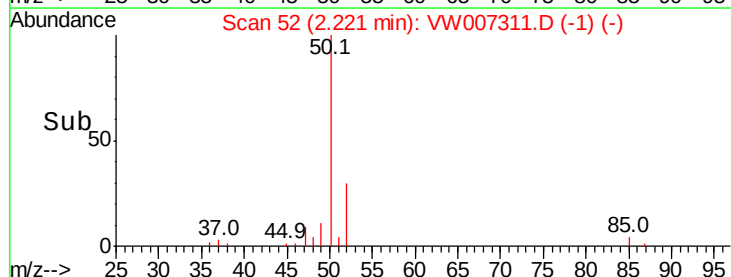
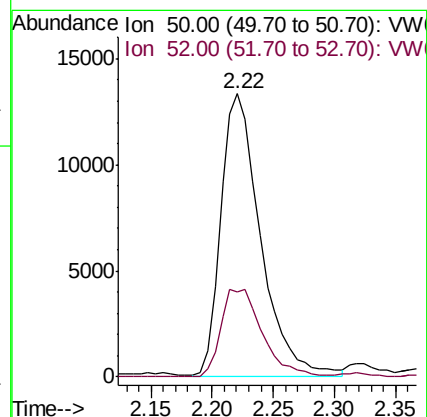
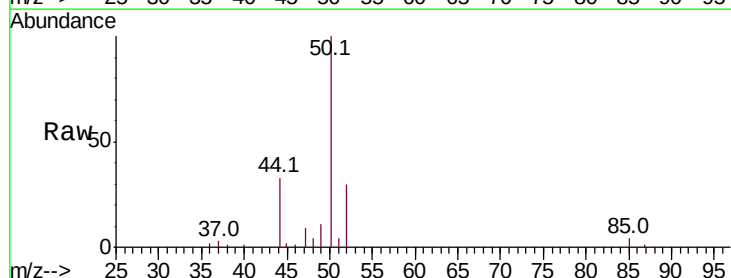
Acq: 07 Dec 2018 16:05

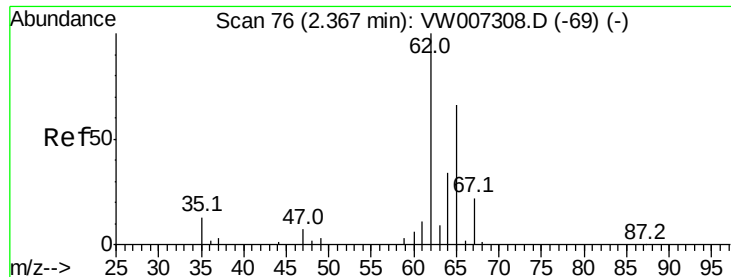
Tgt Ion: 50 Resp: 29987

Ion Ratio Lower Upper

50 100

52 30.0 22.2 41.2





#5

Vinyl chloride

Concen: 26.652 ug/L

RT: 2.37 min Scan# 76

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampled :

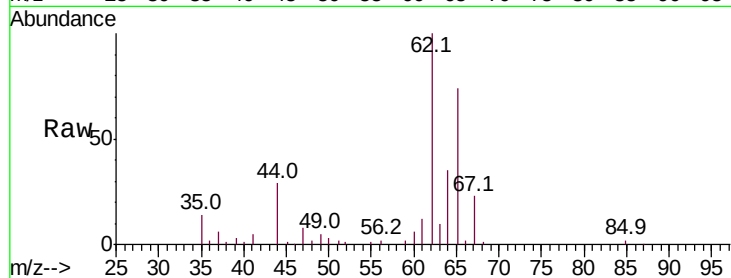
VICV97

Tot Ion: 62 Resp: 31103

Ion Ratio Lower Upper

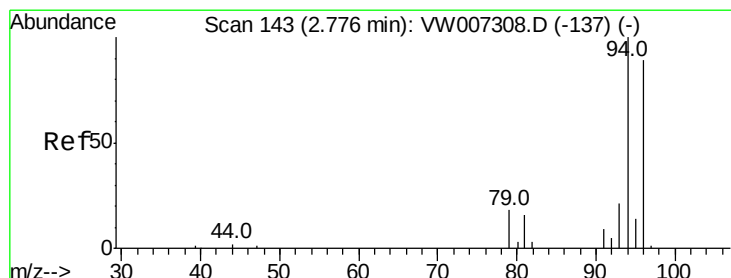
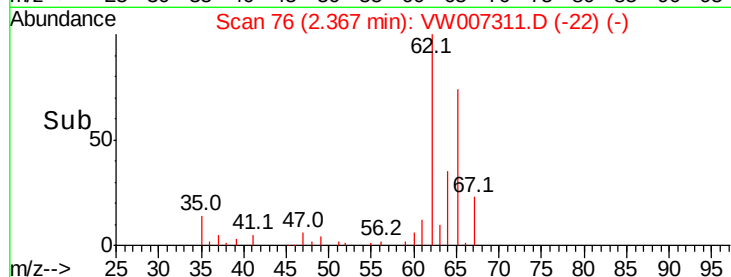
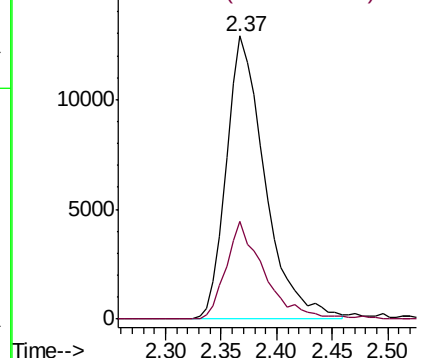
62 100

64 34.6 23.9 44.3



Abundance Ion 62.00 (61.70 to 62.70): VW

Ion 64.00 (63.70 to 64.70): VW



#6

Bromomethane

Concen: 24.556 ug/L

RT: 2.78 min Scan# 144

Delta R.T. 0.01 min

Lab File: VW007311.D

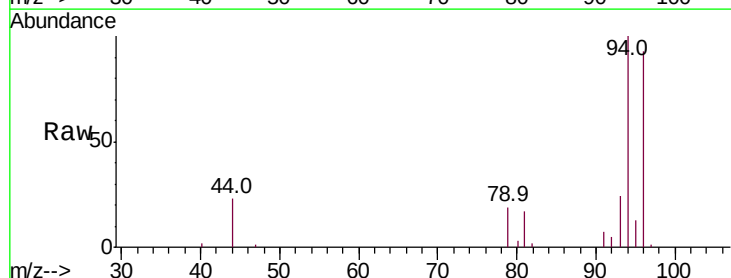
Acq: 07 Dec 2018 16:05

Tgt Ion: 94 Resp: 19822

Ion Ratio Lower Upper

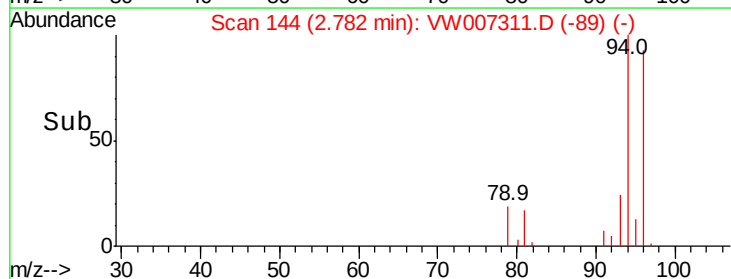
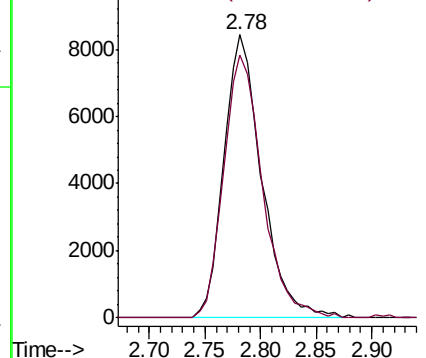
94 100

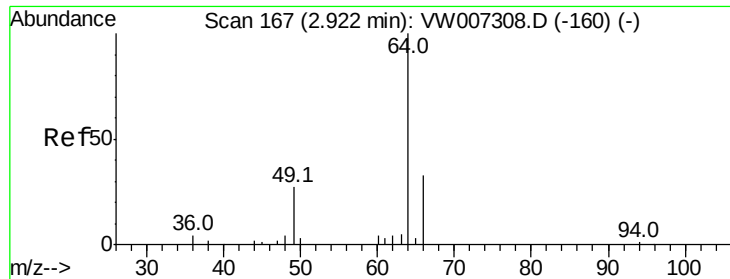
96 95.2 9.6 181.8



Abundance Ion 94.00 (93.70 to 94.70): VW

Ion 96.00 (95.70 to 96.70): VW





#8

Chloroethane

Concen: 24.585 ug/L

RT: 2.92 min Scan# 167

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

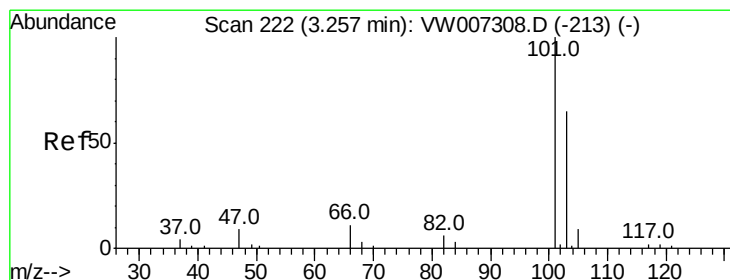
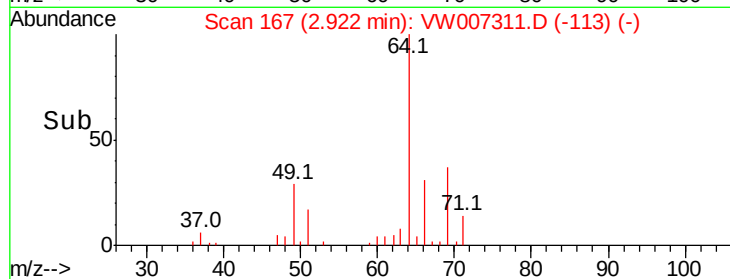
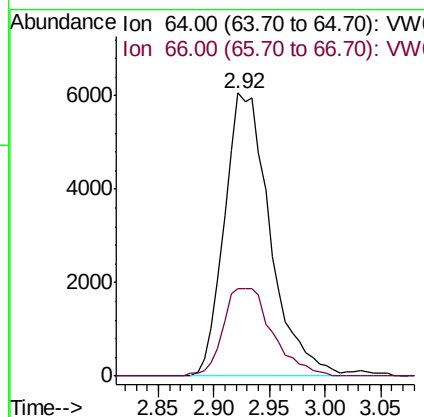
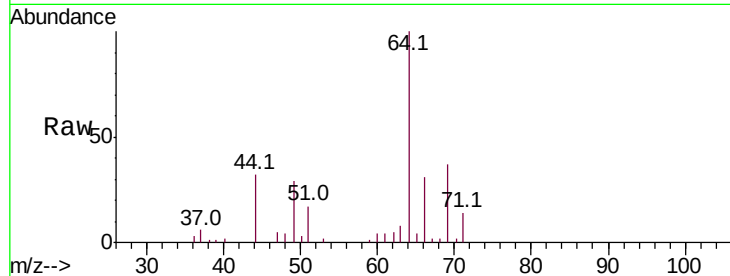
VICV97

Tot Ion: 64 Resp: 17271

Ion Ratio Lower Upper

64 100

66 30.7 23.2 43.2



#9

Trichlorofluoromethane

Concen: 22.499 ug/L

RT: 3.26 min Scan# 222

Delta R.T. -0.00 min

Lab File: VW007311.D

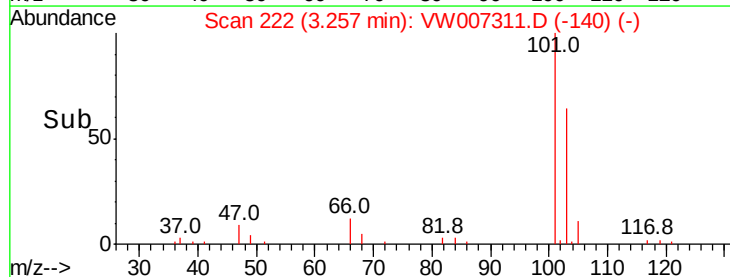
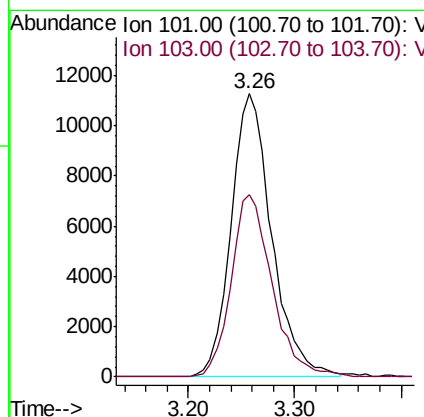
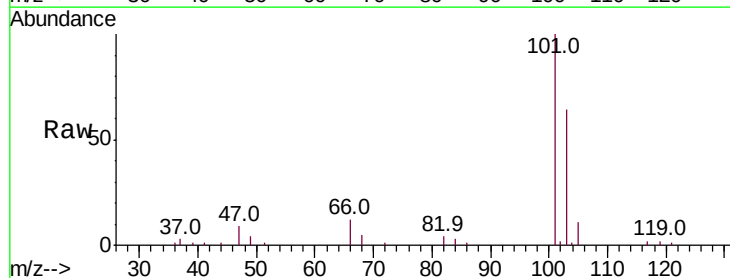
Acq: 07 Dec 2018 16:05

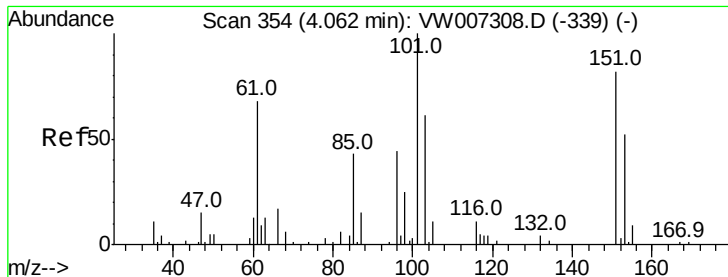
Tgt Ion:101 Resp: 30140

Ion Ratio Lower Upper

101 100

103 64.7 44.7 82.9





#11

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

Concen: 22.704 ug/L

RT: 4.06 min Scan# 354

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampled :

VICV97

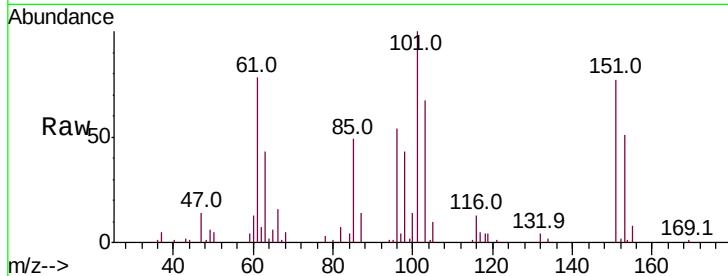
Tot Ion:101 Resp: 40545

Ion Ratio Lower Upper

101 100

85 46.1 35.4 53.2

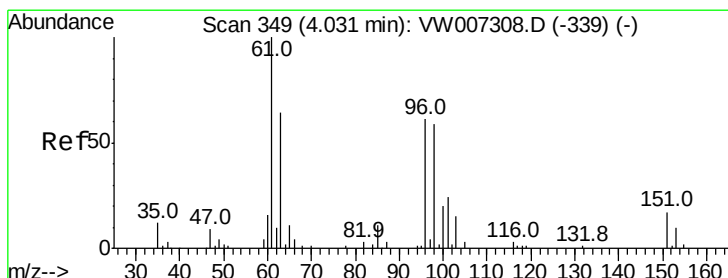
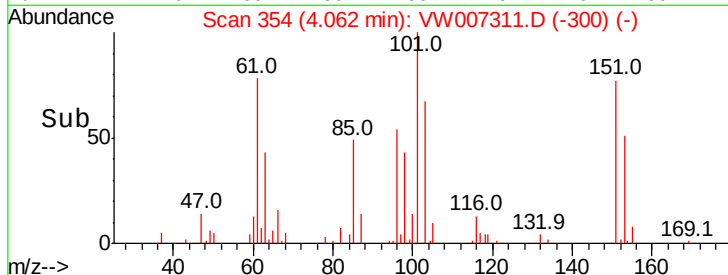
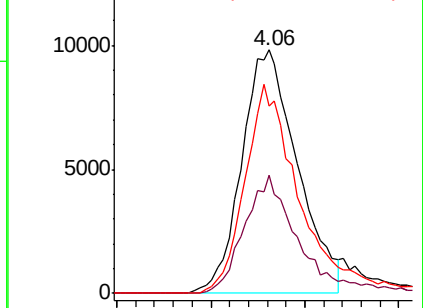
151 82.8 64.8 97.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VW

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 24.712 ug/L

RT: 4.03 min Scan# 349

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

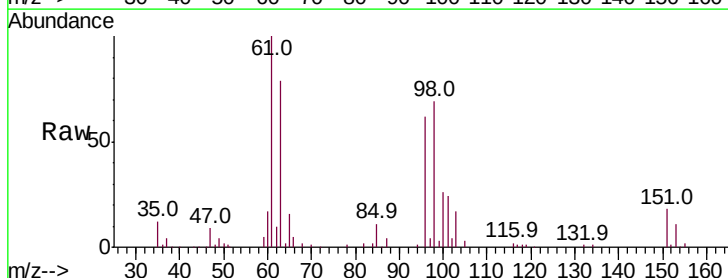
Tgt Ion: 96 Resp: 41063

Ion Ratio Lower Upper

96 100

61 161.5 117.2 217.8

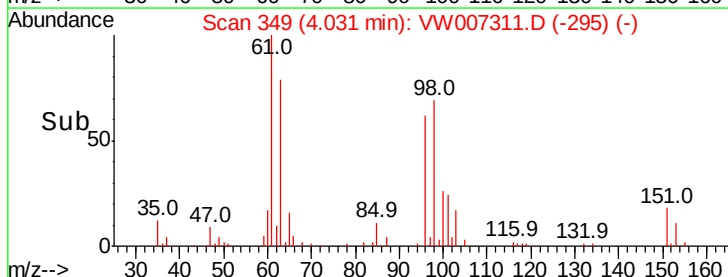
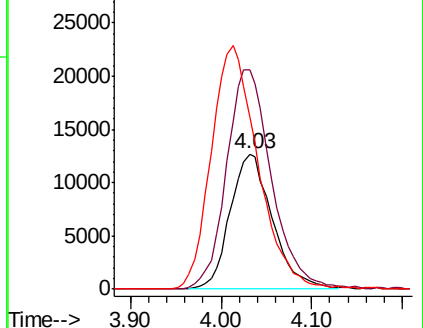
63 127.2 89.7 166.7

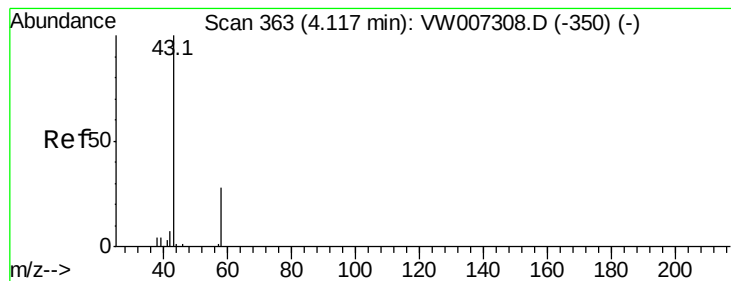


Abundance Ion 96.00 (95.70 to 96.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 63.00 (62.70 to 63.70): VW





#13

Acetone

Concen: 41.486 ug/L

RT: 4.12 min Scan# 363

Delta R.T. -0.00 min

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Instrument :

MSVOA\_W

ClientSampleId :

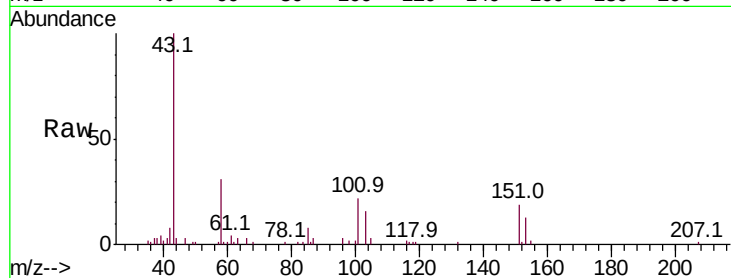
VICV97

Tot Ion: 43 Resp: 28024

Ion Ratio Lower Upper

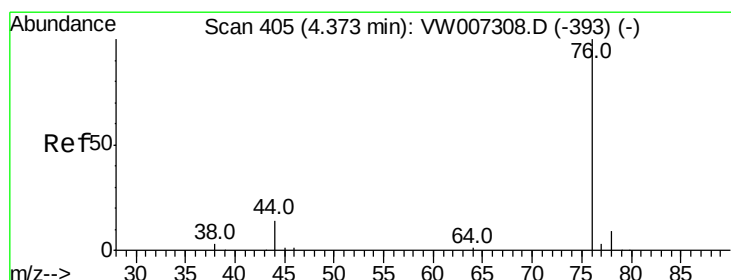
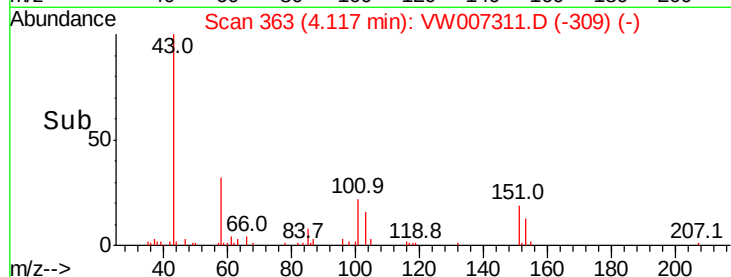
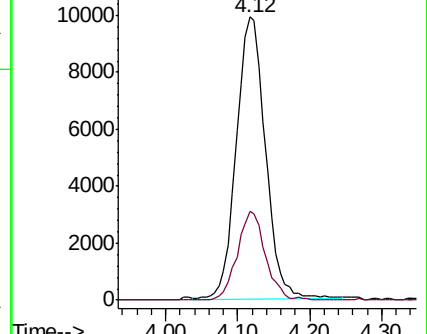
43 100

58 29.8 0.0 59.2



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#14

Carbon disulfide

Concen: 25.374 ug/L

RT: 4.37 min Scan# 405

Delta R.T. -0.00 min

Lab File: VW007311.D

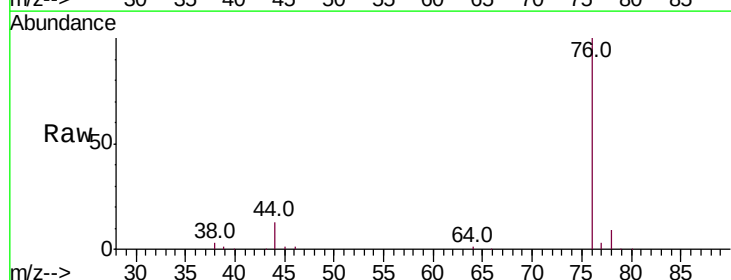
Acq: 07 Dec 2018 16:05

Tgt Ion: 76 Resp: 123107

Ion Ratio Lower Upper

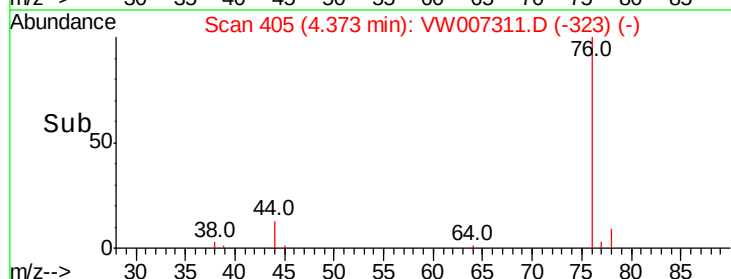
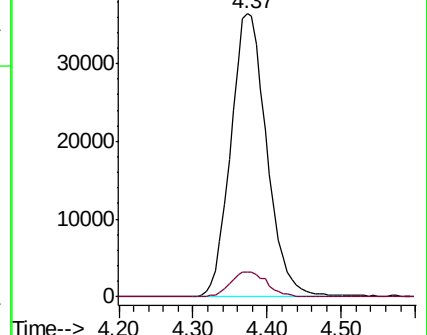
76 100

78 8.6 7.3 10.9

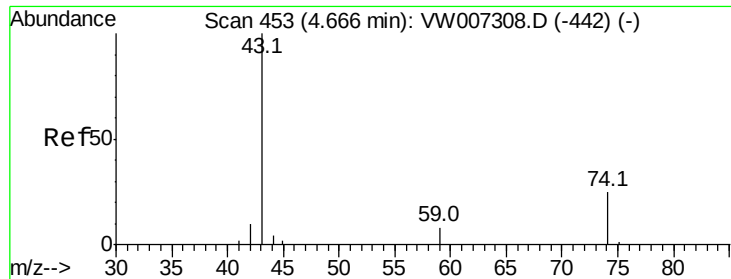


Abundance Ion 76.00 (75.70 to 76.70): VW

Ion 78.00 (77.70 to 78.70): VW







#15

Methvl Acetate

Concen: 23.929 ug/L

RT: 4.67 min Scan# 453

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

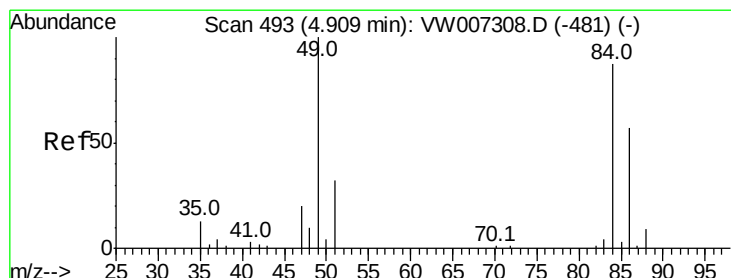
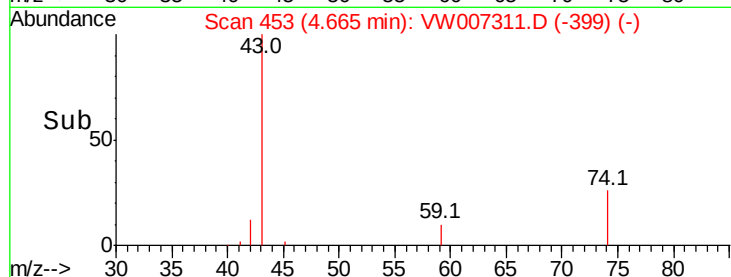
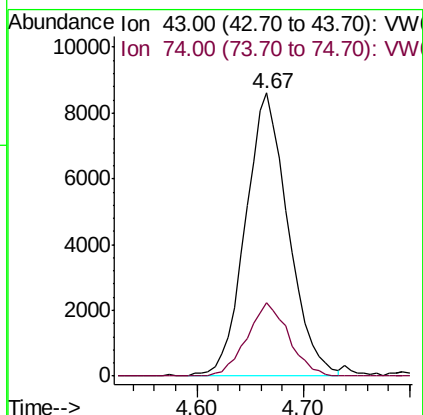
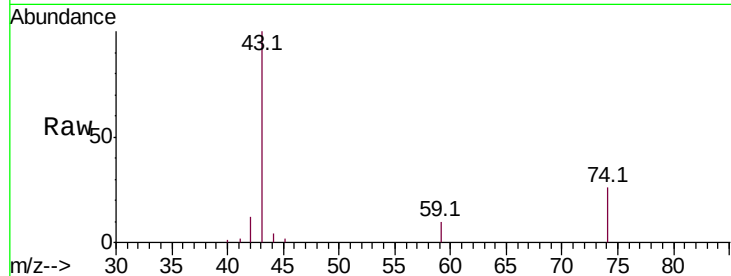
VICV97

Tot Ion: 43 Resp: 24238

Ion Ratio Lower Upper

43 100

74 25.1 0.1 0.1#



#16

Methylene chloride

Concen: 19.881 ug/L

RT: 4.90 min Scan# 492

Delta R.T. -0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

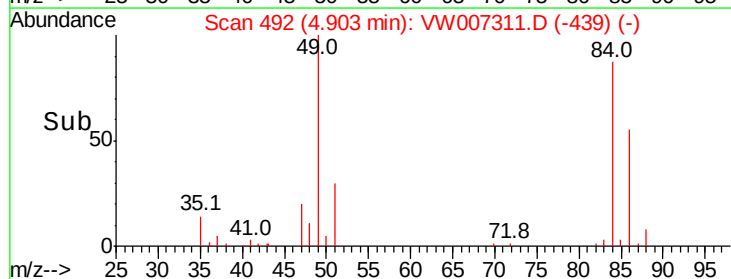
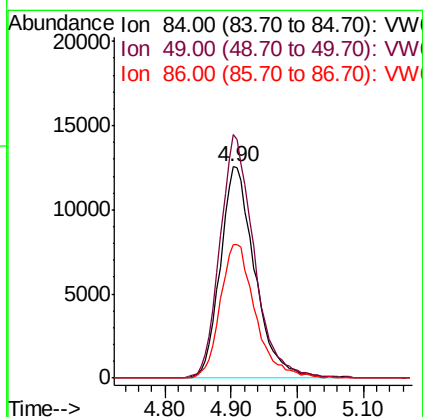
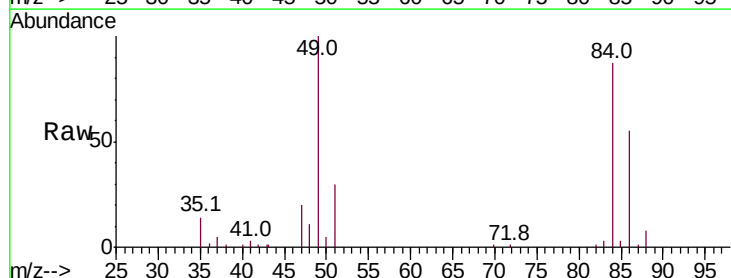
Tgt Ion: 84 Resp: 45452

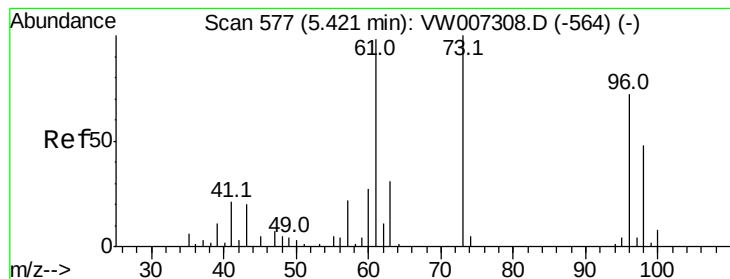
Ion Ratio Lower Upper

84 100

49 115.1 80.8 150.2

86 63.1 45.8 85.2





#17

Methyl tert-butyl Ether

Concen: 24.630 ug/L

RT: 5.43 min Scan# 578

Delta R.T. 0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

VICV97

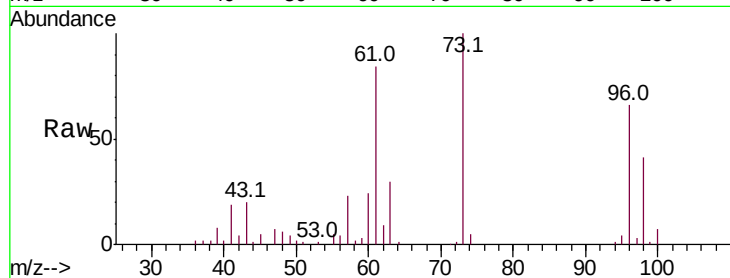
Tot Ion: 73 Resp: 66549

Ion Ratio Lower Upper

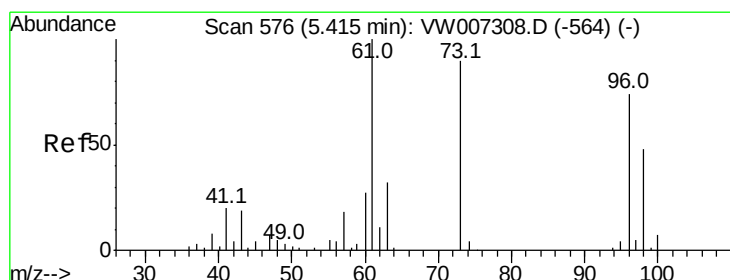
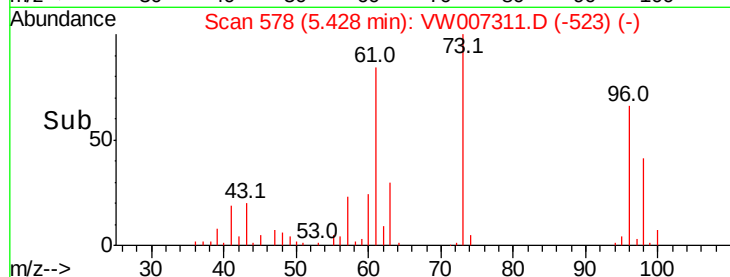
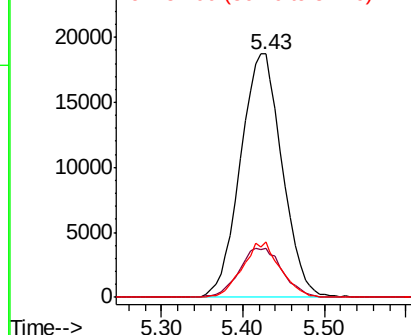
73 100

43 11.2 17.3 25.9#

57 20.7 17.0 25.6



Abundance Ion 73.00 (72.70 to 73.70): VW  
Ion 43.00 (42.70 to 43.70): VW  
Ion 57.00 (56.70 to 57.70): VW



#18

trans-1,2-Dichloroethene

Concen: 24.028 ug/L

RT: 5.42 min Scan# 576

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

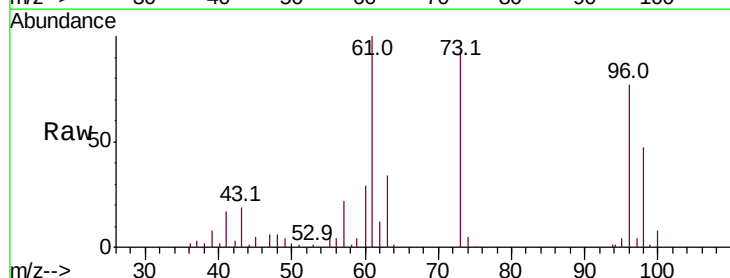
Tgt Ion: 96 Resp: 42834

Ion Ratio Lower Upper

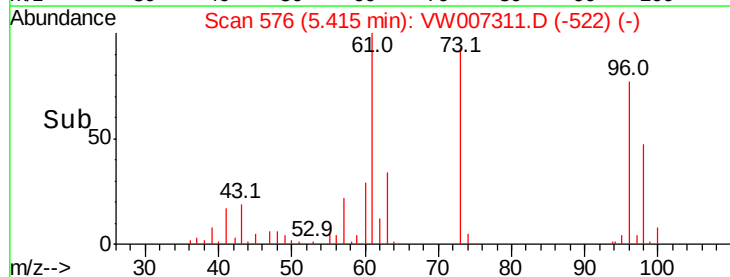
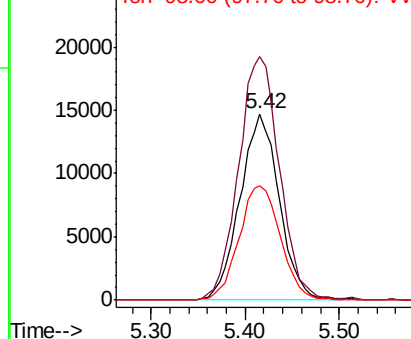
96 100

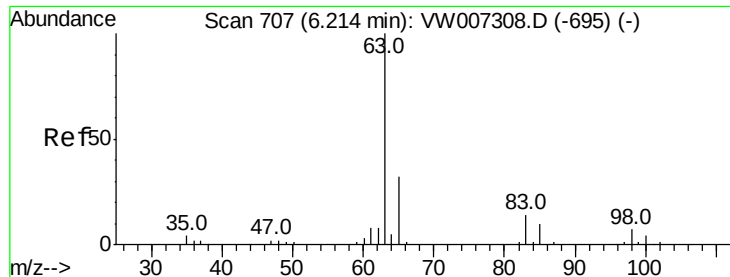
61 130.6 94.6 175.8

98 61.5 45.1 83.7



Abundance Ion 96.00 (95.70 to 96.70): VW  
Ion 61.00 (60.70 to 61.70): VW  
Ion 98.00 (97.70 to 98.70): VW

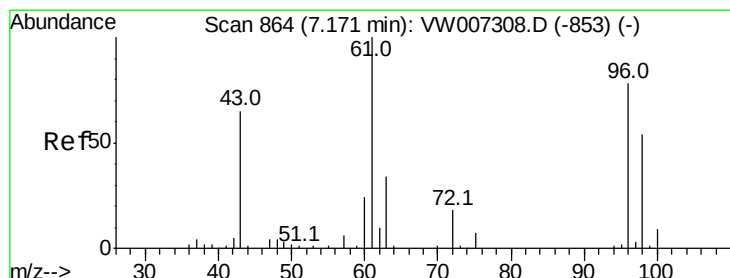
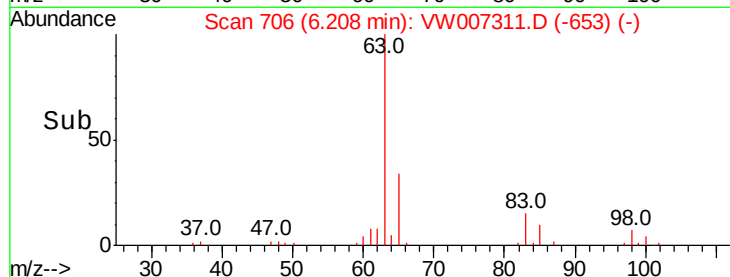
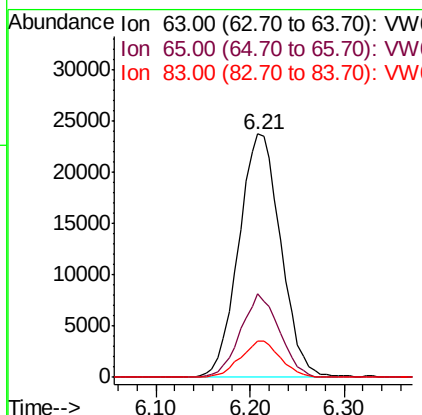
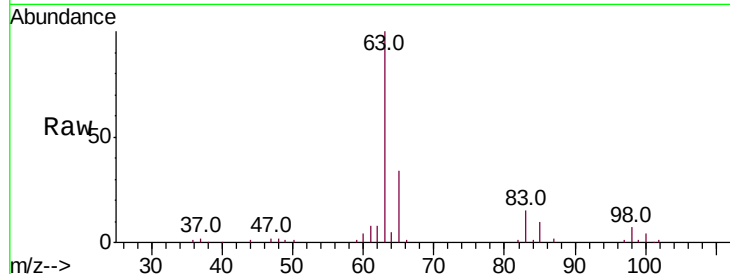




#19  
 1,1-Dichloroethane  
 Concen: 24.374 ug/L  
 RT: 6.21 min Scan# 706  
 Delta R.T. -0.01 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

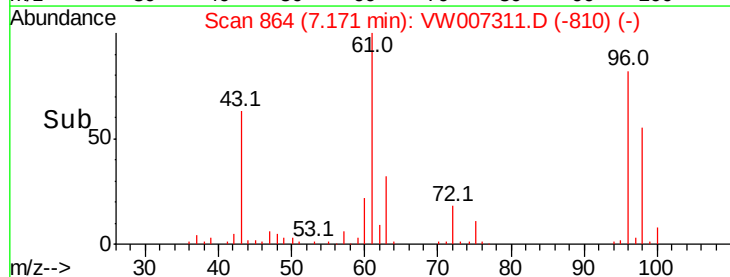
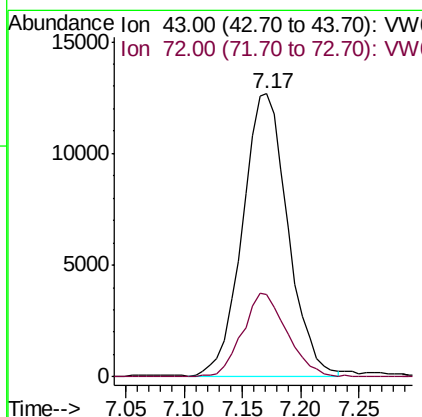
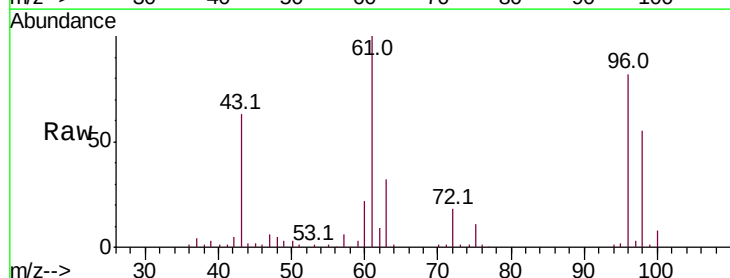
Instrument :  
 MSVOA\_W  
 ClientSampled :  
 VICV97

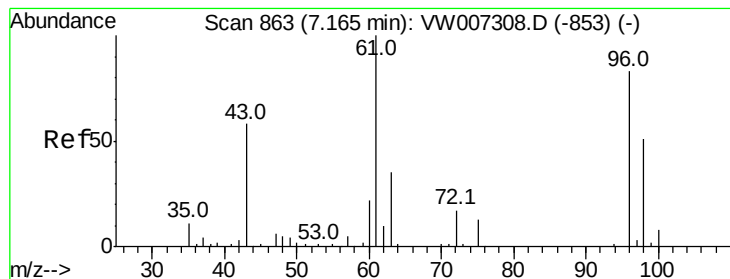
Tot Ion: 63 Resp: 74065  
 Ion Ratio Lower Upper  
 63 100  
 65 34.2 22.1 41.1  
 83 15.1 9.8 18.2



#21  
 2-Butanone  
 Concen: 47.598 ug/L  
 RT: 7.17 min Scan# 864  
 Delta R.T. -0.00 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

Tgt Ion: 43 Resp: 34558  
 Ion Ratio Lower Upper  
 43 100  
 72 28.9 14.7 44.1



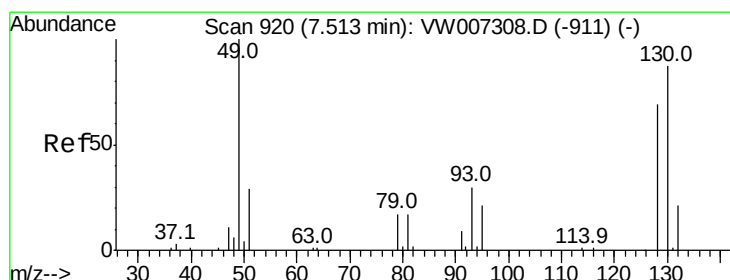
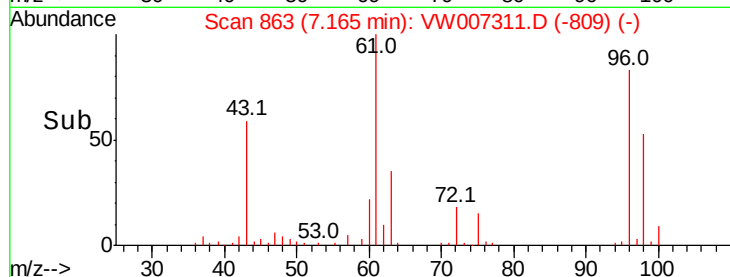
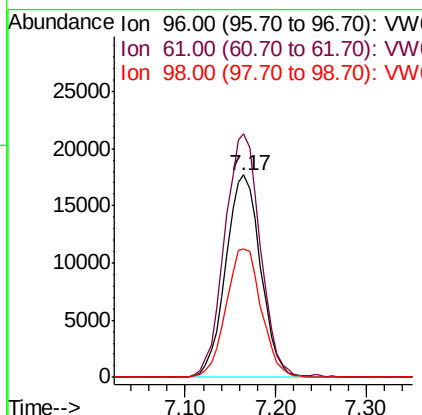
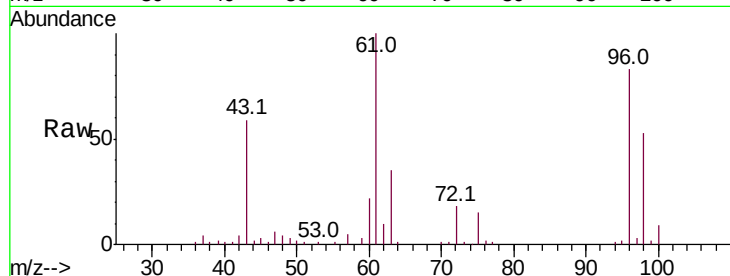


#22

cis-1,2-Dichloroethene  
Concen: 24.076 ug/L  
RT: 7.17 min Scan# 863  
Delta R.T. -0.00 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

Instrument :  
MSVOA\_W  
ClientSampled :  
VICV97

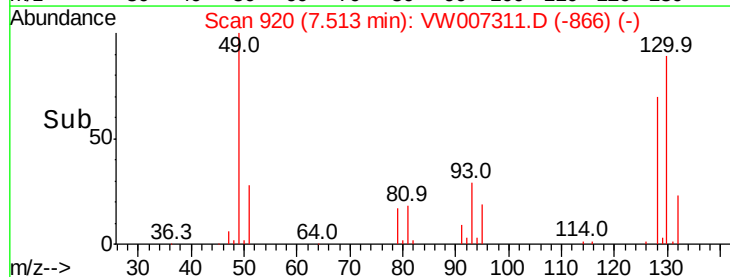
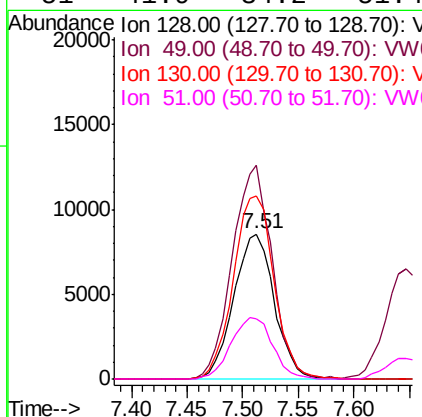
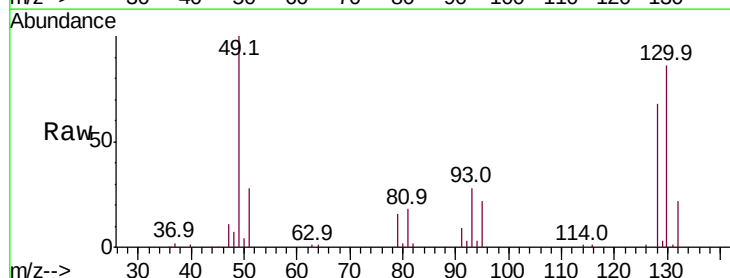
Tot Ion: 96 Resp: 47230  
Ion Ratio Lower Upper  
96 100  
61 120.2 84.6 157.2  
98 63.2 42.9 79.7

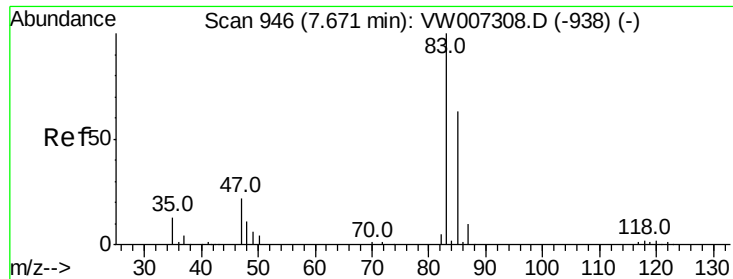


#23

Bromochloromethane  
Concen: 24.216 ug/L  
RT: 7.51 min Scan# 920  
Delta R.T. -0.00 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

Tgt Ion:128 Resp: 21656  
Ion Ratio Lower Upper  
128 100  
49 147.5 102.3 190.1  
130 126.8 88.0 163.4  
51 41.9 34.2 51.4

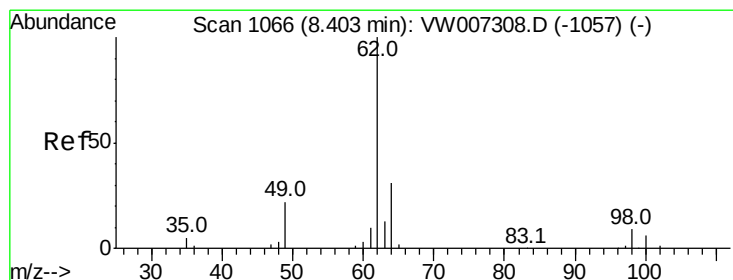
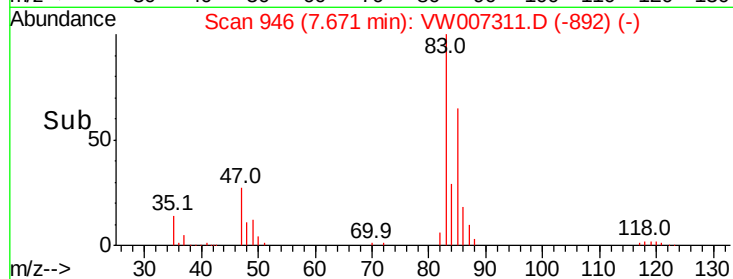
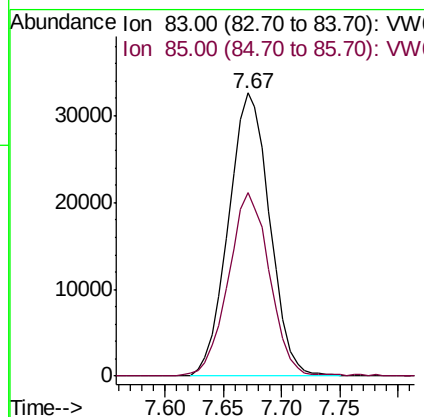
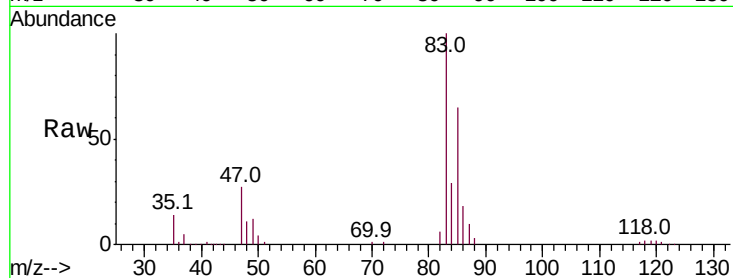




#25  
Chloroform  
Concen: 24.443 ug/L  
RT: 7.67 min Scan# 946  
Delta R.T. -0.00 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

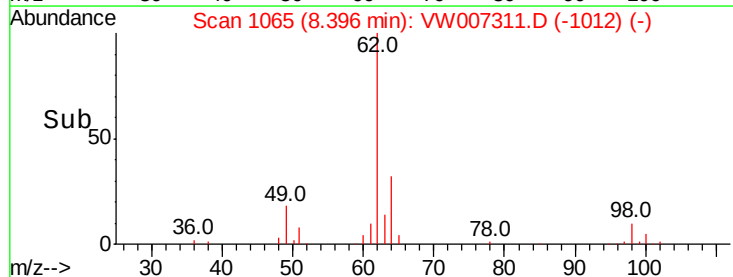
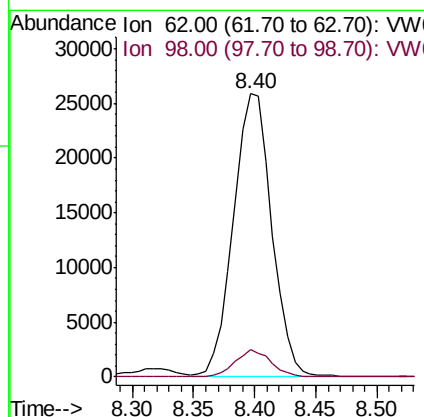
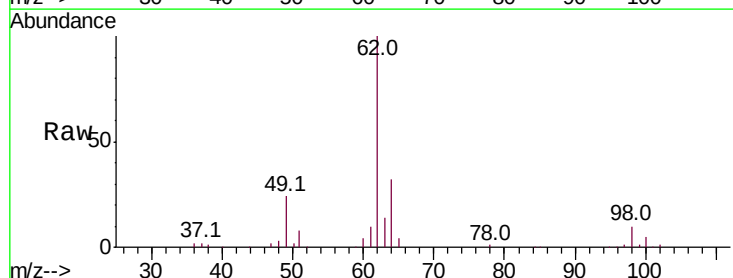
Instrument :  
MSVOA\_W  
ClientSampleId :  
VICV97

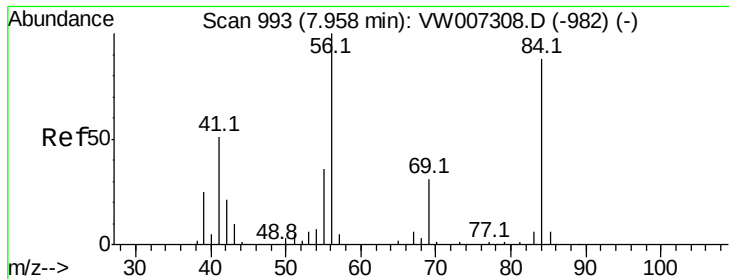
Tot Ion: 83 Resp: 80364  
Ion Ratio Lower Upper  
83 100  
85 64.9 46.0 85.4



#27  
1,2-Dichloroethane  
Concen: 23.983 ug/L  
RT: 8.40 min Scan# 1065  
Delta R.T. -0.01 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

Tgt Ion: 62 Resp: 56368  
Ion Ratio Lower Upper  
62 100  
98 9.5 6.9 10.3





#30

Cyclohexane

Concen: 24.871 ug/L

RT: 7.95 min Scan# 992

Delta R.T. -0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

VICV97

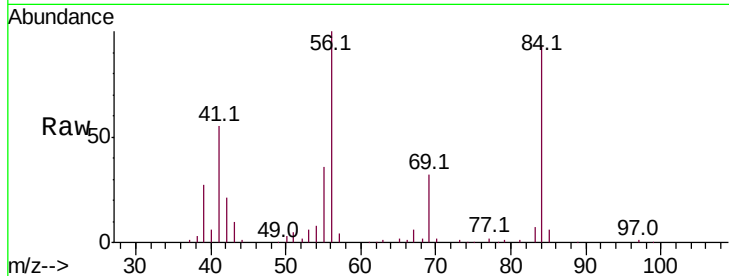
Tot Ion: 56 Resp: 70059

Ion Ratio Lower Upper

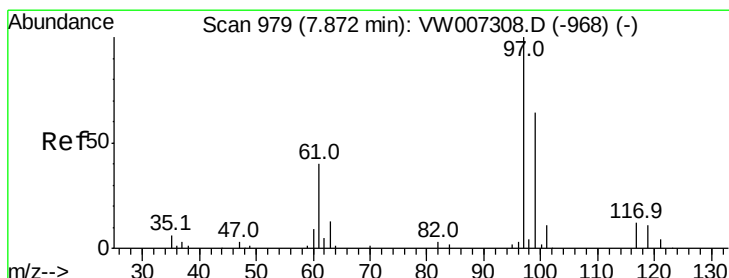
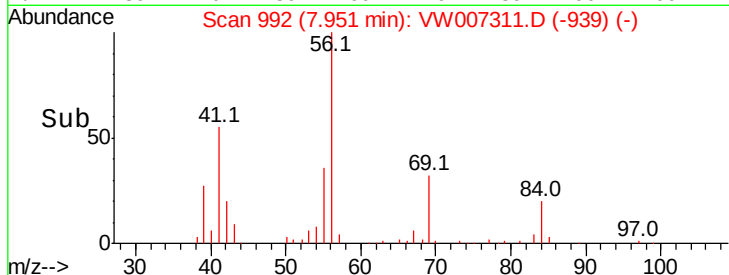
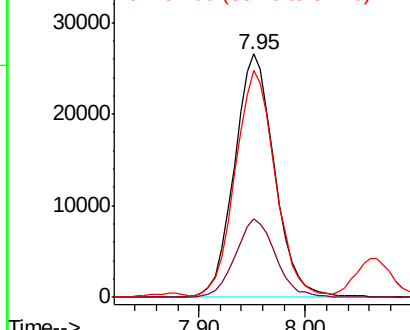
56 100

69 32.3 26.0 39.0

84 93.5 73.6 110.4



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



#31

1,1,1-Trichloroethane

Concen: 25.346 ug/L

RT: 7.87 min Scan# 978

Delta R.T. -0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

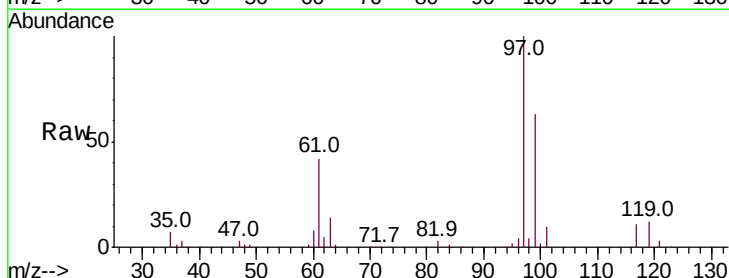
Tgt Ion: 97 Resp: 70046

Ion Ratio Lower Upper

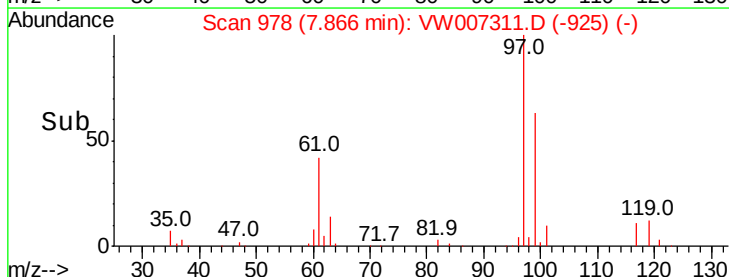
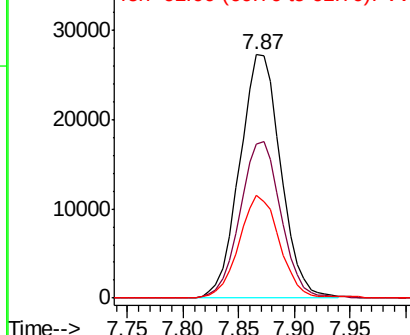
97 100

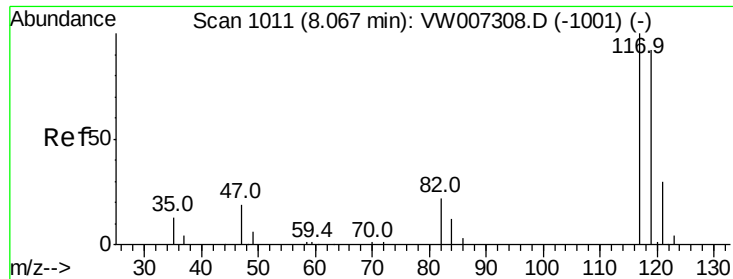
99 64.0 51.3 76.9

61 41.4 33.2 49.8



Abundance Ion 97.00 (96.70 to 97.70): VW  
Ion 99.00 (98.70 to 99.70): VW  
Ion 61.00 (60.70 to 61.70): VW





#32

Carbon tetrachloride

Concen: 25.205 ug/L

RT: 8.06 min Scan# 1010

Delta R.T. -0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

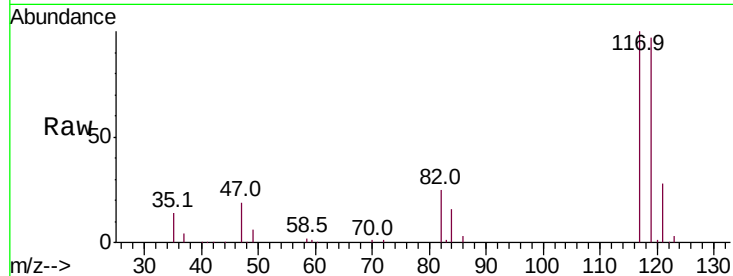
VICV97

Tot Ion:117 Resp: 67314

Ion Ratio Lower Upper

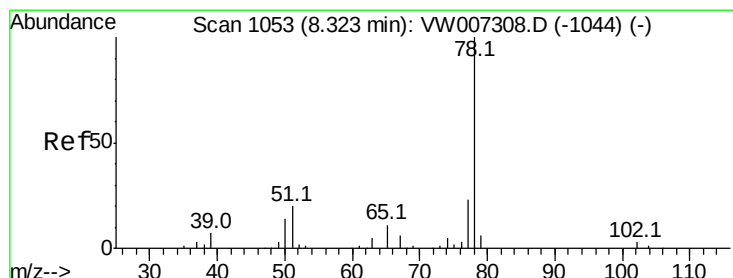
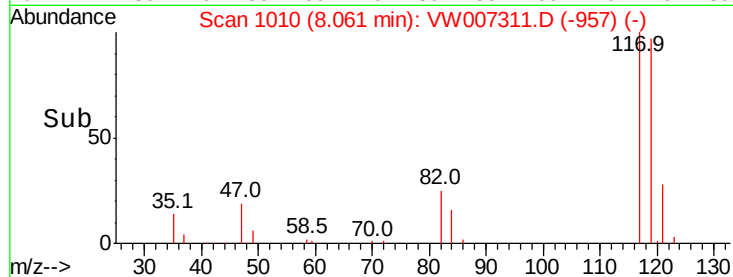
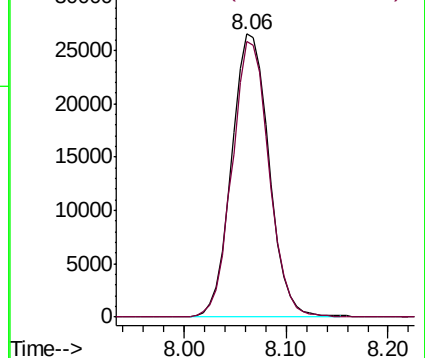
117 100

119 96.0 75.3 112.9



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 24.918 ug/L

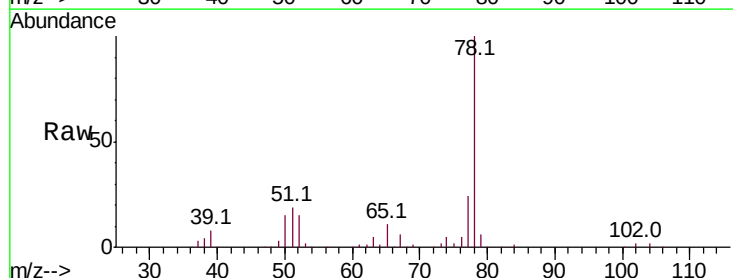
RT: 8.32 min Scan# 1053

Delta R.T. -0.00 min

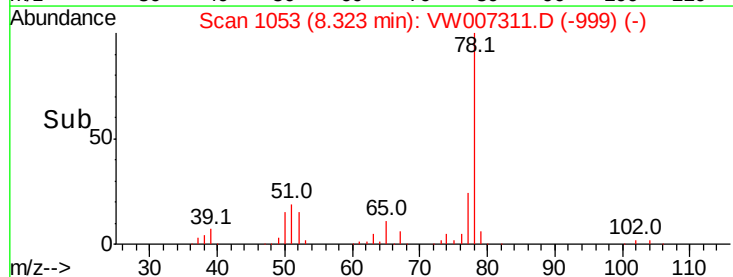
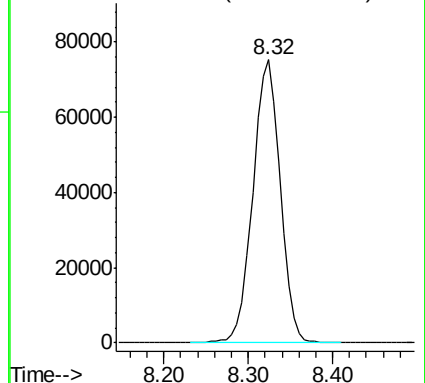
Lab File: VW007311.D

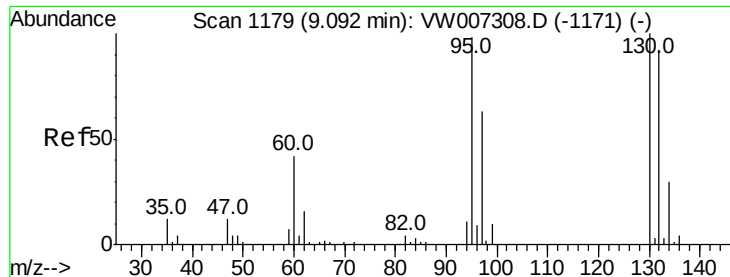
Acq: 07 Dec 2018 16:05

Tgt Ion: 78 Resp: 167706



Abundance Ion 78.00 (77.70 to 78.70): VW





#35

Trichloroethene

Concen: 25.191 ug/L

RT: 9.09 min Scan# 1179

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampled :

VICV97

Tot Ion: 95 Resp: 48618

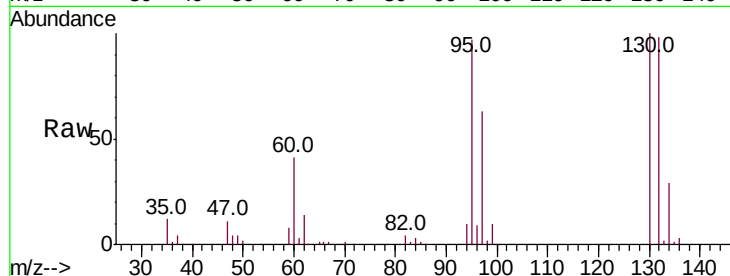
Ion Ratio Lower Upper

95 100

97 63.0 45.8 85.0

132 96.7 68.0 126.4

130 98.7 71.6 133.0

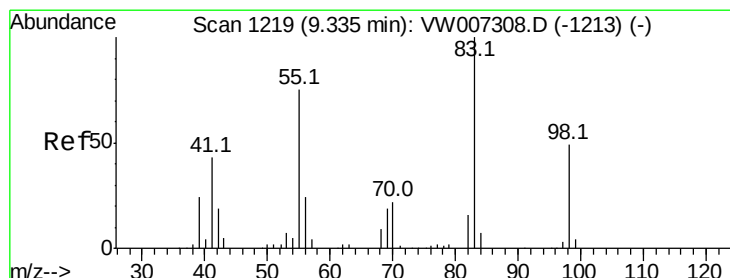
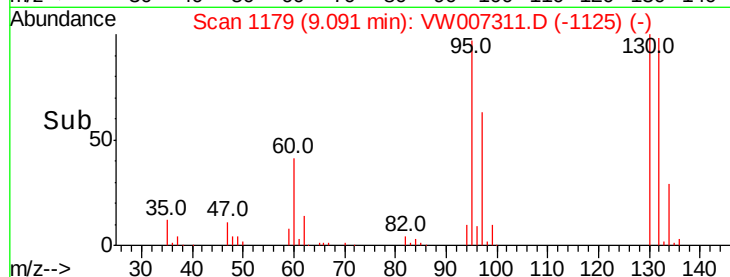
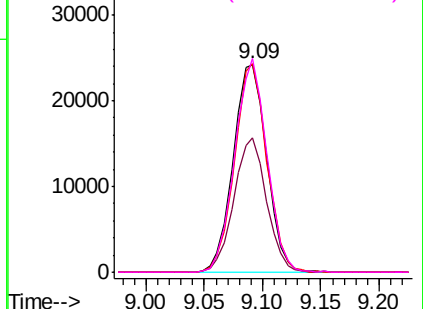


Abundance Ion 95.00 (94.70 to 95.70): VW

Ion 97.00 (96.70 to 97.70): VW

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V



#36

Methylcyclohexane

Concen: 24.798 ug/L

RT: 9.34 min Scan# 1219

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

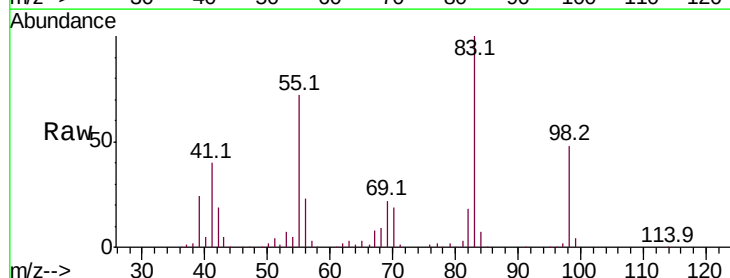
Tgt Ion: 83 Resp: 82619

Ion Ratio Lower Upper

83 100

55 74.3 59.4 89.2

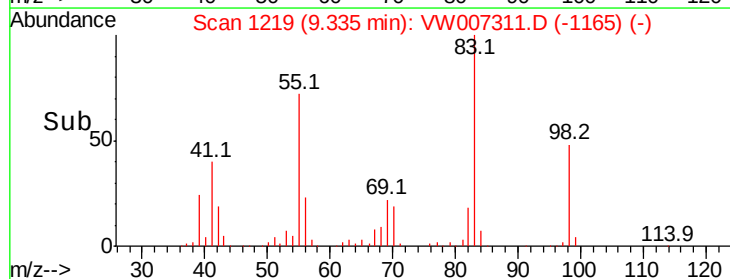
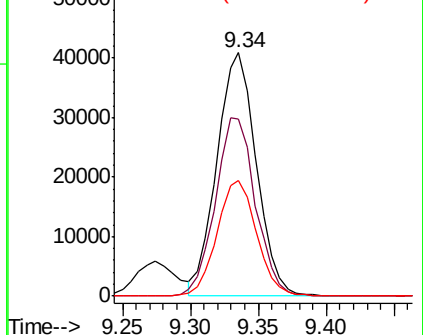
98 47.7 38.1 57.1



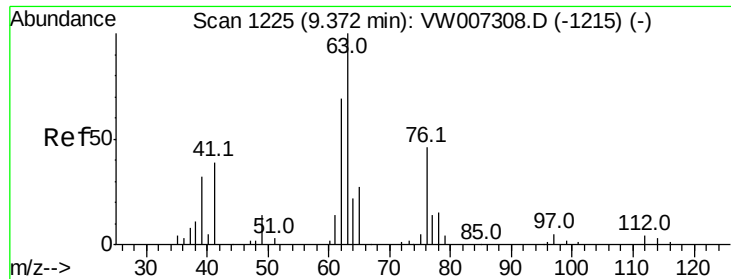
Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 55.00 (54.70 to 55.70): VW

Ion 98.00 (97.70 to 98.70): VW







#40

1,2-Dichloropropane

Concen: 24.771 ug/L

RT: 9.37 min Scan# 1224

Delta R.T. -0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

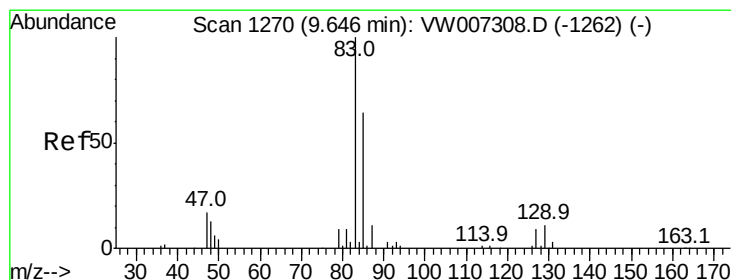
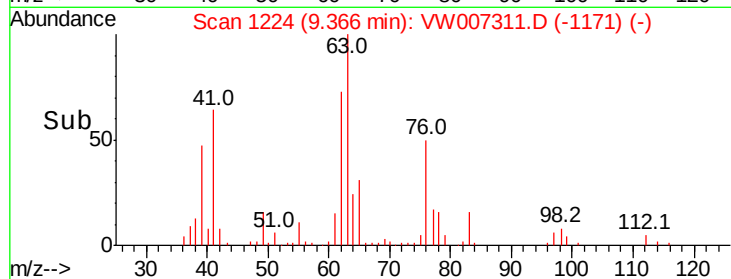
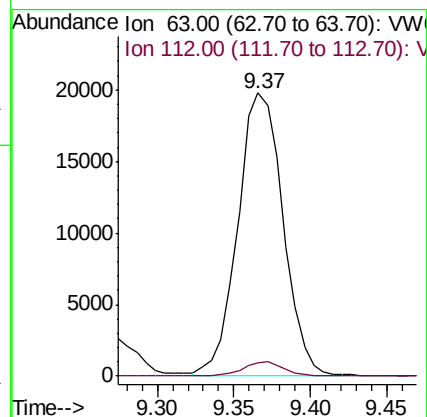
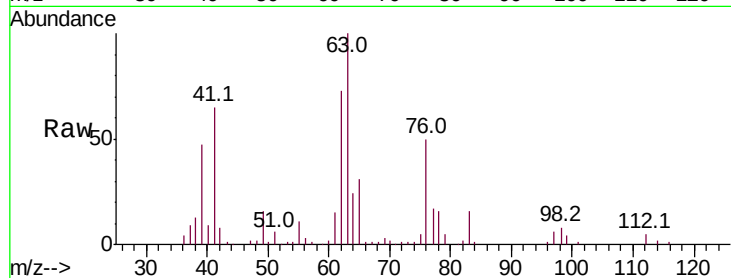
VICV97

Tot Ion: 63 Resp: 40782

Ion Ratio Lower Upper

63 100

112 4.5 3.6 5.4



#41

Bromodichloromethane

Concen: 24.396 ug/L

RT: 9.64 min Scan# 1269

Delta R.T. -0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

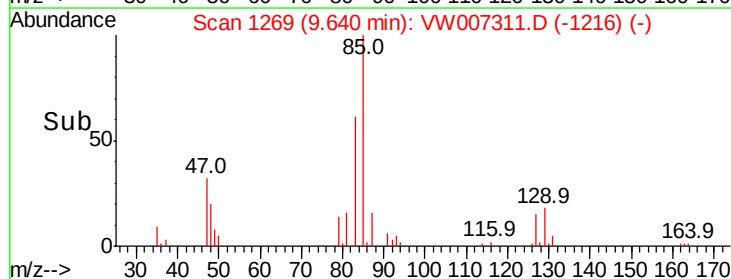
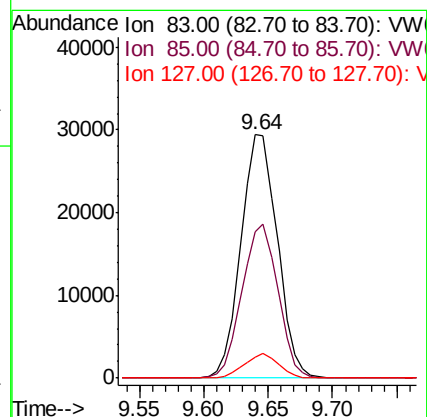
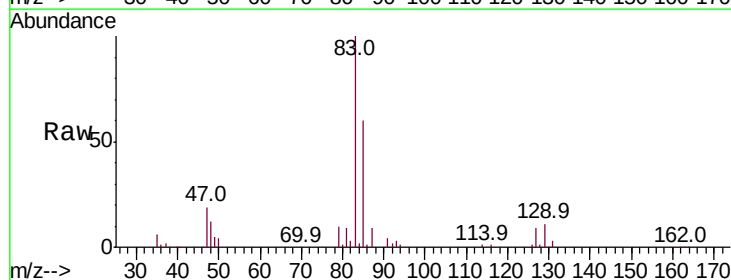
Tgt Ion: 83 Resp: 57671

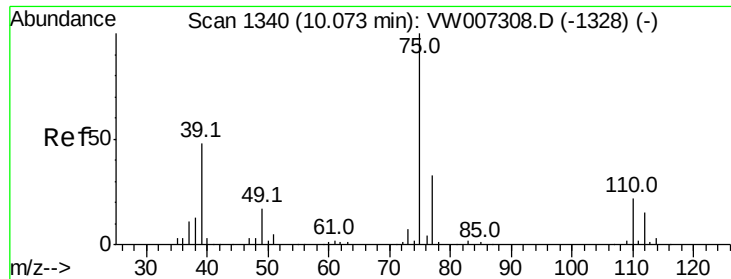
Ion Ratio Lower Upper

83 100

85 60.2 44.9 83.5

127 8.7 7.4 11.2





#42

cis-1,3-Dichloropropene

Concen: 25.149 ug/L

RT: 10.07 min Scan# 1340

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampled :

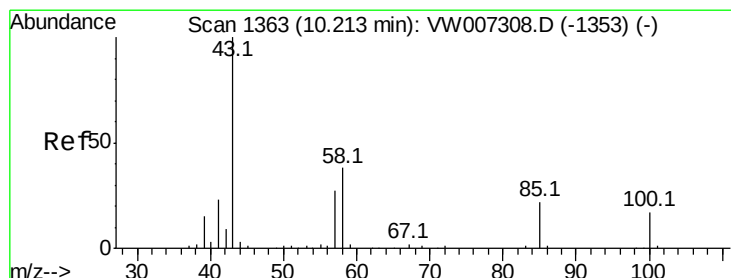
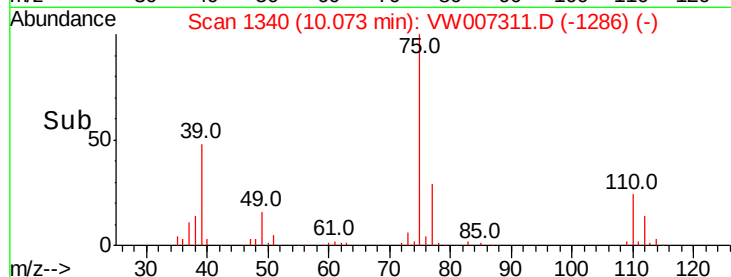
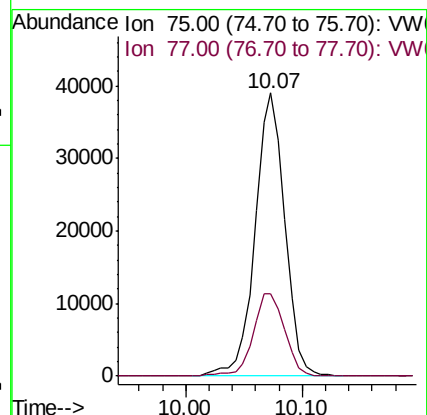
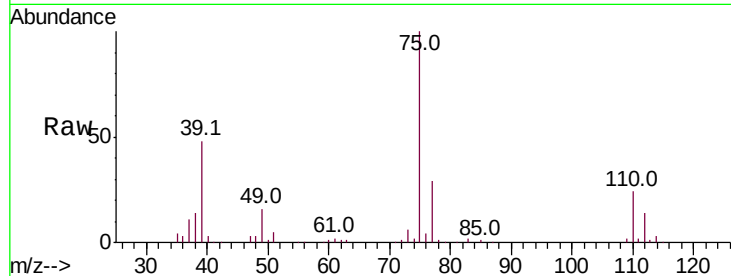
VICV97

Tot Ion: 75 Resp: 69534

Ion Ratio Lower Upper

75 100

77 29.2 23.0 42.6



#43

4-Methyl-2-pentanone

Concen: 51.483 ug/L

RT: 10.21 min Scan# 1363

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

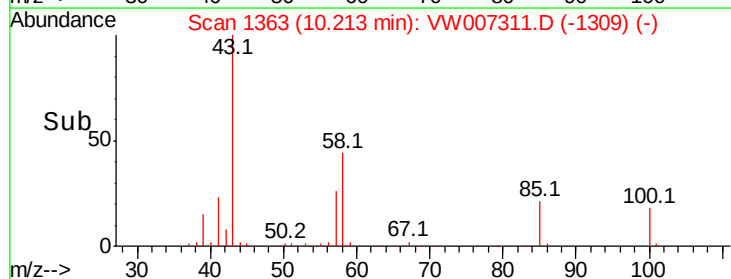
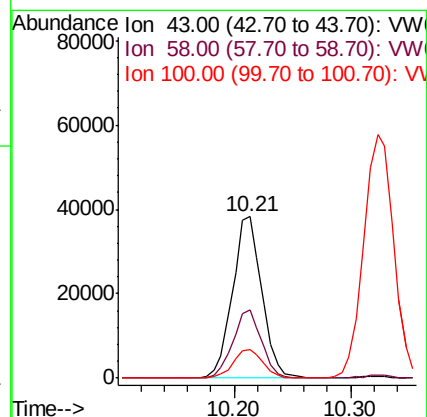
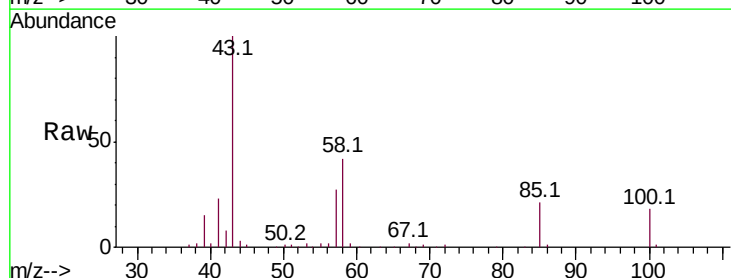
Tgt Ion: 43 Resp: 67087

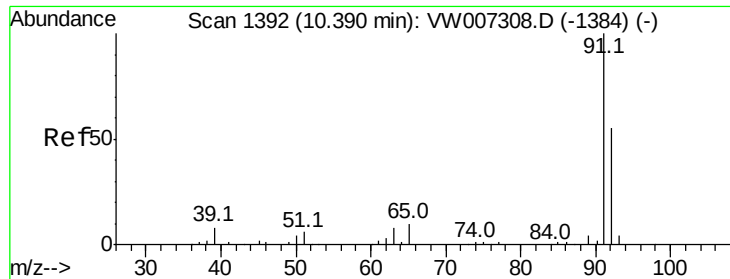
Ion Ratio Lower Upper

43 100

58 41.2 32.6 48.8

100 17.7 13.8 20.8





#44

Toluene

Concen: 25.336 ug/L

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

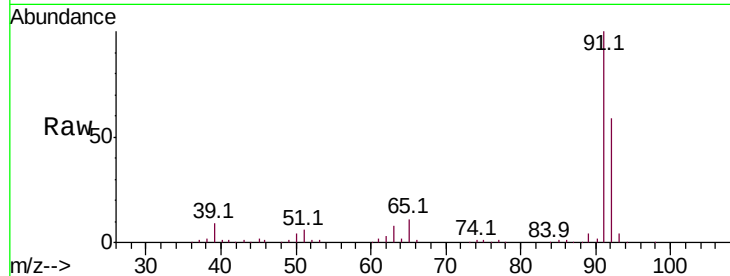
VICV97

Tot Ion: 91 Resp: 183799

Ion Ratio Lower Upper

91 100

92 59.0 38.2 71.0



Abundance Ion 91.00 (90.70 to 91.70): VW

Ion 92.00 (91.70 to 92.70): VW

10.39

120000

100000

80000

60000

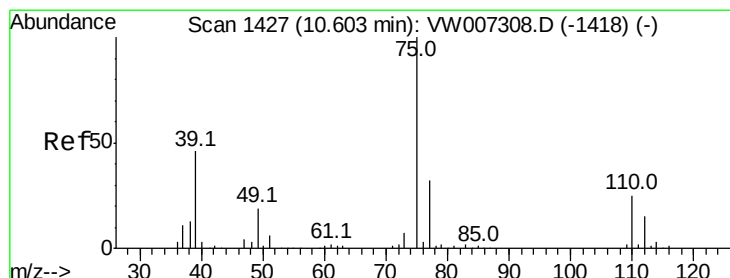
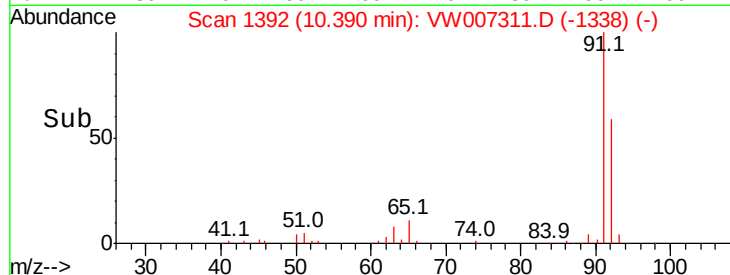
40000

20000

0

Time-->

10.30 10.40 10.50



#45

trans-1,3-Dichloropropene

Concen: 25.129 ug/L

RT: 10.60 min Scan# 1427

Delta R.T. -0.00 min

Lab File: VW007311.D

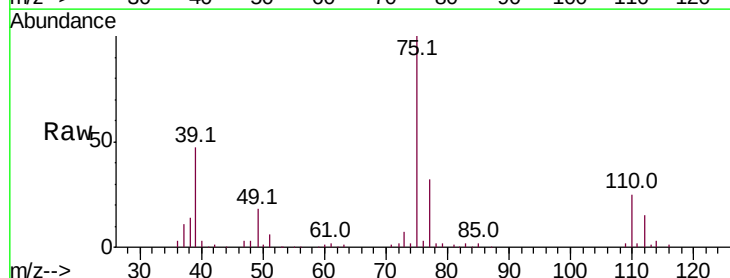
Acq: 07 Dec 2018 16:05

Tgt Ion: 75 Resp: 61015

Ion Ratio Lower Upper

75 100

77 32.1 22.6 42.0



Abundance Ion 75.00 (74.70 to 75.70): VW

Ion 77.00 (76.70 to 77.70): VW

10.60

40000

30000

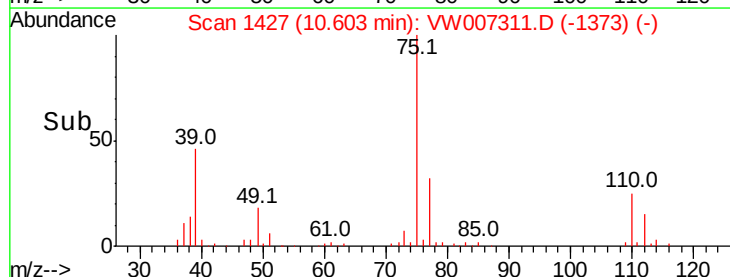
20000

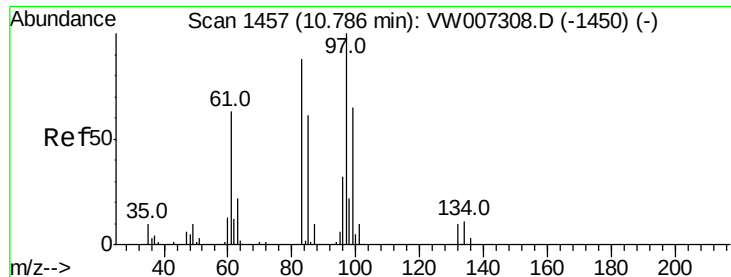
10000

0

Time-->

10.55 10.60 10.65





#46

1,1,2-Trichloroethane

Concen: 25.023 ug/L

RT: 10.79 min Scan# 1457

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampled :

VICV97

Tot Ion: 97 Resp: 33922

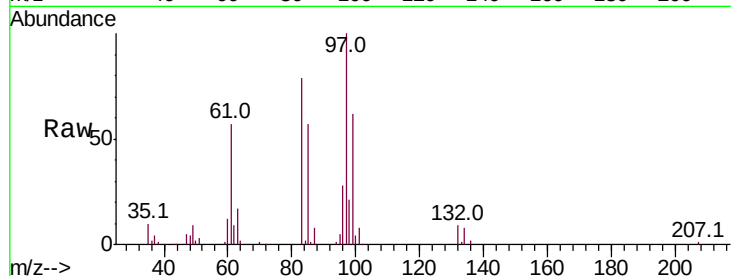
Ion Ratio Lower Upper

97 100

83 78.6 61.2 113.8

85 57.5 42.5 78.9

99 62.0 45.7 84.9



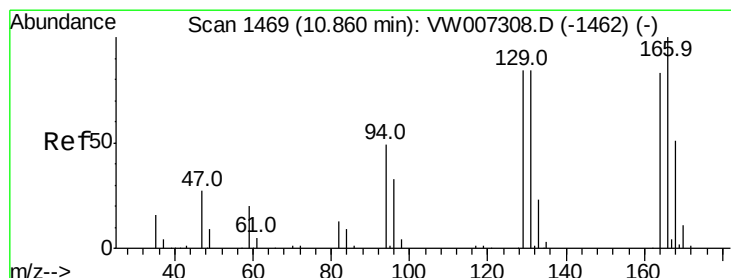
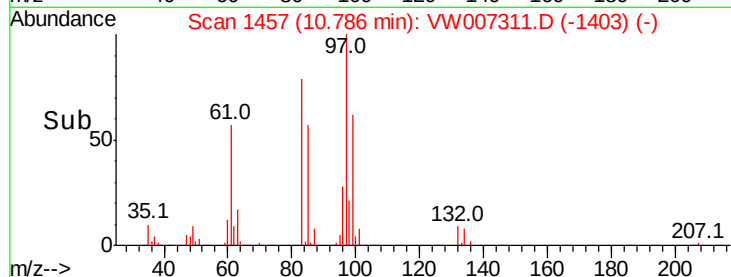
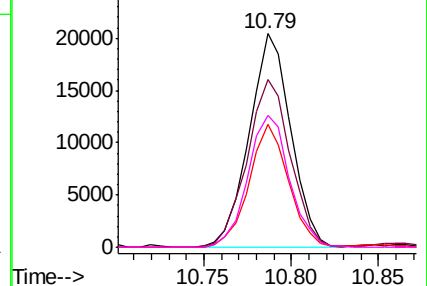
Abundance

Ion 97.00 (96.70 to 97.70): VW

Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 99.00 (98.70 to 99.70): VW



#47

Tetrachloroethene

Concen: 23.788 ug/L

RT: 10.86 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Tgt Ion:164 Resp: 34680

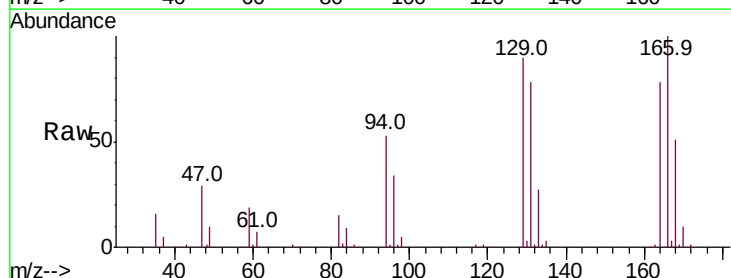
Ion Ratio Lower Upper

164 100

129 114.8 70.8 131.6

131 100.2 70.4 130.8

166 128.2 84.2 156.4



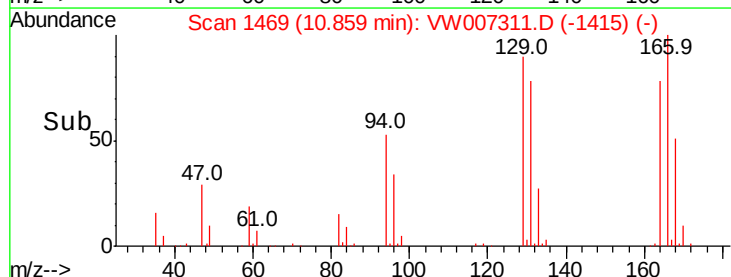
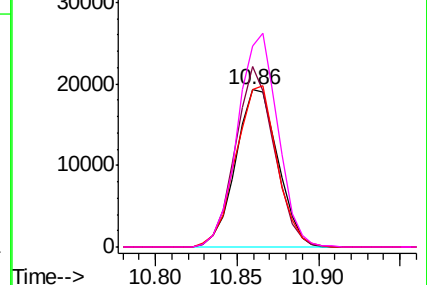
Abundance

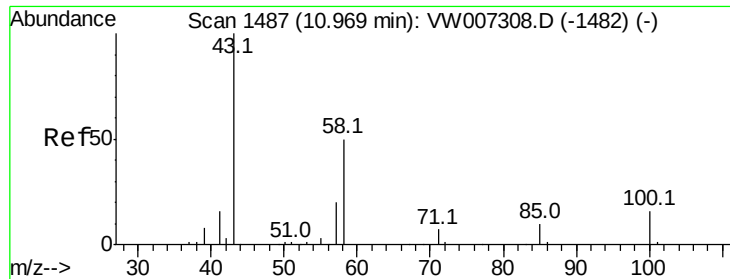
Ion 164.00 (163.70 to 164.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V





#49

2-Hexanone

Concen: 52.962 ug/L

RT: 10.97 min Scan# 1487

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

VICV97

Tot Ion: 43 Resp: 48505

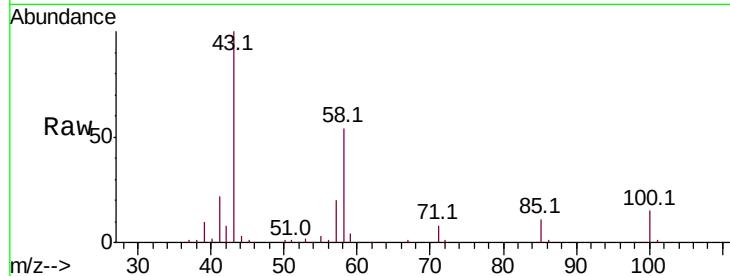
Ion Ratio Lower Upper

43 100

58 53.1 47.2 70.8

57 20.4 17.6 26.4

100 13.1 12.2 18.2

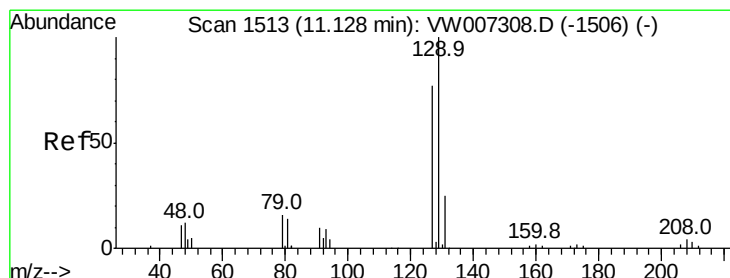
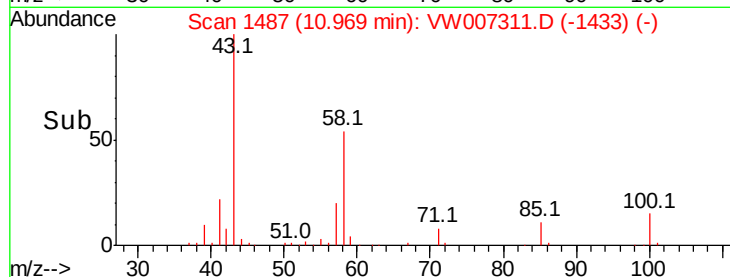
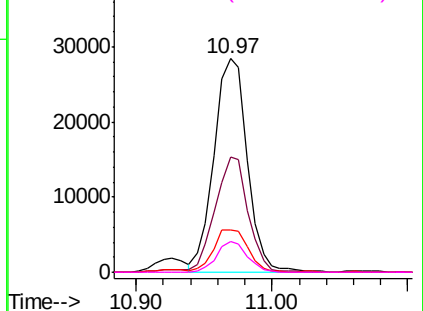


Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

Ion 57.00 (56.70 to 57.70): VW

Ion 100.00 (99.70 to 100.70): VW



#50

Dibromochloromethane

Concen: 25.222 ug/L

RT: 11.13 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VW007311.D

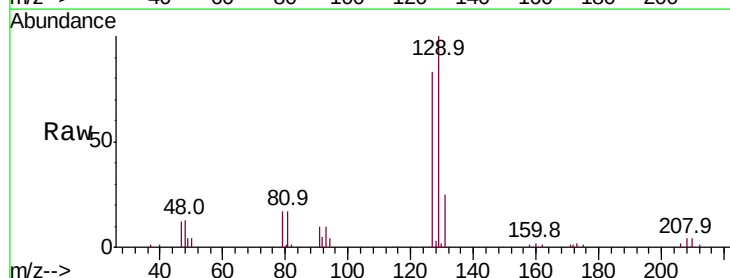
Acq: 07 Dec 2018 16:05

Tgt Ion: 129 Resp: 42004

Ion Ratio Lower Upper

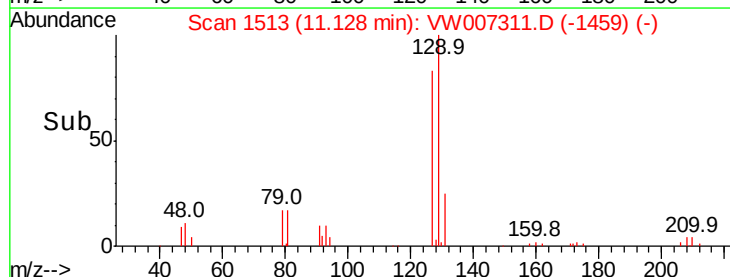
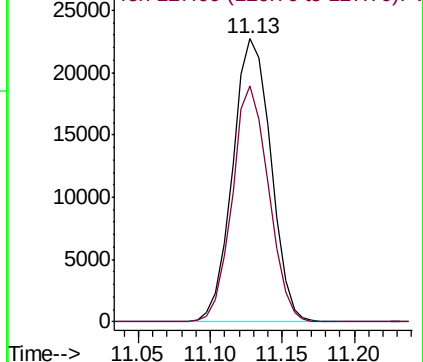
129 100

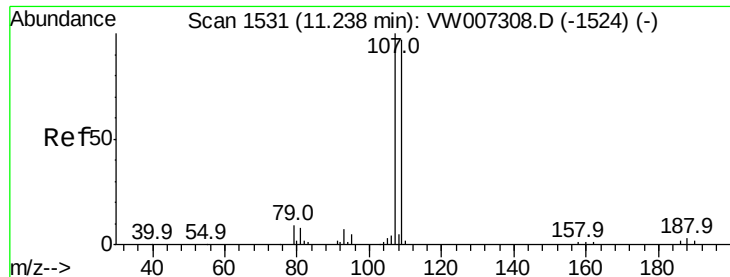
127 83.3 53.8 100.0



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#51

1,2-Dibromoethane

Concen: 25.017 ug/L

RT: 11.24 min Scan# 1531

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

VICV97

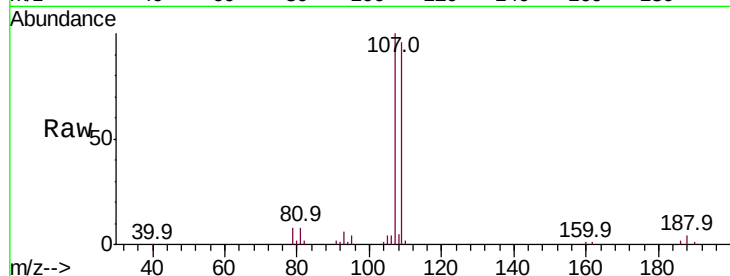
Tot Ion:107 Resp: 34060

Ion Ratio Lower Upper

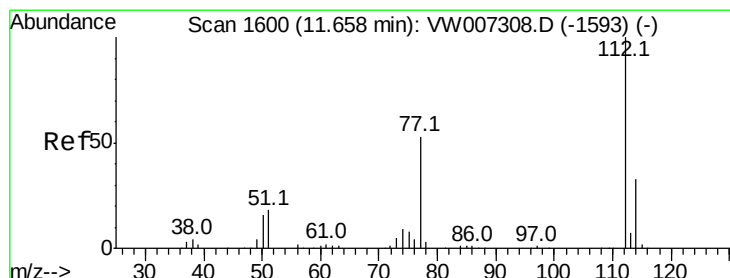
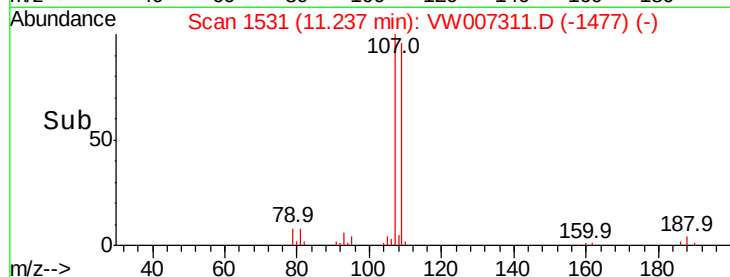
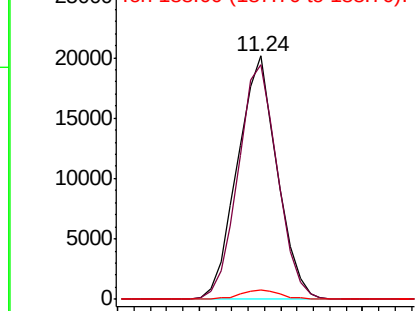
107 100

109 96.5 67.6 125.6

188 4.0 2.6 4.0#



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



#52

Chlorobenzene

Concen: 24.356 ug/L

RT: 11.66 min Scan# 1600

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

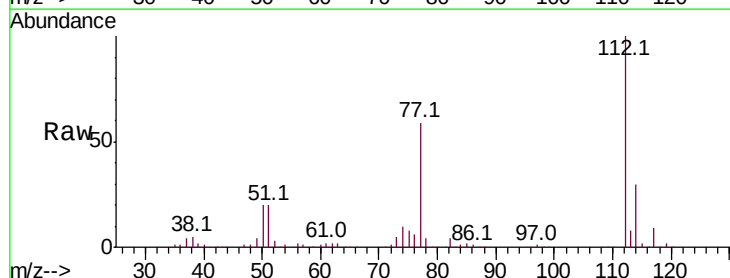
Tgt Ion:112 Resp: 114670

Ion Ratio Lower Upper

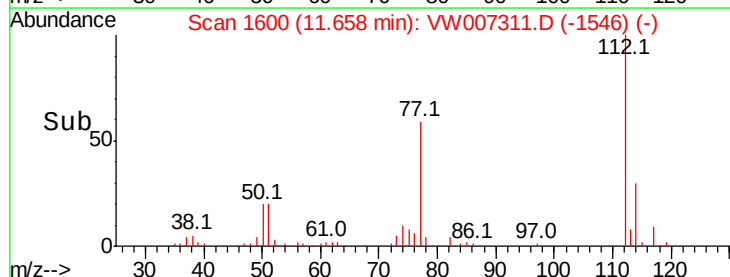
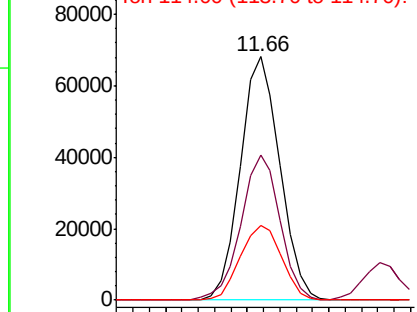
112 100

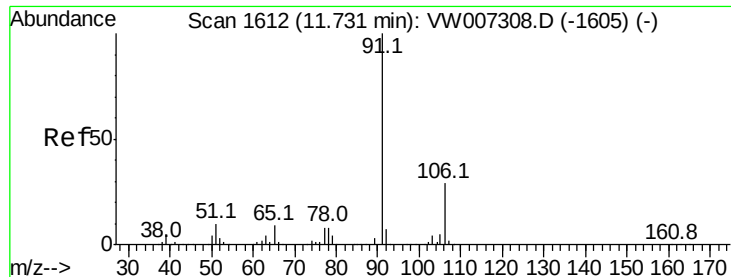
77 59.5 42.6 63.8

114 30.4 23.0 42.8



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

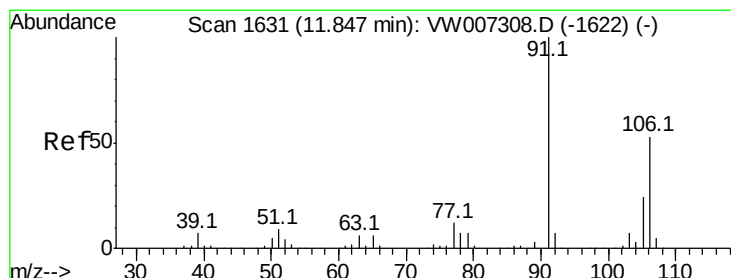
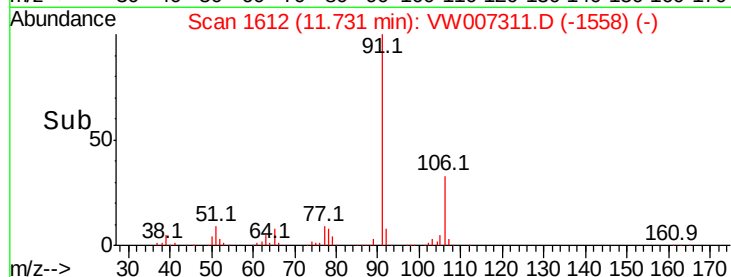
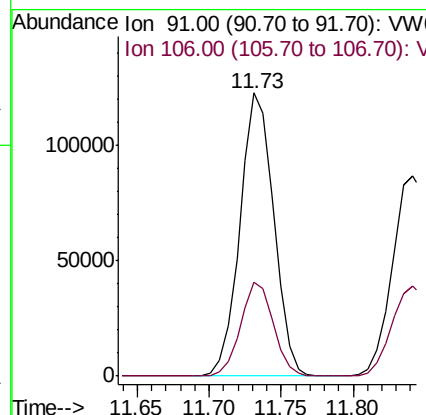
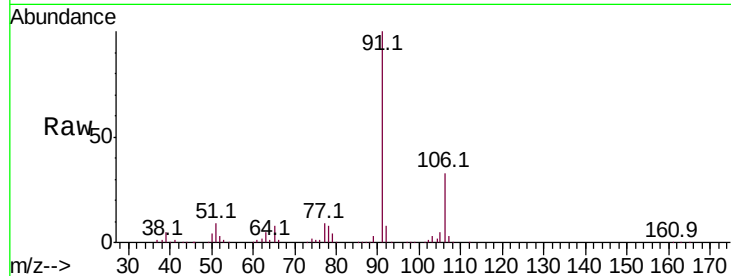




#53  
Ethylbenzene  
Concen: 24.514 ug/L  
RT: 11.73 min Scan# 1612  
Delta R.T. -0.00 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

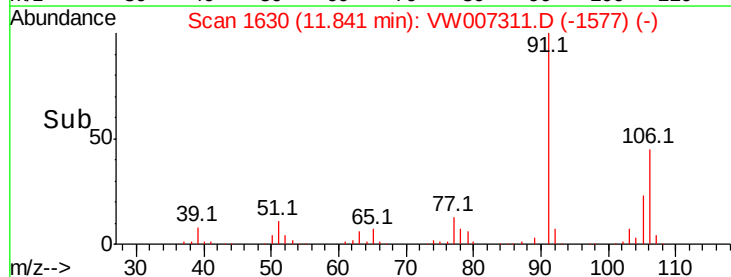
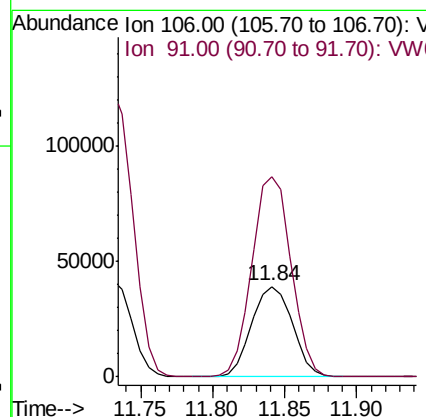
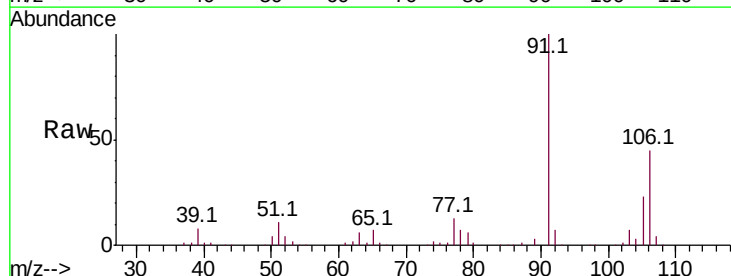
Instrument :  
MSVOA\_W  
ClientSampled :  
VICV97

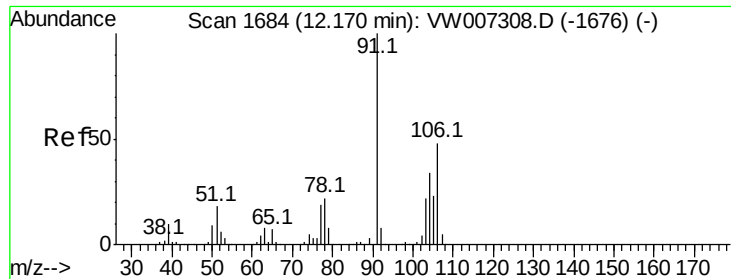
Tot Ion: 91 Resp: 199969  
Ion Ratio Lower Upper  
91 100  
106 33.3 20.2 37.4



#54  
m,p-Xylene  
Concen: 24.814 ug/L  
RT: 11.84 min Scan# 1630  
Delta R.T. -0.01 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

Tgt Ion:106 Resp: 76891  
Ion Ratio Lower Upper  
106 100  
91 221.1 132.2 245.6

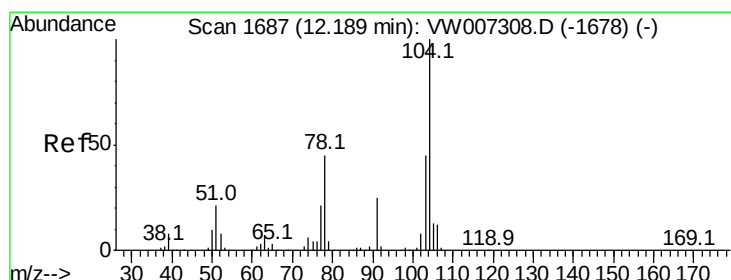
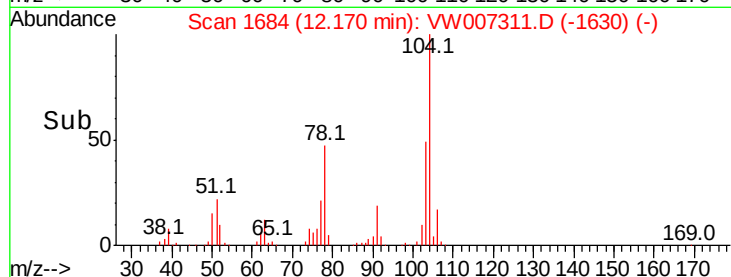
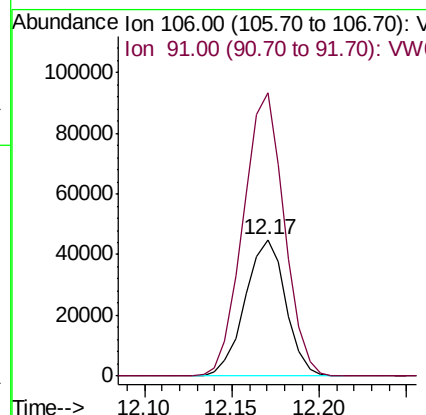
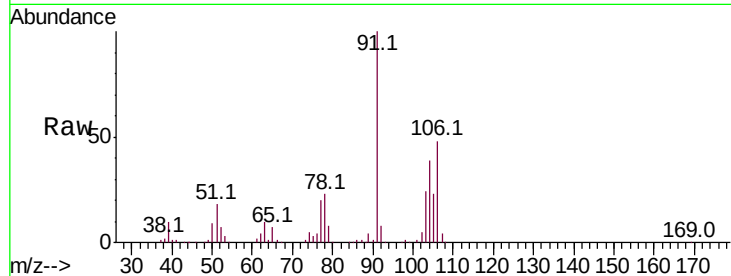




#55  
o-xylene  
Concen: 24.804 ug/L  
RT: 12.17 min Scan# 1684  
Delta R.T. -0.00 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

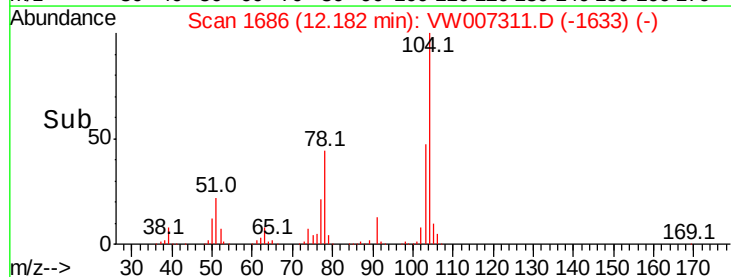
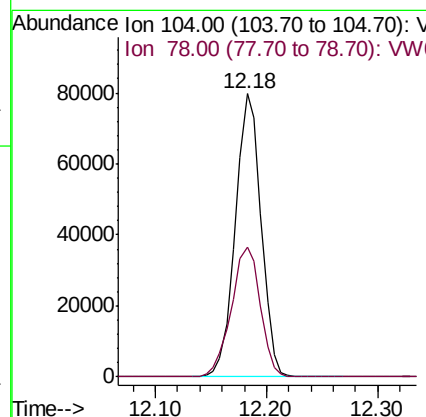
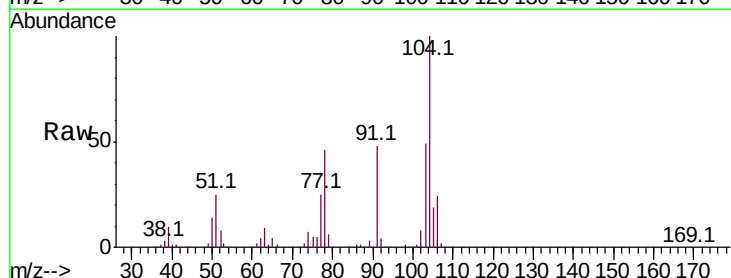
Instrument :  
MSVOA\_W  
ClientSampled :  
VICV97

Tot Ion:106 Resp: 72635  
Ion Ratio Lower Upper  
106 100  
91 207.2 147.0 273.0

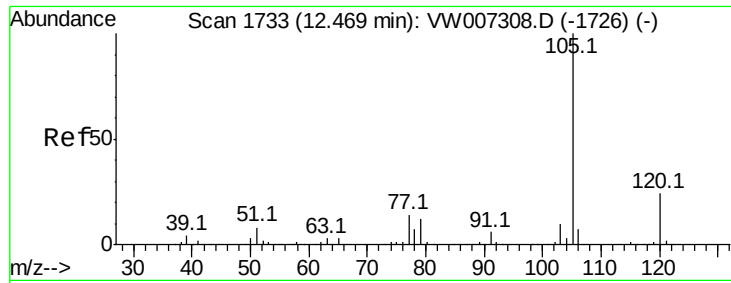


#56  
Styrene  
Concen: 25.382 ug/L  
RT: 12.18 min Scan# 1686  
Delta R.T. -0.01 min  
Lab File: VW007311.D  
Acq: 07 Dec 2018 16:05

Tgt Ion:104 Resp: 127408  
Ion Ratio Lower Upper  
104 100  
78 45.7 31.8 59.0







#57

Isopropylbenzene

Concen: 25.225 ug/L

RT: 12.46 min Scan# 1732

Delta R.T. -0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampled :

VICV97

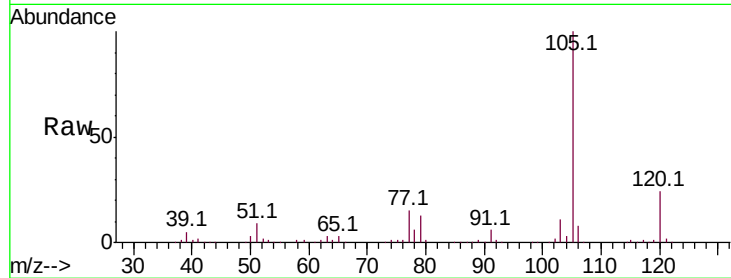
Tot Ion:105 Resp: 206166

Ion Ratio Lower Upper

105 100

120 25.7 20.6 30.8

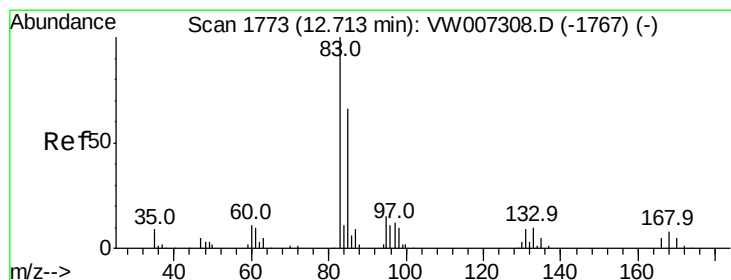
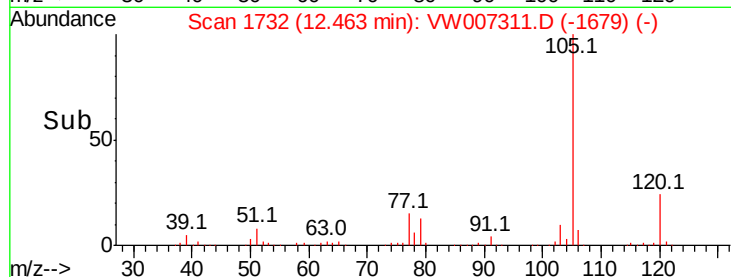
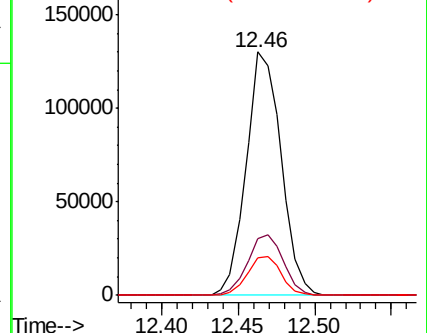
77 15.6 12.2 18.2



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: 24.720 ug/L

RT: 12.72 min Scan# 1774

Delta R.T. 0.01 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

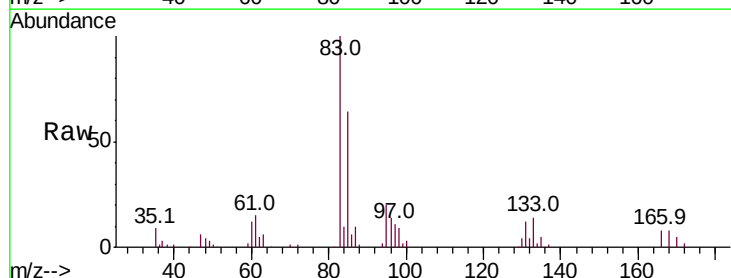
Tgt Ion: 83 Resp: 41543

Ion Ratio Lower Upper

83 100

85 64.0 46.2 85.8

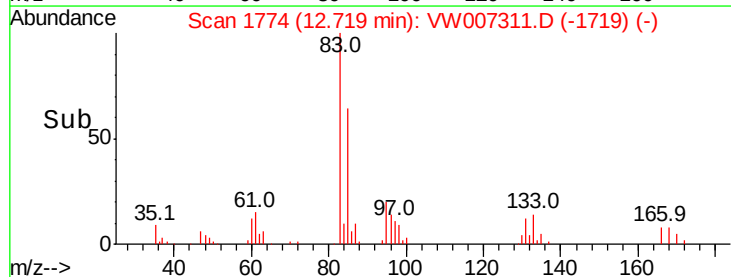
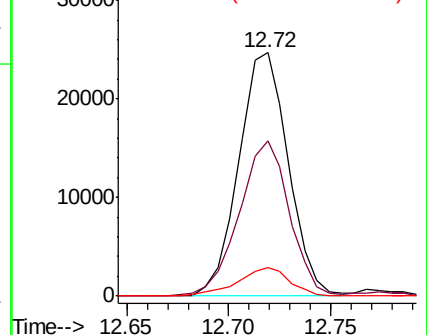
131 12.0 7.8 11.6#

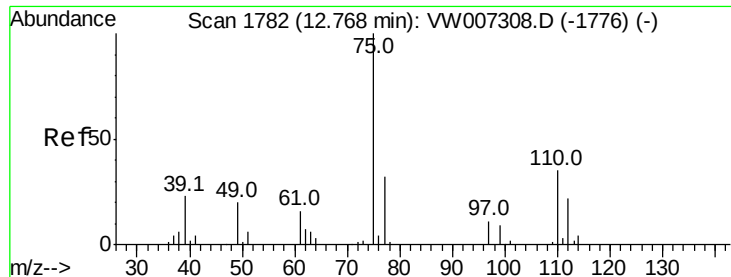


Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 24.428 ug/L

RT: 12.77 min Scan# 1782

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampleId :

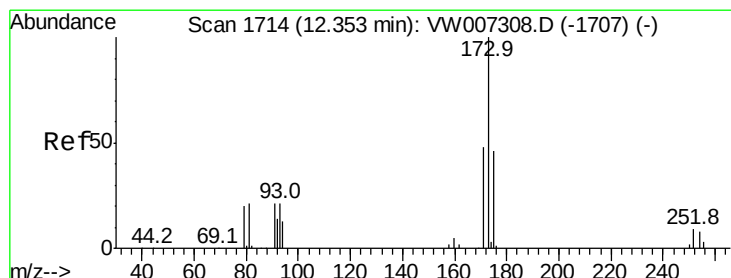
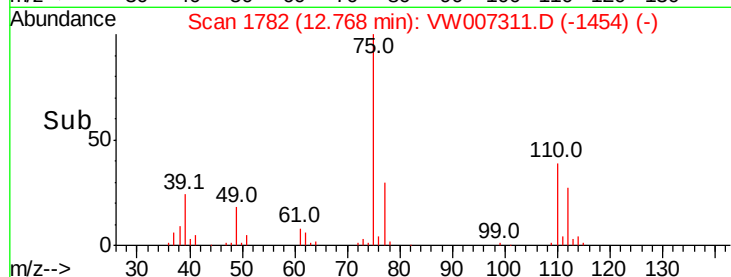
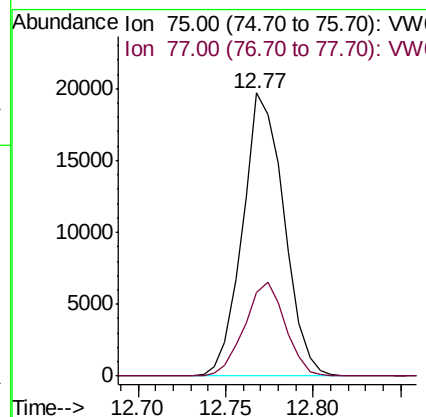
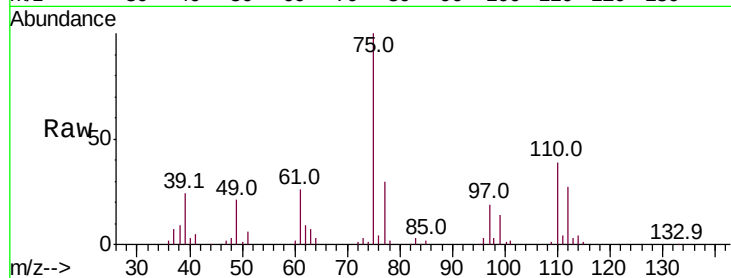
VICV97

Tot Ion: 75 Resp: 32495

Ion Ratio Lower Upper

75 100

77 32.6 26.5 39.7



#62

Bromoform

Concen: 24.826 ug/L

RT: 12.35 min Scan# 1714

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

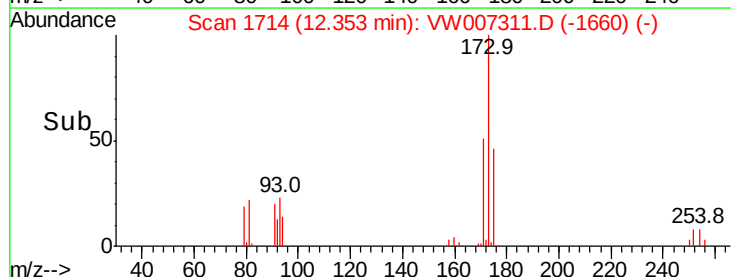
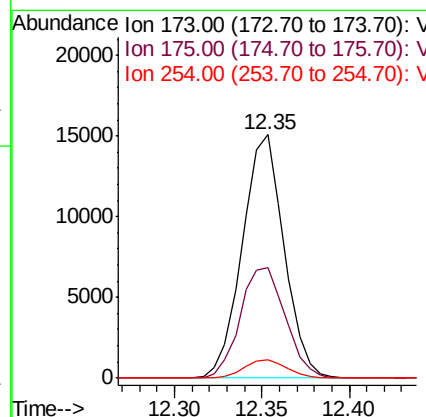
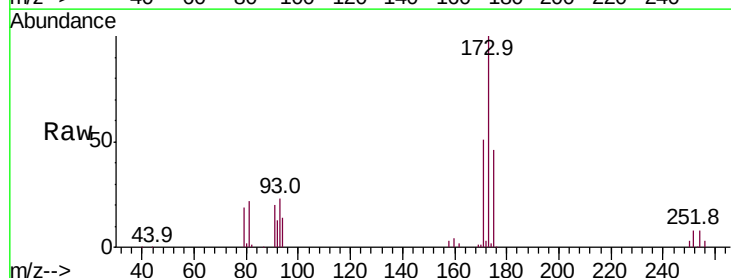
Tgt Ion:173 Resp: 25068

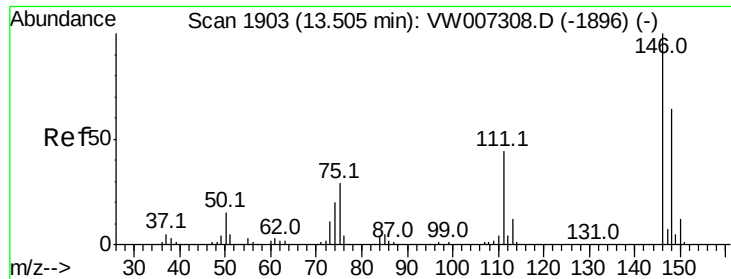
Ion Ratio Lower Upper

173 100

175 48.9 38.6 58.0

254 7.7 6.4 9.6

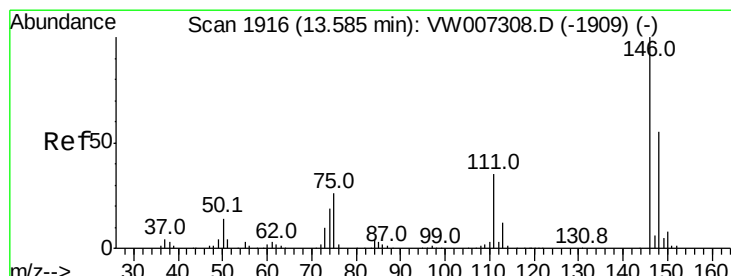
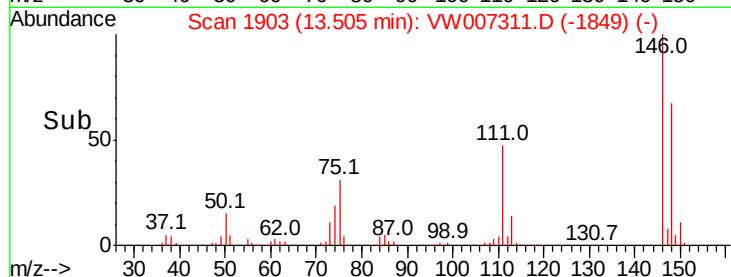
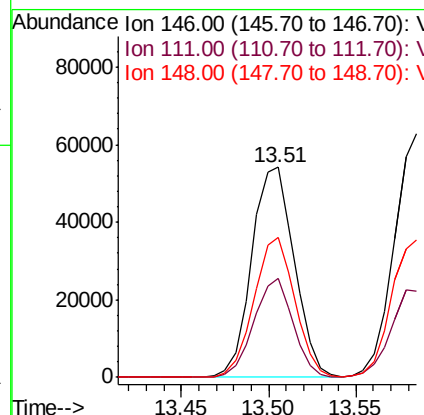
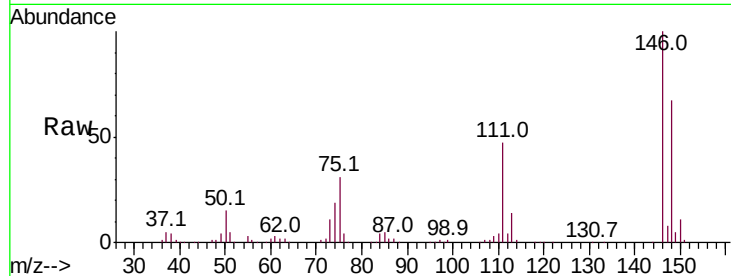




#63  
 1,3-Dichlorobenzene  
 Concen: 24.105 ug/L  
 RT: 13.51 min Scan# 1903  
 Delta R.T. -0.00 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

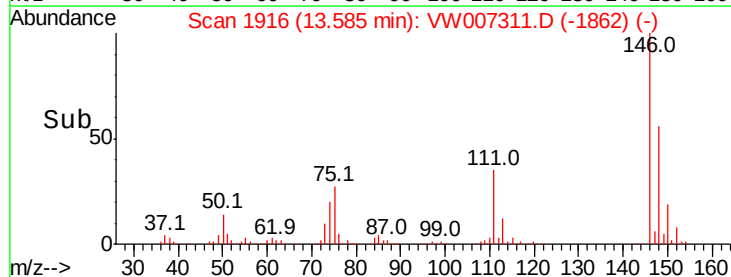
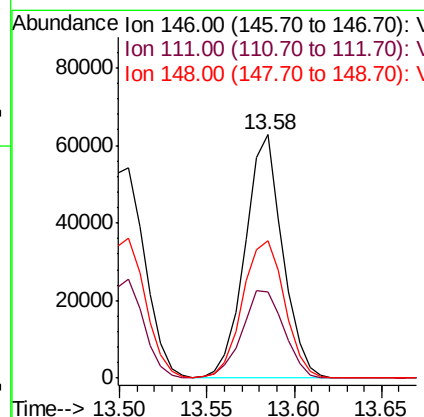
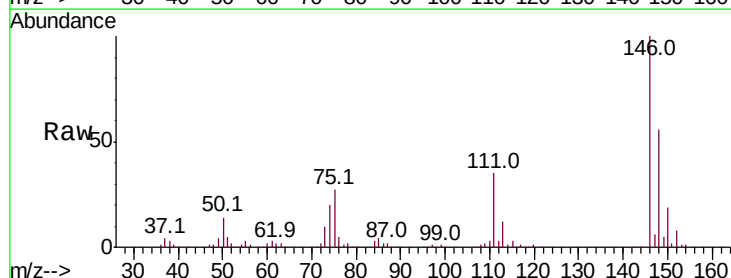
Instrument :  
 MSVOA\_W  
 ClientSampled :  
 VICV97

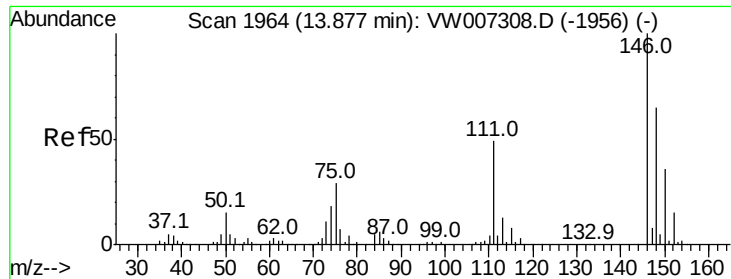
Tot Ion:146 Resp: 91309  
 Ion Ratio Lower Upper  
 146 100  
 111 46.9 31.0 57.6  
 148 66.8 44.7 83.1



#64  
 1,4-Dichlorobenzene  
 Concen: 24.845 ug/L  
 RT: 13.58 min Scan# 1916  
 Delta R.T. -0.00 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

Tgt Ion:146 Resp: 93821  
 Ion Ratio Lower Upper  
 146 100  
 111 35.3 24.8 46.0  
 148 56.2 38.7 71.9

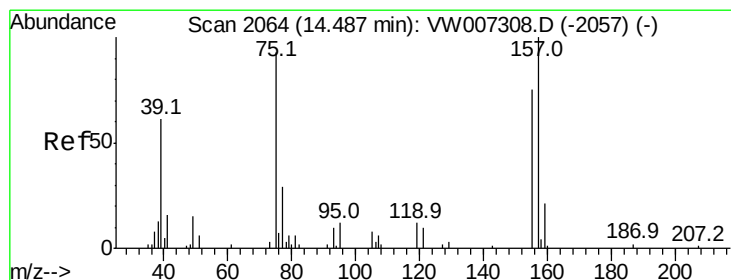
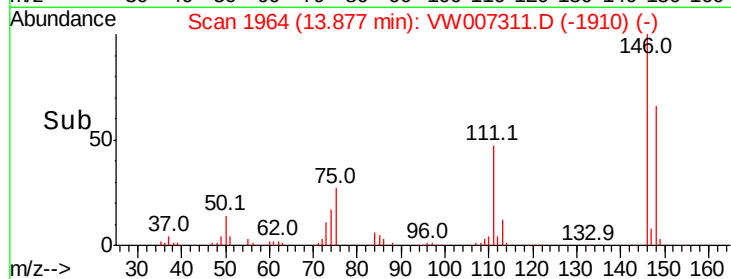
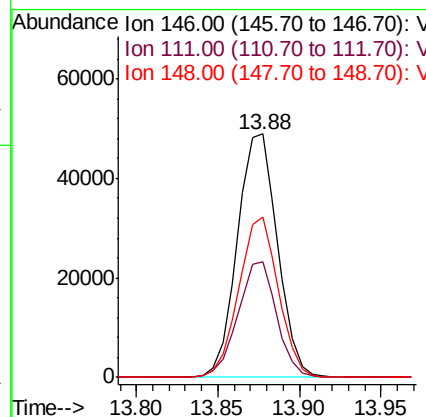
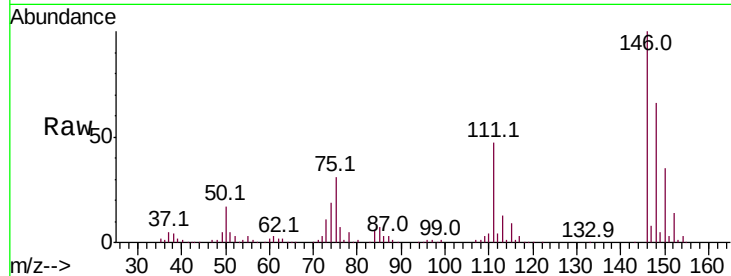




#65  
 1,2-Dichlorobenzene  
 Concen: 24.733 ug/L  
 RT: 13.88 min Scan# 1964  
 Delta R.T. -0.00 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

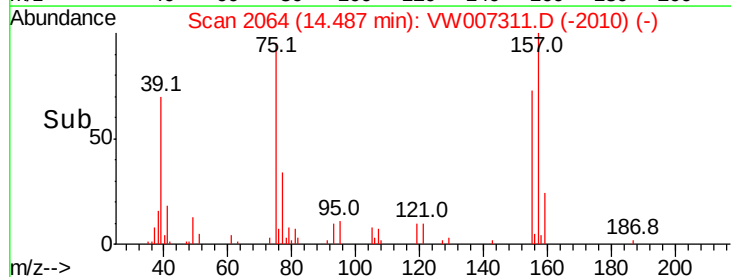
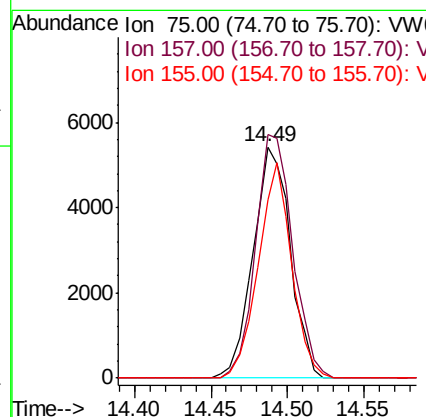
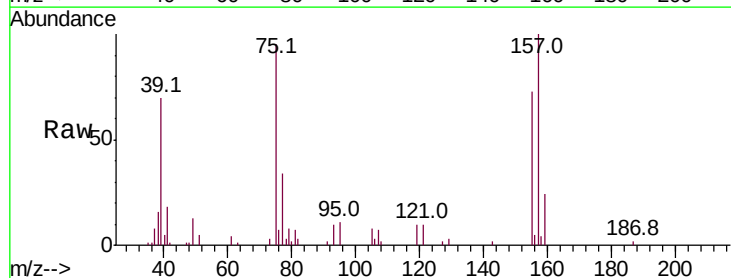
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VICV97

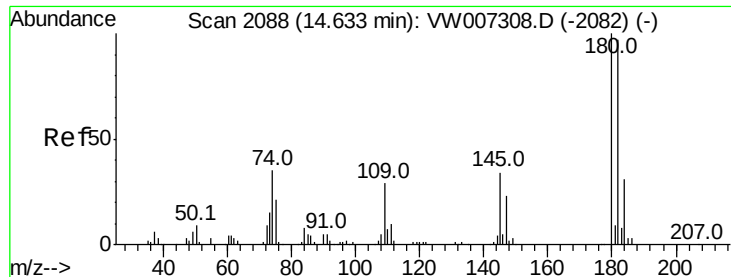
Tot Ion:146 Resp: 83847  
 Ion Ratio Lower Upper  
 146 100  
 111 47.4 39.3 58.9  
 148 66.0 51.8 77.8



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 25.606 ug/L  
 RT: 14.49 min Scan# 2064  
 Delta R.T. -0.00 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

Tgt Ion: 75 Resp: 9194  
 Ion Ratio Lower Upper  
 75 100  
 157 105.3 86.0 129.0  
 155 77.0 64.9 97.3

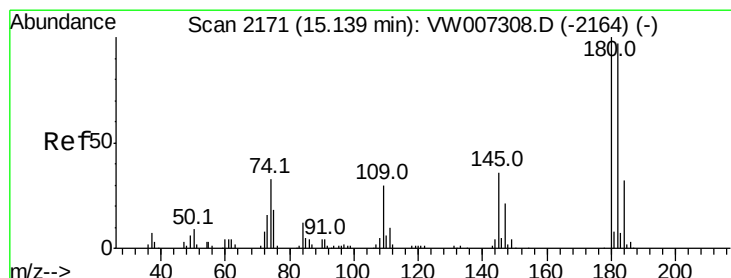
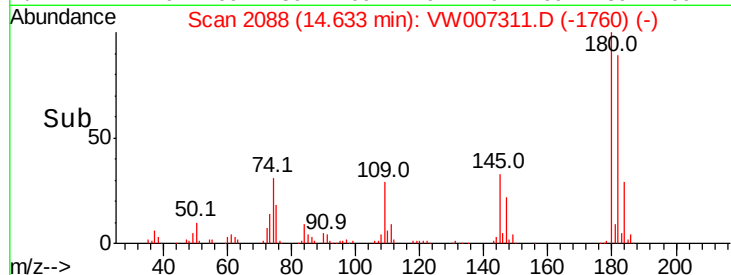
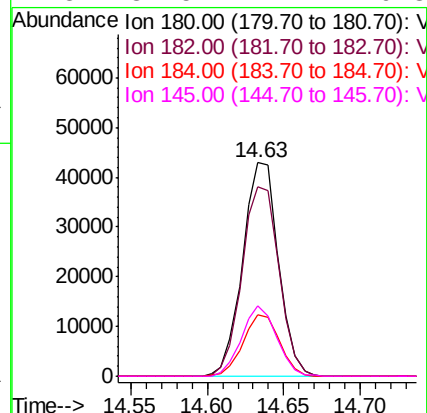
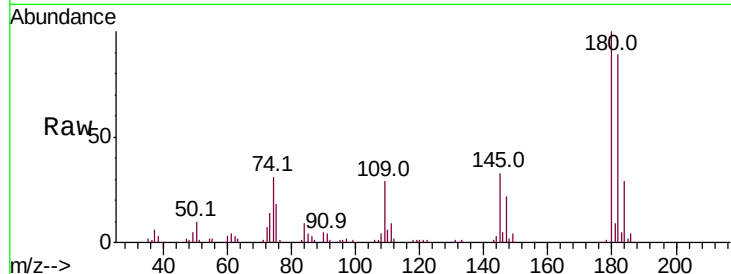




#67  
 1,3,5-Trichlorobenzene  
 Concen: 25.429 ug/L  
 RT: 14.63 min Scan# 2088  
 Delta R.T. -0.00 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

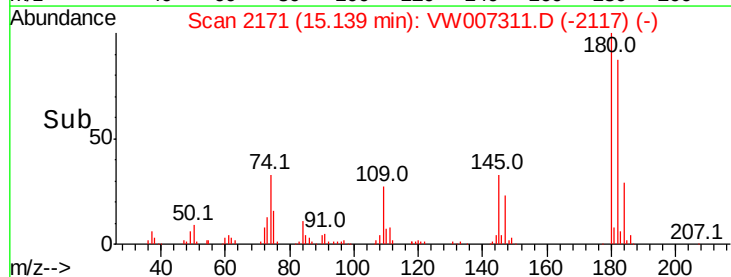
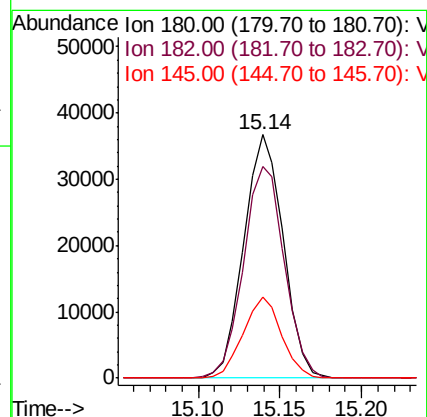
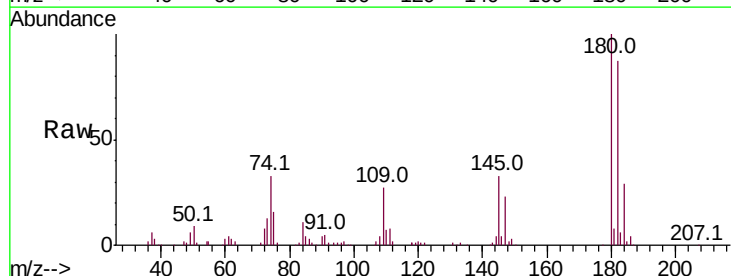
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VICV97

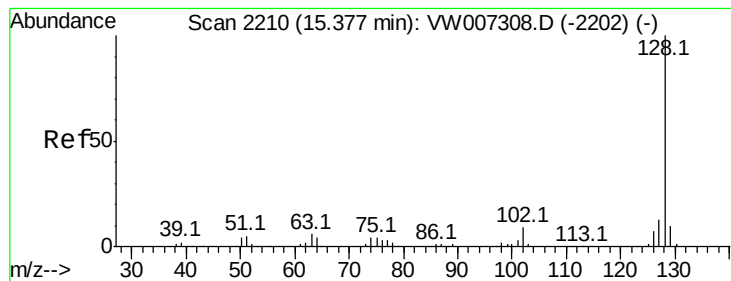
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 91.7  | 74.6  | 111.8 |
| 184     | 29.3  | 24.7  | 37.1  |
| 145     | 32.5  | 27.2  | 40.8  |



#68  
 1,2,4-trichlorobenzene  
 Concen: 26.168 ug/L  
 RT: 15.14 min Scan# 2171  
 Delta R.T. -0.00 min  
 Lab File: VW007311.D  
 Acq: 07 Dec 2018 16:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 89.9  | 77.4  | 116.2 |
| 145     | 32.7  | 28.4  | 42.6  |





#69

Naphthalene

Concen: 26.044 ug/L

RT: 15.38 min Scan# 2210

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

Instrument :

MSVOA\_W

ClientSampled :

VICV97

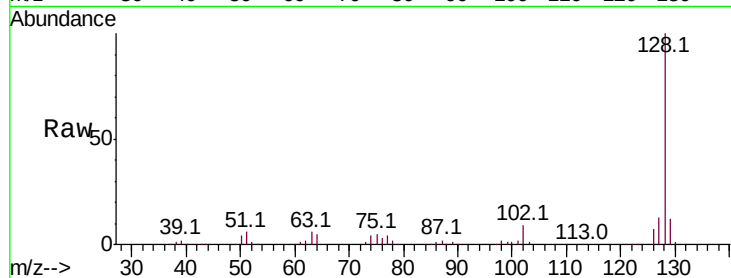
Tot Ion:128 Resp: 152291

Ion Ratio Lower Upper

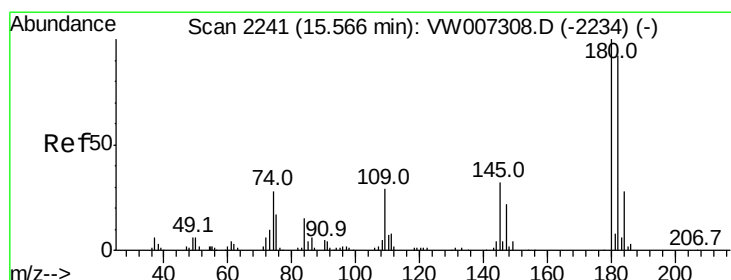
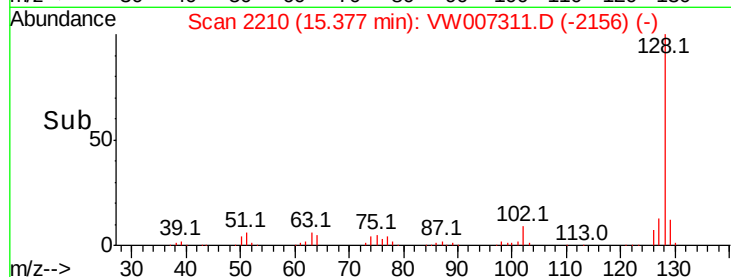
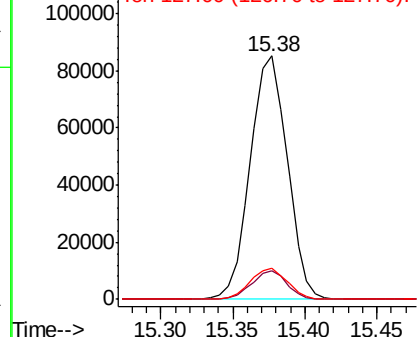
128 100

129 11.1 8.8 13.2

127 12.7 10.7 16.1



Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 129.00 (128.70 to 129.70): V  
Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 25.509 ug/L

RT: 15.57 min Scan# 2241

Delta R.T. -0.00 min

Lab File: VW007311.D

Acq: 07 Dec 2018 16:05

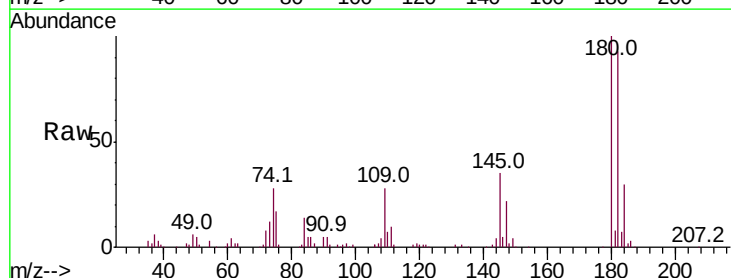
Tgt Ion:180 Resp: 54863

Ion Ratio Lower Upper

180 100

182 94.8 76.2 114.4

145 35.2 27.4 41.0



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

